

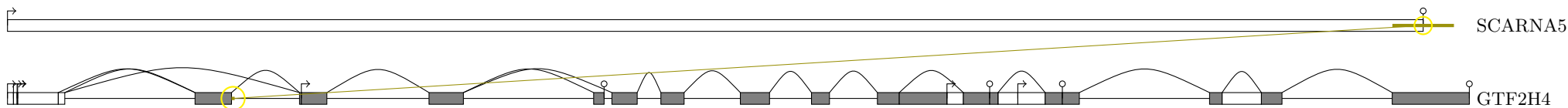
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P. Abe	cctgcaga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcctaagg
C. Jac	cttgacaga	ggtcgcgatgatga...222...gggtgtgacggtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...219...gggtgtgacagtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...217...gggtgtgaccgtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcaggaca
C. Por	tccagaga	ggtcgcgatgatga...219...--tgtgatggtgcatgac	tcaAGTTT	TCAAT	TGAG	acc	tcactgg
O. Cun	acctcaca	ggtcgcgatgatga...219...cggcgtgacagtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...221...gggtgtgatggtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcctaagt
B. Tau	ccctcgga	ggtcagtgatga...224...--tgtgatggtgcatgac	tcaAGTTT	TCAAT	TGAG	acc	tcaccagt
E. Cab	ctcctgga	ggtcgcgatgatga...223...gggtgtgacggtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcctgctt
S. Sus	acctcgga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAGTTT	TCAAT	TGAGA	acc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...216...gggcacgacggtgcatgac	TCAAGTTT	TCAAT	TGAG	acc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2\_234184373\_234184648.1 type=EN

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L. Afr	ataggaag	gtgag-aatcatt...4670...-tgcttttaagcttgcagcaca	TTCA	ca	ATTGA	tt	AACTTGG	ctatttcattgctcaggacc...56...-actcctacacag	aggaaact			
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id=721468 gene=ENSG00000121067 name=SPOP segment=chr17\_47690304\_47695865.-1 type=IN

Figure 1: CS=10.14



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P.Abe cctgcaga ggtcgcgatgatga...228...--tga-tggtgcatgatctcaag-----TTTTCAaTCTGAGACc tcctaagg
C.Jac cttgcaga ggtcgcgatgatga...227...-tga-cggtgcatgatctcaag-----TTTTCAaTCTGAGACc tcctaagg
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B.Tau ccctcga ggtcagtgatga...225...-gtga-tggtgcatgatctcaa-----GTTTTCAaTCTGAGACc tcccagtg
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

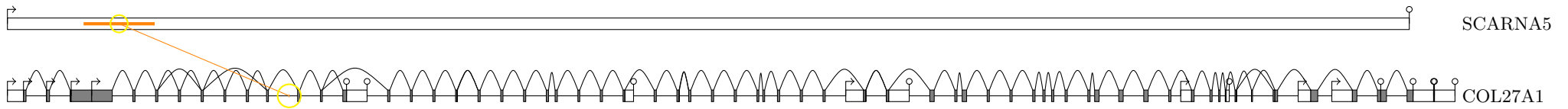
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P.Tro gTCTtCAG GTGAGGA-----gccccttcatggcagggaaa---.222...gtccctgtacag ggagctcc
P.Abe gTCTtCAG GTGAGGA-----gccccttcatggcagggaaa---.222...gtccctgtacag ggagctcc
C.Jac gTCTtCAG GTGAGGA-----gcc--catggcaaggaaatgt..220...atccctatacag ggagctcc
R.Nor gTCTtCAG GTGAGGGcGTTTgGAGAGTGTaACGGggcctgcagactgaagttag---.287...tgaaccttacag ggagctcc
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B.Tau gTCTtCAG GTGAGGAC-----ccccttcatggtaggttcc---.226...cctgcttatag ggagctcc
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Figure 2: CS=14.04



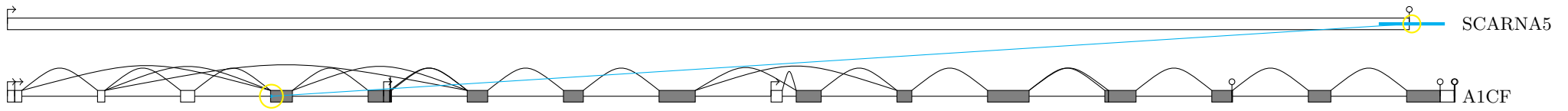
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R. Mac	cttgacga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgattg	cactgaatgtcac...	220...	caatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgattg	cactgaatgtcac...	220...	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgattg	cactgaatgtcac...	220...	caatctgagacc	tcctaagg
C. Jac	cttgacga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgattg	cactgaatgtcac...	219...	caatctgagacc	tcctaagg
M. Mus	cttactga	ggtca	GTGATG	at	TGGT	AAAAGGT	ctgattg	cactgaatgtcac...	216...	caatctgagacc	tcaggaca
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C. Por	tccagaga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctga-tgc	caccgaatatacaca...	213...	caatctgagacc	tcactgga
O. Cun	acctcaca	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgactg	cactgaatgtcac...	216...	caatctgagacc	tcgggagg
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F. Cat	cctgcgga	ggtca	GTGATG	at	TGGT	AAAAGGT	ctgattg	cactaaacatcac...	219...	caatctgagacc	tcccaagt
B. Tau	ccctcgga	ggtca	GTGATG	at	TGGT	AAAAGGT	ctgattg	cacgtgaggtcac...	218...	caatctgagacc	tcccagtg
S. Sus	acctcgga	ggtcga	ATGATG	at	TGGT	AAAAGGT	ctgattg	cactcgaatgtcac...	220...	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtca	GTGATG	at	TGGT	AAAAGGT	ctgactg	cacttaacgtcac...	213...	caatctgagacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373\_234184648.1 type=EN

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Figure 3: CS=10.92



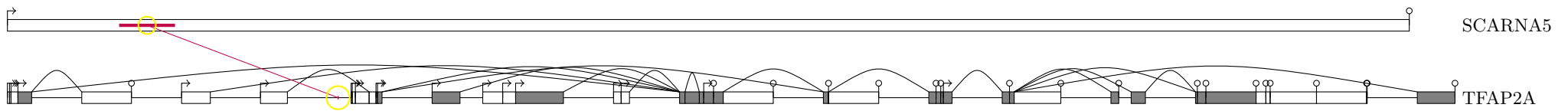
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R. Mac	cttgcaga	ggtcgatgatga...230...	atggtgcatgatctcaagtt	TTCAatCTGAGACC	tcctaagg
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R. Nor	cttacaga	ggtcagtgatga...224...	accgtgcatgatctcaagtt	TTCAatCTGAGACC	tCAGGaca
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C. Por	--ttaaataa	atagctgttaag...3064...	---atthaatttatcttaaac	TTGGTTTCAG	TGAGcaac
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Figure 4: CS=18.2



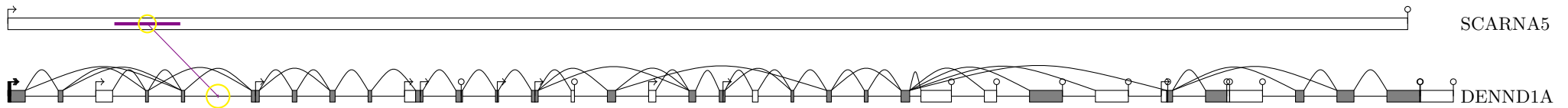
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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M. Mus	tcttcagg	gtacaactt	ttta.. 506..	-----agcaagttag	cggctagaag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 92..	tagaggagatc	tccgagcg			
C. Por	tcttcagg	gtacacttt	tta.. 472..	-----gagtagatct	cggctcggag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 92..	tagaggagatc	tccgagcg			
O. Cun	tcttcagg	atacaactt	ttta.. 501..	-----agcgagttccc	ggcgggag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 92..	tagaggagatc	tccgagcg			
C. Fam	tctttagg	gtacaattt	ttta.. 527..	-----agcaagttc	ggcgtcggag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagactg	.. 92..	tagaggagatc	tccgagcg			
B. Tau	tcttcagg	gtacacttt	ttta.. 487..	---taggagc	gagttcgcgctc	-----	<b>GCAG</b>	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCA</b>	gagcggcggcggcagattg	.. 92..	tagaggagatc	tccgagcg		
E. Cab	tcttcagg	gtacaattt	ttta.. 479..	-----agcaagttc	ggcgtcggag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 126..	tagaggagatc	tccgagcg			
S. Sus	tcttcagg	gtacacttt	ttta.. 497..	-----agcaagttc	ggcgtcggag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 88..	tagaggagatc	tccgagcg			
L. Afr	tcttcagg	gtacaactt	ttta.. 495..	-----ggagaagtt	cggtccgag	-----	<b>AGGCCTTT</b>	<b>TACCT</b>	g <b>GGTCC</b>	gagcggcggcggcagattg	.. 92..	tagaggagatc	tccgagcg			
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Figure 5: CS=10.14



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P. Abe  cctgcaga ggtcgatgatgaTTGGTAAAGGTCTGATTGCActgaatgtcacagtccttt-----..211...caatctgagacc tcctaagg
C. Jac  cttgcaga ggtcgatgatgaTTGGTAAAGGTCTGATTGCActgaatgtcacagtccttt-----..210...caatctgagacc tcctaagg
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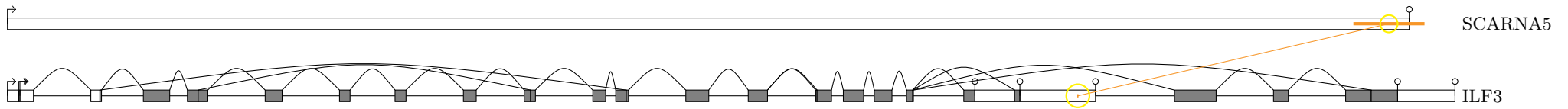
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L. Afr  gtggacag gtagtgtcagat...4894...-----ggttcaacgacttgtcatgaTTAGATaCTTTATCAAgaacgtactgcacattca-ttttccccttggttctgctctgctgcag tctcacag
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Figure 6: CS=13



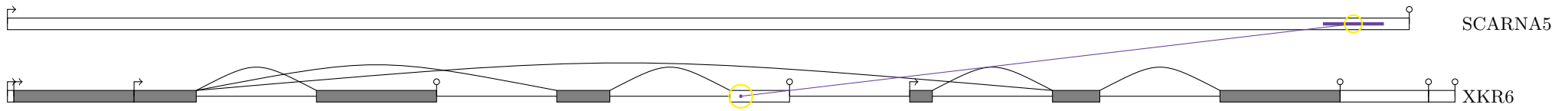
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R. Mac	cttgcaga	ggtc	gatgatga...225...	gtgtgatggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcctaagg
P. Tro	cctgcaga	ggtc	gatgatga...225...	gtgtgatggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcctaagg
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C. Jac	cttgcaga	ggtc	gatgatga...224...	gtgtgacggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcctaagg
M. Mus	cttactga	ggtc	agtgatga...221...	gtgtgacagtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcaggaca
R. Nor	cttacaga	ggtc	agtgatga...219...	gtgtgaccgtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcaggaca
C. Por	tccagaga	ggtc	gatgatga...218...	ctgtgatggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tccactgg
O. Cun	acctcaca	ggtc	gatgatga...221...	gcgtgacagtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcgggagg
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B. Tau	ccctcgga	ggtc	agtgatga...223...	gtgtgatggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcccagtg
E. Cab	ctcctgga	ggtc	gatgatga...225...	gtgtgacggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcctgctt
L. Afr	cacacgga	ggtc	agtgatga...218...	gcacgacggtgcatgatctc	AAGT	TTCA	at	CTGAG	acc	tcctacag
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R. Mac	caaatctg	g	ttgatgccttt...663...	g	ttcccagagg	g	tttgaaca	TTCAGT	GAAACTT	t	ttaaaact	t	ttgattgcatg---	123...	aa	agtaacaagc	c	ctcggcc
P. Tro	caaatctg	g	ttgatgccttt...664...	g	ttcccagagg	g	tttgaaca	TTCAGT	GAAACTT	t	ttaaaact	t	ttgattgcatg---	123...	aa	agtaacaagc	c	ctcggcc
P. Abe	caaatctg	g	ttgatgccttt...669...	g	ttcccagagg	g	tttgaaca	TTCAGT	GAAACTT	t	ttaaaact	t	ttgattgcatg---	123...	aa	agtaacaagc	c	ctcggcc
C. Jac	caaatctg	g	ttgatgccttt...648...	g	ttcccagagg	g	tttgaaca	TTCAGT	GAAACTT	t	ttaaaact	t	ttcattgcatg---	125...	aa	agtaacaagc	c	ctcggcc
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Figure 7: CS=10.92



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P.Abe	cctgcaga	ggtcgatgatga...219...tcatgggtgtgatggtgcat	GATCtCAAGTTTt	caatctgagacc	tcctaagg
C.Jac	cttgcaga	ggtcgatgatga...218...tcatgggtgtgacggtgcat	GATCtCAAGTTTt	caatctgagacc	tcctaagg
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R.Nor	cttacaga	ggtcagtgatga...213...ggatgggtgtgaccgtgcat	GATCtCAAGTTTt	caatctgagacc	tcaggaca
C.Por	tccagaga	ggtcgatgatga...212...aggatgctgtgatggtgcat	GATCtCAAGTTTt	caatctgagacc	tcactg
O.Cun	acctcaca	ggtcgatgatga...215...ggcagcggtgacagtgcat	GATCtCAAGTTTt	caatctgagacc	tcgggagg
C.Fam	cttatgga	ggtcagtgatga...217...gcaggggtgtgatggtgcat	GATCtCAAGTTTt	caatctgagacc	tcctaagt
F.Cat	cctgcgga	ggtcagtgatga...218...ctatgggtgtgatggtgcat	GATCtCAAGTTTt	caatctgagacc	tcaccaagt
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E.Cab	ctctgga	ggtcgatgatga...219...ccctgggtgtgacggtgcat	GATCtCAAGTTTt	caatctgagacc	tcctgct
S.Sus	acctcgga	ggtcgatgatga...219...ccctgggtgtgatggtgcat	GATCtCAAGTTTt	caatctgagacc	tcctaagg
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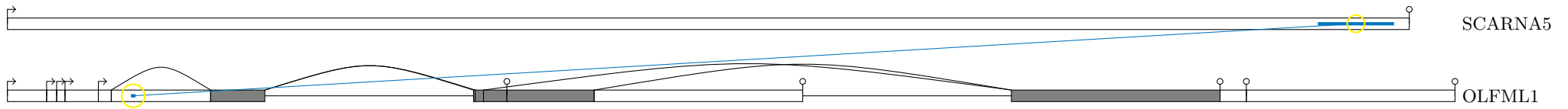
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P.Tro	tttttttag	gtttgcaatTTTTTTTggtgatggcatgttc	AGAAtCTTGGATC	cctaagttc-aatatattgga--...172...	agttatcttttg	aaggtttt
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Figure 8: CS=10.92





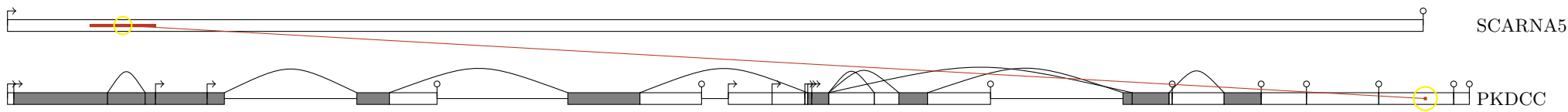
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C.Jac	tgccataa	gtcagctctgcaaggcct-cagggaccaacttccaacagc	TGGACTTGATCA	ccagctggcaactgagcac-...157...	ggtatttgag	gatgatgg
M.Mus	gcaaccaa	gtgaacacgtaaggcctgcagagactggccttgccaacagc	TGGACTTGATCA	ccagcttg-aaactgagatca...142...	ggaagtgtgag	gatgatgg
R.Nor	tgcaccaa	gtgaacaaggcaggcctgcagagaccagccttgccaacagc	TGGACTTGATCA	ccagcttg-aagctgagatca...142...	ggaagtgtgag	gatgatgg
C.Por	tgcaccaa	gtaagcgtgcaaggcctccagggattgcttgccaacagc	TGGACTTGATCA	ccagcttgcaactgagatc-...152...	gtgattgtgag	gatgatgg
O.Cun	tgcaccaa	gttggcctgcaaggcctccagggaccaattccaacagc	TGGACTTGATCA	ccagcttgcaactgagatca...151...	ggaagtctgag	gatgatgg
C.Fam	tagcccaa	gtcgacctgcaaggcctccagggacggccttgccaacagc	TGGACTTGATCA	ccagcttgcaagtgagatc-...141...	ggtggtttgag	gacaatga
F.Cat	taccacac	atcgacctgcaaggcctccagggcggccttgccaacagc	TGGACTTGATCA	ctggccttgcaagtgagatc-...142...	ggtgattcgag	gacaatga
B.Tau	taccocga	gttggcctgcaaggcctccagggac-gacttgccaacagc	TGGACTTGATCA	ccagcttgcaagtgagatc-...143...	ggtggtttgag	gatgatgc
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id=89290 gene=ENSG00000183801 name=OLFML1 segment=chr11.7506868.7507105.1 type=AN

Figure 9: CS=15.12



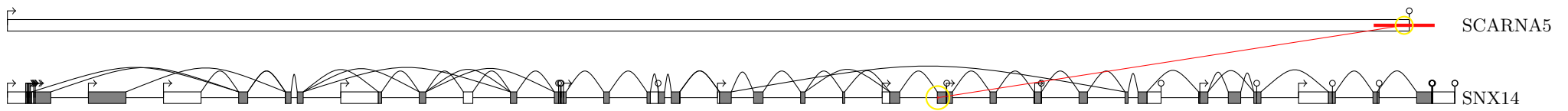
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P. Tro	cctgcaga	ggtcgat	GATGA	ttGGTAAAAGGTCTG	attgcactgaatgtcacagt	-----	..217..	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcgat	GATGA	ttGGTAAAAGGTCTG	attgcactgaatgtcacagt	-----	..217..	caatctgagacc	tcctaagg
C. Jac	cttgcaga	ggtcgat	GATGA	ttGGTAAAAGGTCTG	attgcactgaatgtcacag	-----	..217..	caatctgagacc	tcctaagg
R. Nor	cttacaga	ggtc	AGTGATGA	ttGGTAAAAGGTCTGATTGC	actgaatgtcacagcccctt	..	206..	caatctgagacc	tcaggaca
C. Por	tccagaga	ggtcgat	GATGA	ctGGTAAAAGGTCT	-gatgcaccgaatcacagt	-----	..211..	caatctgagacc	tccactgg
O. Cun	acctcaca	ggtcgat	GATGA	ttGGTAAAAGGTCTG	actgcactgaatgtcacgg	-----	..214..	caatctgagacc	tcgggagg
C. Fam	cttatgga	ggtc	AGTGATGA	ttGGTAAAAGGTCTG	attgcacttaatgtcacagc	-----	..215..	caatctgagacc	tcctaagt
F. Cat	ctgfcgga	ggtc	AGTGATGA	ttGGTAAAAGGTCTG	attgcacttaaacatcacagc	-----	..216..	caatctgagacc	tcccaagt
B. Tau	ccctcggg	ggtc	AGTGATGA	ttGGTAAAAGGTCTG	attgcactgaggtcacagt	-----	..215..	caatctgagacc	tcccagt
E. Cab	ctcctgga	ggtcgat	GATGA	ttGGTAAAAGGTCTG	attgcacttcatgtcacagt	-----	..217..	caatctgagacc	tcctgctt
S. Sus	acctcggg	ggtcgat	GATGA	ttGGTAAAAGGTCTG	attgcactcagatgtcacagt	-----	..217..	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtc	AGTGATGA	ttGGTAAAAGGTCTG	actgcacttaacgtcacagc	-----	..210..	caatctgagacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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P. Tro	tgtgggtg	attctgtac	ctg...124..	-----	acctggggcgggggtggggc	CGGGgCC	-TTTc	TGCCTCATT	tgctttc-atgaaagccgcaa	---..74..	ttgtttat	tttt	gtaaaaa		
P. Abe	tgtgggtg	attctgtac	ctg...124..	-----	acctggggcgggggtggggc	CGGGgCC	-TTTc	TGCCTCATT	tgctttcaatgaaagccgca	---..75..	ttgtttat	tttt	gtaaaaa		
C. Jac	tgtgggtg	attctgtac	ctg...125..	-----	cctggggc-ggggtggggctg	GGGgCC	-TTTc	TGCCTCATT	tgctttcaatgaaagccgca	---..75..	ttgtttat	tttt	gtaaaaa		
R. Nor	tgtgaggg	agccagcc	gtg...113..	agccagga	acctgggggtgggggtg	TAGgg	TGGGgCC	-TTTc	TGCCTCATT	TGCT	ttcagtgaaagccacaaagc	..70..	ttgtttat	tttt	gtaaaaa
C. Por	tgtaggtg	agccggtt	ccc...130..	-----	ctgggggtgggggtgaggctg	GGGgCC	-TTTc	TGCCTCATT	tgctttcaatgaaagccaca	---..74..	ttgtttat	tttt	gtaaaaa		
O. Cun	tgtgggca	atcctggac	cta...125..	-----	caggacctggggcgggggtg	GGGgCC	-TTTc	TGCCTCATT	tgctttcagtgaaagccgca	---..76..	ttgtttat	tttt	gtaaaaa		
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F. Cat	tgtgggaa	actccgtac	ctg...126..	-----	acctgggggtgggggtggggc	CGGGgCC	-TTTc	TGCCTCATT	TGCT	ttcagtgaaagccgccaagc	..71..	atgtttat	tttt	gtaaaaa	
B. Tau	tgtgggag	attctgtac	cccc...122..	-----	acctggggcgggggtggggc	CGGGgCC	-TTTc	TGCCTCATT	TGCT	ttcagtgaaagccgcaaagc	..71..	atgtttat	tttt	gtaaaaa	
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S. Sus	tgtgggag	aatctgtac	ctg...120..	-----	acctgggggtgggggtggggc	CGGGgCC	-TTTc	TGCCTCATT	tgctttcagtgaaagccgca	---..75..	atgtttat	tttt	gtaaaaa		
L. Afr	cgtgggtg	actctggc	ctc...105..	-----	acctggggcgggggtggggc	CAGGgCC	-TTTc	TGCCTCATT	TGCT	ttcagtgaaagcagctcggc	..70..	ttgtttat	tttt	gtaaaaa	
	** *	* *			*****	*****	*****	*****	*****	*	*****	*****	*****		

id=707208 gene=ENSG00000162878 name=PKDCC segment=chr2.42285327.42285609.1 type=EN VIEW

Figure 10: CS=10.14



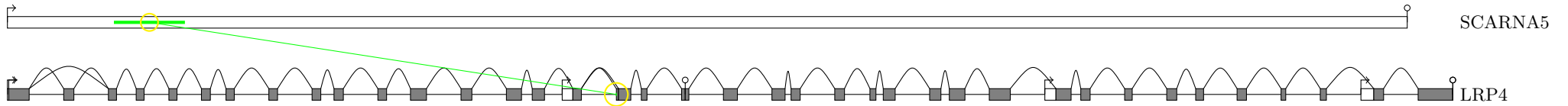
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R. Mac	cttgca	ggtcgatgatga... 228...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga... 228...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga... 228...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
M. Mus	cttactga	ggtcagtgatga... 224...	tgacagtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga... 222...	tgaccgtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcaggaca
C. Por	tccagaga	ggtcgatgatga... 221...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tccactgg
O. Cun	acctcaca	ggtcgatgatga... 224...	tgacagtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga... 226...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga... 227...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcccaagt
B. Tau	ccctcgga	ggtcagtgatga... 226...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcaccagt
E. Cab	ctcctgga	ggtcgatgatga... 228...	tgacggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga... 228...	tgatggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaggt
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	atgatttt	gtaagtaaaatg... 4950...	----aaattatcctgtaatttt	TTTCcAG	ATTGAAGa
P. Tro	atgatttt	gtaagtaaaatg... 2964...	----aaattcatcctgtaatttt	TTTCcAG	ATTGAAGa
P. Abe	atgatttt	gtaagtaaaatg... 2927...	----aaattcatcctgtaatttt	TTTCcAG	ATTGAAGa
M. Mus	atgacttt	gtaagtgaaaac... 3631...	---taagttcaccttgataaacat	TTTCcAG	ATTGAAGa
R. Nor	atgacttt	gtgagtgagaat... 4950...	---tgagttcagcatgtaaacct	TTTCcAG	ATTGAAGa
C. Por	atgacttt	gtaagtaaaagt... 4079...	----aatttatgctgtaacttttt	TTTCcAG	ATTGAAGa
O. Cun	atgacttc	gtaagtagcaat... 4950...	tactaagttcatcctg---tttt	TTTCtAG	ATTGAAGa
C. Fam	atgacttt	gtaagtaaaatt... 4950...	----taatttttcctaatgatttt	TTTCcAG	ATTGAAGa
F. Cat	atgacttt	gtaagtaaaaat... 4950...	----attttttctgatgattttt	TTTCtAG	ATTGAAGa
B. Tau	acgacttt	gtaagtaagaat... 2040...	----ttttttctgattccttttc	TTTCAG	ATTGAAGa
E. Cab	atgacttt	gtaagtaaaaat... 4707...	----aattttcctgatgattttt	TTTCAG	ATTGAAGa
S. Sus	atgatttt	gtaagtaaaaat... 4950...	---taaagttttctgatgattt	TTTCcAG	ATTGAAGa
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id=631085 gene=ENSG00000135317 name=SNX14 segment=chr6.86243519.86246509.1 type=IN

Figure 11: CS=22.75



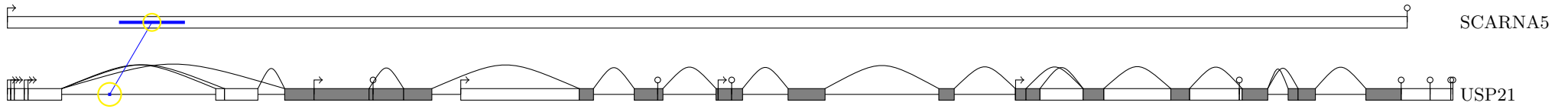
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R. Mac	cttgcaga	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	215...	caatctgagacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagcc...	212...	caatctgagacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagcc...	210...	caatctgagacc	tcaggaca
C. Por	tccagaga	ggtcgatgatga	CTGGTAAAGGt	CTGA	tgcaccgaatgtcacagtc...	209...	caatctgagacc	tcactgg
O. Cun	acctcaca	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	212...	caatctgagacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagcc...	214...	caatctgagacc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagcc...	215...	caatctgagacc	tcctcaagt
B. Tau	ccctcggg	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	214...	caatctgagacc	tcctcagt
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S. Sus	acctcggg	ggtcgatgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga	TTGGTAAAGGt	CTGA	ttgcactgaatgtcacagcc...	209...	caatctgagacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	tgcccaga	gtaagtgggtct...	2888...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
P. Tro	tgcccaga	gtaagtgggtct...	2738...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
P. Abe	tgcccaga	gtaagtgtgtct...	2909...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
C. Jac	tgcccaga	gtaagtgggtct...	3118...	agagcattaa---aagaccctt	TCGGCCTTg	ATCAG	gtcttgac
M. Mus	tgcccaga	gtaagtgggttt...	3726...	---gcattaaaaggagaccctt	TCGGCCTTg	ATCAG	gtcttgac
R. Nor	tgcccaga	gtaagtgggttt...	3888...	---gcattaaaaggagaccctt	TCGGCCTTg	ATCAG	gtcttgac
C. Por	tgctcaga	gtaagtgggtat...	1953...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
O. Cun	tgcccaga	gtaagtgggcct...	3892...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
C. Fam	tgctcaga	gtaagtgggtct...	1612...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
F. Cat	tgcccaga	gtaagtgggtct...	1594...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
B. Tau	tgcccaga	gtaagtggccttt...	1825...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
E. Cab	tgcccaga	gtaagtgggtct...	1633...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
S. Sus	tgcccaga	gtaagtgggtct...	2101...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
L. Afr	tgcccaga	gtaagtggatcc...	1945...	---gcattaaaagaagaccctt	TCGGCCTTg	ATCAG	gtcttgac
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id=810987 gene=ENSG00000134569 name=LRP4 segment=chr11.46908085.46910961.-1 type=IN

