

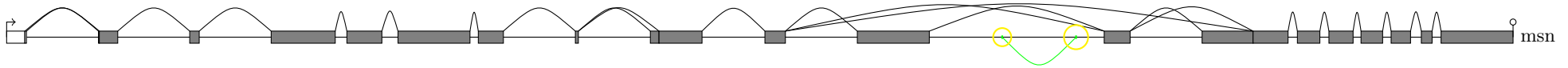
D. Mel	cgtcgaag	gtgagtccaaca...729...cgcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgtacacacacaagcacac...741...aaattattcag	cacttccc
D. Sim	cgtcgaag	gtgagtccaaca...718...cgcgttcct-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgtacacacacaagcacac...758...taattattcag	cacttccc
D. Sec	cgtcgaag	gtgagtccaaca...713...cgcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgtacacacacaagcacac...757...taattattcag	cacttccc
D. Ere	cgtcgaag	gtgagtccaaca...765...cgcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgtacacacacaagcacac...833...aaaatattcag	cacttccc
D. Ana	cgtcgagg	gtgagtacctga...621...cgcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgcacacccaaacaccag...733...agttaattcag	caccgact
D. Gri	cgttgaag	gtaagacaaccg...515...-gttttcataaaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	cccatgacacacacacagac...1278...tttttcttacag	cgttgccg
D. Moj	cgttgagg	gtaagttttcac...479...cgttttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccctagcaacacacacacac...2133...athtccacgcag	ctctgcct
D. Per	cgtagagg	gtaagtgggaagt...482...agcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgcacacgcgagcatactcc...1330...tctcccttgag	ctcttcct
D. Pse	cgtagagg	gtaagtgggaagt...482...agcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgcacacgcgagcatactcc...1372...tctcccttgag	ctcttcct
D. Vir	cgttgagg	gtaagatttcag...420...cgttttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccctagccacacacacacac...1289...tctttttctag	cactgccc
D. Wil	cgttgaag	gtaagtcttccg...407...aacgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCACAT	ccgcacagcaagccagccaa...745...tcattttctcag	ctttgccc
D. Yak	cgtcgaag	gtgagtccaaca...750...cgcgttcat-aaaatgtaacc	AAGAGATGCATGTGA	ttCGCAT	ccgtacacacacaagcacac...809...taaatattcag	cactgccc
		*** ** *	*****	*		** * *

id=885 gene=FBgn0038092 name=beat-Vb segment=chr3R.8757507\_8759062.1 type=IN

D. Mel	cgtcgaag	gtgagtccaaca...996...ccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...472...aaattattcag	cacttccc
D. Sim	cgtcgaag	gtgagtccaaca...1002...ccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...472...taattattcag	cacttccc
D. Sec	cgtcgaag	gtgagtccaaca...996...ccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...472...taattattcag	cacttccc
D. Ere	cgtcgaag	gtgagtccaaca...1059...ccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...537...aaaatattcag	cacttccc
D. Ana	cgtcgagg	gtgagtacctga...931...tccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...421...agttaattcag	caccgact
D. Gri	cgttgaag	gtaagacaaccg...1015...gcttcgctctctgt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...776...tttttcttacag	cgttgccg
D. Moj	cgttgagg	gtaagttttcac...1156...-----gatgtttctgcgctctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...1454...athtccacgcag	ctctgcct
D. Per	cgtagagg	gtaagtgggaagt...920...catgcaggatgctt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...890...tctcccttgag	ctcttcct
D. Pse	cgtagagg	gtaagtgggaagt...944...catgcaggatgctt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...908...tctcccttgag	ctcttcct
D. Vir	cgttgagg	gtaagatttcag...894...tgccctgcctctca-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...813...tctttttctag	cactgccc
D. Wil	cgttgaag	gtaagtcttccg...844...aacagagatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...306...tcattttctcag	ctttgccc
D. Yak	cgtcgaag	gtgagtccaaca...1033...ccacaggatggtt-----ctctgc	ATGTG	ttTTAT	GatCATC	taTTTT	tccgctgatataaaataaat...524...taaatattcag	cactgccc
		*** ** *	*	** *****	*****	*****	** *	*

id=885 gene=FBgn0038092 name=beat-Vb segment=chr3R.8757507\_8759062.1 type=IN VIEW

Figure 1: CS=11.52



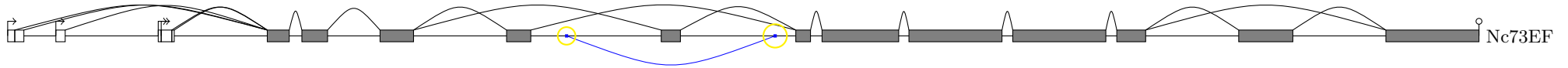
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D.Sim	agaggcaa	gtaaatcacact...	579...	-gaaaaaggc	caaaagtatc	-----	GAATGCTAATGAGAT	cag	taatatccgtagtacag	-----	...	950...	gttccacacag	aatcgagg
D.Sec	agcagcag	gtaaacgctctc...	575...	-aaaaaaggc	caaaagtatc	-----	GAATGCTAATGAGAT	cag	taatatccgtagtaca	-----	...	936...	gttccacacag	aatcgagg
D.Ere	agcagcag	gtaaacgctctc...	586...	-cgaaaaggc	caaaagtatc	-----	GAATGCTAATGAGAT	cag	taataaccgtagtgca	-----	...	954...	gtttcgcacag	aatcgagg
D.Ana	agcagcag	gtaaacgttctc...	644...	-aaactagaag	caaaagtatc	-----	GAATGCTAATGAGA	----	acaagtcgtaggttgagct	----	...	651...	gtccctctacag	aaccgagg
D.Gri	agcagcag	gtaaacgttctc...	870...	-aaaataaaa	caaaagtatc	-----	GAATGCTAATGAGATGCT	----	aaaattgaaaagaaaatca	----	...	971...	tccctctgacag	aatcgagg
D.Moj	cgagcag	gtaaacgttctc...	822...	aaaaaaaaa	aaatcac	AAGTtc	GAATGCTAATGAGATGCT	----	aaaaaaaaacaacaacatt	----	...	1168...	tcgcttaaatag	aaccgtgg
D.Pse	agcagcag	gtaaacgttctc...	1328...	-acacaagag	caaaattatc	-----	GAATGCTAATGAGA	----	tgtgatccattaacagacc	----	...	1220...	tgtcccattcag	aatcgagg
D.Vir	agcagcag	gtaaacgttctc...	750...	-aaaaaacga	caaaagtatc	-----	GAATGCTAATGAGATGCT	----	aaaatacaaaaaaaaaaac	----	...	1146...	tctctgacag	aatcgagg
D.Wil	agcagcag	gtaaacgttctc...	817...	-aaaaaaa	caaataccatt	-----	TGAATGCTAATGAGATGCT	----	atcataatctaaccatt	----	...	1403...	ttcattcaacag	aaccgtgg
D.Yak	agcagcag	gtaaacgctctc...	597...	-cgaaaaggc	caaaagtatc	-----	GAATGCTAATGAGAT	cag	taataaccgtagtgca	-----	...	939...	gttccacacag	aatcgagg
		* **	*****		* * ** *		*****		*				** ** ** **	

id=27350 gene=FBgn0010909 name=msn segment=chr3L.2560296.2561931\_-1 type=IN

D.Me1	agcagcag	gtaaacgctctc...	1393...	-----	cattaggc--aacgtcaaatgt	-----	GTCTCATTGGCATT	-----	atattttgtgctgctgct	...	164...	gttccacacag	aatcgagg
D.Sim	agaggcaa	gtaaatcacact...	1370...	-----	atcattaggc--aacctc--aa--gt	-----	GTCTCATTGGCATT	-----	atattttgtgctgctgct	...	159...	gttccacacag	aatcgagg
D.Sec	agcagcag	gtaaacgctctc...	1368...	-----	atcattaggc--aacctc--aa--gt	-----	GTCTCATTGGCATT	-----	atattttgtgctgctgct	...	143...	gttccacacag	aatcgagg
D.Ere	agcagcag	gtaaacgctctc...	1372...	-----	cattaggc--aacctcaaa--gt	-----	GTCTCATTGGCATT	-----	atattttgtgctgctgct	...	168...	gtttcgcacag	aatcgagg
D.Ana	agcagcag	gtaaacgttctc...	1105...	-----	gaggagcagagctcctagt	-----	TCTCATTGGCATT	-----	actgcgttacaaactacca	...	190...	gtccctctacag	aaccgagg
D.Gri	agcagcag	gtaaacgttctc...	1579...	-----	aggc--gtc--tccagatcctta	AGTATCTCATTGGCATT	-----	atattgtcttctctttgag	...	262...	tccctctgacag	aatcgagg	
D.Moj	cgagcag	gtaaacgttctc...	1700...	-----	ggc--atctcttagtataccta	AGTATCTCATTGGCATT	-----	agctttctctctctctct	...	292...	tcgcttaaatag	aaccgtgg	
D.Pse	agcagcag	gtaaacgttctc...	2336...	-----	gc--gacctcagtgctctctc	TCTCATTGGCATT	-----	atattttgttctgctag	...	212...	tgtcccattcag	aatcgagg	
D.Vir	agcagcag	gtaaacgttctc...	1637...	gaacattttgtaggc--gtc--tc	-----	AGTATCTCATTGGCATT	-----	atattgttactctctgct	...	259...	tctctgacag	aatcgagg	
D.Wil	agcagcag	gtaaacgttctc...	1997...	-----	tttagtttagtccctatca	GGTGTCTCATTGGCATT	CA	tgaaaaaaaaaaccattc	-----	...	223...	ttcattcaacag	aaccgtgg
D.Yak	agcagcag	gtaaacgctctc...	1368...	-----	cattaggc--aacctcaaa--gt	-----	GTCTCATTGGCATT	-----	atattttgtgctgctgct	...	168...	gttccacacag	aatcgagg
		* **	*****		*		*****		* *			** ** ** **	

id=27350 gene=FBgn0010909 name=msn segment=chr3L.2560296.2561931\_-1 type=IN VIEW

Figure 2: CS=15.4



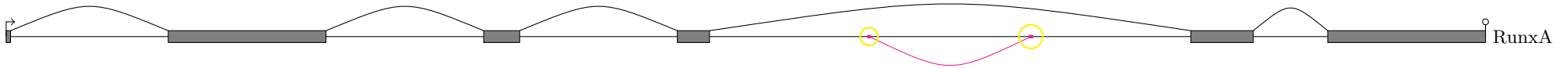
D.Mel	tttgtttg	gtaaattctttt...144...	aacagccgaagaaggttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-ggaagggac----	acatgaccctt...605...	ctgacacgttag	attcgagg
D.Sim	tttgtttg	gtaaattctttt...144...	aacagccgaagaaggttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-ggaagggac----	acatgcccctc...621...	ctgacacgttag	attcgagg
D.Sec	tttgtttg	gtaaattctttt...144...	aacagccgaagaaggttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATG</b>	-aggaagggac----	acatgcccct...623...	ctgacacgttag	attcgagg
D.Ere	tttgtttg	gtaaattctttt...142...	aacagccgaagaaggttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-ggaagggac----	acctagcccta...623...	ctgacacgttag	attcgagg
D.Ana	tttgtttg	gtaaattctttg...198...	aaatgaaatgaatgttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-ggaagggat----	taggattagtc...663...	ctgacacgttag	attcgagg
D.Gri	tttgtttg	gtaaattctttt...179...	taataacttatatattaca	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	---caggcat--	aggcaggcaaata...649...	tgaacacgttag	attcgagg
D.Moj	tttgtttg	gtaaattctttt...119...	taataacttaaatattaca	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-aaaaggcac	taggcagggc---...684...	cacacacgttag	attcgagg
D.Pse	tttgtttg	gtaaattctctt...157...	taacggaagagaatgttaag	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	aatcagga---	atccaatccaa...955...	cacacacgttag	atcgagg
D.Vir	tttgtttg	gtaaattccttt...176...	taataacttatatattaca	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	---gaggcac--	aggcaggcaataa...663...	cacacacgttag	attcgagg
D.Wil	tttgtttg	gtaaaattctc...231...	acaccaagcaaatgtgtaa	<b>TGAAATTCGGAG</b>	<b>TTAATGA</b>	---ggctat	caaaaaaatata...873...	acaacacattag	atacgagg
D.Yak	tttgtttg	gtaaattctttt...142...	aacagccgaagaaggttaaa	<b>TGAAATTCGGAG</b>	<b>TTGATGA</b>	-ggaagggac----	acgtagccctt...601...	ctgacacgttag	attcgagg
	*****	***** * *		* * *****	** ***	**		*** **	** *****

id=113938 gene=FBgn0010352 name=Nc73EF segment=chr3L.16953768.16954599.1 type=IN

D.Mel	cagttttg	gtaagtaaatcc...571...	----ccgaat--	agaagcaacaaaaa	<b>TCATTACACTCCGAATTCA</b>	aacc--	aacatctgccgctac-----	...77...	cgcaaaaaacag	gcgagcag
D.Sim	cagttttg	gtaagtaaatcc...575...	----tccgaat--	agaagcaacaaaaa	<b>TCATTACACTCCGAATTCA</b>	aacc--	aacatctgccgctac-----	...85...	aaaaaaaaacag	gcgagcag
D.Sec	cagttttg	gtaagtaaatcc...576...	----cgaat--	agaagcaacaaaaa	<b>CATTACACTCCGAATTCA</b>	aacc--	aacatctgccgctac-----	...83...	aaaaaaaaacag	gcgagcag
D.Ere	cagttttg	gtaagtaaatcc...576...	----ccgaat--	agaagcaacaaaaa	<b>TCATTACACTCCGAATTCA</b>	aacc--	aacatctgccgctac-----	...84...	aaaaataaacag	gtgagcag
D.Ana	cagttttg	gtaagtaaatcc...591...	----gaacta	agaagcaacaaaaa	<b>TCATTACACTCCGAATTCA</b>	aacc--	aacatctgccgctac-----	...86...	taaaaaacacag	gcgagcag
D.Gri	cagttttg	gtaagtaagcct...785...	----gcaca	atatacagacaacaa--	<b>TCATTACACTCCGAATTCA</b>	-----	aa----cgctac	aaaaactaatc...92...	cataaataacag	gcgagcaa
D.Moj	cagttttg	gtaagtaaggct...810...	----tacag	acaatacaatacaa--	<b>TCATTACACTCCGAATTCA</b>	-----	aaaaa--cgctac	aaaaaacta--...88...	aaaaataaacag	gtgaacag
D.Pse	agcttgtg	gtcagaaaaatc...773...	----ctttat	ctagaagcaacaag--	<b>TCATTACACTCCGAATTCA</b>	acc	caaaaacatttgcgcct-----	...114...	aaaaaaaaacag	gcgacacag
D.Vir	cagttttg	gtaagtaagcct...830...	----gcaca	atttacagaccacaa--	<b>TCATTACACTCCGAATTCA</b>	-----	aat----cgctac	aaaaaactaat...81...	cgaaataaacag	gcgagcag
D.Wil	cagttttg	gtaagtaagctt...802...	----gaagata	aaaacaccttga	<b>TCATTACACTCCGAATTCA</b>	aacta-	aacatthaatgccta-----	...119...	aaaaaaaaacag	gcgacacag
D.Yak	cagttttg	gtaagtaaatcc...574...	----ccgaat--	agaagcaacaaaaa	<b>TCATTACACTCCGAATTCA</b>	aacc--	aacatccgccgctac-----	...81...	aaataaacag	gtgagcag
	** **	** ** **		* * * * *	*****		* **		* ****	* ** **

id=113940 gene=FBgn0010352 name=Nc73EF segment=chr3L.16954703.16955434.1 type=IN VIEW

Figure 3: CS=14.3



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D.Mel ttgtcaga gtgagtaacttt...2151...-----aacgcgtctgttgatactgaTTACCCATaAATTAattgtaaatatgcagaaaagc...1262...-tgtaattttcag gtgcaagc
D.Sim ttgtcaga gtgagtaacttt...2078...-----aacgcgtctgttgatactgaTTACCCATaAATTAattgtaaatatgcagaaaagc...1317...-tgtaatttcag ggcgaagc
D.Sec ttgtcaga gtgagtaacttt...2083...-----aacgcgtctgttgatactgaTTACCCATaAATTAattgtaaatatgcagaaaagc...1316...-tgtaacttcag ggcgccgc
D.Ere ttgtcaga gtgagtagcccc...2111...-----aaagcgtctgttgatactgaTTACCCATaAATTAattgtaaatatgcagaaaagc...1248...-gtgtaattt-cag gcgctagc
D.Ana ctgtcaga gtaagtatccaa...1828...-----aaagcctctgttgatactgaTTACCCATaAATTAattgtaaatatgcaaaaagc...1577...gtatttttt-tag gtgccagt
D.Gri ctgtcaga gtaagtaccct...2311...-----aaagcgtctgttgatactgaTTACCCATAAATTaattgtaaatatgcaaaaa--...1578...aatttggtt-tag gtgccagc
D.Moj ctgtcaga gtgagtagcaat...2435...ttactgaagcgtctgttGTCTgaTTACCCATAAATTaattgtaaatatgcaaaaa--...2067...aatttggtt-tag gtgccagc
D.Vir ctgtcaga gtgagtaccatc...2328...-----aaagcgtctgttgatactgaTTACCCATAAATTaattgtaaatatgcaaaaa--...1908...aatttggtt-tag gtgccagc
D.Yak ttgtcaga gtgagtaaacc...2151...-----aatgcgtctgttgatactgaTTACCCATaAATTAattgtaaatatgcagaaaagc...1444...-tgtaatttcag ggcgaagc
***** ** **** ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** *

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id=38885 gene=FBgn0083981 name=RunxA segment=chrX\_20464612.20468102.-1 type=IN

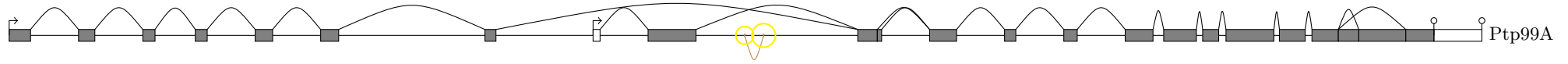
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D.Mel ttgtcaga gtgagtaacttt...2767...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...644...-tgtaattttcag gtgcaagc
D.Sim ttgtcaga gtgagtaacttt...2698...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...695...-tgtaatttcag ggcgaagc
D.Sec ttgtcaga gtgagtaacttt...2703...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...694...-tgtaacttcag ggcgccgc
D.Ere ttgtcaga gtgagtagcccc...2719...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...638...-gtgtaattt-cag gcgctagc
D.Ana ctgtcaga gtaagtatccaa...2825...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...578...gtatttttt-tag gtgccagt
D.Gri ctgtcaga gtaagtaccct...3036...-ctgtacacaaaaagcaacgtAATTaATGGagGTAGaaacatttaagccaatagca-----...850...aatttggtt-tag gtgccagc
D.Moj ctgtcaga gtgagtagcaat...3690...-ctgtacacaaaaagcaacgtAATTaATGGagGTAGaAGCAtttaagccaatagcattaat...810...aatttggtt-tag gtgccagc
D.Vir ctgtcaga gtgagtaccatc...3432...-ctgtacacaaaaagcaacgtAATTaATGGagGTAGaaacatttaagccaatagca-----...801...aatttggtt-tag gtgccagc
D.Yak ttgtcaga gtgagtaaacc...2765...attgtacacaaaaagccacgTAATTaATGGagGTAGaaacatttaagccaatagca-----...828...-tgtaatttcag ggcgaagc
***** ** **** ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** *

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id=38885 gene=FBgn0083981 name=RunxA segment=chrX\_20464612.20468102.-1 type=IN VIEW

Figure 4: CS=8.64



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D.Mel caattatg gtaaatagt tac...3217...catagttcgagt---tcgagtct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1682...tctcatttgca gccaagc
D.Sim caattatg gtaaatagtaac...3240...catagttcgagt---tcgagtct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1659...tctcatttgca gccaagc
D.Sec caattatg gtaaatagt tac...3232...catagttcgagt---tcgagtct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1667...tctcatttgca gccaagc
D.Ere caattatg gtaaatagt tac...3234...catagttggagt---tcgagtct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1665...tttcctttgca gccaagc
D.Ana aaattatg gtaaatagatat...3124...catagttcgagt---tcgagtct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1775...cttcctttacag gccaagc
D.Gri tgattatg gtaaatagt tgc...3585...----agtcgagtcgagttgagtcct ATAAAT TGGCTTTT TCCTTT -----ggcgtttgccttggccca...1320...tctcatttacag gccaagc
D.Moj tagttatg gtaaatagcttg...3579...gtttgcccgctgc---tcgagtct ATAAAT TGGCTTTT TCCTTT -----ggcccaactatcaactgcag--...1326...tctattttgca gccaagc
D.Per aagttatg gtaaatattgcc...2642...cgc-gtttgagtt---ccgagtcct ATAAAT TGGCTTTT TCCTTT -----acgttcctcttcccttttgc--...2263...ccctctttgca gccaagc
D.Pse aagttatg gtaaatattgcc...2739...cgc-gtttgagtt---ccgagtcct ATAAAT TGGCTTTT TCCTTT -----acgttccttcccttttgc--...2166...ccctctttgca gccaagc
D.Wil taattatg gtaaatagaaaa...3385...cgttttcatagt---tcgagtct ATAAAT TGGCTTTT ccTTTccTTTt actcttgctgcagctgctct...1512...gtcttttgca gccaagc
D.Yak caattatg gtaaatagtaat...3170...catggttcgagt---ttgagtcct ATAAAT TGGCTTTT CTTT ccCTTT ttgcagatgcagcagctgcc--...1729...tctcatttgca gccaagc
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id=28880 gene=FBgn0004369 name=Ptp99A segment=chr3R.25288298.25297372.1 type=IN

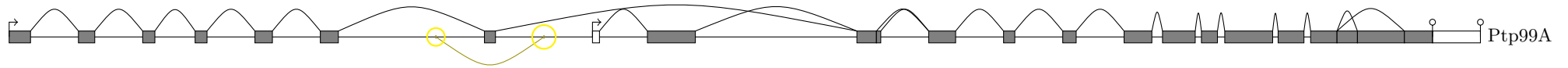
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D.Mel caattatg gtaaatagt tac...3406...-----ggtagcggcaaagcaaagc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1495...tctcatttgca gccaagc
D.Sim caattatg gtaaatagtaac...3423...-----gcaaagcagcggcaaagc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1478...tctcatttgca gccaagc
D.Sec caattatg gtaaatagt tac...3409...-----gcaaagcagcggcaaagc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1492...tctcatttgca gccaagc
D.Ere caattatg gtaaatagt tac...3409...-----cggaggcgaagcaaagc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1492...tttcctttgca gccaagc
D.Ana aaattatg gtaaatagatat...3321...-----aaagtgagcagcaatggc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1580...cttcctttacag gccaagc
D.Gri tgattatg gtaaatagt tgc...3764...-----acaaaagaaaaaagtca--AGAGaaGAGAAAtGCCATTATtgaattgtataaatttgc...1139...tctcatttacag gccaagc
D.Moj tagttatg gtaaatagcttg...3758...gcaggcaagt---ggagcaaaa---AAAGaGAGAAAtGCCATTATtgaattgtataaatttctct...1146...tctattttgca gccaagc
D.Per aagttatg gtaaatattgcc...2826...----tagaagaagtacagccaaag---AAAGGAGAAAtGCCATTATtgaattgtataaatttctat...2079...ccctctttgca gccaagc
D.Pse aagttatg gtaaatattgcc...2935...----tagaagaagtacagccaaag---AAAGGAGAAAtGCCATTATtgaattgtataaatttctat...1970...ccctctttgca gccaagc
D.Wil taattatg gtaaatagaaaa...3507...-----agcgaagcaaaagaaagc GAAGAGAAAGAGAAAtGCCATTATtgaattgtataaatttctgc...1394...gtcttttgca gccaagc
D.Yak caattatg gtaaatagtaat...3331...-----tgggagtgaagcgaagc AAAGAAAGtAGAAAtGCCATTATtgaattgtataaatttctat...1570...tctcatttgca gccaagc
**** ** * * ***** ** **

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id=28880 gene=FBgn0004369 name=Ptp99A segment=chr3R.25288298.25297372.1 type=IN VIEW

Figure 5: CS=10.56



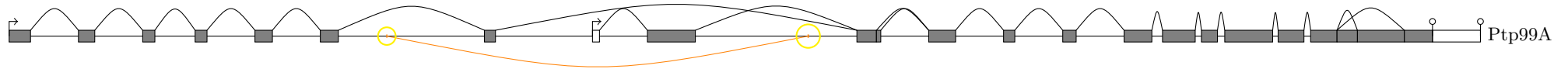
D. Mel	ccgtggag	gtgagttat	...3108...	--gcgagccactctaagctctgc-----	GGCTTGTTTTATGGTTTGG	---cactgcttttgacctttggt-...	844...	catctcttgcag	agccatga		
D. Sim	ccgtggag	gtgagttat	...3060...	--gcgagccactctaagctctgc-----	GGCTTGTTTTATGGTTTGG	---cactgcttttgacctttggt-...	854...	cttctcttgcag	agccatga		
D. Sec	ccgtggag	gtgagttat	...3054...	--gcgagccactctaagctctgc-----	GGCTTGTTTTATGGTTTGG	---cactgcttttgacctttggt-...	835...	cttctcttgcag	agccatga		
D. Ere	ccgtggag	gtgagttat	...2845...	-----ccgtctgaaa--agccgaaagc	AGCCACTTAAGCTGTTG	gcATGGcag	caatccgctgctaagc-...	1103...	attctcttgcag	agccacga	
D. Ana	cagttgag	gtaagtttgc	...2871...	tgaaaatccgtctgaaa--agc-----	AGCCACTTAAGCTGTTGGCATGGC	cag	caatccgctgcttagaa...	1611...	tcttgattgcag	agccatga	
D. Gri	ccgtgag	gtgagttcaca	...4433...	--gtgagctgcttaaagccagc-----	GGCTTGTTTTATGGTTT	---cg	cactgcttttgaccttac---...	460...	tttcttgcag	agtcacga	
D. Moj	cagtgag	gtaagcgag	...3885...	--gtgagctgcttaaagccagc-----	GGCTTGTTTTATGGTTT	---cg	cactgcttttgaccttac---...	1023...	tcccattacag	agccacga	
D. Per	ctgtggag	gtatgtagac	...2782...	tagagctctgggcaccg--agc-----	AGCCACTTAAGCTGTTGGCA	tggcag	caatccgctcta---...	782...	cccgattgcag	agccatga	
D. Pse	ctgtggag	gtatgtaaac	...2744...	tagagctctgggcaccg--agc-----	AGCCACTTAAGCTGTTGGCA	tggcag	caatccgctcta---...	794...	cccgattgcag	agccatga	
D. Wil	cagtgag	gtaagtcctg	...2804...	--gctttctggcttagctctgc-----	GGCTTGTTTTATGGTTAG	---cactgcttttgacctttt	ggt-...	562...	cttcttgcag	agtcacga	
D. Yak	ccgtggag	gtgagttat	...3125...	--gcgagccactctaagctctgc-----	GGCTTGTTTTATGGTTGG	---cactgcttttgacctttggt-...	847...	attctcttgcag	agccatga		
	* * * * *	** *		*	**	** **	***	** * * *	* * *	** * * *	** * * *

id=28874 gene=FBgn0004369 name=Ptp99A segment=chr3R.25252813.25256847.1 type=IN

D. Mel	cgaaggag	gtgagtgtaga	...3763...	cgctgaagtgaagttttta	TAAATgCATAAAACGAGTC	---aaagtcctgggctgccaag-----	...1142...	cgctctttccc	tgtcatca	
D. Sim	cgaaggag	gtgagtgtaga	...3756...	cgccgaagtgaagttttta	TAAATgCATAAAACGAGTC	---aaagtcctgggctgccaag-----	...1149...	cgctctttccc	tgtcatca	
D. Sec	cgaaggag	gtgagtgtaga	...3763...	cgccgaagtgaagttttta	TAAATgCATAAAACGAGTC	---aaagtcctgggctgccaag-----	...1142...	cgctctttccc	tgtcatca	
D. Ere	cgaaggag	gtgagtgtaga	...4134...	----tgtgtgctggtgcccgccta	CCGT-taTAATGaGTTTc	AAGTGGTTc	-cctgcataggcaggttaatt...	765...	cgctctttccc	tgtcatca
D. Ana	cgaaggag	gtgagtgtaga	...4241...	tgccgagtggtttggtacc	GCTA-TGT-TatAATGaGTTTc	AAGTGGTTc	-cctgcataggcaggttaatt...	654...	tgtctcttccc	tgtcatca
D. Gri	tgaaggag	gtgagttttca	...3253...	--gcgaagtgaagtttttatt	AAATgCATAAAACGAGTC	---aaagtcgt-gactatgtgtg	-----	1654...	ttgtctgtctc	tgtcatca
D. Moj	tgaaggag	gtgagtgtaga	...3771...	----ctgaagtgaagtttttatt	AAATgCATAAAACGAGTC	---aaagtcgt-gactgtgtatg	-----	1136...	ggtgtctgtctc	tgtcatca
D. Per	cgaaggag	gtgagtgtaga	...4101...	----cgtgtgtggttagccatac	-TGT-TatAATGaGTTTc	AAGTGGTTc	gcctgcataggcaggttaatt-	799...	tgtctctgtctc	tgtctgtc
D. Pse	cgaaggag	gtgagtgtaga	...4108...	----cgtgtgtggttagccatac	-TGT-TatAATGaGTTTc	AAGTGGTTc	gcctgcataggcaggttaatt-	792...	tgtctctgtctc	tgtctgtc
D. Wil	tgaaggag	gtgagtgtaga	...3264...	cgctgaagtgaagttttta	TAAATgCATAAAACGAGTC	---aaagtcgtgctgccaag-----	...1641...	tctcattctca	catcagca	
D. Yak	cgaaggag	gtgagtgtaga	...3715...	cgccgaagtgaagttttgta	TAAATgCATAAAACGAGTC	---aaagtcctggactgccaag-----	...1191...	cgctctttccc	tgtcatca	
	*****	*****		*** **	* * * * *	**	* * *	*	* * *	**

id=28876 gene=FBgn0004369 name=Ptp99A segment=chr3R.25256963.25283290.1 type=IN VIEW

Figure 6: CS=10.56



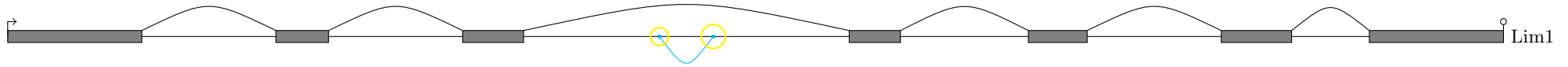
D.Mel	ccgtggag	gtgagttattta...1980...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcacgcagat----	1978...	catctcttgcag	agccatga
D.Sim	ccgtggag	gtgagttattta...1924...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcacgcagat----	1996...	cttctcttgcag	agccatga
D.Sec	ccgtggag	gtgagttattta...1925...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcacgcagat----	1970...	cttctcttgcag	agccatga
D.Ere	ccgtggag	gtgagttatcgc...1981...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcacgcagat----	1977...	attctcttgcag	agccacga
D.Ana	cagttgag	gtaagtttgcac...3392...	gcaaatcaattttaaagtgct	<b>GCAATTTTCATA</b>	<b>TTTGC</b> caacggcaacgcacaaaagt...	1097...	tcttgattgcag	agccatga
D.Gri	ccgtagag	gtgagttcacaa...2649...	ctaattaaatttctgcgct	<b>GTAAAGCATAAAAT</b>	tttgctcgtttaacgcctg----	2248...	tttcttgcag	agtcacga
D.Per	ctgtggag	gtatgtagacac...1956...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcgactgat----	1615...	cccgatttgcag	agccatga
D.Pse	ctgtggag	gtatgtaaacac...1919...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcgactgat----	1626...	cccgatttgcag	agccatga
D.Wil	cagttgag	gtaagttccctg...1209...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttttcaactttcaggcaaga----	2163...	cttcttgcag	agtcacga
D.Yak	ccgtggag	gtgagttatcgc...1978...	ctaattaaatttctgcgcc	<b>GTAAAGCATAAAAT</b>	ttcgcaactttcacgcagat----	2000...	attctcttgcag	agccatga
		* ** *** ** *	** * ** * ** * ** * **	* **** *	*		** ***	** ** **

id=28874 gene=FBgn0004369 name=Ptp99A segment=chr3R.25252813.25256847.1 type=IN

D.Mel	caattatg	gtaaatagttac...3887...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacaaagg...	1022...	tctcatttgcag	tgccaagc
D.Sim	caattatg	gtaaatagttac...3881...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacaaagg...	1028...	tctcatttgcag	tgccaagc
D.Sec	caattatg	gtaaatagttac...3873...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacaaagg...	1036...	tctcatttgcag	tgccaagc
D.Ere	caattatg	gtaaatagttac...3849...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacaaagg...	1060...	tttcttgcag	tgccaagc
D.Ana	aaattatg	gtaaatagatat...3922...	--cgagtgtgtccttggctt	<b>GCAAAAT</b> --- <b>GAAA</b> tt <b>ATTGC</b> cgggcttttgc---	atccgctg----	986...	cttctttacag	tgccaagc
D.Gri	tgattatg	gtaaatagttgc...4057...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttacattgaatacactt---	852...	tctcatttgcag	tgccaagc
D.Per	aagttatg	gtaaatattgcc...3192...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacaacaca...	1717...	ccctcttgcag	tgccaagc
D.Pse	aagttatg	gtaaatattgcc...3287...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacacaca...	1622...	ccctcttgcag	tgccaagc
D.Wil	taattatg	gtaaatagaaa...3958...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcca---atccaccacca...	951...	gtcttttgcag	tgccaagc
D.Yak	caattatg	gtaaatagtaat...3804...	tattagtaaaataaattacc-----	<b>ATTTA</b> g <b>TGCT</b> tt <b>TTGC</b> c---	acttgcac---acacacaaagg...	1105...	tctcatttgcag	tgccaagc
		*****	*****	*** * ** *	** * ** *****	***	* *	*** **

id=28880 gene=FBgn0004369 name=Ptp99A segment=chr3R.25288298.25297372.1 type=IN VIEW

Figure 7: CS=9.6



```

D.Mel  gctgagcg gtaagttctggc...4510...---ggt---aagcgatgaaactcgaaCGCGTGTCagCATTttgCATGgcccagagcttaaatagtcag-----...394...cgattcttacag attcatta
D.Sec  gctgagcg gtaagtcctggc...4528...---gga---aagcgatgaaactcgaaCGCGTGTCagCATTttgCATGgcccagagcttaaacagtcag-----...376...cgattcttacag attcatta
D.Ere  gctgagcg gtaagtcctgga...4548...---gga---aagcgatgaaactcgaaCGCGTGTCagCATTttgCATGgcccagagcttaaacagtcag-----...356...cgattcttacag attcatta
D.Ana  cctaagcg gtaagtttcaga...4491...ctcagagctgaaaagtggag-----CGCGTGTCagCATTttgCATGGcccggagctca-----agtctgctc...412...ctgatttttacag attcatta
D.Gri  gctgagcg gtaagtggaaag...4333...---gtgaatgggaatgtgacc---gaCGCGTGTCaCCATTTTATatggcatacagctcagcg---ag-----...574...tctctcacacag attcatta
D.Moj  gctgagcg gtaagtgcggcc...4330...---gtgaatgggaatgtgacc---gaCGCGTGTCagCATTttTATGcatacagctcagcgataag-----...574...tctctcgcacag attcatta
D.Per  actgagcg gtaagtaccatc...4571...---aggacggagcaggacgga---gaCGCGTGTCagCATTttgCATGGcccacagatcagagaccagg-----...332...cgcttcttacag attcatta
D.Pse  actgagcg gtaagtaccatc...4569...---aggccggagccggacgga---gaCGCGTGTCagCATTttgCATGGcccacagatcagagaccagg-----...334...tgcttcttacag attcatta
D.Vir  gctgagcg gtaagtgaggca...4495...aacgtgccaggaga---gac---gaCGCGTGTCagCATTttTATGcatacagctcggcgataag-----...409...tctctcgcgag attcatta
D.Wil  gctgagcg gtaagtcagtc...4661...---ggggccgaggacatgaaa---gaCGCGTGTCaCATTttgCATGG---acgggccaactgtgagataa---...242...tcctctctgcag attcaata
D.Yak  gctgagcg gtaagtcctgcc...4484...-gcaaacggaaggaattgaa---CGCGTGTCagCATTttgCATGgcccagagcttaaacagtcag-----...420...cgattcttacag attcatta
** **** *****
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id=102442 gene=FBgn0026411 name=Lim1 segment=chrX.8662976.8681642\_-1 type=IN

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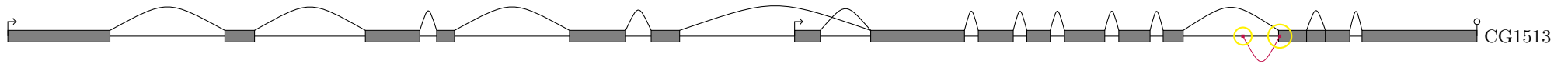
D.Mel  gctgagcg gtaagttctggc...4706...---gaaagaccagctacttagag-CATGAAATGgcGACACGTGaccagtcagcca--aataaac----...200...cgattcttacag attcatta
D.Sec  gctgagcg gtaagtcctggc...4721...---gaaagaccagctacttttag-CATGAAATGgcGACACGTGaccagtcagcca--aataaac----...185...cgattcttacag attcatta
D.Ere  gctgagcg gtaagtcctgga...4736...---gaaagaccagctacttagag-CATGAAATGgcGACACGTGaccagtcagcca--aataaac----...170...cgattcttacag attcatta
D.Ana  cctaagcg gtaagtttcaga...4688...accagaag--cagctacttaga-CCATGAAATGgcGACACGTGaccagccagtcagcagtcagca-----...217...ctgatttttacag attcatta
D.Gri  gctgagcg gtaagtggaaag...4633...gggagttg---ggctacttagta--GTGAAATGGcGACACGTGactgaagactgaa--acgagcc----...274...tctctcacacag attcatta
D.Moj  gctgagcg gtaagtgcggcc...4672...tgggcttg---ggctacttagtg-CATGAAATGgcGACACGTGaccgaaa---cg--aacgttcgggg...234...tctctcgcacag attcatta
D.Per  actgagcg gtaagtaccatc...4728...-gtggcag-tcagctacttaga-CCATGAAATGgcGACACGTGaccaaaaaaagag--aagaatc----...177...cgcttcttacag attcatta
D.Pse  actgagcg gtaagtaccatc...4729...-gtggcag-tcagctacttaga-CCATGAAATGgcGACACGTGaccaaaaaaagag--aagaatc----...176...tgcttcttacag attcatta
D.Vir  gctgagcg gtaagtgaggca...4765...gggggttg---ggctacttagtg-CATGAAATGgcGACACGTGaccaaaa---cg--aacgttcgggg...141...tctctcgcgag attcatta
D.Wil  gctgagcg gtaagtcagtc...4777...-gggttg-gcggctacttagaCCATGAAATGgTGACACGTGactgggg--ggcaccagttact---...128...tcctctctgcag attcaata
D.Yak  gctgagcg gtaagtcctgcc...4715...-gaaagaccagctacttagag-CATGAAATGgcGACACGTGaccagtcagcca--aataaac----...191...cgattcttacag attcatta
** **** *****
* ***** *

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id=102442 gene=FBgn0026411 name=Lim1 segment=chrX.8662976.8681642\_-1 type=IN VIEW

Figure 8: CS=15.4





D.Mel	ataaaaac	gtaagtcgtcca...213...ttcctctgtgtgtttacttt	GTTTgTCTAGAAAATCGA	-----accacaaataatcctatg----	120...tgaattttctag	aaaaccga
D.Ere	acaaaaac	gtaagtcatcca...218...ttcctctgtgtgtttacttt	GTTTgTCTAGAAAAT	-----cgaaccacaaaataatcct-----	130...taaattttctag	aaaaccga
D.Ana	acaaaaat	gtgagttgggcc...214...ttcctctgtgtgtttacttt	GTTTgTCTAGAAAAGT	-----ccaaccccaacctctctaca...	79...tgcattttctag	aaaaccga
D.Gri	ataagaat	gtaagttgcaac...311...tctcaatgtgtgtttacttt	GTTTaTCTAGAAAATTAAA	-----cctcaaatcaaaaccaatac--	113...ttaattttctag	aaaaccga
D.Moj	ataagaat	gtaagttgcaac...254...atagtttgggactttacttt	GTTTaTCTAGAAAATTAAA	-----ccaatacactaaactctgcc--	93...ttaattttctag	aaaactga
D.Per	ataagaat	gtaagttgtccg...255...atttctgtgtattacttt	GTTTaTCTAGAAAATTAA	-----tactaccaactatccaatcc-----	191...tgaattttctag	aaaaccga
D.Pse	ataagaat	gtaagttgtccg...255...atttctgtgtattacttt	GTTTaTCTAGAAAATTAA	-----tactaccaactatccaatcc-----	190...tgaattttctag	aaaaccga
D.Vir	ataagaac	gtaagttgcatg...268...tctctgtgtgtcttacttt	GTTTaTCTAGAAAATTA	-----aacctgaaccacaaaacaaa-----	120...ctaattttctag	aaaaccga
D.Wil	ataagaat	gtaagtttttct...309...tttctaaagtctttacttt	GTTTaTCTAGAAAATTA	-----aaaaaaaaaactaactaaa..	148...atgattttctag	aaaaccga
D.Yak	ataaaaac	gtaagttgtcca...212...ttcactgtgtgtttacttt	GTTTgTCTAGAAAATCGA	-----accacaaataatcctatg----	127...tgaattttctag	aaaaccga
	* ** **	** ** **	* ***** *	* *	*****	***** **

id=90583 gene=FBgn0033463 name=CG1513 segment=chr2R\_5771712-5772126\_-1 type=IN

D.Mel	ataaaaac	gtaagtcgtcca...370...agtgaatctgaatgaa-tctc--	TGAATTTCTAG	AAAACcga
D.Ere	acaaaaac	gtaagtcatcca...386...----aacctgaatgaa-tctcttaa--	ATTTTCTAG	AAAACcga
D.Ana	acaaaaat	gtgagttgggcc...331...----atctgaacgaactctcttg--	ATTTTCTAG	AAAACcga
D.Gri	ataagaat	gtaagttgcaac...462...tgatgtctaccacgta-catc--	TTAATTTCTAG	AAAACcga
D.Moj	ataagaat	gtaagttgcaac...385...gcttaaaaccaccgtgcatc--	TTAATTTCTAG	AAAACcga
D.Per	ataagaat	gtaagttgtccg...483...gaccgtgtatgtgtgcctc--	TGAATTTCTAG	AAAACcga
D.Pse	ataagaat	gtaagttgtccg...482...gaccgtgtatgtgtgcctc--	TGAATTTCTAG	AAAACcga
D.Vir	ataagaac	gtaagttgcatg...426...tgactaccacgtgaa-tctc--	TAATTTCTAG	AAAACcga
D.Wil	ataagaat	gtaagtttttct...495...----gtgcctttgtgtcatttga	TGATTTCTAG	AAAACcga
D.Yak	ataaaaac	gtaagttgtcca...376...agtgaatctgaatgaa-tctc--	TGAATTTCTAG	AAAACcga
	* ** **	** ** *	* *****	***** **

id=90583 gene=FBgn0033463 name=CG1513 segment=chr2R\_5771712-5772126\_-1 type=IN VIEW

Figure 9: CS=18



D.Me1	tgatgagg	gtgagtcctagt...1850...	acaactaaagcaacgacatc-----	ACAGgcAATAGTG	GCAACAACAaCAGCAG	-----	cgttagcaatcacaatcctt--...58...	cgatcatcaacag	cgatcatca		
D.Sim	tgatgagg	gtaagtcctagt...1819...	-----caacgacatcacaggcaata	-----	GTG	GCAACAACAACAGCAGCG	-----	ttagcaatcacaatccttgg...56...	cgatcatcaacac	catcatca	
D.Sec	tgatgagg	gtaagtcctagt...1795...	acaactaaagcaacgacatc-----	ACAGgCAATAGTG	GCAACAACAACAGCAGCG	-----	ttagcaatcacaatccttgg...56...	cgatcatcaacac	catcatca		
D.Ere	tgatgagg	gtgagtcctagt...1726...	-----caacgacatcacaggcaata	-----	GTG	GCAACAACAaCAGCAG	-----	cgttagcaataacaatcctt--...58...	catcatcaacac	catcatca	
D.Ana	tgatgaag	gtgagttcctat...1711...	actgaaactgaaacagaaac-----	-----	ACGACCAACA	ACAACAGCAaTAGCA	-----	acaatatccttagcaacaac-----	...122...	cagcatcaacac	taaaagca
D.Gri	tgatgagg	gtgagtctatct...1826...	-----agtgtgacggcaggaaggtc	-----	AAACA	ACAAcAAACAaCAGCAA	-----	caa-----ctagca--cacaaaacaca...	...163...	cagcagcagcag	tagaaagg
D.Moj	cgatgagg	gtgagtacttga...1925...	-----gtgtgacggcaggaaggtca	-----	ACAACA	ACAAcAGCAAaACAA	-----	caacat-ctagca--cacaaaac-----	...139...	cagcaacaacaa	cgacaag
D.Per	cgatgagg	gtgagtcctagt...1738...	acatcacacgcagctacaca-----	-----	AAACA	ACAAcACAACAACA	-----	-----cacacacacacacacatg...982...	cgccaacaacga	caccaaca	caccaaca
D.Pse	cgatgagg	gtgagtcctagt...1585...	-----ggcgcggcaggaaggtctac	AACAGAaACAACAACGAcTAATGAaAATAcaATA	ACAACAACAACAACAACAGG	aaacacaatagcaatagcaa-----	...141...	tgccaacaacaa	caccaaca	caccaaca	
D.Wil	tgatgagg	gtaagtcgact...1489...	-----acggcaggaaggtcaacaag	-----	AAATGcAAAC	GcAAACAACAACAACA	-----	ccacaacaactactactcct--...103...	attaagttcac	ccacaaaa	ccacaaaa
D.Yak	tgatgagg	gtgagtcctagt...1746...	-----aagcaacgacatcacaggca	-----	ATAGTG	GCAACAACAACAGCAGCG	-----	ttagcaataacaatccttgg...62...	cattatcagcac	cagcatca	cagcatca

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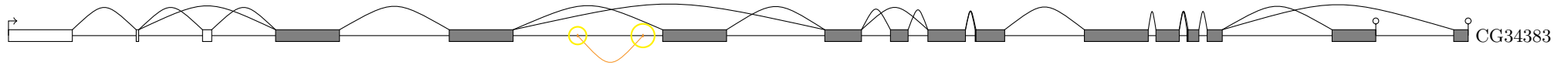
id=125767 gene=FBgn0085412 name=CG34383 segment=chr3R.9576169\_9578169.1 type=IN

D.Me1	ggcgacgg-----	gcaaaaagtcaa...206...	atgtgtttgtgactgtca-----	CTGTTGcT	GTTGTTGTTGCTGTTaTTGT	-----	cattattgttgttattgtt...471...	gtgaccttatag	cctcgatt	
D.Sim	ggcgacgg-----	gcaaaaagtcaa...210...	-----gttttgtgactgtcactgt	TGCTGTTGTT	GTTGTTGTTGT	-----	cattattgttgttattgtt...467...	gtgaccttatag	cctcgatt	
D.Sec	ggcgacgg-----	gcaaaaagtcaa...210...	-----gttttgtgactgtcactgt	TGCTGTTGTT	GTTGTTGTTGTTGTTGTT	-----	cattattgttgttattgtt...468...	gtgaccttatag	cctcgatt	
D.Ere	ggctacaa-----	gcaaaaagtcaa...212...	atgtgtttgtggctgtca-----	CTGTTGcT	GTTGTTGTTGT	-----	cattattgttgttattgtt...466...	gtgaccttatag	cctcgatt	
D.Ana	ggcatcgg-----	gcagaaaatcca...203...	-----tttgtttgtcaattgtcac	TGTTAcT	GTTGTTGTTGTTGatGTTGT	-----	tgtcgtcataattgttgtt--...533...	ccatcctttag	cctcaata	
D.Gri	aacaataatcaagctgtt	gt-----	...240...taaatattctctttcaaaa	TTGTTatTTGTTaTTGTTGTT	-----	-----	tgttataattgttgttgt--...520...	ttgattttacag	cctcgatt	
D.Moj	--tgccatttgaat	gcgggcgc-----	...231...ttggttttcactttcgttta	TTGTTatTTGTTaTTGTTGTTGTT	-----	-----	cattattgttgttattgtt...502...	ttcaatttcag	cctcgatt	
D.Per	cccagcaccctaaagt	gcaaa-----	...243...--tattcatgcagagatatt	TGTTTtGTTGTT	gTTGTTGTT	-----	ggtgtgtcattattgttat-----	...499...	tccgactttag	cctcgatt
D.Pse	cccagcaccctaaagt	gcaaa-----	...243...--tgtattatgcagagatatt	TTGTTTtGTTGTT	GTTGTTGTTGTTGTTGTTGTTGTT	TCATTATTGTTatGTTGTTTtGTT	tagttaatca--actggtaagc-----	...475...	tccgactttag	cctcgatt
D.Wil	-----tggtgtt	gcaaaaatacaa...254...	-----tttctgaacgagccttcaat	TTGTTTtGTTGTT	aaTTGTTaTATT	-----	gattattgtcattgttattgtt-----	...565...	tgaaaatttcag	cctcgatt
D.Yak	ggcgacga-----	gcaaaaagtcaa...208...	-----gttttgtgactgtcactgt	TGCTGTTGTT	GTTGTTGTTGTTGTT	-----	cattattgttgttattgtt...462...	gtgaccttatag	cctcgatt	

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

id=125769 gene=FBgn0085412 name=CG34383 segment=chr3R.9581329\_9582097.1 type=IN VIEW

Figure 10: CS=12.98



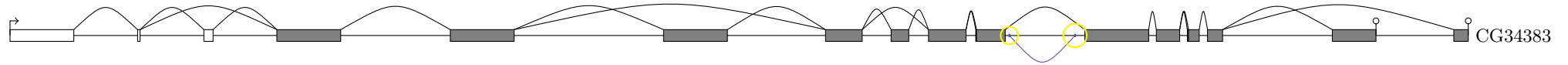
D. Mel	tgatgagg	gtgagtcctagt...	960...	aatttatgtcgaatc	gaaACCTTCCTGCCGTGCGC	---aca-caataca	aaatacatat--...	960...	cgatcatcaacag	cgatcatca
D. Sim	tgatgagg	gtaagtcctagt...	950...	aatttatgtcgaaact	cgaaACCTTCCTGCCGTGCGC	---a-caaatg	caaatgcaaatg	caaatac...	927...	cgatcatcaacac
D. Sec	tgatgagg	gtaagtcctagt...	933...	aatttatgtcgaaact	cgaaACCTTCCTGCCGTGCGC	---a-caaatg	caaatgcaaatg	caaatac...	930...	cgatcatcaacac
D. Ere	tgatgagg	gtgagtcctagt...	880...	aatttatgtcgaaact	cgaaACCTTCCTGCCGTGCGC	---gctaaca-	c-aatacatag	aca-----	910...	catcatcaacac
D. Ana	tgatgaag	gtgagttcctat...	783...	agtttatcaga	aaacaaagaaACCTTCCTGCCGTGCGC	---gcgaca-	caaacaccac	cat-----	1062...	cagcatcaacac
D. Gri	tgatgagg	gtgagtctatct...	1119...	caacaaaaaa	caaaaaaaACCTTCCTGCCGTGCGC	---aca-c-	aatgtgaaa	atccg-...	871...	cagcagcagcag
D. Moj	cgatgagg	gtgagtacttga...	1218...	aaacatcaaat	gaacaaaaACCTTCCTGCCGTGCGC	---cacaca-	cagacacac	acacat-----	849...	cagcaacaaca
D. Per	cgatgagg	gtgagtccaac...	699...	actgaaacaaa	aaacaagaaACCTTCCTGCCGTGCGC	---acacat-	cacacgcag	ctaca-----	1025...	cgccaacaacga
D. Pse	cgatgagg	gtgagtccaac...	708...	actgaaacaaa	aaacaagaaACCTTCCTGCCGTGCGC	---acacat-	cacacgcag	ctaca-----	1055...	tgccaacaaca
D. Wil	tgatgagg	gtaagtcgcact...	768...	ataaaaaaa	gaaacaaaaACCTTCCTGCCGTGCGC	---ccaca-	cgcgtaaaa	aaaaaa-----	838...	atattaagttc
D. Yak	tgatgagg	gtgagtcctagt...	891...	aatttatgtcgaat	cgaatcgaACCTTCCTGCCGTGCGC	---gctcaca-	c-aatataa	ataca-----	928...	cattatcagc
		***** *	** ***		*	*****		*	*	*

id=125767 gene=FBgn0085412 name=CG34383 segment=chr3R\_9576169\_9578169\_1 type=IN

D. Mel	tgatgagg	gtgagtcctagt...	1795...	---ggatgatgata	aacttgtata---GTGCAACGGCAGGAAGGT	catcatcgt	caaaaaaca	caact---...	124...	cgatcatcaacag	cgatcatca
D. Sim	tgatgagg	gtaagtcctagt...	1757...	---ggatgatgata	aacttgtata---GTGCGACGGCAGGAAGGT	---catcgt	caaaaaaca	caact...	121...	cgatcatcaacac	catcatca
D. Sec	tgatgagg	gtaagtcctagt...	1743...	---ggatgatgata	aacttgtata---GTGCGACGGCAGGAAGGT	---catcgt	caaaaaaca	caact...	121...	cgatcatcaacac	catcatca
D. Ere	tgatgagg	gtgagtcctagt...	1669...	-----atgata	aacttgtatagtgc---ACGGCAGGAAGGT	---catcgt	caaaaaaca	caact...	121...	catcatcaacac	catcatca
D. Ana	tgatgaag	gtgagttcctat...	1646...	-----atgaaa	aacttgtataaagcg---GCGGCAGGAAGGT	---caacat-	caacaaca	caataacc...	199...	cagcatcaacac	taaaagca
D. Gri	tgatgagg	gtgagtctatct...	1807...	tgggctggat	gataac---ataa---GTGTGACGGCAGGAAGGT	---caaca-	caacaaca	caacagca...	184...	cagcagcagcag	tagaaagg
D. Moj	cgatgagg	gtgagtacttga...	1905...	tgggctggat	gataac---ataa---GTGTGACGGCAGGAAGGT	---caaca-	caacaaca	caacgcaaca...	163...	cagcaacaaca	cgcaaaag
D. Per	cgatgagg	gtgagtccaac...	1533...	---ggatgata	cagggatcatgGTGGcGCGGCAGGAAGGT	---ctaca-	cagaaaca	caacag...	190...	cgccaacaacga	caccaaca
D. Pse	cgatgagg	gtgagtccaac...	1563...	---ggatgata	cagggatcatgGTGGcGCGGCAGGAAGGT	---ctaca-	cagaaaca	caacag...	199...	tgccaacaaca	caccaaca
D. Wil	tgatgagg	gtaagtcgcact...	1470...	-----tgata	aacttgtatagtgcga---CGGCAGGAAGGT	---caaca-	agaatg	caacagca...	136...	atattaagttc	ccaaaa
D. Yak	tgatgagg	gtgagtcctagt...	1692...	-----atgata	aacttgtatagtgc---ACGGCAGGAAGGT	---catcgt	caaaaaaca	caact...	127...	cattatcagc	cagcatca
		***** *	** ***	*** *	**	*****	*	*	*	**	*

id=125767 gene=FBgn0085412 name=CG34383 segment=chr3R\_9576169\_9578169\_1 type=IN VIEW

Figure 11: CS=10.56



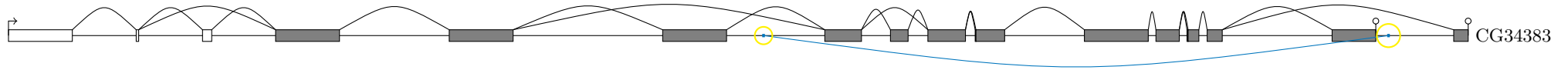
D.Mel	actctaag	gatatcaagg	gcttagt	AGAAGTTTTTGCATT	--ttgtgtccaccactg	cgctgt----	...608...	gctacctgcag	aaactgga
D.Sim	actctaag	gatatcaagg	gcttagt	AGAAGTTTTTGCATT	--ttgtgtccaccactg	cgctgt----	...607...	cctacctgcag	aaactgga
D.Sec	actctaag	gatatcaagg	gcttagt	AGAAGTTTTTGCATT	--ttgtgt-caaccactg	cgctgt--	...611...	ccttccttcag	aaactgga
D.Ana	actcaaag	gatatcaagg	gcttagt	AGAAGTTTTTGCATT	--tgtgtccacatctg	gacaaga--	...380...	ctaaccttcag	aaactgga
D.Gri	actcaaag	gtagctcaggtg	cccta	GTAGAAGTTTTTGCATT	atatgtgt-cagctatg	-gtat----	...584...	aatccctcacag	aaactgga
D.Moj	actctaag	gtagcccaggtg	cccta	GTAGAAGTTTTTGCATT	taTATG	tgt-cagacat	atgtatgtga...	771...tatggcctacag	aaactgga
D.Per	actcaaag	gtagccaagg	tgcccta	GTAGAAGTTTTTGCATT	-gctacgtgt-----	tttttgtctgc...	...243...	cttgatttcag	aaactgga
D.Pse	actcaaag	gtagccaagg	tgcccta	GTAGAAGTTTTTGCATT	-gctacgtgt-----	tttttgtctgc...	...243...	cttgatttcag	aaactgga
D.Vir	actcaaag	gtagcccaggtg	cccta	GTAGAAGTTTTTGCATT	TATAT	gtgt-cagata	ttcatatact-...	1058...gtgatttcacag	aaactgga
D.Wil	actcaaag	gtagctaagg	tgcc	TAGTAAAAGTTTTTGCATT	-----	aatacaataaacataa	att-...	216...tgtccattacag	aaactaga
D.Yak	actctaag	gatatcaagg	gcttagt	AGAAGTTTTTGCATT	--tcgtgtccaccactg	cgctgt----	...646...	cccacctgcag	aaactgga
	****	***	*	*****	*****	*		***	*****

id=125778 gene=FBgn0085412 name=CG34383 segment=chr3R\_9583506\_9584179\_1 type=IN

D.Mel	actctaag	gatatcaagg	tg...549...	aaagct-caaa--	tgataggatt----	AATGCAAAAAGACTTCT	---cgtgtttgtggc-	tctgctgc-----	...45...	gctacctgcag	aaactgga
D.Sim	actctaag	gatatcaagg	tg...548...	aaagct-caaa--	tgataggatt----	AATGCAAAAAGACTTCT	---cgtgtttgtggc-	tctgctgc-----	...45...	cctacctgcag	aaactgga
D.Sec	actctaag	gatatcaagg	tg...552...	aaagct-caac--	tgataggatt----	AATGCAAAAAGACTTCT	---cgtgtttgtggc-	tctgctgc-----	...45...	ccttccttcag	aaactgga
D.Ana	actcaaag	gatatcaagg	tg...320...	aaaagct-caac--	t-attgaatt--	GAATGCAAAAAGACTTCT	---cattttttagct-	tctgctgc-----	...46...	ctaaccttcag	aaactgga
D.Gri	actcaaag	gtagctcaggtg	...503...	agcttgaagt	tatagcttaa----	AATGCAAAAAGACTTCTAC	---agtccgcctcaa-	tcagttgt-----	...65...	aatccctcacag	aaactgga
D.Moj	actctaag	gtagcccaggtg	...697...	ccctagggc	tag--gcatagcc--	CATGATGCAAAAAGACTTCTAC	-----gtttcg	cctatcaattaaa...	60...tatggcctacag	aaactgga	
D.Per	actcaaag	gtagccaagg	tg...185...	tcagtgacaaa--	cgattgaa-----	TGCAAAAAGACTTCTAC	---caaccgcctt--	tcactgcat-----	...42...	cttgatttcag	aaactgga
D.Pse	actcaaag	gtagccaagg	tg...185...	tcagtgacaaa--	cgattgaa-----	TGCAAAAAGACTTCTAC	---caaccgcctt--	tcactgcat-----	...42...	cttgatttcag	aaactgga
D.Vir	actcaaag	gtagcccaggtg	...988...	tcaatc--	cagttcctgtttta	GTAT	taAATGCAAAAAGACTTCTAC	-----atgatg	tatttctgcgatt--	52...gtgatttcacag	aaactgga
D.Wil	actcaaag	gtagctaagg	tg...153...	caaatgt	gattgaacttcag	ATGCAAAAAGACTTCTACTA	aaacgc-----	cgctcgc	atgctgc--	45...tgtccattacag	aaactaga
D.Yak	actctaag	gatatcaagg	tg...587...	aaagct-caaa--	tgataggatt----	AATGCAAAAAGACTTCT	---cgtgtttgtggc-	tctgctgc-----	...45...	cccacctgcag	aaactgga
	****	***	*	*****	*****	*		*		***	*****

id=125778 gene=FBgn0085412 name=CG34383 segment=chr3R\_9583506\_9584179\_1 type=IN VIEW

Figure 12: CS=17.16



D. Mel	ggcgacgg-----	gcaaaaagtcaa...239..tgttgc-tggt-attgtcat-ta---	T-----TGTtg-TGTTa-TGTTGTT--TTGT-----	tttaattaatcaactggaag...444...gtgaccttatag	cctcgatt
D. Sim	ggcgacgg-----	gcaaaaagtcaa...195..gatagtgcctatttgttttGTTGac	TGTCacTGTTGcTGTTgTTGTTGTTg-TTGT	cattattgttgtgttatggt...467...gtgaccttatag	cctcgatt
D. Sec	ggcgacgg-----	gcaaaaagtcaa...195..gatagtgcctatttgttttGTTGac	TGTCacTGTTGcTGTTgTTGTTGTTg-TTGT	ttgTTGTTGTTcattattgttgtgttatggt...468...gtgaccttatag	cctcgatt
D. Ere	ggctacaa-----	gcaaaaagtcaa...236..tgctgt-tggt-gttgtcat-ta---	TTGTTGTTGTTG-TgTTG-TGTTGTT--TTGT-----	tttaattaatcaactggaag...434...gtgaccttatag	cctcgatt
D. Ana	ggcatcgg-----	gcagaaaatcca...203..tttgttttgcattgtgcac-----	TGTTacTGTTGTTgTTGTTgaTTGTG-TTGT-----	cgtcataaattgttgttgtgtggt...530...ccatcctttag	cctcaata
D. Gri	aacaataatcaagctggt	gt-----...238..actaat---attctcttttcaa---	AATTGTTat--TTGTTaTTGTTGTTTGT-----	ataattgttgtgttgttgtt...516...ttgattttacag	cctcgatt
D. Moj	--tgccattgtgaat--	gcggcgc-----...230..tttggttttcactttcgttt---	ATTGTtAT--TTGTTaTTGTTG-TTGT-----	cattattgttgtgttgtt...502...ttcaatttcag	cctcgatt
D. Per	cccagcaccctaaagt---	gcaaa-----...239..---catgtattcatgcagagata---	TGTTTGTTTTGTGTTGTTGTTGTTG-TTGT-----	cattattgttatgttgtt...491...tccgactttag	cctcgatt
D. Pse	cccagcaccctaaagt---	gcaaa-----...241..---tatgtatttatgcagagata---	TGTTTGTTTTGTGTTGTTGTTGTTG-TTGT-----	cattattgttatgttgtt...498...tccgactttag	cctcgatt
D. Wil	-----tggctggtt	gcgaaaatacaa...278..---ttgt-tgtaattgttatatt---	TGTTaTTGTcaTTGTTGTTg-TTGT-----	attctcattattgttgtatt...541...tgaaatttcag	cctcgatt
D. Yak	ggcgacga-----	gcaaaaagtcaa...193..gatagtgcctatttgttttGTTGac	TGTCacTGTTGcTGTTgTTGTTgTTG-TTGT-----	cattattgttgttgttgtt...462...gtgaccttatag	cctcgatt
		*	** * * * * * * * * * * * * * * *		** ** * * * *

id=125769 gene=FBgn0085412 name=CG34383 segment=chr3R.9581329\_9582097\_1 type=IN

D. Mel	-----aaaaaaa	caga-aaaaa-agagaaaaaacgacaacaagaataaaactgcaacgcaatagcaacaagaacaagtacaacaacaacaag
D. Sim	-----aaaaaata	caga-aaaaatagagaaaaaacgacaacaagaataaaactgcaacgcaatagcaacaagaacaagt---acaacaacaacaag
D. Sec	-----aaaaaata	caga-aaaaatagagaaaaaacgacaacaagaataaaactgcaacgcaatagcaacaagaacaagt---acaacaACAACAAG
D. Ere	-----aaaaaata	caga-aaaat-atataaagaacgacaacaagaataaacagcaacgcaatagcaacaagaacaagt-----ACAACAACAAG
D. Ana	atactaaacataaaaacaata	gaacaaaaaaaatagaaaaatgacaacaagaataaacagcaacgcaatagcaacaagaacaagtaca---ACA
D. Gri	-----agaaaaaa	aaga-----aaatataaatcag-----ttcaatgcaatcacaataactaac-----
D. Moj	-----tcacaaaata	ctaa-----acgacaaaaacaacaaca---ctaagccatt-----
D. Per	ttcac-----aaacaaca	aaaa-----tactaaaaaccgacaacaagaataaacagcaacgcaatagcaacaagaacaagtacaacaACAACAACAAC
D. Pse	ttcac-----aaacaaca	aaaa-----tactaaaaaccgaca
D. Wil	-----aatgaaaa	caaa-----aaaaaaaagaaaacat-----caacgcatatc-----
D. Yak	-----aaaaaata	caga-aaaaa-taaaaaaaacgacaacaagaataaacagcaacgcaatagcaacaagaacaagt-----ACAACA--
		* * * * *

D. Mel	cACAAGaACAACAagAACAA--CAA-----	cagatatacattacgtaag-----...916...ttcgaccacag	agaaagcc
D. Sim	cACAAGAACAAcAAgAACAA--CAACAGATAtaCGAT	-----tacgtaagtccaggtttgta...855...ttcgaccacag	agaaagcc
D. Sec	cACAAGAACAAcAAgAACAA--CAACAGATAtaCGAT	-----tacgtaagtccaggtttgta...859...ttcgaccacag	agaaagcc
D. Ere	CACAAG--aACAAGaACAA--CAA-----	cagatatacattacgtaag-----...936...ttcgaccacag	aaaaagcc
D. Ana	-ACAACAAGCACAagAACAA--CAacAA-CA-----	aaagaaatcagattccgttaa...829...gttaaccacag	aaaaagcc
D. Gri	GACAACAACAACAACAACAAGCAATT	-----gcaacaactacaacaagtac-----...1151...gttaaccgacag	agaaagcc
D. Moj	-GCAACAACAACAACAAGTA--CAAT-----	cagcaacaacaacaagcaca-----...1465...atctcttcacag	agaaagcc
D. Per	tACAACAAGCACAAGAACAA--cACA-----	gaaaaatcagatt--tgaatcc-----...1023...gtcaaccacag	agaaagcc
D. Pse	-ACAAGAATA--AACAGCAACGCAATAGcACAagAACAAgtaacaacaacaactac-----	...1061...gtcaaccacag	agaaagcc
D. Wil	---ACAAGAACAAcAAcaA--CAACAAGCA-----	catgaacaacaacaacaaga-----...1344...taccatcatag	agaaagcc
D. Yak	-ACAAG--cACAAGAACAA--CAACAGATAtaCGAT	-----tacgtaagtccaggtttgta...957...ttcgaccacag	agaaagcc
	** * * * *		* ** * * * * *

id=125789 gene=FBgn0085412 name=CG34383 segment=chr3R.9587372\_9588422\_1 type=IN VIEW

Figure 13: CS=12.98



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D.Mel  atttggag gtgagtctgaaa...1003...ttagccgggaaatgagtcgcGTGCATGAttTATGgccccgggttcctggccaag-----...321...gccattttagt gccagtgc
D.Sim  atttggag gtgagtctgaac...1020...ttagccgggaaatgagtcgcGTGCATGAttTATGgccccgggttcctggccaag-----...326...gccattttagt gccagtgg
D.Sec  atttggag gtgagtctgaac...993...ttagccgggaaatgagtcgcGTGCATGAttTATGgccccgggttcctggccaag-----...328...ccccttgttagt gccagtgc
D.Ere  attttagag gtgagtctgcta...1693...ttagccgggaaatgagtcgcGTGCATGAttTATGgccccgggttcctggccaag-----...387...gccattttagt gccagtgc
D.Ana  acttggag gtaagtgtgaa...1127...ttagccgggaaatgagtcgcGTGCATGAttTATGgtcacaggcttctgggccg-----...219...gtgccatttcag gccagcgg
D.Gri  acatggag gtaagtcata...2145...tcagccaggaaatgagtcgcGTGCATGAttTATG-----cgctgggcccaagcagct...552...tttggcccacag ccaaatgc
D.Vir  acttggag gtaggtacccc...2258...tcagccaggaaatgagtcgcGTGCATGAttTATG-----ccaggctctcatttcgcatg-----...63...ttcccctgcag cccgcggc
D.Wil  acttggag gtaagtctcga...811...cagagcaggaaatgagtcgcGTGCATGAttTATG-----tgcttggtacgtgaggcg...146...ctttattacag acctcggc
D.Yak  atttggag gtgagtctgaac...1071...ttagccgggaaatgagtcgcGTGCATGAttTATGgccccgggttcctggccaag-----...388...gctcattttagt gccagtgc
* * ** ** ** * * **** *

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id=125765 gene=FBgn0085412 name=CG34383 segment=chr3R.9573686\_9575087\_1 type=IN

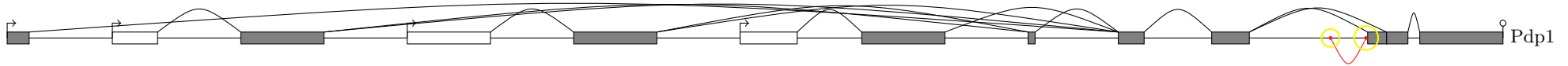
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D.Mel  cgtggccg gtaagtagagtc...307...--ctagatgattaatgataaaa-CATATCATatGCATa--ccatcta--atctaaagcgtt---...560...atatttttctag gaaatccc
D.Sim  cgtggccg gtaagtagagtc...318...--ctagatgattaatgataaaa-CATATCATatGCATa--ccatcta--atctaaagcgtt---...565...atatttttctag gaaatccc
D.Sec  cgtggccg gtaagtagagtc...318...--ctagatgattaatgataaaa-CATATCATatGCATa--ccatcta--atctaaagcgtt---...559...atatttttctag gaaatccc
D.Ere  cgtggccg gtaagtagagtc...315...--ctagatgattaatgataaaa-CATATCATatGCATa--ccatcta--atgtaaagcgtt---...588...atatttttctag gaaatccc
D.Ana  cgtagccg gtgagtagaatt...325...--ctagatgattaatgataaaa-CATATCATaaGCATa--ccatcta--atctaagcgtt---...535...atatttttctag gcaatccc
D.Gri  tgttcgag gtatgtaaatga...383...ttctagacgattaatgagta---CATATCATatGCATa--acatcca----caaagtgttacg...428...gcatacttttag gcaatccc
D.Vir  tgttcgag gtacgtagatgc...352...ttctagacgattaatgaata---CATATCATatGCATatgcatcta----taaagtgttac-...665...gcatacttttag gcaatccc
D.Wil  ttagccg gtacgtagaatt...391...--tagatgattaatgataaaatc-CATATCATaaGCATa--ccatctaataatctaaattg-----...777...gcatttttctag gcaatccc
D.Yak  cgtggccg gtaagtacagtc...315...--ctagatgattaatgataaaa-CATATCATatGCATa--ccatcta--atctaaagcgtt---...566...atatttttctag gaaatccc
** ** * ** ** * **** *

```

id=125787 gene=FBgn0085412 name=CG34383 segment=chr3R.9586085\_9587029\_1 type=IN VIEW

Figure 14: CS=11.34



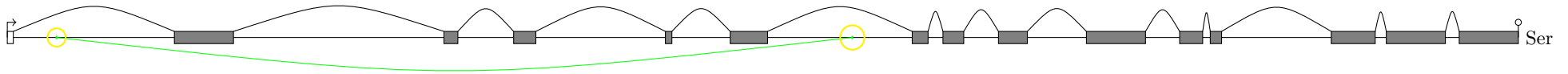
D. Mel	cgagtcaa	gtgagtata	gct...439...	-taagttacc-c-----	acaatgtct----	TATCAAATGCTAAATGTTAA	-----	agagacaccaaccgaaggcc...	188...	ttgatattccag	cattttcg	
D. Sim	cgagtcaa	gtgagtata	gct...450...	-taagttacc-c-----	acaatgtct----	TATCAAATGCTAAATGTTAA	-----	agagacaccaaccgaaggcc...	186...	ttgatattccag	cattttcg	
D. Sec	cgagtcaa	gtgagtata	gct...450...	-taagttacc-c-----	acaatgtct----	TATCAAATGCTAAATGTTAA	-----	agagacaccaaccgaaggcc...	186...	ttgatattccag	cattttcg	
D. Ere	cgagtcaa	gtgagtacag	cg...461...	--aagttaccac-----	acaatgtct----	TATCAAATGCTAAATGTTAA	-----	agagacacataccgaaggcc...	190...	ttgatattccag	cattttcg	
D. Ana	cgagtcaa	gtgagtata	aata...196...	-taagttacc-c-----	acaatgtct----	TATCAAATGCTAAATGTTAA	---	tgagacacacaacgaaggac...	191...	ttgatattccag	cattttcg	
D. Moj	cgaatcaa	gtgagtatt	gca...235...	aatgtttt-----	gctcatgtct----	TATCAAATGCTAAATGTTAA	aggctg-	atttcattccaatt---	186...	ttgatattccag	cattttca	
D. Per	cgagtcaa	gtaagtaaat	gt...406...	-----	tacc-cgaaaagaatgtct----	TATCAAATGCTAAATGTTAA	agatagagatacagatacag----	...	203...	ttgatattccag	cattttcg	
D. Pse	cgagtcaa	gtaagtaaat	gt...406...	-----	tacc-cgaaaagaatgtct----	TATCAAATGCTAAATGTTAA	agatagagatacagatacag----	...	201...	ttgatattccag	cattttcg	
D. Vir	cgaatcaa	gtgagtatg	cga...343...	aatgtttt-----	gctcatgtct----	TATCAAATGCTAAATGTTAA	aggctgaattacattccaat----	...	215...	ttgatattccag	cattttca	
D. Wil	cgagtcaa	gtaagtata	ca...488...	----	atttat-----	gtaaatgacttatt	TATCAAATGCTAAATGTTAA	aaa-agggtcccaa--	agttac...	242...	ttgatattccag	cattttca
D. Yak	cgagtcaa	gtgagtata	tcc...486...	-taagttacc-c-----	acaatgtct----	TATCAAATGCTAAATGTTAA	-----	agagacacataccgaaggcc...	200...	ttgatattccag	cattttcg	
	*** **	** **		*		*** **	*****	*	*	*	*****	

id=100216 gene=FBgn0016694 name=Pdp1 segment=chr3L.7809826.7810536.-1 type=IN

D. Mel	cgagtcaa	gtgagtata	gct...653...	-aacagctctgtg--	agccattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Sim	cgagtcaa	gtgagtata	gct...662...	-aacagctctgtg--	agccattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Sec	cgagtcaa	gtgagtata	gct...662...	-aacagctctgtg--	agccattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Ere	cgagtcaa	gtgagtacag	cg...677...	-aacagctctgtg--	agccattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Ana	cgagtcaa	gtgagtata	aata...413...	cgaacagctctgtg--	aaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Moj	cgaatcaa	gtgagtatt	gca...447...	---	acagctctgtgaaaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttca
D. Per	cgagtcaa	gtaagtaaat	gt...635...	-gaacagctctgtg--	aaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Pse	cgagtcaa	gtaagtaaat	gt...633...	-gaacagctctgtg--	aaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
D. Vir	cgaatcaa	gtgagtatg	cga...584...	-gaacagctctgtg--	aaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttca
D. Wil	cgagtcaa	gtaagtata	ca...756...	-gaacagtttgtg--	aaacattg	TTAACATTTAGTATTTGATA	ttccag	cattttca
D. Yak	cgagtcaa	gtgagtata	tcc...712...	-aacagctctgtg--	agccattg	TTAACATTTAGTATTTGATA	ttccag	cattttcg
	*** **	** **		*****	*** **	*	*****	*****

id=100216 gene=FBgn0016694 name=Pdp1 segment=chr3L.7809826.7810536.-1 type=IN VIEW

Figure 15: CS=15.4



D. Mel	tgtcaacg	gtaaaaccctc...	318...	-gtgtttaatcaaaggcgaaa	AGTAA	aaGTGCAACA	atGTGAA	----atgcgaaacgagtgcccc...	1414...	caattgttacag	ctaaagat	
D. Sim	tgtcaacg	gtaaaaccctc...	320...	-gtgcttaatacaaaggcgaaa	AGTAA	aaGTGCAACA	atGTGAA	----atgcgaaacgagtgcccc...	1399...	caattgttacag	ctaaagat	
D. Sec	tgtcaacg	gtaaaaccctc...	320...	-gtgtttaatcaaaggcgaaa	AGTAA	aaGTGCAACA	atGTGAA	----atgcgaaacgagtgcccc...	1408...	caattgttacag	ctaaagat	
D. Ere	tgtcaacg	gtaaaaccctc...	309...	-gtgtttaatcaaaggcgaaa	AGTAA	aaGTGCAACA	atGTGAA	----atgcgaaacgagtgcccc...	1389...	caattgttacag	ctaaagat	
D. Ana	ctgcaacg	gtaaatTTTcaa...	415...	-gtgtttaatcaaagtcgaa	AAGTAA	aaGTGCAACA	-----atgtgcgaattca	-ccgacc...	1461...	caattgttacag	caacatcg	
D. Gri	ggtaaacg	gttaaaatgcc...	2101...	-caacaacagcagaagcagta	----GCAGC	---AGCAA	cAGTAA	caaatgcgtgtcaattagcg	----...	87...	cttaacaacaa	
D. Moj	tgcaaacg	gtaaacctaaa...	495...	-ttgttaataaaaagcactaa	AGTAA	aaGTGCAACA	atCGGA	tggaatgcgaatgcgaatg	----...	1409...	cagcaacaacag	
D. Per	ctgcaacg	gtaaatctcaac...	427...	-gagagaaagagatatataaa	AGTAA	aaGTGCAACA	-----atgtgcggtggcg	-gccccac...	1487...	atTTTgttacag	caacatcc	
D. Pse	ctgcaacg	gtaaatctcaac...	391...	-gagagagagatatataaa	AGTAA	aaGTGCAACA	-----atgtgcggtggcg	-gccccac...	1545...	atTTTgttacag	caacatcc	
D. Vir	tgcaagcg	gtaaacatTaaa...	174...	-caatagcagcaataacagca	TAGCAAC	CaGC	---AA	caGCAGCAA	caacaacaacaacaata	----...	1671...	taacaacaacag
D. Wil	gcacaacg	gtaaaaatgtca...	399...	-cacactggcaaaaaataaa	AGTAA	AGTGC	aaACAA	-----atatatgtgaatgtgagagg	---	1183...	caaatgttacag	
D. Yak	tgtcaacg	gtaaaaccctc...	334...	-gtgtttaatcaaaggcgaaa	AGTAA	aaGTGCAACA	atGTGAA	----atgcgaaacgagtgcccc...	1398...	caattgttacag	ctaaagat	

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id=18675 gene=FBgn0004197 name=Ser segment=chr3R\_23017847\_23019665\_-1 type=I5

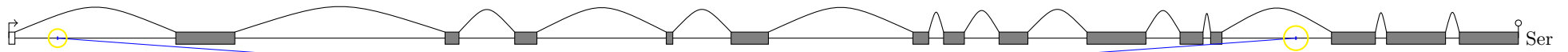
D. Mel	gaatgcga	gtaagtagctta...	2100...	-aagccagaagaaaaattact	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgatttcgca-	...1006...	ttaatccacag	atgcagac	
D. Sim	gaatgcga	gtaagtagctta...	2070...	-aagccagaagaaaaattact	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgatttcgca-	...1013...	ttaatccacag	atgcagac	
D. Sec	gaatgcga	gtaagtagctta...	2051...	-aagccagaagaaaaattact	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgatttcgca-	...1002...	ttaatccacag	atgcagac	
D. Ere	gaatgcga	gtaagtagcttt...	2036...	-aagccagaagaaaaattact	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgatttggg-	...979...	ttaatccacag	atgcagac	
D. Ana	gaatgcga	gtaagtagcctg...	1280...	-----agaagaaaaattact	tttgcTGTGTTGCAC	gTTGCT	Tgccccatttgcagctctggtc-	...874...	ttaccatttcag	atgccgac	
D. Gri	gaatgcga	gtaagtacacta...	252...	-ggggttctttgggtggcttt-	TTACT	ttTTGCTG	TTGC	-caacaacaatcataatactc-	...2120...	tcacaacaaccag	gtgtcgac
D. Moj	gaatgcga	gtaagtacatca...	1712...	-taagcaagaagaaaaattac-	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgctcgccg-	...971...	cgttccgaacag	atgtcgac	
D. Per	gaatgcga	gtaagtgggtcaa...	1111...	-----cagaagaaaaattac	-tttgcTGTGTTGCAC	gTTGCT	-ggccatttgcgagccaggt-	...689...	cgctgatcacag	atgccgac	
D. Pse	gaatgcga	gtaagtgggtcaa...	1058...	-----cagaagaaaaattac	-tttgcTGTGTTGCAC	gTTGCT	-ggccatttgcgagccaggt-	...685...	cgctgatcacag	atgccgac	
D. Vir	gaatgcga	gtaagtactcaa...	1590...	-aagccagaagaaaaattact	-TTTGCTGTTGCAC	acGTTGCT	-ggccatttgcgctcgccgca-	...758...	aattttaaccag	atgtagac	
D. Wil	gaatgcga	gtaagtcaagtc...	370...	-attccgattccttattataa-	---TTGTT	GCAC	TTTGCT	-gccagagatagcatataa-	...2006...	taccatttcag	gtgtcgac
D. Yak	gaatgcga	gtaagtagcttt...	2003...	-aagcaagaagaaaaattact	TTTGCTGTTGCAC	gTTGCT	-ggccatttgcgatttggg-	...1065...	ttaatccacag	atgcagac	

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id=18685 gene=FBgn0004197 name=Ser segment=chr3R\_23005530\_23008719\_-1 type=IN VIEW

Figure 16: CS=9.36





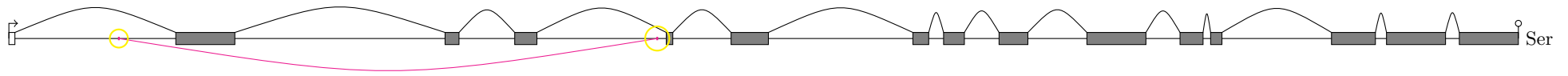
D. Mel	tgtcaacg	gtaaaaccctc...	313...	aaattgtgtttaatcaaagg--	CGAAAAGTAAAAGTGC	-----	aaaca----	atg-tgaatatgcgaa...	1426...	caattgttacag	ctaaagat
D. Sec	tgtcaacg	gtaaaaccctc...	315...	aaattgtgtttaatcaaagg--	CGAAAAGTAAAAGTGC	-----	aaaca----	atg-tgaatatgcgaa...	1420...	caattgttacag	ctaaagat
D. Ere	tgtcaacg	gtaaaaccctc...	306...	--attgtgtttaatcaaaggc--	AAAAGTAAAAGTGC	-----	aaaca----	atg-tgaatatgcgaa...	1401...	caattgttacag	caaaagat
D. Ana	ctgcaacg	gtaaatTTTcaa...	412...	--aattgtgtttaatcaaagtc--	GAAAAGTAAAAGTGC	-----	aaaca----	atg-tgCGaattcacc...	1466...	caattgttacag	caacatcg
D. Gri	ggtaaacg	gttaaaatgcca...	534...	aatttgt---taataaaagccct---	AAAGTAAAAGTGC	-----	caaca----	atg-cgaatgCGaat...	1658...	cttaacaacaa	ctacaata
D. Moj	tgcaaacg	gtaaacctaaa...	493...	aatttgt---taataaaagcact---	AAAGTAAAAGTGC	-----	aaaca----	atg-cgaatgggaatg...	1421...	cagcaacaacag	cagcagca
D. Per	ctgcaacg	gtaaatctcaac...	433...	aagagat---atataaaagttaa	AGTGCAAAcAATg	ggCGGT	ggCGGC	cccactgtcgctcgccgagt-----	1472...	atTTTgttacag	caacatcc
D. Pse	ctgcaacg	gtaaatctcaac...	397...	gagatat---atataaaagttaa	AGTGCAAAcAATg	ggCGGT	ggCGGC	cccactgtcgctcgccgagt-----	1530...	atTTTgttacag	caacatcc
D. Vir	tgcaacg	gtaaacattaaa...	469...	aatttgt---taataaaagcgt---	AAAGTAAAAGTGC	-----	aaaca----	atg-cgaatgCGaatg...	1384...	taacaacaacag	caacaaca
D. Wil	gcacaacg	gtaaaaatgtca...	396...	aaacacactggcaaaaaaat---	AAAAGTAAAAGTGC	-----	aaacaaat	atg-tgaatgT---	1189...	caaatgttacag	cagcaaca
D. Yak	tgtcaacg	gtaaaaccctc...	329...	aaattgtgtttaatcaaagg--	CGAAAAGTAAAAGTGC	-----	aaaca----	atg-tgaatatgcgaa...	1410...	caattgttacag	caaaagat
		* **	** **		*	** **	*	**	*	**	* *

id=18675 gene=FBgn0004197 name=Ser segment=chr3R.23017847\_23019665\_-1 type=I5

D. Mel	ctggacag	gtgagtcggaac...	926...	--agccacat-cgatctatg-tcg---	GCACacTTTFACTT	----	TTCG	--attagttcaagccaagccaa...	266...	ttcccctgtag	gtaaacgc
D. Sec	ctggacag	gtgagtcgagac...	909...	--agtcacat-cgatctatg-tcg---	GCACacTTTFACTT	----	TTCG	--attagttcaagccaagccaa...	237...	ttcccctgtag	gtaaacgc
D. Ere	ctggacag	gtgagtcgagac...	904...	--agccacat-cgatctatg-tcg---	GCACacTTTFACTT	----	TT	-gcgattagttcaagccaagc---	262...	tcttctatgtag	gtaaacgc
D. Ana	ctggacag	gtgagttgattc...	798...	--ggccacat-cgatctatg-tca---	GCACacTTTFACTT	----	TTC	-aattagttcaagccaagcca...	146...	taaatttttag	gcaaacgc
D. Gri	ctggacag	gtgagtcgatgc...	944...	----tacet-cgatctatg-tcagct---	CACTTTFACTT	----	T	-tcaat--ttc-aattagttgcag...	112...	tgtttcaatag	gcaaacgc
D. Moj	ctggacag	gtgagtcgctgt...	1042...	--caatacat-cgatctatg-tcg---	GCACacTTTFACTT	----	T	-tcaatt--tgagaattag--gcat...	114...	tctcttaatag	gcaagcgc
D. Per	ttggacag	gtgagtcgagtc...	511...	----cacacacggccgctgatcga	GTCGGTTCGCATT	taTTG	aaCATT	-gaaagt--tggcagtcattacg--	561...	ttcccctgtag	gcaagcgc
D. Pse	ttggacag	gtgagtcgagtc...	517...	----cacacacggccgctgatcga	GTCGGTTCGCATT	taTTG	aaCATT	-gaaagt--tggcagtcattacg--	493...	ttcccctgtag	gcaagcgc
D. Vir	ctggacag	gtgagtcgctgc...	977...	----ctacet-cgatctatg-tcagc---	GCACacTTTFACTT	----	T	-tcaatt--ttc-aattagctgaa...	99...	gaacgacaacag	gaaaacgc
D. Wil	atggacag	gtgagtcctcaga...	733...	gcttccgattcgcgcactc-----	GCACacTTTFACTT	----	TT	-tgcattcgttc-agccagtt---	31...	ttcgatttttag	gcaaacgc
D. Yak	ctggacag	gtgagtcgagac...	942...	--agtcacat-cgatctatg-tcg---	GCACacTTTFACTT	----	TTCG	--attagttcaagccaagccaa...	254...	tcccctgtag	gtaagcgc
		*****	*****	** ** *	*	** **	*	*	*	**	** **

id=18697 gene=FBgn0004197 name=Ser segment=chr3R.23000660\_23001933\_-1 type=IN VIEW

Figure 17: CS=9.9



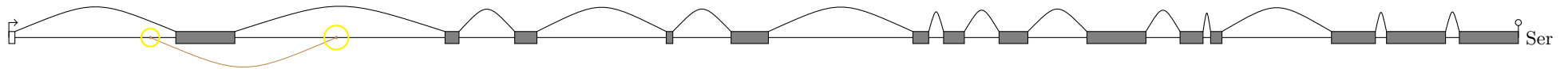
D.Mel	tgtcaacg	gtaaaaccctc...	1289...	gcccgaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgagcaggaggaaccg-	...	450...	caattgttacag	ctaaagat
D.Sim	tgtcaacg	gtaaaaccctc...	1266...	gcccgaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgagcaggaggaaccg-	...	460...	caattgttacag	ctaaagat
D.Sec	tgtcaacg	gtaaaaccctc...	1269...	gcccgaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgagcaggaggaaccg-	...	466...	caattgttacag	ctaaagat
D.Ere	tgtcaacg	gtaaaaccctc...	1258...	gcccgaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgagcaggaggaacca-	...	447...	caattgttacag	caaagat
D.Ana	ctgcaacg	gtaaatTTTca...	127...	aatcgaatcaaattgcttgc	TGATTACA	CAAAATGATGAAG	agcaatcaact--	gaatgtgtg-	...	1745...	caattgttacag	caacatcg
D.Gri	ggtaaacg	gttaaatgcca...	1703...	aagcgaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgatcaacaaataag-	...	485...	cttaacaacaa	ctacaata
D.Moj	tgcaaacg	gtaaacctaaa...	1416...	aagcgtagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgatcaacatcgtgtg-	...	495...	cagcaacaacag	cagcagca
D.Vir	tgcaacg	gtaaacattaaa...	1361...	aagcgtagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgatcaacaacatcgt-	...	489...	taacaacaacag	caacaaca
D.Wil	gcacaacg	gtaaaaatgtca...	1103...	actcaaagcaaattacttaa	TTA-AaTGGACA	TTAA	---	caccgagcaagtgaggcaa-	...	480...	caaatgttacag	cagcaaca
D.Yak	tgtcaacg	gtaaaaccctc...	100...	aatcgaatTaaattgcttgc	TGATTACA	CAAAATGATGAAGAGC	aatcaactaca	aatgctcgg-	...	1631...	caattgttacag	caaaagat
		* **	** **	* * ***** **	*** **	* ** **	** * *	** * *		***	* *	

id=18675 gene=FBgn0004197 name=Ser segment=chr3R.23017847\_23019665\_-1 type=I5

D.Mel	gttggacg	gtaagtgcacgt...	3700...	-----	gcatggcggggcagcctgaga	-----	TTAAacTGTCCATTAG	cgtcagcgcagagtcaaact...	44...	gttcaattacag	aagtcggt	
D.Sim	gttggacg	gtaagtgcagtt...	3589...	-----	gcatggcggggcagcctgaga	-----	TTAAacTGTCCATTAG	cgtcagcgcagagtcaaact...	44...	gttcaattacag	aagtcggt	
D.Sec	gttggacg	gtaagtgcagtt...	3504...	-----	gcatggcggggcagcctgaga	-----	TTAAacTGTCCATTAG	cgtcagcgcagagtcaaact...	44...	gttcaattacag	aagtcggt	
D.Ere	ggtggacg	gtaagtgcagtt...	3700...	-----	gcatggcggggcagccgaga	-----	TTAAacTGTCCATTAG	cgtcagcgcagagtcaaact...	42...	gttcaattacag	aagtcggt	
D.Ana	gatggacg	gtaagtgcattt...	3394...	cgtgaaattaaagtgtttag	-----	CTTTGctTTGTTTGTGtcTGATCG	ctttggtgtttgtttgttt...	140...	gttcaattacag	aagtcggt		
D.Gri	gttggacg	gtaagttgttct...	4449...	-----	gccgaaaacccaacttcaga	-----	TTAAacTGTCCATTAG	cgtcaacactgcgacgagac...	460...	gttcaattacag	aagtcggt	
D.Moj	gttggacg	gtaagttgttgt...	4683...	-----	tcttcatttgcatctgcaga	-----	TTAAacTGTCCATTAG	cgtcaacactgagccgagac...	128...	gttcaattacag	aagtcggt	
D.Vir	gctggacg	gtaagttgttct...	4482...	-----	atcagtgcccaactggaga	-----	TTAAacTGTCCATTAG	cgtcaacactgagccgagac...	96...	gttcaattacag	aagtcggt	
D.Wil	gctggacg	gtaagttggcgt...	4248...	-----	tgcatgtaccgacttgaga	-----	TTAAacTGTCCATTAG	cgtcacacacagaaaaa...	153...	gttcaattacag	aagtcggt	
D.Yak	gttggacg	gtaagtcagtt...	3644...	-----	aagtgtttagtttgccttgc	GCTCgcTTTGT	TTGTC	TGATCG	ctttggtcgtctgtcggtt...	172...	gttcaattacag	aagtcggt
		* *****	*****				*	****	* ** *	*****	*****	

id=18681 gene=FBgn0004197 name=Ser segment=chr3R.23009585\_23013408\_-1 type=IN VIEW

Figure 18: CS=7.8



D. Mel	tgtcaacg	gtaaaaccctc...1558...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgccgc-----	...184...	caattgttacag	ctaaagat
D. Sim	tgtcaacg	gtaaaaccctc...1538...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgccgc-----	...191...	caattgttacag	ctaaagat
D. Sec	tgtcaacg	gtaaaaccctc...1541...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgccgc-----	...197...	caattgttacag	ctaaagat
D. Ere	tgtcaacg	gtaaaaccctc...1529...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgccgc-----	...179...	caattgttacag	caaaagat
D. Ana	ctgcaacg	gtaaatTTTcaa...1452...	-ggggttaaaggctactccgc-	<b>CGGGTGGtGGCAGGAAGAATGAGtAATGT</b>	gggcaagagtgaaaatatct...	...412...	caattgttacag	caacatcg
D. Gri	ggtaaacg	gttaaaatgcc...2004...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	cATTG-----cagcacgttgccgcgctttg...	...181...	cttaacaacaa	ctacaata
D. Moj	tgcaaacg	gtaaacctaaa...896...	-ggagagaactgaacgggggc-	<b>AATGcTTGCAATTTGgATGAGCTT</b>	-accataagcaagagagcagg-	...1008...	cagcaacaacag	cagcagca
D. Per	ctgcaacg	gtaaatctcaac...1693...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgctgc-----	...224...	atTTgttacag	caacatcc
D. Pse	ctgcaacg	gtaaatctcaac...1715...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgctgc-----	...224...	atTTgttacag	caacatcc
D. Vir	tgcaagcg	gtaaacattaaa...1631...	-cagcgttaaattaacataaaa-	<b>TTGAATTGCATTG</b>	-----catttgctgcacgttgagcc-----	...221...	taacaacaacag	caacaaca
D. Wil	gcacaacg	gtaaaaatgtca...1367...	-agtgttaaattaacataaat-	<b>TGAATTGCATTG</b>	cATTG-----ctgcacgttgccgctttttg...	...213...	caaattgttacag	cagcaaca
D. Yak	tgtaacg	gtaaaaccctc...1559...	-agcgttaaattaacataaat-	<b>TGAATTGCATTG</b>	-----catttgctgcacgttgccgc-----	...183...	caattgttacag	caaaagat

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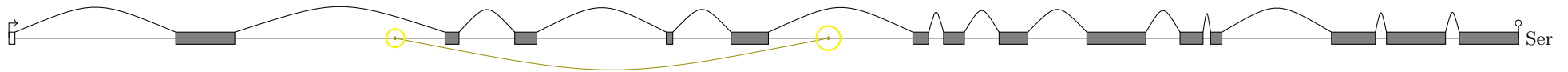
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D. Mel	tccataag	gtaagcaaacca...2074...	-cgttagcca-----agaggctcggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...889...	tctccaccacag	atatccgc	
D. Sim	tccataag	gtaagcaaagca...2074...	-cgttagcca-----agaggctcggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...886...	tctctaccacag	atatccgc	
D. Sec	tccataag	gtaagcaaagca...2086...	-cgttagcca-----agaggcccggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...884...	tctctaccacag	atatccgc	
D. Ere	tccataag	gtaagcaaacca...2031...	-cgttagcca-----agcggcccggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...852...	tctccaccacag	atatccgc	
D. Ana	tccataag	gtaagccaacca...2691...	..aagctagctttgtggggaaa-	<b>ATATTtCTCATTaTTTTCgTGTTTCATTG</b>	-tgttagatttatcaagtcc...	...432...	tctgttcaacag	atatccgc	
D. Gri	tccataag	gtaagcaaaact...3786...	-----gaggca---gtcagcgacagcgt	<b>TAAGgcTAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...1119...	cgatttttacag	atatccgc	
D. Moj	tccataag	gtaagcaaagcc...3766...	----tgcgacagaggacagcgaca	<b>GAGCTCGagCTAAA-TtGCAAttTATT</b>	-tc--taataaacttatcaacgc...	...1133...	cgatttttacag	atatccgc	
D. Per	tccataag	gtaagccaaaac...2542...	-----agccg--ggccggccgcatggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...1118...	tctgtcttacag	atatccgc	
D. Pse	tccataag	gtaagccaaaac...2566...	-----agccg--ggccggccgcatggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...1109...	tctgtcttacag	atatccgc	
D. Vir	tccataag	gtaagcaaagct...2509...	..tcataaattgtaatttaaca-	-----	<b>TAAAttTGCAATTTAA</b>	-cttcattaacagctgcattt-	...2345...	cgatttttacag	atatccgc
D. Wil	tccataag	gtaagcaactt...2783...	-----gacatcctgtggaat-ctctct	<b>CAAGgcTAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...1014...	tttgttttcag	atatccgc	
D. Yak	tccataag	gtaagcaaacca...2154...	-cgttagcca-----agaggcctggc-----	<b>TAAA-TtGCAATTTA</b>	-ttt--taataaacttatcaac---	...878...	tctccaccacag	atatccgc	

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id=18677 gene=FBgn0004197 name=Ser segment=chr3R\_23014187\_23017227\_-1 type=IN VIEW

Figure 19: CS=7.2



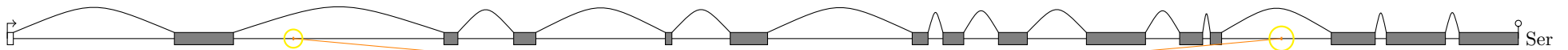
D. Mel	tccataag	gtaagcaacca...	2572..	gctttgtggggaaaatatt	-----	CTCATTATTT	cGTGTT	tcatttgctgccagattat	-----	...388..	tctccaccacag	atatccgc		
D. Sim	tccataag	gtaagcaagca...	2572..	gctttgtggggaaaatatt	-----	CTCATTATTT	cGTGTT	tcatttgctgccagattat	-----	...385..	tctctaccacag	atatccgc		
D. Sec	tccataag	gtaagcaagca...	2584..	gctttgtggggaaaatatt	-----	CTCATTATTT	cGTGTT	tcatttgctgccagattat	-----	...383..	tctctaccacag	atatccgc		
D. Ere	tccataag	gtaagcaacca...	2525..	gctctgtggggaaaatatt	-----	CTCATTATTT	cGTGTT	tcatttgctgccagattat	-----	...355..	tctccaccacag	atatccgc		
D. Ana	tccataag	gtaagcaacca...	2042..	-----	gccgttagcctggccagag	-----	GCTAAATTGCa	ATTTA	---tttctaataaacttatcaac	...1096..	tctgttcaacag	atatccgc		
D. Gri	tccataag	gtaagcaaaact...	3790..	-----	cagtcagcgacag-gcttaag	-----	GCTAAATTGCa	ATTTA	---tttctaataaacttatcaac	...1119..	cgatttttacag	atatccgc		
D. Moj	tccataag	gtaagcaagcc...	3777..	-----	acagcgacagagctcgagct	-----	AAAT	GCAAT	TTAT	---tttctaataaacttatcaac	...1134..	cgatttttacag	atatccgc	
D. Per	tccataag	gtaagcaaaaac...	2536..	-----	gccgttagcgggcccggccg	CATG	GCTAAATTGCa	ATTTA	---tttctaataaacttatcaac	...1118..	tctgtcttacag	atatccgc		
D. Pse	tccataag	gtaagcaaaaac...	2560..	-----	gccgttagcgggcccggccg	CATG	GCTAAATTGCa	ATTTA	---tttctaataaacttatcaac	...1109..	tctgtcttacag	atatccgc		
D. Vir	tccataag	gtaagcaagct...	3812..	gcagagcctgtgacagcct	-----	TTGG	ctAAAT	GCAAT	TTAT	---tttctaataaacttatcaac	...1037..	cgatttttacag	atatccgc	
D. Wil	tccataag	gtaagcaaacct...	2787..	-tcctgtgg	-----	atctctctcaag	-----	GCTAAATTGCa	ATTTA	---tttctaataaacttatcaac	...1014..	ttgttttcag	atatccgc	
D. Yak	tccataag	gtaagcaacca...	2651..	gctttgtggggaaaatatt	-----	CTCATTATTT	cGTGTT	tcatttgctgccagattat	-----	...378..	tctccaccacag	atatccgc		
	*****	*****	**				*	**	***	*	**	* * ****	***	*****

id=18677 gene=FBgn0004197 name=Ser segment=chr3R\_23014187\_23017227\_-1 type=IN

D. Mel	gaatgcga	gtaagtagctta...	1893..	cgttgttaatgc	----	tgacgct	-----	AACACAGAATA	cGTGAG	-----	ccggcg	-gccatgattgcatt	...1216..	ttaatccacag	atgcagac		
D. Sim	gaatgcga	gtaagtagctta...	1863..	cgttgttaatgc	----	tgacgct	-----	AACACAGAATA	cGTGAG	-----	ccggcg	-gccatgattgcatt	...1223..	ttaatccacag	atgcagac		
D. Sec	gaatgcga	gtaagtagctta...	1844..	cgttgataatgc	----	tgacgct	-----	AACACAGAATA	cGTGAG	-----	ccggcg	-gccatgattgcatt	...1212..	ttaatccacag	atgcagac		
D. Ere	gaatgcga	gtaagtagcttt...	1829..	cgttgttaatgc	----	tcagcgt	-----	AACACAGAATA	cGTGAG	-----	ccggcg	-gccatgattgcatt	...1189..	ttaatccacag	atgcagac		
D. Ana	gaatgcga	gtaagtagcct...	1178..	----	atcccgctgtcctgattc	-----	TAAAT	aGCAAT	aaTTAGT	gtggcctagaa	-aacatcaaa	-----	...974..	ttaccatttcag	atgccgac		
D. Gri	gaatgcga	gtaagtacacta...	1335..	gggtcctggc	----	gcactgattc	-----	TAAAT	aGCAAT	aaTTAGC	gtggcctagaa	-accatcaaa	-----	...1037..	tcacacaaccag	gtgtcgac	
D. Moj	gaatgcga	gtaagtacatca...	1390..	-----	gaatacgtgagccagcggtc	-----	ATGATTGCA	TTT	-----	ctcagcgaaca	-gccacagtc	-----	...1301..	cgttccgaacag	atgtcgac		
D. Per	gaatgcga	gtaagtgggtcaa...	988..	gtctgtgtctgt	----	gcccattc	-----	TAAAT	aGCAAT	aaTTAGT	GTG	gcctagaa	-accatcaaa	gaa	...806..	cgctgatcacag	atgccgac
D. Pse	gaatgcga	gtaagtgggtcaa...	935..	gcctgtgtctgt	----	gcccattc	-----	TAAAT	aGCAAT	aaTTAGT	GTG	gcctagaa	-accatcaaa	gaa	...802..	cgctgatcacag	atgccgac
D. Vir	gaatgcga	gtaagtactcaa...	1268..	-----	gaatacgtgagccagcggcc	-----	ATGATTGCA	TTT	cCAG	-----	ccaacagtgccacagtcgct	-----	...1083..	aatttaaccag	atgtagac		
D. Wil	gaatgcga	gtaagtcaagtc...	929..	-----	ctagcattgtcctgattc	-----	TAAAT	aGCAAT	aaTTAGT	gtggcctagaa	-accatcaaa	-----	...1445..	taccatttcag	gtgtcgac		
D. Yak	gaatgcga	gtaagtagcttt...	1795..	cgttgttaatgc	----	accagcgt	-----	AACACAGAATA	cGTGAG	-----	ccggcg	-gccatgattgcatt	...1276..	ttaatccacag	atgcagac		
	*****	*****						*	**	*	**			***	**	***	

id=18685 gene=FBgn0004197 name=Ser segment=chr3R\_23005530\_23008719\_-1 type=IN VIEW

Figure 20: CS=9.36



D.Mel	tccataag	gtaagcaaacca...1720	-----aatgaggagcacggcccag--	GAATGTGatAAATA	-----aatagtaagcagcaagaacc-----	...1242	..tctccaccacag	at	atccgc
D.Ere	tccataag	gtaagcaaacca...1679	-----aatgaggagcatggcccag--	GAATGTGatAAATA	-----aatagtaagcagccagaacc-----	...1203	..tctccaccacag	at	atccgc
D.Gri	tccataag	gtaagcaaaact...2954	-----tgaatgaaaagcggggacc	AAAAGAATGTGataAAATA	-----aatagtaagcagccacacaa-----	...1952	..cgatttttacag	at	atccgc
D.Moj	tccataag	gtaagcaaaagcc...3319	-----gagagatgcagagagggaga	GAATGTGataAAATAaaTAAGT	-----aagcaggcaaacggttcac...1584	..cgatttttacag	at	atccgc	
D.Per	tccataag	gtaagccaaaac...1657	..tcccaaaagatgcgaaatca-----	GAATGTGaaAAATAacCAA	agccacatgccctgccccc-----	...1996	..tctgtcttacag	at	atccgc
D.Pse	tccataag	gtaagccaaaac...1665	..tcccaaaagatgcgaaatca-----	GAATGTGaaAAATAacCAA	agccacatgccctgccct-----	...2003	..tctgtcttacag	at	atccgc
D.Vir	tccataag	gtaagcaaaagct...3370	-----tgaaaatacagggccaaaaa	AAATGTGataAAATAaaTAAGT	-----aagcaggcacagaatatg...1478	..cgatttttacag	at	atccgc	
D.Wil	tccataag	gtaagacaactt...2362	..aggccatgaatgaaatgtaa-----	GAATGTGatAAATA	-----aatagtaagcagccagacaa-----	...1440	..ttgttttcag	at	atccgc
D.Yak	tccataag	gtaagcaaacca...1785	-----aatgaggagcatggcccgcg--	GAATGTGatAAATA	-----aatagtaagcagccagaacc-----	...1246	..tctccaccacag	at	atccgc
	*****	***** **	*	***** **	**		***	*****	

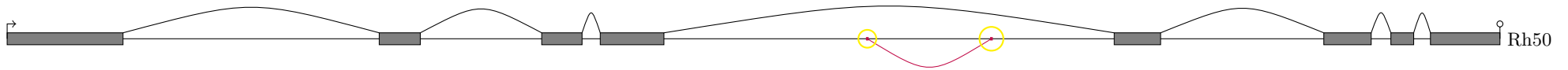
id=18677 gene=FBgn0004197 name=Ser segment=chr3R.23014187\_23017227\_-1 type=IN

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D.Ere	ctggacag	gtgagtcgagac...790	-----tthtttaatttgcgatttgca-----	TATTCACGcgTTTC	gctttttgtcacagacaca-----	...377	..tcttctatgtag	g	taaacgc
D.Gri	ctggacag	gtgagtcgatgc...846	-----ttcgatgtgtgcgatttgca-----	TATTCACGcgTTTC	gctttttgtcacagatacatgacta...201	..tgtttcaatag	g	caaacgt	
D.Moj	ctggacag	gtgagtcgctgt...950	-----atgtttgttttcgatatgcg	ATTGcaTATTCACGcgTTTC	gctttttgtcacagattca-----	...199	..tctcttaatag	g	caagcgc
D.Per	ctggacag	gtgagtcgagtc...827	..tgtttgttttaatttgcga-----	TTTcaTATTCACGcgTTTC	gctttttgtcacagataca-----	...248	..tccccctgcag	g	caagcgc
D.Pse	ctggacag	gtgagtcgagtc...795	..tgtttgttttaatttgcga-----	TTTcaTATTCACGcgTTTC	gctttttgtcacagataca-----	...218	..tccccctgcag	g	caagcgc
D.Vir	ctggacag	gtgagtcgctgc...856	-----atgtttgttttcgaagtgcg	ATTGcaTATTCACGcgTTTC	gctttttgtcacagtcac-----	...212	..gaacgacaacag	g	aaaacgc
D.Wil	atggacag	gtgagtcctcaga...599	-----tthtttaatttgcgatttgca-----	TATTCACGcgTTTC	gctttttgtcacagttaca-----	...164	..tgcgatttttag	g	caaacgc
D.Yak	ctggacag	gtgagtcgagac...828	-----tthtttaatttgcgatttgca-----	TATTCACGcgTTTC	gctttttgtcacagacaca-----	...371	..tccccctgtag	g	taagcgc
	*****	*****	*	* * **	*****		**	* * * *	

id=18697 gene=FBgn0004197 name=Ser segment=chr3R.23000660\_23001933\_-1 type=IN VIEW

Figure 21: CS=8.1





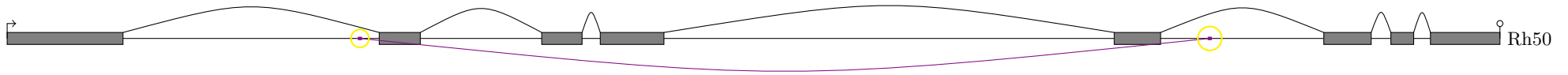
D.Me1	ggcaacag	gtgagtcacgtg...	2195...	cccgcacg-gccaaga-atgc--	TAAGCACAAAAC	-----	acattttacagtcgcaagtg-----	...1229...	ggtattttgcag	tgaccacc		
D.Sim	ggcaacag	gtgagtcacgtg...	2219...	cccgcattg-gccaaga-acgc--	TAAGCACAAAAC	-----	acattttacagtcgcaagtg-----	...1208...	ggtattttgcag	tgaccacc		
D.Sec	ggcaacag	gtgagtcacgtc...	2100...	cccgcattg-gccaaga-acgc--	TAAGCACAAAAC	-----	acattttacagtcgcaagtg-----	...1284...	ggtattttgcag	tgaccacc		
D.Ere	ggcaacag	gtgagtcacgtg...	1692...	-gaatgcgggcgccaaca-gcaa	AAATACGC	cc	CAGTTGTTGTTT	tcacaccaggc---	acaaaatga---	...1553...	ggtattttgcag	tgaccacc
D.Ana	ggcaacag	gtgagtcacgtg...	1579...	-gaatgcgggcgccaaca-gcaa	AAATACGC	cc	CAGTTGTTGTTT	tcacaccaggc---	acaaaatga---	...1641...	ccttcgttcag	tgaccacc
D.Gri	ggcaacag	gtgagtcacgtc...	1864...	-gcagacgacgatggtg-tcca	AAATACGC	cc	CAGT	-----	tgtagttgctgttttgtg...	1265...	tttttttgcag	tgaccacc
D.Moj	ggcaacag	gtgagtcacgtg...	1605...	caaatgcgggcgccaaca-gca-	AAATACGC	cc	CAGTTGTTG	ttttcacaccaagc---	tcgaga---	...2423...	ctctgcttttag	tgaccacc
D.Pse	ggcaacag	gtgagtcacgtg...	1542...	--aatgcgggcgccaacaggcaa	AAATACGC	cc	CAGTTGTTGTTT	tcacaccaagcgagtcggagc---	...	1209...	tccgccgtacag	tgaccacc
D.Wil	ggcaacag	gtgagtcacgtt...	1297...	-aatgcgggcgccaaca-gcaa	AAATACGC	cc	CAGTTGTTGTTT	tcacaccatga---	acgagcctg---	...1710...	accttttgcag	tgaccacc
D.Yak	ggcaacag	gtgagtcacgtg...	1802...	-gaatgtggcgccaaca-gcaa	AAATACGC	cc	CAGTTGTTGTTT	tcacaccaggc---	acaaaatga---	...1645...	ggtattttgcag	tgaccacc
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id=73965 gene=FBgn0028699 name=Rh50 segment=chr3L\_4913957\_4917456\_1 type=IN

D.Me1	ggcaacag	gtgagtcacgtg...	2795...	tcgtgtttacattt--tatta-----	GTTTGTGTTTA	-----	ttaccaaagtgtggttctgt...	629...	ggtattttgcag	tgaccacc		
D.Sim	ggcaacag	gtgagtcacgtg...	2869...	tcgtgtttacattt--tatta-----	GTTTGTGTTTA	-----	ttaccaaagtgtggttctgt...	558...	ggtattttgcag	tgaccacc		
D.Sec	ggcaacag	gtgagtcacgtc...	2741...	tcgtgtttacattt--tatta-----	GTTTGTGTTTA	-----	ttaccaaagtgtggttctgt...	643...	ggtattttgcag	tgaccacc		
D.Ere	ggcaacag	gtgagtcacgtg...	2029...	---aaaacacattttacagtgc-	AAGTGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgttcggc...	1214...	ggtattttgcag	tgaccacc
D.Ana	ggcaacag	gtgagtcacgtg...	1958...	---aaaacacattttacagtgc-	AAGTGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgttcgagc...	1260...	ccttcgttcag	tgaccacc
D.Gri	ggcaacag	gtgagtcacgtc...	2066...	tcacacacaca-----	agtgacac	-----	ATTGGCGTtaATTT	aaattgttaa--	tgtgcaaca...	1063...	tttttttgcag	tgaccacc
D.Moj	ggcaacag	gtgagtcacgtg...	1781...	-----acacattttatagtcacaac-	TGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgtgcaagc...	2245...	ctctgcttttag	tgaccacc
D.Pse	ggcaacag	gtgagtcacgtg...	1777...	-----aaacacattttacagtgc-	AAGTGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgttcgagg...	972...	tccgccgtacag	tgaccacc
D.Wil	ggcaacag	gtgagtcacgtt...	1453...	---tacacacattttatagtcgc-	AAGTGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgttcgagc...	1552...	accttttgcag	tgaccacc
D.Yak	ggcaacag	gtgagtcacgtg...	2161...	---aaaacacattttacagtgc-	AAGTGACA	cc	ATTGGCGTtaATTT	aaattgttaa--	tgttcggc...	1284...	ggtattttgcag	tgaccacc
*****	*****			**	*		** * * * *	**	**	**	* **	***** *

id=73965 gene=FBgn0028699 name=Rh50 segment=chr3L\_4913957\_4917456\_1 type=IN VIEW

Figure 23: CS=12



D. Mel	atatccgc	gtgagtagctgg...	1681...	acaattgggcggttaattga---	<b>AACGACTTgACTCtATTA</b>	.....	-----	cgcagagttccag
D. Sim	atatccgc	gtgagtagctgg...	1916...	acaattgggcggttaattga---	<b>AACGACTTgACTCtATTA</b>	.....	-----	cgcagagttccag
D. Sec	atatccgc	gtgagtagctgg...	1562...	acaattgggcggttaattga---	<b>AACGACTTgACTCtATTA</b>	.....	-----	tgcagagttccag
D. Ere	atatccgc	gtgagtagctgg...	1835...	acaattgggcggttaattga---	<b>AACGACTTgACTCtATTA</b>	.....	-----	cgcagagttccag
D. Ana	atatccgc	gtgagtagcagg...	1286...	acaattgggcggttaattga---	<b>AACGACTTgACTCaATTA</b>	.....	-----	cgcagagttccag
D. Gri	atatccgc	gtgagtagctat...	2274...	--aattgggcaactaattgaaa---	<b>CGACTTgACTCaATTA</b>	.....	ct	ttgcagagttccag
D. Moj	atatcccc	gtgagtgacctat...	1361...	--atttatgcaaatgtgtctct	<b>GTAAacAACTgTTGC</b> aatcataataataaataaataaacgcatttcacactaatt	.....	ttttctaactccatctccctttccactttcagaattccag	gcacagagttccag
D. Pse	atatccgc	gtgagtagcaag...	1783...	acaattgggcggttaattga---	<b>AACGACTTgACTCaATTA</b>	.....	-----	gcacagagttccag
D. Vir	atatccgc	gtgagtagctat...	1900...	acaattgggcaactaattga---	<b>AACGACTTgACTCaATTA</b>	.....	-----	ttacagaatttcag
D. Yak	atatccgc	gtgagtagctgg...	1841...	acaattgggcggttaattga---	<b>AACGACTTgACTCtATTA</b>	.....	-----	cgcagagttccag
	*****	*	*****	**	*	*	*	**** * * **

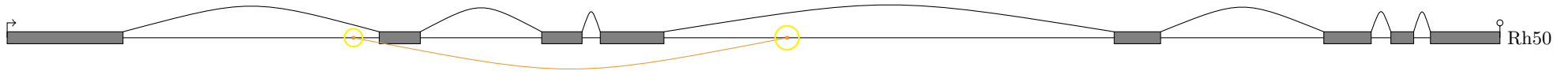
id=73959 gene=FBgn0028699 name=Rh50 segment=chr3L.4910863.4912671.1 type=IN

D. Mel	atthaaca	gtaagttcgcaa...	154...	-gcctag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccggccagcctc--agc...	436...	tctggtttctag	ccctggat
D. Sim	atthaaca	gtaagttcgcaa...	149...	-gcctag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcagccgc--agc...	441...	tctggtttctag	ccctggat
D. Sec	atthaaca	gtaagtttgc...	149...	-gcctag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcagccgc--agc...	440...	tctggtttctag	ccctggat
D. Ere	atthaaca	gtaagtttgc...	157...	-gcctag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcagccgc--aac...	483...	tttgggtttctag	ccctggat
D. Ana	atthaacc	gtaagtttggcg...	363...	-gcccag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcagccgc--agc...	1428...	gatgtggttttag	ccctggat
D. Gri	atthaacc	gtaagttcaaca...	223...	-cctagcaaaaattttagcgc	<b>TAATGAGTA</b>	<b>AAGTTG</b>	--	gtctgccc--ccttggcgagaca...	335...	tactatttacag	ccctggat
D. Moj	atthaacc	gtaagttgaaca...	217...	-g-----aaaaa-tgtgacgctaata	<b>GTAAAGTT</b>	<b>TGTTGC</b>	ccggcggccgctgctgatgc...	431...	tgtatggttcag	ccctggct	
D. Pse	atthaacc	gtaagttcaact...	273...	-cctagcgaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcctggcc--agc...	275...	tccatthacag	ccctggat
D. Vir	atthaacc	gtaagttcaaca...	259...	-gcctagcaaaa-tgtgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcctagcct--ccc...	867...	tgtatggttcag	ccctggat
D. Yak	atthaaca	gtaagttcgcaa...	173...	-gcctag-gaaaaatgacgacgc	<b>TAATGAGTA</b>	<b>AAGT</b>	<b>TGTT</b>	gcccgccgggcagccac--agc...	553...	tctggtttctag	ccctggat
	*****	*****		*** *	*****		* * * *	*		** **	*****

id=73967 gene=FBgn0028699 name=Rh50 segment=chr3L.4917648.4918319.1 type=IN VIEW

Figure 24: CS=16.5





```

D.Mel  atatccgc  gtgagtagctgg...1656...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...73...tcctccccgcag  agttccag
D.Sim  atatccgc  gtgagtagctgg...1891...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...75...gtttccccgcag  agttccag
D.Sec  atatccgc  gtgagtagctgg...1537...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...75...gtttcctcgcag  agttccag
D.Ana  atatccgc  gtgagtagcagg...1261...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...82...tttccccgcag  agttccag
D.Gri  atatccgc  gtgagtagctat...2037...caatgaa--t-aattaaagt-catTAATTTcAATTtATGCaAATG---cgtctgt--aaacaactgttg--...318...ttacctttgcag  agttccag
D.Moj  atatcccc  gtgagtggctat...1333...gaatgaa--t-aattaaagt-catTAATTTcAATTtATGCaAATGTGTC--tctgt--aaacaactgttgca...500...ttccactttcag  aattccag
D.Pse  atatccgc  gtgagtagcaag...1758...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...77...tctctcgcacag  agttccag
D.Wil  atatccgc  gtgagtagcaaa...1396...-ataaa--taaattaaagcgtat-----TTCAcACTAATGGCACcgcgcgtacacacagatac---...201...ttgttgttgag  agttccaa
D.Yak  atatccgc  gtgagtagctgg...1816...caatgcaattgacttttggc-----AGCAgACAATGGGCG--gttaattgaaacgacttgac---...78...tttccccgcag  agttccag
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id=73959 gene=FBgn0028699 name=Rh50 segment=chr3L.4910863.4912671.1 type=IN

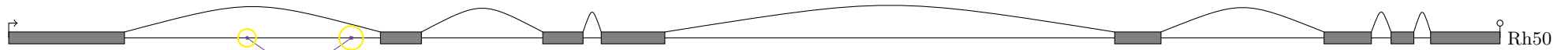
```

D.Mel  ggcaacag  gtgagtcacgtg...1862...cggcgccaaca-gcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaggcacaataatg----...1558...ggtatthttgcag  tgaccacc
D.Sim  ggcaacag  gtgagtcacgtg...1887...cggcgccaaca-gcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaggcacaataatg----...1536...ggtatthttgcag  tgaccacc
D.Sec  ggcaacag  gtgagtcacgtc...1770...cggcgccaaca-gcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaggcacaataatg----...1610...ggtatthttgcag  tgaccacc
D.Ana  ggcaacag  gtgagtcacgtg...1584...cggcgccaaca-gcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaggcacaataatg----...1642...ccttcggtccag  tgaccacc
D.Gri  ggcaacag  gtgagtcacgtc...2065...----gtcacacacacaagtgcacac-CA-TTgGCGTtAATTtAAATGttaa---atgtgcaa-caacaaca...1057...ttttttttgcag  tgaccacc
D.Moj  ggcaacag  gtgagtcacgtg...1782...cacatthttatgtcacaaact-GACAcCA-TTgGCGTtAATTtAAATGttaa---atgtgcaa-gcagcagc...2239...ctctgctttgag  tgaccacc
D.Pse  ggcaacag  gtgagtcacgtg...1547...-ggcgccaacaggcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaagcaggtccga----...1211...tccgccgtacag  tgaccacc
D.Wil  ggcaacag  gtgagtcacgtt...973...ggcattthttatgcggaaggat-----GTGCGATTAGTTGAG-----tca---acgtgcggtgtctgta...2041...acctttttgcag  tgaccacc
D.Yak  ggcaacag  gtgagtcacgtg...1807...tggcgccaaca-gcaaaaataCGCCCcAGTTGTTGTT-----ttcacaccaggcacaataatg----...1646...ggtatthttgcag  tgaccacc
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id=73965 gene=FBgn0028699 name=Rh50 segment=chr3L.4913957.4917456.1 type=IN VIEW

Figure 25: CS=11.7



```

D.Mel  atatccgc  gtgagtagctgg...1209...tagaacgaggagtcctggca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...519...tcctccccgcag agttccag
D.Sim  atatccgc  gtgagtagctgg...1434...taggacgaggagtcctggca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...531...gtttccccgcag agttccag
D.Sec  atatccgc  gtgagtagctgg...1091...taggacgaggagtcctggca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...520...gtttccccgcag agttccag
D.Ere  atatccgc  gtgagtagctgg...1388...taggacgaggagtcctggca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...491...tgtctccccgcag agttccag
D.Ana  atatccgc  gtgagtagcagg...796...---gacctggagaaggaccgta-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...546...ttctccccgcag agttccag
D.Gri  atatccgc  gtgagtagctat...1808...tc---cctgaaccctgcccctgt-----TTTGTgTGCCAAGTGTGgcggtcataaataaatgaa...550...ttacctttgcag agttccag
D.Pse  atatccgc  gtgagtagcaag...1192...ccaggacctgaaccggagca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...642...tctctcgcacag agttccag
D.Wil  atatccgc  gtgagtagcaaa...1062...---atthttggtatttgggccacaAGTTGTatTTGCtTGCCAAGTGTGgcggtcataaataaatgaa...526...ttggtggtgcag agttccaa
D.Yak  atatccgc  gtgagtagctgg...1337...gaggacgaggagtcctggca-----TTGTtTGCCAAGTGTGgcggtcataaataaatgaa...556...tttccccgcag agttccag
***** ***** * ** ** ** **

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id=73959 gene=FBgn0028699 name=Rh50 segment=chr3L.4910863\_4912671.1 type=IN

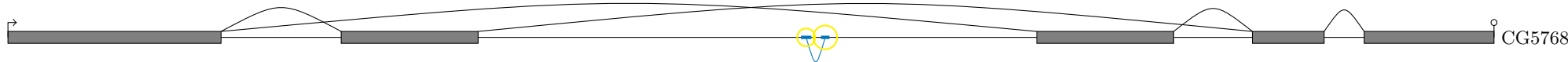
```

D.Mel  atatccgc  gtgagtagctgg...1641...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...84...tcctccccgcag agttccag
D.Sim  atatccgc  gtgagtagctgg...1876...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...86...gtttccccgcag agttccag
D.Sec  atatccgc  gtgagtagctgg...1522...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...86...gtttccccgcag agttccag
D.Ere  atatccgc  gtgagtagctgg...1795...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCGGacaattggcggttaattga-----...81...tgtctccccgcag agttccag
D.Ana  atatccgc  gtgagtagcagg...1246...gggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...93...ttctccccgcag agttccag
D.Gri  atatccgc  gtgagtagctat...2232...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...123...ttacctttgcag agttccag
D.Pse  atatccgc  gtgagtagcaag...1743...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...88...tctctcgcacag agttccag
D.Wil  atatccgc  gtgagtagcaaa...1527...tagtgacatcaatctcaatgCAATtgACTTttGGCAGCAGACAATTgggcatctaatggtagcga...60...ttggtggtgcag agttccaa
D.Yak  atatccgc  gtgagtagctgg...1801...tggtgacatcaatctcaatgCAATtgACTTttGGCAGCAGacaattggcggttaattga-----...89...tttccccgcag agttccag
***** ***** * ** ** ** **

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id=73959 gene=FBgn0028699 name=Rh50 segment=chr3L.4910863\_4912671.1 type=IN VIEW

Figure 26: CS=12.6



```

D.Mel atagacag gtgagtgggcag...2420...-----tgatttacgcgcaccccgcaTTGTTTAAAtATCGTttAATTGttgcaaagtttttgatttac...323...ctcattgatcag gtggccgt
D.Sim atagacag gtgagtgggcag...3722...-----tgatttacgcgcaccccgcaTTGTTTAAAtATCGTttAATTGttgcaaagtttttgatttac...325...ctccttgatcag gtggccgt
D.Sec atagacag gtgagtgggcag...2389...-----tgatttacgcgcaccccgcaTTGTTTAAAtATCGTttAATTGttgcaaagtttttgatttac...325...atccttgatcag gtggccgt
D.Ere atagacag gtgagtgggcag...2404...-----tgatttacgcgcactccgcaTTGTTTAAAtATCGTttAATTGttgcaaagtttttgatttac...315...ctccttgatcag gtggccgt
D.Gri atagacag gtaagccttatc...2777...-----tgatttacgcgcacttcctgTTGTTTAAAtATCGTttAATTGttgtaaagtttttgatttac...352...ttcaatgatcag gttgctgt
D.Per atagacag gtgagtgtgggt...2703...-----ttacgcgcactccgcatgtTAAAtATCGTttAATTGttgcaaagtttttgatttac...343...gtccctggtcag gttgctgt
D.Pse atagacag gtgagtgtgggt...2703...-----ttacgcacactccgcatgtTAAAtATCGTttAATTGttgcaaagtttttgatttac...335...gtccctggtcag gttgctgt
D.Wil ataaacag gtaagtgcact...2268...tactttgcatgatttacgcGCATTTGTatTGTTTAATTATCGTttAATTGttgcaaagtttttgatttac...370...taccaaactcag gtctcagt
D.Yak atagacag gtgagtgggcag...2414...-----tgatttacgcgcactccgcaTTGTTTAAAtATCGTttAATTGttgcaaagtttttgatttac...285...ctccttgatcag gtggccgt
*** ** ** * ***** * * ***** * * ***** * * ***** * * *****

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id=818 gene=FBgn0039198 name=CG5768 segment=chr3R.20212533.20215361.-1 type=IN

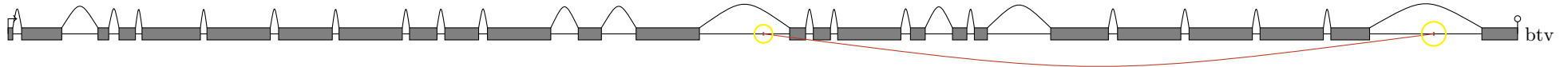
```

D.Mel atagacag gtgagtgggcag...2454...ttaaattggtgcaaagttttTGATTtACGATTTAAAtGCAA-----cgacaaatgccacgcccacg...290...ctcattgatcag gtggccgt
D.Sim atagacag gtgagtgggcag...3756...ttaaattggtgcaaagttttTGATTtACGATTTAAAtGCAA-----cgacaaatgccacgcccctc...292...ctccttgatcag gtggccgt
D.Sec atagacag gtgagtgggcag...2423...ttaaattggtgcaaagttttTGATTtACGATTTAAAtGCAA-----cgacaaatgccacgcccctc...292...atccttgatcag gtggccgt
D.Ere atagacag gtgagtgggcag...2438...ttaaattggtgcaaagttttTGATTtACGATTTAAAtGCAA-----cgacaaatgccacgcccctc...282...ctccttgatcag gtggccgt
D.Gri atagacag gtaagccttatc...2811...ttaaattggtgtaaagttttTGATTtACGATTTAAAtGCAA-----gaacaagtgcgcaaagca...319...ttcaatgatcag gttgctgt
D.Per atagacag gtgagtgtgggt...2733...ttaaattggtgcaaagttttTGATTtACGATTTAA-----ttgcaccgacaaatgcaacg-----...316...gtccctggtcag gttgctgt
D.Pse atagacag gtgagtgtgggt...2733...ttaaattggtgcaaagttttTGATTtACGATTTAA-----ttgcaccgacaaatgcaacg-----...308...gtccctggtcag gttgctgt
D.Wil ataaacag gtaagtgcact...2312...ttaaattggtgcaaagttttTGATTtACGATtAATTGcAAGGACAAATGCcacgcccacgcaa-gctgctg...327...taccaaactcag gtctcagt
D.Yak atagacag gtgagtgggcag...2448...ttaaattggtgcaaagttttTGATTtACGATTTAAAtGCAA-----cgacaaatgccacgcccctc...252...ctccttgatcag gtggccgt
*** ** ** * ***** * * ***** * * ***** * * ***** * * *****

```

id=818 gene=FBgn0039198 name=CG5768 segment=chr3R.20212533.20215361.-1 type=IN VIEW

Figure 27: CS=8.64



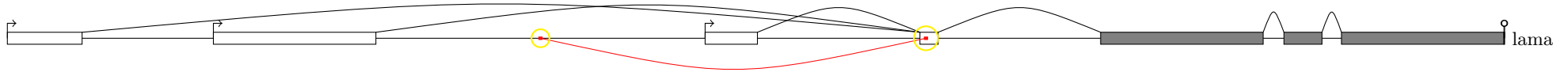
D.Mel	gataacaa	gtaagtgcattt...3081...	acttgtggcgggcctcctcc	TCGGGGGTCATCAG	TGAAAttACAGAGAGAGTGGT	tggttggcaaacggcagtca...	154...	ttgtcccgcag	gctactaa
D.Sim	gataacaa	gtaagtgcattt...4744...	acttgtggcgggcctcctcc	TCGGGGGTCATCAG	TGAAAttACAGAGAGAGTGGT	tggttggcaaacggcagtca...	145...	attgtctcgag	gctactaa
D.Sec	gataacaa	gtaagtgcattt...3047...	acttgtggcgggcctcctcc	TCGGGGGTCATCAG	TGAAAttACAGAGAGAGTGGT	tggttggcaaacggcagtca...	148...	gttgccttcgag	gctactaa
D.Ere	gataacaa	gtaagtgcattt...2699...	acttgtggcgggcctcctcc	TCGGGGGTCATCAG	TGAAAttACAGAGAGAGTGGT	tggttggcaaacggcagtca...	154...	ttttctcgag	gctcctaa
D.Ana	gacaataa	gtgagtaaaaa...2363...	acttgtggcgcgcctcctcc	TCGGGGGTCATCAG	TGAAAttACAGAGAGAGCGGT	tggttggcaaacgcaaatc...	137...	cttaactttcag	gctcctaa
D.Gri	gataacaa	gtgagtaaaaa...3210...	acttgtggcgcgcctcctcc	TCGGGGTGCATCAG	-----	ctgcaa-gtagagatgagaag...	727...	aacattttcag	actcctaa
D.Moj	gataataa	gtgagtattgca...3226...	acttgtggcgcgcctcctcc	TCGGGGTGCATCAG	-----	ctgcaatatagagatgggaa...	509...	aacgtttcgag	actcctaa
D.Vir	gataacaa	gtgagtactaat...2908...	acttgtggcgcgcctcctcc	TCGGGGTGCATCAG	-----	ctgcaatatagagatgggaa...	644...	aacattttcgag	actcctaa
D.Yak	gataacaa	gtaagtgcattt...2650...	acttgtggcgggcctcctcc	TCGGGGTGCATCAG	TGAAAttACAGAGAGAGTGGT	tggttggcaaacggcagtca...	129...	gtttctcgag	gctcctaa
	** ** *	** ** *		*****	*****	**	*	***	** ** *

id=82346 gene=FBgn0023096 name=btv segment=chr2L\_17971664\_17974998\_-1 type=IN

D.Mel	cgctaaag	gtgagtaagaat...680...	gttcttttcagttttctcac	GCCGCTTTTTTGTTCAT	TTGAtTGACaTTCCGG	tacaagagggggaattagag--...	347...	---tttcattacag	attgatgg
D.Sim	ctctaaag	gtgagtgagaat...668...	gttcttttcagttttctcac	GCCGCTTTTTTGTTCAT	TTGAtTGACaTTCCGG	tacaagagggggaattagag--...	422...	---tttcattgcag	attgatgg
D.Sec	ctctaaag	gtgagtaagaat...701...	gttcttttcagttttctcac	GCCGCTTTTTTGTTCAT	TTGAtTGACaTTCCGG	tacaagagggggaattagag--...	421...	---tttcattgcag	attgatgg
D.Ere	ctctaaag	gtgagtaagaat...700...	gttcttttcagttttctcac	GCCGCTTTTTTGTTCAT	TTGAtTGACaTTCCGG	tacaagagggggaattagag--...	325...	---tttcattgcag	attgatgg
D.Ana	cactcaag	gtaagctgagat...441...	---cttcttgattttttcacgc	TTGCTTTT	TTGAtTGACaTTCCGG	---cacagcagggtgccagaca...	230...	---ctttcattccag	attgatgg
D.Gri	cattaaag	gttaaatcttt...337...	cgccgcttctttttgtttat	-----	TTGAtTGACaTTCCGG	---cgctctgttaactccaggca...	429...	---aaacatgcag	ctcgacgg
D.Moj	cgcttaag	gtgagtttttct...348...	cgccgcttctttttgtttat	-----	TTGAtTGACaTTCCGG	---cgctctgttaacttggaaacc...	450...	---caactccatt--ag	cttgatgg
D.Vir	cgcttagg	gtgagtcgttgg...391...	cgccgcttctttttgtttat	-----	TTGAtTGACaTTCCGG	---cgctctgttaactgcagtgcc...	450...	---aatgcagtcag	cttgatgg
D.Yak	ctctaaag	gtgagtaagaat...734...	gttcttttcagttttctcac	GCCGCTTTTTTGTTCAT	TTGAtTGACaTTCCGG	tacaagagggggaattagcg--...	410...	---tttcattgcag	attgatgg
	* * * *	** ** *	** ** *	*****	*****	*		**	* ** *

id=82368 gene=FBgn0023096 name=btv segment=chr2L\_17963017\_17964143\_-1 type=IN VIEW

Figure 28: CS=14.04



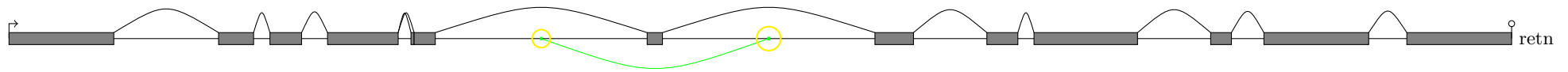
D.Mel	at	tttccg	gtaagttgtcct...1588...	gttcccacag-cgc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactgcctga...	1462...	-gcgatcgggcta	agagattg	
D.Sim	at	tttccg	gtaagttgtcct...1554...	gttcccacag-ccc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctgg...	1483...	-gcgatcgggcta	agagattg	
D.Sec	at	tttccg	gtaagttgtcct...1527...	gttcccacag-ccc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctgg...	1456...	-gcgatcgggcta	agagattg	
D.Ere	at	tttccg	gtgagttgtcct...1577...	gttcccacag-ccc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctgg...	1494...	-gcgatcgggcta	agagattg	
D.Ana	at	tttccg	gtaagttgtcct...1427...	attctcacag-tcc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctgg...	1474...	-acgatcgggcta	cgagattg	
D.Gri	at	tttctg	gtgagtgattgt...1702...	-----cacagatatgcagacaagaa	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tctgcattac...	1439...	-tcgtttttgaaa	aattgcaa	
D.Moj	at	tttccg	gtgagtagatca...2178...	-----aaatcgcagacaagaaatg	AGGT	CA	aa	ATCCTTGAGG	tt	TTGT	ccctcagcatgagatgaact--...	1604...	-tcgttttcacaa	aaattttc
D.Per	at	tttccg	gtaagttgtcct...1428...	-----ccccattgtacgacagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctta...	1094...	-tcagagaggaa	agaaagat	
D.Pse	at	tttccg	gtaagttgtcct...1415...	-----ccccattgtacgacagataa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tactggctta...	1088...	-tcagagaggaa	agaaagat	
D.Yak	at	tttccg	gtaagttgtcct...1678...	-tcccacagcccc-cagacaa--	ATGA	GTCA	aa	ATCCTTGAGG	-----	ttcttgcct--tacaggctgg...	1506...	-gcgatcgggcta	agagattg	
	***	* *	** ***		***	**	*****			**	* *	*	*	

id=7524 gene=FBgn0016031 name=lama segment=chr3L.5344580\_5347714\_-1 type=I5

D.Mel	ttttcag	ttCTTCAA	atGGGTTGACTTGT	gatattgctgcttcctggaccgggaaac--aaaag	gtaagact
D.Sim	ttttgcag	ttCTTCAA	atGGGTTGACTTGT	gatattgctgcttcctggaccgggaaac--aaaag	gtaagact
D.Sec	ttttgcag	ttCTTCAA	atGGGTTGACTTGT	gatattgctgcttcctggaccgggaaac--aaaag	gtaagact
D.Ere	ctttgcag	ttCTTCAA	atGGGTTGACTTGT	gatattgctgcttcctggaccgggaaac--aaaag	gtaagaac
D.Ana	tattgcag	ttCTTCAA	atGGGTTGACTTGT	gacattgcagcttcctggaccgggaaac--aaaag	gtaaaagt
D.Gri	ctttgcag	ttCTTCAA	atGGGTTGACTTGT	gatatttaaaacttcctggaccgggaaac--aaaag	gtaagtaa
D.Moj	ctttGCAG	tACTTCAA	atGGGTTGACTTGT	gggatatttaagcttcctggaccgggaaacaaaag	gtaagcaa
D.Per	cattgcag	ttCTTCAA	atGGGTTGACTTGT	gacattgcagcttcctggaccgggaaac--aaaag	gtaagaaa
D.Pse	cattgcag	ttCTTCAA	atGGGTTGACTTGT	gacattgcagcttcctggaccgggaaac--aaaag	gtaagaaa
D.Yak	tattgcag	ttCTTCAA	atGGGTTGACTTGT	gatattgctgcttcctggaccgggaaac--aaaag	gtaagact
	** ***	*	*****	** ***	*****

id=7527 gene=FBgn0016031 name=lama segment=chr3L.5340728\_5340783\_-1 type=E5 VIEW

Figure 29: CS=6



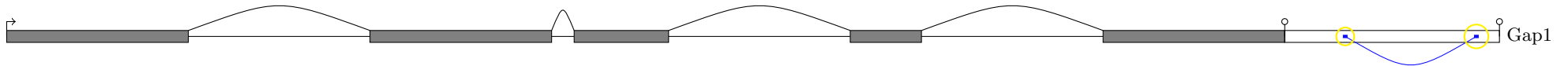
D. Mel	tcagacag	gttagtagagtg...2909...athtagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatg...1431...ttctaattgcag	ctctatga	
D. Sec	tcagacag	gttagtagagtg...2875...athtagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatg...1404...ttctaattgcag	ctctacga	
D. Ere	tcagacag	gttagtggattg...2835...athtagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatg...1424...ttccaattacag	ctctatga	
D. Ana	tcagacag	gttagtgggtgcc...2777...ttagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgataatcaatg...1348...ttctcgttacag	ctctacga	
D. Gri	tcagacag	gttagtgttagt...2516...ttagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatc...2397...ttctattcgcag	ctctacga	
D. Per	tcagacag	gttagtaccag...4028...gaggagccgaaggaggcagt	TCATCATTGCGATTG	acttagaatgtgcaccgcgg	-----	882...ctgtactttcag	ctctacga
D. Pse	tcagacag	gttagtaccag...4039...gaggagccgaaggaggcagt	TCATCATTGCGATTG	acttagaatgtgcaccgcgg	-----	871...ttgtactttcag	ctctacga
D. Vir	tcagacag	gttagtgttagt...2952...ttagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatc...1961...tctattttcag	ctctatga	
D. Wil	tcagacag	gttagtgccagt...2683...ttagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcgcccctgatcgat...1291...ttcacgttttag	ctctatga	
D. Yak	tcagacag	gttagtggagtg...2996...athtagttgataaacgacct--	TTGATGGCGTTG	-----	catcgtcg-cgttgatcaatg...1443...ttctaattgcag	ctctatga	
	*****	*****	** ** * * * * * * * * * *		** * *	* ** ***** **	

id=80565 gene=FBgn0004795 name=retn segment=chr2R.19530796.19535211.1 type=IN

D. Mel	aaagcgcg	gtaagttgcaca...2226...caaacgtatthttcattcaat--	CAACACGTCcATCAA	agagtttgattgattcctct-----	...834...atcacatttcag	gaactccg
D. Sec	aaagcgcg	gtaagttgcaca...2165...caaacgtatthttcattcaat--	CAACACGTCcATCAA	agagtttgattgattcctct-----	...847...atcgatttcag	gaactccg
D. Ere	gaagcgcg	gtaagttgcaca...2126...caaacgtatthttcattcaat--	CAACACGTCcATCAA	agagtttgattgattcctct-----	...895...ttccatttcag	gaactccg
D. Ana	aaagcgcg	gtaagttgcatc...2187...caaacgtatthttcattcaat--	CAACACGTCcATCAA	agagtttgattgattcctct-----	...837...tatctgttcag	gaacgccg
D. Gri	aaagcgag	gtaagtgccctg...3077...aaaatgattthttcattcaat--	CAACACGTCcATCAA	cagatttgattgattcctct-----	...1092...ttctatcgcag	gcacgccc
D. Per	aaagcgcg	gtaagttgcaag...3213...aaattgaagcg--aatgaatgc	CAATGTGGATGATGA	-----tgattagccgccataaacag...431...tgttttctgcag	gcacgccc	
D. Pse	aaagcgcg	gtaagttgcaag...3205...aaattgaagcg--aatgaatgc	CAATGTGGATGATGA	-----tgattagccgccataaacag...431...tgattctgcag	gcacgccc	
D. Vir	aaagcgcg	gtaagtacagat...2719...aaaacgtatthttcattcaat--	CAACACGTCcATCAA	cagatttgattgattcctct-----	...1157...tttctctaaaag	gcacgccc
D. Wil	aaagcgcg	gtaagttcagat...3181...aaaacgtatthttcattcaat--	CAACACGTCcATCAA	cagatttgattgattcctct-----	...816...tttgtttcag	gcacaccc
D. Yak	gaagcgcg	gtaagttgcaca...2193...caaacgtatthttcattcaat--	CAACACGTCcATCAA	agagtttgattgattcctct-----	...904...ttccatttcag	gaactccg
	*****	*****	** * * * * * * * * * * * * *		***** * *	** * * * *

id=80567 gene=FBgn0004795 name=retn segment=chr2R.19535285.19538423.1 type=IN VIEW

Figure 30: CS=9.6



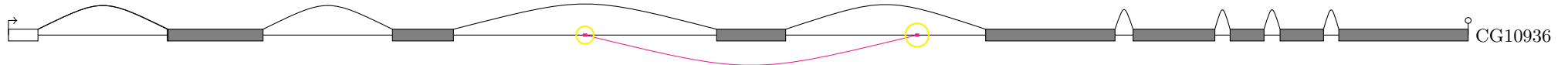
D. Mel	ttgttaag	aacaaatttact...119...cttcgacttacttccaccga	TTTGTtCCAAAGCT	cttcc-atattaattacacat...393...-----gccaatggataa	attttgat-----
D. Sim	ttgttaag	aacaaatttact...120...cttcgacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattaattacaca...397...-----gccaatggataa	attttgat-----
D. Sec	ttgttaag	aacaaatttact...120...attcgacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattaattacaca...400...-----gccaatggataa	attttgat-----
D. Ere	ttgttaag	aacaaatttact...137...cttcgacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattaattacaca...384...-----gccaatggataa	cttttgat-----
D. Ana	ttgttaag	aacaaatttact...129...tcgacacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattaattacaca...450...-----tttt	attttgattttctact
D. Gri	ttgttaag	aacaaatttact...127...tattaactaacttccaccga	TTTGTtCCAAAGCT	cttccaatattgcgtaataa...437...-----gccaatgatttc	ctttcatt-----
D. Moj	ttgttaag	aacaaatttact...121...tattaacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattgcataatcg...407...-----gccaatgattat	gttttgatt-----
D. Vir	ttgttaag	aacaaatttact...125...ttaacacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattgcataatcg...398...ttatcgccaatgat---	ttttgt-----
D. Yak	ttgttaag	aacaaatttact...143...cttcgacttacttccaccga	TTTGTtCCAAAGCT	cttccaatattaataacaca...384...-----gccaatggataa	aatttgat-----
	*****	*****	*** *****	***** **	**

id=115903 gene=FBgn0004390 name=Gap1 segment=chr3L.9832195.9832785\_-1 type=E3

D. Mel	ttgttaag	aacaaatttact...481...--tttaccatgcctagctgata	AGTTgTTGGtACAAA	gaatc--gaaaataaaaac-----atagatat-tttccaagggaaaaataaaagcgtatcgccaatgg--ataa	attttgat-----
D. Sim	ttgttaag	aacaaatttact...486...--tttaccatgcctagctgata	AGTTgTTGGtACAAA	gaatc--gaaaataaaaac-----atagatat-tttccaagggaaaaataaaagcgtatcgccaatgg--ataa	attttgat-----
D. Sec	ttgttaag	aacaaatttact...489...--tttaccatgcctagctgata	AGTTgTTGGtACAAA	gaatc--gaaaataaaaac-----atagatat-tttccaagggaaaaataaaagcgtatcgccaatgg--ataa	attttgat-----
D. Ere	ttgttaag	aacaaatttact...489...--tttaccatgcctagctgata	AGTTgTTGGGACAAA	gaatc--gaaaataaaaagc-----atagatatattttccaagggaaaaataaaagcgtatcgccaatgg--ataa	cttttgat-----
D. Ana	ttgttaag	aacaaatttact...531...--attaccatgcctagctccta	AGTTgTTGGtACAAA	gaatc--gaaaataatatactttctttctagatatattttctagtggaataaaagcgtattgccaatggattttt	attttgattttctact
D. Gri	ttgttaag	aacaaatttact...541...tattatgtaaacgtagct--ta	AGTTgTTGGtACAAA	gaatc--gaaaagc-----atatttttttagcgagaaaaataaaagcgtatcgccaatga--tttc	ctttcatt-----
D. Moj	ttgttaag	aacaaatttact...506...tacttatactacgtagct--ta	AGTTgTTGGtACAAA	gaatc--gaaaatc-----ata-tgttttttagcgagaaaaataaaagcgtatcgccaatga--ttat	gttttgatt-----
D. Vir	ttgttaag	aacaaatttact...507...tattacttatatttagcc--ta	AGTTgTTGGtACAAA	gaatc--gaaaagc-----ata-ttttttagcgagaaaaataaaagcgtatcgccaatga--tttt	tgt-----
D. Yak	ttgttaag	aacaaatttact...493...--tttaccatgcctagctgata	AGTTgTTGGtACAAA	gaattgagaaaaataaaaac-----atagatatattttccaagggaaaaataaaagcgtgctcgccaatgg--ataa	aatttgat-----
	*****	*****	* **	*** ** ***** * * * ***** *	*

id=115903 gene=FBgn0004390 name=Gap1 segment=chr3L.9832195.9832785\_-1 type=E3 VIEW

Figure 31: CS=5.4



D.Mel	agtttgcg	gtaagtttttc...	2074...	ctcttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gcttaacagagcaaaacttt...	1162...	tctgttccatag	aaaccgaa
D.Sim	agtttgcg	gtaagtttttcg...	1998...	ctcttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gcttaacagagcaaaacttt...	1072...	tctgttccatag	aaaccgaa
D.Sec	agtttgcg	gtaagtttttcg...	1983...	ctcttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gcttaacagagcaaaacttt...	1061...	tctgttccatag	aaaccgaa
D.Ere	agtttgcg	gtaagtttttcg...	1904...	gccttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gcttaacagagcaaaacttt...	1104...	tctgttccacag	aaaccgaa
D.Gri	catttgcg	gtaagttttcaa...	2947...	gccttttagcagcaaaactc	CGGTTTTGta	TGCAATTT	gttaacagagcaaaactaca...	1414...	tgcttcccacag	aaaccgaa
D.Moj	aatttgcg	gtaagttttcca...	3243...	gccttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gttaacagagcaaaactgc...	1629...	tgcttcccacag	aaaccgag
D.Vir	aatttgcg	gtaagttttttt...	2718...	gccttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gttaacagagcaaaactgc...	869...	tgcttcccacag	aaaccgaa
D.Wil	aagtggcg	gtggattgccca...	3044...	agcttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gttaacagagcacaactgc...	1863...	cgcttcccacag	aaacaacc
D.Yak	agtttgcg	gtaagttgcacc...	1964...	gccttttagcaacaaaactc	CGGTTTTGta	TGCAATTT	gcttaacagagcacaacttt...	1136...	tctgttccatag	aaaccgaa
		* **	** *		*****	*****	*****	*****		* ** *
										****

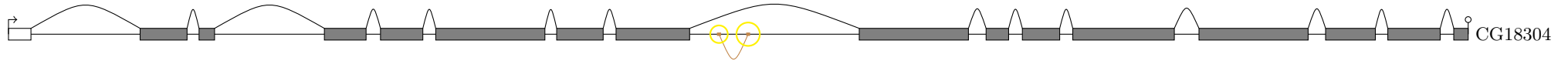
id=83968 gene=FBgn0034253 name=CG10936 segment=chr2R.13499087.13502404.-1 type=IN

D.Mel	aatctggg	gtaaggaaatcg...	1415...	-----	gggtggcggttggcatctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	232...	ttcttttgcag	aacgaaaa
D.Sim	aatttggg	gtaaggaaattg...	1278...	-----	tgcgcggttggcatctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	232...	ttcttttgcag	aacgaaaa
D.Sec	aatctggg	gtaaggaaattg...	1321...	-----	tgcgcggttggcatctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	198...	ttcttttgcag	aacgaaaa
D.Ere	agtctggg	gtaagcaaatag...	1473...	-----	gagtgggggttggcatctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	212...	ttcttttgcag	aacgaaaa
D.Gri	tcaatgag	gtacggaaatag...	1776...	-----	caaatggaacggttgtctt-	CGAAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	994...	tctttgatgcag	aacgaaaa
D.Moj	aggcaacg	gtaaggaaatgc...	1886...	-----	gagtcgagacaaaagctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaata...	388...	tcttcttgcag	aacgaaaa
D.Vir	aggcaacg	gtaaggaaatgt...	4152...	-----	gcaaatggaacagacgact--	CGAAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	302...	ttttgcttcag	aacgaaaa
D.Wil	aggcaacg	gtaagcaacta...	1969...	-----	aatgaagacgaaatgaaaaa	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	295...	atccattgcag	aacgaaaa
D.Yak	agtctggg	gtaagcaactg...	1454...	-----	ggtgggggttggcatctgg	AAATt	TGCACAAAACGC	-tttagacaaattgagaatc...	220...	ttcttttgcag	aacgaaaa
		* ** *	** *			*****	*****	*****		* **	**** *

id=83970 gene=FBgn0034253 name=CG10936 segment=chr2R.13497092.13498819.-1 type=IN VIEW

Figure 32: CS=11.7





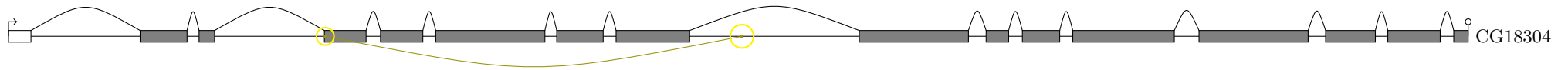
D. Mel	tggagcag	gtaccaagaacc....84...-----tcgtccgagctctgcaaac-----	TATTTTATCCTCGaAAACGA	-----tctctga-atgggtttacgag-----	..673...--actgtacttcag	gtcgcaag
D. Sim	tggagcag	gtaccaagaacc....88...--tttattcgtccgag-----caaac-----	TATTTTATCCTCGaAAACGA	-----tctctga-atgggtttacgag-----	..624...--actgtacctcag	gtcgcaag
D. Sec	tggagcag	gtaccaagaacc....93...-----tcgtccgagctgtgcaaac-----	TATTTTATCCTCGaAAACGA	-----tctctga-atgggtttacgag-----	..614...--actgtacctcag	gtcgcaag
D. Ere	tggagcag	gtaccaagaacc....93...-----ttgtcagagctctgcaaac-----	TATTTTATCCTCGaAAACGA	-----tctctaa-atgggtttattcg-----	..655...--actgtaccttag	gtcgcaag
D. Ana	tggagcag	gtaccaagaacc....94...-----ttccttcaatgcaacagAAC	TATTTTATCCTCGaAAACGA	atgatgatatttcgaatattg-----	..533...--actttcctccag	gtcgcaag
D. Gri	tagtgacg	gtaccagcaca...528...ttagcacttaac-agg---gcca-----	GTTTTTATCCTCGAAACGA	-----acgaattgtagaa-atggat-----	..797...--aattttcatcag	ctcgcaaa
D. Moj	cagcgcag	gtacctagtaca...1055...taactcgatagc-agg---gcaga-----	GTTTTTATCCTCGAAACGA	-----a-atgattttaattgaattaa...520...--aatgtaattgtag	ctcgcaaa	ctcgcaaa
D. Per	tggaacag	gtagaagatctc....88...--tt---tcgtttatg---tagcaaac-----	TATTTTATCCTCGaAAACGA	-----tctcttt-attcgtattataa...562...--gctcccctgcag	ctcgcaag	ctcgcaag
D. Pse	tggagcag	gtaccaagaacc....88...--tt---tcgtttatg---tagcaaac-----	TATTTTATCCTCGaAAACGA	-----tctcttt-attcgtattataa...537...--gctcccctgcag	ctcgcaag	ctcgcaag
D. Vir	tggcgccg	gtgcaggtacaa...1252...-aactccatgtctggg---gcaga-----	ATTTTATCCTCGAAACGA	atcagcacttctggcc-atgga-----	..573...--tgttatgcacag	ctcgcaaa
D. Wil	tggggcag	ggacaggtagca...1369...-----tttgtgtccatttcaaacAGGCTaa	TATTTTATCCTCGAAACGA	-----acgatgatgcaaaactaagct...561...--ttaatttagct--g	gtcgcaaa	gtcgcaaa
D. Yak	tggagcag	gtaccaagaacc....94...-----tcgtcaaacctctgcaaac-----	TATTTTATCCTCGaAAACGA	-----tctctga-atgggtttattc-----	..685...--actgtaccacag	gtcgcaag
		* * *	**** *****	**	*	*** **

id=112408 gene=FBgn0031869 name=CG18304 segment=chr2L.6936698\_6937539\_-1 type=IN

D. Mel	tggagcag	gtaccaagaacc....219...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..539...--actgtacttcag	gtcgcaag
D. Sim	tggagcag	gtaccaagaacc....223...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..490...--actgtacctcag	gtcgcaag
D. Sec	tggagcag	gtaccaagaacc....228...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..480...--actgtacctcag	gtcgcaag
D. Ere	tggagcag	gtaccaagaacc....222...catatgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..527...--actgtaccttag	gtcgcaag
D. Ana	tggagcag	gtaccaagaacc....233...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..395...--actttcctccag	gtcgcaaa
D. Gri	tagtgacg	gtaccagcaca...652...--ttgaggaaaaaggtgactcg	ATTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..673...--aattttcatcag	ctcgcaaa
D. Moj	cagcgcag	gtacctagtaca...1167...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..409...--aatgtaattgtag	ctcgcaaa
D. Per	tggaacag	gtagaagatctc....209...catctgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..442...--gctcccctgcag	ctcgcaag
D. Pse	tggaacag	gtagaagatctc....209...catctgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..417...--gctcccctgcag	ctcgcaag
D. Vir	tggcgccg	gtgcaggtacaa...1363...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..463...--tgttatgcacag	ctcgcaaa
D. Wil	tggggcag	ggacaggtagca...1543...--ttgaggaaaaaggtgactcg	ATTCGAGGATGAAAATG	AGTCTTttgatgatgcagttgaaaaa...388...--ttaatttagct--g	gtcgcaaa	gtcgcaaa
D. Yak	tggagcag	gtaccaagaacc....225...catttgaggaaaaaggtgac	TCGTTTCGAGGATGAAAATG	gagtcctttgatgatgcagttg-----	..555...--actgtaccacag	gtcgcaag
		* * *	*****	*	*	*** **

id=112408 gene=FBgn0031869 name=CG18304 segment=chr2L.6936698\_6937539\_-1 type=IN VIEW

Figure 33: CS=11.52



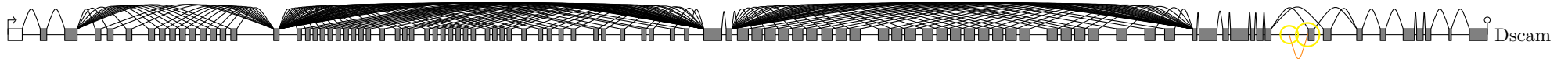
D.Mel	tgatatag	gtatgaatgcc...	852...	ttactgagcctagtgtcca	CTTCAATGT	ag	AGCTgagg
D.Sim	tgatatag	gtatgaatgcc...	835...	ttactgaaccagttgtcca	CTTCAATGT	ag	AGCTgagg
D.Sec	tgatatag	gtatgaatgcc...	845...	ttactgaaccagttgtcca	CTTCAATGT	ag	AGCTgagg
D.Ere	tgatatag	gtatgaatggaa...	778...	ttactgaaccagttgtcca	CTTCAATGT	ag	AGCTgagg
D.Ana	tgacatag	gtacgaatggat...	817...	ttactgaaccagttgtcca	CTTCAATGT	ag	AGCTgagg
D.Gri	tgacatag	gtatgaccaca...	1453...	ttactgaaccagttgtaca	CTTCAATGT	ag	AGCTaaag
D.Moj	tgatatag	gtatgaatgatg...	1310...	ttactcaactcagttgtaca	CTTCAATGT	ag	AGCTaaag
D.Vir	tgatatag	gtatgactgata...	1314...	ttactgaactcagttgtaca	CTTCAATGT	ag	AGCTaaag
D.Wil	tgatatag	gtatgatttaa...	1235...	ccactcaactcagttgttca	CTTCAATGT	ag	AGCTaaag
D.Yak	tgatatag	gtatgaatggaa...	777...	gtactgaaccagttgtcca	CTTCAATGT	ag	AGCTgaag
	*** **	*** **		*** * * *****	*****		*** * *

id=112398 gene=FBgn0031869 name=CG18304 segment=chr2L.6939716..6940610\_-1 type=IN

D.Mel	tggagcag	gtaccaagaacc...	192...	aatcacgttttgtgtttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	570...	--actgtacttcag	gtcgcgaag
D.Sim	tggagcag	gtaccaagaacc...	196...	aatcacgttttgtgtttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	521...	--actgtacctcag	gtcgcgaag
D.Sec	tggagcag	gtaccaagaacc...	201...	aatcacgttttgtgtttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	511...	--actgtacctcag	gtcgcgaag
D.Ere	tggagcag	gtaccaagaacc...	195...	aatcaagttttgtgtttca	GGCTgaACATaTGAGG	aaaaaggtgactcgtttcga...	558...	--actgtaccttag	gtcgcgaag
D.Ana	tggagcag	gtaccaagaacc...	195...	aatcaagttttgtgtttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	426...	--actttcctccag	gtcgcgaaa
D.Gri	tagtgagcag	gtaccagcaca...	622...	aatgtatgtttacatttca	GGCTgaACATTtGAGG	aaaaaggtgactcgatttcga...	703...	--aattttcatcag	ctcgcaaaa
D.Moj	cagcgagcag	gtacctagtaca...	1140...	aatgtgttttatacatttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	439...	--aatgtaatgtag	ctcgcaaaa
D.Vir	tggcgccg	gtgcaggtacaa...	1336...	aatgtgtgtttacatttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	493...	--tgttatgcacag	ctcgcaaaa
D.Wil	tggggcag	ggacaggtagca...	1513...	tgtatattttatacatttca	GGCTgaACATTtGAGG	aaaaaggtgactcgatttcga...	424...	ttaatttagct--g	gtcgcgaaa
D.Yak	tggagcag	gtaccaagaacc...	198...	aatgaagttttgtgtttca	GGCTgaACATTtGAGG	aaaaaggtgactcgtttcga...	586...	--actgtaccacag	gtcgcgaag
	*** **			* ** * *****	*****			* ** * *	*** **

id=112408 gene=FBgn0031869 name=CG18304 segment=chr2L.6936698..6937539\_-1 type=IN VIEW

Figure 34: CS=11.8



```

D.Me1 taccggag gtatttatgac...1634...agaatcgagcagagccacca--TAACAtgACAATcaAGCACAAACCAAAA---G---tatctcaatcctgt----tccatg...776...ttgttgttcag gcactatc
D.Sec taccggag gtatttatgac...1615...agaatcgagcagagccacca--TAACAtgACAATcaAGCACAAACCAAAA---G---tatctcaatcctgt----tccatg...759...ttgttgttcag gcactatc
D.Ere taccggag gtatttatgac...489...-----aaaataataatgatttttct-----TACGTAAATGCAATTTGTTTcttttcgttttaccaacaa----...1846...ttgttgttcag gcactatc
D.Ana cactggag gtatttatgac...1100...-ccatagccataaaaaaaat-----ACAAaAGCACAAACCAAAA---GTGT---cctcatcctggccagagag-t...706...ttgttgttcag gcactatc
D.Gri taccggag gtatgttcgac...1340...-----cacacatTTTTTcgaagc---ACAACAACCAAAA---G-----atccatcatcctaacatgt-t...949...ttgttgttcag gcacaatc
D.Moj gaccggag gtatttacgac...1267...-----aaagcgcacaca---tttccgaa---AGCACAAACCAAAA---G-----atccatcaatgcaacattt-t...957...ttgttgttcag gcacaatc
D.Per gaccggag gtatttatgac...1322...-attaaaaatacaaaacaaaa---AACATAGTAATACAACAACCAAAA---GA-----tttgcaccc-aacatacata...892...ttgttgttcag gcactatc
D.Pse gaccggag gtatttatgac...533...-----aaaaaactaatcattttcct-----TACGTAAATGCAATTTGTTTcttttcgtttttccatag----...1684...ttgttgttcag gcactatc
D.Vir aaccggag gtatttacgac...1325...-----gcaaacaca---tttccgaaagc---ACAACAACCAAAA---G-----atccatcatcc-aacatgt-ta...1035...ttgttgttcag gcacaatc
D.Yak taccggag gtatttatgac...1120...-----gcagagccaccataaacatgaCAATACAATCAACAACCAAAA---G---tatctcaatcctgt----tccatg...797...ttgttgttcag gcactatc
** **** ***** * **** *

```

id=53961 gene=FBgn0033159 name=Dscam segment=chr2R.3214290\_3216793\_-1 type=IN

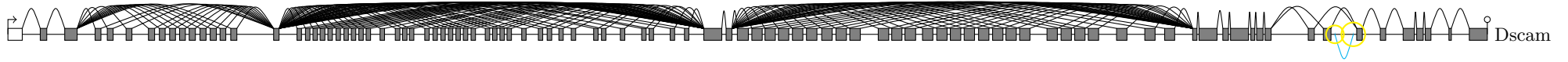
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D.Me1 taccggag gtatttatgac...2442...--actgaccacca---aaaccacc---CTTGGTTGTTGTTGTTATTGTTGTTG-----:-----caggcactatc
D.Sec taccggag gtatttatgac...2406...--actgaccacca---aaaccacc---CTTGGTTGTTGTTGTTGTTATTGTTGTTG-----:-----caggcactatc
D.Ere taccggag gtatttatgac...1877...--actagctctaagcgaatcac-AAACAAATGCAATTAaACGTAtttaaaaaatcaaattaactgtttttatacaatttcgat:::cccttggttgttgttattgtgttcaggcactatc
D.Ana cactggag gtatttatgac...1827...---cctgccaccactgaaaaaaACACcCTTGGTTGTTGTTGTTATTGTT-----:-----tggtgcaggcactatc
D.Gri taccggag gtatgttcgac...2307...---cttggctctacatgtgaaaca---CTTGGTTGTTGTT-----:-----tggtgtgttcaggcacaatc
D.Moj gaccggag gtatttacgac...2245...---cttggctctacatgtgaaaca---CTTGGTTGTTGTTGTTGTT-----:-----ggtgttcaggcacaatc
D.Per gaccggag gtatttatgac...2242...---ggacctgtccactcaaacac---TCTGGTTGTTGTTGTTATTGTTGTT-----:-----gaggcactatc
D.Pse gaccggag gtatttatgac...1729...---ctagctttaagcggctcaaaAAACAATGCAATTAaACGTA-----tttaaaaaaagtgtttttatacaatttatcg:::ctcttggttgttgttattgtgttcaggcactatc
D.Vir aaccggag gtatttacgac...2378...---ctgggtctacatgtgaaaca---CTTGGTTGTTGTT-----:-----tggtgtgttcaggcacaatc
D.Yak taccggag gtatttatgac...1947...aaaccaa--aacca--aaaccacc---CTTGGTTGTTGTTATTGTTGTTG-----:-----caggcactatc
** **** ***** * **** *

```

id=53961 gene=FBgn0033159 name=Dscam segment=chr2R.3214290\_3216793\_-1 type=IN VIEW

Figure 35: CS=15.6



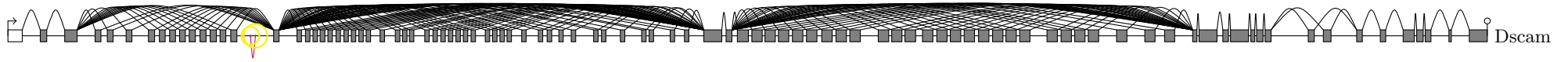
D.Mel	tgtgtact	gtaggttctccc...59...--ttaccgtagaccgtagatcg-----	ATATcTTATTCTGTTTTG	-----	catcatgttggtctaaatggtt-----	...1272...tattaattctag	acgatgta
D.Sec	tgtgtact	gtaggttcttcc...59...--ttaccgtagagcgtagatcg-----	ATATcTTATTCTGTTTTG	-----	catcatgttggtctaaatggtt-----	...1264...tattaattctag	acgatgta
D.Ere	tgtgtact	gtaggttctccc...436...--taccaaaagttctcactcca-----	AAAATATACCAAC	-----	agacagacaaaagaactgaa-----	...911...tattaattctag	acgatgta
D.Ana	tgtgtatt	gtaggttttttt...54...atcctaataccaatttcaaga-----	ACTTtaATATTTTATTCTGTTTTgTTTT	-----	ttggctaaatggttggtcctc...1360...tattaattctag	acgatgta	acgatgta
D.Gri	tgtctact	gtaggttttgac...304...aactcaagaatacacgcaca-----	AAAATATACCAAC	-----	aaaat--attaagaaatcatat-----	...938...tattaattctag	acgatgta
D.Moj	tgtctatt	gtaggtttgccc...382...aaaattccaaaattttca--ca-----	AAAATATACCAAC	-----	aaaataccattaaaatggca-----	...968...tattaattctag	acgatgta
D.Per	tgtctatt	gtaggttctccc...53...atcgatttgaattttatTTT	TAGTTAGCTCGATATTTTATTCTGTTTT	-----	attgtgttttggtctaaatggtt-----	...1207...tattaattctag	acgatgta
D.Pse	tgtctatt	gtaggttctccc...53...atcgatttgaattttatTTT	TAGTTAGCTCGATATTTTATTCTGTTTT	-----	attgtgttttggtctaaatggtt-----	...1208...tattaattctag	acgatgta
D.Vir	tgtatatt	gtaggttttgac...45...a--agcattatttttcgacaa-----	ATTTTATTCTGTTTTaTGGTtcTCAA	ggttgaacattggtt--cgca-----	...1243...tattaattctag	acgatgta	acgatgta
D.Wil	tgtctatt	gtaggttaacgg...226...--atcatcacttttacactaca-----	AAAATATACCAAC	-----	aaattgcattacaaaacagg-----	...1791...tattaattctag	acgatgta
D.Yak	tgtgtact	gtaggttctccc...475...--acaaaaaagttctcactcca-----	AAAATATACCAAC	-----	agacagacaaaagaactgaa-----	...929...tattaattctag	acgatgta
	*** ** *	*****	** *			*****	*****

id=53965 gene=FBgn0033159 name=Dscam segment=chr2R\_3212243\_3213656\_-1 type=IN

D.Mel	tgtgtact	gtaggttctccc...1271...--ggaacaagtgcgagatcgagt----	CGAAACAGAAAGTAAAGTAT	-----	gcgagttgattgaatgcgag-----	...59...tattaattctag	acgatgta
D.Sec	tgtgtact	gtaggttcttcc...1263...--ggaacaagtgcgagatcgagt----	CGAAACAGAAAGTAAAGTAT	-----	gcgagttgattgaatgcgag-----	...59...tattaattctag	acgatgta
D.Ere	tgtgtact	gtaggttctccc...1063...gtaaccgtaatcgttgacca-----	GTTGGTATATTTT	-----	gaaatcgaaaacaataacc...284...tattaattctag	acgatgta	acgatgta
D.Ana	tgtgtatt	gtaggttttttt...1363...-----aagtcagatcgaaaacat	AAGAAACAGAAAGTAAAGTATgCAGT	-----	cgattattgcgagcagca...53...tattaattctag	acgatgta	acgatgta
D.Gri	tgtctact	gtaggttttgac...957...cattattatcatgaacaa-----	GTTGGTATATTTT	-----	gaaatcgacaaaaa...285...tattaattctag	acgatgta	acgatgta
D.Moj	tgtctatt	gtaggtttgccc...1067...aattttatcgtcctaacaa-----	GTTGGTATATTTT	-----	gaaattaaaaaactaaaat...283...tattaattctag	acgatgta	acgatgta
D.Per	tgtctatt	gtaggttctccc...1212...--tcgagaaaaaaagaaaagaa-----	AAAACAGAAAGTAAAGTATCGAGTTGATTG	cattcgagccgcaatgcaat...48...tattaattctag	acgatgta	acgatgta	acgatgta
D.Pse	tgtctatt	gtaggttctccc...1213...--cgagaaaaaaagaaaagaa-----	AAAACAGAAAGTAAAGTATCGAGTTGATTG	cattcgagccgcaatgcaat...48...tattaattctag	acgatgta	acgatgta	acgatgta
D.Vir	tgtatatt	gtaggttttgac...1235...gagtgacggaacaaagctga	TGAATCGAAAACAGAAAGTAAAGT	-----	atgcgagttgac--tttgagc-----	...55...tattaattctag	acgatgta
D.Wil	tgtctatt	gtaggttaacgg...1714...--aaaaaaaacaaaacaaaa-----	GTTGGTATATTTT	-----	gaaatcgataaaaacaaaac...303...tattaattctag	acgatgta	acgatgta
D.Yak	tgtgtact	gtaggttctccc...1116...gtaaccgtattcgttgacca-----	GTTGGTATATTTT	-----	gaaattaaaaacaataacc...288...tattaattctag	acgatgta	acgatgta
	*** ** *	*****	** ** *		*	*****	*****

id=53965 gene=FBgn0033159 name=Dscam segment=chr2R\_3212243\_3213656\_-1 type=IN VIEW

Figure 36: CS=13.2



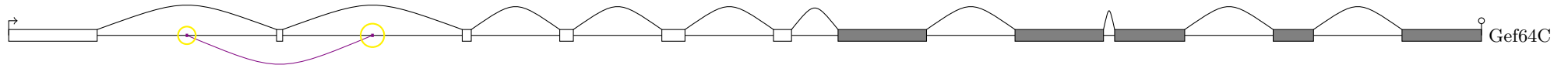
D.Mel	ggaaagcg	gtaa--atttacag-...329...-----gtag-----cgtagtgtaaataaat-----GCAAAAATGCTAATAA	cc-catcgacc--acgtaacaat-----...747...tcaaaatatcag	atggaaaag
D.Sec	ggaaagcg	gtaa--atttacag-...327...-----agag-----cgtagtgtaaataaat-----GCAAAAATGCTAATAA	cc-catcgacc--acgtaacaat-----...778...tcaacatatcag	atggaaaag
D.Ere	ggaaagcg	gtaa--atttacag-...314...-----gtag-----cgtagtgtaaataagt-----GCAAAAATGCTAATAA	ac-cgtcaacc--acgtaacaat-----...748...atcaaatatcag	atggaaaag
D.Ana	agccagcg	gtaa--ttaatcag-...313...-----gtag-----tctagtgtaaatacgc-----GCAAAAATGCTAATAA	atggatcaaca--atttaaca-----...707...tgatcgaatcag	atggcaaaa
D.Gri	agctagcg	gtaa--atcacact-...377...-----g-----tttcatgtaaatatgtatg-----AACAAAAATGCTAATAA	atctctctcatcaattgta...799...aatataattag	acggcaaaa
D.Moj	agctagcg	gtaa--accactag-...395...-----gtaaatagttgtactgtaaa-----TATGTA	tgAACAAAAATGCTAATAA-----aatacatcatatcagtttgt...2028...atcaacgattag	acggcaaaa
D.Per	agccagcg	gtaatgtttgc-...305...-----tgtag-----tccagtgtaaataca-----TACAAAAATGCTAATAA	at--attaaactgatcgatct-----...781...caccgccatcag	atggcaaaa
D.Pse	agccagcg	gtaatgtttgc-...305...-----taaag-----tccagtgtaaataca-----TACAAAAATGCTAATAA	at--attaaactgatcgatct-----...781...caccgccatcag	atggcaaaa
D.Vir	agctagcg	gtaa--accactag-...377...-----gtaaatacttttactgtaaa-----TATGTATGA	CAAAAAATGCTAATAA-----attatcatcgattctgcg...1076...aataaatattag	acggcaaaa
D.Wil	tgttagcg	gtaa--attctctt-...339...ttcatgtag-----ttgaaagtagaATTGGT	TTTTTGTGTtagTTTAGTgTAAAtCAAAAAATGCTAATAA	at--attaatgttaatcaaca-----...546...cgcaatattag
D.Yak	ggaaagcg	gt-a--atttacaga...306...-----gtag-----cgtagtgtaaataat-----GCAAAAATGCTAATAA	ac-agtcaacc--acgtaaaaat-----...703...ttaacatatcag	atggaaaag
		* **** ** *	*****	* ** * ** *

id=53813 gene=FBgn0033159 name=Dscam segment=chr2R.3249373.3250528\_-1 type=IN

D.Mel	ggaaagcg	gtaa--atttacag-...469...aacatgcattt-----catctaagaTTATGGCATT	TTTTGT-----ttcatgcatgctagaatta...607...tcaaaatatcag	atggaaaag
D.Sec	ggaaagcg	gtaa--atttacag-...467...aacttgcattt-----catcaagaTTATGGCATT	TTTTGT-----ttcacgcatgcctagaatta...638...tcaacatatcag	atggaaaag
D.Ere	ggaaagcg	gtaa--atttacag-...450...aacatgcattt-----catctaagaTTATGGCATT	TTTTGT-----taacgcatgctagaattaa...612...atcaaatatcag	atggaaaag
D.Ana	agccagcg	gtaa--ttaatcag-...437...tgatttcatat-----taaatataTTATGGCATT	TTTTCG-----tggtgcatgttaatatagagag...583...tgatcgaatcag	atggcaaaa
D.Gri	agctagcg	gtaa--atcacact-...503...ataatcagcat-----cagctaaaaTTATGGCATT	TTTTGT-----gaagcatgaacatatcatta-----...673...aatataattag	acggcaaaa
D.Moj	agctagcg	gtaa--accactag-...546...aatctaca-at-----cacagagaacTATTcGCATT	TTTTGTTacTGCATG-----aatattgtatat--ggaaatat...1877...atcaacgattag	atggcaaaa
D.Per	agccagcg	gtaatgtttgc-...449...aatccgcatac-----catataaagTTATGGCATT	TTTTGT-----gtggtgcatgct-acacgtag...637...caccgccatcag	atggcaaaa
D.Pse	agccagcg	gtaatgtttgc-...449...aatccgcatac-----catataaagTTATGGCATT	TTTTGT-----gtggtgcatgct-acacgtag...637...caccgccatcag	atggcaaaa
D.Vir	agctagcg	gtaa--accactag-...513...-taatccacat-----cagctaaaaaTTATGGCATT	TTTTGTTGTaGCATG-----aatatcataacgaaaagaaa...940...aataaatattag	acggcaaaa
D.Wil	tgttagcg	gtaa--attctctt-...493...tctcattatccaactaaaaTTATGGCATT	TTTTGTTTGATTGAAgcATGCttAGAAtTTAAGT	acctcatgatcattgcaag-----...394...cgcaatattag
D.Yak	ggaaagcg	gt-a--atttacaga...446...aacatgcattt-----catctaaaaTTATGGCATT	TTTTGT-----taacgcatgctagaactaa...563...ttaacatatcag	atggaaaag
		* **** ** *	*****	* ** * ** *

id=53813 gene=FBgn0033159 name=Dscam segment=chr2R.3249373.3250528\_-1 type=IN VIEW

Figure 37: CS=22.88



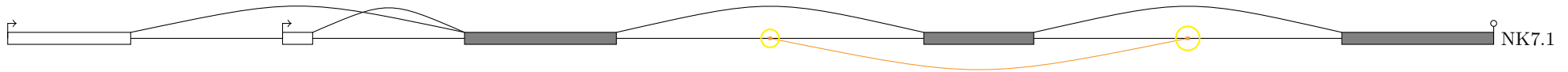
D.Mel	--ccaaaaag	gtaaggcaaatg	---...4066...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tgagccggagtgtgtttttt	-----...844...	cc-----	tcttttcag	tg-tgcagc		
D.Sim	--ccaaaaag	gtaaggcaaatg	---...4024...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tgagccggagtgtgtttttg	-----...886...	cc-----	tcttttcag	tg-tgcagc		
D.Sec	--ccaaaaag	gtaaggcaaatg	---...4065...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tgagccggagtgtgtttttg	-----...845...	cc-----	tcttttcag	tg-tgcagc		
D.Ere	--ccacgaag	gtaagtcaaatg	---...3929...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tgagccggagtgtgtttttg	-----...981...	cc-----	tcttttcag	-gttcagc		
D.Gri	--atagaaaa	aagatgcaaatg	---...3436...	..tcgggg	tgaccataaaaag	-----	TGTTGTT	TGTTTGATTGT	-----	agaatgctttt	gtttttgag	..1469...	ct-----	ttgtttgtag	cg-cacccc
D.Per	taaaaaata	aaaaaccaa	---...3882...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tctctctctctgtgttt	gtt---...1028...	cctctctctctc	ctccag	tg-----		
D.Pse	taaaaaata	aaaaaccaa	---...3890...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tctctctctctctctct	ctct---...1020...	cctctctctctc	ctccag	tg-----		
D.Wil	--cccaaatg	aaa--cgagtcg	...2967...	..tcatgcggt	catggccaatg	-----	TGTTTGTGCTGTTGATGTT	gacttttatgattccatt	-----...1938...	tc-----	tctctcc-t	tattgcagc			
D.Yak	--ccacaaag	gtaaggcaaatg	---...3924...	-----	aaaaagtgtgttattt	gtaCAATGTTGT	TGTT	-----	Tgagccggagtgtgttttt	-----...986...	cc-----	tcttttcag	cgttgcag-		
		*			** *		**** ** *		*		*	*			

id=88805 gene=FBgn0035574 name=Gef64C segment=chr3L\_4693406\_4707616\_1 type=I5

D.Mel	aaagtgag	gtaagtgaaca	...3610...	-----	cacttattc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgccattcattcttaaata	...1299...	-----	tcttcatttcag	ttgcccaa
D.Sim	aaagtgag	gtaagtgaaca	...3602...	-----	cacttattc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgccattcattcttaaata	...1307...	-----	ccttcatttcag	ttgcccaa
D.Sec	aaagtgag	gtaagtgaaca	...3617...	-----	cacttattc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgccattcattcttaaata	...1292...	-----	ccttcatttcag	ttgcccaa
D.Ere	aaagtgag	gtaagtgaaca	...3541...	-----	cacttattc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgccattcattcttaaata	...1368...	-----	ccttcatttcag	ttgcccaa
D.Gri	tcagcaag	gtaagtgtgaca	...3756...	-----	tttgcctgg	caaccagca	-----	ACA-GCAACAGCAACAACA	ataaacaacaagag	caactgc-...1151...	-----	cctgcaggtgag	caacccaa		
D.Per	agtgtgag	gtaggtcccagc	...3458...	-----	cacttatgc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgaccatttggctcttaaata	...1451...	ctttcactcttttgcagac	-----	
D.Pse	agtgtgag	gtaggtcccagc	...3408...	-----	cacttatgc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgaccatttggctcttaaata	...1501...	ctttcactcttttgcagac	-----	
D.Wil	aaggtgag	taagaaaaacc	...3796...	..caacagc	atttgctt-tta	-----	AATATgTAACA-GCAACAgcAGCA	-----	gcagcaacaacatcagcaac	...1106...	-----	tttgcaggtagg	ttctccta		
D.Yak	aaagtgag	gtaagtgaaca	...3517...	-----	cacttattc	-----	ccaaaacaataAA	-----	ACGcGCAACaATTG	-----	cgccattcattcttaaata	...1392...	-----	ccatcatttcag	ttgcccaa
		* **			**	*		** *****		*	*		**		

id=88807 gene=FBgn0035574 name=Gef64C segment=chr3L\_4707651\_4732871\_1 type=I5 VIEW

Figure 38: CS=9.72



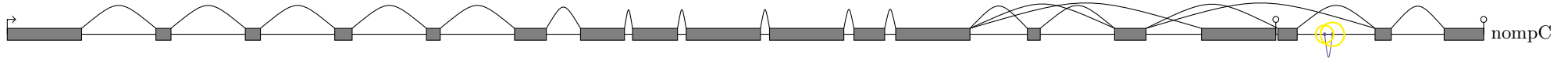
D.Mel	caagaagg	gtatgtattggg...1791...	-tatgaggccgcccgg--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgacaaaacgacaac--...773...	tcacttttgag	aaagttct
D.Sim	caagaagg	gtatgtattggg...1802...	-tatgaggccgtcgg--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgac-aaacgacaacg-...771...	tcacttttgag	aaagctcc
D.Sec	caagaagg	gtatgtattggg...1787...	-tatgaggccgtcgg--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgac-aaacgacaacg-...738...	tcacttttgag	aaagctcc
D.Ere	caagaagg	gtatgtattaga...1828...	atagaggccgcc-g--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgac-aaacgacaaca-...803...	ttgttttgag	aaagctct
D.Ana	caagaagg	gtaagcactcta...1643...	-tatgaggccggcgg--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgac--ggcgtcagtgg...235...	gatttcttgag	agtcctcc
D.Moj	caagaagg	gtaagtgagacc...2218...	---tgaggccgtgcgacggc--cca	CGCGGC--GTATTAG	--caattgcagc--gacaacaaca-...1054...	ttcattcag	agcactcg
D.Per	caagaagg	gtaagtcaaca...2390...	-----agccgaacaacaacaggaca	AACAacAAACATTGT	gcaaacTTTTgtattgtta-...1552...	tgtcttttgag	agaactcg
D.Pse	caagaagg	gtaagtcaaca...2550...	-----agccgaacaacaacaggaca	AACAacAAACATTGT	gcaaacTTTTgtattgtta-...1527...	tgtcttttgag	agaactcg
D.Wil	caaaaagg	gtgagtagaatt...2271...	---ctcatcagttgaacagc--cca	CGCGGC--GTATTAG	--caa-tgtgtttggatttaact--...999...	attttccag	agcattct
D.Yak	caagaagg	gtatgtattggg...1900...	-tatgaggccgcccgg--ggc--cca	CGCGGC--GTATTAG	--caa-tgcgac-aaacgacaatg-...837...	ccattttgag	aaagctct
	*** **	** *	* * *	** * *	*** * **	*	*** * **

id=119311 gene=FBgn0024321 name=NK7.1 segment=chr3R\_10167306\_10169946\_-1 type=IN

D.Mel	aaacgcag	gtaagataacat-...4267...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...643...	ctgtttttgag	gtaaagat
D.Sim	aaacgcag	gtaggataacat-...4236...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...674...	ctgtttttgag	gtgaagat
D.Sec	aaacgcag	gtaggataacat-...4244...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...666...	ctgtttttgag	gtgaagat
D.Ere	aaacgcag	gtaggattgcat-...4268...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...642...	cttaactccag	gtgaagat
D.Ana	aaactcag	gtgagcattccc-...4522...	-gccgacagggcgtgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...388...	tacttttcag	gtgaagat
D.Moj	aaacgcag	gtaa-atactata...3588...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...1322...	gtttatttcag	gtaaaaat
D.Per	aaacacag	gtatgcaacctg-...4362...	aatgaaaacgaagatgagag	GCAAATGTTTtaTGTT	gcgccactgactggtgcggc...547...	ctcttttacag	gttaaaat
D.Pse	aaacacag	gtatgcaacctg-...4362...	aatgaaaacgaagatgagag	GCAAATGTTTtaTGTT	gcgccactgactggtgcggc...547...	ctcttttacag	gttaaaat
D.Wil	aaacgcag	gtaagagagaac-...4089...	-tcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...821...	ttcttttacag	gtgaaat
D.Yak	agacgcag	gtaggaatacat-...4313...	-gcagacatgccgctgaata	CTAAtTATGTgCGCG	atttaaatagatttttcatt...597...	cttacctccag	gtgaagat
	* ** **	**	* * * * ** * * * * * * *	* ** * * *	** * * *	** **	** ** *

id=119313 gene=FBgn0024321 name=NK7.1 segment=chr3R\_10156804\_10166943\_-1 type=IN VIEW

Figure 39: CS=10.8



```

D.Mel aggtcaag gtaaaatctcag...137...tagtttgc--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgagttt...302...-cacg'gcctcag gcacgcat
D.Sim aggtcaag gtaaaatctcag...149...tagcttgc--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgagttt...300...-cacg'gcctcag gcacgcat
D.Sec aggtcaag gtaaaatctcag...143...tagcttac--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgagttt...300...-cacg'gcctcag gcacgcat
D.Ere aggtcaag gtaaaatctcag...152...tagttagc--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgagttt...285...-cacg'gcctcag gcacgcat
D.Ana aggtcaag gtaaaatctcag...139...tagtttgc--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgaagtt...319...tcacg'cgtt-cag gcacgcat
D.Gri aggtcaag gtaaaatcttat...107...tagtt-gc--tgacctttctgcCAA-CCATTAAAGCAATTGgcaacaactgcaacgggagc...346...ccac-aacaacag gcacgcat
D.Vir aggtcaag gtaaaatcaaa...122...tagtt-gc--tgacctttctgcCAA-CCATTAAAGCAATTGgcaacaactgcaaacgggg...247...-cacag'ccacag gcacgcat
D.Wil aggtcaag gtaaaacaacaat...90...-gctaacaacgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaaaaaata...1153...aca-cacaacag gcacgcat
D.Yak aggtcaag gtaaaatctcag...143...tagtttgc--tgacctttcc-cCAACcCATTAAAGCAATTGgcaacaaccgcaatgagttt...308...-cacg'gc'ccacag gcacgcat
***** ***** * * * ***** * * * ***** * * * *****

```

id=82594 gene=FBgn0016920 name=nompC segment=chr2L\_5363785\_5364308\_1 type=IN

```

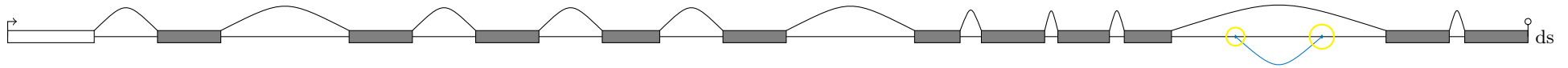
D.Mel aggtcaag gtaaaatctcag...186...-----cgcaatgagtttg--aacacag-TGAATGCTTTAAGTgTGTG-cccacataagaaa-atcacct-----...254...-cacg'gcctcag gcacgcat
D.Sim aggtcaag gtaaaatctcag...198...-----cgcaatgagttta--aacaccg-TGAATGCTTTAAGTgTGTG-cccacataagaga-atcacct-----...252...-cacg'gcctcag gcacgcat
D.Sec aggtcaag gtaaaatctcag...192...-----cgcaatgagttta--aacaccg-CGAATGCTTTAAGTgTGTG-cccacataagaaa-atcacct-----...252...-cacg'gcctcag gcacgcat
D.Ere aggtcaag gtaaaatctcag...201...-----cgcaatgagtttt--aacaccg-TGAATGCTTTAAGTgTGTG-cccacataagaaa-atcacc-----...237...-cacg'gcctcag gcacgcat
D.Ana aggtcaag gtaaaatctcag...190...-----caatgaagtaccatcactg-TGAATGCTTTAAGTgTGTG-cccacaaatcaaacaccac-----...269...tcacg'cgtt-cag gcacgcat
D.Gri aggtcaag gtaaaatcttat...207...-----gtcaacaatgtc--tgcccaa-CAAATGCTTTAAGTgTGTG-cccg--tttg-----caccctgttaca...246...ccac-aacaacag gcacgcat
D.Vir aggtcaag gtaaaatcaaa...206...caaatgtcaacaatgtc--ta-----CAAATGCTTTAAGTgTGTG-cctgtatttg-----caccctgtgc--...163...-cacag'ccacag gcacgcat
D.Wil aggtcaag gtaaaacaacaat...168...-----accacaatatttt--catttaaCAGAA-TGCTTTAAGTgTGTG-tctgtgt-----cctgtcgtatgc...1075...aca-cacaacag gcacgcat
D.Yak aggtcaag gtaaaatctcag...192...-----cgcaatgagtttc--aacaccg-TGAATGCTTTAAGTgTGTG-cccacatatgaaa-atcacct-----...260...-cacg'gc'ccacag gcacgcat
***** ***** * * * ***** * * * ***** * * * *****

```

id=82594 gene=FBgn0016920 name=nompC segment=chr2L\_5363785\_5364308\_1 type=IN VIEW

Figure 40: CS=10.8





```

D.Mel  actgtggg gtaagtttcagt...712...accaatTTTTatctttcactGATTGTCGGCAAAACaataaaaacgaaataccgc...1482...ttttcttgag aaaactgg
D.Sim  accgtggg gtaagtttcagt...707...accaatTTTTatctttcactGATTGTCGGCAAAACaataaaaacgaaataccgc...1491...ttttcttgag aaaactgg
D.Sec  accgtggg gtaagtttcagt...695...accaatTTTTatctttcactGATTGTCGGCAAAACaataaaaacgaaataccgc...1466...ttttcttgag aaaactgg
D.Ere  accgtggg gtaagtttcagt...716...accaatTTTTatctttcactGATTGTCGGCAAAACaataaaaacgaaataccgc...1523...ttttcttgag aaaactgg
D.Ana  acaatcgg gtaagctggcat...576...accaatTTTTatctttcgctGATTGTCGGCAAAACaataaaaacgaaat-cccgc...1449...atTTaatttcag caaactgg
D.Gri  accgtcgg gtgagtttttac...1529...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaatccccg...2307...ctctccaaacag caaattgg
D.Moj  accgtcgg gtaagtctacag...824...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaaaacccc...1531...gtcctccacag caaactgg
D.Per  accgtcgg gtgagcttgag...767...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaaaacccc...1729...ttccaccgcag aaaactcg
D.Pse  accgtcgg gtgagcttgag...715...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaaaacccc...1712...ttccaccgcag aaaactcg
D.Vir  actgtggg gtaagttttcac...1171...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaaaacccc...1889...tcttccgaatag caaactgg
D.Wil  actgttgg gtaagtacatc...564...accaatTTTTatcttgcgctGATTGTCGGCAAAACaataaaaacgaaatgcaca...1073...ccatttctttag aaaactgg
D.Yak  accgtggg gtaagtttcagt...730...accaatTTTTatctttcactGATTGTCGGCAAAACaataaaaacgaaataccgc...1618...ttttcttgag aaaactgg
** * ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=115717 gene=FBgn0000497 name=ds segment=chr2L.645717\_647988\_-1 type=IN

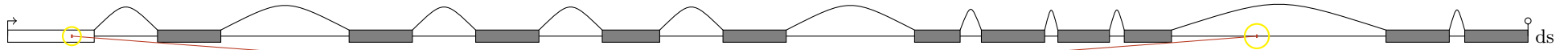
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D.Mel  actgtggg gtaagtttcagt...1548...ctcg---ctgttccttcacttcaGTTTgaCTGAttCAATTcataaaat---ggccctctgccc...643...ttttcttgag aaaactgg
D.Sim  accgtggg gtaagtttcagt...1530...ctcg---ctgttccttcacttcaGTTTgaCTGAttCAATTcataaaat---ggccctctgccc...665...ttttcttgag aaaactgg
D.Sec  accgtggg gtaagtttcagt...1493...ctcg---ctgttccttcacttcaGTTTgaCTGAttCAATTcataaaat---ggccctctgtcc...665...ttttcttgag aaaactgg
D.Ere  accgtggg gtaagtttcagt...1581...ctcg---ctgttccttcacttcaGTTTgaCTGAttCAATTcataaaat---ggccctctgccc...655...ttttcttgag aaaactgg
D.Ana  acaatcgg gtaagctggcat...1408...acagctttcctttattccgc---TTTgaCTGAttCAATTcataaaat---ggccctctgccc...614...atTTaatttcag caaactgg
D.Gri  accgtcgg gtgagtttttac...2511...tcttcagcccattccttcac---TTTgaCTGAttCAATTcataaaacagaaagagcaca---1322...ctctccaaacag caaattgg
D.Moj  accgtcgg gtaagtctacag...1534...tctgcagccagtttcttcac---TTTgaCTGAttCAATTcataaaatccgaa-agcaaaa---818...gtcctccacag caaactgg
D.Per  accgtcgg gtgagcttgag...1886...ctgtgtagcctttccctcac---TTTgaCTGAttCAATTcataaaat---ggagcccagagc...607...ttccaccgcag aaaactcg
D.Pse  accgtcgg gtgagcttgag...1834...ctctgtagcctttccctcac---TTTgaCTGAttCAATTcataaaat---ggagcccagagc...590...ttccaccgcag aaaactcg
D.Vir  actgtggg gtaagttttcac...1831...tctgcagccagttccttcac---TTTgaCTGAttCAATTcataaaacagaa-agcaca---1226...tcttccgaatag caaactgg
D.Wil  actgttgg gtaagtacatc...1070...gctctgcgcttttccttcac---TTTgaCTGAttCAATTcataaaac---gattcggtatat...564...ccatttctttag aaaactgg
D.Yak  accgtggg gtaagtttcagt...1603...ctcg---ctgttccttcacttcaGTTTgaCTGAttCAATTcataaaat---ggccctctgccc...742...ttttcttgag aaaactgg
** * ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=115717 gene=FBgn0000497 name=ds segment=chr2L.645717\_647988\_-1 type=IN VIEW

Figure 41: CS=11.52



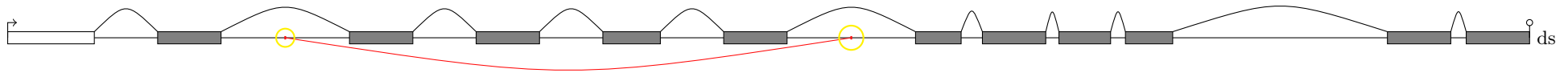
D. Mel	tcgtgtgt	tttcgtcgcagc...463...agtaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTTTG	-----gctcgcttcggccgtgtggc-----	...136...aggccacgaagt	g--taagaga	
D. Sim	tcgtgtgt	tttcgtcgcagc...463...agtaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTTTG	-----gctcgcttcggccgtgtggc-----	...136...aggccacgaagt	g--taagaga	
D. Sec	tcgtgtgt	tttcgtcgcagc...463...agtaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTTTG	-----gctcgcttcggccgtgtggc-----	...136...aggccacgaagt	g--taagaga	
D. Ere	tcgtgtgt	tttcgtcgcagc...462...agtaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTTTG	-----gctcgcttcggccgtgtggc-----	...136...aggccacgaagt	g--taagata	
D. Ana	tcgtttct	tttcgtcgcagc...592...agtaagaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTGG	-----ctcgccttcggccgtgtggc-----	...144...tggccaccaaat	g--taagaaa	
D. Gri	tcgtttgt	tttcgtcgcaga...786...agaaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTctTTTGGCTCG	-----cctttggccgtgtggccagca...114...tagccacaaat	g--taagcaa		
D. Moj	tcgtttgt	tttcgtcgcaga...744...agaaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAG	-----ttcttttggctcgctttggc-----	...164...agagtataaaaa	ggataaat--	
D. Per	tcgtgtgt	tttcgtcgcctga...577...aaaaagaaaaagaagaat	ATTGttCAACAAGTCAaaCGAGTT	-----ccttttggctcgctttggc-----	...229...ccatcgcaaat	g--taagaga	
D. Pse	tcgtgtgt	tttcgtcgcctga...573...aaaaagaaaaagaagaat	ATTGttCAACAAGTCAaaCGAGTT	-----ccttttggctcgctttggc-----	...186...ccatcgcaaat	g--taagaga	
D. Vir	tcgtttgt	tttcgtcgcaga...705...agaaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTctTTTGGCTCGctTTGGcGTGT	ggccagcagcagcagcagct...176...aga--ataaaaa	ggataaataa		
D. Yak	tcgtgtgt	tttcgtcgcagc...469...agtaaaaggcgaaaagaat	ATTGttCAACAAGTCAaaCGAGTTCTTTTTG	-----gctcgcttcggccgtgtggc-----	...136...aggccacgaagt	g--taagcga	
	*** **	***** *	* ** *	*****	**	**	* **

id=115698 gene=FBgn0000497 name=ds segment=chr2L.714275\_714968\_-1 type=E5

D. Mel	actgtggg	gtaagtttcagt...870...agagcagacaaacagactga	-----CGGAGAGacAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1307...tttttcttcag	aaaactgg		
D. Sim	accgtggg	gtaagtttcagt...862...agagcagacaatcagactga	-----CGGAGAGacAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1319...tttttcttcag	aaaactgg		
D. Sec	accgtggg	gtaagtttcagt...850...agagcagacaatcagaccga	-----CGGAGAGacAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1294...tttttcttcag	aaaactgg		
D. Ere	accgtggg	gtaagtttcagt...869...agagcagacaatcagactga	-----CGGAGAGacAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1353...tttttcttcag	aaaactgg		
D. Ana	acaatcgg	gtaagctggcat...771...agagcagacagccagacgga	-----CTGAGGGaCaAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1236...atattaattcag	caaactgg		
D. Gri	accgtcgg	gtgagtttttac...1763...-----acgtacagacaggacagcgt	-----TGGGAcCAGAcAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...2054...ctctccaaacag	caaattgg		
D. Moj	accgtcgg	gtaagtctacag...1095...cgtgcagc---tggacaga-cat	-----TTTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1253...gctcctccacag	caaactgg		
D. Per	accgtcgg	gtgagtcttcag...1048...-----agacaatcagacaga-cagac	-----AATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1439...tttccaccgcag	aaaactcg		
D. Pse	accgtcgg	gtgagtcttcag...997...-----agacaatcagacaga-cagac	-----AATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1421...tttccaccgcag	aaaactcg		
D. Vir	actgtggg	gtaagttttcac...1382...-----ggacagccggacagg-caggg	ACGTaCCGACGGGAcCAGAcAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1650...cttccgaatag	caaactgg		
D. Yak	accgtggg	gtaagtttcagt...884...agagcagacaatcagactga	-----CGGAGAGacAATTCGTGACgTTGTTGtTAGT	cttggacttgacttgact...1447...tttttcttcag	aaaactgg		
	** **	** **	*	*****	** ** *	**	*** **

id=115717 gene=FBgn0000497 name=ds segment=chr2L.645717\_647988\_-1 type=IN VIEW

Figure 42: CS=10.56



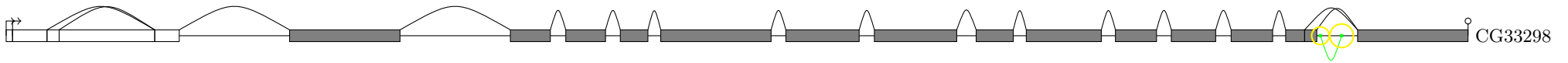
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D.Sec	tcctgcag	gtgatgcatca...4058...	-gatcccgacacgctttagct	TTAAATGCATATCAG	-----	tctggactgcaaacttcggt...852...	cctgccttttag	gtttctgc	
D.Ere	ttctgcag	gtgatgcatca...4000...	ggatcccgacacgctttagc	TTAAATGCATATCAG	-----	tctggactctaagctacgcc...910...	ttcccttttag	gtttctgc	
D.Gri	tacttaag	gtgagtcattag...3823...	cgacgtgg-acacgtttcgct	TTAAATGCATATCAG	-----	tctgggagtct-gtggctgag...1087...	tctgcctttcag	gtatccgc	
D.Moj	tactcaag	gtgagtcattaa...4122...	cgacgtgg-acacgtttcgct	TTAAATGCATATCAG	-----	tctgggagtct-gagtctgag...788...	ttgcgcctcag	gtgtcggc	
D.Per	tcctgcag	gtgtacgcctcc...4285...	-gccgggttacacgtttcgct	TTAAAGGCATATCAG	tGTGT	gt-ccccagacccc----	cctc...	620...ccttttctgcag	gtctctgc
D.Pse	tcctgcag	gtgtacgcctcc...4283...	-gccgggttacacgtttcgct	TTAAATGCATATCAG	tGTGT	gtccccccatacccc----	cctc...	622...ccttttctgcag	gtctctgc
D.Vir	tactcaag	gtgagtcacttc...4196...	cgacgtgg-acacgtttcgct	TTAAATGCATATCAG	-----	tctgggagtctcgagacca...	714...	tttcgcctgcag	gtctcggc
D.Wil	tactcaag	gtgagtcacaat...4427...	cgat-tcgacacgcttttgct	TTAAATGCATATCAG	-----	tctggaacggaagcgaagg...	483...	tctgttttgcag	gtctcagc
D.Yak	tcctgcag	gtgatgcatca...4005...	-gatcccgacacgctttagct	TTAAATGCATATCAG	-----	catggactctaagttacgcc...	905...	cctgttttttag	gtttctgc
	* ** **	***	* * ***** ** *****			*		** ** **	

id=115701 gene=FBgn0000497 name=ds segment=chr2L.657385.705870.-1 type=IN

D.Mel	tcttcagg	gtaagtgcgaga...1061...	----cggtgatggctgacgct	TTGAcATGCATTAA	ttgcctctcgaggcaaac...	1352...	gtatttgcag	gtacgcga	
D.Sec	tcttcagg	gtgagtgcgaga...1046...	----cggtgatggctgacgct	TTGAcATGCATTAA	ttgcctctcgaggcaaac...	1345...	gtatttgcag	gtacgcga	
D.Ere	tctttagg	gtgagtgcgaga...1128...	----cggtgatggctgacgct	TTGAcATGCATTAA	ttgcctctcgaggcaaac...	1267...	gtatttgcag	gtacgcga	
D.Gri	ttttcagg	gtgagtgcgaga...1217...	----tctctgatgactgcgacgct	TTGAcATGCATTAA	ttgcctctctctcctct-	1705...	gcgctaaaacag	gtacgcga	
D.Moj	tcttcagg	gtgagtgcgaga...1658...	----agtctgatggctgacgct	TTGAcATGCATTAA	ttgcctctcg-cctctctg...	1526...	ttttccgcag	gtacgcga	
D.Per	tcttcagg	gtgagtaccccc...599...	cactctctgtgatggctggg	ACGC	TTGAcATGCATTAA	ttgcctctcgagagccggtc-	1999...	ctccttcacag	gtacggga
D.Pse	tcttcagg	gtgagtaccccc...626...	cactctctgtgatggctggg	ACGC	TTGAcATGCATTAA	ttgcctctcgagagccggtc-	1974...	ctccttcacag	gtacggga
D.Vir	tcttcagg	gtgagtgcgaga...1122...	----gactgatggctgacgct	TTGAcATGCATTAA	ttgcctcgccctctctctg-	1371...	gcctttgcag	gtacgcga	
D.Wil	tcttcagg	gtaagttcttac...590...	----tattggtcggcgagacgct	TTGAcATGCATTAA	ttgcctctccaacagtcact-	1356...	ttttaccacag	gtacgcga	
D.Yak	tcttcagg	gtgagtgcgaga...1092...	----cggtgatggctgacgct	TTGAcATGCATTAA	ttgcctctcgaggcaaac...	1288...	gtatttgcag	gtacgcga	
	* ** **	** **	* * * *****			*		** ** **	

id=115709 gene=FBgn0000497 name=ds segment=chr2L.650294.652785.-1 type=IN VIEW

Figure 43: CS=10.8



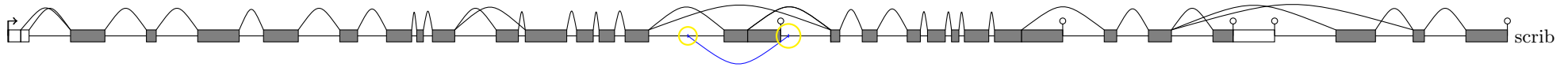
D.Mel	atctaTAG	GTAAAAAGGCACAAAAT	--acttgatctgcaag---caagtt...136...gccgtcttacag	aatcaccg
D.Sim	atctaTAG	GTAAAAAGGCACAAAAT	--acttgatctgcaag---caagtt...139...gccgttttacag	aatcaccg
D.Sec	atctaTAG	GTAAAAAGGCACAAAAT	--acttgatctgcaag---caagtt...143...gccgttttacag	aatcaccg
D.Ere	atcTATAG	GTAAAAAGGCACAAAAT	--acttgattgaaag---caagtt...157...accgtttgcag	aatcaccg
D.Ana	atctaTAG	GTAAAAAGGCACAAAAT	--actggcaaagcaac---tacttt...118...aatatcttgcag	aatcaccg
D.Gri	attTATAG	GT-AAAAGGCACAAAAT	--actagttaccgctg---caagtt...179...attctttgcag	aatcgccg
D.Per	ataTATAG	GTAAAAAGGCACAAAAT	--acttgatagcttct---cttgca...114...ttattcttgcag	aatcaccg
D.Pse	ataTATAG	GTAAAAAGGCACAAAAT	--actgatagcttct---cttgca...114...atattcttgcag	aatcaccg
D.Vir	attTATAG	GT-AAAAGGCACAAAATAA	agcgcaataataat----aaatta...178...aatctcttgcag	aatcgccg
D.Wil	atataTAG	GTAAAAAGGCACAAAAT	-----ctaaaatattttgcgaatt...182...tctatattgcag	aatcgccg
D.Yak	atcTATAG	GTAAAAAGGCACAAAAT	--acttgattgaaag---caagtt...134...actgtttgcag	aatcaccg
	** *****	** *****	* ** **	**** **

id=114873 gene=FBgn0032120 name=CG33298 segment=chr2L.9519535\_9519719.1 type=IN

D.Mel	atctatag	gtaaaaaggcac-...65...gcatgtattag---tttg---ttttg--	ATTTTGTGTCCTTTTAttTCTA	cattg---ttg	cgcaattcttta...34...gccgtcttacag	aatcaccg		
D.Sim	atctatag	gtaaaaaggcac-...68...--tgtattagtttttt---tttg--	ATTTTGTGTCCTTTTAttTCTA	cattg---ttg	cgcaataactttg...34...gccgttttacag	aatcaccg		
D.Sec	atctatag	gtaaaaaggcac-...65...gcatgtattag---ttta---tttg--	ATTTTGTGTCCTTTTAttTCTA	cattg---ttg	cgcaattcttta...41...gccgttttacag	aatcaccg		
D.Ere	atctatag	gtaaaaaggcac-...65...gcatgtattag---ttta---tttg--	ATTTTGTGTCCTTTTAttTGTGTA	cattg---ttg	cgcaaaccttca...55...accgtttgcag	aatcaccg		
D.Ana	atctatag	gtaaaaaggcac-...50...ctgtgcatgag---ttta---ttatg--	ATTTTGTGTCCTTTTAttTGTGTA	aacatta----tctcccactcca...33...aatatcttgcag	aatcaccg			
D.Gri	atctatag	gt-aaaaggcaca...98...----ttatcattttttctttatg--	ATTTTGTGtCCTTTTAttTATA	cattgcatatttctttagt---...43...attctttgcag	aatcgccg			
D.Per	atctatag	gtaaaaaggcac-...44...---cgtttctgagttcct--ttatg--	ATTTTGTGTCCTTTTAttTGTGTA	cattgcttgatttcccct---...33...ttattcttgcag	aatcaccg			
D.Pse	atctatag	gtaaaaaggcac-...44...---cgtttctgagttcct--ttatg--	ATTTTGTGTCCTTTTAttTGTGTA	cattgcttgatttcccct---...33...atattcttgcag	aatcaccg			
D.Vir	atctatag	gt-aaaaggcaca...107...----tcttaacgttttaattttta	TTATTTTGTGtCCTTTTAttTATA	cattgatttgcactaattct---...33...aatctcttgcag	aatcgccg			
D.Wil	atctatag	gtaaaaaggcac-...94...--tttgtttgcg--tttt--atata--	ATTTTGTGTCCTTTTAttTATA	gattttg----atataattttaa...53...tctatattgcag	aatcgccg			
D.Yak	atctatag	gtaaaaaggcac-...65...gcatgtattag---ttta---tttg--	ATTTTGTGTCCTTTTAttTGTGTA	cattg---ttg	cgcaaaccttta...32...actgtttgcag	aatcaccg		
	** *****	** *****	* **	*****	*****	* **	* ** **	**** **

id=114873 gene=FBgn0032120 name=CG33298 segment=chr2L.9519535\_9519719.1 type=IN VIEW

Figure 44: CS=13.2



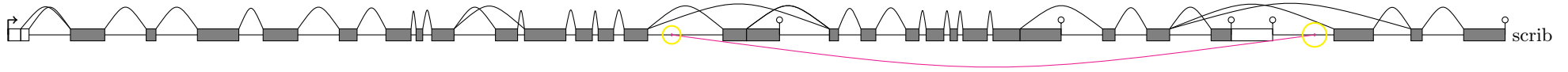
D. Mel	aggcacag	gtaaggaagttg...425...	-----gtatatata-----	acgaaattggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...399...	-gaccgtgagcag	ccctcctc	
D. Sim	aggctcag	gtaaggaagttg...423...	-----gtatgtata-----	acgaaattggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...401...	-gaccgtgagcag	ccctcctc	
D. Sec	aggctcag	gtaaggaagttg...422...	-----gtatgtata-----	acgaaattggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...387...	-gaccgtgagcag	ccctcctc	
D. Ere	aggctcag	gtaaggaagttg...424...	-----gtatgtata-----	acgaaattggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...398...	-gaccgtgagcag	ccctcctc	
D. Ana	aggcgag	gtaaggccaagt...431...	tactcgtatatata-----	acgaaa-TTGT	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...361...	-aactatgagcag	ccctcctc	
D. Moj	aggctcag	gtaggataca...503...	-----atctacatatatt	acgaaa-TTGT	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...493...	-gacaacgagcag	ccctcatc	
D. Pse	aggctcag	gtaaggaacca...421...	-----ctcgtcta-----	atggatttgat-	GTGT	TGTTTTGCATG	---	tg	cctc	cctt	gtgc	gcccc-----	...578...	-gataccgagcag	tcctcctc
D. Vir	aggctcag	gtaagatgacaa...465...	-----atatatatatt	tataaaaa-TTGT	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...444...	-atcaacgagcag	ccctcatc	
D. Wil	aggctcag	gtaaggaccctc...460...	-----ttatgtata-----	ttgaatttggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...503...	-caactatg-gcag	ccatcctc	
D. Yak	aggctcag	gtaaggaagttg...425...	-----gtatgtata-----	acgaaattggt-	TGTG-Tt	TGTTTTGCATGTGC	cctgtg	gc	cctt	gtct	gtcc-----	...396...	-caactatgagcag	ccctcctc	

id=37194 gene=FBgn0261263 name=scrib segment=chr3R.22401171.22402078.1 type=IN

D. Mel	cgttttgc-	aaacgatttgat...42...	tcacatcatgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACA	-----	ttacaag	aggt	gtgatt	gc-----	...1554...	tctgtcctgtag	gaggttgt
D. Sim	cgttttgc-	aaacgatttgat...40...	tcacatcatgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACA	-----	ttacaag	aggt	gtgatt	gc-----	...1543...	tctgtcctcctag	gaggttgt
D. Sec	cgttttgc-	aaacgatttgat...40...	tcacatcatgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACA	-----	ttacaag	aggt	gtgatt	gc-----	...1541...	tctgtcctcctag	gaggttgt
D. Ere	cgttttgc-	aaacgatttgat...50...	tcacatcatgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACA	-----	ttacaag	aggt	gtgatt	gc-----	...1438...	tctgtcctcctag	gaggttgt
D. Ana	cgatttgca	aaacgatttga...86...	ttcattgtgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACAtc	GCACA	-----	gcgtt	gcgatt	gcttcgact	...1469...	ttgtttcctgtag	gaggttgt
D. Moj	gtttttgc-	aaacgaaatgat...127...	----ctgtaattgaa---	atgcattaa-	GCATt	ATGCAAAAACA	cGCACAtc	CGAA-	ctaatt	taataaaa	agtgtgta-----	...2169...	ttgtctcctgtag	gaagtggg	
D. Pse	-gttttgca	aaacgatttgat...73...	----gttgccgttacatt-	acgttt-----	CATGCAAAAACA	tGCAC	-----	cctctg	ccacacacactcgc-	-----	...1691...	ttgtttccacag	gaggttgt		
D. Vir	gtttttgc-	aagcgatttgac...132...	----aattataattgaa---	atg--ttaa-	GCATt	ATGCAAAAACA	cGCACAtc	CGAA	actaa-t	taaacacaaaaa	aga-----	...2095...	ttgtctcctgtag	gaagtggg	
D. Wil	tattttgc-	gaacaatttgat...150...	-----gtgtttctgat	gctg--ccgaa	GCATt	ATGCAAAAACA	tGCACA	-----	tcgtcag	tagctt	gtatgtt-----	...1917...	tctattatgtag	gaggttgt	
D. Yak	cgttttgc-	aaacgatttgat...50...	tcacatcatgtttc-----	atg--ccaa-	GCATt	ATGCAAAAACA	tGCACA	-----	ttacaag	aggt	gtgatt	gc-----	...1590...	tctgtcctgtag	gaggttgt

id=37197 gene=FBgn0261263 name=scrib segment=chr3R.22402762.22404442.1 type=IN VIEW

Figure 45: CS=13.8



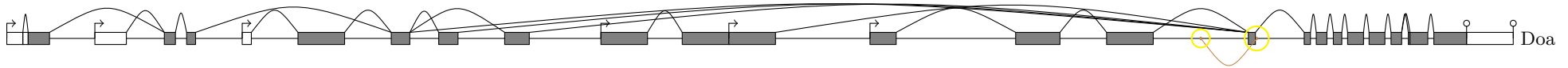
D. Mel	aggcacag	gtaaggaagttg...243...-cagcgcaagtcgtccaagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaaccaa-----	.588...	-gaccgtgagcag	ccctcctc
D. Sim	aggctcag	gtaaggaagttg...240...-cagcgcaagtcgtccaagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaactaa-----	.591...	-gaccgtgagcag	ccctcctc
D. Sec	aggctcag	gtaaggaagttg...240...-cagcgcaagtcgtccaagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaaccaa-----	.576...	-gaccgtgagcag	ccctcctc
D. Ere	aggctcag	gtaaggaagttg...242...-cagcgcaagtcgtccaagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaaccta-----	.587...	-gaccatgagcag	ccctcctc
D. Ana	aggcgcag	gtaaggccaagt...255...acagcgcaaggcgacc-cgca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaaccta-----	.548...	-aactatgagcag	ccctcctc
D. Moj	aggctcag	gtaggataacaa...277...gagatgcccaaggatt-catg	CAAAATGTTGt	TGAT	-----aaacacataaaactcctcc...730...	-gacaacgagcag	ccctcctc	
D. Pse	aggctcag	gtaaggaacaa...218...-aggtcttcgagtcgcagcagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaagaat-----	.785...	-gataccgagcag	ccctcctc
D. Vir	aggctcag	gtaagatgacaa...241...caaccggagagatt-catg	CAAAATGTTGt	TGAT	-----aaacacataaaacaaacttc...679...	-atcaacgagcag	ccctcctc	
D. Wil	aggctcag	gtaaggaccctc...874...-aaaaacaattgttt-cttac-	AAAAACCAAAAC	C	cgtaaaaaacaaaaaatcaa-----	.96...	-caactatg-gcag	ccctcctc
D. Yak	aggctcag	gtaaggaagttg...243...-cagcgcaagtcgtccaagca--	AATTGTTGt	TGAT	atttggcgtcctcaaaaaccta-----	.585...	-caactgagcag	ccctcctc
	****	***	*		**	*		* **

id=37194 gene=FBgn0261263 name=scrb segment=chr3R\_22401171\_22402078.1 type=IN

D. Mel	tttaaatt	agctctagtgtgta-----	.1179...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaag-----	.202...	aaattatgacag	aaccgcac
D. Sim	tttaaatt	agcactagtgtgta-----	.1180...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaagg-----	.202...	aaattatgacag	aaccgcac
D. Sec	tttaaatt	agcactagtgtgta-----	.1192...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaag-----	.202...	aaattatgacag	aaccgcac
D. Ere	tttaaatt	agctttactgtgta-----	.1216...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaag-----	.206...	aaattatgacag	aaccgcac
D. Ana	ttcaaaat	agctttattgca-----	.1302...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaag-----	.207...	aaattatgacag	aaccgcac
D. Moj	attaattt	aaatcaattgca-----	.1165...	----aatgtgtttcttggttttta	ATTACAACa	AATTG	cgacttgttatgccaaaag-----	.220...	aaaaatgacag	aaccgcac
D. Pse	tcgaaaaa	agttttattgct-----	.1604...	----agtatgtttcttggttttta	ATTACAACg	AATT	cgacttgttatgccaaaag-----	.283...	aaattatgacag	aaccgcac
D. Vir	atcaattt	cgattttattgca-----	.1488...	----aatgtgtttcttggttttta	ATTACAACa	AATTG	cgacttgttatgccaaaag-----	.214...	aaaaatgacag	aaccgcac
D. Wil	----atc	aactttgttcataaat...1203...	gtttgaagtttgcagtat----	GTTTC-	TTGGTTTTT		---aattacaacaaattcgactt...	.306...	aaattatgacag	aaccgcac
D. Yak	tttaaatt	agctttactgtgta-----	.1250...	----agtatgtttcttggttttta	ATTACAACa	AATT	cgacttgttatgccaaaag-----	.211...	aaattatgacag	aaccgcac
		**		****	*	*	**	*	**	**

id=37220 gene=FBgn0261263 name=scrb segment=chr3R\_22421911\_22423368.1 type=IN VIEW

Figure 46: CS=10.8



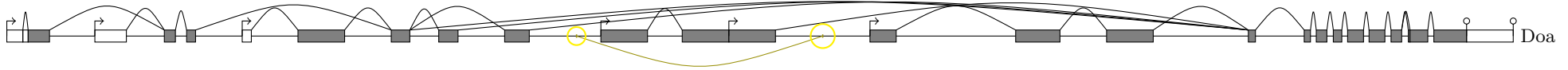
D.Mel	cgaccttt	gtaagcaataag...555...---	ttaaccatttttgtaa--acac--	AAATttCAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...624...	cgaaccgaacag	acagcaaa
D.Sec	cgaccttt	gtaagcaatgag...544...---	ttaaccatttttgtaa--acac--	AAATttCAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...608...	cgaaccgaacag	acagcaaa
D.Ere	cgaccttt	gtaagcaatgag...553...---	ttaaccatttttgtaa--acac--	AAATCtCAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...640...	cgaaccgaacag	acagcaaa
D.Ana	cgaccttt	gtaagcagacga...631...---	atthtttgtaa--acacaaatct--	CAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...726...	ttgctcgaacag	acagcaaa
D.Gri	cgaccttt	gtaagccactcg...664...---	aaaaaaaaaaaaaaccaaa	AAAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...601...	cgcccaaacag	acagcaaa
D.Moj	cgaccttt	gtaagccactcg...563...a---	aaatctctcaaaa--aac-----	AAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...646...	ctccaataacag	acagcaaa
D.Per	cgaccttt	gtaagcagccgt...1044...---	tgtaaacacacaaaatctca--	AAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...715...	ttgcccaaacag	acagccaa
D.Pse	cgaccttt	gtaagcagccgt...1040...---	tgtaaacacacaaaatctca--	AAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...702...	ttgcccaaacag	acagccaa
D.Vir	cgaccttt	gtaagccactcg...593...aac	acacaaaatctctctctca-----	AAAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...692...	gccccataacag	acagcaaa
D.Wil	cgacattt	gtaagctctcct...693...---	tttgtaa--acacaaaatctcaa--	AAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...691...	cgccccataacag	acagcaaa
D.Yak	cgaccttt	gtaagcaatgag...547...---	ttaaccatttttgtaa--acac--	AAATCtCAAAAATTTGTCCGAACtaATTT	tcttatcgaaacaacgaaac...653...	cgaaccgaacag	acagcaaa
	**** **	*****	*	*** *****		****	**** **

id=81854 gene=FBgn0259220 name=Doa segment=chr3R.24743942.24745213.1 type=IN

D.Mel	tcacAGAT	GTTTCGtGACAATTTTGGTTT	-----	tttattt--ttccatacttatg..604...	ccggaatttcag	ataagatc
D.Sec	tcacAGAT	GTTTCGtGACAATTTTGGTTT	-----	tttattt--ttccatacttatg..595...	ccggaatttcag	ataagatc
D.Ere	tcacAGAT	GTTTCGtGACAATTTTGGTTT	-----	tttattt--ttccatacttatg..596...	ccggaatttcag	ataagatc
D.Ana	tcacAGAT	GTTTCGtGACAAtTT---TTTG	-----	tttttaattt--ttccatattt...673...	ccggaatttcag	ataagatc
D.Gri	ccacAGAT	GTTTCGtGACAAtTTT---TTT	-----	cgtttttaattt--ttccatat-----	.582..	accaaatttcag
D.Moj	tcacAGAT	GTTTCGtGACAATTT	-----	tttcgtttttaattt--ttcca-----	.692..	gccacatttcag
D.Per	ccacAGAT	GTTTCGtGACAAtTT---TTT	-----	gtttttaattttccttccat-----	.643..	gccaaatttcag
D.Pse	ccacAGAT	GTTTCGtGACAAtTT---TTT	-----	gtttttaattttccttccat-----	.670..	gccaaatttcag
D.Vir	tcacAGAT	GTTTCGtGACAAtTT---TTT	cgTTTTTaaTTTTTctat	atggtttatgt---ttagag-----	.632..	gccacttttcag
D.Wil	tcacAGAT	GTTTCGtGACAAtTT---TTT	gtttttaaatcttttttaa	-----	.828..	gacaaatttcag
D.Yak	tcacAGAT	GTTTCGtGACAATTTTGGTTT	-----	tttattt--ttccatacttatg..627...	ccggaatttcag	ataagatc
	*****	*****		** * ** *	* *****	**** **

id=81856 gene=FBgn0259220 name=Doa segment=chr3R.24745290.24745946.1 type=IN VIEW

Figure 47: CS=14.63



D. Mel	actatcta	gtgagtcgtccc...2693...	--ttagtaagtc	caagtcgctcgg	--GCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.228...	--acacccttg	-----	ga	atgtccaa
D. Sim	actatcta	gtgagtcaccga...2668...	--ttagtaagtc	caagtcgctcgg	--GCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.228...	--acacccttg	-----	ga	atgtccaa
D. Sec	actatcta	gtgagtcacga...2641...	--ttagtaagtc	caagtcgctcgg	--GCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.228...	--acacccttg	-----	ga	atgtccaa
D. Ere	actatcta	gtgagtcactcc...2683...	gggcatttgcc	aaaatgcc	ATGAGACATTGACATTGAG	--cgtgcatcgatt-gttccga	-----	.207...	--acacccttg	-----	ga	atgtccaa
D. Ana	actactta	gtgagtgccg...2797...	--gcagttgcca	aaaatgcc	aatGAGACATTGACATTGAG	--cgtgcatcgattcgatccg	-----	.206...	gaagatcacgga	-----	ag	agatca--
D. Gri	actatcta	gtgagtgca...1189...	gtcaacgcacac	agcgcca	AGCAAATcaAAACAAAAAC	-----	tgaaaactgaaaacta	caaa...1816...	caatcgacc	-----	g	atgtccga
D. Moj	actatcta	gtgagtgagcga...2650...	--atcgaacga	aacgactaat	--TGCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.299...	--ggcagcccg	-----	cg	atgtctgt
D. Pse	actatctc	gtgagtgagga...610...	--atacctgta	atgattgtac	--AAAC--AAACaAGAAA	--cgcacgaaaaga	acg-caga	-----	.2185...	ccaggcagaaaa	-----	atgtcaaa
D. Vir	actatcta	gtgagtgagcga...2534...	--atcgaacga	aacgactaaa	--TGCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.259...	ttggcagcc	-----	g	atgtcaaa
D. Wil	actatcta	gtgagtgagtg...2486...	tgatgcaat	aatcgca	--TGCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.237...	aatcctccag	-----	ca	atgtcaaa
D. Yak	actatcta	gtgagtcacccc...2758...	--ttagtaagtc	caagtcgctcgg	--GCATttGCCAAAATGC	ca-atgagacattgacattga	-----	.229...	--ccacccttg	-----	ga	atgtccaa
		**** *	*****		* *	**						* **

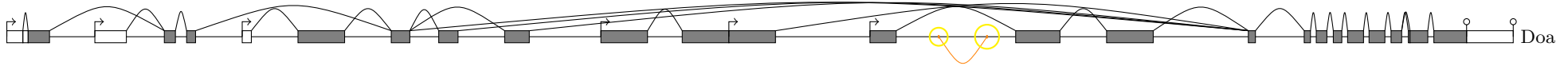
id=81843 gene=FBgn0259220 name=Doa segment=chr3R.24728529.24731529.1 type=IN

D. Mel	tcatcgag	gtagattctattc	-----	ctccaatt	----t:::atcatc	acccaaccttcccttt	tacattgat	aat	GTATTTgTGGCGTGC	----gctttc	gttcatgttgcgct	----	.605...	aaaaactaagga	atggccac
D. Sim	tcatcgag	gtagattctattc	-----	ctccaatt	----t:::atcctca	ccaaccttcccttt	tacattaat	cgaaat	GTATTTgTGGCGTGC	----gctttc	gttcatgttgcgct	----	.591...	aaaagccaagga	atggccac
D. Sec	tcatcgag	gtagattctattc	-----	ctccaatt	----t:::atcctca	ccaaccttcccttt	tacattaat	cg-aatt	GTATTTgTGGCGTGC	----gctttc	gttcatgttgcgct	----	.607...	aaaagccaagga	atggccac
D. Ere		-----	ctattc	-----	cgccaatt	----t:::-----	-----	-----	TTCAATGTCAATTTTCAT	cagctctc	-taaaaatagtg	-----	.1267...	aaaagccaagga	atggccac
D. Ana	tcatcgag	gtagattctatat	--attccg	ccaaagaact	:::-----	-----	-----	-----	TTCAATGTCAA-TTCTT	----tcg	ggacttggctgctct	...	.1434...	agccacaagaa	atggccac
D. Gri	tcatcgag	gtagattcgatgc	-----	gcaacaa	----t:::-----	-----	-----	-----	GTTTATTGTTTGTGTT	gcatatg	gtcggaaatgc	-----	.2176...	acgccaacaaa	atggctac
D. Moj	tcatcgag	gtagattcgttgc	-----	ccaactattgc	:::ctatg	taacagccccggcc	caaatgaggc	agacata	aaaaaaGTATTTgTGGCGTGC	----ctttc	gtaaatgttgcgctg	---	.645...	agaaaaaaa	atggctac
D. Pse	ttatcgag	gtagattctat	atgtattcc	caaatca	----t:::-----	-----	-----	-----	TTTCTGTTcgGTTT	----cg	gttttctgttctg	---	.553...	aaagtgccgat	atggccac
D. Vir	tcatcgag	gtagattcgatgc	-----	caactatttt	:::-----	-----	-----	-----	GTATTTgTGGCGTGC	----ctttc	gtaaatgttgcgctg	---	.707...	ggaaaatagaaa	atggccac
D. Wil	tcatcgag	gtagattctattc	-----	ccaacca	----t:::-----	-----	-----	-----	GTATTTgTGGCGTGC	----ctttc	gtaaatgttgcgctg	---	.787...	aatattgaaa	atggccac
D. Yak	tcatcgag	gtagattctattc	-----	ctccatt	----t:::atta	-----	-----	-----	GTATTTgTGGCGTGC	----gctttc	gttcatgttgcgct	----	.663...	aaaagccaagga	atggccac
		* *		*					* * *	*				**** *	**

id=81848 gene=FBgn0259220 name=Doa segment=chr3R.24736900.24738608.1 type=IN VIEW

Figure 48: CS=11.88





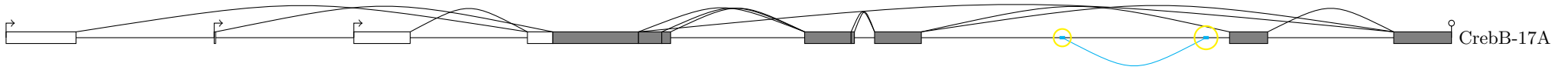
D. Mel	cgcaattg	gtaatc	gatgca	...406...	-----	tccagtag	tcgacgat	ctc	-----	GAAAAGTGTGAAAAAT	-----	cTTGC	-----	tgccataaat	cg	---	tgaataat	...	1282...	ttctct	ttttaag	tg	cg	gcag			
D. Sim	cgcaattg	gtaatc	gatgca	...407...	-----	tccagtag	tcgacgat	ctc	-----	GAAAAGTGTGAAAAAT	-----	cTTGC	-----	tgccataaat	cg	---	tgaataat	...	1284...	ttctct	ttttaag	tg	cg	gcag			
D. Sec	cgcaattg	gtaatc	gatgca	...406...	-----	ttcagtag	tcgacgat	ctc	-----	AAAAAGTGTGAAAAAT	-----	cTTGC	-----	tgccataaat	cg	---	tgaataat	...	1276...	ttctct	ttttaag	tg	cg	gcag			
D. Ere	cgcaatcg	gtaatc	gatgca	...416...	-----	tccagtag	tcgacgat	ctc	-----	GAAAAGTGTGAAAAAT	-----	cTTGC	-----	agccataaat	cg	---	tgaataat	...	1293...	ttctct	ttttaag	tg	cg	gcag			
D. Gri	cgtaatcg	gtaatc	gatgca	...350...	gaacttt	at	tttctt	gg	tg	gc	-----	AGAAGTGTGAAAAAT	-----	ATT	-----	at	tttttt	tttt	gtat	gctg	...	1303...	gggct	ctt	atag	tgaag	cg
D. Moj	cgcaatcg	gtaatc	gatgca	...411...	-----	attggc	ctgctt	gtg	ctg	TGTG	-----	AAAAAGTGTGAAAAAT	-----	ATTGTG	g	aaaatt	gtca	---	tgaatt	ga	-----	1227...	gggct	ttt	atag	tgcag	cg
D. Per	agcaatcg	gtaatc	gatgca	...541...	-----	cccctc	ataag	taat	ctg	gc	-----	AAAAAGTGTGAAAAAT	-----	ATTGC	-----	cataaat	caaat	ccacaat	...	1287...	cgat	ctct	ttcg	tg	catt	at	
D. Pse	agcaatcg	gtaatc	gatgca	...538...	-----	atccgc	acagt	acc	gtg	gc	-----	AAAAAGTGTGAAAAAT	-----	ATTGC	-----	cataaat	caaat	ccacaat	...	1296...	cgat	ctct	ttcg	tg	catt	at	
D. Vir	cggaatcg	gtaatc	gatgca	...373...	-----	tttaact	ctgctt	ttt	gtc	TGTG	-----	AAAAAGTGTGAAAAAT	-----	ATTGTG	g	aaaatt	atcaatt	taatt	-----	1225...	gggct	ttt	atag	tgcag	cg		
D. Yak	cgcaatcg	gtaatc	gatgca	...437...	-----	gccagc	ggtg	ccg	gat	ctc	-----	GAAAAGTGTGAAAAAT	-----	cTTGC	-----	agccataaat	cg	---	tgaataat	...	1270...	ttctct	ttt	caag	tg	cg	gcag
	* ** *	*****										*	**		*		*				*	**		*	**		

id=81850 gene=FBgn0259220 name=Doa segment=chr3R.24738890.24740661.1 type=IN

D. Mel	cgcaattg	gtaatc	gatgca	...1416...	cctctc	gctct	ggcaagt	gc	GCAAt	ATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	272...	ttctct	ttttaag	tg	cg	gcag	
D. Sim	cgcaattg	gtaatc	gatgca	...1419...	cctctc	gctct	ggcaagt	gc	GCAAt	ATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	272...	ttctct	ttttaag	tg	cg	gcag	
D. Sec	cgcaattg	gtaatc	gatgca	...1425...	cctctc	gctct	ggcaagt	gc	GCAAt	ATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	258...	ttctct	ttttaag	tg	cg	gcag	
D. Ere	cgcaatcg	gtaatc	gatgca	...1429...	cctctc	gctct	ggcaagt	gc	GCAAt	ATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	280...	ttctct	ttttaag	tg	cg	gcag	
D. Gri	cgtaatcg	gtaatc	gatgca	...1375...	---	ctgct	actgg	caagt	gc	AATATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	278...	gggct	ctt	atag	tgaag	cg	
D. Moj	cgcaatcg	gtaatc	gatgca	...1380...	cg	gctg	atgct	ggcaagt	gc	CGCAATATTTTCACACTTTTC	-----	CACA	aaaa	ataaaa	acgatt	cc	ctca	...	260...	gggct	ttt	atag	tgcag	cg
D. Per	agcaatcg	gtaatc	gatgca	...1577...	tctgt	gtggc	gcgcaagt	gc	GCAATATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	253...	cgat	ctct	ttcg	tg	catt	at	
D. Pse	agcaatcg	gtaatc	gatgca	...1567...	tccgt	gtggc	gcgcaagt	gc	GCAATATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	269...	cgat	ctct	ttcg	tg	catt	at	
D. Vir	cggaatcg	gtaatc	gatgca	...1355...	ctgct	gctg	ctggcaagt	gc	CGCAATATTTTCACACTTTTC	-----	CACA	aaaa	ataaaa	acgatt	cc	ctca	...	245...	gggct	ttt	atag	tgcag	cg	
D. Yak	cgcaatcg	gtaatc	gatgca	...1425...	cctctc	gctct	ggcaagt	gc	GCAAt	ATTTTCACACTTTTC	-----	acaaaa	ataaaa	acgatt	cc	---	...	282...	ttctct	ttt	caag	tg	cg	gcag
	* ** *	*****			*	*	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****				*	**		*	**

id=81850 gene=FBgn0259220 name=Doa segment=chr3R.24738890.24740661.1 type=IN VIEW

Figure 49: CS=9.6



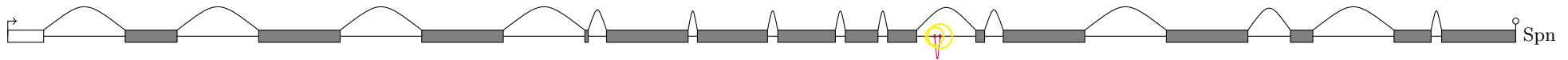
D.Mel	catgagcg	gtaaatccgggg...884...	-----accacccccattatcattta-	<b>GTTG</b>	<b>TGTTGT</b>	<b>GTTG</b>	<b>GTGT</b>	-----	gctttaacgaag--tgaaaata-----	...824...	-----accccatcccag	gcgcatcg	
D.Sim	catgagcg	gtaaatccgggg...1249...	-----gttggtgtgtgctgtaatcgc--	<b>TGTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	-----	tgccgtgtgttacacacaaa-----	...458...	atcgaacccatcccag	gcg-----	
D.Sec	catgagcg	gtaaatccgggg...879...	-----accaccctcattatcattta-	<b>GTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	<b>TTTA</b>	-----	acgaag--tgaaaataacgaaa...	790...	-----accccatcccag	gcgcatcg
D.Ere	catgagcg	gtaaatccgggg...925...	-----ttcgcgccccccattatca-	<b>TTTGGTTGA</b>	<b>tGTTGTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	-----	gctttaacaaaag--tgaaaata-----	831...	-----accccatcccag	gcgcatcg
D.Gri	cattagcg	gtaataatata...2376...	-----tatttattgatgtcctcgtt	<b>GTTG</b>	<b>tGTTG</b>	<b>TGTTG</b>	<b>CGTTG</b>	<b>CGTTG</b>	-----	tagtctaaacttcttcaaat-----	893...	-----gtggtgcagcgg	gcggaaca
D.Moj	catgagcg	gtaatttctccc...1374...	..cacattagtggtgttattg----	<b>CTGTTG</b>	<b>tGTTG</b>	<b>TGTTG</b>	<b>CGTTG</b>	<b>CGTTG</b>	-----	gcttcaagcaga--cgaacaac-----	838...	-----atgatgcagcga	gtggagca
D.Per	tatgagcg	gtaaatccttgg...432...	atcatt--tagttgttggga--	<b>T</b>	<b>GTTG</b>	<b>atGTTG</b>	<b>TT</b>	-----	aatcaagaatcaaaata--taa...	796...	-----tcggtcgatcag	gctcctcg	
D.Pse	tatgagcg	gtaaatccttgg...425...	atcatt--tagttgttggga--	<b>T</b>	<b>GTTG</b>	<b>atGTTG</b>	<b>TT</b>	-----	aatcaagaatcaaaata--taa...	790...	-----tcggtcgatcag	gctcctcg	
D.Wil	catgagcg	gtaattaagatt...950...	-----acatgtacattatgggcaac	-----	<b>AGTGTG</b>	<b>TGTTG</b>	<b>TGTTG</b>	-----	tattgctgctgctgctgctt-----	540...	-----tgaaccaaag	gctcatca	
D.Yak	catgagcg	gtaaatccgggg...915...	---t---cgcgccccattatcattta-	<b>GTTG</b>	<b>TGTTGT</b>	<b>GTTG</b>	<b>GTGT</b>	-----	gctttaacgaag--tgaaaata-----	853...	-----accccatcccag	gcgcatcg	
		** ****	****	*	****	***	*					*	

id=31180 gene=FBgn0014467 name=CrebB-17A segment=chrX.18267489\_18269281.1 type=IN

D.Mel	catgagcg	gtaaatccgggg...1658...	--taaaattc--gataatgttctg--	<b>AACA</b>	<b>-aCAAC</b>	<b>-tGCAACA</b>	<b>aCAAC</b>	-----	aacaacaaacgacaatcaaa-----	...50...	-----accccatcccag	gcgcatcg	
D.Sim	catgagcg	gtaaatccgggg...1655...	--taatgtcctggaacaacaacc----	<b>GCA</b>	<b>-ACAAC</b>	<b>-AACAACAACA</b>	-----	aatcaacaacaacaacacgac-----	...52...	atcgaacccatcccag	gcg-----		
D.Sec	catgagcg	gtaaatccgggg...1639...	tataaaattc--aataatgtcc--	<b>TGAACA</b>	<b>-ACAAC</b>	<b>-TGCAACAACAACA</b>	<b>aCAAC</b>	-----	aaacgacaatcaaaaccca-----	...28...	-----accccatcccag	gcgcatcg	
D.Ere	catgagcg	gtaaatccgggg...1700...	--tcaaattc--aattatgtcctg--	<b>AACA</b>	<b>-aCAAC</b>	<b>-AACAAC</b>	<b>-TCAACA</b>	<b>CAAAA</b>	-----	caacaactaaaccccccaac-----	...55...	-----acccatcccag	gcgcatcg
D.Gri	cattagcg	gtaataatata...2781...	-----aaacaacacgcaccaccacc	<b>CAACCA</b>	<b>CAACCA</b>	<b>CAAC</b>	-----	cagccagccaccacatcgc-----	...493...	-----gtggtgcagcgg	gcggaaca		
D.Moj	catgagcg	gtaatttctccc...1701...	---ttaggtcaaacgcacaaca----	<b>AACA</b>	<b>ttCAACA</b>	<b>attCAACA</b>	<b>attCAACAG</b>	<b>gaacaaacatcaaacctt</b>	-----	...508...	-----atgatgcagcga	gtggagca	
D.Per	tatgagcg	gtaaatccttgg...1171...	---cattttccaaccaacaaccg--	<b>AAACA</b>	<b>-ACAAC</b>	<b>-tgCAACA</b>	-----	acgaaaacaacaacaacctc-----	...57...	-----tcggtcgatcag	gctcctcg		
D.Pse	tatgagcg	gtaaatccttgg...1158...	---cattttccaaccaacaaccg--	<b>AAACA</b>	<b>-ACAAC</b>	<b>-tgCAACA</b>	-----	acgaaaacaacaacaacctc-----	...57...	-----tcggtcgatcag	gctcctcg		
D.Wil	catgagcg	gtaattaagatt...1423...	---taaatacctcatcaatccc----	<b>ACA</b>	<b>-ACAAC</b>	<b>-AACAAC</b>	<b>T</b>	-----	acaaatgatgcccgattat...	67...	-----tgaaccaaag	gctcatca	
D.Yak	catgagcg	gtaaatccgggg...1683...	--taacattc--aattatgtcctg--	<b>AACA</b>	<b>-aCAAC</b>	<b>-tGCAACA</b>	<b>aCAAC</b>	-----	aact--caacaacaacgtcaa-----	...85...	-----accccatcccag	gcgcatcg	
		** ****	****	*	*	**	****	****	*			*	

id=31180 gene=FBgn0014467 name=CrebB-17A segment=chrX.18267489\_18269281.1 type=IN VIEW

Figure 50: CS=15.6



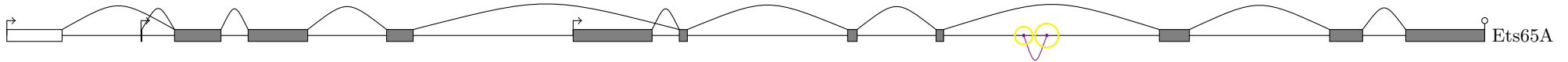
D.Me1	tacaggag	gtaaggattcta...	64...	-tgtgtgttctc--ttctctctc--	CTTTTGCTGaATTCAA	-----	aattgtgtggatattgaaat-----	.218...	ttattttccag	agcgaat
D.Sim	tacaggag	gtaaggattcta...	63...	-tgtgtgttctc--ttctctctc--	CTTTTGCTGaATTCAA	-----	aattgtgtggatattgaaat-----	.227...	ttattttccag	agcgaat
D.Sec	tacaggag	gtaaggattcta...	63...	-tgtgtgttctc--ttctctctc--	CTTTTGCTGaATTCAA	-----	aattgtgtggatattgaaat-----	.219...	ttattttccag	agcgaat
D.Ere	tacaggag	gtaaggattcta...	64...	-tgtgtgttctc--ttctctctc--	CTTTTGCTGaATTCAA	-----	aattgtgtggatattgaaat-----	.223...	ttattttccag	agcgaat
D.Ana	tacaggag	gtaaggagcgc...	65...	-ttctgtgttc--ttctctctc--	CTTTTGCTGaATTCAAaATTGTGTGGATaTTGAAATgCAGCAcAAAG	cggt	aattggacttctgaaa...	.230...	ttatgttccag	agtgaaat
D.Moj	tccaggag	gtttgcactt...	42...	aatcgtgttctt---tttctctc--	CTTTTGCTGaaTTTcaAATTggTTTGT	-----	accacgcggaaattgaaaca-----	.234...	tattccatccag	agcgaat
D.Per	tacaggag	gtaaggcccatg...	71...	---tgtgttctc-tttttctctc--	CTTTTGCTGaATTCAAaATTTT	-----	tctgtg-ggatattgaaatgc-----	.504...	tataattttag	agcgaat
D.Pse	tacaggag	gtgaggcccatg...	72...	-----gttctc-tttttctctcctc	CTTTTGCTGaATTCAAaATTTT	-----	tctgtg-ggatattgaaatgc-----	.498...	tataattttag	agcgaat
D.Wil	tacaggag	gtaagttgggct...	116...	---gtgttctctttttctctc-ta	CTTTTGCTGaATTCAA	-----	tcatggatttc--attcatgg...	.222...	aaaactatccag	agcgaat
D.Yak	tacaggag	gtaaggattctg...	74...	-tgtgtgttctc--ttctctctc--	CTTTTGCTGaATTCAA	-----	aattgtgtggatattgaaat-----	.208...	tttttccccag	agcgaat
		* *****	** *	** *	* *****	*****	** *		** *****	** *****

id=51430 gene=FBgn0010905 name=Spn segment=chr3L.2511932.2512294.-1 type=IN

D.Me1	tacaggag	gtaaggattcta...	94...	--atttcaaatgtgtggata---	TTGAAATgCAGCAcAAAG	cggt	aattggatttgaat...	187...	ttattttccag	agcgaat
D.Sim	tacaggag	gtaaggattcta...	93...	--atttcaaatgtgtggata---	TTGAAATgCAGCAcAAAG	cggt	aattggatttgaat...	196...	ttattttccag	agcgaat
D.Sec	tacaggag	gtaaggattcta...	93...	--atttcaaatgtgtggata---	TTGAAATgCAGCAcAAAG	cggt	aattggatttgaat...	188...	ttattttccag	agcgaat
D.Ere	tacaggag	gtaaggattcta...	94...	--atttcaaatgtgtggata---	TTGAAATgCAGCAcAAAG	cggt	aattggatttgaat...	192...	ttattttccag	agcgaat
D.Ana	tacaggag	gtaaggagcgc...	65...	---ttc---tgtgttcttctctctc	CTTTTGCTGaATTCAAaATTGTGTGGATa	TTGAAATgCAGCAcAAAG	cggt	aattggacttctgaaa...	.230...	ttatgttccag
D.Moj	tccaggag	gtttgcactt...	75...	---tcaaatgtgtgtaccac---	GCGGAAATTGAAAcACAGCAcAAAG	cggt	aattggtaaacgaac...	.204...	tattccatccag	agcgaat
D.Per	tacaggag	gtaaggcccatg...	99...	gaatttcaaattttctgt---	GGGATaTTGAAATgCAGCAcAAAG	cggt	aattggatctgataca...	.475...	tataattttag	agcgaat
D.Pse	tacaggag	gtgaggcccatg...	100...	gaatttcaaattttctgt---	GGGATaTTGAAATgCAGCAcAAAG	cggt	aattggatctgataca...	.469...	tataattttag	agcgaat
D.Wil	tacaggag	gtaagttgggct...	158...	ggatttca---tttcatggatat---	TGAAATgCAGCAcAAAG	cggt	aattggataatgaaa...	.181...	aaaactatccag	agcgaat
D.Yak	tacaggag	gtaaggattctg...	104...	--atttcaaatgtgtggata---	TTGAAATgCAGCAcAAAG	cggt	aattggatttgaat...	.177...	tttttccccag	agcgaat
		* *****	** *	** **	*****	*****	*****	*	** *****	** *****

id=51430 gene=FBgn0010905 name=Spn segment=chr3L.2511932.2512294.-1 type=IN VIEW

Figure 51: CS=9.6



```

D.Mel  cagctcag  gtgagtggaaat...1789...gtttag-cttttg-t-tggctgctAATAgcGTGTCAATTGccCAAG---gagccacgcccagttttcca...1081...ccccattccag gctctggc
D.Sim  cagctcag  gtgagtggaaat...1795...gtttag-cttttg-t-tggctgctAATAgcGTGTCAATTGccCAAG---aagccacgcccagttttcca...1073...ccccattccag gctctggc
D.Sec  cagctcag  gtgagtggaaat...1795...gtttag-cttttg-t-tggctgctAATAgcGTGTCAATTGccCAAG---gagccacgcccagttttcca...1073...ccccattccag gctctggc
D.Ere  cagctcag  gtgagtggaaat...1735...gtttag-cttttg-t-tggctgctAATAgcGTGTCAATTGccCAAG---gagccacgcccagttttcca...1120...ttcccattccag gctctggc
D.Ana  cagctcag  gtgagtggaaat...1794...cagtggcctttgt---tgccagttAATAgcGTGTCAATTGccGTGC---caa-cacgcccttttttact...1114...tacgctccatag gctcggc
D.Gri  cagctcag  gtgagtgtgtaa...2677...-ttagcctattgttttggc--ttAATAgcGTGTCAATT-----atittgccacgccc---tttggat...1174...ttctatttcag gctctgga
D.Pse  cagctcag  gtgagtggaaaca...2550...--ttgttcattgtgtttaaagttAATAgcGTGTCAATTGC-----ctgccacgcccacactttt...1354...ccaatcttttag gctcggga
D.Wil  cagctcag  gttagtataacct...3076...--agcctttgttctttggagttAATAgcGTGTCAATTGCcggcccagcagccc-----...1604...tctctttccag gttctgga
D.Yak  cagttcag  gtgagtggaaat...1801...-ttag-cttttggtt-tagctgctAATAgcGTGTCAATTGccCAAG---gagccacgcccatttttcta...1071...cgttcattccag gctcgggc
*** *** ** ** *

```

id=78427 gene=FBgn0005658 name=Ets65A segment=chr3L\_6109103\_6112058\_1 type=IN

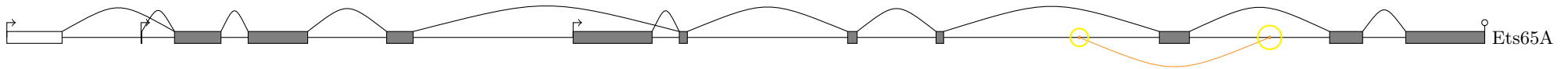
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D.Mel  cagctcag  gtgagtggaaat...1930...--acacattcacttgccatgaTTTGCAATTaACGCaaTATTcatgacgt---tctcacacatga...942...ccccattccag gctctggc
D.Sim  cagctcag  gtgagtggaaat...1936...--acacattcacttgccatgaTTTGCAATTaACGCaaTATTcatgacgt---tctcacacatga...934...ccccattccag gctctggc
D.Sec  cagctcag  gtgagtggaaat...1936...--acacattcacttgccatgaTTTGCAATTaACGCaaTATTcatgacgt---tctcacacatga...934...ccccattccag gctctggc
D.Ere  cagctcag  gtgagtggaaat...1876...--acacattcacttgccatgaTTTGCAATTaACGCaaTATTcatgacgt---tctcacacatga...981...ttcccattccag gctctggc
D.Ana  cagctcag  gtgagtggaaat...1943...-ttagcacattcacttgcccaTGATttGCAATTaACGCaaTATTcatgacgc---tctcacacatga...965...tacgctccatag gctcggc
D.Gri  cagctcag  gtgagtgtgtaa...2843...-----ttctcttgaccatgatattgcAATTaACGCaaTATTcatgacattcattctcacac----...1008...ttctatttcag gctctgga
D.Pse  cagctcag  gtgagtggaaaca...2738...-----cattcacttgccatgattGCAATTaACGCaaTATTcatgacgt---tctcacacatga...1166...ccaatcttttag gctcggga
D.Wil  cagctcag  gttagtataacct...3302...-----cattcacttgccatgattGCAATTaACGCaaTATTcatgacgt---tctcacacatga...1378...tctctttccag gttctgga
D.Yak  cagttcag  gtgagtggaaat...1946...--acacattcacttggtcatgaTTTGCAATTaACGCaaTATTcatgacgt---tctcacacatga...928...cgttcattccag gctcgggc
*** *** ** ** *

```

id=78427 gene=FBgn0005658 name=Ets65A segment=chr3L\_6109103\_6112058\_1 type=IN VIEW

Figure 52: CS=8.64



```

D.Mel cagctcag gtgagtggaaat...2141...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...736...ccccattccag gctctggc
D.Sim cagctcag gtgagtggaaat...2147...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...728...ccccattccag gctctggc
D.Sec cagctcag gtgagtggaaat...2147...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...728...ccccattccag gctctggc
D.Ere cagctcag gtgagtggaaat...2102...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...760...ttccattccag gctctggc
D.Ana cagctcag gtgagtggaaat...2185...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...731...tacgtccatag gctcggc
D.Gri cagctcag gtgagtgtgtaa...3098...ggctgggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgttgaatgcg...753...ttctatttcag gctctgga
D.Moj cagctcag gtgagtttgaat...3392...ggctgggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgttgaatgcg...1020...tttctgttcag gctcggga
D.Per cagctcag gtgagtggaaat...3029...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...892...ccaatctttcag gctcggga
D.Pse cagctcag gtgagtggaaat...3020...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...886...ccaatcttttag gctcggga
D.Vir cagctcag gtgagtggaaat...3149...-ctgggc-ctaattgccaaaATTAAGCGATTTAtgatgtctgcgttgaatgcg...1387...ttctgttacag gctcggga
D.Wil cagctcag gttagtatact...3616...tccggcctctaattgccaaaATGATTAAGCGATTTAtgatgtctgcgttgaatgcg...1065...tctctttccag gttctgga
D.Yak cagttcag gtgagtggaaat...2167...tccacggc-ctaattgccaaaTGATTAAGCGATTTAtgatgtctgcgtcgaatgcg...712...cgttcattccag gctcgggc
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id=78427 gene=FBgn0005658 name=Ets65A segment=chr3L.61109103.6112058.1 type=IN

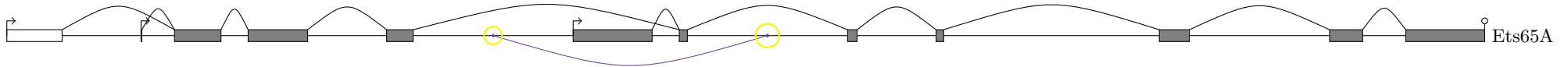
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D.Mel gccttgag gtgagttctgaa...1917...ctgcgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...346...tttcccatttag gtactact
D.Sim gccttgag gtgagttctgaa...1784...ctgcgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...333...tttcccatttag gtactact
D.Sec gccttgag gtgagttctgaa...1871...ctgcgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...345...tttcccatttag gtactact
D.Ere gccttgag gtgagttcctgaa...1817...ctgcgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...281...attcccatttag gtactact
D.Ana gccttgag gtgagttttaa...2064...ctgcgcagggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...259...tttatttttag gtactact
D.Gri gccttaag gttagtttgtt...2939...gtgttgcaaga--cgtaaacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...108...ttatccccatag atactact
D.Moj gccttgag gtaagtctcaca...3876...---ggcaaaagtctctagcaccAAATCGCTTAatGTCAgc-aaattaacttaaaacgca-...195...cgtctgttcag atactact
D.Per gccttgag gtgagctatatc...1894...gagtgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...161...ccatctttgag atattatt
D.Pse gccttgag gtgagctatatc...1843...gagtgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...161...ccatctttgag atattatt
D.Vir gccttaag gtaagcaacaga...3408...gtttggcctaaag--tctagcacTAAATCG-CTAATgtcagc-aaattaacttaaaacgca-...707...ccatatttcag atattatt
D.Wil gccttgag gtaagtttcaa...2837...-cgagctcaagccgagaacacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...235...atgtttttgag atattact
D.Yak gccttgag gtgagttcctaat...1997...ctgcgtctgggg--agcggcacTAAATCG-CTTAatGTCAgc-aaattaacttaaaacgca-...366...tttcccatttag gtactact
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id=78429 gene=FBgn0005658 name=Ets65A segment=chr3L.6112249.6114593.1 type=IN VIEW

Figure 53: CS=9.36



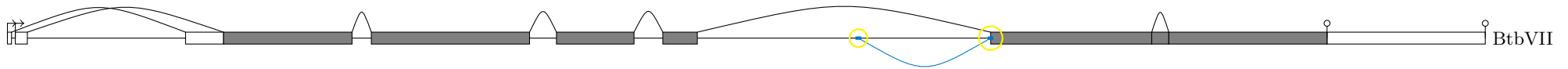
D. Mel	tgcactgt	gtaagttcaata...4505...---	gaaaaaggaagtggataata	CATC	CGTCCTTGTTC	TTC	GTGTCAC	ccactaaaaggc	gatgcca...394...aac	cctaagtat	atcctgca	
D. Sim	tgcactgt	gtaagttcaata...4505...---	gaaaaaggaagtggataata	CATC	CGTCCTTGTTC	TTC	GTGTCAC	ccactaaaaggc	gatgcca...394...aac	cctaagtat	atcctgca	
D. Ere	cgactgt	gtaagttcaatt...4506...---	gaaaaaggaagtggataata	CATC	CGTCCTTGTTC	TTC	GTGTCAC	ccactaaaaggc	gatgcca...393...aac	cctaagtg	atcctgca	
D. Ana	ttcactct	gtaagttcatc...4426...---	aaaaggaagtggataata	TCCGT	ccTTGTT	gTTC	GTGTCAC	ccactaaaaggc	gatgcc...476...aac	cctaagagt	atcctggc	
D. Gri	tgcactgt	gtaagtcacact...4259...---	aaggaaaaggaagtggata	ATACAT	CCGTccTTGTT	gTTC	GTGTCAC	ccactaaaaggc	cagc	gcca...635...aac	cctaagcat	atcctggc
D. Moj	ttcactct	gtaagtatcagt...4413...---	aaaaggaagtggataata	TCCGT	ccTTGTT	gTTC	GTGTCAC	ccactaaaaggc	caagc	cca...488...tag	cctaagtat	atcctggc
D. Per	ggcactgt	gtaagtttcaac...4303...---	agtgataatacatccgtcc	TTGTT	gTTC	GTGTCAC	ccactaaaaggc	gatgcca...605...aac	cctaagtat	atcctggg	atcctggg	
D. Pse	ggcactgt	gtaagtttcaac...4311...---	agtgataatacatccgtcc	TTGTT	gTTC	GTGTCAC	ccactaaaaggc	gatgcca...597...aac	cctaagtat	atcctggg	atcctggg	
D. Yak	tgcactgt	gtaagttcaata...4501...---	gaaaaaggaagtggataata	CATC	CGTCCTTGTTC	TTC	GTGTCAC	ccactaaaaggc	gatgcca...398...aac	cctaagtg	atcctgca	
	**** *	***** *		*****		*****		*****	***	* ** ** *	*****	

id=78419 gene=FBgn0005658 name=Ets65A segment=chr3L\_6096893.6104314.1 type=IN

D. Mel	atcgcaag	gtgagttgcagt...1213...-	tgcttttttaagcacaataa	GTGACA	CGAA	aaCAACAG	cGGGCGGTG	caagaac	-----caccag	---aaatc...567...ctt	cgcttcag	gttacagc
D. Sim	atcgcaag	gtgagttgcac...1267...-	tgcttttttaagcacaataa	GTGACA	CGAA	aaCAACAG	cGGGCGGTG	caagaac	-----caccag	---aaatc...516...ctt	cgcttcag	gttacagc
D. Ere	atcgcaag	gtgagtaacaat...1237...-	gccttttttaagcacaataa	GTGACA	CGAA	aaCAACAG	cGGGCGGTG	caagaac	-----caccag	---aaatc...573...ctt	cgcttcag	gttacagc
D. Ana	atcacaag	gtaattttcatt...1320...-	tgctttttt-agcacaataa	TGACA	CGAAAACA	caGCGGG	cggtgcaagc	ac	-----cacc	aa-----c...645...ttc	gatttcag	gctacagc
D. Gri	atcgcaag	gtgagttgaaa...1836...-	tatattc-tgtgcacaatga	GTGACA	CGAAAACA	caGCGGG	gGTGT	agaac	-----cactcag	ccgaagcc...1035...ttt	ccttctag	gctacagc
D. Moj	atcacaag	gtgagctacgat...1795...-	tatattc-tgtgcacaatga	GTGACA	CGAAAACA	caGCGGG	cggtgc	ataac	-----cactgag	-----cc...1246...taa	atcttcag	gctacagc
D. Per	atcgcaag	gtgagtgttcag...1470...-	tcgtttttaagaacaataa	GTGACA	CGAAAACA	-----	caacagc	ggg	cggtgctgaa	-----...765...tct	ccttttag	gctacagt
D. Pse	atcgcaag	gtgagtgttcag...1459...-	tcgtttttaagaacaataa	GTGACA	CGAAAACA	-----	caacagc	ggg	cggtgctgaa	-----...739...tct	ccttttag	gctacagt
D. Yak	atcgcaag	gtgagtgacaat...1289...-	cctccttttaagcacaataa	GTGACA	CGAA	aaCAACAG	cGGGCGGTG	caagaac	-----caccac	---aaatc...604...ctt	cgcttcag	gttacagc
	*** **	** *		** * * *****		*****		* * * *		** **	* *****	

id=78423 gene=FBgn0005658 name=Ets65A segment=chr3L\_6105522.6107393.1 type=IN VIEW

Figure 54: CS=9.72



D. Mel	gcactcgg	gtaagtcgcaat...615...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacaagtcctcaaaaca----	...384...tccccttcccag	gtctgcaa
D. Sim	tcgcattg	gtaagtcgcaat...628...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...399...tccccttcccag	gtctgcaa
D. Sec	gcactcgg	gtaagtcgcaat...630...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...414...tccccttcccag	gtctgcaa
D. Ere	acactcgg	gtaagtcgcaat...641...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...350...tccccttcccag	gtctgcaa
D. Ana	gcactcgg	gtaagtcgcaat...614...cgaatcgaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...371...tccccttcccag	gtctgcaa
D. Gri	gcactctg	gtaagtcctaaa...925...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...441...tccccttcccag	gtctgcag
D. Moj	gcactcgg	gtaagtttatat...681...aaaatgaaatcttacctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaact----	...372...tccccttcccag	gtctgcag
D. Per	gcactcgg	gtaagtcacac...1002...ataactgaaatcctgcctgaa <b>ACTTGGGAATGGGAGAGAGcTAGC</b> ----	cacagagtcctcaaaacaaaa...408...tccccttcccag	gtctgcaa	
D. Pse	gcactcgg	gtaagtcacac...988...aaaactgaaatcctgcctgaa <b>ACTTGGGAATGGGAGAGAGcTAGC</b> ----	cacagagtcctcaaaacaaaa...391...tccccttcccag	gtctgcaa	
D. Vir	acactctg	gtaagtcacaaat...666...aaaatgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaagt----	...384...tccccttcccag	gtctgcag
D. Wil	gcattctg	gtaagctttaa...1072...-taagaaatcctgcctgat- <b>CTTGGGAATGGGAGAGAGcTAGT</b> acagtacagagatctaatta----	...596...tccccttcccag	gtctgcaa	
D. Yak	gcactcgg	gtaagtcgcaat...614...aaaaccgaaatcctgcctga- <b>ACTTGGGAATGGGAGAGAG</b> ----	ctagcacagagtcctcaaaaca----	...386...tccccttcccag	gtctgcaa
		* * ***** * * * * * ***** ***** * * * * *			

id=26758 gene=FBgn0012049 name=BtbVII segment=chr3L.3151373.3152454.1 type=IN

D. Mel	gcactcgg	gtaagtcgcaat...1033...ctttcattcg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
D. Sim	tcgcattg	gtaagtcgcaat...1061...ctttcattcg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
D. Sec	gcactcgg	gtaagtcgcaat...1078...ctttcattcg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
D. Ere	acactcgg	gtaagtcgcaat...1025...ctttcattcg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
D. Ana	gcactcgg	gtaagtcgcaat...1019...--ctcattcg-ctgtctctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
D. Gri	gcactctg	gtaagtcctaaa...1400...----ttacgcctgtctctctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcag
D. Moj	gcactcgg	gtaagtttatat...1087...--atcttacg-ctgtctctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcag
D. Per	gcactcgg	gtaagtcacac...1442...----acaaaacaatctttcatac <b>GCTGtCTCTcTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa	
D. Pse	gcactcgg	gtaagtcacac...1411...----acaaaacaatctttcatac <b>GCTGtCTCTcTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa	
D. Vir	acactctg	gtaagtcacaaat...1084...caatcttacg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcag
D. Wil	gcattctg	gtaagctttaa...1699...----aaaacaatctttcataa <b>GCTGtCTCTCTCCCcTTCCCAG</b>	<b>Gt</b> ctgcaa	
D. Yak	gcactcgg	gtaagtcgcaat...1034...ctttcattcg-ctgtctctct-----	<b>CTCTCTCCCcTTCCCAG</b>	<b>GT</b> ctgcaa
		* * ***** * * * * * ***** ***** * * * * *		

id=26758 gene=FBgn0012049 name=BtbVII segment=chr3L.3151373.3152454.1 type=IN VIEW

Figure 55: CS=14.4



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D.Mel acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...648...tgcgccgtctag acgtccca
D.Sim acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...660...tgcgccgtctag acgtccca
D.Sec acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...654...tgcgccgtctag acgtccca
D.Ere acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...632...tgcgccgtttag acgtccca
D.Ana acaaatAG GTGAGCTAAACCCCAAAT-----cgtaaccaatctaccataac-----...643...aataaaaaacag acgtccca
D.Gri tcaaatag gtGAGCTAAaCCCAAAATCGTTA--aactatacaattactacac-----...1063...ctccgattgtag acggccca
D.Moj tcaaATAG GtGAGCTAAaCCCAAAATCGTTAAAcTTTA--caactattacacacatatgc...887...cgccctgctgcag acgccccca
D.Per aaaaatAG GTGAGCTAAACCCCAAAT-----cgttacaatctaccataac-----...896...gctgggccacag acgaccca
D.Pse aaaaatAG GTGAGCTAAACCCCAAAT-----cgttacaatctaccataac-----...888...gctgggccacag acgtccca
D.Vir tcaaatag gtGAGCTAAaCCCAAAATCGTTAAaa-tatacca-ttactacacac-----...597...tcttctatgtag acgccccca
D.Wil aaacatAG GTGAGCTAAACCCCAAAT-----tcggtacaatct-tttttac-----...661...tggtccttccag acgccccca
D.Yak acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...610...tgtaccgtgcag acgtccca
* **** ***** * * * **

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id=33624 gene=FBgn0061355 name=CG18431 segment=chr2R.13394251\_13394948.1 type=I3

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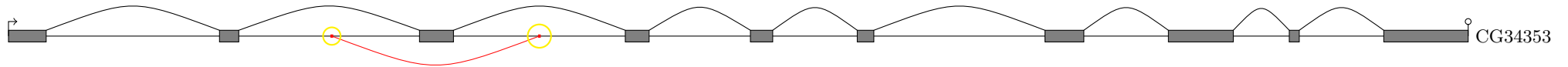
D.Mel acaaatag gtgagctaaacc...454...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...156...tgcgccgtctag acgtccca
D.Sim acaaatag gtgagctaaacc...466...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...156...tgcgccgtctag acgtccca
D.Sec acaaatag gtgagctaaacc...464...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...152...tgcgccgtctag acgtccca
D.Ere acaaatag gtgagctaaacc...437...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...157...tgcgccgtttag acgtccca
D.Ana acaaatag gtgagctaaacc...421...-tgagcgcc-aaaatgtatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttttgtgcgctc...184...aataaaaaacag acgtccca
D.Gri tcaaatag gtgagctaaacc...402...-----tcgagactcctgctaaaag--TGGTGGTTTGGGGcTTAGCTT-----ttccatagttgttgttgcg--...631...ctccgattgtag acggccca
D.Moj tcaaatag gtgagctaaacc...632...gtcattttcgagactcctat--TGAAaTTTGGTGGTTTGGGGcTTAGCTTttCCTATagaatgttgttgttgcg...218...cgccctgctgcag acgccccca
D.Per aaaaatag gtgagctaaacc...632...-aataactctacgtaaatatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagatgttctgcgctc...226...gctgggccacag acgaccca
D.Pse aaaaatag gtgagctaaacc...627...-aataactctacgtaaatatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagatgttctgcgctc...223...gctgggccacag acgtccca
D.Vir tcaaatag gtgagctaaacc...391...-----ttcgagactcctgctgagaa--TTGGTGGTTTGGGGcTTAGCTT-----ttccatagatgttgttgcg--...176...tcttctatgtag acgccccca
D.Wil aaacatag gtgagctaaacc...419...-----gcgaatctgtcgcagaaattTTTGGtGGTTTggGGCTTaGCTT-----tccttagatgatattgttgc...204...tggtccttccag acgccccca
D.Yak acaaatag gtgagctaaacc...415...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...157...tgtaccgtgcag acgtccca
* **** ***** * * * **

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id=33624 gene=FBgn0061355 name=CG18431 segment=chr2R.13394251\_13394948.1 type=I3 VIEW

Figure 56: CS=11.52





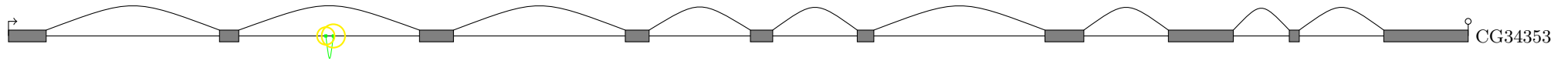
D. Mel	caacacgg	gtgagtacagta...3297...---	gcaataaaatacgcctttttg-----	AATGcgCATGTAaATGAC	ttcataagca-tttattacgg...1610...ctcttggtgcag	acacgtac	
D. Sim	caacacgg	gtgagtacagta...4742...-gtgtgtgtgtttgcgagtc-----	ATGCcAAATTGAAT	---ttc-tagccttttagatcct...169...ctcttggtgcag	acacgtac		
D. Sec	caacacgg	gtgagttcagta...3362...---	gcaataaaatacgcctttttg-----	AATGcgCATGTAaATGAC	ttcataagca-tttattacgg...1545...ctcttggtgcag	acacgtac	
D. Ere	caacacgg	gtgagtacaaat...3274...---	gcaataaaatacgcctttttg-----	AATGcgCATGTAaATGAC	ttcataagca-tttattacgg...1633...ctcttggtgcag	acacgtac	
D. Ana	caacacgg	gtaagttgtac...4714...-ctgcgagtgtgtgattgtgt	GTGCtGGTCCATGCcAAATGAAT	---ttc-tagccttttagatcct...187...tttcgattgcag	atgcata		
D. Gri	caatacgg	gtgagtagctga...3364...-attgcaataaaatacgccttt	-----TGAATGCCCATGtAAATG	acttcataagcattttatta---...1543...ttcattttgcag	agccttat		
D. Moj	caatacgg	gtgagtagaccg...3089...---	gcaataaaatacgcctttttg-----	AATGcgCATGTAaATGAC	ttcataagcattttattacc-...1818...tttgattgcag	agccttat	
D. Per	caatacgg	gtaagcगतaga...4710...-gtgtgtgtgtttgcgggtcc-----	ATGCcAAATTGAAT	---ttc-tagccttttagatcct...201...atctgattgcag	acacgtac		
D. Pse	caatacgg	gtaagcगतaga...4704...-gtgtgtgtgtttgcgggtcc-----	ATGCcAAATTGAAT	---ttc-tagccttttagatcct...207...atctgattgcag	acacgtac		
D. Vir	caatacgg	gtgagtagccta...3450...-ttgcaataaaatacgccttt	-----TGAATGCCCATGtAAATG	acttcataagcattttatta---...1457...tattcattgcag	aacccat		
D. Wil	caatacgg	gtgagtactatt...3919...cattgcaataaaatacgcct	-----TCTGAATGcgCATGTAaATGAC	ttcataagcattttattacc-...984...tccatcttcag	atccatac		
D. Yak	caacacgg	gtgagtacaaaa...3329...---	gcaataaaatacgcctttttg-----	AATGcgCATGTAaATGAC	ttcataagca-tttattacgg...1578...cttatggtgcag	acacgtac	
	*** **	** **	* * * *	**** * * **	*** ** * ****	** **	* * **

id=27226 gene=FBgn0085382 name=CG34353 segment=chr3R.23623307.23630046\_-1 type=IN

D. Mel	gatactcg	gtaagtaggccc...3389...-ttgagaccattaagtagtc-----	GTC--ATcTGCATGaCATT	-----acatgccgcaat-ccacgtat-----...1519...tttccctccag	tgccgccg	
D. Sim	gatactcg	gtaagtaggccc...4769...cg-taaatgccgtttttctc--tc-----	ATTCAATTTGCAT	-----tcggagcgcatttattatt...143...tttgcctccag	tgccgccg	
D. Sec	gatactcg	gtaagtaggccc...3398...-ttgagaccattacgtagtc-----	GTC--ATcTGCATGaCATT	-----acatgccgcaat-ccacgtat-----...1510...tgtgccctccag	tgccgccg	
D. Ere	gatactcg	gtaagtaggccc...3352...-ttgagaccattaagtagtc-----	GTC--ATcTGCATGaCATT	-----acatgccgcaat-ccacgtat-----...1556...tttgcctacag	tgccgccg	
D. Ana	gatactgg	gtaagtaggccc...4747...cg-taaacgtcgtttttctc--tc-----	ATTCAATTTGCAT	tcGGGCCGCATttattattcaaatgtatg-----...154...tttctttgcag	tgccaccg	
D. Gri	gatactgg	gtaagtaggccc...4684...-----ttttgactcat--tcaatttg	CATTGTGCGCAtaTTTA	-----ttcaaatgtttggcgtcct-...223...ggtctttgcag	tgccaccg	
D. Moj	gatattgg	gtaagtaggccc...2993...cgattggcatcgcattag--tc-----	GTC--ATcTGCATGaCATT	-----acatgccgcaat-ccacgtat-----...1915...gtctgtgtgcag	tgccaccg	
D. Per	gatattgg	gtaagtaggacc...4741...cg-taaatgccgtttttctc--tc-----	ATTCAATTTGCAT	-----tcggggcgcatttattatt...171...ttgccccgacag	tgccaccg	
D. Pse	gatattgg	gtaagtaggacc...4741...cg-taaatgccgtttttctc--tc-----	ATTCAATTTGCAT	-----tcggggcgcatttattatt...171...ttgctccgacag	tgccaccg	
D. Vir	aatactgg	gtgagtggtcca...4700...-----ttttgactcat--tcaatttg	CATTGTGCGCAtaTTTA	-----ttcaaatgtttgtcgtcct-...207...tcctttttgcag	taccaccg	
D. Wil	gatacttg	gtaagtagtagg...3147...-tcgacaccattaagtagtc-----	GTC--ATcTGCATGaCATT	aCAGG-----ccacaatcccacgtattaca-...1756...ttttcttcag	taccgccg	
D. Yak	gatactcg	gtaagtaggccc...3289...-ttgagaccattaagtagtc-----	GTC--ATcTGCATGaCATT	-----acatgccgcaat-ccacgtat-----...1619...tttgcctacag	tgccgccg	
	*** * *	** **	** **	****	***	** * **

id=27228 gene=FBgn0085382 name=CG34353 segment=chr3R.23614835.23623105\_-1 type=IN VIEW

Figure 57: CS=12.96



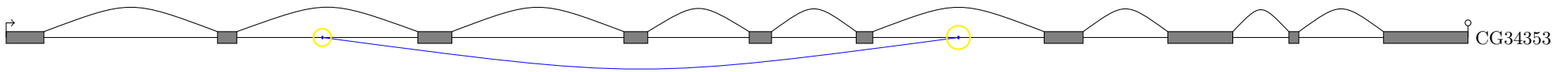
D.Mel	caacacgg	gtgagtacagta...3259...	accgtg-tgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1645...	ctcttggtgcag	acacgtac
D.Sim	caacacgg	gtgagtacagta...3283...	accgtg-tgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1621...	ctcttggtgcag	acacgtac
D.Sec	caacacgg	gtgagttcagta...3324...	accgtg-tgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1580...	ctcttggtgcag	acacgtac
D.Ere	caacacgg	gtgagtacaaa...3236...	accgtg-tgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1668...	ctcttggtgcag	acacgtac
D.Ana	caacacgg	gtaagttgtac...3644...	-cagcgcgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1260...	tttcgattgcag	atgcatat
D.Gri	caatacgg	gtgagttagctga...3329...	-ggctggttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1575...	ttcatttgcag	agccttat
D.Moj	caatacgg	gtgagttagaccg...3053...	---actgctgcttggccttggtga-----	TGTTGT	TGAACTCATTGCA	caataaatacgccttttgaat...1855...	tttgattgcag	agccgtat
D.Per	caatacgg	gtaagcgataga...3739...	-cgttcttgggttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1165...	atctgattgcag	acacctat
D.Pse	caatacgg	gtaagcgataga...3728...	-cgttcttgggttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1176...	atctgattgcag	acacctat
D.Vir	caatacgg	gtgagttagccta...3414...	-ttctctactctggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1490...	tattcattgcag	aaccctat
D.Wil	caatacgg	gtgagtactatt...3873...	---ctgcaacttcaacttgggcccTGGTGTGGTctGGATGTTgt	TGAATCATTGCA	aataaatacgccttctgaat...1019...	tccatcttcag	atccatac	
D.Yak	caacacgg	gtgagtacaaaa...3291...	accgtg-tgccttggccttggtt-----	GATGTTgt	TGAATCATTGCA	aataaatacgccttttgaat...1613...	cttatggtgcag	acacgtac
		*** **** ** **	* **	*****	*	** ***	* * **	

id=27226 gene=FBgn0085382 name=CG34353 segment=chr3R.23623307.23630046.-1 type=IN

D.Mel	caacacgg	gtgagtacagta...3305...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----tattacggcccagccaactt-----	...1598...	ctcttggtgcag	acacgtac
D.Sim	caacacgg	gtgagtacagta...3329...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----tattacggcccagccaactt-----	...1574...	ctcttggtgcag	acacgtac
D.Sec	caacacgg	gtgagttcagta...3370...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----tattacggcccagccaactt-----	...1533...	ctcttggtgcag	acacgtac
D.Ere	caacacgg	gtgagtacaaa...3282...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----tattacggcccagccaactt-----	...1621...	ctcttggtgcag	acacgtac
D.Ana	caacacgg	gtaagttgtac...3690...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----ttattacagccgaggtccca-----	...1213...	tttcgattgcag	atgcatat
D.Gri	caatacgg	gtgagttagctga...3374...	..aatacgc-ttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----ttattaccaccaagtttcac-----	...1529...	ttcatttgcag	agccttat
D.Moj	caatacgg	gtgagttagaccg...4350...	-gta-----taaaaaggaatcacaatT---AATGAGTTCG-ATgAATG-----	-----	-----	-----cgctcgggtgtctgtctgtc...	...557...	tttgattgcag	agccgtat
D.Per	caatacgg	gtaagcgataga...3785...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----ttattacagccgaggcgagc-----	...1118...	atctgattgcag	acacctat
D.Pse	caatacgg	gtaagcgataga...3774...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----ttattacagccgaggcgagc-----	...1129...	atctgattgcag	acacctat
D.Vir	caatacgg	gtgagttagccta...3460...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----ttattaccaccaagtttcac-----	...1443...	tattcattgcag	aaccctat
D.Wil	caatacgg	gtgagtactatt...3931...	-atagccttctgaatgcgca-----	TGTAaATGA	TTCaAtAGCATTtATTAcCACCG	acatgactctgcctgccatg---	...960...	tccatcttcag	atccatac
D.Yak	caacacgg	gtgagtacaaaa...3337...	-atagccttttgaatgcgca-----	TGTAaATGA	TTCaAtAGCATT	-----tattacggcccagccaactt-----	...1566...	cttatggtgcag	acacgtac
		*** **** ** **	** * ** *	* *****	** * **	*		** ***	* * **

id=27226 gene=FBgn0085382 name=CG34353 segment=chr3R.23623307.23630046.-1 type=IN VIEW

Figure 58: CS=11.52



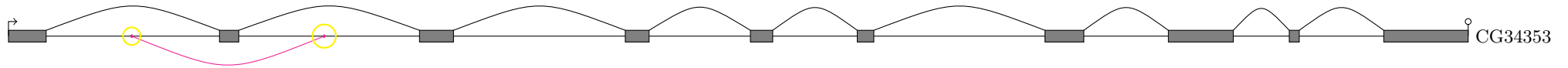
D. Mel	caacacgg	gtgagtacagta...3255...ggag--accgtgtgccttggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1658...ctcttgttcag	acacgtac
D. Sim	caacacgg	gtgagtacagta...3279...ggag--accgtgtgccttggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1634...ctcttgttcag	acacgtac
D. Sec	caacacgg	gtgagttcagta...3320...ggag--accgtgtgccttggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1593...ctcttgttcag	acacgtac
D. Ere	caacacgg	gtgagtacaaat...3232...ggag--accgtgtgccttggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1681...ctcttgttcag	acacgtac
D. Ana	caacacgg	gtaagttgtac...3634...--ggccctgttacagcagcgcTTGGc	TGTTGATGTTGT	tgaactcattgcaataaat-...1273...tttcatttcag	atgcatat
D. Gri	caatacgg	gtgagttagctga...3325...--ggctggctggttggctggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1588...ttcatttcag	agccttat
D. Per	caatacgg	gtaagcgtataga...3729...tgtgccgcctcgttcttggg--TTGGc	TGTTGATGTTGT	tgaactcattgcaataaata...1177...atctgatttcag	acaccttat
D. Vir	caatacgg	gtgagttagccta...3410...-cttcttctctacctctggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1503...tattcatttcag	aacccttat
D. Yak	caacacgg	gtgagtacaaaa...3287...ggag--accgtgtgccttggct-----	TGTTGATGTTGT	tgaactcattgcaataaat-...1626...cttatgttcag	acacgtac
	*** **	** **	*	*****	***** * **

id=27226 gene=FBgn0085382 name=CG34353 segment=chr3R.23623307.23630046.-1 type=IN

D. Mel	agcctgag	gtatgttttaat...3777...-aaacaaaaggcacgaaaaacGCAA	CATCAACA	ttttggacaaataacggcat-----...1135...aattatttacag	gtaatttg
D. Sim	agcctgag	gtatgttttaat...3786...-aaacaaaaggcacgaaaaacGCAA	CATCAACA	ttttggacaaataacggcat-----...1126...aattatttacag	gtaatttg
D. Sec	agcctgag	gtatgttttaat...3818...-aaacaaaaggcacgaaaaacGCAA	CATCAACA	ttttggacaaataacatcta-----...1094...aattatttacag	gtaatttg
D. Ere	agcctgag	gtatgttttaat...3749...-aaacaaaaggcacgaaaaacGCAA	CATCAACA	ttttggacaaataacggcat-----...1163...aattatttacag	gtaatttg
D. Ana	agcctgag	gtatgttttaat...3704...gcaga-aaaggcatgaaaaacGCAA	CATCAACAG	TCGGGacaaataacggcaaaaaaca...1202...aattatttacag	gtaatttg
D. Gri	agcctgag	gtatgttttaat...2873...-cagcaaaaggcatgaaaaacGCAA	CATCAACA	ttttggacaaataatacaaa-----...2039...aattatttacag	gtaatttg
D. Per	agcctgag	gtatgttttaat...3596...gaaggcaaaaggcatgaaaaacAGCAA	CATCAACA	TTGGGacaaataataggagaaggaa...1309...aattatttacag	gtaatttg
D. Vir	agcctgag	gtatgttttaat...2805...-aaacaaaaggcatgaaaaacGCAA	CATCAACA	ttttggacaaataatacaaa-----...2107...aattatttacag	gtaatttg
D. Yak	agcctgag	gtatgttttaat...3696...-aagtaacaaaaggcagaaaaacGCAA	CATCAACA	ttttggacaaataacggcat-----...1216...aattatttacag	gtaatttg
	*****	*****	* * *	* * * * *	*****

id=27234 gene=FBgn0085382 name=CG34353 segment=chr3R.23607352.23613052.-1 type=IN VIEW

Figure 59: CS=8.64



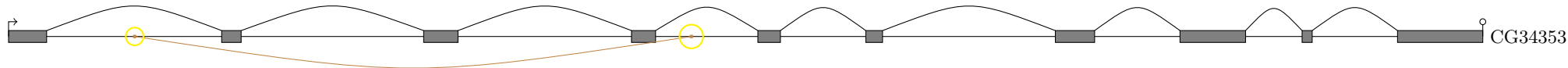
D.Mel	tgagagcg	gtaagttgagaa...3607...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1305...ttcca--tttcag	tgtctgcc	
D.Sim	tgagagcg	gtaagttgagaa...3634...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1278...ctct--ctcccag	tttccgcc	
D.Sec	tgagagcg	gtaagttgagaa...3618...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgggcccgag...1294...ttcca--tttcag	tgccgcc	
D.Ere	cgagagcg	gtaagtagagaa...3576...tgattccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1336...tcca--tttcag	tgccgcc	
D.Ana	tgaaagcg	gtaagttgaccc...3549...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1363...tgtct--tttcag	catctgcc	
D.Gri	ggaaagcg	gtaagttcaact...3694...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1218...tttcg--tttcag	ccagcgcc	
D.Per	ggagagcg	gtaagtcaagac...3345...tgttccacagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1567...tttat--tttcag	tgccgcc	
D.Pse	ggagagcg	gtaagtcaagac...3358...tgttccacagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1554...tttat--tttcag	tgccgcc	
D.Vir	ggaaagcg	gtaagtgttaga...3325...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1587...tttcgctttacag	ccagcg--	
D.Yak	cgagagcg	gtaagttgagaa...3460...tgtttccgcagcagataaat	ACAACAT	TGACA	cttcattattgtgcccgag...1452...ttcca--tttcag	tgccagga	
	** ****	*****	** ** *	*****	*****	* **	*

id=27224 gene=FBgn0085382 name=CG34353 segment=chr3R.23630161\_23659618\_-1 type=IN

D.Mel	caacacgg	gtgagtacagta...3255...ggagaccgtg-tgccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1658...ctcttgttcag	acacgtac	
D.Sim	caacacgg	gtgagtacagta...3279...ggagaccgtg-tgccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1634...ctcttgttcag	acacgtac	
D.Sec	caacacgg	gtgagttcagta...3320...ggagaccgtg-tgccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1593...ctcttgttcag	acacgtac	
D.Ere	caacacgg	gtgagtacaaat...3232...ggagaccgtg-tgccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1681...ctcttgttcag	acacgtac	
D.Ana	caacacgg	gtaagtttgtac...3640...-ggtagcgcagccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1273...tttcgattgcag	atgcatat	
D.Gri	caatacgg	gtgagttagctga...3325...-ggctggctggttggctggct	TGTTGATGTTGT	tgaactcattgcaataaat...1588...ttcattttgcag	agccttat	
D.Per	caatacgg	gtaagcagataga...3735...-gcctcgttcttgggttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1178...atctgattgcag	acacctat	
D.Pse	caatacgg	gtaagcagataga...3724...-gcctcgttcttgggttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1189...atctgattgcag	acacctat	
D.Vir	caatacgg	gtgagttagccta...3410...-cttcttctctacctctggct	TGTTGATGTTGT	tgaactcattgcaataaat...1503...tattcattgcag	aaccttat	
D.Yak	caacacgg	gtgagtacaaaa...3287...ggagaccgtg-tgccttggct	TGTTGATGTTGT	tgaactcattgcaataaat...1626...cttatgttcag	acacgtac	
	*** ****	** **	*****	*****	*****	* **

id=27226 gene=FBgn0085382 name=CG34353 segment=chr3R.23623307\_23630046\_-1 type=IN VIEW

Figure 60: CS=9.6



D.Mel	tgagagcg	gtaagttgagaa...3613...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1292...	ttccatttcag	tgcttgcc
D.Sim	tgagagcg	gtaagttgagaa...3640...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1265...	cctctcccag	tttccgcc
D.Sec	tgagagcg	gtaagttgagaa...3624...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1287...	ttccatttcag	tgctccgc
D.Ere	cgagagcg	gtaagtagagaa...3582...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1323...	ttccatttcag	tgctccgc
D.Gri	ggaaagcg	gtaagttcaact...3700...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1205...	ttcgtttcag	ccagcgcc
D.Per	ggagagcg	gtaagtcaagac...3351...	cacagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1554...	tttattttcag	tgctcgcc
D.Pse	ggagagcg	gtaagtcaagac...3364...	cacagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1541...	tttattttcag	tgctcgcc
D.Wil	tgagagag	gtaagtttccat...3793...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1112...	tctttcttcag	gcactggc
D.Yak	cgagagcg	gtaagttgagaa...3466...	cgcagcagataaatacaaca	TTTGac	ACTTCATTa	TTGTG	cccgcagcgtaatcgaatca...	1439...	ttccatttcag	tgctcagga
	** ** *	*****		*	*****				*	***

id=27224 gene=FBgn0085382 name=CG34353 segment=chr3R.23630161.23659618\_-1 type=IN

D.Mel	gccaacg	gtaagattgcdc...160...	aagaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatattttctgccc...	355...	tctccgtttcag	gcgaggag
D.Sim	gccaacg	gtaagattgcdc...154...	aagaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatattttccgccc...	361...	tctccgtttcag	gcgaggag
D.Sec	gccaacg	gtaagattgcdc...164...	ctttaacaatttcataaa	AATGga	AAGTCAAA	gaaattatattttctgccac...	362...	tctccgtttcag	gcgaggag	
D.Ere	gccaacg	gtaagattgcdc...167...	aagaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatattttctgcttc...	372...	tctccgtttcag	gcgaggag
D.Gri	gccaatg	gtaagatttgc...163...	taaaaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatatttgcagcgaat...	270...	ctggtttgag	gcgaggag
D.Per	gccaatg	gtaagattcagc...191...	aagaaactttaaccatttc	CATAA	AATGga	AAGTCAAA	gaaattatatacagaggagtact...	410...	atacttttcag	gcgaggag
D.Pse	gccaatg	gtaagattcagc...191...	aagaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatatacagaggagtct...	428...	atacttttcag	gcgaggag
D.Wil	gccaatg	gtaagattcagc...167...	agaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatatttttctttt...	309...	acttacttcag	gccaagag
D.Yak	gccaacg	gtaagattgcdc...157...	aagaaactttaacaatttc	CATAA	AATGga	AAGTCAAA	gaaattatattttctgccc...	441...	tctccgtttcag	gcgaggag
	*****	*	*****	**	*****	*****	*****		*	***

id=27230 gene=FBgn0085382 name=CG34353 segment=chr3R.23614095.23614693\_-1 type=IN VIEW

Figure 61: CS=9.72



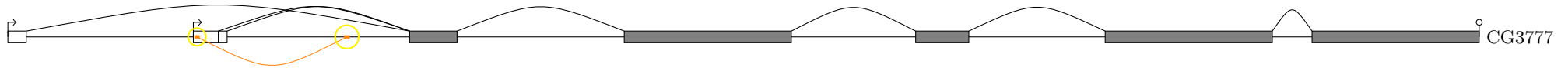
D. Mel	tgatgcag	gtgagttcggtt...3940...--tatgggcccttggcc-----gcatc	ATTG	CATGTGAAA	agcc-tggctcgttcgtgat...971...cctccttttcag	tccccgga
D. Sim	tgatgcag	gtgagtttggtt...3925...--tatgggcccttggcc-----gcatc	ATTG	CATGTGAAA	agcc-tggctcgttcgtgat...986...cctcctttggcag	tccccgga
D. Sec	tgatgcag	gtgagttcggtt...3912...--tatgggcccttggcc-----gcatc	ATTG	CATGTGAAA	agcc-tggcatgttcgtgat...999...cctcctttggcag	tccccgga
D. Ere	tgatgcag	gtgagttcggtt...3844...--tatgggcccttggcc-----gcatc	ATTG	CATGTGAAA	agcc-tggctcgttcgtgat...1067...cttcctttggcag	tccccgga
D. Ana	tgatgcag	gtgagtcctgac...3934...--tatgggcccttggcc-----ccatc	ATTG	CATGTGAAA	agcc-ggggtgagttcacatt...977...ccctctctatag	tccccgga
D. Gri	tgatgcag	gtgagataattg...3794...gctat-tgcta-cgcag-----gcatc	ATTG	CATGTGAAA	agccaaggaaaaaagtttc...1117...atctctttgag	tcgccgga
D. Moj	tgatgcag	gtgagaattcaa...3561...-atat-tgccagtgcct-----tcgtc	ATTG	CATGTGAAA	agcc-gggaaaaaaagtttc...1350...atctgtttgag	tccccgga
D. Pse	tgatgcag	gtgagtccccga...4148...-ggctctgctgccac-----acatc	ATTG	CATGTGAAA	agcg-ttcattgctggttctgt...763...ttctgtggcag	tccccgga
D. Wil	tgatgcag	gtgagtcaataa...3474...-----ttctcacacagcctaacatc	ATTG	CATGTGAAA	agcc-tcgttcgttcacatt...1437...ctctctttacag	tcgccgga
D. Yak	tgatgcag	gtgagttcgttt...3857...--tatgggcccttggcc-----gcatc	ATTG	CATGTGAAA	agcc-tggctcgttcgtgat...1054...cctcattggcag	tccccgga
	*****	****		* *****	*	** **

id=100634 gene=FBgn0035454 name=CG12029 segment=chr3L.3627145\_3644641.1 type=IN

D. Mel	tttatatg	gtgtgtatatcg...519...aatgagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----ttcattgtgtacattaataa...66...tcgattgcacag	aaaccaaa
D. Sim	tctatatg	gtgggtatatag...531...aatgagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----tttattgtgtacattaataa...63...tcgattgcacag	aaaccaaa
D. Sec	tctatatg	gtgggtatatag...531...aatgagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----ttcattgtgtacattaataa...63...tcgattgcacag	aaaccaaa
D. Ere	tctatatg	gtgggtataaag...527...aatgagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----ttcattgtgtacattaataa...63...tcgattgcacag	aaaccaaa
D. Ana	tctatatg	gtgggtatttgg...407...aatcagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----ttcattgtgtacattataa...97...ttgattgcacag	aaaccaaa
D. Gri	tttgtatg	gtaagtaataca...425...---gatggtgtttataagtaaa	TTTC	atGCATATGCGAGAT	-----ttcattgtttgattataa...61...tttctttcacag	aaaccaaa
D. Moj	tctgtatg	gtaagtagagag...298...aacgaacggttgtttataaaa----	TTTC	atGCATATGCGAGAT	-----ttcctttgtttgattataa...95...ttacatatacag	aaaccaaa
D. Pse	tttgtatg	gtaagttcccc...317...-atcagcagctggttagaaaa----	TTTC	atGCATATGCGAGAT	-----ttctcatagatccccccca...121...cttttgaacag	aaaccaaa
D. Wil	tttgtatg	gtaagtaaaatg...546...aatcaacatctgtttataaaa----	TTTC	atGCATATGCGAGAT	ttttttttctgtgtgtgt-----...100...tgatcaaacag	aaaccaaa
D. Yak	tctatatg	gtgggtacaatg...540...aatgagcagctgtttagaaa----	TTTC	atGCATATGCGAGAT	-----ttcattgtgtacattaataa...63...tcgattgcacag	aaaccaaa
	* * ****	** **		*****	**	**** *****

id=100636 gene=FBgn0035454 name=CG12029 segment=chr3L.3645207\_3645874.1 type=IN VIEW

Figure 62: CS=12.6



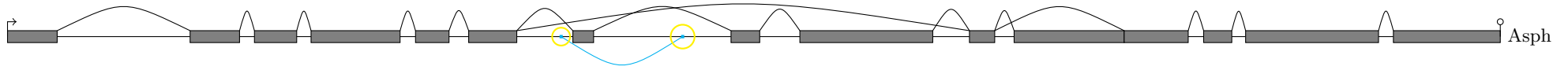
D.Mel	attTTGC	aTTTCACgTTCA	gctagcagcgaatcgaaag...31...aaattagaga--g	gtcttcaa
D.Sim	attTTGC	aTTTCACgTTCA	gctagcagcgaatcgaaag...31...aaatagaga--g	gtctccaa
D.Sec	attTTGC	aTTTCACgTTCA	gctagcagagaaatcgaaag...31...aaatagaga--g	gtctccaa
D.Ere	attTTGC	aTTTCACgTTCA	gctagcagcgaatcgaaag...31...aaatagaga--g	gtcttcaa
D.Ana	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...33...caagtcccaa--g	gaggcccc
D.Moj	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...71...agaagc-gcaacag	ttcaciaa-
D.Per	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...45...--agactgagaccg	gagaccgg
D.Pse	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...31...agagaccgagact-	gagaccg-
D.Vir	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...81...taatcaattt--a	atatttaa
D.Wil	attTTGC	aTTTCACgTTCA	gctggcagcgaatcgaaag...30...aaatcaacaa--t	tcctctaa
D.Yak	attTTGC	aTTTCACgTTCA	gctagcagcgaatcgaaag...31...aaatagaga--g	gtcttcaa
	*****	*****	**** *****	* *

id=103652 gene=FBgn0024989 name=CG3777 segment=chrX.237078.237152\_1 type=A5

D.Mel	---agttcatg	gta-ctgccacaa...310...taagaacgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcgaaaaaatgtcgaaagt-...154...-----tttctttggtag	aagctgaa
D.Sim	---agttcatg	gta-ctgccacaa...708...taaaaaacgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcgaaaaaatgtcgaaagt-...155...-----tttctttggtag	aagctgaa
D.Sec	---agttcatg	tta-ctgccacaa...312...taaaaaacgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcgaaaaaatgtcgaaagt-...144...-----tttctttggtag	aagctgaa
D.Ere	---agttcatg	gta-ctgccacat...366...tacgaaacgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcgaaaaaatgtcgaaagt-...129...-----tttctttggtag	aagctgaa
D.Ana	---atTTTTTg	a-atctgccacag...319...tccaactcgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcaaaaatga-ccaaagtga...189...-----tcgttgaagctg	aagctgaa
D.Moj	acgaaacacgaa	----ccgacgtta...380...taaacaaacacgaaaaatg-	TGAAaaGTGAAAgtGCAA	-ccatgtgaatagtaacaaca...129...-----ttgtatagttg	aacatttg
D.Per	---agttcatg	gtaccctccaca-...399...-ccccaacgagaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcaaaaatga-ccaaaagt-...244...-----tattttcattcg	aagctgaa
D.Pse	---agttcatg	gtaccctccaca-...409...-ccccaacgagaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcaaaaatga-ccaaaagt-...244...-----tattttcgttcg	aagctgaa
D.Vir	cagagcccaga	----ctgcctttt...433...gattttggtgtcgaaaaaag-	TGAAaaGTGAAAgtGCAA	-caatgtgaatataaacaacg...204...tttttttttaaatagttg	a-----
D.Wil	---aattaag	aaaacctatag-...299...-aaaaatcaaaagataaaag-	TGAAaaGTGAAAgtGCAA	ctcaaaaatga-ccaaaagt-...177...-ctccttctcaatagttt	aaa-----
D.Yak	---agttcatg	gta-ctgccgcaa...324...aacgaaacgtaaaataaaag-	TGAAaaGTGAAAgtGCAA	ctcgaaaaaatgtcgaaagt-...129...-----tttctttggtag	aagctgaa
	*	*	* ** *****	*	*

id=103654 gene=FBgn0024989 name=CG3777 segment=chrX.237179.237724\_1 type=I5 VIEW

Figure 63: CS=11.88



D.Mel	ggcatcac	gtaagtagc	gaa...121...cttagaa	accgaaattgtac	AAGAAAGTGC	CAAAA	-----	ggcatt::::	-----	aaacctgactcattt-acag	ttgccg	tt			
D.Sim	ggcatccc	gtaagtagc	gaa...118...cttagaa	accgaaattgtac	AAGAAAGTGC	CAAAAAGC	caTTTG	-----	-----	aaacctgactcattt-acag	ttgccg	tt			
D.Sec	ggcatcac	gtaagtagc	gaa...118...cttagaa	accgaaattgtac	AAGAAAGTGC	CAAAAAGC	caTTTG	-----	-----	aaacctgactcattt-acag	ttgccg	tt			
D.Ere	ggcatcac	gtaagtagc	gaa...116...cttagaa	accgaaattgtac	AAGAAAGTGC	CAAAA	-----	ggcatt::::	-----	aaacctgactcattt-acag	ttgccg	tt			
D.Ana	ggcctcac	gtaagttg	gtgg...115...ctattcg	agaaaaattgtac	AAGAAAGTGC	CAAAAGC	GAAATatGTTTGT	-----	-----	aactgactcattt-acag	ttgccg	tt			
D.Gri	gggctcac	gtaagtagc	gaa...100...aatcta	atataattgtac	AAGAAAGTGC	CAAAAT	---ggcaatgagatagagagagatg	taataatg	ttt::::	-----	aaactgactcatttccag	ttgccg	tt		
D.Moj	gggctcac	gtaagtagc	gaa...98...atagaca	aaaaaaattgtac	AAGAAAGTGC	CAAAAGC	cgaaaatttatctagataata	aaaaatata	tattc	ata	ttt::::	gtttactaaagaaacgtaaatcatttccag	ttgccg	tt	
D.Per	agcatcgc	gtaagttg	gagtc...114...ccacaga	aaaaatattgtac	AAGAAAGTGC	CAAAA	-----	caaatct::::	-----	aaacctgactcatttccag	ttgccg	tt			
D.Pse	agcatcgc	gtaagttg	gagtc...114...ccacaga	aaaaatattgtac	AAGAAAGTGC	CAAAA	-----	caaatct::::	-----	aaacctgactcatttccag	ttgccg	tt			
D.Vir	gggatcac	gtaagtagc	gaa...91...catttg	aaaaaaattgtac	AAGAAAGTGC	CAAAAT	---gaaatgaata	-----	-----	tgaattaa	tg	ttt::::	aaactgactcatttccag	ttgccg	tt
D.Wil	agcatcag	gtaagtagc	gaa...93...aaatata	aaaaaaattgtac	AAGAAAGTGC	CAAAAT	-----	cgaaaa::::	-----	acaatcaatcaatttccag	ttgctg	tt			
D.Yak	ggcatcac	gtaagtagc	gaa...117...cttagaa	accgaaattgtac	AAGAAAGTGC	CAAAAAGC	caTTTG	-----	-----	aaacctgactcattt-acag	ttgccg	tt			

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id=19943 gene=FBgn0034075 name=Asph segment=chr2R.12000475.12000685.1 type=IN

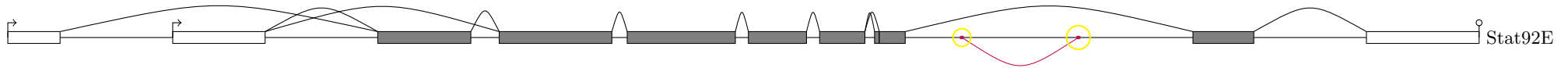
D.Mel	aaatacaa	gtgagtc	ttctca...288...-----	actcattggccctgtctaaa	-----	TTTTGCACTTCTT	cagttagc	-----	ttattttgatta...151...-gtgaatgcatag	ctgaggat		
D.Sim	aaatacaa	gtgagtc	ttctca...283...--gaga	atccatgggcccagtc	-----	CAAAATTTGCACTTCTT	cagttagc	-----	ttattttgatta...151...-gtgaatgcttag	ctgaggat		
D.Sec	aaatacaa	gtgagtc	ttctca...283...--gaga	atccatgggcccagtc	-----	CAAAATTTGCACTTCTT	cagttagc	-----	ttattttgatta...151...-gtgaatgcttag	ctgaggat		
D.Ere	aaatacaa	gtgagtc	ttctca...284...-----	atccatgaagcctgtctaaa	-----	TTTTGCACTTCTT	cagttagc	-----	ttattttgatta...148...-gtgaatgcatag	ctgaggat		
D.Ana	taatacaa	gtgagtc	ttctca...208...-----	gtattaacagaactaaacca	AAAACAGGCATTTT	atTTTTGCACTTCTT	cagttagc	-----	ttattttgattg...147...ctgaaacgc-tag	ccgaggac		
D.Gri	aaatacaa	gtgagtt	gtctca...402...at	tttgaaaataagaacaaa	-----	ATTTTGCCTTCTT	c	-----	atgtttattatttctg	ttta...187...-aaaaacaaaa	caaaaaa	
D.Moj	aaatacaa	gtgagtt	ttctca...486...-ta	atgaatg-aaacaaaat	-----	TTTTGCACTTCTT	catttg	ttg	tttaaaaat	ta	---...189...-ctaatttcttag	ccgatgag
D.Per	gaatacaa	gtgagtc	ttctca...309...-----	aatcggtgccagagtaacc	-----	TTTTGCACTTCTT	---	tattattatgattatgatt...157...-atgaatgtgtag	ccgaagac			
D.Pse	gaatacaa	gtgagtc	ttctca...308...-----	aatcggtgccagagtaacc	-----	TTTTGCACTTCTT	---	tattattatgattatgatt...162...-atgaatgtgtag	ccgaagac			
D.Vir	aaatacaa	gtgagtt	atctca...492...-at	tcgaatatacgaacaaa	-----	ATTTTGCCTTCTT	catttg	atg	tttattttat	---...218...-ctctgctagcag	ctgaggat	
D.Wil	gaatacaa	gtgagtt	ttctca...193...--	actaatttccaaataaagct	-----	GATTTTGCCTTCTT	c	-----	attataattttatg	ttac...226...-aaaaatata	tag	
D.Yak	aaatacaa	gtgagtc	ttctca...284...--	tgaatcttgaaccctgt	-----	ATAAATTTGCACTTCTT	cagttagc	-----	ttattttgatta...148...-gtgaatgcatag	ctgaggat		

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id=19945 gene=FBgn0034075 name=Asph segment=chr2R.12000764.12001280.1 type=IN VIEW

Figure 64: CS=14.4





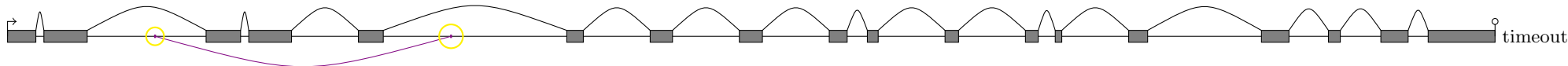
D. Mel	ctgggaaa	gtaagttttgga...191...-----tatgattat---gttttgacca	AAAAGTTTAA	c-AGAT	GCAATACTTTGAA	ttCGTAAA	-----	aaaaacgttgtaaaggggca...1464...aacctcttttag	tggtgact---
D. Sim	ctgggaaa	gtaagttttgga...194...-----tatgattat---gttttgacca	AAAAGTTTAA	c-AGAT	GCAATACTTTGAA	-----	tcgaaaaaaaaacgttgtaa	-----..1490...aacctcttttag	tggtgact---
D. Sec	ctgggaaa	gtaagttttgga...195...-----taagattat---gttttgacca	AAAAGTTTAA	c-AGAT	GCAATACTTTGAA	-----	tcgaaaaaaaaacgttgtaa	-----..1476...aacctcttttag	tggtgact---
D. Ere	ctgggaaa	gtaagttttgga...184...-----gattat---gttttgacca	aaatAGTTTAA	c-AGAT	GCAATACTTTGAA	-----	cgacaaaaaacttttaagg	-----..1476...aacctcttttag	tggtgact---
D. Ana	atgggaaa	gtaagttttgca...200...-----ttt---ttttactat	tttaacc-AAAAGTTTAA	cc-AGAT	GCAATACTTTGAA	-----	ttcgataaaggacgtttgaa	-----..1631...gaacgatttcag	cggtgatt---
D. Gri	atgggaaa	gtaagttttgca...201...-----ttggttta	taaccatttta---AGAGTTTAA	t-AGGT	GCAATACTTTGAA	ATGGAAAGTTTA	ttataaaaccaaacaagcta	-----..1560...--caattttag	tggtagtgatt
D. Moj	atgggaaa	gtaagttttgca...229...-----ttggctt	ctacatttt---cc-AAAAGTTTAA	t-AGAT	GCAATACTTTGAA	-----	attgagaggggaaatgtaa	-----..1689...--caattttag	tggtagtgatt
D. Per	atgggaaa	gtaagtttcgat...193...-----gtttgtttat---	gattttgtc-AAAAGTTTAA	ctAAGAT	GCAATACTTTGAA	-----	ttcgagaaaaa---gaaagggg	-----..1458...tatatattttag	ttccggtg---
D. Pse	atgggaaa	gtaagtttcgat...190...-----gtttgtttat---	gattttgtc-AAAAGTTTAA	ctAAGAT	GCAATACTTTGAA	-----	ttcgagaaaaa---gaaagggg	-----..1460...catgtattttag	ttccggtg---
D. Vir	atgggaaa	gtaagttttgca...215...-----ttggttg	aaaccaattttt---AAGAGCTTAA	t-AGAT	GCAATACTTTGAA	-----	atcgagagggataactaaaa	-----..1737...--caattttag	tggtagtgatt
D. Wil	atgggaaa	gtaagtttagca...253...ggaaaaatt	-----taatttgatt---	-----	GCAATACTTTGAA	-----	ctaaaaaaaaa---acaatgaa	-----..1831...ttctcaatttag	tggtgact---
D. Yak	ctgggaaa	gtaagttttgga...204...-----tatgattat---	gttttgaccaAAAAGTTTAA	c-AGAT	GCAATACTTTGAA	-----	attcgaaaaaacgttgtaa	-----..1437...aacctcttatag	tggtgact---
	*****	***** *		**	***** **		*		* **

id=125869 gene=FBgn0016917 name=Stat92E segment=chr3R.16363186\_16364942\_-1 type=IN

D. Mel	ctgggaaa	gtaagttttgga...1094...--gattctttat	atattttcac-----TTTATGTTCAAAGTATTGC	ATCT	ATTAAACTTTT	---cagccacaactcgatcaaat	-----..563...aacctcttttag	tggtgact---	
D. Sim	ctgggaaa	gtaagttttgga...1102...-----ttttat	atattttcacTTTT	-----GTTCAAAGTATTGC	ATCT	ctTTAAACTTTT	---caggcacaactcgatcaatt	-----..582...aacctcttttag	tggtgact---
D. Sec	ctgggaaa	gtaagttttgga...1089...-----ttttat	atattttcacTTTT	-----GTTCAAAGTATTGC	ATCT	ctTTAAACTTTT	---caggcacaactcgatcaatt	-----..582...aacctcttttag	tggtgact---
D. Ere	ctgggaaa	gtaagttttgga...1074...-----attctatt	tattttacttta---AGTTCAAAGTATTGC	ATCT	ctTTAAACT	---tttcagccacatctcgatca	-----..586...aacctcttttag	tggtgact---	
D. Ana	atgggaaa	gtaagttttgca...1217...acacaaa	attatttttttt---TTCAAAGTATTGC	ATCT	ttTTAAACTTTT	---cagcccgttcgatcttaat	-----..614...gaacgatttcag	cggtgatt---	
D. Gri	atgggaaa	gtaagttttgca...1182...-----attcaa	agttctactagcatTAAAtaTTTTgtTTTGTT	TTCAAAGTATTGC	ATCT	ttTTAAAGCTTT	ctggcagcctcaaatatgtt	-----..573...--caattttag	tggtagtgatt
D. Moj	atgggaaa	gtaagttttgca...1285...-----gttcgc	ccctaattgttctcc---TTCAAAGTATTGC	ATCT	ctTTAAAGCTTTT	---cagtcagcagccatatatat	-----..633...--caattttag	tggtagtgatt	
D. Per	atgggaaa	gtaagtttcgat...1056...-----ttttat	agtctttttgttt---TTCAaAGTATTGC	ATCT	ttTAGACTTTT	---tcagccggaattgatcaaa	-----..596...tatatattttag	ttccggtg---	
D. Pse	atgggaaa	gtaagtttcgat...1051...-----ttgat	agtctattttgttt---TTCAAAGTATTGC	ATCT	ttTAGACTTTT	---tcagccggaattgggtcaaa	-----..600...catgtattttag	ttccggtg---	
D. Vir	atgggaaa	gtaagttttgca...1353...--attatc	ctaagtgtttcac---TTCAAAGTATTGC	ATCT	ttTTAAAGCTTTT	cagctgacgcaaatgtgata	-----..599...--caattttag	tggtagtgatt	
D. Wil	atgggaaa	gtaagtttagca...1385...-----ttttt	attatttaaaattat---TTCAAAGTATTGC	-----	-----	---catctaattaaatttttcag	...699...ttctcaatttag	tggtgact---	
D. Yak	ctgggaaa	gtaagttttgga...1070...--gattcttt	atattttcac-----TTTAAAGTATTGC	ATCT	ctTTAAACTTTT	---cagcaacaactcgatcaatt	-----..570...aacctcttatag	tggtgact---	
	*****	***** *	*	** *****			*	**	

id=125869 gene=FBgn0016917 name=Stat92E segment=chr3R.16363186\_16364942\_-1 type=IN VIEW

Figure 65: CS=16.8



D. Mel	tggaaata	gtgagtt-tcatt...3060...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...344...ctttatttccag	gcatttgc					
D. Sim	tggaaata	gtgagtt-tcagt...3099...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcaact...333...ctttatttccag	gcatttgc					
D. Sec	tggaaata	gtgagtt-tcagt...3077...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...352...cttcatttccag	gcatttgc					
D. Ere	tggaaata	gtaagttgtag-...1164...-----tatgactgaact-cgtccgctTTGTggGTTCAaACTAATTTGAActtcatatctgctcgtcttt...2334...ctttccttccag	gcatttgc					
D. Ana	tggaaata	gtgagtagtac...3067...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...358...ttgtgtcctcag	gcctttgc					
D. Gri	tggaaact	gtacgtactcca...3515...----tcacagctggccttgcaggca--CAAAAGCcgCATTaGTTGTATTATttttaagctcacagcagta...331...tctatttccag	gcatttgc					
D. Moj	tggaaatt	gtaagttaatga...4782...cgttttcacagctg-----agctaca--TAAATTTGCaATTT-----aatttaatttaatttcattt...117...tctcgttttccag	gcatttgc					
D. Per	tggaaata	gtgagta-ttaca...2344...-----gcagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...365...actgaattccag	ggatttgc					
D. Pse	tggaaata	gtgagta-ttaca...2404...-----gcagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...377...actgaattccag	ggatttgc					
D. Vir	tggaaatt	gtaagtcataga...4162...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagta...324...tactatttttag	gcctttgc					
D. Wil	tggaaagt	gtaagtaataca...3168...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagccgga...278...tttttttatag	tcctttgc					
D. Yak	tggaaata	gtgagtt-tcgag...3306...-----acagctggcctttaggcaca--AAAGCcgCATTaGTTGTATTATttttaagctcacagcagca...328...ctttccttccag	gcatttgc					
	*****	** **	*	* *	* *	*	**	*****

id=10630 gene=FBgn0038118 name=timeout segment=chr3R.8914969\_8918458\_1 type=IN

D. Mel	ttagtcag	gtgagtggcatt...1778...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1578...tttcattcgcag	cgaatcgt					
D. Sim	ttagtcag	gtgagtggcatt...1764...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...2299...tttcattcgcag	cgaatcgt					
D. Sec	ttagtcag	gtgagtggcatt...1799...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1571...tttcattcgcag	cgaatcgt					
D. Ere	ttagtcag	gtgagtggcct...1817...-----ttaaattgttttggttactTTCAAATTAGTTtcTGAATgACAA-----caatgaagccttgcaaaaat...1594...tttcattcgcag	cgaatcgt					
D. Ana	ttggtcag	gtgagtgccagt...1870...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1417...tttcattcgcag	cgaatcgt					
D. Gri	ctgtcag	gtaagtcaagta...1783...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTTTG-----caaaaatgttgtcattccg...1390...tttcatttgcag	cgaatcgc					
D. Moj	ctagtcag	gtaagtaagcgt...2146...--aactttctgtttattttcac-----AAATG-CAA-----TTTgcgctgctgctgttacc-----2207...cacatttgcag	tgaatcgc					
D. Per	ttagtcag	gtgagtgtgtgg...2218...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1383...tttcattcgcag	cgaatcgt					
D. Pse	ttagtcag	gtgagtgtgtgg...2245...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1429...tttcattcgcag	cgaatcgt					
D. Vir	ctagtcag	gtgagtgtgtgt...1903...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1876...tttcatttgcag	cgagtgc					
D. Wil	ctagtcag	gtgagtttagca...1346...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1758...tttcattcgcag	tgaatcgt					
D. Yak	ttagtcag	gtgagtggcgtt...1830...gttactttcaaattagtttc-----TGAATGACAACAATGaaGCTTT-----gcaaaaatgttgtcattccg...1652...tttcattcgcag	cgaatcgt					
	* *****	** **	** ** **	**** **	*	*	** *****	** **

id=10636 gene=FBgn0038118 name=timeout segment=chr3R.8921143\_8924584\_1 type=IN VIEW

Figure 66: CS=9.36



D. Mel	tggaaata	gtgagtt-tcatt...3245...ctgcccaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	cccatcgct-----	tgtcttggccc...	165...ctttatttccag	gcatttgc
D. Sim	tggaaata	gtgagtt-tcagt...3273...ctgcccaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	cccatcgct-----	tgtcttggccc...	165...ctttatttccag	gcatttgc
D. Sec	tggaaata	gtgagtt-tcagt...3270...ctgcccaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	accatcgct-----	tgtcttggccc...	165...cttcatttccag	gcatttgc
D. Ere	tggaaata	gtaagttgtag-...3334...ctgcccaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	tccatcgct-----	tgtcttggccc...	172...ctttccttccag	gcatttgc
D. Ana	tggaaata	gtgagtagctac-...3250...cgactcaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	cccatcgct-----	tgtcttccat...	181...ttgtgcctcag	gcctttgc
D. Gri	tggaaact	gtacgtactcca-...3622...cgacgcaaatgatttcaac	<b>TTGACTTTGTTGTGGT</b>	----	agcatctcttctgctcctctg-----	...	232...tctattttccag	gcatttgc
D. Moj	tggaaatt	gtaagttaatga-...2595...gactctcaatacacttactc	<b>TTTTTGTGTGGTGGAT</b>	----	gacttctctaagtg---	attagt---	2302...tctcgttttccag	gcatttgc
D. Per	tggaaata	gtgagta-ttaca...2023...tgcgtcgccgacttacac	<b>GCTTTGATgTATGCGGG</b>	cgagcagccaagtg----	gaccgg---	...	690...actgaattccag	ggatttgc
D. Pse	tggaaata	gtgagta-ttaca...2386...cgtatccgggtaggagtgc	<b>AGCTGGCTgTAGG</b>	-----	cac-----	aaaagccgattagt...	403...actgaattccag	ggatttgc
D. Vir	tggaaatt	gtaagtcataga-...3909...gctttggcctcggttttac	<b>GCTTTGATgTATG</b>	-----	cggcacgacgtggcagaaaa-----	...	586...tactatttttag	gcctttgc
D. Wil	tggaaatt	gtaagtaataca-...1081...gccagaggaatactttattc	<b>TGACTtTTTGTgTG</b>	-----	ccaactct---	ctttgtgtggg---	2371...tttttttatag	tcctttgc
D. Yak	tggaaata	gtgagtt-tcgag...2945...tgcgtcgaccgacttacac	<b>GCTTTGATgTATGCGGG</b>	cgagcagccaagtg----	gacagg---	...	693...ctttccttccag	gcatttgc

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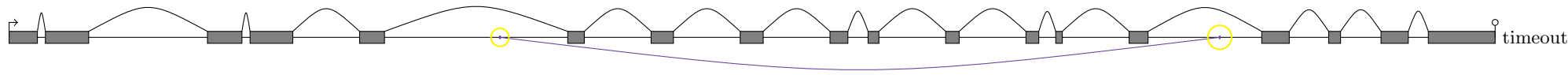
id=10630 gene=FBgn0038118 name=timeout segment=chr3R.8914969.8918458.1 type=IN

D. Mel	tttttcag	gtaagataatca...1661...-----acaagcaaaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	312...tccacatccaag	gccaagct
D. Sim	ttttccag	gtgagataatca...1649...-----acaagcaaaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	309...ctctccacacag	gccaagct
D. Sec	ttttccag	gtgagataatca...1544...-----acaagcaaaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	308...gctctccgcag	gccaagct
D. Ere	tttttcag	gtgagataatca...1664...-----acaagcaaaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	308...ctctccacgcag	gccaagct
D. Ana	tgtttcag	gtgagtggatg...1355...-----acaagcaaaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	352...cctattcccag	gccaagct
D. Gri	tataccag	gtaagtgtgga...1418...-----gtgcggaacaaaagtagc-	<b>ATCATATGCAAAGTCAA</b>	-----	aaccactaatgggtctgcgc---	...	334...tcctttccacag	gccaagct
D. Moj	tctaccag	gtgagtgaacca...85...acgcagctcttggccacataa-----	<b>ATCAAAGTCAAAGTCAA</b>	agcgcgctgc-ggctcagcag---	...	2398...tctgtacacag	gccaagct	
D. Per	tcttccag	gtgagccggagc...108...--taattctttggccagagac-	<b>CTGCaCAT</b>	---Aa <b>ATCAAAGT</b>	caaatgc-aa-aaacaaatgcc---	...	1869...ctctaccacag	gccaagct
D. Pse	tcttccag	gtgagccggagc...1378...--agctct--acatatcagcgtca-----	<b>TCTAAGCCGGCT</b>	-----	cactgtctgtgtgtacaag...	...	527...ctctaccacag	gccaagct
D. Vir	tctaccag	gtgagtgtttg...106...--gggacctgtgtccgggagca-----	<b>CAT</b>	---Aa <b>ATCAAAGT</b>	caaatgc-aa-aaaagcgcgt---	...	2221...ttccttcacag	gccaagct
D. Wil	tctatcag	gtgagtgtattg...1133...-----aaagcaaaacaaaagtagcat-	<b>CATATGCAAAGTCAA</b>	-----	aaaccactaatgggtctgcgc---	...	414...atccatccacag	gccaagct
D. Yak	tatttcag	gtgagataatct...72...-tttaaact----cacttaagcag	<b>CTGCaCAT</b>	---Aa <b>ATCAAAGT</b>	caaacgcaaa-aaacaaatgc---	...	1827...ctctccacacag	gccaagct

\* \* \* \*\* \*\* \* \* \* \*\* \*

id=10654 gene=FBgn0038118 name=timeout segment=chr3R.8984826.8986879.1 type=IN VIEW

Figure 67: CS=9.36



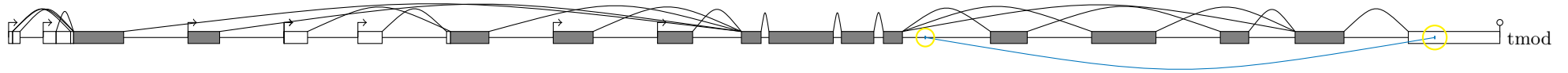
D.Mel	ttagtcag	gtgagtggcatt...2138...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1221...	tttcattcgca	cgaatcgt
D.Sim	ttagtcag	gtgagtggcatt...2126...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1940...	tttcattcgca	cgaatcgt
D.Sec	ttagtcag	gtgagtggcatt...2161...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1212...	tttcattcgca	cgaatcgt
D.Ere	ttagtcag	gtgagtggcgct...2202...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1214...	tttcattcgca	cgaatcgt
D.Ana	ttggtcag	gtgagtgccagt...2246...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1044...	tttcattcgca	cgaatcgt
D.Per	ttagtcag	gtgagtgtgtgg...2599...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1005...	tttcattcgca	cgaatcgt
D.Pse	ttagtcag	gtgagtgtgtgg...2633...	---tttctttatcgtctgccatt	TTCTA	TGATT	TGCA	ctatataaagcatggcattg...1047...	tttcattcgca	cgaatcgt
D.Vir	ctagtcag	gtgagtgtgtgt...2312...	---tttctttatcgtctgccatt	TTCTA	TGATT	TGCA	ctatataaagcatggcattg...1473...	tttctttgca	cgagtcgc
D.Wil	ctagtcag	gtgagtttagca...2268...	---tttctttatcgtctgccatt	TTCTA	TGATT	TGCA	ctatataaagcatggcattg...842...	tttcattcgca	tgaatcgt
D.Yak	ttagtcag	gtgagtggcgct...2227...	aactttctttatcgtctgcc	ATTTTCTA	TGATT	TGCA	ctatataaagcatggcattg...1258...	tttcattcgca	cgaatcgt
		* ****	*****	*****	*****	*****	*****	**** ** ****	** **

id=10636 gene=FBgn0038118 name=timeout segment=chr3R.8921143.8924584.1 type=IN

D.Mel	tttttcag	gtaagataatca...1693...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...277...	-tccacatccaag	gccaagct
D.Sim	ttttccag	gtgagataatca...1681...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...274...	-ctctccacacag	gccaagct
D.Sec	ttttccag	gtgagataatca...1576...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...273...	gctctcc-cgcag	gccaagct
D.Ere	tttttcag	gtgagataatca...1696...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...273...	-ctctccacgcag	gccaagct
D.Ana	tgtttcag	gtgagtggaatg...1387...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...317...	-cctattcccag	gccaagct
D.Per	tcttcag	gtgagccggagc...1674...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...301...	-ctctaccacag	gccaagct
D.Pse	gtgagccggagc	...1595...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...307...	-ctctaccacag	gccaagct
D.Vir	tctaccag	gtgagtgttttg...2023...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...302...	-ttccttcacag	gccaagct
D.Wil	tctaccag	gtgagtgtattg...1163...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...383...	-atccatccacag	gccaagct
D.Yak	tatttcag	gtgagataatct...1618...	gtcaaaaccactaatgggtc	TGCGc	AAATCATAGG	atAAAT	taaattccaatcaggacga...279...	-ctctccacacag	gccaagct
		* * **	** **	*****	*****	*****	*****	* **	** ****

id=10654 gene=FBgn0038118 name=timeout segment=chr3R.8984826.8986879.1 type=IN VIEW

Figure 68: CS=9.6



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D.Mel  cgacagaa gtaagttgaccc...132...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgtagccagcgggaatcacca-----...955...acacttcgacag tcttccgc
D.Sim  cgacagaa gtaagttgaccc...132...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgtagccagcgggaatcacca-----...945...acacttcgacag tcttccgc
D.Sec  agacagaa gtaagttgaccc...132...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgtagccagcagaatcacca-----...955...acacttcgacag tcttccgc
D.Ere  cgacagaa gtaagttgaccc...134...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgtagccagcgggaatcacca-----...943...acacttcgacag tcttccgc
D.Ana  cgacagaa gtaagttgaccc...127...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgTTAGccagcggcatcagcagcagt...986...gatcggtcgcag tcttccgc
D.Gri  cgacagaa gtaagttgccc...149...--cgtgtgtacctcgttcgcgt--TTAGGTGAATGCAACAAGGTAcgtagcttcccggtccgac-----...1208...aacgatctgcag tcttccgc
D.Per  cgacagaa gtaagttccagt...187...-----tcacgttcgcgcgctttaggtGAATGCAACAAGGTAcgtagcgtccaacaccatc-----...1057...ccgctttgcag tcttccgc
D.Pse  cgacagaa gtaagttcag...187...-----taacgttcgcgcgctttaggtGAATGCAACAAGGTAcgtagcgtccaacaccatc-----...1065...ccgctttgcag tcttccgc
D.Wil  cgacagaa gtaagttgtgga...146...tccattgttcctcactcgc--GTTTAggTGAATGCAACAAGGTAcgtagattctcaagcgcct-----...954...attgatcttcag tcttccgc
D.Yak  cgacagaa gtaagttgaccc...132...-----cctcactcgcgcgctttaggtGAATGCAACAAGGTATgtagccagcgggaatcacca-----...920...acacttcgacag tcttccgc
*****
          * * * * *

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id=101739 gene=FBgn0082582 name=tmod segment=chr3R\_26398795\_26399962\_1 type=IN

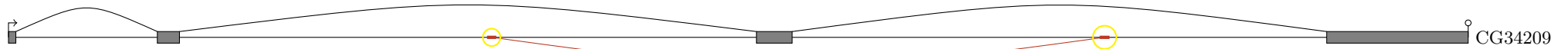
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D.Mel  ttttccag ttggacgtcagc...157...---gtttcat-attgtttgttcaGTGTTTGTTCGCTTC-----ttcagattgatgatttcggt---...553...-aaaaaaaactac aaaaaata---
D.Sim  ttttccag ttggacgtcagc...157...---gtttcat-attgtttgttcaGTGTTTGTTCGCTTC-----ttcagattgatgatttcggt---...551...-aaaaaaaataac aaaaaata---
D.Sec  ttttccag ttggacgtcagc...157...---gtttcat-attgtttgttcaGTGTTTGTTCGCTTC-----ttcagattgatgatttcggt---...552...-aaaaaaaactac aaaaaata---
D.Ere  ttttccag ttggacgtcagc...159...---gtttcat-attgtttgttcaGTGTTTGTTCGCTTC-----ttcagattgatgatttcggt---...544...-aaaaaatac aaaaaacaata
D.Ana  ttttccag ttggacgtcaac...121...--gattgtttaattgttctgtTTAGTGTTTGTTCGCTTC-----ttcagattgatgatttcggt---...608...-aaaattat aaaaatacaaa
D.Gri  ttttgcag ttggtcgcagc...223...---tgctc-aatcctttgttcaaTGTTTGTTCGCTTCCTTAA-----ttaat--gtaatttaattca...719...-aaaaaaatcaat aaaaaaaa---
D.Per  ttttgcag ttggacgtcagc...194...ccctgtcgatc-----cccgttcaaTGTTTGTTCGCTTC-----ttcagat--tgatttcggttcg...670...-acaaaaaaaatat aaaaaata---
D.Pse  ttttgcag ttggacgtcagc...194...ccctgtcgatc-----cccgttcaaTGTTTGTTCGCTTC-----ttcagat--tgatttcggttcg...673...-caaaaaaaatat aaaaagat---
D.Wil  ttttccag ttggacgtcaac...210...gcaaaatggtt-----ttgcttcaaTGTTTGTTCGCTTCATCAAATaattttgatgatttcggtga-----...713...-taagaaactac gcaaaact---
D.Yak  ttttccag ttggacgtcagc...161...---gtttcat-attgtttgttcaGTGTTTGTTCGCTTC-----ttcagtttgatgatttcggtga---...551...-aaaaaaaactac aaaaaaacg---
* * * * *
          * * * * *

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id=101748 gene=FBgn0082582 name=tmod segment=chr3R\_26403839\_26404627\_1 type=E3 VIEW

Figure 69: CS=9



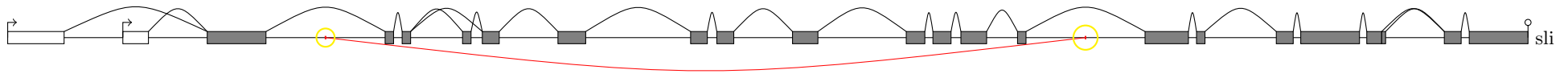
D.Mel	caaaggag	gtgagttccag...1840...	aacattttttttttttttc	-----	GGTT	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...398...	tccgatccacag	gcagaggg
D.Sim	caaaggag	gtgagttccag...1807...	atTTTTttttttttttttt	-----	GGTT	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...408...	tccgatccacag	gcagaggg
D.Sec	caaaggag	gtgagttccag...1793...	cattgtttttttttttttt	-----	GGTT	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...411...	tccgatccacag	gcagaggg
D.Ere	caaaggag	gtgagttccag...1906...	tcttttcgTTTTttttttt	-----	GGTT	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...354...	tccaatccacag	gcagaggg
D.Gri	caaaggag	gtgagttccat...2990...	attgtttgttcgcttcggt	-----	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...416...	tgcttttgcag	gcagaggg	
D.Per	caaaggag	gtgagttcttg...2379...	tatatgtacgtatatatTTT	GGTT	AT	GGTT	TTATTGCCGTT	AGTTT	attggctgagttggggattt	-----	...465...	tctctccacag	gcagaggg
D.Pse	caaaggag	gtgagttcatg...2367...	tatatgtacgtatatatTTT	GGTT	AT	GGTT	TTATTGCCGTT	AGTTT	attggctgagttggggattt	-----	...465...	tctctccacag	gcagaggg
D.Vir	caaaggag	gtgagttcgtt...3707...	tttggtttgttcgcttcgct	-----	TTATTGCCGTT	AGTTT	attggctc	-a	-----	agatttcgtaa	...476...	cttctttgcag	gcagaggg
D.Wil	caaaggag	gtaagtcaaagg...4573...	gtttgtttgttcactacgtt	-----	TTATTGCCGTT	AGTTT	attggctc	-a	-----	agatttcgtaa	...336...	cttctttgcag	gcagaggg
D.Yak	caaaggag	gtgagttctcag...1884...	cgctttaaacttttttttc	-----	GGTT	TTATTGCCGTT	AGTTT	attggctaa	-----	agatttcgtaa	...392...	tccgatccacag	gcagaggg
	*****	** ***		*	*	*****	*	*****		*	***	*****	

id=14004 gene=FBgn0085238 name=CG34209 segment=chr2R.18926543.18928865.-1 type=IN

D.Mel	gccgcgcg	gtaagttgctaa...1638...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	cgg--gctaatttccaaccta	-----	...323...	-ccaccattccag	gagtgggc
D.Sim	gccgcgcg	gtaagttgctaa...1741...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	cgg--gctaatttccaaccta	-----	...323...	-ccaccattccag	gagtgggc
D.Sec	gccgcgcg	gtaagttgctaa...1597...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	cgg--gctaatttccaaccta	-----	...322...	-ccaccattccag	gagtgggc
D.Ere	gccgcgcg	gtaagttgctaa...1684...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	cgg--gctaatttccaaccta	-----	...329...	-ccaccattccag	gagtgggc
D.Gri	gccgcgcg	gtaagttgctaa...2500...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	-----	tggctgtgatatgctgtgct	-----	...901...	agccgatagccg	gttagga-
D.Per	gccgcgcg	gtaagttgctaa...1749...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	GGCT--taatttccaaccta	taacggt	...383...	-ccaccagaccag	gcggggcc
D.Pse	gccgcgcg	gtaagttgctaa...1747...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	GGCT--taatttccaaccta	taacggt	...383...	-ccaccagaccag	gcggggcc
D.Vir	gccgcgcg	gtaagttgctaa...2531...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	-----	tgg--g--agaccccgcttaatt	---	...636...	-gcagagcgact	ggctggag
D.Wil	accacgcg	gtaagttgctaa...3072...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	-----	tgg--g--gcccccaaaaaaaa	---	...520...	-ccatcagtagat	gaaagagc
D.Yak	gccgcgcg	gtaagttgctaa...1740...	aaatagcgttaaattttgta	AAAC	AAACGGCA	ATAA	GGTC	cgg--gctaatttccaaccta	-----	...346...	-ccaccattccag	aagtgggc
	** ****	***** **	*****	*****	*****	*****	**			*		*

id=14006 gene=FBgn0085238 name=CG34209 segment=chr2R.18924438.18926484.-1 type=IN VIEW

Figure 70: CS=9.6



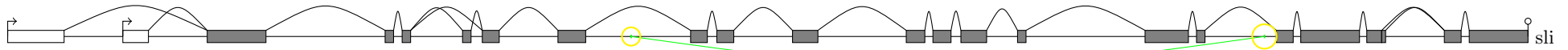
D. Mel	gagcgact	gtgagtatttta...3237...ttgaccacatct--cgaagaga	TATTAAGCTcaTTAAA	aagacatacgt-gtgtatgtg---...657...atattttcgag	cgagctgc	
D. Sim	gagcgact	gtgagtatttta...3281...tgcccacatct--cgaagaga	TATTAAGCTcaTTAAA	aagacatgtgt-gtgtgtgag---...625...atattttcgag	cgagctgc	
D. Ere	gagcgact	gtgagtatttta...3212...atgccacatct--cgaagaga	TATTAAGCTcaTTAAA	aagacgtatgt-gccagtgtg---...687...atattttcgag	cgagctgc	
D. Ana	gaaagact	gtaagtattcca...2276...ataccacatct--taaaaata	TATTAAGCTcaTTAAA	ataacgcgagt-gtgtatgta---...594...ctgctcctacag	cgatttgc	
D. Gri	gaacgact	gtaagtacatat...3696...atgccacatct--tgccaaga	TATTAAGCTcaTTAAA	---aacactgc-ttgtgtgtgtg...1213...ctcttttgcag	cgatttgc	
D. Per	gaacgact	gtaagtacaaac...3282...-tgcccacagat-gtgaagaga	TATTAAGCTcaTTAAA	---atctgtgt-gtgtgtgtgtg...1124...ctatatttgcag	cgatttgc	
D. Pse	gaacgact	gtaagtacaaac...3297...-tgcccacagat-gtgaagaga	TATTAAGCTcaTTAAA	---atctgtgt-gtgagtgtgca...1122...ctatatttgcag	cgatttgc	
D. Vir	gaaagact	gtgagtacaaaa...3192...atgccacatct--tgccaaga	TATTAAGCTcaTTAAA	---aaccttgc-ttgtgtgtgaag...1717...tctcattttcag	cgatttgc	
D. Wil	gagagact	gtaagtacatac...3312...-ggccacatctagccaagaga	TATTAAGCTcaTTAAA	aaaatattgtacaacaaatat---...1597...tctcttttgcag	cgatttgc	
D. Yak	gagcgact	gtgagtattttg...3379...atgccacatct--cgaagaga	TATTAAGCTcaTTAAA	aagacgcagtgt-gtctgtgtg---...740...atattttcgag	cgagctgc	
	** ****	** ****	**** *	* *****	*	** **

id=57806 gene=FBgn0003425 name=sli segment=chr2R.11773821\_11777794\_-1 type=IN

D. Mel	acgtcgct	gtaagtaaccag...632...gcaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcatcaatgaaattca...809...atgccctcgag	gaacctcg	
D. Sim	acgtcgct	gtaagtaaccag...636...gcaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcatcaatgaaattca...677...atgccctcgag	gaacctcg	
D. Ere	acgtcgct	gtaagtaaccag...621...gcaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcatcaatgaaattca...778...gtcccctcgag	gaactctg	
D. Ana	acgtccct	gtaagtaccaga...554...gcaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcatcaatgcactaag...597...ttcattcgcag	gaacctcg	
D. Gri	acgtcttt	gtaagtacaacc...1145...taaaattattgtaaaattca	TTAAActAGCTAATA	Aaatagcatcaatgaaagtca...1213...tthttgtgtg	gaactctg	
D. Per	acgtcgct	gtaagttccctg...553...caaaattattataaaattca	TTAAActAGCTAATA	Aaatagcttcaatgaaattca...813...gtttttttag	gaacctcg	
D. Pse	acgtcgct	gtaagtttcctg...582...caaaattattataaaattca	TTAAActAGCTAATA	Aaatagcttcaatgaaattca...807...tgttttttag	gaacctcg	
D. Vir	acgtcttt	gtaagtataact...1112...taaaattattgtaaaattca	TTAAActAGCTAATA	Aaatagcatcaatgaaagtca...1155...tcaatttttag	gaactctg	
D. Wil	acatcgct	gtaagtacatcc...958...taaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcttcaatgaaattca...2031...tcgtttttatag	aaaccttg	
D. Yak	acgtcgct	gtaagtaaccag...669...gcaaattattgtaaaattca	TTAAgtAGCTAATA	Aaatagcatcaatgaaattca...772...cccatccgcag	gaactctg	
	** ** *	*****	*****	*****	*****	** ** *

id=57830 gene=FBgn0003425 name=sli segment=chr2R.11765046\_11766565\_-1 type=IN VIEW

Figure 71: CS=9.6



D.Mel	atgctcgg	gta	gtatg	taatggc...340	...	tctgcag--cgaggtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctc	gaaatcattgc-----	...	981	...	ttgtccatcag	gtctgagc
D.Sim	atgctcgg	gta	gtatg	taatggc...343	...	tctgcag--agcggtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctc	gaaatcattgc-----	...	985	...	ttgtccatcag	gtctgagc
D.Sec	atgctcgg	gta	gtatg	taatggc...303	...	tctgcag--cgcggtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctc	gaaatcattgc-----	...	978	...	ttgtccatcag	gtctgagc
D.Ere	atgctcgg	gta	gtatg	taatggc...347	...	tctcccg--cgaggtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctc	gaaatcattgc-----	...	996	...	ttgtccatcag	gtctgagc
D.Gri	atgctcag	gta	tggaatgga	...330	...	-tagcat--catcaacgtttgt	TTGCC-AAAACGTTTAAAGCGCGT	catcgctttg	cgttgattggg	----	...	1112	...	ctgcacttgca	gcctcacc
D.Moj	atgctcag	gta	tggaatgga	...244	...	.gcagcat--catcatcc-tgtgt	TTGCC-aAAAACGTTTAAAGCGCGT	cgcttgattggg	atgc	---	...	898	...	acacacttgca	gcctcacc
D.Per	atgctcag	gta	tgttagacg	...606	...	--atcgactcgacgtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctg	aaatcatctt-----	...	889	...	tttctctgcag	gcctgagc
D.Pse	atgctcag	gta	tgttagaca	...606	...	--atcgactcgacgtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctg	aaatcatctt-----	...	884	...	tttctctgcag	gcctgagc
D.Vir	atgctcag	gta	tggtaccac	...277	...	.tcagcat--catcatcg-tgtgt	TTGCCaAAAACGTTTAAAGCGCGT	caacgcttgattggg	atgc	---	...	896	...	tgctacttgca	gtctcacc
D.Wil	atgctcag	gta	tggtaccac	...354	...	.tcgctcga--cgccgtcg-tgtgt	TTGCC-AAAACGTTTA	-----acg	ccgctc	--atcgatggggga--	...	1045	...	caattttgcag	gcctcacc
D.Yak	atgctcgg	gta	gtatg	taatggc...364	...	tcttccg--cgaggtcg-tgtgt	TTGCC-AAAACGTTT	-----aacg	ccgctc	gaaatcattgc-----	...	973	...	ttgtccatcag	gtctgagc
	*** ** *	*****				*	*****	*****		** *				***	* ** **

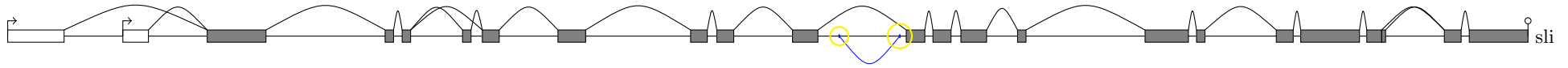
id=57816 gene=FBgn0003425 name=sli segment=chr2R.11770441.11771839\_-1 type=IN

D.Mel	tccacgct	gta	agtccaact	...639	...	-----ctcctccgtttgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...70	...	tgccctttgcag	catcatct	
D.Sim	tccacgct	gta	agtccaact	...488	...	-----ctcctccgtttgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...70	...	tgccctttgcag	catcatct	
D.Sec	tccacgct	gta	agtccaact	...498	...	-----ctcctccgtttgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...59	...	tgccctttgcag	catcatct	
D.Ere	tccacgct	gta	agtccaact	...607	...	-----ctcctccgtttgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...70	...	tgccctttgcag	catcatct	
D.Gri	tccacgct	gta	agtaacgat	...898	...	-gcatttctttcaatttgcg-	GTGGCtgGTTGAAACGTTTTGCAA	attactttcatttcttcatca	...86	...	tggtgcgtag	catcatct	
D.Moj	tccacgct	gta	agtactggg	...625	...	-gcatttctttcaatttgcg-	GTGGCGGgcTTGAAACGTTTTGCAA	attactttcatttcttcatca	...98	...	cgtgtgctgag	catcatt	
D.Per	tccacgct	gta	agtactggg	...785	...	-----ttgtccgattgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...67	...	gcccctttgcag	catcatct	
D.Pse	tccacgct	gta	agtactggg	...826	...	-----ttgtccgattgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...67	...	gcccctttgcag	catcatct	
D.Vir	tccacgct	gta	agtactggg	...740	...	cgatttctttcaatttgcg-	TGGTGGCtgGTTAAAAACGTTTTGCAA	attactttcatttcttcatca	...95	...	cgctgttgcag	catcatt	
D.Wil	tccacact	gta	agtatttgg	...887	...	-----ttttctttggtttctttgg-----	TAAAaCGTTTTGCAA	attactttcatttcttcatca	...142	...	tattctctcag	catcatt	
D.Yak	tccacgct	gta	agtccaact	...606	...	-----ctcctccgtttgcaatgga-----	AAACGTTTTGCAA	attactttcatttcttcatca	...70	...	tgccctttgcag	catcatct	
	***** **	*****				*	**			*****	*****	**	*****

id=57834 gene=FBgn0003425 name=sli segment=chr2R.11763750.11764535\_-1 type=IN VIEW

Figure 72: CS=11.88





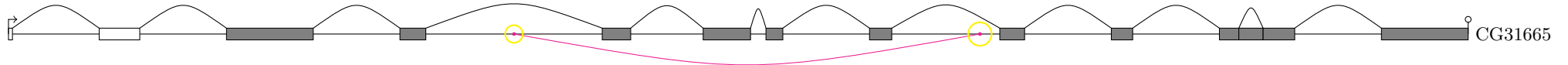
D. Mel	aaaacggt	gtaagtacatgg...135...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgactcagcccc...	1073...	ccatacacacag	acatctgg
D. Sim	aaaacggt	gtaagtacatgg...135...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgactcagcccc...	1066...	accgtacacag	acatctgg
D. Sec	aaaacggt	gtaagtacatgg...135...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgactcagcccc...	1068...	accgtacacag	acatctgg
D. Ere	aaaacggt	gtaagtacatgg...135...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgactgtgcccc...	1151...	accgtacacag	acatctgg
D. Ana	aaaacggt	gtaagtacatgg...89...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttg-ccttgactgttcctcc...	581...	acggacacacag	acatctgg
D. Gri	aaaacggt	gtaagtactgca...162...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttg-ccttgactttgccagc...	1123...	tataacgtgtag	acatttgg
D. Moj	aaaacggt	gtaagtaccacg...163...	gcac-ttgggtgtaaaccgct	GAAGTGCATT	AGTA	aatt-ccttgacttggcagca...	996...	gtgtgtgtatag	acatttgg
D. Per	aaaacggt	gtaagtacatgg...163...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttcctttgacttggccct-	856...	acatatatag	acatctgg
D. Pse	aaaacggt	gtaagtacatgg...164...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttcctttgacttggccct-	861...	acatatatag	acatctgg
D. Wil	aaaacggt	gtaagtacatga...144...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgacttggcctt-	772...	gcgtctttcag	acatttgg
D. Yak	aaaacggt	gtaagtacatgg...139...	-cactttgggtgtaaacctct	GAAGTGCATT	AGTA	gttgcctttgactgtgcccc-	1194...	accgtacacag	acatctgg
	*****	*****		***	*****	*****	*	*****	*

id=57822 gene=FBgn0003425 name=sli segment=chr2R\_11767585\_11768871\_-1 type=IN

D. Mel	aaaacggt	gtaagtacatgg...1184...	gtttcagccattcagtcgaa-	TGCTcAATGCtACTTT	cttt---	gcttactttcattccatttgg-	-----	cagcacactcgacatccatac-	---acaca-	-----	g	ac	
D. Sim	aaaacggt	gtaagtacatgg...1179...	gtttcagccattcagtcgaa-	TGCTcAATGCtACTTT	cttt---	gcttactttctttccatttggg-	-----	cagcacactcgca-	---caccgtacaca-	-----	g	ac	
D. Sec	aaaacggt	gtaagtacatgg...1181...	gtttcagccattcagtcgaa-	TGCTcAATGCtACTTT	cttt---	gcttactttctttccatttggg-	-----	cagcacactcgca-	---caccgtacaca-	-----	g	ac	
D. Ere	aaaacggt	gtaagtacatgg...1258...	gtttcagccattcagtcgaa-	TGCTcAATGCtACTTT	cttt---	gcttactttctttccatttggg-	-----	cagcacactggcactcgcacccgtacaca-	-----	-----	g	ac	
D. Ana	aaaacggt	gtaagtacatgg...651...	actcggccattcagtcgaa-	TGCTcAATGCtACTTT	ctttt	cattcctgctttctttccattt-	-----	ccacacaccaacggac-	-----	acaca-	-----	g	ac
D. Gri	aaaacggt	gtaagtactgca...1232...	ttca-ttccattcactacaaa	TGCTcAATGCtACTTT	-----	cttgctttctttccatttggca-	acacacacacgaacacacata-	tataataaataatataatata-	-----	-----	acgtgtag	ac	
D. Moj	aaaacggt	gtaagtaccacg...1087...	ttca-ttccattcactacaaa	TGCTcAATGCtACTTT	-----	ctttctttctttccatttggca-	acacacgaaaaaacttgta-	catatacaataaataatata-	acacataaaatgtgcgtggg-	gtatgtgtgtgtatag	ac	ac	
D. Per	aaaacggt	gtaagtacatgg...984...	cgccatgccattcagtcgaa-	TGCTcAATGCtACTTT	ctttt	gcttactttctttccatttcca-	-----	cacaaaaacatgtacatc-	---tatatatatacatatata-	-----	tag	ac	
D. Pse	aaaacggt	gtaagtacatgg...986...	cgccatgccattcagtcgaa-	TGCTcAATGCtACTTT	ctttt	gcttactttctttccatttcca-	-----	cacaaaaacatgtacatc-	---tatatatatacatatata-	-----	tag	ac	
D. Wil	aaaacggt	gtaagtacatga...914...	accatttccattcagttgaa-	TGCTcAATGCtACTTT	-----	tattttctttctttt-	-----	tttttgcgtcttttca-	-----	-----	g	ac	
D. Yak	aaaacggt	gtaagtacatgg...1305...	atttcagccattcagtcgaa-	TGCTcAATGCtACTTT	cttt-	gcttactttctttccatttggg-	-----	cagcacacacttgcaaacac-	accgtacaca-	-----	g	ac	
	*****	*****	*****	*****	*	*****	*	*****	*		*	***	

id=57822 gene=FBgn0003425 name=sli segment=chr2R\_11767585\_11768871\_-1 type=IN VIEW

Figure 73: CS=13.2



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D.Mel  acgagcag gtgagtggtaaa...1836...-----gagaaaagtcccgcc-aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...978...atccataagcag cgccgttc
D.Sim  acgagcag gtgagtgttaaa...1911...-----gcgaaaagtcccgcc-aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1003...atccacgagcag cgccgttc
D.Sec  acgagcag gtgagtgttaaa...1826...-----gcgaaaagtcccacc-aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1019...atccacgagcag cgccgttc
D.Ere  accagcag gtgagtgtgaat...1765...-----gaggaaaagtcccgcc-aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1047...atccacgagcag cgccgttc
D.Ana  acaagcag gtgagtaacaac...1873...-----aggaaaagtcccgcacaaactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1004...gtcgcagcagcag cgccgttc
D.Gri  accaacag gtaaatatgata...2558...-----aaaatgaaaagtggcc---aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1224...ctgtagccaaag cgccgttc
D.Moj  attaaaag gtagatttcag...2242...gctcgcataaaaaaaagtac---AAATtATGAaAATGAGATgTCAAAAAGTttttattattgatttcagtc...1155...aatcagccaaag cgctgctc
D.Vir  acagccag gtaaatgacgagt...2204...-----agaaagtggcc---aattatgaaAATGaGATGTCAAAAAGTttttattatcgatttaatat...1185...caacagccaaag cgctgctc
D.Yak  acgagcag gtgagtgttaat...1840...-----gagaaaactcccgcc-aactATGAaAATGAGATgTCAAaaaagtttttattatcgatt-----...1058...atccacgagcag cgccgttc
*      ** ** * *
*** ** * ** *****
*      * **

```

id=2908 gene=FBgn0051665 name=CG31665 segment=chr2L\_1848214.1851109.1 type=IN

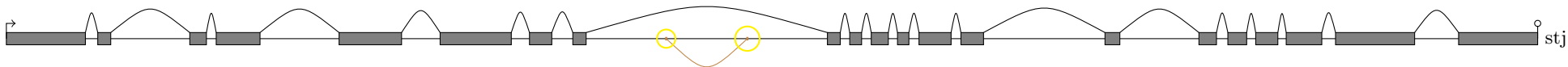
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D.Mel  ccagccag gtgagtaaatgg...505...-agagc---atttccatttccca----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::cgatcctgtctc-----gcag gattcgcc
D.Sim  ccagccag gtgagtaaatgg...505...-agagc---atttccatttccca----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::cgatcctgtctc-----gcag gattcgcc
D.Sec  ccagccag gtgagtaaatgg...501...-agagc---atttccatttccca----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::cgatcctgtctc-----gcag gattcgcc
D.Ere  ccagccag gtgagtaaacgg...512...-ttccc---atttccatttccca----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::cgatcctgtctc-----gcag gattcgcc
D.Ana  ccagccag gtgagtaaatgc...515...-cgagc---atttccatttccaa----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::cgatcctgtctc-----gcag gattcgcc
D.Gri  tcagccag gtaagtaataga...406...---tcacacgcagccagttctcg---TTG-AaATTTcCATTTCATttgctttgcacatttaca-ttaccgcaagcttttcaact:::::tgatgctt-----gcag gctttgcc
D.Moj  tcagccag gtaagaattcct...740...---ctgcgcaagttggcaacatccATTTCgTTTG-AaATTTcCATTTCATttATTttgcacatttagca-ttaccgcaagcttttcaact:::::atctttcttttctatgtcactctcttggcag gctttgcc
D.Vir  ccagccag gtaagtgatcaa...341...-ttggctgaatttccatttc-ATTTCaTTTGCACATTaaCATT-----tactt-----gcag gctttgct
D.Yak  ccagccag gtgagtaaatgg...541...atttcc---a-tttccatttccca----TTG-AaATTTcCATTTCATttactttgcacatttaca-ttaccgcaagcttttcaact:::::ggatcctgtctc-----gcag gattcgcc
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* **

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id=2916 gene=FBgn0051665 name=CG31665 segment=chr2L\_1852786.1853453.1 type=IN VIEW

Figure 74: CS=9.72



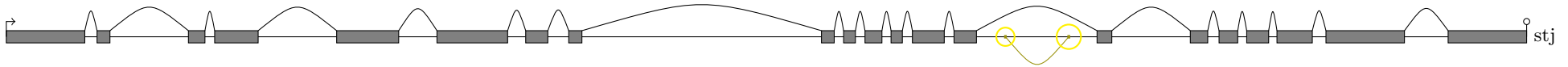
D. Mel	agaacgcg	gtaagtgaaact...1351...--agaggacccattc--cgctgg	<b>AGTTTTTATACCCTTC</b>	-----	tgctggacaggat	atgaata...1532...tctcacg-cacag	actaggat
D. Sec	agaacgcg	gtaagtgaaact...1358...--agaggaccccaatc--cgctgg	<b>AGTTTTTATACCCTTC</b>	-----	tgctggacaggat	atgcata...1508...tctcacg-cacag	actaggat
D. Ere	agaatgcg	gtaagtgaaact...1336...--agaggacccgattc--cgctgg	<b>AGTTTTTATACCCTTC</b>	-----	tgctggacaggat	atgcatt...1504...tctcacg-cacag	acaaggat
D. Ana	agaatgcg	gtaagtgaaatc...1443...--agataataggctaccaatgg	<b>AGTTTTTATACCCTTC</b>	-----	cgctggctggacagg	tacta...1513...aacttct-cacag	acaagaat
D. Gri	aaaatgcg	gtaagttgagac...1594...-atgaggcatcgaa--tcgaata	<b>AGTTTTTATACCCTTCATAG</b>	gaatcagcctaaaagacggc-----	...	1917...gctcatg-cacag	acaagaat
D. Moj	aaaacgcg	gtaagtcaagcc...1562...aataaggcatcg-a--ttgatta	<b>AGTTTTTATACCCTTCATATGA</b>	accagcccaaggacggca-----	...	1900...gctcatg-cacag	acaagaat
D. Per	agaatgcg	gtaagtgaatcc...1576...--cgattctgaatcagtgatgg	<b>AGTTTTTATACCCTTC</b>	-----	ttcgattgagcagcaggctg---	1830...-atcgtgccacag	acaaggat
D. Pse	agaatgcg	gtaagtgaatcc...1599...--cgattctgaatcagtgatgg	<b>AGTTTTTATACCCTTC</b>	-----	ttcgattgagcagcaggctg---	1845...-atcgtgccacag	acaaggat
D. Vir	aaaatgcg	gtaagtcaagcc...1467...--cagtataaaaatttgatta	<b>AGTTTTTATACCCTTCATA</b>	agaaccagcccaaggacgg-----	...	1836...gctcatg-cacag	acaagaat
D. Yak	agaacgcg	gtaagtgaaact...1367...--agaggacccgattc--cgctgg	<b>AGTTTTTATACCCTTC</b>	-----	cgctggacaggat	atataca...1558...tctcacg-cacag	actaggat
		* * * * *	*****		* *	*****	** * * *

id=129372 gene=FBgn0261041 name=stj segment=chr2R.9698342.9701304.1 type=IN

D. Mel	agaacgcg	gtaagtgaaact...2170...accacccaaaa-tgatattgt-----	<b>GAAGGGTATAAAAACT</b>	gtgaaatgtacacactgcc...713...tctcacg-cacag	actaggat	
D. Sec	agaacgcg	gtaagtgaaact...2167...accacccaaaa-tgatattgt-----	<b>GAAGGGTATAAAAACT</b>	gtgaaatgtacacactgcc...699...tctcacg-cacag	actaggat	
D. Ere	agaatgcg	gtaagtgaaact...2132...accgccccaaa-tgatattgt-----	<b>GAAGGGTATAAAAACT</b>	gtgaaatgtacacactgct...708...tctcacg-cacag	acaaggat	
D. Ana	agaatgcg	gtaagtgaaatc...2254...-ttggccaac-cta-accacaa-----	<b>AAGGGTATAAAAACT</b>	gtgaaatcaacaccgaaac...702...aacttct-cacag	acaagaat	
D. Gri	aaaatgcg	gtaagttgagac...2620...--acacacacaatcaacagtg	<b>CTGTGTGAAGGGTATAAAAACT</b>	atgaaaaatacacaaccca...889...gctcatg-cacag	acaagaat	
D. Moj	aaaacgcg	gtaagtcaagcc...2538...aaccattc--ac-ttgtattgcaa	<b>TTGTGTGAAGGGTATAAAAACT</b>	gtatgaaaaaggaacacac...924...gctcatg-cacag	acaagaat	
D. Per	agaatgcg	gtaagtgaatcc...2565...tgtgttcacac-tacaactgt-----	<b>GAAGGGTATAAAAACT</b>	gtaaaaatatacaccacaaac...841...-atcgtgccacag	acaaggat	
D. Pse	agaatgcg	gtaagtgaatcc...2603...tgtgttcacac-tacaactgt-----	<b>GAAGGGTATAAAAACT</b>	gtaaaaatatacaccacaaac...841...-atcgtgccacag	acaaggat	
D. Vir	aaaatgcg	gtaagtcaagcc...2483...caaacacacataacaactg-----	<b>TGTGAAGGGTATAAAAACT</b>	atgaaaaaaaaaaaaataac...820...gctcatg-cacag	acaagaat	
D. Yak	agaacgcg	gtaagtgaaact...2192...accacccaaaa-tgatattgt-----	<b>GAAGGGTATAAAAACT</b>	gtgaaatgtacacactgcc...733...tctcacg-cacag	actaggat	
		* * * * *	*****	* * *	*****	** * * *

id=129372 gene=FBgn0261041 name=stj segment=chr2R.9698342.9701304.1 type=IN VIEW

Figure 75: CS=9.6



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D.Mel catgtttt gtaagtatagta...136...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaaccggccgcta--...550...tttgattttcag gcgatcgg
D.Sim catgtttt gtaagtatagta...132...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaaccggccgcta--...551...tttgattttcag gcgatcgg
D.Sec catgtttt gtaagtatagta...130...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaaccggccgcta--...551...tttgattttcag gcgatcgg
D.Ere catgttct gtaagtatagga...137...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaaccggccgcta--...591...tttgattttcag gcgatcgg
D.Ana catgttct gtaagtatagcc...153...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...532...cttgcttccag gtgatcgg
D.Gri cattttct gtaagtagagcc...192...gattaagatttcaataaccaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...577...tttggtttacag gcgatcgc
D.Moj tatttatt gtaagtgtact...184...gattacgatttcaataatcaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...538...ttctgcttacag gcgatcgc
D.Per catgttct gtaagtataacc...154...gattgcaatctcaatattcaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...892...tttggtttgcag gcgatagg
D.Pse catgttct gtaagtataacc...154...gattgcaatctcaatattcaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...923...tttggtttgcag gcgatagg
D.Vir cattttct gtaagtgacaa...173...gattacgatttcaataatcaTGCAAATTCaCAGCTAACaactcatcaactggccgcta--...920...ttcttattacag gcgatcgc
D.Wil catgtttt gtaagtataacc...164...aaaacaaaaccgaatctcaTGCAAATTCaCAGCTAACAActcatcaactggccgctatc...1491...tttatgttccag gcgatcgc
D.Yak catgttct gtaagtatag...134...gattgcgatttcaatgttcaTGCAAATTCaCAGCTAACaactcatcaaccggccgcta--...577...tttgattttcag gcgatagg
** * * ***** * * * * ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=129384 gene=FBgn0261041 name=stj segment=chr2R.9702292..9703059\_1 type=IN

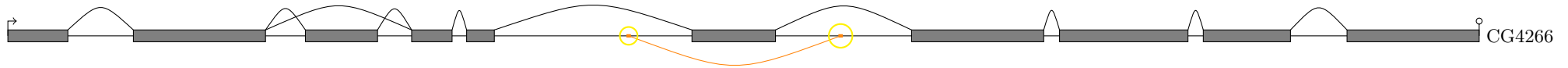
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D.Mel catgtttt gtaagtatagta...539...--attagcaagtagt-ttctgta---GTTAGCTGcgGAATTTGCA-ctca-aatcgttgcattgtcac-----...146...tttgattttcag gcgatcgg
D.Sim catgtttt gtaagtatagta...538...--attagcaagtagt-gtctgta---GTTAGCTGcgGAATTTGCA-ctca-aatcgttgcattgtcac-----...144...tttgattttcag gcgatcgg
D.Sec catgtttt gtaagtatagta...536...--attagcaagtagt-gtctgta---GTTAGCTGcgGAATTTGCA-ctca-aatcgttgcattgtcac-----...144...tttgattttcag gcgatcgg
D.Ere catgttct gtaagtatagga...572...--attagccagtagt-ttctgta---GTTAGCTGcgGAATTTGCA-ctca-aatcgttgcattgtcac-----...155...tttgattttcag gcgatcgg
D.Ana catgttct gtaagtatagcc...539...-tagttactttag--cactgta---GTTAGCTGagGAATTTGCA-cttctca--cgatgcattgtcac-----...145...cttgcttccag gtgatcgg
D.Gri cattttct gtaagtagagcc...572...tcgtgatgtgttgc-cacca----GTTAGCTGcgGAATTTGCA-cagcaaaaaagtcaaatgc-----...196...tttggtttacag gcgatcgc
D.Moj tatttatt gtaagtgtact...546...acttgtagtgttgc-cacca----GTTAGCTGcgGAATTTGCA-cagaataaatcacgaacacc-----...175...ttctgcttacag gcgatcgc
D.Per catgttct gtaagtataacc...861...-tggtt--ttgtagcccactgta---GTTAGCTGagGAATTTGCA-ccttacaatcgttgcattgtc-----...184...tttggtttgcag gcgatagg
D.Pse catgttct gtaagtataacc...892...-tggtt--ttgtagcgcactgta---GTTAGCTGagGAATTTGCA-ccttacaatcgttgcattgtc-----...184...tttggtttgcag gcgatagg
D.Vir cattttct gtaagtgacaa...510...gaagctctatgttgc-cacca----GTTAGCTGcgGAATTTGCA-caa-----acgaacaacaacaaat...582...ttcttattacag gcgatcgc
D.Wil catgtttt gtaagtataacc...544...-aattctattttgccatTTGTatTAGCTGagGAATTTGCA-ctgtaaaaaaatgaaccca-----...1108...tttatgttccag gcgatcgc
D.Yak catgttct gtaagtatag...554...--attagcaagtagt-ttctgta---GTTAGCTGcgGAATTTGCA-ctca-aatcgttgcattgtcac-----...156...tttgattttcag gcgatagg
** * * ***** * * * * ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=129384 gene=FBgn0261041 name=stj segment=chr2R.9702292..9703059\_1 type=IN VIEW