Figure 12: CS=13.5



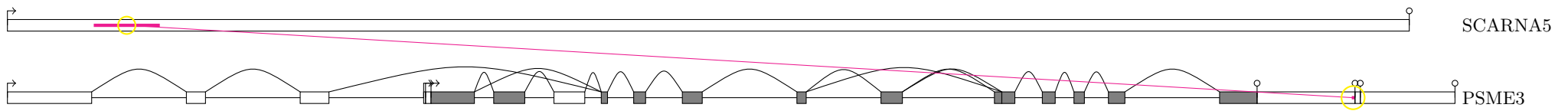
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R. Mac	cttgcaga	ggtcgatgatgatt	GGTAAAAGGTCTGATTG	caCTGA	atgtcacagtcctttgtt...	207...	caatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatgatt	GGTAAAAGGTCTGATTG	caCTGA	atgtcacagtcctttgtt...	207...	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatgatt	GGTAAAAGGTCTGATTG	caCTGA	atgtcacagtcctttgtt...	207...	caatctgagacc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatgatt	GGTAAAAGGTCTGATTGC	actgaatgtcacagtcctt----	211...	caatctgagacc	tcctaagg	
M. Mus	cttactga	ggtcagtgatgatt	GGTAAAAGGTCTGATTGC	actgaatgtcacagccctt----	208...	caatctgagacc	tcaggaca	
R. Nor	cttacaga	ggtcagtgatgatt	GGTAAAAGGTCTGATTGC	actgaatgtcacagccctt----	206...	caatctgagacc	tcaggaca	
C. Por	tccagaga	ggtcgatgatgact	GGTAAAAGGTCTGA	-tgcaccgaatcacagtc-----	209...	caatctgagacc	tccactgg	
O. Cun	acctcaca	ggtcgatgatgatt	GGTAAAAGGTCTGACTGC	actgaatgtcacagtcctt----	208...	caatctgagacc	tcgggagg	
C. Fam	cttatgga	ggtcagtgatgatt	GGTAAAAGGTCTGATTGC	acttaatgtcacagccctt----	210...	caatctgagacc	tcctaagt	
F. Cat	cctgcgga	ggtcagtgatgatt	GGTAAAAGGTCTGATTGC	actaaatcacagccctt----	211...	caatctgagacc	tcccaagt	
B. Tau	ccctcggga	ggtcagtgatgatt	GGTAAAAGGTCTGATTGC	acgtgaggtcacagtcctt----	210...	caatctgagacc	tcccagtg	
E. Cab	ctcctgga	ggtcgatgatgatt	GGTAAAAGGTCTGATTGC	acttcatgtcacagtcctt----	212...	caatctgagacc	tcctgctt	
S. Sus	acctcggga	ggtcgatgatgatt	GGTAAAAGGTCTGATTGC	actcagtcacagtcctt----	212...	caatctgagacc	tcctaggt	
L. Afr	cacacgga	ggtcagtgatgatt	GGTAAAAGGTCTGA	actgcactaacgtcacagcc-----	209...	caatctgagacc	tcctacag	
		*	****	*****	*****	*****	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373\_234184648.1 type=EN

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R. Mac	ggggacag	gtacgggccggg...	145...	ccgcccgatctcgtagccaa	TCAGCAGTCTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	417...	tttactcaatag	atactaag
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M. Mus	ggggacag	gtatgggccggg...	152...	---ccggaccccgtagccaatca	GCAGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	390...	tttattcaagga	gtactaag
R. Nor	ggggacag	gtatgggccggg...	151...	---ccggaccccgtagccaatca	GCAGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	396...	tttattcaagga	gtactaag
C. Por	ggggacag	gtatgagccggg...	160...	-----cctgtagccaatcagctgcc	TCGGCCTTT	TGCC	ctcagagggggcggaccgg...	411...	tttacttgagt	atactaag
O. Cun	ggggacag	gtacgggtccgg...	152...	---ccggaccccgtagccaatca	GCGGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	424...	cctagtgcaggg	atactaag
C. Fam	ggggacag	gtacgggccggg...	145...	---gccgaccccgtagccaatca	GCGGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	392...	tttctcgtg	atactaag
F. Cat	ggggacag	gtacgggccggg...	145...	---ccggaccccgtagccaatca	GCGGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	422...	cctactcaacgg	atactaag
B. Tau	ggggacag	gtacgggtccgg...	144...	---ctggaccccgtagccaatca	GCAGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	434...	tttactcaatgg	ttactaag
E. Cab	ggggacag	gtacaagccggg...	142...	---ctggaccccgtagccaatca	GCGGccTCGGCCTTT	TGCC	ctcagagggggcggaccgg...	429...	tttactcaatgg	acactaag
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id=89653 gene=ENSG00000143258 name=USP21 segment=chr1.161129469\_161130118.1 type=IN

Figure 13: CS=16.2



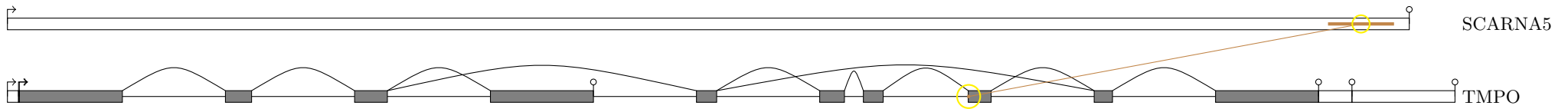
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R. Mac	cttgcaga	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...221...	caatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...221...	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...221...	caatctgagacc	tcctaagg
M. Mus	cttactga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...217...	caatctgagacc	tcaggaca
R. Nor	cttacaga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...215...	caatctgagacc	tcaggaca
O. Cun	acctcaca	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...217...	caatctgagacc	tcgggagg
C. Fam	cttatgga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...219...	caatctgagacc	tcctaagt
F. Cat	cctgcgga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...220...	caatctgagacc	tcaccaagt
B. Tau	ccctcgga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...219...	caatctgagacc	tcaccagt
E. Cab	ctcctgga	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...221...	caatctgagacc	tcctgctt
S. Sus	acctcgga	ggtcgatga	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...221...	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtcagtg	TGATTGGTAAAAGG	tctgattg	cactgaatgtca...214...	caatctgagacc	tcctacag
			*****				

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	cctcctcg	tttttagttaga...1347...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
P. Tro	cctcctcg	tttttagttaga...1458...	cgtggatc	ataatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
P. Abe	cctcctcg	tttttagttaga...1460...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
M. Mus	cctcctcg	tttttagttaga...1454...	cttggattg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
R. Nor	cctcctcg	tttttagttaga...1447...	cttggattg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
O. Cun	cctcctcg	tttttagttaga...1426...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
C. Fam	tctcctcg	tttttagttaga...1494...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaacgc
F. Cat	tctcctcg	tttttagttaga...3448...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatgc
B. Tau	tctcctcg	tttttagttaga...1511...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
E. Cab	tctcctcg	tttttagttaga...1466...	ctcggatc	ataatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
S. Sus	tctcctcg	tttttagttaga...1419...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaaaatac
L. Afr	cgctcctg	tttttagttaga...1461...	cttggatcg	taaatgt	TCTTTTACCA	GTCA	agaaattatt	aaattgca
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Figure 14: CS=10.14



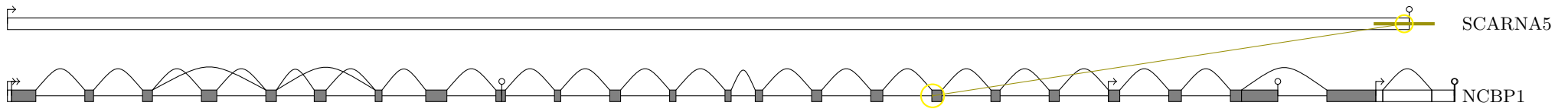
H. Sap	cctgcaga	ggtc	gcatgatga...	217...	agtc	atg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagg
R. Mac	cttgcaga	ggtc	gcatgatga...	217...	agtc	atg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagg
P. Tro	cctgcaga	ggtc	gcatgatga...	217...	agtc	atg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagg
P. Abe	cctgcaga	ggtc	gcatgatga...	217...	agtc	atg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagg
C. Jac	cttgcaga	ggtc	gcatgatga...	216...	agtc	atg--ggtgtgacggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagg
M. Mus	cttactga	ggtc	agtgatga...	216...	---	gatg--ggtgtgacagtgc	ATCTCAAGtt	TTCAA	atctgagacc	tcaggaca
R. Nor	cttacaga	ggtc	agtgatga...	214...	---	gatg--ggtgtgaccgtgc	ATCTCAAGtt	TTCAA	atctgagacc	tcaggaca
C. Por	tccagaga	ggtc	gcatgatga...	210...	---	gcaggatgctgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tccactgg
O. Cun	acctcaca	ggtc	gcatgatga...	213...	---	cgggcac--ggcgtgacagtgc	GTGATCTCAAGtt	TTCAA	atctgagacc	tcgggagg
C. Fam	cttatgga	ggtc	agtgatga...	215...	---	cagcagg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaagt
B. Tau	ccctcggg	ggtc	agtgatga...	215...	---	agcctcg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcccagtg
E. Cab	ctcctgga	ggtc	gcatgatga...	217...	---	agccctg--ggtgtgacggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctgctt
S. Sus	acctcggg	ggtc	gcatgatga...	217...	---	agccctg--ggtgtgatggtgc	ATGATCTCAAGtt	TTCAA	atctgagacc	tcctaggt
L. Afr	cacacgga	ggtc	agtgatga...	210...	---	tcaggcgggcacgacggtgc	GTGATCTCAAGtt	TTCAA	atctgagacc	tcctacag
		*	****	*****		*	**	****	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	aatccta	gtaaatatg	ttt...360...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
P. Tro	aatccta	gtaaatatg	ttt...368...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
P. Abe	aatccta	gtaaatatg	ttt...373...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
C. Jac	aatccta	gtaaatatg	ttt...357...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
M. Mus	aatccta	gtaaatatg	tct...300...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTgg	ccaa
R. Nor	actccta	gtaaatatg	ttt...323...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTgg	ccaa
C. Por	aatccta	gtaaatatg	ttt...235...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
O. Cun	acaccta	gtaaatatg	ttt...354...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
C. Fam	aaaccta	gtaaatatg	ttt...387...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
B. Tau	aaaccta	gtaaatatg	ttt...371...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
E. Cab	aaaccta	gtaaatatg	ttt...375...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
S. Sus	aaaccta	gtaaatatg	ttt...355...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
L. Afr	aaaccta	gtaaatatg	ttt...393...	taattctg	agtctgaataat	TTGAA	CTTGgcAG	GTTGT	caa
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id=227195 gene=ENSG00000120802 name=TMPO segment=chr12.98938316.98938728.1 type=IN

Figure 15: CS=10.92



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R. Mac	cttgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga...227...tgacggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...224...tgacagtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...222...tgaccgtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...221...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcactgg
O. Cun	acctcaca	ggtcgatgatga...224...tgacagtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...226...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga...227...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcceaagt
E. Cab	ctcctgga	ggtcgatgatga...228...tgacggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...221...cgacggtgcatgatctcaag	TTTTCA	TCTGAGA	cc	tcctacag
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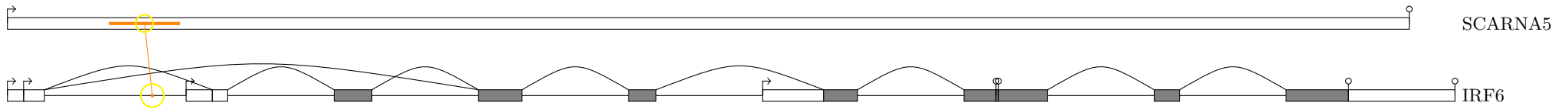
id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	tgatgacg	gtaagtggaatt...962...ctattttactataaaaatatt---	TTCAG	ATGAAGG	a
P. Tro	tgacgacg	gtaagtggaatt...952...ctgttttactataaaaatatt---	TTCAG	ATGAAGG	a
P. Abe	tgatgacg	gtaagtggaatt...958...ctgttttactataaaaatatt---	TTCAG	ATGAAGG	a
C. Jac	tgatgacg	gtaagggaattt...923...ctgttttactgtaaaaatatt---	TTCAG	ATGAAGG	a
M. Mus	tgatgatg	gtgagagaatga...1411...aatcttactataaaaatatt---	TTCAG	ATGAAGG	g
R. Nor	tgatgacg	gtgagagaacga...1312...---cctaacataaaaaaattttt	TTCAG	ATGAAGG	g
C. Por	tgacgatg	gtaagggaactg...1037...tattattactgtgaaatatt---	TTCAG	ATGAAGG	a
O. Cun	cgatgatg	gtaagggaattc...1770...ttcacttgctatgaaatatt---	TTCAG	ATGAAGG	a
C. Fam	tgatgatg	gtaagagaatta...1445...ctgtcttactgtggaatatt---	TTCAG	ATGAAGG	g
F. Cat	tgatgacg	gtaagggaaccac...1135...ctgtcttactgtggaatatt---	TTCAG	ATGAAGG	a
E. Cab	tgatgacg	gtaaggcaattt...1344...ttatcttactgtgaaatatt---	TTCAG	ATGAAGG	g
S. Sus	cgatgatg	gtaagagaatta...932...ctcttactatggattatt---	TTCAG	ATGAAGG	a
L. Afr	tgacgacg	gtaagagaatta...1169...ctgtcttactgtggaatatt---	TTCAG	ATGAAGG	a
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id=550597 gene=ENSG00000136937 name=NCBP1 segment=chr9.100423351.100424323.1 type=IN

Figure 16: CS=19.74





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R. Mac cttgcagaggtcgatgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagtcct-----...213...caatctgagacctcctaagg
P. Tro cctgcagaggtcgatgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagtcct-----...213...caatctgagacctcctaagg
P. Abe cctgcagaggtcgatgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagtcct-----...213...caatctgagacctcctaagg
C. Jac cttgcagaggtcgatgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagtcct-----...212...caatctgagacctcctaagg
M. Mus cttactgaggtcagtgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagcccct-----...209...caatctgagacctcaggaca
R. Nor cttacagaggtcagtgatgaTTGGTAAAagGTCTGATTGcactgaatgtcacagcccct-----...207...caatctgagacctcaggaca
O. Cun acctcacaggtcgatgatgaTTGGTAAAagGTCTGactgactgaatgtcacaggt-----...213...caatctgagacctcgggagg
C. Fam cttatggaggtcagtgatgaTTGGTAAAagGTCTGATTGcacttaatgtcacagcccc-----...211...caatctgagacctcctaagt
F. Cat cctgcggaggtcagtgatgaTTGGTAAAagGTCTGATTGcactaacaatcacagcccct-----...212...caatctgagacctccaagt
B. Tau ccctcggaggtcagtgatgaTTGGTAAAagGTCTGATTGcacgtgaggtcacagtcct-----...211...caatctgagacctcccagt
E. Cab ctctcggaggtcgatgatgaTTGGTAAAagGTCTGATTGcaCTTCATGtcacagtccttccttgccc...204...caatctgagacctcctgctt
S. Sus acctcggaggtcgatgatgaTTGGTAAAagGTCTGATTGcactcagtgacagtcct-----...213...caatctgagacctcctaggt
L. Afr cacacggaggtcagtgatgaTTGGTAAAagGTCTGACTGcacttaacgtcacagcccct-----...206...caatctgagacctcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

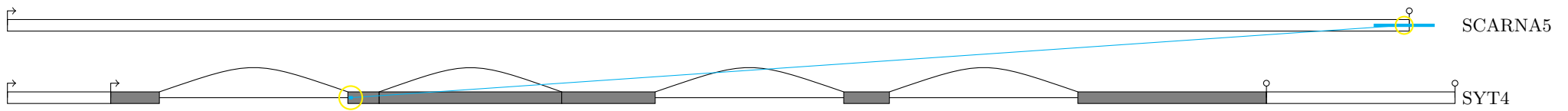
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P. Tro gagcaaaggtgggtacgcca...3574...-----ccatgtatttttacaagaatCAATtgCAGACTTTACCCAGgct-g---gctcctgcaaccaatc...129...agggcttct--gagctttacca
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M. Mus gaggccaggtggggacgccc...3132...-----gtccatgttttcaggagaatCAATcgCAGACTTTACCCAGcct-g---gcccggcaaccagtt...83...agggcttcttagagttttct--
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C. Fam gagaagaggtgaggacgcta...3978...-----cgggtatttttatgagaatCAATtgCAGACTTTACCCAGgcc-g---gctcctgcaaccaatg...126...agggctcct--gaactttcca
F. Cat gagaagaggtgaggacgcta...4777...-----cgtgtatttttatgagaatCAATcgCAGACTTTACCCAGgcc-a---gctcctgcaaccaaag...128...agggctcct--ggactttctg
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E. Cab gaggaaaggtggggacgcca...3535...ctgctatgccctgtatTTATGAGGatCAATtgCAGACTTTACCCAGgct-g---gctcctgcaaccaatc...126...agggcttct--gagctttacta
S. Sus gagaagaggtggggacgcca...3823...-----ccttgtgttttatgagaatCAATtgCAGACTTTACCCAGgct-g---cctcctgcaaccaatc...126...tgggcttct--gagctttacca
L. Afr gaggaaaggtgaggacgcca...4014...-----ttgtctgtttttatgagactCAGTtgCAGACTTTACCCAGgccgg---gctcctgcaaccaatc...100...agggcttct--gagctttacag
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id=204561 gene=ENSG00000117595 name=IRF6 segment=chr1.209975512.209979291.-1 type=I5

Figure 17: CS=14.95



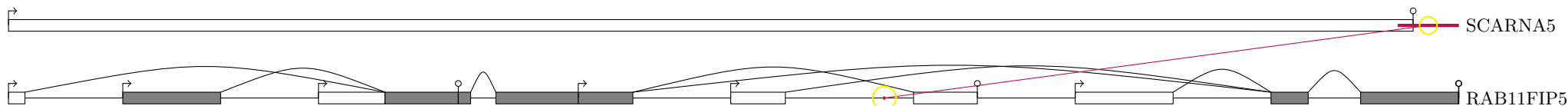
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R.Mac	cttgcaga	ggtcgcgatgatga...229...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcctaagg
P.Tro	cctgcaga	ggtcgcgatgatga...229...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcctaagg
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M.Mus	cttactga	ggtcagtgatga...225...gacagtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcaggaca
R.Nor	cttacaga	ggtcagtgatga...223...gaccgtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcaggaca
C.Por	tcacaga	ggtcgcgatgatga...222...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcactgg
O.Cun	acctcaca	ggtcgcgatgatga...225...gacagtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcgggagg
C.Fam	cttatgga	ggtcagtgatga...227...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcctaagt
F.Cat	cctgcgga	ggtcagtgatga...228...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcaccaagt
B.Tau	ccctcgga	ggtcagtgatga...227...gatggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcaccagt
L.Afr	cacacgga	ggtcagtgatga...222...gacggtgcatgatctcaagt	TTTCAaTCTGAGAcc	tcctacag
	*	**** * * * * *	** **** * * * * * * * * * * * * * * * * * *	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R.Mac	agaatttg	gtaagcaagtta...2768...----atattattggtcatttgatt-	TTTCAG	ATGAAA	tc
P.Tro	agaatttg	gtaagcaagtta...2841...----atattattggtcatttgatt-	TTTCAG	ATGAAA	tc
P.Abe	agaatttg	gtaagcaagtta...3130...----atattattggtcatttgatt-	TTTCAG	ATGAAA	tc
C.Jac	agaatttg	gtaagcaagtta...2752...----atattattggtcatttgatt-	TTTCAG	ATGAAA	tc
M.Mus	ggaattcg	gtgagcaagttg...2826...atgtatgccattggtcaatt-	GGTTTTTCAG	ATGAAA	tt
R.Nor	ggaattcg	gtgagcaagttg...2766...atgtatgccattggtcaatt-	GGTTTTTCAG	ATGAAA	tt
C.Por	agaatttg	gtaagcaactta...2672...----atgttactggtcacttgatt-	TTTCAG	ATGAAA	tc
O.Cun	agaatttg	gtaagcaacttc...2936...----gt-ttgccgatcatttgatt	TTTCAG	ATGAAA	tc
C.Fam	agaatttg	gtaagcaagtta...3097...----atgttattggtcatttgatt-	TTTCAG	ATGAAA	tc
F.Cat	agaatttg	gtaagcaagtta...1773...----atgttattggtcatttgatt-	TTTCAG	ATGAAA	tc
B.Tau	agaatttg	gtaagcaagtta...2736...----atgttattggtcatttgatt-	TTTCAG	ATGAAA	tt
L.Afr	agaatttg	gtaagcgagttc...2868...----gtattattggtcatttcatt-	TTTCAG	ATGAAA	tc
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id=416078 gene=ENSG00000132872 name=SYT4 segment=chr18.40854360.40857212.-1 type=IN

Figure 18: CS=16.25



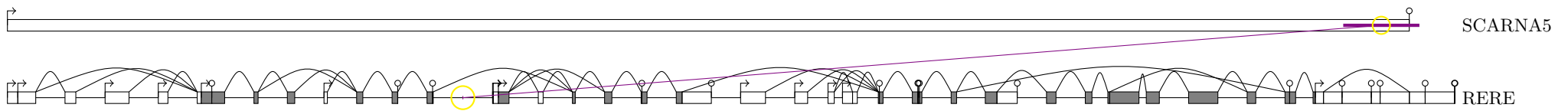
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P. Tro	cctgcaga	ggtcgatgatga...233...	gtgcatgatctcaagttttc	AACTGAGaCC	TCCT	-----aagg
P. Abe	cctgcaga	ggtcgatgatga...233...	gtgcatgatctcaagttttc	AACTGAGaCC	TCCT	-----aagg
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C. Fam	cttatgga	ggtcagtgatga...231...	gtgcatgatctcaagttttc	AACTGAGaCC	TCCT	-----aagt
F. Cat	cctgcgga	ggtcagtgatga...232...	gtgcatgatctcaagttttc	AACTGAGaCC	TCC	-----caagt
B. Tau	ccctcgga	ggtcagtgatga...231...	gtgcatgatctcaagttttc	AACTGAGaCC	TCC	-----cagtg
E. Cab	ctcctgga	ggtcgatgatga...233...	gtgcatgatctcaagttttc	AACTGAGaCC	TCCTG	ctt-----
L. Afr	cacacgga	ggtcagtgatga...226...	gtgcatgatctcaagttttc	AACTGAGaCC	TCCT	-----acag
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Figure 19: CS=10.14



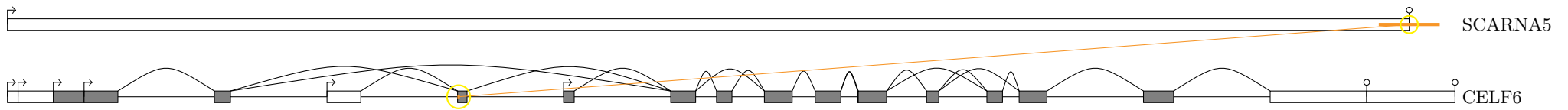
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M.Mus	cttactga	ggtcagtgatga...219...gggtgtgacagtgcatgac	TCAAgt	TTTCAATCTG	agacc	tcaggaca
R.Nor	cttacaga	ggtcagtgatga...217...gggtgtgaccgtgcatgac	TCAAgt	TTTCAATCTG	agacc	tcaggaca
C.Por	tccagaga	ggtcgatgatga...216...tgctgtgatggtgcatgac	TCAAgt	TTTCAATCTG	agacc	tccactgg
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E.Cab	ctcctgga	ggtcagtgatga...223...gggtgtgacggtgcatgac	TCAAgt	TTTCAATCTG	agacc	tcctgctt
L.Afr	cacacgga	ggtcagtgatga...216...gggcacgacggtgcatgac	TCAAgt	TTTCAATCTG	agacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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P.Tro	gagacaag	gtaagtgagtca...4948...ggctttatttacggaaacag	CAGGg	TTGA	GATTGA	tt
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R.Nor	gagacaag	gtaagtcacttc...4948...ggctttatttacggaaacag	CAGGg	TTGA	GATTGA	tt
C.Por	gagacaag	gtaagtgagtca...4948...ggctttatttacggaaacag	CAGGg	TTGA	GATTGA	tt
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Figure 20: CS=11.7



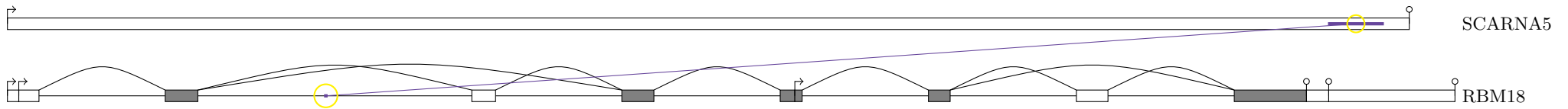
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M. Mus	cttactga	ggtcagtgatga...	226...	acagtgcgatgatctcaagtt	TTCAaTCTGAGAC	c	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...	224...	accgtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcaggaca
C. Por	tccagaga	ggtcgatgatga...	223...	atggtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcactgg
O. Cun	acctcaca	ggtcgatgatga...	226...	acagtgcgatgatctcaagtt	TTCAaTCTGAGAC	c	tcggggagg
C. Fam	cttatgga	ggtcagtgatga...	228...	atggtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcctaagt
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B. Tau	ccctcgga	ggtcagtgatga...	228...	atggtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcaccagt
E. Cab	ctcctgga	ggtcgatgatga...	230...	acggtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...	230...	atggtgcatgatctcaagtt	TTCAaTCTGAGAC	c	tcctaggt
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	agaggaag	gtgagatgggga...	1298...	aatgggtgtgttggtccgat	GTCTttCAG	ATGAAAtcg
P. Tro	agaggaag	gtgagatgggga...	1305...	aatgggtgtgttggtccgat	GTCTttCAG	ATGAAAtcg
P. Abe	agaggaag	gtgagatgggga...	1297...	aatgggtgtgttggtccaat	GTCTttCAG	ATGAAAtcg
C. Jac	agaggaag	gtgagatgggga...	1294...	aatgggtgtgttggtccgat	GTCTttCAG	ATGAAAtcg
M. Mus	agaggaag	gtgagatgggga...	1074...	aatgggtgtgttggtccgat	GTCTttCAG	ATGAAAtcg
R. Nor	agaggaag	gtgagatgggga...	1081...	aatgggtgtgttggtccgat	GTCTttCAG	ATGAAAtcg
C. Por	aaaggaag	gtgagatggggt...	965...	agcgcgtgtgttggtccaat	GTCTttCAG	ATGAAAtcg
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Figure 21: CS=17.5



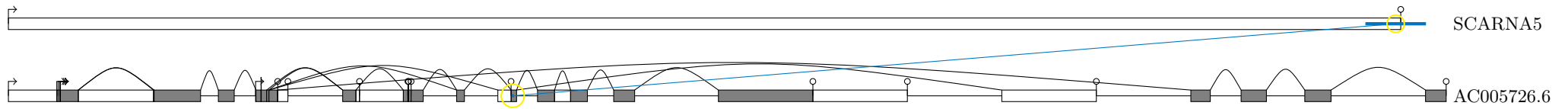
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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Figure 22: CS=10.92



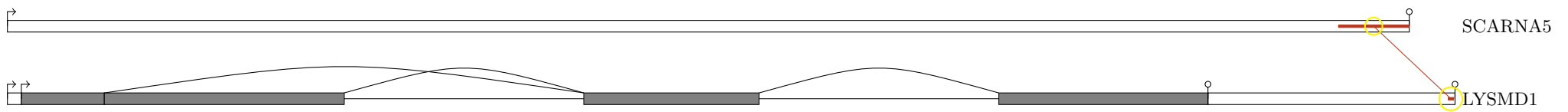
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P. Tro	cctgcaga	ggtcgatgatga...229...gatggtgcatgatctcaagt	TTTCaATCTGAGA	--cc	tcctaagg
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P. Tro	accttcag	ctggggtgtata-...33...-----attacttctcacctgtgatc	TTTCa	GATgGAGa
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Figure 23: CS=12.6



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P. Tro	cctgcaga	ggtcgatgatga...222...tgggtgtgatggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcctaagg				
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C. Jac	cttgcaga	ggtcgatgatga...221...tgggtgtgacggtgcatgat	CTCAaGTTTtcAATCTG	gagacc	tcctaagg				
M. Mus	cttactga	ggtcagtgatga...218...tgggtgtgacagtgcatgat	CTCAaGTTTtcAATCTG	gagacc	tcaggaca				
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C. Por	tccagaga	ggtcgatgatga...215...atgctgtgatggtgcatgat	CTCAaGTTTtcAATCTG	gagacc	tccactgg				
C. Fam	cttatgga	ggtcagtgatga...220...ggggtgtgatggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcctaagt				
F. Cat	cctgcgga	ggtcagtgatga...221...tgggtgtgatggtgcatgat	CTCAaGTTTtcAATCTG	gagacc	tcccaagt				
B. Tau	ccctcgga	ggtcagtgatga...220...cgggtgtgatggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcccagtg				
E. Cab	ctcctgga	ggtcgatgatga...222...tgggtgtgacggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcctgctt				
S. Sus	acctcgga	ggtcgatgatga...222...tgggtgtgatggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcctaggt				
L. Afr	cacacgga	ggtcagtgatga...215...cgggcacgacggtgcatgat	CTCAAGTTTtcAATCTG	gagacc	tcctacag				
	**	****	*****	*	**	****	*****	*****	**