Figure 76: CS=14.4



D.Mel	ccatagag	gtatacccttct...566...-----taagttcctaataatgtaaa--	AAAAATGTTGCTCGAAAACGCAaATTG	-----ccaattagtcgaaataact...198...catctccgatag	gtgatcaa
D.Sim	ccatagag	gtatacccttca...563...-----gtaagttcctaataatgtaaa--	TAAAAATGTTGCTCGAAAACGCAaATTG	-----ccaattagtcgaaataact...213...catctccgatag	gtgatcaa
D.Sec	ccatagag	gtatacccttca...562...-----gtaagttcctaataatgtaaa--	TAAAAATGTTGCTCGAAAACGCAaATTG	-----ccaattagtcgaaataact...213...catctccgatag	gtgatcaa
D.Ere	ccatagag	gtatacccttca...543...-----gtaagttcctaataatgtaaa--	TAAAAATGTTGCTCGAAAACGCA	-----aatagccaattagtcgaaa-----...215...catctccgatag	gtgatcaa
D.Gri	ccattgag	gtacaccccat...683...attcaaatcaattaccca-----	TCAAAAACCTTGCTCGAAAACGCaTCGATAA	-----agatacaaaaa--cmetaaaga...335...tgaacgatcag	gttatcaa
D.Moj	ccattgag	gtatacaccaca...644...-----attacccatcaatgaaacac--	AAAACTTGCTCGAAAACGCG	-----atcgatgagaaaatgccaat...333...cmetaacgctcag	gttatcaa
D.Per	cgattgag	gtatacaccga...715...-----aaaccattca--aaacaaagaa	TCAAAAACCTTGCTCGAAAACGCA	-----aatgccaacgaaatgtaa-----...237...cgactccaatag	gtgatcaa
D.Pse	cgattgag	gtatacaccga...715...-----aaaccattca--aaacaaagaa	TCAAAAACCTTGCTCGAAAACGCA	-----aatgccaacgaaatgtaa-----...234...cgactccaatag	gtgatcaa
D.Vir	ccattgag	gtacgctcacat...689...-----caattgccatcaaaagaaaa--	CAAAAACCTTGCTCGAAAACGCG	-----atcgattcaaaaatgccaat...296...tmetaacgctcag	gttatcaa
D.Wil	ctattgag	gtatatcccaa...631...-----agagatagcmetaaagaacaa--	AACACACGTCAAcaCACCCAAGA	atgcagtttcttatatgtcc-----...147...ttatgmetaaag	gttatcaa
D.Yak	ccatagag	gtatacccttca...562...-----gtaagttcctaataatgtaaa--	TAAAAATGTTGCTCGAAAACGCAaATTG	-----ccaattagtcgaaataact...214...catctccgatag	gtgatcaa

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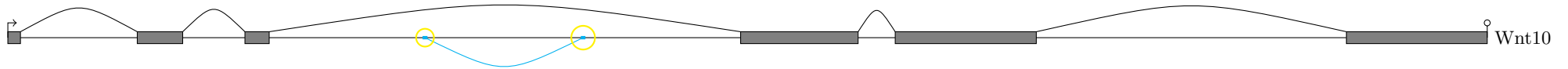
id=42986 gene=FBgn0034598 name=CG4266 segment=chr2R.17053380\_17054234\_-1 type=IN

D.Mel	tctcagtg	gtaactatgacg...190...-tcttagaataatccccctata-	TAATaTGCCTTTTCGAGCAATATTTTT	tgagaccgatttacataca-----...234...ttttgctttcag	tatgcagc
D.Sim	tctcagtg	gtaactatgacg...186...-tcttagaataatccccctata-	TAATaTGCCTTTTCGAGCAATATTTTT	agaccgatttacatacata-----...251...ttttgctttcag	tatgcagc
D.Sec	tctcagtg	gtaactatgacg...183...-tcttagaataatccccctata-	TAATaTGCCTTTTCGAGCAATATTTTT	agaccgatttacatacata-----...247...ttttgctttcag	tatgcagc
D.Ere	tctcagtg	gtaactatgacg...208...-aatctccccctatataata-	TGCCTTTTCGAGCAATGTTTTG	agaccgatttacatacatt-----...290...ttacgctttcag	tatgcagc
D.Gri	cctcagtg	gtaactatttct...366...acatttaataatcacaataa	TTATTGACGCTTTTCGAGCAAGTTTTTG	caacttattaagataaata-----...981...tttttcttacag	tatgcagc
D.Moj	tctaagtg	gtaattattcca...329...-ttaaacaatgtctctgaa-	CGCTTTTCGAGCAAGTTTTT	tagcaacgaaatgaattgaa-----...1161...ttatctctgcag	tgtgcagc
D.Per	cctcagtg	gtaaatatggcg...244...actctagactccccctgtcc-	TGCCTTTTCGAGCAATGTTTTTGA	aga----taatacacatttcat...240...tttcccttacag	tatgcagc
D.Pse	cctcagtg	gtaaatatggcg...242...actctagactccccctgtcc-	TGCCTTTTCGAGCAATGTTTTTGA	aga----taatacacatttcat...240...tttcccttacag	tatgcagc
D.Vir	tctaagtg	gtaactatccat...316...-tataactaaatgccctgac-	CGCTTTTCGAGCAAGTTTTT	gcaacaaatcagatattaa-----...1167...tggttcttgcag	tgtgcagc
D.Wil	tctgagtg	gtaactataaac...92...-ttcttctctccagctccatc	TCTTGGctCGTGcTTGACGTGtgTGT	gtgtgtgtagtggtgtttt-----...1098...cactcttgcag	tttgcagc
D.Yak	tctcagtg	gtaactatgacg...204...-ttaaactccccctata-	CAATaTGCCTTTTCGAGCAATATTTTT	agatcaaattacatacata-----...313...ttatgctttcag	tatgcagc

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id=42988 gene=FBgn0034598 name=CG4266 segment=chr2R.17052549\_17053063\_-1 type=IN VIEW

Figure 77: CS=14.3



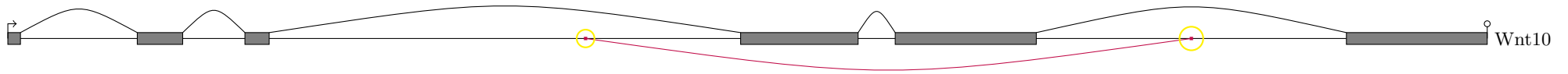
D. Mel	gaagaaag	gtgagttggccg...	2083...	gaaaagacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2300...	tttccgttttag	gctaccga
D. Sim	gaagaaag	gtgagttggccg...	2066...	gaaaagacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2306...	tttccgttttag	gctaccgg
D. Sec	gaagaaag	gtgagttggccg...	2096...	gaaaagacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2282...	tttccgttttag	gctaccgg
D. Ere	gaagaaag	gtgagttggccg...	2173...	gaaaagacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2351...	tttccgttttag	gctaccgg
D. Ana	gaagaaag	gtgagttcactc...	3112...	gcttttttctgctgtacca	-----	TGCATTATTGtCAAT	caagtggagcgggagaggag...	1798...	gcgccattttag	ggtaccgg			
D. Gri	aacgaaag	gtgagtggtgt...	2518...	aatataacaatgccaaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcacttcc	----	...	2024...	tcttacatgcag	gctatcgg
D. Moj	gaagaaag	gtaagtgtgag...	3505...	gcgacgtatgtcgcaaacaa	TTACT	TGGGATTGCA	-----	acataagagacagagacaga	----	...	1278...	tctgcttcgag	gctatcgg
D. Per	gaagaaag	gtaggttcccag...	1990...	cacaaaacaatgccaaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcacttcc	----	...	2056...	ctttccttttag	gctacagg
D. Pse	gaagaaag	gtaggttcccag...	1976...	cacaaaacaatgccaaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcacttcc	----	...	2048...	ctttccttttag	gctacagg
D. Vir	caagaaag	gtgagtggtgag...	2899...	aatataacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2009...	tcttctcaacag	gctatcgg
D. Yak	gaagaaag	gtgagttggccg...	2088...	gaaaagacaatgccgaacaa	TAAAtc	TCCAAATGCAT	-----	gccacaccagcagcagcagc	----	...	2376...	ttgccgttttag	gctaccgg
		* *****	** **		** *	****		** * *				** ** *	

id=9496 gene=FBgn0031903 name=Wnt10 segment=chr2L.7370392.7374855.1 type=IN

D. Mel	gaagaaag	gtgagttggccg...	3290...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcccagagaggggac...	1094...	tttccgttttag	gctaccga	
D. Sim	gaagaaag	gtgagttggccg...	3275...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcccagagaggggac...	1098...	tttccgttttag	gctaccgg	
D. Sec	gaagaaag	gtgagttggccg...	3283...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcccagagaggggac...	1096...	tttccgttttag	gctaccgg	
D. Ere	gaagaaag	gtgagttggccg...	3444...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcccagagaggggac...	1081...	tttccgttttag	gctaccgg	
D. Ana	gaagaaag	gtgagttcactc...	3793...	aggcattgtcaaatgtaact	-----	GITGcCAAT	---GATGTG	atttgatttgcaaa	-----	tggcc	-----	...	1117...	gcgccattttag	ggtaccgg
D. Gri	aacgaaag	gtgagtggtgt...	3476...	-----	aaatgtaactcgctggcaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcctgggaggggga...	1067...	tcttacatgcag	gctatcgg	
D. Moj	gaagaaag	gtaagtgtgag...	4106...	-----	aacattgacatttgcattcg	TGCGc	ATCCTGAGTGA	-----	cggactcttgactttcgttg	----	...	676...	tctgcttcgag	gctatcgg	
D. Per	gaagaaag	gtaggttcccag...	3056...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggctcgacagaggggc...	991...	ctttccttttag	gctacagg	
D. Pse	gaagaaag	gtaggttcccag...	3044...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggctcgacagaggggc...	981...	ctttccttttag	gctacagg	
D. Vir	caagaaag	gtgagtggtgag...	3877...	-----	aatgcaactcgctggcaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcctaagaggggga...	1032...	tcttctcaacag	gctatcgg	
D. Yak	gaagaaag	gtgagttggccg...	3318...	-----	aaatgtaact-gttgccaatg	ATGTg	ATTTGGATTG	-----	caaa	-----	tggcccagagaggggac...	1147...	ttgccgttttag	gctaccgg	
		* *****	** **		**	** **	** **		* * ** *				** ** *		

id=9496 gene=FBgn0031903 name=Wnt10 segment=chr2L.7370392.7374855.1 type=IN VIEW

Figure 78: CS=6.6



D.Mel	gaagaaag	gtgagttggccg...3292...	atgtaactgttgccaatgat	GTGATTGGATTGCAAAT	-----	G-gcccgagaggggacagcccg...1088...	tttccgttttag	gctaccga
D.Sim	gaagaaag	gtgagttggccg...3277...	atgtaactgttgccaatgat	GTGATTGGATTGCAAAT	-----	G-gcccgagaggggacagcccg...1092...	tttccgttttag	gctaccgg
D.Sec	gaagaaag	gtgagttggccg...3289...	----aactgttgccaatgat	TTTGATTGCAAAT	-----	G-gcccgagaggggacagcccg...1090...	tttccgttttag	gctaccgg
D.Ere	gaagaaag	gtgagttggccg...3981...	-tatgcaaagtggcgctggcc--	ATTGCA--TGTCAAT	-----	cgattgacaaatgttgccaa---	...546...	tttccgttttag
D.Ana	gaagaaag	gtgagttcactc...4376...	-tatgcaaagtggcgctgact--	ATTGCA--TGTCAAT	-----	cg-tgacaaatgttgccaa---	...535...	gcgccatttttag
D.Gri	aacgaaag	gtgagtggtgt...4064...	ttatgcaaagtggcgctgac--	AATTGCA--TGTCAAT	CGATTGACAAATG	ttgccaactttggcgctc-	...467...	tcttacatgcag
D.Per	gaagaaag	gtaggttcccag...3633...	ttatgcaaagtggcgctgac--	AATTGCA--TGTCAAT	-----	cgcttgacaaatgttgccaa---	...415...	cttccttttag
D.Pse	gaagaaag	gtaggttcccag...3618...	ttatgcaaagtggcgctgac--	AATTGCA--TGTCAAT	-----	cgcttgacaaatgttgccaa---	...408...	cttccttttag
D.Vir	caagaaag	gtgagttgtag...4444...	ttatgcaaagtggcgctgac--	AATTGCA--TGTCAAT	-----	cgattgacaaatgttgccaa---	...466...	tcttctcaacag
D.Yak	gaagaaag	gtgagttggccg...3320...	atgtaactgttgccaatgat	GTGATTGGATTGCAAAT	-----	G-gcccgagaggggacaagcag...1141...	ttgccgttttag	gctaccgg
		* *****	** **	** * **	***** * ** **	* * * *	** * ** *	** * ** *

id=9496 gene=FBgn0031903 name=Wnt10 segment=chr2L.7370392.7374855\_1 type=IN

D.Mel	tatacagg	gtgagttaatgt...693...	-----tagcca-ttttctgttgaca	-----	CATTGCAAAT	atCAAGcgTCGC	--tgctgccccgccaactgcca...471...	atctccgcacag	gcaccgtg			
D.Sim	tatacagg	gtaagtcaatgt...709...	-----tggcca-ttttctgttgaca	-----	CATTGCAAAT	atCAAGctTCGC	--tgctgccccgccaactgcca...447...	atctccgcacag	gcaccgtg			
D.Sec	tatacagg	gtaagtcattgt...702...	-----tggcca-ttttctgttgaca	-----	CATTGCAAAT	atTGAA	--gctttgtctgtctccgcca-----	...443...	atctccgcacag			
D.Ere	tatacagg	gtaagtcaatgt...608...	ttttctgttgcca-ttttgcc	-----	GTTGac	ACATttGCAAAT	---tatcaagcgtcgtgctgccc-----	...391...	atctctgcacag			
D.Ana	tatacagg	gtaagttccagg...621...	ttttctgttgcca-ttttgct	-----	GTTGac	ACATttGCAAAT	-tatcaaaagcgtttctgtgg-----	...560...	atctctctccag			
D.Gri	tatacagg	gtaagtagaaaa...566...	accgcatctgttgttggct	TGTT	atTGTTG	ttATTGct	GTTGac	ACATttGCAAAT	-atcaaaagcgc--actgcgacta-----	...482...	ttgcaattgtag	gtacagtg
D.Per	tatacagg	gtgagtttgat...766...	ttttgttgccatttttgct	-----	GTTGac	ACATttGCAAAT	atcaaaagcgcgagagatg-----	...485...	atccattccag	gcacagtg		
D.Pse	tatacagg	gtgagtttgat...718...	ttttgttgccatttttgct	-----	GTTGac	ACATttGCAAAT	atcaaaagcgcgagagatg-----	...445...	gtccattccag	gcacagtg		
D.Vir	tattcagg	gtaagtgttaga...812...	ttgttgttggctgtgctgct	-----	GTTGac	ACATttGCAAAT	-atcaaaagcgc--actgcgggcc-----	...540...	cttatttttag	gcacagct		
D.Yak	tatacagg	gtaagttccatag...770...	-----tggcca-ttcggctgttgaca	-----	CATTGCAAAT	atCAAGcgTCGC	--tgctgccccgccaactgcca...660...	atctctgcacag	gcacagtg			
		*** *****	** **	* * *	*****	* * *	* *	* ** *	** * ** *			

id=9500 gene=FBgn0031903 name=Wnt10 segment=chr2L.7375820.7377071\_1 type=IN VIEW

Figure 79: CS=10



D. Mel	tggtcaag	gtaggggccatc...515...	--atztatgagtaaatatcattt	----	GCAATAAATTGGAATTGT	tt	TAATcTAAAAATACAA	--tatatatatatattgttaa	-----	...275...	ccactccaacag	ctgcaggg
D. Sim	tggtcaag	gtaggggccatc...502...	--atztatgagtaaatatcattt	----	GCAATAAATTGGAATTGT	tt	TAATcTAAAAATaaTATA	tatatctgttaaatcttat	-----	...274...	atccaccaacag	ctgcaggg
D. Sec	tggtcaag	gtaggggccatc...499...	--atztatgagtaaatatcattt	----	GCAATAAATTGGAATTGT	tt	TAATcTAAAAATaaTACA	tatatctgttaaatctcttat	-----	...269...	atccaccaacag	ctgcaggg
D. Ere	tggtcaag	gtaggggccttc...493...	--atztatgagtaaatataattt	----	GCAATAAATTGGAATTGT	-----		tttcatcttatctaacatat	-----	...287...	atccaccaacag	ctgcaggg
D. Ana	tggtgaag	gtaggggcctt...430...	--aacia-agtaaatatgattttt	----	TGCAATAAATTGGAATTG	-----		attcaacataca-gacatatt	-----	...175...	atactccacag	ctacaagg
D. Gri	tggtcaag	gtaggggctgtt...673...	ta--caattttatataatttc	----	TGGCAATAAATTGGAATT	-----		gacttttaattgttatcctt	-----	...200...	aactgaatacag	ctacaagg
D. Moj	tggtcaag	gtaggggctgtt...645...	gaaatcaattt----taatttctc	----	TGGCAATAAATTGGAATT	-----		cttttaaatggtttctc	-----	...251...	aacataatgcag	cttcaagg
D. Per	tggtcaag	gtacgggctatt...980...	---ctcatgagtaaatattatttc	----	TGGCAATAAATTGGAATTGTT	-----		tcgatattattttgaaaaa	...	198...	ttcaaaaaacag	ctacaggg
D. Pse	tggtcaag	gtacgggctatt...972...	---ctcatgagtaaatattatttc	----	TGGCAATAAATTGGAATTGTT	-----		tcgatattattttgaaaaa	...	193...	ttcaaaaaacag	ctacaggg
D. Vir	tggtcaag	gtaggggctgtt...590...	ttttttgttttcgttttcat	----	TTACTGGCAATAAATTGGAATTGT	-----		ttatcaattgttttctctt	-----	...244...	actgaaccacag	ctacaggg
D. Yak	tggtcaag	gtaggggccatc...487...	-a-ttatgagtaaatataatttg	----	CAATAAATTGGAATTGT	-----		tttaaacatataa-atatt	-----	...258...	atccaccaacag	ctgcaggg
		**** **	**** **	*								**** **

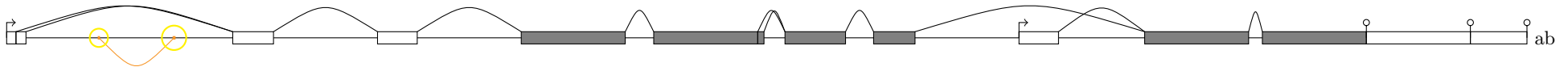
id=133508 gene=FBgn0259994 name=CG42492 segment=chrX.5536060.5536948\_-1 type=IN

D. Mel	tggtcaag	gtaggggccatc...751...	ttgtgtatatact-tactacc	TTGT	ca	TTTTGt	ATTAt	ATGAAATTC	CAATTTATTGT	-----	cgtaactcgag-atgagtcct	...36...	ccactccaacag	ctgcaggg
D. Sim	tggtcaag	gtaggggccatc...743...	caata-atattact-tactacct	TGTA	c	ATTTTg	ATTAt	ATGAAATTC	CAATTTATTGT	-----	cgtaactcgag-ctgagtcct	...33...	atccaccaacag	ctgcaggg
D. Sec	tggtcaag	gtaggggccatc...735...	acata-atatact-tactacct	TGTA	c	ATTTTg	ATTAt	ATGAAATTC	CAATTTATTGT	-----	cgtaactcgag-ctgagtcct	...33...	atccaccaacag	ctgcaggg
D. Ere	tggtcaag	gtaggggccttc...742...	--ttgtacatgtttataaat					ATGAAATTC	CAATTTATTGT	-----	cgtaactcgag-ctgagtcct	...36...	atccaccaacag	ctgcaggg
D. Ana	tggtgaag	gtaggggcctt...569...	---ttattataaaaaaatatata					TAATTC	CAATTTATTGTG	-----	tgtcagcgggatccctttat	...36...	atactccacag	ctacaagg
D. Gri	tggtcaag	gtaggggctgtt...821...	---cgtgtattgctgtacatac					AATTC	CAATTTATTGTTA	-----	tggcattgccatttaacaac	...52...	aactgaatacag	ctacaagg
D. Moj	tggtcaag	gtaggggctgtt...841...	---ttaaactgtttcgtgtaca					AATTC	CAATTTATTGTTG	-----	tggtct-tctgaaactcgtaca	...55...	aacataatgcag	cttcaagg
D. Per	tggtcaag	gtacgggctatt...1135...	---tgtaacatcttgtaccatac					GACATTC	CAATTTATTGTTG	-----	ttaaaaaagtaacaagctc	...44...	ttcaaaaaacag	ctacaggg
D. Pse	tggtcaag	gtacgggctatt...1122...	---tgtaacatcttactatac					GACATTC	CAATTTATTGTTG	-----	ttaaaaaagtaacaagctc	...44...	ttcaaaaaacag	ctacaggg
D. Vir	tggtcaag	gtaggggctgtt...793...	---tttattatattgctgtacat					ACAAAATTC	CAATTTATTGTTG	-----	ctcaaacatctgattcgag	...40...	actgaaccacag	ctacaggg
D. Yak	tggtcaag	gtaggggccatc...706...	cctactacatgtgtac--tat					ATGAAATTC	CAATTTATTG	-----	gcgtccatcgagaacgagta	...37...	atccaccaacag	ctgcaggg
		**** **	**** **	*									**** **	

id=133508 gene=FBgn0259994 name=CG42492 segment=chrX.5536060.5536948\_-1 type=IN VIEW

Figure 80: CS=18.7





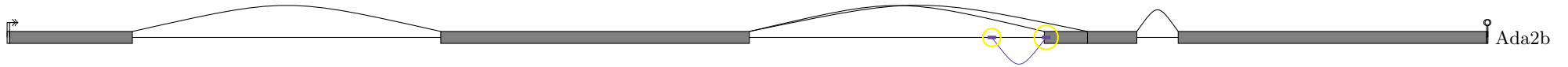
D. Mel	atggctta	gt--a--aactatcag...297...	gttc	ttttttttacaaccg	<b>TTTTATgAATGAATGCAGCTAAC</b>	-aggcag--aaaaaaaccgcaa...	609...	ttgtgattgcag----	ttgtgcag-
D. Sim	atggctta	gt--a--aactatcag...300...	gttc	ttttttttacaaccg	<b>TTTTATgAATGAATGCAGCTAAC</b>	-aggcaa--aaaaaaaccgcaa...	597...	ttgtgattgcag----	ttgtgcag-
D. Sec	atggctta	gt--a--aactatcag...299...	gttc	ttttttttacaaccg	<b>TTTTATgAATGAATGCAGCTAAC</b>	-aggcag--aaaaaaaccgcaa...	591...	ttgtgattgcag----	ttgtgcag-
D. Ere	atggctta	gt--a--aactatcag...289...	gttc	ttttttttacaacctgat	<b>TTTTATgAATGAATGCAGCT</b>	---acagccaggagaaaaaac----	614...	ttgtaattgcag----	ttgtgcag-
D. Ana	ttggctta	tt--gacaagtgtt--...280...	ctc	ttttttttacaacctgat	<b>TTTTATgAATGAATGCAGCT</b>	---acagatacagagctacggga...	607...	ttgttgtgcag----	ttgtgcag-
D. Gri	ttggttc	ttaaccaactt----...385...	ttgc	ttttttttacaacctga	<b>TTTTATgAATGAATGCAGCAGC</b>	agtagcagcaatcgagtcg----	536...	---gtggcggtgtt	ttgtgcat-
D. Moj	---gtttc	tt--agccaagtccgag...431...	ttgc	ttttttttacaacctga	<b>TTTTATgAATGAATGCAGCAGC</b>	agcagcaacaacagcaacag----	617...	caattttgcag----	tt-tgcggt
D. Per	ctcgccac	gt----ttcctaccag...866...	gttg	ctttttacaacctga	<b>TTTTATgAATGAATGCAGC</b>	---gctacagaaagagagagaga...	947...	cagttttgccgc----	ttgtgcag-
D. Yak	ccaactta	gt--t--aactatcag...317...	ttc	ttttttttacaacctgat	<b>TTTTATgAATGAATGCAGCAGC</b>	-aggcagaaaaaaaccgc--...	632...	ttgtaattgcag----	ttgtgcag-
			*	*	*****	*		*	** **

id=39857 gene=FBgn0259750 name=ab segment=chr2L\_11210774\_11211767\_1 type=I5

D. Mel	atggctta	gt--a--aactatcag...665...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAA</b>	-cgaaattcac--acagaaccag...	242...	ttgtgattgcag----	ttgtgcag-
D. Sim	atggctta	gt--a--aactatcag...653...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAA</b>	-cgaaattcac--acagaaccag...	245...	ttgtgattgcag----	ttgtgcag-
D. Sec	atggctta	gt--a--aactatcag...651...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAA</b>	-cgaaattcac--acagaaccag...	240...	ttgtgattgcag----	ttgtgcag-
D. Ere	atggctta	gt--a--aactatcag...646...	gttg	caaaattaataacggaa	<b>AGTTGtgCATTtTATTaATAAAAA</b>	---cgaaattcac--acagaaccag...	254...	ttgtaattgcag----	ttgtgcag-
D. Ana	ttggctta	tt--gacaagtgtt--...709...	gttg	caaaattaataacggaa	<b>AGTTGtgCATTtTATTaATAAAAA</b>	---cgaaattcac--acagaaccag...	175...	ttgttgtgcag----	ttgtgcag-
D. Gri	ttggttc	ttaaccaactt----...716...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAAG</b>	-cgaaaatcac--acaagcgca...	205...	---gtggcggtgtt	ttgtgcat-
D. Moj	---gtttc	tt--agccaagtccgag...805...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAAG</b>	-cgaaaatcac--acacagagcc...	243...	caattttgcag----	tt-tgcggt
D. Per	ctcgccac	gt----ttcctaccag...1211...	gttg	caaaattaataacggaa	<b>GTTGTgCATTtTATTaATAAAAA</b>	acgaaacgaaacgacagagc---	599...	cagttttgccgc----	ttgtgcag-
D. Yak	ccaactta	gt--t--aactatcag...680...	ttg	caaaattaataacggaa	<b>GTTGTGCATTtTATTaATAAAAA</b>	-cgaaattcac--acagaaccag...	269...	ttgtaattgcag----	ttgtgcag-
			*	*	*****	*****	*	***	** **

id=39857 gene=FBgn0259750 name=ab segment=chr2L\_11210774\_11211767\_1 type=I5 VIEW

Figure 81: CS=10.8



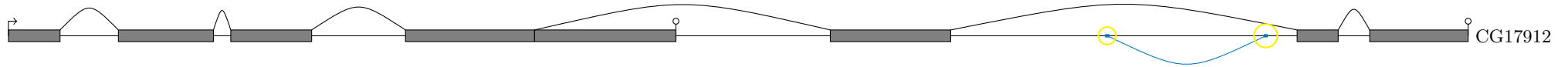
D. Mel	gcaagacc	gtaagt	-----	ttaaggctccgcaac	:::::	ccccttggagtaagc	-tttt	-cccactgagaatgcatgac	GAGTTGAATATCGTG	gtttctgccttgctttaacc	...53...	cacgatattcag	ctccactg	
D. Sim	gcaagacc	gtaagt	-----	gtaaggctccgcaac	:::::	ccccttaaagtaagcttttt	-cccactgagaatgcatgac	GAGTTGAATATCGTG	gtttctgccttgctttaacc	...50...	cacgatattcag	ctccactg	ctccactg	
D. Sec	gcaagacc	gtaagt	-----	gtaaggctccgcaac	:::::	ccccttaaagtaagcttttt	-cccactgagaatgcatgac	GAGTTGAATATCGTG	gtttctgccttgctttaacc	...50...	cacgatattcag	ctccactg	ctccactg	
D. Ere	ggaagacc	gtaagt	-----	gtaaggctccacaac	:::::	tcccttggagtaagc	-tttt	-cccactgagaatgcatgac	GAGTTGAATATCGTG	gtttctgccttgctttaacc	...50...	cacgatattcag	ctccactg	
D. Ana	gaaagact	gtaagt	-----	gtgggataaccacttc	:::::	atactcggggtgactacttc	gttaa	atgagaatgcatgac	GAGTTGAATATCGTG	gtgtctacctgtgtctcttc	...39...	cacgatattcag	ctcctctg	
D. Gri	gcaagacc	gtaagt	-----	gt-----tcc	:::::	-----	-tgtgaatgcatggc	GAGTTGAATATCGTG	tctgctagagctggaaaact	...150...	cacgatattcag	ctcctttg	ctcctttg	
D. Moj	gaaagacc	gtaagt	-----	gt-----	:::::	-ccctt	gtgta-----	-tttgaatgcatggc	GAGTTGAATATCGTG	tctgctagagctggaaaacc	...130...	cacgatattcag	ctcctttg	
D. Per	gcaagact	gtaagt	-----	gcgagcccgcctaaac	:::::	tccctggtt	gtgtgcgctcg	-tccaatgaaaatgcatgac	GAGTTGAATATCGTG	gtgtgctgtttgttctattct	...36...	cacgatattcag	ctcctctg	
D. Pse	gcaagact	gtaagt	-----	gcgagcccgcctaaac	:::::	tccctggtt	gggtgcgctcg	-tccaatgaaaatgcatgac	GAGTTGAATATCGTG	gtgtgctgtttgttctattct	...36...	cacgatattcag	ctcctctg	
D. Vir	ggaagaca	gtaagt	-----	-----	:::::	tccccc	-----	-ccaaattgaaatgcatggc	GAGTTGAATATCGTG	tctgctagagctggaaaaca	...140...	cacgatattcag	ctcctttg	
D. Wil	gcaagact	gtaagt	ggtt	taaatggcggtt	gtcaaaag	:::::	tacctt	gtaagaat-----	-gatgcatgac	GAGTTGAATATCGTG	gtgtgctgaggttcgggtt	...84...	cacgatattcag	ctcctctg
D. Yak	ggaagacc	gtaagt	-----	gtaaggctccgcaac	:::::	ccccttggagtaagc	-tttt	-ttcactgagaatgcatgac	GAGTTGAATATCGTG	gtttctgccttgctttaacc	...50...	cacgatattcag	ctccactg	
	* ****	*****							*****	*****		*****	**** **	

id=123861 gene=FBgn0037555 name=Ada2b segment=chr3R.4063975\_4064452\_-1 type=IN

D. Mel	gcaagacc	gtaagt	ttaagg	...434...	atcgcttttccgtcttg-tct	CACGATATTCAG	CTC	caactg
D. Sim	gcaagacc	gtaagt	gtaagg	...422...	atcgcttttccgtcttg-tct	CACGATATTCAG	CTC	caactg
D. Sec	gcaagacc	gtaagt	gtaagg	...406...	atcgcttttccgtcttg-tct	CACGATATTCAG	CTC	caactg
D. Ere	ggaagacc	gtaagt	gtaagg	...349...	atcgcttttccgtcttg-tct	CACGATATTCAG	CTC	caactg
D. Ana	gaaagact	gtaagt	gtggga	...322...	atcgctttcccgtcttg-tct	CACGATATTCAG	CTC	ctctg
D. Gri	gcaagacc	gtaagt	gtttcca	...217...	acttgtctcttcttct-acttt	CACGATATTCAG	CTC	ctttg
D. Moj	gaaagacc	gtaagt	gtggca	...186...	-cctgtctcttcttcttacttt	CACGATATTCAG	CTC	ctttg
D. Per	gcaagact	gtaagt	gcgagc	...204...	-tcgctttcccgtcttcttct	CACGATATTCAG	CTC	ctctg
D. Pse	gcaagact	gtaagt	gcgagc	...204...	-tcgctttcccgtcttcttct	CACGATATTCAG	CTC	ctctg
D. Vir	ggaagaca	gtaagt	tgccca	...196...	-cttgtctcttcttcttcttct	CACGATATTCAG	CTC	ctttg
D. Wil	gcaagact	gtaagt	tggttt	...262...	-ttcctctctctctctctctct	CACGATATTCAG	CTC	ctctg
D. Yak	ggaagacc	gtaagt	gtaagg	...393...	atcgcttttccgtcttg-tct	CACGATATTCAG	CTC	caactg
	* ****	*****			*	**	*****	**** **

id=123861 gene=FBgn0037555 name=Ada2b segment=chr3R.4063975\_4064452\_-1 type=IN VIEW

Figure 82: CS=20.4



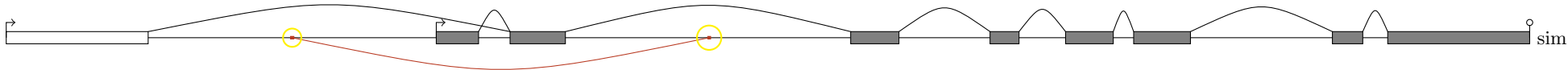
D. Mel	tcggcatg	gtaagtctctaa...1151...-ttatgtttaactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattaca-...1208...ctgaacctccag	atgccgct
D. Sim	tcggcatg	gtaagtctctaa...1145...gttatg-ttatactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattaca-...1208...ctacacctcag	atgccgct
D. Sec	tcggcatg	gtaagtctctaa...1150...gttatg-ttatactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattaca-...1201...ctacacctcag	atgccgct
D. Ere	tcggcatg	gtaagtctctaaa...1188...-ttatgattaaactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttcttttaca-...1254...ctcctggccac	atgcagct
D. Ana	tcggcatg	gtaagtctctaa...1228...-gtgagtttaactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattacc-...1305...ccgccactccag	atgccgat
D. Gri	tgggcatg	gtaagtgttaaa...1795...-t-taattactactact	taaaaTTACTTTG-AACT	----tgtcgtaatggttgcgct...1830...tcgtcggctcag	atgcaact
D. Moj	tgggcatg	gtaagtgttaaa...1775...-ttgagagttatgaactat	gcaactgc-AAGCCATGTAagTACA	ttttgtataatattctat--...2039...cgattcgcatag	atgcctct
D. Per	gtggcatg	gtaagtctctaa...1285...-ttatgtttaactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattacc-...1243...cgtgccgttcag	atgccgtt
D. Pse	gtggcatg	gtaagtctctaa...1282...-ttatgtttaactat	tttgc-AAGCCATGTAagTACA	-tttcaataatttctattacc-...1249...cgtgccgttcag	atgccgtt
D. Vir	tgggcatg	gtaagtgttaag...1588...-tataattaattcta-ttaaaa	TTACTTTG-AACT	----tgtcgtaatggttgcgct...1988...cacaacctgcag	atgccatt
D. Yak	tcggcatg	gtaagtctctaa...1164...-ttatgtttaactat	tttgc-AAGCCATGTAagTACA	-ttccaataatcttttaca-...1201...ctacacctccag	atgccgct
	*****	***** * *	* * * * * * * * * *	* * * * * * *	**** *

id=92724 gene=FBgn0032600 name=CG17912 segment=chr2L.16746617\_16749055\_1 type=IN

D. Mel	tcggcatg	gtaagtctctaa...2291...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagacctaactaaag...69...ctgaacctccag	atgccgct
D. Sim	tcggcatg	gtaagtctctaa...2285...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagaccttgcgtaag...69...ctacacctcag	atgccgct
D. Sec	tcggcatg	gtaagtctctaa...2283...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagaccttgcgtaag...69...ctacacctcag	atgccgct
D. Ere	tcggcatg	gtaagtctctaaa...2356...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagaccttgcgtaag...87...ctcctggccac	atgcagct
D. Ana	tcggcatg	gtaagtctctaa...2468...-ataacaaacttagctaatt	TGTGTAC-AaTGGCTT	taatatagaccaagaaaagc...66...ccgccactccag	atgccgat
D. Gri	tgggcatg	gtaagtgttaaa...3014...-tcctcatcgtcgtcagttc	AGTTcCGAAttGTAA	gtacgtttctttttaacca...607...tcgtcggctcag	atgcaact
D. Moj	tgggcatg	gtaagtgttaaa...3685...aataac-aatttagctaatt	TGTGTAC-AaTGGCTT	cgatatataatacacaca...130...cgattcgcatag	atgcctct
D. Per	gtggcatg	gtaagtctctaa...2457...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagacctgtaaga...72...cgtgccgttcag	atgccgtt
D. Pse	gtggcatg	gtaagtctctaa...2460...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagacctgtaaga...72...cgtgccgttcag	atgccgtt
D. Vir	tgggcatg	gtaagtgttaag...3019...-ctactcatcgtcagttc	AGTTtCGAAttGTAA	gtacgtttctttttaacca...553...cacaacctgcag	atgccatt
D. Yak	tcggcatg	gtaagtctctaa...2297...aataac-aacttagctaatt	TGTGTAC-AaTGGCTT	caatatagaccttgcgtaag...69...ctacacctccag	atgccgct
	*****	***** * *	* * * * * * * * * *	* * * * * * *	**** *

id=92724 gene=FBgn0032600 name=CG17912 segment=chr2L.16746617\_16749055\_1 type=IN VIEW

Figure 83: CS=6.6



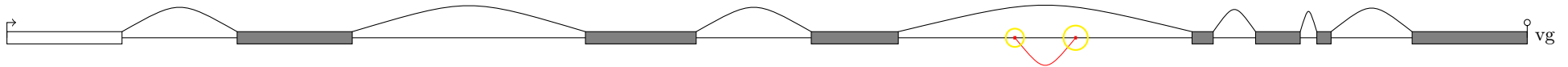
D.Mel	---aaacacat	gtatgtatgctg...3952...	cagacgtgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcgcggaat-actctttag----	ga-----	...957...	ctggaagcggc	tcagttgc
D.Sim	---aaacacat	gtatgtatgctg...3991...	cagacgtgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcgcggaat-actctttag----	ga-----	...918...	gtggaagcggc	tcagttgc
D.Sec	---aaacacat	gtatgtatgctg...3972...	cagacgtgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcgcggaat-actctttag----	ga-----	...937...	gtggaagcggc	tcagttgc
D.Ere	---aaacacat	acgtgtatgcag...3970...	cagccgtgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcgcggaat-actctttag----	ga-----	...939...	gtggaagcggc	tcagttgc
D.Ana	gaaaaacat	gtatggaa----	4008...cagtcgcgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcaccgaat-gctctttag----	ga-----	...901...	gacgaaacagt	tcagtttc
D.Gri	--aaaaacatt	gtacttgta--	3972...cagacgcgca--tgttggcaca-----	TTTgagTTGCGgATTAgtg--gcgcgctctttag-----	gat-----	...937...	gacgaactctgc	tcagttgc
D.Moj	---aaacatt	gtacttgcgct...4006...	cagacgcgca--tgttgcaca-----	TTTgagTTGCGgATTAgcgcgcgcgctctttta-----	g-----	...903...	gacgaagtgcgc	tcagttgt
D.Per	--aatgcatt	gaaaaacatg--	4073...cagacgcgca--tgttgcaca-----	TTTgCGTTGCGgATTAgcGGAGaat-gctctttag----	gattatga...	830...	gccgagagcgc	tcagttac
D.Pse	--aatgcatt	gaaaaacatg--	4082...cagacgcgca--tgttgcaca-----	TTTgCGTTGCGgATTAgcGGAGaat-gctctttag----	gattatga...	821...	gccgagagcgc	tcagttac
D.Vir	---aaacaagt	gtaattcaatgc...	3398...cagacgcgca--tgttgcaca-----	TTTgagTTGCGgATTAgcggcgcgctgctctttag----	g-----	...1511...	gacgaagtgcgc	tcagtcgc
D.Wil	---aaacatgt	gtatggcaaac...	4523...ccatggcatagattttggcAAAAcGCGCcaAAAAcACGTT-----	-----	cgaactattttgtcaatga-----	...380...	tacgaagagagc	tcagttgt
D.Yak	---aaacacat	gtacgagttggc...	3927...cagacgtgca--tgttggcaca-----	TTTgCGTTGCGgATTAgcgcggaat-actctttag----	ga-----	...982...	gcggaagcggc	tcagttgc
			* * * * *	* * * * *			** * *	*****

id=79333 gene=FBgn0004666 name=sim segment=chr3R\_8884100.8898123.1 type=I5

D.Mel	tcccgatg	gtaagttcaatc...678...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgagatccggacgggccc...	467...	cttattttgtag	gtcttggc
D.Sim	tcccgatg	gtaagttcaatc...658...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgagatccggacgggccc...	477...	cttattttgtag	gtcttggc
D.Sec	tcccgatg	gtaagttcaatc...661...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgagatccggacgggccc...	390...	cttattttgtag	gtcttggc
D.Ere	tcccgatg	gtaagttgatac...680...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgagatccggacgggccc...	520...	catgttttcag	gtcttggc
D.Ana	tcccgatg	gtaagctttctc...635...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caaggagacccggcgggccc...	338...	attgtcttacag	gactcggg
D.Gri	cccgatg	gtaagtcgacc...808...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgcg-caaggaaggaaca...	999...	atatccttcag	gactcggg
D.Moj	tcccgatg	gtaagttggcca...717...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgcg-caaggaagtgcgc...	1163...	ttttgcttcag	gactcggg
D.Per	tcccgatg	gtaagctcaacc...747...	----tgctttattgaataattaTTTTaaTAATagGCAACAAA-----	caacgacaaccgccagggca...	318...	tattccttcag	gactcggc
D.Pse	tcccgatg	gtaagctcaacc...752...	----tgctttattgaataattaTTTTaaTAATagGCAACAAA-----	caacgacaaccgccagggca...	330...	tattccttcag	gactcggc
D.Vir	tccggatg	gtaagttggcca...777...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgcg-caaggaagtgcgc...	854...	acctgtttcag	gactcggg
D.Wil	tcccgatg	gtaagtttatac...671...	...ggtgtcgtttcatttggca---GCGGTTTTGTGCTTTTcttttctggctttatga-----	-----	727...	tttcatttcag	gactcggc
D.Yak	tcccgatg	gtaagttcattc...720...	-----tattgaataattatttttaaTAATagGCAACAAA-----	caacgagatccggacgggccc...	525...	cttgttttacag	gcctcggc
			** ****	*****			** ** *

id=79337 gene=FBgn0004666 name=sim segment=chr3R\_8898579.8899801.1 type=IN VIEW

Figure 84: CS=12.96



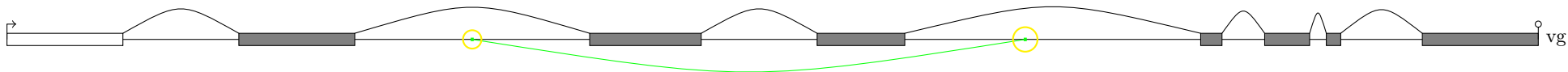
D. Mel	ttctaaag	gtaagttatcta...3784...---	ggatatttttctctcgaatc-	GAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...812...-tggcaattgcag	agagcagc
D. Sec	ttctaaag	gtgagtgctaaa...3811...---	ggatatttttctctcgaatc-	GAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...779...-ttgcaattgcag	agagcagc
D. Ere	ttctaaag	gtaggtgcactg...3727...---	ggatatttttctctcgaatc-	GAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...877...-ttgcgcttgcaag	agagcagc
D. Ana	tagtaaag	gtgagtttctag...3555...tgttg	tatatatttttctctcg-	AATTCGAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...507...-ctctacttacag	agagctcc
D. Moj	aacaaaag	gtaggtgcacac...4377...gtgt	tatatatttttctcttg-	AATTGAGTtt	GGAATGTTGT	caacgcaaatgcaagcct----	...528...-ttctctttgcag	atggcagc
D. Per	cactaaag	gtaggagaacga...3976...tgtt	gtatatatttttctctcg-	AATTGAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...741...-cgtgtct-tacag	aaagccag
D. Pse	cactaaag	gtaggagaacga...4058...tgtt	gtatatatttttctctcg-	AATTGAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...747...-cgtgtct-tacag	aaagccag
D. Vir	ggcaaaag	gtaggtaatcct...4093...tgtt	gtatatatttttctcttg-	AATTGAGTtt	GGAATGTTGT	caacgcaaatgcaagcct----	...543...-cgactctttcag	atagcagc
D. Wil	tgcaaaag	gtaggcgtcatc...2999...tgtt	gtatatatttttccctcg-	AATTGAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...1908...-gtgtctttgcag	aaagcaac
D. Yak	ttctaaag	gtaggtgcactg...4027...---	ggatatttttctctcgaatc-	GAGTtt	GGAATGTT	gtcaacgcaaatgcaagcct----	...878...-ttgcgattgcag	agagcagc
	****	** *		*****	** * *	*****		****

id=123191 gene=FBgn0003975 name=vg segment=chr2R\_8780557\_8785230\_1 type=IN

D. Mel	ttctaaag	gtaagttatcta...4049...-gag	cacgaac--gacaaccgaa--	AACATTCGGCTC	agttatttgcaacaggccat----	...549...-tggcaattgcag	agagcagc	
D. Sec	ttctaaag	gtgagtgctaaa...4074...-gag	cacgaac--gacaaccgaa--	AACATTCGGCTC	agttatttgcaacaggccat----	...518...-ttgcaattgcag	agagcagc	
D. Ere	ttctaaag	gtaggtgcactg...4014...-gag	cacgcac--gacaaccgaa--	AACATTCGGCTC	agttatttgcaacaggccat----	...592...-ttgcgcttgcaag	agagcagc	
D. Ana	tagtaaag	gtgagtttctag...3846...-agg	cacgaac--gacaaccgaa--	AACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...219...-ctctacttacag	agagctcc	
D. Moj	aacaaaag	gtaggtgcacac...4724...-tc	ctgaacaggcgagcagaca	ACAACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...182...-ttctctttgcag	atggcagc	
D. Per	cactaaag	gtaggagaacga...4290...-gac	aacgagc--gacaaccgaa--	AACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...429...-cgtgtct-tacag	aaagccag	
D. Pse	cactaaag	gtaggagaacga...4378...-gac	aacgagc--gacaaccgaa--	AACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...429...-cgtgtct-tacag	aaagccag	
D. Vir	ggcaaaag	gtaggtaatcct...4433...ca	accac--aac--gacaacgaca	ACAACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...204...-cgactctttcag	atagcagc	
D. Wil	tgcaaaag	gtaggcgtcatc...3367...ca	acaac--aac--gacaaccgaa--	AACATTCGGCTCAGTT	atttgcaacaggccatggcg...	...1542...-gtgtctttgcag	aaagcaac	
D. Yak	ttctaaag	gtaggtgcactg...4303...-gag	cacgcac--gacaaccgaa--	AACATTCGGCTC	agttatttgcaacaggccat----	...604...-ttgcgattgcag	agagcagc	
	****	** *		*****	** * *	*****		****

id=123191 gene=FBgn0003975 name=vg segment=chr2R\_8780557\_8785230\_1 type=IN VIEW

Figure 85: CS=9.6



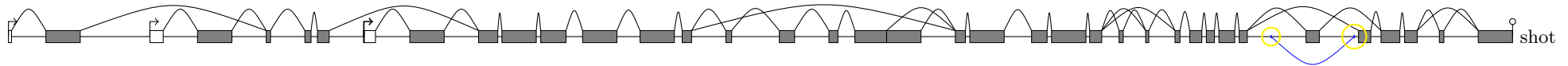
D. Mel	atgagagg	gtgagtaccgca...	3584...	-cgtaa	atcg	tcg	ccag	cgcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	--aga	aagatt	gcggcg...	558...	gtac	at	ttt	cag	ttca	acca				
D. Sim	atgagagg	gtgagtaccgca...	3685...	-cgtaa	atcg	tcg	ccag	cgcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	--aga	aagatt	gcggcg...	660...	taac	at	ttt	cag	ttca	acca				
D. Sec	atgagagg	gtgagtaccgca...	3613...	-cgtaa	atcg	tcg	ccag	cgcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	--aga	aagatt	gcggcg...	679...	ttac	at	ttt	cag	ttca	acca				
D. Ere	atgagagg	gtgagtaccgca...	3512...	-cgtaa	atcg	tcg	ccag	cgcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	--aga	aagatt	gcggcg...	748...	ttcc	act	ttt	cag	ttca	acca				
D. Ana	atgaaagg	gtgagtacaagc...	3222...	-cgtaa	atcg	tcg	ccag	ctcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	gcct	aagatt	gcgg--...	1019...	taac	tct	ttc	cag	ttca	acca				
D. Gri	atgagagg	gtaagttcgata...	4604...	tcg	taa	atgt	ctc	gag	CGCATT	TGTTT	GACAG	TCCG	cg	tcg	c	caagc	-tgga	aagatt	-----	...	305...	ctct	c	ttg	cag	ttca	acca
D. Moj	atgagagg	gtaagttgtctt...	4611...	tcg	taa	atgt	ctc	gag	CGCATT	TGTTT	GACAG	TCCG	cg	tcg	c	caagc	-cgta	gagatt	-----	...	298...	atg	c	ttt	cag	ttca	atca
D. Per	atgagagg	gtgagtattttc...	2428...	tcg	taa	atcg	ttc	ggag	CGCATT	TGTTT	GACAG	TCCG	ctaagc	-tgga	aagatt	gcggc-...	523...	ttat	g	c	ttg	cag	ttca	atca			
D. Pse	atgagagg	gtgagtattttc...	2313...	tcg	taa	atcg	ttc	ggag	CGCATT	TGTTT	GACAG	TCCG	ctaagc	-tgga	aagatt	gcggc-...	533...	ttat	g	c	ttg	cag	ttca	atca			
D. Yak	atgagagg	gtgagtaccgca...	3716...	-cgtaa	atcg	tcg	ccag	cgcc	GCATT	TGTTT	GACAG	TCCG	ctaagc	--aga	aagatt	gcggcg...	812...	ctac	at	ttt	cag	ttca	acca				
	****	***	**	***	*****	**	***	*****	*****	***	****	*	*				**	***	****	***	****	**					

id=123187 gene=FBgn0003975 name=vg segment=chr2R.8774746.8778971.1 type=IN

D. Mel	ttcta	aag	gta	agtt	atcta...	3789...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	798...	tg	g	ca	att	g	cag	ag	ag	c	ag	c						
D. Sim	ttcta	aag	gtg	agt	gctaaa...	3812...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	757...	tg	g	ca	att	g	cag	ag	ag	c	ag	c						
D. Sec	ttcta	aag	gtg	agt	gctaaa...	3816...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	765...	tg	g	ca	att	g	cag	ag	ag	c	ag	c						
D. Ere	ttcta	aag	gtagg	tg	cactg...	3732...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	863...	tt	g	c	g	c	ttg	cag	ag	ag	c	ag						
D. Ana	tag	ta	aag	gtg	agtt	ctag...	3565...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	493...	ct	c	t	act	tt	ac	ag	ag	g	ct	cc					
D. Gri	tg	ct	aa	aag	gtag	ctactact...	3922...	-----	tt	gaa	-ttg	agtt	tg	g	aat	gt	TG	CA	ACG	ca	AATGC	g	---c	ct	at	g	cca	ag	t	acc	ag	---...	987...	act	c	tt	tt	g	cag	at	ag	c	ag			
D. Moj	aac	aaa	aag	gtagg	tg	ccacac...	4394...	-----	tt	gaa	-ttg	agtt	tg	g	aat	gt	TG	CA	ACG	ca	AATGC	g	---c	ct	at	g	c	act	gt	g	c	c	cc	g	---...	515...	tt	c	t	tt	g	cag	at	gg	c	ag
D. Per	cact	aa	aag	gtag	gaga	acga...	3985...	tttt	tct	ctc	gaa	-ttg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	g	---c	ct	at	g	caa	---g	tttt	gg	at...	726...	cg	t	g	t	ct	ta	ac	ag	aa	g	cc	ag				
D. Pse	cact	aa	aag	gtag	gaga	acga...	4067...	tttt	tct	ctc	gaa	-ttg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	g	---c	ct	at	g	caa	---g	tttt	gg	at...	732...	cg	t	g	t	ct	ta	ac	ag	aa	g	cc	ag				
D. Yak	ttcta	aag	gtagg	tg	cactg...	4032...	tttt	tct	ctc	gaa	-tcg	agtt	TGGA	TGTT	TGCA	ACG	ca	AATGC	aag	c	ct	at	g	caa	---g	tttt	tgg	---...	864...	tt	g	c	g	att	g	cag	ag	ag	c	ag	c					
	****	***	**				*	***	*	*****	*****	*****	*	*				**	***	****	**								**	***	*	**	***	****	**	***	****	**								

id=123191 gene=FBgn0003975 name=vg segment=chr2R.8780557.8785230.1 type=IN VIEW

Figure 86: CS=9.6



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D.Mel  ttgtcgcg gtaagtggcca...295...----aataataataa--taatattacCAAACGGaTATGGTCATTAA-----cc--aaccaacaaacaaccaac...1130...atccgggagcag ccaaagga
D.Sec  ttgtcgcg gtaagtggcca...295...----aataataataa--taatattacCAAACGGaTATGGTCATTAA-----cc--aaccaacaaacaaccaac...1143...accgggagcag ccaaggga
D.Ere  ttgtcgcg gtaagtggcca...252...----cctaataataa--taatattacCAAACGGaTATGGTCATTAA-----cc--aaccaacaaacaaccaac...1117...accgggagcag ccaaggga
D.Ana  ttgccgcg gtaagtcaatcc...334...-atgctaataatata--taatac--CAAACGGATATGGTCATTAA-----ccaaaacaaacaaccaac...1253...actcgggagcag ccaaggga
D.Gri  ttgtcgcg gtaagttcaagc...363...-----catattaatataataacaaa-AAACGGATATGGTCATTAA-----ccaacaa--aataaaaatcaaa...1223...tgatcgggagcag ccaaggga
D.Moj  ttgtcgcg gtaagttgcact...350...tatatc--atattaa--taatacc--AAACGGATATGGTCATTAA-----ccaac-a--aatcaatataaac...1126...ttaacgggagcag ccaaggga
D.Pse  ttgtcgcg gtaagttgcgaa...354...-atgctaataatata--taatac--CAAACGGATATGGTCATTAA-----cc--aaccaacaaacaaccaac...1250...gactcgggagcag ccaaggga
D.Vir  ttgtcgcg gtaagttctata...346...aatatc--atattaa--taatacc--AAACGGATATGGTCATTAACAACaaataaa--aatatatataaa...1152...tgaacgggagcag ccaaggga
D.Wil  ttgtcgcg gtaagtttcaat...370...gctaaaaaataat--taata--CAAACGGATATGGTCATTAA-----ccaacaaccaa--aacaaaag--...1164...gggggagagcag ccaaggga
D.Yak  ttgtcgcg gtaagtggcca...287...----cctaataataa--taatattacCAAACGGaTATGGTCATTAA-----cc--aaccaacaaacaaccaac...1115...accgggagcag ccaaggga
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id=12050 gene=FBgn0013733 name=shot segment=chr2R\_9755855\_9757364\_-1 type=IN

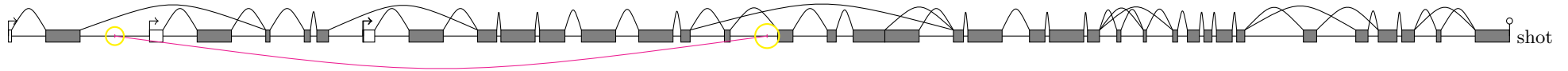
```

D.Mel  tcatacaag gtaaatcaatca...742...--gtaggttgt---tgtcca--cggcTAAATGATCATAaCCGTTTG-----ccaatgaaatgcggt-----aattcattgttggtta--aacatatcgaa-----attata-tcctta-----g cgcacgaa
D.Sec  tcatacaag gtaaatcaatca...770...--gtaggttgt---tgtcca--cggcTAAATGATCATAaCCGTTTG-----ccaatgaaatgcggt-----tgttcattgttggtta--aacatatcgaa-----attata-tcctta-----g cgcacgaa
D.Ere  tcatacaag gtaaatcaatca...775...--gtaggttgt---tgtcca--cggcTAAATGATCATAaCCGTTTG-----ccaatgaaatgcggt-----tgttcattgttggtta--aacatatcgaa-----attaat-tcctta-----g cgcacgaa
D.Ana  tcatacaag gtaaatcaatca...562...--gtaggttgt---tgtcca--cggcTAAATGATCATATaCCGTTTG-----ccaca--aattgcgagaatatcaaatgtccattgttggtta--aacgatcga-----attaatcccctta-----g ctgatgag
D.Gri  tcataaag  gtaaatcaacat...493...agttttgattggctcagtcgc-----TAAATGATCATATaCCGTTT-gcccagcctataaga-at-----tgattgagcaacga--acaaa--acaaaaacaaacaaaatctgttatttctatagtatatag ctgatgag
D.Moj  tcataaag  gtaaatcaacaa...876...-----ctatattgaggccagtttgcTAAATGATCATATaCCGTTT-agtcag-ctataagc-at-----atagagcaaat--gccaa--acaaaaaaca-----acttatttctata--tatgtag ctgatgag
D.Pse  tcatacaag gtaaatcaaaaa...449...--gtaggttgt---tgtcca--tggcTAAATGATCATATgCCGTTTG-----ccag-ct---gcctt--tgctgtccaatgttggtta--aacgatccaat-----attgatttctata--catgtag ctgatgag
D.Vir  tcataaag  gtaaatcaacaa...537...--tttctttgtatagaggcca-GTTGTAAATGATCATATaCCGTTT-agtcag-ctataagctat-----attgagcaaat--gccaaacaacaaaa-----ttgtatttctata--tatgtag ctgatgag
D.Wil  tcataaag  gtaaatcacaaa...434...--tggttgcacatcgcagcctt-----TAAATGATCATATaCCGTTTGGccaatcaaatcaa-----atthttcaacct-ggctctaacaacagctattcgaatattcgtataaattccatttaatacacag ctgatgag
D.Yak  tcatacaag gtaaatcaatca...779...--gtaggttgt---tgtcca--cggcTAAATGATCATAaCCGTTTG-----ccaatgaaatgcggt-----tcttcattgttggtta--aacatatcgaa-----attaat-tcctta-----g cgcacgaa
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id=12052 gene=FBgn0013733 name=shot segment=chr2R\_9754809\_9755660\_-1 type=IN VIEW

Figure 87: CS=18.5



D.Mel	catagcag	gtgagtgc	atcc...3843...	caagaaagacgagagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...1063...	acagcggcgc	---tc	agtcaaat			
D.Sim	catagcag	gtgagtgc	atcc...3989...	caagaaagacgagagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...917...	acagcggcgc	---tc	agtcaaat			
D.Sec	catagcag	gtgagtgc	atcc...4007...	caagaaagacgagagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...899...	acagcggcgc	---tc	agtcaaat			
D.Ana	gatagcag	gtgggtgat	ca...4398...	caagaaagacgagagc	caaaa-----	TTAGGCTTTg	TGTTTATT	aacggc-catgaccattagcg	---...508...	agcaaagtgc	---tc	attcgaat			
D.Gri	catagcag	gtgagctct	atg...4035...	-----	gttgtt	gttgc	gttcgctt	TTAGcTGCTTa	TGTTT	-----	acaacgcaaaatgagagcg	...873...	ggcgtgttc	---tc	agtccact
D.Per	tatagcag	gtgagtga	acc...4060...	aagaaaagaccacagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...846...	tctcttgagc	---gc	attccact			
D.Pse	tatagcag	gtgagtga	acc...4269...	aagaaaagaccacagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...637...	tctcttgagc	---gc	attccact			
D.Vir	catagcag	gtgagtc	aaaa...4097...	-----	gtt-tt	gctgt	ttttgtg	TTAGcTGCTTa	TGTTT	-----	ataacaacacagaagcactc	---...811...	gacggtgttc	---tc	agtccaat
D.Wil	aatagcag	gtgagtga	gcaa...4393...	-----	tttgc	actatt	tttacaca	TTAGcTGCTTa	TGTTT	-----	acatgtaaaagatgatgaag	...516...	---tctcttcag	gtc	agtccaat
D.Yak	catagcag	gtgagtgc	cctc...3981...	caagaaagacgagagc	caaaa-----	TTAGGCTTTc	TGTTTATT	aacggc-catgaccattagcg	---...925...	acagcggcgc	---tc	agtcaaat			
	*****	*** *		*		****	** *****	*	*		*	* * * * *			

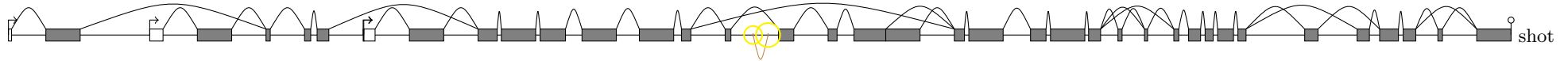
id=11990 gene=FBgn0013733 name=shot segment=chr2R\_9813009\_9821134\_-1 type=IN

D.Mel	aagctaag	gtaaaaatt	gta...487...	taatttcg	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tcaacaagc	cccc...123...	--tccggg	agttag	atctacga
D.Sim	aagccaag	gtaaaaatt	gta...500...	taatttcg	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tcaacaagc	ccccct...125...	--tccggg	agttag	atctacga
D.Sec	aagccaag	gtaaaaatt	gta...491...	taatttcg	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tcaacaagc	ccccct...124...	--tccggg	agttag	atctacga
D.Ana	aagccaag	gtaaaaatt	gta...399...	gtaattcg	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	taaac	cccttactc...125...	--gggact	atatag	atctacga
D.Gri	aagctaag	gtaaaaatt	gt...926...	---ttc	gattg	taataat	caatgAAATAaaAAGCaCTAA	atata	tgcctac	ccccacaacc...139...	--gcgg	acattag	atctacga
D.Per	aagctaag	gtaaaaatt	gt...463...	taatgtc	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tccacc	tcaatccc...135...	--tgcc	accgatag	atctacga
D.Pse	aagctaag	gtaaaaatt	gt...458...	taatgtc	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tccacc	tcaatccc...134...	--tgcc	accgatag	atctacga
D.Vir	aagctaag	gtaaaaatt	gt...776...	---ttc	gattg	taataat	caatgAAATAaaAAGCaCTAA	atata	cctaga	aaaa-aaaa...196...	tggtgtc	--ttag	atctacga
D.Wil	aagctaag	gtaaacag	caaa...417...	---ttc	tattg	taataat	caataAAATAaaAAGCaCTAA	--atata	cctaaaa	acccaaa...151...	--gatg	taacacag	atctacga
D.Yak	aagccaag	gtaaaaatt	gta...492...	taatttcg	tattg	taataatc	AATAAATAAAAGCaCTAA	--atata	tcaacaat	ccccctt...130...	--cttc	gggagcag	atctacga
	**** *	***** *		** *****	*****	*****	**** *		*		** *	*****	

id=12019 gene=FBgn0013733 name=shot segment=chr2R\_9787177\_9787870\_-1 type=IN VIEW

Figure 88: CS=10.8





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D.Mel aagctaag gtaaaaatttga...272...-----gtttctctaccgaatctcaaATATATTTAaTGCTTTTTA-aacc-aattaccggactgtaa...339...-tccgggag-ttag atctacga
D.Sim aagccaag gtaaaaatttga...279...-----gtttctctaccgaatctccaATATATTTAaTGCTTTTTA-aacc-aattaccggactgtaa...347...-tccgggag-ttag atctacga
D.Sec aagccaag gtaaaaatttga...270...-----atttctctaccgaatctccaATATATTTAaTGCTTTTTA-aacc-aattaccggactgtaa...346...-tccgggag-ttag atctacga
D.Ere aagccaag gtaaaaatttga...270...-----gtttctctaccgaatctccaATATATTTAaTGCTTTTTA-aact-atttaccggactgtaa...346...cttcgggag--tag atctacga
D.Ana aagccaag gtaaaaatttga...191...-----tctatcaa--aatctatttccaATATATTTAaTGCTTTTTA-acgg-actttcaagaagtcca...334...-gggactat-atag atctacga
D.Gri aagctaag gtaaaaatttgt...619...-----ctattataca-aaccctttca--ATATTTAaTGCTTTTTA-aacacatttgggtaaatga...446...-gcgacatttag atttacga
D.Moj aagctaag gtaaaaatttgt...619...-----tactctatacgaacctttca--ATATTTAaTGCTTTTTA-aaaa-acatatacagagaaatt...396...ttacggac--tcag atttacga
D.Per aagctaag gtaaaaatttgt...244...-----tatcaactgtcctttttcctATATATTTAaTGCTTTTTA-aaca-ctttgagcctccgacc...355...-tgccaccg-atag atctacga
D.Pse aagctaag gtaaaaatttgt...244...-----tatcaactgtcctttttcctATATATTTAaTGCTTTTTA-aaca-ctttgagcctccgacc...349...-tgccaccg-atag atctacga
D.Vir aagctaag gtaaaaatttgt...518...-----tctttataccgaacctttca--ATATTTAaTGCTTTTTAcaaca-atttgggttaaaat...454...-tggtgtc--ttag atttacga
D.Wil aagctaag gtaaacagcaaa...179...ccaacttccactttatagaa-----TATATTTAaTGCTTTTTA-aaaa-aaatttactttcgtaac...387...-gatgtaac-acag atctacga
D.Yak aagccaag gtaaaaatttga...277...-----gtttctctaccgaatctccaATATATTTAaTGCTTTTTA-aacc-atttaccggactgtaa...346...cttcgggag--cag atctacga
**** *  ***** *
***** ***** *
*
** ** *****

```

id=12019 gene=FBgn0013733 name=shot segment=chr2R.9787177.9787870\_-1 type=IN

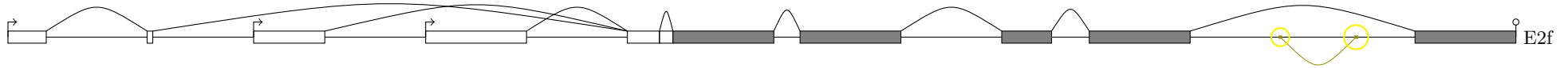
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D.Mel aagctaag gtaaaaatttga...494...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----caacaagcgccttctt--...117...-tccgggag-ttag atctacga
D.Sim aagccaag gtaaaaatttga...507...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----caacaagcccccttctt--...119...-tccgggag-ttag atctacga
D.Sec aagccaag gtaaaaatttga...498...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----caacaagcccccttctt--...118...-tccgggag-ttag atctacga
D.Ere aagccaag gtaaaaatttga...494...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----caataatcccccttctt--...122...cttcgggag--tag atctacga
D.Ana aagccaag gtaaaaatttga...406...gtattgattaatcaataaaaTAAAAAGCAcTAAATATATaaacc-----cctctactcccac-----...119...-gggactat-atag atctacga
D.Gri aagctaag gtaaaaatttgt...929...gtattgattaatcaatgaaaTAAAAAGCAcTAAATAT--atgc-----ctaccccaaccccc--...136...-gcgacatttag atttacga
D.Moj aagctaag gtaaaaatttgt...873...gtattgattaatcaatgaaaTAAAAAGCAcTAAATAT--atgc-----ctaccccaaccccc--...142...ttacggac--tcag atttacga
D.Per aagctaag gtaaaaatttgt...470...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----c--caccctcaatccccttga...129...-tgccaccg-atag atctacga
D.Pse aagctaag gtaaaaatttgt...465...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----c--caccctcaatccccttga...128...-tgccaccg-atag atctacga
D.Vir aagctaag gtaaaaatttgt...779...gtattgattaatcaatgaaaTAAAAAGCAcTAAATAT--atacctagaaaa--aaaaca--...193...-tggtgtc--ttag atttacga
D.Wil aagctaag gtaaacagcaaa...420...ttattgattaatcaataaaaTAAAAAGCAcTAAATATA---cctaaaaaaccaacaaa-----...146...-gatgtaac-acag atctacga
D.Yak aagccaag gtaaaaatttga...499...gtattgattaatcaataaaaTAAAAAGCAcTAAATATAT-----caacaatcccccttctt--...124...cttcgggag--cag atctacga
**** *  ***** *
***** *****
***** *****
** ** *****

```

id=12019 gene=FBgn0013733 name=shot segment=chr2R.9787177.9787870\_-1 type=IN VIEW

Figure 89: CS=11.52



D.Mel	ctcggact	gtaagtacttga...393...	-ttaaattttta--caacctttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgccaatttgattttatattt	----	...634...	tcttatttacag	acttcagc
D.Sim	ctcggact	gtaagtacttga...419...	-ttaaattttta--caacctttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgacaatttgattttatattt	----	...600...	tcttatttacag	acttcagc
D.Sec	ctcggact	gtaagtacttga...405...	-ttaaattttta--caacctttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgacaatttgattttatattt	----	...598...	tcttatttacag	acttcagc
D.Ere	ctcggact	gtaagtacttga...402...	-ttaaattttta--caacctttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgacaatttgattttatattt	----	...603...	tcttatttacag	acttcagc
D.Ana	atcggatt	gtaagtgttttag...661...	-tttttttttca--aaatatttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgacaatttgagtttagtta	----	...563...	ttttctttacag	acttcacc
D.Gri	cacggact	gtaagtactttc...354...	---atttcggcaagctac--accaa	CCACcGAGAATCAGTTCAAAAT	TGAATTT	ttactatatcattttctattt	----	...700...	ctctgtttgcag	acttcaat
D.Per	cccggact	gtaagtacaacc...617...	-ttgatt--gcaacaaaat	tttGGCCaACGAGAATCAGTTCAAAAT	TGAATTT	---atattttggtttcataaatt	----	...595...	ttttctttacag	acttcagc
D.Pse	cccggact	gtaagtacaacc...609...	-ttgatt--gcaacaaaat	tttGGCCaACGAGAATCAGTTCAAAAT	TGAATTT	---atattttggtttcataaatt	----	...601...	ttttctttacag	acttcagc
D.Vir	cacagact	gtaagtatatatt...334...	---tttcggcaagcaaccaaccg	---ACGAGAATCAGTTCAGAA	TGAATTT	ttac---ttatttctattttggt	...	716...	acctctttgcag	actttaat
D.Wil	cgcggact	gtaagtgtcctt...476...	..aataatttttcggccaacca	---ACGAGAATCAGTTCAAAAT	---	tgctctttatttcttcaaat	----	...1583...	tttttttgcag	atttcaac
D.Yak	ctcggact	gtaagtaacttg...387...	-ttaaatttttca--caacctttc	GGCCaACGAGAATCAGTTCAAAAT	-----	tgacaatttgattttatattt	----	...609...	tcttatttacag	acttcagc
		* * * *	*****			*****	***		* * * *	* * * *

id=119611 gene=FBgn0011766 name=E2f segment=chr3R.17447419.17448533\_-1 type=IN

D.Mel	ctcggact	gtaagtacttga...773...	---atcgtcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	252...	tcttatttacag	acttcagc
D.Sim	ctcggact	gtaagtacttga...781...	---atcgtcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	236...	tcttatttacag	acttcagc
D.Sec	ctcggact	gtaagtacttga...765...	---atcgtcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	236...	tcttatttacag	acttcagc
D.Ere	ctcggact	gtaagtacttga...782...	---atcgtcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	221...	tcttatttacag	acttcagc
D.Ana	atcggatt	gtaagtgttttag...994...	---tctcctcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	228...	ttttctttacag	acttcacc
D.Gri	cacggact	gtaagtactttc...794...	---tccaatcaacgcaagcgc	AAATTCATTTTGAACTGAa	TTCTCGTGGTc	gtcagtg---caactgaccgt	...	260...	ctctgtttgcag	acttcaat
D.Per	cccggact	gtaagtacaacc...993...	..tataatcgtcctcgtgtcaaaa	-----	TTCATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgacca	...	218...	ttttctttacag	acttcagc
D.Pse	cccggact	gtaagtacaacc...987...	..tataatcgtcctcgtgtcaaaa	-----	TTCATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgacca	...	222...	ttttctttacag	acttcagc
D.Vir	cacagact	gtaagtatatatt...803...	---tgctcgcgaacgcaagcgc	AAATTCATTTTGAACTGAa	TTCTCGTgggtc	ctgagtg---caactgacc	...	246...	acctctttgcag	actttaat
D.Wil	cgcggact	gtaagtgtcctt...1385...	---tgacgttttaagaaaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	672...	tttttttgcag	atttcaac
D.Yak	ctcggact	gtaagtaacttg...768...	---atcgtcctcgtgtcaaattc	-----	ATTTTGAACTGAaTTCTCGTgGGTc	tgcaactgacaacactgaccg	...	226...	tcttatttacag	acttcagc
		* * * *	*****			*****	***		* * * *	* * * *

id=119611 gene=FBgn0011766 name=E2f segment=chr3R.17447419.17448533\_-1 type=IN VIEW

Figure 90: CS=10.56



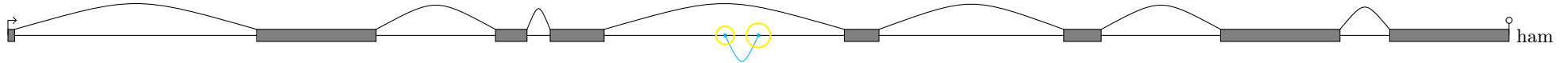
D. Mel	-aacaaaac	aaaacgaaaacc...769...	gtgtagccgagta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcaag	..446...	ctccttgaccag	gttccaag					
D. Sim	-aacaaaac	aaagcgaiaacc...733...	gtggagccgagta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcaag	..445...	ctccttgaccag	gttccaag					
D. Sec	-aacaaaac	aaagcgaiaacc...699...	gtggagccaagta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcaag	..437...	ctccttaacat	attccaag					
D. Ere	-aacaaaac	aaaacgaaaacc...773...	gtggagccgagta	----atgaaa	TGTATTcAGCAGTTAAAC	gtCGGT	atgagtaataaatgc	----aaagca	..434...	ttccttgaccag	gttccaag					
D. Ana	-aacaacaa	acaacaagtaac...509...	cgcggtcgagta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcaac	..586...	ccaactcttag	gatccaag					
D. Gri	-aataaat	aaaaaaaaataca...1072...	-----ta	----atgaaa	atttatacacgctGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcgag	..985...	gcattttgatag	gctccaag					
D. Moj	-aagagcaa	aatcgatcgcc...656...	-----g	cgcggtg	tttctgtg	cgag	-----	ATGTGTga	AATTATG	CAAATGT	---atgtgtg	ctaataa	gaaataaaa	..350...	ccattcaacag	gctccaag
D. Per	gagaaaaac	aatcgaaata-...676...	tcgagtactcgta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----agagcaag	..449...	cggttcgaacag	gctccaag					
D. Pse	gagaaaaac	aatcgaaata-...676...	tcgagtactcgta	----atgaaa	TGTATTcAGCAGTTAAAC	GTGCGTATG	agtaataaatgc	----agagcaag	..440...	cggttcgaacag	gctccaag					
D. Vir	-aagagcaa	aaaacgagcgcc...806...	-----ta	----atgaaa	atttatacacgctGTTAAAC	GTGCGTATG	agtaataaatgc	----aaaacggg	..429...	ccatttggcag	gctccaag					
D. Yak	-aacaaaac	aaaacgaaaacga...821...	-----gta	----atgaaa	atgtattcagc	AGTTAAAC	GTGCGTATG	agtaataaatgc	----aaagcaag	..444...	ttccttgaccag	gttccaag				
					*	** * *	* ** **	** ** *	** ** *	*	*****					

id=21815 gene=FBgn0024944 name=Oamb segment=chr3R.16516830.16518135.-1 type=IN

D. Mel	-aacaaaac	aaaacgaaaacc...1045...	-----cg	tttatggcgca	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggcaggctggcgagctcttt	..166...	ctccttgaccag	gttccaag	
D. Sim	-aacaaaac	aaagcgaiaacc...1009...	-----cg	tttatggcgca	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggcaggctggcgagctcttt	..165...	ctccttgaccag	gttccaag	
D. Sec	-aacaaaac	aaagcgaiaacc...975...	-----cg	tttatggcgca	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggcaggctggcgagctcttt	..157...	ctccttaacat	attccaag	
D. Ere	-aacaaaac	aaaacgaaaacc...1042...	-----t	ggcgca	--acatttg	gcataat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggcaggctggcgagctcttt	..165...	ttccttgaccag	gttccaag	
D. Ana	-aacaacaa	acaacaagtaac...778...	-----cg	tttatggcgaa	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggcaggctggcagaggcca	..313...	ccaactcttag	gatccaag	
D. Gri	-aataaat	aaaaaaaaataca...1381...	-----c	ttatgccaagata	acatttg	CATAat	TACGCGTTTAAAT	---ttg	ctaagtgcagc	ctggc	-----	..674...	gcattttgatag	gctccaag
D. Moj	-aagagcaa	aatcgatcgcc...812...	ctgtgtg	ccttatgccaag	---ACATT	TGCATAATTACGCGT	---t	taatttg	ctaagtgcagc	-----	..196...	ccattcaacag	gctccaag	
D. Per	gagaaaaac	aatcgaaata-...937...	-----cg	tttatgggaaa	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggctggatggcaatggctgg	..184...	cggttcgaacag	gctccaag	
D. Pse	gagaaaaac	aatcgaaata-...928...	-----cg	tttatgggaaa	--acatttg	CATAat	TACGCGTTTAAAT	TGCTaa	AGTGCA	ggctggatggcaatggctgg	..184...	cggttcgaacag	gctccaag	
D. Vir	-aagagcaa	aaaacgagcgcc...1067...	-----cg	tttatgctaag	--acatttg	CATAat	TACGCGTTTAAAT	---t	tagtaagtgcagc	ctggc	-----	..166...	ccatttggcag	gctccaag
D. Yak	-aacaaaac	aaaacgaaaacga...1085...	-----cg	tttatggcgca	--acatttg	CATAat	TACGCGTTTAAAT	---t	gccaagtgcagc	agct	-----	..178...	ttccttgaccag	gttccaag
					*	*	**	*****	*	** *	*	*****		

id=21815 gene=FBgn0024944 name=Oamb segment=chr3R.16516830.16518135.-1 type=IN VIEW

Figure 91: CS=15.4



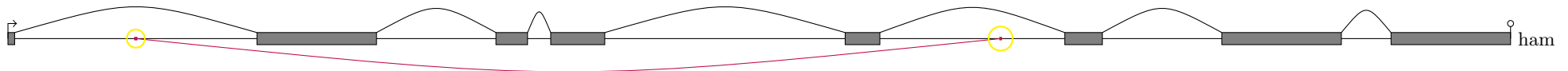
D.Mel	-----tgataatg	gtgagtttcggtt...4199...atagagtgcacacgatttc-----	GTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...467...tattattccag	gttctctg
D.Sim	cagcgatcgtgataatg	gtg-----...4129...atagagtgcacacgatttc-----	GTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...486...tcttcattccag	gctccctg
D.Sec	cagcgatcgtgataatg	gtg-----...4170...atagagtgcacacgatttc-----	GTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...457...tcttcattccag	gctccctg
D.Ere	-----tgataaacg	gtgagttacttc...4231...atagagtgcacacgatttc-----	GTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...497...ccttcattccag	gctctttg
D.Gri	-----tgataatg	gtgagtgcccct...4379...-----gtgcacacgattcctttggtc-----	GCTTGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...527...cttatttctcaa	ctgatctt
D.Moj	-----tgataatg	gtgagttgctca...4188...-----tgcacacagatttggtcgc-----	TGCTAcCAATT	TGTG	ttaagtgtttgcggtgtttgt...721...ttttcatttcag	gcttttac	
D.Pse	-----agataatg	gtgagtgctaat...4097...-----gctatcgtgtcgtctggcgc	TGTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttgc...362...tcttcttctag	gctccctc
D.Wil	-----tgataaacg	gtgagtgcttaa...4357...-----agtgcacacgatttggtcaa-----	TGCTAcCAATT	TGTG	ttaagtgtttgcggtgtttac...552...ttcatattgcag	gttcccat	
D.Yak	-----tgataaacg	gtgagttggcctt...4260...atagagtgcacacgatttc-----	GTCTctGCTA	CAATT	TGTG	ttaagtgtttgcggtgtttac...514...tcttctttccag	gctctttg
	***** *	***				*****	* *

id=11080 gene=FBgn0045852 name=ham segment=chr2L\_18771398\_18776148\_-1 type=IN

D.Mel	-----tgataatg	gtgagtttcggtt...4345...----tggccagaaaaaggacctgc	CGCAGATTG	TAGCGGAC	aaacagaacattagctcgtc-...324...tattattccag	gttctctg	
D.Sim	cagcgatcgtgataatg	gtg-----...4269...----tggccagaaaaaggacctgc	CGCAGATTG	TAGCGGAC	aaacagaacattagctcgtc-...349...tcttcattccag	gctccctg	
D.Sec	cagcgatcgtgataatg	gtg-----...4304...----tggccagaaaaaggacctgc	CGCAGATTG	TAGCGGAC	aaacagaacattagctcgtc-...326...tcttcattccag	gctccctg	
D.Ere	-----tgataaacg	gtgagttacttc...4369...----tggccagaaaaaggacctgc	CGCAGATTG	TAGCGGAC	aaacagaacattagctcgtc-...362...ccttcattccag	gctctttg	
D.Gri	-----tgataatg	gtgagtgcccct...4487...----ctgtg-cgggctagtccttc	CGCAGATTG	TAGCGGGC	aaataaaatattagcttcga-...420...cttatttctcaa	ctgatctt	
D.Moj	-----tgataatg	gtgagttgctca...4286...----tgcgtcctggctagtccttc	CGCAGATTG	TAGCA	agcaataaaaacattagctc-...624...ttttcatttcag	gcttttac	
D.Pse	-----agataatg	gtgagtgctaat...4241...----gtcgtcc-agcaggtccttc	CGCAGATTG	TAGCGGGCA	aacaaaacattagctcgtc-...221...tcttcttctag	gctccctc	
D.Wil	-----tgataaacg	gtgagtgcttaa...4482...cagtg-gtcctag---gtccttc	CGCAGATTG	TAGCG	agcaacaaaacattagctc-...428...ttcatattgcag	gttcccat	
D.Yak	-----tgataaacg	gtgagttggcctt...4370...----tggccagaaaaaggacctgc	CGCAGATTG	TAGCGGAC	aaacagaacattagctcgtc-...407...tcttctttccag	gctctttg	
	***** *	***	**	* ** *	*****	*****	* *

id=11080 gene=FBgn0045852 name=ham segment=chr2L\_18771398\_18776148\_-1 type=IN VIEW

Figure 92: CS=10.8



D. Mel	catatcag	gttggttccacg...1100...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...764...gattgttaacag	gctccgga
D. Sim	catatcag	gttggttccacg...1142...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...779...gattgtcaacag	gctccgga
D. Sec	catatcag	gttggttccacg...1122...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...767...ggttgtaacag	gctccgga
D. Ere	catatcag	gttggttccacg...1131...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...808...gatcgtaacag	gctccgga
D. Gri	tatatcag	gttggttccaat...1824...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	tttaaataaggcggtagg...1466...tatacgataacag	gctctaac
D. Moj	tatgtcag	gttggttgcatt...2372...ctgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	tttaaataagccactaggt...1387...cttctttcacag	gctctaac
D. Pse	catatcag	gttggtctcacg...981...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...878...ctccccgcacag	gctctaac
D. Wil	tatatcag	gttggttccaat...1904...ttgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	tttaaacaaggcagtaggca...1927...ttgtttttcag	gttccaac
D. Yak	catatcag	gttggttccacg...1154...ctgtctaacagctcaaatta	CGAT	TAGT	CAAGTG	ttcgaacaaggcggatggac...785...gattgctaacag	gctccgga
	** ** ** *	*****				***** * ** ** *	*** * **

id=11074 gene=FBgn0045852 name=ham segment=chr2L\_18780332\_18782276\_-1 type=IN

D. Mel	ttagatct	gtaagtacgact...1745...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtccgggaaaagg...238...cttcactttcag	cttggacg
D. Sim	ttgatct	gtaagtacgact...1685...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtccgggaaaagg...235...cttcattttcag	cttggacg
D. Sec	ttgatct	gtaagtacgact...1681...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtccgggaaaagg...236...cttcattttcag	cttggacg
D. Ere	ttagatct	gtaagtacgact...1652...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtccgggaaaagg...234...ttacctttccag	cttggacg
D. Gri	ttagaacg	gtaagcagggcc...1947...gcatattaaatattgaacat	CATTGACTAATTG	acgcccagggagagctacca...293...aactgcttcag	attggacg
D. Moj	ttagaacg	gtaagtactgtc...2120...gcatattaaatattgaacat	CATTGACTAATTG	acgccaacagcaagtggaga...347...ttgcctttgcag	cctggacg
D. Pse	ttagaacg	gtgagtacacgc...1749...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtggagtcgagg...274...ctttgattgcag	gttggacg
D. Wil	ctagaacg	gtaagtttttga...2050...gcatattaaatattgaacat	CATTGACTAATTG	acgctcgacttccagttg...255...ctttgatttcag	cttggacg
D. Yak	ttagatct	gtaagtacgact...1697...gcatattaaatattgaacat	CATTGACTAATTG	acgcccgtccgggaaaagg...239...tttcctttccag	cttggatg
	* ** *	** ** *	*****		** ** *

id=11082 gene=FBgn0045852 name=ham segment=chr2L\_18769192\_18771252\_-1 type=IN VIEW

Figure 93: CS=9.72



```

D.Mel ctgtcaaa gtaagtgacccc...3654...-----ttttgtcaaatgtct--aactGAAAAGAAAGTTgGCTA--gcaaacctaccaaatgtgCG-----...1254...tatctgtttgcag cacctaac
D.Sec ctgtcaaa gtaagtgacccc...3394...-----ttttgtcaaatgtct--aactGAAAAGAAAGTTgACTA--gcaaacttacaaatgtgCG-----...1514...aacctgtttgcag cacctaac
D.Ere ctgtcaaa gtaagtgacccc...3228...-----ttttgtcaaatatTT--aactGAAAAGAAAGTTgGCTA--gcaaacttacaaatgtgCG-----...1680...tatctgtttgcag cacctaac
D.Gri ctgtcaaa gtaagtgacccc...2978...-----atTTgtcaaatgtGC--aattGAAAAGAAAGTTT-----agTTtagttttgtCGTTatt-----...1934...ctcgatttacag cagctaac
D.Moj ctgtcaaa gtaagtgacccc...3459...-----atTTgtcaaatgtGC--aattGAAAAGAAAGTTT-----agTTttatTTgtTTttctt-----...1453...atctcttgacag catctaac
D.Per ctgtcaaa gtaagtgacccc...3858...-----tttGTcaaatTTcttaaacGAAAAGAAAGTTTggTTTgTTgggcatctcatctcTTac-----...1048...atgtatttgCag cacctaac
D.Pse ctgtcaaa gtaagtgacccc...3829...-----tttGTcaaatTTcttaaacGAAAAGAAAGTTTggTTTgTTgggcatctcatctcTTac-----...1077...atgtatttgCag cacctaac
D.Vir ctgtcaaa gtaagtgacccc...3877...-----atTTgtcaaatgtGC--aattGAAAAGAAAGTT-----agTTtag--ctgctgcccGTg-----...1036...ctctcttcccag catctaac
D.Wil ctgtcaaa gtaagtctgacc...2706...gCCatcatcattcacaTTTt-----GAAAAGAAAGTTT-----catcaaacctGTgaactaac...2206...ctTTttgCGcag catttaac
D.Yak ctgtcaaa gtaagtgacccc...3233...-----ttttGTcaaatgtct--aactGAAAAGAAAGTTGGCTAGC--aaacttacaaatgtgCGgag-----...1673...tatccgTTgCag cacctaac
***** ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=90781 gene=FBgn0083978 name=CG17672 segment=chr3L\_13022428\_13028131\_1 type=IN

```

D.Mel tatccgag gt-----gagtcagtc-----atctggcatgg-----
D.Sec tatccgag gt-----gagtcagtc-----atctggcgtgg-----
D.Ere tatccaag gt-----gagtcagctgggagggtatggcatggtatgga-----
D.Gri tatcccag gtat-----gcatttggtatat-----gtgtgcgtgtgCcttGTatgagtcagtg-----ttg
D.Moj tatccaag gtatttacacatacacatacatatGTatatacaataaaagtgtgtGTatgtgagttgagtggtcattcattgacaactcattacgct-----tcg
D.Per tatcccag gt-----gagtgagtc-----acgtcacttaacggtgctcagagtgGCCg
D.Pse tatcccag gt-----gagtgagtc-----acgtcacttaacggtgctcagagtgGCCg
D.Vir tatcccag gtat-----gtgtgtgtat-----gtgtgtgtgtgtg-----actcattacgct-----ttg
D.Wil tatcccag gt-----gagtgagtg-----acaaccgtaa-----
D.Yak tatccaag gt-----gagtcagctgggtatgatc-----
***** ** ** * * * *

```

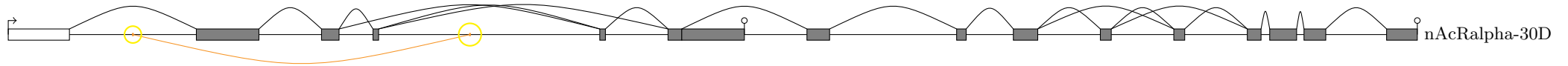
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D.Mel -----TAGTAACTTTCTTTTCtaacgcccc-----tgtgacca-----tccaattgggatct-----ctg-cag cgCGGCCg
D.Sec -----TAGTAACTTTCTTTTCtaacgcccc-----tgtgacca-----tccaattgggatct-----ctg-tag cgCGGCCg
D.Ere -----TGGTAACTTTCTTTTCtaacgCCca-----tttgacca-----ccaattgggatct-----cCG-cag cgCGGCCg
D.Gri tcaagtatgca---AACTTTCTTTTCtaacgCctc-t-----gc-----tccgt--tcatctacatacga-ttg-cag tgCGGCCg
D.Moj gtcacaatgc-a---AACTTTCTTTTCtaacgCctc-t-----gcctatc-----gctttgcttCGt--ctatc-----ga-ttg-cag cgCGGCCg
D.Per atcatagcattCGGAAACTTTCTTTTCtaacgCctc-t-----gcctcttctgcctcgcatttccccattaccatttgCatttgCatttg-cag tgCGGCCg
D.Pse atcatagcattCGGAAACTTTCTTTTCtaacgCctc-t-----gcctcttctgcCGcgcatttccccattaccatttgCatttgCatttg-cag tgCGGCCg
D.Vir a-cacaatgcta---AACTTTCTTTTCtaacgCctc-t-----gc-----ttgt--caatc-----ga-ttg-cag cgCGGCCg
D.Wil -aaaaaaat---AACTTTCTTTTCtaacgCctc-tcggttcggttggtttttttcttcttcttcttcttcttcttattctgtcttcttcttattattgacag tgCGGCCg
D.Yak -----GTTGCCagTAACTTTCTTTTCtaacgCCca-----tatgaccaccatatgaccaccctattgggatct-----ctg-cag cgCGGCCg
***** * * * * *

```

id=90783 gene=FBgn0083978 name=CG17672 segment=chr3L\_13028320\_13028394\_1 type=IN VIEW

Figure 94: CS=14.8



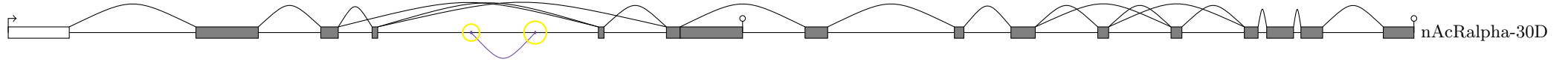
D.Me1	gaaccaag	gtaaacagaacg...4365...tgttttt	gt-tcaactcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...539...ctattccaacag	ctaacatc
D.Sim	gaaccaag	gtaaacagaacg...4272...tgttttt	gt-tcgactcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...632...ttatcctacag	ctaacatc
D.Sec	gaaccaag	gtaaacagaacg...4292...tgttttt	gt-tcgactcgcgt	TTTTaa	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...612...ttatcccacag	ctaacatc
D.Ere	gaaccaag	gtaaacagaacg...4361...-----	gt-tcgactcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...549...ttgttctacag	ctaacatc
D.Ana	gaaccaag	gtaaacactgaa...4518...cgttttt	gt-tcgacctcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...386...tttctttcag	cgaagaac
D.Gri	atttcaag	gtaaacacaac...4272...ttatttt	gt-tactcgagcac	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...632...ttctctttcag	gcaacatt
D.Per	gaaccaag	gtaaacaaaatc...4027...tgttttt	gt-gcgctcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...877...taccattcacag	ctaaaaat
D.Pse	gaaccaag	gtaaacaaaatc...4023...tgttttt	gt-gcgctcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...881...taccattcacag	ctaaaaat
D.Vir	atttcaag	gtaaacacaac...4093...gtttttt	gt-tctcgcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...811...cttttctacag	gcaactct
D.Yak	gaaccaag	gtaaacagaacg...4292...tgttttt	gt-tcgactcgcgt	TTTTac	GCAAATTCA	TGTTT	taatttactcaagttt	gttg...612...tttttttacag	ctaacatc
	****	*****	***	*	*	*****	*****	***	**

id=89513 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9870521.9885725\_-1 type=I5

D.Me1	taaatttg	gtaagtgacatg...3444...cctcgc	atcccggttgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1460...atgcgttt	gttag	gacgagaa
D.Sim	taaatttg	gtaagtgacatg...3463...cctcgc	atcccggttgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1441...atgcgttt	gttag	gacgagaa
D.Sec	taaatttg	gtaagtgacatg...3458...cctcgc	atcccggttgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1446...atgcgttt	gttag	gacgagaa
D.Ere	taaatttg	gtaagtgacatg...3478...cctcgc	atcccggttgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1432...atgcgttt	gttag	gacgagaa
D.Ana	taaatttg	gtaagtgacatg...3594...tggggc	aggcgtcatgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1310...atgcgttt	gttag	gacgagaa
D.Gri	taaatttg	gtaagtgacatg...3589...cttagc	aaactgcctgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1315...atgcgttt	gttag	gacgagaa
D.Per	taaatttg	gtaagtgacatg...3455...cctggc	agacgtcatgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1449...caaaattt	gttag	gacgagaa
D.Pse	taaatttg	gtaagtgacatg...3437...cctggc	agacgtcatgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1467...caaaattt	gttag	gacgagaa
D.Vir	taaatttg	gtaagtgacatg...3578...cttagc	aaactgcctgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1326...acgcgttt	gttag	gacgagaa
D.Yak	taaatttg	gtaagtgacatg...3435...cctcgc	attccggttgtcat	AAACATGAAA	TTTGCac	AAAA	ccgccatttttataaggtgt...	1469...atgcgttt	gttag	gacgagaa
	*****	*****	**	*	*****	*****	*****	*****	*****	*****

id=89519 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9819332.9825296\_-1 type=IN VIEW

Figure 95: CS=11.8



```

D.Mel taaatttg gtaagtgacatg...3460...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacggcacaat...1447...atgcgttttag gacgagaa
D.Sim taaatttg gtaagtgacatg...3479...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacggcacaat...1428...atgcgttttag gacgagaa
D.Sec taaatttg gtaagtgacatg...3474...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacggcacaat...1433...atgcgttttag gacgagaa
D.Gri taaatttg gtaagtgacatg...3605...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacgcaaatat...1302...atgcgttttag gacgagaa
D.Per taaatttg gtaagtgacatg...3471...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacgcaaatat...1436...caaaattttag gacgagaa
D.Pse taaatttg gtaagtgacatg...3453...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacgcaaatat...1454...caaaattttag gacgagaa
D.Vir taaatttg gtaagtgacatg...3594...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacaccaaataat...1313...acgcgttttag gacgagaa
D.Wil taaatttg gtaagtgacatg...2940...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacgcaaagt...1967...aactgtatgtag gacgagaa
D.Yak taaatttg gtaagtgacatg...3451...tcataaacatgaaatttgcaCAA AACcg CCATtT TATaaggtgtcaacggcacaat...1456...atgcgttttag gacgagaa
***** ***** ** * ** * * * * *

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id=89519 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9819332\_9825296\_-1 type=IN

```

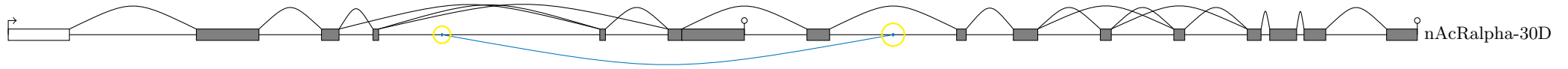
D.Mel taaatttg gtaagtgacatg...4142...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...769...atgcgttttag gacgagaa
D.Sim taaatttg gtaagtgacatg...4164...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...747...atgcgttttag gacgagaa
D.Sec taaatttg gtaagtgacatg...4166...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...745...atgcgttttag gacgagaa
D.Gri taaatttg gtaagtgacatg...4234...taattaa-tt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...677...atgcgttttag gacgagaa
D.Per taaatttg gtaagtgacatg...4157...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...754...caaaattttag gacgagaa
D.Pse taaatttg gtaagtgacatg...4161...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...750...caaaattttag gacgagaa
D.Vir taaatttg gtaagtgacatg...4258...taattaa-tt---tgtataaagATAAATGGGTTTGTataccta---caatggctagttc---...653...acgcgttttag gacgagaa
D.Wil taaatttg gtaagtgacatg...3436...---taaaatttctctatataaagATAAATGGGTTTGTataccta---gtttcgacagaac---...1475...aactgtatgtag gacgagaa
D.Yak taaatttg gtaagtgacatg...4130...-aattaaaattt---tgtataaagATAAATGGGTTTGTatacctagtcca-----agttttt...781...atgcgttttag gacgagaa
***** ***** **** * ** * ** * * * * * ** * * * * *

```

id=89519 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9819332\_9825296\_-1 type=IN VIEW

Figure 96: CS=8.64





```

D.Mel taaatttg gtaagtgcacatg...3221...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1690...atgcgttttag gacgagaa
D.Sim taaatttg gtaagtgcacatg...3236...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1675...atgcgttttag gacgagaa
D.Sec taaatttg gtaagtgcacatg...3231...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1680...atgcgttttag gacgagaa
D.Ere taaatttg gtaagtgcacatg...3252...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1659...atgcgttttag gacgagaa
D.Ana taaatttg gtaagtgcacatg...3339...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1572...atgcgttttag gacgagaa
D.Gri taaatttg gtaagtgcacatg...2808...agaactcatttaaaaacaa---TTTGGCacGTTAA--TGCAAAATA-----aatctataagcttatgcagc...2095...atgcgttttag gacgagaa
D.Moj taaatttg gtaagtgcacatg...2722...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...2189...atgcgttttag gacgagaa
D.Per taaatttg gtaagtgcacatg...3113...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1798...caaaattttag gacgagaa
D.Pse taaatttg gtaagtgcacatg...3095...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1816...caaaattttag gacgagaa
D.Vir taaatttg gtaagtgcacatg...4256...-----tttaattaaaatttgataaaAGATaaa--TGGGTTTTGA-----tacctacaatggctagtca...652...acgcgttttag gacgagaa
D.Wil taaatttg gtaagtgcacatg...2932...acggcatgtcataaacatga-----AATTTGCACAAAACcgccatttttataag----gtgtc...1979...aactgtatgtag gacgagaa
D.Yak taaatttg gtaagtgcacatg...3202...-----atttaaaacaatttg-gcac--GTTAA--TGCAAAATA-----aatctataagcttatgcagc...1709...atgcgttttag gacgagaa
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* *****
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id=89519 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9819332.9825296\_-1 type=IN

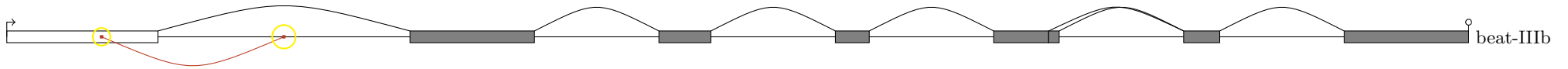
```

D.Mel gaaatcag gtaaagtggcaa...674...agaacttctga-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...510...tttgaatcag ttggattt
D.Sim gaaatcag gtaaagtggcaa...660...agaacttctga-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...499...tttgaatcag ttggattt
D.Sec gaaatcag gtaaagtggcaa...659...agaacttctga-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...497...tttgaatcag ttggattt
D.Ere gaaatcag gtaaagtggcaa...659...agaacttctga-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...495...tttgaatcag ttggattt
D.Ana gaaatcag gtaaagtggcaa...712...cttacttctcg-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...520...tataaaatcag ttggattt
D.Gri gaaatcag gtaaagtggcaa...677...tgaaaaatttc-agtttcaac-----TATTTTGCATgtTAGCagGCCAAA-----ccacgccc-aaaaatataat...490...aaaataaacag ttggattt
D.Moj gaaatcag gtaaagtggcaa...753...tgaaaaatttc-agtttcaac-----TATTTTGCATgtTAGCagacc-aaa--aaccacgccc-aaa-----...438...gaaaaatcag ttggattt
D.Per gaaatcag gtaaagtggcaa...779...gaaactcctaaagggttccgc-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...567...tttgaatcag ttggattt
D.Pse gaaatcag gtaaagtggcaa...763...agaagctctaa-gggttccgc-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...561...tttgaatcag ttggattt
D.Vir gaaatcag gtaaagtggcaa...314...cctgcttt---cgtttatgctttTCAAAACtCTATATCT-----ctatctcaaactatcttcca...865...gaaatatacag ttggattt
D.Wil gaaatcag gtaaagtggcaa...423...tactcaaatca-attcttgc-----GTTTTTGCAGATT-----acaaaccc-aaaaataacca...685...acaaaaaaaag ttggattt
D.Yak gaaatcag gtaaagtggcaa...673...agaacttctga-agtttcaac-----TATTTTGCATggTAGCaggc-aaa--aaccacgccc-aaa-----...496...tttgaatcag ttggattt
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id=89526 gene=FBgn0032151 name=nAcRalpha-30D segment=chr2L\_9807958.9809221\_-1 type=IN VIEW

Figure 97: CS=9.36



D.Me1	tgctgtgt	ggttggcgaagg...334...ttcctacttagtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...194...cgccgacaataa	gtgagtat
D.Sim	tgctgtgt	ggttggcgaagg...334...ttcctacttagtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...194...cgccgacaataa	gtgagtat
D.Sec	tgctgtgt	ggttggcgaagg...325...ttcctacttagtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...194...cgccgacaataa	gtgagtat
D.Ere	tgctgtgt	ggttggcgaagg...319...ttcctacttagtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...178...cgccggcaataa	gtaagtat
D.Ana	tcctgtgt	ggttggcgaagg...360...gtgtgtgtgctttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...213...tagcagcaataa	gtgagtat
D.Gri	tgctgtgt	ggttgagacgac...295...gtgtgtgtgctttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...133...tgccggcagcag	ctaaaaag
D.Moj	tgctgtgt	ggttgagacgac...339...ctggctcgtcgtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...294...aacagtgcagca	gtgagcat
D.Per	tgctgtgt	ggttgacgacgc...349...ttggccaacgttttgacaaa	<b>TTAAAATGC</b>	<b>atAAATTATG</b>	aatgaaagtaccgttacgtg...206...taccagtcataa		gtaagtat
D.Pse	tgctgtgt	ggttgacgacgc...355...ttggccaacgttttgacaaa	<b>TTAAAATGC</b>	<b>atAAATTATG</b>	aatgaaagtaccgttacgtg...206...taccagtcataa		gtaagtat
D.Yak	tgctgtgt	ggttggtgaagg...334...ttcctccttagtttgacaaa	<b>TTAAAATGC</b>	<b>atAAAT</b>	tatgaatgaaagtaccgtta----	...184...gcaaggcaataa	gtgagtat
		* *****			*****		* * * *

id=82924 gene=FBgn0053179 name=beat-IIIb segment=chr2L.16973091.16973697.1 type=E5

D.Me1	gacaataa	gtgagtattatg...1654...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagccagtacca-tgcttgc---...1060...ttatactttcag	attgtcctt
D.Sim	gacaataa	gtgagtattatg...1521...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagccagtacca-tgcttgc---...1178...ttatacttccag	atggctctt
D.Sec	gacaataa	gtgagtattatg...1577...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagcca---cca-tgcttgccac...1223...ttatactttcag	atggctctt
D.Ere	ggcaataa	gtaagtattatg...1606...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagccagtcca-tgcttgc---...1153...ttatattttcag	atggctctt
D.Ana	agcaataa	gtgagtattatg...1336...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagccagtccc-tgcttgc---...995...ttgtcctttcag	actccttgt
D.Gri	ggcagcag	ctaaaaagctga...1844...gtgcttagttgtgctttgg-----	<b>TTATTTCAT</b>	<b>aTTTAA</b>	caagacgacgcca-ttctagc---...1249...tatttctttgca	ggtgaatg
D.Moj	gtcagcaa	gtgagcattcga...1773...tcttagagctgtcgcttcgg-----	<b>TTATTTCAT</b>	<b>aTTTAA</b>	caaagcgtcgcca-ttctggc---...1884...ttgccaatgcg	attttcct
D.Per	agtataa	gtaagtattatg...1440...-----accttgctgcgacggtgtata	<b>TGTAT</b>	<b>ATTTCAT</b>	caagccagtgccagtgcag---...1051...taccattcacag	gctgcca
D.Pse	agtataa	gtaagtattatg...1432...-----accttgctgcgacggtgtata	<b>CGTAT</b>	<b>ATTTCAT</b>	caagccagtgccagtgcag---...1027...taccattcacag	gctgcca
D.Yak	ggcaataa	gtgagtattatg...1552...--ttagaccttgctctccga---at-----	<b>ATTTCAT</b>	<b>aTTTAA</b>	caagccagtacca-ggcctgc---...1232...ttctattttcag	atggctctt
		* * *			*****	* * *

id=82925 gene=FBgn0053179 name=beat-IIIb segment=chr2L.16973698.16976489.1 type=I5 VIEW

Figure 98: CS=14.8



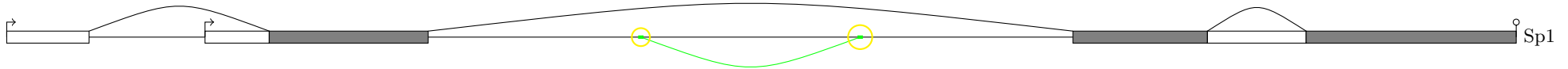
D.Mel	ttaatccg	gtaagccgaaat...2761...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgtgcttttt...	2151...	ccatcctttcag	gatcatcc
D.Sim	ttaatccg	gtaagccgtaat...2793...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgtgcttttt...	2119...	gtatcctttcag	gatcatcc
D.Sec	ttaatccg	gtaagccgaaat...2798...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgtgcttttt...	2114...	gtatcctttcag	gatcatcc
D.Ere	ttaatccg	gtaagccgaaat...2792...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgtgcttttt...	2120...	ctatcctttcag	gatcatcc
D.Gri	tcaatccg	gtaagtggtaaa...2797...	catatgcgcagttgcacgac	GTTGAAATTGCTC	caattatgttttgttttttg...	2115...	tgctcctttccag	gacatcc
D.Moj	taaatccg	gtaagtgtctacc...3257...	catgtgcgcagttgcacgac	GTTGAAATTGCTC	caattatgttgctccgggtg...	1655...	cgctcttttag	gatcatcc
D.Per	ttaatccg	gtaagccgcaca...3135...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgttttttg...	1777...	gctgcttttcag	gatcatcc
D.Pse	ttaatccg	gtaagccgcaca...3118...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgttttttg...	1794...	gctgcttttcag	gatcatcc
D.Wil	ttaatccg	gtaagtttctat...2949...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtggatatttttt...	1963...	tgctccttcag	gatcatcc
D.Yak	ttaatccg	gtaagtgcgaaat...2633...	catacgcgcagttgcacgac	GTTGAAATTGCTC	caattaagtgtgtgcttttt...	2279...	gtatccttacag	gatcatcc
	* *****	*****	*** *****	*****	*		** **	** *****

id=11676 gene=FBgn0020378 name=Sp1 segment=chrX.9624711\_9647033.1 type=IN

D.Mel	acagctag	gtaagcagacag...176...	-gctggcc-ctatac	gactcgc	GAGTAATTCAGC	atctatccttacag	tcgcccc
D.Sim	acagctag	gtaagcagacag...182...	-gctggcc-ctatac	gactcgc	GAGTAATTCAGC	atctatccttacag	tcgcccc
D.Sec	acagctag	gtaagcagactg...182...	-gctggcc-ctatac	gactcgc	GAGTAATTCAGC	atctatccttacag	tcgcccc
D.Ere	acagctag	gtaagcagacag...209...	-gctggcc-ctatac	gactcgc	GAGTAATTCAGC	atctatccttacag	tcgcccc
D.Gri	actgctag	gtaagcagcttg...622...	agcgcgct-ctataca	act-gt	GAGTAATTCAGC	atataccttacag	tcgcccgc
D.Moj	acagctag	gtaagcagcag...194...	-gcatgct-ttataca	actgt	GAGTAATTCAGC	atataccttacag	tcgtccgc
D.Per	acagctag	gtaagaagcgca...742...	-gctggat-ctataca	actcgc	GAGTAATTCAGC	atctatccttacag	tcgcccac
D.Pse	acagctag	gtaagaagcgca...708...	-gctggat-ctataca	actcgc	GAGTAATTCAGC	atctatccttacag	tcgcccac
D.Wil	acagctag	gtaagcatctaa...117...	--cttcctattataca	actgt	GAGTAATTCAGC	atctatccttacag	tcgcccac
D.Yak	acagctag	gtaagcagacag...367...	-gctggcc-ctatac	gactcgc	GAGTAATTCAGC	atctatccttacag	tcgcccc
	** *****	***** *	*	***** ** *	*****	*****	*** **

id=11678 gene=FBgn0020378 name=Sp1 segment=chrX.9647354\_9647588.1 type=AN VIEW

Figure 99: CS=13



```

D.Mel ttaatccg gtaagccgaaat...2751...agtcattactcata-----cgcgca-----GTTGcACGAcGTTGAAattgctccaattaagtgtgt---...2158...ccatcctttcag gatcatcc
D.Sim ttaatccg gtaagccgtaat...2783...agccattactcata-----cgcgca-----GTTGcACGAcGTTGAAattgctccaattaagtgtgt---...2126...gtatcctttcag gatcatcc
D.Sec ttaatccg gtaagccgaaat...2788...agccattactcata-----cgcgca-----GTTGcACGAcGTTGAAattgctccaattaagtgtgt---...2121...gtatcctttcag gatcatcc
D.Ere ttaatccg gtaagccgaaat...2782...agccattactcata-----cgcgca-----GTTGcACGAcGTTGAAattgctccaattaagtgtgt---...2127...ctatcctttcag gatcatcc
D.Gri tcaatccg gtaagtggtaaa...2781...-----actcgcaggagagccccataTGCgcaGTTGcACGAcGTTGAAattgctccaattatgt---ttt...2123...tgctctttccag gaccatcc
D.Per ttaatccg gtaagccgcaca...3125...agccattactcata-----cgcgca-----GTTGcACGACGTTGAaattgctccaattaagtgc-t---...1785...gctgcttttcag gatcatcc
D.Pse ttaatccg gtaagccgcaca...3108...agccattactcata-----cgcgca-----GTTGcACGACGTTGAaattgctccaattaagtgc-t---...1802...gctgcttttcag gatcatcc
D.Wil ttaatccg gtaagtttctat...2939...agccattactcata-----cgcgca-----GTTGcACGACGTTGAAAttgctccaattaagtggatat...1968...tgtctcttgag gatcatcc
D.Yak ttaatccg gtaagtcgaaat...2623...agccattactcata-----cgcgca-----GTTGcACGAcGTTGAAattgctccaattaagtgtgt---...2286...gtatccttacag gatcatcc
* ***** ***** * * * ***** ** * ** ** ** **

```

id=11676 gene=FBgn0020378 name=Sp1 segment=chrX.9624711\_9647033.1 type=IN

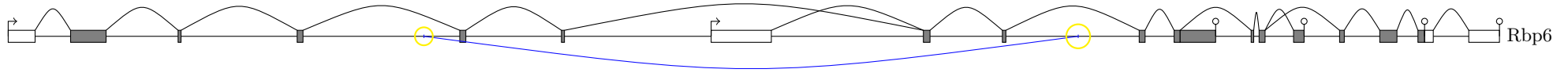
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D.Mel ttaatccg gtaagccgaaat...3994...-atccttctctagagaaatcc---TTCGACctTCGTCAAT-----caggcagc-aattttcgaatg...915...ccatcctttcag gatcatcc
D.Sim ttaatccg gtaagccgtaat...4018...-atccttctctagagaaatcc---TTCGACctTCGTCAAT-----caggcagc-aattttcgagt...891...gtatcctttcag gatcatcc
D.Sec ttaatccg gtaagccgaaat...4027...-atccttctctagagaaatcc---TTCGACctTCGTCAAT-----caggcagc-aattttcgagt...882...gtatcctttcag gatcatcc
D.Ere ttaatccg gtaagccgaaat...4040...aatccttctctagtgaatc---TTCGACctTCGTCAAT-----caggcagc-aattttcgagt...869...ctatcctttcag gatcatcc
D.Gri tcaatccg gtaagtggtaaa...3794...-ccaatacaaatccaaatcc---TCGACctTCGTCAATcaCGCAgcaacttcagtcgcacaac-----...1110...tgctctttccag gaccatcc
D.Per ttaatccg gtaagccgcaca...4156...-acacacacaatatcaaatcc---TCGACcGTCGTCAAT-----aaggcagc-aattagtgtggg...754...gctgcttttcag gatcatcc
D.Pse ttaatccg gtaagccgcaca...4146...-acacacacaatatcaaatcc---TCGACcGTCGTCAAT-----caggcagc-aattagtgtggg...764...gctgcttttcag gatcatcc
D.Wil ttaatccg gtaagtttctat...4258...-atgattgagaatacattcccATTTCGACcGTCGTCAAT-----cagtcagt-aattagtgtgag...648...tgtctcttgag gatcatcc
D.Yak ttaatccg gtaagtcgaaat...3890...-atccttctctagagaaatcc---TTCGACctTCGTCAAT-----caggcagcaaatttcgagt...1019...gtatccttacag gatcatcc
* ***** ***** * * ***** ** * ** ** **

```

id=11676 gene=FBgn0020378 name=Sp1 segment=chrX.9624711\_9647033.1 type=IN VIEW

Figure 100: CS=10.8



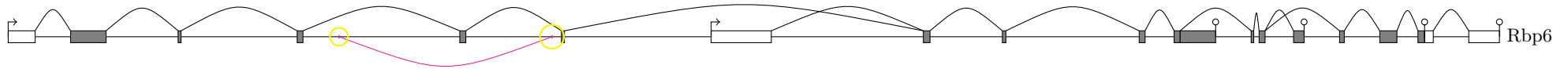
D.Mel	agatccag	gtgagttggtcc...4765...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	147...	atctacttgcat	aggcttcg
D.Sim	agatccag	gtgagttggtcc...4764...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	148...	atctacttgcat	aggcttcg
D.Sec	agatccag	gtgagttggtcc...4764...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	148...	atctacttgcat	aggcttcg
D.Ere	agatccag	gtgagtgggtcc...4730...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	182...	atctacttgcat	aggcttcg
D.Ana	agatccag	gtgagtgcgaag...4707...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	205...	atctacttgcat	aggcttcg
D.Gri	agatccag	gtgagtttctaa...4797...	ttgatgtaatttgagccttct	<b>AATTGGCGCACGT</b>	gctgcccagttgagttcagg...	115...	tctctattgcag	aggttttg
D.Moj	agatccag	gtgagtttaagc...4782...	ttgatgtaatttgagccttct	<b>AATTGGCGCACGT</b>	gctggcacggttaacgttct...	130...	tctctattacag	gggctttg
D.Vir	agatccag	gtgagttattca...4777...	ttgatgtaatttgagccttct	<b>AATTGGCGCACGT</b>	gctgctcgtaccgttgctg...	135...	tcttttttgcag	gggctttg
D.Wil	agatctag	gtaagtttcatg...4648...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	264...	ttatacttgcat	aggcttcg
D.Yak	agatccag	gtgagttggtcc...4730...	ttgatgtaatttgagcgcct	<b>AATTGGCGCACGT</b>	gctaaactgacgatggcagg...	182...	atctacttgcat	aggcttcg
	***** **	** **		*****	*****	*	** **	** ** *

id=82211 gene=FBgn0260943 name=Rbp6 segment=chr3L.17160200.17172393.-1 type=IN

D.Mel	gcacagag	gtgagtttttt...3621...	--agc-tggcgtgcagca-ttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaata...	1291...	tttctcttgcat	gttttggc
D.Sim	gcacagag	gtgagtttttt...3591...	--agc-tggcgtgcagca-ttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaata...	1321...	tttctcttgcat	gttttggc
D.Sec	gcacagag	gtgagtttttt...3605...	--agc-tggcgtgcagca-ttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaata...	1307...	tttctcttgcat	gttttggc
D.Ere	gcacagag	gtgagtccttct...3579...	--agc-tggcgtgcagca-ttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaata...	1333...	tttctcttgcat	gttttggc
D.Ana	gcacagag	gtaagcaatcgc...3628...	--agctttactgtct--acttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaagcaaata...	1284...	tttctcttgcat	gttttggc
D.Gri	gcacagag	gtaagttaacaa...3507...	ccaac-t-acgtgca--acttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaaca...	1405...	gtttttttacag	gttttggc
D.Moj	gcacagag	gtgagcactgaa...3234...	acaac-t-acgtgca--acttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaaca...	1678...	gattttttgcag	gttttggc
D.Vir	gcacagag	gtaagctaacag...3068...	ctatg-t-acgtgca--acttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaaca...	1844...	gctttatttcag	gttttggc
D.Wil	gcacagag	gtgagttcatta...3165...	ct--c-t-acgtgcaacacttgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaaca...	1747...	aattttttcag	gttttggc
D.Yak	gcacagag	gtgagtccttct...3491...	--agc-tggcgtgcaaca-ctgca	<b>ACGTGCGCTAATT</b>	ttatataattaaacaaata...	1421...	tttctcttgcat	gttttggc
	***** **	** **		* *****	* *****	*****	* ** **	*****

id=82221 gene=FBgn0260943 name=Rbp6 segment=chr3L.17071299.17077207.-1 type=IN VIEW

Figure 101: CS=10.8



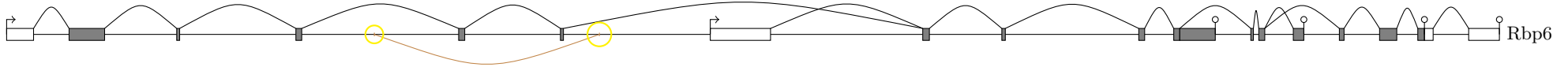
D. Mel	agatccag	gtgagttggtcc...2829...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTttGTTGGCATcgttg	ttg	aatagcaatttc	-----	...2062...atctact	gag	aggcttcg		
D. Sim	agatccag	gtgagttggtcc...2853...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTttGTTGGCATcgttg	ttg	aatagcaatttc	-----	...2038...atctact	gag	aggcttcg		
D. Sec	agatccag	gtgagttggtcc...2858...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTttGCATcGTTG	TTGAA	---	tagcaattt	ctatggcaaaa	...2026...atctact	gag	aggcttcg	
D. Ere	agatccag	gtgagttggtcc...2791...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTttGTTGGCATcgttg	ttg	aatagcaatttc	-----	...2100...atctact	gag	aggcttcg		
D. Ana	agatccag	gtgagttggtcc...3176...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTA	-----	gttt	-----	aatagcaatttc	...1724...atctact	gag	aggcttcg	
D. Gri	agatccag	gtgagttggtcc...3714...at	atgcaaattg	tttt	---	AAATTGCAacAAGC	-----	-----	-----	atcattgttattgctattg	...1196...tctct	atg	aggcttcg	
D. Moj	agatccag	gtgagttggtcc...3826...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCct	---	CATTGTTATTG	---	ttattg	ccgctgctgctgct	...1067...tctct	atg	aggcttcg
D. Vir	agatccag	gtgagttggtcc...4621...t	atgcaaattg	tttt	---	ATGGCTT	---	GTAAGcgTCTGT	-----	-----	caggtcgagcattagtcgag	...285...tctct	atg	aggcttcg
D. Wil	agatccag	gtgagttggtcc...2759...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGC	-----	-----	-----	tcgactg	ccgctgctgctgct	...2142...ttact	atg	aggcttcg
D. Yak	agatccag	gtgagttggtcc...2734...ttccat	atgcaaattg	tttt	---	TATAAATTGCAacAAGCcaTTGTttGTTGGCATcgttg	ttg	aatagcaatttc	-----	...2157...atctact	gag	aggcttcg		
	**** *	** ***	* **	*** *	**	****		*		** ***	** ** *			

id=82211 gene=FBgn0260943 name=Rbp6 segment=chr3L.17160200.17172393.-1 type=IN

D. Mel	gcaaaaag	gtaaatgttaca...1866...-----	ccttggggcaatttcattta	-	ATGTgCAGTGCAG-GCTTaTGCAAgATTATG	-	cgcggtatta	aatatgaaga...99...tttccc	acgcag	gtc	gatcc		
D. Sim	gcaaaaag	gtaaatgttaca...1939...-----	ccttggggcaatttcattta	-	ATGTgCAGTGCAG-GCTTaTGCAAgATTATG	-	cgcggtatta	aatatgaaga...101...tttccc	acgcag	gtc	gatcc		
D. Sec	gcaaaaag	gtaaatgttaca...1955...cccact	ccccttggggcaat	-	TTCAttTAATGTGCAGTGcaG-GCTTaTGCAAgATTATG	-	cgcggtatta	aatatgaaga...93...tttccc	acgcag	gtc	gatcc		
D. Ere	gcaaaaag	gtaaatgttaca...2334...-----	ccttggggcaatttcattta	-	ATGTgCAGTGCAG-GCTTaTGCAAgATTATG	-	cgcggtatta	aatatgaaga...97...tttccc	acgcag	gtc	gatcc		
D. Ana	gcaaaaag	gtaaatgttaca...1663...-----	caatttcattta	atgtgcag	-	TGCAG-GCTTaTGCAAgATTATG	-	cacggctatta	aatatgaaga...103...tctc	gccgcag	gtc	gatcc	
D. Gri	gcaaaaag	gtaaaagaaaaa...2321...-----	tcgctta	atgcgaatgcag	-	GCTTaTGCAAgATTATG	-	atggttggg	cattatga	...160...tttgc	ttgcag	gtg	gaccc
D. Moj	gcaaaaag	gtaaatctctac...3033...-----	ccctaggagtaattcctgct	TAATGcGCAATGcaG	-	GCTTaTGCAAgATTATG	-	ccttgctatta	aatatgaaga...132...ttctg	ttgcag	gtg	gaccc	
D. Vir	gcaaaaag	gtaaatctctac...2570...-----	attctcgctta	atgcgaat	-	GCAG-GCTTaTGCAAgATTATG	-	gctcggctatta	aatatgaag	...114...ttgtg	cttacag	gtg	gaccc
D. Wil	gcaaaaag	gtaaatgttaca...3547...-----	aatttcgctta	atgtgcaat	-	GCAG-GCTTaTGCAAgATTATG	-	cctcggctatta	aatatgaag	...217...ttctc	ctgcag	gtc	gatcc
D. Yak	gcaaaaag	gtaaatgttaca...3474...-----	ccttggggcaatttcattta	-	ATGTgCAGTGCAG-GCTTaTGCAAgATTATG	-	cgcggtatta	aatatgaaga...99...tttccc	acgcag	gtc	gatcc		
	*****	*****	*		*****		*****	*	***	** ** *			

id=82213 gene=FBgn0260943 name=Rbp6 segment=chr3L.17158055.17160114.-1 type=IN VIEW

Figure 102: CS=12



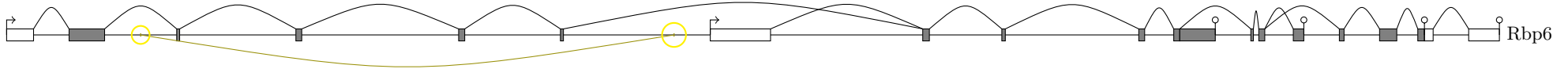
D. Mel	agatccag	gtgagttggtcc...4083...	aattgcaataaaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctagttgggctc...	826...	-atctacttgca	aggcttcg
D. Sim	agatccag	gtgagttggtcc...4082...	aattgcaataaaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctagttgagctc...	827...	-atctacttgca	aggcttcg
D. Sec	agatccag	gtgagttggtcc...4074...	aattgcaataaaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctagttgggctc...	835...	-atctacttgca	aggcttcg
D. Ere	agatccag	gtgagttggtcc...4071...	aattgcaataaaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctagttgggctc...	838...	-atctacttgca	aggcttcg
D. Ana	agatccag	gtgagtgcaag...3977...	aattgcaatagaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctgttgggggc...	932...	-atctacttgca	aggcttcg
D. Gri	agatccag	gtgagtttctaa...4026...	aattgcaatagaatcgacgt	TAATtACTGTcTGTGC	ttgcggttctgttctgtgtg-	884...	tctcta-ttgcag	aggttttg
D. Moj	agatccag	gtgagtttaagc...4048...	aattgcaatagaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttcagctccagctc...	861...	tctcta-ttacag	gggctttg
D. Vir	agatccag	gtgagttattca...4099...	aattgcaatagaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttaaggcttccgc-	811...	tctttt-ttgcag	gggctttg
D. Yak	agatccag	gtgagttggtcc...3999...	aattgcaataaaatcgctcgt	TAATtACTGTcTGTGC	ttgcggttctagttgggctc...	910...	-atctacttgca	aggcttcg
	*****	*****	*****	*****	*****	*****	*****	*****

id=82211 gene=FBgn0260943 name=Rbp6 segment=chr3L.17160200.17172393.-1 type=IN

D. Mel	atcccaag	gtaagttccaga...2610...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctggt-tgcacacac...	2301...	tcagtcgttatc	agacaagc
D. Sim	atcccaag	gtaagttccaga...2641...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctggt-tgcacacac...	2270...	tcagtcgttatc	agacaagc
D. Sec	atcccaag	gtaagttacaga...2562...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctggt-tgcacacac...	2349...	tcagtcgttatc	agacaagc
D. Ere	atcccaag	gtaagttccata...2635...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctggt-tgcacacac...	2276...	tcagtcgttatc	agacaagc
D. Ana	atcccaag	gtaagtactact...2558...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctgct-gatgctgat...	2353...	tcagtcgttatc	agacaagc
D. Gri	atcccaag	gtaagtaccac...2743...	aaacaaaccaggatttacat	TACACAGTtATTG	ctgct-cacacacaaacacac...	2169...	tcagtcgttatc	agacaagc
D. Moj	atcccaag	gtaagtacaagc...3073...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgct-cacacacacatgcac...	1838...	tcagtcgttatc	agacaagc
D. Vir	atcccaag	gtaagtaccac...2977...	aaacaaaccaggatttacat	TACACAGTtATTG	ctgctgctgcacgcacaca-	1935...	tcagtcgttatc	agacaagc
D. Yak	atcccaag	gtaagttccaca...2606...	aaacaaaccaggatttacat	GTACACAGTtATTG	ctgctgctggt-tgcacacac...	2305...	tcagtcgttatc	agacaagc
	*****	*****	*****	*****	*****	*****	*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L.17141055.17158012.-1 type=IN VIEW

Figure 103: CS=10.8



D. Mel	gatcccg	gtaagtgtgctg...3572...	tggtgctgccgctggttgc	TTGTTGcTGCACaTTTTAT	taacattttcatttagttt	---...1334...	ttctcgtttcag	aaaaatgt
D. Sim	gatcccg	gtaagtgtgctg...3615...	tggtgctgccgctggttgc	TTGTTGcTGCACaTTTTAT	taacattttcatttagtta	---...1291...	ttctcgtttcag	aaaaatgt
D. Sec	gatcccg	gtaagtgtgctg...3642...	tggtgctgctgctggttgc	TTGTTGcTGCACaTTTTAT	taacattttcatttagtta	---...1264...	ttctcgtttcag	aaaaatgt
D. Ere	gatcccg	gtaagtggggtt...3619...	tggtgctgccgcttttgc	TTGTTGcTGCACaTTTTAT	taacattttcatttagttt	---...1287...	ttctcgtttcag	aaaaatgt
D. Ana	gatccgg	gtaagtggggg...4020...	cattgcaatttgttctc	TGCATTTTGTGTGTGTTT	-acattcg-ttttcgtgctgcc	...885...	cgctttttcag	aaaaatgt
D. Gri	gatcctg	gtaagtgtcggg...4095...	tggtgtttctgtgttgc	TGTTGTTGCACaTTTTAT	taacattttcatttagttt	---...812...	ggctcgttacag	caaaatgt
D. Moj	gatcctg	gtaagtgtcgac...4330...	cattgcaatttgttctc	TGCATTTTGTGTGTGTTT	-acattcgtttttcgtgctgc	...575...	gttccttatag	aaaaatgt
D. Wil	gatcctg	gtaagtgttgc...4096...	agcttacttcacgttgc	CGTTGTTGTTGCACaTTTTAT	taacattttcatttagtgc	---...808...	tttctgttatag	caaaatgt
D. Yak	gatcctg	gtaagtgtgctt...3697...	tggtgctgccgctggttgc	TTGTTGcTGCACaTTTTAT	taacattttcatttagttt	---...1209...	ttctcgtttcag	aaaaatgt
	*****	**	*****	*	*	**	**	*****

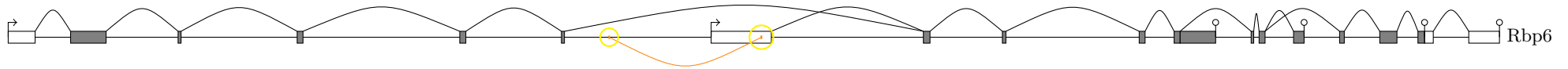
id=82207 gene=FBgn0260943 name=Rbp6 segment=chr3L.17214943.17228451.-1 type=IN

D. Mel	atcccaag	gtaagttcaga...3976...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctggagcgccaagt	---...931...	tcagtcgttatc	agacaagc
D. Sim	atcccaag	gtaagttcaga...3993...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctggagcaccagt	---...914...	tcagtcgttatc	agacaagc
D. Sec	atcccaag	gtaagttacaga...3981...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctggagcaccagt	---...926...	tcagtcgttatc	agacaagc
D. Ere	atcccaag	gtaagttccata...4031...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctggagcgccaagt	---...876...	tcagtcgttatc	agacaagc
D. Ana	atcccaag	gtaagtactact...4035...	-tctcctgctggggccaccacg	AAAACAaACATAAAGGTGCA	acaatgacgcgctagagca	-----...870...	tcagtcgttatc	agacaagc
D. Gri	atcccaag	gtaagtaccac...3745...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctgattttcaac	---...1163...	tcagtcgttatc	agacaagc
D. Moj	atcccaag	gtaagtacaagc...4006...	gctgactgc-ggccaccacg	AAAACAaACATAAAGGTGCA	acaatgacgcgctagatt	-----...899...	tcagtcgttatc	agacaagc
D. Wil	atcccaag	gtaagtaccga...3585...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGACG	cgcgtaagctctgtggctc	...1320...	tcagtcgttatc	agacaagc
D. Yak	atcccaag	gtaagttccaca...3971...	-----ggccaccacgaaaacaac	ATAAAGGTGCAaCAATGA	cgcgctggagcgctatgt	---...936...	tcagtcgttatc	agacaagc
	*****	*****	*****	*****	*****	*****	*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L.17141055.17158012.-1 type=IN VIEW

Figure 104: CS=11.7





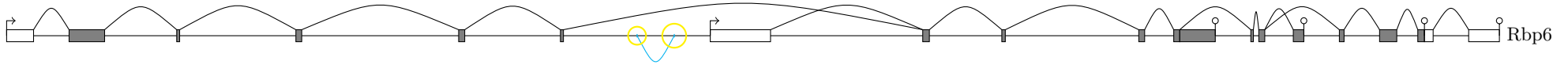
D. Mel	atcccaag	gtaagttccaga...2731...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2170...	tcagtcgttatc	agacaagc
D. Sim	atcccaag	gtaagttccaga...2746...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2155...	tcagtcgttatc	agacaagc
D. Sec	atcccaag	gtaagttacaga...2672...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2229...	tcagtcgttatc	agacaagc
D. Ere	atcccaag	gtaagttccata...2760...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2141...	tcagtcgttatc	agacaagc
D. Ana	atcccaag	gtaagtactact...2734...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2167...	tcagtcgttatc	agacaagc
D. Gri	atcccaag	gtaagtaccac...2864...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcagccgagtcgctg...	2037...	tcagtcgttatc	agacaagc
D. Moj	atcccaag	gtaagtacaagc...3193...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGC-----	catggcagcaaccagcca...	1714...	tcagtcgttatc	agacaagc
D. Vir	atcccaag	gtaagtaccac...3074...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcagccagcagccgctg...	1827...	tcagtcgttatc	agacaagc
D. Wil	atcccaag	gtaagtaccga...2503...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcagcaccagcaccag...	2398...	tcagtcgttatc	agacaagc
D. Yak	atcccaag	gtaagttccaca...2743...	tttccgggaacaacatttca	TGGCaCTGATAAag	CTGCcaTGGC	agcagcctctgtcgcgccg...	2158...	tcagtcgttatc	agacaagc
	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17141055\_17158012\_-1 type=IN

D. Mel	tcgttacc	agacaagcgagt...656...	aatctgttctacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	103...	aagaagctcggt	gtaagtgc
D. Sim	tcgttacc	agacaagcgagt...654...	aatctgttctacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	103...	aagaagctcggt	gtaagtgc
D. Sec	tcgttacc	agacaagcgagt...660...	aatctgttctacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	103...	aagaagctcggt	gtaagtgc
D. Ere	tcgttacc	agacaagcgagt...661...	aatctgttctacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	103...	aagaagctcggt	gtaagtgc
D. Ana	tcgttacc	agacaagcgagt...671...	aatctgttttacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	100...	aagaagctcggt	gtaagtgc
D. Gri	tcgttacc	agacaagcgagt...856...	aatctgttttacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	ccgcttccgagcgaccat...	118...	aagaagctcggt	gtaagtgc
D. Moj	tcgttacc	agacaagcgagt...907...	---tggttctacgtgaagcagcca	GCGGag	TTATTTTCAGca	GCCC	ccgcttccgagcgaccat...	133...	aagaagctcggt	gtaagtgc
D. Vir	tcgttacc	agacaagcgagt...727...	aatctgttttacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	ccgcttccgagcgaccat...	118...	aagaagctcggt	gtaagtgc
D. Wil	tcgttacc	agacaagcgagt...959...	aatctgttttacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	145...	aagaagctcggt	gtaagtgc
D. Yak	tcgttacc	agacaagcgagt...712...	aatctgttctacgtgaagca	GCCAGCGGag	TTATTTTCAGca	GCCC	---ccgcttccgagcgaccat...	103...	aagaagctcggt	gtaagtgc
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=82216 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17140207\_17141054\_-1 type=AN VIEW

Figure 105: CS=9



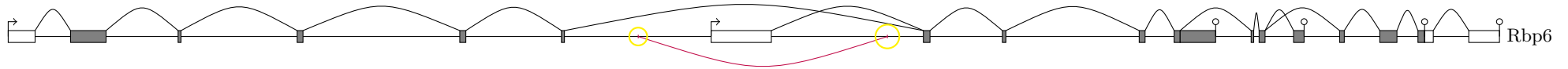
D.Mel	atcccaag	gtaagttccaga...3140...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-agacacac...	1768...	tcagtcgttatc	agacaagc
D.Sim	atcccaag	gtaagttccaga...3155...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-agacacac...	1753...	tcagtcgttatc	agacaagc
D.Sec	atcccaag	gtaagttacaga...3082...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-aacaaca...	1826...	tcagtcgttatc	agacaagc
D.Ere	atcccaag	gtaagttccata...3168...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-agacacac...	1740...	tcagtcgttatc	agacaagc
D.Ana	atcccaag	gtaagtactact...3113...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-aggcacga...	1795...	tcagtcgttatc	agacaagc
D.Gri	atcccaag	gtaagtaccac...3241...	gccgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacacactgcacaca-	1667...	tcagtcgttatc	agacaagc
D.Moj	atcccaag	gtaagtacaagc...3598...	gccgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacacacacatgcacg-	1310...	tcagtcgttatc	agacaagc
D.Vir	atcccaag	gtaagtaccac...3469...	gccgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaatacacgcacacaga-	1439...	tcagtcgttatc	agacaagc
D.Wil	atcccaag	gtaagtaccga...2845...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaa-acacacgacaatgc...	2063...	tcagtcgttatc	agacaagc
D.Yak	atcccaag	gtaagttccaca...3158...	ggcgcgtgactccaggcaa	TGTCAAGTTG	CACTTT	caccaacgcacg-agacacac...	1750...	tcagtcgttatc	agacaagc
	*****	*****		**	*****			*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L.17141055.17158012.-1 type=IN

D.Mel	atcccaag	gtaagttccaga...3979...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtggagcgcgaagtct...	929...	tcagtcgttatc	agacaagc
D.Sim	atcccaag	gtaagttccaga...3996...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtggagcgcgaagtct...	912...	tcagtcgttatc	agacaagc
D.Sec	atcccaag	gtaagttacaga...3984...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtggagcgcgaagtct...	924...	tcagtcgttatc	agacaagc
D.Ere	atcccaag	gtaagttccata...4034...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtggagcgcgaagtct...	874...	tcagtcgttatc	agacaagc
D.Ana	atcccaag	gtaagtactact...4047...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgttagacacactagctct...	861...	tcagtcgttatc	agacaagc
D.Gri	atcccaag	gtaagtaccac...3748...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtagatTTTTcaactct...	1160...	tcagtcgttatc	agacaagc
D.Moj	atcccaag	gtaagtacaagc...4018...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtagatTTTTcagcgc...	890...	tcagtcgttatc	agacaagc
D.Vir	atcccaag	gtaagtaccac...3906...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtagatTTTTgcccagc...	1002...	tcagtcgttatc	agacaagc
D.Wil	atcccaag	gtaagtaccga...3588...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtagctctgtggctct...	1320...	tcagtcgttatc	agacaagc
D.Yak	atcccaag	gtaagttccaca...3974...	caccacgaaaacaacata	AAGGTGCAAC	TGACG	cgcgtggagcgcgtatgttct...	934...	tcagtcgttatc	agacaagc
	*****	*****		**	*****			*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L.17141055.17158012.-1 type=IN VIEW

Figure 106: CS=12



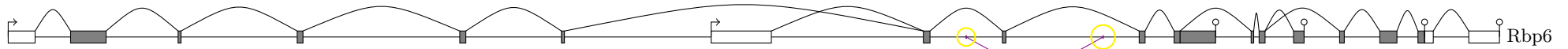
D.Mel	atccaag	gtaagttcaga...3144...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgagacacagca...1766...	tcagtcgttatc	agacaagc
D.Sim	atccaag	gtaagttcaga...3159...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgagacacagca...1751...	tcagtcgttatc	agacaagc
D.Sec	atccaag	gtaagttacaga...3086...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgaacaacaatg...1824...	tcagtcgttatc	agacaagc
D.Ere	atccaag	gtaagttccata...3172...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgagacacagca...1738...	tcagtcgttatc	agacaagc
D.Ana	atccaag	gtaagtactact...3117...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgaggcacagaga...1793...	tcagtcgttatc	agacaagc
D.Gri	atccaag	gtaagtaccac...3748...----	caccacgaaaacaacata-----	AAGTGAACA	TGACG	-----	cgctagattttcaactct...1160...	tcagtcgttatc	agacaagc
D.Moj	atccaag	gtaagtacaagc...3597...tgccgtg	tcactccaggca-----	ATGTcAAGTTGA	CAcTTTCA	-----	ccaacacacacatgcagca...1308...	tcagtcgttatc	agacaagc
D.Vir	atccaag	gtaagtaccac...3468...tgccgcgtg	cactccaggca-----	ATGTcAAGTTGA	CAcTTTCA	-----	ccaatacacgcacacagaca...1437...	tcagtcgttatc	agacaagc
D.Wil	atccaag	gtaagtaccga...2507...----	cggaacaacatttcatggc	ACTGATAAAgCTGC	cA	TGGCAGCAGCAG	caccagcaccagcaccaacg...2390...	tcagtcgttatc	agacaagc
D.Yak	atccaag	gtaagttccaca...3162...----	cgtgcactccaggcaatgtc-----	AAGTTGA	CAcTTTCA	-----	ccaacgcacgagacacagca...1748...	tcagtcgttatc	agacaagc
	*****	*****	** *	*** **	** * *	*	*	*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L.17141055.17158012.-1 type=IN

D.Mel	agctcggt	gtaagtgccttg...4539...-aact-	gcgtaaagttggcatt----	TGAAAcTGTCAGCTT	-----	ataaatgccagctgcacaca-----	...371...tatcctttgcag	atggtgac	
D.Sim	agctcggt	gtaagtgcattg...4565...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	-----	aaaaatgccagctgcacaca-----	...345...gatttgttgcag	atggtgac	
D.Sec	agctcggt	gtaagtgcattg...4566...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	-----	aaaaatgccagctgcacaca-----	...344...gatttgttgcag	atggtgac	
D.Ere	agctcggt	gtaagtgcctt...4564...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	-----	aaaaatgccagctgcacaca-----	...346...gttcctttgcag	atggtgac	
D.Ana	aactcggt	gtaagtcaact...4449...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	-----	aaaaatgccagctgcacaca-----	...461...ctttgtttgcag	atggtgac	
D.Gri	aactcggt	gtaagtaccctg...3258...gagtt	caacgtgtcttggga----	CG--TCATGTTGtTACTTT	-----	cttcagcgcactcaactcg-----	...1650...tttattttgcag	atggtgac	
D.Moj	aactcggt	gtaagttagagcc...4508...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	aaATAT	-----	gccagctgcacacacacata...396...	atggtgac	
D.Vir	aactcggt	gtaagttagagcc...4532...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	aaATAT	-----	gccagctgcacacactgaca...372...	atggtgac	
D.Wil	agctcggt	gtaagtttcaca...2908...ccact-	agg--aggttgtaaaa	CTGCTGGCTAT	TGCAGTTT	GaaTTGGT	ttttaacaacgctgcaattt-----	...1990...tctttcttttag	atggtgac
D.Yak	agctcggt	gtaagtgcctca...4569...-aact-	gcgtaaagttggcact----	TGAAAcTGTCAGCTT	-----	aaaaatgccagctgcacaca-----	...341...aatcctttgcag	atggtgac	
	* *****	*****	* * ****	* * * **	** *	*	* ** **	*****	

id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206.-1 type=IN VIEW

Figure 107: CS=10.8



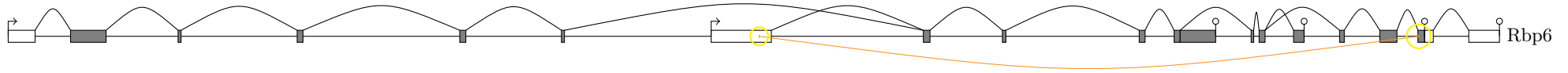
D. Mel	ttggtccg	gtaagtgaagag...4568...-----	ttggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...330...tgctttttcag	atcgagga	
D. Sim	ttggtccg	gtaagtgaagag...4594...-----	ttggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...304...tgctcttttcag	atcgagga	
D. Sec	ttggtccg	gtaagtgaagag...4594...-----	ttggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...304...tgctcttttcag	atcgagga	
D. Ere	ttggtccg	gtaagtgaagag...4578...-----	ttggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...320...tactcttttcag	atcgagga	
D. Ana	ttggtccg	gtaagtccct...4619...-----	tgggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...279...gattaattacag	atcgagga	
D. Gri	ttggtccg	gtaagtagaaa...4779...-----	ggtggtcgctgt--gcgctcac	TTTTgCAATTAGCaCAGTttTGTCTG	ctcagtcttttattcagtc---	...119...ctctatttcag	atcgagga	
D. Moj	ttggtccg	gtaagtaaaac...4756...-----	ttggctattgttggcgctca	GTTTTgCAATTAGCaCAGTttTGTCTG	ctcagtcttttagtcggcc---	...141...ttctatttcag	atcgagga	
D. Pse	ttggtccg	gtaagtgggagt...3817...agcgaactttgccaagaaa	-----	TGTGCAATTAGCAG	-----	aaaggatacagaaggaggag...1094...cactcatttcag	atcgagga	
D. Vir	ttggtccg	gtaagtaaaaac...4790...-----	tgccattgttggcgctcac	TTTTgCAATTAGCaGCAGTttTGTCTG	gttcagtctttttagtcggc---	...109...ttctatttcag	atcgagga	
D. Wil	ttggtccg	gtaagtgtcaa...3320...-----	aaactttgacaagaaagtg	-----	CAATTAGCa-CAGTCTG	-----	tgccaaagagacggggcag...1588...atatatttcag	atcgagga
D. Yak	ttggtccg	gtaagtgaagag...4580...-----	ttggccattgtgcgcaactca-	CTTTgCAATTAGCaGCAGTttTGTCTG	ctgcgaacattattcaggc---	...318...cactcttttcag	atcgagga	
	*****	*****	*	*****	*	*	** ** *	*****

id=82219 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17077257\_17121978\_-1 type=IN

D. Mel	gcacagag	gtgagtttttt...3968...-----	ttttcgccatgtgaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...933...tttctcttcag	gttttggc	
D. Sim	gcacagag	gtgagtttttt...3938...-----	ttttcgccatgtgaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...963...tttctcttcag	gttttggc	
D. Sec	gcacagag	gtgagtttttt...3952...-----	ttttcgccatgtgaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...949...tttctcttcag	gttttggc	
D. Ere	gcacagag	gtgagtccttct...3923...-----	ttttcgccatgtgaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...978...tttctcttcag	gttttggc	
D. Ana	gcacagag	gtaagcaatcg...3961...-----	ttttcgccaaaggaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...940...tttctcttcag	gttttggc	
D. Gri	gcacagag	gtaagttaaca...3927...-----	cttttgccaggccaaatct	CAGACAATTGCTAATTGAAAA	-----	acctcgataagaccaaagcg--...975...gttttttacag	gttttggc	
D. Moj	gcacagag	gtgagcactgaa...3670...-----	cttttgcccgccaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ctcgataagaccaaagcg--...1230...gatttttttcag	gttttggc	
D. Pse	gcacagag	gtgagttatcga...3864...tcaggtgtctgcacttggcc	-----	TTGCTAATTGCACAG	gagag--	cgacaggacaggga--...1047...ctctcttcag	gttttggc	
D. Vir	gcacagag	gtaagctaacag...3476...-----	ttttgcccaggccaaatct	AGACAATTGCGCTAATTGAAAA	-----	acctcgataagaccaaagcg--...1427...gctttatttcag	gttttggc	
D. Wil	gcacagag	gtgagttcatta...3738...-----	ttttgaccatgtgaaatct	CAGACAATTGCGCTAATTG	-----	aaaagcctcgataagaccaa--...1168...aatttttttcag	gttttggc	
D. Yak	gcacagag	gtgagtccttct...3835...-----	ttttgcccagccaaatct	CAGACAATTGCGCTAATTGaAAAG	-----	ccccgataaggccaaagtgg-...1066...tttctcttcag	gttttggc	
	*****	** **	* * *	*****		** * * **	** **	*****

id=82221 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17071299\_17077207\_-1 type=IN VIEW

Figure 108: CS=14.63



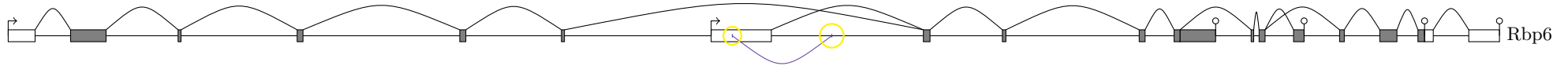
D.Mel	tcggtatc	agacaagcgagt...631...catcaagatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...141...aagaagctcgtt	gtaagtgc
D.Sim	tcggtatc	agacaagcgagt...629...catcaagatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...141...aagaagctcgtt	gtaagtgc
D.Sec	tcggtatc	agacaagcgagt...635...catcaagatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...141...aagaagctcgtt	gtaagtgc
D.Ere	tcggtatc	agacaagcgagt...636...catcaagatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...141...aagaagctcgtt	gtaagtgc
D.Ana	tcggtatc	agacaagcgagt...646...catcaagatttcacactttg	GAGTAAATCTGT	tttacgtgaagcagccagcg...138...aagaaactcgtt	gtaagttc
D.Gri	tcggtatc	agacaagcgagt...831...aatcaaaatttcacactttg	GAGTAAATCTGT	tttacgtgaagcagccagcg...156...aagaaactcgtt	gtaagtac
D.Moj	tcggtatc	agacaagcgagt...878...aatcaaaatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...171...aagaaactcgtt	gtaagtac
D.Pse	tcggtatc	agacaagcgagt...909...gatcaaaatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...150...aaaaaactcgtt	gtaagtgc
D.Wil	tcggtatc	agacaagcgagt...934...aatcaaaatttcacactttg	GAGTAAATCTGT	tttacgtgaagcagccagcg...183...aagaagctcgtt	gtaagttt
D.Yak	tcggtatc	agacaagcgagt...687...catcaagatttcacactttg	GAGTAAATCTGT	tctacgtgaagcagccagcg...141...aagaagctcgtt	gtaagtgc
*****	*****	*****	*****	*****	*****

id=82216 gene=FBgn0260943 name=Rbp6 segment=chr3L.17140207.17141054.-1 type=AN

D.Mel	acagcccg	gtgagttgtcct...260...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Sim	acagcccg	gtgagtcgtcct...243...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Sec	gcgcccgg	ttgaactacagc...256...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Ere	acagcccg	gtgagttgtcct...241...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Ana	acagcccg	gtaagtcgaggc...253...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Gri	acagcccg	gtaagtacgact...265...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Moj	acagcccg	gtaagtacgagg...226...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Pse	acagcccg	gtaagtgcaggc...355...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Wil	atagcccg	gtaagttataca...397...gtatttctctttcatttcgt	ACAG	ATTTATTc
D.Yak	acagcccg	gtgagtggtcct...238...gtatttctctttcatttcgt	ACAG	ATTTATTc
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id=82236 gene=FBgn0260943 name=Rbp6 segment=chr3L.17059941.17060236.-1 type=IN VIEW

Figure 109: CS=10.8



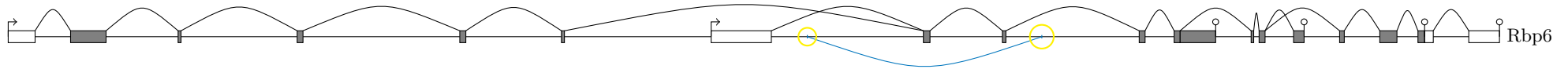
D. Mel	tcgttacc	agacaagcgagt...251...gtgtgttttaagcaaccaac	GCG	-----	TTCAAGTGCAAT	-----	caacaacaataccctaaaca	...518...aagaagctcggt	gtaagtgc	
D. Sim	tcgttacc	agacaagcgagt...243...gtgtgttttaagcaaccaac	GCG	-----	TTCAAGTGCAAT	-----	caacaacaataccctaaaca	...524...aagaagctcggt	gtaagtgc	
D. Sec	tcgttacc	agacaagcgagt...249...gtgtgttttaagcaaccaac	GCG	-----	TTCAAGTGCAAT	-----	caacaacaataccctaaaca	...524...aagaagctcggt	gtaagtgc	
D. Ere	tcgttacc	agacaagcgagt...251...gtgtgttttaagcaaccaac	GCG	-----	TTCAAGTGCAAT	-----	caacaacaataccctaaaca	...523...aagaagctcggt	gtaagtgc	
D. Ana	tcgttacc	agacaagcgagt...648...tcaagatttcacactttgga	GTAAAt	CTGTT	ttACGT	-----	gaagcagccagcggagtatt	...131...aagaactcggt	gtaagtgc	
D. Gri	tcgttacc	agacaagcgagt...833...tcaaaatttcacactttgga	GTAAAt	CTGTT	ttACGT	-----	gaagcagccagcggagtatt	...149...aagaactcggt	gtaagtgc	
D. Moj	tcgttacc	agacaagcgagt...880...tcaaaatttcacactttgga	GTAAAt	CTGTT	ctACGT	-----	gaagcagccagcggagtatt	...164...aagaactcggt	gtaagtgc	
D. Per	tcgttacc	agacaagcgagt...501...catttgcgactgtctaac	GTTGAGC	---	TTT	a-GTAGTGT	gtaaaaacaaaaa	----aaaaac	...536...aaaaactcggt	gtaagtgc
D. Pse	tcgttacc	agacaagcgagt...512...catttgcgactgtctaac	GTTGAGC	---	TTT	a-GTAGTGT	gtaaaaacaaaaa	----aaaaac	...541...aaaaactcggt	gtaagtgc
D. Vir	tcgttacc	agacaagcgagt...704...tcaaaatttcacactttgga	GTAAAt	CTGTT	ttACGT	-----	gaagcagccagcggagtatt	...149...aagaactcggt	gtaagtgc	
D. Wil	tcgttacc	agacaagcgagt...365...tacaagtaaaacaaaac	GCG	-----	TTCAAGTGCAAT	-----	caaataaccgacaaacaaat	...749...aagaagctcggt	gtaagtgc	
D. Yak	tcgttacc	agacaagcgagt...689...tcaagatttcacactttgga	GTAAAt	CTGTT	ctACGT	-----	gaagcagccagcggagtatt	...134...aagaagctcggt	gtaagtgc	
	*****	*****							*****	
			*	*	*	*	*	*	*	

id=82216 gene=FBgn0260943 name=Rbp6 segment=chr3L.17140207.17141054\_-1 type=AN

D. Mel	agctcgtt	gtaagtgccttg...3754...----tgtctgtgccatgctcataaa	---	TTGCAg	CTTGca	AGCGT	cagtgcaatcagcgtcatca	...1153...tatcctttgcag	atggtgac
D. Sim	agctcgtt	gtaagtgccttg...3776...----tgtctgtgccatgctcataaa	---	TTGCAg	CTTGca	AGCGT	cagtgcaatcagcgtcatca	...1131...gatttgttcag	atggtgac
D. Sec	agctcgtt	gtaagtgccttg...3775...----tgtctgtgccatgctcataaa	---	TTGCAg	CTTGca	AGCGT	cagtgcaatcagcgtcatca	...1132...gatttgttcag	atggtgac
D. Ere	agctcgtt	gtaagtgccttg...3756...----tgtctgtgccatgctcataaa	---	TTGCAg	CTTGca	AGCGT	cagtgcaatcagcgtcatca	...1151...gttcctttgcag	atggtgac
D. Ana	aactcgtt	gtaagtgccttg...4023...gccttaactgc-cgtcactta	---	ACGT	tAACAGTTTAC	-----	gcttgccctgcccgtctaaaa	...887...cttttgttcag	atggtgac
D. Gri	aactcgtt	gtaagtgccttg...4323...gccttaactgc-cgtcactta	---	ACGT	tAACAGTTTAC	-----	gcttgccctgcccgtctaaaa	...587...tttatttgcag	atggtgac
D. Moj	aactcgtt	gtaagtgccttg...4338...gccttaactgc-cgtcactta	---	ACGT	tAACAGTTTAC	-----	gcttgccctgcccgtctaaaa	...572...atthttgttcag	atggtgac
D. Per	aactcgtt	gtaagtgccttg...3390...--ttgatgaatthttactgctg	GCA-CTGC	agAAAGCa	TCAGC	accgctgttacatcgtta	...1515...tgtgcattccag	atggtgac	
D. Pse	aactcgtt	gtaagtgccttg...3403...--ttgatgaatthttactgctg	GCA-CTGC	agAAAGCa	TCAGC	accgctgttacatcgtta	...1502...tgtgcattccag	atggtgac	
D. Vir	aactcgtt	gtaagtgccttg...4344...gccttaactgc-cgtcactta	---	ACGT	tAACAGTTTAC	-----	gcttgccctgcccgtctaaaa	...566...atthttgttcag	atggtgac
D. Wil	agctcgtt	gtaagtgccttg...3631...gtatgcctgtgc---ctcataaa	---	TTGCAg	CTTGca	AGCGT	cagtgcaatcagcgtcatca	...1276...tcttcttttag	atggtgac
D. Yak	agctcgtt	gtaagtgccttg...4060...gccttaactgc-cgtcactta	---	ACGT	tAACAGTTTAC	-----	gcttgccctgcccgtctaaaa	...850...aatcctttgcag	atggtgac
	* *****	*****							*****
			*	**	**	*	*	*	** ** *

id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206\_-1 type=IN VIEW

Figure 110: CS=9.36



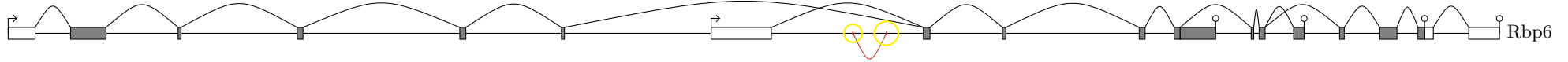
D. Mel	agctcggt	gtaagtgccttg...3411...ctggccaaagcgatttgcc-----	TTGCC	AAAAGcT	GCACG	accaacttt--gtagtaacatc-----	...1497...	tatcctttgcag	atggtgac		
D. Sim	agctcggt	gtaagtgcattg...3773...-----cgttgtctgtgccgtgctca-----	TAAATTGC	AGCTTGca	AGCG	tcagtgcacatcagcgtcatc...1132...	gatttgttcag	atggtgac			
D. Sec	agctcggt	gtaagtgcattg...3772...-----cgttgtctgtgccgtgctca-----	TAAATTGC	AGCTTGca	AGCG	tcagtgcacatcagcgtcatc...1133...	gatttgttcag	atggtgac			
D. Ere	agctcggt	gtaagtgcctt...3753...-----cgttgtctgtgccgtgctca-----	TAAATTGC	AGCTTGca	AGCG	tcagtgcacatcagcgtcatc...1152...	gttcctttgcag	atggtgac			
D. Ana	aactcggt	gtaagttcaact...4428...--tcctgatgctgctgctgctgc-----	TAACTGCG	AAAAGTTGGCACTT	G	aaactgtcagcttaaaaatg-----	...474...	ctttgttcag	atggtgac		
D. Gri	aactcggt	gtaagtaccctg...4524...--ggtactgctgctgctgttc-----	GCTAACTGCG	tAAAAGTTGGCACTT	G	aaactgtcagcttaaatatg-----	...376...	tttatttgcag	atggtgac		
D. Moj	aactcggt	gtaagtagagcc...4468...-----gactcgcgccgcatcatt	TTGGTG	CGCT	TTGG	gTAACTGCGTAAaGTTGGCACTT	g	aaactgtcagcttaaatatg-----	...415...	atttgttcag	atggtgac
D. Pse	aactcggt	gtaagtgcaaaa...4487...--gggcatgctgcatgcgccg-----	TAACTGCG	tAAAAGTTGGCACTT	G	aaaatgtcagcttaaaaatg-----	...415...	tgtgcattccag	atggtgac		
D. Vir	aactcggt	gtaagttagcca...3519...--gcgtgttctctgt--gtgctca-----	TAAATTGC	AGCTTG		caagcttcagtgcaatcagc-----	...1392...	atttgttcag	atggtgac		
D. Wil	agctcggt	gtaagtttcaca...4578...--tgctgctgctttctacgcta-----	ACTGCG	tAAAAGTTGGCACT	T	gaaactgtcagcttaaata-----	...328...	tcttcttttag	atggtgac		
D. Yak	agctcggt	gtaagtgcctca...4548...--ggctgctgcttctcagcgc-----	TAACTGCG	tAAAAGTTGGCACTT	G	aaactgtcagcttaaaaatg-----	...354...	aatcctttgcag	atggtgac		
	* *****	*****				*** ** * *		* ** **	*****		

id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206.-1 type=IN

D. Mel	gcacagag	gtgagtttttt...3053...-----ttggcaataacatgcatgag-----	TGTGCA	a	TTTTGCAG	-----	ttgccaagaccatcgtcagt-----	...1856...	tttctcttcag	gttttggc	
D. Sim	gcacagag	gtgagtttttt...3710...ttcttcagctcggca---catgtCGCTaaTAAGCcTGCG---	TGTGCA	a	TTTTGCAG	-----	ctgttacttgttccaactaa-----	...1193...	tttctcttcag	gttttggc	
D. Sec	gcacagag	gtgagtttttt...3723...ttcttcagctcggca---catgtCGCTaaTAAGCcTGCG---	TGTGCA	a	TTTTGCAG	-----	ctgttacttctccaactaa-----	...1180...	tttctcttcag	gttttggc	
D. Ere	gcacagag	gtgagtccttt...3697...ttcttcagctcggca---catgtCGCTaaTAAGCcTGCG---	TGTGCA	a	TTTTGCAG	-----	cagttacttgttccaactaa-----	...1206...	tttctcttcag	gttttggc	
D. Ana	gcacagag	gtaagcaatcgc...3138...--cttcttggcaataaacatgca---	TGAGTGTgCAA	---	TTTTGCAGTTG	-----	ccaagaccatcgtcagctcc--	...1764...	tttctcttcag	gttttggc	
D. Gri	gcacagag	gtaagttaaaca...3125...--tacttggcaataaacatgca---	TGAGTGTgCAA	---	TTTTGCAGTTGGC	-----	aaaagcatcgtcagggtctc...	...1775...	tgtttttacag	gttttggc	
D. Moj	gcacagag	gtgagcactgaa...2798...--tacttggcaataaacatgca---	TGAGTGTgCAA	---	TTTTGCAGTTGGCAA	aGGCA	CGTCAGG	cactcggcgtctcggggaaa-----	...2087...	gatttttgcag	gttttggc
D. Pse	gcacagag	gtgagttatcga...2931...--cttcttggcaataaacatgca---	TGAGTGTGCAA	---	TTTTGCAGTTG	-----	ccaagaccatcgtcagctcc--	...1971...	ctctcttcag	gttttggc	
D. Vir	gcacagag	gtaagctaacag...3273...--gagtcagca---catgtcgctaaTAAGCcTGCG---	TGTGCA	a	TTTTGCAG	-----	ctgttacttgttccaactaa-----	...1636...	gctttatttcag	gttttggc	
D. Wil	gcacagag	gtgagttcatta...2793...--tcttggcaataaacatgcatg---AGTGTgCAATTTTTTTGCAGT	TGTGCA	a	TTTTGCAGTTG	-----	tgccaaaaaaagagaa---	...2110...	aattttttcag	gttttggc	
D. Yak	gcacagag	gtgagtccttct...2914...--cttcttggcaataaacatgca---	TGAGTGTGCAA	---	TTTTGCAGTTG	-----	ccaagaccatcgtcagctcc--	...1988...	tttctcttcag	gttttggc	
	*****	** **				*** ** *		** **	*****		

id=82221 gene=FBgn0260943 name=Rbp6 segment=chr3L.17071299.17077207.-1 type=IN VIEW

Figure 111: CS=10.56



D.Me1	agctcg	gtaagtgc	ccttg...	4051...	tgcgatgggcccactgtgccc-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	853...	tatcctttg	cag	atggtgac	
D.Sim	agctcg	gtaagtgc	cattg...	4073...	tgcgatgggcccactgtgccc-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	831...	gatttgttg	cag	atggtgac	
D.Sec	agctcg	gtaagtgc	cattg...	3794...	---aattgcagc---ttgcaagcgtc	AGTGCAATCA	-----	GCgtcatcagcttcatccggtt--	1119...	gatttgttg	cag	atggtgac	
D.Ere	agctcg	gtaagtgc	cctt...	4059...	tgcgatgggcccactgtgccc-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	845...	gttcctttg	cag	atggtgac	
D.Ana	aactcg	gtaagt	tcaact...	4006...	gtttctgggcccactgtgccc-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	898...	cttttgttg	cag	atggtgac	
D.Gri	aactcg	gtaagt	accctg...	4306...	tttgtttgcccactgtgcg	-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	598...	tttattttg	cag	atggtgac
D.Moj	aactcg	gtaagt	agagcc...	4321...	atcgtttgcctcactgtgcg	-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	583...	attttgttg	cag	atggtgac
D.Per	aactcg	gtaagt	gcaaaa...	3603...	-----tgcagcttggttcaagcgtc	AGTGCAATCA	-----	GCgtcatcagcttcatccggtt--	1310...	tgtgcattcc	cag	atggtgac	
D.Pse	aactcg	gtaagt	gcaaaa...	3624...	-----tgcagcttggttcaagcgtc	AGTGCAATCA	-----	GCgtcatcagcttcatccggtt--	1289...	tgtgcattcc	cag	atggtgac	
D.Vir	aactcg	gtaagt	agccga...	4327...	atTTTTGGCCcactgtgcg	-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	577...	atTTtgttg	cag	atggtgac
D.Wil	agctcg	gtaagt	ttcaca...	4363...	-----tataccactgtgtttggcc	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	541...	tctttcttt	tag	atggtgac	
D.Yak	agctcg	gtaagt	gcctca...	4043...	tgcgatgggcccactgtgccc-----	TTAAcTGCCGtcACTT	ACGT	--taacagtttacgcttgccctg...	861...	aatcctttg	cag	atggtgac	
	*	*****	*****		*	*		*	*	*****	*	*****	

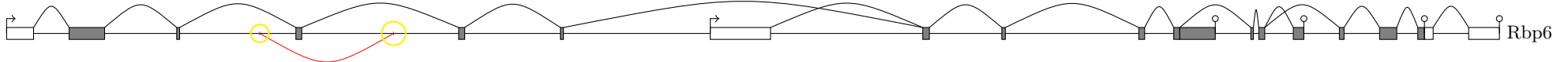
id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206\_-1 type=IN

D.Me1	agctcg	gtaagtgc	ccttg...	4523...	-ctgcttctgc-agcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	383...	tatcctttg	cag	atggtgac
D.Sim	agctcg	gtaagtgc	cattg...	4549...	-ctgcttctgc-agcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	357...	gatttgttg	cag	atggtgac
D.Sec	agctcg	gtaagtgc	cattg...	4125...	cttgc--ctgctggtcgtcaaaaag	-----	GCTGGcgTTGCACT	acacacacacacgcacacgc...	786...	gatttgttg	cag	atggtgac	
D.Ere	agctcg	gtaagtgc	ccctt...	4548...	-ctgcttctgc-agcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	358...	gttcctttg	cag	atggtgac
D.Ana	aactcg	gtaagt	ttcaact...	4433...	-atgctgctgc-tgcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	473...	cttttgttg	cag	atggtgac
D.Gri	aactcg	gtaagt	accctg...	4531...	-ctgctgctgt-tgcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	375...	tttattttg	cag	atggtgac
D.Moj	aactcg	gtaagt	agagcc...	4492...	-gtgctgctgt-tgcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	414...	atTTtgttg	cag	atggtgac
D.Per	aactcg	gtaagt	gcaaaa...	4272...	cttgc--ctgcccgtcaaaaag	-----	GCTGGcgTTGCACT	acacacacacacgcacacgc...	639...	tgtgcattcc	cag	atggtgac	
D.Pse	aactcg	gtaagt	gcaaaa...	4289...	cttgc--ctgcccgtcaaaaag	-----	GCTGGcgTTGCACT	acacacacacacgcacacgc...	622...	tgtgcattcc	cag	atggtgac	
D.Vir	aactcg	gtaagt	agccga...	4516...	-gtgctgctgt-tgcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	390...	atTTtgttg	cag	atggtgac
D.Wil	agctcg	gtaagt	ttcaca...	4581...	-tgcctgtttctacgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	325...	tctttcttt	tag	atggtgac
D.Yak	agctcg	gtaagt	gcctca...	4553...	-ctgcttctgc-agcgctaact	GCGT	AAAGTTGGCA	TTGA	--aactgtcagcttataaatgc...	353...	aatcctttg	cag	atggtgac
	*	*****	*****		***	**	*	**	*	*****	*	**	*****

id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206\_-1 type=IN VIEW

Figure 112: CS=11.52





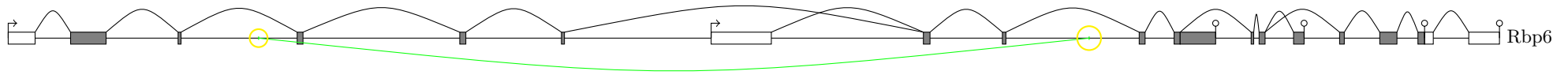
D. Mel	aagtccag	gtgagtgaaaaa..4140..	-----aaataacttcagtgctgctg	TTGTGTGCgt	ACGT	-----gccgctgaagtgcttccagc	----..771..	tattcctttcag	agagctta	
D. Sim	aagtccag	gtgagtgaaaaa..4133..	-----tgaataacttcagtgctgc	GTTTGTGTGCgt	ACGT	-----gccgctgaagtgcttccagc	----..776..	tattcctttcag	agagctta	
D. Sec	aagtccag	gtgagtgaaaaa..4127..	-----tgaataacttcagtgctgc	GTTTGTGTGCgt	ACGT	-----gccgctgaagtgcttccagc	----..782..	tattcctttcag	agagctta	
D. Ere	aagtccag	gtgagtgaaaaa..4167..	caattttgttgaataaactt	CAGTgt	TGCGTTTGTGTGCgt	ACGT	-----gccgctgaagtgcttccagc	----..733..	tttcctttcag	agagctta
D. Ana	aagtccag	gtgagtggctaa..3733..	ggcggcgtgagcggaaaaat	-----CGTTTGTTTTATTGAa	TTTTATT	gaagtttgaatttatgacgc	----..1168..	tcttcctttcag	agagctta	
D. Gri	cagtccag	gtaagtcttctt..4130..	agtttggtgtgcaaaaaat	-----CGTTTGTTTTATTGAa	TTTTATTGTAGT	ttgaatttatgatgcgactg	....766..	gtttatttgcag	agagctta	
D. Moj	cagtccag	gtaagtcttggc..4024..	aaaaaaaaaaaaaagaaatg	-----GTTTGTTTTATTGAa	TTTTATTGTAGT	ttgaatttatgacgcaacgc	....873..	ttttatttgcag	agagctta	
D. Wil	cagtccag	gtaagttaatag..4046..	aggacgggggaaaaaaat	-----CGTTTGTTTTATTGAa	TTTTATTGTAGT	ttgaatttatgacactcaac	....850..	tgttctttcag	agagctta	
D. Yak	aaaacgag	ttaagtgaaat..4076..	caattttgttgaataaactt	CAGTGTGCgt	TTGTGTGCgt	ACGT	-----gccgctgaagtgcttccagc	----..824..	tattcgtttcag	agagctta
		* * **	* **	**	***** * * *	* * * * * *		** ** **	**** **	

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L.17172476.17214901.-1 type=IN

D. Mel	agatccag	gtgagttggtcc..4355..	-caaaactcaataaacataa	-----ACGTG	-----CACACAG	-tctgggttgca	-----aagaggatt	-----..558..	atctacttgcag	aggcttcg	
D. Sim	agatccag	gtgagttggtcc..4335..	-caaaactcaataaacataa	-----ACGTG	-----CACACAGGC	-tgggttgca	-----agggggttgcg	----..576..	atctacttgcag	aggcttcg	
D. Sec	agatccag	gtgagttggtcc..4331..	-caaaactcaataaacatag	-----ACGTG	-----CACACAGGC	-tgggttgca	-----agggagttgca	-----..580..	atctacttgcag	aggcttcg	
D. Ere	agatccag	gtgagttggtcc..4298..	-caaaactcaataaacataa	-----ACGTG	-----CACACAGGCGTGGCTG	-ca	-----agggggttgagggggtt	....606..	atctacttgcag	aggcttcg	
D. Ana	agatccag	gtgagtgcgaag..4177..	-----atcgttaaagcgtt	gctgccaAGTGgc	AAAAcTCAAA	TAAAcATAAACG	tgacacacacatacactaca	-----..720..	atctacttgcag	aggcttcg	
D. Gri	agatccag	gtgagtttctaa..4240..	ctggcgcacgttaagcgtc	GCTGCca	AGTGgc	AAAAcTCAAA	TAAAcATAAACG	tgacacacacacacttaca	-----..650..	tctctattgcag	aggcttcg
D. Moj	agatccag	gtgagtttaagc..4303..	gagcagcatcgtaagcgtc	GCTGCca	AGTGgc	AAAAcTCAAA	TAAAcATAAACG	tgacacacacatacaaat-gc	-----..588..	tctctattgcag	aggcttcg
D. Wil	agatctag	gtaagtttcatg..4121..	ctggcgcacgttaagcgtt	GCTGCca	AGTGgc	AAAAcTCAAA	TAAAcATAAACG	tgacacacacacataca	-----..769..	ttacttgcag	aggcttcg
D. Yak	agatccag	gtgagttggtcc..4266..	-caaaactcaataaacataa	-----ACGTG	-----CACACAGGCGGTGTTG	-ca	-----agggggttgagggggtt	....638..	atctacttgcag	aggcttcg	
		**** **	** **	*** * *	* **	*** * *	** *	** **	*** **	** ** *	

id=82211 gene=FBgn0260943 name=Rbp6 segment=chr3L.17160200.17172393.-1 type=IN VIEW

Figure 113: CS=10.8



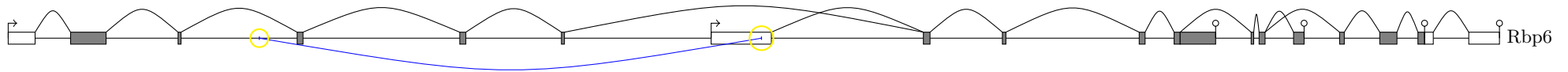
D.Mel	aagtccag	gtgagtgaaaaa...4105...ccgcccacggtcccgtttgt-----CTGGCAATTtGTTGaAATAA	cttca-gtg-ctgcgtttgtgt...799...tattcctttcag	agagctta	
D.Sim	aagtccag	gtgagtgaaaaa...4100...ccgtcccaatcccgtttgt-----CTGGCAATTtGTTGaAATAA	cttca-gtg-ctgcgtttgtgt...804...tattcctttcag	agagctta	
D.Sec	aagtccag	gtgagtgaaaaa...4094...ctttcccgggtcccgtttgt-----CTGGCAATTtGTTGaAATAA	cttca-gtg-ctgcgtttgtgt...816...tattcctttcag	agagctta	
D.Ere	aagtccag	gtgagtgaaaaa...4143...cccggcccgggtcccgtttgt-----CTGGCAATTtGTTGaAATAA	cttca-gtg-ttgcgtttgtgt...761...tttcctttcag	agagctta	
D.Ana	aagtccag	gtgagtggtctaa...3966...tcctcagactcccagccgt-----CTGGCAATTtGTTGAATAA	cttca-gcg-ttgcgtttgtgt...938...tctttcttcag	agagctta	
D.Gri	cagtccag	gtaagtcttctt...4374...gccctcgcacgctggtttgt-----CTGGCAATTtGTTGAATAA	cttca-gtt-ttgcgtttgtgt...530...gtttatttcag	agagctta	
D.Moj	cagtccag	gtaagtcttggc...4225...cccacagcctcgctggtttgt-----CTGGCAATTtGTTGAACA	cttca-gcg-ttgcgtttgtgt...679...ttttatttcag	agagctta	
D.Vir	cagtccag	gtaagtcttggc...3879...-----gttttttattgttcataaattATTGtgCATACTTATGTA	---aatcacgcg-acgcattt-cga...1028...ttgtatttcag	aaagctta	
D.Wil	cagtccag	gtaagttaaatag...3849...-----gttttttattgttcataaattATTGtgCATACTTATGTA	---aatcacgcg-acgcgttc-tgc...1058...tgttctttacag	agagtta	
D.Yak	aaaacgag	ttaagtgaaat...4052...ccgctcccgggtcccgtttgt-----CTGGCAATTtGTTGaAATAA	cttca-gtg-ttgcgtttgtgt...852...tattcgtttcag	agagctta	
	* * *	* * *	**	** * * * * * * * * * * * * * * *	* * * * *

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17172476.17214901.-1 type=IN

D.Mel	gcacagag	gtgagtttttt...3768...gcctgcgtgtttactgttacTTGTTcCAACTAATTGTCAG	---ttacgccag--ctagaccag...1136...tttctcttcag	gttttggc	
D.Sim	gcacagag	gtgagtttttt...3739...gcctgcgtgtttactgttacTTGTTcCAACTAATTGTCAG	---ttacgccag--ctaggccag...1165...tttctcttcag	gttttggc	
D.Sec	gcacagag	gtgagtttttt...3758...-----gtgtttactgttactttctCAACTAATTGTCAG	---ttacgccag--ctaggccag...1152...tttctcttcag	gttttggc	
D.Ere	gcacagag	gtgagtccttct...3726...gcctgcgtgtttactgttacTTGTTcCAACTAATTGTCAG	---ttacgccag--ccaggccag...1178...tttctcttcag	gttttggc	
D.Ana	gcacagag	gtaagcaatcgc...3768...gcctgcgtgtttactgttacTTGTTTCAACTAATTGTCAG	---ttacgccagctctcggcca--...1136...tttctcttcag	gttttggc	
D.Gri	gcacagag	gtaagttaacaa...3745...gcctgcgtgtttactgttacTTGTTTCAACTAATTGTCAG	---ctacgcccaacgcccg-cat...1159...gttttttacag	gttttggc	
D.Moj	gcacagag	gtgagcactgaa...3487...gcctgcgtgtttactgttacTTGTTTCAACTAATTGTCAG	---ctacgcccaacg-c-c-cg-catg...1417...gatttttttcag	gttttggc	
D.Vir	gcacagag	gtaagctaacag...2644...-gccgttacttggcaataaca---TGCATGAGTGTGCAAT	---ttctgcagttggcacaagca--...2265...gctttatttcag	gttttggc	
D.Wil	gcacagag	gtgagttcatta...2787...-tccgcttcttggcaataaca---TGCATGAGTGTGCAAT	ttttttgcagttgccaaaa-----...2122...aattttttcag	gttttggc	
D.Yak	gcacagag	gtgagtccttct...3641...gcctgcgtgtttactgttacTTGTTcCAACTAATTGTCAG	---ttacgccag--ctaggccag...1263...tttctcttcag	gttttggc	
	*****	** **	** * * * *	* * * * *	* * * * *

id=82221 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17071299.17077207.-1 type=IN VIEW

Figure 114: CS=10.8



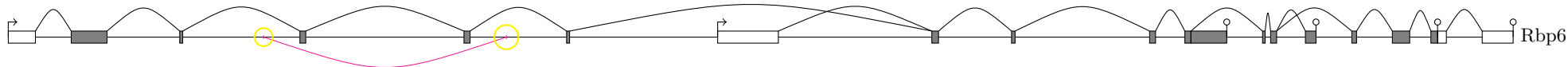
D.Mel	aagtc	gtgagt	gtgagt	gaaaaa	...4114	..gtccc	gtttgt	ctggca	att	TTGTTGAAATAACTTC	agtg	-ctgc	gtttgt	gtgcgt	...795	..tattc	ccttcag	agagctta
D.Sim	aagtc	gtgagt	gtgagt	gaaaaa	...4109	..atccc	gtttgt	ctggca	att	TTGTTGAAATAACTTC	agtg	-ctgc	gtttgt	gtgcgt	...800	..tattc	ccttcag	agagctta
D.Sec	aagtc	gtgagt	gtgagt	gaaaaa	...4103	..gtccc	gtttgt	ctggca	att	TTGTTGAAATAACTTC	agtg	-ctgc	gtttgt	gtgcgt	...806	..tattc	ccttcag	agagctta
D.Ere	aagtc	gtgagt	gtgagt	gaaaaa	...4152	..gtccc	gtttgt	ctggca	att	TTGTTGAAATAACTTC	agtg	-ttgc	gtttgt	gtgcgt	...757	..ttttc	ccttcag	agagctta
D.Ana	aagtc	gtgagt	ggctaa	...3975	..tccc	cagcgt	ctggca	att	TTGTTGAAATAACTTC	agcg	-ttgc	gtttgt	gtgcgt	...934	..tcttc	ccttcag	agagctta	
D.Gri	cagtc	gtaagt	ccttct	...4383	..acg	ctgttt	gtctgg	caatt	TTGTTGAAATAACTTC	agtt	-ttgc	gtttgt	gtgcgt	...526	..gttt	atttgcag	agagctta	
D.Moj	cagtc	gtaagt	ccttggc	...4234	..tcg	ctgttt	gtctgg	caatt	TTGTTGAAATAACTTC	agcg	-ttgc	gtttgt	gtgcgt	...675	..tttt	atttgcag	agagctta	
D.Vir	cagtc	gtaagt	ccttggc	...4301	..tcg	ctgttt	gtctgg	caatt	TTGTTGAAATAACTTC	agtt	-ttgc	gtttgt	gtgcgt	...608	..ttgt	atttgcag	aaagctta	
D.Wil	cagtc	gtaagt	taataag	...4325	..agc	cttttt	gtctgg	caatt	TTGTTGAAATAACTTC	agtt	-ttgc	gtttgt	gtgcgt	...584	..tg	cttttacag	agagtta	
D.Yak	aaaac	gag	gtaagt	gaaaat	...4061	..gtccc	gtttgt	ctggca	att	TTGTTGAAATAACTTC	agtg	-ttgc	gtttgt	gtgcgt	...848	..tattc	gtttcag	agagctta
	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17172476\_17214901\_-1 type=IN

D.Mel	tcgttatc	agacaagc	gag	...662	..ttct	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcagc	gac	...106	..aaga	agctcgtt	gtaagtgc
D.Sim	tcgttatc	agacaagc	gag	...660	..ttct	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcagc	gac	...106	..aaga	agctcgtt	gtaagtgc
D.Sec	tcgttatc	agacaagc	gag	...666	..ttct	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcagc	gac	...106	..aaga	agctcgtt	gtaagtgc
D.Ere	tcgttatc	agacaagc	gag	...667	..ttct	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcagc	gac	...106	..aaga	agctcgtt	gtaagtgc
D.Ana	tcgttatc	agacaagc	gag	...677	..ttt	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcggc	gac	...103	..aaga	aactcgtt	gtaagttc
D.Gri	tcgttatc	agacaagc	gag	...862	..ttt	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gccgtt	---	...121	..aaga	aactcgtt	gtaagtac
D.Moj	tcgttatc	agacaagc	gag	...909	..ttc	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gccgtt	---	...136	..aaga	aactcgtt	gtaagtag
D.Vir	tcgttatc	agacaagc	gag	...733	..ttt	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gccgtt	---	...121	..aaga	aactcgtt	gtaagtag
D.Wil	tcgttatc	agacaagc	gag	...965	..ttt	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gccgtt	gcc	...148	..aaga	agctcgtt	gtaagttt
D.Yak	tcgttatc	agacaagc	gag	...718	..ttc	acgtga	agcagc	ccagc	GGAGTTATTTGAGCAG	---	ccgcc	gcttcc	gcagc	gac	...106	..aaga	agctcgtt	gtaagtgc
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=82216 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17140207\_17141054\_-1 type=AN VIEW

Figure 115: CS=9



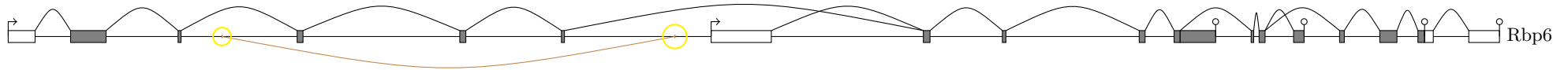
D.Mel	aagtccag	gtgagtgaaaaa...4142	..-----ataacttcagtgcgcttt	-----	GTGTGCGTA	-GTGC	-----	cgctgaagtgcttccagccg	---...769	..tattcctttcag	agagctta	
D.Sim	aagtccag	gtgagtgaaaaa...4125	..aattttgtgaaataacttc	-----	AGTGCTGCGT	ttGTGTGCGTA	-GTGC	-----	cgctgaagtgcttccagccg	---...774	..tattcctttcag	agagctta
D.Sec	aagtccag	gtgagtgaaaaa...4119	..aattttgtgaaataacttc	-----	AGTGCTGCGT	ttGTGTGCGTA	-GTGC	-----	cgctgaagtgcttccagccg	---...780	..tattcctttcag	agagctta
D.Ere	aagtccag	gtgagtgaaaaa...4173	..-----tgttgaataacttcagtg	-----	TGGC	ttTGTGTGCGTA	-GTGC	-----	cgctgaagtgcttccagccg	---...731	..ttttcctttcag	agagctta
D.Ana	aagtccag	gtgagtggctaa...4650	..----tttt-----taccgtgtattttac	-----	GCGT	ctGCATgtGAATAATGT	-----	ccagttgcgatgcaaagg	...254	..tctttcctttcag	agagctta	
D.Gri	cagtccag	gtaagtcttctt...4404	..-----tgttgaataacttcagttt	-----	TGGC	ttTGTGTGCGT	ac-GTGC	-----	cactctgaagtgcgcttact	---...500	..gtttatttgcag	agagctta
D.Moj	cagtccag	gtaagtcttggc...4573	..----tttt-----tttttgcgctcgt	TGGT	TTTGTGTGAG	ccTTGA	aGCGTgtGCATgtGAATAATGT	ccAGCAATTG	gctttagagttgggtttat	---...300	..ttttatttgcag	agagctta
D.Vir	cagtccag	gtaagtcttggc...4559	..ctgttggtt-----tttgcgagcc	-----	TTGA	aGCGTgtGCATgtGAATAATGT	ccAGCAATTG	gctttgagttggcgccgc	---...330	..ttgtatttgcag	aaagctta	
D.Yak	aaaacgag	ttaagtgaaat...4082	..----tgttgaataacttcagtg	-----	TGGC	ttTGTGTGCGTA	-GTGC	-----	cgctgaagtgcttccagccg	---...822	..tattcgtttcag	agagctta
		* * **	* ***								* ** ***	* *****

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L.17172476.17214901.-1 type=IN

D.Mel	gcaaaaag	gtaaatgttaca...750	..--gctgtaatgatattctgcac	-----	GCATTA	-----	CGC	atACGC	-----	cgcattggcattagccta	-----...1231	..tttcccacgcag	gtcgatcc		
D.Sim	gcaaaaag	gtaaatgttaca...798	..--gttgtaatgatattccgcac	-----	GCATTA	-----	CGC	atACGC	GCGT	GGCATT	-----	agcctaattgagtgagctg	...1246	..tttcccacgcag	gtcgatcc
D.Sec	gcaaaaag	gtaaatgttaca...809	..--gttgtaatgatattccgcac	-----	GCATTA	-----	CGC	atACGC	ACGT	GGCATT	-----	agcctaattgagtgagctg	...1251	..tttcccacgcag	gtcgatcc
D.Ere	gcaaaaag	gtaaatgttaca...1229	..--gctgtaatgatattccgcac	-----	GCATTA	-----	CGC	ATACG	CGCA	-----	ttggcattagcctaattgag	---...1214	..tttcccacgcag	gtcgatcc	
D.Ana	gcaaaaag	gtaaatgtaaca...1505	..--ctggtcgagcaattgttac	-----	GCGT	aATTCGTGCGTG	CG	-----	tcagctgaagtcaccacc	---...266	..tctcgcccgcag	gtcgatcc			
D.Gri	gcaaaaag	gtaaaagaaaaa...992	..ccagttttaaggcagctctc	-----	GCATTA	-----	CGC	ATACG	CCGCA	-----	ttggcattagcttaattagc	---...1485	..ttttgcttgcag	gtggacc	
D.Moj	gcaaaaag	gtaaatctctac...2894	..-----gagcagctactctggacgc	CAAT	TGTT	atGCGTT	aATTCGTGCGTGCTCAG	ctTTCAA	gtTGAG	cATTG	ccacaccgaccagcatgaca	---...253	..tctgcttgcag	gtggacc	
D.Vir	gcaaaaag	gtaaatctctac...2425	..-----gggcttcgcccgtggacgc	CAAT	TGTT	atGCGTT	aATTCGTGCGTGCTCAG	-----	ctccaagttgagcatata	acc...247	..ttgtgcttacag	gtggacc			
D.Yak	gcaaaaag	gtaaatgttaca...2293	..--gctgtaatgatattccgcac	-----	GCATTA	-----	CGC	ATACG	CGCA	-----	ttggcattagcctaattgag	---...1292	..tttcccacgcag	gtcgatcc	
	*****	*****	*		** ***	** * *			*			* * ***	** * **		

id=82213 gene=FBgn0260943 name=Rbp6 segment=chr3L.17158055.17160114.-1 type=IN VIEW

Figure 116: CS=10.8



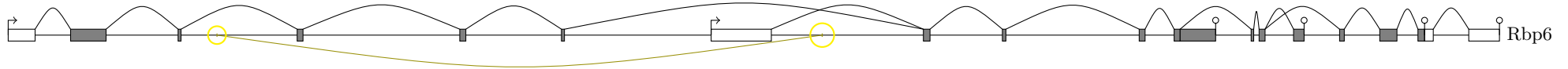
D.Mel	aagtcag	gtgagtgaaaaa...3129...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1777...tattcctttcag	agagctta			
D.Sim	aagtcag	gtgagtgaaaaa...3113...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1793...tattcctttcag	agagctta			
D.Sec	aagtcag	gtgagtgaaaaa...3157...attgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaaccacgcgacgcgcttcg...1749...tattcctttcag	agagctta			
D.Ere	aagtcag	gtgagtgaaaaa...3175...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1731...ttttcctttcag	agagctta			
D.Ana	aagtcag	gtgagtggctaa...3129...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1777...tctttcctttcag	agagctta			
D.Gri	cagtccag	gtaagtcttctt...3899...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcaacgcattccg...1007...gtttatttgcag	agagctta			
D.Moj	cagtccag	gtaagtcttggc...3842...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcatttcg...1064...ttttatttgcag	agagctta			
D.Vir	cagtccag	gtaagtcttggc...3877...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcatttcg...1029...ttgtatttgcag	aaagctta			
D.Wil	cagtccag	gtaagttaataag...3847...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1059...tggtctttacag	agagtta			
D.Yak	aaaacgag	ttaagtgaaaat...3118...ttgttttttattgttcataa	TTATTGTGCAT	TTATGT	aaatcacgcgacgcgcttcg...1788...tattcgtttcag	agagctta			
	* * **	* **		*	*****	*****	*	** **	** **

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17172476.17214901.-1 type=IN

D.Mel	atcccaag	gtaagttccaga...3974...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtggagcgcgaagt...931...tcagtcggtatc	agacaagc
D.Sim	atcccaag	gtaagttccaga...3991...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtggagcgcgaagt...914...tcagtcggtatc	agacaagc
D.Sec	atcccaag	gtaagttacaga...3979...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtggagcgcgaagt...926...tcagtcggtatc	agacaagc
D.Ere	atcccaag	gtaagttccata...4029...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtggagcgcgaagt...876...tcagtcggtatc	agacaagc
D.Ana	atcccaag	gtaagtactact...4042...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgttagagcacttagct...863...tcagtcggtatc	agacaagc
D.Gri	atcccaag	gtaagtaccac...3743...tgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgttagatttttcaact...1162...tcagtcggtatc	agacaagc
D.Moj	atcccaag	gtaagtacaagc...4013...cgcgccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgttagatttttcagcg...892...tcagtcggtatc	agacaagc
D.Vir	atcccaag	gtaagtaccac...3901...gcggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgttagatttttgccga...1004...tcagtcggtatc	agacaagc
D.Wil	atcccaag	gtaagtaccga...3583...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtaagctctgtggct...1322...tcagtcggtatc	agacaagc
D.Yak	atcccaag	gtaagttccaca...3969...cgggccaccacgaaaacaa	ACATAA	agGTGCA	CAATGA	cgcgcgtggagcgcgctatgtt...936...tcagtcggtatc	agacaagc
	*****	*****				*****	*****

id=82215 gene=FBgn0260943 name=Rbp6 segment=chr3L\_17141055.17158012.-1 type=IN VIEW

Figure 117: CS=12



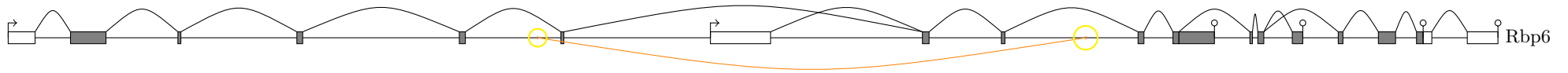
D.Mel	aagtccag	gtgagtgaaaa...3061...	-tgccactcgaaccgctg	gcgc	CAGTTG	-----	CTGtTGTT	-----	atztatgg-ttcc-aaaactgt...	1850...	tattcctttcag	agagctta
D.Sim	aagtccag	gtgagtgaaaa...3045...	-tgccactcgaaccgctg	gcgc	CAGTTG	-----	CTGtTGTT	-----	atztatgg-ttcc-aaaactgt...	1866...	tattcctttcag	agagctta
D.Sec	aagtccag	gtgagtgaaaa...3090...	-tgccactcgaaccgctg	gcgc	CAGTTG	-----	CTGtTGTT	-----	atztatgg-ttcc-aaaactgt...	1821...	tattcctttcag	agagctta
D.Ere	aagtccag	gtgagtgaaaa...3175...	-ttgtttttattgttcataa	TTATTGTGCAT	ac	TTATGTA	-----	aatcacg--cgacgcgttcgc...	1730...	tttcctttcag	agagctta	
D.Ana	aagtccag	gtgagtggctaa...3966...	-tcctcagactcccagccgt	CTGGCA	-----	TTTTGTTGAA	aaacttcagcgttgcg--tt--	...	943...	tctttctttcag	agagctta	
D.Gri	cagtccag	gtaagtcttctt...4377...	cctcgcacgctgtttgtctg	-----	GCA	-----	ATtTTGTTGAAAT	aaacttcagtttgcg--tttgt...	532...	gtttattttcag	agagctta	
D.Moj	cagtccag	gtaagtcttggc...3772...	-ctctctgcctgcatattacgc	CAGTTG	-----	CTGcTGTT	-----	atztatggccaacgaaaact--	1139...	ttttattttcag	agagctta	
D.Wil	cagtccag	gtaagttaaatg...3778...	-aggacagagagccactcgc	CAGTTG	-----	CTGcTGTT	-----	atztatgg-taccaaaaactg-	1133...	gtttctttacag	agagctta	
D.Yak	aaaacgag	ttaagtgaaaat...3050...	-tgccactcgaaccgctg	gcgc	CAGTTG	-----	CTGtTGTT	-----	atztatgg-ttcc-aaaactgt...	1861...	tattcctttcag	agagctta
		* * **									** ** **	**** **

id=82209 gene=FBgn0260943 name=Rbp6 segment=chr3L.17172476.17214901.-1 type=IN

D.Mel	agctcggt	gtaagtgcttg...3620...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1289...	tatcctttgcag	atggtgac		
D.Sim	agctcggt	gtaagtgcttg...3639...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1270...	gatttgttcag	atggtgac		
D.Sec	agctcggt	gtaagtgcttg...3638...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1271...	gatttgttcag	atggtgac		
D.Ere	agctcggt	gtaagtgccctt...4687...	---aataaggccatgcatgtag	-----	TACATA	AaaATGCAC	aaAATGG	ccgaacgactcatggcga	aaa	---	...	217...	gttcctttgcag	atggtgac
D.Ana	aactcggt	gtaagttcaact...4457...	---aaagtggcacttgaaactg	TCAGC	ttA	---AAA	aTGC	-----	CAG	-----	ctgcacacacacacacac...	450...	ctttgttcag	atggtgac
D.Gri	aactcggt	gtaagtaccctg...3643...	-----gcgacaacacaagtgttta	-----	ATTT	TACGA	cATTGT	-----	atgaatcttactgctggc...	1267...	tttattttgcag	atggtgac		
D.Moj	aactcggt	gtaagtagagcc...3117...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1792...	atttgttcag	atggtgac		
D.Wil	agctcggt	gtaagtttcaca...3452...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1457...	tctttcttttag	atggtgac		
D.Yak	agctcggt	gtaagtgctca...3617...	tttactgctggcactgcaga	-----	AACA	tCAGCA	ccGCTG	-----	ttacatatcgtagcttcct...	1292...	aatcctttgcag	atggtgac		
		* *****									* ** **	*****		

id=82217 gene=FBgn0260943 name=Rbp6 segment=chr3L.17122072.17140206.-1 type=IN VIEW

Figure 118: CS=9.72



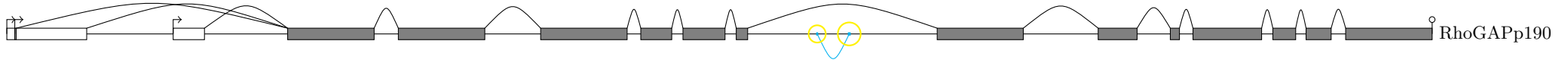
D. Mel	gcaaaaag	gtaaatgttaca...1687...	atTTTtaattatttttaag	ACGCtGCTTATG	GGTA	---gaagctgc-----	tcgttttttctc...292...	tttcccacgcag	gtcgatcc
D. Sim	gcaaaaag	gtaaatgttaca...1746...	atTTTtaattatttttaag	ACGCtGCTTATG	GGTA	---gaagctgc-----	tcgtttttttt...308...	tttcccacgcag	gtcgatcc
D. Sec	gcaaaaag	gtaaatgttaca...1771...	atTTTtaattatttttaag	ACGCtGCTTATG	GGTA	---gaagctgc-----	tcgtttttttt...299...	tttcccacgcag	gtcgatcc
D. Ere	gcaaaaag	gtaaatgttaca...2140...	atTTTtaattatttttaag	ACGCtGCTTATG	GATA	---gaagctgc-----	tcgttttttctc...305...	tttcccacgcag	gtcgatcc
D. Ana	gcaaaaag	gtaaatgtaaca...1375...	atTTTtaattatttttaag	ACGCtGCTTATG	GGTA	---ggagcttc-----	ccatttcgctgt...397...	tctcgccgcag	gtcgatcc
D. Gri	gcaaaaag	gtaaaagaaaaa...2097...	atTTTtaattatttttaag	ACGCtGCTTATG	GATG	-ctgagatcgcagcggagtcg-----	...382...	tttgcttgacg	gtggacc
D. Moj	gcaaaaag	gtaaatctctac...2805...	atTTTtaattatttttaag	ACGCtGCTTATG	GGCA	gtcagcgcagcaggggagac-----	...375...	ttctgcttgacg	gtggacc
D. Vir	gcaaaaag	gtaaatctctcc...2376...	atTTTtaattatttttaag	ACGCtGCTTATG	GCG	-----ccgtcggattgcggggcttc...	313...	tttgcttacag	gtggacc
D. Wil	gcaaaaag	gtaaatgttaat...3262...	atTTTtaattatttttaag	ACGCtGCTTATG	GG	-taaagcgtagagcaagaagc-----	...510...	ttctcttgacg	gtcgatcc
D. Yak	gcaaaaag	gtaaatgttaca...3256...	atTTTtaattatttttaag	ACGCtGCTTATG	GGTA	---gaagctgc-----	tcgttttttctc...331...	tttcccacgcag	gtcgatcc
	*****	****	*****	*			*	***	** ** *

id=82213 gene=FBgn0260943 name=Rbp6 segment=chr3L.17158055.17160114.-1 type=IN

D. Mel	gcacagag	gtgagtttttt...3736...	-----agcttcttcagctcggcaca	TGTCgCTAATAAGCct	GCGT	gtttactgttactgtttcca...1169...	tttctcttgacg	gttttggc	
D. Sim	gcacagag	gtgagtttttt...3707...	-----agcttcttcagctcggcaca	TGTCgCTAATAAGCct	GCGT	gtttactgttactgtttcca...1198...	tttctcttgacg	gttttggc	
D. Sec	gcacagag	gtgagtttttt...3720...	-----agcttcttcagctcggcaca	TGTCgCTAATAAGCct	GCGT	gtttactgttacttcttcca...1185...	tttctcttgacg	gttttggc	
D. Ere	gcacagag	gtgagtccttct...3694...	-----agcttcttcagctcggcaca	TGTCgCTAATAAGCct	GCGT	gtttacagttactgtttcca...1211...	tttctcttgacg	gttttggc	
D. Ana	gcacagag	gtaagcaatcgc...3736...	-----ttctgcttctccacggcaca	TGTCgCTAATAAGCct	GCGT	gtttactgttactgtttcca...1169...	tttctcttgacg	gttttggc	
D. Gri	gcacagag	gtaagttaacaa...3713...	-----aggagtcgctactcagcaca	TGTCgCTAATAAGCct	GCGT	gtttaccgtcactgtttcca...1192...	gttttttacag	gttttggc	
D. Moj	gcacagag	gtgagcactgaa...3455...	agttaaaggaa-----	agcagcacaTGTCgCTAATAAGCct	GCGT	gtttactgttactgtttcca...1450...	gattttttgacg	gttttggc	
D. Vir	gcacagag	gtaagcctaag...3267...	gcaaaaggag-----	tcagcacatgtCGCTAATAAGCct	GCGT	gtttactgttactgtttcca...1641...	gctttatttcag	gttttggc	
D. Wil	gcacagag	gtgagttcatta...3422...	-----ctcctctctccctctcattc-	CCTAATAAGCct	GCGT	gtttactgttactgtttcca...1487...	aatttttttcag	gttttggc	
D. Yak	gcacagag	gtgagtccttct...3609...	-----agcttcttcagctcggcaca	TGTCgCTAATAAGCct	GCGT	gtttactgttactgtttcca...1296...	tttctcttgacg	gttttggc	
	*****	** ** *		* * **	*****	** ** *	*	** ** *	*****

id=82221 gene=FBgn0260943 name=Rbp6 segment=chr3L.17071299.17077207.-1 type=IN VIEW

Figure 119: CS=10.8



D.Mel	gcatcaaa	gtaagttccatg...356...accattttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttttgct--...1907...tggataatt--ag	agtggtg
D.Sim	gcatcaaa	gtaagttccatg...346...accattttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttttgct--...2203...tggataatt--ag	agtggtg
D.Sec	gcatcaaa	gtaagttccatg...347...accattttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttttgct--...1787...tggataatt--ag	agtggtg
D.Ere	gcatcaaa	gtaagttccatg...329...ccattttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttttgct--...1892...tggataatt--ag	agtggtg
D.Ana	ccatcaaa	gtaagttccatc...365...tttttttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttaatctc--...2308...--tttttttacag	aatgggtg
D.Gri	gcatcaaa	gtaagttttatc...1124...gttttttt--tatcgatttat	CTCTGTGTGTGTAT	-----	tcgttgtgtcattgcctat--...1550...--cgctaattgcag	aatgggtg
D.Moj	gcatcaaa	gtaagttgcca...934...tttttttt--aatcgacttat	CTCTGTGTGTGTGTAT	-----	ttcgttgtgttattgccta--...1857...--cataatttacag	aatgggtg
D.Vir	gcatcaaa	gtaagttcacct...1233...tttcggcttcagaatcaagt--	TTGAAGAAATAACaTGTA	-----	atcctaactaattgaatattc...1925...--actaattgcag	agtggtg
D.Yak	gcatcaaa	gtaagttccatg...343...accattttt--tatcgatttat	CTCTGTGTGTGTAT	-----	ttgttgtgtcgttttgct--...1926...tggataatt--ag	agtggtg
	*****	*****		** * * * *	* * *	** ** * * * *

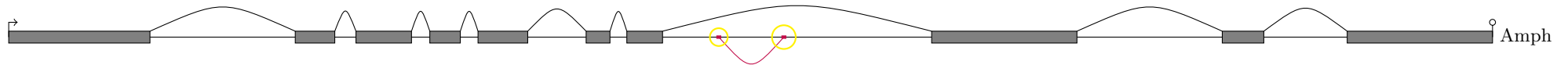
id=56138 gene=FBgn0026375 name=RhoGAPp190 segment=chrX.17538212.17540552\_-1 type=IN

D.Mel	gcatcaaa	gtaagttccatg...539...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...1720...tggataatt--ag	agtggtg
D.Sim	gcatcaaa	gtaagttccatg...526...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...2019...tggataatt--ag	agtggtg
D.Sec	gcatcaaa	gtaagttccatg...528...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...1602...tggataatt--ag	agtggtg
D.Ere	gcatcaaa	gtaagttccatg...507...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...1710...tggataatt--ag	agtggtg
D.Ana	ccatcaaa	gtaagttccatc...584...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...2085...--tttttttacag	aatgggtg
D.Gri	gcatcaaa	gtaagttttatc...1296...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...1374...--cgctaattgcag	aatgggtg
D.Moj	gcatcaaa	gtaagttgcca...1110...cctccagatcatcagctcat--	TACATG	-----	CACATATAAGAGtcaattcgtttcggcttcag...1682...--cataatttacag	aatgggtg
D.Vir	gcatcaaa	gtaagttcacct...2498...gattc--attggcaccacga	TGCAgGTTAcTTTCgcTTCCAA	-----	tcgttacttagtccccccgc...656...--actaattgcag	agtggtg
D.Yak	gcatcaaa	gtaagttccatg...533...cctccagatcatcagctcat--	TACATG	-----	CACATATaAGAGtcaattcgtttcggcttcag...1732...tggataatt--ag	agtggtg
	*****	*****		* * * * *	* * * * *	** ** * * * *

id=56138 gene=FBgn0026375 name=RhoGAPp190 segment=chrX.17538212.17540552\_-1 type=IN VIEW

Figure 120: CS=8.64





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D.Mel aaacagcc gtaagtcctttt...144...--aacacaacaaaaataatcaTTATAAATTGCTcAAAACt-----gtacaataa--taacaaca...763...cacaacaattag cgacatct
D.Sim aaacagcc gtaagtcctttt...135...--aacacaacaaaaataatcaTTATAAATTGCTcAAAACt-----gtacaataa--taacaaca...748...cacaacaattag cgacatcc
D.Sec aaacagcc gtaagtcctttt...142...--aacacaacaaaaataatcaTTATAAATTGCTcAAAACt-----gtacaataa--taacaaca...757...cacaacaattag cgacatcc
D.Ere caacagcc gtaagtcctttt...137...--aacacaacaaaaataatcaTTATAAATTGCTcAAAACt-----gtacaataaactcaataaa...764...cacaacaattag cgacatcc
D.Ana caacagcc gtaagtcctttt...163...ctaac--caaaaaataatcatTATAAATTGCTcAAAACt-----tacaata--aaataaaca...770...gacaacaattag ccacatcc
D.Gri caacagtc gtaagtagcaga...154...--taaacacaaaaataaaaaTTATAAATTGCTcAAAACtGtAAAAAAAtgCATT----acacatcgtcaaagtgtaaa...765...aaaaacaaatag catcatcc
D.Moj caacagtc gtaagtagtaga...161...caaatcaaccaaatgataaa--TTATAAATTGCTcAAAACtGtAAAAAAAtT---ccattacatcgccaaagt-----751...aacaaaaaatag caacatcc
D.Vir caacagtc gtaagtagtaaa...175...--aaaaaaccaaaaatataaaTTATAAATTGCTcAAAACtGtAAAAaaAAAAATATTgcattacacatcgccaaag-----755...aaaccaaattag caacatcc
D.Yak aaacagcc gtaagtcctttt...136...--aacacaacaaaaataatcaTTATAAATTGCTcAAAACt-----gtacaataa--taacaaca...744...cacaacaattag cgacatcc
***** * ***** * ** ** * ***** * ** * *

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id=49886 gene=FBgn0027356 name=Amph segment=chr2R.8495684.8496673\_1 type=IN

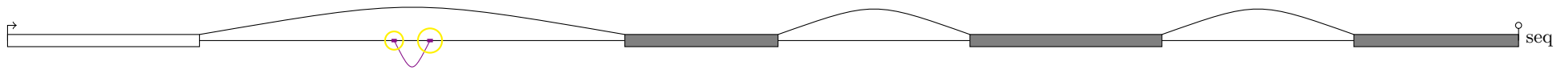
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D.Mel aaacagcc gtaagtcctttt...369...---tatga-----g-gatgatttcggtca-----AGTTTTtGGCAATTTATAA--gaaatTTTTgatt-tatttg...538...cacaacaattag cgacatct
D.Sim aaacagcc gtaagtcctttt...350...aaattgctc-----t-----attccctca-----AGTTTTtGGCAATTTATAA--gacatTTTTgatt-tatttg...533...cacaacaattag cgacatcc
D.Sec aaacagcc gtaagtcctttt...366...---tatga-----t-gatggttcccctca-----AGTTTTtGGCAATTTATAA--gaaattatttgatt-tatttg...533...cacaacaattag cgacatcc
D.Ere caacagcc gtaagtcctttt...366...---tatga-----t-gatgacttcgctca-----AGTTTTtGGCAATTTATAA--gaaatTTTTgatt-tatttt...535...cacaacaattag cgacatcc
D.Ana caacagcc gtaagtcctttt...391...atgctctga-----tggaatgctc-----TAGTTTTtGGCAATTTATAA--tgaataatTTTTgtg-tttt...542...gacaacaattag ccacatcc
D.Gri caacagtc gtaagtagcaga...357...---gtatgcaaaattttaatac-----AATGATTTTTTTtTAGTTTTtGGCAATTTATAA--atatttttagttgtcgcca...564...aaaaacaaatag catcatcc
D.Moj caacagtc gtaagtagtaga...374...-----aattgaaggcgttttttgaAGTTTTTTTTTTTAGTTTTtGGCAATTTATAAagacaaaattttgatt-tagt...539...aacaaaaaatag caacatcc
D.Vir caacagtc gtaagtagtaaa...406...tgtttatgcaaaatttaaac-----GATATTTTTTTTcTAGTTTTtGGCAATTTATAAgtaaaattttgatttagttg---526...aaaccaaattag caacatcc
D.Yak aaacagcc gtaagtcctttt...364...---tatga-----t-gatgatttcgctca-----AGTTTTtGGCAATTTATAA--gaaatTTTTgatt-tattat...516...cacaacaattag cgacatcc
***** * ***** * ** ** * ***** * ** * *

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id=49886 gene=FBgn0027356 name=Amph segment=chr2R.8495684.8496673\_1 type=IN VIEW

Figure 121: CS=10.8



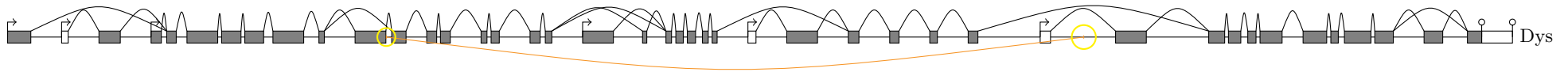
D. Mel	catcacia	gtgagttccaaa...2700...-ctgtgccgagtcaccaact	TTGC	ca	TGGAGCGCT	ggatcgagtacggcaagcgg...1606...gacgtttttcag	atgccaaa
D. Sec	catcacia	gtgagttccgaa...2693...-ctgtgccgagtcaccaact	TTGC	ca	TGGAGCGCT	ggatcgagtacggcaagcgg...1597...gacgtttttcag	atgccaaa
D. Ere	catcacia	gtgagttccaaa...2835...-ctgtgccgagtcaccaact	TTGC	ca	TGGAGCGCT	ggattgagtacggcaagcgg...1612...gacgtttttcag	atgccaaa
D. Gri	gcacacia	gtgagttcaaaa...3076...actgtgccgagtcacaaaat	TTTGC	ca	TGGAACGCT	ggattgagtacggcaagcgt...1833...gaatttttacag	atgccaaa
D. Moj	acacacia	gtgagttttaa...3067...actgcgccaatccacaaa	TTTGC	ca	TGGAACGCT	ggattgagtacggcaagcgt...1842...gcatttttacag	atgccaaa
D. Per	catcacia	gtgagttctaaa...2757...-ctgtgccgagtcacaaaact	TTGC	ca	TGGAGCGCT	ggatcgaatacggcaagcga...1781...gccattttccag	atgccaaa
D. Pse	catcacia	gtgagttctaaa...2788...-ctgcgccgagtcacaaaact	TTGC	ca	TGGAGCGCT	ggatcgaatacggcaagcga...1779...gccattttccag	atgccaaa
D. Vir	gcacacia	gtgagttcttaa...3072...attgtgccgaatccacaaa	TTTGC	ca	TGGAACGCT	ggattgagtacggcaagcgt...1837...gcatttttacag	atattaaa
D. Wil	caacacia	gtgagtttaaat...2772...actgtgccgagtcacaaa	TTTGC	ca	TGGAACGCT	ggattgagtacggcaagcgt...1788...gcatttttacag	atgccaaa
D. Yak	catcacia	gtgagttccaaa...2776...-ctgtgccgagtcacgaact	TTGC	ca	TGGAGCGCT	ggatcgagtacggcaagcgg...1598...gacgtttttcag	atgccaaa
		*****	*		** ***** ** ** ** **		* **** **

id=41794 gene=FBgn0028991 name=seq segment=chr2R.9072681\_9077065\_-1 type=I5

D. Mel	catcacia	gtgagttccaaa...2793...ctcgatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatctgtggatgg...1512...gacgtttttcag	atgccaaa
D. Sec	catcacia	gtgagttccgaa...2786...ctcgatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatctgtggatgg...1503...gacgtttttcag	atgccaaa
D. Ere	catcacia	gtgagttccaaa...2928...ctcaatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatctgtggatgg...1518...gacgtttttcag	atgccaaa
D. Gri	gcacacia	gtgagttcaaaa...3170...ctcaatggacacatttgtca	AGCGT	TCCA	aa	GCGA	atcgctacgagcctggctcga...1738...gaatttttacag	atgccaaa
D. Moj	acacacia	gtgagttttaa...3161...ctccatggacacatttgtca	AGCGT	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1747...gcatttttacag	atgccaaa
D. Per	catcacia	gtgagttctaaa...2919...ctccatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1618...gccattttccag	atgccaaa
D. Pse	catcacia	gtgagttctaaa...2950...ctccatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1616...gccattttccag	atgccaaa
D. Vir	gcacacia	gtgagttcttaa...3166...ctcaatggacacatttgtca	AGCGT	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1742...gcatttttacag	atattaaa
D. Wil	caacacia	gtgagtttaaat...2866...ctcgatggacacatttgtca	AGCGT	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1693...gcatttttacag	atgccaaa
D. Yak	catcacia	gtgagttccaaa...2869...ctcgatggacacatttgtca	AGCGC	TCCA	aa	GCGA	atcgctacgatcgtggatgg...1504...gacgtttttcag	atgccaaa
		*****	*		** ***** ** ** **		* **** **	

id=41794 gene=FBgn0028991 name=seq segment=chr2R.9072681\_9077065\_-1 type=I5 VIEW

Figure 122: CS=9.6



```

D.Mel  gTGAataCG GTaATTGGTTG---aaaggcctgg---caaatctttt----.51...ttatccacacag agtcgcat
D.Sim  gTGAataCG GTaATTGGTTG---aaaggcctgg---caaatcaact----.51...ttatccacacag agtcgcat
D.Sec  gTGAataCG GTaATTGGTTG---aaaggcctgg---caaatcaact----.51...ttatccacacag agtcgcat
D.Ere  gTGAataCG GTaATTGGTTGAATG---ccctgc---aaattgcttcca..46...ctatctacacag agtcgcat
D.Ana  gTGAataCG GTaATTGGTTGG--aataattttaa---tgattttct----.58...attcgaatag agccgcat
D.Gri  gTGAataCG GTaATTGGTAGCG---ctttagccatcatttcaat----.40...ttcgcaaagcag agccgcat
D.Moj  gTGAataCG GTaATTGGTAG---agcttgatcatcgattcta----.44...cgatcaacgcag agccgcat
D.Per  gTGAataCG GTaATTT-----cggggaaccaatc--tcaagg..54...ctttttctttag agtcgcat
D.Wil  gTGAataCG GTaATTGTTgATGGGTTGatcacacagcagatttgcca----.44...tcctctcttcag agccgcat
D.Yak  gTGAataCG GTaATTGGTTGAATG---ccctgg---caaatcctccgtg..43...ctaaccacacag agtcgcat
***** ***** * ** ** ** **

```

id=97288 gene=FBgn0260003 name=Dys segment=chr3R\_15310667\_15310761.1 type=IN

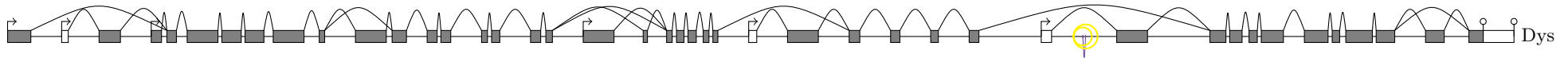
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D.Mel  tgtttaaa gtgcgaaaaata-----...3495...-----tgtca-ttcgtagtaatgttg---TAATAAATACCGTTACaatgtcattaccggcattac..1414...ttttataaatag ataagcgc
D.Sim  tgtttaaa gtgcgaaaaata-----...3561...-----tgtca-ttcgttgaatgttg---TAATAAATACCGTTACaatgtcattaccggcattac..1348...ttttataaatag ataagcgc
D.Sec  tgtttaaa gtgcgaaaaata-----...3629...-----tgtca-ttcgttgaatgttg---TAATAAATACCGTTACaatgtcattaccggcattac..1280...ttttataaatag ataagcgc
D.Ere  tgtttaaa gtgcgaaaaata-----...3238...--acacttgtca-tttgcagtaa---TGTTgTAATAAATACCGTTACaatgtcattaccggcattac..1666...ttttataaatag ataagcgc
D.Ana  tttttgaa gtgcgaaaaaaa-----...3729...--acttgtca-ttcgtcgtaatg---TTGTaaTAAATACCGTTACaatgtcattaccggcattac..1177...ttataataaatag ataagcgc
D.Gri  -----aaaacaaagtgattttgtgc...3668...--acacttgtca-ttcgtcgtaa---TGTTGaaTAAATACCGTTACaatgtcattaccagcattac..1236...atataaaaatag aaacgttc
D.Moj  taaccaa gcaaaaagaaaa-----...3627...-----tgtca-gccgctgttgaatgTTGTaaTAAATACCGTTACaatgtcattaccggcaatc..1279...ctgtaaaaatag aagcggtc
D.Per  -----aaa gtgtaaaccaaaacgca-----...2855...-----a-ttcgtcgtaatgttgaat---AAATACCGTTACaatgtcattaccggcattac..2058...tcttataaatag ataaacga
D.Wil  tgtgtgcg atggaagcaa-----...3488...agacacttgtcagttcgttg---TAATgTTGTAATAAATACCGTTACaatgtcattaccagcattac..1413...ttctaaaatag ataaataa
D.Yak  tgtttaaa gtgcgaaaaata-----...3536...--acacttgtca-tttgaagtaa---TGTTgTAATAAATACCGTTACaatgtcattaccggcattac..1368...ttttataaatag ataagcgc
** * * * * * ** ** ** **

```

id=97330 gene=FBgn0260003 name=Dys segment=chr3R\_15395102\_15410962.1 type=IN VIEW

Figure 123: CS=14.5



```

D.Mel  tgtttaaa gtgcgaaaaata-----...3463...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...1447...ttttataaatag ataagcgc
D.Sim  tgtttaaa gtgcgaaaaata-----...3529...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...1381...ttttataaatag ataagcgc
D.Sec  tgtttaaa gtgcgaaaaata-----...3597...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...1313...ttttataaatag ataagcgc
D.Ere  tgtttaaa gtgcgaaaaata-----...3211...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--ttgcagtaatggtgtaa...1699...ttttataaatag ataagcgc
D.Ana  tttttgaa gtgcgaaaaaaa-----...3700...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...1210...ttatataaatag ataagcgc
D.Gri  -----aaaacaaagtgattttgtgc...3641...agggtgcatggttgcaccaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...1269...atataaaaatag aaacgttc
D.Moj  taaccaaa gcaaaaagaaaa-----...3595...gcgtcgcattggtgccaacTAATtaGACAcTTGTcagcccgctgttgaatggtg---...1315...ctgtaaaaatag aagcgttc
D.Per  -----aaa gtgtaaaccaaacgca-----...2819...tggcgaatggtgttctaacTAATtaGACAcTTGTca-t--tcgtagtaatggtgtaa...2091...tcttataaatag ataaacga
D.Wil  tgtgtgcg atggaaaagcaa-----...3463...ttaggaaatggtgactcaacTAATtaGACAcTTGTcagt--tcgtagtaatggtgtaa...1447...ttctaaaaatag ataaataa
D.Yak  tgtttaaa gtgcgaaaaata-----...3509...gagtggaatggtgttctaacTAATtaGACAcTTGTca-t--ttgaagtaatggtgtaa...1401...ttttataaatag ataagcgc
          ** *                *****
  
```

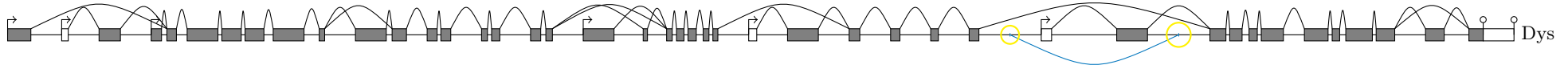
id=97330 gene=FBgn0260003 name=Dys segment=chr3R.15395102.15410962.1 type=IN

```

D.Mel  tgtttaaa gtgcgaaaaata-----...3509...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1404...ttttataaatag ataagcgc
D.Sim  tgtttaaa gtgcgaaaaata-----...3575...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1338...ttttataaatag ataagcgc
D.Sec  tgtttaaa gtgcgaaaaata-----...3643...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1270...ttttataaatag ataagcgc
D.Ere  tgtttaaa gtgcgaaaaata-----...3257...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1656...ttttataaatag ataagcgc
D.Ana  tttttgaa gtgcgaaaaaaa-----...3746...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1167...ttatataaatag ataagcgc
D.Gri  -----aaaacaaagtgattttgtgc...3687...atggtgtaataaataccgttACAATGTCATTA---ccagcattacttgacggtat...1226...atataaaaatag aaacgttc
D.Moj  taaccaaa gcaaaaagaaaa-----...3644...atggtgtaataaataccgttACAATGTCATTA---ccggcaataacttgttggat...1269...ctgtaaaaatag aagcgttc
D.Per  -----aaa gtgtaaaccaaacgca-----...2865...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcctcctc...2048...tcttataaatag ataaacga
D.Wil  tgtgtgcg atggaaaagcaa-----...3510...atggtgtaataaataccgttACAATGTCATTA---ccaccggcattagttgacgg---...1403...ttctaaaaatag ataaataa
D.Yak  tgtttaaa gtgcgaaaaata-----...3555...atggtgtaataaataccgttACAATGTCATTA---ccggcattactcgttggcat...1358...ttttataaatag ataagcgc
          ** *                ***** ** ** *
  
```

id=97330 gene=FBgn0260003 name=Dys segment=chr3R.15395102.15410962.1 type=IN VIEW

Figure 124: CS=12



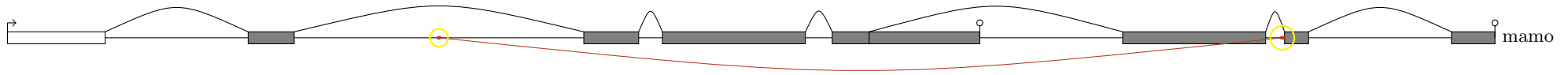
D. Mel	acatgacg	gtaagtcgagac...4557...	---acaacaaaaagcacgccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagcc	---...355...	tgttggtgggtc	agttttcg
D. Sim	acatgacg	gtaagtcgagac...4558...	---acaacaaaaacaggccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagcc	---...354...	tgttggtgggtc	agttttcg
D. Sec	acatgacg	gtaagtcgagac...4558...	---acaacaaaaacagccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagcc	---...354...	tgttggtgggtc	agttttcg
D. Ere	acatgacg	gtaagtcgagac...4551...	---gaccac-aaaaacagccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagcc	---...361...	tgttggtgggtc	agttttcg
D. Ana	acatgacg	gtaagtcagat...4508...	---acaaaaaataccagaccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagcc	---...404...	ttttggtggctc	gaataagc
D. Gri	acatgacg	gtaagtcgatca...4704...	...tccacggcataaaacaaact	---CAAAaTGCGaGCAACAAGT	---ttcctctacatgcgtgagt	...202...	tgttggtgggtc	agttaacg
D. Moj	acatgacg	gtaagtcagcca...4352...	---ggagcgtcaaacgagccatt	C-AAATGCATTTA	-----Taaat-gtatcaatacaagca	---...560...	tgttggtgggtc	agttaacg
D. Vir	acatgacg	gtaagtcgccc...4359...	---aaagcgtcaaacgagccatt	C-AAATGCATTTA	-----Taaat-gtttcgaattgagcca	---...553...	tgttggtgggtc	agttaacg
D. Yak	acatgacg	gtaagtcgagac...4560...	---acaacaaaaagcacgccatt	C-AAATGCATTTA	-----Taaattgtatcgaatgagac	---...352...	tgttggtgggtc	agtgttcg
	*****	*****		* * * * *	* * * * *		* * * * *	*****

id=97328 gene=FBgn0260003 name=Dys segment=chr3R.15388549\_15394933.1 type=IN

D. Mel	agaatgag	gtttgtgtactg...2445...	---gaaacttt--tgctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1086...	ttgtgcttacag	aaaatgcg
D. Sim	agaatgag	gtttgtgtactg...2463...	---gaaacttt--tgctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1037...	ttgtgcttacag	aaaatgcg
D. Sec	agaatgag	gtttgtgtactg...2442...	---gaaacttt--tgctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1002...	ttgtgcttacag	aaaatgcg
D. Ere	agaatgag	gtttgtgtactg...2287...	---gaaacttt--tgctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...997...	ttgtgcttacag	aaaatgcg
D. Ana	aaaagag	gtttgtgtattg...2026...	---caacttg--agctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...920...	gttacttttag	aaaatgcg
D. Gri	aaaatgag	gtttgtttcttg...2501...	...tgcacaggtaaatgcgtttt	---GCTTGTTCaTGCA-TTTG	-----catgcaaaatggctgga	aaa...1834...	tatttcttgca	aaaatgcg	
D. Moj	aaaacgag	gtttgtgtactg...1877...	...ggcatagttgaggttgag	---G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1179...	tggttcttgca	aaaatgcg
D. Vir	aaaacgag	gtttgtgtattg...2228...	---aaagttg--aagttgtgagcag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1344...	tggtacttacag	aaaatgcg
D. Yak	agaatgag	gtttgtgtactg...2419...	---gaaacttt--tgctttgccaag	G-----TAAATGCATTTG	cttgttgc	atgcaaaacggc	-----...1100...	ttgtgcttacag	aaaatgcg
	* * * *	***** * *	* * * * *	* * * * *	* * * * *	*****		* * * *	*****

id=97332 gene=FBgn0260003 name=Dys segment=chr3R.15412237\_15415845.1 type=IN VIEW

Figure 125: CS=10.8



D. Mel	cccataag	gtgagtactcat...4287...-----tatatcg---gtcgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...624...-atgctttttc---ag	gtggtcct	
D. Sim	cccataag	gtgagtactcac...4287...-----tatatcg---gtcgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...624...-atgctttttc---ag	gtggtcct	
D. Sec	cccataag	gtgagtactcat...4292...-----tatatcg---gtcgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...619...-atgctttttc---ag	gtggtcct	
D. Ere	cccataag	gtgagtactgtt...4257...-----tatatcg---ctcgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...654...gatgcttttt---ag	gtggtcct	
D. Ana	cccataag	gtaagttctttc...4412...-----atatcg---agccgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...499...cgacacttgc---ag	gtggtcct	
D. Gri	cccataag	gtgagttcccaa...3857...acggggcaggccg-----tgttgca	TACC	CAAGGCGTG	caagcgcacataaaaaatcga...1054...tgctgttgc---ag	gtggtcct	
D. Moj	cccataag	gtgagtacttt...3717...-----tcagctggcagtgcatgca	TACC	CAAGGCGTG	caagcgcacataaaaaatcga...1194...tatccattgc---ag	gtggtcct	
D. Per	cccataag	gtgagtcacata...4166...-----gatatctcg-----cgatcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...745...ttgtccgtgc---ag	gtggtcct	
D. Wil	cccataag	gtgagtatttc...3678...-----tcgcaaaacgatcattgca	TACC	CAAGGCGT	acatgcgcacataaaaaatcg-...1234...-----tttttcaatag	gtggtcct	
D. Yak	cccataag	gtgagtactatt...4261...-----tatatcg---gttgttcattgca	TACC	CAAGGCGTG	catgcgcacataaaaaatcga...650...tgtgcatttt---ag	gtggtcct	
	*****	** ***	*	*****	** *****	*	** *****

id=15922 gene=FBgn0085375 name=mamo segment=chrX\_13779534\_13795515\_-1 type=IN

D. Mel	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Sim	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Sec	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Ere	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Ana	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Gri	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Moj	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Per	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Wil	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
D. Yak	tgtcatgt	gtaagttctgtgctaaaagttttcccgatgttacatcactgat	CACGC	TTTGtc	GGTA	catacag	gtgatcga
	*****	*****	*****	*****	*****	*****	*****

id=15931 gene=FBgn0085375 name=mamo segment=chrX\_13764437\_13764502\_-1 type=IN VIEW

Figure 126: CS=4.8



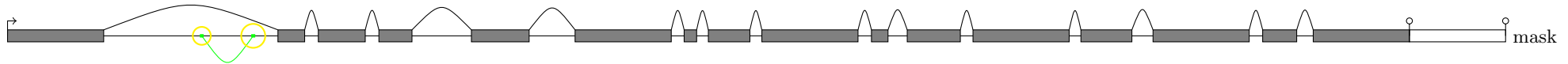
D. Mel	gcgagatg	gtaagtagtcgg...313...	gcgtttttatTTTTcgttc-----	GTTTCAG	TaCATCcg
D. Sim	gcgagatg	gtaggtagtcgg...286...	gcgtttttatTTTTcgttc-----	GTTTCAG	TaCATCcg
D. Sec	gcgagatg	gtaggtagtcgg...294...	gcgtttttatTTTTgttc-----	GTTTCAG	TaCATCcg
D. Ere	gcgagatg	gtaggtagtcgg...296...	gcgtttttatTTTTcgttc-----	GTTTCAG	TaCATCcg
D. Gri	gcgacatg	gtatgtggcca...214...	tgcccttgaatTTTTCGTTcg	TTTTGCAG	TaCATCcg
D. Moj	gcgacatg	gtaggtggagat...388...	-tttgatttattatcgttcg---	TTTTGCAG	TaCATCcg
D. Vir	gcgacatg	gtaggtgcggg...998...	-tttgatttatttccgttcg---	TTTTCAG	TaCATCcg
D. Wil	gtgatatg	gtatgtacatcc...422...	tttttatttcttccgttc-----	GTTTCAG	TaCATCcg
D. Yak	gcgagatg	gtaggtagtcgg...297...	gcgtttttatTTTTcgttc-----	GTTTCAG	TaCATCcg
	* * *	*** **	* * **	*** **	*****

id=59593 gene=FBgn0051352 name=CG31352 segment=chr3R.5523687.5524039.-1 type=IN

D. Mel	tcagctcc	gtaagtgctgcc...559...	ccgctgcggccacgatgcatGGTGcc	ACTGtAAGAC	cgc-ttctggtgtgctatgc--	...129...	tttcgaaaacag	gacttctc
D. Sim	tcagctcc	gtaagtgctgcc...557...	ccgctgcggccacgatgcatGGTGcc	ACTGtAAGAC	cgc-ttctggtgtgctatgc--	...135...	tttcgaaaacag	gacttctc
D. Sec	tcagctcc	gtaagtgctgcc...554...	ccgctgcggccacgatgcatGGTGcc	ACTGtAAGAC	cgc-ttctggtgtgctatgc--	...135...	tttcgaaaacag	gacttctc
D. Ere	acagctcc	gtaagtgctgcc...507...	ccgctgcggccacgatgcatGGTGcc	ACTGtAAGAC	cgc-ttttggtgtgctatgc--	...130...	ttttgaaaatag	gatttctc
D. Gri	acagctcc	gtaagtgctgac...573...	cagcagccgcccacgatgcatGGTGcc	ACTGtAAGAAATG	ctttggtgtgtgtcttt...	...153...	taccctaatag	gacttttc
D. Moj	acagctcc	gtaagtgctgat...597...	ctgccgacgtacgatgcatGGTGcc	ACTGtAAGA	atgc-ttgagttcattttccg---	...204...	tattccatgtag	gacttttc
D. Vir	acagctcc	gtaagtgctggc...517...	ccgcccggccacgatgcatGGTGcc	ACTGtAAGA	atgc-tttggtgtgtgtttt---	...209...	cattgcacacag	gacttctc
D. Wil	acagctca	gtaagtgctgcc...578...	ctgctgctgtcacgatgcatGGTGcc	ACTGtAAGAT	tgcttttggtgttttact---	...169...	tttaataacag	gatttctc
D. Yak	acagctcc	gtaagtgctgcc...528...	ccgctgcggccacgatgcatGGTGcc	ACTGtAAGAC	cgc-ttttggtgtgctatgc--	...133...	tttcgacaatag	gacttctc
	*****	*****	* * * * *	*****	** * * * *		**	** * * *

id=59603 gene=FBgn0051352 name=CG31352 segment=chr3R.5521376.5522143.-1 type=IN VIEW

Figure 127: CS=13.32



```

D.Mel tttcagag gtgagtgtgagccc...2396...--ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...361...tctcccttacag gacgatat
D.Sim tttcagag gtgagtgtgagccc...3934...--ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...383...tctcccttacag gacgatat
D.Sec tttcagag gtgagtgtgagccc...2408...--ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...385...tctcccttacag gacgatat
D.Ere tttcagag gtgagtgtgagccc...2405...--ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...427...tctcccttacag gacgatat
D.Ana tctcagag gtgagtgtgtcc...2217...ctttattttagatcctattGGCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...448...tctcctgttcag gacgatat
D.Gri tctcagag gtgagtgttcaa...3205...-ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagc...597...gtatgttttcag gatgatat
D.Moj tctcagag gtgagtctgtgt...2724...ctttattttagatcctattGGCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagc...538...ttatgttttcag gatgatat
D.Per tctcagag gtgagtgccttt...2600...-ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagtt...430...gtttgtttctag gatgatat
D.Pse tctcagag gtgagtgccttt...2642...-ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagtt...429...gtttgtttctag gatgatat
D.Vir tctccgag gtgagtaaaata...2899...ctttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagc...546...gtatgttttcag gatgatat
D.Wil tatccgag gtaagtgaatga...2059...ttttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcctc...408...ttgtattttcag gacgatat
D.Yak tttcagag gtaagtgggcca...2347...-ttattttagatcctattggCATTCTTGTGTTTAAGGCCAGatctcctgtaagtttcagt...438...tctcccttacag gacgatat
* ** *** ** ** * * * * * ** ** ** * * * * *

```

id=10249 gene=FBgn0043884 name=mask segment=chr3R.20058697\_20061538\_1 type=IN

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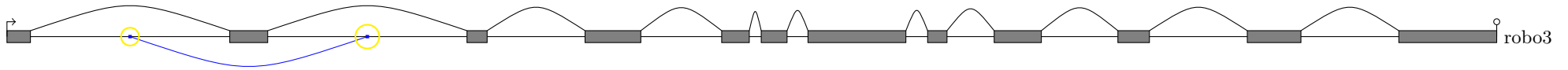
D.Mel tttcagag gtgagtgtgagccc...2663...taaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAATG-----g-gctctactgatcaactatt----...93...tctcccttacag gacgatat
D.Sim tttcagag gtgagtgtgagccc...4201...taaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAATG-----g-gctctactgatcaactatt----...115...tctcccttacag gacgatat
D.Sec tttcagag gtgagtgtgagccc...2675...taaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAATG-----g-gctctactgatcaactatt----...117...tctcccttacag gacgatat
D.Ere tttcagag gtgagtgtgagccc...2672...taaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAATG-----g-gctctactgatcaactatt----...159...tctcccttacag gacgatat
D.Ana tctcagag gtgagtgtgtcc...2544...aaaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAacGTGCT-----ctactgatctatagctatag...118...tctcctgttcag gacgatat
D.Gri tctcagag gtgagtgttcaa...3636...acacacaaaac--atcacattgCTGGCCTTAGACgACAAGAATGTgctctttaagtgtcctcactg-----...165...gtatgttttcag gatgatat
D.Moj tctcagag gtgagtctgtgt...3139...acacataaagc--aacatattgCTGGCCTTAGACaACAAGAatGTGCTctttaagtgtcctcactg-----...120...ttatgttttcag gatgatat
D.Per tctcagag gtgagtgccttt...2884...aatccaacacc-actttttTCTGGCCTTAGACaACAAGAATGT-----gcgctctactgatcaaatga----...145...gtttgtttctag gatgatat
D.Pse tctcagag gtgagtgccttt...2923...aatccaacacc-actttttTCTGGCCTTAGACaACAAGAATGT-----gcgctctactgatcaaatga----...147...gtttgtttctag gatgatat
D.Vir tctccgag gtgagtaaaata...3288...acacacaaaagc--atcatattgCTGGCCTTAGACaACAAGAatGTGCTctttatgtgctcaactgatt-----...154...gtatgttttcag gatgatat
D.Wil tatccgag gtaagtgaatga...2303...caatt--acaccgaattgttgCTGGCCTTAGACaACAAGAATGTT-----ctcctgtgattgattgatgt--...163...ttgtattttcag gacgatat
D.Yak tttcagag gtaagtgggcca...2623...taaacc-acacc-actttgttgCTGGCCTTAGACaACAAGAATG-----g-gctctactgatcaactatt----...161...tctcccttacag gacgatat
* ** *** ** ** * * * * * ** ** ** * * * * *

```

id=10249 gene=FBgn0043884 name=mask segment=chr3R.20058697\_20061538\_1 type=IN VIEW

Figure 128: CS=14.4





```

D.Mel  tgcacaag gtaagctcgaat...3506...cgaactgcgat--caggaattcGATTCCAACTGCGCTTGctGGGTgcaacgtctgtccgctt-----tgt...1393...ctctttttcag gatcccat
D.Sim  tgcacaag gtaagctcgaat...3550...cgaactgcgat--ccggaattcGATTCCAACTGCGCTTGctGGGTgcaacgtctgtccgctt-----tgt...1349...ctctttttcag gatcccat
D.Sec  tgcacaag gtaagctcgaat...3555...cgaactgcgat--ccggaattcGATTCCAACTGCGCTTGctGGGTgcaacgtctgtccgctt-----tgt...1344...ctctttttcag gatcccat
D.Ere  tgcacaag gtaagctcgcgat...3666...-atgcaacttttgccccgggc-TGTTTGTGCGCTCGTTGTC-----gtg--ttgcaatcgacaacaaa...1239...tcgctctttcag gatcccat
D.Ana  tgcacaag gtaagcgcaaaa...3523...ttgttttttctggctggatg--ACATgcAACTTTTGC-----cccagctgt---ttgt-----tgctgt...1387...tctcttcggcag gttcgcag
D.Gri  tgcacaag gtaagtccatgt...3442...tgtgcagcgtctgttgcgatg--ACATgcAACTTTTGCCTCG-----agctgtgaagtgt-----tgttat...1464...catctcttcag gttcgcag
D.Pse  tgcccaag gtaagtacagcc...2784...tttgttatttgcgggatg--ACATgcAACTTTTGCCTCGAG-----ctgt---ttgccatttgatgtg...2120...actctttggcag gttcgcag
D.Vir  tgcacaag gtaagaccatgt...3211...tgtgcagcgtctgttgcgatg--ACATgcAACTTTTGCCT-----gcagctgtgaattgt-----tgtt...1697...tctcgtctccag gttcgcag
D.Wil  tgcacaag gtaagtaagaag...2903...cgtgtagcgtctgttgcgatg--ACATgcAACTTTTGCCT-----gcagctgt---tttc-----atgttgc...2006...tctcgttttcag gttcgcag
D.Yak  tgcacaag gtaagctcgaat...3568...-tgcaacgtctgccccggcgc-TTTGTGTTGTTGC-----tcgctcgggatgacatgcaa-----...1343...tgctctttccag gatcccat
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```

id=89154 gene=FBgn0041097 name=robo3 segment=chr2L.1256946\_1273584.1 type=IN

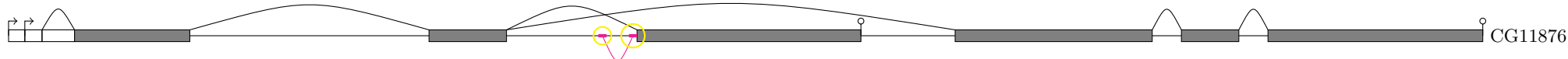
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D.Mel  tcctcaag gtaagcgacggg...4215...cacacttagttt--gacattta-----ATTTTAAGCGCAtGTTGgGGAATT-----cttttgtgctccgaaaaaca-----...686...atctttttgcag gttgtcaa
D.Sim  tcctcaag gtaagcggcgggt...4213...cacacttagttt--gacattta-----ATTTTAAGCGCAtGTTGgGGAATT-----cttttgtgctccgaaaaaca-----...688...atctttttgcag gttgtcaa
D.Sec  tcctcaag gtaagcggcgggt...4223...cacacttagttt--gacattta-----ATTTTAAGCGCAtGTTGgGGAATT-----cttttgtgctccgaaaaaca-----...678...atctttttgcag gttgtcaa
D.Ere  tcctcaag gtaagaagcggg...4414...--ttatgatttgagcacttgaa-----GGCAGCaGACGcGCAACAGACAacagattgc-----cgctctgtttaa-----...489...atctttttgcag gttgtcaa
D.Ana  tcctcaag gtaagcggggcg...4129...-----tggatgaggtcagcgcga--GCAGAAAGTTGTGT-----aaattgtgc-----gaactttgtg-----...783...tttttttccag gttgtcaa
D.Gri  tcctcaag gtaagtccacca...3808...aacacttaattt--cacttgga-----TGAGGCACAGAAGTTGTGT-----aaattgtgc-----gaactttgtag-----...1098...acttttttgcag gttgtcaa
D.Pse  tcctcaag gtaagcgggtaaa...3263...-----gaggcccgaggagccatcTTCGAGCAGAAGTTGTGT-----aaattgtgc-----gaactttgtg-----...1644...tctttttcgcag gttgtcaa
D.Vir  tcctcaag gtaagtgcacag...3963...--cacttaattt--cacttgatg-----AGGCGCAGAAGTTGTGT-----aaattgtgc-----gaactttgtag-----...945...ttatttttgcag gttgtcaa
D.Wil  tcctcaag gtaagcaaccaa...3269...-----tggatgagaaggaagacagaGGCAGAGAAGTTGTGT-----aaattgtgc-----gaacttctct-----...1640...gtcttcttcag gttgtcaa
D.Yak  tcctcaag gtaagaagcggg...4436...-----cacttgaggcagcagacgc---GCAACaGA---CAACAGA-----ttgc-----cgtctgttttatggcc...474...atctttttgcag gttgtcaa
***** ***** * * * * *

```

id=89156 gene=FBgn0041097 name=robo3 segment=chr2L.1273779\_1280598.1 type=IN VIEW

Figure 129: CS=9.6



D.Me1	tcgatcac	gtgagtt-gcctcatc-----	:::::gcaatat-----	g	cagcg	GCGCt-----	TAATgGGATAAATATGGGTGGATTAG	-ctcctgccccaaagtcataga---	...32...	gattatgtgcag	gcaaagat
D.Sim	tcgatcac	gtgagtt-gcctcatc-----	:::::-----	g	CAGta	GGCTAACTACTCATATTATCTCATTG	caacaaaacgtaaaccaaa-----	...143...	gattacgtgcag	gcaaagat	
D.Sec	tcgatcac	gtgagtt-gcctcatc-----	:::::gcaatat-----	g	cagcg	GCGCc-----	TAATgGGATAAATATGGGTGGATTAG	-ctcctgccccaaagtcataga---	...32...	gattacgtgcag	gcaaagat
D.Ere	tcgatcac	gtgagt-gcctcatc-----	:::::gcaatat-----	g	ccgcg	GCGCc-----	TAATgGGATAAATATGGGTGGATTAG	-ctcctgccccaaagtcataga---	...32...	gattacgtgcag	gcaaagat
D.Ana	ttgatcac	gtgagt-g-tccagaac-----	:::::tctatacagatcgg-----	g	ccgcg	GCGCt-----	TAATgGGATAAATATGGGTG	-gtgcagctcctgccacctcc-----	...52...	gattatgtgcag	gcacaatt
D.Gri	tcgatcat	gtgagtgaacttaccctctctctatata	:::::ttgtcgtaaaaccag-----	g	ctcactcag	ACG-----	TAATgGGATAAATATGGGT	-----cgt--ttcaagttgagctgctg...	...54...	aattatgtgcag	gcgaacac
D.Moj	tcgatcac	gtgagttgcacgcacc-----	:::::ttgtcacatgatctgtaaattc	g	caaacgcctcacttta	ACG-----	TAATgGGATAAATATGGGT	-----ctcaaatcaagttgagctg---	...76...	aattatgtgcag	gccaatc
D.Per	ttgatcac	gtgagtgttccatccc-----	:::::tcattacaataccag-----	g	agggcg	GCGCG-----	TAATgGGATAAATATGGGT	-tgagcggctcctgccaccac-----	...64...	gattatgtgcag	gcaaagat
D.Pse	ttgatcac	gtgagtgttccatccc-----	:::::tcattacaataccag-----	g	agggcg	GCGCG-----	TAATgGGATAAATATGGGT	-tgaacggctcctgccaccac-----	...64...	gattatgtgcag	gcaaagat
D.Vir	tcgatcat	gtgagtgcacgcacc-----	tat:::::ttgtcacacaatccg	g	caaatataaattgccttcacttta	CGG-----	TAATgGGATAAATATGGGT	-----ctcaaatctggttgagctg---	...76...	aattatgtgcag	gctaattc
D.Wil	tcgatcat	gtaagctattgttgc-----	:::::-----	g	-----	-----	TACTCATATTATCTCATTGC	-----caaaacaaaacgaaaaaac-----	...189...	aattatgcgcag	gccaaagta
D.Yak	tcgatcac	gtgagtatttctcatc-----	:::::gcaatat-----	g	ccgcg	GCGCc-----	TAATgGGATAAATATGGGTGGATTAG	-ctcctgccccaaagtcataga---	...32...	aattacgtgcag	gcaaagat
		* *****	** ** *				** * ** * * *			**** * ****	** *

id=43434 gene=FBgn0039635 name=CG11876 segment=chr3R.24939878.24940150.1 type=IN

D.Me1	tcgatcac	gtgagttgcctc...207...-aagtc	atagatcggacctc-----	a	CTAATCC	ccACCCATATTATCCgATTAtGTGC	-----	-----	-----	-----	ag	gcaaa
D.Sim	tcgatcac	gtgagttgcctc...131...gtg	caatcgcagcggcgcc-----	g	-----	TAATGGGATAAATATGGGTGGa	TTAGCTcCTGC	-----	-----	-----	ag	gcaaa
D.Sec	tcgatcac	gtgagttgcctc...207...-aagtc	atagatcggacctc-----	a	CTAATCC	ccACCCATATTATCCgATTAcGTGC	-----	-----	-----	-----	ag	gcaaa
D.Ere	tcgatcac	gtgagttgcctc...206...-aagtc	atagatcggacctc-----	a	CTAAT	tcCCACCCATATTATCCgATTAcGTGC	-----	-----	-----	-----	ag	gcaaa
D.Ana	ttgatcac	gtgagtgtccag...236...-act	aatatccttcacaaaa-----	g	-----	CACCCATATTATCCgATTAtGTGC	-----	-----	-----	-----	ag	gcaca
D.Gri	tcgatcat	gtgagtgaact...235...gat	gattgctgtctaattcc-----	g	-----	ACCCATATTATCCaATTATGT	-----	-----	-----	-----	gcag	gcgaa
D.Moj	tcgatcac	gtgagttgcacg...271...acg	attgattgactaattcc-----	g	-----	ACCCATATTATCCaATTATGT	-----	-----	-----	-----	gcag	gcaaa
D.Per	ttgatcac	gtgagtgttcca...233...tgt	accgtttgactaattcc-----	g	-----	ACCCCATATTATCCgATTATGTGC	-----	-----	-----	-----	ag	gcaaa
D.Pse	ttgatcac	gtgagtgttcca...233...tgt	accgtttgactaattcc-----	g	-----	ACCCCATATTATCCgATTATGTGC	-----	-----	-----	-----	ag	gcaaa
D.Vir	tcgatcat	gtgagtgcacg...284...acg	attgattgactaattcc-----	g	-----	ACCCATATTATCCaATTATGT	-----	-----	-----	-----	gcag	gctaa
D.Wil	tcgatcat	gtaagctattgt...163...aat	ggggacacggaactcgc-----	g	-----	GTAATGGGATAAATATGGGTG	tttcagatggctcctgccctgc	caataaattc	caaatgttactcaactaataatcc	accatattgtccaattatgcgcag	gctaa	gcaaa
D.Yak	tcgatcac	gtgagtatttct...207...-aagtc	atagatcggacctc-----	a	CTAATCC	ccACCCATATTATCCaATTAcGTGC	-----	-----	-----	-----	ag	gcaaa
		* *****	** ** *			* ** * * *					** ** *	** ** *

id=43434 gene=FBgn0039635 name=CG11876 segment=chr3R.24939878.24940150.1 type=IN VIEW

Figure 130: CS=14.4



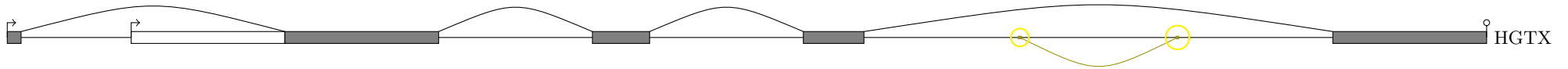
D. Mel	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGATATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctctt	ta-----...793...	ctgcattcacag	gtcctaaa
D. Sim	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGATATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctctt	ta-----...817...	ctgcattcacag	gtcctaaa
D. Sec	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGATATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctctt	ta-----...816...	ctgcattcacag	gtcctaaa
D. Ere	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGATATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctct	-----...818...	cggcattcacag	gtcctaaa
D. Ana	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGATATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctc	at-----...917...	tgctccaacag	gtccaaaa
D. Gri	ggcgacag	gtaggcatatg	ccatcacctc	tggaccagg	ctctttg	ccgccaGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctct	-----...1125...	gttaatcgacag	gtccaaag
D. Moj	ggcatcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctct	ta-----...1062...	attcattcgtag	gtccaaaa
D. Per	cgcttcag	gtaggcatatg	ccatccccct	tggaccggg	ctctttg	ccgccaGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctc	taact-----...1004...	ttgcattgacag	gtccaaaa
D. Pse	cgcttcag	gtaggcatatg	ccatccccct	tggaccggg	ctctttg	ccgccaGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctc	taact-----...997...	ttgcattgacag	gtccaaaa
D. Vir	ggcatcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctct	ta-----...1002...	tgatccacacag	gtccaaaa
D. Wil	cgcatcag	gtaggcatatg	ccatctccat	tggaccagg	ctcattg	ccccagGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctc	taactccgaat...1039...	actgcatacag	gtccgaaa
D. Yak	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagGTTTGTATCGAAAc	GTCGc	GGATTGGATGATg	atccagcgatttctct	ta-----...820...	ctgcattcacag	gtcctaaa
	** **	*****	** **	*****	** **	*****	*****	*****	*****	** **	*****	** **

id=89082 gene=FBgn0022085 name=ssp4 segment=chr2R.13408434\_13409336\_-1 type=IN

D. Mel	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...357...	ctgcattcacag	gtcctaaa
D. Sim	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...382...	ctgcattcacag	gtcctaaa
D. Sec	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...381...	ctgcattcacag	gtcctaaa
D. Ere	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...389...	ctgcattcacag	gtcctaaa
D. Ana	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...439...	ctgcattcacag	gtcctaaa
D. Gri	ggcgacag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...635...	gttaatcgacag	gtccaaaa
D. Moj	ggcatcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...557...	gttaatcgacag	gtccaaaa
D. Per	cgcttcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...525...	ttgcattgacag	gtccaaaa
D. Pse	cgcttcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...515...	ttgcattgacag	gtccaaaa
D. Vir	ggcatcag	gtaggcatatg	ccatctccctc	tggaccagg	ctctttg	ccgccaCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...551...	tgatccacacag	gtccaaaa
D. Wil	cgcatcag	gtaggcatatg	ccatctccat	tggaccagg	ctcattg	ccccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccaaaaaatgtgt	-----...552...	actgcatacag	gtccgaaa
D. Yak	cgcttcag	gtaggcatatg	ccatctccctc	cgaccggg	ctcattgcc	ccagCGTCGTCAAATCCa	CGACTTTCGATGt	TCAAAT	gaaacccagaatgtgt	-----...386...	ctgcattcacag	gtcctaaa
	** **	*****	** **	*****	** **	*****	*****	*****	*****	** **	*****	** **

id=89082 gene=FBgn0022085 name=ssp4 segment=chr2R.13408434\_13409336\_-1 type=IN VIEW

Figure 131: CS=11.52



```

D.Mel aggttaag gtaagcaaatat...3636...aaaagcagccttaatgatgc----CAACtaATGTTGTTGttGCCG----ctgctggctgtctgttgttt...1268...gttttgttcag gtctggtt
D.Sim aggttaag gtaagcaaacat...3568...aaaagcagccttaatgatgc----CAACtaATGTTGTTGttGCCG----ctgctggctgtctgttgttt...1336...gttttgttcag gtctggtt
D.Sec aggttaag gtaagcaaacat...3601...aaaagcagccttaatgatgc----CAACtaATGTTGTTGttGCCG----ctgctggctgtctgttgttt...1303...gttttgttcag gtctggtt
D.Ana aggttaag gtaagcaaaaa...4651...-----cggcaaatgaagcgcagcCAAAAGCGTTAGTCA-----tggtttgtgcatagtttt...259...gttttttgcag gtctggtt
D.Gri aggtgaag gtaagcgcacatc...3710...aaaagcagccttaatgatgc----CAACtaATGTTGTTGT-----tgttgt-tgctgt-tcttgtt...1199...gaattgttacag gtttggtt
D.Per aggttaag gtaagcacatcc...3835...aaaagcagccttaatgatgc----CAACtaATGTTGTTGTTGTTgcttgtctgttgttttccg--...1067...ttccggttcag gtttggtt
D.Pse aggttaag gtaagcacatcc...3835...aaaagcagccttaatgatgc----CAACtaATGTTGTTGTTGTTg-ttgt-tgttgctgtctgtt...1067...tacgttttgcag gtttggtt
D.Wil aggttaag gtaagcacatgg...2682...gtaggcgattggaggagtc---GCAAGAAATTGACTtGGTGTC---caagttttcattattctagt...2222...ccttttttacag gtttggtt
D.Yak aagttaag gtaagcaaacat...3691...aaaagcagccttaatgatgc----CAACtaATGTTGTTGttGCCG----ctgctggctggctgtctgtt...1213...gttttgttcag gtctggtt
* ** *** ***** * * ** * *** * * ** *** ** *****

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id=91082 gene=FBgn0040318 name=HGTX segment=chr3L.14577198.14583100.-1 type=IN

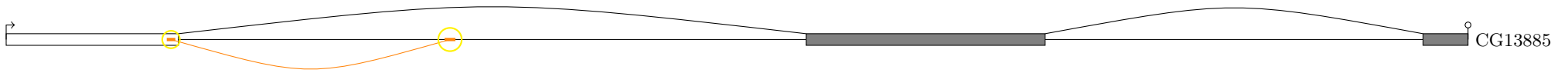
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D.Mel aggttaag gtaagcaaatat...4319...-----gggaaggtcgaggaggattt-----TGGCCAACATATGTTGccacagagcgaggcaaacga--...590...gttttgttcag gtctggtt
D.Sim aggttaag gtaagcaaacat...4267...-----gggaaggtcgaggaggattt-----TGGCCAACATATGTTGccacagagcgaggcaaacga--...642...gttttgttcag gtctggtt
D.Sec aggttaag gtaagcaaacat...4300...-----gggaaggtcgaggaggattt-----TGGCCAACATATGTTGccacagagcgaggcaaacga--...609...gttttgttcag gtctggtt
D.Ana aggttaag gtaagcaaaaa...4851...-----tgttgtgcccgcccccttc-----TGACTtAATGaCTTTG--acaatgtgactcgccctaatt...58...gttttttgcag gtctggtt
D.Gri aggtgaag gtaagcgcacatc...4501...gcacgagcaggggtgggccaat-----GCAACATATGTTG--ccagcgcgttgaggctgtt...411...gaattgttacag gtttggtt
D.Per aggttaag gtaagcacatcc...4610...-----tgggtggtagtcgggggga-----GATGGAGCAACATATGTTGccacagggcgaggcaaacga--...296...ttccggttcag gtttggtt
D.Pse aggttaag gtaagcacatcc...4601...-----tgggtggtagtcgggggga-----GATGGAGCAACATATGTTGccacagggcgaggcaaacga--...305...tacgttttgcag gtttggtt
D.Wil aggttaag gtaagcacatgg...4680...-----agaccgtaagcgcacccaaaGACGTTAGTCatgGTTTTTGC--atagtttctactgtaacagg...224...ccttttttacag gtttggtt
D.Yak aagttaag gtaagcaaacat...4387...-----gggaaggtcgaggaggattt-----TGGCCAACATATGTTGccacagagcgaggcaaacga--...522...gttttgttcag gtctggtt
* ** *** ***** * * ** * *** * * ** *** ** *****

```

id=91082 gene=FBgn0040318 name=HGTX segment=chr3L.14577198.14583100.-1 type=IN VIEW

Figure 132: CS=5.4



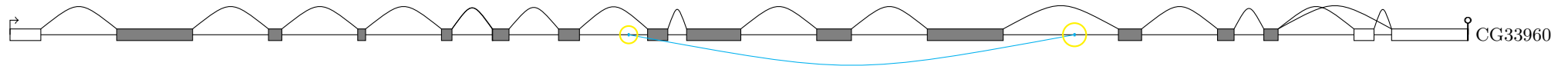
D.Mel	at ttg cag	ct-tgcaatg cgc...167...aggcgaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Sim	at ttg cag	ct-tgcaatg cgc...174...aggcgaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Sec	at ttg cag	ct-tgcaatg cgc...173...aggcgagac gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Ere	at ttg cag	ct-tgcaatg cgc...171...aggcgaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Ana	at ttg caa	ct-tgcagtgcga...164...atg c gaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Moj	at ttg cag	ca-tgcagcagca...191...atg c gaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Per	at ttg cag	cagtgc aa-aatg...298...atg c gaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Pse	at ttg cag	cagtgc aa-aatg...298...atg c gaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Vir	at ttg cag	ct-tgcagcaaca...171...atg c gaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
D.Yak	at ttg cag	ct-tgcaatg cgc...171...aggcgaggc gatagttt atc	GCCAATTTTCGT	gccgtgcagag	gtgaacgc
*****	*	****	* ****	*****	*****

id=17583 gene=FBgn0260471 name=CG13885 segment=chr3L\_392603\_392824\_-1 type=E5

D.Mel	gtgcagag	gtgaacg cggac...303...taaaacggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccaaacgg...427...acctgcgtgtag	tc---ataata
D.Sim	gtgcagag	gtgaacg cggac...305...taaaacggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccaaacgg...409...gcctgcatatag	tcagatat---
D.Sec	gtgcagag	gtgaacg cggac...305...taaaacggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccaaacgg...414...gcctgcatatag	tcagatat---
D.Ere	gtgcagag	gtgaacg cggac...334...taaaacggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccaaacgg...389...gcctgcatatag	tcagatat---
D.Ana	gtgcagag	gtgaacg cggac...273...cccaaatgtcatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccctgcgg...431...acatacggattg	tgacaaat----
D.Moj	gtgcagag	gtgaacg cggac...272...cgccg cggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcgtgccaca...92...agctatata---	-catatatagta
D.Per	gtgcagag	gtgaacg cggac...377...ttttgtggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tgtgtgtgact...131...-cccgtctcc--	-cgattacaata
D.Pse	gtgcagag	gtgaacg cggac...365...ttttgtggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tgtgtgtgact...131...-cccgtctcc--	-cgattacaata
D.Vir	gtgcagag	gtgaacg cggac...267...cgccg cggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcgtggccgc...125...ttctgtgtgtg	gtgtgtgc----
D.Yak	gtgcagag	gtgaacg cggac...311...taaaacggccatgcgcg tta	ACGGTAAATaaTGGC	cgccatc t tggcccaaacgg...420...gcctgcatatag	tcagatat---
*****	*****	*****	* *****	*****	*****

id=17584 gene=FBgn0260471 name=CG13885 segment=chr3L\_391794\_392602\_-1 type=I5 VIEW

Figure 133: CS=12



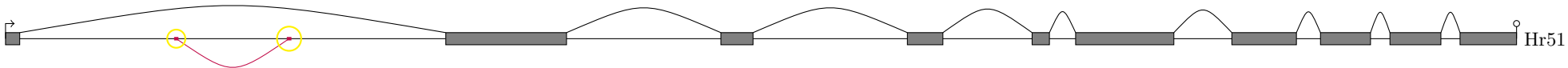
D. Mel	ccgccctg	gtaagttcgacc...278...	agggaggcacgtgcgtacac	TTTATg	CGTAATTG	GTGCGG	tgctgcccctggcttactgg--...87...	ccaaaatgcag	tacgccgg
D. Sim	ccgccctg	gtaagttcgacc...248...	agggaggcacgtgcgtacac	TTTATg	CGTAATTG	GTGCGG	tgctgcccctggcttactgg--...81...	ccaaaatgcag	tacgccgg
D. Sec	ccgccctg	gtaagttcgacc...260...	agggaggcacgtgcgtacac	TTTATg	CGTAATTG	GTGCGG	tgctgcccctggcttactgg--...80...	ccaaaatgcag	tacgccgg
D. Ana	ccgccctg	gtaagttcaacc...312...	agggaggcacgtgcgtacac	TTTATg	CGTAATTG	GTGCGG	tgctgcccctggcttactgg--...92...	ccaaaatgcag	tacgccgg
D. Gri	cagcctg	gtaagtccaagt...327...	ctctcggcacgtgcgtacac	TTTACg	CGTAATTG	---	tgtgctgccc-t-gtgtgtag--...163...	ttgcataccag	tacgccgg
D. Moj	cagcctg	gtaagtccaagt...401...	tctgaggcacgtgcttacac	TTTACg	CGTAATTG	---	tgtgctgccc-t-gtgtgtag--...192...	tacgcacaccag	tacgccgg
D. Per	ccgccctg	gtaagttcaggg...281...	agagaggcacgtgcgtacac	TTTATg	CGTAATTG	---	tgtgctgccc-t-gtgcccagcca...89...	ccgacattcag	tacgccgg
D. Pse	ccgccctg	gtaagttcaggg...279...	agggaggcacgtgcgtacac	TTTATg	CGTAATTG	---	tgtgctgccc-t-gtgcccagcca...89...	ccgacattcag	tacgccgg
D. Wil	ctgccctg	gtaagagttttt...368...	actgaagcacgtgcgtacac	TTTATg	CGTAATTG	---	tgtgctgccc-t-gtattgg--...148...	ctccccttttag	tatgctgg
	* ** **	*****		*****	*****	*****	*	** ** **	** ** **

id=22589 gene=FBgn0053960 name=CG33960 segment=chr2R.12311094.12311542.1 type=IN

D. Mel	aaaggacg	gtgagtattgca...418...	gccgcttcatctcactta---gc	CGTGCCAATg	TGCGGTAAA	attgacactttaaatagcgct...257...	tctctgtgtag	ctatgagg	
D. Sim	aaaggacg	gtgagtattgca...382...	gccgcttcatctcactta---gc	CGTGCCAATg	TGCGGTAAA	attgacactttaaatagcgct...258...	tctctgtgtag	ctacgagg	
D. Sec	aaaggacg	gtgagtattgca...375...	gccgcttcatctcactta---gc	CGTGCCAATg	TGCGGTAAA	attgacactttaaatagcgct...258...	tctctgtgtag	ctacgagg	
D. Ana	aaaggacg	gtgagtattgca...323...	gccgcttcatctcactta---gc	CGTGCCAATg	TGCGGTAAA	attgacactttaaatagcgct...335...	actgtctggcag	ctatgagg	
D. Gri	aaggacg	gtaagtgtgaa...460...	agcattggcattg---gcgttg	CAATg	TGCGGTAAA	attgacactttaaatactat...345...	ccgtctggcag	ctacgagg	
D. Moj	aaggacg	gtgagttagagg...171...	cttctaaatccaaacgc--tgc---	CAATg	TGCGGTAAA	attgacactttaaatagttg...298...	ccctccttgag	ctacgagg	
D. Per	aaggacg	gtaagtgtctat...96...	cacttagtcctggctgc--tgc---	CAATg	TGCGGTAAA	attgacactttaaatactct...304...	cctgtctggcag	ctatgagg	
D. Pse	aaggacg	gtaagtgtctat...96...	cacttagtcctggctgc--tgc---	CAATg	TGCGGTAAA	attgacactttaaatactct...298...	cctgtctggcag	ctatgagg	
D. Wil	aaggacg	gtaagtaaaaat...386...	ttggcgttgctgtgcttgc---	CAATg	TGCGGTAAA	attgacactttaaatagttg...264...	catctctttag	ctatgagg	
	** ** **	** ** *		**	***	*****	*	** ** *	** ** *

id=22597 gene=FBgn0053960 name=CG33960 segment=chr2R.12314504.12315262.1 type=IN VIEW

Figure 134: CS=11.34



```

D.Me1 ttctcaag gtaaattagtg--...952...--tgccccggtgc-cccggaaaaTGCAAGcATATgACGCtaatcctccggccttggacc...898...tcataactttag aactccac
D.Sim ttctcaag gtaaattagtg--...921...--aaagacggtgc-tccggaaaaTGCAAGcATATgACGCtaatcctccggccttggacc...731...tcaaaattccag aactccac
D.Sec ttctcaag gtaaattagtg--...960...--aaagacggtgc-tccggaaaaTGCAAGcATATgACGCtaatcctccggccttggacc...814...tcaaaattccag aactccat
D.Ere ttctcaag gtaaattagtg--...995...--caaagacggtgc--ccggaaaaTGCAAGcATATgACGCtaatcctccggccttggacc...950...tcaaaacttcag agctccac
D.Ana atcacaag gtaattaaacaa--...1002...--aaagacggagcaccggaaaaTGCAAGcATATgACGCtaatcggccggcattagacc...511...tttatattttag agttgcat
D.Gri atcacaag gta--taatttatt...1373...atgtgagccgtttggcttaa--TG---GCaCCCTAATTgaaatgtgtaaatatattttg...131...gctttttttag agctgcac
D.Moj ttcacaag gta--tattcatt...2017...gtctggtctgctgtcctaa--TG---GCaCCCTAATTgaaatgtgtaaatatattttg...656...cctcttcgcag agctgcac
D.Per atcccaag gtaatt--ccaact...2331...--aaagatggaac-gtcggaaaaTGCAAGcATATgACGCtaatccccgggcattagacc...529...cgaccttgcag agctgcac
D.Pse atcccaag gtaatt--ccagtt...2392...--aaagatggaac-gtcggaaaaTGCAAGcATATgACGCtaatccccgggcattagacc...511...cgaccttgcag agctgcac
D.Yak ttctcaag gtaaattgatgt--...1068...--aaagacgatgt-cccggaaaaTGCAAGcATATgACGCtaatcctccggccttggacc...1235...ccaaaacttcag aactccac
** **** *** * * ** ** * ** * ** * ** * ** * **

```

id=44865 gene=FBgn0034012 name=Hr51 segment=chr2R.11219152.11221081.1 type=IN

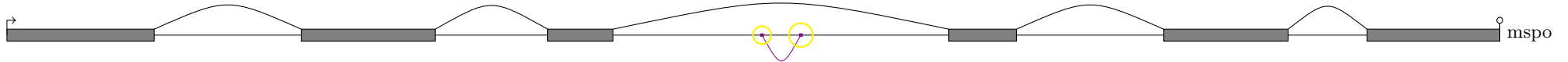
```

D.Me1 ttctcaag gtaaattagtg--...1318...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...531...tcataactttag aactccac
D.Sim ttctcaag gtaaattagtg--...1281...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...370...tcaaaattccag aactccac
D.Sec ttctcaag gtaaattagtg--...1320...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...453...tcaaaattccag aactccat
D.Ere ttctcaag gtaaattagtg--...1355...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...589...tcaaaacttcag agctccac
D.Ana atcacaag gtaattaaacaa--...1369...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...143...tttatattttag agttgcat
D.Gri atcacaag gta--taatttatt...1408...atgtgtaaatatattttgCGATTacAGG----GcGTCAatgtcgttcgCG--tgggataa...94...gctttttttag agctgcac
D.Moj ttcacaag gta--tattcatt...2052...atgtgtaaatatattttgCGATTacAGG----GcGTCAatgtcgttcgCGcgttcggat--...619...cctcttcgcag agctgcac
D.Per atcccaag gtaatt--ccaact...2706...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...153...cgaccttgcag agctgcac
D.Pse atcccaag gtaatt--ccagtt...2767...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...135...cgaccttgcag agctgcac
D.Yak ttctcaag gtaaattgatgt--...1471...taatggcacctaattgaatGTGTaaATATaTTTGCG---gattacagggcgtcaatgtc...831...ccaaaacttcag aactccac
** **** *** * * ** ** * ** * ** * ** * ** * **

```

id=44865 gene=FBgn0034012 name=Hr51 segment=chr2R.11219152.11221081.1 type=IN VIEW

Figure 135: CS=12



```

D.Mel ttatcaag gtgagtggacgc...2692...-----ttcattgtggcttctgg--cgc--CGCTGTGCGaCGCATTTCa--gaatgtagaatgtaggta...603...tcctatttgcag ctgaagga
D.Sim ttatcaag gtgagtggacgc...2665...-----ttcattgtggttctctgg--ggc--CGCTGTGCGaCGCATTTCa--gaatgtagaatgtaggta...576...cctatttgcag ctgaagga
D.Sec ttatcaag gtgagtggacgc...2682...-----cattgtggttctctggcgc--CGCTGTGCGaCGCATTTCa--gaatgtagaatgtaggta...579...cctatttgcag ctgaagga
D.Ere ttatcaag gtgagtggacgc...2638...-----ttcattgtggcttctgg--cgc--CGCTGTGCGaCGCATTTCa--gaatgtaggtacccaaag...610...ttgtatttgcag ctgaagga
D.Ana tcatcaag gtaagaggattg...2157...-----cattgtggttctctggcgcct---CTGTGCGaCGCATTTCa--gaatgt-gttgtaggtgg...624...tgcctttccag ctgaagga
D.Gri ttatcaag gtaagcgtgaac...3083...-----tgccacaaagcaagcaagtcGGCGCTGTGCGaCGCATTTCg--aaaggtagcccctgataa...801...atttatttgcag ctgaagga
D.Moj ttatcaag gtaagggagctg...4322...-----gcaacacgcggtctgagccGTGCGCTGTGCGaCGCATTTCgga-aaaggtagcccctgata...583...ccgctcttgcag ctgaagga
D.Vir ttatcaag gtaagtggagga...2775...-----gcaacacgcggtctgagccGTGCGCTGTGCGaCGCATTTCgaaaaaggtagccccgat---.549...tcctatttgcag ctaagga
D.Yak ttatcaag gtgagtggacgc...2638...ttttggatttttctattgt---GTTTctGGCGCGcGCTGTGCGaCGCATTTCa--gaatgtaggtacccaaag...596...tcctatttgcag ctgagga
* ***** ** ** *                               ***** ** ** *                               ** *** ** * ***

```

id=46295 gene=FBgn0020269 name=mspo segment=chr2R.10567678.10571053-1 type=IN

```

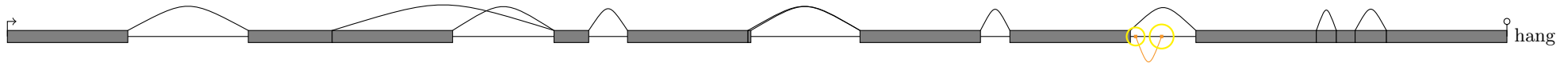
D.Mel ttatcaag gtgagtggacgc...2827...agcggcccaacaataaatTAAATGCGCGACAGCG----caccaacaagtttttcat-----..468...tcctatttgcag ctgaagga
D.Sim ttatcaag gtgagtggacgc...2802...agcggcccaacaataaatTAAATGCGCGACAGCG----caccaacaagtttttcat-----..439...cctatttgcag ctgaagga
D.Sec ttatcaag gtgagtggacgc...2819...agcggcccaacaataaatTAAATGCGCGACAGCG----caccaacaagtttttcat-----..442...cctatttgcag ctgaagga
D.Ere ttatcaag gtgagtggacgc...2766...agcggcccaacaataaatTAAATGCGCGACAGCG----caccaacaagtttttcat-----..482...ttgtatttgcag ctgaagga
D.Ana tcatcaag gtaagaggattg...2306...agcggcccaacaataaatTAAATGCGCGACAG----cgccaccaacaacttttcc-----..475...tgcctttccag ctgaagga
D.Gri ttatcaag gtaagcgtgaac...3263...ccagtcccaacaataaatTAAATGCGCGACAGcGTGCTcgaacaaaaaagttttttt-----..619...atttatttgcag ctgaagga
D.Moj ttatcaag gtaagggagctg...4480...agcagcccaacaataaatTAAATGCGCGACAGCGCGC-ca---gcaaaagttttttccct---..425...ccgctcttgcag ctgaagga
D.Vir ttatcaag gtaagtggagga...2928...agcagcccaacaataaatTAAATGCGCGACAGCGCGC-ca---acaaaagtttttatactc---..396...tcctatttgcag ctaagga
D.Yak ttatcaag gtgagtggacgc...2777...agcggcccaacaataaatTAAATGCGCGACAGCGCGCAAAC----aaagttttcatacctcga...460...tcctatttgcag ctgagga
* ***** ** ** *                               ***** ** ** *                               *** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

```

id=46295 gene=FBgn0020269 name=mspo segment=chr2R.10567678.10571053-1 type=IN VIEW

Figure 136: CS=8.64





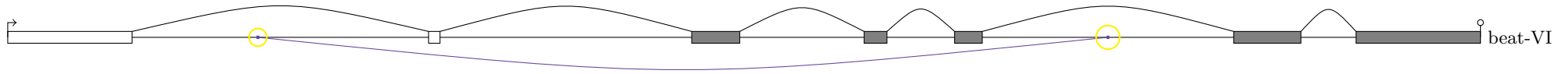
D. Mel	gcaagcag	gtgagcg	TTTTGGGCT	GTGC	agcgaggaggacaagcgacg-...218...taatccttgca	aaccccat
D. Sec	gcaagcag	gtgagcg	TTTTGGGCT	GTGC	agcgaggaggacaagcgacg-...222...taatccttgca	aaccccat
D. Ere	gcaagcag	gtgagcg	TTTTGGGCT	GTGC	agcgaggaggacaagcgacg-...201...taatccttgca	aaccccat
D. Gri	gcaagcag	gtgagc-	TTTTGGGCT	GTGC	agcgagggtggaatctctatt-...242...aacatcatttag	atcccaat
D. Moj	gcaagcag	gtgagc-	TTTTGGGCT	GTGC	agcgagggtgaaatctgtgtg-...203...ttgtacatttag	aatctcat
D. Per	gcaagcag	gtgagcg	TTTTCGGCT	GTGC	agcgaggagaacgaaaaaga-...173...atccgaatgtag	aaccacat
D. Pse	gcaagcag	gtgagcg	TTTTCGGCT	GTGC	agcgaggagaacgaaaaaga-...173...atccgaatgtag	aaccacat
D. Vir	gcaagcag	gtgagc-	TTTTGGGCT	GTGC	agcgagggt-gaatctctattg-...219...aattatatttag	aatcccat
D. Wil	gcaagcag	gtgagcg	TTTTCGGCT	GTGC	agcaaggaggaagatcaacg-...471...atatgtatatag	aaccccat
D. Yak	gcaagcag	gtgagcg	TTTTGGGCT	GTGC	agcgaggagacaagcgacg-...201...taatccttgca	aaccccat
	*****	*****	*****	*****	*****	*****

id=104803 gene=FBgn0026575 name=hang segment=chrX.16328906.16329177\_1 type=IN

D. Mel	gcaagcag	gtgagcgttttt...83...-atgatgatgat-gatgcctccGCACAGTCGCAAAAA-----acagatatcaacatctcgtc...109...taatccttgca	aaccccat
D. Sec	gcaagcag	gtgagcgttttt...83...-atgatgatgat-gatgcctccGCACAGTCGCAAAAA-----acagatatcaacatctcgtc...113...taatccttgca	aaccccat
D. Ere	gcaagcag	gtgagcgttttt...83...-atgatgatgat-gatgcctccGCACAGTCGCAAAAA-----acagatatcaacatctcgtc...92...taatccttgca	aaccccat
D. Gri	gcaagcag	gtgagcgttttt...68...-tttgttctatt-gttgcctccGCACAGTCGCAAAAA-----aaaatacatagtacaaagac...147...aacatcatttag	atcccaat
D. Moj	gcaagcag	gtgagcgttttt...83...gtttgttct-tt-gttgcctccGCACAGTCGCAAAAAataaacaacaactaataaaa-----...93...ttgtacatttag	aatctcat
D. Per	gcaagcag	gtgagcgttttt...59...-tgatgatgagagatgcctccGCACAGTCGCAAAAA-----aacacaatcaacatctctat...89...atccgaatgtag	aaccacat
D. Pse	gcaagcag	gtgagcgttttt...59...-tgatgatgagagatgcctccGCACAGTCGCAAAAA-----aacacaatcaacatctctat...89...atccgaatgtag	aaccacat
D. Vir	gcaagcag	gtgagcgttttt...83...gtttgttgt-tt-gttgcctccGCACAGTCGCAAAAAa-aaacaaaacaaaacaatat-----...109...aattatatttag	aatcccat
D. Wil	gcaagcag	gtgagcgttttt...289...-accagctgct-gcaacctccGCACAGTCGCAAAAA-----aacaatgattatatgtaga-...157...atatgtatatag	aaccccat
D. Yak	gcaagcag	gtgagcgttttt...83...-atgatgatgat-gatgcctccGCACAGTCGCAAAAA-----acagatatcaacatctcgtc...92...taatccttgca	aaccccat
	*****	*****	*****

id=104803 gene=FBgn0026575 name=hang segment=chrX.16328906.16329177\_1 type=IN VIEW

Figure 137: CS=14



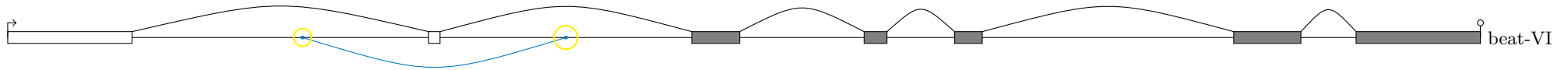
D.Mel	cccataag	gttcgtatcaca...3453...	-cgctttgactcgtaat	TTGCTTTGTTTCAT	---	ccgcttgactgggc---	agca---	ac...1458...	ttctatttgcag	actctgcc
D.Sim	cccataag	gttcgtatcaca...3473...	-cgctttgactcgtaat	TTGCTTTGTTTCAT	---	ccgcttgactgggc---	agca---	ac...1438...	ttctacttgcag	acactgcc
D.Sec	cccataag	gttcgtatcaca...3466...	-cgctttgactcgtaat	TTGCTTTGTTTCAT	---	ccgcttgactgggc---	agca---	ac...1445...	ttctacttgcag	acactgcc
D.Ere	cccataag	gttcgtatcaca...3456...	-cgctttgactcgtaat	TTGCTTTGTTTCAT	---	ccgcttgactgggc---	agca---	ac...1455...	ttctacttgcag	acactgcc
D.Gri	ggaaacag	gttggattggg...3315...	tccctttgacttgcaat	TTTGCtTTGTTTTtGCACTT	---	gactgcgctggacaaacag...	1589...	tttcaactacag	acgttgcc	
D.Moj	cacgttag	cttatgaaca...3153...	tcgctttgacttgcaat	TTTGCtTTGTTTTtGCACTT	---	gactgcgctggacagactt...	1751...	cttcaactacag	actttgcc	
D.Per	gcaataag	gttggatcgca...3097...	ctcctttgactcgtaat	TTGCTTTGTTTCATGCCG	---	cttcgctgggc---	aatagacat...	1811...	tgcttgcagcag	acatcgcc
D.Pse	gcaataag	gttggatcgca...3077...	ctcctttgactcgtaat	TTGCTTTGTTTCATGCCG	---	cttcgctgggc---	aatagacat...	1831...	tgcttgcagcag	acatcgcc
D.Vir	gaaaagag	gttagtattggc...4045...	catcaataaaaatcctt	TAAAtgTCCAaTTTAat	ttt	gttcttctacttactc	-----	...865...	tttcaacttgcag	acattgcc
D.Yak	cccataag	gttcgtatcaca...3442...	-cgctttgactcgtaat	TTGCTTTGTTTCAT	---	ccgcttgactgggc---	agca---	ac...1469...	ttctacttgcag	acactgcc
		**	** *			*	*	*	*	**
			*	*	*	*	*	*	*	*

id=46798 gene=FBgn0039584 name=beat-VI segment=chr3R.24244590.24268491.1 type=I5

D.Mel	atgttgat	gtaagttaatt...4229...	cg----ggattaggacaga---	tgcaa----	ATG-AACAA-AGCGA	-t-----	ggcaacggttcgcgctctgg...	683...	gccactttcag	ctcgccaa
D.Sim	atgttgat	gtaagttaatt...4208...	cg----ggattagtacaga---	tgcaa----	ATG-AACAA-AGCGA	-t-----	ggcaacggttcgcgctctgg...	704...	gccactttcag	ctcgccaa
D.Sec	atgttgat	gtaagttaatt...4325...	cg----ggattagtacaga---	tgcaa----	ATG-AACAA-AGCGA	-t-----	ggcaacggttcgcgctctgg...	587...	gccactttcag	ctcgccaa
D.Ere	atgttgat	gtaagttaatt...4169...	cg----ggattagtacaga---	tgcaa----	ATG-AACAA-AGCGA	-t-----	ggcaacggttcgcgctctgg...	743...	gccactttcag	ctcgccaa
D.Gri	atgttgat	gtaagtgaata...4200...	-----gccaagagagaaat	cgctaAAGTGTtGAAACAAt	cGTAAa	aatggatggggaatgccggg-----	...704...	attcgttgcag	ctaacc	
D.Moj	atgttgac	gtaagtgaata...3975...	-----actaggagagcaat	gcgctaAAGTGTtGAAACAAt	cGTAAa	aaagctgtttggggcgctgg...	929...	ctctcgttgcag	ctaacc	
D.Per	atgttgat	gtaagtttaatt...4396...	catgcttgattagtacaga-----	TGCAaaTGAAACAA-AGCGA	-tggg-	ggcagggttgcgctctgg...	510...	tcctacttgcag	ctcacc	
D.Pse	atgttgat	gtaagtttaatt...4401...	catgcttgattagtacaga-----	TGCAaaTGAAACAA-AGCGA	-tggg-	ggcagggttgcgctctgg...	505...	tcctacttgcag	ctcacc	
D.Vir	atgttgat	gtaagtgaatt...4245...	tgct----gattattgtt	gtgtgc	TGAAgTGGATTG	-----	gagcagcaggcttactcga...	667...	ttctcgttgcag	ctcacc
D.Yak	atgttgat	gtaagttaatt...4167...	cg----ggattagtacaga---	tgcaa----	ATG-AACAA-AGCGA	-t-----	ggcaacggttcgcgctctgg...	745...	gccactttcag	ctcgccaa
	*****	*****	***		*	*	*	*	**	***
			*	*	*	*	*	*	*	*

id=46806 gene=FBgn0039584 name=beat-VI segment=chr3R.24289912.24297876.1 type=IN VIEW

Figure 138: CS=7.8



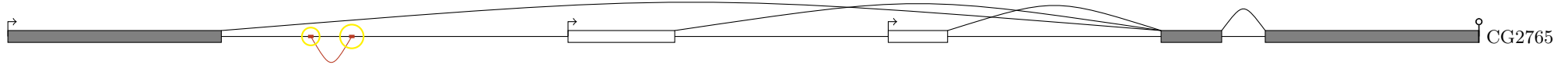
D.Mel	cccataag	gttcgtatcaca...3632...	-cctttcagcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1278...	ttctatttcagc	actctgcc
D.Sim	cccataag	gttcgtatcaca...3652...	-cctttcagcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1258...	ttctacttcagc	acactgcc
D.Sec	cccataag	gttcgtaacaca...3645...	-cctttcagcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1265...	ttctacttcagc	acactgcc
D.Ere	cccataag	gttcgtatcaca...3638...	-cctttcagcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1272...	ttctacttcagc	acactgcc
D.Ana	cccaaaag	gttcgtatcgct...3606...	-cccttcggcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1304...	ttcttcttacag	acactgcc
D.Moj	cacgtagg	cttattgaaaca...3400...	gccttcggcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1510...	ctttacttacag	actttgcc
D.Per	gcaataag	gttggtatcgca...3062...	---gaaaggtgc--ggtgcaaaagt	TGAGtCAAAGGTTTC	TCTTTGACTCGTAATTAATT	-----	...	1847...	tgcttcagcag	acatcgcc	
D.Pse	gcaataag	gttggtatcgca...3042...	---gaaaggtgc--ggtgcaaaagt	TGAGtCAAAGGTTTC	TCTTTGACTCGTAATTAATT	-----	...	1867...	tgcttcagcag	acatcgcc	
D.Vir	gaaaagag	gttagtattggc...3457...	-cccttcggcac--gccccaaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1453...	tttacttcagc	acattgcc
D.Wil	tctatgtg	gctcagactca...3656...	---ttttggcacaagccctgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1254...	ttctacttcagc	acgttgct
D.Yak	cccataag	gttcgtatcaca...3628...	-cctttcagcac--gccccgaag-	TTATGTGAat	TATTT	---	tgcaaaa---	agttaatttcagc...	1282...	ttctacttcagc	acactgcc
				*	**	**	*	*	*	*	**

id=46798 gene=FBgn0039584 name=beat-VI segment=chr3R.24244590\_24268491.1 type=I5

D.Mel	tctagcgg	gtaagaaatag...3558...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	ctcgagatccctc	---ctct	-----
D.Sim	tctagcgg	gtaagaaatag...3553...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	ctcgagatccccc	---ctctcagaac	-----
D.Sec	tctagcgg	gtaagaaatag...3565...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	ctcgagatctccctctctgtcca	-----	-----
D.Ere	tctagcgg	gtaagaaatag...3543...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	ctcgagaacc	-----	-----
D.Ana	tctagcgg	gtaagaaatag...3488...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	ctgagcatatg	-----	-----
D.Moj	tctaacgg	gtaagaaatag...3581...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	ggaactggcaa	-----	ctgagcatatg	-----	-----
D.Per	tctagcgg	gtaagaaatag...4911...	-tgat-tatacgcctgatgctt	GAAACTTTTGTCTCA	-----	-----	-----	-----	-----	-----
D.Pse	tctagcgg	gtaagaaatag...4911...	-tgat-tatacgcctgatgctt	GAAACTTTTGTCTCA	-----	-----	-----	-----	-----	-----
D.Vir	tctaacgg	gtaagaaatag...3590...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gagcatttaacagagtcgat	-----	ctgagcatatgtctgc	-----	-----
D.Wil	tctagcgg	gtaagaaatag...3562...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gagcatttaacagagtcgat	-----	ctatagctttctctcacacattcaatctatttcagttgt	-----	-----
D.Yak	tctagcgg	gtaagaaatag...3505...	ataatatttaaatttaatt--ttAAA	----	TGcTCACATGA	gggcatttaacagagtcgat	-----	-----	-----	-----
					*	*	*	*	*	*

id=46800 gene=FBgn0039584 name=beat-VI segment=chr3R.24268538\_24287728.1 type=I5 VIEW

Figure 139: CS=6.6



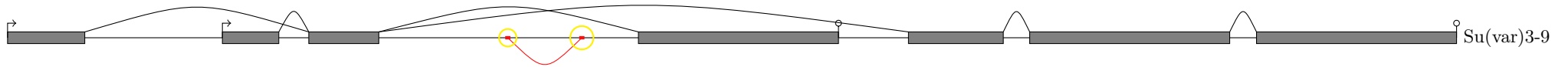
D. Mel	acaagtcg	gtaagtcgcaat...162...	caaaccgcaccccgca-gcg	TTTTcTc	TTTCGTTG	caccaccaccgccgaacgaa-----	...1098...	--ggctggtagcat	ctggcgtg
D. Sim	acaagtcg	gtaagtcggaat...171...	caaaccgcaccccgca-gcg	TTTTcTc	TTTCGTTG	caccgccaccgccgaacgaa-----	...1112...	--ggctggtagcat	gtggcgtg
D. Sec	acaagtcg	gtaagtcggaat...165...	caaaccgcaccccgca-gcg	TTTTcTc	TTTCGTTG	caccgccaccgccgaacgaa-----	...1114...	--ggctggtagcat	gtggcgtg
D. Ere	acaagtcg	gtaagtcggaat...177...	caaaccgcaccccgct-gcg	TTTTcTc	TTTCGTTG	cactgccaccgccaccgccg-----	...1120...	--ggctggcagcat	gtggcgtg
D. Ana	accagtcg	gtaagaccgcc...180...	acaaccgcacccctcga-acg	TTTTcTc	TTTCGTTG	caccgcaccgaaaacgaga-----	...1326...	ttggctgtc--ccg	gtggcgtg
D. Gri	accagtcg	gtaagtgtcaaa...281...	-ccttggtggtgccacacggca	TTTTcTc	TTTCGTTTGAA	-----gaaaaaaaaagtcagcagcaa...	...1017...	--ggcaggtgtgac	caggtgtg
D. Moj	actagtcg	gtaagtaaatc...307...	-cacccttgtccacacggca	TTTTcTc	TTTCGTTT	---cg-----acaagatacaaaaatttt...	...1282...	--aagctttgttt	ttggcgcc
D. Per	actagtcg	gtaagccacgaa...130...	-caaccgcacccctccatag	TTTTcTc	TTTCGTTG	caccg-----aaaacgagatacaag-----	...1630...	--ggttggtcaat	gtggcgtg
D. Yak	acaagtcg	gtaagtcggagt...193...	caaaccgcaccccgcg-gcg	TTTTcTc	TTTCGTTG	cactgccaccgccaccgtca-----	...1182...	--ggctggcagcat	gtggcgtg
	** **	*****	** *	*****	*****				** *

id=65811 gene=FBgn0035087 name=CG2765 segment=chr2R.20850755.20852094.-1 type=IN

D. Mel	acaagtcg	gtaagtcgcaat...258...	cagggggacggac-g-gccatt	CAAAcT	CGAAAGAAAA	atacaacaacaatacaaa-aa-----	...1002...	--ggctggtagcat	ctggcgtg
D. Sim	acaagtcg	gtaagtcggaat...268...	cagggggacggac-g-gccatt	CAAAcA	CGAAAGAAAA	atacaacaacaatacaaa-aa-----	...1015...	--ggctggtagcat	gtggcgtg
D. Sec	acaagtcg	gtaagtcggaat...262...	cagggggacggac-g-gccatt	CAAAcA	CGAAAGAAAA	atacaacaacaatacaaa-aa-----	...1017...	--ggctggtagcat	gtggcgtg
D. Ere	acaagtcg	gtaagtcggaat...280...	cagggggacggac-g-gccatt	CAAAcA	CGAAAGAAAA	atacaac-acaataaaaacca-----	...1017...	--ggctggcagcat	gtggcgtg
D. Ana	accagtcg	gtaagaccgcc...290...	cggacgggggacg-g-acaatt	CAAAcA	CGAAAGAAAA	-----aaccagccagcgctaataat...	...1216...	ttggctgtc--ccg	gtggcgtg
D. Gri	accagtcg	gtaagtgtcaaa...359...	atgatgtgctggacagcgcca	TTCAAAc	CACGAAAGAAAA	-----aaagcaaaagcaaaagcaaaag--	...940...	--ggcaggtgtgac	caggtgtg
D. Moj	actagtcg	gtaagtaaatc...366...	-tacgatgctggaca--gccatt	CAAAcA	CACGAAAGAAAA	-----aaagtaaggcaatgctgccc--	...1223...	--aagctttgttt	ttggcgcc
D. Per	actagtcg	gtaagccacgaa...224...	-ggttggtgacggac-g-gcaatt	CAAAcA	CACGAAAGAAAA	-----aaaaccaagccaccgcgctg--	...1536...	--ggttggtcaat	gtggcgtg
D. Yak	acaagtcg	gtaagtcggagt...310...	gagggggacggac-g-gccatt	CAAAcA	CACGAAAGAAAA	atacaacgaaaaaaccaagc-----	...1065...	--ggctggcagcat	gtggcgtg
	** **	*****	* * *	*****	*****				** *

id=65811 gene=FBgn0035087 name=CG2765 segment=chr2R.20850755.20852094.-1 type=IN VIEW

Figure 140: CS=14.04



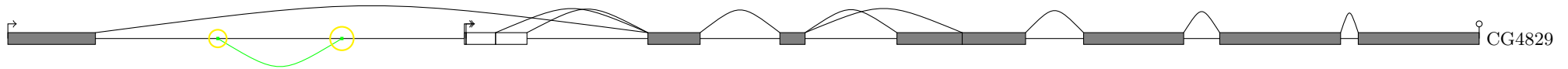
D.Mel	caagctgg	gtgagtcagggga...	270...	----ttcgaattctt	gtgtatttt	GTTAACTTAAATTGCTGGATTAG	cacgcgttg	cctt	gtgtcgt	-----	..292...	tgtcatttcag	aacgcttg	
D.Sim	caagctgg	gtgagtcagggga...	276...	-----ttcctgtg	tattttg	TTAAATTGCTGGATTAG	gcacgcgtt	gcctt	gtgtcgt	-----	..295...	tgtcatttcag	aacgcttg	
D.Sec	caagctgg	gtgagtcagggga...	270...	-----ttcctgtg	tattttg	TTAAATTGCTGGATTAG	gcacgcgtt	gcctt	gtgtcgt	-----	..297...	tgtcatttcag	aacgcttg	
D.Ere	caagctgg	gtgagtcagggga...	279...	-----ttcctgtg	tattttg	TTAAATTGCTGGATTAG	gtacgcgtt	gcctt	gtgtcgt	-----	..294...	tgtcatttcag	aacgctta	
D.Ana	caagctcg	gtaagtggctcct...	322...	-----actactgt	attcttt	TTAAATTGCTGGATTAG	gaatgcgtt	gcctt	gtcttt	-----	..279...	tgtcatttcag	aacgctta	
D.Gri	taaactcg	gtgagtgtggtt...	1141...	-----acatgatt	tttctg	TTAAATTGCTGGTTTAGA	-----ct	cccaaa	atacca	aaaa...	..277...	tgtcatttcag	aacgctta	
D.Moj	aaagctcg	gtgagtgcacata...	734...	atattctt	taaatat	gacttg-----	-----AATTGCTGGATTAGTC	-----cc	caaca	atatata	aaatac...	..319...	aatcatttcag	aacgctta
D.Per	taagctcg	gtgagtggaggg...	333...	-----taattgtg	taattgt	atataTTAAATTGCTGGATTAG	gcacgcgtt	gcctc	ttccaa	-----	..271...	tgtcatttcag	aacgctta	
D.Pse	taagctcg	gtgagtggaggg...	333...	-----taattgtg	taattgt	atataTTAAATTGCTGGATTAG	gcacgcgtt	gcctc	ttccaa	-----	..277...	tgtcatttcag	aacgctta	
D.Vir	taagctcg	gtgagtgacttt...	800...	-----aatata	aat-taa	aatatgacTTAAATTGCTGGATTAG	-----gt	cccc	caaca	-ataca	aca...	..287...	tatcatttcag	aacgctta
D.Wil	taaactcg	gtgagtgtgga...	458...	-----tcttaa	atttgatt	tttct-----	ATTAATTGCTGGATTGTT	-----c	cttccc	-tatc	gactctcc...	..244...	tatcatttcag	aacgctta
D.Yak	caagctgg	gtgagtcagggga...	274...	-----gtcctgtg	tattttg	tttctTTAAATTGCTGGATTAG	gcacgcgtt	gcctt	gtgtcgt	-----	..287...	tgtcatttcag	aacgctta	
	** ** *	** ** *			*	***** **	*				*****	*****		

id=85972 gene=FBgn0003600 name=Su(var)3-9 segment=chr3R.11087620.11088268.-1 type=IN

D.Mel	caagctgg	gtgagtcagggga...	458...	tgttacatt	gattgata	caga-----	CTGATCCAGCAATTTAATTAAT	-tgcca	atctttt	cttcttt	..105...	tgtcatttcag	aacgcttg	
D.Sim	caagctgg	gtgagtcagggga...	462...	----acattg	attgata	cagactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..109...	tgtcatttcag	aacgcttg
D.Sec	caagctgg	gtgagtcagggga...	456...	----acattg	attgata	cagactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..111...	tgtcatttcag	aacgcttg
D.Ere	caagctgg	gtgagtcagggga...	465...	----accttga	aatgata	cagactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..108...	tgtcatttcag	aacgctta
D.Ana	caagctcg	gtaagtggctcct...	487...	----atattg	attgata	caatga--	TAATCCAGCAATTTAA	-ttaatt	gcacat	ctttttct	-----	..114...	tgtcatttcag	aacgctta
D.Gri	taaactcg	gtgagtgtggtt...	1346...	----aaaatt	taatttc	cattgattTTT	atAATCCAGCAATTTAA	-ttaatt	cagat	catctttt	----	..69...	tgtcatttcag	aacgctta
D.Moj	aaagctcg	gtgagtgcacata...	940...	----aattta	atttcatt	gtttttc	GATTAATCCAGCAATTTAA	gtaatta	ant-cag	tccatct	-----	..113...	aatcatttcag	aacgctta
D.Per	taagctcg	gtgagtggaggg...	520...	----tattat	gattgat	-tgactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..84...	tgtcatttcag	aacgctta
D.Pse	taagctcg	gtgagtggaggg...	520...	----tattat	gattgat	-tgactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..90...	tgtcatttcag	aacgctta
D.Vir	taagctcg	gtgagtgacttt...	1019...	-----ttta	attcttt	gatttcga-	TAATCCAGCAATTTAA	-ttaatt	cagtc	atttttt	----	..68...	tatcatttcag	aacgctta
D.Wil	taaactcg	gtgagtgtgga...	626...	----aatc	cttttt	gtgtgttc-	GATAATCCAGCAATTTAA	-taatt	gcaaat	ctttttct	-----	..77...	tatcatttcag	aacgctta
D.Yak	caagctgg	gtgagtcagggga...	457...	----acattg	attgata	cagactga--	TAATCCAGCAATTTAA	-ttaatt	gcaaat	ctttttct	-----	..104...	tgtcatttcag	aacgctta
	** ** *	** ** *			*	*	***** * * * *	*			*****	*****		

id=85972 gene=FBgn0003600 name=Su(var)3-9 segment=chr3R.11087620.11088268.-1 type=IN VIEW

Figure 141: CS=18.72



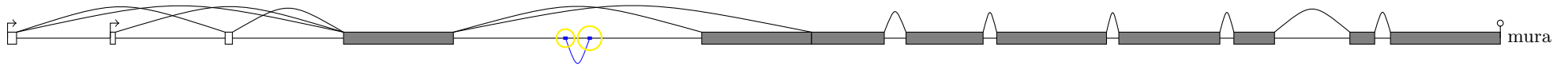
D. Mel	-ctgcaatc	gtaagttcacct...2622...ctcaactgccgataaattgt	GCAA--TTTGTGACAcacattttaatttttccgt...2114...ttagcggccggt	cttaattc
D. Sim	-ctgctata	gtaagttaatcg...2529...ctcaactgccataaattgt	GCAA--TTTGTGACAcacattttaatttttccgt...2382...ttagcggccggt	cttaattc
D. Sec	actgc-atc	gtaagttcnmnn...2632...ctcaactgccgataaattgt	GCAA--TTTGTGACAcacattttaatttttccgt...1894...ttagcggccggt	cttaattc
D. Ere	-ctgcaatc	gtaagttcacct...2485...ctcaactgccgataaattgt	GCAA--TTTGTGACAcacattttaatttttccgt...2123...ttagcggccggt	cttaattc
D. Moj	-ctgcaaac	gtaagtcattta...2512...atatgctgcccgtgtgtgt	GCAAttTTTGTGACAcacatttcaatgtttgcacg...2397...acgcgtcccgt	cttaattc
D. Per	-ctgcaatc	gtaagtcagaa...2655...cacaactgctgataaattgt	GCAA--TTTGTGACAcacatttcaatttttgcgt...2051...accgtcccgt	cttaattc
D. Pse	-ctgcaatc	gtaagtcagaa...2711...cacaactgctgataaattgt	GCAA--TTTGTGACAcacatttcaatttttgcgt...2004...accgtcccgt	cttaattc
D. Vir	-ctgcaaac	gtaagtacttct...3137...ggtccagttgataaattgt	GCAA--TTTGTGACAcacatttcaatgttcgcacg...1774...acgcgtcccgt	cttaattc
D. Wil	-ctacagtc	gtaagtacccaa...3362...tgttgctactgataaattgt	GCAA--TTTGTGACAcacatttcaattttttgca...1549...cggcgtcccatt	cttaattc
D. Yak	-ctgcaatc	gtaagttcgct...2418...ctcaactgccgataaattgt	GCAA--TTTGTGACAcacattttaatttttccgt...2017...ttagcggccggt	cttaattc
	** *	*****	* ***** ***** ** *	*****

id=122875 gene=FBgn0030796 name=CG4829 segment=chrX.16706095.16710908.1 type=IN

D. Mel	-ctgcaatc	gtaagttcacct...3861...tgtccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggctcgcggcgg...875...ttagcggccggt	cttaattc
D. Sim	-ctgctata	gtaagttaatcg...3769...tgtccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggctcgcggcgg...1142...ttagcggccggt	cttaattc
D. Sec	actgc-atc	gtaagttcnmnn...3870...tgtccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggctcgcggcgg...656...ttagcggccggt	cttaattc
D. Ere	-ctgcaatc	gtaagttcacct...3731...tgtccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggctcgcggcgg...877...ttagcggccggt	cttaattc
D. Moj	-ctgcaaac	gtaagtcattta...4468...tatctat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggcgggtgggtg...443...acgcgtcccgt	cttaattc
D. Per	-ctgcaatc	gtaagtcagaa...4378...cgtccac-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggcctgcggcgg...328...accgtcccgt	cttaattc
D. Pse	-ctgcaatc	gtaagtcagaa...4390...cgtccac-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggcctgcggcgg...325...accgtcccgt	cttaattc
D. Vir	-ctgcaaac	gtaagtacttct...4498...tatccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggcgggtgggtg...413...acgcgtcccgt	cttaattc
D. Wil	-ctacagtc	gtaagtacccaa...4512...atccactttttgtgtgtcac	TGTCAACAAATTGCtcttaatggcccagtggtg...399...cggcgtcccatt	cttaattc
D. Yak	-ctgcaatc	gtaagttcgct...3521...tgtccat-tttgtgtgtcac	TGTCAACAAATTGCtcttaatggctcgcggcgg...914...ttagcggccggt	cttaattc
	** *	*****	** * ***** ***** * *	*****

id=122875 gene=FBgn0030796 name=CG4829 segment=chrX.16706095.16710908.1 type=IN VIEW

Figure 142: CS=15.6



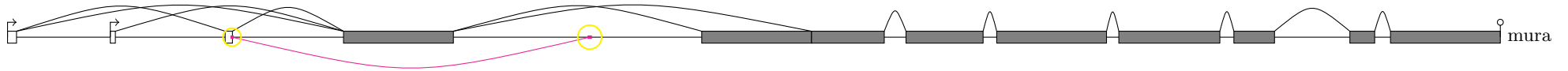
D. Mel	ccaaattg	gtaagagccgag...1938...	ttcgacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatattgatga----	1846...	tcgaaaatccag	cgatgtac
D. Sim	ccaaattg	gtaagagccgag...1950...	ttcgacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatattgatga----	1822...	tcgaaaatccag	cgatgtac
D. Sec	ccaaattg	gtaagagccgag...1947...	ttcgacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatattgatga----	1821...	tcgaaaatccag	cgatgtac
D. Ere	ccaaattg	gtaagagccgag...1986...	ttcgacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatattgaaga----	1880...	tcgaaaatccag	cgatgtac
D. Ana	ataaattg	gtaagagccgat...1939...	ttcaacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatataatata----	1960...	tcgaaaatccag	cgatgtac
D. Gri	tcaaattg	gtaagagccgtg...2247...	---aacattttatgaatgataat	----GCATTt	AGTTGAGTTT	TTGATTGTTATTG	-atatacattctagattggtg...	1805...	tcgaaaatccag	cgatgtac
D. Moj	tcaaattg	gtaagagctacg...2197...	-----tatgaatgatataat	gcattTTAGTTGAGTTT	TTGATTGTTA	TTGATTGTTA	ttaaatagaa-ttgata---gatt...	1522...	tcgaaaatccag	cgatgtac
D. Per	ccaaattg	gtaagagccgag...2106...	---caacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtacatactata----	2250...	tcgaaaatccag	cgatgtac
D. Pse	ccaaattg	gtaagagccgag...2089...	---caacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtacatactata----	2250...	tcgaaaatccag	cgatgtac
D. Vir	tcaaattg	gtaagagctacg...2303...	---acattttatgaatgatatt	----GCATTt	AGTTGAGTTT	TTGATTGTT	-attgataaaaattttata---gat...	1753...	tcgaaaatccag	cgatgtac
D. Wil	ttaaattg	gtaagattcgcc...1969...	..aaccaattttctgaatgat	----GCATTt	AGTTGAGTTT	TTGATT	-----gatttgaattgatctctgat...	2340...	tcgaaaatccag	cgatgtac
D. Yak	ccaaattg	gtaagagccgag...1985...	ttcgacattttatgaatgat	----GCATTt	AGTTGAGTTT	TTGATTG	---atagctaagtatattgacga----	1852...	tcgaaaatccag	cgatgtac
		*****	*****		*	*****	*		*****	*****

id=132115 gene=FBgn0037705 name=mura segment=chr3R.5368647\_5372519\_-1 type=IN

D. Mel	ccaaattg	gtaagagccgag...2048...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1737...	tcgaaaatccag	cgatgtac	
D. Sim	ccaaattg	gtaagagccgag...2060...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1713...	tcgaaaatccag	cgatgtac	
D. Sec	ccaaattg	gtaagagccgag...2057...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1712...	tcgaaaatccag	cgatgtac	
D. Ere	ccaaattg	gtaagagccgag...2096...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1771...	tcgaaaatccag	cgatgtac	
D. Ana	ataaattg	gtaagagccgat...2056...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1844...	tcgaaaatccag	cgatgtac	
D. Gri	tcaaattg	gtaagagccgtg...2396...	-----gaaaacgttgacaaaacca	TAGT	AATGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1656...	tcgaaaatccag	cgatgtac
D. Moj	tcaaattg	gtaagagctacg...2355...	-----tatgtatttatatgtatact-----	TAATGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1363...	tcgaaaatccag	cgatgtac	
D. Per	ccaaattg	gtaagagccgag...2256...	-----atactcgtatct---tgccaaaa-----	TGATCAA	AAACTCAGCT	AAATGT	tttacttatttatttgcatt...	2100...	tcgaaaatccag	cgatgtac	
D. Pse	ccaaattg	gtaagagccgag...2238...	-----atactcgtatct---tgccaaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	2102...	tcgaaaatccag	cgatgtac	
D. Vir	tcaaattg	gtaagagctacg...2436...	..aatgttgaaaaaatcatattc-----	AAATGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1621...	tcgaaaatccag	cgatgtac	
D. Wil	ttaaattg	gtaagattcgcc...2093...	..atatattatttgggtgccc-----	GATCAA	AAACTCAGCT	GATGT	tttacttatttatttgcatt...	2217...	tcgaaaatccag	cgatgtac	
D. Yak	ccaaattg	gtaagagccgag...2095...	-----accgagtcgagttttgcaaa-----	TGATCAA	AAACTCAGCT	AATGT	tttacttatttatttgcatt...	1743...	tcgaaaatccag	cgatgtac	
		*****	*****		*****	*****	*****		*****	*****	

id=132115 gene=FBgn0037705 name=mura segment=chr3R.5368647\_5372519\_-1 type=IN VIEW

Figure 143: CS=7.2



D.Mel	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Sim	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Sec	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Ere	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Ana	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Gri	gttttttag	catacatic--aaatattt	TATTGCTGGTTT	TGGTG	GT	-----aaattt
D.Moj	gttttttag	catacatic--aaatattt	TATTGCTGGTTT	TGGTG	GT	-----aaattt
D.Per	gtttt---	-----	TAGCATACATAC	--AATA	TtTTATT	gctggttttggtgtaaattt
D.Pse	gttttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GTaaATT	-----t
D.Vir	gttttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GT	-----aaattt
D.Wil	gtttt---	-----	TAGCATACATACA	aaATA	TtTTATT	gctggttttggtgtaaattt
D.Yak	tgtttttag	catacatic--aatattt	TATTGCTGGTTT	TGGTG	GT	-----aaa---
		***		**	*	*

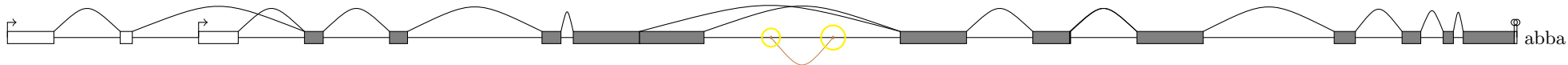
id=132112 gene=FBgn0037705 name=mura segment=chr3R.5375500.5375532\_-1 type=A5

D.Mel	ccaaattg	gtaagagccgag...2045...	cgaaccgagtcgagttttgc--	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1738...	tcgaaatccag	cgatgtac
D.Sim	ccaaattg	gtaagagccgag...2057...	cgaaccgagtcgagttttgc--	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1714...	tcgaaatccag	cgatgtac
D.Sec	ccaaattg	gtaagagccgag...2054...	cgaaccgagtcgagttttgc--	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1713...	tcgaaatccag	cgatgtac
D.Ere	ccaaattg	gtaagagccgag...2093...	cgaaccgagtcgagttttgc--	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1772...	tcgaaatccag	cgatgtac
D.Ana	ataaattg	gtaagagccgat...2053...	cgtaccgagtcgagttttgc--	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1845...	tcgaaatccag	cgatgtac
D.Gri	tcaaattg	gtaagagccgtg...2405...	-----gacaaaaaccatagttaatg--	ATCAaGAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1657...	tcgaaatccag	cgatgtac
D.Moj	tcaaattg	gtaagagctacg...2360...	-----atttatatgtatacttaatg--	ATCAaGAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1361...	tcgaaatccag	cgatgtac
D.Per	ccaaattg	gtaagagccgag...4144...	tgcaaaataaaaactat-----ata	-----AATAAcGTA	----TaTGTGTGGCTA	-----	ccactctgcatatatacact	...	...214...	tcgaaatccag	cgatgtac
D.Pse	ccaaattg	gtaagagccgag...2235...	---tacatactcgtatcttgcca	AAATgATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...2103...	tcgaaatccag	cgatgtac
D.Vir	tcaaattg	gtaagagctacg...2440...	-----ttgaaaaatcatattcaatg--	ATCAaGAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1622...	tcgaaatccag	cgatgtac
D.Wil	ttaaattg	gtaagattcgcc...3995...	aaatcaaaaaaactat-----ata	-----AATAAcGTATaTGTATgt	GTGTgGCTA	ccactaccactctgcatata	-----	...	...311...	tcgaaatccag	cgatgtac
D.Yak	ccaaattg	gtaagagccgag...2097...	-----cgagtcgagttttgcaaatg--	ATCAaCAAACtCAGCtt	AAATG	-----	tttacttatttatttgc	-----	...1744...	tcgaaatccag	cgatgtac
	*****	*****		*	*	*	***	*	*****	*****	*****

id=132115 gene=FBgn0037705 name=mura segment=chr3R.5368647\_5372519\_-1 type=IN VIEW

Figure 144: CS=3.6





D.Mel	agattgag	gtcacggatgaa...675...---	taaagtttcgacc	caaagct--	CGGACATCAGAATTGTA	-----	caatattgtatacaaatata	-----	...1426...acaatccaacag	tcgaagcc				
D.Sim	agattgag	gtcacggatgaa...689...---	taaagtttcgacc	caaagct--	CGGACATCAGAATTGTA	-----	caatattgtatacaaatata	-----	...1395...acaatccaacag	tcgaagcc				
D.Sec	agattgag	gtcacggatgaa...690...---	taaagtttcgacc	caaagct--	CGGACATCAGAATTGTA	-----	caatattgtatacaaatata	-----	...1403...acaatccaacag	tcgaagcc				
D.Ere	agattgag	gttacggatgag...704...---	taaagtttcgacc	caaagct--	CGGACATCAGAATTGTA	-----	caatattgtatacaaatata	-----	...1440...acaatccaacag	tcgaagcc				
D.Ana	tcactgat	gatgatgaagat...820...---	cagagtttcggcc	aaaact--	CGGACATCAGAAATCAGAAT	-	tgtacaatattgtagacatt	-----	...1646...attaccaacag	tcgaaacc				
D.Gri	aggaggag	ggggaggatgag...746...---	taaaaaaagtttc	ggcccaa--	GGCA	tg	GACATCAGAAATTATGA	-----	...1201...cctaccaacag	tccaaacc				
D.Moj	aggaggag	gaggaggaggaa...2299...---	caaaacaaaatg	atgattcat	AGTAA	T	TAAACATC	t	ATTACC	TGTCGTTT	-----	aatgcttagttagactgc	...1657...cctaccaacag	tccaaacc
D.Per	agatagaa	gtgaccgatgac...600...---	aaagtttcggcc	aaaactt--	CGGACATCAGAAAT	ctg	caattgtacaatattgt	-----	...1293...accaccaacag	tcgaaacc				
D.Pse	agatagaa	gtgaccgatgac...600...---	aaagtttcggcc	aaaactt--	CGGACATCAGAAAT	ctg	caattgtacaatattgt	-----	...1297...accaccaacag	tcgaaacc				
D.Vir	aaagcgaa	tccgaggcagag...650...---	gctgaaagtttc	gacc	caag--	GCAGGGACATCAGAAAT	-----	atgaattgtacaaaaaaaa	-----	...1455...cctaccaacag	tccaaacc			
D.Wil	agatagag	gtaactgactat...1737...---	aaaagtttcgacc	aaaaca--	TGGACATCAGAAATTTGT	-----	ctttaatgtattttgtttt	-----	...1329...cctaccaacag	tctaaacc				
D.Yak	agattgag	gtcacggatgag...684...---	taaagtttcgacc	caaagct--	CGGACATCAGAATTGTA	-----	caatattgtatacaaatata	-----	...1462...acaatccaacag	tcgaagcc				
		**		* *		****		* **		*****	** ** *			

id=102167 gene=FBgn0034412 name=abba segment=chr2R.14886415.14888596.1 type=IN

D.Mel	agattgag	gtcacggatgaa...1140...---	tcgttg-ccg	ttttgttggtt	-----	TACAATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	tg	-----	...960...acaatccaacag	tcgaagcc		
D.Sim	agattgag	gtcacggatgaa...1151...---	tcgttg-ccg	ttttgttggtt	-----	TACAATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	tg	-----	...932...acaatccaacag	tcgaagcc		
D.Sec	agattgag	gtcacggatgaa...1155...---	tcgttg-ccg	ttttgttggtt	-----	TACAATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	tg	-----	...937...acaatccaacag	tcgaagcc		
D.Ere	agattgag	gttacggatgag...1213...---	tcgttg-ccg	ttttgttggtt	-----	TACAATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	tg	-----	...930...acaatccaacag	tcgaagcc		
D.Ana	tcactgat	gatgatgaagat...1378...---	atttctttgccc	gtttgtt	-----	GTTTTG	ca	ATTT	-----	ctg--	taaatatttctgtt	tg	-----	...1086...attaccaacag	tcgaaacc		
D.Gri	aggaggag	ggggaggatgag...1177...---	ttttgtt--	tggttttcattg	-----	TCATAA	TTTT	t	-----	ctg--	taaatatttctgtt	tg	-----	...771...cctaccaacag	tccaaacc		
D.Moj	aggaggag	gaggaggaggaa...2541...---	tcgctatttcg	caagtggac	-----	AAACGATG	t	GGTAGT	GATGTTAA	TGCT	taaac	ctaactaa	tata	tac	-----	...1416...cctaccaacag	tccaaacc
D.Per	agatagaa	gtgaccgatgac...1158...---	tgctatatcgt	tgtttttca	-----	ATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	gta	-----	...735...accaccaacag	tcgaaacc		
D.Pse	agatagaa	gtgaccgatgac...1164...---	tgctatatcgt	tgtttttca	-----	ATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	gta	-----	...733...accaccaacag	tcgaaacc		
D.Vir	aaagcgaa	tccgaggcagag...1115...---	gtt--	caattttcattg	tcaca	-----	AATTT	-----	CTGATGTCGG	TTGT	-----	atatattt	gctgtt	gtcgt	...989...cctaccaacag	tccaaacc	
D.Wil	agatagag	gtaactgactat...2259...---	tctt	gttgaa--	gtttttttc	-----	GCAAA	TTTT	-----	ctg--	taaatatata	catat	-----	...808...cctaccaacag	tctaaacc		
D.Yak	agattgag	gtcacggatgag...1166...---	tcgttg-ccg	ttttgttggtt	-----	TACAATTT	-----	CTGATGTCGG	-----	ctg--	taaatatttctgtt	tg	-----	...979...acaatccaacag	tcgaagcc		
		**		* *		* *		*****		****		*****	** ** **				

id=102167 gene=FBgn0034412 name=abba segment=chr2R.14886415.14888596.1 type=IN VIEW

Figure 145: CS=11.52



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D.Mel cacatcag gtaaatatgttt...461...tatgcaaattggcttgcaact-----TTTGAgcTGAATCAGG-----atcaagtgtgagttaataag...1203...cacctcttcag gtcaaatt
D.Sim cacatcag gtaaatatgtta...101...-----tagtttgcaaacgaaaaaag---TTGAG-TGCacAAAGgCAAA--aggcaaacaaaaatgttatt...1590...cgctcttcag gtcaaatt
D.Sec cacatcag gtaaatatgtta...101...-----tagtttgcaaacgaaaaaag---TTGAG-TGCacAAAGgCAAA--aggcaaacaaaaatgttatt...1587...cgctcttcag gtcaaatt
D.Ere cacttcag gtaaatatgttg...465...tatgcaaattggcttgcaact-----TTTGAgcTGAATCAGG-----atcaagtgtgagttaataag...1198...cgccccttcag gtcaaata
D.Ana cacttcag gtaaagaaatta...350...-----ctgatagcaattaaaactaa---GCAAAGcCAAATTGAtTTCCT--ttgagcaatttcatttggc...1284...gcatcttcag gtcaaatt
D.Moj cacctcag gtaagtaatcca...654...-----tcgctcgcaattaaaactaa---GCAAAAgCAAATTGA-----tttgggt-tcattttttgtgt...2359...atttcattgcag gtcaaatt
D.Per gacatcag gtaaggaatgaa...142...-----tgtgcaataaaacagaatccTTTGA-TGCAGAAA--TCAGtaattagaatacagaatca---...1842...ctcctttcgtag gtcaaatt
D.Pse gacatcag gtaaggaatgca...140...-----tgtgcaataaaacagaatccTTTGA-TGCAGAAA--TCAGtaattagaatacagaatca---...1827...ctcctttcgtag gtcaaatt
D.Vir cacctcag gtaagtcgccc...560...-----ccgcccgcaattaaaactaa---GCAAAAgCAAATTGA-----tttgggt-tcattttttgtgt...2393...gattaacttag gtcaaatt
D.Yak cacttcag gtaaatatattt...487...tatgcaaattggcttgcaact-----TTTGAgcTGAATCAGG-----atcaagtgtgagttaataag...1218...cgctcttcag gtcaaatt
** ********
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* * *
** *****

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id=102162 gene=FBgn0034412 name=abba segment=chr2R.14882652.14884396.1 type=IN

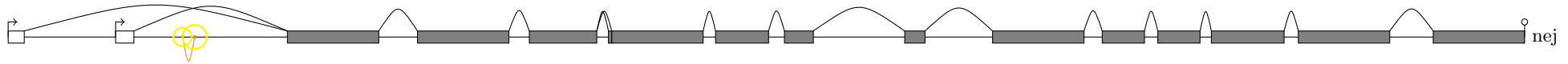
```

D.Mel gccgatag gtaagttaaggg...486...-----tc-----ctcattgtgcgagtcaac--TTTGATttTGCACgTTAAGcggcttagacctaagcccaa...446...tttcgcttcag atacaatc
D.Sim gccgatag gtaagtgaaagg...483...-----tc-----ctcattgtgcgagtcaac--TTTGATTTTGCACgTTAAGcggcttagacctaagccca...386...tttcgcttcag atacaatc
D.Sec gccgatag gtaagttaaggg...461...-----tc-----ctcattgtgcgagtcaac--TTTGATTTTGCACgTTAAGcggcttagacctaagccca...388...tttcgcttcag atacaatc
D.Ere gccgatag gtaagtcagg...928...-----tc-----ctcattgtgcgagtcaac--TTTGATttTGCACgTTAAGcggcttagacctaagcccaa...441...tttcgattgcag atacaatc
D.Ana gccgatag gtgagtgcctt...2560...ggggccgcccagctcattgt--AGGAGTCAA--TTTGATTTTGCACgTTAAGcggcttagagct-----...436...cttttttacag atacaatc
D.Moj gccgatag gtgagttagatcc...1301...gtcgagc-----ctcattgtct--gtcTCAAcTTTGATTTTGCACgTTAAGcggcttagctttagttgt-----...1210...gccacattgcag atacaatc
D.Per gccgatag gtaagtgccctc...372...-----a-----ctcattgtgtgagtcaact--TTGATTTTGCACgTTAAGcggcttagacttaagcccga...191...ctttacttcag atataatc
D.Pse gccgtcaa tcgaatcggcca...395...-----a-----ctcattgtgtgagtcaact--TTGATTTTGCACgTTAAGcggcttagacttaagcccga...191...ctttacttcag atataatc
D.Vir gccgatag gtgattcttta...413...ggccagg-----ctcattgtgt--gtcTCAAcTTTGATTTTGCACgTTAAGcggcttagacttaagcccga...191...ctttacttcag atataatc
D.Yak gccgatag gtaagttaaggg...502...-----tc-----ttcattgtgcgagtcaac--TTTGATttTGCACgTTAAGcggcttagacctaagcccaa...441...tttcgattgcag atacaatc
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id=102174 gene=FBgn0034412 name=abba segment=chr2R.14894077.14895091.1 type=IN VIEW

Figure 146: CS=11.8



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D.Me1 aatatatg gtataaaaccga...220...tagaaactttgaaacgacgtGAAGAAGAAAACGaaACGAaaacgacgacg----aacacaga-...1048...gtgcgtttgcag ttaatgtg-
D.Sim aatatatg gtataaaaccga...220...tagaaactttgaaacgacgtGAAGAAGAAAACGaaACGAaaacgacgacg----aacacaga-...1064...gtgcatttgcag ttaatgtg-
D.Sec aatatatg gtataaaaccga...220...tagaaactttgaaacgacgtGAAGAAGAAAACGaaACGAaaacgacgacg----aacacaga-...1061...gtgcatttgcag ttaatgtg-
D.Ere aatatatg gtataaaaccga...220...tagaaactttgaaacgacgtGAAGAAGAAAACGaaACGAaaacgacgacg----aacacaga-...1063...gtgcgtttacag ttaatgtg-
D.Moj atttttag gtaaaaatacga...213...agaaaactttgatacgcacatGAAGAAGAAAACGGACGAgaacgacacaaa-----aaaaagga...1326...agatttttacag tt-atgtgc
D.Per attatcac gtataaatgcga...216...tagaaactttgaagcgcacgtGAAGAAGAAAACG-----acgagcggagcgcacacacaaa...1085...ctgtgtttgtgt tttttttt-
D.Pse attatcac gtataaatgcga...216...tagaaactttgaagcgcacgtGAAGAAGAAAACG-----acgagcggagcgcacacacaaa...1094...ttttttttacag ttaaagt-
D.Vir aatgtatg gtaaaaatgcat...214...agaaaactttgatacgcacatGAAGAAGAAAACGGACGAgaacgacacaaa-----aaaaagga...988...atatttttacag tt-atgtgc
D.Wil aatcgatg gtataaatcga...235...agaaaactttgatacgcacgtGAAGAAGAAAACGACG-----agcagagccacagagcagag...838...ttaaatttacag ttaatgtg-
D.Yak aatatatg gtataaaaccga...220...tagaaactttgaaacgacgtGAAGAAGAAAACGaaACGAaaacgacgacg----aacacaga-...1081...gtgcgtttacag ttaatgtg-
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id=42008 gene=FBgn0015624 name=nej segment=chrX.9578185.9579535\_-1 type=I5

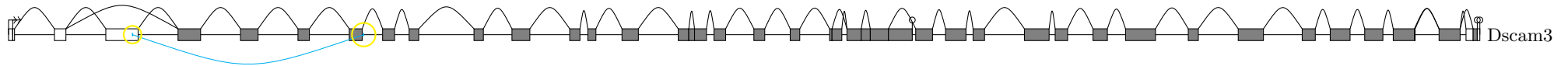
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D.Me1 aatatatg gtataaaaccga...281...aaaaatggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctcctcgactc---...986...gtgcgtttgcag ttaatgtg-
D.Sim aatatatg gtataaaaccga...281...aaaaatggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctcctcgactc---...1002...gtgcatttgcag ttaatgtg-
D.Sec aatatatg gtataaaaccga...281...aaaaatggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctcctcgactc---...999...gtgcatttgcag ttaatgtg-
D.Ere aatatatg gtataaaaccga...281...aaaaatggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctcctcgactc---...1001...gtgcgtttacag ttaatgtg-
D.Moj atttttag gtaaaaatacga...263...aaaaa-ggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctgctcgactc---...1274...agatttttacag tt-atgtgc
D.Per attatcac gtataaatgcga...276...-----tata-tttctgtcgtcgtc---TGTtTtTCTTtCTTtTTCCTTtTTCcaatgctcctcgactcgt...1020...ctgtgtttgtgt tttttttt-
D.Pse attatcac gtataaatgcga...276...-----tata-tttctgtcgtcgtc---TGTtTtTCTTtCTTtTTCCTTtTTCcaatgctcctcgactcgt...1029...ttttttttacag ttaaagt-
D.Vir aatgtatg gtaaaaatgcat...263...aaaaa-ggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgcttctcgactc---...937...atatttttacag tt-atgtgc
D.Wil aatcgatg gtataaatcga...309...aaaaa-----tttctgttctcgcgaCGTCTGTtTtTCTTtCTTttccaatgctcctcgactc---...761...ttaaatttacag ttaatgtg-
D.Yak aatatatg gtataaaaccga...281...aaaaatggaatata-tttctg-----TCGTcTGTtTtTCTTtCTTttccaatgctcctcgactc---...1019...gtgcgtttacag ttaatgtg-
* * * *** ** * ***** * ***** ***** ***** ** ** *

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id=42008 gene=FBgn0015624 name=nej segment=chrX.9578185.9579535\_-1 type=I5 VIEW

Figure 147: CS=14



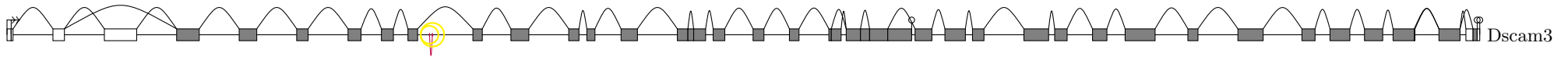
D. Mel	tccaacag	cgactaaca	aaa...286...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGT	agggacacgcgatat-cggtgacggaag	-----cgggacga	:::::-----	gtttcaatg	-----g	gtcggcga
D. Sim	tccaacag	cgactaaca	aaa...283...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGT	agggacacgcgatat-cggggacg	-----	:::::-----	gttctccatg	-----g	gtcggcga
D. Sec	tccaacag	cgactaaca	aaa...283...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGT	agggacacgcgatat-cggggacggaag	-----c	:::::-----	gttctccatg	-----g	gtcggcga
D. Ere	cccagcag	cgactaaca	aaa...295...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGT	agggacacgcgatat-cggggacg	-----	:::::-----	gtttcaatg	-----g	gccgcgca
D. Ana	atcagttg	gaactaaca	aaa...288...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGTT	agGACAcgcaaaa-gggggac	-----	:::::-----	gttctggccg	-----g	gtcggcga
D. Gri	agaaaaag	cagcaaaaa	aaa...316...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGTT	gaAACAcgcaaatggttactgccatagtcacagtacc	:::::gctgctgctgctggtgctgtg	-----ct			gtcggcga
D. Moj	agaagcag	caacaaaa	aaa...277...	-cgcttgaattgatgtaata	AAAAAGGTGGCcaAACATTTGTT	ggAACAcgcaaatggtgctgccacag	-----cca	:::::-----	gctgctaatg	-----tg	gctggag
D. Per	agaggcag	caatggcaca	aaa...343...	gtgccgaattgatgtaata	TAAAGGTGGCcaAACATTTGTT	ggGACAcgcaaat	-----	:::::-----	actctgcataggggaaggcg		gctggca
D. Pse	agaggcag	caatggcaca	aaa...352...	gtgccgaattgatgtaata	TAAAGGTGGCcaAACATTTGTT	ggGACAcgcaaat	-----	:::::-----	actctgcataggggatggcg		gctggcag
D. Vir	agaagcag	caacaaaa	aaa...241...	-cgcttgaattgatgtaata	AAAAAGGTGGCcaAACATTTGTT	ggAACAcgcaaatggtgctgccactg	-----cca	:::::-----	gctgcttatg	-----ta	gctggag
D. Yak	tccaacag	cgactaaca	aaa...288...	gtgccgaattgatgttata	TAAAGGTGGCcaAACATTTGT	aggggcgcgctcctacatggcgaag	-----g	:::::-----	gtttcaatg	-----g	gccggcga
	*	****		**	*****	*****	*****		*		* *

id=75758 gene=FBgn0261046 name=Dscam3 segment=chr3R.13328267\_13328671\_-1 type=A5

D. Mel	ggatgtcg	GTGAGTGTGCCACa-TTTTA	-----acgggcgggggagtttatcg	..204...	atttccgaacag	cgggacgc
D. Sim	ggatgtcg	GTGAGTGTGCCACa-TTTTA	-----acgggcgggggagtttatcg	..204...	atttccgaacag	cgggtcgc
D. Sec	ggatgtcg	GTGAGTGTGCCACa-TTTTA	-----acgggcgggggagtttatcg	..179...	atttccgaacag	cgggtcgc
D. Ere	ggatgtcg	GTGAGTGTGCCACa-TTTTA	acgggctaacgggcggggga	-----	..220...	atttccgaacag
D. Ana	ggaTGTTG	GTGAGTGTGCCACa-TTTTA	-----acaacaacaacaatcgaaa	..246...	atttccgaacag	cgggtcgc
D. Gri	ggaTGTTG	GTGAGTGTGCCACagTTTTA	-----cacacacacatgcacactga	..336...	gattcactgcag	ctggtcgc
D. Moj	ggaTGTTG	GTGAGTGTGCCACa-TTTT	-----tacagagacacacacacaca	..320...	gcttctctgcag	ctggtcgc
D. Per	ggaTGTCG	GTGAGTGTGCCACa-TTTTA	-----acacacacccccaccct	..209...	atttctgcacag	cgggtcgc
D. Pse	ggaTGTCG	GTGAGTGTGCCACa-TTTTA	-----acacacacccccaccct	..238...	atttctgcacag	cgggtcgc
D. Vir	ggaTGTTG	GTGAGTGTGCCACa-TTTT	-----tacacacacacacacaca	..329...	gcttctctgcag	ctggtcgc
D. Yak	ggatgtcg	GTGAGTGTGCCACa-TTTTA	-----acgggcgggggagtttatcg	..211...	atttccgaacag	cgggtcgc
	***** *	*****	**		***	*** * * * *

id=75767 gene=FBgn0261046 name=Dscam3 segment=chr3R.13317902\_13318157\_-1 type=IN VIEW

Figure 148: CS=12.98



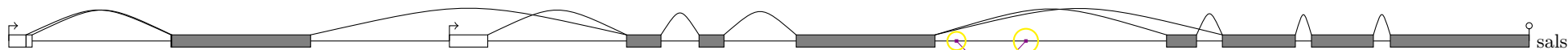
D.Mel	atatttac	gtgagtcaacca...100...gtttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtttgcctggggatgctgt-...1142...tctgatttatag	ctggtatc
D.Sim	atatttac	gtgagtcaaccg...100...gcttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtttgcctggggatgctgg-...1165...tctgatttatag	ctggtatc
D.Sec	atatttac	gtgagtctatcg...86...gtttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtttgcctggggatgctgg-...1168...tctgatttatag	ctggtatc
D.Ere	atatttac	gtgagtccaccg...85...gcttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtttgcctggggatgctgg-...1168...tctgatttatag	ctggtatc
D.Ana	atatttac	gtgagttaacc...125...ggttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtttgcctggggatgctgg-...894...tttgatttatag	ctggtatc
D.Gri	atattcac	gtgagtaacgca...141...-tc--catttatagacaacac	TTAAGTGCAtt	TGAAt	gtttgccca-gggaccctggt...1826...tatgacttgcag	ctggtatc
D.Per	atattcac	gtgagttataca...190...-gttctaggttat--agacaaca	CTTAAGTGCAtt	TGAAt	gtttgccagggaggctgg-...1353...tctgatttatag	ctggtatc
D.Pse	atattcac	gtgagttatcca...178...-gttctagattat--agacaaca	CTTAAGTGCAtt	TGAAt	gtttgccagggaggctgg-...1289...tctgatttatag	ctggtatc
D.Vir	atattcac	gtgagtactgaa...149...-ccatcatttat--agacaacac	TTAAGTGCAtt	TGAAt	gtctgccatgggct-ctggt...1547...atttatatgcag	ctggtatc
D.Yak	atatttac	gtaagtcaactg...100...gcttggagattat--agacagc	CCTTAAGTGCAtt	TGAAt	gtctgcctggggatgctgg-...1164...tctgatttatag	ctggtatc
	***** **	** ***	****	***** * *****	**** *** **	* * * ** *****

id=75771 gene=FBgn0261046 name=Dscam3 segment=chr3R.13316126-13317448\_-1 type=IN

D.Mel	atatttac	gtgagtcaacca...138...-gtttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgatgtttttagtgcta...1104...tctgatttatag	ctggtatc
D.Sim	atatttac	gtgagtcaaccg...138...-gtttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgatgtttttagtgcta...1127...tctgatttatag	ctggtatc
D.Sec	atatttac	gtgagtctatcg...124...-gtttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgatgtttttagtgcta...1130...tctgatttatag	ctggtatc
D.Ere	atatttac	gtgagtccaccg...123...-gtttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgatgtttttagtgcta...1130...tctgatttatag	ctggtatc
D.Ana	atatttac	gtgagttaacc...163...-gtttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgctgtttttagtgcta...856...tttgatttatag	ctggtatc
D.Gri	atattcac	gtgagtaacgca...176...tgtttgcca-gggaccctggt	TTTA	TGCATa	TTAG	agactgttgttttagtgcta--...1791...tatgacttgcag	ctggtatc
D.Per	atattcac	gtgagttataca...227...-gtttgccagggaggctggt	TTTA	TGCATa	TTAGG	gacttctgtttttagtgctaa...1316...tctgatttatag	ctggtatc
D.Pse	atattcac	gtgagttatcca...215...-gtttgccagggaggctggt	TTTA	TGCATa	TTAGG	gacttctgtttttagtgctaa...1252...tctgatttatag	ctggtatc
D.Vir	atattcac	gtgagtactgaa...184...tgctgccatgggct-ctggt	TTTA	TGCATa	TTAGG	aggctgctttgttttagtgcta--...1512...atttatatgcag	ctggtatc
D.Yak	atatttac	gtaagtcaactg...138...-gcttgcctggggatgctggt	TTTA	TGCATa	TTAGGG	actgatgtttttagtgcta...1126...tctgatttatag	ctggtatc
	***** **	** ***	*	****	***	***** * ** * * *****	* * * ** *****

id=75771 gene=FBgn0261046 name=Dscam3 segment=chr3R.13316126-13317448\_-1 type=IN VIEW

Figure 149: CS=14



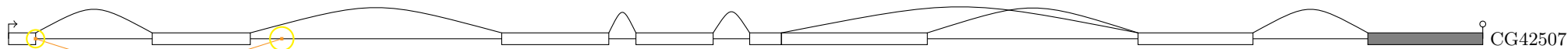
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D.Sim	ctttacag	gtgagtcgc-----tttcagattgggtacggtaa-----tagtttttgggatgctgc-----TCAAAGTGGTTGTCAGTTGA-gactaggatttcggattac--a...	896...	tctct-tgc-aaag	gcga
D.Sec	ctctacag	gtgagtcgc-----tttcagatcgggttcggtaatatgtatatgtagtttttgggatgctgc-----TCAAAGTGGTTGTCAGTTGA-gactaggatttcggattac--a...	913...	tctct-tgc-aaag	gcga
D.Ere	ctctacag	gtaagtccc-----attagagatcgggtttggcacta-----tggttttgggatgctgc-----TCAAAGTGGTTGTCAGTTGA-gactaggatatacggattac--a...	884...	tctct-tgc-aaag	gcga
D.Ana	ccctgcag	gttagttttc-----ttttaagtctggggttcctcaatt-----atgatatggtggaccgcttggaac-----AAGTGGTTGTCAGTTGAGTCTaagggt--ggattattaaccca...	1850...	tctt-tgc-aagg	gcta
D.Gri	caactgcag	gtaagcgcagc--aaaggagcacagacaga---ttaggcggtgcacaaattgt--ggacggggcaca-----acGTGGTTGTCAGTTGTCAGTTGA-atttactatttaaagttaa...	1246...	tatttatat-aagg	gcaa
D.Per	ctctccag	gtcagtcggggttcagggatcgggatgggatgtggaatga-----tgggcgtcgcctcgaa-----GTGGTTGTCAGTTGA-ggggaaagcg--gggtagtgg...	499...	tctct-tgc-aagg	gctg
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D.Vir	cgctgcag	gtaagcgac-----agcgccgtcggggcgcctcccaacttaacaactgt--ggcctggcact-----agactagtagaagatgc--CGTGTgtTGTCAAGTTG--ttgtcagttgaagctctagc...	984...	tat-aagg	caaa
D.Wil	cattgcag	gtaagcgac-----agccaagacaga---ttcaacca--gccaaaatgatgagggggcgggcaagagaaatggtgtggggaatgaagcgagcac--AAAGTGGTTGTCAGTTGAacaaactagtgggagtgg...	571...	tatat-tat-aagg	gtca
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id=94158 gene=FBgn0051374 name=sals segment=chr3R.7264610.7265606\_-1 type=IN

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D.Sim	ctttacag	gtgagtcctgtt...271...--actgtagccaga--gaacagaTCAGCTGACAACACTTGA-----cacaatgtgggatgggtct..642...tctct-tgc-aaag	gcgacacc----
D.Sec	ctctacag	gtgagtcctgtt...280...--actgtagccaga--gaacagaTCAGCTGACAACACTTGA-----cacaatgtgggatgggtct..659...tctct-tgc-aaag	gcgacacc----
D.Ere	ctctacag	gtaagtcctgatt...294...--actgtagccaga--gaacagaTCAGCTGACAACACTTGA-----cacaacgcgggatgggtct..608...tctct-tgc-aaag	gcgacacc----
D.Ana	ccctgcag	gttagttttctt...1338...ttatacattagccag--gaaacAGATCAGCTGACAACACTT-----gacacatgtctgggaaggtt...539...tcttt-tgc-aagg	gctacgcg----
D.Gri	caactgcag	gtaagcgaccga...390...--acgacaataat--tacacatcTCAGCTGACAACACGACACattacaatagagcttagggc-----..888...tatttatat-aagg	gcaatac----
D.Per	ctctccag	gtcagtcggggt...281...--cgaaacgaaacaaaacagaTCAGCTGACAACAC-----acactcacaacatctgggg...243...tctct-tgc-aagg	gctgtgcg----
D.Pse	ctctccag	gtcagtcggggt...281...--cgaaacgaaacaaaacagaTCAGCTGACAACAC-----acacacgcacatatctgggg...250...tctct-tgc-aagg	gctgtgcg----
D.Vir	cgctgcag	gtaagcgacagc...302...--tacgataaataat--tacatat--CAGCTGACAACACG-----acacacattcttgagacatt...727...tat-aagg	caaatcagactcc
D.Wil	cattgcag	gtaagcgacagc...305...--tacttcgtaggtcgctttaa----TCAGCTGACAACACTTT--acatccgctgatatttttgg-----..319...tatat-tat-aagg	gtcatacag----
D.Yak	ctctacag	gtaagtcctgtt...296...--actgtagccaga--gaacagaTCAGCTGACAACACTT-----gacacaattgtgggatgggt...716...ctct-tgcaaaag	gcgacacc----

id=94158 gene=FBgn0051374 name=sals segment=chr3R.7264610.7265606\_-1 type=IN VIEW

Figure 150: CS=22.88



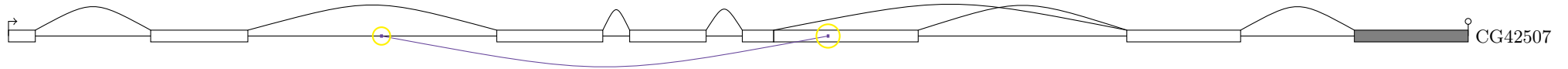
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D.Sim	tcagtctc	agttcgagttat...70.....	-----	tcaccacagccactgaaat-TTTC	-TTT-GCGCTCCG	GTG	gagaag
D.Sec	tcagtctc	agttcgagttat...70.....	-----	tcaccacagccactgaaat-TTTC	-TTT-GCGCTCCG	GTG	gaga--
D.Ere	tctgtctc	agttcgagttat...70.....	-----	tcaccacagccactgaaat-TTTC	-TTT-GCGCTCCG	gtg	gagaag
D.Ana	tgtgtctc	atttcgagtttt...62.....	-----	aagcaccacagcgg-actgaa---	TTTC-TTTGCGCTC	cg	gtgagaag
D.Gri	cagagctc	agttcgagttat...112.....	.....	taaaatagcagcaag----cagat---	TTTC-TTT-GCGCTC	cg	gtgagaag
D.Moj	tcagtctc	agttcgagttat...93.....	.....	taaaatagcagcaag----cagat---	TTTC-TTT-GCGCTC	cg	gtgagaag
D.Per	gagctcac	agtgcgagtttt...87.....	-----	accaactgcag--acgggcaga	TTTC-TTT-GCGCTC	cg	gtgagaag
D.Pse	gagctcac	agtgcgagtttt...87.....	-----	accaactgcag--acgggcaga	TTTC-TTT-GCGCTC	cg	gtgagaag
D.Vir	cagagctc	agttcgagttat...95.....	.....	taaaatagcagccag----cagat---	TTTC-TTT-GCGCTC	cg	gtgagaag
D.Wil	cagcgctc	agttcgagttat...57.....	-----	tagcagctaaactgaaagat---	TTTCaTTTGCGCTC	cg	gtgagaag
D.Yak	tcagtctc	agttcgagttat...71.....	-----	caccacagccactgaaat-TTCT	-TTT-GCGCTCCG	gtg	gagaag
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id=83773 gene=FBgn0260233 name=CG42507 segment=chr3L.14750942.14751059.-1 type=E5

D.Me1	tgctaaag	gtaagtgctcgg...86...	caatcgagaaataggttaa	TGTTTGAGCGCAGAGAAA	---ctgacactgcagc	caaatg-----	...2184...	cgatatttacag-	aatacacc
D.Sim	tgctaaag	gtgagtgtcga...86...	caatcgagaaataggttaa	TGTTTGAGCGCAGAGAAA	---ctgacactgcagc	caaatg-----	...2191...	tgatctttacag-	aatacacc
D.Sec	tgctaaag	gtgagtgtcga...86...	caatcgagaaataggttaa	TGTTTGAGCGCAGAGAAA	---ctgacactgcagc	caaatg-----	...2210...	tgatctttacag-	aatacacc
D.Ere	tgctaaag	gtgagtgtcgg...90...	cgagaaataggttaatgtg	TGGAGCGCAGAGAAA	---ctgacactcacagc	caata-----	...2309...	tgatctttacag-	aacacacc
D.Ana	tgctaaag	gtgagtaagaat...596...	cgccgatgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaataagactgttga...	...1496...	ttgtattgtag-	aacacccc
D.Gri	tgctaaag	gtgagtaagaat...666...	cagttcgaatgtgttagagc-	GAGCGCAAAcGAGAG	cgccgcccgccc--	aagcagcggg-----	...2105...	ttaataatacag-	aacacgcc
D.Moj	tgctaaag	gtgagtacgcg...578...	taattcaaatgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaatgacggggcagcc...	...2062...	ttatctttatag-	aacacgcc
D.Per	tgctaaag	gtaagcgagagt...629...	ctgttcgaatgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaatgacggggcagcc...	...1383...	atatttcataga	aacacacc
D.Pse	tgctaaag	gtaagcgagagt...629...	ctgttcgaatgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaatgacggggcagcc...	...1377...	tatatttcataga	aacacacc
D.Vir	tgctaaag	gtgagtgcgagg...587...	actgttaagtgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaatgacggggcagcc...	...1926...	actttgttttag-	aacacgcc
D.Wil	tgctaaag	gtgagtgtggtc...494...	gattcgaatgtgttagagc-	GAGCGCAAAcGAGAG	-----cgcc--	aaatgacggggcagcc...	...2425...	ccattttaacag-	aacacacc
D.Yak	tgctaaag	gtgagtgtcgg...90...	cgagaaataggttaatgtg	TGGAGCGCAGAGAAA	---tgagacagtcacagc	caaat-----	...2416...	taatttttacag-	aatacacc
	**** **	** **		* * * * *		* * *		* **	** * * **

id=83776 gene=FBgn0260233 name=CG42507 segment=chr3L.14747651.14750003.-1 type=I5 VIEW

Figure 151: CS=11.52



D.Mel	tgctaaag	gtaagtgctcgg...541...	-----tcttgccctt-ttggttcttgc-----	TGTTGTTG	ggTGCA	cacgagcgcgacctctttct...1734...	cgatatttacag-	aatacacc
D.Sim	tgctaaag	gtgagtgcctga...539...	-----tcttgccctt-ttggttcttgc-----	TGTTGTTG	ggTGCA	cacgagcgcgacctctttt...1743...	tgatctttacag-	aatacacc
D.Sec	tgctaaag	gtgagtgcctga...541...	-----tcttgccctt-ttggttcttgc-----	TGTTGTTG	ggTGCA	cacgagcgcgacctctttt...1760...	tgatctttacag-	aatacacc
D.Ere	tgctaaag	gtgagtgcctcgg...547...	--ttcgtcttgccctt-ttggttc-----	TTGCTG	tTGTGTTG	ggTGCA	cacgagcgcgacctctttt...1846...	tgatttttacag-
D.Gri	tgctaaag	gtgagtaaagag...723...	...tgcctgactggcctcttggttg-----	GCTGTTGTTG	ggTGCA	cacgagcgcgacctctttt...2047...	...ttaaatacacg-	aacacgcc
D.Moj	tgctaaag	gtgagtacgagg...646...	...ctcttgctggcaatgtttgc-----	TGCTGCTGTTGC	-----	cgttgccgttgctgctgttg...1997...	...tatactttatag-	aacacgcc
D.Per	tgctaaag	gtaagcgagagt...713...	--agttggttgagct-ttagcctt-----	TTGC	---TGTGTTGGGTGC	acacgagcgcgacctctttt...1297...	...atatttcataga	aacacacc
D.Pse	tgctaaag	gtaagcgagagt...713...	--agttggttgagct-ttagcctt-----	TTGC	---TGTGTTGGGTGC	acacgagcgcgacctctttt...1291...	...tatatttcataga	aacacacc
D.Vir	tgctaaag	gtgagtgcgagg...643...	...gactggctctggctgctaag-----	GTTGTTGTTGCTGTTGTTG	ggtgcacacgagcgcgacct-----	...1866...	acttttgtttag-	aacacgcc
D.Yak	tgctaaag	gtgagtgcctcgg...531...	-----tggagct-ttcgtctcgctat	TGGTTc	TTGCTGTTGTTGTTG	ggtgcacacgagcgcgacct-----	...1968...	taatttttacag-
	*****	** **	* * * *	*****	* ** *		* **	** ** *

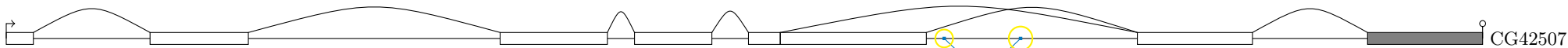
id=83776 gene=FBgn0260233 name=CG42507 segment=chr3L.14747651.14750003\_-1 type=I5

D.Mel	gaagaaaa	gtaagtccggta...193...	-----gcagcagcaacagcagcaac---	TGCAgCAGCA	-----ACA	-----ccagcagcacttgacagcaa-----	...365...	----attaattgctgc	gtaagttt
D.Sim	gaagaaaa	gtaagtccggta...193...	-----gcagcagcagcagcagcaac---	TGCAgCAGCA	-----ACA	-----ccagcagcacttgacagcaa-----	...384...	----attaattgctgc	gtaagttt
D.Sec	gaagaaaa	gtaagtccggta...187...	-----gccccagcagcagcagcaac---	TGCAgCAGCA	-----ACA	-----ccagcagcacttgacagcaa-----	...372...	----attaattgctgc	gtaagttt
D.Ere	gaagaaaa	gtaagtccggta...184...	-----gctgccccagcagcagcaac---	TGCAgCAGCA	-----ACAcCAGCAG	-----cacttgacagcgg-----	cgacatt...357...	----attaattgctgc	gtaagttt
D.Gri	gaagaaaa	gtaagtccggta...166...	-----ggtgttccacagcagcaac---	TGCAaCAGCA	-----GCAGC	-----atcatcaccaagcgac-gcaa-----	...493...	tttcataatttcgctt	atac---
D.Moj	gaagaaaa	gtaagtccggta...368...	-----ggcagcaac-gccgctgcgca-	GCAGCAGCA	-----GCA	-----acagcaaggcatgcaaaatg...250...	----attatttttgc	ttaaacat	
D.Per	gaagaaaa	gtaagtccggta...185...	-----cagcaacaactgcagcaaca---	GCACCATCAAACAGCgcAGCAG	-----	-----cacatgtccactg-----	cagcaat...384...	----ctcttttactgc	gtaagttt
D.Pse	gaagaaaa	gtaagtccggta...185...	-----cagcaacaactgcagcaaca---	GCACCATCAAACAGCgcAGCAG	-----	-----cacatgtccactg-----	cagcaat...390...	----ctcttttactgc	gtaagttt
D.Vir	gaagaaaa	gtaagtccggta...237...	-----aacaacaacaacaacaaca---	CAGCAGCAGCA	-----GCAACAAC	-----aacaaca-----	acagcag--cagcaa...409...	----ataattttgtt	gtaagtct
D.Yak	gaagaaaa	gtaagtccggta...174...	cccaaagtgtgctgctcccag-----	CAGCAACAACA	-----GCAAcAACTG	cagcagca-----	acatcaa-----	cagca--...379...	----attaattgctgc
	*****	*****	* *	*** ** *	**	* *		* **	**

id=83782 gene=FBgn0260233 name=CG42507 segment=chr3L.14745799.14746433\_-1 type=A5 VIEW

Figure 152: CS=7.8





D.Mel attgctgc gtaagtttata-----ttttgc--ataacttt-----tcaaattgcg--tttttaacatataacattttct--tat-GCAGTATTTTCTTGCAATTG-----tagcacagagaaaaggacaa...808...ccttccttgag caaccag  
D.Sec attgctgc gtaagtttata-----ttttgc--ataac--t-----tcaaattgcg--tttttaacatataacattttct--tat-GCAGTATTTTCTTGCAATTG-----tactacagagaataggacaa...796...ccttccttgag caaccag  
D.Ere attgctgc gtaagtttata-----at ttgc--ataacttt-----tcaaattgcg--ttccttaacatataacattttct--tat-GCAGTATTTTCTTGCAATTG-----caccacagagaaaacgaaa...806...ccttccttgag taatcag  
D.Ana attgctgc gtaagttttcatttgc-----at ttgc--aagaatattttgaaatcgaattgcttttttaacacaacactttatt--tat-GCAGTATTTTCTTGCA-----tattgtactacaacagagac...739...gcttccttgag caccag  
D.Gri -----ataa-----tttcgc--ttatacattcctaacaagaacatataaataattat--aataaataaataacaactc-ATGCAGTATTTTCTTGCA-----tataacgctaataactctaa...883...tatactttgag taccag  
D.Moj tt-----ttttgc--ttaaacttttcaaca-----attcaataacagatgattaacaattctgatcattta-TGCAGTATTTTCTTGCAATAACGGTAAATActcaactat tttacttaaa...867...gatactttgag catccag  
D.Per tt tactgc gtaagtttt-----tttttc--caagcttt-----tcaaattccat--tccttaatcgaaaatcactagtagtat-GCAGTATTTTCTTGCA-----tttgaatagatagagataca...830...ccttccttgag catccag  
D.Pse tt tactgc gtaagtttt-----tttttc--caagcttt-----ccaaattccat--tccttaatcgaaaatcactagtagtat-GCAGTATTTTCTTGCA-----tttgaatagaagagataaa...834...ccttccttgag catccag  
D.Vir tttttgtt gtaagttcatab-----ataaataac-----ataaataac--aaagaaaagtttaataatta-TGCAGTATTTTCTTGCA-----tataacggtgaataactcaaa...871...aatactttgag caccag  
D.Wil ttctcggt gtaagttaaagatagaaaataacattagtttttttataatc tttttggcca-----aatgc--gaaaagcgtta-----TGCAGTATTTTCTTGCA-----tatattattataatacggac...1426...aatcgcttgag taccgg  
D.Yak attgctgc gtaagtttata-----at ttgc--ataacttt-----tcaaattgcg--ttccttaacatataacattttct--tat-GCAGTATTTTCTTGCAATTG-----taccacagagaaaaggaaa...790...ccttccttgag caatcag

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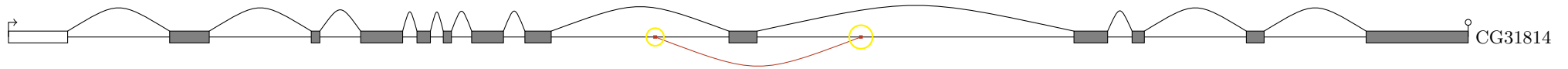
id=83783 gene=FBgn0260233 name=CG42507 segment=chr3L.14744876.14745798.-1 type=I5

D.Mel attgctgc gtaagtttatat...358...tttataattattgtttctct--TAGT-----TGCAAGAAAATACTGT---tggtcg--atttccaaactac--...481...ccttccttgag caaccagt  
D.Sec attgctgc gtaagtttatat...351...tttattattattgtttctct--TAGT-----TGCAAGAAAATACTGT---tggtcg--atttccaaactac--...473...ccttccttgag caaccagt  
D.Ere attgctgc gtaagtttataa...351...tttattattattgtttctct--TAGT-----TGCAAGAAAATACTGT---tggtcg--atttccaaactac--...486...ccttccttgag taatcagt  
D.Ana attgctgc gtaagttttcat...400...--taatttcggttctcgaagt-----TGCAAGAAAATACTGT---tctgtcg--atctcctaactc--...383...gcttccttgag caccagt  
D.Gri ataatttc gcttatacattc...434...gttcttagttttattgtctt-----TGCAAGAAAATACTGTATtt---tg--attttgagctcaaat...473...tatactttgag taccagt  
D.Moj ttttttgc ttaaacttttc...410...gtttctttgtgctcggttc--TGTTACTGTGTtTGCAAGAAAATACTGTActt---tg--atttttaatt--agttg...476...gatactttgag catccagt  
D.Per tt tactgc gtaagttttttt...346...--ttccattggc tttgttcttTG-----TGCAAGAAAATACTGT---tttccacg--attcctaact--at---...514...ccttccttgag catccagt  
D.Pse tt tactgc gtaagttttttt...346...--ttccattggc tttgttcttTG-----TGCAAGAAAATACTGT---tttccacg--attcctaact--at---...518...ccttccttgag catccagt  
D.Vir tttttgtt gtaagttcatab...407...gttcttgtttttatttgctt-----TGCAAGAAAATACTGTActt---tg--atttttaact--attct...496...aatactttgag caccagc  
D.Wil ttctcggt gtaagttaaaag...447...cttgaactctggtttactt-----TGCAAGAAAATACTGTActtaagcacattttcggttt---...1018...aatcgcttgag taccggc  
D.Yak attgctgc gtaagttttaa...353...tttattattattgtttctct--TAGT-----TGCAAGAAAATACTGT---tggtcg--atttccaaactac--...468...ccttccttgag caatcag

\* \* \*\*\*\*\* \* \*\* \* \* \* \* \* \* \*

id=83783 gene=FBgn0260233 name=CG42507 segment=chr3L.14744876.14745798.-1 type=I5 VIEW

Figure 153: CS=19.8



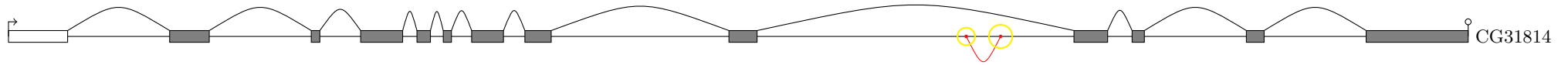
D.Mel	tgtgcaat	gtgagtaaatgt...1286...	-ctttaa	gactgagtgc	cat	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aatggta-...	327...	ccc	ctt	taacag	ttccg	ccg
D.Sim	tgtgcaat	gtgagtaaatgt...1245...	-ctttaa	gactgagtgc	cat	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aatggta-...	308...	cct	gtt	ccacag	ttccg	ccg
D.Ana	agtacaat	gtgagtaaatgt...1194...	-ctttaa	gactgagtgc	ctt	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aatggaa-...	162...	tg	ttt	tttcag	ttcccc	cccc
D.Gri	agttcagt	gtgagtacaact...1221...	-ctttaa	gaccgaatgc	at	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	cg <b>TTG</b>	----	ccaactc	cagtaa	aatgcat-...	823...	at	at	ttccag	ttccacc	ccc
D.Moj	agttcaat	gtgagtatttcc...1127...	tgtgc	gtctgtatg	agc	ga-	<b>TGTGTGTGTG</b>	<b>CGGTGTG</b>	cc	<b>TGTG</b>	----	cgtgt	atttt	gtgtgtat-...	1674...	ca	att	tttcag	ttccg	ccc
D.Per	agtgcaat	gtgagtaaatgt...4586...	-ctttaa	gactgagtgc	cat	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aatgcaa-...	319...	ct	ttt	ccacag	ttccg	ccc
D.Pse	agtgcaat	gtgagtaaatgt...4476...	-ctttaa	gactgagtgc	cat	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aatgcaa-...	319...	ct	ttt	ccacag	ttccg	ccc
D.Vir	agttcaat	gtgagtatttgg...1247...	-ctttaa	gaccgaacgc	at	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	caaactc	cagtaa	aatccat-...	334...	t	att	gttcgag	tcccc	cca
D.Wil	tgtgcaat	gtgagtgcaaat...2186...	ttt	cactctgtt	gcg-gcag	<b>TTTTGTTGTTG</b>	----	----	<b>TTTGCAG</b>	caggtgt-tattttgtgcccc...	648...	t	ct	gtttacag	ttccacc	ccg				
D.Yak	tgtgcaat	gtgagtaaatgt...1299...	-ctttaa	gactgagtgc	cat	<b>TTTA</b>	----	<b>ATCC</b>	aa <b>AAAC</b>	ag <b>TTG</b>	----	taaactc	cagtaa	aaatacta-...	340...	c	ct	gtcaacag	ttccg	ccg
		<b>** ** *</b>	<b>*****</b>	<b>*</b>	<b>**</b>	<b>*</b>	<b>**</b>	<b>*</b>	<b>*</b>	<b>**</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>

id=47495 gene=FBgn0051814 name=CG31814 segment=chr2L.13687659.13689355-1 type=IN

D.Mel	catatcgg	gtaa--gatagggc...1520...	gatgta-----	tggccaacagccac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaaccgcctt---tccattg-...	1369...	tcg	cactttcag	acacctc	g
D.Sim	catatcgg	gtaa--gatagggc...1817...	gatgta-----	tggccaacagccac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaaccgcctt---tccattg-...	1328...	tcg	cactttcag	acacctc	g
D.Ana	aatatctg	gtaa--gtcgagtg...1421...	gatgta-----	tggctaacagacac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaagcgcttt---cgcatag-...	1182...	tc	actat	tttag	acacatc
D.Gri	aatatcag	gtat--tgtccact...2327...	-atgca-----	ttgcaaacagacacc-----	<b>C</b>	<b>AAAGTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaagcgattt---cggagcg-...	1767...	tg	cttttacag	atacttca	
D.Moj	aatatcag	gtaaatggtgaa--...1954...	aacataatcacattggcaaa-----	<b>TATACATATGCACACACACACA</b>	cccagcgagggg---ccaaaagg...	2294...	ttt	tttttcag	acacttcc						
D.Per	catatcgg	gtga--gttatgtc...2079...	gatgta-----	tggctaacagacac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaagcgcttt---tgcaag-...	1449...	gc	at	ttttcag	acacatc
D.Pse	catatcgg	gtga--gttatgtc...2081...	gatgta-----	tggctaacagacac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaagcgcttt---cgcaag-...	1440...	gc	at	ttttcag	acacatc
D.Vir	aatatcag	gtaa--tttgaact...2344...	gatgca-----	tggcaaacagacac-----	<b>CAAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaagcgattt---cggagcg-...	1385...	tg	ct	ttttcag	acacttcc
D.Wil	tatatcgg	gtaa--gatgttta...1978...	-----	aggtaaacgctcagccggct	<b>CTGGCAGACAAGaCAAAATAAAA</b>	-----	atgcgcaacgaaccgagata...	1323...	at	ct	cattgcag	acacttcc			
D.Yak	catatcgg	gtaa--gacagggc...1535...	gatgta-----	tggccaacagccac-----	<b>CGAAA</b>	<b>GTTT</b>	<b>GGGT</b>	aa <b>TAAA</b>	-----	ttttaaccgcctt---tccattg-...	1376...	tcg	cactttcag	acacctca	
		<b>***** *</b>	<b>**</b>	<b>** **</b>	<b>** **</b>	<b>** **</b>	<b>** **</b>	<b>** **</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>

id=47497 gene=FBgn0051814 name=CG31814 segment=chr2L.13684549.13687520-1 type=IN VIEW

Figure 154: CS=10.8



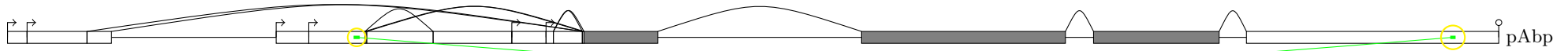
D.Mel	catatcgg	gtaagatagggc...2397...cgccttacaa----tgcgccaagc	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...493...	tcgcactttcag	acacctcg
D.Sim	catatcgg	gtaagatagggc...2640...cgccttacaa----tgcgccaagc	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...506...	tcgcactttcag	acacctcg
D.Sec	catatcgg	gtaagatagagc...2343...cgccttacaa----tgcgccaagc	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...505...	tcgcactttcag	acacctcg
D.Ere	catatcgg	gtaagaaagggc...3385...cgccttacaa----tgcgccaagc	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...513...	tcgcactttcag	acacctcg
D.Ana	aatatcctg	gtaagtcgagtg...2154...cgccttacaa----tgcgccaaac	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...450...	tcactattttag	acacatcc
D.Gri	aatatcag	gtattgtccact...3224...-----aaaaaggagtatagaacct-	GGAAAaaAACTTcTGTTTtATGT	ccca-atattggatggcggca...866...	tcgcttttacag	atacttca	
D.Per	catatcgg	gtgagttatgtc...3005...cgccttacaa----tgcgccaaac	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...525...	gcatattttcag	acacatcg
D.Pse	catatcgg	gtgagttatgtc...2992...cgccttacaa----tgcgccaaac	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...531...	gcatattttcag	acacatcg
D.Vir	aatatcag	gtaatttgaact...3239...cgccttacac----tgcgccaaac	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...492...	tcgcttttcag	acacttcc
D.Wil	tatatcgg	gtaagatgttta...2797...tgccttacaa----tgcgccaaac	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gccta...508...	atctcattgcag	acacttcc
D.Yak	catatcgg	gtaagacagggc...2395...cgccttacaa----tgcgccaagc	AATCaaAGTGAAATTAAG	-----	tttatatatttaaat-gctact...517...	tcgcactttcag	acacctca
	***** **	* * * * *	** ** ** *		* ***** ** **	** **	* ** **

id=47497 gene=FBgn0051814 name=CG31814 segment=chr2L.13684549.13687520\_-1 type=IN

D.Mel	catatcgg	gtaagatagggc...2562...-----agctgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagtta-----	...328...	tcgcactttcag	acacctcg
D.Sim	catatcgg	gtaagatagggc...2804...-----agctgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...342...	tcgcactttcag	acacctcg
D.Sec	catatcgg	gtaagatagagc...2508...-----agctgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...340...	tcgcactttcag	acacctcg
D.Ere	catatcgg	gtaagaaagggc...3554...-----agctgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...344...	tcgcactttcag	acacctcg
D.Ana	aatatcctg	gtaagtcgagtg...2345...-----tggagaacaaaagtttttcc-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...259...	tcactattttag	acacatcc
D.Gri	aatatcag	gtattgtccact...3741...gaaaaaagtgaactaaagaaGCATtGAACAaAAGTTTTTCT		----tttaga---ttttcactgattaa...351...	tcgcttttacag	atacttca	
D.Per	catatcgg	gtgagttatgtc...3211...-----agagagaacaaaag-ttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...319...	gcatattttcag	acacatcg
D.Pse	catatcgg	gtgagttatgtc...3204...-----agagagaacaaaag-ttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...319...	gcatattttcag	acacatcg
D.Vir	aatatcag	gtaatttgaact...3429...-----cattgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...302...	tcgcttttcag	acacttcc
D.Wil	tatatcgg	gtaagatgttta...2939...-----gccagaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagtta-----	...366...	atctcattgcag	acacttcc
D.Yak	catatcgg	gtaagacagggc...2565...-----agctgaacaaaagtttttct-	TTTAGATTTTCACTGATT	aatgagaaaagtttagttg-----	...347...	tcgcactttcag	acacctca
	***** **	**** **	* * ** *	* **	***** *	** **	* ** **

id=47497 gene=FBgn0051814 name=CG31814 segment=chr2L.13684549.13687520\_-1 type=IN VIEW

Figure 155: CS=10.56



D. Mel	ggtcgtgg	attcgctttcag...70...aacgtaac-aaaaaaattg	TAAAAaGTAGCAAAAAA	-----aatcgagcgtgtttgagaa	gtaagtac
D. Sim	ggtcgtgg	attcgctttcag...70...aacgtaac-aaaaaaattg	TAAAAaGTAGCAAAAAAT	-----cgagcgtgtttgagaa	gtaagtac
D. Sec	ggtcgtgg	attcgctttcag...70...aacgtaac-aaaaaaattg	TAAAAaGTAGCAAAAAAT	-----cgagcgtgtttgagaa	gtaagtac
D. Ere	ggtcgtgg	attcgctttcag...70...aacgtaac-aaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaagtgc-ttgagaa	gtaagtac
D. Ana	ggtcgtgg	attcgctttcag...75...aaaactcaa-caaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaagtgt-ttg--aaa	gtaagtac
D. Gri	ggtcgtgg	tttcgcttagca...71...agtaaccaa-aaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaa--gtgttgaaaac	gtaagtac
D. Moj	ggtcgtgg	tttcgcttagca...71...aaaagcaac-aaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaa--gtgttgaaaac	gtaagtac
D. Per	ggtcgtgg	attcgcttatag...72...--agtaac-aaaaaaattg	TAAAGTAGCAAAAAATT	-----cgagcaagtgttt--aagc	gtaagtac
D. Pse	ggtcgtgg	attcgcttatag...72...--agtaac-aaaaaaattg	TAAAGTAGCAAAAAATT	-----cgagcaagtgttt--aagc	gtaagtac
D. Vir	ggtcgtgg	tttcgcttagca...70...aaaagcaac-aaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaa--gtgttgaaaac	gtaagtac
D. Wil	ggtcgtgg	actttagcaca...76...aaaattaac-aaaaaaattg	TAAAAaGTAGCAAAAAAT	ataaaatttcgagcaagtgtgtgaaacc	gtaagtac
D. Yak	ggtcgtgg	attcgctttcag...71...aacgtaacaaaaaaattg	TAAAAaGTAGCAAAAAATT	-----cgagcaagtgt-ttgagaa	gtaagtac
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id=49922 gene=FBgn0003031 name=pAbp segment=chr2R.14028322.14028459.1 type=A5

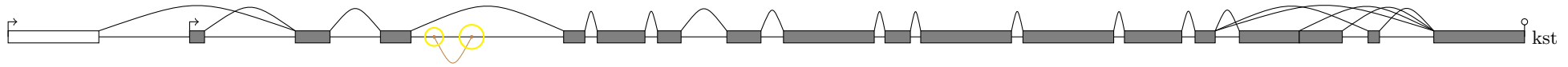
D. Mel	ccttcag--	ttttccactaat--...735...--gcaagaatagagagtcaag	TTTTTGCTACTTTG	-----aaaaagagag-aaaatacag...81...--tgtaaaaaa--gc	aaaaaaa
D. Sim	ccttcag--	ttttccactaat--...738...-cgcaagaatagagagtcaa	GTTTTTGCTACTTTG	-----agaaaagagag-aaaatacag...1058...--tgtaaaaaa--gc	acaaaagt
D. Sec	ccttcag--	ttttccactaat--...735...-cgcaagaatagagagtcaa	GTTTTTGCTACTTTG	-----agaaaagagag-aaaatacag...80...--tgtaaaaaa--gc	aaaaaaat
D. Ere	ccttcag--	ttttccactaat--...726...cgcaagaatagagagtcaa	AGTTTTTGCTACTTTG	-----aaaaagagag-aaaatacag...82...--tgtaaaaaa--gc	aaaaaaa
D. Ana	atttcag--	ttttcctcttca--...792...cgcaagaatagagagtca	AGTTTTTGCTACTTTG	-----aaagaaaagag-aaaatac-...95...--taaaaaaatgc	aaaaaaat
D. Gri	tcttcag--	tttttccct--...909...cgcaagaatagagagtca	AGTTTTTGCTACTTTG	-----aaaaaccaaaaaatcaat--...95...tcgatgtaaaaa--ac	taaaaa--
D. Moj	a---cagtt	tttttcaacatt...966...cgcaagaatagagagtca	AGTTTTTGCTACTTTG	-----aaaaccaacagtaataca-...77...--tatgtaaaacc--aa	aaaaaa--
D. Per	tcttcag--	ttttcctcttca--...767...cgcaagaatagagagtca	AGTTTTTGCTACTTTT	-----aaaaagatagaaaaataca-...94...--tgtaaaagca--ca	aaaaaaga
D. Pse	tcttcag--	ttttcctcttca--...785...cgcaagaatagagagtca	AGTTTTTGCTACTTTT	-----aaaaaagatagaaaaataca-...94...--tgtaaaagca--ca	aaaaaaga
D. Vir	atttcag--	ttttcccac--...867...cgcaagaatagagagtca	AGTTTTTGCTACTTTG	-----aaaaccaaaaaatcaata-...79...--tgtaaaaaat--ac	aaaaaaa
D. Wil	--ttacagtt	ttttcctcttca--...1081...cgcaagaatagagagtcaa	GTTTTTGCTACTTTTG	-----Gaaaaaaggaaaaaacagaaa-...101...--tgtaaacct--aa	aaaaaac
D. Yak	cccttcag--	ttttccactaat--...726...cgcaagaatagagagtca	AGTTTTTGCTACTTTG	-----aaaaagagag-aaaatacag...82...--tgtaaaaaa--gc	aaaaaaa
	***	**** *	*****	* ** * ** *	****

id=49936 gene=FBgn0003031 name=pAbp segment=chr2R.14032847.14033740.1 type=E3 VIEW

Figure 156: CS=7.2







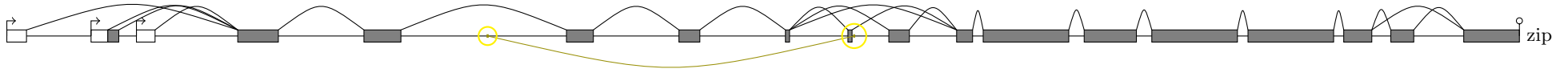
D. Mel	acaccaag	gtgagatatgcc...82...-----taaagctct-ctacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1445...ctttcgtcttag	gtccgtct	
D. Sim	acaccaag	gtgagatatgcc...82...-----tagagctct-ctacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1942...ctttcgttttag	gtccgtct	
D. Sec	acaccaag	gtgagatatgcc...89...-----tagagctct-ctacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1352...ctttcgttttag	gtccgtct	
D. Ere	acaccaag	gtgagatatacc...73...-----tggagctct-ctacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1421...ctttcatttttag	gtccgtct	
D. Ana	acaccaag	gtgagaggcagt...60...-----agagctctactacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1302...gtgggctaacag	gtacgcct	
D. Moj	acaccaag	gtacgtgtgaaa...47...-----gataaaggc---ctacgcatttg	<b>TAGAAAGTGAAGT</b>	---ctcttgaggcagctgcgcg-...1916...caataacaatag	gtacgcct	
D. Per	acacaaag	gtgagagacgca...104...-----agtggatct-ttacgcatttg	<b>TAGAAAGTGAAGT</b>	ctgcggctgcg-cagccaagc-...2123...ccattcaaaag	gtacgcct	
D. Pse	acacaaag	gtgagagacgca...104...-----agtggatct-ttacgcatttg	<b>TAGAAAGTGAAGT</b>	ctgcggctgcg-cagccaagc-...2149...ccattcaaaag	gtacgcct	
D. Vir	acaccaag	gtacgtaagagg...34...-----gaaaaaggc---ctacgcatttg	<b>TAGAAAGTGAAGT</b>	---ctcttgaggcagctgcgcg-...1905...taacaacaacag	gtacgcct	
D. Wil	acaccaag	gtgagtgttttc...66...gagatagagaaggc---ctacgc	<b>ATGTGTAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1442...tctacaacacag	gtgcgctt	
D. Yak	acaccaag	gtgagatatacc...100...-----gggagctct-ctacgcatttg	<b>TAGAAAGTGAAGT</b>	-cgcgcctgcg-cagctgcgcg-...1492...ctttcatttttag	gtccgtct	
	**** **	** *	*	***** *****	* ** * **** **	** ** * *

id=25752 gene=FBgn0004167 name=kst segment=chr3L.3352133.3353737\_1 type=IN

D. Mel	acaccaag	gtgagatatgcc...286...ttcttggcaa-tatct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-cttgactt----...1239...ctttcgtcttag	gtccgtct	
D. Sim	acaccaag	gtgagatatgcc...286...ttcttggcaa-tatct----aaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-cttgactt----...1736...ctttcgttttag	gtccgtct	
D. Sec	acaccaag	gtgagatatgcc...293...ttcttggcaa-tatct----aaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-cttgactt----...1146...ctttcgttttag	gtccgtct	
D. Ere	acaccaag	gtgagatatacc...293...ttcttggcaa-tttct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgca-tttttc-catgacttc---...1199...ctttcatttttag	gtccgtct	
D. Ana	acaccaag	gtgagaggcagt...270...ttcttggcat-tttct----taaat	<b>ATTTCGataCTTTCTA</b>	-atgcatttcttcgctggca----...1090...gtgggctaacag	gtacgcct	
D. Moj	acaccaag	gtacgtgtgaaa...253...-tgctggcaattttgt----aaaat	<b>ATTTCGataCTTTCTA</b>	-atgcgcaggctg-cacattta----...1708...caataacaatag	gtacgcct	
D. Per	acacaaag	gtgagagacgca...312...-tcttggcaattttct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-tccg-ctgc---...1913...ccattcaaaag	gtacgcct	
D. Pse	acacaaag	gtgagagacgca...321...-tcttggcaattttct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-tccg-ctgc---...1930...ccattcaaaag	gtacgcct	
D. Vir	acaccaag	gtacgtaagagg...258...-gtctggcaattttct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgcacgcgctg-catatttg----...1679...taacaacaacag	gtacgcct	
D. Wil	acaccaag	gtgagtgttttc...386...-----gcaatttttctaaagaat	<b>ATTTCGataCTTTCTAATGCAT</b>	tttcctaaagtactttcat...1119...tctacaacacag	gtgcgctt	
D. Yak	acaccaag	gtgagatatacc...298...ttcttggcaa-tttct----gaaat	<b>ATTTCGataCTTTCTA</b>	-atgcattttttc-cttgactt----...1292...ctttcatttttag	gtccgtct	
	**** **	** *	*** **	***** *****	*	** ** * *

id=25752 gene=FBgn0004167 name=kst segment=chr3L.3352133.3353737\_1 type=IN VIEW

Figure 159: CS=13.2



D. Mel	taatctat	gtgagtacctcg...2916...	gtacaacaaatagc--aaagcc	GCATACTT	agTGCC	cacgccg-cagtctcgggtccc----	...429...	tcttcatttcag	acatattc
D. Sim	taatctat	gtgagtacctcg...3021...	gtacaacaaatagc--aaagcc	GCATACTT	agTGCC	cacgccg-cagtctcgggtccc----	...464...	tctttatttcag	acatattc
D. Sec	taatctat	gtgagtacctcg...3082...	gtacaacaaatagc--aaagcc	GCATACTT	agTGCC	cacgccg-cagtctcgggtccc----	...464...	tctttatttcag	acatattc
D. Ere	taatctat	gtgagtaccccg...3081...	gtacaacaaatagc--aacgcc	GCATACTT	agTGCC	cacgccg-cagtctcgggtccc----	...521...	catccatttcag	acatattc
D. Gri	tgatctat	gtaagtacttca...4059...	--gccacaacattcaagagcc	GCATACTT	agTGCC	cacg---caggc-cacttatgtaa...	...852...	gaccatttcag	acatattc
D. Moj	tgatctat	gtaagtataca...4164...	--ctgaaatcattcaagagtc	GCATACTT	agTGCC	cacg---cagtc-cagttatgtac...	...747...	attcttcttcag	acatattc
D. Per	tgatctat	gtaagtattaaa...4188...	--acaacaaatagcaaaaagcc	GCATACTT	agTGCC	cacgccg-cagccgcagtcac----	...723...	ttacttttccag	acatattc
D. Pse	tgatctat	gtaagtattaaa...4164...	--acaacaaatagcaaaaagcc	GCATACTT	agTGCC	cacgccg-cagccgaagccgc----	...747...	ttacttttccag	acatattc
D. Vir	tgatctat	gtaagtaccaat...4001...	--acaaaaagcgttcaagagcc	GCATACTT	agTGCC	cacgcagtcagtc-cagttat----	...910...	ttttgttttag	acatattc
D. Yak	ttatctat	gtgagtaccccg...3111...	atacaacaaatagc--aaagcc	GCATACTT	agTGCC	cacgccg-cgggtctcgggtccc----	...464...	tcctaattgcag	acatattc
		* *****	** ****			* **			* ** *****

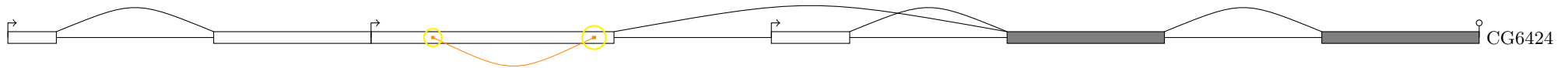
id=2039 gene=FBgn0005634 name=zip segment=chr2R.20889968.20893390.-1 type=IN

D. Mel	catttgcG	GTAAAGTATGC	-----ttgacgt--c	caaaaattcctt...172...	acctaattgcag	aacttctc
D. Sim	catttgcG	GTAAAGTATGC	-----ttgacgt--c	caaaaatcctt...171...	acctaattgcag	aacttctc
D. Sec	catttgcG	GTAAAGTATGC	-----ttgacgt--c	caaaaatcctt...171...	acctaattgcag	aacttctc
D. Ere	catttgcG	GTAAAGTATGC	-----ttgacgt--c	caacatgctatt...180...	acctaattgcag	aacttttc
D. Gri	cattttcG	GTAAAGTATGC	-----tccatataac	caagaaatca...170...	ccataattccag	aacttttc
D. Moj	catttgcG	GTAAAGTATGC	-----tccaagtaac	caagcaaac...208...	ccattattgcag	aacttttc
D. Per	cattttcG	GTAAAGTATGC	ttgctctactgtacac	accc-----...164...	gaataattacag	aacttttc
D. Pse	cattttcG	GTAAAGTATGC	---tctactgtacac	ccccaac-----...162...	gaataattacag	aacttttc
D. Vir	catttgcG	GTAAAGTATGC	-----tctcatgttg	ccaagaaat...175...	ccgtaattgcag	aacttttc
D. Yak	catttgcG	GTAAAGTATGC	-----ttgacgt--c	caaaaatcctt...174...	acctaattgcag	aacttctc
		**** *	*****			* ** * **

id=2047 gene=FBgn0005634 name=zip segment=chr2R.20885221.20885435.-1 type=IN VIEW

Figure 160: CS=17.8





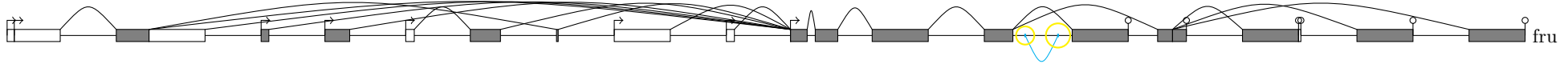
D.Mel	ctacctgc	ccattcaccggt...151...-gcactaaaaatccattcacia	CGTATTCGCTAG	gaGTGC	tacgccatttgggtctgagc...557...aaggcttgcat	gtaagtac
D.Sim	ctgcctgt	ccattcaccggt...153...-gcactaaaaatccattcacia	CGTATTCGCTAG	gaGTGC	tacgccatttgggtctgagc...559...aaggcttgcat	gtaagtac
D.Sec	ctgcctgc	ccattcaccggt...149...-gcactaaaaatccattcacia	CGTATTCGCTAG	gaGTGC	tacgccatttgggtctgagc...559...aaggcttgcat	gtaagtac
D.Ere	ctgcctgc	acattcaccggt...153...-gcactaaaaatccagtca	CGTATTCGCTAG	gaGTGC	tacgccatttgggtctgagc...578...aaggcttgcat	gtaagtac
D.Gri	ggctgtgc	ccattcacgtgc...183...ggcattataattcagtcaca	ACGTATTCGCTAG	GGCGT	tctccgattactcggttga...745...aaggcttgcat	gtaagtac
D.Per	ccgcctgt	tcattgacgcc...156...-gccctataattcagtcaca	CGTATTCGCTAG	gagttctgcgcctgcttgg	-----...699...aaggcttgcat	gtaagtac
D.Pse	ccgcctgc	tcattgacgcc...156...-gccctataattcagtcaca	CGTATTCGCTAG	gagttctgcgcctgcttgg	-----...693...aaggcttgcat	gtaagtac
D.Vir	ggctgtgc	tcattcacgtgc...180...ggccctataattcagtcaca	ACGTATTCGCTAG	gagttctacgcctactcgg	-----...658...aaggcttgcat	gtaagtac
D.Wil	cagtgctc	tcattcaccgaa...168...ggcactataattcattcaca	ACGTATTCGCTAG	gagttctacgactgcttgg	-----...647...aaggcttgcat	gtaagtac
D.Yak	ctgcctgc	tcattcaccggt...163...-gcactaaaaatccagtca	CGTATTCGCTAG	gaGTGC	tacgccatttgggtctgagc...588...aaggcttgcat	gtaagtac
		**** **		** ** **	***** **	*****

id=17219 gene=FBgn0028494 name=CG6424 segment=chr2R.13603211.13604000.-1 type=E5

D.Mel	ctacctgc	ccattcaccggt...674...ccagtcgaacggaaaacgac	GTGCa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac
D.Sim	ctgcctgt	ccattcaccggt...678...ccagtcgaacggaaaacgac	GTGCa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac
D.Sec	ctgcctgc	ccattcaccggt...674...ccagtcgaacggaaaacgac	GTGCa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac
D.Ere	ctgcctgc	acattcaccggt...697...ccagtcgaacggaaaacgac	GTGCa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac
D.Gri	ggctgtgc	ccattcacgtgc...893...cacaataactacaaccgtc	GTGCa	CTGGCGAA	cgTACGT	ggaa-----aatcagcaaaattga...31...aaggcttgcat	gtaagtac
D.Per	ccgcctgt	tcattgacgcc...821...-----taaaaggaacgtcgtgcaa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac	
D.Pse	ccgcctgc	tcattgacgcc...815...-----taaaaggaacgtcgtgcaa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac	
D.Vir	ggctgtgc	tcattcacgtgc...805...-----ttttaaaaaacgtcgtgcaa	CTGGCGAA	cgTACGT	ggaa-----aatcagcaaaattga...31...aaggcttgcat	gtaagtac	
D.Wil	cagtgctc	tcattcaccgaa...776...-----gagcaaaaacgtcgtgcaa	CTGGCGAA	cgTACGT	ggaaatacaaaacagcaa...37...aaggcttgcat	gtaagtac	
D.Yak	ctgcctgc	tcattcaccggt...717...ccagtcgaacggaaaacgac	GTGCa	CTGGCGAA	cgTACG	-ggga-----aaaaccagcaagattg...32...aaggcttgcat	gtaagtac
		**** **		** ** **	***** **	*****	*****

id=17219 gene=FBgn0028494 name=CG6424 segment=chr2R.13603211.13604000.-1 type=E5 VIEW

Figure 161: CS=9.6



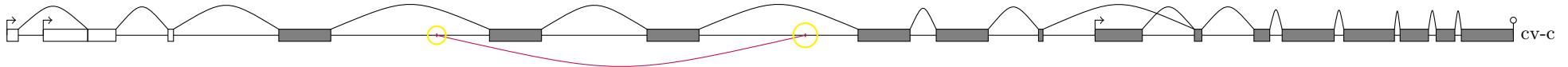
D.Mel	acttgccg	gtaagt---gtgatcagtc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...382...-tcctgtgtgcag	gtgaaaaa
D.Sim	acttgccg	gtaagt---gtggtcagtc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...372...-tcctgtgtgcag	gtgaaaaa
D.Sec	acttgccg	gtaagt---gtggtcagtc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...362...-tcctgtgtgcag	gtgaaaaa
D.Ere	acttgccg	gtaagc-----ccagtt-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...378...-atcctg-gtgtag	gtgaaaaa
D.Ana	acttgccg	gtaagtcagttggccatttcagtcataaat	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...368...-tcctgtatgtag	gtgaaaaa
D.Gri	acttgccg	gtaagtcctatgcccccaatt-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...202...-ttgaatgcgtag	gtgaaaaa
D.Per	acttgccg	gtaagt---gccccactc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...350...-gcgtgcatgtag	gtgaaaaa
D.Pse	acttgccg	gtaagt---gccccactc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...350...-gcgtgcatgtag	gtgaaaaa
D.Wil	acttgccg	gtaagtcctctaaagccatct-----	.....	TTGTT	aAGGTTTTTCTTTTT	-----	aaccggtgcg---atggttcca-...447...-gttattgtgtg	gtgaaaaa
D.Yak	acttgccg	gtaagt---ttggtcagtc-----	.....	TAGTTTGT	aAGGTTTTTCTTTTT	-----	gaaccggtgcg---atggttcca-...347...-tcctgtgtgtag	gtgaaaaa
		***** **					* * * * *	

id=122223 gene=FBgn0004652 name=fru segment=chr3R.14257757.14258285\_-1 type=IN

D.Mel	acttgccg	gtaagtgtgatc...351...--aagcggaaatcgcgccaag---	AAAAAGAAAAAATCT	CAACAATGCTG	-----	cgctcaagcaaaagtaaag...88...-tcctgtgtgcag	gtgaaaaa	
D.Sim	acttgccg	gtaagtgtggtc...353...--aagcggaaatcgcgccaag---	AAAAAGAAAAAATCT	CAACAATGCTG	-----	cgctcaagcaaaagtaaag...82...-tcctgtgtgcag	gtgaaaaa	
D.Sec	acttgccg	gtaagtgtggtc...355...--aagcggaaatcgcgccaag---	AAAAAGAAAAAATCT	CAACAATGCTG	-----	cgctcaagcaaaagtaaag...70...-tcctgtgtgcag	gtgaaaaa	
D.Ere	acttgccg	gtaagcccagtt...339...--aagcggaaatcgcgccaag---	AAAAAGAAAAAATCT	CAACAATGCTG	-----	cgctcaagcaaaagtaaag...97...-atcctg-gtgtag	gtgaaaaa	
D.Ana	acttgccg	gtaagtcagttg...343...--gcggaatcgcgccaatgaa	AAAGAAAAAATCT	TAACAATGCTG	-----	cgcttaaaaaaaagcgta...97...-tcctgtatgtag	gtgaaaaa	
D.Gri	acttgccg	gtaagtcctatg...518...-aaaaaaaata--gaaaaaag-	AAACAGCGA	aaATCCTTC	---TTCT	accagtagattgtttgcca-----...59...-ttgaatgcgtag	gtgaaaaa	
D.Per	acttgccg	gtaagtgtggtc...330...aatatcggaatcgcgccaag---	CAAAG	AAAAAGAAAAAATCT	CAACAATGCTA	-----	cgctctagcgaaaaagacg...70...-gcgtgcatgtag	gtgaaaaa
D.Pse	acttgccg	gtaagtgtggtc...331...aatatcggaatcgcgccaag---	CAAAG	AAAAAGAAAAAATCT	CAACAATGCTA	-----	cgctctagcgaaaaagacg...70...-gcgtgcatgtag	gtgaaaaa
D.Wil	acttgccg	gtaagtcctctaa...347...--aatggaatcgcgccaag---	CAAAG	AGAAAAAATCT	CAACAATGCTA	-----	caacttcttctgacgtaa-----...116...-gttattgtgtg	gtgaaaaa
D.Yak	acttgccg	gtaagtgtggtc...332...--aagcggaaatcgcgccaag---	AAAAAGAAAAAATCT	CAACAATGCTG	-----	cgctcaagcaaaagtaaag...76...-tcctgtgtgtag	gtgaaaaa	
		***** **					* * * * *	

id=122223 gene=FBgn0004652 name=fru segment=chr3R.14257757.14258285\_-1 type=IN VIEW

Figure 162: CS=9.6



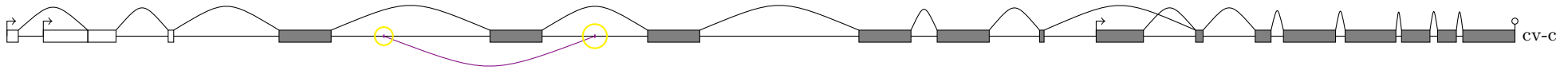
D.Mel	aggaaatg	gtaagtttcttc...2960...--tgact--ctcgtttgcagccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1175...	ttcacttacag-	agcaacag
D.Sim	aggaaatg	gtaagtttcttc...2957...--tgact--ctcgtttgcagccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1147...	ttcacttacag-	agcaacag
D.Sec	aggaaatg	gtaagtttcttc...2925...--tgact--ctcgtttgcagccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1116...	ttcacttacag-	agcaacag
D.Ere	aggaaatg	gtaagtttcttc...2846...--tgact--ctcgtttgcagccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1106...	ttcacttacag-	agcaacag
D.Ana	aggaaatg	gtgagtttcttc...2296...actgact--ctcgttgcacggc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	962...	tcgccttttcag-	agcaactg
D.Gri	aggaaatg	gtgagtttcttc...2582...--gactgactcgtttgcg-tcgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1480...	ttacccttttcag-	agcaacaa
D.Moj	aggaaatg	gtaagtttcttc...2691...--gactgactcgtttgcg-ccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	2044...	tatttttttcag-	agccacct
D.Vir	aggaaatg	gtaagtttcttc...2520...--gactgactcgtttgcg-ccgc	TGATTTAC	GAGCT	-----	cgccacgggcccgttgtgtaa...	1694...	ctaccttttcag-	agcaacaa
D.Yak	aggaaatg	gtaagtttcttc...3058...--taccgttagcgttgcacaa	TGAAATGCAGAAAT	aaAATACAAAaATGCAG	AAGAA	gaaagtgacgagcagtg...	1446...	agcagcagcagc	agcaacag
	**** *	** *****	**	****	*** * * * *	* * * * *		***	*** **

id=30550 gene=FBgn0086901 name=cv-c segment=chr3R.10253484.10257695\_-1 type=IN

D.Mel	agaagcac	gtgagtacacag...4189...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	agttgacataacgcacttat...	723...	tgctcttcag	gccacat	
D.Sim	agaagcac	gtgagtacacag...4182...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	agttgacataacgcacttat...	730...	tgctcttcag	gccacat	
D.Sec	agaagcac	gtgagtacacag...4177...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	agttgacataacgcacttat...	735...	tgctcttcag	gccacat	
D.Ere	agaagcac	gtgagtacacag...4232...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	agttgacataacgcacttat...	680...	tgctcttcag	gccacat	
D.Ana	agaagcac	gtgagtactcat...4149...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	aattgacataacgcacttat...	737...	tgctcttcag	gccacat	
D.Gri	agaagcac	gtgagtactcat...4221...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	aattgacataacgcacttat...	691...	tgctcttcag	gccacat	
D.Moj	agaagcac	gtgagtactcat...4195...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	aattgacataacgcacttat...	717...	tgctcttcag	gccacat	
D.Vir	agaagcac	gtgagtactcat...4316...attgtcaaacgcttgccaaa	GGCTTGTAATCG	-----	aattgacataacgcacttat...	596...	tgctcttcag	gccacat	
D.Yak	agaagcac	gtgagtacacag...2606...gacctagaggaacacaaa	TTTTTATGTGTca	TTTTTGTTcATTTTat	TGCAttTTTCA	tttaactaacgaagaaaca--	2278...	tgctcttcag	gccacat
	*****	** ***	* *	* **	** * **	* * * * *		* ** **	** *****

id=30554 gene=FBgn0086901 name=cv-c segment=chr3R.10236210.10242155\_-1 type=IN VIEW

Figure 163: CS=8.64



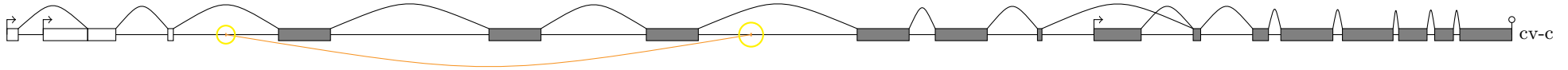
D. Mel	aggaaatg	gtaagtttcttc...2164...	cgcccatc-gcg-gtgaatgga-----	<b>CGGTGGcCATTTAGCG</b>	-----	gacaca-cccggcaaacaatt...1968...	tttcaacttacag-	agcaacag	
D. Sim	aggaaatg	gtaagtttcttc...2138...	gcccatcggtg-gtgaatgga-----	<b>CGGTGGcCATTTAGCG</b>	-----	gacaca-cccggcaaacaatt...1963...	tttcaacttacag-	agcaacag	
D. Sec	aggaaatg	gtaagtttcttc...2101...	gcccatcggtg-gtgaatgga-----	<b>CGGTGGcCATTTAGCG</b>	-----	gacaca-cccggcaaacaatt...1937...	tttcaacttacag-	agcaacag	
D. Ere	aggaaatg	gtaagtttcttc...2150...	cacgccatc--g-gtgaatgga-----	<b>CGGTGGcCATTTAGCG</b>	-----	gacaca-cccggcaaacaatt...1799...	tttcaacttacag-	agcaacag	
D. Ana	aggaaatg	gtgagtttcttc...1599...	cccatcggcgcgacgcacgga-----	<b>CAGTGGcCATTTAGCG</b>	-----	gacaca-cccagcaaacaatt...1656...	tcgccttttcag-	agcaactg	
D. Gri	aggaaatg	gtgagtttcttc...1901...	cacgaacaa--tagtctgacgg-----	<b>ACAGTGGcCATTTAGCG</b>	-----	gacaca-cccagtaaacaatt...2157...	ttacccttttcag-	agcaacaa	
D. Moj	aggaaatg	gtaagtttcttc...2871...	-----	<b>GCCAAGtcGCCA</b>	<b>cggGTGG</b>	<b>cggcgacatttta--</b>	<b>atcaaga...</b>	<b>1859...tatttttttcag-</b>	<b>agccacct</b>
D. Per	aggaaatg	gtaagtttcttc...2311...	gagtgggacgtgggacggac	<b>AGTGGcCATTTAGCaGCCG</b>	-----	acacaccgccgcaaacaatt...2380...	ttttgttttcag-	agtcgcca	
D. Pse	aggaaatg	gtaagtttcttc...2334...	acgtgggacgggggacggac	<b>AGTGGcCATTTAGCaGCCG</b>	-----	acacaccgccgcaaacaatt...2339...	ttttgttttcag-	agtcgcca	
D. Vir	aggaaatg	gtaagtttcttc...1912...	caaacattttattttaagt-----	<b>CAATAAGCAAATAAGT</b>	<b>acAAAT</b>	-----	atatttcattttctcgcgtt...2293...	ctaccttttcag-	agcaacaa
D. Yak	aggaaatg	gtaagtttcttc...2405...	tgatc--a-gtgaatggactgga-	<b>CGGTGGcCATTTAGCG</b>	-----	gacaca-cccggcaaacaatt...2120...	agcagcagcagc	agcaacag	
		***** **		** * *		* *	***	** *	

id=30550 gene=FBgn0086901 name=cv-c segment=chr3R.10253484\_10257695\_-1 type=IN

D. Mel	gtgtcaag	gtgagtcctct...4129...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	779...ttctaatttcag	cgggaaat
D. Sim	gtgtcaag	gtgagtcctct...4108...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	800...ttctaatttcag	cgggaaat
D. Sec	gtgtcaag	gtgagtcctct...4114...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	794...ttctaatttcag	cgggaaat
D. Ere	gtgtcaag	gtgagtcctcc...4183...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	725...ttctaatttcag	cgggaaat
D. Ana	gtgtcaag	gtgagtccttc...4232...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	676...gtcacttttcag	agggaaat
D. Gri	gtgtcaag	gtgagtccttc...4217...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	690...ttctaatttcag	ctggaaat
D. Moj	gctgtaag	gtaagtgtctgg...3302...	cgatggtggcaagataaga-----	<b>CCACATTGCCTTGCC</b>	cggtgtg-	gcaaagcctccg...	1608...ttctaatttcag	ctggaaat
D. Per	gtgtcaag	gtgagtccttc...4112...	caattgtg-agtaatgagca-----	<b>CTGCacGTTAttAATGTCACT</b>	cggcctg-	gcctgggtatag...	792...ttctaatttcag	cgggaaat
D. Pse	gtgtcaag	gtgagtccttc...4101...	caattgtg-agtaatgagca-----	<b>CTGCacGTTAttAATGTCACT</b>	cggcctg-	gcctgggtatag...	803...ttctaatttcag	cgggaaat
D. Vir	gtgtaaac	gtaagtgtctgc...4516...	tctg-gtaacaattgtcttc	<b>ATTTCaATTATTTGGatTTGTTG</b>	ttgttgc	ctgctgcacgtctc...	385...ttctaatttcag	ctggaaat
D. Yak	gtgtcaag	gtgagtcctct...4085...	ggtg-agtaatgagcactgca-----	<b>CGTTAttAATGTCACTG</b>	gggatg	gcg--ggaagaagggtc...	823...ttctaatttcag	cgggaaat
		* ** **		** *		*	** ** **	*****

id=30552 gene=FBgn0086901 name=cv-c segment=chr3R.10242756\_10252758\_-1 type=IN VIEW

Figure 164: CS=10.56



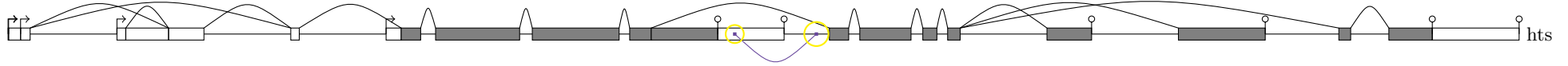
D. Mel	aaaaaaag	gtatgtaacaaa...2557...	-atttatgcgtaagtc-tggac---	TTAGTAGCTTTT	-----	caatattaatttcatactcc----	...2356...	tgaatcttgag	aatcacc		
D. Sim	aaaaaaag	gtatgtaacaaa...4293...	-----c	GAATGCAAT	AAAATG	-----	cagtttgcggctcgagggt----	...617...	tgaatcttgag	aatcacc	
D. Sec	aaaaaaag	gtatgtaacaaa...4274...	-----c	GAATGCAAT	AAAATG	-----	cagtttgcggctcgagggt----	...636...	tgaatcttgag	aatcacc	
D. Ere	aaaaaaag	gtatgtaacaaa...4260...	-----t	GAATGCAAT	AAAATG	-----	cagtttgcggctcgagggt----	...650...	tgtatcttgag	aatcacc	
D. Gri	caaaaaag	gtatgtatacaa...2754...	aatttatgcgtaagtc-tgga---	TTAGTAGCTTTT	-----	caatattaattttgtgctct----	...2158...	ttctggttgag	aatcacac		
D. Per	caaaaaag	gtatgtagacga...2706...	-atttatgcgtaagtc-tggat---	TTAGTAGCTTTT	-----	caatattaatttcgtactct----	...2207...	gtttgttgag	aataacac		
D. Vir	caaaaaag	gtaggtaaccgt...2893...	-atttatgcgtaagtc-tggat---	TTAGTAGCTTTTCAAT	TTAA	tttctgctccttatgacaa----	...2011...	tctgttttgag	aatcacac		
D. Wil	caataaag	gtatgtaaccga...2534...	-atttatgcgtaagtc-tggat---	TTAGTAGCTTTTCAAT	-----	attaatttcgtactcttta...	...2375...	ttattgttgag	aataacac		
D. Yak	aaaaaaag	gtatgtaacaaa...4271...	-----c	GAATGCAAT	AAAATG	-----	cagtttgcggctcgagggt----	...639...	actatcttgag	aatcacc	
	*	***	*** **		*	** *		*	*	*****	*** ** *

id=30548 gene=FBgn0086901 name=cv-c segment=chr3R.10258928.10277675.-1 type=I5

D. Mel	agaagcac	gtgagtacacag...2986...	-----	ttat	ttttggtg	--ccttgat	AAAA	tcGCTA	aaTTAA	tcgagtgtgtg--	cagcaaaa...	1923...	tgccctctccag	gccaccat
D. Sim	agaagcac	gtgagtacacag...2691...	tttatgtgt	---	cattttgtgtt	-----	CATTT	tATTGC	atATTT	-----	cattaactaacgaagaaa...	2217...	tgccctctccag	gccaccat
D. Sec	agaagcac	gtgagtacacag...2675...	tttatgtgt	---	cattttgtgtt	-----	CATTT	tATTGC	atATTT	-----	cattaactaacgaagaaa...	2233...	tgccctctccag	gccaccat
D. Ere	agaagcac	gtgagtacacag...2815...	tttatgtgt	---	cattttgtgtt	-----	CATTT	tATTGC	--ATTT	ttcattaactaacgaagaa--	...2095...	tgccctctccag	gccaccat	
D. Gri	agaagcat	gtaagttaaatg...3025...	-----	aatt	ttgttcag	tttttgat	AAAA	tcGCTA	aaTTAA	agagcaaccggctggtgac--	...1883...	tgcggttgag	gcaaccat	
D. Per	agaagcat	gtaagtcacatca...3232...	-----	aga	attttgttg	--ccttgat	AAAA	tcGCTA	aaTTAA	tagagttagcgtcggtcctt--	...1677...	gtcctccaccag	gccaccat	
D. Vir	agaagcat	gtaagttaacg...3090...	cgcataaatgagaat	ttt	gt--	TTAGATTG	atAAAA	tcGCTA	aaTTAA	tagaacgaccgactgacaga--	...1809...	tctctcttgag	gcaaccat	
D. Wil	agaagcat	gtaagt-aatcat...3142...	attgagagaat	ttt	gtttg	--c	ATTG	atAAAA	tcGCTA	aaTTAA	tagaatgaacgttagatata--	...1761...	gtttgcttgag	gcaaccat
D. Yak	agaagcac	gtgagtacacag...2628...	tttatgtgt	---	cattttgtgtt	-----	CATTT	tATTGC	--ATTT	ttcattaactaacgaagaa--	...2282...	tgccctctccag	gccaccat	
	*****	** *** *		*****		**	** ** *	** *	*			***	** *****	

id=30554 gene=FBgn0086901 name=cv-c segment=chr3R.10236210.10242155.-1 type=IN VIEW

Figure 165: CS=8.64



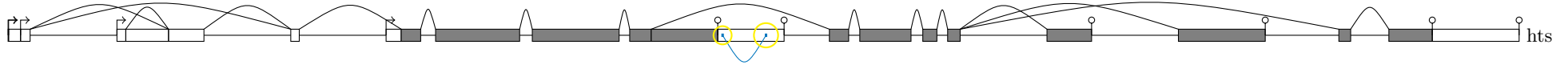
D. Mel	-caagaat-aaaaatttgc...	43...caagacaatagcgctaaaa	AATGcAAAGAAAGAGAAAGAAATTTG	-----ctatgaataactaatcac	----tat...249...--	ttcgaaaaacac	ttgcattg-----
D. Sim	-caagaata-aaaaatttgc...	44...caagaccatagcgctaaaa	AATGcAAAGAAAGAGAAAGAAATTTG	-----ctatgaataactaatcac	----tat...228...acatttc---	aacac	ttgcactg-----
D. Sec	-caagaata-aaaaatttgc...	44...caagacaatagcgctaaaa	AATGcAAAGAAAGAGAAAGAAATTTG	gctatgaatacttatcac	----ta...234...--	ttcgaaaaacac	ttgcactg-----
D. Ere	-caaaaaat-aaaaatttgc...	43...ccagacaatagcgctaaaa	AATGcAAAGAAAGAGAAAGAAATTTG	-----ctatgaataactaatcac	----tat...261...--	tttgaaaagaac	gtgcactg-----
D. Ana	-tgaaaaat-aaaaacgaaaa...	45...taggaaaaataaataatgc	AAAGAAAGAGAAAGAAATTTG	cca---ttttaactc-gaccacc	...245...--	tcaagaaatagc	ttgcaaat
D. Gri	-tatgaac-caaatcgcttag...	50...aatatataaaaacaaatgc	AAAGAAAGAGAAAGAcATTGT	acca--aatattaatgc	----tagc...266...--	ttc-----aat	taacattgcctgc
D. Moj	-tacaaac-taatcgcatag...	62...aaaagtaatgaaacaatgc	AAAGAAAGAGAAAGAcATTGT	aaca--actattaatgc	----taac...289...--	taaccaatttgc	ttgcattt
D. Per	accgaaat-aactccttgc...	83...aatgctctgtaaaacaatgc	AAAGAAAGAGAAAGAAATTTG	taTTAAgtat	----ttaatcattcaaac	...273...--	gctcacaatgc
D. Pse	accgaaat-aactccttgc...	83...aatgctctgtaaaacaatgc	AAAGAAAGAGAAAGAAATTTG	taTTAAgtat	----ttaatcattcaaac	...304...--	ttcttataat
D. Vir	-tacaaac-taatctcatag...	46...taagaaaaaaaacaatgc	AAAGAAAGAGAAAGAcATTGT	acta--actattaatgc	----tagc...322...--	tccgacgggat	ttatcata
D. Yak	-acaaaaat-aaaaatttgc...	43...caagacaatagcgctaaaa	AATGcAAAGAAAGAGAAAGAAATTTG	-----ctatgaataactaatca	----tac...256...--	ttatgaaatcag	ttgcactg-----
	***	* * *	** * ***** * **	* ** *			

id=108870 gene=FBgn0004873 name=hts segment=chr2R.15296360.15296741-1 type=AN

D. Mel	aaaaaac	ttgca-----ttggaat	...136...--tattcactccacattaaat	CAAATTTCTTCTTTCTTTTc	TATT	ttgcattgat-ccca	
D. Sim	ttcaaac	ttgca-----ctggagt	...137...--tattcactccacattaaat	CAAATTTCTTCTTTCTTTTc	TATT	ttgcattgatccca	
D. Sec	aaaaaac	ttgca-----ctggaat	...127...--ttcactccacattaaatca	AATTTCTTCTTTCTTTTc	TATT	ttgcattgatccca	
D. Ere	aaaagaac	gtgca-----ctggaat	...134...--tattcaatccacattaaat	CAAATTTCTTCTTTCTTTTc	TATT	ttgcattatccca	
D. Ana	gaaatagc	ttgca-----aatgaa	...56...--aaaaaccacattaaaa	CAAATTTCTTCTTTCTTTTc		ttctataaaatcaa	
D. Gri	-----at	taacatttgcctgcaatt	...152...aatcattgaaatctaaat-aaa	AACAAATtCTTTCTTTCTTTT		ctatcaattgctt	
D. Moj	caatttgc	ttgca-----tttgagt	...122...aatc-tgaaatttaaatctaa	AACAAATtCTTTCTTTCTTTT		ttcaattgctt	
D. Per	acaaatgc	ttgaa-----gaattgt	...122...-taagcatatcggccctaaa	TAAACAAATTTCTTTCTTTCTTT		tctacttgcattg-tcccac	
D. Pse	tatataat	taaca-----ctgaagc	...96...-taagcatatcggccctaaa	TAAACAAATTTCTTTCTTTCTTT		tctacttgcattg-tcccac	
D. Vir	acgggat	ttatc-----atattgt	...122...aatcattgaaatctaaat-taa	AACAAATtCTTTCTTTCTTT		ctcaattgctt	
D. Yak	gaaatcag	ttgca-----ctggaat	...121...--tattcaatccacattaaat	CAAATTTCTTCTTTCTTTTc	TATT	ttgcattatccca	
			** ***** **				
D. Mel	ccccaccctcaacacacaacataatt-tacaatataa	-----aacaaaata	-----tgacag	tgggtagc			
D. Sim	ccccaccctcaacacacaacataatt-tacaatataa	-----aacaaaata	-----tgacag	tgggtagc			
D. Sec	ccccaccctcaacacacaacataatt-tacaatataa	-----aacaaaata	-----tgacag	tgggtagc			
D. Ere	ccc-accctc--tacacaacacataatt-tacaatataa	-----aacaaaata	-----tcgacag	tgggtagc			
D. Ana	-----aaacaaa	-----tataatttaa	-----accaaa	-----ag	tgggtagc		
D. Gri	gcccccttaa	-----caaatgaaa	-----aacaaaatga	-----acaaaat	-----gaaaaatccaaacatataa	-----ag	tgggtagc
D. Moj	aactcgttgaatgacccccatataaaaacaaaacaaa	-----accgaaaaacccacgtaaatcccttaaaa	-----taaatag	tgggtagc			
D. Per	ccattgccccacaccgtaaaaatgcttgctgctcaaatgaaacactataaacct	-----tcaaaag	tgggtagc				
D. Pse	ccattgccccacaccgtaaaaatgcttgctgctcaaatgaaacactataaacct	-----tcaaaag	tgggtagc				
D. Vir	atctcgttgaatgacctcaaa	-----aaatgccgtacgtaaatcccttgaaaaaatcaaatgcacgtaaatag	tgggtagc				
D. Yak	ccccaaactt--tacacaacacataatt-tacaatataa	-----aaaaaata	-----tcacag	tgggtagc			
		*		** ***** **			

id=108871 gene=FBgn0004873 name=hts segment=chr2R.15296099.15296359-1 type=IN VIEW

Figure 166: CS=16.72



D. Mel	-caagaaat-	aaa	-----	aattt	-----	-----
D. Sim	-caagaaata	aaa	-----	aattt	-----	-----
D. Sec	-caagaaata	aaa	-----	aattt	-----	-----
D. Ere	-caaaaaata	ca	-----	aattt	-----	-----
D. Ana	-tgaaaaata	aaaacgaaaaactctag	tttttagcctctagca	-----	-----	-----
D. Gri	tatgaaacca	-----	-----	aatcgct	-----	-----
D. Moj	tacaaaacta	-----	-----	aatc	-----	-----
D. Per	accgaaat-	-----	-----	aactcttgc	atagatggatgattttgtgc	ctcctttaggggcttcccctgctgtctgtctctctgcttttctccactataacgaa
D. Pse	accgaaat-	-----	-----	aactcttgc	-----	-----
D. Vir	tacaaaacta	-----	-----	aatct	-----	-----
D. Yak	-acaaaaat-	aaa	-----	aattt	-----	-----
	**			*		

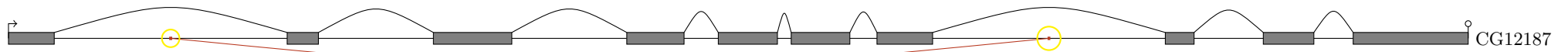
D. Mel	-----	GCATAGATGATTTTGTGCCT	-----	catttagggatttcgctgcc	...322...	---ttcgaaaaacac	ttgcattg	-----
D. Sim	-----	GCATAGATGATTTTGTGCCT	-----	catttagggatttcgctgcc	...301...	acatttc---	aacac	ttgcactg
D. Sec	-----	GCATAGATGATTTTGTGCCT	-----	catttagggatttcgctgcc	...306...	---ttcgaaaaacac	ttgcactg	-----
D. Ere	-----	GCATAGATGATTTTGTGCCT	-----	catttagggatttcgctgcc	...334...	---ttgaaaagAAC	gtgcactg	-----
D. Ana	-----	TAGATGATTTTGTGCCT	-----	atcttttaggaa	---aaaataaa...	292...	---tcaagaaatagc	ttgcaaat
D. Gri	-----	TAGATGATTTTGTGCCTTTTAGGG	-----	aatttccaattatgatttc	...337...	---ttc---	aat	taacatttgctgc
D. Moj	-----	GCATAGATGATTTTGTGCCTCTT	taGGGAAAT	tccaattattattttgct	...368...	---taaccaatttgc	ttgcattt	-----
D. Per	tcgaacgaatgct	CTGTAAAACaAT	-----	GCAAAGAAAGAGaaagaaattt	gttattaag	...292...	---gctcacaatgc	ttgaagaa
D. Pse	-----	TAGAtgGATGATTTTGTGCCT	-----	ccttaggggtctcccctg	...415...	---ttcttataat	taacactg	-----
D. Vir	-----	CATAGATGATTTTGTGCCTTT	ttAGGAAA	aaataccattattttgct	...387...	---tccgacgggat	ttatcata	-----
D. Yak	-----	GCATAGATGATTTTGTGCCT	-----	catttagggatttcgctgcc	...329...	---ttatgaatcag	ttgcactg	-----
		* **		**				

id=108870 gene=FBgn0004873 name=hts segment=chr2R.15296360.15296741.-1 type=AN

D. Mel	-caagaaat-	aaaaatttgc	at...231...	---ttggttttcattg	---ttattca	-----	AGGCACAAAATCATTATGC	ttgtatttttagttaatta	...67...	---ttcgaaaaacac	ttgcattg	-----	
D. Sim	-caagaaata	aaaaatttgc	at...215...	---tttattctctttg	---ttattca	-----	AGGCACAAAATCATTATGC	ttgtatttttagttaatta	...63...	acatttc---	aacac	ttgcactg	
D. Sec	-caagaaata	aaaaatttgc	at...216...	---tttattctctttg	---ttattca	-----	AGGCACAAAATCATTATGC	ttgtatttttagttaatta	...67...	---ttcgaaaaacac	ttgcactg	-----	
D. Ere	-caaaaaat-	acaatttgc	at...228...	---attgttttcattg	---ttattca	-----	AGGCACAAAATCATTATGC	ttgtatttttagttaatta	...82...	---ttgaaaagAAC	gtgcactg	-----	
D. Ana	-tgaaaaat-	aaaacgaaaa	at...231...	---ttattcattgttttattca	-----	-----	GGCACAAAATCATTATGC	ctgtttattttta	---agttt	...64...	---tcaagaaatagc	ttgcaaat	
D. Gri	-tatgaaac-	caaatcgcttag	at...277...	gtcccgaatatttatta	---ata	-----	TTTTGGT	AAGGCACAAAATCATTATGC	atgctgttatataattcatt	...36...	---ttc---	aat	taacatttgctgc
D. Moj	-tacaaaac-	taaatcgcatag	at...296...	---tcctctttttat	---ttacttac	-----	ATTTCCTTAAGGCACAAAATCATTATGC	ttgtattgtatttatttc	...50...	---taaccaatttgc	ttgcattt	-----	
D. Per	accgaaat-	-aactcttgc	at...209...	---tcogttg	---acatttaacaaa	TTTTTCCTT	---GCA	---TGTTTTATGG	taagatttctttcaattaa	...153...	---gctcacaatgc	ttgaagaa	-----
D. Pse	accgaaat-	-aactcttgc	at...329...	---tttttctcattt	---gttctca	-----	AGGCACAAAATCATTATGC	actgttatttttatttatt	...67...	---ttcttataat	taacactg	-----	
D. Vir	-tacaaaac-	taaatctcatag	at...300...	---ccaattgtttttgtt	---taca	-----	TTTTCTTAAGGCACAAAATCATTATGC	ctgtatttttatttatt	...65...	---tccgacgggat	ttatcata	-----	
D. Yak	-acaaaaat-	aaaaatttgc	at...230...	---attgttttcattg	---ttattca	-----	AGGCACAAAATCATTATGC	ttgtatttttagttaatta	...75...	---ttatgaatcag	ttgcactg	-----	
	***	*	*	*	*		***	*	***	*	*	**	

id=108870 gene=FBgn0004873 name=hts segment=chr2R.15296360.15296741.-1 type=AN VIEW

Figure 167: CS=10.56



```

D.Mel  tgaaaaag gtaagtgcact...3481...aattacttgccacactttacGATTCtGGCAATTGTtGCGCTtcAGACgcctccagtggaac-----acagaa...1225...tgttttccgcag atggtggc
D.Sim  tgaaaaag gtaagtgcact...3438...aattacttgccacactttacGATTCtGGCAATTGTtGCGCTtcAGACgcctccagcggaac-----acagaa...1206...tgttttccgcag atggtggc
D.Sec  tgaaaaag gtaagtgcact...3419...aattacttgccacactttacGATTCtGGCAATTGTtGCGCTtcAGATgcctccagcggaac-----acaaaa...1197...tgttttccgcag atggtggc
D.Ere  tgaaaaag gtaagtgcact...2930...aattacttgccacactttacGATTCtGGCAATTGTtGCGCTtcAGACgcctccagcaaagc-----acagaa...1965...cctttccgcag atggtggc
D.Ana  tgaagaag gtaagtggacag...3197...aattacttgccacactttacGATTCtGGCAATTGTtGCGCT-----tccagtggagccgcctacag--...580...tttccgcag atggtggc
D.Moj  tgaagaag gtaagtgcaagc...3014...aattgcttgccgcattttacGATTCtGGCAATTGTtGCGCctgtgcccagccggtccag-----...456...tctctgcacag atggtggc
D.Per  tgaagaag gtaagtggcaag...4419...aattactttccacactttacGATTCtGGCAATTGTtGCGCC---tcaccgccag--cagc---aggagc...482...tcggttttcag atggtggc
D.Pse  tgaagaag gtaagtggcaag...4101...aattactttccgcactttacGATTCtGGCAATTGTtGCGCC---tcaccgccag--cagc---aggagc...483...tcggttttcag atggtggc
D.Vir  tgaaaaag gtaagcgagacc...2921...aattgcttgccgcattttacGATTCtGGCAATTGTtGCGCctGAGCgcagccggtccagc---aggta-...454...catcttaccag atggtggc
D.Yak  tgaaaaag gtaagtgcact...3083...aattacttgccacactttacGATTCtGGCAATTGTtGCGCTtcAGACgcctccagcaaagc-----acagaa...1812...gcttttccgcag atggtggc
**** ** ***** *

```

id=133614 gene=FBgn0035367 name=CG12187 segment=chr3L.2684689\_2689488\_-1 type=IN

```

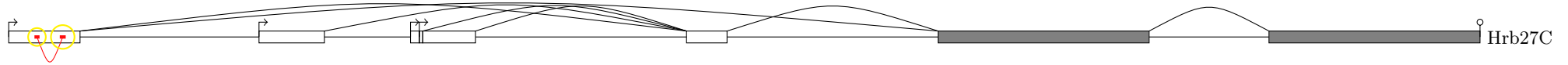
D.Mel  gcaccgca gtgagtaccgag---...4105...acggaaatccgcttttccaaGTTTcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...631...ctactcccgcag cacgtggc
D.Sim  gcaccgca gtgagtaccgag---...3721...acggaaatccgcttttccaaGTTTcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...654...ctactcccgcag cacgtggc
D.Sec  gcaccgca gtgagtaccgag---...4110...acggaaatccgcttttccaaGTTTcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...652...ctactcccgcag cacgtggc
D.Ere  gcaccgca gtgagtacagag---...3983...acggaaatccgcttttccaaGTTTcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...640...ctactcccgcag cacgtggc
D.Ana  gcaccgca gtgagt---gagctt...4309...-----atccgctttcgcaagttttcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...595...cccgcaatgcag cacgtggc
D.Moj  acatcgca gtaagta--aagct...4140...-----atccgctttcgtaagttttc-GTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...765...ctatcttcacag ctgaggc
D.Per  gcaccgca gtaagt---gagctt...4098...-----atccgcttttcgcaagttttcGGTGCACAAATTGTTGAAATT agttttctggtgcccatacc...806...ctattcttcag cacgtggc
D.Pse  gcaccgca gtaagt---gagctt...4098...-----atccgcttttcgcaagttttcGGTGCACAAATTGTTGAAATT agttttctggtgcccatacc...806...ctattcttcag cacgtggc
D.Vir  acatcgca gtaagta--aagcc...4180...gcggaaatccgcttttcgtaaGTTTc-GTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...719...tttttttcag cacgaggc
D.Yak  gcaccgca gtgagtacagag---...4230...acggaaatccgcttttccaaGTTTcGGTGCACAAATTGTTGAAATT agttttctgcgccaaatgat...668...ctactcccgcag cacgtggc
** **** ** **

```

id=133626 gene=FBgn0035367 name=CG12187 segment=chr3L.2673711\_2678537\_-1 type=IN VIEW

Figure 168: CS=13





```

D.Mel  cggtcaca c--agcattaaacgtggcggc----gatttatcatataagttaggttataaatatcgtaTGCATCAAAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagaac
D.Sim  cggtcaca c--agcattaaacgtggcggc----gatttatcatataagttaggttataaatatcgtaTGCATCAAAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagaac
D.Sec  cggtcaca t--agcattaaacgtggcggc----gatttatcatataagttaggttataaatatcgtaTGCATCAAAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagaac
D.Ere  cggtcaca c--agcattaaacgtggcggc----gatttatcatataagttaggttataaatatcgtaTGCATCAAAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagaac
D.Gri  --atggct accaccattaaacgtggcggcggcaggttttctatcataagttaggttat-atatcgtaTGCATC-AAATCATacAATT-atttataagctagtttttta-..65...ttagcacaacg gtaagctc
D.Moj  --atggct accaccattaaacgtggcggcggcaggttttctatcataagttaggttat-atatcgtaTGCATC-AAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagcat
D.Vir  --atggct accaccattaaacgtggcggcggcaggttttctatcataagttaggttat-atatcgtaTGCATC-AAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagcat
D.Wil  cgattatt a--aacattaaacgtggcttt-----ctttctatcataagttaggttat-atatcgtaTGCATCAAAATCATacAATTtttataagctagtttttta-..65...ctggcacaacg gtaagcaa
D.Yak  cggtcaca c--agcattaaacgtggcggc----gatttatcatataagttaggttataaatatcgtaTGCATCAAAATCATacAATT-atttataagctagtttttta-..65...ttggcacaacg gtaagaac
*      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *

```

id=66214 gene=FBgn0004838 name=Hrb27C segment=chr2L.6920693.6920861.1 type=E5

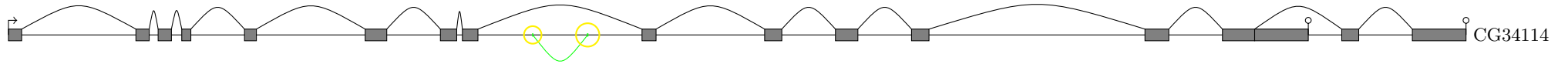
```

D.Mel  -cggtcaca cagcattaaacg...75...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagaac
D.Sim  -cggtcaca cagcattaaacg...75...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagaac
D.Sec  -cggtcaca tagcattaaacg...75...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagaac
D.Ere  -cggtcaca cagcattaaacg...75...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagaac
D.Gri  atggctac- caccattaaacg...78...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttagcacaacg gtaagctc
D.Moj  atggctac- caccattaaacg...78...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagcat
D.Vir  atggctac- caccattaaacg...78...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagcat
D.Wil  -cgattatt aaacattaaacg...73...ttttaaggaaaaaacactTAAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccatagacgaacacttggcacaacg gtaagcaa
D.Yak  -cggtcaca cagcattaaacg...75...-ttttaagg-aaaaaacacttaAATTtaGTGAATTGcaGTGCGaaatctttaaaaaaccacagacgaacacttggcacaacg gtaagaac
*      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *      *

```

id=66214 gene=FBgn0004838 name=Hrb27C segment=chr2L.6920693.6920861.1 type=E5 VIEW

Figure 169:



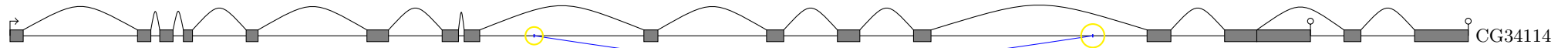
D. Mel	tgtgttct	gtaagtatatct...2074..aacataatgtggcactg---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagttacgac-----	...1228...ctttctttgcag	tcattccc
D. Sim	tgtgttct	gtaagtatatct...2024..aacataatgtggcactg---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagttacgac-----	...1243...ctttctttgcag	tcattccc
D. Sec	tgtgttct	gtaagtatatct...2068..aacataatgtggcactg---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagatacgac-----	...1218...ctttctttgcag	tcattccc
D. Gri	tgtattct	gtaagtcaaata...1180...-tttcaattt--ccatgc---tcattTACATGTTTAta-GCG	tgcttaaaatattttgtgct-----	...2005...ctttctttgcag	ttataacc
D. Per	tgtgttct	gtaagtataac...2287...ctggcagtgtggcaatg---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagtttgggt-----	...1171...ctcttttcgag	tcataacc
D. Pse	tgtgttct	gtaagtataac...2314...gtggcagtgtggcaatg---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagtttgggt-----	...1163...ctcttttcgag	tcataacc
D. Vir	tgtgttct	gtaagtagaaga...2929...tacaaagtgtggcagcg---gcaTTCAAAAAGTCGTTACGTT	---aagctgcagttacgggtttc-----	...909...cttatattgcag	ttataacc
D. Wil	tgtatttt	gtaagtacaacc...2433...---taatgtggcaatgcactgcaCTCAAAAAGTCGTTA	---ctg--gttttggtttatacag...874...cttacattgcag	tcataacc	
D. Yak	tgtgttct	gtaagtatacct...2051..aacataatgtggcacag---gcaCTCAAAAAGTCGTTA	---cgttaagctgcagttacgac-----	...1215...ctttctttgcag	tcattccc
	*** ** *	***** *	* * * * *	** * **	* ** **

id=121456 gene=FBgn0083950 name=CG34114 segment=chr3R.6849540.6852919.1 type=IN

D. Mel	tgtgttct	gtaagtatatct...2637...----tgccggcttaaagtcg-tcgc--TAATGaACTTgTTGAG	----cgggaaaaggatagacacaa...663...ctttctttgcag	tcattccc	
D. Sim	tgtgttct	gtaagtatatct...2586...----tgccggcttaaagtcg-tcgc--TAATGaACTTgTTGAG	----cgggaaaaggatagacacaa...679...ctttctttgcag	tcattccc	
D. Sec	tgtgttct	gtaagtatatct...2617...----tgcggcttaaagtcg-tcgc--TAATGaACTTgTTGAG	----cgggaaaaggatagacacaa...667...ctttctttgcag	tcattccc	
D. Gri	tgtattct	gtaagtcaaata...1686...----cctggtaagaagggaattcCGCTTGAAaaCATGT	---Gctaacagggtgagaaatgtg----	...1498...ctttctttgcag	ttataacc
D. Per	tgtgttct	gtaagtataac...2804...----ctgggcttaaagtcacccgc--TAATGaACTTgTTGAG	----cgtaaaagaagactcgagag...652...ctcttttcgag	tcataacc	
D. Pse	tgtgttct	gtaagtataac...2821...----ctgggcttaaagtcacccgc--TAATGaACTTgTTGAG	----cgtaaaagaagactcgagag...654...ctcttttcgag	tcataacc	
D. Vir	tgtgttct	gtaagtagaaga...3210...tacaaactgggcttaaagtc---AACGTtAATGaACTTgTTGAG	---cagcaggcaaaaaggctttt---	...625...cttatattgcag	ttataacc
D. Wil	tgtatttt	gtaagtacaacc...2677...----gttaggcttaaagtcacccgc--TAATGaACTTgTTGAG	---cacatgg--aaaaagtctttaa--	...628...cttacattgcag	tcataacc
D. Yak	tgtgttct	gtaagtatacct...2571...----tgccggcttaaagtcg-tcgc--TAATGaACTTgTTGAG	----cgggaaaaggatagacacaa...693...ctttctttgcag	tcattccc	
	*** ** *	***** *	** * *	* ** ** *	** * **

id=121456 gene=FBgn0083950 name=CG34114 segment=chr3R.6849540.6852919.1 type=IN VIEW

Figure 170: CS=8.64



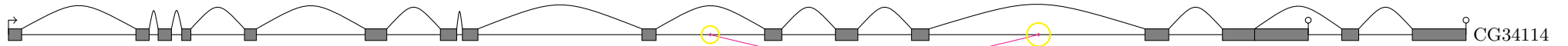
D.Mel	tgtgttct	gtaagtatact...2070...-ctgcaacat---aatgtggcactGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1231...ctttctttgcag	tcattccc
D.Sim	tgtgttct	gtaagtatact...2020...-ctgcaacat---aatgtggcactGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1246...ctttctttgcag	tcattccc
D.Sec	tgtgttct	gtaagtatact...2064...-ctgcaacat---aatgtggcactGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1221...ctttctttgcag	tcattccc
D.Ere	tgtgtttt	gtgagtatact...2025...gctgcaacat---aatgtggcacAGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1171...ctttctttgcag	tcattccc
D.Ana	tgttttct	gtaagtatact...1978...-ctgcaacat---aatgtggcactGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1164...tctactttgcag	tcattcca
D.Gri	tgtattct	gtaagtatact...2316...-tgctacaa---aatgtggcggcGCATT	AAAAgtCGTTac	GTTAAgctgcagttacgggttttgg...861...ctttctttgcag	ttataccc	
D.Moj	tgtcttct	gtgagtactcca...2596...-tgctacaa---actgtggcagcGCATT	AAAAgtCGTTac	GGTAAgctgcagttacgggttttgg...977...gctctgttgcag	ttataccc	
D.Per	tgtgttct	gtaagtatact...2284...-----gcaactggcagtggtgcaatGCACT	AAAAgtCGTTac	GTTAAgctgcagtttgggttttttc...1165...ctcttttcgcag	tcataccc	
D.Pse	tgtgttct	gtaagtatact...2311...-----gcaactggcagtggtgcaatGCACT	AAAAgtCGTTac	GTTAAgctgcagtttgggttttttc...1157...ctcttttcgcag	tcataccc	
D.Vir	tgtgttct	gtaagtatact...2926...-tactacaa---agtgtggcagcGCATT	AAAAgtCGTTac	GTTAAgctgcagttacgggttttgg...907...cttatattgcag	ttataccc	
D.Yak	tgtgttct	gtaagtatact...2046...gctgcaacat---aatgtggcacAGGCAct	CAAAAGTCG	ttacgttaagctgcagttac-----	...1218...ctttctttgcag	tcattccc
		*** ** *	** ***	*** ***** *	* ****	** ** *

id=121456 gene=FBgn0083950 name=CG34114 segment=chr3R.6849540\_6852919.1 type=IN

D.Mel	cattgaag	gtgagttatg...3185...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...667...ttattttcgcag	gattcgac
D.Sim	cattgaag	gtgagttatg...3210...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...668...ttattttcgcag	gattcgac
D.Sec	cattgaag	gtgagttatg...3084...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...665...ttattttcgcag	gattcgac
D.Ere	cattgaag	gtgagttatg...3331...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...655...ttattttcgcag	gattcgat
D.Ana	cattgaag	gtgagttatg...3075...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...779...cctcattcgcag	gctttgat
D.Gri	ccttgaag	gtgagtaacctc...2753...caatgctgcggcaaatttcaTTAGCTa	AACGTTTTaaAGTGC	-gcacaaaat-gctttggctat...933...ttcatttgcag	gatttgac
D.Moj	tctcgaag	gtgagttacacg...2741...cgatgctgcggcaaatttcaTTAGCTa	AACGTTTTaaAGTGC	-gcacaaaat-gctttcggtat...1278...tattttttcag	gctttgat
D.Per	catcgaag	gtgagttatg...2832...tgttgttgaggaaaatttcaTTAGCTa	AACGTTTTaaAGTGC	-gcacaaaatggccccaaca...2071...tttctctcgcag	gcttcgat
D.Pse	catcgaag	gtgagttatg...2617...tgttgttgaggaaaatttcaTTAGCTa	AACGTTTTaaAGTGC	-gcacaaaatggccccaaca...2286...tgtctctcgcag	gcttcgat
D.Vir	cctcgaag	gtaagtacaggg...2867...cgatgctgcggcaaatttcaTTAGCTa	AACGTTTTaaAGTGC	-gcacaaaat-gctttggat...962...ctttcattatag	gcttcgat
D.Yak	cattgaag	gtgagttatg...3380...-ttttcgcaagtgttttaagt-----	CGGCTTTTGTGTC	tacaatgaagtgccatttga---...696...ttattttcgcag	gattcgat
		* ****	** ***	* ** *	* ** *

id=121464 gene=FBgn0083950 name=CG34114 segment=chr3R.6865796\_6869724.1 type=IN VIEW

Figure 171: CS=10.56



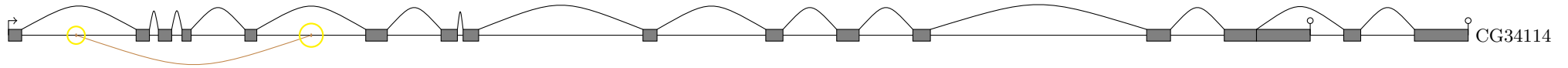
D. Mel	agcataat	gtaagt	gagcaa...	2738...	atcagataaattacggaac-----	TAATtGGGTATTT	--atagtcggaactaacatcaa---	...2174...	tgccaattgcag	catcaaat
D. Sim	agcataat	gtaagt	gagcaa...	2795...	atcagataaattacggaac-----	TAATtGGGTATTT	--atagtcggaactaacatcaa---	...2117...	tgccaattgcag	caccaa
D. Sec	agcataat	gtaagt	gagcaa...	2788...	atcagataaattacggaac-----	TAATtGGGTATTT	--atagtcggaactaacatcaa---	...2124...	tgccaattgcag	caccaa
D. Ere	agcataat	gtaagt	gagcaa...	2726...	atcagataaattacggaac-----	TAATtGGGTATTT	--atagtcggaactaacatcga---	...2186...	tgccaattgcag	caccaa
D. Ana	aacataat	gtaagt	gagcaa...	2359...	atcagataaataacgggcac-----	TAATtGGGTATTT	--atagtcggaacaaacatcaa---	...2068...	tgactattgcag	caccaa
D. Gri	agcataat	gtaagt	gagcaa...	2642...	actatagaatggtcaacac-----	TAATtGGGTATTT	----attgtagctgggtacacagc...	2270...	tgccacttgcag	caccaa
D. Moj	agcataat	gtaagt	gagcaa...	2556...	attaagtaaatggtcgacac-----	TAATtGGGTATTT	----attgtagcctgtagcagaagc...	2356...	tgtaattcgcag	aatcaaat
D. Per	agcataat	gtaagt	cccttt...	4098...	tgagacgaaagtgcgaattt	GTTTTGCTGCTAaATGG	-----cacaaggctctgggaaatg...	810...	tccatttgcag	catcaaat
D. Pse	agcataat	gtaagt	cccttt...	4111...	tgagcgaagtgcaattt	GTTTTGCTGCTAaATGG	-----cacaaggctctgggaaatg...	797...	tccatttgcag	catcaaat
D. Vir	agcataat	gtaagt	taacaaa...	2487...	a--aacaaaatggt-agcgcata-----	AAATgcGCCATTAG	caaggagaggctgtgaggca---	2424...	taccacttgcag	catcaaat
D. Yak	agcataat	gtaagt	gagcaa...	2707...	atcagataaattacggaac-----	TAATtGGGTATTT	--atagtcggaactaacatcaa---	2205...	cgtcatttgcag	caccaa
	* *****	*****		***		** **	*		* ****	* *****

id=121458 gene=FBgn0083950 name=CG34114 segment=chr3R.6853051.6858233.1 type=IN

D. Mel	cattgaag	gtgagttat	atg...	2699...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	...1152...	ttattttcgcag	gattcgac
D. Sim	cattgaag	gtgagttat	atg...	2741...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	...1136...	ttattttcgcag	gattcgac
D. Sec	cattgaag	gtgagttat	atg...	2609...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	...1139...	ttattttcgcag	gattcgac
D. Ere	cattgaag	gtgagttat	atg...	2848...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	...1138...	ttattttcgcag	gattcgat
D. Ana	cattgaag	gtgagttat	atg...	2590...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	...1263...	cctcattcgcag	gctttgat
D. Gri	ccttgaag	gtgagtaacctc...	2673...	tagcctggtctaagtaaataAAATtaACC	-CATTa	-caatgaag-tttttgttgtaa-----	...1021...	ttccatttgcag	gatttgac	
D. Moj	tctcgaag	gtgagtcacag...	2638...	tagctggctccaagtaaataAAATtaACC	-CATTa	-caatgaagttttttgttct-----	...1389...	tattttttcag	gctttgat	
D. Per	catcgaag	gtgagttattta...	2829...	tcctgttgttgaggaaaattTCATTAGCT	-AAAC	-----gttttaagtgcgcaaaaa...	2083...	tttctctcgcag	gcttcgat	
D. Pse	catcgaag	gtgagttattca...	2614...	tcctgttgttgaggaaaattTCATTAGCT	-AAAC	-----gttttaagtgcgcaaaaa...	2298...	tgtctctcgcag	gcttcgat	
D. Vir	cctcgaag	gtaagtacaggg...	3445...	ccagttctttgtgtgta--TAAaTGGCATT	aaatgaagcttttagattac-----	...393...	ctttcattatag	gcttcgat	gattcgat	
D. Yak	cattgaag	gtgagttat	atg...	2910...	ttgctgtagccaagtaaataAAATtaACC	-CATTa	-caatgaagtttttttttctc-----	1166...	ttattttcgcag	gattcgat
	* ****	** ***		*	*	***	*	* ****	* **	* ** *

id=121464 gene=FBgn0083950 name=CG34114 segment=chr3R.6865796.6869724.1 type=IN VIEW

Figure 172: CS=10.56



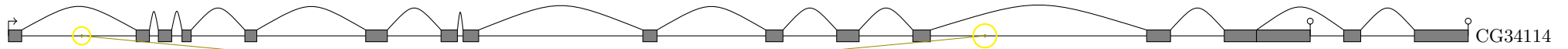
D. Mel	taagccag	gtgagtgatgaa...3211...-----tctatcgtattgctgcccgt	TGCTT	GTTGTTTT	gcTGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1675...tccttctttcag	atggtgaa
D. Sim	caagccag	gtgagtgatgaa...3201...ttggttttctatcgtattgc	TGGCGC	tGCTT	GTTGTTTT	gcTGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1678...tccttctttcag
D. Sec	caagccag	gtgagtgatgaa...3188...ttggttttctatcgtattgc	TGGCGC	tGCTT	GTTGTTTT	gcTGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1691...tccttctttcag
D. Ere	caagccag	gtgagtgatgaa...3278...-----atcgtactgctgccgctgc	TTTG	TGTTTT	gcTGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1611...ttctttttcag	atggcgaa
D. Ana	taagccag	gtgagtgcctc...3603...-----cgcctgctttgtttttgc	-----	-----	TGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1299...gtccattttcag	atggcgaa
D. Gri	taagccag	gtaagcacatac...3947...-----caatgttgttcttgttcctc	-----	GGCTGCT	TGGT	GGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...949...ttgcctttacag
D. Per	taaaccag	gtgagtttttc...2780...-----ttgctactgctattggcccc	-----	CGGTTT	-----	TGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...2116...ctctatttttag
D. Wil	caagcctg	gtaagtgaatcg...4406...-----cacacactttggctcagaga	-----	-----	GAAATGGCGGcCATT	-----	ttgtaatccgcatgctgctg...503...atctttatgcag	acggtgaa
D. Yak	caagccag	gtgagtgatgaa...3164...-----cctgctttgtttttgcgc	-----	-----	TGGCctGGCTaaCAACaAATTGA	agggaaatgattccatttca-----	...1738...tccttctttcag	atggcgaa
	** ** *	** ** *		*	**** *	** * * *		* ** * ** **

id=121442 gene=FBgn0083950 name=CG34114 segment=chr3R.6819328\_6837735.1 type=IN

D. Mel	ttacggag	gtaagttctcgc...4563...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGC	AAGTG	---cgccacgctgctatgagta----	...327...ctatttttccag	gctctccg
D. Sim	ttacggag	gtaagttctcgc...4545...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGC	AAGTGCGCCA	---cgctgcgtatgagtaatgtg...	...340...ctatttttccag	gctctccg
D. Sec	ttacggag	gtaagttctcgc...4545...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGC	AAGTGCGCCA	---cgctgcgtatgagtaatgtg...	...340...ctatttttccag	gctctccg
D. Ere	ttacggag	gtaagttctcgc...4580...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGc	CAAGTg	---cgccacgctgctatgag----	...312...ctatttttccag	gctctccg
D. Ana	ctacggag	gtaagtcacgga...4568...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGC	caagtg	---cgcac-----	...336...ttatttttttag	gatctcca
D. Gri	ctatggcg	gtgagtaatcg...4365...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGGC	caagtg	---ccacacgctgctat-----	...530...atattcccag	gctcggca
D. Per	ctatggag	gtaagcaggac...4505...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGG	caagtgctgcccacact	-----	...392...tctctcccctag	gttctcca
D. Wil	ctatggcg	gtaagtaaatg...3797...----aagtgcactgtaacggccac	AATG	tCTGCTA	gTTTTT	-a-----	ctgtattttccagtgtaat-----	...1111...catgcattgcag	gttcacc
D. Yak	ttacggag	gtaagtgcttgt...4547...acaaaagctaatttcagcgc	TTGATT	aaGTTG	AGTCGTTAAAGGCGG	caagtg	---cgccac-----	...357...ctatttttccag	gctctccg
	** ** *	** ** *	***	* * * *	* * *	*** ** *		** * ** **	** ** **

id=121450 gene=FBgn0083950 name=CG34114 segment=chr3R.6839151\_6845389.1 type=IN VIEW

Figure 173: CS=9.72



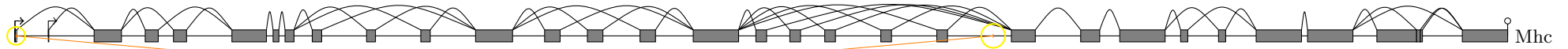
D. Mel	taagccag	gtgagtgatgaa...3283...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1626...	tccttc	ctttcag	atggtgaa
D. Sim	caagccag	gtgagtgatgaa...3280...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1629...	tccttc	ctttcag	atggcgaa
D. Sec	caagccag	gtgagtgatgaa...3267...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1642...	tccttc	ctttcag	atggcgaa
D. Ere	caagccag	gtgagtgatgaa...3347...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1562...	ttcttt	ctttcag	atggcgaa
D. Ana	taagccag	gtgagtgatgaa...3659...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1250...	gtccat	ttcag	atggcgaa
D. Gri	taagccag	gtaagcacatac...4009...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...900...	ttgcct	ttacag	atggtgaa
D. Moj	tagaccag	gtgagcatacga...4004...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...905...	ctcttg	cacag	atggcgac
D. Vir	taagccag	gtaagcacacga...3837...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1072...	tacctt	ttacag	atggtgac
D. Yak	caagccag	gtgagtgatgaa...3220...	catttc	catgctagattaaac	ATGTGTCCAC	atAATT	tatcgattatttatcatgtg...1689...	tccttc	ctttcag	atggcgaa
	*	****	**	**	*****		*****		***	****

id=121442 gene=FBgn0083950 name=CG34114 segment=chr3R.6819328-6837735.1 type=IN

D. Mel	cattgaag	gtgagttatatg...1786...	tttcc	atcccacgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2061...	ttat	tttcgcag	gattcgac
D. Sim	cattgaag	gtgagttatatg...1794...	tttcc	atcccacgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2079...	ttat	tttcgcag	gattcgac
D. Sec	cattgaag	gtgagttatatg...1802...	cttc	cgcccctcgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...1942...	ttat	tttcgcag	gattcgac
D. Ere	cattgaag	gtgagttatatg...1917...	tttcc	gcccctcgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2065...	ttct	tttcgcag	gattcgat
D. Ana	cattgaag	gtgagttatatg...1659...	catcc	gcccctcgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2190...	cctc	atttcgcag	gctttgat
D. Gri	ccttgaag	gtgagtaacctc...1990...	ttac	accccgcacccctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...1700...	ttcc	atttcgcag	gatttgac
D. Moj	tctcgaag	gtgagttccacag...1920...	ctgg	acccgcagccctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2103...	tatt	ttttcag	gctttgat
D. Vir	cctcgaag	gtaagtacagg...2145...	ttgt	agcccgcacccctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...1688...	cttt	cattatag	gcttcgat
D. Yak	cattgaag	gtgagttatatg...1979...	tttcc	gaacctcgggctgct	AATT	taGTGG	ctGCACAT	tattat	catagtcacagca...2093...	ttat	tttcgcag	gattcgat
	*	****	**	**	*	*****		*****	**	*	**	***

id=121464 gene=FBgn0083950 name=CG34114 segment=chr3R.6865796-6869724.1 type=IN VIEW

Figure 174: CS=8.64



D. Mel	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Sec	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Ere	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Ana	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Gri	cacggT	TC	AGAACgGCTTTCGA	gcgc	gtaagtgc
D. Moj	cacggT	TC	AGAACgGCTTTCGA	gcgc	gtaagtgc
D. Per	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Pse	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
D. Vir	cacggT	TC	AGAACgGCTTTCGA	gcgc	gtaagtgc
D. Wil	cacggT	TC	AGAACgGCTTTCGA	gcgc	gtaagtgc
D. Yak	cacggT	TC	AGAACgGCTTT	cgagcgc	gtaagtgc
	*****	**	*****	*****	*****

id=61623 gene=FBgn0086783 name=Mhc segment=chr2L.16766739.16766756.1 type=E5

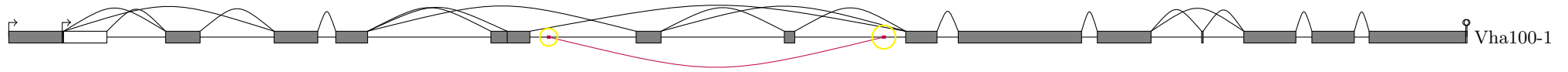
D. Mel	acacaaag	gtatatgactga...	.457...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aaccgctta-agcataagca-----	...169...	gaaaaaaaaacag	gtgttctt
D. Sec	acacaaag	gtatatgaccga...	.443...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aaccgctta-agcataagca-----	...165...	cgaaaaaaaaacag	gtgttctt
D. Ere	acacaaag	gtatatgaccga...	.455...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aaccgctta-agcataagca-----	...155...	caaaaaaaaaacag	gtgttctt
D. Ana	acacaaag	gtatatgccaga...	.454...	-----ccagttacaacctgtccaaa	AAAGTGTtTT	TGAAGa	aaccgctta-agctgaagca-----	...113...	caaaaaatatag	gtgttctt
D. Gri	actcaaag	gtatatccgaga...	.389...	ttctatcccagtt-caacctg--	TCGAAAAGTGTtTT	TGAAGa	aatcgctttcgcttaagc-----	...169...	aaacataaatag	gtgttctt
D. Moj	acacaaag	gtatatcagcga...	.567...	ttctatcccagtt-caaactg--	TCGAAAAGTGTtTT	TGAAGa	aatgcttctgcttaagc-----	...145...	tacaatatctag	gtgttctt
D. Per	acacaaag	gtatatgccaga...	.437...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aatcgctta-agcataaacg-----	...132...	ggccatatctag	gtgttctt
D. Pse	acacaaag	gtatatgccaga...	.435...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aatcgctta-agcataaacg-----	...131...	ggccatatctag	gtgttctt
D. Vir	acacaaag	gtatatccagag...	.365...	ttctatcccagtt-caaactg--	TCGAAAAGTGTtTT	TGAAGa	aatcgctttagcttaagc-----	...161...	ccacataattag	gtgttctt
D. Wil	acacaaag	gtatatggagag...	.430...	atctatcccagtt-caacctg--	TCGAAAAGTGTtTT	TGAAGa	aa-----atgcttaagcaaaaaga...	...115...	taaaataaatag	gtgttctt
D. Yak	acacaaag	gtatatgaccga...	.456...	----atcccagtt-caacctgtcca--	AAAGTGTtTT	TGAAGa	aaccgctta-agcataggcc-----	...154...	tgaaaaaaaaacag	gtgttctt
	** *****	*****		***** ** *	*****	*	*		* **	*****

id=61664 gene=FBgn0086783 name=Mhc segment=chr2L.16779846.16780549.1 type=IN VIEW

Figure 175: CS=9.35







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D.Mel aagcttgg gtaaatattgatg-t-----ggacctgggagctgggagcacggacgacgga--cc-----
D.Sim aagcttgg gtaaatattgatg-c-----ggacctgggagctgggagcacggacgacgga--cc-----
D.Sec aagcttgg gtaaatattgatg-c-----ggacctgggagctgggagcacggacgacgga--cc-----
D.Ere aagcttgg gtaaatattgatg-c-----ggacctg-----ggaccacgga--ca-----
D.Ana aagcttgg gtaaatattgaa-g-t-----ggacctg-----gactggacacgacgagatcc-----
D.Gri aaacttgg gtaaatattgaaacc-tcaaaaaaaaa-----accaacaacaacaacaacat-----
D.Moj aagcttgg gtaaatattgcaacc-tcaatgaattagtcgatccactcagc-aacaaaaacaaacaaacaaagatcaaaacaagaccagatc-----
D.Per aaacttgg gtaaatattgctgtagtcggaaaaccaac-----aacacagcagcagcaacaacaagcaaacccacaca-----
D.Pse aaacttgg gtaaatattgctgtagtcggaaaaccaac-----aacacagcagcagcaacaacaagcaaacccacacaaa-----
D.Vir aagcttgg gtaaatattgaaacc-tcaatgaattagtcgat-cactctgcaaacagaactg---ccaaccagataccaat-----
D.Wil aaacttgg gtaaatat-----ttgaacaaaaaac-----aacaaaaaaagacacagtcagtcaccaatccatttagcactcgcccctccc-----
D.Yak aaacttgg gtaaatattgatgcc-----ggacctgggagcactgaatacggaccacaga--ccacgaacc-----
** ***** * *

```

```

D.Mel -----ACGACGggAACAGGGGAAAATAAACTCAGGCCAAG-----accactcgccttcgctctc---...316...cacaatttctag caagaagg
D.Sim -----ACGACGggAACAGGGGAAAATAAACTCAGGCCAAG-----accactcgccttcgctctc---...321...cacacttcttag caagaagg
D.Sec -----ACGACGggAACAGGGGAAAATAAACTCAGGCCAAG-----accactcgccttcgctctc---...331...cacacttcttag caagaagg
D.Ere -----ACGACGGgcACAGggGAAAATAAACTCAGGCCAAG-----accactcgccttcgctctc---...318...cacaatttctag caagaagg
D.Ana -----ACGA-----cCAGGGGAAAATAAACTCAGGCTAAG-----accactcgccttcgctctc---...301...aacaatttctag caagaagg
D.Gri -----CAA-----AtGGGGGAAAATAAACTCAGccTGCC-----cattacctaagtacaaaag-...566...aacaatttctag caagaggg
D.Moj -----CAA-----CAATGGAAAATAAACTCAGaatcagcctgcgcatttacc-----...492...cacaatttctag caggaggg
D.Per -----ACAA-----ATAtGGGAAAATAAACTCAGTGCcAAAA-----nnnnnnnnnnnnnnnnnnnn...817...ctgaatttctag caagaagg
D.Pse -----AA-----ATAtGGGAAAATAAACTCAGTGCcAAAA-----aatcgtcaaaaaaaaaaaaa...739...ctgaatttctag caagaagg
D.Vir -----GAAAAATAAACTCAGccTGCC-----cattaccaaatgataagaa-...504...aacaatttctag caggaggg
D.Wil ccttctctacaACAA-----cAATGGAAAATAAACTCAGTGCcAAT-----ttaaactttggcttgccaaa...905...aacaatttctag caagaggg
D.Yak -----ACGACGGtcACAGggGAAAATAAACTCAGGCCAAGACCA-----cctcgccttcgctctcgtc...345...cacaatttctag caagaagg
** ***** * * * *

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id=993 gene=FBgn0028671 name=Vha100-1 segment=chr3R.24959152.24959582.1 type=IN

```

D.Mel cttccatg gttggtaccctg...306...-----cctcgc-gcg-tccattggttaa-----CTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGTCTG--aaataa-----cggaatgacattg...44...aatcccctct-ag cttcgtgg
D.Sim cttccatg gttggtaccctg...300...-----cctcgc-gcg-tccattggttaa-----CTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGTCTG--aaataa-----cggaatgactttg...44...aataccctct-ag cttcgtgg
D.Sec cttccatg gttggtaccctg...283...-----cctcgc-gcg-tccattggttaa-----CTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGTCTG--aaataa-----cggaatgactttg...44...aatatcctct-ag cttcgtgg
D.Ere cttccatg gttggtaccctg...310...-----ctactc-gcg-tccattggttaa-----CTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGTCTG--aaataa-----cggaatgactttg...44...aatatcctct-ag cttcgtgg
D.Ana cttccatg gttggtaccctg...260...-----cctcgc-gcg-tccattggttaa-----CTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGT--cgtaataactctgttcgga-----...44...ttctatctct-ag ctttgtgg
D.Gri ctgccatg gttggtatccca...178...-----atgctgcg-ttcattggtatt-----TGTGcTTGAGagTTTAGTTTTCC--TTTTGccgtaactaa-----cggaatga-----...46...catctcttta-ag ctttgtgg
D.Moj ctgccatg gttggtatccca...208...-----gct-ttcattggtatttgtg-----TTGAGagTTTAGTTTTCC--ttGTTG--cgttaactaa-----cggaatgaa-----...47...aatctctct-ag ctttgtgg
D.Per cttccatg gttggtaccctg...338...-----gcg-gtgttcattggttaa-----TTTTGTGCTTGAGagTTTAGTTTTCC--TTGTTTGT--cgtaataa-----cggaatgtct-----...52...tatctctct-ag ctttgtgg
D.Pse cttccatg gttggtaccctg...350...-----gcg-gtgttcattggttaa-----TTTTGTGCTTGAGagTTTAGTTTTCC--TTGTTT--gtcgttaataa-----cggaatgt-----...54...tatctctct-ag ctttgtgg
D.Vir ctgccatg gttggtatccca...157...-----atgctacg-ttcattggtatt-----TGTGcTTGAGagTTTAGTTTTCC--tTTTgCGT--aactaa-----cgg-----...45...gatctctcat-ag ctttgtgg
D.Wil ctaccatg gttggtacctc...291...-----ata-tatttatatatatatATTGTGCTTGAGagTTTAGTTTTCC--TTGTTTGT--cgttaataa-ctaactgaaat-----...51...tcttctct-ag ttttgtgg
D.Yak cttccatg gttggtaccctg...286...gtaacccacgc-gcg-tccat-----TGGTaaCTTGtGCTTGAgAGTTTAGTTTTCC--TTGTTTGTCTG--aaataa-----ctggaatgactttg...44...aatcccctct-ag cttcgtgg
** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=997 gene=FBgn0028671 name=Vha100-1 segment=chr3R.24960321.24960770.1 type=IN VIEW

Figure 177: CS=17.76



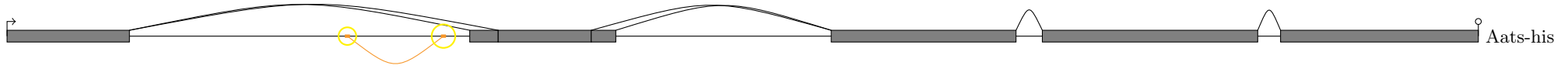
D.Mel	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttacat...753...aatgtatatag	ttaccgc
D.Sim	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttacat...773...aatgtatatag	tgaccgc
D.Sec	---cgga-G	GTGtGTGTTGTT	tgctgcgtgtggtttcatg...773...aatgtatatag	tgaccgc
D.Ere	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttacat...743...aatgaatatag	tgaccga
D.Ana	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggtttttcat...706...aacaattaatag	tgaccga
D.Gri	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggtttttaa...845...cctgcttaacag	ttacgcgc
D.Per	-aacggaG	GTGtGTGTTGTT	tgctgcgtgtggttttaaa...753...acgaacatatag	ttacgcga
D.Pse	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttaaat...750...aaaacatatag	ttaccgt
D.Vir	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttcaat...776...cctgatttacag	ttacacgc
D.Yak	taacgga-G	GTGtGTGTTGTT	tgctgcgtgtggttttacat...770...taatttatacag	tgaccga
		**** *	*****	* ** * ** *

id=75947 gene=FBgn0035429 name=CG12017 segment=chr3L\_3288186\_3288982\_1 type=IN

D.Mel	taacggag	gtgtgtgttgtt---	619...cgcgactgcagttcact	AACAACACCACC	ctccaagcgaagaatttaa...101...aatgtatatag	ttaccgc
D.Sim	taacggag	gtgtgtgttgtt---	639...cgcgactgcagttcact	AACAACACCACC	ctccaagcgaagaatttaa...101...aatgtatatag	tgaccgc
D.Sec	---cggag	gtgtgtgttgttgc..	636...cgcgactgcagttcact	AACAACACCACC	ctccaagcgaagaatttaa...101...aatgtatatag	tgaccgc
D.Ere	taacggag	gtgtgtgttgtt---	620...cgcgactgcagttcact	AACAACACCACC	ctccaagcgaagaatttaa...90...aatgaatatag	tgaccga
D.Ana	taacggag	gtgtgtgttgtt---	572...cgcgactgcagttcact	AACAACACCACC	ctccaagcgataaatata...101...aacaattaatag	tgaccga
D.Gri	taacggag	gtgtgtgttgtt---	729...cgcgactgcagttcact	AACAACACCACC	ctccaagcgataaatatcg...83...cctgcttaacag	ttacgcgc
D.Per	aacggaag	gtgtgtgttgtt---	598...cgcgactgcagttcact	AACAACACCACC	ctccaagcgacaatatat...122...acgaacatatag	ttacgcga
D.Pse	taacggag	gtgtgtgttgtt---	591...cgcgactgcagttcact	AACAACACCACC	ctccaagcgacaatatat...126...aaaacatatag	ttaccgt
D.Vir	taacggag	gtgtgtgttgtt---	653...cgcgactgcagttcact	AACAACACCACC	ctccaagcgataaatatcg...90...cctgatttacag	ttacacgc
D.Yak	taacggag	gtgtgtgttgtt---	636...cgcgactgcagttcact	AACAACACCACC	ctccaagcgaagaatttaa...101...taatttatacag	tgaccga
		* **	*****	*****	**	* ** * ** *

id=75947 gene=FBgn0035429 name=CG12017 segment=chr3L\_3288186\_3288982\_1 type=IN VIEW

Figure 178: CS=14



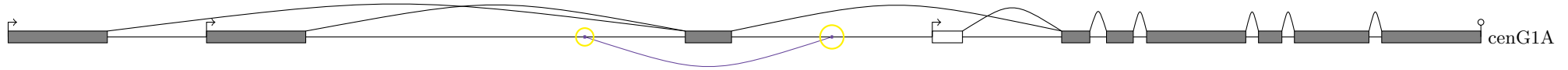
D.Mel	aggagaag	gtcagtttttgg...1732...	-----tgtaaaataagcaaaactta	TTG	TTGTTGTGTT	-----	taattaggttgaaaagttg--...	252...	gcatcaggttag	catctaag		
D.Sim	aggagaag	gtcagtttttgg...1727...	-----tgtaaaataagcaaaactta	TTG	TTGTTGTGTT	-----	taattaggttgaaaagttg--...	246...	gcatcaggttag	catctaag		
D.Sec	aggagaag	gtcagtttttgg...1716...	-----tgtaaaataagcaaaactta	TTG	TTGTTGTGTT	-----	taattaggttgaaaagttg--...	244...	gcatcaggttag	catctaag		
D.Ere	aggagaag	gtcagtttttgg...1724...	-----tagttgtaaaataagcaaaa	CTTATTG	TTGTTGTGTTT	-----	aattaggttgaaaagttgc-	242...	gcagcaggttag	catctaag		
D.Ana	aagagaag	gtcagtagttgc...1673...	---aagtcttagatTTAATgag--	TTTCAT	taTTG	TTGTTGTGTT	-----	caattaggttgaaaaaaa-	298...	ccagcaggttag	catctaag	
D.Gri	aagagaag	gtcagaaacaca...540...	-----tttttactaccgagagttat	TTG	TTGTTGTTaTTGGT	CTTT	TAAT	-attatcaagcaagaagaag--...	666...	acataaggttag	catctgaa	
D.Moj	aagagaag	gtcagtagcaca...537...	---ttttggcatttgtaa-----	caaga--	GTTG	TTGTTGTGTT	-----	gcagtgtggtcatttcttaa...	1815...	gcataaggttag	catctaag	
D.Per	aggagaag	gtcagtgttctg...1346...	---atctaaaaaagtttcattta-	TTG	TTGTTGTGTTT	-----	aattaggttgaaaagcaa-	353...	caataaggttag	catctaag		
D.Pse	aggagaag	gtcagtgttctg...1323...	---atctaaaaaagtttcattta-	TTG	TTGTTGTGTTT	-----	aattaggttgaaaagcaa-	352...	caataaggttag	catctaag		
D.Vir	aagagaag	gtcagtagcaaaa...519...	ttattgtgtatctgtactc-	TTG	TGTTGTGTTG	-----	ctgtgcagtgtggccaact-	2055...	gcataaggttag	catctaag		
D.Wil	aggagaag	gtcagtttcttg...275...	---tgccacataactttcaca-	TTG	TGTTGTGTTGTTGTTG	-----	cttttctgtgtgtgtgctg...	1482...	ccataaggttag	catctaag		
D.Yak	aggagaag	gtcagtttttgg...1581...	-----aaacaaaaaaag--	aattcag-	CGCTG	aCGGTCAATg	GAACGCAATa	ATGT	attattagtattattattat-	371...	gcagcaggttag	catctaag
		* *****			*	**			*	*****	***** *	

id=14413 gene=FBgn0027087 name=Aats-his segment=chrX.18409716.18411777.1 type=IN

D.Mel	aggagaag	gtcagtttttgg...1954...	---cggcgttcagcccaacga-	c-----	AACA	-----	ACAACAACAG	-----	caacaacaacatgagcaactgcatcaggttag	ca
D.Sim	aggagaag	gtcagtttttgg...1946...	---cggcgttcagcccaacga-	c-----	AACA	-----	ACAACAACAG	-----	caacaacaacatgagcaactgcatcaggttag	ca
D.Sec	aggagaag	gtcagtttttgg...1933...	---cggcgttcagcccaacga-	c-----	AACA	-----	ACAACAACAG	-----	caacaacaacatgagcaactgcatcaggttag	ca
D.Ere	aggagaag	gtcagtttttgg...1979...	-----aaaaacaa-----	caacaagcaca-	GAACA	-----	ACAACAACAAca	ATGAG	caactgcagcaggttag	ca
D.Ana	aagagaag	gtcagtagttgc...1961...	---cgcccaacaa-----	ccacagcaac-	AACA	-----	ACAACAACAAc	ATGAG	cagcaagaacaagagcaactccagcaggttag	ca
D.Gri	aagagaag	gtcagaaacaca...1202...	-----acaacaaaagttggt	caaca	ATTGAAAGCACA	AAc	ACAAG	AAACA	gatcaacaacatcaagaatacataaggttag	ca
D.Moj	aagagaag	gtcagtagcaca...2362...	-----caacaacaacaa-----	ttacaaga	ACA	-----	GCAACAACAAC	-----	aaacaacaaatgcataaggttag	ca
D.Per	aggagaag	gtcagtgttctg...1708...	---aacagcaa-----	caacagatacaa-	GAACA	-----	ACAACAACAA	-----	caagcacagatcaataaggttag	ca
D.Pse	aggagaag	gtcagtgttctg...1684...	---aacagcaa-----	caacagatacaa-	GAACA	-----	ACAACAACAA	-----	caagcacagatcaataaggttag	ca
D.Vir	aagagaag	gtcagtagcaaaa...2588...	-----aacaa-----	ttacaagaacagcaa	CAACA	-----	ACAACAACAA	-----	caaatgcataaggttag	ca
D.Wil	aggagaag	gtcagtttcttg...1742...	aaccgggatttcagcagcaa-		CAACA	-----	ACAACAACAA	-----	caacaacaacaagaatacataaggttag	ca
D.Yak	aggagaag	gtcagtttttgg...1823...	-----taccaaataa-----	aaaaaaaaac-	ACATGTTGCGTTC	aATTGGCCGc	CAGTG	gcgctgtagtgtcgtgtttcagtggtgcaacgttcagacg	caacaacaacatgagcaactgcagcaggttag	ca
		* *****		* *	***		*	*	* * * *****	**

id=14413 gene=FBgn0027087 name=Aats-his segment=chrX.18409716.18411777.1 type=IN VIEW

Figure 179: CS=14.4



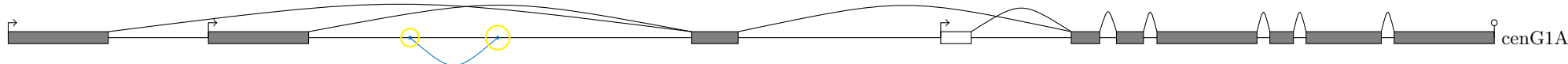
D. Mel	taaatacag	gtgaggtacagt...4151...	-atgccagttgcatgg-tcagc-----					CATTgTCACtCCTT	---	c-----	tacctcaagttcagtgagg...	760...	gttttcttacag	attcgttt
D. Sim	taaatacag	gtgaggtacagt...3718...	-----aacgaaaaaaaaatgtgaaa	AAGGcaT-GCAaATTGCAAAA	c-----	cgcgctaattttaccagc...	1187...	gttttcttacag	attcgttt					
D. Sec	taaatacag	gtgaggtacagt...3717...	-----tcattatttcaacgaaaa	AAGGcaT-GCAaATTGCAAAA	c-----	cgcgctaattttaccagc...	1188...	gttttcttacag	attcgttt					
D. Ere	taaatacag	gtgaggtacagt...4189...	-taaccatgcaactgg-tcagc-----					CATTgTCACtCCTT	---	c-----	tacctcaagttgggtgagg...	722...	tgtttcttacag	attcgttt
D. Ana	taaatacag	gtgaggtacagt...4224...	-tcgctgttcaactgg-tcagc-----					CATTgTCACtCCTT	---	c-----	caccggcagggagtaggt...	687...	ttccgttacag	attcgttt
D. Moj	caaatcag	gtgaggtacagt...4054...	-----ctcacaaggatcagcacttc-					CATTgTCACtCCTT	---	c-----	cgaaaatgctgtaacaacact-	857...	ttgtctcaacag	attcgttt
D. Per	taaatacag	gtgaggtacagt...3951...	-----aatggtcaactgg-tcagaga-					CATTgTCACtCCTT	---	c-----	taccttgaaggatcctg...	960...	ttccgttacag	attcgttt
D. Pse	taaatacag	gtgaggtacagt...3349...	-ccttctgccccttctca-----					GGGGGcaT-GCAaATTGCAAAA	c-----		cgcgctaatttttccctg...	1555...	ttccgttacag	attcgttt
D. Wil	taaatacag	gtgaggtacagt...3669...	-----caaagcagagggttgtcct	TTTAcCATTgTCACTCCTTGGCC	cctggactccctccctctca-----						1234...	attdttcttacag	attcgttt	
D. Yak	taaatacag	gtgaggtacagt...3630...	-----aaaaaaaaaaaatgtaaa	AAGGcaT-GCAaATTGCAAAA	c-----						cgcgctaattttcccctgc...	1275...	gttttcttacag	attcgttt
	*****	*****	*	*** * * *	*			****	****	***			****	***

id=108221 gene=FBgn0028509 name=cenG1A segment=chr2L.13879707\_13891299.1 type=IN

D. Mel	aaatgcag	gtaagtccttgg...917...	cctcctgcg---cctgCGGctta-----					AAGGGTGAaAGTG--	aggattataaatTTtaagct----		1697...	attctagcagcc	agttgttt
D. Sim	aaatgcag	gtaagtccttgg...917...	cattcg-ca---tttgca--tttgca--	TTTTTGCAATTGCAaTTTT	cgctaccccaaatGCCaaag----						2191...	attctagcagcc	agttgttt
D. Sec	aaatgcag	gtaagtccttgg...906...	cattcg-ca---tttgca--tttgca--	TTTTTGCAATTGCAaTTTT	cgctaccccaaatGCCaaag----						1720...	attctagcagcc	agttgttt
D. Ere	aaatgcag	gtaagtccttgg...954...	cctcctgcg---cctgCGGctta-----					AAGGGTGAaAGTG--	aggattataaatTTtaagct----		1608...	attctagcagcc	agttgttt
D. Ana	aaatgcag	gtgagtttctt...1050...	gCgCctgag---cccgagGctta-----					AAGGGTGAaAGTG--	aggattataaatTTtaagct----		1487...	gttctggctgcc	agttgttt
D. Moj	aaatgcag	gtagtggaaga...1751...	ctatgaaacctccagctta-----					AAGGGTGAaAGTG--	tggattataatTTtaagct----		2383...	gaccaagagcc	agttgttt
D. Per	aaatgcag	gtgagtctcgca...1252...	catcctgcg---cctgCGGctta-----					AAGGGTGAaAGTG--	aggattataaatTTtaagct----		2357...	attctcgaagcc	agttgttt
D. Pse	aaatgcag	gtgagtctcgca...1168...	ctcca---ttcgcaaatttacat--	TTTTTGCAATTGCAaTTTTCT	gatcccgCctct--ggtgctc...						2442...	attctcgaagcc	agttgttt
D. Wil	aaatgcag	gtaagtcacata...1899...	actgca-----gCGGcttaaaaaat	GGTAAAGGGTGAaAGTGTGGA	ttataatTTtaagctgctt...						2342...	ctcgtgctgcc	agttgttt
D. Yak	aaatgcag	gtaagtccttgg...913...	gttCGcca---ctcgca--tttgca--	TTTTcGCAATTGCAaTTTT	cgctaccccaaatGCCaaat----						1718...	attctagcagcc	agttgttt
	*****	** **	*	** ** *	*			***				*****	*****

id=108223 gene=FBgn0028509 name=cenG1A segment=chr2L.13891533\_13894223.1 type=IN VIEW

Figure 180: CS=9.6



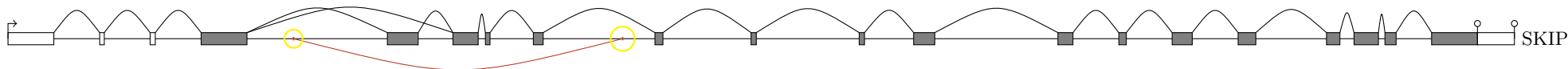
D. Mel	taa	gtg	3251	..	tgg	GCG	ca	TTT	CAT	gag	1659	..	g	att
D. Sim	taa	gtg	3291	..	tgg	GCG	ca	TTT	CAT	gag	1619	..	g	att
D. Sec	taa	gtg	3301	..	tgg	GCG	ca	TTT	CAT	gag	1609	..	g	att
D. Ere	taa	gtg	3258	..	tgg	GCG	ca	TTT	CAT	gag	1651	..	g	att
D. Ana	taa	gtg	3311	..	tgg	GCG	ca	TTT	CAT	gag	1592	..	t	att
D. Gri	caa	gtg	2921	..	tgg	GCG	ca	TTT	CAT	gag	1989	..	c	att
D. Moj	caa	gtg	3177	..	tgg	GCG	ca	TTT	CAT	gag	1733	..	t	att
D. Per	taa	gtg	2902	..	tgg	GCG	ca	TTT	CAT	gag	2000	..	t	att
D. Pse	taa	gtg	2899	..	tgg	GCG	ca	TTT	CAT	gag	2003	..	t	att
D. Vir	caa	gtg	3036	..	tgg	GCG	ca	TTT	CAT	gag	1874	..	g	att
D. Wil	taa	gtg	2719	..	tcc	GCG	ca	TTT	CAT	gag	2191	..	a	att
D. Yak	taa	gtg	3156	..	tgg	GCG	ca	TTT	CAT	gag	1754	..	g	att
	*****	*****		*	*****	*	*****	*****	*****	*****		***	****	***

id=108221 gene=FBgn0028509 name=cenG1A segment=chr2L\_13879707\_13891299\_1 type=IN

D. Mel	taa	gtg	3691	..	---	---	---	CAT	CAA	---	1222	..	g	att
D. Sim	taa	gtg	3722	..	---	---	---	CAT	CAA	---	1191	..	g	att
D. Sec	taa	gtg	3721	..	tt	---	---	CAT	CAA	---	1192	..	g	att
D. Ere	taa	gtg	3703	..	---	---	---	GCAT	CAA	---	1209	..	g	att
D. Ana	taa	gtg	3750	..	---	---	---	TCGG	CAA	---	1157	..	t	att
D. Gri	caa	gtg	3345	..	---	---	---	CAT	CAA	---	1568	..	c	att
D. Moj	caa	gtg	3604	..	---	---	---	CAT	CAA	---	1309	..	t	att
D. Per	taa	gtg	3348	..	---	---	---	CTCAG	CAA	---	1556	..	t	att
D. Pse	taa	gtg	3345	..	---	---	---	CTCAG	CAA	---	1559	..	t	att
D. Vir	caa	gtg	3428	..	---	---	---	CAT	CAA	---	1485	..	g	att
D. Wil	taa	gtg	3101	..	---	---	---	CAT	CAA	---	1811	..	a	att
D. Yak	taa	gtg	3634	..	---	---	---	CAT	CAA	---	1279	..	g	att
	*****	*****						****	*****	*****		***	****	***

id=108221 gene=FBgn0028509 name=cenG1A segment=chr2L\_13879707\_13891299\_1 type=IN VIEW

Figure 181: CS=11.52



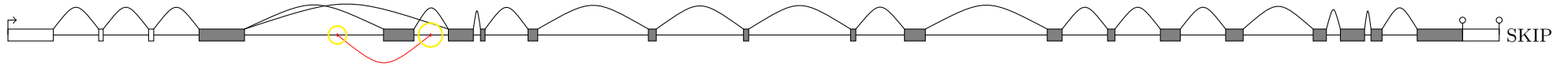
D. Mel	caacaccg	gtaagttagct...	3154...	-gc---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1754...	gctcttttcgag	gatggaca		
D. Sim	caacaccg	gtaagttagct...	3196...	-gc---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1712...	gctcttttcgag	gatggaca		
D. Sec	caacaccg	gtaagttagct...	3181...	-gc---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1727...	gctcttttcgag	gatggaca		
D. Ere	caacaccg	gtaagttagct...	3208...	-gc---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1700...	gctcttttcgag	gatggaca		
D. Ana	caacaccg	gtaagttagct...	3210...	-gt---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1698...	ccttcttttcgag	gatggaca		
D. Gri	caacaccg	gtgagtagct...	3125...	..tac---	gc-gggcgccaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1783...	gtttgcttgcag	gatggaca		
D. Moj	caacaccg	gtaagcgtagc...	3802...	..cac---	gc---atatgagaggcagcg	-----	ATGCGTGTCTA	-----	atatttgattgatgccagct...	1103...	gtttgcttgcag	gatggaca	
D. Per	cgacaccg	gtaagtagcac...	3910...	..g-----	cctagtagcaagaggcaata	-----	AGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1001...	cgtgttttcgag	gatggaca		
D. Pse	cgacaccg	gtaagtagcac...	4058...	..acggggc---	acacgcga--	tgcgat	ATTTTa	ATGCGTGTCTA	-----	atatttgattgatgccacat...	852...	cgtgttttcgag	gatggaca
D. Vir	caacaccg	gtgagtagct...	3557...	..gc---	gcgggggtgccaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1351...	gtttgcttgcag	gatggaca		
D. Wil	caacaccg	gtaagtagcac...	3866...	..ac---	ac-----	acacgcagctgctgctt	GTTTA	ATGCGTGTCTA	-----	atatttgattgatgccatcg...	1045...	tctcgttttcgag	gatggaca
D. Yak	caacaccg	gtaagtagcac...	3159...	-gc---	atcctagtagcaagaggca	-----	ATAAGTAGCaaAAATTA	cgctaaacgtggcaattcc...	1749...	gctcttttcgag	gatggaca		
		* ****			** **		** *		** * ** *		* ** **	** ****	

id=31571 gene=FBgn0051163 name=SKIP segment=chr3R.18000450.18103358.1 type=IN

D. Mel	aggccagg	gtaagtaaagta...	1063...	..ggttcgttgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..321...	cttattttgcag	gcgcccaa	
D. Sim	aggccagg	gtaagtaaagta...	1054...	..ggttcgttgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..321...	cttattttgcag	gcgcccaa	
D. Sec	aggccagg	gtaagtaaagta...	1060...	..ggttcgttgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..321...	cttattttgcag	gcgcccaa	
D. Ere	aggccagg	gtaagtaaagta...	1053...	..ggttcgttgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..327...	tttattttgcag	gcgcccaa	
D. Ana	aggctagg	gtagtagtacc...	..947...	..ttgcatgctgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..339...	atttcttttcag	gcgcccaa	
D. Gri	aagcaagg	gtaagttagct...	1152...	..tttacttgtgtacacc	gcagc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..471...	ttcaacttcgag	gcgcccaa	
D. Moj	aagccagg	gtaagttagct...	818...	..gtcgtctataaataag	caag	GACATGC-ATAAAT	TTTCA	aaagca--	acgagcgcagcaga...	855...	gtttcttttcgag	gcgcccaa
D. Per	aggccagg	gtaagtagaaaa...	1070...	..accgcccgcgcgc	ccccacc	TGATTGCTATTTAT	---catgataagaaa--	acaaacgc---	..321...	tttcttttcgag	gcgcccaa	
D. Pse	aggccagg	gtaagtagaaaa...	682...	..gctgctcataaataag	caag	GACATGC-ATAAAT	ttttcacaagcagc	accaac-----	..688...	tttcttttcgag	gcgcccaa	
D. Vir	aagccagg	gtaagaatctat...	1468...	..cgctggaactc--	cgcccagc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..433...	catacttttcag	gcgcccaa	
D. Wil	aggctaga	gtaagttagct...	763...	..gccgctcataaataag	caag	GACATGC-ATAAAT	ttttcacaagcagc	accaac-----	..860...	tttcttttttag	gcgcccaa	
D. Yak	aagccagg	gtaagtaaagta...	1067...	..ggttcgttgct--	ctcccacc	TGATTGCTATTTAT	---gataagaaa--	acaaacgcatt---	..358...	tttatttcgag	gcgcccaa	
		* ** *			*** *	** ** * ** *		* * ** *		* **	** ** *	

id=31579 gene=FBgn0051163 name=SKIP segment=chr3R.18105058.18106520.1 type=IN VIEW

Figure 182: CS=10.8



```

D.Mel caacaccg gtaagtttagct...4716...-----ccggtgact-agaccccatc-CAACGCCAACATCAATgtagcatc--attaacc---gctct---...193...gctcttttcag gatggaca
D.Sim caacaccg gtaagttcagcc...4729...-----ccggtgact-agaccccatc-CAACGCCAACATCAATgtagcatc--attaacc---gctct---...180...gctcttttcag gatggaca
D.Sec caacaccg gtaagttcagct...4729...-----ccggtgact-agaccccatc-CAACGCCAACATCAATgtagcatc--attaacc---gctct---...180...gctcttttcag gatggaca
D.Ere caacaccg gtaagtcgagca...4723...-----ccggtgact-agaccccatc-CAACGCCAACATCAATgtagcatc--attaacc---gctct---...186...gctcttttcag gatggaca
D.Ana caacaccg gtaagtttgata...4711...---gataaacggataaac--catc-----CAGCGCCAACATCAATTaatac--attaacc---accccc---...197...ccttcttttcag gatggaca
D.Gri caacaccg gtgagtactgaa...4699...-----cacgcccttagacc-acgccc-----ACGCCAACATCAATAA--catc--attaacc---agctcatat...210...gtttgcttcag gatggaca
D.Moj caacaccg gtaagcgctagc...4666...taagccatgcc---atc-gcacc-----CAGCGCCAACATCAATAA--ccatcatattaac--agctca---...241...gtttgcttcag gatggaca
D.Per cgacaccg gtaagtcgacac...4703...tgaattat-----taattaaccccc--ATCCaACGCCAACATCAATC-----tctaacctcatgctcctctc...202...cgtgtttttcag gatggaca
D.Pse cgacaccg gtaagtctcct...4689...tcaattat-----taattaaccccc--ATCCaACGCCAACATCAATC-----tctaacctcatgctcctctc...216...cgtgtttttcag gatggaca
D.Vir caacaccg gtgagtactata...4697...--gataatgccc---acc-tcacctTCGAcCAGCGCCAACATCAATAA--ccatc--attaacc---agctcata--...205...gtttgcttcag gatggaca
D.Wil caacaccg gtaagtcgatgt...4672...--atcacgcc---accatcatcat---CCAACGCCAACATCAAT-----aac--attaacc---ctcgctcgcc...236...tctcgtttcag gatggaca
D.Yak caacaccg gtaagtcgagca...4709...-----ccggtgact-agaccccatc-CAACGCCAACATCAATgtagcatc--attaacc---gctct---...200...gctcttttcag gatggaca
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id=31571 gene=FBgn0051163 name=SKIP segment=chr3R.18000450.18103358.1 type=IN

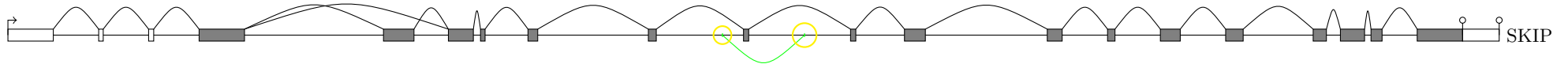
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D.Sim agtactcg gtatgtatgatg...137...---aagaattttctaaaaatgaa-----ATTGATGTTGGCGTTG-----cttgaaaagaataattgaa-----...163...caaaccttacag ccctcgag
D.Sec agtactcg gtatgtatgatg...137...---aagaattttctaaaaatgaa-----ATTGATGTTGGCGTTG-----cttgaaaagaataattgaa-----...165...cgaaccttacag ccctcgag
D.Ere agtactcg gtatgtatgatg...157...tccaaaaataaaaaaaaa-----ATTGATGTTGGCGTTG-----cttgaaaagaataattgaa-----...168...cgaaccttacag ccctcgag
D.Ana agtactcg gtatgtatcaac...105...gcaagaatttgaataaac-----AATTGATGTTGGCGTTG-----aaagaatgcttaaaaaaga...207...accaccttacag ccctccag
D.Gri aatactcg gtatgtatgaat...116...-----ttacagaaaaacgaacattTTATTGATGTTGGCGTTG-----tgatttggc---aaaca--aaaag---...212...ttttcttttcag ccctccag
D.Moj agtattcg gtatgtatgcca...141...taaataaatctataaacattTTATTGATGTTGGCGTTG-----atttggc---aaatagttaaaaa---...255...cgcccttatag ccctccag
D.Per agtattcg gtatgtatgacc...147...--aagaaa---gaaagacaaattt---GGTTGATGTTGGCGTGGATttggcttg-a---aaacacacaaa-----...144...tctctttttag ccctccag
D.Pse agtattcg gtatgtatgacc...138...--aagaaa---gaaagacaaattt---GGTTGATGTTGGCGTGGATttggcttgaa---aaacacacac-----...148...tctctttttag ccctccag
D.Vir agtactcg gtatgtatgcca...125...-----agcggtttaaaaaaatcaaatTTATTGATGTTGGCGTTGatTTGG--caacagaaaaataaattt---...196...cgcttttacag ccctccag
D.Wil aatattcg gtatgtatatac...269...---aatattatgaaaaaatctg-----ATTGATGTTGGCGTTG-----ctataaaaaacaaaaattag...253...taattttcacag ccctcgag
D.Yak agtactcg gtatgtatgatg...156...---aaaaacgaaaaaaacgaa-----ATTGATGTTGGCGTTG-----cttgaaaagaataattgaa-----...165...cgaaccttacag ccctcgag
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```

id=31573 gene=FBgn0051163 name=SKIP segment=chr3R.18103695.18104073.1 type=IN VIEW

Figure 183: CS=16.56



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D.Sim	tccacagg	gtgagtaccatt...	505...	acctgtaatggcatgccacc-----	<b>AGCAA</b> -	<b>CAAaACAAT</b>	--cgaaaacggagcagtgccg--	...405...	ttccaattgcag	ttgaaagt	
D.Sec	tccacagg	gtgagtaccatt...	495...	acctgtaatggcatgccacc-----	<b>AGCAA</b> -	<b>CAAaACAAT</b>	--cgaaaacggagcagtgccg--	...396...	ttccaattgcag	ttgaaagt	
D.Ana	ttcacagg	gtacgtatagga...	304...	ccccattttgactgcattt-----	<b>GCAA</b> -	<b>TGCAATTT</b>	caaca-cgaaagctgcggtg--	...455...	ttctaatttcag	ttaaaagt	
D.Gri	tccatagg	gtgagtacacgg...	135...	-----aattacttc-aaaattgttt	<b>ACAA</b>	<b>AGCAG</b> -	<b>CAAcaACAAT</b>	--aagaaacttgcacacctact--	...639...	tgtctctccag	ctaaaagt
D.Moj	tccaccgg	gtaagtttggag...	121...	-----aattacttcaaaaactgttt	<b>GCAA</b>	<b>AACAG</b> -	<b>CAGcaGCAG</b>	--cagcagcagcagcaacaaca--	...641...	gccgaacaccag	ctaaaagt
D.Per	tccatagg	gtaagccattac...	1400...	cccccttgcgactgcattt-----	<b>GCAA</b> -	<b>TGCAATTT</b>	aaca-cgaaagctgcggtgt...	...464...	ttccaatttcag	ttgaaagt	
D.Pse	tccatagg	gtaagccattac...	1454...	cccccttgcgactgcattt-----	<b>GCAA</b> -	<b>TGCAATTT</b>	aaca-cgaaagctgcggtgt...	...467...	ttccaatttcag	ttgaaagt	
D.Yak	tccacagg	gtgagtaccatt...	495...	acctgtaatggcatgccacc-----	<b>AGCAA</b> -	<b>CAAaACAAT</b>	--cgaaaacgggacagtgccg--	...371...	ttccaattgcag	ttgaaagt	
					*	**	*	*	***	* ****	

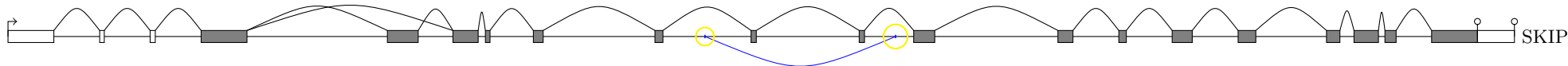
id=31581 gene=FBgn0051163 name=SKIP segment=chr3R.18106608.18107568.1 type=IN

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D.Sim	acgaggag	gtaagtgacatg...	1639...	cgggggtgctggggtgt-cac	<b>ATTGTT</b>	<b>aTTGTTGTT</b>	-----	-agtgctgatgctactgctgc...	1218...	cgtctttaacag	atcctgcg	
D.Sec	acgaggag	gtaagtgacatg...	1657...	gggggtggctggggtgt-cac	<b>ATTGTT</b>	<b>aTTGTTGTT</b>	-----	-agtgctgatgctactgctgc...	1218...	cgtctttaatag	atcctgcg	
D.Ana	acgaggag	gtaagtgaccac...	1189...	ctctggtgcgga-atacacac---	<b>AAATTGC</b>	----	<b>GTTGC</b>	gcacgacaatttgcgact-----	...1408...	tgtcctcaatag	atcctgcg	
D.Gri	acgaggag	gtatgtacatca...	1893...	aacaacttgatgtttgt-ctaa	<b>ATTGT</b>	<b>aaTTGCTGTT</b>	<b>TTGT</b>	-----tgccagtgc-----	ctccaactgaa...	1123...	taattttgcag	atcctgcg
D.Moj	acgaagag	gtaagcgaactg...	2073...	-acaacttgctgtttgt-ctaa	<b>TTGT</b>	<b>aaTTGCTGTT</b>	<b>TTGT</b>	-----tgccagtgc-----	ctgagcctgag...	1163...	ttgttttgcag	atcctgcg
D.Per	acgaggag	gtaagcaaaaca...	2145...	-atggcagggacacacacaca--	<b>GAAATTGC</b>	----	<b>GTTGC</b>	-----tgtttgcctagagaccaca-----	...1292...	ggtctttgag	attctgcg	
D.Pse	acgaggag	gtaagcaaaaca...	1944...	-gggacacacacacacacaca--	<b>GAAATTGC</b>	----	<b>GTTGC</b>	-----tgtttgcctagagactctgc-----	...1381...	ggtctttgag	attctgcg	
D.Yak	acgaggag	gtaagtgacatg...	1752...	tgggggttctggggtgt-cac	<b>ATTGTT</b>	<b>aTTGTTGTT</b>	-----	-agtgctgatgctactgctgc...	1288...	catctttaatag	atcctgcg	
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id=31583 gene=FBgn0051163 name=SKIP segment=chr3R.18107626.18110599.1 type=IN VIEW

Figure 184: CS=9.72





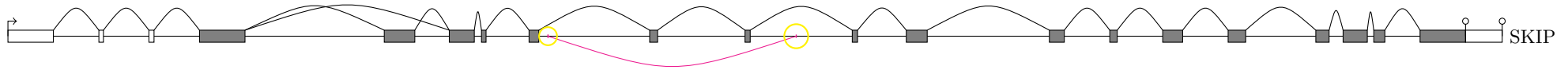
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D. Sim	tccacagg	gtgagtaccatt...	431...	-caccaccac	ttt	gactgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	478...	ttccaattgcag	ttgaaagt			
D. Sec	tccacagg	gtgagtaccatt...	421...	-caccaccac	ttt	gactgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	469...	ttccaattgcag	ttgaaagt			
D. Ana	ttcacagg	gtacgtatagga...	300...	gcaaccc-	cc	ttt	gactgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	455...	ttctaatttcag	ttaaaagt		
D. Gri	tccatagg	gtgagtacacgg...	238...	gctgctg	ctg	ctg	ctg	ctg	-ttg	CAATGCa	ATTT	caacacgaaagctg	gtaaccg...	540...	tgtctcctccag	ctaaaagt	
D. Per	tccatagg	gtaagccattac...	1396...	gcag-	ccc	ctg	tg	cg	actgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	465...	ttccaatttcag	ttgaaagt
D. Pse	tccatagg	gtaagccattac...	1450...	-cagcccc	ctt	tg	cg	actgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	468...	ttccaatttcag	ttgaaagt	
D. Wil	tccatagg	gtgagtatgcat...	209...	-ctttt	gt	gt	gt	gt	gactgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	411...	ccttctttacag	ttaaaagt
D. Yak	tccacagg	gtgagtaccatt...	421...	-aaccaccac	ttt	gactgc	ATTGCAATGCa	ATTT	caacacgaaagctg	cg	ggctg...	444...	ttccaattgcag	ttgaaagt			
		* ** **	*			*	*****	*			*		* **	* ** **			

id=31581 gene=FBgn0051163 name=SKIP segment=chr3R.18106608.18107568.1 type=IN

D. Mel	acgcatgg	gtaagttgaaag...	292...	ctctg	cg	ctag	catgtggc	AAATg	GCATTGCAAGT	ttt	gt	gtg	caacgtggcgta...	164...	cccatcttcag	acgatacg							
D. Sim	acgcatgg	gtaagttgaaag...	286...	ctctg	ctg	ctag	catgtggc	AAATg	GCATTGCAAGT	ttt	gt	gtg	caacgtggcgta...	164...	cccatcttcag	acgatacg							
D. Sec	acgcatcg	gtaagttgaaag...	286...	ctctg	ctg	ctag	catgtggc	AAATg	GCATTGCAAGT	ttt	gt	gtg	caacgtggcgta...	164...	cccatcttcag	acgatacg							
D. Ana	acgcatgg	gtgagtaaaacg...	293...	ttg	ca	ctt	ctg	tt	catgtggc	AAATg	GCATTGCAAGT	ttt	gt	gtg	caacgtggcgta...	132...	ttcctcttcag	acgatacg					
D. Gri	acgcacgg	gtaagttgtctg...	369...	ttt	gt	g	ca	gc	gcatgtggc	AAATg	GCATT	CAAGT	ttt	gt	gtg	caacgtttcgta...	154...	atccttttcag	atgatacg				
D. Per	acgcatgg	gtaagtcccc...	219...	ctg	gg	gc	ctc	g	catgtggc	AAATg	GCATT	CAAGT	ttt	gt	gtg	caacgttccgta...	124...	atccgttttcag	acgacacc				
D. Pse	acgcatgg	gtaagtcccc...	230...	ctg	gg	gc	ctc	g	catgtggc	AAATg	GCATT	CAAGT	ttt	gt	gtg	caacgttccgta...	140...	atccttttcag	acgacacc				
D. Wil	acgcatgg	gtaagtttagct...	210...	ttt	gt	g	ct	g	ctg	atgtggc	AAATg	GCATT	CAAGT	ttt	ct	gt	gt	gt	gt	gtg...	215...	atccttttcag	acgatata
D. Yak	acgcatgg	gtaagttgctgc...	310...	ctctg	ctg	ctag	catgtggc	AAATg	GCATTGCAAGT	ttt	gt	gtg	caacgtggcgta...	170...	cccatcttcag	acgatacg							
		*****	*			*	*****	*			**		*	* **	* ** **								

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Figure 185: CS=10.62



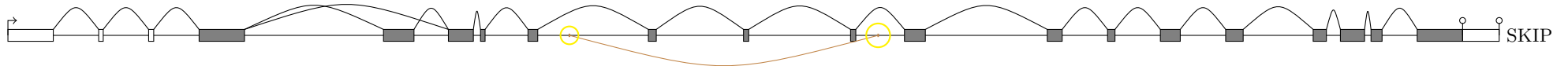
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D. Sim	aggccagg	gtaagtaaagta...	52...	agtgaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTCCT	-----gtcccgcaagttt-tgtccc...	1304...	cttattttgcag	gcggccaa	
D. Sec	aggccagg	gtaagtaaagta...	52...	agcgaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTCCT	-----gtcccgcaagttt-tgtccc...	1310...	cttattttgcag	gcggccaa	
D. Ana	aggctagg	gtaggtactccc...	49...	aacgaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTC	-----ctgtccccagatcctt---ca...	1220...	attcttttcag	gcggccaa	
D. Gri	aagcaagg	gtaagtttgttt...	71...	cttgcttttatgaccgcaa	-----	-----	GCAAATTGT	TTGT	cctttgcctttcattttaa	-----	1554...	ttcaacttcag	gcggctaa	
D. Moj	aagccagg	gtaagttgacaa...	119...	gctcggttttatgaccgcaa	-----	-----	GCAAATTGT	TTGT	cctttgcctttcattttaa	-----	1560...	gttcttttcag	gcggccaa	
D. Per	aggccagg	gtaagtagaaaa...	40...	ggggaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTCCT	----cta---cccagatcccttgcccc...	1329...	ttctcttttcag	gcccctaa	
D. Pse	aggccagg	gtaagtacaaaa...	41...	ggggaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTCCT	----cta---cccagatcccttgccct...	1308...	ttctcttttcag	gcccctaa	
D. Wil	aggctaga	gtaagttttgt...	105...	tgggaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTC	CTGC	---ccttcatttaaatcaactgc---	1494...	tttcttttttag	gcggccaa
D. Yak	aagccagg	gtaagtaaagta...	47...	agtgaaactcattttcgcgc	TTCGTT	TATG	acCGCAA	gcAAATTGT	TGTCCT	-----gtcccgcaagtttTgtccc-	1359...	tttatttcgag	gcggccaa	

id=31579 gene=FBgn0051163 name=SKIP segment=chr3R.18105058.18106520.1 type=IN

D. Mel	acgaggag	gtaagtacatg...	1538...	---aaatgtgtgctcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaagagttggggt...	1344...	tgtctttaatag	atcctgcg	
D. Sim	acgaggag	gtaagtacatg...	1533...	---aaatgtgtgctcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaagagttggggt...	1311...	cgctcttaacag	atcctgcg	
D. Sec	acgaggag	gtaagtacatg...	1545...	---aaatgtgtgctcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaagagttggggt...	1317...	cgctcttaatag	atcctgcg	
D. Ana	acgaggag	gtaagtacac...	1263...	---ttgtgtgagcctaagcaa	GGCAATAATTTT	TGTCATAAATGAA	aagcacacagagcctgggc...	1320...	tgtcctcaatag	atcctgcg	
D. Gri	acgaggag	gtagtgacatca...	1680...	tgggtaaaatgctgtgctgt	ACGACAAT	TTGT	-----ccgtttgctgtcgacgaca...	1344...	taatttttcag	atcctgcg	
D. Moj	acgaagag	gtaagcgaactg...	1889...	catgtggcatgogttgctgc	ACGACAAT	TTGT	-----ctgtttgcatgtcgacgacg...	1354...	ttgttttttcag	atcctgcg	
D. Per	acgaggag	gtaagcaaaaca...	2208...	---aatgtgtccaggcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaacaggaggagg...	1214...	ggtctttttcag	atcctgcg	
D. Pse	acgaggag	gtaagcaaaaca...	2008...	---aatgtgtccaggcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaacaggaggagg...	1302...	ggtctttttcag	atcctgcg	
D. Wil	atgaagag	gtgagtaataca...	1766...	acaacaacgtgtgctcctaagca	GCAAT	GGCAATAATTTT	TGTCATAAATGAA	aagtacacacacacacaaa...	1419...	ttattctttcag	atcctgcg
D. Yak	acgaggag	gtaagtacatg...	1632...	---aaatgtgtgctcctaagca	AGGGCAATAATTTT	TGTCATAAATGAA	aagcacacaagagttggggt...	1395...	catctttaatag	atcctgcg	

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Figure 186: CS=9



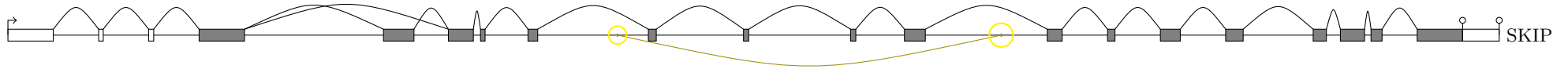
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D. Sim	aggccagg	gtaagtaaagta...	298...	atacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-gccgcgccgagcagcttc...	1072...	cttattttgcag	g	gcggccaa
D. Sec	aggccagg	gtaagtaaagta...	298...	atacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-gccgcgccgagcagcttc...	1078...	cttattttgcag	g	gcggccaa
D. Ana	aggctagg	gtaggtactccc...	292...	atacttaatcttggccctgg	GGACatGTA	ATTTTATGC	CGCTg	cttctgctgctgcctttcc...	984...	atttctttcag	g	gcggccaa
D. Gri	aagcaagg	gtaagttgttt...	289...	gtacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-gcctcgcgctcacactg...	1329...	ttcaacttgcag	g	gcggctaa
D. Moj	aagccagg	gtaagttgacaa...	352...	gtacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-gccgagaaatcccgcgcc...	1320...	gtttctttgcag	g	gcggccaa
D. Vir	aagccagg	gtaagaatctat...	317...	gtacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-gtcgagaaatcccgcgcc...	1579...	catactttacag	g	gcggccaa
D. Wil	aggctaga	gtaagttttgt...	281...	gtacttaatcttggccctgg	GGACatGTA	ATTTTATGC	----	gc-actgcttctgcttttgc...	1335...	tttcttttttag	g	gcggccaa
D. Yak	aagccagg	gtaagtaaagta...	295...	atacttaatcttagccctgg	GGACatGTA	ATTTTATGC	----	gc-gccgcgctgagctgagca...	1125...	tttattttcag	g	gcggccaa
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D. Sim	acgcatgg	gtaagttgaaag...	192...	-----agcgtcgc	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggaccagaatccgt...	256...	cccatcttgcag	acgatacg
D. Sec	acgcatcg	gtaagttgaaag...	192...	-----agcgtcgc	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggaccagaatccgt...	256...	cccatcttgcag	acgatacg
D. Ana	acgcatgg	gtgagtaaaac...	165...	tggc	gagcgtcacatgcata	AGCGaGCATAAAAT	TTATGTCC	g	tttccggaccagatccga...	253...	tttcccttcag	acgatacg
D. Gri	acgcacgg	gtaagttgtctg...	242...	-----ggcgtcac	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccctgttgccctttgca...	279...	atccctttgcag	atgatacg
D. Moj	acgacgg	gtaagttttcat...	98...	-----agcgtcac	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggcaccacaacaa...	299...	atccctttgcag	atgatacg
D. Vir	acgcacgg	gtaagttgttta...	185...	-----agcgtcac	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggctgcagcaacaa...	226...	atccctttgcag	atgatacg
D. Wil	acgcatgg	gtaagtttagct...	130...	-----agcgtcac	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggttgcaacaactc...	293...	atccctttgcag	acgataca
D. Yak	acgcatgg	gtaagttgctgc...	208...	-----agcgtcgc	atgcataagcga	GCATAAAAT	TTATGTCC	g	tttccggaccagaatccgt...	270...	cccatcttgcag	acgatacg
	***	* ** **		*****	*****	*****		*		*	**	*****

id=31585 gene=FBgn0051163 name=SKIP segment=chr3R.18110658.18111193.1 type=IN VIEW

Figure 187: CS=9



D.Mel	aggccagg	gtaagtaaagta...1073...ctctcccacctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattaacacagcgaccctg---...307...cttattttgcag	gcggtctaa
D.Sim	aggccagg	gtaagtaaagta...1064...ctctcccacctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattaacacagcgaccga---...307...cttattttgcag	gcggtctaa
D.Sec	aggccagg	gtaagtaaagta...1070...ctctcccacctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattaacacagcgaccga---...307...cttattttgcag	gcggtctaa
D.Ana	aggctagg	gtaggtactccc...957...ctctcccacctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattaacacagggccagca---...325...atttcttttcag	gcggtctaa
D.Gri	aagcaagg	gtaagttgttt...1162...tacaccacagctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattagtgcggcagcatc---...457...ttcaacttgcag	gcggtctaa
D.Moj	aagccagg	gtaagttgacaa...1164...tgttttagccggcaagg--c-ccCGCCcaGCTGAttTGGT	TTTATGA	TAAGAAAACAAA	-----cgcattagatggccaagagc---...491...gtttcttttcag	gcggtctaa
D.Per	aggccagg	gtaagtagaaaa...1080...cgccccacctgattg--c-ta-----	TTCATGA	TAAGAAAACAAACGCATTAA	acacagagggccagagaggg...296...ttctcttttcag	gcggtctaa
D.Pse	aggccagg	gtaagtagaaaa...1047...agccccacctgattg--c-ta-----	TTCATGA	TAAGAAAACAAACGCATTAA	acacagagggccagagaggg...309...ttctcttttcag	gcggtctaa
D.Vir	aagccagg	gtaagaatctat...1478...tccgccacagctgattg--c-ta-----	TTTATGA	TAAGAAAACAAA	-----cgcattagatggccaacagc---...419...catactttacag	gcggtctaa
D.Wil	aggctaga	gtaagttttgt...1128...--ggccatgtgtttgaaccca--GCCAgTTGAttTGGT	TTTATGA	TAAGAAAACAAA	-----cgcattaga-gac--agagcgag...473...tttctttttag	gcggtctaa
D.Yak	aagccagg	gtaagtaaagta...934...ctggcaca-cagataag--cgca-----	GGAATGA	CTAAGGATATG	-----tgcctaagtagcggcatcct---...487...tttatttcgag	gcggtctaa
	* * * *	*** *		**** * * * *		* ** ** * * *

id=31579 gene=FBgn0051163 name=SKIP segment=chr3R.18105058.18106520.1 type=IN

D.Mel	caattcag	gtgagtcttctc...951...taggca----agttatcgggggaa-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcagctctgaagcgc-----...1058...tttcttcgca-g	ggtggccg
D.Sim	caattcag	gtgagactcgtc...941...taggca----agttatcgggggaa-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcagctctgaagcgc-----...1022...tttcttcgca-g	ggtggccg
D.Sec	caattcag	gtgagactcgtc...887...taggca----agttatcgagagaa-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcagctctgaagcgc-----...1019...tttcttcgca-g	ggtggccg
D.Ana	ccattcag	gtaagtaactat...731...ctgggactggga-----ctgagga-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcaacgtgaagcgc-----...1049...attttttgca-g	ggtggcag
D.Gri	ccattcag	gtaagtcctccc...1089...-----ggcagagcgagcactgaaat-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcaacagtgattcgc-----...999...tctctctcta-g	ggtggccg
D.Moj	ccatacag	gtaagactatct...743...ttcgcttttggg-----gcacaaat-----	TTTGTTCCTT	aGTCAatTGAAaATCAcTCAGCGGGC	aggaggttctcgatgctt---...1069...tttcttttga-g	ggtggccg
D.Per	ccattcag	gtgagtgtctgc...771...--gcatttgggcttcttctggTTGGttTGCGaa	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcaacg--gaatcgga-----...517...tttgtttgcag	ggtggcc-
D.Pse	ccattcag	gtgagtctcggc...766...--gcatttgggcttcttctggTTGGttTGCGaa	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcaacg--gaatcgga-----...451...tttgtttgca-g	ggtggccg
D.Vir	ccatacag	gtaagtgtggct...844...--cttggggcgaacgcagaaat-----	TTTGTTCCTT	aGTCAatTGAA	-----atca---ctcagcagcggcct---...916...tctcttttca-g	ggtggccg
D.Wil	ccatacag	gtaagtgtgtgc...820...--gaggggtaagggaaataaa-----	TTTGTTCCTT	aGTCAatTGAAATCAcTCAGTGGC	---ga---ctcgatatttctgggccc---...983...ttgattttgca-g	ggtggccg
D.Yak	caattcag	gtgagactcatc...594...--cccacttcgatttctatgtc--CATGTCCtTTGGCATTTC	CATGTCC	tTTGGCATTTC	-----cgtcctttctgcgctcctt...1357...tttcttcgca-g	ggtggccg
	* * * *	** ** *		* * * * * * * *		* * * * * * * *

id=31587 gene=FBgn0051163 name=SKIP segment=chr3R.18111424.18113518.1 type=IN VIEW

Figure 188: CS=9.9



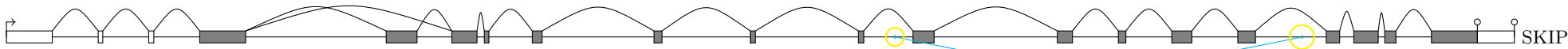
D. Mel	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaa---	ttttgttggattgtttcacctatcgttcattg	cag	ctacgagg	
D. Sim	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaata-	ttttgttggattgtttcacctatcgttcattg	cag	ctacgagg	
D. Sec	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaata-	ttttgttggattgtttcacctatcgttcattg	cag	ctacgagg	
D. Ana	cttaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaata-	ttttgttggattgtttcacctatcgttcattg	cag	ctatgagg	
D. Gri	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-aactctcaacaat-	ttttgttggattgtttcacctatcgttcattg	cag	ctacgagg	
D. Moj	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-cACAAC-	AATTtTTGTtGGATTGTTTCAcCTATCGT	ccATTG	--cag gtacgagg	
D. Per	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-cCAACc	caaccttta--ttgttggattgtttcacctatcgttcattg	cag	gtacgagg	
D. Pse	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-cCAACc	caaccttta--ttgttggattgtttcacctatcgttcattg	cag	gtacgagg	
D. Vir	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-cACAAC	AAATTtTTGTtGGATTGTTTCAcCTATCGT	ccATTG	--cag ctacgagg	
D. Wil	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaat	atTTTTgttggattgtttcacctatcgttcattg	cag	atacgagg	
D. Yak	ctcaaCGG	GTaAGTGgtGTAGaTGAACAAaTTTA	-ccaacaat	atTTTTgttggattgtttcacctatcgttcattg	cag	ctacgagg	
	** *****	*****	*	** *	* * * *	* **	** *****

id=31599 gene=FBgn0051163 name=SKIP segment=chr3R.18118601.18118671.1 type=IN

D. Mel	ctcaacgg	gtaagtggtagatgaacaaat	taccacaa---	ttttgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	ctacgagg
D. Sim	ctcaacgg	gtaagtggtagatgaacaaat	taccacaaata-	ttttgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	ctacgagg
D. Sec	ctcaacgg	gtaagtggtagatgaacaaat	taccacaaata-	ttttgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	ctacgagg
D. Ana	cttaacgg	gtaagtggtagatgaacaaat	taccacaaata-	ttttgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	ctatgagg
D. Gri	ctcaacgg	gtaagtggtagatgaacaaat	ctcaacaat-	ttttgttga--TTGTTTCAcCTATCGT	ccATTG	cag	ctacgagg
D. Moj	ctcaa---	CGGGT	aAGTGgtGTAGaTGAACAaATT	cACAAC-	AATTtTTGTtGGATTGTTTCAcCTATCGT	ccATTG	cag gtacgagg
D. Per	ctcaacgg	gtaagtggtagatgaacaaat	taccacact--	ttattgtGTTGGaTTGTTTCAcCTATCGT	ccATTG	cag	gtacgagg
D. Pse	ctcaacgg	gtaagtggtagatgaacaaat	taccacact--	ttattgtGTTGGaTTGTTTCAcCTATCGT	ccATTG	cag	gtacgagg
D. Vir	ctcaa---	CGGGT	aAGTGgtGTAGaTGAACAaATT	cACAAC	AAATTtTTGTtGGATTGTTTCAcCTATCGT	ccATTG	cag ctacgagg
D. Wil	ctcaacgg	gtaagtggtagatgaacaaat	taccacaaat	atTTTTgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	atacgagg
D. Yak	ctcaacgg	gtaagtggtagatgaacaaat	taccacaaat	atTTTTgt--TGGATTGTTTCAcCTATCGT	ccATTG	cag	ctacgagg
	** **	*** * ** *	**	* ** *	*****	** *****	** *****

id=31599 gene=FBgn0051163 name=SKIP segment=chr3R.18118601.18118671.1 type=IN VIEW

Figure 189:



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D.Me1 acgcatgg gtaagttgaaag...285...caacttgctctgccgctagc---ATGTggCAAATGGCATTgcAAGTTTTGTgtgcaacgtggcgtataata...159...cccatcttgtagcagatacag
D.Sim acgcatgg gtaagttgaaag...279...caacttgctctgctgctagc---ATGTggCAAATGGCATTgcAAGTTTTGTgtgcaacgtggcgtataata...159...cccatcttgtagcagatacag
D.Sec acgcatcg gtaagttgaaag...279...caacttgctctgctgctagc---ATGTggCAAATGGCATTgcAAGTTTTGTgtgcaacgtggcgtataata...159...cccatcttgtagcagatacag
D.Ana acgcatgg gtgagtaaaacg...286...cgcgagcttgcaacttcgttc---ATGTggCAAATGGCATTgcAAGTTTTgtgtgcaacgtggcgtataa...129...ttctcccttcagcagatacag
D.Gri acgcacgg gtaagttgtctg...362...tgcaactttttgtgcagcgc---ATGTggCAAATGGCATTgcAAGTTTTgtgtgcaacgtggcgtataat...150...atccttttgtagcagatacag
D.Moj acgcacgg gtaagttttcat...190...-----ctgtgtgcagcacatgtgga---AAATGGCATT-cAAGT---gtgtgcagatgtgtgtgcgt...210...atccctttgtagcagatacag
D.Per acgcatgg gtaagttccacc...212...gcaacttctggggcgcctcgc---ATGTggCAAATGGCATTcAAGTTTTgtgtgcaacgttccgtataa...121...atccctttgtagcagacacag
D.Pse acgcatgg gtaagttccccc...223...gcaacttctggggcgcctcgc---ATGTggCAAATGGCATTcAAGTTTTgtgtgcaacgttccgtataa...137...atccctttgtagcagacacag
D.Vir acgcacgg gtaagttgttta...181...-----ggcgcagcgtcacatgcataaGCGA---GCAT---AAAATcTTATgtccgtttccggctgcagca...230...atccctttgtagcagatacag
D.Wil acgcatgg gtaagtttagct...126...-----ggcgtagcgtcacatgcataaGCGA---GCAT---AAAATcTTATgtccgtttccggctgcaaca...297...atccctttgtagcagatacag
D.Yak acgcatgg gtaagttgctgc...303...tctgtgctctgctgctagc---ATGTggCAAATGGCATTgcAAGTTTTGTgtgcaacgtggcgtataata...165...cccatcttgtagcagatacag
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id=31585 gene=FBgn0051163 name=SKIP segment=chr3R.18110658.18111193.1 type=IN

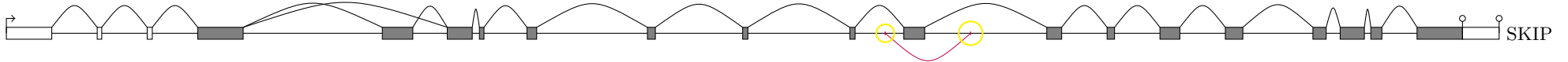
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D.Me1 -----cggttcga gtaagtatacga...640...-----aacaacagct--cgaaaaataATGGgaAACTTcaAGTGCaTATTTGATAT---tttcggggccaagtgaatgt...224...tgtcgtccgcag gcaccag
D.Sim cgcatccggttcga gtaagt-----...639...-----aacaacagct--cgaaaaataATGGgaAACTTcaAGTGCaTATTTGATAT---tttcggggccaagtgaatgt...220...tatcgtccgcag gcaccag
D.Sec cgcatccggttcga gtaagt-----...622...-----aacaacagct--cgaaaaataATGGgaAACTTcaAGTGCaTATTTGATAT---tttcggggccaagtgaatgt...222...tatcgtccgcag gcaccag
D.Ana -----cggttcga gtaagtatacac...764...-----gtacag-----aaaaataataatggAAAACCTcAAGTGCaTATTTGATAT---tttttggggcgtatctgt...199...tttgcttttaag gtactcaa
D.Gri -----cggttcga gtaagtatgcta...722...ggattagcctaagcctttggc-----CAAAAACCTcAAGTGCTcTATTTGATAT---tttttggggcggaccgggctt...259...tccatttggcag gcactcaa
D.Moj -----cggttcga gtgagtacaaaa...675...-----agccaaagcctttggcctaaaa---ACTTcaAGTGCTcTATTT---gaatatttttggggcgaac-----...293...ctattttggcag gcactcaa
D.Per -----cggttcga gtaagtacacaa...545...-----caacaa-----caacaaaataatggAAAACCTcAAGTGCaTATTTGATAT---tttttgggagtcaccggaccct...289...ctttcgtgcag gcacacag
D.Pse -----cggttcga gtaagtatacaa...555...-----aaaggc-----acaaaaataatggAAAACCTcAAGTGCaTATTTGATAT---tttttgggagtcaccggaccct...274...ctttcgtgcag gcacacag
D.Vir -----cggttcga gtaagtataaag...260...-----ctgaaattttgcaactta---ATGAATTTTTaATGCacTTGC-----gcacagtaagtcagcactg...718...cattttcgacag gcactcag
D.Wil -----cggttcga gtaagtataaaa...331...-----cttcaaaattttgcaactta---ATGAATTTTTaATGCacTTGC-----gcaacagagcaagtcagcactg...611...ccccgacaacag gcacacag
D.Yak -----cggttcga gtaagtatacga...683...-----caacagctcccaaaaaataATGGgaAACTTcaAGTGCaTATTTGATAT---tttcggggccaagtgaatgt...232...tctgcaccacag gcacacag
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id=31595 gene=FBgn0051163 name=SKIP segment=chr3R.18117077.18118034.1 type=IN VIEW

Figure 190: CS=12.98



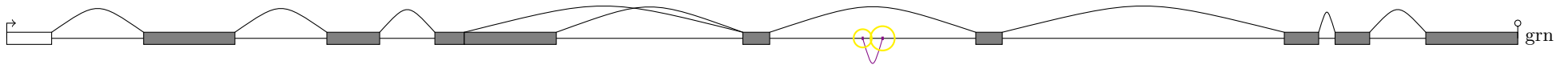
D. Mel	acgcatgg	gtaagttgaaag...285...-caacttgctctgcccgtagc--	ATGTggCAAAtGGCAT	tgcaagttttgtgtgcaacg-----	...171...cccatcttgcaag	acgatacg
D. Sim	acgcatgg	gtaagttgaaag...279...-caacttgctctgctgctagc--	ATGTggCAAAtGGCAT	tgcaagttttgtgtgcaacg-----	...171...cccatcttgcaag	acgatacg
D. Sec	acgcatcg	gtaagttgaaag...279...-caacttgctctgctgctagc--	ATGTggCAAAtGGCAT	tgcaagttttgtgtgcaacg-----	...171...cccatcttgcaag	acgatacg
D. Ana	acgcatgg	gtgagtaaaacg...286...--cgcagct-tgcacttcgttc	ATGTggCAAAtGGCAT	tgcaagttttgtgtgcaacg-----	...140...ttctcccttcag	acgatacg
D. Gri	acgcacgg	gtaagttgtctg...362...tgcaactttt-tgtgcagcgc--	ATGTggCAAAtGGCAT	ttCAAGTTttgtgtgcaacgcttgcgtat...153...atccttttcag	atgatacg	
D. Per	acgcatgg	gtaagtcccacc...212...-gcaacttctggggcctcgc--	ATGTggCAAAtGGCAT	ttCAAGTTttgtgtgcaacgcttgcgtat...123...atcccgttcag	acgacacc	
D. Pse	acgcatgg	gtaagtccccc...223...-gcaacttctggggcctcgc--	ATGTggCAAAtGGCAT	ttCAAGTTttgtgtgcaacgcttgcgtat...139...atcccgttcag	acgacacc	
D. Wil	acgcatgg	gtaagtttagct...203...gcctgcattttgt-cgtcgt-	ATGTggCAAAtGGCAT	ttCAAGTTttctgtgtgtgtgtgtgtgt...214...atcccgttcag	acgataca	
D. Yak	acgcatgg	gtaagttgctg...303...-tctgctgctctgctgctagc--	ATGTggCAAAtGGCAT	tgcaagttttgtgtgcaacg-----	...177...cccatcttgcaag	acgatacg
	*****	* ** **	* * *	*****	* * **	* ** **

id=31585 gene=FBgn0051163 name=SKIP segment=chr3R.18110658.18111193.1 type=IN

D. Mel	caattcag	gtgagtctgtc...622...ccacttcgattt---gtatgtcc-----	ATGTCcTTGGCAT	t-ttctgtctttctgcgctc...1395...tttcttcgca-g	ggtggccg	
D. Sim	caattcag	gtgagactcgtc...616...ccacttcgattt---gtatgtcc-----	ATGTCcTTGGCAT	t-ttctgtctttctgcgctc...1355...tttcttcgca-g	ggtggccg	
D. Sec	caattcag	gtgagactcgtc...562...ccacttcgattt---gtatgtcc-----	ATGTCcTTGGCAT	t-ttctgtctttctgcgctc...1352...tttcttcgca-g	ggtggccg	
D. Ana	ccattcag	gtaagtaactat...354...ccacttcgattt---gtgagtcc-----	TGTCGTTGGCAT	t-ccctgctcctttggagcgg...1435...atTTTTTgca-g	ggtggacc	
D. Gri	ccattcag	gtaagtcttccc...703...gcgcatgattt---ccaacttc	GATTGtATGTCcTTGGCAT	t-ttctctcaactccagac...1386...tctctctta-g	ggtggccg	
D. Per	ccattcag	gtgagtgtctg...446...---cattgatttctaccaacttc	GATTGtATGTCcTTGGCAT	t-gccccacccctcccccta...855...tttgtttgca-g	ggtggcc-	
D. Pse	ccattcag	gtgagtctcggc...408...---cattgatttctaccaacttc	GATTGtATGTCcTTGGCAT	tggctccaccgccctcgc--...822...ttttgttgca-g	ggtggccg	
D. Wil	ccatacag	gtaagttgtgtc...467...gcgcatgattt---ccaacttc	GATTGtATGTCcTTGGCAT	t-ttctttctcaagccc...1350...ttgattttgca-g	ggtggccg	
D. Yak	caattcag	gtgagactcatc...595...ccacttcgattt---ctatgtcc-----	ATGTCcTTGGCAT	t-tctgtctttctgcgctc...1361...ttctcttcgca-g	ggtggccg	
	* ** **	* ** **	* * *	**** *	* ** *	***** *

id=31587 gene=FBgn0051163 name=SKIP segment=chr3R.18111424.18113518.1 type=IN VIEW

Figure 191: CS=11.7



D. Mel	gaagactg	gtaagttaaata..4452..	ttgctc--gattctcgggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	454..	ctctatttacag	accctgca
D. Sec	gaagactg	gtaagttaaata..4460..	ttgctc--gattctcgggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	446..	ctctatttacag	accctgca
D. Ere	gaagactg	gtaagttaaata..4470..	gttctt--ggttctgggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	436..	ctccatttacag	accctgca
D. Ana	gaagactg	gtaagttaaaga..4480..	attctc--ggttctcgggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	426..	actcttttacag	accctgca
D. Gri	gaagactg	gtaagctaaact..3986..	gtcttttgggtat--gacctc----	TGAT	TATGTT	aaTGGCagcgtggcagcaagccagcca..	922..	ttgtatttacag	acattaca
D. Moj	gaagactg	gtaagtttctct..4053..	ctctctctgtggcat--gacctc----	TGAT	TATGTT	aaTGGCagcctggcagcctggcagcg..	855..	gtctatttgcag	acgctgca
D. Per	gaagactg	gtaagtccttaa..4484..	ttcttt--ggttctgagttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	422..	tctatttgcag	accctgca
D. Pse	gaagactg	gtaagtccttaa..4501..	ttcttt--ggttctgagttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	405..	tctatttgcag	accctgca
D. Vir	gaagactg	gtaagttgcagc..3492..	gagctctgtggcat--gacctc----	TGAT	TATGTT	aaTGGCagcgtggcagcaagccagca..	1416..	ttcttttacag	acactaca
D. Wil	gaagactg	gtaagtcacaaa..4528..	tttttttgggttc--ggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	378..	ttctatttacag	acactaca
D. Yak	gaagactg	gtaagttaaata..4444..	ttgctc--gattctcgggttctt	GTAGCCAATTCGT	GAAAT	ttaagcgtggcacagacatg----	462..	ctccatttacag	accctgca
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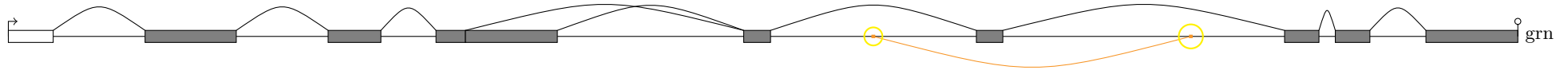
id=15107 gene=FBgn0001138 name=grn segment=chr3R\_3979124\_3986684\_-1 type=IN

D. Mel	gaagactg	gtaagttaaata..4554..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacgc----	350..	ctctatttacag	accctgca
D. Sec	gaagactg	gtaagttaaata..4561..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacgc----	343..	ctctatttacag	accctgca
D. Ere	gaagactg	gtaagttaaata..4568..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacgc----	336..	ctccatttacag	accctgca
D. Ana	gaagactg	gtaagttaaaga..4606..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacga----	298..	actcttttacag	accctgca
D. Gri	gaagactg	gtaagctaaact..4107..	ggcaacaat-taaaaatcaaa	GTCAAACATGATCA	-----	-acgccagtttagggccgcgt..	804..	ttgtatttacag	acattaca	
D. Moj	gaagactg	gtaagtttctct..4158..	ggcaacaat-taaaaatcaaa	GTCAAACATGATCA	-----	-acgccagtttagggccctcgt..	753..	gtctatttgcag	acgctgca	
D. Per	gaagactg	gtaagtccttaa..4600..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaaggc----	304..	tctatttgcag	accctgca
D. Pse	gaagactg	gtaagtccttaa..4602..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaaggc----	302..	tctatttgcag	accctgca
D. Vir	gaagactg	gtaagttgcagc..3588..	ggcaacaat-taaaaatcaaa	GTCAAACATGATCA	-----	-acgccagtttagggccgcgt..	1323..	ttcttttacag	acactaca	
D. Wil	gaagactg	gtaagtcacaaa..4629..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacgc----	275..	ttctatttacag	acactaca
D. Yak	gaagactg	gtaagttaaata..4545..	-gcagttttgtaaaaattgtc	ATTTT	aATGAATTG	atGCTGC	tgttaa-ccaagtcgaacgc----	359..	ctccatttacag	accctgca
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id=15107 gene=FBgn0001138 name=grn segment=chr3R\_3979124\_3986684\_-1 type=IN VIEW

Figure 192: CS=10.56





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D. Sec	gaagactg	gtaagttaata... 4507... ggcacagacatgatcccagc-----	TTGTTGTTGCTGTTGTTcGCTGCTGT	-tgtttttgggcagttttgta-----	... 393... ctctatttacag	accctgca
D. Ere	gaagactg	gtaagttaata... 3127...--aagcg-----ccatctgttttggg	TGTTtGCTGTcGCTGTtGTTGTTGCT	tggttttgggcagttttgta-----	... 1773... ctccatttacag	accctgca
D. Ana	gaagactg	gtaagtgaaga... 4559...-----cttgccctgcttcgagtgag	TGTTGTTGCTGCTG	-----ctggtgttttgggcagttt	... 352... actcttttacag	accctgca
D. Gri	gaagactg	gtaagctaaact... 3228... gtatgtgacttgttgcgtt-----	GTCATTGTTGttGTTGTTGTT	attattgttctgctgactgtt-----	... 1676... ttgtatttacag	acattaca
D. Moj	gaagactg	gtaagtttctct... 3382... gcaagcg-----ccatctgtat-gc-----	CAGCTGCTGCTGCTGCT	gctgctgttgtttgagttt-----	... 1526... gtctatttgag	accctgca
D. Per	gaagactg	gtaagtccttaa... 3853...--ctcactttttcgcatttgg	TGAAaaTGTTACAAGctCGTT	-----aacacacgacagtgccacca... 1051... tctattttgcag	accctgca	
D. Pse	gaagactg	gtaagtccttaa... 4549...-gacacagacatgccctcct	TGTTGcTGTTGTTGTTcTGCTGTTGTTTTG	-----ggcagttttgtaaaaattgt... 344... tctattttgcag	accctgca	
D. Vir	gaagactg	gtaagttgcagc... 3349...--caagtcgagctgtctgt--at-----	GTGAAatTGTTACAAGctCGTT	-----aacacacaacaacagtgcca... 1554... ttctttttacag	acactaca	
D. Wil	gaagactg	gtaagtcaaaa... 3779...-----gttgtg--tgtctgctaaaaat	TGTTACAAGctCGTT	-----aacacaacacagtgcca... 1131... ttctatttacag	acactaca	
D. Yak	gaagactg	gtaagttaata... 4501...-----tgatcccagctgttgttgc	TGTTGTTGCTGCTGTTGTT	-----tttgggcagttttgtaaaaa-----	... 405... ctccatttacag	accctgca
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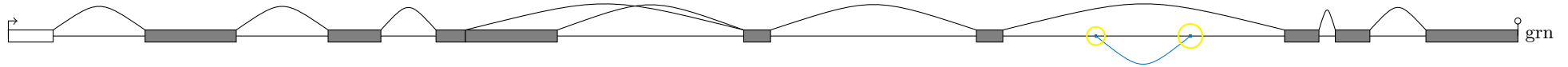
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D. Sec	ttcacaat	gtaagtatgaaa... 2837...-----gccaagggaatcgctgtgct	GCAGCAGCA-CAGCAGCAGCAACAA	-----acgcttcaagtaaaaatata... 464... taatttttccag	gtcaatcg	
D. Ere	ttcacaat	gtaagtattctgc... 2870...-----gccaagggaatcgctgtgct	GCAGCAGCA-CAGCAGCAGCAGCA	-----gaggcagcagcaacaacgc---... 523... taatttttccag	gtcaatcg	
D. Ana	tgcaacaat	gtaagtattcttt... 2622...-----attgcatatgaagag--ag-gcc-----	CAGCAGCAGCAGCA	-----gcagcagcaacaatggccac---... 686... atttttttgcag	gtcaatcg	
D. Gri	tgcaacaat	gtaagttagaag... 3318...-----atataagcggcaggcag-gc--	AGCAGCAGCctCAACAATGGC	-----caagctgagcgactcaca... 382... attgttttgcag	gtcaatcg	
D. Moj	tgcaacaat	gtaagtacaaaa... 2994... aattaagcttttgagaagg-----	AGCAGCAGCAGCAGCTG	-----ctgctgttctgtttagtct---... 995... ctctccatgcag	gtcaatcg	
D. Per	tgcaacaat	gtaagtacattt... 3109... cgcttatctgatcgtgtaga-----	AATGCTTGTAAATcTTCA	-ttttcacttcccggttgcac---... 200... tactttttgcag	gtcaatcg	
D. Pse	tgcaacaat	gtaagtacattt... 2835...-----aagagagccagcagcagca	CAAGCAGCAGCAGaAGCAGCAACaTGGCA	attggcca---agggaaagactaca... 378... tactttttgcag	gtcaatcg	
D. Vir	tgcaacaat	gtaagtaaaaag... 3819... cgcttatctgatcgtgtaga-----	AATGCTTGTAAATcTTCA	-tttcacttcccggttcccga---... 241... ctcttgttgcag	gtcaatcg	
D. Wil	tgcaacaat	gtaagtaaaaag... 3629... cgcttatctgatcgtgtaga-----	AATGCTTGTAAATcTTCA	-cttcatttccactcccgggt---... 247... ctctttttacag	gtcaatcg	
D. Yak	ttcacaat	gtaagtattctgc... 2891...-----gggaatcgctgtgctgcagc	AGCAGCA-ctGCAGCAGCAGCA	-----acaacagcttcaagtaaaaa-----	... 494... ctaattttccag	gtcaatcg
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id=15109 gene=FBgn0001138 name=grn segment=chr3R.3975456\_3978979\_-1 type=IN VIEW

Figure 193: CS=8.58





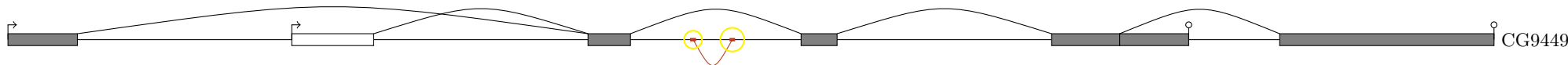
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D.Sim	ttcacaat	gtaagtatgaaa...1174...-ttgggtggctgaaaaagcga---	AATTTaTTTTGCAAAAATTT	-----tccttcaattggacagtggc-...2176...taatntttccag	gtcaatcg
D.Sec	ttcacaat	gtaagtatgaaa...1173...-ttgggtggctgaaaaagcga---	AATTTaTTTTGCAAAAATTT	-----tccttcaattggacagtggc-...2131...taatntttccag	gtcaatcg
D.Ere	ttcacaat	gtaagtatctgc...1151...-ttgggtggctgaaaagcga---	AATTTaTTTTGCAAAAATTT	-----tccttcaattggacagtggc-...2244...taatntttccag	gtcaatcg
D.Ana	tgcaacaat	gtaagtatcttt...1149...-ggcttttcaggcga---	aatgta-TTTTTGCAAAAATTT	-----tccttcaattggacagtggc-...2158...atntntttccag	gtcaatcg
D.Gri	tgcaacaac	gtaagtagaaa...1742...-ttggacagtgtcccatcttg---	ATAAGATGCCAATCA	-----gcgctgctttttgatttct-...1964...attgntttccag	gtcaatcg
D.Moj	tgcaacaat	gtaagtacaaaa...2193...attgctcagtgnttggtt---	GTTGTGCTGTTGTT	-----gntgnttggcctagctgca...1798...ctctccatgcag	gtcaatcg
D.Per	tgcaacaat	gtaagtacattt...2009...-taaaaaagttaatctgcaga-----	TGCTGCTGCTGCTG	---ctgc---tgctccccggcgaga---...1304...tactntttccag	gtcaatcg
D.Pse	tgcaacaat	gtaagtacattt...1107...-ttggacagtggcccatcgcg---	ATAAGATGCCAATCA	-----ggcacatntttgtagctat-...2121...tactntttccag	gtcaatcg
D.Vir	tgcaacaat	gtaagtagaaa...2208...-ttggacagtgtcccatcttg---	ATAAGATGCCAATCA	-----gcg-gctttttgattgctc...1856...ctctgntttccag	gtcaatcg
D.Wil	tgcataat	gtaagtagaaa...2839...cacaatttgcgtaaacgct---	AGAGAGACTATCAaTTACGAAAA	gaatggag-----attgccagccc---...1027...tctntttccag	gtcaatcg
D.Yak	ttcacaat	gtaagtatctgc...1183...-ttgggtggctgaaaagcga---	AATTTaTTTTGCAAAAATTT	-----tccttcaattggacagtggc-...2202...ctaantttccag	gtcaatcg
	* ** **	*****	*		* ** * *****

id=15109 gene=FBgn0001138 name=grn segment=chr3R.3975456.3978979.-1 type=IN

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D.Sim	ttcacaat	gtaagtatgaaa...2155...-gttcgttccac-gctcgattt-----	AGATTTaTGCAaAAAAAGTT	-aatctgctgagctgatgctg--...1194...taatntttccag	gtcaatcg
D.Sec	ttcacaat	gtaagtatgaaa...2146...-gttcgttccac-gctcgattt-----	AGATTTaTGCAaAAAAAGTT	-aatctgctgagctgatgctg--...1157...taatntttccag	gtcaatcg
D.Ere	ttcacaat	gtaagtatctgc...2145...-gttcgttccac-gctcgattt-----	AGATTTaTGCAaAAAAAGTT	-aatctgctgagctgatgctg--...1249...taatntttccag	gtcaatcg
D.Ana	tgcaacaat	gtaagtatcttt...1878...-gttctctctac-gctcgattt-----	AGATTTaTGCAaAAAA	----aagttaatctgctgatgctg--...1427...atntntttccag	gtcaatcg
D.Gri	tgcaacaac	gtaagtagaaa...1940...-tgctgagcgtctgcccag-----	TGATTGGCAcaTTTTAT	-----ggaaatgctgac-tgcattta--...1764...attgntttccag	gtcaatcg
D.Moj	tgcaacaat	gtaagtacaaaa...2994...-aattaaagcttttgagaagg-----	AGCAG-CAG	-----CAGCAGCtgctgctgttg--tgntgatg--...997...ctctccatgcag	gtcaatcg
D.Per	tgcaacaat	gtaagtacattt...2914...-cattgcatatgaagagagcc-----	CAG-CAG	-----CAGCAGCagcagagaagcagcaacaat---...399...tactntttccag	gtcaatcg
D.Pse	tgcaacaat	gtaagtacattt...1274...-ggcctctctgcgagcccaag-----	TGATTGGCAcaTTTTAT	-----ggaaatggtgcccgtacagtg--...1952...tactntttccag	gtcaatcg
D.Vir	tgcaacaat	gtaagtagaaa...2402...-ggctgagcgtctggccatg-----	TGATTGGCAcaTTTTAT	-----ggaaatggtgac-tgcattta--...1660...ctctgntttccag	gtcaatcg
D.Wil	tgcataat	gtaagtagaaa...2958...-tgcgttttttagctaagtgc	TTTTgTGTAAGTGATAcGTTTTTTT	-----ttgatttcatatcatgtt...906...tctntttccag	gtcaatcg
D.Yak	ttcacaat	gtaagtatctgc...2146...-gttcgttccac-gctcgattt-----	AGATTTaTGCAaAAAAAGTT	-aatctgctgagctgatgctg--...1238...ctaantttccag	gtcaatcg
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id=15109 gene=FBgn0001138 name=grn segment=chr3R.3975456.3978979.-1 type=IN VIEW

Figure 195: CS=7.2



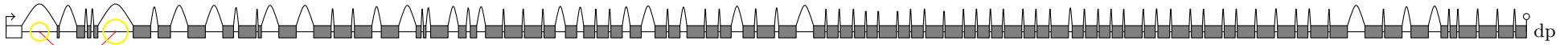
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D.Sim	taacaaat	gtgagtggagaa...68...--caccggaatccccttaccg	GCAA	GCAT	ttAAATA	Aaattgaaatgcaaatgtttt...219...-tcaacgctgcag	aatggcaa	
D.Sec	taacaaat	gtgagtggagaa...80...--caccggaatccccttaccg	GCAA	GCAT	ttAAATA	Aaattgaaatgcaaatgtttt...218...-tcaacgctgcag	aatggcaa	
D.Ere	taacaaat	gtgagtggagaa...68...--caccggatcccattctccg	GCAA	GCAT	ttAAATA	Aaattgaaatgcaaatgtttt...221...-tcaacgctgcag	aatggcaa	
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D.Vir	taacaaat	gtgagtcgagaa...95...ttcagcccgaaaacca---	cgca	GCAA	GCAT	ttAAATA	Aaattgaaatgcaaatgtttg...251...atcaacgct-cag	aatggcaa
D.Yak	taacaaat	gtgagtggagaa...58...--gttcccgctccattccc	GCAA	GCAT	ttAAATA	Aaattgaaatgcaaatgtttt...237...-tcaacgctgcag	aatggcaa	
	* ****	***** ** *	*	* ****	*****	***** ** *	*****	

id=21059 gene=FBgn0036875 name=CG9449 segment=chr3L\_19487522\_19487919\_-1 type=IN

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D.Sim	taacaaat	gtgagtggagaa...159...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...129...-tcaacgctgcag	aatggcaa	
D.Sec	taacaaat	gtgagtggagaa...171...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...128...-tcaacgctgcag	aatggcaa	
D.Ere	taacaaat	gtgagtggagaa...157...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...133...-tcaacgctgcag	aatggcaa	
D.Gri	ttacaaat	gtgagttgagca...218...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	caaatgcaagcatttatt...131...atcaacgct-cag	aatggcaa	
D.Moj	taacaaat	gtgagtcgagca...248...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...154...atcaacgct-cag	aatggcaa	
D.Per	taacaaat	gtgagtggagaa...181...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...173...-tcaacgctccag	aatggcaa	
D.Pse	taacaaat	gtgagtggagaa...181...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...173...-tcaacgctccag	aatggcaa	
D.Vir	taacaaat	gtgagtcgagaa...198...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...149...atcaacgct-cag	aatggcaa	
D.Yak	taacaaat	gtgagtggagaa...153...ttaacatatacacatgcata	TGTTTATGC	aaTTGC	aaaaatgcaaggcatttatt...143...-tcaacgctgcag	aatggcaa	
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Figure 196: CS=6



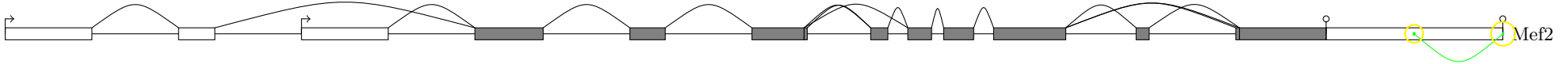
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D.Sec	ataaaatg	gtgagcacattt...3797...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtgg...1111...	atctctttgcag	caaaaatg
D.Ere	ataaaatg	gtgagcacattt...3765...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtgg...1143...	atctctttgcag	caaaaatg
D.Ana	ataaaatg	gtgagcagtaat...3793...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtgg...1115...	ttctctttgcag	caaaaatg
D.Gri	agaaaatg	gtgagcaaatgt...4627...	tgctcatgtttgcgcataaaa	TTTCAA	TGTCATTTA	cccgtcttcgcacttgccac...282...	gtatcatttcag
D.Per	ataaaatg	gtgagcccgact...4016...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtaa...892...	gtttctttgcag	caaaaatg
D.Pse	ataaaatg	gtgagcccgact...4016...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtaa...892...	gtttctttgcag	caaaaatg
D.Vir	agaaaatg	gtgagcaaatat...3732...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccgaaatagataaatcgtac...1176...	atgtcatttcag	caaaaatg
D.Wil	aaaaaatg	gtgagcaaatgt...3690...	agtatgtattt-tatttaagc	GTTTATTAGCTGATAAA	ccaaaatagataaatcgcag...1218...	gtttcttttag	caaaaatg
D.Yak	ataaaatg	gtgagcacattt...3763...	agtgtgtattt-tatttaagc	GTTTATTAGCTGATAAA	ctgaaatagataaatcgtgg...1145...	atctctttgcag	caaaaatg
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id=34919 gene=FBgn0053196 name=dp segment=chr2L.4574343.4591512.-1 type=I5

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D.Sec	ttgtgaag	gtaagttacca...3637...	-----	ccgagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacgg...1272...	cttctcccatag	acattgac
D.Ere	ttgtgaag	gtaagttgtaca...3454...	-----	ccgagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacgg...1455...	cttccccctag	acattgac
D.Ana	ctgtgaag	gtaagtcagca...3901...	-----	ccgagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacgg...1008...	cctttccacag	acgttgac
D.Gri	atgtgaag	gtaagtgccagt...3188...	accgcattgcataaagtaat	-----	TAAA	TGACATTGAAA	cttagaacatagaatgcttc-	...1721...	atcttcttgtag	acattgac
D.Per	ctgtgaag	gtaagtgccagt...3725...	-----	aggagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacga...1184...	ctctacttgtag	acattgac
D.Pse	ctgtgaag	gtaagtgccagt...3746...	-----	aggagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacga...1163...	ctctacttgtag	acattgac
D.Vir	ttgtgaag	gtaagtgccagc...3646...	-----	tagagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgcgcaa...1263...	ttgtgttgtag	acattgac
D.Wil	ttgtgaag	gtaagtcataa...3972...	-----	tagagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacga...916...	tgcatgttgtag	acattgac
D.Yak	ttgtgaag	gtaagttctaca...3585...	-----	ccgagtgatgatcctcttaa	TTTATaAGCTAA	-----	AAAC	--tagtaattataactgaacgg...1324...	tctccccatag	acattgac
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id=34927 gene=FBgn0053196 name=dp segment=chr2L.4564190.4570478.-1 type=IN VIEW

Figure 197: CS=14



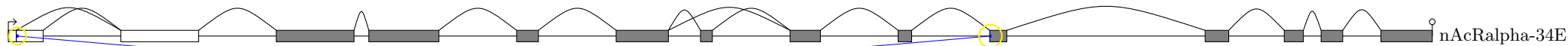
D.Mel	agacaaac	aaaaagcaaaaa..1519..	tgctaacaacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttgatgaa...	1029..	ttttggcaactg	actgtctg
D.Sim	agacaaac	aaaaagcaaaaa..1490..	tgctaacaacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttgatgaa...	1015..	ttttggcaactg	actgtctg
D.Sec	agacaaac	aaaaagcaaaaa..1494..	tgctaacaacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttgatgaa...	1007..	ttttggcaactg	actgtctg
D.Ere	agacaaac	aaaaagcaaaaa..1505..	tgctaataacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttgatgaa...	995..	ttttggcaactg	actgtctg
D.Gri	agtcaaca	aaaacaacaaca..1953..	gttaattgaaacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttgaattaaca--..	1467..	ttttggcaactg	aatttcac
D.Per	atacaaaa	aacaaagcgaaa..1579..	tggtatataacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttaataaa...	1324..	ttttggcaactg	acttttca
D.Pse	atacaaaa	aacaaagcgaaa..1557..	tggtatataacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--taaataaa...	1307..	ttttggcaactg	acttttca
D.Wil	acagcaac	aaatttcaaaaa..2957..	attcattatttttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttatgaac...	1174..	ttttggcaactg	aaatttgg
D.Yak	agacaaac	agaaaagcaaaaa..1502..	tgctaataacttcactgtg	TAGTgt	TGCCtt	AAAAA	cagtcctcttt--ttgatgaa...	1008..	ttttggcaactg	agtgtctg
	*	*	*	*	*	*	*****	*	*****	*

id=26732 gene=FBgn0011656 name=Mef2 segment=chr2R.5801001.5803629\_-1 type=E3

D.Mel	agacaaac	aaaaagcaaaaa..2584..	agaacattttaataaaacc	TTTTGGCAACTG	actgtctg
D.Sim	agacaaac	aaaaagcaaaaa..2541..	agaacattttaataaaacc	TTTTGGCAACTG	actgtctg
D.Sec	agacaaac	aaaaagcaaaaa..2537..	agaacattttaataaaacc	TTTTGGCAACTG	actgtctg
D.Ere	agacaaac	aaaaagcaaaaa..2536..	agaacattttaataaaacc	TTTTGGCAACTG	actgtctg
D.Gri	agtcaaca	aaaacaacaaca..3456..	gaaacttttaataaaacc	TTTTGGCAACTG	aatttcac
D.Per	atacaaaa	aacaaagcgaaa..2939..	agaacattttaataaaacc	TTTTGGCAACTG	acttttca
D.Pse	atacaaaa	aacaaagcgaaa..2900..	agaacattttaataaaacc	TTTTGGCAACTG	acttttca
D.Wil	acagcaac	aaatttcaaaaa..4167..	aaaattttaataaaacc	TTTTGGCAACTG	aaatttgg
D.Yak	agacaaac	agaaaagcaaaaa..2546..	agaacattttaataaaacc	TTTTGGCAACTG	agtgtctg
	*	*	*	*	*

id=26732 gene=FBgn0011656 name=Mef2 segment=chr2R.5801001.5803629\_-1 type=E3 VIEW

Figure 198: CS=8.64



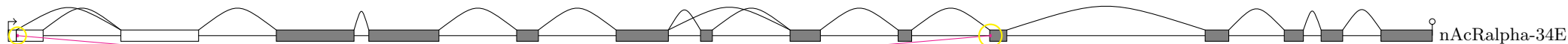
D.Mel	tcgctggc	aatgctgcacgggcatcgggctcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Sim	tcgctggc	aatgctgcacgggcatcgggctcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Sec	tcgctggc	aatgctgcacgggcatcgggctcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Ere	tcgctggc	aatgctgcacgggcatcgggctcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Gri	tggctggc	aattgctgctgtcagcgcattcagttggtgttccggtttcgggt	TGTGCT	GTTaGTTg
D.Per	tggctggc	actgttggacgagcatcggattcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Pse	tggctggc	actgttggacgagcatcggattcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
D.Wil	tggttggt	tatgttggacgagcatcgcattcagttggtgttccggtttcgggt	TGTGCT	GTTtGTTg
D.Yak	tcgctggc	aatgctgcacgggcatcgggctcagttggtgttccggtttcgggt	TGTGCT	GTcaGTTg
	* * *	* * ** * *****		** ****

id=97136 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L.14040171\_14040221.1 type=E5

D.Mel	attgctgg	gtaagatcattt...1669...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Sim	attgctgg	gtaagatcattt...1590...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Sec	attgctgg	gtaagatcattt...1590...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Ere	actgctgg	gtaagatcattt...1632...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Gri	gctgttag	gtaagatgattt...1731...ataatgacaacacgccaac	CAACcAACAG	gTACA	tat
D.Per	tctgttag	gtaagaccattt...1786...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Pse	tctgttag	gtaagaccattt...1790...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D.Wil	tctgttag	gtaagataattt...2562...atattgacaacacgccaac	CAACcAACAG	gTACA	tat
D.Yak	attgctgg	gtaagatcattt...1794...atattgacaacacgccaac	CAACcaACAG	gTACA	tat
	* * *	***** ****	*** *****	*****	

id=97154 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L.14081747\_14083457.1 type=IN VIEW

Figure 199: CS=4.32



D. Mel	gt	TGTGCT	GTcaGTTG	cctttt-----	tgcacagcggctga...	133...	--gtctctctccgg	gtgtgtgc
D. Sim	gt	TGTGCT	GTcaGTTG	cctttt-----	tgcacagcggctga...	131...	gctctctctccgg	gtgtgt--
D. Sec	gt	TGTGCT	GTcaGTTG	cctttt-----	tgcacagcggctga...	131...	gctctctctccgg	gtgtgt--
D. Ere	gt	TGTGCT	GTcaGTTG	cctttt-----	tgcacagcggctga...	133...	--gtctctctccgg	gtgtgtgc
D. Gri	gt	TGTGCT	GTTaGTTG	ccttttcc----	tgcacagc--caag...	121...	--gtctgtgtcttg	gtctgtgt
D. Per	gt	TGTGCT	GTcaGTTG	cctttttctcctg	gcacagc-----	103...	--gagtgcgtgcga	gcgtgtgt
D. Pse	gt	TGTGCT	GTcaGTTG	cctttttctcctg	gcacagc-----	103...	--gagtgcgtgcga	gcgtgtgt
D. Wil	gt	TGTGCT	GTTtGTTG	ccttcttttccac	acacagg-----	254...	--ttctctctgct	gcgtgtgt
D. Yak	gt	TGTGCT	GTcaGTTG	cctttt-----	tgcacagcggctga...	140...	--gtctctctccgg	gtgtgtgc
	*****	**	*****	*	****		*	*
								* **

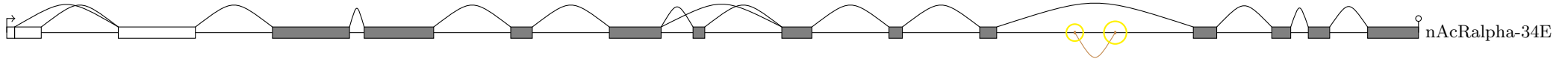
id=97137 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L.14040222.14040394.1 type=A5

D. Mel	attgctgg	gtaagatcattt...	1669...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Sim	attgctgg	gtaagatcattt...	1590...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Sec	attgctgg	gtaagatcattt...	1590...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Ere	actgctgg	gtaagatcattt...	1632...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Gri	gctgttag	gtaagatgattt...	1731...	ataatgacaacacgccaac	CAACcAACAG	gTACA	tat
D. Per	tctgttag	gtaagaccattt...	1786...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Pse	tctgttag	gtaagaccattt...	1790...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
D. Wil	tctgttag	gtaagataattt...	2562...	atattgacaacacgccaac	CAACcAACAG	gTACA	tat
D. Yak	attgctgg	gtaagatcattt...	1794...	atattgacaacacgccaac	CAACcaACAG	gTACA	tat
	** * *	*****	****	***	*****	*****	*****

id=97154 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L.14081747.14083457.1 type=IN VIEW

Figure 200: CS=12.42





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D.Mel ccgaatgg gtaagttgcaaa...2654...gc---aggcgggcccggggccagg-----TGCATtaGAAATGTGC-----atgcccaagaagtccttttt...1675...-cctgccgcttag atacgcat
D.Sim ccgaatgg gtaagttgcaaa...2590...tc---aggcgggcccggggccagg-----TGCATtaGAAATGTGC-----atgcccaagaagtccttttt...1664...-cctgccgcttag atacgcat
D.Sec ccgaatgg gtaagttgcaaa...2701...-----caccccgcttggcccgcgct---TTTGTgTGATAACAACAAAT-----caatttgcgcaaaatttgca---...1549...-cctgccgcttag atacgcat
D.Ere ccgaatgg gtaagttgcaaa...2536...---gacagcaggcccggggccagg-----TGCATtaGAAATGTGC-----atgcccaagaagtccttttg...1703...-cctgccgcttag atacgcat
D.Gri ccgaatgg gtaagtttcaaa...2618...ttgagtcaattggtaaagca-----GGTGCATtaGAAATGTGaaagcgcttagggcatgtaca-----...1649...-acaaccatttag attcgcat
D.Per ccgaatgg gtaagtcacaaa...3068...---gaacgaaaattgagccaattGGCGAGgcAGGTGCATtaGAAATGTGC-----atgcacaaaaaatccttttg...1830...acctgccg-ttag atacgcat
D.Pse ccgaatgg gtaagtcacaaa...3077...---gaacgaaaattgagccaattGGCGAGgcAGGTGCATtaGAAATGTGC-----atgcacaaaaaatccttttg...1821...acctgccg-ttag atacgcat
D.Wil ccgaatgg gtaagtttaata...2975...-----aattggcaaaggaaggcagg-----TGCATtaGAAATGTGC-----atgtacaataagaagaagac...1934...acctgccg-ttag atacgcat
D.Yak ccgaatgg gtaagttgcaaa...2712...gctgacggcggggccggggcc-----AGGTGCATtaGAAATGTGC-----atgcccaagaagtccttttg...1729...-cctgccgcttag atacgcat
***** ***** * ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

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id=97156 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L\_14083568\_14087976.1 type=IN

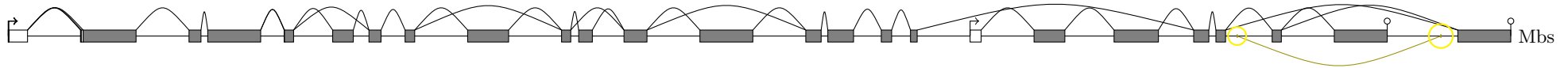
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D.Mel ccgaatgg gtaagttgcaaa...2918...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTA-----agct-ccccgcttgttgcca-----...1412...-cctgccgcttag atacgcat
D.Sim ccgaatgg gtaagttgcaaa...2854...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTA-----agctcccccgcttgttgcc-----...1401...-cctgccgcttag atacgcat
D.Sec ccgaatgg gtaagttgcaaa...3742...-gtatctgtatctgtatccgtGTTTGTgTTGTtagATCATAAA-----tttgcacgcccacgtgacta-----...507...-cctgccgcttag atacgcat
D.Ere ccgaatgg gtaagttgcaaa...2844...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTA-----agct-ccccgattgttgcca-----...1396...-cctgccgcttag atacgcat
D.Gri ccgaatgg gtaagtttcaaa...2923...-ttgcatgccacgtcctcaag-CGCATTTc-----cATGTA-----TCcatc-----gcttgttagcgacacc-----...1345...-acaaccatttag attcgcat
D.Per ccgaatgg gtaagtcacaaa...3411...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTaaGCTTCTCGTT-----tgtagccaaaaaagaaaa...1488...acctgccg-ttag atacgcat
D.Pse ccgaatgg gtaagtcacaaa...3413...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTaaGCTTCTCGCT-----tgtagccaaaaaagaaaa...1486...acctgccg-ttag atacgcat
D.Wil ccgaatgg gtaagtttaata...3366...-ttgccaaccacgttctcgaaGCGCATTTc-----cATGTA-----agcgtctctcctgcttgtta-----...1544...acctgccg-ttag atacgcat
D.Yak ccgaatgg gtaagttgcaaa...3016...tttgcacgcccacgtcctgaa-GCGCATTTc-----cATGTaaGCTT-----ccgcttgttgccaagaaa-----...1424...-cctgccgcttag atacgcat
***** ***** * * * * * ** * * ** ***** ** *****

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id=97156 gene=FBgn0028875 name=nAcRalpha-34E segment=chr2L\_14083568\_14087976.1 type=IN VIEW

Figure 201: CS=10.8



D. Mel	ccaatgcc	gtaagta---cat-gccacgcc-----c:::::a-----	CTGC	AGCAGTAAc	CAACAACAAAACAACA	---cgca-acacgat--aaacttagt...296...tcacattcgag	acaacgaa	
D. Sim	ccaatgcc	gtaagta---cat-gccacgcc-----c:::::a-----	CTGC	CAGCAGTAAc	CAACAACAAAACAACA	---cgca-acacat--aaacttagt...283...tcacattcgag	acaacgaa	
D. Sec	ccaatgcc	gtaagta---cat-gccacgcc-----c:::::a-----	CTGC	AGCAGTAAc	CAACAACAAAACAACA	---cgca-acactat--aaacttagt...283...tcacattcgag	acaacgaa	
D. Ere	ccaatgcc	gtaagta---cagaaacacgcc-----c:::::a-----	CTGC	AGCAGTAAc	CAACAACAAAACAACA	---cgca-acacat--aaacttagt...262...tcacattcgag	acaacgaa	
D. Ana	ccaacgcc	gtaagtagccatcagtcagtcgccc-----c:::::a-----		GTAAC	CAACA--aAAACAACA	---cgcaaacactataaaaactc...271...tcacattcgag	acatcgaa	
D. Gri	ccaatgcc	gtaagta---aacagctaaaca-----g:::::c-----			TAACA	AAAACAGAAACA	---acaacacacaacaaccac...380...acatattcgag	acaactaa
D. Moj	ccaatgcc	gtaagta---aaaagc---cc-----a:::::-----			TACA	ACAACAACA	---gtactcaataaatgaatac...469...ccacattcgag	accactaa
D. Per	ccaatgcc	gtaagta-----gacactgc-----c:::::agcaaagcaaagcaaagcatactctcagcagtaaccaac--		CAACA	--aAAACAACA	AAACA	cacacataaaaacaacagaaa...510...tcacattcgag	accactaa
D. Pse	ccaatgcc	gtaagta-----gacactgc-----c:::::agcaaagcaaagcaaagcatactctcagcagtaaccaac--		CAACA	--aAAACAACA	AAACA	cacacataaaaacaacagaaa...509...tcacattcgag	accactaa
D. Wil	ccaatgct	gtaagtactagtgaacatgtatatttaaatgc:::::-----		ACAAC	CAACaa-----	AAACA	---aaaatacaaaaacaacaac...463...tcacattcgag	acaacgaa
D. Yak	ccaatgcc	gtaagta---cagaaacacgcc-----c:::::a-----			AAACA	CAACAACAACA	---cgca-acacat--aaacttagt...281...tcacattcgag	acaacgaa

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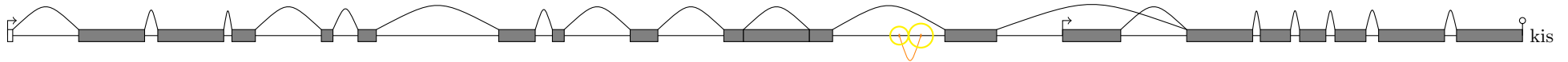
id=126521 gene=FBgn0005536 name=Mbs segment=chr3L.16070383.16070822.1 type=IN

D. Mel	ccaccacc	aaaaaaaaaaaa--...959...-agtaattactaattgtttct	TGTTGTTT	TGTTGTTGTTGCTGCTGTGG	ctgcggtaccgcatcccta--...117...tcggttcaacag	caactcga
D. Sim	ccaccacc	aaaaagaaaaag--...969...-ggtaattactaattgtttct	TGTTGTTT	TGTTGTTGTTGCTGCTGTGG	ctgcggtaccgcatcccca--...117...tcggttcaacag	caactcga
D. Sec	ccaccacc	aaaaataaaaag--...964...-ggtaattactaattgtttct	TGTTGTTT	TGTTGTTGTTGCTGCTGTGG	ctgcgactaccgcatcccca--...117...tcggttcaacag	caactcga
D. Ere	ccaccacc	aaacaagataaa--...953...-ggtaataactaattgtttct	TGTTGTTT	TGTTGTTGTTGCTGCTGTGG	ctgcggtaccgcatcccca--...116...tcggttcaatag	caactcga
D. Ana	ccaccatt	ataattaataaa--...184...-cccaatattatgagctggc	TGTTGTTT	TGTTGTTTAT	-----acacataccacataataat...912...ccctctcgacag	caactcga
D. Gri	ccaccacc	caaaaacaacaa--...810...taagatatacttttaactaa--	CTGTTT	GTTGTTG	-----atcttgttgttgtgtgctgat-----188...attgaaatatag	caacttga
D. Moj	actacaac	agcaacaacaac--...106...-tcatata-tatgagctgactg	TGTTT	GTTGTTGTA	-----taataccaataaaatatata-----948...atccaaatccag	caactcga
D. Per	ccaccatc	agcatcaaaaac--...211...-aaatactattatcagctggc	TGTTGTTG	TTTGTG	-----ttatacacataccac--aaaaa--1316...tttgatccacag	caactcga
D. Pse	ccaccatc	agcatcaaaaac--...211...-aaatactattatcagctggc	TGTTGTTG	TTTGTG	-----ttatacacataccac--aaaaa--1317...tttgattcacag	caactcga
D. Wil	--attaat	caagtgagaaaagt...2230...-----gtttcttttgttttcatcaa--	TGTTGTTGTTGT	-----	ttttagatgatgatgatga--...677...ccctttttatag	caactcga
D. Yak	ccaccacc	aaaaaaattaaa--...161...-cccaatattatgagctggc	TGTTGTTT	TGTTGTT	-----atacacataccacttataaa--...935...tcggttcaacag	caacttga

\* \* \* \* \*

id=126525 gene=FBgn0005536 name=Mbs segment=chr3L.16072690.16073858.1 type=IN VIEW

Figure 202: CS=9.9



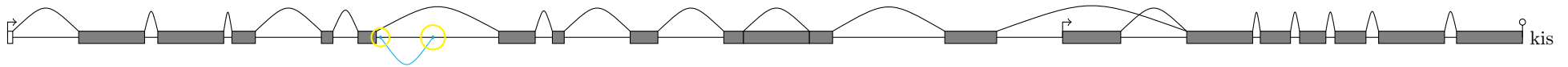
D.Me1	aggccaag	gtaggtgcaata...472...-----gaaatatgtagttttgttc-----	TTAGCTGTTGGCTGTA	TTAGTT	tcgaaccgtacaccgtagtt-----	...304...ttgtcccacag	ctccaggc
D.Sim	aggccaag	gtaggtgcaata...469...-----gaagtatgtagttttgttc-----	TTAGCTGTTGGCTGTA	TTAGTTG	cgaaccgtgcaccgtagtta-----	...307...ttgtcccacag	ctccaggc
D.Sec	aggccaag	gtaggtgcaata...473...-----gaagtatgtagttttgttc-----	TTAGCTGTTGGCTGTA	TTAGTTG	cgaaccgtgcaccgtagtta-----	...307...ttgtcccacag	ctccaggc
D.Ere	aggccaag	gtaagtccaatg...322...-----agaaa-tacgtagttttgtgc-----	TTAGCTGTTGGCTGTA	TTAGTTG	cgaaccgtgcaccgtagtta-----	...306...ttgtcccacag	ctccaggc
D.Ana	aggccaag	gtgagtgttaa...121...gcccgtagtagtgc---ttgta---CGTAGTTTTGTTC	TTAGCTGTTGGC		-----cgtagttagttgcaacct...274...gtccaccacag	ctccaggc	
D.Per	aagccaag	gtagtccctcc...834...-----gtagtgcaccagttgaaacGTACGTAGTTTTGTTC	TTAGCTGTTGGC		-----cgtagcttagttttgca...428...ctgcccacag	ctacaggc	
D.Pse	aggccaag	gtagtccctcc...817...-----gtagtgcaccagttgaaacGTACGTAGTTTTGTTC	TTAGCTGTTGGC		-----cgtagcttagttttgca...431...ctgcccacag	ctacaggc	
D.Vir	aggccaag	gtaagtgcgagt...793...-----aagaggacatattcaagtat---GTAGTTTTGTTC	TTAGCTGTTGGC		-----cgtagataactacttgctt...321...ctgcctcaacag	ctacaggc	
D.Wil	aggccaag	gtaagtccaat...883...-----ataaagtacgtagttttgtt---GCTAGCTGTTGGC	TTAGCTGTTGGC		-----cgtagcttatatatattgg...288...cttggcccacag	ctacaggc	
D.Yak	aggccaag	gtaagtccaatg...327...-----gtagtgcaccagttgaaac-TATGTAGT-TTGTTC	TTAGCTGTTGGCTGTA	TTAGTTG	cgaaccgtgcaccgtagtta-----	...305...ttgtcccacag	ctccaggc
		* * * * *	*****		****	* * * * *	** * * * *

id=87891 gene=FBgn0086902 name=kis segment=chr2L.226509.227371-1 type=IN

D.Me1	aggccaag	gtaggtgcaata...626...-gtaaataagaaaaatcattAACTAATGCAGCCAACAGCTGA	-----	taactaaactatgtaaacgctgacagagg-attgact:::ctgtgat-tgtcacatttgt	----cccacag	ctccaggc
D.Sim	aggccaag	gtaggtgcaata...622...tataaataagaaaaatcattTAAGTAAaGCAGCCAACAGCTGA	-----	taactaaactatgtaaacgctgacagagg-attgact:::ctgtgat-tgtcacatttgt	----cccacag	ctccaggc
D.Sec	aggccaag	gtaggtgcaata...626...tataaataagaaaaatcattTAAGTAAaGCAGCCAACAGCTGA	-----	taactaaactatgtaaacgctgacagagg-attgact:::ctgtgat-tgtcacatttgt	----cccacag	ctccaggc
D.Ere	aggccaag	gtaagtccaatg...474...tataaataagaaaaatcattTAAGTAAaGCAGCCAACAGCTGA	-----	taactaaactatgtaaacgctgacagagg-attgact:::ctgtgat-tgtcacatttgt	----cccacag	ctccaggc
D.Ana	aggccaag	gtgagtgttaa...301...---aagcaacatggaagccaaca---GCCAACAGCTGATTAACAAAACACTATG	-----	g-atcacact:::cttcgatctgtccatctgtgccaccacag	ctccaggc	
D.Per	aagccaag	gtagtccctcc...1034...---actaagaagattgaaaca---GCCAACAGCTGATTAACAAAACACTATG	-----	cagctggaagatgattatcctgaaggatgcatcagtc:::ctgtgtc-tgtccc-tctgc	----cccacag	ctacaggc
D.Pse	aggccaag	gtagtccctcc...1017...---actaagaacattgaaaca---GCCAACAGCTGATTAACAAAACACTATG	-----	cagctggaagatgattatcctgaaggatgcatcagtc:::ctgtgtc-tgtccc-tctgc	----cccacag	ctacaggc
D.Vir	aggccaag	gtaagtgcgagt...937...---actgacgaatctggcgaaca---GCCAACAGCTGATTAACAAAACACTATG	-----	ctgctgacccgctccctccact-----gcccccgcc:::ctc---tgcc-----tcaacag	ctacaggc	
D.Wil	aggccaag	gtaagtccaat...1209...---tcctaactttccctacttt---GCCAACAGCTacAGG	-----	:::ctc---tgcc-----tcaacag	ctacaggc	
D.Yak	aggccaag	gtaagtccaatg...495...tataaataagaaaaatcattTAAGTAAaGCAGCCAACAGCTGATTAACAAcACTATATA	-----	aaactgacagagg-attgact:::ctgtgat-tgtcacatttgt	----cccacag	ctccaggc
		* * * * *	*****			*

id=87891 gene=FBgn0086902 name=kis segment=chr2L.226509.227371-1 type=IN VIEW

Figure 203: CS=18



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D.Mel gccacgag gtaggaatgccaaaGGTATGGTAAAAGATACATTTacgcacact-ccaactgctgc...861...tttgctttacag gtcgcaac
D.Sim gccacgag gtaggaatgccaaaGGTATGGTAAAAGATACATTTacgcacact-ccaactgctgc...854...tttgctttacag gtcgcaac
D.Sec gccacgag gtaggaatgccaaaGGTATGGTAAAAGATACATTTacgcacact-ccaactgctgc...868...tttgctttacag gtcgcaac
D.Ere gccacgag gtaggaatgccaaaGGTATGGTAAAAGATACATTTacgcacact-ccaactgctgc...913...tttgacttacag gtcgcaac
D.Gri gccacgag gtaggaatgccaaaGTATGGTAAAAGATACA--ttcacgcact-ccaactgctg...1290...tacattttgcag gacgcaac
D.Moj gccacgag gtaggaatgccAAAGGTATGGTAAAAGATACA--ttcacgcact-ccaactgctg...1040...tttcatcgacag gacgcaat
D.Per gccacgag gtaggaacgcCAAaggTATGGTAAAAGATACAttcacgcacactccaactg----.1209...gttgctttacag gacgcaat
D.Pse gccacgag gtaggaacgcCAAaggTATGGTAAAAGATACAttcacgcacactccaactg----.1116...gttgctttacag gacgcaat
D.Vir gccacgag gtaggaatgccAAAGGTATGGTAAAAGATACA--ttcacgcact-ccaactgctg...1389...ttacgtttacag gacgcaat
D.Yak gccacgag gtaggaatgccaaaGGTATGGTAAAAGATACATTTacgcacact-ccaacttctgc...854...ttcgcttgacag gccgcaac
***** ***** *****

```

id=87881 gene=FBgn0086902 name=kis segment=chr2L.231035\_231962\_-1 type=IN

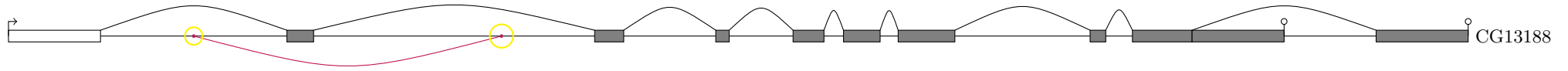
```

D.Mel gccacgag gtaggaatgcca...378...tgtatgtttgttgccatgcAAATGTATgcCTTTTACTATATC--aaatctgttacttttatgta-----..463...tttgctttacag gtcgcaac
D.Sim gccacgag gtaggaatgcca...381...tgtatgtttgttgccatgcAAATGTATgcCTTTTACTATATC--aaatctgttacttttttat-----..453...tttgctttacag gtcgcaac
D.Sec gccacgag gtaggaatgcca...381...tgtatgtttgttgccatgcAAATGTATgcCTTTTACTATATC--aaatctgttacttttttat-----..467...tttgctttacag gtcgcaac
D.Ere gccacgag gtaggaatgcca...401...tgtatgtttgttgccatgcAAATGTATgcCTTTTACTATATC--aaatctgttacttttatgta-----..492...tttgacttacag gtcgcaac
D.Gri gccacgag gtaggaatgcca...607...---atgtttgttgccatgcaatTGTATgcCTTTTACTATATC--aaccttttatgattataaa-----..664...tacattttgcag gacgcaac
D.Moj gccacgag gtaggaatgcca...498...---atgtttgttgccatgcaatTGTATgcCTTTTACTATaACCTTT----ttatgattatataatagct---..518...tttcatcgacag gacgcaat
D.Per gccacgag gtaggaacgcca...464...---atgtttgttgccatgcaatTGTATgcCTTTTACTATATTGaatctgttattattt-tgtac-----..723...gttgctttacag gacgcaat
D.Pse gccacgag gtaggaacgcca...464...---atgtttgttgccatgcaatTGTATgcCTTTTACTATATTGaatctgttattattt-tgtac-----..630...gttgctttacag gacgcaat
D.Vir gccacgag gtaggaatgcca...541...---atgtttgttgccatgcaatTGTATgcCTTTTACTATaACCTTT----tatgatt--tataatatctata...824...ttacgtttacag gacgcaat
D.Yak gccacgag gtaggaatgcca...395...tgtatgtttgttgccatgcAAATGTATgcCTTTTACTATATC--aaacctttacttttatgta-----..439...ttcgcttgacag gccgcaac
***** ***** ****

```

id=87881 gene=FBgn0086902 name=kis segment=chr2L.231035\_231962\_-1 type=IN VIEW

Figure 204: CS=14



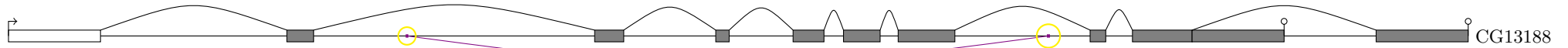
D. Mel	gcagaaag	gtgagttcgag...3547...	gaaagagact-tgtacaactt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	gcc-tgcaacag-...1364...	-cactctttgcag	aggacaga
D. Sim	gcagaaag	gtgagttcgag...3499...	aagagagact-tgtacaactt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	ggc-tgcaacag-...1412...	-cactctttgcag	aggacaga
D. Sec	gcagaaag	gtgagttcgag...3524...	aagagagact-tgtacaactt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	ggc-tgcaacag-...1387...	-cactctttgcag	aggacaga
D. Ere	gcagaaag	gtgagttcgtag...3474...	ccgagagact-tgtacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	ggc-tgcaacag-...1437...	-cactcattgcag	aggacaga
D. Ana	gcagaaag	gtgagttggagga...3550...	cactgagact-tgtacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	ggc-tgcaacag-...1361...	-atctcatttcag	aggacaga
D. Gri	agcaaaag	gtgagttagcatg...3183...	tagcaacaatatcagccaaa-	<b>ATTGAAAgGTGCAAAAT</b>	gcagcacttat-----	-----	tgcaagctca...1724...	-ttttttttcag	actcttcc
D. Moj	agcaaaag	gtgagttagcatg...2973...	gtcagacagt-cgtacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatgc-----	agcaggcaaca--...1938...	-tatcttttcag	actctcgc
D. Pse	acaaaaag	gtgagtacaaga...3473...	gctgatactctatacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatcgcataaagc-tgc-----	...1438...	-ctctctttacag	aaccacaa
D. Vir	agcaaaag	gtgagtaacatg...3237...	gtcagacagt-cgtacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatcc-----	agcaggcaaca--...1674...	gtatc-tttgcag	acactcac
D. Yak	gcagaaag	gtgagttcgtag...3458...	ccgagagact-tgtacaattt	<b>AACGGCTTTGTG</b>	-----	cataaatcg-----	agc-tgcaacag-...1453...	-cactctttgcag	aggacaga
	****	*****	* * *	* * *	**	** **	**	** ** *	*

id=65999 gene=FBgn0033668 name=CG13188 segment=chr2R.7827740.7837549.1 type=I5

D. Mel	tatacaag	gtgagttgttcg...4346...	----aagctaaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcacaacactca...	566...	tttgtctttcag	gagcacat
D. Sim	tatacaag	gtgagttgttcg...4368...	----aaacttaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcacaacactca...	544...	tttgcctttcag	gagcacat
D. Sec	tatacaag	gtaagttgttcg...4366...	----aaacataaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcacaacactca...	546...	tttgcctttcag	gagcacat
D. Ere	tatacaag	gtgagttgcttt...4397...	----aaacttaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcacaacactca...	515...	attgccttacag	gagcacat
D. Ana	tttacaag	gtgagtttacat...4384...	----aaacttaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggctcacacatacc...	312...	tatcatctacag	gaacacat
D. Gri	tttacaag	gtaagcgccaac...3378...	ttacaagttttactacatg	<b>ATTTatTTGCATTTTAAT</b>	gtgcggcctggcccgcctcga---	1528...	ctgattgtacag	gaacacat
D. Moj	tctataag	gtaagcctgacc...4671...	----aaagcacaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttgtctagcaaaaaaa...	241...	tgtctctctcag	gaacacat
D. Pse	tctacaag	gtaagtcacac...4637...	----aaacttaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcaaacacatag...	258...	ctattccaacag	gaacacat
D. Vir	tctacaag	gtaagttgctga...4697...	----aaagcacaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggctggcaaaaagt...	215...	tctctctcag	gaacacat
D. Yak	tatacaag	gtgagttgcct...4331...	----atacttaaaacgcaagcgcc--	<b>CAACAAGGCCGTT</b>	---cactttggcacaacactca...	581...	tttgcctttcag	gagcacat
	** ** **	** **	* * *	**	*	** *	** **	** **

id=66001 gene=FBgn0033668 name=CG13188 segment=chr2R.7837695.7843089.1 type=IN VIEW

Figure 205: CS=9.6



D. Mel	tatacaag	gtgagttgttcg...3112...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcccgc...1796...tttgtctttcag	gagcacat
D. Sim	tatacaag	gtgagttgttcg...3149...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcccgc...1759...tttgctttcag	gagcacat
D. Sec	tatacaag	gtaagttgttcg...3162...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcccgc...1746...tttgctttcag	gagcacat
D. Ere	tatacaag	gtgagttgttcg...3169...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcccgc...1739...attgccttacag	gagcacat
D. Gri	tttacaag	gtaagcgccaac...3372...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gctgcgccag...1536...ctgattgtacag	gaacacat
D. Moj	tctataag	gtaagcctgacc...2868...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gctgcgccag...2040...tgtctctctcag	gaacacat
D. Per	tctacaag	gtaagtccacac...3368...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcgcccgc...1498...cttccatcag	gaacacat
D. Pse	tctacaag	gtaagtccacac...3376...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcgcccgc...1515...ctattccaacag	gaacacat
D. Vir	tctacaag	gtaagttgctga...3014...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtggcagctc...1894...tctctctcag	gaacacat
D. Wil	tatacaag	gtatgttctcta...2870...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtggcagctc...2038...tttatgtgacag	gaacacat
D. Yak	tatacaag	gtgagttggcct...3157...aaaaggttaacaagtttcac	TACATGATTTA	TTTGCA	tttttaaatgt---gtgtgcccgc...1751...tttgctttcag	gagcacat
		* ** *** ** *	*****	*****	*	*** ** *****

id=66001 gene=FBgn0033668 name=CG13188 segment=chr2R.7837695.7843089.1 type=IN

D. Mel	ttccaaag	gtaagagaacag...744...agcgactggcccgc--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgcc...193...tttttctttcag	cgggacta
D. Sim	ttccaaag	gtaagagaacag...725...agcgactggcccgc--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgcc...184...tctttctttcag	cgggacta
D. Sec	ttccaaag	gtaagagaacag...719...agcgactggcccgc--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgcc...192...tctttctttcag	cgggacta
D. Ere	ttccaaag	gtaagaacataa...518...agcgactggcccgc--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgcc...174...tctttctttcag	cgggacta
D. Gri	ttccaaag	gtaagacaatta...420...--tcagcagcaacagaa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcacggaatggt...570...tttctttcacag	cgggacta
D. Moj	ttccaaag	gtgagagacaac...445...---agcaacaactgaaacataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcacggaatggt...902...tcctctccacag	cgggacta
D. Per	ttccaaag	gtaagagagaga...369...ggatttcagcaag--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgct...229...tctctttcacag	cgggacta
D. Pse	ttccaaag	gtaagagagaga...371...ggatttcagcaag--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgct...233...tctctttcacag	cgggacta
D. Vir	ttccaaag	gtgagtgacaaa...919...caacaacaatac--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcacggaatggt...598...tttccctaacag	cgggacta
D. Wil	ttccaaag	gtgagtgattta...496...caacagcagcaac--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcacggaatggt...274...tgcatttacag	cgggacta
D. Yak	ttccaaag	gtatgaaaataa...515...agcgactggcccgc--aa--ataac	TGCAAAc	GAATCG	cgTGTA	attaatatgcccgggaatgcc...188...tctttctttcag	cgggacta
		***** ** *	*****	*****	*****	*	*** *****

id=66011 gene=FBgn0033668 name=CG13188 segment=chr2R.7850487.7851506.1 type=IN VIEW

Figure 206: CS=12.98



```

D.Mel cacacaag gtgggttcggatc-----cggtttcggattcagattcggtttaacgtttgc---tgctactggggttttgtcttTGGAGtGTTTACCCCAATTTGT-----TaTTTTTCgTTGcatatatttttgtttgtt-----...804...gtatcgttcag
D.Sim cacacaag gtgggttcggatc-----cggattcggattcagattcggtttaacgtttgc---tgctgctggggattttgtcttTGGAGtGTTTACCCCAATTTGT-----TaTTTTTCgTTGcatatatttttgtttgtt-----...807...gtatcgttcag
D.Sec cacacaag gtgggttcggatc-----cggattcggattcagattcggtttaacgtttgc---ttctgctggggattttgtcttTGGAGtGTTTACCCCAATTTGT-----TaTTTTTCgTTGcatatatttttgtttgtt-----...801...gtatcgttcag
D.Ere cacacaag gtgggttcggatc-----cggattcggattcagattcggtttaacgtttgc---tgctgctggggattttgtcttTGGAGtGTTTACCCCAATTTGT-----tATTTTTCgTTGcatatatttttgtttgtt-----...813...gtatcgttcag
D.Ana cacacaag gttggtttagaagcgac-----cgg-----tgggggaatggttgt---ttctccg-----t-----GTTTACCCCAATTTCGT-----tgctgttccgtttgcaaac...771...cattcgttcag
D.Moj aacacaag gtgcgaccgat-----tctataattaattttatattttcgtttcagattttttcaggtgcct-----GCGAtGTTTACCCCAATTT-----caagcattacatatttattc-----...584...attgttttcag
D.Per gacgcaag gtgagttt-----tgggccacacgggtgttctgtttggagttttgtcattgctct-----GTTTACCCCAATTTT-TGtaCATTTaTTTTCaTTTTccgcaactgttttttactt-----...504...tcgccattgcag
D.Pse gacgcaag gtgagttt-----tgggccacacgggtgttctgtttggagttttgtcattgctct-----GTTTACCCCAATTTTGTtaCATTTaTTTTCaTTTTccgcaactgttttttattg-----...517...tcgccattgcag
D.Vir aacacaag gtgcgactgatttcaat-----ttgatcttaaatatgtttttagttttgtcgttcttcta-----t-----GTTTACCCCAATTT-----TTGCCATTCT-----atagctgggtgagctggcc...662...atatttttcag
D.Yak cacacaag gtgggtttggatc-----cggattcagattcagatttggtttagcgtttgc---tgctgctggggattttgtcttTGGAGtGTTTACCCCAATTTGT-----TaTTTTTCgTTGcgatattttttttgttt-----...812...atcgttcag
** **** ** * * ** * *****

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id=32820 gene=FBgn0003169 name=put segment=chr3R.10448026\_10448964\_-1 type=IN

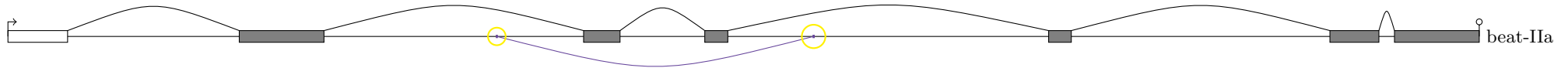
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D.Mel cacacaag gtgggttcggat...722...-----gcttttatctcgaacacaaaTGAGgGGAAAAAgaGATGcgAAATTGGGGgcGAACTTTCG-ttttttagttttcgttttgc...113...gtatcgttcag tgcccaag
D.Sim cacacaag gtgggttcggat...722...-----gcttttatctcgaacacaaaTGAGgGGAAAAAgaGATGcgAAATTGGGGgcGAACTTTCG-ttttttggttttcgttttgc...116...gtatcgttcag tgcccaag
D.Sec cacacaag gtgggttcggat...716...-----gcttttatctcgaacacaaaTGAGgGGAAAAAgaGATGcgAAATTGGGGgcGAACTTTCG-ttttttggttttcgttttgc...116...gtatcgttcag tgcccaag
D.Ere cacacaag gtgggttcggat...747...-----cgaacacaaaatgaggggaaaAAGAGATGCGAAATTTGGGGgcGAACTTTCG-ttttttggttttcgttttgc...113...gtatcgttcag tgcccaag
D.Ana cacacaag gttggtttagaa...663...-----aaatgggggaaaagagatGCGAAATTTGGGGgcGAAC-tttcgttttttggcttctgt-----...119...cattcgttcag tgcccaag
D.Moj aacacaag gtgcgaccgat...455...-----tatatatacaaga-catgcc-----AAATTGGGGacGAACttTCGTtttttccttttttaccgt...153...attgttttcag tgcccaaa
D.Per gacgcaag gtgagttttggg...396...agccctcttttatctcaaac--GAAATGagGGAAAaaGAGATGCAAAATTTGGGGgcGAAC-tttcgttttttggttctcgt-----...127...tcgccattgcag tgcccaag
D.Pse gacgcaag gtgagttttggg...410...agccctcttttatctcaaac--GAAATGagGGAAAaaGAGATGCAAAATTTGGGGgcGAAC-tttcgttttttggttctcgt-----...127...tcgccattgcag tgcccaag
D.Vir aacacaag gtgcgactgatt...432...-----ggtatatacagcagcataa-----AGAGaTGCCAAATTTGGGGgcGAAC-tttcgtttttcgttttgc-----...260...atatttttcag tgcccaaa
D.Yak cacacaag gtgggtttggat...730...-----gcttttatctcgaacacaaaTGAGgGGAAAAAgaGATGcgAAATTGGGGgcGAACTTTCG-ttttttggttttcgttttgc...113...atcgttcag tgcccaag
** **** ** * * ** * ***** ** *

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id=32820 gene=FBgn0003169 name=put segment=chr3R.10448026\_10448964\_-1 type=IN VIEW

Figure 207: CS=9.6



D. Mel	gagcatgg	gtaagtctgcca...	3760...	-----cacaagggactgttgggaa-	AGCCGCA	-AaTTAT	-gtgccattattcttaagggc---	1152...	ttctcgtttcag	agctcgtc
D. Sim	gagcatgg	gtgagtctgcca...	2627...	-----ttggctgcatgtaaacaaa	TCGCAaa	AGGATAAGG	acaaggcacttgaagctgg...	2282...	ttctcgtttcag	agctcgtc
D. Sec	gagcatgg	gtgagtctgcca...	3767...	-----cacaagggactgttgggaa-	AGCCGCA	-AaTTAT	-gtgccattattcttaagggc---	1145...	ttctcgtttcag	agctcgtc
D. Ere	gagcatgg	gtgagtctgcca...	2627...	-----ttggctgcatgtaaacaaa	TCGCAaa	AGGATAAGG	acaaggcacttgaagctgg...	2282...	atgtctttcag	agctcgtc
D. Ana	gagcatgg	gtaagtctgctt...	2808...	-----ctccatgcatgtaaacaaa	TCGCAaa	AGGATAAGG	acaaggcacttgaagctgg...	2101...	catgttttcag	agctcgtc
D. Gri	gacaatgg	gtgagtggctt...	3778...	-----catggagc--acattcaacca	AACA	CTAACaAGCAA	-aacttttgcagcattaagc---	1132...	taatcattcag	agttgggt
D. Moj	cacaatgg	gtaagtggcac...	2841...	gtatgttgttcggctgttaa	ACAAA	CGCAaa	AGGATAAGGccaatgcaattgtaagcaag...	2063...	gtttcgtttcag	agctggtc
D. Per	gagcatgg	gtaagtctgcaac...	2756...	-----tgctgcatgtaaacaaa	CGCA	agaAGGATAAGG	acaaggcacttgaagctgg...	2154...	ttccctttcag	agctcgtc
D. Pse	gagcatgg	gtaagtctgcaac...	2747...	-----tgctgcatgtaaacaaa	CGCA	agaAGGATAAGG	acaaggcacttgaagctgg...	2163...	ttccctttcag	agctcgtc
D. Vir	gacaatgg	gtgagtgtggt...	3287...	-----tgctgtgct-tgtaaacaaa	CGCA	agaAGGATAAGG	gcaatgcaattgtaagcgag...	1623...	ttttcattcag	agctgggt
D. Wil	gggactgg	gtaagttttcaa...	3452...	-----tggagccagccgctcggcaa-	AGCCGCA	-AaTTAT	-gtgccattattcttaagggc---	1460...	ccatttttcag	aacttgtc
D. Yak	gagcatgg	gtaagtctgcca...	2562...	-----tttgcgcatgtaaacaaa	TCGCAaa	AGGATAAGG	acaaggcacttgaagctgg...	2347...	ctgtctttcag	agctcgtc
		*** ** **		*		* * * *	**		** **	* * **

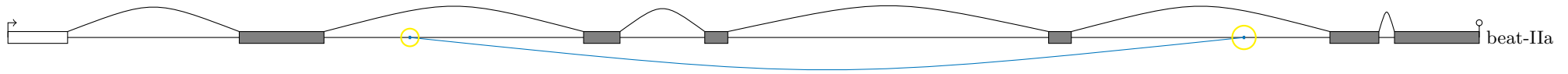
id=100622 gene=FBgn0038498 name=beat-IIa segment=chr3R.13158432.13171120\_-1 type=IN

D. Mel	agttgttg	gtaagtctggct...	1710...	tcgtcgacactaaaccca	AT	---AAcTTGCcGGCT	--aaacaataaattactgtagc-----	1863...	cctgtttttcag	aactgccc
D. Sim	agttgttg	gtaagtctggcg...	2333...	cgtggcacataaaataaaca	CTTTGCCTTGCGG	-----	ggc-gggcaattcaaggcatt-...	1299...	cctgtttttcag	aactgccc
D. Sec	agttgttg	gtaagtctggcg...	1747...	tcgtcgacactaaaccca	AT	---AAcTTGCcGGCT	--aaacaatagattactgtagc-----	1885...	cctgtttttcag	aactgccc
D. Ere	agttgttg	gtaagtctgact...	2290...	cgtggcacataaaataaaca	CTTTGCCTTGCGG	-----	ggc-gggcaattcaaggcatt-...	1229...	cctgtttttcag	aactgccc
D. Ana	agttgttg	gtaagtttcatt...	2255...	tgtggcacataaaataaaca	CTTTGCCTTGCGG	-----	ggcggggccattcagcgggc---	846...	atgttttcag	aacttccc
D. Gri	ggttgtag	gtaagtaaaaa...	3325...	taccaggaacaaagtaccg-	TTGCTGTTGcTGT	-----	gctgttctgttgcctttgg...	421...	atagtttcag	aacttccc
D. Moj	ggttgtag	gtaagttacaaa...	2863...	ccttacacataaaataaaca	CTTTGCCTTGCGG	CTTGT	ggagagcggcggcatcgagt-----	961...	atccattgcag	aactgccc
D. Per	agttgtcg	gtaagtctcata...	2178...	cgaggcacataaaataaaca	CTTTGCCTTGCGG	-----	ccgagctgtgcccgcacctg...	958...	cgtatttcag	agctgccc
D. Pse	agttgtcg	gtaagtctcata...	2151...	cgaggcacataaaataaaca	CTTTGCCTTGCGG	-----	ccgagctgtgcccgcacctg...	952...	cgtatttcag	agctgccc
D. Vir	agttgtgg	gtaagtaaaaa...	2408...	gcttacacataaaataaaca	CTTTGCCTTGCGG	ctttatggaagcagcgcgg-	-----	831...	ctattcttcag	agctgccc
D. Wil	agttgtgg	gtgagttcaccg...	1542...	tcgtcgacactaaaccca	AT	---AAcTTGCcGGCT	--aaacaataaattactacagc-----	1370...	ctccattccag	agttaccc
D. Yak	agttgttg	gtaagtctgact...	2332...	cgtggcacataaaataaaca	CTTTGCCTTGCGG	-----	ggc-gggcaattcaaggcatt-...	1390...	cctgtttttcag	agctgccc
		***** * ** **		* ** *		*****			* ** *	* * **

id=100626 gene=FBgn0038498 name=beat-IIa segment=chr3R.13153089.13156739\_-1 type=IN VIEW

Figure 208: CS=11.52





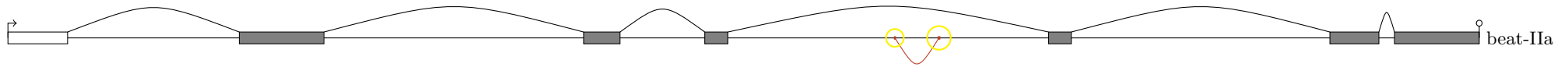
D.Mel	gagcatgg	gtaagtctgcc...	2870...	-----gct--gcaccttc---	ctgcaccta-	AACACTAACAGCAAAG	-ttttccgagcaataagcaag-----	...2038...	ttctcgtttcag	agctcgtc
D.Sim	gagcatgg	gtgagtctgcc...	3340...	ataatctccaggcttctt	-----	ATTTT-GCAATTT-A	ctgttgcccaggcaccggtg-----	...1572...	ttctcgtttcag	agctcgtc
D.Sec	gagcatgg	gtgagtctgcc...	2848...	-----act--gcaccttc---	ctgcaccta-	AACACTAACAGCAAAG	-ttttccgagcaataagcaag-----	...2060...	ttctcgtttcag	agctcgtc
D.Ere	gagcatgg	gtgagtgcgcca...	2875...	-----gct--gcaccttc---	ctgcaccta-	AACACTAACAGCAAAG	-ttttccgagcaataagcaag-----	...2033...	atgtcttttcag	agctcgtc
D.Ana	gagcatgg	gtaagtgtcggt...	3050...	cttgct--gcaccttc-----	caaccta-	AACACTAACAGCAAAG	-ttttccgagcaataagcaag-----	...1858...	catgttttcag	agctcgtc
D.Gri	gacaatgg	gtgagttggctt...	3872...	-----	cactttgagagtttcgactg-	ATTTT	TGCAATTTCA--	atctcaattatcaagcaaac-----	...1038...	taatcatttcag
D.Per	gagcatgg	gtaagtccaac...	2997...	atctcttgct--gcac--tc-----	caac	CTAAACACTAACAGCAAAGT	-ttttccgagcaataagcaag-----	...1907...	tccccttttcag	agctcgtg
D.Pse	gagcatgg	gtaagtccaac...	2998...	atctcttgct--gcac--tc-----	caac	CTAAACACTAACAGCAAAGT	-ttttccgagcaataagcaag-----	...1906...	tccccttttcag	agctcgtg
D.Vir	gacaatgg	gtgagttgtggt...	2689...	tttattgggt--gcaccgta-----	ca-	ACAAGCAAGCAAAACCCAA	-aaataacagccagctttttc...	...2217...	tttctatttcag	agctcgtt
D.Yak	gagcatgg	gtaagtccagcca...	2797...	-----gct--gcaccttc---	ctgcaccta-	AACACTAACAGCAAAG	-ttttccgagcaataagcaag-----	...2111...	ctgtcgtttcag	agctcgtc
	** ****	** ***			* *	*** *	*		** **	** **

id=100622 gene=FBgn0038498 name=beat-IIa segment=chr3R.13158432\_13171120\_-1 type=IN

D.Mel	acatgggtg	gtgagtacttgc...	4127...	---tgtaactcatttttc--catcc--	TTTTGTg---	TG-TTtGTGTT	--gtgctcagacgccg--ctgctt-----	...781...	ttcttcttacag	ataaccca
D.Sim	acatgggtg	gtgagtactcgc...	2603...	---ttaagctcttgtatgaattt	-----	TG-AATtGCAAAAA	-----cagtttatctaagaaaaaat...	...2308...	ttcttcttacag	ataaccaa
D.Sec	acatgggtg	gtgagtacttgc...	4116...	---tctaactcatttttc--catcc--	TTTTGTg---	TG-TTtGTGTT	--gtgctcagacgccg--ctgctt-----	...792...	tttttcttacag	ataaccaa
D.Ere	acttgggtg	gtgagtacttgc...	4114...	---ctaactcatttttcgagcc--	TTTTGTg---	TG-TTtGTGTT	--gtgctcagacgccg--ctgctt-----	...794...	ttcctctcgtag	ataaccaa
D.Ana	acatgggtg	gtgagtactctc...	4156...	---ttcaa--aatttttccccgc	TTTTG-g---	TG-TTtGTGTT	--gtccttagacgccg--ccgctt-----	...753...	ttgttttacag	atcagcga
D.Gri	acatgggtg	gtaagtacagt...	3275...	---ccctggctacaatttttacag-	-----	TGAATTGCActAAAT	-----aactgccca--ttaagcataaaa...	...877...	atctcttttcag	atcacaaa
D.Per	acatgggtg	gtaagtactcta...	4483...	---ttttccgctctctctcgcc--	GCTTTGTg---	TG-TTtGTGTTTGG	--ctcagacgccg--ctgctttt-----	...421...	ttccattccag	ataaccaa
D.Pse	acatgggtg	gtaagtactctt...	4482...	---ttttccgctctctctcgcc--	GCTTTGTg---	TG-TTtGTGTTTGG	--ctcagacgccg--ctgctttt-----	...422...	ttccattccag	ataaccaa
D.Vir	acatgggtg	gtaagtacagt...	3684...	aattgtgagacgcttccttc-----	TTGGG	aTTTG-TTtGTgTT	-GTactccagacaccgctgccc-----	...431...	tcttccatag	ataaccaa
D.Yak	acttgggtg	gtgagtacttgc...	4105...	---ctaactcagttttttcatcc--	TTTTGTg---	TG-TTtGTGTT	--gtgctcagacgccg--ctgctt-----	...803...	ttcttcttacag	atgagcaa
	** *****	** *****			** *	*	** *		** **	** ** *

id=100628 gene=FBgn0038498 name=beat-IIa segment=chr3R.13147227\_13152954\_-1 type=IN VIEW

Figure 209: CS=9.6



```

D.Mel agttgttg gtaagtctggct...2190...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcgg...1382...cctgtttttcag aactgccc
D.Sim agttgttg gtaagtctggcg...2206...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcgg...1425...cctgtttttcag aactgccc
D.Sec agttgttg gtaagtctggcg...2228...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcgg...1403...cctgtttttcag aactgccc
D.Ere agttgttg gtaagtccgact...2159...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcgg...1359...cctgtttttcag aactgccc
D.Ana agttgttg gtaagtttcatt...2145...aataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcg-...955...attgttttcag aacttccc
D.Gri ggttgtag gtaagtaaaaa...2600...-atgattctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgc--...1147...atatgttttcag aacttccc
D.Per agttgtcg gtaagtctcata...2057...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcg-...1078...cgtatttcgag agctgccc
D.Pse agttgtcg gtaagtctcata...2030...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcg-...1072...cgtatttcgag agctgccc
D.Vir agttgttg gtaagtcaaaaa...2298...-atagtcctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcg-...941...ctattcttcag agctgccc
D.Wil agttgttg gtgagttcaccg...1925...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgc--...988...ctcatttcag agttaccc
D.Yak agttgttg gtaagtctgact...2214...-ataactctgaggtttaatcgTGTGTTAATGAGCTCaagtggcaatcagattgcgg...1507...cctgtttttcag agctgccc
***** ** *** ** ***** ** * ** * * **

```

id=100626 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13153089\_13156739\_-1 type=IN

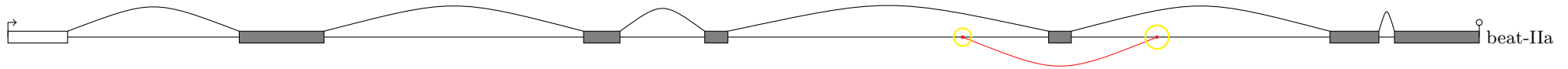
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D.Mel agttgttg gtaagtctggct...2446...ccaaaagttagtctaattcGGGCTTTCATTAAGtCACAA--gcaccatcacagccgctct----...1122...cctgtttttcag aactgccc
D.Sim agttgttg gtaagtctggcg...2466...ccaaaagttagtctaattcGGGCTTTCATTAAGtCACAA--gccccatcacagcagctct----...1161...cctgtttttcag aactgccc
D.Sec agttgttg gtaagtctggcg...2488...ccaaaagttagtctaattcGGGCTTTCATTAAGtCACAA--gccccatcacagcagctct----...1139...cctgtttttcag aactgccc
D.Ere agttgttg gtaagtccgact...2398...ccaaaagttagtctaattcGGGCTTTCATTAAGtCACAA--gccccatcacagccgctct----...1116...cctgtttttcag aactgccc
D.Ana agttgttg gtaagtttcatt...2386...-gcaaaagttagtctaattcGGCTTtcATTAAgtCACAT--ctctgccagcagagctcaa---...710...attgttttcag aacttccc
D.Gri ggttgtag gtaagtaaaaa...2892...-gcaaaagttagtctaattcGGCTTtcATTAAgtCACAA--atggaacaccacggcttctg---...851...atatgttttcag aacttccc
D.Per agttgtcg gtaagtctcata...2368...-gcaaaagttagtctaattcGGCTTtcATTAAgtCACAA--atg---gcgggctccttctgcct...763...cgtatttcgag agctgccc
D.Pse agttgtcg gtaagtctcata...2341...-gcaaaagttagtctaattcGGCTTtcATTAAgtCACAA--atg---gcgggctccttctgcct...757...cgtatttcgag agctgccc
D.Vir agttgttg gtaagtcaaaaa...2543...-gcaaaagttagtctaattcGGCTTtcATTAAgtCACAA--atg---ccacacagcttctggcg...692...ctattcttcag agctgccc
D.Wil agttgttg gtgagttcaccg...2154...-caaaagttagtctaattcGGCTTtcATTAAgtCACAAgtgccagggtcacattcctt-----...755...ctcatttcag agttaccc
D.Yak agttgttg gtaagtctgact...2464...ccaaaagttagtctaattcGGGCTTTCATTAAGtCACAA--gccccatcacaggtcgtct----...1253...cctgtttttcag agctgccc
***** ** *** ***** ** * ** * * **

```

id=100626 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13153089\_13156739\_-1 type=IN VIEW

Figure 210: CS=10.56



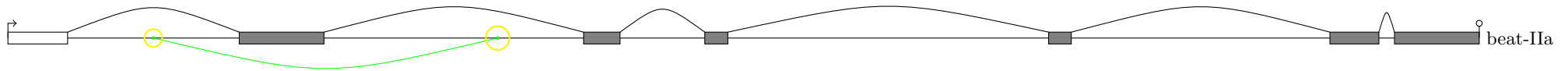
D.Mel	agttgttg	gtaagtctggct...2588...	-cgaggctaaaaccaagtg--ga	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattaagt---tcgaagg----	...983...	cctgtttttcag	aactgccc
D.Sim	agttgttg	gtaagtctggcg...2608...	-cgaggctaaaaccaagtg--ca	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattaagt---tcgaagg----	...1022...	cctgtttttcag	aactgccc
D.Sec	agttgttg	gtaagtctggcg...2630...	-cgaggctaaaaccaagtg--ca	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattaagt---tcgaagt----	...1000...	cctgtttttcag	aactgccc
D.Ere	agttgttg	gtaagtccgact...2537...	-cggggctaaaaccaagtg--ca	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGCAGCT</b>	-----	aaattaagc---tcgaagggcac...	...976...	cctgtttttcag	aactgccc
D.Ana	agttgttg	gtaagtttcatt...2504...	-cgaagctaaaaccaagtg--ca	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattaaac---ttgagtc----	...595...	attgttttcag	aacttccc
D.Gri	ggttgtag	gtaagtaaaaa...2716...	-tgcttacacataaaata--aa	<b>CACTTGT</b> cc <b>TGCGCTCTT</b> at <b>GGTA</b> aac--	-----	aacgaatggcggcaa...	...1017...	atagtttcag	aacttccc
D.Moj	ggttgtag	gtaagttacaaa...3238...	-cgagggtccgacaaaag--ta	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattgaac---tcgagcc----	...589...	atccatttcag	aactgccc
D.Vir	agttgttg	gtaagtcaaaa...2629...	-tggttgtgcaagttttag--a	<b>TAGT</b> g <b>GCAA</b> a <b>CATTGAAG</b>	-----	ggcttaaac---ttaataactt...	...603...	ctattcttcag	agctgccc
D.Wil	agttgttg	gtgagttcacgc...2220...	---gtgcacaagtcaaaagttta	<b>TAGT</b> g <b>GCAA</b> a <b>CATT</b>	-----	tttggaccgaacagcttta-----	...691...	ctcatttcag	agttaccc
D.Yak	agttgttg	gtaagtctgact...2603...	-cgaggctaaaaccaagtg--ca	<b>AAGT</b> ag <b>GCTG</b> g <b>TCAGC</b>	-----	tgctaaattaagt---tcgaagg----	...1117...	cctgtttttcag	agctgccc
				***** * ** **				** **	* ** **

id=100626 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13153089\_13156739\_-1 type=IN

D.Mel	acatggtg	gtgagtacttgc...3416...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1496...	ttcttcttacag	ataacca
D.Sim	acatggtg	gtgagtacttgc...3432...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1480...	ttcttcttacag	ataacc
D.Sec	acatggtg	gtgagtacttgc...3423...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1489...	tttcttcttacag	ataacc
D.Ere	acttgggtg	gtgagtacttgc...3372...	...aagctgttctcgc	catgaagg-----	<b>AGCTGCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1536...	ttcctctctag	ataacc
D.Ana	acatggtg	gtgagtacttgc...3541...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1371...	ttgtttttacag	atcagcga
D.Gri	acatggtg	gtaagtacagtt...3367...	-----gctaaatgcaag	ttaagca <b>TGTTGGAG</b> ct <b>GGC</b> - <b>GCAAATAAAGTG</b> gactta--	-----	cgag---caaggatac...	...775...	atctcttttcag	atcacaaa	
D.Moj	atatggtg	gtaagtacagtt...3680...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...990...	tctccgcacag	ataacaaa
D.Vir	acatggtg	gtaagtacagtt...3217...	----tgggccagc---	cggtgctacaa-- <b>TTTTA</b> c <b>AGT</b> Gaa <b>TTGCACTA</b>	-----	aa--taactgcca--ttaagcata...	...899...	tcttccatacag	ataacaaa	
D.Wil	atatggtg	gtgagtaaatat...3761...	----tcttatggc---	aacaattttac-----	<b>AGT</b> Gaa <b>TTGCACTA</b>	-----	aa--taactgcca--ttaagcata...	...1150...	cttttatttcag	ttaaccaa
D.Yak	acttgggtg	gtgagtacttgc...3248...	----tgttctcgc	catgaaggagct-----	<b>GCTGGCAGCATT</b>	-----	aagccaatgcaagttaag-----	...1664...	ttcttcttatag	atgagcaa
				** ***** ** **				** **	** ** *	

id=100628 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13147227\_13152954\_-1 type=IN VIEW

Figure 211: CS=9.6



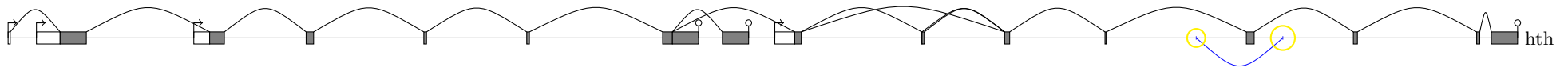
D.Mel	atttgctg	gtaaattattca...4603...	cccgtgctgctt-gctgctat----	TGGCaACATGTTGCGGTggTCCagCAACA	tgct----	gccacctcccttcag-----	...292...	ttcgctttgcag	agcacttc		
D.Sim	atttgctg	gtaaattattca...4604...	tccgtgctgctg-gctgctac----	TGGCaACATGTTGC	-----	tgttgt-----	tccagcaacatgct-----	...307...	ttcgctttgcag	agcacttc	
D.Sec	atttgctg	gtaaattattca...4604...	cccgtgctgctt-gctgctac----	TGGCaACATGTTGC	-----	tgttgt-----	tccagcaacatgct-----	...307...	ttcgctttgcag	agcacttc	
D.Ere	atttgctg	gtaaattattca...3243...	acaatacaataaaaactgcta	AGTGCATGG--GCATGTTGC	-----	tgtggcatatagctccatat-----	...1664...	ttcgctttgcag	agcacttc		
D.Gri	agcagctg	gtaaatgtttgc...4808...	gcaggcagcaaaaacttttc	AGTCGTTTGTCAAC	-----	ttgt-----	cctaggcacgtttgcg-----	...103...	ttgcaactgcag	cgcaacttc	
D.Moj	agcagctg	gtaaatatattc...4770...	ggcgacaacaacagttttc	AGTCGC	TTGTCAAC	-----	ttgt-----	cctaggcacgcttcag-----	...141...	ttgcaactgcag	cgcaacttc
D.Per	gttttctg	gtaaattattca...4666...	gagccttgatgagttttcat	TCGTTTGTCAAC	-----	ttgt-----	cgtaggcacggtattgt-----	...247...	tccgctttgcag	ctcacatc	
D.Pse	gttttctg	gtaaattattca...4660...	gagccttgatgagttttcat	TCGTTTGTCAAC	-----	ttgt-----	cgtaggcacggtattgt-----	...253...	tccgctttgcag	ctcacatc	
D.Vir	agcagctg	gtaaatgtttgc...4805...	agcggcaacaacaacttttc	AGTCGTTTGTCAAC	-----	ttgt-----	cctaggcacgcttcag-----	...106...	ttgcaactgcag	cgcaacttc	
D.Wil	aattgctg	gtaaattattca...4662...	agacgggtacatgttgggct----	TGGCaACATGTTGC	-----	-----	cagcaacatttcagcgtgc...	...249...	ttcgctttgcag	ctcaacttc	
		***	*****	*	**	*	*	*	*****	*** **	

id=100620 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13171857\_13191487\_-1 type=I5

D.Mel	gagcatgg	gtaagtctgcca...3751...	cttctcaccacaaaaggac----	TGTTGGGAAaGCCGCAA	atTATGTGCCA	ttattcttaagggcagagcc-----	...1146...	ttctcgtttcag	agctcgtc		
D.Sim	gagcatgg	gtgagtctgcca...3770...	-----	aagggactgttgggaaagcc----	GCAA	atTATGTGCCA	ttattcttaagggcacagcc-----	...1140...	ttctcgtttcag	agctcgtc	
D.Sec	gagcatgg	gtgagtctgcca...3771...	-----	aagggactgttgggaaagcc----	GCAA	atTATGTGCCA	ttattcttaagggcacagcc-----	...1139...	ttctcgtttcag	agctcgtc	
D.Ere	gagcatgg	gtgagtgcgcca...3807...	-----	aaggggctgttgggaaagcc----	GCAA	atTATGTGCCATTATT	cttaagggcacagccgcatg-	...1098...	atgtcttttcag	agctcgtc	
D.Gri	gacaatgg	gtgagttggcctt...4549...	-----	ctgaattatgctacgtat	tttGTTGACAAACGACT	-----	ttc--	aaatgggcggccataaa-	...362...	taatcatttcag	agttgggt
D.Moj	cacaatgg	gtaagttggcac...3828...	-----	ctgaattatgctgcgcat	tttGTTGACAAACGACT	-----	ttc--	gaat-ggcggccataaag-	...1083...	gtttcgtttcag	agctggtc
D.Per	gagcatgg	gtaagtcgaaac...3925...	-----	ttgaataatgctacgcatt	tttGTTGACAAACGA	-----	ctccgaaatggcggccgta--	...988...	tcccctttgcag	agctcgtc	
D.Pse	gagcatgg	gtaagtcgaaac...3927...	-----	ttgaataatgctacgcatt	tttGTTGACAAACGA	-----	ctccgaaatggcggccgta--	...986...	tcccctttgcag	agctcgtc	
D.Vir	gacaatgg	gtgagttgtggt...4264...	-----	ttgaattatgctacgtat	tttGTTGACAAACGACT	-----	ttc--	aaatgggcggccataaa-	...647...	tttctatttcag	agctgggt
D.Wil	gggactgg	gtaagttttcaa...3456...	-----	gccagccgctcgcaagcc----	GCAA	atTATGTGCCA	ttattcttaagggcacagcc-----	...1454...	ccattttgcag	aactgttc	
		***	** ***		**** *	** *	***	** **	*** **	** **	

id=100622 gene=FBgn0038498 name=beat-IIa segment=chr3R\_13158432\_13171120\_-1 type=IN VIEW

Figure 212: CS=13.3



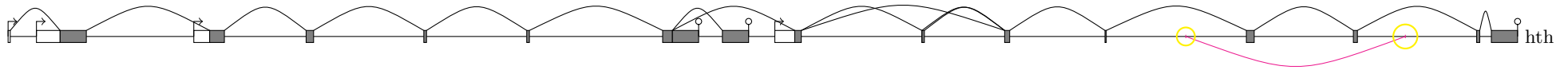
D. Mel	tgcaagcg	gtaagctttctc...4237...	--tc	catcatcatcatcatcatc	GTCG	--ag	GAAGga	GCGTg	AAATTATGCA	-----	atccatggatggtttctgtg...	661...	acaat	ttccag	gtgatgcc						
D. Sim	tgcaagcg	gtaagctttctc...4229...	--tc	gtcatcatcatcatcgtc	GTCG	--ag	GAAGga	GCGTg	AAATTATGCA	-----	atccatggatggtttctgtg...	669...	acaat	ttccag	gtgatgcc						
D. Sec	tgcaagcg	gtaagctttctc...4230...	--tc	gtcatcatcatcatcgtc	GTCG	--ag	GAAGga	GCGTg	AAATTATGCA	-----	atccatggatggtttctgtg...	668...	acaat	ttccag	gtgatgcc						
D. Ere	tgcaagcg	gtaagctttctc...3426...	--a	agtgattgttttgggaact					TCTTTTGTTT	ac	GTTT	tc	ggttc	ccctc	cttc	---	1483...	acaat	ttccag	gtgatgcc	
D. Ana	tgcaagcg	gtaagctttctc...3356...	--a	agtgattgttttgggagct					TCTTTTGTTT	tc	TGTT	g	ggttt	cgtt	gctt	cttct	---	1553...	ctt	tttccag	gtgatgcc
D. Moj	tgcaagcg	gtaagctttctc...2561...	tg	gcgcaa--agt	gcaatccac		TTGAAGGA		ATTTA	---	catatcagcagcagataccg---	2351...	ccac	acacacag	gtgacgcc						
D. Per	tgcaagcg	gtaagttttctt...2661...	cg	gcgtaa--agt	gcaatccac		TTGAAGGA		ATTTA	---	catatcaccagcagatacca---	2251...	ac	cttttccag	gtgatgcc						
D. Pse	tgcaagcg	gtaagttttctt...2638...	cg	gcgtaa--agt	gcaatccac		TTGAAGGA		ATTTA	---	catatcaccagcagatacca---	2274...	ac	cttttccag	gtgatgcc						
D. Vir	cgcaagcg	gtaagctttctc...2624...	tg	gcgcaa--agt	gcaatccac		TTGAAGGA		ATTTA	---	catatcagcagcagataccg---	2288...	tt	tttcttacag	gtgatgcc						
D. Yak	tgcaagcg	gtaagctttctc...4171...	c	ctcatcatcatcaccatg	g		TCGAGAAGga	AGGACCGTg	AAATTATGCA	-----	atccatggatggtttctgtg...	725...	acaat	tttccag	gtgatgcc						
		*****		*****					*		*		*	*		***	****	***			

id=103981 gene=FBgn0001235 name=hth segment=chr3R\_6346943.6355160\_-1 type=IN

D. Mel	at	taacg	gtgagtagcaaa...3172...	aa	attccattttaatttacc	TGCAT	gt	AATTTATGCCTTCTGAC	tt	cttgaacattttat	atgg-----	1729...	att	cctttcag	catcccta	
D. Sim	at	taacg	gtgagtagcaaa...3170...	aa	attccggttttaatttacc	TGCAT	gt	AATTTATGCCTTCTGAC	tt	cttgaacattttat	atgg-----	1731...	att	cctttcag	catcccta	
D. Sec	at	taacg	gtgagtagcaaa...3174...	aa	attccgttttaatttacc	TGCAT	gt	AATTTATGCCTTCTGAC	tt	cttgaacattttat	atgg-----	1727...	att	cctttcag	catcccta	
D. Ere	at	taacg	gtgagtagcaaa...3457...	g	acaacacgtaaaatttatt		AAACac	AAACAA	t	AAAG	---	caaat	gcatt	taaggagcca	catcccta	
D. Ana	at	taacg	gtaagtagcatt...3594...	-	acaacacgtaaaatttatta		AACA	AAACAA	t	AAAG	---	caaat	gcatt	taaggagccta	catcccta	
D. Moj	ac	taacg	gtaagtccaatc...2978...	g	aacgcca-caaagtatgcta		TAA	---	ATTCC	at	TTTAA	tt	ctct	ccttgtag	catcccta	
D. Per	at	taacg	gtgagtcctcaaac...2968...	g	tgcgcca-caaagtatgcta		TAA	---	ATTCC	gt	TTTAA	tt	ctca	aattgtag	catcccta	
D. Pse	at	taacg	gtgagtcctcaaac...3001...	g	tgcgcca-caaagtatgcta		TAA	---	ATTCC	gt	TTTAA	tt	ctca	aattgtag	catcccta	
D. Vir	at	taacg	gtaagtccaatc...2887...	g	aacgcca-caaagtatgcta		TAA	---	ATTCC	at	TTTAA	tt	ctt	cttttag	catcccta	
D. Yak	at	taacg	gtgagtacaaa...3147...	aa	attccggttttaatttacc	TGCAT	gt	AATTTATGCCTTCTGAC	tt	cttgaacattttat	atgg	caagaa...1747...	at	attccttag	catcccta	
		*****	**	***	*		*	*	*	*	*		*	**	**	*****

id=103983 gene=FBgn0001235 name=hth segment=chr3R\_6340067.6346793\_-1 type=IN VIEW

Figure 213: CS=7.8



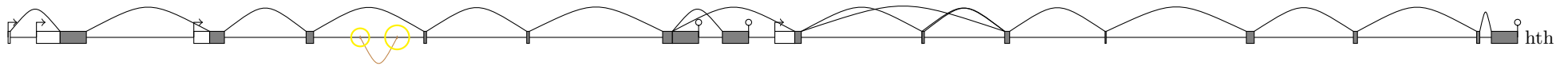
D.Mel	tgcaagcg	gtaagctttctc...	4051..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagtatgga	-----	...857...	acaattttccag	gtgatgcc
D.Sim	tgcaagcg	gtaagctttctc...	4049..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcatgga	-----	...859...	acaattttccag	gtgatgcc
D.Sec	tgcaagcg	gtaagctttctc...	4047..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcatgga	-----	...861...	acaattttccag	gtgatgcc
D.Ere	tgcaagcg	gtaagctttctc...	4020..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcaggga	-----	...888...	acaattttccag	gtgatgcc
D.Ana	tgcaagcg	gtaagctttctc...	4473..	agataaaagcctgggaatt	-----	TAAAtTAACCAAAA	-----	attatgcacggacattacca	...438..	ctgttttccag	gtgatgcc
D.Moj	tgcaagcg	gtaagctttctc...	3180..	cgagcttagtggaaggcg	CGGcCCAT	ccAAATGCCAAcAAGTGT	gcc-----	tttgggtattcttt	...1717..	ccacacacacag	gtgacgcc
D.Per	tgcaagcg	gtaagctttctc...	3836..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcatgga	-----	...1072..	accttttccag	gtgatgcc
D.Pse	tgcaagcg	gtaagctttctc...	3839..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcatgga	-----	...1069..	accttttccag	gtgatgcc
D.Vir	cgcaagcg	gtaagctttctc...	3164..	cgaagcttagtggaagcaa	GGCCCAT	caAAATGACCAAcAAGTG	cgcc-----	tttgggtattcttt	...1736..	ttttcttacag	gtgatgcc
D.Wil	tgccagcg	gtaagctttctc...	3862..	gaaagcaaatgccaaagtg	TTGTg	CAAAAGATAAAGcATGGAaAATT	tatgaagcactcagaagaag	-----	...1035..	gatctattacag	gtgatgct
D.Yak	tgcaagcg	gtaagctttctc...	4005..	agtgaaggtggagcgaaagc	-----	AAATGCCAAAGGTGTTG	tgccaaagataaagcatgga	-----	...903...	acaattttccag	gtgatgcc
	** ****	***** **		*	**	*	*			***	**** **

id=103981 gene=FBgn0001235 name=hth segment=chr3R.6346943.6355160.-1 type=IN

D.Mel	aataattg	gtgagtatgccg-	...865...	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggcaggcgggcaggaca	-----	...1503...	gtctgcttacag	gttcatca
D.Sim	aataattg	gtgagtatgccg-	...872...	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggcaggcgggcaggaca	-----	...1482...	gtctgcttacag	gttcatca
D.Sec	aataattg	gtgagtatgccg-	...873...	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggcaggcgggcaggaca	-----	...1485...	gtctgcttacag	gttcatca
D.Ere	aataattg	gtgagta-gccgc	...850...	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggcaggcgggcaggaca	-----	...1477...	gtctgcttacag	gttcatca
D.Ana	aataattg	gtgagtaccca-	...947..	gcaaaataaaatggtgacac	TTTTGGTTATTTA	----	tgggatgaagcggtggcgga	-----	...1406..	tccggcttacag	gttcatca
D.Moj	aacaattg	gtaagtacgaag-	...1057..	aatagcaaaataaaatggtg	ACACTTTTGGTtATTTATGGGCTg	----	gcagacacaccttcgcaa	...1598..	actctttcacag	gtttatca	
D.Per	aataattg	gtaagtaccaga-	...1058..	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggctaacggacgacacc	-----	...1542..	ctctacttacag	gttcatca
D.Pse	aataattg	gtaagtaccaga-	...1049..	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggctaacggacgacacc	-----	...1541..	atctacttacag	gttcatca
D.Vir	aacaattg	gtaagtgcgaca-	...1223..	atagcaaaataaaatggtga	CACTTTTGGTtATTTATGGGCT	----	ggcagacacaccttcgcaa	...1505..	actctttcacag	gttcatca	
D.Wil	aataattg	gtaagttcaaaa-	...1776..	aaacgaggcaacgggaactc	AATTGCCATTTTGTGcTTTTGATAA	acgatttca-gggcgttgcaa	-----	...790...	gttcttctgag	gttcatca	
D.Yak	aataattg	gtaagttccgc-	...874...	aaaatagcaaaataaaatgt	TGACACTTTTGGTtATTT	----	atgggcaggcgggcaggaca	-----	...1525...	gtctgcttacag	gttcatca
	** *****	** ***		* ** **	* *****	***	*			***	*** ** *

id=103985 gene=FBgn0001235 name=hth segment=chr3R.6337540.6339989.-1 type=IN VIEW

Figure 214: CS=6.6



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D.Mel  gtaaacag gtaagaataatg...3410...----caacaccacatcagccaaccAGCATttGAAAaTGCAAC--ATaaaagccaacgggcaacaac--...1495...ttctccttgag ataagatc
D.Sim  gtaaacag gtaagaataatg...3420...----caacaccacatcagccaaccAGCATttGAAAaTGCAAC--ATaaaagccaacgggcaacaac--...1485...ttctccttgag ataagatc
D.Sec  gtaaacag gtaagaataatg...3414...----caacaccacatcagccaaccAGCATttGAAAaTGCAAC--ATaaaagccaacgggcaacaac--...1491...ttctccttgag ataagatc
D.Ere  gtaaacag gtaagaataatg...3389...-----aacaccacatcagccaaccaGCATttGAAAaTGCAAC--ATaaaagccaacgggcaacaac--...1517...ctctccttgag ataagatc
D.Ana  gtaaacag gtaagaagaata...3658...-----ccagcgaccaaccagcatttGAAAaTGCAAC--ATgaaagccaacaggcagccac--...1254...ctttcttgag ataagatc
D.Gri  gtaaacag gtaagttgttca...3223...-----acgccagcagcagccaaccaGCATttGAAAATGCAAC--ATTaaagccaactggaacaaca--...1682...ctctcattcag ataagatc
D.Moj  gtaaacag gtaagcaaaggt...2807...----tgcaagcgcagcagccaaccAGCATttGAAAATGCAAC--ATTaaagccaactgggtaacagct--...2097...ctctcattcag ataagatc
D.Vir  gtaaacag gtaagcgaacaa...3312...tgtgtgcaagcgcagcagcAACCAGCATttGAAAaTGCAAC--ATTaaagccaactggcaacaact--...1588...ctctcattcag ataagatc
D.Wil  gtaaacag gtaagattttc...3096...-----gatatttatagacttgtctc---ATGCTGTGAATT-tactagtttgaatatgatt...1817...ctctcattcag ataagatc
D.Yak  gtaaacag gtaagaataatg...3372...----caactccacatcagccaaccAGCATttGAAAaTGCAAC--ATaaaagccaacgggcaacaac--...1533...ttctccttgag ataagatc
***** *****
                *      ** * *      ****      ** *      * *      * * * * * *****

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id=103962 gene=FBgn0001235 name=hth segment=chr3R.6419324.6428513.-1 type=IN

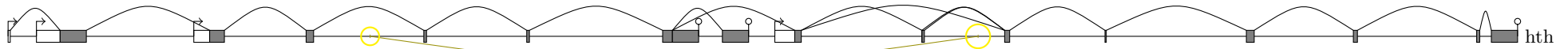
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D.Mel  gtaaacag gtaagaataatg...4629...tgatgag-ctgatgagcaca-ATGTTGCG--TTTccATGCT-----cgccgtggaaccg--atttgct...277...ttctccttgag ataagatc
D.Sim  gtaaacag gtaagaataatg...4630...tgatgag-ctgatgagcaca-ATGTTGCG--TTTccATGCT-----cgccgtggaaccg--atttgct...276...ttctccttgag ataagatc
D.Sec  gtaaacag gtaagaataatg...4637...tgatgag-ctgatgagcaca-ATGTTGCG--TTTccATGCT-----cgccgtggaaccg--atttgct...269...ttctccttgag ataagatc
D.Ere  gtaaacag gtaagaataatg...4660...tgatgag-ctgatgagcaca-ATGTTGCG--TTTccATGCT-----cgccgtggaaccg--atttgct...247...ctctccttgag ataagatc
D.Ana  gtaaacag gtaagaagaata...4703...gggtccg-ttgatgagcaca-ATGTTGCG--TTTc-----ccaagctcgccgtggaaccg-----...210...ctttcttgag ataagatc
D.Gri  gtaaacag gtaagttgttca...3386...-gttgtgtgtgttgcctcacAATGggCGGTtTTTcATGCT-----ctgctaccacatgcccagc...1518...ctctcattcag ataagatc
D.Moj  gtaaacag gtaagcaaaggt...2972...tgttact-ctgtttgccgcacAATGggCGGTtTTTcATGCTtcattgtggcccgatgccca-----...1931...ctctcattcag ataagatc
D.Vir  gtaaacag gtaagcgaacaa...4546...gcaacagcaattttacgca-AATGTTGCG--TTTccATGCTgGGTt-----ttgtaacctctatttgct...354...ctctcattcag ataagatc
D.Wil  gtaaacag gtaagattttc...4270...-acagatagtttcaaatacAA-----TTCGCAGCAT-----ttatttgacctctg-tcgca...643...ctctcattcag ataagatc
D.Yak  gtaaacag gtaagaataatg...4641...tgatgag-ctgatgagcaca-ATGTTGCG--TTTccATGCT-----cgccgtggaaccg--atttgct...265...ttctccttgag ataagatc
***** *****
                ** *      ***      **

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id=103962 gene=FBgn0001235 name=hth segment=chr3R.6419324.6428513.-1 type=IN VIEW

Figure 215: CS=6



D.Mel	gtaaacag	gtaagaataatg...3602...	tggca-tggtatggtactcac	AATG	GGCGT	TTTTCT	catacgaccatttcgtacaa...	1307...	ttctccttgtag	ataagatc
D.Sec	gtaaacag	gtaagaataatg...3606...	tggca-tggtatggtactcac	AATG	GGCGT	TTTTCT	catacgaccatttcgtacaa...	1303...	ttctccttgtag	ataagatc
D.Ere	gtaaacag	gtaagaataatg...3593...	tgcta-tggtatggtactcac	AATG	GGCGT	TTTTCT	catacgaccatttcgtacaa...	1316...	ttctccttgtag	ataagatc
D.Ana	gtaaacag	gtaagaagaata...3803...	ttgtgttgg-ctgcctcac	AATG	GGCGT	TTTTCT	cgtagaccattgtgcgata...	1106...	ctttccttgtag	ataagatc
D.Gri	gtaaacag	gtaagtgttca...3386...	-gttgttgttggcctcac	AATG	GGCGT	TTTTCT	tctcatgctctaccacatgc...	1523...	ctctcattcag	ataagatc
D.Moj	gtaaacag	gtaagcaaagg...2972...	tgttact-ctgtttgccac	AATG	GGCGT	TTTTCT	tctcatgctctaccacatgc...	1940...	ctctcattcag	ataagatc
D.Per	gtaaacag	gtaagaataatg...3312...	tgctgttgg-cagccgcac	AATG	GGCGT	TTTTCT	catacaaccattgtacggtt...	1597...	ctctccttgtag	ataagatc
D.Pse	gtaaacag	gtaagaataatg...3319...	tgctgttgg-cagccgcac	AATG	GGCGT	TTTTCT	catacaaccattgtacggtt...	1590...	ctctccttgtag	ataagatc
D.Vir	gtaaacag	gtaagcgaaca...3470...	tgttgtt-ctgttcgctcac	AATG	GGCGT	TTTTCT	catgtttcattgttgctgg...	1439...	ctctcattcag	ataagatc
D.Wil	gtaaacag	gtaagattttc...3758...	gttgttgg-ctgccacac	AATG	GGCGT	TTTTCT	catgctacagacggggggc...	1151...	ctctcattcag	ataagatc
D.Yak	gtaaacag	gtaagaataatg...3570...	tcgta-tggtatggcactcac	AATG	GGCGT	TTTTCT	catacgaccatttcgtacaa...	1339...	ttctccttgtag	ataagatc
	*****	*****		*		* ***** *			* * ** **	*****

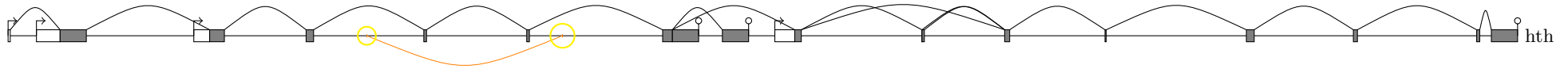
id=103962 gene=FBgn0001235 name=hth segment=chr3R.6419324.6428513.-1 type=IN

D.Mel	atatgatg	gtaagtgcatt...3910...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaag-aaaacgaagcgtag---	1000...	tatcttttcag	gacgatgg
D.Sec	atatgatg	gtaagtgcatt...3909...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaag-aaaacgaagcgtag---	1001...	tatcttttcag	gacgatgg
D.Ere	atatgatg	gtaagtgcatt...3961...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaag-aaaacgaagcgtag---	949...	catcttttcag	gacgatgg
D.Ana	atatgatg	gtaagtgcatt...4029...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aaggcg-aaaacgaagcactc---	881...	catcttttcag	gacgatgg
D.Gri	atacgatg	gtaagtcacatt...4124...	-----aaacgtgccca-ttactacca	AGAAAA	TGCCATT	-----aag-aaaacgaagcagacgcc...	786...	tattgcttcag	gacgatgg
D.Moj	atacgatg	gtaagtcacatt...4225...	caaccacaaaagcgtccat-----	AAAACGT	CCCATT	actaccaag-aaaattggcca-----	686...	tccccttcag	gacgatgg
D.Per	atatgatg	gtaagtcacatt...3889...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaggaaaaacgaagcgca---	1021...	tatcttttcag	gacgatgg
D.Pse	atatgatg	gtaagtcacatt...3904...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaggaaaaacgaagcgca---	1006...	tatcttttcag	gacgatgg
D.Vir	atacgatg	gtaagtcacatt...4137...	-----aaacgtgccca-ttactacca	AGAAAA	TGCCATT	-----aag-aaaacgaggcagacgcc...	773...	taactcttcag	gacgatgg
D.Wil	atatgatg	gtaagtcacatt...3949...	-----aaacgtgccca-ttactacca	AGAAAA	TGCCATT	---aagg-aaaacgaagcag-ctca...	961...	tcttaattcag	gacgatgg
D.Yak	atatgatg	gtaagtcacatt...3925...	-----aacgtgccatttactacca	AGAAAA	TGCCATT	---aagaag-aaaacgaagcgtag---	985...	tatcttttcag	gacgatgg
	*** **	***** **		** * * **		*** ***** * ** *		** **	*****

id=103977 gene=FBgn0001235 name=hth segment=chr3R.6359729.6374328.-1 type=IN VIEW

Figure 216: CS=9.9





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D.Mel  gtaaacag gtaagaataatg...3539...-----tcgcgactc-ttc---aatggccg---TGC-TTTGTgtTTGTT-attattgtatgtaatgtgta-----...1371...ttctccttgag  ataagatc
D.Sim  gtaaacag gtaagaataatg...4618...-c t t t g g g t c c g t - t g a --- t g a g c --- T G A T G A - G c A - C A A A T G T ----- t g c g t t t c c c a - t g c t c g c c g . . . 2 9 1 . . . t t c t c c t t g c a g  ataagatc
D.Sec  gtaaacag gtaagaataatg...4625...-c t t t g g g t c c g t - t g a --- t g a g c --- T G A T G A - G c A - C A A A T G T ----- t g c g t t t c c c a - t g c t c g c c g . . . 2 8 4 . . . t t c t c c t t g c a g  ataagatc
D.Ere  gtaaacag gtaagaataatg...4648...-c c g t t g a t g a g c - t g a --- t g a g c --- T G A T G A - G c A - C A A A T G T ----- t g c g t t t c c c a - t g c c c g c c g . . . 2 6 1 . . . c t c t c c t t g c a g  ataagatc
D.Ana  gtaaacag gtaagaagaata...4519...-g t a t c t a t g t g t ----- t t t g c g g c T - T T G T T G T T G - g G T T G C T G - c c a t a a a a g c g ----- a g a a t c t c t . . . 3 8 8 . . . c t t t c t t t g c a g  ataagatc
D.Gri  gtaaacag gtaagtgtttca...4180...a g a t g t a g t t c c g t g ----- a g a g c --- C A A C c G C A A C A G C A A T ----- c t t c a c t a a t a g c a ----- a a a g c g ----- . . . 7 2 9 . . . c t c t c a t t t c a g  ataagatc
D.Moj  gtaaacag gtaagcaagggt...4088...-a g a t c g t t g c g t - t g c --- t a t g a --- A A T T T C - G C A G c g G G T G - - t a g c t c t g t - t t t g t t a t g t c ----- . . . 8 2 1 . . . c t c t c a t t t c a g  ataagatc
D.Per  gtaaacag gtaagaataatg...3283...-t g t t g t t a c t c g t a t --- t a t g c --- T G T T G C T G T T G C T G T T G T T G C ----- a g c c g c a c a a t g g g g c g t t . . . 1 6 2 1 . . . c t c t t c t t g c a g  ataagatc
D.Pse  gtaaacag gtaagaataatg...3284...-t g t t g t t a c t c g t a t --- t a t g c --- T G T T g t T G T T G C T G T T G C T G T T G T T ----- g c a g c c c a c a a t g g g g c g t - . . . 1 6 1 6 . . . c t c t t c t t g c a g  ataagatc
D.Vir  gtaaacag gtaagcgaaca...3268...-----t g t g t g t g t g t g t g t g a g --- T G C T t T T G T G C T c G T G C a t g t g t g t g t g t g c a a c g c c ----- . . . 1 6 4 0 . . . c t c t c a t t t c a g  ataagatc
D.Yak  gtaaacag gtaagaataatg...3492...-----t c g c g a c t c - t t c --- a a t g g c c g --- T G C - T T T G T g t T T G T T - a t t a t t g t a t g t a a t g t g t a ----- . . . 1 4 1 8 . . . t t c t c c t t g c a g  ataagatc
***** *****
                                     *
                                     * * ** ** * *****

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id=103962 gene=FBgn0001235 name=hth segment=chr3R.6419324.6428513.-1 type=IN

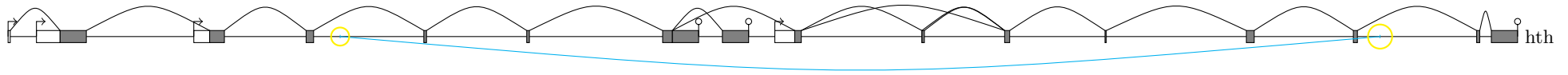
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D.Mel  tagaaaaa gtaagtaacgat...2996...-----g c c a c c c a a t g t - g c a a c a g c A G C A G C A A C A G C A A c A --- G C A ----- a c a g c a g c a --- g c a a c a g c a a t . . . 1 9 1 0 . . . g t c t c g t t g c a g  gtacacga
D.Sim  tagaaaaa gtaagtaacgat...3936...-----a c a c t c a c t t t g c c t t a t c - G C A T T T G T T T T A T C A ----- c a c a c a c a g c g c a c t c a c --- . . . 9 7 4 . . . g t c t c g t t g c a g  gtacacga
D.Sec  tagaaaaa gtaagtaacgat...3938...-----a c a c t c a c t t t g c c t t a t c - G C A T T T G T T T T A T C A ----- c a c a c a c a g c a c a c t c a c --- . . . 9 7 2 . . . g t c t c g t t g c a g  gtacacga
D.Ere  tagaaaaa gtaagtaacgat...3910...-----a c a c t c a c t t t g c c t t a t c - G C A T T T G T T T T A T C A ----- c a c a c a c a a c a c a a c a c t --- . . . 1 0 0 0 . . . g t c t c g t t g c a g  gtacacga
D.Ana  tagaaaaa gtaagtaccgcc...2555...-----t c t c g c a c c g g c a c c g g c a c ----- C A G C A A C a g C A A C A --- G C A A G ----- a c a g c a c c a --- g c a a t t g g a a c . . . 2 3 5 1 . . . g t c t c g t t g c a g  gtacacga
D.Gri  tagaaaaa gtaagtaaacat...4098...t g t t g t c c a t t g t g t g t g t t ----- G T T G C T G T T G C t G T T G ----- c t t g c t t a a a - a g t g t g c c t ----- . . . 8 1 1 . . . t t c t c t t t g c a g  gtgcatga
D.Moj  tagaaaaa gtaagtaaacat...2680...t a t g a g c g g a a a t c g a a a a t ----- T A C C a C T G C G c A G A T T ----- g g a g c g a t t a c a t t a g a t t . . . 2 2 2 9 . . . c t c t c g t t g c a g  gtgcatga
D.Per  tagaaaaa gtaagtaaacat...3706...-----c a c a a a a t g a a g a a a a g a a G C G G C A G C A a C A G C A --- G C A A A C A a t t t g c a t a a g c a a c g c g c a ----- . . . 1 1 9 7 . . . g t c t c g t t g c a g  gtacacga
D.Pse  tagaaaaa gtaagtaaacat...3747...-----c c a c a a a a t g a a g a a a a g a A G C G G C A G C A A C A G C A --- G C A A A C A a t t t g c a t a a g c a a c g c g c a ----- . . . 1 1 5 5 . . . g t c t c g t t g c a g  gtacacga
D.Vir  tagaaaaa gtaagtaaacat...3395...-----c a g c a a c t t c c a c a t c g g c G C A T c A G C A G C A A c A --- G C A ----- g c a g c a a c a --- a c a g c a g c c t g . . . 1 5 1 2 . . . t t c t c t t t g c a g  gtgcatga
D.Yak  tagaaaaa gtaagtaacgat...2953...-c g t g c g g c c a c c c a a t g t - g c ----- A A C A G C A G C A G C A A c A --- G C A ----- g c a a c a g c a a t g t g c a a c a g ----- . . . 1 9 5 3 . . . g t c t c g t t g c a g  gtacacga
***** *****
                                     *
                                     * * ** ** * *****

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id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN VIEW

Figure 217: CS=6.6



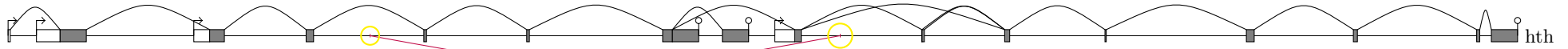
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D.Sim	gtaaacag	gtaagaataatg...3054...---	tatttcgcgctatttatagac	<b>TTGTCTCATGc</b>	<b>TGTGCA</b>	tttttagtagttgcccgc-atg...1854...	ttctccttgacag	ataagatc
D.Sec	gtaaacag	gtaagaataatg...3045...---	tatttcgcgctatttatagac	<b>TTGTCTCATGc</b>	<b>TGTGCA</b>	tttttagtagttgcccga-atg...1863...	ttctccttgacag	ataagatc
D.Ere	gtaaacag	gtaagaataatg...3020...---	tattgcgctatttatagac	<b>TTGTCTCATGc</b>	<b>TGTGCA</b>	tttttagtagttgcccgc-atg...1888...	ctctccttgacag	ataagatc
D.Ana	gtaaacag	gtaagaagaata...3279...	gaacattttg--tatttataga	<b>CTTGTC</b>	<b>CATGc</b>	<b>TGTGCA</b>	tttttagtagttgcccac-atg...1628...	ctttccttgacag
D.Per	gtaaacag	gtaagaataatg...2718...	ccggggggga--tatttataga	<b>CATGTC</b>	<b>CATGc</b>	<b>TGTGCA</b>	catttactagttggtcgc-a--...2191...	ctctccttgacag
D.Pse	gtaaacag	gtaagaataatg...2724...	cgggggggga--tatttataga	<b>CATGTC</b>	<b>CATGc</b>	<b>TGTGCA</b>	catttactagttggtcgc-a--...2185...	ctctccttgacag
D.Vir	gtaaacag	gtaagcgaacaa...2837...	t-ctcggccttatttatagact	<b>TGTCTCATGc</b>	<b>TGTGTA</b>	-ttcgctggtgccaatgatt...2072...	ctctcatttcag	ataagatc
D.Wil	gtaaacag	gtaagatttttc...3088...	ggccgattga--tatttataga	<b>CTTGTC</b>	<b>CATGc</b>	<b>TGTGCA</b>	-aatttactagtt-tgaaa-atg...1821...	ctctcatttcag
D.Yak	gtaaacag	gtaagaataatg...2986...---	tattgcgctatttatagac	<b>TTGTCTCATGc</b>	<b>TGTGCA</b>	ttttactagttgcccgc-atg...1922...	ttctccttgacag	ataagatc
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id=103962 gene=FBgn0001235 name=hth segment=chr3R\_6419324.6428513\_-1 type=IN

D.Me1	aataattg	gtgagtatgccg-...384...--	actgtaacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	caggcagaacttgacactcg-...1985...	gtctgcttacag	gttcatca
D.Sim	aataattg	gtgagtatgccg-...386...--	acggcaacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	ccggcagaacttgacactcg-...1969...	gtctgcttacag	gttcatca
D.Sec	aataattg	gtgagtatgccg-...387...--	acggcaacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	ccggcagaacttgacactcg-...1972...	gtctgcttacag	gttcatca
D.Ere	aataattg	gtgagta-gccg-...360...--	acggcaacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	ccggcagaacttgacactcg-...1968...	gtctgcttacag	gttcatca
D.Ana	aataattg	gtgagtacccca-...374...--	caggcagcttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	ctgcagaacttgacactctg-...1974...	tccggcttacag	gttcatca
D.Per	aataattg	gtaagtaccaga-...396...---	ggcaacttcatcaaattt	<b>CACA</b>	<b>TATGc</b>	<b>GACATG</b>	ctgcagaacttgacactctg-...2206...	ctctacttacag	gttcatca
D.Pse	aataattg	gtaagtaccaga-...395...---	ggcaacttcatcaaattt	<b>CACA</b>	<b>TATGc</b>	<b>GACATG</b>	ctgcagaacttgacactctc-...2197...	atctacttacag	gttcatca
D.Vir	aacaattg	gtaagtcgacaa-...508...--	acgttgacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACATG</b>	ctgcagaacttgacactc-...2226...	actctttcacag	gttcatca
D.Wil	aataattg	gtaagttcaaaa-...380...g	cataagaac---tcaaattttg	<b>CACA</b>	<b>TATGc</b>	<b>GACAG</b>	cgccgagcttgacactttt-...2195...	gtctctctgacag	gttcatca
D.Yak	aataattg	gtaagttgccg-...403...--	acggcaacttcatcaaattt	<b>TGCACA</b>	<b>TATGc</b>	<b>GACAG</b>	ccggcagaacttgacactcg-...1997...	gtctgcttacag	gttcatca
	** *****	** ***		*	*****	*****	** * *****		***

id=103985 gene=FBgn0001235 name=hth segment=chr3R\_6337540.6339989\_-1 type=IN VIEW

Figure 218: CS=6



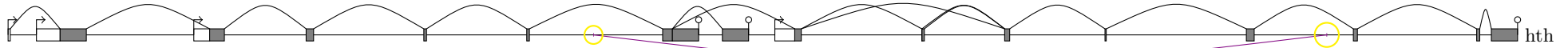
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D. Sec	gtaaacag	gtaagaataatg...	3586...	atgtaatgtgtagtatggca	TGGCATGGT	ATGGT	aCTCA	CAATGg	GGCGT	TTTTc	catacgaccatttcgtaca-----	...1304...	ttctccttg	cag	ataaatc	
D. Ere	gtaaacag	gtaagaataatg...	3574...	-agtatggcatggcatggtat	GCTATGGT	GTGGT	aCTCA	CAATGg	GGCGT	TTTTc	catacgaccatttcgtaca-----	...1317...	ctctccttg	cag	ataaatc	
D. Ana	gtaaacag	gtaagaagaata...	3798...	gagctttgtgtgt-ggctgc-----				CTCA	CAATGg	GGCGT	TTTTCTCGTA	cgaccatt--gtgcgatagctt...	1102...	ctttccttg	cag	ataaatc
D. Gri	gtaaacag	gtaagttgttca...	3381...	-tgctgtgtgtgt-tggt-tgc-----				CTCA	CAATGg	GGCGT	TTTTc	catgcctgtaccacatg-----	...1524...	ctctcattc	cag	ataaatc
D. Moj	gtaaacag	gtaagcaaaagt...	2972...	-tgttactctgtt-tgccgcac-----				AATGg	GGCGT	TTTTc	catgcctcattgtggccc-----	...1938...	ctctcattc	cag	ataaatc	
D. Per	gtaaacag	gtaagaataatg...	3312...	-tgctgtgtgtgc-agccgcac-----				AATGg	GGCGT	TTTTc	catacaaccatt--gtacggt-----	...1598...	ctctccttg	cag	ataaatc	
D. Pse	gtaaacag	gtaagaataatg...	3319...	-tgctgtgtgtgc-agccgcac-----				AATGg	GGCGT	TTTTc	catacaaccatt--gtacggt-----	...1591...	ctctccttg	cag	ataaatc	
D. Vir	gtaaacag	gtaagcgaacaa...	3465...	gtaattgtgtt-c-tggt-cgc-----				CTCA	CAATGg	GGCGT	TTTTc	catgtttcattgtgcctg-----	...1440...	ctctcattc	cag	ataaatc
D. Wil	gtaaacag	gtaagattttt...	3758...	-tgttgtgtgttc-tgccacac-----				AATGg	GGCGT	TTTTc	catgctacagacgggggg-----	...1152...	ctctcattc	cag	ataaatc	
D. Yak	gtaaacag	gtaagaataatg...	3553...	--catgccatggtagtgc	TATGGT	ATGGC	aCTCA	CAATGg	GGCGT	TTTTc	catacgaccatttcgtaca-----	...1340...	ttctccttg	cag	ataaatc	

id=103962 gene=FBgn0001235 name=hth segment=chr3R.6419324.6428513.-1 type=IN

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D. Sec	agaccctg	gtaagtgcacac---	2959...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATTTGGGc	GTTATT	TGTg	GCCGg	agcgggtgctccgactttcca--	...1931...	ttctcgttg	cag	atggtaa
D. Ere	agaccctg	gtaagtgcacac---	3037...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATTTGGGc	GTTATT	TGTg	GCCGg	agcgggtgctccgactttcca--	...1855...	ttctcgttg	cag	atggtaa
D. Ana	agaccctg	gtaagtgcacac---	3304...	...tggcaatcgattcgatgcgt	TGCCAa	GAAAtt	GCGCCa	TATTTGGGc			cgagcgggtgctccgactttcca--	...1594...	cctctcttg	cag	atggtaa
D. Gri	agaccctg	gtaagtaaatgca---	3247...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATTTGGGc				cgattattgtgaccgact--	...1658...	ttctatttg	cag	atggtaa
D. Moj	agaccctg	gtaagtgttga---	2523...	-----cgctgcgtgcgtcccgaat	GAAAtt	GCGCCa	TATT				tgggcggtatttgtggccaa---	...2386...	ctctccttg	cag	atggtaa
D. Per	agaccctg	gtaagtccaat---	2800...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATT				tgggcggtatttgtgccc-----	...2109...	ttcccgttt	cag	atggtaa
D. Pse	agaccctg	gtaagtccaat---	2831...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATT				tgggcggtatttgtgccc-----	...2078...	ttcccgttt	cag	atggtaa
D. Vir	agaccctg	gtaagtgcacac---	3171...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATTTGGGc				cgattattgtgaccgcaact...	...1734...	ttctatttg	cag	atggtaa
D. Wil	agaccctg	gtaagtgcacac---	3305...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATT				tgggcggtatttgtggtcgt---	...1604...	ttctctttg	cag	atggtaa
D. Yak	agaccctg	gta---agttcagcc...	2996...	-----cgattcgttgcgttgcgaat	GAAAtt	GCGCCa	TATTTGGGc	GTTATT	TGTg		gcccgaatctccaggtggag--	...1898...	ttctcgttg	cag	atggtaa

id=103974 gene=FBgn0001235 name=hth segment=chr3R.6374377.6387630.-1 type=IN VIEW

Figure 219: CS=8.58



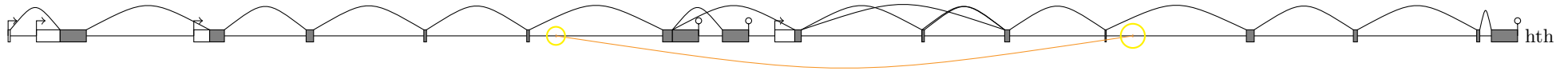
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D. Sim	tagaaaa	gtaagtaacgat...3605...-----cgagtttggccagtttgggc-----	AATGGGCAACAAGTTAAT	--agcctggctgttcagcttt...1302...gtctcgttcag	gtacacga
D. Sec	tagaaaa	gtaagtaacgat...3595...-----cgagtttggccagtttgggc-----	AATGGGCAACAAGTTAAT	--agcctggctgttcagcttt...1312...gtctcgttcag	gtacacga
D. Ere	tagaaaa	gtaagtaacgac...3574...-----cgagtttggccagtttgggc-----	AATGGGCAACAAGTTA	--atagcctggcggttgagct--...1335...gtctcgttcag	gtacacga
D. Ana	tagaaaa	gtaagtaccgcc...3921...--ggagcaccctgtg--gttgtgc	TTGTTgcTGCTGTTg-CTGTTGctGTTG	ctgttctgctgactgct--...977...gtctcgttcag	gtacacga
D. Moj	tagaaaa	gtaagtaaacat...2996...--gcagctgccgggtggtgctgc--	TTGTgcTGCTGTTg-CTGC	-----tgctgtgggtcccagcagtg-...1911...ctctcgttcag	gtgcatga
D. Per	tagaaaa	gtaagtaaacat...3584...--tgacaacttcgggaatt--ggc--	AATGGGCAACAAGTTA	-----atagtgagcagcagccagagc...1325...gtctcgttcag	gtacacga
D. Pse	tagaaaa	gtaagtaaacat...3862...--tgctgccctgccgctgccg--	TTGCTGTTGTTGCTTGCT	-----gccattgccagtgcaatta...1045...gtctcgttcag	gtacacga
D. Vir	tagaaaa	gtaagtaaacat...2778...--cctg-tgctggcaccacttta--	GCTGcTGCTGTTG-CTGCT	-----gctgtgggtcccagtcgtga...2129...ttctctttgag	gtgcatga
D. Wil	tagaaaa	gtaagtacaac...3800...tgcaacaagtgtgacaagt--	TTGGCCAATGGGCAACAA--CAA	caataacgacgacgagct--...1103...cactgtttacag	gttcatga
D. Yak	tagaaaa	gtaagtaacgag...3541...-----cgagtttggccagtttgggc-----	AATGGGCAACAAGTTA	--atagcctggctgttcagct--...1368...gtctcgttcag	gtacacga
	*****	*****	*	* * *	** ** **

id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130\_-1 type=IN

D. Mel	atthaacg	gtgagtagcaaa...4480...--ttatgggaagtggactactc-	GTTGGCaTTTGTTtGCCATT	-----tggcgctagacacgcgctcc--...424...atctccttcag	catcccta
D. Sim	atthaacg	gtgagtagcaaa...4482...--ttatgggaagtggactactc-	GTTGGCaTTTGTTtGCCATT	-----tggcgctagacacgcgctcc--...422...atctccttcag	catcccta
D. Sec	atthaacg	gtgagtagcaaa...4485...--ttatgggaagtggactactc-	GTTGGCaTTTGTTtGCCATT	-----tggcgctagacacgcgctcc--...419...atctccttcag	catcccta
D. Ere	atthaacg	gtgagtagcaaa...4457...-----atgggaagtggactactcgc-	TGGCaTTTGTTtGCCATT	-----tggcgctagacacgcgctcc--...449...atattcttcag	catcccta
D. Ana	atthaacg	gtaagtagcatt...3471...gctgtcagcgtgaaagtcc-----	TGGCctCGACAGGACAGCAAAACA	-----atattgctgccggccagcagc--...1430...ctgcccttcag	catcccta
D. Moj	acttaacg	gtaagtccaatc...3265...-ggcgctggcgcgtggcctgt-	GCAGGACAGCAaACA	-----atattgctgccggcagcagc--...1644...ctctccttcag	catcccta
D. Per	atthaacg	gtgagtccaac...4544...-gtccaagcagtcctcccca--	TGGCctTTGTTtGCCATT	-----tggcgctagacaagcgcagc--...362...ttccaattgcag	catcccta
D. Pse	atthaacg	gtgagtccaac...3378...-g----aagcag----cagcagtgccagg	AGCAACAgaCAACA	GTAAaatt-----tattaacacaaaca--...1527...ctccaattgcag	catcccta
D. Vir	atthaacg	gtaagtccaatc...2960...-cattctatgcccaaacga--	GGTGCAGCAGCA--aCAGC	-----agtcacgactgggactggga--...1948...ttttcttttag	catcccta
D. Wil	acttaacg	gtgagtagcaaa...4514...-tggcctgggctgtgatttt-----	TTGTTTGGCCATTGGCgcTAGA	cacgcggcgtt-----gcaacccaa...388...ctgttcttcag	catcccta
D. Yak	atthaacg	gtgagtagcaaa...4463...-----atgggaagtggactactcgc-	TGGCaTTTGTTtGCCATT	-----tggcgctagacacgcgctcc--...443...atattcttcag	catcccta
	* *****	** ** **	*		* ** ** *****

id=103983 gene=FBgn0001235 name=hth segment=chr3R.6340067.6346793\_-1 type=IN VIEW

Figure 220: CS=8.58



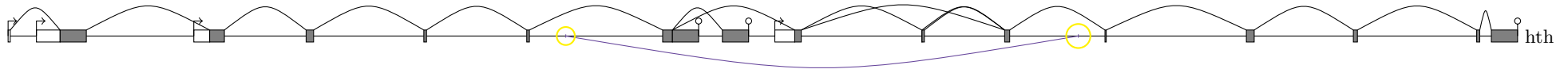
D.Me1	tagaaaa	gtaagtaacgat...2865...-----gtcga	gttgctgctgcgaa-----AAGTTT	TgcTTAAcaGGATGTAC	aaatgagcgc	ccggcatttac-...2037...gtctcgttcag	gtacacga
D.Sim	tagaaaa	gtaagtaacgat...2890...ggaaa	agccgatgttgctgc-----TGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgagcgc	ccaggcatttac-...2006...gtctcgttcag	gtacacga
D.Sec	tagaaaa	gtaagtaacgat...2879...ggaaa	agccgatgttgctgc-----TGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgagcgc	ccaggcatttac-...2017...gtctcgttcag	gtacacga
D.Ana	tagaaaa	gtaagtaccgcc...3034...-----t	agaatggggctgctgcgaa-----AAGTTT	TgcTTAAcaGGATGTAC	aaatgagcgc	ccaggcatttac-...1868...gtctcgttcag	gtacacga
D.Moj	tagaaaa	gtaagtaaacat...2882...-----a	aatgtagcaggacgggacTGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgactgt	-aacatttaca...2014...ctctcgttcag	gtgcatga
D.Per	tagaaaa	gtaagtaaacat...2958...-----g	ttgctgtgaaaagctgtgc-----TTAA	caGGATGTAC	aaacgagtgg	-ggcatttacc...1953...gtctcgttcag	gtacacga
D.Pse	tagaaaa	gtaagtaaacat...3022...-----g	ttgctgtgaaaagctgtgc-----TTAA	caGGATGTAC	aaacgagtgg	-ggcatttaca...1889...gtctcgttcag	gtacacga
D.Vir	tagaaaa	gtaagtaaacat...2687...-----a	aatgtggcaggacgggacTGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgactgt	-aacatttaca...2209...ttctcttcag	gtgcatga
D.Wil	tagaaaa	gtaagtaccaac...3113...-----c	atgaggagaagaaagagacTGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgatggt	-aacatttaca...1783...cactgttacag	gttcatga
D.Yak	tagaaaa	gtaagtaacgag...2810...ggaaa	agccgatgttgctgc-----TGTGaa	AAGTTTgcTTAAcaGGATGTAC	aaatgagcgc	ccaggcatttac-...2086...gtctcgttcag	gtacacga
	*****	*****	*	*****	*****	*****	** ** *

id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN

D.Mel	tgcaagcg	gtaagctttctc...2856...gaacttggagtcggcgtaaa	GTGCaATCCacTTGAaGGAATTT	acatatcaccagcagatacc-----...2046...acaattttccag	gtgatgcc
D.Sim	tgcaagcg	gtaagctttctc...2834...gaacttggagtcggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagataccagata...2063...acaattttccag	gtgatgcc
D.Sec	tgcaagcg	gtaagctttctc...2832...gaacttggagtcggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagataccagata...2065...acaattttccag	gtgatgcc
D.Ana	tgcaagcg	gtaagctttctc...2746...tgactcggagtcggcgtaaa	GTGCaATCCacTTGAaGGAATTT	-acatatcaccagaagatacg-----...2157...cttgttttccag	gtgatgcc
D.Moj	tgcaagcg	gtaagctttctc...2550...tcgagagtccttggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagataccgacgg...2347...ccacacacacag	gtgacgcc
D.Per	tgcaagcg	gtaagctttctc...2650...tcgagagtccttggcgtaaa	GTGCaATCCacTTGAaGGAATTT	acatatcaccagcagataccagcagataccgacgg-----...2260...acctttttccag	gtgatgcc
D.Pse	tgcaagcg	gtaagctttctc...2627...tcgagagtccttggcgtaaa	GTGCaATCCacTTGAaGGAATTT	acatatcaccagcagataccgacgg-----...2283...acctttttccag	gtgatgcc
D.Vir	cgcaagcg	gtaagctttctc...2613...tcgagagtccttggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagataccgacgg...2284...tttttcttacag	gtgatgcc
D.Wil	tgccagcg	gtaagctttccc...2616...ttaagagtccttggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagacccgctctc...2281...gatctattacag	gtgatgcc
D.Yak	tgcaagcg	gtaagctttctc...2706...gaacttggagtcggcgtaaa	GTGCaATCCacTTGAaGGAATTT	aCATAtcaccagcagataccagata...2191...acaattttccag	gtgatgcc
	** ** **	*****	** ** *	*****	** ** *

id=103981 gene=FBgn0001235 name=hth segment=chr3R.6346943.6355160.-1 type=IN VIEW

Figure 221: CS=6



D.Mel	tagaaaa	gtaagtaacgat...3052...	-----	aatgtgcaacagcaa-catgg	<b>GGCCaCTGGCAGTCATAAATATCG</b>	caatgagccgttcgaaaatg-----	...1849...	gtctcgttcgag	gtacacga	
D.Sim	tagaaaa	gtaagtaacgat...3059...	-----	aatgtgcaacagcaa-catgg	<b>GGCCaCTGGCAGTCATAAATATCG</b>	caatgagccgttcgaaaatg-----	...1842...	gtctcgttcgag	gtacacga	
D.Sec	tagaaaa	gtaagtaacgat...3060...	-----	aatgtgcaacagcaa-catgg	<b>GGCCaCTGGCAGTCATAAATATCG</b>	caatgagccgttcgaaaatg-----	...1841...	gtctcgttcgag	gtacacga	
D.Ere	tagaaaa	gtaagtaacgac...3050...	-----	aatgtgcagcagcaa-catgg	<b>GGCCaCTGGCAGTCATAAATATCG</b>	caatggccgctcgaaaatg-----	...1851...	gtctcgttcgag	gtacacga	
D.Ana	tagaaaa	gtaagtaccgcc...3237...	-----	gggggcctccggccgacggc	<b>CAGTCATAAATATCG</b>	-----	ctc-gaaatgtcacatacaat...	1673...	gtctcgttcgag	gtacacga
D.Gri	tagaaaa	gtaagtaaacat...2934...	-----	ccagtcacagcaaccagcca	<b>GCAGTCATAAATATCG</b>	caatgagctgttt--aaatgtc	-----	1975...	ttctcttcgag	gtgcatga
D.Moj	tagaaaa	gtaagtaaacat...3098...	-----	aaca-gcagcagcag-cagcac	<b>CAGTCATAAATATCG</b>	caatgagctgttt--aaatgtc	-----	1812...	ctctcgttcgag	gtgcatga
D.Per	tagaaaa	gtaagtaaacat...3721...	-----	aagaagcggcagcaa-cagca	<b>GCAA--acAATTGCA</b>	---taagcaacgcgcactttttc	-----	1190...	gtctcgttcgag	gtacacga
D.Pse	tagaaaa	gtaagtaaacat...3763...	-----	aagaagcggcagcaa-cagca	<b>GCAA--acAATTGCA</b>	---taagcaacgcgcactttttc	-----	1148...	gtctcgttcgag	gtacacga
D.Vir	tagaaaa	gtaagtaaacat...4254...	g	gttgctga--cgtgtctac	<b>CATTtTGAGTgcCATC</b>	atcaaccattt--ggtggccc	-----	654...	ttctcttcgag	gtgcatga
D.Wil	tagaaaa	gtaagtaaacat...3294...	g	gcaactactgtggggccctc	<b>CAGTCATAAATATCG</b>	caatgagctgttc--aaaatgt	-----	1616...	cactgttcag	gttcatga
D.Yak	tagaaaa	gtaagtaacgag...3000...	-----	aatgtgcaacagcaa-catgg	<b>GGCCaCTGGCAGTCATAAATATCG</b>	caatgagccgttcgaaaatg-----	...1901...	gtctcgttcgag	gtacacga	

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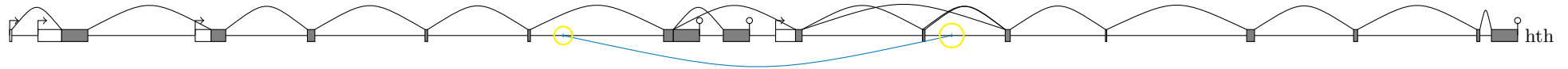
id=103966 gene=FBgn0001235 name=hth segment=chr3R\_6411651\_6417130\_-1 type=IN

D.Mel	tagtctctg	gtaagtaacatcag...3269...	g	gtcaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	<b>TCGGggGTTT</b>	ggggatcctactctggaatc---	...1087...	ctctacttcgag	acaatttc
D.Sim	tagtctctg	gtaagtaacatcag...3268...	g	gtcaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	<b>TCGGggGTTT</b>	ggggatcctactcaggaatc---	...1081...	ctctacttcgag	acaacttc
D.Sec	tagtctctg	gtaagtaacatcag...3213...	g	gttaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	<b>TCGGggGTTT</b>	ggggatcctactctggaatc---	...1081...	ctctacttcgag	acaacttc
D.Ere	tagtctctg	gtaagtaacatcag...3306...	g	gtcaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	<b>TCGGggGTTT</b>	ggggatcctactctggaatc---	...1082...	ctctacttcgag	acaacttc
D.Ana	tagtctctg	gtaagtaacatcag...2788...	g	gattgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	-----	ctcggggttggggctccgag...	1071...	ctctcttcgag	acaacttc
D.Gri	tagtctctg	gtaagtaaacatcag...3351...	g	gtcaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	-----	gggacagcccggacaggac...	1556...	atctcttcgag	acaatttc
D.Moj	cagtctctg	gtaagtaaacatcag...3265...	g	gcgagcgcactcaacttaaga	<b>CGATtATTATGaaCTGc</b>	-----	cggggcag--ggacaggccat---	1643...	tttctacttcgag	acaatttc
D.Per	tagtctctg	gtaagtaaacatcag...2354...	g	ctcaaggctgcttcgctgtc	<b>TGCAAATTaaTTGC</b>	-----	gcccaa--aagccaaagcccg--	1993...	ttctacttcgag	acaacttc
D.Pse	tagtctctg	gtaagtaaacatcag...2331...	g	ctcaaggctgcttcgctgtc	<b>TGCAAATTaaTTGC</b>	-----	gcccaa--aagccaaagcccg--	1954...	ttctacttcgag	acaacttc
D.Vir	tagtctctg	gtaagtaaacatcag...3282...	g	caatgtagcaatgcgtgttc	<b>GATGACTTAAATG</b>	-----	acaacgaacgcagacgacga---	1327...	tttctacttcgag	acaatttc
D.Wil	tagtctctg	gtaagtaaacatcag...3128...	g	acattgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	-----	ttcgcttcggtcggtgtag---	1734...	ttctacttcgag	acaatttc
D.Yak	tagtctctg	gtaagtaaacatcag...3309...	g	gtcaccgcatcaacttaaga	<b>CGATtATTATGaaCTGc</b>	<b>TCGGggGTTT</b>	ggggatcctactctggaatc---	...1130...	ttctacttcgag	acaacttc

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id=103979 gene=FBgn0001235 name=hth segment=chr3R\_6355185\_6359632\_-1 type=IN VIEW

Figure 222: CS=7.2



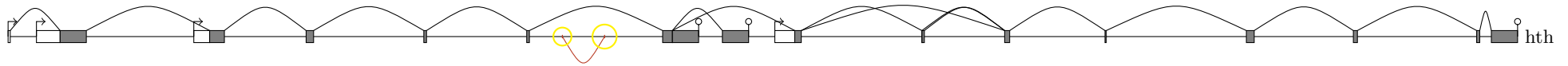
D.Mel	tagaaaaa	gtaagtaacgat...2987...	-gctcgt--ggggc--cac---ccaatg-----	TGCAACAGcAGCAGCAA	-----	CaGCAA	-----	cagcaacagcagca-gcaaca...	1915...	gtctcgttgcag	gtac
D.Sec	tagaaaaa	gtaagtaacgat...3020...	-ccaatgtgcaacagc-a---gca-----	GCAACAGcAGCAGCAA	-----	CaGCAA	-----	tgtgcaacagcaacatgggg--...	1883...	gtctcgttgcag	gtac
D.Ere	tagaaaaa	gtaagtaacgac...3626...	agctttt--gcaggcaaaa---aaaCGAACAGAAaaGAAGcgGCAGCgcAGCAGCaGCAACAA	-----	CaAACA	-----	atttcataagcaacgcgca---	1255...	gtctcgttgcag	gtac	
D.Ana	tagaaaaa	gtaagtaccgcc...2556...	-----ctcgaccggcac--cggcacc-----	AGCAACAGCAACAGCAAGaCAGCAccAGCAatTGGAaCAGCAA	-----	-----	catcatcgccatcgacagct---	2326...	gtctcgttgcag	gtac	
D.Gri	tagaaaaa	gtaagtaaacat...2880...	---ccaatgtgcagcagcga---aca-----	GCAACAGCAACAGCAA	-----	cAGCAGcAGCAGCAG	cagccagtcacagcaaccag---	2014...	ttctcttgcag	gtgc	
D.Moj	tagaaaaa	gtaagtaaacat...3179...	aaattatcagcggc--caa---gca-----	TCGGCAGCAACAGCAACAGCAA	-----	CAA	-----	catgccaaaaggccgagc---	1721...	ctctcgttgcag	gtgc
D.Per	tagaaaaa	gtaagtaaaaca...3705...	---ccacaaaaatgaagaaa---aga-----	AGCGGcAGCAACAGCAG	-----	CAAAcA	-----	atttcataagcaacgcgca---	1197...	gtctcgttgcag	gtac
D.Pse	tagaaaaa	gtaagtaaaaca...4113...	-----gcaacatcacagctacagcc-----	ACAGCAACAGCAA	-----	CA	-----	acagggttttaaaacgcat---	797...	gtctcgttgcag	gtac
D.Vir	tagaaaaa	gtaagtaaacat...3407...	---catcgcgccatcagc-a---gca-----	ACAGCAGCAGCAA	-----	CAACAGCAGC	ctgtaaacgagtttggcaag---	1495...	ttctcttgcag	gtgc	
D.Wil	tagaaaaa	gtaagtacaac...2494...	-----catgccggcatggggcaac-----	AGCAACAGcAACAGCAG	-----	CAaCAACAcCGAT	---tttgggccttgtttgatg---	2401...	cactgttacag	gttc	
D.Yak	tagaaaaa	gtaagtaacgag...2950...	-gctcgt--gcggc--cac---ccaatg-----	TGCAACAGcAGCAGCAA	-----	CA	-----	gcagcaacagcaatgtgcaa---	1956...	gtctcgttgcag	gtac
	*****	*****	*	**** * *		**				** * *	** *

id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN

D.Mel	atatgatg	gtaagtgcatt...3141...	---gactgtttggctctgtctc-t-----	TTG	-----	TGTTGTTGTTaTTGTTGTTG	-----	actttgtttgtttgtctg...	1762...	tatcttttgcag	gacgatgg	
D.Sec	atatgatg	gtaagtgcatt...3189...	---gactgtttggctctgtctc-t-----	TTG	-----	TGTTGTTGTTaTTGTTGTT	-----	gactttgtttgttttgcg...	1715...	tatcttttgcag	gacgatgg	
D.Ere	atatgatg	gtaagtgcatt...3222...	-----tgttggctctgtctc-ttcg---	TGT	-----	TGTTGTTGTTgGTTGTTGTTGTTgaCTTTgTTTTGtTTG	ccgcgct---	ttttattttat---	1662...	catcttttgcag	gacgatgg	
D.Ana	atatgatg	gtaagtgcatt...3478...	-----tttggctctgtctc-tgggct---	TTGTTGcTC	-----	TGTTGTTGTTGTTGTTGTTTGGCT	-----	ttggcttggcttttatttt---	1413...	catcttttccag	gacgatgg	
D.Gri	atacgatg	gtaagtacatt...4171...	-----cagacgccttctt-gttgct-c	TTGCTGCTc	TTGTTa	TTGTTGTTGTTGTTGTTG	-----	actggccaagttagaattta---	723...	tattgcttgcag	gacgatgg	
D.Moj	atacgatg	gtaagtacatt...2779...	cgttggatatttggggttcaa	TTG	-----	TGTTGTTGTTGTTGTTG	CTGG	-----	ggtggcttctatttctaaat---	2120...	tccccttgcag	gacgatgg
D.Per	atatgatg	gtaagtacatt...3535...	-----tggctcattggt-gttgccgc-	TGT	-----	TctTGTTGTTGTTGTTGTTGTT	-----	accgctcttgttggcagcaa...	1365...	tatcttttgcag	gacgatgg	
D.Pse	atatgatg	gtaagtacatt...3547...	-----tggtcattggt-gttgccgc-	-----	-----	TGTTGTTGTTGTTGTT	-----	taccgctcttgttggacca...	1363...	tatcttttgcag	gacgatgg	
D.Vir	atacgatg	gtaagtacatt...2721...	---ttggatatttggggtttaaatt---	GT	-----	TGTTGTTGTTGTTGTTGTTGTT	-----	ctggggtggcttctatttct---	2181...	taactcttgcag	gacgatgg	
D.Wil	atatgatg	gtaagtacatt...3009...	-----ctgctgcctttcagttggt-	GTTGc	TGTTG	TGTTGCTGTTaTTGTTGTT	-----	attctatttctttacaataa...	1886...	tcttaattgcag	gacgatgg	
D.Yak	atatgatg	gtaagtgcatt...3171...	---tgttggctctgtctc-ttgg---	-----	-----	TGTTGTTGTTaTTGTTGTTG	-----	actttgtttgtttgtctg...	1735...	tatcttttgcag	gacgatgg	
	*** **	***** **	*	**** * *		**		**		** **	*****	

id=103977 gene=FBgn0001235 name=hth segment=chr3R.6359729.6374328.-1 type=IN VIEW

Figure 223: CS=9.9



D.Me1	tagaaaa	gtaagtaacgat...2994...	-----g-ggccaccaatgtgcaaca-	<b>GCAG</b>	-----ca	<b>GCAACAGCAACAGCA</b>	-a	<b>CA</b>	<b>GCA</b>	-----gca-gcaacagcaatgt---	gca...	1904...	gtctcgttcag	gtacacga			
D.Sim	tagaaaa	gtaagtaacgat...3003...	-----ccagtcgcccttgttgctcg	<b>TGCGGc</b>	<b>CACCCAATGTGCAACAg</b>	<b>CAGCAGCA</b>	-	<b>ACA</b>	<b>G</b>	-----caatgtgcaacagcaacat---	g---	1887...	gtctcgttcag	gtacacga			
D.Sec	tagaaaa	gtaagtaacgat...2992...	-----ccagtcgcccttgttgctcg	<b>TGCGGc</b>	<b>CACCCAATGTGCAACAg</b>	<b>CAGCAGCA</b>	-	<b>ACA</b>	<b>G</b>	-----cagca-gcaacagcaatgt---	gc---	1898...	gtctcgttcag	gtacacga			
D.Ere	tagaaaa	gtaagtaacgac...3010...	-----ctgctcgtggggccacc	-----	<b>TGTGCAACa</b>	<b>GAGCAGCA</b>	-	<b>GCAATGT</b>	<b>GCAAGCAGCA</b>	-----	acatggggccactggcagtc...	1881...	gtctcgttcag	gtacacga			
D.Ana	tagaaaa	gtaagtaaccg...2544...	....tcgctgagggatctgcacc	-----	<b>GGCAc</b>	<b>CGGCAc</b>	<b>CAGCAACAGCAACAGCA</b>	ag	<b>ACA</b>	<b>GCAc</b>	<b>CAGCAAT</b>	-----	tggaacagcaacatcatcgc...	2337...	gtctcgttcag	gtacacga	
D.Gri	tagaaaa	gtaagtaaacat...2867...	-----ctgctgtgcccacc	caatgt	-----	<b>GCAGCAGCGaa</b>	<b>CAGCAACAGCAa</b>	<b>CAGCA</b>	-	<b>ACA</b>	<b>GCAGca</b>	<b>GCAG</b>	-----	2017...	ttctcgttcag	gtgcatga	
D.Moj	tagaaaa	gtaagtaaacat...3055...	-----gttggcccacc	caatgtgca	-----	<b>CAGCAGCAGCCAGTc</b>	<b>ACAGCAGCAACAGCA</b>	-	<b>GCA</b>	<b>GCAGCAGCACCAGT</b>	-----	cataaatatcgcaatgagct...	1823...	ctctcgttcag	gtgcatga		
D.Per	tagaaaa	gtaagtaaacat...4049...	-----ggcagaggcctgcaacatca	-----	<b>CAGCta</b>	<b>CAGCca</b>	<b>CAGCA</b>	-	<b>ACA</b>	<b>ACAG</b>	-----	ggttttaaaacgcattttg---	852...	gtctcgttcag	gtacacga		
D.Pse	tagaaaa	gtaagtaaacat...3748...	-----cacaanaatgaagaaagaa	-----	-----	<b>CGGGCAGCA</b>	-	<b>ACA</b>	<b>GCAGCAA</b>	-----	acaatttgcataagcaacgc...	1158...	gtctcgttcag	gtacacga			
D.Vir	tagaaaa	gtaagtaaacat...3390...	-----ggcaacagcaactccacat	-----	<b>CGGCGGCAc</b>	<b>tCAGCAGCAc</b>	<b>agCAGCAGCA</b>	-	<b>ACA</b>	<b>ACAGCAGCct</b>	<b>GTAAc</b>	<b>acgagtttgcaa</b>	-----	gttttg---	1489...	ttctcgttcag	gtgcatga
D.Wil	tagaaaa	gtaagtaaacat...2488...	-----gggtagcatgccggcatggg	-----	-----	<b>GGCAACAGCAACAGCA</b>	-	<b>ACA</b>	<b>G</b>	-----	cagcaacaaccgattttg---	2417...	caactgttacag	gttcatga			
D.Yak	tagaaaa	gtaagtaaacgag...2945...	....ttgtgctgctgcccacc	-----	<b>CAATg</b>	<b>TGCAACAGCAGCAGCA</b>	-	<b>aCA</b>	<b>GCAGCAACAG</b>	-----	caatgtgcaacagcaacat---	g---	1946...	gtctcgttcag	gtacacga		

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id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN

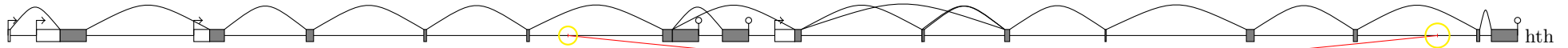
D.Me1	tagaaaa	gtaagtaacgat...3791...	----gttgtgctggtgtgcccg	-----	<b>TGTTGca</b>	<b>GTT</b>	-----	<b>GTTGCTGTTGTgt</b>	<b>CTGC</b>	-----	cagccatggcccagtgcaat---	1107...	gtctcgttcag	gtacacga			
D.Sim	tagaaaa	gtaagtaacgat...3765...	----gcccggttaaatggaccacc	-----	<b>CTG</b>	<b>TTGTTGCTGgt</b>	-----	<b>GTTGCcg</b>	<b>GTGTTGct</b>	<b>GGTGTGCA</b>	<b>gttgtgctgctgtgtctgc</b>	-----	1122...	gtctcgttcag	gtacacga		
D.Sec	tagaaaa	gtaagtaacgat...3767...	----gcccggttaaatggaccacc	-----	<b>CTG</b>	<b>TTGTTGCTGgt</b>	-----	<b>GTTGCcg</b>	<b>GTGTTGct</b>	<b>GGTGTGCA</b>	<b>gttgtgctgctgtgtctgc</b>	-----	1120...	gtctcgttcag	gtacacga		
D.Ere	tagaaaa	gtaagtaacgac...3734...	----cccggttaaatggaccacc	-----	<b>TG</b>	<b>TTGTTGca</b>	<b>GT</b>	-----	<b>GTTGCa</b>	<b>GTTGTTGCa</b>	<b>GTTGt</b>	<b>TGCA</b>	<b>gttgtgctgctgtgtctgc</b>	-----	1154...	gtctcgttcag	gtacacga
D.Ana	tagaaaa	gtaagtaaccg...3920...	....tgagcaccctgtggtgtgc	<b>GTTGTTGc</b>	<b>TGCTG</b>	<b>TTGCTGTTGCT</b>	-----	<b>GTTGCTGt</b>	<b>TGCTGc</b>	<b>TGCT</b>	-----	actgctgcttct---	ggcccaat...	963...	gtctcgttcag	gtacacga	
D.Gri	tagaaaa	gtaagtaaacat...3751...	----gcccggttaaatggaccacc	-----	<b>CTGTTGTTGTTGCT</b>	-----	<b>Gc</b>	<b>TGCTGTTGCTGc</b>	<b>TGCTGc</b>	<b>CTGT</b>	-----	ctgc-tcagcccagcgcaat...	1134...	ttctcgttcag	gtgcatga		
D.Moj	tagaaaa	gtaagtaaacat...3867...	----ccgtttaaatggaccacc	-----	<b>GTTGGTt</b>	<b>GTTGTTGCTGTTG</b>	-----	<b>Gt</b>	<b>GTTGt</b>	<b>GCTGTTGCTG</b>	-----	ctgcttctgctgctgca...	1008...	ctctcgttcag	gtgcatga		
D.Per	tagaaaa	gtaagtaaacat...4222...	----gcacgtgctgctcatgttg	-----	<b>CTG</b>	<b>TTGc</b>	<b>TGTTGgt</b>	-----	<b>GTTGc</b>	-----	<b>GCTG</b>	-----	cttgatgcttaaaagtgtg---	680...	gtctcgttcag	gtacacga	
D.Pse	tagaaaa	gtaagtaaacat...3862...	----tgctgccctgcccgc-tgccg	-----	<b>TTG</b>	<b>CTGTTGTTGtC</b>	-----	<b>TGCTGC</b>	-----	-----	-----	-----	cattgccagtgcaattaat...	1043...	gtctcgttcag	gtacacga	
D.Vir	tagaaaa	gtaagtaaacat...3659...	----cacctgttggtgtgctgag	-----	<b>TTA</b>	<b>CtGCTGCTGTTGg</b>	<b>GCTGTTGGTt</b>	<b>GTTGt</b>	<b>TGTTGTTG</b>	-----	ttgtgctgctgctgctgct---	1224...	ttctcgttcag	gtgcatga			
D.Wil	tagaaaa	gtaagtaaacat...3189...	----caagtaacaagcaaccct	-----	<b>CT</b>	-----	<b>GTTGCTGTTGCTGTTGCC</b>	-----	gttgctg	-----	atgatgctgtc...	1716...	caactgttacag	gttcatga			
D.Yak	tagaaaa	gtaagtaaacgag...3725...	----gcccggttaaatggaccacc	-----	<b>CTG</b>	<b>TTGTTGCTGgt</b>	-----	<b>GTTGCTGTTGTTGCA</b>	<b>GTTG</b>	-----	ttgctg-tgtgtgctgca---	1167...	gtctcgttcag	gtacacga			

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id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN VIEW

Figure 224: CS=7.2





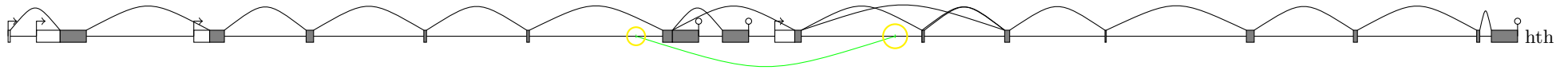
D. Mel	tagaaaaa	gtaagtaacgat...3103...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaacttatcagccag-----	...1807...	gtctcgttgag	gtacacga
D. Sim	tagaaaaa	gtaagtaacgat...2954...	-tttacaagcaacgcctccg-----	GTTG-CTGCCGTTGCCA	ctgccatgtccgcccagtcg-----	...1955...	gtctcgttgag	gtacacga
D. Sec	tagaaaaa	gtaagtaacgat...3111...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaacttatcagccag-----	...1799...	gtctcgttgag	gtacacga
D. Ere	tagaaaaa	gtaagtaacgat...3101...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaacttatcagccag-----	...1809...	gtctcgttgag	gtacacga
D. Ana	tagaaaaa	gtaagtaacgat...3268...	-atcgctcga-aatgtcacata-----	CAATG-CTGAcA	AATT--aatcaaaaagttatcag-gca-----	...1642...	gtctcgttgag	gtacacga
D. Gri	tagaaaaa	gtaagtaaacat...4637...	-atgatttagctaca-aacgta-----	TTGCAATGCCTGA	-----ttagattacatgcttaagat-----	...275...	ttctcttgag	gtgcatga
D. Moj	tagaaaaa	gtaagtaaacat...2996...	-----gcagctgccggtgtgtgtg	TTGTgCTG-CTGTTgCTGCTG	-----tcgtgggtcccagcagtgag-----	...1909...	ctctcgttgag	gtgcatga
D. Per	tagaaaaa	gtaagtaaacat...3120...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaagttatcagagtc-----	...1790...	gtctcgttgag	gtacacga
D. Pse	tagaaaaa	gtaagtaaacat...3185...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaagttatcagcgtc-----	...1725...	gtctcgttgag	gtacacga
D. Vir	tagaaaaa	gtaagtaaacat...4328...	-----atggataacg-cataaaaagc	AATTGTCATGCC	-----atttcagcgggagcaaacg-----	...585...	ttctcttgag	gtgcatga
D. Wil	tagaaaaa	gtaagtaaacat...3200...	-----caacgcctctgtgtgtgt	GCTG-tGCCGTTGCT	-----gatgtatgctgtccatct-----	...1710...	cacttgtag	gttcatga
D. Yak	tagaaaaa	gtaagtaacgat...3051...	-ccgttcgaaaatgtcacata-----	CAATG-CTGAcA	AATT--aatc-aaaacttatcagccag-----	...1859...	gtctcgttgag	gtacacga
	*****	*****		** **	*		** ** **	** ** **

id=103966 gene=FBgn0001235 name=hth segment=chr3R\_6411651.6417130\_-1 type=IN

D. Mel	aataattg	gtgagtagccg...1481...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgccccaaaa-----	...890...	gtctgcttacag	gttcatca
D. Sim	aataattg	gtgagtagccg...2209...	-----gtcggcgaggcccattgat	TGGCAGTGGCAGggCAGC	-----aaaaagtgtgactctggcgg-----	...145...	gtctgcttacag	gttcatca
D. Sec	aataattg	gtgagtagccg...1486...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgccccaaaa-----	...875...	gtctgcttacag	gttcatca
D. Ere	aataattg	gtgagtagccg...1458...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgccccaaaa-----	...872...	gtctgcttacag	gttcatca
D. Ana	aataattg	gtgagtagccg...1575...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgccccaaaa-----	...776...	tccgcttacag	gttcatca
D. Gri	aacaattg	gtgagtagcaact...2504...	-----tgtcgttttgataaacgatt	TCAGGgCGTTGCAA	-----caatttccgcccataaatga-----	...829...	actcttttacag	gttcatca
D. Moj	aacaattg	gtaagtagcaag...1029...	-----gagagagagagcaacaacct	TAGCAGaaAATAGCAaaATAA	aatgtagacacttttggtta-----	...1629...	actcttttacag	gttcatca
D. Per	aataattg	gtaagtagcaga...1821...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgcccataaaa-----	...782...	ctctacttacag	gttcatca
D. Pse	aataattg	gtaagtagcaga...1801...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgcccataaaa-----	...792...	atctacttacag	gttcatca
D. Vir	aacaattg	gtaagtagcaaa...1974...	-----gttttgataaacgatttcag	GGCGtTGCAcAATT	-----tccgcctcaaatgagcaaa...761...	actcttttacag	gttcatca	
D. Wil	aataattg	gtaagtagcaaa...764...	-tattttctccctacactag-----	GGCAGCa-GCActCAGC	-tcaattaaattgaatttcgc-----	...1810...	gttctctgag	gttcatca
D. Yak	aataattg	gtaagtagccg...1501...	-atgttgcgttttgataaac-----	GATTTcAGggCGTTG	-----caacaatttccgccccaaaa-----	...901...	gtctgcttacag	gttcatca
	** *****	** **			*		** ** **	** ** **

id=103985 gene=FBgn0001235 name=hth segment=chr3R\_6337540.6339989\_-1 type=IN VIEW

Figure 225: CS=7.2



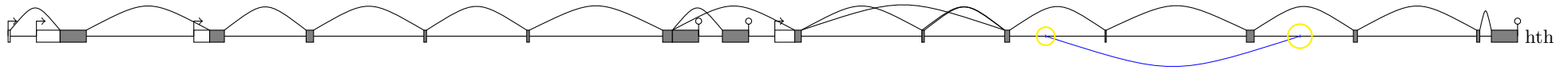
D. Mel	tagaaaaa	gtaagtaacgat...4403...	-----gagttttcaggtaacgcatc	AAAAGCAATTTGCA	-----	tgccattt	---gctggggagggga...	508...	gtctcgttcag	gtacacga	
D. Sec	tagaaaaa	gtaagtaacgat...4408...	-----gagttttcaggtaacgcatc	AAAAGCAATTTGCA	-----	tgccattt	---gctggggagggga...	503...	gtctcgttcag	gtacacga	
D. Ere	tagaaaaa	gtaagtaacgac...4378...	-----gagttttcaggtaacgcatc	AAAAGCAATTTGCA	-----	tgccattt	---gctggggattgg...	533...	gtctcgttcag	gtacacga	
D. Ana	tagaaaaa	gtaagtaccgcc...4526...	-----tgggtctggggcaacgcatc	AAAAGCAATTTGCA	-----	tgccattt	---tcgggcggggat...	385...	gtctcgttcag	gtacacga	
D. Gri	tagaaaaa	gtaagtaaacat...2735...	-----ggactgtgaaaagttttgct	TAACAGGATGta	CAAATGACTGTAac	ATTTACA	acgcttacaacaagcaacg--	2157...	ttctcttcag	gtgcatga	
D. Moj	tagaaaaa	gtaagtaaacat...2898...	-----ggactgtgaaaagttttgct	TAACAGGATGta	CAAATGACTGTAac	ATTTACA	atacttgc-aacaagcaacg-	1994...	ctctcgttcag	gtgcatga	
D. Per	tagaaaaa	gtaagtaaaaca...2960...	-----tgctgtgaaaagctgtgctt	AACAGGATGta	CAAAcg	AGTG	-----gggcattt	---accagcaacgcc...	1944...	gtctcgttcag	gtacacga
D. Pse	tagaaaaa	gtaagtaaaaca...3024...	-----tgctgtgaaaagctgtgctt	AACAGGATGta	CAAAcg	AGTG	-----gggcattt	---acaagcaacgcc...	1880...	gtctcgttcag	gtacacga
D. Vir	tagaaaaa	gtaagtaaacat...2557...	tacattagattaaagagaaa-	CGAATGTAGGc	AAAGTGCAATa	GTGCA	-----ataagacagtt	---ggccagggc...	2341...	ttctcttcag	gtgcatga
D. Wil	tagaaaaa	gtaagtaccaac...4648...	-----aaggcaaacgaagggtat-	AAAAGCAATTTGCA	-----	tgccattt	---gtggcgggaaca...	263...	cacttgttacag	gttcatga	
D. Yak	tagaaaaa	gtaagtaacgag...4373...	-----gagttttcaggtaacgcatc	AAAAGCAATTTGCA	-----	tgccattt	---gcaagagagggg...	538...	gtctcgttcag	gtacacga	
	*****	*****		* * * *		**		** * * *	** * * *	** * * *	

id=103966 gene=FBgn0001235 name=hth segment=chr3R\_6411651\_6417130\_-1 type=IN

D. Mel	agaccctg	gtaagtgcacac---...4208...	-----gaagcagcagaagaggattc	TGCGtt	AATTTGCat	TTTT	-----gttttgtgataacaaa	---agcg...	698...	ttctcgttcag	atggtaag				
D. Sec	agaccctg	gtaagtgcctcac---...4197...	-----gaagcagcagaagaggattc	TGCGtt	AATTTGCat	TTTT	-----gttttgtgataacaaa	---agcg...	709...	ttctcgttcag	atggtaag				
D. Ere	agaccctg	gtaagtgcgcc---...4193...	-----gaagcagcagaagaggattc	TGCGtt	AATTTGCat	TTTT	-----gttttgtgataacaaa	---agcg...	713...	ttctcgttcag	atggtaag				
D. Ana	agaccctg	gtaagtgcggac---...4416...	-----tgaagcagcagaagag-attc	TGCGtt	AATTTGCat	TTTT	-----gttttcgcgataacaaa	---agta...	490...	cctctcttcag	atggtaag				
D. Gri	agaccctg	gtaagtaatgca---...4374...	tcaaatggacaacaa----	aaaaa	TGTAATc	TGTGc	GTTAa	TTTGCA	TTTGGTTG	-----	cacgataacaaa	agcagcaa...	518...	ttctatttcag	atggtaag
D. Moj	agaccctg	gtaagtgttcta---...4327...	-----tagacaaacaacacaaaa	TGTAATc	TGTGc	GTTAa	TTTGCA	TTTGGTTG	-----	catgataacaaa	aaagcagca-	...	565...	ctctcttcag	atggtaag
D. Per	agaccctg	gtaagtcctaata---...3980...	-----agcggccgaagaggattctg	CGTTaa	TTTGCA	TTTGGTT	-----	ttatgataacaaa-	aaaaaaa...	925...	ttcccgttcag	atggtaag			
D. Pse	agaccctg	gtaagtcccaat---...3988...	-----agcggccgaagaggattctg	CGTTaa	TTTGCA	TTTGGTT	-----	ttatgataacaaa-	aaaaaaa...	917...	ttcccgttcag	atggtaag			
D. Vir	agaccctg	gtaagttagttca---...3553...	-----ttcttctggcccattgcca	GTGCGa	AATTTGC	CA	TTTTat	TTTGGC	ca	TTTG	gcatttttcggggcgctgtg	...	1341...	ttctatttcag	atggtaag
D. Wil	agaccctg	gtaagttatttt---...4289...	-----aagcaacaacacaaacattg	TGCGtt	AATTTGC	CA	TTTT	-----	tgttttatgataacaaa-	aca---	...	618...	ttcttttcag	atggtaag	
D. Yak	agaccctg	gta---agttcagcc...4201...	-----gaagcagcagaagagattctc	TGCGtt	AATTTGC	CA	TTTT	-----	gttttgtgataacaaa	---agcg...	...	705...	ttctcgttcag	atggtaag	
	*****	***	*	* * * * *		*	*		** * * *	*****					

id=103974 gene=FBgn0001235 name=hth segment=chr3R\_6374377\_6387630\_-1 type=IN VIEW

Figure 226: CS=8.58



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D.Mel tagtcctg gtaagtaatcag...2638...ctctccggcaactgaaaagcTGCACTTTGCatTTTA-----accagaactttggctgcgaa...1730...ctctacttgca gacaatttc
D.Sim tagtcctg gtaagtaatcag...2646...ctctccggcaactgaaaagcTGCACTTTGCatTTTA-----accagaactttggctgcgaa...1715...ctctacttgca gacaacttc
D.Sec tagtcctg gtaagtaatcag...2594...ctctccggcaactgaaaagcTGCACTTTGCatTTTA-----accagaactttggctgcgaa...1712...ctctacttgca gacaacttc
D.Ere tagtcctg gtaagtaatccg...2711...ctctccggcaactgaaaagcTGCACTTTGCatTTTA-----accagaactttggctctttg...1689...ctctacttgca gacaacttc
D.Ana tagtcctg gtaagtactccc...2222...cgctgctccctcccagagcTGCACTTTGCatTTTA-----accagagaaccagaggagaa...1638...ctctctttccag acaacttc
D.Per tagtcctg gtaagtatttcc...2637...ttttcggttttgagaaaagtTGCACTTTGCatTTTA-----accagaggaacggaaagcgg...1708...ttctactttcag acaacttt
D.Pse tagtcctg gtaagtatttcc...2599...ttttcggttttgagaaaagtTGCACTTTGCatTTTA-----accagaggaacggaaagcga...1684...ttctactttcag acaacttt
D.Vir tagtcctg gtaagtatcaga...2581...tccgcaaagtgtgcaagtTGCACTTTGCatTTTAacagtggcgacaacttcca-----..2025...ttttctttgcag acaatttc
D.Wil tagtcctg gtaagtgaaaaa...2611...ttatttaagtatctagaataTTAAATGGGatCAGACA--cgacaaaagtgtgtgtgtt--..2250...ttctactttcag acaatttt
D.Yak tagtcctg gtaagtattgcc...2763...ctctccggcaactgaaatgcTGCACTTTGCatTTTA-----accagaactttggctgcgaa...1688...ttctacttgca gacaacttc
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id=103979 gene=FBgn0001235 name=hth segment=chr3R\_6355185\_6359632\_-1 type=IN

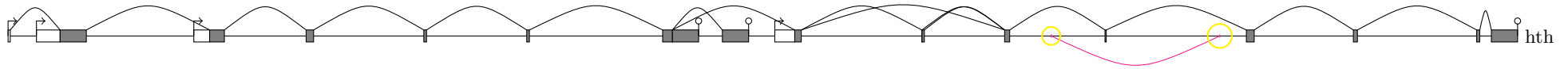
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D.Mel atttaacg gtgagttagcaaa...3499...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggagcccacagctac--..1413...atctcctttcag catcccta
D.Sim atttaacg gtgagttagcaaa...3511...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ccacagctaca-..1401...atctcctttcag catcccta
D.Sec atttaacg gtgagttagcaaa...3524...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ccacagctaca-..1388...atctcctttcag catcccta
D.Ere atttaacg gtgagttagcaaa...3469...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ccacagccaca-..1443...atattcctttcag catcccta
D.Ana atttaacg gtaagttagcatt...3605...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ctaccgagcca-..1307...ctgcccttcag catcccta
D.Per atttaacg gtgagtccaac...3416...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ctaccaaacag-..1496...ttccaattgcag catcccta
D.Pse atttaacg gtgagtccaac...3418...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ctaccaaacag-..1494...ctccaattgcag catcccta
D.Vir atttaacg gtaagtccaatc...3291...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggagtcgatggagt-..1621...ttttctttttag catcccta
D.Wil acttaacg gtgagtaactaa...4515...ggcctgggctgtggattttt-----TGTTTGCCCATTTGGcgctagaca--cgcgcgcttgc...395...ctgttcttcag catcccta
D.Yak atttaacg gtgagtaccaa...3492...-----aatttattaacacaaacaaTAAGGCAAATGCAtttaaggag-ccacagctcca-..1420...atattcttacag catcccta
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id=103983 gene=FBgn0001235 name=hth segment=chr3R\_6340067\_6346793\_-1 type=IN VIEW

Figure 227: CS=7.8



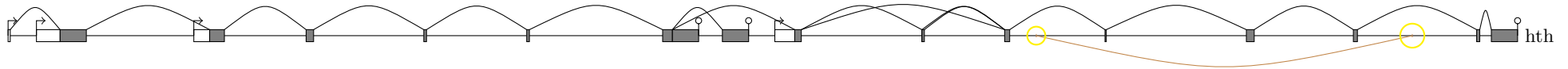
D. Mel	tagtcctg	gtaagtaatcag...2741...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacacaacttcg	tatgctg-----	...1624...	ctctacttcgag	acaatttc
D. Sim	tagtcctg	gtaagtaatctg...2749...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacacaacttcg	tatgctg-----	...1609...	ctctacttcgag	acaatttc
D. Sec	tagtcctg	gtaagtaatctg...2697...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacacaacttcg	tatgctg-----	...1606...	ctctacttcgag	acaatttc
D. Ere	tagtcctg	gtaagtaatcag...2822...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacacaacttcg	tatgctg-----	...1575...	ctctacttcgag	acaatttc
D. Ana	tagtcctg	gtaagtaactccc...2337...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacactaagtgc	caggagag-----	...1520...	ctctctttccag	acaatttc
D. Moj	cagtccctg	gtaagtaacttga...2902...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacctgttctgc	gcgtgag-----	...2004...	ttttcatttcgag	acaatttc
D. Per	tagtcctg	gtaagtatttcc...2784...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgaccaaagtgc	tgctg-----	...1558...	ttctactttcag	acaatttc
D. Pse	tagtcctg	gtaagtatttcc...2746...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgaccaaagtgc	tgctg-----	...1534...	ttctactttcag	acaatttc
D. Vir	tagtcctg	gtaagtatcaga...2689...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgac-----	ttgttgttacagcc...	1914...	tttcttttcag	acaatttc
D. Wil	tagtcctg	gtaagtgaaaaa...2610...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacaaaagttg	tgttgtt-----	...2250...	ttctactttcag	acaatttc
D. Yak	tagtcctg	gtaagtattgcc...2866...	tttatttaagtatctagaat	ATTAaaATGGGAT	caGACAcgacacaacttcg	tatgctg-----	...1582...	ttctacttcgag	acaatttc
		*****		*****				* * * * *	**** **

id=103979 gene=FBgn0001235 name=hth segment=chr3R\_6355185\_6359632\_-1 type=IN

D. Mel	tgcaagcg	gtaagctttctc...4699...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgagtgga...	211...	acaattttccag	gtgatgcc
D. Sim	tgcaagcg	gtaagctttctc...4691...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgagtgga...	219...	acaattttccag	gtgatgcc
D. Sec	tgcaagcg	gtaagctttctc...4691...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgagtgga...	219...	acaattttccag	gtgatgcc
D. Ere	tgcaagcg	gtaagctttctc...4681...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgaccgag...	229...	acaattttccag	gtgatgcc
D. Ana	tgcaagcg	gtaagctttctc...4703...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgaccgag...	207...	cttgttttccag	gtgatgcc
D. Moj	tgcaagcg	gtaagctttctc...4661...	taaaccgagccacaacaa	TGTCATCCATaTGAT	tatcattatgtttaagcagc...	249...	ccacacacacag	gtgacgcc
D. Per	tgcaagcg	gtaagttttctt...4687...	tgaacggcagccacaacaa	TGTCATCCATaTGAT	tatcgttatggctagtaag...	223...	acgtttttccag	gtgatgcc
D. Pse	tgcaagcg	gtaagttttctt...4688...	tgaacggcagccacaacaa	TGTCATCCATaTGAT	tatcgttatggctagtaag...	222...	acgtttttccag	gtgatgcc
D. Vir	cgcaagcg	gtaagctttctc...4687...	taaaccgagccacaacaa	TGTCATCCATaTGAT	tatcattatgtttaagcagc...	223...	ttttctttacag	gtgatgcc
D. Wil	tgccagcg	gtaagctttccc...4637...	taaaccgagccacaacaa	TGTCATCCATaTGAT	tatcattatgcccctagagcc...	273...	gatctattacag	gtgatgct
D. Yak	tgcaagcg	gtaagctttctc...4679...	tgacctgcagtcacaacaa	TGTCATCCATaTGAT	tatcgttacgaccgagtgga...	231...	acaattttccag	gtgatgcc
	** ****	***** **		* * * * *	***** **		***	**** **

id=103981 gene=FBgn0001235 name=hth segment=chr3R\_6346943\_6355160\_-1 type=IN VIEW

Figure 228: CS=6.6



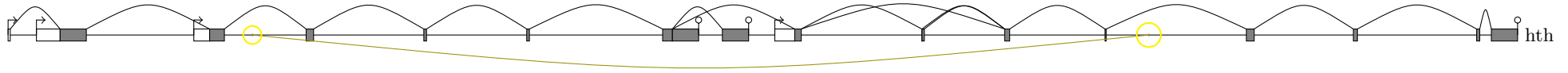
D.Mel	tagtcctg	gtaagtaatcag...	2458...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccgagaagacgaagaaac	-...	1910...	ctctacttgca	acaatttc
D.Sim	tagtcctg	gtaagtaatctg...	2466...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccgaggagacgaagaagc	-...	1895...	ctctacttgca	acaatttc
D.Sec	tagtcctg	gtaagtaatctg...	2414...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccgaggagacgaagaagc	-...	1892...	ctctacttgca	acaatttc
D.Ere	tagtcctg	gtaagtaatcgg...	2524...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccgagaagacgaacaccag	-...	1876...	ctctacttgca	acaatttc
D.Ana	tagtcctg	gtaagtactccc...	2065...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	agtAGTGC	cgaggaggaagagaggagag	-...	1788...	ctctctttccag	acaatttc
D.Gri	tagtcctg	gtaagtaaatcc...	3522...	---tgtgtacaatgtagcaatgc	---GTGTTc	GATGACTT	aaatgacaatgaagcga	aaa-----	...	1389...	atctctttgca	acaatttc
D.Moj	cagtccctg	gtaagtacttga...	3428...	---tgtgtacaatgtagcaatgc	---GTGTTc	GATGACTT	aaatgacaacgaacgcgca	g-----	...	1483...	ttttcattgca	acaatttc
D.Per	tagtcctg	gtaagtatttcc...	2360...	gctgcttcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccaaagccccggcaccagt	-...	1985...	ttctactttca	acaatttt
D.Pse	tagtcctg	gtaagtatttcc...	2337...	gctgcttcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	-----	gccaaagccccggcaccagt	-...	1946...	ttctactttca	acaatttt
D.Vir	tagtcctg	gtaagtatcaga...	3276...	---aatgtacaatgtagcaatgc	---GTGTTc	GATGACTT	aaatgacaacgaacgcagac	-----	...	1332...	ttttctttgca	acaatttc
D.Wil	tagtcctg	gtaagtgaaaaa...	3331...	---catgtacaatgtaccaatgc	---GTGTTc	GATGACTT	aaatgacaa-gaaagcgtcca	-----	...	1534...	ttctactttca	acaatttt
D.Yak	tagtcctg	gtaagtattgcc...	2563...	gctgattcgctgtctgcaaa	TTAATTGGCGcc	CAAAA	g	ccaagaagacgaaagacga	-...	1887...	ttctacttgca	acaatttc
	*****	*****		* * * * *	***	* * * *		*			* * * * *	**** **

id=103979 gene=FBgn0001235 name=hth segment=chr3R.6355185.6359632.-1 type=IN

D.Mel	aataattg	gtgagtatgccg-...	999...	gctctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	gc---	cggcagg---	aactgagcata...	1372...	gtctgcttacag	gttcatca
D.Sim	aataattg	gtgagtatgccg-...	1006...	gctctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	gc---	cggcagg---	aactgagcata...	1351...	gtctgcttacag	gttcatca
D.Sec	aataattg	gtgagtatgccg-...	1007...	gctctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	gc---	cggcagg---	aactgagcata...	1354...	gtctgcttacag	gttcatca
D.Ere	aataattg	gtgagta-gccgc...	983...	gccctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	gccggcggcagg	---	aactgcgc---	1347...	gtctgcttacag	gttcatca
D.Ana	aataattg	gtgagtaccca-	1075...	gct-gcta	actgcgtaaatgt	GTATT	taTTTTGCGCAA	tTTGA	-----	ggcagccgga	aaaaataca...	1269...	tccggcttacag	gttcatca
D.Gri	aacaattg	gtgagtacaact-	1824...	gagagaga	-gagtgtgtaa-	AAGTc	CATTAACAC	-----	ccaataaga	ataagaagaa-	...	1509...	actcttttacag	gttcatca
D.Moj	aacaattg	gtaagtacgaag-	1318...	ggctgctt	ggg-gagagagtaa-	AAGTc	CATTAACAC	-----	ccaatagga	ataataagaa-	...	1347...	actctttcacag	gtttatca
D.Per	aataattg	gtaagtaccaga-	1204...	tcctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	-----	ggcaagtcc	agccacatca...	1399...	ctctacttacag	gttcatca
D.Pse	aataattg	gtaagtaccaga-	1201...	tcctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	-----	ggcaagtcc	agccacatcga...	1392...	atctacttacag	gttcatca
D.Vir	aacaattg	gtaagtcgaaa-	1460...	gagagaa	aga-aagagaataa-	AAGTc	CATTAACAC	-----	ccaataaga	ataagaagaa-	...	1276...	actctttcacag	gttcatca
D.Wil	aataattg	gtaagttcaaaa-	1300...	ggacttac	acttgaggggaa-	AAGTc	CATTAACAC	-----	ccaataaga	tggggcaaa-	...	1277...	gttctctgag	gttcatca
D.Yak	aataattg	gtaagttgccg-	1008...	gctctcta	aatgtgtattta	-----	TTTTGCGCAA	tTTGA	gc---	cggcagg---	aactgagcata...	1393...	gtctgcttacag	gttcatca
	** *****	** *****		*			** * *		*				*** *****	** ** *

id=103985 gene=FBgn0001235 name=hth segment=chr3R.6337540.6339989.-1 type=IN VIEW

Figure 229: CS=7.2



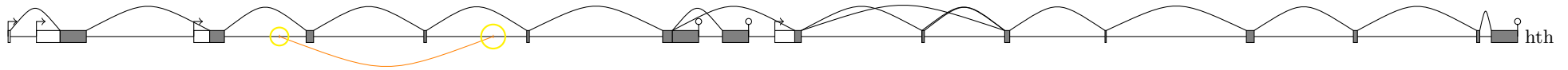
D. Mel	atztatga	gtgagtataagt...714...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	ccgagaactaaaacc...1362...tttcattgcag	acatccgc
D. Sim	atztatga	gtgagtataagt...694...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	ccaagaactaagacc...1372...tttcattgcag	acatccgc
D. Sec	atztatga	gtgagtataagt...707...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	ccgagaacgaagacc...1371...tttcattgcag	acatccgc
D. Ere	atztatga	gtgagtataagt...776...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	ccgagaactaagacc...1355...tttcattgcag	acatccgc
D. Moj	atztatga	gtaagtaataacc...977...-cggacacggcacaacgaacgTGCTtaGGCATTAGggagtc	ccatgccaatgagc...1992...ttcattttgcag	acatccgc
D. Per	atztatga	gtaagtaataacc...911...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	cactccagtcagtc...1290...tttcattgcag	acatccgc
D. Pse	atztatga	gtaagtaataacc...899...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	cactccagtcagtc...1270...tttcattgcag	acatccgc
D. Vir	atztatga	gtaagtaataacc...990...tccgacacggcac-atggacgTGCTtaGGCATTAGggagtc	ccatgccaatgagc...1575...tttcattgcag	acatccgc
D. Wil	atztatga	gtaagtaataacc...607...acggacacggaac-atggacgTGCTtaGGCATTAGggagtc	ccatgccaatgagc...2321...atctcattgcag	acatccgc
D. Yak	atztatga	gtgagtataacgt...754...acggacacggaac-atgaacgTGCTtaGGCATTAGggagtc	ccgagaactaaaacc...1465...tttcattgcag	acatccgc
	*****	** ****	* ***** * * * *****	* ** ** *****

id=103960 gene=FBgn0001235 name=hth segment=chr3R\_6428656\_6430809\_-1 type=IN

D. Mel	tgcaagcg	gtaagctttctc...3162...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1750...acaattttccag	gtgatgcc
D. Sim	tgcaagcg	gtaagctttctc...3160...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1752...acaattttccag	gtgatgcc
D. Sec	tgcaagcg	gtaagctttctc...3158...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1754...acaattttccag	gtgatgcc
D. Ere	tgcaagcg	gtaagctttctc...3159...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1753...acaattttccag	gtgatgcc
D. Moj	tgcaagcg	gtaagctttctc...2903...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	2009...ccacacacacag	gtgatgcc
D. Per	tgcaagcg	gtaagctttctc...2987...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1925...acattttccag	gtgatgcc
D. Pse	tgcaagcg	gtaagctttctc...2956...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1956...acattttccag	gtgatgcc
D. Vir	cgcaagcg	gtaagctttctc...2926...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1986...ttttcttccag	gtgatgcc
D. Wil	tgccagcg	gtaagctttctc...2973...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1939...gatctattacag	gtgatgcc
D. Yak	tgcaagcg	gtaagctttctc...3056...aacaacttttaaatgaagttgTTAAgTGCCAGCAgctagtttctt-ctcgctct...	1856...acaattttccag	gtgatgcc
	** ****	***** ****	***** ****	** **

id=103981 gene=FBgn0001235 name=hth segment=chr3R\_6346943\_6355160\_-1 type=IN VIEW

Figure 230: CS=7.8



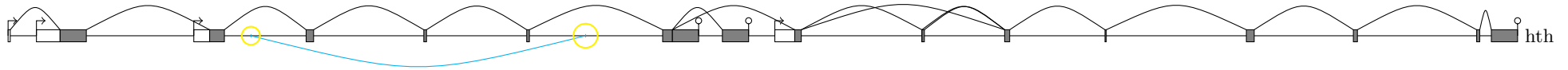
D.Mel	atztatga	gtgagtataagt...	1553...	tctgggtcagaggggtcccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---acagaaattgagaa...	518...	tttccattgcag	acatccgc	
D.Sim	atztatga	gtgagtataagt...	1520...	tctgggtcagaggggtcccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---acagaaattgagaa...	541...	tttccattgcag	acatccgc	
D.Sec	atztatga	gtgagtataagt...	1532...	tctgggtcagaggggtcccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---acagaaattgagaa...	541...	tttccattgcag	acatccgc	
D.Ana	atztatga	gtgagtattcgg...	1165...	tccggcgagctgagctcccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---gcgtgaagaaataa...	413...	tttgcattgcag	acatccgc	
D.Gri	atztatga	gtaagtaaacgc...	307...	attctaccttttcttttttg	TTTG	aaTTCAT	ccGTTG	---aatgac	---aaattgattttgtc...	2289...	ttttccttgag	acatccgc	
D.Moj	atztatga	gtaagtaataacc...	2162...	ctggctcactcgctcgctgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---gcttggagcgtgaa...	802...	ttcattttgcag	acatccgc	
D.Per	atztatga	gtaagtatcccc...	778...	agaaatgggctgatccctg	TGCG	TTTTG	CGC	caaaatacaaaattat	---gggtt	-----	1425...	tttcccttacag	acatccgc
D.Pse	atztatga	gtaagtatcccc...	1890...	gggacagagaccaacccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	gcgctctaagcgt	---	274...	tttcccttacag	acatccgc
D.Vir	atztatga	gtaagtaaacgc...	2140...	agggttcactcgctcctttgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---gcttggagcgtgaa...	420...	tttctattacag	acatccgc	
D.Wil	atztatga	gtaagtatacgt...	1586...	tgtttttctgctggtttcc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---gcttagagcgtgaa...	1337...	atctcattgcag	acatccgc	
D.Yak	atztatga	gtgagtatacgt...	1666...	tctgggtcagaagggtcccgc	CTAA	TTTG	ttCAGGTGCA	--atttgt	---acagaaattgagaa...	548...	tttccattgcag	acatccgc	
	*****	** ****			**	*		*		*	** ***	*****	

id=103960 gene=FBgn0001235 name=hth segment=chr3R.6428656.6430809.-1 type=IN

D.Mel	actcactg	gtaagtacgaag...	1404...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	607...	cttttcttacag	atggtgca
D.Sim	actcactg	gtaagtacgaag...	1394...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	607...	cttttcttacag	atggtgca
D.Sec	actcactg	gtaagtacgaag...	1397...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	603...	cttttcttacag	atggtgca
D.Ana	actcactg	gtaagtaccta...	1167...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	543...	ctctctttccag	atggtgca
D.Gri	attcactg	gtaagtaaaaag...	562...	---gatgctctcaactcgacta	CAATATGAA	---gCAGA	-----	acgatttaatgatcatatg-	...	2005...	ctctcctttgcag	atggtgca
D.Moj	attcactg	gtaagtaaaaac...	1224...	tggcgggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	785...	ctctcctttgcag	atggtgca
D.Per	attcactg	gtaagtaaaaac...	1304...	-----taaatcaagacggaaatgcc	GCGTGCAAAAAA	gTGCA	-aacgagccatgcaattggg	...	1101...	tttccctttgcag	atggtgca	
D.Pse	attcactg	gtaagtaaaaac...	1671...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	723...	tttccctttgcag	atggtgca
D.Vir	attcactg	gtaagtaaaaac...	1279...	tggcgggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	788...	ctctcctttgcag	atggtgca
D.Wil	actcactg	gtaagtacacaa...	1462...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacata-	...	706...	ttctatcttcag	atggtgca
D.Yak	actcactg	gtaagtacacatg...	1427...	ctctggtggccctaatttta	-----	TGCACTTGCAGA	---TTAG	tttattagttgtagtacaaa-	...	615...	gttttctttcag	atggtgca
	* *****	*****		**		*** *		*		*	** ***	*****

id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272.-1 type=IN VIEW

Figure 231: CS=8.58



D.Me1	atztatga	gtgagtataagt...686...-atcttgggggtgtgcaggt-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1389...tttcattgcag	acatccgc
D.Sim	atztatga	gtgagtataagt...666...-atcttgggggtgtgcaggt-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1399...tttcattgcag	acatccgc
D.Sec	atztatga	gtgagtataagt...679...-tatctt-ggggtgtgcaggt-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1398...tttcattgcag	acatccgc
D.Ere	atztatga	gtgagtatacgt...748...-atcttgggggtgtgcaggt-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1382...tttcattgcag	acatccgc
D.Ana	atztatga	gtgagtattcgg...382...-cggccgggggtgtgcaggt-	GTTTAgTGACGGACA	--tggacatggccacgaactcc----	...1200...tttcattgcag	acatccgc
D.Moj	atztatga	gtaagtaataacc...2159...-cggctggctcactcgctcgc	TGCCtAATTtTGTTcAGGT	gcaattt-----gtgcttgagcgt...	...805...ttcatttgcag	acatccgc
D.Per	atztatga	gtaagtatcccc...883...-tctgtgggggtgtggcaaga-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1317...tttccttacag	acatccgc
D.Pse	atztatga	gtaagtatcccc...871...-tctgtgggggtgtggcaaga-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1297...tttccttacag	acatccgc
D.Wil	atztatga	gtaagtatgata...579...-tttttgggggtgtggcgcac-	GTTTAgTGACGGACA	--cggaacatgg--acgtgcttag----	...2348...atctcattgcag	acatccgc
D.Yak	atztatga	gtgagtatacgt...726...-atcttgggggtgtgcaggt-	GTTTAgTGACGGACA	--cggaacatga--acgtgcttag----	...1492...tttcattgcag	acatccgc
*****	** ****		* * * * * * * *	* * * * *	* ** **	*****

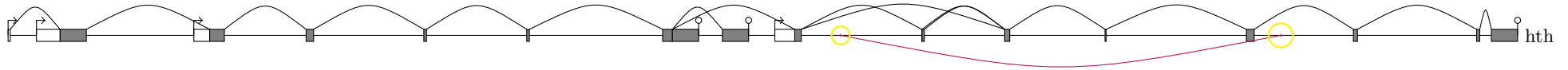
id=103960 gene=FBgn0001235 name=hth segment=chr3R.6428656.6430809.-1 type=IN

D.Me1	tagaaaaa	gtaagtaacgat...3437...-gacggcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgctgtag-gcccgttg----	...1473...gtctcgttgcag	gtacacga
D.Sim	tagaaaaa	gtaagtaacgat...3453...-gacggcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgctgtag-gcccgttg----	...1457...gtctcgttgcag	gtacacga
D.Sec	tagaaaaa	gtaagtaacgat...3445...-gacggcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgctgtag-gcccgttg----	...1465...gtctcgttgcag	gtacacga
D.Ere	tagaaaaa	gtaagtaacgat...3416...-ggcggcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgctgtag-gcccgttg----	...1494...gtctcgttgcag	gtacacga
D.Ana	tagaaaaa	gtaagtaccgcc...3596...-ggcgacgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgc---a-gcctttttaat...	...1314...gtctcgttgcag	gtacacga
D.Moj	tagaaaaa	gtaagtaaacat...3613...-ccacagcagcagcagcagca-	GCCTGgaAAcAGTtGGCA	agtttcggcaatgggcaaca----	...1292...ctctcgttgcag	gtgcatga
D.Per	tagaaaaa	gtaagtaaaaaca...3464...-aacagcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgc---a-ggcccgttgcttt...	...1446...gtctcgttgcag	gtacacga
D.Pse	tagaaaaa	gtaagtaaaaaca...3509...-aacagcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgc---a-ggcccgttgcttt...	...1401...gtctcgttgcag	gtacacga
D.Wil	tagaaaaa	gtaagtaccac...3650...-agcagcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttt---atcatcttatatat...	...1260...cactgttacag	gttcatga
D.Yak	tagaaaaa	gtaagtaacgag...3392...-ggcggcgacaaaatttgacat	TGTCCTGTCATAAAC	----cagttgccgcca-gcccgttg----	...1518...gtctcgttgcag	gtacacga
*****	*****		* * * * *	****	** ** ** *	*****

id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN VIEW

Figure 232: CS=7.8





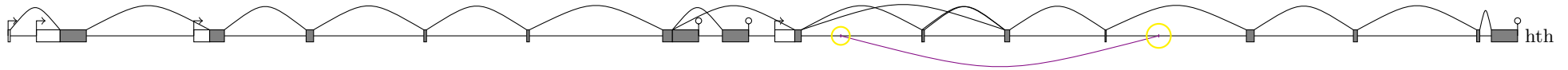
D. Mel	agaccctg	gtaagtgcacac	---	2958...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGT	ggcc--	gagcgggtgctccgact	---	1947...	ttctcgttgag	atggtaag	
D. Sec	agaccctg	gtaagtgtcac	---	2969...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGT	ggcc--	gagcgggtgctccgact	---	1936...	ttctcgttgag	atggtaag	
D. Ere	agaccctg	gtaagtgccgcc	---	3047...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGT	ggcc--	gagcgggtgctccgact	---	1858...	ttctcgttgag	atggtaag	
D. Ana	agaccctg	gtaagtgccgac	---	4420...	gcagcagaagagattct	----	gcg	TAAAttTGCAttTTGTTT	---	cgcgataacaaaagtaaaaa	---	486...	cctccttgag	atggtaag	
D. Moj	agaccctg	gtaagtgttga	---	2533...	cgccccgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGT	ggcc--	aatgccgagtcgagtc	---	2372...	ctccttgag	atggtaag	
D. Per	agaccctg	gtaagtccta	---	2810...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGTG	cc--	gacttcaagtgaggag	...	2092...	ttcccgttcag	atggtaag	
D. Pse	agaccctg	gtaagtccta	---	2841...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGTG	cc--	gacttcaagtgaggag	...	2061...	ttcccgttcag	atggtaag	
D. Vir	agaccctg	gtaagtagttca	---	3291...	ggcaacgagcgtcgatc	----	gc	GTCGAAGGCATtAATTGC	----	acagcgttttgacgt	---	1615...	ttctattgag	atggtaag	
D. Wil	agaccctg	gtaagttat	---	3844...	-----	cgactgctagtcgacaac	----	ATTGACAGTAAA	-----	attatttctacgcgcttcg	...	1069...	tctctttgag	atggtaag	
D. Yak	agaccctg	gta--agttcagcc	...	3006...	cgttgcgaatgaaattgc	----	gc	CATATTGGGCGTTATTTGT	ggccagaatctccaggtgga	---	1899...	ttctcgttgag	atggtaag		
	*****	***			*	*		*	*				**	***	*****

id=103974 gene=FBgn0001235 name=hth segment=chr3R\_6374377\_6387630\_-1 type=IN

D. Mel	atthaacg	gtgagtagcaaa	...	3125...	----	tgagaaagccatct	-----	ctgcaa	ATAGATGtGCGCCaCAAAgTATG	ctataaattccattttaatt	...	1777...	atctccttcag	catcccta		
D. Sec	atthaacg	gtgagtagcaaa	...	3127...	----	tgagaaagccatct	-----	ctgcaa	ATAGATGtGCGCCaCAAAgTATG	ctataaattccgttttaatt	...	1775...	atctccttcag	catcccta		
D. Ere	atthaacg	gtgagtagcaaa	...	3093...	----	ggagaaagccatct	-----	cagcaa	ATAGATGtGCGCCaCAAAgTATG	ctataaattccgttttaatt	...	1809...	atattccttcag	catcccta		
D. Ana	atthaacg	gtaagtagcatt	...	3607...	-----	tttattaaacacaaacaata	-----	AGGCAAAATGCA	TAA--	ggagctaccgagccaaggag	---	1302...	ctgcccttcag	catcccta		
D. Moj	acttaacg	gtaagtccta	...	2952...	----	gggtaaaagcattt	-----	ctctaa	ATAGATgAACGCCaCAAAgTATG	ctataaattccattttaatt	...	1950...	ctccttcag	catcccta		
D. Per	atthaacg	gtgagtcctaa	...	2938...	acctccctggagccatct	-----	ct	GCAAaTAGATGtGCGCCaCAAAgTATG	ctataaattccgttttaatt	...	1960...	ttccaattgag	catcccta			
D. Pse	atthaacg	gtgagtcctaa	...	2971...	acctccctggagccatct	-----	ca	GCAAaTAGATGtGCGCCaCAAAgTATG	ctataaattccgttttaatt	...	1927...	ctccaattgag	catcccta			
D. Vir	atthaacg	gtaagtccta	...	2913...	-----	ccattt	---	taatttacctgcat	GTA-ATTtATGCCtTTTGAC	---	1993...	tttcttttgcag	catcccta			
D. Wil	acttaacg	gtgagtaactaa	...	3212...	-----	gtatttacatggttt	---	ctacg	TTTATTTGTCAAT	---	1700...	ctgttcttcag	catcccta			
D. Yak	atthaacg	gtgagtagcaaa	...	3100...	----	tgagaaagccatct	-----	ctgcaa	ATAGATGtGCGCCaCAAAgTATG	ctataaattccgttttaatt	...	1802...	atattccttcag	catcccta		
	* *****	** ***			*	*		*	*				*	**	**	*****

id=103983 gene=FBgn0001235 name=hth segment=chr3R\_6340067\_6346793\_-1 type=IN VIEW

Figure 233: CS=9.6



```

D.Mel agaccctg gtaagtgcacac---.2957...-----gcgttgcaatgaaattgCGCATATTGgGCGTtATTtggccgagcgggtgctccga...1949...ttctcgttcag atggtgtaag
D.Sec agaccctg gtaagtgtcac---.2968...-----gcgttgcaatgaaattgCCATAATTGgGCGTtATTtggccgagcgggtgctccga...1938...ttctcgttcag atggtgtaag
D.Ere agaccctg gtaagtgccgcc---.3046...-----gcgttgcaatgaaattgCCATAATTGgGCGTtATTtggccgagcgggtgctccga...1860...ttctcgttcag atggtgtaag
D.Ana agaccctg gtaagtgccgac---.3302...attggcaatcgattcgatgc-----GTTGCGaATGAaaTT--GCGCcatatttggcggttatttgt----.1604...cctcctttgcag atggtgtaag
D.Moj agaccctg gtaagtgttgta---.2527...-----gcgctgcgtcccgaatgaaaTTGCGCCatATTtggGCGTtatttgtggccaatgccgag----.2379...ctctcctttgcag atggtgtaag
D.Per agaccctg gtaagtccaat---.2804...-----tcgctgcgttgcaatgaaaTTGCGCCatATTtggGCGTtatttgttggccgacttcaa----.2102...ttccgctttcag atggtgtaag
D.Pse agaccctg gtaagtcccaat---.2835...-----tcgctgcgttgcaatgaaaTTGCGCCatATTtggGCGTtatttgttggccgacttcaa----.2071...ttccgctttcag atggtgtaag
D.Vir agaccctg gtaagttagttca---.3162...caatcgattcgatgcgctgc---GTTGCGaATGAaaTT--GCGCcatatttggcggttatttgt----.1744...ttctattttgcag atggtgtaag
D.Wil agaccctg gtaagttatttt---.3309...-----tcgctgcattgcaatgaaaTTGCGCCatATTtggGCGTtatttgtgctgctactgaa----.1597...tctcctttgcag atggtgtaag
D.Yak agaccctg gta--agttcagcc...3005...-----gcgttgcaatgaaattgCGCATATTGgGCGTtATTtggccagaatctccaggtg...1901...ttctcgttcag atggtgtaag
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id=103974 gene=FBgn0001235 name=hth segment=chr3R\_6374377\_6387630\_-1 type=IN

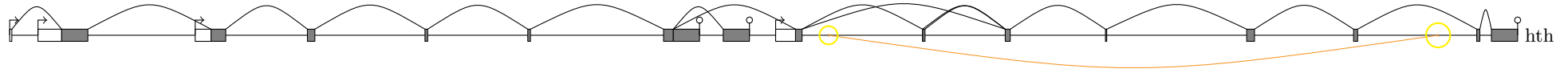
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D.Mel tgcaagcg gtaagctttctc...3349...----aacgcatttc---cataattgct----AAATtATGCAAAcaATGGcgggaagtggggcgaaag----.1558...acaattttccag gtgatgcc
D.Sec tgcaagcg gtaagctttctc...3344...----aacgcatttc---cataattgct----AAATtATGCAAAcaATGGcgggaagtggggcgaaag----.1563...acaattttccag gtgatgcc
D.Ere tgcaagcg gtaagctttctc...3349...----agcgcatttc---cataattgct----AAATtATGCAAAcaATGGcgggaagtggggcgaaag----.1558...acaattttccag gtgatgcc
D.Ana tgcaagcg gtaagctttctc...4152...-----cgtggccgggaaggaaggGCGTGAAaTTATGCAAT-----ctgctag--gg--agtttggccag...756...cttgtttccag gtgatgcc
D.Moj tgcaagcg gtaagctttctc...3602...tcaaaacgaacttc---cggttt---ACGCaAAATGGCGTGA-----agtctgccaccatgagaatg...1307...ccacacacacag gtgacgcc
D.Per tgcaagcg gtaagttttctc...3649...tcaaaacgaacttc---cggttt---ACGCaAAATGGCGTGA-----agtctgccaccatgtccgtc...1260...acctttttccag gtgatgcc
D.Pse tgcaagcg gtaagttttctc...3650...tcaaaacgaacttc---cggttt---ACGCaAAATGGCGTGA-----agtctgccaccatgtccgtc...1259...acctttttccag gtgatgcc
D.Vir cgcaagcg gtaagctttctc...4059...-----cagttcggagcaggtcggaGCGTGAAaTTATGCAAT-----attg--ggccagccgggctagg...849...tttttcttacag gtgatgcc
D.Wil tgccagcg gtaagctttccc...3567...tcaaaacgaacttc---cggttt---ACGCaAAATGGCGTGA-----agtctggcacctggaatatt...1342...gatctattacag gtgatgct
D.Yak tgcaagcg gtaagctttctc...3262...----aacgcatttc---cataattgct----AAATtATGCAAAcaATGGcgggaagtggggcgaaag----.1645...acaattttccag gtgatgcc
** *****
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id=103981 gene=FBgn0001235 name=hth segment=chr3R\_6346943\_6355160\_-1 type=IN VIEW

Figure 234: CS=7.8



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D.Mel agaccctg gtaagtgcacac---.2713...--caccaatggggctgttcatt-AATTGTTG-aCAATG-----attacctggccaacacagaa...2198...ttctcgttgag atggtaag
D.Sec agaccctg gtaagtgctcac---.4477...-gcgccgcaatgcgtattaaaTAAATgCGCACATAAataaaattaatcaagcaccaa---.430...ttctcgttgag atggtaag
D.Ere agaccctg gtaagtgccgcc---.2805...--caccagtggcctgttcatt-AATTGTTG-aCAATG-----attacctggccaacacaggc...2106...ttctcgttgag atggtaag
D.Ana agaccctg gtaagtgccgac---.3086...cccaccaat--gcccggttcatt-AATTGTTG-aCAATG-----attacctggcctggaacaaa...1825...cctctcttgag atggtaag
D.Gri agaccctg gtaagtaatgca---.2514...--cgccacaatggcctttcatt-AATTGTTG-aCAATG-----attacctggagcgtatggccc...2397...ttctatttgag atggtaag
D.Moj agaccctg gtaagtgttga---.4644...--cgccatggcgcgtattaaaTAAATgCGCACATAAatgaattaat--aacaataatg---.264...ctctcttgag atggtaag
D.Per agaccctg gtaagtccaat---.2498...cccaccaat--ggctgttcatt-AATTGTTG-aCAATG-----attacctggccctcaagaaa...2413...ttccggttgag atggtaag
D.Pse agaccctg gtaagtccaat---.2518...cccaccaat--ggctgttcatt-AATTGTTG-aCAATG-----attacctggccctcaagaaa...2393...ttccggttgag atggtaag
D.Vir agaccctg gtaagttagtca---.2914...--cgccacaatggcctttcatt-AATTGTTG-aCAATG-----attaccaggcggatggcct...1997...ttctatttgag atggtaag
D.Wil agaccctg gtaagttatfff---.3070...--gatcgaagtgtgttcatt-AATTGTTG-aCAATG-----attacctggagagcaacaaa...1841...ttctcttgag atggtaag
D.Yak agaccctg gta--agttagcgc...2775...--caccaatggcctgttcatt-AATTGTTG-aCAATG-----attacctggcagcagagaa...2136...ttctcgttgag atggtaag
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          ** **
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id=103974 gene=FBgn0001235 name=hth segment=chr3R.6374377.6387630\_-1 type=IN