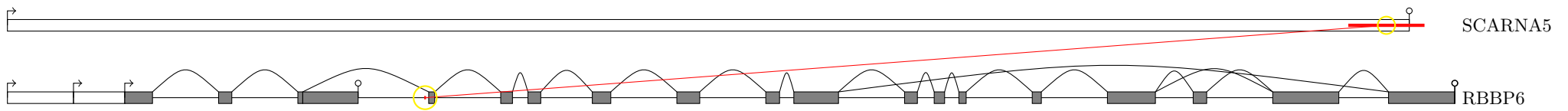
id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	cattccct	ggccttagaaca...778...ataaggtatacgaagctgga	CAGATTAAAACaTTGAG	ccctgtgca	tattctag				
P. Tro	ctttccct	ggccttagaaca...788...ataaggtatatacgaagctgga	CAGATTAAAACaTTGAG	ccctgtgca	tattttag				
P. Abe	ctttccct	ggccttagaaca...778...ataaggtatacgaagctgga	CAGATTAAAACaTTGAG	ccctgtgca	tattttag				
C. Jac	cattccct	ggccttaggaca...740...-taaggtgtaagcagctggag	AGATTAAAACacTGAG	ccctgtgca	cattttag				
M. Mus	cattccct	ggccttagagca...667...-gcctgagtatggagctcgag	AGATTAAAACcGAG	ccctgtgca	tgctttag				
R. Nor	cattccct	ggccttacacag...565...-gcctgagtgaggagcttgag	AGATTAAAACagTGAG	ccctgtgca	tgctttag				
C. Por	tggttttt	ggccttagagca...679...cgaaggtgt-agcagctggag	AGATTAAAACacTGAG	ccctgacca	tgctttag				
C. Fam	cattccct	ggccttagagca...781...-gaaggtataagaagctggag	AGATTAAAACgTTGAG	ccctgtgca	tgctttag				
F. Cat	ctttccct	ggccttagaaca...771...-taaggtgtaagaagctggag	AGATTAAAACacTGAG	ccctgtgca	tgctttag				
B. Tau	gattccct	ggccttagagca...760...-taagatataaaaagctggag	AGATTAAAACaTTGAG	ccctgtgca	tgctttaa				
E. Cab	cattccct	ggccttagagca...758...-taagatgtaagaagctggag	AGATTAAAACaTTGAG	ccctgtgca	tgctttag				
S. Sus	cattccct	ggccttagagca...762...-aaagatataagaagctggag	AGATTAAAACaTTGAG	ccctgtgca	tgctttgaa				
L. Afr	cattccct	ggccttagagca...742...-caaggtgtgagaagctggag	AGATTAAAACaTTGAG	ccctgtgca	tgctttag				
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Figure 24: CS=16.1





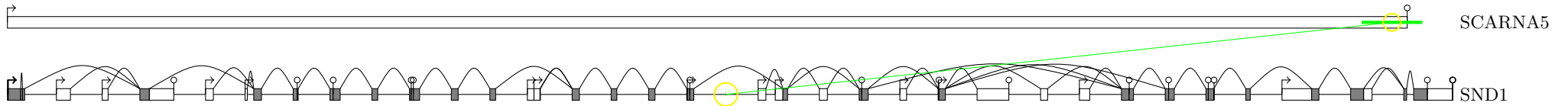
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R. Mac	cttgacaga	ggtcgatgatga...223...gggtgtgatggtgcatgac	TCAAGtTTTCAAtCTGAGA	cc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...223...gggtgtgatggtgcatgac	TCAAGtTTTCAAtCTGAGA	cc	tcctaagg
C. Jac	cttgacaga	ggtcgatgatga...222...gggtgtgacggtgcatgac	TCAAGtTTTCAAtCTGAGA	cc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...219...gggtgtgacagtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...217...gggtgtgaccgtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...216...tgctgtgatggtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tccactgg
O. Cun	acctcaca	ggtcgatgatga...219...cggcgtgacagtgcgtgac	TCAAGtTTTCAatCTGAGA	cc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...221...gggtgtgatggtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcctaagt
B. Tau	ccctcga	ggtcagtgatga...221...gggtgtgatggtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcccagtg
E. Cab	ctcctgga	ggtcgatgatga...223...gggtgtgacggtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcctgctt
S. Sus	acctcga	ggtcgatgatga...223...gggtgtgatggtgcatgac	TCAAGtTTTCAatCTGAGA	cc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...216...gggcacgacggtgcgtgac	TCAAGtTTTCAatCTGAGA	cc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	tggagtgt	atattttgccaat...4056...aatgatcactttaagatgt	TTTCAGtTTGGAACCTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
P. Abe	tggagtgt	atattttgccaat...4044...aatgatcactttaagatgt	TTTCAGtTTGGAACCTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
C. Jac	tggagtgt	atattttgccaat...4045...aatgatcactttaagatgt	TTTCAGtTTGGAACCTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
M. Mus	tggagtgt	atattttgccaat...3869...aataatcactttagctgt	TTTCAGtTGGACCTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
R. Nor	tggagtgt	atattttgccaat...3830...aataatcactttcagtgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
C. Por	tgaactgt	atattttgccaat...3790...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
O. Cun	tggagtgt	atattttgccaat...3724...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
C. Fam	tggagtgt	atattttgccaat...4046...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
B. Tau	tggagtgt	atattttgccaat...3916...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	atgaacag	attgatga
E. Cab	tggagtgt	atattttgccaat...3913...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
S. Sus	tggagtgt	atattttgccaat...3887...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	gtgaacag	attgatga
L. Afr	tggagtgt	atattttgccaat...4189...aatgatcactttcagatgt	TTTCAGtTGGAACTTGA	atgtgtgtttaat	ttttt	atgaacag	attgatga
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id=659499 gene=ENSG00000122257 name=RBBP6 segment=chr16.24560722.24564833.1 type=IN

Figure 25: CS=11.7



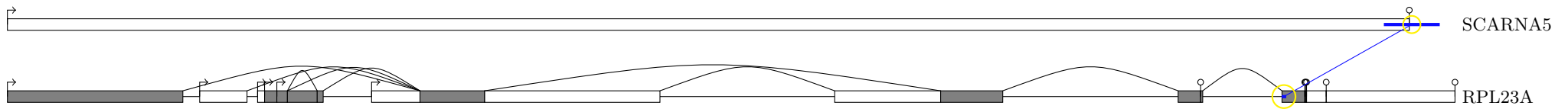
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R. Mac	cttgca	ggtcgatgatga...227...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga...227...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...227...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaagg
C. Jac	cttgca	ggtcgatgatga...226...	gtgacggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...223...	gtgacagtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...221...	gtgaccgtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...220...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tccactgg
O. Cun	acctcaca	ggtcgatgatga...223...	gtgacagtgctgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...225...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga...226...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcccaagt
B. Tau	ccctcgga	ggtcagtgatga...225...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcccagtg
E. Cab	ctcctgga	ggtcgatgatga...227...	gtgacggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...227...	gtgatggtgcatgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...220...	acgacggtgctgatctcaa	<b>GTTTCAATCTGA</b>	gacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373\_234184648.1 type=EN

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R. Mac	gaggccag	gtaagaccaaac...4930...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagccac--atttt	gcatttaa
P. Tro	gaggccag	gtaagaccaaac...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	accagccacatatttt	gcatttaa
P. Abe	gaggccag	gtaagaccaaac...4928...	ctgggaggaacttatttccg	<b>TTAGaATTGGAAC</b>	actagccacatatttt	gcatttaa
C. Jac	gaggccag	gtaagaacaaaa...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagccacatatttt	acatttaa
M. Mus	gaggccag	gtacgttgtgaa...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctacatatttt	gcatttaa
R. Nor	gaggccag	gtaagttgtgaa...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctacatatttt	gcatttaa
C. Por	gaggccag	gtgctgcaaaaa...4928...	ctagaaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctacatatttt	gcatttaa
O. Cun	gaggccag	gtacgacgcaac...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctacatatttt	gcatttaa
C. Fam	gaggccag	gtgagatgaata...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actaactgtatatttt	gcatttaa
F. Cat	gaggccag	gtgagatgagta...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctcatatttt	gcatttaa
B. Tau	gaggccag	gtgagatgcta...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	ctaggtacatatttt	gcatttaa
E. Cab	gaggccag	gtgagttgaata...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actagctacatatttt	gcatttaa
S. Sus	gaggccag	gtgagaacagtc...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	gccagctccatatttt	gcatttaa
L. Afr	gaggccag	gtgagacagtc...4928...	ctgggaggaacttatttcca	<b>TTAGaATTGGAAC</b>	actggctacatatttt	gcatttaa
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Figure 26: CS=16.2



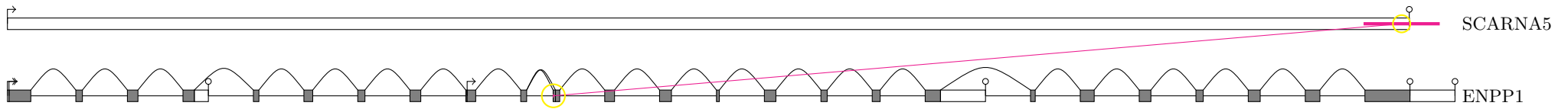
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P. Tro	cctgcaga	ggtcgatgatga...	229...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...	229...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga...	228...	gacggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...	225...	gacagtgcatgatctcaagt	TTTCAATCTGAGACc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...	223...	gaccgtgcatgatctcaagt	TTTCAATCTGAGACc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...	222...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcactagg
O. Cun	acctcaca	ggtcgatgatga...	225...	gacagtgcatgatctcaagt	TTTCAATCTGAGACc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...	227...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaagg
F. Cat	cctgcgga	ggtcagtgatga...	228...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctcagg
E. Cab	ctcctgga	ggtcgatgatga...	229...	gacggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctgctt
S. Sus	acctcggg	ggtcgatgatga...	229...	gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tccttagt
L. Afr	cacacgga	ggtcagtgatga...	222...	gacggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373\_234184648.1 type=EN

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R. Mac	cc	aacaaa	gtaagtttcctt...	184...	cagtaac-gaggctccctttt----	GTTTttCAG	ATTGGGAt
P. Tro	cc	aacaaa	gtaagtttcctt...	185...	cagtaac-gaggctccctttt----	GTTTttCAG	ATTGGGAt
P. Abe	cc	aacaaa	gtaagtttcctt...	185...	cagtaac-gaggctccctttt----	GTTTttCAG	ATTGGGAt
C. Jac	ca	aacaaa	gtaagtttcctt...	176...	cagtaac-gaggctccctttt----	GTTTttCAG	ATTGGGAt
M. Mus	cc	aacaag	gtaagcataatc...	115...	----ac-tcagctccgttttgtttt	GTTTttCAG	ATTGGGAt
R. Nor	cc	aacaag	gtaagcagctc...	111...	--gtaat-ttagctccctttt----	GTTTttCAG	ATTGGGAt
C. Por	cc	aacaaa	gtaagcttcctt...	181...	tggtaac-aaagctccctttt----	GTTTttCAG	ATTGGGAt
O. Cun	cc	aacaaa	gtaagcttcctt...	164...	caataac-caagctccctttt----	GTTTttCAG	ATTGGGAt
C. Fam	cc	aacaaa	gtaagcttcctt...	203...	--gtaatgaaagctccctttt----	GTTTttCAG	ATTGGGAt
F. Cat	cc	aacaaa	gtaagcttcctt...	170...	-agtaac-aaagctccctttt----	GTTTttCAG	ATTGGGAt
E. Cab	cc	aacaaa	gtaagcttcctt...	190...	cagtaac-aaagctccctttt----	GTTTttCAG	ATTGGGAt
S. Sus	ct	aacaaa	gtaagcttcctt...	188...	cagtaac-aaagctccctttt----	GTTTttCAG	ATTGGGAt
L. Afr	cc	aacaaa	gtaagcttcctc...	176...	tagtaac-aaagctccctttt----	GTTTttCAG	ATTGGGAt
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Figure 27: CS=14



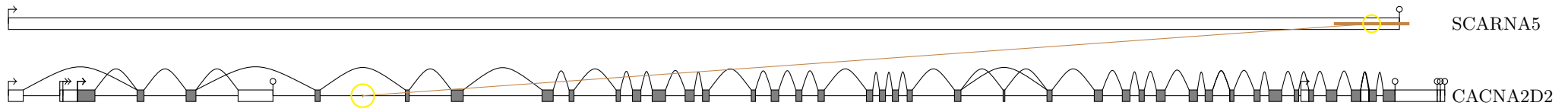
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R. Mac	cttgca	ggtc	gatgatga...	227...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaagg
P. Tro	cctgcaga	ggtc	gatgatga...	227...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaagg
P. Abe	cctgcaga	ggtc	gatgatga...	227...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaagg
C. Jac	cttgca	ggtc	gatgatga...	226...	gtgacg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaagg
M. Mus	cttactga	ggtc	cagtgatga...	223...	gtgacag	tgcatgatctcaa	GTTTtcAATCtgAGACc	tcaggaca
R. Nor	cttacaga	ggtc	cagtgatga...	221...	gtgacc	tgcatgatctcaa	GTTTtcAATCtgAGACc	tcaggaca
C. Por	tccagaga	ggtc	gatgatga...	220...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcactgg
O. Cun	acctcaca	ggtc	gatgatga...	223...	gtgacag	tgcatgatctcaa	GTTTtcAATCtgAGACc	tcgggagg
C. Fam	cttatgga	ggtc	cagtgatga...	225...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaagt
B. Tau	ccctcgga	ggtc	cagtgatga...	225...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcaccagt
E. Cab	ctcctgga	ggtc	gatgatga...	227...	gtgacg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctgctt
S. Sus	acctcgga	ggtc	gatgatga...	227...	gtgatg	ggtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctaggt
L. Afr	cacacgga	ggtc	cagtgatga...	220...	acgacg	gtgcatgatctcaa	GTTTtcAATCtgAGACc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	gatgaaag	gtctgtaggcaa...	248...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
P. Tro	gatgaaag	gtctgtaggcaa...	251...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
P. Abe	gatgaaag	gtctgtaggcaa...	251...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
C. Jac	gatgaaag	gtatgtaggcaa...	256...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
M. Mus	catgaaag	gtatgtagacag...	240...	aaatgttacat	tttgatactGTTTGATTtAG	ACc	caact
R. Nor	tatgaaag	gtatgtaggacgg...	282...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
C. Por	ggggaaag	gtatgtagatgg...	246...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
O. Cun	gatgaaag	gtatgtagacaa...	221...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
C. Fam	gatgaaag	gtatgtagagga...	267...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
B. Tau	gatgaaag	gtatgtagatga...	261...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
E. Cab	gatgaaag	gtatgtagataa...	261...	aaacattacg	tttgatactGTTTGATTtAG	ACc	cccact
S. Sus	gatgaaag	gtatgtagatga...	258...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
L. Afr	gacgaaag	gtatgtagataa...	377...	aaatattacat	tttgatactGTTTGATTtAG	ACc	caact
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id=462594 gene=ENSG00000197594 name=ENPP1 segment=chr6.132185712.132186005.1 type=IN

Figure 28: CS=12.6



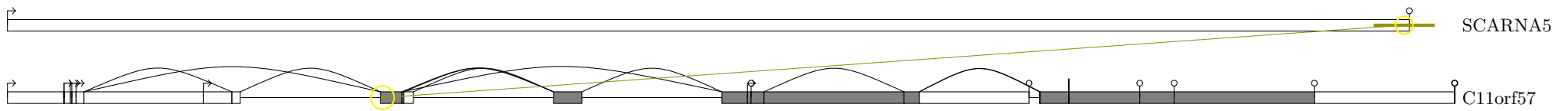
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R. Mac	cttgacaga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcctaagg
P. Tro	cctgcaga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcctaagg
P. Abe	cctgcaga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...219...gggtgtgacagtgcacatgac	TCAAgtTTTCaaTCTG	agacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...217...gggtgtgacagtgcacatgac	TCAAgtTTTCaaTCTG	agacc	tcaggaca
C. Por	tccagaga	ggtcgcgatgatga...216...tgctgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tccactgg
O. Cun	acctcaca	ggtcgcgatgatga...219...cggcgtgacagtgcacatgac	TCAAgtTTTCaaTCTG	agacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...221...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcctaagt
B. Tau	ccctcgga	ggtcagtgatga...221...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcccagtg
E. Cab	ctcctgga	ggtcgcgatgatga...223...gggtgtgacagtgcacatgac	TCAAgtTTTCaaTCTG	agacc	tcctgctt
S. Sus	acctcgga	ggtcgcgatgatga...223...gggtgtgatggtgcatgac	TCAAgtTTTCaaTCTG	agacc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...216...gggcacgacagtgcacatgac	TCAAgtTTTCaaTCTG	agacc	tcctacag
	*	****	*****	*	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	acatcaag	gtaggaacccca...4546...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...366...tcccctcaccag	gaggaaga
R. Mac	acatcaag	gtaggaacccca...4547...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...365...tccccaccag	gaggaaga
P. Tro	acatcaag	gtaggaacccca...4546...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...366...tcccctcaccag	gaggaaga
P. Abe	acatcaag	gtaggaacccca...4546...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...366...tcccctcaccag	gaggaaga
M. Mus	acatcaag	gtaaggttcaca...4522...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...390...tctcatcaccag	gaggaaga
R. Nor	acatcaag	gtaaggttcaca...4530...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...382...tctcatcaccag	gaggaaga
C. Por	atatcaag	gtaaggagcaca...4613...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...299...tcccctcaccag	gaggaaga
O. Cun	gcatcaag	gtaagaagcacc...4588...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...324...cgccccccag	gaggaaga
C. Fam	acatcaag	gtaagaactaca...4596...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...316...ctctcaccag	gaggaaga
B. Tau	acatcaag	gtaagaactgca...4503...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...409...ctctcaccag	gaggaaga
E. Cab	acatcaag	gtaagaactgca...4528...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...384...ctccccaccag	gaggaaga
S. Sus	acatcaag	gtaagaactgca...4519...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...393...ctccccaccag	gaggaaga
L. Afr	acatcaag	gtaagaaccaa...4527...gtaatgagcaggcctttttaa	TAGAA	GAAATTGGA	aatgagcggcgtcgagtc	cat...385...ctccccaccag	gaggaaga
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id=297991 gene=ENSG0000007402 name=CACNA2D2 segment=chr3.50425044.50431539.-1 type=IN

Figure 29: CS=13



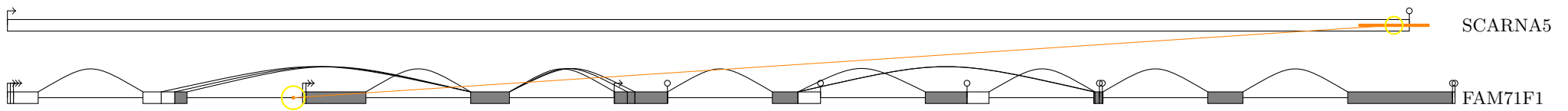
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R. Mac	cttgacaga	ggtcgatgatga... 228... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga... 228... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
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C. Jac	cttgacaga	ggtcgatgatga... 227... tgacgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaagg
C. Por	tccagaga	ggtcgatgatga... 221... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tccactgg
O. Cun	acctcaca	ggtcgatgatga... 224... tgacagtgctgatctcaag	TTTTCAATCTGAGA	cc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga... 226... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	Cc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga... 227... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcccaggt
B. Tau	ccctcgga	ggtcagtgatga... 226... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcccaggt
E. Cab	ctcctgga	ggtcgatgatga... 228... tgacgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga... 228... tgatgggtgcatgatctcaag	TTTTCAATCTGAGA	cc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga... 221... cgacgggtgctgatctcaag	TTTTCAATCTGAGA	cc	tcctacag
		* **** * * * * *	** **** * * * * * * * * * * * * * * * * * *	**	

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	atcaaggg	gtgagtgagcgt... 612... -aacgttat---ttgttgattca	TTTCAG	ATTGAAGa
R. Mac	atcaaggg	gtgagtgagcgt... 610... -aacgttat---ttgttgattca	TTTCAG	ATTGAAGa
P. Tro	atcaaggg	gtgagtgagcgt... 613... -aacgttat---ttgttgattca	TTTCAG	ATTGAAGa
P. Abe	atcaaggg	gtgagtgagcgt... 613... ----cgttatttggttgattca	TTTCAG	ATTGAAGa
C. Jac	atcaaggg	gtgagtgagcgt... 605... -aacattat---ttgttgattca	TTTCAG	ATTGAAGa
C. Por	atcgaggg	gtgagtgagcgc... 868... -gaatgtcag---ttattgattca	TTTCAG	ATTGAAGa
O. Cun	atcgaggg	gtgagtgagcgt... 1133... -aagtgttat---ctattgactca	TTTCAG	ATTGAAGa
C. Fam	accgaggg	gtgagtgagcgg... 771... -taaatgttat---ctactgattc	GTTTCAG	ATTGAAGa
F. Cat	atcgaggg	gtgagtgagcgg... 589... -aagtgttat---gtcttgattaa	TTTCAG	ATTGAAGa
B. Tau	atcgaggg	gtgagtgagcgg... 769... -aaatgttac---ttattgattca	TTTCAG	ATTGAAGa
E. Cab	atcgaggg	gtgagtgagcgg... 568... -aaatgttat---ttattgattca	TTTCAG	ATTGAAGa
S. Sus	atcaaggg	gtgagtgagcgg... 582... -aaaagttac---ttatcgattca	TTTCAG	ATTGAAGa
L. Afr	atcgaggg	gtgagtgagcgg... 600... -aaatgttac---ttattgattca	TTTCAG	ATTGAAGa
		* * **** * * * * *	* * * * * * * * * * * * * * * * * * *	*****

id=580696 gene=ENSG00000150776 name=C11orf57 segment=chr11.111945641.111946290.1 type=I5

Figure 30: CS=17.42



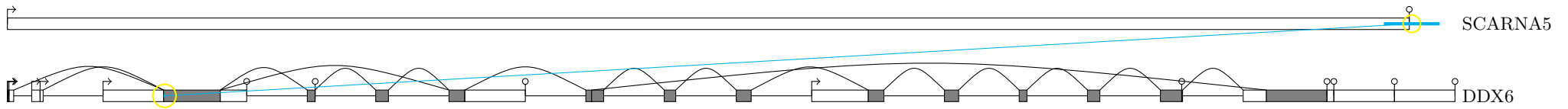
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R. Mac	cttgcaga	ggtcgatgatga...226...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...226...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga...225...----	tgtgacggtgcatgatctca	AGTTTtCAATcTGAGacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...222...----	tgtgacagtgcatgatctca	AGTTTtCAATcTGAGacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...220...----	tgtgaccgtgcatgatctca	AGTTTtCAATcTGAGacc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...219...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tccactgg
O. Cun	acctcaca	ggtcgatgatga...222...----	cgtgacagtgctgatctca	AGTTTtCAATcTGAGacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...224...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga...225...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcccaagt
B. Tau	ccctcgga	ggtcagtgatga...224...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcccagtg
S. Sus	acctcgga	ggtcgatgatga...226...----	tgtgatggtgcatgatctca	AGTTTtCAATcTGAGacc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...215...cgggcacgacggtgctgat	CTCAAGTTTtCAATcTGAGacc		tcctacag
		* **** * * * * *	** * * * *	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	attggatg	gtg--agagcctcc...1164...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gactggcggtccc--aggccttggccagctgccc	aaggccaggagg	ggagacag-
R. Mac	attggacg	ggg--agagcctcc...1148...atttttcgtgatgtcatcca	TTCAtcATTGtGAGCT	gactggcggtccc--aggccttggccagctgccc	aaggccaggagg	ggagagag-
P. Abe	attggatg	ggg--agagcctcc...1165...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gactggcggtccc--aggccttggccagctgccc	aaggccaggagg	gg-gagaga
C. Jac	attgagtg	ggg--tgagcctct...1170...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gactggcggtccc--aggccttggccagctgccc	aaggccaggagg	ggagaaag-
M. Mus	acaagact	ggg--aaagccttg...1419...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gaccggctgccccttaggccttggccagctgccc	atgatcagaagg	gaagagac-
R. Nor	accagact	gag--aaaaccttg...1188...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gactggctgcccctcaggccttggccaggtgccc	atgatcagaagg	gaagagac-
C. Por	atcagacc	agg--aaatccttg...1915...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gaccggccaatccc--aggccttggccagc-	attcaagatcagaagc	gggggaga-
O. Cun	tccagacc	ttg--tgaaccttc...769...gttttagcatgatgtcatcca	TTCAtcATTGtGAGCT	gattggcggtccc--cggccttggccagcagccc	aaggccaggagg	gaagagag-
C. Fam	atcggatc	agg--agaatcctg...848...ttttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gattggcggtccc--aggccttggccagctgccc	aaggccacgagg	gaagagag-
F. Cat	atcagatc	agg--aaagcctca...1285...ttttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gattggcggtccc--aggccttggccagctgccc	aaggccaggagg	gaagagag-
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S. Sus	atcggata	agg--agagcctca...847...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCT	gattggctgccc--aggacttggccagctgccc	aaggccaggagg	gaagagag-
L. Afr	atcagaag	aggaaaagcct--...2433...gtttttcatgatgtcatcca	TTCAtcATTGtGAGCTGAG	tggcggtccc--aaggctggccagcagccc	aggccaggga-g	gaagagaga
		* * * *	*** * *****	** * * *	* * * * *	* * *

id=239345 gene=ENSG00000135248 name=FAM71F1 segment=chr7.128354187.128355442.1 type=IN

Figure 31: CS=13



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R. Mac	cttgcaga	ggtcgcgatgatga...231...--tggtgcatgatctcaagttt	TCAATCTGAGACc	tcctaagg
P. Tro	cctgcaga	ggtcgcgatgatga...231...--tggtgcatgatctcaagttt	TCAATCTGAGACc	tcctaagg
C. Jac	cttgcaga	ggtcgcgatgatga...230...--cggtgcatgatctcaagttt	TCAATCTGAGACc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...225...gacagtgcatgatctcaagt	TTTCAATCTGAGACc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...223...gaccgtgcatgatctcaagt	TTTCAATCTGAGACc	tcaggaca
C. Por	tccagaga	ggtcgcgatgatga...222...gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcactgg
O. Cun	acctcaca	ggtcgcgatgatga...226...-acagtgcatgatctcaagt	TTTCAATCTGAGACc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...227...gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga...228...gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcccaagt
B. Tau	ccctcgga	ggtcagtgatga...227...gatggtgcatgatctcaagt	TTTCAATCTGAGACc	tcccagt
E. Cab	ctcctgga	ggtcgcgatgatga...229...gacggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctgctt
S. Sus	acctcgga	ggtcgcgatgatga...230...-atggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...222...gacggtgcatgatctcaagt	TTTCAATCTGAGACc	tcctacag
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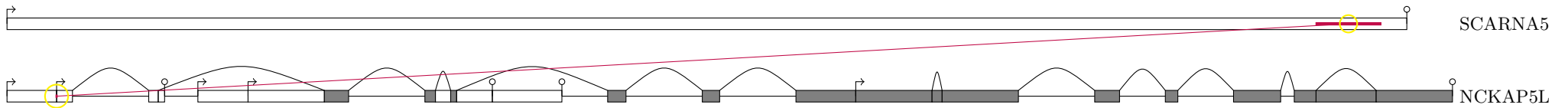
id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	gagtcctt	attgtttgctac...4477...--taatttaattttggtt--attt	GTTTCAG	ATTGA-cgt
P. Tro	gagtcctt	attgtttgctac...3937...--taatttaattttggtt--gttt	GTTTCAG	ATTGA-cgt
C. Jac	gagtcctt	attgtttcctac...3537...--tgatttaattttggtt--gttt	GTTTCAG	ATTGA-cgt
M. Mus	gagtcctt	attgtttccac...1631...gctaatttaa--ttttt--cttt	GTTTCAG	ATTGAAG-t
R. Nor	gagtcctt	attgtttccac...1966...ctaatttaa--ttttt--cttt	GTTTCAG	ATTGAAG-t
C. Por	gagtcctt	attgtttcgcc...2127...ctaatttaa--ttttt--cttt	GTTTCAG	ATTGAAG-t
O. Cun	cagtcctt	attgtttgctgc...1894...tctaatttaa--ttttt--cttt	GTTTCAG	ATTGAAG-t
C. Fam	tagtcctt	attgtttcctgc...2192...gctaattaaactttct---cttt	GTTTCAG	ATTGAAG-t
F. Cat	gaatcctt	attgtttctgtcc...4292...gctaattaaactttct---cttt	GTTTCAG	ATTGAAG-t
B. Tau	gagtcctt	attgtttccctag...2193...-tgatttaactttttt--cttt	GTTTCAG	ATTGAAG-t
E. Cab	gagtcctt	attgtttcctgt...1960...gctaatttaac--ttttt--cttt	GTTTCAG	ATTGAAG-t
S. Sus	gagtcctt	attgtttccctac...1919...-ttaatttaac--ttttt--cttt	GTTTCAG	ATTGAAG-t
L. Afr	gagtcctt	attgtttccaac...2675...--aatttaac--tttttccctt	GTTTCAG	ATTGAAG-t
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Figure 32: CS=16.8