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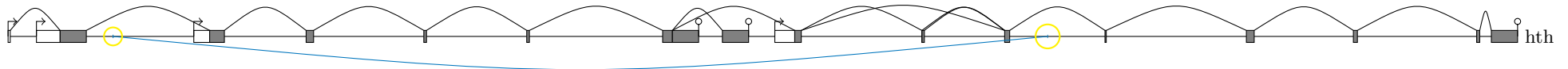
D.Mel aataattg gtgagtatgccg...1491...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-aaaaatgagcaaa---.882...gtctgcttacag gttcatca
D.Sec aataattg gtgagtatgccg...1004...atagctctctaattgtgatTTATTtTGC-GcaATTGAgccggca-ggaactgagcata---.1354...gtctgcttacag gttcatca
D.Ere aataattg gtgagta-gccgc...1468...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-aaaaatgagcaaa---.864...gtctgcttacag gttcatca
D.Ana aataattg gtgagtaccaca...1585...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-aaaaatgagcag---.768...tccggcttacag gttcatca
D.Gri aacaattg gtgagtacaact...2510...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcct-aaaaatgagcaca---.824...actcttttacag gttcatca
D.Moj aacaattg gtaagtacaag...1194...gaccggactaaatgtgatTTATTtTGC-GcaATTG---cgggg-caaacagaatgaaag...1468...actcttttacag gtttatca
D.Per aataattg gtaagtaccaga...1831...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-taaaatgagcaga---.774...ctctacttacag gttcatca
D.Pse aataattg gtaagtaccaga...1811...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-taaaatgagcaga---.784...atctacttacag gttcatca
D.Vir aacaattg gtaagtgcacaa...1976...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcct-aaaaatgagcaaa---.761...actcttttacag gttcatca
D.Wil aataattg gtaagttcaaaa...1813...----tttgataaacgatttcagggCGTTGCAACAATT---tccgccgttaaataagagtaa---.765...gttcttttacag gttcatca
D.Yak aataattg gtaagttgccgc...1511...----tttgataaacgatttcagggCGTTGCAACAATT---tccgcc-aaaaatgagcaaa---.893...gtctgcttacag gttcatca
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          **** *****
          ** **
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id=103985 gene=FBgn0001235 name=hth segment=chr3R.6337540.6339989\_-1 type=IN VIEW

Figure 235: CS=8.58





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D.Me1 agcccagg gtaagtagatcc...2901...-----tgcctaagagtc caattga--GTTGTTgcTGTTAAGTTGGTCGTAgGCTGGccttcag--caatgacttaatg-----...1994...ttgttcttctct tttttcga
D.Sim agcccagg gtaagtagatcc...2876...-----tgccttaagagtc caattga--GTTGTTgcTGTTEAGTTGGTCGTAgGCTGGccttcag--caatgacttaatgt-----...2019...ttgttcttctct tttttcga
D.Ere agcccagg gtaagtagatac...2812...-----tgcctaagagtc caattga--GTTGTTgcTGTTEAGTTGGTCGTAgGCTGGccttcag--caatgacttaatgt-----...2093...ttgttcttctcc tttttcga
D.Gri agcctagg gtaagtgttaa...2556...--gtcgttgtt gttattgctgtTGTTTTGTTGTTGTTT--AttATTG-----cctgggc---tggtttcagcaa...2343...tttttttcttt ttcttttt
D.Moj agcctagg gtaagtactaga...2582...--ttgctgtcgtt gtagttgta-----GTTGTTgTTGTT--GTTGTTGG-----ctcgatgacttaatgtctcg...2323...gtttgttattt ttttgga
D.Pse agcccagg gtaagtaccgac...4622...tggtttttgcgcttgcacac--AAACcaGTTTgCAAT-----tgcgcgatc caaaa--aatgt-----...288...aatcgcttttt tttttgta
D.Vir agcctagg gtaagtaaatcg...2630...--attga-gtcgagtgagttgta-----GTTGTTGTTGTT--G-----tgctcggtcgtgacttaaa-----...2282...ttccccctct tttatttt
D.Wil agcctagg gtaagtacaaat...2651...--agcaagctaaac caaagcca--GTTGTTGTTGTT--GTTG-----ttattgtt-----attgttgttggc...2258...ttgttcttcaat ttttttcg
D.Yak agcccagg gtaagtagatcc...2839...-----tgcctaagagtc caattga--GTTGTTgcTGTTEAGTTGGTCGTAgGCTGGccttcag--caatgacttaatg-----...2056...ttgttcttctcc tttttcga
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id=103957 gene=FBgn0001235 name=hth segment=chr3R.6431393.6438706.-1 type=IN

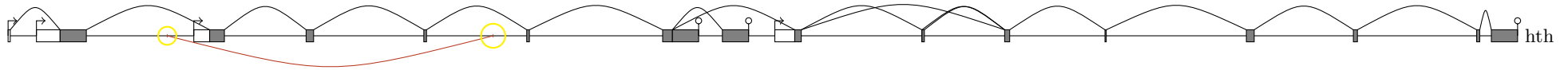
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D.Me1 tagtcctg gtaagtaatcag...2663...-tttgcatthtaaccag--aaactTTGGCTGCCaaATCAATTAACAACAAT--aaacgttgttggccaggcc-----...1693...ctctacttgcag acaatttc
D.Sim tagtcctg gtaagtaatctg...2671...-tttgcatthtaaccag--aaactTTGGCTGCCaaATCAATTAACAACAAT--aaacgttgttggccaggcc-----...1678...ctctacttgcag acaacttc
D.Ere tagtcctg gtaagtaatcag...2755...-tttggtcttcttggctgcgaa-----ATCAATTAACAACAAT--aaacgttgttggccaggcc-----...1644...ctctacttgcag acaacttc
D.Gri tagtcctg gtaagtaaatcc...2667...-gcgacaacttcc--agcaaaat-----CAATTAACAACAATAAACG--tttgttggccaagccagaca...2238...atctcttgcag acaatttc
D.Moj cagtcctg gtaagtacttga...2836...ggcgacaacttcc--agcaaaa-----TCAATTAACAACAAT--aaacgttgttggccaagcc-----...2073...ttttcattgcag acaatttc
D.Pse tagtcctg gtaagtattcc...2897...--caatgcgttcgctgacattc-----ATTGA--AACGTTTttggaatctgagcggttc-----...1390...ttctacttgcag acaacttt
D.Vir tagtcctg gtaagtatcaga...2624...-gcgacaacttcc--agcaaaat-----CAATTAACAACAAT--aaacgttgttggccaagcc-----...1983...ttttcttgcag acaatttc
D.Wil tagtcctg gtaagtataaaa...2545...--aacaacttcccaggcgaat-----CAATTAACAACAAT--aaacgttgttggccaagcc-----...2319...ttctacttgcag acaatttt
D.Yak tagtcctg gtaagtattgcc...2788...-tttgcatthtaaccag--aaactTTGGCTGCCaaATCAATTAACAACAAT--aaacgttgttggccaggcc-----...1651...ttctacttgcag acaacttc
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                                     * * *
                                     *** * ** *

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id=103979 gene=FBgn0001235 name=hth segment=chr3R.6355185.6359632.-1 type=IN VIEW

Figure 237: CS=8.1



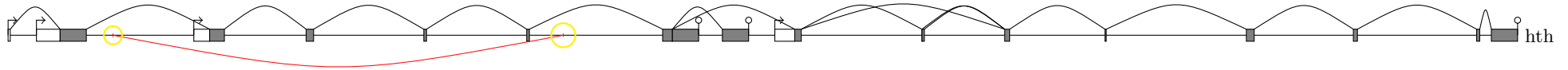
D.Me1	agcccagg	gtaagtagatcc...4426...aacttctctggtgtccctca-	AATTaTGCAGTGTGAAA	---cggagaggcgaagtgtatct-...482...ttgttcttctct	tttttcga
D.Sim	agcccagg	gtaagtagatcc...4398...aacttctctggtgtccctca-	AATTaTGCAGTGTGAAA	---cggagaggcgaagtgtatct-...510...ttgttcttctct	tttttcga
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D.Ere	agcccagg	gtaagtagatcc...4765...tgctt-ttggcgcttaattaa--	TATGCA---AAaaACGTc	gaaagacaaaagtaaggta...146...ttgttcttctcc	tttttcga
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D.Moj	agcctagg	gtaagtactaga...4777...gattt-ttggcgcttaattaa--	TATGCA---AAaaACGTc	gaaagaaaagaagcgacaa...134...gttttgttat	ttttggga
D.Pse	agcccagg	gtaagtaccgac...4277...ggcgaaccaacttgcctca-	AATTaTGCAGTGTGAAGA	---ggagcagagaagcttctcag...630...aatcgcttttt	ttttgtga
D.Vir	agcctagg	gtaagtataatcg...4390...-ctcagatgctcagctccaaa	AATTaTGCAGTGTGAAG	---cggcgacgacgacgacgacg-...518...ttccccctct	tttatttt
D.Wil	agcctagg	gtaagtacaaat...4073...gagctgtgtcctttcaaa-	AATTaTGCAGTGTGAAA	---aagaggtaggaaaggggggc-...834...ttgttcttcaat	tttttcga
D.Yak	agcccagg	gtaagtagatcc...4398...aacttctctggtgtccctca-	AATTaTGCAGTGTGAAA	---cggagaggcgaagtgtatct-...510...ttgttcttctcc	tttttcga
	**** *	*****	* ***** ** *		**

id=103957 gene=FBgn0001235 name=hth segment=chr3R.6431393.6438706.-1 type=IN

D.Me1	actcactg	gtaagtacgaag...1399...gtttcctctggtg---gcc-----taa	TTTTatGCAC-tTGCAGATT	agtttattagttgtagtaca...609...cttttcttacag	atggtgca
D.Sim	actcactg	gtaagtacgaag...1389...gtttcctctggtg---gcc-----taa	TTTTatGCAC-tTGCAGATT	agtttattagttgtagtaca...609...cttttcttacag	atggtgca
D.Sec	actcactg	gtaagtacgaag...1392...gtttcctctggtg---gcc-----taa	TTTTatGCAC-tTGCAGATT	agtttattagttgtagtaca...605...cttttcttacag	atggtgca
D.Ere	actcactg	gtaagtacgag...1573...-----cttttg---gcccgctcgcgtct---	CCGTacTTTgCATA	aatcattttggcatgccact...462...ctcttcttcag	atggtgca
D.Gri	attcactg	gtaagtaaaaag...1767...atctctggcggtg---gcc-----taa	TTTTatGCAC-TTGCAGATT	agtttattagttgtagtaca...795...ctctctttgcag	atggtgca
D.Moj	attcactg	gtaagtaaaaac...1400...ggccatggcgtgtgcgct-----	CCGTacTTTgCATA	aatcattttggcatgccacc...609...ctctctttgcag	atggtgca
D.Pse	attcactg	gtaagtaaaaac...1666...gggatctctggtg---gcc-----taa	TTTTATGCAC-TTGCAGATT	agtttattagttgtagtaca...725...ttcctttgcag	atggtgca
D.Vir	attcactg	gtaagtaaaaac...1274...atctctggcggtg---gcc-----taa	TTTTATGCAC-TTGCAGATT	agtttattagttgtagtaca...790...ctctctttgcag	atggtgca
D.Wil	actcactg	gtaagtacacaa...1457...gaaatctctggtg---gcc-----taa	TTTTATGCAC-TTGCAGATT	agtttattagttgtagtaca...708...ttctatttcag	atggtgca
D.Yak	actcactg	gtaagtacaatg...1422...gttcctctggtg---gcc-----taa	TTTTATGCAC-TTGCAGATT	agtttattagttgtagtaca...617...gttttctttcag	atggtgca
	* *****	*****	** *** ** * * * * *		* ** ** *

id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272.-1 type=IN VIEW

Figure 238: CS=9



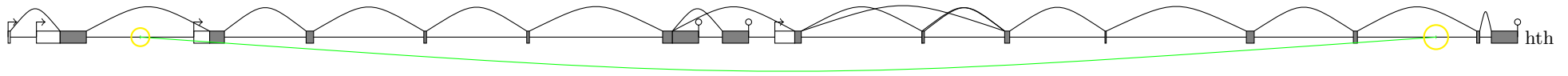
D. Mel	agcccagg	gtaagtagatcc...2896...agctctgcctaagaggtcca-----	ATTGAGTTGTTGCTGTTaaGTTG	---gtcgtaggctggctttcagc-----	...2006...ttgttcttctct	tttttcga
D. Sim	agcccagg	gtaagtagatcc...2876...-----tgccttaagagtcgaattga-----	-----GTTGTTGCTGTTtaGTTG	---gtcgtaggctggc-ttcagca-----	...2031...ttgttcttctct	tttttcga
D. Sec	agcccagg	gtaagtagatcc...3158...-----acccaaatttggcccactt-----	-----TTGCTGCTGTTGTTGTTGTTGTT	---tttggctggcctggggg-----	...1745...ttgttcttctct	tttttcga
D. Ere	agcccagg	gtaagtagatcc...3110...-----ccaccaaactggagcccac-----	TTCTGTT-----GTTGTaGTTGCTGTTGTT	---tttggctggcctggggg-----	...1790...ttgttcttctct	tttttcga
D. Gri	agcctagg	gtaagtgttaa...2533...-----tcaatgtttgagtcgagtaa-----	GTTGtGcGTTGTTGTTaTTGCTGTTGTTtTTGTTGTTGTTGTT	---attattgtgggctcgatgac-----	...2350...tttttttctt	ttctttt
D. Moj	agcctagg	gtaagtactaga...2560...-----aacaattgagtcgagtgagt-----	TGTTGCTGTCGTTGTaGTTGTaGTTGTtGTTGTTGTTGTTG	---gctcgatgacttaaatgtctc...2324...gttttgttatt	ttttggga	ttttttt
D. Vir	agcctagg	gtaagtaaatc...2624...-----ccaacaattgagtcgagtgag-----	-----GTTGTaGTTGTTGTTGTTGCT	---cgctcgatgacttaaatgtc...2278...tttccccctct	tttatttt	ttttttt
D. Wil	agcctagg	gtaagtacaaat...2657...-----ctaaccaagcagttggt-----	GTTGtTGTTGTTaTTGTTaTTGTTGTTg--GCTGTTGCgTCAT	---aaattttgaaggatttcgg-----	...2227...ttgttcttcaat	tttttcg
D. Yak	agcccagg	gtaagtagatcc...2839...-----tgcctaaagagtcgaattga-----	-----GTTGTTGCTGTTcaGTTG	---gtcgtaggctggctttcagc-----	...2068...ttgttcttctcc	tttttcga
	**** *	*****	*** * ****		*	**

id=103957 gene=FBgn0001235 name=hth segment=chr3R.6431393.6438706.-1 type=IN

D. Mel	tagaaaaa	gtaagtaacgat...3013...-----agca-gc-agcaacagcaacag-----	CAACAGCAGCAGCAACagCAAT	---gtcaacag-caacatggggc-----	...1890...gtctcgttgag	gtacacga
D. Sim	tagaaaaa	gtaagtaacgat...3204...-----ttgca-gc-agcaacaacagcg-----	-----CAGCAACAGCAGCAGC	---agcagcagcagcagcatcg-----	...1705...gtctcgttgag	gtacacga
D. Sec	tagaaaaa	gtaagtaacgat...3187...-----tctccga-agggccacaactt-----	-----GCAGCAGCAACAACagc-GCAGCAA	---cagcagcagcagcagcatcg-----	...1714...gtctcgttgag	gtacacga
D. Ere	tagaaaaa	gtaagtaacgat...3948...-----acacaca-a-----cacaacactcgc-----	AGCAACAGCAGCaGCAACAACAGGG	---ccttaaaacgcattctgtt-----	...952...gtctcgttgag	gtacacga
D. Gri	tagaaaaa	gtaagtaaacat...2879...-----ccca-atgtgcagcagcgaac-----	AGCAACAGCAACAGcAACAGCAGCAGcAGCAGCAGCCAGT	---cacagcaaccagccagcagt-----	...2006...ttctcttgag	gtgcatga
D. Moj	tagaaaaa	gtaagtaaacat...3055...gttgccaccaca-atgtgcaa-----	CAGCAGCAGcCAGTcACAGCaGCAACaGCAGCaGCAGCAGCa	---ccagt--cataaatatcgcaat-----	...1828...ctctcgttgag	gtgcatga
D. Vir	tagaaaaa	gtaagtaaacat...3400...-----acttccacatcggcggcatc-----	AGCAGCAACAGCAGCAGCaACAAC	---agcagc-ctgtaaacgagttt-----	...1501...ttctcttgag	gtgcatga
D. Wil	tagaaaaa	gtaagtaccaac...2483...-----a-ggggtagcatgccggcATGGgg	GCAACAGCAACAGCAACAGCAGCaACAACA-cGAT	---tttggggccttgttttgatg...2401...cacttggttacag	gttcatga	gttcatga
D. Yak	tagaaaaa	gtaagtaacgat...3148...-----gca-acttgcaacagcaacta-----	-----CAGCAACAGCAGCAGC	---agcatc-gcataaacatatca-----	...1761...gtctcgttgag	gtacacga
	*****	***** *	** ** * ** *		** ** **	** ** **

id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN VIEW

Figure 239: CS=8.1



D. Mel	agcccagg	gtaagtagatcc...3618...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttgct...1287...ttgttcttctct	tttttcga
D. Sim	agcccagg	gtaagtagatcc...3594...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttgct...1311...ttgttcttctct	tttttcga
D. Sec	agcccagg	gtaagtagatcc...3586...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttgct...1319...ttgttcttctct	tttttcga
D. Ere	agcccagg	gtaagtagatac...3591...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttgct...1314...ttgttcttctcc	tttttcga
D. Gri	agcctagg	gtaagtgttaaa...3360...tggtaattttcagagatctc---	TTTGTGCTg	ATTtTgTTTGTG	tttggccttggctctg-tgct...1542...tttttttcttt	ttcttttt
D. Moj	agcctagg	gtaagtactaga...3302...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttcagagatcctctttgttgg...1603...gttttgttattt	ttttggga
D. Pse	agcccagg	gtaagtaccgac...3289...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttggc...1616...aatcgcttttt	ttttgtga
D. Vir	agcctagg	gtaagtaaatcg...3314...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttcagagatcctctttgttgg...1591...ttccccctct	tttatttt
D. Wil	agcctagg	gtaagtacaaat...3179...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgtttt...1726...ttgttcttcaat	ttttttcg
D. Yak	agcccagg	gtaagtagatcc...3587...-----ttccacattacttatgtac	AAGTACAAA	ttGTGGtAATT	-ttca-agatcctctttgttgct...1318...ttgttcttctcc	tttttcga
	**** **	*****	** ** *	** ** *	** ** *	**

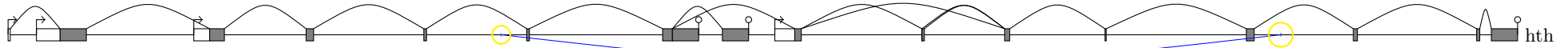
id=103957 gene=FBgn0001235 name=hth segment=chr3R\_6431393\_6438706\_-1 type=IN

D. Mel	aataattg	gtgagtatgccg...1455...tatatggcagaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...913...gtctgcttacag	gttcatca
D. Sim	aataattg	gtgagtatgccg...1459...tatatggcagaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...895...gtctgcttacag	gttcatca
D. Sec	aataattg	gtgagtatgccg...1460...tatatggcagaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...898...gtctgcttacag	gttcatca
D. Ere	aataattg	gtgagta-gccgc...1432...tatatggcagaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...895...gtctgcttacag	gttcatca
D. Gri	aacaattg	gtgagtacaact...1565...tagaaaaaaggc-aaaactc	TAGCAGAAA	atATAGCAatATAAA	----atgttgacactttgttatt...1760...actcttttacag	gttcatca
D. Moj	aacaattg	gtaagtacgaag...1853...caaaaaacgcaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...808...actcttttacag	gtttatca
D. Pse	aataattg	gtaagtaccaga...1775...aagagaaggcaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...815...atctacttacag	gttcatca
D. Vir	aacaattg	gtaagtcgacaa...1940...caaaaaacgcaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...792...actcttttacag	gttcatta
D. Wil	aataattg	gtaagttcaaaa...1776...-aaacgaggcaacgggaactc-----	AATTCCAT	tTTTTGTcGTTT	tgataaacgatttcagggcg...796...gttcttctgcag	gttcatca
D. Yak	aataattg	gtaagttgccgc...1475...tatatggcagaac-ggaactc-----	AATTCCA	-TTTTGTcGTTT	tgataaacgatttcagggcg...924...gtctgcttacag	gttcatca
	** *****	** ** *	*	** ** *	** ** *	** ** ** *

id=103985 gene=FBgn0001235 name=hth segment=chr3R\_6337540\_6339989\_-1 type=IN VIEW

Figure 240: CS=9





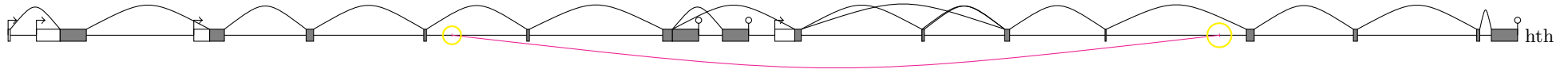
D.Me1	actcactg	gtaagtacgaag...1560...cttttggcccgcctcgcgt-ct-----	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...451...cttttcttacag	atggtgca				
D.Sim	actcactg	gtaagtacgaag...1550...cttttggcccgcctcgcgt-ct-----	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...451...cttttcttacag	atggtgca				
D.Sec	actcactg	gtaagtacgaag...1553...cttttggcccgcctcgcgt-ct-----	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...447...cttttcttacag	atggtgca				
D.Ere	actcactg	gtaagtacgcag...1573...cttttggcccgcctcgcgt-ct-----	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...462...ctctctttcag	atggtgca				
D.Ana	actcactg	gtaagtacac...1350...cgaagagcgcctcttgcgt-ct-----	CGGTACTTTGG	CCATA	aatcatttgggtggcatgcc---...360...ctctctttccag	atggtgca				
D.Moj	attcactg	gtaagtaaaaca...1400...ggccatggccgtgtgcgc-ct-----	CGGTACTTTGG	Ccataaatcattt---tggcatgc---	...613...ctctctttgcag	atggtgca				
D.Per	attcactg	gtaagtaaaaca...1893...-----ttgcgtctcgcgt-ttgcgtct	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...511...ttcctttgcag	atggtgca				
D.Pse	attcactg	gtaagtaaaac...1856...-----cctcgttgcgt-ctgcgtct	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...538...ttcctttgcag	atggtgca				
D.Vir	attcactg	gtaagtaaaaca...1459...ggcgtggccgtgtgcgc-ct-----	CGGTACTTTGG	Ccataaatcattt---tggcatgc---	...612...ctctctttgcag	atggtgca				
D.Wil	actcactg	gtaagtacacaa...1599...-gccatggccgtgtgcgcgc-----	TGGTACTTTGG	CCATA	aatcattt---tggcatggcact...568...ttctattttcag	atggtgca				
D.Yak	actcactg	gtaagtacaatg...1588...-----gccgcctcgcgt-ctgcgtct	CGGTACTTTGG	CCATA	aatcattt---tggcatgccact...454...gttttctttcag	atggtgca				
	* *****	*****	*	***	*****	*****	*****	*	** **	*****

id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272\_-1 type=IN

D.Me1	atttaacg	gtgagtagcaaaa...3130...aagccatctctgcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccattttaattt-...1776...atttcctttcag	catcccta			
D.Sim	atttaacg	gtgagtagcaaaa...3128...aagccatctctgcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1778...atttcctttcag	catcccta			
D.Sec	atttaacg	gtgagtagcaaaa...3132...aagccatctctgcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1774...atttcctttcag	catcccta			
D.Ere	atttaacg	gtgagtagcaaaa...3098...aagccatctcagcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1808...atattctttcag	catcccta			
D.Ana	atttaacg	gtaagtagcatt...3186...caaccatctctgtaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1720...ctgcccttcag	catcccta			
D.Moj	acttaacg	gtaagtccaatc...2962...-----atttctctaataatagatgaac	GCCAcA	AAGTATGC	tataaattccattttaattt-...1949...ctctccttcag	catcccta				
D.Per	atttaacg	gtgagtcacaac...2947...gagccatctctgcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1959...ttccaattgcag	catcccta			
D.Pse	atttaacg	gtgagtcacaac...2980...gagccatctcagcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1926...ctccaattgcag	catcccta			
D.Vir	atttaacg	gtaagtccaatc...2871...-----atttctctaataatagatgaac	GCCAcA	AAGTATGC	tataaattccattttaattt-...2040...ttttcttttag	catcccta				
D.Wil	acttaacg	gtgagtaactaa...2983...ctctcgtcactgcataga	TGTG	GCCAcA	AAGTATGC	tataaattccattttaattt-...1922...ctgttcttcag	catcccta			
D.Yak	atttaacg	gtgagtagcaaaa...3105...aagccatctctgcaaataga	TGTG	GCCAcA	AAGTATGC	tataaattccggttttaattt-...1801...atattcttacag	catcccta			
	* *****	** **	*****	*****	*****	*	*****	*	** **	*****

id=103983 gene=FBgn0001235 name=hth segment=chr3R.6340067.6346793\_-1 type=IN VIEW

Figure 241: CS=8.58



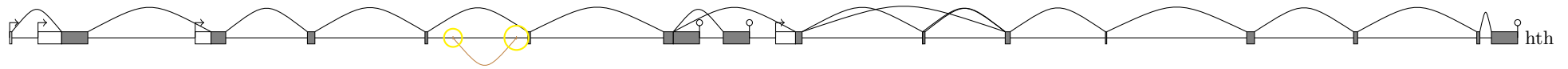
D. Mel	actcactg	gtaagtacgaag...440...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1575...cttttcttacag	atggtgca
D. Sim	actcactg	gtaagtacgaag...432...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1573...cttttcttacag	atggtgca
D. Ere	actcactg	gtaagtacgcag...443...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1596...ctcttctttcag	atggtgca
D. Ana	actcactg	gtaagtacctca...437...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctggc...1277...ctctctttccag	atggtgca
D. Moj	attcactg	gtaagtaaaca...419...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatggccagcc...1594...ctctctttgcag	atggtgca
D. Per	attcactg	gtaagtaaaca...540...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1869...tttcctttgcag	atggtgca
D. Pse	attcactg	gtaagtaaaac...525...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1873...tttcctttgcag	atggtgca
D. Vir	attcactg	gtaagtaaaca...516...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggcagcc...1555...ctctctttgcag	atggtgca
D. Wil	actcactg	gtaagtacaca...473...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggcagcc...1699...ttctattttcag	atggtgca
D. Yak	actcactg	gtaagtacaatg...466...agaacgatttaaatgatgcat	ATGACATTTTTC	cactctctaaatgggctgcc...1580...gttttctttcag	atggtgca
	* *****	*****	*****	* * *	* ** ** *

id=103964 gene=FBgn0001235 name=hth segment=chr3R\_6417182\_6419272\_-1 type=IN

D. Mel	tgcaagcg	gtaagctttctc...4692...agtctactgacctgcagtc	CAAA	AATGTCAT	ccatagattatcgttacga...220...acaatttccag	gtgatgcc
D. Sim	tgcaagcg	gtaagctttctc...4684...agtctactgacctgcagtc	CAAA	CAATGTCAT	ccatagattatcgttacga...228...acaatttccag	gtgatgcc
D. Ere	tgcaagcg	gtaagctttctc...4674...agtctactgacctgcagtc	CAAA	CAATGTCAT	ccatagattatcgctacga...238...acaatttccag	gtgatgcc
D. Ana	tgcaagcg	gtaagctttctc...4696...tctctactgacctgcagtc	CAAA	CAATGTCAT	ccatagattatcgttacgg...216...cttgttttccag	gtgatgcc
D. Moj	tgcaagcg	gtaagctttctc...4654...cttgctttaaaccggcagcca	CAAA	CAATGTCAT	ccatagattatcattatgt...258...ccacacacacag	gtgacgcc
D. Per	tgcaagcg	gtaagctttctc...4680...agtgtcttgaacggcagcca	CAAA	CAATGTCAT	ccatagattatcgttatgg...232...acctttttccag	gtgatgcc
D. Pse	tgcaagcg	gtaagctttctc...4681...agtgtcttgaacggcagcca	CAAA	CAATGTCAT	ccatagattatcgttatgg...231...acctttttccag	gtgatgcc
D. Vir	cgcaagcg	gtaagctttctc...4680...cttgctttaaaccggcagcca	CAAA	CAATGTCAT	ccatagattatcattatgt...232...tttttcttacag	gtgatgcc
D. Wil	tgccagcg	gtaagctttccc...4630...agtgtctttaaaccggcagcca	CAAA	CAATGTCAT	ccatagattatcattatgc...282...gatcattacag	gtgatgct
D. Yak	tgcaagcg	gtaagctttctc...4672...agtctactgacctgcagtc	CAAA	CAATGTCAT	ccatagattatcgttacga...240...acaatttccag	gtgatgcc
	** ****	*****	*****	* * * * *	*****	** * **

id=103981 gene=FBgn0001235 name=hth segment=chr3R\_6346943\_6355160\_-1 type=IN VIEW

Figure 242: CS=6



```

D.Mel actcactg gtaagtacgaag...436...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1574...cttttcttacag atggtgca
D.Sim actcactg gtaagtacgaag...428...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1572...cttttcttacag atggtgca
D.Sec actcactg gtaagtacgaag...427...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1572...cttttcttacag atggtgca
D.Ere actcactg gtaagtacgcag...439...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1595...ctctctttcag atggtgca
D.Ana actcactg gtaagtaccta...433...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1276...ctctctttccag atggtgca
D.Gri attcactg gtaagtaaaaag...589...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1975...ctctctttgcag atggtgca
D.Moj attcactg gtaagtaaaaac...415...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1593...ctctctttgcag atggtgca
D.Per attcactg gtaagtaaaaac...536...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1868...tttcctttgcag atggtgca
D.Pse attcactg gtaagtaaaaac...521...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1872...tttcctttgcag atggtgca
D.Vir attcactg gtaagtaaaaac...514...--gcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1554...ctctctttgcag atggtgca
D.Yak actcactg gtaagtacaatg...462...aagcagaacgatttaatgatGCATaTGACATTTTTGCactctctaaatgggctgcct...1579...gttttctttcag atggtgca
* *****
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*****

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id=103964 gene=FBgn0001235 name=hth segment=chr3R\_6417182\_6419272\_-1 type=IN

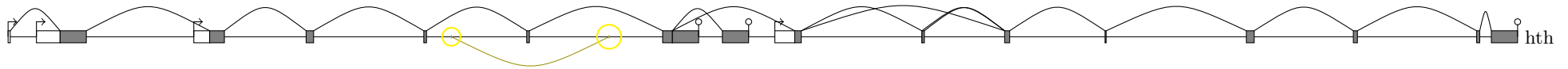
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D.Mel actcactg gtaagtacgaag...1827...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaagtgatgttttaattag...183...cttttcttacag atggtgca
D.Sim actcactg gtaagtacgaag...1817...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaagtgatgttttaattag...183...cttttcttacag atggtgca
D.Sec actcactg gtaagtacgaag...1820...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaagtgatgttttaattag...179...cttttcttacag atggtgca
D.Ere actcactg gtaagtacgcag...1837...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaactgatgttttaattag...197...ctctctttcag atggtgca
D.Ana actcactg gtaagtaccta...1622...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaactgatgttttaattag...87...ctctctttccag atggtgca
D.Gri attcactg gtaagtaaaaag...2345...ccacaccagtttagcagcatcGTAAAAATGTCAaATGTcaaactgacgttttaattag...219...ctctctttgcag atggtgca
D.Moj attcactg gtaagtaaaaac...1801...ccacaccagtttagcagcatcGTAAAAATGTCAaATGTcaaactgacgttttaattag...207...ctctctttgcag atggtgca
D.Per attcactg gtaagtaaaaac...2280...tctgagcagtttagcagcatcGTAAAAATGTCAaATGTcaaactgatgttttaattag...124...tttcctttgcag atggtgca
D.Pse attcactg gtaagtaaaaac...2248...tctgagcagtttagcagcatcGTAAAAATGTCAaATGTcaaactgatgttttaattag...145...tttcctttgcag atggtgca
D.Vir attcactg gtaagtaaaaac...1876...ccacaccagtttagcagcatcGTAAAAATGTCAaATGTcaaactgacgttttaattag...190...ctctctttgcag atggtgca
D.Yak actcactg gtaagtacaatg...1858...cagcagcagtttagcagcatcGTAAAAATGTCAaATGTcaaactgatgttttaattag...183...gttttctttcag atggtgca
* *****
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*****
*****
*****

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id=103964 gene=FBgn0001235 name=hth segment=chr3R\_6417182\_6419272\_-1 type=IN VIEW

Figure 243: CS=6.6



```

D.Mel  actcactg gtaagtacgaag...430...---aatatgaagcagaacgatt-----AATGATGCATATG-----acatttttgactctctctaaa...1584...cttttcttacag atggtgca
D.Sim  actcactg gtaagtacgaag...1822...-----gcagtttagcagcatcgtaaa-AATGTCAAATGTC-----aaagt---gatgttttaattagc...182...cttttcttacag atggtgca
D.Sec  actcactg gtaagtacgaag...1825...-----gcagtttagcagcatcgtaaa-AATGTCAAATGTC-----aaagt---gatgttttaattagc...178...cttttcttacag atggtgca
D.Ere  actcactg gtaagtacgcag...639...-----aaaggggggctcgcgatccaag---GCAAATGcAGCAGcACAA-----ccttgacgatgatcatgatc...1393...ctctctttcag atggtgca
D.Ana  actcactg gtaagtaccta...1601...acccaaaccaaaccaggccac---ACAGCAGCAGtTAGCAGCA-----tcgtaaaaatgtcaaatgct...106...ctctctttccag atggtgca
D.Gri  attcactg gtaagtaaaaag...654...-----gcaaaagacgcagggcaacaa---CAGCAGCAGCAG-CAACAGCAGcaGCAGcaacagcaacagcagcatat...1900...ctctctttgcag atggtgca
D.Moj  attcactg gtaagtaaaaag...501...-----aacaacaacagcaacaaaaaCAGCAaCAGCAG-CAACAATAA-----agccatcgtcgtcgtcgtg--...1503...ctctctttgcag atggtgca
D.Per  attcactg gtaagtaaaaaca...603...-----ctggcagccttgggtgtgca-ACAGCAG-CaACAATG-----aagcc---aacggccttaggctt...1803...ttcctttgcag atggtgca
D.Pse  attcactg gtaagtaaaaac...1264...tgccatgtaaatcaagacgg-----AAATGcCGGTGCAAA-----aagtgcaaacagcagc-catgc--...1130...ttcctttgcag atggtgca
D.Yak  actcactg gtaagtacaatg...1863...-----gcagtttagcagcatcgtaaa-AATGTCAAATGTC-----aaact---gatgttttaattagc...182...gttttctttcag atggtgca
* ***** * ***** * ***** * ** ** * *****

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id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272.-1 type=IN

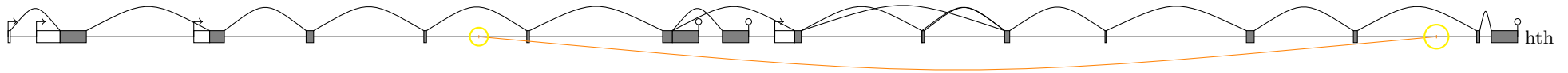
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D.Mel  tagaaaaa gtaagtaacgat...3887...-----cattcctctctttgttgctg---CATAttTGCATaTATT-----cctgactcacactcactttg---...1022...gtctcgttgtag gtacacga
D.Sim  tagaaaaa gtaagtaacgat...3439...-ggcagcttatcagcgacggc---GACAaaTTTGACATT-----gtcctg-tcataaaccagttg---...1471...gtctcgttgtag gtacacga
D.Sec  tagaaaaa gtaagtaacgat...3431...-ggcagcttatcagcgacggc---GACAaaTTTGACATT-----gtcctg-tcataaaccagttg---...1479...gtctcgttgtag gtacacga
D.Ere  tagaaaaa gtaagtaacgat...3851...-----cgccggctgcattcctctct---TTGTTGCTGCATatTTGCatagcagatataatgcctgact---...1056...gtctcgttgtag gtacacga
D.Ana  tagaaaaa gtaagtaccgcc...3922...-----gagcaccctgtggttgctgtTGTGCTGCTGTTGCTGT-----tgctgttgctgttgctgctg---...985...gtctcgttgtag gtacacga
D.Gri  tagaaaaa gtaagtaaacat...3751...-gcccgtttaaatggagcacc---CTGTTTGTGTTGCTGCTGCTGTTG-----ctgctgctgctctgctgct---...1149...ttctctttgcag gtgcatga
D.Moj  tagaaaaa gtaagtaaacat...3285...-atthagtaagtatttatgcc---TTGTTGTTGTTGTTGcTGCTG-----ctgctg-tgcgctggcaacat---...1619...ctctcgttgtag gtgcatga
D.Per  tagaaaaa gtaagtaaaaaca...3415...-actgtatgttgctgcaaca-----TGTGTcGCTGCTGT-----ggctgct---tatcagcaacagc...1495...gtctcgttgtag gtacacga
D.Pse  tagaaaaa gtaagtaaaaaca...4579...gggcaacgcacataaaagcaa-----TTTGCATGCCATT-----gcaaggcagatggaggaagca---...332...gtctcgttgtag gtacacga
D.Yak  tagaaaaa gtaagtaacgat...3378...-agcagcttatcagcggcggc---GACAaaTTTGACATT-----gtcctg-tcataaaccagttg---...1532...gtctcgttgtag gtacacga
***** ***** * ***** **** ***** ** ** *

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id=103966 gene=FBgn0001235 name=hth segment=chr3R.6411651.6417130.-1 type=IN VIEW

Figure 244: CS=6



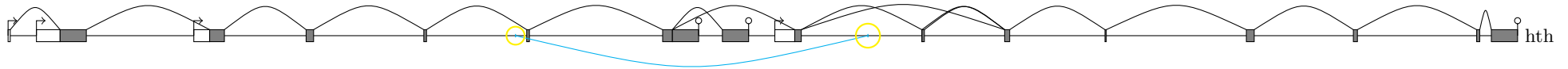
D.Mel	actcactg	gtaagtacgaag...1132...--cagcatccagctgaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...880...cttttcttacag	atggtgca	
D.Sim	actcactg	gtaagtacgaag...1125...--cagcatccagctgaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...877...cttttcttacag	atggtgca	
D.Sec	actcactg	gtaagtacgaag...1124...--cagcatccagctgaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...877...cttttcttacag	atggtgca	
D.Ere	actcactg	gtaagtacgcag...1142...--cagcatccagcagaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...894...ctctctttcag	atggtgca	
D.Ana	actcactg	gtaagtaccta...887...--gaacatccaacagaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaggaggaaa...824...ctctctttccag	atggtgca	
D.Gri	attcactg	gtaagtaaaaag...1387...--agttttggagcgcagatgtaa	ATCAA	GACGGAAATG	-----	ctgctgcaaaaagtgcaaa...1179...ctctctttgag	atggtgca	
D.Moj	attcactg	gtaagtaaaaca...895...--atthtttggagaacatgtaa	ATCAA	GACGGAAATG	-----	ctgctgcaaaaagtgcaaa...1115...ctctctttgag	atggtgca	
D.Per	attcactg	gtaagtaaaaca...1287...--tcatttcggctggcatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...1119...tttcctttgag	atggtgca	
D.Pse	attcactg	gtaagtaaaaca...1254...--tcatttcggctggcatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...1141...tttcctttgag	atggtgca	
D.Vir	attcactg	gtaagtaaaaca...503...tacaatatgaagcagaacg--a	TTTAATGATGCA	ATGA	catttttgcactctctaaat----	1563...ctctctttgag	atggtgca	
D.Wil	actcactg	gtaagtacacaa...460...tacaatatgaagcagaacg--a	TTTAATGATGCA	ATGA	catttttgcactctctaaat----	1707...ttctattttcag	atggtgca	
D.Yak	actcactg	gtaagtacaatg...1140...--cagcatccagctgaatgtaa	ATCAA	GACGGAAATG	-----	ccgctgcaaaaagtgcaaa...903...gttttctttcag	atggtgca	
	* ****	*****				** *	* ** **	*****

id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272.-1 type=IN

D.Mel	aataattg	gtgagtatgccg...1460...ggcagaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...909...gtctgcttacag	gttcatca	
D.Sim	aataattg	gtgagtatgccg...1464...ggcagaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...891...gtctgcttacag	gttcatca	
D.Sec	aataattg	gtgagtatgccg...1465...ggcagaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...894...gtctgcttacag	gttcatca	
D.Ere	aataattg	gtgagta-gccgc...1437...ggcagaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...891...gtctgcttacag	gttcatca	
D.Ana	aataattg	gtgagtaccca...1554...ggtggaacggaactcgattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...795...tccgcttacag	gttcatca	
D.Gri	aacaattg	gtgagtacaact...2479...aacgcaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...851...actcttttacag	gttcatca	
D.Moj	aacaattg	gtaagtacgaag...1858...aacgcaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...804...actcttttacag	gttatca	
D.Per	aataattg	gtaagtaccaga...1800...aaggcaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...801...ctctacttacag	gttcatca	
D.Pse	aataattg	gtaagtaccaga...1780...aaggcaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...811...atctacttacag	gttcatca	
D.Vir	aataattg	gtaagtgcacaa...2444...gacggcctgcttattatttc----	TTATTGCATT	ATTAAA	cgacaatcataaccaaagtc...	289...actctttcacag	gttcatca	
D.Wil	aataattg	gtaagttcaaaa...2296...cagcaactgcttattatttc----	TTATTGCATT	ATTAAA	cgacaatcataaccaaagtc...	278...gttctctgcag	gttcatca	
D.Yak	aataattg	gtaagttgccg...1480...ggcagaacggaactcaattc	CATTTT	CGTTTTGAT	----	aaacgatttcagggcgttgc...920...gtctgcttacag	gttcatca	
	** ****	** **				** ** *	*	** ** **

id=103985 gene=FBgn0001235 name=hth segment=chr3R.6337540.6339989.-1 type=IN VIEW

Figure 245: CS=7.2



D.Mel	actcactg	gtaagtacgaag...1829	..gcagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAGTGATGTT	TAATT	agcggctct--ggtcacaccagc---	...165...cttttcttacag	atggtgca
D.Sec	actcactg	gtaagtacgaag...1822	..gcagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAGTGATGTT	TAATT	agcggctct--ggtcacaccagc---	...161...cttttcttacag	atggtgca
D.Ere	actcactg	gtaagtacgcag...1839	..gcagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgatgtttt-----aattagcgg...	...193...ctctctttcag	atggtgca
D.Ana	actcactg	gtaagtacctca...1624	..gcagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAaGCTGATGTT	TAATT	agcggctctcgatggaatta-----	...69...ctctctttccag	atggtgca
D.Gri	attcactg	gtaagtaaaaag...2347	..acacca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgacgtttt-----aattagcatc...	...215...ctctctttgca	atggtgca
D.Moj	attcactg	gtaagtaaaaac...1803	..acacca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgacgtttt-----aattagcatc...	...203...ctctctttgca	atggtgca
D.Per	attcactg	gtaagtaaaaac...2282	..tgagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgatgtttt-----aattagcga...	...120...tttcctttgca	atggtgca
D.Pse	attcactg	gtaagtaaaaac...2250	..tgagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgatgtttt-----aattagcga...	...141...tttcctttgca	atggtgca
D.Vir	attcactg	gtaagtaaaaac...1866	..acagca-g-cggccacaccagt	TAGCaGCCTCGT	AAAAaTG	-TCAAATGTCAAAA	ctgacgtttt-----aattagcatc...	...186...ctctctttgca	atggtgca
D.Wil	actcactg	gtaagtacacaa...1752	..cacatcatgttttgaacatt	TAAAAGTGCA	TTAGT		aaccttatt-----caacaacaca...	...416...ttctattttcag	atggtgca
D.Yak	actcactg	gtaagtacaatg...1860	..gcagca-gttagcagcatc-gt-----	AAAAaTG	-TCAAATGTCAAAA		ctgatgtttt-----aattagcgg...	...179...gttttctttcag	atggtgca

\* \* \* \* \*

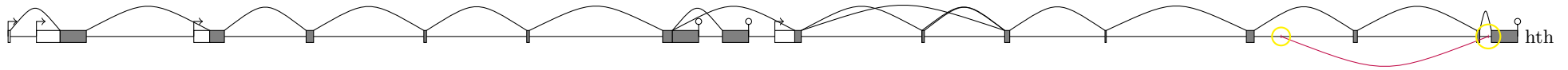
id=103964 gene=FBgn0001235 name=hth segment=chr3R.6417182.6419272.-1 type=IN

D.Mel	agaccctg	gtaagtgcacac---	...3565...gctacctccaattgagtgcg	AATTGGCAT	ttCATTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1327...ttctcgttgca	atggtgca
D.Sec	agaccctg	gtaagtgcacac---	...3552...gctacctccaattgagtgcg	AATTGGCAT	ttCATTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1340...ttctcgttgca	atggtgca
D.Ere	agaccctg	gtaagtgcacac---	...3572...gagtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1333...ttctcgttgca	atggtgca	
D.Ana	agaccctg	gtaagtgcacac---	...3775...gcctcctcgaattgagtgcg	AATTGGCAT	ttCGGCTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1117...cctccttgca	atggtgca
D.Gri	agaccctg	gtaagtaaatgca---	...3630...-----agtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1276...ttctcgttgca	atggtgca	
D.Moj	agaccctg	gtaagtgttga---	...2847...-----agtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...2059...ctctctttgca	atggtgca	
D.Per	agaccctg	gtaagtgcacac---	...3233...-----gagtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1672...ttcccgttgca	atggtgca	
D.Pse	agaccctg	gtaagtgcacac---	...3262...-----gagtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1643...ttcccgttgca	atggtgca	
D.Vir	agaccctg	gtaagtgcacac---	...3572...-----gagtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1322...ttctcgttgca	atggtgca	
D.Wil	agaccctg	gtaagtgcacac---	...4292...caacaacaaaacattgtgc		GITAA	ttTG-CATTTTG	tttcatgatacaaaaacaa...	...616...ttctcgttgca	atggtgca
D.Yak	agaccctg	gtaagtgcacac---	...3568...-----gagtgcaattggcatttca	TTTGGCG	caTTGGCATTTT	cggggcgcgttgatcattta-----	...1337...ttcccgttgca	atggtgca	

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id=103974 gene=FBgn0001235 name=hth segment=chr3R.6374377.6387630.-1 type=IN VIEW

Figure 246: CS=8.58



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D.Me1  atttaacg|gtgagtagcaaa...3140...-tgcaaatagatgtgcgccacAAAGtATGCTATAAattccattttaatttacctg...1771...atctcctttcag|catcccta
D.Sim  atttaacg|gtgagtagcaaa...3138...-tgcaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1773...atctcctttcag|catcccta
D.Sec  atttaacg|gtgagtagcaaa...3141...-ctgcaaatagatgtgcgccaCAAAGtATGCTATAAattccgttttaatttacctg...1769...atctcctttcag|catcccta
D.Ere  atttaacg|gtgagtagcaaa...3108...-agcaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1803...atctcctttcag|catcccta
D.Ana  atttaacg|gtaagtagcatt...3196...-tgtaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1715...ctgcccttcag|catcccta
D.Moj  acttaacg|gtaagtccaatc...2967...-tctaaatagatgaacgccacAAAGtATGCTATAAattccattttaatttacctg...1944...ctctccttgag|catcccta
D.Per  atttaacg|gtgagtccaac...2957...-tgcaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1954...ttccaattgcag|catcccta
D.Pse  atttaacg|gtgagtccaac...2990...-agcaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1921...ctccaattgcag|catcccta
D.Vir  atttaacg|gtaagtccaatc...2876...-tctaaatagatgaacgccacAAAGtATGCTATAAattccattttaatttacctg...2035...ttttcttttag|catcccta
D.Yak  atttaacg|gtgagtaccaaa...3115...-tgcaaatagatgtgcgccacAAAGtATGCTATAAattccgttttaatttacctg...1796...atattcttacag|catcccta
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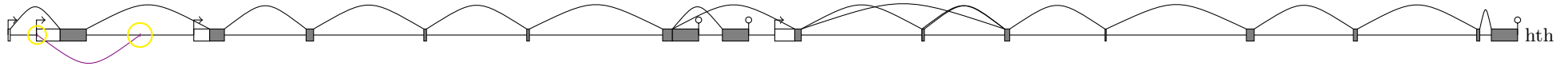
id=103983 gene=FBgn0001235 name=hth segment=chr3R.6340067.6346793.-1 type=IN

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D.Sim  tcgtgcag|gtaactatcgct...116...cattcgaacgcaatttctaaTTATGtGCATTTTT-----tctcttttccgttc-----ctccgcctttt-tccacttggcgactcaccaacag|tctataca
D.Sec  tcgtgcag|gtaactatcgct...115...cattcgaacgcaatttctaaTTATGtGCATTTTTG-----ctcttttccgttc-----ctccgcctttt-tccacttggcgactcaccaacag|tctataca
D.Ere  tcgtgcag|gtaactatcgct...123...cattcgaacgcaatttctaaTTATGtGCATTTTT-----tctcttttccgttcctccggtt--ttccgccttt-tccacttggcgactcaccaacag|tctataca
D.Ana  tcgtgcag|gtaactatcgct...97...acttgaaacgcaatttctaaTTATGtGCATTTTT--tcttctatcttctctg-----tgaactacag|tctataca
D.Moj  cogagcag|gtaaatatccaa...86...atttgcacgcaatttctaaTTATGtGCATTTTT--tctctt-tttttctcat-----gctactc-tcaacag|tttataca
D.Per  tcgtgcag|gtaactatcgct...108...ctttcgaccgcaatttctaaTTATGtGCATTTTT-tttgtctcttctctctttcgccacaacgatacagacgac-----actgatccacag|tctataca
D.Pse  tcgtgcag|gtaactatcgct...107...ctttcgaccgcaatttctaaTTATGtGCATTTTT-tttgtctcttctctctttcgccacaacgatacagacgac-----actgatccacag|tctataca
D.Vir  cogagcag|gtaaatatccaa...79...atttgcacgcaatttctaaTTATGtGCATTTTT--tctttttgtctgccc-----gcaactc-tcaacag|tttataca
D.Yak  tcgtgcag|gtaactatcgct...123...cattcgaacgcaatttctaaTTATGtGCATTTTT-----tctcttttccggtt-----ttgcgctctttatccacttggcgactcaccaacag|tctataca
** **** ***** ** ** ***** ***** ***** ***** ** * * * ***** * * **** * *****
  
```

id=103987 gene=FBgn0001235 name=hth segment=chr3R.6337260.6337480.-1 type=IN VIEW

Figure 247: CS=9.6



D. Mel	----tcatccg-C	ACAGTGTAttTTTGacTGCG	aagcgcgtacgacgtgtgtc...	399...	gttcatctctag	taacgtag---
D. Sim	----tcatccg-C	ACAGTGTAttTTTGacTGCG	aagcgcgtacgacgtgtgtc...	396...	gttcatctctag	taacgtag---
D. Sec	---tttcatccg-C	ACAGTGTAttTTTGacTGCG	aagcgcgtacgacgtgtgtc...	397...	gttcatctctag	taacgtag---
D. Ere	----tcatccg-C	ACAGTGTAttTTTGacTGCG	aagcgcgtacgacgtgtgtc...	400...	gttcatctctag	taacgtag---
D. Gri	----catGATTG	ACAGTgTGTATTG	ccttcgaaccgcgtacgacg-----	...661...	---ggttttttg	tagtatattat
D. Moj	----catGATTG	ACAGTgTGTATTG	ccttcgaaccgcgtacgacg-----	...610...	---ggtttttca	tagtatattat
D. Vir	----catGATTG	ACAGTgTGTATTG	ccttcgaaccgcgtacgacg-----	...629...	...ttggtttttcg	tagcatat---
D. Wil	actggcaa-----	ACAGTgTGTATTG	ccttcgaaccgcgtacgacg-----	...619...	---taatata	tagtatatagt
D. Yak	----tcatccg-C	ACAGTGTAttTTTGacTGCG	aagcgcgtacgacgtgtgtc...	401...	gttcatctctag	taacgtag---
	**	***** * **** * ** * *****				** **

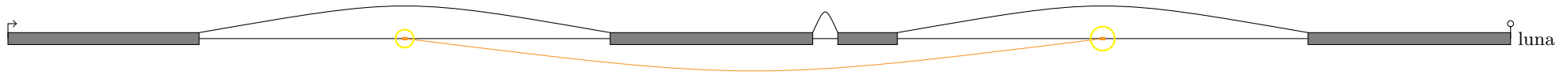
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D. Sim	agcccagg	gtaagtagatcc...3589...	tcaaattcccacattactta	TGTACAAGTACAaaTTGTG	-gtaattttcaagatctcttt-----	...1317...	ttgttcttctct	tttttcga
D. Sec	agcccagg	gtaagtagatcc...3581...	tcaaattcccacattactta	TGTACAAGTACAaaTTGTG	-gtaattttcaagatctcttt-----	...1325...	ttgttcttctct	tttttcga
D. Ere	agcccagg	gtaagtagatac...3586...	tcaaattcccacattactta	TGTACAAGTACAaaTTGTG	-gtaattttcaagatctcttt-----	...1320...	ttgttcttctcc	tttttcga
D. Gri	agcctagg	gtaagtgttaaa...3327...	----attcccacattacttatgta	CAAGTACAaATTGTggTAATT	ttcagagatctctttggtgc...	...1577...	tttttttctctt	ttcttttt
D. Moj	agcctagg	gtaagtactaga...3301...	----attcccacattacttatgta	CAAGTACAaATTGTggTAATT	ttcagagatctctttggtgg...	...1603...	gttttgttattt	ttttggga
D. Vir	agcctagg	gtaagtaaatcg...3313...	----attcccacattacttatgta	CAAGTACAaATTGTggTAATT	ttcagagatctctttggtgg...	...1591...	tttccccctct	tttatttt
D. Wil	agcctagg	gtaagtacaaat...3178...	----attcccacattacttatgta	CAAGTACAaATTGTggTAATT	-ggtaattttcaagatctctt-----	...1733...	ttgttcttcaat	ttttttcg
D. Yak	agcccagg	gtaagtagatcc...3582...	tcaaattcccacattactta	TGTACAAGTACAaaTTGTG	-gtaattttcaagatctcttt-----	...1324...	ttgttcttctcc	tttttcga
	*** **	*****	*****	*****	* ** *****		*	**

id=103957 gene=FBgn0001235 name=hth segment=chr3R.6431393.6438706\_-1 type=IN VIEW

Figure 248: CS=11.7





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D. Sim	ggcaacag	gtgagttgattt...4075...	tggcag-aaagggttagcgcaa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	833...	ctccatttcgag	acctgcta
D. Sec	ggcaacag	gtgagatgagtt...4073...	tggcag-aaagggttagcgcaa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	835...	ctccatttcgag	acctgcta
D. Ere	ggcaacag	gtgagttgcaag...4131...	tggcag-aaagggttagcgcaa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	777...	ttccatttcgag	acctgcta
D. Ana	ggcaacag	gttagtctaadc...4045...	tggcaa-aaagggttagcaa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	863...	tttctatttcgag	acctgcta
D. Gri	ggcaacag	gtgagtggaac...4270...	cgacttgaaagggttaag-aa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	638...	catttatttcgag	acctgcta
D. Per	ggcaacag	gtttgtggccc...3997...	ttcgcaagggttagcg-aa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	911...	attcatttcgag	acctgcta
D. Vir	ggcaacag	gtgagtgaagat...4023...	cgagttgaaagggttaag-aa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	885...	tctatcttacag	acctgcta
D. Wil	ggcaacag	gtaagattaata...3862...	ggagaaaaagggttaag-aa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	1046...	tctcgttttcgag	acctgcta
D. Yak	ggcaacag	gtgagtttcgat...4056...	gggcag-aaagggttagcgcaa	ATTTaTGTGTTgCAATT	-at	ttt---cttgaataaacactt...	852...	tttatttcgag	acctgcta
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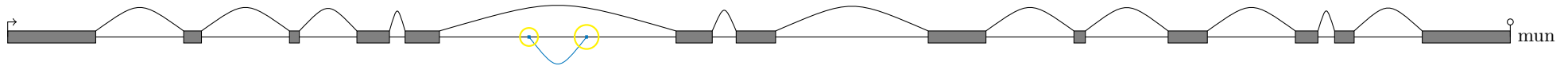
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D. Sim	gcatacag	gtgagtcgcccc...3632...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1277...	ttcccggttcgag	gtgaaaag
D. Sec	gcatacag	gtgagtcgcccc...3652...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1257...	ttcccggttcgag	gtgaaaag
D. Ere	gcacacag	gtgagtgcccc...3659...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1250...	ttcccggttcgag	gtgaaaag
D. Ana	gcacacag	gtgagtgaggaaa...3439...	accgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1470...	ctgccattacag	gtgagaag
D. Gri	ccacacag	gtgagaagctca...3481...	tgggcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1029...	ctctcatttcgag	gtgagaag
D. Per	gcacacag	gtgagtggttg...3622...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1287...	gtcccggttcgag	gtgagaag
D. Vir	ccatacag	gtaagaaggat...3592...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1107...	ctgtcatttcgag	gtgagaag
D. Wil	gcacacag	gtgagtgactg...2904...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	2005...	aactatttcgag	gtgagaag
D. Yak	gcacacag	gtgagttggccc...3585...	gccgcaagtgcataatgtga	AATTGAGCACGgAAAT	atcacacatttccgcatgca...	1324...	ttcccggttcgag	gtgaaaag
	** ****	** **	*****	*****			* ***	**** **

id=110556 gene=FBgn0040765 name=luna segment=chr2R.6870979.6877132\_-1 type=IN VIEW

Figure 249: CS=9





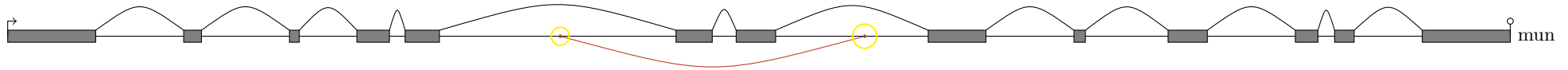
D. Mel	gagtgacg	gtgggtattggg...836...--agttgcagccagaccgcgtg	AATGtGTCAAACAcaAAGT	taagttataaat	acgatgct...1418...ttcctatatcag	attaaagt
D. Sim	gagtgacg	gtgcgtattggg...860...--agttgcagccagaccgcgtg	AATGtGTCAAACAcaAAGT	taagttataaat	acgatgct...1562...ttcctatatcag	attaaagt
D. Sec	gagtgacg	gtgggtattgcg...873...--agttgcagccagaccgcgtg	AATGtGTCAAACAcaAAGT	taagttataaat	acgatgct...1570...ttcctatatcag	attaaagt
D. Ere	gagtgacg	gtgggtcatggg...874...--agttgcagccgagccgcgag	AATGtGTCAAACAcaAAGT	taagttataaat	acgatgct...1693...ttcccttaccag	actgaagt
D. Ana	gagtgacg	gtgggttcaaag...648...--agcaactgagaccgcgtg	AATGtGTCAAACAcaAAGT	taagttataaat	acgatgct...1441...tgattttgacg	gctaaaat
D. Moj	gagtgacg	gtgggttaaata...516...aaacttcaagccagccgcg	--AATGtGTCAAACAcaAAGT	taagttataaat	acgatgca...1207...caaccttgacag	actcaagc
D. Per	gagtgacg	gtgggtacaaag...889...--aggctgggcccagaccgcg	ccgAATGtGTCAAACAcaAAGT	taagttataaat	aggatgca...1414...ttcttggggcag	gctcaagc
D. Pse	gagtgacg	gtgggtacaaag...842...--aggctgggcccagaccgcg	ccgAATGtGTCAAACAcaAAGT	taagttataaat	aggatgca...1421...ttcttggggcag	gctcaagc
D. Vir	gaatgcag	gtgggtcaaata...463...aaacttcaagccaagccgcg	--AATGtGTCAAACAcaAAGT	taagttataaat	acgatgca...1115...ttacattcacag	gctcaaac
D. Yak	gagtgacg	gtgggtcatggg...3197...--agttgcagccagaccgcgtg	AATGtGTCAAACAcaAAGT	taagttataaat	acgatggt...1709...ttcccatatcag	attgaagt
	** *****	*** **	*	**** *****	***** **	** * **

id=127559 gene=FBgn0261342 name=mun segment=chr3R.16213347.16215683.-1 type=IN

D. Mel	gagtgacg	gtgggtattggg...1164...--ttagaggcaacgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1092...ttcctatatcag	attaaagt
D. Sim	gagtgacg	gtgcgtattggg...1191...--ttagaggcaacgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1233...ttcctatatcag	attaaagt
D. Sec	gagtgacg	gtgggtattgcg...1204...--ttagaggcaacgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1241...ttcctatatcag	attaaagt
D. Ere	gagtgacg	gtgggtcatggg...1218...--ttagaggcaacgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1351...ttcccttaccag	actgaagt
D. Ana	gagtgacg	gtgggttcaaag...1055...--tgtggctctctgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1036...tgattttgacg	gctaaaat
D. Moj	gagtgacg	gtgggttaaata...856...tttcgtcttgcctat-tcgagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gcat...869...caaccttgacag	actcaagc
D. Per	gagtgacg	gtgggtacaaag...1321...--acgctctctctgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...984...ttcttggggcag	gctcaagc
D. Pse	gagtgacg	gtgggtacaaag...1282...--acgctctctctgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...983...ttcttggggcag	gctcaagc
D. Vir	gaatgcag	gtgggtcaaata...789...ctgcgtctcctat-tcgagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtat...791...ttacattcacag	gctcaaac
D. Yak	gagtgacg	gtgggtcatggg...3529...--ttagaggcaacgtgtagagt	GCTTaTGTTGACTTATT	acgtatacagcgcgtt	gtgc...1379...ttcccatatcag	attgaagt
	** *****	*** **	* * *****	* **	** * **	** * **

id=127559 gene=FBgn0261342 name=mun segment=chr3R.16213347.16215683.-1 type=IN VIEW

Figure 251: CS=12



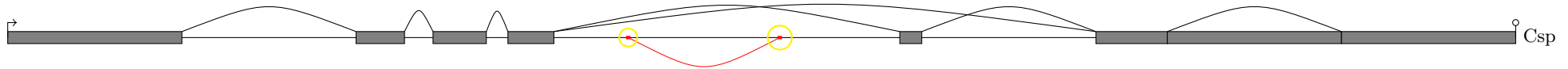
D.Mel	gagtg	cag	gtgggtattggg...	1016...	-gtcgtagctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1243...	ttcctatatcag	attaaagt
D.Sim	gagtg	cag	gtgcgtattggg...	1044...	-gtcgttgctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1383...	ttcctatatcag	attaaagt
D.Sec	gagtg	cag	gtgggtattgcg...	1057...	-gtcgttgctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1391...	ttcctatattag	attaaagt
D.Ere	gagtg	cag	gtgggtcatggg...	1072...	-gtcgtagctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1500...	ttcccttaccag	actgaagt
D.Ana	gagtg	cag	gtgggttcaaag...	878...	-gtcgtagctgtggctgtgaa	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1216...	ttgattttgag	gctaaaat
D.Gri	gagtg	cag	gtgagtcactc...	1426...	ggcgtcactgtggctgtgaa	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1949...	ttatcgctgcag	acttaagt
D.Moj	gagtg	cag	gtgggttaaata...	677...	ggctctgggttggctgtgaa	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1050...	caacctgacag	actcaagc
D.Pse	gagtg	cag	gtgggtacaaag...	1072...	-gtcgtagctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1196...	ttcttggggcag	gctcaagc
D.Vir	gaatg	cag	gtgggtcaaata...	620...	ggctctggctgtggctgtgaa	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	962...	ttacattcacag	gctcaaac
D.Wil	gattg	cag	gtgggtaccagg...	851...	tgtcggaactcggctgcga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	2176...	atctttcggcag	actcaagc
D.Yak	gagtg	cag	gtgggtcatggg...	3382...	-gtcgtagctgtggctctgga	AAATT	AATTG	C	TTTT	taagtgaatcg	cacttgctt...	1529...	ttccatcatcag	attgaagt
	** *****	*** **			*	** ** *	*	*****	*****				**	* **

id=127559 gene=FBgn0261342 name=mun segment=chr3R.16213347.16215683.-1 type=IN

D.Mel	-----taataacg	gtaagcgactac...	672...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagccaatgta-	...	330...	tgaaaacggcag	gcaaaaaga
D.Sim	-----taataacg	gtaagcgactac...	677...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagccaatgta-	...	315...	gtgaaaacggcag	gcaaaaaga
D.Sec	-----taataacg	gtaagcgactac...	681...	-cctcgggt---	tagcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagccaatgta-	...	307...	gtgaaaacggcag	gcaaaaaga
D.Ere	-----ttattacg	gtaagcgactac...	761...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagccaatgta-	...	305...	tgaaaacggcag	gcaaaagga
D.Ana	-----tcaatgcg	gtaagtggcaac...	700...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagcaacggct-	...	347...	cgaatagggcag	gcaaaaaga
D.Gri	-----gtgccaca	gagtaaaactaa...	171...	gagctctgaa---	t-gcaaacgcag	AAAGCAAT	CAATT	cctgacctgctatagggggag-	...	229...	caccgagagcag	gcaaaaaga
D.Moj	-----tagcctgt	gcctatgagtg...	297...	gactatgaa---	t-tcaaacgcag	AAAGCAAT	CAATT	ctgccttctgctgctgctg-	...	293...	caactcgaacag	gcaaaagga
D.Pse	-----tcaatgcg	gtaagttagggtc...	396...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagctgcacca-	...	340...	gagccagcatcg	gtagaaca
D.Vir	-----tctttaag	gtaactagctgt...	286...	gagtatgaa---	t-tcaaacgcag	AAAGCAAT	CAATT	ctgccttctgctgctgctg-	...	286...	caaccctaacag	gcaaaagga
D.Wil	-----tcaatgcg	gtaagttagatgg...	313...	---ctgggttctagccaacgcag	AAAGCAAT	CAATT	cctgacctgctcagcaaaa-	...	253...	aaaaccctaacag	ccaaagga	
D.Yak	aattgctcgcagcg	gtcaa-----	684...	-cctcgggt---	tggcaaacgcag	AAAGCAAT	CAATT	cctgacctgcagccaatgta-	...	303...	tgaaaacggcag	gcaaaaaga
		*		*	* * *****	*** ** *	*				*	* * *

id=127563 gene=FBgn0261342 name=mun segment=chr3R.16211702.16212780.-1 type=IN VIEW

Figure 252: CS=14.3



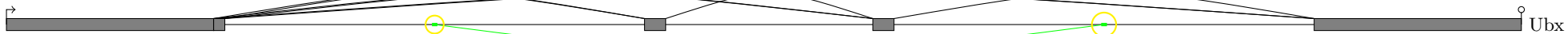
D.Mel	atctgaat	gtgagtgaagtt...167...--tacgaacctacaaccaac-----TTTGATGATTTTTGTGGGG	agat-ctgtatcatttttct--...743...cctcgccgtcag	c---gccccga
D.Sim	atctgaat	gtgagtgatggt...68...-ttgatttagttaagaaaaga-----GAAAAACAAGAAAAcCAATC	---cggt---gcaaagctaaaacatt...870...cctcgccgtcag	c---gccccga
D.Sec	atctgaat	gtgagtgaagtt...68...-ttgatttagttaagaaaaga-----GAAAAACAAGAAAAcCAATC	---cggt---gcaaagctaaaacatt...867...cctcgccgtcag	c---gccccga
D.Ere	atctgaat	gtgagtgaagtt...67...-ttgatttagttaagaaaaga-----GAAAAACAAGAAAAcCAATC	---cggt---gcaaagctaaaacatt...853...cctcgccgtcag	c---gccccga
D.Ana	atctgaat	gtgagtgatgta...54...-atgatttagtttagtaataga-----GAAAAACAAGAAAAcCAATC	---tgat---gcaaagcctatcttaa...877...cgcgccgtcag	c---gctccga
D.Gri	atctgaat	gtgagtgatggt...74...--aatcaacaacaaacaaaaa-----AAAAAAAACAAGAAAAcCAAT	---caatttcataagattttaac...1132...gtgaatgccag	c---gctccaa
D.Moj	atctgaat	gtgagtgatggt...261...-----taatacaacactggacacgt-----TTTGATGATTTTTGTG	---aggc-gattgt--ttagtcaaaa...828...cttgatccgaac	c---gtttcgt
D.Pse	atctgaat	gtgagtgatggt...83...--agtttaaaaaaaacgcacag-----AAAAACAAGAAAAcCAATC	---tggt---gcaagtcttaataact...1256...tcgctccgatag	c---gccccga
D.Vir	atctgaat	gtgagtgatggt...259...-----caacataaacactggacatgt-----TTTGATGATTTTTGTG	---aggc-gcttgt--ttagtcaaaa...903...ttgatctgata	c---gatccga
D.Wil	atctgaat	gtgagtgaagtt...63...--tagttaccaacccaaaaaAAAAAAAACAAGAAAAcCAATC	---agat---gcattattttaata...1206...--aatatggca	cagagaccgca
D.Yak	atctgaat	gtgagtgaagtt...171...-----caaccgaacacccaagccaac-----TTTGATGATTTTTGTGGGG	agat-ccgtatcattgttct--...746...cctcgccgtcag	c---gccccga
** ****	***** **	* *	** * *	* * *

id=108426 gene=FBgn0004179 name=Csp segment=chr3L.22263021.22264013.1 type=IN

D.Mel	atctgaat	gtgagtgaagtt...597...----gtttgtttgtatatatgtaCTTCACGAAAATCATCAA	-tgcttccaacgtttctctct--...313...cctcgccgtcag	c---gccccga
D.Sim	atctgaat	gtgagtgatggt...752...acgattattgtttatccacGATTGcTTTTCTTGtTTTT	---aagtgtcccattgcgcatcac---...185...cctcgccgtcag	c---gccccga
D.Sec	atctgaat	gtgagtgaagtt...749...acgattattgtttatccacGATTGcTTTTCTTGtTTTT	---aagtgtcccattgcgcatcac---...185...cctcgccgtcag	c---gccccga
D.Ere	atctgaat	gtgagtgaagtt...739...acgattattgtttatccacGATTGcTTTTCTTGtTTTT	---aagtgtcccattgcgcatcac---...180...cctcgccgtcag	c---gccccga
D.Ana	atctgaat	gtgagtgatgta...727...agattttattttcatccacGATTGcTTTTCTTGtTTTT	---aagtgtctcattccacatctc---...203...cgcgccgtcag	c---gctccga
D.Gri	atctgaat	gtgagtgatggt...869...cgttttcatcagtcacaaaca-ATTGcTTTTCTTGTTTTT	cccctttctcccaagtctca-----...338...gtgaatgccag	c---gctccaa
D.Moj	atctgaat	gtgagtgatggt...620...tttgcttgaatgaggattc-----CACGAAAATCATCAA	-tgcttgaaggttctactaa---...469...cttgatccgaac	c---gtttcgt
D.Pse	atctgaat	gtgagtgatggt...1079...cgagtttgatttgatccacGATTGTTTTCTTGtTTTT	---gtacgtgcctcattacgcat-----...259...tcgctccgatag	c---gccccga
D.Vir	atctgaat	gtgagtgatggt...696...ttctctatgaatgaggacac-----CACGAAAATCATCAA	---tgtttaaagcagaagaag...466...ttgatctgata	c---gatccga
D.Wil	atctgaat	gtgagtgaagtt...992...ttccttagttgtaaccacGATTGcTTTTCTGTTTTTTTT	---ctccttatgtctctctcgag...278...--aatatggca	cagagaccgca
D.Yak	atctgaat	gtgagtgaagtt...583...----gattgtttgtgtttttgtaCTTCACGAAAATCATCAA	-tgcttccaacgttgcctctct--...334...cctcgccgtcag	c---gccccga
** ****	***** **	* *	*	* * *

id=108426 gene=FBgn0004179 name=Csp segment=chr3L.22263021.22264013.1 type=IN VIEW

Figure 253: CS=15.4



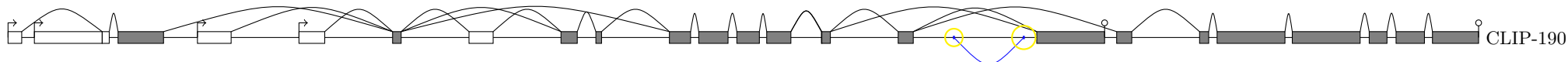
D. Mel	gacaaaa	gtgagtgtccac...3818...-cccccttttgccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTgGCGG</b>	---ctggacgttttcctctttt	-----	..1083...	ttgcattttcag	gtaagata
D. Sim	gacaaaa	gtgagtgtccac...3864...-cccccttttgccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTgGCGGcTGCC</b>	---cgtttcctctttttttcc	...	1032...	ttgcattttcag	gtaagata
D. Sec	gacaaaa	gtgagtgtccac...3859...-cccccttttgccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTgGCGGcTGCC</b>	---cgtttcctctttttttcc	...	1037...	ttgcattttcag	gtaagata
D. Ere	gacaaaa	gtgagtgtccac...3871...-cccccttttgccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTg</b>	---gctggccttttcctctttt	...	1034...	ttgcattttcag	gtaagata
D. Ana	ggcaaaa	gtgagtgtctac...3797...-gatttatatcagcccctttg	<b>ATGGgGCA</b>	-----	<b>ATAAAAGGC</b>	---cgaagacgccgctgcagccg	-----	..1111...	ttgcattttcag	gtaagata	
D. Gri	aaccaaaa	gtgagtgtccga...3349...ctgccgacgcgccaaccatt	-----	<b>TGTTTGAATTTGT</b>	-----	<b>CTAAAG</b>	---tggtgctgccctttttctcc	...	1557...	ctgcattttcag	gtaagata
D. Moj	aatcaaaa	gtgagtgtccag...3721...-cggcgagccgccaaccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTg</b>	---gctgccctttttcttttg	-----	..1184...	ctgcattttcag	gtaagata
D. Per	gacaaaa	gtgagtgtccac...3030...-aatgttccttaatgacttc	<b>TTTGCTgGAACCTGTTGTTGTTGGCTg</b>	<b>gAAGTTGTTaTCTG</b>	<b>ggccctggtcaaaactgtcg</b>	---	..1853...	ttgcattttcag	gtaagata		
D. Pse	gacaaaa	gtgagtgtccac...3826...cctacccccgccaaccggt	-----	<b>TGTTTGAATTTGT</b>	-----	<b>CTAAAG</b>	---tggtgctgccctggccgt	...	1080...	ttgcattttcag	gtaagata
D. Vir	aagcaaaa	gtgagtgtccag...3258...cggcgagccgccaaccattt	-----	<b>TGTTTGAATTTGT</b>	-----	<b>CTAAAG</b>	---tggtgctgtgtgcccctc	...	1648...	ctgcattttcag	gtaagata
D. Wil	aaccaaaa	gtgagtgtccac...3382...-atctcgacgaccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTg</b>	---gctgctgctgtgccatcg	---	..1523...	ttgcattttcag	gtaagata
D. Yak	gacaaaa	gtgagtgtccac...3800...-cccccttttgccagccattt	-----	<b>GTTTgAATTTGT</b>	-----	<b>CTAAAGTg</b>	---gctgccctttgtctttt	-----	..1105...	ttgcattttcag	gtaagata
	****	*****		*	*	*		*	*	*****	*****

id=42135 gene=FBgn0003944 name=Ubx segment=chr3R\_12551029\_12558419-1 type=IN

D. Mel	ctggctag	gtaagtcaagt...3935...-acacacacgaaattgagtt	<b>TTGCACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...967...	tccgatctacag	gtacaaat	
D. Sim	ctggctag	gtaagtcaagt...3932...ttgcacacacgaaattga	<b>GTTATTGCACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...966...	tccgatctcag	gtacaaat	
D. Sec	ctggctag	gtaagtcaagt...3930...ttacacacacgaaattga	<b>GTTATTGCACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...968...	tccgatctcgag	gtacaaat	
D. Ere	ctggctag	gtaagtcaagt...4051...-cacacggaattgagttattg	<b>CACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...854...	tccgatctcgag	gtacaaat	
D. Ana	ctggctag	gtaagtcaagt...3775...-ggccatattatc	-cgatc	<b>GTTTTATTGCTAT</b>	-----	-----	aaaatttttcgccattat	-----	..1135...	aaatcctcag	gtacaaat		
D. Gri	ctggctag	gtaagtgcatt...3657...-cggcataaattgttaatac	-----	<b>CTTTAGGCcAAATTTA</b>	<b>AAAC</b>	-----	taataaat	-----	gctcataatatt	..1247...	ctctcggaacag	gcacaaat	
D. Moj	ctggctag	gtaagtcaagt...3985...-cacataaaattgagttattg	<b>CACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...921...	tgtgtcaacag	gcacaaat	
D. Per	ctggctag	gtaagtcaagt...3030...gagtag	-cagcagcagtgag	<b>CGGGAGCGg</b>	<b>ATTGAAAGGTTAA</b>	<b>CAGCaAAACAGGTTTg</b>	<b>GGCTAA</b>	<b>taaat</b>	---	atztatgcttc	..1850...	aatcctgtcag	gtacaaat
D. Pse	ctggctag	gtaagtcaagt...3877...-cggcataaattgttaatac	-----	<b>CTTTAGGCcAAATTTA</b>	<b>AAAC</b>	-----	taataaat	-----	gctcataatatt	..1027...	aatcctcag	gtacaaat	
D. Vir	ctggctag	gtaagtcaagt...3793...-cggcataaattgttaatac	-----	<b>CTTTAGGCcAAATTTA</b>	<b>AAAC</b>	-----	taataaat	-----	gctcataatatt	..1111...	ctgccaaacag	gcacaaat	
D. Wil	ctggctag	gtaagtcaagt...3570...-tatattatattgacttattg	<b>CACTTg</b>	<b>AGGCAAATT</b>	<b>AAAGT</b>	-----	ttcataaat	-----	acttaaatca	..1335...	ttgtttcatag	gcacaaat	
D. Yak	ctggctag	gtaagtcaagt...4018...-cacacgaaattgagttattg	<b>CACTTg</b>	<b>AGGCAAATT</b>	<b>AAAC</b>	-----	ttcataaat	-----	atttaaatca	...887...	tccgatctcgag	gtacaaat	
	*****	*****	*	**	**		***		**		**	**	

id=42139 gene=FBgn0003944 name=Ubx segment=chr3R\_12484796\_12536283-1 type=IN VIEW

Figure 254: CS=11.52



```

D.Mel tcaacgag gtaattatcttc...251...gcaggccaagccaagaagaagTTTGGTTTTGCGaTAAAAAGaaactctttccagttggctg...1240...tgattcttatag caaatact
D.Sec tcaacgag gtaattatcttc...233...gcgggccaagccaagaagaagTTTGGTTTTGCGaTAAAAAGaaactctttccagttggcta...1188...tgattcttatag caaatact
D.Ere tcaacgag gtaattatcttc...242...gcaggccaagccaagaagaagTTTGGTTTTGCGaTAAAAAGaaactctttccagttggctg...1203...tgattcttatag caaatact
D.Ana tcaacgag gtaattatcttc...204...-caggccaagccaagaagaagtTTGGTTTTGCGaTAAAAAGaaactctttccagttggctg...1079...gtatgattatag caaatact
D.Gri tcaatgag gtaattatcttc...182...acgatcgacgcaaaaaaagTTTGGTTTTGCGaTAAAAAGaaattgtttccagtctaaaa...2083...tccattttatag caactgct
D.Moj tcaatgag gtaattatcttc...188...--cgataaaccaagaagaagtttGGTTtTGCGaTAAAAAGaaactatctccagttggctaa...1576...caatttttatag caactgct
D.Per tcaacgag gtaattatcttc...212...gaagactaagacgaagaagaagTTTGGTTTTGCGaTAAAAAGaaactttttccagttggctg...2155...tgatttttatag caaatact
D.Pse tcaacgag gtaattatcttc...209...gaagacaaagacgaagaagaagTTTGGTTTTGCGaTAAAAAGaaactttttccagttggctg...1897...tgatttttatag caaatact
D.Vir tcaatgag gtaattatcttc...194...atccgataaaccaagaagaagTTTGGTTTTGCGaTAAAAAGaaactatctccagttggctaa...1346...catttgattatag caactgct
D.Yak tcaacgag gtaattatcttc...233...gcaggccaagccaagaagaagTTTGGTTTTGCGaTAAAAAGaaactctttccagttggctg...1169...tgattcttatag caaatact
**** ** ***** * * ** ***** * ***** ***** ** * **

```

id=276 gene=FBgn0020503 name=CLIP-190 segment=chr2L.17402486.17404060.1 type=IN

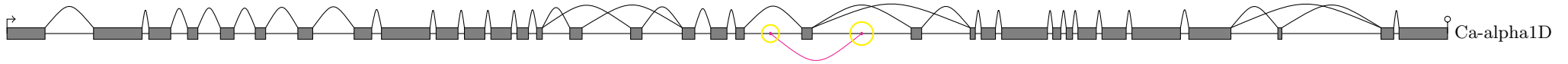
```

D.Mel tcaacgag gtaattatcttc...1429...--ca--ctgatcaagctatccatcCTTTTTAaCGCAAAACCAA-----aagat--aatctgactaccaatgtgaacaaaattaggtcgtccttaagagttgaattctgtttgcacaagactattt-----ttgtatgat--tcttat
D.Sec tcaacgag gtaattatcttc...1359...--ca--ctgatcgatctatccatcCTTTTTAaCGCAAAACCAA-----aagat--aatctgactaccaatgtgaacaaaattaggtcgtccttaagcattgaattctgtttgcacaagactattt-----ttgtatgat--tcttat
D.Ere tcaacgag gtaattatcttc...1381...--ca--tccactgacctgtccatcCTTTTTAaCGCAAAACCAA-----acgactaaatctgactacctatttgaccaaattatgctggccctttggaattgaattctgtttgcacaagactattt-----ttgtatgat--tcttat
D.Ana tcaacgag gtaattatcttc...1262...ccccatactgaactgtatc---CTTTTTAaCGCAAAACCAA-----ttgaaagtagagtc-----ctaggctggccctg-----aacgttattc-----ttgtatga----ttat
D.Gri tcaatgag gtaattatcttc...2206...--tgttctaataccctgctgaa---CTTTTTAaCGCAAAACCAA-----accaaattgatattcgcaaaaatttgttaagctgaaacgaacgactttatccgcaccactgtatgcatgtcctgttcattcattttat
D.Moj tcaatgag gtaattatcttc...1708...--cagttctaataccttgttgc---TCTTTTTAaCGCAAAACC---caaaaaacaagcaaaaaccaacaatcgaatatcaaaa---ttctc-aattgtac--aacgacttt-tatgacca-----ctgttcaat--ttttat
D.Per tcaacgag gtaattatcttc...2304...accatctttcatattcttac---CTTTTTAaCGCAAAACCAAaccaaaaaaccaaaaccaaataatgat-atctgaaaagatgtagccag-----agaaatgaatcctgtttgcacaaaactattt-----ttgtatgat--ttttat
D.Pse tcaacgag gtaattatcttc...2043...accatctttcatattcttac---CTTTTTAaCGCAAAACCAAaccaaaaaaccaaaaccaaataatgat-atctgaaaagatgtagccag-----agaaatgaatcctgtttgcacaaaactattt-----ttgtatgat--ttttat
D.Vir tcaatgag gtaattatcttc...1502...--cagttctaataccctgctgc---TCTTTTTAaCGCAAAACCAA-----aaaaacctaaa---ttctcaactgtac--aacgacttt-tacgcaccactgtttgta---cctgttcatt--tgttat
D.Yak tcaacgag gtaattatcttc...1340...--ca--tccactgagctatccatcCTTTTTAaCGCAAAACCAA-----aagat--aatctgactaccaatgtgacaaaattagctggccctttggaattgaattctgtttgcacaagactattt-----ttgtatgat--tcttat
**** ** ***** * ***** * ***** * ***** ** * **

```

id=276 gene=FBgn0020503 name=CLIP-190 segment=chr2L.17402486.17404060.1 type=IN VIEW

Figure 255: CS=14



D. Mel	gactgaag	gtaagaattcat...218...-agagtaagccaacacaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	cacctcaataaagttatgaa...286...tatcacatacag	catgttgt
D. Sim	gactgaag	gtaagaattcat...223...-agagtatgccaacacaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	cacctcaataaagttatgaa...284...tatcacatacag	catgttgt
D. Sec	gactgaag	gtaagaattcat...223...-agagtatgccaacacaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	cacctcaataaagttatgaa...285...tatcacatacag	catgttgt
D. Ere	gactaaag	gtaagaattcat...224...-agagtatgccaacacaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	cacctcaataaagttatgaa...284...tatcacatacag	catgttgt
D. Ana	gtctcaag	gtaagaacccat...174...-----tcttggacaagaacaaat	CCTTGaa	ATGCTGGGTGTAGGGTG	caccgatataaaatataat...299...atcacatacag	catgttgt
D. Gri	gtctgaag	gtaagccacatt...261...-aaaccaattgaaatcaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	gaccacgaaaagctctatt...271...tatcatatacag	catgttgt
D. Moj	gtctaaag	gtaagacacatc...278...gaaatcagttgaaattaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	gaccactataaagctctgc...313...tatcacatacag	catgttgt
D. Per	gtctcaag	gtaagactccat...238...-tgccaataccaaccgaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	gaccgaaacgcaagctgaa...278...tatcacatacag	catgttgt
D. Vir	gtctgaag	gtaagccacatc...266...aaaaccaattcaaaataaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	gaccacgaaaagctctta...291...cgtcgtatacag	catgttgt
D. Wil	gtctaaag	gtgagatcatg...471...-ttactattttaacacctaac	-----GAAAa	ATGGGcGTGGAATA	aaaaaaatgaaaagagaaa...535...tcacatacag	catgttgt
D. Yak	gactgaag	gtaagaatcct...220...-agagtatgccaacacaaaaa	-----CCTTGaa	ATGCTGGGTGTAGGGTG	cacctcaataaagttatgaa...288...tatcacatacag	catgttgt
		* * * * *	** **	* **	* ** * * * * *	* * * * * *

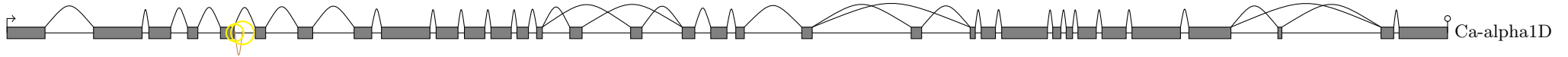
id=115377 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16179547\_16180138.1 type=IN

D. Mel	tgtttaag	gtatgattttaa...893...ttagctacaaatcagcaacc	-----TACCTTGACCCt	AGCATCAAGG	-----ccaa-----tcccgggtgtaaagt...577...aaacttctgcag	tatgtggt
D. Sim	tgtttaag	gtatgattttaa...875...ttagctacaaatcagcaacc	-----TACCTTGACCCt	AGCATCAAGG	-----ccaa-----tccgtcctatagt...602...aaacttctgcag	tatgtggt
D. Sec	tgtttaag	gtatgattttaa...874...ttagctacaaatcagcaacc	-----TACCTTGACCCt	AGCATCAAGG	-----ccaa-----tccgtcctatagt...602...aaacttctgcag	tatgtggt
D. Ere	tgtttaag	gtatgattttat...909...ttagctacaagtcaagcaacc	-----TACCTTGACCCt	AGCATCAAGG	-----ccaa-----tccgtcctatagt...603...aaatttctgcag	tatgtggt
D. Ana	tgtttaag	gtatgattttat...909...ttttcctc-aaacagcaatcc	-----TACCTTGACCCt	AGCATCAAGG	cgaa-ccaa-----tcttttctgaa--a...558...aaacttcaacag	tatgtggt
D. Gri	tgtttaag	gtatgattttgt...933...taaacatc-atgcagcgacca	-----ACCTTGACCCt	AGCATCAAGG	caaa-ccaa-----acagcaaaaccg--...628...aaaatacacag	tatgtggt
D. Moj	tgtttaag	gtatgattttgt...957...aatatctc-aagctgcatca	-----ACCTTGACCCt	AGCATCAAGG	caaaacccaa-----acaaccaa--g...754...aaactgttacag	tacgtggt
D. Per	tgtttaag	gtatgattttcg...1181...-agcatcaaacagcaaacca	-----ACCTTGACCCt	AGCATCAAGG	ccgaaaaaaaagttccct-----...861...ctacttctgcag	tatgtggt
D. Vir	tgtttaag	gtatgattttgt...990...atgatatc-atgcagcgacca	-----ACCTTGACCCt	AGCATCAAGG	caac-ccaa-----tctcaacaaa--a...792...tatataatacag	tatgtggt
D. Wil	tgtttaag	gtatgatttcct...854...-tataaatgtaatttcatt	TATTCCAc	ACCc-ATTTTC	-----tgcgtttctctgcaaat--...1078...aaactttatag	tacgtggt
D. Yak	tgtttaag	gtatgattttat...935...ttagctacaaatcagcaacc	-----TACCTTGACCCt	CAGCATCAAGG	-----ccaa-----tccgtcctatagt...604...aaacttctgcag	tatgtggt
		*****	*****	* **	* ** * * * * *	** ** * * * *

id=115379 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16180247\_16181803.1 type=IN VIEW

Figure 256: CS=13.2





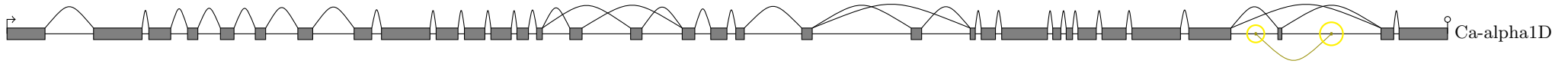
D. Mel	gtTATAGG	GTAAGCATA	attAAAT	taccagttaaaagcgctta-...172...acat	ttttccag	ggcgataa	
D. Sim	gtTATAGG	GTAAGCATA	attAAAT	taccagttaaaagcgctta-...172...acat	ttttccag	ggcgataa	
D. Sec	gtTATAGG	GTAAGCATA	attAAAT	taccagttaaaagcgctta-...172...acat	ttttccag	ggcgataa	
D. Ere	gtTATAGG	GTAAGCATA	AAAAAT	taccagttaaaagcgctta-...173...acat	ttttccag	ggcaataa	
D. Ana	gtTATAGG	GTAAGCATA	AAAAAT	ttccagttaaaagcgctta-...158...acat	ttttccag	agcaataa	
D. Gri	gtTATAGG	GTAAGCATA	AAAAAT	atgccagttaaaagcgctta-...99...aata	atttacag	agcgataa	
D. Moj	gtTATAGG	GTAAGCATA	AAAAAT	atgccagttaaaagcgctta-...114...acat	tttttacag	agcgataa	
D. Per	gtTATAGG	GTAAGCATA	AAAAAT	ttccagttaaaagcgctta-...159...acat	tttttacag	agcgataa	
D. Pse	gtTATAGG	GTAAGCATA	AAAAAT	ttccagttaaaagcgctta-...159...acat	tttttacag	agcgataa	
D. Vir	gtTATAGG	GTAAGCATA	AAAAAT	atgccagttaaaagcgctta-...102...aca	attttacag	agcaataa	
D. Wil	gtTATAGG	GTAAGCATA	AAAAAT	atgccagttaaaagcgctta-...147...ttg	tttttacag	agcaataa	
D. Yak	gtTATAGG	GTAAGCATA	AAAAAT	taccagttaaaagcgctta-...170...acat	ttttccag	ggcaataa	
	*****	*****	*****	*****	*	*** **	** ****

id=115349 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16174197.16174415.1 type=IN

D. Mel	gttatagg	gtaagcatatta...35...-attg	cggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tgaattcaatcgaattga...100...acat	ttttccag	ggcgataa
D. Sim	gttatagg	gtaagcatatta...35...-actg	cggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tgaattcaatcgaattga...100...acat	ttttccag	ggcgataa
D. Sec	gttatagg	gtaagcatatta...35...-actg	cggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tgaattcaatcgaattga...100...acat	ttttccag	ggcgataa
D. Ere	gttatagg	gtaagcatataa...35...-gctg	cggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tgaattcaatcgaattga...101...acat	ttttccag	ggcaataa
D. Ana	gttatagg	gtaagcatataa...36...-tctc	ggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcaaaattg...85...acat	ttttccag	agcaataa
D. Gri	gttatagg	gtaagcatataa...36...-attc	ggcctcattttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcaaaactga...26...aata	atttacag	agcgataa
D. Moj	gttatagg	gtaagcatataa...48...-tatt	cgccctagttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcgaactga...29...acat	tttttacag	agcgataa
D. Per	gttatagg	gtaagcatataa...35...-cctc	ggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcaaaactga...87...acat	tttttacag	agcgataa
D. Pse	gttatagg	gtaagcatataa...35...-actc	ggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcgaactga...87...acat	tttttacag	agcgataa
D. Vir	gttatagg	gtaagcatataa...37...-taat	cggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcgaactga...28...aca	attttacag	agcaataa
D. Wil	gttatagg	gtaagcatataa...39...-tgta	ggcctcgttttaacc	ATTTTc	TATGTTACCTTATA	tccaattcaatcggcaaaa...71...ttg	tttttacag	agcaataa
D. Yak	gttatagg	gtaagcatatta...34...-cact	acgtctcgttttaacc	TATTTTc	TATGTTACCTTATA	tgaattcaatcgaattga...99...acat	ttttccag	ggcaataa
	*****	*****	*	** **	*****	*****	*****	** ****

id=115349 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16174197.16174415.1 type=IN VIEW

Figure 257: CS=7.2



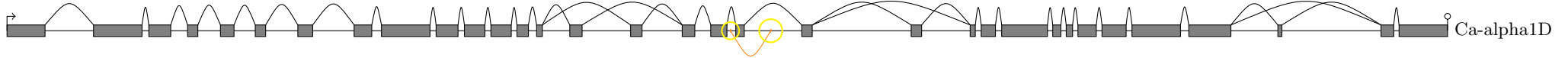
D.Me1	aactatga	gtgagtatg	cgg...204...	cctagtg	aagagcg	ccctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCG	agccaagct	-caacaactgac	-----	..191...	cattaattcag	caaccgca
D.Sim	aactatga	gtgagtatg	cgg...212...	cctagtg	aagagcg	ccctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCG	agccaagct	-caacaactgac	-----	..191...	cattaattcag	caaccgca
D.Sec	aactatga	gtgagtatg	cgg...208...	cctagtg	aagagcg	ccctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCG	agccaagct	-caacaactgac	-----	..191...	cattaattcag	caaccgca
D.Ere	aactatga	gtgagtatg	cgg...211...	cctagtg	aagagcg	ccctga	---AGTTT	GTAATg	GACAAA	AGGAGCCG	agccaagct	-caacaacagac	-----	..192...	cattaattcag	caaccgca
D.Gri	tcttatga	gtgagtatt	ggg...218...	ttatttagt	gcgcc	ttaac	---GTTT	GTAATg	GACAAA	AGGAGCC	-----	cggg	-ccacagatt	gttc...209...	cattaattcag	caaccgca
D.Moj	tcttatga	gtgagtatt	ggg...316...	aacacttagt	gcgcc	gtaaa	TGTTTT	GTAATg	AACAAA	AGGAGCC	-----	cggc	caaacaggtt	ctctc...246...	cattaattcag	caaccgca
D.Per	tcttatga	gtaagtatg	cgg...213...	tagtgt	gaagag	tcctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCA	agccaagct	-caactactg	g-----	..212...	cattaattcag	caaccgca
D.Pse	tcttatga	gtaagtatg	cgg...213...	tagtgt	gaagag	tcctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCA	agccaagct	-caactactg	g-----	..217...	cattaattcag	caaccgca
D.Vir	tcttatga	gtgagtatt	aat...226...	cactttagt	gcgcc	ttaaac	---GTTT	GTAATg	AACAAA	AGGAGCC	-----	cggc	caaacagatt	ctgttc...208...	cattaattcag	caaccgca
D.Wil	tcttatga	gtgagtatt	gg...314...	atcgag	agagag	cccttaa	---AGTTT	GTAATg	GACAAA	AGGAGCCA	aaccaagt	-gataataactg	-----	..136...	cattaattcag	caaccgca
D.Yak	aactatga	gtgagtatg	cgg...165...	cctagtg	aagagcg	ccctaa	---AGTTT	GTAATg	GACAAA	AGGAGCCG	agccaagct	-caacaactgac	-----	..192...	caataattcag	caaccgca
	*****	** *****		** * ** *			*****	*****			*	*		** *****	*****	

id=115399 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16185627\_16186110.1 type=IN

D.Mel	taacaatg	gtaagcctaaa	...1103...	actattaac	ct---tagc	gtatg	TGGCTC	TTTTGTT	aATTACA	AACT	aataaac	gga-actaac	ccat---	..1681..	gcaaac	gtgcag	tctacgca	
D.Sim	taacaatg	gtaagcctaaa	...1102...	actattaac	ct---tagc	gtatg	TGGCTC	TTTTGTT	aATTACA	AACT	aatgaac	gga-actaac	ccat---	..1663..	gcaaac	atgcag	tctacgca	
D.Sec	taacaatg	gtaagcctaaa	...1102...	actattaac	ct---tagc	gtatg	TGGCTC	TTTTGTT	aATTACA	AACT	aatgaac	gga-actaac	ccat---	..1704..	gcaaac	atgcag	tctacgca	
D.Ere	taacaatg	gtaagcctaaa	...1118...	actattaac	ct---tagc	gtatg	TGGCTC	TTTTGTT	aATTACA	AACT	aataaac	gga-actaac	ccag---	..1625..	gcaaac	atgcag	tctacgca	
D.Gri	taataatg	gtaagcgcaaaa	...1175...	tgctcta	aacca--aat	-gcacat	--GGCTC	TTTTGTT	gATTACA	AACT	taacaa	aattgag	attgattc	-----	..1815..	gcaatt	atag	tctacgca
D.Moj	taacaatg	gtaagcgcaaaa	...1170...	atatta	aaccaaat	-gcacat	--GGCTC	TTTTGTT	gATTACA	AACT	ctAAC	aattaaga	attgttcga	att...2075...	tcata	catatag	tctacgca	
D.Per	taacaatg	gtaagcctaaa	...1276...	acactta	aaccg--aat	agtagt	g--TGGCTC	TTTTGTT	gATTACA	AACT	aacgaa	-tatgatt	gagaaat	-----	..2116..	gtgct	catttag	tctacgca
D.Pse	taacaatg	gtaagcctaaa	...1276...	acactta	aaccg--aat	agtagt	g--TGGCTC	TTTTGTT	gATTACA	AACT	aacgaa	-tatgatt	gagaaat	-----	..2081..	gtgat	catttag	tctacgca
D.Vir	taacaatg	gtaagcgcaaaa	...1327...	ttctcta	acaa--aat	-gcacaa	--GGCTC	TTTTGTT	gATTACA	AACT	taacaa	aattgag	attattaa	-----	..2006..	gcatt	atag	tctacgca
D.Wil	atataatg	gtaagcctaaa	...2048...	aaactg	--agt	gccgacga	TGGCTC	TTTTGTT	gATTACA	AACT	taacaa	actaa-aatt	tttggat	-----	..2001..	gcata	catttag	tctacgca
D.Yak	taacaatg	gtaagcctaaa	...1109...	actatta	aacac	----tggc	gtatg	TGGCTC	TTTTGTT	aATTACA	AACT	aataaac	gga-actaac	ct---	..1660..	acaac	atgcag	tctacgca
	* ****	*****	****	***	*		*****	*****	**	*	*	*		** *****	*****			

id=115401 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L.16186152\_16189024.1 type=IN VIEW

Figure 258: CS=10.56



```

D.Mel  ggtgccag gta-----aacga---taatccatataacTACTCTAACCCAGTA-----gttgtg-----atacta-attacttctggaacata-aactataacgctgattcaactgcag ttcgaatg
D.Sim  ggtgccag gta-----aacga---taatccatataacTACTCTAACCCAGTA-----gttgtg-----atacta-attacttctggaacata-aactataacgctgattcaactgcag ttcgaatg
D.Sec  ggtgccag gta-----aacga---taatccatataacTACTCTAACCCAGTA-----gttgtg-----atacta-attacttctggaacata-aactataacgctgattcaactgcag ttcgaatg
D.Ere  ggtgccag gta-----aacga---taatccatataacTACTCTAACCCAGTA-----gttgtg-----atactt-attacttctggaacata-aacaataacgctgattcaactgcag ttcgaatg
D.Gri  gtatccag gta-----aac-a---caat--a-aagacTACTCTAACCCAGTAGTTGA-----taacttacttctggaatat--aattataacgctgattcaactgcag ttcgaatg
D.Moj  gcattcag gtaacaagtaacaa---atatcta-aacgcTACTCTAACCCAGTA-----gctggatataaaaataataatatttttaaatggaatatataatcataa--tcgattcaactgcag ttcgaatg
D.Per  gtctccag gta-----aacaa---taatcga-aacacTACTCTAACCCAGTA-----gttgtg-----atataattttacttctggaacata-aactataaacatcgattcaactgcag ttcgaatg
D.Wil  ggtgccag gta-----atataactcatgctctaactcTACTCTAACCCAGTAGTTGAGctgtg-----accattttttgggacaatata-aataaaaacatcgattcaactacag ttcgaatg
D.Yak  ggtgccag gta-----aacga---taatccatataacTACTCTAACCCAGTA-----gttgtg-----atacta-attacttctggaacata-aactataacgctgattcaactgcag ttcgaatg
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *

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id=115375 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L\_16179368\_16179458.1 type=IN

```

D.Mel  gactgaag gtaagaattcat...226...-----caaacaacaccttgaaa-TGCTGGGTgTAGGGTgcacctcaata-aagttatgaa...286...tatcacatacag catgttgt
D.Sim  gactgaag gtaagaattcat...231...-----caaacaacacaccttgaaa-TGCTGGGTgTAGGGTgcacctcaata-aagttatgaa...284...tatcacatacag catgttgt
D.Sec  gactgaag gtaagaattcat...231...-----caaacaacacaccttgaaa-TGCTGGGTgTAGGGTgcacctcaata-aagttatgaa...285...tatcacatacag catgttgt
D.Ere  gactaaag gtaagaattcat...232...-----caaacaacacaccttgaaa-TGCTGGGTgTAGGGTgcacctcaata-aagttatgaa...284...tatcacatacag catgttgt
D.Gri  gtctgaag gtaagccacatt...263...accaattgaaatcaaaacc-TTGAaaTGCTGGGTgTAGGGTgcaccacga-a-aagctctattg...270...tatcacatacag catgttgt
D.Moj  gtctaaag gtaagacacatc...286...-----ttgaaatataaaccttgaaa-TGCTGGGTgTAGGGTgcaccactata-aagctctgca...312...tatcacatacag catgttgt
D.Per  gtctcaag gtaagactccat...246...-----ccaaccgaaaacaccttgaaa-TGCTGGGTgTAGGGTgcaccgaaacgcaagc--tgaag...277...tatcacatacag catgttgt
D.Wil  gtctaaag gtgagagtcag...289...gaggtacaaaataaaaacCTTGAATTGCTGGGTgTAGGGTgcacctgaaagaaa--tacaaag...713...tatcacatacag catgttgt
D.Yak  gactgaag gtaagaattcct...228...-----caaacaacacaccttgaaa-TGCTGGGTgTAGGGTgcacctcaata-aagttatgaa...288...tatcacatacag catgttgt
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *

```

id=115377 gene=FBgn0001991 name=Ca-alpha1D segment=chr2L\_16179547\_16180138.1 type=IN VIEW

Figure 259: CS=5.4



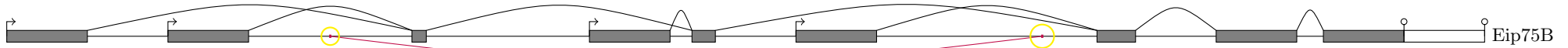
D. Mel	ctctggtc	gtgagtagtggg...1111...tgcccagcgggaattgttatt	GTTTcAATTGCAACA	aattg-----gccgctgagaaaaat...193...gctggagccgcg-	attcaata
D. Sim	ctctggtc	gtgagtagtggg...1104...tgcccagcgggaattgttatt	GTTTcAATTGCAACA	aattg-----gccgctgagaaaaat...194...gctggagccgcg-	attcaata
D. Sec	ctctggtc	gtgagtagtggg...1104...tgcccagcgggaattgttatt	GTTTcAATTGCAACA	aattg-----gccgctgagaaaaat...193...gctggagccgcg-	attcaata
D. Ere	ctctggtc	gtgagtagtggg...1134...tgcccagcgggaattgttatt	GTTTcAATTGCAACA	aattg-----gccgctgagaaaaat...195...gctggagccgcg-	attcaata
D. Ana	tggctgcc	gtgagaagcggg...1847...tgccctgtggaattgttatt	GTTTcAATTGCAACA	aattg-----gcccgctcaggccgca...155...ggagccgcctg-	tttcaata
D. Moj	ctctggcg	ctggctccgctg...307...ctcaatatgcagagatttgt	GTGGGAATCAAATGA	-cttgacgacgcgtcgttgc-----1281...-cttgagccgcg-	tttcaata
D. Per	ctctggtt	aacaatggaagc...1028...tgccctgtggaattgttatt	GTTTcAATTGCAACA	aattg-----cccctcaagccgca...121...gctggagccgcg-	tttcaata
D. Pse	ctctggtt	aacaatggaagc...1025...tgccctgtggaattgttatt	GTTTcAATTGCAACA	aattg-----cccctcaagccgca...131...gctggagccgcg-	tttcaata
D. Vir	ctctagct	gtgctgatgctt...286...ctcagtatgcagagatttgt	GTGGGAATCAAATGA	-cttgacgacgcgtcgttgc-----1363...acttgagccgcg-	tttcaat-
D. Wil	ctctggcc	taaagcggggg...268...agaaatgcagagatttgt	GTGGGAATCAAATGA	-cttgt-----cgccacagctccaat...814...cgtctctctgca-	tttcaata
D. Yak	ctctggtc	gtgagtagtggg...273...ctcaatatgcagagatttgt	GTGGGAATCA	AATGA-cttga-----tgtcgttctctcaa...1022...gctggagccgcg-	attcaata
	*		* * * * *		* * * * *

id=28098 gene=FBgn0033987 name=CG12424 segment=chr2R.10851802.10853184.1 type=I5

D. Mel	ttaacatg	gtaatttcata...3162...-gtggggcctg---c-ctgtt--cca	TGTTtGCAATTA--AAC	ttacagctcctaacaacaat---...1748...ttttccaccag	gagtcggc
D. Sim	ttaacatg	gtaatttcata...3192...-gtggggcctg---c-ctgtt--cca	TGTTtGCAATTA--AAC	ttacagctcctaacaacaat---...1718...ttttccaccag	gagtcggc
D. Sec	ttaacatg	gtaatttcata...3237...-gtggggcctg---c-ctgtt--cca	TGTTtGCAATTA--AAC	ttacagctcctaacaacaat---...1673...ttttccaccag	gagtcggc
D. Ere	ttaacatg	gtaatttcata...3192...-aaggggcctg---c-ctgtt--cca	TGTTtGCAATTA--AAC	ttacagctcctaacaacaat---...1718...ttttccaccag	gagtcggc
D. Ana	ttaaatg	gtaatttata...3351...---gggggtgcg---c-ctgttgcca	TGTTtGCAATTA--AAC	ttacagctcctaacaacaat---...1559...ttttcgaacag	gagtcgga
D. Moj	ttcaaatg	gtaatttcata...2894...acgc---gcaag---tggttgcgc-	TCATTaTGATTaCTCAC	caccacacccagcaccagc---...2014...ttgctctgag	gagtcgct
D. Per	taacaatg	gtaatttctctg...3002...---gcagcgtg---tacagtgggca	TGTTtGCAATTA--AAC	ttacaatccaacagcacaac---...1641...ttttccaacag	gagtcgga
D. Pse	taacaatg	gtaatttctctg...3014...---gcagcgtg---tacagtgggca	TGTTtGCAATTA--AAC	ttacaatccaacagcacaac---...1673...ttttccaacag	gagtcgga
D. Vir	ttcaaatg	gtaatttcata...2288...actg---gcaag---tggttctgtgc-	TCATTaTGATTaCTCAC	caccacacccagcaccagc---...1604...ctgtctgag	gagttgcc
D. Wil	ttaaatg	gtaataaatga...2870...---gcaagctatagggttatgcc	TCATTaTGATTaCTCAC	---ccgcccacaacaacaatagt...2038...tcatttcaaca	ttgttgc
D. Yak	taaacatg	gtaatttcata...2866...agacagggcaag---tggtat---gc-	TCATTaTGATTaCTCAC	caccacagtcagggtgtg---...2042...ttttccaacag	gagtcggc
	*	*** ** *	* * * * *	*** ** *	** *

id=28100 gene=FBgn0033987 name=CG12424 segment=chr2R.10853505.10859234.1 type=I5 VIEW

Figure 260: CS=11.88



```

D.Mel caacatag gtgagttgtgtg...4006...-----gcaacgatctgcagtcgcaaATGTcaGTGAACTT-----gtcggcattgcagccgtata-----...905...ttttccttgcag aattcgat
D.Sim caacatag gtgagttgtgtg...4029...-----gcaacgatctgcagagcgaaATGTcaGTGAACTT-----gtcggcattgcagccgtata-----...882...ttttccttgcag aattcgat
D.Sec caacatag gtgagttgtgtg...4022...-----gcaacgatctgcagagcgaaATGTcaGTGAACTT-----gtcggcattgcagccgtata-----...889...ttttccttgcag aattcgat
D.Ere caacatag gtgagttttag...3967...-----gcaacgatctgcagagcgaaATGTcaGTGAACTT-----gtcggcattgcagccgtata-----...944...ttttccttgcag aattcgat
D.Ana caacatag gtgagttatcgg...3833...-----gcaacgatctgcagtcgcaaATGTcaGTGAACTTACG--gtgcatacgcagtcaccaaac-----...772...aatccttgcag aattcgat
D.Gri aaatattg gtgagtcgacc...3480...caaaagtgcacgatctgcaGTGCAaaATGTcaGTGAACTT-----gtcgagacgacaacaacaac-----...1424...gtttccttgcag aattcgat
D.Moj gaatattg gtgagttccttg...3790...-----gcaacgatctgcagtcgcaaaATGTcaGTGAACTT-----gtcgagacaacaacaataac-----...1121...ctcccttgcag aattcgat
D.Per taatattg gtgagtgccgaa...3895...-----gcaacgatctgcagtcgcaaATGTcaGTGAACTTCACAgatacacacacacacacaca-----...650...ttttccttgcag aattcgat
D.Pse taatattg gtgagtgccgat...3866...-----gcaacgatctgcagtcgcaaATGTcaGTGAACTTCACAgatacacacacacacacaca-----...675...ttttccttgcag aattcgat
D.Wil caatattg gtgagttccttgcag...4235...-----gcaacgatctgcaatgcgaaATGTcaGTGAACTTGTG-----ccacagaaagagagagat...673...ttcaatttacag aatttgcg
D.Yak caacatag gtgagtttctatg...3966...-----gcaacgatctgcacagcaaaATGTcaGTGAACTT-----ggcggcattgcagccgtata-----...945...ttctccttgcag aattcgat
** ** * ***** ***** ** ***** ***** ** ** * *** **** *

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id=99450 gene=FBgn0000568 name=Eip75B segment=chr3L\_17986097\_17991522\_-1 type=IN

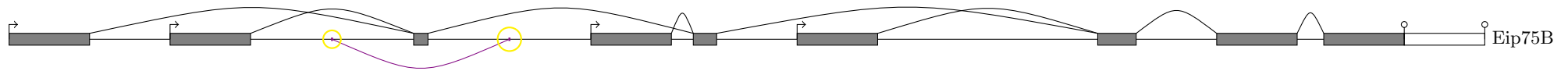
```

D.Mel caatgcgc gtaagttatccg...998...ctctcg----ttggtgaaatgtgaAAGTTCACccACAT-----acaaatTTTTcggttgcagc----...308...ttccaattgcag ctgtgcgt
D.Sim caatgcgc gtaagttatccg...999...ctctcg----ttggtgaaatgtgaAAGTTCACccACAT-----acaaatTTTTcggttgcagc----...329...ttccaattgcag ctgtgcgt
D.Sec caatgcgc gtaagttatccg...996...ctctca----ttggtgaaatgtgaAAGTTCACccACAT-----acaaatTTTTcggttgcagc----...329...ttccaattgcag ctgtgcgt
D.Ere caatgcgc gtaagttatccg...1034...ctctcg----ttggtgaaatgtgaAAGTTCACccACAT-----acaaatTTTTcggttgcagc----...351...tttcattgcag ctgtgcgt
D.Ana caatgcc gtaagttatccg...813...ttttagcgcctttggtgaaaTGTGAAAGTTCACccACAT-----acaaatTTTTTTTTTTGGGT----...277...ctctacttgcag ctgtgcgt
D.Gri caatgcgc gtaagttatccg...1215...-ttag--ctgggcaaatgtgaAAGTTCACccACATcaTGCACacaaaagcttcggttgcagc...306...ctttatTTTtag ctgtgcgt
D.Moj caatgcgc gtaagttatccg...1570...-tctgg---cctggtgaaatgtgaAAGTTCACccACAT-----acaa---ttcgttagtgcaaat...415...tctacttgcag ctgttgcg
D.Per caatgcgc gtaagttatccg...958...TTTTGGGTTTTTGGTgaaaTGTGaAAGTTCACccACAT-----ccaaatgctggttgcagc----...330...ctctcgttgcag ctgtgcgc
D.Pse caatgcgc gtaagttatccg...1006...TTTTGGGATTTTTGGTgaaaTGTGaAAGTTCACccACAT-----ccaaatgctggttgcagc----...359...ctctcgttgcag ctgtgcgc
D.Wil caatgcgc gtaagttatccg...1304...TTTTTTTTTTTTGGGcaaaaTGTGAAAGTTCACccACAT-atacacagaa-----gagaaagag...370...ttgttttgcag ctgtgcga
D.Yak caatgcgc gtaagttatccg...1050...ctctcg----cctggtgaaatgtgaAAGTTCACccACAT-----acaaatTTTTcggttgcagc----...350...ttcccattgcag ctgtgcgt
***** * * ** ***** ***** ** * ** ** **** **

```

id=99458 gene=FBgn0000568 name=Eip75B segment=chr3L\_17952721\_17954104\_-1 type=IN VIEW

Figure 261: CS=11.88



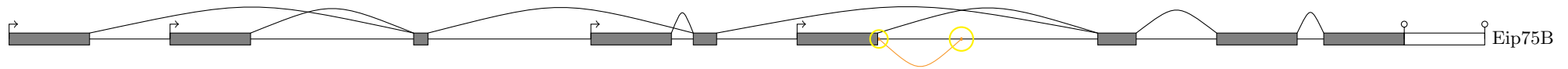
D.Mel	caacatag	gtgagttgtgtg...4004...	gtgcaacgatctgcagtgcg	AAATGTc	AGTGAACCTTGT	cggcattgcagccgtatagg...	903...	ttttctttgcag	aattcgat
D.Sec	caacatag	gtgagttgtgtg...4020...	gtgcaacgatctgcagagcg	AAATGTc	AGTGAACCTTGT	cggcattgcagccgtataga...	887...	ttttctttgcag	aattcgat
D.Ere	caacatag	gtgagttttatg...3965...	gtgcaacgatctgcagagcg	AAATGTc	AGTGAACCTTGT	cggcattgcagccgtataga...	942...	ttttctttgcag	aattcgat
D.Ana	caacatag	gtgagttatcgg...3831...	gtgcaacgatctgcagtgcg	AAATGTc	AGTGAACCTTGT	acgggtgcatcacgatgcacc-	775...	aatctcttgcag	aattcgat
D.Gri	aaatattg	gtgagtcgaccc...3485...	gtgcaacgatctgcagtgca	AAATGTc	AGTGAACCTTGT	cgagacgacaacaacaacag...	1422...	gtttcttgcag	aattcgat
D.Moj	gaatattg	gtgagttccttg...3788...	gtgcaacgatctgcagtgca	AAATGTc	AGTGAACCTTGT	cgagacaacaacaataaaca...	1119...	ctcccttgcag	aattcgat
D.Per	taatattg	gtgagtgccgaa...3893...	gtgcaacgatctgcagtgcg	AAATGTc	AGTGAACCTTGT	gcacagatacacacacacac-	655...	ttttcttgcag	aattcgat
D.Pse	taatattg	gtgagtgccgat...3864...	gtgcaacgatctgcagtgcg	AAATGTc	AGTGAACCTTGT	gcacagatacacacacacac-	680...	ttttcttgcag	aattcgat
D.Vir	aaatattg	gtgagtcgctga...3648...	gtgcaacgatctgcagtgca	AAATGTc	AGTGAACCTTGT	cgagacgacaacaacaagca...	1259...	tcttttgcag	aattcgat
D.Yak	caacatag	gtgagttctatg...3964...	gtgcaacgatctgcacagca	AAATGTc	AGTGAACCTTGT	ggcggcattgcagccgtgta--	945...	ttctcttgcag	aattcgat
	** ** *	*****	*****	**	*****	*	*****	*****	*****

id=99450 gene=FBgn0000568 name=Eip75B segment=chr3L\_17986097\_17991522\_-1 type=IN

D.Mel	ggtgcaag	gtaagttcgtgc...3255...	acttgattattcgctttg----	cac-----	GCAGAGTTCATTc	ACATT	ggccacgccgtgagagagag...	1651...	tggcttcgctgt	cgacgctt	
D.Sec	ggtgcaag	gtaagttcgtgc...3234...	acttgattattcgctttg----	cga-----	GCAGAGTTCATTc	ACATT	ggccacgccatgagagagag...	1672...	tggcgtcgctgt	cgacgctt	
D.Ere	ggtgcaag	gtaagttcgggc...3214...	acttgattattcgctttg----	cga-----	GCAGAGTTCATTc	ACATT	ggccacgccacg-gagagaga...	1692...	tggcgtcgctgt	cgacgctt	
D.Ana	ggtgcaag	gtaagttcctcc...3399...	-----	tttgccctgcagtcgcaagca-	GAGTTCATTc	ACATT	ggccacgccatc-gaaagagc...	1510...	tgctgctgctgt	cgacgctt	
D.Gri	gctgcaag	gtaagttgacaa...2988...	-----	tattcgattg----	cagctgcca	GCAGAGTTCATTc	ACATT	ggcagc-cagaccaagagagt...	1918...	ccgctcgacgt	cgacgttg
D.Moj	gctgcaag	gtaagttgact...3107...	-----	tattcgattg----	cagctgcca	GCAGAGTTCATTc	ACATT	ggcagc-cagaccaagagagc...	1799...	tcgctcgacgt	cgacgttg
D.Per	ggtgcaag	gtaagttgcaca...3513...	-----	gctttggccgctgacgaaca-	GAGTTCATTc	ACATT	ggcagc-cagcgagagagaga...	1396...	ctgctcgctgc	cgctgccg	
D.Pse	ggtgcaag	gtaagttgcaca...3504...	-----	gctttggccgctgacgaaca-	GAGTTCATTc	ACATT	ggcagc-cagcgagagagaga...	1405...	ctgctcgctgc	cgccgccg	
D.Vir	gctgcaag	gtaagttgcaat...2981...	-----	tattcgattg----	cagctgcca	GCAGAGTTCATTc	ACATT	ggcagc-cagaccaagagagc...	1925...	ccgctcgacgt	cgccgaca
D.Yak	ggtgcaag	gtaagttcgcca...3192...	---	tgattattcgctttg----	cgagca-----	GAGTTCATTc	ACATT	ggccacgccacg-ggaagaga...	1717...	tggcgtcgctgt	cgacgctt
	* *****	*****	** *	*****	*	*****	* * *	****	* * *	** *	

id=99452 gene=FBgn0000568 name=Eip75B segment=chr3L\_17964540\_17986007\_-1 type=IN VIEW

Figure 262: CS=12



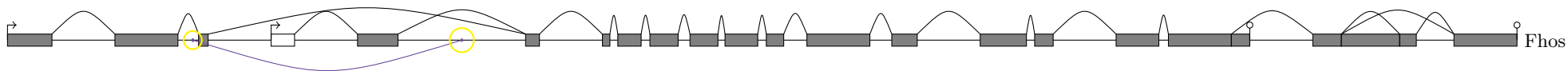
D.Mel	caa <b>TGCGC</b> <b>GTAAGTTA</b> -----tccgatccgaaagtcgcaca...1344...ttccaattgcag	ctgtgcgt
D.Sim	caa <b>TGCGC</b> <b>GTAAGTTA</b> -----tccgatccgaaagtcgcaca...1366...tttcaattgcag	ctgtgcgt
D.Sec	caa <b>TGCGC</b> <b>GTAAGTTA</b> -----tccgatccgaaagtcgcaca...1363...ttccaattgcag	ctgtgcgt
D.Ere	caa <b>TGCGC</b> <b>GTAAGTTA</b> -----accgatccgaaagtcgcaca...1423...ttttcattgcag	ctgtgcgt
D.Moj	caa <b>TGCGC</b> <b>GTAAGTTGAGC</b> aaactctaatatgacagaga----...2020...tctactttgcag	ctgttcgc
D.Per	caa <b>TGCGC</b> <b>GTAAGTT</b> -----tccaaacagattagagatcc...1332...ctctcgttgcag	ctgtgcgc
D.Pse	caa <b>TGCGC</b> <b>GTAAGTT</b> -----tccaaacagattagagatcc...1409...ctctcgttgcag	ctgtgcgc
D.Vir	caa <b>TGCGC</b> <b>GTAAGTTG</b> -----acaaaaaattagctcaaagt...1973...ctcccgttgcag	ctgtgcgc
D.Wil	caa <b>TGCGC</b> <b>GTAAGTT</b> -----ttaagcacaaaatttagaa...1718...ttgttttgcag	ctgtgcga
D.Yak	caa <b>TGCGC</b> <b>GTAAGTTA</b> -----tccaaaccgaaagtcgcaca...1438...ttcccattgcag	ctgtgcgt
	*****	**** **

id=99458 gene=FBgn0000568 name=Eip75B segment=chr3L.17952721.17954104.-1 type=IN

D.Mel	caatgcg	gtaagttatccg...490...-----gacgttgcggcgcgtcgctc---TAATTTct <b>ACGCGCA</b> gttcgtcgctgcgcctgcgc-...815...ttccaattgcag	ctgtgcgt
D.Sim	caatgcg	gtaagttatccg...487...-----gacgttgcggcgcgtcgctc---TAATTTct <b>ACGCGCA</b> gttcgtcgctgcgcctgcgc-...840...tttcaattgcag	ctgtgcgt
D.Sec	caatgcg	gtaagttatccg...486...-----gacgttgcggcgcgtcgctc---TAATTTct <b>ACGCGCA</b> gttcgtcgctgcgcctgcgc-...838...ttccaattgcag	ctgtgcgt
D.Ere	caatgcg	gtaagttaaccg...517...-----agcgttgcggcgcgtcgctc---TAATTTct <b>ACGCGCA</b> gttcgtcgctgcgcctgcgc-...867...ttttcattgcag	ctgtgcgt
D.Moj	caatgcg	gtaagttgagca...627...gcgctgctcgctgt-----tcgctc <b>GCTC</b> TAATTTct <b>ACGCGCA</b> g-cgcagctgcgttcatttt...1353...tctactttgcag	ctgttcgc
D.Per	caatgcg	gtaagtttccaa...511...gcggc-ggcgcagc-----gcgctct---AATTTct <b>ACGCGCA</b> g-cgcagcggcagcatttca...782...ctctcgttgcag	ctgtgcgc
D.Pse	caatgcg	gtaagtttccaa...550...gcggc-ggcgcagc-----gcgctct---AATTTct <b>ACGCGCA</b> g-cgcagcggcagcggcagc...820...ctctcgttgcag	ctgtgcgc
D.Vir	caatgcg	gtaagttgaaa...569...---caggcgtcg-cgc-cgcctc---CAATTTct <b>ACGCGCA</b> gt-cgcagctgcgttcatttt...1365...ctcccgttgcag	ctgtgcgc
D.Wil	caatgcg	gtaagttttaa...676...-cttcgaaagttgt-----tcgctct---AATTTct <b>ACGCGCA</b> gtcagtcgc-gcagtcgatt...1003...ttgttttgcag	ctgtgcga
D.Yak	caatgcg	gtaagttatcca...546...-----gacgttgcggcgcgtcgctc---TAATTTct <b>ACGCGCA</b> gttcgtcgctgcgcctgcgc-...853...ttccaattgcag	ctgtgcgt
	*****	*****	**** **

id=99458 gene=FBgn0000568 name=Eip75B segment=chr3L.17952721.17954104.-1 type=IN VIEW

Figure 263: CS=9.6



```
D.Mel atgcagcg gtaagt-tcgtttttgtattcagtattt-----:-----gagagagccttttcGTTTGtTGTGTGGTGAAT-ttgcttaacatgtggttgct-----:-----ttgatcttgcag cg
D.Sim atgcagcg gtaagt-tcgtttttgtattcagtattt-----:-----gagagagccttttcGTTTGtTGTGTGGTGAAT-ttgctcaacatgtggttgct-----:-----ttgatcttgcag cg
D.Sec atgcagcg gtaagt-tcgttttctgtattcagtattt-----:-----gagagagccttttcGTTTGtTGTGTgTGAA-ttgctcaacatgtggttgct-----:-----ttgatcttgcag cg
D.Ere atgcagcg gtaagt-tcgtgttttactcgcacatgtaatc-----:-----gagagagccttttcGTTTGtTGTGTgTGAA-ttgctcaacatgtggttgct-----:-----ttgatcttgcag cg
D.Ana atgcaacg gtgagttaattgttacttttaagtaattgatt:::ttatatgataaatcccatgagcctttaagagagagccttttcGTTTGtTGTGTgTGAAT-tggctcaacatgtggttgct-----:-----ttgatcttgcag cg
D.Gri atgcagcg gtgagt-----:-----TTTGTGTGTGGTGAAT-ttgctcaacatgtggttgcttttcgactctcttttactct:::-----ttgatcttgcag cg
D.Moj atgcagcg gtgagt-----:-----TGGCtTTTGTGTGTGGTGAATttcgttcaacatgtggttgattacgttccc-----:-----ttgatcttgtag cg
D.Per atgcaaaag gtgagt-----:-----tgctGTTTGtTGTGTGGTGAATGtcg--agcatgtggttgctaatagcactctctc-----:-----ttgatcttgtag ag
D.Pse atgcaaaag gtgagt-----:-----tgctGTTTGtTGTGTGGTGAATGtcg--aacatgtggttgctaatagcactctctc-----:-----ttgatcttgtag ag
D.Vir atgcagcg gtgagt-----:-----GTTTGtTGTGTgTGAAtttgctcaacatgtggttgctctctctctctctctct:::tccgactctctgtcgcgcttgatcttgtag cg
D.Yak atgcagcg gtaagt-gtgtgtttgtattcaatatat-----:-----gagaaaagccttttcGTTTGtTGTGTGGTGAAT-ttgctcaacatgtggttgct-----:-----ttgatcttgtag cg
***** * ** ***                               ***** * * * *****                               ***** ** *
```

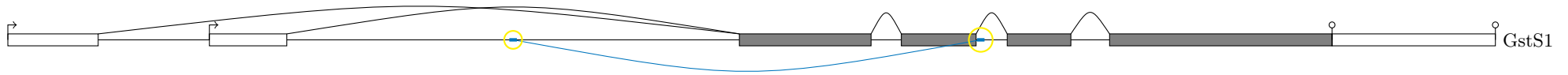
id=75026 gene=FBgn0261259 name=Fhos segment=chr3L.8755986.8756149.1 type=IN

```
D.Mel cacaagc gtaagatattcc...4150...attttccgttgttttgttt---ATTTTTCACACATTAAGC-----aagtgacgtcgacacagata-----...756...ttccccttgtag atcgacga
D.Sim cacaagc gtaagatatttc...4135...attttcccgtcgttttgttt---ATTTTTCACACATTAAGC-----aagcgacggcgacacagata-----...771...ttccccttgtag atcgacga
D.Sec cacaagc gtaagatatttc...4140...-----cccgtcgttttgttttttt---TTCACACATTAAGC-----tagcgacggcgacacagata-----...771...ttccccttgtag atcgacga
D.Ere ccaaagc gtaagctattcc...4040...-----ccatcgttttgtttacttt---TTCACACATTAAGC-----aagcgacggcgacacagata-----...871...atccccttgtag atcgacga
D.Ana cgcaaagt gtaagaaatcta...3942...-----ccagacagtatgttgctgc---GTTTTCACACATTAAGC-----aag--cgtcgacacagataatt-----...636...tctcgttccag atcgatga
D.Gri cgcaagc gtaaggatctct...2639...-----ctttataacatcatatcacg---CATTTTCACACATAA-----ttttaataaacacctccaca-----...2272...gtctccttgtag atcgatga
D.Moj cgcaagc gtaaggatcaca...4326...cattttcttatatttcttc---ATTTTCACACA tAAGCAAGcGCCG-----acacacataattccatggtg...574...gtttacttgtag attgatga
D.Per cacaagc gtaagcattaag...4303...-----tctggtgcttttgctgctgcTGTTTTTCACACATTAAGCattgagcattaag---catcgac-----...604...ctctcattgtag atcgatga
D.Pse cacaagc gtaagcattaag...4320...-----tctggtgcttttgctgctgcTGTTTTTCACACATTAAGCattgagcattaag---catcgac-----...587...ccctcattgtag atcgatga
D.Vir cgcaaagc gtaaggatgatt...4256...gctgagttggatattttttt---TTCACACATTAAGC-----aag--cgtcgacacacataatt-----...655...gtccacttgtag atcgatga
D.Yak ccaaagc gtaagatattcc...4095...cttttcccgtcgttttgctt---ATTTTTCACACATTAAGC-----aagcgacgtcgacacagata-----...811...ttccccttgtag atcgacga
* ** ** *****                               ***** * *                               ***** ** ** **
```

id=75032 gene=FBgn0261259 name=Fhos segment=chr3L.8770418.8775647.1 type=IN VIEW

Figure 264: CS=10.56





D. Mel	agcgtgag	gtactcgaaccg...	575...	aacaccgaaaagtcaaatcg	----	ATTGTTGCaATTg	AGAC	tctccga-aagc	gaaaattgc-----	...	1086...	cttttctatcag	ggaattgc
D. Sim	agcgtgag	gtactcgaaccg...	568...	aacgccgaaaagtcaaatcg	----	ATTGTTGCaATTg	AGAC	tctccga-aagc	gaaaattgc-----	...	1065...	catttctttcag	ggaattgc
D. Sec	agcgtgag	gtactcgaaccg...	568...	aacgccgaaaagtcaaatcg	----	ATTGTTGCaATTg	AGAC	tctccga-aagc	gaaaattgc-----	...	1069...	catttctctcag	ggaattgc
D. Ere	agcgtgag	gtactcgaaccg...	576...	aacgccgaaaagtcaaatcg	----	ATTGTTGCaATTg	AGAC	tctccga-aagc	gaaaattgc-----	...	1066...	catttctttcag	ggaattgc
D. Ana	agcgtgag	gtactcgtatcg...	639...	aacgccgaaaagtcaaatcg	----	ATTGTTGCaATTg	AGAC	-acagagaaga	aaagaaaccga-----	...	990...	attcgcttcag	ggaattgc
D. Gri	accgtgag	gtacttgcttat...	1090...	gagaaaagtcgaca	aatcg----	ATTGTTGCaATTg	AGAC	-ac-----	gaaattgcag	cggaagag...	1243...	gtttgttcag	ggaatttc
D. Per	agcgtgag	gtactcgaatcg...	689...	aacgccgaaaagtca	aatcg----	ATTGTTGCaATTg	AGAC	-acagagaatc	gaaaattgca-----	...	1012...	gtttgttcag	gaaattgc
D. Pse	agcgtgag	gtactcgaatcg...	693...	-----cgaaaagtc	aatcgcaattcg	ATTGTTGCaATTg	AGAC	-acagagaatc	gaaaattgca-----	...	1020...	gtttgttcag	gaaattgc
D. Vir	agcgtgag	gtacttaaat...	989...	tagtgagagaagtca	aatcg----	ATTGTTGCaATTg	AGAC	-ac-----	gaaattgcag	cggaagag...	1902...	gatttcacgcag	ggaattgc
D. Yak	agcgtgag	gtactcgaaccg...	629...	aacgccgaaaagtca	aatcg----	ATTGTTGCaATTg	AGAC	tctccga-aagc	gaaaattgc-----	...	1129...	tttctttcag	ggaattgc
	* *****	*****		** * * * *		*****	*	**			*	***	* ****

id=42604 gene=FBgn0010226 name=GstS1 segment=chr2R.12982566.12984308\_-1 type=I5

D. Mel	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Sim	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Sec	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Ere	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Ana	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Gri	ccGTCTAA	GTaGCGAaCAAT	gtgtgcttcagttttcatggt...	27...	tttaatgtatag	aaattgca
D. Per	ccGTCTAA	GTaGCGAgCAAT	gtgtgcccag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Pse	ccGTCTAA	GTaGCGAgCAAT	gtgtgcccag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Vir	ccGTCTAA	GTaGCGAaCAAT	gtgtgcttcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
D. Yak	ccGTCTAA	GTaGCGAaCAAT	gtgtgcctcag-tttcatggtt...	26...	tttaatgtatag	aaattgca
	*****	*****	*****	***	*****	*****

id=42608 gene=FBgn0010226 name=GstS1 segment=chr2R.12981964.12982033\_-1 type=IN VIEW

Figure 265: CS=6



D.Mel	ctcaacaa	gtatgtgaacga-----	..436...	-tccttcgggaaaagtcggtc	<b>GTGC</b>	<b>aACAAA</b>	<b>GTTGCGCTCAGCTG</b>	agatgcaatcctctccagct----	..317...	gcttttgtgtgt	gcagtcgg
D.Sim	ctcaacaa	gtatgtgaacga-----	..441...	-tccttcgggaaaagtcggtc	<b>GTGC</b>	<b>aACAAA</b>	<b>GTTGCGCTCAGCTG</b>	agatgcaatcctctccagct----	..316...	gcttttgtgtgt	gcagtcgg
D.Sec	ctcaacaa	gtatgtgaacga-----	..437...	-tccttcgggaaaagtcggtc	<b>GTGC</b>	<b>aACAAA</b>	<b>GTTGCGCTCAGCTG</b>	agatgcaatcctctccagct----	..316...	gcttttgtgtgt	gcagtcgg
D.Ere	ctcaacaa	gtatgtgaacgc-----	..441...	-tccttcgggaaaagtcggtc	<b>GTGC</b>	<b>aACAAA</b>	<b>GTTGCGCTCAGCTG</b>	agatcctaactcctctccagct----	..321...	gcttttgtctgt	gcagtcgg
D.Ana	ctcaacaa	gttttgcttctc-----	..472...	---ttcgggaaaagttggtcgtg	<b>CAACAAA</b>	<b>GTTGCGCTCAG</b>	---ctg	cgccaccgactccaac----	..360...	gcctttgtgtgt	gcagttgg
D.Gri	-----ta	ctcacagcataaatgcgg..	..464...	---cggtc-gtaatgctggtcgt	<b>GCAACAAA</b>	<b>GTTGCTCTCAGT</b>	-----	atcactctctctctctca..	..340...	gctttgctgcat	gcagtcag
D.Moj	ctccataa	atcactcaataa-----	..472...	---gctgtaaaaatgctggtcgt	<b>GCAACAAA</b>	<b>GTTGCTCTCA</b>	---ct	atcatcacactctctcgt----	..451...	actctggtctat	gcagtcgg
D.Per	atcaacaa	gtaaactactaa-----	..414...	.gtccttcgggaaaactcgggt	<b>CGTGCAACAAA</b>	<b>GTTGCGCTCAG</b>	---ct	gcactccaaagccttct----	..372...	ccttttgtgtgt	gcagttgg
D.Pse	atcaacaa	gtaaactactag-----	..414...	.gtccttcgggaaaactcgggt	<b>CGTGCAACAAA</b>	<b>GTTGCGCTCAG</b>	---ct	gcactccaaagccttct----	..372...	ccttttgtgtgt	gcagttgg
D.Vir	----taaa	ttcgtaagctaacgc--..	..464...	---tgtgc-caaatgctggtcgt	<b>GCAACAAA</b>	<b>GTTGCGCTCA</b>	---tt	gctctctgctctcc--ct----	..416...	actttggtgtat	gcagtcgg
D.Yak	ctcaacaa	gtatgtgaacga-----	..441...	-tccttcgggaaaatgctggtc	<b>GTGC</b>	<b>aACAAA</b>	<b>GTTGCGCTCAGCTG</b>	agatgcaattctctccagct----	..309...	gcttttgtgtgt	gcagtcgg
		* *		** * *****				*		* * * *	***** *

id=128229 gene=FBgn0020312 name=CG4050 segment=chr2R.17015066.17015906.-1 type=I5

D.Mel	ctcaacaa	gtatgtgaacga-----	..569...	-ctgaacgccggaaaatcga	<b>TGGC</b>	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	ccgcccatctgccaccgat...	..182...	gcttttgtgtgt	gcagtcgg
D.Sim	ctcaacaa	gtatgtgaacga-----	..574...	-ctgaacgccggaaaatcga	<b>TGGC</b>	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	ccgcccatctgccaccgat...	..181...	gcttttgtgtgt	gcagtcgg
D.Sec	ctcaacaa	gtatgtgaacga-----	..570...	-ctgaacgccggaaaatcga	<b>TGGC</b>	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	ccgcccatctgccaccgat...	..181...	gcttttgtgtgt	gcagtcgg
D.Ere	ctcaacaa	gtatgtgaacgc-----	..569...	actgc-cgccccgaaaatcga	<b>TGGC</b>	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	ccgcccatctgccaccgat...	..191...	gcttttgtctgt	gcagtcgg
D.Ana	ctcaacaa	gttttgcttctc-----	..599...	-----cgtccagaaaatcgatgaca	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	g	ccgcccatctgccaccgat...	..233...	gcctttgtgtgt	gcagttgg
D.Gri	-----ta	ctcacagcataaatgcgg..	..567...	---t	cgttgcaaaaatcgatgac	<b>ATTGAGTGCAACTTTGTTGC</b>	---	tgtctcttggtcagcaataa..	..237...	gctttgctgcat	gcagtcag
D.Moj	ctccataa	atcactcaataa-----	..614...	-----	gcacacaaaatcgatgacat	<b>TGAGTGCAACTTTGTTGC</b>	---	tgtctctcggtcagcgcag...	..309...	actctggtctat	gcagtcgg
D.Per	atcaacaa	gtaaactactaa-----	..520...	-----	cgctcgaaaatcgatgaca	<b>TTGAGTGCAAC</b>	<b>TTGTTGTATG</b>	cctctctatggtgcatccac..	..266...	ccttttgtgtgt	gcagttgg
D.Pse	atcaacaa	gtaaactactag-----	..520...	-----	cgctcgaaaatcgatgaca	<b>TTGAGTGCAAC</b>	<b>TTGTTGTATG</b>	cctctctatggtgcatccac..	..266...	ccttttgtgtgt	gcagttgg
D.Vir	----taaa	ttcgtaagctaacgc--..	..612...	-----	cgctcacaaccgatgacat	<b>TGAGTGCAACTTTGTTGC</b>	---	tgtctctcggtcagcgcag...	..268...	actttggtgtat	gcagtcgg
D.Yak	ctcaacaa	gtatgtgaacga-----	..572...	-ctgcacgccggaaaatcga	<b>TGGC</b>	<b>TTGAGTGCAAC</b>	<b>TTGTgGCAT</b>	ccgcccatctgccaccgat...	..176...	gcttttgtgtgt	gcagtcgg
		* *		**** *****				* * *		* * * *	***** *

id=128229 gene=FBgn0020312 name=CG4050 segment=chr2R.17015066.17015906.-1 type=I5 VIEW

Figure 266: CS=10.56



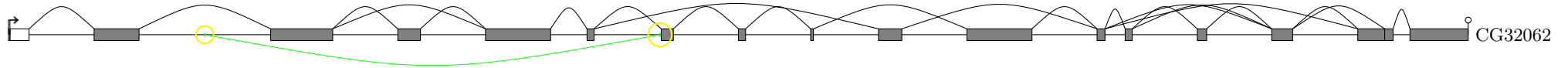
D. Mel	gctcacgg	gtgagtggag-----	agcagattggcagatc-----	GGTTGCAGATCGTCATTATT	-gcattctaagact-gagatat...392...ttctttttcag	atztatgc	
D. Sec	gctcacgg	gtgagtggag-----	agcagattggcagatc-----	GGTTGCAGATCGTCATTATT	-gcattccaagact-gagatat...389...attatftttcag	atztatgc	
D. Ere	gctcacgg	gtgagtggag-----	agcagattggcagatc-----	GGTTGCAGATCGTCATTATT	-gcattccaagact-gagatat...388...aattcftttcag	atztatgc	
D. Ana	gctcgcgg	gtgagtcaggctagtgatgcagcttgcatgattggcagatc-----	-----	GGTTGCAGATCGTCATTATT	gtgcattccc--att-gagagat...516...cctctctttcag	atztatgc	
D. Gri	gctctcgg	gtgagtcatc-----	tagccacacctg-----	gctactgctgca-----	GATCGTCATTATT	gtaaacaatgccaactgc--...880...atctctttcag	atctatgc
D. Moj	gctcacgg	gtgagtcctc-----	tagccggatctg-----	ggtactgctgca-----	GATCGTCATTATT	caaaccaatgccaatgcg...813...tttcttttcag	atctatgc
D. Per	gctcgcgg	gtgagtcctc-----	gggaacagacagagaccactcgcactctgtccctttagatattggcggcagatcagatc	GGTTGCAGATCGTCATTATT	-gctttctatgactcaagatg...677...tctttctttcag	atctatgc	
D. Pse	gctcgcgg	gtgagtcctc-----	gggaacagacagagaccactcgcactctgtccctttagatattggcggcagatcagatc	GGTTGCAGATCGTCATTATT	-gctttctatgactcaagatg...675...tctttctttcag	atctatgc	
D. Vir	gctcacgg	gtgagtcctc-----	tggtctgcatctg-----	ggtactgctaca-----	GATCGTCATTATT	caaaccaatgccaatgcg...1124...cttctattgcag	atctatgc
D. Yak	gctcacgg	gtgagtggag-----	agcagattggcagatc-----	GGTTGCAGATCGTCATTATT	-gcatttcaagact-gagatat...391...aattcftttcag	atztatgc	
	**** **	*****	* *	*****		** **	** ** *

id=101414 gene=FBgn0011785 name=BRWD3 segment=chr3R.20151001.20151471.1 type=IN

D. Mel	gctcacgg	gtgagtggagag--...279...-ttaaataatgtctaacca	AATGAATGACGATCT	ccGTGACT	--atcatcta-atgtaggataat...105...ttctttttcag	atztatgc	
D. Sec	gctcacgg	gtgagtggagag--...277...-ttgatataatgtctaacca	AATGAATGACGATCT	ccGTGACT	--atcatcta-atgtaggataat...104...attatftttcag	atztatgc	
D. Ere	gctcacgg	gtgagtggagag--...278...-tttgacataatgtctaacca	AATGAATGACGATCT	ccGTGACT	--atcatcta-atgtaggataat...102...aattcftttcag	atztatgc	
D. Ana	gctcgcgg	gtgagtcaggct...341...-ttgataataataactaacca	AATGAATGACGATCT	cgGTGACT	--atcatcta-aaataggataat...184...cctctctttcag	atztatgc	
D. Gri	gctctcgg	gtgagtcctccta--...768...-aaatatttcgaactaactaacca	AATGAATGACGATCT	---cgtgacaatcaactt-aaata-----	...114...attctctttcag	atctatgc	
D. Moj	gctcacgg	gtgagtcctccta--...701...-aaatatttcgaactaactaacca	AATGAATGACGATCT	---cgtgacaatcaacta-aaata-----	...114...tttcttttcag	atctatgc	
D. Per	gctcgcgg	gtgagtcctccta--...601...-cgatatctaataacgaacca	AATGAATGACGATCT	acGTGACT	ctatcatctatctataggat--...110...tctttctttcag	atctatgc	
D. Pse	gctcgcgg	gtgagtcctccta--...599...-cgatatctaataacgaacca	AATGAATGACGATCT	acGTGACT	ctatcatctatctataggat--...110...tctttctttcag	atctatgc	
D. Vir	gctcacgg	gtgagtcctccta--...1021...-caaatatttcgaactaactaacca	AATGAATGACGATCT	---cgtgacaatcaacta-aaata-----	...105...cttctattgcag	atctatgc	
D. Yak	gctcacgg	gtgagtggagag--...280...-tttgatataatgtctaacca	AATGAATGACGATCT	ccGTGACT	--atcatcta-atgtaggataat...103...aattcftttcag	atztatgc	
	**** **	*****	*	*****	* **** ** **	** **	** ** *

id=101414 gene=FBgn0011785 name=BRWD3 segment=chr3R.20151001.20151471.1 type=IN VIEW

Figure 267: CS=12



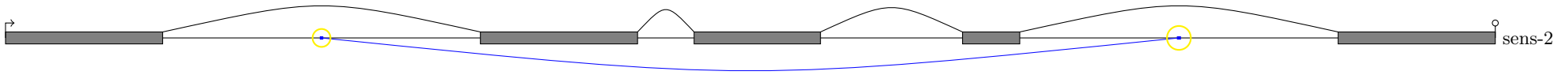
D.Mel	attatccg	gtaag-cacagat...3925...-----tgaatttggccaaccggcaa	CAATAAGCTGCAA	atTTTgcatatttcatagct-----	...987...ttgaacatgcag	cacatggt
D.Sim	attatccg	gtaag-cacagat...4044...-----tgaatttggccaacaagcaa	CAATAAGCTGCAA	atTTTgcatatttcatagct-----	...868...ctgaacatgcag	cacatggt
D.Sec	attatccg	gtaag-cacagat...3958...-----tgaatttggccaacaagcaa	CAATAAGCTGCAA	atTTTgcatatttcatagct-----	...954...ctgaaaatgcag	cacatggt
D.Ana	attatccg	gtaag-caaactc...4218...-----ccctcctccact-ataaccaa	CAATAAGCTGCAA	atTTTgcatatttcatagat-----	...694...tccaaaatgcag	cacatggt
D.Gri	attatcag	gtaag-aaacaac...4174...ggatgagggtttatTTTgcta-----	CAATAAGCTGCAG	atTTTgcatatttcatagat-----	...738...catcatttacag	cacatggt
D.Pse	attatccg	gtaagacaaca...4173...-----ctgtatttagct-acagccaa	CAATAAGCTGCAA	atTTAGcatatttcatagatgctgac...733...ctatccatacag		cacatggt
D.Vir	attatccg	gtaag-caaaca...4049...gatgggtttttatTTTtagct-a-----	CAATAAGCTGCAA	atTTTgcatatttcatagat-----	...863...tctcatttgcag	cacatggt
D.Wil	attatccg	gtaag-aatcgtc...4213...-cgacagagcgtgtggtt-----caa	CAATAAGCTGCAA	atTTTgcatatttcatagac-----	...699...tacatttgcag	cacatggt
D.Yak	attatccg	gtaag-cacagac...4002...-----tgaatttggccaacaagcaa	CAATAAGCTGCAA	atTTTgcatatttcatagct-----	...910...ccgaacatgcag	cacatggt
	***** *	***** *	***** **	***** **	***** **	***** **

id=110323 gene=FBgn0052062 name=CG32062 segment=chr3L\_10511407\_10561228.1 type=IN

D.Mel	gcagcaag	gtaagttgcgcc...773...----tactctatatgtttcTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Sim	gcagcaag	gtaagttgcgcc...763...----tactctatatgtttcTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Sec	gcagcaag	gtaagttgcgcc...762...----tactctatatgtttcTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Ana	gcagcaag	gtaagttcgtt...737...----tactctatatgtttcTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Gri	gaagcaag	gtaagttgccg...525...----tactcaatatgtttcTTAATTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Pse	gcagcaag	gtaagtccctg...799...tatatactctatatgtttcTTAATTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Vir	gcagcaag	gtaagttcccat...536...----tactctatatgttttTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
D.Wil	gcagcaag	gtaagttgctt...875...----tactctaaatgtttcTTGCA	TGCA	TGTTgATTGcgattgccag	ggattcgg-----
D.Yak	gcagcaag	gtaagttgcctc...779...----tactctatatgtttcTTGCA	TGCA	TGTTgATTGcgaatggcag	ggattcgg-----
	* *****	*****	***** *	***** *****	***** **

id=110331 gene=FBgn0052062 name=CG32062 segment=chr3L\_10567589\_10568418.1 type=IN VIEW

Figure 268: CS=10.8



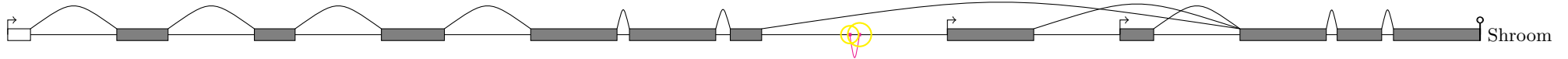
D.Mel	ctccgacg	gtaagccggaat...4652...-----ttcgttgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	261...gttatattacag	atgcctcg
D.Sec	ctccgacg	gtaagccggaat...4659...-----tacgttgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	254...tctatattacag	atgcatcg
D.Ere	ctccgacg	gtaagccggaat...4670...-----ttcgttgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	243...tcaacattacag	atgcctcg
D.Ana	ttccgacg	gtaagtttctga...4657...-----gcccttgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	256...ttcccttttcag	atgcctcg
D.Gri	ttccgacg	gtaagcaagaaa...4734...ttgctctgcgcttgattagg-	GTGAATTAATg	GTCATGTAagggtggattaggcgattgaa...	172...ttctcttttcag	atgcctcg
D.Moj	taccgacg	gtaagtcaagag...4728...ctgctatgcgcttgattagg-	GTGAATTAATg	GTCATGTAagggtggattaggcgattgaa...	178...tctcccttttcag	atgccgct
D.Per	tcccgacg	gtaagtactcgg...4722...ggcaggatacgttgattagg	GTGGAATTAATg	GTCATGTAagggtggatta-gcgattgaa...	183...ttctttctccag	atgcctct
D.Pse	tcccgacg	gtaagtactcgg...4722...ggcaggatacgttgattagg	GTGGAATTAATg	GTCATGTAagggtggatta-gcgattgaa...	183...ttctttctccag	atgcctct
D.Vir	caccgacg	gtaagctaaaga...4725...-----gcgctgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	188...ctcatattgtag	atgcatcg
D.Yak	ctccgacg	gtaagcgggaac...4644...-----ttcgttgattagggtgaatt-	AATGGTCATGTA	agggtggattaggcgattgaa...	269...tctattttacag	atgcctcg
	*****	*****	*****	*****	*****	*****

id=114729 gene=FBgn0051632 name=sens-2 segment=chr2L.6823060\_6831169\_1 type=IN

D.Mel	ccacacag	gtaagcagttcg...2635...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	1863...ccactcttcag	gcgagaaa
D.Sec	ccacacag	gtaagcagttcg...2684...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	1830...ccactcttcag	gcgagaaa
D.Ere	ccacacag	gtaagcagttcg...2796...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	1804...ccactcttcag	gtgagaaa
D.Ana	acatacag	gtaagaattatt...2775...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	1565...ctatccttcag	gtgaaaaa
D.Gri	tcacacag	gtaagtaatta...2964...tgctctataatctctgac	TACGTGACGTTATTTGT	gccgatagtgcacgaacgtg...	1944...gtgtattttcag	gtgagaaa
D.Moj	tcacacag	gtaagttcaacc...2656...tgctctataatctctgac	TACGTGACGTTATTTGT	gccgatagtgcacgaacgtg...	2252...ttttatttcag	gtgagaaa
D.Per	acacacag	gtaagcattcga...2799...tgctctataatctctgac	TACGTGACGTTATTTGT	gccgatagtgcacgaacgtg...	2109...tttcgatttcag	gtgagaaa
D.Pse	acacacag	gtaagcattcga...2832...tgctctataatctctgac	TACGTGACGTTATTTGT	gccgatagtgcacgaacgtg...	2076...tttcgatttcag	gtgagaaa
D.Vir	ccacacag	gtaagttacttt...2873...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	2038...gtgtatttcag	gcgagaaa
D.Yak	ccacacag	gtaagcagttcg...2804...tgctctataatctctgac	TACGTGACgtTATT	tgtgccgatagtgcacgaac---	1976...tccatcttcag	gtgagaaa
	** ** *	*****	*****	*****	** ** *	** ** *

id=114735 gene=FBgn0051632 name=sens-2 segment=chr2L.6833188\_6837763\_1 type=IN VIEW

Figure 269: CS=13



```

D.Mel  cagaaacg gtgagttatg...1193...-gtggctcagttgacaccgggGGAGACcTTTGCggCACGAtTTGTgcagcagcagcatccagca----...1299...tcaaacgggtga aaacgtct
D.Sim  cagaaacg gtgagtccaagc...1674...-tgcgctcagttgacaccgggGGAGACcTTTGCggCACGAtTTGTgcagcagcagcatccagca----...1330...tcaaacgggtga aaacgtct
D.Ere  cagaaacg gtgagttatagc...1171...-gtggctcagttgacaccgggGGAGACcTTTGCggCACGAtTTGTgcagcagcagcatccagca----...1268...tcaaacgtgtga aaacgtct
D.Ana  cagaaaag gtgagtccttac...1133...-gtggctcggttgacaccgagGGAGACcTTTGCggCACGAtTTGTgcagcagcagcatccagca----...1662...tcaaacgagaaa aaaccgct
D.Gri  cagaagcg gtgagtgcagcg...2098...tgtgtctc---tgacaccgctgcAGACcTTTGCggCACGAtTTGTgcagca---catccagcagcag...2437...tcaaacgagtgga aaaccgct
D.Per  cagaaggg gtgagtgaaga...1000...-tggctttgcttgacaccggaGGAGACcTTTGCggCACGAtTTGTgcagcggcagcag-cagcag---...2147...tcaaacgattgg caaccgcg
D.Pse  cagaaggg gtgagtgaaga...995...-tggctttgcttgacaccggaGGAGACcTTTGCggCACGAtTTGTgcagcggcagcag-cagcag---...2145...tcaaacgattgg caaccgcg
D.Vir  cagaaacg gtgagtgtgca...1593...ggtggctc---tgacaccgctgcAGACcTTTGCggCACGAtTTGTgcagca---catccagcagcag...2093...tcaaacgagtgga aaaccgct
D.Yak  cagaaacg gtgagttacagt...1196...-gtggctcagttgacaccgggGGAGACcTTTGCggCACGAtTTGTgcagcagcagcag-cagcat---...1247...tcaaacgtgtga aaacgtct
***** * ***** * ***** ** ***** ***** ** *

```

id=20376 gene=FBgn0085408 name=Shroom segment=chr2R.10217320\_10219899\_1 type=IN

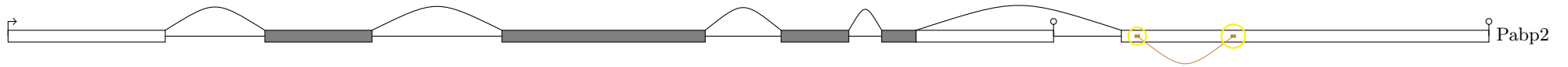
```

D.Mel  cagaaacg gtgagttatg...1253...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTc----gggctggcaacttgtaaag-...1242...tcaaacgggtga aaacgtct
D.Sim  cagaaacg gtgagtccaagc...1734...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTc----gggctggcaacttgtaaag-...1273...tcaaacgggtga aaacgtct
D.Ere  cagaaacg gtgagttatagc...1231...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTc----gggctggcaacttgtaaag-...1211...tcaaacgtgtga aaacgtct
D.Ana  cagaaaag gtgagtccttac...1193...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTcaactcccgaagcataggctt-----...1605...tcaaacgagaaa aaaccgct
D.Gri  cagaagcg gtgagtgcagcg...2152...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTT---ttgtcttgggcttctctct-----...2387...tcaaacgagtgga aaaccgct
D.Per  cagaaggg gtgagtgaaga...1092...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTcaactcggctggctggctgt-----...2058...tcaaacgattgg caaccgcg
D.Pse  cagaaggg gtgagtgaaga...1093...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTcaactcggctggctggctgt-----...2050...tcaaacgattgg caaccgcg
D.Vir  cagaaacg gtgagtgtgca...1647...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTT---tt-----gggcttctctctctcccg...2043...tcaaacgagtgga aaaccgct
D.Yak  cagaaacg gtgagttacagt...1262...agcacgagacaaatattgacACAAAtTTGTGGCAAAGTTTTc----aggctggcaacttgtaaag-...1184...tcaaacgtgtga aaacgtct
***** * ***** * ***** ** ***** ***** ** *

```

id=20376 gene=FBgn0085408 name=Shroom segment=chr2R.10217320\_10219899\_1 type=IN VIEW

Figure 270: CS=8.64



```

D.Mel gatttcag atttttttac-aatataaTTTCAAAAAACATTATtttattgccaacttctttg-----..695...cattcttcattc aaaagcac
D.Sim gatttcag atttttttac-aatataaTTTCAAAAAACATTATtttattgccaacttctttg-----..686...cattcttcattc aaaagcac
D.Sec gatttcag atttttttac-aatataaTTTCAAAAAACATTATtttattgccaacttctttg-----..689...cattcttcattc aaaagcac
D.Ere gatttcag atttttttac-aatataaTTTCAAAAAACATTATtttattgccaacttctt-----..688...aacacttaattc aagcacta
D.Ana gatttcag atttttttac-aatattaTTTCAAAAAACATTATtttattgccaacttcttaa-----..821...acctcttccttc aagcacta
D.Gri gatttcag atttttttaa-tatataaTTTCAAAAAACattTTATtGCCAA--aacttctttg-taataaatgc..849...aacttggtcttt aagctcgc
D.Moj gatttcag atttttttaa-tatataaTTTCAAAAAACattTTATtGCCAA--aacttctttgctaacaaa-a...841...catgtttcaaaa taaaataa
D.Per -----ttttaccaattta-TTTCAAAAAACATTATtttattgccaacttctttg-----..816...tcattttcattt aagcactt
D.Pse gatttcag atttttttaccaattta-TTTCAAAAAACATTATtttattgccaacttctttg-----..816...tcattttcattt aagcactt
D.Vir gatttcag atttttttaa-tatataaTTTCAAAAAACattTTATtGCCAA--aacttctttgctaataaata-..867...aacttggcatta acgcacgc
D.Wil gatttcag atttttttcaaatattaTTTCAAAAAACATTATtttattgccaacttcttt-----..903...agtcgactaaga aaaagaag
***** ** * ***** * ** ** *

```

id=88983 gene=FBgn0005648 name=Pabp2 segment=chr2R.4021120\_4021879.1 type=E3

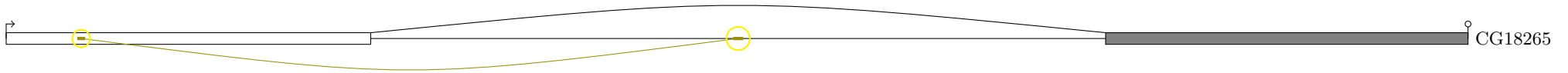
```

D.Mel gatttcag atttttttacaa...173...--acgaatatcttgacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...507...cattcttcattc aaaagcac
D.Sim gatttcag atttttttacaa...174...--acgaatatcttgacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...497...cattcttcattc aaaagcac
D.Sec gatttcag atttttttacaa...174...--acgaatatcttgacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...500...cattcttcattc aaaagcac
D.Ere gatttcag atttttttacaa...181...--acgaatatcttgacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...492...aacacttaattc aagcacta
D.Ana gatttcag atttttttacaa...223...--acgaatatcttgacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...583...acctcttccttc aagcacta
D.Gri gatttcag atttttttaata...209...-aaagaaaaaaaaaacgtaacTTGGCtATAATGTTTTTTGAAGcacc---aacaccacaaacacc...627...aacttggtcttt aagctcgc
D.Moj gatttcag atttttttaata...199...-aaataaaaaaaaaaacgtaacTTGGCtATAATGTTTTTTGAAGcacc---aacaccacaaacac--..629...catgtttcaaaa taaaataa
D.Per tttacca atttatttcaaa...200...--aatcaacatggacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...589...tcattttcattt aagcactt
D.Pse gatttcag atttttttacca...212...--aatcaacatggacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacccc...589...tcattttcattt aagcactt
D.Vir gatttcag atttttttaata...200...gatttaaaaaaaaaaacgt-acTTGGCtATAATGTTTTTTGAAGcacc---aacaccacaaacacc...654...aacttggcatta acgcacgc
D.Wil gatttcag atttttttacaa...223...--attacccttgaacttggct----ATAATGTTTTTTGAAGcacc---aacaccaaacacacac---..666...agtcgactaaga aaaagaag
** * ***** ** *

```

id=88983 gene=FBgn0005648 name=Pabp2 segment=chr2R.4021120\_4021879.1 type=E3 VIEW

Figure 271: CS=10.56



```

D.Mel  gtctacag aaaaacggtacg...58...-taaaataagtgtaacgccccGTACAAGTTCTGtaagtttccagctgcaacaa...369...gccggagacatt  gtgagtcc
D.Sec  gtctacag aaaaacggtacg...58...-taaaataagtgtaacgccccGTACAAGTTCTGtaagtttccagctgcaacaa...372...gccggagacatt  gtgagtcc
D.Ere  gtctacag aaaaacggtacg...58...-tcaattaagtgtaacgccccGTACAAGTTCTGtaagtttccagctgcaacaa...347...gccagagacatt  gtgagtcc
D.Ana  gtctacag aaaaacggtacg...57...atcaataagtgtaacgccccGTACAAGTTCTGtaagtttccaaaacaccaac...425...gccggagacatt  gtgagtcc
D.Gri  gtctacag aaaaacggtacg...56...gataaataagtgtaacgccccGTACAAGTTCTGtaagtttcaacaacaacaac...485...actagagacatt  gtgagtcc
D.Moj  gtctacag aaaaacggtacg...56...gataaataagtgtaacgccccGTACAAGTTCTGtaagtttcaacaataacaac...387...actagagacatt  gtgagttc
D.Per  gtctacag aaaaacggtacg...58...-tcgaataagtgtaacgccccGTACAAGTTCTGtaagtttccagaatccgaat...362...gccagagacatt  gtgagtcc
D.Pse  gtctacag aaaaacggtacg...58...-tcgaataagtgtaacgccccGTACAAGTTCTGtaagtttccagaatccgaat...367...gccagagacatt  gtgagtcc
D.Vir  gtctacag aaaaacggtacg...56...gataaataagtgtaacgccccGTACAAGTTCTGtaagtttcaacaacaacaac...422...actagagacatt  gtgagtcc
D.Yak  gtctacag aaaaacggtacg...58...-tcaattaagtgtaacgccccGTACAAGTTCTGtaagtttccagctgcaacaa...370...gccagagacatt  gtgagtcc
*****
***** *          * ***** ***** ***** *          *          * ***** * ***** *

```

id=54500 gene=FBgn0036725 name=CG18265 segment=chr3L\_17432511\_17433013\_1 type=E5

```

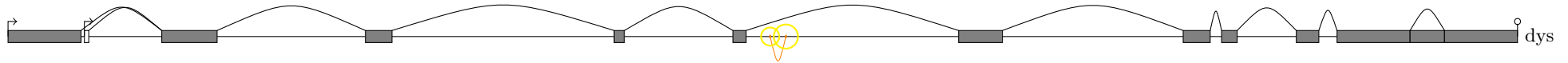
D.Mel  gagacatt gtgagtccgagc...4030...aaaatttgattccttaaatCGGAtgACTTtGTATaaattttcgtgtgcccaca--...880...cccgccccgcag  taatatca---
D.Sec  gagacatt gtgagtcccagc...4053...aaaatttgattccttaaatCGGAtgACTTtGTATaaattttcgtgtgcccaca--...857...ccccgcccgag  taatatca---
D.Ere  gagacatt gtgagtcccagc...3980...aaaatttgattccttaaatCGGAtgACTTtGTATaaattttcgtgtgcccaca--...930...cctgccccgcag  taatatca---
D.Ana  gagacatt gtgagtcccccc...4107...aaaatttgattccttaaatCGGAtgACTTtGTATAaaattttcgtgtgcccaca--...802...cgccccttctag  taatatca---
D.Gri  gagacatt gtgagtcctaaag...4128...aaaatttgattccttaaatCGGAtgACTTtGTATAaa-tttcgtgtgcccgaatgg...781...ttttgtacacag  taatatca---
D.Moj  gagacatt gtgagttccaca...4179...aaaatttgattccttaaatCGGAtgACTTtGTATAaaattttcgtgtgcccgaatg-...730...ttccattcacag  taatatca---
D.Per  gagacatt gtgagtccccag...3960...gaaatatgtattccttaaatCGGAtgACTTtGTATAaaattttcgtgtgtgcccct--...950...tctcctttgcag  taatatca---
D.Pse  gagacatt gtgagtccccag...3935...aaaatttgattccttaaatCGGAtgACTTtGTATAaaattttcgtgtgtgcccct--...975...tctcttttgcag  taatatca---
D.Vir  gagacatt gtgagtcccagc...4202...aaaatttgattccttaaatCGGAtgACTTtGTATAaaattttcgtgtgcccgaatg-...707...tcatctcacag  taatatca---
D.Yak  gagacatt gtgagtcccagc...3983...aaaatttgattccttaaatCGGAtgACTTtGTATaaattttcgtgtgcccaca--...927...--gccccgcag  taatatcatcc
***** *          *          *          *          *          *          *          *          *          *

```

id=54501 gene=FBgn0036725 name=CG18265 segment=chr3L\_17433014\_17442492\_1 type=I5 VIEW

Figure 272: CS=9





```

D.Mel attccatg gtaagtcttttg...119...-----gcatgtcatagtctcctaac---AGCAGC-AGCAGCA-----acataagcgcagcagcaaca-----...1684...ttctcgttacag gaggatct
D.Sim attccatg gtaagtcttttg...119...-----gcatgtcatagtctcctaac---AGCAGC-AGCAACATaAGCG-----cagcagcaacatcaacgctg-----...1718...ttctcgttacag gaggatct
D.Sec attccatg gtaagtcttttg...119...-----gcatgtcatagtctcctaac---AGCAGC-AGCAACATaAGCG-----cagcagcaacatcaacgctg-----...1717...ttctcgttacag gaggatct
D.Ere attccatg gtaagactttg...1105...-----aaattcactcgtatgccatg-----TGTGGCAtAATTA-----cgggcacaataaaaacggaa-----...735...ttctcgttacag gaggatct
D.Ana attccatg gtaagagctctt...157...-----cagagcatgtcatagagtct---GCAAC-AGCAGCAaAGCA-----acatttggcccaacagcaac-----...1883...ttatgctttcag gaggatct
D.Gri attctatg gtaagtacaata...148...-----aacaacagca-----acatcgatgt-CGACtCAGC-AGCAGCAACAACA-----aatatttgttgagtttttg...2131...ctctgcttttag gaggattt
D.Moj attccatg gtaagttgatgt...2001...-aaacgac-----agtagca-----gccact-----GCAAC-AGCAAaAGCAACAGCAA--caacaacaagcaaagttaat-----...1326...cattgccacag gaggattt
D.Per attccatg gtaagagttttg...1467...gctacgactgcgacaaccca-----CAAGAGCAGCAGC-----agcagcagcagcagcagcag-----...1373...tctctttaatag gaggatct
D.Pse attccatg gtaagagttttg...1366...-gagttagttagcggcaagaa-----AAC-GGCAGCAGCAACA-----agggtaccaccagcagcagc-----...1334...tctctttaatag gaggatct
D.Vir attccatg gtaagttggcgt...2205...ttaacggcaa--aacggca-----gcAGCAaCAGCaCAGCAA--AGCAGCAACAaCAAA-----gcaaagttaattaacaaact...953...acctgcgcgag gaggattt
D.Wil attcgatg gtaagttccaaa...192...taga--gccaatagctgca-----gc-----AGCAcC-AGCAACAACAGCAaCAAC-----cacaatagcaacatatttgt...1678...tgtcattatag gaggattt
D.Yak attccatg gtaagaacttt...123...-----cagagcatgtcatagtctcc-TAACaCGAGCAac-AGCAGCAACatCAGCaGCAGcaacatcagcagcagcaaca-----...1698...ttctcgttgag gaggatct
**** ** ***** ** ** *

```

id=65371 gene=FBgn0039411 name=dys segment=chr3R\_21907914\_21909793\_-1 type=IN

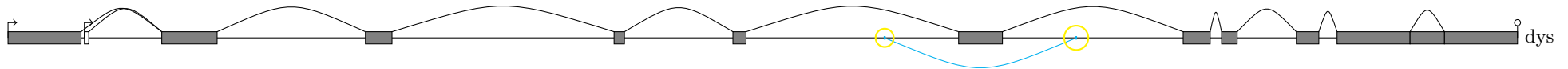
```

D.Mel attccatg gtaagtcttttg...227...-----tgtgctg-tactagttgctga-----TGTGTTGCTGCT-----ccggtgacaagttagcaac...1576...ttctcgttacag gaggatct
D.Sim attccatg gtaagtcttttg...235...-agttttgtgctg-tactagt-----TGCTgATGTTGTTGCTGCT-----ccggtgacaagttagcaac...1602...ttctcgttacag gaggatct
D.Sec attccatg gtaagtcttttg...248...-ttgcagtttttg-tactagt-----TGCTgATGTTGTTGCTGCT-----ccggtgacaagttagcaac...1588...ttctcgttacag gaggatct
D.Ere attccatg gtaagactttg...1560...-tctctccttcgctg-----tggcca-----TAATTGTCAACA-----ataataaaagctcatgacaa-----...282...ttctcgttacag gaggatct
D.Ana attccatg gtaagagctctt...1393...-----aacattgtgttttttggcc-----TGCTa-TGCTGCTGTTG-----ttcggatgtgtgtgctgttc-----...648...ttatgctttcag gaggatct
D.Gri attctatg gtaagtacaata...361...-gtaaccgctgctgctgctgc-----TGTTGTTGTTGCTGCTGctGTTG-----ctgctgctgtgtgtctta-----...1917...ctctgcttttag gaggattt
D.Moj attccatg gtaagttgatgt...2074...-caaaaatgtcaatg-aa--ggcc-----TGTGTTGCTGCTgTTGTTGTTG-----tgcaagttgtgcccctgct-----...1253...cattgccacag gaggattt
D.Per attccatg gtaagagttttg...1576...-gtaacattgttggtgctctg-----GCTGTTGCTGTTG-----ctgttgctgttcggaatagc-----...1265...tctctttaatag gaggatct
D.Pse attccatg gtaagagttttg...1513...-aacattgttggtgctctg-----TGTTGCTGTTGCTGTT-----cgaatagccgatgctgctg-----...1187...tctctttaatag gaggatct
D.Vir attccatg gtaagttggcgt...2316...gttgctgccctgctg-tag-----TGTGTTGTTGTTGTTaTTGTTGcTGCTGcTGTttgggcatcataattccaatt-----...842...acctgcgcgag gaggattt
D.Wil attcgatg gtaagttccaaa...273...-ttgctgttgctattgctctt--GTTGcTGTGTTGTTGTTGTTGCT-----atggctgctccggtgacaa-----...1597...tgtcattatag gaggattt
D.Yak attccatg gtaagaacttt...1347...-----gtcaata-gatcttggaacaTTGTgGCTGTgTGTGCTGCTcTGTGCaGTTG--cttttaccattgcccagtt-----...474...ttctcgttgag gaggatct
**** ** ***** * ** *

```

id=65371 gene=FBgn0039411 name=dys segment=chr3R\_21907914\_21909793\_-1 type=IN VIEW

Figure 273: CS=7.2



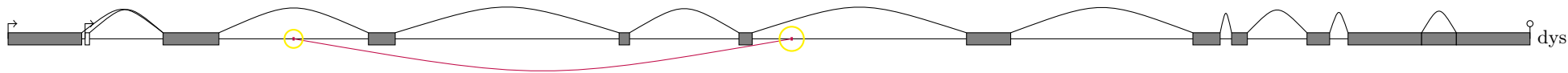
D.Mel	attccatg	gtaagtc	ttttg...	1059...	-----	aaattcactc	gtagc	catg	gccatg	TGTTg	GCATa	ATTACGGG	cacaata	aaaaac	ggaattg	...	739...	ttctcgt	tacag	gaggatct	
D.Sim	attccatg	gtaagtc	ttttg...	1075...	-----	aaattcgtc	gtagc	catg	gccatg	TGTTg	GCATa	ATTACGGG	cacaata	aaaaac	ggaattg	...	763...	ttctcgt	tacag	gaggatct	
D.Sec	attccatg	gtaagtc	ttttg...	1088...	-----	aaattcgtc	gtagc	catg	gccatg	TGTTg	GCATa	ATTACGGG	cacata	aaaaac	ggaattg	...	749...	ttctcgt	tacag	gaggatct	
D.Ere	attccatg	gtaagact	tttg...	1105...	-----	aaattcactc	gtagc	catg	gccatg	TGTTg	GCATa	ATTACGGG	cacaata	aaaaac	ggaattg	...	731...	ttctcgt	tacag	gaggatct	
D.Ana	attccatg	gtaagact	ctctt...	1187...	-----	tcagtcg	tacat	atg	gccatg	TGTTg	GCATa	ATTACGGG	cacaata	aaaaac	ggaattg	...	853...	ttatgct	tacag	gaggatct	
D.Moj	attccatg	gtaagtt	gatgt...	1865...	-----	taaattg	ctc	gtac	gccatg	TGTTg	GCATa	ATTA	---	cggcaca	ataact	gtgtgca	...	1470...	cattg	gccacag	gaggattt
D.Per	attccatg	gtaagag	ttttg...	1082...	aggggg	aaaaaactt	-----	tgcca	---	ATTGGC	--	AACCATG	--	acatttg	acagc	cttttggc	...	1759...	tctct	taaatag	gaggatct
D.Pse	attccatg	gtaagag	ttttg...	1041...	aggggg	aaaaaactt	-----	tgcca	---	ATTGGC	--	AACCATG	--	acatttg	acagc	cttctggc	...	1662...	tctct	taaatag	gaggatct
D.Vir	attccatg	gtaagtt	ggcgt...	2081...	-----	taaattg	tcg	tat	gccatg	TGTTg	GCATa	ATTA	---	cggcaca	ataact	gtctcaca	...	1098...	acctg	cgccag	gaggattt
D.Yak	attccatg	gtaagaa	acttt...	1119...	-----	aaattcactc	gtagc	catg	gccatg	TGTTg	GCATa	ATTACGGG	cacaata	aaaaac	ggaattg	...	717...	ttctcgt	tacag	gaggatct	
	*****	*****				*	*			****	****	**	*		*	*			**	*****	*

id=65371 gene=FBgn0039411 name=dys segment=chr3R.21907914.21909793.-1 type=IN

D.Mel	atcagaag	gtgagt	gttcaa...	1372...	--cattcact	cccaggc	-cggca	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	702...	-ctgtatt	tgca	gttgtcct					
D.Sim	atcagaag	gtgagt	gtcaat...	1357...	--cattcact	cccattgc	-cggca	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	671...	-ctgtatt	tgca	gttgtcct					
D.Sec	atcagaag	gtgaat	gtcaat...	1360...	--cattcact	cccattgc	-cggca	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	676...	-ctgtatt	tgca	gttgtcct					
D.Ere	atcagaag	gtgagt	gtcaat...	1392...	--cattcact	cccaggc	-cggca	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	682...	-ctgtact	tgca	gttgtcct					
D.Ana	atcagaag	gtgagt	taactg...	1348...	--cattcact	cccaggc	-tgga	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	718...	-ctccaatt	tgca	gttgtcct					
D.Moj	atcagaag	gtaagt	gcaata...	1569...	cacattc	ac-----	c-cggc	actcgt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	812...	-gttt	gttgca	gtcgtttt					
D.Per	atcaaaag	gtgagt	gaagag...	510...	----ccac	ctca	acacaca	caaaa	-----	TATGaa	GTTGTCAGT	gggtc	gtgtgg	caggca	agct...	1612...	tctgt	-cttgca	gttgttct				
D.Pse	atcaaaag	gtgagt	gaagag...	517...	----ccac	ctca	acacaca	caaaa	-----	TATGaa	GTTGTCAGT	gggtc	gtgtgg	caggca	agct...	1614...	tctgt	-cttgca	gttgttct				
D.Vir	atcagaag	gtgagt	gcaaca...	2243...	cacattc	ac-----	c-cggc	actcgt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	705...	-ttatt	tttgca	gtcgttct					
D.Yak	atcagaag	gtgagt	gtcaat...	1391...	--cattcact	accaggc	-cggca	CTCGt	TAATATGCAATA	-aaaat	ggaccaat	---	aaataa	-t...	688...	-gtgtatt	tgca	gttgtcct					
	****	***	**	*		***	*	**	****	**	*	***	*	*	**	*	*	*	*	*****	**	**	*

id=65373 gene=FBgn0039411 name=dys segment=chr3R.21905459.21907613.-1 type=IN VIEW

Figure 274: CS=6



```

D.Mel  tttacaag gtaagttcttag...3778...----tgttaacatggccatttaga----GGCAATAACAgCGGCAA-----aatggcagac-agtcgaacga...1130...tctccattgcag attcgatg
D.Sec  tttacaag gtaagttcttag...3799...----tgttaacatggccatttaga----GGCAATAACAgCGGCAA-----aatggcagac-agtcgaacga...1109...tccccattgcag attcgatg
D.Ere  tttacaag gtaagttcttag...3767...----tgttaacatggccatttaga----GGCAATAACAgCGGCAA-----aatggcagac-agtcgagcga...1141...taaccattgcag attcgatg
D.Ana  tttacaag gtaagttcttag...3723...----acgc-agtgagattgttttaa-----ATGTTAACA-TGGC-catttagaggtaataacagc...1189...ttccattgcag gttcgatg
D.Gri  tttacaag gtaag-tcttagc...3619...----tgttaacatggccatttaga----GGCAATAACAgCGGCAA-----aatggcagtc--ccagactga...1290...ttgccattgcag attcgatg
D.Moj  tttacaag gtaag-tcttagc...3270...----catgt--gtgtgattgttttaa-----ATGTTAACA-TGGC-catttagaggcaataacagc-----...1642...cgtctttgtag attcgatg
D.Per  tttacaag gtaagttcttag...3250...----aagcAAAAagg-cgCGGCaCTTGctGTTATtaCAACaATATtaccaatatttcaaaagct-----...1653...gctcCGTtag gttcgatg
D.Pse  tttacaag gtaagttcttag...3150...ttaaagttaacatggccat----TTAGAGGCAATAACAGCGG-----caaaatggcagac-agtcgac----...1756...gctcCGTtag gttcgatg
D.Vir  tttacaag gtaag-tcttagc...3519...----catgt--gtgtgattgttttaa-----ATGTTAACA-TGGC-catttagaggcaataacagc-----...1393...tgcctttgtag gttcgatg
D.Yak  tttacaag gtaagttcttag...3809...----tgttaacatggccatttaga----GGCAATAACAgCGGCAA-----aatggcagacaagtcgaacg...1099...tatacattgcag attcgatg
***** * **** * **** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=65365 gene=FBgn0039411 name=dys segment=chr3R\_21914070\_21921910\_-1 type=IN

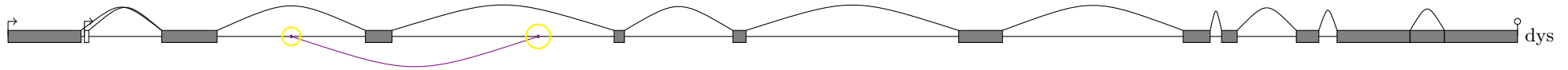
```

D.Mel  attccatg gtaagtcctttg...220...----cagttttgtgctgtactag-----TTGCTGATGTTGTTGCTgctcccgttgacaagtttag-----...1579...ttctcgttacag gaggatct
D.Sec  attccatg gtaagtcctttg...247...ggtgcagttttt---tgtagtag-----TTGCTGATGTTGTTGCTgctcccgttgacaagtttag-----...1591...ttctcgttacag gaggatct
D.Ere  attccatg gtaagactttgc...219...----ccgttttgtgctgtactag-----TTGCTGATGTTGTTGCTgctcccgttgacaagtttag-----...1618...ttctcgttacag gaggatct
D.Ana  attccatg gtaagagctctt...1181...----ataaattcagtcgtacatatGCCATGtgTTGGCAT-----aattacgggcacaa--taaaaa-----...862...ttatgctttcag gaggatct
D.Gri  attccatg gtaagtacaata...355...----aactttgtaacCGctgtcgc-----TGCTGCTGTTGTTGCTgctg-----ctgctgttctgctgc-----...1930...ctctgcttttag gaggatct
D.Moj  attccatg gtaagttgatgt...1859...agttcAAAA-ttgctcgtac-----GCCATGtgTTGGCAT-----aattac-ggcacaa--taactgt-----...1475...cattgccacag gaggatct
D.Per  attccatg gtaagagttttg...1294...----cataaatttactcgtatgcc---ATGTGTTGgcATAATtaCGGG-----cacia--taaacggaattggg-----...1539...tctcttaaatag gaggatct
D.Pse  attccatg gtaagagttttg...335...--ttaaAAactcggcgtcatt-----TTGCTGTTGTTGCTgtTTTAG-----ttttgttgttgttttt...2360...tctcttaaatag gaggatct
D.Vir  attccatg gtaagttggcgt...2075...agttcAAAA-ttgctcgtat---GCCATGtgTTGGCAT-----aattac-ggcacaa--taactgc-----...1103...acctgcgcgag gaggatct
D.Yak  attccatg gtaagaacttt...227...----cactttttgtgctgtactag-----TTGCTGATGTTGTTGCTgctcccgttgacaagtttag-----...1610...ttctcgttgag gaggatct
**** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=65371 gene=FBgn0039411 name=dys segment=chr3R\_21907914\_21909793\_-1 type=IN VIEW

Figure 275: CS=9



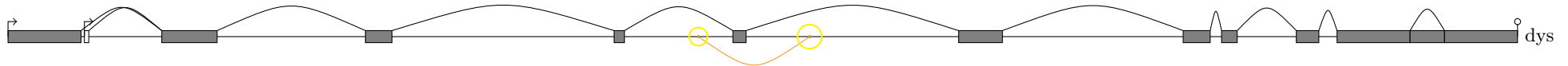
D. Mel	tttacaag	gtaagttcttag-...3778...	-tgттаacatggccatttaga-----	GGCAATAACAGCGGCAAAATGGcaGACAGT	--cgaacgaggaaagcAAAAA...1117...	tctccattgcag	attcgatg	
D. Sec	tttacaag	gtaagttcttag-...3799...	-tgттаacatggccatttaga-----	GGCAATAACAGCGGCA	---aaatggca-----gacagtcgaacg...	1110...	tcccattgcag	attcgatg
D. Ere	tttacaag	gtaagttcttag-...3767...	-tgттаacatggccatttaga-----	GGCAATAACAGCGGGC	---aaaatggca-----gacagtcgagc-	1143...	taaccattgcag	attcgatg
D. Ana	tttacaag	gtaagttcttag-...3753...	-----ggccatttagaggttaataac-	AGCGGCAAAaTGGCAG	---ac-agtcga-----gaaagcAAAAA...	1156...	ttccattgcag	gttcgatg
D. Gri	tttacaag	gtaag-tcttagc...4116...	---cacaacgacaacaacatcgt-----	CAGCAACAACAGCAACAGTA	---agaacaacagc---aacaactag---	789...	ttgccattgcag	attcgatg
D. Moj	tttacaag	gtaag-tcttagc...3104...	---ggatgctggcca---agaaacca	ACAACtaCAACAACAACAACA	-----caca---caaaatcgacggttc---	1800...	cgctctttgcag	attcgacg
D. Per	tttacaag	gtaagttcttag-...3182...	-tgттаacatggccatttaga-----	GGCAATAACAGCGGGC	---aaaatggca-----gacagtcgaca-	1728...	gctccgttgcag	gttcgatg
D. Pse	tttacaag	gtaagttcttag-...3155...	-tgттаacatggccatttaga-----	GGCAATAACAGCGGGC	---aaaatggca-----gacagtcgaca-	1755...	gctccgttgcag	gttcgatg
D. Vir	tttacacg	gtaag-tcttagc...3540...	-tgттаacatggccatttaga-----	GGCAATAaCAGCGGCAAAaTGGCAGT	ccccgtctga---gaaagccaga-	1359...	tgcttttgcag	gttcgatg
D. Wil	tttacaag	gtaagttcttag-...2974...	atgттаacatggccatttag-----	AGGCAATAACAGCGGCA	---aaaatggca-----gacaatcgacat...	1934...	tttttttgcag	attcgatg
D. Yak	tttacaag	gtaagttcttag-...3809...	-tgттаacatggccatttaga-----	GGCAATAACAGCGCAAAATGGCAG	---acaagtcgaacgaggaaagc-----	1091...	tatacattgcag	attcgatg
	***** *	***** *****	* * *	* * *	* * *	*****	***** *	***** *

id=65365 gene=FBgn0039411 name=dys segment=chr3R\_21914070\_21921910\_-1 type=IN

D. Mel	ccagcaag	gtaagttgcagc...1407...	-----ttgggtg-tgctttcgctgcc---	GCTGTTaCTGTTGCTGTTGTTGTTGTT	-----cattgtcattgcaccgttta...	1487...	ccctcgttgcag	ttttcaaa
D. Sec	ccagcaag	gtaagttgcagc...1411...	-----gggtg-tgctttcgctgctgc---	TGCTGCTGTTGTTGTT	-----gttcattgtcattgcaccgt---	1444...	ccctcgttgcag	ttttcaaa
D. Ere	ccagcaag	gtaagttgcagc...1395...	ggttatttgggtg-tgctttc-----	GCTGCTGTTGTTGTT	-----cattgtcattgcaccgttta...	1391...	ctctcgttgcag	ttttcaaa
D. Ana	ccaacaag	gtaagtccgcaa...1343...	-----gctgttgctgttgtgctca---	TTGTCATTGC-acCGTT	-----taaagcatttataatcaca---	1538...	caatccttgcag	ttttcaaa
D. Gri	tcaacaag	gtgagtgagtc...1027...	-----gtttgctcagctctgtgtgtg---	TGTTGTTCTTTGTTGTTG	---ttattgttcattgtcattgc-----	1433...	tttcattgcag	tatttaag
D. Moj	ccaacaag	gtgagtgcaaaa...2180...	-----gccgcagtgattgtgtgtgc---	TGTTGTTGTTGTTGCTGTTGT	-----gactgtttctgtttggcttt...	544...	tctattttgcag	ttttcaag
D. Per	tcaacaag	gtaagcgcgccga...1039...	-----gggtg-tgttgttctgcccgtg---	GCTGTTGTTATTGTT	-----cattgtcattgcaccgttta...	1982...	atttcattgcag	tatttaag
D. Pse	tcaacaag	gtaagcgcgccga...1058...	-----gggtg-tgttgttctgcccgtg---	GCTGTTGTTATTGTT	-----cattgtcattgcaccgttta...	1992...	atttcattgcag	tatttaag
D. Vir	tcaacaag	gtgagtgagtg...2218...	-----aatgattgtttagctagca	GTTGTTGTTGCTGCTGCTGTTGCT	gctgctgatgtgactgtttc-----	545...	attttttgcag	tcttcaag
D. Wil	tcaacaag	gtaacaacaaaa...2651...	-----gctgctgttctgttctgctgc---	TGCTGCTGTTGTTGCTGCT	gttctgtgggtagttgcctt-----	667...	ttatttttgcag	ttttcaag
D. Yak	ccagcaag	gtaagtttgggt...1523...	-gttatttgggtg-tgctttc-----	CTGCTGTTGCTCTTGTGTTGTT	-----gttcattgtcattgcaccgt---	1442...	cttcattgcag	ttttcaaa
	** ** ** *	** ** *		* ** *		*****	*****	* ** **

id=65367 gene=FBgn0039411 name=dys segment=chr3R\_21910903\_21913887\_-1 type=IN VIEW

Figure 276: CS=9.9



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D.Mel tctcaaag gtaagcatttaa...665...attagtgtcagacgcgaaaATGAATTGCATTTCcgacacaag-attcaattta-...205...tttgtcttacag gcactctc
D.Sim tctcaaag gtaagaatttaa...648...attagtgtcagacgcgaaaATGAATTGCATTTCcgacacaag-attcaatttat...196...tttgtattgcag gcactttc
D.Sec tctcaaag gtaagagtttaa...637...attagtgtcagacgtgaaaATGAATTGCATTTCcgacacaag-attcaatttat...196...tttgtcttacag gcactctc
D.Ana tctcaaag gtaagcttcgct...683...attagtgtcagacgtgaaaATGAATTGCATTTCcaacacatg-attcaattta-...206...tttgtcttacag gcactctc
D.Gri tctcgaag gtaagaatatta...767...attagtgtgcagacgcgaaaATGAATTGCATTTC-cacacacat-tgttagccaac...264...tttgtattgcag gcactttc
D.Per tctcgaag gtaagaaactga...648...attagtgtgcagacgcgaaaATGAATTGCATTTCcaacacaag-attcaattta-...854...tttgtcttcag gcactttc
D.Pse tctcaaag gtaagaaactga...646...attagtgtgcagacgcgaaaATGAATTGCATTTCcaacacaag-attcaattta-...802...tttgtcttcag gcactttc
D.Wil tctcaaag gtaagcaaaagt...766...attagtgtgcagacgcgaaaATGAATTGCATTTCcaacacaaatagccaagt--...974...accttattgcag gcactttc
D.Yak tctcaaag gtaagaaagcaa...661...attagtgtcagacgcgaaaATGAATTGCATTTCcgacacaag-attcaattta-...198...tttgtattgcag gcactctc
**** ** ***** * ***** * ***** * ***** * ***** * ***** * ***** * ***** *

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id=65369 gene=FBgn0039411 name=dys segment=chr3R.21909884.21910831\_-1 type=IN

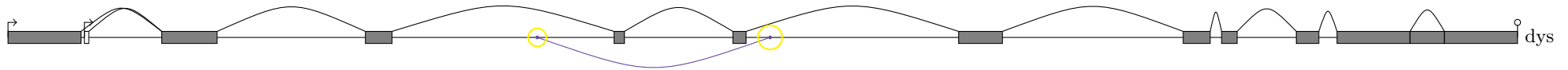
```

D.Mel attccatg gtaagcttttg...389...-attgcacgcttataccgcttAAATAGCAAGgTTATacatgtggatataatata...1412...ttctcgttacag gaggatct
D.Sim attccatg gtaagcttttg...402...tattgcacgcttatgccgctTAAATAGCAAGgTTATacatgtggaaatataatata...1438...ttctcgttacag gaggatct
D.Sec attccatg gtaagcttttg...415...tattgcacgcttatgccgctTAAATAGCAAGgTTATacatgtggaaatataatata...1424...ttctcgttacag gaggatct
D.Ana attccatg gtaagagctctt...442...-attgcacgctttacgccgcttAAATAGCAAGgTTATacatagaggagtataatata...1601...ttatgctttcag gaggatct
D.Gri atttcatg gtaagtacaata...455...-atgcacgctttacgctgcttAAATAGCAAGgTTATacatcgtggcctttcacttt...1831...ctctgcttttag gaggatct
D.Per attccatg gtaagagtttg...447...-attgcacgctttatgctgcttAAATAGCAAGgTTATacatatctaaataaacttat...2392...tctctttaatag gaggatct
D.Pse attccatg gtaagagtttg...424...-attgcacgctttatgctgcttAAATAGCAAGgTTATacatatctaaataaacttat...2277...tctctttaatag gaggatct
D.Wil attcgaag gtaagttccaaa...484...-atgcacgctttacgctgcttAAATAGCAAGgTTATatatacatatatacataa...1395...tgtcatttatag gaggatct
D.Yak attccatg gtaagaaacttt...398...-attgcacgctttatgccgcttAAATAGCAAGgTTATacatgtgcaagtacatata...1441...ttctcgttcag gaggatct
**** ** ***** * ***** * ***** * ***** * ***** * ***** * ***** *

```

id=65371 gene=FBgn0039411 name=dys segment=chr3R.21907914.21909793\_-1 type=IN VIEW

Figure 277: CS=5.4



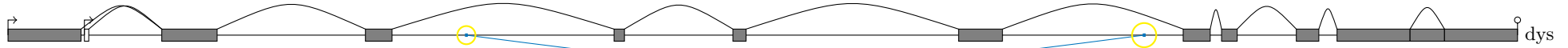
D. Mel	ccagcaag	gtaagttgcagc...	1409...	-----	gggtgtgctttc--gctgcccgc		<b>TGTTaCTGTTGCTGTTGTTG</b>	-----	ttgttcattgtcattgcacc-----	...1492...	ccctcgttcgag	ttttcaaa
D. Sim	ccagcaag	gtaagttgcagc...	1394...	-----	gtgctttc--gctgctgctgct	<b>I</b>	<b>TTGCTGTTGTTGTTGTT</b>	-----	cattgtcattgcaccg-ttta-----	...1467...	ccctcgttcgag	ttttcaaa
D. Sec	ccagcaag	gtaagttgcagc...	1411...	-----	gggtgtgctttc--gctgctgctg		<b>TGCTgcTGTGTTGTTGTT</b>	-----	cattgtcattgcaccg-ttta-----	...1441...	ccctcgttcgag	ttttcaaa
D. Ere	ccagcaag	gtaagttgcagc...	2155...	-----	atgaataccagttgctggt		<b>TGCTgcTGTGCaGTTGCTGCTGCTGCTGCTG</b>	-----	ccgctgctgctgcagttggt-----	...614...	ctctcgttcgag	ttttcaaa
D. Ana	ccaacaag	gtaagtccgcaa...	1318...	-----	ctattgcta-ttgctattgccc		<b>GTGTTGCTGTTGCTGTTGTTGc</b>	-----	tcattgtcattgcaccg-ttt-----	...1557...	caatcttcgag	ttttcaaa
D. Gri	tcaacaag	gtgagtggagtc...	2087...	-----	gctggtgattttcgctttg		<b>TGTTgcTGTGTTGCTGTTGCTGTTGATGTTG</b>	-----	ctgcccgttgacagttgatgct-----	...361...	tttcattgcag	tatttaag
D. Moj	ccaacaag	gtgagtggcaaa...	2170...	-----	tgcggtgctg--ccgcaagtg		<b>TTGTTGTTGcTGTGTTGTTGTTGCTGTTGTTG</b>	-----	actgtttctgtttggctttt-----	...543...	tctattttgcag	ttttcaag
D. Per	tcaacaag	gtaagcgcggca...	2398...	caagttcaatga	aattacca		<b>GTTCgGTTGCTGTTGCTGCTGCTGCTGTTG</b>	-----	ctggtgcagtgattgtggcc-----	...607...	atctcattgcag	tatttaag
D. Pse	tcaacaag	gtaagcgcggca...	2430...	-----	aattaccagttgctggtgct		<b>GTTGc--TGCTGCTGCTGCTGTTG</b>	-----	ctggtgcagtgattgtggcc-----	...613...	atctcattgcag	tatttaag
D. Vir	tcaacaag	gtgagtggagtg...	2218...	aatgattgtt	gtagctagca		<b>GTTGTTGTTGCTGcTGCTGTTGCTGcTGCTG</b>	-----	atgtgactgtttct-tttgcc-----	...538...	atctcattgcag	tcttcaag
D. Wil	tcaacaag	gtaacaacaaaa...	2636...	-----	gttgctgctgattg--tgctg		<b>TGTTGCTGTTGcTGCTGcTGCTGTTGTT</b>	-----	tgctgctgctgggtagtt-----	...672...	ttattttgcag	ttttcaag
D. Yak	ccagcaag	gtaagtttggtt...	1524...	ttatttgggtg	gctttc--gc		<b>TGCTGTTGCTcTGTGTTGTTGTTcaTTGT</b>	-----	cattgcaccg-tttaaagca...	1433...	ctctcattgcag	ttttcaaa
	** **	** **	** *				* * * * *		*		*****	* ** **

id=65367 gene=FBgn0039411 name=dys segment=chr3R\_21910903\_21913887\_-1 type=IN

D. Mel	attccatg	gtaagtcttttg...	115...	-----	cagagcatgtcatagtctcc-----	<b>TAACAGCAG</b>	<b>CAGCAGcAAcA</b>	-----	taagc-gcagca-gcaacatca-----	...1681...	ttctcgttacag	gaggatct
D. Sim	attccatg	gtaagtcttttg...	56...	-----	aatcgttgatacaaatctct-----	<b>GACA</b>	<b>AgCGACAACaGGCAAA</b>	-----	cgacgatgcctgtcgtcgtc-----	...1780...	ttctcgttacag	gaggatct
D. Sec	attccatg	gtaagtcttttg...	56...	-----	aatcgttgatacaaatctct-----	<b>GACA</b>	<b>AgCGACAACAGGCA</b>	-----	aaacgacgatgcctgtcgtc-----	...1781...	ttctcgttacag	gaggatct
D. Ere	attccatg	gtaagactttg...	117...	-----	agcatgtcatagtctcctaa-----	<b>CAGCAGCAGC</b>	<b>AGCAGCAGCaGCAACaAGCG</b>	-----	cagcagca-gcaacataagtg-----	...1705...	ttctcgttacag	gaggatct
D. Ana	attccatg	gtaagactctt...	157...	-----	cagagcatgtcatagagtct-----	<b>GCAAC</b>	<b>AGCAGCAACAGCAACAT</b>	-----	ttgcccgaaca-gcaacagca-----	...1879...	ttatgctttcag	gaggatct
D. Gri	attcctatg	gtaagtacaata...	142...	-----	acagacaacaacagcaacat-----	<b>CGATGTCGACT</b>	<b>CAGCAGCAGCAACAAcAAATA</b>	-----	tttgtt-----gagttttgtgtt-----	...2127...	ctctgcttttag	gaggatct
D. Moj	attccatg	gtaagttgatg...	2000...	-----	aaaacgcagtagcagccac-----	<b>TGCAACAGCAAA</b>	<b>AGCAACAGCAaCAACAAcAA</b>	-----	gcaagtttaattaacaact...	1317...	cattgccacag	gaggatct
D. Per	attccatg	gtaagacttttg...	1467...	-----	gctacgactgcgacaaccca	<b>CAACg</b>	<b>AGCAGCAGCAGC</b>	-----	agcaacaactacagcgaag-----	...1355...	tctcttaatag	gaggatct
D. Pse	attccatg	gtaagacttttg...	1420...	-----	gctacgactgcgacaaccca	<b>CAACg</b>	<b>AGCAGCAGCAcCAAC</b>	-----	tacagcgaagtttaattaac-----	...1273...	tctcttaatag	gaggatct
D. Vir	attccatg	gtaagttggcgt...	2204...	gtaaacggc	caaacggcag		<b>CAGCAcAGCAAC</b>	-----	agcaaacagcagcaaac-----	...958...	acctgcgagcag	gaggatct
D. Wil	attccatg	gtaagttccaaa...	187...	-----	tgctatagagccaatagct		<b>GCAGCAGCAcC</b>	-----	accacaata-gcaacatatt-----	...1680...	tgctcattatag	gaggatct
D. Yak	attccatg	gtaagaacttt...	128...	-----	catgtcatagtctcctaaca		<b>GCAGcAACAGCAGC</b>	-----	acatcagcagca-gcaacatt-----	...1696...	ttctcgttcgag	gaggatct
	**** *	*****			*		* * * * *		*		** ***** *	

id=65371 gene=FBgn0039411 name=dys segment=chr3R\_21907914\_21909793\_-1 type=IN VIEW

Figure 278: CS=7.2



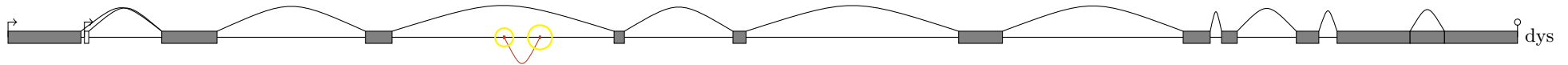
D.Mel	ccagcaag	gtaagtgcagc...	923...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataggcccat...	1978...	ccctcgttgcag	ttttcaaa
D.Sim	ccagcaag	gtaagtgcagc...	887...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataggcccat...	1972...	ccctcgttgcag	ttttcaaa
D.Sec	ccagcaag	gtaagtgcagc...	908...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataggcccat...	1943...	ccctcgttgcag	ttttcaaa
D.Ere	ccagcaag	gtaagtgcagc...	909...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataggcccat...	1872...	ctctcgttgcag	ttttcaaa
D.Ana	ccaacaag	gtaagtccgcaa...	798...	----gtttgctggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataagcccat...	2079...	caatcttgcag	ttttcaaa
D.Gri	tcaacaag	gtgagtggagtc...	1818...	----tattaaaacactgcacaaaat-----	CTGACTgCATTACATGG	cctttccg	ttcaagttcaat-----	646...	tttccattgcag	tatttaag
D.Moj	ccaacaag	gtgagtggcaaa...	514...	----ctttctggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataagcccca...	2211...	tctatttgcag	ttttcaag
D.Per	tcaacaag	gtaagcgcccga...	2398...	caagttcaatga--aattacca	GTTGCGGTTGCTGTTGCTGCTGCTGCTGTTGC	---tg	ttgcagtgattgtggccc--...	606...	atttattgcag	tatttaag
D.Pse	tcaacaag	gtaagcgcccga...	2427...	----tga--aattaccagttgcggtt	GCTGTTGCTGCTGCTGCTGCTGCTGTTGC	gtttgct	gttgcagtgattg-----	618...	atttattgcag	tatttaag
D.Vir	tcaacaag	gtgagtggagtg...	517...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataagacca...	2250...	atttttgcag	tcttcaag
D.Yak	ccagcaag	gtaagtttggtt...	993...	----ttttgtggataattacgaaa-----	ATTGTTTTTCaAATTAGCGT	-----tg-tg	tgcggtacataggcccat...	1975...	ctctcattgcag	ttttcaaa
	** ****	** **		* * * *	* * *		** **		*****	* ** *

id=65367 gene=FBgn0039411 name=dys segment=chr3R.21910903.21913887\_-1 type=IN

D.Mel	atcagaag	gtgagtgttcaa...	1838...	----gggtcgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ccgagtcgacgagcct...	232...	ctgtatttgcag	gttgtcct
D.Sim	atcagaag	gtgagtgtcaat...	1792...	----gggtcgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ccgagtcgacaagcct...	232...	ctgtatttgcag	gttgtcct
D.Sec	atcagaag	gtgaatgtcaat...	1800...	----gggtcgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ccgagtcgacgagcct...	232...	ctgtatttgcag	gttgtcct
D.Ere	atcagaag	gtgagtgtcaat...	1833...	----gggtcgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ccaagtcgacgagcct...	237...	ctgtacttgcag	gttgtcct
D.Ana	atcagaag	gtgagtacactg...	1757...	----gggacgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ttgcactgcagctctg...	305...	ctccaattgcag	gttgtcct
D.Gri	atcagaag	gtgagtgaaca...	1763...	aaaaatggaccaataaataa	TTATGAATgAGG	-----TCAG	catagtt---	cagtggtagtacc...	721...	ttgcgcttacag	gtcgttct
D.Moj	atcagaag	gtaagtgcata...	1984...	----atggaanaactaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	cgactccgactgaga---	388...	gtttgttgcag	gtcgttct
D.Per	atcaaaag	gtgagtgaagag...	1370...	----aatccaagcgcattcactc	GC---AGTCAGCAGGCAGgCAGCAGTcAGCAGT	caggca---	ggcacactcgtaa---	737...	tctgt-cttgcag	gttgttct	
D.Pse	atcaaaag	gtgagtgaagag...	1385...	----aatccaagcgcattcactc	GC---AGTCAGCAGG	-----CAGCAGT	caggca---	ggcacactcgtaa---	742...	tctgt-cttgcag	gttgttct
D.Vir	atcagaag	gtgagtgaaca...	2631...	----atggaagctaattgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	gagccttgcagctgaga---	308...	ttattttgcag	gtcgttct
D.Yak	atcagaag	gtgagtgtcaat...	1829...	----gggtcgaataaatgcaggc	ACGTTtAATTGGGAGA	-----CAAT	---ggct---	ccaagtcgacgagcct...	246...	gtgtatttgcag	gttgtcct
	**** **	** * *		**	* **		** *		**	* ** **	** ** *

id=65373 gene=FBgn0039411 name=dys segment=chr3R.21905459.21907613\_-1 type=IN VIEW

Figure 279: CS=6.6



D. Mel	ccagcaag	gtaagttgcagc...	1183...	agtcgggccaggcaatttca	-----	CAATtGCAATGGTAACAACGAGCG	-----	tctgcctggcattgctataa...	1714...	ccctcgttgtag	ttttcaaa		
D. Sim	ccagcaag	gtaagttgcagc...	1408...	gctgcttttgctgttgtgt	-----	TGTTcATTGTCATTG	-----	caccgtttaaagcatttat...	1456...	ccctcgttgtag	ttttcaaa		
D. Sec	ccagcaag	gtaagttgcagc...	1175...	agtcgagccaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacgagc-gtctgcctggca	...	1681...	ccctcgttgtag	ttttcaaa	
D. Ere	ccagcaag	gtaagttgcagc...	1162...	agtcgagccaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacgagcctctctgctgg	-----	...	1624...	ctctcgttgtag	ttttcaaa
D. Ana	ccaacaag	gtaagtcgcaa...	1044...	togcgttttgccaatttca	-----	CAATtGCAATGGTAACA	-----	acgagc-gtctgcctggcatt	-----	...	1836...	caatcttgtag	ttttcaaa
D. Gri	tcaacaag	gtgagtgagtc...	747...	cctgctcaaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacaaa-gtctgcctgcat	-----	...	1718...	tttcattgtag	tatttaag
D. Moj	ccaacaag	gtgagtgagcaaa...	747...	ccttagccaagcaatttca	-----	CAATTGCAATGGTAA	-----	caacagc-gtctgcctgcat	-----	...	1983...	tctattttgtag	ttttcaag
D. Per	tcaacaag	gtaagcggcga...	807...	tctggggccaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacgagc-gtctgcctggca	-----	...	2214...	atttcattgtag	tatttaag
D. Pse	tcaacaag	gtaagcggcga...	826...	tctggggccaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacgagc-gtctgcctggca	-----	...	2224...	atttcattgtag	tatttaag
D. Vir	tcaacaag	gtgagtgagtc...	733...	cttagccaagcaatttca	-----	CAATTGCAATGGTAA	-----	caacaac-gtctgcctgcat	-----	...	2039...	attttttgtag	tcttcaag
D. Wil	tcaacaag	gtaacaacaaaa...	1053...	caaaagactaggcaatttca	-----	CAATtGCAATGgtAACAAACAGCA	-----	acaactaccaccaccaacaa	-----	...	2259...	ttattttgtag	ttttcaag
D. Yak	ccagcaag	gtaagtttggtt...	1288...	agtcgagccaggcaatttca	-----	CAATTGCAATGGTAA	-----	caacgagc-gtctgcctggca	-----	...	1685...	ctctcattgtag	ttttcaaa
		** ****	** *		*	***		*		*****	* ** **		

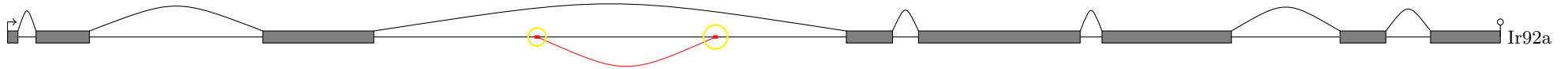
id=65367 gene=FBgn0039411 name=dys segment=chr3R.21910903.21913887\_-1 type=IN

D. Mel	ccagcaag	gtaagttgcagc...	1418...	ttcgtgcccgtgttactgt	TGCTgt	TGTTGTTGTTcATTGt	ATTG	caccgtttaaagcatttat--	...	1476...	ccctcgttgtag	ttttcaaa
D. Sim	ccagcaag	gtaagttgcagc...	2549...	ttgt	-----	TAGTGACAATGACA	----	cattttc--tttttgtgattca...	...	316...	ccctcgttgtag	ttttcaaa
D. Sec	ccagcaag	gtaagttgcagc...	2250...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgctggttgagttgctgct--	...	605...	ccctcgttgtag	ttttcaaa
D. Ere	ccagcaag	gtaagttgcagc...	2141...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgctggttgagttgctgct--	...	644...	ctctcgttgtag	ttttcaaa
D. Ana	ccaacaag	gtaagtcgcaa...	1293...	ttatttgggtgtgctgttc	-----	TGTTGCTA	TTGc	ATTGctattgccc-gtggctgttg-	...	1587...	caatcttgtag	ttttcaaa
D. Gri	tcaacaag	gtgagtgagtc...	1858...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgcctcagtgattgttatt--	...	606...	tttcattgtag	tatttaag
D. Moj	ccaacaag	gtgagtgagcaaa...	2142...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgcccagtgattgttatt--	...	587...	tctattttgtag	ttttcaag
D. Per	tcaacaag	gtaagcggcga...	2392...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgttgctgctgctgctgtt--	...	628...	atttcattgtag	tatttaag
D. Pse	tcaacaag	gtaagcggcga...	2412...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgttgctgctgctgctgtt--	...	637...	atttcattgtag	tatttaag
D. Vir	tcaacaag	gtgagtgagtc...	2175...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgcccagtgattgttatt--	...	596...	attttttgtag	tcttcaag
D. Wil	tcaacaag	gtaacaacaaaa...	1316...	gtatgtctgtgtgtgctgg	-----	TGTTGTTGTTcATTGt	ATTG	caccgtttaaagcatttat--	...	1998...	ttattttgtag	ttttcaag
D. Yak	ccagcaag	gtaagtttggtt...	2313...	-----	tccgttcaagttcaatgaaa--	TTACCAg	TTGCGGTTG	ctgctggttgagttgctgct--	...	659...	ctctcattgtag	ttttcaaa
		** ****	** *		*	*	*	*		*****	* ** **	

id=65367 gene=FBgn0039411 name=dys segment=chr3R.21910903.21913887\_-1 type=IN VIEW

Figure 280: CS=7.2





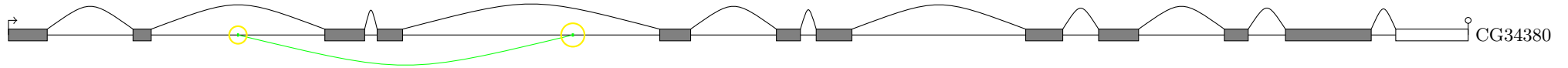
D.Mel	gcctgctc	gttggctccatt...422...	cagagattg	cacgccaaca	TTAAGC	-AAAgc	CAATTGG	tcgtcctt	gctcccatttac...1057...	--aaccattg	cag	cccgctgg	
D.Sim	gcctgctc	gttggctccatt...383...	cagagattg	cacgccaaca	TTAAGC	-AAAgc	CAATTGG	tcgtcctt	gctcccatttac...1044...	--aaccattg	cag	cccgctgg	
D.Ana	gcctgctc	gttggctccatt...304...	cagagattg	cacccaaca	TTAAGC	-AAAgc	CAATTGG	tcgtcctt	gctcccatttac...939...	-caccgc	-ttccag	ccagctgg	
D.Gri	cactgctc	ctaggctccatt...902...	cagagattg	cacgccggca	TTAAGC	-AAAgc	CAATTGG	tcaacctc	agcagcctcatc...1429...	ctcaa	--tcg	cag	gcagctgg
D.Moj	cgctacgc	ctcggctccatt...195...	ttgagattg	cacgaggca	TTAAGC	-AAAgc	CAATTGG	tcgtcctc	gccacaatgttg...1071...	--gcaact	tcacag	gcagctgg	
D.Per	ccctgctc	ttgggctccatt...144...	cagagattg	cacgccaaca	TTAAGC	-AAAgc	CAATTGG	ttgtcctc	gcactgcactc...1487...	--acggtact	gcag	ccagctgg	
D.Pse	ccctgctc	ttgggctccatt...144...	cagagattg	cacgccaaca	TTAAGC	-AAAgc	CAATTGG	ttgtcctc	gcactgcactc...1499...	--acggtact	ccag	ccagctgg	
D.Vir	cgcttcgc	ctcggctccatt...154...	tagagattg	cacgccggca	TTAAGC	-AAAgc	CAATTGG	tcgtcctc	caccagcctcgt...923...	--tcaact	taacag	gcagctgg	
D.Wil	cactgcga	atgggctccatt...162...	gagagattg	caagccaaca	TTAAGCAAAAGC	CAATTG	tcgttgtc	ccctcttctt	...1192...	--tcaatt	catcag	gcagctgg	
	** *	* *****	*****	*	*****	*****	*			***	* ****		

id=44452 gene=FBgn0038789 name=Ir92a segment=chr3R.16166179.16167739.1 type=IN

D.Mel	gcctgctc	gttggctccatt...1136...	ggcaaaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...344...	--aaccattg	cag	cccgctgg	
D.Sim	gcctgctc	gttggctccatt...1078...	ggcaaaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...350...	--aaccattg	cag	cccgctgg	
D.Ana	gcctgctc	gttggctccatt...863...	---aaaag	tttgttcg	cactcc	ATTGTTG	CCTAA	ggacattt	gcacatttgtaa...381...	-caccgc	-ttccag	ccagctgg	
D.Gri	cactgctc	ctaggctccatt...1999...	ggtggaag	tttgttcac	ac	TCAATTGTTG	CCTAA	ggacattc	gcacatttgtaa...333...	ctcaa	--tcg	cag	gcagctgg
D.Moj	cgctacgc	ctcggctccatt...917...	ggtggaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...350...	--gcaact	tcacag	gcagctgg	
D.Per	ccctgctc	ttgggctccatt...1241...	ggcaaaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...391...	--acggtact	gcag	ccagctgg	
D.Pse	ccctgctc	ttgggctccatt...1246...	ggcaaaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...398...	--acggtact	ccag	ccagctgg	
D.Vir	cgcttcgc	ctcggctccatt...795...	gctgaaag	tttgttcg	cac	TCAATTGTTG	CCTAA	ggacattc	gcacatttgtaa...283...	--tcaact	taacag	gcagctgg	
D.Wil	cactgcga	atgggctccatt...989...	ga-gaaag	tttgttcg	cact	CAATTGTTG	CCTAA	ggacattt	gcacatttgtaa...367...	--tcaatt	catcag	gcagctgg	
	** *	* *****	*****	*****	*****	*****	*****	**	*****	***	* ****		

id=44452 gene=FBgn0038789 name=Ir92a segment=chr3R.16166179.16167739.1 type=IN VIEW

Figure 281: CS=10.8



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D.Mel catgcaag gtaagttggcca...2541...aactctggcaataacaataaTTAAAGTCAAGTTGAaaggcacataactgcggata----...1064...ccttttttcag actgaaaa
D.Ere catgccag gtaagctggccc...2465...aactctggcaataacaataaTTAAAGTCAAGTTGAaaggcacataactgcggata----...988...gcctctttcag actgaaaa
D.Gri cacgcaag gtgagttcatat...3095...aactttggcaataacaataaTTAAAGTCAAGTTGaaatgcacataacggcggac----...1412...ctttcgttcag actgaaaa
D.Moj catgcaag gtgagttcgga...2475...-----ttgatataacaataaTTAAAGTCAAGTTGaaatgcacataactgcggat----...2436...tttattttgag actgaaaa
D.Per catgcaag gtaagtctcgct...2728...aacttgggcaataacaataaTTAAAGTCAAGTTGAATGcacataaccgaggatattag...1046...tttccgccgag actgaaaa
D.Pse catgcaag gtaagtctcgct...2687...aacttgggcaataacaataaTTAAAGTCAAGTTGAATGcacataaccgaggatattag...1057...tttccgccgag actgaaaa
D.Vir cacgcaag gtgagttatgt...3157...aactttggcaataacaataaTTAAAGTCAAGTTGaaatgcacataactgcggat----...1754...gactctttgag actgaaaa
D.Wil catgcaag gtgagttttgt...2720...aactttggcaataacaataaTTAAAGTCAAGTTGAATGcacataactgcggatattag...2186...tctcttttgag actgaaaa
D.Yak catgcaag gtaagctggccc...2618...aactctggcaataacaataaTTAAAGTCAAGTTGAaaggcacataactgcggata----...1123...ccctctttgag actgaaaa
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id=105312 gene=FBgn0085409 name=CG34380 segment=chr2L.6192860\_6196543.1 type=IN

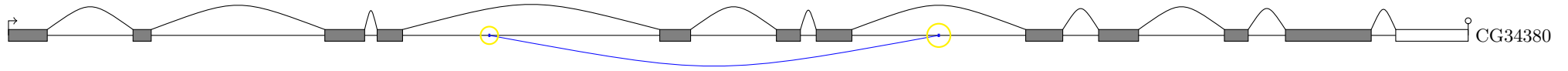
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D.Mel atgggaag gtgagtacagtc...3620...-----tcagccccgagaataacgc-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...565...ttcgttctcag agggcatc
D.Ere ctgggaag gtgagtccagtc...3442...-----ccccaccgcgcacaacgc-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...463...cctgcatttcag agggcatc
D.Gri ctgggaag gtaagtttttct...4187...--ttgcggtttgtctcccactg-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...597...ttctatttcag agggcatt
D.Moj ctgggaag gtgagtcgtttg...4399...--ttgtgtgtgtcagccgctg-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...511...atttatttcag agggcatt
D.Per ctgggaag gtgagtcgttcg...3547...ccttttggc--tccgcttcgaa-----CATTGACTtTGACaTTGAAAAaactatagccgcaagt...493...ttcctttcag agggcatc
D.Pse ctgggaag gtgagtcgttcg...3613...ccttttggc--tccgcttcgaa-----CATTGACTtTGACaTTGAAAAaactatagccgcaagt...507...ttcctttcag agggcatc
D.Vir ctgggaag gtaagtccttg...4358...--ttgtgtctgtcagccactg-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...552...tttcatttcag agggcatt
D.Wil atggcaag gtaagtgtattt...4443...-----aaaggaaaaaagacacacaCATTGACTtTGACaTTGAAAAaactatagccgcaagt...463...gtgtatttcag agggcatt
D.Yak gtgggaag gtgagtcaggc...3720...-----tcagccagcagaataacgc-----TTGACTtTGACaTTGAAAAaactatagccgcaagt...599...tccattttcag agggcatc
*** ** ** ** ** * ***** * ** **

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id=105316 gene=FBgn0085409 name=CG34380 segment=chr2L.6196997\_6201261.1 type=IN VIEW

Figure 282: CS=13.32



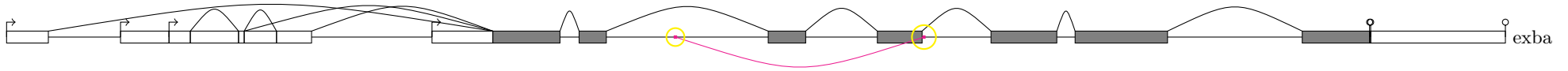
D.Mel	atgggaag	gtgagtacagtc...3136...-----cgtaggaggtccctaattac	GTGTAATTATGTG	Gatttttgtaattattggaa-----...1052...ttccgttctcag	agggcac
D.Sim	atgggaag	gtgagtacagtc...3570...ggcagtgctaggaggtctc	TAAATacGTGTAATTATGTG	Gatttttgtaattattggaa-----...1175...ttccattttcag	agggcac
D.Sec	atgggaag	gtgagtacagtc...3578...-----cgtaggaggtctctaattac	GTGTAATTATGTG	Gatttttgtaattattggaa-----...1065...tgccaatagaag	agggcac
D.Ere	ctgggaag	gtgagtcagtc...3011...----gtgcgtagcg---ccctaattac	GTGTAATTATGTG	Gatttttgtaattattggaa-----...897...cctgcatttcag	agggcac
D.Ana	ctgggaag	gtgagtcctttt...2751...----atgtgtaat---tatgtgatttt	TGGTAATTATTGG	-----aaaatccttcggcctcacc...866...ttcctttgcag	agggcatt
D.Moj	ctgggaag	gtgagtcgtttg...3910...----atgtataat---tatgtgatttt	TGGTAATTATTGG	-----gaaaatgccttgactgccc...1003...atttatttcag	agggcatt
D.Per	ctgggaag	gtgagtcgttcg...3174...----atgtgtaat---tatgtgatttt	TGGTAATTATTGG	-----gaaaatccttcgctgcccc...873...ttcctttgcag	agggcac
D.Pse	ctgggaag	gtgagtcgttcg...3235...----atgtgtaat---tatgtgatttt	TGGTAATTATTGG	-----gaaaatccttcgctgcccc...892...ttcctttgcag	agggcac
D.Vir	ctgggaag	gtaagtccttg...3937...----atatgtaat---tatgtgatttt	TGGTAATTATTGG	-----gaaaatccttgactgttt...976...tttcatttcag	agggcatt
D.Yak	gtgggaag	gtgagtcccagtc...3263...-----cgtaggaggtccctaattac	GTGTAATTATGTG	Gatttttgtaattattggaa-----...1059...tccattttcag	agggcac
	*****	** ***	* * * *	*****	* * *

id=105316 gene=FBgn0085409 name=CG34380 segment=chr2L.6196997\_6201261.1 type=IN

D.Mel	tatatccg	gtaagtgtggca...2022...---acatccccacaagaacttca	CACAgTAATTACGC	catttactgtct-aagaaacg-----...491...tctaatacccag	tgcccgcc
D.Sim	tatatccg	gtaagtgtggca...2098...---acatccccgcaagaacttca	CACAgTAATTACGC	ATTActgtct-aagaaacgaggtca...458...tctaatacccag	tgcccgcc
D.Sec	tatatccg	gtaagtgtggca...1964...---acatccccgcaagaacttca	CACAgTAATTACGC	catttactgtct-aagaaacg-----...437...tctaatacccag	tgcccgcc
D.Ere	tatatccg	gtaagtgtggca...1847...---acgtccccgcaagaacttca	CACAgTAATTACGC	catttactgtct-aagaaacg-----...441...tctaatacccag	tgcccgcc
D.Ana	tatatccg	gtgagtacacat...2142...ctcgcagcctccc--cagtcctc--	CCAGTAATTacGCC	Attactgtcctgcaaaaatg-----...806...catatattccag	tgcccgc
D.Moj	tatatccg	gtaagtacgtga...3502...---gcagc--aacaacaacttctca	CAGTAATTacGCC	Attactgtcctgaagaaacg-----...1050...tctctatttcag	tgccagct
D.Per	tatatctg	gtgagtacactc...2081...----gggcaggcaagaacttca	CAGTAATTacGCC	Attactgtcctgaagaaac-----...1526...ctccctttgcag	tccccgcc
D.Pse	tatatccg	gtgagtacactc...2134...----gggcaggcaagaacttca	CAGTAATTacGCC	Attactgtcctgaagaaac-----...1519...ctccctttgcag	tccccgcc
D.Vir	tatatccg	gtaagtacgtga...2853...---gcagc--aacaacagttcaca	CAGTAATTacGCC	Attactgtcctgagaaacg-----...1132...ttgctcctgcag	tgcccgcg
D.Yak	tatatccg	gtaagtgtggca...2068...---agaacttcagtagaacttca	CACAgTAATTACGC	catttactgtct-aagaaacg-----...499...tctaatacccag	tgcccgc
	*****	** ***	* * *	*****	** ***

id=105322 gene=FBgn0085409 name=CG34380 segment=chr2L.6203619\_6206209.1 type=IN VIEW

Figure 283: CS=14.8



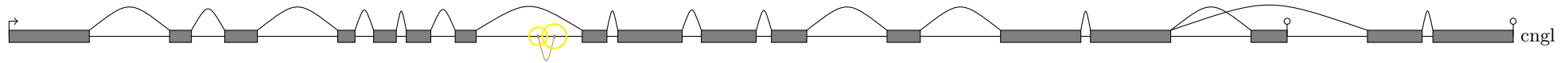
D.Mel	atgagcag	gttt	gtaatc	tt...	210...	--tatg	-caataaca	atcaacac	-----	ATTTACTT	GtCTTT	ggttt	gtccta	aaacactaac	-...313...	tacctttt	ccag	gtattt	gt
D.Sec	atgagcag	gttt	gtaatc	at...	186...	--tatg	-caataaca	atcgacac	-----	ATTTACTT	GtCTTT	ggatt	gtccta	aaacactaac	-...313...	tacctttt	ccag	gtattt	gt
D.Ere	atgagcag	gttt	gtaatc	ct...	198...	--tatg	-caatat	caattgacac	-----	ATTTACTT	GtCTTT	ggttt	gttcta	aatcactaac	-...303...	tactttt	ctag	gtattt	gt
D.Gri	atgaacag	g	ttagta	acaca...	265...	--gttg	-caaaat	gaaagccac	-----	ATTTACTT	GtCTTT	-aatt	tttcg	aaaaactcgat	...311...	tattg	ttcag	gtg	ttt
D.Moj	atgagcag	g	ttagta	aatct...	1630...	--aatg	-caaaat	taaacgccac	-----	ATTTACTT	GtCTTT	-att	tattc	gaaaactcgat	...91...	taatc	ttccag	gtg	ttt
D.Per	atgagcag	g	ttt	tagatca...	113...	---tg	-ccacat	ggaagccacat	-----	ATTTACTT	GtCTTT	ggttt	gtt	gtagacaac	cta...308...	ctatg	ttt	ccag	gtattt
D.Pse	atgagcag	g	ttt	tagatca...	113...	---tg	-ccacat	ggaagccacat	-----	ATTTACTT	GtCTTT	ggttt	gtt	gtagacaac	cta...309...	ctatg	ttt	ccag	gtattt
D.Vir	atgagcag	g	ttag	tatatcg...	70...	---tatg	-ccaaat	gaaagcctc	-----	ATTTACTT	GtCTTT	-att	ttgtat	agaataatta	...293...	aatg	ttt	ccag	gtg
D.Wil	atgaacag	g	ttt	gtattatt...	343...	..ttg	gtcga	aat--atg	ccaAATGAAaaGCCA	ATTTACTT	GtCTTT	-att	gt	ca	gaaattcca	...102...	tcc	att	ccag
D.Yak	atgagcag	g	ttt	gtaatc	ct...	163...	--tatg	-caatata	aatcggcac	-----	ATTTACTT	GtCTTT	ggttt	gttcta	aatcactaac	-...303...	tactttt	ctag	gtattt
	****	***	***	***	***	**	*	*	*	*****	*	*	*	*	**	**	**	****	****

id=129692 gene=FBgn0250753 name=exba segment=chr3R.1424065.1424665\_-1 type=IN

D.Mel	gAAAGCAA	GTAAGT	-----	tttag	ttgtgatt	gtttt...	218...	acgtttt	ccag	acttat	gg
D.Sec	gAAAGCAA	GTAAGT	-----	tttag	ttgtgatt	gtttt...	218...	actttatt	ccag	acttat	gg
D.Ere	gAAAGCAA	GTAAGT	-----	ttatag	at-gatt	gttttct...	216...	cctttatt	ctag	acttat	gg
D.Gri	gAAAGCAA	GTAAGT	-----	ttcata	acatcct	catatca...	201...	tttgc	ttgcag	acttat	gg
D.Moj	gAAAGCAA	GTAAGT	-----	atata	agtag	aggccaca...	201...	tattg	ttgcag	acttat	gg
D.Per	gAAAGCAA	GTAAGT	-----	tttaa	atttag	actgcagtc...	416...	ttcact	tttaag	acttat	gg
D.Pse	gAAAGCAA	GTAAGT	-----	tttaa	atttag	actgtagtc...	417...	ttcc	ctttaag	acttat	gg
D.Vir	gAAAGCAA	GTAAGT	-----	tacatt	acatatt	gtaaat...	193...	tttc	ggtgcag	acttat	gg
D.Wil	gAAAGCAA	GTAAGT	TGGTTTTATT	ctct	ctctct	gtattt	gtt...	214...	aact	cttttag	acttat
D.Yak	gAAAGCAA	GTAAGT	-----	tttaa	agtctg	attt	gtttg...	225...	ccg	tattccag	acttat
	*****	*****	*	*	*	*	*	**	**	*****	*****

id=129696 gene=FBgn0250753 name=exba segment=chr3R.1423238.1423493\_-1 type=IN VIEW

Figure 284: CS=14.8



```

D.Mel aatgcaga gtgagtaggaat...337...-----ccacgaatgagcattgggcATCAAAGTTTTCGAAAGCgtgcgacagccttgaacagt---.241...gctccttcgcag atatatatt
D.Sim aatgcaga gtgagtaagaat...313...-----tgcataattgccacgaataaGAGTTTGGcaTCAAAGTTTTCGAAAGCgtgcgacagccttagaacagt---.246...gctccttcgcag atatatatt
D.Sec aatgcaga gtgagtaagaat...313...-----tgcataattgccacgaataaGAGTTTGGcaTCAAAGTTTTCGAAAGCgtgcgacagccttagaacagt---.231...gctccttcgcag atatatatt
D.Ere aatgcaga gtgagtaggaat...323...-----tgcccc--actgagcgttgggcATCAAAGTTTTCGAAAGCGTgcgacagccttgaacagttcc..204...gctccttcgcag atatatatt
D.Ana aatgcaga gtgagtacaatt...358...-----tgaccttaaggacctcaaac-----ATCAAAGTTTTCGAAAGCGTgcgacagccttgaacaatt--.209...tatccccggcag atatatatt
D.Gri aatgctga gtgagtattttg...382...-----aatactcacctaataaata-----TCAAAGTTTTCGAAAGCGTgcgacagccttcaacaattcc..910...ctgctcggctag atatatatt
D.Moj aatgcaga gtgagtatgaga...390...-----attgcttcatataattgct---ATCAAAGTTTTCGAAAGCGTgcgacagccttcaacaattcc..425...tcacctccttag gtatatatt
D.Per aatgcaga gtgagtacggca...361...-----ctgttcattctcttcaaat---ATTGcaTCGAAAGTTTTCGAAAGCgtgcgacagccttagaacagt---.296...tctcattcgcag atatatatt
D.Pse aatgcaga gtgagtacggca...354...-----ctgttcattctcttcaaac---ATTGcaTCGAAAGTTTTCGAAAGCgtgcgacagccttagaacagt---.298...tctccttcgcag atatatatt
D.Vir aatgcaga gtgagtatgaga...389...-----taacatgatatcg--atatttATCAAAGTTTTCGAAAGCGTgcgacagccttcaacaattcc..799...cgctaccgcag atatatatt
D.Wil aatgcaga gtgagtattata...465...tctctctctcgttcttgcctc-----TTGGcATCAAAGTTTTCGAAAGCgtgcgacagccttcaacaattcc..646...cacatttactag gtacattt
D.Yak aatgcaga gtgagtaagatt...318...-----catattgtcccgaatgagc-----ATCAAAGTTTTCGAAAGCgtgcgacagccttgaacagt---.243...gctccttcgcag atatatatt
**** ** ***** * ** ***** ** ** **

```

id=78918 gene=FBgn0029090 name=cngl segment=chrX\_15291831\_15292490\_-1 type=IN

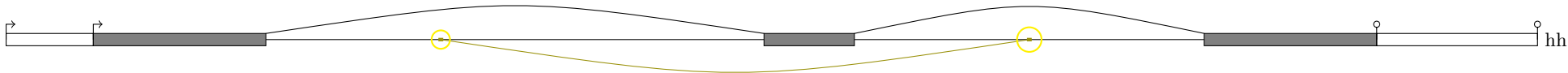
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D.Mel aatgcaga gtgagtaggaat...439...---tttatttaacataatctcaa-----GCTTTCGAAAACCTTTGAT-----tgagcttgctaa--aaagtgc-----...139...gctccttcgcag atatatatt
D.Sim aatgcaga gtgagtaagaat...430...---tgtttaaacataatctcaa-----GCTTTCGAAAACCTTTGATTGAGCTT-----gc-aa-aaagtgcgtttcaag...131...gctccttcgcag atatatatt
D.Sec aatgcaga gtgagtaagaat...432...---gttttgaacataatctcaa-----GCTTTCGAAAACCTTTGATTGAGCTT-----gc-aa-aaagtgccttcttcaag...114...gctccttcgcag atatatatt
D.Ere aatgcaga gtgagtaggaat...424...tagtttgtaagcccatct-----TATGCTTTCGAAAACCTTTGAT-----tgagcttgc-at-aaagtgc-----...103...gctccttcgcag atatatatt
D.Ana aatgcaga gtgagtacaatt...439...---aaaagtaaatgcaaaagattTGTTCGAAAACCTTTGAT-----tgagcttgc-aa-agattg-----aag...128...tatccccggcag atatatatt
D.Gri aatgctga gtgagtattttg...513...---aaaaaaacaaatacattgaaaa---TGTGCTTTCGAAAACCTTTGA-----atgtgacaagagttttggca---.779...ctgctcggctag atatatatt
D.Moj aatgcaga gtgagtatgaga...506...---agctgattatattgaaaa---TGTGCTTTCGAAAACCTTTGAT-----tgagcttttcaatccattc-----...309...tcacctccttag gtatatatt
D.Per aatgcaga gtgagtacggca...485...---acaattttcaactgcattca-----GCTTTCGAAAACCTTTGATTGAT-----cttgccaataaaagtgtgat-----...174...tctcattcgcag atatatatt
D.Pse aatgcaga gtgagtacggca...478...---acaattttcaactgcattca-----GCTTTCGAAAACCTTTGATTGAT-----cttgccaataaaagtgtgat-----...176...tctccttcgcag atatatatt
D.Vir aatgcaga gtgagtatgaga...521...---aaaaaaacaaattgaaaa---TGTGCTTTCGAAAACCTTTGAT-----tgtgcttttgca-agcgagca-----...667...cgctaccgcag atatatatt
D.Wil aatgcaga gtgagtattata...557...---taataacaagctgactacaa-----GCTTTCGAAAACCTTTGATTGGattgagttt-----cagtttcagtt-----...555...cacatttactag gtacattt
D.Yak aatgcaga gtgagtaagatt...422...---tttattaaacctcatcttaa-----GCTTTCGAAAACCTTTGAT-----tgagcttgc-aa-aaagtgc-----...139...gctccttcgcag atatatatt
**** ** ***** * ** ***** ** ** **

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id=78918 gene=FBgn0029090 name=cngl segment=chrX\_15291831\_15292490\_-1 type=IN VIEW

Figure 285: CS=11.52



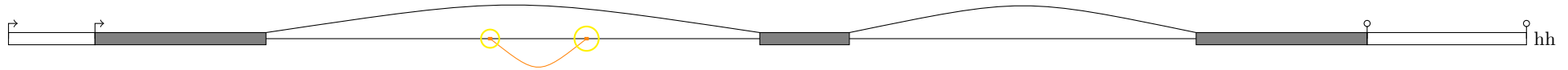
D.Mel	tgagcaag	gtaaggaaaacc...2721...ctggacttgggttgggatg----	GGCAAAACAaACAAAG	-----ccccgaacttgtctctgtgt...2188...cctcttttgag	cgctgcaa
D.Sim	tgagcaag	gtaaggaaaacc...2746...gtggacttgggttgggatg----	GGCAAAACAaACAAAG	-----ccccgaacttgtctctgtgt...2163...cccttttgag	cgctgcaa
D.Sec	tgagcaag	gtaaggaaaacc...3325...-----ccacttacaaggcacacaca	TTATttAGCCATCTTTTTG	ggccgccgacccgtgtatc--...1581...cctcttttgag	cgctgcaa
D.Ere	tgagcaag	gtaaggaaaacc...2756...gtggacatggacttgggatg----	GGCAAAACAaACAAAG	-----ccccgaacttgtgcccgg...2153...tgcccctttgag	cgctgcag
D.Ana	tgagcaag	gtgagttgtaaa...3404...-----ccacttacaaggcacacaca	TTATttAGCCATCTTTTTG	ggccgccgacccgctcta--...1502...tctctcttag	cgctgcaa
D.Gri	tgaccaag	gtaagtctccac...3048...-----ccacttacaatacaaacaca	TTATttAGCCATCTTTTTG	ggccgccgacgacggcgact--...1858...ttcacttgag	cgctgcaa
D.Moj	tgtccaag	gtaagtgaccaa...3004...-----ccacttacaatacaaacaca	TTATttAGCCATCTTTTTG	ggccgatgccgacccgacg--...1902...tatgctccag	cgctgcag
D.Per	tgacaag	gtaagtccattc...3004...-----ccacttacaatgcacacaca	TTATttAGCCATCTTTTTG	ggccgccgcccgcgacgacg--...1902...actctctgag	cgctgcaa
D.Pse	tgacaag	gtaagtccattc...3356...aacatcgttgtct--cgatgct--	TAAGaCAAAAAGcGTTT	gctctccatacccctctc--...1553...actcgtgcag	cgctgcaa
D.Vir	tgtccaag	gtaagttcccc...3096...-----ccacttaccatacaaacaca	TTATttAGCCATCTTTTTG	ggccgccgacccgacgccc--...1810...cttgaccgag	cgctgcag
D.Wil	tgaccaag	gtaagtgcaaat...3039...tcaattttgttttggcaa	CATTtGGCAaACAAAACAaaAACA	---aacaacgctttttgacc--...1862...tttcttgacag	cgctgcag
D.Yak	tgagcaag	gtaagcaaaagt...3264...-----ccacttacaaggcacacaca	TTATttAGCCATCTTTTTG	ggccgccgacccgtgtatc--...1642...ctcctttccag	cgctgcag
	** **	** **	*	* *	** *****

id=40088 gene=FBgn0004644 name=hh segment=chr3R.18958986.18966763\_-1 type=IN

D.Mel	caagtcat	gtaattatccac...1859...----ttaccaatgt--tgctgctgtc--	TTTTGTTGTTgTTGCT	-----ggtgtgtcgcgcgcgcg-cat...1651...tcctacttgag	attcgtcg
D.Sim	caagtcat	gtaattatccac...2294...----ttaccaatgt--tgctgctgtc--	TTTTGTTgTGTGTTgTTGCT	-----ggtgtgtcgcgcgcgcg-cat...1613...tcctacttgag	attcgtcg
D.Sec	caagtcat	gtaattatccac...1726...--caacagcagcag--cacgacga	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1720...tcctacttgag	attcgtcg
D.Ere	caagtcat	gtaattatccac...1872...----ttaccaatgt--tgctgctgccc--	TTTTGTTGTTgTTGCT	-----ggtgtgtcgcgcgcgcg-cat...1638...tcttacttgag	attcgtcg
D.Ana	caaatcag	gtaattgtctat...1726...--acacaacaccag--cacaacga	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1781...ttcacttgag	attcctcc
D.Gri	caaatcag	gtaattgtctat...1562...agcagcagcggcag--ca--gcaa	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...2250...ttgcattgag	attcctcg
D.Moj	caaatcag	gtaagcttgcat...1768...ggcagcagcagcgg--ca--gcaa	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1912...ctctcttcag	attcgtcg
D.Per	caaatcag	gtaagagatgct...2140...----acagcagcggccacagcga	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1948...ctctacttgag	actcctcg
D.Pse	caaatcag	gtaagagatgct...3908...gccatt--caaagg--atctgtga	AAACtTTTGTGaCTTG	-----ttgggttggcaattggatg--...90...tctctctgag	actcctcg
D.Vir	caaatcag	gtaagcaaacgc...1644...agcagcggcagcgg--ca--gcaa	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1773...tttcattgag	attcctcg
D.Wil	taagtcat	gtaagattgtc...1772...--ttttttttctt--cttgcca--	TGTTggTGTGTTgTTGCTgGGTG	actgatcgtttggacagcat...1757...ttctattgag	attcatca
D.Yak	caagtcat	gtaattgtccac...1897...--caacagcatcgg--cacgacga	CGAAGAGtaATGGCTGTAA	-----acctttttgtcgacact-aat...1795...tttacttgag	attcctcg
	** ****	****	*	**	* ** * ** *

id=40090 gene=FBgn0004644 name=hh segment=chr3R.18955134.18958723\_-1 type=IN VIEW

Figure 286: CS=7.2



D.Mel	tgagcaag	gtaaggaaaacc...2870...	-atttcgcc-ga-----ccattaaga-----	CCGTcaAATTGGCAgcCAGC	cagtcagacaatttaaatca----	..2035...	cctcttttcgag	cgctgcaa
D.Sim	tgagcaag	gtaaggaaaacc...2895...	-atttcgcc-ga-----ccattaaga-----	CCGTcaAATTGGCAccCAGC	cagtcagacaatttaaatca----	..2010...	ccccttttcgag	cgctgcaa
D.Sec	tgagcaag	gtaaggaaaacc...2882...	-atttcgcc-ga-----ccattaaga-----	CCGTcaAATTGGCAgcCAGC	cagtcagacaatttaaatca----	..2023...	cctcttttcgag	cgctgcaa
D.Ere	tgagcaag	gtaaggaaaacc...2918...	aatttcg-cc-ga-----ccattaaga-----	CCGTcaAATTGGCAgcCGGC	cagccagacaatttaaatca----	..1987...	tgcccctttcag	cgctgcag
D.Ana	tgagcaag	gtgagttgtaaa...3031...	-tttcgcctgga-----ccattaata-----	CCGTcaAATTGGCAgcCAGC	---cagacgatttaaatcaataa..	1874...	tctctcttcag	cgctgcaa
D.Gri	tgaccaag	gtaagtctccac...2561...	-----tgcctaaatgcatgccatta-----	CCGTcaAATTGGCA-----	gcttcgagacgatttaaatc-----	..2350...	ttccacttcgag	cgctgcaa
D.Moj	tgtccaag	gtaagtgcacaa...2519...	-----cctaaatgcgagccattaag-----	CCGCTcaAATTGGCA-----	gctggcagacgatttaaatc-----	..2391...	tatgctccacag	cgctgcag
D.Per	tgacaag	gtaagtccattc...2598...	-attttgcca-ga-----ccattaata-----	CCGTcaAATTGGCAgcCCAGC	---cagacaatttaaatcaataa..	2307...	cactctctgcag	cgctgcaa
D.Pse	tgacaag	gtaagtccattc...2682...	-attttgcca-ga-----ccattaata-----	CCGTcaAATTGGCAgcCCAGC	---cagacaatttaaatcaataa..	2223...	cactcgtgcag	cgctgcaa
D.Vir	tgtccaag	gtaagtccccc...3478...	cacttgac-----tggtaagcctt	TTAATAAAGCAAAGttGTTTA	---agagtcataataatataata----	..1426...	cttgaccgcag	cgctgcag
D.Yak	tgagcaag	gtaagcaaaagt...2804...	-atttcgcct-ga-----ccattaaga-----	CCGTcaAATTGGCAgcCAGC	cagccagacaatttaaatca----	..2101...	cttcctttccag	cgctgcag
	**	***	** **	***	* ** ***	** * ** ** *	**	*****

id=40088 gene=FBgn0004644 name=hh segment=chr3R.18958986.18966763.-1 type=IN

D.Mel	tgagcaag	gtaaggaaaacc...3146...	-aaaggcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcctaggggagatg...1759...	cctcttttcgag	cgctgcaa	
D.Sim	tgagcaag	gtaaggaaaacc...3159...	-aaaggcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcctaggggagatg...1746...	ccccttttcgag	cgctgcaa	
D.Sec	tgagcaag	gtaaggaaaacc...3157...	-aaaggcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcctaggggagatg...1748...	cctcttttcgag	cgctgcaa	
D.Ere	tgagcaag	gtaaggaaaacc...3169...	-aaaggcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcctaggggagatg...1736...	tgcccctttcag	cgctgcag	
D.Ana	tgagcaag	gtgagttgtaaa...3263...	-ctgggcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcctagggtagagac...1642...	tctctcttcag	cgctgcaa	
D.Gri	tgaccaag	gtaagtctccac...2815...	-----a--gttcacaccttgtttta	TGTCaAATTaATGC	-----aggcagcttttttttg---tg...2096...	ttccacttcgag	cgctgcaa	
D.Moj	tgtccaag	gtaagtgcacaa...2829...	-----aaa--gttcacaccttg--	tttaaTGTCaAATTaATGCG	-----gcagcttttctttcgg--cctt...	2081...	tatgctccacag	cgctgcag
D.Per	tgacaag	gtaagtccattc...2879...	-ctgagcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcgggagtggggga...2026...	cactctctgcag	cgctgcaa	
D.Pse	tgacaag	gtaagtccattc...2967...	-ctgagcaaa--gttcacacctt--	GTTGaaTGTCaAATTaATGC	-----agctttcggtagtggggga...1938...	cactcgtgcag	cgctgcaa	
D.Vir	tgtccaag	gtaagtccccc...4396...	catggcaataataaaaac-----	TAAGCCTTGCCT-TTGcTTAG	ccaacgacaaacacacaaca-----	..507...	cttgaccgcag	cgctgcag
D.Yak	tgagcaag	gtaagcaaaagt...3089...	-aaaggcaaa--attcacacctt--	GTTGaaTGTCaAATTaATGC	-----agcttttctaggggagatg...1816...	cttcctttccag	cgctgcag	
	**	***	** **	* * * **	* * * * *	* *	**	*****

id=40088 gene=FBgn0004644 name=hh segment=chr3R.18958986.18966763.-1 type=IN VIEW

Figure 287: CS=6.6



D.Me1	accacaaa	gtaagcttagtc...277...tacttccgcttctctcact-tg-----	TAATAAACGagTGCAAGAG	agcagtgcca-gcagcagtag-...1398...atattgacacag	aaccaaca
D.Sim	aaaaaaaa	gtaagcttagta...274...tacttccgcttctctcact-tg-----	TAATAAACGagTGCAAGAG	agcagcagca-gtagcaaca-...1386...atattgacacag	aacctatca
D.Sec	accacaaa	gtaagcttagta...280...tacttccgcttctctcact-tg-----	TAATAAACGagTGCAAGAG	agcagcagca-gtagcaaca-...1386...atattgacacag	aacctatca
D.Ere	accacaaa	gtaagcttagtc...270...tacttccgcttctctcact-tg-----	TAATAAACGagTGCAAGAG	agcagtagca-acaacaaca-...1412...atattgacacag	aatcaaca
D.Gri	ataaccaa	gtaagctatagt...659...---tgtccacggggcggg-ggtgTGAGcgGTGTaa	TAATAAACGagTGCA	---cagcagcaa-a-gcagcagcag-...1789...accaaattacag	aaactagc
D.Per	cgtataaa	gtaagctatttg...471...---acggggcgga-gtgagcggg----	TAATAAACGagTGCA	---cagtgcagca-gcag-agaag-...1813...taactgtacag	aaacatca
D.Pse	cgtataaa	gtaagctatttg...475...---acggggcgga-gtgagcggg----	TAATAAACGagTGCA	---cagtgcagca-gcag-agaag-...1807...taactgtacag	aaacatca
D.Vir	ttcaacaa	taataacaaca...684...cattgtcaacggggcggg-gg---TGAGcgGTGTaa	TAATAAACGagTGCA	---cagcagcagca-gcagcagca-...1592...taaattgacag	aaactaaa
D.Wil	cataataa	gtaagcttaag...489...---gggcgcggaagcggcagtg---	TAATAAACGagTGCA	caGAAGGcagagcagcagcagtagc...1401...aaacaacaaca	atttaaca
D.Yak	accacaaa	gtaagcctactc...272...tacttccgcttctctcact-tg-----	TAATAAACGagTGCAAGAG	agcaatagca-gcagcagtag-...1413...atattgacacag	aatcaaca
	* **	*	*****	* * * *	* *

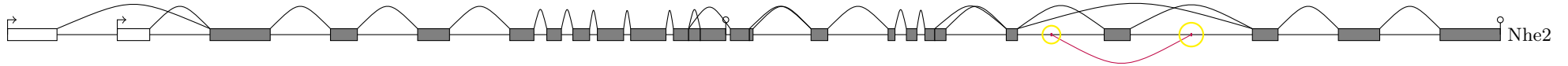
id=45322 gene=FBgn0014037 name=Su(Tp1) segment=chr3L.19888139.19889897\_-1 type=I5

D.Me1	accacaaa	gtaagcttagtc...384...-cgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttggcacacacag-...1294...atattgacacag	aaccaaca
D.Sim	aaaaaaaa	gtaagcttagta...375...-cgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttggcacacacag-...1288...atattgacacag	aacctatca
D.Sec	accacaaa	gtaagcttagta...381...-cgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttggcacacacag-...1288...atattgacacag	aacctatca
D.Ere	accacaaa	gtaagcttagtc...371...-cgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttggcacacacag-...1314...atattgacacag	aatcaaca
D.Gri	ataaccaa	gtaagctatagt...772...---ttcatttagcagatacctttTGTACGTTgATTA	agATACCTTg	gtgtggcacacacagacatac-...1680...accaaattacag	aaactagc
D.Per	cgtataaa	gtaagctatttg...586...---ttcatttagcagatacctttTGTACGTTgATTA	-----	agataccttgggactcacat-...1700...taactgtacag	aaacatca
D.Pse	cgtataaa	gtaagctatttg...590...---ttcatttagcagatacctttTGTACGTTgATTA	-----	agataccttgggactcacat-...1694...taactgtacag	aaacatca
D.Vir	ttcaacaa	taataacaaca...797...---ttcatttagcagatacctttTGTACGTTgATTA	agATACCTTg	---gacacacagacagcaaa...1483...taaattgacag	aaactaaa
D.Wil	cataataa	gtaagcttaag...598...-tcgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttgggacaacgac-...1296...aaacaacaaca	atttaaca
D.Yak	accacaaa	gtaagcctactc...388...-cgatttcatttagcagatacCTTTGTACGTTgATTA	-----	agataccttggcacacacag-...1300...atattgacacag	aatcaaca
	* **	*	*****	** * *	* *

id=45322 gene=FBgn0014037 name=Su(Tp1) segment=chr3L.19888139.19889897\_-1 type=I5 VIEW

Figure 288: CS=6





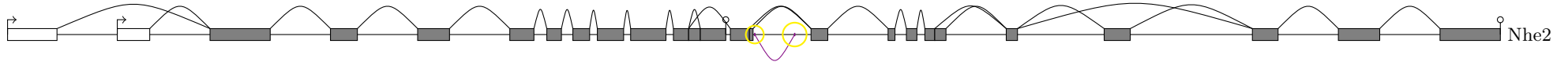
D. Mel	atcatcac	gtaagtgttcat...222...tcctgttttctgccaccct	GTTTGT	TTGT	CACA	AAAA	ATGCCAT	-----	cacttaatcgaataattgaa	-----	...405...aattacgattag	ctgactcg	
D. Sim	atcatcac	gtaagtgttctc...237...tcctgtttgccgccaccct	GTTTGT	TTGT	CACA	AAAA	ATGCCAT	-----	cacttaatcgaataatcaa	-----	...404...aattacgattag	ctgactcg	
D. Sec	atcatcac	gtaagtgttctc...238...tcctgtttgccgccaccct	GTTTGT	TTGT	CACA	AAAA	ATGCCAT	ca	TTTT	gcctgtaagaacgaaatc	-----	...377...aattacgattag	ctgactcg
D. Ere	atcatcac	gtaagtgttctc...230...tcctgtttgctgccaccct	GTTTGT	TTGT	CACA	AAAA	ATGCCAT	-----	cattt	-----	aataatcgaatcctt	...391...aattacgattag	ctgactcg
D. Ana	atcatcac	gtaagtgtcctt...284...gttgttttattcgaaatgc	-----	-----	CACAAAA	ATGCCAT	-----	catttaattaactcct	-----	ttt	...457...aattacaattag	ctgactcg	
D. Gri	atcatcac	gtaagttcgatc...211...tttctcaactcaattgacta	-----	-----	CACAAAA	ATGCCAT	-----	caagtaattcatttgatgct	-----	...	567...ttacacaattag	ctgactcg	
D. Moj	atcatcac	gtaagttccatt...140...tcaactgaaacaactgacta	-----	-----	CACAAAA	ATGCCAT	-----	caagtatttcatttgattct	-----	...	479...tccgtatattag	ctgactcg	
D. Per	atcatcac	gtaagtaagt...230...gttcgactcgaccctatggt	TTTTGT	TTGT	CACA	AAAA	ATGCCAT	aa	TTTT	-----	aaataatattttctgtttc	...477...acacacgattag	ctgactcg
D. Pse	atcatcac	gtaagtaagt...237...-----tcgaccctatgttttatggt	TTGT	TTGT	CACA	AAAA	ATGCCAT	aa	TTTT	-----	aaataatattttctgtttc	...484...acacacgattag	ctgactcg
D. Vir	atcatcac	gtaagttccatt...195...tttatctcaacaattgacta	-----	-----	CACAAAA	ATGCCAT	-----	caagtactatattcatatg	-----	...	459...acacacaattag	ctgactcg	
D. Wil	atcatcac	gtaagtcatact...316...tatgtatctcctcatgatta	-----	-----	CACAAAA	ATGCCAT	-----	aacagtcacctaaactcact	-----	...	674...acaccaattag	ctgactcg	
D. Yak	atcatcac	gtaagtgttctc...230...-----cccacctgtttgtttgat	CACA	AAAA	ATGCCAT	-----	-----	cattta	-----	aataatcgaatcct	...380...aattacgattag	ctgactcg	
		*****	*****		*****	*****					*****	*****	

id=76082 gene=FBgn0040297 name=Nhe2 segment=chr2L\_21125440\_21126158.1 type=IN

D. Mel	gagcattg	gtaaagacatcc...862...-----aagaagcgtcgaacagagc	ATGGCATT	TTTTGTG	CATGAC	CAAAT	ttctgttt	gtattttat	at	...524...tgtttgatctag	tggccgaa	
D. Sim	gagcattg	gtaaagacatca...815...-----aagaagcgtcgaacagagc	ATGGCATT	TTTTGTG	CATGAC	CAAAT	ttctgttt	gtattttat	at	...506...tgtttgatctag	tggccgaa	
D. Sec	gagcattg	gtaaagacatca...785...accagaagaagcgtcgaaac	AGAG	ATGGCATT	TTTTGTG	CATGAC	CAAAT	ttctgttt	gtattttat	at	...506...tgtttgatctag	tggccgaa
D. Ere	gagcattg	gtaaagacatca...863...-----aagaagcgtcgaacagagc	ATGGCATT	TTTTGTG	CATGAC	CAAAT	ttctgttt	gtattttat	at	...455...tgtttgatctag	tggccgaa	
D. Ana	gagcattg	gtaaagagatat...841...-----gaaacatccgagagcaaac	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	attttata	aaa	...587...tttgaatttag	tggctgaa	
D. Gri	gagcattg	gtaaaccaaatc...1278...--atcaaacagca--aaagc--agc	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	gtattttgt	g	...746...tatctcacag	tggccgag	
D. Moj	gagcattg	gtaaaccaaatc...3440...--aaccaaacagca--aaagc--agc	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	gtattttgt	g	...564...tctatcccatag	tggccgag	
D. Per	gagcattg	gtaaaagattat...1280...aaaagaagaacctcaaac	AAAG	ATGGCATT	TTTTGTG	ATGAC	GAAA	tttctgct	tatttttact	...1153...tttgtgatctag	tggccgaa	
D. Pse	gagcattg	gtaaaagattat...1280...aaaagatgaacctcaaac	AAAG	ATGGCATT	TTTTGTG	ATGAC	gaaa	tttctgct	tatttt	...1161...tttgtgatctag	tggccgaa	
D. Vir	gagcattg	gtaaaccaaatc...1628...catttcaagcg--a--aaagc--agc	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	gtattttgt	g	...662...tatctcacag	tggccgag	
D. Wil	gagcattg	gtaaaccaaac...1563...taagcaaaaa--c--aaatc--agc	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	cttttcctc	c	...1774...cattcaatgtag	ttgccgag	
D. Yak	gagcattg	gtaaagacatca...882...-----aagaagcgtcgaaaagagc	ATGGCATT	TTTTGTG	-----	-----	catgacaaa	attttcgt	t	...634...tttgtgatctag	tggccgaa	
		*****	*****		*	*****				*	**	* ** **

id=76084 gene=FBgn0040297 name=Nhe2 segment=chr2L\_21126375\_21127849.1 type=IN VIEW

Figure 289: CS=18.72



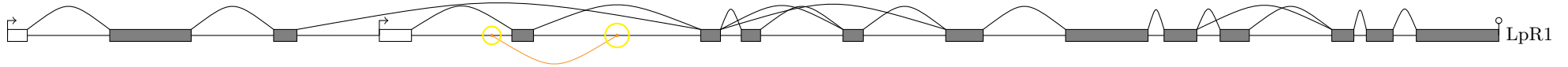
D.Mel	accacc	CGTAAACGAATTTGGAT	--tgaatgatttc----	ttgcctgta--	...432..	accattcct--tag	ccccagtc
D.Sim	accacc	CGTAAACGAATTTGGAT	--tgaatgatttc----	ttgcctgta--	...411..	actattcct--cag	tcccagtc
D.Sec	accacc	CGTAAACGAATTTGGAT	--tgaatgatttc----	ttgcctgta--	...405..	actattcct--cag	tcccagtc
D.Ere	accacc	CGTAAACGAATTTGGAT	--tcaatgatatc----	ttgcctgta--	...376..	accactcct--cag	tcccagtc
D.Gri	accacctg	CGTAAACGAATTTGGATA	atcgtaaatcgataa-tcgat-----	..	..285..	caattggaatag	ccccagtc
D.Moj	accacctg	CGTAAACGAATTTGGATA	atcgataaacaataa-tcgat-----	..	..282..	tgattcgcacag	tccaagct
D.Vir	accacctg	CGTAAACGAATTTGGATA	atcgataaatcgataa-ttaaat-----	..	..299..	ccattcaaatag	tcccagcc
D.Wil	accacc	CGTAAACGAATTTGGATG	-----	atatcctaaattgactgtagt..	..285..	ttggatcct--tag	tcccagtc
D.Yak	accacc	CGTAAACGAATTTGGGA	--ttgaatgatatc----	ttgcctgt--	...401..	accattcct--cag	tcccagtc
	*****	*****		* * *		* **	** **

id=76071 gene=FBgn0040297 name=Nhe2 segment=chr2L.21121770.21122250.1 type=IN

D.Mel	accacctg	gtaaacgaattt...296...	gtacatcaatgtcttcgatat--	ATCTAAAATTCGTTTAACCA	---cttccttagttttacttaa...	101...	accattcct--tag	ccccagtc
D.Sim	accacctg	gtaaacgaattt...297...	gtacatcaatgtcttcgatat--	ATCTAAAATTCGTTTAACCA	---cttccttagttttacttaa...	79...	actattcct--cag	tcccagtc
D.Sec	accacctg	gtaaacgaattt...298...	gtacatcaatgtcttcgatat--	ATCTAAAATTCGTTTAACCA	---cttccttagttttacttaa...	72...	actattcct--cag	tcccagtc
D.Ere	accacctg	gtaaacgaattt...274...	ttgaatatatatatatat--	ATCTAAAATTCGTTTAACCA	---cttccttagttttacttaa...	67...	accactcct--cag	tcccagtc
D.Gri	accacctg	gtaaacgaattt...194...	catataattacctttttgta	TATCTAAAATTCGTTTAT	---gtgtatttttggttaatact---	59...	caattggaatag	ccccagtc
D.Moj	accacctg	gtaaacgaattt...193...	ctctatatattac-ttttgca	TATCTAAAATTCGTTTATC	---tgatattttagtttaatact---	56...	tgattcgcacag	tccaagct
D.Vir	accacctg	gtaaacgaattt...204...	atatttaaagaac-ttttgca	TATCTAAAATTCGTTTATC	---tgatcctttgtttaaaact---	62...	ccattcaaatag	tcccagcc
D.Wil	accacctg	gtaaacgaattt...218...	taccctattctagtaattgc-	TGTCgAAAATTCGTTTAACCA	cttcctcttcttgcgactt---	32...	ttggatcct--tag	tcccagtc
D.Yak	accacctg	gtaaacgaattt...283...	tatttctatgtctcgtatc-	TCTAAAATTCGTTTAACCA	---cttccttagttgtacttaa...	83...	accattcct--cag	tcccagtc
	*****	*****		* * * * *		* * * * *	* **	** **

id=76071 gene=FBgn0040297 name=Nhe2 segment=chr2L.21121770.21122250.1 type=IN VIEW

Figure 290: CS=18



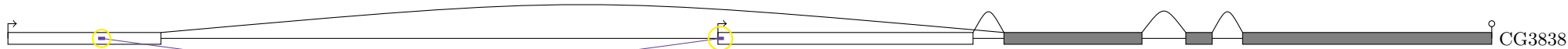
D.Mel	ccaagtgt	gtaagtgtgtg...	441...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctggacaccacttaaatatg--...	86...	-aatcttctgcag	ctcctcaa
D.Sim	ccaagtgt	gtaagtgtgtgc...	439...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctgg--accacttaaatatgtc...	84...	-aatcttctgcag	ctcctcaa
D.Sec	ccaagtgt	gtaagtgtgtgc...	442...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctgg--accacttaaatatgtc...	84...	-aatcttctgcag	ctcctcaa
D.Ere	ccaagtgt	gtaagtgtgtgc...	464...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctgg--accacttaaatat---	82...	-catgttctgcag	ctcctcaa
D.Ana	aaaagtgt	ttcgtgtgtcc...	456...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctgg--actcctcaaat----	157...	taacttct-taa	ctacttaa
D.Gri	ccaaatgg	aaaagttttcac...	694...	-cgcaacggaattatgcaat	CAATTTGTGCAAGTTGG	ctggctgc--tccgctacaat----	109...	-ttaataattcgt	ttattcaa
D.Per	ccaagtgt	gtgatttaacc...	497...	-gttttcggaattatgcaat	CAATTTGTGCAAGTTGG	ctga--acctctgaaatgtc...	136...	-cccccaaaaa	ctcccaa
D.Vir	gaaatga	aaaattttgtgc...	606...	gcacaacggaattatgcaa	TCAATTTGTGCAAGTTGG	ctgagt-a--actcctcaata---	95...	-aaggaaaatag	cgcattaa
D.Yak	ccaagtgt	gtaagtgtgtgc...	459...	tgtttcggaattatgcaa	TCAATTTGTGCAAGTTGG	ctggctgg--accacttaaatat---	95...	-aatcttctgcag	ctcccaa
	** **	*		****	*****	*** *		** **	***

id=117980 gene=FBgn0066101 name=LpR1 segment=chr3R.21577914.21578522.-1 type=IN

D.Mel	tataaatg	gtatgaaaatta...	641...	-----aatatTTTTGCAAGTTGG	TTAACatTTGCAtaCAAATTTGG	ctgagagcagagagactgag--...	1944...	tgcttttcgcag	aggccact
D.Sim	cataaatg	gtatgaaaatta...	630...	-----aatatTTTTGCAAGTTGG	TTAACatTTGCAtaCAAATTTGG	ctgagagc--agagactgagcg...	1887...	tgcttttcgcag	aggccact
D.Sec	cataaatg	gtatgaaaatta...	623...	-----aatatTTTTGCAAGTTGG	TTAACatTTGCAtaCAAATTTGG	ctgagagc--agagactgagcg...	1867...	tgcttttcgcag	aggccact
D.Ere	cataaacg	gtacgcaaaaa...	651...	atgcaacagaatatttttgc	-----ATTTGCAtaCAAATTTGG	ctgagagc--agagactgagcg...	2008...	tgcttttcgcag	aggccact
D.Ana	cataacg	gtatgaaaata...	584...	-----ttgccagcgcgcttaacat	TTGCAtaCAAATTTGG	catgagc--tgaggcatgag...	1532...	tgcttttcgcag	aggccact
D.Gri	tcaacacg	gtatgcttgaag...	508...	-----ttgtcacgctgcctgacat	TTGCAtaCAAATTTGG	ccaggactc--tggactaaag-	1870...	ctatttttacag	aggccact
D.Per	tgaaaatg	gtaaatagaata...	745...	-----aatatTTTTGCAAGTTGG	TTAACatTTGCAtaCAAATTTGG	ccaggagcgg--aaggagagcga-	1686...	tgcttttcgcag	aggccacc
D.Vir	tgaacatg	gtatgaaaacaa...	825...	-----ttgcacatgccgcttgacat	TTGCAtaCAAATTTGG	caggagc--tgctgttgccgc...	2086...	tgcttttcgcag	aggccacc
D.Yak	catcaacg	gtacgcaaaaa...	626...	atgcaacagaatatttttgc	-----ATTTGCAtaCAAATTTGG	ctgagagc--agagagggagc...	1896...	cgcttttcgcag	aggccact
	*	***		***	*****	*****	*	** **	*****

id=117982 gene=FBgn0066101 name=LpR1 segment=chr3R.21575112.21577782.-1 type=IN VIEW

Figure 291: CS=12.42



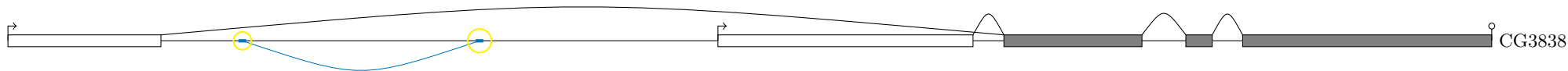
D.Mel	gtgtgctt	agtgccttgg...	141...	-----agcagcagcaacaaaaatat	TTTTggCGCCGTTTT	-----atttgtgtgccg---	tgcatcgt-----	...87...	accaaccaaag	gtaatgaa
D.Sim	gtgtgctt	agtgccttgg...	144...	-----agtagcagcaacaaaaatat	TTTTggCGCCGTTTT	-----atttgtgtgccg---	tgtatcgt-----	...101...	accaaccaaag	gtaatgaa
D.Sec	gtcgcctt	ggtcgccttgaa...	132...	-----agcagcagcaacaaaaatat	TTTTggCGCCGTTTT	-----atttgtgtgccg---	tgtatcgt-----	...103...	accaaccaaag	gtaatgaa
D.Gri	gtgtgttt	agtgccttctgt...	150...	-tcgtcacgcacatcggacac-----	TTTTggCGCCGTTTTtc	AGTGC	---agcactggcagtggtttaa	...91...	aataacaaaa	caaaaaat
D.Moj	gtttgttt	agtgccttctgt...	149...	-tcgccatcgtagcagacac-----	TTTTggCGCCGTTTTT	GTGC	---gcgcggaactggattaag	...68...	tgacagtacag	gtaaaata
D.Per	gcgtatct	gtgtgttttagt...	192...	-----gggaggagcaacaaaatagt	TTTTggCGCCGTTTTT	TtGTGTCT	ggcgccattcgaaaactgat	...42...	caacaccaaag	gtataaca
D.Pse	gcgtatct	gtgtgttttagt...	186...	-----gggaggagcaacaaaatagt	TTTTggCGCCGTTTTT	TtGTGTCT	ggcgccattcgaaaactgat	...42...	caacaccaaag	gtataaca
D.Vir	gtgtgttt	agtgccttctgt...	148...	atcccaagcagcggattc-----	TTTTggCGCCGTTTTT	CAGTGC	---ggcactggcttaaaaaataag	...70...	aataacacat	gttcgagt
D.Yak	gtgtgttt	agtgccttctgt...	180...	-----agcagcagcaacaaaaatat	TTTTggCGCCGTTTT	-----atttgtgtgccg---	tgtatcgt-----	...101...	taattccaaag	gtaacgaa
	*	*		*	*	*	*		*	*

id=62977 gene=FBgn0032130 name=CG3838 segment=chr2L\_9568892.9569198.1 type=E5

D.Mel	-accaaaag	gtaatgaattct-----	...1076...	---ggtgggcc---	caaaaggtgctg-----	AAAGTGGCGg	gAAAActg
D.Sim	-accaaaag	gtaatgaattct-----	...1050...	---tggtgggcc---	c-aaaggtgctg-----	AAAGTGGCGg	gAAAActg
D.Sec	-accaaaag	gtaatgaattct-----	...1015...	---tggtgggcc---	c-aaaggtgctg-----	AAAGTGGCGg	gAAAActg
D.Gri	aacaaaaac	aaaaaatgttc-----	...1402...	actggtggtcttaacgcaag	-----	GTGCTcAAAGTGGCGg	gAAAAttt
D.Moj	-cagtacag	gtaaaaaaaca-----	...1444...	actggtgggcttagcgaag	-----	GTGCTGAAAGTGGCGg	gAAAAttt
D.Per	-accaaaag	gtataacaacg-----	...1015...	---ggtcgcgctt---	aggcggcgaAGGTGCT	GAAAGTGGCGg	gAAAAcgg
D.Pse	-accaaaag	gtataacaacg-----	...1001...	---ggtcgcgctt---	aggcggcgaAGGTGCT	GAAAGTGGCGg	gAAAAcgg
D.Vir	aac-----	--aacatgttcagtgaaa...	1309...	actggtgggcttaacgcaag	-----	GTGCTGAAAGTGGCGg	gAAAAttt
D.Yak	-tccaaaag	gtaacgaattct-----	...1052...	---tggtgggcc---	g-caaggtgctg-----	AAAGTGGCGg	gAAAActg
		*	*	*	*	*****	*****

id=62978 gene=FBgn0032130 name=CG3838 segment=chr2L\_9569199.9570316.1 type=I5 VIEW

Figure 292: CS=11.34



D. Mel	-----acc-aaaaggt-----aa:::::	TTGTTGTTGTTgTTGTTG	-----tctatctaac-aaagttattg--...921...tgaaagtggcgg	gaaaactg
D. Sim	-----acc-aaaaggt-----aa:::::ttttgtagctttagaataaatctttttttttttcatt	TTGTTGTTTTGTT	-----ttccgttgggttttgtgttt...701...tgaaagtggcgg	gaaaactg
D. Sec	-----acc-aaaaggt-----aa:::::ttttgtagctttagaataaatta--ttttttttcatt	TTGTTGTTTTGTT	-----ttccgttgggttttgtgttt...680...tgaaagtggcgg	gaaaactg
D. Gri	-----aacaaaaacaaaaatgttcgactggaaaa:::::	TGTTGTTGTTGTTtTTGTTgTTGTTgTGT	-----ctatctaac-aaagttattgc...1132...tcaaagtggcgg	gaaaattt
D. Moj	cagtacaggtaaaataaac--aacatgttcg-----aaa:::::	TGTTGTTGTTGTTGTTGTCG	-----gtgctgctgctgttgtgttt...1203...tgaaagtggcgg	gaaaattt
D. Per	-----acc-aaaaggtat-----aa:::::	TGTTGTTGcTGTGTT	-----ctatctaacaaaagttattg--...814...tgaaagtggcgg	gaaaacgg
D. Pse	-----acc-aaaaggtat-----aa:::::	TGTTGTTGcTGTGTT	-----ctatctaacaaaagttattg--...802...tgaaagtggcgg	gaaaacgg
D. Vir	-----aac--aacatgttcg-----ag:::::	TGTTGTTGTTGTT	-----ctatctaac-aaagttattgc--...1059...tgaaagtggcgg	gaaaattt
D. Wil	-----taaaaaa-----aa:::::	GCAAAAACAACAACAACAGGTAA	-----ctgaaaactgatttcaagta...1977...aaaatgtggcgg	gaaatttg
D. Yak	-----tcc-aaaaggt-----aa:::::	CACAAGTTAGAGGAGcAACAGcAACAACAACA	-----caacagcctgataagcagc-----...1003...tgaaagtggcgg	gaaaactg

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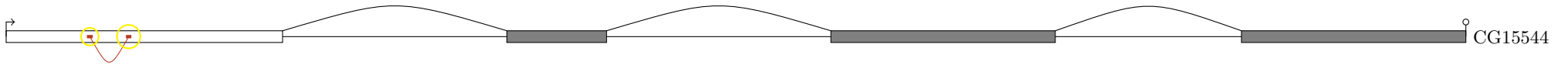
id=62978 gene=FBgn0032130 name=CG3838 segment=chr2L.9569199.9570316.1 type=I5

D. Mel	-accaaaag gtaatgaattct...591...-----cagcaatccaacaataacat-----	TAACAAaAACAACAACGG	-----gcagagccaaaacacgcgag-----...445...tgaaagtggcgg	gaaaactg
D. Sim	-accaaaag gtaatgaattct...607...-----agcaatccaacaataacatt-----	AACAAAAACAACAA	-----cgggcagaacaaaacacgc-----...407...tgaaagtggcgg	gaaaactg
D. Sec	-accaaaag gtaatgaattct...593...-----agcaatccaacaataacatt-----	AACAAAAACAACAA	-----cgggcagaacaaaacacgc-----...386...tgaaagtggcgg	gaaaactg
D. Gri	-aacaaaaa caaaaaatgttc...649...ctctacttgccaatacaata-----	AGTACAACAGaAGCAGc	-----acaactagcattgcgagggc-----...704...tcaaagtggcgg	gaaaattt
D. Moj	-cagtacag gtaaaataaaca...751...-----aataataaccgttgcgagc-----	CGGTAcAACAACAACAACA	-----acaacgaaaattcagcaa--gc-----...655...tgaaagtggcgg	gaaaattt
D. Per	-accaaaag gtataacaaacg...802...-----gataataattatgacggcaa-----	AACAAC-ACAACAATA	-----ccccacaccaatcgcacagt...184...tgaaagtggcgg	gaaaacgg
D. Pse	-accaaaag gtataacaaacg...788...-----gataataattatgacggcaa-----	AACAAC-ACAACAATA	-----ccccacaccaatcgcacagt...184...tgaaagtggcgg	gaaaacgg
D. Vir	-aacacat gttcagtgaaa...686...-----gcaggcggtacaacaacagc-----	AACAACAACAACA	-----aaaatcagcaa--acagcagca--...594...tgaaagtggcgg	gaaaattt
D. Wil	taaaaaaa cattcga-attc...290...-----aattttgtagctttagaaa	TTGTgTTGTTGTTGTTgT	-----GTTTTTGT-----gtttttgtatt-ctgttttt--...1681...aaaatgtggcgg	gaaatttg
D. Yak	-tccaaaag gtaacgaattct...328...tctcttcttcttattogtct-----	TGTTGTTGTTtTTGTTTTCTTTGGgtTTTGTG	-----tttgctgttctgtttcag...669...tgaaagtggcgg	gaaaactg

\* \*
\*\* \*\*\*\*\*
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id=62978 gene=FBgn0032130 name=CG3838 segment=chr2L.9569199.9570316.1 type=I5 VIEW

Figure 293: CS=9.6



```

D.Me1 cgctgtag ccaaacggacgc...140...-----caaacagaaacgcgagcaa--ACACagCTGAAAAcctatttaaggaccgttccaa-----...398...gctataaatgtg|gtgggtgc
D.Sim cgctgtag ccaaacggacgc...154...-----gtcaaacagaaacgcgagca--ACACagCTGAAAAcctatttaaggaccgttccaa-----...401...actataaatgtg|gtgggtgc
D.Sec cgctgtag ccaaacggacgc...155...-----tcaaacagaaacgcgagca--ACACagCTGAAAAcctatttaaggaccgttccaa-----...403...actataaatgtg|gtgggtgc
D.Ere cgctgtag ccaaacggacgc...155...-----tcgaaacagaaacgcgagca--ACACagCTGAAAAcctatttaaggaccgttccaa-----...416...actataaatgtg|gtgggtgc
D.Ana cactgtag ccaaacggacgc...166...-----tcaagt cagaggag-aagtaa--ACACagCTGAAAACTT aTTTAaggaccgttctaaaaagagt...438...caaataaatgtg|gtgggtgc
D.Gri cgctgtag ccaaacggacgc...167...-----ttttaggccacaaca-aaaca--ACACagCTGAAAAcATATTTAAaggaccgtactaaaagaagta...481...acaacaatgtg|gtgggtgc
D.Moj cgctgtag ccaaacggacgc...186...-----cagagtctctgttagccca-a-----GCACagCTGAAAAcattatttaaggaccgtactaa-----...472...acaacaatgtg|gtgggtgc
D.Per cgctgtag ccaaacggacgc...174...atccgcgga-----gtagccaata-----ACACagCTGAAAACTTatttaaggaccgttccaaaa-----...398...gccataaatgtg|gtgggtgc
D.Pse cgctgtag ccaaacggacgc...174...atccgcgga-----gtagccaata-----ACACagCTGAAAACTTatttaaggaccgttccaaaa-----...408...gccataaatgtg|gtgggtgc
D.Vir cgctgtag ccaaacggacgc...139...-----agcatttttgcagcccca-----GCACagCTGAAAAcATATTTAAaggaccgtaccaaaagtatc...578...acaacaatgtg|gtgggtgc
D.Wil cgctgtag ccaaacggacgc...134...-----aagtcaaagaga-acgaaaaaACACagCTGAAAACTT aTTTAaggaccgttcaaaaaataa...489...acaacaatgtg|gtgggtgc
D.Yak cgctgtag ccaaacggacgc...161...-----cgaaaacgcgacacgagca--ACACagCTGAAAAcctatttaaggaccgttccaa-----...424...actataaatgtg|gtgggtgc
* ***** * ***** * * ***** * ***** * * ***** * *****

```

id=15756 gene=FBgn0039804 name=CG15544 segment=chr3R.26653572.26654187.1 type=E5

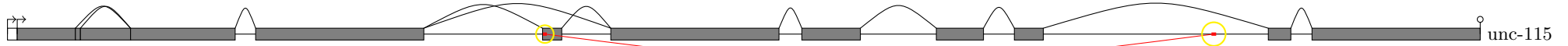
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D.Me1 cgctgtag ccaaacggacgc...227...-----tcaagtcagttaaatacagaGTTTTCAGaGTGT--gtgtctgtgtgctgtgtgcca...312...gctataaatgtg|gtgggtgc
D.Sim cgctgtag ccaaacggacgc...241...-----ccaagtcagttaaatacagaGTTTTCAGaGTGT--gtgtctgtgtgctgtgtgcca...315...actataaatgtg|gtgggtgc
D.Sec cgctgtag ccaaacggacgc...242...-----ccaagtcagttaaatacagaGTTTTCAGaGTGT--gtgtctgtgtgctgtgtgttc...317...actataaatgtg|gtgggtgc
D.Ere cgctgtag ccaaacggacgc...242...-----ccaagtcagttaaatacagaGTTTTCAGaGTGT--gtgcctgtgtgctgtgtgcca...330...actataaatgtg|gtgggtgc
D.Ana cactgtag ccaaacggacgc...253...-----tttcgacaaagtcagTTAAatATATaGTTTTCAGaGTGT--gtgaaatagtgccacagtg...353...caaataaatgtg|gtgggtgc
D.Gri cgctgtag ccaaacggacgc...311...aatcatttcgacaaagtcagTTAAatATATaGTTTTCAGaGTGT--gtgtgtgtctgtgtatgt...335...acaacaatgtg|gtgggtgc
D.Moj cgctgtag ccaaacggacgc...300...-----caaagtcagttaaataaacGTTTTCAGggTGTGagtgcgcgctaagataatcg...357...acaacaatgtg|gtgggtgc
D.Per cgctgtag ccaaacggacgc...301...-----gaccaagtcagttaaataaacAAGTTTTCAGaGTGT--gtgtgctgtgtgctgtgtgtgc...272...gccataaatgtg|gtgggtgc
D.Pse cgctgtag ccaaacggacgc...301...-----gaccaagtcagttaaataaacAAGTTTTCAGaGTGT--gtgtgctgtgtgctgtgtgtgc...282...gccataaatgtg|gtgggtgc
D.Vir cgctgtag ccaaacggacgc...279...aagcatttcgacaaagtcagTTAAatATATaGTTTTCAGagTGTGagtgcgcgctaagataaaaa...434...acaacaatgtg|gtgggtgc
D.Wil cgctgtag ccaaacggacgc...271...-----tttcgacaaagtcagTTAAatATATaGTTTTCAGaGTGT--gtttaaagcctaattaaaac...355...acaacaatgtg|gtgggtgc
D.Yak cgctgtag ccaaacggacgc...249...-----ccaagtcagttaaatacagaGTTTTCAGaGTGT--gtgctgtgtgtgtagtggt...337...actataaatgtg|gtgggtgc
* ***** * ***** * ***** * ***** * * ***** * *****

```

id=15756 gene=FBgn0039804 name=CG15544 segment=chr3R.26653572.26654187.1 type=E5 VIEW

Figure 294: CS=11.52



```

D.Mel  gcgagatg gtaagtagtcgg...313...gcgtttttatTTTTcgttc-----GTTTCAG TaCATCcg
D.Sim  gcgagatg gtaggtagtcgg...286...gcgtttttatTTTTcgttc-----GTTTCAG TaCATCcg
D.Sec  gcgagatg gtaggtagtcgg...294...gcgtttttatTTTTgttc-----GTTTCAG TaCATCcg
D.Ere  gcgagatg gtaggtagtcgg...296...gcgtttttatTTTTcgttc-----GTTTCAG TaCATCcg
D.Gri  gcgacatg gtatgtggcca...214...tgcctttgaatTTTTattCGTTcgTTTTGCAG TaCATCcg
D.Moj  gcgacatg gtaggtggagat...388...-tttgatttattatcgttcg----TTTTGCAG TaCATCcg
D.Vir  gcgacatg gtaggtgcgggg...998...-ttttgatttatttccgttcg----TTTTCAG TaCATCcg
D.Wil  gtgatatg gtagtgcacatcc...422...tttttattttctttcgttc-----GTTTCAG TaCATCcg
D.Yak  gcgagatg gtaggtagtcgg...297...gcgtttttatTTTTcgttc-----GTTTCAG TaCATCcg
* * * * *

```

id=114676 gene=FBgn0260463 name=unc-115 segment=chr3R.5515801.5516153\_-1 type=IN

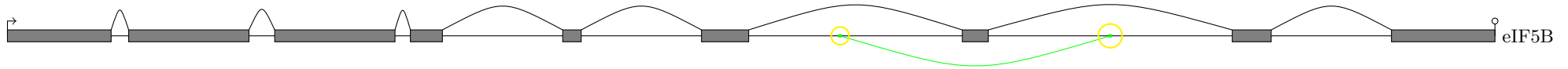
```

D.Mel  tcagctcc gtaagtgtgccc...559...ccgctgcggccacgatgcatGGTGccACTGtAAGACcgc-tttcgttggtgctatgc--...129...tttcgaaaacag gacttctc
D.Sim  tcagctcc gtaagtgtgccc...557...ccgctgcggccacgatgcatGGTGccACTGtAAGACcgc-tttcgttggtgctatgc--...135...tttcgaaaacag gacttctc
D.Sec  tcagctcc gtaagtgtgccc...554...ccgctgcggccacgatgcatGGTGccACTGtAAGACcgc-tttcgttggtgctatgc--...135...tttcgaaaacag gacttctc
D.Ere  acagctcc gtaagtgtgccc...507...ccgctgcggccacgatgcatGGTGccACTGtAAGACcgc-ttttggttggtgctatgc--...130...ttttgaaaatag gatttctc
D.Gri  acagctcc gtaagtgtgac...573...cagcagccgcccacgatgcatGGTGccACTGtAAGAAATGctttggttggtgcttcttt...153...tacccaaatag gacttttc
D.Moj  acagctcc gtaagtgtgat...597...ctgccgagctacgatgcatGGTGccACTGtAAGAAatgc-ttgagttcattttccg--...204...tattccatgtag gacttttc
D.Vir  acagctcc gtaagtgtggc...517...ccgcccggcccacgatgcatGGTGccACTGtAAGAatgc-tttggttggtgctttt--...209...cattgcacacag gacttctc
D.Wil  acagctca gtaagtgtgccc...578...ctgctgctgtcacgatgcatGGTGccACTGtAAGATtgcttttggttggttttact--...169...ttttaataacag gatttctc
D.Yak  acagctcc gtaagtgtgccc...528...ccgctgcggccacgatgcatGGTGccACTGtAAGACcgc-ttttggttggtgctatgc--...133...tttcgacaatag gacttctc
*****

```

id=114686 gene=FBgn0260463 name=unc-115 segment=chr3R.5513490.5514257\_-1 type=IN VIEW

Figure 295: CS=13.32



D. Mel	agttaagg	gtaagtatgta...333...	-gactgcaattacccccgaaa--	GCTAcaGGTGTAAATG	caatctgccggaactgaaa--	...1385...	tccatcccacag	atactgcc
D. Sim	agttaagg	gtaagtaggctc...358...	-aactgcaattacccccgaaa--	GCTAcaGGTGTAAATG	caatctgccggaactgaaa--	...1363...	tccatcccacag	atactgcc
D. Sec	agttaagg	gtaagaaggctc...331...	-aactgcaattacccccgaaa--	GCTAcaGGTGTAAATG	caatctgccggaactgaaa--	...1388...	tccatcccacag	atactgcc
D. Ere	agttaagg	gtaagtcaatct...295...	tagctgcaatta-ccccgaaa--	GCTAcaGGTGTAAATG	caatctgccggaactgaaa--	...1479...	tccatcccacag	atactgcc
D. Ana	agctaagg	gtaagttggatt...155...	cttctgcaattacccccaaaa--	GCTAcaGGTGTAAATG	caatctgccgaaaaccgaa--	...1085...	cgcatccgacag	atactgcc
D. Gri	aactaaag	gtaagttgagat...210...	gaaacataattacgcaaaaa--	GCTAcaGGTGTAAATG	caatcaactcgc--ttgtggtt...	...666...	ttcaatccacag	atactgcc
D. Moj	aactaaag	gtgagtgaaat...183...	----aatagtcataagcaaatgcca	GCTAcaGGTGTAAATG	caatcaactcgcctttgtgg--	...913...	cttttttcacag	atactgcc
D. Vir	aactaaag	gtgagttcagat...751...	gaaacataattacgcaaaaa--	GCTAcaGGTGTAAATG	caatcagctcgc--ttgtggt...	...1179...	atcctttcacag	atactgcc
D. Wil	aactaaag	gtaagaccaaac...554...	----tgcaattacccccaaaaagaa	GCTAcaGGTGTAAATG	caatctgctctgacttgaaa--	...2277...	ttttgttttag	atactgcc
D. Yak	agttaagg	gtaagttttcta...272...	-aactgcaattacccccgaaa--	GCTAcaGGTGTAAATG	caatctgtcgcggtctgaaa--	...1411...	tccaaccacag	atactgcc
		* ** *	** **	* * * * *	*****		** *****	** *****

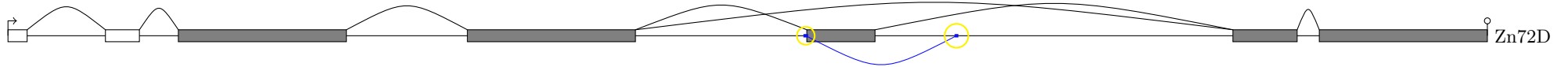
id=50296 gene=FBgn0026259 name=eIF5B segment=chr3L.3443566.3445364.-1 type=IN

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D. Sim	gcaaggag	gtaagtgcactg...4126...	--gtgtaaatgtgctatgtagc	TATTTCACCgaTAGC	aacaggccagcacaacaaca...	...783...	ctttgattgcag	ttcgtgga
D. Sec	gcaaggag	gtaagtgcactg...4142...	--gtgtaaatgtgctatgtagc	TATTTCACCgaTAGC	aacaggccagcacaacaaca...	...767...	ctttgattgcag	ttcgtgga
D. Ere	gcaaggag	gtaagtgcactg...4149...	--gtgtaaatgtgctatgtagc	TATTTCACCgaTAGC	aacaggccagcacaacaaca...	...760...	ctgtgattgcag	tttgtgga
D. Ana	gcaaggag	gtaagtgcacaa...3606...	tggtgtaagtgtgt--tgtagc	TATTTCACCgaTAGC	aacaagaaataaaagaaaa...	...1303...	tctttttgcag	tttgtgga
D. Gri	gcaaagag	gtaagcagaagt...4194...	gtagtaaatgtgt--tgtagc	TATTTCACCgaTAGC	aacaagccaaaaacgacgaa...	...715...	ggtcttttgcag	tttgtgaa
D. Moj	gcaaagag	gtaagtctgaga...3952...	gtagtaaatgtgt--tgtagc	TATTTCACCgaTAGC	aacaagccaaaaacgacgaa...	...957...	attcatttacag	tttgtgga
D. Vir	gcaaagag	gtgagtgattag...3965...	gtagtaaatgtgt--tgtagc	TATTTCACCgaTAGC	aacaagccaaaaacgacgaa...	...944...	gtccatttgcag	tttgtgga
D. Wil	gcaaggag	gtaagtgtataa...3249...	gtgtgtaaatgtgt--tgtagc	TATTTCACCgaTAGC	aacaagccaaaaaaacagaa...	...1660...	tttcttttgcag	tttgtgga
D. Yak	gcaaggag	gtaagtgcactg...4131...	--gtgtaaatgtgctatgtagc	TATTTCACCgaTAGC	aacaggccaaacacacagca...	...778...	ctgtgcttgcag	tttgtgga
		**** **	** **	***** **	***** * *	*	** **	** **

id=50298 gene=FBgn0026259 name=eIF5B segment=chr3L.3432366.3443457.-1 type=IN VIEW

Figure 296: CS=10.8





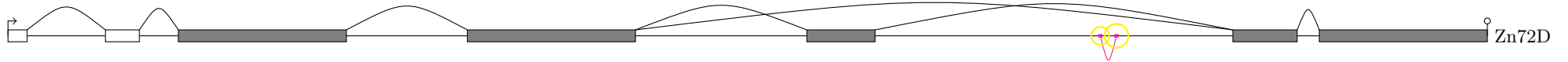
D.Mel	ggtggcag	gtaagtgaggag...517...-caactaattg	cgtaataaaaa	CGTATTGCcgTTTT	cag	cttctctc
D.Sim	ggtggcag	gtaagtgaggag...517...-caactaattg	cgtaataaaaa	CGTATTGCcgTTTT	cag	cttctctc
D.Sec	ggtggcag	gtaagtgaggag...517...-caactaattg	cgtaataaaaa	CGTATTGCcgTTTT	cag	cttctctc
D.Ere	ggtggcag	gtaagtgcgatg...514...-caactaattg	cgtaataaaaa	CGTATTGCcgTTTT	cag	cttctctc
D.Gri	ggtggcag	gtaagttgcaac...1161...-caaaacaaaaa	ataaaaa	CGTATTGCcgTTTT	cag	cttctctc
D.Per	tgtggcag	gtaagtgccgaa...573...gcaacacaata	aaaaaccaa	CGTATTGCcgTTTT	caGCTTC	tctc
D.Pse	tgtggcag	gtaagtgccgaa...570...gcaacacaata	aaaaaccaa	CGTATTGCcgTTTT	caGCTTC	tctc
D.Wil	ggtggcag	gtaagttgggtg...812...-agtagcccc	acaatttgatTTTGACGTATTGC	TTTT	cag	cttctgtc
D.Yak	ggtggcag	gtaagtgagatg...507...-caactaattg	cgtaataaaaa	CGTATTGCcgTTTT	cag	cttctctc
	*****	*****	** *	*****	*****	**** *

id=46960 gene=FBgn0017453 name=Zn72D segment=chr3L.16102155.16102721\_-1 type=IN

D.Mel	tcgtcacg	gtaacaagcgcg...197...-----aacaacaca	aacacacgcca	AGAAGCAATGCC	-----attgatccacacagagacg...792...tcttgatttcag	gcgacact
D.Sim	tcgtcacg	gtaacaagcgcg...197...-----aacaacaca	aacacacgcca	AGAAGCAATGCC	-----attgatccacacagagacg...820...tcttgatttcag	gcgacact
D.Sec	tcgtcacg	gtaacaagcgcg...197...-----aacaacaca	aacacacgcca	AGAAGCAATGCC	-----attgatccacacagagacg...815...tcttgatttcag	gcgatact
D.Ere	tcgtcacg	gtaacaagcgcg...196...-----aacaacaca	aacacacgcca	AGAAGCAATGCC	-----attgatccacacagagaa...749...tcttgatttcag	gcgacatt
D.Gri	tcgtaatg	gtaacacacaag...385...-----aattataa	attcagcgcacc	AGAAGCAATGCC	-----attgatccacacagatagac...899...tctctgttcag	gtgaggca
D.Per	tcgttacg	gtaacaagcagt...305...--tgttgaacaaa	c-caaacGAAGC	AAGAAGCAATGCC	-----attgatccacacagattt...843...tctcaattccag	gcgacatg
D.Pse	tcgttacg	gtaacaagcagt...305...--tgttgaacaaa	c-caaacGAAGC	AAGAAGCAATGCC	-----attgatccacacagattt...843...tctcaattccag	gcgacatg
D.Wil	tcgtaacg	gtaacaagcag...527...tttgacaaaca	gc-----tgccc	AGAAGCAATGCC	aTTAAAtaatattagaatatctata-----...967...ttccctttccag	gtgacatt
D.Yak	tcgtcacg	gtaacaagcgcg...196...-----aacaacaca	aacacacgcca	AGAAGCAATGCC	-----attgatccacacagagaa...767...tcttgatttcag	gcgaaatt
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id=46962 gene=FBgn0017453 name=Zn72D segment=chr3L.16100887.16101951\_-1 type=IN VIEW

Figure 297: CS=8.64



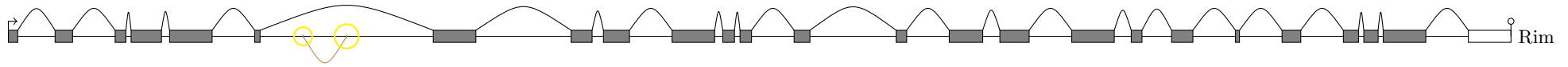
D.Mel	tcgtcacg	gtaacaagcgcg...620...taaaat--acagtgaagtgcgc	GCTCTAAGTGGAAATGCAA	-----c--gggtggatgacgccgagtc---	362...tcttgatttcag	gcgacact
D.Sim	tcgtcacg	gtaacaagcgcg...639...taaaat--acagtgaagtgcgc	GCTCTAAGTGGAAATGCAA	-----c--gggtggatgacgccgagtc---	371...tcttgatttcag	gcgacact
D.Sec	tcgtcacg	gtaacaagcgcg...634...taaaat--acagtgaagtgcgc	GCTCTAAGTGGAAATGCAA	-----c--gggtggatgacgccgagtc---	371...tcttgatttcag	gcgatact
D.Ere	tcgtcacg	gtaacaagcgcg...591...--aaat--aca--gaagtgcgcgctc	TAAGTGGAAATGCAA	-----c--gggtggatgacgccgagtc---	351...tcttgatttcag	gcgacatt
D.Ana	tcgtcacg	gtaacaagcggg...663...---aaa--ataatga--ccgtgcgctc	TAAGTGGAAATGCAAATTG	-----c--aaagtggattgtctctcg---	332...tctcgtttacag	gcgacggt
D.Gri	tcgtaatg	gtaacacacaag...1048...-tctatcgtatctgtggaacg---	TAGGggGAAGAaACAAACATT	-----tacattt-tgcttttgattat---	227...tctctgttccag	gtgaggca
D.Moj	tcgtaatc	gtaatggtaaca...720...---ac--acagccagccacgcgctc	TAAGTGGAAATGCGAG	-----ctccaattttccaatttcaa---	433...tctccgttctag	gtgaaaca
D.Per	tcgttacg	gtaacaagcagt...219...ccagat--gccagaggaattc-----	AAGAtACAAACtTTGTG	-----taaataaagtcctttgctgg---	931...tctcaattccag	gcgacatg
D.Pse	tcgttacg	gtaacaagcagt...219...ccagat--gccagaggaattc-----	AAGAtACAAACtTTGTG	-----taaataaagtcctttgctgg---	931...tctcaattccag	gcgacatg
D.Vir	tcgtaatg	gtaacacaagca...1057...-tttgt--tatccgtggaacgta-----	GGAAGAaACAAACATT	-----tacattt-tgcttttgagatt---	186...tttccgttccag	gtgacaca
D.Wil	tcgtaaacg	gtaacaaagcag...1228...ggggat--aatccgtggcacgt-----	AGGAAGAaACAAACATT	-----tttatctcatgtccattttt-----	267...ttccctttccag	gtgacatt
D.Yak	tcgtcacg	gtaacaagcgcg...749...cgagcg--aatacagagatcgt-----	GGGAAGAaACAAACATT	-----attcgtgcttttatacactg...	209...tcttgatttcag	gcgaaatt
	**** *	****	* **	*	* ** **	* **

id=46962 gene=FBgn0017453 name=Zn72D segment=chr3L.16100887.16101951.-1 type=IN

D.Mel	tcgtcacg	gtaacaagcgcg...671...gccgagtcgagtcctcgagc----	TTGCAATTCGGTTTAcGAGT	ccccaa---acggagataccgat-----	310...tcttgatttcag	gcgacact
D.Sim	tcgtcacg	gtaacaagcgcg...690...gccgagtcgagtcctcgagc----	TTGCAATTCGGTTTAcGAGT	ccccaa---aaggagataccgat-----	319...tcttgatttcag	gcgacact
D.Sec	tcgtcacg	gtaacaagcgcg...685...gccgagtcgagtcctcgagc----	TTGCAATTCGGTTTAcGAGT	ccccaa---acggagataccgat-----	319...tcttgatttcag	gcgatact
D.Ere	tcgtcacg	gtaacaagcgcg...638...gccgagtcgagtcctcgagc----	TTGCAATTCGGTTTAcGAGT	ccccaa---acggagata-----	304...tcttgatttcag	gcgacatt
D.Ana	tcgtcacg	gtaacaagcggg...712...ttgtctctcgagactcgtctCGAGc	TTGCAATTCGGTTTAcGAGT	tgagag-ccat---acggatatag-----	282...tctcgtttacag	gcgacggt
D.Gri	tcgtaatg	gtaacacacaag...1199...-caacatctaccaaca--caacAATGTTTGTcTCTTTTCTA	TTGCAATTCGGTTTAcGAGT	-----a---gccgaactttttacgcata...	78...tctctgttccag	gtgaggca
D.Moj	tcgtaatc	gtaatggtaaca...764...-tccaatttcaatttcaattt---	TTGCAATTCGGTTTAcGAGT	tgag-gcccag---gtggagtgg-----	389...tctccgttctag	gtgaaaca
D.Per	tcgttacg	gtaacaagcagt...1099...atggaacttttgcttccacc	CACAAAtGTTTGTcTCTT	-----tttccaa---gccgaatctagaa-----	51...tctcaattccag	gcgacatg
D.Pse	tcgttacg	gtaacaagcagt...1099...atggaacttttgcttccacc	CACAAAtGTTTGTcTCTT	-----tttccaa---gccgaatctagaa-----	51...tctcaattccag	gcgacatg
D.Vir	tcgtaatg	gtaacacaagca...1172...-ttatctatcatctactcaacAATGTTTGTcTCTTTT	TTGCAATTCGGTTTAcGAGT	-----ctaa---gccgaacttttgcgct---	71...tttccgttccag	gtgacaca
D.Wil	tcgtaaacg	gtaacaaagcag...1383...--atatatatatatatatatAATGTTTGTcTCTTTT	TTGCAATTCGGTTTAcGAGT	-----ccaatgaaccaggcattta-----	112...ttccctttccag	gtgacatt
D.Yak	tcgtcacg	gtaacaagcgcg...904...-tggaattttg--tttcaccaccAATGTTTGTcTCTTTT	TTGCAATTCGGTTTAcGAGT	-----ccaa---gtcgaatctagtattt---	54...tcttgatttcag	gcgaaatt
	**** *	****	* * * *	**	* ** **	* **

id=46962 gene=FBgn0017453 name=Zn72D segment=chr3L.16100887.16101951.-1 type=IN VIEW

Figure 298: CS=11.52



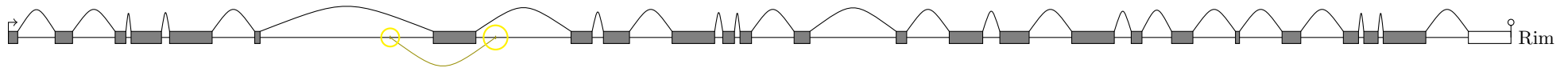
D. Mel	ccttgaag	gtggcaaacaca...	3387...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcgaacaaacaaa...	1526...	ccaccctacag	gcgggcgc
D. Sec	ccttgaag	gtggcaaacaca...	3389...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcgaacaaaaaatg...	1524...	ccaccctacag	gcgggcgc
D. Ere	ccttgaag	gtggcaaacaca...	3327...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcgaacaaaaaatgtgt...	1586...	ccaccctacag	gcgggcgc
D. Ana	ccttgaag	gt-gcaaacacaa...	3529...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaaagaattaaat...	1384...	caaccctacag	gcgggcgc
D. Gri	ccttggag	gtggaaaacaca...	2923...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaaaaaaaaaaaa...	1990...	ctacatctacag	gcggccgt
D. Moj	agaaggaa	agagagcacaaa...	3273...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaagataaataaca...	1640...	ctacatctacag	gcgggcgt
D. Per	ccttgaag	gtggaagggaaa...	3767...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaaataaaaaaca...	1146...	accattctacag	gcgggcgc
D. Pse	ccttgaag	gtggaagggaaa...	3764...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaactaaaaaaca...	1149...	accattctacag	gcggccgt
D. Vir	cgctggtg	gtggaacagca...	3244...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcaaaagaaacaaaaaca...	1669...	ctacatctacag	gcgggcgt
D. Wil	tgatgacg	atgggaaagtaa...	3212...	tacgtccggcgatctacaa	ATTCATGCAAAT	gtaagcaaaactaaaaga...	1701...	cataatctacag	gcggccgt
D. Yak	ccttgaag	gtggcaaacaca...	3357...	tctgcccggcgatctacag	ATTCATGCAAAT	gtaagcgaacaaatgattaa...	1556...	ccaaccctacag	gcgggcgc
		*	*	*	** ** *	***** **		*****	**** *

id=34269 gene=FBgn0053547 name=Rim segment=chr3R\_13720625\_13727116\_-1 type=IN

D. Mel	ccttgaag	gtggcaaacaca...	3953...	acatgaaatccttgggtaaca	ATTGCGATGGAT	atcgtaacgctgtttccctgt...	960...	ccaccctacag	gcgggcgc
D. Sec	ccttgaag	gtggcaaacaca...	3955...	acatgaaagtcttgggtaaca	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	958...	ccaccctacag	gcgggcgc
D. Ere	ccttgaag	gtggcaaacaca...	3884...	acaagaaatccttgggtaata	ATTGCGATGGAT	atcgtaacgctgtttccctgt...	1029...	ccaccctacag	gcgggcgc
D. Ana	ccttgaag	gt-gcaaacacaa...	4096...	agcaagaaacttgggtaata	ATTGCGATGGAT	atcgtaacgctgtttccat...	817...	caaccctacag	gcgggcgc
D. Gri	ccttggag	gtggaaaacaca...	3519...	aaaaataactacgtgaaga	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	1394...	ctacatctacag	gcggccgt
D. Moj	agaaggaa	agagagcacaaa...	3857...	acaaacaatacgtgaaga	ATTGCGATGGAT	atcgtaacgctgtttccagt...	1056...	ctacatctacag	gcgggcgt
D. Per	ccttgaag	gtggaagggaaa...	4286...	aaagaataccttgggtaata	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	627...	accattctacag	gcgggcgc
D. Pse	ccttgaag	gtggaagggaaa...	4285...	aaagaataccttgggtaata	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	628...	accattctacag	gcggccgt
D. Vir	cgctggtg	gtggaacagca...	3838...	aaaacaactacgtgaaga	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	1075...	ctacatctacag	gcgggcgt
D. Wil	tgatgacg	atgggaaagtaa...	3756...	actttgcatttgcaataaga	ATTGCGATGGAT	atcgtaacgctgtttcctgt...	1157...	cataatctacag	gcggccgt
D. Yak	ccttgaag	gtggcaaacaca...	3908...	acaagaaatccttgggtaata	ATTGCGATGGAT	atcgtaacgctgtttccctgt...	1005...	ccaaccctacag	gcgggcgc
		*	*	*	*	*	** ***** *	*****	**** *

id=34269 gene=FBgn0053547 name=Rim segment=chr3R\_13720625\_13727116\_-1 type=IN VIEW

Figure 299: CS=13.2



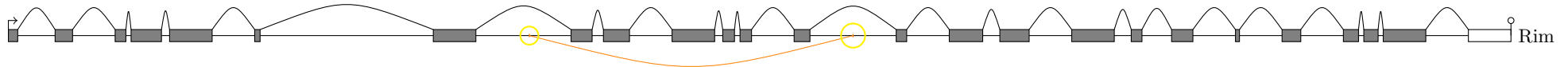
D. Mel	ccttgaag	gtggcaaacaca...	4761...	catttggtgaac--atctg--aa	<b>AAGGACAACAAAC</b>	tat--ggcaggcaagcggcgca...	151...	ccaccctacag	gcgggcgc
D. Sec	ccttgaag	gtggcaaacaca...	4775...	catttattgaac--atctg--aa	<b>AAGGACAACAAAC</b>	tat--ggcaggcaagcggcgca...	137...	ccaccctacag	gcgggcgc
D. Ere	ccttgaag	gtggcaaacaca...	4769...	catttggtgaac--atctg--aa	<b>AAGGACAACAAAC</b>	tat--ggcaggcaagcggcgca...	143...	ccaccctacag	gcgggcgc
D. Ana	ccttgaag	gt-gcaaacacaa...	4785...	cattaaatgaac--atctg--aa	<b>AAGGACAACAAAC</b>	tat--ggcaggcaagcggcgca...	127...	caaccctacag	gcgggcgc
D. Gri	ccttggag	gtggaaacacaca...	4709...	-tttcgccgaatgaaaccg--a-	<b>AAGGACAACAAAC</b>	taat-gtcaggcaagcagcag--...	203...	ctacatctacag	gcggccgt
D. Moj	agaaggaa	agagagcacaaa...	4761...	--tcgccgtaag--tttaccaca	<b>AAGGACAACAAAC</b>	taat-gtcaggcaaatgaacc--...	151...	ctacatctacag	gcgggcgc
D. Per	ccttgaag	gtggaagggaaa...	4783...	catttggttaaca--attcg--aa	<b>AAGGACAACAAAC</b>	taataagcaggcaagcagcag--...	129...	accattctacag	gcgggcgc
D. Pse	ccttgaag	gtggaagggaaa...	4783...	catttggttaaca--attcg--aa	<b>AAGGACAACAAAC</b>	taataagcaggcaagcagcag--...	129...	accattctacag	gcgggcgc
D. Vir	cgctggtg	gtggaacagca...	4758...	-ttgcgccgaaa--atttgctaa-	<b>AAGGACAACAAAC</b>	taat-gtcaggcaagcagcca--...	154...	ctacatctacag	gcgggcgc
D. Wil	tgatgacg	atgggaaagtaa...	4746...	-aaatgcaataatcagtttg--a-	<b>AAGGACAACAAAC</b>	taataaaaggcaagtgc--...	165...	cataatctacag	gcgggcgc
		*		*	*****	*** *		*****	**** *

id=34269 gene=FBgn0053547 name=Rim segment=chr3R\_13720625\_13727116\_-1 type=IN

D. Mel	ggcccaag	gtacacacagat...	185...	atatcccaccaactttctct	<b>GTTTGTGTTCTT</b>	--gtcatgtccagaaagtaacc...	856...	ctgcatatag	aatccggt
D. Sec	ggcccaag	gtacacacagat...	168...	atatcccaccaactttctct	<b>GTTTGTGTTCTT</b>	--gtcatgtccagaaagtaacc...	829...	ctgcatatag	aatccggt
D. Ere	ggcccaag	gtacacacagat...	188...	taatccaaccaactttctct	<b>GTTTGTGTTCTT</b>	--gtcatgtccagaaagtaacc...	813...	ctgcatatag	aatccggt
D. Ana	ggcccaag	gtacaaggactc...	150...	tgataacccccgaattccct	<b>GTTTGTGTTCTT</b>	--gtcgaaaaaccaataaac...	844...	cgatcatatag	aatccggt
D. Gri	ggcccaag	gtacaaaaatc...	345...	ctctttctctctcaactat	<b>GTTTGTGTTCTT</b>	--ctcatacgtctgattacctt...	1022...	atgtatctatag	aatccggt
D. Moj	ggcccaag	gtacacgacagc...	280...	ctttgtcttactaagctcc	<b>GTTTGTGTTCTT</b>	--gtttttccttaacttgaaa...	1135...	atgtgtctatag	aatccggt
D. Per	ggcccaag	gtacagcccga...	181...	ttaactttctctctctctct	<b>GTTTGTGTTCTT</b>	--gtcatgtccccatgcattg...	1016...	atcgatatatag	aatccggt
D. Pse	ggcccaag	gtacagcccga...	185...	ctctctctctctctctctct	<b>GTTTGTGTTCTT</b>	--gtcatgtccccatgcattg...	1013...	atcgatatatag	aatccggt
D. Vir	ggcccaag	gtacagcccagc...	259...	ctctttctctcttaactct	<b>GTTTGTGTTCTT</b>	--gtcatgtcttcaactcaatc...	986...	gtgtatctgtag	aatccggt
D. Wil	tgccgaag	gtattagaaacg...	263...	tacaacaacggtttttccat	<b>GTTTGTGTTCTT</b>	catcataatgtgaatgtccc--...	866...	atcatgtatag	aatccggt
		** **		*	*****	*		* **	*****

id=34271 gene=FBgn0053547 name=Rim segment=chr3R\_13718509\_13719626\_-1 type=IN VIEW

Figure 300: CS=12



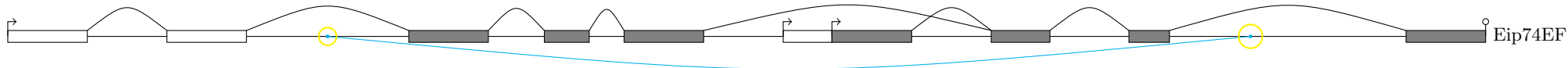
D.Mel	ggccaag	gtacacacagat...582...	gttgaggtactcttgaatc	GTGTG	TGTTCTCAA	-----	aacaagtaggaa--taccaata...	458...	ctgcgcatatag	aatccggt
D.Sim	ggccaag	gtacacacagat...565...	gttgaggtactcttgaatc	GTGTG	TGTTCTCAA	-----	aacaagtaggaa--taccaata...	436...	ctgcgcaaatag	aatccggt
D.Ere	ggccaag	gtacacacagat...568...	gttgagggaactcttgaatc	GTGTG	TGTTCTCAA	-----	aacaagtaggaa--taccaata...	432...	ctgcgcatatag	aatccggt
D.Ana	ggccaag	gtacaaggactc...538...	gttgaggaaactcttgaac	GTGTG	TGTTCTCAA	-----	aaaacaagtaggaa--ca-aaat...	455...	cgatgcatatag	aatccggt
D.Gri	gccaag	gtacaaaaatc...344...	-tctctttctctctcaacta	TGTTGTTGTTCTT	-----	ctcatagctctgattacctt...	1022...	atgtatctatag	aatccggt	
D.Moj	gccaag	gtacacgacagc...877...	--gatctaattgcaaaagctac	GTGTG	TGTTCTCAAAGT	aggtcta-taacac--taaaact...	534...	atgtgtctatag	aatccggt	
D.Per	gccaag	gtacagcccga...555...	tccccgaaactcttgaac	GTGTG	TGTTCTCAA	-----	ccgaaaaaaaa-gtatactta...	641...	atcgatatatag	aatccggt
D.Pse	gccaag	gtacagcccga...558...	tccccgaaactcttgaac	GTGTG	TGTTCTCAA	-----	ccgaaaaaaaaagctatattt...	639...	atcgatatatag	aatccggt
D.Vir	gccaag	gtacagcccga...258...	-tctctttctctcttaactc	TGTTGTTGTTCTTGT	-----	catgtctcaactcaatcgt...	984...	gtgtatctgtag	aatccggt	
	* * *	*****		* ** *****			*		*** *****	

id=34271 gene=FBgn0053547 name=Rim segment=chr3R.13718509\_13719626\_-1 type=IN

D.Mel	tgctagag	gtaacagccaccacaacaacttgaaacaact:::-----	TTGAGAAC	ACATACT	gccaaggctatctctgaa--...	539...	atgacgatccag	ctcgatct
D.Sim	tgctagag	gtaacagccaccacaacaacttgaaacaact:::-----	TTGAGAAC	ACATACT	gccaaggctatctctgaa--...	734...	acgacgatccag	ctcgatct
D.Ere	tgctagag	gtaacagccaccacaacaacttgaaacaact:::acatgccatgagcagcataagcatcaccatgccagcaca	TTGAGAAC	ACATACT	gccaaggctatctctgaa--...	524...	acgacgatccag	ctcgatct
D.Ana	tgcttagag	gtaacaac-----	TTGAGAAC	ACATACT	gccaaggcggccttttaa--...	484...	ccaacgatccag	ctcgatct
D.Gri	tgctcgag	gtaaca-----	AAGAACA	ACAAACA	-actacaacaataaccacact...	2109...	cacataattcag	ctcgatct
D.Moj	tgctcgag	gtaacaacaa-----	ACTTGAGAAC	ACATACT	taactgcagaaaactgtcca--...	619...	cgcataattcag	ctcgatct
D.Per	tgcttagag	gtaacagc-----	TTGAGAAC	ACATACT	gcccagagcgatctctc--...	527...	atctcgatccag	ctcgatct
D.Pse	tgcttagag	gtaacagccaa-----	TTGAGAAC	ACATACT	gcccagagcgatctctc--...	516...	gatccgatccag	ctcgatct
D.Vir	tgctcgag	gtaacaac-----	ACAAGAACAACA	acAACA	-acaaaaacaacaaccatata...	2083...	cacataattcag	ctcgatct
	* * *	*****	*****	* ** *			** **	*****

id=34283 gene=FBgn0053547 name=Rim segment=chr3R.13713266\_13715316\_-1 type=IN VIEW

Figure 301: CS=13.05



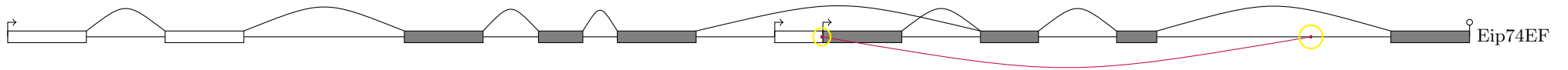
D.Mel	agcgaag	gtgagaatgaaa...848...	-----ggcttttcctttcgcgcttc-----	<b>TTGTT</b>	--t	<b>GTTGTTGTTGTTGTTG</b>	-cgcag-ctctttcgagttttc-----	...2307...	-ttctttttcag	actccaaa			
D.Sim	agcgaag	gtgagaatgaaa...793...	-----tttcctttcgcgcttcctcgt-----			<b>TTGTTGTTGcTGTTGTTGTTG</b>	-cccag-ctctttcgagttttc-----	...2262...	-cttcctttcag	actccaaa			
D.Sec	agcgaag	gtgagaatgaaa...2171...	---tttgcgccgtg--aatgcagat---	<b>TGTTGTTGC</b>	a	<b>GTTGCTGTTGTTGTTGTTGTTG</b>	-----	-tgttgcaaatgctgctgttg...	...877...	-cttcctttcag	actccaaa		
D.Ere	agcgaag	gtgagaatggat...3069...	.gttgctgcgccgtgttgatg			<b>TGTTGTTG-TGTTGTTGTTG</b>	-----	ccgcagttcagtaacatggtt...	...812...	cttcattt-cag	actccaaa		
D.Ana	agagaaag	gtgagtacaaa...1040...	---ggcaatgttgaatgtctga---			<b>GCTGtTGCTGTT</b>	-t	<b>GTTGCTgTTT</b>	-----	tgcacaagaaaaataatt...	...1640...	-ttccatttcag	actccaaa
D.Gri	tacaaaat	atatatacat...1359...	---tgtctgagtgatgtgccag	<b>TGTT</b>	t	<b>GTTGCTGCTGTTGTTGTTGTTG</b>	t	<b>TTGT</b>	-----	ttgggctctcttggcattt...	...1568...	-tttccatttcag	acttttag
D.Pse	tctgagag	gttcgcgggagg...1495...	-----aagtaataaaattctcttct			<b>GCTGcTGCTGTTGTTGTTGTTGTTG</b>	cgtagtaattctcttac-tcc-----	...1894...	-tttctttccag	actccgaa			
D.Wil	agaaatat	ttagataaat...3288...	-----ttgttcagcagcagcacca---			<b>GTTGTTGTTGTTGTTGTTGTTGCTG</b>	-----	gtattgcttt--gcatgcagtt...	...1021...	-ttcattttacag	actccaag		
D.Yak	aatccaaa	ctgagcgcttg...2239...	---ttgttgttgttttagtttca---			<b>GTTGTTGTTGTTGTTGcTGCC</b>	-g	agtgccttcaagtttgctg---	...1175...	cttcattt-cag	actccaaa		
						**** * * *				* ** **	*** *		

id=61201 gene=FBgn0000567 name=Eip74EF segment=chr3L.17592534.17595774\_-1 type=I5

D.Mel	tgttgggg	gtgagtatcgag...656...	-----aattgtgaaggtcacaacga---	<b>CAACGACAACGACAGCAACAG</b>	-----	cagcagca	----	gcagcgccaatg...	...1106...	ttgttcttcag	tgcccgac
D.Sim	tgttgggg	gtgagtatcgag...606...	---tgcgcaaattgtgaaggtca---	<b>CAACGACAACGACAGCAACAG</b>	-----	cagcagca	----	gcagcgccaatg...	...1226...	ttgttcttcag	tgcccgac
D.Sec	tgttggag	gtgagtatcgag...617...	---ttgcgcaaattgtgaaggtc---	<b>ACAACGACAACGACAGCAACGAGCAGC</b>	a	<b>GCAGCAGCG</b>	---	ccaatgtggcaataatgctg...	...1216...	ttgttcttcag	tgcccgac
D.Ere	tgttgggg	gtgagtatcgag...665...	---tgcgcaaattgtgaaggtca---	<b>CAACGACAACGACAGCAACAG</b>	-----	gcagcagca	----	gcagcgccaatg...	...1100...	ttgttcttcag	tgcccgac
D.Ana	tgttgggg	gtgagtaatgag...369...	-----gtgaaggtcacaacgacaac---	<b>GAAAGCAGCAACAGCAcCAGC</b>	-----	aacaccaacaaca	----	ccaacaa-----	...606...	ttctcaatttag	tgcccgac
D.Gri	tgttgggg	gtgagtataatc...391...	---ttgcgcaaattgtgaaggtc---	<b>ACAACGACAACGACAACGACAGCAACAGCA</b>	---	gcagcagcaatgtggcaatg	-----	...	...706...	ttctcttcag	tgcccgac
D.Pse	tgttgggg	gtgagtatacat...755...	---gcgcaaattgtgaaggtc---	<b>AACGACAACGACAGCAGCAGCAGC</b>	a	<b>CAGC</b>	caaagcaacagca--	gagacag-----	...502...	ttctcttcag	tgcccgac
D.Wil	tgttgggt	gtaagtacataa...645...	-----gaaggtcacaacgacaacga	<b>CAGCAACAGCAACAGCAACGACAAC</b>	---	gaagttgacgta	----	acagcag-----	...898...	tttcttcag	taccgat
D.Yak	tgttgggg	gtgagtatcgag...642...	.cctttgcgcaaattgtgaag	<b>GTCACAACGACAACGACAGC</b>	-----	aacagcagcagca	----	gcagcgc-----	...1222...	ttgttcttcag	tgcccgac
	***** *	** ****	****	** * * * *		*	**			* * **	* ** **

id=61214 gene=FBgn0000567 name=Eip74EF segment=chr3L.17555859.17557705\_-1 type=IN VIEW

Figure 302: CS=11.34



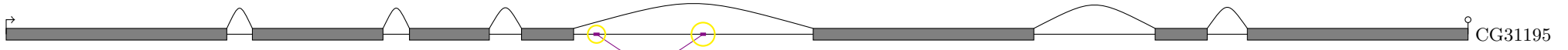
D.Mel	---gtcgattc	agtcggttcagtc-----	...249...	gcgtaacaaacactc--gcagc	GGTTTTGTGCTGacTTAGatttt	agttttgc
D.Sim	---gtcgattc	agtcggttcagtc-----	...248...	gcctaacaaacactc--gcagc	GGTTTTGTGCTGacTTAGatttt	agttttgc
D.Sec	---gtcgattc	agtcggttcagtc-----	...248...	gcctaacaaacactc--gcagc	GGTTTTGTGCTGacTTAGatttt	agttttgc
D.Ere	---gtcgattc	agtcggttcagtc-----	...256...	gcctaacaaacactc--gcagc	GGTTTTGTGCTGacTTAGatttt	agttttgc
D.Ana	---gacaactc	gcgatttcagtc-----	...239...	gcctaacaaacactg--gcagc	GGTTTTGTGCTGacTTAGatttt	agtttttc
D.Gri	---gcccgcac	tctctttcagtt-----	...325...	----aataaacactcgggcagtg	TTTTTGTGCTGacTTAGatttt	agtttcgc
D.Moj	-----atc	gttttcgcaatagcgca...	...366...	---taataaacactc--ggcagtg	TTTTTGTGCTGacTTAGatttt	agttttgc
D.Pse	agcgaccgaca	gaagctcca-----	...337...	----acaacagtg--gcagcggttt	TGTgcTGACTTTAGATTt	agtttcgc
D.Vir	---tggctcgc	gctcttcagtt-----	...264...	---taataaacactc--ggcagtg	TTTTTGTGCTGacTTAGatttt	agttttgc
D.Yak	---gtcgattc	agtcggttcagtc-----	...261...	----acaacactc--gcagcggttt	TGTgcTGACTTTAGATTt	agttttgc
		**		* **** *	*** * *****	**** *

id=61208 gene=FBgn0000567 name=Eip74EF segment=chr3L.17569421.17569726.-1 type=AN

D.Mel	tgttgggg	gtgagtatcgag...1127...	aaagaaaaaaaaaactta-CTAAATAGCATA	---cAAAATT	-atacctgtgccac-cacacag...	...637...	ttgttcttcag	tgcccgcac
D.Sim	tgttgggg	gtgagtatcgag...1069...	gtaaaaaaaaaataaactta-CTAAATAGCATA	---cAAAATT	-atacctgtgccac-cacacag...	...765...	ttgttcttcag	tgccctgac
D.Sec	tgttgggag	gtgagtatcgag...1076...	gtaaaaaaaaaataaactta-CTAAATAGCATA	---cAAAATT	-ttacctgtgccac-cacacag...	...774...	ttgttcttcag	tgccctgac
D.Ere	tgttgggg	gtgagtatcgag...1139...	gtaaaaaaaaaataaactta-CTAAATAGCATA	---cAAAATT	-atacctgtgccac-cacacag...	...627...	ttgttcttcag	tgcccgcac
D.Ana	tgttgggg	gtgagtaatgag...773...	gtaaaaaaaaaattcaactta-CTAAATAGCATA	---cAAAATT	-atacctgtgccac-cacacag...	...204...	ttctcaatttag	tgccctgat
D.Gri	tgttgggg	gtgagtatattc...812...	cggatgtaaaaaaaactta-CTAAATAGCATA	---tAAAA	---ttacataca-tatgatgat...	...298...	ttctcgttacag	tgcccgcac
D.Moj	tgttgggg	gtgagtataatca...693...	cggatgtaaaaaaaactta-CTAAATAGCATA	---cAAAA	---ttacataca-tatgatgat...	...259...	cccttctatag	tgcccgcac
D.Pse	tgttgggg	gtgagtatacat...739...	---tcgacacattgcctttgccc	AAATTgTGAAgGTCAcaACGA	caacgacagcgacagcgaca...	...524...	gtcgttcag	tgcccgcac
D.Vir	tgttgggg	gtgagtataatca...755...	cggatgtaaaaaaaactta-CTAAATAGCATA	---cAAAA	---ttacacagc-tacacacatac...	...274...	gctccttcag	tgcccgcac
D.Yak	tgttgggg	gtgagtatcgag...631...	---tcgacacattgcctttgccc	AAATTgTGAAgGTCAcaACGA	caacgacagcaacagcagca...	...1232...	ttgttcttcag	tgcccgcac
	*****	*****	* * **	**** * * **	**	*	* **	**** **

id=61214 gene=FBgn0000567 name=Eip74EF segment=chr3L.17555859.17557705.-1 type=IN VIEW

Figure 303: CS=12.6



```

D.Mel ttctgcaggaagc-----:-----:-----ca---tcgccTTCACGCTAaATGAAgagcaataattgataaccg...459...tcctccttacag gtatcgga
D.Sim ttctgcaggaagc-----:-----:-----ca---tcgccTTCACGCTAaATGAAgagcaataattgataaccg...457...tccgccttacag gtatcgga
D.Sec ttctgcaggaagc-----:-----:-----ca---tcgccTTCACGCTAaATGAAgagcagtaattgataaccg...457...tccgccttacag gtatcgga
D.Ere ttttgcaggaagc-----:-----:-----ca---tcgccTTCACGCTAaATGAAgagcaataattgataaccg...441...tccgccttacag gtatcgga
D.Gri ttttgcaggaagc-----:-----:-----ca---tcgagcTTCACGCTAaATGAAgagcaataattgataaacc...419...tttattattcag gtatcgga
D.Moj ttttgcaggaagc-----:-----:-----ca---tcgagcTTCACGCTAaATGAAgagcaataattgataaacc...521...tgtgtcgcatag gtatcgga
D.Per tcctgcaggaagcagcagccgtgtctattctatc---t-----:-----:-----catcatttcgccTTCACGCTAaATGAAgagcaataattgataaccg...579...tgctttcggcag ataccgga
D.Pse tcctgcaggaagcagcagccgtgtctattctatctacat:-----:-----:-----catcatttcgccTTCACGCTAaATGAAgagcaataattgataaccg...579...tcctttcgacag ataccgga
D.Vir ttttacaggaagc-----:-----:-----ca---tcgagcTTCACGCTAaATGAAgagcaataattgataaacc...470...tatatcgcatag ataccgga
D.Wil tcttgcaggtacgt-----:-----:-----cattaagatgaggcaaggcaaggcagggca---tcgccTTCACGCTAaATGAAgagcattaattgataaccg...452...cttctctgccag gtatcgga
D.Yak ttctgcaggaagc-----:-----:-----ca---tcgagcTTCACGCTAaATGAAgagcaataattgataaccg...450...tccgccttacag gtatcgga
* * ***** *
** ** ***** **
** ** ***** **
***** **

```

id=2577 gene=FBgn0051195 name=CG31195 segment=chr3R.16585627\_16586169\_-1 type=IN

```

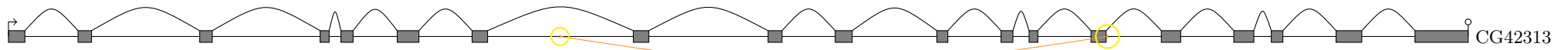
D.Mel ttctgcag gtaagcaaacga...247...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgccg-aggacacgaaaaacg-----..218...tcctccttacag gtatcgga
D.Sim ttctgcag gtaagcaaacga...247...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgag-aggacacgaaaaacg-----..216...tccgccttacag gtatcgga
D.Sec ttctgcag gtaagcaaacga...247...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgag-aggacacgaaaaacg-----..216...tccgccttacag gtatcgga
D.Ere ttttgcag gtaagcttaatg...235...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgccg-aggacacgaaaaacg-----..200...tccgccttacag gtatcgga
D.Gri ttttgcag gtaagcgttaag...235...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgag-aggacacgaaaaacg-----..201...tttattattcag gtatcgga
D.Moj ttttgcag gtaagcgtgca...266...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgca-aggacacgaaaaacg-----..251...tgtgtcgcatag gtatcgga
D.Per tcctgcag gtaagcagcagc...339...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgcaa-aggacacgaaaaacg-----..284...tgctttcggcag ataccgga
D.Pse tcctgcag gtaagcagcagc...343...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgca-aggacacgaaaaacg-----..284...tcctttcgacag ataccgga
D.Vir ttttacag gtaagcgtgcaa...240...aaccattacc-aaatgctaaaTTCATTAGTtTGAGcgca-aggacacgaaaaacg-----..243...tatatcgcatag ataccgga
D.Wil tcttgcag gtaagcgtgcaa...313...-accattacc-aaatgctaaaTTCATTAGTtTGAG-----agacacgaaaaacgaggtcg...202...cttctctgccag gtatcgga
D.Yak ttctgcag gtaagcaaacga...247...aaccattacc-aaatgctaaaTTCATTAGTtTGAG-----ccg-aggacacgaaaaacggg-----..209...tccgccttacag gtatcgga
* * *** *** *
***** *****
*****
** **** **

```

id=2577 gene=FBgn0051195 name=CG31195 segment=chr3R.16585627\_16586169\_-1 type=IN VIEW

Figure 304: CS=6.6





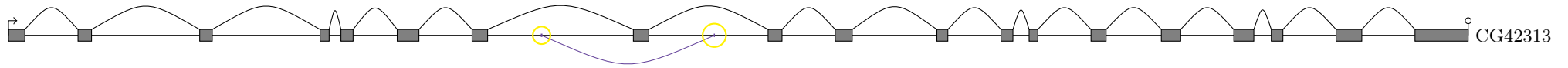
D.Mel	gcacaaag	gtagtgggaagt...	979...	ccgcttatatgcataacgc-----	TGATTGCTTGCC	gttttggccagctcctgggc...	1154...	ttttgttgcag	gacgacat
D.Sim	gcacaaag	gtagtgggaga...	1570...	ccgcttatatgcataacgc-----	TGATTGCTTGCC	gttttggccagctcctgggc...	1152...	tttttttgcag	gacgacat
D.Sec	gcacaaag	gtagtgggagt...	987...	ccgcttatatgcataacgc-----	TGATTGCTTGCC	gttttggccagctcctgggc...	1116...	ttttgttgcag	gacgacat
D.Ere	gcacaaag	gtgagtgaagt...	1138...	ccgcttatatgcataacgc-----	TGATTGCTTGCC	gttttggccagctactgggc...	1169...	tttttttgcag	gacgacat
D.Moj	gcacaaag	gtgagtggagg...	651...	tcgttatgcataaccgccc-----	TGATTGCTTGCC	gtttgagctacactccttt...	1402...	cacatttgcag	gacgacat
D.Per	gcacaaag	gtgagtgcggg...	1101...	ccgtatatgcataacgc-----	TGATTGCTTGCC	gttctggccagggccagggc...	1466...	ttgtctgaacag	gacgacat
D.Pse	gcacaaag	gtgagtgcggg...	1106...	ccgtatatgcataacgc-----	TGATTGCTTGCC	gttctggccagggccagggc...	1463...	ttgtctgaacag	gacgacat
D.Vir	gcacaaag	gtgagttgagtt...	667...	tcgcttatgcataaccgccc-----	TGATTGCTTGCC	gtttgagctacactccttt...	1480...	cacatttccag	gacgacat
D.Wil	gcacaaag	gtgagtgagtga...	628...	-----atatataactgtccttttac	TGATTGCTTGCC	gttttggcctcaaccacgt...	1901...	tccttgctgcag	gacgacat
D.Yak	gcacaaag	gtagtgggagt...	1010...	ccgcttatatgcataacgc-----	TGATTGCTTGCC	gttttggccagctcctgctc...	1206...	ttttgttgcag	gacgacat
	*****	** ***		** * **	*****	*		***	*****

id=78238 gene=FBgn0259213 name=CG42313 segment=chr2L.14932659.14934868.-1 type=IN

D.Mel	atcaccaG	GTAAGCA	ATTA	atcaactataactacagctg...	1606...	ccatcttcg--cag	attcaatt
D.Sim	atcaccaG	GTAAGCA	ATTA	atcaactataactacagctg...	1579...	tcatcttcg--cag	attcaatt
D.Sec	atcaccaG	GTAAGCA	ATTA	atcaactataactacagctg...	1553...	tcatcttcg--cag	attcaatt
D.Ere	atcaccaG	GTAAGCA	ATTA	atcaactataactacagctg...	1601...	ccatcttcg--cag	attcaatt
D.Moj	attaccaG	GTAAGCA	ATTA	atcagctacacgtataaac...	2110...	--atcttgcacag	attcaatc
D.Per	atcaccaG	GTAAGCA	ATTA	atcaactataactacaacaa...	1672...	tccccattg--cag	attcaatt
D.Pse	atcaccaG	GTAAGCA	ATTA	atcaactataactacaacaa...	1720...	tccccattg--cag	attcaatt
D.Vir	attaccaG	GTAAGCA	ATTA	atcagctactcgtacagccc...	2179...	ctttttttt--cag	acttaatc
D.Wil	gtcaccaG	GTAAGCA	ATTA	atcaactataactacagcca...	2022...	tttccccg--cag	attcaact
D.Yak	atcaccaG	GTAAGCA	ATTA	atcaactataactacagctg...	1614...	ccatcttcg--cag	attcaatt
		* *****		*****	** *	***	* * **

id=78252 gene=FBgn0259213 name=CG42313 segment=chr2L.14914450.14916099.-1 type=IN VIEW

Figure 305: CS=10.8



```

D.Mel  gcacaaag gttagtggaagt...805...---ctttttttttctcttcaac---TTTgacAAAttTATGGGgGTTTGGCGcAATTttgttgcaattcattttgt...1308...ttttgtttgcag gacgacat
D.Sim  gcacaaag gttagtgggaga...1396...---tgctttttttctcttcaac---TTTgacAAAttTATG-----ggagttttggcgcaattttg-----...1323...ttttttttgcag gacgacat
D.Sec  gcacaaag gttagtgggagt...813...---tgctttttttctcttcaac---TTTgacAAAttTATG-----ggagttttggcgcaattttg-----...1287...ttttgtttgcag gacgacat
D.Ere  gcacaaag gtgagtggaagt...971...tccctgctttttctcttc---AACTTTCGACAAAT-----ttatgggagttttggcgcaa-----...1335...ttttttttgcag gacgacat
D.Ana  gcacaaag gtaagtgggggg...1875...-----gcaaacacaccaataaatt---TAAATTCaAACA-----taaatatttcgacaaatt...164...ttccttttcag gacgacat
D.Gri  gcacaaaa gtgagtaggga...2220...-----ttgc-aa-acataaaatattc---GACAAATTGCAAA-----aaaaagaagcacacactcac...149...cacattttccag gacgacat
D.Moj  gcacaaag gtgagtaggagg...509...-----caaatttatgggagtttag---CGCAATTTGTtGCAA-----tcatttttgagccgctttg-----...1541...cacattttgcag gacgacat
D.Per  gcacaaag gtgagtgtcggg...931...---ttttctgtctcttcaac---TTTgacAAAttTATGGGgGTTTGGCGcaattttgttgcaattcatt-----...1621...ttgtctgaacag gacgacat
D.Pse  gcacaaag gtgagtgtcggg...2396...---taaattgcaaa-acataaaatA---TTTCGACAAAT-----ttgcaaaacgaaaaaaagt...174...ttgtctgaacag gacgacat
D.Vir  gcacaaag gtgagttgagtt...496...-----caaatttatgggagtttag---CGCAATTTGTtGCAA-----tcatttttgagccgctccg-----...1648...cacattttccag gacgacat
D.Wil  gcacaaag gtgagtgagtg...451...---ttttgtttttgcgtttcaac---TTTgacAAAttTATGGGgGTTTtAGCGcaattttgttgcaattcatt-----...2063...tcctgtctgcag gacgacat
***** ** *** * ** * ** * ** *

```

id=78238 gene=FBgn0259213 name=CG42313 segment=chr2L.14932659.14934868.-1 type=IN

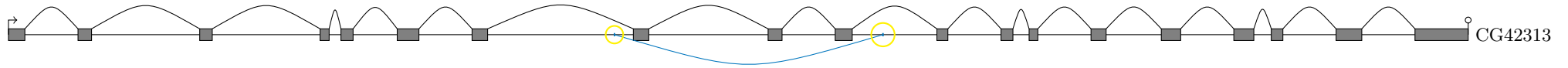
```

D.Mel  tgtcgttt gtaagtattaca...4522...-----ctgatgcttcactttgttccAGTTatTGCTctAAATcgCTCATATTTGCAAA-----aactattaataagcttgat...371...tcctctttgcag atcctccc
D.Sim  tgtcgttt gtaagtattaca...3297...-----ataatagatgattcaaaaa-----CATATTTGCAAA-----atgtgcttgcccaaaagaa...1616...tcctctttgcag atcctccc
D.Sec  tgtcgttt gtaagtattaca...3544...-----ataatagatgattcataaa-----CATATTTGCAAA-----atgtgcttgcccaaaagaa...1369...tcctctttgcag atcctccc
D.Ere  tgtcgttt gtaagtattaca...4439...tcttgccgcttc---tggtctcc-----GTTTGTGCGcAAAAGTT-----tgtggctcgtaagcaaat---...471...tccctttgcag atcctccc
D.Ana  tgtcgttt gtaagtattaca...4344...---tgctgctgt---tggtctctgtt-----TGTTCGAAagTTTG-----tggctcgtaagcaaatcgc---...567...tcctctttccag atcctccc
D.Gri  tgtcgttt gtaagtattaca...3241...attcagcattattaaataac-----TTTgagCAAAatTTGTTtataattaacttttagatt-----...1446...aattctttgcag atccccca
D.Moj  tgtcgttt gtaagtattaca...4056...---tgtgccgtgctttgctgtg-----TTGTcGCAAAGtTTGTG-----gctcgtaagcaaatcaaa...852...aattgtttgcag atcctcca
D.Per  tgtcgttt gtaagtattaca...4300...---ttg-----cactttgtccctgttatTGCTctAAATcgCTCATATTTGCAAA-----aactattaatcagcttgct...599...gtctctttgcag atccacct
D.Pse  tgtcgttt gtaagtattaca...3971...cctttctgctgt---tgctttct-----GTTTGTGCGcaAAGT-----tgtggctcgtaagcaaat---...940...gtctctttgcag atccccca
D.Vir  tgtcgttt gtaagtattaca...4067...---ttcgaggttctatgctgtg-----TTGTcGCAAAGtTTGTG-----gctcgtaagcaaatcaaa...841...gaatcattgcag atccccca
D.Wil  tgtcgttt gtaagtattaca...4163...-----gtcataactctgtgttat---TGCTctAAATcgCTCATATTTGCAAA-----aactattaatcagcttgat...736...tcctttttgcag atccacct
***** ***** *****

```

id=78240 gene=FBgn0259213 name=CG42313 segment=chr2L.14923080.14932513.-1 type=IN VIEW

Figure 306: CS=12.98



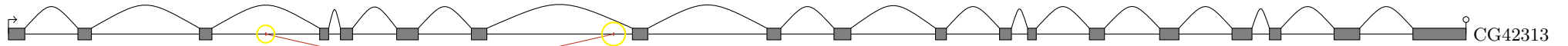
D. Mel	gcacaaag	gtagtggaagt...	1986...	-acaacattccaataaatt-----	TAAATTGCAAAACATaAAAT	atttcgacaaattgacgc-----	...141...	ttttgtttgcag	gacgacat
D. Sim	gcacaaag	gtagtgggaga...	2580...	-acaacattccaataaatt-----	TAAATTGCAAAACATaAAAT	atttcgacaaattgacgc-----	...136...	ttttttttgcag	gacgacat
D. Sec	gcacaaag	gtagtgggagt...	1973...	-acaacattccaataaatt-----	TAAATTGCAAAACATaAAAT	atttcgacaaattgacgc-----	...124...	ttttgtttgcag	gacgacat
D. Ere	gcacaaag	gtgagtgaagt...	2163...	-acaacattccaataaatt-----	TAAATTGCAAAACATaAAAT	atttcaacaaattgacgc-----	...138...	ttttttttgcag	gacgacat
D. Ana	gcacaaag	gtaagtgggggg...	93...	gttgccagctctg-tgctgc-----	TGTTGACTGACTCACGT	-tc-agctcgataacttattgt-----	...1942...	ttcctttttcag	gacgacat
D. Moj	gcacaaag	gtgagtaggagg...	59...	-ctgctgtggggggaggcagcc	AAAGGGTcTGTTGACTGACTCACG	-----ataagtattgtatttgc	...1983...	cacattttgcag	gacgacat
D. Per	gcacaaag	gtgagtgtcggg...	128...	-gtctcttcttctgctcctgc-----	TGTTGACTGACTCACGT	-tcaagctcgataacttattg-----	...2435...	ttgtctgaacag	gacgacat
D. Pse	gcacaaag	gtgagtgtcggg...	127...	-gtctcttcttctgctcctgc-----	TGTTGACTGACTCACGT	-tcaagctcgataacttattg-----	...2438...	ttgtctgaacag	gacgacat
D. Vir	gcacaaag	gtgagttgagtt...	97...	-acctaaggttgggcttgtgt-----	GGGTGTTGACTGACTCACGT	-tc-agctcgataagttattgt-----	...2043...	cacattttccag	gacgacat
D. Wil	gcacaaag	gtgagtgtgagta...	85...	-gctgctgctgctgccctgc-----	TGTTGACTGACTCACGT	-tc-agctcgataacttattgt-----	...2440...	tccttctgacag	gacgacat
D. Yak	gcacaaag	gtagtgggagt...	105...	tgctcctcggttcca-tgctgc-----	TGTTGACTGACTCACGT	-tc-agctcgataacttattgt-----	...2107...	ttttgtttgcag	gacgacat
	*****	** ***			* * * * *			***	*****

id=78238 gene=FBgn0259213 name=CG42313 segment=chr2L.14932659.14934868.-1 type=IN

D. Mel	ggtgaaat	gtgagtgtcct...	237...	----tctcccata-gccagactc	ATTTgATGTaTTGCAATTTG	cctttttcttctcggagct----	...2346...	ctctcattacag	acacgcc
D. Sim	ggtgaaat	gtgagtgtcct...	237...	----ttcccata-gccagactc	ATTTgATGTaTTGCAATTTG	cctttttcttctcggggct----	...2343...	ctctcattacag	acacgcc
D. Sec	ggtgaaat	gtgagtgtcct...	236...	----ttcccata-gccagactc	ATTTgATGTaTTGCAATTTG	cctttttcttctcggggct----	...2258...	ctctcattacag	acacgcc
D. Ere	ggtgaaat	gtgagtgtcct...	227...	----ttcccata-gccagactc	ATTTgATGTaTTGCAATTTG	cctttttcttctcggggct----	...2232...	ttcttattacag	acacgcc
D. Ana	ggtgaaat	gtgagtgtcct...	1752...	gcaaattacgcatacgcac----	GTGTGcctGTCAGcTAATA	atcctttaacatttatggaa-----	...532...	ttctcattacag	acacccc
D. Moj	cgtaaata	gtgagttagaaca...	3551...	g-aaattacgcatacgcac----	FGTGcctGTCAGcTAATA	atcctttaacatttatggaa-----	...1111...	cttctctttcag	atacacct
D. Per	tgtgaaat	gtgagttagcct...	2107...	gcaaattacgcatacgcac----	GTGTGccGTCAGcTAATA	atcctttaacatttatggaa-----	...530...	ttcccattacag	acactccg
D. Pse	tgtgaaat	gtgagttagcct...	2122...	gcaaattacgcatacgcac----	GTGTGccGTCAGcTAATA	atcctttaacatttatggaa-----	...535...	ttcccattacag	acactccg
D. Vir	tgtgaaat	gtgagtatacaa...	2269...	taaaattacgcatacgcac----	GTGTGcctGTCAGcTAATA	atcctttaacatttatggaa-----	...572...	tcttcataatcag	acacgcct
D. Wil	tgtgaaat	gtgagttagcga...	2103...	gcaaattacgcatacgcac----	GTGTGcctGTCAGcTAATA	atcctttaacatttttttgg-----	...771...	tttctgaatag	acacacc
D. Yak	agtgaaat	gtgagtgtcct...	1845...	gcaaattacgcatacgcac----	GTGTGccGTCAGcTAATA	atcctttaacatttatggaa-----	...736...	ttctcattacag	acacgcc
	** ****	*****		* * * * *	* * * * *	***	*****	* * *	** * * * *

id=78244 gene=FBgn0259213 name=CG42313 segment=chr2L.14919271.14921937.-1 type=IN VIEW

Figure 307: CS=11.88



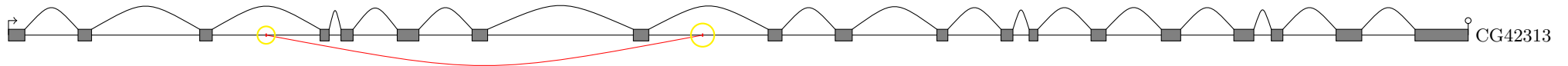
D. Mel	aaattaag	gtaagatttaac...641...cctggcgcacgcgaaatggt-----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1364...caggatatcaag	cgacatga
D. Sim	aaataaag	gtgagttttacc...623...cctggcgcacgcgaaatggt-----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1419...caggatatcaag	cgacatga
D. Sec	aaataaag	gtgagattttcc...624...cctggcgcacgcgaaatggt-----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1406...caggatatcaag	cgacatga
D. Ere	aaattaag	gtgagttttacc...917...---ttaacaagctgcatttcgaa--	ATGAATG	TGAAaTGCA	ACGAAAGag	-tcagccaccataaatac...1109...caggatatcaag	cgacatga
D. Ana	aaattaag	gtgagatttgc...645...ctcggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1035...caggatatcaag	cgatcatga
D. Gri	aaattaag	gtaagatctcaa...657...cctcggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1448...caggatatcaag	cgatcatga
D. Moj	aaattaag	gtaagattcgcc...758...cctcggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1413...caggatatcaag	aggcatga
D. Per	aaattaag	gtgagattttct...1885...cctggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1838...caggatatcaag	cgatcatga
D. Vir	aaattaag	gtaagatcccaa...643...cctcggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1415...caggatatcaag	cgatcatga
D. Wil	aaattaag	gtgagatttact...1245...-----acgagctgcattttgagaaa	ATGAATG	TGAAcTGCA	ACGAAAGag	ggttctg--cacagttgcataa...1220...caggatatcaag	cgatcatga
D. Yak	aaattaag	gtgagatttacc...593...cctggcgcacgcgaaatggt----	TATTaATGTC	TTGCAT	GTTTAcAGAT	aaacttgatttagcgtttctg--...1378...caggatatcaag	cgacatga
	**** **	** ** *		* ** ** *	** ** ** *	** ** * *	***** * ****

id=78230 gene=FBgn0259213 name=CG42313 segment=chr2L\_14936816\_14938910\_-1 type=IN

D. Mel	gcacaaag	gttagtggaagt...1982...ccgaacaacattccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgacgcgca...140...tttgtttgcag	gacgacat
D. Sim	gcacaaag	gttagtgggaga...2576...ccgaacaacattccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgacgcgca...135...tttttttgcag	gacgacat
D. Sec	gcacaaag	gttagtgggagt...1969...ccgaacaacattccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgacgcgca...123...tttgtttgcag	gacgacat
D. Ere	gcacaaag	gtgagtggaagt...1005...ttatgggagttttggcgcaa	TTTT	GTTGCA	TTCAT	TTTTGTgtgtcgg-aacctcgagctga...1293...tttttttgcag	gacgacat
D. Ana	gcacaaag	gtaagtggggg...1871...ccgagcaaacacaccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgcaaaaa...157...tccttttgcag	gacgacat
D. Gri	gcacaaaa	gtgagtagggga...2192...cccaaagtatgcagcaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgcaaaaa...167...cacattttcag	gacgacat
D. Moj	gcacaaag	gtgagtaggagg...1846...cccaaagtatacagcaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgcaaaaa...196...cacattttcag	gacgacat
D. Per	gcacaaag	gtgagtgctcggg...2369...ggaaaaacacataccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgcaaaaa...186...ttgtctgaacag	gacgacat
D. Vir	gcacaaag	gtgagttgagtt...1990...cccaaagtatgcagcaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgcaaaaa...146...cacattttcag	gacgacat
D. Wil	gcacaaag	gtgagtgagtga...482...ttatgggagttttagcgcaa	TTTT	GTTGCA	TTCAT	TTTTGTatgtctg-agggtctagtct...2038...tccttgctgcag	gacgacat
D. Yak	gcacaaag	gttagtgggagt...2053...ccgaacaacattccaataa	ATTTTAAATTGC	AAACATaa	AATA	-tttcgacaaattgacgcgca...152...ttttgttgcag	gacgacat
	*****	** ** *	** ** *	*** * **	** * *	** * *	*** *****

id=78238 gene=FBgn0259213 name=CG42313 segment=chr2L\_14932659\_14934868\_-1 type=IN VIEW

Figure 308: CS=11.88



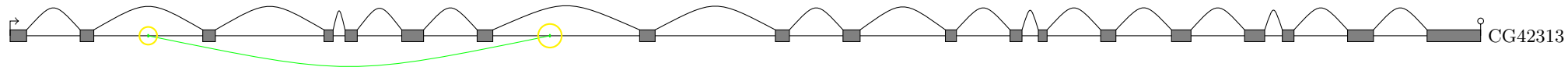
D. Mel	aaattaag	gtaagatttaac...	646...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1369...	caggatatcaag	cgacatga
D. Sim	aaataaag	gtgagttttacc...	628...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1424...	caggatatcaag	cgacatga
D. Sec	aaataaag	gtgagattttcc...	629...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1411...	caggatatcaag	cgacatga
D. Ere	aaattaag	gtgagttttacc...	612...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1421...	caggatatcaag	cgacatga
D. Ana	aaattaag	gtgagatttgcc...	650...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1040...	caggatatcaag	cgatcatga
D. Gri	aaattaag	gtaagatctcaa...	662...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1453...	caggatatcaag	cgatcatga
D. Moj	aaattaag	gtaagattcgcc...	763...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1418...	caggatatcaag	aggcatga
D. Per	aaattaag	gtgagattttct...	1890...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1843...	caggatatcaag	cgatcatga
D. Yak	aaattaag	gtgagattttacc...	598...	cgcacgcgaaatg	tttatta	ATGTC	TTGCa	TGTTTA	cagataacttgatttagcgt...	1383...	caggatatcaag	cgacatga
	**** **	** ** *		*****							*****	* ****

id=78230 gene=FBgn0259213 name=CG42313 segment=chr2L\_14936816.14938910.-1 type=IN

D. Mel	tgtcgttt	gtaagtattaca...	4430...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	480...	tcctctttgcag	atcctccc
D. Sim	tgtcgttt	gtaagtattaca...	4143...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	767...	tcctctttgcag	atcctccc
D. Sec	tgtcgttt	gtaagtattaca...	4388...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	522...	tcctctttgcag	atcctccc
D. Ere	tgtcgttt	gtaagtattaca...	4483...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	427...	tcctctttgcag	atcctccc
D. Ana	tgtcgttt	gtaagtattaca...	4385...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	525...	tcctctttgcag	atcctccc
D. Gri	tgtcgttt	gtaagtattaca...	4105...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	584...	tcctctttgcag	atcctccc
D. Moj	tgtcgttt	gtaagtattaca...	4098...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	812...	tcctctttgcag	atcctccc
D. Per	tgtcgttt	gtaagtattaca...	4165...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	745...	tcctctttgcag	atcctccc
D. Yak	tgtcgttt	gtaagtattaca...	4482...	ttaagcaaattcaa	acgact	TAAGCGGCAA	ACAT	gttggcaaacagcggtcgat...	428...	tcctctttgcag	atcctccc
	*****	*****		*****						*** **	**** **

id=78240 gene=FBgn0259213 name=CG42313 segment=chr2L\_14923080.14932513.-1 type=IN VIEW

Figure 309: CS=11.7



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D.Mel ctctatag gtgagtcctaga...1401...tcccgcataaattattg---tgtGTTGCATACAAAAGGCGCT--taacgctcagctcgccgcag----...1004...tctacccccag cttcgatg
D.Sim ctctatag gtgagtcctaga...1377...tcccgcataaattattg---tgtGTTGCATACAAAAGGCGCT--taacgctcagctcgccgcag----...1040...ccccaccacag cttcgatg
D.Sec ctctatag gtgagtcctaga...1367...tcccgcataaattattg---tgtGTTGCATACAAAAGGCGCT--taacgctcagctcgccgcag----...1025...caccatccacag cttcgatg
D.Ere ctgtatag gtgagtcctaga...1409...tcccgcataaattattg---tgtGTTGCATACAAAAGGCGCT--taacgctcagctcgccgcag----...1033...ccccaccacag cttcgatg
D.Ana ctctatag gtgagtagagcg...1564...tcccgcataaattattg---tgtGTTGCATACAAAAGGCGCT--taacgctcagaccgccgcag----...835...tgccgacccag cttcgatg
D.Gri ttatatag gtgagtactatc...2447...gcccgcataaattattg---cgtGTTGCATACAAAAGGCGCT--taacgcccacttgccgcaa----...1314...tttctttccag ctttgatg
D.Moj ctatatag gtgagtactatc...2311...gcccgcataaattattg---cgtGTTGCATACAAAAGTCCGCTTAA--cggcccacttgccgcagagg...1653...ctctccttgag cttcgatg
D.Vir ttatacag gtaagtactatc...2042...gcccgcataaattattg---cgtGTTGCATACAAAAGGCGCT--taacgcccacttgccgcag----...1791...ctctccttgag cttcgatg
D.Wil ctctatag gtaagtcacagc...1584...--cgcataaattattattttgtGTTGCATACAAAAGGCGCTTAAAGGgcaaccttagttaaaaagac...2016...tcaattctgcag ctttgatg
* ** ** ** ** * ** *

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id=78228 gene=FBgn0259213 name=CG42313 segment=chr2L\_14939029\_14941517\_-1 type=IN

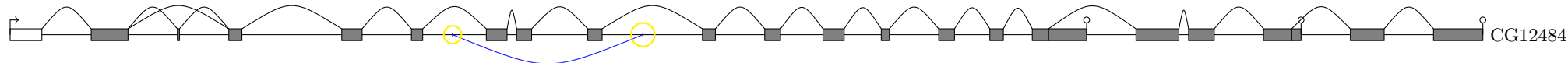
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D.Mel gcacaaag gttagtggaggt...829...----gacaaatttatgggagttttGGCGCaaTTTGTGCAATtcattttgtgtgctcgggac...1298...ttttgtttgcag gacgacat
D.Sim gcacaaag gttagtgggaga...1420...----gacaaatttatgggagttttGGCGCaaTTTGTGCAATtcattttgtgtgctcgggac...1296...ttttttttgcag gacgacat
D.Sec gcacaaag gttagtgggagt...837...----gacaaatttatgggagttttGGCGCaaTTTGTGCAATtcattttgtgtgctcgggac...1260...ttttgtttgcag gacgacat
D.Ere gcacaaag gtgagtggaggt...998...----gacaaatttatgggagttttGGCGCaaTTTGTGCAATtcattttgtgtgctcgggac...1303...ttttttttgcag gacgacat
D.Ana gcacaaag gtaagtgggggg...775...----gacaaatttatgggagttttGGCGCaaTTTGTGCAATtcattttgtgtgctcgggac...1258...ttcctttttcag gacgacat
D.Gri gcacaaaa gtgagtgggga...501...----tacaatttatgggagttttAGCGCaaTTTGTGCAATtcattttgtgcccgatccgt...1863...cacattttccag gacgacat
D.Moj gcacaaag gtgagtggagg...505...---gggacaaatttatgggagttTTAGCGCAaTTTGTGCAATtcatttttgagccgctttgc...1540...cacattttgcag gacgacat
D.Vir gcacaaag gtgagttgagtt...494...----gacaaatttatgggagttttAGCGCaaTTTGTGCAATtcattttgtgcccgatccgt...1647...cacattttccag gacgacat
D.Wil gcacaaag gtgagtggaggt...470...ctttggacaaatttatgggagTTTGTAGCGCaaTTTGTGCAATtcattttgtatgtctgagg...2048...tccttgctgcag gacgacat
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id=78238 gene=FBgn0259213 name=CG42313 segment=chr2L\_14932659\_14934868\_-1 type=IN VIEW

Figure 310: CS=9.72



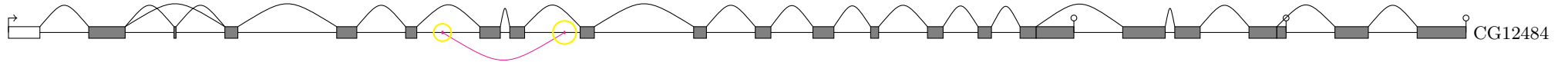
D. Mel	catcggcg	gtaagtccttac...	257...	-----	gagcacttgagaattgctaa-----	AAGCca	AAACAAGAC	-----	aacaaatgaaacagcgaag-...	310...	caccttccacag	gccgcccg
D. Sim	catcggcg	gtaagtccttcc...	258...	-----	gagcacttgagaattgctaa-----	AAGCca	AAACAAGAC	-----	aacaaatgaaacagcgaag-...	301...	caccttccacag	gccgcccg
D. Sec	catcggcg	gtaagtccttcc...	254...	-----	gagcacttgagaattgctaa-----	AAGCca	AAACAAGAC	-----	aacaaatgaaacagcgaag-...	297...	caccttccacag	gccgcccg
D. Ere	catcggcg	gtaagtccttgc...	263...	-----	gagcacttgagaattgctaa-----	AAGCca	AAACAAGAC	-----	aacaaatgaaacagcgaag-...	335...	cgcttccacag	gtcgcccg
D. Ana	cattggcg	gtaagttgtgac...	335...	-----	gagcacttgaaaattgctaa-----	AAGCca	AAACAAGAC	-----	aacaaatgaaacagcgaag-...	333...	tatatgttcag	gtcgcccg
D. Gri	cattggcg	gtaagttcatcc...	194...	cattgagagcacttgaaaat-----	TGCTa	AAAGCCa	AAACAAGAC	-----	aagaaatgaaatagcgaag-...	326...	gcttttctgcag	gtcgacca
D. Per	catcggcg	gtaagtcctttt...	316...	-----	aagccaacaagacaacaaaTG	AAac	AGCGa	AAAGGC	ACTTgtgcacacacaatcacaacc...	250...	gttgtcgtgcag	gtcgccca
D. Pse	catcggcg	gtaagtcctttt...	298...	-----	aagccaacaagacaacaaaTG	AAac	AGCGa	AAAGGC	ACTTgtgcacacacaatcacaacc...	248...	gttgtcgtgcag	gtcgccca
D. Wil	cattggcg	gtaagttgtcct...	347...	-----	aagccaacaagacaacaaaTG	AAac	AGCGAAAGGC	ACTTgtacacacacttgacacac...	311...	tttcattttcag	gacgacct	
	*** **	*****			*** * *	*****	** * ** *		* * * *		*** * ** **	

id=80708 gene=FBgn0086604 name=CG12484 segment=chr2R.16351479\_16352123.1 type=IN

D. Mel	catatatac	gtgagttttgct...	368...	ctgtttccttgggagtg-----	cg-	GTTTGT	GCTT	-----	acctttaacttttcactt-----	...	573...	tttcattcgcag	acataaccg	
D. Sim	catatatac	gtgagttttgct...	382...	ctgtttccttgggagtg-----	cg-	GTTTGT	GCTT	-----	acctttaacttttcactt-----	...	560...	tttcattcgcag	acataaccg	
D. Sec	catatatac	gtgagttttgct...	388...	ctgtttccttgggagtg-----	cg-	GTTTGT	GCTT	-----	acctttaacttttcactt-----	...	559...	tttcattcgcag	acataaccg	
D. Ere	catttatac	gtgagttttgct...	387...	ctgtttccttgggagtg-----	cg-	GTTTGT	GCTT	-----	acctttaacttttcactt-----	...	531...	tttcattcgcag	acataaccg	
D. Ana	catctatac	gtgagttctggt...	471...	ctgtttccttgggagtg-----	cg-	GTTTGT	GCTT	-----	acctttaacttttcactt-----	...	510...	tttcattcgcag	atattccg	
D. Gri	catctatac	gtaagttattatt...	480...	tccatacctaaccgctt-----	cc-	GTTT	ccTGTTGGCTTT	acAGTG	cgctttttggttgcttacct-----	...	600...	tccatacattag	atatacct	
D. Per	catttatac	gtgagttttgcg...	266...	-----	agcggcagcggccatagc-ca	GAGTca	TCTTaa	CGCTTT	TA-----	cagttttccgacctggttg-	...	1217...	atccccacacag	atataccc
D. Pse	catttatac	gtgagttttgcg...	266...	-----	agcggcagcggccatagc-ca	GAGTca	TCTTaa	CGCTTT	TA-----	cagttttccgacctggttg-	...	1217...	atccccacacag	atataccc
D. Wil	catttatac	gtaagttatattc...	413...	-----	tagcagcgacgttggcagca	AAGTca	TCTTaa	CGCTTT	TA-----	cagttttcgacctggttgca...	635...	tcttcatacag	atataccc	
	*** **	** **			* ** *	****			** * *		** * ** *			

id=80714 gene=FBgn0086604 name=CG12484 segment=chr2R.16353297\_16354313.1 type=IN VIEW

Figure 311: CS=8.64



D.Mel	catcggcg	gtaagtccttac...213...gaggagctcggcagctcac--	CAATgc	CCACACAAAttGCAT	tgagagcacttgagaattgc...347...caccttcacag	gccgcccg	
D.Sim	catcggcg	gtaagtccttcc...214...gaggagctcgggagctcac--	CAATgc	CCACACAAAttGCAT	tgagagcacttgagaattgc...338...caccttcacag	gccgcccg	
D.Sec	catcggcg	gtaagtccttcc...210...agacaatcgaggagctcac--	CAATgc	CCACACAAAttGCAT	tgagagcacttgagaattgc...334...caccttcacag	gccgcccg	
D.Ere	catcggcg	gtaagtccttgc...219...cggtagctcgggagctcac--	CAATgc	CCACACAAAttGCAT	tgagagcacttgagaattgc...372...cgcttcacag	gtcggccg	
D.Ana	cattggcg	gtaagttgtgac...291...ctggaaaagctgagagc--	CAATgc	CCACACAAAttGCAT	tgagagcacttgaaaattgc...370...ttatgttgac	gtcgcccg	
D.Gri	cattggcg	gtaagttcatcc...156...--accaacaacgagcacaccaa	CAATgc	CCACACAAAttGCAT	tgagagcacttgaaaattgc...363...gctttctgcag	gtcgacca	
D.Moj	cattggcg	gtaagtaacagc...230...atgcacacaaggaa--catcaa	CAATgc	CCACACAAAttGCAT	tgagagcacttgaaaattgc...399...gctttgatgcag	gtcgacca	
D.Vir	cattggcg	gtaagttcatct...209...caacacacaacgag--catcaa	CAATgc	CCACACAAAttGCAT	tgagagcacttgaaaattgc...373...gctttgtgcag	gtcgaccg	
D.Yak	catcggcg	gtaagtccttct...247...gggtagctcggcagctcac--	CAATgc	CCACACAAAttGCAT	tgagagcacttgagaattgc...332...ccacttcacag	gtcgacca	
	*** **	*****	* **	*****	*****	* **	*** **

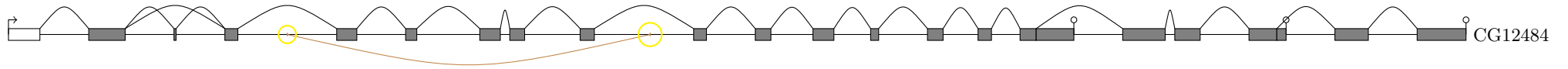
id=80708 gene=FBgn0086604 name=CG12484 segment=chr2R.16351479\_16352123.1 type=IN

D.Mel	acgagatt	gtaagtggaaac...361...cgagagacagagccgtacac	ATGCTTTGTGGta	ATTG	aaagtactcgaacggcagtc...127...ctgttatttag	gctacacc	
D.Sim	acgagatt	gtaagtggaaac...397...accgagacagtgcggtacac	ATGCTTTGTGGta	ATTG	aaagtgtctcgaacggcagtc...127...ctgttatttag	gctacacc	
D.Sec	acgagatt	gtaagtggaaac...367...accgagacagagccgtacac	ATGCTTTGTGGta	ATTG	aaagtgtctcgaacggcagtc...127...ctgttatttag	gctacacc	
D.Ere	atgagatt	gtaagtggaaac...351...accgagacagcgcgtacac	ATGCTTTGTGGta	ATTG	aaagtgtctcgaacggcagtc...130...ccttatttag	gctacacc	
D.Ana	acgagatt	gtaagtggaaac...410...cccgaatttcaagcgtacac	ATGCTTTGTGGta	ATTG	aaagtgtctcgaacggcagtc...176...tcgttattcag	gccaatcc	
D.Gri	atgaaatt	gtgagtacatcg...436...tctgaacctgctagtagac	ATGCTTTGTGGta	ATTG	aaagtactttaacggcagtc...148...ttgactttgcag	gccaatcc	
D.Moj	acgaaatc	gtaagtacccaa...2008...tcaacctcttttggggac	ATGCTTTGTGGta	ATTG	aaagtactttaacggcagtc...198...ttgactttgcag	gccaatcc	
D.Vir	atgaaatt	gtaagtacccaa...420...tctgggactgctgtagac	ATGCTTTGTGGta	ATTG	aaagtactttaacggcagtc...131...ttgactttgcag	gccaatcc	
D.Yak	atgagatt	gtaagtggaaac...445...aacgagacagcgcgtacac	ATGCTTTGTGGta	ATTG	aaagtgtctcgaacggcagtc...111...tgtctcatttag	gctacacc	
	* ** *	** **	*	*****	*****	* **	** * **

id=80712 gene=FBgn0086604 name=CG12484 segment=chr2R.16352583\_16353151.1 type=IN VIEW

Figure 312: CS=11.34





D.Me1	atttacag	gtgagtgccgag...857...	ccagtgcgc	----	cagagtcctgg	----	TGATTAGCTgATTG	-----	cca	---	ggcagccaggcagccag	-----	...1448...	tccacatttcag	tgtggaca		
D.Sim	atttacag	gtgagtgccgag...828...	ccagtgcgc	----	cagaacctgg	----	TGATTAGCTgATTG	-----	cca	---	ggcagccaagcagccag	-----	...1425...	ttccatttcag	tgtggaca		
D.Sec	atttacag	gtgagtgccgag...836...	ccagtgcgc	----	cagagtcctgg	----	TGATTAGCTgATTG	-----	cca	---	ggcagccaggcagccag	-----	...1435...	ttccatttcag	tgtggaca		
D.Ere	atttacag	gtgagtgccgag...804...	ccagtgcgc	----	cagagtcctgg	----	TGATTAGCTgATTG	-----	cca	---	ggcagccaggcagccag	-----	...1334...	ttccatttcag	tgtggaca		
D.Ana	atttacag	gtgagtgcgag...895...	---	ttctgg	-	tcttggggcgaagc	ATGTGGTGATTAGCTgATTG	CCAGTT	agccg	-	tctagctatgatct	-----	...1627...	ccttcatttcag	tgtggata		
D.Gri	atztatag	gtgagtaacata...1161...	---	tgtcagacacgaacacagac	---	---	GTTGATTAGCTgATTG	TAGTT	-	gcggc	-	ggcagccaagctggc	-----	...1667...	atctcgttttag	tgtggata	
D.Per	atttacag	gtgagtcgtaag...793...	ggggcatgt	-	gtgtggggc	-	gc	---	TGATTAGCTgATTG	-----	ccaggcggcgctaa	-	aaacta	-----	...1395...	tttttttccag	tgtggata
D.Pse	atttacag	gtgagtcgtaag...794...	ggggcatgt	-	gtgtggggc	-	gc	---	TGATTAGCTgATTG	-----	ggcggctaa	-	aaacta	-----	...1404...	cttttttccag	tgtggata
D.Vir	atatatag	gtaagtagaata...1200...	---	gtgtgtcagacagagctgc	---	---	TGATTAGCTgATTG	-----	ctggc	-	tgaggctgagatgcc	-----	...1519...	ttttcttttag	cgtggata		
D.Yak	atttacag	gtgagtgccgag...876...	ccagtacgc	----	cagagccctgg	----	TGATTAGCTgATTG	-----	cca	---	ggcagctaggcagccag	-----	...1472...	ttccatttcag	tgtggaca		
	** ** *	** ** *		*	*		*****		**		** **		** **	*****	*		

id=80704 gene=FBgn0086604 name=CG12484 segment=chr2R.16347126\_16349508.1 type=IN

D.Me1	catatatic	gtgagttttgct...525...	-----	gctcaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	-----	...413...	tttcatttcgag	acataccg
D.Sim	catatatic	gtgagttttgct...536...	-----	gctcaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	-----	...403...	tttcatttcgag	acataccg
D.Sec	catatatic	gtgagttttgct...542...	-----	gctcaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	-----	...402...	tttcatttcgag	acataccg
D.Ere	cattttatc	gtgagttttgct...533...	-----	gctcaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	-----	...382...	tttcatttcgag	acataccg
D.Ana	catctatc	gtgagttctgtt...586...	actg	tttgcccaatttgata	GATTGctTAATAAGCTtAATTG	atTCGCAT	---	tcgcggcgaatttgaatt	...377...	tttctcattcag	atattccg	
D.Gri	catctatc	gtaagtattatt...654...	ctgt	tttgacaaatttgata	GATTGctTAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	...424...	ttctacatag	atatacct	
D.Per	cattttatc	gtgagttttgct...536...	-----	gcacaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgctacaat	...952...	atccccacacag	atataccc	
D.Pse	cattttatc	gtgagttttgct...529...	g	ttgttgacaaatttgata	GATTGctTAATAAGCTtAATTG	attcgcgca	---	ttcgcgctacaat	...952...	atccccacacag	atataccc	
D.Vir	catctatc	gtaagttttgct...683...	-----	gcagaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	...404...	ccaccttatag	atataccc	
D.Yak	cattttatc	gtgagttttgct...549...	-----	gctcaatttgatagattgct	TAATAAGCTtAATTG	attcgcgca	---	ttcgcgcaccaat	...419...	tttcatttcgag	atataccc	
	*** **	** ** *	*	**	*****	**	*	**	*	**	** ** *	

id=80714 gene=FBgn0086604 name=CG12484 segment=chr2R.16353297\_16354313.1 type=IN VIEW

Figure 313: CS=10.8



```

D.Mel  caaagacc gtgagttgaaat...374...aacgaatataatcaattggt-CTGGAATTGGCATtAAAA--TCGTTtgTAAGTGaccgttccgtacggcacttg-----...494...gtttgatttttag ggacatca
D.Sim  cagagacc gtaagtcgaagt...392...aacgaatataatcaattggt-CTGGAATTGGCATtAAAA--TCGTTtgTAAGTGaccgttccgtgcggcacttg-----...510...gtttgatttttag ggacatca
D.Sec  cagagacc gtaagtcgaagt...395...aacgaatataatcaattggt-CTGGAATTGGCATtAAAA--TCGTTtgTAAGTGaccgttccgtgcggcacttg-----...484...gtttgatttttag ggacatca
D.Ere  caaagacc gtaagtcgatgt...411...aacgaatataatcaattcct-TTGAATTGGCATtAAAA--TCGTTtgTAAGTG-----accgtaccgtaccgtatagc----...588...gtttcatttttag tgacataa
D.Ana  cagagacc gtaagttaatga...250...aacgaatataatcaattggt-TTGAATTGGCATtAAAA--TCGTTtgTAAGTGACCG-----taaagcacttgTgcgtccag...394...ttttctttccag tgacatta
D.Gri  cagcgacc gtaagttcactt...40...-----tatatgttttccacataact--CGTAAACAaTTCA-----ttcaacgcttgcgagtgcgt...478...ttttcttttag tgatataa
D.Moj  caaagacc gtaagtatatcg...114...---caattcaattgttttcaaa--AATTGGCAttAAAAATTCGTT-----taagtgaccgtaaaacactt...349...ttctctttacag tgatataa
D.Per  caacgacc gtaagttgatat...175...---aatataatcaattgtttgGAAATTGGCATtAAAA--TCGTTTG-----tactcgttaagtgaccgtaaa-----...363...cgttctttgcag tgatatta
D.Pse  caacgacc gtaagttgatat...160...---aatataatcaattgtttgGAAATTGGCATtAAAA--TCGTTTG-----tactcataagtgaccgtaaa-----...356...cgttctttgcag tgatatta
D.Vir  caaagaac gtaagttcaaca...55...-----aatatgttttccacataact--CGTAAACAaTTCA-----ttcaacgcttcagagtgcgc...471...atttcttttag tgatttaa
D.Yak  cagagacc gtaagttgatat...486...aacgaatataatcaattcct-TTGAATTGGCAtT-AAAA--TCGTTtgTAAGTG-----accgtaccataccgtatagc----...560...gttccatttttag tgacataa
** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** *

```

id=91872 gene=FBgn0027364 name=Six4 segment=chr3L.20782272.20783235-1 type=IN

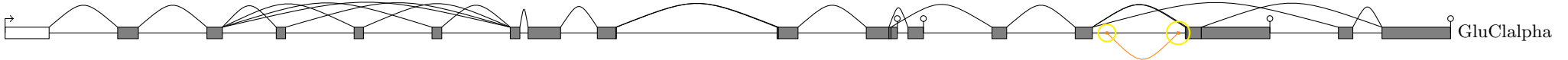
```

D.Mel  caaagacc gtgagttgaaat...441...-----acttgtgcctccaggccgccCACTTGAGCGtGTTTTATGTCcAATTTCCGg-----ccggctccttgacggctcct...429...gtttgatttttag ggacatca
D.Sim  cagagacc gtaagtcgaagt...459...-----acttgtgcctccaggccgccCACTTGAGCGtGTTTTATGTCcAATTTCCGg-----ccggctccttgacggctcct...445...gtttgatttttag ggacatca
D.Sec  cagagacc gtaagtcgaagt...462...-----acttgtgcctccaggccgccCACTTGAGCGtGTTTTATGTCcAATTTCCGg-----ccggctccttgacggctcct...419...gtttgatttttag ggacatca
D.Ere  caaagacc gtaagtcgatgt...483...-----acttgtgcctctagtccgccCACTTGAGCGtGTTTTATGTCcAATTTCCGg-----ccggctccttgacggctcct...518...gtttcatttttag tgacataa
D.Ana  cagagacc gtaagttaatga...307...aaagcacttgTgcgtccagcCGGTCcACTTGAGCGtGTTTTATGTCcAATTTCCGA-----ccggctcctttctcgtcct...338...ttttctttccag tgacatta
D.Gri  cagcgacc gtaagttcactt...272...-----ttttttctaaaaaggcact---TGAGcgTGTTTATG-----tccaattttgcagctccttg-----...245...ttttcttttag tgatataa
D.Moj  caaagacc gtaagtatatcg...253...-----tttttctgaaaggccacttg---AGCGtGTTTTATGTCcAATT-----ttgcagctccttttaccta-...212...ttctctttacag tgatataa
D.Per  caacgacc gtaagttgatat...263...-----tccggaccgaaaatgccact---TGAGCGtGTTTTATGTCcAATTTTgccttagcttagctcagct-----...275...cgttctttgcag tgatatta
D.Pse  caacgacc gtaagttgatat...248...-----tccggaccgaaaatgccact---TGAGCGtGTTTTATGTCcAATTTTgccttagcttagctcagct-----...268...cgttctttgcag tgatatta
D.Vir  caaagaac gtaagttcaaca...288...-----ccatttttctaaaaggcact---TGAGcgTGTTTATG-----tccaattttgcagctccttg-----...237...atttcttttag tgatttaa
D.Yak  cagagacc gtaagttgatat...557...-----acttgtgcctctagtccgccCACTTGAGCGtGTTTTATGTCcAATTTCCGg-----ccggctccttgacggctcct...490...gttccatttttag tgacataa
** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** * ** ** *

```

id=91872 gene=FBgn0027364 name=Six4 segment=chr3L.20782272.20783235-1 type=IN VIEW

Figure 314: CS=17.16



```

D.Mel cccacaag gtaacgcacggg...51...ccat atgtgtccgtagtag TTGATGGATTtaCTTTTGGATgTTGTGAacatgtactattct-actctt---...735...taat atccaag acaatggt
D.Sim cccacaag gtaacgcacggg...51...ccat atgtgtccgtagtag TTGATGGATTtaCTTTTGGATgTTGTGAacatgtactattct-actctt---...713...taat atccaag acaatggt
D.Sec cccacaag gtaacgcacggg...51...ccat atgtgtccgtagtag TTGATGGATTtaCTTTTGGATgTTGTGAacatgtactattct-actctt---...716...taat atccaag acaatggt
D.Ere cccacaag gtaacgcacggg...49...tccat tgtgtccgtagtag TTGATGGATTtaCTTTTGGATgTTGTGAacatgtactattct-actctt---...699...taat atccaag acaatggt
D.Ana ccaacaag gtaactaacggg...65...cccattgtgtccgtagtag TTGGTGGATTtaCTTTTGGATgTTGTGAacatttactattct-actctg---...837...ta atgccaaag acaatggt
D.Gri cccacaag gtaacgctcgtc...31...----att atattgtagtagttgat GGATTtcCTTTTGGATgTTGTGAat atgtactatcta-catttc---...827...tatt atccaag acaatggt
D.Moj cccacaag gtaactcaactc...44...----aacattttgtagtagttgat GGATTtcCTTTTGGATgTTGTGAat atg---tatcta-caacttgct...994...tatt atccaag acaatggt
D.Wil ccaacaag gtaa-tgacggct...46...----ta atagttttt-gtagttgat GGATTtcCTTTTGGATgTTGTGAat at-tactat atattatctc---...1081...at ctatccaag acaatggt
D.Yak cccacaag gtaacgcacggg...51...ccat atgtgtccgtagtag TTGATGGATTtaCTTTTGGATgTTGTGAacatgtactattct-actctt---...735...taat atccaag acaatggt
** *****
* * * * *

```

id=51718 gene=FBgn0024963 name=GluClalpa segment=chr3R.15592370.15593247\_1 type=IN

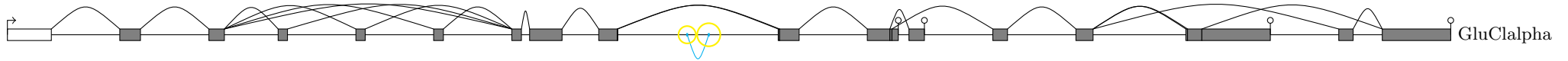
```

D.Mel cccacaag gtaacgcacggg...774...aagaataaccaatcaagtaa TCACAAaaATCAAAAAGccAATCTTTAGatgatcaattaattgcat tttcgtacttgtttaatatcca---aag acaatggt
D.Sim cccacaag gtaacgcacggg...752...aagaataaccaatcaagtaa TCACAAaaATCAAAAAGccAATCTTTAGatgatcaattaattgcat tttcgtacttgtttaatatcca---aag acaatggt
D.Sec cccacaag gtaacgcacggg...755...aagaataaccaatcaagtaa TCACAAaaATCAAAAAGccAATCTTTAGatgatcaattaatttcat tttcgtacttgtttaatatcca---aag acaatggt
D.Ere cccacaag gtaacgcacggg...736...aagaataaccaatcaagtaa TCACAAaaATCAAAAAGccAATCTTTAGatgatcaattaattgcat tttcgtacttgtttaatatcca---aag acaatggt
D.Ana ccaacaag gtaactaacggg...890...aaaaacaaaaaaccagaaa TCACAAaaATCAAAAAGccAATCTCTAGatgatcaattaatttata tttcgtacttgtttaatgccca---aag acaatggt
D.Gri cccacaag gtaacgctcgtc...843...aaaaactaaagaaaaaaca TCACA--AATCAAAAAGccAATCTctagatgatcaattaatgtg---tttcgtacttgttga atattatcc-aag acaatggt
D.Moj cccacaag gtaactcaactc...1023...caagccaaatgaaagaaca TCACA--AATCAAAAAGccAATCTctagatgatcaattaatgtg---tttcgtacttgttga atattatcc-aag acaatggt
D.Wil ccaacaag gtaa-tgacggct...1111...aaaaacaaaaaattccaaa TCACA--AATCAAAAAGccAATCTctagatgatcaattaatctg---ttttgtcgtgttga atatctatccaag acaatggt
D.Yak cccacaag gtaacgcacggg...774...aagaataaccaatcaagtaa TCACAAaaATCAAAAAGccAATCTTTAGatgatcaattaattgcat tttcgtacttgtttaatatcca---aag acaatggt
** *****
* * * * *

```

id=51718 gene=FBgn0024963 name=GluClalpa segment=chr3R.15592370.15593247\_1 type=IN VIEW

Figure 315: CS=8.64



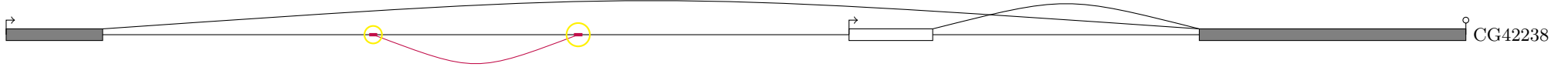
D.Me1	accg	gtac	gtgggttcagaa...1768...tcttgaagagatggaacgc- <b>TTTGcCAACAAATTAACGGAAATGAAG</b> -----cacaagaaagggcggtggcc...700...gtatactcatag	gtgaatac
D.Sec	accg	gtac	gtgggttcagaa...1771...tcttgaagagatggaacgc- <b>TTTGcCAACAAATTAACGGAAATGAAG</b> -----cacaagaaagggcggtggcc...692...gtatactcatag	gtgaatac
D.Ere	accg	gtac	gtgggttcagaa...1610...tcttgaagagatggaacgc- <b>TTTGcCAACAAATTAACGGAAATGAAG</b> -----cacaagaaagggcggtggcc...651...gtatactcatag	gtgaatac
D.Ana	accg	gtaa	gtaccacccgtt...1854...tcttgaagagatggaacgc- <b>TTTGcCAACAAATTAACGGAAATGAAG</b> -----cacaagaaagggcggtggcc...718...gtatactcatag	gtgaatac
D.Gri	accg	gtaa	gtaccacccgtt...2245...-----tggaaacgcaactgcaaaaaa- <b>TAAACGGAAATGAAG</b> ggctgcaacaagcagcgggtg-----...664...gtatactcatag	gtgaatac
D.Moj	accg	gtat	gtttgtttgtgt...2208...-----tggaaacgcaactgcaaaaaa- <b>TAAACGGAAATGAAG</b> ggcggtacaaccaggcagc-----...765...gtatactcatag	gtgaatac
D.Per	accg	gtac	gtttctgttct...2423...-cttgaagagatggaacgca <b>TTTGCCAAACAAATTAACGGAAATGAAG</b> -----catacaacaaagggc--gggc...620...gtatactcatag	gtgaatac
D.Pse	accg	gtac	gtttctgttct...2478...-cttgaagagatggaacgca <b>TTTGCCAAACAAATTAACGGAAATGAAG</b> -----catacaacaaagggc--gggc...534...gtatactcatag	gtgaatac
D.Wil	accg	gtac	gtttgctttgtc...2115...-----agagatggaacgctttgcc- <b>AACAAaTTAACGGAAATGAAG</b> cgcacgaaaaaaaagaca-----...1348...gtatactcatag	gtgaatac
D.Yak	accg	gtac	gtgcgttcagaa...1739...tcttgaagagatggaacgc- <b>TTTGcCAACAAATTAACGGAAATGAAG</b> -----cacaagaaagggcggtggcc...693...gtatactcatag	gtgaatac
	** *	*** **	***** * * * ** *****	* ** *

id=51705 gene=FBgn0024963 name=GluClalpha segment=chr3R.15586761.15589319.1 type=IN

D.Me1	accg	gtac	gtgggttcagaa...1938...-----agcacacaaaagccgtcgaa <b>CTTCATTTCCGTTAAgATTt</b> ttGT-- <b>TGCAAA</b> --a----gtcag-aaattgaattcatg...527...gtatactcatag	gtgaatac
D.Sec	accg	gtac	gtgggttcagaa...1940...-----agcacacaaaagccgtcgaa <b>CTTCATTTCCGTTAAgATTt</b> ttGT-- <b>TGCAAA</b> --a----gtcag-aaattgaattcatg...520...gtatactcatag	gtgaatac
D.Ere	accg	gtac	gtgggttcagaa...1776...-----agcacacaaaagccgtcgaa <b>CTTCATTTCCGTTAAgATTt</b> ttGT-- <b>TGCAAA</b> --a----gtcag-aaattgaattcatg...482...gtatactcatag	gtgaatac
D.Ana	accg	gtaa	gtaccacccgtt...2036...-----agtacacaaagccgtcgaa <b>CTTCATTTCCGTTAAgATTt</b> ttGT-- <b>TGCAAA</b> --a----gtcagaaaattgaattcatg...533...gtatactcatag	gtgaatac
D.Gri	accg	gtat	gtttgtttgtgt...2383...-----aagtctctgcccgaatgaa <b>CTTCATTTCCGTTAA</b> -----gaa-tttgttgcgaatgtca-----...526...gtatactcatag	gtgaatac
D.Moj	accg	gtat	gtttgtttgtgt...2359...actctacaagc-----ccctgcgaa <b>CTTCATTTCCGTTAA</b> -----gaattttgttgcgaagcaag-----...614...gtatactcatag	gtgaatac
D.Per	accg	gtac	gtttctgttct...2547...-----cgagcatcgaaactcaaaaa <b>CTTCATTTCCGTTAAgATTt</b> tt <b>GTTGtGCAAA</b> gaa-----aacaagaaa--aaaatag...491...gtatactcatag	gtgaatac
D.Pse	accg	gtac	gtttctgttct...2602...-----cgagcatcgaaactcaaaaa <b>CTTCATTTCCGTTAAgATTt</b> tt <b>GTTGtGCAAA</b> gaa-----aacaagaaa--aaaatag...405...gtatactcatag	gtgaatac
D.Wil	accg	gtac	gtttgctttgtc...2286...-----agaacacaaaagtcgacgaa <b>CTTCATTTCCGTTAAgATTt</b> tt <b>GTTGtGCAAA</b> gaa-----tggtgcaaaaacataaaaa-----...1177...gtatactcatag	gtgaatac
D.Yak	accg	gtac	gtgcgttcagaa...1922...-----agcacacaaagccgtcgaa <b>CTTCATTTCCGTTAAgATTt</b> ttGT-- <b>TGCAAA</b> --a----gtcag-aaattgaattcatg...507...gtatactcatag	gtgaatac
	** *	*** **	* *****	*

id=51705 gene=FBgn0024963 name=GluClalpha segment=chr3R.15586761.15589319.1 type=IN VIEW

Figure 316: CS=14



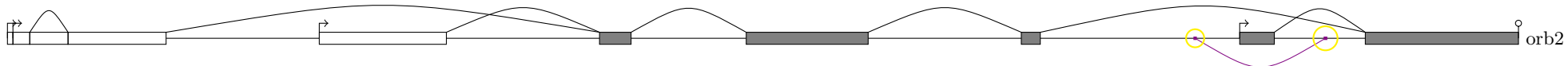
D. Mel	attaaacg	gtgagtgtgca...3974...	-----cccggggttatacagctccc-----	GTAAaaGGTGCcGAGTG	attaattattatgtcagga-...934...	---atgctgaaaaac	agaaagca--
D. Sec	attaaacg	gtgagtgtgca...3966...	-----cccggggttattcacgtccc-----	GTAAaaGGTGCcGAGTG	attaattattatgtcagga-...942...	---atgctgaaaaac	agaaagta--
D. Ana	ttcgaacg	gtgagtgtctacg...3685...	-----aggtctctgtctcggaccgt	GTGTCTcGTAAaaGGTGCcGAGTG	attaattattatgtcagga-...1216...	---gaacggaaaaag	ggaaaaca--
D. Gri	ttcaaatc	gtaagctgtaaa...3811...	-----gctctttgg-gactgct---gctc-----	GTAAaaGGTGCAGAGTG	attaatta-tatgtcagagga...1097...	---aaagggaaaaat	ggaaaatg--
D. Moj	aaattacg	gtgagtgtcgcg...3816...	-----ttttgg-gactgctctgcctc-----	GTAAaaGGTGCAGAGTG	attaatta-tatgtcagtga...1092...	---aaaaagggaaaaag	ggaaa---tg
D. Per	tatatacg	gtgagtgtgaaga...3776...	-----gggttagacatggctccgcc-----	GTAAaaGGTGCAGAGTG	attaattattatgtcagga-...1132...	---acctgcacagcg	aggagcca--
D. Pse	tatatacg	gtgagtgtgaaga...3804...	-----gggttagacatggctccgcc-----	GTAAaaGGTGCAGAGTG	attaattattatgtcagga-...1104...	---acctgcacagcg	aggagcca--
D. Vir	attcaatc	gtcagctgtaaa...3905...	...gcgtttcttttggagactg-----	CTGTAAaaGGTGCAGAGTG	attaatta-tatgtcagagga...1001...	---agggaaaaag	ggaaaatgta
D. Wil	aatttacg	gtgagttgagaa...3345...	-----ggtctcctatctctctctc---	TTGTAAaaGGTGCAGAGTG	attaatta-tatgtcagggaa...1561...	aggatgagcaacagc	aggaa-----
D. Yak	attaaacg	gtgagtgtgca...3998...	-----cctggggttatacagctccc-----	GTAAaaGGTGCcGAGTG	attaattattatgtcagga-...910...	---atgctgaaaaat	agaaagca--
	*	** **	*	*****	*****	*****	*

id=40470 gene=FBgn0250867 name=CG42238 segment=chr2L.20968944.21051773.-1 type=IN

D. Mel	attaaacg	gtgagtgtgca...4357...	catcaataacatttctctgc--	CACTTatGCACCacTTAC	agatacttacc-ggcgacga----	...550...	---atgctgaaaaac	agaaagca--
D. Sec	attaaacg	gtgagtgtgca...4354...	catcaataacatttctctgc--	CACTTatGCACCacTTAC	agatacttacc-ggcgacga----	...553...	---atgctgaaaaac	agaaagta--
D. Ana	ttcgaacg	gtgagtgtctacg...4173...	catcaataacatttctctgc--	CACTTatGCACCacTTACAGATAC	ttaccccgacgacggatac...	...728...	---gaacggaaaaag	ggaaaaca--
D. Gri	ttcaaatc	gtaagctgtaaa...4345...	catcaataacatttcttttc--	CACTTatGCACCacTTAC	agatacttaaccgca---aagac---	...562...	---aaagggaaaaat	ggaaaatg--
D. Moj	aaattacg	gtgagtgtcgcg...4307...	catcaataacatttcttttc--	CACTTatGCACCacTTAC	agatacttaaccgca---aagac---	...600...	---aaaaagggaaaaag	ggaaa---tg
D. Per	tatatacg	gtgagtgtgaaga...4272...	ctccctctatctgtgtgtgc--	CACTTatGCACCacTTAC	agatacttaccctggagacg-----	...635...	---acctgcacagcg	aggagcca--
D. Pse	tatatacg	gtgagtgtgaaga...4284...	ctccctctatctgtgtgtgc--	CACTTatGCACCacTTAC	agatacttaccctggagacg-----	...623...	---acctgcacagcg	aggagcca--
D. Vir	attcaatc	gtcagctgtaaa...4392...	catcaataacatttcttttc--	CACTTatGCACCacTTACAG	atacttaaccgagcaaga-----	...513...	---agggaaaaag	ggaaaatgta
D. Wil	aatttacg	gtgagttgagaa...4223...	-tcaataacatttctctctac	CACTTatGCACCacTTACAG	atacttaccgagacgaggg-----	...682...	aggatgagcaacagc	aggaa-----
D. Yak	attaaacg	gtgagtgtgca...4378...	catcaataacatttccctgc--	CACTTatGCACCacTTAC	agatacttacc-ggcgacga----	...529...	---atgctgaaaaat	agaaagca--
	*	** **	* * * * *	*****	*****	*****	*	

id=40470 gene=FBgn0250867 name=CG42238 segment=chr2L.20968944.21051773.-1 type=IN VIEW

Figure 317: CS=9.6



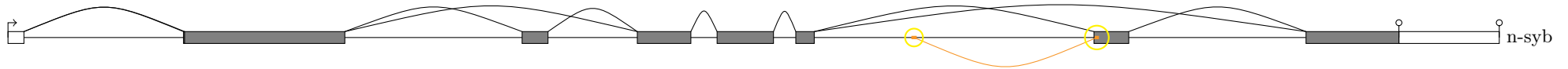
D.Mel	cgaaaaag	gtgagtgccgaa...	2701...	a-acgtcgagcataaaagttaa-ATTA	AAAAAGGAGCAATTT	aggatatgagaagat----	aagttaggatagttcggat:::	ataatgtagtatattata-----	gtagctt	gtctcata
D.Sim	cgaaaaag	gggagtgccgaa...	2711...	a-acgtcgagcataaaagtga-ATTA	AAAAAGGAGCAATTT	atgatatgagaagat----	aggataggatagttcggat:::	ataatgtattctagtata-----	gtagctt	gtctgatg
D.Sec	cgaaaaag	gtgagtgccgaa...	2709...	a-acgtcgagcataaaagtga-ATTA	AAAAAGGAGCAATTT	atgatatgagaagat----	aggataggatagttcggat:::	ataatgtattctagtata-----	gtagctt	gtctgatg
D.Ere	cgaaaaag	gtgagtgcccaa...	2705...	a-acgtcgagcataaaagtga-ATTA	AAAAAGGAGCAATTT	aggatatgagaagactcaaaagcttagcatagttcggtt:::	acaatgtagt-atttgctgatctgccacctg	ggcagtga	gatacttt	gatacttt
D.Ana	cgaaaaag	gtgagtcctct...	2723...	acaccacgggtataaag-taaTATTA	AAAAAGGAGCAATTT	gaggatttgatttatt-----	aagttgg-----	tagatt:::	atataatacattaca-----	agagata
D.Moj	cgaaaaag	gtgagtgaaca...	2567...	t-ttataaaactgaaaacaga----	GAAAGGAGCAATTT	-----	-----	-----	-----	-----
D.Per	cgaaaaag	gtgagtgcttcc...	2839...	a-ataccaaaaaaaaaagaa----	AAAAGGAGCAATTT	caagatttg-----	-----	tttgaggattagat:::	agattaagtataactatt-----	ccggcat
D.Pse	cgaaaaag	gtgagtgcttcc...	2857...	a-ataccaaaaaaaaaagaa----	AAAAGGAGCAATTT	taagatttg-----	-----	tttgaggattagat:::	agattacagtaactatt-----	cctgc-
D.Wil	cgaaaaag	gtgagtacacac...	3234...	a-ctaaaactaaaaaaaaaac----	AAAAGGAGCAATTTGT	-----	-----	-----	-----	-----
D.Yak	cgaaaaag	gtgagtgccaaa...	2727...	a-acgtcgagcataaaagtga-ATTA	AAAAAGGAGCAATTT	aggaaatgaggagactcgaaaattcaggatagttcggat:::	ataatgtagtaactcgctgacctg-	ccatctg	-----	-----
	** ****	* ****		***	** ****					

id=112024 gene=FBgn0035938 name=orb2 segment=chr3L.8938031.8940927\_-1 type=IN

D.Mel	aatttcat	gtaagttccgcc...	120...	--tccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATgcaaca-----	actatacagacct--...	92...	ttcttcctgcag	ttgcggtg
D.Sim	aatttcat	gtaagttccgcg...	138...	--tccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATgcaa-aa-----	actatacagacctg-	90...	ttcttcctgcag	ttgcggtg
D.Sec	aatttcat	gtaagttccgcg...	137...	--tccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATgcaa-aa-----	actatacagacctg-	90...	ttcttcctgcag	ttgcggtg
D.Ere	agtttcat	gtaagttccgcg...	151...	--tccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATgcaa-aa-----	actatacagacctg-	81...	ttcttcctgcag	ttgcggcg
D.Ana	aattccct	atatcccagta...	96...	--ccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATGcaaaaaaaaaatgctactacac-----	...	103...	ctcttcctgcag	ttgcagcg
D.Moj	aatcctat	gcagatttcagt...	178...	--tttgaagcaaatccttgaacAAATTGCTC	TTTTT	-----	ataaaa-----	tccatataataaat...	43...	tcccttacgcag
D.Per	gccttcca	agaagtccagcc...	191...	--accgaagcaaatccttgaacAAATTGCTC	TTTTT	ataatgcaaa-a-----	acatagtag-	124...	ccttcctgcag	ttgtagcg
D.Pse	gtcttcca	agaagtccagcc...	369...	--accgaagcaaatccttgaacAAATTGCTC	TTTTT	ataatgcaaa-a-----	acatagtag-	124...	ccttcctgcag	ttgtagcg
D.Wil	agtgttag	ttagccatcttc...	158...	gagaaaaagcaaatccttgaACAAATTGCTC	TTTTT	tataatgcaaaaga-----	gtatactc-	186...	tcccttacgcag	ttgcagcg
D.Yak	aatttcat	gtaagtttccgcg...	143...	--tccgaagcaaatccttgaacAAATTGCTC	TTTTT	caTAATgcaa-aa-----	actatacagacctg-	96...	ttcttcctgcag	ttgcggcg
		*		***** ** * ***** **		*			****	** * *

id=112026 gene=FBgn0035938 name=orb2 segment=chr3L.8937621.8937917\_-1 type=IN VIEW

Figure 318: CS=10.8



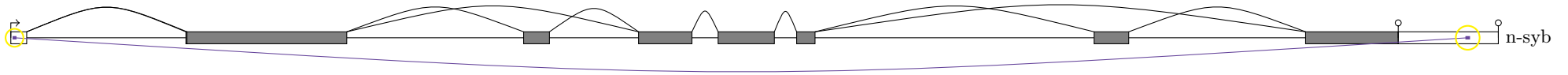
D.Mel	tattgcaa	gtaagttgacag...234...--gcgttcttaattccgcca---ct	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1065...gaacaattacag	agaaagac
D.Sim	tattgcaa	gtaagttgacag...233...--gcgttcttaattccgcca---ct	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1257...gaacaattacag	agaaagac
D.Sec	tattgcaa	gtaagttcacag...233...--gcgttcttaattccgcca---ct	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1062...gaacaattacag	agaaagac
D.Ere	tattgcaa	gtaagttgacag...228...--ttgttcttaattccgcca---ct	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1044...gaacaattacag	agaaagac
D.Ana	cattgcaa	gtaagttgatcg...220...----ttaattaattctgcca-cggt	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1088...caacaattacag	agaaagac
D.Gri	tattgcaa	gtaagttcctcg...223...----ttttttattccgtca-cggt	TTTTTCTCTag	GTAAC	ctttatgtagattgctaaaa-----	...979...accaatttacag	agaaagac
D.Moj	tatagcaa	gtaagttaatcg...249...acacttttttctctaggtta-----	ACTTTATGTA	gATTGCT	-----aaaaactaactataagaa--aa...940...acacaattacag	agaaagac	agaaagac
D.Pse	cattgcaa	gtaagttaatcg...244...----tcttaattccgccaactct	TTTTTCTCTag	GTAATT	ttatgtagattgctagctat-----	...1187...gaacaattacag	agaaagac
D.Vir	catagcaa	gtaagtctttcg...263...aacttttcttctctaggtta-----	ACTTTATGTA	TTTGCT	-----aaactaactataagcagcaa...819...caacaattacag	agaaagac	agaaagac
D.Wil	tattgcaa	gtaagtttttc...374...ttatttttttctctaggtta-----	ACTTTATGTA	ATTGCT	-----aatatcaataataa-tatcaa...1525...aattagtcattg	gtaatgaa	gtaatgaa
D.Yak	tattgcaa	gtaagttgacag...212...--gcgttcttaattccgcca---ct	TTTTTCTCTag	GTAAC	ctttatgtagattgctaact-----	...1031...gaacaattacag	agaaagac
	** ** ** *	*****	* * * * *	*** * ** *	*	* * *	** **

id=68482 gene=FBgn0013342 name=n-syb segment=chr3L.1633807.1635185\_-1 type=IN

D.Mel	tattgcaa	gtaagttgacag...1341...-cgaaccatatttttgaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Sim	tattgcaa	gtaagttgacag...1532...-cgaaccatatttttgaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Sec	tattgcaa	gtaagttcacag...1337...-cgaaccatatttttgaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Ere	tattgcaa	gtaagttgacag...1314...-tgaaccatatttttgaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Ana	cattgcaa	gtaagttgatcg...1350...-tgtacaatatttttcaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Gri	tattgcaa	gtaagttcctcg...1244...-caact-ttttctccaccaat-----	TTACAGAGAAAAGA	-----c-----	.....	-----
D.Moj	tatagcaa	gtaagttaatcg...1024...-----agtattttgaccaaggtcagc	AGCAAATGCATA	--AAGT	a-----ctgcaaaaaataaaaaagcattctt:--	...:cagagaaagac-----
D.Pse	cattgcaa	gtaagttaatcg...1473...-tacacaatatttttgaac-----	AATTACAGAGAAAAGA	-----c-----	.....	-----
D.Vir	catagcaa	gtaagtctttcg...959...atgggccgcaggtcccaaac-----	AGCAAAATGCATA	--AAGT	a-----ctgca-----atcttc:--	...:cagagaaagac-----
D.Wil	tattgcaa	gtaagtttttc...1541...-ccacctcctctgaaaaaa-----	AGCAAAATGCATA	--AAGT	attaaccttagttctctgta-----gtttct:--	...:ca-agagatcatctcttcaattagtcattgtaatgaa
D.Yak	tattgcaa	gtaagttgacag...1285...-tgaaccatatttttgaacaa-----	TTACAGAGAAAAGA	-----c-----	.....	-----
	** ** ** *	*****	* * * * *	*** * ** *	*	

id=68482 gene=FBgn0013342 name=n-syb segment=chr3L.1633807.1635185\_-1 type=IN VIEW

Figure 319: CS=13.2



D. Mel	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttcgcagttggcc-aaaaacgtc	gtaagtga
D. Sim	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttcgcagttggcc-aaaaacgtc	gtaagtga
D. Sec	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttcgcagttggcc-aaaaacgtc	gtaagtga
D. Ere	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttcgcagttggcc-aaaaacgtc	gtaagtga
D. Ana	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttccagttggct-aaaaacgtc	gtaagtga
D. Gri	-ataca	CAT	AACAGTTAG	----	gaaagctgcaagttttcgcagttggctaaaaaacgtc	gtaagtga
D. Moj	-ataca	CAT	AACAGTTAG	----	aaaagctgccagttttcgcagttggct-aaaaacgtc	gtaagtga
D. Per	cata-a	CAT	AACAGTTAG	gaaaggaagctgtgagttttcgcagttggct-aaaaacgtc	gtaagtga	
D. Pse	cata-a	CAT	AACAGTTAG	gaaaggaagctgtgagttttcgcagttggct-aaaaacgtc	gtaagtga	
D. Yak	-ataca	CAT	AACAGTTAG	----	gaaagctgtaagttttcgcagttggcc-aaaaacgtc	gtaagtga
	***	****	*****	*****	*****	*****

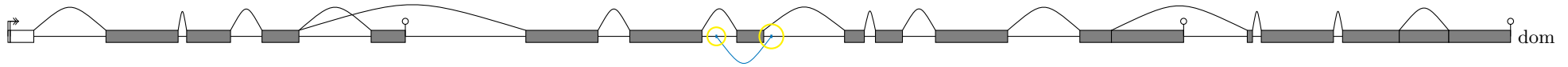
id=68470 gene=FBgn0013342 name=n-syb segment=chr3L.1637723.1637767\_-1 type=E5

D. Mel	gagaagac	aaaagaaaacca-...150...	cggacaattt-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...55...	-atggaacttg--aa	ta-ttacga
D. Sim	gagaagac	aaaaaaaaacca-...149...	cggacaattt-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...54...	-atggaacttg--aa	ta-ttacga
D. Sec	gagaagac	aaaagaaaacca-...149...	cggacaattt-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...54...	-atggaacttg--aa	ta-ttacga
D. Ere	gagaagac	aaagaaacaaaa-...151...	cggacaaatt-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...51...	-atggaacttg--aa	ta-ttacga
D. Ana	gaaagaaa	aaaaccaaacca-...143...	cggacaaatt-aaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...41...	-atgaaattgaaaa	tattta---
D. Gri	ta-aaaaa	aaaataaaaacaa-...194...	cgggcaaatt-aaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...62...	tatatat-atatata	tatata---
D. Moj	tataaaat	gaaataaaaata-...105...	ggacaaat-aaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...54...	-atgtatgatgata	tatata---
D. Per	gaaccgac	aaaacaaaact-...159...	cggacaaat-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...42...	-tgggtacttg--aa	tatttacg-
D. Pse	gaaccgac	aaaaaaaaaactc-...157...	cggacaaat-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...42...	-tgggtacttg--aa	tatttacg-
D. Yak	atgaagac	aaaagaacaaa-...162...	cggacaaatt-gaagttgttg	CTAA	TTGT	TATG	gttacattatttcatgcata...59...	-atggaacttg--aa	ta-ttacga
	*	**	*	*	*****	*	*****	*	**

id=68486 gene=FBgn0013342 name=n-syb segment=chr3L.1631910.1632192\_-1 type=E3 VIEW

Figure 320: CS=3





```

D.Mel acagagag gtagtaatgat...54...gctaaactagcatggcgact-----ACGCTTGGGTGCTAAAAGTAAAT-tcgctataatgccgatac...100...aactttctacag gcgctctgt
D.Sim acagagag gtagtaatgat...53...gctaaactagcatggcgact-----ACGCTTGGGTGCTaaaagtaaat-tcgctataat...109...aactttctacag gcgctctgc
D.Sec acagagag gtagtaatgat...54...gctaaactagcatggcgact-----ACGCTTGGGTGCTaaaagtaaat-tcgctataat...110...aactttctgcag gcgctctgc
D.Ere acagagag gtagtagtatg...64...gctaaactagcatggcgact-----ACGCTTGGGTGCTaaaagtaaat-tcgctataa...114...aattttttacag acgactgac
D.Ana accgagag gtaagtcgtggt...67...gctaaactagcatggcgact-----ACGCTTGGGTGCTGacagtaact-tcgctataatg...105...ctcctccacag acgcctgc
D.Gri accgaaag gtcagtaaatgg...81...gctaaactagcttggcgact-----ACGCTTGGGTGCTAacattaattaccgctataat...184...atattacaccag acgtttac
D.Moj accgaaag gtcagtaaatgt...90...gctaaactagcttggcgact-----ACGCTTGGGTGCTAaaatt-aaatcagctatgatg...183...tattcataacag acgcttgc
D.Per accgagag gtaaccccaac...85...----agtaacatgacgactgctaaCTAGCAcGGGGActACGCTTGGGTGCTAaaattaata-tcgttataatg...136...tctctcccatag acgcctgt
D.Pse accgagag gtaaccccaac...90...----catgacgactgctaactagcaCGGGGActACGCTTGGGTGCTAaaattaata-tcgttataatg...135...tctctcccatag acgcctgt
D.Vir accgaaag gtcagtaattga...78...gctaaactagcttggcgact-----ACGCTTGGGTGCTAaaatataaacacgctataat...283...cataaacaacag acgattgc
D.Yak acagagag gtagtaaacatg...61...gcaaaactagcatggcgact-----ACGCTTGGGTGCTAAAAGTaaat-tcgctataatgccgca...107...aacattctacag acgactgc
** ** ** ** *                *****                ***** * * * * ** ** *                ** ** *

```

id=116250 gene=FBgn0020306 name=dom segment=chr2R.17217167.17217407\_1 type=IN

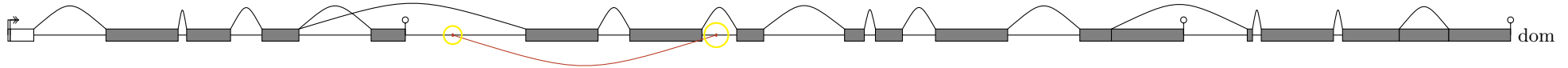
```

D.Mel tgcacaag gtaagcatatcatta----aga-----: : : :-----tataaatGTTTATtTTTTtAGCACCTAAaaGCGTtttcttatcagcttgataaa-----...945...ttctccgtacag gtgattcg
D.Sim tgcacaag gtaagcatatcataa----ggaaaaaaatat: : : :-----AGCACCTAAaaGCGTtttcttgtagcctgataaa-----...951...ttttccgtacag gtgattcg
D.Sec tgcacaag gtaagcatatcataa----ggaaaaaaatat: : : :-----AGCACCTAAaaGCGTtttcttgtagcctgataaa-----...952...ttctccgtaaag gtgattcg
D.Ere tgcacaag gtaagaatagcttta----agatcaacatgg: : : :aaatcgcatttaacactattataaatcaattattttcatGCACCTAAaaGCGTtttcttgccagctcattatg-----...331...ttctccgtacag gtgattcg
D.Ana tccacaag gtaggcactgacttactggcggtttgaattta: : : :gaggataaacac-----TAGCACCTAAaaGCGTtttcttgccagcccgttaac-----...1184...ttctccttacag gtgattcg
D.Gri tacataag gtaaatata-----attgatgcgt: : : :-----TAGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...673...ttatttacatag gtcattcg
D.Moj tacacaag gtaa--ataaagttg----atattgtcg--: : : :-----TAGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...707...ctttctttatag gttattcg
D.Per tgcacaag gtaagaagcgtttc-----tcagaatac: : : :-----TAGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...929...gtgccttgacag gtgattcg
D.Pse tgcacaag gtaagaagcgtttc-----tcagaatac: : : :-----TAGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...358...gtgccttgacag gtgattcg
D.Vir aacttgtg ttaattatattctta----aagttgcagt--: : : :-----TAGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...747...ttttttattcag gtcattcg
D.Yak tgcacaag gtaagcatagcatta----agatcaa-----: : : :aaatcgcatttgacactattataaatcaataATTTTTTtGCACCTAAaaGCGTtttcttgtaggccaacttaa-----...328...ttctccgtacag gtgattcg
* * ** *                ***** * * * * ** ** *                ** ** *

```

id=116252 gene=FBgn0020306 name=dom segment=chr2R.17217595.17218624\_1 type=IN VIEW

Figure 321: CS=9.9



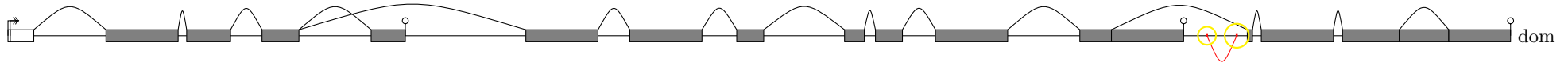
D. Mel	catttctc	aagcaaagtagt--...282...----tactagactagttttatgtc--GCACCTaaAAGCGT-tttctcgtcggctcgtaa-----...632...ttattttctaag	gtggcacc
D. Sim	catttctc	aagcaaagtagt--...283...----tcctagactacttttatgtc--GCACCTaaAAGCGT-tttctcgtcggctcgtaa-----...611...ttattttctaag	gtggcacc
D. Sec	catttctc	aagcaaagtagt--...283...----tctagactacttttatgtc--GCACCTaaAAGCGT-tttctcgtcggctcgtaa-----...611...ttattttcttag	gtggcacc
D. Ere	aatttctc	aagcaaagtagt--...286...----ctctagactagttttatgtc--GCACCTaaAAGCGT-tttctcgtcggctcgtaa-----...626...ttcttttccaag	gtggcacc
D. Ana	tatttgcc	acgaaacgtagt--...253...----tagacatacttcaatcttccGCACCTaaAAGCGT-tttcttccagcccgttaac-----...514...ttcttttcgaag	gtggcact
D. Gri	-gttgccg	caaattaaaagcg--...395...tttattttacatcgatttgc--AGCACCTaaAAGCGT-tttcttgtagccaattcaa-----...761...ttttccaaaag	gtggcact
D. Moj	tttgactt	aactatatacat--...329...----tgttcaaagcatttttaatt--GCACCTaaAAGCGT-tttcttgtacccaattaaa-----...855...tttcttctaaag	gtggcact
D. Per	cattttcc	aagcgcaaaagt--...361...tatagctctcaag---ttaaccc--GCACCTaaAAGCGTtTCTTGatagtcctctttaaagtctc...1047...ttctattccaag	gtggcact
D. Pse	cattttcc	aagtgcaaaagt--...368...tatagctatcaag---ttaaccc--GCACCTaaAAGCGTtTCTTGatagtcctctttaaagtctc...1046...ttctattccaag	gtggcact
D. Vir	catttctc	tagaattggtgt--...291...----gttttaagatatttttggct--GCACCTaaAAGCGT-tttcttgtacgccaactcaa-----...1031...gtttacctcaag	gtggcact
D. Wil	gattt--t	gctaagcgtagtgc...358...gattttctttaaagaattgtt----GCACCTaaAAGCGTtTCTTCT--tgtccgccttaaaaaatgcg...547...ttttctaataag	gtggcact
D. Yak	aatttctc	aagcaaagtagt--...285...----cctagactagttttatgtc--GCACCTaaAAGCGT-tttctcgtcagcctgttaa-----...629...ttattttccaag	gtggcacc
	*		***** **

id=116246 gene=FBgn0020306 name=dom segment=chr2R.17213932.17214923.1 type=IN

D. Mel	acagagag	gtgagtaatgat...54...-----gctaaactagcatggcgactACGCTTGGGTGCTaaaagtaaat---tcgctataa...111...aactttctacag	gcgtctgt
D. Sim	acagagag	gtgagtaatgat...53...-----gctaaactagcatggcgactACGCTTGGGTGCTaaaagtaaat---tcgctataa...110...aactttctacag	gcgtctgc
D. Sec	acagagag	gtgagtaatgat...54...-----gctaaactagcatggcgactACGCTTGGGTGCTaaaagtaaat---tcgctataa...111...aactttctgacag	gcgtctgc
D. Ere	acagagag	gtgagtagtatg...64...-----gctaaactagcatggcgactACGCTTGGGTGCTaaaagtaaat---tcgctataa...114...aattttttacag	acgactgc
D. Ana	accgagag	gtaagtcgtggt...67...-----gctaaactagcatggcgactACGCTTGGGTGCTgacagtaact---tcgctataa...107...cttctccacag	acgcctgc
D. Gri	accgaaag	gtcagtaaatgg...81...-----gctaaactagcctggcgactACGCTTGGGTGCTaacattaatta---ccgctataa...185...atattacaccag	acgcttgc
D. Moj	accgaaag	gtcagtaattgt...90...-----gctaaactagcctggcgactACGCTTGGGTGCTaaaatt-aaat---acgctatga...185...tattcataacag	acgcttgc
D. Per	accgagag	gtaaccccaac...91...catgcgactgcta-actagcaCGGGGactACGCTTGGGTGCTaaaattaatat---cgttataa...138...tctctcccatag	acgcctgt
D. Pse	accgagag	gtaaccccaacc...90...catgcgactgcta-actagcaCGGGGactACGCTTGGGTGCTaaaattaatat---cgttataa...137...tctctcccatag	acgcctgt
D. Vir	accgaaag	gtcagtaattga...78...-----gctaaactagcctggcgactACGCTTGGGTGCTaaaattaataac---acgctata...285...cataaacaacag	acgattgc
D. Wil	accgaaag	gtaagttcaat...47...--agcgaatgctaaactagcctGGGGactACGCTTGGGTGCTcaaattgatttaaccgctc---...122...cccttcatttag	acgactgc
D. Yak	acagagag	gtgagtaaatg...61...-----gcaaaactagcatggcgactACGCTTGGGTGCTaaaagtaaat---tcgctataa...114...aacattctacag	acgactgc
	** ** *	** * ***** ** ***** * * * * * ** *	** ** *

id=116250 gene=FBgn0020306 name=dom segment=chr2R.17217167.17217407.1 type=IN VIEW

Figure 322: CS=9.36



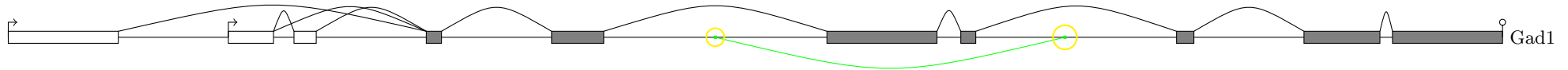
D.Mel	actaaatg	acgttgtggttt...109...-----atattat	tttctataaa	caaa	ATGTAGAATTCTGTTTGGTGT	cgcaatta-gta---tccaattat-...246...catctggtccag	gtctggat
D.Sim	actaaaag	acgttgtggttt...110...----caatattat	tttctataaaa	-----AATGTAGAATTCTGTTTGGTGT	cgcaatta-gta---tccaattat-...246...catctggtccag	gtctggat	
D.Sec	actaaaag	acgttgtggttt...112...-----atattat	tttctataaaaa	-----ATGTAGAATTCTGTTTGGTGT	cgcaatta-gta---tccaattat-...246...catctggtccag	gtctggat	
D.Ere	actcaaag	acgttgtggttt...104...-----atattat	tttctgtaaa	caaa	ATGTAGAATTCTGTTTGGTGT	cgcaatta-gta---tccaattaa-...232...catctggtccag	gtctggat
D.Ana	aacaaaag	acgttgtggttt...121...tgtaaatattat	tttctcc---	GAATt	AGAATTCTGTTTGGTGT	cgcaattatgtacattccaa----...303...ctggcgctcag	gtctggat
D.Gri	aaactaag	acgttgtggttt...115...-----tttctgtg	ttaacgaatgt	AGAATTCTGTTTGGTGT	-----acgctaaatataataataa...299...atatactctcag	gtctggat	
D.Moj	aatgtaag	acgttgtggttt...134...-----ttctgtg	ttaacgaatgtag	AATTCTGTTTGGTGT	-----tcgcaaaagataatgaaaa...399...gcacgtcttcag	gtctggat	
D.Per	actaaaag	acgttgtggttt...110...-----atattat	tttctccaa	agaa	ATGTAGAATTCTGTTTGGTGT	cgatataccgaaaatctgtc----...298...ccccgtgtccag	gtctggat
D.Pse	actaaaag	acgttgtggttt...110...-----atattat	tttctccaa	agaa	ATGTAGAATTCTGTTTGGTGT	cgatataccgaaaatctgtc----...298...ccccgtgtccag	gtctggat
D.Vir	tggaaaag	aataagcggaaa...33...-----ttctgtg	ttaacgaatgtag	AATTCTGTTTGGTGT	-----taatgaaaaactataagaat...411...gcacgtccgag	gtctggat	
D.Wil	aaaacaag	acgttgtggttt...117...cggaaatcattat	ttt-----aatg-	TAGAGAATTCTGTTTGGTGT	-----gtcgcgaattgttctcgctc...333...tgatgtctctag	gtctggat	
D.Yak	actcaaag	acgttgtggttt...110...-----aatattat	tttctgtaa	caaa	ATGTAGAATTCTGTTTGGTGT	cgcaatta-gta---tccaattaa-...233...catctggtccag	gtctggat
		* * *	**	*	*****	*	** ** *

id=116261 gene=FBgn0020306 name=dom segment=chr2R.17224492.17224932.1 type=IN

D.Mel	actaaatg	acgttgtggttt...320...gcaaatagtttct--aagca-----	ACACCAAAACAGAGTt	gCTATAT	---catgaaaataatgtggaacc...34...catctggtccag	gtctggat	
D.Sim	actaaaag	acgttgtggttt...325...gcaaatagtttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---atgaaaataatgtggaaccg...30...catctggtccag	gtctggat	
D.Sec	actaaaag	acgttgtggttt...326...gcaaatagtttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---catgaaaataatgtggaacc...31...catctggtccag	gtctggat	
D.Ere	actcaaag	acgttgtggttt...304...aaaaatagtttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---catgaaaataatgtggaacc...31...catctggtccag	gtctggat	
D.Ana	aacaaaag	acgttgtggttt...390...--aagtagttactataagcca-----	ACACCAAAACAGAGc	TTCTATTT	-atcctgaaaataatgtggaac---...35...ctggcgctcag	gtctggat	
D.Gri	aaactaag	acgttgtggttt...346...-----act--aagccaatgaacaacac---	CACCAAAACAGAGa	TTCT	tcatcagatacgaataat-----...67...atatactctcag	gtctggat	
D.Moj	aatgtaag	acgttgtggttt...476...-----act--aagccaataaacaccac---	CACCAAAACAGAGTt	gcttcatac	gatacgaataat-----...57...gcacgtcttcag	gtctggat	
D.Per	actaaaag	acgttgtggttt...345...tcaaatagtttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---cctgaaaataatgtggaacc...62...ccccgtgtccag	gtctggat	
D.Pse	actaaaag	acgttgtggttt...345...tcaaatagtttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---cctgaaaataatgtggaacc...62...ccccgtgtccag	gtctggat	
D.Vir	tggaaaag	aataagcggaaa...389...-----act--aagccaataaacaccac---	CACCAAAACAGAGTt	acttcatac	gatacgaataat-----...55...gcacgtccgag	gtctggat	
D.Wil	aaaacaag	acgttgtggttt...352...-----aaacaaaa	gaaaaaaa	ACACCAAAACAGAGTt	gCTTTA	-aaacatgaaaataatgtggaac---...97...tgatgtctctag	gtctggat
D.Yak	actcaaag	acgttgtggttt...311...aaaaatatttct--aagcca-----	ACACCAAAACAGAGTt	gCTATAT	---catgaaaataatgtggaacc...31...catctggtccag	gtctggat	
		* * *	** ** *	*****	*	*****	** ** *

id=116261 gene=FBgn0020306 name=dom segment=chr2R.17224492.17224932.1 type=IN VIEW

Figure 323: CS=7.2



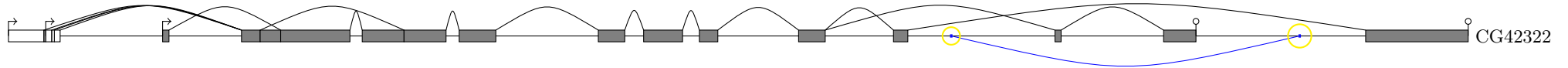
D.Mel	taagacgg	gtaagttaagga...2052...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...771...acaatttccag	gacatccc
D.Sim	caagacgg	gtaagtcaagga...2093...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...736...taacatttccag	gacatccc
D.Sec	caagacgg	gtaagtcaagga...2058...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...746...aaatatttccag	gacatccc
D.Ere	caagacgg	gtaagtcacgga...2200...---	tgggcggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...791...gaaaatttccag	gacatccc
D.Ana	gaagacag	gtgagttcttta...1680...---	tgtgaggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...1764...tttattccccag	gacatcct
D.Gri	gaagacgg	gtaagtgatttg...1429...gggtgggtgaatttagcctt--	GTGGCGAATGGGATTTT	TaaTCACA	cgacttatggcactcaagat...573...accaccaaacag	gacatccg			
D.Moj	gaagacag	gtaagtggcatg...1889...gggcggatggatttagcctt--	GTGGCGAATGGGATTTT	TaaTCACA	cgacttatggcactcaagat...629...tctgctccacag	gacatccc			
D.Per	gaagacgg	gtgagttcggct...1243...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...656...ataacccccag	gacatcca
D.Pse	gaagacgg	gtgagttcggct...1244...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...650...ataacccccag	gacatcca
D.Vir	gaagacgg	gtaagtgcggcg...1432...gtgtgggtggatttagcctt--	GTGGCGAATGGGATTTT	TaaTCACA	cgacttatggcactcaagat...548...tctgctccacag	gacatccg			
D.Wil	gaagacgg	gtaagtttagca...1688...--catggcagctgcggccacatG-	GGCAAATTGAAATGTT	-----	tcttcaatgccaatgctgct...756...cttttctcgag	gacatcct			
D.Yak	caagacgg	gtaagtcaaaga...2124...---	tgggtggatttagcctt	gtg-	GGC	AATGGGATTT	TaaTCACA	cgacttatggcactcaagat...827...acaatttccag	gacatccc
	*****	** ***			*	***	* *** ** * * * *		*** ** * * *

id=27260 gene=FBgn0004516 name=Gad1 segment=chr3L\_4079495\_4082402\_-1 type=IN

D.Mel	gttgagcg	gtaagtttttag...357...---	ggtcggcggcgtgctg	-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1428...taactcttgcag	tgccgatt
D.Sim	gttgagcg	gtgagtaagaaa...331...---	cggcggcggcagctg	-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1408...taactcttgcag	tgccgatt
D.Sec	gttgagcg	gtaagtaagaga...333...---	cggcggcggcagctg	-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1416...taactcttgcag	tgccgatt
D.Ere	gttgagcg	gtaagtaagaga...318...---	ggtcggatgagctg	-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1408...tgactcttgcag	ggccgatt
D.Ana	gtggagcg	gtaagtgcttac...303...cctcgttaagctgg-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1207...ttttttttcag	tgccgatt		
D.Gri	atcgaacg	gcaagtacaacc...310...-----	actcagagcctcagcgaca	TGTGGcAAAAaTCTCAa	TTTGTCAT	-----	ttagtgctccatcaggtgt...1071...tgacttttgcag	tggtgatt		
D.Moj	gtcgaagc	gtaagttcatta...798...-----	agggcagccttcagcgaca	TGTGGTAAAAaTCTCAa	TTTGCCAT	-----	ttagtgctccatcaggtgt...1129...tgacttttgcag	cgccgatt		
D.Per	gttgagcg	gtaagtagaaga...305...-----	gcagaaaatcaactcaaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1586...gacttttgcag	cgccgatt		
D.Pse	gttgagcg	gtaagtagaaga...306...-----	gcagaaaatcaactcaaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1575...gacttttgcag	cgccgatt		
D.Vir	gttgaacg	gtaagtactatc...2789...-----	ggggcaagcctcagcgaca	TGTGGcAAAAaTCTCAa	TTTGTCAT	-----	ttagtgctccatcaggtgt...1102...tgacttttgcag	cgccgatt		
D.Wil	gttgagcg	gtaagttcaatg...164...caaaataagaagcactttgc-----	AACATc	TTCAATTGTC	Tcgaactcaattccgaaactc-----	...1439...gacttttgcag	agccgatt			
D.Yak	gttgagcg	gtaagtaagagt...261...---	ggttggcaacgagctg	-----	aaca	TGTGGgAAAAaTCTCAa	TTGTGc	-----	atttagtgctccatcaggt--...1493...tcactcttgcag	cgccgatt
	* * * *	* ** *				** * * * * * * *			* * * * *	

id=27264 gene=FBgn0004516 name=Gad1 segment=chr3L\_4076878\_4078749\_-1 type=IN VIEW

Figure 324: CS=11.52



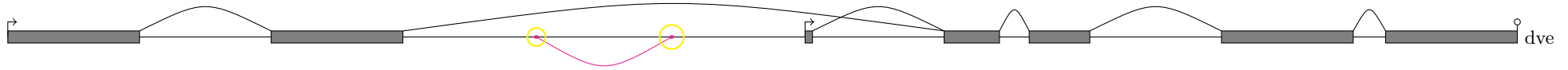
D.Mel	-ctcattcg	gtaggccaaaaa...166...	taagtaa-----cagaaac-ttggca	GATTTTTACTGA	-----atacaacaacaaaaacttct---	1345...	gtctttttgcag	aagcatca
D.Sec	-ctcattcg	gtaggccaaaaa...181...	taagtaa-----cagaaac-ttggca	GATTTTTACTGA	-----atacaacaacaaaaacttct---	1336...	gtctttttgcag	aagcatca
D.Ere	-ctcattcg	gtaggccaaaaa...182...	taagtaa-----cagaaac-ttggca	GATTTTTACTGA	-----atacaacaacaaaaacttct---	1329...	gtctttttgcag	aagcatca
D.Ana	-ctcattcg	gtaggccaaaaa...160...	--agaaatgattgccagaaac-----a	GATTTTTACTGA	-----ac-caaatacaaaaacttctt---	1426...	gtatttttgcag	aagcatca
D.Gri	-ctcattcg	gtaggccaaata...159...	-atgta-----ccagaactttggca	GATTTTTACTGA	-----ctgaatgtactcgtacttaa...	1655...	ttgtatttacag	aagcatca
D.Moj	-ctcattcg	gtaggccaaata...158...	gtataaaa-----aaaaaac-ttgaca	GATTTTTACTGA	-----ccgaacaagtattatata-----	1435...	ttgtatttacag	aagcatca
D.Per	gctcatcc-	gtaggcaaaaac...167...	-aagtaa-----ccagatat-ttggca	GATTTTTACTGA	atacca-ccaacaacaacaac-----	1392...	gtatttttgcag	aagcatca
D.Pse	-ctcattcg	gtaggccaaaaa...170...	-aagtaa-----ccagatac-ttggca	GATTTTTACTGA	ataccacccaataacaaca-----	1396...	gtatttttgcag	aagcatca
D.Vir	-ctcattcg	gtaggccaaata...153...	-aatata-----ccagaaac-atggca	GATTTTTACTGA	-----ctgaacaagtataatatata-----	1419...	ttgtatttacag	aagcatca
D.Wil	-ctcattcg	gtaggccaaaca...127...	gatgata-----atgaaag-cagcca	GATTTTTACTGA	-----acaccaaccacaatttctc-----	1518...	tatattttgcag	aagcatca
D.Yak	-ctcattcg	gtaggccaaaaa...168...	taagtaa-----cagaaac-ttggca	GATTTTTACTGA	-----at---acaacaaaaacttctaag...	1307...	tgttttttacag	aagcatca
		**** * ***** **	*	* *	*****	*	*** **	*****

id=89225 gene=FBgn0259222 name=CG42322 segment=chr3R.16576480\_16578067\_1 type=IN

D.Mel	aaaaaaa	cagaacaagaca...934...	aaaaaaaaaacacaaaaca	TCAGTAAAAAATC	cgtaa-aagtcttagcgctta...291...	cacaaactatag	atggggtc
D.Sec	cagaaaa	cagaacaagaca...944...	tgaaaaataaacacaaaaca	TCAGTAAAAAATC	cgtaa-aagtcttagcgctta...291...	cacaaactatag	atggggtc
D.Ere	aaaaaaa	caaaacaagaca...938...	tataaaaaaaaaaccagaaca	TCAGTAAAAAATC	cagtaa-aagtcttagcgctta...294...	ccaaactatag	atggggtc
D.Ana	aaaccaaa	cagaacacatga...1026...	taataataaacacaaaaca	TCAGTAAAAAATC	cagtaaaaagtcttagcgctt...292...	acaattatag	atggggtc
D.Gri	aaacaagc	aacaacaagaaa...995...	gacaacaacttaacaaca	TCAGTAAAAAATC	cagtaaaaaaaaaatgtattt...681...	atatatgtatag	atggggtc
D.Moj	atagaaac	aagaaaaacacg...966...	tgtgaaaaacttaagaaca	TCAGTAAAAAATC	cagtaaaaaaatatgtagctt...348...	tataatacatag	atggggtc
D.Per	accgcaac	cagaacatatat...1073...	taataactttaacagaaca	TCAGTAAAAAATC	cagtaaaaagtcttagatctt...315...	attgttgtag	atggggtc
D.Pse	accgcaac	cagaacatatat...1010...	taataactttaacagaaca	TCAGTAAAAAATC	cagtaaaaagtcttagatctt...310...	attattgttag	atggggtc
D.Vir	acagacaa	caaaaaataca...1048...	tgtgacatacttaagaaca	TCAGTAAAAAATC	cagtaaaaatatttataaaa...402...	atacatatag	atggggtc
D.Wil	acaacaaa	acaacaacaaa...1152...	caaaacaaccgaaattaaca	TCAGTAAAAAATC	cgtacaaatttctagagtca...315...	acacctatttag	atggggtc
D.Yak	taagaaaa	cagaacaagaca...954...	taaaagaaaaaacacagaaca	TCAGTAAAAAATC	cgtaa-aagtcttagcgctta...286...	ccaaactatag	atggggtc
		** *	*	*****	** *	***	*****

id=89229 gene=FBgn0259222 name=CG42322 segment=chr3R.16579389\_16580690\_1 type=IN VIEW

Figure 325: CS=13.86



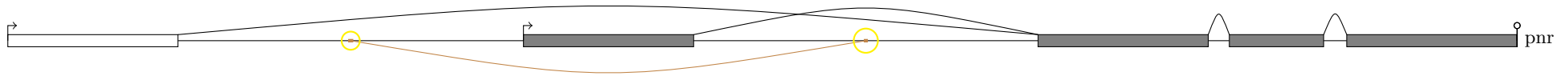
D. Mel	agtgaatc	gtgagtaaagc...	3970...	----cgagggatttaatttcgtgc-----	GGGATtaTTATTTCG	gatttaactcttcgttttat...	940...	ggttccgcttc	agtatcgt
D. Sec	agtgaatc	gtgagtaaagc...	3932...	ttgcggt-tgcgtttgcctttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	962...	ggttccgcttc	agtatcgt
D. Ere	agtgaatc	gtgagtaaagc...	3927...	ttgcggt-tgcgtttgcctttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	967...	ggttccgcttc	agtatcgt
D. Ana	agtaaadc	gtgagtaaagga...	3883...	ttgcggt-tgcgtttgcctttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	1011...	tgagtatctctc	agtatcgt
D. Gri	agtgaatc	gtgagtagacaa...	3738...	----cgagggatttaatttcgtgc-----	GGGATtaTTATTTCG	gatttaactcttcgttttat...	1172...	gctttgggcttc	agtatcgt
D. Per	agtaaadc	gtgagtaaagga...	3946...	-ggcactgggcctttgcgttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	948...	ggttccggttc	agtatcgt
D. Pse	agtaaadc	gtgagtaaagga...	3954...	-ggcactgggcctttgcgttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	940...	ggttccggttc	agtatcgt
D. Vir	agtaaadc	gtgagtaccga...	3894...	----cgagggatttaatttcgtgc-----	GGGATtaTTATTTCG	gatttaactcttcgttttat...	1016...	gcatttcgcttc	agtatcgt
D. Wil	agtaaadc	gtaagtaaagac...	3786...	----cgagggatttaatttcgtgc-----	GGGATtaTTATTTCG	gatttaactcttcgttttat...	1124...	gtttccggttc	agtttgg
D. Yak	agtgaatc	gtgagtaaagc...	3921...	ttgcggt-tgcgtttgcctttGGTGGCCGTG	GGGCGAGGGatT-TAA	TTCCgtcgggattattatttcgga...	973...	ggttccgcttc	agtatcgt
	*** **	** **		* ** * ** *	***** * *****	* * * * *		** ** * *	** ** * *

id=39148 gene=FBgn0020307 name=dve segment=chr2R.18150949.18158424.1 type=IN

D. Mel	agtgaatc	gtgagtaaagc...	4581...	--actggggcattatcccaaaaCGAATGAcATCCC	-----	ttggaaattaatccttaatt...	330...	ggttccgcttc	agtatcgt
D. Sec	agtgaatc	gtgagtaaagc...	3979...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggcattataatgaacagcg...	916...	ggttccgcttc	agtatcgt
D. Ere	agtgaatc	gtgagtaaagc...	3974...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggcattataatgaacagcg...	921...	ggttccgcttc	agtatcgt
D. Ana	agtaaadc	gtgagtaaagga...	3930...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggcattataatgaacagtg...	965...	tgagtatctctc	agtatcgt
D. Gri	agtgaatc	gtgagtagacaa...	4554...	--caggcagaattatccgaaaaCGAATGAcATCCC	-----	ttggaaattaatccttaatt...	357...	gctttgggcttc	agtatcgt
D. Per	agtaaadc	gtgagtaaagga...	3993...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggattataatgaacagag...	902...	ggttccggttc	agtatcgt
D. Pse	agtaaadc	gtgagtaaagga...	4001...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggattataatgaacagag...	894...	ggttccggttc	agtatcgt
D. Vir	agtaaadc	gtgagtaccga...	4601...	--cacacagaattatccgaaaaCGAATGAcATCCC	-----	ttggaaattaatccttaatt...	310...	gcatttcgcttc	agtatcgt
D. Wil	agtaaadc	gtaagtaaagac...	4586...	--cacatagcattatcccaaaaCGAATGAcATCCC	-----	ttggaaattaatccttaatt...	325...	gtttccggttc	agtttgg
D. Yak	agtgaatc	gtgagtaaagc...	3968...	ttcgtgcccggattattatt--CGGA	TTAACTCTtCGTTTTATGgATCGCT	tggcattataatgaacagcg...	927...	ggttccgcttc	agtatcgt
	*** **	** **		* *****	** * * * **	* * * * **** *		** ** * *	** ** * *

id=39148 gene=FBgn0020307 name=dve segment=chr2R.18150949.18158424.1 type=IN VIEW

Figure 326: CS=9.6



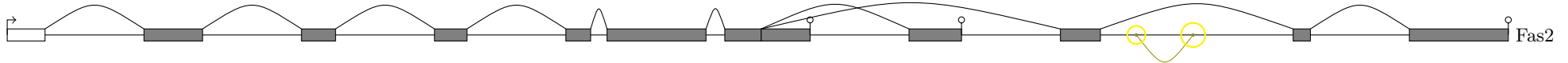
D. Mel	tgattaat	gtaagtttaaag...3158...	gggtcggccggggcgga	---taa	-----	CGCGTGA	cgCCAC	ttTGAAA	ATTC	TGGCGA	catttccccgacccc	gagaa...1737...	ttgtgacagtgg	acgaaggg	----	
D. Sim	tgaataat	gtaagttgaaat...3190...	gggtcggccggggcgga	---taa	-----	CGCGTGA	cgCCAC	ttTGAAA	ATTC	TGGCGA	catttccccgacccc	gagaa...1705...	ttgcagcagtgg	acgaaggg	----	
D. Sec	tgaataat	gtaagttgaaat...3191...	gggtcggccggggcgga	---taa	-----	CGCGTGA	cgCCAC	ttTGAAA	ATTC	TGGCGA	catttccccgacccc	gagaa...1704...	ttgcagcagtgg	acgaaggg	----	
D. Ere	caacaat	gtaagtttaa...3197...	gggactgacggggcgga	---taa	-----	CGCGTGA	cgCCAC	ttTGAAA	ctctggcgacattt	ccccga	-----	...1707...	ttggcgagtgg	acggaggg	----	
D. Gri	caatgaat	gcattttaaaag...2995...	tacttaggatagcgttggcg	-----	-----	GTGA	cgCCAC	ttTGAAA	atttcggttgacattt	tctac	-----	...1913...	aagtgcac	tcgaaggg	aac-	
D. Moj	atattcat	acaagtttatg...3108...	gtgacggtgacggtggc	---ggt	-----	GGCGTGA	cgCCAC	ttTGAAA	tttc-ggtgacattt	tccaaa	-----	...1796...	aagtgcac	tcgaagaa	agg-	
D. Per	ggatttta	ttaggtttaatg...3036...	cggaggggacactcttcaa	GTGGATGGC	aGCGGTGA	cgCCAC	ttTGAAA	ATTC	ggggcgacattt	ctccattg	-----	...1856...	tcgaaggg	gaag	accgaggg	----
D. Pse	acagtcaa	gtaagttgaaat...3049...	cggaggggacacactttcga	GTGGATGGC	aGCGGTGA	cgCCAC	ttTGAAA	ATTC	ggggcgacattt	ctccattg	-----	...1843...	tcgaaggg	gaag	accgaggg	----
D. Vir	agagtcaa	gtaagttgaaat...2590...	gaaataacttgggatagcgtt	-----	-----	GGCGTGA	cgCCAC	ttTGAAA	atttcggttgacattt	tcct	-----	...2314...	aagtgcac	gcggagg	caacg	
D. Yak	aaaactat	gtaagtttaa...3209...	gggtcggacggggcgga	---taa	-----	CGCGTGA	cgCCAC	ttTGAAA	ATTC	TGGCGA	catttccccgactcca	gaa...1686...	ttgtggcggtgg	acggggg	cc	
	*	* *	*			*****		** *	*****					*	*	

id=48984 gene=FBgn0003117 name=pnr segment=chr3R.11852561.11860111.1 type=I5

D. Mel	atggcgat	gtaagtttactc...1351...	cttccttgctt--tgaccggc	TTGTTG	acAATT	tTTCG	tGTGGT	CGCCGC	-----	ctcctttgatctcgcccagc	--...2036...	ttattctttcag	tccacatc	
D. Sim	atggcgat	gtaagtttactc...1336...	tcgctttgcctt--cgaccggc	TTGTTG	acAATT	tTTCG	tGTGGT	CGCCGC	-----	ctcctttgatctcgccctgc	--...1945...	ttattctttcag	tccacatc	
D. Sec	atggcgat	gtaagtttactc...1356...	tcgctttgcctt--cgaccggc	TTGTTG	acAATT	tTTCG	tGTGGT	CGCCGC	-----	ctcctttgatctcgctctgc	--...1959...	ttatgctttcag	tccacatc	
D. Ere	acggcgat	gtaagttacctc...1393...	ttgcc-cggcgtgtgacaat	-----	-----	TTTTCG	tGTGGT	CGCCGC	-----	ctcctttgatctcgccctgc	--...2089...	ctcttctttcag	tccacatc	
D. Gri	atggcgat	gtaagttcagct...1189...	gctgcagcatgttgacaat	-----	-----	TTTTCG	tGTGGT	CGCCGC	-----	agctcctttgatccagcacc	----...2192...	tcatctttcag	tccacatc	
D. Moj	atggcgat	gtaagtttagat...1200...	gctgcaacatgttgacaat	-----	-----	TTTTCG	tGTGGT	CGCCGC	-----	cctttgatgaagcaccgct	...2010...	tctctttcag	tcgacctc	
D. Per	atggcgat	gtaagttttacc...1363...	accaactgcatctgttgac	-----	-----	AATT	tTTCG	tGTGGT	CGCCGC	cgCCGC	cttctttgatct--tcgcctc	...1985...	gactctttcag	tccacatc
D. Pse	atggcgat	gtaagttttacc...1278...	accaactgcatctgttgac	-----	-----	AATT	tTTCG	tGTGGT	CGCCGC	cgCCGC	cttctttgatct--tcgcctc	...1986...	gactctttcag	tccacatc
D. Vir	atggcgat	gtaagtttagct...1336...	gacgcaacatgttgacaat	-----	-----	TTTTCG	tGTGGT	CGCCGC	-----	cctttgatccgacaccgct	...2351...	ctgtttttcag	tcgacctc	
D. Yak	atggcgat	gtaagtttactc...1430...	tcctttgtgt--ttgccggc	TTGTTG	acAATT	tTTCG	tGTGGT	CGCCGC	-----	ctcctttgatctcgccctgc	--...2061...	ttctgctttcag	tccacatc	
	* *****	*****	*	*	*	*****		*****		*****		** ***	** ** *	

id=48986 gene=FBgn0003117 name=pnr segment=chr3R.11860829.11864308.1 type=IN VIEW

Figure 327: CS=10.8



D. Mel	ctgggcag	gtaagctccatc...136...agtggaaatctttggaatga----	AATATTGCACTAAAAAT	cagaatcggattcgaattta-----	...854...-accttattgcag	tggccagc	
D. Sim	ctgggcag	gtaagctccatc...162...agtggaaaacttttgaatga----	AATATTGCACTAAAAAT	cagaatcagattcgaattta-----	...847...-accttattgcag	tggccagc	
D. Sec	ctgggcag	gtaagctccatc...171...agtggaaaacttttgaatga----	AATATTGCACTAAAAAT	cagaatcggattcgaattta-----	...938...-accttattgcag	tggccagc	
D. Ere	ctgggcag	gtaagcgacatc...167...tatggaaaacttttgaatga----	AATATTGCACTAAAAAT	cagaatcggactcgaattta-----	...833...-accttattgcag	tggccagc	
D. Ana	ttgggcag	gtaagcgaagat...296...----caacgagacgaaatgaaacg-	AATATTGCACTAAAAAT	cgaatcggaaatgaaatgca-----	...751...-taccta-tgcag	tggccagc	
D. Gri	ctgggcag	gtaagcatcaaa...67...---gcagggtctatcgaacaaa-	TAATATTGCACTAAAAATGA	-----tacgaaattccaacaaaaaa...1316...-accttattgcag	tggacagc		
D. Vir	ctgggcag	gtaagcatctat...27...-gttgggtctttcaaatcaca-	TAATATTGCACTAAAAATGA	-----tacgaaattccaacaaataaa...1428...-accttattgcag	tggacagc		
D. Wil	ttgggaag	gtaagccacaac...52...----aaacaatcaaaaaacaat	TAATATTGCACTAAAC	tgataagtgatattcggcct-----	...1622...-accttattgcag	tggacagc	
D. Yak	ctgggcag	gtaagcttcatc...147...agtggaaaactttggaatga----	AATATTGCACTAAAAAT	cagaatcggattcgaattta-----	...801...-accttattgcag	tggccagc	
	**** *	*****	**	*****	*	***** *****	*** **

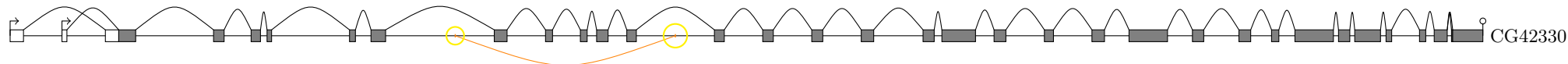
id=110815 gene=FBgn0000635 name=Fas2 segment=chrX\_4029531\_4030601\_-1 type=IN

D. Mel	ctgggcag	gtaagctccatc...418...aacttttcgtttgccatgaa-	ATTTT	TAGTGCAATATT	--caatgtaatcca-aagaccaa...572...-accttattgcag	tggccagc		
D. Sim	ctgggcag	gtaagctccatc...442...aacttttcgtttgccatgga-	ATTTT	TAGTGCAATATT	--caatgtaatccg-aagaccaa...567...-accttattgcag	tggccagc		
D. Sec	ctgggcag	gtaagctccatc...451...aacttttcgtttgccatgaa-	ATTTT	TAGTGCAATATT	--caatgtaatccg-aagaccaa...658...-accttattgcag	tggccagc		
D. Ere	ctgggcag	gtaagcgacatc...452...accttttcgtttgccatgac-	ATTTT	TAGTGCAATATT	--gaatgtaatccg-aagaccaa...548...-accttattgcag	tggccagc		
D. Ana	ttgggcag	gtaagcgaagat...596...a--ttttcgttttgccatcaact	ATTTT	TAGTGCAATATT	--gaatttaattca-aaattcag...451...-taccta-tgcag	tggccagc		
D. Gri	ctgggcag	gtaagcatcaaa...416...acgatatcggttcttatttc	TCATTT	cTAGTGCAATATTA	Aa--atgtttacaattttgccaat...967...-accttattgcag	tggacagc		
D. Vir	ctgggcag	gtaagcatctat...384...agtatttcaattattaattc	TCATTT	cTAGTGCAATATTA	Aaatatgtttacaa-tttgcta...1071...-accttattgcag	tggacagc		
D. Wil	ttgggaag	gtaagccacaac...361...--taaaacaaacacacaacaat	GTTT	TAGTGCAATATTA	aaaatggtt-ttca-cacacaca...1313...-accttattgcag	tggacagc		
D. Yak	ctgggcag	gtaagcttcatc...418...accttttcgtttgccatgaa-	ATTTT	TAGTGCAATATT	--aaatgttattcgg-aagaccaa...530...-accttattgcag	tggccagc		
	**** *	*****	*	*	* *****	** *	***** *****	*** **

id=110815 gene=FBgn0000635 name=Fas2 segment=chrX\_4029531\_4030601\_-1 type=IN VIEW

Figure 328: CS=8.64





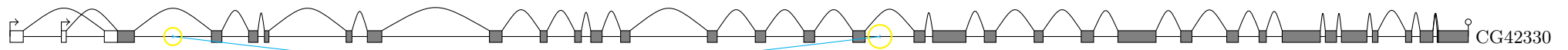
D. Mel	actgacag	gtacgtgataat...1280...	gttttgccaaaac---	taaaa---	TTATGAGCTGCATATT	---	agttggctcctgga-atgctg	---...	803...	tctcgtcccag	gtgaaagta
D. Sim	actgacag	gtacgtgataat...1294...	gttttgccaaaagc---	gaaaa---	TTATGAGCTGCATATT	---	agttggctccggga-atgctg	---...	1017...	tctcgtcccag	gtgaaagta
D. Sec	actgacag	gtacgtgataat...1283...	gttttgccaaaagc---	gaaaa---	TTATGAGCTGCATATT	---	agttggctccggga-atgctg	---...	793...	tctcgtcccag	gtgaaagta
D. Ere	actgacag	gtacgtgataat...1141...	gttttgccaaaagc---	gaaaa---	TTATGAGCTGCATATT	---	ag-tggctcctgga-atgctga-	...	740...	tctcgtcccag	gtgaaagta
D. Ana	actgacag	gtacgtgataat...1178...	gttctggctaaacac---	gaaaa---	TTATGAGCTGCATATT	---	aatctggcc--gga-gtatgga-	...	1015...	attccctcacag	gtgaaata
D. Gri	actgacag	gtacgtggcacg...1728...	---tttattgtgtgt---	gaaaatgc	GCTTAAGCtGA--ATT	tctattag-cctttgtggcgc---	...	2286...	tatcttttacag	gtgaaata	
D. Moj	actgacag	gtacgtgataat...1354...	---tttattgtgtgt---	gaaaatgc	GCTTAAGCtGA--ATT	tctattag-cctttgt-gcgca---	...	2291...	tgtcttttcag	gtgaaata	
D. Per	actgacag	gtacgtgataat...1312...	gccgt---aaaagcagcg	gggaaa---	TATGAGCTGCATATT	---	aattgggg--ggga-gttgtag...	1321...	cggcacacacag	gtgaaata	
D. Pse	actgacag	gtacgtgataat...1295...	gccgt---aaaagcagcg	gggaaa---	TATGAGCTGCATATT	---	aattgggg--ggga-gttgtag...	1285...	cggcacacacag	gtgaaata	
D. Vir	actgacag	gtacgtgataat...1716...	---tttattgtgtgt---	gaaaatgc	GCTTAAGCtGA--ATT	tctattagccctttgt-gcgc---	...	2376...	tggctctcag	gtgaaata	
D. Wil	actgacag	gtacgtgataat...1206...	aagtattgtgtgt---	gaaaa	TGCGCTTAAGCtGA--ATT	tctattag-cctttgt-tcgca---	...	2039...	tctcccacag	ctgaaata	
D. Yak	actgacag	gtacgtgataat...1324...	gttttgccaaaagc---	gaaaa---	TTATGAGCTGCATATT	---	agttgcctcctaga-atgctg	---...	834...	gctcggcccag	gtgaaagta
		*****	***** *	*	***	* *****	***	*	***	**** **	**** **

id=117020 gene=FBgn0259232 name=CG42330 segment=chr3L.8253891\_8256053.1 type=IN

D. Mel	gttgggcg	gtaagttatgat...1156...	tgtggtgaggagcaaata---	AATATG	CAGCTTATAA	-----ct--gggaacgagca	ccaaa...	685...	tgttcatttcag	atgcctcg	
D. Sim	gttgggcg	gtaagttatgat...1154...	tgtgtgtgaggagcaaata---	AATATG	CAGCTTATAA	-----ctgggggaatgccagac	cca--...	673...	tgttcatttcag	atgcctcg	
D. Sec	gttgggcg	gtaagttatgat...1119...	tgtgtgtgaggagcaaata---	AATATG	CAGCTTATAA	-----cagggggaatgccagac	cca--...	682...	tgttcatttcag	atgcctcg	
D. Ere	gttgggcg	gtaagttatgat...1275...	agtgtgcgagagcaaaca---	AATATG	CAGCTTATAA	-----ct--gggaatgccagac	caaaa...	710...	tgttcatttcag	atgcctcg	
D. Ana	attgggtg	gtaagtaatcat...1163...	tgtgtgtcgcagcaaata---	AATATG	CAGCTTATAA	-----ct--ggaaatgcaggc	gggta...	577...	tgtcatttcag	atgcctcg	
D. Gri	attgggcg	gtaagcaaatg...1022...	-gcggtttggcaacgtttt	GATT	---GCTTttAGGC	caaac--ggaat-tgatttcg	---	1408...	tttctatttcag	atgcctcg	
D. Moj	attgggcg	gtaagccggggc...1193...	-gcggtttggcaacatttct	GATT	---GCTTttAGGC	acaagc--ggaat-tgatttcg	---	1804...	tgacaatttcag	atgcctcg	
D. Per	gttgggcg	gtacgtaatcat...1381...	tctgtgtgagtgagcaaata---	AATATG	CAGCTTATAA	-----act--gagaatgtcaggc	-gatg...	503...	tgttcatttcag	atgcctca	
D. Pse	gttgggcg	gtacgtaatcat...1360...	tctgtgtgagtgagcaaata---	AATATG	CAGCTTATAA	-----act--gagaatgtcaggc	-gatg...	497...	tgttcatttcag	atgcctca	
D. Vir	gctgggcg	gtaagtcgtggc...1085...	-gcggtttggcaacgtttct	GATT	---GCTTttAGGC	caaac--ggaat-tgatttcg	---	1677...	tgactatttcag	atgcctcg	
D. Wil	attgggcg	gtaagtaaggga...1143...	---gctttggcaacatttct	GATT	---GCTTttAGGC	CGCAaac--ggaat-tgatttcgata...	...	751...	tgtcatttcag	atgcctcc	
D. Yak	gttggggg	gtgagttatgat...1263...	agtgtgcgagagcaaaca---	AATATG	CAGCTTATAA	-----ctggagggaatgccagac	cca--...	718...	tgttcatttcag	atgcctcg	
		**** *	** *	*	***	** *****	**	*	*	** **	**** **

id=117030 gene=FBgn0259232 name=CG42330 segment=chr3L.8260174\_8262095.1 type=IN VIEW

Figure 329: CS=12.96



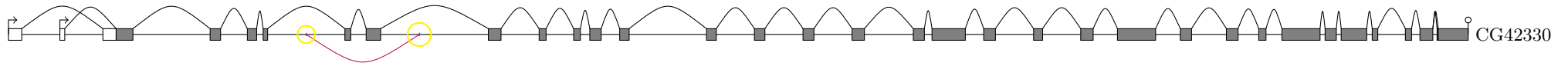
D. Mel	cataagag	gtgagtatttct...3560...ttg	cgccgcat	ttcctt	gg	GCATTGCA	TTGAC	-----	agcgtgtt	gccaggc	gaagg	-----	...1351...ctt	cttgcag	cagagacc	
D. Sec	cataaagt	gtgagtatttcc...3545...ttg	cgccgcat	ttcctt	gg	GCATTGCA	TTGAC	-----	agcgtgtt	gccaggaga	aagg	-----	...1366...ctt	cttgcag	cagagacc	
D. Ere	catcagag	gtgagtacttct...3377...ttg	cgccgcat	ttcctt	gg	GCATTGCA	TTGAC	-----	agcgtgtt	gccaggc	gaagg	-----	...1534...tct	cattgcag	cagagacc	
D. Ana	catcacgag	gtgagtatttcc...3700...gtg	cgccgcat	ttcctt	gg	GCATTGCA	TTGAC	-----	agcgtgtt	gccaggc	gaagg	-----	...1211...c	cattgcag	ctgagacc	
D. Gri	catccgag	gtgagttagctct...3496...gct	cctcgc	attcct	ttgg	GCATTGCA	TTGA	-----	cagcctgc	acacata	cac	-----	...1416...tgt	cttacag	ctgagacc	
D. Moj	catcacgag	gtgagtaccaat...3415...gct	cgcgcg	attcct	ctgg	GCATTGCA	TTGA	-----	cagc-taca	cacacaca	ca	-----	...1497...tct	ctttcag	ctgagacc	
D. Per	catcacgag	gtgagtattagc...3919...ttg	cgccgcat	atcctt	ttgg	GCATTGCA	TTGAC	cagcaga	aagcct	ccgca	----	acga	-----	...992...tt	ctcgtgcag	ctgagacc
D. Pse	catcacgag	gtgagtattagc...3920...ttg	cgccgcat	atcctt	ttgg	GCATTGCA	TTGAC	cagcaga	aagcct	ccgca	----	acga	-----	...991...tt	ctcgtgcag	ctgagacc
D. Vir	catcacgag	gtgagttccatt...3175...gct	cgcgcg	attcct	ttgg	GCATTGCA	TTGA	-----	cagcgtgc	acacacac	acac	-----	...1737...ctt	ctcgtgcag	ctgagacc	
D. Wil	catacaag	gtgagtaaccaa...3508...ttg	cgccgcat	ttcctt	ttgg	GCATTGCA	TTGA	AGCGTGT	-----	gccaggc	agtagc	agtaaaa	...1395...cat	cttgcag	tgaaaca	
D. Yak	cataagag	gtgagtatttct...2757...ttg	cgccgcat	ttcctt	ttgg	GCATTGCA	TTGAC	-----	agcgtgtt	gccaggc	gaagg	-----	...2154...ctt	cttgcag	cagagacc	
	***	*	*****			*	*****	***	*****					*	***	** *

id=117010 gene=FBgn0259232 name=CG42330 segment=chr3L.8242052.8247964.1 type=IN

D. Mel	agtgctgg	gtgagttccttt...148...-caac	agcaactatt	-----	tt-cca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...415...ttcc	gat--	tgca	tgccgccg	
D. Sec	agtgctgg	gtgagttcctct...145...-caac	agcaactatt	-----	tt-cca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...398...ttcc	gat--	tgca	tgccgccg	
D. Ere	agtgctgg	gtgagttcctct...127...-caac	agcaactatt	-----	tt-cca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...387...ttcc	gat--	tgca	tgccgccg	
D. Ana	ggtcctgg	gtaagttccag...547...gct	gcagcaactatt	-----	t-tca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...370...tcccc	cc--	aacag	tgccgccg	
D. Gri	agtgttgg	gtgagtacacgc...215...-----	atccagct	gccagcactt	-----	TTAATGCAC	ATGC	acacagc	gagtg	ggggga	...577...tgcc	act--	tgca	tgccgccg		
D. Moj	agtgttgg	gtgagtacgagg...228...-----	atccagct	gccagcactt	-----	TTAATGCAC	ATGC	acgcagc	agc	gtgggg	...424...ccatt	ttt--	ta	tgccaccg		
D. Per	agtgttgg	gtgagtactaca...272...-gcc	ggcaactatt	-----	ttccca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...357...tcccc	atc--	ca	tgccaccg	
D. Pse	agtgttgg	gtgagtactaca...262...-agc	ggcaactatt	-----	tt-cca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...339...tcccc	atc--	ca	tgccaccg	
D. Vir	agtcttgg	gtaagtttctat...176...-----	ttcagcct	gccagcactt	-----	TTAATGCAC	ATGC	acacagag	cacag	tagagc	...254...tgcc	act--	tgca	tgccacca		
D. Wil	agtgttgg	gtacgtacatac...239...-----	caactatt	ccagttg	ccag	AGCACGCT	TTAATGCAC	ATGC	agtc	gataagg	gtaag	...444...ttt	cacc--	ca	tgccacca	
D. Yak	agtgttgg	gtaagttcctct...162...-caac	agcaactatt	-----	tt-cca	-----	GTTAATGCAC	ATGC	agtc	gtgggt	ggatgg	...1141...--	ccgat	gggtgcag	tgccgccg	
	**	***	**	**			*	*****						*	***	**** **

id=117038 gene=FBgn0259232 name=CG42330 segment=chr3L.8264712.8265352.1 type=IN VIEW

Figure 330: CS=10.56



D. Mel	gcgcggcg	gtaagttgaaat...2712...---	gaatagttagatga--gaaaaa--	ATGCGgACAATAA--CTaCAAAAT	--cagcg-aagactggcatacca---	1906...aattcgttacag	tcgtcaac
D. Sim	gcgcggcg	gtaagttgaaat...2769...---	tgaatagttagatgg--gagaa---	ATGCGgACAATAA--CTgCAAAAT	--cagcg-aagactggcatacca---	1924...aattcgttacag	tcgtcaac
D. Sec	gcgcggcg	gtaagttgaaat...2767...---	tgaatagttagttga--gagaa---	ATGCGgACAATAA--CTgCAAAAT	--cagcg-aagactggcatacca---	1933...aattcgttacag	tcgtcaac
D. Ere	gcggtggcg	gtaagttgaaat...3464...---	gggggggtaggc--aaacaata---	ACAAcAACTttTCAAAT	--ta--a-acttttatccaatttta---	1224...aattcgttacag	tcgtcaac
D. Ana	gcgcggcg	gtaagttgaaat...2579...---	ttttga-----ggacga--gagaaatc---	CGCACAAATAA--CTgCAAAAT	--tcagcg-aagactggcatacc---	2329...aattcgttacag	tcgtcaac
D. Moj	gcgcggcg	gtaagtggctcg...3156...---	aatcaactgccaaataata---	ACAAcAACTttTCAAAT	--ta--a-ac-tttatccaattttag...	1752...ttttctttacag	ttgtcaac
D. Per	acgcggcg	gtaagtgcgaaat...3444...---	agagtgcgaatgc--ggacaata---	ACAAcAACTttTCAAAT	--ta--a-acttttatccaattttt---	1464...aattcgttccag	tcgtcaac
D. Pse	acgcggcg	gtaagtgcgaaat...3465...---	agagtgcgaatgc--ggacaata---	ACAAcAACTttTCAAAT	--ta--a-acttttatccaattttt---	1443...aattcgttccag	tcgtcaac
D. Vir	gcgcggcg	gtaagttcaagt...3627...---	tcgcagaaaaaa--aaaggaaa---	TACACAATAAACTccCAAAATAA	taaca-acaacttttcaaatt---	1124...catttgttacag	ttgtcaac
D. Wil	acgtggcg	gtaagtcccaaa...2749...---	atccttagacta--gaaaaaacTTGTGCACAATAA	--CTgCAAAAT	--tcagcgaaagacca--aaagca---	2156...aattcgttacag	ttgtcaac
D. Yak	gcgcggcg	gtaagttgaaat...3465...---	aacaacaaaagc--aaacaata---	ACAAcAACTttTCAAAT	--ta--a-acttttatccaattttg---	1443...aattcgttacag	tcgtcaac
	** ****	*****		**** **	**** * *	** ** ** *	*****

id=117016 gene=FBgn0259232 name=CG42330 segment=chr3L.8248719-8253421.1 type=IN

D. Mel	actgacag	gtacgtgataat...882...cgagataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1197...tctcgccccag	gtgaagta	
D. Sim	actgacag	gtacgtgataat...897...cgagataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1410...tctcgccccag	gtgaagta	
D. Sec	actgacag	gtacgtgataat...881...cgagataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1191...tctcgccccag	gtgaagta	
D. Ere	actgacag	gtacgtgataat...755...cgagataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1126...tctcgccccag	gtgaagta	
D. Ana	actgacag	gtacgtgataat...766...c-agataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1423...attcctcacag	gtgaaata	
D. Moj	actgacag	gtacgtgataat...1326...---	aatatctgtgctgctgcttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	2317...tgctctttcgag	gtgaaata	
D. Per	actgacag	gtacgtgataat...732...ccatgtgtgctc-tgctg--gctt	ATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1900...cggcacacacag	gtgaaata	
D. Pse	actgacag	gtacgtgataat...743...ccatgtgtgctc-tgctg--gctt	ATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1836...cggcacacacag	gtgaaata	
D. Vir	actgacag	gtacgtgataat...1686...gctgtatctgtgctg-tgc	TATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	2397...tggtctctcgag	gtgaaata	
D. Wil	actgacaa	gtacgtgataat...1182...tgtgg--aattctttt--gctt	ATTGgAGTTtATTGTGTGTGT	gaaaatgcgcttaagctgaa---	2059...tctccgcacag	ctgaaata	
D. Yak	actgacag	gtacgtgataat...915...cgagataaattctctcc---	cttATTGgAGTTtATTGTGTGT	gaaaatgcgcttaagctgaa---	1243...gctcgccccag	gtgaagta	
	*****	*****	*	*****	*****	**	**** *

id=117020 gene=FBgn0259232 name=CG42330 segment=chr3L.8253891-8256053.1 type=IN VIEW

Figure 331: CS=11.88



```

D.Mel acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Sim acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Sec acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Ere acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Ana acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtccaata
D.Gri atttcaa GTGAGTttGAAATTGAAatgtgtaaattgttt--ggtccaatttaaattcgatttcttattcatag gtgcaata
D.Moj acttcag GTGAGTttGAAATTGAAatgtgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Per actttcag GTGAGTttGAAATTGAAatgtgtaaattgttt--gtgccaatttaaattcgatttcttattcatag gtgcaata
D.Pse actttcag GTGAGTttGAAATTGAAatgtgtaaattgttt--gtgccaatttaaattcgatttcttattcatag gtgcaata
D.Vir actttcag GTGAGTttGAAATTGAAatgtgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
D.Wil atttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--gtgccaatttaaattcgatttcttattcatag gtgcaata
D.Yak acttcag GTGAGTttGAAATTGAAatgcgtaaattgttt--ggtacaatttaaattcgatttcttattcatag gtgcaata
* * * * * *****

```

id=41996 gene=FBgn0027779 name=VhaSFD segment=chr2L.16724795.16724858.-1 type=IN

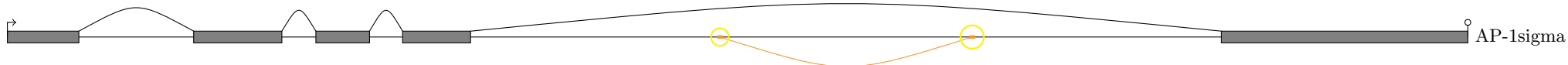
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D.Mel acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Sim acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Sec acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Ere acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Ana acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtccaata
D.Gri atttcaa gtgagtttgaaattgaaatgtgtaaattgttt--ggtccaattttaaTTCGATTTCttATTCATag gtgcaata
D.Moj acttcag gtgagtttgaaattgaaatgtgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Per actttcag gtgagtttgaaattgaaatgtgtaaattgttt--gtgccaattttaaTTCGATTTCttATTCATag gtgcaata
D.Pse actttcag gtgagtttgaaattgaaatgtgtaaattgttt--gtgccaattttaaTTCGATTTCttATTCATag gtgcaata
D.Vir actttcag gtgagtttgaaattgaaatgtgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
D.Wil atttcag gtgagtttgaaattgaaatgcgtaaattgttt--gtgccaattttaaTTCGATTTCttATTCATag gtgcaata
D.Yak acttcag gtgagtttgaaattgaaatgcgtaaattgttt--ggtacaattttaaTTCGATTTCttATTCATag gtgcaata
* * * * * *****

```

id=41996 gene=FBgn0027779 name=VhaSFD segment=chr2L.16724795.16724858.-1 type=IN VIEW

Figure 332:



```

D.Mel tccaagag gtcagtacacc...669...-----gatcgtagttggcttgattaTTTTCATGACCTTT-----gtagatgaatttcta--gtt...1709...ctcccttccag gatgagac
D.Sim tccaagag gtcagtacacc...669...-----gatcgtagttggcttgattaTTTTCATGACCTTTGT-----agatgaattactaactagag...1713...ctcccttccag gatgagac
D.Sec tccaagag gtcagtacacc...654...-----gatcgtagttggcttgattaTTTTCATGACCTTTGT-----agatgaattactaactagag...1706...ctcccttccag gatgagac
D.Ere tccaagag gtcagtacacc...663...-----gatcgtagttggcttgattaTTTTCATGACCTTTGT-----agatgaattactaactagaa...1732...ctcccttccag gatgagac
D.Ana tccaagag gtcagtacacc...687...-----gccttagttggcttgattacTTTTCATGACCTTTGT-----agctgaaatagtaactaact...1878...ctccattgcag gatgagac
D.Gri tacaagag gtcagtacacc...827...-----aggagagtaacaattgaat---CGTTTTGCATGATCTTTGT-----agttgttttattgtaattg...2198...tccattttacag gatgaaac
D.Moj tacaagag gtcagtacacca...792...-----aaggtatcaagttatttgtt---TTGCATGACCTTTGT agTGCTGTaattacattatccaatcgaa...2244...tccattttacag gacgaaac
D.Vir tacaagag gtcagtacacc...773...cattatcgagcagttatcaa---GTTATTGTTTTGCATGACCTTT-----gtagcttg--tggtaccatgcc...1960...cccattttacag gacgaaac
D.Wil tacaagag gtcagtacacc...890...-----tggtatatatt--ttaaattgcTTTTCATGATCTTTGT agTTGT-ctttgttttgatttcctt...2061...ctcattttacag gacgaaac
* ***** * ***** * *

```

id=101111 gene=FBgn0039132 name=AP-1sigma segment=chr3R.19785316\_1978772.1 type=IN

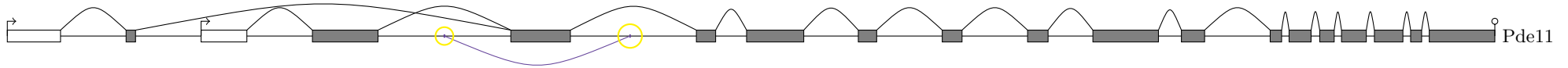
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D.Mel tccaagag gtcagtacacc...1638...--acagacacaatagattcaga-----AAAGTTCATGCAAAA-----caagccaacctcacgtagtt...740...ctcccttccag gatgagac
D.Sim tccaagag gtcagtacacc...1652...gcacagacacaatagattca-----GCAAAGTTCATGCAAAA-----caagccaacctcacgtagtt...730...ctcccttccag gatgagac
D.Sec tccaagag gtcagtacacc...1622...gcacagacacaatagattca-----GCAAAGTTCATGCAAAA-----caagccaacctcacgtagtt...738...ctcccttccag gatgagac
D.Ere tccaagag gtcagtacacc...1655...acatagatacaatagataca-----GCAAAGTTCATGCAAAA-----caagccaacctcacgtagtc...740...ctcccttccag gatgagac
D.Ana tccaagag gtcagtacacc...1797...tcacacgacaaatagaacg-----GCAAAGTTCATGCAAAA-----ttagccaacctcacgtagt...768...ctccattgcag gatgagac
D.Gri tacaagag gtcagtacacc...2153...acttcatcttttagtcttga-----GTAAGTTCATGCAAAAACG-----ctaatactccctcccccgg...872...tccattttacag gatgaaac
D.Moj tacaagag gtcagtacacca...2138...tgtcgtcctctcctccttaGTAGTGAATAAAGTTCATGCAA-----cattt-acttaacttctcata...899...tccattttacag gacgaaac
D.Vir tacaagag gtcagtacacc...1997...-cctca-cccctagctcttgaga-----AAAGTTCATGCAAAAcgCAAATAGCcaacatttaaagtaacttct...734...cccattttacag gacgaaac
D.Wil tacaagag gtcagtacacc...2130...--agttattttgaaatccattGCAAAGCAAAGTTCATGCAAAA-----tcgctaataccctgacattt...822...ctcattttacag gacgaaac
* ***** * ***** * *

```

id=101111 gene=FBgn0039132 name=AP-1sigma segment=chr3R.19785316\_1978772.1 type=IN VIEW

Figure 333: CS=5.4



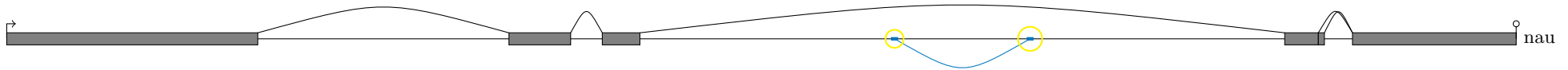
D.Mel	tacaacag	gtgagaaggtgg...2079...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgaaacacttt...	.652...	tcctcgttgcag	gcctgcat
D.Sim	tacaacag	gtgagaatgtgg...2581...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgaaacacttt...	.697...	tcctcgttgcag	gcctgcat
D.Sec	tacaacag	gtgagaatgtgg...2063...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgaaacacttt...	.697...	tcctcgttgcag	gcctgcat
D.Ana	cacaacag	gtgagagggcg...1432...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgaaacacttt...	.1397...	tgcttcttcag	gcctgcat
D.Gri	gacaacag	gtgagaaaaaca...2346...	ccccatatttctcgccaatt	GCCAATat	TTCCGGTT	aaTGTGAacttgacatatgtatatgat...	.730...	attttcttcag	gcctgcaa
D.Per	agcaacag	gtgaggtcttag...3394...	--caataattcacggaaattgc	CAATat	TTCCGGTT	-----aatgttgaacttgagacact...	.1517...	cctttcttcag	gcctgcat
D.Pse	agcaacag	gtgaggtcttag...3394...	--caataattcacggaaattgc	CAATat	TTCCGGTT	-----aatgttgaacttgagacact...	.1517...	cctttcttcag	gcctgcat
D.Wil	atccattt	gcgtgtacatga...2318...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgtagtggagg...	.562...	ctttcttcag	gtctgcat
D.Yak	tacaacag	gtgagaaggtgg...2037...	--caatatttcaaggaaattgc	CAATat	TTCCGGTT	-----aatgttaactgaaacacttt...	.578...	tcctcgttgcag	gcctgcat
		* * *	* * * * *			* * *		* * * * *	* * * * *

id=28485 gene=FBgn0085370 name=Pde11 segment=chr2L.18543716.18546524.-1 type=IN

D.Mel	tttataag	gcaagtcgaagt...410...	--gatggctcgtttccgccata--	AACCGGAAATTG	-cctttgccaca--gcaggacat...	.772...	tatttcccacag	gaaagcca
D.Sim	tttataag	gcaagtcgaatt...377...	--gatggctcgtttccgccata--	AACCGGAAATTG	-cctttgccaca--gcaggacat...	.795...	tatttcccacag	gaaagcca
D.Sec	tttataag	gcaagtcgaatt...364...	--gatggctcgtttccgccata--	AACCGGAAATTG	-cctttgccaca--gcaggacat...	.816...	tatttcccacag	gaaagcca
D.Ana	tttataag	gtgagtgccaga...290...	--gtagctcgtttccgctata--	AACCGGAAATTG	-cctttgccaca--gcaggacat...	.818...	tatcgcccgag	gaaagcca
D.Gri	ttcataag	gtgagctatcaa...442...	ctggtggccggcgttttccg	TCGTAAACCGGAAATTGGC	-tttcgcacatacacaccata-	.970...	tcttcttcag	aaaggcca
D.Per	tttataag	gtaagacataaa...838...	--gctagctcgtttccgctata--	AACCGGAAATTG	ccttttcccaca--gcagggga-	.913...	ctcgttccgtag	aaaagcca
D.Pse	tttataag	gtaagacataaa...782...	--gctagctcgtttccgctata--	AACCGGAAATTG	ccttttcccaca--gcagggga-	.910...	gccgttccgtag	aaaagcca
D.Wil	tttataag	gtgagcaaat...743...	--accagctcgtttccgctata--	AACCGGAAATTG	cctttcatggcg--gcaggag-	.715...	ttgatttgcag	aaaggcca
D.Yak	tttataag	gcaagtcgaggt...345...	--gatggctcgtttccgccata--	AACCGGAAATTG	-cctttgccaca--gcaggacat...	.806...	tatttcccacag	gaaagcca
	** ** ** *		** ** *		** ** *		** ** *	** ** *

id=28487 gene=FBgn0085370 name=Pde11 segment=chr2L.18542004.18543261.-1 type=IN VIEW

Figure 334: CS=12.42



```

D.Me1 attatctg gtaagttttgtc...644...tgcgacgtggaacaaaacc--GTTGTGGcAGTTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2350...tttccttgag agctccta
D.Sim attatctg gtaagttttgtc...662...tgcgacgtggaacaaaacc--GATGTGGcAGTTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2313...tttccttgag agctccta
D.Sec attatctg gtaagttttgt...667...-----aaccaaaaccgatgtggcag--TTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2293...tttccttgag agctccta
D.Ere attatctg gtaagttttccg...620...-----aacaaaaaccgatgtggcag--TTGACAAATTGCAcaGGAAAaacatgacaagatctcggga...2200...tttccttgag agctccta
D.Ana attatctg gtaagtttttca...715...-----aaacaaaaagaaaatgtgtcAGTTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2272...gttattttacag agctccta
D.Gri attatctg gtaagttttgtt...1297...-----aacaaaaaggaaaatgtgtcAGTTGACAAATTGCAcaGGAAAaacatgacaagatcggagcg...2087...tatcaattgcag agctccta
D.Per attatctg gtaagttttttc...837...-----gaacaaaaagaaaatgtgtcAGTTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2154...tttccattgcag agttccta
D.Pse attatctg gtaagttttttc...838...-----gaacaaaaagaaaatgtgtcAGTTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2159...tttccattgcag agctccta
D.Vir attatctg gtaagtttttgc...729...-----tcgagaaaggaaaatgtgtcAGTTGACAAATTGCAcaGGAAAaacatgacaagatcggagca...2127...tttcaattgcag agctccta
D.Yak attatctg gtaagttttccg...702...-----aacaaaaaccaatgtggcag--TTGACAAATTGCAcaGGAAAaacatgacaagatctcgggg...2370...ctctttttgcag agctccta
*****
*****
*** **
*****
*****
** **

```

id=123836 gene=FBgn0002922 name=nau segment=chr3R.19538997.19542084.-1 type=IN

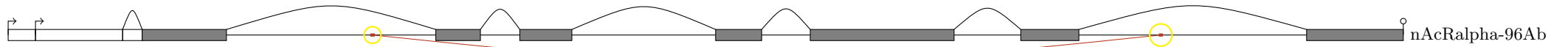
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D.Me1 attatctg gtaagttttgtc...928...ggttggcctgcgctgagtaaTTCCaTGCAGTTTGTtaAGTTtcTCACAATtttaatgtacaaatttgta...2064...tttccttgag agctccta
D.Sim attatctg gtaagttttgtc...926...ggttggcctgcgctgagtaaTTCCaTGCAGTTTGTtaAGTTttTCACATtttaatgtacaaatttgta...2047...tttccttgag agctccta
D.Sec attatctg gtaagttttgt...915...ggttggcctgcgctgagtaaTTCCaTGCAGTTTGTcTTAAgtttttcacatttttaatgt-----...2045...tttccttgag agctccta
D.Ere attatctg gtaagttttccg...858...ggttggcctgcgctgagtaaTTCCaTGCAGTTTGTcTTAAgttctgcgcattttaatgt-----...1962...tttccttgag agctccta
D.Ana attatctg gtaagtttttca...943...tgccagctctgtggtgataaTTCCaTGCAGTTTGTgaAGTTtttctgcattttaatgtaca-----...2043...gttattttacag agctccta
D.Gri attatctg gtaagttttgtt...1544...tgccacactctgctgagtaaTTCCaTGCAGTTTGTtgAGTT-tctcaaaactttaatgtaca-----...1839...tatcaattgcag agctccta
D.Per attatctg gtaagttttttc...1090...gcgacgactgggttgagtaaTTCCaTGCAGTTTGTtaAGTTttttcacatttttaatgtaca-----...1900...tttccattgcag agttccta
D.Pse attatctg gtaagttttttc...1091...gcgacgactgggttgagtaaTTCCaTGCAGTTTGTtaAGTTttttcacatttttaatgtaca-----...1905...tttccattgcag agctccta
D.Vir attatctg gtaagtttttgc...931...ggccacactctgctgagtaaTTCCaTGCAGTTTGTtgAGTT-tttcaaattttaatgtaca-----...1924...tttcaattgcag agctccta
D.Yak attatctg gtaagttttccg...992...ggttggcctgcgctgagtaaTTCCaTGCAGTTTGTcTTAAgtttttcacatttttaatgt-----...2080...ctctttttgcag agctccta
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*****
*****
* * *

```

id=123836 gene=FBgn0002922 name=nau segment=chr3R.19538997.19542084.-1 type=IN VIEW

Figure 335: CS=9.6



```

D.Mel tcgatttg gtaagcaaaatt...662...gaagaagccgtaagctgacAGCAAAAGCAcATTAGccgggggtaccgggtggccag...187...aatTTTTgcag aatctcaa
D.Sim tcgatttg gtaagcacaatt...643...gaaagaagccgtaagctgacAGCAAAAGCAcATTAGccgggggtaccgggtggccag...186...aatTTTTgcag aatctcaa
D.Sec tcgatttg gtaagcaaaatt...668...gaagaagccgtaagctgacAGCAAAAGCAcATTAGccgggggtaccgggtggccag...186...aatTTTTgcag aatctcaa
D.Ana tcgatttg gtaagtaaatta...675...ccagagaccgtaagctgacAGCAAAAGCAcATTAAccggggcgcagggcgagagaga...172...tttattttccag aatctcaa
D.Gri tcgatttg gtgagtcaatgc...1606...tccaaaaccgtaagctgacAGCAAAAGCAcATTAGcggcagggcagagagtctag...249...tctctgccacag aatctcaa
D.Moj tcgatttg gtaagccaataa...1177...tccaaaaccgtaagctgacAGCAAAAGCAcATTAGcggcagggcagagagtacactc...267...tcttgcacacag aacctcaa
D.Per tagatttg gtaagtaaatca...686...aagcgaagccgtaagctgacAGCAAAAGCAcATTAGccaggggcagagaggctggc...161...taattTTTTgcag aatctgaa
D.Pse tagatttg gtaagtaaatta...700...aagcgaagccgtaagctgacAGCAAAAGCAcATTAGccaggggcagagaggctggc...160...taattTTTTgcag aatctgaa
D.Vir tcgatttg gtaagtcaatga...1037...tccaaaaccgtaagctgacAGCAAAAGCAcATTAGcggcagggcagagaggatgcat...256...actcgcacacag aatctcaa
D.Wil ttgatttg gtaagtagaggc...797...aaccaaaaccgtaagctgacAGCAAAAGCAcATTAGcggcagggcagagaggatgcat...203...ttttaatctacag aatctaaa
D.Yak tcgatttg gtaagcacaatt...652...agaagccgccgtaagctgacAGCAAAAGCAcATTAGtcggggcgaggagtgcaaat...187...attctcttgccag aatctcaa
* ***** ** ** * * * * * ** * * * * * ** * * * * * ** * * * * *

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id=62143 gene=FBgn000039 name=nAcRalpha-96Ab segment=chr3R.20311923.20312852.1 type=IN

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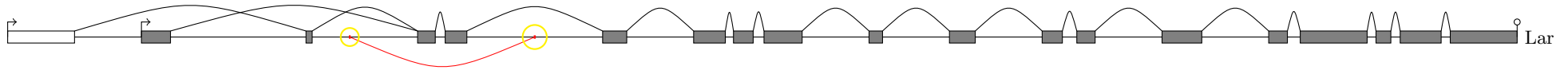
D.Mel tcaatgcg gtgagtccggca...238...tcgaccggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggcc...700...ttcctcttacag gaagatca
D.Sim tcaatgcg gtgagtccggca...216...tcgccccggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggca...690...tacctcttgccag gaagatca
D.Sec tcaatgcg gtgagtccggca...214...tcgaccggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggca...688...ttccttttgccag gaagatca
D.Ana tcaatgcg gtgagtccggca...232...gtcgtccggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggca...442...ttcatccttttag gaggacca
D.Gri tcaatgcg gtgagtccggca...594...agaccacacaaaatccacttTTAATTGCTTTTGT---caattgactggcaaacggct...363...attcaataacag gaggatca
D.Moj tcaatgcg gtgagtccggca...384...agaccacacaaaatccacttTTAATTGCTTTTGT---caattgactggcaattggct...407...attcaataacag gaggatca
D.Per tcaatgcg gtgagtccggca...268...acgctacggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggcg...393...cggcctttgcag gaggatca
D.Pse tcaatgcg gtgagtccggca...247...acgctacggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggcg...394...cggcctttgcag gaggatca
D.Vir tcaatgcg gtaagttctgct...382...agaccacacgaaatccagttTTAATTGCTTTTGT---caattgactggcaattggct...388...atttaataacag gaagatca
D.Wil tcaatgcg gtgagtccggca...421...gtttcaatcaaacccccaa--AATGCTTTTGTttgcgattg--cggc-atttgct...255...tttgattcacag gaggatca
D.Yak tcaatgcg gtgagtccggca...262...gaccctcggcaaatccacttTTAATTGCTTTTGT---caattgactggcaattggca...607...ttcctcttacag gaagatca
***** ** ** * * * * * ** * * * * * ** * * * * * ** * * * * *

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id=62153 gene=FBgn000039 name=nAcRalpha-96Ab segment=chr3R.20315523.20316539.1 type=IN VIEW

Figure 336: CS=15.4





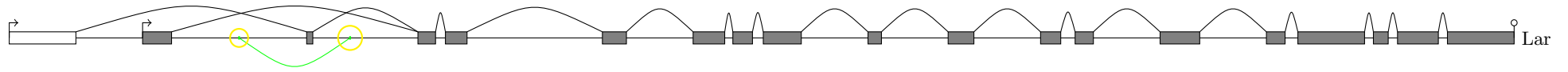
D. Mel	acacgtaa	gtcgggctgcgg--...231...---	gctggttgtttaacgtttc	TGATTTTGGCCAGa	TTTT	aatgccacacatctgtttc...	577...	gaccctccacag	atccgccg
D. Sim	acacgtaa	gtcgggctgcgg--...244...---	ggttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccacacatctgtttt-...	556...	gaccctccacag	atccgccg
D. Sec	acacgtaa	gtcgggctgcgg--...245...---	ggttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccacacatctgtttt-...	555...	gaccctccacag	atccgccg
D. Ere	acacgtaa	gtcaggctgcgg--...222...---	ggttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccacacatctgtttt-...	602...	gaccctccacag	atccgccg
D. Ana	acacgtaa	gtcaggctctcc--...252...---	ggttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccacacatctgtttc-...	430...	gaccctccacag	atccgccg
D. Gri	acacgtaa	gttttgggtgaa--...246...---	tttctgcttgccttaacgtt	TCGTga	TTTTGGCCag	ATTTT	aatgccacacacaccaca-...	619...	gcactttcacag
D. Moj	acacgtaa	gttttgggtgac--...202...---	attgctgcttgccttaacgtt	TCGTga	TTTTGGCCag	ATTTT	aatgccgcacgcagaggca-...	805...	gcactttcacag
D. Per	acacgtaa	gtcc--ctgttgag...264...---	gcttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccgcacacacacagc-...	1027...	gaccctccacag	atccgccg
D. Vir	acacgtaa	gttttggcgct--...221...---	tttctgcttgccttaacgtt	TCGTga	TTTTGGCCag	ATTTT	aatgccacacacacacagc-...	757...	gcactttcacag
D. Wil	acacgtaa	gttttgggttac--...317...---	gcttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccgcacacacagatg-...	788...	taactttcacag	atccgccg
D. Yak	acacgtaa	gtctggctgcgg--...220...---	ggttgtttaacgtttcgtga	TTTTGGCCag	ATTTT	aatgccacacatctgtttt-...	569...	gaccctccacag	atccgccg
	*****	**		* ** *	*****			* * *****	**** **

id=108538 gene=FBgn0000464 name=Lar segment=chr2L.19643377.19644267.1 type=IN

D. Mel	atatgaag	gtaagtgcctg...3759...---	aatgtttcagtaaatgcca	AAAAGCTGGCt	AGAAaa	GTCA	ataagaccacaa-----	caaccgcc---	1144...	tcctcgttcag	gcgataaa
D. Sim	ctatgaag	gtaagtgcctg...4595...---	aatcccattgtttgacttac	AAAA--	TGGCGt	AGAA	agcagccaacaa-----	aagcaact-----	316...	tcctcgttcag	gcgataaa
D. Sec	ctatgaag	gtaagtgcctg...4583...---	aatcccattgtttgacttac	AAAA--	TGGCGt	AGAA	agcagccaacaa-----	aagcaact-----	328...	tcctcgttcag	gcgataaa
D. Ere	ctatgaag	gtaagtgcctg...4595...---	aatcccattgtttgacttac	AAAA--	TGGCGt	AGAA	agc-gccaacaa-----	aagcaactg-----	316...	tcctcgttcag	gcgataaa
D. Ana	ctatgaag	gtaagtgcctg...4661...---	aacgccattgtttgacttac	AAAA--	TGGCGt	AGAA	aat-gccaacaa-----	aagcgacac-----	250...	tcctcattgcag	gcgataaa
D. Gri	ctatgaag	gtaagtggcaac...4601...---	cccaccattgtttgacttac	AAAA--	TGGCGt	AGAA	caacaaacgacgcaaccgag--	...	305...	tttgcgttcag	gcgataaa
D. Moj	atatgaag	gtgagtgcgaga...4566...---	aaagccattgtttgacttac	AAAA--	TGGCGt	AGAA	accaa-----	aggcagccaagcaa...	340...	tcctgttacag	gcgataaa
D. Per	ctatgaag	gtaagtgcctg...4657...---	gaagccattgtttgacttac	AAAA--	TGGCGt	AGAA	agc-gccaacaa-----	agagaacga-----	254...	gttttttcag	gcgataaa
D. Vir	ctatgaag	gtaagtggcaac...4594...---	cacgccattgtttgacttac	AAAA--	TGGCGt	AGAA	caacaa-----	aggcaaccgagcag...	312...	ttccggttcag	gcgataaa
D. Wil	ctatgaag	gtaagtgcctg...4620...---	caacccattgtttgacttac	AAAA--	TGGCGt	AGAA	agcgccaacaa-----	aagcaact-----	291...	tcctgttcag	gcgataaa
D. Yak	ctatgaag	gtaagtgcctg...4597...---	aatcccattgtttgacttac	AAAA--	TGGCGt	AGAA	agc-gccaacaa-----	aagcaactg-----	314...	tcctcgttcag	gcgataaa
	*****	** ****		* ** *	****	****		* ****		** **	*****

id=108542 gene=FBgn0000464 name=Lar segment=chr2L.19644636.19691017.1 type=IN VIEW

Figure 337: CS=13.2



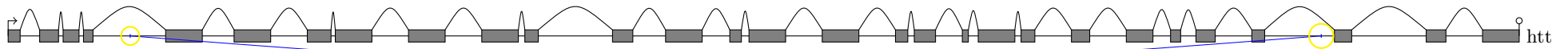
D.Mel	tgcagccc	gtaagtattaga...	3525...	-----	ccagccgaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC	AAGC	-----	acaacttggtgcagttcag	-----	...1372...	tgcccattacag	atgcaaat
D.Sim	tgcagccc	gtaagtattagg...	3525...	-----	ccagccgaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC	AAGC	-----	acaacttggtgcagttcag	-----	...1372...	tgcccattgcag	atgcaaat
D.Sec	tgcagccc	gtaagtattagg...	3542...	-----	ccagccgaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC	AAGC	-----	acaacttggtgcagttcag	-----	...1355...	tgcccattacag	atgcaaat
D.Ere	tgcagccc	gtaagtactagg...	3460...	-----	ccagccgaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC	AAGC	-----	caagcacaacttggtgcagt	-----	...1437...	tgcccattacag	atgcaaat
D.Ana	tgcagtcc	gtgagtacagcc...	3517...	-----	ccagccaaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC	GAAC	-----	caaaacttggtgcagttca	-----	...1380...	tgcccgttcag	atgcaaat
D.Gri	tgcagtcc	gtgagtaccaag...	2720...	-----	gttctggcgctatctatggc	ATCTaCAAA	-ttTCAT	GGTG	-----	ggcctttaatctttaaaca	...	2184...	ttacattacag	atgcaaat
D.Per	tgcagtcc	gtaagtactact...	2650...	-----	tatgtactcgtatccttgcc	ATCTaCAAA	-ttTCAT		-----	ttgccattcctttaatcttg	-----	...2260...	gccccgttacag	atgcaaat
D.Pse	tgcagtcc	gtaagtactact...	2652...	-----	tatgtactcgtatccttgcc	ATCTaCAAA	-ttTCAT		-----	ttgccattcctttaatcttg	-----	...2258...	gccccgttacag	atgcaaat
D.Vir	tgcagtcc	gtgagtactact...	2543...	-----	gctctggtgctatctatggc	ATCTaCAAA	-ttTCAT		-----	ttcgtatgcctttaatctt	-----	...2367...	ctacattacag	atgcaaat
D.Yak	tgcagccc	gtaagtattagg...	3468...	-----	ccagccgaacgtgcgaaatg	AAAAATCaGCAA	AAGTgCAGC		-----	ctagcacaacttggtgcag	-----	...1434...	tgcccattacag	atgcaaat
	***** **	** ****			* *	*** ****	** **			** *			* ** **	*****

id=108536 gene=FBgn0000464 name=Lar segment=chr2L\_19611627\_19643330\_1 type=IN

D.Mel	acacgtaa	gtcgggctg	cg--...	225...	-atTTTTgctggtt	gttttaac	GTTTCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	577...	gacctccacag	atccgccg	
D.Sim	acacgtaa	gtcgggctg	cg--...	235...	-atTTTTgctggtt	gttttaac	GTTTCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	555...	gacctccacag	atccgccg	
D.Sec	acacgtaa	gtcgggctg	cg--...	236...	-atTTTTgctggtt	gttttaac	GTTTCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	554...	gacctccacag	atccgccg	
D.Ere	acacgtaa	gtcaggctg	ctcc--...	213...	-atTTTTgctggtt	gttttaac	GTTTCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	601...	gacctccacag	atccgccg	
D.Ana	acacgtaa	gtcaggctg	ctcc--...	243...	-atTTTTgctggtt	gttttaac	GTTTCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	429...	gacctccacag	atccgccg	
D.Gri	acacgtaa	gttttggtt	gaa--...	242...	.tattttgctgctt	gcttaa	CGTtTCGTG	ATTGccAGAT	ttttaatgccacacaccc	---	622...	gcactttcacag	atccaccg	
D.Per	acacgtaa	gtcc--ctg	ttgtg...	260...	-----	tgctgctt	gttttaacg	tttcGTGAtt	TTTGccAGAT	ttttaatgccacacacac	---	1030...	acctccacag	atccgccg
D.Pse	acacgtaa	gtcc--ctg	ttgtg...	245...	-----	tgctgctt	gttttaacg	tttcGTGAtt	TTTGccAGAT	ttttaatgccacacacac	---	1050...	acctccacag	atccgccg
D.Vir	acacgtaa	gttttgcc	cgct--...	223...	-----	tgctgctt	gttttaacg	tttcGTGAtt	TTTGccAGAT	ttttaatgccacacacac	---	760...	gcactttcacag	atccaccg
D.Yak	acacgtaa	gtctggtg	ctg--...	215...	-----	ttgctggtt	gttttaacg	tttcCGTGATT	TTTGCaGATTTT	aatgccacacat	ctgttttc...	568...	gacctccacag	atccgccg
	***** **	** ****			***** **	*****	*****	*****	**	**		* ** **	*****	

id=108538 gene=FBgn0000464 name=Lar segment=chr2L\_19643377\_19644267\_1 type=IN VIEW

Figure 338: CS=12



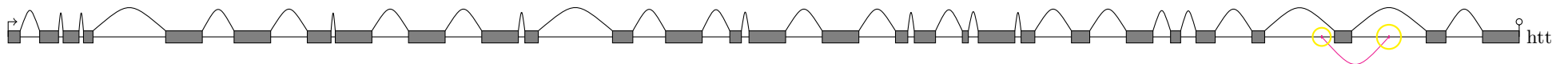
D.Mel	agtgatgg	gtaagacagctt...2402...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	452...tatttcttgag	agctcctg
D.Sim	agtgatgg	gtaagacagctt...2374...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	485...tatttcttgag	agctcctg
D.Sec	agtgatgg	gtaagacagctt...2365...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	461...tatattttgag	agctcctg
D.Ere	agtgatgg	gtaagacagctt...2402...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	460...tatttcttgag	agctcctg
D.Ana	agtgatgg	gtaagagctgta...2302...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	485...ctgccccgag	atcttctt
D.Per	agtgatgg	gtaagcggaat...2257...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	503...cttcattatag	agctcctt
D.Pse	agtgatgg	gtaagcggaat...2268...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	494...cttcattatag	agctcctt
D.Vir	agtgattg	gtaagccaaca...3315...acccaaggaaaacggcaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgtgatt...396...tcatcctgag	aaatgctg	aaatgctg
D.Wil	agtgattg	gtaagccaaca...2827...ctcttcttgaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgtg----	405...gtttgttacag	aactcctg
D.Yak	agtgatgg	gtaagacagcta...2380...ccaaggaagaaaatgaaaa	CTAATTGAGT	aaCAAA	cttccaacatggcgttttgt----	485...tatttcttgag	agctcctg
	*****	*****			*** * ***** ** ***** **		** * *

id=34055 gene=FBgn0027655 name=htt segment=chr3R.24523123.24526056.1 type=IN

D.Mel	ttctgcat	gtgagtacaac...888...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...147...tgtcattgacag	ggcctgga	
D.Sim	ttctgcat	gtgagtacaac...880...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...145...tgtcattgacag	ggcctgga	
D.Sec	ttctgcat	gtgagtacaaa...902...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...145...tgtcattgacag	ggcctgga	
D.Ere	ttctgcat	gtgagtacaaa...903...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...149...tgtcattgacag	ggcctgga	
D.Ana	ttctgcat	gtaagtaaatc...1655...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaagc...148...tgtcgttgccag	ggcctgga	
D.Per	ttctgcat	gtgagtattccg...1159...-----agaggcaataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...169...gctatgccccag	ggcctaga	
D.Pse	ttctgcat	gtgagtattccg...1176...-----agaggcaataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...169...gctatgccccag	ggcctaga	
D.Vir	ttctgcat	gtgagtagaat...1976...acaacagcggc-----caataacaa	TAACaa	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaat...213...tgccttgccag	ggtctoga
D.Wil	tactgcat	gtgagttaacta...810...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...223...ccctgtaaacag	ggtctaga	
D.Yak	ttctgcat	gtgagtacaac...920...-----agcggccataacaataacaa-----	TTTGcc	ACTCAATTAG	cgtagccattactgaaaaac...149...gtccattgacag	ggcctgga	
	*	*****	** **		*****	*** ** ** **	

id=34099 gene=FBgn0027655 name=htt segment=chr3R.24553422.24554536.1 type=IN VIEW

Figure 339: CS=6



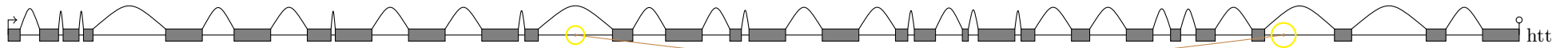
D. Mel	ttctgcat	gtgagtacaaaac...891...ggccataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttaag-...138...tgtcattgacag	ggcctgga	
D. Sim	ttctgcat	gtgagtacaaaac...883...ggccataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttaag-...136...tgtcattgacag	ggcctgga	
D. Sec	ttctgcat	gtgagtacaaaa...905...ggccataacaataacaatttGCCA	ctCAATTAgCGTGGCCAT	tactgaaaaaccacttaag-...136...tgtcattgacag	ggcctgga	
D. Ere	ttctgcat	gtgagtacaaaa...906...ggccataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttaag-...140...tgtcattggcag	ggcctgga	
D. Ana	ttctgcat	gtaagtaaatc...1658...ggccataacaataacaatttGCCA	ctCAATTAGCGTGGCCAT	tactgaaaag-ccacttaagt...139...tgtcgttgccag	ggcctgga	
D. Moj	tgctgcat	gtgagtagaact...1589...ggcaataacaataacaatttGCCA	ctCAATTAGCGTGGCCAT	tactgaaaaatccacttaag-...198...ctatctgtgacag	ggctctcga	
D. Per	ttctgcat	gtgagtagaact...1162...ggcaataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttaag-...160...gctatgccccag	ggcctaga	
D. Pse	ttctgcat	gtgagtagaact...1179...ggcaataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttaag-...160...gctatgccccag	ggcctaga	
D. Vir	ttctgcat	gtgagtagaaat...1985...ggcaataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaatccac-----...209...tgccctggccag	ggctctcga	
D. Yak	ttctgcat	gtgagtacaaaac...923...ggccataacaataacaatttGCCA	ctCAATTAGCGTgGCCAT	tactgaaaaaccacttatg-...140...gtccattgacag	ggcctgga	
		* *****	** ****	* * *****	****	***

id=34099 gene=FBgn0027655 name=htt segment=chr3R.24553422.24554536.1 type=IN

D. Mel	gtatgtgg	gtgagtagatgagg...2245...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...835...-ttcattctcag	gctcggct	
D. Sim	gtatgtgg	gtgagtagatgagg...2253...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...830...-ttcattctcag	gctcggct	
D. Sec	gtatgtgg	gtgagtagatgagg...2264...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...831...-ttcattctcag	gctcggcc	
D. Ere	gtatgtgg	gtgagtagatgagg...2239...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...842...-ttcattctcag	gctcagct	
D. Ana	gtatgtgg	gtgagtagatgagg...2846...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...855...-ttcattctcag	gctcagct	
D. Moj	gtatgtgg	gtgagtagatgagg...2216...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...955...-ttcattctcag	gctcagct	
D. Per	gtatgtgg	gtgagtagatgagg...2772...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...779...-ttcattctcag	gctcagct	
D. Pse	gtatgtgg	gtgagtagatgagg...2702...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...785...-ttcattctcag	gctcagct	
D. Vir	gtatgtgg	gtgagtagatgagg...1981...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...1328...attgtcct-gcag	gctcagct	
D. Yak	gtatgtgg	gtgagtagatgagg...2273...gtgcattgcctgcggcattcGTGGCGCGCa	TAATTGTGGC	caggcgccg-ggaagcacc...888...-ttcattctcag	gctcagct	
		**** **	** ***	* * * * *	*****	* * *

id=34101 gene=FBgn0027655 name=htt segment=chr3R.24554772.24557935.1 type=IN VIEW

Figure 340: CS=7.8



D. Mel	aatggcag	gtgagtagtggg...1193...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaataa-tttttgtgt...1548...	gcatcattgcag	gtgccatg
D. Sim	aatggcag	gtgagtagtggg...1186...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1572...	tcatcattgcag	gtgccatg
D. Sec	aatggcag	gtgagtagtggg...1163...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1571...	tcatcattgcag	gtgccatg
D. Ere	aatggcag	gtgagtagtggg...1178...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1577...	gcatcattgcag	gtgccatg
D. Ana	aatggcag	gtaagaggcca...1029...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1405...	ctatctgaacag	gtgccatg
D. Moj	aatagcag	gtaagtgccgcg...2002...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgtaaaatag-ttttcgtgc...2066...	ttcccctgcag	gcggcatg
D. Per	ggtggcag	gtgagtgacga...1580...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1639...	ctccactccag	gtgccatg
D. Pse	ggtggcag	gtgagtgacga...1585...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1641...	ctccactccag	gtgccatg
D. Vir	aatagcag	gtaagtagcaga...1319...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgtaaaatag-ttttcgtgc...2133...	tctccatctag	gtggaatg
D. Wil	aatggcag	gtgagtagtagt...1665...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaataacttttcgtg...1830...	caacgaacacag	gttccatt
D. Yak	aatggcag	gtgagtagtggg...1223...	aatcaaaaagtaattaaatt	ATTAAT	AAACCATTAA	atgttaacaa-tttttgtgt...1659...	gcatcattgcag	gtgccatg

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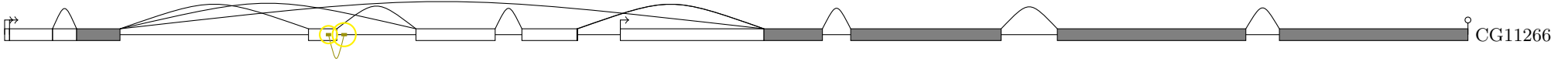
id=34069 gene=FBgn0027655 name=htt segment=chr3R.24536844.24539664.1 type=IN

D. Mel	ttctgcat	gtgagtacaaac...211...	ctgggcagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaacggcaa...823...	tgtcattgacag	ggcctgga
D. Sim	ttctgcat	gtgagtacaaac...211...	ctgggcagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaacggcaa...813...	tgtcattgacag	ggcctgga
D. Sec	ttctgcat	gtgagtacaaa...211...	ctgggcagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaacggcaa...835...	tgtcattgacag	ggcctgga
D. Ere	ttctgcat	gtgagtacaaa...204...	ctgggtagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaacggcaa...847...	tgtcattgacag	ggcctgga
D. Ana	ttctgcat	gtaagtaaatc...336...	cgtcgtagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaaaggcac...1466...	tgtcgttgcag	ggcctgga
D. Moj	tgctgcat	gtgagtagaact...159...	agacagcgtccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caagaggaa...1633...	ctatctgtgcag	ggtctcga
D. Per	ttctgcat	gtgagtattccg...297...	cagggaaccccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttg	aaaaggcac...1030...	gctatgccccag	ggcctaga
D. Pse	ttctgcat	gtgagtattccg...297...	cagggaaccccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttg	aaaaggcac...1047...	gctatgccccag	ggcctaga
D. Vir	ttctgcat	gtgagtataaat...133...	agacagcgtccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caagaggag...2061...	tgccctggccag	ggtctcga
D. Wil	tactgcat	gtgagttaacta...214...	agagaccagccatgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaaaacgg...818...	ccctgtaaacag	ggtctaga
D. Yak	ttctgcat	gtgagtacaaac...222...	ctgggcagcccacgttgcgc	TAAAT	GGTTT	TTGAT	tgacaatttc	caaacggcta...846...	gtccattgacag	ggcctgga

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id=34099 gene=FBgn0027655 name=htt segment=chr3R.24553422.24554536.1 type=IN VIEW

Figure 341: CS=9.9



D. Mel	ctttgcag	agaatcgaataagctcaatattg	ttgctagagattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Sim	ctttgcag	agaatcgaataagctcaatattg	ttgctagagattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Sec	ctttgcag	agaatcgaataagctcaatattg	ttgctagagattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Ere	ctttgcag	agaatcgaataagctcaatattg	ttgctagagattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Ana	ctttgcag	agaatcgtataagctcaatattg	ttgctaaagattg	TTTTGGTCATTCTAAAC	acaaataagctggagaccatttg	gtaagttt
D. Gri	ctttgcag	a-aatcgtataagctcaatattg	tgtgctagtattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Moj	ctttgcag	a-aatcgtataagctcaatattg	tgtgctagtattg	GTTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Per	ctttgcag	agaatcgtataagctcaatattg	tgtgctagagattg	tttTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Pse	ctttgcag	agaatcgtataagctcaatattg	tgtgctagagattg	tttTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Vir	ctttgcag	a-aatcgtttaagctcaatattg	tgtgctagtattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt
D. Yak	ctttgcag	agaatcgaataagctcaatattg	tgtgctagagattg	TTTTGGTCATTCTAAAC	acaaaaagctggagaccatttg	gtaagttt

\*\*\*\*\* \* \*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\*

id=18448 gene=FBgn0031883 name=CG11266 segment=chr2L\_7034199\_7034273\_1 type=AN

D. Mel	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--gctgcg	aaaaaaaccaatt---.156..	actaaatttcag	atatactc
D. Sim	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--gctgcg	aaaaaaaccaatta---.150..	actaaatttcag	atatactc
D. Sec	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--gctgcg	aaaaaaaccaatt---.154..	actaaatttcag	atatactc
D. Ere	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--gctgcg	---aaaaaccaattaca..144..	actaaatttcag	atatactc
D. Ana	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--actg	---aaaaaaaccaactaca..138..	actaaatttcag	ataaactc
D. Gri	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--actgcg	taaaaaaaagaac---.124..	actaaatttcag	ataaactc
D. Moj	accatttg	gtaaGTTTt	GAATGtACCAgAAAC	--tgcg	aaaaaaataaaaaataa...141..	actaaatttcag	atatactc
D. Per	accatttg	gtaaGTTTt	GAATGtGCCA	cagaagctgcg	aacaaaaa-----..274..	actaaatttcag	ataaactc
D. Pse	accatttg	gtaaGTTTt	GAATGtGCCA	cagaagctgcg	aacaaaaa-----..261..	actaaatttcag	ataaactc
D. Vir	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--actgcg	aaaaaaagaaaa---.111..	actaaatttcag	ataaactc
D. Yak	accatttg	gtaaGTTTt	GAATGtGCCAGAA	--gctgcg	aaaaaaaccaatta---.157..	actaaatttcag	atatactc

\*\*\*\*\* \*\*\*\*\* \*\* \* \*\* \*\*\*\* \*\*\*\*\* \*\*\* \*\*\*\*

id=18449 gene=FBgn0031883 name=CG11266 segment=chr2L\_7034274\_7034483\_1 type=IN VIEW

Figure 342:



```

D.Mel  cggtggag gtaagtgtcgct...4211...--ctgcatctttaaagccatTTGCaTCTTTGTGGTT-----ttggc--gcagcccgatggca-----...698...tctatntccag atgccaac
D.Sim  cggtggag gtaagtgtcgct...4238...--ctgcatctttaaagccatTTGCaTCTTTGTGGTT-----ttggc--gcagcccgatggca-----...671...tctatntccag atgccaac
D.Sec  cggtggag gtaagtgtcgct...2606...tgccgtgtctcatttagcagc-TGTTG--TTGCTGCTGCT-----cgatggctctatacagatgc--...2303...tctatntccag atgccaac
D.Ere  cggtggag gtaagtgtcgct...4252...--ctgcatctttaaagccatTTGCaTCTTTGTGGTT-----ttggc--gcagcccgatggca-----...657...tctatntccag atgccaac
D.Ana  agcaggag gtaagtgtcgct...4306...-gactgcatctttaaagccATTTCATcTTTGT-----ggttttggc--gcagcccgat-----...605...cttctatnttag atgccaac
D.Moj  tggtggag gtaagtgtcaat...4143...-ggatgcatctttaaagccATTTCATcTTTGT-----ggc-tggcgtggcaggccc-----...768...tctctctnttag atgccaac
D.Per  cggtggag gtaagtgtcgcc...4255...-gactgcatctttaaagccATTTCATcTTTGTggTTGGCCGAGcctcatg----gcaggctcattac-----...644...ctccacttccag atgccaac
D.Pse  cggtggag gtaagtgtcgcc...2473...-gctacgtatt----gccc-----CAGCAGCAGCAGCAACAA-----cagccacaacagcagcaaca...2434...ctccacttccag atgccaac
D.Vir  tggtggag gtgagtgtcaac...4218...-ggatgcatctttaaagccATTTCATcTTTGT-----ggc-tggcgtggcaggccc-----...693...ttctctnttag atgccaac
D.Wil  cggtggag gtaagtttgcgat...4409...-ggctgcatctttaaagccATTTCATcTTTGT-----g-----gcaagctcattacttcat--...502...ttttctnttag atgccaac
D.Yak  cggtggag gtaagtgtcgct...4057...--ctgcatctttaaagccatTTGCaTCTTTGTGGTT-----ttggc--gcagcccgatggca-----...852...tctatntccag atgccaac
* **** ** ** ** * ** ** * ** ** ** **

```

id=17616 gene=FBgn000492 name=Dr segment=chr3R.25383568.25389874.1 type=IN

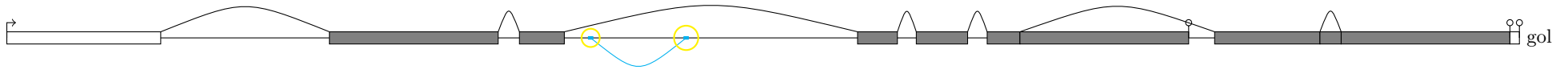
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D.Mel  cggtggag gtaagtgtcgct...4628...-----gtttagacagcaaatatt-----GGCCACTtAAAGGATAAttaccgtatattgttgccgc-----...279...tctatntccag atgccaac
D.Sim  cggtggag gtaagtgtcgct...4632...-----gtttagacagcaaatatt-----GGCCACTtAAAGGATAAttaccgtatattgttgccgc-----...275...tctatntccag atgccaac
D.Sec  cggtggag gtaagtgtcgct...2767...-----cgacgtattgcccgccgc-----AGCAGCAGCAGCAACA-----atgcctataaaagagcaaaa...2142...tctatntccag atgccaac
D.Ere  cggtggag gtaagtgtcgct...4642...-----gtttagacagcaaatatt-----GGCCACTtAAAGGATAAttaccgtatattgttgctgc-----...265...tctatntccag atgccaac
D.Ana  agcaggag gtaagtgtcgct...4558...-----gtgcgcctttgttgcacaa-----ACAAAATGCCAAAT-----taaaattgtttgctgtgga-----...352...cttctatnttag atgccaac
D.Moj  tggtggag gtaagtgtcaat...4446...-----gccggtctttgttgcacaa-----ACAAAATGCCAAAT-----taaaattgtttgagccga-----...464...tctctctnttag atgccaac
D.Per  cggtggag gtaagtgtcgcc...4468...-----tctgtctctgtctgtgcctTTGTTtGCCAAAACAAAATGCCAAAT-----taaaattgtttgctgtgca-----...430...ctccacttccag atgccaac
D.Pse  cggtggag gtaagtgtcgcc...3927...gatgaatactcattcttta-----TTGTTGCTGCTGCTGCTG-----ttgttgtgcatgccccatt...980...ctccacttccag atgccaac
D.Vir  tggtggag gtgagtgtcaac...4485...-----tgcggtctttgttgcacaa-----ACAAAATGCCAAAT-----taaaattgtttgagccaa-----...425...ttctctnttag atgccaac
D.Wil  cggtggag gtaagtttgcgat...4617...-----tcttgctttgttgcacaa-----ACAAAATGCCAAAT-----taaaattgtttgctgatac-----...293...ttttctnttag atgccaac
D.Yak  cggtggag gtaagtgtcgct...4486...-----gtttagacagcaaatatt-----GGCCACTtAAAGGATAAttaccgtatattgttgccgc-----...421...tctatntccag atgccaac
* **** ** ** ** * ** ** * ** ** **^

```

id=17616 gene=FBgn000492 name=Dr segment=chr3R.25383568.25389874.1 type=IN VIEW

Figure 343: CS=6.6



D. Mel	ttaaatag	gtgagtcccacc...30...---	atctcctgaac----	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...1340...	tttatat	tttag	aacatcag
D. Sim	ttaaatag	gtgagtcccca...26...---	acctcccga---ta--	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...1655...	tttatat	tttag	aacatcag
D. Sec	ttaaatag	gtgagtcccca...26...---	acctcccga---ta--	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...1512...	tttatat	tttag	aacatcag
D. Ere	ttaaatag	gtgagtcccatc...37...---	tttcctgatc----	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...1046...	tttatat	tttag	aacatcag
D. Ana	ctgaatcg	gtgagttccaaa...37...accagt--	ccaga-----	ctggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...934...	tttctctg	cag	gacatccg
D. Gri	ttaaatcg	gtgagtgagcaa...27...agaatt--	ccaaa-----	ctggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...906...	tcttattg	cag	aacctcgg
D. Moj	ttaaatcg	gtaagctaaaca...34...--caattgt	tgtta-----	ctggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...777...	aatccttt	cag	caacctcgg
D. Per	ttaaaccg	gtaagttataag...43...-----	cctcgaattta--	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...895...	attccttt	cag	aacttcag
D. Pse	ttaaaccg	gtaagttataaa...29...-----	gctcgaattta--	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...901...	attccttt	cag	aacttcgg
D. Vir	ttaaatcg	gtaagacatta...47...-----	tagatttaaatat	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...865...	tactcttt	cag	aacctcgg
D. Yak	ttaaatag	gtaagctccatc...41...---	ttctccttatc----	atggagacg	CCGGg	GTTTGAACCCGG	gacttctcacatg	cgaagcg...1187...	tttatat	tttag	aacatcag
		* * * * *			*****				** **	** * * *	

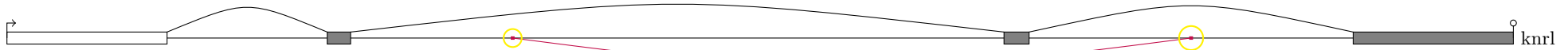
id=59469 gene=FBgn0004919 name=gol segment=chr2R\_20963246\_20964696\_-1 type=IN

D. Mel	ttaaatag	gtgagtcccacc...313...--	tgacaactctgtt	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...1057...	tttatat	tttag	aacatcag
D. Sim	ttaaatag	gtgagtcccca...526...--	tgaaaactctgct	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...1155...	tttatat	tttag	aacatcag
D. Sec	ttaaatag	gtgagtcccca...511...--	tgaaaactctgct	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...1027...	tttatat	tttag	aacatcag
D. Ere	ttaaatag	gtgagtcccatc...846...--	tgcatgaacagct	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...237...	tttatat	tttag	aacatcag
D. Ana	ctgaatcg	gtgagttccaaa...786...--	atcttcgctact	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...185...	tttctctg	cag	gacatccg
D. Gri	ttaaatcg	gtgagtgagcaa...639...--	atctgtaacaat	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...294...	tcttattg	cag	aacctcgg
D. Moj	ttaaatcg	gtaagctaaaca...680...caattattac-	tatggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...131...	aatccttt	cag	caacctcgg	
D. Per	ttaaaccg	gtaagttataag...803...--	actgttttatat	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...135...	attccttt	cag	aacttcag
D. Pse	ttaaaccg	gtaagttataaa...795...--	actgttttatat	ggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...135...	attccttt	cag	aacttcgg
D. Vir	ttaaatcg	gtaagacatta...756...--	ttaagcaca	aatggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...156...	tactcttt	cag	aacctcgg
D. Yak	ttaaatag	gtaagctccatc...871...--	cctttaa	cagatggagacg	CCGGg	TTTGAACCCGG	gacttctcacatg	cgaagcg...357...	tttatat	tttag	aacatcag
		* * * * *			*****				** **	** * * *	

id=59469 gene=FBgn0004919 name=gol segment=chr2R\_20963246\_20964696\_-1 type=IN VIEW

Figure 344: CS=15.4





```

D.Mel  catatgcg gtaag-caatctg...3355...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1557...ctgccattccag atgaatca
D.Sim  catatgcg gtaag-caatctg...3374...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1538...ttgccattccag atgaatca
D.Sec  catatgcg gtaag-caatctg...3369...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1543...ttgccattccag atgaatca
D.Ere  cgtatgcg gtaag-caatctg...3426...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1486...tgtccattccag atgaatca
D.Ana  catatgcg gtaag-cgatctc...3590...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1322...gttcctttgcag atgaatca
D.Gri  catatgcg gtaagttaagct...4761...-----gtagatgctcgtgtcatgat-----TTGCTGTTGCTTTT--aattgaaattttatgaattt...150...cattctctgcag atgaatca
D.Moj  cgtatgcg gtaagtcaagct...3085...-----gtgctttct-ctactttgtaaTGTGCC-AATTGT--ttggacagatgggaaaaatt-----...1828...gtttcttttcag atgaatca
D.Pse  catacgcg gtaag-ctctcac...4755...gcttcgagctctagatgctc-----GTGTCATGATTtGCTGttg--cttttaattgaaatttt-----...154...ttctcattgcag atgaatca
D.Vir  cgtatgcg gtaagtcaagct...4783...--agagcgcaagatgctcgtgt-----CATGatTTGCTGTTGC--atttaattgaaattttatga----...126...catgcttttcag atgaatca
D.Wil  catatgcg gtaagtttcaat...4746...cttggagagagaagatgctc-----GTGTCAAtGATTtGCTGttg--cttttaattgaaatttt-----...163...ctctttctacag atgaatca
D.Yak  catatgcg gtaag-caatctg...3378...-----tgctttctcctactttgtaaTGTGCCAAATTGT--ttg--tggcccgcaagaattat-----...1534...ttgccattgcag atgaatca
* ** *** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

```

id=94395 gene=FBgn0001323 name=knrl segment=chr3L\_20595371.20610487.-1 type=IN

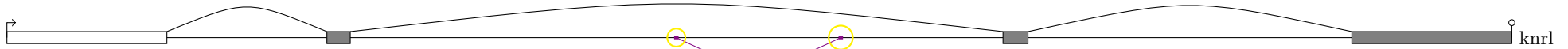
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D.Mel  gctgcaag gtgagttcgatg...1489...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...646...-ttcgcattacag tccttctt
D.Sim  gctgcaag gtgagttcgatg...1566...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...610...-ttcgcattacag tccttctt
D.Sec  gctgcaag gtgagttcgatg...1564...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...573...-ttcgcattacag tccttctt
D.Ere  gctgcaag gtgagttcgatg...1592...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...607...-ctcgcattacag tccttctt
D.Ana  gttgtaag gtgagttcagtt...1441...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...576...-tttattttttag tccttctt
D.Gri  gttgcaag gtgagtagaggt...421...acaacaacaacaacaacagc---AAAAGCAACAGCAG-----caacaataacagcaacaata...1920...ctct-ctttgcag tccttctt
D.Moj  gatgtaag gtgagtaaaaggc...1673...tgtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...1185...-tctactttgcag tccttctt
D.Pse  gctgcaag gtgagttggtat...1623...--ttccatttccatttccgaccCAGTAATCtTGATGCccaattaaccttaaaagtgg----...1501...-ttccggtttcag tcggttctt
D.Vir  gttgtaag gtgagtacaagt...1407...--ctttgccacagctgatggca--GCAACAGCAACATG--ttgtagcctttttctgtgccc---...1018...ctctac-ttgcag tccttctt
D.Wil  gctgtaag gtaagtcaaatt...1258...--ctccgtttccatttccgaccCAGTAATCtTGATGCccaattaaccttaaaagtgg----...1970...-tgtcttttacag tccttctt
D.Yak  gctgcaag gtgagttcgatg...1623...ggtgatttactgccaacatt-----GCAAc-TTGGCATAagtgttgcacagcc-ataacc---...611...-ttcccattacag tccttctt
* ** *** ** ** * ** ** ** ** ** ** ** **

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id=94397 gene=FBgn0001323 name=knrl segment=chr3L\_20593081.20595292.-1 type=IN VIEW

Figure 345: CS=10.56



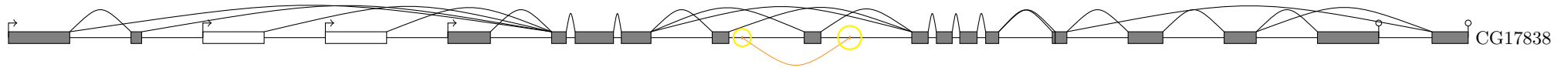
D. Mel	catatgcg	gtaag-caat	atg...4104...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcagc...	806...	ctgccattccag	atgaatca
D. Sim	catatgcg	gtaag-caat	ctg...4115...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcagc...	795...	tgccattccag	atgaatca
D. Sec	catatgcg	gtaag-caat	ctg...4116...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcagc...	794...	tgccattccag	atgaatca
D. Ere	cgtatgcg	gtaag-caat	ctg...4159...	ggcaaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcaac...	751...	gtccattgcag	atgaatca
D. Ana	catatgcg	gtaag-cgat	ctc...4214...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcagc...	696...	gtcctttgcag	atgaatca
D. Gri	catatgcg	gtaagttaag	ct-...4276...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatataaccttgt...	634...	cattctgcag	atgaatca
D. Moj	cgtatgcg	gtaagtcaag	ct-...4208...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatatacagtggt...	702...	gttctttcag	atgaatca
D. Pse	catacgcg	gtaag-ctct	cac...4236...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctgggc...	674...	ttctattgcag	atgaatca
D. Vir	cgtatgcg	gtaagtcaag	ct-...4272...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatatacagtggt...	638...	catgctttcag	atgaatca
D. Wil	catatgcg	gtaagtttca	at-...4137...	ggcaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattcctttggc...	773...	ctctttctacag	atgaatca
D. Yak	catatgcg	gtaag-caat	ctg...4104...	ggcaaattgttgataaacat	TTCGCTCGCA	TAAAta	aaacaaatattccctcaac...	806...	tgccattgcag	atgaatca
	* ** **	*****		****	*****				* **	*****

id=94395 gene=FBgn0001323 name=knr1 segment=chr3L\_20595371\_20610487\_-1 type=IN

D. Mel	catatgcg	gtaag-caat	atg...4680...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	tttagctggcggctggtttt-	230...	ctgccattccag	atgaatca	
D. Sim	catatgcg	gtaag-caat	ctg...4678...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	ttttgctggcggctggtttt-	232...	tgccattccag	atgaatca	
D. Sec	catatgcg	gtaag-caat	ctg...4679...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	ttttgctggcggctggtttt-	231...	tgccattccag	atgaatca	
D. Ere	cgtatgcg	gtaag-caat	ctg...4713...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	ttttgctggcggctttgggg-	197...	gtccattgcag	atgaatca	
D. Ana	catatgcg	gtaag-cgat	ctc...4658...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	tttcgctggcggctgcaatt-	252...	gtcctttgcag	atgaatca	
D. Gri	catatgcg	gtaagttaag	ct-...4689...	actgtgtttgattttaatt	TTTAaTGCGtGTGAA	tttcgctggcggc-gtacttg-	221...	cattctgcag	atgaatca	
D. Moj	cgtatgcg	gtaagtcaag	ct-...4674...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	tttcgctggcggc-gcacttg-	236...	gttctttcag	atgaatca	
D. Pse	catacgcg	gtaag-ctct	cac...4643...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	tttcgctggcggcgtgcagcc-	267...	ttctattgcag	atgaatca	
D. Vir	cgtatgcg	gtaagtcaag	ct-...4705...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	tttcgctggcggc-gcacttg-	205...	catgctttcag	atgaatca	
D. Wil	catatgcg	gtaagtttca	at-...4621...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	ttttgctggcggcagccatt-	289...	ctctttctacag	atgaatca	
D. Yak	catatgcg	gtaag-caat	ctg...4683...	actatgtttgattttaatt	TTTAaTGCGtGTGAA	ttttgctggcggctggtcct-	227...	tgccattgcag	atgaatca	
	* ** **	*****		***	*****				* **	*****

id=94395 gene=FBgn0001323 name=knr1 segment=chr3L\_20595371\_20610487\_-1 type=IN VIEW

Figure 346: CS=10.56



D.Mel	acttacag	gtaaattgcaa...54..gccactcc-gcaatcggcact	AAATTG	TAAACAAAAATCCAATTGG	ctataccaacaacaacatt-----	...1144...	aaacaattgcag	ctaaatga
D.Sec	acttacag	gtaaattgcaa...54..gccactcc-gcaatcggcact	AAATTG	TAAACAAAAATCCAATTGG	ctaaccaacaacaaacatt-----	...1105...	aaacaattgcag	ctaaatga
D.Ere	acttacag	gtaaattaacaa...54..gccactcc-gcaatcggcact	AAATTG	TAAACAAAAATCCAATTGG	ctaaccaacaacattggct-----	...1079...	aaacaattgcag	ctaaatga
D.Ana	acttacag	gtaaattaacaa...43..tcaacttca-taatcggcttt	-----	AAACAAAAATCCAATTGG	cgaa--taca--taattggctaa----	...1071...	aaacaattgcag	ctaaatga
D.Gri	acttacag	gtaaattgaac...107..gtctccaaa-aaatcggcttt	AAATTC	AAACAAAAATCCAATTGG	-----cttacaacaagaattgataa----	...1526...	gaacaattgcag	ctaaatga
D.Moj	acttacag	gtaaattgaac...90..-tatagcaacaatcggcttt	AAATTGT	AAACAAAAATCCAATTGG	ctca---ttaaaactgaattggc-----	...1073...	gaacaattgcag	ctaaatga
D.Pse	acttacag	gtaaattgtcaa...77..atgctccaa-aaatcggcttt	AAATCG	AAACAAAAATCCAATTGG	ctaa---aatggga-aaattggct-----	...1189...	aaacaattgcag	ctaaatga
D.Vir	acttacag	gtaaattgaac...85..-caaaccaa-aaatcggcttta	-----	AAACAAAAATCCAATTGGCTTT	-----aactgaattggctaattgca...	1042...	gaacaattgcag	ctaaatga
D.Wil	acttacag	gtaaattgatac...87..---acttcaacaatcggcattaa	ATTG	AAACAAGAATCCAATTGG	ctaatacacacaacaatg-----	...1406...	aaacaattgcag	ctaaatga
D.Yak	acttacag	gtaaattaacca...39..ggcactcc-gcaatcggcact	AAATTG	TAAACAAAAATCCAATTGG	ctaaccaacaacattggct-----	...1077...	aaacaattgcag	ctaaatga

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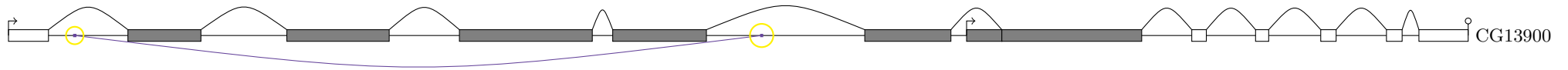
id=60127 gene=FBgn0038826 name=CG17838 segment=chr3R.16619574\_16620860\_1 type=IN

D.Mel	acatgcac	gtaagtgatcca...186..gaagcctaca-aaaagaagta	-----	TGCAATTG	TCGATTGGATTTTGTtTGCAATTT	tcgcttttaaatgccatat...1593...	ctgaacctatag	ctggccta
D.Sec	acatgcac	gtaagtgatcca...176..gaagcctaca-aaaagaagta	-----	TGCAATTG	TCGATTGGATTTTGTtTGCAATTT	tcgcttttaaatgctaac...1611...	ctgaacctatag	ctggccta
D.Ere	acatgcac	gtaagtgatcca...164..gaagcctaca-aaaagaagta	-----	TGCAATTG	TCAATTGGATTTTGTtTGCAATTT	tcgcttttaaatgctacac...1580...	ctgaacctatag	ctggccta
D.Ana	acatgcac	gtaagtgatcca...197..gaagcctatg-aaacgaagta	-----	TGCAATTG	TCAATTGGATTTTGTtTGCAATTT	tcgcttttaaatgcttaaaa-----	...1736...	ctgaacctatag
D.Gri	acatgcac	gtaagtgatcca...185..-----caatt---a-aagattt-aattaa	-----	TGCAATTG	TTAATTGGATTTTGTtTGCAATTT	tcgcttttaaaaggcttcc-...1629...	atagtgtatag	ctggcctc
D.Moj	acatgcac	gtaagtgatcca...208..-----gctg---cagcagcaacaagta	-----	TGCAATTG	CTAATTGGATTTTGTtTGCAATTT	tcgcttttaaaattcttca...1496...	caaaattcgtag	ctggcctc
D.Pse	acatgcac	gtaagtgatcca...254..-aagcctgtttatgccaagta	-----	TGCAATTG	TCAATTGGATTTTGTtTGCAATTT	tcgcttttaaaacgcttaaa...1801...	ctgaacctatag	ctggcctc
D.Vir	acatgcac	gtaagtgatcca...182..aaaacaactg---cagcagcaac-AAAGC	at	TAATTGG	TAATTGGATTTTGTtTGCAATTT	gcaattttcgcttttaaaaa-----	...1493...	acaattcgtag
D.Wil	acatgcac	gtaagtgatcca...232..-----atg---atgaagtattgaagtaa	-----	TGCAATTG	CTAATTGGATTTTGTtTGCAATTT	gCAATattcgcttttaaaaaaatg--	...2092...	ctgaaaatgtag
D.Yak	acatgcac	gtaagtgatcca...180..gaagcctaca-aaaagaagta	-----	TGCAATTG	TCAATTGGATTTTGTtTGCAATTT	tcgcttttaaatgctaata...1526...	atgaacctatag	ctggccta

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id=60129 gene=FBgn0038826 name=CG17838 segment=chr3R.16620997\_16622865\_1 type=IN VIEW

Figure 347: CS=14.5



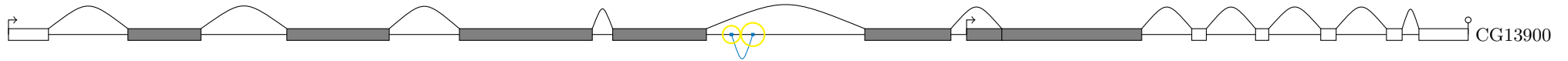
D.Me1	agccgaag	gtaaacaatac...48...-gtatctccagaa-atcagaaa	TGCTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...158...cttctcttgac	tcgtggac			
D.Sim	ggccaaag	gtaaacaatac...48...-gtatctccagaa-atcagaaa	TGCTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...143...cttctcttgac	tcgtggac			
D.Sec	ggccaaag	gtaaacaatac...48...-gtatctccagaa-atcagaaa	TGCTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...143...cttctcttgac	tcgtggac			
D.Ere	ggcagaag	gtaagcaaatac...48...-gtatctccagaa-atcagaaa	TGCTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...156...actctcttgac	ttgtggac			
D.Ana	agccaaag	gtaaacaatac...45...-gtatctccagaa-atcagaaa	ATGTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...149...ctttcttgac	ttttggga			
D.Moj	agcaaaag	gtaattaactaa...49...-gtatctccagaa-atcagaaa	ATGTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...156...tctgcagtgc	ctgtgtag			
D.Per	gggaaaag	gtagctattgga...46...-gtatctccagaa-atcagaaa	ATGTCTGTG	CTTTGG	tcgca-aattaagcgtgctaa...157...acctcttgac	ctttggtt			
D.Pse	gggaaaag	gtagctattgga...46...-gtatctccagaa-atcagaaa	ATGTCTGTG	CTTTGG	tcgca-aattaagcgtgctaa...156...acctcttgac	ctttggtt			
D.Vir	agcaaaag	gtaataatcttt...51...-gtatctccagaa-acagcagaaa	ATGTCTGTG	GTTTGG	tcgcatttttaaccgtgctaa...151...tttttccgtag	gcttaaaa			
D.Yak	agcagaag	gtaaggaattac...48...-gtatctccagaa-atcagaaa	TGCTCTGTG	CTTTGG	tcgca--tttgaagcgtgctaa...158...tctccattgc	ttgtggac			
	*	***	***	*	*****	* * * * *	** * * * *	* * * * *	* * * * *

id=97361 gene=FBgn0035162 name=CG13900 segment=chr3L.832976.833259\_-1 type=I5

D.Me1	agctgatg	gtgagtgtgtct...151...ttctctcttatttcaggcgc	TTAAACACAGACG	-----gcaata--tgtgtgaactatcg--...338...cctatttttag	acgagt	
D.Sim	agctgatg	gtgagtgtctgc...149...ttctctcttatttcaggcgc	TTAAACACAGACG	-----gcaata--tgtgtgaactatcg--...330...ccctatttttag	acgagt	
D.Sec	agctgatg	gtgagtgtctgc...149...ttctctcttatttcaggcgc	TTAAACACAGACG	-----gcaata--tgtgtgaactatcg--...335...ccctatttttag	acgagt	
D.Ere	agctgatg	gtgagtgtctag...150...ttctctcttatttcaggcgc	TTAAACACAGACG	-----gcaata--tgtgtgaactatcg--...326...ccctatttttag	acgagt	
D.Ana	agctgatg	gtgaggaagaat...151...ttctctcttatttcaggcgc	TTAAACACAGACG	-----caag--tgtgactatcgaaaga...325...cgctatttttag	acgagt	
D.Moj	cattgatg	gtgagtcgaaat...323...ttctctcttatttcaggcgc	TTAAACACAGACG	-----ctac--tgtttgtgtgtgact...330...tcctacttttag	acgagt	
D.Per	agctgatg	gtgagtttcgta...151...ttctctcttatttcaggcgc	TTAAACACAGACG	cagtcctgcaac--tgttt--tgt--...402...ccctacttttag	acgaattc	
D.Pse	agctgatg	gtgagtttcgta...151...ttctctcttatttcaggcgc	TTAAACACAGACG	cagtcctgcaac--tgttt--tgt--...404...ccctacttttag	acgaattc	
D.Vir	cattgatg	gtgagtttaagaa...329...ttctctcttatttcaggcgc	TTAAACACAGACG	-----caac--tgtttgtgtgtgta...331...tcctacttttag	acgaattt	
D.Yak	agctgatg	gtgagtgctccac...156...ttctctcttatttcaggcgc	TTAAACACAGACG	-----gcaatg--tgtgtgaactatcg--...338...ccctacttttag	acgagt	
	***	*****	*****	*****	*****	*****

id=97369 gene=FBgn0035162 name=CG13900 segment=chr3L.830342.830907\_-1 type=IN VIEW

Figure 348: CS=6



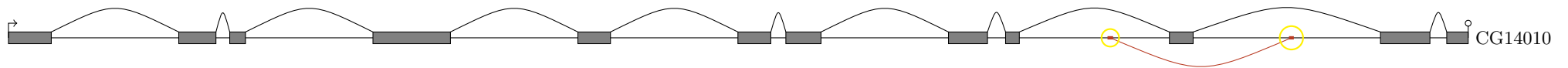
D. Mel	agctgatg	gtgagtgtct...	43...	tgaaacgtggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..443...	cctatttttag	acgagttt			
D. Sim	agctgatg	gtgagtgtctgc...	41...	tgaaacgtggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..435...	ccctatttttag	acgagttt			
D. Sec	agctgatg	gtgagtgtctgc...	41...	tgaaacgtggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..440...	ccctatttttag	acgagttt			
D. Ere	agctgatg	gtgagtgtctag...	42...	tgaaacgtggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..431...	ccctacttttag	acgagttt			
D. Ana	agctgatg	gtgaggaagaat...	40...	tgagaatggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..434...	cgctatttttag	acgagttc			
D. Gri	catagatg	gtgagtcgaaca...	64...	tgaaatgtttctaataattc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	-----acagaacacgataccccaag..	670...	cctatttctag	acgagttt			
D. Moj	cattgacg	gtgagtcgaat...	61...	tgaaatatttctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	-----acagaacacgataccccaag..	588...	tcctacttttag	acgagttt			
D. Per	agctgatg	gtgagtttcgta...	47...	aaggatcgtttctctaactc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	-----gatatagaatacagctagct---	502...	ccctacttttag	acgaattc			
D. Pse	agctgatg	gtgagtttcgta...	47...	aaggatcgtttctctaactc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	-----gatatagaatacagctagct---	504...	ccctacttttag	acgaattc			
D. Vir	cattgatg	gtgagttaagaa...	55...	tgaaatgtttctaataattc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	-----actgaacacgataccccaag..	601...	tcctacttttag	acgaattt			
D. Wil	tgttgacg	gtgagtagaaag...	89...	atgattccctctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATGAT</b>	--atgagagattgattcaaat-----	592...	aactacttttag	acgaattt			
D. Yak	agctgatg	gtgagtgccac...	48...	tgaaacgtggctaataactc	<b>AACTGGTG</b>	ca	<b>TTGATA</b>	cagatcgagatatagattac-----	..443...	ccctacttttag	acgagttc			
		** *	*****		***	*****			*	*	**	***	****	**

id=97369 gene=FBgn0035162 name=CG13900 segment=chr3L.830342.830907\_-1 type=IN

D. Mel	agctgatg	gtgagtgtct...	118...	--tccaa-acaagtcccacaagt	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	369...	cctatttttag	acgagttt		
D. Sim	agctgatg	gtgagtgtctgc...	116...	--tccaa-acaagtcccacaagt	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	361...	ccctatttttag	acgagttt		
D. Sec	agctgatg	gtgagtgtctgc...	116...	--tccaa-acaagtcccacaaga	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	366...	ccctatttttag	acgagttt		
D. Ere	agctgatg	gtgagtgtctag...	117...	--tccaa-acaagtcccacaagt	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	357...	ccctacttttag	acgagttt		
D. Ana	agctgatg	gtgaggaagaat...	118...	--tccca-acaagtcccacaaga	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctctgttttcaggcgctt...	357...	cgctatttttag	acgagttc		
D. Gri	catagatg	gtgagtcgaaca...	355...	-cacgatccaaaagccacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	380...	cctatttctag	acgagttt		
D. Moj	cattgacg	gtgagtcgaat...	288...	acacgat-ccaaaagccacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	362...	tcctacttttag	acgagttt		
D. Per	agctgatg	gtgagtttcgta...	116...	attccaa-acaagtcccacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	434...	ccctacttttag	acgaattc		
D. Pse	agctgatg	gtgagtttcgta...	116...	attccaa-acaagtcccacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	436...	ccctacttttag	acgaattc		
D. Vir	cattgatg	gtgagttaagaa...	294...	accgat-ccaaaagccacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	363...	tcctacttttag	acgaattt		
D. Wil	tgttgacg	gtgagtagaaag...	154...	acacaaa-ataccatcgacaa	<b>GTTATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	528...	aactacttttag	acgaattt		
D. Yak	agctgatg	gtgagtgccac...	123...	--tccaa-acaagtcccacaagt	<b>TATCAA</b>	<b>CACCAGTT</b>	ctctcttatttcaggcgctt...	369...	ccctacttttag	acgagttc		
		** *	*****		*	*	*****	*****	**	***	****	**

id=97369 gene=FBgn0035162 name=CG13900 segment=chr3L.830342.830907\_-1 type=IN VIEW

Figure 349: CS=7.2



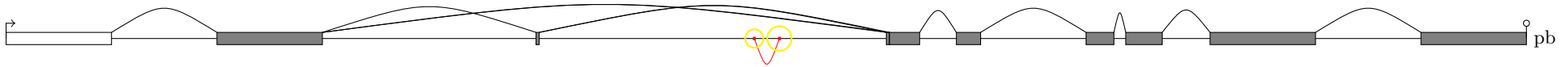
D. Mel	gcacaaaag	gtgagtgtggca...	306...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtgaat...	196...	ctcgtt-gcacag	gcaaaaaag
D. Sim	gcacaaaag	gtgagtgtggca...	312...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtgaat...	181...	ctcgtt-gcacag	gcaaaaaag
D. Sec	gcacaaaag	gtgagtgtggca...	312...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtgaat...	192...	ctcgtt-gcgcag	gcaaaaaag
D. Ere	gcacaaaag	gtgagtggcagt...	259...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtgaat...	185...	ctcgtt-gcgcag	gcaaaaaag
D. Ana	acacaaaag	gtgagtctgaga...	226...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtggaat...	273...	-tctcgttcacag	gcaaaaaag
D. Gri	tcacaaaag	gtaagtcaaaaat...	466...	cataaataattc	catttggca	TGCAAAAT	CGTT	tcAAAT	TGTCa	acgccacgaac	caggtgaag...	203...	-aaaaaacacag	gcaaaaaag
D. Per	acacaaagg	gtaagtgttaac...	224...	cataaataattc	cattcggca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacgaat	caggtgaat...	216...	tccatt-gcacag	gcaaaaaag
D. Pse	acacaaagg	gtaagtgttaac...	221...	cataaataattc	cattcggca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacgaat	caggtgaat...	216...	tccatt-gcacag	gcaaaaaag
D. Wil	acataaag	gtaagcttaact...	854...	cataaataattc	catttggca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacgaat	caggtgaat...	250...	-tgttggacacag	gaaaaaag
D. Yak	gcacaaaag	gtgagtggcaca...	265...	cataaataattc	catacgcca	TGCAAAAT	CGTT	tcAAAT	CGTCA	acgccacggat	caggtgaat...	174...	-tcgttggcgcag	gcaaaaaag
	** ** *	** ** *		*****	*	*****	*****	*****	*	*****	*	** ** *	* ** *	*****

id=106085 gene=FBgn0031725 name=CG14010 segment=chr2L.5604002.5604590\_-1 type=IN

D. Mel	aaggaaaag	gtaagagagcgg...	336...	acacgctcggctt	ggcatta	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ccacaatcaaa...	315...	ctcttccgcag	ccgatttg
D. Sim	aaggaaaag	gtaagagagcgg...	338...	acacgctcggctt	ggcattg	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ccacaatcaaa...	330...	cttttccgcag	ccgatttg
D. Sec	aaggaaaag	gtaagagagcgg...	338...	acacgctcggctt	ggcattg	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ccacaatcaaa...	318...	ctcttccgcag	ccgatttg
D. Ere	aagaaaaag	gtaagagagtaa...	332...	acacgctcggctt	ggcatta	TGGC	ATTTAATGATTTGTA	aaatacttgg---	cgcaatcaaa...	347...	ctcttccgcag	ccgatttg
D. Ana	gagaaaaag	gtaagaagcgga...	330...	acacgctcggctt	ggcattt	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ccacaatcaaa...	379...	ttcttccgcag	ccgatttg
D. Gri	gcgaaaaag	gtaagccaagtc...	442...	acacgctcggctt	ggcattt	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ctacaatcaaa...	643...	cctctccgcag	ccgatttg
D. Per	gagaaaaag	gtaagagagaga...	341...	acacgctcggctt	ggcattt	TGGC	ATTTAATGATTTGTA	aaatacttggggcccaatc---	313...	cacccacacag	ccgatttg	
D. Pse	gagaaaaag	gtaagagagaga...	359...	acacgctcggctt	ggcattt	TGGC	ATTTAATGATTTGTA	aaatacttggggcccaatc---	313...	cacccacacag	ccgatttg	
D. Wil	acgaaaaag	gtgagtccaaga...	364...	acacgctcggctt	ggcattt	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ctacaatcaaa...	886...	tctcttcacag	ctgatttg
D. Yak	aagaaaaag	gtaagagaaga...	357...	acacgctcggctt	ggcatta	TGGC	ATTTAATGATTTGTA	aaatacttgg---	ccacaatcaaa...	344...	ctcttccgcag	ccgatttg
	* ** ** *	** ** *		*****	*	*****	*****	*****	*	*****	* ** ** *	*****

id=106087 gene=FBgn0031725 name=CG14010 segment=chr2L.5603174.5603908\_-1 type=IN VIEW

Figure 350: CS=11.8



D.Mel	ctccatta	gtaagtacttac...	3399...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1511...	tctcaattgcag	ctgaattc
D.Sim	ctccatta	gtaagtacttac...	3468...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1442...	tctcaattgcag	ctgaattc
D.Sec	ctccatta	gtaagtacttac...	3437...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1473...	tctcaattgcag	ctgaattc
D.Ere	ctccatta	gtaagtacttac...	3312...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1598...	tctcaattgcag	ctgaattc
D.Ana	ctccataa	gtaagtagtgcc...	3546...	ttgctgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1364...	tctcaattgcag	ctgaattc
D.Gri	ctccataa	gtaagtacaaat...	2771...	ctgctcgtcgtgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	2139...	tttcaattgcag	ctgaattc
D.Per	ctccataa	gtaagtacttcc...	2998...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1912...	tctcaattgcag	ctgaattc
D.Pse	ctccataa	gtaagtacttcc...	2986...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1924...	tctcaattgcag	ctgaattc
D.Vir	ttccataa	gtaagtacaatt...	2900...	ctgctcgtcgtgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	2010...	tttcaattgcag	ctgaattc
D.Wil	ctccataa	gtaagctttgta...	2522...	ttgctcgtcgtgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	2388...	tctcaattgcag	ctgaattc
D.Yak	ctccatta	gtaagtacttat...	3281...	ttgcttgctgctgcgcaaaaa	GGAAAtCATA	TTTC	tgctttgtgcactttactt...	1629...	tctcaattgcag	ctgaattc
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id=131916 gene=FBgn0051481 name=pb segment=chr3R.2537673.2552939\_-1 type=IN

D.Mel	ctccatta	gtaagtacttac...	3518...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1392...	tctcaattgcag	ctgaattc
D.Sim	ctccatta	gtaagtacttac...	3587...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1323...	tctcaattgcag	ctgaattc
D.Sec	ctccatta	gtaagtacttac...	3556...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1354...	tctcaattgcag	ctgaattc
D.Ere	ctccatta	gtaagtacttac...	3431...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1479...	tctcaattgcag	ctgaattc
D.Ana	ctccataa	gtaagtagtgcc...	3656...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1254...	tctcaattgcag	ctgaattc
D.Gri	ctccataa	gtaagtacaaat...	2907...	tttggttgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	2002...	tttcaattgcag	ctgaattc
D.Per	ctccataa	gtaagtacttcc...	3159...	ttcggctgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1751...	tctcaattgcag	ctgaattc
D.Pse	ctccataa	gtaagtacttcc...	3147...	ttcggctgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1763...	tctcaattgcag	ctgaattc
D.Vir	ttccataa	gtaagtacaatt...	3051...	tttggttgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1858...	tttcaattgcag	ctgaattc
D.Wil	ctccataa	gtaagctttgta...	2692...	gttggttgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	2218...	tctcaattgcag	ctgaattc
D.Yak	ctccatta	gtaagtacttat...	3410...	ttcgggtgcaacttttgtgc	GAAAttTATG	TTTC	--gttcggtatcgtatctggg...	1500...	tctcaattgcag	ctgaattc
	**** *	*****		**	*****		** *	*	*****	*****

id=131916 gene=FBgn0051481 name=pb segment=chr3R.2537673.2552939\_-1 type=IN VIEW

Figure 351: CS=10.56



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D.Sim	caatcagg	gtgagtccacat...4123...aggctagacgctattatttc-----	CGACAGCATgATTtatttgc	ccctgccc	catc-----	...788...ttctcg	tttcag	gtgataac	
D.Sec	caatcagg	gtgagtccacat...4128...aggctagacgctattatttc-----	CGACAGCATgATTtatttgc	ccctgccc	catc-----	...783...ttctcg	tttcag	gtgataac	
D.Ere	caatcagg	gtgagtccacat...4136...aggctagacgctattatttc-----	CGACAGCATgATTtatttgc	ccttgccc	catc-----	...775...ttctcg	tttcag	gtgataac	
D.Ana	caatcaga	gtaagttcataa...3583...-----tgcgtttc	gtgcaagag	GGGTGGGAAAA	ctGTCAGAATGAAT	-gagtagccc	ggc	cacaccta-----	
D.Moj	caatcagg	gtgagtccaaa...2521...-aaattgcgttt-	tgtgcaaga	GTGGGTggGAAA	acTGCAGAATGAAT	-gagtagact	ggt	cacacct-----	
D.Per	taatcagg	gtgagtccaaga...3294...-----tgcgtttc	gtgcaagag	GGGTGGGAAAA	ctGTCAGAATGAAT	-gagtagcat	ggt	cacaccta-----	
D.Pse	taatcagg	gtgagtccaaga...3267...-----tgcgtttc	gtgcaagag	GGGTGGGAAAA	ctGTCAGAATGAAT	-gagtagcat	ggt	cacaccta-----	
D.Vir	caatcagg	gtaagtacctc...2996...-aaattgcgttt-	tgtgcaaga	GTGGGTggGAAA	acTGCAGAATGAAT	-gagtagact	ggt	cacacct-----	
D.Yak	caatcagg	gtaagtccatac...3334...acaattgcgtttc	gtgcaagag	GAGAGTGGGTGG	gaAAACTGTCAGAATga	ATGAGT	-agccc	ggc	cacacctactcc...1556...cctcttttcag
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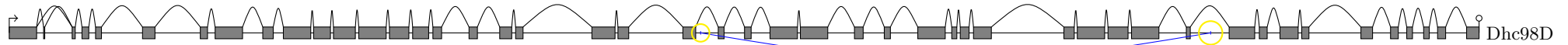
id=131914 gene=FBgn0051481 name=pb segment=chr3R.2552955\_2565271.-1 type=IN

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D.Sim	ctccatta	gtaagtacttac...2867...---gcgttta	agtgttaacatgt-----	AAATgATGCTGTTG	-----	aagcag	ttaataaggtgtatg--	...2044...tctcaattgcag	ctgaattc
D.Sec	ctccatta	gtaagtacttac...2834...---gcgttta	agtgttaacatgt-----	AAATgATGCTGTTG	-----	aagcag	ttaataaggtgtatg--	...2077...tctcaattgcag	ctgaattc
D.Ere	ctccatta	gtaagtacttac...2697...---gcgttta	agtgttaacatgt-----	AAATgATGCTGTTG	-----	aagcag	ttaataaggtgtatg--	...2214...tctcaattgcag	ctgaattc
D.Ana	ctccataa	gtaagtagtgcc...3158...---ggtcggtag-	tttgctgataa-----	GTTTcCATTTTGACTTTTCC	ggCAATT	catccat	gctgatgacattt-----	...1740...tctcaattgcag	ctgaattc
D.Moj	ctccataa	gtaagttgaaac...2568...---gctgata	agtttctgttacgt-----	TTTTGacTTTTcc	GGCATTTCATCCAT	gctgat	gacatttccaatgc...2331...tttcaattgcag	ctgaattc	
D.Per	ctccataa	gtaagtacttcc...2567...---gttttagt	ttttgctgataa-----	GTTTcCATTTTGACTTTTCC	ggCAATT	catccat	gctgatgacattt-----	...2331...tctcaattgcag	ctgaattc
D.Pse	ctccataa	gtaagtacttcc...2561...---gttttagt	ttttgctgataa-----	GTTTcCATTTTGACTTTTCC	ggCAATT	catccat	gctgatgacattt-----	...2337...tctcaattgcag	ctgaattc
D.Vir	ttccataa	gtaagtacaatt...2529...---gctgata	agtttctgttacgt-----	TTTTGacTTTTcc	GGCATTTCATCCAT	gctgat	gacatttccaatgc...2370...tttcaattgcag	ctgaattc	
D.Yak	ctccatta	gtaagtacttat...2911...gcagctg	caaagatccttcGCTCGTg	GTTTgCTGATA	aGTTTCCATCCtg	ACTTTT	ccggcatttcatccatgctg-----	...1977...tctcaattgcag	ctgaattc
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id=131916 gene=FBgn0051481 name=pb segment=chr3R.2537673\_2552939.-1 type=IN VIEW

Figure 352: CS=10.8





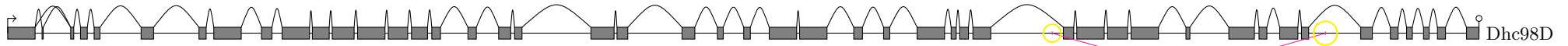
D.Mel	tcattaag	gtgggtatcggg...34...-----ttggtgggtgtgctgcctt	TTGGTggTGACAA	AACAGatTTGC	caaactgccagcgacattat-----	..288...	ttcaattttcag	atgtacga
D.Sim	tcattaag	gtgggtatcggg...34...-----ttggtgggtgtgctgcctt	TTGGTggTGACAA	AACAGatTTGC	caaactgccagcgacattat-----	..291...	tgcaattttcag	atgtacga
D.Sec	tcattaag	gtgggtatcggg...34...-----ttggtgggtgtgctgcctt	TTGGTggTGACAA	AACAGatTTGC	caaactgccagcgacattat-----	..283...	tgcaattttcag	atgtacga
D.Ere	tcattaag	gtgggtatcggg...44...-----gttggtgggtgtgctgcctt	TTGGTggTGACAA	AACAGatTTGC	caaactgccagcgacattat-----	..268...	tgcaattttcag	atgtacga
D.Gri	tcattaag	gtgggttgaagt...29...-tgtcagtggtgatgggtg-----	TGACAA	AACAGatTTGCTAAACT	gccagcaacattatTTTTAT..	..228...	ccgcatccgag	atgtacga
D.Moj	tcattaag	gtgggtcgaagt...46...--gcagt-tgggtggagatgagt-----	CTGACAA	AACAGatTTGCTAAACT	gccagccacattatTTTTAT..	..243...	ccgcttcgag	atgtacga
D.Per	tcattaag	gtgggtacaaaa...86...-tggggccttggttcggtttt-----	CTGGTgACAA	AACAGatTTGC	caaactgccagcgacattat-----	..309...	cccgttcacag	atgtacga
D.Pse	tcattaag	gtgggtacaaaa...86...-tggggccttggttcggtttt-----	CTGGTgACAA	AACAGatTTGC	caaactgccagcgacattat-----	..309...	cccgttcacag	atgtacga
D.Vir	tcattaag	gtgggttgaagt...31...-tctgtgtggttatgagtg-----	TGACAA	AACAGatTTGCTAAACT	gccagcaacattatTTTTAT..	..226...	ccgcatccgag	atgtacga
D.Wil	tcattaag	gtgggtactatt...191...aagttaatgtcactgtttat-----	ACGTTCTGGCC	AAATG	-----tccagggaatggcgaaat..	..188...	gacttttcgag	atgtacga
D.Yak	tcattaag	gtgggtatcggg...35...-----gttggtgggtgtgctgcctt	TTGGTggTGACAA	AACAGatTTGC	caaactgccagcgacattat-----	..290...	tgcaatttcag	atgtacga
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id=123405 gene=FBgn0013813 name=Dhc98D segment=chr3R.24327077\_24327487\_1 type=IN

D.Mel	cattccag	gcaagtgtctgcg...324...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-catgcttggcagttatccta-----	..299...	tctccccacag	aaattaat
D.Sim	cattccag	gcaagtgtctgcg...311...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-catgcttggcagttatccta-----	..299...	tctccccacag	aaattaat
D.Sec	cattccag	gcaagtgtctgcg...317...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-catgcttggcagttatccta-----	..299...	tctccccacag	aaattaat
D.Ere	cattccag	gcaagtgtctgcg...323...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-catgcttggcagttatccta-----	..299...	tctccccacag	aaattaat
D.Gri	cattccag	gcaagtgtctgcg...260...tggcgcacatTTCTgctca	AGTTatTAGCAGcCTGTTt	TTGTCA	-----gccagtatggttgaatctgt-----	..313...	cttccaccag	aaattgct
D.Moj	cattccag	gcaagtgtccact...261...tggcgcacatTTCTgctca	AGTTatTAGCAGcCTGTTt	TTGTCA	-----ccagcatagctgtatctagc-----	..295...	gtctaccacag	aaattgct
D.Per	cattccag	gcaagtgtccggg...295...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-----ctctctctcaagttatccta-----	..389...	ccgcccccttag	aaactggt
D.Pse	cattccag	gcaagtgtccggg...306...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTgaGCCAG	-----ctctctctctctcgaagt..	..391...	ccgcccccttag	aaactggt
D.Vir	cattccag	gcaagtgtccgct...269...tggcgcacatTTCTgctca	AGTTatTAGCAGcCTGTTt	TTGTCA	-----gccagcatggtgtatcttt-----	..281...	ctctaccacag	aaactgct
D.Wil	cattccag	gcaagtgtgagat...109...ccaagagtgtgctctgtgc-----	CGTTGCCA	ttGAGCGT	tattggatttcgactttat-----	..559...	ttgcatccttag	aaattaat
D.Yak	cattccag	gcaagtgtctgcg...335...-----attttcctctcaagttatta	GCAGcCTGTTt	TTGTCAGCCAG	-catgcttggcagttatccta-----	..299...	tctccccacag	aaattaat
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id=123435 gene=FBgn0013813 name=Dhc98D segment=chr3R.24339211\_24339919\_1 type=IN VIEW

Figure 353: CS=6.6



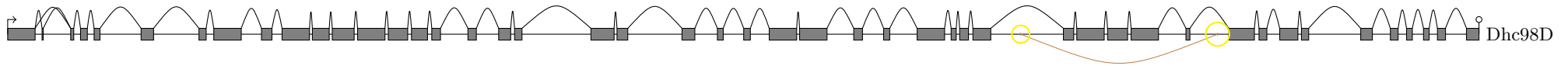
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D.Sim	tttttaag	gtaagttttaag...	1221...	ctgggtcggcgactgcaact	TGATAATGGCTGtaAATT	cagcaacttggcagtgctccc...	170...	cctgattcccag	atggtgat
D.Sec	tttttaag	gtaagttttaag...	1214...	ctgggtcggcgactgcaact	TGATAATGGCTGtaAATT	cagcaacttggcagtgctccc...	174...	cctgattcccag	atggtgat
D.Ere	ttttcaag	gtaagtataacc...	1170...	tgggtcggcgactgcaactc	GATAATGGCTGtaAATT	cagcaacttggcagtgctccc...	158...	cctgattcccag	atcgtgat
D.Ana	tgtttaag	gtatgttcaaga...	1302...	---agcggcggtgcaactc	AATGGCTGtaAATT	cagcaacttggcaactgccc...	153...	cctgacccgcag	atggtaat
D.Moj	tattcaag	gtaagtattoga...	1045...	agctgggtggcggtgcaact	TGATAATGGCTGtaAATT	caagtgaacgcaagtcgtcc...	169...	tcgcctctttag	atggttat
D.Per	tattcaag	gtgggttcttgg...	1077...	ctgtggcag-ggctgcaactc	GATAATGGCTGtaAATT	cagcaacttggcaatgctccc...	220...	tctctcccacag	atggtaat
D.Pse	tattcaag	gtgggttcttgg...	1066...	ctgtggcag-ggctgcaactc	GATAATGGCTGtaAATT	cagcaacttggcaatgctccc...	220...	gctctcccacag	atggtaat
D.Vir	tattcaag	gtttgatattta...	4751...	-aggtcggcgcaactgcagctc	GATAATGGCTGtaAATT	tagctgaatgcaagttgtcc...	157...	cgggcccgcag	atggtcat
D.Wil	tattcaag	gtgagttcagat...	1092...	-tgcgccggcgtctgcaactc	GATAATGGCTGtaAATT	cagcaacttggcctgcact...	152...	tcttccatttag	ttggtcat
D.Yak	ttttcaag	gtaagttagccc...	1242...	-tgggtcggcgactgcaactc	GATAATGGCTGtaAATT	cagcaacttggcagtgctccc...	164...	cctgattcccag	atcgtgat
		* * * * *	** *	*	***** ** ***** *	*	*	**	* * * *

id=123425 gene=FBgn0013813 name=Dhc98D segment=chr3R.24333214\_24334636.1 type=IN

D.Mel	acagacgg	gtaagtggatgg...	257...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1253...	tgggtgatccag	gtgagggga
D.Sim	acagacgg	gtaagtggatgg...	246...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATTA	acattttatcttgttgattt...	1251...	tgggtgatccag	gtgagggga
D.Sec	acagacgg	gtaagtggatgg...	239...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATTA	acattttatcttgttgattt...	1244...	tgggtgatccag	gtgagggga
D.Ere	gcagacgg	gtaagtggatga...	236...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1250...	cgctgctccag	gagggga
D.Ana	gcaaacgg	gtgagtagccga...	238...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1310...	tgcttcatccag	gtgaggggt
D.Moj	gcaaacgt	gtgagtgactgg...	455...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATTA	acattttatcttgttgattt...	1321...	tttcccattcag	gtgagggc
D.Per	gcagactg	gtgagtagtggc...	231...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1585...	tgccccatgcag	gaggggt
D.Pse	gcagactg	gtgagtagtggc...	237...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1630...	tgccctatgcag	gaggggt
D.Vir	acaaactg	gtgagtgactgg...	472...	acatacatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1473...	tcctccatttag	gtgaggggt
D.Wil	acaaactg	gtgagtgacttaa...	214...	atgtgcatgcaacgtatgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	2245...	cgccctcctag	gtgagggc
D.Yak	gcaaacgg	gtaagtggatgg...	262...	atgtgcatgcaacgtgtgcc	AATTgtCAGCCGTTTATT	acattttatcttgttgattt...	1289...	tgggtgatccag	gtgagggga
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Figure 354: CS=8.58



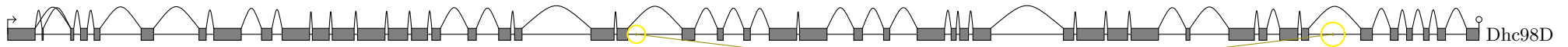
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D.Sim	tttttaag	gtaagttttaag...	551...	tcaatctcgtagctgctcca	TTGGTt	TTTCGAGTGC	--aactcagtgccgtagtcgcc...	842...	cctgattcccag	atggtgat
D.Ere	ttttcaag	gtaagtataacc...	502...	tcaatctcgtagctgctcca	TTGGTt	TTTCGAGTGC	--aactcagtgccgtagtcgcc...	827...	cctgattcccag	atcgtgat
D.Ana	tgtttaag	gtatgttcaaga...	589...	tgaatctcgtagctgctcca	TTGGTt	TTTCGAGTGC	--aactcagtgccatagtcgca...	864...	cctgacccgcag	atggtaat
D.Gri	tgttcaag	gttggtatcata...	448...	cctcccccttagctgctcca	TTGGTt	TTTCGAGT	--acaactcaatgctggtggca--	865...	ttatatcgtcag	attgtcat
D.Per	tattcaag	gtgggttcttgg...	356...	tcaatctcctagttgctcca	TTGGTt	TTTCGAGTGC	--agctcagtgccggagccatg...	942...	tctctcccacag	atggtaat
D.Pse	tattcaag	gtgggttcttgg...	357...	tcaatctcctagttgctcca	TTGGTt	TTTCGAGTGC	--aactcagtgccggagccatg...	930...	gctctcccacag	atggtaat
D.Vir	tattcaag	gtttgatattta...	4073...	cgttctccatggctgctcca	TTGGTt	TTTCGAGT	--acagtcagtgtggtgtca--	838...	cgggcccgtcag	atggtaat
D.Wil	tattcaag	gtgagttcagat...	400...	ctgcttcaaagcctgctcca	TTGGTt	TTTCGAGTGC	caactctcgttgcctc-tcac...	845...	tcttcatttag	ttggtcat
D.Yak	ttttcaag	gtaagtttagccc...	554...	tcaatctcgtagctgctcca	TTGGTt	CTCGAGTGC	--aactcagtgccgtagtcgcc...	853...	cctgattcccag	atcgtgat
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id=123425 gene=FBgn0013813 name=Dhc98D segment=chr3R.24333214.24334636.1 type=IN

D.Mel	cattccag	gcaagtgtctgc...	457...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgccaagc---gaagcgagccca...	174...	tctccccacag	aaattaat
D.Sim	cattccag	gcaagtgtctgc...	444...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgccaagc---gaagcgagccca...	174...	tctccccacag	aaattaat
D.Ere	cattccag	gcaagtgtctgc...	456...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgccaagc---gaagcgagccca...	174...	tctccccacag	aaattaat
D.Ana	cattccag	gcaagtgcggc...	509...	ggcaatttgcgctgcagtc--	GCACTTGAAA	CCAG	cgccaagc---caagcgagccca...	186...	tttcgctacag	aaattaat
D.Gri	cattccag	gcaagtgtctgg...	419...	--caatttacgccagcagtc--	ACTTGAAA	CCAG	cgcgagc---ccaatttgcact...	167...	ctttcaccacag	aaattgct
D.Per	cattccag	gcaagtgcggg...	480...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgtaagcactgaagcgagc---	212...	ccgccccttag	aaactggt
D.Pse	cattccag	gcaagtgcggg...	493...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgtaagcactgaagcgagc---	212...	ccgccccttag	aaactggt
D.Vir	cattccag	gcaagtgcggc...	407...	--caatttacgccgcagtc--	ACTTGAAA	CCAG	cgcgagc---ccaatttgcact...	156...	ctcttaccacag	aaactgct
D.Wil	cattccag	gcaagtgcggc...	483...	--aatttacgccacagtcgct	GCACTTGAAA	CCAG	cacgaaac-cagagccaaacc---	186...	tttgccatttag	aaattaat
D.Yak	cattccag	gcaagtgtctgc...	468...	ggcaatttgcgccgcagtc--	GCACTTGAAA	CCAG	cgccaagc---gaagcgagccca...	174...	tctccccacag	aaattaat
		*****		*****	*****	*****			**	* * * *

id=123435 gene=FBgn0013813 name=Dhc98D segment=chr3R.24339211.24339919.1 type=IN VIEW

Figure 355: CS=6



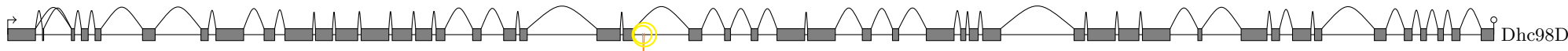
D. Mel	atcg	cagg	gtgag	taatccg...109...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgctattgtgtatgc-...805...cttccattgcag	atcatggt
D. Sim	atcg	cagg	gtgag	taatccg...109...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgctattgtgtatgc-...804...cttccattgcag	atcatggt
D. Sec	atcg	cagg	gtgag	taatccg...109...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgctattgtgtatgc-...835...cttccattgcag	atcatggt
D. Ere	atcg	cagg	gtgag	taatccg...109...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgctattgtgtatgc-...826...ctttcgttgcag	atcatggt
D. Ana	atcg	cagg	gtgaga	aatcag...155...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactactcctgtgtatgc-...719...ctccattgcag	atcatggt
D. Moj	atcg	cagg	gtaagt	atattgc...161...cgccttacttaacggtaaac	ATAATA	CGCATGCAA	acgaccact-ttgcgtattcg...873...cttccactgcag	atcatggt
D. Per	atcga	agg	gtgag	agtctgg...181...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgct-ttctatagaca...891...tttccattgcag	atcatggt
D. Pse	atcga	agg	gtgag	agtctgg...181...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgct-ttctatagaca...780...tttccattgcag	atcatggt
D. Vir	accgc	aga	gtagt	atattgc...117...cgccttacttaacggtaaac	ATAATA	CGCATGCAA	acgaccact-ttgcgtattcg...773...cttccactgcag	atcatggt
D. Wil	atcgt	cgg	gtaag	atgtgga...214...cgccttacttaacggtaaac	ATAATA	CGCATGCAA	acgaccgct-ttgtgtatgcg...689...tttccattgcag	atcatggt
D. Yak	atcg	cagg	gtgag	taatccg...112...ctccttacttaacggtaaac	ATAATA	CGCATGCAA	acgactgctattgtgtatgc-...862...ctttcgttgcag	atcatggt
	* * *	*	** **		*	*****	** * ** *	* * *****

id=123403 gene=FBgn0013813 name=Dhc98D segment=chr3R.24325850\_24326842.1 type=IN

D. Mel	acagac	ggtg	aaagtg	gatgg...394...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacacacagcaat...1118...tggatgcatccag	gtgagggga
D. Sim	acagac	ggtg	aaagtg	gatgg...383...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacacacagcaat...1117...tggatgcatccag	gtgagggga
D. Sec	acagac	ggtg	aaagtg	gatgg...376...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacacacagcaat...1110...tggatgcatccag	gtgagggga
D. Ere	gcagac	ggtg	aaagtg	gatga...373...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacacacagcaat...1115...cgctgcatccag	gagggga
D. Ana	gcaaac	ggtg	aaagtg	gatgg...379...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacagacagcaat...1167...tgcttcatccag	gtgaggggt
D. Moj	gcaaac	ggtg	aaagtg	gatgg...571...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	aggtgcaacaataacaggg...1208...tttccattcag	gtgagggc
D. Per	gcagac	ggtg	aaagtg	gatgg...404...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgcaagcacacacacagcaat...1414...tgcccatgcag	gaggggt
D. Pse	gcagac	ggtg	aaagtg	gatgg...410...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgcaagcacacacacagcaat...1459...tgcttcatgcag	gaggggt
D. Vir	acaaact	ggtg	aaagtg	gatgg...588...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	agccggcacaataacaggg...1359...tcctccattag	gtgaggggt
D. Wil	acaaact	ggtg	aaagtg	gatgg...334...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccgaactacaacacaca...2127...cgcctctcctag	gtgagggc
D. Yak	gcaaac	ggtg	aaagtg	gatgg...399...cggttttgcaattaacttta	TTGCATGCG	ccATTAT	tgccggcgacacacagcaat...1154...tggatgcatccag	gtgagggga
	** ** *	** ** *			*****	*	* * **	* ** * *****

id=123443 gene=FBgn0013813 name=Dhc98D segment=chr3R.24341375\_24342966.1 type=IN VIEW

Figure 356: CS=10.56



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D.Mel atcgcagg gtgagtaatccg...101...tatggcgactccttacttaaCGGTaaACATAATACGCATGCaaACGActgctattgtgtatgcgtaa...801...cttcattgcag atcatggt
D.Sim atcgcagg gtgagtaatccg...101...tatggcgactccttacttaaCGGTaaACATAATACGCATGCaaACGActgctattgtgtatgcgtaa...800...cttcattgcag atcatggt
D.Sec atcgcagg gtgagtaatccg...101...tatggcgactccttacttaaCGGTaaACATAATACGCATGCaaACGActgctattgtgtatgcgtaa...831...cttcattgcag atcatggt
D.Ere atcgcagg gtgagtaatccg...107...-----gactccttacttaacggtaaACATAATACGCATGCaaACGActgctattgtgtatgcgtaa...822...cttcattgcag atcatggt
D.Ana atcgcagg gtgagaaatcag...148...-atggcgactccttacttaacGGTAAaCATAATACGCATGCaaacgactactcctgtgtatg-----720...ctccattgcag atcatggt
D.Gri atcgcagg gttagtatttga...108...-----cgacgccttacttaacggtaaAACATAATACGCATGCaaacgactactcctgtgtatg-----790...ttccattgcag atcatggt
D.Moj atcgcagg gtaagtatttgc...154...-atggcgacgccttacttaacGGTAAaCATAATACGCATGCaaacgactactcctgtgtatg-----875...cttcactgcag atcatggt
D.Vir accgcaga gttagtatttgc...109...tatggcgacgccttacttaacCGGTAAaCATAATACGCATGCaaacgactactcctgtgtatg-----775...cttcactgcag atcatggt
D.Wil atcgtcgg gtaagatgtgga...212...-----gacgccttacttaacggtaaACATAATACGCATGCaaACGAacgct-ttgtgtatgcgtaa...685...ttccattgcag atcatggt
D.Yak atcgcagg gtgagtaatccg...110...-----gactccttacttaacggtaaACATAATACGCATGCaaACGActgctattgtgtatgcgtaa...858...cttcattgcag atcatggt
* ** * ** ** * ** * ***** ** ** ***** * * ***** *****

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id=123403 gene=FBgn0013813 name=Dhc98D segment=chr3R.24325850.24326842.1 type=IN

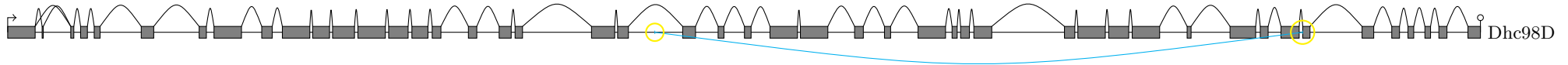
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D.Mel atcgcagg gtgagtaatccg...134...-acgcatgcaaacgactgctaTTGTGTATGCGTAA TTGTGTaGCCGcacacacaccgaaatcgtt-----770...cttcattgcag atcatggt
D.Sim atcgcagg gtgagtaatccg...134...-acgcatgcaaacgactgctaTTGTGTATGCGTAA TTGTGTaGCCGcacacacaccgaaatcgtt-----769...cttcattgcag atcatggt
D.Sec atcgcagg gtgagtaatccg...134...-acgcatgcaaacgactgctaTTGTGTATGCGTAA TTGTGTaGCCGcacacagaccgaaatcgtt-----800...cttcattgcag atcatggt
D.Ere atcgcagg gtgagtaatccg...134...-acgcatgcaaacgactgctaTTGTGTATGCGTAA TTGTGTaGCGGcacacagaccgaaatcgtt-----796...cttcattgcag atcatggt
D.Ana atcgcagg gtgagaaatcag...183...----catgcaaacgactactcctgTGTATGCGTAA TTGTGTGGCCcactaacgctggaagtccc-----685...ctccattgcag atcatggt
D.Gri atcgcagg gttagtatttga...139...----catgcaaacgaccactttgc-GTATTGTA TTGTGTGGCCcactaacgctggaagtccc-----758...ttccattgcag atcatggt
D.Moj atcgcagg gtaagtatttgc...189...----catgcaaacgaccactttgc-GTATTGTA TTGTGTGGCC-----atac----gactactgctacaaat...840...cttcactgcag atcatggt
D.Vir accgcaga gttagtatttgc...145...----catgcaaacgaccactttgc-GTATTGTA TTGTGTGGCCcacaatac----aactactaca-----739...cttcactgcag atcatggt
D.Wil atcgtcgg gtaagatgtgga...238...tacgcatgcaaacgaccgct-TTGTGTATGCGTAA TTGTGTgacctaccacac----acacac-----660...ttccattgcag atcatggt
D.Yak atcgcagg gtgagtaatccg...137...-acgcatgcaaacgactgctaTTGTGTATGCGTAA TTGTGTgacctaccacac----acacac-----832...cttcattgcag atcatggt
* ** * ** ** * ***** ** ***** * * ***** *****

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id=123403 gene=FBgn0013813 name=Dhc98D segment=chr3R.24325850.24326842.1 type=IN VIEW

Figure 357: CS=9.6



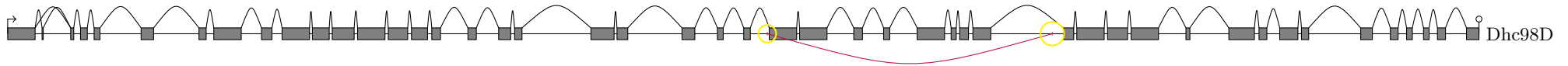
D.Mel	atcgcagg	gtgagtaatccg...435...at ttgcaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...476...cttccattgcag	atcatggt
D.Sim	atcgcagg	gtgagtaatccg...433...at ttgcaacatttgcgcca	TATTtGATGcCATTtGTGAA	atgattattattttgattt...475...cttccattgcag	atcatggt
D.Ere	atcgcagg	gtgagtaatccg...425...at ttgcaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...507...cttccattgcag	atcatggt
D.Ana	atcgcagg	gtgagaaatcag...496...at ttgtaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...375...cttccattgcag	atcatggt
D.Gri	atcgcagg	gttagtatttga...460...at ttgcaacatttgcgcca	TATTtGATGcCATTt	atgaaatgattattattt-----440...tttccattgcag	atcatggt
D.Per	atcgaagg	gtgagagtctgg...595...at ttgtaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...474...tttccattgcag	atcatggt
D.Pse	atcgaagg	gtgagagtctgg...585...at ttgtaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...373...tttccattgcag	atcatggt
D.Wil	atcgtcgg	gtaagatgtgga...510...at ttgtaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...390...tttccattgcag	atcatggt
D.Yak	atcgcagg	gtgagtaatccg...481...at ttgcaacatttgcgcca	TATTtGATGcCATTtGTG	aaatgattattattttgat--...490...cttccattgcag	atcatggt
	**** **	*****	*****	*****	*****

id=123403 gene=FBgn0013813 name=Dhc98D segment=chr3R.24325850\_24326842.1 type=IN

D.Mel	ctacatag	gtgag---cgatggg-----aagtgggtggtcacattgcc--g-agcta--tttaca	TATGtAATGCATTGATA	acag	cgcacatc
D.Sim	ctacatag	gtgag---cgatggg-----aagtgggtggtcacattccc--g-agcta--tttaca	TTTGtAATGCATTGATA	acag	cgcacatc
D.Ere	ctacatag	gtgag---cgatggg-----cagtggcgacatattccc--g-agcta--tttaca	TATGtAATGCATTGATA	acag	cgcacatc
D.Ana	ctacatag	gtgag---tgacggg-----tgatggacggtagcag-----g-aggca--tataca	TATGtAATGCATTGATA	acag	cgcacatc
D.Gri	cttcatag	gtgagtacttgttcgt-----ggtacatgtgttgcgacataaccagttttacacgt	AATGCATTGATA	acag	tccacatt
D.Per	ctatatag	gtgag---tgacgagacagagggttcgggtcgggtggaccatgccaga-agcta--tttaca	TATGtAATGCATTGATA	acag	cgcacatc
D.Pse	ctatatag	gtgag---tgacgagacagagggttcgggtcgggtggaccatgccaga-agcta--tttaca	TATGtAATGCATTGATA	acag	cgcacatc
D.Wil	ctacatag	gtgagtctataatgggttcgg----tcagtgcagtgagtgaggag--a-ggcta--tttaca	TATGtAATGCATTGATA	acag	ctcacatt
D.Yak	ctacatag	gtgag---cgaaggg-----cagttggtggacacatttcc--a-agcta--tttaca	TATGtAATGCATTGATA	acag	cgcacatc
	** ****	*****	*****	*****	*****

id=123441 gene=FBgn0013813 name=Dhc98D segment=chr3R.24341178\_24341242.1 type=IN VIEW

Figure 358: CS=7.02



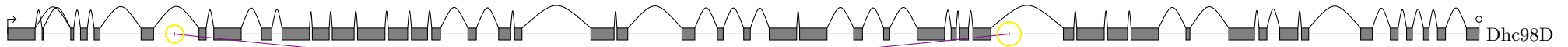
D. Mel	atttcaag	gtaagtgtacc...	263...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttcgactttgtgtgtc	-----	cgcag	gcccgact
D. Sim	atttcaag	gtaagtgtacc...	263...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttcgactttgtgtgtc	-----	cgcag	gcccgact
D. Sec	atttcaag	gtaagtgtacc...	263...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttcgactttgtgtgtc	-----	cgcag	gcccgact
D. Ere	atttcaag	gtaagtgtacc...	263...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttcgactttgtgtgtc	-----	cgcag	gcccgact
D. Ana	attgcaag	gtaagtgcacc...	269...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgattttgacttccacttcgatgtggttatt	-----	ttcag	accggagt
D. Moj	atttcaag	gtaagtgaaca...	229...	..ggcatat	ttatggccaattg	CATTaAATTgACAGTCATTGG	-cac	-----	tttcgatttcca	-----	cag	gccggact
D. Per	attgcaag	gtaagtgtgagagt...	304...	-----	atztatggccaattgtttta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttc	-----	tatag	accggagt
D. Pse	attgcaag	gtaagtgtgagagt...	308...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttc	-----	tatag	accggagt
D. Vir	atttcaag	gtaagtgaaca...	205...	..catat	ttatggccaattgca	TAAATTgACAGTCATT	G-ggcac	-----	tttcgatttcca	-----	cag	accggact
D. Wil	atttcaag	gtaagtgtgtaa...	278...	-----	atztatggccaattgtatta	AATTgACAGTCATT	Ggggcactttcttcgatttcgatttcactatctcttctctctccctcgcctctctctccctatgtctttctag	-----	cgcag	-----	gcccgact	
D. Yak	atttcaag	gtaagtgtacc...	268...	-----	atztatggccaattgtatta	AATTgACAGTCATT	G-ggcac	-----	tttcgatttcgactttgtgtgtc	-----	cgcag	gcccgact
	*** **	*****			*****	*****	* **		*** *		**	** ** *

id=123409 gene=FBgn0013813 name=Dhc98D segment=chr3R.24328088\_24328431.1 type=IN

D. Mel	ttttaaag	gtaagtattata...	1173...	..gtgc	----	ggcggctgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcagtggtccc...	171...	..cctgattcccag	atggtgat
D. Sim	ttttaaag	gtaagtattata...	1224...	..gtgc	----	ggcgactgcaacttga	TAATGGCTGTaAATT	-----	cagcaacttggcagtggtccc...	170...	..cctgattcccag	atggtgat
D. Sec	ttttaaag	gtaagtattata...	1217...	..gtgc	----	ggcgactgcaacttga	TAATGGCTGTaAATT	-----	cagcaacttggcagtggtccc...	174...	..cctgattcccag	atggtgat
D. Ere	ttttaaag	gtaagtattata...	1172...	..gtgc	----	ggcgactgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcagtggtccc...	158...	..cctgattcccag	atggtgat
D. Ana	tgtaaag	gtatgttcaaga...	1301...	..gagc	----	ggcggctgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcaactgtccc...	153...	..cctgaccgag	atggtgat
D. Moj	tattcaag	gtaagtattcga...	1044...	..gagct	ggtggcggctgcaac	TTGATaAATGGCTGTaAATT	caAGTG	acagcaactgtccagctct...	163...	..tcgcctcttag	atggtgat	
D. Per	tattcaag	gtgggttcttgg...	1079...	..gtgg	----	caggctgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcaactgtccc...	220...	..tctctcccacag	atggtgat
D. Pse	tattcaag	gtgggttcttgg...	1068...	..gtgg	----	caggctgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcaactgtccc...	220...	..gctctcccacag	atggtgat
D. Vir	tattcaag	gtttgatattta...	4753...	..gtgc	----	ggcaactgcagctcga	TAATGGCTGTaAATT	AGctgaatgcaactgtccagg	-----	154...	..cgggccgag	atggtgat
D. Wil	tattcaag	gtgagttcagat...	1094...	..cgcc	----	ggcgtctgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcctcgcact...	152...	..tctccattag	atggtgat
D. Yak	ttttaaag	gtaagtattcga...	1244...	..gtgc	----	ggcgactgcaactcga	TAATGGCTGTaAATT	-----	cagcaacttggcagtggtccc...	164...	..cctgattcccag	atggtgat
	** ** *	** *				*****	** *****		**** * * *		**	* ** *

id=123425 gene=FBgn0013813 name=Dhc98D segment=chr3R.24333214\_24334636.1 type=IN VIEW

Figure 359: CS=6.6



D.Mel	caacaaaa	gtatttaacttt...337..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggcgccgta...412...----	cactcctcccag	gaaaatga
D.Sec	caacaaaa	gtatttaacttt...334..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggcgccgta...412...----	actcctcccag	gaaaatga
D.Ere	caacaaaa	gtatttaacttt...345..-gataag-gaat	tttttattttt	AATCGGATTCATG	ctaccatcaacgacgcggt...410...----	cactcctcccag	gaaaaaga
D.Ana	caacaaaa	gtatttaacttt...335..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggcgccacc...423...----	cagttatgcag	aaagaaaa
D.Gri	caacaaaa	gtatttaacttt...330..cgataag--aat	tttttattttt	AATCGGATTCATG	ctgccatcaacggcgccagc...364...----	tgacatcacag	gaagcaaa
D.Moj	caacaaaa	gtatttaacttt...326..cgataag--aat	tttttattttt	AATCGGATTCATG	ctaccatcaacggcgccagc...439...----	cgtatgatag	aaaaaaaa
D.Per	ctacaaaa	gtatttaacttt...464..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggtggcgcc...491...----	cgttggccgag	gaagaaga
D.Pse	ctacaaaa	gtatttaacttt...460..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggtggcgcc...491...----	cgttggccgag	gaagaaga
D.Vir	caacaaaa	gtatttaacttt...298..cgataag--aat	tttttattttt	AATCGGATTCATG	ctgccatcaacggcgccagc...376...ttgacatg---	gcag	aaagaaaa
D.Wil	caacaaaa	gtatttaacttt...339..--ataagaaaat	tttttattttt	AATCGGATTCATG	ctgccatcaacggcgccgcc...481...----	tttgtgagcag	gaagcaaa
D.Yak	caacaaaa	gtatttaacttt...371..-gataag-aaat	tttttattttt	AATCGGATTCATG	ctaccatcaacggcgccggt...413...----	cactcctaccag	gaaaaaga
	* ** ** ** *	*****	*****	*****	*****	**	** *

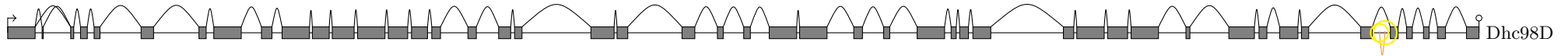
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D.Mel	tttttaag	gtaagtattata...290..ttaaggcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1055...cctgattcccag	atggtgat
D.Sec	tttttaag	gtaagtattata...338..ttaaggcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1054...cctgattcccag	atggtgat
D.Ere	ttttcaag	gtaagtataacc...295..ttaaggcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1036...cctgattcccag	atcgtgat
D.Ana	tgtttaag	gtatggtcaaga...388..ttaaggcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1067...cctgaccgag	atggtgat
D.Gri	tgttcaag	gttggtatcata...314..taaaagtctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...999...ttatatcgtcag	atggtgat
D.Moj	tattcaag	gtaagtattcga...217..ttaaagtctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1001...tcgctctttag	atggtgat
D.Per	tattcaag	gtgggttcttgg...123..ttaaagcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1177...tctctcccag	atggtgat
D.Pse	tattcaag	gtgggttcttgg...123..ttaaagcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1166...gctctcccag	atggtgat
D.Vir	tattcaag	gttgatattta...3939..ttaaagtctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...972...cggcccgag	atggtgat
D.Wil	tattcaag	gtgagttcagat...81..aggccgactctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1166...tcttcatttag	atggtgat
D.Yak	ttttcaag	gtaagttagccc...336..ttaaggcctctcaca	aatttTATGAAATTCGATT	tacatatgcaaataacgaca...1073...cctgattcccag	atcgtgat
	* ** ** ** *	*****	*****	*****	** * ** *

id=123425 gene=FBgn0013813 name=Dhc98D segment=chr3R.24333214\_24334636\_1 type=IN VIEW

Figure 360: CS=8.58





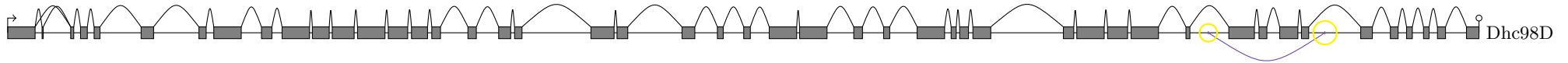
D.Mel	tacgcaag	gtaacttacagt...74...	--ccttcagccttgtttgc	cat-TTCGca	TTTGTTTATGCA	TTTGC	-----	caacttggctggcgaccaag...167...	tgctctccgcag	gccattgc			
D.Sim	tacgcaag	gtaactaacagt...74...	--ccttcagccttgtttgc	cat-TTCGca	TTTGTTTATGCA	TTTGC	-----	ccaacttggctggcgacca-...216...	tgctctccgcag	gccattgc			
D.Sec	tacgcaag	gtaactaacctg...74...	--ccttcagccttgtttgc	cat-TTCGca	TTTGTTTATGCA	TTTGC	-----	ccaacttggctggcgacca-...208...	tgctctccgcag	gccattgc			
D.Ere	tccgcaag	gtaactaacagt...79...	--cgttcagccttgtttgc	cat-TTCGca	TTTGTTTATGCA	TTTGC	-----	ccaacttggctggcgacca-...218...	tgctctccgcag	gccattgc			
D.Ana	ttcgaag	gtaactaacgca...54...	-----	tgtttgcatttccccatt	GTTTATGCA	TTTGC	-----	ccaacttggcggctacca-...201...	tgctctccgcag	gccatagc			
D.Moj	tgcggaag	gtaactttgagt...42...	.gccacataaatccttcagc	-----	TTTGTTT-tGCAT	TTTGT	ttatacaattgccaacttgg	-----	...294...	tgccctccgcag	gccatcgc		
D.Per	tccgcaag	gtaactactatt...81...	-----	ctgtttgtgtgcattct	-----	GTTTATGCA	TTTGC	-----	ccatttggccaacttggctaa	-----	...145...	tgctctccgcag	gccattgc
D.Pse	tccgcaag	gtaactactatt...81...	-----	ctgtttgtgtgcattct	-----	GTTTATGCA	TTTGC	-----	ccatttggccaacttggctaa	-----	...145...	tgctctccgcag	gccattgc
D.Vir	tgcgcaag	gtaactaacgaga...40...	.gctcacataaatccttcagc	-----	TTTGTTT-tGCAT	TTTGT	ttatgcatttggccaacttgg	-----	...245...	tgctctccgcag	gccatcgc		
D.Wil	tgcgcaag	gtaagcttttgc...68...	.cgtcacataaatccttcagc	-----	TTTGTTT-tGCAT	TTTGT	ttatgcatttggccaacttgg	-----	...251...	ttctcccgcag	gctattgc		
D.Yak	tgcgcaag	gtaactaacagt...81...	-----	gccttgtttgcatttcgca	-----	TTTGTTTATGCA	TTTGC	-----	ccaacttggctggcgacca-...234...	ctctctccgcag	gccattgc		
		* * * **	****	** **	**** * ** *	****	*****		* * *****	** * **			

id=123445 gene=FBgn0013813 name=Dhc98D segment=chr3R.24343179\_24343506.1 type=IN

D.Mel	tacgcaag	gtaacttacagt...184...	-atgggacgttgggtgatccc	GCAAAATGCA	aaTGAA	ccCGGGCGGG	-cttttgccttggccccggaa...	55...	tgctctccgcag	gccattgc	
D.Sim	tacgcaag	gtaactaacagt...233...	-ttgttgccaaaataaat	ttt-CAAAATGCA	aaTGAA	ccCGGGCGGG	-cttttgccttggccccggga...	55...	tgctctccgcag	gccattgc	
D.Sec	tacgcaag	gtaactaacctg...225...	-ttgttgccaaaataaat	ttt-CAAAATGCA	aaTGAA	ccCGGGCGGG	-cttttgccttggccccggga...	55...	tgctctccgcag	gccattgc	
D.Ere	tccgcaag	gtaactaacagt...241...	-ttgttgccaaaataaat	ttt-CAAAATGCA	aaTGAA	ccCGGGCGGG	-cttttgccttggccccggga...	54...	tgctctccgcag	gccattgc	
D.Ana	ttcgaag	gtaactaacgca...176...	-ttgttgccaaaataaat	ttt-CAAAATGCA	aaTGAAC	-----	tccggctcc-ctgctgcgga	---...77...	tgctctccgcag	gccatagc	
D.Moj	tgcggaag	gtaactttgagt...183...	.ttgttgccaaaataaat	ttt-ACAAATGCA	AAATGAA	-----	ctctgccctgtgtgtg	-----	...155...	tgccctccgcag	gccatcgc
D.Per	tccgcaag	gtaactactatt...173...	-gtgctgccaaaataaat	ttt-CAAAATGCA	aaTGAAC	-----	tcgagcccagtcacgcca	-----	...51...	tgctctccgcag	gccattgc
D.Pse	tccgcaag	gtaactactatt...173...	-gtgctgccaaaataaat	ttt-CAAAATGCA	aaTGAAC	-----	tcgagcccagtcacgcca	-----	...51...	tgctctccgcag	gccattgc
D.Vir	tgcgcaag	gtaactaacgaga...168...	.ttgttgccaaaataaat	ttt-ACAAATGCA	AAATGAA	-----	ctctgctgctgcccgtg	ccg---...119...	tgctctccgcag	gccatcgc	
D.Wil	tgcgcaag	gtaagcttttgc...198...	.ttgttgccaaaataaat	ttt-ACAAATGCA	AAATGAA	-----	ctcggct-cgccaagtgc	ca---...123...	ttctcccgcag	gctattgc	
D.Yak	tgcgcaag	gtaactaacagt...249...	-ttgttgccaaaataaat	ttt-CAAAATGCA	aaTGAA	ccCGGG	gaggacttttgccttggccc	-----	...62...	ctctctccgcag	gccattgc
		* * * **	****	** *	**	*****	*		* * *****	** * **	

id=123445 gene=FBgn0013813 name=Dhc98D segment=chr3R.24343179\_24343506.1 type=IN VIEW

Figure 361: CS=6.6



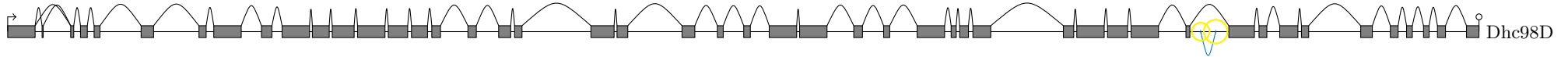
D. Mel	cattccag	gcaagtgctgcg...289...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	341...	tctccccacag	aaattaat
D. Sim	cattccag	gcaagtgctgcg...276...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	341...	tctccccacag	aaattaat
D. Sec	cattccag	gcaagtgctgcg...282...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	341...	tctccccacag	aaattaat
D. Ere	cattccag	gcaagtgctgcg...288...	ctagacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	341...	tctccccacag	aaattaat
D. Ana	cattccag	gcaagtgccggc...316...	cccgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	378...	tttcgctacag	aaattaat
D. Gri	cattccag	gcaagtgtggc...233...	ttcgacttttgctctgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	350...	ctttcaccacag	aaattgct
D. Moj	cattccag	gcaagtgccact...234...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	333...	gtctaccacag	aaattgct
D. Per	cattccag	gcaagtgccggg...260...	ctcgactttcgcaacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	431...	ccgccccttag	aaactggt
D. Pse	cattccag	gcaagtgccggg...271...	ctcgactttcgcaacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	433...	ccgccccttag	aaactggt
D. Vir	cattccag	gcaagtgccgct...242...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	318...	ctctaccacag	aaactgct
D. Yak	cattccag	gcaagtgctgcg...300...	ctcgacttttgctacgtcct	GCAA	ctTTGGCGCAC	attttcctctcaagttatta...	341...	tctccccacag	aaattaat
	*****	*****	***** **	*****	*****	*****	*****	* **	*** *

id=123435 gene=FBgn0013813 name=Dhc98D segment=chr3R.24339211\_24339919\_1 type=IN

D. Mel	acagacgg	gtaagtggatgg...250...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1265...	tggatgcatccag	gtgagggg
D. Sim	acagacgg	gtaagtggatgg...239...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1264...	tggatgcatccag	gtgagggg
D. Sec	acagacgg	gtaagtggatgg...232...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1257...	tggatgcatccag	gtgagggg
D. Ere	gcagacgg	gtaagtggatga...229...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1262...	cgctgctccag	gagggg
D. Ana	gcaaacgg	gtgagttagccga...231...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1318...	tgcttcatccag	gtgagggt
D. Gri	acaaactg	gtaagtgactag...309...	tgaatggttaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1143...	tgtatattgtag	gtgagggt
D. Moj	gcaaacctg	gtgagtactgg...448...	tggtttaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1334...	ttccattcag	gtgagggc
D. Per	gcagactg	gtgagttagtggc...224...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1597...	tgcccattcag	gaggggt
D. Pse	gcagactg	gtgagttagtggc...230...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1642...	tgccattcag	gaggggt
D. Vir	acaaactg	gtgagtactgg...465...	ttaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1485...	tcctcatttag	gtgagggt
D. Yak	gcaaacctg	gtaagtggatgg...255...	tggttcaatttgcacgcaac	GTGTG	GCCAATTGT	cagccgtttattacatttta...	1301...	tggatgcatccag	gtgagggg
	** ** *	** ** *	* *	****	*****	*****	*****	* **	* ****

id=123443 gene=FBgn0013813 name=Dhc98D segment=chr3R.24341375\_24342966\_1 type=IN VIEW

Figure 362: CS=8.58



D. Mel	cattccag	gcaagtgctgcg...148...ttattggatttcgtacttta	TGCTCGct	TCTAGTGG	attattatgtacaaccagg...481...tctccccacag	aaattaat
D. Sim	cattccag	gcaagtgctgcg...148...ttattggatttcgtacttta	TGCTCGct	TCTAGTGG	attattatgtacaaccagg...468...tctccccacag	aaattaat
D. Sec	cattccag	gcaagtgctgcg...148...ttattggatttcgtacttta	TGCTCGct	TCTAGTGG	attattatgtacaaaacagg...474...tctccccacag	aaattaat
D. Gri	cattccag	gcaagtgctggc...112...-attggatttcgtacttta	CTCGat	TCTAGTGG	attattatgtacaagactca...472...ctttaccacag	aaattgct
D. Moj	cattccag	gcaagtgccact...102...ttattggattttgtacttta	TGCTCGtt	TCTAGTGG	attattatgtacaagccgca...464...gtctaccacag	aaattgct
D. Per	cattccag	gcaagtgccggg...139...ttattggatttcgtacttta	TGCTCGtt	TCTAGTGG	attattatgtacaagccgta...551...cggccccttag	aaactggt
D. Pse	cattccag	gcaagtgccggg...139...ttattggatttcgtacttta	TGCTCGtt	TCTAGTGG	attattatgtacaagccata...564...cggccccttag	aaactggt
D. Vir	cattccag	gcaagtgccgct...102...ttattggatttcgtacttta	TGCTCGtt	TCTAGTGG	attattatgtacaagccgca...457...ctctaccacag	aaactgct
D. Wil	cattccag	gcaagtgagagt...144...ttattggatttcgtacttta	TGCTCGtt	TCTAGTGG	attattatgtacaagccgca...524...tttgccatttag	aaattaat
	*****	*****	*****	*****	*****	*****

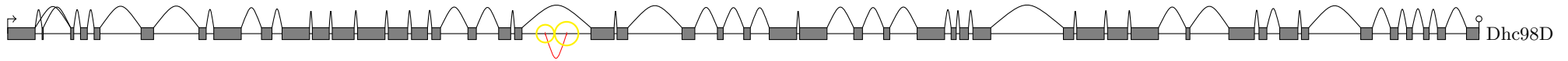
id=123435 gene=FBgn0013813 name=Dhc98D segment=chr3R\_24339211\_24339919\_1 type=IN

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D. Sim	cattccag	gcaagtgctgcg...411...tattttatcaattttccaaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...207...tctccccacag	aaattaat
D. Sec	cattccag	gcaagtgctgcg...417...tattttatcaattttccaaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...207...tctccccacag	aaattaat
D. Gri	cattccag	gcaagtgctggc...384...tattttatcaattttccaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...202...ctttaccacag	aaattgct
D. Moj	cattccag	gcaagtgccact...379...tattttatcaattttccaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...189...gtctaccacag	aaattgct
D. Per	cattccag	gcaagtgccggg...447...tattttatcaattttccgaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...245...cggccccttag	aaactggt
D. Pse	cattccag	gcaagtgccggg...460...tattttatcaattttccgaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...245...cggccccttag	aaactggt
D. Vir	cattccag	gcaagtgccgct...372...tattttatcaattttccaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...189...ctctaccacag	aaactgct
D. Wil	cattccag	gcaagtgcgaggt...447...tattttatcaattttccaa	CCATTAGATGAGCG	gcaatttgcgcccgcagtgc...223...tttgccatttag	aaattaat
	*****	*****	*****	*****	*****

id=123435 gene=FBgn0013813 name=Dhc98D segment=chr3R\_24339211\_24339919\_1 type=IN VIEW

Figure 363: CS=5.4





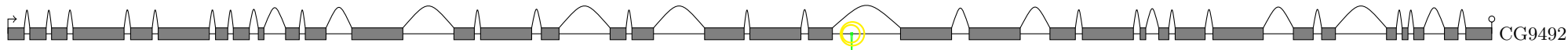
D.Me1	ccaaggcg	gtaagcttttc...379...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	796...	tttcgttccag	gtgcgcac
D.Sec	ccaaggcg	gtaagcttttc...377...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	800...	tttcgttccag	gtgcgcac
D.Ere	ccaaggcg	gtaagcttttac...365...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	743...	tttcgttccag	gtgcgcac
D.Gri	caaaaccg	gtaagcttttc...335...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	840...	tttcgttccag	gtgcgcca
D.Moj	ccaaggcg	gtaagcttttc...390...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	887...	tttcgttccag	gtgcgcat
D.Per	caaaaccg	gtaagcttttc...313...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	807...	tttcgttccag	gtgcgcat
D.Pse	caaaaccg	gtaagcttttc...319...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	807...	tttcgttccag	gtgcgcat
D.Vir	caaaaccg	gtaagcttttc...349...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	768...	tttcgttccag	gtgcgcca
D.Wil	ccaagccg	gtaagcttttc...582...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttc...	801...	tttcgttccag	gtgcgaca
D.Yak	ccaaggcg	gtaagcttttac...381...	tttgacacataaactgattat	GACAAATTGATTATT	acttcactaacaagttttg...	734...	tttcgttccag	gtgcgcac
		* ** **	*** *	** *****	*****		* **	* **

id=123399 gene=FBgn0013813 name=Dhc98D segment=chr3R.24323923\_24325178.1 type=IN

D.Me1	ccaaggcg	gtaagcttttc...761...	tctacataatca-gcgt----	cctaAAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	412...	tttcgttccag	gtgcgcac
D.Sec	ccaaggcg	gtaagcttttc...759...	tctacataatca-gcgt----	cctaAAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	416...	tttcgttccag	gtgcgcac
D.Ere	ccaaggcg	gtaagcttttac...730...	tctacataatca-gcgt----	cctaGAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	376...	tttcgttccag	gtgcgcac
D.Gri	caaaaccg	gtaagcttttc...777...	atgacataatca-gggt----	cccaAAATgcAAATCAATTTGTT	caatattgaaaataattaaa...	396...	tttcgttccag	gtgcgcca
D.Moj	ccaaggcg	gtaagcttttc...804...	atgacataatca-gtgt----	cccaAAATgcAAATCAATTTGTT	caatattgaaaataattaaa...	471...	tttcgttccag	gtgcgcat
D.Per	caaaaccg	gtaagcttttc...685...	ctacataatcaggcgt----	tctaAAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	433...	tttcgttccag	gtgcgcat
D.Pse	caaaaccg	gtaagcttttc...691...	ctacataatcaggcgt----	tctaAAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	433...	tttcgttccag	gtgcgcat
D.Vir	ccaagccg	gtaagcttttc...718...	caggcataatca-gtgt----	cccaAAATgcAAATCAATTTGTT	caatattgaaaataattaaa...	397...	tttcgttccag	gtgcgcca
D.Wil	ccaagccg	gtaagcttttc...1009...	ataatca-gtgtgtcctca	AAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	372...	tttcgttccag	gtgcgaca
D.Yak	ccaaggcg	gtaagcttttac...755...	tctacataatca-gcgt----	cctaAAATgtAAATCAATTTGTT	caatattgaaaataattaaa...	358...	tttcgttccag	gtgcgcac
		* ** **	*** *	*****	* **	*****	* **	* **

id=123399 gene=FBgn0013813 name=Dhc98D segment=chr3R.24323923\_24325178.1 type=IN VIEW

Figure 365: CS=14



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D.Mel ccacgatg gtaagtgtacat...136...-----aacatgtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctaatacc...439...tcgacccccacag aggacctc
D.Sim ccacgatg gtaagtgtacat...136...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctaataccc...401...ttgacccccacag aggacctc
D.Sec ccacgatg gtaagtgtacat...136...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----ataaagtatatcccaaacct...392...ttgacccccacag aggacctc
D.Ere ccacgatg gtaagtgtaaat...134...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctatatcc...456...ttgacccccacag aggacctc
D.Ana ccacgatg gtaagtgtacatt...143...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatacccgtaatta...872...tgctcccacag aggatatt
D.Gri tcaggatg gtaagttggtat...114...-----agcaactcggagaagcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataataattcgcaa...751...aaactttaacag atgatcag
D.Per ccatgatg gtaagtgaaga...115...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataccaaccctc...314...ataccctacag aggatctg
D.Pse ccatgatg gtaagtgaaga...93...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataccaaccctc...331...ataccctacag aggatctg
D.Vir tcaagatg gtaagttgttat...80...-----aacaatcgaagaagcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatacaatccgtaa...526...ttactttaacag acgatgtg
D.Wil tcaggatg gtaagtcttttg...153...atcaaaaacaaatcgaagaaTTGGgaCGGCAATCGATTGgCAGTCaGATTGTCCGTAAtattcatttaagtgatca...284...ctaatactctag aggatctg
D.Yak ccacgatg gtaagtgtaaat...139...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcccatatcc...455...ttgacccccacag aggacctc
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id=116518 gene=FBgn0037726 name=CG9492 segment=chr3R.5486517.5487183\_-1 type=IN

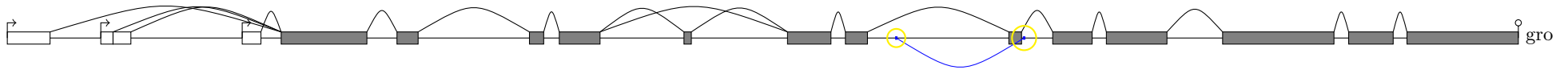
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D.Mel ccacgatg gtaagtgtacat...136...-----aacatgtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctaatacc...439...tcgacccccacag aggacctc
D.Sim ccacgatg gtaagtgtacat...136...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctaataccc...401...ttgacccccacag aggacctc
D.Sec ccacgatg gtaagtgtacat...136...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----ataaagtatatcccaaacct...392...ttgacccccacag aggacctc
D.Ere ccacgatg gtaagtgtaaat...134...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcctatatcc...456...ttgacccccacag aggacctc
D.Ana ccacgatg gtaagtgtacatt...143...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatacccgtaatta...872...tgctcccacag aggatatt
D.Gri tcaggatg gtaagttggtat...114...-----agcaactcggagaagcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataataattcgcaa...751...aaactttaacag atgatcag
D.Per ccatgatg gtaagtgaaga...115...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataccaaccctc...314...ataccctacag aggatctg
D.Pse ccatgatg gtaagtgaaga...93...-----aacaatcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtataccaaccctc...331...ataccctacag aggatctg
D.Vir tcaagatg gtaagttgttat...80...-----aacaatcgaagaagcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatacaatccgtaa...526...ttactttaacag acgatgtg
D.Wil tcaggatg gtaagtcttttg...153...atcaaaaacaaatcgaagaaTTGGgaCGGCAATCGATTGgCAGTCaGATTGTCCGTAAtattcatttaagtgatca...284...ctaatactctag aggatctg
D.Yak ccacgatg gtaagtgtaaat...139...-----aacaagtcgaagaggcgcggaCGGCAATCGATTGgCAGTCaGATTGTCC----gtaaagtatatcccatatcc...455...ttgacccccacag aggacctc
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id=116518 gene=FBgn0037726 name=CG9492 segment=chr3R.5486517.5487183\_-1 type=IN VIEW

Figure 366: CS=17.16



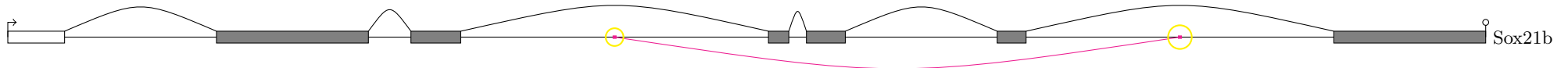
D.Me1	aactgcaa	gtgagatc	gag...	84...	--catctgagctgttgctgtct	<b>CTCAACTCACCA</b>	-----	gaaactcaattccgtagttt	-----	..548...	aattattccag	gaggatga
D.Sim	aactgcaa	gtgagatc	gag...	84...	--catctgagctgttgctgtct	<b>CTCAACTCACCA</b>	-----	gaaactcaattccgtagttt	-----	..500...	aattattccag	gaggatga
D.Sec	aactgcaa	gtgagatc	gag...	84...	--catctgagctgttgctgtct	<b>CTCAACTCACCA</b>	-----	gaaactcaattccgtagttt	-----	..511...	aattattccag	gaggatga
D.Ere	aactgcaa	gtgagatc	gag...	93...	--catctgagctgttgctgtct	<b>CTCAACTCACCA</b>	-----	gaaaatcaattccgtagttt	-----	..576...	aattattccag	gaggatga
D.Ana	agctacaa	gtgagtatt	ctg...	95...	-tcatatcagctga-gctgtcc	<b>CTCAACTCACCA</b>	-----	-----accaa--ccgtagtcctaacca	..307...	aattattccag	gacgatga	
D.Gri	aactgcaa	gtgagatc	gaa...	44...	.gtcatc--agttgatgctgcct	<b>CTCAACTCACCAT</b>	aaaaaaacaacccaataat	-----	..215...	aaatthttgag	gacgatga	
D.Moj	aactgcaa	gtgagat	tgaag...	43...	.gtcatc--agctgttgctgcct	<b>CTCAACTCACCA</b>	-----	aaaaagaaaaacata	-----	..203...	aattattgag	gacgatga
D.Per	aactgcaa	gtgagat	cagc...	83...	--tgctgatgctgctgctgtct	<b>CTCAACTCACCA</b>	-----	aaaaaaaaaaaaacaaa	-----	..313...	aattattacag	gacgatga
D.Pse	aactgcaa	gtgagat	cagc...	83...	--tgctgatgctgctgctgtct	<b>CTCAACTCACCA</b>	-----	aaaaaaaaaaaaacaaa	-----	..298...	aattattacag	gacgatga
D.Vir	aactgcaa	gtgagat	ctgtg...	43...	.gtcatc--agcagttgctgcct	<b>CTCAACTCACCA</b>	-----	aataaaaaaaaaaacatat	-----	..206...	aattattgag	gacgatga
D.Wil	agatgcaa	gtgagtata	tacc...	102...	-ctaacttagctaagcc-tct	<b>CTCAACTCACCAT</b>	-----	aaattattagtagttgta	-----	..131...	aattattccag	gaggatga
D.Yak	aactgcaa	gtgagtata	tacg...	95...	--catctgagctgttgctgtct	<b>CTCAACTCACCA</b>	-----	gaaaatcaattccgtagttt	-----	..532...	aattattccag	gaggatga
	* * *	*****			*	** * *****		*			** * ** *	** *****

id=71025 gene=FBgn0001139 name=gro segment=chr3R.21871550.21872257.1 type=IN

D.Me1	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..98...	tgtgccttgag	gaatccca
D.Sim	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..99...	tgtgccttgag	gaatccca
D.Sec	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..95...	tgtgccttgag	gaatccca
D.Ere	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..112...	tgtgccttgag	gaatccca
D.Ana	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..107...	ctttactttgag	gaatccca
D.Gri	atgaaa	<b>ATG GTGAGTTGAG</b>	tgtcggccc	-	tgattaacatg	---	..68...	gccattttgag	gaatccca
D.Moj	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcagccc	-	tgatattcatg	---	..83...	taaccattgtag	gaatccca
D.Per	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	cagagattcaa	-----	..102...	tatgccttcag	gaatccca	
D.Pse	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	cagagattcaa	-----	..103...	tatgccttcag	gaatccca	
D.Vir	atgaaa	<b>TG GTGAGTTGAG</b>	tctcggccc	-	tgacattcatg	---	..72...	tgccccttgag	gaatccca
D.Wil	atgaaa	<b>ATG GTGAGTTGAG</b>	tgtcggccc	---	attgaaaaaat	...	..138...	ctttgtaatag	gaatccca
D.Yak	atgaaa	<b>TG GTGAGTTGAG</b>	tgtcggccc	---	agattcaatgc	---	..112...	tgtgccttgag	gaatccca
	*****	*****	* ****		*			* **	*****

id=71027 gene=FBgn0001139 name=gro segment=chr3R.21872315.21872454.1 type=IN VIEW

Figure 367: CS=15.96



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D.Sim aaggctgggtaagttttcaa...4766...gacaaccactgacaacgacaTTGT----TTGCTgTTATccTTCGTgcacagac--aagacaagtttt...138...ttcaatttctaggtgccgag
D.Sec aaggctgggtaagtttttaa...4766...gacaaccactgacaacgacaTTGT----TTGCTgTTATccTTCGTgcacagac--aagacaagtttt...138...ttcaatttctaggtgccgag
D.Ere aaggctgggtgagtgcaaaa...4334...tcccctcatcagacgctcataTGACACATGTCATTATaaCGTT--ttacattaacttaaaaacat----...569...ttcgcttccaggtgccgag
D.Ana gcgactgggtgagttctaga...4382...tgcccccttcagacatcataTGACACATGTCATTATaaCATT--ttacattaacttaaaaacat----...521...ttcaatttccaggtgccgag
D.Gri aaggctgggtaagtgatcat...4115...agactttatcagcagccttgTGACACATGTCATTATaaCATT--ttacattaacttaaaaacat----...784...actcgttccaggtgccgaa
D.Moj gaggctgggtgagtgcta...4004...cgatatcatcagcgcgcttaTGACACATGTCATTATaaCATT--ttacattaacttaaaaacat----...899...actcaatgaggtgccgaa
D.Per gaggctgggtaagtaaatc...4278...ccctcaattcagacatcataTGACACATGTCATTATaaCGTT--ttacattaacttaaaaacat----...625...atccccttccaggtgccgag
D.Pse gaggctgggtaagtaaatc...4287...ccctcaattcagacatcataTGACACATGTCATTATaaCGTT--ttacattaacttaaaaacat----...616...atccccttccaggtgccgag
D.Vir aaggctgggtaagttaaatg...4148...agactttatcagctgccttgTGACACATGTCATTAT--aagattttacattaacttaa-----...761...tctcgattgaggtgccgaa
D.Yak acggctgggtaagttgatc...4758...gacaaccactgacagcgacaTTGT----TTGCTgTTATccttgggtgcacagac--aagac-----...153...tcgaatttccaggtgccgag
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id=29584 gene=FBgn0042630 name=Sox21b segment=chr3L\_14111798\_14118185\_-1 type=IN

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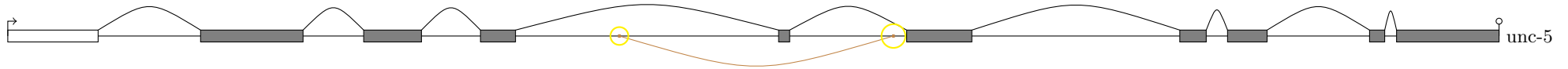
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D.Sec cgacgcaggtgagttcccgt...1888...cagcaaccactcaaaacaaa-----ACGGAaATGAAGCAAaACAAccctctgatgtgcttagtac----...650...cctcattcacaggccaccct
D.Ere cgacgcaggtgagttcccgt...1779...-----gcgaggatgacgaggaggat--GGTGATGATGATGATGATGTTA----acaacataattatagcccag...675...cctctttcacaggccaccct
D.Ana cgacgcaggtgagtttcgcc...1768...catcctgccaccaggccgac-----GGTGATGATGATGATGATGTTA----acaacataattatagcccag...559...tactctccacaggccaccct
D.Gri caacgcaggtgagtaacagt...1681...-----tattgctattgctgttctgctGTGATGATGATGATGATGTTA----acaacataattatagcccag...942...ttgccttttcaggccacact
D.Moj caacgcaggtgagtaactagt...1487...-----atgttgttctgctggtgatgat--GATGGTATGATGATGATGTTA----acaacataattatagcccag...1490...gcttcttttcaggccacact
D.Per cgacgcaggtgagttctct...1778...-----aggatgaggatggtgaggat--GGTGATGATGATGATGATGTTA----acaacataattatagcccag...875...cacactggacaggccaccct
D.Pse cgacgcaggtgagttctct...1743...-----aggatgaggatggtgaggat--GGTGATGATGATGATGATGTTA----acaacataattatagcccag...869...cacactggacaggccaccct
D.Vir caacgcaggtgagtaaaaca...1496...-----tgctggtgaagctgatgatg--ATGATGACGATGATGTTA----acaacataattatagcccag...950...gtcacatttcaggccacact
D.Yak cgacgcaggtgagttcccgt...1943...-----cactcaaaacaaaacggaa-----ATGAAGCAAaACAAccctctgatgtgcttagtac----...755...tgcttcttcacaggccaccct
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id=29590 gene=FBgn0042630 name=Sox21b segment=chr3L\_14106703\_14109365\_-1 type=IN VIEW

Figure 368: CS=9.6





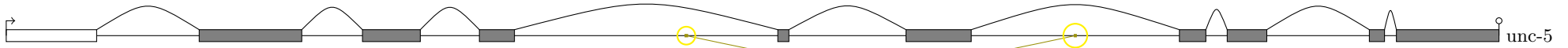
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D.Sim	atgtccag	gtacgttcctgc...869...-----gtgagtgctgagtatttcat-----	TTTAAa	CACGCATTCGGT	-tcctcggaccgacgacagat-...748...cgccaacaacag	aggacact			
D.Sec	atgtccag	gtacgttcctgc...840...-----gtgagtgctgagtatttcat-----	TTTAAa	CACGCATTCGGT	-tcctcggaccgacgacagat-...752...cgccaacaacag	aggacact			
D.Ere	atgtccag	gtacgttcctgc...884...-----gtgagtgctgagtatttcat-----	TTTAAa	CACGCATTCGGT	-tcctcggaccgacgacagat-...739...tgccaacaacag	aggacact			
D.Ana	ctgcccag	gtagtacacgt...827...-----gtgagtgctgagtatttcat-----	TTTAAa	CACGCATTCGGGT	cctcggctctcggtcctcggtc...709...tgccaacaacag	aggacact			
D.Gri	atgtccag	gtatgcaaacg...82...cgaattgaagtccaacaa-CAAAAattGTCAatTTAAATGG-----	catct	-gcacagcc-tgtggcc...1652...caacaacaacag	aggacact				
D.Moj	atgtccag	gtaaaaccgaaa...73...--taattgaagtccaacaacaAAAAattGTCAatTTAAATGG-----	cagcg	-ggcgttgccacctga--...1956...cgacatctacag	aggacact				
D.Per	ctgcccag	gtatgtccacac...940...--acttttattcatgtaaatTTTATTGcATTGT-----	attgtagt	gctcac-acagat-...377...tgccaacaacag	aggatact				
D.Pse	ctgcccag	gtatgtccacac...939...--acttttattcatgtaaatTTTATTGcATTGT-----	attgtagt	gctcac-acagat-...384...tgccaacaacag	aggatact				
D.Vir	atgtccag	gtatgcaaacg...73...--taattgaagtccaacaacgAAAAattGTCAatTTAAATGG-----	cagctcag	caccgcc-tgtgg--...1627...caacaacaacag	aggacact				
D.Yak	atgtccag	gtacgttcctgc...919...-----gtgagtgctgagtatttcat-----	TTTAAa	CACGCATTCGGT	-tcctcggaccgacgacagat-...857...tgccaacaacag	aggacact			
	** ****	***	*	*	** *	*	*	** * ****	**** **

id=117644 gene=FBgn0034013 name=unc-5 segment=chr2R.11246255.11247919.1 type=IN

D.Mel	taagcgca	gtaagttgaacc...1398...----atgaccgggga-----gtgccgct---	GTCGGGAATGTGTGcTAAA	-----	tttacagtgg-----	ccgc-----			
D.Sim	taagcgca	gtaagttgaacc...1514...----atgaccgggga-----gtgccgct---	GTCGGGAATGTGTGcTAAA	-----	tttacagtgg-----	ccgc-----			
D.Sec	taagcgca	gtaagttgaacc...1349...----atgactcgggga-----gtgccgct---	GTCGGGAATGTGTGcTAAA	-----	tttacagtgg-----	ccgc-----			
D.Ere	taagcgca	gtaagttgaacc...1351...----atgaccgggga-----gtgccgct---	GTCGGGAATGTGTGcTAAA	-----	tttacagtgg-----	ccgc-----			
D.Ana	taagcgca	gtaagttgaacc...1393...atatatgaccgggga-----gtgc---	CGTgtCGGGAATGTGTGcTAAA	-----	attcagtgg-----	ctgc-----			
D.Gri	taagcgca	gtaagttgaaca...1405...--tgcgggaatgtgtgctaaaTCATgTT--	AAtaTGACTTTT	-----	cgcatagtgg-----	ctgc-----			
D.Moj	taagcgca	gtaagttgaaca...1314...--cgggaaaatgtgtgctaaaTCATgTT--	AAtaTGACTTTT	-----	cttcagtgg-----	cacg-----			
D.Per	taagcgca	gtaagttgaaac...210...--gtcagattcggcg-----gccttaACAATtC--	AATaaACAATt	gtgttaaactgagcccaagccatcagtgcatcattagtgccc:::	tttatggtgggaacaactttcgatttctccaacggac--				
D.Pse	taagcgca	gtaagttgaaac...210...--gtcagattcggcg-----gccttaACAATtC--	AATaaACAATt	gtgttaaactgagcccaagccatcagtgcatcattagtgccc:::	tttatggtgggaacaactttcgatttctccaacggacta				
D.Vir	taagcgca	gtaagttcaaaa...1186...--tgcgggaatgtgtgctaaaTCATgTT--	AAtaTGACTTTT	-----	ctttagtgg-----	ctgc-----			
D.Yak	taagcgca	gtaagttgaacc...1405...----atgaccgggga-----gtgccgct---	GTCGGGAATGTGTGcTAAA	-----	tttacagtgg-----	ccgc-----			
	*****	***** *	*	**	**	**	**	**	**

id=117646 gene=FBgn0034013 name=unc-5 segment=chr2R.11247974.11249487.1 type=IN VIEW

Figure 369: CS=10.56



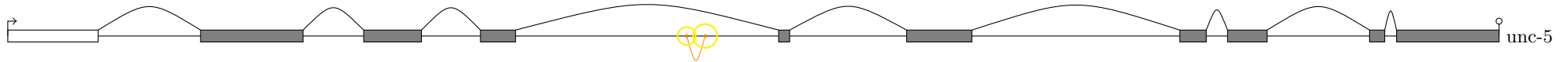
D.Mel	atgtccag	gtacgttcctgc...1170...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGTATTGTATTGTa	AGTGCT	cgcacagatactcac-ccaca...401...cgccaacaacag	aggacact	
D.Sim	atgtccag	gtacgttcctgc...1220...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGTATTGTATTGTa	AGTGCT	cgcacagatactcac-ccaca...385...cgccaacaacag	aggacact	
D.Sec	atgtccag	gtacgttcctgc...1187...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGTATTGTATTGTa	AGTGCT	cgcacagatactcac-ccaca...393...cgccaacaacag	aggacact	
D.Ere	atgtccag	gtacgttcctgc...1195...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGTATTGTATTGTa	AGTGCT	cgcacagatactcac-ccaca...416...tgccaacaacag	aggacact	
D.Ana	ctgccag	gtatgtacacgt...1100...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGT	---	agtgtcacacagatactc-----..437...tgccaacaacag	aggacact	
D.Gri	atgtccag	gtatgcaaacg...1383...aggctcga-	gcgggcacagc-----	AATGAGC--AATTGT	-----	tg-acagacaagcggggcaaa...359...caacaacaacag	aggacact	
D.Moj	atgtccag	gtaaacccgaa...1685...aggctcaca-	gcgggcacagc-----	AATGAGC--AATTGT	-----	tg-acagacaagcggggcaaa...351...cgacatctacag	aggacact	
D.Per	ctgccag	gtatgtccacac...1030...aggcgca-	gcgggcacagc-----	AATGAGC--AATTGT	-----	tg-acagacaagcggggcaaa...289...tgccaacaacag	aggacact	
D.Pse	ctgccag	gtatgtccacac...1029...aggcgca-	gcgggcacagc-----	AATGAGC--AATTGT	-----	tg-acagacaagcggggcaaa...296...tgccaacaacag	aggacact	
D.Vir	atgtccag	gtatgcaaaaag...1379...aggcgca-	gcgggcacagc-----	AATGAGC--AATTGT	-----	tg-acagacaagcggggcaaa...328...caacaacaacag	aggacact	
D.Yak	atgtccag	gtacgttcctgc...1302...---	ctttattcatgtaaattta	TTGTATTGcATTGTATTGTATTGTATTGTa	AGTGCT	cgcacagatactcac-acaca...462...tgccaacaacag	aggacact	
	** ****	***	* * * * *	* **	*****	***** * *	** * ****	**** **

id=117644 gene=FBgn0034013 name=unc-5 segment=chr2R.11246255.11247919.1 type=IN

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D.Sim	caaggatg	gtaagtctgtgc...1266...gcca-----	acaaccagtcaccgcc	AGCGCcgGCAAca	ATGACGACAACAATcACAG	caacggaacag-gcagcgca-...797...tcaccattgcag	atttcgat	
D.Sec	caaggatg	gtaagtctgtgc...1270...gcca-----	acaaccagtcaccgcc	AGCGCcgGCAAca	ATGACGACAACAATcACAG	caacggaacag-gcagcgca-...832...tcaccattgcag	atttcgat	
D.Ere	caaggatg	gtgagtcctgtgc...1294...gcca-----	acaaccagtcaccgcc	AGCGCcgGCAAca	ATGACGACAACAATcACAG	caacggaacag-gcagcgca-...820...tcaccattgcag	atttcgat	
D.Ana	caaggatg	gtgagtgctgt...1541...-----	cacatccagcgccagcaaca	-----	ATGACGACAACAATcACAG	caacggaacag-gcagcgca-...894...ttgccattgcag	atttcgat	
D.Gri	caaggatg	gtaagtgtgctt...1363...gtcgtgatttacagcgaat	-----	ATAATTGC-----	TCATT	---tcatacattgtgcaatgcgt...798...caccattcacag	acttcgat	
D.Moj	caaggatg	gtaagtgtgctt...2825...gtcgtgatttacagcgaat	-----	ATAATTGC-----	TCATT	---tcatacattgtgcaatgcgt...1399...tttcattcacag	acttcgat	
D.Per	caaggatg	gtaagtgtgctt...1254...gccgctgatttacagcgaat	-----	ATAATTGC-----	TCATT	---tcatacattgtgcaatgcgt...869...ttaccattgcag	atttcgat	
D.Pse	caaggatg	gtaagtgtgctt...1248...gccgctgatttacagcgaat	-----	ATAATTGC-----	TCATT	---tcatacattgtgcaatgcgt...870...ttaccattgcag	atttcgat	
D.Vir	caaggatg	gtaagtgtgctt...1418...gtcgtgatttacagcgaat	-----	ATAATTGC-----	TCATT	---tcatacattgtgcaatgcgt...750...ctgcccttacag	acttcgat	
D.Yak	caaggatg	gtgagtcctgtgc...1389...acca-----	acaaccagtcaccgcc	AGCGCcgGCAAca	ATGACGACAACAATcACAG	caacggaacag-gcagcgca-...809...tcaccattgcag	atttcgat	
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id=117648 gene=FBgn0034013 name=unc-5 segment=chr2R.11249806.11252017.1 type=IN VIEW

Figure 370: CS=8.58



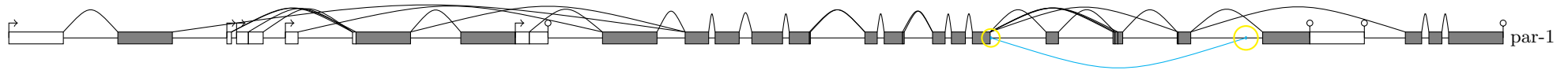
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D. Sim	atgtccag	gtacgttcctgc...1219...	-acttttattcatgtaaattt-----	ATTGTATTGcaTTGTaTTGT	---attgtagtgctcgcacagat-----	.396...	cgccaacaacag	aggacact
D. Sec	atgtccag	gtacgttcctgc...1186...	-acttttattcatgtaaattt-----	ATTGTATTGcaTTGTaTTGT	---attgtagtgctcgcacagat-----	.404...	cgccaacaacag	aggacact
D. Ere	atgtccag	gtacgttcctgc...1133...	.cggtgtagctggggcgctc-----	TTTTTGACagACGC	---acggggcgcatgtgtttgag..	.494...	tgccaacaacag	aggacact
D. Ana	ctgccag	gtatgtacacgt...1109...	-----atgtaaatttattgtattgc	ATTGTA---TTGTaGTGCTC	acacagatactcccgcacac-----	.430...	tgccaacaacag	aggacact
D. Gri	atgtccag	gtatgcaaagcg...1287...	-----tattcatgtaaatttattgt	ATTGCa---CATTGtaTTGT	---agtgcctcacacacacacaca..	.451...	caacaacaacag	aggacact
D. Moj	atgtccag	gtaaaaccgaaa...1607...	-----tattcatgtaaatttattgt	ATTGCa---CATTGtaTTGT	---agtgcacatagaggagaga..	.425...	cgacatctacag	aggacact
D. Per	ctgccag	gtatgtccacac...871...	---gtgtagctggggcgctttt	GTTTttTTTTttTGACagACGC	---acggggcgcatgtgtttgag..	.439...	tgccaacaacag	aggatact
D. Pse	ctgccag	gtatgtccacac...876...	-----ggggcgcttttggtttttt	TTTTttTGACagACGC	---acggggcgcatgtgtttgag..	.446...	tgccaacaacag	aggatact
D. Vir	atgtccag	gtatgcaaagcg...1275...	-----tattcatgtaaatttattgt	ATTGCa---CATTGtaTTGT	---agtgcacgcacacacgcaca..	.428...	caacaacaacag	aggacact
D. Wil	gtgtccag	gtaaacaacaca...620...	-----agtgagtgtgagtatttca	TTTCAAAcACGCAT	---tcggctgctggctgtgtttgag..	.666...	tgacaacaacag	aggacact
D. Yak	atgtccag	gtacgttcctgc...1240...	.cggtgtagctggggcgctc-----	TTTTTGACagACGC	---acggggcgcatgtgtttgag..	.540...	tgccaacaacag	aggacact
		** ****	***	**		** * ****	**** *	

id=117644 gene=FBgn0034013 name=unc-5 segment=chr2R.11246255.11247919.1 type=IN

D. Mel	atgtccag	gtacgttcctgc...1254...	.gatacttgccaggcgacac-----	GCGGgcACAGCAATgaGCAAT	tgttgacagacaagcggggc--	.326...	cgccaacaacag	aggacact
D. Sim	atgtccag	gtacgttcctgc...1304...	.gatacttgccaggcgacac-----	GCGGgcACAGCAATgaGCAAT	tgttgacagacaagcggggc--	.310...	cgccaacaacag	aggacact
D. Sec	atgtccag	gtacgttcctgc...1271...	.gatacttgccaggcgacac-----	GCGGgcACAGCAATgaGCAAT	tgttgacagacaagcggggc--	.318...	cgccaacaacag	aggacact
D. Ere	atgtccag	gtacgttcctgc...1441...	.gtatttcttttctatgaaaa-----	GTGTGTCAtAAAA	---ttaattttaaatttcgcttg-----	.187...	tgccaacaacag	aggacact
D. Ana	ctgccag	gtatgtacacgt...1189...	---tacttgccaggcgacacgc-----	GGGCACaGCAATgaGCAAT	tgttgacagacaagcggggc--	.348...	tgccaacaacag	aggacact
D. Gri	atgtccag	gtatgcaaagcg...1378...	-----ctgg-caggctcgacgcgggc	ACAGCAATGaGCAAT	tgttgacagacaagcggggc--	.362...	caacaacaacag	aggacact
D. Moj	atgtccag	gtaaaaccgaaa...1680...	.ggca-----gaggctcacagcgggc	ACAGCAATGaGCAAT	tgttgacagacaagcggggc--	.354...	cgacatctacag	aggacact
D. Per	ctgccag	gtatgtccacac...1195...	.gggcttttattctatgaaaa-----	GTGTGTCAtAAAA	---ttaatttctgcttgggtttc..	.118...	tgccaacaacag	aggatact
D. Pse	ctgccag	gtatgtccacac...1194...	.gggcttttattctatgaaaa-----	GTGTGTCAtAAAA	---ttaatttctgcttgggtttc--	.131...	tgccaacaacag	aggatact
D. Vir	atgtccag	gtatgcaaagcg...1374...	-----ctgg-caggcgacacgcgggc	ACAGCAATGaGCAAT	tgttgacagacaagcggggc--	.331...	caacaacaacag	aggacact
D. Wil	gtgtccag	gtaaacaacaca...833...	-----ttgacagacgcacggcggc	ATGTGTTTgAGA	---ctcttacttttattcatgt---	.455...	tgacaacaacag	aggacact
D. Yak	atgtccag	gtacgttcctgc...1600...	.attttcttttctatgaaaa-----	GTGTGTCAtAAAA	---ttaattttaaatttcgcttg-----	.181...	tgccaacaacag	aggacact
		** ****	***	*	** *	** * ****	**** *	

id=117644 gene=FBgn0034013 name=unc-5 segment=chr2R.11246255.11247919.1 type=IN VIEW

Figure 371: CS=11.52



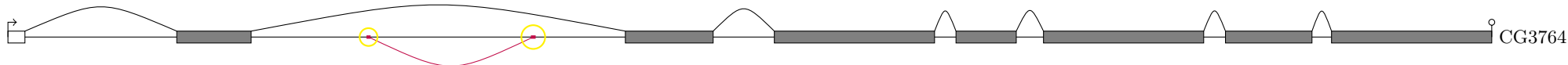
D.Me1	gAGAcAAA	GTACGTGA	gagttaagctagttctgatt---...520...gcaaattaccag	cagtggat
D.Sim	gAGAcAAA	GTACGTGA	gagttaagctagttctgatt---...486...gcaaattaccag	cagtggat
D.Sec	gAGAcAAA	GTACGTGA	gagttaagctagttccgatt---...482...gcaaattaccag	cagtggat
D.Ere	gAGAcAAA	GTACGTGA	gagttaagctagttctgatt---...476...gcaaattaccag	cagtggat
D.Ana	gAGAcAAA	GTACGTGA	gactcgatcgggttgccatt---...506...gcacattaccag	cagcggat
D.Moj	gAGAcAAA	GTACGTGA	atgtgtaacacttctatcc---...644...aaacgtaaccag	tagtggat
D.Per	gAGAcAAA	GTACGTGA	gaccggaac---ttgccaactat...590...gcacgtaaccag	cagcggat
D.Pse	gAGAcAAA	GTACGTGA	gaccggaac---ttgccaactat...605...gcacgtaaccag	cagcggat
D.Wil	gAGAcAAA	GTACGTGA	gccttgttttaatctctatt---...635...aaacaaaccag	cagcggat
D.Yak	gAGAcAAA	GTACGTGA	gagttaagctagttctgatt---...496...gcaaattaccag	cagtggat
	*****	*****	* * * * *	** **

id=30394 gene=FBgn0260934 name=par-1 segment=chr2R.15361473.15362032.1 type=IN

D.Me1	agcaaacg	gtaagtagtggc...2083...---	acttatcagttgaagaacga---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaa---	gaacatgaa...121...ctttaattttag	gccaaacc
D.Sim	agcaaacg	gtaagtagtggc...1708...---	acttatcagttgaagaacga---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaa---	gaacatgaa...121...ctctaatttttag	gccaaacc
D.Sec	agcaaacg	gtaagtagtggc...2069...---	acttatcagttgaagaacga---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaa---	gaacatgaa...121...ctttaatttttag	gccaaacc
D.Ere	agcaaacg	gtaagtagtggc...2060...---	acttatcagttgaagaacaa---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaa---	gaacatgaa...121...ctttaatttttag	gccaaacc
D.Ana	agcaaacg	gtaagtactact...2323...---	tatcagttgaagaacaacaa---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaa---	gaacatgaa...132...ctttaatttttag	gccaaacc
D.Moj	agcaaacg	gtaagtgtgcc...2225...tgagtatttaaat	aaa---aaa---	TTGCGT	ttACTTTTCTT	ttttccaat	atgtcaatgaa-----	229...ctttaatttttag	gccaaacc
D.Per	agcaaacg	gtaagtacgaac...2604...---	acttatcagctgaagagata---	TTGCGT	ttACTTTTCTT	-tttcta	atgaa---gaacat---	142...ctttaatttttag	gccaaacc
D.Pse	agcaaacg	gtaagtacgaac...2592...---	acttatcagctgaagagata---	TTGCGT	ttACTTTTCTT	-tttcta	atgaa---gaacat---	142...ctttaatttttag	gccaaacc
D.Wil	agcaaacg	gtaagttttaat...2970...caaaaa	---aaaataaaaacaaa---	TTGCGT	ttACTTTTCTT	-ttaata	aggaaacgtttaat---	124...ctttaatttttag	gccaaacc
D.Yak	agcaaacg	gtaagtagtggc...2115...---	acttatcagttgaagaacaa---	TTGCGT	ttACTTTTCTT	-tttc---	tatgaacatgaaaaac---	126...ctttaatttttag	gccaaacc
	*****	*****	* * * *	*****	*****	** *	*	** *****	*****

id=30403 gene=FBgn0260934 name=par-1 segment=chr2R.15366371.15368655.1 type=IN VIEW

Figure 372: CS=13.8



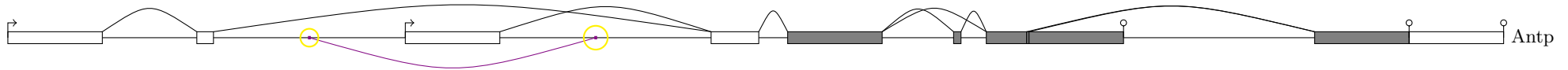
D.Mel	aaatccaa	gtaagcaggtc...318...-atcagttgggctaattgtta	ATTATAGCGCta	ATTTT	-----ag----	agaaggcgcctttgcaa...	1104...ccttctttgcag	tcgattcc
D.Sim	aaatccaa	gtaagcatggtc...322...-atc-gttgggctaattgttaa	TATAGCGCta	ATTTT	-----ag----	agaaggcgcctttcgcaa...	1108...cttctttgcag	tcgattcc
D.Sec	aaatccaa	gtaagcaggtc...324...-atcagttgggctaattgtta	ATTATAGCGCta	ATTTT	-----ag----	agaagcgccttttgcta...	1089...cttctattgcag	tcgattcc
D.Ana	aaatccaa	gtaagcactggg...326...catt--tcgggctaattgttaa	TTATAGCGCta	ATTTT	-----ag----	agaagcgccttttgcta...	634...gattttttgcag	tcgattcc
D.Gri	aagtatag	gtaagccaccac...419...tata--taaaaaattgtta	TATAGCGCta	ATTTT	-----ggtc--	agttgacgtatttctc--...	1522...tttatttaag	ccagtcc
D.Moj	cactatgg	gtacgtttccga...352...aaca---gaaaaaattcgta	TATAGCGCta	ATTTT	-----aggc--	agttggcgcagtttca--...	1366...ctctctttgcag	ccaattcc
D.Per	aaatacaa	gtaaacaccacc...473...-acatattgagctaattgtta	ATTATAGCGCta	ATTTT	-----ctggagaggcagagcagcg	-----	729...ccctatttgcag	tcgattcc
D.Vir	aagcatag	gtaagcctccag...347...acac---tgaaaaattcgta	TATAGCGCta	ATTTT	-----aggc--	agttggcgtattttca--...	1738...ttcgctttgcag	ccaattcc
D.Yak	aaatccaa	gtaagcaggtc...290...-atcagttgggctaattgtta	ATTATAGCGCta	ATTTT	-----ag----	agaaggcgcctttgcaa...	1167...ccttctttgcag	ccgattcc
	*	***	* * * * *	*****	* ** *		** **	* ****

id=17868 gene=FBgn0036684 name=CG3764 segment=chr3L\_16993113\_16994615\_-1 type=IN

D.Mel	aaatccaa	gtaagcaggtc...1167...--acaaaatacagagagctgctc	GAGATgt	GCGC	TATAAT	-gaacctccgctaggcggcga-...	253...ccttctttgcag	tcgattcc
D.Sim	aaatccaa	gtaagcatggtc...1171...--aaaaatacagagagctgctc	GAGATgt	GCGC	TATA	-atgaacctccgctgggcgga-...	257...cttctttgcag	tcgattcc
D.Sec	aaatccaa	gtaagcaggtc...1168...--aaaaatacagagagctgctc	GAGATgt	GCGC	TATAAT	-gaacctccgctgggcgga-...	243...cttctattgcag	tcgattcc
D.Ana	aaatccaa	gtaagcactggg...885...tagaatagaattagaga-gca-	GAGATgt	GCGC	TATAG	-cgaacctcgtctggcatggg--...	73...gattttttgcag	tcgattcc
D.Gri	aagtatag	gtaagccaccac...972...ctcgacaat-gagaagc-gcaa-	AGATgt	GCGC	TATA	accgagacagagacaaagc-...	967...tttatttaag	ccagtcc
D.Moj	cactatgg	gtacgtttccga...838...-tcgacaataaaatagc-gcta-	AGATgt	GCGC	TATA	-tgaaagtcgtca--gcaattcg...	878...ctctctttgcag	ccaattcc
D.Per	aaatacaa	gtaaacaccacc...932...agagagagggggacatt-gaa-	AGATgt	GCGC	TATAAT	-agatctcgtcattgcgacac-...	268...ccctatttgcag	tcgattcc
D.Vir	aagcatag	gtaagcctccag...822...ctcgacaat-gaatagc-gcaa-	AGATgt	GCGC	TATA	cacaaattgccgtcgttcga-...	1261...ttcgctttgcag	ccaattcc
D.Yak	aaatccaa	gtaagcaggtc...1114...--acaaaatacagagagctgctc	GAGATgt	GCGC	TATAAT	-gaacctccgctgggctgca-...	341...ccttctttgcag	ccgattcc
	*	***	* * * * *	*****	* ** *		** **	* ****

id=17868 gene=FBgn0036684 name=CG3764 segment=chr3L\_16993113\_16994615\_-1 type=IN VIEW

Figure 373: CS=17.1



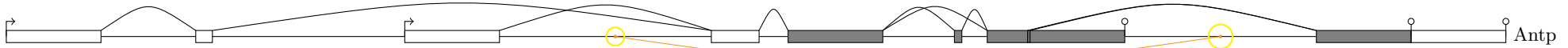
D.Mel	cgcaaaag	gtaggcccaaaa...3526...	gacactctcgatgacttccc	CGTTtcCACGct	TTCACITTT	caattg	cgggctcaactttt	-----	1378...	-----	gattcactggc-g	ttcagttg
D.Sim	cgcaaaag	gtaggcccaaaa...3523...	gacactctcgatgacttccc	CGTTtcCACGct	TTCACITTT	caattg	cgggctcaactttt	-----	1381...	-----	attcactggcgg	ttcagttg
D.Sec	cgcaaaag	gtaggcccaaaa...3550...	gacactctcgatgacttccc	CGTTtcCACGct	TTCactttcaattg	cgggctcaac	-----	1359...	-----	attcactggcgg	ttcagttg	
D.Ere	cgcaaaag	gtaggcccaaaa...3671...	gacactctcgatgacttccc	CGTTtcCACGct	TTCACITTT	caattg	cgggctcaactttt	-----	1233...	-----	attcactggcgg	ttcagttg
D.Ana	cgaataag	gtatggaccaaaa...3379...	gacactctcgatgacttccc	CGTTtcCACGct	TTCaCTTCA	aattg	cgggctcaactttttac	-----	1523...	tcgccttattc	-----	attcagttc
D.Gri	cataaaag	gtaagcaaatg...3261...	gacttccacgtttccacgct	TTTCaC	TTTCAATTGTA	-----	gctcaactttttactatttc	..	1647...	-----	tgtttacgagcgt	ttacggt-
D.Per	cataaaag	gtaagcaaatcaa...3326...	gacttccacgtttccacgct	TTTCaC	TTTCAATT	-----	ttggctcaactttttactgg	---	1585...	-----	tgttttcagtt-t	ctcagttg
D.Pse	cataaaag	gtaagcaaatcaa...3289...	gacttccacgtttccacgct	TTTCaC	TTTCAATT	-----	ttggctcaactttttactgg	---	1622...	-----	tgttttcagtt-t	ctcagttg
D.Vir	cacaaaag	gtaagcaaatg...3420...	gacttccacgtttccacgct	TTTCaC	TTTCAATTGTA	-----	gctcaactttttactatttc	..	1488...	-----	tgtttacgagcgt	ttacggt-
D.Yak	cgcaaaag	gtaggccgcaaaa...3607...	gacactctcgatgacttccc	CGTTtcCACGct	TTCACITTT	caattg	cgggctcaactttt	-----	1297...	-----	attcactggcgg	ttcagttg
	* * **	*** *	*** * * * *	** **	***** **	**** **	**				* * *	

id=131038 gene=FBgn0260642 name=Antp segment=chr3R.2758563.2796304\_-1 type=I5

D.Mel	aaactaag	gtaaatatttga...4294...	---cgggcaattttgtgatttat	GAGGTcaGAGAct	CGTGatAATG	----	agccaggaaatataatcact...	608...	aattctttacag	agtttcaa	
D.Sim	aaactaag	gtaaatatttga...4299...	---cgggcaattttgtgatttat	GAGGTcaGAGAct	CGTGatAATG	----	agccaggaaatataatcact...	603...	aattctttacag	agtttcaa	
D.Sec	aaactaag	gtaaatatttga...4304...	-----ttttatgatttatgagttca	GAGActCGTGatAATG	----	agccaggaaatataatcact...	605...	aattctttacag	agtttcaa		
D.Ere	aaactaag	gtaaatatttga...4315...	---cgggcaattttgtgatttat	GAGGTcaGAGAct	CGTGatAATG	----	agccaggaaatataatcact...	587...	aattatttacag	agtttcaa	
D.Ana	aaactaag	gtaaatatggcg...4430...	.gggggggca- -tttgtgattta	TGAGGGcaGAGAct	CGTGatAATG	----	agccaggaaatataatcact...	471...	gatctcttcag	agtttcaa	
D.Gri	aaactaag	gtaaatatattt...3666...	.ttcgccgtcagcggaaatg	-----	TGTAATTGAAAGgGAAG	-	cctttgctttggcgcaagaa	----	1242...	gttattttcag	agtttcaa
D.Per	aaactaag	gtaaataaatac...3655...	---gccatcattgggaaatgtgt	-----	AATTGAAAGgGAAG	-	cctttgctttggcctttggc	----	1256...	ccctttttcag	agtttcaa
D.Pse	aaactaag	gtaaataaatac...3635...	---gccatcattgggaaatgtgt	-----	AATTGAAAGgGAAG	-	cctttgctttggcctttggc	----	1276...	tcctttttcag	agtttcaa
D.Vir	aaactaag	gtaaataaata...3571...	.gccaccgtcagcggaaatg	-----	TGTAATTGAAAGgGAAG	-	cctttgctttggcggcctgcg	----	1337...	gttattttcag	agtttcaa
D.Yak	aaactaag	gtaaatataat...4285...	---cgggcaattttgtgatttat	GAGGTcaGAGAct	CGTGatAATG	----	agccaggaaatataatcact...	617...	atattattacag	agtttcaa	
	*****	*****	**	*	*	*	*	*	** **	*****	

id=131040 gene=FBgn0260642 name=Antp segment=chr3R.2736194.2757240\_-1 type=I5 VIEW

Figure 374: CS=10.8



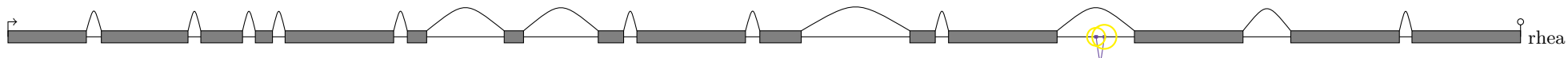
D.Mel	aaactaag	gtaaatattga...4406...-----attcataaattcaatgaatg	TTGTcaGCTTGTCAAG	-----	cgcggggaaacgggggcaa...503...aattccttacag	agtttcaa	
D.Sim	aaactaag	gtaaatattga...4370...--aaggatgt-caggtcagaagg	-----	GGATaACACaaTTGATtTCAT	attcataaattcaatgaatg---...534...aattccttacag	agtttcaa	
D.Sec	aaactaag	gtaaatattga...4368...--aaggatgt-caggtcagaagg	-----	GGATaACACaaTTGATtTCAT	attcataaattcaatgaatg---...536...aattccttacag	agtttcaa	
D.Ere	aaactaag	gtaaatattga...4386...--aaggatgt-caggtcagaagg	-----	GGATaACACaaTTGATtTCAT	attcataaattcaatgaatg---...518...aattccttacag	agtttcaa	
D.Ana	aaactaag	gtaaatatggcg...4502...--aaggatgt-caggtcaaaagg	-----	GGATaACACaaTTGATtTCAT	attcataaattcaatgaatg---...402...gatctctgcag	agtttcaa	
D.Gri	aaactaag	gtaaatatattt...3123...tcttttattg-caaatcaaat	TTTAGcATTGTtc	GCTTGaaTAAA	-----tcacatcagacaacataaa---...1777...gtttattgcag	agtttcaa	
D.Moj	aaactaag	gtaataaattc...4054...--aaggatgt-caggtcaaagg	-----	GGATaACACAATTGATtTCAT	attcataaattcaacgaatg---...850...gtctaattgcag	agtttcaa	
D.Per	aaactaag	gtaataaatac...4301...-----attcataaattcaatgaatg	TTGTcaGCTTGTCAAG	ccAAAGGAAgGGACT	-----tgcaaagcaggcaggagggg...593...cccttttgcag	agtttcaa	
D.Pse	aaactaag	gtaataaatac...4280...-----attcataaattcaatgaatg	TTGTcaGCTTGTCAAG	ccAAAGGAAgGGACT	-----tgcaaagcaggcaggcaggagg...614...tccttttgcag	agtttcaa	
D.Vir	aaactaag	gtaataaataa...4193...--aggatgt-caggtcaaaagg	-----	GGATaACACaATTGATtTCAT	attcataaattcaacgaatg---...711...gtttattgcag	agtttcaa	
D.Wil	gaactaag	gtaaatatttca...4539...--aggatgtccaggtcaaaagg	-----	GGATaACACaATTGATtTCAT	attcataaattcaatgaatg---...365...tttcttttacag	agtttcaa	
	*****	*****		** * * *		** ** *	*****

id=131040 gene=FBgn0260642 name=Antp segment=chr3R.2736194.2757240\_-1 type=I5

D.Mel	aagaactc	gcctcaaaaaat...4627...-ccctgttttttctcttttt	-----	TTTGACAAGTACAA	atatccgaattcgtaaggt-----...284...tggaaccaacag	aacgcaaa	
D.Sim	aagaacgc	gcctcaaaaaat...2607...-----gaacgcctcgggttatagac	ATGGcATCAGc	CGTGTcATTT	---aaa-----agaaggtagctgctctg...2297...tggaaccaacag	aacgcaaa	
D.Sec	aataacgc	gcctcaaaaaat...3271...-----gaacgcctcgggttatagac	ATGGcATCAGc	CGTGTcATTT	---aaa-----agaaggtagctgctctg...1633...tggaaccaacag	aacgcaaa	
D.Ere	aagaacgc	gccttaaaaaaa...3201...-----gaacgcctcgggttatagac	ATGGcATCAGc	CGTGTcATTT	---aaa-----agaaggtagctgctctg...1703...tggaaccaacag	aacgcaaa	
D.Ana	ataaaat	acaaaaaaaat...3204...-----gagtgctcaggttatagac	ATGGcATCAGc	CGTGTcATTT	---aaa-----agaaggtagctgctctg...1700...tggaaccaacag	aacgcaaa	
D.Gri	cattgtgc	gcctacaacaaa...4568...---ctatcggagcctgttgggat	-----	TTTgCAAGTACAAT	atCTGAAttcgtaaggtcgtctttaa...334...tggaaccaacag	agcgcaaa	
D.Moj	aattgtgc	gcctacaacaaa...3635...-----gaacgccttgggttatagac	ATGGcATCAGT	TGTGTcATTT	---aaa-----agaaggtagctgctctg...1269...cacaaccaacag	agcgcaaa	
D.Per	aagaacgc	gcctaaaaagca...4596...gctctctcgggcctctcttt	-----	GGTTCggTTCTTTTTT	TGACAAGTACAA	atatccgaattcgtaaggt-----...301...tggaaccaacag	aacgcaaa
D.Pse	aagaacgc	gcctaaaaagca...4587...gctctctcgggcctctcttt	-----	GGTTCggTTCTTTTTT	TGACAAGTACAA	atatccgaattcgtaaggt-----...310...tggaaccaacag	aacgcaaa
D.Vir	aattgtgc	gcctacaacaaa...3603...-----gaacgccttgggttatagac	ATGGcATCAGT	cGTGTcATTT	---aaa-----agaaggtagctacatgg...1301...tggaaccaacag	agcgcaaa	
D.Wil	gagaacgc	gcctactagcca...3089...-----gaacgccttgggttatagac	ATGGcATCAGT	cGTGTcATTT	---aaa-----agaaggtagctgctgctggc...1815...gacaaccaacag	aacgtaaa	
	*	*		** * * *	** * *	*****	* * * *

id=131050 gene=FBgn0260642 name=Antp segment=chr3R.2724261.2732739\_-1 type=IN VIEW

Figure 375: CS=10.56



D. Mel	atgtcaag	gtgggtc	tttgt...	118...	-----	ttc-----	aaaacga	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgtttc	cattcaa	aaagtca...	143...	tttacc	acatag	attgaact
D. Sim	atgtcaag	gtgggtc	tttagt...	118...	-----	ttc-----	aaaacga	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgtatc	cattcaa	aaagtca...	143...	tctacc	acatag	attgaact
D. Sec	atgtgaag	gtgggtc	tttagt...	118...	-----	ttc-----	aaaatga	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgtttc	cattcaa	aaagtca...	143...	tctacc	acatag	attgaact
D. Ere	atgtcaag	gtgctc	tttgc...	120...	-----	ttc-----	aaatcga	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgtttc	cattcaa	aaagtca...	145...	tctgcc	acacag	attgaact
D. Ana	atgtcaag	gtaggat	tctc...	104...	-----	tcc-----	aaacaca	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	197...	cttgtc	acacag	atcgaact
D. Moj	atgttaag	gtgagtc	ctccca...	147...	----	ctatcc-----	actacct	catctaa	CGATT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	205...	acattc	acacag	atcgaact
D. Per	atgtgaag	gtgggtg	gttct...	208...	-----	-----	aacgaac	taattgg	gattc-	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	191...	ctaccc	cgacag	atcgaact
D. Pse	atgtgaag	gtgggtg	gttct...	202...	-----	-----	aacgaac	taattgg	gattc-	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	191...	ctaccc	cgacag	atcgaact
D. Vir	atgtcaag	gtgagct	gagct...	114...	caaac	tacc-----	cca-ctc	atcTAATGATT	CAGTAAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	189...	ttcatt	acacag	atcgaact	
D. Wil	atgttaag	gtaggcat	gcca...	161...	-----	tgcccac	aaaacga	actaa-TTATGATT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgttac	cattcaa	aaagtca...	177...	tttcat	atttag	attgaact	
D. Yak	atgtcaag	gtgggtc	ttttac...	113...	-----	ttc-----	aaaacga	actaatt	gat-GGTT	CAGTGAG	ATATGTTT	GatATTCTTGG	ttgtttc	cattcaa	aaagtca...	144...	tctgcc	acacag	attgaact
	****	***	**	*			*	***	*	*****	*****	*****	*****	*****			*****	*****	*****

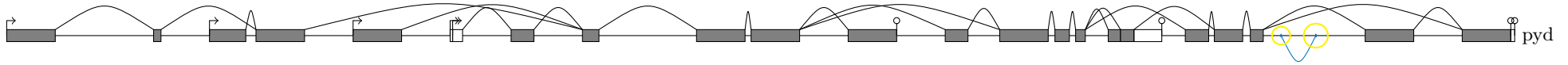
id=90048 gene=FBgn0260442 name=rhea segment=chr3L.8564762.8565117.1 type=IN

D. Mel	atgtcaag	gtgggtc	tttgt...	170...	tgtttc	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GACC-	ctcgcca	atctactaa	---aaca	-----	...	92...	tttacc	acatag	attgaact
D. Sim	atgtcaag	gtgggtc	tttagt...	170...	tgatc	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GACC-	ctcgcca	atctactaa	---aaca	-----	...	92...	tctacc	acatag	attgaact
D. Sec	atgtgaag	gtgggtc	tttagt...	170...	tgtttc	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GACC-	ctcgcca	atctactaa	---aaca	-----	...	92...	tctacc	acatag	attgaact
D. Ere	atgtcaag	gtgctc	tttgc...	172...	tgtttc	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	AGCC-	ttcgcca	atctactaa	---aaca	-----	...	94...	tctgcc	acacag	attgaact
D. Ana	atgtcaag	gtaggat	tctc...	156...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GACT-	ctcgcca	atctactaa	---aata	-----	...	146...	ctgtc	acacag	atcgaact
D. Moj	atgttaag	gtgagtc	ctccca...	200...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GATCG	cttaa-	acttactaa	---aaacg	-----	...	153...	acattc	acacag	atcgaact
D. Per	atgtgaag	gtgggtg	gttct...	255...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	-tgata	accgg	aaatctacta	-----	...	145...	ctaccc	cgacag	atcgaact	
D. Pse	atgtgaag	gtgggtg	gttct...	249...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	-tgata	accgg	aaatctacta	-----	...	145...	ctaccc	cgacag	atcgaact	
D. Vir	atgtcaag	gtgagct	gagct...	170...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GATTGTTG	aa-	acttactaa	aaacca	-----	...	134...	ttcatt	acacag	atcgaact
D. Wil	atgttaag	gtaggcat	gcca...	218...	tgttac	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GATCGTCGG	--aat	tactaa	---aaacca	atc...	121...	tttcat	atttag	attgaact	
D. Yak	atgtcaag	gtgggtc	ttttac...	165...	tgtttc	cattcaa	aaagtccac	CCAGGAATCAAACATATTa	TTACTGt	GACC-	ctcgcca	atctactaa	---aaca	-----	...	93...	tctgcc	acacag	attgaact
	****	***	**	*			***	*****	*****	*****	*****	*****	*****	*****			*****	*****	*****

id=90048 gene=FBgn0260442 name=rhea segment=chr3L.8564762.8565117.1 type=IN VIEW

Figure 376: CS=10.56





D. Mel	aacatgag	gtgagtcataa...136...--tccaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgacttt--...	907...ataaatctttag	cgaaatgg
D. Sim	aacatgag	gtgagtcataca...133...--ctcaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgacttt--...	897...ataaatctttag	cgaaatgg
D. Sec	aacatgag	gtgagtcataca...131...--cccaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgacttt--...	895...ataaatctttag	cgaaatgg
D. Ere	aacatgag	gtgagtcagtc...113...--cccaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgactttat...	889...ataaatcttag	cgaaatgg
D. Ana	aatatgag	gtaagtggatc...128...--cttcaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgtaattc--...	924...caaatcttag	cgaaatgg
D. Gri	aacatgag	gtaagtgcacat...251...-tgtccaa--gctccacatttct--	GTTAACGAAAAATGTTT	TATTTTGTAT	-----	atgccat---tgatgattt--...	1282...caaaaacttag	cgaaatgg
D. Moj	aacatgag	gtaagtgcagat...212...--ttcaac-gctccacatttct--	GTTAACGAAAAATGTTT	TATTTTGTAT	-----	atgcat---tgattaca...	1020...caaaaacttag	cgaaatgg
D. Per	aatatgag	gtgagtgaag...143...--cttcaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTTTGT	-----	atagccat---tgtaatt--...	1006...aaatcttag	cgaaatgg
D. Pse	aatatgag	gtgagtgaag...144...--cttcaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTTTGT	-----	atagccat---tgtaatt--...	991...aaatcttag	cgaaatgg
D. Vir	aacatgag	gtaagtgcac...245...-acagtttacaagcaaatc--	GTTAACGAAAAATGTTT	TATTTTGTAT	-----	atgcat---tattaca...	1174...caaaaacttag	cgaaatgg
D. Wil	aatatgag	gtaagttggctc...199...-tgtctttccctcaaac	ATTGTGTTAACGAAAAATGTTT	TATTTTGTATTTAT	gcTATT	tgatgccagttt-aacaatc--...	1498...aaaaacttag	cgaaatgg
D. Yak	aacatgag	gtgagtcacac...122...--cccaat-tttcaacatttgt--	GTTAACGAAAAATGTTT	taTATTcTTGTT	-----	aatgccat---tgacttt--...	903...ataaatctttag	cgaaatgg

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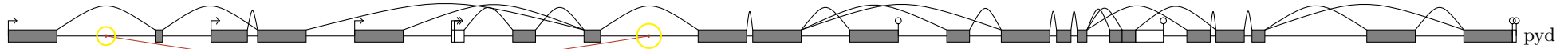
id=8142 gene=FBgn0003177 name=pyd segment=chr3R.4656728.4657863\_-1 type=IN

D. Mel	aacatgag	gtgagtcataa...483...-----ataaaatgaaaaaaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttcgacttgctattttagtt--...	560...ataaatctttag	cgaaatgg
D. Sim	aacatgag	gtgagtcataca...476...--cacatgtaaaaaatgaaaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttctacttgctattttagtt--...	554...ataaatctttag	cgaaatgg
D. Sec	aacatgag	gtgagtcataca...474...--cacatgtaaaaaatgaaaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttctacttgctattttagtt--...	552...ataaatctttag	cgaaatgg
D. Ere	aacatgag	gtgagtcagtc...439...-tcacgcacctacaaaatgaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttctacttgctattttagtt--...	563...ataaatcttag	cgaaatgg
D. Ana	aatatgag	gtaagtggatc...481...--aattctgaaatgaataagaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttctatagtacagatcgtta--...	571...caaaaacttag	cgaaatgg
D. Gri	aacatgag	gtaagtgcacat...640...-tcgcgctgataaaaa--aaaa	ATAACGAAAAATAAACATTTTTCG	ggTTAAC	-----	tttttgccataaacaacag-...	892...caaaaacttag	cgaaatgg
D. Moj	aacatgag	gtaagtgcagat...626...-----aaaaacttttaaaaaaaa	ATAACGAAAAATAAACATTTTTCG	ggTTAAC	-----	ttttacaaatcacagtct...	605...caaaaacttag	cgaaatgg
D. Per	aatatgag	gtgagtgaag...522...-----aaaaaagaaagaaaatca	AACGAAAAATAAACATTTTTCG	ggTTAAC	-----	ttcgatatacaaatatttcta--...	627...aaatcttttag	cgaaatgg
D. Pse	aatatgag	gtgagtgaag...504...-----aaaaaagaaatcaaatca	AACGAAAAATAAACATTTTTCG	ggTTAAC	-----	ttcgatatacaaatatttcta--...	631...aaatcttttag	cgaaatgg
D. Vir	aacatgag	gtaagtgcac...697...-taataataataa-aaataaaa	ATAACGAAAAATAAACATTTTTCG	ggTTAAC	-----	ttttgccaacacacagttct...	721...tcaaaaacttag	cgaaatgg
D. Wil	aatatgag	gtaagttggctc...622...-taaatagaaaataaacaat	AATAATAAACGAAAAATAAACATTTTTCG	ggTTAACGTA	TTTTTGTATTTT	TTTTTTGTTT	1077...aaaaacttag	cgaaatgg
D. Yak	aacatgag	gtgagtcacac...476...-tcacgcacatacaaaatgaa	AACGAAATAAAAACATTTTTCG	ggTTAAC	-----	ttctacttgctattttagtt--...	549...ataaatctttag	cgaaatgg

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id=8142 gene=FBgn0003177 name=pyd segment=chr3R.4656728.4657863\_-1 type=IN VIEW

Figure 377: CS=11.52



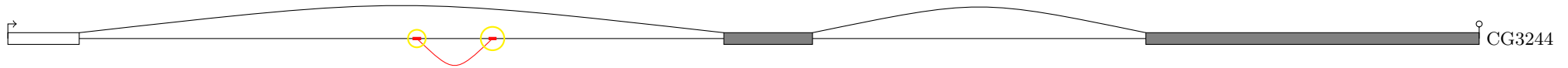
D. Mel	caagaccg	gtaagtacctgg...3465...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttcttgacttg-tata...1445...	tccttctttcag	atgccgcc
D. Sim	taagaccg	gtaagtacctgg...3532...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttcttgacttg-tagt...1378...	tccttctttcag	atgccgcc
D. Sec	caagaccg	gtaagtacctgg...3521...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttcttgacttg-tagt...1389...	tccttctttcag	atgccgcc
D. Ere	caagaccg	gtaagtacctgg...3509...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttcttgacttg-ttcc...1401...	cctcctttcag	atgccgcc
D. Ana	caaaagcg	gtaagtgcctct...3702...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttctgggctag-tacc...1208...	at t t t t t t c c a g	actcggcc
D. Gri	caaaagcg	gtaagtgaacga...2585...	at a t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gcatttcag-gccagaccact...2325...	tacatcttacag	atgccgcc
D. Moj	caaaagcg	gtaagtactaa...2927...	at a t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagtttcagaggcaga-gacc...1983...	catgtcttacag	atgctgcc
D. Per	caagagt	gtaagtctgct...3079...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGA	atgagcctctgttaatgtt---...1833...	actatcttacag	atgctgcc
D. Pse	caagagt	gtaagtctgct...2996...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGA	atgagcctctgttaatgtt---...1916...	actatcttatag	atgctgcc
D. Wil	caaaaatg	gtaagtttcagt...3649...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gag-tccgtacataat t t t t g t...1261...	catctctttcag	acgctagc
D. Yak	caagaccg	gtaagtacctgg...3456...	at t t t t c t a c g c a t g t c t c t	AGGATATGc	ACGAGT	gagcttcttgaacttg-tact...1454...	ttcatgtttcag	atgccgcc
	** * *	*****		** *****	*		** **	* * *

id=8103 gene=FBgn0003177 name=pyd segment=chr3R.4707062.4756437\_-1 type=IN

D. Mel	cgattgca	gtaagtaccctc...451...	g g c g g c c c t a g t g a t t a c g a	ACTTGTcATA	TCTT	tttttccaagaactatt--...1525...	tcctctttgcag	agtcaacg
D. Sim	cgattgca	gtaagtaccctc...464...	a g a g a c c g t a g t g a t t a c g a	ACTTGTcATA	TCTT	--ttttccaagaactattta...1506...	tcctctttgcag	agtcaacg
D. Sec	cgattgca	gtaagtaccctc...462...	a g a g g c c g t a g t g a t t a c g a	ACTTGTcATA	TCTT	--ttttccaagaactattta...1550...	tcctctttgcag	agtcaacg
D. Ere	cgattgca	gtgagtatacga...487...	a g a g a c c g t a g t g a t t a c c a	ACTTGTcATA	TCTT	--ttttccaagaactattta...1532...	tcctccttgcag	agtcaacg
D. Ana	cgattgca	gtaagtacgaa...571...	a c c a a g c c a a g t g a t t a a a a	ACTTGTcATA	TCTT	--ttttccaagaactatgta...1294...	cctat t t t t g c a g	agtcaacg
D. Gri	cgtttgca	gtaagtacatac...1336...	t c g t g t t g t g t g a t t a a a a	ACTTGTcATA	TCTT	--ttttcttcgaaactattta...2021...	tgcaacttgcag	tgtaaatg
D. Moj	cgtttgca	gtaagtacaacc...1062...	t c g t g c t c g t g t g a t t a a a a	ACTTGTcATA	TCTT	--ttttccaagaactattta...1878...	tccacttttag	tgtaaatg
D. Per	cgtttgca	gtaagtacatcc...587...	-t t c g c t t -c g t g a t t a a a a c	TTGTcATA	TCTT	--ttttccaagaactattta...1866...	cgctttttcag	agtcaacg
D. Pse	cgtttgca	gtaagtacatcc...589...	-t t c g c t t -c g t g a t t a a a a c	TTGTcATA	TCTT	--ttttccaagaactattta...1879...	cgctttttcag	agtcaacg
D. Wil	cgtttgca	gtaagtagaat...722...	c g t c g t c g g t g t g a t t a a a a	ACTTGTcATA	TCTT	--ttttccaagaactattta...1773...	tgtccatttcag	agtgaacg
D. Yak	cgattgca	gtgagtattcga...493...	a g a g g c t c t a g t g a t t g t a g	ACTTGTcATA	TCTT	--ttttccaagaactattta...1566...	tccacattgcag	agtcaacg
	** *****	** ****	*****	*****	*****	*****	** **	** * *

id=8118 gene=FBgn0003177 name=pyd segment=chr3R.4666337.4668391\_-1 type=IN VIEW

Figure 378: CS=11.88



D.Me1	aagcaaag	gtaagcagcagc...1429...gatattgatggt-gctgcc-ga	TGCTGAT	CACGt	TGCCCG	-tgcgctgcgccacaataaaa-----	..427...tttgcgttcag	atgaaagt
D.Sim	aagcaaag	gtaagcagcagc...1384...gatattgatgct-gatgcc-ga	TGCTGAT	CACGt	TGCCCG	-cgcgctgcgccacaataaaa-----	..428...ctcgccttcag	atgaaagt
D.Sec	aagcaaag	gtaagcagcagc...1382...tgtgctgacgcc-gatatt-ga	TGCTGAT	CACGt	TGCCCG	-cgcgctgcgccacaataaaa-----	..442...ctcgccttcag	atgaaagt
D.Ere	aagcaaag	gtaagcagcagc...1412...gatattgatggt-gatgct-ga	TGCTGAT	CACGt	TGCCCG	-tgcgctgcgccacaataaaa-----	..443...tttgcgttcag	atgaaagt
D.Ana	aagcaaag	gtaagaagcaga...1343...-tgccagtgttcctgctaca	TGCTGAT	CACGt	TGCCCG	-----ccacaatgaaaataaaaatg...381...tttattttcag	atgaaagt	
D.Gri	aaataaag	gtaagcagacat...1633...gatgccgttgcc-gatggt-ga	TGCTGAT	CACGt	TGCCCG	acgctgctaagctacaataa-----	..750...ctttgcttcag	atgaaagt
D.Per	aagcaaag	gtaagcaccaga...1696...gct--cgatgctcga	TGCTGAT	CACGt	TGCCCG	-----cgccacaataaaaataataa--..476...ttgtttttcag	atgaaagt	
D.Pse	aagcaaag	gtaagcaccaga...1703...gct--cgatgctcga	TGCTGAT	CACGt	TGCCCG	-----cgccacaataaaaataataa--..494...tcgtttttcag	atgaaagt	
D.Vir	aaacaat	ataatatcaaaa...1862...ggcaatgtgct-gctgct-ga	TGCTGAT	CACGt	TGCCCG	---gatgctaagctacaataaaa-----	..338...ttttcttcag	atgaaagt
D.Yak	aagcaaag	gtaagcagcagc...1455...gatattgatggt-gatgct-ga	TGCTGAT	CACGt	TGCCCG	-----tgcgccacaataaaaatgaa--..479...tattgcttacag	atgaaagt	
	** **	***	*	*	*****	* **** *	** **	*****

id=64663 gene=FBgn0031629 name=CG3244 segment=chr2L.4799879\_4801816.-1 type=IN

D.Me1	aagcaaag	gtaagcagcagc...1543...---gatggcgtttgtagtcact	GTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...314...tttgcgttcag	atgaaagt		
D.Sim	aagcaaag	gtaagcagcagc...1497...---gatggcgtttgtagtcact	GTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...316...ctcgccttcag	atgaaagt		
D.Sec	aagcaaag	gtaagcagcagc...1509...---gatggcgtttgtagtcact	GTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...316...ctcgccttcag	atgaaagt		
D.Ere	aagcaaag	gtaagcagcagc...1547...---gatggcgtttgtagtcact	GTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...309...tttgcgttcag	atgaaagt		
D.Ana	aagcaaag	gtaagaagcaga...1422...---tgtcgtcgtttgtagtcac	TGTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...303...tttattttcag	atgaaagt		
D.Gri	aaataaag	gtaagcagacat...1714...---cgacgtcgt--gtcgtcact	TGGCAGT	TGTGTCAGT	Gccgccctcggggcaaccggtt...670...ctttgcttcag	atgaaagt		
D.Per	aagcaaag	gtaagcaccaga...1815...agccatcggcgttggtagt	CAGT	gtGGCAGT	TGTGTCAGT	Gccgctctcaagtgcctccg-...356...ttgtttttcag	atgaaagt	
D.Pse	aagcaaag	gtaagcaccaga...1822...agccatcggcgttggtagt	CAGT	gtGGCAGT	TGTGTCAGT	Gccgctctcaagtgcctccg-...374...tcgtttttcag	atgaaagt	
D.Vir	aaacaat	ataatatcaaaa...1956...---gtcgcctc--gccgtcact	gGCAGT	TGTGTCAGT	Gccgctcgcgcagcga-...245...ttttcttcag	atgaaagt		
D.Yak	aagcaaag	gtaagcagcagc...1592...---gatggcgtttgtagtcact	GTGGCA	TGTGTCAGT	Gccgccg-ggggcaaccggtt...343...tattgcttacag	atgaaagt		
	** **	***	**	*	**** * * * * *	* *	** **	*****

id=64663 gene=FBgn0031629 name=CG3244 segment=chr2L.4799879\_4801816.-1 type=IN VIEW

Figure 379: CS=6



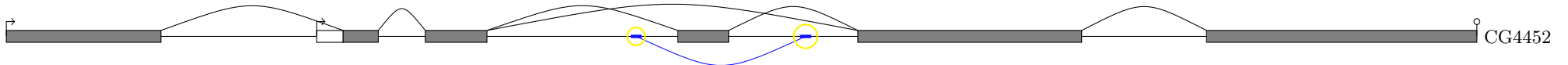
D.Sim tgcatacggtgagttttgtt...52...-----ttccaccgaatcaaacggcc-GTGTAAcTTGAAATGCACAATgc-----aagagct---tcgacattgt...212...cttcgtatacagatgcgcca  
D.Sec tgcatacggtgagttttgtt...52...-----ttccaccgaatcaaacggcc-GTGTAAcTTGAAATGCACAATgc-----aagagct---tcgacattgt...211...cttcgtatacagatgcgcca  
D.Ere tgcatacggtgagttttgtt...52...-----ttccaccgaatcaaacggccCGTGTAacTTGAAATGCACAATgc-----aagagct---tcgataattgt...211...cttcgtatatagatgcgcca  
D.Gri tgcatacggtatgttttcca...58...-----acgagcaacgtggcagccg--TGTAaTTTGAATGCACAATatatg----aaatgctcgaataa-----...372...aactgcaaatagatgcgcca  
D.Moj tgcatacggtatgattgatat...64...-----acgagcaacgtggcagccg--TGTAaTTTGAATGCACAATatatagaatgcaaatgctcg-----...325...aactgcaaatagatgcgcca  
D.Per tgcatacggtatgattcactt...73...-----tattctgagcaatgt---atggcCGTGTAaTTTGAATGCACAATgtaagaa---aaaatcttgaata-----...279...catgcaaatagatgcgcca  
D.Pse tgcatacggtatgattcactt...73...-----tattctgagcaatgt---atggcCGTGTAaTTTGAATGCACAATgtaagaa---aaaatcttgaata-----...279...catgcaaatagatgcgcca  
D.Vir tgcatacggtacgtttgatct...69...-----acgagcaacgtggcagccg--TGTAaTTTGAATGCACAATgtata-----aagagctcgtatcaa-----...287...aactgcaaatagatgcgcca  
D.Wil tgcatacggtataaaaaacta...329...ttathttttagtctttggcag-----TGTAaTTTGAATGCACAAT-----atttgattgaggtaccacct--...216...ttgtaaatagatgcgcca  
D.Yak tgcatacggtatgattttgtt...52...-----ttccaccgaatcaaatcggcCGTGTAacTTGAAATGCACAATgc-----aagagct---gcatattgt...211...cttcgtatatagatgcgcca  
\*\*\*\*\* \*\* \* \* \* \*\*\*\*\* \*\* \* \* \* \*\*\*\*\* \*\*

id=40707 gene=FBgn0035981 name=CG4452 segment=chr3L.9361315.9361667\_1 type=IN

D.Sim tgcatacggtgagttttgtt...142...-aaaccgatcc-aa--aatccanaATTGTGCcTTCAAaTACAT-actgctcttccc---gat---ctcta--...122...cttcgtatacagatgcgcca  
D.Sec tgcatacggtgagttttgtt...141...-aaaccgatcc-aa--aatccaa-ATTGTGCcTTCAAaTACAT-actgctcttccc---gat---ctcta--...122...cttcgtatacagatgcgcca  
D.Ere tgcatacggtgagttttgtt...141...-aaaccgatcc-aa--aatccaa-ATTGTGCcTTCAAaTACAT-act---ttgca---gataactgctctt--...122...cttcgtatatagatgcgcca  
D.Gri tgcatacggtatgttttcca...196...--ctgccttgtcccaccaacta--ATTGTGCcTTCAAaTACA-----ttcaaatgaaatgcccgtttt--...234...aactgcaaatagatgcgcca  
D.Moj tgcatacggtatgattgatat...212...-cgcccacttctaccaacta--ATTGTGCcTTCAAaTACA-----ttaac---taatgcccgtttgccc...177...aactgcaaatagatgcgcca  
D.Per tgcatacggtatgattcactt...198...atagcccta--gctaccaccaacta--ATTGTGCcTTCAAaTACAT-act---ttgta---actcctcagta--...154...catgcaaatagatgcgcca  
D.Pse tgcatacggtatgattcactt...198...atagcccta--gctaccaccaacta--ATTGTGCcTTCAAaTACAT-act---ttgta---actcctcagta--...154...catgcaaatagatgcgcca  
D.Vir tgcatacggtacgtttgatct...182...-cttcccttgttaccaccaacta--ATTGTGCcTTCAAaTACA-----tgtaac---caaaagcccgttttggcc...174...aactgcaaatagatgcgcca  
D.Wil tgcatacggtataaaaaacta...446...-ccacatcctaaccaaaccta--ATTGTGCcTTCAAaTACA--aca---caaaa---aataatcaatta--...99...ttgtaaatagatgcgcca  
D.Yak tgcatacggtatgattttgtt...141...-aaaccgatccaaa--aatccaa-ATTGTGCcTTCAAaTACAT-act---ttgca---gataactgctctt--...122...cttcgtatatagatgcgcca  
\*\*\*\*\* \*\* \* \* \* \*\*\*\*\* \*\* \* \* \* \*\*\*\*\* \*\*

id=40707 gene=FBgn0035981 name=CG4452 segment=chr3L.9361315.9361667\_1 type=IN VIEW

Figure 380: CS=14



```

D.Mel  tgcattcgt  gtgagttttgtt...225...--aaccacccaaccaaccaacc---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...37...cttcgtatacag  atgcgcc
D.Sim  tgcattcgt  gtgagttttgtt...221...--aatgaaccaaccaaccaacc---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...36...cttcgtatacag  atgcgcc
D.Sec  tgcattcgt  gtgagttttgtt...220...--aatgaaccaaccaaccaacc---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...36...cttcgtatacag  atgcgcc
D.Ere  tgcattcgt  gtgagttttgta...223...--accaagcaaatgaacctacc---GTCTCTTATGAACGCAAACATT-tctcttctc-ttttctgcccgc--...38...cttcgtatatag  atgtgcc
D.Ana  tgcattcgt  gtaagaggagat...237...tttccggac--agcaatacaac---GTCTCTTATGAACGCAAACATTTTTC-ttcttctc-ttttctgcccgc--...27...tctgcgccatag  atgcgcc
D.Gri  tgcattcgt  gtatgtttcca...350...--acaagaatagaacaacacg---TCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...72...aactgcaaatag  atgcgcc
D.Per  tgcattcgt  gtatgttcact...306...--tcaaaccacaatacaaaa---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...38...catgcaaatag  atgcgcc
D.Pse  tgcattcgt  gtatgttcact...306...--tcaaaccacaatacaaaa---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...38...catgcaaatag  atgcgcc
D.Vir  tgcattcgt  gtacgttgatct...289...--aaacaaaatagaacgaaaaCAACGtCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...65...aactgcaaatag  atgcgcc
D.Wil  tgcattcgt  gtaaaaaaacta...501...--attaatccctaaacattgt---CTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...43...tggtaaatag  atgcgcc
D.Yak  tgcattcgt  gtaagttttgta...223...--accaagcaaatgaaccaacc---GTCTCTTATGAACGCAAACATTTTCTC-ttcttctc-ttttctgcccgc--...34...cttcgtatatag  atgcgcc
***** **                **                *****                ***** *   *   *   *   *   *   *   *   *   *

```

id=40707 gene=FBgn0035981 name=CG4452 segment=chr3L.9361315.9361667\_1 type=IN

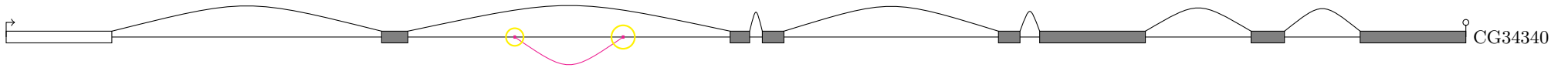
```

D.Mel  acaaaaag  gtcagcgacag...85...----gagcgggatgaa-----ctgtatcc-----GAGAAttATGTacTTGCGTTCATAAGAGAC-cgtgataag---tctaggatt----at...60...tctcgccgacag  gtcaatgg
D.Sim  acaaaaag  gtcagcgacag...82...----gagcgggatgaa-----ctgtacc-----GAGAAttATGTacTTGCGTTCATAAGAGAC-cgtgataag---tctaggatt----at...60...tctcgccgacag  gtcaatgg
D.Sec  acaaaaag  gtcagcgacag...79...----gagcgggatgaa-----ctgtacc-----GAGAAtAATGTacTTGCGTTCATAAGAGAC-cgtgataag---tctaggatt----at...60...tctcgccgacag  gtcaatgg
D.Ere  acaaaaag  gtcagctccag...85...----atgaa-----ttgtaccgagaatc-----AATGTaTTTGGTTCATAAGAGAC-cgtgtttag---tctaggata----t...56...tctcgccgacag  gtcaatgg
D.Ana  acaaaaag  gtatactacca...128...tgttcatttcgacgtttct---GAGAAtcATGTaTTTGGTTCATAAGAGAC-cgaatgtag---attaagatt----ag...42...tctctctgcag  gtcaatgg
D.Gri  acaaaaag  gtcagcgaat...125...----aatga-----cagtgacgagtctcaAGAGAttATGTgTTGCGTTCATAAGAGAC-----gag---tctaggatttgtttaac...59...accgctcttcag  gtcaatgg
D.Per  acaaaaag  gtcagcgtccct...130...tcgtcgatttcacgaacct-----AAGAAtcATGTaTTTGGTTCATAAGAGAC-caaatctag---tctaggatt----ag...43...tctcgcttcag  gtcaatgg
D.Pse  acaaaaag  gtcagcgtccct...130...tcgtcgatttcacgaacct-----AAGAAtcATGTaTTTGGTTCATAAGAGAC-caaatctag---tctaggatt----ag...43...tctcgcttcag  gtcaatgg
D.Vir  acaaaaag  gtcagcgatata...157...--atgagtctagattttgta-----TTGCGTTCATAAGAGTGTGagcctaaaagttttaagagc-----...63...gcctcttcag  gtcaatgg
D.Wil  acaaaaag  gtcagcaagaa...133...--gaattctgaaaggaatccc-----ATGTaTTTGGTTCATAAGAGAC-----cccccagaagaa--atcataatt-----...53...tgtatattgcag  gtaaatgg
D.Yak  acaaaaag  gtcagctcccag...84...----gatgtacc---gttttgtacc---GAGAAttATGTacTTGCGTTCATAAGAGAC-cgtgtttat---tctaggata----at...56...tctcgccgacag  gtcaatgg
***** **  *                *   *                *****                *   *   *   *   *   *   *   *   *   *

```

id=40709 gene=FBgn0035981 name=CG4452 segment=chr3L.9361762.9362000\_1 type=IN VIEW

Figure 381: CS=17.05



```

D. Mel ccatccat gtgagtataat...3073...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1759...-gctattcc-ccag ataccagc
D. Sec ccatccat gtgagtataaa...3064...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1763...-gctattcc-ccag ataccagc
D. Ere ccatccat gtgagtatctaa...3176...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1736...-gctattcc-ccag ataccagc
D. Ana acatcctt gtaagtacacta...3039...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1873...-ctattcctccag ataccagc
D. Gri tcatccat gtgagtatgaca...2544...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...2367...-tttccttgtag ataccagt
D. Moj ccatccat gtgagtatgagt...3001...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1910...-ggctgctt--acag ataccagc
D. Per ccatccat gtgagtataccc...2877...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...2035...-tcttttcaacag acaccagc
D. Pse ccatccat gtgagtataccc...2861...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...2051...-tcttttcaacag acaccagc
D. Vir ccatccat gtgagtatgaaa...3219...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1692...-ccctgcttgtag acaccagc
D. Yak ccatccat gtgagtataaa...3160...t-gggatttgactcgaaaccTAATtGTGCTAATtgcca--gccgcttgaaactca----...1752...-gcttttcc-ccag ataccagc
***** ** ***** * ***** ** * ***** ** * ***** ** * ***** ** * *****

```

id=31721 gene=FBgn0085369 name=CG34340 segment=chr2L.3673302.3678210.1 type=IN

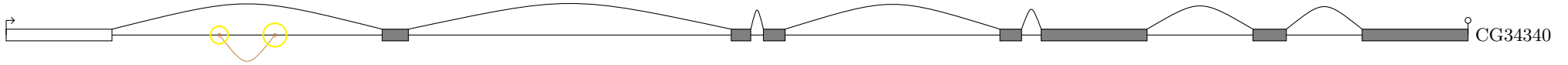
```

D. Mel ccatccat gtgagtataat...3743...--agtagaacatgacaacacagcATTAgcGCGCATTAcagagagtctctagagaact-...1088...-gctattcc-ccag ataccagc
D. Sec ccatccat gtgagtataaa...3736...--aggacaacatggcaaacacagcATTAgcGCGCATTAcagagagtctctagaggaact-...1090...-gctattcc-ccag ataccagc
D. Ere ccatccat gtgagtatctaa...3858...--tagacgacatggcaaacacagcATTAgcGCGCATTAcagagagtctctagagaatt-...1053...-gctattcc-ccag ataccagc
D. Ana acatcctt gtaagtacacta...3905...acggagttgtaga--aaacaacATTAgcGCGCATTAcacggattctccaggggaatc-...1006...-ctattcctccag ataccagc
D. Gri tcatccat gtgagtatgaca...2992...--agagttgtcagccaacaacATTAgcGCGCATTAgatgtattcccctgaggggga...1918...-tttccttgtag ataccagt
D. Moj ccatccat gtgagtatgagt...3464...--ttgttcgcccgaacaacagcATTAgcGCGCATTAgaggtattcccctggggcagcg...1446...-ggctgctt--acag ataccagc
D. Per ccatccat gtgagtataccc...3715...--ggaaaaacgtagcaaacacagcATTAgcGCGCATTAcatagagtccctggggggga-...1196...-tcttttcaacag acaccagc
D. Pse ccatccat gtgagtataccc...3730...--ggaaaaacgtagcaaacacagcATTAgcGCGCATTAcatagagtccctgggggtggg-...1181...-tcttttcaacag acaccagc
D. Vir ccatccat gtgagtatgaaa...3660...--ccagttgtgagccaacaacATTAgcGCGCATTAgatgtactcccagggagggc...1250...-ccctgcttgtag acaccagc
D. Yak ccatccat gtgagtataaa...3817...--aggccgacatggcaaacacagcATTAgcGCGCATTAcacaaagtctccaggggaatt-...1094...-gcttttcc-ccag ataccagc
***** ** ***** * ***** ** * ***** ** * ***** ** * *****

```

id=31721 gene=FBgn0085369 name=CG34340 segment=chr2L.3673302.3678210.1 type=IN VIEW

Figure 382: CS=12



```

D.Mel  gtaataag gtaatatctctt...2879...-cctatTTAATTcaGCATaA-----ATT--attcactgga---aattaattca...2030...ttcgatttcag ctcggtcc
D.Sim  gtaataag gtaatatcatct...2831...-cctatTTAATTcaGCATaA-----ATT--attcactgga---aattaattca...2078...ttccatttcag ctcggtcc
D.Sec  gtaataag gtaatatcatct...2855...-cctatTTAATTcaGCATaA-----ATT--attcactgga---aattaattca...2054...ttccatttcag ctcggtcc
D.Ere  gtaataag gtaatatctcat...2878...-cctatTTAATTcaGCATaA-----ATT--attcactgga---aattaattca...2031...ttcgatttcag ctcggtcc
D.Ana  gtaataag gtgagttaagga...2797...-cctatTTAATTcgGCATaA-----ATT--attcaatgga---aattaattca...2112...tttttttacag ctcggtcc
D.Gri  gtaacaag gtaagtcggata...2670...ttccattTTGTAATTTGCATAAATTGTTATatTTGGagtcctcgccgcaaa--aact--...2225...ttcacttacag ctcggtcc
D.Moj  gtaataag gtaagtcgaaga...2538...-cattgGTAATTTGCATAAATTGTTGtaTTGGagtcctcgccgcaaa--aatt--...2360...ctcacttcag ctcggtcc
D.Pse  gtaataag gtgagttaatgg...2754...-cctatTTAATTcaGCATaA-----ATT--attcagagga---aattaattca...2155...ttctgtttacag ctcggtcc
D.Vir  gcaataag gtaagtcgatga...3120...-cattgGTAATTTGCATAAATTGTTaTATTGGAGtccgtcggccgcaaa--aactca...1776...tcgtatttacag ctcggtcc
D.Wil  gcaataag gtgagttaagga...2602...-cattgGTAATTTGCATAAATTGTTaTTGGagtcctcgccgcaaa--aact--...2296...ctctgttttag ctcggtcc
D.Yak  gtaataag gtaatatctcag...2754...-cctatTTAATTcaGCATaA-----ATT--attcactgga---aattaattca...2155...ttcgatttcag ctcggtcc
* ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=31719 gene=FBgn0085369 name=CG34340 segment=chr2L.3663307\_3673177\_1 type=I5

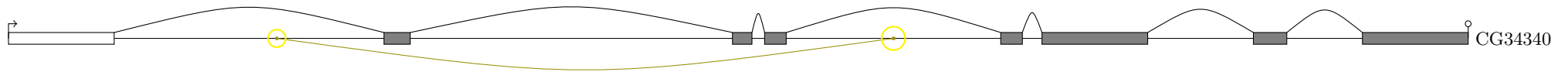
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D.Mel  gtaataag gtaatatctctt...3143...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1767...ttcgatttcag ctcggtcc
D.Sim  gtaataag gtaatatcatct...3091...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1819...ttccatttcag ctcggtcc
D.Sec  gtaataag gtaatatcatct...3115...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1795...ttccatttcag ctcggtcc
D.Ere  gtaataag gtaatatctcat...3187...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1723...ttcgatttcag ctcggtcc
D.Ana  gtaataag gtgagttaagga...3067...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1843...tttttttacag ctcggtcc
D.Gri  gtaacaag gtaagtcggata...2956...-tgttagtgaatt---aattccaC---TGAATAATTTATGCTGAATTAttTGGG-----cgtattaaatagccgtacag...1941...ttcacttacag ctcggtcc
D.Moj  gtaataag gtaagtcgaaga...2779...-tgttagtgaatt---aattccaT---TGAATAATTTATGCTGAATTAT--tt--ggccgtattaaatagctg...2123...ctcacttcag ctcggtcc
D.Pse  gtaataag gtgagttaatgg...2999...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1911...ttctgtttacag ctcggtcc
D.Vir  gcaataag gtaagtcgatga...3387...gggtgttagtgaatt---aat---TTCCAGTGAATAATTTATGCTGAATTAT--tt--ggccgtattaaatagccg...1510...tcgtatttacag ctcggtcc
D.Wil  gcaataag gtgagttaagga...2886...-tgttagtgaatt---aattccaT---TGAATAATTTATGCTGAATTAT--tttcggccatattaaatag-----...2016...ctctgttttag ctcggtcc
D.Yak  gtaataag gtaatatctcag...3063...-----cgacggactccaatataac-----AATTATGCaaAATTACaaattctcacaattctaat-----...1847...ttcgatttcag ctcggtcc
* ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=31719 gene=FBgn0085369 name=CG34340 segment=chr2L.3663307\_3673177\_1 type=I5 VIEW

Figure 383: CS=10.56



D.Mel	gtaataag	gtaatatctctt... 3143...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1768...	tttcgatttcag	ctcgggtcc
D.Sim	gtaataag	gtaatatcatct... 3091...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1820...	tttcatttcag	ctcgggtcc
D.Sec	gtaataag	gtaatatcatct... 3115...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1796...	tttcatttcag	ctcgggtcc
D.Ere	gtaataag	gtaatatctcat... 3187...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1724...	tttcgatttcag	ctcgggtcc
D.Ana	gtaataag	gtgagttaagga... 3067...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1844...	tttttttacag	ctcgggtcc
D.Gri	gtaacaag	gtaagtcggata... 2956...	-----tggttagtgaatt---	aatttccaCTGAATAATTTATGC	tgAATT	--atTT-----ggcgattataaatagc...	1948...	tttcacttacag	ctcgggtcc
D.Moj	gtaataag	gtaagtcgaaga... 2773...	gcgtggtgtagtgaatt---	aaTTTCCaTTGAATAATTTATGC	tgAATT	--atTT-----ggcgattataaatagc...	2125...	ctctacttcag	ctcgggtcc
D.Wil	gcaataag	gtgagtttaagg... 2880...	tggtggtgtagtgaatt---	aaTTTCCATTGaaTAATTTATGC	tgAATT	--atTTTCggccatattaaat---	2018...	ctctgttttag	ctcgggtcc
D.Yak	gtaataag	gtaatatctcag... 3063...	-----cgacggactc	caaatataac-----	AATTATGCAAAATT	acaaattctcacaattctaa-----	... 1848...	tttcgatttcag	ctcgggtcc
	* ** **	** *	* **	*** *	* ** **	* **	* **	** **	*****

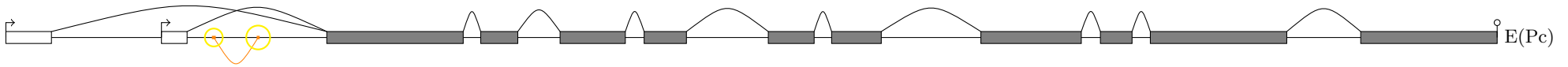
id=31719 gene=FBgn0085369 name=CG34340 segment=chr2L.3663307.3673177.1 type=I5

D.Mel	gggttcag	gtaagcaaaagt... 3605...	-----tgtgtattaaa	caaaaagaaAATTgTGCATgaAATT	-----atgagtgagatggcaactgc...	1304...	gccaaccgcag	gtctggtt	
D.Sim	gggttcag	gtaagcaaaagt... 3598...	-----tgtgtataaaa	caaaaagaaAATTgTGCATgaAATT	-----atgattgcgagggagtgaga...	1311...	gccaaccgcag	gtctggtt	
D.Sec	gggttcag	gtaagcaaaagt... 3598...	-----tgtgtataaaa	caaaaagaaAATTgTGCATgaAATT	-----atgattacgagggagtgaga...	1311...	gccaaccgcag	gtctggtt	
D.Ere	gggttcag	gtaagcaaaagt... 3608...	-----tgtgtataaaa	caaaaagaaAATTgTGCATgaAATT	-----atgattgcgagcaagtgaga...	1301...	gccaaccgcag	gtctggtt	
D.Ana	gggttcag	gtaagaagacat... 3413...	aaattctgtgt	aataataAATTgTGCATgaAATT	-----atgattgtgagaggggaga...	1496...	ctttcccgcag	gtctggtt	
D.Gri	gagtcacag	gtgagtgccaca... 2481...	-----caataaaa	caaaagcaaAATTgtGCATgAAATTAT	taTTGG-----aagataaaaaacacacatac...	2420...	tgtcattcacag	gtctggtt	
D.Moj	gagtcacag	gtgagtgcaaca... 3432...	attgctataaaa	ccgagcaaAATTgtGCATgAAATTAT	taTTGAaGGAGa	aaaaataaaagaattacgtat...	1463...	tgtcattggcag	gtctggtt
D.Wil	gtgtacag	gtgagcaataaa... 3528...	gtgtaataaaa	caaaagcaaAATTgtGCATgAAATTATGAT	tGGAAG	---agagacgaatgatggagagt...	1370...	caattttgcag	gtttggtt
D.Yak	gggttcag	gtaagcaaaagca... 3549...	-----tgtgtataaaa	caaaaagaaAATTgTGCATgaAATT	-----atgattgcgagggagtgaga...	1360...	gccaaccgcag	gtctggtt	
	* ** **	** **	*** *	*****	*		***	** *****	

id=31725 gene=FBgn0085369 name=CG34340 segment=chr2L.3678465.3683866.1 type=IN VIEW

Figure 384: CS=8.64





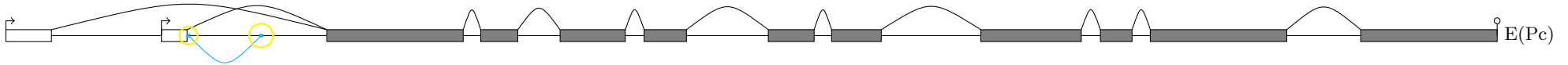
D.Mel	aaagtgcg	gtaaagtgtgta...51...-----attaactagataaaaagcaaa	AAACaAAACccACATG	-----aggcggagtttgattgcgtt--..381...-tatcaattctag	atTTTTta-----
D.Sim	aaagtgcg	gtaaagtgtgta...51...-----attaactagataaaaagcaaa	AAACaAAACccACATG	-----aggcggagtttgattgcgtt--..383...-tctcaattctag	atTTTTta-----
D.Sec	aaagtgcg	gtaaagtgtgta...46...tactaattaactagataaaa	GCAAAAAACaAAACccACATG	-----aggcggagtttgattgcgtt--..384...-tctcaattctag	atTTTTta-----
D.Ere	aaagtgcg	gtaaagtgtgtg...51...-----attaactagataaaaagcaaa	AAACaAAACccACATG	-----aggcggagtttgattgcgtt--..381...-tctcaattctag	atTTTTta-----
D.Ana	aaagtgcg	gtaaagtgtgtg...51...-----tttggacgaaatagcaaaa	AAACaAAACtcACATGag	GCCGgagtttgctgagtttttttc...430...ctcctgtttgtag	atTTTTta-----
D.Gri	aaaacgcg	gtaaagtgcgtt...51...-----ttctggcgaatatttgcgaaa	AAACaAAACcCACATG	-----aagagtgcctacggtttttt--..606...-----ttgcag	atttatatcagctg
D.Moj	aaagcgtg	gtaaagtgtgtt...51...-----atttggctaataattgcaaaa	AAACaAAACcCACATG	-----aagagcgcctacggttttttcg--..598...-gttgctttgcag	atttgata-----
D.Per	aaagtgcg	gtaaacgatgct...51...-----atttggccaataattgcaaaa	AAACaAAACcCACATG	-----aggaagagttgactaccttt--..442...-tcgctttgtag	atTTTTta-----
D.Pse	aaagtgcg	gtaaacgatgct...51...-----atttggccaataattgcaaaa	AAACaAAACcCACATG	-----aggaagagttgactaccttt--..436...-tcgctttgtag	atTTTTta-----
D.Vir	aaagcgcg	gtaaagtgtgct...51...-----tttggcaataattgcaaaa	AAACaAAACcCACATG	-----aagtgctacggttttttcgt...560...-gttgctttgcag	atTTTTta-----
D.Yak	aaagtgcg	gtaaagtgtgtg...51...-----attaactagataaaaagcaaa	AAACaAAACccACATG	-----aggcggagtttgattgcgtt--..380...-tctcaattctag	atTTTTta-----
	*** * *	***** *			** ** ****

id=131367 gene=FBgn0000581 name=E(Pc) segment=chr2R\_7340386\_7340897\_1 type=I5

D.Mel	aaagtgcg	gtaaagtgtgta...214...ttgagatgtgtgtttgcgcg	-----CGTGTGTTTGT	atgccgcctttttcttcgtc---..221...-tatcaattctag	atTTTTta-----
D.Sim	aaagtgcg	gtaaagtgtgta...213...ttgagatgtgtgtttgcgcg	-----CGTGTGTTTGT	atgccgcctttttcttcgtc---..224...-tctcaattctag	atTTTTta-----
D.Sec	aaagtgcg	gtaaagtgtgta...214...ttgagatgtgtgtttgcgcg	-----CGTGTGTTTGT	atgccgcctttttcttcgtc---..220...-tctcaattctag	atTTTTta-----
D.Ere	aaagtgcg	gtaaagtgtgtg...213...ttgagatgtgtgtttgcgcg	-----CGTGTGTTTGT	atgccgcctttttcttcgtt---..222...-tctcaattctag	atTTTTta-----
D.Ana	aaagtgcg	gtaaagtgtgtg...168...-----gcgtttgtttgattctgtcg	CCGCGCGTGTGTTTGT	atgccgcctttttcttcgcg---..317...ctcctgtttgtag	atTTTTta-----
D.Gri	aaaacgcg	gtaaagtgcgtt...163...-----tgtttggggcaactcgccg	---CGTGTGtGTTTGT	atgccgcctttttacactc---..495...-----ttgcag	atttatatcagctg
D.Moj	aaagcgtg	gtaaagtgtgtt...158...-----ttgtttggggcaactcgccg	---CGTGTGtGTTTGT	atgccgcctttttacgctc---..492...-gttgctttgcag	atttgata-----
D.Per	aaagtgcg	gtaaacgatgct...169...-----tttgtttgaggctgtcgccg	CGTGTGtGTTTGT	atgccgcctttttgtacg---..325...-tcgctttgtag	atTTTTta-----
D.Pse	aaagtgcg	gtaaacgatgct...169...-----tttgtttgaggctgtcgccg	CGTGTGtGTTTGT	atgccgcctttttgtacg---..319...-tcgctttgtag	atTTTTta-----
D.Vir	aaagcgcg	gtaaagtgtgct...157...-----ttgtttggggcaactcgccg	---CGTGTGtGTTTGT	atgccgcctttttacgctc---..455...-gttgctttgcag	atTTTTta-----
D.Yak	aaagtgcg	gtaaagtgtgtg...212...ttgagatgtgtgtttgcgcg	-----CGTGTGTTTGT	atgccgcctttttcttcgtc---..222...-tctcaattctag	atTTTTta-----
	*** * *	***** *	***** *		** ** ****

id=131367 gene=FBgn0000581 name=E(Pc) segment=chr2R\_7340386\_7340897\_1 type=I5 VIEW

Figure 385: CS=10.56



```

D.Mel ctttccag cgaaacacgct...52...-----gattgcgttcgctgatgcat-----GAAAAGtGCG GTAAAGTg
D.Sim ctttccag cgaaacacgct...52...-----gattgcgttcgctgatgcat-----GAAAAGtGCG GTAAAGTg
D.Ere ctttccag cgaaacacgct...52...-----gattgcgttcgctgatgcac-----GAAAAGtGCG GTAAAGTg
D.Ana ctttccag caaacacgct...42...-----aattgcgttcgctgatgcat-----GAAAAGtGCG GTAAAGTg
D.Gri gcttccag caaacacgct...33...tcagcgaattatcaacaaaaTTGTgcGTGCaGGTGTgtGAAAAAcGCG GTAAAGTg
D.Per ctttccag caaacacgct...39...-----aattatcaacaaaatttcgcTTGCagGTGTGtGAAAAGtGCG GTAAACGa
D.Pse ctttccag caaacacgct...39...-----aattatcaacaaaatttcgcTTGCagGTGTGtGAAAAGtGCG GTAAACGa
D.Vir gcttccag caaacacgct...33...tttacgaattatcaacaaaaTTGTgcGTGCaGGTGTgtGAAAAGcGCG GTAAAGTg
D.Yak ctttccag cgaaacacgct...52...-----gattgcgttcgctggtgcat-----GAAAAGtGCG GTAAAGTg
***** * ***** ** * * ***** ** *

```

id=131366 gene=FBgn0000581 name=E(Pc) segment=chr2R\_7340292.7340385\_1 type=A5

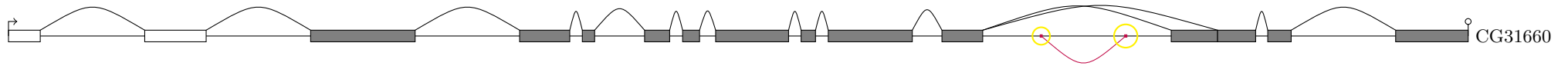
```

D.Mel aaagtgcg gtaaagtgtgta...222...tgtgtttgcgcgctgtgttTGTTTATGCCGCcTTTTTC-----ttcgtc--tcggctttc-tatga-----...207...-tatcaattctag atttttta-----
D.Sim aaagtgcg gtaaagtgtgta...221...tgtgtttgcgcgctgtgttTGTTTATGCCGCcTTTTTC-----ttcgtc--tcggctttc-tatga-----...210...-tctcaattctag atttttta-----
D.Ere aaagtgcg gtaaagtgtgtg...221...tgtgtttgcgcgctgtgttTGTTTATGCCGCcTTTTTC-----ttcgtt--tcggctttc-tacga-----...208...-tctcaattctag atttttta-----
D.Ana aaagtgcg gtaaagtgtgtg...181...tctgtcgcgcgctgtgttTGTTTATGCCGCcTTTTTT-----tcggcgagcggctttc-tatg-----...303...ctcctgtttgtag atttttta-----
D.Gri aaaacgcg gtaaagtgcggtt...173...gaactcgcgcgctgtgttTGTTTATGCCGCcTTTTTTTACTcGCATcgGCGGcgcggtcttt-tctgcttcta-----...465...-----ttgcag attttatcagctg
D.Per aaagtgcg gtaaacgatgct...179...gctgtcgcgcgctgtgttTGTTTATGCCGCcTTTTTT-----TGTACGCGG-----ctttc-tatgattttgcatt...302...-tcgctttttag atttttat-----
D.Pse aaagtgcg gtaaacgatgct...179...gctgtcgcgcgctgtgttTGTTTATGCCGCcTTTTTT-----TGTACGCGG-----ctttc-tatgattttgcaatt...296...-tcgctttttag atttttat-----
D.Vir aaagcgcg gtaaagtgtgct...167...gaatcgcgcgctgtgttTGTTTATGCCGCcTTTTTTTACGCTcGCATcgGCGGcgcggc-ttt-tctgcttctat-----...425...-gtgttttgcag atttttat-----
D.Yak aaagtgcg gtaaagtgtgtg...220...tgtgtttgcgcgctgtgttTGTTTATGCCGCcTTTTTC-----ttcgtc--tcggctttttagatg-----...208...-tctcaattctag atttttta-----
*** ** ***** * * ***** ***** ***** * * * * * ** ** ***** *

```

id=131367 gene=FBgn0000581 name=E(Pc) segment=chr2R\_7340386.7340897\_1 type=I5 VIEW

Figure 386: CS=8.64



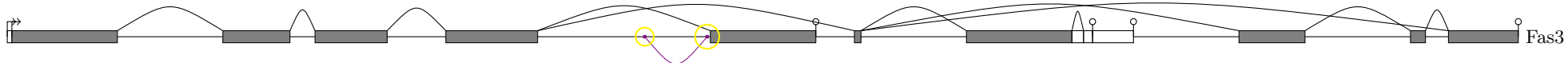
D. Mel	acaagcag	gtaaccgatttg...225...-----atgcgtacttgta-----ttgaca-----	TTGGtt	GAGGAAACGATTTTGTTA	aataac-tagccaaaacacaa-...588...gttcatttccag	caccccca
D. Sim	acaagcag	gtaaccgatttg...217...-----atccgtacttgta-----ttgaca-----	TTGGtt	AGGAAACGATTTTGTTA	ataac-tagcctaaacacaag...576...attcatttccag	caccccca
D. Sec	acaagcag	gtaaccgatttg...218...-----atccgtacttgta-----ttgaca-----	TTGGtt	AGGAAACGATTTTGTTA	ataac-tagcctaaacacaag...576...attcatttccag	caccccca
D. Ere	acaagcag	gtaacgtatttg...209...-----atccgtatttgta-----ttgaca-----	TTGGtt	GAGGAAACGATTTTGTTA	ataac-tagccaacacaaaa...570...attcatttccag	caccctca
D. Ana	acaagcag	gtaaccgaatcg...201...-----ttcgcatttgta-----tttaaa--g	TTGAatt	GAGGAAACGATTTTGTTA	ctaac-caatcaccacaaaa...641...ttcatttccag	caccacca
D. Gri	acaagcag	gtaacaaaaatt...291...-----ctttgtatttgta-----ttcaca--	TTTTGGtt	GAGGAAACGATTTTGT	-----aaacaacatcaaaaaaatt...681...tctcatttacag	cacaacaa
D. Moj	acaagcag	gtaacacaatt...339...-----gtatttgta-----ttaaatttg--	GTTG	GAGGAAACGATTTTGT	-----aaaaaaatttaataaata...720...tctcatttacag	caccacaa
D. Per	acaagcag	gtaaccaacgt...269...-----tatttggtataatattgaaa--	TTTGct	GAGGAAACGATTTTGT	-----caactaaaaaaagtgaacc...630...tctcatttccag	caaaacat
D. Pse	acaagcag	gtaaccaacgt...269...-----tatttggtataatattgaaa--	TTTGct	GAGGAAACGATTTTGT	-----caactaaaaaaagtgaacc...631...tctcatttccag	caaaacat
D. Wil	acaagcag	gtaaaatgaaat...301...aaaacatgtacatt-----taaata--	TTGGtc	GAGGAAACGATTTTGTG	agcttttgctaaaccgaaa...657...atttatttccag	cacaataa
D. Yak	acaagcag	gtaacctatttc...218...-----atccgtatttgta-----ttgaca--	TTGGtt	AGGAAACGATTTTGTTA	ataacttagccaacacaaaa...580...attcatttccag	cacccccc
	*****	****		*****		**** **

id=100183 gene=FBgn0051660 name=CG31660 segment=chr2L.4872694.4873595.1 type=IN

D. Mel	acaagcag	gtaaccgatttg...635...-----tctaactactaacaacaaaa--	TGACAAAAATCGg	TTTCC	TTTCAA	aatttccaatagcatacca----...179...gttcatttccag	caccccca
D. Sim	acaagcag	gtaaccgatttg...619...---aacatctaact---acaacaaaa--	TGACAAAAATCGg	TTTCC	TATCAA	aatttccaatagcatacca----...175...attcatttccag	caccccca
D. Sec	acaagcag	gtaaccgatttg...620...---aacatctaact---acaacaaaa--	TGACAAAAATCGg	TTTCC	TATCAA	aatttccaatagcatacca----...175...attcatttccag	caccccca
D. Ere	acaagcag	gtaacgtatttg...605...---acataataatt---acaacaaaa--	TGACAAAAATCGg	TTTCC	TTTCAA	aatttccaatagcatacca----...175...attcatttccag	caccctca
D. Ana	acaagcag	gtaaccgaatcg...643...---aacttttgaat---acaagcaaa--	TGACAAAAATCGg	TTTCC	TTTCAA	aatcccagaa--ataccagata...200...ttcatttccag	caccacca
D. Gri	acaagcag	gtaacaaaaatt...755...---aatcacacagctaacaatg-----	ACAAAAATCGg	TTTCTT	TTAAAA	---cccaacatgatacacaac...217...tctcatttacag	cacaacaa
D. Moj	acaagcag	gtaacacaatt...837...---caaccatacaatttataatg-----	ACAAAAATCGg	TTTCC	TTTAAT	---accaacatgtatacacaac...220...tctcatttacag	caccacaa
D. Per	acaagcag	gtaaccaacgt...668...---aatcaatt--taa-aaaaatat-	GACAAAAATCGg	TTTCC	TTtCAAA	atcccaatagcatacat---ata...231...tctcatttccag	caaaacat
D. Pse	acaagcag	gtaaccaacgt...669...---aatcaact--aaacaaaaatat-	GACAAAAATCGg	TTTCC	TTtCAAA	atcccaatagcatacat---ata...231...tctcatttccag	caaaacat
D. Wil	acaagcag	gtaaaatgaaat...707...gaacaaaaaaatt--tta-aaa----	TGACAAAAATCGg	TTTCC	TTTCAA	---atacaacataaaaaacaaa...252...atttatttccag	cacaataa
D. Yak	acaagcag	gtaacctatttc...624...---aacatctaact---acaacaaaa--	TGACAAAAATCGg	TTTCC	TATCAA	aatttccaatagcatacca----...175...attcatttccag	cacccccc
	*****	****		*****	****	**** **	**

id=100183 gene=FBgn0051660 name=CG31660 segment=chr2L.4872694.4873595.1 type=IN VIEW

Figure 387: CS=13.2



```

D.Mel ttttggcg gtaagtagaaca...901...-----aaaagtgtctaca-aatgaca-----ACAACAAgAAGAGCTAACATTgaaaaca---aaaattggtcact---...277...tcgtttttacag gcgccact
D.Sec ttttggcg gtaagtagaaca...884...-----aaaagtgtctaca-aatgaca-----ACAACAAgAAGAGCTAACATTgaaaaca---aaaattggtcact---...278...tcgtttttacag gcgccact
D.Ere ttttggcg gtaagtagaaca...899...-----aaaagtgtctaca-aatgaca-----ACAACAAgAAGAGCTAACATTgaaaaca---aaaattggtcact---...273...tcgtttttacag gcgccact
D.Ana tttcggcg gtaagtagagt...730...gagc---caaagtgtctaaa-aat-----GACAACAACAAgAAGAGCTAACAcccgaacg---aaaattggtca---...282...gttgttttacag gcgccact
D.Gri ctttggcg gtaagtaacgca...1170...ggcttcaaaaagtgtctaca-----AATGACAACAACAAgAAGAGCTAACATTaaagacgctgtataatat-----...296...tgttcattacag gagccact
D.Moj ctttggcg gtaagtaaccag...1600...---cttaaaaaatgtctaca-aat-----GACAACAACAAgAAGAGCTAACATaagagacgcttcacaat-tat-----...336...ttgttcttgacag gcgccaca
D.Per ctttggcg gtaagtagagag...1370...-----aaactctc caaataaaaaagaGTCTaCAAAatGGCAACAACAAaAAGAGCTAACATcaaaaacga---aaaattggttt-----...301...tgctctttgcag gcgccacc
D.Pse ctttggcg gtaagtagagag...1417...-----aaactctc caaataaaaaagaGTCTaCAAAatGGCAACAACAAaAAGAGCTAACATcaaaaacga---aaaattggttt-----...305...tgctctttgcag gcgccacc
D.Wil ctttggcg gtaagtagaaca...1838...gaaaacaaaaaacacaaaaa---GTGTCTaCAAAatGACAACAACAAgAAGAGCTAACACAT-aaac---aaaattgtcaattta...272...gtgtttttgcag gcgccact
D.Yak ttttggcg gtaagtagaaca...914...-----aaaagtgtctaca-aatgaca-----ACAACAAgAAGAGCTAACATTgaaaaca---aaaattggtcact---...269...tcgtttttacag gcgccact
** ** * ***** ** * * ***** * ** * ** *

```

id=70305 gene=FBgn0000636 name=Fas3 segment=chr2L.18384894.18386156.1 type=IN

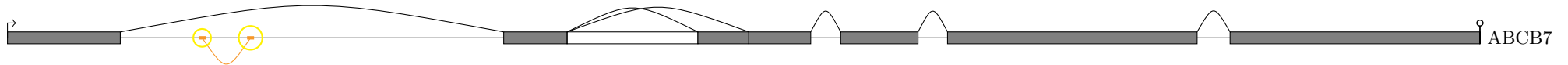
```

D.Mel ttttggcg gtaagtagaaca...1199...tctctctgcacacaaagctaAATGTTAGTTCTTgTTGTT-GT--cgtttttacag gcgccact
D.Sec ttttggcg gtaagtagaaca...1183...tctctctgcacacaaagctaAATGTTAGTTCTTgTTGTT-GT--cgtttttacag gcgccact
D.Ere ttttggcg gtaagtagaaca...1193...tctctctgcacacaaagctaAATGTTAGTTCTTgTTGTT-GT--cgtttttacag gcgccact
D.Ana tttcggcg gtaagtagagt...1038...---tttctgcacacaaagctaaaTGTTAGTTCTTgTTGTT-GTTGTT---ttacag gcgccact
D.Gri ctttggcg gtaagtaacgca...1493...caggaactcactcgtcgctaaAATGTTAGTTCTTgTTGTT-GTTGTT---acag gagccact
D.Moj ctttggcg gtaagtaaccag...1960...ca-gagctcgtcgtcgctaaAATGTTAGTTCTTgTTGTT-GTTGTT---cttgac gcgccaca
D.Per ctttggcg gtaagtagagag...1706...tctctc-acactcgaagctaaATGTTAGTTCTTgTTGTT-GTTGTTcTTTGcAGGc-gccacc
D.Pse ctttggcg gtaagtagagag...1757...tctctc-acactcgaagctaaATGTTAGTTCTTgTTGTT-GTTGTTcTTTGcAGGc-gccacc
D.Wil ctttggcg gtaagtagaaca...2147...cc-gacctgacacgacgctaaAATGTTAGTTCTTgTTGTT-GTTgTGTtTTGcAGcGCcact
D.Yak ttttggcg gtaagtagaaca...1204...tctctctgcacacaaagctaAATGTTAGTTCTTgTTGTT-GT--cgtttttacag gcgccact
** ** * ***** ** * ** * ** *

```

id=70305 gene=FBgn0000636 name=Fas3 segment=chr2L.18384894.18386156.1 type=IN VIEW

Figure 388: CS=9.6



```

D.Sim caagagtggtagtgctcgg...109...aagcgatcggcgggaaagc-----AGTCTGcGTGTGCGTTGTTTGGTC-----cttctcc--actttcattcgat...1599...gaccctttcagctgtactc
D.Sec caagagtggtagtgccg...109...aagcgatcggcgggaaagc-----AGTCTGcGTGTGCGTTGTTTGGTC-----cttctcc--actttcattcgat...1600...gaccctttcagctgtactc
D.Gri cgcgtgtgtaagtataaaat...121...acaaag-aggtcaggcaacaa-----TATGcGTGTGtgTTGTTTGGCCctTTGtagacc--gagtagattaac...1521...ttgtcttgcaagtataatgc
D.Moj catatgtgtaagtacaata...119...----g-aggtcaggcaacagtagc-----GTGTGtgTTGTTTGGCC-----ctttcgaataattagttga--...1579...ttgccttgcaagtataatgc
D.Per cgagagtggtaagtgttccg...154...--aaag-aggtcaggcaacagtagc-----TGCCTGTGtgTTGTTTGGCC-----cttttag--agatcgagagtagt...1578...gtccttttcagctgtactc
D.Pse cgagagtggtaagtgttccg...154...--aaag-aggtcaggcaacagtagc-----TGCCTGTGtgTTGTTTGGCC-----cttttag--agatcgagagtagt...1578...gtccttttcagctgtactc
D.Vir cgcgtgtgtaagtacaata...124...tcaaag-aggtcaggcaacaa-----TTTGCCTGTGtgTTGTTTGGCC-----cttttcg--caattaactcaat...1553...tttactttgcaagtataatgc
D.Wil caagagttgtaagtttttt...148...gaatagtaggtcaggcaaca-----GTTTGCCTGTGtgTTGTTTGGCC-----cctaac--aagactctgagac...1597...gtaattttcagttgtactc
D.Yak caagagtggtagtgctcgg...84...--tgccggtttgattgagtagggGATCaCCAGTCTGcGTGTGCGTTGTTTGGTC-----catctcc--ctttccatcacgat...1609...caaacctttcagctgtactc
*   ** ** ** *                               *           *                               ***** *****                               ** ** * ** *

```

id=23108 gene=FBgn0035244 name=ABCB7 segment=chr3L\_1618618\_1620427.1 type=IN

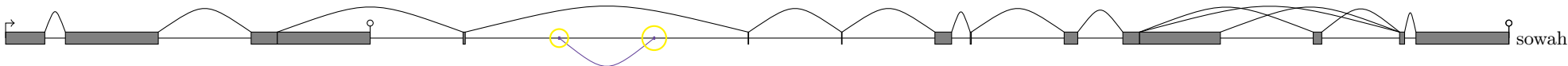
```

D.Sim caagagtggtagtgctcgg...212...ttgcagc---aagc--atagagtagt-----GACCAAAACAGCGCACACaCAGACT-----tgaggctcgatcgggtatt-----...1496...gaccctttcagctgtactc
D.Sec caagagtggtagtgccg...212...ttgcagc---aagc--atagagtagt-----GACCAAAACAGCGCACACaCAGACT-----cggaggctcgatcgtgtatt-----...1497...gaccctttcagctgtactc
D.Gri cgcgtgtgtaagtataaaat...214...----caaaactcacctcaaggcatTAAAcGGGcGCAAAACAGCACACaCATA-----cacgaaaatgggacgcacac-----...1429...ttgtcttgcaagtataatgc
D.Moj catatgtgtaagtacaata...267...--aaaaacaaaaacaaataaac-----GGGcGCAAAACAGCACAC-----acactcagtaggggacgcac-----...1431...ttgccttgcaagtataatgc
D.Per cgagagtggtaagtgttccg...277...--gaatacacac--atagtagcac-----GGCAAAACAGCACACaCGCA-----gccacagactgaaaggaata-----...1455...gtccttttcagctgtactc
D.Pse cgagagtggtaagtgttccg...277...--gaatacacac--atagtagcac-----GGCAAAACAGCACACaCGCA-----gccacagactgaaaggaata-----...1455...gtccttttcagctgtactc
D.Vir cgcgtgtgtaagtacaata...243...-cacatcctaagc--at---tttac-----GGGcGCAAAACAGCACACaCGCAG-----atgggacgactcagcgcca...1432...tttactttgcaagtataatgc
D.Wil caagagttgtaagtttttt...244...ataaaaacataaat-aataga-----GCCAAACAGaACACACCGCAGG-----caaacagatctgaccaaat-----...1501...gtaattttcagttgtactc
D.Yak caagagtggtagtgctcgg...194...ttgcagc---aagc--atagagtagt-----GACCAAAACAGCGCACACaCAGAcTTGGagGATCgatcagggactgggacaat-----...1497...caaacctttcagctgtactc
*   ** ** ** *                               *           *                               ***** **                               ** ** * ** *

```

id=23108 gene=FBgn0035244 name=ABCB7 segment=chr3L\_1618618\_1620427.1 type=IN VIEW

Figure 389: CS=12.6



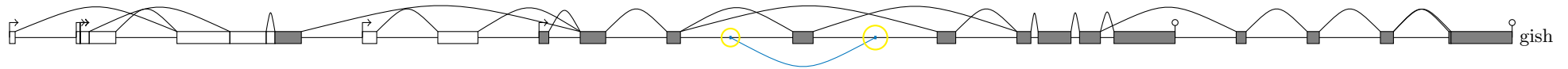
D.Mel	ctgcaacg	gta-agttt	gtga...	951...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	2049...	---aataaaaaacag	ggcgtaag	
D.Sim	cagcaacg	gta-agttt	ctta...	908...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	1983...	ccaaat---aatag	ggcgtaag	
D.Sec	cagcaacg	gta-agttt	ctta...	913...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	1996...	ccaaat---aatag	ggcgtaag	
D.Ere	cagcaacg	gta-agtt	actga...	943...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	1631...	---aataaaaaacag	ggcgtaag	
D.Ana	cagcgacg	gta-agtt	gttag...	808...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	1701...	---aatggaatag	ggcgtaag	
D.Gri	aggctgtg	gaacag	tttgtg-	967...	acgagtttatcgattgcccc	ACTGACaAATGAGCC	-----	gctgtg	aaaccaat	aaagc...	1880...	---cttaaccacag	ggtgtaag
D.Moj	cagctacg	gta-agt	tttcat...	810...	gcgagtttatcgattgcccc	ATTGACaAATGAGCC	-----	gttggga	aaaccaat	aaaga...	1836...	---tgctaataatcag	ggtgtaag
D.Per	cagcaacg	gta-agt	ttggga...	1017...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaaccg	-----	..	1250...	---aatcggaacag	ggcgtaag	
D.Pse	cagcaacg	gta-agt	ttgga...	1023...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaaccg	-----	..	1252...	---aatcggaacag	ggcgtaag	
D.Yak	cagcaacg	gtg-agt	tttctg...	979...	gcgaatttattgattgccac	ATTGACaAATGAGCC	accctgctgttataaaacca	-----	..	2058...	---aatacaaacag	ggcgtaag	
	**	*	*	****		***	*****	*****		**	*	****	

id=38311 gene=FBgn0036302 name=sowah segment=chr3L.12538506.12541584\_-1 type=IN

D.Mel	ctgcaacg	gta-agttt	gtga...	1945...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	1056...	---aataaaaaacag	ggcgtaag		
D.Sim	cagcaacg	gta-agttt	ctta...	1932...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	960...	ccaaat---aatag	ggcgtaag		
D.Sec	cagcaacg	gta-agttt	ctta...	1927...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	983...	ccaaat---aatag	ggcgtaag		
D.Ere	cagcaacg	gta-agtt	actga...	1738...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	837...	---aataaaaaacag	ggcgtaag		
D.Ana	cagcgacg	gta-agt	tttgtg...	1638...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	872...	---aatggaatag	ggcgtaag		
D.Gri	aggctgtg	gaacag	tttgtg-	1423...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	1425...	---cttaaccacag	ggtgtaag		
D.Moj	cagctacg	gta-agt	tttcat...	1206...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	1441...	---tgctaataatcag	ggtgtaag		
D.Per	cagcaacg	gta-agt	ttggga...	1509...	accacgattaagcaaacga	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	759...	---aatcggaacag	ggcgtaag		
D.Pse	cagcaacg	gta-agt	ttgga...	1519...	accacgattaagcaaacga	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	757...	---aatcggaacag	ggcgtaag		
D.Yak	cagcaacg	gtg-agt	tttctg...	1985...	accacgattaagcaaacaa	GGCTCATTGTCGGT	taaatgacaagtttgacaa...	1053...	---aatacaaacag	ggcgtaag		
	**	*	*	****		*****	*****	*****		**	*	****

id=38311 gene=FBgn0036302 name=sowah segment=chr3L.12538506.12541584\_-1 type=IN VIEW

Figure 390: CS=12



```

D.Me1 atcacatg gtatgtaatcta...342...----cactgccaagaagaataacg---ACGAAAG-AAaACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...708...--atcgaatgcag ccgataac
D.Sim atcacatg gtatgtaatcta...340...----cactgccaagaagaataacg---ACGAAAG-AAaACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...719...--atcgaatgcag ccgataac
D.Sec atcacatg gtatgtaatcta...341...----cactgccaagaagaataacg---ACGAAAG-AAaACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...721...--atcgaatgcag ccgataac
D.Ere atcacatg gtatgtaatcta...316...----cactgccaagaagaataacg---ACGAAAGAAaAAACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-tggtgc...742...--atcgaatgcag ccgataac
D.Ana atcacatg gtatgtaaaaa...350...---gtatctgcgaa-agataatgaTAAATACgaaATG-GaaAACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...597...gaatgagaat--ag ccgataac
D.Gri atcacatg gtatgttgaatt...333...----agtgc-ta-taagaatatacac-ATAAGAAG-----ACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgaa...525...--ccgatcccacag ccgaaaac
D.Moj atcacatg gtatgttaaaat...280...---tagaacacaca-taagactac-----ATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgaa...540...--atgctccttcag ccgaaaac
D.Per atcacatg gtatgttaacta...448...atgaaaattacgacgagaag-----AGGAAaACATtAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...797...--acgaatgtccag ccgaaatcc
D.Pse atcacatg gtatgttaacta...449...atgaaaattacgacgagaag-----AGGAAaACATtAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...793...--acgaatgtccag ccgaaatcc
D.Vir atcacatg gtatgtttaaatt...329...---tgagtgc-ta-taagaatatacac-ATAAGAAG-----ACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgaa...471...--tcgctcacaag ccgaaaac
D.Wil atcacatg gtatgttgaat...361...ttttcgaagatgaacaaaa-----CAGAt-aATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgaa...495...--gcaaatgtgag ccgataac
D.Yak atcacatg gtatgtaatcta...327...----cactgccaagaagaataacg---ACGAAAG-AAaACATGAATAGAttTTCTCAAGCATAtttcggaggtcggg-cggtgc...682...--atcgaatgcag ccgataac
*****          *****          *          ** *****          *****          *          ** *****          *