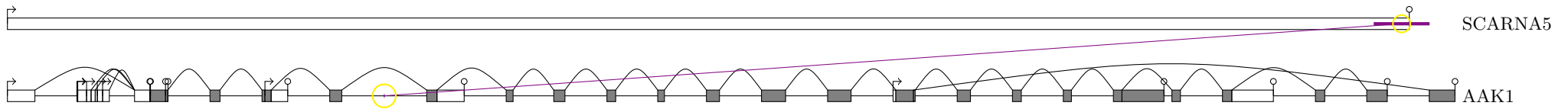
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P. Tro	cctgcaga	ggtcgatgatga...218...gtcatg--ggtgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcctaagg
C. Jac	cttgca	ggtcgatgatga...217...gtcatg--ggtgtgacggtgca	TGATcTCAAGTTT	caatctgagacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...214...cggatg--ggtgtgacagtgca	TGATcTCAAGTTT	caatctgagacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...212...cggatg--ggtgtgaccgtgca	TGATcTCAAGTTT	caatctgagacc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...211...-caggatgctgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcactgg
O. Cun	acctcaca	ggtcgatgatga...214...gggcac--ggcgtgacagtgcg	TGATcTCAAGTTT	caatctgagacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...216...agcagg--ggtgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcctaagt
F. Cat	cctgcgga	ggtcagtgatga...217...gctatg--ggtgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcaccaagt
B. Tau	ccctcgga	ggtcagtgatga...216...gcctcg--ggtgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcaccagt
E. Cab	ctcctgga	ggtcgatgatga...218...gccctg--ggtgtgacggtgca	TGATcTCAAGTTT	caatctgagacc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...218...gccctg--ggtgtgatggtgca	TGATcTCAAGTTT	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...211...-caggcgggcacgacggtgcg	TGATcTCAAGTTT	caatctgagacc	tcctacag
		* **** * ** * ** * ** * ** * ** * ** * ** * ** *			

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	ccgcg-c	acctacttagtt...278...cgggctccccggccccttt	AAAGCcTTGAcATCA	ggaggcgg
P. Tro	ccgcg-c	acctacttagtt...278...cgggctccccggccccttt	AAAGCcTTGAcATCA	ggaggcgg
C. Jac	ccgcac-c	acctacttagtt...277...cgggctccccggccccttt	AAAGCcTTGAcATCA	ggaggcgg
M. Mus	ccgcgca-a	acctacttagtt...304...cgggctcattggccccttt	AAAGCcTTGAcATCA	agaggcgg
R. Nor	ccgcgtg-a	acctacttagtt...321...cgggctcattggccccttt	AAAGCcTTGAcATCA	agaggcgg
C. Por	ccgcgcat	tcctacttagt...279...cgggcttactggccccttt	AAAGCcTTGAcATCA	agaggcgg
O. Cun	ccaccg-c	cccgaacttagtt...268...cgggctcccctggccccttt	AAAGCcTTGAcATCA	agaggcgg
C. Fam	ccgcg-c	acctacttagtt...282...cgggcccactggccccttt	AAAGCcTTGAcATCA	agaggcgg
F. Cat	ccgcg-c	acctacttagtt...287...cgggctcactggccccttt	AAAGCcTTGAcATCA	agaggcgg
B. Tau	ccgcgtg-c	acctacttagtt...325...cgggctcattggccccttt	AAAGCcTTGAcATCA	agaggcgg
E. Cab	ctgcg-c	acctacttagtt...286...cgggctcactggccccttt	AAAGCcTTGAcATCA	agaggcgg
S. Sus	ccgcgtg-c	acctacttagtt...291...cgggctcactggccccttt	AAAGCcTTGAcATCA	agaggcgg
L. Afr	ccgctg-c	aggtacttagtt...282...cgggctcactggccccttt	AAAGCcTTGAcATCA	agagacag
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Figure 33: CS=10.14



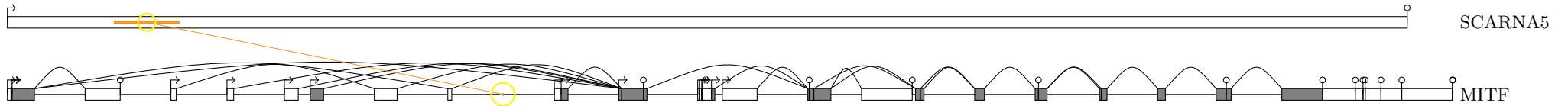
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R. Mac	cttgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	TCCTaagg---
P. Tro	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	TCCTaagg---
P. Abe	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	TCCTaagg---
C. Jac	cttgcaga	ggtcgatgatga...227...tgacggtgcatgatctcaag	TTTCAATCTGAGAcc	tcctaagg---
M. Mus	cttactga	ggtcagtgatga...224...tgacagtgcatgatctcaag	TTTCAATCTGAGAC-	--ctcaggaca
R. Nor	cttacaga	ggtcagtgatga...222...tgaccgtgcatgatctcaag	TTTCAATCTGAGAC-	--ctcaggaca
C. Por	tccagaga	ggtcgatgatga...221...tgatggtgcatgatctcaag	TTTCAATCTGAGACC	TCCactgg---
O. Cun	acctcaca	ggtcgatgatga...224...tgacagtgctgcatctcaag	TTTCAATCTGAGAC-	--ctcgggagg
C. Fam	cttatgga	ggtcagtgatga...226...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	TCCTaagt---
F. Cat	cctgcgga	ggtcagtgatga...227...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	TCCCaagt---
E. Cab	ctcctgga	ggtcgatgatga...228...tgacggtgcatgatctcaag	TTTCAATCTGAGAC-	--ctcctgctt
S. Sus	acctcgga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTCAATCTGAGACc	tcctaggt---
L. Afr	cacacgga	ggtcagtgatga...221...cgacggtgcatgatctcaag	TTTCAATCTGAGACc	tcctacag---
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	acctgaag	gt-acagaccacg...4942...tatcttggaatgggtggttg	GGGAatGTTTTTCAG	GTTGAAAa
P. Tro	acctgaag	gt-acagaccaca...4942...tatcttggaatgggtggttg	GGGAatGTTTTTCAG	GTTGAAAa
P. Abe	acctgaag	gt-acagaccaca...4942...tatcttggaatgggtggttg	GGGAatGTTTTTCAG	GTTGAAAa
C. Jac	acctgaag	gt-acagaccaca...4951...-----atgggtgattggggaatatt	TTTCAG	GTTGAAAa
M. Mus	acctgaag	gtaacagactga...4948...-----ggattgggtggttggggaat	GTTTTTCAG	GTTGAAAa
R. Nor	acctgaag	gtaaccgaccgg...4948...-----ggattgggtggttggggaat	GTTTTTCAG	GTTGAAAa
C. Por	acctgaag	gtaacagaccac...4942...tgactggaatgagtgggtg	GGGGatGTTTTTCAG	GTTGAAAa
O. Cun	acctgaag	gtaggaggctgc...4948...-----gggatggatggttggggaat	GTCTTTCAG	GTTGAAAa
C. Fam	acctgaag	gtaa-aggccg...4942...tatcttggaatgagtgggtg	GGGAatGTTTTTCAG	GTTGAAAa
F. Cat	acctgaag	gtaacagccgc...4942...tatcttggatcgggtggttg	GGGAatGTTTTTCAG	GTTGAAAa
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S. Sus	atctgaag	gtaacagatcac...4948...-----ggaatgggtggttgggcaat	GTTTTTCAG	GTTGAAAa
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id=131220 gene=ENSG00000115977 name=AAK1 segment=chr2.69759295.69769654.-1 type=IN VIEW

Figure 34: CS=16.1



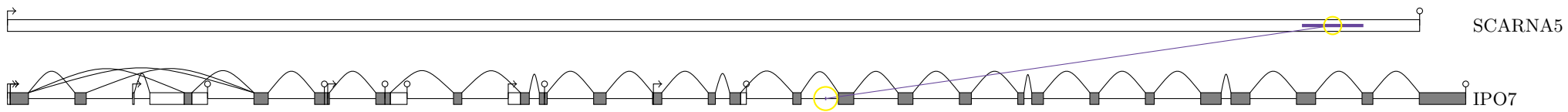
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C.Jac cttgcaga ggtc gatgatga TTGGTaaAAGGTCTGattgcactgaatgtcacagt-...216...caatctgagacc tcctaagg  
M.Mus cttactga ggtc agt gatgatga TTGGTaaAAGGTCTGattgcactgaatgtcacagc-...213...caatctgagacc tcaggaca  
R.Nor cttacaga ggtc agt gatgatga TTGGTaaAAGGTCTGattgcactgaatgtcacagc-...211...caatctgagacc tcaggaca  
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O.Cun acctcaca ggtc gatgatga TTGGTaaAAGGTCTGactgcactgaatgtcacgg-...213...caatctgagacc tcgggagg  
C.Fam cttatgga ggtc agt gatgatga TTGGTaaAAGGTCTGattgcacttaatgtcacagc-...215...caatctgagacc tcctaagt  
F.Cat cctgcgga ggtc agt gatgatga TTGGTaaAAGGTCTGattgcactaaacatcacagc-...216...caatctgagacc tcccaagt  
B.Tau ccctcgga ggtc agt gatgatga TTGGTaaAAGGTCTGattgcacgtgagggtcacagt-...215...caatctgagacc tcccagt  
E.Cab ctctcgga ggtc gatgatga TTGGTaaAAGGTCTGattgcacttcatgtcacagt-...217...caatctgagacc tcctgctt  
S.Sus acctcgga ggtc gatgatga TTGGTaaAAGGTCTGattgcactcgatgtcacagt-...217...caatctgagacc tcctaggt  
L.Afr cacacgga ggtc agt gatgatga TTGGTaaAAGGTCTGactgcacttaacgtcacagc-...210...caatctgagacc tcctacag  
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373\_234184648.1 type=EN

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R.Mac ttccagg gtaagtctttt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
P.Tro ttcccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
P.Abe ttcccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
C.Jac ttcccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
M.Mus ttcccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
R.Nor ttcccag gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
C.Por ttcccagg gtaagtttgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
O.Cun ttccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
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B.Tau ttcccagg gtaagtctgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
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S.Sus ttcccagg gtaagtcgatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
L.Afr ttccagg gtaagtacatt...4932...tgtg tttggattggagt ttc CAGGgCCTTATCAGgagccaccct agtgacac  
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id=649260 gene=ENSG00000187098 name=MITF segment=chr3.69887784\_69915362.1 type=IN

Figure 35: CS=11.7



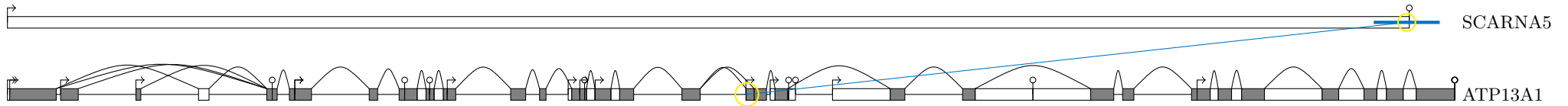
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R. Mac	cttgcaga	ggtcgatgatga...211...	-----agtgccagtc	catgggtgtga	<b>TGGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga...211...	-----agtgccagtc	catgggtgtga	<b>TGGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...211...	-----agtgccagtc	catgggtgtga	<b>TGGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga...210...	-----agtgccagtc	catgggtgtga	<b>CGGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...207...	-----tgagtgccgg	--atgggtgtga	<b>CAGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcaggaca
R. Nor	cttacaga	ggtcagtgatga...198...	gtcttgatgag	tggcgg--atg	<b>GGTGTGACCGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcaggaca
C. Por	tccagaga	ggtcgatgatga...204...	-----ggagtgccag	--gatgctgtga	<b>TGGTGCATGATCTCAAGTT</b>	ttcaatctgagacc	tcactg
O. Cun	acctcaca	ggtcgatgatga...207...	-----gagtgccgg	-gcacggcgtga	<b>CAGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...209...	-----gagtgccag	-caggggtgtga	<b>TGGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcctaagt
B. Tau	ccctcgga	ggtcagtgatga...209...	-----agcggcagc	cctcgggtgtga	<b>TGGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcaccagt
E. Cab	ctcctgga	ggtcgatgatga...211...	-----agcggcagc	ccctgggtgtga	<b>CGGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcctgctt
L. Afr	cacacgga	ggtcagtgatga...204...	-----gtgaggtca	-gcccggcaca	<b>CGGTGCATGATCTCAAGTTT</b>	ttcaatctgagacc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R. Mac	gagcaagg	gtatgttttaa...214...	acgtcatgc	cagccaaagagt	<b>AACTTGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctggac...103...	ttttacaaaag	gcttgctg
P. Tro	gagcaagg	gtatgttttaa...212...	atatcatgc	cgccaaagagt	<b>AACTTGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctggac...103...	ttttacaaaag	gcttgctg
P. Abe	gagcaagg	gtatgttttaa...214...	acgtcatgc	cagccaaagagt	<b>AACTTGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctggac...103...	ttttacaaaag	gcttgctg
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B. Tau	gagccagg	gtatgttttaa...179...	acatcatgc	cagccaaagagt	<b>AAGTGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctttgg...111...	tttttttaag	gcttgctg
E. Cab	gagcaagg	gtatgttttaa...211...	acatcatgc	cagccaaagagt	<b>AAGTGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctttgg...115...	tttttttaag	gcttgctg
L. Afr	gagcgagg	gtatgttttagt...382...	---catgcag	ccaaagcaacg	<b>TGGGATCATaGTACTG</b>	-----gtctagtgt	tgtctctttgg...107...	tgtaaaaaaag	gcttgctg
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Figure 36: CS=10.14



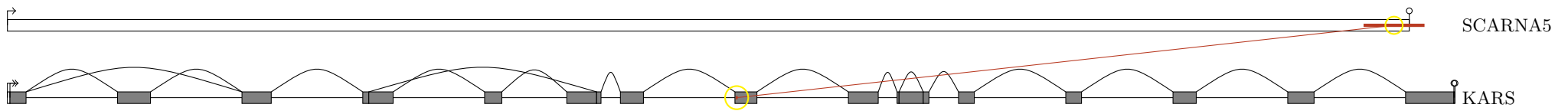
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P.Tro	cctgcaga	ggtc	gatgatga...229...	gatggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcctaagg
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C.Jac	cttgcaga	ggtc	gatgatga...228...	gacggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcctaagg
M.Mus	cttactga	ggtc	cagtgatga...225...	gacagtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcaggaca
R.Nor	cttacaga	ggtc	cagtgatga...223...	gaccgtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcaggaca
C.Por	tcagaga	ggtc	gatgatga...222...	gatggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcactgg
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B.Tau	ccctcggga	ggtc	cagtgatga...227...	gatggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcaccagt
E.Cab	ctcctgga	ggtc	gatgatga...229...	gacggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcctgctt
S.Sus	acctcggga	ggtc	gatgatga...229...	gatggtgcatgatctcaagt	TTTCAa	TCTGAGAC	tcctaggt
L.Afr	cacacgga	ggtc	cagtgatga...222...	gacggtgcgtgatctcaagt	TTTCAa	TCTGAGAC	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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C.Jac	gaccaaa	gtgag--	gggctct...360...	-ctcaggactcgtacttattt	GTTTcC	AGATGAGa
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C.Por	gaccaaa	gtgag--	gggctgg...192...	-ctcaggactcctgcttattt	GTTTcC	AGATGAGa
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F.Cat	gaccaaa	gtgag--	gggctgg...348...	-ctcaggattcgtacttattt	GTTTcC	AGATGAGa
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E.Cab	gaccaaa	gtgag--	gggctgg...328...	-ctcaggactcgtacttattt	GTTTcC	AGATGAGa
S.Sus	gaccaaa	gtgag--	gagctgg...268...	-ctcaggactcgtgcttattt	GTTTcC	AGATGAGa
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id=74609 gene=ENSG00000105726 name=ATP13A1 segment=chr19.19764956.19765351.-1 type=IN

Figure 37: CS=17.25



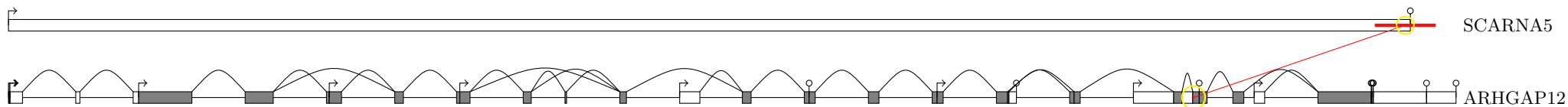
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C.Jac	cttgca	ggtc	gcatgatga...226...	gtgacggtgcatgatctcaa	GTTTt	CAATCTGAGA	-cc	tcctaagg
C.Por	tccagaga	ggtc	gcatgatga...220...	gtgatggtgcatgatctcaa	GTTTt	CAATCTGAGAC	-c	tccactgg
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C.Fam	cttatgga	ggtc	cagtgatga...225...	gtgatggtgcatgatctcaa	GTTTt	CAATCTGAG	-acc	tcctaagt
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E.Cab	ctcctgga	ggtc	gcatgatga...227...	gtgacggtgcatgatctcaa	GTTTt	CAATCTGAGAC	-c	tcctgctt
S.Sus	acctcgga	ggtc	gcatgatga...227...	gtgatggtgcatgatctcaa	GTTTt	CAATCTGAGAC	-c	tcctagtg
L.Afr	cacacgga	ggtc	cagtgatga...220...	acgacggtgcatgatctcaa	GTTTt	CAATCTGAGA	-cc	tcctacag
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id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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P.Tro	tcctagag	gt-aaggagagtt...1344...	-----ctgatgtttctccctgcctt	TTTTAG	ATTGAAA	c
P.Abe	tcctagag	gt-aaggagagtt...1373...	-----ctgatgtttctccctgcctt	TTTTAG	ATTGAAA	c
C.Jac	tcctggag	gt-aaggagagtt...1572...	-----tgaatgtttctcctgtctc	TTTTAG	ATTGAAA	c
C.Por	tcctagag	gtgatagagggt-...787...	--ttctaaatgtttctccctgt	GTCTt	TTAG	ATTGAAA
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F.Cat	tcctggag	gtgagagagttc-...874...	aggactcagtgatctccct-	GTCTt	TTAG	ATTGAAA
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S.Sus	tcctagag	gtgatggagagc-...1794...	aaaactaactgttcttctc-	GTCTt	TTAG	ATTGAAA
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Figure 38: CS=22.88



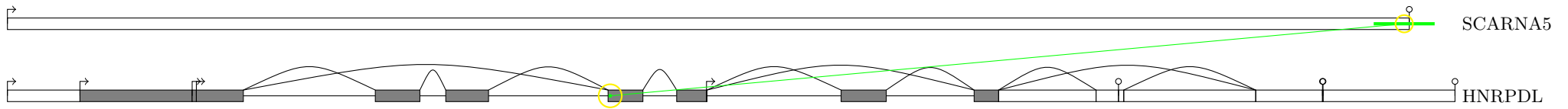
H. Sap	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagg
R. Mac	cttgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagg
C. Jac	cttgcaga	ggtcgatgatga...227...tgacggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagg
M. Mus	cttactga	ggtcagtgatga...224...tgacagtgcatgatctcaag	TTTTCAaTCTGAGAC	ctCAGGA	a-----
R. Nor	cttacaga	ggtcagtgatga...222...tgaccgtgcatgatctcaag	TTTTCAaTCTGAGAC	ctCAGGA	a-----
C. Por	tccagaga	ggtcgatgatga...221...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcactg
O. Cun	acctcaca	ggtcgatgatga...224...tgacagtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcgggagg
C. Fam	cttatgga	ggtcagtgatga...226...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaagt
E. Cab	ctcctgga	ggtcgatgatga...228...tgacggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----cc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...228...tgatggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...221...cgacggtgcatgatctcaag	TTTTCAaTCTGAGAC	-----c	tcctacag
		* **** * * * * *	** * * * * *		*

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	caatcatg	gtaagattatat...60...----taaaatgtccaattcctgct	-----GTTTTTCAG	ATGAGAAa
R. Mac	caatcacg	gtaagattatat...60...----taaaatgtccaattcctgct	-----GTTTTTCAG	ATGAGAAg
P. Tro	caatcatg	gtaagattatat...60...----taaaatgtccaattcctgct	-----GTTTTTCAG	ATGAGAAa
P. Abe	caatcacg	gtaagattatat...60...----taaaatgtccaattcctgct	-----GTTTTTCAG	ATGAGAAa
C. Jac	caatcacg	gtaagattatat...50...----tacaatgtccaattcctgct	-----GTCCTTCAG	ATGAGAAg
M. Mus	caatcatg	gtaagagcacac...51...----caattttcacactatcctgt	TCTTGctGTTTTTCAG	ATGAGAAg
R. Nor	caatcatg	gtaagaatgcac...53...----caatttttacaatgtccttat	TCTTGctGTTTTTCAG	ATGAGAAg
C. Por	caatcatg	gtaagagtttac...61...----ataaatggcctgattctact	-----GTTTTTCAG	ATGAGAAa
O. Cun	caaccacg	gtaagattatcc...62...----aaaaatttcgattccttct	-----GTTTCcCAG	ATGAGAAg
C. Fam	caatcatg	gtaagatcatac...58...ttttaaaaatttcctattct	-----GTTTTTCAG	ATGAGAAa
E. Cab	caatcatg	gtaacatcacat...65...----aatttcctatttctcctatt	-----TTTCAG	ATGAGAAa
S. Sus	caatcatg	gtaagatcactc...60...----aaaaattttcgttcctact	-----GTTTTCCAG	ATGAGAAg
L. Afr	caatcatg	gtaaggttatac...53...----aaaaatttcctgtttctgct	-----GTTTTTCAG	ATGAGAAa
		*** ** *	****	* ** *

id=772577 gene=ENSG00000165322 name=ARHGAP12 segment=chr10.32098057.32098157.-1 type=AN

Figure 39: CS=13



H. Sap	cctgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
R. Mac	cttcgaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
P. Tro	cctgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
P. Abe	cctgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
C. Jac	cttcgaga	ggtcgatgatga...227...	tgacggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
M. Mus	cttactga	ggtcagtgatga...224...	tgacagtgcatgatctcaag	TTTCAATCTGAGA	ccTCA	GG---	aca
R. Nor	cttacaga	ggtcagtgatga...222...	tgaccgtgcatgatctcaag	TTTCAATCTGAGA	ccTCA	GGaca---	
O. Cun	acctcaca	ggtcgatgatga...224...	tgacagtgcatgatctcaag	TTTCAATCTGAGA	ccTCG	GG---	agg
C. Fam	cttatgga	ggtcagtgatga...226...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaagg
F. Cat	cctgcgga	ggtcagtgatga...227...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tccaagt
B. Tau	ccctcgga	ggtcagtgatga...226...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcccagt
E. Cab	ctcctgga	ggtcgatgatga...228...	tgacggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctgctt
S. Sus	acctcgga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctaggt
L. Afr	cacacgga	ggtcagtgatga...221...	cgacggtgcatgatctcaag	TTTCAATCTGAGA	---	cc	tcctacag
		*	****	*****		**	**** *****

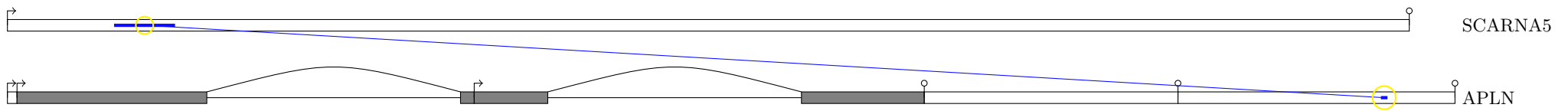
id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	ttggagag	gtgtgtgattat...415...	-----acgttgagtgtgcatctcga	TTTCAG	ATTGAAA	a
R. Mac	ttggagag	gtgtgtgattat...434...	-----accttgagtgtgcatctcga	TTTCAG	ATTGAAA	a
P. Tro	ttggagag	gtgtgtgattat...416...	-----acgttgagtgtgcatctcga	TTTCAG	ATTGAAA	a
P. Abe	ttggagag	gtgtgtgataat...418...	-----acgttgagtgtgcatctcga	TTTCAG	ATTGAAA	a
C. Jac	ttggagag	gtgtgtgattat...435...	-----accttgagtgtgcatctcga	TTTCAG	ATTGAAA	a
M. Mus	ttggagag	gtgggctgtgtt...308...	--ttgtttgtttgtctgtgca-	CCTGATTTCAG	ATaGAAA	a
R. Nor	tccgagag	gtgggctgtgtt...305...	gtttgtttgtttggac--tgca-	CCTGATTTCAG	ATaGAAA	a
O. Cun	ttggagag	gtgcgctgtgat...409...	--tgcatgatcttgagtgtgca	TCTGgATTTCAG	ATTGAAA	a
C. Fam	ttggagag	gtgcgctgtgtt...451...	-----atggtgaatgtgcttcttga	TTTCAG	ATTGAAA	a
F. Cat	ttggagag	gtgcgctttatg...413...	-----atcgtgagtgtgcttcttga	TTTCAG	ATTGAAA	a
B. Tau	ttggagag	gtgcgctgtgct...433...	-----atccttgagtgtgcatcttga	TTTCAG	ATTGAAA	a
E. Cab	ttggagag	gtgcgctgattc...442...	-----atccttgagtgtgcatcttga	TTTCAG	ATTGAAA	a
S. Sus	ttggagag	gtgcgctgtgtt...443...	-----atccttgagtgttcatcttga	TTTCAG	ATTGAAA	a
L. Afr	tccgagag	gtgggctttatg...416...	-----gatcctaag-atacatcttga	TTTCAG	ATTGAAA	a
		*	*****	***	*	** *****

id=338249 gene=ENSG00000152795 name=HNRPDL segment=chr4.83348718.83349170.-1 type=IN

Figure 40: CS=23.52





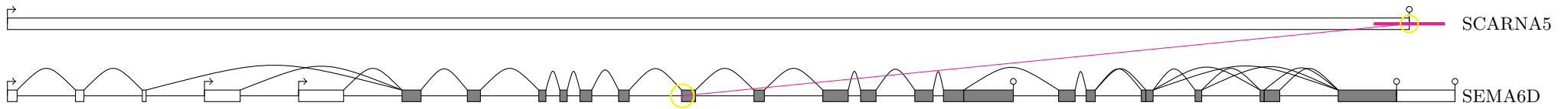
H. Sap	cctgcaga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
R. Mac	cttgcaga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
P. Tro	cctgcaga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
P. Abe	cctgcaga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagtc...	216...	caatctgagacc	tcctaagg
M. Mus	cttactga	ggtca	GTGA	tgATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagcc...	212...	caatctgagacc	tcaggaca
R. Nor	cttacaga	ggtca	GTGA	tgATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagcc...	210...	caatctgagacc	tcaggaca
C. Por	tccagaga	ggtc	gcatgat	GACTGGTAAAAGGTCTGA	tgaccgaatgtcacagtc...	209...	caatctgagacc	tccactgg
O. Cun	acctcaca	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagtc...	212...	caatctgagacc	tcgggagg
C. Fam	cttatgga	ggtca	GTGA	tgATTGGTAAAAGGTCTGA	ttgcactgaatgtcacagcc...	214...	caatctgagacc	tcctaagt
B. Tau	ccctcgga	ggtca	GTGA	tgATTGGTAAAAGGTCTG	gattgcactgaggtcacag---	216...	caatctgagacc	tcccagtg
E. Cab	ctcctgga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcacttcatgtcacagtc...	216...	caatctgagacc	tcctgctt
S. Sus	acctcgga	ggtc	gcatgat	GATTGGTAAAAGGTCTGA	ttgcactgcatgtcacagtc...	216...	caatctgagacc	tcctaggt
L. Afr	cacacgga	ggtca	GTGA	tgATTGGTAAAAGGTCTG	actgcacttaacgtcacagc---	210...	caatctgagacc	tcctacag
		*	****	*****	*****	*****	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H. Sap	aaagctga	cagttcgc	ccctt...	357...	ttatctacttttga	caactt	TCAGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	105...	aaagagtt	caat	ataattct
R. Mac	aaagctga	cagttcgc	ccctt...	355...	ttatctacttttga	caactt	TCAGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	103...	aaagagtt	gaat	ataattct
P. Tro	aaagctga	cagttcgc	ccctt...	357...	ttatctacttttga	caactt	TCAGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	105...	aaagagtt	caat	ataattct
P. Abe	aaagctga	cagttcgc	ccctt...	357...	ttatctacttttga	caactt	TCAGGACT	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	105...	aaagagtt	caat	ataattct
M. Mus	aaagttga	cagtttgc	ccctt...	356...	ttatctgcttttga	aactt	TCGGGAC	TTTTTa	GCCAGTTTGC	cttt	cttgaca	aatg	ttgtc...	101...	gaggagtt	cgat	aggattct
R. Nor	aaagctga	cagtttgc	ccctt...	354...	gtatctgcttttga	aactt	TCGGGAC	TTTTTa	GCCAGTTTGC	cttt	cttgaca	aatg	ttgtc...	100...	gaggagtt	caat	acaatcct
C. Por	aaagctga	caatttgc	ccctt...	355...	ttatctacttttga	caactt	TCAGGAC	TTTTTa	GCCAGTT	cgct	tttctc	caaa	gatctc---	105...	aaggagtt	caat	gcaattct
O. Cun	aaagctga	cagtgacc	ccctt...	346...	tgatctactttcca	caactt	TTGGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	101...	gaggagtt	caat	acaatcct
C. Fam	aaagctga	caattcacc	ccctt...	353...	ttatctacttctga	caactt	TCGGGAC	TTTTTa	GCCAGTTTGC	cttt	ttcgaaa	aatcatt	gtt...	100...	aaggagtt	caat	acaattct
B. Tau	aaagctga	caattcacc	ccctt...	361...	---tctacttttga	caactcctg	GGAC	TTTTTa	GCCAGTTTGC	cttt	cttgaga	aatg	ttctg...	102...	aaggagtt	cgat	gcaattct
E. Cab	aaagctga	caatttgc	ccctt...	359...	ttatctacttttga	caactt	TCGGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	105...	aaggagtt	cgac	gccgttct
S. Sus	aaactga	cgcttcacc	ccctt...	473...	ttatctacttttga	caactc	TCGGGAC	TTTTTa	GCCAGTT	tgcc	tttcttg	gaaaaatg	tt---	101...	atggagtt	cgat	gcaattct
L. Afr	aaagctga	caagtagc	ccctt...	356...	-tatctaccttga	caacttc	CGGGAC	TTTTTa	GCCAGTTTGC	cttt	cttgaaa	aatg	ttatg...	101...	cgagagtt	cgat	gctgttcg
		***	***	*	****	***	*	***	***	****	*****	*****	*****	*****	*****	*	**

id=678239 gene=ENSG00000171388 name=APLN segment=chrX.128779240.128779785.-1 type=E3