```

id=19025 gene=FBgn0250823 name=gish segment=chr3R.12118557\_12119708.1 type=IN

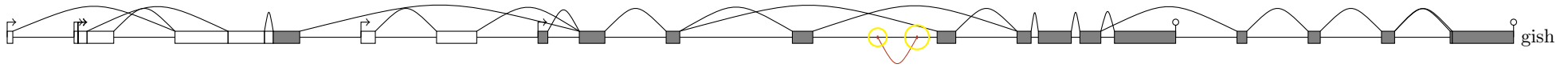
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D.Me1 aacaactt gtaagtgtggca...960...---cggcagtc-atctcctgtgt----ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttagcacagttgcccgaa----...452...atcaatcgatag cagagggt
D.Sim aacaactt gtaagtgtggca...998...---cggcagtc-atctcctgtgt----ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttagcacagttgcccgaa----...454...atcaatcgatag cagagggt
D.Sec aacaactt gtaagtgtggca...996...---cggcagtc-atctcctgtgt----ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttagcacagttgcccgaa----...462...atcaatcgatag cagagggt
D.Ere aacaactt gtaagtgtggca...982...---cagcagtc-atctcctgtgt----ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttagcacagttgcccgaa----...454...atcaatcgatag cagagggt
D.Ana aacaactt gtaagtgtgccc...1006...----caggc---tgcttcctcctgtgtATATGCTTcGAGAAcTCTATtTTGtTGTtTTGTTGTTTAgcacagtcagttgattatat...491...ataatcgatag cagagggt
D.Gri aacaactt gtaagttaaacc...1008...-tta-acaggc---ttcctcgtttt---ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttttagcagttttccc-----...523...gttggcctgtag cagagggt
D.Moj aacaactt gtaagtttattc...1070...gtttcataggc---ttcctcgtt---ATATGCTTcGAGAAcTCTATtTTGT-----tgctcctgtgttttagca-----...521...gttggcctgtag cagagggt
D.Per aacaactt gtaagtgtggca...1149...agca-gcaggc---ttcctcgtgt---ATATGCTTcGAGAAcTCTATtTGTtTTCTTgttgtgttagcacagttac-----...526...gttggccaatag cagagggt
D.Pse aacaactt gtaagtgtggca...1149...agca-gcaggc---ttcctcgtgt---ATATGCTTcGAGAAcTCTATtTGTtTTCTTgttgtgttagcacagttac-----...531...gttggccaatag cagagggt
D.Vir aacaactt gtaagtttatt...1064...gttgtgcaggc---ttcctcgt-t---ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttttagcagtttttc-----...465...gttggcctgtag cagagggt
D.Wil aacaactt gtaagttcctga...1009...gtattagcgaacttcctgt---ATATGCTTcGAGAAcTCTATTTG-----gttctcctgtgtttt---ta-----...524...gttggcctatag cagagggt
D.Yak aacaactt gtaagtgtggca...983...---cagcagtc-atctcctgtgt---ATATGCTTcGAGAAcTCTATTTtTGTtTTCTTgTTGtgtttagcacagttgcccgaa----...464...atcaatcgatag cagagggt
*****          *****          * * * * *          *****          *****          * * * * *          * * * * *          *****

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id=19027 gene=FBgn0250823 name=gish segment=chr3R.12119876\_12121390.1 type=IN VIEW

Figure 391: CS=12.96



D. Mel	aacaactt	gtaagtgtggca...	983...	----tgcttcgagaatttctattt	TTGTTGTT	TTGTTGTTT	agcacagttgcc	----gaaaag-	...	448...	atcaatcgatag	cagagggt
D. Sim	aacaactt	gtaagtgtggca...	1017...	tatatgcttcgagaatctct	ATTTTGTGTT	TTGTTGTT	tagcacagttgcc	----gaataa-	...	451...	atcaatcgatag	cagagggt
D. Sec	aacaactt	gtaagtgtggca...	1015...	tatatgcttcgagaatctct	ATTTTGTGTT	TTGTTGTT	tagcacagttgcc	----gaataa-	...	459...	atcaatcgatag	cagagggt
D. Ere	aacaactt	gtaagtgtggca...	1001...	tatatgcttcgagaatctct	ATTTTGTGTT	TTGTTGTT	tagcacagttgcc	----gaataa-	...	451...	atcaatcgatag	cagagggt
D. Gri	aacaactt	gtaagttaaacc...	1030...	---atgcttcgagaactctatt	TTTGTGTT	TTGTTGTTT	TAGCAG	-tttcccctgaaaaaaaaat	...	511...	gttggcctgtag	cagagggt
D. Moj	aacaactt	gtaagtttattc...	1092...	---atgcttcgagaatctctatt	TTTGTGTT	TTGTTGTTT	TAGCAG	---gtaaaaa	...	504...	gttggcctgtag	cagagggt
D. Per	aacaactt	gtaagtgtggca...	472...	gttttttatcttaaatttt	TTGTT	TTGTTT	TGATTGTA	---gctaccattgtaacgac	...	1217...	gttggccaatag	cagagggt
D. Pse	aacaactt	gtaagtgtggca...	1172...	---tgcttcgagaatctctatt	TTGTTGTT	TTGTTGTTT	agcacagttact	----gattgtat	...	521...	gttggccaatag	cagagggt
D. Vir	aacaactt	gtaagtttattt...	1087...	---tgcttcgagaatctctatt	TTGTTGTT	TTGTTGTTT	agcacagttttc	----tgaaaatt	...	457...	gttggcctgtag	cagagggt
D. Wil	aacaactt	gtaagttcctga...	1031...	---atgcttcgagaatctctatt	TTGTTGTT	TTGTTGTT	-ttttattttttt	----ttatta-	...	509...	gttggcctatag	cagagggt
D. Yak	aacaactt	gtaagtgtggca...	1002...	tatatgcttcgagaatctct	ATTTTGTGTT	TTGTTGTT	tagcacagttgcc	----gaataa-	...	461...	atcaatcgatag	cagagggt
	*****	*****		* ** ** *	*****	*****	*				* * **	*****

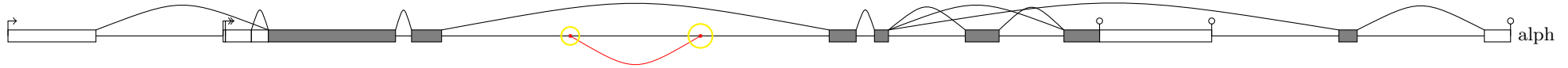
id=19027 gene=FBgn0250823 name=gish segment=chr3R.12119876.12121390.1 type=IN

D. Mel	aacaactt	gtaagtgtggca...	1298...	-----tgcccacgaattgttgcaa	AAATACAACAA	AAACAACA	-----	caactacaaa	----tcgatcaac	---	133...	atcaatcgatag	cagagggt		
D. Sim	aacaactt	gtaagtgtggca...	1345...	-----cgaattgttgcaaaaatac	AACAaa	AACAAC	AACA	AAAT	cgatcaaccaa	-----	aaactttt	...	120...	atcaatcgatag	cagagggt
D. Sec	aacaactt	gtaagtgtggca...	1351...	-----cgaattgttgcaaaaatac	AACAaa	AACAAC	AACA	AAAT	cgatcaaccaa	-----	aaactttt	...	120...	atcaatcgatag	cagagggt
D. Ere	aacaactt	gtaagtgtggca...	1328...	-----cgaattgttgcaaaaatac	AACAaa	AACAAC	AACA	AAAT	cgatcaaccaa	-----	aaactttt	...	121...	atcaatcgatag	cagagggt
D. Gri	aacaactt	gtaagttaaacc...	1413...	tctctctcccctctcgatt	TGCA	TAAACAACAAC	AAACAACA	-----	cgaacaacaacgtttccc	-----	...	128...	gttggcctgtag	cagagggt	
D. Moj	aacaactt	gtaagtttattc...	1456...	-----atatctgtcgatt-tctgca	TAAACAACAAC	AAACAACA	-----	tgatcaatcaacgtgcttc	-----	...	141...	gttggcctgtag	cagagggt		
D. Per	aacaactt	gtaagtgtggca...	1542...	-----ctcacgaatt-ttgcataag	TACAACAAA	AAACAACA	-----	ccgaacaacaaa	----tcgaacat	----	...	147...	gttggccaatag	cagagggt	
D. Pse	aacaactt	gtaagtgtggca...	1543...	-----ctcgctcacgaatt-ttgca	TAAACAACAAC	AAACAACA	-----	caaccgaacaacaaa	----tcgaa	-----	...	150...	gttggccaatag	cagagggt	
D. Vir	aacaactt	gtaagtttattt...	1420...	-----tatattgtcgatt-ttgca	TA	AAAAACAAC	AAACAACA	-----	caacaacaacgtatccaa	-----	...	126...	gttggcctgtag	cagagggt	
D. Wil	aacaactt	gtaagttcctga...	1466...	-----cgattgattcctctctacc	AACAaa	ACAAtc	AAACA	ACCAA	-----	caaacaaccaa	-----	...	70...	gttggcctatag	cagagggt
D. Yak	aacaactt	gtaagtgtggca...	1339...	-----cgaattgttgcaaaaatac	AACAaa	AACAAC	AACA	AAAT	cgatcaaccaa	-----	aaactttt	...	121...	atcaatcgatag	cagagggt
	*****	*****		*** *	***	*	*****		* * * *			* * **	*****		

id=19027 gene=FBgn0250823 name=gish segment=chr3R.12119876.12121390.1 type=IN VIEW

Figure 392: CS=10.56





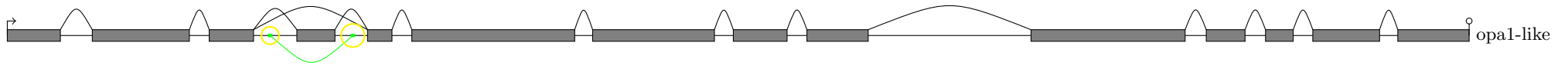
D.Me1	cacaagag	gttgtccttagtc...1552...ttaa	cgaaaccga-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1267...	at	ttgttgcag	acgagata		
D.Sim	cacaagag	gttgtccttagtc...1550...ttaa	cgaaaccga-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1270...	at	ttgttgcag	acgagata		
D.Sec	cacaagag	gttgtccttagtc...1514...ttaa	cgaaaccga-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1273...	at	ttgttgcag	acgagata		
D.Ere	cacaagag	gttgtccttagtc...1528...ttaa	cgaaaccga-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1274...	gat	tattgcag	acgagata		
D.Ana	cacaagag	gttgtccttagtc...1509...taa	atgaaacgaa-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1317...	gt	ttgttgcag	atgagata		
D.Gri	tacaagag	gttgtccttagtc...1444...acc	aaataagt-attgtaa	ACCTTATGCTCAC	ca	ATTGT	gtgctt	gttgc	aa	ca	cgtaa...1407...	gcattcttacag	aggaaatt	
D.Moj	cgcaagag	gttgtccttagtc...1565...-ta	ataatataatcattgtaa	ACCTTATGCTCAC	ca	ATTGT	gtgctt	tattgt	ca	cgtaa...1475...	gcattcttacag	aagagatt		
D.Per	cacaagag	gttgtccttagtc...1593...gaa	acgaaacgaa-attgtaa	ACCTTATGCTCAC	caattgtt	gtgctt	gttgc	gttgc	gttgc	gttgc...1543...	gattgttgcag	acgagata		
D.Pse	cacaagag	gttgtccttagtc...1574...gaa	acgaaacgaa-attgtaa	ACCTTATGCTCAC	caattgtt	gtgctt	gttgc	gttgc	gttgc	gttgc...1534...	gattgttgcag	acgagata		
D.Vir	cgcaagag	gttgtccttagtc...1470...aga	cgtagaaat-attgtaa	ACCTTATGCTCAC	caattgtt	gtgctt	gttgc	gttgc	gttgc	gttgc...1408...	gcattcttacag	aggagatc		
D.Wil	tgcaagag	gttgtccttagtc...1260...aca	aaaatataaaa-attgtaa	ACCTTATGCTCAC	caattgtt	gttgc	gttgc	gttgc	gttgc	gttgc...1867...	tattattgcag	atgagatt		
D.Yak	cacaagag	gttgtccttagtc...1549...taa	atgaaaccga-attgtaa	ACCTTATGCTCAC	caactgtt	gtgctt	gttgtt	-----	...1283...	at	ttgttgcag	acgagatt		
	*****	*****	****	*****	*****	****	****	**		**	**	***	**	**

id=108636 gene=FBgn0086361 name=alpha segment=chr3R.25420067.25422962.1 type=IN

D.Me1	cacaagag	gttgtccttagtc...2184...-----	gcaattcaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-actttt	gtagtt...635...	at	ttgttgcag	acgagata			
D.Sim	cacaagag	gttgtccttagtc...2177...-----	gcaattcaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-actttt	gtagtt...643...	at	ttgttgcag	acgagata			
D.Sec	cacaagag	gttgtccttagtc...2145...-----	gcaattcaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-actttt	gtagtt...642...	at	ttgttgcag	acgagata			
D.Ere	cacaagag	gttgtccttagtc...2150...-----	gcaattcaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-aatttt	gtagtt...652...	gat	tattgcag	acgagata			
D.Ana	cacaagag	gttgtccttagtc...2168...-----	gctatacaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-agatt	tagtagtt...658...	gt	ttgttgcag	atgagata			
D.Gri	tacaagag	gttgtccttagtc...2266...-g	ccaatcaatacaaat	tattATGATga	GTGAGCATAAGGT	aaggcacat	agata	accacaac...585...	gc	attcttacag	aggaaatt			
D.Moj	cgcaagag	gttgtccttagtc...2376...c	agaagccaaca	aatttt-ATGATga	GTGAGCATAAGGT	aaggcacat	agat	cccacca...664...	gc	attcttacag	aagagatt			
D.Per	cacaagag	gttgtccttagtc...2423...-----	cattaca	aattttaagatgt	GTGAGCATAAGGT	-acgtctat	-aa-ttt	gtagtt...713...	gat	ttgttgcag	acgagata			
D.Pse	cacaagag	gttgtccttagtc...2411...-----	cattaca	aattttaagatgt	GTGAGCATAAGGT	-acgtctat	-aa-ttt	gtagtt...697...	gat	ttgttgcag	acgagata			
D.Vir	cgcaagag	gttgtccttagtc...2271...-----	ccataca	aattatgtgaaga	GTGAGCATAAGGT	aaggcacat	agat	cccacaa...607...	gc	attcttacag	aggagatc			
D.Wil	tgcaagag	gttgtccttagtc...2218...-----	ataca	aaaattttaagatga	GTGAGCATAAGGT	-acgtctata	aat	tttagtt...909...	tatt	attgcag	atgagatt			
D.Yak	cacaagag	gttgtccttagtc...2197...-----	gcaattcaaat	t-aagatga	GTGAGCATAAGGT	-acgtctat	-aatttt	gtagtt...635...	at	ttgttgcag	acgagatt			
	*****	*****	****	*****	*****	**	**	**	**	**	***	**	**	**

id=108636 gene=FBgn0086361 name=alpha segment=chr3R.25420067.25422962.1 type=IN VIEW

Figure 393: CS=14.4



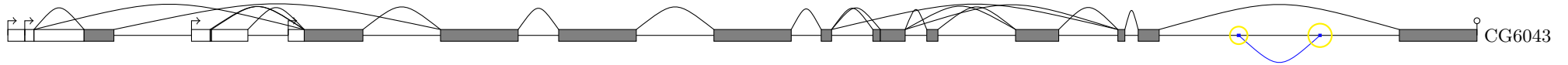
D. Mel	cgaagttg	gtgagtg	-----	ccatgtagac	ctaccatgc	ccctttca	-----	ATCTCTCACTTTAAATGGTC	-----	atatacctt	ggtcagattcg	-----	... 46...	gtttgctt	gtag	atccaaag	
D. Sim	cgaagttg	gtgagtg	-----	ccatgtagac	ctaccatccc	ccctttca	-----	ATCTCTCACTTTAAATGGTC	-----	atatacctt	ggtcagattcg	-----	... 46...	gtttgctt	gtag	atccaaag	
D. Sec	cgaagttg	gtgagtg	-----	ccatgtaac	actaccatccc	ccctttcaa	-----	TCTCTCACTTTAAATGGTC	-----	atatacctt	ggtcagattcg	-----	... 46...	gtttgctt	gtag	atccaaag	
D. Ere	cgatgtcg	gtgagtg	-----	ccatattgc	actaccttccc	ccctttcaa	-----	TCTCTCACTTTAAATGGTC	-----	atatacctt	ggtcagattcg	-----	... 59...	gtttgctt	gtag	atccaaag	
D. Ana	tgatatcg	gtgagttg	-----	cagttc	-cttaaccg	ccaccacgc	-----	TTCTCTCACTaTAAATGGTc	TTCAcGGCGGG	atattttct	ggaagggtatt	-----	... 277...	atctgctt	gtag	atccgagg	
D. Gri	tgaaatcg	gtgagttc	-----	ttaattt	gtatatact	tttttct	-----	TTCTCTcTCACTTTAAAT	-----	tgccataac	agttagtata	-----	... 530...	gtttgctt	gtag	atccgagg	
D. Moj	tgacatcg	gtgagtc	ctatccata	agtc	cgattaatt	gtcgactccac	-----	TCTCTCACTTTAAATGc	CATAA	-----	cagttagct	gattaaattgg	...	143...	gtttgatt	gtag	atccgagg
D. Per	cgatatcg	gtgagtac	-----	taggct	--actgatc	tctcctcctgc	ccctctctgc	ctttcccaat	ctctcttctctc	TCTCtTCACTTTAAATGGTC	atGGTG	-----	... 78...	tgctt	gtag	atccgagg	
D. Pse	cgatatcg	gtgagtac	-----	taggct	--actgatc	tctcctcctgc	ccctctctgc	cgatcccaat	ctctctctc	TCTCtTCACTTTAAATGGTC	atGGTG	-----	... 78...	tgctt	gtag	atccgagg	
D. Wil	cgatatag	gtgagtat	-----	gcatgtc	-tgtcatg	atcccc	-----	ACTGAGTcGGTCTCTCACTTTAAATGGTc	ATAAC	-----	agttagt	tccggtgttggga	...	35...	gtttgctt	gtag	atccgaaa
D. Yak	cgatgtcg	gtgagtg	-----	ccgtgtt	gcactacct	cgcccaatcaa	-----	TCTCTCACTTTAAATGGTC	-----	atatacctt	ggtcagattcg	-----	... 59...	gtttgctt	gtag	atccaaag	
	** * *	*****		*				***** *		*				*** *****	****		

id=4579 gene=FBgn0261276 name=opa1-like segment=chr2R.10122065\_10122197\_-1 type=IN

D. Mel	tgtcgaaa	gtaggttacaca	-----	aat	-----	tacacagact	cccacgttg	-----	GACCATTAAAGTGAGAGAT	-----	ccctatctaccgca	-----	ttcgagact	tattct	-----	aacatctgttgcag	caaagat					
D. Sim	tgtcgaaa	gtaggttacaca	-----	aat	-----	tacacagact	cccacgttg	-----	GGCCcATTAAAGTGAGAGAT	-----	ccctgtctaccgca	-----	ctcgagact	tattct	-----	aacatctgttgcag	ctaaagat					
D. Sec	tgtcgaaa	gtaggttacaca	-----	aat	-----	tacacagact	cccacgttg	-----	GGCCcATTAAAGTGAGAGA	-----	ccctgtctaccgca	-----	ttcgagact	tattct	-----	aacatctgttgcag	ctaaagat					
D. Ere	tgtcgaaa	gtaggttacaca	-----	aa	-----	tacacagact	cccacgttg	-----	GGCCcATTAAAGTGAGAGA	-----	ccctgtccaccgca	-----	ctcgagact	tattct	-----	aacatctgttgcag	ctaaagat					
D. Ana	tgtcgaaa	gtaggttacaca	-----	at	tttaa	-aatcacact	gcctcCCTGCT	TGGGcCTATTTA	aAGTGAGAGAA	-----	ccctgccctgtgta	-----	atcgagact	tatttt	-----	a-tatctgtt	gtag	ccaagag				
D. Gri	tgtcgaaa	gtaggttacaca	caataca	aattca	aattt	gtgaacata	aatgc	-----	ATTTAAAGTGAGAGAA	tttatgctc	gcctattatta	aattcgtt	tattact	-ta	-----	ttcaaaact	gcaattc	-----	atattccatt	gtag	ccaaggac	
D. Moj	tgtcgaaa	gtaggttacaca	-----	tttta	-aatca	atttggta	cgaaca	-TTATGC	-ATTTAAAGTGAGAGA	-----	at	ttatgttc	cccacctt	cttaca	actcata	aaacta	attttct	atcgaa	actctatt	tcag	ccaaggag	
D. Per	tgtcgaaa	gtaggttacaca	-----	ca	catgcacac	acagacctc	caga	-----	CATTGATCcaATTAAAGTGAGAGA	-----	ac	-----	ccaggc	ttt	gta	-----	atcgaa	acttattg	-----	gaactctatt	acag	ccaaggag
D. Pse	tgtcgaaa	gtaggttacaca	-----	ca	catgcacac	acagacctc	caga	-----	CATTGATCcaATTAAAGTGAGAGA	-----	ac	-----	ccaggc	ttt	gta	-----	atcgaa	acttattg	-----	gaactctatt	acag	ccaaggag
D. Wil	aattgaca	gtag	-----	aa	ttta	ccCATTTAAAGTGAGAGATT	ct	ATTGAGT	-----	ccctgtc	ctt	gct	-----	at	ttta	attcc	-----	ttac	cttt	ccag	ccaaggaa	
D. Yak	tgtcgaaa	gtaggttacaca	-----	aa	-----	tacacagact	cccacgttg	-----	GGCCcATTAAAGTGAGAGA	-----	ccctgtccaccgca	-----	ttcgagact	tattct	-----	accatctgttgcag	ctaaagat					
	** * *	****						*****					**		*	** **	****					

id=4581 gene=FBgn0261276 name=opa1-like segment=chr2R.10121848\_10121947\_-1 type=IN VIEW

Figure 394: CS=13.2



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D.Me1  aaatgccg gtaagtacagat...3675...gtaataaac--caattgaaac-----CAATgA-AAGGAAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaaac...1213...aatcttttcag gacctggt
D.Sim  aaatgccg gtaagtacagat...3687...gtaataaac--caattgaaac-----CAATgA-AAGGAAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaaaa...1201...aatcttttcag gacctggt
D.Sec  aaatgccg gtaagtacagat...3678...gtaataaac--caattgaaac-----CAATgA-AAGGAAATCaTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaaaa...1210...aatcttttcag gacctggt
D.Ere  aaatgccg gtaagtacggat...3672...gtaataaac--caattgaaac-----CAATGA-AAGGAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaata...1216...aatcttttcag gacctggt
D.Ana  aaatgccg gtaagtacgct...3612...gtaataaac--caattgaaac-----CAATGA-AAAGaAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaaac...1276...gctctctccag gacctgga
D.Gri  gaatgccg gtaagtgtatta...3494...-----taaac--caactgaaaccaag-----AA-----AAATCgTTCATTGTTcGTTcGTTTGTtattctcagtaaaagcgtaa...1395...actttatttcag gacctgga
D.Moj  gaatgccg gtaagtcttga...4304...-----ctttc--caaaaatattttgatTTAACGAaTTTTgGAGAGcAAACTcCACC-----TTGA-----acaaaatgctgagcaacgaa...588...ttgtatttcag gaccggga
D.Per  aaatgccg gtaagtgtcct...3579...nnnnnnnnn--caattgagac-----CAATGACAAAGAAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgtaaga...1308...gatcttttcag gacctgga
D.Pse  aaatgccg gtaagtgtcct...3582...gtaataaac--caattgagac-----CAATGACAAAGAAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgtaaga...1305...gatcttttcag gacctgga
D.Vir  gaatgccg gtaagtgcact...3586...gtatataaac--agacttaaac-----CAAAGA-----AAATCgTTCATTGTTcGTTcGTTTGTcGTTTGTtattctcaataaaagcgcaa...1299...actctatttcag gcctgga
D.Wil  aaatgccg gtaagtacagga...3161...-----caaccaacaacaaaatcgt-----TTCATTGTTcGTTcGTTTGT-----ctgttacctc---taaccaag--...1743...ctttcttacag gacctgga
D.Yak  aaatgccg gtaagtacagat...3675...gtaataaac--caattgaaac-----CAATGA-AAGGAATCgTTCATTGTTcGTTcGTTTGT-----tacctcagt-aaagcgcaata...1213...aatcttttcag gacctggt
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id=44632 gene=FBgn0032497 name=CG6043 segment=chr2L.13276513.13283360.1 type=IN

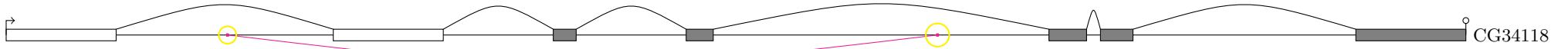
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D.Me1  aaatgccg gtaagtacagat...4358...-tggagagcaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacTCT-TTTGTTG-----ttgagaccataaataaaaac-----...532...aatcttttcag gacctggt
D.Sim  aaatgccg gtaagtacagat...4362...-tggagagcaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacTCT-TTTGTTG-----ttgagaccataaataaaaac-----...528...aatcttttcag gacctggt
D.Sec  aaatgccg gtaagtacagat...4364...-tggagagtaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacTCT-TTTGTTG-----ttgagaccataaataaaaac-----...526...aatcttttcag gacctggt
D.Ere  aaatgccg gtaagtacggat...4363...-tggagagcaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacTCT-TTTGTTG-----ttgagaccataaataaaaac-----...526...aatcttttcag gacctggt
D.Ana  aaatgccg gtaagtacgct...4343...-tggagagcaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacTCT-TTTGTTG-----ttgagaccataaataaaaac-----...548...gctctctccag gacctgga
D.Gri  gaatgccg gtaagtgtatta...4329...-ttggagagcaaaactccacctTGAACaGAATGcTGAACAACGAATGAAGATT-----TTT-----gcattagtgaacaaaataaa...562...actttatttcag gacctgga
D.Moj  gaatgccg gtaagtcttga...4681...-aaaaaaaaaattgtaaacaa-TTAAG-----GTGaAGTTCTCTCAAAGTTGTTGGctg---cttttgctttatttatt---...213...ttgtatttcag gaccggga
D.Per  aaatgccg gtaagtgtcct...4299...-tggagagcaaaactccacctt-GTAAT-----GAACAACGAATGAAGATTacT-T-TTTGTTGTTG-t---gaccataaataaatacaat---...589...gatcttttcag gacctgga
D.Pse  aaatgccg gtaagtgtcct...4302...-tggagagcaaaactccacctt-GTAAT-----GAACAACGAATGAAGATTacT-T-TTTGTTGTTG-t---gaccataaataaatacaat---...586...gatcttttcag gacctgga
D.Vir  gaatgccg gtaagtgcact...4386...-ttggagagaaaactccacctTGAACaaAATGGTGAACAACGAATGAAGATT-----TTTTTTG-----t-----gcataagtaaatataataa...501...actctatttcag gcctgga
D.Wil  aaatgccg gtaagtacagga...4394...-tggagagcaaaactccacctt-ATAAAA-----TGAACAACGAATGAA-----gaagatttttttatataac...511...ctttcttacag gacctgga
D.Yak  aaatgccg gtaagtacagat...4355...-tggagagcaaaactccacctt-GCAAAA-----GAACAACGAATGAAGATTacCCTTatTTGTTG-----ttaagaccataaataaatacaat---...534...aatcttttcag gacctggt
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id=44632 gene=FBgn0032497 name=CG6043 segment=chr2L.13276513.13283360.1 type=IN VIEW

Figure 395: CS=7.2



D. Mel	ctagccat	gtaagtgatatc-----	1815	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	449	..	tactcttttcag	gtgaactg	
D. Sim	ctggccat	gtaagtgatatc-----	2082	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	474	..	tactcttttcag	gtgaactg	
D. Sec	ctggccat	gtaagtgatatc-----	2052	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	466	..	tactcttttcag	gtgaactg	
D. Ere	ctggccat	gtaagtgatatc-----	2064	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	467	..	cccttttttcag	gtgaactg	
D. Ana	atcgccat	gtaagtgatatc-----	2240	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	470	..	ttctcgttcag	gtgaactg	
D. Gri	ctagtgg	gtaagtgatatc-----	3691	..	tctgtctatttccgcttgc-----	TTGGCGTTG	TTATAG	cttaatagatgaccgacagaa...	838	..	tttgattacaa	aaaaaatc	
D. Moj	ctggctgt	gtaagtgatatg-----	2821	..	tctgtctatttccgcttgc-----	TTGGCGTTG	TTATAG	cttaatagatgaccgactgaa...	451	..	ttctatttcag	cttaacaa	
D. Per	ctggctat	gtaagtgatatc-----	1031	..	tcaactgttctctcgttgc	AAAAAT	TagTAAAA	GCAAATAACA	-tgacattattaatgatttag...	2318	..	ttctcttttcag	gaaaatta
D. Pse	ctggccat	gtaagtgatatc-----	1033	..	tcaactgttctctcgttgc	AAAAAT	TagTAAAA	GCAAATAACA	-tgacattattaatgatttag...	2310	..	ttctcttttcag	gaaaatta
D. Vir	ttggccgt	gtaagtgatatc-----	2245	..	tctgtctatttccgcttgc-----	TTGGCGTTG	TTATAG	cttaatagatgaccgactgaa...	443	..	gttttgagcaa	gtgcatg	
D. Wil	acaacc--	aaacgatccgcaat...	3135	..	ctgtctatttccgcttgc	TTGGCGTTG	TTATA	cttaatagatgaccaacaga...	434	..	ttctatttcag	ataatttc	
D. Yak	ctggccat	gtaagtgatatc-----	4242	..	aaatctgtctatttccgctt-----	GCCGTGGCGTTG	TTATA	cttaatagatgaccggctgg-...	455	..	ctcctcttcag	gtgaactg	

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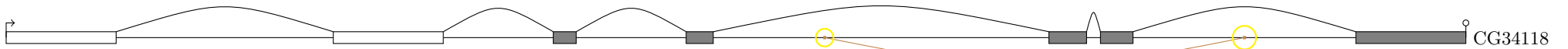
id=45128 gene=FBgn0083954 name=CG34118 segment=chr3R.16307353.16309698.-1 type=I5

D. Mel	cattccag	gtaaataaaca...	4576	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGC	ccaaacctgcactgaaaaa...	331	..	ttccatttcag	tgtcctgc
D. Sim	cattccag	gtaaataaaca...	4577	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGC	ccaaacctgcactgaaagaa...	330	..	ttccatttcag	tgtcctgc
D. Sec	cattccag	gtaaataaaca...	4577	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGC	ccaaacctgcactgaaagaa...	330	..	ttccatttcag	tgtcctgc
D. Ere	cattccag	gtaaataaaca...	4369	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGC	ccggacctgcactgaaagaa...	538	..	tcccacttcag	tgtcctgc
D. Ana	tataccag	gtaaacaacatc...	4586	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGT	ccccacctgcactgagaaat...	321	..	ttcctcttcag	tgtcctgc
D. Gri	cataccag	gtatgcatgtgt...	4597	..	gctgcctgcctcctgccat-----	TTATAACA	ActGTCAA	---ctggctcactcgggtaat...	312	..	ttgtccttcag	tgtcctgc
D. Moj	cataccag	gtaagagagtca...	4729	..	ggccgacgcccctgccat-----	TTATAACA	ActGTCAA	---ctggctcactcgggtaat...	180	..	ttgtccttcag	tgtcctgc
D. Per	cattccag	gtaaa-acgcaat...	4215	..	catattgtcggcagtttgc	TTGTTTTG	GcGATTTT	-----acggcttatgacgacaaa...	687	..	tctcttttcag	tgtcctgc
D. Pse	cattccag	gtaaa-acgcaat...	4220	..	cccattgtcggcagcttgc	TTGTTTTG	GcGATTTT	-----acggcttatgacgacaaa...	682	..	tctcttttcag	tgtcctgc
D. Vir	cataccag	gtaagctcgaga...	4743	..	ttgtcctgcctcctgccat-----	TTATAACA	ActGTCAA	---ctggctcactcgggtaat...	166	..	ttgtccttcag	tgtcctgc
D. Wil	cataccag	gtaaacaataa...	4780	..	gtcgttctcgtgccatt-----	TATAACA	ActGTCA	---agggccacaacttggtaat...	131	..	atcttttcag	tgtcctgc
D. Yak	cattccag	gtaaataaaca...	4225	..	gtagttgtctcgtgccatt-----	TATAACA	ActGTCATGGC	ccgaactgcactgaaagaa...	682	..	ttccatttcag	tgtcctgc

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id=45134 gene=FBgn0083954 name=CG34118 segment=chr3R.16229117.16236803.-1 type=IN VIEW

Figure 396: CS=14.16



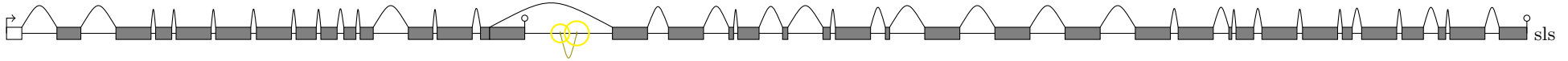
D.Mel	cattccag	gtaataaaca-	...3135...	aaacaaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1776...	ttccatttgcag	tgtcctgc	
D.Sim	cattccag	gtaataaaca-	...3148...	aaacaaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1763...	ttccatttgcag	tgtcctgc	
D.Ana	tataccag	gtaacaacatc-	...2822...	aaacaaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...2089...	ttcctcttcag	tgtcctgc	
D.Gri	cataccag	gtatgcatgtg-	...2928...	gcagcaacaagaatcgtt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1981...	ttgtccttgcag	tgtcctgc	
D.Moj	cataccag	gtaagagagtc-	...3369...	gaaacaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1542...	ttgtccttgcag	tgtcctgc	
D.Per	cattccag	gtaaa-acgcaat	...2963...	aaacaaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1948...	tctcttttgcag	tgtcctgc	
D.Vir	cataccag	gtaagctcgaga-	...3546...	gcaacaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1365...	ttgtccttgcag	tgtcctgc	
D.Wil	cataccag	gtaacaataaa-	...3107...	acaacgacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...1804...	atctttttgcag	tgtcctgc	
D.Yak	cattccag	gtaataaaca-	...2603...	aaacaaacaagaatcatt	GAACca	ATTCAGCG	accaactcaacaaccggaaa--	...2308...	ttccatttgcag	tgtcctgc	
	** ****	***		*	*****	***	*	*****	*****	** **	*****

id=45134 gene=FBgn0083954 name=CG34118 segment=chr3R.16229117.16236803.-1 type=IN

D.Mel	gaaaacag	gtatgccatgtc...	...973...	tcgatacacttgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...655...	ttctcgtttcag	ggacgcct	
D.Sim	gaaaacag	gtaagccatgtc...	...891...	tcgatacacttgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...686...	ttctcgtttcag	ggacgcct	
D.Ana	gaaaacag	gtatgtttaata...	...616...	ccgatacacttggatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...824...	ctctcgtttcag	ggacgcct	
D.Gri	gaaaacag	gtgaataaata...	...1017...	atactctcctcgaatacaaaa	CGTTGTT	GAATGTTT	taataactcgaatgacttt...	...339...	ttcaatttttag	ggatgcct	
D.Moj	gaaaacag	gtgagcgaattg...	...712...	tcaatccctcgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...422...	ttttcgttttag	ggatgcct	
D.Per	gaaaacag	gtaattgtccta...	...709...	tcgatacacttgaatgcaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...396...	gattcattacag	ggatgcct	
D.Vir	gaaaacag	gtgagtggatag...	...630...	tcaatccctcgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...401...	tttatttttaag	ggatgcct	
D.Wil	gaaaacag	gtgagcagcatt...	...453...	tcgatacactcgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...387...	tacttatttcag	agatgcct	
D.Yak	gagaacag	gtaagccatgtc...	...839...	tcgatacacttgaatacaaaa	CGTTct	GAATGTTT	taataactcgaatgacttt...	...1764...	ttctcgtttcag	ggacgcct	
	** ****	**		*	*****	***	*	*****	*****	** **	** ****

id=45138 gene=FBgn0083954 name=CG34118 segment=chr3R.16227029.16228734.-1 type=IN VIEW

Figure 397: CS=10.62



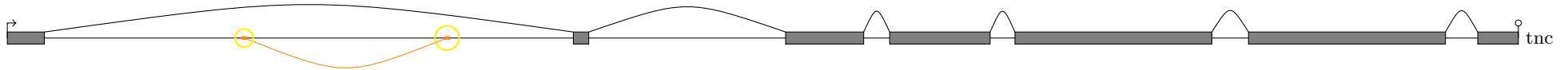
D. Mel	ataataaa	aatcattacaag...1476...	ttaattgaattttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattaccgc...	1742...	aatccctcttag	aacgacgc	
D. Sec	ataataaa	aatcattacaag...1442...	ttaattgaattttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattaccgc...	1656...	aatccctcttag	aacgacgc	
D. Ere	ataataaa	aataattacaag...1440...	ttaatagaattttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattaccgc...	1651...	aatccctcttag	aacgacgc	
D. Ana	ataataaa	aataattacaag...1471...	tta-tta-tttttagtgat	-----	GTTGCATGAGa	TTTTAT	agttcattttttattactgc...	2060...	aatctcccttag	aacgccgc	
D. Gri	ataataaa	aataattacaag...1530...	ttaattacatttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttaatgccgc...	1582...	ttgaacttttag	agcgacgt	
D. Moj	ataataaa	aataattacaag...1630...	ttaattacgtttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattgctgc...	1624...	ttgaacttcttag	aacgacgt	
D. Per	ataataaa	aataattacaag...1705...	tta-tttatttttagtgat	-----	GTTGCATGAGa	TTTTAT	aattcattttttattaccgc...	1853...	cgcttcgtttag	aacgacga	
D. Pse	ataataaa	aataattacaag...1736...	tta-tttatttttagtgat	-----	GTTGCATGAGa	TTTTAT	aattcattttttattaccgc...	1891...	cgcttcgtttag	aacgacga	
D. Vir	aaaataat	aataattacaag...1544...	ttaattacaattat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattgcccgc...	1600...	ttaaacttcttag	aacgacgt	
D. Wil	ataataaa	tataattacaag...1797...	ttattttggataaaaaatt	ATT	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattgacgc...	1634...	cccctattttag	aacgacgt
D. Yak	ataataaa	aataattacaag...1425...	ttaatagaattttat--ttat---	TTTGtAGTGA	GTTGCATGAGa	TTTTAT	tattcattttttattaccgc...	1753...	aatccctcttag	aacgacgc	
	* **	** **	*** *	**	*****	*****	* **	**	***	* ** *	

id=100443 gene=FBgn0086906 name=sls segment=chr3L\_2087185\_2090494\_-1 type=IN

D. Mel	ataataaa	aatcattacaag...1721...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ctTCGTTtTAAG	---tcttatctgt-cttttatctg...	1496...	aatccctcttag	aacgacgc
D. Sec	ataataaa	aatcattacaag...1685...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ctTCGTTtTAAG	---tcttatctgt-cttttatctg...	1412...	aatccctcttag	aacgacgc
D. Ere	ataataaa	aataattacaag...1679...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ctTCGTTtTAAG	---tcttatctgt-catgtttatg...	1411...	aatccctcttag	aacgacgc
D. Ana	ataataaa	aataattacaag...1727...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	-----	ttcgatttaagtttatcca...	1804...	aatctcccttag	aacgccgc
D. Gri	ataataaa	aataattacaag...1775...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ttTTGTTtTAAG	---ttttatctac-aatacattga...	1336...	ttgaacttttag	agcgacgt
D. Moj	ataataaa	aataattacaag...1867...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ttTTGTTtTAAG	---tttgatctac-aatacattg...	1386...	ttgaacttcttag	aacgacgt
D. Per	ataataaa	aataattacaag...1905...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	-----	ctttttgtttttaag--tacc--...	1653...	cgcttcgtttag	aacgacga
D. Pse	ataataaa	aataattacaag...1936...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	-----	ctttttgtttttaag--tacc--...	1691...	cgcttcgtttag	aacgacga
D. Vir	aaaataat	aataattacaag...1802...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ttTTGTTtTAAG	---tttgatctacaaataca-ttg...	1341...	ttaaacttcttag	aacgacgt
D. Wil	ataataaa	tataattacaag...2043...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ttTTGTTtTAAGAAAT	ttatgtttat-gtttactttc...	1389...	cccctattttag	aacgacgt
D. Yak	ataataaa	aataattacaag...1664...	gctttactaaaaaattaatc	ATAAAAA	CTCATGCGAC	ctTTGTTtTAAG	---tcttatctgt-catgtttatg...	1513...	aatccctcttag	aacgacgc
	* **	** **	*****				*		***	* ** *

id=100443 gene=FBgn0086906 name=sls segment=chr3L\_2087185\_2090494\_-1 type=IN VIEW

Figure 398: CS=17.16



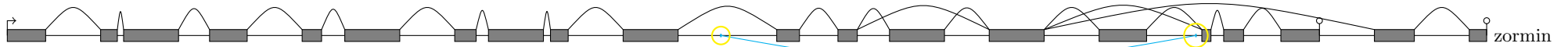
D. Mel	gcatagcg	gtaaaaacgcat...1361...--gctccgaagagtcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...986...ctctcattgcag	ccccggtc	
D. Sim	gcatagcg	gtaaaaacgcat...1631...--gctccgaagagtcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...988...ctctcattgcag	ccccggtc	
D. Sec	gcatagcg	gtaaaaacgcat...1325...--gctccgaagagtcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...987...ctctcattgcag	ccccggtc	
D. Ere	gaatagcg	gtaaaaacgcat...1305...-aggctccga--agtcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...1000...ctctcattgcag	ccccggtc	
D. Ana	gaatagcg	gtaaaaataaat...1260...-ccaggtt--ctggctcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...1020...ttctcattacag	ccccgttg	
D. Gri	aaatagcg	gtaaaaatagcgg...1743...--gttc--tcggctcggtgctggtt-----	TTGTTc	TTACCGCATAA	aatgtaattacatccggtta...1074...gcctatttacag	ccccacta	
D. Per	gaatagcg	gtaaaaaaaaaa...1493...tatgctgtgccagg-----ttcggc	CGTGTGGTTGTTc	TTACCGCATAA	aatgtaattacatccggtta...1177...tcctcattccag	ctccactg	
D. Pse	gaatagcg	gtaaaaaaaagg...1488...tatgctgtgccagg-----ttcggc	CGTGTGGTTGTTc	TTACCGCATAA	aatgtaattacatccggtta...1177...tcctcattccag	ctccactg	
D. Vir	gcatagca	acacacaaaat...1376...--ggt--tcggctcggtgctggtgc-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...1063...ttcttttgag	ccccactg	
D. Wil	aagtagcg	gtaaaatacaca...1406...--tggtcggctggctcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...1007...ttctatttacag	caccgttg	
D. Yak	gaatagcg	gtaaaaacgcat...1346...-aggctccga--agtcg---tgttgt-----	TGTTc	TTACCGCATAA	aatgtaattacatccggtta...1052...ttctcattgcag	ccccggtc	
	****	* *		*****		** **	* ** *

id=27885 gene=FBgn0039257 name=tnc segment=chr3R.20835177\_20837603.1 type=IN

D. Mel	gcatagcg	gtaaaaacgcat...2059...gcgccaggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacagccaa-----	...288...ctctcattgcag	ccccggtc
D. Sim	gcatagcg	gtaaaaacgcat...2324...gcgccaggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacagccaa-----	...295...ctctcattgcag	ccccggtc
D. Sec	gcatagcg	gtaaaaacgcat...2017...gcgccaggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacagccaa-----	...295...ctctcattgcag	ccccggtc
D. Ere	gaatagcg	gtaaaaacgcat...2009...gcgccaggctgcattttga	TTATGTGGTAA	AACA	cgttacacgcatacaagcc-----	...296...ctctcattgcag	ccccggtc
D. Ana	gaatagcg	gtaaaaataaat...1940...gcttctggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacagagcc-----	...340...ttctcattacag	ccccgttg
D. Gri	aaatagcg	gtaaaaatagcgg...2390...cttctgctgctgaattttga	TTATGTGGTAA	AACA	gttgcacgcacacaatgccg-----	...427...gcctatttacag	ccccacta
D. Per	gaatagcg	gtaaaaaaaaaa...2320...cctggctggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacaagctggtg...349...tcctcattccag	ctccactg	
D. Pse	gaatagcg	gtaaaaaaaagg...2293...gctggctggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacaagctggtg...371...tcctcattccag	ctccactg	
D. Vir	gcatagca	acacacaaaat...2063...ccgctgctgctgaattttga	TTATGTGGTAA	AACA	cgttcacgcacacaagcc-----	...376...ttcttttgag	ccccactg
D. Wil	aagtagcg	gtaaaatacaca...2051...gcagctgctgctacattttga	TTATGTGGTAA	AACA	cgttcacgcacacaagcc-----	...362...ttctatttacag	caccgttg
D. Yak	gaatagcg	gtaaaaacgcat...2050...ctagcaggctgcattttga	TTATGTGGTAA	AACA	cgttcacgcacacagagcc-----	...348...ttctcattgcag	ccccggtc
	****	* *	***	*****	*** ***** **	** **	* ** *

id=27885 gene=FBgn0039257 name=tnc segment=chr3R.20835177\_20837603.1 type=IN VIEW

Figure 399: CS=6.6



D.Mel	cgtaa	gtgagtactgaa...342...ccacatcaatcagtgagag	CATTaaAGTGTcATTG	tcgagggacgaggggcctag...584...cgaaaaatctag	agaccata
D.Sim	cgtaa	gtgagtactgaa...381...ccacatcaatcagtgagag	CATTaaAGTGTcATTG	tcgagggacgaggggcctag...1194...cccgaaatctag	agaccata
D.Sec	cgtaa	gtgagtaccgaa...369...ccacatcaatcagtgagag	CATTaaAGTGTcATTG	tcgagggacgaggggcctag...581...cccgaaatctag	agaccata
D.Ere	tgtaa	gtgagtattgaa...381...ccacatcaatcagtgagag	CATTaaAGTGTcATTG	tcgagggacgaggggcctag...565...cccgaaatctag	agaccata
D.Ana	cgtaa	gtgagtattcac...285...ccacatcaatcagcgagag	CATTaaAGTGTcATTG	tcgagggatgggtggagga...596...ttcattttcag	agacgatc
D.Moj	ggtgaaa	gtaagttaaagt...267...ccacatcaatcagcgggag	CATTaaAGTGTcATTG	tcggggcgtaaatagatct...553...ctatccgtgcag	agaccatc
D.Per	ggtcaaaa	gtgagtatttcc...913...acacatcaatcagcgtagag	CATTaaAGTGTcATTG	atggatcttcaaacgtcaa...638...tcctttccgcag	agaccatc
D.Pse	ggtcaaaa	gtgagtatttcc...882...acacatcaatcagcgtagag	CATTaaAGTGTcATTG	atggatcttcaaacgtcaa...672...tcctttccgcag	agaccatc
D.Vir	ggtgaaa	gtaagttatctt...474...ccacatcaatcagcgggag	CATTaaAGTGTcATTG	ttggggcgtaaatagatct...578...ctattcgtgcag	agaccatc
D.Wil	ggtgaaa	gtgagtattaat...445...ccacatcaatcaacatacaa	CATTaaAGTGTcATTG	tcggggcgtaaatgagatct...641...ttctattacag	agaccgta
D.Yak	cgtaa	gtgagtattgaa...350...ccacatcaatcagtgagag	CATTaaAGTGTcATTG	tcgagggacgaggggcctag...579...cccgaaatctag	agaccata
	** ****	** ***	*****	* *****	** **** *

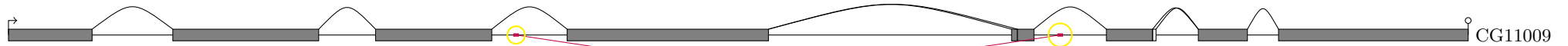
id=9342 gene=FBgn0052311 name=zornin segment=chr3L.2129787.2130792\_-1 type=IN

D.Mel	ccgcacag	gtactgaagcaa...402...-gtttcgtgcttg-cgcgtgc	TAATccCACTAATG	gatg--cgctttga-----	agtgccggag
D.Sim	ccgcacag	gtactgaagcac...412...-gttcctgcttg-cgcgtgc	TAATccCACTAATG	gatg--cgctttga-----	agtgccggag
D.Sec	ccgcacag	gtactgaagcac...411...-gttcctgcttg-cgcgtgc	TAATccCACTAATG	gatg--cgctttga-----	agtgccggag
D.Ere	ccgcacag	gtactgaagcac...422...-gttcctgcttg-cgcgtgc	TAATccCACTAATG	gatg--cgctttga-----	agtgccggag
D.Ana	ccgaacag	gtacgctccaga...484...-attttgtgcttg-cgcgtgc	TAATccCACTAATG	gatg--ctctttga-----	aagtgccggac
D.Moj	gcgacag	gtacagctggca...954...-ttgctgtgtttg-tgtgtg	TAATccCACTAATG	gatg--ctgctataag-----	agtgccggaa
D.Per	ccgcacag	gtacaggatag...401...ccgctcgcgtttg-tgc-tgc	TAATccCACTAATG	gatgcccgcgtttgaa-----	agtgccggaa
D.Pse	ccgcacag	gtacaggatag...379...ccgctcgcgtttg-tgc-tgc	TAATccCACTAATG	gatgcccgcgtttgaa-----	agtgccggaa
D.Vir	gcgacag	gtacagatggcg...585...-gtctgtctttg-cgtgtgc	TAATccCACTAATG	gatg--ctgctttaag-----	agtgccggaa
D.Wil	ccgcacag	gtataaccgata...695...-tgtgtgtgcttg-tgagtg	TAATccCACTAATG	gatg--gcctttgaaataaaagaaaaacaaaaaa	agtgccggaa
D.Yak	ccgtacag	gtactgaagcac...429...-gtttcgtgcttg-cgtgtgc	TAATccCACTAATG	gatg--cgctttga-----	agtgccggag
	** ****	***	* ** *	*****	*****

id=9352 gene=FBgn0052311 name=zornin segment=chr3L.2123680.2124181\_-1 type=IN VIEW

Figure 400: CS=13.2





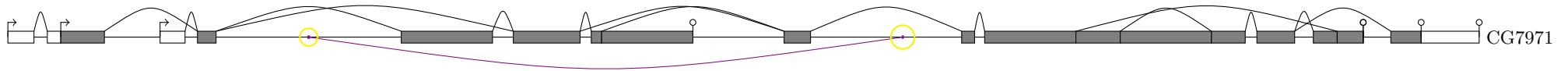
D.Mel	gggtatcg	gtaagt--ta-aacgcacgtgcactttacccaatctat-----	ACTCGGCTTTGTTTGG	cacgctg----gctacgcaattg...70...ttttcgtcttag	caccacct
D.Sim	gggtatcg	gtaagt--tt-aacgcacgtacaatttacccaatcaat-----	ACTCGGCTTTTGT	ctggcaccgctacgcaatt...71...ttttcgtcttag	caccacct
D.Sec	gggcatcg	gtaagt--ta-aacgcacgtacaatttacccaatcaat-----	ACTCGGCTTTTGT	ctggcaccgctacgcaatt...71...ttttcgtcttag	caccacct
D.Ere	gggtatcg	gtaagt--tc-aacatgctgcactctatccaatcaat-----	ACTCGGCTTTTGT	ctggcactgctacgcaatt...71...ttctcgtcttag	caccacct
D.Ana	gggtatcg	gtaagtacc-atcaagtgacatTTTgtccatctaccagT-----	ACTCGGCTTTTGT	ttgacactgcaccgcaatt...70...ctttctcctag	caccaccg
D.Gri	tggcatca	gtaagt--t-accca----cttttaattcctttgccccaca-----	CTCGGCTTTTGT	ctgcacagctgttgagctga...91...tcttttctag	caccacca
D.Moj	gggcatca	gtaagttttgtgt---ataagattttatccttccata-----	CTCGGCTTTTGT	ctgtacatatgacgacatt...95...tatctttaatag	caccacca
D.Per	gggcatca	gtaag---t-accaggcagccatagactccc---accacc-----	ACTCGGCTTTTGT	cacagctgctgcatgcttc...91...ctctacatag	caccgccc
D.Pse	gggcatca	gtaag---t-accaggcagccatagactccc---accacc-----	ACTCGGCTTTTGT	cacagctgctgcatgcttc...92...ctctacatag	caccgccc
D.Vir	gggcatga	gtaagttttcgattctaagcagcttttccgctccatt-----	CTCGGCTTTTGT	tccgtacagatgttgcgctg...95...atTTTTatag	caccacca
D.Wil	gggcatca	gtgagt--a-atccg-----ttaatttaa-----aatgAAGAGTc	ACTCGGCTTTTGT	ttgcttctactactactgc...70...cgtatttcacag	caccacca
D.Yak	gggtatcg	gtaagt--tc-aacaagcgtgcactttacccaatcaat-----	ACTCGGCTTTTGT	ctgtcactgctacgcaatt...71...ttctcgtcttag	caccacct
	** **	** **	*****		** **** **

id=27498 gene=FBgn0036318 name=CG11009 segment=chr3L.12844254.12844408.1 type=IN

D.Mel	cccgacaa	gtaagattt-----att--gtttcaatgt---ta-----	cccaaagca--a---atta---	CTAACAAAAGCCGAGT	---cttcaag--tag-ttaagtctat-...63...-----	gcaaccaatag	tagccaga
D.Sim	cccgacaa	gtaagattt-----att--gtttcaatgt---ta-----	cccaaagct--a---attact---	AACAAAAGCCGAGT	---cttcaag--tag-ttagtctac-...63...-----	gcaaccaatag	tagccaga
D.Sec	cccgacaa	gtaagattt-----att--gtttcaatgt---ta-----	cccaaagca--a---attact---	AACAAAAGCCGAGT	---cttcaag--tag-ttagtctac-...63...-----	gcaaccaatag	tagccaga
D.Ere	cccgacaa	gtaagattt-----att--gtttcaatgt---aa-----	cccaaagca-----aatact---	AACAAAAGCCGAGT	---cttcaag--tag-ttagtatacc-...64...-----	gcaaccaatag	tagcaaga
D.Ana	cccgacaa	gtaagattt-----att--gtttcaatgt---taa-----	aattcctgaaagca-----aatact---	AACAAAAGCCGAGT	---cttcaag--tag-ttagtctac-...69...-----	ccaacctgtag	tagccaga
D.Gri	caaaacaa	gtaagatttcataatgttctctaccatttacatagctatataataataatatttatatacaaaatgatattgataaaaattccc	AACAAAAGCCGAG	---cctacag--ttt-tgcaatttg-...48...ccaatgcaaact---	ttgcagga		
D.Moj	gcaaacaa	gtaagattttgtaatgcttt---tatt--cgtttcgaccatcatataa-----	ataactaaaattcagttgcttaaatTTTcc-	AACAAAAGCCGAG	---cctatag--ttc-cgcaatttaa-...50...tccatgcaaact---	ttgcagga	
D.Per	cccaacaa	gtaagattt-----att--tttcgatgtgttcccc-----	actccccacc---cgctcaaaaa-	CTAACAAAAGCCGAGT	---ctcaaat--tag-aatagtcgat-...78...-----	tgcaacc-tcag	tagcaaga
D.Pse	cccaacaa	gtaagattt-----att--tttcgatgtgttcccc-----	actccccacc---cgctcaaaaa-	CTAACAAAAGCCGAGT	---ctcaaat--tag-aatagtcgat-...78...-----	tgcaacc-tcag	tagcaaga
D.Vir	acagccaa	gtaagattttcgca-----attcgttataaattgtatataa-----	atacgtatttattt--tggttaaaatttcc-	AACAAAAGCCGAG	---cctaaag--ttt-tgcaattttc-...51...tccatgcaaact---	ttgcagga	
D.Wil	caagtcaa	gtaagatat-----atc-----ctaaaaacc--taactaatt---	ctaaaaacc--taactaatt---	GAACAAAAGCCGAGTTTCTT	ataag--tagatgtgtcttta...137...-----	acaactcaacag	ttgccaga
D.Yak	cccaacaa	gtaagattt-----att--gtttcaatgt---aa-----	cccaacgca--aatataaact---	AACAAAAGCCGAGT	---cttc-ag--tag-ttagtctacc-...64...-----	gcaaccaatag	tagcaaga
	***	***** *	**	*	***** **	*	**

id=27503 gene=FBgn0036318 name=CG11009 segment=chr3L.12845378.12845526.1 type=IN VIEW

Figure 401: CS=21.36



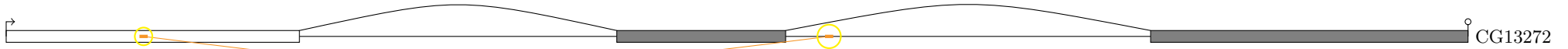
D. Mel	cgcgtagc	gtaagtaccacg...	.823...	----acataagccgaa-tgaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.634...	ggagatctatag	caacacca---
D. Sim	cgcgtagc	gtaagtaccacg...	.868...	----acctaagccgaa-tgaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.639...	ggagatttatag	caacacca---
D. Sec	cgcgtagc	gtaagtaccacg...	.861...	----acctaagccgaa-tgaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.609...	ggagatttatag	caacacca---
D. Ere	cgcgtagc	gtaagtattaca...	.849...	----acctaagccgaa-tgaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.587...	ggagatctatag	caacacca---
D. Gri	cgtgtagc	gtgagtagccaa...	.893...	---cagctcagaaactg----	aaagcaACAAAtcACTA	AaaTAAG	tcttccaacatagtcgta...	.889...	---aatctacac	gagcgcaaca
D. Per	cgcgtagc	gtgagtagtata...	.964...	----ctgatgccaaactaaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.590...	ggaaatctacac	caatacga---
D. Pse	cgcgtagc	gtgagtagtata...	.931...	----ctgatgccaaactaaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.591...	ggaaatctacac	caatacga---
D. Vir	cgcgtagc	gtaagttagctgc...	.815...	---gatccaacaaaccg----	aaagcaACAAAtcACTA	AaaTAAG	tcttccaacatagtcgta...	.1133...	ggaaatctacac	gaacacaa---
D. Wil	cgtgtagc	gtgagtaataata...	.1097...	----agtgaactgcattaaaagca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.532...	ggaaatttatac	taatacaca---
D. Yak	cgcgtagc	gtaagtattaca...	.851...	----acctaagccgaa-tgaatgca	ACAAAtcACTA	AaaTAAG	tcttccaacatagtcagta...	.607...	ggagatctacag	caacacca---
	** *****	** ****		*	** *****	***	***		* ** *	* ** *

id=36412 gene=FBgn0035253 name=CG7971 segment=chr3L.1662382.1663919.-1 type=IN

D. Mel	aggacaag	gtag-gcaggagc...	.887...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.291...	tctattatgcag	aaaaaacg
D. Sim	aggacaag	gtag-gcaggagc...	.891...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.284...	tctattatgcag	aaaaaacg
D. Sec	aggacaag	gtag-gcaggagc...	.884...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.284...	tctattatgcag	aaaaaacg
D. Ere	aggacaag	gtat-gcaagggc...	.899...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.274...	tttattatgcag	aaaaaacg
D. Gri	aggaaaag	gtaatgcccata-	.1035...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.342...	ttaattatgcag	aaaaaacg
D. Per	aggacaag	gtat-gcataagc...	.1202...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.261...	tctattatgcag	aaaaagcg
D. Pse	aggacaag	gtat-gcataagc...	.1204...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.261...	tctattatgcag	aaaaagcg
D. Vir	aggagaag	gtaa-actcacat...	.1001...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.322...	tttattatgcag	aagaaacg
D. Wil	aggataag	gtat-gcaataac...	.1514...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.452...	tctattatgcag	aaaaaacg
D. Yak	aggacaag	gtat-gcaagggc...	.924...	ggatagctttcaatggctct	CTTGTAAGTTTTGT	aagtactttcatttgactgt...	.280...	tctattatgcag	aaaaagcg
	*** **	*** *		*****	*****	** *		* ****	*** **

id=36421 gene=FBgn0035253 name=CG7971 segment=chr3L.1658591.1659845.-1 type=IN VIEW

Figure 402: CS=9



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D.Mel  cgcgaaat  cagttaacaaac...170...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgtc...213...gccgggaaaaag  gtgatgta
D.Sim  cgcgaaat  cacttaacaaac...170...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgtc...207...ggcgggaaaaag  gtgatgta
D.Sec  cgggaaat  cagttaacaaac...170...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgtc...203...gccgggaaaaag  gtgatgta
D.Ere  cgcgaaat  cagttaacaaac...169...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgtc...200...cggaaaaaaaag  gtgatgta
D.Ana  cgcgaaat  cagttaacaaac...219...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgcc...246...ggaaaaagttag  gtgatgca
D.Gri  cgcgaaat  cagttaacaaac...143...ggcacgtcggggcg---tcgtcgtTTAAaAGTGAAATTTactgaatgaaatgaaatga...282...atcaaatgttgc  atgatgta
D.Moj  cgcgaaat  cagttaacaaac...165...agcacgtcgggct---ttgtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgaa...365...cccatttcaatg  gttttgct
D.Per  cgcgaaat  cagttaacaaac...225...--tcatcgccgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgaa...248...gccagaaaccag  atgatgta
D.Pse  cgcgaaat  cagttaacaaac...225...--tcatcgccgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgaa...247...gccagaaaccag  atgatgta
D.Vir  cgcgaaat  cagttaacaaac...119...tgtgtgtttggttcctggc---TTAAaAGTGAAATTTactgaatgaaatgaaatgaa...244...aggattacaag  tttacatc
D.Yak  cgcgaaat  cagttaacaaac...182...--tcatcggtcgcgctgggtcgcTTAAaAGTGAAATTTactgaatgaaatgaaatgtc...204...gccgaataaag  gtgatgta
** ***** * * * ***** *

```

id=125327 gene=FBgn0086673 name=CG13272 segment=chr2L\_16807318\_1680779.1 type=E5

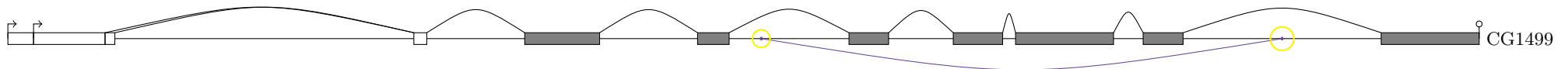
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D.Mel  gacaacag  gtgagcgaaca-acgagcaacgtac-----:~::~-----gcgaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1500...tctctttcacag  ctccacga
D.Sim  gacaacag  gtgagcgaaca-acgaacaacgtac-----:~::~-----gcgaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1459...tctctttcacag  ctccacgg
D.Sec  gacaacag  gtgagcgaaca-acgaacaacgtac-----:~::~-----gcgaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1448...tctctttcgtag  ctccacgg
D.Ere  gacaacag  gtgag-----cgaacaacgtac-----:~::~-----gcgaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1501...tctttttcacag  ctccacgg
D.Ana  gacaacag  gtgag-----cgaac-----:~::~-----gcgaaatg-----agaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1397...cctattttgcag  ttcgatcc
D.Gri  gacaacag  gtgagagagagg---agggacacacttaggaa:~::~-----tgaaatg-----ccgcaaatatgaaAGATTTCACCTTTGAttttgtttaccaccaa...1587...cattcattgcag  caccacgc
D.Moj  gacgacag  gtgagccaagt---tg---attagttggag:~::~-----tgaaatg-----ccgcaaatatgaaAGATTTCACCTTTGAttttgtttcgcccgaacataat...1898...gattcattgcag  cgccacgg
D.Per  gacaacag  gtgagcaatga-ac-cgcaacacac-----:~::~:aaaaatgatg-aaaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcaccaacataat...2306...actcattcacag  ctccccga
D.Pse  gacaacag  gtgagcaatga-ac-cgcaacacac-----:~::~:aaaaatgaagaaaaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcaccaacataat...2229...actcattcacag  ctccccga
D.Vir  gacaacag  gtgagcgcgaatatggcgacgggttcgggc:~::~-----tgaaatgcccgcgcaaatatgaaAGATTTCACCTTTGAttttgtttaccgccaacataat...1071...gcttcattgcag  caccacgg
D.Yak  gacaacag  gtgag-----cgaacaacgtgc-----:~::~-----gcgaaatg-----aaaaatatgaaAGATTTCACCTTTGAttttgtttcgccaacataat...1725...tctctttcacag  ctccacgg
*** **** ***** ***** * * * * * * * * * * * * * * * * * * * * * * *

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id=125330 gene=FBgn0086673 name=CG13272 segment=chr2L\_16811864\_16813463.1 type=IN VIEW

Figure 403: CS=11.88



```

D.Mel attgccag gtgagttagaaa...118...-----ttcatttactcaattactgaGTTTCAGTTCATGCAGGTCGGctgc--ggttgctgtggccccg---...409...ctgcgttttcag gttcactt
D.Sim attgccag gtgagttagaaa...115...-----ttcatttactcaattactgaGTTTCAGTTCATGCAGGTCGGctgc--ggttgctgtggccccg---...402...ctgcgttttcag gttcactt
D.Sec attgccag gtgagttagaaa...115...-----ttcatttactcaattactgaGTTTCAGTTCATGCAGGTCGGctgc--ggttgccgtggccccg---...407...ctgcgttttcag gttcactt
D.Ere attgccag gtgagttagaaa...138...-----ttcatttactcaattactgaGTTTCAGTTCATGCAGGTCGGctgc--ggctgtcgtggccccg---...396...ctgcgttttcag gttcactt
D.Ana attgccag gtgagttagaaa...136...-----ttcatttctcaattactgaGTTTCAGTTCATGCAGGTTGG---caagagttg-aagccactgct...510...ttgcactttcag gttcactt
D.Gri attgccag gtgagttagaaa...109...-----ctcattcattcaattactgaGTTTCAGTTCATGG-----tggccacaagaccaggcgc-----...471...ttggctctgcag gttcactt
D.Vir attgccag gtgagttagaaa...85...-----ctcgttcattcaattattgaGTTTCAGTTCATGG-----tggc--caaagcgtggccgcat---...440...gctcttttcag gttcactt
D.Wil atcgccag gtgagttagaaa...139...gctcaactcattcattcaatTATTgaGTTTCAGTTCATGGAG---agctgtgtggagttgtaaga-----...398...ttgttttcgcag gttcactt
D.Yak attgccag gtgagttagaaa...116...-----ttcatttactcaattactgaGTTTCAGTTCATGCAGGTCGGctgc--ggttgctgtggccccg---...426...ctgcgttttcag gttcactt
** *****
** ** *

```

id=97603 gene=FBgn0039852 name=CG1499 segment=chr3R.27385112.27385723.1 type=IN

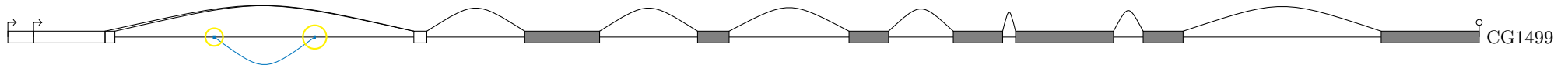
```

D.Mel tggctatg gtaagttggatg...2034...gacgctgttgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----acaaac--agaagaggcagcaa---...843...cacttttttcag gacttatc
D.Sim tggctatg gtaagttggatg...2052...gacgctgttgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----acaaac--agcagaggcagcaa---...840...tcttttttcag gacttatc
D.Sec tggctatg gtaagttggatg...2051...gacgctgttgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----acaaac--agcagaggcagcaa---...841...tcttttttcag gacttatc
D.Ere tggctatg gtaagttggatg...1880...gacgctgttgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----aaaaac--atcagcggcagcaa---...884...caattccttcag gacttatt
D.Ana tggctatg gtaagttccta...2110...gtcggatgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----aaagac--aacaaaagcaacag---...848...tctgcttttcag gacttatc
D.Gri tggctatg gtaggttttc...3166...-----tcgcatcatcttcagaatt--TCGTGAAGTGGAC-----gacaaaacgcatgcaagcca---...923...atttttttccag gtttgatt
D.Vir tggctatg gtaagttttgct...2504...-----tgctcctaaattcagaattTTCGTGAAGTGGAC-----gac--aacgcatgcaagcaaac...620...cttcatttcag gttctgatc
D.Wil tggctatg gtaagttccctc...2527...----ctgctgctccttaaattctga--TTTCGTGAAGTGGACGATGtcgacgat--gacaacaacaac-----...668...gtgtgttcag gttctgta
D.Yak tggctatg gtaagttggatg...1879...gacgctgttgctccttaaatt--CTGATTTTCGTGAAGTGGAC-----aaaaac--agcagaggcagcaa---...853...ctattccttcag gactcatc
***** ** *
* * * *

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id=97611 gene=FBgn0039852 name=CG1499 segment=chr3R.27387873.27390832.1 type=IN VIEW

Figure 404: CS=7.02



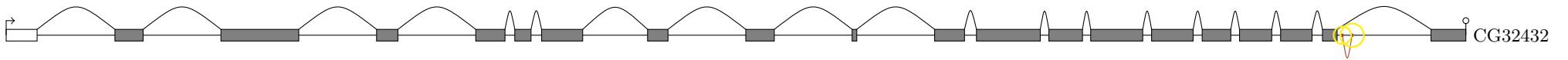
D. Mel	aatgacaa	gtaagaaattca...3357...cgaaccacgagttttctag-----	CCGCTt	CTACac	CCATt	CAATggcatttttattattgttcg-...1547...tttgcttacag	atacaacg
D. Sim	aatgacaa	gtaagaaattca...3437...cgaaccacgagttttctag-----	CCGCTt	CTACac	CCATt	CAATggcatttttattattgttcg-...1467...tttgcttacag	atacaacg
D. Ere	aatgacaa	gtaagaaattca...3431...cctgccacgacttttctag-----	CCGCTt	CTACac	CCATt	CAATggcatttttattattgttcg-...1473...tttgcttacag	atacaacg
D. Ana	aatgacaa	gtcagaaatccg...3300...tctccggcttcagcttttca-----	TCTGCTt	CTACac	CCATt	CAATggcatttttattattatttc-...1603...tttgtcttacag	atcgcaca
D. Gri	tataatat	atataatccttt...3107...cttgacgcttttgccctcatt-----	CTACgc	CCATt	CAATggca-tttttaagtagacttc...1803...tttccttacag	atcaaca	
D. Moj	aaatattc	ctatgagatctc...3073...ctctatggttgccctcatt-----	CTACgc	CCATt	CAATggcattttttaagtagtctt-...1837...gtttgcttacag	atcacaca	
D. Per	aatgacag	gccagaaaccgg...3198...ctttctagccgtacttcttcTTGTGCTGCTt	CTACgt	CTACac	CCATt	CAATggca-ttttattattatttct...1695...tttgcttacag	atcacaca
D. Pse	aatgacac	gccagaaaccgg...3192...ctttctagccgtacttcttcTTGTGCTGCTt	CTACgt	CTACac	CCATt	CAATggca-ttttattattatttct...1701...tttgcttacag	atcacaca
D. Yak	aatgacaa	gtaagaaattca...3379...ccaaccacgagttttctag-----	CCGCTt	CTACac	CCATt	CAATggcatttttattattgttcg-...1525...tttgcttacag	atacaacg
	* *	*				**** ***** *	** ***** ** **

id=97597 gene=FBgn0039852 name=CG1499 segment=chr3R.27369300.27375008.1 type=I5

D. Mel	aatgacaa	gtaagaaattca...4479...gcttaaatagttgcaaataaATTGtGTGGGTAGcGGTGG-----	aaactggcaacagcaagtaa...427...tttgcttacag	atacaacg
D. Sim	aatgacaa	gtaagaaattca...4521...gcttaaatagttgcaaataaATTGtGTGGGTAGcGGTGG-----	aaactggcaacagcaagtaa...385...tttgcttacag	atacaacg
D. Ere	aatgacaa	gtaagaaattca...4533...gcttaaatagttgcaaataaATTGtGTGGGTAGcGGTGG-----	aaactggcaacagcaagtaa...373...tttgcttacag	atacaacg
D. Ana	aatgacaa	gtcagaaatccg...4435...gtttaaagttgcaaataaATTGtGTGGGTAGcGGTGG-----	aactggcaacagcaagtaa...470...tttgtcttacag	atcgcaca
D. Gri	tataatat	atataatccttt...4297...gtttaaagttgcaaataaATTGtGTGGGTAG-----	cgaccagacgagagatgt-----...615...tttccttacag	atcaaca
D. Moj	aaatattc	ctatgagatctc...4294...gtttaaagttgcaaataaATTGtGTGGGTAG-----	cgac-----gagagatgtgccacag...618...gtttgcttacag	atcacaca
D. Per	aatgacag	gccagaaaccgg...4398...gtttaaagttgcaaataaATTGtGTGGGTAGcaGTAGcAGTGGcAGTGGcggtggaactggcaaaagc-----	...496...tttgcttacag	atcacaca
D. Pse	aatgacac	gccagaaaccgg...4404...gtttaaagttgcaaataaATTGtGTGGGTAGcaGTAGcAGTGGcAGTGGcggtggaactggcaaaagc-----	...490...tttgcttacag	atcacaca
D. Yak	aatgacaa	gtaagaaattca...4541...gcttaaatagttgcaaataaATTGtGTGGGTAGcGGTGG-----	aaactggcaacagcaagtaa...365...tttgcttacag	atacaacg
	* *	* *****	* * *	** ***** ** **

id=97597 gene=FBgn0039852 name=CG1499 segment=chr3R.27369300.27375008.1 type=I5 VIEW

Figure 405: CS=8.64



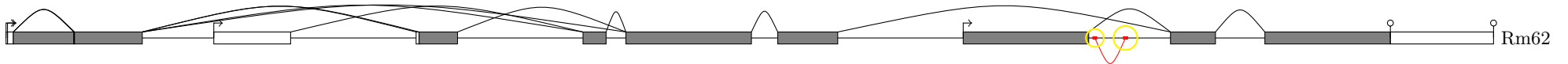
D. Mel	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTACGTTAC	gtggagatcgatcgtgtgac	----. . .1312. . .	tttgtg-tcgaag	aaaaaac-----
D. Sec	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTACGTTAC	gtggagatcgatcgtgtgac	----. . .1300. . .	tttgtg-tcgaag	ataaaac-----
D. Ere	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTACGTTAC	gtggagatcgatcgtgtcac	----. . .1303. . .	tttgtg-tcgaag	aaaaaac-----
D. Ana	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	gtggagatcgatcgtgtcac	----. . .1453. . .	tgtgtg-tcgaag	aaaaaac-----
D. Gri	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	cgttgagatcgatcgtgtga	----. . .1339. . .	tgtgtgttaaag	agaacga-----
D. Moj	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	cgttgagatcgatcgtgtga	----. . .2050. . .	-----aagatg	agaacgagcaaat
D. Pse	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	cgttgagatcgatcgtgtga	----. . .1424. . .	tttgtg-tcaag	aaaaaggc-----
D. Vir	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	cgttgagatcgatcgtgtga	----. . .1703. . .	tttgta-tcgaag	agaacggc-----
D. Wil	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	GTGGagatcgatcgtgtcaccacg	. . .2168. . .	ataata-caaaag	agaaaaat-----
D. Yak	aaaaggag	gtgatttgctgacaaagcg	ACAATTCTGTGCGTTA	GTGGagatcgatcgtgttaccacg	. . .1277. . .	tttgtg-tcgaag	aaaaaac-----
	*****	*****	*****	*****		*****	*****

id=42677 gene=FBgn0052432 name=CG32432 segment=chr3L\_20837649\_20839028\_-1 type=IN

D. Mel	aaaaggag	gtgatttgctga. . .47. . .	-----ggtctgatgctcgacggcca-	GTAACGTGCAGAATTGT	gccccggaacagacaccagt. . .1252. . .	tttgtg-tcgaag	aaaaaac-----
D. Sec	aaaaggag	gtgatttgctga. . .47. . .	-----ggtctgatgctcgacgacca-	GTAACGTGCAGAATTGT	gccccggaacagacaccagt. . .1240. . .	tttgtg-tcgaag	ataaaac-----
D. Ere	aaaaggag	gtgatttgctga. . .47. . .	-----ggtctgatgctcgacggcca-	GTAACGTGCAGAATTGT	gccccggaacagaaacaagt. . .1243. . .	tttgtg-tcgaag	aaaaaac-----
D. Ana	aaaaggag	gtgatttgctga. . .47. . .	-----ggtctgatgctcgacgacca-	GTAACGTGCAGAATTGT	gccccggaacagacaccgcc. . .1393. . .	tgtgtg-tcgaag	aaaaaac-----
D. Gri	aaaaggag	gtgatttgctga. . .48. . .	-----gtctgatcattgacgaacc-	TAACGTGCAGAATTGT	gccccggaactgatactgaa. . .1278. . .	tgtgtgttaaag	agaacga-----
D. Moj	aaaaggag	gtgatttgctga. . .50. . .	-----ctgatcgaacagcactcaaa	TAACGTGCAGAATTGT	gccccggaactgaaaaaaaa. . .1987. . .	-----aagatg	agaacgagcaaat
D. Pse	aaaaggag	gtgatttgctga. . .48. . .	-----gtctgatgctcgacggcccc-	TAACGTGCAGAATTGT	gccccggaactgaaacccaa. . .1363. . .	tttgtg-tcaag	aaaaaggc-----
D. Vir	aaaaggag	gtgatttgctga. . .48. . .	-----gtctgattgctcgacggccc-	TAACGTGCAGAATTGT	gccccggaactgaaactgaa. . .1642. . .	tttgta-tcgaag	agaacggc-----
D. Wil	aaaaggag	gtgatttgctga. . .41. . .	caccacggtctgatgctcgg-	CGACcaATAACGTGCAGAATTGT	gccccggaactgaaccacaa. . .2112. . .	ataata-caaaag	agaaaaat-----
D. Yak	aaaaggag	gtgatttgctga. . .44. . .	---cacggtctgatgctcgacgg-	CCACTAACGTGCAGAATTGT	gccccggaacagaaacaagt. . .1221. . .	tttgtg-tcgaag	aaaaaac-----
	*****	*****	*****	*****		*****	*****

id=42677 gene=FBgn0052432 name=CG32432 segment=chr3L\_20837649\_20839028\_-1 type=IN VIEW

Figure 406: CS=12



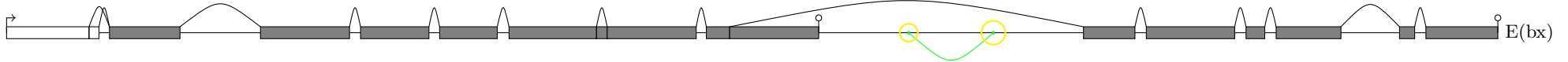
D. Mel	ccaagaag	gtaacgt	ACATTTTGAAACATTTTCTTTTTT	ctcttaaaaaaatacaaa	-----	..262..	ggacacctgtag	acgtggac
D. Sec	ccaagaag	gtaacgt	ACATTTTGAAACATTTTCTTTTTT	ctcttaaaaaaatacaaa	-----	..258..	ggacacctgtag	acgtggac
D. Ere	ccaagaag	gtaacgt	ACATTTTGAAACATTTTCTTTTTT	ctcttaaaaaaatacaaa	-----	..260..	ggacacctgtag	acgtggac
D. Ana	ccaagaag	gtaacgt	ACATTTTGAAACATTTTCTTTTTT	ctcttaaaaaaatacaaa	-----	..290..	ggacacctgtag	acgtggac
D. Gri	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	ttcgtaaaaaaatacaaa	-----	..301..	tcacatgtgtag	acgtcgat
D. Moj	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	CGT	---aaacaaaaacaaaaagca	..279..	acgcaaatag	acgtcgat
D. Per	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	ctaaaaacatat	accacaaac	-----	..385..	cgaaccaacag
D. Pse	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	ctaaaaacatat	accacaaac	-----	..300..	cgaaccaacag
D. Vir	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	tcgtataaaaaaatacaaa	-----	..314..	acacatgcacag	acgtcgat
D. Wil	ccaagaag	gtaacg	TACATTTTGAAACATTTTCTTTTTT	tctaaaccaaaaaaatacaaa	-----	..334..	ctaaacatgcag	acgtggat
D. Yak	ccaagaag	gtaacgt	ACATTTTGAAACATTTTCTTTTTT	ctcttaaaaaaatacaaa	-----	..255..	ggacacctgtag	acgtggac
*****	*****	*****	*****	*	*		**	* * * *

id=96089 gene=FBgn0003261 name=Rm62 segment=chr3R.1827459.1827784\_-1 type=IN

D. Mel	ccaagaag	gtaacgtacatt	...91...	-----	aaaaaaatttaaaaaaaa	AAGAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..144..	ggacacctgtag	acgtggac
D. Sec	ccaagaag	gtaacgtacatt	...87...	-----	aaaaaaaaataaaaaaaa	AAGAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..144..	ggacacctgtag	acgtggac
D. Ere	ccaagaag	gtaacgtacatt	...92...	-----	tataaaaaaaaaataaaaa	AAGAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..141..	ggacacctgtag	acgtggac
D. Ana	ccaagaag	gtaacgtacatt	...117...	-----	attaaatgttaaaacaaaa	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..146..	ggacacctgtag	acgtggac
D. Gri	ccaagaag	gtaacgtacatt	...99...	-----	ttattcaaaagcgaataac	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..174..	tcacatgtgtag	acgtcgat
D. Moj	ccaagaag	gtaacgtacatt	...105...	-----	aaaaaaactttactcgaaa	-a-GCGAAa	taAAAAAAGAGAc	AGTGTg	TTCAAAGTGT	aaacgtctc-gaaa-aacgct-	..142..	acgcaaatag	acgtcgat
D. Per	ccaagaag	gtaacgtacatt	...103...	-----	ccaaaaaacaaacaaaccc	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	aaacatctcgaaa	-aacgct-	..254..	cgaaccaacag	atgtggat
D. Pse	ccaagaag	gtaacgtacatt	...103...	-----	ccaaaaaacaaacaaaccc	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	aaacatctcgaaa	-aacgct-	..169..	cgaaccaacag	atgtggat
D. Vir	ccaagaag	gtaacgtacatt	...119...	-----	ctttactcgaaa-agcgaatc	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	aaacgtctcgaaa	-aacgct-	..167..	acacatgcacag	acgtcgat
D. Wil	ccaagaag	gtaacgtacatt	...124...	-----	acattaaatcaaaatagt	AAAAAAGAc	AAGTGTg	TTCAAAGTGT	aaagacatctcgaaa	-aacgct-	..182..	ctaaacatgcag	atgtggat
D. Yak	ccaagaag	gtaacgtacatt	...86...	-----	ataaaaaaaaaaatgaaaa	AAGAAAAGAc	AAGTGTg	TTCAAAGTGT	ccaagacatctcgaaa	-aac----	..142..	ggacacctgtag	acgtggac
*****	*****	*****	*****	*****	*****	*****	*****	*****	*	*	*	**	* * * *

id=96089 gene=FBgn0003261 name=Rm62 segment=chr3R.1827459.1827784\_-1 type=IN VIEW

Figure 407: CS=10.56



D. Mel	----gcaactac	actaattgtgac...861...--tgatttaaatacgaactgc----	TGA--AGAGATTAAC	-----cc--cacgcagagttttcgttg...957...tgttcattgcag	accaacaa		
D. Sim	----gcaactac	actaattgtgac...725...gctaatagactataaatata----	AATCAGATATCAGTTG	aattcactttaggattacaa-----	1063...tgttcattgcag	accaacaa	
D. Sec	----gcaactac	actaattgtgac...710...gctaatagactataaatata----	AATCAGATATCAGTTG	aattcactttaggattacaa-----	1063...tgttcattgcag	accaacaa	
D. Gri	taaataatacaa	aataacga----	837...--aaacaaggacatatatatga	CTTTAATCAGAAATCAGTTG	aattagagtacaaacagac-----	1394...tatatattgcag	accaacga
D. Moj	tgaaatatacaa	aataacga----	899...--aacagaaaaaaaaacaaca	CTTTAATCAGATATCAGTTG	aattagttgacaaaaccag-----	1581...tatatattgcag	accaacga
D. Per	----caaaccaa	tacgattgtgac...917...--ttgctgaattgtggaattgc----	TGA--AGAGATTAAC	-----cctatacacagagttttagt--	1131...tgttcattgcag	ccaacat	
D. Pse	----caaaccaa	tacgattgtgac...931...--ttgctgaattgtggaattgc----	TGA--AGAGATTAAC	-----cctatacacagagttttagt--	1138...tgttcattgcag	ccaacat	
D. Vir	----atatacaa	aataacgattac...858...--taacaata-acatatatga	CTTTAATCAGAAATCAGTTG	aattagagtacataactaat-----	1301...tatatattgcag	accaacga	
D. Yak	----gcaaccac	actaattgtgac...868...--tgattgaaatacgaactgc----	TGA--AGAGATTAAC	-----cc--cacgcagagttttgattg...952...tgttcattgcag	accaacaa		
		* * * * *			* * * * *		

id=107862 gene=FBgn0000541 name=E(bx) segment=chr3L.236428.238322.-1 type=IN

D. Mel	----gcaactac	actaattgtgac...1336...--acttcaactcctaaccacgt	GTTAATCTCTTCG	-----acaactacaacaacttcaat...482...tgttcattgcag	accaacaa	
D. Sim	----gcaactac	actaattgtgac...1377...gttgcctggagtaaattcta-	CAACTGATcTCTGATT	aaagtcaggtaggtgtgttc----	411...tgttcattgcag	accaacaa
D. Sec	----gcaactac	actaattgtgac...1362...gttgcctggagtaaattcta-	CAACTGATcTCTGATT	aaagtcaggtaggtgtgttc----	411...tgttcattgcag	accaacaa
D. Gri	taaataatacaa	aataacga----	1765...gttgcctggaaataacta-	CAACTGATcTCTGATTAAAG	ccaggtaggtgcccacaaa...466...tatatattgcag	accaacga
D. Moj	tgaaatatacaa	aataacga----	1918...gttgcctggaaataacta-	CAACTGATcTCTGATTAAAG	ccaggtaggtgcccactcat...562...tatatattgcag	accaacga
D. Per	----caaaccaa	tacgattgtgac...1509...--actacaactcctaaccacgt	GTTAATCTCTTCG	-----ccaaccacaactactcaact...539...tgttcattgcag	ccaacat	
D. Pse	----caaaccaa	tacgattgtgac...1530...--actacaactcctaaccacgt	GTTAATCTCTTCG	-----ccaaccacaactactcaact...539...tgttcattgcag	ccaacat	
D. Vir	----atatacaa	aataacgattac...1658...gttgcctggaaataacta-	CAACTGATcTCTGATTAAAG	ccaggtaggtgatcatcata...501...tatatattgcag	accaacga	
D. Yak	----gcaaccac	actaattgtgac...1347...--acttcaacttaactccacgt	GTTAATCTCTTCG	-----ccaactacaacaactacaat...473...tgttcattgcag	accaacaa	
		* * * * *			* * * * *	

id=107862 gene=FBgn0000541 name=E(bx) segment=chr3L.236428.238322.-1 type=IN VIEW

Figure 408: CS=12.6





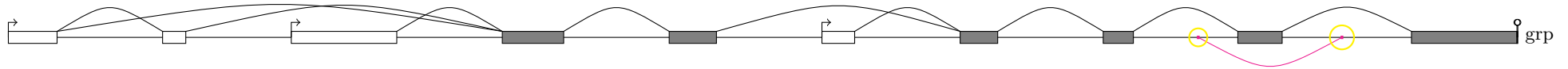
D.Mel	tgcacaga	gtaagtaaaaa...1198...ttgcaaaaaacaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1497...attaatctccag	ccaagaca
D.Sim	tgcacaga	gtaagtgaaaaa...2776...cagcaaaaaacaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1641...ataaatctccag	ccaagaca
D.Sec	tgcacaga	gtaagtataaaaa...1729...aaaagtttac2taggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1156...attcatctccag	ccaagaca
D.Ere	tgcacaga	gtaagtataaaaa...1237...gcaaaaaaaacaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1686...aaccaatttcag	ccaagaca
D.Ana	tgcacaga	gtaagtataaaga...46...agaaaaaaatttaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	2162...ttgtattacag	ccaagacc
D.Gri	cgcacaga	gtaagtactcca...386...aaagataatttcaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1915...ttgtttttgcag	ccaagacc
D.Moj	tgcacaga	gtaagttgaaaa...38...aaagctttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	2185...tcttaatttcag	ccaagacc
D.Per	tgcacaga	gtaagtattttg...1140...acaaaaaaaatcaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1450...atcttacttcag	ccaaaacc
D.Pse	tgcacaga	gtaagtattttg...1138...aaaaaaaatcaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1423...ctcttacttcag	ccaaaacc
D.Vir	cgcacaga	gtaagtagacag...34...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	2037...tttcatttcag	ccaagacc
D.Wil	tgcacaga	gtaagtaaatat...815...ataaaaaaaactaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	1998...tgcacatttcag	ctaagaca
D.Yak	tgcacaga	gtaagtataaaaa...1306...tgcaaaaaaaacaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg...	2441...at1taacttcag	ccaagaca
	*****	*****	*****	*****	* **	* ** *

id=13244 gene=FBgn0035398 name=Cht7 segment=chr3L\_3094887\_3097662\_-1 type=IN

D.Mel	tgcacaga	gtaagtataaaaa...1830...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	865...attaatctccag	ccaagaca
D.Sim	tgcacaga	gtaagtgaaaaa...3518...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	899...ataaatctccag	ccaagaca
D.Sec	tgcacaga	gtaagtataaaaa...1982...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	903...attcatctccag	ccaagaca
D.Ere	tgcacaga	gtaagtataaaaa...2017...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	906...aaccaatttcag	ccaagaca
D.Ana	tgcacaga	gtaagtataaaga...1147...aaaaagtgattaaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	1061...ttgtattacag	ccaagacc
D.Gri	cgcacaga	gtaagtactcca...1316...aaaggtttac2taggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	985...ttgtttttgcag	ccaagacc
D.Moj	tgcacaga	gtaagttgaaaa...1067...aaaagtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	1156...tcttaatttcag	ccaagacc
D.Per	tgcacaga	gtaagtattttg...1706...aaaggttactcaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	884...atcttacttcag	ccaaaacc
D.Pse	tgcacaga	gtaagtattttg...1711...aaaggttactcaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	850...ctcttacttcag	ccaaaacc
D.Vir	cgcacaga	gtaagtagacag...1036...aaaagtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	1035...tttcatttcag	ccaagacc
D.Wil	tgcacaga	gtaagtataaat...1665...aaagttatctcaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcga...	1148...tgcacatttcag	ctaagaca
D.Yak	tgcacaga	gtaagtataaaaa...2861...aaaggtttaccaaggggaca-	CCCGgTTTGAACCGGg	gacctctcgatctgcagtcg-...	886...at1taacttcag	ccaagaca
	*****	*****	***	*****	* **	* ** *

id=13244 gene=FBgn0035398 name=Cht7 segment=chr3L\_3094887\_3097662\_-1 type=IN VIEW

Figure 409: CS=14.4



D. Mel	ggcgggtg	gtaagtgtggtt...261...attatcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttcacgcacat-...154...gttgttttcag	agctgccc	
D. Sec	ggcgggtg	gtaagtgtgatt...258...attatcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttcacgcacat-...188...gttgttttcag	agctgccc	
D. Ere	ggcgggtg	gtaagtgtgatt...252...ttttatcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttcacgcacat-...187...attgtttttcag	agctgccc	
D. Ana	ggcgggtg	gtaagtccgaaa...999...tttcattatctttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttcacgcacat-...298...tttaaatcag	aattgccc	
D. Gri	ggcgggtg	gtaagtgccaca...396...tcctttcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttc-tatatctt...323...tcatttcaaag	agctgccc	
D. Moj	agcgggtg	gtgagtacaaaa...255...ctctttcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttt-cacatatt...274...gacgtttcacag	aactgccc	
D. Per	ggcaggag	gtaagtgcaaat...418...tcctttaatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttttgcacat-...289...atttttgcacag	aattgcca	
D. Pse	ggcaggag	gtaagtgcaaat...425...tcctttaatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttttgcacat-...292...atttttgcacag	aattgcca	
D. Vir	ggcgggtg	gtaagtacaata...205...aattttcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttttacagttt...302...tcacctcctcag	agctgccc	
D. Wil	ggcgggtg	gtaagttagtcca...370...-ccctccatcatcatttttgcgtgtt-----	CTGT	CTTTGGTA	TCTAGCT	gtagattgtttttgcacat-...1157...atcgattacag	aattgccc
D. Yak	ggcgggtg	gtaagttaatt...243...attatcatttttgcgtgtt-----	CTTTGGTA	TCTAGCT	gtagattgtttcgcgcacat-...188...ttgttttacag	agctgccc	
	** ** *	** ***	** * * **	*****	*	** ****	

id=22882 gene=FBgn0261278 name=grp segment=chr2L\_16697644\_16698138\_1 type=IN

D. Mel	agacaatg	gtatgtgttatt...235...-agatttaaactacttcataa	AGCTAGAT	TACCAAAG	-----cattggcttctgcaggtcaa-...298...tctttttctcag	aacgttcc
D. Sec	agacaatg	gtatgttttatt...229...-agatttaaactacttcataa	AGCTAGAT	TACCAAAG	-----cattggcttctgcagatcaa-...297...tcttttcctcag	aacgttcc
D. Ere	agacaatg	gtaagtactttg...237...-agatttaaactacttcataa	AGCTAGAT	TACCAAAG	-----cattggcttctgcagatcaa-...297...cctttttgtag	aacgttcc
D. Ana	gataatg	gtaaggtataaa...212...tagattt-aaatacttcataa	AGCTAGAT	TACCAAAG	-----cattggcttccgcaggcctg-...271...tctccccttag	aacgttcc
D. Gri	agagcatg	gtaagcccagag...311...tagattt-gaatacttcataa	AGCTAGAT	TACCAAAG	-----catcggcgcctgtggccagc-...316...ccctcttgcag	atcgttcc
D. Moj	cgagcatg	gtaagaactcag...268...tagattt-aaatacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggccaaac...269...tctcttttgcag	atcgttcc
D. Per	cgagcatg	gtaagggtgta...266...-agatttaaataacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggaaactt...285...tcccacacaaag	atcgttcc
D. Pse	cgagcatg	gtaagggtgta...266...-agatttaaataacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggaaactt...285...tcccacacaaag	atcgttcc
D. Vir	tgagcatg	gtaagaaactc...258...tagattt-gaatacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggccagct...279...cctttcttgcag	atcgttcc
D. Wil	cgagcagc	gtgagcaatac...251...tagattt-gactacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggccagct...279...cctttcttgcag	atcgttcc
D. Yak	tgacaatg	gtactgtactttg...224...-agatttataactacttcataa	AGCTAGAT	TACCAAAG	-----cattggc-tctgtggccagct...284...tctcttttgcag	aacgttcc
	** * *	** *	*****	*	** **	** ** **

id=22884 gene=FBgn0261278 name=grp segment=chr2L\_16698349\_16698961\_1 type=IN VIEW

Figure 410: CS=11.88



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D.Me1 agacaatg gtagtgtgttatt...229...-----tatgatagatttaaactactTCATAaAGCTAGATTACCAAAGCAattggcttctgcaggtcaatc-----..296...tcttttctcag aacgttcc
D.Sec agacaatg gtagtgttttatt...223...-----tatgatagatttaaactactTCATAaAGCTAGATTACCAAAGcATTGGcttgtgcagatcaatcgtca-...291...tcttttctcag aacgttcc
D.Ere agacaatg gtagtacttcttg...231...-----tatgatagatttaaactactTCATAaAGCTAGATTACCAAAGCAattggcttctgcagatcaatc-----..295...cctctttgtag aacgttcc
D.Ana ggataatg gtaaggattaaa...206...-----gtatgatagatttaa-tactTCATAaAGCTAGATTACCAAAGCAattggcttccgaggcctgtc-----..269...tctcccccttag aacgtctc
D.Gri agagcatg gtaagcccagag...305...-----gtatgatagatttgaa-tactTCATAaAGCTAGATTACCAAAGCAtcggcgccctgtggccagctt-----..314...cccctcttgag atcgttcc
D.Moj cgagcatg gtaagaactcag...262...-----gtatgatagatttaa-tactTCATAaAGCTAGATTACCAAAGCAattggc-tctgtggcacaacc-----..267...tctctttgtag atcgttcc
D.Per cgagcatg gtaaggggtgta...255...agctgtatgatagatttaaATACTTCATAaAGCTAGATTACCAAAGcATTGGc-tctgtggaacttcatcca..279...tcccacacaag atcgctct
D.Pse cgagcatg gtaaggggtgta...255...agctgtatgatagatttaaATACTTCATAaAGCTAGATTACCAAAGcATTGGc-tctgtggaacttcatcca..279...tcccacacaag atcgctct
D.Vir tgagcatg gtaagaaacgtc...252...-----gtatgatagatttgaa-tactTCATAaAGCTAGATTACCAAAGCAattggc-tctgtggccagctta-----..277...cctttcttgag atcgttcc
D.Wil cgagcacg gtgagcaatac...245...-----gtatgatagatttgac-tactTCATAaAGCTAGATTACCAAAG--catgg-gctctggctgactta-----..333...tgtggcttttag atcgttcc
D.Yak tgacaatg gtacgtacttctg...218...-----tatgatagatttataactactTCATAaAGCTAGATTACCAAAGCAattggcttctgcagatcaatc-----..282...tctctttgtag aacgttcc
** * * ** *          *****          *****          *          *          ** * ** *

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id=22884 gene=FBgn0261278 name=grp segment=chr2L.16698349.16698961.1 type=IN

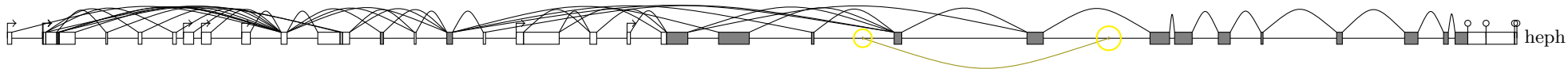
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D.Me1 agacaatg gtagtgtgttatt...374...-tcttttggttgcatattattTGCTCCTTGGTGATTTAGCTgTATGGgtttatgtatattccatag-----..148...tcttttctcag aacgttcc
D.Sec agacaatg gtagtgttttatt...368...ctcttttggttgcatattattTTGGTCTTTGGTGATTTAGCTgTATGGgtga--taagtattccatagag---..146...tcttttctcag aacgttcc
D.Ere agacaatg gtaagtacttctg...376...-tcttttggttgcatattattTGCTCCTTGGTGATTTAGCTgTATGGgtgtg--tatgtgttccatagag---..147...cctctttgttag aacgttcc
D.Ana ggataatg gtaaggattaaa...347...-tcttttggttgacattattTGCTCCTTGGTGATTTAGCTgTATGGgtg---ctcatattccatagagc---..125...tctcccccttag aacgtctc
D.Gri agagcatg gtaagcccagag...469...-tctttgagtttgcatattattTGCTCCTTGGTGATTTAGCTgTATGG--tgtgcgcataatccacagag---..147...cccctcttgag atcgttcc
D.Moj cgagcatg gtaagaactcag...396...-tctttatgttgcatattattTGTCCTTGGTGATTTAGCTgTATGGgtgtg--cgcgattccatagag---..130...tctctttgtag atcgttcc
D.Per cgagcatg gtaaggggtgta...414...atcttttggttgacattattTTGATCCTTGGTGATTTAGCTgTATGGGTATatcaaagatccatagagctt...120...tcccacacaag atcgctct
D.Pse cgagcatg gtaaggggtgta...414...atcttttggttgacattattTTGATCCTTGGTGATTTAGCTgTATGGGTATatcaaagatccatagagctt...120...tcccacacaag atcgctct
D.Vir tgagcatg gtaagaaacgtc...394...-tctttatgttgcatattattTGCTCCTTGGTGATTTAGCTgTATGGgtgtg--cgcgattccatagag---..132...cctttcttgag atcgttcc
D.Wil cgagcacg gtgagcaatac...430...att-----ttcgcatattattggtCTTTGGTGATTTAGCTgTATGGgtgtatgagcataatccatag-----..147...tgtggcttttag atcgttcc
D.Yak tgacaatg gtacgtacttctg...358...-tcttttggttgcatattattTGCTCCTTGGTGATTTAGCTgTATGGgtgtttatgtgttccatag-----..139...tctctttgtag aacgttcc
** * * ** *          *          ** ** ***** *****          *****          *          **** **          ** ** **

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id=22884 gene=FBgn0261278 name=grp segment=chr2L.16698349.16698961.1 type=IN VIEW

Figure 411: CS=10.56



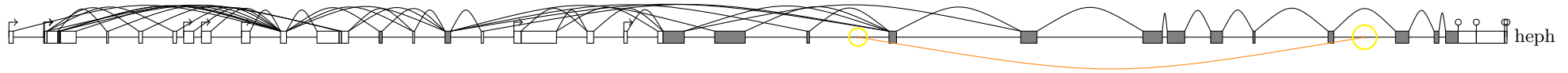
D. Mel	actat	gtaagcaatttc...3725...ccccttcaccagctccc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1184...tctgaaaatcag	cgcggaag	
D. Sim	actat	gtaagcaatttc...3717...tcctgcctacctcgctccc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1192...tctgaaaatcag	cgcggaag	
D. Sec	actat	gtaagcaatttc...3717...tcctgcctacctcgctccc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1192...tctgaaaatcag	cgcggaag	
D. Ere	actat	gtaagcaatttc...3700...cctcccaccgccagctacc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1209...tctgaaaatcag	cgcggaag	
D. Ana	actat	gtaagcagatg...3559...---cgagggcgagg-gcagcacga-	TGATAAGC	CAAGT	ggcgaattcaagcgtagtca-----	...1353...ttgtgaaaccag	cgcggaag	
D. Gri	atcatt	gtaagccgaaag...2931...taacaaaagcaaagcgtcgc	CTGTga	TGATAAGC	CAAGTGGCGAATT	caagcgtagtcaagcgtagtca...1967...ggtccctgcag	cgcggaag	
D. Moj	atcatt	gtaagccgctat...3068...ccccttgcctgcctgctc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1841...gtggccatgcatag	cgcggaag	
D. Per	actat	gtaagcgtttta...3831...ggaaagtggggagagagacc	AGAACTc	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1071...cgcaacgcgcag	cgcggaag
D. Pse	actat	gtaagcgtttta...3852...ggggattggggagagagacc	AGAACTc	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1050...tgcaatgcgcag	cgcggaag
D. Vir	atcatt	gtaagccgcaat...3226...ccccttgcagtgctgctc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1683...ggggccacgcag	cgcggaag	
D. Wil	actat	gtaagaactgtt...3403...-agcaaaagcgaagcgcagca-	TGATAAGC	CAAGT	ggcgaattcaagcgtagtca-----	...1509...atgtataatcag	cgcggaag	
D. Yak	actat	gtaagcaatttc...3701...ccccttcaccagctccc-----	GTTTAT	TGACtt	TTTG	---tcattgccgctaataatgcatag...1208...tctgaaaatcag	cgcggaag	
	* ** *	*****	*	** *	* * *	* * * *	***	*****

id=80457 gene=FBgn0011224 name=heph segment=chr3R.27707594.27747354\_-1 type=IN

D. Mel	gtcacaac	gtaagtaaaacc...4375...-----aata-----	ggaataaattcacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...535...ccctgtttccag	aactcgac
D. Sim	gtcacaac	gtaagtaaaact...4366...-----aata-----	ggaataaattcacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...544...ttcctttccag	aactcgat
D. Sec	gtcacaac	gtaagtaaaact...4361...-----aata-----	ggaataaattcacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...549...ttcctttccag	aactcgat
D. Ere	gtcacaat	gtaagtaaggcc...4376...-----aata-----	ggaataaattcacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...534...ccctgtttccag	aactcgat
D. Ana	gccacaat	gtaagtactatt...3040...ttccagcca-----	gcgatcgataa-----	ATTTGCTT	TATCA	---gcagtttgcgat---acttctg-----	...1873...actctcttcag	aactcggg	
D. Gri	gtcacaat	gtaagtgtgtc...3245...-----gataattgagcttatcagca	GATTTGCTATTTT	TGCTTATCA	aaGCAG	-tttagttatcagacttatc-----	...1652...ctcttctagcaa	aactcttc	
D. Moj	gtcacaat	gtaagtcttaca...4414...-----aata-----	cgaataaatatacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...496...tctttgcagcag	aactcgtc
D. Per	gtcacaat	gtgagtatcccc...4410...-----aata-----	ggaataaatttacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgtatatt...494...ttctgctttcag	aactcggg	
D. Pse	gtcacaat	gtgagtatcccc...4410...-----aata-----	ggaataaatttacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgtatatt...494...ttctgctttcag	aactcggg	
D. Vir	gtcacaat	gtaagtgtatgc...4455...-----aata-----	ggaataaatttacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...455...ttgtttcagcag	aactcgtc
D. Wil	gtcacaat	gtaagtaaac...2884...-----tatatattttgggatagata	-----	ATTTT	GCTTATCA	-----aagcgtttatcatcaataa-----	...2028...tgcttgacgcaa	aactcagt	
D. Yak	gtcacaac	gtaagtaaaagca...4370...-----aata-----	ggaataaattcacttc-----	CGAA	GTCAT	TAAAT	tgtttccgatagaacgtgt-----	...540...ccctgctccag	aactcgat
	* ** *	** **	*	**	* * **	**	*	**	*****

id=80461 gene=FBgn0011224 name=heph segment=chr3R.27692159.27699555\_-1 type=IN VIEW

Figure 412: CS=11.52



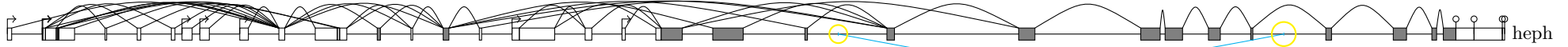
D.Mel	actatttg	gtaagcaatttc...3729...--ttcatcaccagctcccgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1181...tctgaaaatcag	cgcggaag
D.Sim	actatttg	gtaagcaatttc...3721...--tgcctacctcgtcccgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1189...tctgaaaatcag	cgcggaag
D.Sec	actatttg	gtaagcaatttc...3721...--tgcctacctcgtcccgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1189...tctgaaaatcag	cgcggaag
D.Ere	actatttg	gtaagcaatttc...3704...--cccaccgccagctaccgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1206...tctgaaaatcag	cgcggaag
D.Ana	actatctg	gtaagcgatgcg...3743...--cctttccaccgctatcgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1167...ttgtgaaaccag	cgcggaag
D.Gri	atcatttg	gtaagccgaag...2535...ttttgtgggctgtgtgctg	TGTCAT	CGTTTTT	-----gtctgcgcttagcagcgag...2373...gcgtccctgcag	cgcggaag	
D.Moj	atcatttg	gtaagccgctat...3072...tttgtctgcgct--gctcgttt--	ATTGACTT	ttTGTCAT	ttgctgctaataatgcatagcaa...1838...gtggccatgcag	cgcggaag	
D.Per	actatttg	gtaagcgtttta...3842...--gagagagccagaactcgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1068...cgcaacgcgcag	cgcggaag
D.Pse	actatttg	gtaagcgtttta...3863...--gagagagccagaactcgttt--	ATTGACTT	ttTGTCAT	ttgccgctaatgcatagcag----	...1047...tgcaatgcgcag	cgcggaag
D.Vir	atcatttg	gtaagccgcaat...3230...tttgcagtgcct--gctcgttt--	ATTGACTT	ttTGTCAT	ttgctgctaataatgcatagcag----	...1680...ggggccacgcag	cgcggaag
D.Wil	actatttg	gtaagaactgtt...3645...--tcgttttaccacttcgttt--	ATTGACTT	ttTGTCAT	ttctctgctaataatgcatagcag----	...1265...atgtataatcag	cgcggaag
D.Yak	actatttg	gtaagcaatttc...3705...--ttcatcgcagctcccgttt--	ATTGACTT	ttTGTCAT	ttgccgctaataatgcatagcag----	...1205...tctgaaaatcag	cgcggaag
		* ** * *****	*** *	** *****	* ** *	*** *****	

id=80457 gene=FBgn0011224 name=heph segment=chr3R.27707594.27747354.-1 type=IN

D.Mel	ttatttgg	gtaagtcaagca...4444...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatctgagtatgtaaata...466...tctgctccacag	ccatgtct
D.Sim	ttatttgg	gtaagtcaagca...4540...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatctgagtatgtaaata...370...tctgctccacag	ccatgtct
D.Sec	ttatttgg	gtaagtcaagca...4447...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatctgagtatgtaaata...400...tctgctccacag	ccatgtct
D.Ere	ttatttgg	gtaagtcaagca...4520...tcaccagaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatctgagtatgtaaata...390...tctgctccacag	ccatgtct
D.Ana	ttatttgg	gtaagtcaaaca...4550...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatttcagtatgtaaata...360...tctgctccacag	ccatgtct
D.Gri	ttatttgg	gtaagtcaaaca...4561...catttgcttgtaa--atcacca	AAGG	AGACGACAT	TGATAaagttgcagttacatttttag-----...345...ttctttttacag	ccatgtct
D.Moj	ttatttgg	gtaagtcaaaca...4557...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacattttagtagttaaata...353...tctgctccacag	ccatgtct
D.Per	atacttag	gtaagtccacac...4585...-----aaggcagacgacaacgacat----	TGATAAAGT	tgCAGT	-----tacatttcagaaccagaac...325...ctttgtttacag	ccatgtct
D.Pse	atacttag	gtaagtccacac...4580...-----aaggcagacgacaacgacat----	TGATAAAGT	tgCAGT	-----tacatttcagaaccagaac...330...ctttgtttacag	ccatgtct
D.Vir	ttatttgg	gtaagtcaaaca...4596...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacattttagtagttaaata...314...ttattttttgag	ccatgtct
D.Wil	ttatttgg	gtaagtcacatt...4683...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacattttagtagttaaata...227...tattctttttgag	ccatgtct
D.Yak	ttatttgg	gtaagtcaagca...4568...tcaccaaaggcag-----acgacat----	TGATAAAGT	tgCAGT	-----tacatctgagtatgtaaata...342...tctgctccacag	ccatgtct
		** ** * *****	* **	** * **	***** * *	** *****

id=80471 gene=FBgn0011224 name=heph segment=chr3R.27678531.27683600.-1 type=IN VIEW

Figure 413: CS=11.52



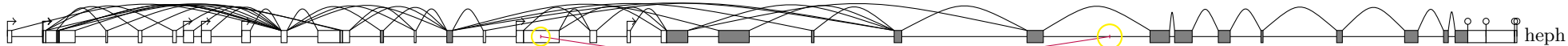
D.Mel	actatttg	gtaagcaatttc...3439...	aaaataaaaaaccacagcaa	---	CAA-AtaGCAAATAA	---	caaata-aagcacaacaaaag...1472...	tctgaaaatcag	cgcggaag
D.Sim	actatttg	gtaagcaatttc...3451...	aaaataaaaaaccacagcaa	---	CAA-AtaGCAAATAA	---	caaata-aagcacaacaaaag...1460...	tctgaaaatcag	cgcggaag
D.Sec	actatttg	gtaagcaatttc...3451...	aaaataaaaaaccacagcaa	---	CAA-AtaGCAAATAA	---	caaata-aagcacaacaaaag...1460...	tctgaaaatcag	cgcggaag
D.Ere	actatttg	gtaagcaatttc...4193...	ttggcttcgactctttgtgt	---	GAGTGCAGTA	AATAAAGTGT	tcacatgtaattacaataca--...714...	tctgaaaatcag	cgcggaag
D.Gri	atcatttg	gtaagccgaaag...3425...	tagcttgg--ttgccgactca	---	GAGTGCAGTA	AATAAAGTGT	tcacatgtaattacaataca--...1482...	gcgtccctgcag	cgcggaag
D.Moj	atcatttg	gtaagccgctat...3401...	ggcattg--ttgccgactcac	---	GAGTGTGTA	AATAAAGTGT	tcacatgtaattacaataca--...1506...	gtggccatgcag	cgcggaag
D.Vir	atcatttg	gtaagccgcaat...3458...	ggcattg--tctttgcactcgt	---	GAGTGCAGTA	AATAAAGTGT	tcacatgtaattacaataca--...1449...	ggggccacgcag	cgcggaag
D.Wil	actatttg	gtaagaactgtt...3887...	tatttcttctcttcttctgt	---	GAGTGCAGTA	AATAAAGTGT	tcacatgtaattacaataca--...1020...	atgtataatcag	cgcggaag
D.Yak	actatttg	gtaagcaatttc...3422...	aaaataaaaaaccacagcaa	---	CAA-AtaGCAAATAA	---	caaata-aagcacaacaaaag...1489...	tctgaaaatcag	cgcggaag
	*	***	*		*	*	***	*	***
		*****			*	*	***	*	*****

id=80457 gene=FBgn0011224 name=heph segment=chr3R.27707594.27747354.-1 type=IN

D.Mel	cctttttg	gtacgtctgcac...3932...	gggcaggg--ctgcactttaca	----	TTGTTTGCTTTG	----	gggtcggttttgccattggc...981...	tccaatccgcag	gtgtatac
D.Sim	cctttttg	gtacgtctgcac...3910...	gggcaggg--ctgcactttaca	----	TTGTTTGCTTTG	----	gggtcggttttgccattggc...1003...	tccaatccgcag	gtgtatac
D.Sec	cctttttg	gtacgtctgcac...3928...	gggcaggg--ctgcactttaca	----	TTGTTTGCTTTG	----	gggtcggttttgccattggc...985...	tccaatccgcag	gtgtatac
D.Ere	cctttttg	gtacgtctgcac...3473...	gaaccctcctgtgccccac	----	TATTTAcTACCTGCATT	----	ccattgctagttttgtaact---...1434...	tcccatccgcag	gtgtatac
D.Gri	cctctttg	gtacgtctgcac...3521...	actatacgccgttcccgcac	----	TATTTAcTACCTGCATT	----	ctattgctacttttgaact---...1386...	cgcaattcacag	gtgtatac
D.Moj	cctctttg	gtacgtctgcac...3460...	gttgaactatgttcccgcac	----	TATTTAcTACCTGCATT	----	ctattgctacttttgaact---...1447...	cgcaattcacag	gtgtatac
D.Vir	cctctttg	gtacgtctgcac...3563...	actatgcgccgttcccgcac	----	TATTTAcTACCTGCATT	----	ctattgctacttttgaact---...1344...	cgcaattcacag	gtgtatac
D.Wil	cctctttg	gtacgtctgcac...3515...	tgtggctctggttcccgcac	----	TATTTAcTACCTGCATT	----	tctattgctacttttgaact---...1392...	tctctcgtgcag	gtgtatac
D.Yak	cctttttg	gtacgtctgcac...3904...	gggcaggg--ctgcactttaca	----	TTGTTTGCTTTG	----	gggtcggttttgccattggc...1009...	tccaatccgcag	gtgtatac
	***	***	***		*	*	***	*	***
		*****			*	*	***	*	*****

id=80469 gene=FBgn0011224 name=heph segment=chr3R.27683694.27690318.-1 type=IN VIEW

Figure 414: CS=8.64



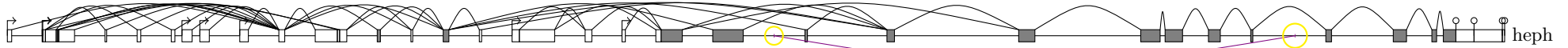
D.Mel	-agcatcag	gtcggg-agccca...232...aatatc	caaatcaaagtcgg	GTTTCaaATCGAAAAACAG	ccgcaacagcagcaacaacg...267...gctttctaaaat	gtaagaat-
D.Sim	-agcatcag	gtcggg-agccca...232...aatatc	caaatcaaagtcgg	GTTTCaaATCGAAAAACAG	ccgcaacagcagcaacaacg...270...gctttctaaaac	gtaagaaa-
D.Ere	-agcatcag	gtcggg-agccca...253...aatatc	caaatcaaagtcgg	GTTTCaaATCGAAAAACAG	ccgcaacagcagcaacaacg...286...gctttctgaaat	gtaagaga-
D.Gri	agccgcata	gcccgc--gccgc...258...aatatc	caaatcaaagttga	GTTTCaaATCGAAAAACAG	ccgcaataccagcaacaacg...383...aattcaaaagct	ataagtg-
D.Moj	-gcctcatc	gcccgcgagccg...264...aatatc	caaatcaaagttga	GTTTCaaATCGAAAAACAG	ccgcaataccagcaacaacg...250...taattctcagat	tttactt-
D.Per	-gcttcttc	gtctgtgttcca...409...aatatc	caaatcaaagtcga	GTTTCaaATCGAAAAACAG	ccgcaacaccagcaacaacg...482...acaacaacaaat	gtaagcaa-
D.Vir	aacaacaaa	tacacctgggt--...337...aatatc	caaatcaaagttga	GTTTCaaATCGAAAAACAG	ccgcaataccagcaacaacg...419...-atattttaa	aaaataa
D.Wil	-atcacgcc	gtcggg-agcctc...432...aatatc	caaatcaaagttga	GTTTCaaATCGAAAAACAG	ccgcaataccagcaacaacg...448...gcaacaataa	gtaagcag-
D.Yak	-agcatcag	gtcggg-agccca...235...aatatc	caaatcaaagtcgg	GTTTCaaATCGAAAAACAG	ccgcaacagcagcaacaacg...273...gctttctgaaat	gtaagaaa-
		*	*	*****	*	*****

id=80445 gene=FBgn0011224 name=heph segment=chr3R.27762412.27762991.-1 type=AN

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D.Sim	gtcacaac	gtaagtaaaact...4380...cacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...528...ttcctttccag	aactcgat
D.Ere	gtcacaat	gtaagtaagcc...4390...cacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...518...ccctgttccag	aactcgt
D.Gri	gtcataat	gtaagtgtgtgc...4474...tacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...434...ctcttagcaa	aactcttc
D.Moj	gtcacaat	gtaagtcttaca...4428...tacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...480...tcttgcagcag	aactcgtc
D.Per	gtcacaat	gtgagtatccc...4424...tacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatatttccacgcaaga...484...ttctgcttcag	aactcgtg
D.Vir	gtcacaat	gtaagtgtatgc...4469...tacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...439...ttgttcagcag	aactcgtc
D.Wil	gtcataat	gtaagtaaac...4445...tacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...463...tgcttcagcaa	aactcagt
D.Yak	gtcacaac	gtaagtaaaagca...4384...cacttc	cgaaatgcatctaa	TTGTTTTcCGATaGAAC	gtgatattt-cacgcaagaa...524...ccctgcttcag	aactcgt
	**** **	** **		*****		** *****

id=80461 gene=FBgn0011224 name=heph segment=chr3R.27692159.27699555.-1 type=IN VIEW

Figure 415: CS=9.72



D. Mel	ccaataat	gtaaataataca...3622...-----aacaagttaatat-aaaagta-----	TTTTT	TGCTTTGA	-----	aaacatttgccaagctaaa-----	...1289...at	tttgttcag	gtaaggat		
D. Sim	ccaacaat	gtaaataataca...3607...-----acttttggttt-gagtgcgtg-----	TTGAA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1295...at	tttcttcag	gtaaggat	
D. Sec	ccaacaat	gtaaataataca...3607...-----acttttggttt-gagtgcgtg-----	TTGAA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1295...at	tttcttcag	gtaaggat	
D. Ere	ccaacaat	gtaaataataca...3588...-----acttttggttt-gagtgcgtg-----	TTGAA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1314...tt	tttcttcag	gtaaggat	
D. Ana	ccaacaat	gtaaataataca...3465...-----gtgggggt-gc-tgtgttgaa-----	-----	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1443...gt	tttcttcag	gtaaggat	
D. Moj	gcaacaat	gtaaataactca...4231...-----ctccgcttggttagcatctg-----	TGCTTTG	CTTAGCAAA	CAAT	AAAAGT	agataattgagatttcttta-----	...663...cat	ccattcag	gtaaggat	
D. Per	acaacaat	gtaaataataca...3334...-----gcacagtgcgt---tgtgtgttg-----	TTAGA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1568...tt	tatttcag	gtaaggat	
D. Pse	ccaacaat	gtaaataataca...3340...---ttgtggcacagtgcgt---tgtg-----	-----	TAGA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1563...tt	tatttcag	gtaaggat
D. Vir	acatcaat	gtaaataataca...3114...-----ctgtgcgtgt-gtgtgtgttcGTGTtg	TTAG	aaCAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1782...g	ctcttcag	gtaaggat	
D. Wil	ccaacaat	gtaaataataca...3512...-----tgtgtgtgtgt-gtgtgtgtt	GTTAG	aaCAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1389...at	tttattcag	gtaaggat	
D. Yak	ccaacaat	gtaaataataca...3599...-----acttttggttt-gagtgcgtg-----	TTGAA	CAAGT	AAT	GTAAAAGT	-----at	ttttatgctttgaaaaac...1303...tt	tttcttcag	gtaaggat	
	** **	***** **		*		***		* *		* ** **	*****

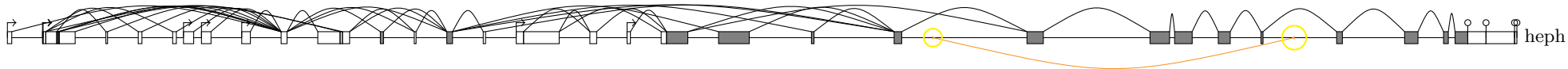
id=80455 gene=FBgn0011224 name=heph segment=chr3R.27747397.27757793.-1 type=IN

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D. Sim	cctttttg	gtacgtctgcac...3902...g---ttgtcttgggcaggg-ctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggtcggttttgccattggca-----	...1002...tccaatccgcag	gtgtatac		
D. Sec	cctttttg	gtacgtctgcac...3920...g---ttgtcttgggcaggg-ctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggtcggttttgccattggca-----	...984...tccaatccgcag	gtgtatac		
D. Ere	cctttttg	gtacgtctgcac...3885...g---ttgtcttgggcaggg-ctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggtcggttttgccattggca-----	...1019...tccatccgcag	gtgtatac		
D. Ana	cctctttg	gtacgtctgcac...3859...g---ttgtcttgagcagga-ctgc	ACTTTAC	ATTGTTG	-----	-----	cgttggggtatattttccac-----	...1051...ctgaatccgcag	gtgtatac		
D. Moj	cctctttg	gtacgtctgcac...3686...ggg-caaccgagggcgc---ctgc	ACTTT	acATTGTTG	Ca	TGGGTGTGG	ctGGCAg	-----	catccgtacgggggagag...1206...cg	caattcacag	gtgtatac
D. Per	cctctttg	gtacgtctgcac...3788...g---ga-tcgggggcaggtcctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggctgccttgcgaccctg-----	...1116...gctctccgcag	gtgtatac		
D. Pse	cctctttg	gtacgtctgcac...3800...g---gt-tcgggggcaggtcctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggctgccttgcgaccctg-----	...1105...gctctccgcag	gtgtatac		
D. Vir	cctctttg	gtacgtctgcac...3784...ggg-caaccgagggcgc---ctgc	ACTTTAC	ATTGTTG	Ca	TGGGCGT	-----	tg-----	ctgaggggtatcgaggg-----	...1116...cgcaattcacag	gtgtatac
D. Wil	cctctttg	gtacgtctgcac...3811...t---ttgttgtgtgtgcc-ctgc	ACTTTAC	ATTGTTG	Ca	TTGGC	-----	tactagttgtcaaacctct-----	...1092...tctctcgtgcag	gtgtatac	
D. Yak	cctttttg	gtacgtctgcac...3896...g---ttgtcttgggcaggg-ctgc	ACTTTAC	ATTGTTG	CTTTG	-----	ggtcggttttgccattggca-----	...1008...tccaatccgcag	gtgtatac		
	*** **	*****	***	*	*	*				***	*****

id=80469 gene=FBgn0011224 name=heph segment=chr3R.27683694.27690318.-1 type=IN VIEW

Figure 416: CS=10.56





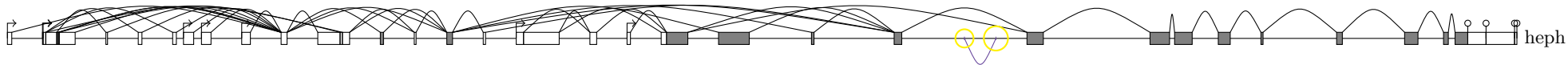
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D.Sim	cggaatcg	gtaagtccttcag...	3374...	gtttcgggttcattccggtt-----	TCGAaCTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1529...	ttttccttgcag	ccaaggcc
D.Sec	cggaatcg	gtaagtccttcag...	3374...	gtttcgggttcattccggtt-----	TCGAaCTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1529...	ttttccttgcag	ccaaggcc
D.Ere	cggaattg	gtaagtccttcag...	4435...	-----gcaatggcgatggcggtc	GCTTtATTATGCaaAAATA	-----acaacaagtagccggcgag...	470...	ttttccttgcag	ccaaggcc
D.Ana	cggaatcg	gtaagtccttcag...	3499...	-----ggcttcattccggttcgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1409...	ctccacttgcag	ccaaggcc
D.Gri	cggaattg	gtaagttttgta...	2466...	-----cgaacatgcaacaaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	2442...	tctttccttgcag	ccaagacc
D.Moj	cggaattg	gtaagttttata...	2933...	-----aacttcattccgtaaccgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1975...	ctctgcttgcag	ccaagacc
D.Per	cggaattg	gtaagtccttcag...	3409...	-----aacttcattccggttcgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1499...	ttttccttgcag	ccaaggcc
D.Pse	cggaattg	gtaagtccttcag...	3314...	-----aacttcattccggttcgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	1594...	ttttatttgcag	ccaaggcc
D.Vir	cggaattg	gtaagttttata...	2758...	-----aacttcattccggttcgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattca---	2150...	ctctccttgcag	ccaagacc
D.Wil	cggaattg	gtaagttttcct...	3250...	-----aacttcattccgttcgaa	CTAATCA	---AAaAGTGTAAtttccgattagttgtattga---	1658...	ttctatttgcag	ccaaggcc
D.Yak	cggaattg	gtaagtccttcag...	4588...	-----tgttctgctggattattca	CAGCgGT-TGaaAGTG	-----tgcaatgaa-tgaatttatgg...	322...	ctctccttgcag	ccaaggcc
	*****	***** *		*	*	*** *	* * * *	** **	**** **

id=80459 gene=FBgn0011224 name=heph segment=chr3R.27699822.27707469.-1 type=IN

D.Mel	cctttttg	gtacgtctgcac...	3927...	gtcttgggcaggg-ctgcact	TTACATTgTTT	-GctTTGGggTCGG	ttttgccattggcattgccg-----	974...	tccaatccgcag	gtgtatac
D.Sim	cctttttg	gtacgtctgcac...	3905...	gtcttgggcaggg-ctgcact	TTACATTgTTT	-GctTTGGggTCGG	ttttgccattggcattgccg-----	996...	tccaatccgcag	gtgtatac
D.Sec	cctttttg	gtacgtctgcac...	3923...	gtcttgggcaggg-ctgcact	TTACATTgTTT	-GctTTGGggTCGG	ttttgccattggcattgccg-----	978...	tccaatccgcag	gtgtatac
D.Ere	cctttttg	gtacgtctgcac...	3326...	---aacgaaacgatattgctcgg	TGTTTgGCATAAGTcAAGT	ccgcctaactgggataactg	-----	1580...	tcccatccgcag	gtgtatac
D.Ana	cctctttg	gtacgtctgcac...	3862...	gtcttgagcagga-ctgcact	TTACATTgTTT	-GcGTTGG	-----ggcta-tttttccactgcac...	1045...	ctgaatccgcag	gtgtatac
D.Gri	cctctttg	gtacgtctgcac...	3763...	caaccgagggcgga-ctgcact	TTACATTgTTT	-GcATTGG	-----gcgatgcagggcgccg	1144...	cgcaattcacag	gtgtatac
D.Moj	cctctttg	gtacgtctgcac...	3689...	caaccgagggcgga-ctgcact	TTACATTgTTT	-GcATTGG	-----gtgtggctg	1218...	cgcaattcacag	gtgtatac
D.Per	cctctttg	gtacgtctgcac...	3791...	-tcggggcaggtcctgcact	TTACATTgTTT	-GctTTGG	-----ggctgcccttgcgaccctg	1116...	gctcttccgcag	gtgtatac
D.Pse	cctctttg	gtacgtctgcac...	3803...	-tcggggcaggtcctgcact	TTACATTgTTT	-GctTTGG	-----ggctgcccttgcgaccctg	1104...	gctcttccgcag	gtgtatac
D.Vir	cctctttg	gtacgtctgcac...	3787...	caaccgaggggtgc-ctgcact	TTACATTgTTT	-GcATTGG	-----gcgttctg	1120...	cgcaattcacag	gtgtatac
D.Wil	cctctttg	gtacgtctgcac...	3814...	gttgttgggtggcc-ctgcact	TTACATTgTTT	-GcATTGG	-----ctactagttggtcaaacctc	1093...	tctctcgtgcag	gtgtatac
D.Yak	cctttttg	gtacgtctgcac...	3414...	-tcgtctgtataaaatgatt	TACTgC	CAACTGTTG	-----aactgtgttctctgt-ctgc...	1496...	tccaatccgcag	gtgtatac
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id=80469 gene=FBgn0011224 name=heph segment=chr3R.27683694.27690318.-1 type=IN VIEW

Figure 417: CS=11.52



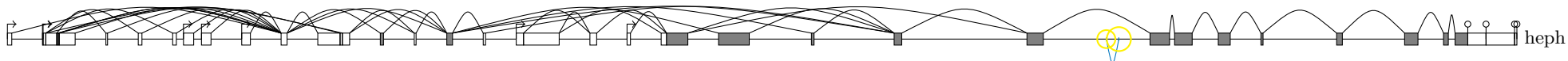
D. Mel	cggaattg	gtaagtttcagc...4063...	-----aaggcatgaggggcgacgg-----	CATTtCATTtGCATAT	gaacagcaaactgttctctt-----	...846...	ttttgttgag	ccaaggcc
D. Sim	cggaatcg	gtaagtcttcag...3963...	-----aagggtatgagggcgactg-----	CATTtCATTtGCATAT	gaacagcaaactgttctctt-----	...946...	ttttccttgag	ccaaggcc
D. Sec	cggaatcg	gtaagtcttcag...3963...	-----aaggcatgaggggcgactg-----	CATTtCATTtGCATAT	gaacagcaaactgttctctt-----	...946...	ttttccttgag	ccaaggcc
D. Ere	cggaattg	gtaagtcttcag...3950...	-----aaggccttgggggcgactg-----	CATTtCATTtGCATAT	gaacagcaaatgtgctctt-----	...959...	ttttccttgag	ccaaggcc
D. Gri	cggaattg	gtaagttttgta...3644...	-----ctgtgcagcaacgggtgcaa-----	CATTtCATTtGCAT	-atgaaccacactgactcctc-----	...1267...	tcttcttgag	ccaagcc
D. Moj	cggaattg	gtaagttttata...2886...	-----ttgcctagccagccagcc	AGCCggTGGCttGCATAA	TTCGTTT-CA--acttc-----	...2011...	ctctgcttgag	ccaagcc
D. Per	cggaattg	gtaagtcttcgc...3977...	-----gctcgcagcggaggtgactg-----	CA-TTCATTTGCATAT	aaacaccctgctacgcatct-----	...933...	ttttccttgag	ccaaggcc
D. Pse	cggaattg	gtaagtcttcgc...3022...aa	-----ctgccaacggcacttga-----	TTTGTGTTTGT	---cttctgcagaacatttccgc-----	...1891...	ttttattgag	ccaaggcc
D. Vir	cggaattg	gtaagttttata...2722...	actttggttcttctgccc-----	TGCATAA	TTCGTTT-CA--acttc-----	...2186...	ctctcttgag	ccaagcc
D. Wil	cggaattg	gtaagtttctt...3978...	-----atgaggtgtacagcgactg-----	CATTtCATTtGCATAT	gaatacacacacacagcgac-----	...931...	ttctattacag	ccaaggcc
D. Yak	cggaattg	gtaagtcttcag...3981...	-----aaggcctgaggggcgactg-----	CATTtCATTtGCATAT	gaacagcaaatgttctctt-----	...928...	ctctccttgag	ccaaggcc
	***** *	***** *		* **			* ** **	**** **

id=80459 gene=FBgn0011224 name=heph segment=chr3R.27699822.27707469\_-1 type=IN

D. Mel	cggaattg	gtaagtttcagc...4622...	--gttattcacagccgttga	GTGTGCAATGAATG	-----aatttatggcgtacccccg--	...289...	ttttgttgag	ccaaggcc	
D. Sim	cggaatcg	gtaagtcttcag...4593...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatggcagtagccccct--	...318...	ttttccttgag	ccaaggcc	
D. Sec	cggaatcg	gtaagtcttcag...4593...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatggcagtagccccct--	...318...	ttttccttgag	ccaaggcc	
D. Ere	cggaattg	gtaagtcttcag...4580...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatggcgtgccccctc--	...331...	ttttccttgag	ccaaggcc	
D. Gri	cggaattg	gtaagttttgta...4160...	----tattcccagtcgttga	GTGCAATGAATG	-----aatttatggcagtagccccctc--	...753...	tcttcttgag	ccaagcc	
D. Moj	cggaattg	gtaagttttata...4495...	--cgtacaaaagagagtgcaa	-----TGAATGAAT	TTATGTGCTAGGTT	---cttgccggtccccctctcc...	...407...	ctctgcttgag	ccaagcc
D. Per	cggaattg	gtaagtcttcgc...4537...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatgggttctccttct--	...374...	ttttccttgag	ccaaggcc	
D. Pse	cggaattg	gtaagtcttcgc...4358...	gctttattta-----	tgcaaaaata--ACAAACA	gCAAAagagaggagcaaccagagag	-----	...554...	ttttattgag	ccaaggcc
D. Vir	cggaattg	gtaagttttata...4558...	--ttcacagtcataagtgcaa	-----TGAATGAAT	TTATGCG	---ccaggctgttgagtttccc---	...351...	ctctcttgag	ccaagcc
D. Wil	cggaattg	gtaagtttctt...4666...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatggacccttttct--	...245...	ttctattacag	ccaaggcc	
D. Yak	cggaattg	gtaagtcttcag...4600...	--attattcacagccgttga	GTGTGCAATGAATG	-----aatttatggcgtacccccctc--	...311...	ctctccttgag	ccaaggcc	
	***** *	***** *	*	** **	**		* ** **	**** **	

id=80459 gene=FBgn0011224 name=heph segment=chr3R.27699822.27707469\_-1 type=IN VIEW

Figure 418: CS=10.56



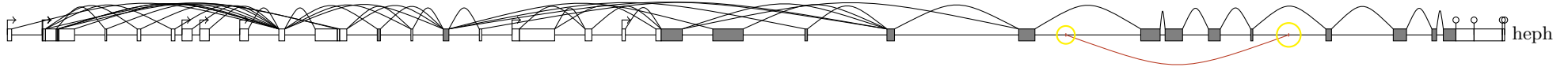
D.Mel	gtcacaac	gtaagtaaaacc...4326...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..574...	ccctgtttccag	aactcgac	
D.Sim	gtcacaac	gtaagtaaaact...4317...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..583...	ttcctttccag	aactcgat	
D.Sec	gtcacaac	gtaagtataact...4312...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..588...	ttcctttccag	aactcgat	
D.Ere	gtcacaat	gtaagtaaggcc...4327...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..573...	ccctgtttccag	aactcgat	
D.Ana	gccacaat	gtaagtactatt...4435...	ccgagtcgatggcggtga	ATGTGttACGG	ttATGA	TTTCga	AATCAAAA	TCAG	ACGA	TAGG	aataaatttacttcggaatg	..443...	actccttcgag	aactcggg
D.Gri	gtcataat	gtaagtgtgtgc...4411...	acggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..489...	ctctttagcaa	aactcttc	
D.Moj	gtcacaat	gtaagtcttaca...4365...	acggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..535...	tctttgagcag	aactcgtc	
D.Per	gtcacaat	gtgagtatccc...4361...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..539...	ttctgtttcag	aactcggg	
D.Pse	gtcacaat	gtgagtatccc...4361...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..539...	ttctgtttcag	aactcggg	
D.Wil	gtcataat	gtaagtaaac...4382...	gctgctgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..518...	tgcttcagcaa	aactcagt	
D.Yak	gtcacaac	gtaagtaaaagca...4321...	gcggtcgaatgtgtttacgt	-----	TATGA	TTTCga	AATCAAAA	TCAG	cacgaataggaataaattca	-----	..579...	ccctgtttccag	aactcgat	
	* ** **	** **	* ** * *		*****	*****	*****	*****	*		**	****		

id=80461 gene=FBgn0011224 name=heph segment=chr3R\_27692159\_27699555\_-1 type=IN

D.Mel	gtcacaac	gtaagtaaaacc...4538...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttatcgaggatgat	ttctga	-----	..365...	ccctgtttccag	aactcgac
D.Sim	gtcacaac	gtaagtaaaact...4531...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggcgaggatgat	ttctga	-----	..372...	ttcctttccag	aactcgat
D.Sec	gtcacaac	gtaagtataact...4526...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggcgaggatgat	ttctga	-----	..377...	ttcctttccag	aactcgat
D.Ere	gtcacaat	gtaagtaaggcc...4541...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggcgaggatgat	ttctga	-----	..362...	ccctgtttccag	aactcgat
D.Ana	gccacaat	gtaagtactatt...4645...	cccagatattattaccggtg	CTTG	TTGT	TTGATTTTGATTGAGAT	TTAT	TTGTTGT	ctgttgagcag	---tgctg	---gc..239...	actccttcgag	aactcggg
D.Gri	gtcataat	gtaagtgtgtgc...4656...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttgctggcgaggatgat	ttctga	-----	..247...	ctctttagcaa	aactcttc
D.Moj	gtcacaat	gtaagtcttaca...4627...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttgctggcgaggatgat	ttctga	-----	..276...	tctttgagcag	aactcgtc
D.Per	gtcacaat	gtgagtatccc...4606...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggccttgaggatgat	ttctga	-----	..297...	ttctgtttcag	aactcggg
D.Pse	gtcacaat	gtgagtatccc...4617...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggccttgaggatgat	ttctga	-----	..286...	ttctgtttcag	aactcggg
D.Wil	gtcataat	gtaagtaaac...4617...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATA	-----	ttggaatgct	---tgctgtgtgt	..286...	tgcttcagcaa	aactcagt	
D.Yak	gtcacaac	gtaagtaaaagca...4535...	-----	tattacgatacttgatatta	TTGATTTTGATTGAGAT	TTATG	-----	ttggcgaggatgat	ttctga	-----	..368...	ccctgtttccag	aactcgat
	* ** **	** **		*****	*	*****	*****	*			**	****	

id=80461 gene=FBgn0011224 name=heph segment=chr3R\_27692159\_27699555\_-1 type=IN VIEW

Figure 419: CS=10.56



D.Me1	gtcacaac	gtaagtaaaacc...3203...actgacaggaatcgatcgat	---AAATgTGCTTA	---TC--AGCA	agtagtcgacacatt--tcgct---	1705...ccctgtttccag	aactcgac
D.Sim	gtcacaac	gtaagtaaaact...4845...ttttgtgcaactgccagttgc	-----TTTGATTaATGCgCAAA	---agt-ttt--cgccctt--taactaat....63...ttcctttccag		aactcgat	
D.Sec	gtcacaac	gtaagtataact...4845...ttttgtgcaactgccagttgc	-----TTTGATTaATGCgCAAA	---agt-ttt--cgccctt--taactaat....63...ttcctttccag		aactcgat	
D.Ere	gtcacaat	gtaagtaaggcc...3136...actgacaggaatcgatcgat	---AAATgTGCTTA	---TC--AGCA	agtagtcgacacatt--tcgct---	1772...ccctgtttccag	aactcgat
D.Gri	gtcataat	gtaagtgtgtgc...4832...ttttgttgcacgcaagttt	-----TTTGATTaATGCtCAAAC	---ttttgccatgtg--cagcgttt....75...ctctttagcaa		aactcttc	
D.Moj	gtcacaat	gtaagtcctaca...3163...tatcagcagatttgatattt	-----TTGctTA	---TCaAAGCA	---gttttagttatc--tgacttat...1747...tctttgcagcag	aactcgtc	
D.Per	gtcacaat	gtgagtatcccc...4845...-----tgctcctcctcttcgctcc	TTTGATTaATGCgCAAA	---att-tttggcgccctt--taacta--....63...ttctgtttccag		aactcggg	
D.Pse	gtcacaat	gtgagtatcccc...4845...-----aagtctcctcttcgctcc	TTTGATTaATGCgCAAA	---agt-tttggcgccctt--taacta--....63...ttctgtttccag		aactcggg	
D.Vir	gtcacaat	gtaagtgtatgc...3270...tatcagcagaattgatattt	-----TTGctTA	---TCaAAGCA	---gttttagttatc--agacttat...1640...ttgtttcagcag	aactcgtc	
D.Wil	gtcataat	gtaagtaaacatc...3120...aacaaggggcaaggaatc	-----TGCAcAATTG	acTCATTAA	---caggcaaacccgcgacaagt...1786...tgcttgcagcaa	aactcagt	
D.Yak	gtcacaac	gtaagtaaaagca...3016...actgacaggaatcgatcgat	---AAATgTGCTTA	---TC--AGCA	agtagtcgacacatt--tcgct---	1892...ccctgcttccag	aactcgat
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id=80461 gene=FBgn0011224 name=heph segment=chr3R.27692159.27699555.-1 type=IN

D.Me1	cctttttg	gtacgtctgcac...4011...-cgaccggcaactatTTTTTA	TGCTTGATGGCAATTT	-----gcg--ccccgcttcgaatttgc---	898...tccaatccgcag	gtgtatac
D.Sim	cctttttg	gtacgtctgcac...3385...----cgaacgatattgctcgggt	TTTGCA-TaAGTCAAG	-----tccaccggataactgggaac...1524...tccaatccgcag		gtgtatac
D.Sec	cctttttg	gtacgtctgcac...3401...----cgaacgatattgctcgggt	TTTGCA-TaAGTCAAG	-----tccaccggataactgggaac...1508...tccaatccgcag		gtgtatac
D.Ere	cctttttg	gtacgtctgcac...3990...-cgaccggcaactatTTTTTA	TGCTTGATGGCAATTT	-----gcg--ccccgcttcgaatttgc---	919...tccaatccgcag	gtgtatac
D.Gri	cctccttg	gtacgtctgcac...3369...-agcaaaa-gaaatTTTTcggT	GTTTGCA-TaAGTCAAG	tttccg--ttttttttttt-----...1539...cgcaattcagcag		gtgtatac
D.Moj	cctccttg	gtacgtctgcac...3811...-ccagcaacaactatTTTTTA	TGCTTGATGGCAA	-----tttgcg--ccctgctgcaaatt-----...1101...cgcaattcagcag		gtgtatac
D.Per	cctccttg	gtacgtctgcac...3340...----caaacgaaatTTTTcggT	TTTGCA-TaAGTCAAG	tttagcagtttacgctgcaga-----...1569...gctcttccgcag		gtgtatac
D.Pse	cctccttg	gtacgtctgcac...3260...----caaacgaaatTTTTcggT	TTTGCA-TaAGTCAAG	tttagcagtttacgctgcaga-----...1649...gctcttccgcag		gtgtatac
D.Vir	cctccttg	gtacgtctgcac...3874...gctaccaactactatTTTTTA	TGCTTGATGGCAA	-----tttgcg--ccctgctgcaaatt-----...1038...cgcaattcagcag		gtgtatac
D.Wil	cctccttg	gtacgtctgcac...3871...----ctggcaactatTTTTatgc	TTGATGGCAATTTGCG	-----ccctattccaaattcgctgc...1038...tctctcgtgcag		gtgtatac
D.Yak	cctttttg	gtacgtctgcac...3983...-cgaccggcaactatTTTTTA	TGCTTGATGGCAATTT	-----gcg--ccccgcttcgaatttgc---	926...tccaatccgcag	gtgtatac
	*** ****	*****	*** *	*** **		*** *****

id=80469 gene=FBgn0011224 name=heph segment=chr3R.27683694.27690318.-1 type=IN VIEW

Figure 420: CS=10.56



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D.Sim tccacacg gtgagtcggaaa...281...----gtcagcggcagcgtgtgcggAT--GGAGCTGAGCTGGC-----ccaccgggagccagctcacg---...109...--ttctaatttcag ggaattcc
D.Sec tccacacg gtgagtcggaaa...281...----gtcagcggcagcgtgtgcggAT--GGAGCTGAGCTGGC-----ccaccgggagccagctcacg---...94...--ttctaatttcag ggaattcc
D.Ere tccacacg gtgagtcggaaa...272...----gtcagcggcagcgtgtgcggAT--GGAGCTGAGCTGGC-----ccaccaggagccagctcacg---...103...--ttcgaattgcag agaattcc
D.Ana tccactcg gtaagtatttgg...275...----gtcaatggcaacgtgtgcggGT--GGAGCTGAGCTGGCccCCCCGgaGCCAGCTCGcGCTCCGTtagacatcttggtcgggtgcg...82...--tctccattttag cgaattcc
D.Per tctaccgg gtgagtgaggagg...264...----atgtcaacggcagcgtgtgc--GTCAGGAGCTGAGCTGGC-----ccgcaggagccagctcgcg---...106...--tccatattgcag cgaattct
D.Pse tctaccgg gtgagtgaggagg...270...----atgtcaacggcagcgtgtgc--GTCAGGAGCTGAGCTGGC-----ccaccagaagccagctcgcg---...106...--tccatattgcag cgaattct
D.Vir tccacacg gttagtatgtta...341...gaaaatgtcaacggcagcgt--AT--GGAGCTGAGCTGGC-----cgccgg---ccagctcccgtcc...203...ggctcttca---tag cgaatttc
D.Wil tccacaag gtaaatctattg...373...----gtcaacggcagcgtatgcgtAT--GGAGCTGAGCTGGCcaCCaGGTGCCAGCTCGcGCTCCGTtgacattttggtcgggtggtg...74...--tttacattacag agaatttc
D.Yak tccacacg gtgagtcggaaa...271...----gtcagcggcagcgtgtgcggAT--GGAGCTGAGCTGGC-----ccaccaggagccagctcacg---...103...--tttaatttcag agaattcc
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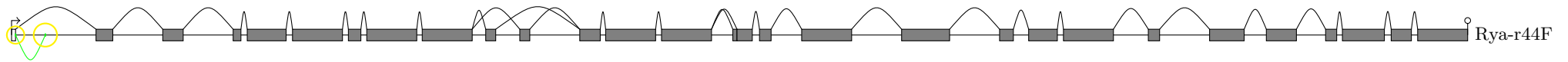
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D.Sim tccacacg gtgagtcggaaa...306...----gctgagctggc--ccaccggga-----GCCAGCTCAcGCTCCGTggacattttagtcgggtgcg---...83...--ttctaatttcag ggaattcc
D.Sec tccacacg gtgagtcggaaa...306...----gctgagctggc--ccaccggga-----GCCAGCTCAcGCTCCGTggacattttagtcgggtgcg---...68...--ttctaatttcag ggaattcc
D.Ere tccacacg gtgagtcggaaa...297...----gctgagctggc--ccaccagga-----GCCAGCTCAcGCTCCGTggacattttagtcgggtgcg---...77...--ttcgaattgcag agaattcc
D.Ana tccactcg gtaagtatttgg...275...----gtcaa--tggcaacgtgtgcggGTGGAGCTGAGCTGGCccCCCCGgaGCCAGCTCGcGCTCCGTtagacatcttggtcgggtgcg...82...--tctccattttag cgaattcc
D.Per tctaccgg gtgagtgaggagg...291...----gctgagctggc--ccgcaggga-----GCCAGCTCGcGCTCCgtTGACattttggtcgggtgcggcgt...76...--tccatattgcag cgaattct
D.Pse tctaccgg gtgagtgaggagg...297...----gctgagctggc--ccaccagaa-----GCCAGCTCGcGCTCCgtTGACattttggtcgggtgcggcgt...76...--tccatattgcag cgaattct
D.Vir tccacacg gttagtatgtta...362...tggagctgagctggc--ccgcc-----GCCAGCTCGcGCTCCgtTGACattttggtcgggtgcggcgt...181...ggctcttca---tag cgaatttc
D.Wil tccacaag gtaaatctattg...373...----gtcaa--cggcagcgtatgcgtATGGAGCtGAGCTGGccCaCCaGGTGCCAGCTCGcGCTCCGTtgacattttggtcgggtggtg...74...--tttacattacag agaatttc
D.Yak tccacacg gtgagtcggaaa...296...----gctgagctggc--ccaccagga-----GCCAGCTCAcGCTCCGTggacattttagtcgggtgcg---...77...--tttaatttcag agaattcc
** ** * ** * *      * * ** * ***** ** ** ** ** ** * ** * **

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id=123556 gene=FBgn0050481 name=mRpL53 segment=chr2R.9841951.9842421.1 type=IN VIEW

Figure 421: CS=12



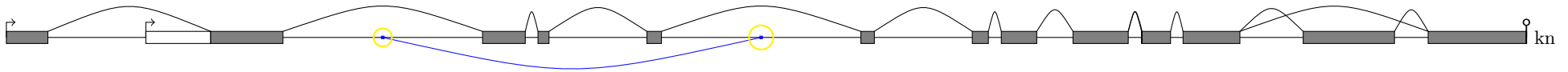
D. Mel	cgccgacg	ggg-ctcgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Sec	cgccgacg	gga-ctcgtcgc-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Ere	cgccgacg	ggg-ctcgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Ana	cgctcgtcg	gggccccgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Gri	tgc--ttt	tcc-gtgcctcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Moj	agcagccg	act-ctgcctcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Per	gtcgtttg	ggg-ctcgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Pse	gtcgtttg	ggg-ctcgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Vir	cccagccg	ccgttcaaccgtcgt	CGTCAGTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
D. Yak	cgccgacg	ggg-ctcgtcgt-ca----	GTCT	agAGAG	taATATC	gACACG	aAAA	Gtaagttc
			** *	*	*****	*****	*****	*****

id=87805 gene=FBgn0011286 name=Rya-r44F segment=chr2R.4747896.4747935.1 type=E5

D. Mel	cacgaaaa	gtaagttcgccg...251...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcct-----	tcggcaac...2074...	aatctttcgaag	gaaattat
D. Sec	cacgaaaa	gtaagttcgccg...251...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgtgcct-----	tcggcaac...2052...	aatcttttgaag	gaaattat
D. Ere	cacgaaaa	gtaagttcgccg...250...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcct-----	tcggcaac...2240...	aatcattcgaag	gaaattat
D. Ana	cacgaaaa	gtaagttcgccg...262...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcctcgtagtcg-----	...1607...	tttttttgaag	gaaataaa
D. Gri	cacgaaaa	gtaagtttagccg...270...	gttttt	gtgcgctgcccaggc	GCTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgatgctcgtcgg-----	...1683...	tatatgccaacg	gaacttag
D. Moj	cacgaaaa	gtaagttggcct...263...	-ttttt	gtggctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcctcgtcctcgtc-----	...1071...	acctctttaat	ccacttag
D. Per	cacgaaaa	gtaagttcgccg...269...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcctcgtcctcgtc-----	...1487...	ttttctcaagg	aaaagaaa
D. Pse	cacgaaaa	gtaagttcgccg...268...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAT	-----	atgtgtgcgcctcctcgtcgg-----	...1557...	ttttctcaagg	aaaagaat
D. Vir	cacgaaaa	gtaagttggcct...240...	agtttt	gtgcgctgcccaggc	GCTTTg	CGTGTGATATTTTGGACTg	GATG	tctgaagcgcctcgttactc-----	...894...	attagttcgaac	catttttt
D. Yak	cacgaaaa	gtaagttcgccg...250...	-gtttt	gtgcgctgcccaggc	CTTTg	CGTGTGATATTTTGGAC	-----	atgtgtgcgcct-----	tcggctac...2207...	aatctttcgaag	gaaattat
	*****	***** **	****	*****	*****	*****		*		*	

id=87806 gene=FBgn0011286 name=Rya-r44F segment=chr2R.4747936.4750347.1 type=I5 VIEW

Figure 422: CS=10.4



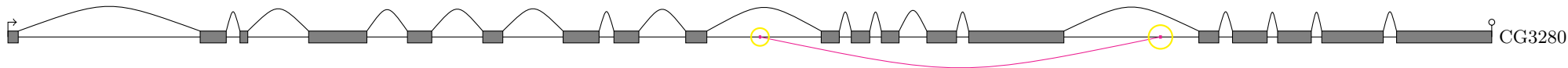
D. Mel	cagagcaa	gtaagtaaagg...	2561...	-tttttttagctgctcttctc	GTTGcAAATGGCGcAAGTgCAAA	caaagtgagctggcaaactg---	1763...	gatccattgcag	tttgggca
D. Sim	cagagcaa	gtaagtaaagg...	2618...	-tttttttagctgctcttctcc	GTTGcAAATGGCGcAAGTgCAAA	caaagtgagctggcaaactg---	2081...	gatccattgcag	tttgggca
D. Sec	cagagcaa	gtaagtagcggg...	2635...	-tttttttagctgctcttctcc	GTTGcAAATGGCGcAAGTgCAAA	caaagtgagctggcaaactg---	1770...	gatccattgcag	tttgggca
D. Ere	cagagcaa	gtaagtgacggg...	2580...	-tttttttagctgctctactcc	GTGGCAAATGGCGcAAGTgCAAA	caaagtgagctggcaaactg---	1703...	gatccattgcag	tctgggca
D. Ana	cagagcaa	gtaagtaggatc...	2163...	aattttttgttcggcc--ctcc----	AAATGGCGcAAGTgCAAA	caaagcgagctggcaaactg---	1495...	ataacattgcag	tttgggca
D. Moj	cagagcaa	gtaagtgaatg...	2824...	-----aacaataacctttcgccag--	AAT--GTAACATGtcTGGC	---atztatgtcggactcgaa...	2084...	ttctaattgcag	cctgggca
D. Per	cagaccaa	gtaagtgaatg...	2415...	-----taacaataacctttcacc-ag--	AAT--GTAACATGtcTGGC	---atztatgtcgtataggag...	1276...	gtttttttgcag	cctgggca
D. Pse	cagaccaa	gtaagtgaatg...	2457...	-----taacaataacctttcacc-ag--	AAT--GTAACATGtcTGGC	---atztatgtcgtataggag...	1290...	gtttttttgcag	cctgggca
D. Vir	cagaccaa	gtaagttcagt...	2648...	-----cataacaataacctttcgcc--	CAGAAT--GTAACATGtcTGGC	---atztatgtcgtatattccc...	1607...	ttctaattgcag	tctgggca
D. Wil	cagaccaa	gtaagtcaaatt...	3154...	-----taacaataacctttcacc-aa--	AAT--GTAACATGtcTGGC	---atztatgtcgtactcgca...	1754...	gtgttttcacag	cctgggca
D. Yak	cagagcaa	gtaagtgacggg...	2492...	-tttttttagctgctctgctcc	GTGGCAAATGGCGcAAGTgCAAA	caaagtgtcctggcaaactg---	2022...	gatccattgcag	tttgggca
	**** **	*****		* * * * *	*** * ** *	* * * * *		* ** *	* ****

id=3025 gene=FBgn0001319 name=kn segment=chr2R.10681346.10685759.-1 type=IN

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D. Sim	atgtgcag	gtgagtccttat...	861...	gaggacgtcctt-----ccttatcgt	TTTGGCTTgCGCCcATTTCAGT	-----catccatgtttatggtatata--	618...	tttatttttcag	ccgctgct
D. Sec	atgtgcag	gtgagtccttat...	863...	gaggacgtcctt-----ccttatcgt	TTTGGCTTgCGCCcATTTCAGT	-----catccatgtttatggtatata--	606...	tttatttttcag	ccgctgct
D. Ere	atgtgcag	gtgagtccttat...	839...	gaggacgtcctt-----ccttatcgt	TTTGGCTTgCGCCcATTTCAGT	-----catccatgtttatggtatata--	770...	gtttcctttcag	ccgctgct
D. Ana	atgtgcag	gtaagtccttat...	762...	ggggcgactt-----ccttatcgt	TTTGGCTTgCGCCcATTTCAGT	-----cagtcacatggttatggtt-----	441...	tatccatttcag	ccgctgct
D. Moj	atgtgcag	gtgagtgcaatg...	1616...	-ttggcatttcgcca-tttta---	GT-----CATcCATGtTTATGTT	-gtgccaggacgaagccttca---	984...	ttttacctgcag	ccgctgct
D. Per	atgtgcag	gtgagagtcctt...	843...	-ttggcatttcgcca-tttca---	GT-----CATcCATGtTTATGTT	-gtgccaggacgaagccttca---	563...	ctgcttccacag	ccgctgct
D. Pse	atgtgcag	gtgagagtcctt...	824...	-ttggcatttcgcca-tttca---	GT-----CATcCATGtTTATGTT	-gtgccaggacgaagccttca---	564...	ctgcttccacag	ccgctgct
D. Vir	atgtgcag	gtgagttcgttt...	1312...	-ttggcatttcgcca-tttta---	GT-----CATcCATGtTTATGTTCTG	-cccagcacgatgccaagct---	810...	ttttacctgcag	ccgctgct
D. Wil	atgtgcag	gtgagttcccaa...	1022...	-ttggcatttcgcca-tttta---	GT-----CATcCATGtTTATGTT	-cccagcacgatgccaagct---	1324...	ttttatttcag	ccgctgct
D. Yak	atgtgcag	gtgagtgcttat...	840...	gaggacgtcctt-----ccttatcgt	TTTGGCTTgCGCCcATTTCAGT	-----catgatttatggtatata--	565...	tttcttttcag	ccgctgct
	*****	** **		* * *	** * *	* * * * *		*	*** *****

id=3031 gene=FBgn0001319 name=kn segment=chr2R.10673416.10674951.-1 type=IN VIEW

Figure 423: CS=10.56



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D.Sim	ttgaggaa	gtgagtatggtg...232...---	gagaa-agcattggccattat	GATTTAcGCACGCACAC	-aacagagcacgtgcccgat--...286...atccatcgacag	aatggcgg
D.Sec	ttgaggaa	gtgagtatggtg...225...---	gagaa-agcattggccattat	GATTTAcGCACGCACAC	-aacagagcacgtgcctcgaa--...289...atccatcgacag	aatggcgg
D.Ere	ctgaggaa	gtgagtattatg...239...---	gaaga-agcattggccattat	GATTTAcGCACGCACAC	-aagcaagcacgtgtttgaaa--...309...atccttcgacag	aatggcgg
D.Ana	cttaggaa	gtgagtatggtg...231...---	gaagacggcattggccatta	TGATTTAcGCACGCACG	---caggacgcaggacgaaatc...456...atctgtcgacag	gatggcgg
D.Gri	ttaagaaa	gtgagttagcggg...205...---	gagaa-aaacttggccattat	GATTTAcGCACGCACG	-cagccagacacgagacatgc---...374...tacttgtaaaag	aatggcgg
D.Moj	ttgcgcaa	gtgagtattggg...176...---	ggccg-aaacttggccattat	GATTTAcGCACGCACG	-cagt cagacacgagacacga---...346...ctgcattgacag	gatggcgg
D.Vir	ctgagaaa	gtgagttagaggt...182...---	acaag-aaacttggccattat	GATTTAcGCACGCACGG	-gccagacacgagacatgcag-...346...tactttggcag	gatggcgg
D.Wil	ttgagaaa	gtgagtatcctc...178...aatgaacgaaaagtggccc	CTTATGATTTAcGCACGCACAC	aatcagcagaagtgtagggc	---...369...ctttctctgcag	aatggcgg
	* * *	*****		*** * *****		** ***** *

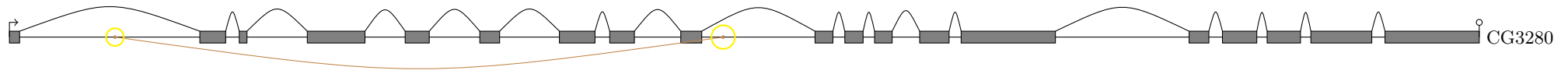
id=9209 gene=FBgn0036017 name=CG3280 segment=chr3L.9599604\_9600204.1 type=IN

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D.Sim	tcgatggg	gtgagtgcgatt...1134...---	ctcattcg-ggtttggggcac---	GTGTcCGTGCaTGAATT	---tcg--accacagaatcgagaag-...168...-caatccaaaag	ctgatgtc
D.Sec	tcgatggg	gtgagtgcggtt...1130...---	ctcattcg-agtttggggcac---	GTGTcCGTGCaTGAATT	---tcg--accacagaatcgaaacg-...168...-caatccaaaag	ctgatgtc
D.Ere	tcgacggg	gtgagtgcgggg...1163...---	cgattcgaacttggggcac---	GTGTcCGTGCaTGAATT	---tcg--accacagaatcgagaag-...168...-caatccaaaag	cttatgtc
D.Ana	tcgatggg	gtgagtaaatgc...1155...---	gattc-aaacttggagcaggca	CGTGTtCGTGCaTGAATTG	---cg--accacaggatgagatag-...117...-tacaccataaag	cttatgtc
D.Gri	ttgatggg	gtaagcatttta...1167...---	catggttatgagtggggaa---	CGTGTtCGTGCaTGAATT	---tcg--gtttagaaatgaatggg-...242...-atgcctgtgcag	ctgatgtc
D.Moj	tcgatggg	gtaagtgggtggg...1266...---	ttacggctgggagct--gagca---	CGTGTtCGTGCaTGAATT	---ttg--gctgggaaatgaatggg-...163...cctcttcac-cag	ctgatgtc
D.Vir	tcgatggg	gtaagctagagc...1090...---	ttttggctggaagct--gggca---	CGTGTtCGTGCaTGAATT	---tcg--gttggaatgaatggg-...201...-tggccttgcag	cttatgtc
D.Wil	tcgatggg	gtaagcagaagc...1240...---	ttaactca-gttttcgtgcac---	GTGTcCGTGCaTGAATTTGGG	tagctatttgggggtggcca---...425...-gcatccttgcag	ctaattgtc
	* * *	** **	* * *	*** *****	* * *	** *****

id=9219 gene=FBgn0036017 name=CG3280 segment=chr3L.9602937\_9604303.1 type=IN VIEW

Figure 424: CS=8.64





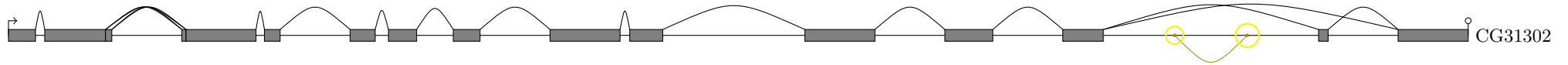
D. Mel	gcctaaag	gtgtgtgctttc...703...--ttgtgtgggttttgggcacg	TTTGGCTTTGAT	aaGTTG	----cccat----	cgctcggggcggggc...413...atccattcgtag	aacaactc
D. Sim	gcctaaag	gcgtgtgctttc...695...gcttgtgtgggttttgggca	CGTTTGGCTTTGAT	aaGTTG	----cccat----	cgggcggggcggggc...412...atccattcgtag	aacaactc
D. Sec	gcctaaag	gcgtgtgctttc...685...gcttgtgtgggttttgggca	CGTTTGGCTTTGAT	aaGTTG	----cccat----	tgggctggtcggggc...407...atccattttag	aacaactc
D. Ere	gcccaaag	gcgtgtgctttt...685...--ttgtgtgggttttgggcacg	TTTGGCTTTGAT	aaGTTG	----cccatagtggtcgtttctca----	...392...atccattcgtag	aacaactc
D. Ana	acctaag	atgggcctgcca...784...--tgttgtgggttttgggcacg	TTTGGCTTTGAT	---	aagttggccaaga-gtgggtt-----	...335...tgaattaaatag	aacaactc
D. Moj	atgtgagt	gtgtgtgtgtgt...919...--gtgtgtgcttttgggcacg	TTTGGCTTTGAT	aaGTCCGG	cgtagacag-gtagg-gttcgg--	...475...aacaattcgtag	aacaactc
D. Per	gcctaagg	atggaggattcc...914...--ctgtgtgcttttgggcacg	TTTGGCTTTGAT	aaGTTGG	----ccatgg-gttggtcattgttg--	...462...cctaattcccag	aacaactc
D. Pse	gcctaagg	atggaggattcc...894...--ctgtgtgcttttgggcacg	TTTGGCTTTGAT	aaGTTGG	----ccatgg-gttggtcattgttg--	...463...cctaattcccag	aacaactc
D. Vir	actaacac	atgtgtgagagt...944...--gtgtatgcttttgggcacg	TTTGGCTTTGAT	aaGTCTG	ttggccatgg-gtggg-gttcg----	...467...aacaattcctag	aacaactc
D. Yak	gcctaaag	gcgtgtgctttg...695...--ttgtgtgggttttgggcacg	TTTGGCTTTGAT	aaGTTG	----cccaa----	cacgcgggcggggtg...431...gtccattcgtag	aacaactc
		*	*	*	*	*	*

id=9193 gene=FBgn0036017 name=CG3280 segment=chr3L.9595743.9596941.1 type=IN

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D. Sim	ttgaggaa	gtgagtatggtgggagcacaagaaataggggtcaaggggtcatggg--tatgga-----	tatggtgccagcgtgttgggtaggcacttcattaaatact	TGGTcATCGAAGCCgcAAAA	AGcaactaaatgtc-agactgc...	...451...atccatcgacag	aat		
D. Sec	ttgaggaa	gtgagtatggtgggagcaaaagaaataggggtcaaggggtcatggg--tatgga-----	tatggttcccagcgtgttgggtaggcacttcattaaatact	TGGTcATCGAAGCCgcAAAA	AGcaactaaatgtc-agactgc...	...447...atccatcgacag	aat		
D. Ere	ctgaggaa	gtgagtattatggg-gcacagag-aataggggtcaaggggtcatggg--tatgga-----	tatggttcccagcgtgttgggtaggcacttcattaaatccc	TGGTcATCGAAGCCgcAAAA	agcaactaaatgtc-agaat--	...475...atccttcgacag	aat		
D. Ana	cttaggaa	gtgagtatgttggggttatattg--gccaaaatgcaagagcatttgg-----	ggcagacacttcattttggggcagacacttcattaaatcctgggtc	ATCGAAGCCgcAAAA	agcaactaaatgtc-ggact--	...630...atctgtcgacag	gat		
D. Moj	ttgagcaa	gtgagt-----attggg-----	agcgggc-----	ggggacacttcattaaatct	TGGACATCGAAGCCacAAAA	gcaaacggaatgcaaaagt--	...510...ctgattgacag	gat	
D. Per	ctgagaaa	gtgagtatggctaggactatggg--gtcgg-----	ggccctggg-----	ggtg-----	tccgtgcagaagaggcacttcattaaatct	CTGGTcATCGAAGCCgcAAAA	agcaactaaatgtc-agact--	...556...atcttcaatag	aat
D. Pse	ctgagaaa	gtgagtatggctaggactatggg--gtcgg-----	ggtcctggg-----	ggtg-----	tccgtgcagaagaggcacttcattaaatct	CTGGTcATCGAAGCCgcAAAA	agcaactaaatgtc-agact--	...547...atcttcaatag	aat
D. Vir	ctgagaaa	gtgagt-----gag--gtcgt-----	ggc-----	gg-----	t-gcactgaag-ggcacttcattaaatct	TGGACATCGAAGCCgcAAAA	gcaactaaatgcaaaaat--	...506...ctactttggcag	gat
D. Yak	ttaaggaa	gtgagtatggtgggagcactgggaaataggggtcaaggggtcatggg-----	tatgggtccca--gtttgggtaggcacttcattaaagtcc	TGGTcATCGAAGCCgcAAAA	agcaactaaatgcaaaagt--	...468...atacttgacag	aat		
		* * *	**	*	*	*	*		

id=9209 gene=FBgn0036017 name=CG3280 segment=chr3L.9599604.9600204.1 type=IN VIEW

Figure 425: CS=9.6



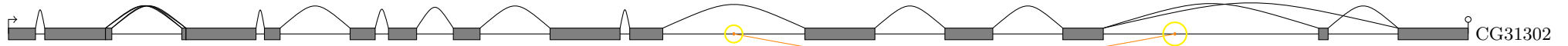
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D.Sim	---gggcaaaa	gtaagtaggctt...761...	----ataaaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacacaaat	----aatcattt...1923...	tcgttgctatag	atgctcgc
D.Sec	---gggcaaaa	gtaagtaggctt...755...	----ataaaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----atcatttt...1927...	tcgttgctatag	atgctcgc
D.Ere	agccgggcaaaa	gtaagtaggctt...777...	----ataaaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----attcatttt...1924...	tcgttgctatag	atgctcgc
D.Ana	---gggcaaaa	gtaagtaggctt...856...	----ataaaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----ataaagtatt...1978...	tcgttgctatag	atgctcgc
D.Gri	---aggcaaaa	gtaagtaggctt...761...	----atacaatatata-gataaata	GTTGTTGTT	CTTGTTGTTGTA	--acac-agtctttgaataattt	...1940...	tcgttgctatag	atgctcgc
D.Moj	---aggcaaaa	gtaagtaggctt...901...	----atacaatatata-gatacata	GTTGTTGTT	CTTGTTGTTGTA	--acac-aatcttgatattaact	...1923...	tcgttgctatag	atgctcgc
D.Per	---aggtaaaa	gtaagtaggctt...915...	----atacaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----atattatattc...2026...	tcgttgctatag	atgctcgc
D.Pse	---aggtaaaa	gtaagtaggctt...925...	----atacaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----atattatattc...2034...	tcgttgctatag	atgctcgc
D.Vir	---aggcaaaa	gtaagtaggctt...949...	----atacaatatata-gatacata	GTTGTTGTT	CTTGTTGTTGTA	--acac-agtcttttaattacct	...1863...	tcgttgctatag	atgctcgc
D.Wil	---aggcaaaa	gtaagtatactt...1004...	tcgattaccatataata----gata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----ttatgcattt...2088...	tcgttgctatag	atgctcgc
D.Yak	---gggcaaaa	gtaagtaggctt...800...	----ataaaa-atatacaatagata	GTTGTTGTT	CTTGTTGTTGTA	cacacac-aat	----attcatttt...1989...	tcgttgctatag	atgctcgc
	** ****	*****	** * *****	*****	**** *	*	*****	*****	*****

id=59697 gene=FBgn0051302 name=CG31302 segment=chr3R.11219221.11222031.1 type=IN

D.Mel	---gggcaaaa	gtaagtaggctt...1753...	---ttgttaattttt-gttccaaa---	TATAACAACAAa	AACAACAAC	agca-tcagcaagggtccaa---	...973...	tcgttgctatag	atgctcgc
D.Sim	---gggcaaaa	gtaagtaggctt...1732...	---ttgttaattttt-gttccaaa---	TATAACAACAAa	AACAACAAC	agca-tcagcaagggtccaa---	...952...	tcgttgctatag	atgctcgc
D.Sec	---gggcaaaa	gtaagtaggctt...1724...	---ttgttaattttt-gttccaaa---	TATAACAACAAa	AACAACAAC	agca-tcagcaagggtccaa---	...958...	tcgttgctatag	atgctcgc
D.Ere	agccgggcaaaa	gtaagtaggctt...1752...	---ttgttcatttttt-gttccaaa---	TATAACAACAAa	AACAACAAC	agca-tcagcaagggtccaa---	...949...	tcgttgctatag	atgctcgc
D.Ana	---gggcaaaa	gtaagtaggctt...1785...	---ttgttcatttttt-gttcaaga---	TATAACAACAAa	AACAACAAC	agca-tcagtaagggtccaa---	...1049...	tcgttgctatag	atgctcgc
D.Gri	---aggcaaaa	gtaagtaggctt...1805...	---ttttttatggtt--tttagag---	ATATAACAACAAa	AACAACAAC	---a--ccgcaggggctataaaagc...	...896...	tcgttgctatag	atgctcgc
D.Moj	---aggcaaaa	gtaagtaggctt...1829...	---gttccttggtttc--cttagag---	ATATAACAACAAa	AACAACAAC	acca--ccgcaggggcttaaaag---	...995...	tcgttgctatag	atgctcgc
D.Per	---aggtaaaa	gtaagtaggctt...1961...	---gttcataattttt-gttcaaga---	TATAACAACAAa	AACAACAAC	agca-tcagaaaagggttaac---	...980...	tcgttgctatag	atgctcgc
D.Pse	---aggtaaaa	gtaagtaggctt...1970...	---gttcataattttt-gttcaaga---	TATAACAACAAa	AACAACAAC	agca-tcagaaaagggttaac---	...989...	tcgttgctatag	atgctcgc
D.Vir	---aggcaaaa	gtaagtaggctt...1941...	---agatttttagtttc--c-tagag---	ATATAACAACAAa	AACAACAAC	---a--ctgcaggggcttaaaagcac...	...871...	tcgttgctatag	atgctcgc
D.Wil	---aggcaaaa	gtaagtatactt...2065...	---attttcagttcgaataatgaa---	TATAACAACAAa	AACAACAAC	agcaatcagcaagggtttaa---	...1027...	tcgttgctatag	atgctcgc
D.Yak	---gggcaaaa	gtaagtaggctt...1823...	---ttgttcatttttt-gttccaaa---	TATAACAACAAa	AACAACAAC	agca-tcagcaagggtccaa---	...966...	tcgttgctatag	atgctcgc
	** ****	*****	**	*****	* * * * *	*	*****	*****	*****

id=59697 gene=FBgn0051302 name=CG31302 segment=chr3R.11219221.11222031.1 type=IN VIEW

Figure 426: CS=7.2



```

D.Me1  gtcatcag gtgagtgcgacg----...959...tcaattgtcttaaggaaaac--GCAATGCAACG-AACAATtttaaa-cgaacaag-tacat...1175...accaacaaccag ggctatca
D.Sec  gtcatcag gtgagtgcgacg----...945...tcaattgtcttaaggaaaac--GCAATGCAACG-AACAATtttaaa-cgaacaag-tacat...1172...accatcaaccag ggctatca
D.Ere  gtcatcag gtgagtgcgacg----...958...acaattgtcttaaggaaaac--GCAATGCAACG-AACAATtttaaa-cgaacaag-tacat...1414...cacaccaaccag ggctatca
D.Ana  gtcatcag gtgagtgcgacg----...979...acaattgtcttaaggataac--GCAATGCAACG-AACAATtttaaa-caatacagtacata...1332...aatcccatccag ggctacca
D.Gri  gtcatcag gttagtgtgtgt----...1174...--gtattaaggaaaaaaaacGCAATgCAACGAAACAATtttaaa-caatacaagttaca...1531...atcgacaaccag ggctatca
D.Moj  gccatcag gttagtgtgggt----...1058...--taatttaaaaatcaaaatGCAATGCAACG-AACAATtttaaaccaaaacaagttat...1437...atcgatatgcag ggctatcc
D.Per  gtcatcag gtgagtgtccag----...1040...--gattttattaaggaatatacGCAATGCAACG-AACAATtttaaa-caaacaagttaca...1669...aatatcctccag ggatacca
D.Pse  gtcatcag gtgagtgtccag----...1052...--gattttattaaggaatatacGCAATGCAACG-AACAATtttaaa-caaacaagttaca...1676...aatatcctccag ggatacca
D.Vir  ----tcag gttagtgcgccc...1070...gcggaattgattaaggagaac--GCAATGCAACG-AACAATtttaaa-caaacaagttata...1368...atcgataatcag ggctatca
D.Wil  gccatcag gtgagtgtccgc----...1575...ttgatttttcaaacattttt--GAATGAAAACAGAAA--gcgtaa-ctgaaaaatttgaa...1807...tcggtcgtccag ggctacca
D.Yak  gtcatcag gtgagtgcgacg----...1005...acaattgtcttaaggaaaac--GCAATGCAACG-AACAATtttaaa-cgaacaag-tacat...1226...ccaaccaaccag ggctatca
      **** ** **** * ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=59691 gene=FBgn0051302 name=CG31302 segment=chr3R.11214633.11216847.1 type=IN

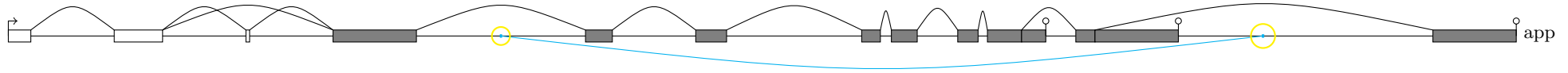
```

D.Me1  ----gggcaaaa gtaagtaggctt...769...----aaaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----cgatatataatt...1961...tcgttgctatag atgctcgc
D.Sec  ----gggcaaaa gtaagtaggctt...758...----aaaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatatacatt...1928...tcgttgctatag atgctcgc
D.Ere  agccgggcaaaa gtaagtaggctt...780...----aaaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatatacatt...1925...tcgttgctatag atgctcgc
D.Ana  ----gggcaaaa gtaagtaggctt...859...----aaaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatataaaagat...1979...tcgttgctatag atgctcgc
D.Gri  ----aggcaaaa gtaagtaggctt...764...----caatataatagataaatagttGTTGTTCTTGTtGTTGTatcacacagtcttgaataat...1942...tcgttgctatag atgctcgc
D.Moj  ----aggcaaaa gtaagtaggctt...904...----caatataatagatacatagttGTTGTTCTTGTtGTTGTatcacacaatcttgatattaa...1925...tcgttgctatag atgctcgc
D.Per  ----aggtaaaa gtaagtagtctt...918...----caaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatataattat...2027...tcgttgctatag atgctcgc
D.Pse  ----aggtaaaa gtaagtagtctt...928...----caaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatataattat...2035...tcgttgctatag atgctcgc
D.Vir  ----aggcaaaa gtaagtaggctt...952...----caatataatagatacatagttGTTGTTCTTGTtGTTGTatcacacagtctttaaattac...1865...tcgttgctatag atgctcgc
D.Wil  ----aggcaaaa gtaagtatactt...770...ttttcaat-tccaaatgaaa-----TTTTTGTTCgaATTTCtctttttccaaccctct...2326...tcgttgctatag atgctcgc
D.Yak  ----gggcaaaa gtaagtaggctt...803...----aaaatataca-atagatagttGTTGTTCTTGTtGTTGTacacaca----caatatacatt...1990...tcgttgctatag atgctcgc
      ** **** ***** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=59697 gene=FBgn0051302 name=CG31302 segment=chr3R.11219221.11222031.1 type=IN VIEW

Figure 427: CS=9.9



```

D.Mel gccttcga gtgagtatacgc...1407...gacggtgcgattagacaaaa-TTATGCTCAACATTTctgcacgaaatcatttcag...1912...tccttctttcag ctgtccct
D.Sim gccttcga gtgagtatacgc...1442...gacattgcgattagacgaaa-TTATGCTCAACATTTctgcacgaaatcattttag...1971...cctttcttgcag ctgtccct
D.Sec gccttcga gtgagtatacgc...1454...gacagtgcgattagacgaaa-TTATGCTCAACATTTctgcacgaaatcattttag...1892...cctttcttgcag ctgtccct
D.Ere gccttcga gtgagtatacgc...1484...gaaagtgcgattagacgaaa-TTATGCTCAACATTTctgcacgaaatcatttcag...2064...tccttctttcag ctgtccct
D.Ana gccttcga gtgagtatgagt...1361...gccagcgcgattagacaaaa-TTATGCTCAACATTTctgcacgaaatcatttcag...1385...cctctatttcag ctgcccat
D.Gri gccttcga gtgagtattcca...1322...cagcgcgcgattagaaaaaa-TTATGCTCAACATTTctgcacgagttcgtttcaa...1620...tcttttcaatag ctgcccgt
D.Moj gccttcga gtgagtatccga...1168...cagtgcacgattagaaaaaa-TTATGCTCAACATTTctgcacgaaatcgtttcaa...1677...tttctctgttag ctgcccct
D.Pse gcgttcga gtgagtattcca...1389...gacagcgcgattagacaaaa-TTATGCTCAACATTTctgcacgaaatcatctccg...1824...gtttcgttcag ctgcccgt
D.Vir gccttcga gtgagtattaga...1008...-agtgcgcgattagaaaaaa-TTATGCTCAACATTTctgcacgaaatcgtttgaa...1906...ttttgttaacag ctgcccct
D.Yak gccttcga gtgagtatacgc...1604...cccattgcgattagcgaaa-TTATGCTCAACATTTctgcacgaaatcatttcag...1971...ttcttctttcag ctgtccct
** *****
***** ** * *
** ***** ** * *
** *****

```

id=69126 gene=FBgn0260941 name=app segment=chr3L\_12209680\_12213077\_-1 type=IN

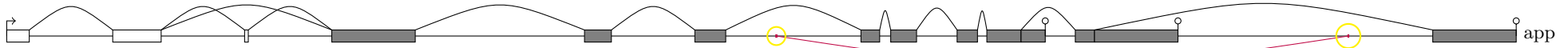
```

D.Mel cgtcatag tacgcagcagca...2174...-atacacacatatgtatggttAAATGTTGGGCaATAAagtgta-tctagcgtatggtt...1439...tctcg-tttccag gtaattcc
D.Sim cgtcatag tacgcagcagca...3479...-acacacacatatgtatggttAAATGTTGGGCaATAAagtgta-tctagcgtatggtt...1430...-ctcgttttcag gtaattcc
D.Sec cgtcatag tacgcagcagca...2175...-atacacacatatgtatggttAAATGTTGGGCaATAAagtgta-tctagcgtatggtt...1418...-ctcgttttcag gtaattcc
D.Ere cgtcatag tacgcagcagca...2106...-atacacacatatgtatggttAAATGTTGGGCaATAAagtgta-tctagcgtatggtt...1445...tatcg-tttccag gtaattcc
D.Ana cgtcatag tacgcagctcgt...1904...tatacaca-atatgtatggttAAATGTTGGGCaATAAagtgtactctagcgtatggtt...1336...ctcct-cgcacag gtaattcc
D.Gri cgtcctag tacgcagccta...2121...-acacacataataattatacttAAATGTTGGGCaATAAaatgtactctagcgtatggtt...2120...tcttc-tgtacag gtaattcc
D.Moj cgtcctag tacgcagctcgc...2693...-atatttataaaaattatacttAAATGTTGGGCaATAAaatgtactctagcgtatggtt...2216...tctcg-ttcgag gtaattcc
D.Pse cgtcatag tacgcagctcgc...1961...aatataca-ttatgtatggttAAATGTTGGGCaATAAaactgatcgtatggtt...2086...tctcg-tccgag gtaattcc
D.Vir cgtcctag tacgcagctcct...1928...-ataaatataataattatacttAAATGTTGGGCaATAAaatgtactctaacgtatcta...2334...tctcg-ttcgag gtaattcc
D.Yak cgtcatag tacgcagcagta...2180...-atacacacatatgtatggttAAATGTTGGGCaATAAagtgta-tctagcgtatggtt...1505...tatcc-tttccag gtaattcc
**** ** *****
***** * * * * * ***** * **

```

id=69142 gene=FBgn0260941 name=app segment=chr3L\_12201038\_12204730\_-1 type=IN VIEW

Figure 428: CS=10.8



```

D.Mel  gtcacctgg  gtgagtagtgat...256...--cagcctctcg---tcgtctctct---GACTTtaACCCAATTc--caa---cggcaaccgctgaggt-----...1231...ctctctttgcag  gtgggaaa
D.Sim  gtcacctgg  gtgagtagtgat...256...aacagcctctcg---tcgtctctct---GACTTtaACCCAATTc--caa---cggcaaccgctgaggt-----...1246...ctctctttgcag  gtgggaaa
D.Sec  gtcacctgg  gtgagtagtgat...254...aacagcctctcg---tcgtctctct---GACTTtaACCCAATTc--caa---cggcaaccgctgaggt-----...1226...ctctctttgcag  gtgggaaa
D.Ere  gtcacctgg  gtgagtagtgat...270...aacagcctctcg---tcgtctctct---GACTTtaACCCAATTc--caa---cggcaaccgctgaggt-----...1214...ctctctttgcag  gtgggaaa
D.Ana  gtcacctgg  gtgagtatcctg...235...--tgccagctgttggcgagct---GACTTtaACCCAATTc--cag---cggcaaccgctgaggt-----...770...ttcacttgag  gtgggaaa
D.Gri  gtcacctgg  gtaagtacatag...92...--tgccagcag-cggcagcgt---GACTTtaACCCAATTcGGCG-----ccaactgctgtgcaaatga...1285...gtctctttgcag  gtgggcaa
D.Moj  gtcacctgg  gtaagtgcgagt...31...-----ccatcgaaaacaactttcacTGACTTtaACCCAATTcctgcg---ccaactgctgagc-----...1147...ctctctttccag  gtgggcaa
D.Pse  gtcacctgg  gtaagtcaagga...214...-----cactgtgccactgcccgtct---GACTTtaACCCAATTccacag---cgccaaccgctgag-----...933...ccctcgttgag  gtgggaaa
D.Vir  gtcacctgg  gtaagtacaaat...93...--tgcccaccgcggctgccc---TGACTTtaACCCAATTtctgc---ccaactgctgaggt-----...1536...gtctctttgcag  gtgggaaa
D.Wil  gtcacctgg  gtaagttagcaa...234...gctccgctctgttgggc--tct---GACTTtaACCCAATTttgagtttcgcaaccgct-----...1629...gtatcttttcag  gtgggaaa
D.Yak  gtcacctgg  gtgagtagtgat...266...--agcctctcg---tcgtcgtgct---GACTTtaACCCAATTc--caa---cggcaaccgctgaggt-----...1252...ctctctttgcag  gtgggaaa
***** ** *** * ***** **** ** ** ** **

```

id=69130 gene=FBgn0260941 name=app segment=chr3L\_12207152\_12208717\_-1 type=IN

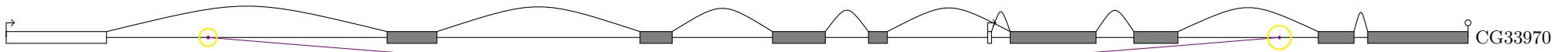
```

D.Mel  cgtcatag  tacgcagcagca...2703...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-cacat...913...tctcgtttccag  gtaattcc
D.Sim  cgtcatag  tacgcagcagca...3993...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-cacat...919...ctcgttttcag  gtaattcc
D.Sec  cgtcatag  tacgcagcagca...2677...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-cacat...919...ctcgttttcag  gtaattcc
D.Ere  cgtcatag  tacgcagcagca...2624...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-aacat...930...tctcgtttccag  gtaattcc
D.Ana  cgtcatag  tacgcagtcctg...2409...--aaaaatgcattttaagcctt---AATTGGGTGAGTTctctcctcgtgtaatgcaaaa-----...834...ctcctcgcacag  gtaattcc
D.Gri  cgtcctag  tacgcagccta...3134...tacctagagtaaaacataaaTGCCtcAATTGGGTGAGTTtgcccttcacaaaacaca-aa---...1104...tctctgtacag  gtaattcc
D.Moj  cgtcctag  tacgcagctcgc...3745...tgccctatgc--taaatgcctc---AATTGGGTGAGTTG---cctccacaacacagaa-agtaa...1166...tctcgttcgag  gtaattcc
D.Pse  cgtcctag  tacgcagctcgc...2708...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-agtaa...1342...tctcgttcgag  gtaattcc
D.Vir  cgtcctag  tacgcagctcct...3095...tgccctatgc--tatatgcctc---AATTGGGTGAGTTG---cctccacaacacaaa-agtaa...1169...tctcgttcgag  gtaattcc
D.Wil  cgtcatag  tacgcagttatc...3391...--acttatgcattttgagcctc---AATTGGGTGAGTT---ttctccaaaatc-acaac...1521...tttcatttcag  gtaattcc
D.Yak  cgtcatag  tacgcagcagta...2727...--aaaaatgcattttaagcctt---AATTGGGTGAGTT---ctctcctaataatgcaaa-aacat...961...tctcgtttccag  gtaattcc
**** ** ***** * * ***** * ** ** **

```

id=69142 gene=FBgn0260941 name=app segment=chr3L\_12201038\_12204730\_-1 type=IN VIEW

Figure 429: CS=13.86



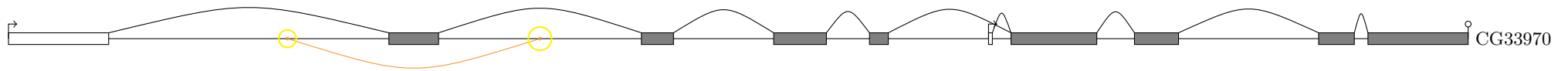
D.Mel	gagcacag	g---taaccgcaggc...3981...aagttttgcccaagctggcaAATTGttTGCTgCATTttCGATTAGCAAAA	tGCA	atttcgaatgaaatgaaa-...909...--ggctatttcag	aactgccg-
D.Sim	gagcacag	g---taaccgcaggc...4000...agct---ggcaaatgtttgctg-----CATTttCGATTAGCAAAA	tGCA	atttcgaatgaaatgaaa-...902...--ggctatttcag	aactgccg-
D.Sec	gagcacag	g---taaccgcaggc...4004...agct---ggcaaatgtttgctg-----CATTttCGATTAGCAAAA	tGCA	atttcgaatgaaatgaaa-...898...--ggctatttcag	aactgccg-
D.Ere	gagcacag	g---taaccgcaggc...3920...agct---ggcaaatgtttgctg-----CATTttCGATTAGCAAAA	tGCA	atttcgaatgaaatgaaa-...982...--ggctatttcag	aactgccg-
D.Gri	agaaaccg	c---aaaccgcaagc...4266...aactttagcggcaattcgcaAATTGttTGCTgCATTttCGATTAGCAGAA	tGCAA	acttgaatgtaaacgaaaat...623...--gccaacgcaa	caacaacca
D.Moj	gagcgtag	agcccaaccac----.4162...aatt---cgcaaatgtttgctg-----CATTttCGATTAGC	-----	aaatatcaactgaaacga----.749...gcagccaacgcaa	cagcag---
D.Per	caacacag	g---taacgacaatc...3820...acttttccccaaacgggcaAATTGttTGCTgCATTttCGATTAGCAAAA	tGCAA	atttcaaataaaacgaaa-...1070...--cactatttcag	-actgcttc
D.Vir	acaggtaa	g---aaaccgaaaa...4283...aatt---cgcaaatgtttgctg-----CATTttCGATTAGC	-----	aaatgtcaactcaaatga----.628...--gccaacaacaa	caacagctt
D.Yak	gagcacag	g---taaccgcaggc...3845...agct---ggcaaatgtttgctg-----CATTttCGATTAGCAAAA	tGCA	atttcgaatgaaatgaaa-...1057...--ggctatttcag	aactgccg-
		*** *		*****	** * * * * **

id=82479 gene=FBgn0053970 name=CG33970 segment=chr3R.22144696.22157117.1 type=I5

D.Mel	tggttctg	gtgagtgaatg...3878...tgactggct-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATGAGCA	ttTGATT	-----gactgctggcgtt-----:::ta-----ttacttcatttcag	caatatgt
D.Sim	tggttctg	gtgagtgaatg...3869...tgtctggct-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATG	-----	agcttttgattgactgttggcgtt-----:::tattgacacattgcctgttacttcatttcag	caatatgt
D.Sec	tggttctg	gtgagtgaatg...3900...tgtctggct-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATG	-----	agctttttattgactgttggcgtt-----:::tattgacacattgtctgttacttcatttcag	caatatgt
D.Ere	tggttctg	gtgagtgaatg...3900...tgtctggga-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATG	-----	agcttttgattgactgttggcatt-----:::tctctgttcatttcag	caatatgt
D.Gri	tggtcctg	gtgagtacatgc...3999...ccttcggctggcaggtgcaTTGACTTTTTaaGCTAATTGAATGGGCAA	tTGATT	-----gactgctagcatttcgcg:::-----tctctatctcattcatag	aaatatgt
D.Moj	tggttctg	gtgagtacatgc...3756...-----cagttgactgttccgGCTAATTGAATG	agtcattactgactgttgcata-----:::-----gtcctcacag	aaatacgt	
D.Per	tggttctg	gtgagtgaatg...3790...catctgtct-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATGAGCA	ttTGATT	-----gactgttggcatt-----:::-----tctctccag	aaatatgt
D.Vir	tggttctg	gtgagtacatgc...3747...-----cagttgtattgattcttagGCTAATTGAATG	-----	aacatttgattgacagttggtt-----:::-----tttgcacag	aaatatgt
D.Yak	tggttctg	gtgagtgaatg...3899...tgtctggca-ggcaggtgcaaTGACTTTTTaaGCTAATTGAATG	-----	agcttttgattgactgttggcatt-----:::gattgacacattgttcttaattaatttcag	caatatgt
		**** ** ***** **		*** * * * *	* **

id=82493 gene=FBgn0053970 name=CG33970 segment=chr3R.22182158.22186285.1 type=IN VIEW

Figure 430: CS=8.64



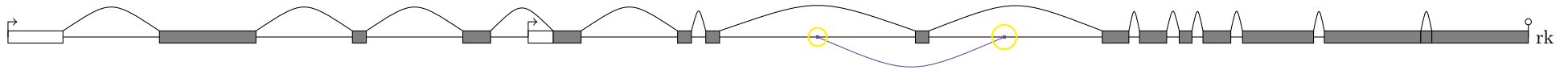
D.Mel	gagcacag	g----taaccgcaggc...4379...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcagcgacacc...533...--ggctatttgcag	aactgccg-
D.Sim	gagcacag	g----taaccgcaggc...4379...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcagcgacact...533...--ggctatttgcag	aactgccg-
D.Sec	gagcacag	g----taaccgcaggc...4390...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcagcgacact...522...--ggctatttgcag	aactgccg-
D.Ere	gagcacag	g----taaccgcaggc...4313...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcagcgacact...599...--ggctatttgcag	aactgccg-
D.Gri	agaaccg	c----aaaccgcaagc...4546...ccatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagtagcactaag...366...--gccaacgacaa	caacaacca
D.Moj	gagcgtag	agcccaaaccac----.4470...ccatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagtagcatcagc...442...gcagccaacgacaa	cagcag---
D.Per	caacacag	g----taacgacaatc...4267...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcaacgacacc...645...--cactatttgcag	-actgcttc
D.Pse	caacacag	g----taacgacaatc...4285...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcaacgacact...627...--cactatttgcag	-actgcttc
D.Vir	acaggtaa	g----aaaccgcaaaa...4561...ccatatacaaaaattggttt	AATCAACTGTGAA	acaactgcaacagcagcagt...351...--gccaacaacaa	caacagctt
D.Yak	gagcacag	g----taaccgcaggc...4255...cgatatacaaaaattggttt	AATCAACTGTGAA	acaactgcagcaacgacact...657...--ggctatttgcag	aactgccg-
		*** *	* ***** * * *	* * **	*

id=82479 gene=FBgn0053970 name=CG33970 segment=chr3R.22144696.22157117.1 type=I5

D.Mel	ggttccat	gtgagtaccat...4304...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...608...gtgcaattgcag	atatggtc
D.Sim	ggttccat	gtgagtaccat...4315...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...597...gtgcaattgcag	atagcgtc
D.Sec	ggttccat	gtgagtaccat...4380...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...532...gtgcaattgcag	atagcgtc
D.Ere	ggttccat	gtgagtaccat...4210...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...702...gtgcaattgcag	atagcgtc
D.Gri	ggttccat	gtaagtactgat...4236...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...676...ttcgcctgtag	ctatggtc
D.Moj	ggttccat	gtaagtactgat...4249...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...663...tactcctgtag	ctatggtc
D.Per	ggttccat	gtgagtgcaaat...4327...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...585...ctttcattgcag	ctatggtc
D.Pse	ggttccat	gtgagtgcaaat...4330...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...582...ctttcattgcag	ctatggtc
D.Vir	ggttccat	gtaagtacagtt...4148...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...764...tactcctgtag	ctatggtc
D.Yak	ggttccat	gtgagtactcca...4304...tgaatattttgcgaaacta	TTCACAGTTGATT	tttcacctgatgcttttcat...608...gtgcaattgcag	atagcgtc
	** *****	** **	** * ***** * *****	* **	** *****

id=82481 gene=FBgn0053970 name=CG33970 segment=chr3R.22157366.22174635.1 type=IN VIEW

Figure 431: CS=9.6



D.Mel	aaagtttt	gtaagtagcaag...557...agcgttgacgt--tctgcgctg-----	CTGTTTACCG	AAATT	tttggcttttccgctgcacg...1110...ctccctttgcag	agagctgg			
D.Sim	aaagtttt	gtaagtagcaag...544...agcgttgacgt--tctgcgctg-----	CTGTTTACCG	AAATT	tttggcttttccgctgcacg...1096...ctccctttgcag	ggaactgg			
D.Sec	aaagtttt	gtaagtagcaag...544...agcgttgacgt--tctgcgctg-----	CTGTTTACCG	AAATT	tttggcttttccgctgcacg...1097...ctccctttgcag	agagctgg			
D.Ere	aaagtttt	gtaagtagcaag...841...agggttgacgt--tctgcgctg-----	CTGTTTACCG	AAATT	tttggcttttccgctgcacg...1087...ctccctttgcag	agaactgg			
D.Ana	aaagtttt	gtgagtaataga...608...acagcttaaattgtcgacgc	CAGCG	TGACGTTTTG	cGTTGCTGTTTACCG	AAATT	tttggcttttgggctgcaca...732...cttcattgcag	ggaactgg	
D.Per	aaagtctt	gtaagtaacaaa...606...cgcgttgacgt--tttgctctg-----	CTGTTTACCG	AAATT	tttggcttttgcactgcata...1022...ctttctttgcag	ggaactgg			
D.Pse	aaagtctt	gtaagtaacaaa...604...cgcgttgacgt--tttgctctg-----	CTGTTTACCG	AAATT	tttggcttttgcactgcata...919...ctttctttgcag	ggaactgg			
D.Vir	aaagtttt	gtaagtaaccca...1935...--tgtcgtcgctgttgctgcag	CTGTTTACCG	AAATT	tttggcttttgcactgcata...1825...ttttctttctag	agaactgg			
D.Wil	aaagtttt	gtaagtagcaag...980...ttcgtcgtgctgcacgc	TGTT	CTGTTTACCG	AAATT	tttggcttttgcactgcata...777...tcttatttgcag	agagctgg		
D.Yak	aaagtttt	gtaagtagcaag...609...cgcgttgacgt--tctgcgctg-----	CTGTTTACCG	AAATT	tttggcttttccgctgcaccg...1131...ctccttttgcag	agagctgg			
	***** *	** ****	*	*	*	*****	**	** **	** ****

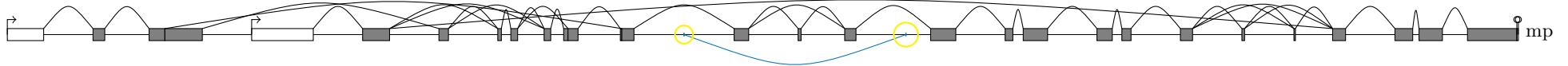
id=37528 gene=FBgn0003255 name=rk segment=chr2L.13987890\_13989636\_-1 type=IN

D.Mel	caggagct	gtaagtatatca...344...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...665...tcgacccttcag	ttccatca		
D.Sim	caggagct	gtaagtatatca...358...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...664...tcgaccctccag	ttccatca		
D.Sec	caggagct	gtaagtatatca...358...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...673...tcgaccctccag	ttccatca		
D.Ere	caggagct	gtaagtatatca...363...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...639...tcgaccctgcag	ttccatca		
D.Ana	caggagct	gtaagtatatca...360...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	gaTAAT	taTGAGc	ATGTTA	aaTGTTG	cgataaaagccacgctgtgc--...628...acaccaccag	gtccatga
D.Per	caggagct	gtaagtcttccc...409...gcagctcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...641...tgttccttcag	ttctatga		
D.Pse	caggagct	gtaagtcttccc...409...gcagctcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...712...tgttccttcag	ttctatga		
D.Vir	caggagct	gtaagtattaac...1315...atgtctcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...1404...tattctttgcag	gtccatga		
D.Wil	caggagct	gtaagtatttct...338...gggaagatgaaagaaattc	AAATTc	TGGTAAACAG	GATA	-----	attatgaccatgttaa	aatgt...1022...cactccatgcag	ctctatga	
D.Yak	caggagct	gtaagtatatca...363...agaactcccaaggaaattc	AAATTc	TGGTAAACAG	-----	gataattatgagcatgttaa----	...667...tcgaccctccag	ctccatca		
	*****	*****	*	*****		** *	** *	** *	***	** ** *

id=37530 gene=FBgn0003255 name=rk segment=chr2L.13986732\_13987820\_-1 type=IN VIEW

Figure 432: CS=10.8





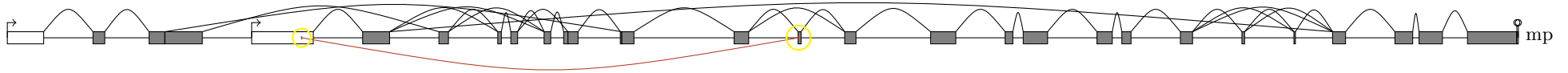
D. Mel	gacacacc	gtaagtaccagt...598...	gggctgcatgttttcctatg	TCAAACA	TCAT	aaTTTG	cactgtgcaccatgtgtgtg-----	...1444...	ccatttatccag	ggagccac
D. Ana	gtcacacc	gtaagtatcaat...343...	atcctgcatgttttcctctg	TCAAACA	TCAT	aaTTTG	cacagtgcagtgtgtgtg-----	...1535...	ggacgcaaccag	ggagccac
D. Gri	gacttacc	gtaagtacatgc...272...	cgctgctctgttatcccatg	TCAAACA	TCAT	aaTTTG	cagtgtgta-tgtgtgtgctg-----	...1504...	ttgcatatacag	ggtgccac
D. Moj	gacttacc	gtaagtacatgc...198...	acacgcacacgactgccaaag	TCAAACA	TCAT	aaTTTG	-----tgcg-tgtgtgtgctgtagc...	...1498...	ttgtatttacag	ggtgccac
D. Per	gtcacacc	gtaagtagagcc...245...	tccctcgatgttttcctatg	TCAAACA	TCAT	aaTTTG	cactgtgcatc---tgcgtggag---	...1737...	acgtttatccag	ggagccac
D. Pse	gtcacacc	gtaagtagagcc...245...	tccctcgatgttttcctatg	TCAAACA	TCAT	aaTTTG	cactgtgcatc---tgcgtggag---	...1744...	acgtttatccag	ggagccac
D. Vir	gacttacc	gtaagtaccagc...213...	cgctgctctttaaagcaag	TCAAACA	TCAT	aaTTTG	-----tgcg-tgtgtgctgcttctgtg...	...1372...	tttcatttcag	ggtgccac
D. Wil	gacatacg	gtaagcagtcaa...276...	actgcatgtgttttcctaca	TCAAACA	TCAT	aaTTTG	caatgtgaaccggaaatgg-----	...2162...	tcattccttag	ggagccac
D. Yak	gacacacc	gtaagtaccagt...617...	gggctgcatgttttcctatg	TCAAACA	TCAT	aaTTTG	cactgtgcaccatgtgtgtg-----	...1500...	ccatttaaccag	ggagccac
	* * *	**** *		*****			**	*	**	****

id=15612 gene=FBgn0260660 name=mp segment=chr3L.7028982-7031104.1 type=IN

D. Mel	gcgatccg	gtaagtcagagg...2038...	tttcggaattgatttgattt	CAAAATGAGTTTGA	aattgaatttttttttctg-...	...218...	accaaaaaacag	ggtcacia
D. Ana	gcgatccg	gtaagtcagagg...2254...	tttcggaattgatttgattt	CAAAATGAGTTTGA	aattgaatttttttctgtctg-	...173...	actttcctgcag	ggtcacia
D. Gri	gtgaaaag	gtgagtcagagg...3422...	ttttagaattgatttgattt	CAAAATGAGTTTGA	aattgaatttttgcgcagac-	...153...	tttattgaacag	ggccacia
D. Moj	gtgagaag	gtgagtcagagg...2546...	ttttagaattgatttgattt	CAAAATGAGTTTGA	aattgaatttttgcgcagac-	...122...	ctccaataacag	ggtcacia
D. Per	gcgatccg	gtaagtcagagg...2429...	tttcggaattgatttgattt	CAAAATGAGTTTGA	aattgaa-ttttttctgtcgtc...	...206...	gccttctgctag	ggtcacia
D. Pse	gcgatccg	gtaagtcagagg...2398...	tttcggaattgatttgattt	CAAAATGAGTTTGA	aattgaa-ttttttctgtcgtc...	...210...	gccttctgctag	ggtcacia
D. Vir	gtgaaaag	gtgagtcagagg...2639...	ttttagaattgatttgattt	CAAAATGAGTTTGA	aattgaatttttgcgcagac-	...117...	cgccaataacag	ggtcacia
D. Wil	gcgaacag	gtaagtcactag...4209...	atccaaaattgatttgattt	CAAAATGAGTTTGA	aattgaatttcttttcttct-	...217...	gtatattctcag	ggtcacia
D. Yak	gcgatccg	gtaagtcagagg...2219...	tttcggaattgatttgattt	CAAAATGAGTTTGA	aattgaatttcttttcttct-	...209...	tggcaaaaacag	ggtcacia
	* * *	** *****	*	*****	** *		**	** * *

id=15618 gene=FBgn0260660 name=mp segment=chr3L.7034232-7036565.1 type=IN VIEW

Figure 433: CS=9.72



D. Mel	tccagcag	ttcagatggcca...988...---	gcaaagtatttgcaattaa	TTATCTGT	gATT	ttgtcaacatatta	aatatt-...87...ttcggcttaag	gtaa	aatat
D. Sec	tccagcag	ttcagatggcac...986...---	gcaaagtatttgccattaa	TTATCTGT	gATT	ttgtcaacatatta	aatatt-...87...ttcggcttgaag	gtaa	aatat
D. Ere	tccagcag	ttcagatggcca...1014...---	gcaaagtatttgccattaa	TTATCTGT	gATT	ttgtcaacatatta	aatatt-...83...ttcggcttgaag	gtaa	aatat
D. Ana	tccaacag	ttcagaccggca...942...--	aggcaaagtgtttgcaatta	AATTATCTGT	gATT	ttgtcaacatatta	aatatt-...75...atcggcctagag	gtaa	aatat
D. Gri	gcaaacag	ttaacatgtgcg...1499...--	acaataacaatttgaatta	AATTATCTGT	gATT	ttgtcaacatattcaatatta	...105...tgtggtatatag	ttag	ctca
D. Moj	gcaaacag	ttaacatgtgcg...1534...--	taataactacttgaatta	AATTATCTGT	gATT	ttgtcaacatattcaatatta	...94...ctcggcccaag	gtaa	atac
D. Per	ccacactg	ttcagatggcca...1241...--	aagcaaagtatttgcaatta	AATTATCTGT	gATT	ttgtcaacatattcaatact-...	65...ttcggcttaag	gtaa	aatat
D. Pse	ccacactg	ttcagatggcca...1245...--	aagcaaagtatttgcaatta	AATTATCTGT	gATT	ttgtcaacatattcaatact-...	65...ttcggcttaag	gtaa	aatat
D. Vir	gcaaacag	ttaacatgtgcg...1342...aata	aataacta-ttgaatt	TAATTATCTGT	gATT	ttgtcaacatattcaatatta	...101...ctcaactgaag	gtaa	aatat
D. Yak	tccagcag	ttcagatggcca...1009...---	gcaaagtatttgccattaa	TTATCTGT	gATT	ttgtcaacatatta	aatatt-...82...ttcggcttgaag	gtaa	aatat
		* * *	** * *	*** ** *	*****	***** ** *	** * *	** *	*

id=15595 gene=FBgn0260660 name=mp segment=chr3L\_7007225\_7008376.1 type=AN

D. Mel	attacgat	gtaagtattcca...2353...tcttgtaa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Sec	attacgat	gtaagtattcct...2426...tcttgtaa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Ere	attacgat	gtaagtattctg...2375...tcttgtaa-	caaccaacacat	AAATaACAG	ATAA	attg
D. Ana	attacgat	gtaagtattccg...1590...-cttataccaat	caacacat	AAATaACAG	ATAA	attg
D. Gri	gctacgat	gtaagtacacct...2106...tcttgtaa-	ccatcaacacat	AAATaACAG	ATAA	attg
D. Moj	gctatgat	gtgagtacaagt...1882...tcttgtaa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Per	actacgat	gtaagtatcctt...2592...ttatataa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Pse	actacgat	gtaagtatcctt...2539...ttatataa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Vir	gctatgat	gtgagtacaact...2432...tcttgtaa-	caatcaacacat	AAATaACAG	ATAA	attg
D. Yak	actacgat	gtaagtattcca...2527...tcttgtaa-	caatcaacacat	AAATaACAG	ATAA	attg
		** *** ** ****		* ** * *	*****	*****

id=15614 gene=FBgn0260660 name=mp segment=chr3L\_7031252\_7033645.1 type=IN VIEW

Figure 434: CS=13.8



D.Mel	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...59...aaaaccgaaaa	gtaagaaa
D.Sim	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...59...aaaaccgaaaa	gtaagaaa
D.Sec	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...59...aaaaccgaaaa	gtaagaaa
D.Ere	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...63...aaaaccgaaaa	gtaagaaa
D.Ana	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...63...aaaaccgaaaa	gtaagaaa
D.Gri	tcgcattc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...91...aatcacccaaaa	gcaataaa
D.Per	tcgctttc	agtttgaattgtgcctcgttaagaaggatattcgttacatTGTGTAAAGTGTTAttataatttcacaaacaaa...61...gccccaaaaac	gtaagaga
D.Pse	tcgctttc	agtttgaattgtgcctcgttaagaaggatattcgttacatTGTGTAAAGTGTTAttataatttcacaaacaaa...61...gccccaaaaac	gtaagaga
D.Vir	tcgcattc	agtgtgaattgtgcctcgtgaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...123...aatataataaaa	ttaaataa
D.Yak	tcgctttc	agtttgaattgtgcctcgttaagaaggatattCGTTacATTGTTGTTaaGTTGTTattataatttcacaaacaaa...59...aaaaccgaaaa	gtaagaaa

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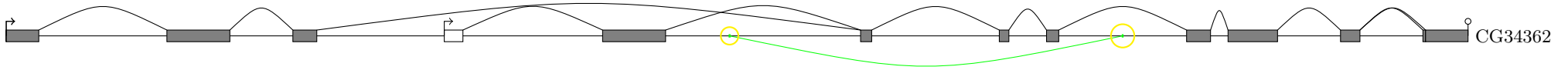
id=55408 gene=FBgn0085391 name=CG34362 segment=chr3R.23873296\_23873443.1 type=AN

D.Mel	-accgaaaa	gtaagaaaaagg...589...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcctgcctgcccactggg----...922...---atatttccatag	aaaaatat
D.Sim	-accgaaaa	gtaagaaaaagc...575...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcctgcctgcccactggg----...914...---atatttccatag	aaaaatat
D.Sec	-accgaaaa	gtaagaaaaagc...576...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcctgcctgcccactggg----...903...---atatttccatag	aaaaatat
D.Ere	-accgaaaa	gtaagaaaaagc...594...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcctgcctgcccactggg----...914...---atatttccatag	aaagttaa
D.Ana	-accgaaaa	gtaagaaaaagc...561...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcc-gccagccgacatcgc----...993...---aaattttcccta	agaatct-
D.Gri	-accgaaaa	gcaataaatgt...627...gcttatgtggccacataaac-GACAACgAGCAGcCAATaAATGcttccagccagccaacgcog----...1053...---atatttccatag	aaacttta
D.Per	-ccaaaaac	gtaagagaaact...1145...gtcgaggctgcgcctgattcTGACACTT----GcCAACA-----cttggggcgtacagggtgac...696...ttgaaatt---atag	aaaaatca
D.Pse	-ccaaaaac	gtaagagaaact...1119...gtcgaggctgcgcctgattcTGACACTT----GcCAACA-----cttggggcgtacagggtgac...669...tttaaat---atag	aaaaatca
D.Vir	taataaaat	taaatagaaa...760...gcttatatgccacataaac-GACAACgAGCAGcCAATaAATGctttcagccagccaacgcog----...1041...---atatttccatag	ggctatat
D.Yak	-accgaaaa	gtaagaaaaagc...584...gcttgtgggccacataaac-GACAACgAGCAGcCAATaAATGctgcctgcctgcccactggg----...935...---atatttccatag	aaaattat

\*\*\* \*\* \*

id=55409 gene=FBgn0085391 name=CG34362 segment=chr3R.23873444\_23875040.1 type=IN VIEW

Figure 435: CS=4.8



D.Mel caagcagg gtaagccaaaga...3408...ggccgcgacgacgacgttgc-----CGTTAATTTtCGCTTTGCTTtcattttcgca---aaattaccg-----...1495...cttttttgcag aacaattc  
D.Sim caagcagg gtaagccaaaga...3391...ggccgcgacgacgacgttgc-----CGTTAATTTtCGCTTTGCTTtcattttcgca---aaattaccg-----...1512...cttttttgcag aacaattc  
D.Sec caagcagg gtaagccaaaga...3398...ggccgcgacgacgacgttgc-----CGTTAATTTtCGCTTTGCTTtcattttcgca---aaattaccg-----...1505...cttttttgcag aacaattc  
D.Ere caagcagg gtaagccaaaga...3457...ggccgcgacgacgacgttgc-----CGTTAATTTtCGCTTTGCTTtcattttcgca---aaattaccg-----...1446...cttttttgcag aacaattc  
D.Ana caagcagg gtaagttctgaa...3409...--ttaaatttatttaacaca-----AAAGCTTTCGCCA-----tttcgcatitttgcttgctg-----...1503...tttttttgcag aacaattc  
D.Gri caagcagg gtaagcaataa...2801...aattgtcattttgcttttg AGTTGACAAcAGCAACAA caacagcagcagcaacaata-----...2106...ttctcttgcag aacaattc  
D.Per caagcagg gtaagccaaaca...4084...cgacttt---ttctg-tgccaaagAGACAAAGcACACAAAAATA-----ataataaatgattgcaatt...821...attttttgcag aacaattc  
D.Pse caagcagg gtaagccaaaca...4080...cgacttt---ttctg-tgccaaagAGACAAAGcACACAAAAATA-----ataataaatgattgcaatt...825...attttttgcag aacaattc  
D.Vir caagcagg gtaagcaaaaga...3024...ccgattacgttttctgtgc-----CGTTAATTTtCGCTTTGCTTtcattttcgca---aaattaccg-----...1879...tatctttgcag aacaattc  
D.Wil caagcagg gtaagcttcta...4396...gacttt---ttctg-tgccaaagaGACAAAGCAcAAAAAT-----ataataaatgattgctgctt---...511...ttctattgcag aacaattc  
D.Yak caagcagg gtaagcttaaga...3937...-----tt---ttctg-tgccaaagagacaAAGCACAAAAATA-----ataataaatgattgctgattc...973...cttttttgcag aacaattc  
\*\*\*\*\* \*\* \* \* \* \* \* \*\* \*\* \*

id=55411 gene=FBgn0085391 name=CG34362 segment=chr3R.23876029\_23901398.1 type=IN

D.Mel gagtaaaag gtaaggaaatca...2871...---atgcagcgcacacaagcac---AAAGCAAAGTGcAAATTAGTGaaacatggcgctct---aaagta-...1312...catcaccgcgag agaacatc  
D.Sim gagtaaaag gtaaggaaatca...2881...---atgcagcgcacacaacac---AAAGCAAAGTGcAAATTAGTGaaacatggcgctct---aaagta-...1303...catcaccgcgag agaacatc  
D.Sec gaataaaag gtaaggaaatca...2718...---atgcagcgcacacaacac---AAAGCAAAGTGcAAATTAGTGaaacatggcgctct---aaagta-...2186...catcaccgcgag agaacatc  
D.Ere gagtaaaag gtaaggaaatca...2867...---aggcaggcgcacacaacac---AAAGCCcAAGTGcAAATTAGTGaaacatgacgctct---aaagta-...1361...catcaccgcgag agaacatc  
D.Ana gagtaaaag gtaaggaaatca...3189...-gtggccgaagcgcatatcatt-----TGTGGcAAAGCT--TTcaaaagtatttgcg---agcttg-...1206...cctcaccgcgag agaacatc  
D.Gri gagtaaaag gtaaggaaatca...3662...-----acctcgtctgaaagccctttgaTTGTTGTTcTTGTgcTAGTT-----gtgtgatgtatgtgtgtgt...1243...tgccacctag aaaacatc  
D.Per gagtaaaag gtaaggaaatca...3674...-tgttgcatg-tcattgggcca---TATTTTg--TGTTTGTtT-----ggcatgttcgctgcacagcc...1233...tttttctgcag agaacatc  
D.Pse gagtaaaag gtaaggaaatca...3573...-tgttgcatg-tcattgagcca---TATTTTg--TGTTTGTtT-----ggcatgttcgctgcacagcc...1334...ttcttttgcag agaacatc  
D.Vir gagtaaaag gtaaggaaatca...3174...-tgaaacgatggcagaagcac---AAAGCAAAGTGcAAATTAGTGaaacatgctca---aaagta-...1730...ttcacttttag agaacatc  
D.Wil gagtaaaag gtaaggaaatca...2869...-ttggtgcacctogcaatag-----GTTTTTgAtTGTgTGT-----gcctctgttctgctactgc...2037...tttttttgcag agaacatc  
D.Yak gagtaaaag gtaaggaaatca...3353...-tgttgcatg-tcattgagcca---TATTTTg--TGTTTcttcggcatgttcgctgctgctg---...1025...ttctctgcag agaacatc  
\*\* \*\*\*\*\* \* \* \* \* \*\*

id=55417 gene=FBgn0085391 name=CG34362 segment=chr3R.23904355\_23908622.1 type=IN VIEW

Figure 436: CS=11.88



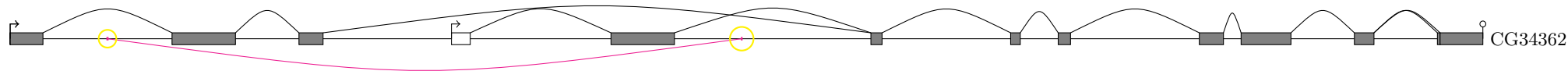
D. Mel	gctgcaca	gtgagtacagtt...3043...	gttttccattgttttcacgc	<b>TCAA</b>	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...669...	cgcttcgctttc	agtttgaa
D. Sim	gctgcaca	gtgagtacagtt...3023...	gttttccattgttttcacgc	<b>TCAA</b>	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...654...	cgcttcgctttc	agtttgaa
D. Sec	gctgcaca	gtgagtacagtt...2968...	gttttccattgttttcacgc	<b>TCAA</b>	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...645...	cgcttcgctttc	agtttgaa
D. Ere	gctgcaca	gtgagtacagtt...3057...	gttttccattgttttcacgc	<b>TCAA</b>	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...695...	cgcttcgctttc	agtttgaa
D. Ana	gcttcaca	gtaagtatgagt...2856...	-----cattgttttcacgctcaac	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...741...	cgattcgctttc		agtttgaa
D. Gri	attacaca	gtgagttagaca...3627...	-----ctattgttttcacgctcaac	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaa...681...	cgcttcgcattc		agtttgaa
D. Per	gctgcaca	gtgagtacacac...3077...	-----ctattgttttcacgctcaac	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaa...820...	cgcttcgctttc		agtttgaa
D. Pse	gctgcaca	gtgagtacacac...3116...	-----ctattgttttcacgctcaac	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaa...832...	cgcttcgctttc		agtttgaa
D. Vir	gttacaca	gtgagttagaca...4191...	-----ctattgttttcacgctcaac	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatc...718...	cgcttcgcattc		agtttgaa
D. Wil	attgcata	gtgagtacttta...3078...	---tttctattgttttcacgctc	<b>AACAAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaa...750...	cgcttcgccttc		agtttgaa
D. Yak	gctgcaca	gtgagtacagtt...3167...	gttttccattgttttcacgc	<b>TCAA</b>	<b>AAAAGGCAGACAATTAG</b>	ttttcttaaacgacaaatca...684...	cgcttcgctttc	agtttgaa
				<b>* * * *</b>	<b>** *****</b>	<b>* ***** *</b>	<b>* ***** *</b>	<b>*** *****</b>

id=55407 gene=FBgn0085391 name=CG34362 segment=chr3R.23869498\_23873295\_1 type=IN

D. Mel	gaaatctc	gtaagtattaaa...1301...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGcCCTTTTttTTGG</b>	cTTtgTTTTctgctt--ttt...1005...	atTTcttgCag	cgactgtc
D. Sim	gaaatctc	gtaagtattaaa...1309...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGcCCTTTTttTTGG</b>	cTTtgTTTTctgctt--ttt...1015...	atTTcttgCag	cgactgtc
D. Sec	gaaatctc	gtaagtattaaa...1318...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGcCCTTTTttTTGG</b>	cTTtgTTTTctgctt--ttt...1009...	atTTcttgCag	cgactgtc
D. Ere	gaaatctc	gtaagtattaaa...1301...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGcCCTTTTttTTGG</b>	cTTtgTTTTctggtt--ttt...1028...	ctTTTTtgCag	cgactgtc
D. Ana	gaaatctc	gtaagtattaaa...1129...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTT</b>	-----tttctgatatatttt--ttg...1036...	ttctcttgCag	cgactgtc
D. Gri	gaaatctc	gtaagtattaaa...1367...	-----aaaagttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTT</b>	-----ttttgTTTTccattt--ttt...761...	tctcttttgCag	ggattgcc
D. Per	gaaatctc	gtaagtattaaa...1450...	-----cttttatgctgctgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTT</b>	-----tccccattgagcctgtgt...1068...	ttctcttttgCag	cgactgtc
D. Pse	gaaatctc	gtaagtattaaa...1356...	-----cttttatgctgctgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTT</b>	-----tccccattgagcctgtgt...1077...	ctctcttttgCag	cgactgtc
D. Vir	gaaatctc	gtaagtattaaa...1239...	---ttgtcaaaagttttatg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTT</b>	-----ttgTTTTcggtttatTTT...750...	ttctcattgCag	tgattgcc
D. Wil	gaaatctc	gtaagtattaaa...1458...	---aaaagttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTTGTT</b>	-----ttttctttttctttt--ttt...867...	tttattgCag	cgactgtc
D. Yak	gaaatctc	gtaagtattaaa...1393...	---gtcaaaacttttatgctg	<b>CTGG</b>	<b>cGTTGTTTGCCcTTTTttTTGG</b>	cTTtgTTTTctggtt--ttg...1459...	tatTTTTgCag	cgactgtc
				<b>*****</b>	<b>***** ** *</b>	<b>*</b>	<b>**</b>	<b>** ** *</b>

id=55413 gene=FBgn0085391 name=CG34362 segment=chr3R\_23901487\_23903882\_1 type=IN VIEW

Figure 437: CS=10.56



D.Mel	gcactagt	gtaagtgagcac...1436...	tgttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2110...	ttttatttcag	ttaaataa
D.Sim	gcactagt	gtgagcgagcac...1392...	tgttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2095...	ttttatttcag	ttaaataa
D.Sec	tcactagt	gtgagtgagcac...1438...	tgttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2088...	ttttatttcag	ttaaataa
D.Ere	gcactagt	gtgagtgagcac...1470...	tgttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2086...	tttaatttcag	ttaaataa
D.Ana	gtgccagt	gtgtgtgagcac...1707...	ttttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...1925...	ttttatctttt	ttagccaa
D.Gri	gtgtgtgt	gtgtgtgagcgt...2346...	cgctgtgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2118...	cttaattaactc	ttactct
D.Per	ggccttgt	gcctgtgccaca...2499...	gcgagttgtgag---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2408...	ctttcttttcag	ttactct
D.Vir	gtgtctgt	gtgtgtgagcga...3887...	tgccatttcaggcgtgtgc---	AATGAAAAGCAA	---	cctttttaa--cagcaatacga...	1025...	tttattttcag	ttgaacaa	
D.Wil	gtgtctgt	aaagcgaccga...4307...	tgccatttcaggcgtgtgc---	AATGAAAAGCAA	---	cctttttaa--cagcaatacga...	605...	tttattttcag	ctaagctg	
D.Yak	gcactagt	gtgagtgagcac...1473...	tgttgcgagtt---gc-tgccgc	CTGGcAATTTTT	cgGTGA	taaaatatttaaat	taatt-----	...2111...	tttaatttcag	ctaaatat

\* \*

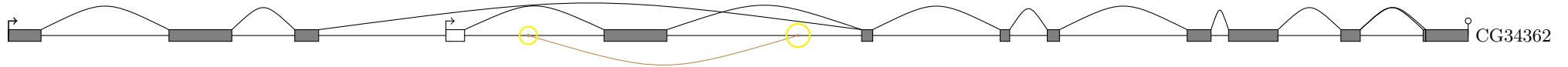
id=55403 gene=FBgn0085391 name=CG34362 segment=chr3R.23852593\_23856220\_1 type=IN

D.Mel	caagcagg	gtaagccaaaga...3436...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1474...	ctttttttgcag	aacaattc	
D.Sim	caagcagg	gtaagccaaaga...3419...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1491...	ctttttttgcag	aacaattc	
D.Sec	caagcagg	gtaagccaaaga...3426...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1484...	ctttttttacag	aacaattc	
D.Ere	caagcagg	gtaagctaaaga...3485...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1425...	ctttttttgcag	aacaattc	
D.Ana	caagcagg	gtaagtctgaa...3488...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1422...	ttttttttgcag	aacaattc	
D.Gri	caagcagg	gtaagcaataa...3400...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1510...	ttctctttgcag	aacaattc	
D.Per	caagcagg	gtaagccaaaca...3606...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1304...	atthttttgcag	aacaattc	
D.Vir	caagcagg	gtaagcaaaaga...3038...	tgctgccgttaatttttcgc-	TTTGC	---	TTTTCATT	ttcgaa----	aattaccggaaat...	1874...	tatctttttgcag	aacaattc
D.Wil	caagcagg	gtaagtccttga...3886...	ttctgccgttaatttttcgc-	TTTGC	---	TTTTCATT	ttcgaa----	aattaccggaaat...	1026...	ttctatttcag	aacaattc
D.Yak	caagcagg	gtaagcttaaga...3385...	tttcgc--tttgcttttcattt	TCGCAAAATT	aCCGG	-----	aaatgtaatttctgcacgt...	1525...	ctttttttgcag	aacaattc	

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id=55411 gene=FBgn0085391 name=CG34362 segment=chr3R.23876029\_23901398\_1 type=IN VIEW

Figure 438: CS=10.8



D. Mel	accgaaaa	gtaagaaaaagg...499...	gaacgctttttg	cg	tgcatg	--TATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	CATA	----	tccacattatgtacaactac----	...1001...	-atatttccatag	aaaaatat
D. Sim	accgaaaa	gtaagaaaaagc...485...	gaacgctttttg	cg	tgcatg	--TATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	CATA	----	tccacattatgtacaactac----	...993...	-atatttccatag	aaaaatat
D. Sec	accgaaaa	gtaagaaaaagc...486...	gaacgctttttg	cg	tgcatg	--TATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	CATA	----	tccacattatgtacaactac----	...982...	-atatttccatag	aaaaatat
D. Ere	accgaaaa	gtaagaaaaagc...504...	gaacgctttttg	cg	tgcatg	--TATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	CATA	----	catatccacattatgtacaa----	...997...	-atatttccatag	aaagttaa
D. Ana	accgaaaa	gtaagaaaaagc...422...	acgctttttg	cg	tgcatg	gtaTATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	-----	gtgtgtt-gtgttttggcca-----	...1136...	aaattttccta	agaatct-	aaacttta
D. Gri	accgaaaa	gcaataaatgt...842...	ttgtaatttttt	tata	-----	TTTG	-----	tgTGTG	ggTTT	ttgtgttagcattttgg-ta-----	...844...	-atatttcaattc	aaacttta	aaacttta	aaacttta
D. Per	ccaaaaac	gtaagagaaact...164...	atatttctgtat	gagttc	ttta	-----	GTTTTGTG	a-----	TTTTG	-----	agtgttggta--tagtttcctt...	1676...	-ttgaaattatag	aaaaatca	aaaaatca
D. Wil	agcaaaag	gaaggaagaaag...663...	gtgtg-tgtgtg	tg	gcctg	-aGTTTTgtTGTG	-----	TGTTG	-----	aatgagtaagtgtgtg--ta-----	...1157...	-aaaagaaaaaa	aaaagctg	aaaagctg	aaaagctg
D. Yak	accgaaaa	gtaagaaaaagc...494...	gaacgctttttg	cg	tgcatg	--TATTTTgtTGTG	ccTGTG	gTGT	TTTGGC	CATA	----	tccacattatgtacaactac----	...1014...	-atatttccatag	aaaaatat
	***	* * *	* * *	* * *	* * *	****					** * *				* *

id=55409 gene=FBgn0085391 name=CG34362 segment=chr3R.23873444\_23875040\_1 type=IN

D. Mel	caagcagg	gtaagccaaaga...3952...	tcgcattcg	cgacttttttc	TGTGCCAAAg	aGACA	aAGCACACAAAAATA	aataataaatgattgcgattc...	943...	cttttttgcag	aacaattc	
D. Sim	caagcagg	gtaagccaaaga...3944...	tcgcactcg	cgacttttttc	TGTGCCAAAg	aGACA	aAGCACACAAAAATA	aataataaatgattgcgattc...	951...	cttttttgcag	aacaattc	
D. Sec	caagcagg	gtaagccaaaga...3936...	tcgcattcg	cgacttttttc	TGTGCCAAAg	aGACA	aAGCACACAAAAATA	aataataaatgattgcgattc...	959...	cttttttacag	aacaattc	
D. Ere	caagcagg	gtaagcctaaaga...3934...	gcactcg	cgactttttctgt	GCCA	caGAGACA	aAGCACACAAAAATA	aataataaatgattgcgattc...	964...	cttttttgcag	aacaattc	
D. Ana	caagcagg	gtaagtctgaa...4032...	-----	tttctgtg	c	caaagagaca	-AGCACACAAAAATA	aataataaatgatttcaattc...	879...	tttttttgcag	aacaattc	
D. Gri	caagcagg	gtaagcaataa...3966...	-----	tttttctgtg	c	caaagagac	-AAAGCACACAAA	aataataaatgattgcg---	947...	ttctctttgcag	aacaattc	
D. Per	caagcagg	gtaagccaaaca...4087...	-----	cttttctgtg	c	caaagaga	-CAAAGCACACA	caAAAAT	aataataaatgattgcaatt...	822...	attttttgcag	aacaattc
D. Wil	caagcagg	gtaagtcctga...4398...	-----	cttttctgtg	c	caaagaga	-CAAAgCACACAAA	AATA	aataataaatgattgcgttc...	511...	ttctattgcag	aacaattc
D. Yak	caagcagg	gtaagcctaaaga...3922...	tcgcattcg	cgacttttttc	TGTGCCAAAg	aGACA	aAGCACACAAAAATA	aataataaatgattgcgattc...	973...	cttttttgcag	aacaattc	
	*****	*****	*		***	* *	* *****			* * **	*****	

id=55411 gene=FBgn0085391 name=CG34362 segment=chr3R.23876029\_23901398\_1 type=IN VIEW

Figure 439: CS=9.72



D. Mel	gTTCATAG	TCAGc	----	gcgggacagacaaaggccc-...	926...	cctcgtccacag	acacggta
D. Sec	gTTCATAG	TCAGc	----	gcgggacagaccttagccc-...	896...	cctcgtccacag	acacggta
D. Ere	gTTCATAG	TCAGc	----	gcgggacagacctgagccc-...	916...	cctcctccacag	acacggta
D. Ana	gTTCATAG	TCAGc	----	gctggaatcgctcagctcg-...	876...	caatttctgcag	acacggta
D. Gri	gTTCATAG	TCAGc	ctggagctggagcagcaaac-----	...	1257...	tcctatcggcag	acacggta
D. Moj	gTTCATAG	TCAGc	----	gctggagcagatcacaaaa-...	1685...	attctactgcag	acacggta
D. Per	gTTCATAG	TCAGT	----	gctggaggcacacgctccat...	1181...	tgctccctttag	acacggta
D. Pse	gTTCATAG	TCAGT	----	gctggaggcacacgctccat...	1169...	tgctccctttag	acacggta
D. Vir	gTTCATAG	TCAGc	----	gctggagcagcaaaccaaaa-...	1491...	ctctactgcag	acacggta
D. Wil	gTTCATAG	TCAGc	----	gctggatccccgcacactt-...	1152...	ctcaccctgcag	acacggta
	*****	****		** **		*	** *****

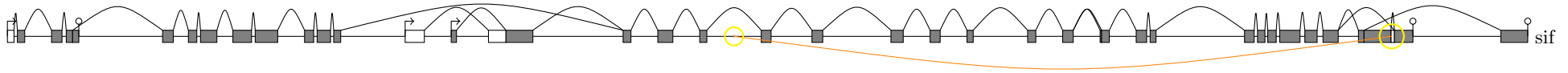
id=103356 gene=FBgn0085427 name=CG34398 segment=chr2L\_8931939\_8932900.1 type=IN

D. Mel	gttcatag	tcagcgcgggac...	.665...	-agtag-aatcaactctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.221...	cctcgtccacag	acacggta
D. Sec	gttcatag	tcagcgcgggac...	.640...	-agtag-aatcaactctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.216...	cctcgtccacag	acacggta
D. Ere	gttcatag	tcagcgcgggac...	.665...	-agtag-aatgaactctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.211...	cctcctccacag	acacggta
D. Ana	gttcatag	tcagcgcgggac...	.611...	-cagtag-aatcaactctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.225...	caatttctgcag	acacggta
D. Gri	gttcatag	tcagcgcgggac...	.932...	-ttag-tattgattctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.285...	tcctatcggcag	acacggta
D. Moj	gttcatag	tcagcgcgggac...	.1403...	-ttag-tatcaattctaaaca-	CTGACTATGAAC	atggtgctggaaccagaaa...	.242...	attctactgcag	acacggta
D. Per	gttcatag	tcagcgcgggac...	.917...	-agtagtaactcaactctaaaa-	ACTGACTATGAAC	atggtgctggaaccagaaa...	.224...	tgctccctttag	acacggta
D. Pse	gttcatag	tcagcgcgggac...	.905...	-agtagtaactcaactctaaaa-	ACTGACTATGAAC	atggtgctggaaccagaaa...	.224...	tgctccctttag	acacggta
D. Vir	gttcatag	tcagcgcgggac...	.1184...	-ttag-tatcaattctaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.267...	ctctactgcag	acacggta
D. Wil	gttcatag	tcagcgcgggac...	.842...	-tttctctgaactcttaaaaa-	CTGACTATGAAC	atggtgctggaaccagaaa...	.270...	ctcaccctgcag	acacggta
	*****	****	*	*	*	*	*	*	** *****

id=103356 gene=FBgn0085427 name=CG34398 segment=chr2L\_8931939\_8932900.1 type=IN VIEW

Figure 440: CS=9.6





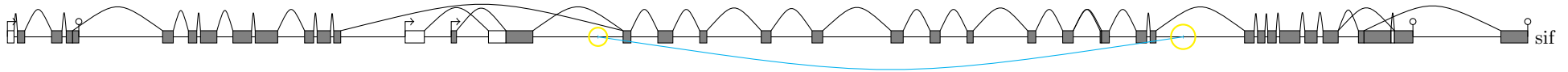
D.Mel	----ttgagtcg	gtaagtaaat...	4716...	gaaaattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	194...	ttcgccccgcag	gatcaaa
D.Sim	gccattgagtcg	gtaagtaa----	4719...	caaaattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	191...	ttcgccccgcag	gatcaaa
D.Sec	----ttgagtcg	gtaagtaaat...	4737...	caaaattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	173...	ttcgccccgcag	gatcaaa
D.Ere	----ttgagtcg	gtaagtaatac...	4683...	cgatgcgaaagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	227...	ttcgccccgcag	gatcaaa
D.Ana	----ttgagtcg	gtgagtaaat...	4742...	aacaattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	168...	ctctccccgcag	gatcaaa
D.Moj	----ttgaatcg	gtaagtgaatgc...	3463...	gaaaaatgctgctgcacatg	ACGCGT	GATTTATGT	aatttcgtcaaatggcagcc...	1448...	tcgctcttcag	gatcaaa
D.Per	----ttgaatcg	gtaagtaaat...	4628...	gaacattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	282...	ttctcttcag	gatcaaa
D.Pse	----ttgaatcg	gtaagtaaac...	4643...	gaaaattttagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	267...	ttctcttcag	gatcaaa
D.Wil	----ttgaatcg	gtaagtgaaca...	4724...	ctcgtgtgtgtggatg	ACGCGT	GATTTATGT	attttcgtcaaatggcaact...	186...	ctctcttcag	gatcaaa
D.Yak	----ttgagtcg	gtaagtaaat...	4688...	cattgggaaagctgcacatg	ACGCGT	GATTTATGT	attttcgtcaaatggcagcc...	222...	ttcgccccgcag	gatcaaa
	**** **	** *** *			** * *****	*** ** *	** * *****		*** *****	

id=44713 gene=FBgn0085447 name=sif segment=chr3L\_5699674\_5709196\_1 type=IN

D.Mel	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacgccacgtggaatg-----	gtggtggtcag	tgctcagc
D.Sim	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacaccacgcggaatg-----	gtggtggtcag	tgcgcagc
D.Sec	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgcgcagc
D.Ere	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgcgcagc
D.Ana	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacccccggggcatg-----	gtggtggtcag	tgcccagc
D.Moj	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacgccacgcggactgagcggcatgcccggaatgccaggaatgccggcatggtggttag	tgcccagc	cacacagc
D.Per	ccctccta	GCATAAGTC	CGCGT	gcggcaaagtgcacgcggaagaacgccccgaggcatg-----	gtggtggtcag	tgcgcagc
D.Pse	ccctccta	GCATAAGTC	CGCGT	gcggcaaagtgcacgcggaagaacgccccgaggcatg-----	gtggtggtcag	tgcgcagc
D.Wil	ccctccta	GCATAAGTC	CGCGT	gcggcaaagtgcacgcggaagaagacaccaagaacatg-----	ggcatgaccatgggaggagtggcggtggtggttag	tgcccagc
D.Yak	ccctccta	GCATAAGTC	CGCGT	gcggcagagtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgcgcagc
	*****	*****	*****	***** ** ** *	*** ** **	* ** *

id=44749 gene=FBgn0085447 name=sif segment=chr3L\_5735148\_5735213\_1 type=AN VIEW

Figure 441: CS=4.8



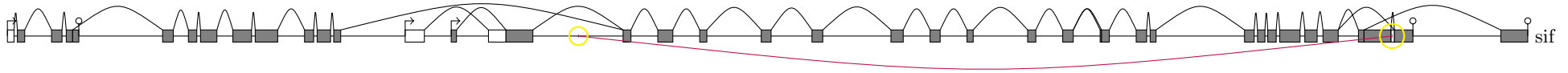
D. Mel	ttcgcaag	gtaggaggagct...4388...ccaacgattctcgcagccat----	TTTGCAATTGTT	GT	ctgggcctgcccctatctcta-----	..433...tttttttgcag	atttcgga
D. Sec	ttcgcaag	gtaggaggtgct...4331...ccagcgattctcgcagccat----	TTTGCAATTGTT	GT	ctgggcctgcccctatctcta-----	..432...tctttttgcag	atttcgga
D. Ere	ttcgcaag	gtaggaagagct...4362...ccagagattctcccagccat----	TTTGCAATTGTT	GT	ctgggcctgcccctatctcta-----	..413...cttcttttcag	atttcgga
D. Ana	ttcgcaag	gtaggattaagg...4437...cgtgtccctttttccatcat----	TTTGCAATTGTT	GTCTG	ggcctgcccctatctctatct--	..470...tacctgttacag	atttcgga
D. Gri	ttcgcaag	gtaaacctttatt...4474...attcgttttctgagtcgttt	CGTAGTTGCAATTGTT	GT	-----ccatccgttgcccgtcctt..	..432...gtccatttcag	atctcgga
D. Moj	ttcgcaag	gtaaacgaaaat...4400...tactgtgtgtgtgtgtgtg----	TTTGCAATTGTT	GT	-----ccatccgcccctccctcgt..	..511...catctctgcag	atctcgga
D. Per	ttcgcaag	gtaaaaacccat...4286...ctcctctttctgtctgccat----	TTTGCAATTGTT	CGT	-----cctgcccctatctccatctt..	..623...tcccctctgcag	atttcgga
D. Pse	ttcgcaag	gtaaaaacccat...4280...ctcctctttctgtctgccat----	TTTGCAATTGTT	CGT	-----cctgcccctatctccatctt..	..629...tcccctctgcag	atttcgga
D. Vir	ttcgcaag	gtaaacaaaaa...4399...cctttttttctttttgtta----	TTTGCAATTGTT	GT	-----ccatccgtgcacctctcgag..	..512...gcacttttcag	atctcgga
D. Yak	ttcgcaag	gtaggaagagct...4477...ccagcgattctcccagccat----	TTTGCAATTGTT	GT	ctgggcctgcccctatctcta-----	..433...atttatttcag	atttcgga
	*****	***	*****	**	* * *	* **	** *****

id=44707 gene=FBgn0085447 name=sif segment=chr3L\_5692125\_5697024\_1 type=IN

D. Mel	gcatccga	gtgagtatttcc...519...----aaccatccg-aaccacaga--	GCG	AACAATTGGCAA	actattcgcttcaattgtgcc-----	..1290...--cattcaaacag	acgagggc
D. Sec	gcatccga	gtgagtatttcc...533...----aaccatccg-aaccacaga--	GCG	AACAATTGGCAA	actattcgcttcaattgtgcc-----	..1242...--cattcaaacag	acgagggc
D. Ere	gcatccga	gtgagtatttcc...627...----aaccatccg-aaccacaga--	GCG	AACAATTGGCAA	actattcgcttcaattgtgcc-----	..1314...--cattcaaacag	acgagggc
D. Ana	gcatccaa	gtgagtattcat...500...agcaaacgaaactg-aaccga--	CAGAC	cg--AACAATTGGCAA	actattcgcttcaattgtgcc-----	..1367...attcctctc--	cag atgaaggc
D. Gri	acaccxaa	gtaagtaacaca...643...agtcaaac-----aagcgacaagt	ACG	AACAATTGGCAA	actattcgcttcaattgtgtcagag..	..1789...attattttc--	cag atgagggc
D. Moj	acatccaa	gtaagtaacattg...597...agtaaac-----aagcgacaagt	GCG	AACAATTGGCAA	actattcgcttcaattgtgtg-----	..1780...--cattgcccag	atgagggc
D. Per	gcatccga	gtgagtatatcc...257...cagaagtc---ctg-aacgca-aaa--	GCGG	AACAATTGGCAA	actattcgcttcaattgtgag-----	..1646...tgccacacc--	cag atgaaggc
D. Pse	gcatccga	gtgagtatatcc...260...cagaagtc---ctg-aacgca-aaa--	GCGG	AACAATTGGCAA	actattcgcttcaattgtgag-----	..1615...tgccacacc--	cag atgaaggc
D. Vir	gcatccaa	gtaagtaacat...607...agtcaaac-----aagcgacaagt	ACG	AACAATTGGCAA	actattcgcttcaattgtgtg-----	..1536...--cattgctgcag	acgagggc
D. Yak	gcatccga	gtgagtatttcc...601...----aaccatccgaaaccacaga--	GCG	AACAATTGGCAA	actattcgcttcaattgtgcc-----	..1287...--cattcaaacag	acgagggc
	** * *	** *****	*	** *	*****	** *****	** * **

id=44734 gene=FBgn0085447 name=sif segment=chr3L\_5729195\_5731083\_1 type=IN VIEW

Figure 442: CS=7.8



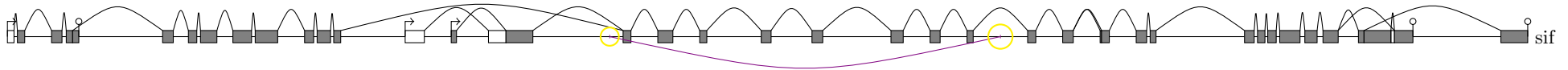
D.Mel	ttcgcaag	gtaggaggagct...4021...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--ccgagcgcacaga----	...801...tttttttgcag	atttcgga
D.Sec	ttcgcaag	gtaggaggtgct...3985...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--ccaagcgcacaga----	...779...tctttttgcag	atttcgga
D.Ere	ttcgcaag	gtaggaagagct...4014...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--ccgagcgcacaga----	...762...cttcttttcag	atttcgga
D.Ana	ttcgcaag	gtaggattaagg...4053...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--ccgaacagagcca----	...858...tacctgttacag	atttcgga
D.Gri	ttcgcaag	gtaaaactttatt...3777...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtaga-----gcgctcagtagca...	...1134...gtccatttcag	atctcgga
D.Moj	ttcgcaag	gtaaacgaaaat...3919...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagcgaacgagcgcgcg-----	...92...catctcttcag	atctcgga
D.Per	ttcgcaag	gtaaaaacccat...3860...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--cgggagtcttggt----	...1051...tcccctctgcag	atttcgga
D.Pse	ttcgcaag	gtaaaaacccat...3848...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--cgggagtcttggt----	...1063...tcccctctgcag	atttcgga
D.Wil	ttcgcaag	gtacagtagaaa...4055...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--tatggggctgga----	...856...tattttttgtag	atttcgga
D.Yak	ttcgcaag	gtaggaagagct...4112...aatgggcaaccaattttta	<b>TGCCACGCGGGAC</b>	acgtagc--ccgagtcacaga----	...799...atattttgcag	atttcgga
	*****	***	*****			* ** ** * **

id=44707 gene=FBgn0085447 name=sif segment=chr3L.5692125.5697024.1 type=IN

D.Mel	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccacgtggaatg-----	gtggtggtcag	tgctcagc
D.Sec	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgccgagc
D.Ere	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgccgagc
D.Ana	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccccggggcatg-----	gtggtggtcag	tgccgagc
D.Gri	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAA</b>	agtcgcacgcggaagaagacgccacgtggcatg-----	ccacaaataggtgattag	tacacagc
D.Moj	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccacgcggactgagcggcatgcccggaatgccaggaatgccggcatggtggttag	caacacagc	
D.Per	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAA</b>	agtcgcacgcggaagaaacgccccgaggcatg-----	gtggtgtcag	tgccgagc
D.Pse	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAA</b>	agtcgcacgcggaagaaacgccccgaggcatg-----	gtggtgtcag	tgccgagc
D.Wil	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAA</b>	agtcgcacgcggaagaagacaccaagaacatg-----	ggcatgaccatgggaggagtggcggtgtggtggttag	tgcccaac
D.Yak	ccctccta	gcataa	<b>GTCCCGCGT</b>	<b>GGCAG</b>	agtcgcacgcggaagaagacgccacgcggaatg-----	gtggtggtcag	tgccgagc
	*****	*****	*****	*****	*****	*** * **	* ** *

id=44749 gene=FBgn0085447 name=sif segment=chr3L.5735148.5735213.1 type=AN VIEW

Figure 443: CS=4.8



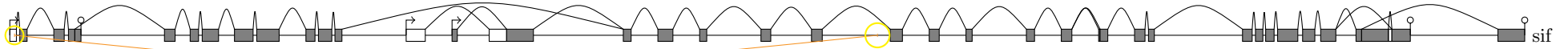
D. Mel	ttcgcaag	gtaggaggagct...4604...	-----cggcgagcagcaaacctggcc	ATTAttGGTTTCA--AA	-----tg-gcttcgctcctgctaggct-----	...217...tcttttttgcag	atcttcgga	
D. Sim	ttcgcaag	gtaggaggagct...4701...	-----acggcgagcagc-aacctggcc	ATTAttGGTTTCA--AA	-----tggcgcttcgctcctgctagg-----	...209...tcttttttgcag	atcttcgga	
D. Sec	ttcgcaag	gtaggagggtgct...4544...	-----acggcgagcagc-aacctggcc	ATTAttGGTTTCA--AA	-----tggcgcttcgctcctgctagg-----	...219...tcttttttgcag	atcttcgga	
D. Ere	ttcgcaag	gtaggaagagct...4467...	----atgcaggcgagaagagaaga-----	CAAAttGCTTtaTCGA	-----cgacatacgtaacaaatggt...307...	cttctttttcag	atcttcgga	
D. Ana	ttcgcaag	gtaggattaagg...4540...	----gccccggcgagaagagaaga-----	CAAAttGCTTtaTCGA	-----cgacatacgtaacaaatggt...369...	tacctgttacag	atcttcgga	
D. Gri	ttcgcaag	gtaaacctttatt...4694...	----aggagccgagccagtcaccc-----	ATTAttGGTTTCA--AA	taGCTTAcggga-cgatacgttcgtg-----	...210...gtccatttcag	atcttcgga	
D. Moj	ttcgcaag	gtaaacgaaaaat...4498...	....aaaaatgcaggcgagagaag-----	ACAAAttGCTTtaTCGA	-----cgacatacgtaacaaatggt...410...	catcttttcag	atcttcgga	
D. Per	ttcgcaag	gtaaaaacccat...4411...	----atgcaggcgagaagagaaga-----	CAAAttGCTTtaTCGA	-----cgacatacgtaacaaatggt...498...	tccccttcgag	atcttcgga	
D. Pse	ttcgcaag	gtaaaaacccat...4405...	----atgcaggcgagaagagaaga-----	CAAAttGCTTtaTCGA	-----cgacatacgtaacaaatggt...504...	tccccttcgag	atcttcgga	
D. Vir	ttcgcaag	gtaaacaaaaaaa...4633...	----caacaaggagccagtcaccc-----	ATTAttGGTTTCA--AA	taGCTTAcggggtcgattcgtctcat-----	...271...gcacttttcag	atcttcgga	
D. Wil	ttcgcaag	gtacagtagaaaa...4800...	----gagggctggcaccagc-aacc-----	ATTAttGGTTTCA--AA	-----tg-gcttcgctcctgctaatta-----	...110...tattttttgtag	atcttcgga	
D. Yak	ttcgcaag	gtaggaagagct...4718...	-----gcaggagcagc-aacctggcc	ATTAttGGTTTCA--AA	-----tg-gcttcgctcctgagagct-----	...192...atttatttcag	atcttcgga	
	*****	***		** * * * *		*	** **	** * * *

id=44707 gene=FBgn0085447 name=sif segment=chr3L\_5692125.5697024.1 type=IN

D. Mel	atgatgcg	gtaagttatgac...1138...	-tcgggcgagccgaacggcat-----	TTTGAAGCCTAAT	-----tagcttctctttatggcaaa...680...	ctcattccgcag	gtcctcgc
D. Sim	atgatgcg	gtaagttatgac...1000...	-tcgggcgagccgaacggcat-----	TTTGAAGCCTAAT	-----tagcttctctttatggcaaa...654...	ctcattccgcag	gtcctcgc
D. Sec	atgatgcg	gtaagttatgac...1078...	..tccggc-ggccgaacggcat-----	TTTGAAGCCTAAT	-----tagcttctctttatggcaaa...682...	ctcattccgcag	gtcctcgc
D. Ere	atgatgcg	gtaagttatgac...526...	..acacccagaatgtcaacaa-----	TCGAcAAGCTTTG	---ccaattt-ttgacgatgttac-----	...1216...ctcactccgcag	gtcctcgc
D. Ana	atgatgcg	gtaagttatgac...525...	..acaaccagaatgtcaacaa-----	TCGAcAAGCTTTG	---ccaattt-tagatgatgttac-----	...1222...ttcctcatatag	gtcctcgc
D. Gri	atgatgcg	gtaagttctttt...1578...	..tacagctcaggctcaggacc-AGGCat	TTTGAAGCCTAAT	-----tagctgctcctttatggccgc...299...	tcttttttatag	ctcctcgc
D. Moj	atgatgcg	gtaagttgcact...1249...	..-acctgaaatgtcaacat-----	TCGAcAAGCttTTGT	acatcttagtagctgtagtt-----	...764...cccattgtacag	ctcctcgc
D. Per	atgatgcg	gtaagttatgac...721...	..cccacccaaaatgtcaacaa-----	TCGAcAAGCTTTG	---ccaattt-ttgatgatgttac-----	...1002...cgattccttag	gtcctcgc
D. Pse	atgatgcg	gtaagttatgac...716...	..cccacccaaaatgtcaacaa-----	TCGAcAAGCTTTG	---ccaattt-ttgatgatgttac-----	...995...cgattccttag	gtcctcgc
D. Vir	atgatgcg	gtaagttgcgtt...1496...	..-acagtcgagtcgagacc-AGGCat	TTTGAAGCCTAAT	-----tagctgctcctttatagccgc...243...	tgtgttttacag	ctcctcgc
D. Wil	atgatgcg	gtaagttcttct...1593...	..-ttcgtgtgtcagtagcat-----	TTTGAAGCCTAAT	-----tagcttcactcaaaaagcct...511...	ctttttttacag	atcttctc
D. Yak	atgatgcg	gtaagttatgac...1173...	-tcgggcgagccgaacggcat-----	TTTGAAGCCTAAT	-----tagcttctctttatggcaaa...1301...	ctcactccgcag	gtcctcgc
	*****	*****		* * * * *		** * *	** * * *

id=44723 gene=FBgn0085447 name=sif segment=chr3L\_5719695.5721590.1 type=IN VIEW

Figure 444: CS=12.96



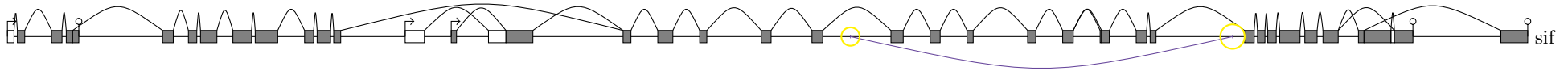
D. Mel	tcttttgc	agcgatcgagtc...39...	-----tgaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtgagctc	
D. Sim	tcttttgc	agcgatcgagtc...39...	-----tgaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtgagctc	
D. Sec	tcttttgc	agcgatcaagtc...39...	-----tgaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtgagctc	
D. Ere	tctcttgc	agcgatcgagtc...39...	-----tgaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtgagctc	
D. Ana	ttttttc	agcgaggaagtc...33...	---agtcgctgaatcgcggtcag	GCGCtCTCG	CAgCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtcagtaa	
D. Gri	ctaacagc	agcgcggcagtc...40...	-----aaatcgcggccaggcgctc	CG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtaaaata	
D. Moj	gcacctgc	agcgcggcagtc...40...	-----aaatcgcggccaggcgctc	CG	CAggCGGACGTGA	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtaagtct	
D. Per	atctttcc	agcgaggaagtc...39...	-----taaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtaagtac	
D. Pse	atctttcc	agcgaggaagtc...39...	-----taaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtaagtac	
D. Vir	tctcttgc	cccgacccttca...39...	acggctgcagtcgctgaatc	GCGGc	CAGGCGCTCTCG	caggcggacgtgac	cggcatgtggtgacatcggggtgcctctggtaaag	gtgagtg
D. Yak	tttctttc	agcgatcgagtc...39...	-----tgaatcgcggacaggcgctc	TCG	CAggCGGACGTGAG	-----cggcatgtggtgacatcggggtgcctctggtaaag	gtgagcac	
		*	**	****	** ***** * *	*** *****	** *	

id=44676 gene=FBgn0085447 name=sif segment=chr3L\_5660920.5661042.1 type=E5

D. Mel	ccatgcag	gtgagtc	ccaatc...2853...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGG	-----ccatattcaagaatgcgcac	---...206...	gcctttttccag	atgaattc	
D. Sim	ccatgcag	gtgagtc	ccaatc...2911...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGG	-----ccatattcaagaatgcgcac	---...206...	gcctttttccag	atgaattc	
D. Sec	ccatgcag	gtgagtc	ccaatc...2872...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGG	-----ccatattcaagaatgcgcac	---...206...	gcctttttccag	atgaattc	
D. Ere	ccatgcag	gtgagtc	ccaatc...2673...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGG	-----ccatattcaagaatgcgcac	---...160...	gcctttttccag	atgaattc	
D. Ana	ccatgcag	gtgagtc	cttgaa...3076...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGcGTG	GGGtGTGTat	---cctgcgactgtgtatcct	...102...	gcctttttccag	atgaattc
D. Gri	ccatgcag	gtgagtc	cataca...3027...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTG	-----tatggcttatgacttgggt	---...100...	gcctttttccag	atgaattc	
D. Moj	ccatgcag	gtaagc	gacaat...4443...	---tttttgctat	ttttcaatt	TTCACt	TCCGTGTG	-----tgctccagcagcagcag	...96...	gcctttttccag	atgaattc	
D. Per	ccatgcag	gtgagtc	cctgcc...3105...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGA	-----atatattgtatctgcat	---ct...214...	gcctttttccag	atgaattc	
D. Pse	ccatgcag	gtgagtc	cctgcc...2988...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGA	-----atatattgtatctgcat	---ct...210...	gcctttttccag	atgaattc	
D. Vir	ccatgcag	gtaagta	acaca...3551...	acacctgtgtg	cgct	CGGGCGCCTGCTGC	-----agcggcaatggcaacggca	---...507...	gcctttttccag	atgaattc		
D. Yak	ccatgcag	gtgagtc	ccaatc...3136...	---gtgtttgctat	ttttcaatt	TTCACt	TCCGTGTGG	-----ccatattcaagaatgcgcac	---...223...	gcctttttccag	atgaattc	
	*****	** **		* * * * *	*	** **		*****	*****	*****		

id=44717 gene=FBgn0085447 name=sif segment=chr3L\_5710839.5713976.1 type=IN VIEW

Figure 445: CS=5.28



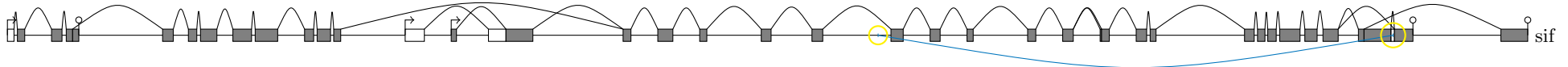
D.Mel	ccatgcag	gtgagtccaatc...1398...	-----actgcaaattcaatgaattGAAAaATGTgCATTtGATTtGTTc	atataatattttcgcccaat...1651...	gcctttttccag	atgaattc
D.Sim	ccatgcag	gtgagtccaatc...1408...	gtaaatgccctgcaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcatat...1707...	gcctttttccag	atgaattc
D.Sec	ccatgcag	gtgagtccaatc...1404...	gtaaatgccctgcaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcatat...1672...	gcctttttccag	atgaattc
D.Ere	ccatgcag	gtgagtccaatc...1192...	gtaaatgccctgcaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcatat...1639...	gcctttttccag	atgaattc
D.Ana	ccatgcag	gtgagtccttgaa...1594...	-----gctgaaaattcaatgaattGAAAaATGTgCATTtGATTtGTTc	atataatattttccaagccaat...1582...	gcctttttccag	atgaattc
D.Gri	ccatgcag	gtgagtcataca...1492...	-----actgaaaattcaatgaattGAAAaATGTaCATTtGATTtGCTTg	atagattttgcatagtaact...1624...	gcctttttccag	atgaattc
D.Per	ccatgcag	gtgagtcctgcc...1288...	gtaaatgctgctgaaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcccc...2029...	gcctttttccag	atgaattc
D.Pse	ccatgcag	gtgagtcctgcc...1231...	-taaatgctgctgaaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcccc...1966...	gcctttttccag	atgaattc
D.Vir	ccatgcag	gtaagtaacaca...1847...	atgcg-gcgtgaaaattcatTGAATtTGAAAaATGT	-----gcatattgatttggttgatat...2210...	gcctttttccag	atgaattc
D.Yak	ccatgcag	gtgagtccaatc...1596...	gtaaatgccctgcaaattcaATGAATtTGAAAaATGT	-----gcatattgatttggttcatat...1761...	gcctttttccag	atgaattc
	*****	** ***	*** ***** ** *****	* *	*****	*****

id=44717 gene=FBgn0085447 name=sif segment=chr3L\_5710839\_5713976\_1 type=IN

D.Mel	gcatccga	gtgagt-atttcc...1611...	-agctgctcggtgacaataa-----GAACAAGTTAATGACATTTTC	ttgtcg--acgttgtgacgctg-----...193...	ccattcaaacag	acgagggc
D.Sim	gcatccaa	gtgagt-atttcc...785...	gtgatgtggtggtggcagca-----GCA-----TaTTCAtATTCAT	-----gccaaggca-g----ccagtagcag...1058...	ccattcaaacag	acgagggc
D.Sec	gcatccga	gtgagt-atttcc...748...	gtgatgtggtggtggcagca-----GCA-----TaTTCAtATTCAT	-----gccaaggca-g----ccagtagcag...1027...	ccattcaaacag	acgagggc
D.Ere	gcatccga	gtgagt-atttcc...836...	ggtgtgatgtggcggcagca-----GCA-----TaTTCAtATTCAT	-----gccaaggca-g----ccagcggtagg...1105...	ccattcaaacag	acgagggc
D.Ana	gcatccaa	gtgagt-attcat...1696...	-tgcagctcgctgacaataa-----GAACAAGTTAATGACATTTTC	ttgtcgtaacggcatatcct-----...170...	attcctctccag	atgaaggc
D.Gri	acacccaa	gtaagtaacaca...2248...	-agcttctcagcttctgacaa---TAAGaaCAAGTTAATGACATTTTC	ttgttggcgtcgtacactg-----...181...	attattttccag	atgagggc
D.Per	gcatccga	gtgagt-atatcc...461...	gccagattggggggcgca-----GCA-----TaTTCAtATTCAT	-----gccaaggca-gtgtcaccaa-----...1444...	tgccacaccag	atgaaggc
D.Pse	gcatccga	gtgagt-atatcc...464...	gccagattggggggcgca-----GCA-----TaTTCAtATTCAT	-----agccaaggca-gtgtcaccaa-----...1414...	tgccacaccag	atgaaggc
D.Vir	gcatccaa	gtaagt-acatat...762...	-----cgcaggcgcgcaaggcgtgGCA-----TaTTCAtATTCAT	-----tgccatgccatgccatgcca-----...1381...	catttctgcag	acgagggc
D.Yak	gcatccga	gtgagt-atttcc...818...	tggtggcagtggcagcagca-----GCA-----TaTTCAtATTCAT	-----gccaaggca-g----ccagtagcag...1070...	ccattcaaacag	acgagggc
	** ** *	** ** *	* ** ** ** *	*	** ** **	** ** **

id=44734 gene=FBgn0085447 name=sif segment=chr3L\_5729195\_5731083\_1 type=IN VIEW

Figure 446: CS=7.8



```

D.Mel ccatgcag gtgagtc caatc...2851...gtgtgtttgctatTTTTcaCTTCCGTGTGG-----C-----catattca-agaatgcgcacg-...205...gccttttccag atgaattc
D.Sim ccatgcag gtgagtc caatc...2909...gtgtgtttgctatTTTTcaCTTCCGTGTGG-----C-----catattca-agaatgcgcacg-...205...gccttttccag atgaattc
D.Sec ccatgcag gtgagtc caatc...2870...gtgtgtttgctatTTTTcaCTTCCGTGTGG-----C-----catattca-agaatgcgcacg-...205...gccttttccag atgaattc
D.Ere ccatgcag gtgagtc caatc...2671...gtgtgtttgctatTTTTcaCTTCCGTGTGG-----C-----catattca-agaatgcgccgg-...159...gccttttccag atgaattc
D.Ana ccatgcag gtgagtc cttgaa...3074...gtgtgtttgctatTTTTcaCTTCCCGTGTGG-----gtgtgtatcctgcgactgtg-...108...gccttttccag atgaattc
D.Gri ccatgcag gtgagtc cataca...3025...gtgtttttgctatTTTTcaCTTCCGTGTGtaTGGCTTatgacttggtgtgtg-----tgtgt...92...gccttttccag atgaattc
D.Moj ccatgcag gtaagc gacaat...4440...gtgtttttgctatTTTTcaCTTCCGTGTGT--GCTC-----cagcagca-gcagcagcagca...91...gccttttccag atgaattc
D.Vir ccatgcag gtaagt aacaca...3951...gtgtttttgctatTTTTcaCTTCCGTGTGT-----atgtgcc-ccaacaacaaca...105...gccttttccag atgaattc
D.Yak ccatgcag gtgagtc caatc...3134...gtgtgtttgctatTTTTcaCTTCCGTGTGG-----C-----catattca-agaatgcgcacg-...222...gccttttccag atgaattc
***** ** **                               **** * **** * **** * **** * **** * **** *

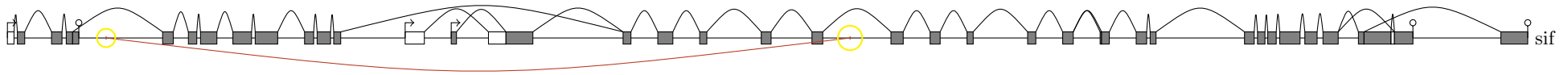
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id=44717 gene=FBgn0085447 name=sif segment=chr3L\_5710839.5713976.1 type=IN

D.Mel	ccctccta	gcataagtcccgcgtg	cggcaga	GTCGCACGCg	GAAGAAGAc	gccacgtggaatg	-----	-----	gtggtggtcag	tgctcagc
D.Sim	ccctccta	gcataagtcccgcgtg	cggcaga	GTCGCACGCg	GAAGAAGAc	caccacgcggaatg	-----	-----	gtggtggtcag	tgcgcagc
D.Sec	ccctccta	gcataagtcccgcgtg	cggcaga	GTCGCACGCg	GAAGAAGAc	gccacgcggaatg	-----	-----	gtggtggtcag	tgcgcagc
D.Ere	ccctccta	gcataagtcccgcgtg	cggcaga	GTCGCACGCg	GAAGAAGAc	gccacgcggaatg	-----	-----	gtggtggtcag	tgcgcagc
D.Ana	ccctccta	gcataagtcccgcgtg	cggcagag	TGCACCGCGGA	AAGAAGAc	ccccggggcatg	-----	-----	gtggtggtcag	tgcccagc
D.Gri	ccctccta	gcataagtcccgcgtg	cggca	AAGTCGCACGC	GAAGAAGAc	gccacgtggcatg	-----	-----	ccaacaatatggtgattag	tacacagc
D.Moj	ccctccta	gcataagtcccgcgtg	cggca	GAGTcGCACCG	GAAGAAGAc	gccacgcggactgagcggcatgccggaatg	-----	-----	ccaggaatgccaggaatgcccgcatggtggttag	cacacagc
D.Vir	ccctccta	gcataagccccgcgtg	cggcaaa	GCACCGCGGA	AAGAAGAc	gccacgcggcctaagc	-----	-----	gggatgcccgcatggtggttag	cacacagc
D.Yak	ccctccta	gcataagtcccgcgtg	cggcaga	GTCGCACGCg	GAAGAAGAc	gccacgcggaatg	-----	-----	gtggtggtcag	tgcgcagc
*****	*****	*****	*****	*****	*****	** ** ** *			**** * **	* ****

id=44749 gene=FBgn0085447 name=sif segment=chr3L\_5735148.5735213.1 type=AN VIEW

Figure 447: CS=4.32



D. Mel	-agccaaaa	gaaaaaagaaaa...	2222...	ttctttttctctcttcta	-----	CATTTTCg	AAATCATTG	tcgaaacacgccaac	ctca...	1565...	gacgttttacag	tcgccttc			
D. Sim	-agccaaaa	gaaaaacaaaa...	2238...	ttctttttctctcttcta	-----	CATTTTCg	AAATCATTG	tcgaaacacgccaac	ctca...	1558...	gaaattttacag	tcgccttc			
D. Sec	-agccaaaa	gaaaaacaaaa...	2224...	ttctttttctctcttcta	-----	CATTTTCg	AAATCATTG	tcgaaacacgccaac	ctca...	1617...	gacgttttacag	tcgccttc			
D. Ere	-agccaaaa	aaaaaatatata...	2254...	ttctttttctctcttcta	-----	CATTTTCg	AAATCATTG	tcgaaacacgccaac	ctca...	1525...	gacgttttacag	tcgccttc			
D. Ana	-aaacaaca	acaaaatgaaaa...	1818...	ttctttttctctcttcta	-----	CATTTTCGAAa	TCATT	atcgaacacgcca	aaaaact...	1746...	gacgttttacag	tcgccttc			
D. Moj	-aaccacaa	aaacaacacta...	2590...	-----	caacgtacaatg	aaaatgc	AAAAGAAAA	cGC	-----	AAAACGC	-tttaaaca-	atcgacgat...	1115...	gacgttttacag	tcgccttc
D. Per	-aaatacaa	aaaaagagaaaa...	2553...	-----	catttacggtg	cgcaaacatc	-----	CACATTTCGAA	aCATT	atcaaaa-	acacaaaagg	cac...	1767...	gacgttttacag	tcgccttc
D. Pse	-aaatacaa	aaaaagagaaaa...	2461...	ttctttttctctcttcta	-----	CATTTTCGAAa	TCATT	ctcgaacacgcca	aaaaaca...	1909...	gacgttttacag	tcgccttc			
D. Vir	caaacactg	aaaaaacatgt-	2607...	-----	caacgtacaatg	aaaatgc	AAAAGAAAA	cGC	-----	AAAACGC	-tttaaaca-	atcgacgat...	961...	gacgttttacag	tcgccttc
D. Yak	-agccaaag	aaaaacaaaa...	2339...	ttctttttctctcttcta	-----	CATTTTCg	AAATCATTG	tcgaaacacgccaac	ctca...	1748...	gacgttttacag	tcgccttc			
	* *	**		* *		*	** *	* ** *	*	** *****	*****				

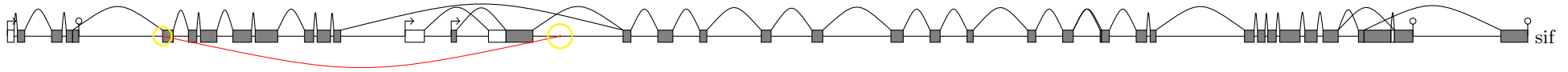
id=44684 gene=FBgn0085447 name=sif segment=chr3L.5662298.5666166.1 type=IN

D. Mel	ccatgcag	gtgagtccaatc...	1388...	ttgtaaatgcac	----	tgcaaatt	CAATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1668...	gcctttttccag	atgaattc	
D. Sim	ccatgcag	gtgagtccaatc...	1406...	ttgtaaatgcc	----	tgcaaatt	CAATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1708...	gcctttttccag	atgaattc	
D. Sec	ccatgcag	gtgagtccaatc...	1402...	ttgtaaatgcc	----	tgcaaatt	CAATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1673...	gcctttttccag	atgaattc	
D. Ere	ccatgcag	gtgagtccaatc...	1190...	ttgtaaatgcc	----	tgcaaatt	CAATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1640...	gcctttttccag	atgaattc	
D. Ana	ccatgcag	gtgagtcttgaa...	1585...	-tgtaaatg	gc	-----	tgaaaattc	AATG	aTTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1599...	gcctttttccag	atgaattc
D. Moj	ccatgcag	gtaagcgacaat...	4420...	-----	atttgctctc	ggatagaaat	-----	GTGT	tTTGCa	TTTTTC	aaTTTT	cacttccgtgtg	--	tgctccag...	108...	gcctttttccag	atgaattc
D. Per	ccatgcag	gtgagtcctgcc...	1287...	-tgtaaatg	gc	-----	tgaaaattc	AATG	aATTGAA	-----	AATGTG	--	catttgatttg	gtttcccc...	2028...	gcctttttccag	atgaattc
D. Pse	ccatgcag	gtgagtcctgcc...	1229...	-tgtaaatg	gc	-----	tgaaaattc	AATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gtttccc--	1967...	gcctttttccag	atgaattc
D. Vir	ccatgcag	gtaagtaacaca...	3931...	-----	acatttgctc	ggatagaaat	-----	GTGT	tTTGCa	TTTTTC	aaTTTT	cacttccgtgtg	atgtgcc--	118...	gcctttttccag	atgaattc	
D. Yak	ccatgcag	gtgagtccaatc...	1594...	ttgtaaatgcc	----	tgcaaatt	CAATG	aATTGAAA	-----	AATG	--	tgcatattgatttg	gttcata--	1762...	gcctttttccag	atgaattc	
	*****	** **		* * *		* ****	** **** *	***	* * * * *		*****	*****	*****				

id=44717 gene=FBgn0085447 name=sif segment=chr3L.5710839.5713976.1 type=IN VIEW

Figure 448: CS=7.8





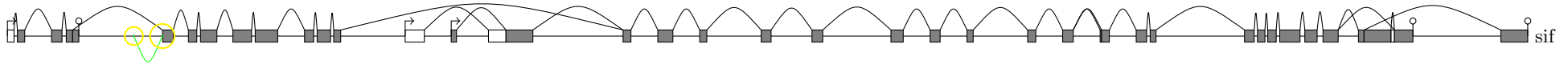
D.Me1	-agccaaaa	gaaaaaagaaaa...	3821...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Sim	-agccaaaa	gaaaaacaaaaa...	2649...	tgaatatatTTTTCAAATCGA--	TCGTTTGCAATTTTAc	cg	gtgccacaaaacaaaaaactgaaacccgaaactaat	:::::	tgtccgcacactctactactactactccataaactgct	
D.Sec	-agccaaaa	gaaaaacaaaaa...	3875...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Ere	-agccaaaa	aaaaaatatata...	3813...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Ana	-aaacaaca	acaaaatgaaaa...	3597...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Gri	-acacttta	gatacaaacaca...	3759...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Per	-aaatacaa	aaaaagagaaaa...	4353...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Pse	-aaatacaa	aaaaagagaaaa...	4403...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Vir	caaacactg	aaaaaacatgt...	3604...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
D.Yak	-agccaaag	aaaaacaaaaa...	4121...	--aatcaactaacctaataatgata	GTGCG	---ac	GTTTTACAG	-----	:::::	-----
	*	*		*** * * * * ** * **	*		*****			

id=44684 gene=FBgn0085447 name=sif segment=chr3L\_5662298.5666166.1 type=IN

D.Me1	ttcgcaag	gtaggaggagct...	3681...	gaggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1140...	ttttttttgcag	atttcgga
D.Sim	ttcgcaag	gtaggaggagct...	4571...	gcctcatccttttgcgccac--	TAAAAA-ATGCAGGCCGAG	aagagaagacaaatgcttt--	...	338...	tctttttgcag	atttcgga	
D.Sec	ttcgcaag	gtaggagggtgct...	3644...	gaggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaagtgttgaaa...	1119...	tctttttgcag	atttcgga
D.Ere	ttcgcaag	gtaggaagagct...	3659...	gaggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1116...	cttcttttcag	atttcgga
D.Ana	ttcgcaag	gtaggattaag...	3690...	gaggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1220...	tacctgttacag	atttcgga
D.Gri	ttcgcaag	gtaaaactttatt...	3421...	ggggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1489...	gtccatttcag	atctcgga
D.Per	ttcgcaag	gtaaaaaccat...	3432...	caggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1478...	tcccctctgcag	atttcgga
D.Pse	ttcgcaag	gtaaaaaccat...	3438...	caggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1472...	tcccctctgcag	atttcgga
D.Vir	ttcgcaag	gtaaacaaaaa...	3544...	cgggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1366...	gcacttttcag	atctcgga
D.Yak	ttcgcaag	gtaggaagagct...	3784...	gaggcagtcaataaataaac	TTGTAAAACaTGCAT	----	atgagca--	aaatgtttgaaa...	1126...	atttatttcag	atttcgga
	*****	***		** * *	** ***** **		* ** *	*** ** *		* **	** *****

id=44707 gene=FBgn0085447 name=sif segment=chr3L\_5692125.5697024.1 type=IN VIEW

Figure 449: CS=7.8



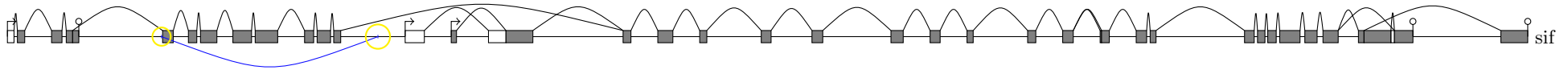
D. Mel	-agccaaa	gaaaaagaaaa...2842...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	944...	gacgttttacag	tcgccttc
D. Sec	-agccaaa	gaaaaacaaaa...2836...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1004...	gacgttttacag	tcgccttc
D. Ere	-agccaaa	aaaaaatatata...2870...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	908...	gacgttttacag	tcgccttc
D. Ana	-aaacaaca	acaaaatgaaaa...2521...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1041...	gacgttttacag	tcgccttc
D. Gri	-acacttta	gatacaaacaca...2700...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1024...	gacgttttacag	tcgccttc
D. Moj	-aaccacaa	aaacaacacta...2612...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1094...	gacgttttacag	tcgccttc
D. Per	-aaatacaa	aaaaagagaaaa...3174...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1144...	gacgttttacag	tcgccttc
D. Pse	-aaatacaa	aaaaagagaaaa...3227...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1141...	gacgttttacag	tcgccttc
D. Vir	caaacactg	aaaaaacatgt-...2629...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	940...	gacgttttacag	tcgccttc
D. Yak	-agccaaag	aaaaccacaaaa...2963...	aagaaaacgcaaacgctt	TAAACaa	TCGCAG	TATC	ctctactacaataccgttac...	1123...	gacgttttacag	tcgccttc
	*			*****	*****	*****		*****	*****	*****

id=44684 gene=FBgn0085447 name=sif segment=chr3L\_5662298.5666166\_1 type=IN

D. Mel	-agccaaa	gaaaaagaaaa...3817...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Sec	-agccaaa	gaaaaacaaaa...3871...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Ere	-agccaaa	aaaaaatatata...3809...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Ana	-aaacaaca	acaaaatgaaaa...3593...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Gri	-acacttta	gatacaaacaca...3755...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Moj	-aaccacaa	aaacaacacta...3737...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Per	-aaatacaa	aaaaagagaaaa...4349...	ccccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Pse	-aaatacaa	aaaaagagaaaa...4399...	ccccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Vir	caaacactg	aaaaaacatgt-...3600...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
D. Yak	-agccaaag	aaaaccacaaaa...4117...	tcccaatcaactaacctaat	GATAGT	GCGAc	GTTTTCag	tcgccttc
	*			*****	*****	*****	*****

id=44684 gene=FBgn0085447 name=sif segment=chr3L\_5662298.5666166\_1 type=IN VIEW

Figure 450: CS=6



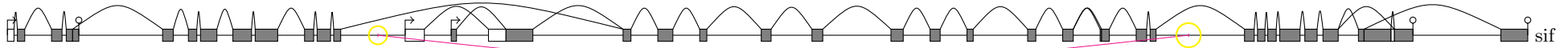
D. Mel	-agccaaaa	gaaaaagaaaa...	3802...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	AATG	TAAGT	-----	gccttc
D. Sim	-agccaaaa	gaaaaacaaaa...	3811...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Sec	-agccaaaa	gaaaaacaaaa...	3856...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Ere	-agccaaaa	aaaaaatatata...	3794...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Ana	-aaacaaca	acaaatgaaaa...	3578...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Gri	-acacttta	gatacaaacaca...	3740...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Moj	-aacacaaa	aaacaacacta...	3722...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Per	-aaatacaa	aaaaagagaaaa...	4334...	-acagaaccttgtaatcccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Pse	-aaatacaa	aaaaagagaaaa...	4384...	-acagaaccttgtaatcccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Vir	caaacactg	aaaaaacatgt...	3585...	cacagaaccttgtaat-ccca	ATCAA	ctAACCT	TAATG	TAAGT	-----	gccttc
D. Yak	-agccaaag	aaaaacaaaa...	2953...	gaaatgcaaaagaaa-aacg	CAAA	acGCTT	-----	TAAA	acaatcgcacgtatcctctactacaataccgttacctatc	gccttcactatctagttatactgt
	*			*	*	*	*	*		** **

id=44684 gene=FBgn0085447 name=sif segment=chr3L.5662298.5666166.1 type=IN

D. Mel	catcagag	gtgagtactctt...	4377...	ctcgcaccgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcaccatcgtcgt...	529...	-tggtgaaaagtc	agtcagaa
D. Sim	catcagag	gtgagtactctt...	4393...	ctcgcaccgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcaccatcgtcgt...	513...	-tggtgaaaagtc	agtcagaa
D. Sec	catcagag	gtgagtactctt...	4375...	ctcgcaccgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcaccatcgtcgt...	531...	-tggtgaaaagtc	agtcagaa
D. Ere	catcagag	gtgagtactctt...	4345...	ctcgcactgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcaccatcgtcgt...	561...	-tggtgaaaagtc	agtcagaa
D. Ana	catcagag	gtgagtgttat...	4311...	ctcctcgtgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcaccgtcgtcgt...	595...	-tggtgaaaatc	agtcagaa
D. Gri	cgtcagag	gtaagtttcagt...	4074...	gccagcctgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgacaacgttgctcgt...	832...	gtggtgaaaa-tc	agtcacaa
D. Moj	cgtcagag	gtaagttgtt...	4180...	agctgcccagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgacaacgttgctcgt...	726...	gtggtgaaaa-tc	agtcacaa
D. Per	catcagag	gtgagtactgt...	4235...	caaccgctgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcatcgttgctcgt...	671...	gtggtgaaaa-tc	agtcagaa
D. Pse	catcagag	gtgagtactgt...	4241...	caaccgctgagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgtcatcgttgctcgt...	665...	gtggtgaaaa-tc	agtcagaa
D. Vir	cgtcagag	gtgagtgttaga...	4198...	agctgcctaagtgattata---	ACTGCATT	ttGGTTTTGAT	gacgtcgacaacgttgctcgt...	708...	gtggtgaaaa-tc	agtcacaa
D. Yak	catcagag	gtgagtactctt...	2640...	ataaaaggaaaaataattata	TTTA	aAGGCaaTTTG	-----	ggggcacagcctccaccgc...	2270...	-tggtgaaaagtc
	** **	** **		*	*****	* **	*****	* * *	*	***** **

id=44700 gene=FBgn0085447 name=sif segment=chr3L.5670049.5684526.1 type=IN VIEW

Figure 451: CS=6.6



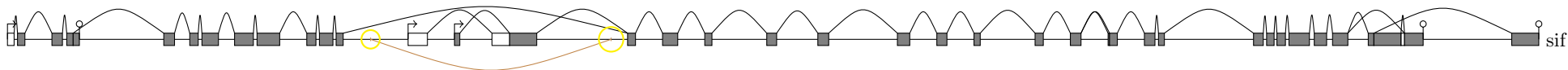
D. Mel	catcagag	gtgagtactctt...4380...	--gcaccg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccatcgtcgt...529...	-tggtgaaaagtc	agtcagaa
D. Sim	catcagag	gtgagtactctt...4396...	--gcaccg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccatcgtcgt...513...	-tggtgaaaagtc	agtcagaa
D. Sec	catcagag	gtgagtactctt...4378...	--gcaccg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccatcgtcgt...531...	-tggtgaaaagtc	agtcagaa
D. Ere	catcagag	gtgagtactctt...4348...	--gcactg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccatcgtcgt...561...	-tggtgaaaagtc	agtcagaa
D. Ana	catcagag	gtgagtggttat...4314...	--tcgctg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccgtcgtcgt...595...	-tggtgaaaattc	agtcagaa
D. Gri	gctcagag	gtaagtttcagt...4062...	--tccccttcctgcgcc--agcct	GAGTGCATT	atAACT	-----gcattttggtttgatgacg...	848...	gtggtgaaaa-tc
D. Moj	gctcagag	gtaagtgttgtt...4182...	ctgc-ccg--agtgcattataac---	TGCATTTGTT	TGAT	g-acgtcgcacaacgttgcgt...726...	gtggtgaaaa-tc	agtcacaa
D. Per	catcagag	gtgagtactgt...4238...	--ccgctg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcatcgttgcgt...671...	gtggtgaaaa-tc	agtcagaa
D. Pse	catcagag	gtgagtactgt...4244...	--ccgctg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcatcgttgcgt...665...	gtggtgaaaa-tc	agtcagaa
D. Vir	cgccagag	gtgagtgttaga...4186...	ctgccccgcagagc---tgccct	AAGTGCATT	atAACT	-----gcattttggtttgatgacg...	724...	gtggtgaaaa-tc
D. Yak	catcagag	gtgagtactctt...4337...	--gcactg--agtgcattataact---	GCATTTTGGTT	TGAT	g-acgtcgtcaccatcgtcgt...572...	-tggtgaaaagtc	agtcagaa
		* * * * *	** * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

id=44700 gene=FBgn0085447 name=sif segment=chr3L\_5670049.5684526.1 type=IN

D. Mel	gcatccga	gtgagtatttcc...621...	atttgcaagttaaatgaata	ATTA	AACCCG	AAATGC	cgacgacgacggagatggcg-----	1187...	--cattcaaacag	acgagggc
D. Sim	gcatccaa	gtgagtatttcc...672...	atttgcaagttaaatgaata	ATTA	CAACCCG	CAAATGT	cgacgacgacggagatggcg-----	1170...	--cattcaaacag	acgagggc
D. Sec	gcatccga	gtgagtatttcc...635...	atttgcaagttaaatgaata	ATTA	CAACCCG	AAATGC	cgacgacgacggagatggcg-----	1139...	--cattcaaacag	acgagggc
D. Ere	gcatccga	gtgagtatttcc...714...	atttgcaagttaaatgaata	ATTA	CAACCCG	AAATGC	cgacgacgacggagatggcg-----	1226...	--cattcaaacag	acgagggc
D. Ana	gcatccaa	gtgagtattcat...600...	atttgcaagttaaatgaata	ATTA	CAACCCG	AAATGC	cgacgacgacgactatg-----	1270...	atcctctc--cag	atgaaggc
D. Gri	acacccaa	gtaagtaacaca...2256...	agcttctgacaataagaaca	AGT	TAATG	CATTT	--tcttgttggcgtcgtcaacc-----	183...	attatttc--cag	atgagggt
D. Moj	acatccaa	gtaagtaacattg...713...	atttgcaagttaaatgaata	ATTA	CAACCCG	CAAATGCG	----tagactggcgaagcagcaa...	1661...	--catttgcgcag	atgagggc
D. Per	gcatccga	gtgagtatatcc...347...	atttgcaagttaaatgaata	ATTA	CAACCCG	CAAATGT	----caaccaaaaaatgtgcgg...	1557...	tgccacacc--cag	atgaaggc
D. Pse	gcatccga	gtgagtatatcc...350...	atttgcaagttaaatgaata	ATTA	CAACCCG	CAAATGT	----caaccaaaaaatgtgcgg...	1526...	tgccacacc--cag	atgaaggc
D. Vir	gcatccaa	gtaagtacatat...2003...	ctcagctgactataagaaca	AGT	TAATG	CATTT	--tcttgtcaacgttgcgcacg-----	141...	--catttgcgcag	acgagggc
D. Yak	gcatccga	gtgagtatttcc...690...	atttgcaagttaaatgaata	ATTA	CAACCCG	CAAATGC	caacgacgacggagaaggcg-----	1197...	--cattcaaacag	acgagggc
		** * * *	** * * *	*	* * * * *	** * * *	*	*	***	* * * *

id=44734 gene=FBgn0085447 name=sif segment=chr3L\_5729195.5731083.1 type=IN VIEW

Figure 452: CS=6.6



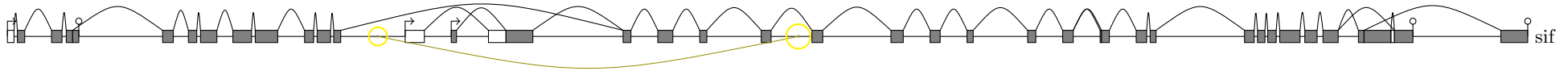
D.Mel	catcagag	gtgagtactctt...4194...	taccgcacataactccaagt--	TGTTGCcGTTGTcGTTGTTGc	TGTCG	ttgttcatgttgactaaca----	...705...	-tggtgaaaagtc	agtcagaa
D.Sim	catcagag	gtgagtactctt...3277...	-----tgagcgtgtttaagcattcg	TGCTGTTGTgaTTGC	-----	ctatgttgtatagtaggggc...	1633...	-tggtgaaaagtc	agtcagaa
D.Sec	catcagag	gtgagtactctt...3259...	-----tgagcgtgtttaagcatttg	TGCTGTTGTgaTTGC	-----	ctatgttgtatagtaggggg...	1651...	-tggtgaaaagtc	agtcagaa
D.Ere	catcagag	gtgagtactctt...2682...	-----aaaaggaaaataattatatt	TAAA	GGCAATTG	--ggtggca--cagcctccatctc--	...2230...	-tggtgaaaagtc	agtcagaa
D.Ana	catcagag	gtgagtggttat...4306...	---gctcgctctcgctgagtgca----	TTATAac	TGCATTTTG	--gtttggatgacgtcgtcacc----	...603...	-tggtgaaaagtc	agtcagaa
D.Gri	cgtcagag	gtaagtttcagt...4069...	---cctgcgccagcctgagtgca----	TTATAac	TGCATTTTG	--gtttggatgacgtcgcacaac----	...840...	-tggtgaaaagtc	agtcagaa
D.Moj	cgtcagag	gtaagtttcagt...4175...	---cggagagctcccagtgca----	TTATAac	TGCATTTTG	--gtttggatgacgtcgcacaac----	...734...	-tggtgaaaagtc	agtcagaa
D.Per	catcagag	gtgagtactgt...4230...	---cttccaacogctgagtgca----	TTATAac	TGCATTTTG	--gtttggatgacgtcgtcatc----	...679...	-tggtgaaaagtc	agtcagaa
D.Pse	catcagag	gtgagtactgt...2553...	---aaaggaaaaataaattaaatt----	TAAA	GGCAATTG	--ggtggcatgccacatccaca----	...2359...	-tggtgaaaagtc	agtcagaa
D.Vir	cgtcagag	gtgagtgttaga...4193...	---gccagagctgcctaagtgca----	TTATAac	TGCATTTTG	--gtttggatgacgtcgcacaac----	...716...	-tggtgaaaagtc	agtcagaa
D.Yak	catcagag	gtgagtactctt...4335...	-----tcgcactgagtcattataa----	CTGCATTTGGT	-----	tttggatgacgtcgtcaccat--	...578...	-tggtgaaaagtc	agtcagaa
		* ** **	** **	*	*	*		***** **	**** **

id=44700 gene=FBgn0085447 name=sif segment=chr3L.5670049.5684526.1 type=IN

D.Mel	ttcgcaag	gtaggaggagct...4539...	tacgtaacaaatgttgctgt-----	CGGCAC	TGACAACaGCAACaGCAACA	tagcagcaacatcacagcac-----	...271...	ttttttttgcag	atttcgga
D.Sim	ttcgcaag	gtaggaggagct...4651...	-----tgctgtcggcactgacaaca-	GCAACaGCAACa-	TAGCA	-----gcaacatcacagcacggcag...	257...	tcttttttcag	atttcgga
D.Sec	ttcgcaag	gtaggaggagct...4494...	-----tgctgtcagcactgacaaca-	GCAACaGCAACa-	TAGCA	-----gcaacatcacagcacggcag...	267...	tcttttttcag	atttcgga
D.Ere	ttcgcaag	gtaggaagagct...4467...	-----atgcaggcgagaagagaaga-	CAAATTGCT	T-TA	-----tcgacgacatacgtaacaaa...	311...	cttcttttcag	atttcgga
D.Ana	ttcgcaag	gtaggattaagg...3693...	-----ccagtcacaaataaacttg-	TAAAAca	TGCA-TATGA	-----gcaaaaatgtttgaaaattg...	1216...	tacctgttacag	atttcgga
D.Gri	ttcgcaag	gtaaaactttatt...3424...	-----gcagtcacaaataaacttg-	TAAAAca	TGCA-TATGA	-----gcaaaaatgtttgaaaattg...	1485...	gtccatttcag	atctcgga
D.Moj	ttcgcaag	gtaaacgaaaat...3523...	-----gcagtcacaaataaacttg-	TAAAAca	TGCA-TATGA	-----gcaaaaatgtttgaaaattg...	1386...	catctctgcag	atctcgga
D.Per	ttcgcaag	gtaaaaaccat...3435...	-----gcagtcacaaataaacttg-	TAAAAca	TGCA-TATGA	-----gcaaaaatgtttgaaaattg...	1474...	tcccctctgcag	atttcgga
D.Pse	ttcgcaag	gtaaaaaccat...4405...	-----atgcaggcgagaagagaaga-	CAAATTGCT	T-TA	-----tcgacgacatacgtaacaaa...	508...	tcccctctgcag	atttcgga
D.Vir	ttcgcaag	gtaaaaacaaa...3547...	-----gcagtcacaaataaacttg-	TAAAAca	TGCA-TATGA	-----gcaaaaatgtttgaaaattg...	1362...	gcacttttcag	atctcgga
D.Yak	ttcgcaag	gtaggaagagct...4564...	-----cccagcctcct--tttcgttc	ACTAAaAATGCA	G	-----gcgagaagagaagacaatt...	348...	atttatttcag	atttcgga
		***** **	**	*	*	*		** **	** **

id=44707 gene=FBgn0085447 name=sif segment=chr3L.5692125.5697024.1 type=IN VIEW

Figure 453: CS=8.58



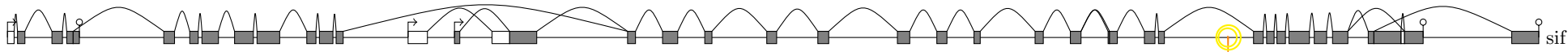
D.Mel	catcagag	gtgagtactctt...4379...cgcaccgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccatcgtcgtct...527...-tgggtgaaaagtc	agtcagaa	
D.Sim	catcagag	gtgagtactctt...4395...cgcaccgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccatcgtcgtct...511...-tgggtgaaaagtc	agtcagaa	
D.Sec	catcagag	gtgagtactctt...4377...cgcaccgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccatcgtcgtct...529...-tgggtgaaaagtc	agtcagaa	
D.Ere	catcagag	gtgagtactctt...4347...cgcactgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccatcgtcgtct...559...-tgggtgaaaagtc	agtcagaa	
D.Ana	catcagag	gtgagtggttat...4313...ctcgtgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccgctcgtctg...593...-tgggtgaaaattc	agtcagaa	
D.Moj	cgtcagag	gtaagtgtttgt...4186...---ccgagtgattataactgca	TTTTGGTTTGGATGA	cgtcgacaacgttgcgtcg...724...gtgggtgaaaa-tc	agtcacaa	
D.Per	catcagag	gtgagtgactgt...4237...accgctgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcatcgttgcgtcg...669...gtgggtgaaaa-tc	agtcagaa	
D.Pse	catcagag	gtgagtgactgt...4243...accgctgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcatcgttgcgtcg...663...gtgggtgaaaa-tc	agtcagaa	
D.Vir	cgtcagag	gtgagtgattaga...4204...---ctaagtgattataactgca	TTTTGGTTTGGATGA	cgtcgacaacgttgcgtcg...706...gtgggtgaaaa-tc	agtcacaa	
D.Yak	catcagag	gtgagtgatctt...4336...cgcactgagtgattataac	TGCATTTGGTTTGGATGA	cgtcgtcaccatcgtcgtct...570...-tgggtgaaaagtc	agtcagaa	
		** ** **	*	*****	** * * ** *	***** **

id=44700 gene=FBgn0085447 name=sif segment=chr3L.5670049.5684526.1 type=IN

D.Mel	atccgaag	gtgagttatggc...955...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...217...cttattcaacag	tcgctgct	
D.Sim	atccgaag	gtgagttatggc...921...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...217...tatattcaacag	tcgctgct	
D.Sec	atccgaag	gtgagttatggc...909...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...217...tatattcaacag	tcgctgct	
D.Ere	atccgaag	gtgagttatggc...897...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...212...cttattcaacag	tcgctgct	
D.Ana	atccgaag	gtgagttatggc...1520...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...206...tttattcaacag	tcgctgct	
D.Moj	atccaaag	gtgagttatggc...1245...ataaagagcaaccatttta	TTATTAAtAACCAcAAAATGCA	cccaacaacttcagcagc---a...342...ctttcattgcag	tcactgct	
D.Per	atccaaag	gtgagttatggc...871...gtgaaaagcaacgttatttta	TTATTAAtAACCAcAAAATGCA	aacaacttcagaccagagca...320...ttccatccacag	tcgctgct	
D.Pse	atccaaag	gtgagttatggc...846...atgaaaagcaacgttatttta	TTATTAAtAACCAcAAAATGCA	aacaacttcagaccatggca...276...ttccatccacag	tcgctgct	
D.Vir	atccaaag	gtgagttatggc...1224...ataaagagcaaccatttta	TTATTAAtAACCAcAAAATGCA	cccaacaacttcagcagc---a...455...tttctactgcag	tcactgct	
D.Yak	atccgaag	gtgagttatggg...857...ctgaaaagcaacattattta	TTATTAAtAACCAcAAAATGCA	aacaacttcagcacctgtga...230...cttattcaacag	tcgctgct	
		**** **	*****	* ** *****	*** *****	*****

id=44715 gene=FBgn0085447 name=sif segment=chr3L.5709380.5710637.1 type=IN VIEW

Figure 454: CS=10



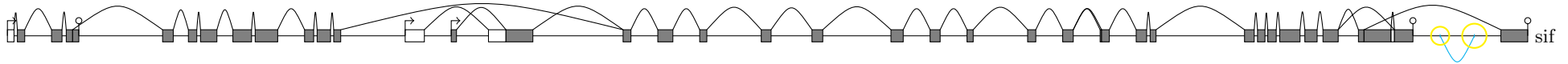
D. Mel	gcatccga	gtgagtattcc...1363...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	431...--cattcaaacag	acgagggc
D. Sim	gcatccaa	gtgagtattcc...1387...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	441...--cattcaaacag	acgagggc
D. Sec	gcatccga	gtgagtattcc...1333...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	427...--cattcaaacag	acgagggc
D. Ere	gcatccga	gtgagtattcc...1469...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaggagcaagaacagg...	457...--cattcaaacag	acgagggc
D. Ana	gcatccaa	gtgagtattcat...1416...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagattc...	440...attcctctc--cag	atgaaggc
D. Gri	acaccxaa	gtaagtaacaca...723...catcgcc	-----tctccccttctca	CATGATTGCAAGTTAA	-----	atgaataattacagccaca...	1713...attatthtc--cag	atgagggc
D. Moj	acatccaa	gtaagtaacattg...690...---	gcc-acaggctgagcctttaa	ATGATTGCAAGTTAA	-----	atgaataattacaaccgca...	1686...--cattgcccag	atgagggc
D. Per	gcatccga	gtgagtattcc...1395...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcagctggagcagcagg...	495...tgccacacc--cag	atgaaggc
D. Pse	gcatccga	gtgagtattcc...1366...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcagctggagcagcagg...	496...tgccacacc--cag	atgaaggc
D. Vir	gcatccaa	gtaagtaacatat...1798...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	caagcaggcaagcaggcagg...	329...--cattgctgcag	acgagggc
D. Yak	gcatccga	gtgagtattcc...1402...---	gttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	471...--cattcaaacag	acgagggc
		** * * *	** * * * *	* * * * *	* * * * *	* * * * *	* * * * *	** * * *

id=44734 gene=FBgn0085447 name=sif segment=chr3L.5729195.5731083.1 type=IN

D. Mel	gcatccga	gtgagtattcc...1363...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	431...--cattcaaacag	acgagggc
D. Sim	gcatccaa	gtgagtattcc...1387...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	441...--cattcaaacag	acgagggc
D. Sec	gcatccga	gtgagtattcc...1333...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	427...--cattcaaacag	acgagggc
D. Ere	gcatccga	gtgagtattcc...1469...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaggagcaagaacagg...	457...--cattcaaacag	acgagggc
D. Ana	gcatccaa	gtgagtattcat...1416...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagattc...	440...attcctctc--cag	atgaaggc
D. Gri	acaccxaa	gtaagtaacaca...886...-	tgtaagtaacaca	TAAaCTTGCAgAATTATG	-----	acacgcctgcaagtaggcaa...	1548...attatthtc--cag	atgagggc
D. Moj	acatccaa	gtaagtaacattg...860...-	tgtaagtaacattg	TAAaCTTGCAgAATTATG	-----	acacgcctgcaagtaggcaa...	1514...--cattgcccag	atgagggc
D. Per	gcatccga	gtgagtattcc...1395...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcagctggagcagcagg...	495...tgccacacc--cag	atgaaggc
D. Pse	gcatccga	gtgagtattcc...1366...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcagctggagcagcagg...	496...tgccacacc--cag	atgaaggc
D. Vir	gcatccaa	gtaagtaacatat...1798...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	caagcaggcaagcaggcagg...	329...--cattgctgcag	acgagggc
D. Yak	gcatccga	gtgagtattcc...1402...g	ttgaaggataaatta	TAGCaaGAAGt	GCACTTAAGTGCCTTCGTTA	cggtcaagagcaggagaatc...	471...--cattcaaacag	acgagggc
		** * * *	** * * * *	* * * * *	* * * * *	* * * * *	* * * * *	** * * *

id=44734 gene=FBgn0085447 name=sif segment=chr3L.5729195.5731083.1 type=IN VIEW

Figure 455: CS=6.6



D. Mel	atatacaa	tctatttactag--...2590...acaacacttgatattatta	GTTGGCATCGCTT	-----atta-ataaaaaaaaaaactc-...1342...atttaattgtag	ggtccccg
D. Sim	atatacaa	tctacttactag--...2596...acaacacttgatattatta	GTTGGCATCGCTT	-----attaacaacaactaaccacaa-...1309...atttaattgtag	ggtccccg
D. Sec	atatacaa	tctacttactag--...2485...acaacacttgatattatta	GTTGGCATCGCTT	-----attaacaacaactaaccacaa-...1309...atttaattgtag	ggtccccg
D. Ere	atatacac	tctacttactag--...2579...acaacacttgatattatta	GTTGGCATCGCTT	-----attaacaacaactaaccga-...1277...atttaattgtag	ggtccccg
D. Ana	atatacaa	aatctatactag--...2609...acaacacttgatattatta	GTTGGCATCGCTT	-----ataa-caaataaaaaataata-...1415...catttattgtag	ggtccccg
D. Gri	ataaagaa	aatattaatcaa--...2631...acaacacttgatattatta	GTTGGCATCGCTT	-----attaattaat-attaataaac-...1438...atttaattgtag	ggtccccg
D. Moj	atatatat	actatatataaa--...2631...aatatatacatatattatta	GTTGGCATCGCTT	-----attaattaataattaatgaa-...1484...atttaattgtag	ggtccccg
D. Pse	atatacac	--tatacaacagta...2970...caaacacttgatattatta	GTTGGCATCGCTT	-----attaactaattaacaaacta-...1536...atttaattgtag	ggtccccg
D. Wil	atacacac	ttcaggcacttg--...3329...ttaattattaatttcaaca	GTTGGCATCGCTT	GATTaAGTttt-tgataaaaaataagag...1574...ttttaattgtag	ggtccccg
D. Yak	atatacaa	tctacttactag--...2730...acaacacttgatattatta	GTTGGCATCGCTT	-----attaacaacaactaaccga-...1351...atttaattgtag	ggtccccg
	*** **	*	*	*	** *****

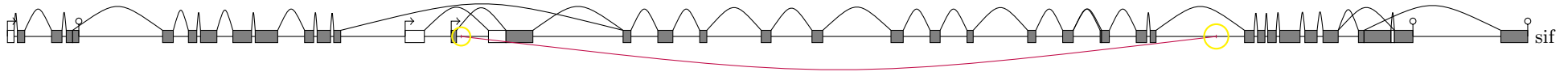
id=44751 gene=FBgn0085447 name=sif segment=chr3L\_5735558\_5739567\_1 type=IN

D. Mel	atatacaa	tctatttactag--...3471...ctgcaaacgagaaaa--tgaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaactcc---...461...atttaattgtag	ggtccccg
D. Sim	atatacaa	tctacttactag--...3453...ctgcaaacgagaaaa--tgaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaactcc---...452...atttaattgtag	ggtccccg
D. Sec	atatacaa	tctacttactag--...3344...ctgcaaacgagaaaa--tgaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaactcc---...450...atttaattgtag	ggtccccg
D. Ere	atatacac	tctacttactag--...3400...ctgcaaacgagaaaa--tgaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaactct---...456...atttaattgtag	ggtccccg
D. Ana	atatacaa	aatctatactag--...3535...---gaatcgaggagtgtgaaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaacccc---...489...catttattgtag	ggtccccg
D. Gri	ataaagaa	aatattaatcaa--...3528...aagcaaatattatga--aaaac-----	CAAGCGATGTCAAC	atttttag-ccaacacaacttaact---...541...atttaattgtag	ggtccccg
D. Moj	atatatat	actatatataaa--...3640...-agtaatacaaaaa--tgaatac-----	CAAGCGATGTCAAC	atttttag-ccaacacaacttaact---...475...atttaattgtag	ggtccccg
D. Pse	atatacac	--tatacaacagta...3953...-aatgaatggaata--ccagac-----	CAAGCGATGTCAAC	atttttag-ccaacacaactgt---...553...atttaattgtag	ggtccccg
D. Wil	atacacac	ttcaggcacttg--...4124...-aaaaaatatcaaa--tcagccc	AATTAATCAAGCGATGTCAAC	atttttag-ccaacacaactct---...780...ttttaattgtag	ggtccccg
D. Yak	atatacaa	tctacttactag--...3616...-tgcaaacgagaaaa--tgaaaa-----	CAAGCGATGTCAAC	atttttag-ccaacacaactct---...465...atttaattgtag	ggtccccg
	*** **	*	** *	*	***** ** *****

id=44751 gene=FBgn0085447 name=sif segment=chr3L\_5735558\_5739567\_1 type=IN VIEW

Figure 456: CS=9.6





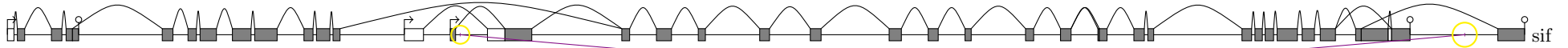
D. Mel	gtatttat	gtatgcgcttat...41...	tgtctgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...813...	aattaattatag	ataaatgt
D. Sim	gtatttat	gtatgcgcttat...37...	tgtctgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...812...	aattaattatag	ataaatgt
D. Sec	gtatttat	gtatgcgcttat...37...	tgtctgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...813...	aattaattatag	ataaatgt
D. Ere	gtatttat	gtatgcgcttat...26...	tgtctgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...833...	aattaattatag	ataaatgt
D. Ana	gtatttat	gtatgcgcttat...49...	tgtctgtgtagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...563...	aattaattatag	ataaatgt
D. Gri	gtatttat	gtatgcgcttat...81...	ggtgtgtgcagatagccagc	AAATTTATGCTAGC	aatataacaacaaaatatt...980...	aattaattatag	ataaatgt
D. Moj	gtatttat	gtatgcgcttat...107...	tgtgtgtgcagatagccagc	AAATTTATGCTAGC	aatataacaacaaaatatt...1103...	aattaattatag	ataaatgt
D. Per	gtatttat	gtatgcgcttat...66...	tgtccgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...1210...	aattaattatag	ataaatgt
D. Pse	gtatttat	gtatgcgcttat...66...	tgtccgtgcagatagccaac	AAATTTATGCTAGC	aatataacaacaaaatatt...1195...	aattaattatag	ataaatgt
D. Vir	gtatttat	gtatgagcttat...64...	ggtgtgtgcagatagccagc	AAATTTATGCTAGC	aatataacaacaaaatatt...881...	aattaattatag	ataaatgt
	*****	*****	*****	*****	*****	*****	*****

id=44704 gene=FBgn0085447 name=sif segment=chr3L.5687590.5688521.1 type=IN

D. Mel	gcatccga	gtgagtatttcc...1316...	gggtgatgccactgc-gcccgc	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...492...	--cattcaaacag	acgagggc
D. Sim	gcatccaa	gtgagtatttcc...1340...	gggtgtgtgcatg-gcccgc	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...502...	--cattcaaacag	acgagggc
D. Sec	gcatccga	gtgagtatttcc...1286...	gggtgtgtgcatg-gcccgc	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...488...	--cattcaaacag	acgagggc
D. Ere	gcatccga	gtgagtatttcc...1422...	cggtgtgtgcatg-ggcag	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...518...	--cattcaaacag	acgagggc
D. Ana	gcatccaa	gtgagtatttcc...1369...	tgagggtgtgtgcatg-gcccgc	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...501...	attcctctc--cag	atgaaggc
D. Gri	acaccxaa	gtaagtaacaca...2016...	-gctgctgttctgctgcttg	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...420...	attattttc--cag	atgagggc
D. Moj	acatccaa	gtaagtaacattg...1969...	cgctgctgtgctgctg-gcttg	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...406...	--cattgcccag	atgagggc
D. Per	gcatccga	gtgagtatatcc...1348...	agaacgtgtgactgc-gcctg	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...556...	tgccacacc--cag	atgaaggc
D. Pse	gcatccga	gtgagtatatcc...1319...	agaacgtgtgactgc-gcctg	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...557...	tgccacacc--cag	atgaaggc
D. Vir	gcatccaa	gtaagtaacatat...1751...	tgctgctgtgctgctg-gcttg	GCTGttGCATgAAATTT	tatgcaaaaagttgaaagga...390...	--cattgtgctgag	acgagggc
	** ** *	** ** *	* **	* **	*****	*****	*** * **

id=44734 gene=FBgn0085447 name=sif segment=chr3L.5729195.5731083.1 type=IN VIEW

Figure 457: CS=9



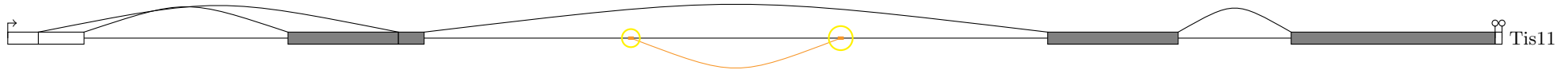
D.Mel	gtatttat	gtatgcgcttat...43...--tctgtgcagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...812...aattaattatag	ataaatgt
D.Sim	gtatttat	gtatgcgcttat...39...--tctgtgcagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...811...aattaattatag	ataaatgt
D.Sec	gtatttat	gtatgcgcttat...39...--tctgtgcagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...812...aattaattatag	ataaatgt
D.Ere	gtatttat	gtatgcgcttat...28...--tctgtgcagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...832...aattaattatag	ataaatgt
D.Ana	gtatttat	gtatgcgcttat...51...--tctgtgtagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...562...aattaattatag	ataaatgt
D.Gri	gtatttat	gtatgcgcttat...83...--tgtgtgcagatagccagcaa	ATTATGCTAGCA	atataacaacaaaatattt...979...aattaattatag	ataaatgt
D.Moj	gtatttat	gtatgcgcttat...109...--tgtgtgcagatagccagcaa	ATTATGCTAGCA	atataacaacaaaatattt...1102...aattaattatag	ataaatgt
D.Pse	gtatttat	gtatgcgcttat...68...--tccgtgcagatagccaacaa	ATTATGCTAGCA	atataacaacaaaatattt...1194...aattaattatag	ataaatgt
D.Wil	gtatttat	gtatgctcttat...61...tgtgtgtagatagcca--aa	ATTATGCTAGCA	atataacaacaaaatattt...1527...aattaattatag	ataaatgt
	*****	***** *****	* ** *****	*****	*****

id=44704 gene=FBgn0085447 name=sif segment=chr3L\_5687590.5688521\_1 type=IN

D.Mel	atatacaa	tctatttactag--...3347...agaagaggcagaacggaaaa	TGTTGGCAT	AAATgcaaaacttttgatcgaaaa...585...atthaattgtag	ggtccccg
D.Sim	atatacaa	tctacttactag--...3339...agaagaggcagaacggaaaa	TGTTGGCAT	AAATgcaaaacttttgatcgaaaa...566...atthaattgtag	ggtccccg
D.Sec	atatacaa	tctacttactag--...3232...agaagaggcagaacggaaaa	TGTTGGCAT	AAATgcaaaacttttgatcgaaaa...562...atthaattgtag	ggtccccg
D.Ere	atatacac	tctacttactag--...3295...aaaagaggcagaacggaaaa	TGTTGGCAT	AAATgcaaaacttttgatcgaaaa...561...atthaattgtag	ggtccccg
D.Ana	atatacaa	aatctatactag--...3411...gacagaggcagaacggaaaa	TGTTGGCAT	AAATgcaaaactctcaattgaaaa...613...catttattgtag	ggtccccg
D.Gri	ataaaaga	aatattaatcaa--...3424...aacacgaaacttacgaaaa	TGTTGGCAT	AAATgcaaaactgttttatgaaat...645...atthaattgtag	ggtccccg
D.Moj	atataat	actatatataaa--...3498...cagagatacaagaaaaaaa	TGTTGGCAT	AAATgcaaaactgataaaaattaa...617...atthaattgtag	ggtccccg
D.Pse	atatacac	--tatacaacagta...3819...ttcagagacagaagaaaa	TGTTGGCAT	AAATgcaaaactgttgatcagaaa...687...atthaattgtag	ggtccccg
D.Wil	atacacac	ttcaggcacttg--...3987...ctatcaaatcgaacacaaaa	TGTTGGCAT	AAATgcaaaactgatctaaaaaaa...924...ttthaattgtag	ggtccccg
	*** * *	*	* *****	*	** *****

id=44751 gene=FBgn0085447 name=sif segment=chr3L\_5735558.5739567\_1 type=IN VIEW

Figure 458: CS=9.72



```

D.Mel acgtaacg gtaagtttccca...4164...ttctgcc--ttcgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...746...ttgcattcgcag atgaacga
D.Sim acgtaacg gtaagtttccca...4173...ttctgcc--ttcgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...737...ttgcattcgcag atgaacga
D.Sec acgtaacg gtaagtttccca...4193...ttctgcc--ttcgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...717...ttgcattcgcag atgaacga
D.Ere acgtagcg gtaagtttccca...4218...ttctgcc--ttcgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...692...ttgcattcgcag atgaacga
D.Ana tccagacg gtaagtttct...4172...ccaactgttgcgtgttgGGCTTgaACTTgAGCTctatacatatgtaattggct...737...ttcattcacag gtggcgag
D.Gri aggcagtg gtaagtctacaa...3840...gtgtgtt--ttgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...1070...agtgatatgcag cagcagca
D.Per tccagacg gtaagtcctcct...3703...gttggtc--ttcgtgttgGCTTgaACTTgAGCTccatacatatgtaattggct...1207...accattcgcag gtggccag
D.Pse tccagacg gtaagtcctcct...3657...gttggtc--ttcgtgttgGCTTgaACTTgAGCTccatacatatgtaattggct...1253...accattcgcag gtggccag
D.Wil ttcaaacg gtaagtttctt...3961...gtgtgtg--ttgtogttGCTTgaACTTgAGCTctatacatatgtaattggtt...949...cttcatttgcag gtggccac
D.Yak acgtaacg gtaagtttccca...4101...ttctgcc--ttcgtgttgGCTTgaACTTgAGCTctatacatatgtaattggtt...809...ttgcattcgcag atgaacga
* ***** ** ***** ** *** *

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id=127782 gene=FBgn0011837 name=Tis11 segment=chrX\_12554901\_12571769\_1 type=IN

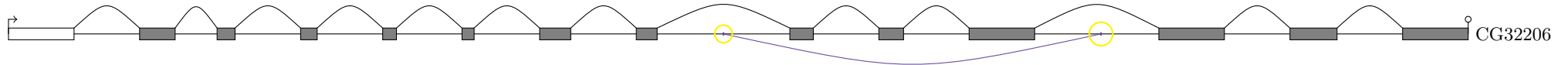
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D.Mel acgtaacg gtaagtttccca...4735...ctgttttgccttataggtcaAGTTaaAAGTaaAAGTgagtttggcttttgccttg-----...174...ttgcattcgcag atgaacga
D.Sim acgtaacg gtaagtttccca...4731...ctgttttgccttataggtcaAGTTaaAAGTaaAAGTgagtttggcttttgccttg-----...178...ttgcattcgcag atgaacga
D.Sec acgtaacg gtaagtttccca...4737...ctgttttgccttataggtcaAGTTaaAAGTaaAAGTgagtttggcttttgccttg-----...172...ttgcattcgcag atgaacga
D.Ere acgtagcg gtaagtttccca...4757...ctgttttgccttataggtcaAGTTaaAAGTaaAAGTgagc-----ttaaactttgtgctgc...152...ttgcattcgcag atgaacga
D.Ana tccagacg gtaagtttct...4677...tttttcaacttataggtcaAGTTaaAAGTaaAAGTC-tccaaa--caccatttgagctc...231...ttcattcacag gtggcgag
D.Gri aggcagtg gtaagtctacaa...4619...tactcttacttataggtcaAGTTaaAAGTaaAAGTattttgtgtgcgtgtgttg-----...290...agtgatatgcag cagcagca
D.Per tccagacg gtaagtcctcct...4755...ggttttgccttataggtcaAGTTaaAAGTaaAAGT--atccaa--caccatttgagccg-...154...accattcgcag gtggccag
D.Pse tccagacg gtaagtcctcct...4749...gttttgccttataggtcaAGTTaaAAGTaaAAGT--atccaa--caccatttgagccg-...160...accattcgcag gtggccag
D.Wil ttcaaacg gtaagtttctt...4725...gctgcttaacttataggtcaAGTTaaAAGTaaAAGT--attccaattccaccatttgc-----...184...cttcatttgcag gtggccac
D.Yak acgtaacg gtaagtttccca...4715...ctgttttgccttataggtcaAGTTaaAAGTaaAAGTaaagcttggcttttaacttgc-----...194...ttgcattcgcag atgaacga
* ***** ***** **** ** *** *

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id=127782 gene=FBgn0011837 name=Tis11 segment=chrX\_12554901\_12571769\_1 type=IN VIEW

Figure 459: CS=12



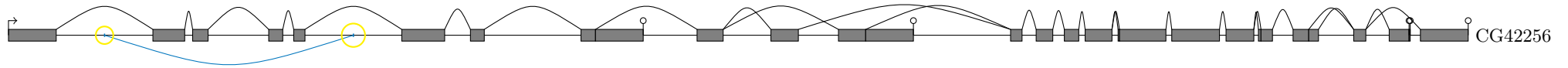
D. Mel	gtttcacg	gtacgtcaaact...3174...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcactgacagaaa-----	...1737...tgtcactttcag	aggtcctg
D. Sim	gtttcacg	gtaagtcaaact...2807...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcactgacagaaa-----	...2104...tgtcactttcag	aggtcctg
D. Sec	gtttcacg	gtaagtcaaact...2924...taaaaattaatatacttttc	ATTGCAGTTTATT	gcacttggcactgacagaaa-----	...1987...tgtcactttcag	aggtcctg
D. Ere	gtttcacg	gtacgtccaact...3151...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcactgacagaaa-----	...1760...tgttactttcag	cggtcctg
D. Ana	gtgtcacg	gtaagtccaag...3402...taaaaattaatttacttttc	ATTGCAGTTTATT	-----gcaatgacaaaaccattgca...	...1509...tttactttcag	tggccccg
D. Gri	gtgtcacg	gtgagtggaatg...3126...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcagtgcacaaaa-----	...1785...tgtcttctgcag	tgttccag
D. Per	gtgtcacg	gtaagtccaag...3275...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcactgacacaaaa-----	...1636...tgtgactttcag	tggcgtag
D. Vir	gtctcacg	gtgagttgaatg...3120...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttggcagtgcacaaaa-----	...1791...tgtcttttcag	cggaccag
D. Wil	gtatcacg	gtaagttatact...2537...taaaaattaatttacttttc	ATTGCAGTTTATT	gcacttgggtgctgcagctg-----	...2374...ttctatttcaag	tggtcctg
	** *****	** ** *	*****	** **	* * **	** * *

id=53997 gene=FBgn0052206 name=CG32206 segment=chr3L.19357899.19364185.-1 type=IN

D. Mel	gggatttg	gtaagtaaatca...940...-----gacgtcgctcctcggtgaca	AATATGAACTGCAAAT	attgtgatgccaattgaag...410...ttcccctgacag	aaactgga
D. Sim	gggatttg	gtaagttacact...1543...-----gacgtcgctcctcggtgaca	AATATGAACTGCAAAT	attgtgatgccaattgaag...410...ttccccttacag	aaactgga
D. Sec	gggatttg	gtaagttaagcc...1482...-----gacgtcgctcctcggtgaca	AATATGAACTGCAAAT	attgtgatgccaattgaag...410...ctccccttacag	aaactgga
D. Ere	gggatttg	gtaagtaaatca...952...-----gacgtcgctcctcggtgaca	AATATGAACTGCAAAT	attgtgatgccaattgaag...398...ttcccctttcag	aaactgga
D. Ana	gggatttg	gtaagttgacta...744...-----gacgtcgctcggtgaca	AATATGAACTGCAAAT	attgtgatgccaattgaag...128...ttttattgacag	aaactgga
D. Gri	gggatttg	gtaagttaccg...1622...tagcctttttaaatggcg-----ca	AATATGAACTGCAAAT	attttgacgccaattgaag...1398...tcgtatttgcag	aaactgga
D. Per	gagatttg	gtaagttccaag...862...-----cgccgccc-ttgccggtgaca	AATATGAACTGCAAAT	attttgatgccaattgaag...54...ttctcttgcag	aaactgga
D. Vir	gagatttg	gtaagttcaata...872...tagccttttgaatgtcg-----ca	AATATGAACTGCAAAT	attttgacgccaattgaag...219...tgctatttgcag	aaactgga
D. Wil	gagatttg	gtaagtaaacaa...705...----ccatttcgacg-----tcggtgaca	AATATGAACTGCAAAT	attttgatgccaattgaag...69...ttcccgcacag	aaactgga
	* *****	*****	*	***** ** ** *	** ** *

id=54003 gene=FBgn0052206 name=CG32206 segment=chr3L.19341904.19343333.-1 type=IN VIEW

Figure 460: CS=12.42



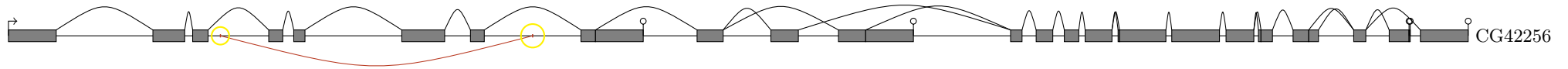
D.Mel	caatctgg	gtaggtgccacc...3271...-----cgcacaggagcacggatagg	GTGGACTTTT	TGTTTTTG	---caggaaagaataaaacccct...1636...tatactttccag	ataacacc
D.Sim	caatctgg	gtaggtgccacc...3319...-----cgcataggagtacggatagg	GTGGACTTTT	TGTTTTTC	---gcaggaaagaataaaacccc...1589...tctactttccag	ataacacc
D.Sec	caatctgg	gtaggtgccacc...3307...-----cgcataggagtacggatagg	GTGGACTTTT	TGTTTTTC	---gcaggaaagaataaaacccc...1601...tatactttccag	ataacacc
D.Ere	caatctgg	gtaggtgcctcc...4465...--gcattatacaaaatgtaaaa-----	TG--	CTTATTAAGTGCAA	aaaggtctcaaggattttg-...443...tttactttccag	atgccacc
D.Ana	ccatctcg	gtaggtgcaatcc...2816...-----cgcacaggatcacaaagagg	GTGGACTTTT	TGTTTTTT	---gcaggaaagaataaaacccc...1788...tttcctttccag	aaaccacc
D.Gri	caggtttg	gtaggtgcaact...4165...tgaatatatgaaatttaag-----	TG--	CTTATTAAGT	---actacagcctaaaaaaaca---...224...tttcggtttcag	atgcaacc
D.Per	ccatcttg	gtaggtgccacc...4324...gggtatcctacaaaatcggc-----	TTG--	CTTATTAAGAGC	aaaaagggttaaaaggagaca---...585...tttatcatgcag	atgcaacc
D.Pse	ccatcttg	gtaggtgccacc...4324...gggtatcctacaaaatcggc-----	TTG--	CTTATTAAGAGC	aaaaagggttaaaaggagaca---...585...tttatcatgcag	atgcaacc
D.Wil	caatctgg	gtaggtatattac...4650...ttcacaataaaaaatttaa-----	TG--	CTTATTAAG	---agacagatagacatagagac---...263...gattcattgcag	atgccacc
D.Yak	caatctgg	gtaggtgccacc...3198...-----cgcacaggaaacacggatagg	GTGGACTTTT	TGTTTTTC	---gcaggaaagaataaaacccc...1710...tatacctttcag	atgccacc
	*	* * *****	*	** ** * **	*	* * ** * * ** *

id=6553 gene=FBgn0259141 name=CG42256 segment=chr3L.7177056\_7182366\_-1 type=IN

D.Mel	gaatacag	gtgtgtatgggt...876...----gcacaatgtcagcctgatga-----	CAGAAAACAAAAGaa	TCTAT	aagcgactgcatggtggggc-...761...cctccaacgcag	ctggttca
D.Sim	gaatacag	gtgtgtatgggt...899...----acaatgtcagcctgatgaca-----	GAAAACAAAAGaa	TCTAT	aagcgacagcatggtggggc-...788...cctccaacgcag	ctggttca
D.Sec	gaatacag	gtgtgtatgggt...900...----acaatgtcagcctgatgaca-----	GAAAACAAAAGaa	TCTAT	aagcgacagcatggtggggc-...757...cctccaacgcag	ctggttca
D.Ere	gaatacag	gtgtgtatagtg...792...ttgtgtac-atgtggccataa	TTGCGCTTTGATAAGCA	-----	gacaagtaatgtaagatccg-...861...tctccaacgcag	ctggttca
D.Ana	gaatacag	gtgtgtatgggg...552...-----atgtcagactgctgacagag--	GGAAAACAAAAGaa	TCTAT	aagcga-aacgtggcatgcct...674...catctccccag	ctggtaca
D.Gri	gaatacag	gtgggtacgggt...500...----atgt-gtgtacacataattaa	GCTTTGATAAGCA	-----	aacaagtaataaaaaacttt-...593...tactttttatag	ctggtaca
D.Per	gaatacag	gtgtgtatgggt...692...----gtat-gtgcagccataattac	GCTTTGATAAGCAG	-----	acaagtaaaacaaagtagaa...703...tctgaccacag	ctggtata
D.Pse	gaatacag	gtgtgtatgggt...547...----gtat-gtgcagccataattac	GCTTTGATAAGCAG	-----	acaagtaaaacaaagtagaa...683...tctgaccacag	ctggtata
D.Wil	gaatacag	gtatgctatcta...591...----tat-atgcacacataattac	GCTTTGATAAGCA	-----	ggcaagtaataaaacgtaac-...589...ctcatcttacag	ttggtata
D.Yak	gaatacag	gtgtgtataggt...1009...----acaatgtcaggctgatgaca-----	GAAAACAAAAGaa	TCTAT	aagcgtcggcatggtgggca-...779...ccccccagcag	ctggttca
	*****	** *	** *	** **	**	**** *

id=6561 gene=FBgn0259141 name=CG42256 segment=chr3L.7173687\_7175407\_-1 type=IN VIEW

Figure 461: CS=12.6



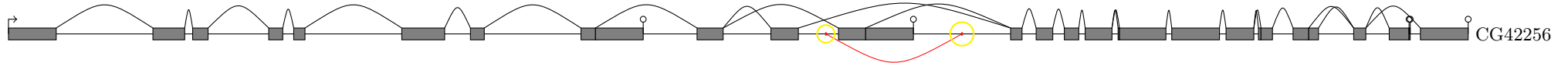
D. Mel	gcaaggcg	gtaagttaactc...	83...	-tccttgccgtgcaacaagc	CAACAAAGTGCATTGTTGTTGCA	gtattttgc---	ctcacatgtttg...	518...	cccttccaccag	atggcaaa
D. Sim	gcaaggcg	gtaagttacctc...	62...	-tctgcatccctgcaacaagc	CAACAAAGTGCATTGTTGTT	tttcagattttgc---	ctacat-----	514...	cccttccaccag	atggcaaa
D. Sec	gcaaggcg	gtaagttacctc...	62...	-tctgcatccctgcaacaagc	CAACAAAGTGCATTGTTT	tttcagattttgc---	cttac-----	511...	cccttccaccag	atggcaaa
D. Ere	gcaaggcg	gtaagttaaccg...	68...	-tccttgccctgcaacaagc	CAACAAAGTGCATTGTTGCT	tttcagattttgc---	ctacat-----	507...	tctccactccag	atggcaaa
D. Ana	gcaaggcg	gtaagtatcccg...	96...	atccttgccctgtggc-agc	CAACAAAGTGCATTGTTTATT	tttcagattttgc---	ctcacatgt---	322...	tctaccctctag	atggcaag
D. Per	gcaaggcg	gtaagtaacacg...	216...	-gtggcagcgcttccaagc	CAACAAAGTGCATTGTTGTTGCA	gtattttgc---	ctcacatgtttg...	318...	cacttttcgcag	acggaaaa
D. Pse	gcaaggcg	gtaagtaacacg...	215...	-gtggcagcgcttccaagc	CAACAAAGTGCATTGTTGTTGCA	gtattttgc---	ctcacatgtttg...	318...	cacttttcgcag	acggaaaa
D. Vir	gcaaggcg	gtaagtaatggt...	130...	-cctgtagcggcttccaagc	CAACAAAGTGCATTGTTTGT	tttcagattttgc---	ctacat-----	581...	cttcttttcag	atggtaaa
D. Wil	gcaaggcg	gtaagtaacgaa...	199...	-gtggcagcgcttccaagc	CAACAAAGTGCATTGTTGTTGCA	gtattttgc---	ctcacat-----	358...	ttctattcacag	atggcaaa
D. Yak	gcaaggcg	gtaagttaaccg...	111...	-tccttgcccgcaacaagc	CAACAAAGTGCATTGTTGCTT	gtattttgc---	ctcacatgtttg...	503...	ttttgtccag	atggcaaa
	*****	*****		*	*****	**	*****	**	**	***

id=6557 gene=FBgn0259141 name=CG42256 segment=chr3L.7175788.7176477.-1 type=IN

D. Mel	aacggaag	gtaattgaactt...	2878...	---tggagatagcggatgggga-----	TGCGGA	tgCGGATG	GTGCGA	CTTTGTTG	caactcggctccttgccattg-	1175...	ttgccatttcag	atttatga
D. Sim	aacggaag	gtaattgaactt...	2759...	---gaggatgaggatgggga-----	CGCGATG	GTGCGA	CTTTGTTG	caactcggctcctcgccattg-	1174...	ttgccgtttcag	atttatga	
D. Sec	aacggaag	gtaattgaactt...	2793...	---ggatgaggatgggga-----	GGATG	GTGCGA	CTTTGTTG	caactcggctcctcgccattg-	1143...	ttgccgtttcag	atttatga	
D. Ere	aacggaag	gtaattgaactt...	2851...	---gtggctgaggatgggga-----	GCGGATG	GTGCGA	CTTTGTTG	caattttgtcctcgccattg-	1135...	ttgccatttcag	atttatga	
D. Ana	aacggaag	gtaattgaactt...	2733...	---gggctgaggatgggga-----	GGATG	GTGCGA	CTTTGTTG	caattttgtcctcgccattg-	1189...	ttgtcgtttcag	atttatga	
D. Per	aacggaag	gtaattgaactt...	3042...	---aggacggatgggga-----	TGCGGA	tgCGGATG	GTGCGA	CTTTGTTG	caattttgtccccgccattg-	1078...	ttgtcgtttcag	atttatga
D. Pse	aacggaag	gtaattgaactt...	2995...	---aggacggatgggga-----	TGCGGA	tgCGGATG	GTGCGA	CTTTGTTG	caattttgtccccgccattg-	1066...	ttgtcgtttcag	atttatga
D. Vir	aacggaag	gtaattgaactt...	2873...	---tagcgtcgtcctgcatg-----	GCGGATA	-----	GTGCGA	CTTTGTTG	caattttgtcgtg-cattgt	1114...	tcttttcacag	atttatga
D. Wil	aacggaag	gtaattgaactt...	3625...	---cgttgtgaggatgggga-----	GCGGATA	agGATG	GTGCGA	CTTTGTTG	caattttgtccccgccattg-	1272...	gtctcgtttcag	atttatga
D. Yak	aacggaag	gtaattgaactt...	2974...	---tggagatagcggatgggga-----	TGCGGA	atGCGAATG	GTGCGA	CTTTGTTG	caattttgtcctcgccattg-	1227...	ttgccatttcag	atttatga
	*****	*****		* * *	*	*****	*****	*	***	* *****	***	*****

id=6565 gene=FBgn0259141 name=CG42256 segment=chr3L.7168677.7172822.-1 type=IN VIEW

Figure 462: CS=10



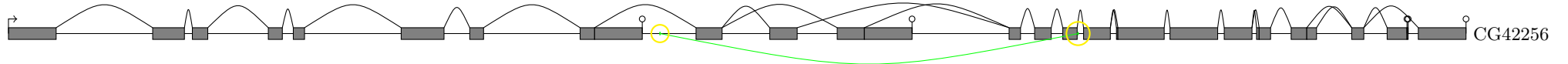
D.Mel	ggtcaatg	gtaaaaacaatg...	226...	gattaagtagcgttt	-----	ttcga	TTCGAaTGTGTTAa	CAAAACTGCGAAGg	TTTA	-----	cagagcgtg	caaattgacaa--	...	98...	tcctcttgtag	tgccgccc	
D.Sim	ggtcaatg	gtaaaaacaatg...	228...	gattaagtagcgttt	-----	ttcga	TTCGAaTGTGTTAa	CAAAACTGCGAAGg	TTTA	-----	cagagcgtg	caaattgacaa--	...	112...	tcctcttgtag	tgccgccc	
D.Sec	ggtcaatg	gtaaaaacaatg...	217...	gattaagtagcgttt	-----	ttcga	TTCGAaTGTGTTAa	CAAAACTGCGAAGg	TTTA	-----	cagagcgtg	caaattgacaa--	...	105...	tcctcttgtag	tgccgccc	
D.Ana	cgtcaacg	gtaaacacatca...	253...	-----	cggtt	-----	tattcgaattacat--	GTTAa	CAAAACTGCGAAGg	TTTA	-----	ctgccaat	acaagtgtatg--	...	119...	tcctcttgtag	tgccgccc
D.Gri	ggttaaatg	gtaagaaatga...	324...	-----	agagt	ttaaacagtcttttaa	-----	CAAAACTGCGAAGg	TTTAGTTGTA	caTATAT	gtagtga	tgtagtga	...	173...	tcctcttgtag	taccgccc	
D.Moj	ggtgaatg	gtaaacactga...	348...	-----	agagt	ttaacaatccttttaa	-----	CAAAACTGCGAAGg	TTTAG	-----	ctgtacaca	tgaatgtatg--	...	142...	tcctcttgtag	taccgccc	
D.Pse	ggtcaacg	gtaaacacatga...	301...	-----	agtagcgttt	-----	tattcga	TGTGTTAa	CAAAACTGCGAAGg	TTTAG	-----	ctgtaaac	caaat--	...	181...	tcctcttgtag	tgccgccc
D.Vir	ggtcaatg	gtaagaaacga...	298...	-----	agagt	ttaacaatccttttaa	-----	CAAAACTGCGAAGg	TTTAGTTGT	acATAT	gtagtga	tgtagtga	...	165...	tcctcttgtag	taccgccc	
D.Yak	ggtcaatg	gtaaaaagaatg...	227...	gattaagtagcgttt	-----	ttcga	TTCGAaTGTGTTAa	CAAAACTGCGAAGg	TTTA	-----	cagagcgtg	caaattgacaa--	...	119...	tcctcttgtag	tgccgccc	
		** * * *		***** *		****	** *	*	**** *****		*	*		*	** * * * *	*****	

id=6572 gene=FBgn0259141 name=CG42256 segment=chr3L.7165058\_7165477-1 type=IN

D.Mel	-----	aaaaaaa	gtgaaatattgg...	830...	-----	aactaaat	ggataagaact	-----	TAAAg	CTTCGCAGT	TTTGc	TAATGTA	TTGAG	aatggtgt	ttttttttttg	...	1540...	taagccccgtag	tgccgcct	
D.Sim	-tc-----	aaaaatt	ccaaaatttag...	852...	-----	aactaaat	ggataagaact	-----	TAAAg	CTTCGCAGT	TTTGc	TAATGTA	TTGAG	aatggtgt	tttttttctaga	...	1569...	taagccccgtag	tgccgcct	
D.Sec	ttc-----	aaaaatt	caaaaatttg...	834...	-----	aactaaat	ggataagaact	-----	TAAAg	CTTCGCAGT	TTTGc	TAATGTA	TTGAG	aatggtgt	tttttttctaga	...	1570...	taagccccgtag	tgccgcct	
D.Ana	ctctccaagc	ggaattgg	ca	...	615...	-----	acgaaagt	ggtaagaact	-----	TAAAg	CTTCGCAGT	TTTGc	TAAT	ctagtagag	catgaacat	...	1567...	taagccccgtag	tgccgcct	
D.Gri	-----	aaaaaaa	gcgatttgatac...	673...	-----	aaattaca	aaaaaaaaaagaa	ATATAaaTATAA	atTTAAAg	CTTCGCAGT	TTTGc	taatgtag	ctgagaatgaa	-----	...	1518...	taagctccacag	ttccgcca		
D.Moj	-----	ggtaatt	atcgaaactctaac	...	687...	-----	attataag	caatatataat	-----	TTAAAg	CTTCGCAGT	TTTGc	taatgtag	ttgacaatgaa	-----	...	1593...	taagctctgtag	tgccgccc	
D.Pse	atgtaaaagg	ggactcca	cc	-----	729...	-----	accaaata	aatagataaga	-----	TTAAAg	CTTCGCAGT	TTTGc	TAATGTA	gtagaatgag	gtttgttt	-----	...	1685...	taagccccgtag	tgccaccc
D.Vir	-----	aaaattaa	ctacgaaattat	...	782...	-----	atgaaacca	aatcaacaaca	-----	ATATATAA	atTTAAAg	CTTCGCAGT	TTTGc	taatgtag	ttgagaatgaa	-----	...	1453...	taagctctgtag	tgccgcca
D.Yak	ctcccagc	gcaaat	caat	-----	892...	-----	aactaaat	ggataagaact	-----	TAAAg	CTTCGCAGT	TTTGc	TAATGTA	TTGAG	aatggtgt	ttttttttgtt	...	1605...	taagccccgtag	tgccacct
		*					*			*****	**	*	***				*	** * * *	** * * *	

id=6575 gene=FBgn0259141 name=CG42256 segment=chr3L.7161390\_7163856-1 type=IN VIEW

Figure 463: CS=9.72



D.Mel	attccgca	gaaaaaaaaaaga...139...--ggacgaaccagccaggata---	TGCAT	TTACa	TTGTG	ctccgcttcccgttgtctgc...345...attccgtcacag	gtcttcca	
D.Sim	attccgca	gaaaaaaaaaatg...136...--ggacgaaccagccaggata---	TGCAT	TTACa	TTGTG	ctccgcttcccgttgtctgc...339...attccgtcacag	gtcttcca	
D.Sec	attccgca	gaaaaaaaaaatg...136...--ggacgaaccagccaggata---	TGCAT	TTACa	TTGTG	ctccgcttcccgttgtctgc...364...attccgtcacag	gtcttcca	
D.Ana	at tt t t t g c a	gaaaaaaagcaa...132...--aggagcggcaggagccaggata---	TATGCAT	TTACa	TTGTG	ttctgttccttgcctat...326...tattttccacag	gtcttcca	
D.Gri	attccgca	gaattcaca...182...--tctgtgcactgtcaggata---	TGCAT	TTACa	TTGTG	cgctgttctgcctccggtt...120...gactcctgcag	gtctgccc	
D.Per	attctgca	gaaaaaaaaat...144...gaagggcggatgggcaggc	AGGAT	TGCAT	TTACa	TTGTG	aaatgcttcccgttgcctga...201...tctatgtcacag	gtctaccg
D.Pse	attctgca	gaaaaaaaaata...145...gaagggcggatgggcaggc	AGGAT	TGCAT	TTACa	TTGTG	aaatgcttcccgttgcctga...201...tctgtgtcacag	gtctaccg
D.Vir	actccgca	gaaatctacaag...147...--tgtccctggctgccaggata---	TGCAT	TTACa	TTGTA	cgctgttctgccttct...122...ttttccctag	gtttgccc	
D.Yak	attccgca	gaaaaaatgga...146...--ggacgaaccagccaggata---	TGCAT	TTACa	TTGTG	ctccgcttcccgttgtctgc...337...attccatcacag	gccttcca	
	* * **	**** *	* ****	*****	* **** *	**	* * **	

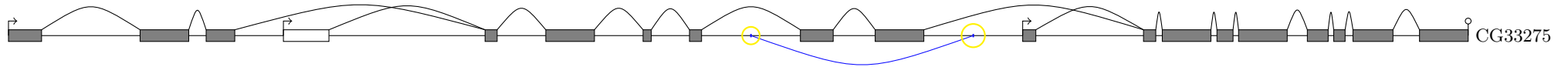
id=6568 gene=FBgn0259141 name=CG42256 segment=chr3L\_7166655\_7167218.-1 type=IN

D.Mel	aat	TACAA	GTGAGTGCA	----ctcagccggatct--gtggga----	aacgaaagtaatacaactgcactttgcattc-----	gttttcag	gatctcgg	
D.Sim	aat	TACAA	GTGAGTGCA	----ctcagtcggatctgagtgga----	aacgaaagtaataaccgctgcactttgcattc-----	gctttcag	gatctcgg	
D.Sec	aat	TACAA	GTGAGTGCA	----ctcagccggatct--gcggga----	aacgaaagtaatacctctgcactttgcattc-----	gctttcag	gatctcgg	
D.Ana	aat	TACAA	GTGAGTGCATG	----cccagcagtcctcagt-----	catgtccataatccttcgtcacc-----	ttc	actttcag	
D.Gri	aat	TACAA	GTGAGTGCA	----ctgaatcga-----	aactaatgcaatgactttgccaatccaatctcaatcccacacag	aatatctg	aatatctg	
D.Per	aac	TACAA	GTGAGTGCA	GAGTCCT	cc-----	aataagcgtaatggggagcctcagttcaatcat---	tgcttcag	gatatccg
D.Pse	aac	TACAA	GTGAGTGCA	GAGTCCT	cc-----	tataaacgtaagggggcctcagtttaataatcat---	tgcttcag	gatatccg
D.Vir	aat	TACAA	GTGAGTGCA	----gtgagccaa-----	tgccaatgaattgac--ttgtcaatctttatccc---	tccaacacag	aatatcgg	
D.Yak	aat	TACAA	GTGAGTGCA	----ctcagccgatgct--gcgggaagcgaacgaaagtaataaccgctgcactttgcattc-----	gctttcag	***	** * **	
	** *****	*****		* *	**	***	** * **	

id=6581 gene=FBgn0259141 name=CG42256 segment=chr3L\_7160609\_7160675.-1 type=IN VIEW

Figure 464: CS=14.04





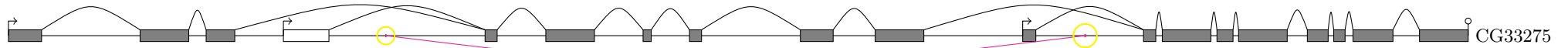
D. Mel	gagcgcag	gtgagtgggggt...3281...agcaat-ttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...847...ttaccattgcag	ctcctgcc
D. Sim	gagcgcag	gtgagtgggggt...3340...agcaat-ttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...827...ttaccattgcag	ctcctgcc
D. Sec	gagcggag	gtgagtgggggt...3188...agcaat-ttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...830...ttaccattgcag	ctcctgcc
D. Ere	gagcgcag	gtgagtggggga...3237...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...838...ttaccattgcag
D. Ana	gatcgcag	gtgagtggggga...3670...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...638...ttgcctttgcag
D. Gri	gagcgcag	gtgagcgaagt...3458...-gcaat	tttccat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcaaat
D. Per	gagcgcaa	gtaagtgttata...3621...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...991...gcacatttgcag
D. Pse	gagcgcaa	gtaagtgttata...3584...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...964...gcacatttgcag
D. Vir	gagcgcag	gtgagttaaatt...3567...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatatt
D. Wil	gaaagcag	gtgagttgcggg...4418...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...490...ttgcagcagcag
D. Yak	gagcgcag	gtgagtgggggt...3430...-gcaat	tttcaat	tttttattt	ACGCt	GATTAA	aaGTGG	ctaccaacttgtcatagtta...834...ttaccattgcag
	** * *	** **		****	***	*****	*****	* **

id=26085 gene=FBgn0035802 name=CG33275 segment=chr3L\_7613489\_7617697\_1 type=IN

D. Mel	tcagtgag	gtaagtccacta...4166...gcat	-cgactt	gttgaactg	TCACg	TAAATT	GCGT	tttatgccaggcggcagcgg...742...gcctgtggcatg-	ttgctgct
D. Sim	tcagtgag	gtaagtccacta...4124...gcat	-cgactt	gttgaactg	TCACg	TAAATT	GCGT	tttatggtgtggcggcagcgg...784...gcctgtggcatg-	ttgctgct
D. Sec	tcagtgag	gtaagtccacta...4116...gcat	-cgactt	gttgaactg	TCACg	TAAATT	GCGT	tttatggtgtggcggcagcgg...792...gcctgtggcatg-	ttgctgct
D. Ere	tcagtgag	gtaagtccaagc...4232...gcat	-cgactt	gttgcactg	TCACg	TAAATT	GCGT	tttggccagtcggcagcgg...676...gcctgtggcatg-	ttgctgcc
D. Ana	tcagtgag	gtgagtacgcta...4309...gcat	-caactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgtcaggccgcacata...599...gcctgtggcatg-	ttgctgca
D. Gri	tcaacgag	gtgagttctcca...4215...gcat	-caactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgtcagagacaccaac...693...cctgtggcatg-	ttgtgtt
D. Per	tgaatgag	gtaagtacgagc...4073...gcat	-caactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgccaagcctaagaag...835...gtctctggcatg-	ttgccgca
D. Pse	tgaatgag	gtaagtacgagc...4081...gcat	-caactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgccaagcctaagaag...827...gtctctggcatg-	ttgccgca
D. Vir	tcaacgag	gtgagtgtgttc...3588...gcat	-caactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgtcagagccaacacc...1320...gcctgtggcatg-	ttgtgtt
D. Wil	tcaactgag	gtaagtgcgaaa...3520...cgat	gcaactt	gttaaaactg	TCACg	TAAATT	GCGT	tttatgtcaggcaccacaag...1388...gcctcgggcatg-	ttgtttt
D. Yak	ctaaccag	gcaacggccct...4178...gcat	-cgactt	gttgaactg	TCACg	TAAATT	GCGT	tttatgccaggcggcagtg...730...gcctgtggcagg-	ttgtgca
	* **	* *		****	*	*****	*****	** **** *	***

id=26089 gene=FBgn0035802 name=CG33275 segment=chr3L\_7619097\_7626577\_1 type=IN VIEW

Figure 465: CS=11.88



D.Mel	gttttgag	gtaatttctggt...3563...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttcgatcgggcaa...1348...cgttcttgag	tcctggtt	
D.Sim	gttttgag	gtaatttctggt...2723...-----cgtccgagcgcgcgcatTTGGG	CAATGACGA--CG	aaactgaaacgcttccaatg--...2185...cgtctcttgag	tcctggtt	
D.Sec	gttttgag	gtaatttctggt...3556...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttcgatcgggcaa...1355...gtctcttgag	tcctgggt	
D.Ere	gttttgag	gtaatttctggt...3587...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttcgatcggggac...1324...cgtctcttgag	tcctggtt	
D.Ana	agtttgag	gtaatttctggt...3853...ggctttgatcaaatgacaaa-----	ATTGATCATT	TCTGTTT	Gaa--tggatttcgatcggcgcc...1053...ctatcttgag	tcctggtt
D.Gri	tgcttgag	gtaatttctgga...3828...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttcggagcagct...1083...ctatcttgag	tcctggtt	
D.Moj	gttgtaaa	attgtattt...3852...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttggagcagct...1059...ctatcttgag	tcctggtt	
D.Per	agtttgag	gtaatacatata...3317...-----cgtccgagcgcgcgcatTTGGG	CAATGACGA--TG	aaactgaaacgtaaccgatt--...1591...tccgtcttgag	tcctggtt	
D.Pse	agtttgag	gtaatacatata...3179...-----cgtccgagcgcgcgcatTTGGG	CAATGACGA--TG	aaactgaaacgtaaccgatt--...1729...tccgtcttgag	tcctggtt	
D.Vir	agtctgag	gtaatttctggc...3892...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttggagcagct...1019...ctctcttgag	tcctggtt	
D.Yak	gttttgag	gtaatttctggt...3563...-----tgatcaaatgacaaaattga-----	TCATTTTCTGTTT	Gaa--tggatttcgatcgggac...1348...cgtctcttgag	tcctggtt	
		* * * *	*** * *	*** ** *	** ** *	

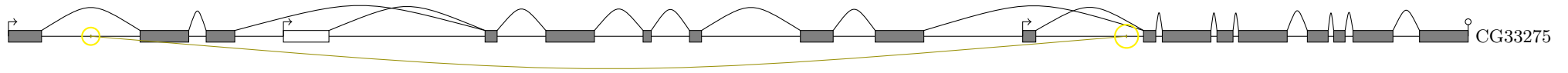
id=26077 gene=FBgn0035802 name=CG33275 segment=chr3L.7598632.7609207.1 type=IN

D.Mel	ccaactat	gtgagtcagcag...1421...-actagagttt--gggcagaatc--	CAAAAaaCGG--AAAGTGA	-----atgcg---ctggtgcacgcgctc---...567...ctatttttaag	gtcacctc	
D.Sim	ccaactat	gtgagtcagctg...1552...-----tcatcatcatcaagcggcggCGTCGTCgATTG	taTCAA	-----ttcaattggacgcagcaggt...425...ctatttttaag	gtcacctc	
D.Sec	ccaactat	gtgagtcagctg...1398...-actagagttt--gggcagaacc--	CAAAAaaCGG--AAAGTGA	-----atgcg---cgggtgcacgcgctc---...594...ctatttttaag	gtcacctc	
D.Ere	ccaactat	gtgagtcaccag...1395...aactagag-tt--gggcagaacc--	CAAAAaaCGG--AAAGTGA	-----atgcg---cgggtgcacgcgctc---...574...cctatttttaag	gtcacctc	
D.Ana	ccaattat	gtgagtcagcgg...1501...--taggagctgggggagaacc--	CAAAAaaCGG--AAAGTGA	aTCGGTcggtg---cacgcgccgctc---...605...ctatatttttaag	gtcacctc	
D.Gri	ccaactat	gtgagtcataa...1244...--aaagatcgccagtggaacc--	CAAAAaaCGG--AAAGTGA	-----atgcg---cgggtgcacgcgctc---...567...caatatttttaag	gtcacctc	
D.Moj	ccaactat	gtgagtcacag...1772...--agatcgacaaagacagagac	CAAAAaaCGG--AAAGTGA	-----atgcg---gctggtgcacgcgctc---...470...gtcgttttag	gtcacctc	
D.Per	ccagctat	gtgagtcacag...1918...--atcatcatcatc-atcatcgg	CATCGTCgATTG	taTCAA	-----ttcaattggacgcagcaggt...455...gtcatttttaag	gtcacctc
D.Pse	ccagctat	gtgagtcacag...1908...--atcatcatcatc-atcatcgg	CATCGTCgATTG	taTCAA	-----ttcaattggacgcagcaggt...462...gtcatttttaag	gtcacctc
D.Vir	ccaactat	gtgagtcacat...1372...--aagatcgacaaa-acacacac	CAAAAaaCGG--AAAGTGA	-----acgcg---gcgacgcagcagct---...443...atatttttttaag	gtcacctc	
D.Yak	ccaactat	gtgagtcagcca...1495...aactagag-tt--gggcagaacc--	CAAAAaaCGG--AAAGTGA	-----atgct---cgggtgcacgcgctc---...620...ctatttttttaag	gtcacctc	
	*** **	*****	* ** *	***	*** ** *****	

id=26091 gene=FBgn0035802 name=CG33275 segment=chr3L.7626713.7628780.1 type=IN VIEW

Figure 466: CS=10.56





D.Mel	agtgtca-c	gtgagtacaccg...4186...-ttgtgtgtgttcgtatctga	AAGAAa	GTGAATTC	tactgtgctacacttgacct...725...ctgcattt-gcag	gctgacac
D.Sec	agtgtca-c	gtgagtacaccg...4207...-ttgtgtgtgttcgtatctga	AAGAAa	GTGAATTC	tactgtgctacacttgacct...704...ctgcattt-tcag	gctgacac
D.Ere	agtgtca-c	gtgagtacaccg...4303...-ttgtgtgtgttcgtatctga	AAGAAa	GTGAATTC	tactgtgctacacttgacct...608...ctgcattt-tcag	gctgacac
D.Ana	gatgtcg-c	gtaagtacactg...4006...-gtgtgtgtgtgtattcccaa	AAGAAa	GTGAATTC	tactgtgctacacttgacct...905...-ggcatttcgcag	gctgacac
D.Moj	-gcgtcgac	gtcagcagcacc...3309...-gtgtgtgtgtgtgtgtgcaa	AAGAAa	GTGAATTC	tactgtgctacacttgacct...1602...gcccgaat-gcag	actgacac
D.Per	gcagtcg-c	gtgagtattgcg...3885...tgtgtgtgtgtgtgta-tctgaa	AGAAa	GTGAATTC	tactgtgctacacttgacct...1027...ttctattt-gcag	gccgacga
D.Pse	gcagtcg-c	gtgagtattgcg...3875...tgtgtgtgtgtgtgta-tctgaa	AGAAa	GTGAATTC	tactgtgctacacttgacct...1037...ttctattt-gcag	gccgacga
D.Vir	agcagcg-g	gtgagtgctcctg...3819...aatttgcgca-gtgtgtgcaa	AAGAAa	GTGAATTC	tactgtgctacacttgacct...1092...cgcccgaat-gcag	actgacac
D.Wil	cttgccg-g	gtaggtatcaac...4091...tgtgtatgtgtgtgtgtaa-	AGAAAGTGAATTC	tactgtgctacacttgacct...821...ttccaggc-ggac	acaaacac	
D.Yak	agtgtca-c	gtgagtacaccg...4309...-ttgtgtgtgttcgtatctga	AAGAAa	GTGAATTC	tactgtgctacacttgacct...602...ctgcattt-acag	gctgacac
	*	** *		*****		* **

id=26071 gene=FBgn0035802 name=CG33275 segment=chr3L.7586546.7595887.1 type=IN

D.Mel	ccaactat	gtgagtcagcag...1848...-----agagcgacgatca-tttctat	GAGTt	TCACTTTT	---cagcgctgt-gaatggggaat...143...ctatttttaag	gtcacctc
D.Sec	ccaactat	gtgagtcagcag...1852...-----agagcgacgatca-tttctat	GAGTt	TCACTTTT	---cagcgctgt-gaatggggaat...143...ctatttttaag	gtcacctc
D.Ere	ccaactat	gtgagtcaccag...1834...-----agagcgacgatca-tttctat	GAGTt	TCACTTTT	---cagcgctgt-gaattgggaac...138...cctatttttaag	gtcacctc
D.Ana	ccaattat	gtgagtcagcgg...1966...-----agagcgtcgatca-tttctat	GAGTt	TCACTTTT	---cagtgtctgg-gatctcgggga...149...ctatatttttaag	gtcacctc
D.Moj	ccaactat	gtgagtcacag...2160...agcctaattagatcgctgat-----	GAGTt	TCACTTTT	---cgtcaggag-aaagagagaga...85...gtcgtttgtag	gtcacctc
D.Per	ccagctat	gtgagtcacag...2230...-----gtctcgtcgatca-tttcgat	GAGTt	TCACTTTT	---catctctctggaattggggg...148...gtccatttttaag	gtcacctc
D.Pse	ccagctat	gtgagtcacag...2220...-----gtctcgtcgatca-tttcgat	GAGTt	TCACTTTT	---catctctctggaattggggg...155...gtccatttttaag	gtcacctc
D.Vir	ccaactat	gtgagtcacag...1758...-----gatcgcaatcgctttgtat	GAGTt	TCACTTTT	---catcgactt-gagccttgagg...60...atatatttttag	gtcacctc
D.Wil	ccaattat	gtgagtcagcag...3498...-----agagcgtcgatca-tttctat	GAGTt	TCACtTTTCT	acattggttttctgttttg--...178...tgtttttgtag	gtcacctc
D.Yak	ccaactat	gtgagtcagcca...1969...-----agagcgacgatca-tttctat	GAGTt	TCACTTTT	---cagcgctgt-gaattggggaat...149...ctatttttaag	gtcacctc
	*** **	***** *		*****		*** ** *****

id=26091 gene=FBgn0035802 name=CG33275 segment=chr3L.7626713.7628780.1 type=IN VIEW

Figure 468: CS=9.6



D.Mel	gcgataag	gtaagtgtccgg...52...ccctgacatggcggaaccag	TCCTgGTGGagCTCAAaTTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCAGaTTGAGCTGCaaAGGA	gcgacacaacagaggagcac-----...83...ttaaccattcag
D.Sim	gcgataag	gtaagtgtccgg...61...-----ggcgcaaccagtctctggtga	AGCTCAAaTTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCaGATTGAGCT	-acaaggagcga-gacaacag-...91...ttaaccattcag
D.Sec	gcgataag	gtaagtgtccgg...61...-----ggcgcaaccagtctctggtga	AGCTCAAaTTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCaGATTGAGCT	-acaaggagcga-gacaacag-...91...ttaaccattcag
D.Ere	gcgataag	gtaagtgtccgg...57...-----ggcggaaccagtctctggtga	AGCTCAAaTTGACTCTagTAGGGAGTc-----	-cttc-ataagcgactcccta---...129...ttaaccattcag
D.Ana	gcgacaag	gtgagtgtctcgc...98...-----aaccaaccacttctctggcgc	AGTTCAAaTTGACTCTagTAGGGAGTcTTTT	-aacgagagactccctaacgg...120...acacaccttag
D.Gri	gcgataag	gtaagcggcaat...70...-----gccccgaacttctctgctgc	AGTTCAAaTTGACTCTagTAGGGAGTc-----	-cttttaacagcgactccct---...164...gcactcttacag
D.Moj	gcgataag	gtaaaaaaaaag...29...-----cgctacgagtttctcctatgc	AGTTCAAaTTGACTCTagTAGGGAGTc-----	-ctttttttaaagactccct---...203...cctatcttgag
D.Pse	gcgataag	gtgagtctgtgg...60...-----tgcacggcaattctctgcagc	AGTTCAAaTTGACTCTagTAGGGAGTcctTTTatTGAGcGACTCCCTAacGGAGTCAGaTTGAATT	-accaaggaca-gacaacagt-...128...caacatatacag
D.Vir	gtgacaag	gtaagcaaaaatt...33...-----gaccggtgaattctctgccc	AGTTCAAaTTGACTCTagTAGGGAGTc-----	-ctttc-acgagcactcccta---...525...acactcttacag
D.Wil	gcgataag	gtaagcaaaaag...74...-----gcttgagaacttctctgccc	AGTTCAAaTTGACTCTagTAGGGAGTcTTTATATAAGcGACTCCCTAacGGAGTCAGaTTGAATT	-acaaggaaacaacaaca---...110...aacaccacag
D.Yak	gcgataag	gtaagtatccgt...57...-----ggcaaaaccagtctctggtga	AGCTCAAaTTGACTCTagTAGGGAGTcTTTA-aTGAAcGACTCCCTAacGGAGTCaGATTGAGCT	-acaaggagcga-gacaacag-...86...ttaacaattcag

id=9548 gene=FBgn0041605 name=cpx segment=chr3R\_121009\_121289\_1 type=IN

D.Mel	gcgataag	gtaagtgtccgg...52...ccctgacatggcggaaccag	TCCTgGTGGagCTCAAaTTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCAGaTTGAGCTGCaaAGGA	gcgacacaacagaggagcac-----...83...ttaaccattcag
D.Sim	gcgataag	gtaagtgtccgg...61...-----ggcgcaaccagtctctggtga	AGCTCaAATTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCAGaTTGAGCT	-acaaggagcga-gacaacag-...91...ttaaccattcag
D.Sec	gcgataag	gtaagtgtccgg...61...-----ggcgcaaccagtctctggtga	AGCTCaAATTGACTCTagTAGGGAGTcTTTA-aTGAGcGACTCCCTAacGGAGTCAGaTTGAGCT	-acaaggagcga-gacaacag-...91...ttaaccattcag
D.Ere	gcgataag	gtaagtatccgg...95...-----tagggagtcttcc-ataagc	-GACTCCCTAacGGAGTCAGaTTGAGCT	-acaaggagcga-gacaacag-...91...ttaaccattcag
D.Ana	gcgacaag	gtgagtgtctcgc...133...-----tagtagggagtctttaa	GAGAGACTCCCTAacGGAGTCAGaTTGAATT	-acaaggagcga-gacaacag-...86...acacaccttag
D.Gri	gcgataag	gtaagcggcaat...109...-----agggagtctttaaagcagc	-GACTCCCTAacGGAGTCAGaTTGAGTT	-acaaggacca-gtcaaca---...125...gcactcttacag
D.Moj	gcgataag	gtaaaaaaaaag...68...-----agggagtctttaa	GACTCCCTAacGGAGTCAGaTTGAATT	-ttagaggacca-gacaacag-...164...cctatcttgag
D.Pse	gcgataag	gtgagtctgtgg...60...-----tgcacggca-ttctctgcagc	AGTTCAAaTTGACTCTagTAGGGAGTcctTTTatTGAGcGACTCCCTAacGGAGTCAGaTTGAATT	-accaaggac-a-gacaacagt-...128...caacatatacag
D.Vir	gtgacaag	gtaagcaaaaatt...71...-----tagggagtcttcc-acgagc	GACTCCCTAacGGAGTCAGaTTGAATT	-acaaggacca-gacaacag-...487...acactcttacag
D.Wil	gcgataag	gtaagcaaaaag...74...-----gcttgagaacttctctgccc	AGTTCAAaTTGACTCTagTAGGGAGTcTTTATATAAGcGACTCCCTAacGGAGTCAGaTTGAATT	-acaaggaaacaacaaca---...110...aacaccacag
D.Yak	gcgataag	gtaagtatccgt...57...-----ggcaaaaccagtctctggtga	AGCTCaAATTGACTCTagTAGGGAGTcTTTA-aTGAAcGACTCCCTAacGGAGTCAGaTTGAGCT	-acaaggagcga-gacaacag-...86...ttaacaattcag

id=9548 gene=FBgn0041605 name=cpx segment=chr3R\_121009\_121289\_1 type=IN VIEW

Figure 469: CS=15.4



D.Mel	tgtagggt	actctggcagtg	ggcgtgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Sim	tgtagggt	actctggcagtg	ggcgtgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Sec	tgtagggt	actctggcagtg	ggcgtgcagaaaagtg	GAACat	AGCATGAA	GTAAGaag
D.Ere	tgcagggt	actctggcagtg	ggcgtgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Ana	tgtaggga	actc-ggcagtg	ggcgtccagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Gri	tgtaggga	actc-ggcagtg	cgacacagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Moj	tgtaggcg	actc-agccgtg	cgacacagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Per	tgtaggga	acac-ggcagtg	tgtctgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Pse	tgtaggga	acac-ggcagtg	tgtctgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Vir	tgtaggcg	actc-ggccgtg	cgacacagaagagtg	GAACat	AGCATGAA	GTAAGaag
D.Yak	tgtagggt	actctggcagtg	ggcgtgcagaagagtg	GAACat	AGCATGAA	GTAAGaag
	** **	** *	** **	*****	*****	*****

id=9518 gene=FBgn0041605 name=cpx segment=chr3R.107552\_107593.1 type=A5

D.Mel	ttttacaa	gtaagtc	ttttgc...1716...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Sim	ttttacaa	gtaagtt	ttttgc...1730...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Sec	ttttacaa	gtaagtt	ttttgc...1742...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Ere	ttttacaa	gtaagtt	ttttgc...1696...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Ana	ttttacaa	gtaagt	ggtcgt...1929...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Gri	ttttacaa	gtgagt	tcgaga...2349...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-tttttacag	aactgaaa
D.Moj	ttttacaa	gtaagtc	agaga...3080...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-tttttacag	aactgaaa
D.Per	tttcacaa	gtaagtc	attgt...2294...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Pse	tttcacaa	gtaagtc	attgt...2271...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
D.Vir	ttttacaa	gtaagtc	agaga...2336...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-tttttacag	aactgaaa
D.Yak	ttttacaa	gtaagt	tgtttc...1711...	agtctactctacaaaatag	CTTATTTA	TGCTGTTT	ccatactcaatttc-ttttacag	aactgaaa
	*** **	** **		*****	*****	*****	*****	*****

id=9550 gene=FBgn0041605 name=cpx segment=chr3R.121423\_123209.1 type=IN VIEW

Figure 470: CS=6.6



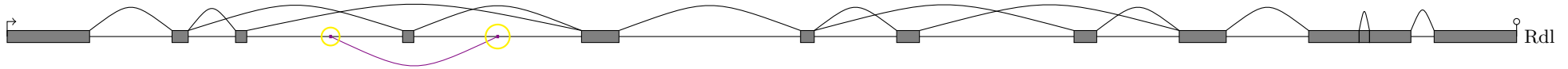
D. Mel	cccaacag	gtgagtacaagt...	680	-----	tgcgctagcccagagcgatc-----	CGTATCTAATGGAT	act--tcaacg	ccgctgctttc--...	616	..	ctcattccacag	agtgcgtg	
D. Sim	cccaacag	gtgagtgcgagt...	676	-----	tgcgctagcccagagcgatc-----	CGTATCTAATGGAT	act--tcaacg	ccgctgctttc--...	631	..	ctcattccacag	agtgcgtg	
D. Sec	cccaacag	gtgagtgcgagt...	678	-----	tgcgctagcccagagcgatc-----	CGTATCTAATGGAT	act--tcaacg	ccgctgctttc--...	631	..	ctcattccacag	agtgcgtg	
D. Ere	cccaacag	gtgagtgcgagc...	701	-----	cgcgctagcccagagcgatc-----	CGTATCTAATGGAT	act--tcaacg	ccgctgctttc--...	634	..	ctcattccacag	agtgcgtg	
D. Ana	cccaacag	gtaagagagggt...	639	-----	tgc-----	gagagatgcgtatctaa	GTATCTAATGGAT	act--tcaacg	ctg--gctgacag...	831	..	ttatctccacag	agtgcgtg
D. Gri	cccaacag	gtaagcagacac...	819	....	cgttgcgc-ctagccttgagc-----	CGGTGTATCTAATGGAT	acttctcaacac	gctggttg-----	783	..	cattgtcacag	agtgcgtg	
D. Per	cccaacag	gtgagtggggca...	587	....	gctctagccttgagcgatgc-----	GTATCTAATGGAT	act--tcaacg	ctg--gctgacag...	1016	..	tcctttcacag	agtgcgtg	
D. Pse	cccaacag	gtgagtggggca...	578	....	gctctagccttgagcgatgc-----	GTATCTAATGGAT	act--tcaacg	ctg--gctgacag...	1013	..	tcctttcacag	agtgcgtg	
D. Vir	cccaatag	gtaagtgtgtat...	1164	..	ttgtgc-ctagccttgagctc-----	CGGTATCTAATGGAT	act--tcaacg	ctgctgctc--...	978	..	tccttaaacag	agtgcgtg	
D. Wil	cccaatag	gtgagtctcgtg...	604	....	tttgccttaagctaaccagc-----	GTATCTAATGGAT	act--tcaacg	ctgctgctc--...	300	..	ttctatgatag	agtgcgtg	
D. Yak	cccaacag	gtgtgtgcgaat...	714	....	cgcgctagcccagagcgatc-----	CGTATCTAATGGAT	act--tcaacg	ccgctgctttc--...	636	..	ctcattccacag	agtgcgtg	
		** ** *			**	*****		*	***		**	*** ** *	

id=96952 gene=FBgn0014141 name=cher segment=chr3R.12934562.12935935.-1 type=IN

D. Mel	acatcaag	gtaatagccgct...	986	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-----	aaagatgtgcgagtccttctgt...	1429	..	ttggtggaatt	tctttgga
D. Sim	acatcaag	gtaaatgccgct...	1020	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-----	aaagatgtgcgagtcgccgt...	1404	..	ttggtggaatt	tctttgga
D. Sec	acatcaag	gtaaatgccgct...	1001	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-----	aaagatgtgcgagtcgctgt...	1413	..	ttggtggaatt	tctttgga
D. Ere	gcatcaag	gtaaatccgct...	1114	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-----	cgagtcgtcgtggtcaccgc...	1440	..	tcggaggaaatt	tctttgga
D. Ana	acatcaag	gtaatcttct...	965	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-c-	aaagatgccactgcctctg...	1597	..	ttggtggaatt	tctttgga
D. Gri	acatcaag	gtaaccaagaat...	847	....	tcattgtccttgccagcctc--	GTCCATTAGATGCG	ca-	aaagatgccttcttctc--	1486	..	ttgagcgaatt	tctttgga
D. Per	acatcaag	gtaaatccccg...	1225	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-c-	aaagatgcctgccccctc-	1658	..	ttgagggaatt	tctttgga
D. Pse	acatcaag	gtaaatccccg...	1187	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-c-	aaagatgcctgccccctca-	1660	..	ttgagggaatt	tctttgga
D. Vir	acatcaag	gtaaataactaa...	1810	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	caaaaaagatgccactgggc---	2071	..	ttgagggaatt	tcttaaga	
D. Wil	acatcaag	gtaaatgaaaa...	1032	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-c-	aaagatgccagcgtcgcag-	1844	..	ttgagggaatt	tcttactt
D. Yak	acatcaag	gtaaatgccgct...	998	....	ctttcattgtattgccagc--	GTCCATTAGATGCG	-----	aaaaatgtgcgagtcgctgt...	1479	..	ttggtggaatt	tctttgga
		*****			*****	*****		*	*		**	***

id=96975 gene=FBgn0014141 name=cher segment=chr3R.12921267.12923759.-1 type=IN VIEW

Figure 471: CS=13.2



D.Mel	tgaaaatg	gtacaaactaat	----	..1285..	-----	aacctcgagtagagtcaact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	gcgtgcaatca-acagaagca	-----	..402..	tatatgttgcag	gtccccct
D.Sim	----gttt	gcaggacctcctgtcg	..	1456..	-----	tgaacctcgagt--agtcaact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	gcgtgcaatca-acagaagca	-----	..449..	gaagttcctaatg	gtacatac
D.Sec	----gttt	gcaggacctcctgtcg	..	1337..	-----	tgaacctcgagt--agtcaact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	cgcggtgcaatca-acagaagc	-----	..450..	gaagttcctaatg	gtacatac
D.Ere	----gttt	gcaggacctcctgtcg	..	1332..	-----	cgaacctcgagt--agtcaact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	cgcggtgcaatca-acagaagc	-----	..472..	gaagttcctaatg	gtacatac
D.Ana	tgaaaatg	gtacaaactaat	----	..1646..	-----	aaaaatcagagt--agttagact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	gcgtgcatataaaacaaagc	-----	..441..	tatatgttgcag	gtccccct
D.Gri	----tctt	ttaggacctcctgtcg	..	1239..	-----	aaataatacaaaaactcga	-----	act	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	..469..	gaagttcctcatg	gtacatat
D.Moj	----tgtt	tcaggacctcctgtcg	..	1191..	-----	tacttagaaaaaaaactcga	-----	aTAGTt	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	..410..	gaagttcctcatg	gtacatac
D.Vir	tgaaaatg	gtacaaactaaa	----	..1175..	-----	aaaaaaaaaactcga	-----	aTAGTt	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	..607..	tatatgttgcag	gtccccct
D.Yak	----gttt	gcaggacctcctgtcg	..	1385..	-----	tgaacctcgagt--agtcaact	----	<b>GATTGGTTTTTCATTCGGC</b>	-----	gcgtgcaatca-acagaagca	-----	..462..	gaagttcctaatg	gtacatac
	*	* * * *				**	*	*	*****	*	*	**	* * * *	** *

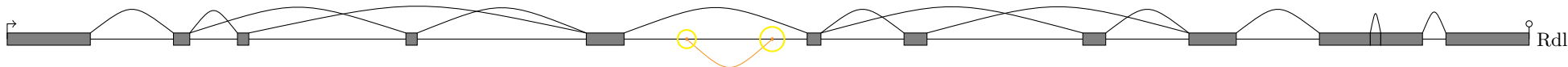
id=30073 gene=FBgn0004244 name=Rdl segment=chr3L.9161968.9163737\_-1 type=IN

D.Mel	ttctaag	gtacatacgtaa	..	3520..	----	ttgttctgggcgcccagaa	-----	<b>GCCGAGTGGAAACCAAATC</b>	----	tgctag	----	aataagccgggag	..	1386..	tgaattgaatag	gacttcac			
D.Sim	tgaaaatg	gtacaaactaat	..	3520..	----	ttgttctgggcgcccagaa	-----	<b>GCCGAGTGGAAACCAAATC</b>	----	tgctag	----	aataagccgggag	..	1386..	tgaattgaatag	gacttcac			
D.Sec	tgaaaatg	gtacaaactaat	..	3521..	----	ttgttctgggcgcccagaaa	-----	<b>CCGAGTGGAAACCAAATC</b>	----	tgctag	----	aataagccgggag	..	1386..	tgaattgaatag	gacttcac			
D.Ere	tgaaaatg	gtacaaactaat	..	3515..	----	ttgttctgggcgcccagaaa	-----	<b>CCGAGTGGAAACCAAATC</b>	----	tgctag	----	aataagccgggag	..	1392..	tgaattgaatag	gacttcac			
D.Ana	ttctcatg	gtacatacgtta	..	3420..	----	gtgagttggcgtgcccagaa	-----	<b>GCCGAGTGGAAACCAAATC</b>	----	tgccagttaaactcaaac	----	..1486..	tgaattgaatag	gacttcac					
D.Gri	tgaaaatg	gtacaaatatta	..	3586..	----	ttgttttggcgtgcctgta	-----	<b>CCGAGTGGAAACCAAATC</b>	----	tgctagttgagttttcaact	----	..1321..	caccggttatag	gactttac					
D.Moj	tgaaaatg	gtacaaactaaa	..	3556..	----	ttgttttggcgtgcctgta	-----	<b>CCGAGTGGAAACCAAATC</b>	----	GCTA	gagttgaaacttaagcctgaa	..	1346..	tatacgatatag	gactttac				
D.Vir	ttctcatg	gtacatacacaac	..	3542..	----	cttgaacttttg-gttaaag	----	<b>TTTTGT</b>	----	<b>TTTG</b>	gc	<b>GTGC</b>	ct	<b>GTGCCGAGTGGAAACCAAATC</b>	gagttgaaacttaagcctgaa	..	1338..	tttcgtgatag	gactttac
D.Yak	tgaaaatg	gtacaaactaat	..	3481..	----	ttgttctgggcgcccagaa	-----	<b>GCCGAGTGGAAACCAAATC</b>	----	tgctag	----	aataagccgggag	..	1425..	tgaattgaatag	gacttcac			
	*	***		*****	*	**	*	*	*****	**	*		****	*****	**				

id=30075 gene=FBgn0004244 name=Rdl segment=chr3L.9156075.9161899\_-1 type=IN VIEW

Figure 472: CS=12.6





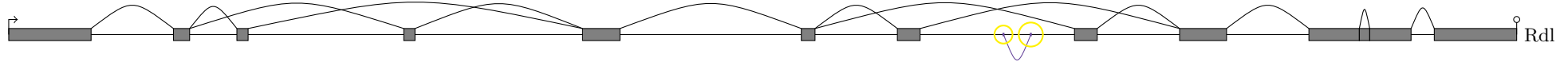
D.Mel	agtattag	gtaaaaaccacc...330...caagcgattaagactaatca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...992...taatccacttag	attgacta
D.Sim	agtattag	gtaaaaaccacc...328...caagcgattaaaactaatca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...959...taatccacttag	attgacta
D.Sec	agtattag	gtaaaaaccacc...324...caagcgattaagactaatca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...952...taatccacttag	attgacta
D.Ere	agtattag	gtaaaaaccacc...321...caagcgattaagactaatca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...973...taatccacttag	attgacta
D.Ana	agtattag	gtaaaaacaac...403...tacgatttaacgattattca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...918...tatctccttag	attgacaa
D.Gri	agtattag	gtaaaaatcaac...299...gaaaaaagagttttcaatca	AGTGAGTTCAATTGG	---gaagtga--aagcgatagaaa...709...aaaaactttcag	attgacta
D.Moj	agtattag	gtaaaaatcaac...348...tgaaaaacagttttcaatca	AGTGAGTTCAATTGG	---aaaagtga--aagcgatcgaa...805...gaaactttccag	attgacta
D.Vir	agtattag	gtaaaactatca...315...tgaaaaacagttttcaatca	AGTGAGTTCAATTGG	caaaaaagtga--aagcgatag...804...atgacctttcag	attgacta
D.Wil	agtattag	gtaaaagcaaca...419...acaatttttttaaatca	AGTGAGTTCAATTGG	----aagcgatgaacaaaaacaa...1545...caccacaacaag	attgacta
D.Yak	agtattag	gtaaaaaccacc...335...caagcgattaagactaatca	AGTGAGTTCAATTGG	----aagtga--aagtgaaagaaag...984...taatccacttag	attgacta
	*****	*****	* *****	*** ** * *	** ***** *

id=30077 gene=FBgn0004244 name=Rdl segment=chr3L.9154447\_9155847\_-1 type=IN

D.Mel	agtattag	gtaaaaaccacc...1144...atatacaaatag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaatgacttgaat...178...taatccacttag	attgacta
D.Sim	agtattag	gtaaaaaccacc...1120...atatacaaatag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaatgacttgaat...167...taatccacttag	attgacta
D.Sec	agtattag	gtaaaaaccacc...1108...atatacaactag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaatgacttgaat...168...taatccacttag	attgacta
D.Ere	agtattag	gtaaaaaccacc...1129...atatacaaatag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaataacttgaaa...165...taatccacttag	attgacta
D.Ana	agtattag	gtaaaaacaac...1156...ataaatattatag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaatgacttgaac...165...tatctccttag	attgacaa
D.Gri	agtattag	gtaaaaatcaac...825...--atgaatgtaactctcatat	CCAATTGAACTCGCT	ctgtttcaactaactagaaa...183...aaaaactttcag	attgacta
D.Moj	agtattag	gtaaaaatcaac...955...aatgaatgtaaa--gtcatat	CCAATTGAACTCGCT	ctactagaacaaaaaatat...198...gaaactttccag	attgacta
D.Vir	agtattag	gtaaaactatca...889...taacgaatgttaa--ctcataa	CCAATTGAACTCGCT	cagtttcaactagaaaa...230...atgacctttcag	attgacta
D.Wil	agtattag	gtaaaagcaaca...1711...taactaacttag--ctcatat	CCAATTGAACTCGCT	cccttctccttgacacacc...253...caccacaacaag	attgacta
D.Yak	agtattag	gtaaaaaccacc...1150...atatacaaatag--ctcatat	CCAATTGAACTCGCT	ctgtatgtaatgacttgaat...169...taatccacttag	attgacta
	*****	*****	* * *****		** ***** *

id=30077 gene=FBgn0004244 name=Rdl segment=chr3L.9154447\_9155847\_-1 type=IN VIEW

Figure 473: CS=12



D.Me1	aaccacag	gtacc-ccatac-...1054...ttaaagcgacaagt	tgaaTGAGACTATTAATG	caaccgaacccaatcgaaaa...399...caccat	atag	t	cggtac
D.Sec	aaccacag	gtacc-ccatac-...1035...ttaaagcgacaagt	tgaaTGAGACTATTAATG	caaccgaacccaatcgaaaa...365...caccat	atag	t	cggtac
D.Ere	aaccacag	gtacc-ccatac-...1044...ttaaagcgacaagt	tgaaTGAGACTATTAATG	caaccgaacccaatcgaaaa...423...caccat	atag	t	cggtac
D.Ana	aaccacag	gtacc-ccatac-...1256...tcaaagcgacaagt	tgaaTGAGACTATTAAT	-caacaaaaaaaaaaaaaac...479...acaact	atag	t	cggtac
D.Gri	aaccacag	gtaccctccata--...972...ttcaagcaacaagt	tgaaTGAGACTATTAAT	-taacgtaagaaagaaataaa...324...acacat	atag	t	cggtac
D.Moj	aaccacag	gtaccctccata--...994...ttcaagcaacaagt	tgaaTGAGACTATTAAT	-taccaaaaaaaaatataat...297...aatata	aatag	t	cggtac
D.Pse	aaccacag	gta-cc-ccatac...1210...ttcaagcaacaagt	tgaaTGAGACTATTAAT	-taaccaacaacacaaaaaaa...342...cacaat	atag	t	cggtac
D.Vir	aaccacag	gtaccctccata--...1000...ttaaagcaacaagt	tgaaTGAGACTATTAAT	-ttacgtaataaaacaaatga...448...gtat	atag	t	cggtac
D.Wil	aaccacag	gtacc-ccataa-...1574...ttaaagcaacaagt	tgaaTGAGACTATTAAT	-tgacaaaacaaatgaaaa...553...at	atag	t	cggtac
D.Yak	aaccacag	gtacc-ccatac-...1094...ttaaagcgacaagt	tgaaTGAGACTATTAATG	caaccgaacccaatcgaaaa...439...caccat	atag	t	cggtac

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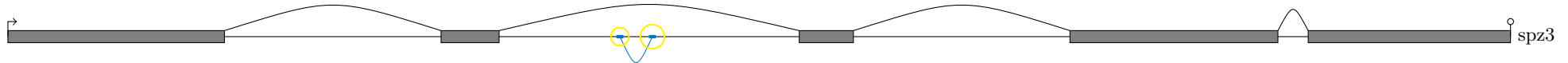
id=30081 gene=FBgn0004244 name=Rdl segment=chr3L\_9151179\_9152709\_-1 type=IN

D.Me1	aaccacag	gtacc-ccatac-...1219...ttctattatagaatagaact	-----TATTAATAGTCTCA	cgaaatgattttttgtttt...234...caccat	atag	t	cggtac
D.Sec	aaccacag	gtacc-ccatac-...1192...ttctatgatagaatagaact	-----TATTAATAGTCTCA	cgaaatgattttttgtttt...208...caccat	atag	t	cggtac
D.Ere	aaccacag	gtacc-ccatac-...1205...ttctatgatagaatagaact	-----TATTAATAGTCTCA	cgaaatgattttttgtttt...262...caccat	atag	t	cggtac
D.Ana	aaccacag	gtacc-ccatac-...1442...-tctataatagaatagaact	-----ATTAATAGTCTCA	cgaaatgattttttgtttt...293...acaact	atag	t	cggtac
D.Gri	aaccacag	gtaccctccata--...1094...-----aaattaatttttgccaatc	ATTAATAGTCTCA	cgaaatgattttttgtttt...202...acacat	atag	t	cggtac
D.Moj	aaccacag	gtaccctccata--...1113...-----aaattcttttttgccaatc	ATTAATAGTCTCA	cgaaatgattttttgtttt...178...aatata	aatag	t	cggtac
D.Pse	aaccacag	gta-cc-ccatac...1343...-cttatgatcgaagacaatc	-----ATTAATAGTCTCA	cgaaatgattttttgtttt...209...cacaat	atag	t	cggtac
D.Vir	aaccacag	gtaccctccata--...1145...-----aaattcttttttgccaatc	ATTAATAGTCTCA	cgaaatgattttttgtttt...303...gtat	atag	t	cggtac
D.Wil	aaccacag	gtacc-ccataa-...1850...ttcaacca-aaatagagcct	-----ATTAATAGTCTCA	caaatgattttttgtgtt...277...at	atag	t	cggtac
D.Yak	aaccacag	gtacc-ccatac-...1269...ttctatgatagaatagaact	-----TATTAATAGTCTCA	cgaaatgattttttgtttt...264...caccat	atag	t	cggtac

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id=30081 gene=FBgn0004244 name=Rdl segment=chr3L\_9151179\_9152709\_-1 type=IN VIEW

Figure 474: CS=12



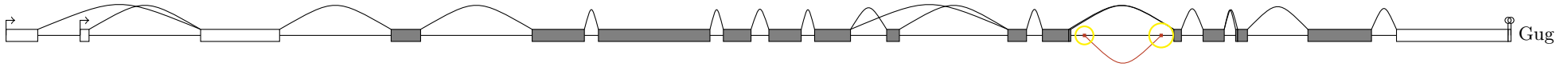
D. Mel	agattccg	gtaagtacggat...220...ctctcgatatcgatcgagtt-----	TGTTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-ttcatttcggttttattttc-...373...tggttaatttag	atctggtg
D. Sim	agattccg	gtaagtatgaag...225...ctctcgatatcgatcgagtt-----	TGTTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-ttcatttcggttttattttc-...361...tggttaatttag	atctggtg
D. Sec	agattccg	gtaagtatggat...228...ctctcgatatcgatcgagtt-----	TGTTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-ttcatttcggttttattttc-...361...tggttaatttag	atctggtg
D. Ere	agattccg	gtaagcatggag...221...ctctcgatttcgatcgagtt-----	TGTTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-ttcatttcggttttattttc-...322...tggtttatttag	atctggtg
D. Ana	agattccg	gtaagtacggac...220...ctctcgatttcgatcgagtt-----	TGCTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGTGT	tcatttcggttttttttttt...477...tgaccaatttag	atctggtg
D. Gri	agattccg	gtaagtacaagc...68...gtaagtatatcgatcgagtt-----	TGCTca	TTTGcGGAAatAACTTtg	ACGATCT	-----ctgctgtgtgtgtgtgag-...343...ctctccctctag	atctggtg
D. Per	agattccg	gtaagtactctt...84...gactcgatatcgatcgagtt-----	TGCTTat	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-tttaactttttttatttat-...390...ccaacatttag	atctggtg
D. Pse	agattccg	gtaagtactctt...85...gactcgatatcgatcgagtt-----	TGCTTat	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-tttaactttttttatttat-...375...ccaacatttag	atctggtg
D. Wil	agattccg	gtgagttctcta...70...-----gagtttactcaaaaaaaaa	TTGCGGAAat	AACTTtg	ACGATTTTGTGT	-tttcatttcattatctttgt-...343...tttttgcgtag	atctggtg
D. Yak	agattccg	gtaagtatggag...226...ctctcaatatcgatcgagtt-----	TGTTca	TTTGcGGAAatAACTTtg	ACGATTTTGTGT	-ttcatttcggttttattttc-...382...tggttaattcag	atctggtg
	*****	** **	*****	* ***** * * * * *		* * *	** *****

id=23772 gene=FBgn0031959 name=spz3 segment=chr2L\_7875338\_7876030\_-1 type=IN

D. Mel	agattccg	gtaagtacggat...297...tttttttt-ttgtttttttgc--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...295...tggttaatttag	atctggtg
D. Sim	agattccg	gtaagtatgaag...301...cttttttt-ttggttttttgc--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...284...tggttaatttag	atctggtg
D. Sec	agattccg	gtaagtatggat...304...cttttttt-ttggttttttgc--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...284...tggttaatttag	atctggtg
D. Ere	agattccg	gtaagcatggag...294...ttcttttt-tttgttttttgc--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...248...tggtttatttag	atctggtg
D. Ana	agattccg	gtaagtacggac...320...tctttttg-ctttgtttttt	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...376...tgaccaatttag	atctggtg
D. Gri	agattccg	gtaagtacaagc...166...tggtggtt-tttggcgcacga-----	AGGTCGTgc	GAGTTcg	TTTCGt	TAAGaGGTG	tgatgataatcatgccaact...245...ctctccctctag	atctggtg	
D. Per	agattccg	gtaagtactctt...163...-gttggtgttttttttttgcgt--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGAGGTG	tgatgatgttgatgacgacg...311...ccaacatttag	atctggtg
D. Pse	agattccg	gtaagtactctt...162...tggtgttg-ttttttttgcgt--	GCACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGAGGTG	tgatgatgttgatgacgacg...298...ccaacatttag	atctggtg
D. Wil	agattccg	gtgagttctcta...127...cattatc--tttgtttttgcgt--	CACGAAg	GTCGTgc	GAGTTcg	TTTCGt	TAAGaggtgtgatgaagttga-----	...284...tttttgcgtag	atctggtg
D. Yak	agattccg	gtaagtatggag...302...tttttttt-ttggttttttgc--	ACACGAAg	GTCGTgc	GAGTTcg	TTTCat	TAAGaGGTG	tgatgatgttgatgacgacg...305...tggttaattcag	atctggtg
	*****	** **	* * *	***** * * * * *		**	** *****		

id=23772 gene=FBgn0031959 name=spz3 segment=chr2L\_7875338\_7876030\_-1 type=IN VIEW

Figure 475: CS=9.6



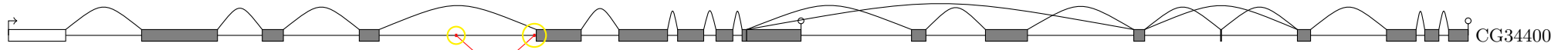
D. Mel	tgcgtatg-----	gta-ggctacacttcttta-----	ttatt-----	ccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	cgtaagcgatcgaaccgca-----	... 368...	ttgcatccacag	ccgcaacc
D. Sim	tgcgtatg-----	gta-ggctacacttcttta-----	ttatt-----	ccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	cgtaagcgatcgaaccgca-----	... 371...	ttgcatccacag	ccgcaacc
D. Sec	tgcgtatg-----	gta-ggctacacttcttta-----	ttatt-----	ccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	cgtaagcgatcgaaccgca-----	... 371...	ttgcatccacag	ccgcaacc
D. Ere	tgcgtatg-----	gta-ggctacacttctttt-----	ttact-----	ccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	cgtaagcgatcgaaccgca-----	... 364...	ttgcatccacag	ccgcaacc
D. Ana	tgcgtatg-----	gta-ggctacaaatctttt-----	ttatt-----	ccactcgactcatattcacttcaa	TCAATCGTATTTGGAA	cgtaagcgatcgcatagca-----	... 424...	ttgcatccacag	ccgcaacc
D. Gri	tgcgtatacttatt	gcatgatcatatcttttcattgtacacaaaatcgaact----	ccaactcatattcac-aaaa	TCAATCGTATTTGGAA	---aaacaattcaaaactgcaaca--	... 490...	ttgcatccacag	ccgcaacc	
D. Moj	tgcgtatg--aatt	gcatggccatctctcatc--ttgtaaacaaaactgaaactc	ccactcatattcac-aaaa	TCAATCGTATTTGGAA	---aaacaaaaacaaaaaa-----	... 501...	ttgcatccacag	ccgcaacc	
D. Pse	tgcgtatg-----	gta-ggccacacttcttttataactactattatt-----	ccat---	attcatattcac-aaga	TCAATCGTATTTGGAA	---cgaaccacaaaaccacaaat---	... 451...	ttgcatccacag	ccgcaacc
D. Vir	tgcgtata--gact	gcatggccagctctcatc--ttgtacaccatactcgaaac--	tcactcatattcac-agaa	TCAATCGTATTTGGAA	---aagaaaaaaaaagcaaaaa--	... 477...	ttgcatccacag	ccgcaacc	
D. Wil	tgcgtatg-----	gta-ggccacaaatttatt-----	ttatttacaataccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	---c-aatatcaaac--caaattca...	... 607...	ttgcatccacag	ccgcaacc	
D. Yak	tgcgtatg-----	gta-ggctacacttctttt-----	ttact-----	ccactcgactcatattcac-aaaa	TCAATCGTATTTGGAA	cgtaagcgatcaaacgca-----	... 371...	ttgcatccacag	ccgcaacc
	*****	* * * * *		* *****	*****	* *		*****	*****

id=8740 gene=FBgn0010825 name=Gug segment=chr3L.8462792.8463253.1 type=IN

D. Mel	tgcgtatg--	gtaggctacact... 358...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Sim	tgcgtatg--	gtaggctacact... 361...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Sec	tgcgtatg--	gtaggctacact... 361...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Ere	tgcgtatg--	gtaggctacact... 354...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Ana	tgcgtatg--	gtaggctacaaa... 415...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Gri	tgcgtatact	tattgcatga--... 499...	ctatcaacg--atattcaataa	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Moj	tgcgtatg--	aattgcatggcc... 512...	ctatcaacg--atattcaataa	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Pse	tgcgtatg--	gtaggccacact... 448...	tttctacg--atattcaataa	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Vir	tgcgtata--	gactgcatggcc... 482...	ctatcaacg--atattcaataa	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Wil	tgcgtatg--	gtaggccacaaa... 604...	atctacgatattcaataa	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
D. Yak	tgcgtatg--	gtaggctacact... 361...	tttctacg--atattcgataat	TTTCAGATACGATTGA	cgagagaatcatgacactctcactcatttacattgcctttgcatccacag	ccgcaacc
	*****	**	** **	*****	*****	*****

id=8740 gene=FBgn0010825 name=Gug segment=chr3L.8462792.8463253.1 type=IN VIEW

Figure 476: CS=6.6



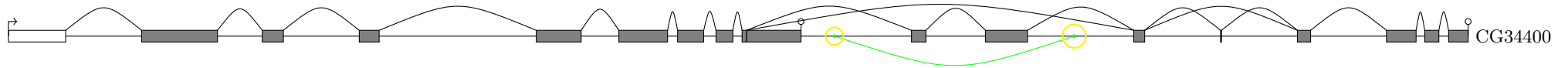
D.Mel	cgctg-aag	gtaagcatccca...1162...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgtatcag-...	836...	ttcttaacgcag	agatgtgt
D.Sim	cgctg-aag	gtgagcatccca...1124...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgtatcag-...	830...	ttcttaacgcag	agatgtgt
D.Sec	-gctgaaag	gtgagcatccca...1065...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgtatcag-...	831...	ttcttaacgcag	agatgtgt
D.Ere	cgctg-aag	gtgagcatgcca...1165...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgtatcag-...	834...	ttcttaacgcag	agatgtgt
D.Ana	cgctt-aag	gtgagcatctct...927...	acactaatacaaatgaacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgaacat-...	763...	ttcttaacgcag	agatgtgt
D.Gri	cgctt-aag	gtgagcctaaact...1029...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcacattaaat-tcaca...	869...	ttcttaacgcag	agatgtgt
D.Moj	cgctt-aag	gtgagcctaaact...1010...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcatttgaat-tcact...	1062...	ttcttaacgcag	agatgtgt
D.Pse	cgctg-aag	gtgagcatccat...1100...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcattttgtatctg-...	754...	ttcttaacgcag	agatgtgt
D.Vir	cgctt-aag	gtgagcctaaact...1117...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcatttgaat-tcaca...	857...	ttcttaacgcag	agatgtgt
D.Wil	cgctg-aag	gtaatctattta...1761...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgcatttgatattta-...	1012...	ttcttaacgcag	agatgtgt
D.Yak	cgctg-aag	gtgagcatccca...1155...	acactaatacaaatatacac	TGAGAAAAAATGGCAATAGA	Attagtcgca-tttgtatcaga...	833...	ttcttaacgcag	agatgtgt
		* * **	** * *	***** * *****	** *	***** **	*****	*****

id=113723 gene=FBgn0085429 name=CG34400 segment=chr3L\_13880566\_13882648\_-1 type=IN

D.Mel	cgctg-aag	gtaagcatccca...2023...	cctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Sim	cgctg-aag	gtgagcatccca...1979...	cctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Sec	-gctgaaag	gtgagcatccca...1921...	cctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Ere	cgctg-aag	gtgagcatgcca...2024...	cctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Ana	cgctt-aag	gtgagcatctct...1715...	gtatcctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Gri	cgctt-aag	gtgagcctaaact...1923...	cgctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Moj	cgctt-aag	gtgagcctaaact...2097...	cgctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Pse	cgctg-aag	gtgagcatccat...1879...	gtcctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Vir	cgctt-aag	gtgagcctaaact...1999...	cgctctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
D.Wil	cgctg-aag	gtaatctattta...2798...	tgctctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	atgcag	agatgtgt
D.Yak	cgctg-aag	gtgagcatccca...2013...	cctctctttttgtgtctct	TCTATTGCCAcATTTTCTTA	acgcag	agatgtgt
		* * **	** * *	** *****	*****	*****

id=113723 gene=FBgn0085429 name=CG34400 segment=chr3L\_13880566\_13882648\_-1 type=IN VIEW

Figure 477: CS=13.2



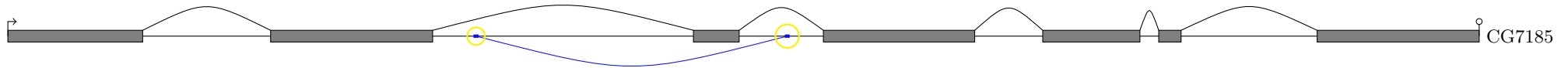
D. Mel	aaacaaaa	cttgtagttaa...	173...	-----tcaaaaca-aaaacaatcaaa	TCGAATGTCAATTTTC	-----caaccaataccacatatata	...668...	gttcgccaacag	gtaactgc
D. Sim	aaacaaaa	cttgtagttaa...	166...	ttgcatttcaaaaca-aaaac	AATCAaaTCGAATGTCAATTTTC	-----ccaaccaataccacatatata	...660...	gctcgccaacag	gtaactgc
D. Ere	aaacaaaa	cttgtagttaa...	163...	-tgcatttcaaaaca-aaaaca	AATCAaaTCGAATGTCAATTTTC	-----ccaaccaataccacatatata	...669...	gttcgccaacag	gtaacagc
D. Ana	aaacaaaa	cttgtagttaa...	181...	-----aaaaacagaaaacaatccga	TCGAATGTCAATTTTC	-----caaaacaaaattacacaaa	...552...	tccgttcaacag	gtaactgc
D. Gri	aagcaaaa	cttgtagttaa...	174...	-----cacaaaaatgagaaccacaaa	CGAATGTCAATTTTC	acTTTTCaaatgaaaacaaaatcaa	...737...	cattccaacag	gtaactgc
D. Moj	aagcaaaa	cttgtagttaa...	165...	-----aacaaatcgatacccaaaa	CGAATGTCAATTTTC	acTTTTCaaaaataaaataaaa-aaa	...670...	cattccaacag	gtaacagc
D. Pse	aaacgaaa	cttgtagttaa...	251...	-----gaacagaaat-gaaacgaaaa	CGAATGTCAATTTTC	-----tccaagaaaaccacgcctct	...664...	ttccccaacag	gtaacagc
D. Vir	agcaaaaa	cttgtagttaa...	180...	-----aaacaaaaat-cgaaccacaaa	CGAATGTCAATTTTC	acTTTTCaaaatgcaagaaaagaac	...771...	cattccaacag	gtaacagc
D. Wil	aaacaaat	cttgtagttaa...	260...	aaacaaaagaaaacataaaa	CGAATGTCAATTTTC	acTTTTCaaagcaacacctcacacac	...898...	cccttctaacag	gtaacagc
D. Yak	aaacaaaa	cttgtagttaa...	162...	-tgcatttcaaaaca-gaaaca	AATCAaaTCGAATGTCAATTTTC	-----ccatacaatagacatatata	...651...	gttcgccaacag	gtaacagc
	*	**	*****	* * *	*****	*	****	****	**

id=113734 gene=FBgn0085429 name=CG34400 segment=chr3L.13877900.13878821\_-1 type=IN

D. Mel	agcaacag	gtcaggactgaa...	258...	agtttttctaagcttttatt	GAAAAAATTGACATTCGG	---ctgttacatcgccgagttt	...359...	atcccgcttag	gaatacgg
D. Sim	agcaacag	gtcaggactgaa...	249...	-gtttttctaagcttctatta	AAAAATTGACATTCGG	cTGGT-acatcgccgagtttgcaat	...355...	atcccgcttag	gaatacgg
D. Ere	agcaacag	gtcaggaccgaa...	234...	---ttttctaagctttgattaaa	AAAAATTGACATTCGG	cTGGT-aacatcgccgagtttgaga-	...360...	atcccgcttag	gaatacgg
D. Ana	agcaacag	gtcaggattgtc...	188...	-ctcttctgtcttggaac	GAAAAAATTGACATTCGG	---ctcaaaaaatggaacattc	...391...	aaaaattcg	---tag
D. Gri	agcaacag	gtcaggaaattg...	472...	acttattttatagtgcata	AAGAAAAATTGACATTCGG	ggtctaa---atcggcgcttctg	...345...	taccggcttag	gaatacgg
D. Moj	agcaacag	gtcaggaaattg...	264...	---catttatatgaaagaaaaca	AAATAAAATTGACATTCGG	gtactgaa---atcggctcgatt	...323...	tgtttgcttag	gaatacgg
D. Pse	agcaacag	gtcaggaatgaa...	364...	accccc aaatggggtatgc	AAAAATTGACATTCGG	ggcccaaaagatcggcgct	...325...	cgccccgcttag	gaatacgg
D. Vir	agcaacag	gtcaggaatgaa...	440...	---cttaattgtattgcata	TAAGAAAAATTGACATTCGG	gatctaa---atcggcgctctc	...309...	tctccgcttag	gaatacgg
D. Wil	agcaacag	gtcaggaatgaa...	1297...	---tacctaacaataactagga	TAAGAAAAATTGACATTCGG	gtactaaaaaaaaaagaaa	...471...	ccccgcttag	gaatacgg
D. Yak	agcaacag	gtcaggaccgaa...	255...	---tttctaagctttaataaaa	AAAAAATTGACATTCGG	cTGGT-aacatcgccgagtttcgaga-	...344...	atcccgcttag	gaatacgg
	*****	*****			*****	*	***	*****	

id=113738 gene=FBgn0085429 name=CG34400 segment=chr3L.13876436.13877135\_-1 type=IN VIEW

Figure 478: CS=14.8



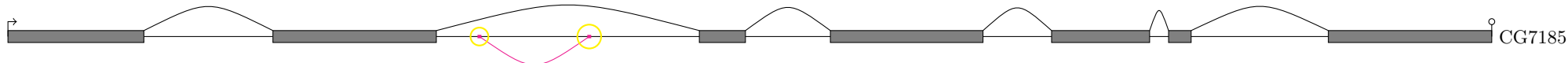
D. Mel	gaatgcag	gtacacaaccac...85...-cattat-ttctatttccatc---AAAAATGTTCTGAATGCAaaatttgcttacttaggtaa-----...638...gtat-taatatag	cgccaat
D. Sim	gaatgcag	gtacacaaccat...85...-cattat-ttctatttccatc---AAAAATGTTCTGAATGCAaaatttgcttacttaggtaa-----...618...gtat-taatatag	cgccgat
D. Sec	gaatgcag	gtacacaaccat...85...-cattat-ttctatttccatc---AAAAATGTTCTGAATGCAaaatttgcttacttaggtaa-----...644...gtat-taatatag	cgccaat
D. Ere	gaatgcag	gtacacacccat...86...-attat-ttctatttccatc---AAATGTTCTGAATGCAaaattttcttacttaagtaa-----...643...gtat-taatatag	cgccaat
D. Ana	gcatgcag	gtgtgatccgc...71...ttattatttccattattcca---TTAAATGTTCTGAATGCAaaa---attgattttgtaaaggc-----...532...gtat-taatatag	cgccgat
D. Gri	gcatgcag	gtgagcttttg...143...---ta---tttaacttttaacattgAAATGTTCTGAATGCAaAATT---ttgtttatcacacaagtcg---...720...ttataatat-tag	cgccaat
D. Moj	gaatgcag	gtgagctattgc...152...---tt---tttaactattactcattgAAATGTTCTGAATGCAaAATT---tgatacttcaaagtcgaat...796...gtaaattat-tag	cgccaat
D. Per	gaatgcag	gtgtgtttctat...143...-----ccccgattctcattaaat---TGTCTGAATGCAaagttttgttgattctgtaa-----...480...gtat-taatatag	ccccaat
D. Pse	gaatgcag	gtgtgtttctat...143...-----ccccgattctcattaaat---TGTCTGAATGCAaagttttgttgattctgtaa-----...477...gtat-taatatag	ccccaat
D. Vir	gcatgcag	gtgagtttctca...161...---tatattttaaactttactcaTTGAAATGTTCTGAATGCAaAATT---taatatcacaaatagtcgaat...764...gtaaattat-tag	cgccaat
D. Wil	gcatgcag	gtgtgtttcatt...263...---tattttgtaattttacctca---AAATGTTCTGAATGCAaaat---tattaatttaattcct---...1509...taaattatag	cgccaat
D. Yak	gaatgcag	gtacacaaccat...87...-attat-ttctatttccatc---AAATGTTCTGAATGCAaaatttcgttacttaagtaa-----...655...gtat-taatatag	cgccaat
		* ***** ** * ***** * *	** ** ** ** **

id=25894 gene=FBgn0035872 name=CG7185 segment=chr3L.8306252.8307056.-1 type=IN

D. Mel	gaccaatg	gtaacaatccc...101...-gttaacttagtcttaagcga-----TGTATTGAGAACATTTT---cagtaattccacagatcaac---...78...tctgccttgag	ttccaagg
D. Sim	gaccaatg	gtaacaatccc...109...-gttaacttagtcttaagcga-----TGTATTGAGAACATTTT---cagtaattccacagatcaac---...78...tctgccttgag	ttccaagg
D. Sec	gaccaatg	gtaacaatccc...109...-gttaacttagtcttaagcga-----TGTATTGAGAACATTTT---cagtaattccacagatcaac---...78...tctgccttgag	ttccaagg
D. Ere	gaccaatg	gtaacaatccc...105...-gttaacttagtcttaagcga-----TGTATTGAGAACATTTT---aaagtaattccacggatcaa---...74...tctgccttgag	ttccaagg
D. Ana	gccaatg	gtaacaaacccc...115...-gttaacttagcattaaagcga-----TGTATTGAGAACATTTAAatataaatcaaccatgaaa---...66...tttaccattcag	ttccaagg
D. Gri	caccaatg	gtaacaaattcc...149...-----cgacattagatggtctcattAATTGATTGAGAACATTTT---aaataactgcacatgtttgt---...261...tgctttttgag	ttccaagg
D. Moj	caccaatg	gtaaaaaaattc...127...-----cgacattagagtgtctcattAATTGATTGAGAACATTTT---aaataactgcacatgtttgt---...157...ttctttttgag	ttcagg
D. Per	gaccaatg	gtaaaaaaattc...136...tgatgcccgcataagaga-----TGTATTGAGAACA---ttcagaataaattccatgct---...88...ttcgcgttgag	ttcagg
D. Pse	gaccaatg	gtaaaaaaattc...137...tgatgcccgcataagaga-----TGTATTGAGAACA---ttcagaataaattccatgct---...88...ttcgcgttgag	ttcagg
D. Vir	caccaatg	gtaacaaattcc...125...-----ggacattagaatgtccatcAATTGATTGAGAACATTTCAA---ataactgcacatgtttgt---...147...tgctttttgag	ttcagg
D. Wil	ctccaatg	gtaacaaatccc...136...-ataaaggccgcttaagcaga-----TGTATTGAGAACATTTT---caagataacattaagacaac---...114...ttaccttttag	ttccaagg
D. Yak	gaccaatg	gtaacaatccc...101...-gttaacttagtcttaagcga-----TGTATTGAGAACATTTT---aaagtaattccacggatcag---...73...tctgccttgag	ttccaagg
		***** ** * * ***** * * * * ***** ** ** ***** **	***** **

id=25896 gene=FBgn0035872 name=CG7185 segment=chr3L.8305851.8306110.-1 type=IN VIEW

Figure 479: CS=16.56



D.Mel	gaatgcag	gtacacaaccac...85...catta-tttcctatt-tccatc	AAAATTGTTCTGAA	tgcaaaatttgcttacttag...642...gtattaatatag	cgccaat
D.Sim	gaatgcag	gtacacaaccat...85...catta-tttcctatt-tccatc	AAAATTGTTCTGAA	tgcaaaatttgcttacttag...622...gtattaatatag	cgccgat
D.Sec	gaatgcag	gtacacaaccat...85...catta-tttcctatt-tccatc	AAAATTGTTCTGAA	tgcaaaatttgcttacttag...648...gtattaatatag	cgccgat
D.Ere	gaatgcag	gtacacacccat...85...catta-tttcctatt-tccatc	AAAATTGTTCTGAA	tgcaaaatttcttacttaa...647...gtattaatatag	cgccaat
D.Ana	gcatgcag	gtgtgatccgc...73...-attatcttctatt-tccatt	AAAATTGTTCTGAA	tgcaaaattgattttgtaa...536...gtattaatatag	cgccgat
D.Gri	gcatgcag	gtgagcttttg...142...-ttatttaacttttaacatt	GAAATGTTCTGAA	tgcaaaatttgtttatca...729...ttataatattag	cgccaat
D.Moj	gaatgcag	gtgagctattgc...150...-tcttttaactattactcat	TGAAATGTTCTGAA	tgcaaaatttgatatcttca...805...gtaaattattag	cgccaat
D.Vir	gcatgcag	gtgagtttctca...163...-tattttaacttttactcatt	GAAATGTTCTGAA	tgcaaaatttaatatca...773...gtaaattattag	cgccaat
D.Yak	gaatgcag	gtacacaaccat...86...catta-tttcctaatt-tccatc	AAAATTGTTCTGAA	tgcaaaatttcgcttacttaa...659...gtattaatatag	cgccaat
	* **	** ** *	*** **	** **	*** **

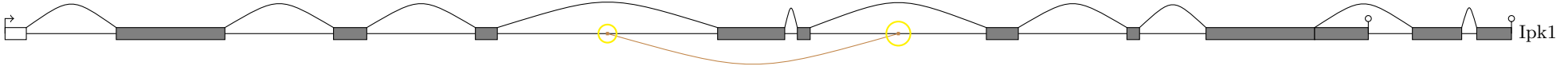
id=25894 gene=FBgn0035872 name=CG7185 segment=chr3L.8306252.8307056\_-1 type=IN

D.Mel	gaatgcag	gtacacaaccac...422...tctattaattcacaagtaat	TTCAGAGCAATTTT	-----ttgtagcactcctcggccta---...305...gtattaatatag	cgccaat
D.Sim	gaatgcag	gtacacaaccat...397...tctgttaactcacaagtaat	TTCAGAGCAATTTT	-----ttagcactcctcggcctaa---...310...gtattaatatag	cgccgat
D.Sec	gaatgcag	gtacacaaccat...423...tctgttaactcacaagtaat	TTCAGAGCAATTTT	-----ttagcactcctcggcctaa---...310...gtattaatatag	cgccgat
D.Ere	gaatgcag	gtacacacccat...422...ttttttactcacagtaat	TTCAGAGCAATTTT	-----ttagtacttctcagcctaa---...310...gtattaatatag	cgccaat
D.Ana	gcatgcag	gtgtgatccgc...279...ttggcttatttacagtaat	TTCAGAGCAATTTT	-----cgtagtccccccagcctaa---...330...gtattaatatag	cgccgat
D.Gri	gcatgcag	gtgagcttttg...547...acactacatattttgtaat	TTCAGAGCAATTTT	ttatatatttgcattcc-----...324...ttataatattag	cgccaat
D.Moj	gaatgcag	gtgagctattgc...592...ttggtttaataaagaaaaat	TTCAGAGCAATTTTA	-----tagaaattcttgagttaaga...363...gtaaattattag	cgccaat
D.Vir	gcatgcag	gtgagtttctca...602...ttggtttaataaataaataat	TTCAGAGCAATTTT	-----tatagaacttttgagtttt---...334...gtaaattattag	cgccaat
D.Yak	gaatgcag	gtacacaaccat...428...tctttttactcacaagtaat	TTCAGAGCAATTTT	-----tatagcacttctcagcctaa---...317...gtattaatatag	cgccaat
	* **	*	*****	**	** **

id=25894 gene=FBgn0035872 name=CG7185 segment=chr3L.8306252.8307056\_-1 type=IN VIEW

Figure 480: CS=10.8





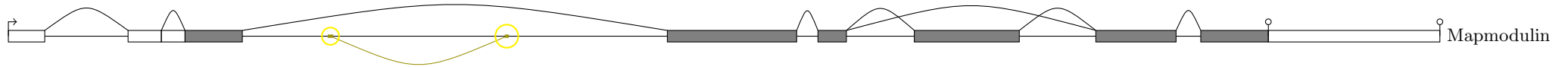
D.Mel	atttacag	gtgagttggtcg...	768...	catattg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgccagca...	638...	-ataatTTgcag	gcaaaggg
D.Sim	atttacag	gtgagttggtcg...	774...	-atattgaaatTTatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgccagca...	659...	-ataatTTgcag	gcaaaggg
D.Sec	atttacag	gtgagatgggtcg...	771...	catattg-aatgtatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgccagca...	666...	-ataatTTgcag	gcaaaggg
D.Ere	atttacag	gtgagttggtcg...	727...	catattg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgccagca...	670...	-ataatTTgcag	gcaaaggg
D.Gri	atttacag	gtgagttttcgg...	1038...	aacattc-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgcaagaa...	663...	tataa-tttgtag	gcaaagga
D.Per	atttacag	gtgagttgccat...	752...	cataatg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgcaagca...	1050...	-ataatTTgcag	gcaaaggg
D.Pse	atttacag	gtgagttgccat...	759...	catattg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgcaagca...	1021...	-ataatTTgcag	gcaaaggg
D.Wil	atttacag	gtgagtataccg...	951...	catattg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgcaagca...	714...	-ataatTTacag	gcaacaga
D.Yak	atttacag	gtgagttggtcg...	775...	catattg-aatttatggcttt	GGTGCca	AAGCATTGA	ccgaaataaaaattgccagca...	693...	-ataatTTgcag	gcaaaggg
	*****	*****		* * *	***	*****	*****	****	* * *	****

id=124641 gene=FBgn0050295 name=Ipk1 segment=chr2R.16761257\_16762742\_1 type=IN

D.Mel	tttccgg	gtagtgcgacaa...	359...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	372...	ctctgcttttag	tacaccca
D.Sim	ttctcgg	gtagtgcgacga...	332...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	392...	ctctgcttttag	tacaccca
D.Sec	ttctcgg	gtagtgcgacga...	324...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	392...	ctctgcttttag	tacaccca
D.Ere	ttctctgg	gtagtgcagcga...	346...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	405...	ccctgcttttag	tacaccca
D.Gri	ttctcgg	gtaagagttctc...	326...	catgcatccgtgcacgaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	267...	ttttatTTtag	tacaccgg
D.Per	ttctcgg	gtagtgcacga...	335...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	653...	tattctTTtag	cgtagccca
D.Pse	ttctcgg	gtagtgcacga...	335...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	656...	tattctTTtag	cgtagccca
D.Wil	tttccgg	gtagtctgtct...	327...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	320...	ttcattTTtag	tgacaccg
D.Yak	ttctctgg	gtagtgcagcga...	369...	cgtgcatccgtgcacaaaat	TCAATtt	GCTTGCgCT	ttcattccggtttaccgctt...	458...	ccctgcttttag	tacaccca
	** ** *	***	*	* ****	*****	*****	*****	*****	*****	****

id=124645 gene=FBgn0050295 name=Ipk1 segment=chr2R.16763169\_16763979\_1 type=IN VIEW

Figure 481: CS=7.02



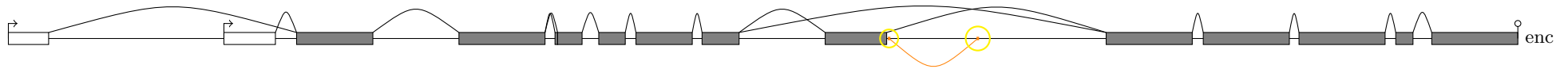
D.Mel	taaatcag	gtaagctaaata...198...	aaattctacacacatgcctc--	TGTGTGCGTGC	TGTGTG	caTGTG	acgccagtg	tgtgcatgtgc--	...2230...	--attataacctag	atcacaga		
D.Sim	taaatcag	gtaagctaaata...203...	-----tacacacatgcctctttttg	CGTGC	GTGTGTG	TATGT	TGTG	acgccagtg	tgtgcatgtgc--	...2159...	--attttaacctag	atcacaga	
D.Sec	taaatcag	gtaagctaaata...204...	-----tacacacatgcctctttttg	CGTGC	GTGTGTG	TATGT	TGTG	acgccagtg	tgtgcatgtgc--	...2142...	--attttaacctag	atcacaga	
D.Ere	taaatcag	gtaagctaaata...61...	--tgtgcattatcatgc--aaatc-	TAGTtt	CAAT	TGTGT	TAT	agaccca-	tagagaaaagtg--	...2284...	--cttaaaccttag	atcacaga	
D.Ana	ccaatcag	gtaagtgtgata...104...	----atgccatcatgtaaaaatc-	TAGTtt	CAAT	TGTGT	TAT	cgcca-	taataaaaaataaaa...	2163...	--tttcatttttag	atcacaga	
D.Gri	tgaaccag	gtaagattttct...122...	----tgtatcaacgcataacgcctt--	GTGTGT	TATGTGT	TGTGT	TAT	cctataa-	caacagcaactac--	...2260...	tattttgaac--ag	atcacaga	
D.Per	cgaaccag	gtgagtttagtt...89...	---ctctgtgattgtgt--ttgtcc-	TATGTGT	TATGTGT	TGTGT	TAT	atggcag-	cagtcagcagca--	...2149...	--gaccgaccacag	atccaaga	
D.Pse	cgaaccag	gtgagttgttta...92...	---ctctgtgattgtgt--ttgtcc-	TATGTGT	TATGTGT	TGTGT	TAT	aaggcag-	cagtcagcagca--	...2139...	--gaccgaccacag	atccaaga	
D.Wil	tttgtatg	gaaagcataggt...263...	gagat----tacatgccctctgc	GTGTG	ccTATGTGT	TGTGT	TAT	gtgtaa-	gaaagaaagagaga--	...1676...	--gccatttttcag	atcacaga	
D.Yak	taaatcag	gtaagctaaata...66...	--tgtgcattatcacgt--aaatc-	TAGTtt	CAAT	TGTGT	TAT	agaccca-	tagaaaaaagtg--	...2155...	--tttgaatcgtag	atcacaga	
				*	**	***	*				**	***	***

id=85610 gene=FBgn0034282 name=Mapmodulin segment=chr2R.13756314.13758833.-1 type=IN

D.Mel	taaatcag	gtaagctaaata...2006...	----gctttgtgtcgaagcacacg----	CACACATACACAG	CtTGTGg	CACACA	ccacatatattggggttacat...	423...	--attataacctag	atcacaga		
D.Sim	taaatcag	gtaagctaaata...1946...	ttctgctttgtgtcgaggca-----	CGCACACATACACACG	CtTGTGg	gcacacacacacatatgttg-----	...418...	--attttaacctag	atcacaga			
D.Sec	taaatcag	gtaagctaaata...1934...	ttctgctttgtgtcgaggca-----	CGCACACATACACACG	CtTGTGg	gcacacacacacatatgttg-----	...414...	--attttaacctag	atcacaga			
D.Ere	taaatcag	gtaagctaaata...726...	-----acatatcagtatccatac	ATACATA	tATTGACTG	TGTG	cgca-gtcataatacttttat-----	...1621...	--cttaaaccttag	atcacaga		
D.Ana	ccaatcag	gtaagtgtgata...820...	-----aaaataatgcacacatacat	ATACATA	tATTGACTG	TGTG	cgca-gtcataatacttttat-----	...1449...	--tttcatttttag	atcacaga		
D.Gri	tgaaccag	gtaagattttct...1987...	---tacgtcacacgtacacgcac-----	GCACACATA	caCACAC	ccgtcgtctgaaaaatgggt-----	...393...	tattttgaac--ag	atcacaga			
D.Per	cgaaccag	gtgagtttagtt...851...	-----acaaaagacacacaatcccg--	ACATACATA	agTACATG	TACATG	cacacgccaagaaacgtatg-----	...1385...	--gaccgaccacag	atccaaga		
D.Pse	cgaaccag	gtgagttgttta...845...	-----acaaaagacacacaatcccg--	ACATACATA	agTACATG	TACATG	cacacgccaagaaacgtatg-----	...1384...	--gaccgaccacag	atccaaga		
D.Wil	tttgtatg	gaaagcataggt...1651...	-----atacaccgcactggaggcg	GCACACATACATAC	TACATG	TACATG	atacatacatgtacatacat-----	...290...	--gccatttttcag	atcacaga		
D.Yak	taaatcag	gtaagctaaata...727...	----gcatacatatcagtacatcc--	ATACATA	tATTGACTG	TATTGACTG	cgca-gtcataatacttttat-----	...1496...	--tttgaatcgtag	atcacaga		
				*	**	***	**	*	*	**	***	***

id=85610 gene=FBgn0034282 name=Mapmodulin segment=chr2R.13756314.13758833.-1 type=IN VIEW

Figure 482: CS=9.6



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D.Mel gcagaCGG GTAATTTACAAAAAC-----taaaccaagaaaattaaacc...1347...cgatTTTTgcag ttccattt-
D.Sim gcagaCGG GTAATTTACAAAAAC-----taaaccaagaaaattaaacc...1384...ctaataataca- ttcgatttt
D.Sec gcagaCGG GTAATTTACAAAAAC-----taaaccaagaaaattaaacc...1385...cgatTTTTgcag ttccattt-
D.Ana gcagaCGG GTAATTTACAAAAAC-----taaaccaaaaaaaaaaaaaaaa...1596...aacatTTTTcag ttctattt-
D.Gri gcagaCGG GTAATTTACAAAAAC-----caaaaacacacaaaatcca...1474...ttcatTTTTcag ctccattt-
D.Moj gcagaCGG GTAATTTACAAAAAC-----cgaaaacacacaaaaccaa...1317...gtctgcttgag ctccattt-
D.Per gcagaCGG GTAATTTACAAAAAC-----taaaccacaaaaaatcga...1639...ctgatTTTTcag ttccatct-
D.Pse gcagaCGG GTAATTTACAAAAAC-----taaaccacaaaaaatcga...1652...ctgatTTTTcag ttccatct-
D.Vir gcagaCGG GTAATTTACAAAAACAaaACACacacaaaaaatccagcaaca...1716...gactgcttgag ctccattt-
D.Wil gcagaCGG GTAATTTACAAAAAC-----taaactaaaaataaaaaaa...2382...attctTTTTcag ttccatct-
***** ***** * * * *

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id=2227 gene=FBgn0004875 name=enc segment=chr3L.3834628\_3836021\_1 type=IN

```

D.Mel gcagacgg gtaatttcaaaa...601...aaggacgacttatcgatggt-----GTTTTGTAAATTATCTGcc-taaactcg-aactaaatta...711...cgatTTTTgcag ttccattt-
D.Sim gcagacgg gtaatttcaaaa...629...aaggacgacttatcgatggt-----GTTTTGTAAATTATCTGcc-taaactcg-aacaaaatta...720...ctaataataca- ttcgatttt
D.Sec gcagacgg gtaatttcaaaa...622...aaggacaacttatcgatggt-----GTTTTGTAAATTATCTGcc-taaactcg-aacaaaatta...728...cgatTTTTgcag ttccattt-
D.Ana gcagacgg gtaatttcaaaa...582...gtgacaaacttggtgatggt-----GTTTTGTAAATTATCTGcc-taaactcg-aactaaatta...979...aacatTTTTcag ttctattt-
D.Gri gcagacgg gtaatttcaaaa...656...actatcaaatggtgatggt-----GTTTTGTAAATTATCTGcc-taaaatc--aatcaatta...783...ttcatTTTTcag ctccattt-
D.Moj gcagacgg gtaatttcaaaa...630...actttcaacttggtgatggt-----GTTTTGTAAATTATCTGccctaaaatcaaaatcaaa--a...652...gtctgcttgag ctccattt-
D.Per gcagacgg gtaatttcaaaa...885...tgtgacgacttggtgatggt-----GTTTTGTAAATTATCTGcc-taaaactc-gaaaactact...719...ctgatTTTTcag ttccatct-
D.Pse gcagacgg gtaatttcaaaa...892...tgtgacgacttggtgatggt-----GTTTTGTAAATTATCTGcc-taaaactc-gaaaactatt...725...ctgatTTTTcag ttccatct-
D.Vir gcagacgg gtaatttcaaaa...985...---tcgatgtgctactttcgactTGTGgaTGTGTTTTGTAAATTATCTGccataaaatta-aatcaaac--...694...gactgcttgag ctccattt-
D.Wil gcagacgg gtaatttcaaaa...1235...ttcaaaaacttggtgatggt-----GTTTTGTAAATTATCTGcc-taaaacaa-aattaaaatt...1112...attctTTTTcag ttccatct-
***** ***** * * * * ***** * * * * * * * *

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id=2227 gene=FBgn0004875 name=enc segment=chr3L.3834628\_3836021\_1 type=IN VIEW

Figure 483: CS=9.6



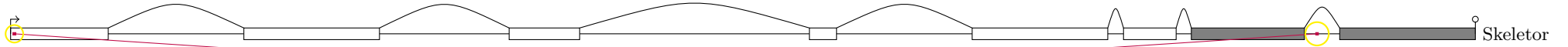
D. Mel	tgaaaatg	gtgagtttctaa...4736...-gtgataaacaacgttctaaa-----	GAAAAcAACA--aACAAcCAACcAAATcGTTT	taaaactcaattaccacaat...159...aaaccaatgcaa	atcgagtg		
D. Sim	tgaaaatg	gtgagtttctaa...4725...-tgtgataaacaacgttctaaa-----	AGAAAAcAACA--AACAAcACAAc	ccaaatcgttttaaactca-----...180...aaaccaatgcaa	atcgagtg		
D. Sec	tgaaaatg	gtgagtttctaa...4740...-gtgataaacaacgttctaaa-----	GAAAAcAACA--aACAAcCAACcAAATcGTTT	taaaactcaattaccacaat...155...aaaccaatgcaa	atcgagtg		
D. Ere	tgaaaatg	gtgagtttctaa...4749...-----	gttctaaagaaaacaactac-----	A--AACAAcCAACCAAAATcGTTT	taaaactcaattaccacaat...155...aaaccaagcaa	atcgagtg	
D. Ana	tgagaatg	gtaagtttttt...4152...-----	gcggtgccgtcctcttccTACAAcAACAAcCAACAA	-----cacacagatacacagtttta-----...753...ataccaagtaa	atcgagtg		
D. Gri	tgaaaatg	gtgagtttctaa...4721...-----	aaaagttttaatgcaatttc-----	AAAAcAACAACAACA	taactacatcaaaaagtctc-----...188...aaaccaaaaaa	aaagaaaa	
D. Moj	tgaaaatg	gtgagtaaaata...2516...-----	caacgaaatagttgtagcat-----	AAAcAaAC--AATAAC	-----tgtatagattgctaggcatt-----...2395...aataataattaa	aaaaaata	
D. Per	tgaaaatg	gtgagtttttcc...4334...-----	aaaacaaatgctgaaaagct-----	AAAcAACA--AACAAg	aa--aca-aaaaaaattaaagaa...577...aaattatctaaa	agcaattc	
D. Pse	tgaaaatg	gtgagtttttcc...4334...-----	aaaacaaatgctgaaaagct-----	AAAcAACA--AACAAg	aa--aca-aaaaaaattaaaga...577...aaattatctaaa	agcaattc	
D. Vir	tgaaaatg	gtgagtttctaa...4246...-gcagcaaatgtgtgccaca-----	AAAcAACA--AatCAAA	-----gaaattctcagtttaacctga...665...aaaacattacaa	attatttaa		
D. Yak	tgaaaatg	gtgagtttctaa...4705...-----	acaacgttctaaaaa-----	AAAAAAcAACAACAACA	gaa--acatacaacaaccaaa-----...200...aaaccaagcaa	atcgagtg	
	*** **	** ***	*	** *	*	*	** *

id=2210 gene=FBgn0004875 name=enc segment=chr3L.3818921\_3828996.1 type=I5

D. Mel	gcagacgg	gtaatttacaaa...982...ttgtatcaattcaatcaatcGAGCcATTGTTGTTGTTGTTTTTC	-aattactcttatataaact----	...322...cgatttttgcag	ttccattt-	
D. Sim	gcagacgg	gtaatttacaaa...1019...-----	aattcaatcaatcgagccatTTGTTGTTGTTGTTTTT	-caattactcttatataat-----...330...ctaataataca-	ttcgatttt	
D. Sec	gcagacgg	gtaatttacaaa...1001...ttgtatcaattcaatcaatcGAGCcATTGTTGTTGTTGTTTTTC	-aattactcttatatagatt----	...341...cgatttttgcag	ttccattt-	
D. Ere	gcagacgg	gtaatttacaaa...1015...ttgtatcaatccagtcAAGCcATTGTTGTTGTTGTTTTT	ttttcaattactcttatata-----...327...cgatttttgcag	ttccattt-		
D. Ana	gcagacgg	gtaatttacaaa...571...tttcatttat--tgtgacaac----	TTGTTGATGTTGTTT	TTGTAaattatctgcctaaactcga-----...988...aacattttcag	ttctattt-	
D. Gri	gcagacgg	gtaatttacaaa...1198...-----	tctctgtatcaaaaa-gcatTTGTTGTTGTTGTTTT	-accattactttatatacaaa-----...243...ttcattttgcag	ctccattt-	
D. Moj	gcagacgg	gtaatttacaaa...1019...-----	actctctgtctcgcattt----	GTTGTTGTTGTTT	ttgcattaatttatagcca-----...268...gtctgcttgcag	ctccattt-
D. Per	gcagacgg	gtaatttacaaa...873...ttttattgttctgtgacga-----	CTTGTTgaTGTGTTT	ttgtaaattatctgcctaaa-----...733...ctgattttgcag	ttccattt-	
D. Pse	gcagacgg	gtaatttacaaa...880...ttttattgttctgtgacga-----	CTTGTTgaTGTGTTT	ttgtaaattatctgcctaaa-----...739...ctgattttgcag	ttccattt-	
D. Vir	gcagacgg	gtaatttacaaa...1465...-----	tctctgtatcaaaaaacgca-TTGTTGTTGTTT	-----gtttttatataactttaagt...230...gactgcttgcag	ctccattt-	
D. Yak	gcagacgg	gtaatttacaaa...1020...-----	caatccaatcaattaagccaTTTGTTGTTGTTGTTTTT	caattactcttatataaac-----...346...cgatttttgcag	ttccattt-	
	*****	*****	*	**** *	* **	** ** *

id=2227 gene=FBgn0004875 name=enc segment=chr3L.3834628\_3836021.1 type=IN VIEW

Figure 484: CS=10.56



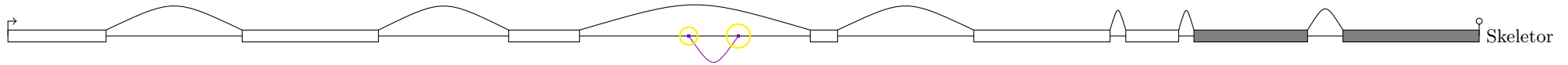
D. Mel	ctggc-GAT	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...314...cgcattaagct	gtaagtac
D. Sim	ctggc-GAT	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...317...cgcattaagct	gtaagtac
D. Sec	ctggc-GAT	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...319...cgcattaagct	gtaagtac
D. Ere	ctggc-GAT	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...322...cgcattaagct	gtaagtac
D. Ana	gcagc-GAT	CAGAgCGGTtTTGG	-agttcgttgcttcggtcgc-...273...cgcattaagct	gtaagtac
D. Gri	gcaacgt-T	CAGtgCGGTtTTGG	-agttcgttagcgtctggtcgt-...294...cgcattgagtt	gtaagtac
D. Moj	-cgtcgttT	CAGtgCGGTtTTGG	-agttcgttagcgtctggtcgt-...266...cgcattgagtt	gtaagtac
D. Per	ttgtcgt-T	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...320...cgcattaagct	gtaagtac
D. Pse	ttgtcgt-T	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...325...cgcattaagct	gtaagtac
D. Vir	acgtcgt-T	CAGtgCGGTtTTGG	-agttcgttagcgtctggtcgt-...301...cgcattgagtt	gtaagtac
D. Wil	ttgtcgt-T	CAGtgCGGTtTTGG	-agttcgttagcgtctggtcgt-...299...cgcattgagtt	gtaagtac
D. Yak	ctggc-GAT	CAGtgCGGTtTTGG	-agttcgttgcttcggtcgc-...322...cgcattaagct	gtaagtac
	*	*	*** ***** **	*****

id=106363 gene=FBgn0020517 name=Skeletor segment=chr3R.6512665.6513024\_1 type=E5

D. Mel	aaaccaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
D. Sim	aaaccaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
D. Sec	aaaccaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
D. Ere	aaaccaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
D. Ana	aaacaaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
D. Gri	aaaccaag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Moj	aaacaaag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Per	aaaccag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Pse	aaaccag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Vir	aaaccaag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Wil	aaaccaag	gtcagcccccaacgataa---ttttttattgaagca	CCAAACCGatTTGA	attaagaatcacaatataat---...52...aactgatttcag	atggcatc
D. Yak	aaaccaag	gtcagcgccaacgataa---ttttttattgaagca	CCAAACCGatTTGATT	aagaaccacaatatgaacgg...50...aactgatttcag	atggcatc
	**** **	***** *****	*****	*****	*****

id=106376 gene=FBgn0020517 name=Skeletor segment=chr3R.6519570.6519699\_1 type=IN VIEW

Figure 485: CS=7.2



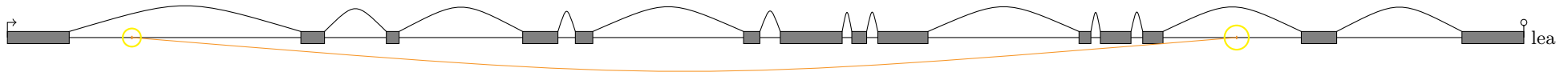
D.Mel	gtcctcag	gtaaagaagaac...353...g--cttgagctccgggagcgtc---	TTATACAAAATGAAA	tctgtgtgggactgaatcct-----	...415...aatctcttcag	tcgaagct
D.Sim	gtcctcag	gtaaagaagaac...353...g--cttgagctccgggagcgtc---	TTATACAAAATGAAA	TATGTgtgggactgaatcctcattg---	...397...aatctcttcag	tcgaagct
D.Sec	gtcctcag	gtaaagaagaac...353...g--cttgagctccgggagcgtc---	TTATACAAAATGAAA	tctgtgtgggactgaatcct-----	...399...aatctcttcag	tcgaagct
D.Ere	gtcctcag	gtaaagaagaac...385...g--cttgagctccgggagcgtc---	TTATACAAAATGAAA	TATGTgtgggactgaatcctaattg---	...409...aatctcttcag	tcgaagct
D.Ana	gtccacag	gtaaagaagaac...402...ggtcttg--tccgggagcgtc---	TATACAAAATGAAA	tctgtgtgggactgagtcgt-----	...431...aatctcttcag	tcgaagct
D.Gri	gtccacag	gtaaagaagccg...310...ttattttattgttgaattGAGCGCca	ATACAAAATGAAATGT	--gtgcaatgaattc-tttggg--	...509...attctcttcag	tccaagct
D.Moj	gtccacag	gtaaagaagccg...325...gtatttctgaatt--gagcgc--	TATACAAAATGAAATGTGTG	--caaatcttctattgggtt...	...534...attctcttcag	tcgaagct
D.Per	gtccacag	gtaaagaagccg...354...-----tgttcgttgggagcgtccta---	TACAAAATGAAA	tctgtgtggcatgtctactt-----	...440...attctcttcag	tcgaaact
D.Pse	gtccacag	gtaaagaagccg...356...-----tgttcgttgggagcgtccta---	TACAAAATGAAA	tctgtgtggcatgtctactt-----	...443...attctcttcag	tcgaaact
D.Vir	gtcctcag	gtaaagaagccg...284...ttgcttctgtcttttgaattGAGCGcc	TATACAAAATGAAATGTGTG	--caatatttcttttgggtac...	...461...attctcttcag	tccaaact
D.Wil	gtccacag	gtaaagaagccg...271...-tatgctctctattcaaat--	AGTCTATACAAAATGAAATGT	--gtgcaa-atattcttcaacgg--	...524...attgttttcag	tccaaact
D.Yak	gtcctcag	gtaaagaagaac...408...g--cctgagctccgggagcgtc---	TTATACAAAATGAAA	tctgtgtgggactgaatcct-----	...435...aatctcttcag	tcgaagct
	**** **	*****	*	***** * * *	* * * *	** ** *

id=106368 gene=FBgn0020517 name=Skeletor segment=chr3R.6516225.6517071.1 type=I5

D.Mel	gtcctcag	gtaaagaagaac...537...----caagcgaatataaaacatt-----	TTTCATTTGTATAA	-----taaaacaattcgaaaagcag...	...231...aatctcttcag	tcgaagct
D.Sim	gtcctcag	gtaaagaagaac...529...accccgaagcgaatcaaaa-----	ACATTTTCATTTGTATAA	-----taaaccattcgaaaagcaaa...	...221...aatctcttcag	tcgaagct
D.Sec	gtcctcag	gtaaagaagaac...530...----caagcgaatcaaaaacatt-----	TTTCATTTGTATAA	-----taaaaccattcgaaaagcaa...	...222...aatctcttcag	tcgaagct
D.Ere	gtcctcag	gtaaagaagaac...583...acaccgaagcgaatcaaaa-----	ACATTTTCATTTGTATAA	-----taaaaccattcgaaaagcaa...	...211...aatctcttcag	tcgaagct
D.Ana	gtccacag	gtaaagaagaac...583...----ctagcgaatcaaaaacatt-----	TTTCATTTGTATG	---ttgcttcat--aacgaactat-----	...250...aatctcttcag	tcgaagct
D.Gri	gtccacag	gtaaagaagccg...597...--cttacctccaaccaacaaa-----	ACATTTTCATTTGTATGTGCTT	ca----taaatcaatgtaaatcagt--	...223...attctcttcag	tccaagct
D.Moj	gtccacag	gtaaagaagccg...572...--ttcgtaccctccgtcaaaa--TACAaa	CATTTTCATTTGTATG	----agcttcattaaacg-ttttaa-----	...284...attctcttcag	tcgaagct
D.Per	gtccacag	gtaaagaagccg...592...----aaaaaaaaataaaaacatt-----	TTTCATTTGTATA	-----aaaaccattcctcaaaaagca...	...202...attctcttcag	tcgaaact
D.Pse	gtccacag	gtaaagaagccg...596...----aaaacaaaacaaaacatt-----	TTTCATTTGTATA	-----aaaaccattcctcaaaaagca...	...203...attctcttcag	tcgaaact
D.Vir	gtcctcag	gtaaagaagccg...514...aagccccttaccaccc--caac	CACAaaCATTTTCATTTGTATATGCTT	ca----taaaacgatgtaaatcaga--	...230...attctcttcag	tccaaact
D.Wil	gtccacag	gtaaagaagccg...540...--tccaataaattttgaaaaaa--	ACATTTTCATTTGTATatGATT	catacaagaaaaccat---aaaa---	...253...attgttttcag	tccaaact
D.Yak	gtcctcag	gtaaagaagaac...611...----caagcgaatcaaaaacatt-----	TTTCATTTGTATAA	-----taaaaccattcgagaagcaa...	...232...aatctcttcag	tcgaagct
	**** **	*****	*	***** * * *	* * * *	** ** *

id=106368 gene=FBgn0020517 name=Skeletor segment=chr3R.6516225.6517071.1 type=I5 VIEW

Figure 486: CS=14.4



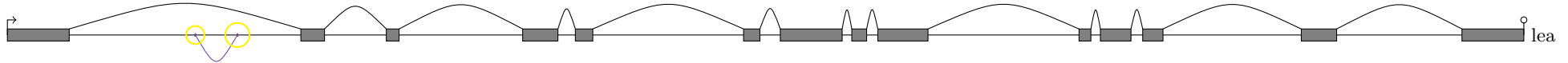
D. Mel	gctcaagg	gtaagtgtcaac...2834...	aaatgaagagcatatatgcc	AAATgaGCGTAATTaAGTG	ctgaggaaaaatgggtaatt----	2072...	ctttcattccag	gtgaaaaat
D. Sim	gctcaagg	gtaagtgtcaac...2904...	aaatgaagagcatatatgcc	AAATgaGCGTAATTaAGTG	ctgaggaaaaatgggtaatt----	2002...	ctttcattccag	gtgaaaaat
D. Sec	gctcaagg	gtaagtgtcaac...2942...	aaatgaagagcatatcacgcc	AAATgaGCGTAATTaAGTG	ctgaggaaaaatgggtaatt----	1964...	ctttcattccag	gtgaaaaat
D. Ere	gctcaagg	gtaagtgtcaac...2955...	aaatgaagagcatatatgcc	AAATgaGCGTAATTaAGTG	ctgaggaaaaatgggtaattgtgt...	1947...	ctttcattccag	gtgaaaaat
D. Ana	gctcaagg	gtaagtgtcaac...2484...	acttgcttc-catatattgcc	AAATgaGCGTAATTaAGTG	ccgaatagaaatggcggaag----	2422...	tttcattccag	gtgaaaaat
D. Gri	gctcaagg	gtaagtctcgtc...2633...	acaaattaagtgcgtgccc	AAATgaGCGTAATT	----aagtgcaagactttctc----	2278...	ctttatgacag	gtgaaaaat
D. Per	tctcaagg	gtaagtgtcaac...2598...	aaatgaagagagcacatgcc	AAATgaGCGTAATTaAGTG	cagaagagagagagaggc----	2308...	tctttattccag	gtgaaaaat
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D. Vir	gctcaagg	gtaagtgtcagc...2683...	acaagtaagtgcgtgccc	AAATgaGCGTAATT	----aagtgcaagcttctccta----	2228...	atcattgcccag	gtgaaaaat
D. Yak	gctcaagg	gtaagtgtcaac...2809...	aaatgaagagcatatatgcc	AAATgaGCGTAATTaAGTG	ctgaggaaaaatgggtaatt----	2097...	tttcattccag	gtgaaaaat
	*****	***** ** *	*	*****	* **		* **	*****

id=129938 gene=FBgn0002543 name=lea segment=chr2L.1397253.1419903\_-1 type=IN

D. Mel	aatgcgtg	gtgagtacattg...544...	-ctcaaccctaatgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	1009...	tctcacctgcag	gcaatcac
D. Sim	catgcgtg	gtgagtacattg...528...	-ctcaaccctaatgg----	ctgcCATTgcCAATTATGCATT	agttttgtgtgcattattaa...	1030...	tctcacctgcag	gcaatcac
D. Sec	catgcgtg	gtgagtacattg...542...	-ctcaaccctaatgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	1031...	tctcacctgcag	gcaatcac
D. Ere	catgcgtg	gtgagtacattg...532...	actcaaccctaatgg----	ctgcCAGTGCAATTATGCATT	agttttgtgtgcattattaa...	982...	tctcacctgcag	gcaatcac
D. Ana	aatgcgtg	gtaagtgcactg...513...	actcgggccccg-atgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	1082...	tctcacctgcag	gcaatcac
D. Gri	catgcgtg	gtgagtacatca...690...	-----taccctcaacagc	caactgc-----	AATTATGCATT	agttttgtgtgcattattaa...	1727...	tatcacctgtag
D. Per	catgcgtg	gtgagtatttc...295...	-acccctctcctaatgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	1260...	ttccacctgcag	gcaatcac
D. Pse	catgcgtg	gtgagtatttc...311...	-acccctctcctaatgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	1253...	ttccacctgcag	gcaatcac
D. Vir	catgcgtg	gtgagtacccaa...329...	ccccgcctctc-acag----	ctgc-----	AATTATGCATT	agttttgtgtgcattattaa...	2013...	tctcacctgcag
D. Yak	catgcgtg	gtgagtacattg...550...	-ctcaaccctaatgg----	ctgcCATTgcAATTATGCATT	agttttgtgtgcattattaa...	980...	tctcacctgcag	gcaatcac
	*****	** **	* * *	****	*****		* **	*****

id=129960 gene=FBgn0002543 name=lea segment=chr2L.1385213.1386847\_-1 type=IN VIEW

Figure 487: CS=9.6



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D.Mel gctcaagg gtaagtgtcaac...4405...ccgctgg-gcgaacacacacaTTTTTCACctTTAAgcg-c-tttgtaattacattt----...506...ctttcattccag gtgaaaat
D.Sim gctcaagg gtaagtgtcaac...4389...ccgctgg-gcaaacacacacaTTTTTCACctTTAAgcg-c-tttgtaattacattt----...522...cttcattccag gtgaaaat
D.Sec gctcaagg gtaagtgtcaac...4397...-tgtccgggctaacacacacaTTTTTCACctTTAAgcg-c-tttgtaattacattt----...514...cttcattccag gtgaaaat
D.Ana gctcaagg gtaagtgtcaac...4296...gcgccc-gcaaacacacacaTTTTTCACctTTAAgcgcttttgaattacattt----...615...tttcattccag gtgaaaat
D.Gri gctcaagg gtaagtctcgtc...4344...acacacacaca-acacacataTTTTTCACctTTAAgcgcttttgaattacattt----...567...ctttatgacag gtgaaaat
D.Per tctcaagg gtaagtgtcaac...4296...-ctctctctctcgacacacacaTTTTTCACctTTAAgcgcttttcgtaattacattt----...615...tctttattccag gtgaaaat
D.Pse tctcaagg gtaagtgtcaac...4289...-gtctctctctcgacacacacaTTTTTCACctTTAAgcgcttttcgtaattacattt----...622...tctttattccag gtgaaaat
D.Vir gctcaagg gtaagtgtcagc...4329...-caaaaacacacacacacataTTTTTCACctTTAAGCGCTttttgtaattacatttccagc...577...atcattgtccag gtgaaaat
D.Wil gctcaagg gtaagtgtgtc...4220...atccatgctca-atatacacaTTTTTCACctTTAAGcgcttttgaattacattt----...690...tctttgttccag gtgaaaat
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id=129938 gene=FBgn0002543 name=lea segment=chr2L.1397253.1419903\_-1 type=IN

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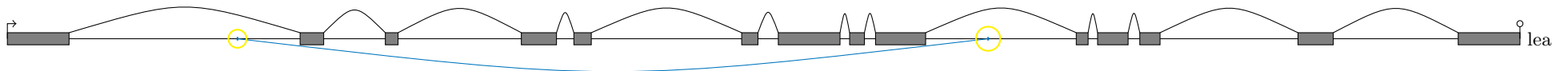
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D.Sim gctcaagg gtaagtgtcaac...4747...-gcctcttaattgccg-ctgca-----TTAAGTGAcAAAAcctgttttagccgtcaaagat...165...cttcattccag gtgaaaat
D.Sec gctcaagg gtaagtgtcaac...4747...-gcctcttaattgccg-ctgca-----TTAAGTGAcAAAAcctgttttagccgtcaaagat...165...cttcattccag gtgaaaat
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D.Gri gctcaagg gtaagtctcgtc...4742...ggcgcatattgctgaacg-----TTAAGTGAcAAAAcctgttttagcgtcgttccc...170...ctttatgacag gtgaaaat
D.Per tctcaagg gtaagtgtcaac...4685...-gccccttaattgccg-cgca-----TTAAGTGAcAAAAcctgtttggccgtcgaaaga...227...tctttattccag gtgaaaat
D.Pse tctcaagg gtaagtgtcaac...4684...-gtcccttaattgccg-cgca-----TTAAGTGAcAAAAcctgtttggccgtcgaaaga...228...tctttattccag gtgaaaat
D.Vir gctcaagg gtaagtgtcagc...4707...-----ttcaccagaactctaTGCGCaTTAAGTGAcAAAAcctgttttagtagcaaga...199...atcattgtccag gtgaaaat
D.Wil gctcaagg gtaagtgtgtc...4611...-----cttaattgctggactcactc-----CTTAAAGTGAcAAAAcctgtttcgaaacgaggag...300...tctttgttccag gtgaaaat
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id=129938 gene=FBgn0002543 name=lea segment=chr2L.1397253.1419903\_-1 type=IN VIEW

Figure 488: CS=8.64





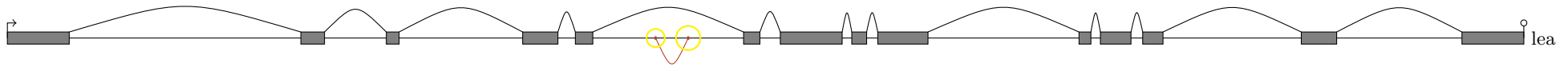
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D.Sim	gctcaagg	gtaagtgtcaac...4749...	---ctcttaattg	ccgctgcatt-	AAGTGAcaAAACCTGTTT	----agccgtcaa	aatgatgatttc	-----	...158...	cttcattccag	gtgaaaat
D.Sec	gctcaagg	gtaagtgtcaac...4749...	---ctcttaattg	ccgctgcatt-	AAGTGAcaAAACCTGTTT	----agccgtcaa	aatgatgatttc	-----	...158...	cttcattccag	gtgaaaat
D.Ana	gctcaagg	gtaagtgtcaac...4706...	---ctcttaattg	ccgctgcatt-	AAGTGAcaAAACTTGTTGGG	----ccgtcaa	aatgaatttcgt	----	...199...	ttccattccag	gtgaaaat
D.Gri	gctcaagg	gtaagtctctgc...3867...	ttttggtaaat	caccgctttt	----AGTGAaTAACTGTTTAAA	----tgataat	agaatttagcgt	....	1038...	ctttatgacag	gtgaaaat
D.Per	tctcaagg	gtaagtgtcaac...4564...	--gcgcaaaat	at--tttcatga	AGTTaaTTGAaTTTGA	----gaggagc	cctcgatgaaatt	-----	...345...	tctttattccag	gtgaaaat
D.Pse	tctcaagg	gtaagtgtcaac...4563...	--gcgcaaaat	at--tttcatga	AGTTaaTTGAaTTTGA	----gaggagc	cctcgatgaaatt	-----	...346...	tctttattccag	gtgaaaat
D.Vir	gctcaagg	gtaagtgtcagc...4715...	agaaactcta	atg--gcgcat	AAGTGAcaAAACTGTTTAAAGT	aggc---	aatgatattgccag	-...	187...	atcattgccag	gtgaaaat
D.Yak	gctcaagg	gtaagtgtcaac...4724...	---ctcttaattg	ccgctgcatt-	AAGTGAcaAAACTTGTTT	----agccttcaa	aatgatgatttc	-----	...183...	ttccattccag	gtgaaaat
	*****	***** ** *		*	* * *		* *			* **	*****

id=129938 gene=FBgn0002543 name=lea segment=chr2L\_1397253.1419903\_-1 type=IN

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D.Sim	tgaagatg	gtgagttaagca...1160...	-----cg	gaaaaagg	aaactttcc	----AGACAGGTTT	aTCACTT	cattccat	caccgtaa	agc...2143...	tttcctttccag	ttccctct
D.Sec	tgaagatg	gtgagttaagca...1116...	-----cg	gaaaaagg	aaactttgc	----AGACAGGTTT	aTCACTT	cattccat	caccgtaa	agc...2099...	tttcctttccag	ttccctct
D.Ana	ggaagatg	gtgagtgagaat...1056...	cgacggg	gaaaagg	aaactt	----TCCAGACAGGTTT	aTCACTT	cattccat	caccagag	cagc...2081...	tttcctttgcag	tgcccaac
D.Gri	tgaagatg	gtaagtattctag...1905...	aactgcca	aatgctg	gaaaac	----TTTGcAGACAGG	TTTATCACTT	tcattttat	caccgaaaa	...2194...	tcgtttttgcag	tgcccaat
D.Per	ggaagatg	gtgagtttacc...1341...	ttctgccc	cccaact	--gtca	----TCAAA	----TCAAAACT	catctcgat	gcacacatt	...1648...	ccctctttccag	taccaaac
D.Pse	ggaagatg	gtgagtgtaaag...1333...	tctgcccc	cccaact	--gtca	----TCAAA	----TCAAAACT	catctcgat	gcacacatt	...1732...	ccctctttccag	taccaaac
D.Vir	cgaagatg	gtgagtattcca...2073...	tgccaa	actcagt	gagcgaa	ACTTTgcAGACAGGTTT	aTCACTT	cattttat	caccgaaaa	...2290...	tttttttttag	tgcccaat
D.Yak	ggaagatg	gtgagttaagca...1124...	-----cg	gaaaaagg	aaactttcc	----AGACAGGTTT	aTCACTT	cattccat	caccgtaa	agc...2088...	tttcctttccag	ttccctct
	*****	** ***		*	* *		* * * * *		* *		** **	* **

id=129954 gene=FBgn0002543 name=lea segment=chr2L\_1387527.1390892\_-1 type=IN VIEW

Figure 489: CS=8.64



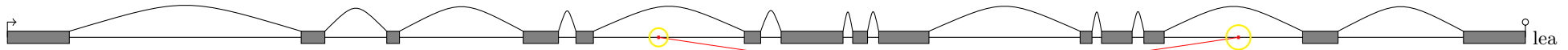
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D. Sim	gccactgc	gtaagttttcct...606...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...672...ttctttcgacag	gtcgtgtg
D. Sec	gccactgc	gtaagttttttt...601...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...671...ttctttcgacag	gtcgtgtg
D. Ere	gccactgc	gtaagtttcctt...549...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...665...ttctttcgacag	gtcgtgtg
D. Ana	gcctttgc	gtaagtttcctt...640...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...710...tcctttcacag	gtcgtgtg
D. Gri	gccattac	gtaagtatctct...801...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...877...tgttatgtttag	gtcgtgtg
D. Moj	gcctctac	gtaagtatctgc...911...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...994...ctcccattgcag	gccgtgtg
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D. Vir	gtaagtgtctat...572...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...1170...ctccacttacag	gtcgtgtg	
D. Wil	gcctttga	gtaagtttcact...818...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...798...cacttgccacag	gtcgtgtg
D. Yak	gccactgc	gtaagttttcct...533...tctctgttggcagcaatcaa	CAATTTTGCTTG	ACAA	cactcgactgttgcaatggt...685...ttctttcgacag	gtcgtgtg
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id=129946 gene=FBgn0002543 name=lea segment=chr2L\_1392822.1394191\_-1 type=IN

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D. Sim	gccactgc	gtaagttttcct...866...tcggttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggctagaaataga...411...ttctttcgacag	gtcgtgtg
D. Sec	gccactgc	gtaagttttttt...860...tcggttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggctagaaataga...411...ttctttcgacag	gtcgtgtg
D. Ere	gccactgc	gtaagtttcctt...798...tcgcttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggctagaaatagg...415...ttctttcgacag	gtcgtgtg
D. Ana	gcctttgc	gtaagtttcctt...876...tcggttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggctagaaatagg...473...tcctttcacag	gtcgtgtg
D. Gri	gccattac	gtaagtatctct...1077...ctcttggggcggcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcactgaagga...600...tgttatgtttag	gtcgtgtg
D. Moj	gcctctac	gtaagtatctgc...1265...ggagagcgtggcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcactgaagga...639...ctcccattgcag	gccgtgtg
D. Per	gcctctgc	gtaagttttcct...824...tcggttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcgggaagaga...407...ctgtctgttcag	gtcgtgtg
D. Pse	gcctctgc	gtaagttttcct...801...tcggttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcgggaagaga...406...ctgtctgttcag	gtcgtgtg
D. Vir	gcctctgc	gtaagtgtctat...885...gctctttggggcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcactgaagga...856...ctccacttacag	gtcgtgtg
D. Wil	gcctttga	gtaagtttcact...1153...tgttgtgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggcgcacatttaa...462...cacttgccacag	gtcgtgtg
D. Yak	gccactgc	gtaagttttcct...798...tcgcttgtgtcctaactt	TGTTAAGCAAA	caATTG	gcacagtggctaggaatagg...419...ttctttcgacag	gtcgtgtg
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id=129946 gene=FBgn0002543 name=lea segment=chr2L\_1392822.1394191\_-1 type=IN VIEW

Figure 490: CS=7.2



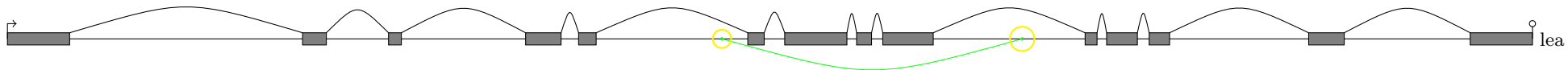
D. Mel	gccactgc	gtaagttttctt...627...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagtcgctt...	.656...	ttccttcgacag	gtcgtgtg
D. Sim	gccactgc	gtaagttttctt...622...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagtcgctt...	.650...	ttccttcgacag	gtcgtgtg
D. Sec	gccactgc	gtaagttttttt...617...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagtcgctt...	.649...	ttccttcgacag	gtcgtgtg
D. Ere	gccactgc	gtaagtttcctt...565...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagtcgctt...	.643...	ttccttcgacag	gtcgtgtg
D. Ana	gcctttgc	gtaagtttcctt...656...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacagaaagtctgc...	.688...	tcctttcacag	gtcgtgtg
D. Gri	gccattac	gtaagtatctct...811...cagcaatcaacaattttgct	TGCACAACACT	CGACTGTTG	-----caatgttgccttcagacag	-----	...864...	tgttatgtttag	gtcgtgtg	
D. Per	gcctctgc	gtaagttttcct...584...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacagacagacagg...	.642...	ctgtctgttcag	gtcgtgtg
D. Pse	gcctctgc	gtaagttttcct...545...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacagacagacaga...	.657...	ctgtctgttcag	gtcgtgtg
D. Vir	gcctctgc	gtaagtgtctat...588...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagagagaca...	.1148...	ctccacttacag	gtcgtgtg
D. Wil	gcctttga	gtaagtttcact...834...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	tgctcttc--cagacacactaa...	.776...	cacttgccacag	gtcgtgtg
D. Yak	gccactgc	gtaagttttctt...549...-----tcaacaattttgcttgacaca	ACACTc	GACTGt	TGCAat	GTTGT	-----ccttcagacggagtcgctt...	.663...	ttccttcgacag	gtcgtgtg
	*** *	***** * *	*****	***	****	* *	**	*****		

id=129946 gene=FBgn0002543 name=lea segment=chr2L.1392822.1394191\_-1 type=IN

D. Mel	aatgcgtg	gtgagtacattg...548...accccctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.999...	tctcacctgcag	gcaatcac
D. Sim	catgcgtg	gtgagtacattg...532...accccctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.1020...	tctcacctgcag	gcaatcac
D. Sec	catgcgtg	gtgagtacattg...546...accccctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.1021...	tctcacctgcag	gcaatcac
D. Ere	catgcgtg	gtgagtacattg...537...accccctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.972...	tctcacctgcag	gcaatcac
D. Ana	aatgcgtg	gtaagtgcactg...517...gggccccgatggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.1072...	tctcacctgcag	gcaatcac
D. Gri	catgcgag	gtgagtacatca...723...gttttgtgtgcattattaac	-----CAACA	AGTTGt	GTGT	TGTGTA	tttgtgtgtgctcctggcat...	.1684...	tatcacctgtag	gcaatcac
D. Per	catgcgtg	gtgagtatttcc...299...cctctctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.1250...	ttccacctgcag	gcaatcac
D. Pse	catgcgtg	gtgagtatttcc...315...cctctctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.1243...	ttccacctgcag	gcaatcac
D. Vir	catgcgag	gtgagtacccaa...327...tcccccgctctctacagct	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaagtt...	.2003...	tctcacctgcag	gcaatcac
D. Wil	catgcgtg	gtgagtaccagt...263...cttcccctccgacgccagt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccagccagcc...	.1466...	gttcacctgcag	gcaatcat
D. Yak	catgcgtg	gtgagtacattg...554...accccctaattggctgccatt	GCAATta	TGCAatt	TAGTTtt	GTGT	-----gcattattaaccaacaatttt...	.970...	tctcacctgcag	gcaatcac
	**** *	** ***	**	****	*****	* * *	*****	**	*****	

id=129960 gene=FBgn0002543 name=lea segment=chr2L.1385213.1386847\_-1 type=IN VIEW

Figure 491: CS=8.58



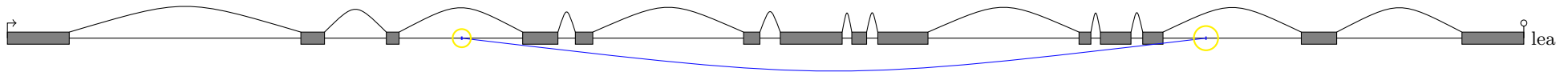
D.Mel	gccactgc	gtaagttttctt...1116...	-agtctatgctgatcttgtc-----	<b>TTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttggctctccg----	...176...	ttctttcgacag	gtcgtgtg
D.Sim	gccactgc	gtaagttttctt...1107...	-agtctatgctgatcttgtc-----	<b>TTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttggctctccg----	...174...	ttctttcgacag	gtcgtgtg
D.Sec	gccactgc	gtaagttttctt...1101...	-attctatgctgatcttgtc-----	<b>TTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttggctctccg----	...174...	ttctttcgacag	gtcgtgtg
D.Ere	gccactgc	gtaagtttcctt...1041...	-agtcctatgctgatctcgtc-----	<b>TTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttggctctccg----	...176...	ttctttcgacag	gtcgtgtg
D.Ana	gcctttgc	gtaagtttcctt...1130...	ttgtctacgctc-tatgtcgtac-	<b>TCTTGCTTTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttggctctccg----	...216...	tcctttcag	gtcgtgtg
D.Gri	gccattac	gtaagtatctct...752...	-agtcaactgggtaaacacaa	<b>CTGTaACTTTTAaTTCCGTTA</b>	-----	-attgccaatctctgttggca...	...922...	tgttatgttag	gtcgtgtg
D.Moj	gcctctac	gtaagtatctgc...1772...	ccaccttggc-tagctattc-	<b>TTGGCTTA</b>	<b>TTTGC</b>	---tgcggttatttgaactcctt----	...136...	ctccattgcag	gccgtgtg
D.Per	gcctctgc	gtaagttttctt...820...	-ggcctcggttgtgtcctaa-	<b>ACTTTT</b>	-----	<b>GTtaAGCA</b> aacaattggca---	...415...	ctgtctgttcag	gtcgtgtg
D.Pse	gcctctgc	gtaagttttctt...797...	-ggcctcggttgtgtcctaa-	<b>ACTTTT</b>	-----	<b>GTtaAGCA</b> aacaattggca---	...414...	ctgtctgttcag	gtcgtgtg
	*** * *	***** *	* * *	** **	** **	** **		** * *****	

id=129946 gene=FBgn0002543 name=lea segment=chr2L.1392822.1394191.-1 type=IN

D.Mel	tgaagatg	gtgagttaagca...1377...	---gggag----	agctctcacagtgcc	<b>GCAAATAAGTCAA</b>	-----	caa-----	ccgcagcaatataaaa...	1912...	tttcctttccag	ttccctct
D.Sim	tgaagatg	gtgagttaagca...1369...	---gggag----	acctcttacagtgcc	<b>GCAAATAAGTCAA</b>	-----	caa-----	ccgcagcaatataaaa...	1938...	tttcctttccag	ttccctct
D.Sec	tgaagatg	gtgagttaagca...1325...	---gggag----	acctcttacagtgcc	<b>GCAAATAAGTCAA</b>	-----	caa-----	ccgcagcaatataaaa...	1894...	tttcctttccag	ttccctct
D.Ere	tgaagatg	gtgagttaagca...1353...	---gggag----	acctctcacagtgcc	<b>GCAAATAAGTCAA</b>	-----	caa-----	ccgcagcaatataaaa...	1970...	cttcgtttccag	ttccctct
D.Ana	ggaagatg	gtgagtgagaat...1291...	---cgaag----	tcctttccagcgc	<b>GCAAATAAGTCAA</b>	<b>acGGCAAGG</b>	actcccctcctcggagcaa-----	...1844...	tttcctttccag	tgcccaac	
D.Gri	tgaagatg	gtaagtatctag...2960...	ataaaaaag-----	aaataaagaaa-	<b>TAATaGGAAGTGAAAGTACAG</b>	-----	aaaatctaagaagttttctt----	...1139...	tcgtttttccag	tgcccaat	
D.Moj	cgaagatg	gtgagtacttca...2037...	---aggcg----	cgacacgacagtgcc	<b>GCAAATAAGTCAA</b>	-----	caaacgctcgactgcaatat----	...2043...	tttccttttag	tgcccaac	
D.Per	ggaagatg	gtgagtttacc...1206...	---aaagtgctcggctctcacag	<b>TGCTGCAA</b>	<b>gtAAGT</b>	-----	caacagacgcagaaccgcaa-----	...1782...	ccctctttccag	tacccaac	
D.Pse	ggaagatg	gtgagtgtaaag...1190...	---aaagtgctcggctctcacag	<b>TGCTGCAA</b>	<b>gtAAGT</b>	-----	caacagacgcagaaccgcaa-----	...1874...	ccctctttccag	tacccaac	
	*****	** ***	*	*	* ****		*	** **	** **	* ***	

id=129954 gene=FBgn0002543 name=lea segment=chr2L.1387527.1390892.-1 type=IN VIEW

Figure 492: CS=7.02



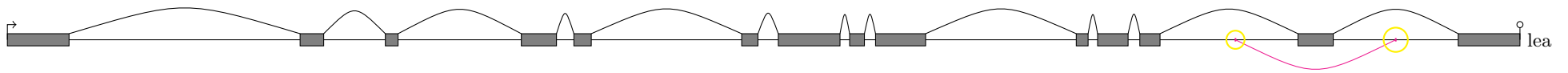
D.Mel	agtggcat	gtaagtaaatgc...605...tttggcgctcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttcg	-----	..461...tttctccaccag	ttctccgc
D.Sim	agtggcat	gtaagtaaatgc...587...tttggcgctcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttcg	-----	..455...tttcccaccag	ttctccgc
D.Sec	agtggcat	gtaagtaaatgc...581...tttggcgctcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttcg	-----	..444...tttcccaccag	ttctccgc
D.Ere	agtggcat	gtaagtaaagcg...571...-----cgctcagtgagcgcattat	GCGTTTAtGAAGTGCATTTT	gca-ttttgcatttcgcattt	..425...tatcccaccag	ttctccgc		
D.Ana	agtggcat	gtaagttcataa...471...tttggcgcttcattggagcgc	ATTAtGCGTtTATT	-----	ggagtgcatttttgcatttc	-----	..436...tccggtcctag	ttctaagc
D.Gri	agtggcat	gtaagtacaata...1063...tttggcgctgcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-atttgcatttca	-----	..831...ttgtatttttag	ttttgcgc
D.Per	agtggcat	gtaagtattacc...750...tttggcgctcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttca	-----	..417...tctgttccatag	ttcttcgc
D.Pse	agtggcat	gtaagtattatc...773...tttggcgcttcagtgagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttca	-----	..393...tctctccatag	ttcttcgc
D.Vir	agtggcat	gtaagtagatca...1303...tttggcgctgcactgaagcgc	ATTAtGCGTtTATT	-----	gaagtgca-ttttgcatttca	-----	..919...gctctatttcag	ttcttcgc
D.Yak	agtggcat	gtaagtaactgc...585...-----cgctcagtgagcgcattat	GCGTTTAtGAAGTGCATTTT	aca-ttttgcattttgcattt	..480...tttcccaccag	ttctccgc		
	*** **	*****	** ** *	*****	** ** *	*****	** ** *	

id=129942 gene=FBgn0002543 name=lea segment=chr2L.1394759.1395902\_-1 type=IN

D.Mel	aatgcgtg	gtgagtacattg...302...-----cacacacatttg--atatata	AATAACGCTAAT	-----	ttccattgttggacacaat	...1257...tctcacctgcag	gcaatcac
D.Sim	catgcgtg	gtgagtacattg...279...-----cacacacatttg--atatata	AATAACGCTAAT	-----	ttccattgttggacacaat	...1285...tctcacctgcag	gcaatcac
D.Sec	catgcgtg	gtgagtacattg...293...-----cacacacatttg--atatata	AATAACGCTAAT	-----	ttccattgttggacacaac	...1286...tctcacctgcag	gcaatcac
D.Ere	catgcgtg	gtgagtacattg...890...caccggaacagagtg--aca-----	AAAGTtGCATaTTCATGGGCGC	catttaccataaaactaagct	...621...tctcacctgcag	gcaatcac	
D.Ana	aatgcgtg	gtaagtgcactg...242...-----cacacacatttg--atatata	AATAACGCTAAT	-----	ttccattgttggacacaat	...1359...tctcacctgcag	gcaatcac
D.Gri	catgcgag	gtgagtacatca...421...-----ctgcgagatttg--atatata	AATAACGCTAAT	-----	ttccattgttggaggtacc	...1996...tatcacctgtag	gcaatcac
D.Per	catgcgtg	gtgagtatttcc...89...-----cacacatttgctgtatata	AATAACGCTAAT	-----	ttttgcattgttgggcctc	...1472...ttccacctgcag	gcaatcac
D.Pse	catgcgtg	gtgagtatttcc...105...-----cacacatttgctgtatata	AATAACGCTAAT	-----	ttttgcattgttgggcctc	...1465...ttccacctgcag	gcaatcac
D.Vir	catgcgag	gtgagtaccaa...117...-----gatttactcttg--atttata	AATAACGCTAAT	-----	ttccattgttgggcctc	...2225...tctcacctgcag	gcaatcac
D.Yak	catgcgtg	gtgagtacattg...913...-tgcgaacagagcgcgca-----	AAAGTtGCATaTTCATGGGCGC	catttaccataaaactaagct	...613...tctcacctgcag	gcaatcac	
	***** *	** ** *	*	*** ** *	** ** *	* ***** **	*****

id=129960 gene=FBgn0002543 name=lea segment=chr2L.1385213.1386847\_-1 type=IN VIEW

Figure 493: CS=10.8



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D.Mel  aatgcgtg  gtgagtacattg...563...-----ccattgcaattatgcatttaGTTTTGTGTGCATTATTAaccaacaagttgtgtgtgtgtgtgtgct:::tttgaattttaaagcgcacat-----aatgagttaa--
D.Sim  catgcgtg  gtgagtacattg...547...-----ccattgcaattatgcatttaGTTTTGTGTGCATTATTAaccaacaagt--tgtgtgtgtgtgtgtgct:::tttgaattttaaagcgaattttgctgtcagctagagt
D.Sec  catgcgtg  gtgagtacattg...561...-----ccattgcaattatgcatttaGTTTTGTGTGCATTATTAaccaacaagt--tgtgtgtgtgtgtgtgct:::tttgaattttaaa-tggatttttgctgtcagctagact
D.Ana  aatgcgtg  gtaagtgcactg...532...-----ccattgcaattatgcatttaGTTTTGTGTGCATTATTAaccaacaagt--tgtgtgtgccggtcagct:::-----
D.Gri  catgcgag  gtgagtacatca...690...taccctcaacagccaactgcAATTatGCATTtAGTTtTGTGtgcatatttaaccaacaagttgtgtgtgtgtgtatt-----:aaccgacattttaaaagcgagctaaaaaca-----
D.Per  catgcgtg  gtgagtatttcc...1545...----cccacaatttggtgcacaa--CATTTAATTGCT-----:-----
D.Pse  catgcgtg  gtgagtatttcc...1547...----cccacaatttggtgcacaa--CATTTAATTGCT-----:-----
D.Vir  catgcbag  gtgagtacccaa...2297...--gttgccaatttggtgcaaaa--CATTTAATTGCTCTGT-----:-----
D.Wil  catgcgtg  gtgagtaccagt...270...----ttccgacgccagtcaattaTGCATTtAGTTTGTGTGCATTATTAaccagccagc-----ca:::ctctgca-----
D.Yak  catgcgtg  gtgagtacattg...1523...--gctcacaatttggtgcacaa--CATTTAATTGCT-----:-----
**** * ** ***                ****                ***** **

```

id=129960 gene=FBgn0002543 name=lea segment=chr2L.1385213.1386847\_-1 type=IN

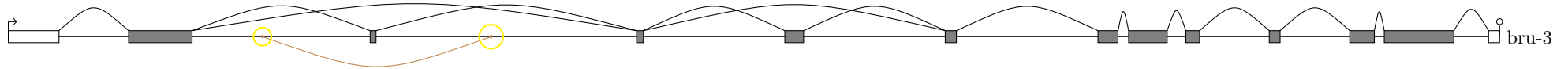
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D.Mel  cagcagcg  gtaagttttacc...1354...-----ttaaaccgaaatattaaaaTAATAAtTGCAACAAAAT-----gataaccataacaataaaag--...858...tggtca-ttgcag  gtacgtgg
D.Sim  cagcagcg  gtaagttttacc...1335...-----ttaaaccgaaatattaaaaTAATAAtTGCAACAAAAT-----gatagccataacaataaaag--...859...tggtca-ttgcag  gtacgtgg
D.Sec  cagcagcg  gtaagttttacc...1278...-----ttaaaccgaaatattaaaaTAATAAtTGCAACAAAAT-----gatagccataacaataaaag--...847...tggtca-ttgcag  gtacgtgg
D.Ana  cagcagcg  gtaagttttaac...1263...-----gcagtccccaaatataata--TTAATAAtTGCAACAAAAT-----aataaccataacaataaaag--...911...-gttcatttgcag  gtacgtgg
D.Gri  catcagcg  gtaagtttttcc...1103...----aataatagcatagtcgaggt-----TGCAAAATtGATGCAATT-----attcaattg---ataacaaaat--...2274...-gttcatttgcag  ctatgtgg
D.Per  cagcagcg  gtaagtttttcc...1172...----agctg-ctgtccaacaaaaat-----GGCAATTAATG-----ccaatca---agcatcaaaagct...1510...-gttcatttgcag  gtacgtgg
D.Pse  cagcagcg  gtaagtttttcc...1265...----agctg-ctgtccaacaaaaat-----GGCAATTAATG-----ccaatca---agcatcaaaagct...1487...-gttcatttgcag  gtacgtgg
D.Vir  catcagcg  gtaagttttttt...1236...--cacagctgtctgtctgcca-----ATGGCAATTAATG-----ccaatca---agcgtaaaaagct...2113...-cttcatttgcag  ctacgtgg
D.Wil  cagcagcg  gtaagtttttac...1607...-----gagtgaagagagaaggata--TTAATAAtTGCAACAAAATAGTGTGcgaaatgcbgtaataacaat--...994...-cttcatttgcag  gtatgtgg
D.Yak  cagcagcg  gtaagtttcaac...1046...tgccagctg-ccgtcc---aaat-----GGCAATTAATG-----ccaatca---gccatcaaaagct...1150...tggtca-ttgcag  gtacgtgg
** *****                **** *                *                **                * * * ****                ** *****

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id=129962 gene=FBgn0002543 name=lea segment=chr2L.1382633.1384926\_-1 type=IN VIEW

Figure 494: CS=9.6



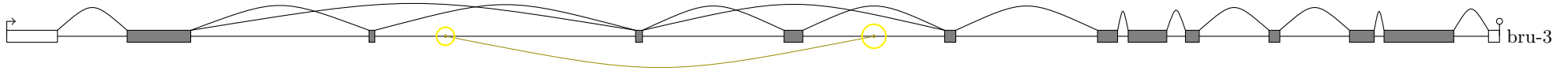
D. Mel	aagttact	gtgagtatccaa...4052...-----ttttatagttcaaaggacat	TTGAATGATTGAA	-----tgaactgtttgccctcccat	...860...ctgtcctttgcag	gtaagttg
D. Sim	aagttact	gtgagtatccaa...4053...-----ttttatagttcaaaggacat	TTGAATGATTGAA	-----tgaactgtttgccctcccat	...859...ctgtcctttgcag	gtaagttg
D. Sec	aagttact	gtgagtatccaa...4008...----agcttctgcccgttggtg	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...892...ctgtcctttgcag	gtaagttg
D. Ere	aagttact	gtgagtatcaaa...4487...---accctgtg---gtgctgatgat	ATGTTGTTGTCGC	-----caagcgtcggccatcgccatc	...425...ctgtcctttgcag	gtaagttg
D. Ana	aagttact	gtgagtatcaaa...3955...aggagagct---ctcccgtg	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...945...actctctttgcag	gtaagttg
D. Gri	aagttact	gtgagtatcatc...3696...-ggcaacgta---gcccagtg	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...1204...tattctctttgcag	gtaagttg
D. Per	aagttact	gtgagtatcaaa...3873...gagcagcgtt---t--ccagtg	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...1027...ctgtcctttgcag	gtaagttg
D. Pse	aagttact	gtgagtatcaaa...3843...tagcagcgtt---t--ccagtg	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...1057...ctgtcctttgcag	gtaagttg
D. Vir	aagttact	gtgagtatcaaa...3786...ccgggaacgta---g--cgagt	GTGTcATTGTTTCGTTtTCTTTATT	agtgatcatgtatttttatag	...1114...tgttctctttgcag	gtaagttg
D. Wil	aagttact	gtgagtatatac...3541...-ggtgtgctgctttttcggg	TGTCgTGTCatTTGT	-----tcgttttctttatagtg	...1369...atctatctttgcag	gtaagttg
D. Yak	aagttact	gtgagtatcaaa...4469...---accctgtg---gtgctgatgat	ATGTTGTTGTCGC	-----caagcgtcggccatcgccatc	...443...ctgtcctttgcag	gtaagttg
	*****	*****	* **		** **	*****

id=98259 gene=FBgn0036379 name=bru-3 segment=chr3L.13644697.13657518.-1 type=IN

D. Mel	tcaaatta	gtaagtacacaa...3929...---tgaattttgc---agttaaaagc	TTCAATCAttTTCAA	-----ttgccgcaactaatggctg	...981...-ttctctttgcag	atgaaccg
D. Sim	tcaaatta	gtaagtacacaa...3950...---tgaattttgc---agttaaaagc	TTCAATCAttTTCAA	-----ttgccgcaactaatggctg	...960...-ttctctttgcag	atgaaccg
D. Sec	tcaaatta	gtaagtacacaa...4613...----gatgtggc--tgcccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	aggagcgcagagacaggaga	...285...-ttctctttgcag	atgaaccg
D. Ere	tcaaatta	gtaagtacacaa...4403...----catttgccataaaccaaaag	GTGA-CcACAACACGT	---agccgtcccagaccatc	...507...-ttctctttgcag	atgaaccg
D. Ana	tcaaatta	gtaagtacacaa...4643...----gatgtggc--tgcccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	agaaacgtggcggcaggcg	...255...-tcttctttgcag	atgaaccg
D. Gri	tcaaatta	gtaagtacacaa...4521...----gatgtggc--taccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	agagagacagagacagatat	...377...-tgtttttgcag	atgaaccg
D. Per	tcaaatta	gtaagtacacaa...4574...----gatgtggc--tgcccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	agagg---agagccagagagcca	...324...-tttctctttgcag	atgaaccg
D. Pse	tcaaatta	gtaagtacacaa...4574...----gatgtggc--tgcccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	agagg---agagccagagagcca	...324...-tttctctttgcag	atgaaccg
D. Vir	tcaaatta	gtaagtacacaa...4541...----gatgtggc--tgcccagtcgtg	GGTAAAAGGcAATGA-GCgcAA-ATGTGC	agagagtccatagaaagag	...357...-tctatctttgcag	atgaaccg
D. Wil	tcaaatta	gtaagtacaaca...3620...gagccaatctaag---gcccgg	ACAGGACAgGACA	---ggcagccaa---aatggacca	...1292...-tttctctttgcag	atgaaccg
D. Yak	tcaaatta	gtaagtacacaa...4366...----catttgccataaaccaaaag	GTGA-CcACAACACGT	---agtcgtcccagaccagacc	...544...ctcta-tttgcag	atgaaccg
	*****	***** * ** *	*		* ** **	*****

id=98261 gene=FBgn0036379 name=bru-3 segment=chr3L.13631666.13644654.-1 type=IN VIEW

Figure 495: CS=6.6



D. Mel	tcaaatta	gtaagtacacaa...3608...	ttgggcctggctcct-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1302...	-ttctctttgcag	atgaaccg	
D. Sim	tcaaatta	gtaagtacacaa...3630...	ttgggcctggctcct-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1280...	-ttctctttgcag	atgaaccg	
D. Sec	tcaaatta	gtaagtacacaa...3631...	ttgtgcctggctcct-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1279...	-ttctctttgcag	atgaaccg	
D. Ana	tcaaatta	gtaagtacacaa...3526...	agcgcgcacatcagc-----actac-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1384...	-tcttgcttgcag	atgaaccg	
D. Gri	tcaaatta	gtaagtacagaa...3527...	aggcagcctctttta-----gtcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1383...	-tggtttttgcag	atgaaccg	
D. Per	tcaaatta	gtaagtacacaa...3448...	tgggggaactctgca-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1462...	-tttctcttgcag	atgaaccg	
D. Pse	tcaaatta	gtaagtacacaa...3456...	tgggggaactctgca-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1454...	-tttctcttgcag	atgaaccg	
D. Vir	tcaaatta	gtaagtacagaa...3628...	cgTgcagacctctg-----ttcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1282...	-tctatcttgcag	atgaaccg	
D. Wil	tcaaatta	gtaagtacaaca...3087...	tgccatgccactcta-----ctcat-----	TCATT	ATGCat	TAAT	gtaaata-cggtaaatgctgt...1823...	-tttctcttgcag	atgaaccg	
D. Yak	tcaaatta	gtaagtacacaa...4269...	-----cactccgtataaagccctca	ATTAAGTT	ttATT	taATGCATT	Tcatttgaacgtctttaaag	-----	.632...ctcta-tttgcag	atgaaccg
	*****	*****	*	*	***	*****	*	* **	* **	*****

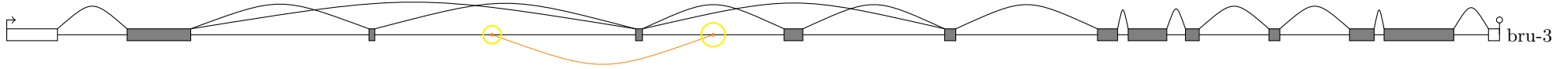
id=98261 gene=FBgn0036379 name=bru-3 segment=chr3L.13631666.13644654.-1 type=IN

D. Mel	tagcaaag	gtgagtaccatc...4343...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...568...	ttttatttgcag	gctgcgct	
D. Sim	tagcaaag	gtgagtaccatc...4338...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...573...	ttttatttgcag	gctgcgct	
D. Sec	tagcaaag	gtgagtaccatc...4340...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...571...	ttgtatttgcag	gctgcgct	
D. Ana	tagcaaag	gtaagtgccga...4132...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...779...	atttcgttgcag	gctgtgct	
D. Gri	tagcaaag	gtgagtacgcc...4390...	---ggttattgcctgtgtattaa	ATTAGCATAa	ATGA	tttttaataaattatgctcat-----	...521...	tttttttccag	gctgcgct	
D. Per	gagcaaag	gtgagtacagtc...4246...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...665...	tctcacttgcag	gctgcgca	
D. Pse	gagcaaag	gtgagtacagtc...4242...	--tggttatta-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...669...	tctcacttgcag	gctgcgca	
D. Vir	tagcaaag	gtaagtacgtcc...4407...	---ggttattgcctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgcgcat-----	...504...	gtttacttgcag	gctgcgct	
D. Wil	tagcaaag	gtgagtacccca...4083...	--cggttatga-ctgtatattaa	ATTAGCATAa	ATGA	tttttaataaattatgccatt-----	...828...	gtatttttgcag	gctgtgct	
D. Yak	tagcaaag	gtgagtaccatt...4321...	tgtggttatta-ctgtatatt	AAAT	taGCATAA	ATGATT	ttTAAT	aattatgccattgaagccgg...580...	ttttatttgcag	gctgcgct
	*****	** ** *	*****	*****	*****	*****	*	** ** *	*****	

id=98265 gene=FBgn0036379 name=bru-3 segment=chr3L.13577372.13595441.-1 type=IN VIEW

Figure 496: CS=7.8





```

D.Mel tcaaatta gtaagtacacaa...3941...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...965...-ttctctttgcag atgaaccg
D.Sim tcaaatta gtaagtacacaa...3962...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...944...-ttctctttgcag atgaaccg
D.Sec tcaaatta gtaagtacacaa...4562...atgggtcgttggg---tgagat-----TTAAGCTTtAATGatGCAT---gaagcggcacaggatgtggc-----...344...-ttctctttgcag atgaaccg
D.Ere tcaaatta gtaagtacacaa...3959...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...947...-ttctcgttgcag atgaaccg
D.Ana tcaaatta gtaagtacacaa...3855...tta-----aaagc---tccaatcgtttt-----CAATtGCCGCAAACtAATG-----gcagattataaaatattcat...1051...-tcttctttgcag atgaaccg
D.Gri tcaaatta gtaagtacagaa...4515...gca-----cagga---tgtggctacccaGTCGTGggTAAAGGCAAtGAGCG-----caaatgtgcagagagacaga...386...-tgttttttgcag atgaaccg
D.Per tcaaatta gtaagtacacaa...3771...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...1135...-tttctcttgcag atgaaccg
D.Pse tcaaatta gtaagtacacaa...3787...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...1119...-tttctcttgcag atgaaccg
D.Vir tcaaatta gtaagtacagaa...3286...ttatccagctgagc---tttgag-----TAAAGGCAA-AAGCGAATTtatgctcgacgccaattgcg-----...1621...-tctattttgcag atgaaccg
D.Wil tcaaatta gtaagtacaaca...3453...-----aagcatatataaagcaattg-----AATTTTGCAGTT-----aaaagcttcaatcatttcca...1460...-tttatctttgcag atgaaccg
D.Yak tcaaatta gtaagtacacaa...3907...tta-----aaagc---ttcaatcatttt-----CAATtGCCGCAAACtAATG-----gctgattataaaatattcat...999...ctcta-tttgcag atgaaccg
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***** * * * * *

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id=98261 gene=FBgn0036379 name=bru-3 segment=chr3L.13631666.13644654\_-1 type=IN

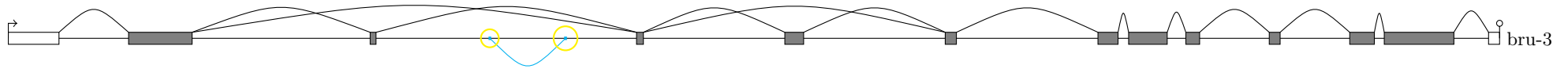
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D.Mel tcgcagcg gtaagtaatcac...3258...----gttgttttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgcttgggccggaag-----...1650...aaaccaaacaag agcattta
D.Sim tcgcagcg gtaagtaatcac...3250...----gttgttttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgcttgggccggaag-----...1658...aaaccaaacaag agcattta
D.Sec tcgcagcg gtaagtaatcac...3336...-----caggacgaaacggaacccaaATGCCATTAGGC---TTAA---cccggacacaagacaattgc-----...1573...aaaccaaacaag agcattta
D.Ere tcgcagcg gtaagtaatcac...3192...----gttgttttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgcttgggccggaag-----...1716...aaaccaaacaag agcattta
D.Ana tcgcagcg gtaagtagtcac...3084...----gttgttttagcatgccatggg-----CGTTGTTTGGC---ttATTGcacgtgcttgggatgactag-----...1824...aacctcaaacaag agcatcta
D.Gri tcgcagcg gtaagtaaacca...3333...---tagttattttctacttcgat-----TGCTTTTGGCacTTTAAaCGCGAC---aacagcagaggcagctgcct...1569...aaaaacaacaag agcattta
D.Per tcgcagcg gtaagtaatcaa...3104...----gttgcttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgctcaggggtgggggt-----...1804...aaccccaacaag agcatcta
D.Pse tcgcagcg gtaagtaatcaa...3134...----gttgcttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgctcaggggtgggggt-----...1774...aaccccaacaag agcatcta
D.Vir tcgcagcg gtaagtaatcaa...3358...tattagttattttctacttc---GATTGCTTTTGGCacTTTA---acgcgacaacagcagcagct-----...1548...aaaacaatacag agcattta
D.Wil tcgcagcg gtaagtaatcga...3888...-----aaaaaaaaaacaatacaaa---AATTGgCAAAATT-----ggaaaactgacaattttatt---...1024...aacataaaacaag agcattta
D.Yak tcgcagcg gtaagtaatacac...3142...----tgtttttagcatgccagggg-----CGTTGTTTGGC---ttATTGcacgtgcttgggccggaag-----...1766...aaaccaaacaag agcattta
*****
***** * * * * *

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id=98263 gene=FBgn0036379 name=bru-3 segment=chr3L.13595577.13631616\_-1 type=IN VIEW

Figure 497: CS=6.6



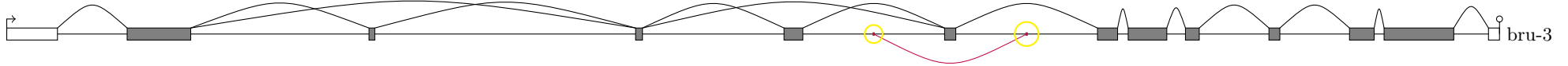
D. Mel	tcaaatta	gtaagtacacaa...3916...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...985...-ttctctttgcag	atgaaccg
D. Sim	tcaaatta	gtaagtacacaa...3937...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...964...-ttctctttgcag	atgaaccg
D. Sec	tcaaatta	gtaagtacacaa...3939...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...962...-ttctctttgcag	atgaaccg
D. Ere	tcaaatta	gtaagtacacaa...3934...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...967...-ttctctttgcag	atgaaccg
D. Ana	tcaaatta	gtaagtacacaa...3830...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1071...-tcttgcttgcag	atgaaccg
D. Gri	tcaaatta	gtaagtacagaa...3857...cgcatgaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1044...-tggttttgcag	atgaaccg
D. Per	tcaaatta	gtaagtacacaa...3746...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1155...-tttctcttgcag	atgaaccg
D. Pse	tcaaatta	gtaagtacacaa...3762...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1139...-tttctcttgcag	atgaaccg
D. Vir	tcaaatta	gtaagtacagaa...3919...cacataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...982...-tctatcttgcag	atgaaccg
D. Wil	tcaaatta	gtaagtacacaa...3458...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1443...-tttatcttgcag	atgaaccg
D. Yak	tcaaatta	gtaagtacacaa...3882...tatataaagcaattgaatt	TGCAGTTAaAAGCTTcAATCATT	tcaattgccgcaaactaatg...1019...ctcta-tttgcag	atgaaccg
	*****	***** *	** ***** ***** ***** ***** *****	* ** **	*****

id=98261 gene=FBgn0036379 name=bru-3 segment=chr3L\_13631666\_13644654\_-1 type=IN

D. Mel	tcaaatta	gtaagtacacaa...4541...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...357...-ttctctttgcag	atgaaccg	
D. Sim	tcaaatta	gtaagtacacaa...4552...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...346...-ttctctttgcag	atgaaccg	
D. Sec	tcaaatta	gtaagtacacaa...4553...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...345...-ttctctttgcag	atgaaccg	
D. Ere	tcaaatta	gtaagtacacaa...4569...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...329...-ttctctttgcag	atgaaccg	
D. Ana	tcaaatta	gtaagtacacaa...4583...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...315...-tcttgcttgcag	atgaaccg	
D. Gri	tcaaatta	gtaagtacagaa...4461...agagtcgacatgggtcgcat	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...437...-tggttttgcag	atgaaccg	
D. Per	tcaaatta	gtaagtacacaa...4514...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...384...-tttctcttgcag	atgaaccg	
D. Pse	tcaaatta	gtaagtacacaa...4514...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...384...-tttctcttgcag	atgaaccg	
D. Vir	tcaaatta	gtaagtacagaa...4481...ccagtcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...417...-tctatcttgcag	atgaaccg	
D. Wil	tcaaatta	gtaagtacacaa...4297...ccagtcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...601...-tttatcttgcag	atgaaccg	
D. Yak	tcaaatta	gtaagtacacaa...4528...agaatcgacatgggtcgctt	GGGTgaGATTaAAGCTTTAATgaTGCAtgaagcggcacaggatgtgg...370...ctcta-tttgcag	atgaaccg	
	*****	***** *	* ***** ***** ***** ***** ***** *****	* ** **	*****

id=98261 gene=FBgn0036379 name=bru-3 segment=chr3L\_13631666\_13644654\_-1 type=IN VIEW

Figure 498: CS=6.6



```

D.Mel tagcaaag gtgagtaccatc...4338...-----ttttgtggttatta-ctgatatATTAAaTTAGCATAAAATGatntttaataattatgccat...569...ttttatttcag gctgcgct
D.Ere tagcaaag gtgagtaccatc...4307...ttactttttgtggttatta-cTGTAtATTAAaTTAGCATAAAATGatntttaataattatgccat...595...ttttatttcag gctgcgct
D.Ana tagcaaag gtaagtgccgca...4127...-----ttttgtggttatta-ctgatatATTAAaTTAGCATAAAATGatntttaataattatgccat...780...atttcgtttcag gctgtgct
D.Gri tagcaaag gtgagtacgccc...4381...--cattttttgtggttattgcctGTGTATTAAaTTAGCATAAAATGatntttaataattatgctca...522...ttttttttccag gctgcgct
D.Per gagcaaag gtgagtacagtc...4245...-----gtggttatta-ctgatatattaAATTAGCATAAAATGatntttaataattatgccat...666...tctcacttcag gctgcgca
D.Pse gagcaaag gtgagtacagtc...4241...-----gtggttatta-ctgatatattaAATTAGCATAAAATGatntttaataattatgccat...670...tctcacttcag gctgcgca
D.Vir tagcaaag gtaagtacgtcc...4402...-----tttgggttattgcctgatatATTAAaTTAGCATAAAATGatntttaataattatgccat...505...gtttactttcag gctgcgct
D.Wil tagcaaag gtgagtacccca...4078...-----ttttgcggttatga-ctgatatATTAAaTTAGCATAAAATGatntttaataattatgccat...829...gtattttttcag gctgtgct
D.Yak tagcaaag gtgagtaccatt...4318...-----ttttgtggttatta-ctgatatATTAAaTTAGCATAAAATGatntttaataattatgccat...589...ttttatttcag gctgcgct
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id=98265 gene=FBgn0036379 name=bru-3 segment=chr3L.13577372.13595441.-1 type=IN

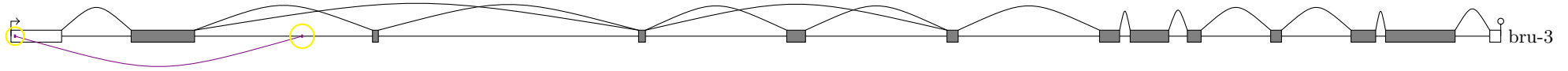
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D.Ere ctatgccg gtaagtagaaaa...4455...-acacgaaatgcaagcctgc--CATTatTATGCTAATTAATtTACAcaaaa--gcaaagaaaatgta...446...-cttatcttc-cag ggcgcatc
D.Ana ctatgccg gtaagtcagaga...4480...-gtgcgaaatgtgaagcctgc--CATTatTATGCTAATTAATtgacatcaaaa--gcaaagaaa-----...426...-tttcattc-cag ggagcatc
D.Gri caatgccg gtaagtgctttt...4224...agtgcgaaatgtgaag-cgtc--CATTatTATGCTAATTAATtgACATcaaaagtaggcaacaaggcgc--...676...-ttatttttcag ggtgcatc
D.Per ctatgccg gtgagtactac...4402...-gtgcgaaatgtgaagcctgc--CATTatTATGCTAATTaattgacatcaaaa--gcaaag-----...507...-cttatattc-cag ggtgcatc
D.Pse ctatgccg gtaagtgactac...4402...-gtgcgaaatgtgaagcctgc--CATTatTATGCTAATTaattgacatcaaaa--gcaaag-----...507...-cttatattc-cag ggtgcatc
D.Vir ctatgccg gtaagtgccgca...4294...agtgcgaaatgtgaag-cggc--CATTatTATGCTAATTAATtgacatcaaaagaacgcaaca-----...612...aattatttt-cag ggtgcatc
D.Wil ctatgccg gtaagttcaagt...4283...-tgaatgtgaagcctgttgcCATTatTATGCTAATTAATtgacatcaaaaagagtgcag-----...623...tatcgtata--tag ggtgcatc
D.Yak ctatgccg gtaagtgaaaaa...4431...-acacgaaatgtgaagcctgc--CATTatTATGCTAATTAATtgacatcaaaa--gcaaagaaa-----...475...-cttatcttg-cag ggcgcatc
* ***** ** *** * ***** **** * ***** ***** * * * * ** *****

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id=98267 gene=FBgn0036379 name=bru-3 segment=chr3L.13535319.13577291.-1 type=IN VIEW

Figure 499: CS=9.72



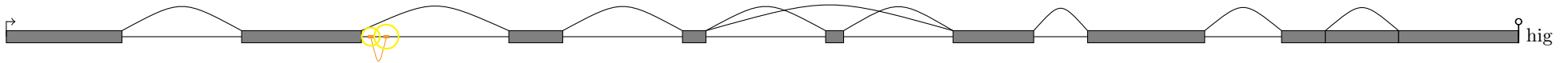
D.Mel	atattgag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...303...	actggt--aaatct	gtaagcaa
D.Sim	atattgag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...298...	actggt--aaatct	gtaagcaa
D.Sec	atattgag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...298...	actggt--aaatct	gtaagcaa
D.Ere	atattgag	t--tctgtgtagttaaagtcggaaTA--TTTCGTATAGTT	ctcgtc--gactgtcgtgtgac...	...305...	actggt--aaatct	gtaagcaa
D.Ana	acattaag	ttctctgtgtagttaaagtcggaaTATTTTCGTATAGTT	ctcgtcgtgacattgttct--	...190...	gctggt--gaatct	gtaagcac
D.Gri	atattgag	t--tttgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...293...	--tgtaaataatt	gtaagcat
D.Per	ctagttag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...264...	actggt--aaatct	gtaagcaa
D.Pse	ctagttag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...264...	actggt--aaatct	gtaagcaa
D.Vir	atattgag	t--tttgtgtagttaAGTCggAATA--ttTCGT	ataattctcgtc--gactgtcg-----	...271...	attggt--aaaatt	gtaagcat
D.Wil	atattgag	t--tttgtgtagttaaagtcggaaTA--TTTCGTATAGTT	ctcctc--gactgtcgtggaca...	...348...	acaacc--aaattt	gtaagcaa
D.Yak	atattgag	t--tctgtgtagttaAGTCggAATA--ttTCGT	atagttctcgtc--gactgtcg-----	...303...	actggt--aaatct	gtaagcaa
		* * * *	* *		* * * *	* *

id=98256 gene=FBgn0036379 name=bru-3 segment=chr3L.13659486.13659849\_-1 type=E5

D.Mel	aagttact	gtgagtatccaa...4320...--tctggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtgtggcgctccgt...	...592...	ctgtctttgcag	gtaagttg
D.Sim	aagttact	gtgagtatccaa...4322...--tctggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtgtggcgctccgt...	...590...	ctgtctttgcag	gtaagttg
D.Sec	aagttact	gtgagtatccaa...4334...--tctggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtgtggcgctccgt...	...578...	ctgtctttgcag	gtaagttg
D.Ere	aagttact	gtgagtatcaaa...4575...atatttagattactttcgaAATTTTATACGAAATA---	gaatTTTTATGACATTTTT...	...333...	ctgtctttgcag	gtaagttg	
D.Ana	aagttact	gtgagtattaac...4577...atatttagattactttcgaAATTTTATACGAAATA---	gaatTTTTATGACATTTTT...	...331...	actctctttcag	gtaagttg	
D.Gri	aagttact	gtgagtatcatc...4070...--ggtttcgactatatcaata-----	ACGAcTATTGACT	gcgcctgtcctctgcaccctg...	...842...	tattctttcag	gtaagttg
D.Per	aagttact	gtgagtatcaaa...4236...--tcggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtcctctcctcggtt...	...676...	ctgtctttccag	gtaagttg
D.Pse	aagttact	gtgagtatcaaa...4218...--tcggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtcctctcctcggtt...	...694...	ctgtctttccag	gtaagttg
D.Vir	aagttact	gtgagtacatac...4160...--ggattcgactatatcaata-----	ACGAcTATTGACT	acgcctgtcctctcctcggtt...	...752...	tgttctttcag	gtaagttg
D.Wil	aagttact	gtgagtatatac...4245...atatttagattactttcgaAATTTTATACGAAATA---	gaatTTTTATGACATTTTT...	...663...	atctattttcag	gtaagttg	
D.Yak	aagttact	gtgagtatcaaa...4288...--tctggcgactatatcaata-----	ACGAcTATTGACT	acgcctgtgtggcgctccgt...	...624...	ctgtctttgcag	gtaagttg
		*****	*****	** *		** * * *	*****

id=98259 gene=FBgn0036379 name=bru-3 segment=chr3L.13644697.13657518\_-1 type=IN VIEW

Figure 500: CS=6.6



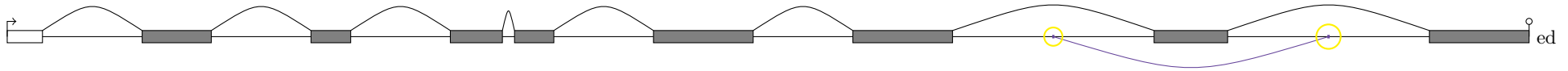
D. Mel	-----ggacaagg	gtgag-----tgt	-----GCGC	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgcctt	gaagcctt-----	...1633...	--tcgaatatccag	gtatctac	
D. Sim	tcgcaaggacaagg	gtgag-----tgt	-----GCGC	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgcctt	gaagcctt-----	...1620...	--tcgaatatccag	gtatctac	
D. Sec	-----ggacaagg	gtgag-----tgt	-----GCGC	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgcctt	gaagcctt-----	...1621...	--tcgaatatccag	gtatctac	
D. Ere	-----ggacaagg	gtgag-----tgt	-----GCGC	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgcctt	gaagcctt-----	...1552...	--tcgaaatccag	gtatctac	
D. Ana	-----ggacaagg	gtgag-----tgt	-----GCGT	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	tccaatgcctataa	gaattt-----	...1709...	..aacaaa--atatag	gtatctat	
D. Gri	-----ggataaagg	gtaagcatttca	-----AGCAT	ttACATAGCGG	cCAGACA	ctGGCA	-----tcgccacagt	gcctatgaca	-----	...1857...	..cgcccc--aattag	gcatctat	
D. Moj	-----ggacaagg	gtaaggaaaatg	cttgcaaaagcaa	AGCAT	ttGCATAGCGG	cCAGACA	ctGGCAATG	ccACAGTG	-----cccatgaaaatt	gaattgaa...	..2185...	..acccca--atttag	gtatctat
D. Per	-----ggacaagg	gtgag-----tgtgt	-----GCGC	ccACATAGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgccttaca	agaatt-----	...1783...	..tctcaa--ctgcag	gcatctac	
D. Pse	-----ggacaagg	gtgag-----tgtgt	-----GCGC	ccACATAGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgccttaca	agaatt-----	...1669...	..tctcaa--ctgcag	gcatctac	
D. Vir	-----ggacaagg	gtaagga-----ttgaaa	-----AGCAT	ttGCATAGCGG	cCAGACA	ctGGCAATG	ccACAGTG	-----cccatgaaaatt	gaattgaa...	..1979...	..catccc--aattag	gcatctat	
D. Wil	-----ggataaagg	gtaagtttg	gcacttacac	gtagccggc-----	-----CAGACA	ctGGCAATG	ccACAGTG	cccaatgccttata	aatgaatt-----	...2126...	..ttactc--ttatag	gcatctat	
D. Yak	-----ggacaagg	gtgag-----tgt	-----GCGC	ccGCACGGCGG	cCAGACA	ctGGCAATG	ccACAGTG	cccaatgcctt	gaagcctt-----	...1601...	..aatcga--atctag	gtatctac	
	*** ****	** **	**	*****		*	*		** ****				

id=47929 gene=FBgn0010114 name=hig segment=chr2R.5120238.5121949\_-1 type=IN

D. Mel	-----ggacaagg	gtgagtgtg	cgcc...51...	-----ccttgattt	gccgctg	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	cGCGC	-gttc---	cgatctcg	cagagatc...	1560...	--tcgaatatccag	gtatctac	
D. Sim	tcgcaaggacaagg	gtgagt-----	...57...	-----ccttgattt	gccgctg	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	cGCGC	-gttc---	cgatctcg	cagagatc...	1547...	--tcgaatatccag	gtatctac	
D. Sec	-----ggacaagg	gtgagtgtg	cgcc...51...	-----ccttgattt	gccgctg	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	cGCGC	-gttc---	cgatctcg	cagagatc...	1548...	--tcgaatatccag	gtatctac	
D. Ere	-----ggacaagg	gtgagtgtg	cgcc...51...	-----ccttgattt	gccgctg	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	cGCGC	-gttc---	cgatctcg	cagagatc...	1479...	--tcgaaatccag	gtatctac	
D. Ana	-----ggacaagg	gtgagtgtg	cgcc...45...	-----ataaagatt	gct-cgc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	aGCGC	-cgtccg	tgcgat	catgactag---	1642...	..aacaaa--atatag	gtatctat	
D. Gri	-----ggataaagg	gtaagcatttca	...69...	-----agccg	tgtcgctg	tctctgt	-----TGCTGTCTGT	CCGT	TGTGT	tATGCT	cttcca-	cacacc	caaaaag---	1770...	..cgcccc--aattag	gcatctat	
D. Moj	-----ggacaagg	gtaaggaaaatg	...67...	-----attgaatt	gaaagcc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	TGTGT	tATGCT	aagcca-	catcaac	ccaaca---	2113...	..acccca--atttag	gtatctat	
D. Per	-----ggacaagg	gtgagtgtg	tgcc...49...	-----aaagaatt	gcccgc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	TGTGT	tGTGC	---ccag	atctat	ccaccagatc...	1714...	..tctcaa--ctgcag	gcatctac	
D. Pse	-----ggacaagg	gtgagtgtg	tgcc...49...	-----aaagaatt	gcccgc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	TGTGT	tGTGC	---ccag	atctat	ccaccagatc...	1600...	..tctcaa--ctgcag	gcatctac	
D. Vir	-----ggacaagg	gtaaggaattg	aa...55...	-----attgaatt	gaaagcc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	TGTGT	tATGCT	ctcca-	cattcac	acagacac...	1907...	..catccc--aattag	gcatctat	
D. Wil	-----ggataaagg	gtaagtttg	gca...50...	-----taatgaatt	gcccgc	ctgtCGCTGT	ctCGTTGTCTGT	CTGTCCGT	TGTGT	tATGCT	-----tccg	tctgt	gtgtg	cagaa...	2074...	..ttactc--ttatag	gcatctat
D. Yak	-----ggacaagg	gtgagtgtg	cgcc...45...	...ttgaagc	ccttgattt	gccgctg	-----CGCTGT	ctCGTTGTCTGT	CTGTCCGT	cCGTGT	cGCGC	-gttc---	cggtctcg	cagagatc...	1534...	..aatcga--atctag	gtatctac
	*** ****	** **		*		*	*****		*	*		*		** ****			

id=47929 gene=FBgn0010114 name=hig segment=chr2R.5120238.5121949\_-1 type=IN VIEW

Figure 501: CS=11.52



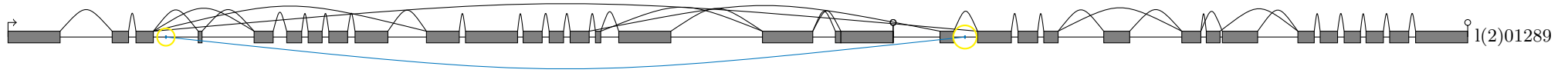
D.Mel	aaatgaat	gtgagtacaaaa...3064...	ctgctgtttctgttgacaaa--AAAT-GTTGCATA-----	attgtaagcgcttccggttg-----	...1849...	-ttgctttccag	gggtcaac
D.Sim	aaatgaat	gtgagtacaaaa...3090...	ctgctgtttctgttgacaaa--AAAT-GTTGCATA-----	attgtaagcgcttccggttg-----	...1823...	-ttgctttccag	gggtcaac
D.Sec	aaatgaat	gtgagtacatac...3102...	--gctgtttctgttgacaaaa--AT-GTTGCATAAATTGT-----	aagcgcttccggttgaaaag-----	...1808...	-ttgctttccag	gggtcaac
D.Ere	aaatgaat	gtgagtacagaa...2967...	ctgctgttctgttgacaaa--AAAT-GTTGCATA-----	attgtaagcgcttccggttg-----	...1946...	-gtgtttccag	gggtcaac
D.Ana	aaacgaat	gtaagtaccaga...3033...	ccactgctgttgacaaa--AAAT-GTTGCATA-----	attgtaagcgcttccggttg-----	...1880...	-ctgtttaccag	gggtgaat
D.Gri	aaatgaat	gtaagtataaac...2573...	cta--aactatgccgagaaaAGTTAATTGCACAAA	CAATGTGAAAAgttttggggacaaaacttt-----	...2325...	-ctctattccag	gggtcaac
D.Per	aaatgaat	gtaagtacacat...2544...	-tgctcaaatcaatgcgga--AAC-TTGCACAACTTAAATTG-----	cgtccccattgttccact...2360...	-ctcgtttccag	gggtcaac	gggtcaac
D.Pse	aaatgaat	gtaagtacacat...2522...	ttgctcaaatcaatgcgga--AAC-TTGCACAAA-----	ctttaattgctccccattt-----	...2390...	-ctcgtttccag	gggtcaac
D.Vir	aaatgaat	gtaagtacacac...2946...	tcgttgccttctgttgacaaa--AAAT-GTTGCATA-----	attataagcgcttccggttg-----	...1967...	-tcattttaccag	gggtcaac
D.Wil	aaatgaat	gtgagtacacac...2838...	-tttgttgcct-gtgacaaaa--AT-GTTGCATAAATT-----	ataagcgcttccagttcaaa-----	...2074...	gtca-tttaccag	gggtcaac
D.Yak	aaatgaat	gtgagtacacaaa...3013...	ctgctgttctgttgacaaa--AAAT-GTTGCATA-----	attgtaagcgcttccggttg-----	...1900...	-tttattccag	gggtcaac
	*** **	** **	** **	** *	*	**	** **

id=17046 gene=FBgn0000547 name=ed segment=chr2L.4101129\_4107435.1 type=IN

D.Mel	gcatttag	gtaagccaccta...4112...	--gagatgggatgctttaaTATGCAA-----	CaATTT-gtagcagacaa--agatgtttg--	...800...	-ttcactcgccag	attcacca
D.Sim	gcatttag	gtaagtcaccta...4160...	--gagatgggatgctttaaTATGCAA-----	CaATTT-gtagcagacaa--agatgtttg--	...752...	-ttcactcgccag	attcacca
D.Sec	gcatttag	gtaagtcaccta...3184...	ccaagggggatgggacaa--ATAAAGT-----	TATGCGCAT--aatatcca--cagctcacgtat...1725...	-ttcactcgccag	attcacca	attcacca
D.Ere	gcatttag	gtacgtaaccaa...4129...	--gagatgggatgctttaaTATGCAA-----	CaATTT-gtagcagacaa--agatgtttg--	...783...	-ttctctcccag	attcacca
D.Ana	gcatttag	gtgagttatttt...3883...	--gacgatgggatgctttaaTATGCAA-----	CaATTT-gtagcagacaa--agatgtttg--	...1029...	-tattttgtgtag	attcacca
D.Gri	gcatttag	gtgagtcctgtt...4869...	--ttgtttgtttggcttgtTTTTTAATTGTTTGTGCATGATT-----	ctcaagtttctttttttt...33...	-tttctgttcag	attcacca	attcacca
D.Per	gcatttag	gtgagtacaagt...2751...	--gctaaagccttaacgcaaaaaCGATTAAGT-----	TGTTGAGTT--gagagataa--agagataca-ga...2156...	-cccttcgtacag	attcacca	attcacca
D.Pse	gcatttag	gtgagtacaagt...3095...	cagagtctgtactttttt--TTTGGT-----	CA--AGTTTatgcagatgccaaagcggag-----	...1816...	-cccttcgtacag	attcacca
D.Vir	acatttag	gtaagtcacga...3380...	--aggacatccgcttgaTATGCAA-----	CaATTT--gcagacaa--agatgtattcga...1532...	atttcg-ttcag	attcacca	attcacca
D.Wil	gcatttag	gtaagcatcctc...2806...	--acaccacatacacacaa--AGT-----	TATGCGCAT--aatatctaactccagctcac--	...2107...	-gtgttctttag	attcacca
D.Yak	gcatttag	gtaagttgcctt...4157...	--gaagtgggaagcgtttaaTATGCAA-----	CaATTT-gtagcagacaa--agatgtttg--	...755...	-ctctctccacag	attcacca
	*****	** *		*	*	**	*****

id=17048 gene=FBgn0000547 name=ed segment=chr2L.4107805\_4113620.1 type=IN VIEW

Figure 502: CS=10.56



D.Mel	tctgttct	gtaagtgtgaat...73..-tgatgatattct-ttttcaaa	GCAGTTGCAGTTTTTAG	cgaacacaaacagtttagct...277...aaacgact-gcag	gtccagat
D.Sim	tctgttct	gtaagtgtgaat...73..-tgatgatgttct-ttttcaaa	GCAGTTGCAGTTTTTAG	cgaacacaaacagtttagct...276...aaacgact-gcag	gtccagat
D.Sec	tctgttct	gtaagtgtgaat...73..-tgatgatgttct-ttttcaaa	GCAGTTGCAGTTTTTAG	cgaacacaaacagtttagct...277...aaacgact-gcag	gtccagat
D.Ere	tctattct	gtaagtgtgaaa...69..-tgatgatgttct-ttttcaaa	GCAGTTGCAGTTTTTAG	cgaacacaaacagtttagct...265...aaacgact-gcag	gtccagat
D.Ana	gctattct	gtaagtgtgagctg...64...ttgacgatactctatttc--aa	GCAGTTGCAGTTTTTAG	cgaacacaaacagtttagct...274...aaacgact-gcag	gtccagat
D.Gri	cttattct	gtgagtacaaat...94...ttgattatttat--acttcaaa	GCAGTTGCAGTTTTTAG	cgttcaaaaagaaaaaac...315...aaacgata-acag	gtcctgat
D.Moj	tctcttct	gtgagtacaagt...114...ttgattatggtt--acttcaaa	GCAGTTGCAGTTTTTAG	cgttaaaagaaatttgaatt...338...aaacgata-acag	gtcccgat
D.Per	cctattct	gtaagtctgcct...90...--gatgatgttctcttttcaaa	GCAGTTGCAGTTTTTAG	cgtacacaaacagtttagct...287...gaacgact-gcag	gtccagat
D.Pse	cctattct	gtaagtctgcct...90...--gatgatgttctcttttcaaa	GCAGTTGCAGTTTTTAG	cgtacacaaacagtttagct...287...gaacgact-gcag	gtccagat
D.Wil	tcttttct	gtaagtacttt...66...--actctgaatttattttcaaa	GCAGTTGCAGTTTTTAG	ccttcacattcaaaagattt...289...-tacgatgaacag	gtccagat
		* **** ** **	* ***** * *	* **** ** **** **	

id=116871 gene=FBgn0010482 name=l(2)01289 segment=chr2R.2625035.2625465\_-1 type=IN

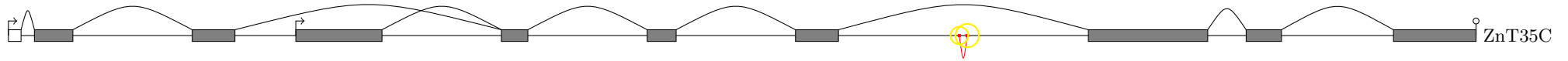
D.Mel	tgtttttt	gtaagtatacct---cgggaacggt---a:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaaaaac-acacgag---caaaa---...88...ttgcaattgcag	acaaagaa
D.Sim	tgtttttt	gtaagtatacct---cgggaa--gttgtaag:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaaaaac-acaaaag---caaaa---...84...ttgcaattgcag	acaaagaa
D.Sec	tgtttttt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaaaaac-acaaaag---caaaa---...87...ttgcaattgcag	acaaagaa
D.Ere	tgtgtttt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Ana	tgtatatt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Gri	tgtcttct	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Moj	tgtcttct	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Per	tgtatatt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Pse	tgtatatt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
D.Wil	tgtatatt	gtaagtatacct---cgggaacggt---g:::::-----ta-----	cttttagtaaatcgcgccca	CTAAAACTGTAAGTGC	ccaaac--acacaag---caaaata...86...ttgcaattgcag	acaaggaa
		*** ** *	*****	***** * ** *	** * **	*** **

id=116905 gene=FBgn0010482 name=l(2)01289 segment=chr2R.2613533.2613761\_-1 type=IN VIEW

Figure 503: CS=13







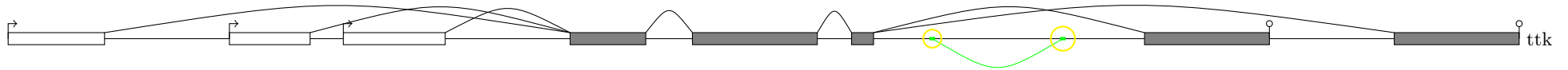
D.Mel	aatgtcat	gtaagtacagtc...	3668...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1243...	-aactcggtttag	catgggcg
D.Sim	aatgtcat	gtaagtacagtt...	3717...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1194...	aaactcgg-ttag	catgggcg
D.Sec	aatgtcat	gtaagtacagtt...	3673...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1238...	aaactcgg-ttag	catgggcg
D.Ere	aatgtcat	gtgagtacaatg...	3739...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1172...	caactcgg-ctag	catgggcg
D.Ana	aatgtcat	gtaagtactatc...	3797...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1114...	-cgttatttccag	aatgggcg
D.Gri	aatgtcat	gtaagtaccggt...	3713...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1198...	-atccgcacgcag	catgggcg
D.Moj	aatgtcat	gtagtagatgcc...	3673...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1238...	-gtctccttttag	catggggtg
D.Pse	aatgtcat	gtaagtacaacgg...	3466...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1445...	-ttgcccgtctag	aatgggcg
D.Vir	aatgtcat	gtgagtaccatt...	3664...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1247...	-ttaccatttccag	catgggcg
D.Wil	aatgtcat	gtaagtattatt...	3819...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1092...	-ctccctttttag	catgggcg
D.Yak	aatgtcat	gtaagtacttat...	3575...	tagaaaagccataaatctgca	AATGTCGGaGCATT	taaaatgaataaaaagtcaa...	1336...	caactcgg-ttag	catgggcg
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id=29168 gene=FBgn0028516 name=ZnT35C segment=chr2L\_15230355\_15236604\_-1 type=IN

D.Mel	aatgtcat	gtaagtacagtc...	3700...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgcc-gatccacgccgtg...	1209...	-aactcggtttag	catgggcg
D.Sim	aatgtcat	gtaagtacagtt...	3749...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgcc-gatccatgccgtg...	1160...	aaactcgg-ttag	catgggcg
D.Sec	aatgtcat	gtaagtacagtt...	3705...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgcc-gatccatgccgtg...	1204...	aaactcgg-ttag	catgggcg
D.Ere	aatgtcat	gtgagtacaatg...	3771...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgcc-gatccgagccgtg...	1138...	caactcgg-ctag	catgggcg
D.Ana	aatgtcat	gtaagtactatc...	3829...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccgt...	1080...	-cgttatttccag	aatgggcg
D.Gri	aatgtcat	gtaagtaccggt...	3745...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccag-	1164...	-atccgcacgcag	catgggcg
D.Moj	aatgtcat	gtagtagatgcc...	3705...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccg-	1204...	-gtctccttttag	catggggtg
D.Pse	aatgtcat	gtaagtacaacgg...	3498...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccgt-	1411...	-ttgcccgtctag	aatgggcg
D.Vir	aatgtcat	gtgagtaccatt...	3696...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccat-	1213...	-ttaccatttccag	catgggcg
D.Wil	aatgtcat	gtaagtattatt...	3851...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgccctgatgcatgccgt-	1058...	-ctccctttttag	catgggcg
D.Yak	aatgtcat	gtaagtacttat...	3607...	tttaaatgaataaaaagtc	AATGTGCCGAgcTATT	aaactgcc-gatccgtaccgtg...	1302...	caactcgg-ttag	catgggcg
	*****	**		*****	*****	*****		**	*****

id=29168 gene=FBgn0028516 name=ZnT35C segment=chr2L\_15230355\_15236604\_-1 type=IN VIEW

Figure 505: CS=13.2



D. Mel	cacttccg	gtgagtcctctt...183...gaccaatct---catctgcgaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---gtagtagaaa...880...tacaatttttag	acggaaac			
D. Sec	cacttccg	gtgagtcctctt...183...gaccaatct---catctgcgaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---gtagtagaaa...913...tacaatttttag	acggaaac			
D. Ere	cacttccg	gtgagtcctcca...185...gaccaatct---catctgcgaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---gtagtagaaa...893...tacaatttttag	acggaaac			
D. Ana	cacttccg	gtaagtcgaagc...200...g---aatctgtgaatctgcgaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaaatgttagat---...854...aacaatttttag	atggcaac			
D. Gri	cacttccg	gtgagttgaaga...365...aacacatttcgaattgtgac---	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcat---aaagacaga...924...tacaatttttag	atgggaac			
D. Moj	cacttccg	gtgagtcgagaa...293...ataa-atctcgaattgtgta---	TCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---atagaaaagg...723...attgatttttag	atggaaac			
D. Per	cacttccg	gtgagtcctatt...294...aatg---ttcgaattattggaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---tttagatcga...829...ctcttcctgtag	atggcaac			
D. Pse	cacttccg	gtgagtcctatgc...293...aatg---ttggaattattggaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---tttagatcga...798...ctcttcctgtag	atggcaac			
D. Vir	cacttccg	gtgagtggaaaa...333...aaca-ttttcgaattgtgta---	TCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcat---atataaaaa...782...aacatttttag	atggcaat			
D. Wil	cacttccg	gtaagtcactat...327...aacgaatttcgaattcgaat---	ATCGGAAAAGCTAAA	-----	aaaaagggat---attgatacga...767...tcttgatatag	atggtaat			
D. Yak	cacttccg	gtgagtcctctt...187...gaccaatct---catctgcgaat	ATCGGAAAAGCTA	aaAGGGATTTTA	cgcatattcaa---gtagtagaaa...924...tacaatttttag	acggaaac			
	*****	** ***	*	*	*****	*	*	***	* ** **

id=127735 gene=FBgn0003870 name=ttk segment=chr3R.27554202.27555353.1 type=IN

D. Mel	cacttccg	gtgagtcctctt...774...--gcaacgcgttg-a---aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactctttctc...290...tacaatttttag	acggaaac			
D. Sec	cacttccg	gtgagtcctctt...784...--gcaacgcgttg-a---aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactctttctc...313...tacaatttttag	acggaaac			
D. Ere	cacttccg	gtgagtcctcca...763...--gcaacgcgttg-a---aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactctttctc...316...tacaatttttag	acggaaac			
D. Ana	cacttccg	gtaagtcgaagc...827...--caacgcgttgaa---aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactcgttctc...228...aacaatttttag	atggcaac			
D. Gri	cacttccg	gtgagttgaaga...1142...----atacaaaaaga-aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactagtgtgc...147...tacaatttttag	atgggaac			
D. Moj	cacttccg	gtgagtcgagaa...930...---tagtgctttgaa---atatggct	TGAAAAATCCCTa	TAGCTTTTCCGA	accgatttgaactgttcc-...85...attgatttttag	atggaaac			
D. Per	cacttccg	gtgagtcattt...944...-----cgcgttgaaaacaatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgactcaaaactatctctc...180...ctcttcctgtag	atggcaac			
D. Pse	cacttccg	gtgagtcctatgc...940...-----cgcgttgaaaacaatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgactcaaaactatctctc...152...ctcttcctgtag	atggcaac			
D. Vir	cacttccg	gtgagtggaaaa...1005...---tagagtggtgaa---atatggct	TGAAAAATCCCTa	TAGCTTTTCCGA	accgatttgaactcgttcc-...109...aacatttttag	atggcaat			
D. Wil	cacttccg	gtaagtcactat...927...aacgaatggcttgaa---atc---cc-----	TTTAGCTTTTCCGAT	ccgatttgaactcgacgat...167...tcttgatatag	atggtaat				
D. Yak	cacttccg	gtgagtcctctt...816...--gcaacgcgttg-a---aatggct	TG-AAATCCCTa	TAGCTTTTCCGAT	ccgatttgaactctttctc...296...tacaatttttag	acggaaac			
	*****	** ***	*	*	*****	*	*	***	* ** **

id=127735 gene=FBgn0003870 name=ttk segment=chr3R.27554202.27555353.1 type=IN VIEW

Figure 506: CS=13.2





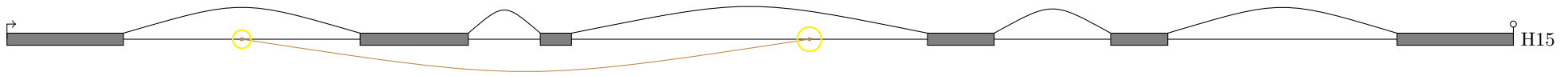
D.Mel	tttgatag	gtaagtttttct...608...gcaaatgccctgccgcccagc	AGCAACA	cGGGCG	CAGCAGCAGCAACAA	cagcagcaaca--acaacagca	...444...-caacatttcag	ggatccca	
D.Sim	tttgatag	gtaagtctgccc...590...gcaa--cacgggcgc-agcagca	G	CAACAGCAGCA	acagcaacaaca--gcagcagc	...464...-caacatttcag	ggatccca		
D.Sec	tttgatag	gtaagtctgccc...559...gcaa--cacgggcgc-agcagca	G	CAACAGCAACA	acagcaacaaca--gcagcagc	...463...-tcacatttcag	ggatccca		
D.Ere	tttgatag	gtaagtttttct...645...-caa--cacgggcgc-agcagcag	CAGCAA	CAACAGCAACAGCAGCAGCGG	cagcagcggca--gcaacacca	...479...-caacattgtag	ggatccca		
D.Ana	tttgatag	gtaagtgttggc...513...-ttgcgactattaagacagca	AAG	CAaCAGCAACA	gcagcagca--gcaaatgctct	...481...-tttcggttcag	ggatccca		
D.Gri	tttgatag	gtgagtttttta...831...-tactattaagacagcaaacg	CAGGc	GGCAGgCAGCAGC	cAGCAGCAACAGCAACATGGT	cagcagcaacatggcaacag	...876...-ttcttgc-cacag	agatccca	
D.Moj	tttgatag	gtgagttgtttt...971...-cgtgtactattaagacagca	AACGca	GGCAGtCAGCAGCATGGaCAACGt	CAGCAGCAACAAC	a-acaacaaca--acagcaaca	...354...-tgttc-tttgcag	agatccca	
D.Per	tttgatag	gtgagtgctctcc...738...-aagacagcaagagcaacgca	GCAGa	AGCA	G	CAGCAGCAGCAAACG	ctctgccgccagcagca	...329...-gttcgcttcag	agatccca
D.Pse	tttgatag	gtgagtgctct...755...-agcaagagcaacgcagcaga	AGCA	G	CAGCAGCAG	cagcagcaaacgctctgccg	...332...-gttcgcttcag	agatccca	
D.Vir	tttgatag	gtaagcaaaaa...1027...-ttaaagacagcaaacgcagac	CAGCa	GCCA	G	CAGCAGCAGCAACA	tggcagcagca--ccagcaac	...343...-tgttt-cttttag	agatccga
D.Wil	tttgatag	gtgagtttttag...552...-cacagagacgt-agcagaagc	CAACAG	Ta	ACAGCAGCAACAGCAAC	atacaacaaca--acagcaaca	...505...-cgccgtacacag	aaatgcta	
D.Yak	tttgatag	gtaagtttttct...611...-ctgccgccagcagcaaacg	GGCG	cAGCAGCAACAACAGCAACAA	caacagcagca--gcaacaaca	...522...-ctacttttctag	ggatccca		
	*****	** **	***	* *****	*	**	**	** * *	

id=52573 gene=FBgn0016660 name=H15 segment=chr2L.5414210.5415353.1 type=IN

D.Mel	tttgatag	gtaagtttttct...800...-ataatgagtga	TTGTTGCTGTTGTTGCTg	GCTTTGTTGTT	-----cctgttgttagtgcggca	...251...-caacatttcag	ggatccca		
D.Sim	tttgatag	gtaagtctgccc...642...ggcagcaagacaaaagcaa	TGTTGCTGTTGT	-----agccggcacggcgcgctt	...412...-caacatttcag	ggatccca			
D.Sec	tttgatag	gtaagtctgccc...611...ggcagcaacacaaaagcaa	TGTTGCTGTTGT	-----agccggcacggcgcgctt	...411...-tcacatttcag	ggatccca			
D.Ere	tttgatag	gtaagtttttct...821...-ataatgagtga	TTGTTGCTGTTGTTGCTGTTGTTGCTG	-----gcttctgttctctgtt	...303...-caacattgtag	ggatccca			
D.Ana	tttgatag	gtaagtgttggc...733...-taatgagtga	TGTTGCTGTTGTTT	-----ctggtgttgttctctgtt	...261...-tttcggttcag	ggatccca			
D.Gri	tttgatag	gtgagtttttta...1072...-attgttgttgttgttgcctc	ACTGTTGCTGTTGCTGTTGTTGTTGTTGTTCTG	-----gagttgttagtgcggca	...640...-ttcttgc-cacag	agatccca			
D.Moj	tttgatag	gtgagttgtttt...1160...-gaaaataatgagtga	GTTGTTGCTGTTGt	TGTTGTTGt	GTTGTTGTTGCTga	CGTTg	tttagtgcggcaattggc	...166...-tgttc-tttgcag	agatccca
D.Per	tttgatag	gtgagtgctctcc...938...-aatgatctcttgtggctct	TGTTGCTGTTGTTGCTGTTGTTGCTG	-----agttgttctctgtagtt	...130...-gttcgcttcag	agatccca			
D.Pse	tttgatag	gtgagtgctct...955...-aatgatctcttgtggctc	TTGTTGCTGTTGTT	-----gcagttgttctctgtagtt	...132...-gttcgcttcag	agatccca			
D.Vir	tttgatag	gtaagcaaaaa...1243...-aatgttgttgtttagccgc	TGTTGTTGTTGTTGCTGGCGTTG	-----tttagtgcggcaattggca	...128...-tgttt-cttttag	agatccga			
D.Wil	tttgatag	gtgagtttttag...734...-aatgagtga	GTTGCTGTTGTTGTTGt	GTTGTTG	-----ttgttgcgttctctgtt	...323...-cgccgtacacag	aaatgcta		
D.Yak	tttgatag	gtaagtttttct...842...-ataatgagtga	TTGTTGCTGTTGTTGCTGTT	atTGTT	-----attgctggcttctgttcc	...290...-ctacttttctag	ggatccca		
	*****	** **	* *	*** ** *	* *	**	** * *		

id=52573 gene=FBgn0016660 name=H15 segment=chr2L.5414210.5415353.1 type=IN VIEW

Figure 508: CS=7.2



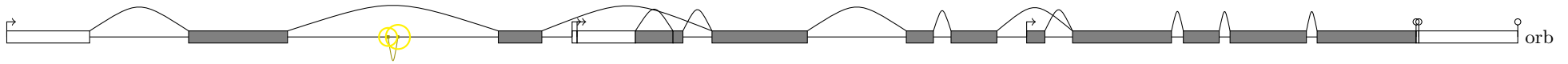
D.Me1	cagtctga	gtgagtaaagta...	898...	ataaattatatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcagcaaatgcgcg...	736...	-ctggtcgtgtag	gtccccga
D.Sim	cagtctga	gtgagtaaagta...	866...	ataaattatatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcagcaaatgcgcg...	654...	-ctggtcgtgtag	gtccccga
D.Sec	gagtctga	gtgagtaaagta...	875...	ataaattacatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcagcaaatgcgcg...	656...	-ctggtcgtgtag	gtccccga
D.Ana	gagtctga	gtgagtaaagta...	887...	ataaattatatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgcgcg...	735...	-cttaacgtgtag	gtccccga
D.Gri	gagtctga	gtgagtagcaaa...	1685...	ataaattgcatattgatgac	AATGca	ACGTTGATGACTTG	Gataattacggcaaatgcgcg...	1318...	-ctctgtgtag	gtccctcg
D.Moj	gagtctga	gtgagtagctaa...	3324...	acaattgcatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgtgcg...	482...	-ttgctctttag	gtccatta
D.Per	gagtctga	gtgagtaaagta...	1197...	ataaattatatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgcgcg...	536...	-tgttgcatctag	gtccattg
D.Pse	gagtctga	gtgagtaaagta...	1232...	ataaattatatattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgcgcg...	548...	-tgttgcatctag	gtccattg
D.Vir	gagtctga	gtgagtagcaaa...	2804...	ataaattgcatattaatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgcgcg...	480...	gctctctgt-cag	gtcccttg
D.Wil	gagtttga	gtgagtaaaagt...	2948...	ataaatcatgtattgatgac	AATGca	ACGTTGATGACTTG	Gataattgcggcaaatgcgcg...	703...	-ctttggctacag	gtccattg
	*** **	*****		* **		*****		* **		***

id=52565 gene=FBgn0016660 name=H15 segment=chr2L.5405193.5406910.1 type=IN

D.Me1	tcgggcag	gtgagtcagtg...	4511...	-caaatgacaaaa-aactgggc	TGGGTCATTAGCGTCATT	tacacttacctgcgaccaca--...	396...	tataaatttcag	acgcatgt
D.Sim	tcgggcag	gtgagtcagtg...	4016...	-caaatgacaaaa-aactgggc	TGGGTCATTAGCGTCATT	tacacttacctgcgaccaca--...	891...	tataaatttcag	acgcatgt
D.Sec	tcgggcag	gtgagtcagtg...	4494...	-caaatgacaaaa-aactgggc	TGGGTCATTAGCGTCATT	tacacttacctgcgaccaca--...	413...	tataaatttcag	acgcatgt
D.Ana	tcgggcag	gtgagtcaatg...	4621...	-caaatgacaaaa-aactaggc	TGGGTCATTAGCGTCATT	tacacttggcctggactgcg--...	286...	ttgcctttgcag	acgcatgt
D.Gri	acgggcag	gtgagtaaatatc...	4570...	--aaatgacaaaagaactgggc	TGGGTCATTAGCGTCATT	tacacttggagctggtggca--...	337...	gtctacttttaa	gcgcatgt
D.Moj	acgggcag	gtgagtgagaag...	4594...	--aaatgacaaaagaactgggc	TGGGTCATTAGCGTCATT	tacactttgcct-ggcccag--...	313...	gtctactttcag	gcgcatgt
D.Per	tcgggcag	gtgagtcgagac...	4608...	-caaatgacaaaa-aagtgggc	TGGGTCATTAGCGTCATT	tacacttaccttcgaccgca--...	299...	gtccactttcag	gcgcatgt
D.Pse	tcgggcag	gtgagtcgagac...	4582...	-caaatgacaaaa-aagtgggc	TGGGTCATTAGCGTCATT	tacacttaccttcgaccgca--...	325...	gtccactttcag	gcgcatgt
D.Vir	acgggcag	gtgagcatatct...	4596...	--aaatgacaaaagaactgggc	TGGGTCATTAGCGTCATT	tacacttag-ct-ggccacaac...	311...	gtctacttttag	gcgcatgt
D.Wil	tcgggcag	gtgagtcctcaaa...	4509...	acaatgacgaa--aactgggc	TGGGTCATTAGCGTCATT	tacacttaccttcgaacgta--...	398...	tgcttcttcag	acgaatgt
	*****	*** *		***** ** ** *		*****		** *	** **

id=52569 gene=FBgn0016660 name=H15 segment=chr2L.5407818.5413011.1 type=IN VIEW

Figure 509: CS=12



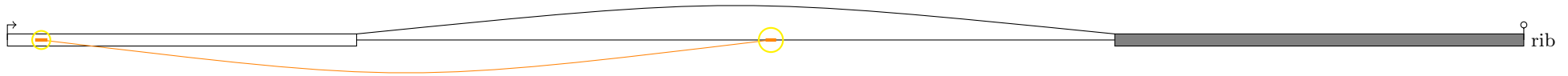
D.Mel	tgcaacag	gtatgtaaataa...3732...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	1175...	tttcatttcag	tacgacac
D.Sim	tgcaacag	gtatgtaaataa...3696...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	1211...	tttcatttcag	tacgacac
D.Sec	tgcaacag	gtatgtaaataa...3702...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	1205...	tttcatttcag	tacgacac
D.Ere	tgcaacag	gtatgtaaataa...3674...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	1233...	tttcatttcag	tacgacac
D.Ana	tgcaacag	gtatgtaaataa...3945...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	962...	ctatatttcag	ttcgacac
D.Gri	tgcaacag	gtatgtaaataa...3652...	cgacttttcacgtaccttca	TCAAG	TTGTCA	ttCAATT	tttaagtccatagcaagttt...	1255...	ttttacttcag
D.Moj	tgcaacag	gtatgtaaataa...3817...	cgacttttcacgtaccttca	TCAAG	TTGTCA	ttCAATT	tttaaatccatagcaagttt...	1090...	ttatatttcag
D.Vir	tgcaacag	gtatgtaaataa...3814...	cgacatttcacgtaccttca	TCAAG	TTGTCA	ttCAATT	tttaaatccatagcaagttt...	1093...	ctatacttcag
D.Wil	tgcaacag	gtatgtaaataa...3897...	cgacttttcacgtaccttca	TCAAG	TTGTCA	ttCAATT	tttaaatccatagcaagttt...	1010...	ttctatgtag
D.Yak	tgcaacag	gtatgtaaataa...3639...	cgactttgcacgtaccttca	TCAAGTGTCA	ttCAATT	tttaaatccatagcaagttt...	1268...	tttcatttcag	tacgacac
	*****	*****		**** *	*****			* * * **	* ** **

id=41487 gene=FBgn0004882 name=orb segment=chr3R\_19096406\_19104780\_-1 type=IN

D.Mel	tgcaacag	gtatgtaaataa...3782...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagactaaggaagccgtc...	1127...	tttcatttcag	tacgacac
D.Sim	tgcaacag	gtatgtaaataa...3746...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagactaaggaagccgtc...	1163...	tttcatttcag	tacgacac
D.Sec	tgcaacag	gtatgtaaataa...3752...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagactaaggaagccgtc...	1157...	tttcatttcag	tacgacac
D.Ere	tgcaacag	gtatgtaaataa...3724...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagaccgaggaagccgtc...	1185...	tttcatttcag	tacgacac
D.Ana	tgcaacag	gtatgtaaataa...3995...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagactaaggaagccgtc...	914...	ctatatttcag	ttcgacac
D.Gri	tgcaacag	gtatgtaaataa...3702...	gcaagtcctgtacttaacat	AGTTGTGACA	AGTTGA	caaaaagtaagtatgcataa...	1207...	ttttacttcag	tacgagac
D.Moj	tgcaacag	gtatgtaaataa...3867...	gcaagttttgtacttaacat	AGTTGTGACA	AGTTGA	caaaaagtaagtatgcctcc...	1042...	ttatatttcag	tacgagac
D.Vir	tgcaacag	gtatgtaaataa...3864...	gcaagttttgtacttaacat	AGTTGTGACA	AGTTGA	caaaaagtaagtatgccttg...	1045...	ctatacttcag	tacgagac
D.Wil	tgcaacag	gtatgtaaataa...3947...	gcaagttttgtacttaacat	AGTTGTGACA	AGTTGA	caaaaagtaaggagatgca...	962...	ttctatgtag	tacgagac
D.Yak	tgcaacag	gtatgtaaataa...3689...	gcaagttttgtacttaacat	AGTTGTGACA	CTTGA	caaagactaaggaagccgtc...	1220...	tttcatttcag	tacgacac
	*****	*****		*****	*****			* * * **	* ** **

id=41487 gene=FBgn0004882 name=orb segment=chr3R\_19096406\_19104780\_-1 type=IN VIEW

Figure 510: CS=12



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D.Me1 aaaccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTg-cacgcaaaactctcaaaat-----..353...catta-tttcgtg gtaaggtt
D.Sim aaaccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTg-cacgcaaaactctcaaaat-----..338...catta-tttcgtg gtaaggtt
D.Sec aaaccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTg-cacgcaaaactctcaaaat-----..336...catta-tttcgtg gtaaggtt
D.Ere aaaccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTg-cacgcaaaactctcaaaat-----..346...catta-tttcgtg gtaaggat
D.Gri acgccgtg gcacttttattcaagtttgagcgctcGAATcTGCAAcaACGTgccacgcaaaattcaaaaa-----..491...atata-ttttgtg gtaagcta
D.Moj gcgccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTgccacgcaaaattcaaaaa-----..430...-acaattttgtg gtaagatt
D.Per gcgccgtg gcagttttattcaactttgacgctcGAATcTGCAaAACG-----caaaaccaacaacgcacgac...362...catta-ttttgtg gtaagccc
D.Pse gcgccgtg gcagttttattcaactttgacgctcGAATcTGCAaAACG-----caaaaccaacaacgcacgac...364...catta-ttttgtg gtaagccc
D.Vir gcgccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTgccacgcaaaattcaaaac-----..385...taca-ttttgtg gtaagata
D.Yak aaaccgtg gcagttttattcaagtttgagcgctcGAATcTGCAAcaACGTg-cacgcaaaactctcaaaat-----..341...catta-tttcgtg gtaaggct
***** ** * ***** ** * ***** ***** ** * ** * ** * *****

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id=28533 gene=FBgn0003254 name=rib segment=chr2R.15163231.15163657.1 type=E5

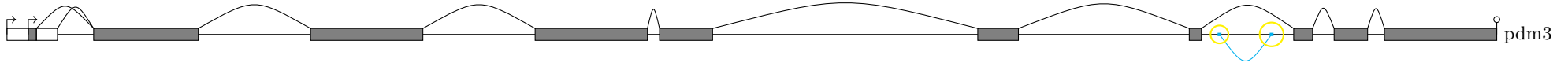
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D.Me1 atttcgtg gtaaggtataa...1242...gcgcacacatctttcgagggATGTTTGCAATTTttttccccatttttctac---...389...-tccgtaaccag gcaaccag-
D.Sim atttcgtg gtaaggtataa...1221...gcgcacacatctttcgagggATGTTTGCAATTTttttccccatttttctac---...375...-tccgtaaccag gcaaccag-
D.Sec atttcgtg gtaaggtataa...1206...gcgcacacatctttcgagggATGTTTGCAATTTttttccccatttttctac---...376...-tccgtaaccag gcaaccag-
D.Ere atttcgtg gtaaggataaaa...1248...gcgcacacatctttcgagggATGTTTGCAATTTttttccccatttttctac---...382...-tccggtggccag gcaaccag-
D.Gri attttgtg gtaagctatatt...1690...gcgcacacgtttttcgagggATGTTTGCAATTT---ccccatttttctttttt...1321...-cgcacctttag gccaaagt-
D.Moj ttttgtg gtaagatttag...1328...tttttcgtttttccgagggATGTTTGCAATTT---tccccatttttattttttt...1328...-ttcgattcgat gccaacaga
D.Per attttgtg gtaagccctgat...1360...-cgcacacatctttcgagggATGTTTGCAATTT-tttccccatttttctaca---...510...ctcccgggcagg cccaaca-
D.Pse attttgtg gtaagccctgat...1359...-cgcacacatctttcgagggATGTTTGCAATTT-tttccccatttttctaca---...510...ctcccgggcagg cccaaca-
D.Vir attttgtg gtaagatataca...1392...gcgcacacgtttttcgagggATGTTTGCAATTT---tccccatttttctccg-...642...gaacaaca-cag gcaactgg-
D.Yak atttcgtg gtaaggctaaaa...1265...gcgcacacatctttcgagggATGTTTGCAATTTttttccccatttttctgc---...380...-accgtaaccag gcaaccag-
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id=28534 gene=FBgn0003254 name=rib segment=chr2R.15163658.1516366.1 type=I5 VIEW

Figure 511: CS=11.8



D. Mel	cagaacat	gtatgtgtgcct	-----	ccttgagagggtgt	-----	gtgtacgctg	-----	tgtgtgtgtgtgtgtgtgcagtc	-----	CAAGAGAA	AC	TAACTAAAGTGC	-----	aaggctcattaacctgttca	....	297	...tcccaac					
D. Sim	cagaacat	gtatgtgtgcct	-----	ccttgagaggatgt	-----	gtgtacgc	-----	tgtgtgtgtgtgcagtc	-----	CAAGAGAA	AC	TAACTAAAGTGC	-----	aaggctcattaacctgttca	....	297	...tcccaac					
D. Sec	cagaacat	gtatgtgtgcct	-----	ccttgagaggatgt	-----	gtgtacgc	-----	tgtgtgtgtgtgcagtc	-----	CAAGAGAA	AC	TAACTAAAGTGC	-----	aaggctcattaacctgttca	....	297	...tcccaac					
D. Ere	cagaacat	gtatgtgtgcct	-----	ccttgagagggtgt	-----	gtgcacgc	-----	tgtgtgtgtgtgtgcagtc	-----	CAAGAGAA	AC	TAACTAAAGTGC	-----	aaggctcattaacctgttca	....	296	...tcccaac					
D. Ana	caaaacat	gtatgtgtgccca	-----	ctctgaggggtgtgt	-----	gagtgctg	gtg	ttgctt	gtgtgtgtgtatg	tctgtgtgtgtggctgagtgctc	GGCTTAAAC	CAGAGAA	AC	TAACTAAAGTGC	-----	aagtctcattaacctgttca	....	257	...ccaaaat			
D. Gri	cagaacat	gtatgtgtgtgt	-----	gtgtatgtgtgtgt	-----	gtgtgtgtgt	-----	gtgcggttatgattgtgtgtg	-----	tgtgtgtgtgtgtcctgcgc	-----	GAAGAA	AC	TAACTAAAGTGC	-----	aaaagagctcatt	-----	tttatta	....	299	...atctata	
D. Moj	cagaacat	gtatgtgtgtgt	-----	atcgagtggtgtgt	-----	gtgtgtgtgcgaat	-----	gtgtgcctgactatgt	-----	GTGAAAGAA	AC	TAACTAAAGTGC	-----	aagagctcata	-----	tttgttttg	....	351	...gtacgca			
D. Per	cagaacat	gtatgtgtgatg	cccttgagcgcctctgagtg	gtgtgtgtgtgctgagtg	gtgtgtgtgtg	-----	tgagtggtgtgctgagcgtgtgtgtgtgt	-----	GTGTAAAGAGAA	AC	TAACTAAAGTGC	-----	cgagcagcatcgaagtgcc	....	325	...accacca						
D. Pse	cagaacat	gtatgtgtgatg	ccccctgagcgcctctgagtg	gtgtgtgtgt	-----	gtgtgtgtgt	-----	tgagtggtgtgctgagcgtgtgtgtgtgt	-----	GTGTAAAGAGAA	AC	TAACTAAAGTGC	-----	cgagcagcatcgaagtgcc	....	325	...accacca					
D. Vir	cagaacat	gtatgtgtgtgt	-----	gtgtgtgtgtgtgc	-----	gtatgtgtgtgagtg	cgctgtgtaca	aatgtgtg	-----	tgtgtgtgtgtgtgtgtgtgt	-----	GCGTg	AAAGAA	AC	TAACTAAAGTGC	-----	aagagctcatt	-----	ttgtttaca	....	246	...tatacca
D. Wil	cagaacat	gtacgtgtgtgt	-----	atatctgtgtgtgt	-----	gtgtatgtgtgtgt	-----	tgtatgtgtgtgatgtgtgtgtgtgtgt	-----	TG	TAAGAGAAACA	CC	TAACTAAAGTGC	AG	agaa	-----	atcgaaagctccatta	....	299	...catccca		
D. Yak	cagaacat	gtatgtgtgcct	-----	ccttgagagggtgt	-----	gtgtacgc	-----	tgtgtgtgtgtgtcgtgcagtc	-----	CAAGAGAA	AC	TAACTAAAGTGC	-----	aaggctcattaacctgttca	....	305	...tcccaac					

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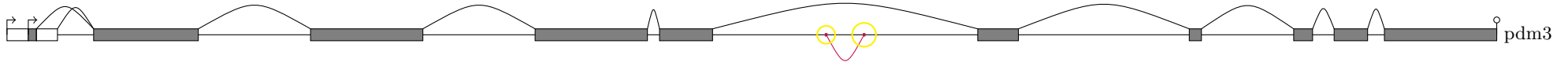
D. Mel	cagaacat	gtatgtgtgcct	...264...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	tataacgggcttg	---cacaagc
D. Sim	cagaacat	gtatgtgtgcct	...256...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	tataacgggcttg	---cacaagc
D. Sec	cagaacat	gtatgtgtgcct	...256...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	tataacgggcttg	---cacaagc
D. Ere	cagaacat	gtatgtgtgcct	...259...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	tataacgggcttg	---cacaagc
D. Ana	caaaacat	gtatgtgtgccca	...283...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	AAGCCG	-----agagac
D. Gri	cagaacat	gtatgtgtgtgt	...299...	---tgctacttgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	taactagcgca	---tacagac
D. Moj	cagaacat	gtatgtgtgtgt	...319...	---tgctacttgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	ttttcgcgca	---tacggt
D. Per	cagaacat	gtatgtgtgatg	...316...	---atgctaattgacaatgtcctg	GGC	ACTTTAGTTA	GTTT	CTTTT	ACGT	tatttgtacttgcgcaatg	cgcacac
D. Pse	cagaacat	gtatgtgtgatg	...308...	---atgctaattgacaatgtcctg	GGC	ACTTTAGTTA	GTTT	CTTTT	ACGT	tatttgtacttgcgcaatg	cgcacac
D. Vir	cagaacat	gtatgtgtgtgt	...261...	---tgctacttgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	ACGT	taatccaattagcgca	---tacaga
D. Wil	cagaacat	gtacgtgtgtgt	...295...	aaaagctacttgacaatgtc	CTGG	CACTTTAGTTA	GTTT	CTTTT	TACA	-tagttgagctgtttat	---caaaaa
D. Yak	cagaacat	gtatgtgtgcct	...265...	---tgctaattgacaatgtcctg	GCAC	TTAGTTA	GTTT	CTTTT	CGTT	tataaagggcttg	---caccagc

D. Mel	ccatcgag	-----	cgatctgatccaggatctaattctctacatacctcttcctaataacc	-----	actccaaccgcag	gttcgaga				
D. Sim	ccatcgag	-----	cgatctgatccaggatctaattctctacatacctcttcctaataacc	-----	actccaaccgcag	gttcgaga				
D. Sec	ccatcgag	-----	cgatctgatccaggatctaattctctacatacctcttcctaataacc	-----	actccaaccgcag	gttcgaga				
D. Ere	ccagcgag	-----	cgatctgatccaggatctaattctctacatacctcttcctaataacc	-----	actccaaccgcag	gttcgaaa				
D. Ana	cgagagag	-----	caacgatctaattcctacatacctcttcctaataacc	-----	caacccaataacc	-----cag	gttcgaga			
D. Gri	tgagagagt	gagtcag	-----	tagtcatttaacta-agatcctctatct	-----	at	-----atgtag	gttcgaga		
D. Moj	-----	tgtacgg	-----	ca	-----	tttacta-agtactctatccctcctatatatgtatatgtatatgtatgtatgtacgcacatag	-----	gttcgaga		
D. Per	cgatcgag	-----	ca	-----	cagcagcagagccgctcgcctgacatccctactaatt	-----	caaccaccgcag	gttcgaga		
D. Pse	cgatcgag	-----	ca	-----	cagcagcagagccgctcgcctgacatccctactaatt	-----	caaccaccgcag	gttcgaga		
D. Vir	-----	gattcgg	-----	tg	-----	tgtaacta-agatactctatcc	-----	atac	-catgcag	gttcgaga
D. Wil	aaaaaaaa	-----	taaaaaataaaataccttatcca	-----	ccatcatccc	-----	atccatt	-----	cag	gttcgaga
D. Yak	ccatcgag	cccatcgatctgatccaggatctaattctctacatacctcttcctaataacc	-----	actccaaccgcag	gttcgaga					

id=21515 gene=FBgn0033288 name=pdm3 segment=chr2R.4282125.4282535.1 type=IN VIEW

Figure 512: CS=11.52





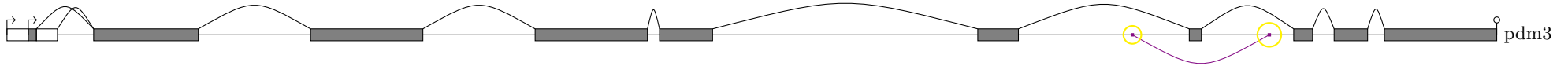
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D.Sim	ttcaccga	gtgagtaaagat...942...gtggggccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaagct...800...atcttccccag	atgaacc
D.Sec	ttcaccga	gtgagtaaagat...940...gtggggccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaagct...801...atcttccccag	atgaacc
D.Ere	ttctccga	gtgagtaaagat...962...gttaggccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaatct...832...atcttctccag	atgaacc
D.Ana	ctcgccga	gtgagtaaagat...1035...cggcaggccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaagct...873...ttaaactctag	atgaacc
D.Gri	ttcaccga	gtgagtaaagat...1417...gtgttctccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaacaa...995...tgtattccacag	atgaacc
D.Moj	ttcaccga	gtgagtaaagat...2565...gcttagagccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaacaa...1078...tgctttccag	atgagccc
D.Vir	ttcaccga	gtgagtaaagat...1673...gctaagaccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaacaa...1011...gctactttcag	atgaacc
D.Yak	ttctccga	gtgagtaaagat...988...gttaggccttaattgaaac	TTTgATGCATTAA	aaatgcaatcagcacaatct...824...atcttccccag	atgaacc
	** **	*****	* **	*****	** **

id=21511 gene=FBgn0033288 name=pdm3 segment=chr2R.4279242.4281061.1 type=IN

D.Mel	ttcaccga	gtgagtaaagat...1109...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...632...atcttccccag	atgaacc
D.Sim	ttcaccga	gtgagtaaagat...1111...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...631...atcttccccag	atgaacc
D.Sec	ttcaccga	gtgagtaaagat...1109...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...632...atcttccccag	atgaacc
D.Ere	ttctccga	gtgagtaaagat...1155...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...639...atcttctccag	atgaacc
D.Ana	ctcgccga	gtgagtaaagat...1234...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...674...ttaaactctag	atgaacc
D.Gri	ttcaccga	gtgagtaaagat...1682...tgcagcttaattactactaa	TTGATGCATaCAAAA	acttaagatgt-tttcgtat...730...tgtattccacag	atgaacc
D.Moj	ttcaccga	gtgagtaaagat...2827...tgcagcttaattactactaa	TTGATGCATaCAAAA	acttaagatgt-tttcgtat...816...tgctttccag	atgagccc
D.Vir	ttcaccga	gtgagtaaagat...1918...tgcagcttaattactactaa	TTGATGCATaCAAAA	acttaagatgt-tttcgtat...766...gctactttcag	atgaacc
D.Yak	ttctccga	gtgagtaaagat...1189...tgccgcttaattactactaa	TTGATGCATaCAAAA	acttaagatgtcttccgcat...623...atcttccccag	atgaacc
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id=21511 gene=FBgn0033288 name=pdm3 segment=chr2R.4279242.4281061.1 type=IN VIEW

Figure 513: CS=5.4



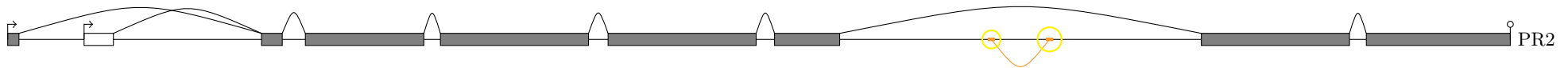
D. Mel	atttcag	gtgagatgca...527...-----c	ttctggaaccaat	tttcga--AGAGTGCCAGGACATT	-----ttctag	caaatctaaaactg-...221...gaatgcaagcag	tgcaactcg		
D. Sim	atttcag	gtgagatgca...514...-----c	tttggaccaat	ttttaa--AGAGTGCCAGGACATT	-----ttctag	caaatctaaaaatg-...214...gaatgcaagcag	tgcaactcg		
D. Sec	atttcag	gtgagatgca...428...-----c	ttctggaaccaat	tttcga--AGAGTGCCAGGACATT	-----ttctag	caaatctaaaaatg-...214...gaatgcaagcag	tgcaactcg		
D. Ere	atttcag	gtgagatgca...495...-----c	ttctggaaccaat	tttcga--AGAGTGCCAGGACATT	-----ttctag	caaatctaaaaatg-...221...gaatgcaagcag	tgcaactcg		
D. Ana	atttcag	gtgagatgca...294...-taacttctggaaccgattt	-TGGTAGAGTGCCAGGACATT	TCGA	ataaagctaaaaaaaaccg-...204...caatgcaagcag	tgcaactcg			
D. Gri	atttcag	gtgagctatgaa...629...aatcatttctggaaccgattc	----TTAGAGTGCCAGGACATTTTGA	-ac-aagctataaaaaaagag...278...aatgcaagcag	tgcaactcg				
D. Moj	atagtcag	gtgagctatgca...981...aaaaacttctggaac-caatct	----TTAGAGTGCCAGGACATTTTGA	-ac-aagctataaaaaaccata...287...aatgcaagcag	tgcaactcg				
D. Per	atagtcag	gtgagctatgca...279...-----tttctgga	aaaaat	tttctc--AGAGTGCCAGGACATT	-----ttctaac	cgagcagtaac-...235...aatgcaagcag	tgcaactcg		
D. Pse	atagtcag	gtgagctatgca...284...-----tttctgga	aaaaat	tttctc--AGAGTGCCAGGACATT	-----ttctaac	cgagcagtaac-...236...aatgcaagcag	tgcaactcg		
D. Vir	atttcag	gtgagctatgaa...549...-aatatttctggaaccatttg	----TAGAGTGCCAGGACATTTTGA	-ac-aagctataaaagtaaat...279...atagcaagcag	tgcaactcg				
D. Wil	atttcag	gtgagctaatg...346...-----ttttggatccaattat	ttcTTAGAGTGCCAGGACATT	----tc-taataagaaaaaaac...303...aatgcaagcag	tgcaactcg				
D. Yak	atttcag	gtgagatgca...1074...-----c	ttctggaaccaat	tttcga--AGAGTGCCAGGACATT	-----ttctag	caaatctaaaactg-...214...gaatgcaagcag	tgctctcg		
	** *****	***** ** *	** ****	*	*****	*	*	*****	*** ****

id=21513 gene=FBgn0033288 name=pdm3 segment=chr2R.4281243.4282070.1 type=IN

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D. Sim	cagaacat	gtatgtgtgcct...247...-----gaaagagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...76...tcccaaccgcag	gttcgaga			
D. Sec	cagaacat	gtatgtgtgcct...247...-----gaaagagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...76...tcccaaccgcag	gttcgaga			
D. Ere	cagaacat	gtatgtgtgcct...250...-----gaaagagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...76...tcccaaccgcag	gttcgaga			
D. Ana	caaacat	gtatgtgtgcca...269...aataccaaatgtaagtctaa	----TTGAC	AATGTCCTGGCAGCTTT	aGTTA	agttacgtttcttttgcgttaagcc...43...cctaaataccag	gttcgaga		
D. Gri	cagaacat	gtatgtgtgtgt...285...-----gcgattaaaaagatgctac	TTGAC	AATGTCCTGGCAGCTTT	AGT	tacgtttcttttgcgttaagcc...57...atctatatgtag	gttcgaga		
D. Moj	cagaacat	gtatgtgtgtgt...305...-----aaaaaataatgctac	TTGAC	AATGTCCTGGCAGCTTT	AGT	tacgtttcttttgcgttaagcc...71...gtacgcacatag	gttcgaga		
D. Per	cagaacat	gtatgtgtgatg...308...-----ccaaagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...74...accaccacgcag	gttcgaga			
D. Pse	cagaacat	gtatgtgtgatg...300...-----ccaaagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...74...accaccacgcag	gttcgaga			
D. Vir	cagaacat	gtatgtgtgtgt...247...-----agaatgataaagatgctac	TTGAC	AATGTCCTGGCAGCTTT	AGT	tacgtttcttttgcgttaagcc...51...tataccatgtag	gttcgaga		
D. Wil	cagaacat	gtacgtgtgtgt...289...-----gaaatataaagctactgtgac	----AATGTCCTGGCAGCTTT	AGT	atgtttcttttgcgttaagcc...62...catccattcag	gttcgaga			
D. Yak	cagaacat	gtatgtgtgcct...256...-----aagaagaatgctaattgac	----AATGTCCTGGCAGCTTT	agttacgtttcttttgcgtt	-----...81...tcccaaccacag	gttcgaga			
	** *****	*** *****	*	**	*****	*****	*	*	** *****

id=21515 gene=FBgn0033288 name=pdm3 segment=chr2R.4282125.4282535.1 type=IN VIEW

Figure 514: CS=15.12



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D.Sec atatacag gtga-gcccttta...2113...ggctccataactaaggaaaaTGCTGAAATACgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...1743...cgcgcaaatag tcactgat
D.Ere atatacag gtaaggccctat...2113...ggctccataactaaggaaaaTGCTGAAATACgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...1726...cgcgccaacacag tcgctgat
D.Moj atattcag gtgagatttaat...2131...ggctccataactaaggaaaaTGCTGAAATATgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...2122...gactcttcacag tcgctcat
D.Per acatacag gtgaggcgcgagc...2245...ggctccataactaaggaaaaTGCTGAAATATgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...2290...gcgcaaacacag gggctcat
D.Pse acatacag gtgaggcgcgagc...2225...ggctccataactaaggaaaaTGCTGAAATATgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...2310...gcgcaaacacag gcgctcat
D.Vir atatacag gtga-gcatggcc...2102...-gctccataactaaggaaaaTGCTGAAATATgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...2133...cataaccacag tccctgat
D.Wil atatacag gtga-ctaagccc...2168...-gctccataactaaggaaaaTGCTGAAATATgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...1880...tcttctttttag tctctaata
D.Yak atatacag gtaa-gccaata...2112...ggctccataactaaggaaaaTGCTGAAATACgTTCTCAATTTACTgTTGGCaatgtgatgtccgattaggc-----...1728...cgcgccaacacag tcgctgat
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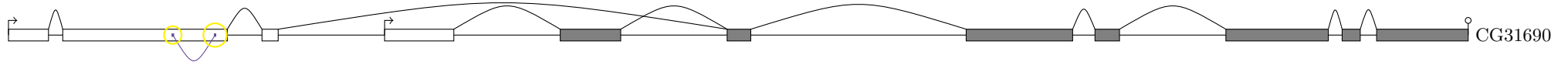
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D.Sim atatacag gtga-gcccttta...2300...agggag-c-----gtagagtgttggc---GTC-GAAgAGTAAATGtAGAAGTATTTaCAGCGaatagat-tatatatTTTTt---...2017...cgcgcaaatag tcgctgat
D.Sec atatacag gtga-gcccttta...2293...agggag-c-----gtagagtgttggc---GTC-GAAgAGTAAATGtAGAAGTATTTaCAGCGaatagat-tatatatTTTTt---...1562...cgcgcaaatag tcactgat
D.Ere atatacag gtaaggccctat...2304...atagag-c-----gtagagtgttggc---GTC-GAAgAGTAAATGtAGAAGTATTTaCAGCGaatagat-tatatatTTTTt---...1534...cgcgccaacacag tcgctgat
D.Moj atattcag gtgagatttaat...2279...tgtgtgcgtgtgggtgggtg---GGTGGTtTGTGTCGGAagAGTAAATGtAGAAGTATTTaCAGCGaatatttat---tagtgtttaca...1973...gactcttcacag tcgctcat
D.Per acatacag gtgaggcgcgagc...2519...-ggag-cggtccggaagtagag-----C-GGAaAGTAAATGtAGAAGTATTTaCAGCG-ataaatacgtatatTTTTt---...2015...gcgcaaacacag gggctcat
D.Pse acatacag gtgaggcgcgagc...2495...-ggag-cggtccggaagtagag-----C-GGAaAGTAAATGtAGAAGTATTTaCAGCG-ataaatacgtatatTTTTt---...2039...gcgcaaacacag gcgctcat
D.Vir atatacag gtga-gcatggcc...2231...agtgtg-gtgtgtgtcgcag--G-----TGTGTC-GAAgAGTAAATGtAGAAGTATTTaCAGCGcaatatttat---tagtctatac...2004...cataaccacag tccctgat
D.Wil atatacag gtga-ctaagccc...2277...gatggg-gtgtgt---tagtgtgtGTGTTGggTC-GAAaAGTAAATGtAGAAGTATTTaCAGCGcaaat---caaaaaacaaaac...1768...tcttctttttag tctctaata
D.Yak atatacag gtaa-gccaata...2300...atagag-c-----gtagagtgttggc---GTC-GAAgAGTAAATGtAGAAGTATTTaCAGCGaatagat-tatatatTTTTt---...1539...cgcgccaacacag tcgctgat
* ** *** ** *
* *
* * * ***** ** ** ** ** * *

```

id=112517 gene=FBgn0013955 name=PR2 segment=chr2R\_9032194\_9036175\_-1 type=IN VIEW

Figure 515: CS=9.6



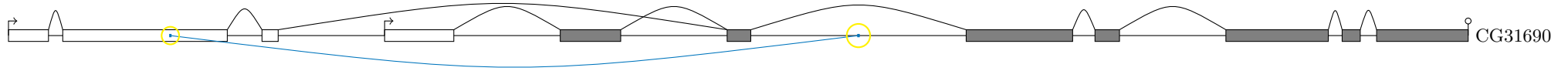
D. Mel	tttcacag	tcatatttaatt...497...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagttcccgttc-...225...aacagtaagccg	gtaaggga
D. Sim	tttcacag	tcatatttaatt...511...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagttcccgttc-...209...aacagtaagccg	gtaaggga
D. Sec	tttcacag	tcatatttaatt...503...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagttcccgttc-...209...aacagtaagacg	gtaaggga
D. Ere	tttcacag	tcatatttaatt...534...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagttcccgttc-...255...accagtaagccg	ctaaggag
D. Ana	tttcacag	tcatatttaatt...490...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagaccgcac-...231...aacgtaagccg	gcaaggaa
D. Gri	tttcacag	tcatatttaatt...1098...-ggatgaacggcatctgtggac	GCGAAa	TTGAATTC	gtgcctggcagttctcgc-...247...aataggaatcag	aatacgaa
D. Moj	tttctcag	tcatatttaatt...1204...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagcttcacac-...256...aagaggagagc	gagtgctc
D. Per	tttccag	taatttttttt...577...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagctccgcac-...285...aacaggaagaca	gcacccaa
D. Pse	tttcacag	taatttttttt...541...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagctccgcac-...297...aacaggaagaca	gcaccat
D. Yak	tttcacag	tcatatttaatt...494...-gtgaatggcatctgtggacg	CGAAa	TTGAATTC	gtgcctggcagttcccgttc-...270...gccagtaagccg	gtaaggga
	**** **	* ** ** *	****	*****	* *	* *

id=93452 gene=FBgn0051690 name=CG31690 segment=chr2L\_2675080\_2675878\_1 type=E5

D. Mel	tttcacag	tcatatttaatt...696...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcccgtctcagccaccggggaat	-----ctg-caaagttaacagtaagccg	gtaaggga
D. Sim	tttcacag	tcatatttaatt...694...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcccgtctcagccaccggggaat	-----ctg-caaagttaacagtaagccg	gtaaggga
D. Sec	tttcacag	tcatatttaatt...686...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcccgtctcagccaccggggaat	-----ctg-caaagttaacagtaagacg	gtaaggga
D. Ere	tttcacag	tcatatttaatt...766...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc---cgctcagccaccggggaat	-----ctg-cgaagttaacagtaagccg	ctaaggag
D. Ana	tttcacag	tcatatttaatt...697...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc---cgctcagccaccggggaat	-----ctg-gaaagtaacagtaagccg	gcaaggaa
D. Gri	tttcacag	tcatatttaatt...1320...-ttgtctcgcgcatctctcga	TGGATTCAATTTG	agaaaatgcagcc-----ccggcaaaatgcacg	gacactgactaaacgaataggaatcag	aatacgaa
D. Moj	tttctcag	tcatatttaatt...1451...-ttgtctcgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc-----ccgaagaatttgca	-----atgggaagaggagagcg	agtg---
D. Per	tttccag	taatttttttt...843...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc---cgctcag---ccggggaat	-----ctg-caaagttaacaggaagaca	gcacccaa
D. Pse	tttcacag	taatttttttt...819...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc---cgctcag---ccggggaat	-----ctg-caaagttaacaggaagaca	gcaccat
D. Yak	tttcacag	tcatatttaatt...741...-ttgtct-cgcgcatctctcga	GGATTCAATTTG	gagcaaatgcagcc---cgccagccaccggggaat	-----ctg-caaagtgccagtaagccg	gtaaggga
	**** **	* ** ** *	****	*****	* ** ** *	* *

id=93452 gene=FBgn0051690 name=CG31690 segment=chr2L\_2675080\_2675878\_1 type=E5 VIEW

Figure 516: CS=6



D. Mel	tttcacag	tcatat	tttaatt...477...	--gatagtcgtacgtgccgaa	<b>GTGAATG</b>	gc	<b>ATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...237...	aacagtaagccg	gtaaggga
D. Sim	tttcacag	tcatat	tttaatt...490...	-tgatagtcgtacgtgccgaa	<b>GGTGAATG</b>	gc	<b>ATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...221...	aacagtaagccg	gtaaggga
D. Sec	tttcacag	tcatat	tttaatt...482...	-tgatagtcgtacgtgccgaa	<b>GGTGAATG</b>	gc	<b>ATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...221...	aacagtaagccg	gtaaggga
D. Ere	tttcacag	tcatat	tttaatt...513...	-tgatagtcgtacgtgccgaa	<b>GGTGA</b>	<b>AATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...267...	accagtaagccg	ctaaggag	
D. Ana	tttcacag	tcatat	tttaatt...468...	ttgatagtcgtacgtgccgaa	<b>AGGTGAATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...243...	aacgtaagccg	gcaaggaa		
D. Gri	tttcacag	tcatat	tttaatt...1078...	-tgatagtcgtacgtgccgaa	<b>GGTGA</b>	<b>ACGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...260...	aataggaatag	aatacga	
D. Moj	tttctcag	tcatat	tttaatt...1188...	-----gtggtacgtgccgaa	ggtga	<b>ATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...268...	aagagggagagc	gcgagtgc	
D. Per	tttccag	taat	tttttttt...556...	-tgatagtcgtacgtgccgaa	<b>GGTGA</b>	<b>AATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...297...	aacaggaagaca	gcacccaa	
D. Pse	tttcacag	taat	tttttttt...520...	-tgatagtcgtacgtgccgaa	<b>GGTGA</b>	<b>AATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...309...	aacaggaagaca	gcacccat	
D. Yak	tttcacag	tcatat	tttaatt...473...	-tgatagtcgtacgtgccgaa	<b>GGTGA</b>	<b>AATGGCATCTGTGGACCG</b>	gaaattgaattcgtgcctgg...282...	gccagtaagccg	gtaaggga	
	****	***		* ** ** *						

id=93452 gene=FBgn0051690 name=CG31690 segment=chr2L.2675080.2675878.1 type=E5

D. Mel	gatgacag	gtgagaaa	aatt...4644...	cattttaattaattggacag	<b>GTGTgCCACAGGTTGTT</b>	<b>CA</b>	-----gtcattccgagcagagga	-----	...261...	tctttttgcag	gcgcgcca
D. Sim	gatgacag	gtgagaaa	aatt...4688...	cattttaattaattggacag	<b>GTGTgCCACAGGTTGTT</b>	<b>cgTGTC</b>	-----cattccaagcagaggaatg	-----	...214...	tctttttgcag	gcgcgcca
D. Sec	gatgacag	gtgagaaa	aatt...4683...	cattttaattaattggacag	<b>GTGTgCCACAGGTTGTT</b>	<b>ctTGTC</b>	-----cattccgagcagaggaatg	-----	...219...	tctttttgcag	gcgcgcca
D. Ere	gatgacag	gtgagaaa	aatt...4638...	cattttaattaattggacag	<b>GTGTgCCACAGGTTGTTGTTGTC</b>		-----cgttccggcagaggaatg	-----	...264...	ttttttgcag	gcgcgcca
D. Ana	gatgacag	gtgagaaa	aatt...4593...	cattttaattaataggacag	<b>GTGTgCCACAGGTTGTCGTTACCT</b>		-----actcttaacgaacgaat	-----	...307...	gtcctctgcag	acgagcca
D. Gri	gatgacag	gtgagaaa	aatt...4834...	cattttaattaataggacag	<b>GTGTgCCACAGGTTGTTGTTGTC</b>		-----gtgcc	-----	...68...	gtctcttgcag	gcgcgcca
D. Moj	gatgacag	gtgagaaa	aatt...4852...	cattttaattaataggacag	<b>GTGTgCCACAGGTTGTTGTTGTTGTC</b>		-----cggtc	-----	...54...	cttgcttgcag	gcgtgcca
D. Per	gatgacag	gtgagaaa	aatt...4820...	cattttaattaataggacag	<b>GTGTgCCACAGGTTGTTGTTGTTGTC</b>		-----gagacgactccccgactcga	-----	...82...	gtctccttgcag	gcgtgcca
D. Pse	gatgacag	gtgagaaa	aatt...4820...	cattttaattaataggacag	<b>GTGTgCCACAGGTTGTTGTTGTTGTC</b>		-----gagacgactccccgactcctcga	-----	...82...	gtctccttgcag	gcgtgcca
D. Yak	gatgacag	gtgagaaa	aatt...4284...	cattttaattaattggacag	<b>GTGTgCCACAGGTTGCCGTTGTC</b>		-----cgttgogagcggaggaatg	-----	...618...	tctttttgcag	gcgcgcca
	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=93461 gene=FBgn0051690 name=CG31690 segment=chr2L.2705037.2710498.1 type=IN VIEW

Figure 517: CS=10



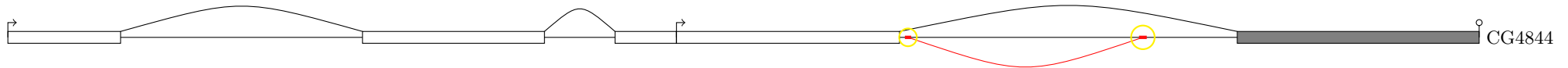
D.Me1	ttgatcag	gtaaaccattaa...382...--cttaagttttacgtgcaggc-	GCAACAGTTGAC	-----	ggggcagtt---aagaggaatt...726...caaccgatcaac	caactgta	
D.Sim	ttgatcag	gtaaaccattaa...385...--cttaagttttacgtgcaggc-	GCAACAGTTGAC	-----	ggggcagtt---aagagggcatt...725...caaccgatcaac	caactgta	
D.Sec	ttgatcag	gtaaaccattaa...383...--cttaagttttacgtgcaggc-	GCAACAGTTGAC	-----	ggggcagtt---aagagggcatt...723...caaccgatcaac	caactgta	
D.Gri	tcgatcag	gtaaaacatcaa...600...--cttaagcttaagttttaggt	GGCAACAGTTGAC	-----	aaacagcagtaacagaagta-----...818...ccaacaaccaa	caactgta	
D.Moj	tcgatcag	gtaaaacatcaa...417...--attaagcataagttttaggt	GCAACAGTTGACAGTA	gatgatgaagggcagtg---aga-----...757...caatcaaccaac	caactgta		
D.Per	tcgatcag	gtaaaacataca...528...ttattaagcttactt--aggt-	GCAACAGTTGAC	-----	ggggcagtgtttgaggagag----...846...caaccaaacgat	caactata	
D.Pse	tcgatcag	gtaaaacataca...511...ttattaagcttactt--aggt-	GCAACAGTTGAC	-----	ggggcagtgtttgaggagag----...846...caaccaaacgat	caactata	
D.Vir	tcgatcag	gtaaaacatcaa...439...--cgtaagcataagttttaggt	GCAACAGTTGACTGTAG	-----	aggagtgt---aagggatggcg...744...caaccaatcaac	caaccaac	
D.Yak	ttgatcag	gtaaaacataaa...392...--gttaagtttaacgtgcaggt-	GCAACAGTTGAC	-----	ggggcagtt---aagagggcatt...755...caaccaaccgat	caactgta	
	* *****	***** ** *	**** * * * **	*****	** *	*****	****

id=36625 gene=FBgn0050122 name=CG30122 segment=chr2R.14522464.14523647\_-1 type=IN

D.Me1	ttgatcag	gtaaaccattaa...786...--atccttatgcaa-agtattaa-----	GTCAACTGTTGT	tagatgtg---gccgggtaaca-----...322...caaccgatcaac	caactgta	
D.Sim	ttgatcag	gtaaaccattaa...791...--atccttatgcaa-agtattaa-----	GTCAACTGTTGT	tagatgcg---gccgggtaaca-----...319...caaccgatcaac	caactgta	
D.Sec	ttgatcag	gtaaaccattaa...787...--atccttatgcaa-agtattaa-----	GTCAACTGTTGT	tagatgcg---gccgggtaaca-----...319...caaccgatcaac	caactgta	
D.Gri	tcgatcag	gtaaaacatcaa...1039...--cacacaagcaaatgattaa-----	GTCAACTGTTGT	-----cc---gaaattccgaagcagatc...379...ccaacaaccaa	caactgta	
D.Moj	tcgatcag	gtaaaacatcaa...781...ttaattctttgctactata-----	TATTGaGTCAACTGTTGT	ttcgttct---gccaatccgatg-----...391...caatcaaccaac	caactgta	
D.Per	tcgatcag	gtaaaacataca...999...--atataatgca-aaatcatta-----	GTCAACTGTTGT	tagttggt---gttaatagggcc-----...375...caaccaaacgat	caactata	
D.Pse	tcgatcag	gtaaaacataca...982...--atataatgca-aaatcatta-----	GTCAACTGTTGT	tagttggt---gttaatagggcc-----...375...caaccaaacgat	caactata	
D.Vir	tcgatcag	gtaaaacatcaa...813...--atactcttgcta-tacaaaaa	TTATtaAGTCAACTGTTGT	ttcgttct---gccattccgaag-----...368...caaccaatcaac	caaccaac	
D.Yak	ttgatcag	gtaaaacataaa...800...--atccttatgcaa-agtattaa-----	GTCAACTGTTGT	tagatgtggtgccgggtaa-----...347...caaccaaccgat	caactgta	
	* *****	***** ** *	*****	*	*****	****

id=36625 gene=FBgn0050122 name=CG30122 segment=chr2R.14522464.14523647\_-1 type=IN VIEW

Figure 518: CS=10.8



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D.Mel acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...648...tgcgccgtctag acgtccca
D.Sim acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...660...tgcgccgtctag acgtccca
D.Sec acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...654...tgcgccgtctag acgtccca
D.Ere acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...632...tgcgccgtttag acgtccca
D.Ana acaaatAG GTGAGCTAAACCCCAAAT-----cgtaaccaatctaccataac-----...643...aataaaaaacag acgtccca
D.Gri tcaaatag gtGAGCTAAaCCCAAAATCGTTA--aactatacaattactacac-----...1063...ctccgattgtag acggccca
D.Moj tcaaATAG GtGAGCTAAaCCCAAAATCGTTAAAcTTTA--caactattacacacatatgc...887...cgccgtgctgcag acgccccca
D.Per aaaaatAG GTGAGCTAAACCCCAAAT-----cgttacaatctaccataac-----...896...gctgggccacag acgaccca
D.Pse aaaaatAG GTGAGCTAAACCCCAAAT-----cgttacaatctaccataac-----...888...gctgggccacag acgtccca
D.Vir tcaaatag gtGAGCTAAaCCCAAAATCGTTAAaa-tatacca-ttactacacac-----...597...tcttctatgtag acgccccca
D.Wil aaacatAG GTGAGCTAAACCCCAAAT-----tcggtacaatct-tttttac-----...661...tggtccttccag acgccccca
D.Yak acaaatAG GTGAGCTAAACCCCAAAT-----cgttaccaatctaccataac-----...610...tgtaccgtgcag acgtccca
* **** ***** * * * **

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id=39009 gene=FBgn0061354 name=CG4844 segment=chr2R.13394251.13394948.1 type=I5

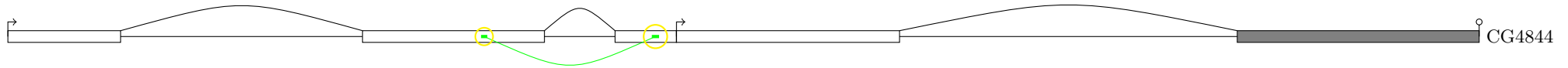
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D.Mel acaaatag gtgagctaaacc...454...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...156...tgcgccgtctag acgtccca
D.Sim acaaatag gtgagctaaacc...466...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...156...tgcgccgtctag acgtccca
D.Sec acaaatag gtgagctaaacc...464...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...152...tgcgccgtctag acgtccca
D.Ere acaaatag gtgagctaaacc...437...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...157...tgcgccgtttag acgtccca
D.Ana acaaatag gtgagctaaacc...421...-tgagcgcc-aaaatgtatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagtttgcgctc...184...aataaaaaacag acgtccca
D.Gri tcaaatag gtgagctaaacc...402...-tcgagactcctgctaaaag--TTGGTGGTTTGGGGcTTAGCTT-----ttccatagttgttgttgcg--...631...ctccgattgtag acggccca
D.Moj tcaaatag gtgagctaaacc...632...gtcattttcgagactcctat--TGAAaTTTGGTGGTTTGGGGcTTAGCTTttCCTATagaatggttgttgttgc...218...cgccgtgctgcag acgccccca
D.Per aaaaatag gtgagctaaacc...632...-aatactctacgtaaatatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagatgttctgcctc...226...gctgggccacag acgaccca
D.Pse aaaaatag gtgagctaaacc...627...-aatactctacgtaaatatctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagatgttctgcctc...223...gctgggccacag acgtccca
D.Vir tcaaatag gtgagctaaacc...391...-ttcgagactcctgctgagaa--TTGGTGGTTTGGGGcTTAGCTT-----ttccatagatgttgttgcg--...176...tcttctatgtag acgccccca
D.Wil aaacatag gtgagctaaacc...419...-gcgaatctgctgccagaattTTTGGtGGTTTggGGCTTaGCTT-----tccttagatgatattgttgc...204...tggtccttccag acgccccca
D.Yak acaaatag gtgagctaaacc...415...-gagcgccgaaaatgtatcctt----GTTTGGtGGTTTggGGCTTaGCTT-----ccttagttgttgcgctc...157...tgtaccgtgcag acgtccca
* **** ***** * * * **

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id=39009 gene=FBgn0061354 name=CG4844 segment=chr2R.13394251.13394948.1 type=I5 VIEW

Figure 519: CS=11.52



D.Mel	ttctatag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...cgctcgcgacag	gtaaggat
D.Sim	ttctttag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...cgctcgcgacag	gtaatgat
D.Sec	ttctatag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...cgctcgcgacag	gtaaggat
D.Ere	ttcaatag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...cgctcgcgacag	gtaaggac
D.Ana	atthtttag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...tgcccgcgacag	gtaagtag
D.Gri	gtggttag	gtcaacgatta...205...tcgcttgggcacgggcatgt	TCCTATGGA	TGAGCA	ccggactaccgttcaatgca...92...ggcacgcgacag	gtaagaga
D.Moj	tggattag	gtcaacgatta...205...tcgcttgggcacgggcatgt	TCCTATGGA	TGAGCA	ccggactaccgttcaatgca...92...ggcacgcgacag	gtaagaca
D.Per	gggattag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ccggtttaccgttcaatgca...92...cgcccgcgacag	gtaagtac
D.Pse	gggattag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ccggtttaccgttcaatgca...92...cgcccgcgacag	gtaagtac
D.Vir	gcggttag	gtcaacgatta...205...tcgcttgggcacgggcatgt	TCCTATGGA	TGAGCA	ccggactaccgttcaatgca...92...ggcacgcgacag	gtaagaca
D.Yak	tcgaatag	gtcaacgatta...205...tcgcctgggcacgggcatgt	TCCTATGGA	TGAGCA	ctggtctgccgtttaacgcc...92...cgctcgcgacag	gtaaggac
	***	***** *	***	*****	** * ***** **	** ** ***** ****

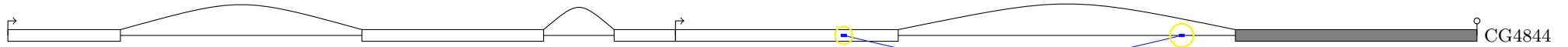
id=39005 gene=FBgn0061354 name=CG4844 segment=chr2R.13393141\_13393516.1 type=E5

D.Mel	atctacag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	gaAGGA	cttcattt	gtgagcagaccgctgctactactacaactacggc	agcatccc
D.Sim	atctacag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	gaAGGA	cttcattt	gtgagcagaccgctgctactactacaactacggc	agcatccc
D.Sec	atctacag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	gaAGGA	cttcattt	gtgagcagaccgctgctactactacaactacggc	agcatccc
D.Ere	atctacag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	gaAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcatccc
D.Ana	atctatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCg	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcatccc
D.Gri	tattatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcattcc
D.Moj	ctatatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCg	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcattcc
D.Per	aactatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactacggc	agcatccc
D.Pse	aactatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactacggc	agcatccc
D.Vir	ctttatag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	caAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcattcc
D.Yak	atctacag	cagcagtggcgc...35...tcaagtggatgccgaggac	TGCTCG	CCGT	gaAGGA	cttcattt	gtgagcagaccgctgctactactacaactatggc	agcatccc
	** **	***** **	**	**	*****	*****	*****	*****

id=39007 gene=FBgn0061354 name=CG4844 segment=chr2R.13393663\_13393789.1 type=E5 VIEW

Figure 520:





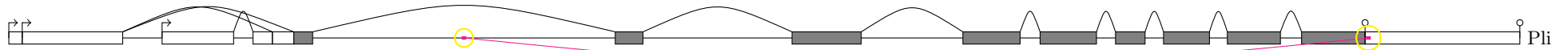
D.Mel	actacggc	agcatccccgtc...300...----	aggataacgtgattaaaaac---	AAGTTA	ctTTAGTTGA	CATAA	-acgaacacacacacacactt-...	75...acgaacaaatag	gtgagcta
D.Sim	actacggc	agcatccccgtc...313...----	aggataacgtgattaaaaac---	AAGTTA	ctTTAGTTGA	CACAA	-acgaacacacacacacacttac-...	67...acgaacaaatag	gtgagcta
D.Sec	actacggc	agcatccccgtc...321...-----	gtgattaaaaacaagttact---	TTAGTTGA	CACAA	-acgaacacacacacacacttac-...	77...acgaacaaatag	gtgagcta	
D.Ere	actatggc	agcatccccgtc...305...----	aggataacgtgattaaaaac---	AAGTTA	ctTTAGTTGA	CACAA	-acgaacacacacacacactctt-...	68...atgaacaaatag	gtgagcta
D.Gri	actatggc	agcattccggtc...364..ataat--	aatacgtgattaat----	CAAGTTA	atTTAGTTGA	CACAAA	cgaaaaaaagaaaaaaaac-...	79...taatcaaatag	gtgagcta
D.Moj	actatggc	agcattccagta...290...----	t--gatacgtgattaataaac-	AAGTTA	atTTAGTTGA	CACAAA	acgaacacacacacacacac-...	69...ttaatcaaatag	gtgagcta
D.Per	actacggc	agcatccccgtc...332...----	aaggataacctgattaaacg--	AAAGTTA	atTTAGTTGA	CACAAA	-cacacacacacacacacagc-...	125...actcaaaatag	gtgagcta
D.Pse	actacggc	agcatccccgtc...332...----	aaggataacctgattaaacg--	AAAGTTA	atTTAGTTGA	CACAAA	-cacacacacacacagccaca-...	124...actcaaaatag	gtgagcta
D.Vir	actatggc	agcattccggtg...269...tcgat	caaatcgtgattaa---	TAAAgTTA	atTTAGTTGA	CACAAA	acaaaagaaaaacaaacaa-...	65...gaaatcaaatag	gtgagcta
D.Wil	actatggc	agcatcccagtg...289...-----	gtgattaaataaaagttaat---	TTAGTTGA	CACAAA	gcaaacacacacacacacac-...	62...aaacaacatag	gtgagcta	
D.Yak	actatggc	agcatccccgtc...314...----	aggataacgtgattaaaaac---	AAGTTA	ctTTAGTTGA	CACAAA	-cgaacacacacacacactct-...	86...atgaacaaatag	gtgagcta
	**** **	***** ** **	*****	*	***** **	*	*	*	**** *****

id=39008 gene=FBgn0061354 name=CG4844 segment=chr2R.13393790.13394250.1 type=E5

D.Mel	acaaatag	gtgagctaaacc...535...-g	tgtgatgttgc	catgatgaaTTGTG	cTCAACTAA	TAAC	TT-----taggctaagcaactttcgca...	78...--tgcgccgtctag	acgtccca
D.Sim	acaaatag	gtgagctaaacc...547...-g	tgtgatgttgc	catgatgaaTTGTG	cTCAACTAA	TAAC	TT-----taggctaagcaactttcgca...	78...--tgcgccgtctag	acgtccca
D.Sec	acaaatag	gtgagctaaacc...545...-g	tgtgatgttgc	catgatgaaTTGTG	cTCAACTAA	TAAC	TT-----cttttaggctaagcaactttc-...	81...--tgcgccgtctag	acgtccca
D.Ere	acaaatag	gtgagctaaacc...521...-g	tgtgatgttgc	catgaagaaTTGTG	cTCAACTAA	TAAC	TT-----taggctaagcaactttcgca...	76...--tgcgccgtttag	acgtccca
D.Gri	tcaaatag	gtgagctaaacc...468...aat	tgtgtgtgtgc	caccaagaTTTGTG	cTCAACTAA	TAAC	TTT--agcttcagactcg--ctcttc-...	563...--ctccgattgtag	acgcccc
D.Moj	tcaaatag	gtgagctaaacc...709...t	gttgtgtgtg	cactaagaTTTGTG	cTCAACTAA	TAAC	TTT--tagcttcagactcg--cacttt-...	154...--gcctgtctgcag	acgcccc
D.Per	aaaaatag	gtgagctaaacc...729...c	gttgtgtgtg	catgatgaTTTGTG	cTCAACTAA	TAAC	TTTtagtataagcagcttaa--agct-...	130...gctgggcc--acag	acgcccc
D.Pse	aaaaatag	gtgagctaaacc...721...c	gttgtgtgtg	catgatgaTTTGTG	cTCAACTAA	TAAC	TTTtagtataagcagcttaa--agct-...	130...gctgggcc--acag	acgtccca
D.Vir	tcaaatag	gtgagctaaacc...481...t	gttctgtgtg	cactgagaTTTGTG	cTCAACTAA	TAAC	TTT--gcttcagactcg--cactttc-...	84...--tcttctatgtag	acgcccc
D.Wil	aaacatag	gtgagctaaacc...506...t	gttgtgtgtg	catgaagaTTTGTG	cTCAACTAA	TAAC	TTTctaaatttagcctaa--agctc-...	125...--tgttcttccag	acgcccc
D.Yak	acaaatag	gtgagctaaacc...498...t	gttgtgtgtg	catgatgaTTTGTG	cTCAACTAA	TAAC	TTT-----taggctaagcaactttcgca...	76...--tgtaccgtgcag	acgtccca
	* ****	*****	** *****	** *****	*****	** *****	** *	**	** ****

id=39009 gene=FBgn0061354 name=CG4844 segment=chr2R.13394251.13394948.1 type=I5 VIEW

Figure 521: CS=11.88



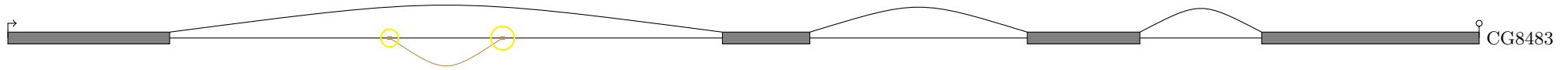
D. Mel	gtgaaacg	gtaagtaatcgt...4016...-----cat-ttagcccacgcaaaagg----	GGAGCaAGTTT	AATGC	agcaagcaaaaatcaatgca...	.892...tttcacttgag	caccgacg
D. Sim	gtgaaacg	gtaagtaatcgt...4047...-----cat-tcagcccacgcaaaagg----	GGAGCaAGTTT	AATGC	agcgagcaaaaatcaatgca...	.861...tttcacttgag	caccgacg
D. Sec	gtgaaacg	gtaagtaatcgt...4096...-----cat-tcagcccgcgcaaaagg----	GGAGCaAGTTT	AATGC	agcgagcaaaaatcaatgca...	.812...tttcacttgtag	caccgacg
D. Ere	gtgaaacg	gtaagtaaacgt...3984...-----cat-tcagcccacgcaaaagg----	GGAGCaAGTTT	AATGC	agcgagcaaaaatcaatgca...	.924...tttcacttgag	caccgacg
D. Ana	gtgaaacg	gtaagatttga...4114...-----gcaacatcacac-cgaaagg----	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.794...ttgcacttacag	caccgacg
D. Gri	gtcaaacg	gtaagttaaata...4002...cgcagcgcacatcag-----aaaaagg----	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.906...ttttattacag	caccgacg
D. Moj	gtcaaacg	gtaggtaacacat...4012...-----cttgtaacagggca-aaaagg----	GGAGCaAGTTT	aaATGC	aacgagcaaaaatcaatgca...	.896...ttgcatttacag	aaccgacg
D. Per	gtgaaacg	gtaagtctcaa...3478...-----agcacacataaaaataaaaagg	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.1430...ttaccattgag	caccgacg
D. Pse	gtgaaacg	gtaagtctcaa...3565...-----agcacacataaaaataaaaagg	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.1343...ttaccattgag	caccgacg
D. Vir	gtcaaacg	gtaagtacagac...4172...-----gccgccagcaggc-caaaagg----	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.736...ttgcatttgag	caccgacg
D. Wil	gtcaaacg	gtaagtacatac...3229...-----cagcagcacatacaaaaacga----	GGAGCaAGTTT	AATGC	aacgagcaaaaatcaatgca...	.1679...tctattttaag	caccgacg
D. Yak	gtgaaacg	gtaagtaatcgt...3987...-----cat-tcagcccacgcaaaagg----	GGAGCaAGTTT	AATGC	agcgagcaaaaatcaatgca...	.921...tttcacttgag	caccgacg
	** *****	*** *	*	***	***** * *****	* ** **	*****

id=117198 gene=FBgn0025574 name=Pli segment=chr3R.19691378.19714778.-1 type=IN

D. Mel	cagGCATT	aAAACTagGCTTT	atttattatcattaattaac...1086...-ctagcaata-cat	aaactaaa
D. Sim	cagGCATT	aAAACTagGCTTT	atttattatcattaattaac...1086...-ctagcaata-cat	aaactaaa
D. Sec	cagGCATT	aAAACTagGCTTT	atttattatcattaattaac...1074...-ctagcaata-cat	aaactaaa
D. Ere	cagGCATT	aAAACTagGCTTT	atttattatcattaattaac...1080...-ctagaaata-cat	aaactaat
D. Ana	cagGCATT	aAAACTagGCTTT	atttattatcattaattaat...1127...-ctagcaata-cac	ataaaaga
D. Gri	cagGCATT	aAAACTagGCTTT	atttattatcattatataat...955...-ctagcgata-cac	acatacat
D. Moj	cagGCATTg	aAAACTagGCTTT	atttattataattaattaat...966...-ctagcgata-cac	atacaaat
D. Per	cagGCATT	aAAACTagGCTTT	atttattaccattaattaat...1115...-ctagcaata-cac	acatccac
D. Pse	cagGCATT	aAAACTagGCTTT	atttattaccattaattaat...1120...-ctagcaata-cac	acatccac
D. Vir	cagGCATT	aAAACTagGCTTT	atttattataattaattaat...913...ttagcg-ta-cac	atacaaat
D. Wil	cagGCATT	aAAACTagGCTTT	atttattatcatgaattata...1284...-tagcaataccac	atacaaaa
D. Yak	cagGCATT	aAAACTagGCTTT	atttattatcattaattaac...1095...-ctagcaata-cat	aaactaaa
	*****	*****	** * **	*** ** * *

id=117214 gene=FBgn0025574 name=Pli segment=chr3R.19685884.19687014.-1 type=E3 VIEW

Figure 522: CS=12.96



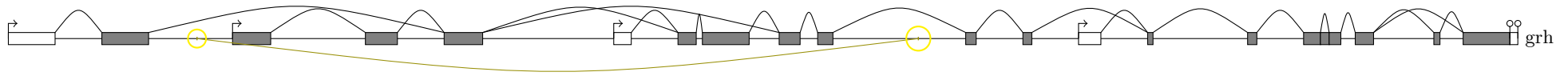
D.Mel	gataattg	gtaagttattca...	1449...	gagc	gagctg	-ttgac	gttcc	<b>GTTGTCAA</b>	CA--TTAT	-----	ctcagc	ggtttg	ttttgtgc	-----	...1469...	taatcatttcag	catcgggc	
D.Sim	gataattg	gtaagttattca...	1529...	gcgga	aactgatc	gacagct	--TTAT	GTGCA	AATTTGT	-----	cagcga	aagtag	ttcacaaa	-----	...1410...	taatcatttcag	catcgggc	
D.Sec	gataattg	gtaagttattca...	1529...	gcgga	aactgatc	gacagct	--TTAT	GTGCA	AATTTGT	-----	cagcga	aagtag	ttcacaaa	-----	...1412...	taatcatttcag	catcgggc	
D.Ere	gataattg	gtaagttattca...	1514...	gcgga	aactgatc	gacagct	--TTAT	GTGCA	AATTTGT	-----	cagcga	aagtag	ttcacaaa	-----	...1399...	taatcatttcag	catcgggc	
D.Ana	gataattg	gtaagtttccca...	1645...	ctgca	aagctg	-ttgac	gttcc	<b>GTTGTCAA</b>	CA--TTAT	-----	ctcaac	atctc	gaagcctc	-----	...1708...	taatcatttcag	catcgggc	
D.Gri	gctaatac	gtaggttgaata...	1917...	ttgga	aagctg	-ttgac	gtttc	<b>GTTGTCAA</b>	CA--TTA	-----	tcatg	tgtgat	catcgtc	ttt	...1785...	taatcatttcag	catcgggc	
D.Moj	gctgatcg	gtaagtcgtagc...	1691...	gtgga	tagctg	-ttgac	gtttc	<b>GTTGTCAA</b>	CA--TTA	-----	tgttt	atatac	agttttt	...	2104...	caatcgtttcag	catcgggc	
D.Per	gataattg	gtaagcctcca...	1703...	ttgca	aagctg	-ttgac	gtttc	<b>GTTGTCAA</b>	CA--TTAT	ctccat	cagagg	caacagtc	-----	...1829...	taatcatttcag	catcgggc		
D.Wil	gttaatag	gtaagttgggca...	2028...	ttgca	aagctg	-ttgac	gtttc	<b>GTTGTCAA</b>	CA--TTAT	---	ctt-	catctc	gagtcggc	gag	-----	...1962...	taatcatttcag	catcgggc
D.Yak	gataattg	gtaagttattca...	1523...	gcgga	aactgatc	gacagct	--TTAT	GTGCA	AATTTGT	-----	cagcga	aagtag	ttcacaaa	-----	...1418...	taatcatttcag	catcgggc	
	* * * *	*** *		* * * *	* * * *		** *	** *	** *						****	*****	*****	

id=18705 gene=FBgn0038126 name=CG8483 segment=chr3R.9036820\_9039815.-1 type=IN

D.Mel	gataattg	gtaagttattca...	1708...	-cgcatt	gatacaaat	gtagc	<b>ATAATTTGACAGC</b>	-tgc	--ggtt	ggtctct	gcgctt	...	1211...	taatcatttcag	catcgggc	
D.Sim	gataattg	gtaagttattca...	1559...	-tttgt	cagcgaag	tagttc	<b>ACAAATTTGCATAG</b>	cg	cctg	ctggatt	--gcat	caa...	1381...	taatcatttcag	catcgggc	
D.Sec	gataattg	gtaagttattca...	1559...	-tttgt	cagcgaag	tagttc	<b>ACAAATTTGCATAG</b>	cg	cctg	ctggatt	--gcat	caa...	1383...	taatcatttcag	catcgggc	
D.Ere	gataattg	gtaagttattca...	1544...	-tttgt	cagcgaag	tagttc	<b>ACAAATTTGCATAG</b>	cg	ccc	gcttgat	gcagc	atc--	1370...	taatcatttcag	catcgggc	
D.Ana	gataattg	gtaagtttccca...	1986...	-cgcatt	gatacaaat	gtagc	<b>ATAATTTGACAGC</b>	-tgc	--ggtt	gggcc	ggag	ttt...	1368...	taatcatttcag	catcgggc	
D.Gri	gctaatac	gtaggttgaata...	2336...	gtata	aaca-cta	acagtc	ttt	-TAATTTGACAGC	-tgc	--ggtt	gagtt	gaag	ctc...	1367...	taatcatttcag	catcgggc
D.Moj	gctgatcg	gtaagtcgtagc...	2076...	gcata	aaca-cta	acagtc	ttt	-TAATTTGACAGC	-tgc	--ggtt	gagtt	gaag	ctc...	1720...	caatcgtttcag	catcgggc
D.Per	gataattg	gtaagcctcca...	2040...	-catatt	gatacaaat	gtagc	<b>ATAATTTGACAGC</b>	-tgc	--ggt	caac	gcag	agtc	tt...	1493...	taatcatttcag	catcgggc
D.Wil	gttaatag	gtaagttgggca...	2454...	-tatatt	gatataa	aatgtagc	<b>ATAATTTGACAGC</b>	-tgc	--ggtt	gacgt	tttttt	ttt...	1537...	taatcatttcag	catcgggc	
D.Yak	gataattg	gtaagttattca...	1553...	-tttgt	cagcgaag	tagttc	<b>ACAAATTTGCATAG</b>	cg	ccc	gctg	gatt	--gcat	caa...	1389...	taatcatttcag	catcgggc
	* * * *	*** *		*			** ** *	** *	** *				****	*****	*****	

id=18705 gene=FBgn0038126 name=CG8483 segment=chr3R.9036820\_9039815.-1 type=IN VIEW

Figure 523: CS=6



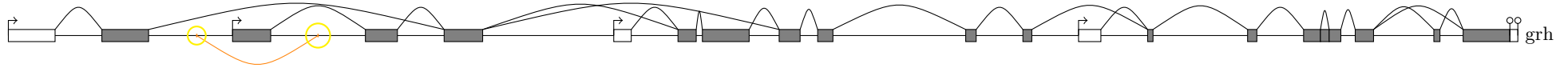
D. Mel	ctgcagag	gtgagtaattgc...4264...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...349...	aaagtggttttc	agttgata	
D. Sim	ctgcagag	gtgagtaattgc...4545...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...367...	aaagtggttttc	agttgata	
D. Sec	ctgcagag	gtgagtaattgc...4384...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...317...	aaagtggttttc	agttgata	
D. Ere	ctgcagag	gtgagtaattgc...4558...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...354...	aaagtggttttc	agttgata	
D. Ana	ttgcagag	gtgagtaatcgt...4261...	agtcatctatттаатcaatgCAATTTtc	TAGTTGTTGTTATTGCTTTT	-----	tgtttcttgctgctcatttt...438...	aaagtggttttc	agttgata		
D. Moj	ttacaggg	gtgagtaaaccc...4596...	taatatt-aaagggtgcaacagc-----	CGTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...315...	aaagtggttttc	agttgata	
D. Per	ttacaaag	gtgagtacgagt...4595...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaataaacaacctgtt-----	...317...	aaagtggttttc	agttgata	
D. Pse	ttacaaag	gtgagtacgagt...4563...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaataaacaacctgtt-----	...321...	aaagtggttttc	agttgata	
D. Wil	ttacaaag	gtaagtgaagcg...4545...	--atattaaaagggtgcaacagc-----	GTTTgGAC	ATTTT	gatacaataaacaacctgtt-----	...365...	aaagtggttttc	agttgata	
D. Yak	ctgcagag	gtgagtaattgc...4526...	--atattaaaagggtgcaacagc-----	GTTTgGAC	-ATTTT	gatacaaaaaacaacctgtt-----	...386...	aaagtggttttc	agttgata	
		* ** *	** ***	** *	***	*** *	****	**	*****	*****

id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN

D. Mel	ccgtcaag	gtaggatccaaa...917...	-----ttgcaaggctcgaccaaaaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1097...	aatcgattccag	agttgat
D. Sim	ccgtcaag	gtaggatccaaa...892...	-----attttgcaaggctcgac---aaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1076...	aatcgattccag	agttgat
D. Sec	ccgtcaag	gtaggatccaaa...902...	-----attttgcaaggctcgac---aaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1077...	aatcgattccag	agttgat
D. Ere	ccgtcaag	gtaggatccaaa...910...	-----attttgcaaggctcgac---aaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1095...	caaccgacgcag	agttgat
D. Ana	ccgtcaag	gtaggacgccac...692...	-----aaaggaagtagggaagtcctGGAGGC	taAGTAa	ACAACAATTGAAGTTG	aaggaatcgaatccgaatc-----	...1249...	acaacaatacag	agttgat		
D. Moj	cagttaag	gtaagactctaa...1560...	-----tttgcgctagacttttgaaa-----	A	AAGTG	-----TCaAAATG	-----aatt	-----tacgagtttatttgt...	1101...	ttgcctttgcag	agttgat
D. Per	cggttaag	gtaggtgccacg...1136...	-----attttgcaaggctcgac---aaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1107...	ttatattttcag	agttgat
D. Pse	cggttaag	gtaggtgccacg...1148...	-----attttgcaaggctcgac---aaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1100...	ttatattttcag	agttgat
D. Wil	cagtaaag	gtaagttttgtt...2207...	ataattttgcaa-----aagggaaa-----	AAA	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	2125...	ctcccacaacag	agttgat
D. Yak	ccgtcaag	gtaggatccaaa...928...	-----ttgcaaggctcgaccaaaaa-----	A	AAGTG	-----TCaAAAT	-----taatt	-----tacgagtttatttgt...	1061...	caatcgacgcag	agttgat
		* ** ***	*** *	**	*	****	* ** *	***	* ** *	***	*****

id=55364 gene=FBgn0259211 name=grh segment=chr2R.13716411.13718501.1 type=IN VIEW

Figure 524: CS=9.6



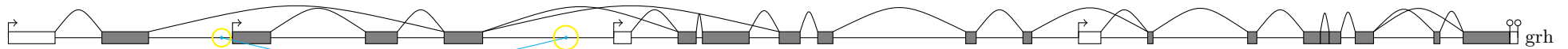
D.Mel	ctgcagag	gtgagtaattgc...4260...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...351...	aaagtggtttc	agttgata
D.Sim	ctgcagag	gtgagtaattgc...4541...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...369...	aaagtggtttc	agttgata
D.Sec	ctgcagag	gtgagtaattgc...4380...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...319...	aaagtggtttc	agttgata
D.Ere	ctgcagag	gtgagtaattgc...4554...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...356...	aaagtggtttc	agttgata
D.Ana	ttgcagag	gtgagtaattgc...4335...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...377...	aaagtggtttc	agttgata
D.Gri	ttacaggg	gtgagtaattgc...4593...	tattaatatt-aaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...317...	aaagtggtttc	agttgata
D.Moj	ttacaggg	gtgagtaattgc...4593...	tattaatatt-aaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...317...	aaagtggtttc	agttgata
D.Vir	ttgcaggg	gtgagtaattgc...4649...	tattaatatt-aaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...261...	aaagtggtttc	agttgata
D.Yak	ctgcagag	gtgagtaattgc...4522...	-attaatattaaaaggtgcaa	CAGCGT	TTGGACATT	ttgatacaaaaaacaacctg...388...	aaagtggtttc	agttgata
		* ** *	*****			*****	*****	*****

id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN

D.Mel	gagccacg	gtagaatgaaa...909...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1639...	-ctcgcaaacag	gagaggct-
D.Sim	gagccacg	gtagaatgaaa...877...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...2109...	-ctcgcaaacag	gagaggct-
D.Sec	gagccacg	gtagaatgaaa...897...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1667...	-ctcgcaaacag	gagaggct-
D.Ere	gagccacg	gtagaatgaaa...919...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1581...	-ctcgcaaacag	gagaggct-
D.Ana	gagccacg	gtagaatgaaa...1029...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1517...	-ctcgcaaacag	gagaggct-
D.Gri	gagtcacg	gtagaatgaaa...1188...	ggacacgtagaatgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1426...	-ttccaacaactg	tcaggcgc-
D.Moj	gagtcacg	gtagaatgaaa...1136...	atcctgcaagaaagaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1222...	-acctgtagac-g	cagcagct-
D.Vir	gagtcacg	gtagaatgaaa...1078...	ccagtagaagaaagaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1156...	-ctcgccagac-g	cagcagct-
D.Yak	gagccacg	gtagaatgaaa...965...	tctcaatgggccgaggtgc	GATGTCCAACGTTG	agaacaatgacaataataa...1667...	-ctcgcaaacag	gagaggct-
		*** ** *	*	*****	*	*****	* *

id=55350 gene=FBgn0259211 name=grh segment=chr2R.13702258.13704883.1 type=IN VIEW

Figure 525: CS=8.64



D. Mel	ctgcagag	gtgagtaattgc...4510...	-----gactgtcg--cctggttctt	<b>GTAT</b>	<b>TGTT</b>	<b>GTTGTTG</b>	<b>TTGT</b>	<b>TTGTTGTTGTT</b>	-----	cttattttgtgtcattttg....81...	aaagtggtttc	agttgata		
D. Sim	ctgcagag	gtgagtaattgc...4795...	-----gtcg--cctggttctt	gtat	-----	<b>TTGT</b>	<b>taTGT</b>	<b>TGTTG</b>	<b>TGTT</b>	<b>CTGTTG</b>	-----	ccgtttgagttgtgtgtt...101...	aaagtggtttc	agttgata
D. Ere	ctgcagag	gtgagtaattgc...4824...	-----tgtgtttctgtgctgtt	-----	-----	<b>GTGT</b>	<b>GTTG</b>	<b>TGTTGTTGTT</b>	-----	cttattttgtgtcattttg....81...	aaagtggtttc	agttgata		
D. Ana	ttgcagag	gtgagtaattgc...4616...	-----gttgttctgtgtttagt	-----	-----	<b>TTAT</b>	<b>tTTTCT</b>	<b>TGTTGTTGTTGTTT</b>	-----	gttgattattgtt-gtatt....82...	aaagtggtttc	agttgata		
D. Gri	ttacaggg	gtgagtaattgc...2807...	-----ctctacttcttctgctt	-----	-----	<b>TTGTTGTTGTTG</b>	<b>TGTT</b>	<b>TGTTGTTGTTGTT</b>	-----	attaaatgcgattgtgcaa...2090...	aaagtggtttc	agttgata		
D. Moj	ttacaggg	gtgagtaattgc...4809...	-----agttgtttagttagtgc	-----	-----	-----	<b>TGTTGTTGTTG</b>	-----	-----	ctctgctgctgctgctgctg...104...	aaagtggtttc	agttgata		
D. Per	ttacaag	gtgagtaattgc...4825...	tcgacgttgactgtcg--cctg	-----	<b>TTGTTGTTGTTG</b>	<b>TGTT</b>	<b>ttTTGT</b>	<b>gTGT</b>	<b>TGTTGTT</b>	-----	gtt-gtatttctgttggat...62...	aaagtggtttc	agttgata	
D. Pse	ttacaag	gtgagtaattgc...4791...	tcgacgttgactgtcg--cctg	-----	-----	<b>TTGTTGTTGTTG</b>	<b>TGTT</b>	<b>ttTTGT</b>	-----	gctgctgttgttgtgtgtg...83...	aaagtggtttc	agttgata		
D. Vir	ttgcaggg	gtgagtaattgc...3194...	-----agaaatgattg--cctctgct	-----	-----	<b>TTGTTGTTGTTGTTG</b>	<b>ctTTTCAT</b>	<b>aaGTTT</b>	<b>cccttttaagttatcaaca</b>	-----	...1702...	aaagtggtttc	agttgata	
D. Wil	ttacaag	gtgagtaattgc...4778...	-----gaacgctttg--actgtgct	-----	-----	-----	<b>TGTTGTTGTTGTT</b>	-----	-----	attdttgtctctgctcgcc...134...	aaagtggtttc	agttgata		
D. Yak	ctgcagag	gtgagtaattgc...4787...	-----tcg--cctggttctt	gtatt	-----	<b>TGTT</b>	<b>atGTT</b>	<b>TGTT</b>	<b>CTGTTGCTG</b>	<b>TGTT</b>	-----	gttgttgcctgttattgt...108...	aaagtggtttc	agttgata

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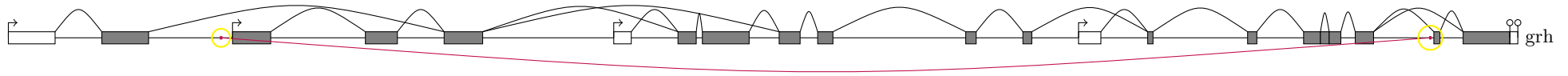
id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN

D. Mel	cccaaaag	gtaggccaacaa...966...	-----ggttctattgaacagcggc	-----	<b>AGCAACAACAA</b>	<b>aaACAACAACAACAGTGC</b>	cagcaa	-----	caaccacagcggca--...1091...	---tcggcggccttt	agtcagtc			
D. Sim	cgcaag	gtaggccaacaa...940...	-----ctcgttcggttctattgaa	-----	<b>CAGCGG</b>	<b>cAGCA</b>	<b>CAACAAG</b>	<b>AACAACAA</b>	-----	caactatttactcgagcaac...1026...	---tcggcggccttt	agtcagtc		
D. Ere	cgcaag	gtaggccaacaa...1012...	-----ttcgttctattgaacagc	-----	-----	<b>GGCAGCAACA</b>	<b>CAACA</b>	<b>ACGC</b>	-----	tgccagcga--caaccacagc...1065...	---tcggcggccttt	agtcagtc		
D. Ana	cgcaaaag	gtaggccttaaaa...923...	-----gaaagcaatgagacaaaaa	-----	<b>AAAAACAG</b>	<b>ACAACAACAACA</b>	<b>CGGAGATAG</b>	cagtag	-----	ctggcacacctgag...797...	---atcacggccttt	agtcagtc		
D. Gri	cgcaag	gtaggcaaaaa...442...	-----ggttctattgacgcaaaagc	-----	<b>AATG</b>	<b>GACAACAGCAACAACAACAACA</b>	-----	caaca	-----	caaacacattaaca...881...	gtggaatcgg--tc	agtcagtc		
D. Moj	cgcaag	gtaggcaaaaa...462...	-----gcaaaagcaatgagacaca	-----	-----	<b>GCAACAACAACA</b>	-----	acaagca	-----	gcaagcaggcag...889...	ggggaatcgg--tc	agtcagtc		
D. Per	cgcaaaag	gtaagacatattc...347...	tgctgttcggttctattgaa	-----	<b>AGCAATGAGACAGCAG</b>	<b>cAGCAG</b>	<b>CAACAACAACAACA</b>	-----	gaaaa	-----	caactacacagatc...825...	---ccacacggcgtc	attcattc	
D. Pse	cgcaaaag	gtaagacatattc...365...	ctattgaaagcaatgagaca	-----	<b>GCAG</b>	<b>AGCAG</b>	<b>CAACAACAACAACA</b>	-----	gaaaa	-----	caactacacagatc...811...	---ccacacggcgtc	attcattc	
D. Vir	cgcaag	gtaggaaaagt...416...	-----tcgtcgttctattgacgcaa	-----	<b>AAGCa</b>	<b>ATGA</b>	<b>GACAACAACAACAACA</b>	-----	cagcaactggaggcaggcag...821...	gtggaatcgg--tc	agtcagtc			
D. Wil	cgcaag	gtaggcaaaacc...491...	-----tcgttctatttga-tagcagc	-----	-----	<b>AGCAGCAACAACA</b>	-----	aca	-----	cagcaataccaacccc...780...	---acttctggcctc	agtcagtc		
D. Yak	cgcaag	gtaggccaacaa...998...	gctcgttcggttctattgaa	-----	<b>ACGGCAGCAGCAG</b>	<b>cAACAACAACAACA</b>	<b>ACTA</b>	<b>cgccgaggcga</b>	-----	caaccac	-----	...1057...	---tcggcggccttt	agtcagtc

\* \* \* \* \*      \* \* \* \* \*      \* \* \* \* \*      \* \* \* \* \*      \* \* \* \* \*

id=55354 gene=FBgn0259211 name=grh segment=chr2R.13708917.13711069.1 type=IN VIEW

Figure 526: CS=11.88



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D.Mel  ctgcagag  gtgagtaattgc...4513...-----tgtcgccgtgtgttcttctaTTTGTaTGTtGt-----TGTtTGTGTTgTTGTtgttcttatt-tt-gttgtcatt---...84...aaagtggtttcc agttgata
D.Sim  ctgcagag  gtgagtaattgc...4783...acgctttcgactgtcgcctg-----T-----TGTTcT-----TGTaTTTGTaTGTt-gttgttgcgtt--tctgttgc---...120...aaagtggtttcc agttgata
D.Sec  ctgcagag  gtgagtaattgc...4386...-----atta-----aaaggtgcaacagcgt-----T-----TGGACATTTG-----atacaaaa--acaaacctgttc...316...aaagtggtttcc agttgata
D.Ere  ctgcagag  gtgagtaattgc...4813...atattggtatggtggttgtttc-----TGTTgcTGTtTGTgTTGTgcttatt-tt-gttgtcattttg...81...aaagtggtttcc agttgata
D.Ana  ttgcagag  gtgagtaattgc...4626...ttgttttagtttatttttct-----TGTTgT-----TGTtTGTGTTg-----gtattatt--gttgattttgt...78...aaagtggtttcc agttgata
D.Gri  ttacaggg  gtgagtaattgc...2808...tctacttcttcttctgcttt-----TGTTgT-----TGTtTGTgTGTGT-----tgtattataaatgcgcatt---...2096...aaagtggtttcc agttgata
D.Per  ttacaagg  gtgagtacgagt...4826...-cgacgttgactgtcgcctgt-----TGTTgT-----TGTtgaTGTtTTTGTgctgttgtt--gttgttgt---...77...aaagtggtttcc agttgata
D.Pse  ttacaagg  gtgagtacgagt...4792...-cgacgttgactgtcgcctgt-----TGTTgT-----TGTtgaTGTtTTTGTgctgttgtt--gttgttgt---...83...aaagtggtttcc agttgata
D.Vir  ttgcaggg  gtgagtctatca...4649...-----tattaatattaaaggtgcaaC-----AGGgTT-----TGGACATTTG-----atacaaaa--acaaacctgttc...258...aaagtggtttcc agttgata
D.Yak  ctgcagag  gtgagtaattgc...4528...-----atta-----aaaggtgcaacagcgt-----T-----TGGACATTTG-----atacaaaa--acaaacctgttc...385...aaagtggtttcc agttgata
* ** * *****
                                           ** * * *

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id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN

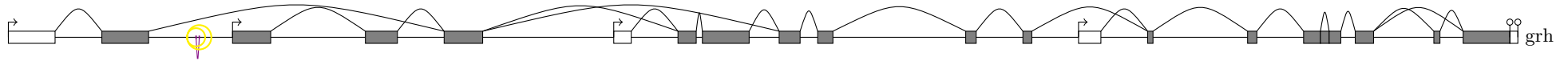
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D.Mel  taaatgcg  gtaagcgaagt...555...--aagagaatatttttagccga-----AACAGaAACAAaAAACAAAACAGACAAA-----:~::~:~::~:~::~:~::~:-acatcatatttctcgtttctcaattgcag attgaaaa
D.Sim  tgaatgcg  gtaagcgaagt...541...--aagagaatatttttagccga-----AACAGaAACAAAaACAAAACAG-----:~::~:~::~:~::~:~::~:-aacatcatatttctcgtttctcaattgcag attgaaaa
D.Sec  tgaatgcg  gtaagcgaagt...146...-----aattcaacaatgaagcgc-----CAAAATGTTCAA-----:~::~:~::~:~::~:~::~:-aacatcatatttctcgtttctcaattgcag attgaaaa
D.Ere  tgaatgcg  gtaagcgaagt...572...gagcaaaaacaaa--aaacaaa-----AACAAACAACAagAACAAaACAGACAaAAACA-----:~::~:~::~:~::~:~::~:-tcatatttctcgtttctcaattgcag attgaaaa
D.Ana  tgaatgcg  gtaagaatggcc...599...--gcagcaaacagtagcagaaa-----CAACAAAACAGACAAAACA-----:~::~:~::~:~::~:~::~:-tcatatttctcgtttctcaattgcag attgaaaa
D.Gri  taaatgcg  gtaagtacggat...810...-----actcgttactcgccactcgtGCAACACAACaGACAAAACA-----:~::~:~::~:~::~:~::~:-tcatatttctcgtttctcaattgcag attgaaaa
D.Per  tgaatgcg  gtaagcagtcgc...714...--gcaacaaaaaatccacaaa-----ACAAAAGACAAaAACAAAACA-----:~::~:~::~:~::~:~::~:-tcatatttctcgtttctcaattgcag attgaaaa
D.Pse  tgaatgcg  gtaagcagtcgc...725...--gcaacaaaaaatccacaaa-----ACAAAAGACAAaAACAAAACA-----:~::~:~::~:~::~:~::~:-tcatatttctcgtttctcaattgcag attgaaaa
D.Vir  tgaatgcg  gtaagtcttggg...197...-----aaaaaaattaaaacaacc-----CAAAATGTTCAAAGCTGaaagaatgaggtgctctaaaaacaaaaacaaaaaa:~::~:~::~:~::~:~::~:-aacatcatatttctcgtttctcaattgcag attgaaaa
D.Yak  tgaatgcg  gtaagcgaagt...151...-----aatcaacaatgaagcgc-----CAAAATGTTCAA-----:~::~:~::~:~::~:~::~:-aacatcatatttctcgtttctcaattgcag attgaaaa
* ***** ***** * *****

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id=55380 gene=FBgn0259211 name=grh segment=chr2R.13727295.13727939.1 type=IN VIEW

Figure 527: CS=9.6



D. Mel	ctgcagag	gtgagtaattgc...4252...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...357...aaagtggtttc	agttgata
D. Sim	ctgcagag	gtgagtaattgc...4533...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...375...aaagtggtttc	agttgata
D. Sec	ctgcagag	gtgagtaattgc...4372...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...325...aaagtggtttc	agttgata
D. Ere	ctgcagag	gtgagtaattgc...4546...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...362...aaagtggtttc	agttgata
D. Ana	ttgcagag	gtgagtaaatcgt...4327...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...383...aaagtggtttc	agttgata
D. Gri	ttacaggg	gtgagtaactca...4585...tttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...323...aaagtggtttc	agttgata
D. Moj	ttacaggg	gtgagtaaagcc...4585...attattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...323...aaagtggtttc	agttgata
D. Per	ttacaaag	gtgagtacgagt...4583...-cgagtattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaataaca...325...aaagtggtttc	agttgata
D. Pse	ttacaaag	gtgagtacgagt...4551...-cgagtattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaataaca...329...aaagtggtttc	agttgata
D. Vir	ttgcaggg	gtgagtctatca...4641...tttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...267...aaagtggtttc	agttgata
D. Wil	ttacaaag	gtaagtgaagcg...4533...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacatattttctgtgttg...375...aaagtggtttc	agttgata
D. Yak	ctgcagag	gtgagtaattgc...4514...-ttattattattaatattaaa	AGGTGc	AACAGc	GTTTG	gacattttgatacaaaaaca...394...aaagtggtttc	agttgata
		* ** *	** **	* **	*****	*****	*****

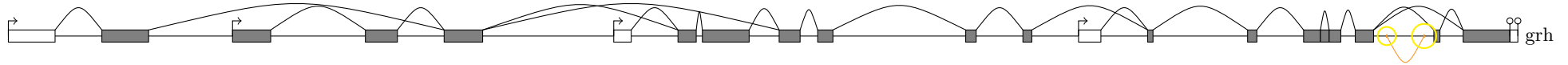
id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN

D. Mel	ctgcagag	gtgagtaattgc...4287...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...324...aaagtggtttc	agttgata	
D. Sim	ctgcagag	gtgagtaattgc...4568...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...342...aaagtggtttc	agttgata	
D. Sec	ctgcagag	gtgagtaattgc...4407...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...292...aaagtggtttc	agttgata	
D. Ere	ctgcagag	gtgagtaattgc...4581...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcac...329...aaagtggtttc	agttgata	
D. Ana	ttgcagag	gtgagtaaatcgt...4362...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcgg...350...aaagtggtttc	agttgata	
D. Gri	ttacaggg	gtgagtaactca...4620...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...290...aaagtggtttc	agttgata	
D. Moj	ttacaggg	gtgagtaaagcc...4620...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...290...aaagtggtttc	agttgata	
D. Per	ttacaaag	gtgagtacgagt...4618...tggacattttgatacaataa	CAAACCTGTTACCT	gcgcagtctacctgcagcaa...292...aaagtggtttc	agttgata	
D. Pse	ttacaaag	gtgagtacgagt...4586...tggacattttgatacaataa	CAAACCTGTTACCT	gcgcagtctacctgcagcaa...296...aaagtggtttc	agttgata	
D. Vir	ttgcaggg	gtgagtctatca...4676...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcag...234...aaagtggtttc	agttgata	
D. Wil	ttacaaag	gtaagtgaagcg...4600...ttttattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcgg...310...aaagtggtttc	agttgata	
D. Yak	ctgcagag	gtgagtaattgc...4549...tggacattttgatacaaaa	CAAACCTGTTACCT	gcgcagtctacctgcagcac...361...aaagtggtttc	agttgata	
		* ** *	** **	* **	*****	*****

id=55348 gene=FBgn0259211 name=grh segment=chr2R.13697160.13701849.1 type=IN VIEW

Figure 528: CS=11.52





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D.Mel taaatgcg gtaagcgaagtg...86...tcgtgct---aatggt---taaccac---CTTTTcTGTAATTTTGTTCATTTGGTC-----taattggaaccgctgaaaag-----...467...tctcaattgcag attgaaaa
D.Sim tgaatgcg gtaagcgaagtg...78...tcgtgct---aatggt---taaccac---CTTTTcTGTAATTTTGTTCATTTGGTC-----taattggaaccgctgaaaag-----...461...tctcaattgcag attgaaaa
D.Sec tgaatgcg gtaagcgaagtg...78...tcgtgct---aatggt---taaccac---CTTTTcTGTAATTTTGTTCATTTGGTC-----taattggaaccgctgaaaag-----...465...tctcaattgcag attgaaaa
D.Ere tgaatgcg gtaagcgaagtg...70...-cgtgct---aatggt---taaccac---TTTTTcTGTAATTTTGTTCATTTGGTCTaa--TTGG-----atccgctgaaaagaaatcaa...493...tctcaattgcag attgaaaa
D.Ana tgaatgcg gtaagaatggcc...68...tcgttct---aatggt---taaccac---CTTTTcTGTAATTTTGTTCATTTT-----ggtctaattgg---atctgaacc-----...522...tctcaattgcag attgaaaa
D.Gri taaatgcg gtaagtacggat...137...-----a-----aactctaataacgtctgta-----ATTTTGTTCATTT-----ggtctaattgg---ttatcaaa-----...675...tctcaattgcag attgaaaa
D.Moj tcaatgcg gtaagtgtatga...143...-----aaaaaacaactct---aacgtc-----TGTAATTTTGTTCATTTGGTcGAATGGTAAaacgcaaaatatattgaaaa-----...1231...tctcaattgcag attgaaaa
D.Per tgaatgcg gtaagcagtcgc...74...-----tcta---attgat---tataaccaaa---TTTTTCTGTAATTTTGTTCATTTGGTCTAa--TTGGTG---gagaagagaacaaaaaacga-----...619...tctcaattgcag attgaaaa
D.Pse tgaatgcg gtaagcagtcgc...75...-----tcta---attgac---tataaccaaa---TTTTTCTGTAATTTTGTTCATTTGGTCTAa--TTGGTG---gagaagagaacaaaaaacga-----...629...tctcaattgcag attgaaaa
D.Vir tgaatgcg gtaagtcttggg...122...-----ccaa---aactct---aacgtctgta-----ATTTTGTTCATTTGG-----tcgaattggttaaatcagaa-----...792...tctcaattgcag attgaaaa
D.Wil tgaatgcg gtaagtttgct...70...-----taaa---aactct---aatactctat---TGTAATTTTGTTCATTTGGTCTAAaTTGGT-----ctaaacaacaaagaaaa-----...1675...tctcaattgcag attgaaaa
D.Yak tgaatgcg gtaagcgaagt...81...-----tgct---aatggt---tataaccac---TTTTTTTcTGTAATTTTGTTCATTTGGTC-----taattggaatcgctgaaaag-----...510...tctcaattgcag attgaaaa
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id=55380 gene=FBgn0259211 name=grh segment=chr2R.13727295.13727939.1 type=IN

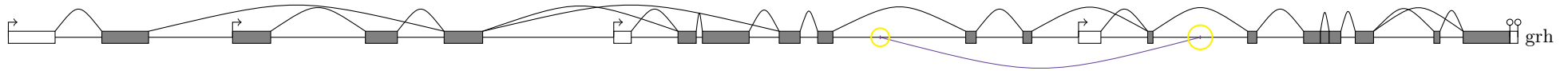
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D.Mel taaatgcg gtaagcgaagtg...485...-----tgaataataaaa---attggct-----GACCatAGAAAATGAACAAAATTACaCAAAAAG-----aaaaaccgaggtataag-----...63...tctcaattgcag attgaaaa
D.Sim tgaatgcg gtaagcgaagtg...471...-----tgattaaattaag---attggct-----GACCatAGAAAATGAACAAAATTACaCAAAG-----aaaaaaaccgaggtata-----...65...tctcaattgcag attgaaaa
D.Sec tgaatgcg gtaagcgaagtg...469...-----tgaataaattaag---attggct-----GACCatAGAAAATGAACAAAATTACaCAAAGaaaaaaaccgaggtata-----...71...tctcaattgcag attgaaaa
D.Ere tgaatgcg gtaagcgaagtg...454...tgaaacctgataaatcaaga---TTGGcAGACCatAGAAAATGAACAAAATTACaCAAAGA-----aaaaccgaggtataaga-----...106...tctcaattgcag attgaaaa
D.Ana tgaatgcg gtaagaatggcc...524...-----aattattggctgaccac---aag-----AAAATGAACAAAATTACaCAAAG-----aaagaccaacgaggtataag-----...67...tctcaattgcag attgaaaa
D.Gri taaatgcg gtaagtacggat...682...-----ag---attggctgaaaactaaaa-----AAAAATGAACAAAAT-----cacaacacacacaagagtt-----...129...tctcaattgcag attgaaaa
D.Moj tcaatgcg gtaagtgtatga...1254...-----ttcaaaaatttatc---aaagTTATTAatGTTTCCAAAATGAACAAcATTACA-----aacacacgaaggtataaag-----...120...tctcaattgcag attgaaaa
D.Per tgaatgcg gtaagcagtcgc...583...-----cagatcattcgaagattgg-----CACTGGcTGGACgCAAAAATGAACAAAATTACaGAGAAA-----aacgagttataagagaaata...107...tctcaattgcag attgaaaa
D.Pse tgaatgcg gtaagcagtcgc...592...-----cagatcattcgaagattgg-----CACTGGcTGGACgCAAAAATGAACAAAATTACaGAGAAA-----aacgagttataagagaaata...109...tctcaattgcag attgaaaa
D.Vir tgaatgcg gtaagtcttggg...724...-----gaaaactgcaaagtTTTTTT-----TTAAAATGAACAAAAT-----cacaacacacacaagagtt-----...190...tctcaattgcag attgaaaa
D.Wil tgaatgcg gtaagtttgct...1635...-----aactgtatgagttagttgca---ATCGAaaTTGGcATTAAAATGAACAAAATTACa-----tccaatcagagttatcagag-----...109...tctcaattgcag attgaaaa
D.Yak tgaatgcg gtaagcgaagt...483...-----aatcaaaattaag---attggct-----GACCatAGAAAATGAACAAAATTACaCAAAGAAA-----aacgaggtataagagaa-----...104...tctcaattgcag attgaaaa
* ***** ***** * ***** ***** * ***** ***** *****

```

id=55380 gene=FBgn0259211 name=grh segment=chr2R.13727295.13727939.1 type=IN VIEW

Figure 529: CS=11.52



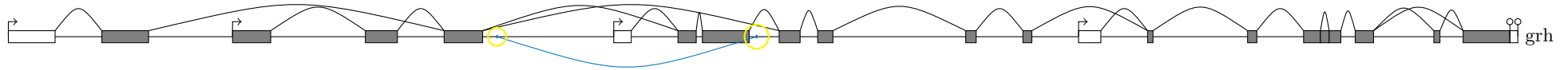
D. Mel	ccgtcaag	gtaggatccaaa...509...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgaagat--gcaaatgcaaat...1505...aatcgattccag	agtgtgat	
D. Sim	ccgtcaag	gtaggatccaaa...490...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgaagat--gcaaatgcaaat...1478...aatcgattccag	agtgtgat	
D. Sec	ccgtcaag	gtaggatccaaa...490...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgaagat--gcaaatgcaaat...1489...aatcgattccag	agtgtgat	
D. Ere	ccgtcaag	gtaggatccaaa...469...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgaagat--gcaaatgcaaat...1536...caaccgacgcag	agtgtgat	
D. Ana	ccgtcaag	gtaggacgccac...502...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgc-tcctcgagatggaaga...1455...acaacaatacag	agtgtgat	
D. Gri	cagttaag	gtaagtgcacat...467...tacaatacacatcaac---atca	TCAAT	CAGATAAGCTT	AATGACGT	-----	cttctgact-gctactgga---...2326...tttctttgcag	agtgtgat
D. Moj	cagttaag	gtaagactctaa...502...cacaatacgcacatcaac---atca	TCAAT	CAGATAAGCTT	AATGACGT	-----	cttctgactcgcactggat--...2148...ttgcctttgcag	agtgtgat
D. Per	cggttaag	gtaggtgccacg...646...--caacat-catcaatcagataa-----	GCTT	AATGACGT	cTGCG	tctgcgtctgcctcag-----	...1592...ttatatttcag	agtgtgat
D. Pse	cggttaag	gtaggtgccacg...640...--caacat-catcaatcagataa-----	GCTT	AATGACGT	cTGCG	tctgcgtctgcgtc-----	...1603...ttatatttcag	agtgtgat
D. Yak	ccgtcaag	gtaggatccaaa...500...--caacat-catcaatcagataa-----	GCTT	AATGACGT	-----	ctgaagat--gcaaatgcaaat...1489...caatcgacgcag	agtgtgat	
	* ** **	*** *		*****	** *	*****	** *	*** *****

id=55364 gene=FBgn0259211 name=grh segment=chr2R.13716411.13718501.1 type=IN

D. Mel	gagttaag	gtgagtttacta...466...ctcctggccagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...536...ttctgtttccag	ggcctgcc	
D. Sim	gagttaag	gtgagtttttta...556...ctcctggccagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...557...tttctgttccag	ggcctgcc	
D. Sec	gagttaag	gtgagtttttta...531...ctcctggccagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...547...tttctgttccag	ggcctgcc	
D. Ere	gagttaag	gtgagttctgtta...510...ctcctggccagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...569...tgttattccag	ggcctgcc	
D. Ana	gagtaag	gtgagtttagag...327...ggcctgcttgagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...547...ttatggttcag	ggcctgcc	
D. Gri	gtgttaag	gtgagttcttatt...1362...catccttctgtgttgaat----	GCGT	acCATTAAGTT	gaTATT	cATTGA	cagaaa-----	catacga--actcggc...196...gttgtgttcag	ggcctgcc
D. Moj	gtgttaag	gtgagtttttcc...1265...catcctttgtatgttgaat----	GCGT	acCATTAAGTT	gaTATT	cATTGA	cagaaa-----	gacacgaagagttg--...497...cttctgttacag	ggcctgcc
D. Per	gagtaag	gtgagtaaaact...598...atcctcctggcttctctggt	TGTA	atGCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...431...tctcggttccag	ggcctgcc
D. Pse	gagtaag	gtgagtaaaact...587...atcctcctggcttctctggt	TGTA	atGCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...431...tctcggttccag	ggcctgcc
D. Yak	gagtaag	gtgagttgtta...442...ctcctggccagagttgtaat----	GCGT	CATTAAGT	-----	ctgatatttcattgacagaa-----	...545...tgttattccag	ggcctgcc	
	* ** **	*****	*	** *	*****	** **	** **	** **	

id=55372 gene=FBgn0259211 name=grh segment=chr2R.13722177.13723255.1 type=IN VIEW

Figure 530: CS=9.6



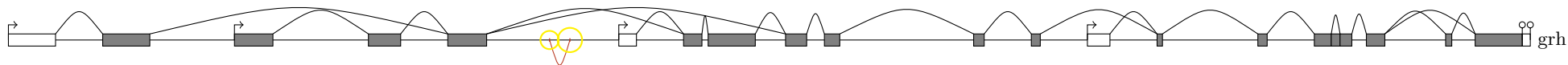
D.Mel	cccaaaag	gta-ggccaacaaaacatatt-----	::::c-agctcagctggaagctcttttatgaataaaaaaaaaag	TTAATGGACACGCACGCA	aatttcaatttagaagcaag--..1965...	---tcggcggccttt	agtcagtc
D.Sim	cgcagaag	gta-ggccaacaaaacatatt-----	::::c-ctctcagctggaagctctcttatgaataaaaaaaaaag	TTAATGGACACGCACGCA	aatttcaatttagaagcaag--..1873...	---tcggcggccttt	agtcagtc
D.Sec	cgcagaag	gtaggccaacaaaacatatt-----	::::c-ctctcagctggaagctctcttatgaatacaaaaag	TTAATGGACACGCACGCA	aatttcaatttagaagcaag--..1877...	---tcggcggccttt	agtcagtc
D.Ere	cgcagaag	gta-ggccaacaaaatagtt-----	::::c-ctctcagctggaagctctcttacgaaaaaag	TTAATGGACACGCACGCA	aaattcaatttagaagcaaa--..1972...	---tcggcggccttt	agtcagtc
D.Ana	cgcaaaag	gta-ggcttaaaaaata-----	::::tgctctcagctggaagctctcttaggaaacaaa	TTAATGGACACGCACGCA	aaattcaatttagaaggaaaga..1636...	---atcacggccttt	agtcagtc
D.Gri	cgcagaag	gta-ggacaacaaaacca-----	::::-ttagcagctaagagct--tcaggtatttaac	GTTTAAATGGACACG	-----cacgcaaaaaaaaaagtagta..1291..	gtggaatcgg--tc	agtcagtc
D.Moj	cgcagaag	gta-ggcaacaaaa-----	::::-atcgtaatcaaaagct--ttacgta---ttaacgc	TTAATGGACACGCACGC	aaaacgcaaaaaaaaaataaa--..1304..	ggggaatcgg--tc	agtcagtc
D.Vir	cgcagaag	gta-ggaaaagttaatg-----	::::-----tagcaag-----tcttacgtattt	AACGCTTAATGGACACGCACGCA	aaaccaaaaaaaaaaaccc..1214..	gtggaatcgg--tc	agtcagtc
D.Wil	cgcagaag	gta-ggcaaa-----	::::-----accacaaagct--ttaggtaaaacttta	TTAATGGACACGCACGCA	-taagaagaagaaaaaac..1263..	---acttctgcctc	agtcagtt
D.Yak	cgcagaag	gta-ggccaacaaaatatttttaaaccaaac	::::c-ctctcagctggaagctctcttaggaaaaaac	TTAATGGACACGCACGCA	aatttcaatttagcagcaaa--..1936...	---tcggcggccttt	agtcagtc
	* ** **	*** ** *	*	*****	*	** *	*****

id=55354 gene=FBgn0259211 name=grh segment=chr2R.13708917.13711069.1 type=IN

D.Mel	tccaacag	gtatacccca-----	::::-----caatcaaaacaaagtagt--tatgtttgtaa	TGCGTtGCGTGTCATTAA	---aa--tatagaatatgaatagaa-----..208...	ctctacaacag	tcctttga
D.Sim	tccaacag	gtatacccct-----	::::-----caatcaaaacaaagtagt--tctgtttgataa	TGCGTtGCGTGTCATTAA	---aaccataacttagaggtag-----..187...	ccttccaaacag	tccttcga
D.Sec	tccaacag	gtatacccct-----	::::-----caatcaaaacaaagtagt--tatgtttgataa	TGCGTtGCGTGTCATTAA	---aa-cataacttagaggtag-----..186...	ccttccaaacag	tccttcga
D.Ere	tccaacag	gtataccctt-----	::::-----tgataa-----	TGCGTtGCGTGTCATTAA	---aacgcaaaacttgg--cgaaca-----..228...	ccatccaaacag	tccttcga
D.Ana	tccaacag	gtatagccctctactaccagcactcccactcc	::::agagtaattgtagccaagtagtagagttttctgt	TTTGCGTtGCGTGTCATTAA	-----cctaa---c---tagaaaccaagtag...67..	tattttatttag	tccttcga
D.Gri	tacagcag	gtatacacac-----	::::cgagtaca--agtagcgagtaacgagtagcgaatgagtg	CGTGTCATTAA	atagttgta--aatctataaa-----..559..	ttattattacag	tccttcga
D.Moj	tacagcag	gtatacacac-----	::::agagtaatgagtaatgagtaatgagtagttaaataaa	GCGTgaCGTGTCATTAA	-----ttcgtacttaa--taaaaactt-----..74..	cctttcgaacag	tccttcga
D.Vir	tacagcag	gtatacacac-----	::::cgagtaaatgtaacgagtagcgaatgagtagcag	TGCGTtGCGTGTCATTAA	aCGTT--tagaaccttagacttaaaact-----..194..	aatctttgtag	tccttcga
D.Wil	ttcaacag	gtatacacactc-----	::::agtgtagcctagtagtagtagcagcactaat	TGCGTgaCGTGTCATTAA	---atattgatcctaactat--at-----..90..	cctctctacag	tcattcga
D.Yak	tccaacag	gtatatcctt-----	::::-----ttgaaaaacaaagtagt--actctttgataa	TGCGTtGCGTGTCATTAA	---aa--cttag---cgaatagaaccc-----..193..	ttgcttaaacag	tccttcga
	* ** **	*** * *		*****		** **	**

id=55360 gene=FBgn0259211 name=grh segment=chr2R.13715515.13715835.1 type=IN VIEW

Figure 531: CS=15



D. Mel	cccaaaag gta-ggccaacaa...749...-----atctatatttgttgcctc-----	TTGTTG	TTGTTGTCGCT	agctgatggttgcctgctgctg-----	...1323...---	tcggcggccttt	agtcagtc
D. Sim	cgcagaag gta-ggccaacaa...727...-----atctatatttgttgcctc-----	TGTTTGTGTTG	TTGTTGTTGCT	agctgatggttgcctgctgctg-----	...1243...---	tcggcggccttt	agtcagtc
D. Sec	cgcagaag gtagggccaaca...726...-----atctatatttgttgcctc-----	TTGTTTGTGTTG	TaGCTG	-----atggttgcctgctgctggcgca...1251...---	tcggcggccttt	agtcagtc	agtcagtc
D. Ere	cgcagaag gta-ggccaacaa...792...-----ctatatttgttgcctgctc-----	GTTGTTGTTG	TTGTTGCTGTT	ggttcagctagctgatggtg-----	...1284...---	tcggcggccttt	agtcagtc
D. Gri	cgcagaag gta-ggcaaaaa...301...-----ataaacagagtggtttcta-----	GTTGTTGCTG	TTGTT	-----gcgtctctaagacctgcaat...1035...gtggaatcgg---tc			agtcagtc
D. Moj	cgcagaag gta-ggcaaaaa...268...-----acatgcgagtcgctatgtg-----	GTTGTTGTTG	TTGTTT	TTGTC	-----gctgctctaagacctgcaat...1073...ggggaatcgg---tc		agtcagtc
D. Per	cgcaaaag gta-agacatatc...195...-----gccgccttgttggccttcg-----	GTTGTaGTTG	TaGTTGTaGTTGT	-----agttgcttgcctgctgctc...988...---	ccacacggcgtc		attcattc
D. Pse	cgcaaaag gta-agacatatc...195...-----gccgccttgttggccttcg-----	GTTGTaGTTG	TaGTTGTaGTTGT	-----agttgcttgcctgctgctc...974...---	ccacacggcgtc		attcattc
D. Vir	cgcagaag gta-ggaaaagt...212...tgctcaattaatatgcgagTTTTTGTCTa	TGTTGTTGTTGTTGTTG	TTTTTgtTCCG	ggtttttatgtgcctgctgctg-----	...1012...gtggaatcgg---tc		agtcagtc
D. Wil	cgcagaag gta-ggcaaaacc...257...gatatctatgtacacataga-----	GTTGTTGTTG	TTGTTGTCTGTTG	-----tcggtgctgctgctgctgtt...1005...---	acttctggcctc		agtcagtt
D. Yak	cgcagaag gta-ggccaacaa...749...-----tatttgttgcctccttgc-----	GTTGTTGTTG	TTGTTGTTGC	agttgtttgttgcctgctgctg-----	...1314...---	tcggcggccttt	agtcagtc

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id=55354 gene=FBgn0259211 name=grh segment=chr2R\_13708917\_13711069.1 type=IN

D. Mel	cccaaaag gta-ggccaacaa...960...---tcggtt--cggttctattgaaac-----	AGCGGCAGCAACAACA	-----aaacaac-----	aacaacaacagtg-----	...1112...---	tcggcggccttt	agtcagtc
D. Sim	cgcagaag gta-ggccaacaa...941...---tcggtt--cggttctattgaaac-----	AGCGGCAGCAACAACAAGAACA	-----ac-----	aacaactatttactcgag...1030...---	tcggcggccttt	agtcagtc	agtcagtc
D. Sec	cgcagaag gtagggccaaca...930...---ctcggtt--cggttctattgaaa-----	CAGCGGCAGCAACAACA	-----gaaacagc-----	aacaactatttac-----	...1048...---	tcggcggccttt	agtcagtc
D. Ere	cgcagaag gta-ggccaacaa...1006...tgctcgtt--cggttctattga-----	AACGGCGGCAGCAACAACAAC	-----tacgctgccaggcaacaacc-----	...1070...---	tcggcggccttt	agtcagtc	agtcagtc
D. Gri	cgcagaag gta-ggcaaaaa...447...-----tattgacgcaaaagcaatgaGACGAc	AGCAACAACAACAAC	-----aacaac-----	aacaacaacaaca-----	...889...gtggaatcgg---tc		agtcagtc
D. Moj	cgcagaag gta-ggcaaaaa...455...-----tattgacgcaaaagcaatgaGACGAc	AGCAACAACAACAAC	-----aagcaagcaagcaggcaggc-----	...887...ggggaatcgg---tc		agtcagtc	agtcagtc
D. Per	cgcaaaag gta-agacatatc...356...-----gttctattgaaagcaatgag--ACAGCa	GCAGCaGCAACaCAAC	-----aagaaa-----	aacaactacacaga-----	...827...---	ccacacggcgtc	attcattc
D. Pse	cgcaaaag gta-agacatatc...357...-----gtt--cggttctattgaaagca--ATGA	GCAGCaGCAACaCAAC	-----aagaaa-----	aacaactacacaga-----	...813...---	ccacacggcgtc	attcattc
D. Vir	cgcagaag gta-ggaaaagt...411...gctcgtcg--tcggttctattgaCGCAAAAGca	ATGAgaCAACAACAACAACAacAGCAactGGAG	gcaggcaggcaggcagctag-----	...809...gtggaatcgg---tc		agtcagtc	agtcagtc
D. Wil	cgcagaag gta-ggcaaaacc...481...cgctcgtcgttcggttctatt-----	TGATaGCAGCAGCAGCAACAAC	-----aacaac-----	agcaa-taccaacc-----	...781...---	acttctggcctc	agtcagtt
D. Yak	cgcagaag gta-ggccaacaa...1001...---cggtt--cggttctattgaaacg-----	GCAGCAGCAGCAACAACAAC	-----aactacgccccaggcaaca-----	...1062...---	tcggcggccttt	agtcagtc	agtcagtc

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id=55354 gene=FBgn0259211 name=grh segment=chr2R\_13708917\_13711069.1 type=IN VIEW

Figure 532: CS=13.2



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D.Me1  acaaaacg gtgagtttcgac...1443...-actccccctcttcagcaaacTGAATtGCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1689...ggtattttacag|gtgtcctg
D.Sim  acaaaacg gtgagtttcggc...1528...-actccccctcttcagcaaatTGAATtGCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1778...ggtattttacag|gtgtcctg
D.Sec  acaaaacg gtgagtttcggc...1499...-tactccccctcttcagcaatTGAATtGCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1775...ggtattttacag|gtgtcctg
D.Ere  acaaaacg gtgagtttcggc...1451...-ccccctgctgctcagcaatTGAATtGCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1774...ggtattttacag|gtgtcctg
D.Ana  acaaaacg gtgagtttttag...1530...-ttgccccagcactttcaatt-----GCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1498...ggtattttgacag|gtatcctg
D.Moj  acaaaacg gtgagtccaac...1631...-ccccctgccacaaaacacttGCAAttGCATTtgaGCGCGAAATTA-----ttaaacaatttcgtagaaa...1561...tttccatgcag|gtatcctg
D.Per  acaaaacg gtgagtttttgg...1614...-gcctcgcagcactttcaatt-----GCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1400...tccccattgcag|gtatcctg
D.Pse  acaaaacg gtgagtttttgg...1562...-gcctcgcagcactttcaatt-----GCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1447...tccccattgcag|gtatcctg
D.Vir  acaaaacg gtgagtgaaac...1584...-atggggcctgcaacaacacttGCAAttGCATTtgaGCGCGAAATTA-----ttaaacaatttcgtagaaa...1546...ttttgtgcgag|gtctcctg
D.Wil  acaaaacg gtgagttagagta...1968...-atggtggagcatgcccaaa-----TGCCAAaAAACaACAaacttcaacacgcttgcaa---...1919...acgtcattgcag|gtatcctg
D.Yak  acaaaacg gtgagtttcggc...1554...-ctccccctcccagcaatTGAATtGCATTtgaGCGCGAAATTA-----ttaaacaatttcacgaaat...1809...ggtattttacag|gtgtcctg
***** ***** * ** *** * ** ** * * ** ** ** **

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id=99412 gene=FBgn0040823 name=dpr6 segment=chr3L.10026525.10029745.1 type=IN

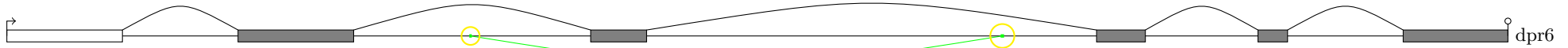
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D.Me1  acaaaacg gtgagtttcgac...2036...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGttGTTA-----atggcagcga--tgtcgttgcg...1094...ggtattttacag|gtgtcctg
D.Sim  acaaaacg gtgagtttcggc...2137...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGttGTTA-----atggcggcga--tgtcgttgcg...1167...ggtattttacag|gtgtcctg
D.Sec  acaaaacg gtgagtttcggc...2120...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGttGTTA-----atggcggcga--tgtcgttgcg...1152...ggtattttacag|gtgtcctg
D.Ere  acaaaacg gtgagtttcggc...2192...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGttGTTA-----atggcggcgc--tgtcgttgcg...1031...ggtattttacag|gtgtcctg
D.Ana  acaaaacg gtgagtttttag...2121...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGt-----ttgtttaatggcag----cgttgt-----...906...ggtattttgacag|gtatcctg
D.Moj  acaaaacg gtgagtccaac...2014...--tgcacttgtaattacacttTAATTTgtTGCCTaAAATGTTTGT-----ttaatggcagccccttgcg-----...1179...tttccatgcag|gtatcctg
D.Per  acaaaacg gtgagtttttgg...2004...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGt-----ttgtttaatggcag----ggctgt-----...1009...tccccattgcag|gtatcctg
D.Pse  acaaaacg gtgagtttttgg...1990...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGt-----ttgtttaatggcag----ggctgt-----...1018...tccccattgcag|gtatcctg
D.Vir  acaaaacg gtgagtgaaac...1943...--tgcacttgtaattacacttTAATTTgtTGCCTaAAATGTTTGT-----ttaatggcagcccc--tgtcga-----...1188...ttttgtgcgag|gtctcctg
D.Wil  acaaaacg gtgagttagagta...2774...ctttaatttggtgcgtaaaa-----TGTTtGTTTaaTGCCAagagtgtcg-----ttttgctgctg...1112...acgtcattgcag|gtatcctg
D.Yak  acaaaacg gtgagtttcggc...2256...--tgcacttgtaattacgcttTAATTTgtTGCCTaAAATGttGTTA-----atggcggcga--tgtcgttgcg...1105...ggtattttacag|gtgtcctg
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id=99412 gene=FBgn0040823 name=dpr6 segment=chr3L.10026525.10029745.1 type=IN VIEW

Figure 533: CS=10.56



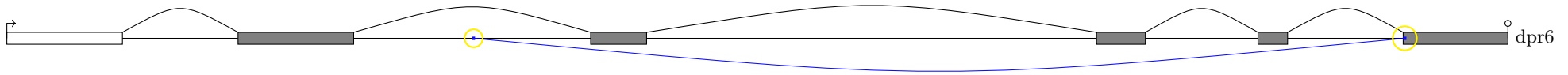
D. Mel	gatgag-cg	gtaagtgaacag...3840...--gtgcatgtgg-aaaaacagtt	<b>TTCGaaTGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1067...aaccattttcag	acatgaca
D. Sim	-atgagccg	gtaagtgcacaa...3810...---tgcatgtgg-aaaaacagttt	<b>TCGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1098...aaccattttcag	acatgaca
D. Sec	gatgag-cg	gtaagtgcacag...3788...---tgcatgtgg-aaaaacagttt	<b>TCGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1120...aaccattttcag	acatgaca
D. Ere	gatgag-cg	gtaagtgcacag...3859...--gtgcatgtgg-aaaaacagtt	<b>TTCAaaTGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1048...aaccattttcag	acatgaca
D. Ana	gatgag-cg	gtaagtaccat...3914...---tgcatgtgg-aaaaacagttt	<b>TCGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...994...tcctcgttgacag	acatgaca
D. Gri	actgag-cg	gtaagtaccta...3584...---gcatgtgg-aaaaacagttt	<b>TCGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1324...aattcgtacag	atatgaca
D. Moj	gctcag-cg	gtaagtaccacg...3647...---tgcatgtgg-aaaaacagctt	<b>TCGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1261...aactcgttgacag	atatgaca
D. Per	gatgag-cg	gtaagttagcggc...2668...acaaaaatgggggaaggaaa-----	<b>AAATGAATGcCAAAA</b>	caaaagcgtgaaaattgcaa...2242...ccctcgttgacag	atatgaca
D. Pse	gatgag-cg	gtaagttagcggc...2692...acaaaaatgggggaaggaaa-----	<b>AAATGAATGcCAAAA</b>	caaaagcgtgaaaattgcaa...2218...ccctcgttgacag	atatgaca
D. Vir	cctgag-cg	gtaagtgccat...3518...---tgcatgtgg-aaaaacagttt	<b>TTGAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1390...aattcgttgacag	atatgaca
D. Yak	gatgag-cg	gtaagtgcacag...3758...---catgtgg-aaaaacagttt	<b>AAATGAATGCAAGTT</b>	ttaatccttgaaatatgatt...1152...aaccattttcag	acatgaca
		* ** ** *****	*** ** * * *	***** * * * * **	* ** * *****

id=99410 gene=FBgn0040823 name=dpr6 segment=chr3L\_9997202\_10026282.1 type=IN

D. Mel	acaaaacg	gtgagtttcgac...2766...-tgcgtc-ggcaattcgttttc	<b>AATTgcTGCAttTTTAaTGGG</b>	ccagacgcttgctcaaggag-----...370...---ggtattttacag	gtgtcctg
D. Sim	acaaaacg	gtgagtttcgac...2471...actcggctgtcaagtgcgat--	<b>AATT-TtGCATTtaCATTGGA</b>	-----cttaataagtt-tatataagc...840...---ggtattttacag	gtgtcctg
D. Sec	acaaaacg	gtgagtttcgac...2457...actcggctgtcaagtgcgat--	<b>AATT-TtGCATTtaCATTGGA</b>	-----cttaataagtt-tatataagc...823...---ggtattttacag	gtgtcctg
D. Ere	acaaaacg	gtgagtttcgac...2912...-tgcgtc-ggcaattcgttttc	<b>AATTgcTGCAttTTTAaTGGG</b>	-----cagccgcctactcaaggcgc-----...317...---ggtattttacag	gtgtcctg
D. Ana	acaaaacg	gtgagtttttag...2504...gcctggctgtcaagtgcgat--	<b>AATT-TtGCATTtaCATTGGA</b>	-----cttaataagtt-tgcataagc...523...ggtatttt---tgcag	gtatcctg
D. Gri	acaaaacg	gtgagtaagaaa...2151...cagcgtgtggcaagtgcgat--	<b>AATT-TtGCATTtaCATTGGA</b>	-----cttaataagtttgcgcatat-c...1080...---tgtgtgtggcag	gtatcctg
D. Moj	acaaaacg	gtgagtgcaca...2320...cagcaactggcaactgcgat--	<b>AATT-TtGCATTtgCATTGGA</b>	-----cttaataagtttgcgcatat-c...877...---tttccatgcag	gtatcctg
D. Per	acaaaacg	gtgagtttttgg...2402...-gtggctgtcaagtgcgataa--	<b>TT-TtGCATTtaCATT</b>	-----gacttaataagtt-tacataa...615...---tccccattgcag	gtatcctg
D. Pse	acaaaacg	gtgagtttttgg...2397...-gtggctgtcaagtgcgataa--	<b>TT-TtGCATTtaCATT</b>	-----gacttaataagtt-tacataa...615...---tccccattgcag	gtatcctg
D. Vir	acaaaacg	gtgagtgaaaac...2241...cggcgcctggcaagtgcgat--	<b>AATT-TtGCATTtaCATTGGA</b>	-----ctttataagtttgcgcatat-c...894...---ttttgtgcgacag	gtctcctg
D. Yak	acaaaacg	gtgagtttcgac...2610...acttggctgtcaagtgcgat--	<b>AATT-TtGCATTtaCATT</b>	-----gacttaataagtt-tatataa...760...---ggtattttacag	gtgtcctg
		***** *****	* ** * * * * ** ***** * *	** * *	*** ** ** **

id=99412 gene=FBgn0040823 name=dpr6 segment=chr3L\_10026525\_10029745.1 type=IN VIEW

Figure 534: CS=11.88



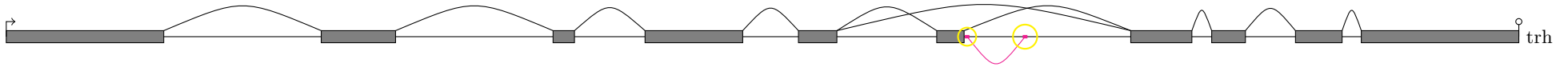
D.Mel	gatgag-cg	gtaagtgaacag...3858...-----ttttcgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...1053...aaccattttcag	acatgaca
D.Sim	-atgagccg	gtaagtgcacaa...3827...-----ttttcgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...1084...aaccattttcag	acatgaca
D.Sec	gatgag-cg	gtaagtgcacag...3805...-----ttttcgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...1106...aaccattttcag	acatgaca
D.Ere	gatgag-cg	gtaagtgcacag...3896...ttaaactccttgaata---tgat---	TTGAGTGCaaATATT	-ttgcataaccatgagctcga-----...1014...aaccattttcag	acatgaca
D.Ana	gatgag-cg	gtaagtacccat...3931...-----ttttcgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...980...tcctcgttcgag	acatgaca
D.Gri	actgag-cg	gtaagtacctca...3587...-----tgtgaaaaaac---agttttcg	AATGAATGCAAGTTT	aatccttgaatatgattg-----...1322...aattcgtacag	atatgaca
D.Moj	gctcag-cg	gtaagtaccacg...3664...-----ctttcgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...1247...aactcgttcgag	atatgaca
D.Pse	gatgag-cg	gtaagttagcggc...3881...ttaaactccttgaata---tgat---	TTGAGTGCaaATATT	-ttgcataaccatgagctcga-----...1029...ccctcgttcgag	atatgaca
D.Vir	cctgag-cg	gtaagtgccat...3535...-----tttttgaatgaatgcaagtt-----	TTAATcCTTGAAAT	-----atgatttgagtgcaaataatt...1376...aattcgttcgag	atatgaca
D.Yak	gatgag-cg	gtaagtgcacag...3792...ttaaactccttgaata---tgat---	TTGAGTGCaaATATT	-ttgcataaccatgagctcga-----...1118...aaccattttcag	acatgaca
		* ** ** *****	* ** * * * * *	**** *	* ** * *****

id=99410 gene=FBgn0040823 name=dpr6 segment=chr3L\_9997202\_10026282.1 type=IN

D.Mel	acgaggag	gtaattaaagct...3344...cga-----ctctcctccttctctcc-	ATTTgCAGGtcATTA	-----a
D.Sim	acgaggag	gtaattaaagct...3294...tca-----ctactctcctcctctcc-	ATTTgCAGGtcATTA	-----a
D.Sec	acgaggag	gtaattaaagct...3302...tga-----cgactctccttctctcc-	ATTTgCAGGtcATTA	-----a
D.Ere	acgaggag	gtaattaaagct...2624...tcagctggatggagcgactt-	AATATGCATTcAG-	-----cagctgtaaatccagt-ccttgacaggacc-t-----cattaa-
D.Ana	acgaggag	gtaattcaagtt...4154...ctc-----acacgatcccctcttac-	ATTTtCAGGtcCATTa	-----a
D.Gri	acgaggag	gtaattaaactt...2957...-----gggcaaaaagtgttatgccc	AAAGtTTTgCATTgtCATT	gttttttatactcgatatcgagcatatctacagtttcat-----cattaatcgataatgaagttgagtttgatgctgctaatac
D.Moj	acgaggag	gtaattaaactt...4949...tct-----cggcgtaatgctcttcc-	ATTTgCAGGtcATTA	-----a
D.Pse	acgaggag	gtaattaaagtt...3662...tat-----ttgttttccgggaactt-	AATATGCATTcAG-	-----ctgctgttagcggcagt-ccttgacaggctc-t-----cattaa-
D.Vir	acgaggag	gtaattaaactt...3739...ttt-----tggcgtaatgctcttcc-	ATTTgCAGGtcATTA	-----a
D.Yak	acgaggag	gtaattaaagct...2719...tcagctggaggagcgactt-	AATATGCATTcAG-	-----ctgctgtaaatccagt-ccttgacaggacc-t-----cattaa-
		***** ** *	* * **	*

id=99416 gene=FBgn0040823 name=dpr6 segment=chr3L\_10030572\_10033955.1 type=IN VIEW

Figure 535: CS=12



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D.Mel acTATTTCG GTACgtATCAATTGAAATCAGT acgtttgtatgctaaaaatgc-----..475...gaacctttgcag gtggttct
D.Sim acTATTTCG GTACgtATCAATTGAAATCAGT acgtttgtatgctaaaaatgc-----..548...gaacctttgcag gtggtttt
D.Sec acTATTTCG GTACgtATCAATTGAAATCAGT acgtttgtatgctaaaaatgc-----..547...gaacctttgcag gtggtttt
D.Ere acTATTTCG GTACgtATCAATTGAAATCAGT acgtttgtatgctaaaaatgc-----..575...gaacctttgcag gtggtcct
D.Ana acTATTTCG GTACgtATCAGTTGAAATCAGT ac---gtatgctaaaaatccaag..597...gaacatttgcag gtggtgct
D.Gri acTATTTCG GTACgtATCAATTGAAATCAGT aaaaaaaaaatacaacaaa-----..488...tgccttttgcag gtggtgct
D.Per acTATTTCG GTACgtATCAATTGAAATCAGT acaaaaaacaacaaaaaaaa-----..569...gtgcctttacag gtcgtcct
D.Pse acTATTTCG GTACgtATCAATTGAAATCAGT acaaaaaacaacaaaaaaaa-----..539...gtgcctttacag gtcgtcct
D.Vir acTATTTCG GTACgtATCAATTGAAATCAGT acaaaaacgcaaggcaaac-----..473...ttgcctttgcag gtcgtgct
D.Wil acTATTTCG GTACgtATCAATTGAAATCAGT acaaaaaaaaaacaacaaaa-----..622...gaacatttacag gttgtcct
D.Yak acTATTTCG GTACgtATCAATTGAAATCAGT acgtttgtatgctaaaaatgc-----..506...gaacctttgcag gtggttct
***** ***** *

```

id=131313 gene=FBgn0003749 name=trh segment=chr3L.369674.370202\_-1 type=IN

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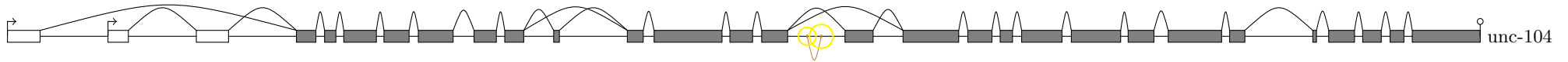
D.Mel actattcg gtacgtatcaat...133...aaac--aaaggcaagccactg---ACTGATTTTAgATTGATcaGTATCGAATA-acta--gtgcggagctgcttca---..303...gaacctttgcag gtggttct
D.Sim actattcg gtacgtatcaat...132...aaac--aaaggcaagccactg---ACTGATTTTAgATTGATcaGTATCGAATA-aata--gtgcggagctgcttca---..377...gaacctttgcag gtggtttt
D.Sec actattcg gtacgtatcaat...132...aaac--aaaggcaagccacta---ACTGATTTTAgATTGATcaGTATCGAATA-aata--gtgcggagctgcttca---..376...gaacctttgcag gtggtttt
D.Ere actattcg gtacgtatcaat...138...aaac--aaaggcaagccactg---ACTGATTTTAgATTGATcaGTATCGAATA-acta--gtgcggagctgcttca---..398...gaacctttgcag gtggtcct
D.Ana actattcg gtacgtatcagt...115...tgtc--caaggcaatgccactg---ACTGATTTTgATTGATcaGTATCGAATA-ataa--gtgcggaaccaccttc---..443...gaacatttgcag gtggtgct
D.Gri actattcg gtacgtatcaat...156...-----acaagttgagtactgtaaaACTGATTTTAgATTGATcaGTATCGAATAaagca--gcatcaaatcgtatc---..293...tgccttttgcag gtggtgct
D.Per actattcg gtacgtatcaat...164...aaag--aacaacgaaccactg---ACTGATTTTAgATTGATcaGTATCGAATA-actatagtgccgaa--gcagca---..366...gtgcctttacag gtcgtcct
D.Pse actattcg gtacgtatcaat...163...aaag--aacaacgaaccactg---ACTGATTTTAgATTGATcaGTATCGAATA-actatagtgccgaa--gcagca---..337...gtgcctttacag gtcgtcct
D.Vir actattcg gtacgtatcaat...130...tttcgttaaggcaatgcaaa---ACTGATTTTAgATTGATcaGTATCGAATAtatatatataatatacatata-----..304...ttgcctttgcag gtcgtgct
D.Wil actattcg gtacgtatcaat...230...aaga--aatacaaaaaaaaaa---ACTGATTTTAgATTGATcaGTATCGAATA----aaagtcaaaa--acatcaatc...353...gaacatttacag gttgtcct
D.Yak actattcg gtacgtatcaat...131...aaag--aaaggcaagaccactg---ACTGATTTTAgATTGATcaGTATCGAATA-acta--gtgcggagctgcttca---..336...gaacctttgcag gtggttct
***** ***** *

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id=131313 gene=FBgn0003749 name=trh segment=chr3L.369674.370202\_-1 type=IN VIEW

Figure 536: CS=15.4





D. Mel	aagttacg	gtaggttctttt	....98	..tg-aatattatttaaataa	-----	CGTGcATGGTGGT	tgtagttcatggattctagt	...247	..tacacaacaag	ctatcgcc	
D. Sim	aagttacg	gtaggttctttc	....96	..tg-aatattatttgaataa	-----	CGTGcATGGTGGT	tgtagttcatggattctagt	...238	..tacacaacaag	ctatcgcc	
D. Sec	aagttacg	gtaggttctttc	....86	..tg-aatattatttgaataa	-----	CGTGcATGGTGGT	tgtagttcatggattctagt	...240	..tacacaacaag	ctatcgcc	
D. Ere	aagttacg	gtaagctctttc	....95	..tg-aatattatttgaataa	-----	CGTGcATGGTGGT	tgtagttcatggattctagt	...238	..tacacaacaag	ctatcgcc	
D. Ana	aagctacg	gtaagtcagtc	....109	..tgtatttggattatgt-tta	-----	TTTTGGT	CGTGcATGGTGGT	tgtagttcatggattctagt	...254	..tgcataaccag	ctatcgcc
D. Gri	aagttacg	gtaatctttatt	....2508	..tactatgTTTTGTTTaaat-ttt	-----	TTTTGGT	CGTGcATGGTGGT	tgtagttcctgaattcta	...314	..cataaaccag	ctatcgac
D. Moj	aagctacg	gtgagcatatta	....300	..-tgatcattttttctggt	-----	CGTGcATGGTGGT	tgtagttccttacattgct	...253	..tccccgaaaag	ctatcgcc	
D. Per	aagctccg	gtaagccggtcc	....106	..-gtttggtttcatttctggt	-----	CGTGcATGGTGGT	tgtagttcatggattcgaag	...238	..accttatccaag	atctcgcc	
D. Pse	aagctccg	gtaagccggtcc	....114	..-gtttggtttcatttctggt	-----	CGTGcATGGTGGT	tgtagttcatggattcgaag	...238	..accttatccaag	atctcgcc	
D. Vir	aaactacg	gtaaggatgacg	....677	..-ttttttttccttaaatggt	-----	CGTGcATGGTGGT	tgtagttcctgaattcgaag	...268	..aactcccaaaag	ctatcgcc	
D. Wil	aagctacg	gtaag--attccat	....78	..cttttcggtttct--ctggt	aa-----	CGTGcATGGTGGT	tgtagttctctctctatat	...203	..ttctccataaag	ctatcgcc	
D. Yak	aagttacg	gtaagttctttc	....95	..tg-aatattatttgaataa	-----	CGTGcATGGTGGT	tgtagttcctgaattcgaag	...242	..tacacaacaag	ctatcgcc	
	** * **	**		*	*	*****	*	*	**	*****	

id=131853 gene=FBgn0034155 name=unc-104 segment=chr2R.12646335\_12646756\_-1 type=IN

D. Mel	aagttacg	gtaggttctttt	....202	..-aacaagcgaagatcacgcc	GCCACCAT	TACG	-----	actcaagtctcatcgccatc	-----	...143	..tacacaacaag	ctatcgcc
D. Sim	aagttacg	gtaggttctttc	....199	..-aacaagcgaagatcacgcc	GCCACCAT	TACG	-----	actcaagtctcatcgccatc	-----	...135	..tacacaacaag	ctatcgcc
D. Sec	aagttacg	gtaggttctttc	....190	..-aacaagcgaagatcacgcc	GCCACCAT	TACG	-----	actcaagtctcatcgccatc	-----	...136	..tacacaacaag	ctatcgcc
D. Ere	aagttacg	gtaagctctttc	....198	..-aacaagcgaagatcacgcc	GCCACCAT	TACG	-----	cctcaagtctcatagccatc	-----	...135	..tacacaacaag	ctatcgcc
D. Ana	aagctacg	gtaagtcagtc	....238	..-caattaacaaagatcacgcc	GCCACCAT	TACG	ccTCAAGA	-----	atcatcgccatcagaccga	...125	..tgcataaccag	ctatcgcc
D. Gri	aagttacg	gtaatctttatt	....2677	..-ttttgcaaaataaattcacc	GCCACCAT	TACG	acGTTAAAAA	ttctcatcgccatcgtgaa	-----	...144	..cataaaccag	ctatcgac
D. Moj	aagctacg	gtgagcatatta	....399	..-cgctggcaaatatcttcacc	GCCACCAT	TACG	-----	cccttgatactcatcgcca	-----	...154	..tccccgaaaag	ctatcgcc
D. Per	aagctccg	gtaagccggtcc	....207	..attgtctcgcgaagatca--cc	GCCACCAT	TACG	-----	cctcaaccctcatcgatc	-----	...137	..accttatccaag	atctcgcc
D. Pse	aagctccg	gtaagccggtcc	....215	..attgtctcgcgaagatca--cc	GCCACCAT	TACG	-----	cctcaaccctcatcgatc	-----	...137	..accttatccaag	atctcgcc
D. Vir	aaactacg	gtaaggatgacg	....795	..-aaagttggctaattcacc	GCCACCAT	TACG	-----	ctctacaagaaaactc	-----	...150	..aactcccaaaag	ctatcgcc
D. Wil	aagctacg	gtaag--attccat	....140	..-tgcctagcgaagatcaccc	GCCACCAT	TACG	-----	cctacaatcaactctcatcg	-----	...141	..ttctccataaag	ctatcgcc
D. Yak	aagttacg	gtaagttctttc	....199	..-aacaagcaaaatcacacc	GCCACCAT	TACG	-----	cctcaagtctcatagccatc	-----	...138	..tacacaacaag	ctatcgcc
	** * **	**		*****				***		**	*****	*

id=131853 gene=FBgn0034155 name=unc-104 segment=chr2R.12646335\_12646756\_-1 type=IN VIEW

Figure 537: CS=11.52



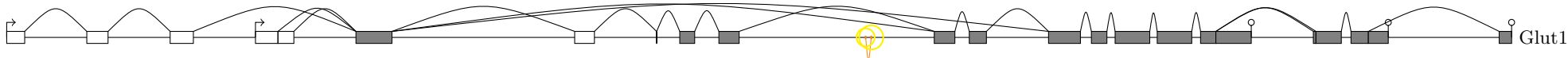
D. Mel	--atc	tttgt	actatgcccttg...191...-ctccaaggacctttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	tgaagccaccgaggacgatt...646...ttgatcatatag	cgaggata
D. Sim	--atc	tttgt	actatgcccttg...191...-ctccaaggacctttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	tgaagccaccgaggacgatt...634...ttgacatata	cgaggata
D. Sec	--atc	tttgt	actatgcccttg...191...-ctccaaggacctttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	tgaagccaccgaggacgatt...631...ttgacatata	cgaggata
D. Ere	--atc	tttgt	aatatgccctcg...191...-ctccaaggacctttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	tgaagccaccgaggacgatt...650...ttgacctatag	cgaggata
D. Ana	--gttt	gtat	actctgtcccct...194...-cccgaaggactttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	atgaagtcacgaaggat...651...aaactatttag	cgaggaga
D. Gri	atag	ttgtct	ctttcttctt--...227...aactaaaggacatttcgaga	TAGTAGA	cTGTACGGGTAAGTTGCA	atgaa-ctaagagaactgaa...862...ttgtccatttag	tggggcca
D. Moj	--aac	gaat	atctttccttca...177...aactgaaggacatttcgaga	TAGTAGA	cTGTACGGGTAAGTTGCA	atgaatttcagagaactgaa...878...ttgtccatttag	tggggaga
D. Vir	--agct	gaat	atattttcttca...198...atctgaaggacatttcgaga	TAGTAGA	cTGTACGGGTAAGTTGCA	atgaa-ctaagagaactgaa...852...ttgtccatttag	tggggaca
D. Yak	--atc	tttgt	actatgccctcg...191...-ctccaaggacctttcgagat	AGTAGA	ctGTACGGGTAAGTTGCA	tgaagccaccgaggacgatt...658...ttgacatata	cgaggata
	*		*	*****	*****	****	* **

id=16248 gene=FBgn0025593 name=Glut1 segment=chr3L.984437-985361.1 type=IN

D. Mel	--atc	tttgt	actatgcccttg...330...ccaaagttccaccttaaatt	TGTAGCT	cgTATTGCTGTACTTTATT	tagccactttatgtacaatt--...505...ttgatcatatag	cgaggata
D. Sim	--atc	tttgt	actatgcccttg...328...ccaaagttccaccttaaatt	TGTAGCT	cgTATTGCTGTACTTTATT	tagccactttatgtacaatt--...495...ttgacatata	cgaggata
D. Sec	--atc	tttgt	actatgcccttg...328...ccaaagttccaccttaaatt	TGTAGCT	caTATTGCTGTACTTTATT	tagccactttatgtacaatt--...492...ttgacatata	cgaggata
D. Ere	--atc	tttgt	aatatgccctcg...329...ccaaagttccaccttaaatt	TGTAGCT	cgTATTGCTGTACTTTATT	tagccactttatgtaccatt--...510...ttgacctatag	cgaggata
D. Ana	--gttt	gtat	actctgtcccct...345...tcaaactaccacctttaa	GTAGCT	cgTATTGCTGTACTTTATT	tagccactttatgtacaaa--...498...aaactatttag	cgaggaga
D. Gri	atag	ttgtct	ctttcttctt--...383...gcgtttcgctctatttaa	GTAGCT	cGT-TTGCTGTACTTTATT	gttcactct-aaagcaactt...705...ttgtccatttag	tggggcca
D. Moj	--aac	gaat	atctttccttca...320...gcgtttcgctctatttaa	GTAGCT	cGT-TTGCTGTACTTTATT	gttcactct-aaagcaactt...734...ttgtccatttag	tggggaga
D. Vir	--agct	gaat	atattttcttca...349...gcgtttcgctctatttaa	GTAGCT	cGT-TTGCTGTACTTTATT	gttcactct-aaagcaactt...700...ttgtccatttag	tggggaca
D. Yak	--atc	tttgt	actatgccctcg...332...ccaaagttccaccttaaatt	TGTAGCT	cgTATTGCTGTACTTTATT	tagccactttatgtaccatt--...515...ttgacatata	cgaggata
	*		*	*	*	*****	* **

id=16248 gene=FBgn0025593 name=Glut1 segment=chr3L.984437-985361.1 type=IN VIEW

Figure 538: CS=12.6



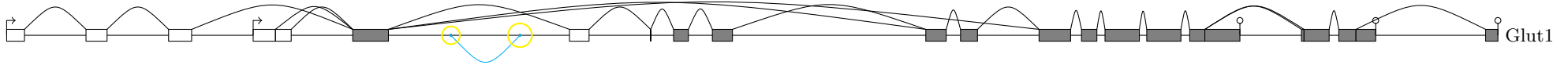
D. Mel	ctgctcga	gtacgtagaaaag...4621...ttcgagccg-tggccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	287...--gaccaccacag	tttgcaaa
D. Sim	ctgctcga	gtacgtagaaaag...4648...ttcgagccg-tggccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	260...actgac---ccacag	tttgcaaa
D. Sec	ctgctcga	gtacgtagaaaag...4648...ttcgagccg-tggccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	260...actgac---ccacag	tttgcaaa
D. Ere	ctgctcga	gtacgtagaaagc...3401...-gggagaaattggcagaaaaat	TTATTaaATGCTcACGT	atacaaatcccctatacaaa--...	1507...actgac---ccacag	tttgcaaa
D. Ana	ctgctcga	gtacgtagatag...3060...-ggaagaaattggcagaaaaat	TTATTaaATGCTcACGT	atacaaatcctttacacaaa--...	1848...--accaatcatag	tttgcaaa
D. Gri	ctgctcga	gtatgtagaatg...4500...-tgcagcccaaaagccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	408...--tcgttaccgcag	tttgcaaa
D. Moj	ctgctcga	gtatgtagaacg...4393...-ttgcagctc-aaagccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	515...--gccgtggcgag	tttgcaaa
D. Pse	ctgctcga	gtatgtatctct...2554...-ggagaaaaattggcagaaaaat	TTATTaaATGCTcACGT	atacaaatcattatacaaa--...	2354...--tacattgtacag	tttgcaaa
D. Vir	ctgctcga	gtatgtagactg...4397...-ttgcagccc-aaagccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	511...--accgtccgcag	tttgcaaa
D. Yak	ctgctcga	gtacgtagaatg...4598...-ttcgagctg-tggccataaaa	ATTTATGTTGCTTCATT	cctcaa--taattgcatagctc...	310...accac---acacag	tttgcaaa
	*****	*** **	* ** * * ***** * *** * * *			** *****

id=16227 gene=FBgn0025593 name=Glut1 segment=chr3L.974301.979771.1 type=IN

D. Mel	ctgctcga	gtacgtagaaaag...4668...tgcatagctcagtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgttctgtttgctt--...	238...--gaccaccacag	tttgcaaa
D. Sim	ctgctcga	gtacgtagaaaag...4695...tgcatagctcagtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgttctgtttgctt--...	211...actgac---ccacag	tttgcaaa
D. Sec	ctgctcga	gtacgtagaaaag...4695...tgcatagctcagtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgttctgtttgctt--...	211...actgac---ccacag	tttgcaaa
D. Ere	ctgctcga	gtacgtagaaagc...3666...-gcatcgggttgcgctgctg	ATGTatGC---ATaaAATAA	tccttttatgcccggcacia...1242...actgac---ccacag		tttgcaaa
D. Ana	ctgctcga	gtacgtagatag...3293...-tgtttcggttgcgctgctg	ATGTatGC---ATaaAATAA	tccttttatgctcggcataa...1615...--accaatcatag		tttgcaaa
D. Gri	ctgctcga	gtatgtagaatg...4547...tgcatagctcggtaaatTTT	AATGcAAGCGGtCATAAAT	-aattttgttttg--tggattcg...359...--tcgttaccgcag		tttgcaaa
D. Moj	ctgctcga	gtatgtagaacg...4440...tgcatagctcggtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgtacgg--tgccttcg...466...--gccgtggcgag		tttgcaaa
D. Pse	ctgctcga	gtatgtatctct...2908...-ccgtaacgtaacgcttgcgctg	ATGTatGC---ATaaAATAA	tccttttatgctcggcaaaa...2000...--tacattgtacag		tttgcaaa
D. Vir	ctgctcga	gtatgtagactg...4444...tgcatagctcggtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgttttg--tgccttcg...462...--accgtccgcag		tttgcaaa
D. Yak	ctgctcga	gtacgtagaatg...4645...tgcatagctcagtaaatTTT	AATGcAAGCGGtCATAAAT	-aatttcgttttgtttgctt--...	261...accac---acacag	tttgcaaa
	*****	*** **	** * ***** ** * * *			** *****

id=16227 gene=FBgn0025593 name=Glut1 segment=chr3L.974301.979771.1 type=IN VIEW

Figure 539: CS=12



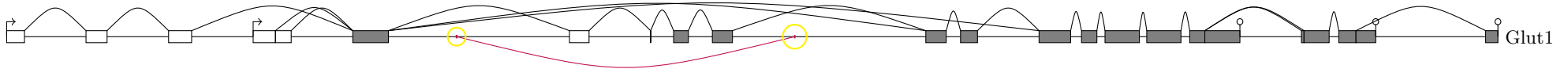
D. Mel	gtgcaccg	gtaagtttcgct...3119...	-----	ggatcctccgc-catctgaat	CGGCCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1502...	-----	cgactgaaatag	ctggccag
D. Sim	gtgcaccg	gtaagtttcgct...3143...	-----	ggatcctccgc-catctgaat	CGGCCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1485...	-----	gactgatt---ctag	ctggccag
D. Sec	gtgcaccg	gtaagtttcgct...3417...	-----	ggatcgtccgc-catctgaat	CGGCCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1487...	-----	gaacgatt---ctag	ctggccag
D. Ere	gtgcaccg	gtaagtttcgct...3153...	-----	tcctccgcacatctgaatcg-	GCCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1386...	-----	gcgactg--t---ctag	ctggccag
D. Ana	gtgcaccg	gtaagttagct...3371...	-----	caggatcgtc---tctgtgaggc-	CCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1537...	-----	tatgatt---atag	ctggccag
D. Gri	acataaaa	gtaagtacagat...3588...	-----	tacatacacgccagatcctt-	CCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1320...	-----	aatctttt---acag	ctggccac
D. Moj	gtgcaacg	gtgagtaaaatt...3385...	-----	gatatacacgcctgatcctt-	CCATcaTTTGccCACAT	ttcttgcattcatccgttg...	1523...	-----	aatctctt---gcag	ctggccac
D. Vir	gtgcaacg	gtaagtacatat...3466...	-----	gatatacacgcctgatcctt-	CCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1336...	-----	aatctttt---gcag	ctggccac
D. Wil	gtgcaccg	gtgagtaccta...3188...	-----	atgatacagatacagatcct-	CCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1720...	-----	aaactttt---gcag	ctggcctt
D. Yak	gtgcaccg	gtaagtttcgct...3186...	-----	ggatcctccgc-catctgaat	CGGCCATAaTTTGccCACAT	ttcttgcattcatccgttg...	1438...	-----	gactgtgt---gcag	ctggccag
		*	** ***	*	**** *****	*	**	*****		

id=16219 gene=FBgn0025593 name=Glut1 segment=chr3L.967538.972243.1 type=IN

D. Mel	gtgcaccg	gtaagtttcgct...4257...	g	cgggagctggcatacaattt---	ATGTGCGAAaTATGG-cGCCG	cacacctttactttgcgct...	365...	-----	cgactgaaatag	ctggccag
D. Sim	gtgcaccg	gtaagtttcgct...4289...	g	cgggagctggcatacaattt---	ATGTGCGAAaTATGG-cGCCG	cacacctttactttgcgct...	340...	-----	gactgatt---ctag	ctggccag
D. Sec	gtgcaccg	gtaagtttcgct...4565...	g	cgggagctggcatacaattt---	ATGTGCGAAaTATGGcGCCG	cacacctttactttgcgct...	339...	-----	gaacgatt---ctag	ctggccag
D. Ere	gtgcaccg	gtaagtttcgct...4256...	g	cgggagctggcatacaattt---	ATGTGCGAAaTATGG-c	gcccgcacacctttactttt---	285...	-----	gcgactg--t---ctag	ctggccag
D. Ana	gtgcaccg	gtaagttagct...4597...	g	cgggagctggcatacaattt---	ATGTGCGAAaTATGG-c	gcccgcacacctttactttt---	313...	-----	tatgatt---atag	ctggccag
D. Gri	acataaaa	gtaagtacagat...4834...	g	actagccgcacaatttatgt	ATGTGCGAAaTATGG-c	gccaca---acacattttacc-	76...	-----	aatctttt---acag	ctggccac
D. Moj	gtgcaacg	gtgagtaaaatt...4792...	g	actgcccacacaatttatgt	ATGTGCGAAaTATGG-c	gccgca---tcttaattttacc-	118...	-----	aatctctt---gcag	ctggccac
D. Vir	gtgcaacg	gtaagtacatat...4688...	g	tcttgcgcacaatttatgc	ATGTGCGAAaTATGG-c	gccaca---acacattttacc-	116...	-----	aatctttt---gcag	ctggccac
D. Wil	gtgcaccg	gtgagtaccta...4748...	g	ctggactggctacaattt---	ATGTGCGAAaTATGG-c	gcctca---tctt-attttacct...	162...	-----	aaactttt---gcag	ctggcctt
D. Yak	gtgcaccg	gtaagtttcgct...4303...	g	cgggcgtggcatacaattt---	ATGTGCGAAaTATGG-cGCCG	cacacctttactttgcgct...	322...	-----	gactgtgt---gcag	ctggccag
		*	** ***	** ***** *	*****	**** **	***	*	**	*****

id=16219 gene=FBgn0025593 name=Glut1 segment=chr3L.967538.972243.1 type=IN VIEW

Figure 540: CS=9.6



D. Mel	gtgcaccg	gtaagtttcgct...3170...----	catccgctggatggagcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtacgcaa...1456...----	cgactgaaatag	ctggccag
D. Sim	gtgcaccg	gtaagtttcgct...3194...----	catccgctggatggagcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtacgcaa...1439...----	gactgatt---ctag	ctggccag
D. Sec	gtgcaccg	gtaagtttcgct...3468...----	catccgctggatggagcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtacgcaa...1441...----	gaacgatt---ctag	ctggccag
D. Ere	gtgcaccg	gtaagtttcgct...3201...----	catccgctggatggagcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtgacgcaa...1340...g	cgactg--t---ctag	ctggccag
D. Ana	gtgcaccg	gtaagttatgct...3430...----	g-gctctggggctggggcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtgcctctct...1479...--	tatggatt---atag	ctggccag
D. Gri	acataaaa	gtaagtacagat...3629...----	tacattcatcgac--acacggc	CATGAAAGGtc	ATTA	--gtgtgctgctcagtgctgtgt...1280...--	aatctttt---acag	ctggccac
D. Moj	gtgcaacg	gtgagtaaaatt...3426...----	tacattcatcgac--aggcggc	CATGAAAGGtc	ATTA	--gtgtgctgctgtgtgctcat...1483...--	aatctctt---gcag	ctggccac
D. Pse	ggataaac	gtgagtcctcc...3380...----	gcgagtggggc--agggcggc	CATGAAAGGtc	ATTA	--gtgtatgctgtatgcacac...1529...----	tcgttggagaag	cctgccac
D. Vir	gtgcaacg	gtaagtacatat...3507...----	tacattcatcgac--aggcggc	CATGAAAGGtc	ATTA	--gtgtgctcctctcactctgt...1296...--	aatctttt---gcag	ctggccac
D. Wil	gtgcaccg	gtgagtacctta...3227...ctt	gcattcatcgac--gaggc	CATGAAAGGtc	ATTA	gagtgctgtgtgtgtgtgtgt...1682...--	aaactttt---gcag	ctggccctt
D. Yak	gtgcaccg	gtaagtttcgct...3237...----	catccgctggatggagcggc	CATGAAAGGtc	ATTA	--gtgtgtgctgtgtacgcaa...1392...--	gactgtgt---gcag	ctggccag
	*	** ***	*	* *****	***	*	*	** ***

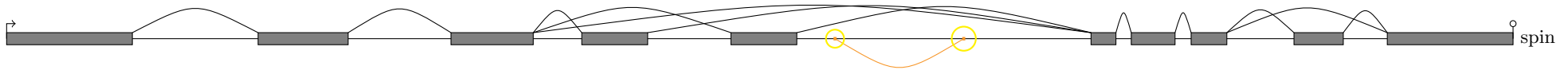
id=16219 gene=FBgn0025593 name=Glut1 segment=chr3L.967538\_972243.1 type=IN

D. Mel	ctgctcga	gtacgtagaag...3543...cgg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1369...--	gaccaccacag	tttgaaa	
D. Sim	ctgctcga	gtacgtagaag...3586...cgg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1326...act	gac---ccacag	tttgaaa	
D. Sec	ctgctcga	gtacgtagaag...3597...cgg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1315...act	gac---ccacag	tttgaaa	
D. Ere	ctgctcga	gtacgtagaagc...3680...tgg	ctgatgatgcataaaa	TAATCCTTTTATG	ccc-----	ggcacaacaatgtccgt...1232...act	gac---ccacag	tttgaaa	
D. Ana	ctgctcga	gtacgtagatag...3307...tcg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1605...--	accacatcatag	tttgaaa	
D. Gri	ctgctcga	gtatgtagaat...3159...ttg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	agcacaacaatgtccgt...1753...--	tcgttaccgcag	tttgaaa	
D. Moj	ctgctcga	gtatgtagaacg...2970...ttg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1942...--	gacctggcgcag	tttgaaa	
D. Pse	ctgctcga	gtatgtatctct...2922...tcg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1990...--	tacattgtacag	tttgaaa	
D. Vir	ctgctcga	gtatgtagactg...2985...ttg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1927...--	accgtgccgcag	tttgaaa	
D. Wil	ctgctcga	gtatgtaaaaa...2504...ctg	ctgatgatgcataaaa	TAATCCTTTTATG	ctccagctctagcacaaca	-----	2408...--	tgatgatggcag	tttgaaa
D. Yak	ctgctcga	gtacgtagaatg...3548...acg	ctgatgatgcataaaa	TAATCCTTTTATG	ctc-----	ggcacaacaatgtccgt...1364...acc	acacag	tttgaaa	
	*****	*** ***	*****	*	*** *****	**	*****		

id=16227 gene=FBgn0025593 name=Glut1 segment=chr3L.974301\_979771.1 type=IN VIEW

Figure 541: CS=11.88





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D.Mel tactgctg gtaagccaagtt...96...----acagaaaaactttagttata-GCATTAACTTTTACTGTTATAATgagtaacacacacg-gcacia-----..2159...ttgttatatag tatgtggt
D.Sim tactgctg gtaagccaagtt...96...----acagaaaaaccttagttata-GCATTAACTTTTACTGTTATAATgagtaacacacgcacacaca-----..2205...ttgttacatag tatgtggt
D.Sec tactgctg gtaagccaagtt...96...----acagaaaaaccttagttata-GCATTAACTTTTACTGTTATAATgagtaacacacacacacaca-----..2197...ttgttacatag tatgtggt
D.Ere tactgctg gtaagccaagtt...93...----catag-aaaccttagttttaGCCATTAACTTTTACTGTTATAAC-----acactcg-gcacaacaacaac---..2127...ttgttatacag tacgtggt
D.Ana tcctgctg gtaagcatccc...566...----gtaattacacactgagatta--ATTAACTTTTACTGTTATAACAAAAT-----cctcacaatgcctgccaat..1002...tctcttctgtag tatgtggt
D.Gri ttttactg gtaagacaaca...176...tcgttttc-----atgtgtaaaaatTATTAATTTACTGTTATAATAAG-cacacacacc-acgcattaaa-----..1476...tcttttcatag tatgtcgt
D.Per tcttgctg gtaagccgagag...102...----gtacgacacgtaacttaaat-ATTAACTTTTACTGTTATAATgag-aacactatcaccacccc-----..2409...ctcgtgatccag tatgtagt
D.Pse tcttgctg gtaagccgagag...102...----gtacgacacgtaacttaaat-ATTAACTTTTACTGTTATAATgag-aacactatcaccacccc-----..2422...cccgtgatgcag tatgtagt
D.Vir ttttgctg gtaagcattagc...544...----tttcgataacaatttgataAATTATTAACtaTTTACTGTTATAA-cacgcacacacacacacaca-----..1654...acccttatgcag tacgtggt
D.Yak tactgctg gtaagccaagta...104...-----tcttagtttagccaataacTTTTACTGTTATAATgagtaacacactct-gcacia-----..2157...tctgatacacag tatgtggt
* * ** ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=46131 gene=FBgn0086676 name=spin segment=chr2R.12021189.12023531.1 type=IN

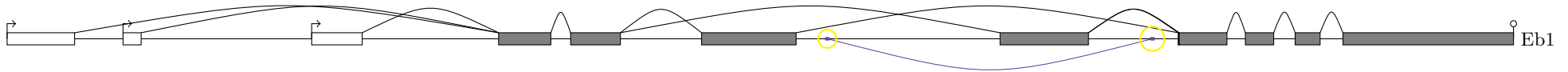
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D.Mel tactgctg gtaagccaagtt...1709...-acgcatcgtacat-acctgta-----GTTATAACAGTAAAAA-TTAATGT-ggccaacaacagtttagcgc---..546...ttgttatatag tatgtggt
D.Sim tactgctg gtaagccaagtt...1756...cacgcatcgtat-c-acctgta-----GTTATAACAGTAAAAA-TTAATGT-ggccaacaacagtttagcgc---..545...ttgttacatag tatgtggt
D.Sec tactgctg gtaagccaagtt...1748...cacgcatcgtat-t-acctgta-----GTTATAACAGTAAAAA-TTAATGT-ggccaacaacagtttagcgc---..545...ttgttacatag tatgtggt
D.Ere tactgctg gtaagccaagtt...1674...cacgcatcgtat-c-acccgta-----GTTATAACAGTAAAAA-TTAATGTGGC-caacaacagtttagcagaca...544...ttgttatacag tacgtggt
D.Ana tcctgctg gtaagcatccc...1119...caccactg-attc-acatggtATTTGTTATAACAGTAAAAA-TTAAT---gcctccaacagtttagacct---..449...tctcttctgtag tatgtggt
D.Gri ttttactg gtaagacaaca...1251...catac-tcacacgc-ctactca--TTTGATTATAACAGTAAAAAAGTTAATGtgtagtagtattgattttt-----..400...tcttttcatag tatgtcgt
D.Per tcttgctg gtaagccgagag...1978...cacac-acactcac-tattgta-----ATTATAACAGTAAAAA-TTAAT-tttgcttgaaagaaactcga-----..533...ctcgtgatccag tatgtagt
D.Pse tcttgctg gtaagccgagag...1988...cacac-acacacac-tattgta-----ATTATAACAGTAAAAA-TTAAT-tttgcttgaaagaaactcga-----..536...cccgtgatgcag tatgtagt
D.Vir ttttgctg gtaagcattagc...1865...cacgctgcactc-gcctgc-----TTATAACAGTAAACAGTTAAAtaTAGTTgattattatattttgtaat...331...acccttatgcag tacgtggt
D.Yak tactgctg gtaagccaagta...1709...--cgcatcgtacccacactgta-----GTTATAACAGTAAAAA-cttaatgtggccaacaacag-----..552...tctgatacacag tatgtggt
* * ** ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=46131 gene=FBgn0086676 name=spin segment=chr2R.12021189.12023531.1 type=IN VIEW

Figure 543: CS=15.6



D.Me1	ttcaa-ctg	gtacggttctgt-----	...43...	ttcatttgagttgcaagcg--	AACGAACGTGAAGCACGCAGCG	gaactaggcaaaactgggat...	547...	ttttacttttag	attataacc
D.Sim	ttcaa-ctg	gtacggttctgt-----	...43...	ttcatttgagttgcaagcg--	AACGAACGTGAAGCACGCAGCG	ggaaccaggcaaaactggga-	...560...	ttttacttttag	attataacc
D.Sec	ttcaa-ctg	gtacggttctgt-----	...43...	ttcatttgagttgcaagcg--	AACGAACGTGAAGCACGCAGCG	ggaaccaggcaaaactggga-	...551...	ttttacttttag	attataacc
D.Ere	ttcaa-ctg	gtacggttctgt-----	...45...	-catttcatttgcaagcaaa-	CGAACGTGAAGCACGCAGCG	ggaaccaggcaaaactggga-	...657...	ttttacttttag	attataacc
D.Ana	-gaacacgg	gtatgggcaag-----	...57...	-tcattgggctcctggaacga-	ACGAACGTGAAGCACGC	---agtggggctatgccaagaca...	296...	atthcttttag	attataacc
D.Moj	-----tgg	ttttgaaattgtaata...	100...	---aaaattaatcgaaaagtga-	AACGAACGTGAAGCACGC	gga-	...366...	ttttacttttag	attataacc
D.Per	tgaac-cgg	gtatggacttgt-----	...72...	---cattcaagttccaagatgcg	AGCGAACGTGAAGCACGT	---ggcgaccaccaccaaccaa...	381...	ttttacttttag	ataatacc
D.Pse	tgaac-cgg	gtatggacttgt-----	...72...	---catccaagttccaagatgcg	AGCGAACGTGAAGCACGT	---ggcgaccaccaccaaccaa...	383...	ttttacttttag	ataatacc
D.Vir	ccaaa-ctg	gtatgggctcca-----	...134...	---aaaaagaaaaaaacccaaa	AGCGAACGTGAAGCACGC	gga-	...396...	ttttacttttag	ataatacc
D.Wil	accaaagg	gtaaaaactga-----	...112...	-ttggtcgctttaaagcgcgg-	AACGAACGTGAAGCACGC	-----cacgcgcgataaaagtcat...	1098...	ttttacttttag	ataatacc
D.Yak	ttcaa-ctg	gtacggttctgt-----	...45...	-catttgagttgcaagggaa-	CGAACGTGAAGCACGCAGCG	gatccaggcaaaactgggat...	686...	ttttacttttag	attataacc

\*\*\*\*\*

id=5454 gene=FBgn0027066 name=Eb1 segment=chr2R.2641009\_2641684.1 type=IN

D.Me1	gaagccca	gtatgttttgg...	133...	-----aagcacgaatagaagaca-aa	TGCTGT	ctGTGCTTCACGTTTGT	-gattccttatgctttatac...	42...	tgccattccag	cagtatcc
D.Sim	gaagccca	gtatgttttgg...	158...	-----agcacgaatagaagacacaa-	GCTGT	ctGTGCTTCACGTTTGT	-gattccttatgctttatac...	42...	tgaccattccag	cagtatcc
D.Sec	gaagccca	gtatgttttgg...	158...	-----agcacgaatagaagacacaa-	GCTGT	ctGTGCTTCACGTTTGT	-gattccttatgctttatac...	42...	tgaccattccag	cagtatcc
D.Ere	gaagccca	gtatgttttgg...	159...	-----agcacgaaagaagacacaa-	GCTGT	ctGTGCTTCACGTTTGT	-ctgattccttatgctttatac...	38...	tgccattcaag	cagtctcc
D.Ana	gaagccca	gtatgtctgatt...	184...	acagctaaccggctggtcga-	-----	CGTGCTTCACGTTTGT	ctagtgtccgagcttcgga-	...39...	cgccattcaag	cagtctca
D.Moj	aaagccca	gtatgttctct...	273...	-----cgctacttgaagcccaacca	TTG	aCGTGCTTCACGTTTGT	-aaatactcaacatagattcc...	78...	tcgcaatacaag	tagtttct
D.Per	aaagccca	gtatgtttggt...	222...	gaaacgctctcgcgtttcga-	-----	ACGTGCTTCACGTTTGT	-aaatctgtctcgaaaggaaa...	73...	cgccatttaag	cagtctcc
D.Pse	aaagccca	gtatgtttggt...	223...	gaaacgctctcgcgtttcga-	-----	ACGTGCTTCACGTTTGT	-aaatctgtctcgaaaggaaa...	73...	cgccatttaag	cagtctcc
D.Vir	aaagccca	gtaggttctct...	195...	-----gccaaatgaagccagcca	TTG	aCGTGCTTCACGTTTGT	-aaataatctagaccaca...	93...	atccaatcaag	cagtctct
D.Wil	aaagccca	gtatgtttggt...	225...	-----caaaactcgtggcaaatca-	-----	CGTGCTTCACGTTTGT	-aaataatagccaccacacata...	92...	ttgtccgaaag	cagtctcc
D.Yak	gaagccta	gtatgtttggt...	150...	-----cttcacaaaatgaagacaca-	CGTGT	ctGTGCTTCACGTTTGT	-ccgattccttatggttctat-	...40...	tgccattcaag	cagtctcc

\*\*\*\*\*

id=5456 gene=FBgn0027066 name=Eb1 segment=chr2R.2641944\_2642206.1 type=IN VIEW

Figure 544: CS=22.66





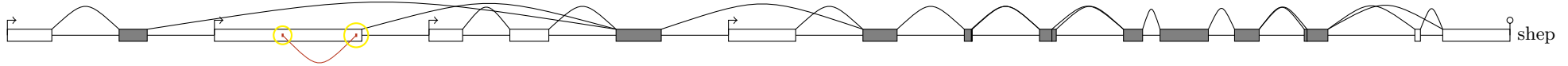
D.Me1	ccgacttc	gtaagtacatgg...1047...atTTTtacaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	gctttat-gcgtcgctctgat...182...ttccgcccgag	gagaagta	
D.Sec	ccgacttc	gtaagtacatgg...1087...atTTTtacaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	gctttat-gcgtcgctctgat...182...ttccgcccgag	gagaagta	
D.Ere	ccgacttc	gtaagtacatgg...1072...gtTTTtacaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	gctttat-gcgtcgctctgat...192...ttccgcccgag	gagaagta	
D.Ana	ccgacttt	gtaagtaccagc...856...ctTTTtaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	gctccatggcgtcgctctga...182...cctaaccacag	gaaaagta	
D.Gri	ccgatttc	gtaagtacatcaca...993...tactTTTtaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	aggcttcttttagc-cattgg...201...cccgtttcgcag	gagaagta	
D.Moj	ccgatttc	gtaagtaccct...957...tatatttaggccacgccgat	TTGCCGTCAGAGAGTGA	ATCCcttGGGATagTCGCTCTGATGGCAG	gtactca-gtggcatat...153...gggttcccgcag	gagaagta	
D.Per	ctgacttc	gtaagtaccct...728...ctattTTtaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	agctct--gcgtcgctctgat...174...tatgTTTTgcag	gagaagta	
D.Pse	ccgacttc	gtaagtaccct...728...ctattTTtaggccacgccgat	TTGCCGTCAGAGAGTGA	-----	agctct--gcgtcgctctgat...174...tatgTTTTgcag	gagaagta	
D.Vir	cagatttc	gtaagtaccatc...1266...gttatttagccacgccgat	TTGCCGTCAGAGAGTGA	-----	aggcttt-tggcgtgtgcg...199...ttgcttcgcag	gagaagta	
D.Yak	ccgacttc	gtaagtacatgg...1071...gtTTTtacaggccacgccgat	TTGCCGTCAGAGAGTGA	GCTTtAAGGgTCGCTCTGATGGCAG	gtactca-gtggcacagca...172...ttccgcccgag	gagaagta	
	* ** **	*****	*	***** *****	*	*	*** ** ** **

id=8572 gene=FBgn0015288 name=Rpl22 segment=chrX.657025.658334.-1 type=IN

D.Me1	ccgacttc	gtaagtacatgg...1074...-cagagagtg-agctttat	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...157...ttccgcccgag	gagaagta
D.Sec	ccgacttc	gtaagtacatgg...1114...-cagagagtg-agctttat	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...157...ttccgcccgag	gagaagta
D.Ere	ccgacttc	gtaagtacatgg...1099...-cagagagtg-agctttat	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...167...ttccgcccgag	gagaagta
D.Ana	ccgacttt	gtaagtaccagc...884...-agagagtg-agctccatg	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...156...cctaaccacag	gaaaagta
D.Gri	ccgatttc	gtaagtacatcaca...1030...-aggcttcttttagccattgg	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...166...cccgtttcgcag	gagaagta
D.Moj	ccgatttc	gtaagtaccct...957...-tatatttaggccacgccgat	TTGCCGTCAGAGAGTGA	GTGAaATCCcttGGGATag	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...153...gggttcccgcag	gagaagta
D.Per	ctgacttc	gtaagtaccct...754...tcagagagtgaagctct	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...150...tatgTTTTgcag	gagaagta
D.Pse	ccgacttc	gtaagtaccct...754...tcagagagtgaagctct	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...150...tatgTTTTgcag	gagaagta
D.Vir	cagatttc	gtaagtaccatc...1299...-gtgaaggccttttggcctg	-----gcg-----	-----	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...168...ttgcttcgcag	gagaagta
D.Yak	ccgacttc	gtaagtacatgg...1071...-gtTTTtacaggccacgccgat	TTGCCGTCAGAGAGTGA	gaGTGAGCTTtAAGGg	TCGCTCTGATGGCAG	gtactcagtggcacagcaa...172...ttccgcccgag	gagaagta
	* ** **	*****			*****	*	*** ** ** **

id=8572 gene=FBgn0015288 name=Rpl22 segment=chrX.657025.658334.-1 type=IN VIEW

Figure 545: CS=12



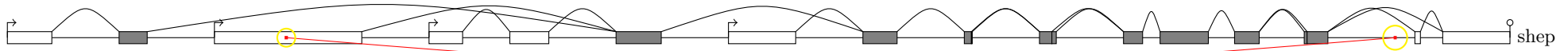
D.Mel	caagttca	gttacaaacgcc--...1352...aacaacaacatccgtagcag	<b>CAGCAGCAGCaGCGGCGG</b>	-----caggagcagcaacagtagca...561...cctgtgcccggtg	gtgagtgt	
D.Sim	caagttca	gttacaaacgcc--...1540...agcagcagcagcaacagcag	<b>CAGCAtCAGCaGCGGCGG</b>	-----caggagcagcaacagtagca...540...cctgtgcccggtg	gtgagtgt	
D.Sec	caagttca	gttacaaacgcc--...1348...agcagcagcagcagcagtag	<b>CAGCAtCAGCaGCGGCGG</b>	-----caggatcagcaacagtagca...531...cctgtgcccggtg	gtgagtgt	
D.Ere	caagttca	gttacaaacgcc--...1364...agcagcagcagcaacagcag	<b>CAGCAtCAGCaGCGGCGG</b>	-----caggagcaacaacagtagca...528...cccggtgcccggtg	gtgagtgt	
D.Ana	caagttca	gttacaaacgcc--...1417...ctcgaaacatcggaacag	<b>CAGCAcCAGCGGCGGC</b>	-----aacagctacaacataccag...485...cctgtgcccggtg	gtaagtac	
D.Gri	caagttaa	gt--taaacgcctt...1969...aacggcaacagtagcaacag	<b>CAACAGCAGCGGCGGCA</b>	aacgtagaagcagcagcagc-----...514...cccggtgcccggtg	gtaagtcc	
D.Moj	caagttaa	gt--taaacgcctt...1751...agcagtagcagcagcaaca	<b>CAACAGCAGCaGCGGCGG</b>	-----aacaacagcaccacaacac...494...cccggtgcccggtg	gtaagtcc	
D.Per	caagttaa	gttgtaaacacc--...1323...aacaatttggccctgaag	<b>AGCAaCAGCAaCGGCAG</b>	-----cagcagcagcaacagcaaca...736...cctgtgcccggtg	gtgagtcc	
D.Vir	caagttaa	gt--taaacgcctt...1840...aacagcaacaacacagcag	<b>CAGCAGCAGCaGCGGCGG</b>	-----aaacgtagcagcaacaacag...542...cccggtgcccggtg	gtaagtcc	
D.Yak	caagttca	gttacaaacgcc--...1411...agcagcagcagcagccgcat	<b>CAGCAGCGGCGG</b>	-----aggagcaacaacagtagcag...572...cctgtgcccggtg	gtgagtgt	
	***** *	** **** **	*	* **** **	* ** **	** ***** ** ** **

id=97785 gene=FBgn0052423 name=shep segment=chr3L\_5264440\_5266434\_-1 type=AN

D.Mel	caagttca	gttacaaacgcc--...1904...--ct--acggactgccgaccgcca	<b>CGGCGG</b>	<b>CcGCTGCTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtgagtgt
D.Sim	caagttca	gttacaaacgcc--...2071...--ct--acggactgccgaccgcca	<b>CGGCGG</b>	<b>CcGCTGcTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtgagtgt
D.Sec	caagttca	gttacaaacgcc--...1870...--ct--acggactgccgaccgcca	<b>CGGCGG</b>	<b>CcGCTGcTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtgagtgt
D.Ere	caagttca	gttacaaacgcc--...1883...--ct--acggactgccgaccgcca	<b>CGGCGG</b>	<b>CcGCTGcTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtgagtgt
D.Ana	caagttca	gttacaaacgcc--...1893...-----acggactgccgaccgcca	<b>GCCG</b>	<b>CCGCTGcTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtaagtac
D.Gri	caagttaa	gt--taaacgcctt...2477...--t--acggctctgcctacggctgc	<b>TGCTG</b>	<b>CCGCTGCTGTTG</b>	---gccatccctgtgtttactgtgtgatacctgtgcccggtg	gtaagtcc
D.Moj	caagttaa	gt--taaacgcctt...2239...--cct--acggctctgccaactgtc	<b>GCTGCCG</b>	<b>CcGCTGCTGTTG</b>	---gccatccctgtgtctactgtgtgatacctgtgcccggtg	gtaagtcc
D.Per	caagttaa	gttgtaaacacc--...2048...gacctgaacgg--tgctacgg--	<b>CTGCCG</b>	<b>TGCTGcTGTT</b>	gtgggcatccctgtgtctactgtgtgatacctgtgcccggtg	gtgagtcc
D.Vir	caagttaa	gt--taaacgcctt...2376...--cct--acggctctgccaactgtc	<b>GCTGCCG</b>	<b>CcGCTGCTGTTG</b>	---gccatccctgtgtctactgtgtgatacctgtgcccggtg	gtaagtcc
D.Yak	caagttca	gttacaaacgcc--...1971...-----acggactgccgaccgcca	<b>GCCG</b>	<b>CCGCTGCTGTTG</b>	gtgggcatccctgcgtctactgcgtgatacctgtgcccggtg	gtgagtgt
	***** *	** **** **	**** **	* ** * *****	* ***** ** ***** *****	** ** **

id=97785 gene=FBgn0052423 name=shep segment=chr3L\_5264440\_5266434\_-1 type=AN VIEW

Figure 546: CS=6



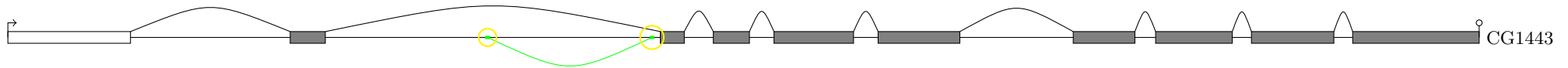
D. Mel	caagttca	gttacaacgcc...1356...----	acaacatccgtagcagcagc	----	AGCAGcAGCGgcGGCAggAGCAGCAACAGtaGCAGcAGCAGCAAAGTA	Agcagcaacatcgaaaggagc	-----	..526...cctgtgcccg	gtgagtg	
D. Sim	caagttca	gttacaacgcc...1517...-----	tccgtagccacaacatcaac	AGCAGcaGCAGcaGCAACAGCAGCAGta	AGCAGcGGGGCAGgAGCA	gcaacagtagcagcagcaca	-----	..532...cctgtgcccg	gtgagtg	
D. Sec	caagttca	gttacaacgcc...1373...-----	tcagcagcggcggcaggatc	-----	AGCAACAGtaGCAGCAGCACAAGCAGCA	-----	acatcgaaaaagcagcatc	..496...cctgtgcccg	gtgagtg	
D. Ere	caagttca	gttacaacgcc...1335...----	acaacaacatccgtagccac	-----	AACAGCaGCAGcaGCAGCAGCAACAGCAGcAGCATcAGCAGcGGCG	gcaggagcaacaacagtagc	-----	..529...cccgtgcccg	gtgagtg	
D. Ana	caagttca	gttacaacgcc...1412...-----	acagactcgcaaacatcggc	-----	AACAGCAGCaCAGC	-----	ggcggcaacagctacaacat	-----	..491...cctgtgcccg	gtaagtac
D. Gri	caagttca	gttacaacgcc...1771...----	taatttcagtcagctcagc	-----	AGCAACAGcaGCAGcaGCAACAACAACAGCAACAA	-----	caacaacagcagcagcagca	-----	..694...cccgtgcccg	gtaagtac
D. Moj	caagttca	gttacaacgcc...1593...acta	taatttcagtcagccaga	-----	GCAGctACAGgaGCAGcaGCAGCAACAGcaGCAGCAACAA	-----	caacaacagcagcagcagca	-----	..631...cccgtgcccg	gtaagtac
D. Vir	caagttca	gttacaacgcc...1683...----	atcagccagagcagctacta	-----	GAAAGcaGCAGcaGCAACAACAACAGCAGCAGCAG	-----	cagcagcagcagcagcagcagc	-----	..682...cccgtgcccg	gtaagtac
D. Wil	caagttca	gttacaacgcc...1471...----	agcaacagcaacaacaacaa	-----	CAACAGCAGCAGCAGCAACAA	-----	caacagcaattgctcaaga	-----	..655...cccgtgcccg	gtaagtac
D. Yak	caagttca	gttacaacgcc...1370...----	acatccgtagccacaacagc	-----	AGCAGcaGCAGcaGCAA	-----	caacagcagcagcagcagc	-----	..609...cctgtgcccg	gtgagtg
*****	*		*		*	*	*	*	** ***** **	** **

id=97785 gene=FBgn0052423 name=shep segment=chr3L.5264440.5266434\_-1 type=AN

D. Mel	ttcgcgag	gtgagtgaagtc...445...----	tgactatcatcggcctcatg	TGTTTTGTgTGCTCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	--tcagatctgttcattaccga	...98...tttcttatatag	tataggta		
D. Sim	ttcgcgag	gtgagtgaagtc...431...----	tgacaatcatcggcctcatg	TGTTTTGTgTGCTCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	--tcagatctgttcattacttt	...92...tttcttatatag	tatagtta		
D. Sec	ttcgcgag	gtgagtgaagtc...455...----	tcggcttcatgtgtttgtg	-----	TGCTctGC	TTGtTGTTGcTTGCCCTGTTTGCT	...92...tttcttatatag	tatagtta		
D. Ere	ttcgcgag	gtgagtgaagtc...492...----	tgacaatcatcggcctcatg	TGTTTTGTgTGCTCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	--tgcttcaaatctgttcatta	-----	..102...tttcttatatag	tatagtta	
D. Ana	ttcgcgag	gtgagtgaagtc...415...gtg	ttttctgtgctctgct	-----	GTTGtTGCTTGcTGTT	--tgcttccgatctgtttatta	-----	..107...tttcttatatag	tatagtta	
D. Gri	ttcgcgag	gtgagtgaagtc...505...----	tacacttctcttcattcgtt	TTGTgTGCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	--tacaatctgttcattgactct	...100...ttgcatacttag	tatagtta		
D. Moj	ttcgcgag	gtgagtgaagtc...438...----	ttttttcttttcattcgtt	TTGTgTGCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	ctacaatctgttcattgct	---	..125...tcgcatacttag	tatagtta	
D. Vir	ttcgcgag	gtgagtgaagtc...403...----	cacatttcttttcattcgtt	TTGTgTGCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	gcttacaatctgttcattgct	-----	..111...ttgcatacttag	tatagtta	
D. Wil	ttcgcgag	gtgagtgaagtc...986...----	catcttggttttgtgtgtt	TTGTgTGCTGC	TTGTTGTTGCTTGCCCTGTTTGCT	-----	cttgcctgcctgtttgctat	---	..261...ttgcatacttag	tatagtta
D. Yak	ttcgcgag	gtgagtgaagtc...479...----	tgtgctctgctttgtgctg	-----	TGCTCTGCTTTGTTTGCT	--taagatctgttcattaccga	...102...tttcttatatag	tatagtta		
*****	*****	*	*	**		*****		* * ** **	***** **	

id=97811 gene=FBgn0052423 name=shep segment=chr3L.5154909.5155555\_-1 type=I3 VIEW

Figure 547: CS=10.8



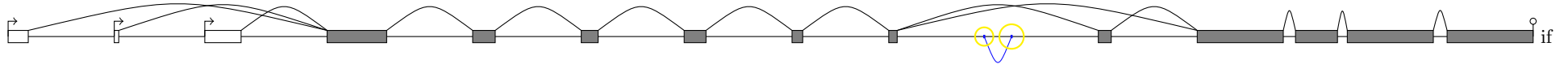
D. Mel	cgtcaagg	gtaagtggccag	..645	.....	tgcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1368	...	tctcttacc-cag	acgagtcg
D. Sim	cgtgaagg	gtaagtggccag	..638	.....	tgcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1344	...	tctcttccc-cag	acgagtcg
D. Sec	cgtgaagg	gtaagtggccag	..638	.....	tgcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1346	...	tctcttccc-cag	acgagtcg
D. Ere	cgtaaagg	gtgagtggccag	..647	.....	tgcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1307	...	tctcttccc-cag	acgagtcg
D. Ana	cgtcaagg	gtgagtggccag	..631	.....	tgcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1479	...	ctcttccctcag	acgagtcg
D. Gri	catacaag	gtgagtggccag	..615	.....	tgagaagtgcgcttgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1532	...	tgatctttgcag	atgagtcg
D. Moj	cacaaagg	gtgagtggccag	..776	.....	tgagaagtgcgcttgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..960	...	tgatctttgcag	atgagtcg
D. Per	cgtgaagg	gtgagtggccag	..963	.....	ggcgaagtgcgcttgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1904	...	cttgggtacag	acgagtcg
D. Pse	cgtgaagg	gtgagtggccag	..879	.....	ggcgaagtgcgcttgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1668	...	cttgggtacag	acgagtcg
D. Vir	cacacagg	gtgagtggccag	..601	.....	tgagaagtgcgcttgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1032	...	tgatctttgcag	atgagtcg
D. Wil	cggacagg	gtgagttcacac	..569	..g	cgcgatgagaagtgcgctt	CAGT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1139	...	cttccccaatag	atgagtcg
D. Yak	tgtgaagg	gtgagtggccag	..677	.....	agcaaagtgcgctcgagttg	CATT	AAGC	CAATTAGC	ataggtaaacaaaacatttg	..1341	...	tctcttccc-cag	acgagtcg
		* *	** ***		*	*****	*****	*****	*****			**	* *****

id=79980 gene=FBgn0039620 name=CG1443 segment=chr3R\_24821263\_24823356\_-1 type=IN

D. Mel	cgtcaagg	gtaagtggccag	..2021	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttacc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Sim	cgtgaagg	gtaagtggccag	..1990	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Sec	cgtgaagg	gtaagtggccag	..1992	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Ere	cgtaaagg	gtgagtggccag	..1962	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Ana	cgtcaagg	gtgagtggccag	..2117	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Gri	catacaag	gtgagtggccag	..2158	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Moj	cacaaagg	gtgagtggccag	..1747	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Per	cgtgaagg	gtgagtggccag	..2851	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Pse	cgtgaagg	gtgagtggccag	..2531	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Vir	cacacagg	gtgagtggccag	..1644	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Wil	cggacagg	gtgagttcacac	..1719	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
D. Yak	tgtgaagg	gtgagtggccag	..2026	...	caatgatgcgcatcaaattg	GCTAATTGTTAATG	actgtttgattgatctcttccc	-----	-----	-----	-----	-----	-----	acgagtcg
		* *	** ***		*	*****	*****	*****	*****			**	* *****	

id=79980 gene=FBgn0039620 name=CG1443 segment=chr3R\_24821263\_24823356\_-1 type=IN VIEW

Figure 548: CS=7.2



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D.Mel ttggcaag gtaag-tgcacgt...1033...---tcatatatgt-acatatattg-----TGTGTCGAGTTGTgtccttc-aattcgtttaac-----...631...accataaaaag gacaaacc
D.Sim ttggcaag gtaag-tgcacgt...2628...---ccgcaactgt-atgtatatgg-----TGTGTCGAGTTGTgtcctcc-aattcgtttaac-----...626...aaccataaaaag gacaaacc
D.Sec ttggcaag gtaag-tgcacgt...954...---acattcatat-atgtatatgg-----TGTGTCGAGTTGTgtcctcc-aattcgtttaac-----...637...aaccataaaaag gacaaacc
D.Ere ttggcaag gtaag-tgcacgt...950...---cattattattatgtatatgg-----TGTGTCGAGTTGTgtcctcc-aattcgtttaac-----...598...aaccataaaaag gacaaacc
D.Ana ctggcaag gtaag-tgcacgt...1220...---agtaaaactccttagctattg-----TGTGTCGAGTTGTgtcaaccaaatcgtttaa-----...625...aaccataaaaag gacaaacc
D.Gri ttggcaag gtaaaactgcacg...932...aagtcatgatttt---tttctag-----TGTGTCGAGTTGTtctgttg-ctaccatccaaa-----...624...ataaaaaaaaag gacaaacc
D.Vir ctggcaag gtaag-tgaacgt...1142...---tataagtaatgagttaatatTATTtagTGTGTCGAGTTGTgtgtgttg-ttatcatccaaa-----...747...cataaataaaaag gacaaacc
D.Wil ttggcaag gtaag-tgcacgt...1101...ctatcgtgcgtgt---gtata-tg-----TGTGTCGAGTTGT-----tttccaccaagataaatta...771...ctgaataaaaag gagaacc
D.Yak ttggcaag gtaag-tgcacgt...1007...---tcatagatgt-atgtaaatg-----TGTGTCGAGTTGTgtcctcc-aattcgtttaac-----...664...aaccataaaaag gacaaacc
***** **** * ** *
***** ***** * **
***** ** ** *

```

id=66612 gene=FBgn0001250 name=if segment=chrX.16652622.16654363.-1 type=IN

```

D.Mel ttggcaag gtaag-tgcacgt...1191...tgctaactccgat---atcatctACAACCTCGACAGCAaggagtcagcatta----taaccgt...473...accataaaaag gacaaacc
D.Sim ttggcaag gtaag-tgcacgt...2786...tgctaactccgat---atcatctACAACCTCGACAGCAaggagtcagcatta----taaccgt...468...aaccataaaaag gacaaacc
D.Sec ttggcaag gtaag-tgcacgt...1118...tgctaactccgat---atcatctACAACCTCGACAGCAaggagtcagcatta----taaccgt...473...aaccataaaaag gacaaacc
D.Ere ttggcaag gtaag-tgcacgt...1100...tgctaactccgat---atcatctACAACCTCGACAGCAaggagtcagcatta----tatccga...448...aaccataaaaag gacaaacc
D.Ana ctggcaag gtaag-tgcacgt...1365...cgccaactccgga---ctcaaccACAACCTCGACAGCAaggagtcggcgaaa----taacctt...480...aaccataaaaag gacaaacc
D.Gri ttggcaag gtaaaactgcacg...1053...tggttaactattt---accatctACAACCTCGACAGCAactgctgcagata---actaac--...503...ataaaaaaaaag gacaaacc
D.Vir ctggcaag gtaag-tgaacgt...1294...taacaactcgtat---accatctACAACCTCGACAGCAAGTGccgcagacacagactaacct--...597...cataaataaaaag gacaaacc
D.Wil ttggcaag gtaag-tgcacgt...1294...---aaaaaaaaaaaaaacaac--CAACTCGACAGCAgaaatggttaaacgtaatg----...578...ctgaataaaaag gagaacc
D.Yak ttggcaag gtaag-tgcacgt...1160...---taactccgatatcatcatctACAACCTCGACAGCAaggagtcagcatta----taaccgt...511...aaccataaaaag gacaaacc
***** **** * ** *
***** ***** * **
***** ** ** *

```

id=66612 gene=FBgn0001250 name=if segment=chrX.16652622.16654363.-1 type=IN VIEW

Figure 549: CS=12.6



```

D.Mel acattgcg GTGAGTAcTTAGcgGAATAAATAGTGCGTAGA---gtcatccatctagccagcca-----..465...acccactatag aactcctc
D.Sim acattgcg GTGAGTAcTTAGcgGAATAAATAGTGCGTAGA---gtcatccatctagccagcca-----..440...accgactgtag aactcctc
D.Sec acattgcg GTGAGTAcTTAGcgGAATAAATAGTGCGTAGA---gtcatccatctagccagcca-----..457...acccactgtag aactcctc
D.Ere acattgcg GTGAGTAcTTAGcgGAATAAATAGTGCGTAGA---gtcatccatctagccagcca-----..445...acccactgtag aactcctg
D.Ana atattgcg gtgagtacTTAGtgGAATAAATAGTGCGTAGAGTCAtcacca--gagtcacccagtc--..227...tcccttttacag aactcctc
D.Gri acattgcg GTGAGTAcT--TGGGATAAATAGTGCGTATAGAT-----ttttagaacaatcaatcaa...488...ctccgaacacag aactctgc
D.Moj acattgcg GTGAGTAcTg--TAGGATAAATAGTGCGTATAGC-----ttttagaaccaattaacaa...250...gccgtcaaacag aactctgc
D.Vir acattgcg GTGAGTAcT--GGGgATAAATAGTGCGTGTA-----tagcttttagaacaatcaa----..239...acacgcacacag aactctgc
D.Wil acattgcg GTGAGTAcgTAGAGagATAAATAGTGCGTGTA-----tatagtgtatgatca--tgatc--..536...tccccctacag aactcctc
D.Yak acattgcg GTGAGTAcTTAGcgGAATAAATAGTGCGTAGA---gtcatccatctagccagcca-----..421...acccactgtag aactcctg
* ***** ***** * ***** ** *****

```

id=97766 gene=FBgn0032475 name=Sfmbt segment=chr2L.13170785.13171312.-1 type=IN

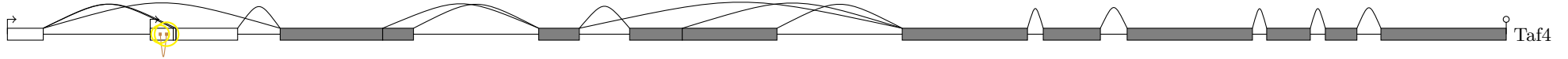
```

D.Mel acattgcg gtgagtacttag...355...---ccaatttgtatataaatttaa----TTTACGCACTGTTATTTTGGTACTTGCaacagc-----ccaatagcccaa-...81...acccactatag aactcctc
D.Sim acattgcg gtgagtacttag...338...---ccaatttgtatataaatttaa----TTTACGCACTGTTATTTTGGTACTTGCaacagc-----ccaacacaccaac-...73...accgactgtag aactcctc
D.Sec acattgcg gtgagtacttag...355...---ccaatttgtatataaatttaa----TTTACGCACTGTTATTTTGGTACTTGCaacagc-----ccaacacaccgac-...73...acccactgtag aactcctc
D.Ere acattgcg gtgagtacttag...345...---ccaatttgtatataaatttag----TTTACGCACTGTTATTTTGGTACTTGCaacagc-----ccaacacaccgac-...71...acccactgtag aactcctg
D.Ana atattgcg gtgagtacttag...150...tgcctttttgtaaataact---TGATTTTACGCACTCTTATTTTGTAG-----taccgc-----cctgcaaggacctt-...55...tcccttttacag aactcctc
D.Gri acattgcg gtgagtacattg...155...-----aacttgtatataaacttac-tt-ATTTACGCACTGTTA-TTTTGGTACTTGC-atagaattacatccacagca-----..305...ctccgaacacag aactctgc
D.Moj acattgcg gtgagtactgta...145...---gcaatttgtatataaacttat----GTTACGCACTGTTA-TTTTGGTACTTGC-atagc-----ttcatcaacaattca...77...gccgtcaaacag aactctgc
D.Vir acattgcg gtgagtacttgg...125...-----atattgtatataaacttatgtt---TACGCACTGTTA-TTTTGGTACTTGC-atagc-----ttcatcaaccattca...84...acacgcacacag aactctgc
D.Wil acattgcg gtgagtacttag...376...-----gtatataaatttaattttactTACGCACTGTTATTTTGGTACTTGCaacacattccgccaatag-----..131...tccccctacag aactcctc
D.Yak acattgcg gtgagtacttag...323...---ccaatttgtatataaatttag----TTTACGCACTGTTATTTTGGTACTTGCaacagc-----ccaacacaccgac-...69...acccactgtag aactcctg
* ***** ***** * ***** ** *****

```

id=97766 gene=FBgn0032475 name=Sfmbt segment=chr2L.13170785.13171312.-1 type=IN VIEW