Figure 41: CS=10.14



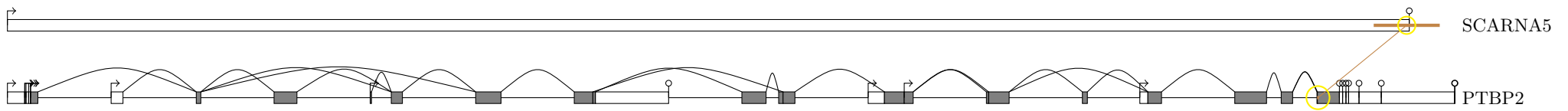
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R.Mac	cttgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaagg
P.Tro	cctgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaagg
P.Abe	cctgcaga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaagg
C.Jac	cttgcaga	ggtcgatgatga...227...	tgacggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaagg
M.Mus	cttactga	ggtcagtgatga...224...	tgacagtgcatgatctcaag	TTTTCaATCTGAGACC	tCAGGaca
R.Nor	cttacaga	ggtcagtgatga...222...	tgaccgtgcatgatctcaag	TTTTCaATCTGAGACC	tCAGGaca
O.Cun	acctcaca	ggtcgatgatga...224...	tgacagtgcatgatctcaag	TTTTCaATCTGAGACC	tCGGGagg
C.Fam	cttatgga	ggtcagtgatga...226...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaagt
F.Cat	cctgcgga	ggtcagtgatga...227...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcccaagt
B.Tau	ccctcgga	ggtcagtgatga...226...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcccagtg
E.Cab	ctcctgga	ggtcgatgatga...228...	tgacggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctgctt
S.Sus	acctcgga	ggtcgatgatga...228...	tgatggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctaggt
L.Afr	cacacgga	ggtcagtgatga...221...	cgacggtgcatgatctcaag	TTTTCaATCTGAGACC	tcctacag
		*	****	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

H.Sap	ctttgctg	gtaagatccttt...408...	cttaccaaaattataccttt	GGTTTCAG	ATgGGAAg
R.Mac	ctttgctg	gtaagatcctct...414...	cttaccaaaattataaacttt	GGTTTCAG	ATgGGAAg
P.Tro	ctttgctg	gtaagatccttt...408...	cttaccaaaattataaacttt	GGTTTCAG	ATgGGAAg
P.Abe	ctttgctg	gtaagatccttt...404...	cttaccaaaattataaacttt	GGTTTCAG	ATgGGAAg
C.Jac	ctttgctg	gtaagatccttt...410...	cttaccaaaattataaacttt	GGTTTCAG	ATgGGAAg
M.Mus	ctttgctg	gtaagaagctac...390...	ttatgttacc-aaattataac	TTGGTTTCAG	ATGGAAAa
R.Nor	ctttgctg	gtgagaagctac...408...	ttatgttacc-aaattataac	TTGGTTTCAG	ATgGGAAa
O.Cun	ttttgctg	gtaagaaccttt...415...	ttatgttacc-aaattataac	TTGGTTTCAG	ATgGGAAg
C.Fam	ttttgctg	gtaagatccttt...592...	tttacc-aaattataaactct	GGTTTCAG	ATgGGAAg
F.Cat	ttttgctg	gtaagatccttt...631...	cttacc-aaattataaactct	GGTTTCAG	ATgGGAAg
B.Tau	ttttgctg	gtaagattccttt...852...	tttacc-aaattataaactct	GGTTTCAG	ATgGGAAg
E.Cab	ttttgctg	gtaagattccttt...401...	tttacc-aaattataaactct	GGTTTCAG	ATgGGAAg
S.Sus	ttttgctg	gtaagattccttt...403...	tttacc-aaattataaactct	GGTTTCAG	ATgGGAAg
L.Afr	ctttgctg	gtaagatcctta...566...	tttacc-aaattataaactct	GGTTTACG	ATgGGAAg
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id=521242 gene=ENSG00000137872 name=SEMA6D segment=chr15.48053949.48054396.1 type=IN

Figure 42: CS=18.76



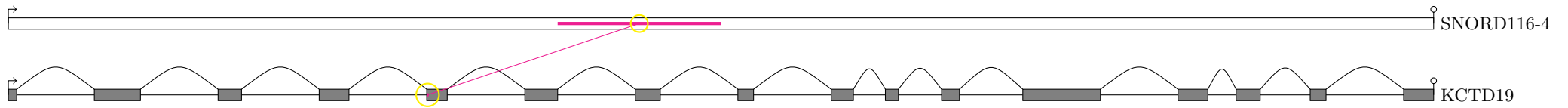
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R.Mac	cttgca	ggtc	gatgatga...229...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctaagg
P.Tro	cctgcaga	ggtc	gatgatga...229...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctaagg
P.Abe	cctgcaga	ggtc	gatgatga...229...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctaagg
C.Jac	cttgca	ggtc	gatgatga...228...	gacggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctaagg
M.Mus	cttactga	ggtc	cagtgatga...225...	gacagtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcaggaca
R.Nor	cttacaga	ggtc	cagtgatga...223...	gaccgtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcaggaca
C.Por	tcagaga	ggtc	gatgatga...222...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcactgg
O.Cun	acctcaca	ggtc	gatgatga...225...	gacagtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcgggagg
C.Fam	cttatgga	ggtc	cagtgatga...227...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctaagt
B.Tau	ccctcgga	ggtc	cagtgatga...227...	gatggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcaccagt
E.Cab	ctcctgga	ggtc	gatgatga...229...	gacggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctgctt
L.Afr	cacacgga	ggtc	cagtgatga...222...	gacggtgcatgatctcaagt	TTTCaa	TCTGAGACc	tcctacag
	*	****	*****	**	****	*****	**

id=152625 gene=ENSG00000252010 name=SCARNA5 segment=chr2.234184373.234184648.1 type=EN

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R.Mac	ttttttca	gtaagcaagc	tt...131...	gtatctgattttataat	TTTCAG	AaGAGAtc
P.Tro	ttttttca	gtaagcaagc	tt...131...	gtatctaattttataat	TTTCAG	AaGAGAtc
P.Abe	ttttttca	gtaagcaagc	tt...131...	gtatctaattttataat	TTTCAG	AaGAGAtc
C.Jac	ttttttca	gtaagcaagc	tt...131...	gtatctaattttataat	TTTCAG	AaGAGAtc
M.Mus	ttttttca	gtaagcaagc	tt...107...	gtatctaatttcataat	TTTCAG	AaGAGAtc
R.Nor	ttttttca	gtaagcaagc	tt...108...	gtatctaatttcataat	TTTCAG	AaGAGAtc
C.Por	ttttttca	gtaagcaagc	tt...135...	gtgtctaatttcataat	TTTCAG	AaGAGAtc
O.Cun	ttttttca	gtaagcaagc	tt...126...	gtatctaatttgataat	TTTCAG	AaGAGAtc
C.Fam	ttttttca	gtaagcaagc	tt...126...	gtatctaatttcataat	TTTCAG	AaGAGAtc
B.Tau	ttttttca	gtaagcaagc	tt...123...	gtatctaatttcataat	TTTCAG	AaGAGAtc
E.Cab	ttttttca	gtaagcaagc	tt...153...	gtatctaatttcataat	TTTCAG	AaGAGAtc
L.Afr	ttttttca	gtaagcaagc	tt...133...	gtatctaatttcataat	TTTCAG	AaGAGAtc
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id=174350 gene=ENSG00000117569 name=PTBP2 segment=chr1.97278663.97278828.1 type=IN

Figure 43: CS=10.14



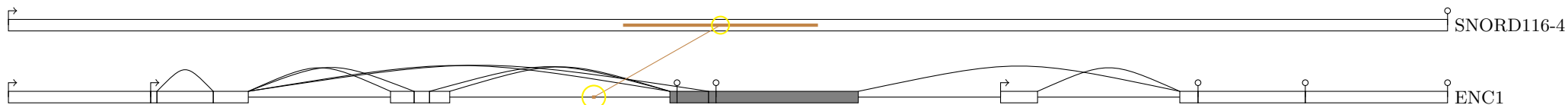
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R. Mac	atgtgctt	ggatc	gatgatgag	gtcccccaaaa-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gagaactcat-accg	tcgttctcatcggaactgaggtcc	agcacttg		
P. Tro	atgtgttt	ggatc	gatgatgag	gtcccccaaaa-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gaaaactcat-accg	tcgttctcagcggaactgaggtcc	agcacggt		
P. Abe	atgtgttt	ggatc	gatgatgag	gtcccccaaaa-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gaaaactcat-accg	tattctcatcggaactgaggtcc	agcacggt		
C. Jac	atgtgctt	ggatc	aatgatgag	gtcccccaaaa-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gagaactcat-accg	tctcctcatcggaactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatc	tatgatga	---ttcccagtc-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gaaaactctgtaccg	cactctcatcggaactgaggtcc	agcatctt		
R. Nor	ccgtgctt	ggatc	gatgatga	---ttccaata-aaac	ATTCTTGG- AAAGC	TGAA	caaaatgagt	gaaaactcaataccg	cactatcatcgtgactgaggtcc	agacctgg		
C. Por	atgtgctc	ggatc	gatgatga	---tgcccaaaa-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gagagcttaataccg	tactctcgtcgtgactgaggtcc	agcacact		
O. Cun	atgtgctt	ggatc	gatgatga	---ctccccat-aaac	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gagaactcacaaccg	tcttctcatcgtgactgaggtcc	agcacatt		
C. Fam	atgtgctt	ggatt	gatgatga	---ctccttcaatctgc	ATTCTTGGAAAAgc	TAAA	caaaatgagt	gagaactcctactg	tcttctcatgaaactgaggtcc	agcatggt		
F. Cat	atgtgctc	ggatc	gatgatga	---ctcctcaa-cagc	ATTCTTGG- AAAGC	TGAA	caaaatgagt	gagaactcctaccg	tcttctcatcaaaactgaggtcc	agcacggt		
B. Tau	acgtgctt	ggatc	gatgatga	---ctcccacaa-atgc	ATTCTTGG- AAA	TGAA	caaaatgagt	gagccatcactaccg	tc-tcctcatcggaactgaggtcc	agcacggt		
E. Cab	acgtgctc	ggatc	gatgatga	---ctccctcat-atgc	ATTCTTGGAAAAgc	TGAA	caaaatgagt	gagaactcactaccg	tcttctcatcgaaactgaggtcc	ggcacggt		
S. Sus	ccgtgctc	ggatc	gatgatga	---ctccctcta-aagc	ATTCTTGG- AAA	TGAA	caaaatgagt	gagaactcactaccg	tc-tcctcatcgaaactgaggtcc	ggcacggt		
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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R. Mac	cttcattg	gtgattgctctg...1172...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
P. Tro	cttcattg	gtgattgctctg...1178...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
P. Abe	cttcattg	gtgattgctctg...1179...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
C. Jac	cttcacg	gtgattgctctg...1175...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
M. Mus	cttcattg	gtgattgctctg...1271...	---aacacatgtgttcttct	GCTTTTCAAG	tGAAT	ttt	
R. Nor	cttcattg	gtgattgctctg...1272...	---aactcatgtgttcttct	GCTTTTCAAG	tGAAT	ttt	
C. Por	ctttattg	gtgatggtctg...1505...	gttaactcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
O. Cun	cttcattg	gtgattgctctg...1407...	---aattcatctgttcccatt	GCTTTTCAAG	tGAAT	ttt	
C. Fam	cttcattg	gtgattgctcta...1173...	ccttaatcattttgttccc	TTTGTTTTCAAG	tGAAT	ttt	
F. Cat	cttcattg	gtgattgctcta...1164...	cttatctcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt	
B. Tau	ctttattg	gtgattgttcta...1184...	----ccattttgttcccctgc	TTTCAAG	tGAAT	ttt	
E. Cab	cttcattg	gtgattgttcta...1210...	gttaactcattttgttccc	TTTGcTTTCAAG	tGAAT	ttt	
S. Sus	cttcattg	gtgattgctcta...1409...	gttaaccattttgttct	TTTGcTTTCAAG	tGAAT	ttt	
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id=204363 gene=ENSG0000168676 name=KCTD19 segment=chr16.67335826.67337048.-1 type=IN

Figure 44: CS=10.92



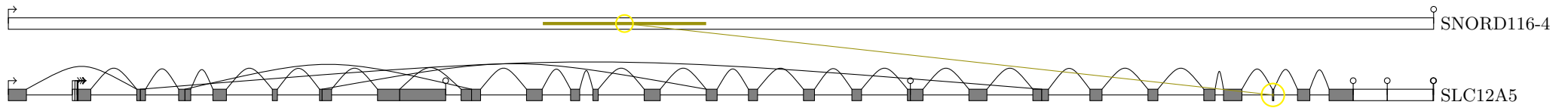
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R. Mac	atgtgcctt	ggatcgatgatgagt	-cccccaaaaaaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gagaactcat	-accgtcgttctcagc	ggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gaaaactcat	-accgtcgttctcagc	ggaactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gaaaactcat	-accgtcatttctcagc	ggaactgaggtcc	agcacgtt
C. Jac	atgtgcctt	ggatcaatgatgagt	-cccccaaaaaaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gagaactcat	-accgttctcctcagc	ggaactgaggtcc	agcacatt
C. Por	atgtgcctt	ggatcgatgatgagtc	cccc-aaaaaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gagagctcta	atccgtcactctcgtc	gtagtgcaggtcc	agcacact
O. Cun	atgtgcctt	ggatcgatgatgact	cccc-ataaacattc	-----	CTTGGAAAAGCTGA	acaaaatgagt	gagaactcaca	accgtcgttctcagc	gtagtgcaggtcc	agcacatt
F. Cat	atgtgcctt	ggatcgatgatgact	ccctc-aacagcattc	-----	CTTGG- AAAGCTGA	acaaaatgagt	gagaactcct	accgtcttctcagc	gtagtgcaggtcc	agcacgtt
B. Tau	acgtgcctt	ggatcgatgatgact	ccac-aaatgcattc	-----	CTTGG- AAATCTGA	acaaaatgagt	gagccatcact	accgtc-tcctcagc	gtagtgcaggtcc	agcacgtt
E. Cab	acgtgcctt	ggatcgatgatgact	ccctc-atatgcattc	-----	CTTGGAAAATCTGA	acaaaatgagt	gagaactcact	accgtcgttctcagc	gtagtgcaggtcc	ggcacgtt
S. Sus	cctgcctt	ggatcgatgatgact	ccctc-taaagcattc	-----	CTTGG- AAATCTGA	acaaaatgagt	gagaactcact	accgtc-tcctcagc	gtagtgcaggtcc	ggcacgtt
O. Avi	acatgcctt	ggatcagtgatgac	-----aac	tttcataTTATtc	CTTGGAAAATCTGA	acaaaatgagt	gagaactcact	accatc-tcctcagc	gtagtgcaggtcc	agcacgtt
L. Afr	atgtgcctt	ggatcgtttatgact	ttccac-acatacattc	-----	CTTGG- AAATCTGA	acaaaatgagt	gagaacccct	actgtctccttagc	-aacgtgaggtcc	agcatacc
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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R. Mac	caagacag	gtagttggtgat	...666...	aatggcctgaaagt	tgccaaTCAGgTTTTCCAAG	atgaacctgctttttatgca	-----	...317...	tattat	tttttag	gagtggaa
P. Tro	caagacag	gtagttggtgat	...681...	aatggcctgaaagt	tgccaaTCAGgTTTTCCAAG	atgaacctgctttttatgca	-----	...237...	tattat	tttttag	gagtggaa
P. Abe	caagacag	gtagttggtgat	...682...	aatggcctgaaagt	tgccaaTCAGgTTTTCCAAG	atgaacctgctttttatgca	-----	...237...	tattat	tttttag	gagtggaa
C. Jac	caagacag	gtagtcggtgat	...700...	aatggcctgaaagt	tgccggTCAGgTTTTCCAAG	atgaacctgctttttatgca	-----	...231...	tattat	tttttag	gagtggaa
C. Por	caagaaag	atgggtggccat	...403...	aggatcctgaaagt	tgccaaTCAGgTTTTCCAAG	acgaacctgcttttaagcag	-----	...245...	ttgttt	ataggtag	gagtggaa
O. Cun	caagaaag	atgggtggcaac	...756...	agtatccacaagt	tgccaaTCAGgTTTTCCAAG	acgaacctgcttttaagcgg	-----	...197...	ttgttt	tttttag	gagtggaa
F. Cat	caagaaag	atgggtggtgat	...432...	agtatcctgaaagt	tgccagTCAGgTTTTCCAAG	acgaacctgctttcaagcag	-----	...261...	tttgct	tttttag	gagtggaa
B. Tau	cagaaaag	gtgggtggtaag	...440...	aacatcctgaaagt	tgccaaTCAGGTTTCCAAG	atgaacctgctcttgagcag	-----	...242...	ggtttt	ttccag	gagtggaa
E. Cab	caagaaag	atgggtggtgat	...447...	aatatcctgagagt	tgccaaTCAGGTTTTCCAAG	atgaacctgcttttaagcag	-----	...225...	ttgttt	tttttag	gagtggaa
S. Sus	caagaaag	gtgggtggtgat	...445...	aacatcctcaagt	tgccaaTCAGGTTTCCAAG	acagacctccttaagcag	-----	...220...	ttgttt	tttttag	gagtggaa
O. Avi	cagaaaag	gtgggtggtgat	...446...	aacatcctgaaagt	tgccaaTCAGGTTTTCCAAG	atgaacctgctcttgagcag	-----	...234...	ggtttt	tttcag	gagtggaa
L. Afr	caagaaag	atgggtggtgat	...430...	agtatcctgaaagt	tgccaaTCAGGTTTCCAAG	atgaacctgct-ttgagcag	-----	...238...	ttgttt	tttttag	gagtggaa
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id=57829 gene=ENSG0000171617 name=ENC1 segment=chr5.73932324.73933318.-1 type=I5

Figure 45: CS=11.7



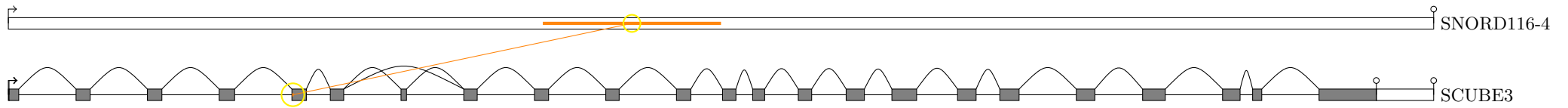
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R. Mac	atgtgctt	ggatcgatgatgagtgcccccaaaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgtcgtttctcagcggaaactgagggtcc	agcacttg
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P. Abe	atgtgttt	ggatcgatgatgagtgcccccaaaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactca-taccgtcattctcagcggaaactgagggtcc	agcacggt
C. Jac	atgtgctt	ggatcaatgatgagtgcccccaaaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgtcctctcagcggaaactgagggtcc	agcacatt
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R. Nor	ccgtgctt	ggatcgatgatgatt-tccaataaaa-	CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactcaataccgccactatcagcggaaactgagggtcc	agcacctg
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S. Sus	ccgtgctc	ggatcgatgatgact-ccctctaaag-	CATTCCCTGGAAAAT	ctgaacaaaatgagtgagaactcactaccgtc-tcctcagcggaaactgagggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatgact-tccacacata-	CATTCCCTGGAAAAT	ctgaacaaaatgagtgagaaccctactgtctccttagc-aacctgagggtcc	agcatacc
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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R. Mac	atgaagcc	gtacgggcctgg...290...-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
P. Tro	atgaagcc	gtacgggcctgg...289...-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
P. Abe	atgaagcc	gtacgggcctgg...267...-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
C. Jac	atgaagcc	gtatgggcctgg...278...-----tttcttttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggcctgg...297...--tctttctctcttgccttctc-	TTTGtGTTTCCTGAAG	GGAGTGgg
R. Nor	atgaagcc	gtacgggcctgg...273...-----ttctctcttgccttctct-	GTTTCCTGAAG	GGAGTGgg
C. Por	atgaagcc	gtatgggcctgg...271...tttctttctcccttgcctt-	TGTTGTTTTCCTgAAG	GgAGTGgg
C. Fam	atgaagcc	gtaggggcctgg...278...-----cctctcgttgcttctcttgt-	GTTTCCTGAAG	GGAGTGgg
F. Cat	atgaagcc	gtaggggcctgg...298...-----cctctcttgccttcttgt-	GTTTCCTGAAG	GGAGTGgg
B. Tau	atgaagcc	gtacgggtctgg...296...-----cctctccttgccttctt-	GTTTCctgAAG	GgAGTGgg
E. Cab	atgaagcc	gtatgggcctag...299...-----cctcacttgccttcttgt-	GTTTCCTGAAG	GGAGTGgg
S. Sus	atgaagcc	gtacgggcctgg...305...-----cctctcttgccttcttgt-	GTTTCcgaAG	GgAGTGgg
L. Afr	atgaagcc	gtatgggcctgg...288...-----cttttcttgccttcttgt-	GTTTCtgaAG	GgAGTGgg
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Figure 46: CS=16.1



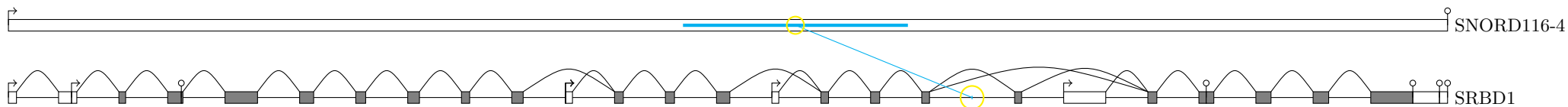
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M. Mus	acgtgctt	ggatcgatgatgatt	cccagtc	caaaa-CATTCCCTTgGAAAAG	ctgaacaaaatgagt	gaaaactctgtacc	gccactctcagcgg	aactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatgatt	ccaataaaaa	---CATTCCCTTgGAAAAG	ctgaacaaaatgagt	gaaaactcaatacc	gccactatcatcgt	gactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatg	cccccaaaaa	---CATTCCCTTgGAAAAG	ctgaacaaaatgagt	gagagcttaac	ccgtcactctcgt	cgtagaggtcc	agcacact
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B. Tau	acgtgctt	ggatcgatgatgact	cccacaaatg	---CATTCCCTTgGAAAAG	tctgaacaaaatgagt	gagccactacc	gtc-tcctcagcgg	aactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgact	ccctcatatg	---CATTCCCTTgGAAAAG	atctgaacaaaatgagt	gagaactcactacc	gtcgttctcagcgg	aactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctctaaag	---CATTCCCTTgGAAAAG	tctgaacaaaatgagt	gagaactcactacc	gtc-tcctcagcgg	aactgaggtcc	ggcacgtg
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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M. Mus	gccagaag	gtcagccc	acgg-...695...gcgcca	acgtctccttctccCTTTTAg	AAGGAATg
R. Nor	gccagaag	gtcagccc	acggg-...712...ggagc	gtcagcctcctccCTTTTAg	AAGGAATg
C. Por	gccagaag	gt-agccc	atgag...865...-actc	accctctccttctCTTTAg	AAGGAATg
O. Cun	gccagaag	gtcagccc	gtga-...863...catgca	-ccccctccttctCTTTAg	AAGGAATg
C. Fam	gccagaag	gtcagccc	catga-...1137...cactc	acctccctctctCTTTTAg	AAGGAATg
F. Cat	gccagaag	gtcagccc	catga-...2802...cactc	acctccctctctCTTTTAg	AAGGAATg
B. Tau	gccggaag	gtcagcct	ctgg-...989...-caccc	gcctcctcttccTTTAg	AAGGAATg
E. Cab	gccggaag	gtcagccc	catga-...1162...-ttcatt	gcccacctcttccTTTAg	AAGGAATg
S. Sus	gccagaag	gtcagcct	atga-...882...-gcg	cctcctcttcccTTTAg	AAGGAATg
L. Afr	accagaag	gtcagccc	ctgc-...964...-ttc	accctcctcttcccTTTAg	AAGGAATg
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id=478871 gene=ENSG0000146197 name=SCUBE3 segment=chr6.35199637.35200626.1 type=IN