Figure 550: CS=18



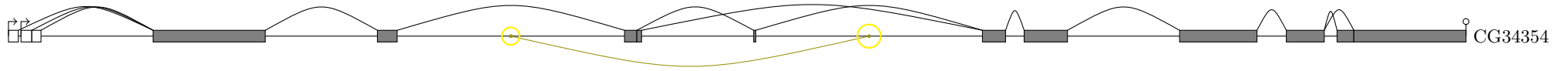
D. Mel	ccagcctc	g-----at	tttcgctttg	cacgcgcat	tcgTAAAa	TGGCGGCG	ttctgg--	caccgtcgt	gcgcaaat	ttttgtac	at-caaaa	aatcaaaa	taaag	cattcttc	---		
D. Sim	ccaccctc	g-----at	tttcgctttg	cacgcgcat	tcgTAAAa	TGGCGGCG	ttctgg--	caccgtcgt	gcgcaaat	ttttgtac	at-caaaa	aatcaaaa	taaag	cattcttc	---		
D. Ere	cctccctc	g-----at	tttcgctttg	cacgcgcat	tcgTAAAa	TGGCGGCG	ttctgg--	caccgtcgt	gcgcaaat	ttttgtac	at-caaaa	aatcaaaa	taaag	cattcttc	---		
D. Gri	-----t	gtgcgttt	actgtcgt	tttgcac	gcgcat	tcgTAAAa	TGGCGGCG	ttgtcg--	ctcgtcgt	gcgcaaat	ttttgtac	atcaaaa	aatcaaaa	taaag	cgacaata	---	
D. Moj	tgcccctt	gcgcgttt	actgtcgt	tttgcac	gcgcat	tcgTAAAa	TGGCGGCG	ttGTCGct	CGGTGCTGCC	aaATTTt	TTGT---	acatc	caaaa	aatcaaaa	taaag	cgacaata	---
D. Per	ccgctcca	g-----ac	gattat	tttgcac	gcgcat	tcgTAAAa	TGGCGGCG	ttgtcga	actactgt	cgtgcgca	aat	ttttgtac	at-caaaa	aacaaa	taaag	cgacattctt	c
D. Pse	ccgctcca	g-----ac	gattat	tttgcac	gcgcat	tcgTAAAa	TGGCGGCG	ttgtcga	actactgt	cgtgcgca	aat	ttttgtac	at-caaaa	aacaaa	taaag	cgacattc	---
D. Vir	tgcccctt	gcgcgttt	actgtcgt	tttgcac	gcgcat	tcgTAAAa	TGGCGGCG	ttGTCGct	CGGTGCTGCC	aaATTTt	TTGT---	acatc	caaaa	aatcaaaa	taaag	cgacaata	---
D. Yak	cctctctc	g-----at	tttcgctttg	cacgcgcat	tcgTAAAa	TGGCGGCG	ttctgg--	caccgtcgt	gcgcaaat	ttttgtac	at-caaaa	aatcaaaa	taaag	cattcttc	---		
		*	*	*	*	***	*****	*	*	**	***	*	****	*****	*****	*	*

id=22545 gene=FBgn0010280 name=Taf4 segment=chr3L.16106893.16106984.1 type=A5

D. Mel	-----cc	agcctc	gattttcg	ctttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	gcaccgt--	CGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aatcaaaa	taaag	cattcttc	---	
D. Sim	-----cc	agcctc	gattttcg	ctttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	gcaccgt--	CGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aatcaaaa	taaag	cattcttc	---	
D. Ere	-----c	ctccctc	gattttcg	ctttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	gcaccgt--	CGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aatcaaaa	taaag	cattcttc	---	
D. Gri	-----t	gtgcgttt	-actgtc	gtttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	ctcgtcgt	CGCTGCCA	aaaTTTT	ttgtacat	c	caaaa	aatcaaaa	taaag	cgacaata	---
D. Moj	tgcccctt	gcgcgttt	-actgtc	gtttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	ctcgtcgt	CGCTGCCA	aaaTTTT	ttgtacat	c	caaaa	aatcaaaa	taaag	cgacaata	---
D. Per	-----c	cgctcca	gacgatt	at	tttgcac	gcgcat	tcgtgaaa	atggcg	gcttctg	ctcgaact	actgtCGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aacaaa	taaag	cgacattctt	c
D. Pse	-----c	cgctcca	gacgatt	at	tttgcac	gcgcat	tcgtgaaa	atggcg	gcttctg	ctcgaact	actgtCGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aacaaa	taaag	cgacattc	---
D. Vir	tgcccctt	gcgcgttt	-actgtc	gtttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	ctcgtcgt	CGCTGCCA	aaaTTTT	ttgtacat	c	caaaa	aatcaaaa	taaag	cgacaata	---
D. Yak	-----c	ctctctc	gattttcg	ctttgca	cgcgcatt	ctgtgaaa	atggcg	gcttctg	gcaccgt--	CGCTGCCA	aaaTTTT	ttgtacat	-caaaa	aatcaaaa	taaag	cattcttc	---	
		*	*	*	*	***	*****	*	*	*****	*****	*****	*****	*****	*****	*	*	

id=22545 gene=FBgn0010280 name=Taf4 segment=chr3L.16106893.16106984.1 type=A5 VIEW

Figure 551:



D.Mel	gaaatatic	gtaagtaaaccg...3175...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GTGA</b> aatatgatatactccgggga-----	...1724...atctttttgcag	agactgca				
D.Sim	gaaatatic	gtaagtaccgc...2865...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GTGA</b> aatatgatatactccgggga-----	...2034...atctttttgcag	agactgca				
D.Sec	gaaatatic	gtaagtaccgc...3193...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GGTGA</b> aatatgatatactccgggga-----	...1706...atctttttgcag	agactgca				
D.Ere	gaaatatic	gtaagtagccgc...3160...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GTGA</b> aatatgatatactccgggga-----	...1739...gtctttttgcag	agactgca				
D.Ana	gaaatatic	gtaagtatttta...3095...cttgacacat----	ttcgaatt	<b>CGTATTTA</b> ca	<b>TGCA</b> agccgg	aaattgacgccccacacca-----	...1810...ccatctttacag	agactgca				
D.Per	gaaatatic	gtaagtagaaaa...3371...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GTGA</b> aatatgatatgctctgggga-----	...1528...atcttccacag	agactgca				
D.Pse	gaaatatic	gtaagtagaaaa...3357...-acaaaaacgt----	tatgaaaata	<b>TGAACTGTGA</b> tg	<b>TTTATCGA</b> tt	<b>GTGA</b> aatatgatatgctctgggga-----	...1542...atcttccacag	agactgca				
D.Vir	gaaatatic	gtaagttaaata...3293...-atggaaggag----	agtccagtt	<b>TTGTTGTTGCTTTT</b> G	tgctctgctgcatgtgaaaat-----	...1614...tgtcacttacag	agactgcc					
D.Wil	gaaatatic	gtaagtcca...3581...-aaaatagagctgtgatgtt-----			<b>TATCGA</b> t	<b>TGTGA</b> aa	<b>TATG</b> atatacaagcagaggatggg...1326...atattttacag	agactgca				
D.Yak	gaaatatic	gtaagtaacttt...3138...-aaaatagagctgtgatgtt-----			<b>TATCGA</b> t	<b>TGTGA</b> aa	<b>TATG</b> atatactcctgggagatggc...1769...ctttttttgcag	agactgca				
	*****	*****		*	*	*		*	*	*	***	*****

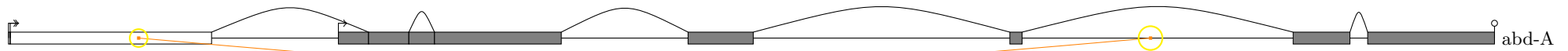
id=87013 gene=FBgn0085383 name=CG34354 segment=chr3R.24027978.24052454.1 type=IN

D.Mel	-----agaaagcg	gcac	-----aactgca	-----ctt:::~::~	-----	<b>TCAT</b> t	<b>TCGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...591...ggctcgttcag	gaggcgga				
D.Sim	-----agaaagcg	gcac	-----aactgca	-----ctt:::~::~	a-----tatttaaatatggatcggg	<b>TCAT</b> t	<b>TCGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...591...ggctcgttcag	gaggcgga				
D.Sec	-----agaaagcg	gcac	-----aactgca	-----ctt:::~::~	ggtaacttatttaaatatggatac	<b>TCAT</b> t	<b>TCGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...591...ggctcgttcag	gaggcgga				
D.Ere	-----agaaagcg	gcac	-----aactgca	-----ctt:::~::~	aggaaggtctataaacgc	<b>TCAT</b> t	<b>TCGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...583...ggctcgttcag	gaggcgga				
D.Ana	-----ataaccag	aaaa	-----aactgcagaaaatcga:::~::~	-----	-----	<b>CTGGC</b> aa	<b>TGCATAAA</b>	aa	<b>TGGG</b>	---cacgcacgca--aacggagaga...1862...ggctcgttcag	gaggcgga					
D.Per	-----atccg	gggg	-----agctgc	-----:::~::~	attaagtcgacgggtggattggcaatgttcaaactttccac	<b>TCAT</b> t	<b>TTGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...450...ggctcgttcag	gaagcgga				
D.Pse	-----atccg	gggg	-----agctgc	-----:::~::~	attaagtcgacgggtggattggctatgttcaa	<b>TCAT</b> t	<b>TTGG</b> ca	<b>TGAATCACGTTT</b> G	at	acgcacgaattacctttt	---...452...ggctcgttcag	gaagcgga				
D.Vir	-----	-----	-----	-----:::~::~	-----	<b>AGAAGCAGCAACA</b> CAAA	-----	-----	-----	cagcaatacttagctgcaa--...1460...tgccatttcag	gaagcgga					
D.Wil	tgccatacagagaaca	gtgctttaaattgcatta	-----ctc:::~::~	-----	-----	<b>CATG</b> aa	<b>TCACG</b> t	<b>TTGATA</b>	cg	cacgaattaccttttatg...444...tggtatttcag	gaagcaga					
D.Yak	-----agaaagcg	gcac	-----aactgca	-----ctt:::~::~	a-----tgtttaaggattggaga	<b>CATG</b> aa	<b>TCACG</b> t	<b>TTGATA</b>	cg	cacgaattaccttttatg...595...ggctcgttcag	gaggcgga					
						**	**	*	*	*	**	*	*****	**	**	**

id=87018 gene=FBgn0085383 name=CG34354 segment=chr3R.24058766.24060796.1 type=IN VIEW

Figure 552: CS=9.6





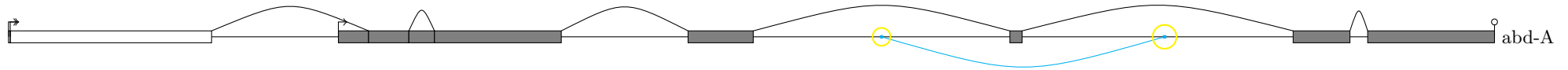
D. Mel	a	ttgccc	ataaacgtttcg...786...-----agagtgcattaaaaaagat- <b>CGCGCGCCT</b> a <b>TAAAT</b> -----cacacgtacgaaatcccgcc---...255...aacttgagaaaag	gtaacaaa
D. Sim	a	ttgccc	ataaacgtttcg...2346...-----agagtgcattaaaaaagat- <b>CGCGCGCCT</b> a <b>TAAAT</b> -----cacacatagaaatcccgcc---...255...aacttgagaaaag	gtaacaaa
D. Sec	a	ttgccc	ataaacgtttcg...786...-----agagtgcattaaaaaagat- <b>CGCGCGCCT</b> a <b>TAAAT</b> -----cacacatagaaatcccgcc---...239...aacttgagaaaag	gtaacaaa
D. Ere	a	ttgccc	ataaacgtttcg...804...-----agagtgcattaaaaaagat- <b>CGCGCGCCT</b> a <b>TAAAT</b> -----cacatgtacgaaatcccgcc---...255...aacttgagaaaag	gtaacaaa
D. Ana	a	ttgccc	ataaacgtttcg...880...taaaactacaagagtgcatt <b>TAAAAAA</b> ga <b>TCGCG</b> c <b>GCCTATAAGT</b> -----cacaatcctcgaatcccgcc---...234...agcccagaaaag	gtaacgaa
D. Gri	a	ttgccc	ataaacgtttcg...382...-----cacgaaattttat---actcct----- <b>TTAAAA</b> a <b>TTTCG</b> tt <b>TTATT</b> ataatatttattatcgttgc---...1318...gctaactgaaaag	gtaaaaca
D. Per	a	ttgccc	ataaacgtttcg...251...-----cacgaaattttat---actcct----- <b>TTAAAA</b> a <b>TTTCG</b> tt <b>TTATTATAA</b> tatttattatcgtggcgcg...1034...gagctctgaaaag	gtaacgaa
D. Pse	a	ttgccc	ataaacgtttcg...263...-----cacgaaattttat---actcct----- <b>TTAAAA</b> a <b>TTTCG</b> tt <b>TTATTATAA</b> tatttattatcgtggcgcg...1005...gagctctgaaaag	gtaacgaa
D. Vir	a	ttgccc	ataaacgtttcg...241...-----cacgaaattttat---actcct----- <b>TTAAAA</b> a <b>TTTCG</b> tt <b>TTATT</b> ataatatttattatcgttgc---...1147...gctaactgaaaag	gtaaaacc
D. Wil	a	ttgccc	ataaacgtttcg...311...-----cacgaaattttat---actcct----- <b>TTAAAA</b> a <b>TTTCG</b> tt <b>TTATT</b> ataatatttattatcgttgc---...1283...gctaactgaaaag	gtaaaaga
D. Yak	a	ttgccc	ataaacgtttcg...801...-----agagtgcattaaaaaagat- <b>CGCGCGCCT</b> a <b>TAAAT</b> -----cacacgtacgaaatcccgcc---...255...aacttgagaaaag	gtaacaaa
	*	*****	*****	*****
			* * * * *	

id=23381 gene=FBgn0000014 name=abd-A segment=chr3R.12654643.12655762\_-1 type=E5

D. Mel	tttcaacg	gtaagtaccgca...3466...ttgcgggggtcgtaaatcct--- <b>GTTTA</b> g <b>GGGCGCGTG</b> -----tgtcctgggagtcgtgatt---...1444...tctcctccgag	gccccaac
D. Sim	tttcaacg	gtaagtaccgca...3443...ttgcgggggtcgtaaatcct--- <b>GTTTA</b> g <b>GGGCGCGTG</b> -----tgtcctgggagtcgtgatt---...1467...tctcctccgag	gccccaac
D. Sec	tttcaacg	gtaagtaccgca...3441...ttgcgggggtcgtaaatcct--- <b>GTTTA</b> g <b>GGGCGCGTG</b> -----tgtcctgggagtcgtgatt---...1469...tctcctccgag	gccccaac
D. Ere	tttcaacg	gtaagtaccgca...3386...ttgcgggggtcgtaaatcct--- <b>GTTTA</b> - <b>GGGCGCGTG</b> -----tgtcctgggagtcgtgatt---...1525...tctcctccgag	gccccaac
D. Ana	tttcaacg	gtaagtaccgca...2658...--gcggggattcaagattccta--- <b>ATTATAGGC</b> t <b>CGCGATTTT</b> ct <b>TTTAT</b> tgggcttcccgatgcttt...2241...tctcttttcgag	gccccaac
D. Gri	ttttaatg	gtaagtaccgct...4177...--gccgtggcctgcaatttgca--- <b>GATAGCGAAATTTTGA</b> -----tttcc--gaaacataaacacga...732...tgtggtttgcag	gccccaac
D. Per	ttttaatg	gtaagtaccgca...4262...ccagaggatgcggcagcaat <b>TTGTA</b> g <b>ATAGCGAAATTTTGA</b> -----tttcc--gaaacataaacacgg...642...tccgcccacag	gccccaac
D. Pse	ttttaatg	gtaagtaccgca...4308...ccagaggatgcggcagcaat <b>TTGTA</b> g <b>ATAGCGAAATTTTGA</b> -----tttcc--gaaacataaacacgg...596...tccgcccacag	gccccaac
D. Vir	ttttaatg	gtaagtaccgca...4093...--tccttgcccgcgcaatttgca--- <b>GATAGCGAAATTTTGA</b> -----tttcc--gaaacataaacacga...816...tctcgtttgcag	gccccaac
D. Wil	ttttaatg	gtaagtaccgca...4250...--gtctaaggctgcaatttgca--- <b>GATAGCGAAATTTTGA</b> -----tttcc--gaaacataaacacga...659...ctttttgcacag	gccccaac
D. Yak	tttcaacg	gtaagtaccgca...3447...ttgcgggggtcgtaaatcct--- <b>GTTTA</b> g <b>GGGCGCGTG</b> -----tgtcctgggagtcgtgatt---...1463...tctcctccgag	gccccaac
	*** ** *	*****	*** * *****
			* * * * *

id=23391 gene=FBgn0000014 name=abd-A segment=chr3R.12636078.12648143\_-1 type=IN VIEW

Figure 553: CS=8.58



D.Mel	gcttacag	gtgagtcaaac...2225...tgctgcaacaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1278...ttttaatttcag	actggatg	
D.Sim	acttacag	gtgagtcaaac...1138...atctctcatgagccactcg	ATTTCACAGCTgcACAA	-----gaagaaattgaacgaattca...	2389...ttttaatttcag	actggatg	
D.Sec	acttacag	gtgagtcaaac...1134...atctctcatgagccactcg	ATTTCACAGCTgcACAA	-----gaagaaattgaacgaattca...	2385...ttttaatttcag	actggatg	
D.Ere	gcttacag	gtgagtcagcga...2248...tgctgcaacaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1289...ctccttttcag	actggatg	
D.Ana	acttacag	gtgagtcattag...1954...aacaacggcaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1235...cttcatttcag	actggatg	
D.Gri	actcacag	gtgagtcactga...3529...agcagcgagcatggcaccgc-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1370...cttcttttcag	actggatg	
D.Per	gctcacag	gtgagtcacggc...1852...aacaacggcaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1264...cttcttttcag	actggatg	
D.Pse	gctcacag	gtgagtcacggc...1867...aacagcaacaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1168...ctttcttcag	actggatg	
D.Wil	gctcacag	gtgagtcgtgag...1711...agcaacggcaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1066...tttcttttcag	actggatg	
D.Yak	gcttacag	gtgagtcaaca...2334...tgctgcaacaacggcaacgt-	TTTACA-GCTGAATG	cttgccaaatgcaatttaac-----	...1331...gtttaatttcag	actggatg	
	** ****	*****	* **	*** ** * * *	* * **** **	* * **	* *****

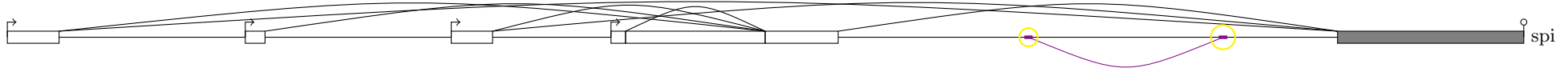
id=23389 gene=FBgn0000014 name=abd-A segment=chr3R.12648192.12651772.-1 type=IN

D.Mel	tttcaacg	gtaagtaccgca...3522...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttgta...	1387...tctcctccgag	gccccaac	
D.Sim	tttcaacg	gtaagtaccgca...3501...--ggacgaattgtagctgctca	TTGTAGCGGTgTA	AAaatttagattagtttggtat...	1409...tcttctcctcag	gccccaac	
D.Sec	tttcaacg	gtaagtaccgca...3499...--ggacgaattgtagctgctca	TTGTAGCGGTgTA	AAaatttagattagtttggtat...	1411...tctcctcctcag	gccccaac	
D.Ere	tttcaacg	gtaagtaccgca...3441...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttggtat...	1468...tctcctccgag	gccccaac	
D.Ana	tttcaacg	gtaagtaccgca...3596...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttggtat...	1313...tcttttttcag	gccccaac	
D.Gri	ttttaatg	gtaagtaccgca...3652...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttagca...	1257...tgggttttcag	gccccaac	
D.Per	ttttaatg	gtaagtaccgca...3583...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttcggtat...	1326...tcccgccacag	gccccaac	
D.Pse	ttttaatg	gtaagtaccgca...3635...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttcggtat...	1274...tcccgccacag	gccccaac	
D.Wil	ttttaatg	gtaagtaccgca...3638...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttggtat...	1271...ctttttgcacag	gccccaac	
D.Yak	tttcaacg	gtaagtaccgca...3503...tgggacgaattgtagctgct	CATTgTAGCGTGTA	AAaatttagattagtttggtat...	1406...tctcctccgag	gccccaac	
	** ** *	*****	*****	*****	** *	** *	*****

id=23391 gene=FBgn0000014 name=abd-A segment=chr3R.12636078.12648143.-1 type=IN VIEW

Figure 554: CS=9.6





D. Mel	gttgtcat	gtatgatatgcac...1322...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	gcatgctcaaggc...933...tcttcccacag	a-tacacac
D. Sim	gttgtcat	gtatgatatgcac...1354...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	gcatgctcaaggc...943...tcttcccacag	a-tacacac
D. Sec	gttgtcat	gtatgatatgcac...1304...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	gcatgctcaaggc...921...tcttcccacag	a-tacacac
D. Ere	gttgtcat	gtatgatatgcac...1284...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	gcatgctcaaggc...908...tcttcccacag	a-tacacac
D. Ana	gttgtcat	gtatgatatgcac...1356...atat-tggcacattcctgctg-----	GGCTCACA---AAGTGGTTGTGaaATGC	atttcc---	atttgcgccata...672...tttctctcacag	attaaaca-
D. Gri	attgtcat	gtatgatatgcac...1457...-gat-tggcacattcctgctg-----	GCTCTCA---AAGTGGTTGTGaaATGC	atttcc---	atttgcgccata...584...ttccacacacac	a-cacacac
D. Per	gttgtcat	gtatgatatgcac...1183...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	acgatgctcaaggc...1181...tctttcccag	a-tacacac
D. Pse	gttgtcat	gtatgatatgcac...1186...aatgtttgcctttttatgcc-----	TATTCATATCACAGCCaGCTTTGAGG	---agcgac---	acgatgctcaaggc...1174...tctttcccag	a-tacacac
D. Vir	ttcttttt	ttttttctgctg...1849...-gat-tggcacattcctgctg-----	GCTCTCA---AAGTGGTTGTGaaATGC	atttcc---	atttgcgccata...502...tctttcccag	a-tacgctg
D. Wil	gctttcat	gtatgatatgctt...2846...-cacacgacattcctgctg-----	AGCTCACA---AAGTGGTTGTGaaATGC	atttcc---	gctttatccagca...717...tctttctcag	a-tacgctt
D. Yak	gttgtcat	gtatgatatgcac...1479...aat-caataaaactat-tggcGCATTcACGCTGGGCTCTCA	---AAGTGGTTGTGaaATGC	atttcc---	gctttgcggcat...658...tctttcccag	a-tacacac
		* * * * *	** * * *	* * * * *	* * * * *	* * * *

id=98661 gene=FBgn0005672 name=spi segment=chr2L\_19569227\_19571571\_-1 type=I5

D. Mel	gttgtcat	gtatgatatgcac...1985...-tacgatgttgattatctaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	269...tcttcccacag	a-tacacac
D. Sim	gttgtcat	gtatgatatgcac...2026...-tacgatgttgattatctaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	270...tcttcccacag	a-tacacac
D. Sec	gttgtcat	gtatgatatgcac...1957...-tacgatgttgattatctaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	267...tcttcccacag	a-tacacac
D. Ere	gttgtcat	gtatgatatgcac...1921...-tacgatgttgattatctaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	270...tcttcccacag	a-tacacac
D. Ana	gttgtcat	gtatgatatgcac...1713...ttgtgatatgga-taccacGCATaTCACAGCCAgCTTTGATGAGCT	---aggataatcaacgggaaaca-----	313...tttctctcacag	attaaaca-	
D. Gri	attgtcat	gtatgatatgcac...1794...ttgtgatatgga-taccacGCATaTCACAGCCAgCTTTGATGAGCT	---taggataatcaacgggaaaca-----	245...ttccacacacac	a-cacacac	
D. Per	gttgtcat	gtatgatatgcac...2037...-tatgatgttgcttcttaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	326...tcttcccag	a-tacacac
D. Pse	gttgtcat	gtatgatatgcac...2032...-tatgatgttgcttcttaagCCTCAtcAAG--TGTTGTGATATGGATA	-----	ccaacgcatatcacagcca----	327...tcttcccag	a-tacacac
D. Vir	ttcttttt	ttttttctgctg...2156...ttgtgatatgga-taccacGCATaTCACAGCCAgCTTTGATGAGCT	---taggataatcaacgggaaaca-----	193...tctttcccag	a-tacgctg	
D. Wil	gctttcat	gtatgatatgctt...3252...ttgtgatatgga-taccacGCATaTCACAGCCAgCTTTGATGAGCT	---aggataatcaacgggaaaca-----	309...tctttctcag	a-tacgctt	
D. Yak	gttgtcat	gtatgatatgcac...1532...atgcatttcgctt-tgcgGCATaTCACAGCCAgCTTTGATGAGCTAGCGTAATGT	atcgtacatcaaatcatggt...	604...tctttcccag	a-tacacac	
		* * * * *	* * * * *	* * * * *	* * * * *	* * * *

id=98661 gene=FBgn0005672 name=spi segment=chr2L\_19569227\_19571571\_-1 type=I5 VIEW

Figure 556: CS=10.56



D.Mel	cagtggcg	gtaa-cagacacg...298...	-ccgcatccgttttcccgtgc----	AATGaAGCTTATG	atttgactgctggccggcac...259...	tgttttccgtag	ctactggt
D.Sim	cagtggcg	gtat-cagacgcg...298...	-ccgcatccgtgtcccgtgc----	AATGaAGCTTATG	atttgactgctggccggcac...261...	tgttttccgtag	ctactggt
D.Sec	cagtggcg	gtat-cagacgcg...294...	-ccgcatccgtgtcccgtgc----	AATGaAGCTTATG	atttgactgctggccggcac...261...	tgttttccgtag	ctactggt
D.Ere	cagttgcg	gtat-cagacgct...281...	-ccgcatccgtgtcccgtgc----	AATGAAGCTTATG	atttgactgctggccggcac...245...	tgttttctgcag	ctactggt
D.Gri	cacaaaca	gcag-cagcaaca...300...	---tttacttagtcgtatccaaa--	AATGAAGCTTATG	atttcactcaatttaattgt...305...	ctctttccacag	ctgctggc
D.Moj	cattgaca	gcaa-cagcaaca...227...	ttattatcctccatctaata----	AATGAAGCTTATG	atttgactgccagtttgatt...354...	ttttctccttag	ttgctggc
D.Per	cagtggca	gtag-caatcaca...274...	-gtgtgtgcctgtgtgtgtgc----	AATGAAGCTTATG	atttgactgctgttctctcc...284...	cccttcggtaag	ctggtggc
D.Pse	cagtggca	gtag-caatcaca...268...	-gtgtgtgcctgtgtgtgtgc----	AATGAAGCTTATG	atttgactgctgttctctcc...298...	cccttcggtaag	ctggtggc
D.Vir	caatggca	atgg-caaacgca...215...	-tagtac----tgtgtatcccaaac	AATGAAGCTTATG	atttgactatcataattc...298...	ctttgcctacag	ttgctggc
D.Wil	cgcgaca	gcagttaacagc...434...	-ctttcacttacttaattac----	AATGAAGCTTATG	atttgactgcttgtttgccc...619...	ctctctctctag	ctgacagc
D.Yak	cagtggcg	atat-cagacgcg...281...	-ccgcatccgtgtcccgtgc----	AATGAAGCTTATG	atttgactgctggccagccc...242...	tgttttccgtag	ctactggt
		* * * * *		***** **		* **	* *

id=40973 gene=FBgn0260936 name=scny segment=chr3L.5767655-5768288.1 type=IN

D.Mel	cagtggcg	gtaa-cagacacg...500...	cgagcg-accgtactcat-ctg	CATAAGCTcCATT	aactagcgcgatgctcagcc--...57...	tgttttccgtag	ctactggt
D.Sim	cagtggcg	gtat-cagacgcg...501...	-gagcgtaccgactcat-ctg	CATAAGCTcCATT	acctagcgcgatgc--cagccag...58...	tgttttccgtag	ctactggt
D.Sec	cagtggcg	gtat-cagacgcg...497...	-gagcgtaccgactcat-ctg	CATAAGCTcCATT	acctagcgcgatgc--cagccag...58...	tgttttccgtag	ctactggt
D.Ere	cagttgcg	gtat-cagacgct...481...	-gagcgtaccgtactcat-ctg	CATAAGCTTcATT	acctagcgcgatgc--cagccgc...45...	tgttttctgcag	ctactggt
D.Gri	cacaaaca	gcag-cagcaaca...566...	-gttgttttaactcatcctg	CATAAGCTTcATT	accaaaaccagatttcgaa--...39...	ctctttccacag	ctgctggc
D.Moj	cattgaca	gcaa-cagcaaca...532...	-tgtgtcgttaactcat-cta	CATAAGCTTcATT	accaaaagacccttctagag--...49...	ttttctccttag	ttgctggc
D.Per	cagtggca	gtag-caatcaca...505...	-ctttgtggctacatcat-ctg	CATAAGCTTcATT	acggcctgcctctgcctc--...53...	cccttcggtaag	ctggtggc
D.Pse	cagtggca	gtag-caatcaca...499...	-ctttgtggctacatcat-ctg	CATAAGCTTcATT	acggcctgcctctgcctc--...67...	cccttcggtaag	ctggtggc
D.Vir	caatggca	atgg-caaacgca...467...	-tgtgtcgttttctcat-ctg	CATAAGCTTcATT	accaaaccaccagtccaaga--...46...	ctttgcctacag	ttgctggc
D.Wil	cgcgaca	gcagttaacagc...993...	-catacatatacctcat-cta	CATAAGCTTcATT	atgaactatataacacaata--...60...	ctctctctctag	ctgacagc
D.Yak	cagtggcg	atat-cagacgcg...481...	-gagcgtaccgtactcat-ctg	CATAAGCTTcATT	acctagcgcgatgc--cagcctg...42...	tgttttccgtag	ctactggt
		* * * * *		**** ** ***** **		* **	* *

id=40973 gene=FBgn0260936 name=scny segment=chr3L.5767655-5768288.1 type=IN VIEW

Figure 557: CS=19.8



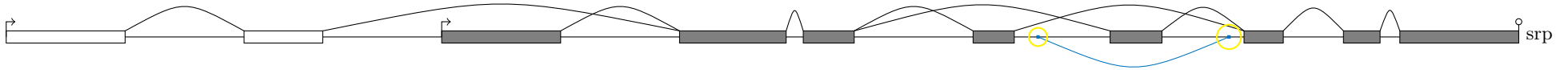
D. Mel	gaaactag	gtgagttttgtg...79...---	gcctcggtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-atccagaatggtgtttgttt...1239...	--ttgctcttcag	aaatattt
D. Sim	aaaactag	gtgagttttgtg...79...---	gcctcggtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-atccagaatggtgtttgttt...1182...	--tcgctcttcag	aaatattt
D. Sec	aaaaatag	gtgagttttgtg...79...---	gcctcggtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-atccagaatggtgtttgttt...1206...	--tcgctcttcag	aaatattt
D. Ere	gaaactag	gtgagttttgtg...68...---	gcctcagtggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-accagaatggtgtttattt...1205...	--tcgttcttcag	aaatattt
D. Ana	gaaactag	gtgagttttgtg...69...atgtgcc---	gtgcctacaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-ttgcaactcagaatggtgttt...1254...	--tcttctggcag	attagcgc
D. Gri	gaaaatag	gtgagtttagtg...59...---	tatattgatgtggtcga	aaaGAAAGtGTAGAGaaATTTT	cgTTGC	-ggtgcagttcacaatggtgt...942...	--gtgttttcag	agagctcc
D. Moj	gaaaatag	gtgagtttagtg...63...---	tatattgatgtggtgaaa	aaaGAAAGtGTAGAGaaATTTT	cgTTGC	-ggtgcagtcac-aatggtgt...959...	--tggttttcag	agctcaa
D. Per	ggaaatag	gtgagttttgtg...77...--	ctgcct--gtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-agttagaatattgtatatt...1485...	taccttctctcag	atcatc--
D. Pse	ggaaatag	gtgagttttgtg...77...--	ctgcct--gtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-agttagaatattgtatatt...1467...	taccttctctcag	atcatc--
D. Vir	gaaaatag	gtgagtttagtg...56...---	tatattgatgtggtgaaa	aaaGAAAGtGTAGAGaaATTTT	cgTTGC	-ggtgcagtcacaaatggtgt...894...	--ttgcttttcag	agctcaa
D. Wil	taaaactag	gtgagttttgtg...53...--	aaaatattgatgtga--	aaaaaGAAAGtGTAGAGaaATTTT	cgTTGC	-ccttttacttca--ggtgcagga--1341...	--tttcttttagcc	agtttcgc
D. Yak	gaaactag	gtgagtttagtg...68...---	gcctcggtgggtgcaaaaa	GAAAGtGTAGAGaaATTTT	cgTTGC	-accagaatggtgtttattt...1226...	--tcgttcttcag	aaatattt
	** **	***** **	**	**** ***** *	**	***	* *	*

id=72726 gene=FBgn0037021 name=CG11399 segment=chr3L.20777722.20779128.-1 type=I5

D. Mel	gaaactag	gtgagttttgtg...488...	aacatatacacataaccag-----	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...834...	--ttgctcttcag	aaatattt
D. Sim	aaaactag	gtgagttttgtg...489...	aacatatacacataaccag-----	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...776...	--tcgctcttcag	aaatattt
D. Sec	aaaaatag	gtgagttttgtg...487...	aacatatacacataaccag-----	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...802...	--tcgctcttcag	aaatattt
D. Ere	gaaactag	gtgagttttgtg...474...	aacatatacacataaccag-----	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...803...	--tcgttcttcag	aaatattt
D. Ana	gaaactag	gtgagttttgtg...530...	-----aggcaaggcaaggagacgt-	CGGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...794...	--tcttctggcag	attagcgc
D. Gri	gaaaatag	gtgagtttagtg...519...	tatacacaagcagg--caggca-----	GAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...484...	--gtgttttcag	agagctcc
D. Moj	gaaaatag	gtgagtttagtg...520...	aaaacatacacag--caggca-----	GAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...504...	--tggttttcag	agctcaa
D. Per	ggaaatag	gtgagttttgtg...481...	-----acacataaccaggcaaaag	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...1085...	taccttctctcag	atcatc--
D. Pse	ggaaatag	gtgagttttgtg...481...	-----acacataaccaggcaaaag	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...1067...	taccttctctcag	atcatc--
D. Vir	gaaaatag	gtgagtttagtg...499...	aacatatacacag--caggca-----	GAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...453...	--ttgcttttcag	agctcaa
D. Wil	taaaactag	gtgagttttgtg...538...	cacgctcgtcaaaa--cataca-----	GAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...858...	--tttcttttagcc	agtttcgc
D. Yak	gaaactag	gtgagtttagtg...474...	aacatatacacataaccag-----	GCAGAAAAATCTCTATtCTTTT	gcaatttgtttgatttctc...824...	--tcgttcttcag	aaatattt
	** **	***** **	*	*	*****	* *	*

id=72726 gene=FBgn0037021 name=CG11399 segment=chr3L.20777722.20779128.-1 type=I5 VIEW

Figure 558: CS=14.4



```

D.Mel gaagattg gtaaatgtctaa...51...accaa-tcaatcaaaacaac-----GCTTTTGTGTGGAACAA-----aatttctgt-gtgaacatcc...271...gctcaattccag tggccgct
D.Sim gaagattg gtaaatgtctaa...55...atcaa-tcaatcgaacaac-----GCTTTTGTGTGGAACAA-----aatttctgt-gtgaacatcc...289...gctcaattccag tggccgct
D.Sec gaagattg gtaaatgtctaa...55...atcaa-tcaatcaaaacaac-----GCTTTTGTGTGGAACAA-----aatttctgt-gtgaacatcc...259...gctcaattccag tggccgct
D.Ere gaagattg gtaaatgtctaa...51...accaa-tcaatcaaaacaac-----GCTTTTGTGTGGAACAA-----aatttctgt-gtgcgacctc...254...gctcaattccag tggccgct
D.Ana gaagattg gtaaatgtctaa...39...accaaaaaaaaaatattcgc-----TTTTTGTGTGGAACAA-----aatttctat-gtgtgagaact...218...gctcaattaccag tggccgct
D.Gri gaagattg gtaaatgtcaac...41...aaaaaaaaaatcaaatcaaa-----TTTGCTTTTGTGTGGAACAAATTTTTccaaaatgtattagagagc-----...319...gcattattacag tggccgct
D.Moj gaagattg gtaaatgtcaac...52...actaactcaaac--caaac--GATTTTTTGTGCTTTTGTGTGGAACAAATTTTT--aatagcaac-gagagctcta...282...gccttattacag tggccgct
D.Vir gaagattg gtaaatgtcaac...120...-----tcaaagcaaagtttggattaTTTGCTTTTGTGTGGAACAAATTTTT--aagtactct-aaaagagaaaa...307...gcattattacag tggccgct
D.Yak gaagattg gtaaatgtctaa...67...atcaa-tcaatcgaatcaaac-----GCTTTTGTGTGGAACAA-----aatttctgt-gtgcgacctc...270...gctcaattccag tggccgct
***** ***** *
***** ***** **
** *** **
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```

id=67434 gene=FBgn0003507 name=srp segment=chr3R.11826508.11826910.1 type=IN

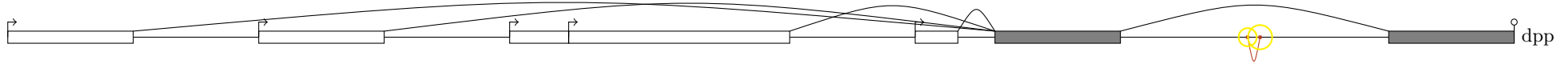
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D.Mel gacgcttg gtaggtcgccca...234...--ctgagttgccata-gaaaacg-----TTGTTCCACACgAAAAGC-----tactgcatcccagagcgttc---...29...tgcaacatctag agcgctc
D.Sim gacgcttg gtaggtcgccca...226...--ctgagttgccata-gaaaacg-----TTGTTCCACACgAAAAGC-----tactgcatcccagagcgttc---...29...tgcaacatctag agcgctc
D.Sec gacgcttg gtaggtcgccca...225...--ctgagttgccata-gaaaacg-----TTGTTCCACACgAAAAGC-----tactgcatcccagagcgttc---...29...tgcaacatctag agcgctc
D.Ere gacgcttg gtaggtcgccca...235...--ctgagttgccata-gaaaacg-----TTGTTCCACACgAAAAGC-----tactgcttcctgagcgcac---...29...tgctacatctag agcgctc
D.Ana gacgcatg gtaggtcgctca...115...--acacagccacata-gaaaacg-----TTGTTCCACACGAAAA--aaaagctaatgcctccaa-----...48...ccgatcgtttag agcgcca
D.Gri gacgcttg gtaggtcgtcca...575...cacccttccttacccttaa--AAAAATaTTGTTCCACAtCAAAAGCAAA--agtgaaacactcacaact-----...56...aaatgtttacag agcgctc
D.Moj gacgcttg gtaggtcgtcca...480...--aaaacccttatattaaaacaAAAAATaTTGTTCCACAtCAAAAGCAatAAAAGTtcaacgcccccaataactcat--...75...aaactttcacag agcgctc
D.Vir gacgcttg gtaggtcgtcca...656...--taggtcaaaaaaaaaaaagAAAAATaTTGTTCCACATgAAAAGCAAA-----agtggtctaagcgcccgtaaa...86...caaacttcacag agcgctc
D.Yak gacgcttg gtaggtcgccca...279...--ctgagttgccata-gaaaacg-----TTGTTCCACACgAAAAGC-----tactgccttcgagagcgttc---...29...tgccacatctag agcgctc
**** ** ***** **
* **
***** **
* *
**

```

id=67436 gene=FBgn0003507 name=srp segment=chr3R.11827129.11827473.1 type=IN VIEW

Figure 559: CS=12.6



D. Mel	acacaaag	gtgagtctcctt...771...acaccaggaccgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...871...gtttccttgag	atagtaaa
D. Sim	acacaaag	gtgagtctgctt...797...acaccaggaccgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...877...gtttccttgag	atagtaaa
D. Sec	acacaaag	gtgagtcttctt...765...acaccaggaccgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...877...gtttccttgag	atagtaaa
D. Ere	acacaaag	gtgagtctcctt...830...acaccaggaccgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...885...gtatacttgag	atagtaaa
D. Ana	acacaaag	gtgagttctttt...853...acaccagtaacgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...940...ttcctcttgag	atagtaaa
D. Gri	acataaag	gtgagtctcgat...1239...acaccggaacgttttagcgc	ATGCGC	AAATGGCTTT	tatattttaggtgtgtttgt...990...tttgatttgag	atagtaaa
D. Moj	acataaag	gtgagtgcata...1735...acaccggaacgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtgttttaggaat...1730...ccctatttgag	atagtaaa
D. Vir	acataaag	gtgagtttgca...1279...acaccggaacgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtgttttaggaat...1063...tatgtttgag	atagtaaa
D. Wil	acataaag	gtgagtttttt...685...acaccaggagtagtttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...655...ttttgttgag	atagtaaa
D. Yak	acacaaag	gtgagtcttcat...843...acaccaggaccgttttagcgc	ATGCGC	AAATGGCTTT	tatattgtattttaggaat...931...ctgcacttgag	atagtaaa
	*** **	*****	**** * *	*****	***** * * ** *	*****

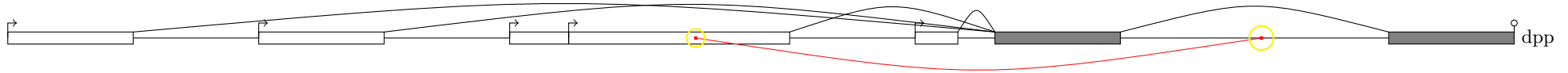
id=29207 gene=FBgn0000490 name=dpp segment=chr2L\_2455939\_2457661\_1 type=IN

D. Mel	acacaaag	gtgagtctcctt...821...taggaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...822...gtttccttgag	atagtaaa
D. Sim	acacaaag	gtgagtctgctt...847...taggaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...828...gtttccttgag	atagtaaa
D. Sec	acacaaag	gtgagtcttctt...815...taggaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...828...gtttccttgag	atagtaaa
D. Ere	acacaaag	gtgagtctcctt...880...taggaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...836...gtatacttgag	atagtaaa
D. Ana	acacaaag	gtgagttctttt...903...taaaaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...891...ttcctcttgag	atagtaaa
D. Gri	acataaag	gtgagtctcgat...1295...taaaaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccacaggattatag...934...tttgatttgag	atagtaaa
D. Moj	acataaag	gtgagtgcata...1785...taaaaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccacaggattatag...1681...ccctatttgag	atagtaaa
D. Vir	acataaag	gtgagtttgca...1329...taaaaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccacaggattatag...1014...tatgtttgag	atagtaaa
D. Wil	acataaag	gtgagtttttt...735...taaaaataacaattattatt	AAAGCGTA	TTTCGCAT	tattttccacaggattatag...606...ttttgttgag	atagtaaa
D. Yak	acacaaag	gtgagtcttcat...893...taggaataacaataattatt	AAAGCGTA	TTTCGCAT	tattttccgaggattatag...882...ctgcacttgag	atagtaaa
	*** **	*****	** *****	*****	***** **	*****

id=29207 gene=FBgn0000490 name=dpp segment=chr2L\_2455939\_2457661\_1 type=IN VIEW

Figure 560: CS=9.6





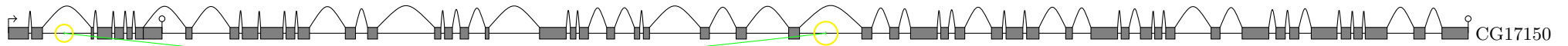
D. Mel	aggcggtta	gtcgttcaacag...752...--gcagcgcataaacatctgt	AAATtGTGCAAAATAT	atccaa-----gtgtaaccgaacgc-----	:::::cactcgaccataggaactttataagactgag	gtgagtgc
D. Sim	aggcggtta	gtcgttcaacag...752...--gcagcgcataaacatctgt	AAATtGTGCAAAATAT	atccaa-----gtgtaaccgaatgc-----	:::::cactcgaccataggaactttataagactgag	gtgagtgc
D. Sec	aggcggtta	gtcgttcaacag...839...--gcagcgcataaacatctgt	AAATtGTGCAAAATAT	atccaa-----gtgtaaccgaatgc-----	:::::cactcgaccataggaactttataagactgag	gtgagtgc
D. Ere	cagcgcctg	atcagagtttaa...760...--gcagcgcataaacatctgt	AAATtGTGCAAAATAT	atccaa-----gtgtaaccgaaagc-----	:::::cactcgaccataggaactttataagactgag	gtgagtgc
D. Ana	aggcggtta	gtcgttcaacag...1097...--cttatgccataaacatattt	AAATtGTGCAAAATAT	atccgaatccgtgtgta-----	:::::cactcgaccattggaactatataagactgag	gtgagtgc
D. Gri	aggcggtta	gtcgttccacag...1342...taccgaccaacataggaac	TTTATaaGACTgaGGTG	-----	:::::-----	---agttc
D. Moj	aggcggtta	gtcgttccacag...1215...taccgaaacataggaac	TTTATaaGACTgaGGTG	-----	:::::-----	---agttt
D. Per	aggcggtta	gtcgttccacag...1080...--caagtgccataaacatctgt	AAATtGTGCAAAATAT	atccgga-----gtgta-----	:::::cattcaaccataggaactttataagactgag	gtgagtcc
D. Pse	aggcggtta	gtcgttccacag...994...--caagtgccataaacatctgt	AAATtGTGCAAAATAT	atccgga-----gtgta-----	:::::cattcaaccataggaactttataagactgag	gtgagtcc
D. Vir	aggcggtta	gttgttccacag...1062...--ttgccacttaaacagctgt	AAATtGTGCAAAATAT	atctaaggcagagtgagagatagagagagagtgcgagg	:::::gac---aacataggaactatataagactgag	gtgagttc
D. Wil	aggcggtta	gtcgttcaacag...1103...--caaatgccataaacagctgt	AAATtGTGCAAAATAT	-tccaactgtgtgtgtgtgtacgcgcggttgctt	:::::cattcaaccataggaactttataagactgag	gtgagtgc
D. Yak	aggcggtta	gtcgttcaacag...770...--gcagtgccataaacatctgt	AAATtGTGCAAAATAT	atccaa-----gtgtaaccgaaagc-----	:::::cactcgaccataggaactttataagactgag	gtgagtgc
		*** *	* * * * *			***

id=29202 gene=FBgn0000490 name=dpp segment=chr2L\_2451242\_2452414\_1 type=A5

D. Mel	acacaaag	gtgagtctcctt...826...ataacaattattattaaagc	GTATTTcGCATtATTT	tccgca-ggattatagggtcg...817...gtttccttgtag	atagtaaa
D. Sim	acacaaag	gtgagtctgctt...852...ataacaattattattaaagc	GTATTTcGCATtATTT	tccgca-ggattatagggtcg...823...gtttccttgtag	atagtaaa
D. Sec	acacaaag	gtgagtcttctt...820...ataacaattattattaaagc	GTATTTcGCATtATTT	tccgca-ggattatagggtcg...823...gtttccttgtag	atagtaaa
D. Ere	acacaaag	gtgagtctcctt...885...ataacaattattattaaagc	GTATTTcGCATtATTT	tccgca-ggattatagggtcg...831...gtatacttgtag	atagtaaa
D. Ana	acacaaag	gtgagtctcttt...908...ataacaattattattaaagc	GTATTTcGCATtATTT	tccgca-ggattagagtactc...886...ttccttgtag	atagtaaa
D. Gri	acataaag	gtgagtctcgat...1692...gtcaggtcctttgcaacagg	CGCCAGTCGTAAA	--aggcggct-cgacaaaagtga--...541...tttgatttgtag	atagtaaa
D. Moj	acataaag	gtgagtcatga...2462...gtcaggtcctttgcaacagg	CGCCAGTCGTAAA	--agtcggctgcacaaaagta--...1007...ccctatttgtag	atagtaaa
D. Per	acacaaag	gtgagtttcag...934...ataacaattattattaaac	GTATTTcGCATtATTT	tccgca-ggattagaggacg...835...tttcaattgtag	atagtaaa
D. Pse	acacaaag	gtgagttctcag...946...ataacaattattattaaac	GTATTTcGCATtATTT	tccgca-ggattagaggacg...843...tttcaattgtag	atagtaaa
D. Vir	acataaag	gtgagttgtgca...1334...ataacaattattattaaagc	GTATTTcGCATtATTT	tccaca-ggattagaggatg...1009...tatgtgttgtag	atagtaaa
D. Wil	acataaag	gtgagtttttc...740...ataacaattattattaaagc	GTATTTcGCATtATTT	tccaca-ggattagagagatg...601...ttttgttgtag	atagtaaa
D. Yak	acacaaag	gtgagtcttcat...898...ataacaataattattaaagc	GTATTTcGCATtATTT	tccgca-ggattatagggtcg...877...ctgcacttgtag	atagtaaa
		*** *****	* * * * *	* * * * *	***** *****

id=29207 gene=FBgn0000490 name=dpp segment=chr2L\_2455939\_2457661\_1 type=IN VIEW

Figure 561: CS=11.52



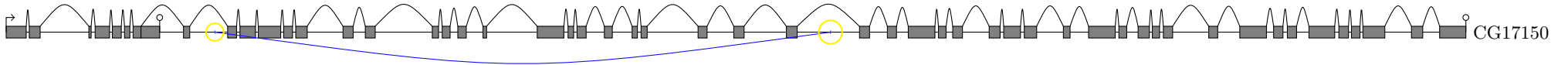
D. Mel	ttccactg	gtaagtaggaac...361...	aaaggcaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	908...	attcgcttgca	cctgtaat
D. Sim	ttccacgg	gtaagtaggaac...357...	aaaggcaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	899...	attcgcttgca	cctgtaat
D. Sec	ttccacgg	gtaagtaggaac...357...	aaaggcaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	891...	attcgcttgca	cctgtaat
D. Ere	ttccatgg	gtaagcaggagc...355...	aaaggtaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	908...	attcacttgca	cctgtaat
D. Ana	ttccacgg	gtgagttaaatt...378...	aaaggcaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tctgggagtg...	932...	ttttgcttcag	cttghtaat
D. Gri	tggccagg	gtgagttaaatt...326...	aaacgtgaaacc--aaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	970...	ttttgcttcag	cttghtaat
D. Per	tcagcagg	gtgagtgtggca...469...	-aggtaaaaaccgaaaaaaca	AATGCGTATGACAT	TTTAT	ttgaatatcccttttgggag-	1138...	ccctggctgcag	cctgcaat
D. Pse	tcagcagg	gtgagtgtggca...469...	aaaggtaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	1148...	ccctggctgcag	cctgcaat
D. Vir	ttcaacgg	gtgagtaaggc...304...	accaaaaaaacc--aaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	1495...	ttttgcttcag	cttghtaat
D. Wil	taaaatgg	gtgagaataacc...437...	aaaggagaaacc--aaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	1225...	tatcgcttcag	cttghtaat
D. Yak	ttccatgg	gtaagcggcaac...355...	aaaggtaaaacc--gaaaaaca	AATGCGTATGACA	TTTAT	ttgaatatcc-tttgggagtg...	1062...	attcgcttcag	cctgtaat
	*	*	** ** *	*** *	*****	*****	* ** *	*****	* ** *

id=26493 gene=FBgn0035581 name=CG17150 segment=chr3L\_4861941\_4863291\_1 type=IN

D. Mel	cgattacg	gtgagtaaagcg...443...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	766...	tttatttgccag	gaatgcg
D. Sim	cgattacg	gtgagtaaagag...443...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	734...	tttatttgccag	gaatgcg
D. Sec	cgattacg	gtgagtaaagag...416...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	734...	tttatttgccag	gaatgcg
D. Ere	cgattacg	gtgagtaaagag...364...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	727...	tctatttgccag	gaatgcg
D. Ana	cgattacg	gtaggtgatcc...334...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acagcatgcctgtgtatgcc...	743...	tttatttgccag	gaatgcg
D. Gri	tgactatg	gtgggtattatt...178...	-attgctgtccttttacgac	ATAAC	ATGTCATATG	CATT	acaatatgtgogtgtgtgtg...	618...	tgatcatct-ttag	gtatgcg
D. Per	cgattacg	gtgagtacgaac...296...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	726...	ccatcgac--acag	gtatgcg
D. Pse	cgattacg	gtgagtacgaac...310...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	725...	ccatcgac--acag	gtatgcg
D. Vir	cgattacg	gtaagtatatag...600...	-atattgctccttttacgac	ATAAC	ATGTCATATG	CATT	acaacatgtcctgtgtgttg...	516...	acaatttgccag	gtatgcg
D. Wil	cgattacg	gtaagtacttca...395...	-atattgctccttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtgtcgg...	554...	gttgtttgacag	gtatgcg
D. Yak	cgattacg	gtgagttacaag...422...	gatattgctc-cttttacgac	GTAAC	ATGTCATATG	CATT	acaacatgtctgtgtttgcc...	764...	tttatttgccag	gaatgcg
	** ** *	** ** *	** * **	*****	*****	***	***	**	*****	

id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L\_4880207\_4881499\_1 type=IN VIEW

Figure 562: CS=10.56



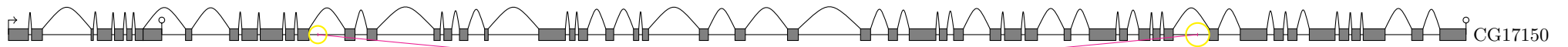
D. Mel	aagaaaag	gtgagtaactga...422...	tgacaagtgacgaggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.205...	aactca-ttacag	agagattg		
D. Sim	aggaaaag	gtgagtaactga...394...	tgacaagtgacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.205...	aactca-ttacag	aaagattg		
D. Sec	aggaaaag	gtgagtaactga...387...	tgacaagtgacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.208...	aactca-ttacag	aaagattg		
D. Ere	aagaaaag	gtgagtaactgg...421...	tgacaacagacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.205...	aactca-ttacag	aaagattg		
D. Ana	gggaggag	gtaagtctcaat...389...	tgacaagtaacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.208...	aactca-ttacag	aaattttg		
D. Gri	aggaagag	gtaagttcatgt...708...	-cacaactagaggagcaaa	-----	ATGCgt	GTTGATGTTTTGACGTG	gctccagccgaaagt	ttta---	.181...	aactcg-ttacag	aaacattg
D. Pse	acgaagag	gtaagttccatgt...225...	tgacaagtgacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaagcaaag-tttggcagg...	.317...	-actcattacag	caacattg		
D. Wil	aggaacag	gtgagtgctgctc...121...	tctcttcccccaaggaagga	AGGCTgT	GAAAAGGATGC	GTTGATGTTTTGACGTGAGC	gtcaactaac-tttttggc...	.167...	-ttttgattatag	gtacattg	
D. Yak	aggaaaaag	gtgagtaactat...421...	tgacaagtgacggggcgcgt	-----	GTTGATGTTTTGACGTGAGC	gccaacaac-tttggcagg...	.213...	aactca-ttacag	aaagattg		
	** **	** **	*	**	*****	** * * * *	*	** * *	* **		

id=26506 gene=FBgn0035581 name=CG17150 segment=chr3L.4865182.4865892.1 type=IN

D. Mel	cgattacg	gtgagtaaagcg...573...	aggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.632...	--tttatttgcag	gaatgcgc	
D. Sim	cgattacg	gtgagtaaagag...574...	aggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.599...	--tttatttgcag	gaatgcgc	
D. Sec	cgattacg	gtgagtaaagag...547...	aggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.599...	--tttatttgcag	gaatgcgc	
D. Ere	cgattacg	gtgagtttaagag...493...	aggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.594...	--tctatttgcag	gaatgcgc	
D. Ana	cgattacg	gtaggtgatcc...466...	gggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.607...	--tttatttgcag	gaatgcgc	
D. Gri	tgactatg	gtgggtattatt...345...	-ctctgtcagctgtgtaagt	-TATGTg	CAAAgt	ACATt	TGAT	caGTAT	-----	cttattttga--g	tttaattg...	.444...	-tgtcatct-ttag	gtatgcgc
D. Pse	cgattacg	gtgagtacgaac...551...	ggctgtgcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.480...	ccatcgac--acag	gtatgcgc	
D. Wil	cgattacg	gtaagtacttca...546...	ggcaaggcagctgtgtgtaa	GTTTATGTg	CAAAgt	ACATt	TGAT	caGTATCT	ta	TTTTGAGTT	aaattgaaaaacttcttcg...	.379...	-gttgtttgacag	gtatgcgc
D. Yak	cgattacg	gtgagttacaag...562...	aggaaggcagctgtgtgcaa	GTTTATGTg	CAAAgt	ACATt	TGAT	-----	cagtatcttattttga--g	ttt-----	.620...	--tttatttgcag	gaatgcgc	
	** ** *	** **	*****	*****	*****	*** **	**	** ** *	**	** ** *	**	** ** *	** ** *	

id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L.4880207.4881499.1 type=IN VIEW

Figure 563: CS=11.34



```

D.Mel aacttggg gtgagtccatcc...115...----tttcattatggaatattaatAGACTG-CTGACAgACAG-----aca-----gt--agcagtcgacggga--...891...catgtcctttag gctgtcca
D.Sim aacttggg gtgagtcctgcc...111...----tttcattatggaatattaatAGACTG-CTGACAgACAG-----aca-----gt--agcagtcgacggga--...889...catgtcctctag gctgtcca
D.Sec aacttggg gtgagtcctgcc...111...----tttcattatggaatattaatAGACTG-CTGACAgACAG-----aca-----gt--agcagtcgacggga--...782...catgtcctttag gctgtcca
D.Ere aacttggg gtgagtcagcc...107...----tttcattacggaatattaatAGACTG-gTGACAgACAG-----aca-----gt--cgcagtcgacagga--...899...catgtcctttag gctgtcca
D.Gri aattagtg gtgagtgatgaaa...264...taaaattgcattatgcaataTTAAATAAAGT-CTGACAgACAG-----actgactgactgacaacttg...910...aacggacaacag gttgttca
D.Moj atttggtg gtgagtgatgaca...200...----tttcattatgcaatattaatAAAGT-CTGACAgACAGT-ttgactaa--gc--ggcagacgcc-----...1419...tctcctcaacag gttgtaca
D.Pse atttggtg gtgagtagcagt...128...----tttcattatgcaatattaatAGACTG-CTGACAgACAGgacagagacag--gc--ggcagggg-----...1087...gtctcccaacag gttgtcca
D.Vir acttagtg gtgagtgatgaaa...197...----tttcattatgcaatattaatAAAGT-CTGACAgACAG-----ctag--actgactgactgac---tg...1480...atccgccaacag gttgttca
D.Wil atttagtg gcaagtatgaaa...193...----tgccgactgcctagctggct-GACTGACTGACTGACAGGTGG-agaacgtgttagcaagtg-----...942...tctggacaacag gttgttca
D.Yak aacttggg gtgagtccatcc...111...----tttcattatggaatattaatAGACTG-CTGACAgACAG-----aca-----gttgggaagtggcag-----...878...catgtcctttag gttgtcca
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id=26516 gene=FBgn0035581 name=CG17150 segment=chr3L\_4867384\_4868470\_1 type=IN

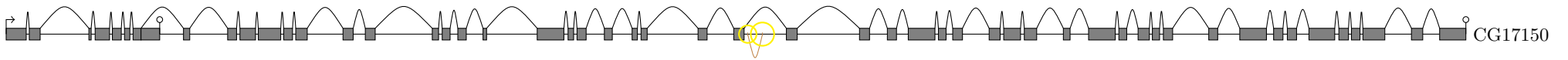
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D.Mel tggttatg gtaagttgtccc...412...--catcgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...185...tcctctgtttag gtaacagt
D.Sim tggttatg gtaagttgtccc...410...gcatcgc-----tattatgctgca--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...179...tcctctgtttag gtaacagt
D.Sec tggttatg gtaagttgtccc...395...--catcgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...186...tcctctgtttag gtaacagt
D.Ere tggttatg gtaagttgtacc...431...--catcgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...191...tcctctgtttag gtaacagt
D.Gri tggttatg gtaagttgacat...404...--cattgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTTGGCccctttt--ccatt--ccctttt...102...ctccgtgtttag gtaacagt
D.Moj tggttatg gtaagttgacat...489...--cgtgc-----tgctgctgctgctactACTGTTGTGACAGCAGTTT-----ttctattcgttttctttat--...120...ctcgtgtttag gtaacagt
D.Pse tggttatg gtaagtcgtcgg...400...--catcgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...223...ttctctgtttag gtaacagt
D.Vir tggttatg gtaagttgacat...432...--cattgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tctcagtttctttatthttc--...92...ctccctgtttag gtaacagt
D.Wil tggttatg gtaagttgatgg...427...--ctttaccggcatttttatg--CTGCaCTGTTGTGACAGCAGTTT-----tttt--cccttttgcccatcta...238...ttctctgtttag gtaacagt
D.Yak tggttatg gtaagttgtccc...447...--catcgc-----tthttatgctgcaa--CTGTTGTGACAGCAGTTT----tcctttaaccat---ctctatt--...220...tcctctgtttag gtaacagt
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```

id=26574 gene=FBgn0035581 name=CG17150 segment=chr3L\_4889786\_4890462\_1 type=IN VIEW

Figure 564: CS=11.8



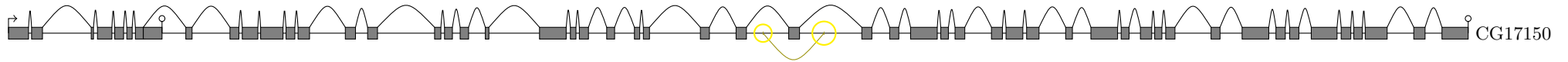
D.Me1	aatcccgg	gtgagtagcg	-----	gggttttt	-----	gggatg--caaggatgcctgagtgctgggaacagcagc	TGCGGTTT	caCGCA	--tcgca-tttttccgacttc...	692...	ttttgccacag	ctacgccg
D.Sim	aatcccgg	gtgagtagcg	-----	gggttttt	-----	gggatgcacaaggatgcctgagtgctgggaacagcagc	TGCGGTTT	caCGCA	--tcgca-tttttccacacttc...	684...	ttttgccacag	ctacgccg
D.Sec	aatcccgg	gtgagtagcg	-----	gggttttt	-----	ggtgtgcacaaggatgcctgagtgctgggaacagcagc	TGCGGTTT	caCGCA	--tcgca-tttttccacacttc...	674...	ttttgccacag	ctacgccg
D.Ere	aatcccgg	gtgagtagcg	-----	gggttttt	-----	tggatg--caaggatgcctgagtgctgggaacagcagc	TGCGGTTT	caCGCA	--tcgca-tttttccgacttc...	677...	ctttgccacag	ctacgccg
D.Ana	aatcccgg	gtgagtagag	-----	aggagatt	-----	cgaat--tgcgaac-----ctggaacagcagc	TGCGGTTT	caCGCA	--tcgcatTTTTCCgactc...	800...	ttatTTCCacag	ttatgccg
D.Gri	aatccggg	gtgagtgaacgtgagatgc	-----	cacatgact	-----	cccac-----ccagcagcagc	TGCGGTTT	caCGCA	--tcctattccctatttctct-	590...	tctcttccacag	ctacgctg
D.Moj	aatcctgg	gtgagtggcacgtgagatgagtgccagagtagcagtaaccaccaagcaggaagct	-----	gttgctgtagcaaaagcagcagcagagcagcagc	-----	gagccggcagcagcagcagcagcagc	TGCGGTTT	caCGCA	--tcgtccttctcgttgcttt-	1121...	ccctccctctag	ctacgctg
D.Vir	aatcctgg	gtgagtggcac-tggcccgtacgtgagagccg	-----	acaggct	-----	gagccggcagcagcagcagcagcagc	TGCGGTTT	caCGCAGC	gcctt-tttttacggccaac...	1060...	gccattaacag	ctacgctg
D.Wil	aatcctgg	gt	-----	gagca	-----	gagca--tcggcagcagc	TGCGGTTT	caCGCA	--acgta-ttttcccacctct...	825...	actatTTTgcag	atatgccg
D.Yak	aatcccgg	gtgagtagcg	-----	gggttttttttgggatgcaaggatg	-----	ctaggatgcctgagtgctgggaacagcagc	TGCGGTTT	caCGCA	--tcgca-tttttccgacttc...	739...	ttttgccacag	ctacgccg
	****	**					*****		*	*	*	**

id=26544 gene=FBgn0035581 name=CG17150 segment=chr3L.4879212.4880003.1 type=IN

D.Me1	aatcccgg	gtgagtagcggg...	297...	--tggcatgcatgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	416...	ttttgccacag	ctacgccg		
D.Sim	aatcccgg	gtgagtagcggg...	291...	--tggcatgcatgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	416...	ttttgccacag	ctacgccg		
D.Sec	aatcccgg	gtgagtagcggg...	291...	--tggcatgcatgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	406...	ttttgccacag	ctacgccg		
D.Ere	aatcccgg	gtgagtagcggg...	299...	--tggcatgcatgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	399...	ctttgccacag	ctacgccg		
D.Ana	aatcccgg	gtgagtagagag...	305...	--tggcatgcatatggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	506...	ttatTTCCacag	ttatgccg		
D.Gri	aatccggg	gtgagtgaacg...	401...	--tggcatgcctgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	201...	tctcttccacag	ctacgctg		
D.Moj	aatcctgg	gtgagtggcacg...	412...	--tggcatacatgtgaaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	769...	ccctccctctag	ctacgctg		
D.Vir	aatcctgg	gtgagtggcact...	375...	tttggcatgcatgtggaaca	GCTGCGacAAACa	TGCA	tattagccaggccctgtgaa...	726...	gccattaacag	ctacgctg		
D.Wil	aatcctgg	gtgagcatcggc...	458...	--tggatgcatgtgaaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	352...	actatTTTgcag	atatgccg		
D.Yak	aatcccgg	gtgagtagcggg...	317...	--tggcatgcatgtggaacagc	TGCGacAAACa	TGCA	tattagccaggccctgtgaa...	454...	ttttgccacag	ctacgccg		
	****	**			*****				*	*	*	**

id=26544 gene=FBgn0035581 name=CG17150 segment=chr3L.4879212.4880003.1 type=IN VIEW

Figure 565: CS=9.6



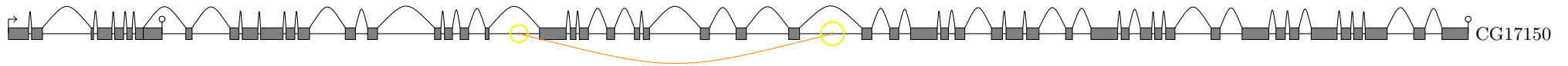
D. Mel	aatccgg	gtgagtagcggg...263...attggagat---cccat-cgg----	GATATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...446...ttttgccacag	ctacgccg	
D. Sim	aatccgg	gtgagtagcggg...257...attggagat---cccat-cgg----	GATATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...446...ttttgccacag	ctacgccg	
D. Sec	aatccgg	gtgagtagcggg...257...attggagat---cccat-cgg----	GATATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...436...ttttgccacag	ctacgccg	
D. Ere	aatccgg	gtgagtagcggg...265...attggagat---cccat-cgg----	GATATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...429...ctttgccacag	ctacgccg	
D. Ana	aatccgg	gtgagtagagag...271...attggagat---cccaa-cgg----	GATATTa	TTGCTTTGGCA	tgcatatggaacagctgcga...536...ttattccacag	ttatgccg	
D. Gri	aatccgg	gtgagttgaacg...363...---gagatttagccatacggc	TGCGGa	TATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...231...tctctccacag	ctacgctg
D. Moj	aatcctgg	gtgagtgccacg...375...----attttgtccccatacggtt	GCGGa	TATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...799...ccctcccttag	ctacgctg
D. Vir	aatcctgg	gtgagtgccact...340...----agatttagccatacggct	GCGGa	TATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...756...gccattaacag	ctacgctg
D. Yak	aatccgg	gtgagtagcggg...283...attggagat---cccat-cgg----	GATATTa	TTGCTTTGGCA	tgcatgtggaacagctgcga...484...ttttgccacag	ctacgccg	
	***** **	***** *			***** **	***** **	***** **

id=26544 gene=FBgn0035581 name=CG17150 segment=chr3L.4879212-4880003.1 type=IN

D. Mel	cgattacg	gtgagtaaagcg...409...cgtgcatccttttgcctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...800...tttattgcccag	gaatgcgc	
D. Sim	cgattacg	gtgagtaaagag...409...cgtgcatccttttgcctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...768...tttattgcccag	gaatgcgc	
D. Sec	cgattacg	gtgagtaaagag...382...cgtgcatccttttgcctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...768...tttattgcccag	gaatgcgc	
D. Ere	cgattacg	gtgagttaaagag...330...cgtgcatccttctgctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...761...tctattgcccag	gaatgcgc	
D. Ana	cgattacg	gtaggttatcc...300...ttctttccttcttctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...777...tttattgcccag	gaatgcgc	
D. Gri	tgactatg	gtgggtattatt...141...ttgt---gtgttttctttgcact	TGTTTCAAGGCAAAGATATTGCG	ttccttttacgacataaca-...652...tgtcatcttag	gtatgcgc	
D. Moj	tgattatg	gtatacatattt...480...ttctctactgttttcttt---ct	TGTTTCAAGGCAAAGATATTGCG	---tcgcttttacgacataacat...529...tcattcaacag	gtatgcgc	
D. Vir	cgattacg	gtaagtatatag...565...ttttcactgttttcttt---ct	TGTTTCAAGGCAAAGATATTGCG	---tcgcttttacgacataacat...549...acaattgcccag	gtatgcgc	
D. Yak	cgattacg	gtgagttacaag...388...cgtgcatccttttgcctg---ct	TGTTTCAAGGCAAAGATATT	---gctccttttacgacgtaaca-...798...tttattgcccag	gaatgcgc	
	** ** *	**		***** **	***** **	** ** *

id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L.4880207-4881499.1 type=IN VIEW

Figure 566: CS=8.64



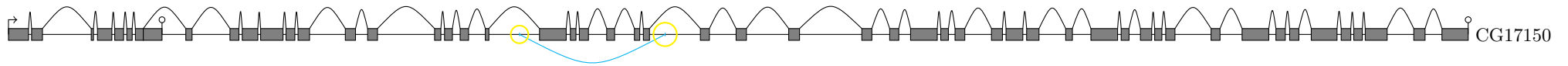
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D.Sim	tgcaaacg	gtaagtagttgc...518...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagcccaa...322...	-tatttttccag	ataatgta
D.Sec	tgcaaacg	gtaagtagttgc...509...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagcccaa...327...	-tatttttccag	ataatgta
D.Ere	tgcaaacg	gtaagtagttgc...527...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagtccaa...281...	-aatatttccag	ataatgta
D.Gri	tgttcaag	gtaagtagttgg...761...	-aacgccagttgaattgaat	TTTTggGCACA	gcTGAA	-----gcaacaaagtgggacacat...508...	catcatc-ttcag	attatgca
D.Moj	tgtacaag	gtaagtagttgg...333...	ctaaaaaatgacgttgcc	-----CAAAGCTGCAAAGG	catcgcgagccgaattgaat	-----	..358...	-atcctcaaccag
D.Per	tgcaaacg	gtaagtagttgc...595...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagcgcgaa...178...	-cccctcctgcag	ataatgta
D.Pse	tgcaaacg	gtaagtagttgc...581...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagcgcgaa...166...	-tcctcctgcag	ataatgta
D.Wil	tgcaaacg	gtaagtagttgc...990...	aaaagtcagttgaattcaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagagcgc...272...	-cgattcgtgcag	attatgta
D.Yak	tgcaaacg	gtaagtagttgc...564...	gaaagtcagttgaattgaat	TTTTcgGCACA	gcTGAA	-----gcggcaaatgggagtccaa...205...	-aatatttccag	ataatgta
	** **	****	*****	* * *	** **	* * *	** **	** ** *

id=26528 gene=FBgn0035581 name=CG17150 segment=chr3L.4871162\_4872110\_1 type=IN

D.Me1	cgattacg	gtgagtaaagcg...574...	---ggaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..642...	tttatttgccag	gaatgvcg
D.Sim	cgattacg	gtgagtaaagag...575...	---ggaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..609...	tttatttgccag	gaatgvcg
D.Sec	cgattacg	gtgagtaaagag...548...	---ggaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..609...	tttatttgccag	gaatgvcg
D.Ere	cgattacg	gtgagtaaagag...494...	---ggaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..604...	tctatttgccag	gaatgvcg
D.Gri	tgactatg	gtgggtattatt...343...	ctctctgtcagctgtg--aag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..460...	tgtcatctttag	gtatgvcg
D.Moj	tgattatg	gtatacatattt...684...	-----tttgagtttaaatgaaaaa	CTTTctTGCAaGTTTTG	--cttttg--cgctttgtactgc...330...	..tcatctcaacag	gtatgvcg	
D.Per	cgattacg	gtgagtacgaac...544...	---gctgtgcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..485...	ccatcgacacag	gtatgvcg
D.Pse	cgattacg	gtgagtacgaac...552...	---gctgtgcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..490...	ccatcgacacag	gtatgvcg
D.Wil	cgattacg	gtaagtacttca...547...	---gcaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..409...	ggtgtttgacag	gtatgvcg
D.Yak	cgattacg	gtgagttacaag...563...	---ggaaggcagctgtgtgcaag	-----TTTATGTGCAAA	----Gtacatttgatcagtatccta	----..630...	tttatttgccag	gaatgvcg
	** ** *	**	** ** *	** ** **	* * **	* * **	** ** **	** ** **

id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L.4880207\_4881499\_1 type=IN VIEW

Figure 567: CS=9.6



D.Mel	tgca	caag	gtaagtagttgc...527...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAG	-----	tgggagcccaaaaaaatgaa-----	...341...tattttcgccag	ataatgta
D.Sim	tgca	caag	gtaagtagttgc...527...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAG	-----	tgggagcccaaaaaaatgaa-----	...313...tattttcccgag	ataatgta
D.Sec	tgca	caag	gtaagtagttgc...518...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAG	-----	tgggagcccaaaaaaatgaa-----	...318...tattttcccgag	ataatgta
D.Ere	tgca	caag	gtaagtagttgc...536...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAG	-----	tgggagtccaaaaaaatgag-----	...272...aatattcccgag	ataatgta
D.Ana	tgca	caag	gtaagtagttgc...336...-----aagttccacttgccagccga	AAAGtaTGCAaGAAAAAATG	-----	ccaacatatttggcgcaaa...497...ttttatcatcag	attatgta	
D.Gri	tg	ttcaag	gtaagtagttgc...764...gcccagttgaattgaatttt	TGGGcaCAGCTgAAGCAaCAAAGtGGGG	-----	acacattgcaaaagtagcat-----	...494...catcatcttcag	attatgca
D.Per	tgca	caag	gtaagtagttgc...604...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAGtGGGG	acgcaagagacccttaaaa-----	...164...cccctcctgcag	ataatgta	
D.Pse	tgca	caag	gtaagtagttgc...590...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAGtGGGG	acgcaagagacccttagaa-----	...152...tccctcctgcag	ataatgta	
D.Vir	tg	ttcaag	gtaagtagttgc...277...aaaaaaaacaga--tgccga--	AAAGtaTGCAaGAAAAAATG	-----	ccaacatatttggcgcaac...784...tatcctcatcag	attatgca	
D.Yak	tgca	caag	gtaagtagttgc...573...-----ttgaattgaatttttcggca-	CAGCTgAAGCGgCAAAG	-----	tgggagtccaaaaaaatgaa-----	...196...aatattcccgag	ataatgta
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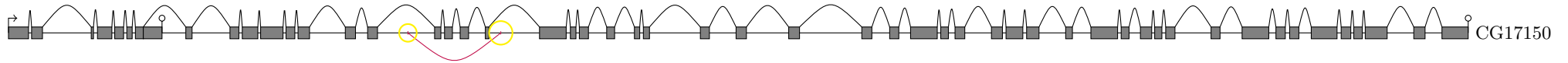
id=26528 gene=FBgn0035581 name=CG17150 segment=chr3L.4871162\_4872110.1 type=IN

D.Mel	tgctaccg	gtttgtatgcaa...245...--gcaaaaagagctgaaagcct-----	TTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acaaca--...850...actcgattgcag	cacattga	
D.Sim	tgctaccg	gttcgtatacaa...240...--gcaaaaagagctgaaacct-----	TTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acaaca--...857...gctcgattgcag	cacattga	
D.Sec	tgctaccg	gttcgtatacaa...240...--gcaaaaagagctgaaagcct-----	TTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acaaca--...850...gctcgattgcag	cacattga	
D.Ere	tgctaccg	gtgggtgtacaa...240...--gcaaaaagagctgaaacct-----	TTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acagca--...860...attcgattgcag	cacattga	
D.Ana	tgctaccg	gtgggtaccgta...168...--acgattattgaaaaatatt	TATTTaTTTCgTGCATTTT	-----	aaatatttttcatttttca...928...tcaatttcacag	gactttga		
D.Gri	tgctaccg	gtgggtaccgta...218...taagcaaaaagagctgaaaa	-----CCTTTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acaaca--...1294...ctcgttttgcag	cactttga	
D.Per	tgctaccg	gtgggtactcct...267...aaaaaaaaggagctgaaaa	-----CCTTTTTGATG	---TTT	aAGCTG	ctaccgtgcccgtacgacaaa...1257...ttctctgtgcag	cactttga	
D.Pse	tgctaccg	gtgggtactcct...258...aaaaaaaaggagctgaaaa	-----CCTTTTTGATG	---TTT	aAGCTG	ctaccgtgcccgtacgacaaa...1253...ttctctgtgcag	cactttga	
D.Vir	tgctaccg	gtgggtaccgta...145...--acgtttattgaaaaatatt	TATTTaTTTCgTGCATTTT	-----	aaatatttttcatttttac...1176...tctcatttgcag	cactttga		
D.Yak	tgctaccg	gtgggtatacaa...248...--gcaaaaagagctgaaacct-----	TTTTGATG	---TTT	aAGCTG	cctacgacaaacac--acaaca--...871...attcgattgcag	cacactga	
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								***

id=26540 gene=FBgn0035581 name=CG17150 segment=chr3L.4874563\_4875738.1 type=IN VIEW

Figure 568: CS=9.6





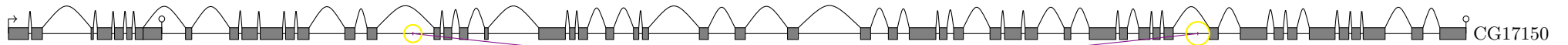
D.Mel	cctgtcca	gtgag--tgatgca...523...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacacc...465...tcccatccgcag	gcgacgaa
D.Sim	cctgtcca	gtgag--tgatgca...513...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacacc...461...tcccatccgcag	gcgacgaa
D.Sec	cctgtcca	gtgag--tgatgca...527...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacacc...461...tcccatccgcag	gcgacgaa
D.Ere	cctgtcca	gtaag--tgatgca...394...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacacc...480...tcccatccacag	gcgatgaa
D.Ana	cctgtcca	gtgag--tgatgca...600...cctcaactaacaagc----	tgagt	CTACTaATTGGTTTATA	Aattacttgcggt-gagacacc...465...ccacatccacag	gcgatgaa
D.Gri	cctgacca	gtaagtttggtg--...93...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggtggagacac...726...tattctctgcag	gtgatgaa
D.Per	cctgacca	gtgag--tgcata...266...-----actaacaagcagagaggagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacaca...541...tgctaccaacag	gcgacgaa	
D.Pse	cctgacca	gtgag--tgcata...230...-----actaacaagcagagaggagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacaca...513...tgctaccaacag	gcgacgaa	
D.Vir	cctgacca	gtaag--tgatgca...146...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacac...498...ttgtcccaacag	gcgacgaa
D.Wil	cctgtccg	gtgag--tgatgaa...195...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-aagaca...576...tgctcttattag	atgatgaa
D.Yak	cctgtcca	gtaag--tgatgca...443...cctcaactaacaagc----	tgagt	CTACTaATTGGtTTTATA	Aattacttgcggt-gagacacc...489...tcccatccgcag	gcgatgaa
	**** **	** ** *	*****	*****	*****	** ** **

id=26520 gene=FBgn0035581 name=CG17150 segment=chr3L.4869074.4870143.1 type=IN

D.Mel	tgacaaag	gtaagtagttgc...176...---ctatctccgctgtgctcgtc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...694...tattttccgcag	ataatgta	
D.Sim	tgacaaag	gtaagtagttgc...176...---ctatctccgctgtgctcgtc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...666...tattttccgcag	ataatgta	
D.Sec	tgacaaag	gtaagtagttgc...176...---ctatctccgctgtgctcgtc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...662...tattttccgcag	ataatgta	
D.Ere	tgacaaag	gtaagtagttgc...186...---ctatctcagcctgtgctcgtc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...624...aatatttccgcag	ataatgta	
D.Ana	tgacaaag	gtaagtagttgc...192...---tctctgctgtt-tgtccctc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...647...ttttattatcag	attatgta	
D.Gri	tgacaaag	gtaagtagttgc...240...---cttcta-gtccgt--tgtccctc	TGTAAGCCAATGTAG	cagctaaaatgcaactaaaa...1031...catcatctcag	attatgta	
D.Per	tgacaaag	gtaagtagttgc...249...---tgtctgtctgtc-tgtccctc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...526...cccctcctgcag	ataatgta	
D.Pse	tgacaaag	gtaagtagttgc...247...---tgtctgtctgtc-tgtccctc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...502...tcctcctgcag	ataatgta	
D.Vir	tgacaaag	gtaagtagttgc...184...---gtctgtgaccg--ggccattc	TGTAAGCCAATGTAG	cagctaaaatgcaactaaaa...884...tatcctcatcag	attatgta	
D.Wil	tgacaaag	gtaagtagttgc...169...---cttctctcttctgtc-tgtc--tc-	TAAGCCAATGTAG	cagctaaaatgcaactaaaa...1097...cgattcgtgcag	attatgta	
D.Yak	tgacaaag	gtaagtagttgc...205...---ctatctgtgctgtcgtcgtc	TGTAAGCCAATGTAG	caactaaaatgcaactaaaa...566...aatatttccgcag	ataatgta	
	** ****	*****	*	*** *	*****	*** ** ** *

id=26528 gene=FBgn0035581 name=CG17150 segment=chr3L.4871162.4872110.1 type=IN VIEW

Figure 569: CS=10.56



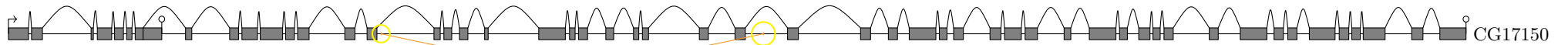
D.Mel	cctgtcca	gtgag--tgatgca...627...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cagcaaatgcagacgggctc...361...tcccatccgcag	gcgacgaa
D.Sim	cctgtcca	gtgag--tgatgca...617...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cagcaaatgcagacgggctc...357...tcccatccgcag	gcgacgaa
D.Sec	cctgtcca	gtgag--tgatgca...631...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cagcgaatgcagacgggctc...357...tcccatccgcag	gcgacgaa
D.Ere	cctgtcca	gtaag--tgatgca...498...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cagcaaatgcagacgggctc...376...ttccatccacag	gcgatgaa
D.Ana	cctgtcca	gtgag--tgatgca...704...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatgcagacggcaaa...361...ccacatccacag	gcgatgaa
D.Gri	cctgacca	gtaagtttggtg--...199...caacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatgccaacaaaacc...620...tattctctgcag	gtgatgaa
D.Moj	tctgacca	gtaag--taagat...366...caacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatgcagacaaagct...447...cttatccaacag	gcgatgaa
D.Pse	cctgacca	gtgag--tgatgca...337...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatgcagacaggccc...406...tgctaccaacag	gcgacgaa
D.Vir	cctgacca	gtaag--tgatgat...249...caacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatgcagacaaagcc...394...ttgtccaacag	gcgacgaa
D.Wil	cctgtccg	gtgag--tgatgaa...359...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cgacaaatggagacaaaacc...410...tgctcttattag	atgatgaa
D.Yak	cctgtcca	gtaag--tgatgca...547...taacaaattcatgaatgtgt	GAAAGTTGC	ttTGACAAC	cagcaaatgcagacgggctc...385...tccattcgcag	gcgatgaa
		*** **	** ** *	*****	* **** **	** ** **

id=26520 gene=FBgn0035581 name=CG17150 segment=chr3L\_4869074\_4870143\_1 type=IN

D.Mel	tggttatg	gtaagttgtccc...414...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTC	--cttttaaccatctctatttt--...183...tcctctgtttag	gtaacagt	
D.Sim	tggttatg	gtaagttgtccc...412...catcgc-tattatgctgc-act	GTTGTCAGCAGTTTTC	--ttttaaccatctctattttag...177...tcctctgtttag	gtaacagt	
D.Sec	tggttatg	gtaagttgtccc...397...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTC	--cttttaaccatctctatttt--...184...tcctctgtttag	gtaacagt	
D.Ere	tggttatg	gtaagttgtacc...433...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTC	--cttttaaccatctctatttt--...189...tcctctgtttag	gtaacagt	
D.Ana	tggttatg	gtaagttgtgga...330...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTC	--cttttaaccatctctatttt...171...tcctctgtttag	gtaacagt	
D.Gri	tggttatg	gtaagttgacat...406...--ttgctttttatgctgcaact	GTTGTCAGCAGTTTTT	-tgcccttttccattccctt--...105...ctccgtgtttag	gtaacagt	
D.Moj	tggttatg	gtaagttgacat...492...--ctgctgctgctgctactact	GTTGTCAGCAGTTTTT	-tctattcgcttttctttatt--...119...ctcgctgtttag	gtaacagt	
D.Pse	tggttatg	gtaagtcgtcgg...402...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTT	--cttttaaccatctctatttt--...222...tcctctgtttag	gtaacagt	
D.Vir	tggttatg	gtaagttgacat...434...--ttgctttttatgctgcaact	GTTGTCAGCAGTTTTT	tcagtttctttatttttcct--...90...ctccctgtttag	gtaacagt	
D.Wil	tggttatg	gtaagttgatgg...435...--cgcatttttatgctgcaact	GTTGTCAGCAGTTTTT	-ttcccttttgccatctata--...236...tcctctgtttag	gtaacagt	
D.Yak	tggttatg	gtaagttgtccc...449...--tcgctttttatgctgcaact	GTTGTCAGCAGTTTTT	--cttttaaccatctctatttt--...218...tcctctgtttag	gtaacagt	
		*****	***** *	***	* *****	*****

id=26574 gene=FBgn0035581 name=CG17150 segment=chr3L\_4889786\_4890462\_1 type=IN VIEW

Figure 570: CS=10.56



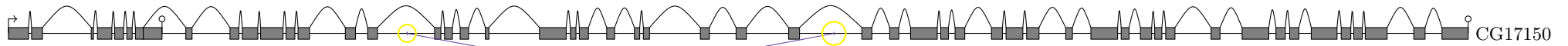
D. Mel	cctgtccagtgag-----: : : : :ccgctt-----tctcccttccgc	TGTTTGTGCAGCTG	-----cagctggccagccgagctct-----..962..tcccatccgcag	gcgacgaa
D. Sim	cctgtccagtgag-----: : : : :ccactt-----cctcccttccgc	TGTTTGTGCAGCTG	-----cagctggccagccgagctct-----..947..tcccatccgcag	gcgacgaa
D. Sec	cctgtccagtgag-----: : : : :ccactt-----cctcccttccgc	TGTTTGTGCAGCTG	-----cagctggccagccgagctct-----..961..tcccatccgcag	gcgacgaa
D. Ere	cctgtccagtaag-----: : : : :-----ccttccgc	TGTTTGTGCAGCTG	-----cagctggccagccgagctct-----..868..tcccatccacag	gcgatgaa
D. Ana	cctgtccagtgag-----: : : : :ccactccttgcgcttctgtttagacttcccttccgc	TGTTTGTGCAGCTG	-----accaagcagctctttctcc...959..ccacatccacag	gcgatgaa
D. Gri	cctgaccagtaag-----: : : : :-----	TGTGTTTGTGCAGCTG	-----atgcctg-gtgttttagacaa-----..808..tattctctgcag	gtgatgaa
D. Moj	tctgaccagtaagtaaggatgatgatgatgatgatga: : : : :tag-----	TGTGTTTGTGCAGCTG	-----gcagcaa-gtggcatgtgcat-----..742..cttatccaacag	gcgatgaa
D. Vir	cctgaccagtaag-----: : : : :gaa-----	TGTTTGTGCAGCTG	-----gcgttggtttgttttagaca-----..611..ttgtccaacag	gcgacgaa
D. Wil	cctgtccggtgag-----: : : : :-----	TGTTTGTGCAGCTG	-----gaggcaccttcatatacaca-----..786..tgctcttattag	atgatgaa
D. Yak	cctgtccagtaag-----: : : : :ccgctg-----tctcccttccgc	TGTTTGTGCAGCTG	-----cagctggacagccgagctct-----..906..tccattcgcag	gcgatgaa
	*** ** ** **	*****		** ** **

id=26520 gene=FBgn0035581 name=CG17150 segment=chr3L.4869074.4870143.1 type=IN

D. Mel	aatcccggtgagtagcggg...293...-gctttggcatgcatgtggaa	CAGCTGCgACAAACA	tgcatattagccag---gccctg...420...ttttgccacag	ctacgccg
D. Sim	aatcccggtgagtagcggg...287...-gctttggcatgcatgtggaa	CAGCTGCgACAAACA	tgcatattagccag---gccctg...420...ttttgccacag	ctacgccg
D. Sec	aatcccggtgagtagcggg...287...-gctttggcatgcatgtggaa	CAGCTGCgACAAACA	tgcatattagccag---gccctg...410...ttttgccacag	ctacgccg
D. Ere	aatcccggtgagtagcggg...295...-gctttggcatgcatgtggaa	CAGCTGCgACAAACA	tgcatattagccag---gccctg...403...ttttgccacag	ctacgccg
D. Ana	aatcccggtgagtagagag...301...-gctttggcatgcatatggaa	CAGCTGCgACAAACA	tgcatattagccg---gctacg...510...ttattccacag	ttatgccg
D. Gri	aatcccggtgagttgaacg...397...-gctttggcatgcctgtggaa	CAGCTGCgACAAACATG	tgcatattagccctaaaccca...203...tctctccacag	ctacgctg
D. Moj	aatcctgggtgagtgccacg...408...-gctttggcatacatgtgaaa	CAGCTGCgACAAACAT	tgcatattagccctacgacca...772...ccctccctctag	ctacgctg
D. Vir	aatcctgggtgagtgccact...373...-gctttggcatgcatgtggaa	CAGCTGCgACAAACAT	tgcatattagcccta--gccact...729...gccattaaacag	ctacgctg
D. Wil	aatcctgggtgagcatcggc...453...tgctttggtatgcatgtgaa	ACAGCTGCgACAAACA	tgcatattagcccc---gatctc...356...actatthtgcag	atagccg
D. Yak	aatcccggtgagtagcggg...313...-gctttggcatgcatgtggaa	CAGCTGCgACAAACA	tgcatattagccag---gccctc...458...ttttgccacag	ctacgccg
	***** **	***** ** * * **		** ** **

id=26544 gene=FBgn0035581 name=CG17150 segment=chr3L.4879212.4880003.1 type=IN VIEW

Figure 571: CS=9.6



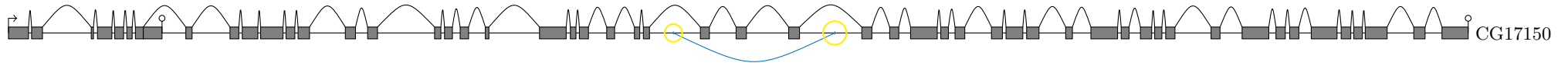
D. Mel	cctgtcca	gtgag--tgatgca...	507...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...472...	tcccatccgcag	gcgacgaa
D. Sim	cctgtcca	gtgag--tgatgca...	497...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...468...	tcccatccgcag	gcgacgaa
D. Sec	cctgtcca	gtgag--tgatgca...	511...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...468...	tcccatccgcag	gcgacgaa
D. Ere	cctgtcca	gtaag--tgatgca...	378...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...487...	ttccatccacag	gcatgaa
D. Ana	cctgtcca	gtgag--tgatgca...	584...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...472...	ccacatccacag	gcatgaa
D. Gri	cctgacca	gtaagtgtggtg-	...77...	cgcttaagataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...733...	tattctctgcag	gtgatgaa
D. Moj	tctgacca	gtaag--taaggat...	246...	agcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...558...	cttatccaacag	gcatgaa
D. Per	cctgacca	gtgag--tgcata...	378...	-----aattcatgaatgtg	gaaag----	TTGCTTTGACAA	-----	ccgaca	aatgcagacagcc...	435...	tgctaccaacag	gcgacgaa
D. Pse	cctgacca	gtgag--tgcata...	342...	-----aattcatgaatgtg	gaaag----	TTGCTTTGACAA	-----	ccgaca	aatgcagacagcc...	407...	tgctaccaacag	gcgacgaa
D. Vir	cctgacca	gtaag--tgatgat...	130...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...515...	ttgtccaacag	gcatgaa
D. Wil	cctgtccg	gtgag--tgatgaa...	179...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...581...	tgctcttattag	atgatgaa
D. Yak	cctgtcca	gtaag--tgatgca...	427...	cgcttaacataaataaacctc	AACTaaCAAGc	TGAGtc	TACTa	ATTGG	ttttataattacttgcggtg-	...496...	tccattcgcag	gcatgaa
		*** **		** ** *		* * * * *		*	** * ** *		* **	** ** **

id=26520 gene=FBgn0035581 name=CG17150 segment=chr3L.4869074.4870143.1 type=IN

D. Mel	cgattacg	gtgagtaaacg...	592...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...613...	tttattgcccag	gaatgccc
D. Sim	cgattacg	gtgagtaaacg...	593...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...580...	tttattgcccag	gaatgccc
D. Sec	cgattacg	gtgagtaaacg...	566...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...580...	tttattgcccag	gaatgccc
D. Ere	cgattacg	gtgagtaaacg...	512...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...575...	tctattgcccag	gaatgccc
D. Ana	cgattacg	gtaggtgatcc...	485...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...588...	tttattgcccag	gaatgccc
D. Gri	tgactatg	gtgggtattatt...	361...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...431...	tgtcatcttag	gtatgccc
D. Moj	tgattatg	gtatacatattt...	648...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...359...	tcatttcaacag	gtatgccc
D. Per	cgattacg	gtgagtacgaac...	261...	gttcggacttttctttttgc	-----	TTGTTt	CAAGGCAA	agatattgctcctt	---ttacga...	767...	ccatcgacacag	gtatgccc
D. Pse	cgattacg	gtgagtacgaac...	275...	gttcggacttttctttttgc	-----	TTGTTt	CAAGGCAA	agatattgctcctt	---ttacga...	766...	ccatcgacacag	gtatgccc
D. Vir	cgattacg	gtaagtatatag...	793...	tgttgagttaaattgaaa	-----	ACTTt	CCTTgca	AGTT	-----tgctgcgctttgtgctgctg-	...328...	acaattgcccag	gtatgccc
D. Wil	cgattacg	gtaagtacttca...	565...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...380...	gttggttgcag	gtatgccc
D. Yak	cgattacg	gtgagttacaag...	581...	-----agtttatgtgcaaagtacat	TTGATc	AGTA	CCTTA	TTTGAGTT	-taattgaaaaactt---tcttg-	...601...	tttattgcccag	gaatgccc
		** ** *		** *		** ** **		*	** *		** *	** * ** ** *

id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L.4880207.4881499.1 type=IN VIEW

Figure 572: CS=11.52



```

D.Mel  tgctaccg gtttgtatgcaa...398...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...695...actcgattgcag cacattga
D.Sim  tgctaccg gttcgtatacaa...393...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...702...gctcgattgcag cacattga
D.Sec  tgctaccg gttcgtatacaa...393...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...695...gctcgattgcag cacattga
D.Ere  tgctaccg gtgggtgtacaa...405...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...693...attcgattgcag cacattga
D.Ana  tgctaccg gtgggtaccgta...444...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...654...tcaatttcacag gactttga
D.Gri  tgctatcg gtgggtaacatt...383...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...1134...ctcgttttgtag cactttga
D.Moj  tgctatcg gtgggtaacaaa...317...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...1037...cgttttgttcag cactttga
D.Per  tgctaccg gtgggtactcct...489...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...1036...ttctctgtgcag cactttga
D.Pse  tgctaccg gtgggtactcct...485...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...1027...ttctctgtgcag cactttga
D.Vir  tgttaccg gtgggttcaaca...316...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTtTATAttaacaaataaatcaatgt...1002...tctcatttgcag cactttga
D.Wil  tgctatcg gtgggtacaaaa...395...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...697...ctattttctag gactttga
D.Yak  tgctaccg gtgggtatacaa...409...ggcagaaaggacattttaatGGGGTTTcCGATaAAACTTttatattaacaaataaatc-----...708...attcgattgcag cacactga
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

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id=26540 gene=FBgn0035581 name=CG17150 segment=chr3L.4874563\_4875738\_1 type=IN

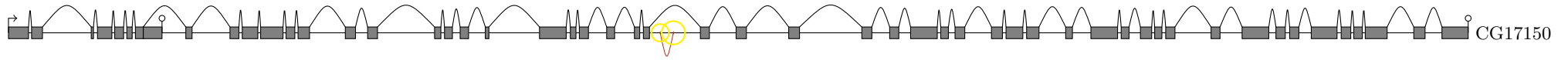
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D.Mel  cgattacg gtgagtaaagcg...611...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...597...tttatttgccag gaatgcdc
D.Sim  cgattacg gtgagtaaagag...612...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...564...tttatttgccag gaatgcdc
D.Sec  cgattacg gtgagtaaagag...585...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...564...tttatttgccag gaatgcdc
D.Ere  cgattacg gtgagtaaagag...531...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...559...tctatttgccag gaatgcdc
D.Ana  cgattacg gttaggttatcc...504...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...572...tttatttgccag gaatgcdc
D.Gri  tgactatg gtgggtattatt...380...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...415...tgtcatcttag gtagtgcg
D.Moj  tgactatg gtatataat...667...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...343...tcatctcaacag gtagtgcg
D.Per  cgattacg gtgagtacgaac...581...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...440...ccatcgacacag gtagtgcg
D.Pse  cgattacg gtgagtacgaac...589...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...445...ccatcgacacag gtagtgcg
D.Vir  cgattacg gtaagtatatag...771...agtacatttgatcagatctTATGttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...338...acaatttgccag gtagtgcg
D.Wil  cgattacg gtaagtacttca...584...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...364...gttgttgacag gtagtgcg
D.Yak  cgattacg gtgagttacaag...600...-----tttgatcagatccttattttGAGTTTaaATTGaaAAACTTTcttgcaagttt--gctgcgctt...585...tttatttgccag gaatgcdc
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** * * * * *

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id=26546 gene=FBgn0035581 name=CG17150 segment=chr3L.4880207\_4881499\_1 type=IN VIEW

Figure 573: CS=11.52



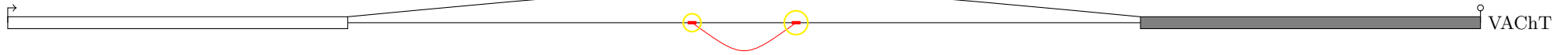
D.Me1	tgctaccg	gtttgtatgcaa...155..	-----tcagaagagaagccaggcac	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	935...	actcgattgcag	cacattga	
D.Sim	tgctaccg	gttcgtatacaa...150..	-----tcagaaggaagccaggcac	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	942...	gctcgattgcag	cacattga	
D.Sec	tgctaccg	gttcgtatacaa...150..	-----tcagaaggaagccaggcac	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	935...	gctcgattgcag	cacattga	
D.Ere	tgctaccg	gtgggtgtacaa...151..	-----tcagacgagaagccaggcac	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	944...	attcgattgcag	cacattga	
D.Gri	tgctatcg	gtgggtaacatt...131..	-----taaaagtca--tgagaagcaac---	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	1383...	ctcgttttcgag	cactttga	
D.Moj	tgctatcg	gtgggtaacaaa...108..	-----taaaagtca--tgaaaggcaac---	GTTTATTGGGAAAAAT	TTTATT	ttatttcactgcattttaaa...	1243...	cgttttgttcag	cactttga	
D.Per	tgctaccg	gtgggtactcct...162..	ccccctgagtcctaagtca-----	GGAAc	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	1355...	ttctctgtgcag	cactttga
D.Pse	tgctaccg	gtgggtactcct...154..	ccccctgagtcctaagtca-----	GGAAc	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	1350...	ttctctgtgcag	cactttga
D.Vir	tgttaccg	gtgggttcaaca...127..	-----taaaagtca--tgaaaggcaac---	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	1193...	tctcatttcgag	cactttga	
D.Wil	tgctatcg	gtgggtacaaaa...105..	-----aagtcagtgataggcaacc---	GTTTATTGGGAAAAAT	TTTATT	ttatttcactgcattttaaa...	984...	ctatttttctag	gactttga	
D.Yak	tgctaccg	gtgggtatacaa...158..	-----tcagacgagaagccaggcac	GTTTATTGGGAAAAAT	TTTATT	ttatttcggtgcattttaaa...	956...	attcgattgcag	cacactga	
	** ** *	** **	***	*****	*****	*****		* **	** ***	

id=26540 gene=FBgn0035581 name=CG17150 segment=chr3L.4874563.4875738.1 type=IN

D.Me1	tgctaccg	gtttgtatgcaa...395..	gccggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	697...	actcgattgcag	cacattga	
D.Sim	tgctaccg	gttcgtatacaa...390..	gccggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	704...	gctcgattgcag	cacattga	
D.Sec	tgctaccg	gttcgtatacaa...390..	gccggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	697...	gctcgattgcag	cacattga	
D.Ere	tgctaccg	gtgggtgtacaa...402..	gccggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	695...	attcgattgcag	cacattga	
D.Gri	tgctatcg	gtgggtaacatt...380..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	1136...	ctcgttttcgag	cactttga	
D.Moj	tgctatcg	gtgggtaacaaa...314..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	1039...	cgttttgttcag	cactttga	
D.Per	tgctaccg	gtgggtactcct...486..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	TTTTTatattaacaaataaatcaa...	1034...	ttctctgtgcag	cactttga	
D.Pse	tgctaccg	gtgggtactcct...482..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	TTTTTatattaacaaataaatcaa...	1025...	ttctctgtgcag	cactttga	
D.Vir	tgttaccg	gtgggttcaaca...313..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	1009...	tctcatttcgag	cactttga	
D.Wil	tgctatcg	gtgggtacaaaa...392..	gctggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	699...	ctatttttctag	gactttga	
D.Yak	tgctaccg	gtgggtatacaa...406..	gccggcagaaggacattht	AATGGGGTTCCGATaAAAC	ttttatattaacaaataaa----	710...	attcgattgcag	cacactga	
	** ** *	** **	***	*****	*****	*****		* **	** ***

id=26540 gene=FBgn0035581 name=CG17150 segment=chr3L.4874563.4875738.1 type=IN VIEW

Figure 574: CS=10.56



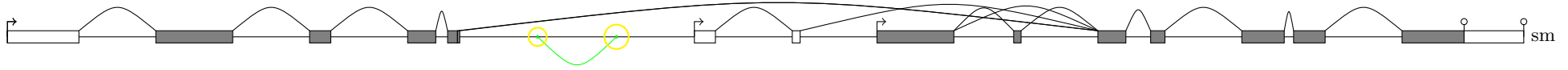
D.Me1	cgatacag	gtgagtaacata...4609...-----acacgt-acttttcggtattc-----	GTTTTATGATTGAAATGT	gtgtccctcgaaaagaagaa-----	..298...	gtgtcgttaaag	gttgttca
D.Sim	cgacacag	gtgagtaacata...4619...-----acacgt-acttttcggtattc-----	GTTTTATGATTGAAATGT	gtgtccctcgaaaagaagaa-----	..288...	gtgtcgttaaag	gttgttca
D.Sec	cgacacag	gtgagcaacata...4617...-----acacgt-acttttcggtattc-----	GTTTTATGATTGAAATGT	gtgtccctcgaaaagaagaa-----	..290...	gtgtcgttaaag	gttgttca
D.Ere	cgacacag	gtgagttgtagt...4609...---tttacacgt-acttttcggtat-----	TTTGTTTTATGATTGAAATGT	gtgtccctcgaaaagaagaa-----	..295...	gtgtcgttaaag	gttgttca
D.Ana	cgacacag	gtgagcatttaa...4607...---tgtacacgtaatttttcggt-----	ATTGTTTTATGATTGAAATGT	gtgtccctcgaaaagaagaa-----	..296...	gtgtcgttaaag	gttgttca
D.Gri	cgatacag	gtgagccacaca...4749...---ccagcaggcattccttttgca-----	ACACAGAAACAAcATTTC	---aatcataaaagcaaatgaaa...	..158...	gtgtcgttaaag	gttgttca
D.Moj	cgatacag	gttagtcggata...4760...---ccagcaggcaaccttttgca-----	ACACAGAAACAAcATTTC	---aatcataaaacaaatgatac...	..147...	gtgtcgttaaag	gttgttca
D.Per	cgacacag	gtaagccaccag...4630...---tgtacttac--tttttcggtat-----	TTGTTTTATGATTGAAATGT	gtgtcactcgaaaagaaaa-----	..276...	gtgtcgttaaag	gttgttca
D.Pse	cgacacag	gtaagccaccag...4623...---gtacttac-tttttcggtat-----	TTGTTTTATGATTGAAATGT	gtgtcactcgaaaagaaaa-----	..282...	gtgtcgttaaag	gttgttca
D.Vir	cgatacag	gtgagacacata...4613...tattaatacctaaattaaaAAATATATTtTGGTat	TTGTTTTATGATTGAAATGT	gtcaattgctgtgcaaaaa-----	..275...	gtgtcgttaaag	gttgttct
D.Wil	cgatacag	gtgagttccttt...4765...---ccagcaggcattccttttgca-----	ACACAGAAACAAcATTTC	---aatcataaaagcaaatgaat...	..142...	gtgtcgttaaag	gttgttca
D.Yak	cgacacag	gtgagcagtagt...4617...---taatgaattagttgtcggta-----	TTTGTTTTATGATTGAAATGT	gtgtcccgcgaaaaggagaa-----	..287...	gtgtcgttaaag	gttgttca
	*** **	** **	*	* * * * *	*	*	*****

id=38917 gene=FBgn0015323 name=VACHT segment=chr3R.14531829.14538146.1 type=I5

D.Me1	cgatacag	gtgagtaacata...4766...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAAT	-----agaccaactaacca---gctaactcctagttaag----	:::::actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Sim	cgacacag	gtgagtaacata...4776...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAAT	-----agaccaactaacca---gctaactcctagttaag----	:::::actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Sec	cgacacag	gtgagcaacata...4774...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAAT	-----agaccaactaacca---gctaactcctagttaag----	:::::actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Ere	cgacacag	gtgagttgtagt...4769...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAATAGAA	-----cccaactaacca---actaatcctagttaagagaaa:::::	actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Ana	cgacacag	gtgagcatttaa...4782...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAATGAAT	-----ccaactaacactgaaa--attaactcctagttaag----	:::::actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Gri	cgatacag	gtgagccacaca...4931...---aataaaacaaacatctaacGAAATcTTGTTTCTGTGT	GAAATcTTGTTTCTGTGT	-----::::::-----cgtaaag	gttgttca	
D.Moj	cgatacag	gttagtcggata...4931...---gcaataatgaaagaactaacGAAATcTTGTTTCTGTGT	GAAATcTTGTTTCTGTGT	-----::::::-----cgtaaag	gttgttca	
D.Per	cgacacag	gtaagccaccag...4784...ccttttgcaacacagaaaca-----	ACATTTC AATCATAaaAGCAA	-----tcgaaactactaaaaataaaaatacactaacactgaat:::::	actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Pse	cgacacag	gtaagccaccag...4784...ccttttgcaacacagaaaca-----	ACATTTC AATCATAaaAGCAA	-----tcgaaactactaaaaataaaaatacactaacactgaat:::::	actaacgaaatctgtttctgtgtcgttaaag	gttgttca
D.Vir	cgatacag	gtgagacacata...4806...ccttttgcaacacagaaaca-----	ACATTTC AATCATAaaAGCAAATTA	caaataaATATTa-----::::::actaacgaaatctgtttctgtgtcgttaaag	gttgttct	
D.Wil	cgatacag	gtgagttccttt...4931...---atgcctagagaagaactaacGAAATcTTGTTTCTGTGT	GAAATcTTGTTTCTGTGT	-----::::::-----cgtaaag	gttgttca	
D.Yak	cgacacag	gtgagcagtagt...4777...ccttttgcaacacagaaaca-----	ACATTTC AATCATAAAATAGAA	-----cccaactaacca---actaatcctagttaag----	:::::actaacgaaatctgtttctgtgtcgttaaag	gttgttca
	*** **	** **	** * * * *	*	*	*****

id=38917 gene=FBgn0015323 name=VACHT segment=chr3R.14531829.14538146.1 type=I5 VIEW

Figure 575: CS=14.4



D. Mel	tctaccaa	gtgcgttcacat...2531...aagcatatatcaagatacca---	<b>GCAGCAACAACCACA</b>	-----	ccagcaataagcaagcaaca-----	...2379...--cgtatccgtaac	ggtacat		
D. Sim	tctaccaa	gtgcgttcacat...2596...aagcatatatcaaaatacca---	<b>GCAGCAACAACCACA</b>	-----	ccagcaataagcaagcaaca-----	...2314...--cgtatccgtaac	ggtacat		
D. Sec	tctaccaa	gtgcgttcacat...2580...aagcatatatcaagatacca---	<b>GCAGCAACAACCACA</b>	-----	ccagcaataagcaagcaaca-----	...2330...--cgtatccgtaac	ggtacat		
D. Ere	tctaccaa	gtgcgttcacat...2481...---atatatcaagatacca---	<b>GCAGCAACAACCACA</b>	-----	ccagcaataagcaagcaaca-----	...2429...--tgtatccgtaac	ggtacat		
D. Ana	tctaccaa	gtgcgttcacat...4309...cgaaaagcaaaaaataaaa---	<b>ACGT</b>	---	<b>ATTGAAACAGATCCT</b>	-----	tgaaaaaaaatgttgttg-----	...597...atcgctaccg--ac	aatatcgt
D. Moj	tcaaccaa	gtgcgttcaaat...4376...agtcccattcgctagtcgc	<b>TATAGaCGT</b>	<b>AcaATTGAAACAGATCCT</b>	-----	tgaaa-----	tggttggggcggtgt...	521...gtagtttctg--ac	ggttctca
D. Per	tctaccaa	gtgcgttcacat...2465...aaaaagcattcgaa-----	<b>ACA</b>	<b>acaACAACAAGAA</b>	-----	caaaacaaagaaaaacacca-----	...2444...--cgctctgcccac	cgccgcg	
D. Pse	tctaccaa	gtgcgttcacat...2479...tcaacagctacaaca-----	<b>ACAAGaACA</b>	<b>-aaCAAAG</b>	-----	aaaaacccaaccaccgaa-----	...2429...tccgctctgcccac	cgccgc--	
D. Wil	tctaccaa	gtgcgttcactt...2652...ccacagcaacaagaataaac	<b>TACAACAACA</b>	<b>caACATcAAGC</b>	<b>tttttg</b>	<b>cacttattgt</b>	<b>taaa-----</b>	...2251...ctcgactcc--gg	gatccaa
D. Yak	tctaccaa	gtgcgttcacat...2475...---aacgacaaaaacca---	<b>GCAGCAACAACCACA</b>	-----	ccagcaataagcaagcaaca-----	...2435...--tgtatccgtaac	ggtacat		

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id=14020 gene=FBgn0003435 name=sm segment=chr2R.15453791.15461492.-1 type=IN

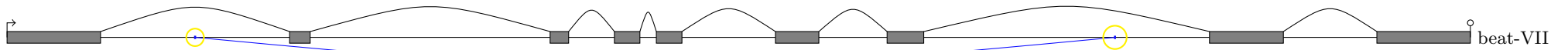
D. Mel	tctaccaa	gtgcgttcacat...4550...tgagcgagtatgttccaat---	<b>TGTGGTTGTTGCTGT</b>	-----	gctgatgtgtttacaaaac...	360...--cgtatccgtaac	ggtacat	
D. Sim	tctaccaa	gtgcgttcacat...4553...cgagtgagtatgttccaat---	<b>TGTGGTTGTTGCTGT</b>	-----	gctgatgtgtttacataacc...	357...--cgtatccgtaac	ggtacat	
D. Sec	tctaccaa	gtgcgttcacat...4553...cgagtgagtatgttccaat---	<b>TGTGGTTGTTGCTGT</b>	-----	gctgatgtgtttacataacc...	357...--cgtatccgtaac	ggtacat	
D. Ere	tctaccaa	gtgcgttcacat...4516...cgagcgagtatgttccaat---	<b>TGTGGTTGTTGCTGT</b>	-----	gctgatgtgtttacaaaacc...	394...--tgtatccgtaac	ggtacat	
D. Ana	tctaccaa	gtgcgttcacat...4775...aaagtatacattttaccatt	<b>GGGATCTGTTCAAA</b>	<b>gtTATGT</b>	---	<b>cagccatagtctaaatacca-----</b>	...129...atcgctaccg--ac	aatatcgt
D. Moj	tcaaccaa	gtgcgttcaaat...4836...aatcaaaacatttaccatt	<b>GGGATCTGTTCAAA</b>	<b>AGTTATGT</b>	<b>aaCTATA</b>	<b>tagctctatattg--atogaatt...</b>	61...gtagtttctg--ac	ggttctca
D. Per	tctaccaa	gtgcgttcacat...3401...---tttgtaacttactaataacc	<b>TTTTGTTGT</b>	<b>gtTTGT</b>	---	<b>gtgctctctgtgtgcgttg-----</b>	...1508...--cgctctgcccac	cgccgcg
D. Pse	tctaccaa	gtgcgttcacat...3411...---ttgtaacttactaataacc	<b>TTTTGTTGT</b>	<b>gtTTGT</b>	---	<b>gtgctctctgtgtgcgttg-----</b>	...1499...tccgctctgcccac	cgccgc--
D. Wil	tctaccaa	gtgcgttcactt...3944...ctactaccttttcaatctc-	<b>GCTTGTGT</b>	<b>-TGTcTGTGTG</b>	---	<b>cagggatgatggcacgggc...</b>	961...ctcgactcc--gg	gatccaa
D. Yak	tctaccaa	gtgcgttcacat...4529...cgagcgagtatgttccaat---	<b>TGTGGTTGTTGCTGT</b>	-----	gctgatgtgtttacaaaac...	381...--tgtatccgtaac	ggtacat	

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id=14020 gene=FBgn0003435 name=sm segment=chr2R.15453791.15461492.-1 type=IN VIEW

Figure 576: CS=9.6





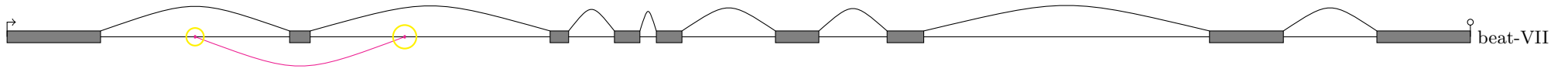
D.Mel	gccaataa	gtaagtactttt...3054...	----attaatgctgattgattgat-----	TATTTGCGTTTT	tctgacatgatgcacgcttt----	...1859...	--ctgccgtttcag	atggacaa		
D.Sim	gccaataa	gtaagtactttt...2686...	--ttgattaatgctgattgatt-----	GATTATTTGCGTTTT	tttctgacatgatgcacgct-----	...2226...	--ctgccgtttcag	atggacaa		
D.Sec	gccaataa	gtaagtactttt...3152...	----attaatgctgattgattgat-----	TATTTGCGTTTT	tctgacatgatgcacgcttt----	...1761...	--ctgccgtttcag	atggacaa		
D.Ere	gccaataa	gtaagtactttt...3019...	--ttgattaatgctgattgatt-----	GATTATTTGCGTTTT	tttctgacatcatgcacgct-----	...1893...	--ctgccgtttcag	atggacaa		
D.Ana	gccaataa	gtgagtataaatt...2736...	...cgttgattaatgctgattgattga-----	TTGATTATTTGCGTTTT	tttctgacatgatgcacgctttattg...	...2168...	cctgcc--cgcag	atggacaa		
D.Gri	accaataa	gtaagttccagg...2681...	----attaatgctgattgattgat-----	TATTTGCGTTTTG	ctgacatgctgcacgcttta---	...2231...	---caatthttgtag	atggacaa		
D.Per	gccaataa	gtaagtacattt...3578...	...gccatatttatacc----atgatat---	GGCAACAAGTTGCCAG	--ctggtccggggcagtcata---	...1331...	acctgcc--cacag	atggacaa		
D.Wil	tccaaaaa	atatgtgcagtt...2812...	---tgctgagcgttgattaatgt	TGATTGATTGATTATTTGCGTTTT	tttctgacatgatgcacgct-----	...2091...	ctctgtc--tacag	atggacaa		
D.Yak	gccaataa	gtaagtactttt...2958...	--ttgattaatgctgattgatt-----	GATTATTTGCGTTTT	tttctgacatgatgcacgct-----	...1954...	--ctgccgtttcag	atggacaa		
		**** **	* **	*	*	****	**	*** *	**	*****

id=91773 gene=FBgn0250908 name=beat-VII segment=chr3R.22492614.22507098\_-1 type=IN

D.Mel	aagcacag	gtgagtggcggg...4872...	-----cgtttgcacacatcaatcat--	AAAATGCAAATA	-----	tttacgattttatttgtgtg-----	...41...	tttatgttcag	gaacagca			
D.Sim	aagcacag	gtgagtggcggg...4523...	---aatgtgcgatacggctgaat-----	AATGCAAAC	TAATC	-----	tggcctg--	aatgcaggcaaac	gaacagca			
D.Sec	aagcacag	gtgagtggcggg...4873...	-----cgtttgcacacatcaatcat--	AAAATGCAAATA	-----	tttacgattttatttgtgtg-----	...40...	tttatgttcag	gaacagca			
D.Ere	aagcacag	gtgagtgggga...4508...	---aatgtgcgatacggctgaat-----	AATGCAAAC	TAATC	-----	tggccgg--	aatgcaggcgaac	gaacagca			
D.Ana	aagcacag	gtgagtgtcgt...4452...	...agcatgctactgc-----cgacggc	TGAA	AATGCAAAC	TAATCAG	-----	cccgt--	aatgcaggagaacca--	...452...	ttatattcgcag	gaacaaca
D.Gri	aagcacag	gttagtctcgac...4800...	...gtattctcgcacatcaatca--	TAAAATGCAAATA	-----	tttacgattttatttgtgcg-----	...112...	catcttttcag	aaattcaa			
D.Per	aagcacag	gtgagtgtgat...2736...	...ttccgtctg----atttgaattgc--	TTGGCAA	gTTTGT	taTGCT	-----	ttg-----	aacttgagcttcctgcc...	...2170...	ttttattgcag	gaacagca
D.Wil	aagcacag	gtaagccccgca...4490...	---cggcaaacagcatttgaat-----	AATGCAAAC	TAATCAG	cCAGTTA	tactgaa--	aagccattataaa	-----	...412...	tctctgttcag	gaacacaa
D.Yak	aagcacag	gtgagtgaagg...4515...	---aatgtgcgatacggctgaat-----	AATGCAAAC	TAATC	-----	tggccga--	aatgcaggcgaac	-----	...396...	tttatgttcag	gaacagca
		*****	** **	*	****	*	*	***	**	*		

id=91785 gene=FBgn0250908 name=beat-VII segment=chr3R.22477110.22487256\_-1 type=IN VIEW

Figure 577: CS=8.64



D.Mel	gccaataa	gtaagtactttt...3054...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...1859...ctgccgtttc-ag	atggacaa				
D.Sim	gccaataa	gtaagtactttt...2689...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...2224...ctgccgtttc-ag	atggacaa				
D.Sec	gccaataa	gtaagtactttt...3152...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...1761...ctgccgtttc-ag	atggacaa				
D.Ere	gccaataa	gtaagtactttt...3749...ccatgttatgcatgtcctGCAACAGTTGC-----caactgtttcgggcctccat...1164...ctgccgtttc-ag	atggacaa				
D.Ana	gccaataa	gtgagtataatt...2741...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...2172...-cctgcccgtag	atggacaa				
D.Gri	accaataa	gtaagtccagg...2681...attaatgctgattgattgat-----TATTGCGTTTTGctgacatgctgcacgcttta--...2231...-caattttttag	atggacaa				
D.Moj	gccaacaa	gtaagtcaata...2820...attaatgctgattgattgat-----TATTGCGTTTTGctgacatgctgcacgcttta--...2092...-tgctttcccag	atggacaa				
D.Pse	gccaataa	gtaagtacattt...2689...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...2224...-acctgccacag	atggacaa				
D.Wil	tccaaaaa	atatgtcagtt...2824...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...2089...-ctctgtctacag	atggacaa				
D.Yak	gccaataa	gtaagtactttt...2961...attaatgctgattgattgat-----TATTGCGTTTTtctgacatgatgcacgcttt---...1952...ctgccgtttc-ag	atggacaa				
	**** **	* **	*** ** ** **	* ****	* ** * * ** *	**	*****

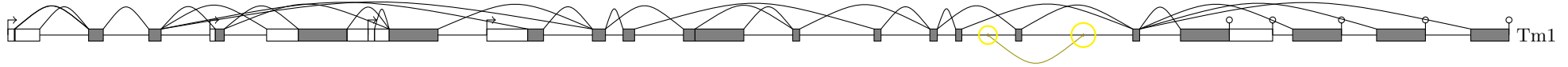
id=91773 gene=FBgn0250908 name=beat-VII segment=chr3R.22492614\_22507098\_-1 type=IN

D.Mel	tgttcaag	gtaagtgagtc...1236...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----ctaactgtaaggggatcctt--...1773...ttgttttgtag	gttacatg				
D.Sim	tgttcaag	gtaagtactgc...1254...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----ctaactgtaaggggatcctt--...1777...ttgttttgtag	gttacatg				
D.Sec	tgttcaag	gtaagtactgc...1245...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----ctaactgtaaggggatcctt--...1783...ttgttttgtag	gttacatg				
D.Ere	tgttcaag	gtaagtgcctgc...4430...gtcgaattattca-gttaac-----GCAACTTGTTCGcaagttaaagt--gctctgcag...257...ttgttttgtag	gtgacatg				
D.Ana	tcttcaag	gtaagtgggatt...1678...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----cgaacactgacgggatcatg--...1966...ttgtattccag	gtgacatg				
D.Gri	ttttcaag	gtgagtcgaatg...2080...agtggcactaaaaa-ggcaattTAAAACGCAAATG-----cgaacacggtt--actcatgga...1504...gttgattgcag	gtgacatg				
D.Moj	tattcaag	gtaagctctgtg...1128...agtggcactaaaaa-ggcaattTAAAACGCAAATG-----cgaacacggtt--acctatgga...1730...gttgattgcag	gtgacatg				
D.Pse	tcttcaag	gtaagtggcag...1465...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----cgaatactgtc--gtccgtacg...1858...tgtctttgcag	gtgacatg				
D.Wil	tcttcaag	gtaagcagtg...1775...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----cgaatgcgaaa--acaaatgaa...2157...tgcttttgtag	gtgacatg				
D.Yak	tgttcaag	gtaagtactgc...1284...-gtggcactaaaaa-ggcaattAAAACGCAAATG-----ctaactgtaaggggatcctt--...1957...ttgttttgtag	gtgacatg				
	* ** **	** **	* ** * * ** *	** **	** ** *	** ** *	** ** *

id=91775 gene=FBgn0250908 name=beat-VII segment=chr3R.22489419\_22492503\_-1 type=IN VIEW

Figure 578: CS=10.8





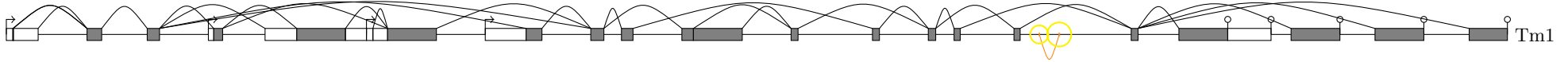
D. Mel	taaaggag	gtagatacgata...	221	---	gtattcgacta	aatccttg	----	AAAAATGTCTACCGA	ATGAA	attcgtttatagct	caagca	---	245	...	tgaaaccatag	gccacaca	
D. Sim	taaaggag	gtagatacgata...	215	---	gtattcgacta	aatccttg	----	AAAAATGTCTACCGA	ATGAA	attcgtttacagct	caagcg	---	248	...	tgaaaccatag	gccacaca	
D. Sec	taaaggag	gtagatacgata...	215	---	ttgtattcgta	ctaattcct	----	TGAAAATGTCTACCGA	ATGAA	attcgtttacagct	caagcg	---	237	...	tgaaaccatag	gccacaca	
D. Ere	taaaggag	gtagatacagata...	214	---	gtattcgacta	aatccttg	----	AAAAATGTCTACCGA	ATGAA	attcgtttacagct	caagcg	---	230	...	tgaaactcatag	gccacaca	
D. Ana	taaaggag	gtacagatacag...	208	---	cagaactaat	ccatattatt	----	TATAAAAATGTCTACCGA		tgtttacagat	ccccctct	...	193	...	aaaactgcttag	gccacaca	
D. Gri	taaaggag	gtagatacaata...	195	---	gccactgtaca	caactggct	----	ATTATAAAAATGTCTACCGA	AGTG	caactgtacatg	cccctaa	---	332	...	aaaacataatag	gctacaca	
D. Moj	taaaggag	gtagatacaaca...	188	---	ctggccacgc	gtgcattcat	----	ATAAAAATGTCTACCGA		caactgtgcaact	gtcct	---	379	...	tgtaaaaaacag	gctacaca	
D. Per	taaaggag	gtagatacga...	252	---	gttgtgtgta	ctaataattct	----	TATAAAAATGTCTACCGA		catgat	atttacagat	caat	----	229	...	actgaacgccag	gccacaca
D. Pse	taaaggag	gtagatacga...	252	---	gttgtgtgta	ctaataattct	----	TATAAAAATGTCTACCGA		catgat	atttacagat	caat	----	229	...	actgaacgccag	gccacaca
D. Vir	taaaggag	gtagatacaaac...	188	---	gtggctgcg	cgcaatcgc	----	ATAAAAATGTCTACCGA	AGTG	cagctgtacatg	cgcgccc	---	316	...	taacaaatag	gctacaca	
D. Wil	taaaggag	gtagatcacaaa...	1074	...	actaactaagt	gcaaaattt		TATAT	TATAAAAATGTCTACCGA		----	----	263	...	aacaaacttag	gccacaca	
D. Yak	taaaggag	gtagatacaga...	217	---	gtattcgacta	aatccttg	----	AAAAATGTCTACCGA	ATGAA	attcgtttacagct	caagcg	---	243	...	tgaaaccatag	gccacaca	
	*****	*** *						*****							**	** *****	

id=44134 gene=FBgn0003721 name=Tm1 segment=chr3R.11126796.11127345.1 type=IN

D. Mel	tgaaagag	gtattattgata...	579	---	gaaattaatt	cactgagata	----	TTTAT	TCGGTAGATATTTT	----	acccaagatcctca	aaaact	---	803	...	tcaaatcaaaag	gctgaggg
D. Sim	tgaaagag	gtattacgaaag...	541	---	ttaattcactg	agatacata	----	TTTAT	TCGGTAGATATTTT	----	acccaagatcctca	aaaact	---	780	...	atcaatcaaaag	gctgaggg
D. Sec	tgaaagag	gtattacgaaag...	543	---	gacattaata	cactgagata	----	TTTAT	TCGGTAGATATTTTATA	----	cacaagatcctca	taaaact	---	789	...	atcaatcaaaag	gctgaggg
D. Ere	tgaaagag	gtattacgaaag...	572	---	gaaattaatt	caatgagaca	----	TTTAT	TCGGTAGATATTTT	----	acccaagatcctca	aaaact	---	822	...	atcaatcaaaag	gctgaggg
D. Ana	tgaaagag	gtattataataa...	453	---	aatatcctg	gaagctactatt	----	TCGGTAGATATTTTATA		----	tatttttataat	ttttttt	...	806	...	aaaaaataaag	gctgaggg
D. Gri	tgaaagag	gtatatgccaag...	578	...	aaataataa	atattattc	----	TATTCGGTAGATATTTTATAGT		----	caaagcacacacac	acatta	...	921	...	caacacttaaag	gctgaggg
D. Moj	tgaaagag	gtatatgcccac...	494	...	ttgaattaat	ctataatat	----	TCGGTAGATATTTTAT		----	tgtcaagcactg	cacatc	---	1019	...	caacacttaaag	gctgaggg
D. Per	tgaaagag	gtattatgcaga...	766	---	aaaacaaa	agatatctaatt	----	TCGGTAGATATTTTATA		----	taccccccaaaaa	acacaca	...	820	...	cccaacaaaag	gctgaggg
D. Pse	tgaaagag	gtattatgcaga...	770	---	aaaacaaa	agatatctaatt	----	TCGGTAGATATTTTATA		----	taccccccaaaaa	acacacaaa	...	818	...	cccaacaaaag	gctgaggg
D. Vir	tgaaagag	gtatatgcacaa...	588	---	ataattaat	taattatagaa	----	TATTCGGTAGATATTTTAT		----	tgccaaagcaca	aaacaaa	---	944	...	aaacacttaaag	gctgaggg
D. Wil	taaaagag	gtaaagaatcg...	556	---	taatgacaca	aaaataaaagt	----	TCGGTAGATATTTTATA	ATATG	tatatccaaaa	aaaaaaaaa	...	828	...	ctctcatctag	gctgaggg	
D. Yak	tgaaagag	gtattacgacag...	613	---	gaaattaatt	caatgagaca	----	TTTAT	TCGGTAGATATTTT	----	acccaagatcctca	aaaact	---	834	...	atcaatcaaaag	gctgaggg
	* *****	***			*			*****		*	*				**	*****	

id=44136 gene=FBgn0003721 name=Tm1 segment=chr3R.11127409.11128874.1 type=IN VIEW

Figure 580: CS=14.16



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D.Mel  tgaaagag gtattattgata...150...-att-ctcaattttaaatttac-----TGTACATATCGTCaattcgacatttaaatatattt-----...1238...tcaaatcaaaag gctgaggc
D.Sim  tgaaagag gtattacgaaag...162...-att-ctcaattttaaatttac-----TGTACATATCGTCaattcgacatttaaatatattt-----...1165...atcaatcaaaag gctgaggc
D.Sec  tgaaagag gtattacgaaag...168...-att-ctcaattttaaatttac-----TGTACATATCGTCaattcgacatttaaatatattt-----...1172...atcaatcaaaag gctgaggc
D.Ere  tgaaagag gtattacgacag...166...-att-ctcaattttaaatttac-----TGTACATATCGTCaattcgacatttaaatatattt-----...1234...atcaatcaaaag gctgaggc
D.Gri  tgaaagag gtatatgccaag...171...-att-ctcaattttaaattaac-----TGTACATAGTCGTC-----aagacacattcttattaatt...1336...caacacttaaag gctgaggc
D.Moj  tgaaagag gtatatgccac...104...aattgcacaaatcgttattcTCAATTTTAAAtTAATTGTACATAGTCGTC-----acatttgatattttcttta...1395...caacacttaaag gctgaggc
D.Per  tgaaagag gtattatgcaga...133...-att-ctcaattttaaatttat-----TGTACATATCGTCaattcgacatttaaatatattt-----...1456...cccaacaaaag gctgaggc
D.Vir  tgaaagag gtatatgcacaa...141...aattgcacaaatcgttattcTCAATTTTAAAtTAATTGTACATAGTCGTC-----acgacaaattcgttactcga...1380...aaacacctaag gctgaggc
D.Yak  tgaaagag gtattacgacag...186...-att-ctcaattttaaatttac-----TGTACATATCGTCaattcgacatttaaatatattt-----...1267...atcaatcaaaag gctgaggc
***** ****                *** * ** * **                ***** *****                * ** *                * **** *****

```

id=44136 gene=FBgn0003721 name=Tm1 segment=chr3R.11127409.11128874.1 type=IN

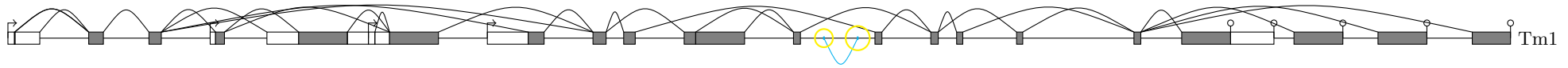
```

D.Mel  tgaaagag gtattattgata...353...-tgaatccatctttc----gcataaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...1033...tcaaatcaaaag gctgaggc
D.Sim  tgaaagag gtattacgaaag...359...-tgaatcaatctccc----gcataaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...966...atcaatcaaaag gctgaggc
D.Sec  tgaaagag gtattacgaaag...364...-tgaatcaatctccc----gcaaaaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...974...atcaatcaaaag gctgaggc
D.Ere  tgaaagag gtattacgacag...363...-tgaaccaatctccc----gcataaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...1035...atcaatcaaaag gctgaggc
D.Gri  tgaaagag gtatatgccaag...376...tggcaagtattttccc-----tatagGACGtGTGTGtgTACA-----ttacttgaaaattgaaaaca...1129...caacacttaaag gctgaggc
D.Moj  tgaaagag gtatatgccac...335...-----gtatttcctatatatatagGACGtGTGTGTACATTAcTTGAAaATTGAaaaagaactttttgtgcattg-----...1163...caacacttaaag gctgaggc
D.Per  tgaaagag gtattatgcaga...340...tcgtgtc-atccctc----tcgcaaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...1247...cccaacaaaag gctgaggc
D.Vir  tgaaagag gtatatgcacaa...362...tggcaagtattt-----atatttggGACGtGTGTGTACATTAcTTGAAaATTGAaaacaactttttgtgcatca-----...1158...aaacacctaag gctgaggc
D.Yak  tgaaagag gtattacgacag...406...-tgaaccaatctccc----gcataaGACGtGTGTGtgTACA-----tttgttcaaattgaaaaca...1045...atcaatcaaaag gctgaggc
***** ****                **                *****                * ** *                * **** *****

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id=44136 gene=FBgn0003721 name=Tm1 segment=chr3R.11127409.11128874.1 type=IN VIEW

Figure 581: CS=8.64



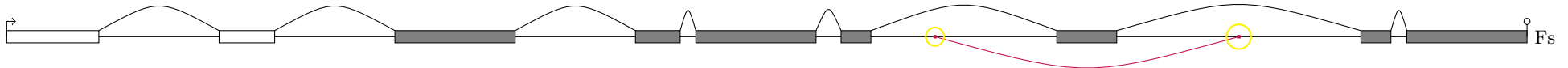
D. Mel	ggtgaaaa	gtacgttataag...191...----	tgcccatatgtttataatgt	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----atccttagagaaaaccaccta--	..487...	cgacgagaaaaag	gtggccag
D. Sim	ggtgaaaa	gtacgttataag...199...----	tgcccatatgtttataatgt	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	atcctacctaagtgtttgtgta-----	..469...	tgcgccgaaaaag	gtggccag
D. Sec	ggtgaaaa	gtacgttataag...198...----	tgcccatatgtttataatgt	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----atcgtagag-aaaccacctac-	..478...	tgcgccgaaaaag	gtggccag
D. Ere	ggtgaaaa	gtacgttataag...184...----	gcctatatgtttacaatgtt	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----cccaatgtttgtatgacat-	..509...	tgcgccgaaaaag	gtggccag
D. Ana	ggtgaaaa	gtacgttcaag...161...----	cctatttgtttgtattgt	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----cccatgaaatataatataat...	..343...	ccaccgaaaag	gttgccag
D. Gri	cgtgccga	gcagggtgaaaa...280...--	cttgcataatcttcaaaa--	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----attgaaaaacaacaacaa-	..324...	ctcatcaaaaag	gtggccag
D. Moj	ggtgaaaa	gtacgttataag...258...----	tataaatatttgaatcggc	-----	<b>AAAAATGTGAATAT</b>	-----ctcgatcaaaattaacgaat-	..273...	tcacctgtgaag	gtggccag
D. Per	ggtgaaaa	gtacgttataag...209...----	taaatgtttgtatattgt	<b>TTGGT</b> -t	<b>TGAAAAATGTGAATATT</b>	-----ctatccactggaatctaata-	..609...	ctacgactgaag	gttgccag
D. Pse	ggtgaaaa	gtacgttataag...209...----	taaatgtttgtatattgt	<b>TTGGT</b> -t	<b>TGAAAAATGTGAATATT</b>	-----ctatccactggaatctaata-	..546...	ctacgactgaag	gttgccag
D. Vir	ggtgaaaa	gtacgttataag...255...----	tttgcataacttttaaaa--	<b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----ttctataaatttatgaatgt-	..269...	cctgccgaaaag	gtggccag
D. Yak	ggtgaaaa	gtacgttataag...193...----	ctttgcctatatttcata	<b>ATGT</b> <b>TTGGT</b> -t	<b>AAAAATGTGAATAT</b>	-----cccaatgtttgtatgacag-	..510...	tgcgccgaaaaag	gtggccag
	***	*	* * * * *	**		*	*	*****	*** ** *****

id=44128 gene=FBgn0003721 name=Tm1 segment=chr3R.11125070.11125831.1 type=IN

D. Mel	ggtgaaaa	gtacgttataag...536...-----	tcatgaatgaaccagcaca--	<b>GTATTCACATTTT</b>	<b>TGCCAA</b>	---tctgtgc-tttaagccagac-----	..142...	cgacgagaaaaag	gtggccag
D. Sim	ggtgaaaa	gtacgttataag...531...-----	tgatgaatgaatccagcaca--	<b>GTATTCACATTTT</b>	<b>TGCCAA</b>	---tctgtgc-tttaagccagac-----	..137...	tgcgccgaaaaag	gtggccag
D. Sec	ggtgaaaa	gtacgttataag...539...-----	tgatgaatgaatccagcaca--	<b>GTATTCACATTTT</b>	<b>TGCCAA</b>	---tctgtgc-tttaagccagac-----	..137...	tgcgccgaaaaag	gtggccag
D. Ere	ggtgaaaa	gtacgttataag...535...-----	tcatgaatgaaccagcaca--	<b>GTATTCACATTTT</b>	<b>TGCCAA</b>	---tctgtgc-tttaagccagac-----	..158...	tgcgccgaaaaag	gtggccag
D. Ana	ggtgaaaa	gtacgttataag...362...-----	aatcatgaatgaa-catgcac--	<b>AGTATTCACATTTT</b>	<b>TGCCAA</b>	---cctac----agtcagacactatcg..	..142...	ccaccgaaaag	gttgccag
D. Gri	cgtgccga	gcagggtgaaaa...423...--	ctcttca-catatgc-acaac----	<b>ATATTCACATTTT</b>	<b>TGCCAA</b>	---cttcaaaacaagaatcaatt-----	..181...	ctcatcaaaaag	gtggccag
D. Moj	ggtgaaaa	gtacgttataag...380...--	gctctctca-ta-atgc-acaac----	<b>ATATTCACATTTT</b>		---cggc---caaacgcaactgcca-----	..153...	tcacctgtgaag	gtggccag
D. Per	ggtgaaaa	gtacgttataag...644...-----	tcacgaatgat-cctgcacac	<b>AGTATTCACATTTT</b>	<b>TGCCAA</b>	---catcccagcgtttaagcca-----	..174...	ctacgactgaag	gttgccag
D. Pse	ggtgaaaa	gtacgttataag...588...-----	tcacgaatgat-cctgcacac	<b>AGTATTCACATTTT</b>	<b>TGCCAA</b>	---catcccagcgtttaagcca-----	..167...	ctacgactgaag	gttgccag
D. Vir	ggtgaaaa	gtacgttataag...364...-----	tcaccacaagc-acaacatat	<b>GTATTCACATTTT</b>	<b>TGCCAA</b>	---atgcaattgtaaacataaac-----	..160...	cctgccgaaaag	gtggccag
D. Yak	ggtgaaaa	gtacgttataag...549...-----	tcatgaatgaaccagcaca--	<b>GTATTCACATTTT</b>	<b>TGCCAATAT</b>	---gctgc-tttggccagacacg---	..155...	tgcgccgaaaaag	gtggccag
	***	*	* * * * *	**		*	*	*****	*** ** *****

id=44128 gene=FBgn0003721 name=Tm1 segment=chr3R.11125070.11125831.1 type=IN VIEW

Figure 582: CS=17.16



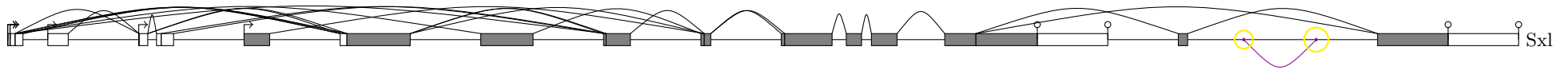
D. Mel	ctgcaaga	gtgagtgcgcca...	220...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	832...	cctatccccag	acagctgc
D. Sim	gcgcaagc	gcgcctgccgca...	283...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	790...	cctatccccag	acagctgc
D. Sec	ctgcaaga	gtgagtgcgcca...	225...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	743...	catatccccag	acagctgc
D. Ere	ctgcaaga	gtgagtccgcca...	189...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	787...	tccatccccag	gcagctgc
D. Ana	ttgcaaga	gtaagtccgca...	205...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	821...	tattctttcag	caacctgt
D. Gri	ctgtaaga	gtgagtgtcagc...	638...	ctcaataagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	1483...	attctcacacag	ccagctgc
D. Moj	ctgcaaga	gtgagtactgta...	88...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	1847...	tcacacacacag	ctagctgc
D. Vir	ctgcaaga	gtgagtactatg...	116...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	1034...	aatccccacag	cgagctgc
D. Yak	ctgcaaga	gtgagtccgcca...	187...	cacaattagattagatgaca	<b>AATTATTGCACATT</b>	tcaattacggccaacaactt...	850...	tcctaaccgag	acagctgc
		* ** *			* **** *			***	* **

id=29624 gene=FBgn0259878 name=Fs segment=chr2R.11120065.11121194.-1 type=IN

D. Mel	ctgtcgag	gtatgtattttg...	3617...	catccattataaccatac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gggccg	cggtcgt-	...	1292...	tttatattgcag	caggccgc
D. Sim	atatccgg	gtccctgtcgag...	3610...	catccattataaccatac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gggccg	cggtcgt-	...	1299...	tttatattccag	ccggccgc
D. Sec	ctgtcgag	gtatgtattttg...	3626...	catccattataaccatac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gggccg	cggtcgt-	...	1283...	tttatattgcag	ccggccgc
D. Ere	ctgtcgag	gtatgtattttg...	3547...	catccattataaccatac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gggccg	cggtcgt-	...	1336...	tttatattgcag	caggccgc
D. Ana	ctgtcgag	gtatgaatattc...	2338...	cctatatatgcatgccacac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gagccg	cggtcgt-	...	1220...	tttatattgcag	ccggccgc
D. Gri	gtgtcgag	gtaagtgcacat...	2634...	tgccctctggccatgccacac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-cag-cggc	cggtcgt-	...	1724...	ggttttttgcag	cggaccgc
D. Moj	atgtcgtg	gtacgtaactcc...	3151...	actctttggccatgccacac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-cag-tggc	cggtcgt-	...	1548...	ttacctttgcag	cggaccgc
D. Vir	gtgtcgtg	gtatgtacaact...	3476...	aatctctggccatgccacac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-cag-cagc	cggtcgt-	...	1433...	tattttttgcag	cggaccgc
D. Yak	ctgtcgag	gtatgtattttg...	3598...	catccattataaccatac	<b>AATGTTGCAAT</b>	<b>AGTT</b>	ccgccaac-gggccg	cggtcgt-	...	1311...	ttttattgcag	caggccgc
		* ** *			* ** *			**			** **	* ** *

id=29626 gene=FBgn0259878 name=Fs segment=chr2R.11111952.11119815.-1 type=IN VIEW

Figure 583: CS=8.64



D.Me1	tctcgata	gtaattattcct...337...aatacttaaaaaataagccg- <b>AATTTTC</b> tt <b>TTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1189...ttatcaatctag	gcgaaaaac				
D.Sim	tctcgata	gtaattattcct...336...-----gaaaaataagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1167...tttctttacct	tcgcacct				
D.Sec	tctcgata	gtaattattcct...336...-----gaaaaataagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1195...ttatcaatctag	gcgaaaaac				
D.Ere	tctcgata	gtaattattcct...329...-----tgcaatgaagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1203...ttatcaatctag	gcgataac				
D.Ana	tctcgata	gtaattattcct...334...atatttaaagcgaaaggag----- <b>AAGCGTGCCATGTTTTCTTT</b> -attactttatctca--tgccat---...1050...gaaccggttag	gtgacaac				
D.Gri	tctcgata	gtaattattcct...586...-----ttgtcgaacaa--caaaaaatc--- <b>TTCAAAGCGTGCCATGTTTT</b> ---attcattttcatttcgatt-----...1628...aaaaattgtag	gcgacaac				
D.Moj	tctcgata	gtaattattcct...973...-aacttaaaaaacaattcaa----- <b>AGCGTGCCATGTTTTATGCATT</b> --cctctatttagttgcatc--...1619...taactatttag	gcgacaac				
D.Per	tctcgata	gtaattattcct...362...-----caagaaaaagagaagcgatt <b>TTTTTCAAAGCGTGCCATGTTTTTC</b> ct <b>TTGTT</b> actttctctca--agccatcgt...1515...gaatcactatag	gtgacaac				
D.Pse	tctcgata	gtaattattcct...343...-----actccaagaaaaagagaagc <b>GATT</b> tt <b>TTTCAAAGCGTGCCATGTTTTTC</b> ct <b>TTGTT</b> actttctctca--tgccatcat...1559...gaacactatag	gtgacaac				
D.Yak	tctcgata	gtaattattcct...361...-----gaaaaagaagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1244...ttatcaatctag	gcgataac				
	*****	***** * *	**	*****	* * *	*	*

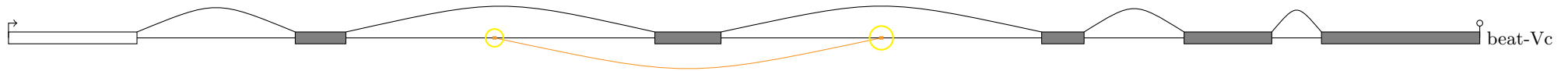
id=117386 gene=FBgn0003659 name=Sxl segment=chrX.6973401.6975021.-1 type=IN

D.Me1	tctcgata	gtaattattcct...1138...----acaaactgaaatgga-----aaca--- <b>GAAAAATGGCAGGTTGAAATGAAAAAT</b> -acgaaaacccttaaatcgtg...392...ttatcaatctag	gcgaaaaac				
D.Sim	tctcgata	gtaattattcct...1127...----acaaaactgaaatgga-----aaca--- <b>GAAAAATGGCAGGTTTaaTGAAAA</b> -ttacgaaaacccttaaatcg--...375...tttctttacct	tcgcacct				
D.Sec	tctcgata	gtaattattcct...1127...----acaaaactgaaatgga-----aaca--- <b>GAAAAATGGCAGGTTTaaTGAAAA</b> -ttacgaaaacccttaaatcg--...403...ttatcaatctag	gcgaaaaac				
D.Ere	tctcgata	gtaattattcct...1125...----caaaaactgaaatgga-----aaca--- <b>GAAAAATGGCAGGTTTaaTGAAAA</b> -ttacgaaaacccttaaatcg--...406...ttatcaatctag	gcgataac				
D.Ana	tctcgata	gtaattattcct...950...tgtttaatcacgaaatggc----- <b>AAAGAAAAAATGGCAGGTTT</b> -----aataacaaagcataaatat---...433...gaaccggttag	gtgacaac				
D.Gri	tctcgata	gtaattattcct...1572...----aaaaatacaaaaaaaa-----aaaa--- <b>AAAAATGGCAGGTTTaaTGAA</b> --tgaatgaaggataaatcgt---...640...aaaaattgtag	gcgacaac				
D.Moj	tctcgata	gtaattattcct...2024...----cacaaaacaaaaacaaa-----agaa <b>AATGCAAAAAATGGCAGGTT</b> -----caatgaatgaattaagtta--...570...taactatttag	gcgacaac				
D.Per	tctcgata	gtaattattcct...1345...----caattgaaaagaaaa-----caaa <b>AACAAAAAATGGCAGGTTTaaTGAAAAA</b> cctatgaaaacattttaac---...535...gaatcactatag	gtgacaac				
D.Pse	tctcgata	gtaattattcct...1367...----caattgaaaagaaaa-----caaa <b>AACAAAAAATGGCAGGTTTaaTGAAAAATC</b> atgaaaaca-tttaatcgtg...540...gaacactatag	gtgacaac				
D.Yak	tctcgata	gtaattattcct...1191...-----actgaaatggatacagaaca--- <b>GAAAAATGGCAGGTTTaaTGAAAA</b> -ttacgaaaacccttaaatcg--...413...ttatcaatctag	gcgataac				
	*****	***** * *	* *	*****	* **	*	*

id=117386 gene=FBgn0003659 name=Sxl segment=chrX.6973401.6975021.-1 type=IN VIEW

Figure 584: CS=9.6





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D.Mel tttttcag gtgagcccacc...417...-----aaatatgtgcgaagagggtTTTtTAAcTGGCTTAAT-----tgttgacattgcattgccg...1503...ctttcctttcag atactcgc
D.Sim tttttcag gtgagcccacc...442...-----aaatatgtgcgaagagggtTTTtTAAcTGGCTTAAT-----tgttgacattgcattgccg...1438...ctttcctttcag atactcgc
D.Sec tttttcag gtgagcccacc...432...-----aaatatgtgcgaagagggtTTTtTAAcTGGCTTAAT-----tgttgacattgcattgccg...1499...ctttcctttcag atactcgc
D.Ere tttttcag gtgagccaacc...414...cgggccaaatatgtgcgaaGAGGGcTTTtTAAcTGGCTTAAT-----tgttgacattgcattgccg...1535...ctttcctttcag atactcgc
D.Ana tttttcag gtgagccaacc...370...-----caaatatgtgcgaagagggtTTTtTAAcTGGCTTAAT-----tgttgacattgccgcatc...1436...ctccttttcag atactcgc
D.Gri tttttcag gtagtataaaa...426...-----cgtgaaaagcgcacttttTAAcTGGCTTAAT-----tgtcgggcaaaggtcgggct...1112...atatatttcag atattcgc
D.Moj tttttcag gtagcagagc...454...-----tgtgtaaagcgcagtttTAAcTGGCTTAATtgTGGTcaatgcttcg---gcttaatca...1661...atgcttttcag atactcgc
D.Pse tttttcag gtgagccggcgg...358...-----caaatatgtgcgaagagctTTTtTAAcTGGCTTAAT-----tgttgacattgccgcatc...2293...ttgtctttcag atactcgc
D.Wil tttttcag gtgagtcacaca...349...-----tgtgcgaagcagcttttTAAcTGGCTTAAT-----tgttgacattgccgcaaca...1424...ctttcctttcag atattcgc
D.Yak tttttcag gtgagccaacc...427...-----aaatatgtgcgaagagggtTTTtTAAcTGGCTTAAT-----tgttgacattgcactgccg...1547...ctttcctttcag atactcgc
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id=45807 gene=FBgn0038084 name=beat-Vc segment=chr3R.8578349.8580352.-1 type=IN

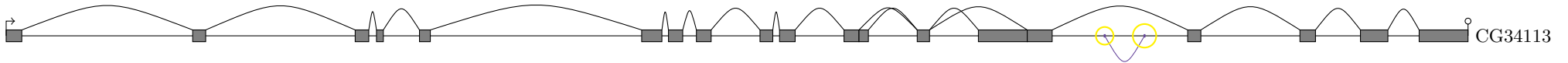
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D.Mel agtcggag gtaggtgtgcac...4167...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--acagtcctgctgactgc----...605...tttatatttcag tgttgccc
D.Sim agtcggag gtaggtgcagca...4065...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--acagtcctgctgactgc----...620...cttatatttcag tgctgccc
D.Sec agtcggag gtaggtgcagca...4083...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--acagtcctgctgactgc----...622...cttatatttcag tgctgccc
D.Ere agtcggag gtaggtgaacaa...4169...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGTTTC--agtcctgctgactgcctgac...733...cttgatttcag tgctgccc
D.Ana agtcggtg gtagctataaga...3744...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--acagtcctgctgactgc----...614...ttgtatttcag ttctacca
D.Gri cgttggcg gtaggtagact...3902...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--atagtactgctgac-----...1008...tcacatttcag tactgcca
D.Moj cgttggcg gtaggtataaaa...3859...aaactttccacc-aaagtggtTTGTATTAAGTCAaTTAAAAAGttt--atactactgctgac-----...1047...cttgcttcacag tgctgcca
D.Pse agtcggtg gtaggtacagcc...4022...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--atagtcctgctgactgc----...885...actattttcag tcctgccc
D.Wil agttggtg gtaggtactaaa...4191...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--atagtcctgctgactgc-----...719...tttcatttacag tcttacc
D.Yak agtcggag gtaggtgctcaa...4225...----ttccacc-aaagtggtttgtATTAAGTCAaTTAAAAAGttt--acagtcctgctgactgc----...651...cttgtttttcag tgctacct
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id=45809 gene=FBgn0038084 name=beat-Vc segment=chr3R.8573286.8578139.-1 type=IN VIEW

Figure 585: CS=9.6



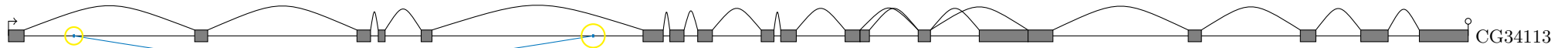
D.Mel	tctatcag	gtga--gtgtgtct...	1625...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactct---	tccgacgattggt...	814...	ccccccgcacag	atctgatg
D.Sim	tctatcag	gtaa--gagttata...	1590...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactct---	tccgatgattggg...	792...	ccccccgcacag	atctgatg
D.Sec	tctatcag	gtga--gagttata...	1644...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactct---	tccgatgattggg...	800...	tccccgcacag	atctgatg
D.Ere	tctgtcag	gtga--gactgttt...	1851...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactct---	tccgaggttga...	1221...	cgccccgcacag	atctgatg
D.Ana	tctgtcag	gtaa--caccaag...	1444...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgacgctg--	tcggatggattg...	679...	ctttctcctcag	atctgatg
D.Gri	tctgtctg	gtga--gtttcgt...	1383...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactctggtt	tctagagtt---	290...	tactctgtcag	atctgacg
D.Per	tctgacag	gtgagtattgg---	1250...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgacgctg--	tcagaggggaatg...	534...	ttgcctccacag	atctgatg
D.Pse	tctgacag	gtgagtattgg---	1230...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgacgctg--	tcagaggggaatg...	524...	ttgcctccacag	atctgatg
D.Vir	tctgtctg	gtga--gttgagtt...	2470...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactctggctt	acagatg---	860...	tcctacttgcag	atctcact
D.Wil	tttgacag	gtga--gaatggaa...	1144...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgatgctctgact	ttgttt---	389...	ctctcgtgtag	atctcatt
D.Yak	tctgtcag	gtga--gtctcct...	1845...	aaacgaagcgtaaagtcacg	ATTAGT	TAGACAGGCGTg	TAA	cgactct---	tccgtgattggt...	772...	gtccccgcacag	atctaag
		* * * *				*****					**	**** *

id=5810 gene=FBgn0083949 name=CG34113 segment=chr3R.1699274.1701798.-1 type=IN

D.Mel	tctatcag	gtga--gtgtgtct...	2034...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcacag	gacta--...	406...	ccccccgcacag	atctgatg	
D.Sim	tctatcag	gtaa--gagttata...	1979...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcacag	gacta--...	404...	ccccccgcacag	atctgatg	
D.Sec	tctatcag	gtga--gagttata...	2042...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcacag	gacta--...	403...	tccccgcacag	atctgatg	
D.Ere	tctgtcag	gtga--gactgttt...	2214...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcacag	gacta--...	859...	cgccccgcacag	atctgatg	
D.Ana	tctgtcag	gtaa--caccaag...	1852...	tttgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcac-	agtactacc...	272...	ctttctcctcag	atctgatg	
D.Gri	tctgtctg	gtga--gtttcgt...	1617...	gcctggcagcaacgtgtaa	TAAATGCCTGTTTg	CTAAT	ggagtttgcgaa	tgaagt---	57...	tactctgtcag	atctgacg	
D.Per	tctgacag	gtgagtattgg---	1688...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcac-	tgcaataca...	97...	ttgcctccacag	atctgatg	
D.Pse	tctgacag	gtgagtattgg---	1670...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcac-	tgcaataca...	85...	ttgcctccacag	atctgatg	
D.Vir	tctgtctg	gtga--gttgagtt...	3291...	tgctggccgcaacgtgtaa	TAAATGCCTGTTTg	CTAAT	ggagtttgcaca	atacaagtt---	40...	tcctacttgcag	atctcact	
D.Wil	tttgacag	gtga--gaatggaa...	1482...	tcctggccgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttactt-	ggcggcaag...	52...	ctctcgtgtag	atctcatt	
D.Yak	tctgtcag	gtga--gtctcct...	2224...	ttcgaccgcgacgtgctaa	TAAATGCCTGTTTg	CTAAT	gaagtttgcacag	gacta--...	394...	gtccccgcacag	atctaag	
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id=5810 gene=FBgn0083949 name=CG34113 segment=chr3R.1699274.1701798.-1 type=IN VIEW

Figure 586: CS=13.2



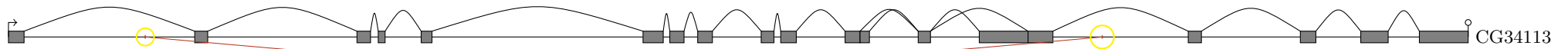
D. Mel	tgatccag	gtgagtgatt...3032...	cgctgggtcggcggtttcat	GTGCaaATTTctGTAGTGTGCCA	-taaattatccgactgggaat...1870...	cttcccttttag	tttccacg
D. Sim	tgatccag	gtgagtgatt...2954...	cgctgggtcggcggtttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1949...	ctcccctttcag	tttccacg
D. Sec	tgatccag	gtgagtgatt...2969...	cgctgggtcggcggtttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1934...	ctcccctttcag	tttccacg
D. Ere	tgatccag	gtgagtgatt...3041...	cgctgggtcggcggtttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1862...	ctcccctttcag	tttccaca
D. Ana	cgatccag	gtgagtactac...3235...	gtttcatgtggcggtttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1668...	atTTTTttcag	tttccaca
D. Gri	tgatccag	gtgagtgtgc...2481...	ctgtcgcatttttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...2422...	ctctttttcag	tttctact
D. Moj	tgatccag	gtgagtactgt...3402...	tcttgcgactcaattgcaa	ATTTctGTAGTGTGCC	-ataaattatccgactggga-...1507...	ctcgtttgtag	ttagcaca
D. Per	cgatccag	gtgagtgtggtgc...3076...	ggcaatgggagcgttttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1827...	tttactttcag	tctccaca
D. Pse	cgatccag	gtgagtgtggtgc...3110...	ggcaatgggagcgttttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1793...	ttttctttcag	tctccaca
D. Vir	cgatccag	gtgagtgtggtgc...3871...	atatctctttgactgacat	CAA---TTGGCaGTTT	aaatgcaaaagatgaggccg-----	1041...	ctctctttcag
D. Yak	tgatccag	gtgagtgatt...2950...	cgctgggtcggcggtttcat	GTGCaaATTTctGTAGTGTGCC	-ataaattatccgactggga-...1953...	tccctctttcag	tttcaaca
	*****	*****	* * *	* * * * *	*** * * * *	** **	* **

id=5784 gene=FBgn0083949 name=CG34113 segment=chr3R.1729571-1765085.-1 type=IN

D. Mel	gcgtggcg	gtaagtaaatca...4175...	aagc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtcaaaa...672...	ctccatcaacag	gtcgaccg
D. Sim	gcgtggcg	gtaagtaaatca...4104...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...681...	ctccatcaacag	gtcgaccg
D. Sec	gcgtggcg	gtaagtaaatca...4223...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...679...	ctccatcaacag	gtcgaccg
D. Ere	gcgtggcg	gtaagtaaatca...3961...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...626...	ctctatcaacag	gtcgaccg
D. Ana	gcgtggcg	gtaagtaaatca...4283...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...455...	tttatcaacag	gtcgaccg
D. Gri	gcgtggcg	gtaagtaaatca...4180...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...260...	tttatcaacag	gtcgaccg
D. Moj	gcgtggcg	gtaagtaaatca...4174...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgggcattatcattaaaatgt	-----213...	tcgtatccgtag	gacggccg
D. Per	gcgtggcg	gtaagtaaatca...3512...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...275...	gacggcaacag	gtcgccca
D. Pse	gcgtggcg	gtaagtaaatca...3415...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...273...	gacggcaacag	gtcgccca
D. Vir	gcgtggcg	gtaagtaaatca...2414...	-ggcgcagcatcataaacggc	-----AAACGCCAaATTG	-----ctttatcaactttattaac...2232...	gctcgtccatag	gtcgaccg
D. Yak	gcgtggcg	gtaagtaaatca...4106...	-agc---cttttttaaaagcctt	TGGTACacACTGCTAAATgcGCAT	tatcattaaaatggtgaaag...620...	ctctatcaacag	gtcgaccg
	*****	*****	** * * * *	* * * * *	* * * * *	** **	** **

id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008-1717942.-1 type=IN VIEW

Figure 587: CS=10.56



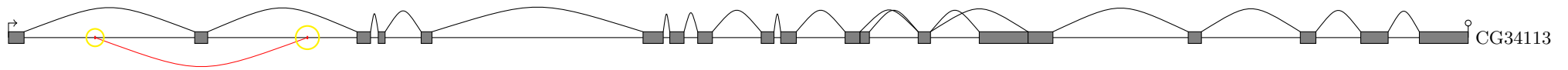
D. Mel	tgatccag	gtgagtggattt...4429...	aaaagaacattttcatattg--	TGTTaaTGACTTTGGCAA	-----	tagttttgtcatgacatttc-----	...478...	cttcccttttag	tttccacg
D. Sim	tgatccag	gtgagtggattt...4238...	gacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAGGaaATCGaCGAAG	---gagtcgagtcgcagtaattg-----	...652...	ctcccccttcag	tttccacg
D. Sec	tgatccag	gtgagtggattt...4236...	gacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAGGaaATCGaCGAAG	---gagtcgagtcgcagtaattg-----	...654...	ctcccccttcag	tttccacg
D. Ere	tgatccag	gtgagtggattt...4287...	gacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	-----	tatgaaatcgacgaaggagt-----	...619...	ctcccccttcag	tttccaca
D. Ana	cgatccag	gtgagtgactac...4552...	acgtgacacttaaaaggcac	CGTTTTGTTGACaTTTg	TAGAaaATCG	-----	acgaaggagtca-acgaagtc-----	...346...	attttttttcag
D. Gri	tgatccag	gtgagtgagtgc...4691...	gtgacagttaaaaggcagca	TTTTGTTGACaTTTg	TtGATGTTtaAGGAatCGAAG	aaggagtca-agtaattgcag--	...198...	ctctttttgcag	tttctact
D. Moj	tgatccag	gtgagtgagtgc...4694...	gtgacagttaaaaggcagca	TTTTGTTGACaTTTg	TtGATGTTcaaggcatcgaagaaggagt	-----	...208...	ctcgtttgtag	ttagcaca
D. Per	cgatccag	gtgagtgggtgc...4696...	aacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAAGaaATCG	-----	acgaaggagtccaagtaatt-----	...201...	tttatcttcag
D. Pse	cgatccag	gtgagtgggtgc...4696...	aacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAAGaaATCG	-----	acgaaggagtccaagtaatt-----	...201...	ttttcttcag
D. Vir	cgatccag	gtgagtgagtgc...4733...	ggcgtgacagttaaaaggca	CGGTTTTGTTGACaTTTg	TtGATGTTtaAGAAatcgcagcaaggagtca-ggta	-----	...160...	ctctcttcag	ttagcact
D. Wil	tgatccag	gtaagtgcagag...4709...	aacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAAGaaATCG	-----	acgaaggagtct-agtaattg-----	...188...	ttctcattgcag
D. Yak	tgatccag	gtgagtggattt...4229...	gacgtgacacttaaaaggca	CGGTTTTGTTGACaTTTg	TAGGaaATCGaCGAAGgAGTC	---gagtcgccgtaattgtggca...	...656...	tcctcttcag	tttcaaca
	*****	** ****	*** ** *	* ** **** ** *		**		** ** *	**

id=5784 gene=FBgn0083949 name=CG34113 segment=chr3R.1729571.1765085.-1 type=IN

D. Mel	tctatcag	gtga--gtgtgtct...1595...	-----	ttaaggggtttcggcgatat	-----	TTGCAAAGTCAAACG	aagcgtaaagtcacgattag-----	...851...	ccccccgcacag	atctgatg
D. Sim	tctatcag	gtaa--gagttata...1548...	atgactcgggggtaagggg	-----	TTTCGgCGATa	TTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...823...	ccccccgcacag	atctgatg
D. Sec	tctatcag	gtga--gagttata...1602...	atgactcgggggtaagggg	-----	TTTCGgCGATa	TTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...831...	ccccccgcacag	atctgatg
D. Ere	tctgtcag	gtga--gactgttt...1823...	-----	aaggggtttcggcgatattt	-----	GCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...1252...	cgccccgcacag	atctgatg
D. Ana	tctgtcag	gtaa--caccaaag...1408...	-----	gg-----	tgggtgttcagattcag-----	CGATaTTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...711...	ctttctcctcag	atctgatg
D. Gri	tctgtcag	gtga--gtttcgat...1335...	-----	ataacggctcggggtcggc	TTTTGcaTTCTgc	GATATTtGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...324...	tcactcttcag	atctgacg
D. Moj	tctctcag	gtga--gtggctca...1430...	-----	ttgcgctctcgtcattctgc	-----	GATATTtGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...1044...	ctcctttgcag	atcttacg
D. Per	tctgacag	gtgagtgattgg...1214...	-----	gcgcggtctgtgcatcaa	-----	CGATaTTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...565...	ttgcctccacag	atctgatg
D. Pse	tctgacag	gtgagtgattgg...1194...	-----	gctcgggtctgtgcatcaa	-----	CGATaTTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...555...	ttgcctccacag	atctgatg
D. Vir	tctgtcag	gtga--gttgagtt...2429...	-----	ggcggtctcggcctttt-ca	-----	TTCTgcGATATTtGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...891...	tcctacttcag	atctcact
D. Wil	tttgacag	gtga--gaatggaa...1108...	-----	gg-----	gtgtgg-gtatgcattctg	-----	CGATaTTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...420...	ctctcgttgcag
D. Yak	tctgtcag	gtga--gtctccct...1800...	-----	tcgggggtaaggggttttgc	-----	GGTTTTTgCGATaTTTGCAAAGTCAAaACGAAGCGT	aaagtcacgattagttagac...	...803...	gtccccgcacag	atctaatg
	** * *	** *		*		*****		**	**** *	

id=5810 gene=FBgn0083949 name=CG34113 segment=chr3R.1699274.1701798.-1 type=IN VIEW

Figure 588: CS=12.96



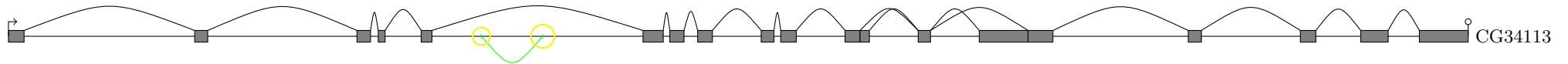
D. Mel	tgatccag	gtgagtggattt...3251...-----aacac-----gattgtggggctccc	TTTTGg	GTATTAATGAGC	-----accgggctgtaaaataggtc-----	...1656...cttcccttttag	tttccacg
D. Sim	tgatccag	gtgagtggattt...4354...-----ggacattttcatattgtgtt-----	AATGac	TTTGgCAAT	-----agttttgtcatgacatttca-----	...556...ctcccctttcag	tttccacg
D. Sec	tgatccag	gtgagtggattt...4352...-----ggacattttcatattgtgtt-----	AATGac	TTTGgCAAT	-----agttttgtcatgacatttca-----	...558...ctcccctttcag	tttccacg
D. Ere	tgatccag	gtgagtggattt...2578...ggggcgcatat-cacaaatta-----	TGTCA	ATTGCTGC	-----aacagcccgc-----gcgcctttgg-----	...2333...ctcccctttcag	tttccaca
D. Ana	cgatccag	gtgagtgtactac...2699...gaggctcatat-cgcaaatta-----	TGTCA	ATTGCTGC	-----aGCATcccgc-----ccgcctgtgggactt...2207...atTTTTTTTcag	tttccaca	
D. Gri	tgatccag	gtgagtgtgtgc...2752...-----aacat-----cattgcggggcccct	TTTTGg	GTATTAATGAGCTTT	-----GTGCTG-----cttgatggatctctctacat...2146...ctctttttgcag	tttctact	
D. Per	cgatccag	gtgagtgtgtgc...2743...gaggcgcatat-cacaaatta-----	TGTCA	ATTGCTGCTG	-----TGCAGcccactgtcgcaccgc-----ccc...2160...tttatcttgag	tctccaca	
D. Pse	cgatccag	gtgagtgtgtgc...2777...gaggcgcatat-cacaaatta-----	TGTCA	ATTGCTGCTG	-----TGCAGcccactgtcgcaccgc-----ccc...2126...ttttcttgag	tctccaca	
D. Vir	cgatccag	gtgagtgtgtgc...2700...-----aacat-----cattgcggatcccct	TTTTGg	GTATTAATGAGCTT	-----tgcgccgtttgatgatctc-----	...2205...ctctctttgcag	ttagcact
D. Yak	tgatccag	gtgagtggattt...3173...-----aacac-----gattgtggggctccc	TTTTGg	GTATTAATGAGC	-----accgggctgtaaaataggtc-----	...1734...tccctctttcag	tttcaaca
	*****	*****		* * * * *		** **	* **

id=5784 gene=FBgn0083949 name=CG34113 segment=chr3R.1729571-1765085.-1 type=IN

D. Mel	ctttacag	gtaagcaggagt...3886...-----cgccaaagatagcacgtcag	GCTT	TTAATGCgCAAAA	-----ttgcaa--acgtttgctgtttc...1021...cctttttccag	cttcgacg	
D. Sim	ctttacag	gtaagcaggagc...3909...caggcttttaaatgcgcaaa-----	ATT	GCAAAC	-----GTTtgctgtttcgttcgctgggc-...1004...cctttttccag	cttcgacg	
D. Sec	ctttacag	gtaagcaggagt...3908...caggcttttaaatgcgcaaa-----	ATT	GCAAAC	-----GTTtgctgtttcgttcgctgggc-...1005...cctttttccag	cttcgacg	
D. Ere	ctttacag	gtaagcaggagc...3123...-----accggatataaattgtgtca-----	GCG	GCAAATGATA	-----aaaaaccac-ttaaaggcgca...1788...ccgcttttccag	cttcgacg	
D. Ana	ctatacag	gtaagcatgctg...3182...-----atgagcaccggatataaatt-----	GTGT	caGCG-GCAAATGATA	-----aaaaaccac-ttaaaggcgca...1723...tttttttgcag	cttcgatg	
D. Gri	ctttacag	gtaagtgcogat...4186...---acaataaaaagcgccaaaga	TAGCAGC	tcAGGCTT	-----TTAATGCgCAAAA-----ttgcaa--acgttggcgaggcc...710...tcccccttgcag	ctttgatg	
D. Per	ctttacag	gtaaggataaag...3325...-----atatgagcaccggatataaa-----	TTGTGt	CAGCG-GCAAATGATA	-----aaaaaccac-ttaaaggcgca...1578...tcccttttgcag	ctttgatg	
D. Pse	ctttacag	gtaaggataaag...3334...-----atatgagcaccggatataaa-----	TTGTGt	CAGCG-GCAAATGATA	-----aaaaaccac-ttaaaggcgca...1569...tcccttttgcag	ctttgatg	
D. Vir	ctttacag	gtaagtgcagac...3384...-----agcggcaaatagcacgtc	AGGCTT	TTAATGCgCAAAA	-----ttgcaa--acgttgcagctcg...1521...tgcttccctgcag	ctttgatg	
D. Yak	ctttacag	gtaagcaggagc...3923...-----cgccaaagatagcacgtcag	GCTT	TTAATGCgCAAAA	-----ttgcaa--acgtttgctgttc...984...gcttttttccag	cttcgatg	
	** *****	*****		*****		* **	* ** * **

id=5786 gene=FBgn0083949 name=CG34113 segment=chr3R.1718712-1729437.-1 type=IN VIEW

Figure 589: CS=10.8



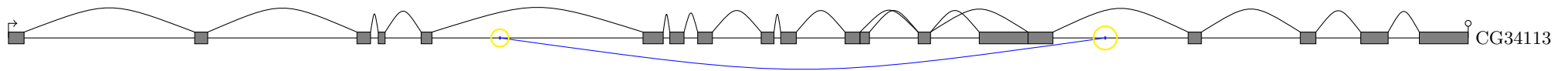
D. Mel	gcgtggcg	gtaagtaaatca...2441...tttatcaagtttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...2416...ctccatca-acag	gtcgaccg
D. Sim	gcgtggcg	gtaagtaaatca...2386...tttatcaagtttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...2408...ctccatca-acag	gtcgaccg
D. Ere	gcgtggcg	gtaagtaaatca...2269...tttatcaagtttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...2327...ctctatca-acag	gtcgaccg
D. Ana	gcgtggcg	gtaagtaaatca...2397...tttatcaactttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...2350...ttttatca-acag	gtcgcccg
D. Gri	gcgtggcg	gtaagtaaatca...2280...tttatcaactttattaactt	CGACTAATAGCAAT	taataaccaggcaataaaaagc...2169...ttatattc-atag	gtcgaccg
D. Per	gcgtggcg	gtaagtaaatca...2009...tttatcaactttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...1787...gacgggca-acag	gtcgccca
D. Pse	gcgtggcg	gtaagtaaatca...1899...tttatcaactttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...1798...gacgggca-acag	gtcgccca
D. Wil	gcgtggcg	gtaagtaaatca...2502...tttatcaactttattaactt	CGACTAATAGCAAT	taataacc-agtaataaaaagc...1475...-catatcatgcag	gacggccg
D. Yak	gcgtggcg	gtaagtaaatca...2383...tttatcaagtttattaactt	CGACTAATAGCAAT	taataacc-ggcaataaaaagc...2352...ctctatca-acag	gtcgtccg
	*****	*****	*****	*****	** * * *

id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008.1717942.-1 type=IN

D. Mel	gcgtggcg	gtaagtaaatca...3070...-atcccaatcccagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1788...ctccatca-acag	gtcgaccg
D. Sim	gcgtggcg	gtaagtaaatca...3001...-atcccaatcccagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1794...ctccatca-acag	gtcgaccg
D. Ere	gcgtggcg	gtaagtaaatca...2860...aatgccaatcccc-gctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1737...ctctatca-acag	gtcgaccg
D. Ana	gcgtggcg	gtaagtaaatca...3266...-atggcaatacccagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1482...ttttatca-acag	gtcgcccg
D. Gri	gcgtggcg	gtaagtaaatca...3182...catccatgt-ctcagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1268...ttatattc-atag	gtcgaccg
D. Per	gcgtggcg	gtaagtaaatca...2643...cgttgctgc-ctcagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1154...gacgggca-acag	gtcgccca
D. Pse	gcgtggcg	gtaagtaaatca...2545...cgttgctgc-ctcagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1153...gacgggca-acag	gtcgccca
D. Wil	gcgtggcg	gtaagtaaatca...3120...catcgctgg-ctcagatgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...858...-catatcatgcag	gacggccg
D. Yak	gcgtggcg	gtaagtaaatca...2972...-atgccaatcccagctgctt	GTTGCTATTGTTG	ctcatttccgcccattcac...1764...ctctatca-acag	gtcgtccg
	*****	*****	*****	*****	** * * *

id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008.1717942.-1 type=IN VIEW

Figure 590: CS=8.64



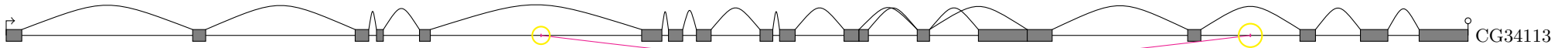
D. Mel	gcgtggcg	gtaagtaaatca...2627...	-----g	tatggcttagcaaatggca	AACGCGCTGTCTtc	ATTA--	cacaaggaagtgggtggga	-----	..2226..	ctccatc-aacag	gtcgaccg
D. Sim	gcgtggcg	gtaagtaaatca...2572...	-----g	tatggcttagcaaatggca	AACGCGCTGTCTtc	ATTA--	cacaaggaagtgggtgagt	-----	..2218..	ctccatc-aacag	gtcgaccg
D. Sec	gcgtggcg	gtaagtaaatca...2552...	-----g	tatggcttagcaaatggca	AACGCGCTGTCTtc	ATTA--	cacaaggaagtgggtggct	-----	..2355..	ctccatc-aacag	gtcgaccg
D. Ere	gcgtggcg	gtaagtaaatca...2450...	-----	cgtaagtatggcttagcaaa	TGGCaaGCGGCTGTCTtc	ATTA--	cacaaggaagtgggtcaat	-----	..2137..	ctctatc-aacag	gtcgaccg
D. Ana	gcgtggcg	gtaagtaaatca...2585...	-----g	tatggcttagcaaatggca	AACGCGCTGTCTtc	ATTA--	cacaaggaagtgggtgttc	-----	..2158..	ttttatc-aacag	gtcgcccg
D. Gri	gcgtggcg	gtaagtaaatca...3176...	-----	tgagctcatccatgtctcag	CTGCTTgTTGCTATTGTTGCTc	-----	attccgccacattcactt	..1266..	ttatatt-catag	gtcgaccg	
D. Moj	gcgtggcg	gtaagtaaatca...2139...	-----	aaccttaagtatggcttagc	AACGCGCTGTCTtc	ATTA--	ctgatgggattaccgggggc	-----	..2247..	tcgtatc-cgtag	gacggccg
D. Per	gcgtggcg	gtaagtaaatca...2638...	-----	ccactcgttgctgcctcagc	TGCTtGTTGCTaTTGTTGCTc	-----	attccgccacattcactt	..1152..	gacgggc-aacag	gtcgccca	
D. Pse	gcgtggcg	gtaagtaaatca...2540...	-----	ccactcgttgctgcctcagc	TGCTtGTTGCTaTTGTTGCTc	-----	attccgccacattcactt	..1151..	gacgggc-aacag	gtcgccca	
D. Vir	gcgtggcg	gtaagtaaatca...2612...	-----	tcgacaaccttaagtatggc	TTAGCaGCGGCTGTCTtc	ATTA--	ctgaagggattaccaggac	-----	..2024..	gctcgtc-catag	gtcgacct
D. Wil	gcgtggcg	gtaagtaaatca...1585...	-----	agtttttcttgtttttaaa	GCCATTGGCAac	AAAA--	c-----	gtagttggcagtatcattt	..2390..	catatcatgcag	gacggccg
D. Yak	gcgtggcg	gtaagtaaatca...2559...	-----	cgtaagtatggcttagcaaa	TGGCaaGCGGCTGTCTtc	ATTA--	cacaaggaagtgggtggg	-----	..2167..	ctctatc-aacag	gtcgtccg
	*****	*****		**	**	*				**	** ** *

id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008.1717942.-1 type=IN

D. Mel	tctatcag	gtga--gtgtgtct...1627...	..acgaagcgta-aagtcacgat-	TAGTtAGACA	gCGGTGTT	----	aacgactct--	tccgatgattg-	...816...	ccccccgcacag	atctgatg
D. Sim	tctatcag	gtaa--gagttata...1592...	..acgaagcgta-aagtcacgat-	TAGTtAGACA	gCGGTGTT	----	aacgactct--	tccgatgattg-	...794...	ccccccgcacag	atctgatg
D. Sec	tctatcag	gtga--gagttata...1646...	..acgaagcgta-aagtcacgat-	TAGTtAGACA	gCGGTGTT	----	aacgactct--	tccgatgattg-	...802...	tccccgcacag	atctgatg
D. Ere	tctgtcag	gtga--gactgttt...1853...	..acgaagcgta-aagtcacgat-	TAGTtAGACAGCGGTGTTA	----	acgactct--	tccgaggattgg...	1222...	cgccccgcacag	atctgatg	
D. Ana	tctgtcag	gtaa--caccaaag...1446...	..acgaagcgta-aagtcacgat-	TAGTtAGACA	gCGGTGTT	----	aacgacgctg--	tccgatggat-	...681...	ctttctcctcag	atctgatg
D. Gri	tctgtctg	gtga--gtttgat...940...	..taggggcaaa-cagcaacatc-	AGCAACAGTGGCAAGAGCAG	aaagtgccacaaattgaatt	----	...	735...	tcaactctgcag	atctgacg	
D. Moj	tctctcag	gtga--gtggctca...1467...	..acgaagcgta-aagtcacgat-	TAGTtAGACA	gCGGTGTT	----	aacgactctggcctttacaga	----	..1012...	cctccttgcag	atcttacg
D. Per	tctgacag	gtgagtgattgg--...426...	..ggccagtatc-cagagcaggc--	AGCAACAAc	AGCAATAGCA	-----	acagggaaaaacaaaaacaaa	...1361...	ttgcctccacag	atctgatg	
D. Pse	tctgacag	gtgagtgattgg--...426...	..ggccagtattc-cagagcaggc--	AGCAACAAc	AGCAATAGCA	-----	acagggaaaaacaaaaacaaa	...1331...	ttgcctccacag	atctgatg	
D. Vir	tctgtctg	gtga--gttgagtt...2472...	..acgaagcgta-aagtcacgat-	TAGTtAGACAGCGGTGTTA	----	cgactctggcctttacagatg-	...860...	tcctacttgcag	atctcact		
D. Wil	tttgacag	gtga--gaatggaa...651...	..ttctagctagtcagcaaaac	TTTtTGCCAAATGGC	-----	gttcaactgatcgggtggacc-	...889...	ctctcgttgcag	atctcatt		
D. Yak	tctgtcag	gtga--gtctcct...1847...	..acgaagcgta-aagtcacgat-	TAGTtAGACAGCGGTGTTA	----	acgactct--	tccgtggattg...	773...	gtccccgcacag	atctaatg	
	** ** *	** *		*	**	*				**	**** *

id=5810 gene=FBgn0083949 name=CG34113 segment=chr3R.1699274.1701798.-1 type=IN VIEW

Figure 591: CS=12.96



D.Mel	gcgtggcg	gtaagtaaatca...	3068...	-caatcccaatccccagctgc-----	TTGTTGCTATTGT	tgctcattccgccgcatc-----	...1790...	ctccatcaacag	gtcgaccg
D.Sim	gcgtggcg	gtaagtaaatca...	2999...	-caatcccaatccccagctgc-----	TTGTTGCTATTGT	tgctcattccgccgcatc-----	...1796...	ctccatcaacag	gtcgaccg
D.Sec	gcgtggcg	gtaagtaaatca...	2979...	--aatcccaataccagctgct-----	TGTTGCTATTGT	tgctcattccgccgcatc-----	...1934...	ctccatcaacag	gtcgaccg
D.Ere	gcgtggcg	gtaagtaaatca...	2858...	.ccaatgccaatcccc-gctgc-----	TTGTTGCTATTGT	tGCTcattccgccgcatcactg----	...1734...	ctctatcaacag	gtcgaccg
D.Ana	gcgtggcg	gtaagtaaatca...	3265...	--aatggcaataccagctgct	TGTTGctATTGTTGCTcATTT-----	-----ccgccgcatcacttggtc...	...1475...	tttatcaacag	gtcgaccg
D.Gri	gcgtggcg	gtaagtaaatca...	3180...	.ctcatccatgt-ctcagctgc-----	TTGTTGCTATTGT	tgctcattccgccacattc-----	...1270...	ttatattcatag	gtcgaccg
D.Moj	gcgtggcg	gtaagtaaatca...	2543...	--tctctcgtctgcttgttgc-----	ATTGTTGCTcATTT-----	-----ccgccacattcacttggtg...	...1847...	tcgtatccgtag	gacggccg
D.Per	gcgtggcg	gtaagtaaatca...	2641...	.ctcgttgcctgc-ctcagctgc-----	TTGTTGCTATTGT	tgctcattccgccacattc-----	...1156...	gacgggcaacag	gtcgccca
D.Pse	gcgtggcg	gtaagtaaatca...	2543...	.ctcgttgcctgc-ctcagctgc-----	TTGTTGCTATTGT	tgctcattccgccacattc-----	...1155...	gacgggcaacag	gtcgccca
D.Vir	gcgtggcg	gtaagtaaatca...	2962...	--tgtctgtcgtccttgttct-----	ATTGTTGCTcATTT-----	-----ccgccacattcacttggtg...	...1683...	gctcgtccatag	gtcgacct
D.Yak	gcgtggcg	gtaagtaaatca...	2970...	-caatgcccaatccccagctgc-----	TTGTTGCTATTGT	tgctcattccgccgcatc-----	...1766...	ctctatcaacag	gtcgaccg
	*****	*****		* ** *	***** *	**** *		** ** *	** ** *

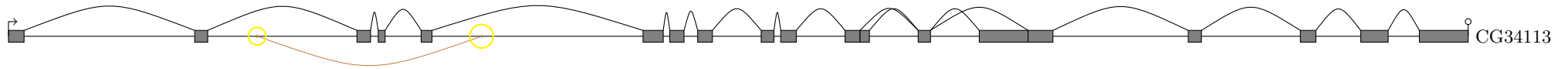
id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008.1717942.-1 type=IN

D.Mel	gcgttcag	gtaggagtacaa...	3243...	-----ctgacaacaagaccaggttt	ATAA	TAGCAACAG	-----tctgcatgcaccaccatcc---	...1667...	tccattttgcag	atggtcga
D.Sim	gcgttcag	gtaggagtacaa...	3354...	-----ctgacaacaagaccaggttt	ATAA	TAGCAACAG	-----tntgcatgcaccaccatcc---	...1556...	ccctttttgcag	atggtcga
D.Sec	gcgttcag	gtaggagtacaa...	3345...	-----ctgacaacaagaccaggttt	ATAA	TAGCAACA	-----tctgcatgcaccaccatc---	...1566...	ccctttttgcag	atggtcga
D.Ere	gcgctcag	gtaggttcaggt...	2554...	.gtttgctgacaacaagacc	GGGT	ATAA	TAGCAACAG	-----tctgaccaccatccatta---	...2350...	aactttttgcag
D.Ana	gcgttcag	gtaggttgat...	4006...	-----ggctgacagtc-caggtttat	AAAT	AGCAACAGTCGGCA	ctaacaagccacatgtat---	...900...	ttatttttacag	atggtcga
D.Gri	gcgttcag	gtgggtgttttt...	3747...	-----tggctgacagccgaggttt	ATAA	TAGCAACAG	-----tctgcg-gatacacatagctt---	...1163...	cgattccacag	atggtcgc
D.Moj	gcgttcag	gtgggtgtcgct...	3737...	-----gctgacagggcaggtttat	AAAT	AGCAACAGT	-----ctgtgcg-actacacacagca---	...1174...	cctttttttcag	atggacgc
D.Per	gcgttcag	gtaggtgtttgg...	3917...	-----tagctgacaagcccaggttt	ATAA	TAGCAACAG	-----tcggagtcccgcagtgccc...	...993...	tttgcattgcag	acggacgc
D.Pse	gcgttcag	gtaggtgtttgg...	3861...	-----tagctgacaagcccaggttt	ATAA	TAGCAACAG	-----tcggagtcccgcagtgccc...	...1049...	tttgcattgcag	acggacgc
D.Vir	gcgttcag	gtaagtgttatg...	3851...	-----gctgacagggcaggtttat	AAAT	AGCAACAGT	-----c-tgcg-actgcacgcctcct---	...1060...	tggcttttacag	atggacgc
D.Yak	gcgctcag	gtaggagtacaa...	3460...	-----ctgacaacaagaccaggttt	ATAA	TAGCAACAG	-----ctgaccattcatccatta---	...1450...	gcttttttcag	atggccga
	*** **	** *		* ** *	*****		* ** *		***	** ** *

id=5812 gene=FBgn0083949 name=CG34113 segment=chr3R.1692745.1699138.-1 type=IN VIEW

Figure 592: CS=13.86





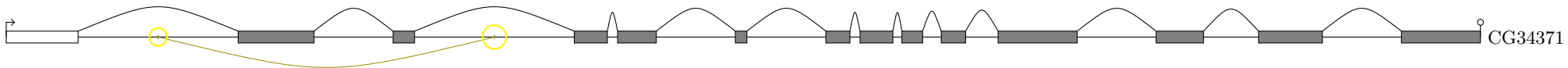
D.Mel	ctttacag	gtaagcaggagt...2616...--tgtttacat	tttcgcgcata	---	TATTtAATT	agGCTAaTTAG	gagaacgtgc	cctggctttg	...2289...c	ctttttccag	cttcgacg
D.Sim	ctttacag	gtaagcaggagc...3896...aaagatagc	acg-tcaggctt	-----	TTTAA-TGCG	caAAATTG	caaacgtttg	ctgtttcgtt	...1012...c	ctttttccag	cttcgacg
D.Ere	ctttacag	gtaagcaggagc...2929...--tgtttacat	tttcgcgcata	---	TATTtAATT	agGCTAaTTAG	ggaacgtg	ctctggctttg	...1976...c	cgctttccag	cttcgacg
D.Ana	ctatacag	gtaagcatgctg...3932...aaagatagc	acg-tcaggctt	-----	TTTAA-TGCG	caAAATTG	caaacgtttg	ctgggctctg	...976...t	ttttttgacg	cttcgatg
D.Gri	ctttacag	gtaagtccgat...3572...---tttacac	actcgccatata	---	TATTtAATT	aaGCTAaTTAG	ggtacgtg	ctttggccaga	...1333...t	cccccttcgacg	ctttgatg
D.Per	ctttacag	gtaaggataaag...2522...---cttgtct	cgccagcaggac	GACAGtTAA	-----	CATTCT	gcaactg	gccacaatgttgc	...2387...t	cccttttcgacg	ctttgatg
D.Pse	ctttacag	gtaaggataaag...2532...---cttgtct	cgccagcaggac	GACAGtTAA	-----	CATTCT	gcaactg	gccacaatgttgc	...2377...t	cccttttcgacg	ctttgatg
D.Vir	ctttacag	gtaagtgcagac...2752...---tttacat	attcggaatata	---	TATTtAATT	agGCTAaTTAG	ggaacgtg	ctctgagccaga	...2153...t	gcttcctgcag	ctttgatg
D.Wil	ctctatag	gtaagtttacta...3351...--tgtttacat	tttcttcgata	---	TATTtAATT	agGCTAaTTAG	ggaacgtg	cttcggccgca	...1554...t	cttttttcgacg	tttcgatg
D.Yak	ctttacag	gtaagcaggagc...3927...aaagatagc	acg-tcaggctt	-----	TTTAA-TGCG	caAAATTG	caaacgtttg	ctgtcttctt	...981...g	ctttttccag	cttcgatg
	** ** *	*****	*	** *	****	* *	**		* **	** ** *	

id=5786 gene=FBgn0083949 name=CG34113 segment=chr3R.1718712.1729437.-1 type=IN

D.Mel	gcgtaggc	gtaagtaaatca...2444...--atcaag-t	tttattaacttcga	---	CTAAT	---AGCAATTAATA	cc-ggcaata	aaaaagcta	atc-...2411...c	ctcatca-acag	gtcgaccg	
D.Sim	gcgtaggc	gtaagtaaatca...4310...--gttagc	----acgaaat	tttaaat	TAATTT	TGCATTA	AA--c-atta	atttaaat	ttgaaat...482...c	ctcatca-acag	gtcgaccg	
D.Ere	gcgtaggc	gtaagtaaatca...2272...--atcaag-t	tttattaacttcga	---	CTAAT	---AGCAATTAATA	cc-ggcaata	aaaaagcta	atc-...2322...c	ctcatca-acag	gtcgaccg	
D.Ana	gcgtaggc	gtaagtaaatca...4502...--gttagc	----acgaaat	tttaaat	TAATTT	TGCATTA	AA--c-atta	atctaaat	tttaatt...243...t	tttatca-acag	gtcgaccg	
D.Gri	gcgtaggc	gtaagtaaatca...2283...--atcaac-t	tttattaacttcga	---	CTAAT	---AGCAATTAATA	cc-ggcaata	aaaaagcta	atc-...2164...t	ttatattc-atag	gtcgaccg	
D.Per	gcgtaggc	gtaagtaaatca...2315...aaggcagc	-----taa	atgcccag	GGAAC	---TGTTA	TTGTC	t--attat	ccctgcatt	cccat...1478...g	acgggca-acag	gtcgccca
D.Pse	gcgtaggc	gtaagtaaatca...2205...aaggcagc	-----taa	atgcccag	GGAAC	---TGTTA	TTGTC	t--attat	ccctgcatt	cccat...1489...g	acgggca-acag	gtcgccca
D.Vir	gcgtaggc	gtaagtaaatca...2452...--tcaact	tttattaacttcga	---	CTAAT	---AGCAATTAATA	cc-agcaata	aaaaagcta	atc-...2191...g	ctctcc-atag	gtcgacct	
D.Wil	gcgtaggc	gtaagtaaatca...2505...--atcaac-t	tttattaacttcga	---	CTAAT	---AGCAATTAATA	cc-agtaata	aaaaagcta	atc-...1470...c	atattcagcag	gtcgaccg	
D.Yak	gcgtaggc	gtaagtaaatca...4312...--gttagc	----acgaaat	tttaaat	TAATTT	TGCATTA	AA--t-atta	atctgaatt	gaaact...421...c	ctcatca-acag	gtcgaccg	
	*****	*****	** *	**	* *	*	*		*	*	** ** *	

id=5792 gene=FBgn0083949 name=CG34113 segment=chr3R.1713008.1717942.-1 type=IN VIEW

Figure 593: CS=10.8



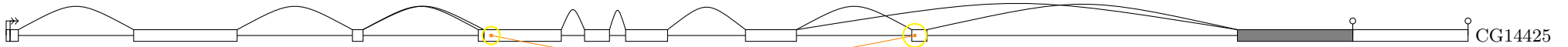
D.Mel	ataacaaa	gtaattgcata...3897...	ggagcgcgggggtaataaaa	---AATTGAggTCAATTTGtTTTg	gc---atggtgaaaggttgacaa...	1007...	ttctattttcag	tggcgaat
D.Sim	ataacaaa	gtaattgcata...3877...	ctggattgggggtaataaaa	---AATTgaGGTCAATTTGtTTTg	gc---atggtgaaaggttgacaa...	1027...	ttctattttcag	tggcgaat
D.Sec	ataacaaa	gtaattgcata...3899...	ctggatcgggggcaataaaa	---AATTGAggTCAATTTGtTTTg	gc---atggtgaaaggttgacaa...	1005...	ttctattttcag	tggcgaat
D.Ere	ataacaaa	gtaattgcata...3903...	ctggatcgggggtaataaaa	---AATTgaGGTCAATTTGtTTTg	gc---atgctgaaaggtt-----	1006...	ttctattttcag	tggcgaat
D.Gri	ataaaaa	gtaattgcata...3767...	-tag--cctgaaagaaagcaaa	AATTgaGGTCAATTTGtTTTg	gc---atattgaaagctggcagag...	1136...	ttctattttcag	tggcgcat
D.Per	ataacaaa	gtaattgcata...3220...	cccactttgggctaataata	---AATTgaGGTCAATTTGtTTTg	gc---atattgaaagctggcagag...	1689...	ttctattttcag	tggcgcat
D.Pse	ataacaaa	gtaattgcata...3454...	cccactttgggctaataata	---AATTgaGGTCAATTTGtTTTg	gc---atattgaaagctggcagag...	1455...	ttctattttcag	tggcgcat
D.Wil	acaacaaa	gtaattgcata...4345...	ctca--tgtatataatgaaa-aa	AATTgaGGTCAATTTGtTTTg	gc---atggtgaaaggtt-----	564...	ttctattttcag	tggcgcat
D.Yak	ataacaaa	gtaattgcata...4012...	ctggatcgggggcaataaaa	---AATTGAggTCAATTTGtTTTg	gc---atggtgaaaggtt-----	897...	ttctattttcag	tggcgaat
	* * * *	*****		* * *	***** * * * *		* * *	***** *

id=114260 gene=FBgn0085400 name=CG34371 segment=chr2R.19079128\_19091039\_-1 type=I5

D.Mel	atctatac	gtaagttaa...2239...	aagccaagagcgaatacaaa	-CAGGccTAAATTGATCAATT	aattaattgaagtgaactat...	822...	tttccttacag	ctttgatg
D.Sim	atctacac	gtaagttaa...2277...	aagccaagagcgaatacaaa	-CAGGccTAAATTGATCAATT	aattaattgaagtgaactat...	828...	tttccttacag	cttcgatg
D.Sec	atctacac	gtaagttaa...2242...	aagccaagagcgaatacaaa	-CAGGccTAAATTGATCAATT	aattaattgaagtgaactat...	837...	tttccttacag	cttcgatg
D.Ere	atctacac	gtaagtcaa...2230...	-----gagcgaatacaacagcc	TAAATTGATCAATT	aattaattgaagtgaactat...	793...	tttccttacag	ctttgatg
D.Gri	atctatag	gtaagtac...2982...	aaaatgctacaccacaacaa	ACAGCGcTAAATTGATCAATT	aattaattgaagtgaactat...	1703...	tttccttacag	cttcgatg
D.Per	atctatac	gtaagttag...2304...	-----aaacagaacagaacaagc	gcTAAATTGATCAATT	aatttatcgaattacaaaac...	1450...	tttccttacag	ctttgatg
D.Pse	atctatac	gtaagttag...2338...	-----aaacagaacagaacaagc	gcTAAATTGATCAATT	aatttatcgaattacaaaac...	1451...	tttccttacag	ctttgatg
D.Wil	atatatac	gtaagttaa...2655...	agaagacaacaacatgcac	-----TAAATTGATCAATT	aattaattgaagtgaactat...	2256...	tttccttacag	ctttgatg
D.Yak	atctacac	gtaagtcaa...2332...	-----gagcgaatacaacagcc	cTAAATTGATCAATT	aattaattgaagtgaactat...	847...	tttccttacag	ctttgatg
	* * * *	*****		* * *	***** * * * *		* * *	***** *

id=114264 gene=FBgn0085400 name=CG34371 segment=chr2R.19060529\_19063673\_-1 type=IN VIEW

Figure 594: CS=9.72



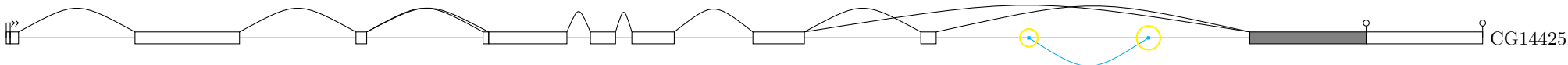
D.Mel	cgccacag	gatacagaat	tttca	TTCCAAGTTC	at	CGTC	gcgctcgtggttacaatgatt...272...	cgagactataag	gtaagcgt
D.Sim	cgccacag	gatacagaat	tttca	TTCCAAGTTC	ct	CGTC	gcgctcgtggttacaacgatt...272...	cgagactataag	gtaagcgt
D.Sec	cgccacag	gatacagaat	tttca	TTCCAAGTTC	ct	CGTC	gcgctcgtggttacaacgatt...272...	cgagactataag	gtaagcgt
D.Ere	cgccacag	gatacagaat	tttca	TTCCAAGTTC	ct	CGTC	gcgctcgtggttacaacgatt...272...	cgagactataag	gtaagcgt
D.Gri	caccacag	gacacagaat	ttaca	TTCCAAGTTC	ct	CGTC	gcgctcgcggttacaatgatt...248...	agagactataag	gtaagtta
D.Moj	caccacag	gacacagaat	ttaca	TTCCAAGTTC	ct	CGTC	gcgctcgcggttacaacgatt...251...	agagactataag	gtgagtgc
D.Per	caccacag	gatacagaat	tctca	TTCCAAGTTC	ct	CGTC	ccgctcgcggttacaatgatt...281...	agagactataag	gtgagtga
D.Pse	caccacag	gatacagaat	tctca	TTCCAAGTTC	ct	CGTC	ccgctcgcggttacaatgatt...281...	agagactataag	gtgagtga
D.Vir	caccacag	gacacagaat	ttaca	TTCCAAGTTC	ct	CGTC	gcgctcgcggttacaacgatt...254...	agagactataag	gtgagttt
D.Wil	caccacag	gatacagaat	ttaca	TTCCAAGTTC	ct	CGTC	gcgctcgcggttacaacgatt...263...	agagactataag	gtaatgct
D.Yak	cgccacag	gatacagaat	tttca	TTCCAAGTTC	ct	CGTC	gcgctcgcggttacaacgatt...272...	cgagactataag	gtaagcgt
	*	*****	**	*****	*****	*****	*****	*****	**

id=105468 gene=FBgn0029933 name=CG14425 segment=chrX\_6979652.6979987\_-1 type=E5

D.Mel	cattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
D.Sim	cattataG	ACGGAGCT	aTGGAAA	aattacgctcattattggatggtatatgggatgctatcctttggtctcgata	gtaattat
D.Sec	cattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
D.Ere	cattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
D.Gri	tttttaG	ACGGAGC	aaTGGAAA	aattacgctcattattcgatgctatttgcgatgctatcctttggtctcgata	gtaattat
D.Moj	ttttataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatttgcgatgctatcctttggtctcgata	gtaattat
D.Per	tattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
D.Pse	tattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
D.Vir	ttttataG	ACGGAGC	aaTGGAAA	aattacgctcattattcgatgctatttgcgatgctatcctttggtctcgata	gtaattat
D.Wil	ttttataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatttgcgatgctatcctttggtctcgata	gtaattat
D.Yak	cattataG	ACGGAGCT	aTGGAAA	aattacgctcattattcgatgctatatgcatgctatcctttggtctcgata	gtaattat
	**	***	*****	*****	*****

id=105476 gene=FBgn0029933 name=CG14425 segment=chrX\_6975022.6975087\_-1 type=A5 VIEW

Figure 595: CS=3.3



D.Me1	tctcgata	gtaattattcct...337...aataacttaaaaaataagccg- <b>AATTTTC</b> tt <b>TTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1189...ttatcaatctag	gcgaaaaac				
D.Sim	tctcgata	gtaattattcct...336...-----gaaaaataagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1167...tttctttacct	tcgcacct				
D.Sec	tctcgata	gtaattattcct...336...-----gaaaaataagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1195...ttatcaatctag	gcgaaaaac				
D.Ere	tctcgata	gtaattattcct...329...-----tgcaatgaagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1203...ttatcaatctag	gcgataaac				
D.Ana	tctcgata	gtaattattcct...334...atatttaaatgcaagaggag----- <b>AAGCGTGCCATGTTTTCTTT</b> -attactttatctca--tgccat---...1050...gaaccgttttag	gtgacaac				
D.Gri	tctcgata	gtaattattcct...586...-----ttgtcgaacaa--caaaaaatc--- <b>TTCAAAGCGTGCCATGTTTT</b> ---attcatttttcatttcgatt-----...1628...aaaaattgtag	gcgacaac				
D.Moj	tctcgata	gtaattattcct...973...-aacttaaaaaacaattcaa----- <b>AGCGTGCCATGTTTT</b> <b>TGCATT</b> ---cctctatttagttgcatc---...1619...taactatttag	gcgacaac				
D.Per	tctcgata	gtaattattcct...362...-----caagaaaaagagaagcgatt <b>TTTTTCAAAGCGTGCCATGTTTTT</b> ct <b>TTGTT</b> actttctctca--agccatcgt...1515...gaatcactatag	gtgacaac				
D.Pse	tctcgata	gtaattattcct...343...-----actccaagaaaaagagaagc <b>GATT</b> tt <b>TTTCAAAGCGTGCCATGTTTTT</b> ct <b>TTGTT</b> actttctctca--tgccatcat...1559...gaacactatag	gtgacaac				
D.Yak	tctcgata	gtaattattcct...361...-----gaaaaagaagccgaattttc- <b>TTTTTAAAGCGTGCCATGTTTTTC</b> -gttattactttctctca--tgt-----...1244...ttatcaatctag	gcgataaac				
	*****	***** * *	**	*****	* * *	*	*

id=105477 gene=FBgn0029933 name=CG14425 segment=chrX\_6973401.6975021.-1 type=I5

D.Me1	tctcgata	gtaattattcct...1138...----acaaactgaaatgga----aaca--- <b>GAAAAATGGCAGGTTGAA</b> <b>GAAAAAT</b> -acgaaaacccttaaatcgtg...392...ttatcaatctag	gcgaaaaac				
D.Sim	tctcgata	gtaattattcct...1127...----acaaaactgaaatgga----aaca--- <b>GAAAAATGGCAGGTT</b> aa <b>TGAAAA</b> -ttacgaaaacccttaaatcg---...375...tttctttacct	tcgcacct				
D.Sec	tctcgata	gtaattattcct...1127...----acaaaactgaaatgga----aaca--- <b>GAAAAATGGCAGGTT</b> aa <b>TGAAAA</b> -ttacgaaaacccttaaatcg---...403...ttatcaatctag	gcgataaac				
D.Ere	tctcgata	gtaattattcct...1125...----caaaaactgaaatgga----aaca--- <b>GAAAAATGGCAGGTT</b> aa <b>TGAAAA</b> -ttacgaaaacccttaaatcg---...406...ttatcaatctag	gcgataaac				
D.Ana	tctcgata	gtaattattcct...950...tgtttaatcacgaaatggc----- <b>AAAGAAAAAATGGCAGGTT</b> -----aataacaaaagcataaatat---...433...gaaccgttttag	gtgacaac				
D.Gri	tctcgata	gtaattattcct...1572...-----aaaaatacaaaaaaaa-----aaaa--- <b>AAAAATGGCAGGTT</b> aa <b>TGAA</b> ---tgaatgaaggataaatcgt---...640...aaaaattgtag	gcgacaac				
D.Moj	tctcgata	gtaattattcct...2024...-----cacaaaacaaaacaaa-----agaa <b>AATGCAAAAAATGGCAGGTT</b> -----caatgaatgaattaagtta---...570...taactatttag	gcgacaac				
D.Per	tctcgata	gtaattattcct...1345...----caattgaaaagaaaaa----caaa <b>AAACAAAAAATGGCAGGTT</b> aa <b>TGAAAAA</b> cctatgaaaacattttaatc---...535...gaatcactatag	gtgacaac				
D.Pse	tctcgata	gtaattattcct...1367...----caattgaaaagaaaaa----caaa <b>AAACAAAAAATGGCAGGTT</b> aa <b>TGAAAAATC</b> atgaaaaca-tttaatcgtg...540...gaacactatag	gtgacaac				
D.Yak	tctcgata	gtaattattcct...1191...-----actgaaatggatacagaaca--- <b>GAAAAATGGCAGGTT</b> aa <b>TGAAAA</b> -ttacgaaaacccttaaatcg---...413...ttatcaatctag	gcgataaac				
	*****	***** * *	**	*****	* **	*	*

id=105477 gene=FBgn0029933 name=CG14425 segment=chrX\_6973401.6975021.-1 type=I5 VIEW

Figure 596: CS=9.6



D.Me1	gtgtcaag	gtataaa	---	gtttg	-aactggttt	caaagaacatag	----	tt	-----	gacggcggtac	-----	cgggcattttgggt	-----	GTGTGATTGTAGCAA	agt	gat	atg	tattgat	--	cat	...	114	...	tctcctcaa	--	c	-ag	gcattaac	
D.Sim	gtgtcaag	gtataa	----	gtttg	-aacaagctactagagaacattt	-----	tt	-----	gatggcggtac	-----	cgggcattttgggt	-----	GTGTGATTGTAGCAA	agt	gat	atg	tattgat	--	cat	...	119	...	tctcccaa	--	c	-ag	gcattaac		
D.Sec	gtgtcaag	gtataa	----	gtttg	-aacaagctgctagagaacattt	-----	tt	-----	gatggcggtac	-----	cgggcattttgggt	-----	GTGTGATTGTAGCAA	agt	gat	atg	tattgat	--	cat	...	119	...	tatcccaa	--	c	-ag	gcattaac		
D.Ere	gtgtcaag	gtataa	caagatcta	-aacaagcttcagaaaaacatat	-----	tt	-----	gatgacggtac	-----	cgggcattttgggt	-----	GTGTGATTGTAGCAA	agt	gat	atg	tattgat	--	cat	...	132	...	tcttcttaa	--	c	-ag	gcattaac			
D.Ana	gtgtcaag	gtg	-----	gggttt	aatggaatcagt	-----	-----	aagtgga	-----	aaggtgtactgga	CAATTTGGGT	gt	GTGATTGTGGCAA	agt	gat	aggt	tattgat	--	cat	...	120	...	ccctcgaac	-ag	gc	atcaac			
D.Gri	gtgtcaag	gta	caaaagcgtttgt	-----	ttcttcttt	aaagcatattaaattcc	-----	-----	gagtgtggtatttc	-----	tgtgcattttgggc	-----	GTGTGATTGTGGCAA	agt	gat	gagc	-tt	-gattccat	...	117	...	atgcttttg	--	c	-ag	gcatcaac			
D.Moj	gtgtcaag	gtagag	cagagccttt	----	cattttg	gataaagact	----	at	tcg	-----	gagtgttataatctatcatgtgtatt	gcgcattttggtc	-----	GTGTGATTGTGGCAA	agt	gat	gagc	-tat	gattcca	...	111	...	cttctccg	--	c	-ag	gcatcaac		
D.Per	gtgtcaag	gtaga	agctagataagaaaaagt	g	ttatatcccg	gataaactgggtatccaggaatccagactg	-----	-----	tggacattttgggt	-----	GTGTGATTGTGGCAA	agt	gat	atg	catttgat	--	cat	...	125	...	tccttcatct	-ag	gc	atcaac					
D.Pse	gtgtcaag	gtaga	agctagataag-aaaaag	ttttat	atcccg	gataaactgggtatccaggaatccagactg	-----	-----	tggacattttgggt	-----	GTGTGATTGTGGCAA	agt	gat	atg	catttgat	--	cat	...	125	...	tccttcatct	-ag	gc	atcaac					
D.Vir	gtgtcaag	gta	acggagcgtgatt	----	ta	-----	tg	cacagatcat	-----	gtcca	-----	gagtgtgtaatatatc	-----	tgcgcattttgggc	-----	GTGTGATTGTGGCAA	agt	gat	gagc	-ttg	gattcca	...	116	...	cttcttca	--	c	-ag	gcatcaac
D.Wil	gtgtcaag	gtag	tagaagattct	-aa	at	ctt	---	aag	tacattt	gtttagtt	-----	aaaacgaattg	-----	tgggcatttcgggc	-----	GTGTGATTGTAGCAA	agt	gat	atg	tacttgat	--	aat	...	115	...	ctctttaa	-caag	gc	attaac
D.Yak	gtgtcaag	gtataa	----	gtctg	-aacaagcttctaataacattt	-----	tt	-----	catggcgttac	-----	tgggcattttgggt	-----	GTGTGATTGTAGCAA	agt	gat	atg	tattgat	--	cat	...	132	...	tcttcttaa	--	c	-ag	gaattaac		
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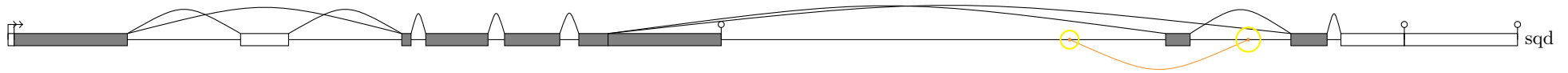
id=38187 gene=FBgn0033688 name=Prp8 segment=chr2R.8046289.8046511.-1 type=IN

D.Me1	gtgtcaag	gtataa	agttgg	...	69	...	at	atg	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	agat	gat	ctg	cgaaata	...	72	...	tctcctcaa	--	c	-ag	gcattaac
D.Sim	gtgtcaag	gtataa	agtttg	...	68	...	at	atg	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	agat	gat	ctg	gaaata	...	77	...	tctcccaa	--	c	-ag	gcattaac
D.Sec	gtgtcaag	gtataa	agtttg	...	68	...	at	atg	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	agat	gat	ctg	cgaaata	...	77	...	tatcccaa	--	c	-ag	gcattaac
D.Ere	gtgtcaag	gtataa	caaga	...	73	...	at	atg	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	cga	aggt	gac	ctg	cgaaata	...	90	...	tcttctaa	--	c	-ag	gcattaac
D.Ana	gtgtcaag	gtggg	gtttta	...	60	...	at	ag	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGCCAAGGTG	ctttt	caa	cg	caac	at	atc	-----	70	...	ccctcgaac	-ag	gc	atcaac	
D.Gri	gtgtcaag	gta	caaaagcgt	...	79	...	at	gag	c	-tt	-gatt	ccatcccc	TTGTTGCAAA	cc	TCACGC	-----	cga	aggt	ggc	gcat	ctaagc	...	75	...	atgcttttg	--	c	-ag	gcatcaac
D.Moj	gtgtcaag	gtagag	cagagc	...	86	...	tg	agc	-tat	gatt	ccatcccc	TTGTTGCAAA	cc	TCACGC	-----	tga	aggt	gac	gcat	agcagc	...	68	...	cttctccg	--	c	-ag	gcatcaac	
D.Per	gtgtcaag	gtaga	agctaga	...	87	...	at	atg	catttgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	ag	ttg	aat	cccacac	ct	...	83	...	tccttcatct	-ag	gc	atcaac
D.Pse	gtgtcaag	gtaga	agctaga	...	86	...	at	atg	catttgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	ag	ttg	aat	cccacac	ct	...	83	...	tccttcatct	-ag	gc	atcaac
D.Vir	gtgtcaag	gta	acggagcgt	...	74	...	tg	agc	-ttg	gatt	ccatcccc	TTGTTGCAAA	cc	TCACGC	-----	caa	aggt	ggc	gcat	ttaacc	...	73	...	cttcttca	--	c	-ag	gcatcaac	
D.Wil	gtgtcaag	gtag	tagaaaga	...	76	...	at	atg	tacttgat	--	aat	cccc	TTGTTGCAAA	cc	TCACGC	-----	cga	aa	gat	gtct	c	caata	...	73	...	ctctttaa	-caag	gc	attaac
D.Yak	gtgtcaag	gtataa	agttctga	...	68	...	at	atg	tattgat	--	cat	cccc	TTGTTGCAAA	cc	TCACGC	-----	caa	aggt	gac	ctg	cgaaata	...	90	...	tcttctaa	--	c	-ag	gaattaac
	*****	**						*	*	***	*****	*****	*****											**	**	***	*		

id=38187 gene=FBgn0033688 name=Prp8 segment=chr2R.8046289.8046511.-1 type=IN VIEW

Figure 597: CS=14.4





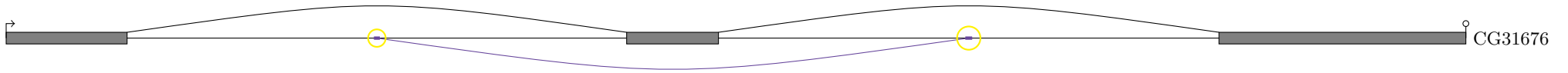
D. Mel	----acaac-aa	acaaaaacaaa...3337...--cgtccaaaactgggcggcac-----	AAATTTGACCAA	--gcgaaa-agttaaagaatac...393...tgcaacaaaag	acggctac
D. Sim	gacaacaacaac	aaacaaa-----...3589...--cgtccaaaactgggcggcac-----	AAATTTGACCAA	--gcgaaa-agttaaagaatac...373...tgcaacaaaag	acggctac
D. Sec	----acaacaac	aaacaaaacac...3347...--cgtccaaaactgggcggcac-----	AAATTTGACCAA	--gcgaaa-agttaaagaatac...374...tgcaacaaaag	acggctac
D. Ere	----acaacaa-	acacaaaacaaa...3303...--tctccaaaactgaacactac-----	AAATTTGACCAA	--gcgaaa-agttaaagaatac...381...tgcaacaaaag	acggatac
D. Ana	aactaaaaacaaa	aaacaaa-----...3436...tcgcctcccaaaaaccaata-----	AAAATTTGACCAATT	gaccttttaagaagtaac--...377...cgcaaccgacag	acggctac
D. Gri	----acaacaac	acataagcgaaa...3793...--ctcctacttactatctgaaATTGAcA	AAAATTTGACCAAA	--accaagc-aaaaaccattag...133...aaactcaaaact	aagactac
D. Moj	----acaacaac	caaacacacac...3697...tc--tgcccacaaattcttaaa-	GAAATTTGACCAAA	--accaagc-aaaaaccattg...113...gatctataaca	aagactac
D. Vir	----acacaac--	acacatacaaaa...3500...--tatataaaaaagaaaaaga-----	AAAATTTGACCAAA	--accaagctaaaagacatta...128...tgactctaaaca	aagactac
D. Wil	----acaacaac	caaacatacaa...3762...--gtctccctcggcgcagcgt-TGCAcA	AAAATTTGACCAA	--tatccatc-acaaccacaaa...274...gttaatgaaaa	aagaatac
D. Yak	----caacaaa	aaaaaaaacaaa...3285...--cgtccataactgagtagtac-----	AAATTTGACCAA	--gcgaaa-agttaaagaatac...408...tgcaacaaaag	acggatac
	****	*	*****	* * *	* * **

id=10794 gene=FBgn0086897 name=sqd segment=chr3R.9462801\_9466607\_-1 type=IN

D. Mel	ccccaaag	gtatt-aacacta...211...-gtgtgtgccccccactagaaTTGGTCAAAATTT	-tcaaaaaataacaaaaaat-----	...157...tttcacaacag	gcggtggc-----
D. Sim	ccccaaag	gtatt-aacacta...210...-tgtgtgtg-ccccccactagaaTTGGTCAAAATTT	-cccaaaaaaaaaaaaaagaaa-----	...156...tttcacaacag	gcgcggtg-----
D. Sec	ccccaaag	gtatt-aacacta...204...-tgtgtgtg-ccccccactagaaTTGGTCAAAATTT	-acaagaaaaaaa--gaaaac-----	...154...tttcacaacag	gcgcggtg-----
D. Ere	ccccaaag	gtatt-aacacta...189...-cgcccc-ccccccactagaaTTGGTCAAAATTT	-cccaaaaaagaaaacggaag-----	...142...tttcacaacag	gcgcggtg-----
D. Ana	cccgaaag	gtatt-aacttac...201...-atthagctgttctcttagAGTTGGTCAAAATTT	cccaaaagcaaacacagaaa-----	...148...actacacatag	gcgcggtg-----
D. Gri	tccccaaag	gtata-cacaata...216...-agacattgtttatccttagATTGGTCAAAATTT	caTCAGT-----cgcttgaaccgtttggcgtt---	...147...ttcttaaacag	gcgcggtg-----
D. Moj	tccccaaag	gtatgccacaac...258...-agtcattgtttatccttagATTGGTCAAAATTT	----catcagtcgcttgaatcgct-----	...138...tttctgaaacag	gcggaggg-----
D. Vir	tccccaaag	gtata-cacaaca...194...-gaacattttttatccttagATTGGTCAAAATTT	----catcagtcgcttgaatcgct-----	...137...----aaacag	gcgcggtg-----
D. Wil	tccccaaag	gtata-aatttga...164...-ttac-ttattaactcttagATTGGTCAAAATTT	-----tatagtcctttatattatgt...220...tatttgaacag	gcgcggtg-----	gcgcggtg-----
D. Yak	ccccaaag	gtatt-aacta...183...-tgctgtg-ccccccactagaaTTGGTCAAAATTT	-cc-aaaaagaaaacggaatc-----	...143...--ccaacacag	gcgcggtg-----
	** ****	**** *	**** *****	*	* ** **** **

id=10796 gene=FBgn0086897 name=sqd segment=chr3R.9462248\_9462692\_-1 type=IN VIEW

Figure 599: CS=14.8



D. Mel	caatacag	gtgtgttattaa...	2953...	ttctgcaaacgatctgaaaa---	TTCAGCTGTCAATtAATTT	caatatattgtaaatgatta...	1262...	catccatttcag	cttccgcg		
D. Sim	caatacag	gtgtgttaacaa...	2938...	ttctgcaaacgatctgacaa---	TTCAGCTGTCAATtAATTT	caatatattgtaaatgatta...	1301...	taccatttcag	cctccgcg		
D. Sec	caatacag	gtgtgttaacaa...	2928...	ttctgcaaacgatctgacaa---	TTCAGCTGTCAATtAATTT	caatatattgtaaatgatta...	1294...	taccatttcag	cctccgcg		
D. Ere	cagcacag	gtgtgttataaaa...	2686...	ttctgcaaacgatctgacaa---	TTCAGCTGTCAATtAATTT	caatatattg-aaatgattat...	1072...	ttcccatttcag	cctccgcg		
D. Gri	caatgcag	gtgggtgccag...	2853...	---tagatataatattacagggc	CTCA-----AAGTGCATT	caacttggctaataacatag-	2059...	tttcgctttcag	cctctggt		
D. Moj	gagtacag	gtgggtgttcac...	3101...	tttggccaacgatctgacaa---	TTCAaCTGTCAATtAATTT	caatatattgtaaatgataa-	1805...	attccttgcag	cctctggt		
D. Per	caatgcag	gtgggt-ctcagt...	3282...	ttctgcaaacgatctgacaa---	TTCAaCTGTCAATtAATTT	caatatattgtaaatgatta-	1624...	cttctctccag	cttctggg		
D. Pse	caatgcag	gtgggt-ctcagt...	3563...	ttctgcaaacgatctgacaa---	TTCAaCTGTCAATtAATTT	caatatattgtaaatgatta-	1343...	cttctctccag	cttctggg		
D. Vir	ggatgcag	gtgggtgttcag...	2671...	---ttgatataaagttacagtc	CTCA-----AAGTGCATT	caaccggccttataacatag-	2241...	caaatattacag	cctcagga		
D. Yak	caatacag	gtgtgttagaaa...	2973...	ttctgcaaacgatctgacaa---	TTCAGCTGTCAATtAATTT	caatatattgtaaatgatta-	1317...	ttcccatttcag	cctccgcg		
		***	*** **	*	* * * * *	***	** *	*****	* * **	** ***	* * * *

id=128326 gene=FBgn0051676 name=CG31676 segment=chr2L\_20841045\_20845342.1 type=IN

D. Mel	gcaagaag	gtgagatcgagc...	1464...	aaaat-----	acataataattaattAA-GTTGTTGcACAGGcTGAA	gcgctcaatta---cgactcaa...	1480...	tttcattttcag	tctacggc		
D. Sim	gcaggaag	gtgagatcaaac...	1377...	aaaat-----	acataataattaattAA-GTTGTTGcACAGGcTGAA	gcgctcaatta---cgactcaa...	1496...	tttcaatttcag	tctacggc		
D. Sec	gcaggaag	gtgagatcgagc...	1393...	aaaat-----	acatagaattaattaattAA-GTTGTTGcACAGGcTGAA	gcgctcaatta---cgactcaa...	1544...	tttcaatttcag	tctacggc		
D. Ere	gcaggaag	gtgagttcccac...	1529...	aaag-----	acataataattaattaattAA-GTTGTTGcACAGGcTGAA	gcgctcaatta---cgactcaa...	1327...	ttaattttcag	tctacggc		
D. Gri	gcaggaag	gtaagcagcaaaa...	3380...	acgatttggacgacatttga-----	AATGcATT-----tTTGAG	---ataagttaacgcaaggcgaa...	162...	gtttcattgcag	tctatggg		
D. Moj	gcaggaag	gtaagccacaaa...	2630...	tatat-----	atatataaattaattaattAA-GTTGTTGcACAGcTGAA	gcgctcaatta---cggcaatga...	2275...	gtttcattgcag	tatacggc		
D. Per	gcaggaag	gtgagatcaaag...	2022...	aaaat-----	acataataattaattaattAA-GTTGTTGcACAGcTGAA	gcgctcaatta---cgggccata...	2014...	tcctttttgcag	tgtacggc		
D. Pse	gcaggaag	gtgagatcaaag...	2037...	aaaat-----	acataataattaattaattAA-GTTGTTGcACAGcTGAA	gcgctcaatta---cgggccata...	2011...	tcctttttgcag	tgtacggc		
D. Vir	gcaggaag	gtaagcaaccag...	3668...	acgatttggacgacatttga-----	AATGcATT-----tTTGAG	---ataagtcaaacgcaacggac...	139...	gtttcattgcag	tctatggc		
D. Yak	gcaggaag	gtgagatcgaac...	1484...	aaaat-----	acataataattaattaattAA-GTTGTTGcACAGGcTGAA	gcgctcaatta---cgactcaa...	1404...	cttcattttcag	tctacggc		
		*** ****	** **	**	* * * *	** * **	***	* * * *	*	** ***	* * * **

id=128328 gene=FBgn0051676 name=CG31676 segment=chr2L\_20845529\_20848556.1 type=IN VIEW

Figure 600: CS=12





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D.Mel  atctgcag gtaaatatgcac...1358...ctttcacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaagaactaattga-...105...catttacagcag ggtgtacg
D.Sim  atctgcag gtaaatatgcac...1368...ctttcacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaagaactacttga-...96...catttacagcag ggtgtacg
D.Sec  atctgcag gtaaatatgcac...1431...ctttcacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaagaactacttga-...102...catttacagcag ggtgtacg
D.Ere  atctgcag gtaaatatgcac...1370...ctttcacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaagaactacttga-...96...catttacagcag ggtgtacg
D.Ana  atctgcag gtaaatatgcac...1183...ccaccacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaagaaagtga-...107...catttacagcag ggtgtacg
D.Gri  atctgcag gtaacatacaat...1097...caaatatgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaa-gtaaagaatttaa...114...catttacagcag ggtgtacg
D.Moj  atctgcag gtaactattaaa...1164...tagatatgcgacattgaa--aTTA-TTTTGGCGAATTgttgcaatataaagaattaa...151...catttacagcag ggtgtacg
D.Vir  atctgcag gtaacatatgat...1054...--ttatgcgacattcaactta--TTTTGGCGAATTgttgcaatataaagaattaa...147...catttacagcag ggtgtacg
D.Wil  atctgcag gtaaatataata...1163...cttttgcgacattctaa--aTTACTTTTGGCGAATTgatttaa-tgaatctgtcaat...72...catttacagcag ggtgtacg
D.Yak  acctgcag gtaaatatccac...1271...ctttcacgcgacattcaaa--aTTA-TTTTGGCGAATTgttgcaaaaaaactactag-...97...catttacagcag ggtgtacg
* **** * * ***** * * * ***** * ** *

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id=32708 gene=FBgn0259934 name=CG42457 segment=chr3R\_13833047\_13834589\_1 type=I5

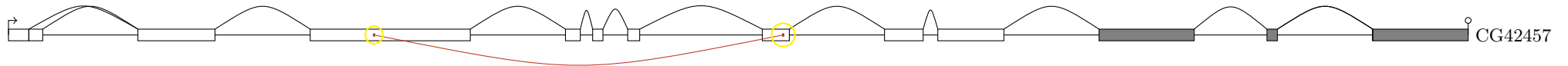
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D.Sim  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Sec  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Ere  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Ana  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Gri  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...ctctcactggac gtaagtaa
D.Moj  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Vir  tacagcag ggtgtacgcttcgaccccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...55...cactcactggac gtaagtaa
D.Wil  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...51...cactcactggac gtaagtaa
D.Yak  tacagcag ggtgtacgcttcgatcccgatatgccccaaacaattcgcttggAATTCGCCAAGAGTAAcagcaaaagttagcaaaccca...1010...cactcactggac gtaagtaa
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id=32709 gene=FBgn0259934 name=CG42457 segment=chr3R\_13834590\_13834731\_1 type=E5 VIEW

Figure 601: CS=7



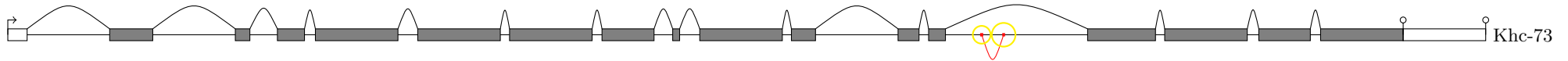
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D.Sim	tttcgcag	ttcaactgactc...290...gacgccagcaagtgtccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...984...aatgaggaagag	gtgagtga
D.Sec	tttcgcag	ttcaactgactc...290...gacgccagcaagtgtccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...951...aatgaggaagag	gtgagtga
D.Ere	tttcgcag	ttcaactgactc...290...gacgccagcaagtgtccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...975...aatgaggaagag	gtgagtga
D.Gri	ttttgtag	gttaactgagtc...302...aacgccagcgagtgccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...978...aatgaggaagag	gtgagtgc
D.Moj	tcttcgag	gttaactgagtc...278...aacgccagcgagtgccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...963...aacgaggaagag	gtaagtgc
D.Vir	tctttcag	gttaactgagtc...254...aacgccagcgagtgccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...942...aatgaggaagag	gtaagtgc
D.Wil	ttccacag	gttaactgagtc...266...gacgccagcaagtgtccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...909...aatgaggaagag	gtaagtgc
D.Yak	ttccacag	ttcaactgactc...290...gacgccagcaagtgtccccac	AGGTGTTGTCGC	cgctcgcccaagcgcagtg...978...aatgaggaagag	gtgagtga
	*	**	** ** ** *	*****	** ** ** *

id=32701 gene=FBgn0259934 name=CG42457 segment=chr3R.13792195\_13793550.1 type=E5

D.Mel	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Sim	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Sec	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Ere	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Gri	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccctcactggacgtaagta:::-----
D.Moj	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Vir	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Wil	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::-----
D.Yak	tacagcag	ggtgtacgcttc...64...ccaaccacagccaataca	GCGACAACaGCCT	cacatcctgcattgatgcaccactcactggacgtaagta:::tagagtcataaagcattgataaataagatgttttaacaa
	*****	*****	*****	*****

id=32709 gene=FBgn0259934 name=CG42457 segment=chr3R.13834590\_13834731.1 type=E5 VIEW

Figure 602:



```

D.Mel tggcattg gtgggtatttcg...166...acctagttgaagcca-agctcATGAGCAAGGATTATCTTTGTTTCAA-----gtttgtttctgttacagaa...1247...atattccacag cttcgcca
D.Sim tggcattg gtatgtatttcg...170...----agttgaagcca-agctcatgaGCAAGGATTATCTT-----agtttcaagttttggttctc-----...1261...atatctccacag cttcgcca
D.Sec tggcattg gtgggtatttcg...170...----agttgaagcca-agctcatgaGCAAGGATTATCTTTGTTTCAA-----gtttggttctcttacagaa...1253...atatctccacag cttcgcca
D.Ere tggcattg gtgggtatttcg...170...----agttgaagcca-agctcatgaGCAAGGATTATCTT-----cgtttcaagttttggttctc-----...1277...atatctccacag cttcgcca
D.Ana tggcattg gtacgtgcttgt...175...----cgatcta-tgctctagagcAAGGATTATCTTTGTT-----tcagtat---cagtatatata...1481...atgttccacag cttcgccg
D.Gri tggcattg gtgtgtataccc...193...----ttgctgcca-tgccttagagcAAGGATTATCTTTGTT-----tacgtatatac--atcctaata...1580...ttatttacgcag cttcaccg
D.Moj cggcattg gtatgtatattg...240...----ttgctgtca-tgccttagagcAAGGATTATCTTTGTT-----tacgtacatacaatataat---...1813...ctattcacaag catcgccg
D.Per cggcattg gtgggtattgct...206...----ttgcaggcg-tgctctagagcAAGGATTATCTTTGTT-----tgaacttcgattgtactacc---...1463...ttgtgtccacag catcgccg
D.Pse cggcattg gtgggtattgccc...206...----ttgcaggcg-tgctctagagcAAGGATTATCTTTGTT-----tgaacttcgattgaactacc---...1482...ttgtgtccacag catcgcca
D.Vir tggcattg gtatgtataccc...198...----aggctgcca-tgccctagagcAAGGATTATCTTgTTAcgtaacttgacatatct---ttaa---...1629...ctatttatacag cttcgccg
D.Wil tggcattg gtatgtatttgg...189...----tgcaaggctaccctagctc-AAGGATTATCTTTGTTTGTgATT---taaatct---ttaatcgaccta...1569...gtttgccacag catcgccg
D.Yak tggcattg gtgggtatttcg...173...----tgaagcca-agctcatgagcaAGGATTATCTTTGTT-----tcaagtttggttctcttac---...1261...atatctccacag cttcgcca
***** ** ** * * * * * ***** * * *** * * * *

```

id=127485 gene=FBgn0019968 name=Khc-73 segment=chr2R.11407842.11409346\_-1 type=IN

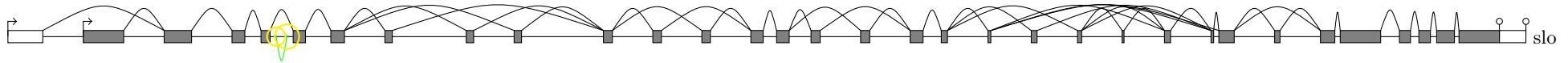
```

D.Mel tggcattg gtgggtatttcg...299...gataaattgaaatgat---cgta-----TTGGcAACAAGATAAAATCCTTGTTTGT-----ttacctatgctttctctctgtg...1115...atattccacag cttcgcca
D.Sim tggcattg gtatgtatttcg...307...----gacatgat---catattggcaac-----AAGATAAAATCCTTGT-----cgaactgttgtttacttat...1125...atatctccacag cttcgcca
D.Sec tggcattg gtgggtatttcg...299...gataaattgacatgat---ccta-----TTGGcAACAAGATAAAATCCTTGT-----cgaactgttgtttacttat...1125...atatctccacag cttcgcca
D.Ere tggcattg gtgggtatttcg...307...----gacataa-t---ccgaatggcaac-----AAGATAAAATCCTTGT-----cgaactgttgtttacttat...1141...atatctccacag cttcgcca
D.Ana tggcattg gtacgtgcttgt...315...----aattaaatcgacctaattggc-----AACAAGATAAAATCCTT-----ttc---cgagtctttgtgtgctt---...1343...atgttccacag cttcgccg
D.Gri tggcattg gtgtgtataccc...363...----attctctcgcgctcggctt-----AACAAGATAAAATCCTT-----tta---caaaactg-tgataacaca---...1412...ttatttacgcag cttcaccg
D.Moj cggcattg gtatgtatattg...422...----ttgtactgac---agttgactat-----AACAAGATAAAATCCTT-----taaccaaactgcttttaata---...1633...ctattcacaag catcgccg
D.Per cggcattg gtgggtattgct...389...----aatcatactat---cccactggc-----AACAAGATAAAATCCTT-----tac---cgaatgattctgtgctc---...1282...ttgtgtccacag catcgccg
D.Pse cggcattg gtgggtattgccc...389...----aatcatactat---cccactggc-----AACAAGATAAAATCCTT-----tac---cgaatgattctgtgctc---...1301...ttgtgtccacag catcgcca
D.Vir tggcattg gtatgtataccc...371...----attctctcgcgctcggctt-----TAAAAAGATAAAATCCTT-----taa---caaaatgctttttat---...1459...ctatttatacag cttcgccg
D.Wil tggcattg gtatgtatttgg...336...----tggaataat---caaa---tgatacGGATaACAAcAACACAAGATGAATCCTTataccataagataaaaactct-----...1419...gtttgccacag catcgccg
D.Yak tggcattg gtgggtatttcg...305...----ttgacataaatt---cctaattggc-----AACAAGATAAAATCCT-----ggt---cgaactgttgtttact---...1131...atatctccacag cttcgcca
***** ** ** ***** ***** * * * * *

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id=127485 gene=FBgn0019968 name=Khc-73 segment=chr2R.11407842.11409346\_-1 type=IN VIEW

Figure 603: CS=7.2



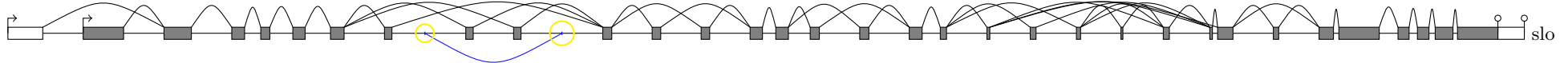
D. Mel	atggatcg	gtaagc	-----	gaaac-aatccctcttaaat	--aacctatcac	-----	aatgaaaattcc	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	gttg--ctcaatcaattggaaa	...	178...	tatcgtg-aacag	gtccttcg			
D. Sim	atggatcg	gtaagc	-----	gaaac-aatccctcttaaat	--aacctatcac	-----	aatg-aaattcc	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	gttg--ctcaatcaattggaaa	...	175...	tatcgtg-aacag	gtccttcg			
D. Sec	atggatcg	gtaagc	-----	gaaac-aatccctcttaaat	--aacctatcac	-----	aatg-aaattcc	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	gttg--ctcaatcaattggaaa	...	183...	tatcgtg-aacag	gtccttcg			
D. Ere	atggatcg	gtaagc	-----	gaaac-aatccctctcaaat	--aacctatccc	-----	aatg-aaattcc	-----	aaa	-----	ATGTTa	TATGCATACAAATCGGT	---	gttg--ctcaa--gattggaaatc	...	192...	tatcgtg-aacag	gtccttcg			
D. Ana	atggatcg	gtaagc	-----	gaaaa-actccctattaat	--atcctaactaaaaagaaaaaatgaaaattca	-----	aaaaa	-----	aaaaa	-----	TATATTa	TATGCATACAAATCGGT	---	gatggatttaa--gattgaaat	...	195...	tatcgtg-aacag	gtccttcg			
D. Gri	atggatcg	gtaagc	-----	gaaaaaat	-----gaaaaac	-----	cccaaat	-----	tatactataattatg-aaattcc	-----	caaaaaaaaac	-----	aaatttgATGCATACAAATCGGTT	---	ctaagat	caagattcccat	...	213...	ttatata-aacag	gtccttcg	
D. Moj	atggatcg	gtaagc	-----	gacaacaaa	-----agaatt	-----	acctaaattta	-----	tatt-aaattccc	-----	aacaa	-----	caatttgATGCATACAAATCGGTTT	---	caatg--tcgaagattttcata	...	251...	tattata-aacag	gtccttcg		
D. Per	atggatcg	gtaagc	-----	gaaacaaatcccttataaattcaatcctaattc	-----	aatg-aaatttt	-----	aaaa	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	agctgattgggattaatata	-----	...	199...	taccacg-aacag	gtccttcg	
D. Pse	atggatcg	gtaagc	-----	gaaacaaatcccttataaattccaccctaattc	-----	aat-aaattt	-----	aaaa	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	agctgattgggattaatata	-----	...	199...	taccacg-aacag	gtccttcg	
D. Wil	atggatcg	gtaagc	-----	gtaagc	-----	taaaagaaaaaa	-----	aaaatt	-----	tataaattaa	-----	aatg-gaattccttccttaaacaaaaaaagaatacatattcgc	---	TGCATACAAATCGGTT	---	tcaattgttattaataaagt	-----	...	130...	-tgcataaacag	gtccttcg
D. Yak	atggatcg	gtaagc	-----	gaaac-aatccctcttaaat	--aacctaacac	-----	aatg-aaattcc	-----	aaaa	-----	ATGTTa	TATGCATACAAATCGGT	---	gttg--ctcca--tattggaaatc	...	197...	tatcgtg-aacag	gtccttcg			
	*****	*****		* * *	*		**	*	*		**	*	*****	*	*		*****	*****			

id=126822 gene=FBgn0003429 name=slo segment=chr3R.20500604.20500888.1 type=IN

D. Mel	atggatcg	gtaagc	gaaaca	...	161...	aaaa-aaaaacagtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gccttactcgacatgaaac	...	37...	tatcgtg-aacag	gtccttcga	
D. Sim	atggatcg	gtaagc	gaaaca	...	158...	ccgaa-taaaacagtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gcttactcgacatgaaaca	...	36...	tatcgtg-aacag	gtccttcga	
D. Sec	atggatcg	gtaagc	gaaaca	...	166...	ccgaa-taaaacagtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gccttactcgacatgaaaca	...	36...	tatcgtg-aacag	gtccttcga	
D. Ere	atggatcg	gtaagc	gaaaca	...	174...	accga-aaaaacagtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gccttactctacatgaaaca	...	36...	tatcgtg-aacag	gtccttcga	
D. Ana	atggatcg	gtaagc	gaaaaa	...	191...	gcgaa-gcaacaggtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gccttactctatgaaacat	...	35...	tatcgtg-aacag	gtccttcga	
D. Gri	atggatcg	gtaagc	gcaaaa	...	222...	aat-a-gttaaaggcgtgcca	---	GATCGATTGTATGCATG	CAATGT	gcaatgtgcttactctatg	-----	...	30...	ttatata-aacag	gtccttcga
D. Moj	atggatcg	gtaagc	gcaaca	...	189...	ggtcc-ttttaccgctgcca	---	GATCGATTGTATGCATG	CAATGT	gcaatgtgcttactctatg	-----	...	84...	tattata-aacag	gtccttcga
D. Per	atggatcg	gtaagc	gaaaca	...	181...	agcca-acaccgg-gtcctga	---	TCGATTGTATGCATG	CAATGT	gtgccttactctacgccatc	---	...	42...	taccacg-aacag	gtccttcga
D. Pse	atggatcg	gtaagc	gaaaca	...	181...	agcca-acaccgg-gtcctga	---	TCGATTGTATGCATG	CAATGT	gtgccttactctacgccatc	---	...	42...	taccacg-aacag	gtccttcga
D. Wil	atggatcg	gtaagc	gtaagc	...	151...	acacacacccttgatattcct	---	GATCGATTGTATGCATG	CAATGT	gcaatgtgcttactctca	-----	...	30...	-tgcataaacag	gtccttcga
D. Yak	atggatcg	gtaagc	gaaaca	...	180...	aaaca-aaagacagtgtcctg	---	ATCGATTGTATGCATG	CAATGT	gccttactctacatgaaaca	...	36...	tatcgtg-aacag	gtccttcga	
	*****	*****		* * *	*		**	*****	*****		*	*	*****	*****	

id=126822 gene=FBgn0003429 name=slo segment=chr3R.20500604.20500888.1 type=IN VIEW

Figure 604: CS=10.56



```

D. Mel  ggaaagag  gtagtctataaa...362...-----atcaaagtcgataaattaa-----TAGTCTGTTACCCCT-----ttcactttgtttccctaatttca-----:gtcccat---aaaaagcatcggtcacgca-----
D. Sim  ggaaagag  gtagtctataaa...347...-----atcaaagtcgataaattaa-----TAGTCTGTTACCCCT-----ttcactttgtttccctaatttca-----:gtcccat---aaaaagcatcggtcacgcat-----
D. Sec  ggaaagag  gtagtctataaa...346...-----atcaaagtcgataaattaa-----TAGTCTGTTACCCCT-----ttcactttgtttccctaatttca-----:gtcccat---aaaaagcatcggtcacgcat-----
D. Ere  ggaaagag  gtagtctataaa...345...-----atcaaagtcgataaattaa-----TAGTCTGTTACCCCT-----ttcactttgtttccctaatttca-----:gtcccat---aaaaagcatcggtcacgattgaat-----
D. Ana  ggaaagag  gtagtctataaa...333...-----gattaaagtcggtacattaa-----TTAGTCTGTTACCCCT-----ttcactttctttccctaatttca-----:gtcccat---aaaaagcatcggtcacgattgaat-----
D. Gri  ggaaagag  gtagtctataac...2401..gcactt-----ctctctatttctaaaTGTGTAT-GTGTGTTGTT-----:gtcccat---aaaaagcatcggtcacgattgaat-----
D. Moj  ggaaagag  gtagtctataac...371...tcaattatcaaattacgtac-----TTAGTCTGTTACCCCTttgttatatatatcgtatacttttataaattaccaaatg:atttcaatttgaagagagtttaagctacatttgcataa
D. Per  ggaaagag  gtagtctataac...337...-----gattagagtcgataaattgc-AATTtaTAGTCTGTTACCCCTCCA-----actttgtttcccttatttcattatcaactg:gtcccatatgaaaaagcatcggtcacg
D. Yak  ggaaagag  gtagtctataaa...346...-----atcaaagtcgataaattaa-----TAGTCTGTTACCCCT-----ttcactttgtttccctaatttca-----:gtcccatatgaaaaagcatcggtcacg
*****

```

id=126828 gene=FBgn0003429 name=slo segment=chr3R.20503058\_20505207\_1 type=IN

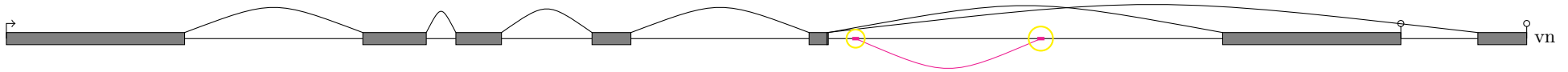
```

D. Mel  gggcgaag  gtgagacaaacc...4031...--tgatttgt---gtacaa---gccccGGGGTAGCAGAC-TAaattcatgcattttgcattt---...678...---caacaacaca-ag  acatattg
D. Sim  gggcgaag  gtgagacaaacc...3995...--tgatttgt---gtacaa---gccccGGGGTAGCAGAC-TAaattcatgcattttgcattt---...657...---caacaacaca-ag  acatattg
D. Sec  gggcgaag  gtgagacaaacc...4022...--tgatttgt---gtacaa---gccccGGGGTAGCAGAC-TAaattcatgcattttgcattt---...654...---caacaacaca-ag  acatattg
D. Ere  gggcgaag  gtgagacaaacc...4039...--tgatttgt---gtacaa---gccccGGGGTAGCAGAC-TAaattcatgcattttgcattt---...634...---caccaactca-ag  acatattg
D. Ana  gggcgaag  gtgagacaaacc...4214...--taatttgt---gtacac---gccccGGGGTAGCAGAC-TAAattcatgcattttgcaatta---...671...--tatatccg---ccag  acatattg
D. Gri  gggcgaag  gtgagacaaact...3586...attaatatatgtcagtataa-----GACAAatCACACATACATAcatacatatctcgacgatg...1320...---accggttcccag  acatattg
D. Moj  gggcgaag  gtgagaccaact...4278...-----ttgt---gttcaaaagagatttctGGGGTAGCAGAC-TAAattcatgcattttgcattt---...632...---acacacacatag  acatattg
D. Per  gggcgaag  gtgagacaaacc...4212...--ttgatttgt---gaacaa---gcctcTGGGGTAGCAGAC-TAAATTcatgcattctgcattatga...694...cgaataca---cag  acatattg
D. Yak  gggcgaag  gtgagacaaacc...4041...--tgatttgt---gtacaa---gccccGGGGTAGCAGAC-TAaattcatgcattttgcattt---...657...---caccaacaca-ag  acatattg
*****

```

id=126832 gene=FBgn0003429 name=slo segment=chr3R.20508122\_20512908\_1 type=IN VIEW

Figure 605: CS=8.64



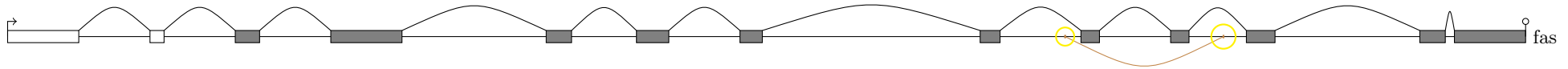
D. Mel	gaca	gtag	gtacagc-----tctcccgaatcatgc	caaaaattatcagggagggttat	TACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaacg-cga---...1666..	atctcttcacag	atattttg
D. Sec	gaca	gtag	gtacagc-----tctcccgaatcatgc	caaaaattatcagggagggttat	TACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaacg-cga---...1665..	atctcttcacag	atattttg
D. Ere	gaca	gtag	gtacagc-----actcccgaatcatgc	caaaaattatcagggagggttat	TACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaacg-cgag---...1639..	atctcttcacag	atattttg
D. Ana	gaca	gtag	gtacagcaat---aatcccacac	ttgtgaaaatttcaaggagggttat	ACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaacg-cgagtt...1672..	atctcttcacag	atattttg
D. Gri	gaca	gtac	gtacagcaat---aatcccgaatgt	ggcaacaagtattatggagggttat	ACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaccgatacag...1878..	atctcttcacag	atattttg
D. Moj	gaca	gtac	gtacatcaat---tatccc	caaatgtggcaacgag	tattatctgctTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caacgataaacc...1615..	atctcttcacag	ataatgtg
D. Per	gaca	gtag	gtacagcaatagtaatcccgaat	tttggcacaattatcatggagggttat	ACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaccgaccaat...1719..	atctcttcacag	atattttg
D. Pse	gaca	gtag	gtacagcaatagtaatcccgaat	tttggcacaattatcatggagggttat	ACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaccgaccaat...1719..	atctcttcacag	atattttg
D. Vir	gaca	gtac	gtacagcaat---aatcccgaatgt	ggcaacaagtttttagggGTA	ttACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaccgataccg...1764..	atctcttcacag	atattttg
D. Yak	gaca	gtag	gtacagc-----tctcccgaatcatgc	caaaaattatcagggagggttat	TACTGcTAAATAGgc	ACTTCTATAGCATCga	TTGTTTTgcgagtcgagtc	caaccgagtcgagtc	caaccgagtcgagtc	caaccgagtcgagtc
	****	***	***** *	**** **	* * * * *	*****	*****	**** *	*****	*** * **

id=45052 gene=FBgn0003984 name=vn segment=chr3L.5807967.5809746\_-1 type=IN

D. Mel	gaca	gtag	gtacagctctcc...665..	--aatgcaataaatacgaata	AAAACAAagGGTGCTATAGa	AGGTTTATTTTaa	TAGTG-tttacatagga	acttaatt---...1012..	atctcttcacag	atattttg
D. Sec	gaca	gtag	gtacagctctcc...675..	--aatgcaataaatacgaata	AAAACAAagGGTGCTATAGa	AGGTTTATTTTaa	TAGTG-tttacatagga	acttaatt---...1001..	atctcttcacag	atattttg
D. Ere	gaca	gtag	gtacagcactcc...666..	agaaatcaataaatacgaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGTG-tttacatagga	acttaatt---...983..	atctcttcacag	atattttg
D. Ana	gaca	gtag	gtacagcaataa...665..	tataatcaataaatacgaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGT-ttttaaatagga	caataatt---...1021..	atctcttcacag	atattttg
D. Gri	gaca	gtac	gtacagcaataa...726..	gaatatttataatgcaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGT-tattacatagga	aaaaa---ctaa...1166..	atctcttcacag	atattttg
D. Moj	gaca	gtac	gtacatcaatta...538..	tatatatattataatgcaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	aataattattacat	atagag-----...1097..	atctcttcacag	ataatgtg
D. Per	gaca	gtag	gtacagcaatag...651..	gaaaatcaataaatacgaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGT-ttttaaatagga	aatttaatt---...1085..	atctcttcacag	atattttg
D. Pse	gaca	gtag	gtacagcaatag...651..	gaaaatcaataaatacgaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGT-ttttaaatagga	aatttaatt---...1085..	atctcttcacag	atattttg
D. Vir	gaca	gtac	gtacagcaataa...637..	atcaattatgataatgcaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGTACT-acatagga	aaaaaagtatat...1137..	atctcttcacag	atattttg
D. Yak	gaca	gtag	gtacagctctcc...708..	agaaatcaataaatacgaata	TAAAaACAAaagGGTGCTATAGa	AGGTTTATTTTaa	TAGTG-tttacatagga	acttaatt---...1026..	atctcttcacag	atattttg
	****	***	***** *	**** **	* * * * *	*****	*****	**** *	*****	*** * **

id=45052 gene=FBgn0003984 name=vn segment=chr3L.5807967.5809746\_-1 type=IN VIEW

Figure 606: CS=9.6



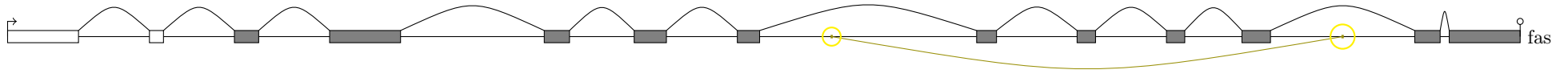
D.Mel	acacgccg	gtaagttgggtt...408...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgagc	aaactcatttccc	...79...	-cgatcattgcag	gtgccgca
D.Sim	acacgccg	gtaagttggggc...528...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgagc	aaactcatttcca	...73...	-cgatcattgcag	gtgccgca
D.Sec	acacgccg	gtaagttggtgc...476...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgagc	aaactcatttcca	...73...	-cgatcattgcag	gtgccgca
D.Ere	acacgccg	gtaagttggcct...331...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgagc	aaactcatttcca	...75...	-cgatcattgcag	gtgccgca
D.Ana	acacgccg	gtaagttttttt...737...	cgcttccttaattacc	AAATTGtt	TACGCATAA	---cgagc	aaagccctcatcatc	...48...	-atthttttacag	gtgcctca
D.Gri	acacaccg	gtaagtcttgca...157...	tccttacctaattacc	AAATTGtt	TACGCATAA	---gaa	cgaactcgtttcttaa	...88...	-gcaatthttacag	gtgccgca
D.Moj	acacgccg	gtaagtcttata...152...	tccttacctaattacc	AAATTGtt	TACGCATAA	gac	cgaaactcatttccc	...90...	-ttttgttcgag	gtaccaca
D.Pse	acacgccg	gtaagtctagtc...115...	tccttacctaattacc	AAATTGtt	TACGCATAA	-cgag	gcagcgtcgtcccat	...49...	-aaatattgcag	gtgccgca
D.Vir	acacgccg	gtaagttctata...136...	tccttacctaattacc	AAATTGtt	TACGCATAA	gac	---cgaaactcatttccatg	...64...	tgcaa-tttacag	gtgccgca
D.Wil	acacgccg	gtaagtcagaca...190...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgag	cgaactcatttccct	...25...	-ctttgattgcag	gtgcctca
D.Yak	acacgccg	gtaagtttgct...374...	tccttacctaattacc	AAATTGtt	TACGCATAA	---cgag	ccaactcatttcca	...62...	-ccatcattgcag	gtgccgca
	**** **	*****		*****	*****		****		*	***

id=124028 gene=FBgn000633 name=fas segment=chr2R.9606023\_9606590\_1 type=IN

D.Mel	ccctcaag	gtaag-cgtaagc...196...	ttagcgcaattggaat	TTATGCGTGCAATTT	actttgctcacttttcggcc	...128...	ccctcgttctag	gctccctg
D.Sim	tcctcaag	gtaag-cgtaagc...183...	ttagcgcaattggaat	TTATGCGTGCAATTT	actttgctcacttttcggcc	...128...	ccctcgttctag	gctccctg
D.Sec	tcctcaag	gtaag-cgtaagc...183...	ttagcgcaattggaat	TTATGCGTGCAATTT	actttgctcacttttcggcc	...127...	ccctcgttctag	gctccctg
D.Ere	tccgcaag	gtaag-cgttggc...207...	ttagcgcaattggaat	TTATGCGTGCAATTT	actttgctcacttttcggcc	...127...	ccctcgttctag	gctccctg
D.Ana	tccgcaag	gtaag-cgttggc...207...	ttagcgcaattggaat	TTATGCGTGCAATTT	actttgctcacttttcggcc	...127...	ccctcgttctag	gctccctg
D.Gri	tccacaag	gtaag-cacattt...385...	ttagcacaattgaaa	TTATGCGTGCAATTT	actttgctcactttttgggg	...249...	atgctctcgtag	gctccctg
D.Moj	tccacaag	gtaag-taactgt...979...	ttagcacaattgaaa	TTATGCGTGCAATTT	actttgctcac-ttttaggca	...255...	ctctattcgag	gctccctg
D.Pse	tccgcaag	gtaag-accctcc...156...	ttagcgcaatgaaa	TTATGCGTGCAATTT	gctttgcccgc-tttcggcca	...184...	tccccgtttcag	gctccctg
D.Vir	tccacaag	gtatt-ttatagc...697...	ttagcacaattgaaa	TTATGCGTGCAATTT	actttgctcac-ttttaggca	...220...	gctttaatgtag	gctccctg
D.Wil	tcctcaag	gtaagacacaaa...196...	ttagcgcaattgaaa	TTATGCGTGCAATTT	actttgctcacttttttaggc	...226...	acttcgatttag	gctccctg
D.Yak	tccacaag	gtaag-ccaactt...205...	ttagcgcaattgaaa	TTATGCGTGCAATTT	actttgctcacttttcggcc	...127...	ccccattctag	gctccctg
	** ****	***		*****	*****		**	** ** *

id=124032 gene=FBgn000633 name=fas segment=chr2R.9613180\_9613582\_1 type=IN VIEW

Figure 607: CS=16.28



D. Mel	tgtgcaat	gtaagtttggat...1637...	-ttaggctttggcctttggcc-----	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...1786...	tccccttgcag	acacgccc
D. Sim	tgtgcaat	gtaagtttggat...1579...	-ttaggctttggcctttggcc-----	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...1764...	tccccttgcag	acacgccc
D. Sec	tgtgcaat	gtaagttgggat...1600...	-ttaggctttggcctttggcc-----	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...1759...	tccccttgcag	acacgccc
D. Ere	cgtgcaat	gtgagtttggat...1554...	-tgtggcctttggcctttggcc-----	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...1814...	gtccccttgcag	acacgccc
D. Ana	cgtgcaat	gtaagttcgatt...1271...	-tgtggaggtgtggcgggtgctTTGGcc	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...2088...	tccccttgcag	acacgccc
D. Gri	tgtgcagt	gtaagtgggaatt...1759...	-tgtttgtgtgtgtgtggactTCGGcc	AGGCATGAAAATTGCAA	aaaccgcaataacaacagca-...2103...	ttcaccacag	atcagcca
D. Moj	tgtgcagt	gtaagtgggaat...2754...	-ttgtggccttagatTTTTGCC-----	CA-AACAAAT-TGA	tagacgaaagccagaaacgg-...2159...	ccctcttgcag	atcagccc
D. Per	cgtgcaat	gtaagttccacg...1960...	atgcccg-----tcaagccgcataa	TGCCaTGACAAATGCCA	-aggtacacgactagttgagg...1666...	tatccttgcag	atcagcca
D. Pse	cgtgcaat	gtaagttccacg...1282...	atgcccg-----tcaagccgcataa	TGCCaTGACAAATGCCA	-aggtacacgactagttgagg...1722...	tatccttgcag	atcagcca
D. Vir	tgtgcagt	gtaagttgaaat...1981...	-tgcgtgtgtgtgtacaagctTTGGcc	AGGCATGAAAATTGCAA	aaaccgcaataacaacagca-...2242...	tcctcttgcag	atcagcct
D. Wil	tgttcaat	gtaagtacaact...2683...	-gatttgcattgctgagtcct-----	GGCATGAAAATTGCAA	aaaccgcaataacaataaca-...2226...	tctcttccag	acacgccc
D. Yak	cgtgcaat	gtaagttgggat...1712...	-tgtggcctttggcctttggcc-----	AGGCaTGAAAaTTGCAA	aaaccgcaataacaacagca-...1843...	tccccttgcag	acacgccc
	** ** *	** ** *	*	** * * * *	*	*	*** * *****

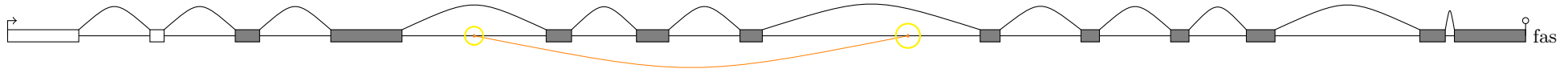
id=124026 gene=FBgn0000633 name=fas segment=chr2R.9602379.9605882.1 type=IN

D. Mel	cgtgaagg	gtaagtaaaactt...4120...	cttggcga---tgatgaggaaaaTTGCAAaa	TTTCGAGCCT	cacgataattaatatgctg-----	...787...	tatatattctag	gcgctccc
D. Sim	cgtaaagg	gtgagtgaactt...4121...	cttggcga---tgatgaggaaaaTTGCAAaa	TTTCGAGCCT	cacgataattaatatgctg-----	...786...	tatatattctag	gtgctccc
D. Sec	cgtaaagg	gtgagtgaactt...4133...	cttggcga---tgatgaggaaaaTTGCAAaa	TTTCGAGCCT	cacgataattaatatgctg-----	...774...	ttacatttttag	gcgctccc
D. Ere	cgtgaagg	gtgagtgatcca...4142...	cttggcga---tgatgaggaaaaTTGCAAaa	TTTCGAGCCT	cacgataattaatatgctg-----	...765...	ttgtatttctag	gcgctccc
D. Ana	tgtgaagg	gtaagtggaaat...4010...	caaggcaa---tgatggggaaaaTTGCAAaa	TTTCaGCCTcTCGA	taattaataatgcttctaca-----	...892...	tttccttatag	gtgcccc
D. Gri	agtcaagg	gtaagtcaaatg...3719...	gggggcaa---tgatgtggaaaaTTGCAAaa	TTTTCGTGCCTtTCGA	taattaataatgcttggcagc-----	...1182...	ctctcctttag	gttcgccc
D. Moj	agtaagg	gtaagtcgaacg...4057...	ggcaagtgtcgatgggcgct-TCG--	ATTTGTT--TG	-----tgtttgggtctgctgggagt-----	...856...	ccctcttgcag	gtgcgccc
D. Per	agtaagg	gtaagtctcaag...4541...	agggaagccacggcagtaag--TGGCAca	TTTGTCTGGGTG	-----atcgcctttaaattagtggc...	...366...	ccattttgcag	gctcccc
D. Pse	agtaagg	gtaagtctcaag...4517...	agggaagccacggcagtaag--TGGCAca	TTTGTCTGGGTG	-----atcgcctttaaattagtggc...	...390...	ccattttgcag	gctcccc
D. Vir	cgtaagg	gtaagtcaaatg...4326...	gagagcaa---tgatgaggaaaaTTGCAAaa	TTTTCGTGCCTtTCGA	taattaataatgctcagcga-----	...575...	ctatcatgag	gtgcgccc
D. Wil	ggttaaag	gtaagttataaa...4155...	aaaggcaa---tgatgaggaaaaTTGCAAaa	TTTTCGTGCCT	tttcgataattaatatgct-----	...752...	tttttttttag	gtgctccc
D. Yak	cgtaagg	gtgagtgaaccg...4111...	cttggcga---tgatggggaaaaTTGCAAaa	TTTCGAGCCT	tacgataattaatatgctg-----	...796...	tatatattctag	gcgctccc
	** ** *	** ** *	* * *	* * * * *	* * *		* ** * * ** *	

id=124034 gene=FBgn0000633 name=fas segment=chr2R.9613784.9633667.1 type=IN VIEW

Figure 608: CS=11.52





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D.Mel  atggccag gtgagttgggca...4600...gtttttaagcc--gcc--agtccaTTGTTGCCAATTAc--CAGT-ggataaca-----catggctggagt---...306...-tgcattttccag gtggtcca
D.Sim  acggccag gtgagttgggca...4614...gtttttaagcc--gcc--agtccaTTGTTGCCAATTAc--CAGT-ggataaca-----catggctggagg---...292...-tgcattttccag gtggtcca
D.Sec  acggccag gtgagttgagca...4614...gtttttaagcc--gcc--agtccaTTGTTGCCAATTAc--CAGT-ggataaca-----catggctggagg---...292...-tgcattttccag gtggtcca
D.Ere  atggccag gtgagttggcca...4618...gtttttaagcc--gcc--agtccaTTGTTGCCAATTAc--CAGT-ggataaca-----catggcggagg---...288...ctgc-tttccag gtggtcca
D.Ana  acggccag gtgagctagcac...4400...gtttttaagcc--ggc--agtccaTTGTTGCCAATTAc--CAGTG-gataaca-----tgcggcatgctgc---...505...-ctctctctgcag gtggtcca
D.Moj  atggccag gtaagtgacaac...4569...--tgaagccagttcg--agtccaTTGTTGCCAATTAc--CAGTAactgtact-----cagtgatttgc---...337...-cttgtccgcag gtggtcca
D.Pse  atggccag gtgagtgtagca...4449...gtttttaagcc--atc--agtccaTTGTTGCCAATTAc--CAGTGA-taatcccagcaggcagg-----...350...-atccaactgcag gtcgtcca
D.Vir  atggccag gtaagtgacaac...4542...--gtaagcccagccacagtccaTTGTTGCCAATTAc--CAGTAactgtact-----cagtgatttgc---...364...-tctgcccctag gaggttca
D.Wil  atggccag gtgagtgtagag...4490...g--ttaaagccatgcc--agtccaTTGTTGCCAATTAc--CAGTGA-taacc-----cagttaaggagcggg...411...-atcttttgcag gtggtcca
D.Yak  atggccag gtgagttgggca...4606...gtttttaagcc--gcc--agtccaTTGTTGCCAATTAc--CAGT-ggataaca-----catggctggagg---...300...-tgcattttccag gtggtcca
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id=124020 gene=FBgn0000633 name=fas segment=chr2R.9594704.9600633.1 type=IN

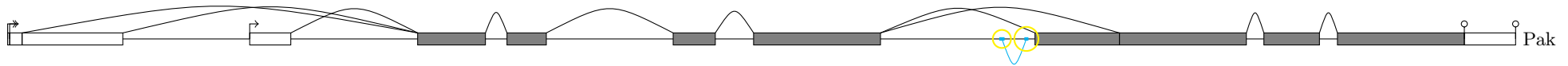
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D.Sim  tgtgcaat gtaagtttggat...2404...--ggcagggcgcattgaattga--ATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...935...tcccccttgcag acacgcc
D.Sec  tgtgcaat gtaagttgggat...2419...--ggcagggcgcattgaattga--ATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...936...tcccccttgcag acacgcc
D.Ere  cgtgcaat gtgagtttggat...2393...--ccgaagccgaagcaggcga--ATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...971...gtccccttgcag acacgcc
D.Ana  cgtgcaat gtaagttcgatt...2216...acgatgggagccagccggag----TATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...1144...tccccgttgcag acacgcc
D.Moj  tgtgcagt gtaagttgggat...3035...--acacaactcagatgaatgtc--TATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...1868...ccctcttgcag atacgcc
D.Pse  cgtgcaat gtaagttccacg...2257...-gcatggacacgaaccgaatc--TCTATTGaaTAGTtTGGCAaACAAccggcaacaatttcattt...740...tatccttgcag atacgcc
D.Vir  tgtgcagt gtaagttgaaat...2925...--ggcaactcagacgaatgtc--TATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...1299...tcctcttgcag atacgcc
D.Wil  tgttcaat gtaagtacaact...3809...--acagagacaacaataattcTCTATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...1092...tctcttccag acacgcc
D.Yak  cgtgcaat gtaagttgggat...2581...--tggatactagcgaagcga--ATTGaaTAGTtTGGCAaACAAccgacaacaatttcattt...970...tcccccttgcag acacgcc
** ** * ** ** **                               ***** ** ** **                               * ** * ** **

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id=124026 gene=FBgn0000633 name=fas segment=chr2R.9602379.9605882.1 type=IN VIEW

Figure 609: CS=9.6



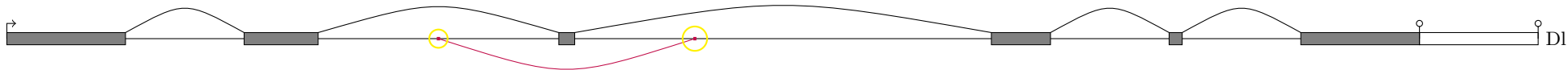
D.Mel	caatgcaa	gtgagtgccgct...422...tgatatttggta-tttgtatc-----	GCCTcTCTGTgTTCTGTTCTGTTTGT	-----	ccgcttctaattgctgctaa...95...ctcttttatcag	ctactaat
D.Sim	taatgcaa	gtgagtgccgct...322...tgatatttggta-tttgtatc-----	GCCTcTCTGTgTTCTGTTCTGTTTGT	-----	ccgcttctaattgctgctaa...96...ctctttgtcag	ctactaat
D.Sec	caatgcaa	gtgagtgcac...292...tgatattcggta-tttgtatc-----	GCCTcTCTGTgTTCTGTTCTGTTTGT	-----	ccgcttctaattgctgctac...95...ctctttgtcag	ctactaat
D.Ere	caatgcaa	gtgagtgccgct...444...tatatttggta-tttgtatc-----	GCCTcTCTGTgTTCTGTTCTGTTTGT	-----	ctccgcttctatttgcgct...98...ctctttgtcag	ctactaat
D.Moj	caatgcaa	gtgagttagctcg...413...-----tgcatatttgcctct	TCTGTGTTcTGTCTGTTCTGTTTGTCTGTT	-----	ttgactctgctttgaattgc...180...caacaacaacag	ttgtaaat
D.Per	caatgcaa	gtgagtgttg...124...-----ccaggca-gttggtccacca-	TCTcTGTGTTGTTGTTG	-----	aaaactaatcaacttt--ttg-----	ctactaat
D.Pse	caatgcaa	gtgagtgttg...130...-----ca-gtaggtccaccatattc-	TGTTTGTGTTGTTG	-----	aaaactaatcaacttt--ttg-----	ctactaat
D.Vir	caatgcaa	gtgagttat...579...-----ca-tttgatcgcctctctcg-	TGTTTGTGTTTCTGTT	-----	ttgaaattgctttgaattg-----	ctactaat
D.Wil	taatgcaa	gtgagtgcac...446...tat-tgttgca-tttgatc-	TCTGTaTTCTGTtaTGTGTTG	-----	aaaaaaaaaacaacaa-----	ctactact
D.Yak	caatgcaa	gtgagtgccgct...427...tgatatttggta-tttgtatc-----	GCCTcTCTGTgTTCTGTTCTGTTTGT	-----	ccgcttctaattgctgctaa...97...ctctttgtcag	ctactaat
	*****	*****	**** * * * *			* *

id=116217 gene=FBgn0014001 name=Pak segment=chr3R\_2183063\_2183671.1 type=IN

D.Mel	caatgcaa	gtgagtgccgct...522...ctccaacgtcccaacaacc-----	ACAAaAAACAACAGCAGAAACAGAAGGC	-----	-----	tcttttat-----	cag	ctactaat
D.Sim	taatgcaa	gtgagtgccgct...423...ctccaacgtcccaacaacc-----	ACAAaAAACAACAGCAGAAACAGAAGGC	-----	-----	tcttttgt-----	cag	ctactaat
D.Sec	caatgcaa	gtgagtgcac...397...-----acgtcccaacaaccactaa-	AAACAACAGCAGAAACAGAAGGC	-----	-----	tcttttgt-----	cag	ctactaat
D.Ere	caatgcaa	gtgagtgccgct...547...--ccaacgtcccaacaaccac-	CAAAACAacAGCAGAAACAGAAGGC	-----	-----	tcttttgt-----	cag	ctactaat
D.Moj	caatgcaa	gtgagttagctcg...581...--cctacaacaacaacaacAACAGct	ATAGcAACAGcAGCAGcAAACAacAAACAcAGA	-----	-----	ttgctaata-----	-----	-----
D.Per	caatgcaa	gtgagtgttg...349...-atcagcatcgacaacagaaa-	CAACAACAGCaGAAACAaAAGG	-----	-----	gtgcaactgctactatttgt-----	ctg	ctactaat
D.Pse	caatgcaa	gtgagtgttg...350...-atcagcatcgacaacagaaa-	CAACAACAGCaGAAACA	-----	-----	gtgcaactgctactatttgt-----	ctg	ctactaat
D.Vir	caatgcaa	gtgagttat...689...cgacagaagca--gacagctcc-	ACAGcGGCAACAGCAGcAAACgcagcaacagcaacaacacacagcaacagcaacaa	-----	-----	ctgtaactgctcgatattgt-----	ctg	ctactact
D.Wil	taatgcaa	gtgagtgcac...583...cagcagcagcagcaacagca-	ACAAcAAACAACAGAAACAGA	-----	-----	ctgtaactgctactatattactaccacaacta	-----	ctactact
D.Yak	caatgcaa	gtgagtgccgct...531...--ccaacgtcccaacaaccac-	CAAAACAACAGCAGAAACAGAAGGC	-----	-----	tcttttgt-----	cag	ctactaat
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id=116217 gene=FBgn0014001 name=Pak segment=chr3R\_2183063\_2183671.1 type=IN VIEW

Figure 610: CS=14



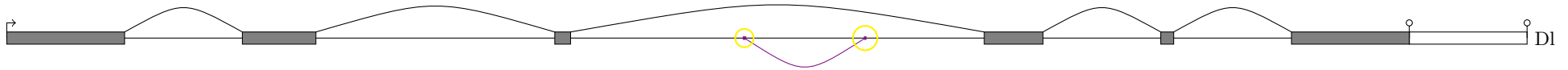
D. Mel	catggccg	gtaagtaagca...	2037...	gctgcccgtgctgccaac	-----	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaacaacgaaagacgagc...	1623...	tccgatttacag	ggtacctt		
D. Sim	catggccg	gtaagtacagca...	1928...	gcgccgctgctgccaac	-----	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaacaacgaaagacgagc...	1618...	tccgctttacag	ggtacctt		
D. Sec	catggccg	gtagtacagca...	1928...	gctgcccgtgctgccaac	-----	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaacaacgaaagacgagc...	1616...	tccgctttacag	ggtacctt		
D. Ere	catggccg	gtaagtaagca...	1984...	-----cgctgctgcatcaactaatt	-----		TAATG	TGCAC	TTAAT	-----	taaaacaacgaaagacgagc...	1603...	tccgatttacag	ggcacctt		
D. Ana	cctggccg	gtaagtacacc...	1635...	tctgctgactgctgccaac	-----	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaacaacgcatgccagag...	1637...	tccgacttacag	ggcacctt		
D. Gri	cctggccg	gtgagtaaaata...	2456...	agtgcagctcgccgcatcaac	-----	TAAT	TTAATG	TGCAC	TTAAT	-----	taaaagcgtgtggcacgggc...	2342...	tctacattgcag	ggcacctt		
D. Moj	cctggccg	gtaagtgaacag...	1642...	---gtaattatag--tcagcgacta	GACCGTGCACAGT	GCAGCAGCAA	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaaaaagaaagaaagaa...	1825...	cttgattgcag	ggcacctt	
D. Per	catggccg	gtaagtaaaaca...	1327...	gtgaaatgtgtaattgtgcat	-----	AAAT	TTGTGT	TGCAGCAA	acTGCGG	gcataacttaacaattagca	---	2343...	ttttatttacag	ggaacctt		
D. Pse	catggccg	gtaagtaaaaca...	1356...	gtgaaatgtgtaattgtgcat	-----	AAAT	TTGTGT	TGCAGCAA	acTGCGG	gcataacttaacaattagca	---	2369...	ttttatttacag	ggcacctt		
D. Vir	cctggccg	gtaagtgcacgc...	3018...	tatatatacatttggctct	-----	TGGATT	TTGTGT			catctctgtctggttttg...	459...	cttgcttgcag	ggcacctt			
D. Wil	cctggccg	gtaagttgaatg...	1593...	---cgactagacttctctagact	-----	AGGC	AA	TAAT	ttAATG	TGCAC	TTAAT	---	taaagcaaggcaacagttg...	1703...	ttcctcttacag	ggcacctt
D. Yak	catggccg	gtaagtaagca...	1904...	gctgcccgtgctgcatcaac	-----	TAAT	ttAATG	TGCAC	TTAAT	-----	taaaacaacgaaagacgagc...	1609...	tccgatttacag	ggaacctt		
		* *****		** *** *									** ***	** ** **		

id=84378 gene=FBgn0000463 name=D1 segment=chr3R.15141795\_15145539\_-1 type=IN

D. Mel	caccaaca	gtaagtt--taacc...	1739...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTG	-----	tggccgctgctctct--gctct--	...	2120...	tttcacttgcag	agctcctc	
D. Sim	caccaaca	gtaagta--aaacc...	1716...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTG	-----	tggccgctgctctct--gctct--	...	2111...	tttcacttgcag	agctcctc	
D. Sec	caccaaca	gtaagta--aaacc...	1763...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTG	-----	tggccgctgctctct--gctct--	...	2090...	ttcctctgcag	agctcctc	
D. Ere	caccaaca	gtaagta--gaacc...	1689...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTG	-----	t--tcgctcctcgct--gctctc--	...	2055...	ctccacttgcag	atctcctc	
D. Ana	atcaaaaa	gtaagta--aaata...	1734...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTG	-----	ccgctgctctcctggttcga...	...	2061...	cgacttttacag	gcaagctc	
D. Gri	cttaaaaa	gtaagtacacaa--	1898...	tctctgccaatgccaagtt	-----	GTTAG	TGCA	ACGTTGGT	GTTG	-----	ttgttactc--ttgccgatgtt--	...	2369...	tttctgtttcag	atctgctc
D. Moj	caccaaca	gtaagtaccgaa--	1649...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTGTTGTTGTTG	TGTG	TGGCgATGTT	gtaaaatgcttatcttta	-----	...	gactcatttcag	atctgctc
D. Per	tgtaaaaa	gtgagtaatcct--	1616...	---agtcaagtttggatttcttg	TTGCAaa	TTTGTG	TGC	ACACAAATTT	-----	cactcatttgttaatggcag...	1927...	ctctcttgcag	atctcctc		
D. Pse	tgtaaaaa	gtgagtaatcct--	1619...	---agtcaagtttggatttcttg	TTGCAaa	TTTGTG	TGC	ACACAAATTT	-----	cactcatttgttaatggcag...	1926...	ctctcttgcag	atctcctc		
D. Vir	caccaaca	gtgagtacaaa--	2199...	---ctggctcttgcatttctgtt	-----	GC	ACACAAATTTCA	-----	-----	ctcgaagacaaaacgcgca	-----	...	2220...	atctcttttcag	atctgctc
D. Wil	ctcaaaaa	gtaagtttaataa--	1730...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTGTTGTTT	-----	ttgttgttgtttcaatgtt	---	2076...	ctcttcaacag	atgtactt	
D. Yak	caccaaca	gtaagtc--aaacc...	1695...	tctctgccaatgccaagtt	-----	GTTAG	TGC	ACGTTGTTG	-----	tggccgctgctcgt--tctcg--	...	2062...	tttcacttgcag	atctcctc	
		** *		** ***		*	*	**					*	***	

id=84380 gene=FBgn0000463 name=D1 segment=chr3R.15137787\_15141727\_-1 type=IN VIEW

Figure 611: CS=9.36



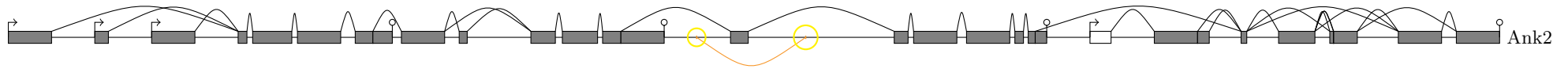
D. Mel	caccaaca	gtaagtt--taacc...	1961...	gtcgttgttgatttcgtttt--	TGTTGTc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaatt...	1891...	ttcacttgag	agctcctc
D. Sim	caccaaca	gtaagta--aaacc...	1929...	gtcgttgttgatttcgtttt--	TGTTGTc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaatt...	1891...	ttcacttgag	agctcctc
D. Sec	caccaaca	gtaagta--aaacc...	1968...	gtcgttgttgatttcgtttt--	TGTTGTc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaatt...	1878...	ttcctctgcag	agctcctc
D. Ere	caccaaca	gtaagta--gaacc...	1893...	gtcgttgttgatttcgtttt--	TGTTGTc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaatt...	1841...	ctccacttgag	atctcctc
D. Ana	atcaaaaa	gtaagta--aaata...	1961...	-----gttttcgttttggttgctc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaatt...	1835...	cgatctttacag	gcaagctc	
D. Gri	cttaaaaa	gtaagtacacaa--...	2102...	-----tcttcttcttggctgc	GTCGTGt	GTCTtg	ATAAA	atggtattttataaattcct...	2169...	ttctgtttcag	atctgctc	
D. Moj	caccaaca	gtaagtaccgaa--...	1837...	-----ccttcgccaatgt--ctgcttc	GTCGTGt	GTCTtg	ATAAA	atggtattttataaattcct...	2174...	gactcatttcag	atctgctc	
D. Per	tgtaaaaa	gtgagtaaatcct--...	1487...	-----gtctgtgttgcctgctgc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaattc...	2063...	ctctctttgcag	atctcctc	
D. Pse	tgtaaaaa	gtgagtaaatcct--...	1483...	-----gttgttgctctgtgtgctc--	TGTTGTc	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaattc...	2062...	ctctctttgcag	atctcctc
D. Vir	caccaaca	gtgagtacaaa--...	1995...	-----gtctgcaacctgtccgcgc	GTCGTGt	GTCTtg	ATAAA	atggtattttataaattcct...	2420...	atctctttcag	atctgctc	
D. Yak	caccaaca	gtaagtc--aaacc...	1915...	-----ttgattcgtttttagtgc--	GTCGTGt	GTCTtg	ATAAA	atggtattttcgaaaaaattc...	1842...	ttcacttgag	atctcctc	
		** *	** ***	*	*****	***	** ***	***				

id=84380 gene=FBgn0000463 name=D1 segment=chr3R.15137787\_15141727\_-1 type=IN

D. Mel	caccaaca	gtaagtt--taacc...	3253...	gtcatgcacctgcaatttac	TTTATAGACCATGGCATAATG	tgcc-----	tgccatgtatctgta...	603...	ttcacttgag	agctcctc	
D. Sim	caccaaca	gtaagta--aaacc...	3216...	gtcatgcacctgcaatttac	TTTATAGACCATGGCATAATG	tgcc-----	tgccatgtatctgta...	608...	ttcacttgag	agctcctc	
D. Sec	caccaaca	gtaagta--aaacc...	3247...	gtcatgcacctgcaatttac	TTTATAGACCATGGCATAATG	tgcc-----	tgccatgtatctgta...	603...	ttcctctgcag	agctcctc	
D. Ere	caccaaca	gtaagta--gaacc...	3166...	gtcatgcacctgcaatttac	TTTATAGACCATGGCATAATG	cgcc-----	tgccatgtatctgta...	572...	ctccacttgag	atctcctc	
D. Ana	atcaaaaa	gtaagta--aaata...	3197...	-tcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	cgcc-----	tgccatgta-----	602...	cgatctttacag	gcaagctc
D. Gri	cttaaaaa	gtaagtacacaa--...	3791...	gtcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	tgcc-----	tataaaaaac-----	483...	tttctgtttcag	atctgctc
D. Moj	caccaaca	gtaagtaccgaa--...	3415...	gtcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	tgcc-----	tataaaaaac-----	599...	gactcatttcag	atctgctc
D. Per	tgtaaaaa	gtgagtaaatcct--...	3054...	gtcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	tgccaccgatgtat	-----	499...	ctctctttgcag	atctcctc
D. Pse	tgtaaaaa	gtgagtaaatcct--...	3054...	gtcatgcacctgcaatttac	TTTATAGACCATGGCATAATG	tgccaccgatgtat	atatacat	-----	495...	ctctctttgcag	atctcctc
D. Vir	caccaaca	gtgagtacaaa--...	3809...	gtcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	tgcc-----	tatatgaaac-----	609...	atctctttcag	atctgctc
D. Yak	caccaaca	gtaagtc--aaacc...	3183...	gtcatgcacctgcaatttac	TTTATAGACCATGGC	ataatg	tgcc-----	tgccatgta-----	577...	ttcacttgag	atctcctc
		** *	** ***	*****	*****	*	*	*	** ***	***	

id=84380 gene=FBgn0000463 name=D1 segment=chr3R.15137787\_15141727\_-1 type=IN VIEW

Figure 612: CS=6.6



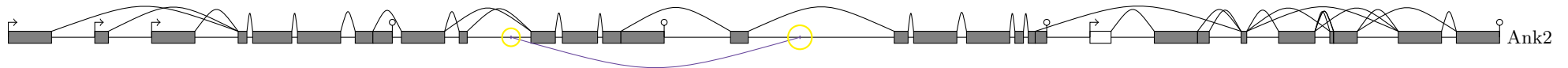
D.Mel	agttcgac	aaaaactttatg...329...tttttgataactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...358...cactcgttctag	gcccaacc
D.Sim	agttcgac	aaaaactttatg...333...tttttgataactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...359...cactcgttctag	gcccaacc
D.Sec	agttcgac	aaaaactttatg...331...tttttgataactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...360...cactcgttctag	gcccaacc
D.Ere	agttcgac	aaaaactttatg...327...tttttgataactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...347...cactcgttctag	gcccaacc
D.Ana	agttcaac	aaaaactttatg...382...tttttgatgactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...331...cactcgttctag	gccagacc
D.Gri	agttcaac	aaaaactttata...371...tttttgatgactaaat	TTGGga	CATAAATGGG	cttgaacattgtattgt	ttt...376...ttacatttctag	gctcaacc
D.Moj	agttcaac	aaaaactttata...368...tttttgataactaaat	TTGGga	CATAAATGGG	cttgaacattgtattgt	ttt...389...ttacatttctag	gcccaacc
D.Pse	agttcaac	aaaaactttatg...433...tttttgatgactaaat	TTGGga	CATAAATGGG	cttgaacattgtatcg	ttt...447...ctcgttctag	gccagacc
D.Vir	agttcaac	aaaaactttata...364...tttttgatgactaaat	TTGGga	CATAAATGGG	cttgaacattgtattgt	ttt...381...ttacatttctag	gcccaacc
D.Yak	agttcgac	aaaaactttatg...336...tttttgataactaaat	TTGGga	CATAAATGGG	ctcgaacattggtatcg	ttt...372...cactcgttctag	gcccaacc
	**** **	*****	*****	*	*****	*****	****

id=64219 gene=FBgn0085445 name=Ank2 segment=chr3L-7697151-7697917\_-1 type=IN

D.Mel	cattacag	gtaagttgaagc...1320...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaccaataaaa	ttt...1898...atccatgccag	gcggaacca
D.Sim	catcacag	gtaagttgaagc...1314...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaccaataaaa	ttt...1894...atccatgccag	gcggaacca
D.Sec	catcacag	gtaagttgaagc...1312...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaccaataaaa	ttt...1889...atccatgccag	gcggaacca
D.Ere	cattacag	gtaagttgaagc...1296...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaccaataaaa	ttt...1905...atccatgccag	gcggaacca
D.Ana	gatcacag	gtaagttgtagc...1340...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	ccaaaaacaaaaaa	aata...1986...ctccatgccag	gcggaaccg
D.Gri	gataacag	gtaagttataat...1286...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	aaataattaacaata	atacca...1922...accaaccatag	gcggaacca
D.Moj	gataacag	gtaagtttaact...1256...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	aaaaaatatatatta	ata...1993...attaccattag	gcggaaccg
D.Pse	catcacag	gtaagttgtagc...1340...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaacaaaaaa	aata...2112...ctaactcgtcag	gcggaaccg
D.Vir	aataacag	gtatgttataat...1232...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	aaataattaataaca	aca...1973...atcaaccaccag	gcggaacca
D.Yak	cattacag	gtaagttgatgc...1330...atgtgtcatat	ttggtt	TCGTTc	TATGCCAA	acaaaaccaataaaa	ttt...1907...atccatgccag	gcggaacca
	** ****	*** **		*****		**	*	* **

id=64221 gene=FBgn0085445 name=Ank2 segment=chr3L-7693649-7696945\_-1 type=IN VIEW

Figure 613: CS=6



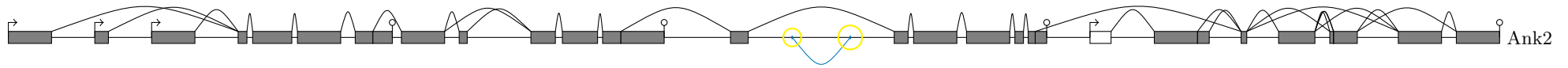
D.Mel	tgtctcca	gtaagtgccag...608...--gaaatthttgtactaaa-atcAAACTCATttGCATtcttctattttcaatgcact...198...tcaaaactc---tag	gcgaagac
D.Sim	tgtctcca	gtaagtgccag...613...--gaaatthttgtactaaa-atcAAACTCATttGCATtcttctattttcaatgcact...199...tcaaaactc---tag	gcgaagac
D.Sec	tgtctcca	gtaagtgccag...611...--gaaatthttgtactaaa-atcAAACTCATttGCATtcttctattttcaatgcact...172...tcaaaactc---tag	gcgaagac
D.Ana	tgtgacca	gtaagtggcca...725...--gaaatthtttaactaaa-atcAAACTCATttGCATtcttctattttcaatgcact...202...taaaactc---tag	gcgaagac
D.Gri	tgtctcta	gtaagtgccacc...646...--aaatttatcaactaaacaaaAAACTCATttGCATtcttctattttcaatgcacc...206...aacaaaatc---tag	gcgaagac
D.Moj	tgtctcca	gtaagttgtaa...554...--aaatttctcgactaaaagaaAAACTCATttGCATtcttctattttcaatgcact...175...--aaaatcccatag	gcgaagat
D.Pse	tgtcacca	gtaagttgtccac...775...--aaaatthtttaactaaa-atcAAACTCATttGCATtcttctactttcaatgcacc...237...tccaaaatc---tag	gcgaagat
D.Vir	tgtgtcca	gtaagttgtaaat...980...acaaaatthttgtaactaaa-a-AAACTCATttGCATtcttctattttcaatgcacc...171...acaaaatc---tag	gcgaagac
D.Yak	tgtctcca	gtaagtgccag...626...--gaaatthttgtactaaa-atcAAACTCATttGCATtcttctactttcaatgcacc...224...acaaaactc---tag	gcgaagac
	*** * *	*****	*****

id=64212 gene=FBgn0085445 name=Ank2 segment=chr3L\_7699844\_7700727\_-1 type=IN

D.Mel	cattacag	gtaagttgaagc...1255...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...1965...atccatcgccag	gcggacca
D.Sim	catcacag	gtaagttgaagc...1249...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...1961...atccatcgccag	gcggacca
D.Sec	catcacag	gtaagttgaagc...1247...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...1956...atccatcgccag	gcggacca
D.Ana	gatcacag	gtaagttgtagc...1275...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...2053...ctccatcgccag	gcggaccg
D.Gri	gataacag	gtaagttataat...1218...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...1992...accacccatag	gcggacca
D.Moj	gataacag	gtaagttactt...1183...aaattcagaaattcacaaacATGTATGAaGTTTcttcaaatgaaactctgtt---...2068...attaccattag	gcggaccg
D.Pse	catcacag	gtaagttgtagc...1273...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...2181...ctaactcgtcag	gcggaccg
D.Vir	aataacag	gtatgttataat...1167...aaattcagaaattcacaaacATGTATGAaGTTT---aaattgaaactgtttacaaa...2039...atcaaccaccag	gcggacca
D.Yak	cattacag	gtaagttgatg...1265...aaattcagaaattcacaaacATGTATGAaGTTT---caaatgaaactgtttacaa...1974...atccatcgccag	gcggacca
	** ****	*** **	*****

id=64221 gene=FBgn0085445 name=Ank2 segment=chr3L\_7693649\_7696945\_-1 type=IN VIEW

Figure 614: CS=7.02



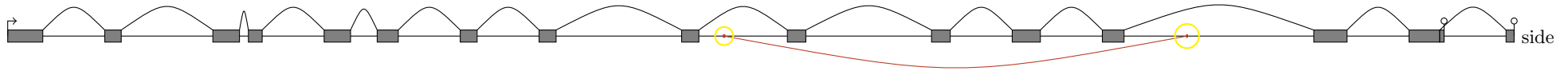
D. Mel	cattacag	gtaagttgaagc...1163...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2052...	atccatcgccag	gcgga
D. Sim	catcacag	gtaagttgaagc...1157...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2048...	atccatcgccag	gcgga
D. Sec	catcacag	gtaagttgaagc...1155...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2043...	atccatcgccag	gcgga
D. Ere	cattacag	gtaagttgaagc...1139...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2059...	atccatcgccag	gcgga
D. Ana	gatcacag	gtaagttgtagc...1185...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2138...	ctccatcgccag	gcgga
D. Gri	gataacag	gtaagttataat...1136...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaaaatga...2069...	accaaccatag	gcgga
D. Moj	gataacag	gtaagttactt...1093...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaaaatga...2153...	attaccattag	gcgga
D. Pse	catcacag	gtaagttgtagc...1180...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaaaatga...2269...	ctaactcgtcag	gcgga
D. Vir	aataacag	gtatgttataat...1085...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaaaatga...2117...	atcaaccaccag	gcgga
D. Wil	gataacag	gtaagttgtggc...2631...	cttaaatgcaaaaactgact	-----	AAAGTTgCTCTTTGGGCCAT	taAAAC	cgattgacattacatacat...1966...	ctcaccaccag	gcgga
D. Yak	cattacag	gtaagttgatgc...1169...	tctcaatccattgaaggtgt	GTTTCGGAA	AAGGTCTCT	-----	aaaaggtactaaaactgac...2065...	atccatcgccag	gcgga
		** ****	*** **		* * * * *		* * * * *		* ** *****

id=64221 gene=FBgn0085445 name=Ank2 segment=chr3L.7693649.7696945\_-1 type=IN

D. Mel	cattacag	gtaagttgaagc...2356...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataagtgtaactattg...859...	atccatcgccag	gcgga
D. Sim	catcacag	gtaagttgaagc...2351...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataagtgtaactattg...854...	atccatcgccag	gcgga
D. Sec	catcacag	gtaagttgaagc...2349...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataagtgtaactattg...849...	atccatcgccag	gcgga
D. Ere	cattacag	gtaagttgaagc...2333...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataagtgtaactattg...865...	atccatcgccag	gcgga
D. Ana	gatcacag	gtaagttgtagc...2463...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	ccaacaatgtcaactattg...860...	ctccatcgccag	gcgga
D. Gri	gataacag	gtaagttataat...2292...	tatactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	ctaaaaaataataaaaaa...913...	accaaccatag	gcgga
D. Moj	gataacag	gtaagttactt...2316...	tcaactgtttgtggccccaa	-----	AGAGA	aCTTTTCTGAAAC	cgagaaaatgaaaaatgaaa...930...	attaccattag	gcgga
D. Pse	catcacag	gtaagttgtagc...2479...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	tgacaatatcaactattg...970...	ctaactcgtcag	gcgga
D. Vir	aataacag	gtatgttataat...2293...	tcaactgtttgtggccccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataaaaaaaaacca...909...	atcaaccaccag	gcgga
D. Wil	gataacag	gtaagttgtggc...3253...	gcaatt--ttgaatttcctact	GTTTGTGGC	aCCAAAGAGAACTT	-----	tctgaaaccgaacaataaat...1346...	ctcaccaccag	gcgga
D. Yak	cattacag	gtaagttgatgc...2364...	tctactgtttgtggcaccaa	-----	AGAGA	aCTTTTCTGAAAC	cgaataagtgtaactattg...870...	atccatcgccag	gcgga
		** ****	*** **		* * * * *		*****		* ** *****

id=64221 gene=FBgn0085445 name=Ank2 segment=chr3L.7693649.7696945\_-1 type=IN VIEW

Figure 615: CS=6.6



D.Mel	agtgca	gtaagta-cgact...154...--aactttttggggca--acggcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgtcgctaact...1427...cgtccttttcag	tctccccg
D.Sim	agtgca	gtaagta-cgact...152...--aactttttggggca--acggcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgtcgctaact...1419...cgtccttttcag	tctccccg
D.Sec	agtgca	gtaagta-cgact...151...--aactttttggggca--acggcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgtcactaact...1424...cgtccttttcag	tctccccg
D.Ana	agtgca	gtaagta-ccagg...136...----agtttcagagggcggaagag----	GGAAATGCT	GAAATG	atgcat-gaccggccgtttct...1522...atctcttttcag	tctcgcca	
D.Moj	agtgca	gtaagta-agcag...180...----agttggcaacttgcgcagcgc	GATGg	GGAAATGCT	GAAAT	aatacatcgccctctgtgg--...1664...ttccttttcag	tctcgccg
D.Per	attgca	gtaagtagatct...176...----ctttctggggcagcacagcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgaccgtctcc...1566...atctcttttcag	tctccccg
D.Pse	attgca	gtaagtagatct...176...----ctttctggggcagcacagcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgaccgtctcc...1571...atctcttttcag	tctccccg
D.Vir	agtgca	gtaagta-agcag...180...----gtttgccaacttgcgcagcgc	GATGg	GGAAATGCT	GAAAT	Gatacatagcccaactgtgac-...1763...gcatcttttcag	tctcgccg
D.Wil	agtgca	gtaagtagagca...166...gagaaacttttcagca--acg--	GATGg	GGAAATGCT	-----	caaaaaaaaaaacccacc-----...1635...tggtattttcag	tctcgcca
D.Yak	agtgca	gtaagta-cgact...172...--ttttttgggggca--acggcg	GATGg	GGAAATGCT	GAAATG	atgcat-gaccgtcgctaact...1474...tcatccttttcag	tctcgccg
		* ** * *		*****	** * * ** *	** ** *	**** **

id=108039 gene=FBgn0016061 name=side segment=chr3R.23216761.23218428.-1 type=IN

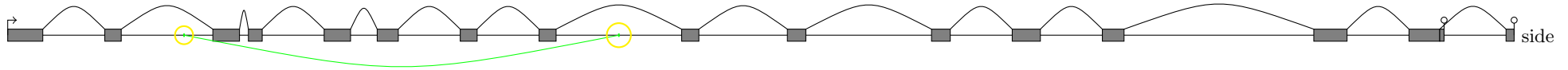
D.Mel	accatag	gtgagtgcccca...519...ttatgcagtgagcggaaag	CATTTGAGCATTTCATC	aattc---	tttgagtggggcaca...1988...ctctccttcag	acgaatcc
D.Sim	accatag	gtgagtgcccca...525...ttatgcagtgagcggaaag	CATTTGAGCATTTCATC	aattc---	tttgagtggggcaca...2017...ctctccttcag	acgaatcc
D.Sec	accatag	gtgagtgcccca...524...ttatgcagtgagcggaaag	CATTTGAGCATTTCATC	aattc---	tttgagtggggcaca...2008...ttctccttcag	acgaatcc
D.Ana	accatag	gtgagtaccca...512...ttatgcagtgagcggaaag	CATTTGAGCATTTCATC	aattc---	tttgagtggggc---...2277...cttcatttcag	atgaatct
D.Moj	accatag	gtgagtaaccaa...405...-tatgcagcgtatgtaaac	ATTTGAGCATTTCATC	aattc---	ggctagcagctacg...2360...tctcacttcag	atgaatct
D.Per	accatag	gtgagtattccc...513...ttatgcagtgagcgtaaag	CATTTGAGCATTTCATC	aattc---	gttgagtggggcaca...2345...ctctttcccag	atgaatcc
D.Pse	accatag	gtgagtattccc...507...ttatgcagtgagcgtaaag	CATTTGAGCATTTCATC	aattc---	gttgagtggggcaca...2320...ctctttcccag	atgaatcc
D.Vir	accatag	gtgagtagccga...444...ttatgcagcgaagcgtaaag	TATTTGAGCATTTCATC	aattc---	gctaagcagggcagc...2351...tctcacttacag	atgaatct
D.Wil	accatag	gtgagtaccaa...474...----agtgagcgtaaagcatttc	AGCATTTCATC	aattcctt	gttgagtgagg--...2069...cccctcatctag	atgagtcc
D.Yak	accatag	gtgagtgcccca...506...ttatgcagtgagcggaaag	CATTTGAGCATTTCATC	aattc---	tttgagtggggcaca...2053...ttttcgttcag	atgaatcc
		*****		** * ** ** *	** * *	** ** *

id=108047 gene=FBgn0016061 name=side segment=chr3R.23210192.23212781.-1 type=IN VIEW

Figure 616: CS=10.8







D.Mel	ctgtacag	gtgagc-----gaaaactactgctttat:::::gagtaatttactaaaacagcaacaattactgcaatttgc	GCAAAGCTGcCAAAG	tcgtggggcag-gcgaaggag...201...ttcaccttacag	tctggact
D.Sim	ctgtacag	gtgagc-----gaaaactactgctttat:::::gagtaatttactaaaacagcaacaattactgcaatttgc	GCAAAGCTGcCAAAG	tcgcggggcag-gcaaaggag...235...ttcccttgcag	tctggact
D.Sec	ctgtacag	gttagc-----gaaaactactgctttat:::::gagtaatttactaaaacagcaacaattactgcaatttgc	GCAAAGCTGcCAAAG	tcgcggggcag-gcgaaggag...242...ttcctcttgcag	tctggact
D.Ana	ctgtacag	gtaagc-----gaaaacta--gttgttt:::::gagtaatttactaaaacagcaacaattactgcaatttgc	GCAAAGCTGcCAAAG	ttgcagtacag-acaaacgaa...257...ttttctcgatag	cctcgact
D.Gri	ctgtacag	gtaagt-----gaaaacta--gttgttt:::::gagtaatttactaaaacagcaacaattactgcaatttgc	CAAAGGCTGgcCAA	ctatttagttg-gtaaacgaa...1179...tacattttgcag	tttggact
D.Per	ttgtacag	gtgagtaggacgacagcaaaacta--gcttttt:::::gagtaatttactaaaacagcaacaattactgcaatt	TGCGCAAAGCTGgCAAAG	tcgcaactggcacgaaagca...360...gttttcgcacag	cctggact
D.Pse	ttgtacag	gtgagtaggacgacagcaaaacta--gctgttt:::::gagtaatttactaaaacagcaacaattactgcaatt	TGCGCAAAGCTGgCAAAG	tcgcaactggcacgaaagca...360...gttttcgcacag	cctggact
D.Wil	ttatacag	gtgagt--gagtaagaaagcgagagtgagtg:::::actgcaacagcagcagctgatag-----	ACAAAGCTGcCAAAG	tcgcgacgtggcacgaaacac...294...tctgtttcacag	tctggact
D.Yak	ctgtacag	gtgagc-----taaaactactgctttat:::::gagtaatttactaaaacagcaacaattactgcaatttgc	GCAAAGCTGcCAAAG	tcgcggggcag-acgaagaag...255...ctcccttccag	tctggact
		* ***** ** **	** **** * **	* *	** * ****

id=108025 gene=FBgn0016061 name=side segment=chr3R.23225009.23226017\_-1 type=IN

D.Mel	tcaagaat	gtaagtaa--gacc--...508...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatagtcacatcatcat---...1576...ttcacatttcag	ggcatgcg
D.Sim	tcaagaat	gtaagtaa--gacc--...485...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatggccacatcatcat---...1547...ttcacatttcag	ggcatgcg
D.Sec	tcaagaat	gtaagtaa--gacc--...487...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatggtcacatcatcat---...1550...ttcacatttcag	ggcatgcg
D.Ana	tcaagaat	gtaagt---gaccct...565...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatggtcacatcatcat---...1450...gcttcttttcag	ggcatgcg
D.Gri	tcaagaac	gtaagtatgcc---...640...---ggggcggcattttgacaacc	TTTGACAGTTTTGT	ttcacatagttggcacatcat---...1958...tatgttttcag	ggcatgcg
D.Per	tcaagaat	gtaagtac-tgat---...466...aaccgcatg--attctgacatc	CTTTGACAGTTTTGTGCA	--catggtcacatcatcat---...1391...atctcttttcag	ggcatgcg
D.Pse	tcaagaat	gtaagtac-tgat---...477...aaccgcatg--attctgacatc	CTTTGACAGTTTTGTGCA	--catggtcacatcatcat---...1436...atctcttttcag	ggcatgcg
D.Wil	tcaagaat	gtaagtcc--aac---...495...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatggtcaatcatcat---...1739...atctatttttag	ggatgcg
D.Yak	tcaagaat	gtaagtatatga---...466...aaccgcatg--attctgacatc	CTTTGACAGTTTTGT	--ccacatgg-cacatcatcatt---...2122...ttcacatttcag	ggcatgcg
	*****	***** *	** * ** * ** *	** * ** *	** ** ** *

id=108037 gene=FBgn0016061 name=side segment=chr3R.23218568.23220730\_-1 type=IN VIEW

Figure 618: CS=10.62



```

D.Me1 atgaggagG GTTAGAATCAAAAcGTTGGccgcattccctagcgttacg-...667...tcccgaactag gccgatga
D.Sim atgaggagG GTTAGAATCAAAAcGTTGGccgcattccctagcgttacg-...688...ccccaaaactag gctgatga
D.Sec atgaggagG GTTAGAATCAAAAcGTTGGccgcattccctagcgttacg-...689...ccccaaaaccag gctgatga
D.Ere atgaggagG GTTAGAATCAAAAcGTTGGctgcattccatagcgttacg-...718...tcccaaacctag gctgatga
D.Ana atGAGGAG GTTAGAAtcagaacgttggcgcattt-----...627...ttccaccaacag gccgatga
D.Gri atgaggag GTTAGAATCAAAAcGTTGGcagcatttactac-gatgat...1021...tgcaacacgcag gccgacga
D.Moj acgaggag GTTAGAATCAAAAcGTTGGcagcattcactagcattcg-...681...tggtaacgcag gccgacga
D.Per atgAGGAG GTTAGAAtcagaacgttggcagcattc-----...608...tctctcctccag gccgatga
D.Pse atgAGGAG GTTAGAAtcagaacgttggcagcattc-----...608...tctctcctccag gccgatga
D.Vir atgaggag GTTAGAATCAAAAcGTTGGcagcattcactagcgttacg-...775...tgcaactcgcag gccgacga
D.Wil atgAGGAG GTTAGAATCAAAAcGTTGGcagcatttaaggcaaacgta-...533...tctaattcccag gctgatga
D.Yak atgaggagG GTTAGAATCAAAAcGTTGGctgcattccatagcgttacg-...749...ttccaaaactag gctgatga
* ***** ** * ** *

```

id=121219 gene=FBgn0040238 name=Best1 segment=chr3R.5989579\_5990296\_-1 type=IN

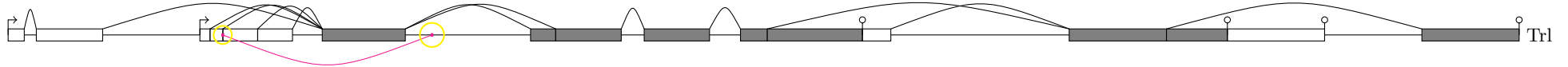
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D.Me1 atgaggag gttagaatcaaa...473...acgctttaagaatgtgaataCTAAC-TTTTGATTCTAATT----gtctaaaagatctgtccaca-----...162...tcccgaactag gccgatga
D.Sim atgaggag gttagaatcaaa...490...atgctttaagaatgtgaataCTAAC-TTTTGATTCTAATT----gtctaaaagatctgtccaca-----...166...ccccaaaactag gctgatga
D.Sec atgaggag gttagaatcaaa...488...atgctttaagaatgtgaataCTAAC-TTTTGATTCTAATT----gtctaaaagatctgtccaca-----...169...ccccaaaaccag gctgatga
D.Ere atgaggag gttagaatcaaa...518...atgctttaagaatgtgaataCTAAC-TTTTGATTCTAATT----gtctaaaagatctgtccaca-----...168...tcccaaacctag gctgatga
D.Ana atgaggag gttagaatcaga...106...tctaattcgaatcaaaagt-----TTCTAACCTCTTttctctgacatttcattggt-----...483...ttccaccaacag gccgatga
D.Gri atgaggag gttagaatcaaa...835...tattgtataagactgcataCTAAC-TTTTGATTCTAAC-----aataatctgtttgcctacag-----...155...tgcaacacgcag gccgacga
D.Moj acgaggag gttagaatcaaa...462...ataaactataagactgcataCTAAC-TTTTGATTCTAAC-----aataatctgtttgcctacag-----...188...tggtaacgcag gccgacga
D.Per atgaggag gttagaatcaga...106...acctaatacaaatcaaaagt-----TTCTAACCTCTT-----attcgctcatttgggacca...465...tctctcctccag gccgatga
D.Pse atgaggag gttagaatcaga...106...acctaatacaaatcaaaagt-----TTCTAACCTCTT-----attcgctcatttgggacca...465...tctctcctccag gccgatga
D.Vir atgaggag gttagaatcaaa...583...ttaaactataagactgcataCTAAC-TTTTGATTCTAAC-----aataatctgtttgcctacag-----...161...tgcaactcgcag gccgacga
D.Wil atgaggag gttagaatcaaa...370...ctgaactaaatgactgcataCTAAC-TTTTGATTCTAACaaTTCT-----atctgcctacagcctctcta...125...tctaattcccag gctgatga
D.Yak atgaggag gttagaatcaaa...548...atgctttaagaatgtgaataCTAAC-TTTTGATTCTAATT----gtctaaaagatctgtccaca-----...169...ttccaaaactag gctgatga
* ***** * ***** * ***** * ***** *

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id=121219 gene=FBgn0040238 name=Best1 segment=chr3R.5989579\_5990296\_-1 type=IN VIEW

Figure 619: CS=16.8



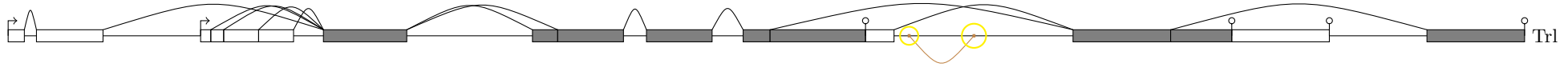
D. Mel	----aaaaaac	gtacgggc--aagag-----	-----aaagagaaggca-----	-----caaatcacccacagccactgaat-	TTTCt-TTT-GCGCTCCG	GTG	gagaag
D. Sim	----aaaaaac	gtacgggc--aagag-----	-----aaagagaaggca-----	-----caaatcacccacagccactgaat-	TTTCt-TTT-GCGCTCCG	GTG	gagaag
D. Sec	----aaaaaac	gtacgggc--aagag-----	-----aaagagaaggca-----	-----caaatcacccacagccactgaat-	TTTCt-TTT-GCGCTCCG	GTG	gagaag
D. Ere	----aaaaaac	gtacgggc--aagag-----	-----aaagagaaggca-----	-----caaatcacccacagccactgaat-	TTTCt-TTT-GCGCTCCG	gtgagaag	
D. Ana	aaaaatcaacaat	ccaagaga--cggaa-----	-----cagtgagggaagcaccacggcactgaa-	-----TTTTC-TTTgCGCTCcg	gtgagaag		
D. Gri	aaaaaaaagtaaa	ccaagagctatcagagccaacagccgtgagcgcggtggcgccaagaagggaagcaataaccgagtataaaaatagcagcaagc----	agat-	TTTTTC-TTT-GCGCTCcg	gtgagaag		
D. Moj	-----aa	tcaagagc--cagagccaccagccgtgagc-----	ggcggcgaagaagggaagca--	aaccgagtataaaaatagcagcaagc----	agat-	TTTTTC-TTT-GCGCTCcg	gtgagaag
D. Per	-----ag	tcaggagaagtgagaa-----	gtgaacgagaggggaaagcaccacactgcagacgg-----	gcaga	TTTTTC-TTT-GCGCTCcg	gtgagaag	
D. Pse	-----ag	tcaggagaagtgagaa-----	gtgaacgagaggggaaagcaccacactgcagacgg-----	gcaga	TTTTTC-TTT-GCGCTCcg	gtgagaag	
D. Vir	----aaagaaaa	ccaagagc--cagagctaccaaccgtgagc-----	ggcaatcaagaagggaagca--	aaccgagtataaaaatagcagccagc----	agat-	TTTTTC-TTT-GCGCTCcg	gtgagaag
D. Wil	----aaaaaag	tcgaaact--taaag-----	agaaggggaaatagcagctaaactgaa-----	agat-	TTTTTCaTTTGCGCTCcg	gtgagaag	
D. Yak	----aaaaaac	gtacggcc--aagag-----	-----aaagagaaggca-----	-----caaatcacccacagccactgaat-	TTTCt-TTT-GCGCTCCG	gtgagaag	
			* ** *		** **	*****	*****

id=43963 gene=FBgn0013263 name=Trl segment=chr3L\_14750942\_14751007\_-1 type=A5

D. Mel	tgctaag	gtaagtgtcgg...86...caatcgagaaataggttaa	TGTTTGGAGCGCAGAGAAA	---ctgacactcgacgcaaatg-----	...2184...cgatatttacag-	aatacacc
D. Sim	tgctaag	gtgagtgtcga...86...caatcgagaaataggttaa	TGTTTGGAGCGCAGAGAAA	---ctgacactcgacgcaaatg-----	...2191...tgatcitttacag-	aatacacc
D. Sec	tgctaag	gtgagtgtcga...86...caatcgagaaataggttaa	TGTTTGGAGCGCAGAGAAA	---ctgacactcgacgcaaatg-----	...2210...tgatcitttacag-	aatacacc
D. Ere	tgctaag	gtgagtgtcgg...90...---cgagaaataggttaatgtg	TGGAGCGCAGAGAAA	---ctgacactcacgcgcaata-----	...2309...tgatttttacag-	aacacacc
D. Ana	tgctaag	gtgagtaagaat...596...---cgccgatgtgtgtagagc---	GAGCGCAAAcGAGAG	---cgcc--aataagactgttga...1496...ttgtattgtag-	aacacccc	
D. Gri	tgctaag	gtgagtaagaat...666...---cagttcgaatgtgtagagc---	GAGCGCAAAcGAGAG	cgccgccc--aagcgacggg-----	...2105...ttaaataatag-	aacacgcc
D. Moj	tgctaag	gtgagtacgcg...578...---taattcaaatgtgtagagc---	GAGCGCAAAcGAGAG	---cgcc--aataagcggggcagcc...2062...ttatcittatag-	aacacgcc	
D. Per	tgctaag	gtaagcgagagt...629...---ctgttcgaatgtgtagagc---	GAGCGCAAAcGAGAG	---cgccaaagcatcgaagcaa--...1383...-atatttcataga	aacacacc	
D. Pse	tgctaag	gtaagcgagagt...629...---ctgttcgaatgtgtagagc---	GAGCGCAAAcGAGAG	---cgccaaagcatcgaagcaa--...1377...-atatttcataga	aacacacc	
D. Vir	tgctaag	gtgagtgcgcg...587...---actgttaagtgtgtagagc---	GAGCGCAAAcGAGAG	---cgcc--aagcaacggggctgcc...1926...actttgtttag-	aacacgcc	
D. Wil	tgcttaag	gtgagtgttcc...494...---gattcgaaatgtgtagagc---	GAGCGCAAAcGAGAG	---cgcc--aagtgacaagtctgtg-...2425...ccatttaacag-	aacacacc	
D. Yak	tgctaag	gtgagtgtcgg...90...---cgagaaataggttaatgtg	TGGAGCGCAGAGAAA	---tgagacagtcacacgcaaat-----	...2416...taatttttacag-	aatacacc
	**** **	** **	* ** * *	* **	* **	** ** **

id=43968 gene=FBgn0013263 name=Trl segment=chr3L\_14747651\_14750003\_-1 type=IN VIEW

Figure 620: CS=12.96



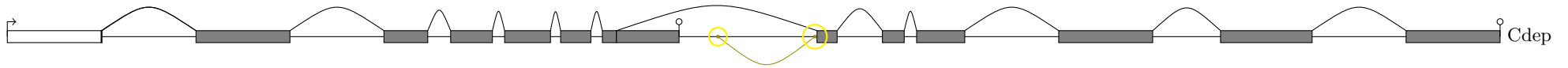
D.Mel	attgctgc	gtaagtttata-----	ttttgc--ataacttt-----	tcaaattgcg--tttttaacataaacattttct--tat-	GCAGTATTTCTTGCA	ATTG	-----	tagcacagagaaaaggacaa...808...	ccttccttgag	caaccag	
D.Sec	attgctgc	gtaagtttata-----	ttttgc--ataac--t-----	tcaaattgcg--tttttaacataaacattttct--tat-	GCAGTATTTCTTGCA	ATTG	-----	tactacagagaataggacaa...796...	ccttccttgag	caaccag	
D.Ere	attgctgc	gtaagtttata-----	atttgc--ataacttt-----	tcaaattgcg--ttccttaacataaacattttct--tat-	GCAGTATTTCTTGCA	ATTG	-----	caccacagagaaaacgaaaa...806...	ccttccttgag	taatcag	
D.Ana	attgctgc	gtaagttttcatttgc----	atttgc--aagaatatatttgaatc	gaaattgcgcttttttaacacaacactttatt--tat-	GCAGTATTTCTTGCA		-----	tattgtactacaacagagac...739...	gcttccttgag	caccag	
D.Gri		-----ataa-----	tttcgc--ttatacattc	ttaacacaagcatataataattat--aataaataataacaatct	ATGCAGTATTTCTTGCA		-----	tataacgctaaataactctaa...883...	tatactttgag	taccag	
D.Moj	tt-----	-----ataa-----	ttttgc--ttaaacttttcaaca----	attcaataacagatgattaacaattctgatcattta	TGCAGTATTTCTTGCA	ATAACGGTAAATA	actca	aactat	tttactttaa...867...	gatactttgag	catccag
D.Per	tttactgc	gtaagtttt-----	tttttc--caagcttt-----	tcaaattccat--tccttaatcgaaaatcactagtagtat-	GCAGTATTTCTTGCA	TGCAGTATTTCTTGCA	-----	tttgaatagatagagataca...830...	ccttccttgag	catccag	
D.Pse	tttactgc	gtaagtttt-----	tttttc--caagcttt-----	ccaaaattccat--tccttaatcgaaaatcactagtagtat-	GCAGTATTTCTTGCA	TGCAGTATTTCTTGCA	-----	tttgaatagaaagagataaa...834...	ccttccttgag	catccag	
D.Vir	ttttgtt	gtaagttcataa-----	tttcgc--tttaaacatt--	ttaaca-----ataataac--aaagaaaagttaataatta	TGCAGTATTTCTTGCA		-----	tataacggtgaataactcaaa...871...	aatactttgag	caccag	
D.Wil	ttctcgtt	gtaagttaaaagatagaaaaataacattagtttttttattatc	ttttttgcca-----	aattgc--gaaaagc	cgta-----	TGCAGTATTTCTTGCA	-----	tatattattataatacggac...1426...	aatcgcttgag	taccgg	
D.Yak	attgctgc	gtaagttttta-----	atttgc--ataacttt-----	tcaaattgcg--ttccttaacataaacattttct--tat-	GCAGTATTTCTTGCA	ATTG	-----	taccacagagaaaaggaaaa...790...	ccttccttgag	caatcag	

id=43977 gene=FBgn0013263 name=Trl segment=chr3L\_14744876\_14745798\_-1 type=IN

D.Mel	attgctgc	gtaagtttatat...358...	tttataattattgtttctct--TAGT	-----	TGCAAGAAAATACTGT	--tggtcg-atttccaaacctac--...481...	ccttccttgag	caaccagt
D.Sec	attgctgc	gtaagtttatat...351...	tttattattattgtttctct--TAGT	-----	TGCAAGAAAATACTGT	--tggtcg-atttccaaacctac--...473...	ccttccttgag	caaccagt
D.Ere	attgctgc	gtaagtttataa...351...	tttattattattgtttctct--TAGT	-----	TGCAAGAAAATACTGT	--tggtcg-atttccaaacctac--...486...	ccttccttgag	taatcagt
D.Ana	attgctgc	gtaagttttcat...400...	----taatttcgtttcgtctaagt	-----	TGCAAGAAAATACTGT	-tctggtcg-atctcctaactc--...383...	gcttccttgag	caccag
D.Gri	ataatttc	gcttatacattc...434...	.gttccttagttttattgtcct	-----	TGCAAGAAAATACTGT	tt--tg-attttgagctcaaat...473...	tatacttgag	taccag
D.Moj	ttttttgc	ttaaacttttc...410...	.gtttctttgtgctccgttc--TGTTACTGTTGT	tt	TGCAAGAAAATACTGTA	ctt--tg-atttttaatt-agttg...476...	gatacttgag	catccag
D.Per	tttactgc	gtaagttttttt...346...	--ttccattggctttgttcttTG	-----	TGCAAGAAAATACTGT	-tttcacg-attcctaact-at--...514...	ccttccttgag	catccag
D.Pse	tttactgc	gtaagttttttt...346...	--ttccattggctttgttcttTG	-----	TGCAAGAAAATACTGT	-tttcacg-attcctaact-at--...518...	ccttccttgag	catccag
D.Vir	ttttgtt	gtaagttcataa...407...	.gttcctgtttttattgtcct	-----	TGCAAGAAAATACTGTA	ctt--tg-atttttaact-attct...496...	aatacttgag	caccag
D.Wil	ttctcgtt	gtaagttaaaag...447...	.cttgactctgttttactt	-----	TGCAAGAAAATACTGTA	cttaagcacattttcggttt--...1018...	aatcgcttgag	taccgg
D.Yak	attgctgc	gtaagtttttaa...353...	tttattattattgtttctct--TAGT	-----	TGCAAGAAAATACTGT	--tggtcg-atttccaaacctac--...468...	ccttccttgag	caatcag

id=43977 gene=FBgn0013263 name=Trl segment=chr3L\_14744876\_14745798\_-1 type=IN VIEW

Figure 621: CS=19.8



```

D.Mel -catagcct aatcatcttgac...159...caagatcacaatt--gcgcctt-----AGAAAAGAAGAGGAT-ttaaa-aaccaattggtacaa--...1144...ctttgctgcag gtctcagt
D.Sim -catagcct aatcatcttgac...157...caaggtcacaatt--gcgcctt-----AGAAAAGAAGAGGAT-ttaaa-aaccaattggtacaa--...1170...ctttgctgcag gtctcagt
D.Sec -catagcct aatcatcttgac...154...caaggtcacaatt--gcgcctt-----AGAAAAGAAGAGGAT-ttaaa-aaccaattggtacaa--...1140...ctttgctgcag gtctcagt
D.Ere -catagcct aatcatctttac...161...caaggtcacaatt--gcgcctt-----AGAAAAGAAGAGGAT-ttaaa-aa-caattggtacaa--...1136...ctttgctgcag gtctcagt
D.Ana -cattgccca aatcatcaagac...187...--aggtcgaacgaagcgcctt-----AGAAAAGAAGAGGAT-ttaaa-aaccaattggtata--...1170...ctttgctgcag gtctcagt
D.Gri acatta-tg aatcatcaactg...135...ca----tt-----gtggcgccaagtcaatGAGAAAAGAAGAGGATTA-aaataaccaattggtcttaa...1176...ctttgctgcag gtctcagt
D.Moj -ctaagcca actaattatgaa...206...caaat-----atgacctcaagttgAAGAGAAAAGAAGAGGATTA-aaa-acccaattggtcttaag...1122...ctttgctgcag gtctcagt
D.Per -atttgcca attcatccagat...231...aaatgttg-----gtggcgc---gcttt-AGAAAAGAAGAGGATctaaaa-aaccaattggtaca--...1025...ctttgctgcag gtctcagt
D.Pse -atttgcca attcatccagat...231...aaatgttg-----gtggcgc---gcttt-AGAAAAGAAGAGGATctaaaa-aaccaattggtaca--...1037...ctttgctgcag gtctcagt
D.Vir -aattatgt gtacaatttgat...217...-aaat-----gtggcatcaagttacAGAGAAAAGAAGAGGATTA-aaa-aaccaattggtcttaag...1130...ctttgctgcag gtctcagt
D.Yak -tatagcct aatcatcttgac...160...caatgctacaatt--gcgcctt-----AGAAAAGAAGAGGAT-ttaag-aaccaattggtaca--...1142...ctttgctgcag gtctcagt
          *                               * *                               * * * * *                               * * * * *

```

id=68205 gene=FBgn0051536 name=Cdep segment=chr3R\_749884.751267.1 type=IN

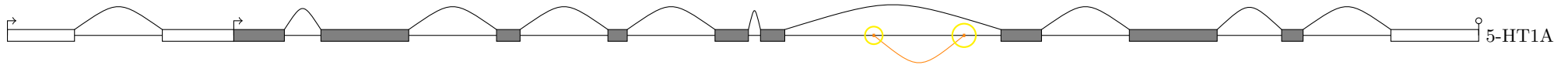
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D.Mel -catagcct aatcatcttgac...1325...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Sim -catagcct aatcatcttgac...1349...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Sec -catagcct aatcatcttgac...1316...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Ere -catagcct aatcatctttac...1319...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Ana -cattgccca aatcatcaagac...1379...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Gri acatta-tg aatcatcaactg...1332...agcatgtgaaaata-aaatcgTGGTATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Moj -ctaagcca actaattatgaa...1351...agcatgtgaaaata-aaatcgTGGTATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Per -atttgcca attcatccagat...1278...-----gaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Pse -atttgcca attcatccagat...1290...-----gaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Vir -aattatgt gtacaatttgat...1369...agcatgtgaaaata-aaatcgTGGTATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
D.Yak -tatagcct aatcatcttgac...1324...-----gtgaaaatataaaacgtggtATCCTCTTgTCTTTTCTtttgctgcag gtctcagt
          *                               * * * * *                               * * * * *

```

id=68205 gene=FBgn0051536 name=Cdep segment=chr3R\_749884.751267.1 type=IN VIEW

Figure 622: CS=15.4



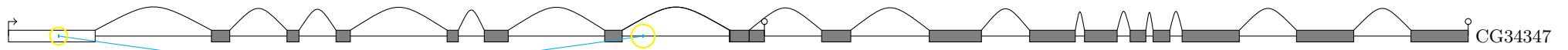
D.Me1	ataatcag	gtaaa-gtgcaga...3761...--ctgtaaaccatttaataact	ATTTGCGCaaATATTCA	---caccacttttgatcgccat-...929...tatcgctttc-ag	ccggacgg
D.Sim	ataatcag	gtaaa-gtgcaga...3733...-aatttgccatagttt---ctgg--	CCCACaAAATGAAGGT	ca-cacacacatgggtcatgc...1109...tatcgcttac-ag	ccggacgg
D.Sec	ataatcag	gtaaa-gtgcaga...3784...--ctgtaaaccatttaataact	ATTTGCGCaaATATTCA	---caccactttcggatcgccat-...1055...tatcgctttc-ag	ccggacgg
D.Ere	ataatcag	gtaaa-gtgcgga...3816...--ctgtaaaccatttaataact	ATTTGCGCaaATATTCA	---caccacttttgatcgccat-...994...aatctctttc-ag	ccggacgg
D.Ana	ataatcag	gtggg-tcattag...3925...--ctgtaaaccatttaataact	ATTTGCGCaaATATT	-----ca-caccactttgtagtgccg...967...tctctctttc-ag	ccggacgg
D.Gri	ataatcag	gtagtgccttaa...4096...--attacacttctgttgctctg---	CCCACaAAATGAAGGT	ca-catacatagctgcaaatc...813...ttccacttta-ag	cccgatgc
D.Moj	ataatcag	gtgag-tgccaat...4028...-aattacacttc--tctgtctg---	CCACaAAATGAAGGT	ca-catgcgtctctagcag...882...ctctctctag	cccgatgc
D.Per	ataatcag	gtaaa-gtghtaat...3908...--ctgtaaatccatttaataact	ATTTGCGCaaATATT	-----ca-caccatttctcggatggg...1002...cctctcttac-ag	ccgatggg
D.Pse	ataatcag	gtaaa-gtghtaat...3898...--ctgtaaatccatttaataact	ATTTGCGCaaATATT	-----ca-caccatttctcggatggg...1012...cctctcttac-ag	ccgatggg
D.Vir	ataatcag	gtaaatatgcta...4032...-caattacacttc--ttgtcctg---	CCCACaAAATGAAGGT	ca-catgcgtagctgcaaatc...877...ttcattttgc-ag	ccagcgac
D.Wil	ataatcag	gtatg-ttaaagc...3385...gcaattcactt---ttgtctg---	CCCACaAAATGAAGGT	caccatgcatgctatagag-...1524...atctattcac-ag	ccgatgc
D.Yak	ataatcag	gtaaa-gtgcaga...3804...--ctgtaaaccatttaataact	ATTTGCGCaaATATTCA	---caccacttttgatcgccat-...1104...tatctctttc-ag	ccggacgg
	*****	**	* * * * *	** **	* ** ** *

id=83802 gene=FBgn0004168 name=5-HT1A segment=chr2R.14996654.15001424.1 type=IN

D.Me1	ataatcag	gtaaa-gtgcaga...4512...--gttcagcctaaaacttttt	TGGATATGCGGTacAAAT	tgcggtttattgaagcgtaa-----...178...tatcgctttc-ag	ccggacgg
D.Sim	ataatcag	gtaaa-gtgcaga...3997...aagggttgactactcaatt	ACTTTaATTG-GTGGG	-----attg-ag-gcgacaaaatcag...845...tatcgcttac-ag	ccggacgg
D.Sec	ataatcag	gtaaa-gtgcaga...4647...-ggttcagcctaaaacttttt	TGGATATGCGGTacAAAT	tgcggtttattgaagcgtaa-----...192...tatcgctttc-ag	ccggacgg
D.Ere	ataatcag	gtaaa-gtgcgga...4616...-ggttcagcctaaaacttttt	TGGATATGCGGTacAAAT	tgcggtttattgaagcgtaa-----...194...aatctctttc-ag	ccggacgg
D.Ana	ataatcag	gtggg-tcattag...4685...-----ttgcccaattttttttta	GATATGCGGTacAAAT	tgcggtttattgaagcgtaa-----...207...tctctctttc-ag	ccggacgg
D.Gri	ataatcag	gtagtgccttaa...4405...aaaggtttgactactcaatt	ACTTTaATTG-GTGGG	-----gattgaag-gcgacgacaaca--...504...ttccacttta-ag	cccgatgc
D.Moj	ataatcag	gtgag-tgccaat...4386...aagggtttgactactcaatt	ACTTTaATTG-GTGGG	-----ggattgaag-gcgacgacaac--...524...ctctctctag	cccgatgc
D.Per	ataatcag	gtaaa-gtghtaat...4688...aggctcaggcattggcggtt---	GATATGCGGTacAAAT	tgcggtttattgaagcgtga-----...222...cctctcttac-ag	ccgatggg
D.Pse	ataatcag	gtaaa-gtghtaat...4688...aggctcaggcattggcggtt---	GATATGCGGTacAAAT	tgcggtttattgaagcgtga-----...222...cctctcttac-ag	ccgatggg
D.Vir	ataatcag	gtaaatatgcta...4379...aaaggtttgactactcaatt	ACTTTaATTG-GTGGG	-----gattgaag-gcgacgacaaca--...530...ttcattttgc-ag	ccagcgac
D.Wil	ataatcag	gtatg-ttaaagc...3688...aaaggtttgactactcaatt	ACTTTaATTG-GTGGG	-----attgaag-gcgacgacaagag-...1221...atctattcac-ag	ccgatgc
D.Yak	ataatcag	gtaaa-gtgcaga...4707...-ggttcggcctaaaacttttt	TGGATATGCGGTacAAAT	tgcggtttattgaagcgtaa-----...201...tatctctttc-ag	ccggacgg
	*****	**	** * * *	**** * * *	* ** ** *

id=83802 gene=FBgn0004168 name=5-HT1A segment=chr2R.14996654.15001424.1 type=IN VIEW

Figure 623: CS=11.52



D.Me1	ttggaccg	tgcacgtaacg...383...-----tcataaattatacaag--agcg	CATT	TGCGAACGA	TTGCAAA	taataagcatttacgctttt...288...tatctcaagcag	gtaagcat	
D.Sim	ttggaccg	tgcacgtaacg...385...-----tcataaattataaaag--agcg	CATT	CGCGAACGA	TTGCAAA	taataagcatttacgctttt...282...tatctgaagcag	gtaagcgg	
D.Sec	ttggaccg	tgcacgtaacg...384...-----tcataaattataaaag--agcg	CATT	CGCGAACGA	TTGCAAA	taataagcatttacgctttt...286...tatcceaagcag	gtaagcgg	
D.Ere	ttggaccg	tgcacgtaacg...414...-----tcataaattatacaag--agcg	CATT	CGCGAACGA	TTGCAAA	taataagcatttacgctttt...299...tatctcaagcag	gtaagcaa	
D.Ana	ttggaccg	tgcacgtaacg...638...gggcttcataaattatacaa--	GAGCGCATT	TGCGAACGA	TTGCAAA	taataagcatttacgctttt...364...gctatcaagcag	gtaagcaa	
D.Moj	ttgaaacg	tgtgccaacg...676...-----ttatacaag--cg	cattttt	gt	GAACGA	TTGCAAA	taataagcatttacgctttt...407...atagcacaac	ccagc
D.Pse	ttgaaacg	ttggagccaacg...627...-----aacagag--cg	cattttc	gaga	ACGA	TTGCAAA	taataagcatttacgctttt...319...gatataaac	gtaagcag
D.Vir	ttgaaacg	tgtgccaacg...688...-----ttatacaag--cg	cattttc	gt	GAACGA	TTGCAAA	taataagcatttacgctttt...328...aatatactatag	gtaagcat
D.Wil	gtgaatcg	ttggacccaacg...634...-----atacaagagccg	cattt	tgt	GAACGA	TTGCAAA	taataagcatttacgctgtt...426...taatttatatt	atcattat
D.Yak	ttgaaacg	tgcacgtaacg...411...-----tcataaattatacaag--agcg	CATT	CGCGAACGA	TTGCAAA	taataagcatttacgctttt...290...tatctcaagcag	gtaagcca	
	** * **	* * * **		*	*	** * *	*****	*

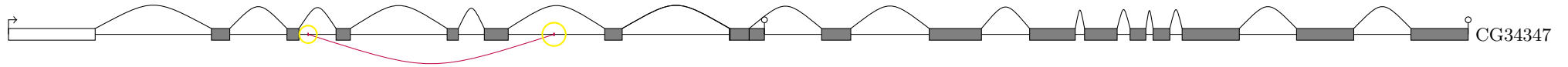
id=40001 gene=FBgn0085376 name=CG34347 segment=chr3R.27136896\_27137653.1 type=E5

D.Me1	ataaaaat	gtaaatctcaa...137...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	Gaatggtcgaagtggcact-----...772...tgttcccgcag	aacgagct	
D.Sim	ataaaaat	gtaaatctcaa...137...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	Gaatggtcgaagtggcact-----...763...tgttcccgcag	aacgagct	
D.Sec	ataaaaat	gtaaatctcaa...137...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	Gaatggtcgaagtggcact-----...772...tgttcccgcag	aacgagct	
D.Ere	ataaaaat	gtaaatcccaa...131...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	Gaatggtcgaagtggcact-----...841...tgttcccgcag	aacgagct	
D.Ana	ataaaaat	gtaaatcttaa...143...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	GaaTGITCgaaagttagcagtaagggt...772...gcaatttcag	aacgaact	
D.Moj	ataaaaat	gtaaatctcagc...106...gctgctcagtgcttca-caca	ATTTCAGT	TCGTT	-----	tctattgttcgcctc--aagtt...870...ccttcttcacag	aatgagct	
D.Pse	ataaaaat	gtaaatcttca...124...gccgacaagtgcttca-taca	ATTTCAGT	TCGT	-----	ataaagatggaaaggaaa---...845...cctcctccacag	aatgagct	
D.Vir	ataaaaat	gtaaatctcagc...99...cctgctcagtgcttct-taca	ATTTCAGT	TCGTT	-----	tctattgttcgctc--aagtt...981...ccttcttcacag	aatgagct	
D.Wil	ataaaaat	gtaaatcttct...129...ctgacaagtgcttctgtaca	ATTTCAGT	TCGTT	-----	tcttataatt---ctatgactc...967...tctccttcacag	aatgagct	
D.Yak	ataaaaat	gtaaatcccca...162...gccgacaagtgctttt-taca	ATTTCAGT	TCGTT	CGCGAGT	Gaatggtcgaagtggcact-----...885...ttctcccgcag	aacgagct	
	*****	*****	* * *	*****	*****	* * *	***	** * **

id=40014 gene=FBgn0085376 name=CG34347 segment=chr3R.27180337\_27181332.1 type=IN VIEW

Figure 624: CS=13





```

D.Me1 atcagacg gtaagtgtgtag...33...-----agaccgcttcgcgtgggcac-----ACATATTGG-TTTTgaaattcattttcgttttca-...213...atattccacag cactggct
D.Sim atcagacg gtaagtgtgttg...33...-----agaccgcttcgcgtgggcac-----ACATATTGG-TTTTgaaattcattttcgttttca-...212...atttccacacag cactggct
D.Sec atcagacg gtaagtgtgttg...33...-----agaccgcttcgcgtgggcac-----ACATATTGG-TTTTgaaattcattttcgttttca-...212...atttccacacag cactggct
D.Ere atcagacg gtaagcgtgtgg...33...-----agaccgcttcgcgtgggcac-----ACATATTGG-TTTTgaaattcattttcgttttca-...194...atttccacacag cactggct
D.Ana atcaaacg gtgagtgtagtg...50...agacgcagccaccacccaCTTcGGTggCAAGCATATTGGTTTg-aaattcattttcgttttca...195...gtctctttacag cactggct
D.Moj atcaaacg gtaagtggcggc...55...-ctcttactgctgctcctgctGCTGcTGTGCAAACATATTGGTTTg-aaattcattttcgttttcat...363...tctgtctacag cactggct
D.Per atcaaacg gtaag-gcaggca...27...-cctgcttctacttccgctgt-----GCAAGCATATTGGTTTg-aaattcattttcattttcat...231...atttcccgacag cactggct
D.Pse atcaaacg gtaag-gcaggca...27...-ccggcttctacttccgctgt-----GCAAAACATATTGGTTTg-aaattcattttcattttcat...228...atttccacacag cactggct
D.Vir atcaaacg gtaagtggcggc...59...-gccgttgccgttcctgttgc-----TGTGCAAAACATATTGGTTTg-aaattcattttcgttttcat...385...accgttttacag cactggct
D.Wil atcaaacg gtgagtacagaa...49...tattcctgc-tctgcttccgc-----TGTGCAAAACATATTGGTTTg-aaattcattttcgttttcat...2314...tattgttttag cactggct
D.Yak atcagacg gtaagtgtgcag...50...-----agaccgcttcgcgtgggcac-----ACATATTGG-TTTTgaaattcattttcgttttca-...256...atttccacacag cactggct
**** ** ** ** * * * * * ***** ** ** ** **

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id=40006 gene=FBgn0085376 name=CG34347 segment=chr3R.27177095\_27177418.1 type=IN

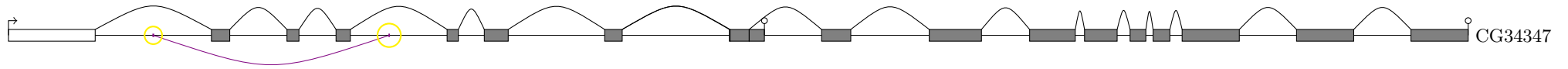
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D.Me1 ccgttctg gtgagt-aatgtg...353...actttgatatcaaacctcaaTAAAtcACCAGcTGTGT-----ttgtatacatgcgtggagtt---.409...ctttccacacag ggcgagga
D.Sim ccgttctg gtgagt-aatgtg...348...actttgatatcaaacctcaaTAAAtcACCAGcTGTGT-----ttgtatacatgcgtggagtt---.414...ctttccacacag ggcgagga
D.Sec ccgttctg gtgagt-aatgtg...348...actttgatatcaaacctcaaTAAAtcACCAGcTGTGT-----ttgtatacatgcgtggagtt---.406...ctttccacacag ggcgagga
D.Ere ccgttctg gtgagt-aatgtg...356...actttgatatcaaacctcaaTAAAtcACCAGcTGTGT-----ttgtatacatgcgtggagtt---.431...ttttccacacag ggcgagga
D.Ana ccgttctg gtaagt-tacata...387...actttgatatcaaacctcaaTAAAtcACCAGcTGTGTTTGTATTcGGAGagtatcggggggagtttg...426...attctccaacag ggcgagga
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D.Per ccgttttg gtaagt-tataga...284...actttggtatcaaacctcaaTAAAtcACCAGcTGTGTTTGT-----ctggggggcgtgtggcatg----.427...ttgctcccacag ggcgagga
D.Pse ccgttttg gtaagt-tataga...283...actttggtatcaaacctcaaTAAAtcACCAGcTGTGTTTGT-----ctggggggcgtgtggcatg----.443...ttgctcccacag ggcgagga
D.Vir ccgtgctg gtaagaacacat...363...actttgatatcaaacctcaaTAAAtcACCAGcTGTGTTTGTATAcgaaccatgaatggtgtgga----.516...ttgtttccag ggcgaaga
D.Wil ccgtgctg gtaagtaaatgt...417...ctttgatatcaaacctcaaTAAAtcACCAGcTGTGTTTGTATA-----tatatacatgctgtgtggtgg...470...ttgtttccag ggcgagga
D.Yak ccgttctg gtgagt-aatgtg...400...actttgatatcaaacctcaaTAAAtcACCAGcTGTGT-----ttgtatacatgcgtggagtc---.460...cgtttccacacag ggcgagga
**** ** ** ** * * * * * ***** ** ** **

```

id=40012 gene=FBgn0085376 name=CG34347 segment=chr3R.27179341\_27180183.1 type=IN VIEW

Figure 625: CS=11



D.Me1	tcaagcag	gtaagcatgtgg...3543...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1364...	---ttccattgcag	aaaatgct
D.Sim	tgaagcag	gtaagcgggggt...3527...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1380...	---ttccattgcag	aaaatgct
D.Sec	caaagcag	gtaagcgggggt...3534...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1373...	---ttccattgcag	aaaatgct
D.Ere	tcaagcag	gtaagcaaagg...3551...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1356...	---ttccattgcag	aaaatgct
D.Ana	tcaagcag	gtaagcaaagg...3446...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1461...	---ttccattgcag	aaaatgct
D.Moj	gcacacac	ccagccataggg...2791...	agaattatgagggtgtcgt-----CGCTGGcTGCTccTGATGATGT-----	ATaaTATTtCATTAGT	-----cctgtttgcataaggccag---...2112...	gacttca-cgcg-	aaaatgct
D.Per	tcaaacag	gtaagcagcaa...3490...	-----cccagtcgactttccattaATTAGcGC-----	ATaaTATTtCATTAGT	-----ctaagtagcgcggcgtcc---...1412...	---ttgtttctttag	acaatgct
D.Pse	tcaaacag	gtaagcagcaa...3497...	-----cccagtcgactttccattaATTAGcGC-----	ATaaTATTtCATTAGT	-----ctaagtagcgcggcgtcc---...1405...	---ttgtttctttag	acaatgct
D.Vir	tactatag	gtaagcattggt...2606...	aggg---tggcgttgcgcttgc-----TGCTccTGATgATGTccTGTTGTGCATAAG	accaggcctaagatatgac...2289...	gctctca-cgca	aaaatgct	
D.Yak	tcaagcag	gtaagccataac...3524...	-----gccgactttccattaattagGC-----	ATaaTATTtCATTAGT	-----gtaatgagcgcaggcagtg---...1383...	---ttccattgcag	atggagca
			* **	** ** *	** *	*	* *

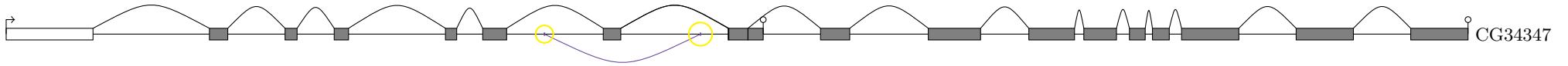
id=40002 gene=FBgn0085376 name=CG34347 segment=chr3R.27137654\_27166143.1 type=I5

D.Me1	ataaccag	gtga--gcaaccaa...292...	---gaactc---gctctgccactca-----	ACTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...892...	tgtcatttgcag	gtatcaac
D.Sim	ataaccag	gtgag-g-aaccaa...273...	---gaactc---gctctgccactca-----	ACTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...885...	tgtcatttgcag	gtatcaac
D.Sec	ataactag	gtgag-t-aaccaa...273...	---gaactc---gctctgccactca-----	ACTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...867...	tgtcatttgcag	gtatcaac
D.Ere	ataaccag	gtgag-gcaacca...277...	---gagctc---gctctgccactca-----	ACTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...878...	tgtcatttgcag	gtatcaac
D.Ana	ataaccag	gtgag-tggccca...213...	---gcaaac---tctccaactacca-----	ACTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...1066...	gtcgttttcag	gtatcaac
D.Moj	ataaccag	gtgagttcaatc...709...	-----ccttagctatgcagttagct---	GCATccATCAAGCA	TTGGTgtgtgcaaatatttgcgctta---	...1082...	tttatagcag	atatcaac
D.Per	atcaccag	gtgag-tgagcct...169...	---gagagccatggccacgacta-----	ACTAATGGATAATGC	CaTGAT-----gaaattaat-gcatttatgca...	...1184...	gtcaattttcag	ataccaac
D.Pse	atcaccag	gtgag-tgagcct...169...	---gagagccatggccacgacta-----	ACTAATGGATAATGC	CaTGAT-----gaaattaat-gcatttatgca...	...1213...	gtcaattttcag	ataccaac
D.Vir	attacgag	gtgagattaatc...255...	---gaaataatgttttaatgcaTTTATGCACAGTA	tGCAT--ATCAAGCA	-----aaataaattggaagaatgc...1558...	tttatttgacag	atatcaac	
D.Yak	ataaccag	gtgag-gcaatca...305...	ctgaaaactgaaagctgaaa-----	GCTAATGGATAATGC	-----atcgagcaattaat-gcattt-----	...993...	tgtcatttgcag	gtatcaac
			** ** *	****	*	** ** *	***	** ****

id=40008 gene=FBgn0085376 name=CG34347 segment=chr3R.27177544\_27178806.1 type=IN VIEW

Figure 626: CS=9.6





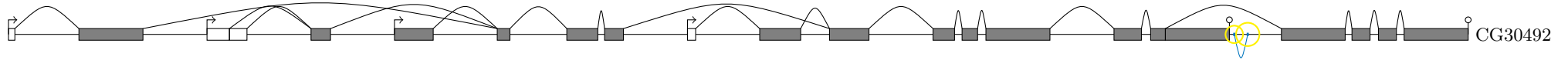
D. Mel	ccgttctg	gtgagtaatgtg...	283...	gcgagtctcgtgtgtctacg-----	CTTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..474...	cttttccacag	ggcgagga
D. Sim	ccgttctg	gtgagtaatgtg...	278...	gcgagtctcgtgtgtctacg-----	CTTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..479...	cttttccacag	ggcgagga
D. Sec	ccgttctg	gtgagtaatgtg...	510...	-----ttgtttatagacacaaatca-----	TTGA	TATCGcGGCG	ccagaccgccgtcttttata-----	..246...	cttttccacag	ggcgagga
D. Ere	ccgttctg	gtgagtaatgtg...	286...	gcgagtctcgtgtgtctacg-----	CTTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..496...	tttttccacag	ggcgagga
D. Ana	ccgttctg	gtaagttacata...	557...	-----ttgtttatagacacaaatca-----	TTGA	TATCGcGGCG	ccaggccgccgtcttttatg-----	..270...	attctccaacag	ggcgagga
D. Gri	cagtgtcg	gtaagaactcaa...	1052...	-----ttgtttatagacacaaatca-----	TTGA	TATCAcGGCG	ccagttgccagatcccataa-----	..601...	tattcattgcag	ggcgagga
D. Moj	ccgtgctg	gtaagtgtacac...	534...	-----ttgtttatagacacaaatca-----	TTGA	TATCGcGGCG	ccagttgcagag---ccaacacgg...	..349...	gtttctttcag	ggcgagga
D. Per	ccgttttg	gtaagttataga...	215...	-----cccctgcccgatcccctgg	TTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..496...	ttgctcccacag	ggcgagga
D. Pse	ccgttttg	gtaagttataga...	214...	-----cccctgcccgatcccctgg	TTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..512...	ttgctcccacag	ggcgagga
D. Vir	ccgtgctg	gtaagaacacat...	557...	-----ttgtttatagacacaaatca-----	TTGA	TATCGcGGCG	ccagttgccag---ccaagactt...	..331...	ttgtttccag	ggcgaaga
D. Yak	ccgttctg	gtgagtaatgtg...	330...	gcgagtctcgtgtgtctacg-----	CTTTTGTGCTGCGT	aAGTTGGC	acttcatttgcattttttat-----	..525...	cgtttccacag	ggcgagga
					*	** **	*		***	***** **

id=40012 gene=FBgn0085376 name=CG34347 segment=chr3R.27179341\_27180183.1 type=IN

D. Mel	ataaaaaat	gtaaatctcaa...	701...	ataatcaaaaaagtttcc-----	caGCCAGTTg	ACGCGCACAAAAG	gcgg-aacttaagc---atthttcc...	..210...	tgthttccgcag	aacgagct
D. Sim	ataaaaaat	gtaaatctcaa...	689...	ataatcaaaaaagtttcc-----	caGCCAGTTg	ACGCGCACAAAAG	gcgg-aacttaagc---atthttcc...	..213...	tgthttccgcag	aacgagct
D. Sec	ataaaaaat	gtaaatctcaa...	662...	-----tgcacacttttgggtgttaa-	CGCTt	TGATAaTCAA	-----aaaagtttcccagccagttg--	..255...	tgthttccgcag	aacgagct
D. Ere	ataaaaaat	gtaaatcccaa...	757...	ataatcaaaaaagtttcc-----	caGCCAGTTg	ACGCGCACAAAAG	gcggaaacttaagc---attctc-	..217...	tgthttccgcag	aacgagct
D. Ana	ataaaaaat	gtaaatcttaa...	602...	-----tgcacacttttgggtgttaa-	CGCTt	TGATAaTCAA	-----aaaacttttcccagccagttg--	..328...	gcaatthttacag	aacgaact
D. Gri	ataaaaaat	gtaaatctcaac...	936...	-----tgaacacttttgggtgttaa-	CGCTt	TGATAaTCAA	-----aaaacttttcccagttga--	..306...	cctccttgacag	aatgagct
D. Moj	ataaaaaat	gtaaatctcagc...	664...	-----tgaacacttttgggtgttaa-	CGCTt	TGATAaTCAA	-----aaaacttttgc-gcagttgac-	..312...	cctccttcacag	aatgagct
D. Per	ataaaaaat	gtaaatthttca...	670...	-taatcaaaaaactttttg-----	caGCCAGTTg	ACGCGCACAAAAG	ggcgaaactttaac---gthttt-	..293...	cctcctccacag	aatgagct
D. Pse	ataaaaaat	gtaaatthttca...	669...	-taatcaaaaaactttttg-----	caGCCAGTTg	ACGCGCACAAAAG	ggcgaaactttaac---gthttt-	..293...	cctcctccacag	aatgagct
D. Vir	ataaaaaat	gtaaatctcagc...	785...	-----tgaacacttttgggtgttaa-	CGCTt	TGATAaTCAA	-----aaaacttttcc-gcagttgac-	..295...	cctccttcacag	aatgagct
D. Yak	ataaaaaat	gtaaatcccca...	783...	ataatcaaaaaagtttcc-----	caGCCAGTTg	ACGCGCACAAAAG	gcggaaacttaagc---atthttc-	..266...	thtttccgcag	aacgagct
	*****	*****		* * **	*	***** **	** ** *	*	***	** ** **

id=40014 gene=FBgn0085376 name=CG34347 segment=chr3R.27180337\_27181332.1 type=IN VIEW

Figure 628: CS=9.9



D. Mel	----accaa----caa	acaaagccaataactgaaccac	TGAAACAAATGTTtTTAGT	-----atc-----	cgatccgaatccatat---	..334...	ttttaccaaaag	gctcgaaa
D. Sim	----accaa----caa	acaaagccaataactgaaccac	TGAAACAAATGTTtTTAGT	-----atc-----	cgatccgtatccgttt---	..324...	ttttaccaaaag	gctcgaaa
D. Sec	----accaa----caa	acaaagccaataactgaaccac	TGAAACAAATGTTtTTAGT	-----atc-----	cgatccgaatccgtat---	..323...	ttttaccaaaag	gctcgaaa
D. Ere	----accaa----caa	acaaagccaataactgaaccac	TGAAACAAATGTTtTTAGT	-----acc-----	agtatcccaataatcac---	..313...	ttttaccaaaag	gctcaaaa
D. Ana	----accaa----aaa	agtatccaaccattgaaccac	TGAAACAAATGTTtTTAGT	-----tcttaaaaaaacaatgaaag..	..366...	attccacaaaag	gctcaaac	
D. Moj	aaacacaaataataaaa	agtaaaaaaa-----	TGAAACAAATGTTtTTAGT	AAAAggGCTGatTACA	aatcggggtgagtacaaa..	..458...	tccttaaaaaag	gctcacia
D. Per	----actaatga-aaa	cgcaagcaa-----	TGAAACAAATGTTtTTAGT	agGTATcCCAAcAAGC	tatccaatggtagtacagc..	..401...	tcttatcaaaaag	gcggtca
D. Pse	----accaataa-aaa	cgcaagcaa-----	TGAAACAAATGTTtTTAGT	agGTATcCCAAcAAGC	tatccaatggtagtacagc..	..400...	tcttatcaaaaag	gcggtca
D. Vir	----aaciaa----caa	a-----ccaatattaaa	TGAAACAAATGTTtTTAGT	AAAA	acctgaattttaacgggtg-----	..704...	ttttatcaaaaag	gcgcaaaa
D. Yak	----accaa----caa	acaaagcatataactgaaccac	TGAAACAAATGTTtTTAGT	-----atc-----	cgatcccaataaacct---	..317...	ttttaccaaaag	gctcaaaa
	* ** **		*****				****	**

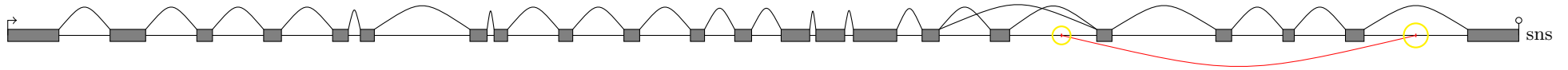
id=66161 gene=FBgn0050492 name=CG30492 segment=chr2R.3537410\_3537815.1 type=IN

D. Mel	accaa-----caa	acaaagccaata...94...	gaaatagccatttagatctg-----	ACTAAcAGCATTGTTTCG	---aagtcaagtgattgtaacta---	..229...	ttttaccaaaag	gctcgaaa
D. Sim	accaa-----caa	acaaagccaata...94...	gaaatagccatttagatctg-----	ACTAAcAGCATTGTTTCG	---aagtcaagtgattgtaacta---	..219...	ttttaccaaaag	gctcgaaa
D. Sec	accaa-----caa	acaaagccaata...94...	gaaatagccatttagatctg-----	ACTAAcAGCATTGTTTCG	---aagtcaagtgattgtaacta---	..218...	ttttaccaaaag	gctcgaaa
D. Ere	accaa-----caa	acaaagccaata...82...	gaaatagccatttagatctg-----	ACTAAcAGCATTGTTTCG	---aagtcaagtgattgtaacta---	..220...	ttttaccaaaag	gctcaaaa
D. Ana	accaaaaagtatcca	accaa-----	..139...-atgggattgcttttgatgc	GACTAAcAGCATTGTTTCG	---aaaataattgaa--aactaact..	..216...	attccacaaaag	gctcaaac
D. Moj	-----aaacacaa	ataataaaagta...89...	aatttaattattatgtgtg--	TGTGTGGCaTTTACTAAcAGCATTGTTTCG	---ctt-tctgctatatataaata---	..358...	tccttaaaaaag	gctcacia
D. Per	actaatgaaaacgcaa	gcaa-----	..81...-ttttccactgtttggcgtt	GCTTTTGGaATATgACTAAcGGCATTGTTTCG	aaacaaaccatttgaa--tagc----	..302...	tcttatcaaaaag	gcggtca
D. Pse	accaataaaaacgcaa	gcaa-----	..81...-ttttccactgtttggcgtt	GCTTTTGGaATATgACTAAcGGCATTGTTTCG	aaacaaaccatttgaa--tagc----	..301...	tcttatcaaaaag	gcggtca
D. Vir	aaciaa-----caa	accaatattaaa...92...	-tataattattgttaatggca--TTTT	ACTAAcGGCATTGTTTCG	---cttctctgctaaacttagtt---	..592...	ttttatcaaaaag	gcgcaaaa
D. Yak	accaa-----caa	acaaagcatata...86...	gtaatagtaatttaattta	GCTAAcAGCATTGTTTCG	---aagtcaagtgatttctaacta---	..220...	ttttaccaaaag	gctcaaaa
	* *	*	*	*****	*	*	****	**

id=66161 gene=FBgn0050492 name=CG30492 segment=chr2R.3537410\_3537815.1 type=IN VIEW

Figure 629: CS=15.6





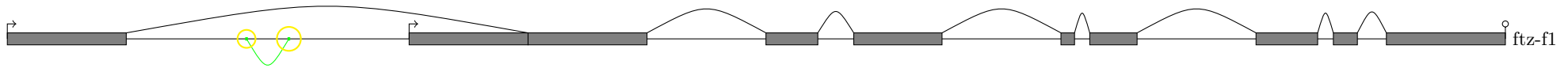
D.Mel	caagcgag	gtgaggggatcc...	579...	ggctccgcttcgc	---aggctct	ACGTgaTTTGc	GTCA	-----	ctcgctggtcgctagtcggt...	312...	cgttttgtcaag	gacttgaa
D.Sim	caagcgag	gtgaggggatcc...	572...	ggctccgcttcgc	---aggctct	ACGTgaTTTGc	GTCA	-----	ctcgctggtcgctagtcggt...	309...	cgttttgtcaag	gacttgaa
D.Sec	caagcgag	gtgaggggatcc...	573...	ggctccgcttcgc	---aggctct	ACGTgaTTTGc	GTCA	-----	ctcgctggtcgctagtcggt...	309...	cgttttgtcaag	gacttgaa
D.Ere	caagcgag	gtgaggggatcc...	551...	ggctccgcttcgc	---aggctct	ACGTgaTTTGc	GTCA	-----	ctcgctggtcgctagtcggt...	327...	cgttttgtcaag	gacttgaa
D.Ana	caagcgag	gtacgaaggac...	564...	ggcatcgcttcgc	---aggctct	ACGTgaTTTGc	GTCA	-----	atcgctggactccgggcta...	331...	gtcccgaag	gagctgaa
D.Gri	gaagcgag	gtaccgctactg...	214...	tgagtcgttcctg	---agtctct	ACGTgaTTTGc	GTCActTTTGCA	----	ttccttaccggacacggac---	234...	ggctggaacag	gagttgaa
D.Moj	gaagcgag	gtacatcagcaa...	1063...	gccattgtgactc	---catggct	ACGTgaTTTGc	GTCActTTGCA	GGGTT	ccttaaccgtaccagagta...	280...	ttcatggaccag	gaattgaa
D.Per	caaacgtg	gtatgcggatga...	270...	ggggagggggggc	---atctact	ACGTgaTTTGc	GTCActTTTGCA	GGGTT	ctcgctggacttctttattg...	288...	tttggcccag	gacttgaa
D.Pse	caaacgtg	gtatgcggatga...	267...	ggttggggggggc	---atctact	ACGTgaTTTGc	GTCActTTTGCA	GGGTT	ctcgctggacttctttattg...	288...	tttggcccag	gacttgaa
D.Vir	taagcgag	gtatattatcgc...	411...	gccattgtgactc	---catggct	ACGTgaTTTGc	GTCActTTTGCA	GGGTT	ccttaaccggaccagatac...	245...	gtcatggaccag	gacttgaa
D.Yak	caagcgag	gtgaggggatcc...	580...	---tccgcttcgc	caggagcctc	ACGTgaTTTGc	GTCActTTTGCA	GGGTT	ctcgctggtcgctagtcggtc...	305...	cgttttgtcaag	gacttgaa
		** * * *		*		*****		*			** ** *	****

id=78596 gene=FBgn0024189 name=sns segment=chr2R.4721487\_4722456.1 type=IN

D.Mel	cgccaatg	gtaagtgagatc...	3888...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	1024...	gtcacatttcag	gaataccc	
D.Sim	cgccaatg	gtaagtgagatc...	3843...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	1009...	gtcacatttcag	gaataccc	
D.Sec	cgccaatg	gtaagtgagatc...	3889...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	1014...	gtcacatttcag	gaataccc	
D.Ere	cgccaatg	gtgagtgcagatc...	3869...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	1005...	ttctaatttcag	gaatacac	
D.Ana	cgccaatg	gtgagtaagatc...	3918...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	942...	ttttatttcag	gaataccc	
D.Gri	cgccaatg	gtgagtattatg...	3476...	-----	cgtttaagacaattttgtaaac	TGATaCAAAATGT	ccgccc-tggtctacttaaga...	1429...	ttctcttttcag	gaatatcc	
D.Moj	caccaatg	gtaagtgcagatc...	2651...	-----	cttttcgttaagacaatttt	AACCTTGTAAA	TGATaCAAAATGT	tgcctt-tggtatacttaagt...	2249...	ttctcgttcag	gaatatcc
D.Per	cgccgatg	gtgagtgccaca...	3259...	-----	gacaatttaactttgcaaac	TGATaCAAAATGT	ccgccc-taggtccctccag-	1653...	atTTTTTgtag	gaatatcc	
D.Pse	cgccgatg	gtgagtgccaca...	3306...	-----	gacaatttaactttgcaaac	TGATaCAAAATGT	ccgccc-taggtccctccag-	1606...	atTTTTTgtag	gaatatcc	
D.Vir	cgccaatg	gtgagtagaact...	3736...	-----	gtttccgttaaagacaatttt	AACCTTGTAAA	TGATaCAAAATGT	tgcctt-tggtatactcaagt...	1164...	tattcatttcag	gaataccc
D.Yak	cgccaatg	gtaagtgcagatc...	3714...	-----	gacaatttaactttgtaaac	TGATaCAAAATGT	ccgccc-tggactacttaagt...	975...	atcaaatttcag	gaataccc	
		** * * *	** * * *		*****	*****	** * * *	** * *	** * *	****	

id=78604 gene=FBgn0024189 name=sns segment=chr2R.4734454\_4739444.1 type=IN VIEW

Figure 631: CS=15.95



D. Mel	taacggag	gtaagttcatct...3278...	-gctc-aaagctatgccaaaaa-	<b>GTTTCACTTTCG</b>	ctttccg----	tttgggtttgagt...1635...	tcgccttga--att	ctac-----gcaa
D. Sim	taacggag	gtaagtcctctt...3301...	-gctc-aaagctatgccaaaaa-	<b>GTTTCACTTTCG</b>	ctttccg----	tttgggtttgagt...1612...	tcgccttga--att	ctac-----gcaa
D. Sec	taacggag	gtaagtcctctt...3321...	-gctc-aaagctatgccaaaaa-	<b>GTTTCACTTTCG</b>	ctttccg----	tttgggtttgagt...1592...	tcgccttga--att	ctac-----gcaa
D. Ere	taacggag	gtaagtcctctt...3234...	-gctc-aaagctatgccaaaaa-	<b>GTTTCACTTTCG</b>	ctttccg----	tttgggtttgagt...1679...	-gccttcaaaatt	caat-----ccaa
D. Ana	tcaaggag	gtaagtcctctt...2996...	-gctc-aaagccaggccaaaaa-	<b>AGTTTCACTTTCG</b>	ctttcagctctcgcagccg----	1916...	attgatttc--att	cgaa-----aaga
D. Gri	tcaaggag	gtaagtagcaa...3246...	-gtccaaaagctatgccaaaa-	<b>AGTTTCACTTTCG</b>	ctttcaa----	cgagttgtaatt...1666...	--acaataaaaatt	aaaa-----acaa
D. Moj	ccaagggg	gtaagtaggtct...3236...	ggcctaaaagctatgttaaa-	<b>TAGTTTCACTTTCG</b>	ctttcag----	agcagttgtaatt...1675...	--tgagcaacagct	cggt-----tcaa
D. Per	tcacggag	gtaagtcagat...2508...	-ggctcaaagctaggccaaaa-	<b>AGTTTCACTTTCG</b>	ctttcag----	cgcggttgaatt...2404...	tccccttgaattt	cgat-----c--a
D. Pse	tcacggag	gtaagtcagat...2525...	-ggctcaaagctaggccaaaa-	<b>AGTTTCACTTTCG</b>	ctttcag----	cgcggttgaatt...2387...	tccccttgaattt	cgat-----c--a
D. Vir	tcaagggg	gtaagtagacat...3306...	--cccaaaagctgtgttaaaaa-	<b>AGTTTCACTTTCG</b>	ctttcag----	cgagttgtaatt...1606...	-----cagct	cggtctttctgttaa
D. Yak	taacggag	gtaagtcctctt...3210...	-gctc-aaagctatgccaaaaa-	<b>GTTTCACTTTCG</b>	ctttccg----	tttgggtttgagt...1703...	tcgccttca--att	ctat-----tcaa
		* * * *	*****	***** * ** *	*****	*	*	*

id=90211 gene=FBgn0001078 name=ftz-f1 segment=chr3L.18757511.18790636\_-1 type=IN

D. Mel	taacggag	gtaagttcatct...3456...	-ggcagagagcgcagcttctg	<b>TGAAAGTGAAAC</b>	--gagcagatccgagcgacc...	1457...	tcgccttga--att	ctac-----gcaa
D. Sim	taacggag	gtaagtcctctt...3477...	-ggcagagagcgcagcttctg	<b>TGAAAGTGAAAC</b>	--gagcagatccgagcgacc...	1436...	tcgccttga--att	ctac-----gcaa
D. Sec	taacggag	gtaagtcctctt...3499...	-ggcagagagcgcagcttctg	<b>TGAAAGTGAAAC</b>	--gagcagatccgagcgacc...	1414...	tcgccttga--att	ctac-----gcaa
D. Ere	taacggag	gtaagtcctctt...3422...	-ggcagagagcgcagcttctg	<b>TGAAAGTGAAAC</b>	--gagcagatatacagcgacc...	1491...	-gccttcaaaatt	caat-----ccaa
D. Ana	tcaaggag	gtaagtcctctt...3207...	agaaagagagcgtgg-tctat	<b>TGAAAGTGAAACT</b>	ggcgaacggtgagcggcaaa-	1705...	attgatttc--att	cgaa-----aaga
D. Gri	tcaagggg	gtaagtagcaa...3389...	-gagagggcgcagcgcgcat	<b>TGAAAGTGAAACT</b>	ggctcccactcacacacaag-	1523...	--acaataaaaatt	aaaa-----acaa
D. Moj	ccaagggg	gtaagtaggtct...3449...	-gagaacgtgagcgcgcat	<b>TGAAAGTGAAACTG</b>	gctcccacatgttcacatat...	1462...	--tgagcaacagct	cggt-----tcaa
D. Per	tcacggag	gtaagtcagat...2735...	-gcaggcaggcgaacgctat	<b>TGAAAGTGAAACT</b>	gctggcagcaaaaacgaatg-	2177...	tccccttgaattt	cgat-----c--a
D. Pse	tcacggag	gtaagtcagat...2754...	-gcaggcaggcgaacgctat	<b>TGAAAGTGAAACT</b>	gctggcagcaaaaacgaatg-	2158...	tccccttgaattt	cgat-----c--a
D. Vir	tcaagggg	gtaagtagacat...3477...	-gagcgcagctcgcgcgcat	<b>TGAAAGTGAAACT</b>	ggctcccactcacacacaca-	1435...	-----cagct	cggtctttctgttaa
D. Yak	taacggag	gtaagtcctctt...3386...	-gccggagaacgcagcttctg	<b>TGAAAGTGAAAC</b>	--gagcagatccgagcaacc...	1527...	tcgccttca--att	ctat-----tcaa
		* * * *	*****	*	*****	*	*	*

id=90211 gene=FBgn0001078 name=ftz-f1 segment=chr3L.18757511.18790636\_-1 type=IN VIEW

Figure 632: CS=6.6