Figure 47: CS=23.16



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R. Mac	atgtg	ggatcgatgatgag	cccccaaaaaacattcct	TGGAAAag	CTGAAC	AAAAATGAGTGAAAA	ctcat-accg	tcgttctcagc	gggaactgaggtcc	agcacttg
P. Tro	atgtg	ggatcgatgatgag	cccccaaaaaacattcct	TGGAAAag	CTGAAC	AAAAATGAGTGAAAA	ctcat-accg	tcgttctcagc	gggaactgaggtcc	agcacgtt
M. Mus	acgtg	ggatctatgatgatt	cccag---tcaaacattcct	TGGAAAag	CTGAAC	AAAAATGAGTGAAAA	ctgtaccg	ccactctcatc	gggaactgaggtcc	agcatcct
R. Nor	ccgtg	ggatcgatgatgatt	ccaa---taaacattcct	TGGA-AAg	CTGAAC	AAAAATGAGTGAAAA	ctcaataccg	ccactatcatc	gtgactgaggtcc	agacctgg
C. Por	atgtg	ggatcgatgatgatg	cccca---aaaaacattcct	TGGAAAag	CTGAAC	AAAAATGAGT	gagagctta	atccgtcactc	tcgtcgtgactgaggtcc	agcacact
O. Cun	atgtg	ggatcgatgatgact	cccc---ataaacattcct	TGGAAAag	CTGAAC	AAAAATGAGTGAAAA	ctcacaaccg	tcgttctcatc	gtgactgaggtcc	agcacatt
F. Cat	atgtg	ggatcgatgatgact	ccctc---aacagcattcct	TGGA-AAg	CTGAAC	AAAAATGAGT	gagagaactc	ccaccgtctt	tctcatcaaaactgaggtcc	agcacgtt
B. Tau	acgtg	ggatcgatgatgact	cccac---aatgcattcct	TGGA-AAg	CTGAAC	AAAAATGAGT	gagccatcact	accgtc-tcct	catcggaaactgaggtcc	agcacgtg
E. Cab	acgtg	ggatcgatgatgact	ccctc---atatgcattcct	TGGAAAat	CTGAAC	AAAAATGAGTGAAAA	ctcactaccg	tcgttctcatc	gaaactgaggtcc	ggcacgtt
S. Sus	ccgtg	ggatcgatgatgact	ccctc---taagcattcct	TGGA-AAg	CTGAAC	AAAAATGAGTGAAAA	ctcactaccg	tcctcatc	gaaactgaggtcc	ggcacgtg
O. Avi	acatg	ggatcagtgatgaca	actttc--atattattcct	TGGAAAat	CTGAAC	AAAAATGAGTGAAAA	ctcactaccatc	tcctcatc	gatactgagctct	agcacgtt
L. Afr	atgtg	ggatcgtttatgact	ccac---acatacattcct	TGGA-AAg	CTGAAC	AAAAATGAGT	gagagaacc	ccctactgtc	tctcttagc-aacctgaggtcc	agcatacc
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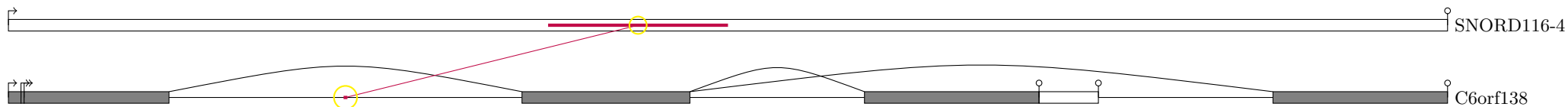
id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	aagtgcag	gtaagaaactat...4934...	ttcacatt--aagtcatactt	GTTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
R. Mac	aagtgcag	gtaagaaactat...4934...	ttcacatt--aagtcatactt	GTTTTctg	ATTctA-	TTTTTTCAG-	TTTCCata
P. Tro	aagtgcag	gtaagaaactat...4934...	ttcacatt--aagtcatactt	GTTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
M. Mus	aagtgcag	gtgagaagctgt...4933...	ttcacatt--aaatcgactt	GTTTTctg	ATTctGTTTt	TTCAG-	TTTCCata
R. Nor	aagtgcag	gtgagaagctgt...4935...	ttcacatt--aaaccatactta	TTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
C. Por	aagtgcag	gtaagaagctat...4942...	-----t--aagtcatactt	gttctg	ATTctG-	TTTTTTCAG-	TTTCCata
O. Cun	aagtgcag	gtaagaaatgat...4935...	ttcacatt--aagtcatactt	GTTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
F. Cat	aagtgcag	gtaagaaactac...4946...	-----ttaaagccatactt	tatttc-	TG-	TTTTTTCAGT	TTTCCat-
B. Tau	aagtgcag	gtaagaaactgt...4942...	-----t--aagccatactt	gttttctg	ATTctG-	TTTTTTCAG-	TTTCCata
E. Cab	aagtgcag	gtaggaaactat...4936...	ttcacatt--aagccatgctta	TTTTctg	ATTt--c	TTTTTTCAG-	TTTCCata
S. Sus	aagtgcag	gtaagaaactaa...4934...	ttcacatt--aagtcatactt	GTTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
O. Avi	aagtgcag	gtaagaaactat...4934...	ttcacatt--aagtcatactt	GTTTTctg	ATTctG-	TTTTTTCAG-	TTTCCata
L. Afr	gagtcag	gtaagaaaccgt...4947...	ttctgtttt-----	ttttttttt	-----	TTTTTTCAG-	TTTCCata
	*****	** **	***	*	** ** *	*****	*****

id=181516 gene=ENSG0000068784 name=SRBD1 segment=chr2.45704215.45715378.-1 type=IN

Figure 48: CS=14.95





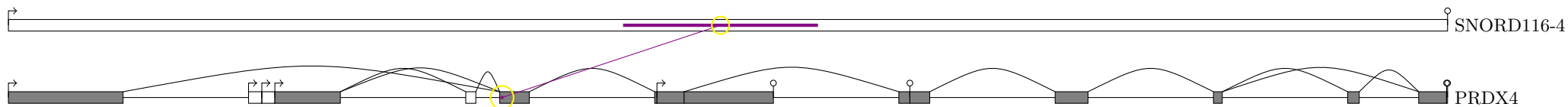
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R. Mac	atgtgctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gagaactcat	-accgtcgttctc	cggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gaaaactcat	-accgtcgttctcagc	ggaaactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gaaaactcat	-accgtcattctc	cggaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaaa	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gagaactcat	-accgtcttctc	cggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgatt	-cccagtc	caaa-	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gaaaactctgt	accgccactctc	cggaactgaggtcc
C. Por	atgtgctc	ggatcgatgatgatg	-ccccaaaaaa-	CATTc	CTTGAAAAAGCTGAA	caaaaatgagt	gagagctctaat	ccgtcactctc	gtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgact	-ccccataaa-	CATTc	CTTGAAAAAGC	tgaacaaaatgagt	gagaactcaca	accgtcgttctc	atcgtgactgaggtcc	agcacatt
C. Fam	atgtgctt	ggattgatgatgact	ccttcaatctg-	CATTc	CTTGAAAAAGC	agtaacaaaatgagt	gagaactccct	actgtcgttctc	actgaaactgaggtcc	agcatgtt
B. Tau	acgtgctt	ggatcgatgatgact	-cccacaaatg-	CATTc	CTTGAAAAAT	-ctgaacaaaatgagt	gagccactacc	gtc-tcctcatc	ggaaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgact	-cctcatatg-	CATTc	CTTGAAAAAT	-ctgaacaaaatgagt	gagaactcact	accgtcgttctc	atcgaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgact	-cccttaaag-	CATTc	CTTGAAAAAT	-ctgaacaaaatgagt	gagaactcact	accgtc-tcctcatc	gaaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatgact	-tccacacata-	CATTc	CTTGAAAAAT	-ctgaacaaaatgagt	gagaactcact	accgtc-tcctcatc	gaaactgaggtcc	agcatacc
	*** *	**** * ****		*****		* ** *	*****	* * * *	*****	**

id=614553 gene=ENSG00000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	aaatgaag	gtgaaccacaag...	4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
R. Mac	aaatgaag	gtgaaccacaag...	4948...	-----ttgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
P. Tro	aaatgaag	gtgaaccacaag...	4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
P. Abe	aaatgaag	gtgaaccacaag...	4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
C. Jac	aaatgaag	gtgaactacaag...	4948...	-----cagaagtctcttcttttct---	GTTTCAAG	GATG	ggag
M. Mus	aaatgaag	gtgaaccacaag...	4948...	-----ctgaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Por	aaatgaag	gtgaaccacagg...	4943...	ggtaaacttaagtctcccctt---	TTCAATGTTTCAAG	GATG	ggag
O. Cun	aaatgaag	gtgaaccacaag...	4948...	-----cttaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Fam	aaatgaag	gtgaaccacaag...	4949...	-----ttaagtctccccttttct---	TTTCAAG	GATG	ggag
B. Tau	aaatgaag	gtgaactacaag...	4948...	-----cttcagtctccccttttct---	GTTTCAAG	GATG	ggag
E. Cab	aaatgaag	gtgaaccacaag...	4948...	-----cttaagtttccccttttct---	GTTTCAAG	GATG	ggag
S. Sus	aaatgaag	gtgaaccacaag...	4948...	-----ctcaagtctccccttttct---	GTTTCAAG	GATG	ggag
L. Afr	agatgaag	gtgaaccacaag...	4941...	--taacttaagtctcccctttt	TTTTTTGTTTCAAG	GATG	ggag
	* *****	***** ** *		*** ** *	*	*****	*****

id=9880 gene=ENSG00000244694 name=C6orf138 segment=chr6.47976851.48035965.-1 type=IN

Figure 49: CS=14.04



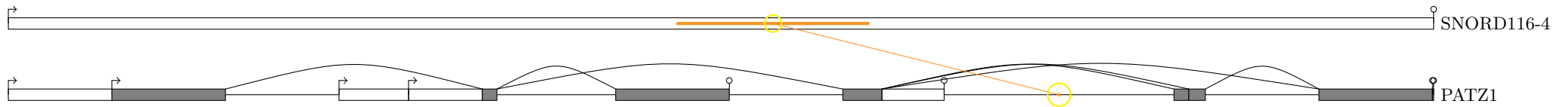
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattc	CTTGGaa	AAGCTGAac	AAAAAGAGTG	aaaactcat-accgtcgttctcagcgg	aaactgaggtcc	agcgcgtt
R. Mac	atgtgctt	ggatcgatgatgagt-	cccccaaaaaaacattc	CTTGGaa	AAGCTGAac	aaaaatgagtgagaactcat-	accgtcgttctcatcgg	aaactgaggtcc	agcacttg
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattc	CTTGGaa	AAGCTGAac	aaaaatgagtgagaactcat-	accgtcattctcatcgg	aaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagt-	cccccaaaaaaacattc	CTTGGaa	AAGCTGAac	aaaaatgagtgagaactcat-	accgtcttctcatcgg	aaactgaggtcc	agcacatt
R. Nor	ccgtgctt	ggatcgatgatgattcca	---ataaaacattc	CTTGG	aAAGCTGAac	aaaaatgagtgaaaaactcaata	accgccactatcatcgtgactgaggtcc		agacctgg
C. Por	atgtgctc	ggatcgatgatgagtc	cccc---aaaaaacattc	CTTGGaa	AAGCTGAac	aaaaatgagtgagagcttaata	ccgtcactctcgtcgtgactgaggtcc		agcacact
O. Cun	atgtgctt	ggatcgatgatgactcccc	---ataaacattc	CTTGGaa	AAGCTGAac	aaaaatgagtgagaactcaca	accgtcgttctcatcgtgactgaggtcc		agcacatt
F. Cat	atgtgctc	ggatcgatgatgactccctc	---aacagcattc	CTTGG	aAAGCTGAac	aaaaatgagtgagaactccct	accgtcttctcatcaaaactgaggtcc		agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccac	---aatgcattc	CTTGG	AAAtCTGAac	aaaaatgagtgagccatcactaccgtc-	tcctcatcggaaactgaggtcc		agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactccctc	---atatgcattc	CTTGGAAA	atCTGAac	aaaaatgagtgagaactcactaccgtcgttct	catcgaactgaggtcc		ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgactccctc	---taagcattc	CTTGG	AAAtCTGAac	aaaaatgagtgagaactcactaccgtc-	tcctcatcgaactgaggtcc		ggcacgtg
O. Avi	acatgctc	ggatcagtgatgacaactttc	--atattattc	CTTGGAAA	atCTGAac	aaaaatgagtgagaactcactaccatc-	tcctcatcgatactgaggtcc		agcacgtt
L. Afr	atgtgctt	ggatcgtttatgacttcac	---acatacattc	CTTGG	AAAtCTGAac	aaaaatgagtgagaaccctactgtctc	ctcttagca-acctgaggtcc		agcatacc
	** *	*****	* **** *	*****	***	*****	* * * * *	*****	** *

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	atctaaag	gt----agccctgatt	---.47...cagtggttacagaacatcatg	TATTTt	ATTTT	TTAG	TTTCCAAg
R. Mac	atctaaag	gt----agccctgatt	---.59...-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg
P. Abe	atctaaag	gt----agccctgatt	---.59...-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg
C. Jac	aaataaag	gt----agccctgatt	---.59...-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg
R. Nor	-----	atttagaagcccaagttta	..51...-----	tagataat-	tgctttctttc	TTAG	TTTCCAAg
C. Por	atctgagg	gtgtag---ctcagt	---.99...-----	acatcgtgtc	ttttctttc	TTAG	TTTCCAAg
O. Cun	gtccaaag	atttagaagcct	---.51...-----	aatcatcct	atctctttc	TTAG	TTTCCAAg
F. Cat	gtccaaag	gtttagaatcct	---.64...-----	actcatata	ttttctttc	TTAG	TTTCCAAg
B. Tau	gtccaaag	attc----cctccaaa	---.67...-----	acatcatatg	ttttctttc	TTAG	TTTCCAAg
E. Cab	gtccagag	gattagaagcct	---.64...-----	acatcatata	ttttctttc	TTAG	TTTCCAAg
S. Sus	----cag	actcagaagccttgatt	---.59...-----	gaatatcatata	---tttctttc	TTAG	TTTCCAAg
O. Avi	gtccaaag	attc----cctccgaa	---.65...-----	acatcatatg	ctttctttc	TTAG	TTTCCAAg
L. Afr	atccaaag	gttaagaagccc	---.67...-----	tcagtgaat	ctttctttc	TTAG	TTTCCAAg
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id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX.23689551.23689645.1 type=IN

Figure 50: CS=15.6



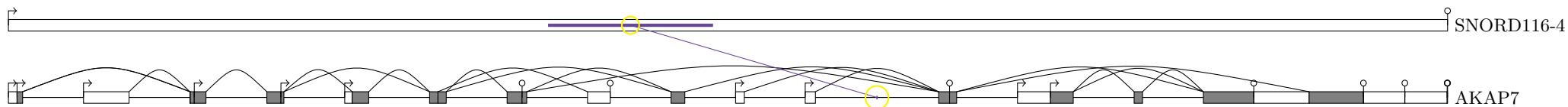
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R. Mac	atgtgctt	ggatcgatgatgagtc	cccccaaaaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	GAGA	actca-taccgtc	gttctcagc	ggaaactgaggtcc	agcacttg	
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	gaaaactca-taccgtc	gttctcagc	ggaaactgaggtcc	agcacggt		
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	gaaaactca-taccgtc	gttctcagc	ggaaactgaggtcc	agcacggt		
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	GAGA	actca-taccgtc	tctcagc	ggaaactgaggtcc	agcacatt	
M. Mus	acgtgctt	ggatcctatgatgatt	cccag---	tcaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	gaaaactctgt	accgcaactctc	atcagc	ggaaactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatgatt	tcca---	ataaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	gaaaactcaat	accgcaactat	catcgtgact	gaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatg	cccc---	aaaaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	GAGA	gctctaaccg	tactctcgtg	actgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgact	cccc---	ataaacattc	cctt	GGAAA	agCTGAACAA	aATGAGT	GAGA	actcacaacc	gctgtctcagc	ggaaactgaggtcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgact	cccac---	aatgcattc	cctt	GGAAA	agCTGAACAA	aATGAGT	gagccatcact	accgtc-tcctc	atcagc	ggaaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgact	ccctc---	atagcattc	cctt	GGAAA	aTCTGAACAA	aATGAGT	GAGA	actcactacc	gctgtctcagc	ggaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctc---	taagcattc	cctt	GGAAA	aTCTGAACAA	aATGAGT	GAGA	actcactacc	gctcagc	ggaaactgaggtcc	ggcacgtt
O. Avi	acatgctc	ggatcagtgatgaca	actttc---	atattattc	cctt	GGAAA	aTCTGAACAA	aATGAGT	GAGA	actcactacc	atcagc	ggaaactgaggtcc	agcacgtt
L. Afr	atgtgctt	ggatcgtttatgact	tccac---	acatactc	cctt	GGAAA	aTCTGAACAA	aATGAGT	GAGA	aaaccctact	gtctcttagc	-aacctgaggtcc	agcatatt
	** *	*****	* **** *	*	*****	* ** *	*****	*	*	*	*	*****	*

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	aactctca	cctgctactcag...	4943...	-----	gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
R. Mac	aactctca	cctgctactcag...	4937...	-ttgctggc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
P. Tro	aactctca	cctgctactcag...	4943...	-----	gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
P. Abe	aactctca	cctgctactcag...	4943...	-----	gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
C. Jac	aactcca	cctgctactcag...	4937...	-ttgctggc	cctcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
M. Mus	cagataca	cctgctcaagt...	4943...	-----	gctgtgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
R. Nor	cagatgca	cctgctcaagt...	4943...	-----	gctgtgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
C. Por	caaacata	cctgctgcttag...	4937...	-ttgctggc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
O. Cun	gtaacaca	cctgttgcccag...	4937...	-ttgctggc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
B. Tau	atgacgca	cctgctgcccc...	4943...	-----	ggccgc-ggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
E. Cab	gtagcaca	tctgctgctcag...	4937...	-gtgctggc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
S. Sus	gtaataca	gctgctgctgg...	4937...	-gtgctggc	gctgggatctca	TCTCct	TTTATc	TTGTTTAG	gTTTCTcc
O. Avi	atgacgca	cctgctgcccc...	4937...	tgccgc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
L. Afr	acaaaaca	cctgctgctcag...	4937...	-gtgctggc	gctgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
	*	*** *	*		**	**	*****	*****	

id=182225 gene=ENSG0000100105 name=PATZ1 segment=chr22.31724911.31731403.-1 type=IN

Figure 51: CS=12.6



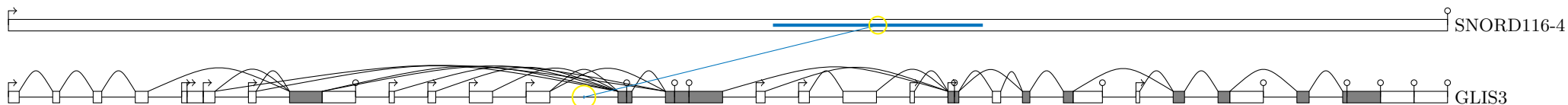
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gaaaactcat	-accgctgttctcagc	ggaactgaggtcc	agcgcgtt
R. Mac	atgtgcctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gagaactcat	-accgctgttctc	atcggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gaaaactcat	-accgctgttctcagc	ggaactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gaaaactcat	-accgctcattctc	atcggaactgaggtcc	agcacgtt
C. Jac	atgtgcctt	ggatcaatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gagaactcat	-accgcttctctc	atcggaactgaggtcc	agcacatt
M. Mus	acgtgcctt	ggatctatgatgatt	---cccagtc	aa	CATTCCTTGGAAAAGc	TGAACAAA	atgagt	gaaaactctgtacc	ccactctc	atcggaactgaggtcc
R. Nor	ccgtgcctt	ggatcgatgatgatt	---tccaata	aaaa	CATTCCTTGGAAA	-agct	gaacaaaatgagt	gaaaactcaat	accgctc	atcggaactgaggtcc
C. Por	atgtgcctt	ggatcgatgatgatg	---ccccaaaaa	CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gagaactcaat	accgctc	atcggaactgaggtcc	agcacact
O. Cun	atgtgcctt	ggatcgatgatgact	-ccccataaa	---CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gagaactcaca	accgctgttctc	atcggaactgaggtcc	agcacatt
C. Fam	atgtgcctt	ggattgatgatgact	ccttcaatctg	---CATTCCTTGGAAA	aa	gctgaacaaaatgagt	gagaactcc	tactgtcgttctc	atcggaactgaggtcc	agcatgtt
B. Tau	acgtgcctt	ggatcgatgatgact	-cccacaatg	---CATTCCTTGGAAAAT	-ct	gaacaaaatgagt	gagccatcact	accgctc	-tcctc	atcggaactgaggtcc
E. Cab	acgtgcctt	ggatcgatgatgact	-ccctcatatg	---CATTCCTTGGAAAATc	TGAACAAAAT	gagt	gagaactcact	accgctgttctc	atcggaactgaggtcc	ggcacgtt
L. Afr	atgtgcctt	ggatcgtttatgact	---tccacacata	CATTCCTTGGAAAATc	TGAACAAAAT	-gagt	gagaacc	ccctactgtctc	ctctagc	-aacctgaggtcc
	*** *	****	* ****	*****		* ** *	*****	*	* * *	*****

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	tggtgaag	gtaatatctccg...	4950...	ttgattga	---ttgttttttca	-----TTTCAAG	gGAGTGaa
R. Mac	tggtgaag	gtaatatctcca...	4950...	ttgactta	---ttgttttttca	-----TTTCAAG	gGAGTGaa
P. Tro	tggtgaag	gtaatatctccg...	4950...	ttgattga	---ttgttttttca	-----TTTCAAG	gGAGTGaa
P. Abe	tggtgaag	gtaatatctccg...	4950...	ttgattga	---ttgttttttca	-----TTTCAAG	gGAGTGaa
C. Jac	tggtgaag	gtaatatctcca...	4950...	ttgattta	---ttgttttttca	-----TTTCAAG	gGAGTGaa
M. Mus	ttgtgaag	gtaattccccta...	4938...	-aatgagtg	cctgacatgga	TTTGT	TTTGTc
R. Nor	tggtgaag	gtaattccccta...	4950...	gacatgga	---ttgtttttgtca	-----TTTCAAG	gGAGTGag
C. Por	tgctgaag	gtaatatcccca...	4950...	-atgtgat	ttttgtttgtg	-----TTTCAAG	gGAGTGaa
O. Cun	tggtgaag	gtaatatcccca...	4950...	-atgtgat	ttttctttgtta	-----TTTCAAG	GGAGTGaa
C. Fam	tggtgaag	gtaatacccaca...	4950...	-gatgtgat	ttttttatca	-----TTTCAAG	gGAGTGaa
B. Tau	tggtgaag	gtaatgccca...	4949...	-tgatgtgat	ttgtctgtc	-----ATTCAAG	gGAGTGaa
E. Cab	tggtgaag	gtaatatctgcg...	4936...	tgaatgact	gattgatgtg	ATTTGT	TTTGTc
L. Afr	tggtgaag	gtaatgtcccca...	4936...	tgaatgatt	cattgatgta	ATTTGT	TTTGTc
	* ****	****		*	*	*****	*****

id=215573 gene=ENSG00000118507 name=AKAP7 segment=chr6.131522051.131540800.1 type=IN

Figure 52: CS=19.24



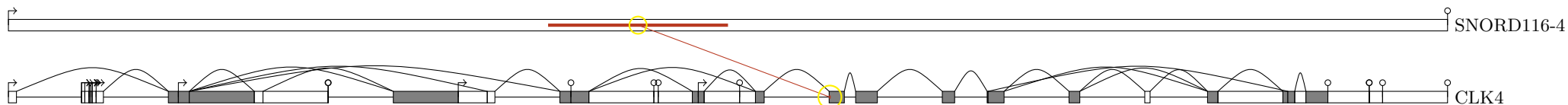
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gaaaactcat-accgtc	gttctcagcgg	aactgaggtcc	agcgcgtt
R. Mac	atgtgctt	ggatcgatgatgagt-	cccccaaaaaacattc	ccttggaaaag	GAACAAa	AATGAGT	gagaactcat-accgtc	gttctcagcgg	aactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gaaaactcat-accgtc	gttctcagcgg	aactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gaaaactcat-accgtc	gttctcagcgg	aactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagt-	cccccaaaaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gagaactcat-accgtc	tctcagcgg	aactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattcc-	-agtcaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gaaaactctgtacc	gccactctcagcgg	aactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatgattcc-	-ataaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gaaaactcaatacc	gccactctcagcgg	aactgaggtcc	agacotgg
C. Por	atgtgctc	ggatcgatgatgatcccc-	-aaaaaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gagagcttaata	ccgtcactctcagcgg	aactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgactcccc-	-ataaacattc	ccttggaaaag	CTGAACAAa	ATGAGT	gagaactcacaacc	gtcgttctcagcgg	aactgaggtcc	agcacatt
F. Cat	atgtgctc	ggatcgatgatgactccctc-	-aacagcattc	ccttggaaaag	CTGAACAAa	ATGAGT	gagaactccctacc	gtcgttctcagcgg	aactgaggtcc	agcacgtt
E. Cab	acgtgctc	ggatcgatgatgactccctc-	-atatgcattc	ccttggaaaag	TCTGAACAAa	ATGAGT	gagaactcactacc	gtcgttctcagcgg	aactgaggtcc	ggcacgtt
O. Avi	acatgctc	ggatcagtgatgacaactttc-	-atattatc	ccttggaaaag	TCTGAACAAa	ATGAGT	gagaactcactacc	atc-tcctcagcgg	aactgaggtcc	agcacgtt
L. Afr	atgtgctt	ggatcgtttatgactccac-	-acatacattc	ccttggaaaag	TCTGAACAAa	ATGAGT	gagaaccctact	gtcgttctcagcgg	aactgaggtcc	agcatacc
	** *	*****	* ****	*	*****	*****	* * *	* * *	* * *	*****

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
R. Mac	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGTT	tttag	gggctc	tt
P. Tro	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
P. Abe	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
C. Jac	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
M. Mus	taatacag	gtaagttttg	...4941...	gggacatacaagcta	acctg	ATTCGTTTGT	ttTTAG	gggctc	tt
R. Nor	taatacag	gtaagttttt	...4941...	gggacataaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
C. Por	caatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
O. Cun	gaatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
F. Cat	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	gggctc	tt
E. Cab	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	Gggctc	tt
O. Avi	taatacag	gtaagttttg	...4941...	gggacatgaaagcta	acctg	ATTCATTTGT	ttTTAG	Gggctc	tt
L. Afr	taatacag	gtaagttttg	...4941...	gggacacagaagcta	acctg	ATTCATTTGT	ttTTAG	Gggctc	tt
	*****	*****	** *	***	**	*****	*****	*****	*****

id=609102 gene=ENSG0000107249 name=GLIS3 segment=chr9.4125942.4144838.-1 type=IN

Figure 53: CS=11.7



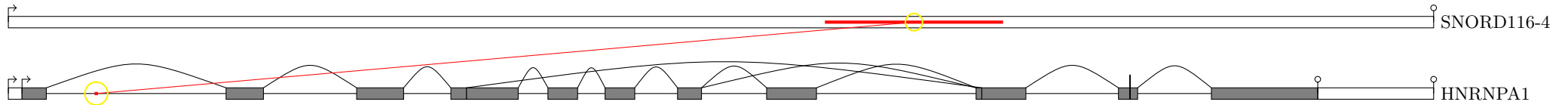
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaa	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gaaaactca-	taccgtcgttctcagcggaactgaggtcc	agcgcgtt	
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaa	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gaaaactca-	taccgtcgttctcagcggaactgaggtcc	agcacgtt	
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaa	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gaaaactca-	taccgtcattctcatcggaactgaggtcc	agcacgtt	
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaa	CATTCCTT	GG-AAA	agctgaacaaaatgagt	gagaactca-	taccgtcttcctcatcggaactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatctatgatgattc	ccagtc-aaa-	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt		
R. Nor	ccgtgctt	ggatcgatgatgattt	ccaata-aaa-	CATTCCTT	GG-AAA	gcTGAA	-caaaatgagt	gaaaactcaataccgccactatcatcgtgactgaggtcc	agacctgg		
O. Cun	atgtgctt	ggatcgatgatgactc	ccccat-aaa-	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt		
C. Fam	atgtgctt	ggattgatgatgactc	cttcaatctg-	CATTCCTT	GAAAAG	TAAA	-caaaatgagt	gagaactcctactgtcgttctcactgaaactgaggtcc	agcatgtt		
F. Cat	atgtgctc	ggatcgatgatgactc	ccctcaa-cag-	CATTCCTT	GG-AAA	gcTGAA	-caaaatgagt	gagaactcctaccgtcttctcatcaaaactgaggtcc	agcacgtt		
B. Tau	acgtgctt	ggatcgatgatgactc	ccacaa-atg-	CATTCCTT	GG-AAA	tcTGAA	-caaaatgagt	gagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg		
E. Cab	acgtgctc	ggatcgatgatgactc	ccctcat-atg-	CATTCCTT	GAAAAG	TGAA	-caaaatgagt	gagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt		
S. Sus	ccgtgctc	ggatcgatgatgactc	ccctcta-aag-	CATTCCTT	GG-AAA	tcTGAA	-caaaatgagt	gagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg		
L. Afr	atgtgctt	ggatcgatgatgactc	ccacac-ata-	CATTCCTT	GG-AAA	tcTGAA	-caaaatgagt	gagaacccctactgtctctcttagc-aacctgaggtcc	agcatacc		
	*** *	****	* **** *	*****	***	*	*****	* ** *	*	*****	*

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15\_25304685\_25304780\_1 type=EN

H. Sap	catggcat	gtaagttt	gttt...2994...	----t	tta	---c	at	tt	tt	tt	tt	tt	TTTATTTTAAG	GGATG	gca
P. Tro	catggcat	gtaagttt	gttt...2993...	----t	tta	---c	at	tt	tt	tt	tt	tt	TTTATTTTAAG	GGATG	gca
P. Abe	catggcat	gtaagttt	gttt...2998...	----t	tta	---c	at	tt	tt	tt	tt	tt	TTTATTTTAAG	GGATG	gca
C. Jac	catggcat	gtaagttt	gttt...3178...	----a	tt	---c	at	tt	tt	tt	tt	tt	TTTTTAAG	GGATG	gca
M. Mus	cacggcat	gtaagttt	gctt...1540...	.t--	tt	ta	gc	at	cat	cat	cat	ct---	TTTGTTTTCAAG	GGATG	gct
R. Nor	catggcat	gtaagttt	gctt...1496...	.tac	at	tt	ag	---c	at	cat	cat	ct---	TTTGTTTTCAAG	GGATG	gct
O. Cun	catggcat	gtaagttt	gctt...2567...	----t	at	ac	---c	at	at	tt	tt	tt	TTTGTTTTCAAG	GGATG	gca
C. Fam	catggcat	gtaagttt	gctt...3759...	----t	at	ac	---c	at	tt	tt	tt	tt	TTTGTTTTCAAG	GGATG	gca
F. Cat	catggcat	gtaagttt	gctt...2893...	----t	ct	ac	---c	gt	tt	tt	tt	tt	TTTGTTTTCAAG	GGATG	gca
B. Tau	catgacat	gtaagttt	gctt...3284...	----t	gt	ac	---a	tt	at	cat	tt	tt	TTTGTTTTCAAG	GGATG	gca
E. Cab	catggcat	gtaagttt	gctt...2877...	----a	tt	ac	---c	at	tt	tt	tt	tt	TTTGTTTTCAAG	GGATG	gca
S. Sus	catggcat	gtaagttt	tttt...4259...	.tt	ca	tt	tt	ac	---c	at	tt	tt	TTTGTTTTCAAG	GGATG	gca
L. Afr	catggcat	gtaagttt	ttttac...1359...	----t	tt	ac	---c	at	tt	tt	tt	tt	TTTGTTTTCAAG	GGATG	gca
	** * **	*****											*** **	*****	

id=746901 gene=ENSG00000113240 name=CLK4 segment=chr5\_178040845\_178043882\_-1 type=IN

Figure 54: CS=22.75



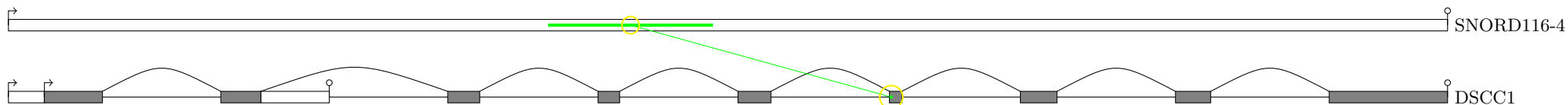
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcgcgtt
R. Mac	atgtgctt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcacggt
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactca-taccgtc	tctcagc	ggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgatt	cccag---tcaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactctgtacc	gccactctcagc	ggaactgaggtcc	agcatcct
R. Nor	ccgtgctt	ggatcgatgatgatt	tcc---aataaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactcaatacc	gccactatcagc	ggaactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgagtc	cccc---aaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gagctctaat	ccgtcactctcagc	ggaactgaggtcc	agcacact
D. Cun	atgtgctt	ggatcgatgatgagtc	cccc---ataaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcacaacc	cggttctcagc	ggaactgaggtcc	agcacatt
C. Fam	atgtgctt	ggattgatgatgact	ccttc--aatctgattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcctact	gtcgttctcagc	ggaactgaggtcc	agcatggt
F. Cat	atgtgctc	ggatcgatgatgact	ccctc---aacagattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcctacc	gtcgttctcagc	ggaactgaggtcc	agcacggt
B. Tau	acgtgctt	ggatcgatgatgact	cccac---aatgcattc	ccttggaaaagctga	ACAAAATG	GTGA	gcatcactacc	gtc-tcctcagc	ggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgact	ccctc---atagcattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	gtcgttctcagc	ggaactgaggtcc	ggcacggt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctc---taagcattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	gtc-tcctcagc	ggaactgaggtcc	ggcacggt
O. Avi	acatgctc	ggatcagtgatgaca	acttt--catattattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	atc-tcctcagc	ggaactgaggtcc	agcacggt
L. Afr	atgtgctt	ggatcgatttatgact	tccac---acatacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	atc-tcctcagc	ggaactgaggtcc	agcatacc
	** *	****	* **** *	*****	*** **	*****	* * *	*	**** **	*

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	agtcagag	gtgagttaggcg	..111..-----taccctc	ccaaagttcaag	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..376..ccccactctag	tctcctaa
R. Mac	agtcagag	gtgagttaggcg	..113..-----taccctc	ccaaagttcaag	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..377..ccccactccag	tctcctaa
P. Tro	agtcagag	gtgagttaggcg	..111..-----taccctc	ccaaagttcaag	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..375..ccccactctag	tctcctaa
C. Jac	agtcagag	gtgagttaggcg	..106..-----ctaccctc	ccaaagttcaag	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..371..ccccactgtag	tctcctaa
M. Mus	agtccgag	gtaagttggatg	..106..-----ctacttta	aaaaaatgcagg	TCGCCATTTGT	cctcatagtca	ccatgaggc---	..369..cctccacttag	tctcccaa
R. Nor	agtcagag	gtgagttaggcg	..105..-----cctacttt	aaaaaatgcagg	TCGCCATTTGT	cctcatagtca	ccatgaggc---	..361..actttatttag	tccccaa
C. Por	agtcagag	gtaagcgtat	..103..-----gcctgctc	ccaaagttcagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..327..cttccactctag	tctcctaa
O. Cun	agtcagag	gtgaggagctcc	..102..aagcctacc	ctc---ccaaag---	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..378..tctcccgccag	tgcgccaa
C. Fam	agtcagag	gtgagtaacacg	..112..-----ttcccctc	ccgaagttgagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..363..ccccctcctag	tctcccaa
F. Cat	agtcagag	gtgagtaacacg	..113..-----taccctc	ccaaagttcagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..378..cccactcctag	tctcccaa
B. Tau	aatcagag	gtgggtaagacg	..111..-----tcccctc	cctaaagttgagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..362..ctcctcctag	tctcccaa
E. Cab	agtcagag	gtgagtaggacg	..111..-----taccctc	ccaaagttcagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..359..tctactcctag	tctcccaa
S. Sus	agtcagag	gtgagtaggacg	..111..-----taccctc	cctaaagttcagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..358..ccctactcctag	tctcccaa
O. Avi	aatcagag	gtgggtaagacg	..111..-----tcccctc	cctaaagttgagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..366..ctccactcctag	tctcccaa
L. Afr	agtcagag	gtaagctacct	..108..-----taccctc	ccaaagttgagg	TCGCCATTTGT	cctcttgatcg	ccatgaggc---	..389..ttccaccattag	tctcctaa
	** ** ** *	** *	*	*	*****	** *****	** *****	** ** ** *	** ** ** *

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 55: CS=18.75



H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgaaaactcat-	accgtcgttctcagc	ggaactgaggtcc	agcgcgtt
R. Mac	atgtgctt	ggatcgatgatgagt-	cccccaaaaaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgagaactcat-	accgtcgttctcagc	ggaactgaggtcc	agcacttg
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgaaaactcat-	accgtcattctcatc	ggaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgagaactcat-	accgtcttcctcatc	ggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgatt-	cccagtc	caaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgaaaactctgtaccg	cactctcatc	ggaactgaggtcc
R. Nor	ccgtgctt	ggatcgatgatgatt-	tccaataaaa	CATTCCTTGG-AAAAGc	TGAA	-caaaatgagtgaaaactcaataccg	cactatcatc	gtgactgaggtcc	agcactgg
O. Cun	atgtgctt	ggatcgatgatgact-	ccccataaaa-	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgagaactcacaaccgtc	gttctcatc	gtgactgaggtcc	agcacatt
C. Fam	atgtgctt	ggattgatgatgact-	ccttcaatctg-	CATTCCTTGG-AAA	agctaa	caaaatgagtgagaactcctactgtc	gttctcactg	aaactgaggtcc	agcatgtt
F. Cat	atgtgctt	ggatcgatgatgact-	ccctcaacag-	CATTCCTTGG-AAAAGc	TGAA	-caaaatgagtgagaactcctaccgtc	tcttctcatc	aaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgact-	cccacaaatg-	CATTCCTTGG-AAAATc	TGAACA	-aaatgagtggacatcactaccgtc-	tcctcatc	ggaactgaggtcc	agcacgtg
E. Cab	acgtgctt	ggatcgatgatgact-	ccctcatatg-	CATTCCTTGGAAAATc	TGAA	-caaaatgagtgagaactcactaccgtc	gttctcatc	gaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctt	ggatcgatgatgact-	ccctctaaag-	CATTCCTTGG-AAAATc	TGAACA	-aaatgagtgagaactcactaccgtc-	tcctcatc	gaaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcggtttatgact-	tccacacata	CATTCCTTGG-AAAATc	TGAA	-caaaatgagtgagaaccctactgtc	tctcttagc-	aacctgaggtcc	agcatacc
	*** *	****	* **** *	*	***** **	** *****	* ** *	* *	***** *

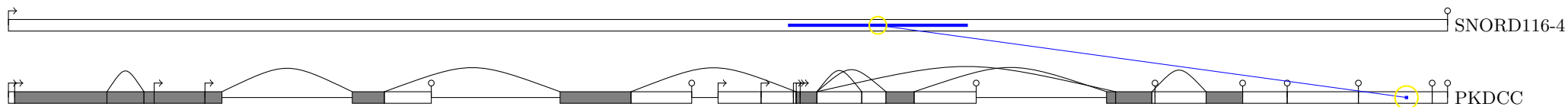
id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	gagccaga	gtaagtatttta...	734...	---ataacttttcaagtgggtg	-----TTTAAa	TTTTTCAG	GGaAATGa
R. Mac	gagccaga	gtaagtatttta...	729...	---ataacttttcaaatgggtg	-----TTTAAa	TTTTTCAG	GGaAATGa
P. Abe	gagccaga	gtaagtatttta...	751...	---ataacttttcaagtgggtg	-----TTTAAa	TTTTTCAG	GGaAATGa
C. Jac	gagccaga	gtaagtatttta...	608...	---agaacttttcaaatgtgtg	-----TTTAAa	TTTTTCAG	GGaAATGa
M. Mus	gagccaga	gtgagtatttgc...	905...	-tcatagtttcttt--tgtgtgc	-----TTTAAa	TTTTTCAG	GGaAATGa
R. Nor	gagccaga	gtgagtatttgc...	1060...	-tcatagtttctct--tgtgtgc	-----TTTAAa	TTTTTCAG	GGaAATGa
O. Cun	gagccaga	gtaagtatttta...	403...	-gaatagcttctca--tgagtgt	-----TTTAAa	TTTTTCAG	GGaAATGa
C. Fam	gagccaga	gtaagtattttt...	640...	-----ttcaaatgagtgttttaaaa	-----TTTTCAG	TTTTTCAG	GGaAATGa
F. Cat	gagccaga	gtaagtatttta...	426...	---taacttttcaaatgagtatt	-----TTTAAa	TTTTTCAG	GGaAATGa
B. Tau	gagccaga	gtaagtatttat...	450...	.gtgaaaacttttcaataag	-----TGTTTAAa	ATTTTTTCAG	GGaAATGa
E. Cab	gaaccaga	gtaagtatttta...	728...	---gtaacttttcaaatgagggt	-----TTTAAa	TTTTTCAG	GGaAATGa
S. Sus	gagccaga	gtaagtatttta...	323...	-----tcataaaaatgtgaagaag	TGTTTAAa	ATTTTTTCAG	GGaAATGa
L. Afr	gaaccaga	gtaagtatttta...	392...	---ataacttttcaaatgggtg	-----TTTAAa	ATTTTTTCAG	GGaAATGa
	** *****	** *** *	*	*	*****	*****	*****

id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 56: CS=23.14





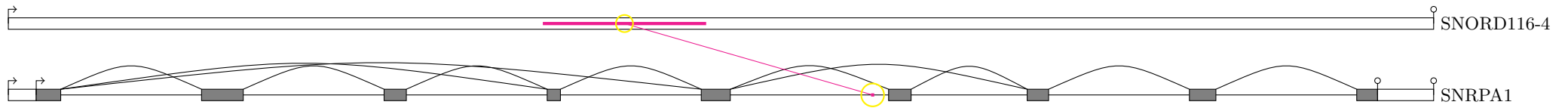
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P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattccttggaaaagc-	TGAACAAAaTGAG	tgaaaactca-taccgtcgttctcagcggaaactgaggtcc	agcacgtt	
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattccttggaaaagc-	TGAACAAAaTGAG	tgaaaactca-taccgtcattctcatcggaactgaggtcc	agcacgtt	
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaaacattccttggaaaagc-	TGAACAAAaTGAG	tgAGAActca-taccgtcttcctcatcggaactgaggtcc	agcacatt	
M. Mus	acgtgctt	ggatctatgatga---	ttccagtc	caaacattccttggaaa-	GCTGAACAAAaTGAG	tgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatga---	ttccaata	aaaaacattccttggaaa-	GCTGAACAAAaTGAG	tgaaaactcaataccgccactatcatcgtgactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatga---	tgcccc	aaaaaacattccttggaaaagc-	TGAACAAAaTGAG	tgAGAGctctaaccgtcactctcgtcgtgactgaggtcc	agcacact
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F. Cat	atgtgctc	ggatcgatgatga---	ctccct	caacagcattccttggaaa-	GCTGAACAAAaTGAG	tgAGAActccctaccgtcttctcatcaaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatga---	ctccaca	aatgattccttggaaa-	CTGAACAAAaTGAG	tgagccactactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatga---	ctccct	catatgattccttggaaa-	CTGAACAAAaTGAG	tgAGAActcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatga---	ctccct	ctaaagcattccttggaaa-	CTGAACAAAaTGAG	tgAGAActcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatga---	cttcac	acatacattccttggaaa-	CTGAACAAAaTGAG	tgAGAAcCCCTactgtctctcttagca-acctgaggtcc	agcatacc
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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P. Tro	tgtgggtg	attctgtacctg...	138...	-----	tggggccggggcctttctgc-----	CTCATTGctTTCA	-tgaaagccgcaaagcagcca-	...	66...	ttgtttat	tttt	gtaaaaa
P. Abe	tgtgggtg	attctgtacctg...	138...	-----	tggggccggggcctttctgc-----	CTCATTGctTTCA	atgaaagccgcaaagcagcc--...	67...	ttgtttat	tttt	gtaaaaa	
C. Jac	tgtgggtg	attctgtacctg...	131...	-g	ggggtggggcctttctgc-----	TTCTgcCTCATTGctTTCA	atgaaagccgcaaagcagcc--...	67...	ttgtttat	tttt	gtaaaaa	
M. Mus	tgtgagtg	aaccagcactgg...	137...	-----	tagggtcggggcctctctgc-----	CTCATTGctTTCAGT	gaaagccaggagcagccg...	113...	ttgtttat	tttt	gtaaaaa	
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C. Por	tgtgagtg	agcccgcttccc...	136...	-t	ggggtgaggctggggcct-----	TTCTgcCTCATTGctTTCA	atgaaagccacagcagcc--...	66...	ttgtttat	tttt	gtaaaaa	
O. Cun	tgtgggca	atcctggacct...	131...	-c	ggggtggggcctttctgc-----	TTCTgcCTCATTGctTTCAGT	gaaagccgcaaagcagccaa...	66...	ttgtttat	tttt	gtaaaaa	
F. Cat	tgtgggaa	actccgtacctg...	134...	-t	ggggtggggcctttctgc-----	TTCTgcCTCATTGctTTCAGT	gaaagccgcaaagcagccaa...	65...	atgtttat	tttt	gtaaaaa	
B. Tau	tgtgggca	attctgtacccc...	136...	-----	tggggccggggcctttctgc-----	CTCATTGctTTCAGT	gaaagccgcaaagcagcca-	...	66...	atgtttat	tttt	gtaaaaa
E. Cab	tgtgggca	atccatacctg...	131...	-t	ggggtggggcctttctgc-----	TTCTgcCTCATTGctTTCAGT	gaaagccgcaaagcagcca-	...	66...	atgtttat	tttt	gtaaaaa
S. Sus	tgtgggca	aatctgtacctg...	128...	-t	ggggtggggcctttctgc-----	TTCTgcCTCATTGctTTCAGT	gaaagccgcaaagcagcca-	...	66...	atgtttat	tttt	gtaaaaa
L. Afr	cgtgggtg	actctggcctcc...	106...	c	tggggtggggcctttctgc-----	AGGGcTTTCTgcCTCATTGctTTCAGT	gaaagcagcctggcagctg-	...	65...	ttgtttat	tttt	gtaaaaa
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id=707208 gene=ENSG0000162878 name=PKDCC segment=chr2.42285327.42285609.1 type=EN

Figure 57: CS=10.14



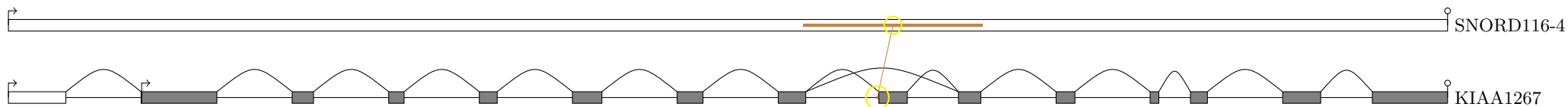
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R. Mac	atgtgctt	ggatc	gatgatgag	tcccccaaaaaa	-CATTCTGGAA	aaagctga	acaaaatg	agtgaga	actcat-	accgtcgtt	tctcagc	ggaactg	agggtcc	agcacttg
P. Tro	atgtgttt	ggatc	gatgatgag	tcccccaaaaaa	-CATTCTGGAA	aaagctga	acaaaatg	agtgaaa	actcat-	accgtcgtt	tctcagc	ggaactg	agggtcc	agcacgtt
P. Abe	atgtgttt	ggatc	gatgatgag	tcccccaaaaaa	-CATTCTGGAA	aaagctga	acaaaatg	agtgaaa	actcat-	accgtcgtt	tctcagc	ggaactg	agggtcc	agcacgtt
C. Jac	atgtgctt	ggatc	aatgatgag	tcccccaaaaaa	-CATTCTGGAA	aaagctga	acaaaatg	agtgaga	actcat-	accgtcgtt	tctcagc	ggaactg	agggtcc	agcacatt
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C. Por	atgtgctc	ggatc	gatgatgatg	tcccccaaaaaa	-CATTCTGGAA	aaagctga	acaaaatg	agtggag	cttaac	ccgtcact	ctcgtcgt	gactgag	gggtcc	agcacact
O. Cun	atgtgctt	ggatc	gatgatgact	tccccataaaa	---CATTCTGGAA	aaagctga	acaaaatg	agtgaga	actcaca	accgtcgtt	tctcagc	ggaactg	agggtcc	agcacatt
C. Fam	atgtgctt	ggatt	gatgatgact	tccctcaatc	--TGCA	TTCCTGGAA	aaagctga	acaaaatg	agtgaga	actcct	actgtctt	ctcactg	aaactg	agggtcc
F. Cat	atgtgctc	ggatc	gatgatgact	ccctcaaca	---GCAT	TTCCTGGAA	aaagctga	acaaaatg	agtgaga	actccct	accgtcgtt	tctcagc	aaactg	agggtcc
B. Tau	acgtgctt	ggatc	gatgatgact	cccac---aa	ATGCAT	TTCCTGGAA	aaagctga	acaaaatg	agtggac	catcact	accgtc	tctcagc	ggaactg	agggtcc
E. Cab	acgtgctc	ggatc	gatgatgact	ccctcat---	ATGCAT	TTCCTGGAA	aaagctga	acaaaatg	agtgaga	actcact	accgtcgtt	tctcagc	aaactg	agggtcc
L. Afr	atgtgctt	ggatc	ggtttatgact	---tccacacata	-CATTCTGGAA	aaagctga	acaaaatg	agtgaga	accct	actgtct	ctcttagc	-aacctg	agggtcc	agcatacc
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15\_25304685\_25304780\_1 type=EN

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R. Mac	aactaaaa	gtaagtag	taat...505...	---ggagag	ttcgcttccatg	ttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
P. Tro	aactaaaa	gtaagtag	taat...512...	---ggagag	ttcgcttccatg	ttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
P. Abe	aactaaaa	gtaagtag	taat...512...	---ggagag	ttcgcttccatg	ttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
C. Jac	aactaaaa	gtaagtag	taat...472...	---ggagag	ttcacttccatg	ttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
M. Mus	aactcaaa	gtgagtatt	gcg...487...	tcaggaga	attctcttccat	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
R. Nor	aactaaaa	gtgagtatt	gcg...467...	ttcagaga	attctcttccat	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
C. Por	aactaaaa	gtaagtgtt	ctt...457...	---gcagc	attctctcccgctg	ttctgaggaatg	cgct	taaatgc	gtggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
O. Cun	agctaaaa	gtaagtgtt	gtt...439...	gctggaaa	aattgccttgtg	gttttctgaggaatg	catc	tacatg	catggtatt	gctaattc	catt-act	ctggtg	gtgctg	tag	gagcgtca
C. Fam	aactaaaa	gtaagtatt	gtt...528...	tcaggaga	gtttcttccat	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
F. Cat	aactgaaa	gtaagtatt	ttt...545...	tcagaag	gttttcttccat	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
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E. Cab	aactaaaa	gtaagtatt	tatt...734...	tcaggaga	atttttccat	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
L. Afr	aactgaaa	gtaagtatt	tagc...490...	---agggc	gctattcttccatg	gttttctgaggaatg	catc	taaatgc	atggtatt	ctatttcc	taactctg	tgtgtg	gtgctg	tag	gagcgtca
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id=143334 gene=ENSG0000131876 name=SNRPA1 segment=chr15\_101826499\_101827112\_-1 type=IN VIEW

Figure 58: CS=14



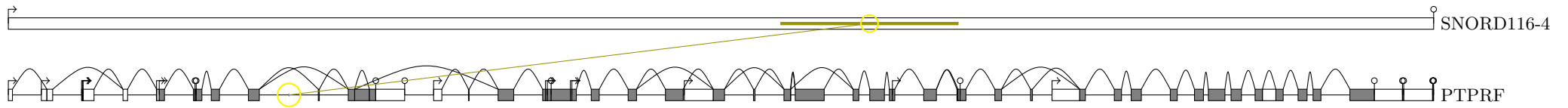
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P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattc	ccttggaaaagct	GAACAAAATGAGT	gaaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagt	-cccccaaaaaaacattc	ccttggaaaagct	GAACAAAATGAGT	gagaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacatt
R. Nor	ccgtgctt	ggatcgatgatgatttc	--aataaaaacattc	ccttgg-aaaagct	GAACAAAATGAGT	gaaaactcaatacc	gccactatcatc	gtgactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatgccc	---aaaaaacattc	ccttggaaaagct	GAACAAAATGAGT	GAGAGctcta	atccgtcactct	cgctgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgactcccc	---ataaacattc	ccttggaaaagct	GAACAAAATGAGT	gagaactcaca	accgtcgtttct	catcgtgactgaggtcc	agcacatt
F. Cat	atgtgctc	ggatcgatgatgactccctc	---aacagcattc	ccttgg-aaaagct	GAACAAAATGAGT	gagaactccct	accgtctttct	catcaaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccac	---aatgcattc	ccttgg-aaaagct	GAACAAAATGAGT	gagccatcact	accgtc-tcct	catcggactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactccctc	---atatgcattc	ccttggaaaagct	GAACAAAATGAGT	gagaactcact	accgtcgtttct	catcgaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgactccctc	---taagcattc	ccttgg-aaaagct	GAACAAAATGAGT	gagaactcact	accgtc-tcct	catcgaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatgactccac	---acatacattc	ccttgg-aaaagct	GAACAAAATGAGT	gagaactcact	accgtcgtttct	catcgaactgaggtcc	agcatacc
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R. Mac	aacagcca	gtaaggttcagg...	.428...	-----	ttgagaggacatatttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
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P. Abe	aacagcca	gtaaggttcagg...	.429...	-----	ttgagaggacatatttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
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R. Nor	aacatcca	gtaagtttctga...	.386...	-----	ttgagtaaatgtatttcaca	GCTCtTTTT-TGTC	ccctcttcag	agctgtcc	
C. Por	aacagcca	gtaagttctcggg...	.431...	aaagatttgagagaag	gtatctc	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
O. Cun	aactgcca	gtaagttttagg...	.392...	-----	ttgagaggaggtatttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
F. Cat	aacagcca	gtaagtttcagg...	.469...	-----	gattgagagaag--atttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
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E. Cab	aacagcca	gtaagtttcagg...	.436...	-----	ttcagagaagatatttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
S. Sus	aacagcca	gtaagtttcagg...	.428...	-----	atgagaaaagatacttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
L. Afr	aacagcca	gtaagtttcagg...	.425...	-----	ttgagagaaggtatttcaca	GCTCtTTTTctGTC	ccctcttcag	agctgtcc	
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Figure 59: CS=13



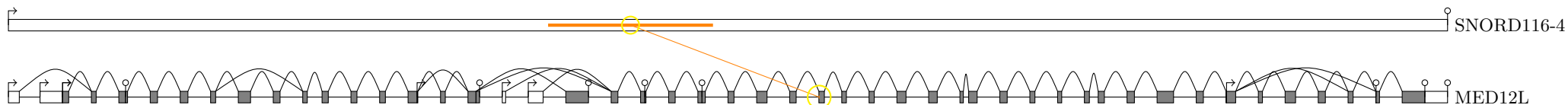
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P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactcat-accgtc	gttctcagcggaactgaggtcc	agcacggt
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactcat-accgtc	tctctcagcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgatt	cccag---tcaaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactctgtaccgccactctc	atcggaactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatgatt	tcca---ataaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactcaataccgccactatc	atcgtgactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatg	cccc---aaaaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgagagctctaatccgtcactctc	gtcgtgactgaggtcc	agcacact
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E. Cab	acgtgctc	ggatcgatgatgact	ccctc---atatgattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactcactaccgtcgttctc	atcgaactgaggtcc	ggcacggt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctc---taagcattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactcactaccgtc-tcctc	atcgaactgaggtcc	ggcacggt
L. Afr	atgtgctt	ggatcgattatgact	ccac---acatacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaaccctactgtctctctag	ca-acctgaggtcc	agcatacc
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id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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R. Mac	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P. Tro	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P. Abe	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Jac	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M. Mus	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R. Nor	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Por	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcaccag	gtggttca
O. Cun	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	cgTTCA	aattacctcgccag	gtggttca
F. Cat	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B. Tau	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E. Cab	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S. Sus	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
L. Afr	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
	***	****	*****	**	*****	**	*****	*****

id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 60: CS=12.6



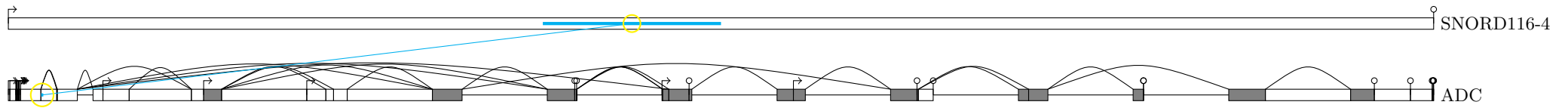
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcgcgtt
R. Mac	atgtgcctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacgtt
C. Jac	atgtgcctt	ggatcaatgatgagtc	cccccaaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcat-accgtc	gtttctcagcgg	aactgaggtcc	agcacatt
M. Mus	acgtgcctt	ggatctatgatgatt	---cccagtcaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactctgtacc	gccactctcatcg	gaactgaggtcc	agcatctt
R. Nor	ccgtgcctt	ggatcgatgatgatt	---tccaataaaa	CATTCCTTGGAAAAG	ctgaacaaaatgagtg	aaaactcaatacc	gccactatcatc	gtgactgaggtcc	agacctgg
C. Por	atgtgcctt	ggatcgatgatgatg	---cccccaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcctaacc	gtcactctcgtc	gtgactgaggtcc	agcacact
O. Cun	atgtgcctt	ggatcgatgatgact	ccccataaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtg	aaaactcacaacc	gtcgttctcagc	gaactgaggtcc	agcacatt
C. Fam	atgtgcctt	ggattgatgatgact	ccttcaatctg	CATTCCTTGGAAAAGC	taacaaaatgagtg	aaaactccctact	gtcgttctcagc	gaactgaggtcc	agcatggt
B. Tau	acgtgcctt	ggatcgatgatgact	cccacaaatg	CATTCCTTGGAAA	tctgaacaaaatgagtg	aaaactcactacc	gtc-tcctcatcg	gaactgaggtcc	agcacgtg
S. Sus	ccgtgcctt	ggatcgatgatgact	ccctctaaag	CATTCCTTGGAAA	tctgaacaaaatgagtg	aaaactcactacc	gtc-tcctcatcg	gaactgaggtcc	ggcacgtg
L. Afr	atgtgcctt	ggatcgtttatgact	---tccacacata	CATTCCTTGGAAA	tctgaacaaaatgagtg	aaaaccctactgt	ctctcttagca	-acctgaggtcc	agcatacc
	*** *	**** * ****		*****	** *****	*	* * * *	*****	*

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15\_25304685\_25304780.1 type=EN

H. Sap	ctgtagat	gtaagttttctt...1609...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
R. Mac	ctgtagat	gtaagttttctt...1596...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Tro	ctgtagat	gtaagttttctt...1611...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Abe	ctgtagat	gtaagttttctt...1599...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Jac	ctgtagat	gtaagtagtttc...1911...	aagtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
M. Mus	cggtagat	gtaagttttctt...1434...	gggtattaaaac	ctgtcaat	GTTTTTCTtaAAG	GtgAGTGa
R. Nor	ctgtggat	gtaagttttctt...1318...	gcattaaaac	ctgtccatgt	TTTTTCTtaAAG	GtgAGTGa
C. Por	ctgtagat	gtaagttttctt...1542...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
O. Cun	ctgtcgat	gtaagtttgctt...1690...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Fam	ctgtggat	gtaagttttctt...1568...	aggtattaaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
B. Tau	ctgtcgat	gtaagttttctg...1572...	tattaaaac	atgtcaatg	TTTTTCTtgAAG	GtgAGTGa
S. Sus	ctgtagat	gtaagttttctt...1671...	tattaaaac	ctgtcaatg	TTTTTCTtgAAG	GtgAGTGa
L. Afr	ccgtcgat	gtaagttttctt...2102...	tattaaaac	atgtcaatg	TTTTTCTtgAAG	GtgAGTGa
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id=595784 gene=ENSG00000144893 name=MED12L segment=chr3\_151083780\_151085433.1 type=IN

Figure 61: CS=15.6



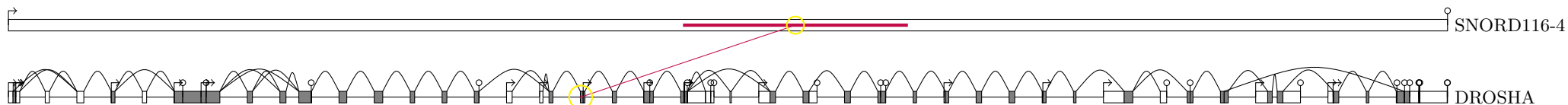
H. Sap	atgtgctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCCTGGAAA	agctgaacaaaatgagt	gaaaactcat-accgtc	gtttctcagc	ggaactgagg	tcc	agcgcgtt	
R. Mac	atgtgctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCCTGGAAA	agctgaacaaaatgagt	gagaactcat-accgtc	gtttctcagc	ggaactgagg	tcc	agcacttg	
P. Abe	atgtgctt	ggatcgatgatgagtc	cccccaaaaaaa	CATTCCCTGGAAA	agctgaacaaaatgagt	gaaaactcat-accgtc	attctcagc	ggaactgagg	tcc	agcacggt	
C. Jac	atgtgctt	ggatcaatgatgagtc	cccccaaaaaaa	CATTCCCTGGAAA	agctgaacaaaatgagt	gagaactcat-accgtc	tctctcagc	ggaactgagg	tcc	agcacatt	
M. Mus	acgtgctt	ggatctatgatgatt	---cccagtcaaa	CATTCCCTGGAAA	agctgaacaaaatgagt	gaaaactctgtacc	gccactctcagc	ggaactgagg	tcc	agcatcct	
R. Nor	ccgtgctt	ggatcgatgatgatt	---tccaataaaa	CATTCCCTGGAAA	AGC	-tgaacaaaatgagt	gaaaactcaatacc	gccactatcagc	gtgactgagg	tcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatg	-ccccaaaaaa	-CATTCCCTGGAAA	agctgaacaaaatgagt	gagagcttaac	ccgtcactctcagc	gtgactgagg	tcc	agcacact	
O. Cun	atgtgctt	ggatcgatgatgact	-ccccataaa	-CATTCCCTGGAAA	agctgaacaaaatgagt	gagaactcacaacc	gtcgttctcagc	gtgactgagg	tcc	agcacatt	
C. Fam	atgtgctt	ggattgatgatgact	-ccttcaa	-TCTGCATTCCCTGGAAA	agctgaacaaaatgagt	gagaactcctact	gtcgttctcagc	gaaactgagg	tcc	agcatggt	
F. Cat	atgtgctc	ggatcgatgatgact	-cctcaaca	-GCATTCCCTGGAAA	AGC	-tgaacaaaatgagt	gaaactcctacc	gtcttctcagc	caaaactgagg	tcc	agcacggt
B. Tau	acgtgctt	ggatcgatgatgact	---cccacaaa	TGCATTCCCTGGAAA	T	-ctgaacaaaatgagt	gagccactacc	gtc-tcctcagc	ggaactgagg	tcc	agcacggt
E. Cab	acgtgctc	ggatcgatgatgact	-ccctc-ata	TGCATTCCCTGGAAA	T	-ctgaacaaaatgagt	gagaactcactacc	gtcgttctcagc	gaaactgagg	tcc	ggcacggt
S. Sus	ccgtgctc	ggatcgatgatgact	-ccctctaaa	-GCATTCCCTGGAAA	T	-ctgaacaaaatgagt	gagaactcactacc	gtc-tcctcagc	gaaactgagg	tcc	ggcacggt
L. Afr	atgtgctt	ggatcgtttatgact	---tccacacata	CATTCCCTGGAAA	T	-ctgaacaaaatgagt	gaaacccctact	gtctctcagc	-aacctgagg	tcc	agcatacc
	*** *	****	* ****	*****	*	*****	*	***	*	*****	*

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	gTTTAAAG	GcgAGTGC	-----gaaagtggcctggggagc-----	..54..-gcctcctgtcag	cagaggcc
R. Mac	gTTTAAAG	GcgAGTGC	-----gaaagtggcctggggagc-----	..54..-gcctcctgtcag	caggggccc
P. Abe	gTTTAAAG	GcgAGTGC	-----gaaagtggcctggggagc-----	..54..-gcctcccgtcag	caggggccc
C. Jac	gTTTAAAG	GcgAGTGC	-----ggggagtggcctggggagc-----	..54..-gcctcctctcag	caggggccc
M. Mus	gTTTAAAG	GcgAGTGC	-----aggagatggctggggggga-----	..57..-gcctcctctcag	caggggccc
R. Nor	gTTTAAAG	GcgAGTGC	-----agcagatggctggggggag-----	..58..-gcctcctctcag	caggggccc
C. Por	gTTTAAAG	GcgAGTGC	cag-----ggggatagtctcgggga-----	..57..-gcctcctttcag	caggagccc
O. Cun	gTTTAAAG	GcgAGTGC	-----gggggtggctggggagcc-----	..54..-gcctcctctcag	caggggccc
C. Fam	gTTTAAAG	GcgAGTGC	GGG-----gagtggtcggggagcctcc..	..48..-gcctcctcccag	caggggccc
F. Cat	gTTTAAAG	GcgAGTGC	-----ggggagtggctcggggagcc---	..51..-gcctcctttcag	caggggccc
B. Tau	gTTTAAAG	GcgAGTGC	-----gggagacctcggggagcct---	..51..-gcctcctctcag	caggggccc
E. Cab	gTTTAAAG	GcgAGTGC	-----gggagtggctcggggagcct---	..51..-gcctcctcag	caggggccc
S. Sus	gTTTAAAG	GcgAGTGC	-----ggggagtggctcggggagcc---	..52..-gcctcctctcag	caggggccc
L. Afr	gTTTAAAG	GcgAGTGC	ggggaggaggtggcttgc-----	..69..tgcttc-ctcag	caggggccc
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id=513845 gene=ENSG0000142920 name=ADC segment=chr1.33546896.33546988.1 type=AN

Figure 62: CS=10.92



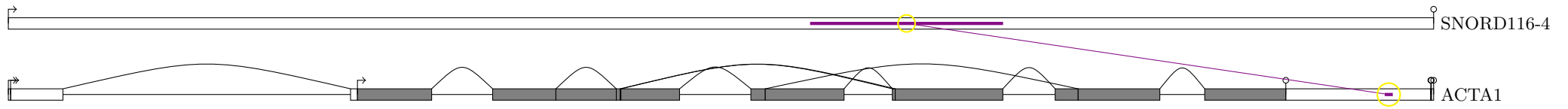
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAAA	-actca-taccgtcgttctcagcggaactgaggtcc	agcgcgtt
R. Mac	atgtgctt	ggatcgatgatgagt	cccccaaaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAGA	-actca-taccgtcgttctcagcggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAAA	-actca-taccgtcgttctcagcggaactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAAA	-actca-taccgtcatttctcagcggaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcaatgatgagt	cccccaaaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAGA	-actca-taccgtcgttctcagcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattcccag	---tcaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAAA	-actctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	ccgtgctt	ggatcgatgatgattcca	---ataaacattcctt	TGAAAagCTGAac	AAAATGAGTGAAA	-TCAA-taccgccactatcatcgtgactgaggtcc	agacctgg
C. Por	atgtgctc	ggatcgatgatgatgcccc	---aaaaaacattcctt	GGAAAagCTGAac	AAAATGAGTGAGA	-gctctaaccgtcactctcgtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgactcccc	---ataaacattcctt	GGAAAagCTGAac	AAAATGAGTGAGA	-actcacaaccgtcgttctcagcggaactgaggtcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgactccac	---aatgcattcctt	TGAAAagCTGAac	AAAATGAGTGAGA	-gagccatcac-taccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactccctc	---atatgcattcctt	GGAAAagCTGAac	AAAATGAGTGAGA	-actcactaccgtcgttctcagcggaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgactccctc	---taaagcattcctt	TGAAAagCTGAac	AAAATGAGTGAGA	-cactaccgtc-tcctcatcggaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatgactccac	---acatacattcctt	TGAAAagCTGAac	AAAATGAGTGAGA	-aacccctactgtctctcttagca-acctgaggtcc	agcatacc
	*** *	*****	* **	*****	* **	*****	*****

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

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R. Mac	tgccagag	gtaagggaaaag	..1483..	----gccaatttacagtaatttaa	---TTTTgTTTATTTTCAG	aaTTTTTg
P. Tro	tgccggag	gtaagggaaaag	..1489..	----gccaactacagtaatttaa	---TTTTgTTTATTTTCAG	aaTTTTTg
P. Abe	tgccggag	gtaagggaaaag	..1488..	----gccaactacagtaatttaa	---TTTTgTTTATTTTCAG	aaTTTTTg
C. Jac	tgccagag	gtaagggaaaat	..1497..	----tgccaactacagtaatttaa	---TTTTgTTTATTTTCAG	aaTTTTTg
M. Mus	tgccagag	gtaagagctgct	..1414..	----gcagatctatagtaatttga	---TTTTgACTTATTTTCAG	aaTTTTTg
R. Nor	tgccagag	gtaagagagaag	..1461..	atgtgcagatcaatagtaatttga	---TTTTgACTTATTTTCAG	aaTTTTTg
C. Por	tgcccagag	gtaagggaaaag	..1468..	----gcagatccacaataatttga	---TTTTgATTTATTTTCAG	aaTTTTTg
O. Cun	tgcccagag	gtaagggaaaag	..1492..	----gcagatcttcagtaatttga	---TTTTgCTTTATTTTCAG	aaTTTTTg
B. Tau	tgccagag	gtaagagagaag	..1570..	-----acagtaatttgggtttctg	---TTTTgATTTATTTTCAG	AaTTTTTg
E. Cab	tgccagag	gtaagggaaaag	..1526..	----gcagatccacaataatttga	---TTTTgATTTATTTTCAG	AaTTTTTg
S. Sus	tgccagag	gtaagggaaaag	..1814..	---tttgcata-ctatagttattt	---GGTTTTGCTTtATTTTCAG	AaTTTTTg
L. Afr	tgccagag	gtaagggaaaac	..2148..	----gcagatgacaataatttga	---TTTTgATTTATTTTCAG	AaTTTTTg
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id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 63: CS=21.32



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R.Mac	atgtgctt	ggatc	gatgatgagt	cccccaaaaaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--gaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcact	tg
P.Tro	atgtgttt	ggatc	gatgatgagt	cccccaaaaaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcacg	tt
P.Abe	atgtgttt	ggatc	gatgatgagt	cccccaaaaaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcacg	tt
C.Jac	atgtgctt	ggatc	aatgatgagt	cccccaaaaaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--gaactca-taccgtc	gttctcagc	ggaactgaggtcc	agcacat	t
M.Mus	acgtgctt	ggatc	ctatgatgatt	cccag---	tcaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--actctgtacc	gccactctcagc	ggaactgaggtcc	agcatct
R.Nor	ccgtgctt	ggatc	gatgatgatt	ttcc---	aataaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--actcaatacc	gccactatcagc	gtgactgaggtcc	agacctg
C.Por	atgtgctc	ggatc	gatgatgatg	cccc---	aaaaaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--agctctaata	ccgtcactctcagc	gtgactgaggtcc	agcacact
O.Cun	atgtgctt	ggatc	gatgatgact	cccc---	ataaacattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aactcaca	accgctgttctcagc	gtgactgaggtcc	agcacatt
C.Fam	atgtgctt	ggatt	gatgatgact	ccttc---	aatctgcattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aaatcccta	ctgtcgttctcagc	gaaactgaggtcc	agcatgt
B.Tau	acgtgctt	ggatc	gatgatgact	cccac---	aatgcattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	catcac---	taccgtc-tcctcagc	ggaactgaggtcc	agcacgtg
E.Cab	acgtgctc	ggatc	gatgatgact	ccctc---	atatgcattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aactcact	accgctgttctcagc	gaaactgaggtcc	ggcacgtt
S.Sus	ccgtgctc	ggatc	gatgatgact	ccctc---	taagcattc	ccttg	gaaaagctg	<b>AACAAAATGAGTGA</b>	--aactcact	accgctc-tcctcagc	gaaactgaggtcc	ggcacgtt
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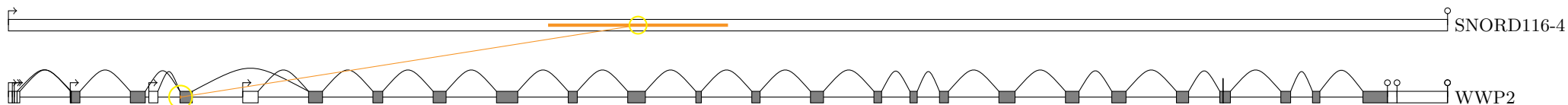
id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H.Sap	aatgcttc	tagacacactcc	...132...	-----cgtgtacatacat	taactta-	<b>TTAC</b>	<b>TCATTTTGTT</b>	atttttcga	aaacaaagccct	---.41...	ctgttaagctgc-	gtaaagt	
R.Mac	aatgcttc	tagacacactcc	...129...	-----cgtgtacatacat	taactta-	<b>TTAC</b>	<b>TCATTTTGTT</b>	atttttcga	aaacaaagccct	---.41...	ctgttaagctgc-	gtaaagt	
P.Tro	aatgcttc	tagacacactcc	...132...	-----cgtgtacatacat	taactta-	<b>TTAC</b>	<b>TCATTTTGTT</b>	atttttcga	aaacaaagccct	---.41...	ctgttaagctgc-	gtaaagt	
P.Abe	aatgcttc	tagacacactcc	...132...	-----cgtgtacatacat	taactta-	<b>TTAC</b>	<b>TCATTTTGTT</b>	atttttcga	aaacaaagccct	---.43...	ctgttaagctgc-	gtaaagt	
C.Jac	aatgcttc	tagacacactcc	...128...	-----cgtgtacatacat	taactta-	<b>TTAC</b>	<b>TCATTTTGTT</b>	atttttcga	aaacaaagccct	---.41...	ctgttaagctgc-	gtaaagt	
M.Mus	aatgcttc	tagg	cgcaactcg	...120...	-----cgtgtacatagatt	gactcg	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-caa	acaaagccctg	...43...	-tgttttgctcca	ataaactg
R.Nor	aatgcttc	tagg	cgcaactcg	...120...	-----cgtgtacatagatt	gactcg	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-caa	acaaagccctg	...42...	-tgttttgctcca	ataaactg
C.Por	aatgcttc	taagg	cgccggg	...33...	-----gtgtacatacag	tgactcga	<b>CTTACTC</b>	<b>ATTTTGTT</b>	attttt-aaa	acaaagccctg	...39...	atcttaaac	cgctg
O.Cun	aatgcttc	tagac	gcgag	...120...	-----gtgtacatacatt	caactta-	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-gaa	acaaagccctg	...42...	ctgttagactac-	ctgaagt
C.Fam	aatgcttc	tagac	cccacgc	...137...	-----cgtgtacatacat	taactta-	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-aaa	acaaagccctg	...40...	tctgtctgttc-	gtaaagt
B.Tau	aatgcttc	tagac	gcctctc	...125...	ttataatgtgtacata	cat-----	<b>GTTAC</b>	<b>TCATTTTGTT</b>	attttt-aaa	acgaagccctg	...41...	ctgttttgctgc-	gtaaagt
E.Cab	aatgcttc	tagac	cccactc	...130...	-----tgtgtacatacatt	aactta-	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-aaa	acaaagccctg	...40...	ctgttacgcagc-	gcaaagt
S.Sus	aatgcttc	taa	ccccattc	...128...	-----cgtgtacatacat	taactta-	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-aaa	acgaagccctg	...41...	ctgttatgctgc-	gtaaagt
O.Avi	aatgcttc	tagac	gcctctc	...124...	-tataatgtgtacata	catgg-----	<b>TTTAC</b>	<b>TCATTTTGTT</b>	attttt-aaa	acgaagccctg	...41...	ctgttttgctgc-	gtaaagt
	*****	**		*****	*	*	*****	*****	***	*****	*	**	

id=727623 gene=ENSG0000143632 name=ACTA1 segment=chr1.22956697.229567248.-1 type=EN

Figure 64: CS=12.6





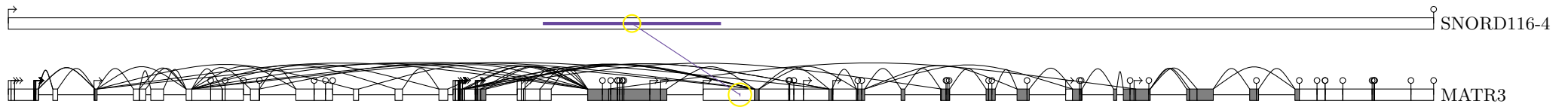
H. Sap	atgtgttt	ggatcgatgatgagtc	cccccaaaaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gaaaactcat	-accgtcgttctcagc	ggaactgaggtcc	agcgcgtt
R. Mac	atgtgcctt	ggatcgatgatgagt	-cccccaaaaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gagaactcat	-accgtcgttctc	cggaactgaggtcc	agcacttg
P. Tro	atgtgttt	ggatcgatgatgagtc	cccccaaaaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gaaaactcat	-accgtcgttctcagc	ggaactgaggtcc	agcacgtt
P. Abe	atgtgttt	ggatcgatgatgagtc	cccccaaaaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gaaaactcat	-accgtcattctc	cggaactgaggtcc	agcacgtt
C. Jac	atgtgcctt	ggatcaatgatgagt	-cccccaaaaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gagaactcat	-accgtcttctc	cggaactgaggtcc	agcacatt
M. Mus	acgtgcctt	ggatctatgatgatt	-cccagtcaa	ACATTCC	TGGAAAAG	TGAA	caaatgagt	gaaaactctgt	accgccactctc	cggaactgaggtcc	agcatctt
R. Nor	ccgtgcctt	ggatcgatgatgatt	tccaataa	-AACATTCC	TGG- AAAG	TGAA	caaatgagt	gaaaactcaat	accgccactatc	atcgtgactgaggtcc	agacctgg
C. Por	atgtgcctt	ggatcgatgatgatg	-cccccaaaa	-ACATTCC	TGGAAAAG	TGAA	caaatgagt	gagaactcaat	accgccactctc	gtcgtgactgaggtcc	agcacact
O. Cun	atgtgcctt	ggatcgatgatgact	-ccccataa	-ACATTCC	TGGAAAAG	TGAA	caaatgagt	gagaactcaca	accgtcgttctc	atcgtgactgaggtcc	agcacatt
C. Fam	atgtgcctt	ggattgatgatgact	-ccttcaatc	-GCATTCC	TGGAAAAG	TGAA	caaatgagt	gagaactccct	actgtcgttctc	actgaaactgaggtcc	agcatggt
F. Cat	atgtgcctt	ggatcgatgatgact	-cctcaaca	-GCATTCC	TGG- AAAG	TGAA	caaatgagt	gagaactccct	accgtcgttctc	atcgaactgaggtcc	agcacgtt
B. Tau	acgtgcctt	ggatcgatgatgact	-cccacaaat	-GCATTCC	TGG- AAAT	TGAA	caaatgagt	gagccatcact	accgtc-tcctc	atcgaactgaggtcc	agcacgtg
L. Afr	atgtgcctt	ggatcgattatgact	-tccacacat	-ACATTCC	TGG- AAAT	TGAA	caaatgagt	gagaaccct	actgtcctc	cttagca-acctgaggtcc	agcatacc
	*** *	****	* ****	*	*****	*** **	*****	*	* * *	*	***** **

id=614553 gene=ENSG0000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	---tacccaag	gtgactctttt...175...	--tggatg	taatgaatcaggt	TTGTTTTCCAG	GAATGTca
R. Mac	---tacccaac	gtgcctctctt...175...	--tggatg	taatgaatccggt	TTGTTTTCCAG	GAATGTca
P. Tro	---tacccaag	gtgactctttt...175...	--tggatg	taatgaatcaggt	TTGTTTTCCAG	GAATGTca
P. Abe	---tacccaag	gtggctctctt...175...	--tggatg	taatgaatcaggt	TTGTTTTCCAG	GAATGTca
C. Jac	---tacccaag	atgcctctctt...177...	----atg	tagtgaatcaggt	atctGTTCCAG	GAATGTca
M. Mus	---ccccatg	gtgctcctctt...170...	----ctg	tgatgagtcact	tactGTTCCAG	GAATGTca
R. Nor	---ccccatg	gtgctcctctt...166...	--gggctg	tgatgaatcact	ttaTTGTTTTCCAG	GAATGTTa
C. Por	agggtccggg	g---ctctgtcc...173...	----acat	gatgaatcaggt	tactGTTCCAG	GAATGTca
O. Cun	---tacccaag	gtgcctctctt...163...	--tggatg	tgatgaaccaag	tcTTGTTTTCCAG	GAATGTca
C. Fam	---tacccaag	ggacctctctt...184...	----att	tgatcaatcaag	tatctGTTCCAG	GAATGTca
F. Cat	---tacccaag	gcacctctctt...180...	--tggatg	tgatgaatcaag	ttaTTGTTTTCCAG	GAATGTca
B. Tau	---tacctgag	gcacctctctt...191...	--tggatg	tgatgaatcaag	ttaTTGTTTTCCAG	GAATGTca
L. Afr	---tacctgaa	gcacctctctt...145...	ctt	ggaagtgaatcag	TGTTTATTTCCAG	GAATGTca
	**			*	* * * * *	***** *

id=149604 gene=ENSG00000198373 name=WWP2 segment=chr16.69832858.69833076.1 type=IN

Figure 65: CS=15.6



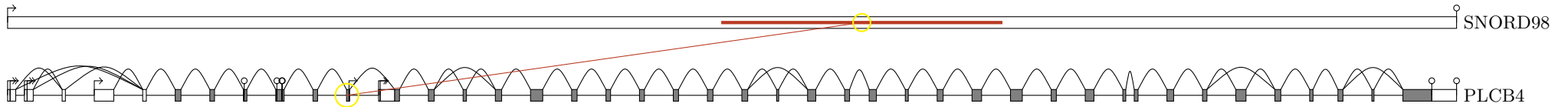
H. Sap	atgtgttt	ggatc	gatgatg	agtc	cccccaaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcat	-accg	tcgttct	cagcg	gaactg	agggtcc	agcgcgtt		
R. Mac	atgtgctt	ggatc	gatgatg	agtc	cccccaaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcat	-accg	tcgttct	cagcg	gaactg	agggtcc	agcacttg		
P. Tro	atgtgttt	ggatc	gatgatg	agtc	cccccaaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcat	-accg	tcgttct	cagcg	gaactg	agggtcc	agcacggt		
P. Abe	atgtgttt	ggatc	gatgatg	agtc	cccccaaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcat	-accg	tcgttct	cagcg	gaactg	agggtcc	agcacggt		
C. Jac	atgtgctt	ggatc	aatgatg	agtc	cccccaaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcat	-accg	tcctcct	catcg	gaactg	agggtcc	agcacatt		
M. Mus	acgtgctt	ggatc	tatgatg	atga	---ttccc	agtc	caaa-CATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actctgt	accg	cactct	catcg	gaactg	agggtcc	agcatctt	
R. Nor	ccgtgctt	ggatc	gatgatg	atga	---tttcca	ataaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actca	taacc	gccact	atcat	cgtag	agggtcc	agacctgg	
C. Por	atgtgctc	ggatc	gatgatg	atga	---tgcccc	aaaaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtggag	ctct	aatcc	gta	ctct	cgtag	agggtcc	agcacact	
O. Cun	atgtgctt	ggatc	gatgatg	atga	---ctcccc	ataaa	ACATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcaca	accg	tcgtt	ctcat	cgtag	agggtcc	agcacatt	
C. Fam	atgtgctt	ggat	tgatgatg	atga	---ctcc	caaa	TGCATT	CTTGAAAAGCTG	aacaaaatg	agtgaaa	actcct	actgt	ctct	ctc	actg	agggtcc	agcatggt	
B. Tau	acgtgctt	ggatc	gatgatg	atga	---ctccc	caaa	TGCATT	CTTGAAAAGCTG	aacaaaatg	agtggac	catc	actacc	gta	ctct	catcg	agggtcc	agcacgtg	
E. Cab	acgtgctc	ggatc	gatgatg	atga	---ctccc	TGCATT	CTTGAAAAGCTG	aacaaaatg	agtggag	actc	actacc	gta	ctct	ctc	actg	agggtcc	ggcacggt	
S. Sus	ccgtgctc	ggatc	gatgatg	atga	---ctcc	cttaaa	TGCATT	CTTGAAAAGCTG	aacaaaatg	agtggag	actc	actacc	gta	ctct	ctc	actg	agggtcc	ggcacgtg
L. Afr	atgtgctt	ggatc	ggtttatg	atga	---cttc	caaca	TGCATT	CTTGAAAAGCTG	aacaaaatg	agtggag	aaac	ccctact	gtct	ctct	tagc	-aac	ctgagg	ctcc
	*** *	****	* ****	*	*****	*****	** *****	*	* * *	*	*****	*						

id=614553 gene=ENSG00000207464 name=SNORD116-4 segment=chr15.25304685.25304780.1 type=EN

H. Sap	-----tcatgaac	ac--aatggaacca...	4381...	-agtatg	tgtga	-caagt	taatc	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..169..	actttg	ctgcag	gagtggag	
R. Mac	-----aaaggaac	ac--aacggaacca...	4336...	-agtatg	tgtga	-caagt	taatc	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..169..	actttg	ctgcag	gagtggag	
P. Tro	-----aaaggaac	ac--aatggaacca...	4351...	-agtatg	tgtga	-caagt	taatc	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..169..	actttg	ctgcag	gagtggag	
P. Abe	-----aaaggaac	ac--aatggaacca...	4336...	-agtatg	tgtga	-caagt	taatc	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..169..	actttg	ctgcag	gagtggag	
C. Jac	-----aaaggaac	ac--agtggaacca...	4649...	-aagtat	gttgg	-caagt	gatac	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..169..	actttg	ctgcag	gagtggag	
M. Mus	caattggaagaaaggaac	at-----	..2571..	-ttatg	tgtgacca	agtt	taatc	CAGTTTTTCCAAGAATGT	catagag	tattt	gagggcag	-----	..153..	actttg	ctgcag	gagtggag	
R. Nor	ctattggaagaaaggaac	at-----	..2638..	-ttgtat	tgtgat	caagt	taatc	CAGTTTTTCCAAGAATGT	gcatagag	tattt	gagggca	-----	..150..	actttg	ctgcag	gagtggag	
C. Por	-----ataaagaac	----agaagaatct...	2912...	-gtatg	tgtgacca	agtt	taatc	CAGTTTTTCCAAGAATGT	gcatggc	gtattt	gagggca	-----	..166..	actttg	ctgcag	gagtggag	
O. Cun	-----aaaagaac	acagaaaggaac--	..3762..	-attatg	tgtgacca	aat	taaac	CAGTTTTTCCAAGAATGT	gcatagc	gtattt	gagggca	-----	..167..	actttg	ctgcag	gagtggag	
C. Fam	-----aaaggaac	acaaaaggaac--	..2733..	-gtatg	ttaaat	caagt	tacc-	AGTTTTTCCAAGAATGTG	catggc	gtattt	gagggcag	-----	..166..	actttg	ctacag	gagtggag	
B. Tau	-----aggaac	acaaaaggaatca...	2653...	-tgtaa	ccaagt	ta-	ccagtt-	TTTCCAAGAATGTG	catggag	tattt	gagggcag	-----	..155..	actttg	ctacag	gagtggag	
E. Cab	-----aataac	acagaaggaacca...	2815...	-tgtaa	ccaagt	ttacc	agtt-	TTTCCAAGAATGTG	catggc	gtattt	gagggcag	-----	..161..	actttg	ctgcag	gagtggag	
S. Sus	-----aaaac	acaaaaggaacca...	2799...	-gttaa	ccaagt	ttacc	agtt-	TTTCCAAGAATGTG	catggc	gtattt	gagggca	-----	..164..	actttg	ctgcag	gagtggag	
L. Afr	-----aaaggaac	aa--gagagaacca...	2784...	-gta	accaa	at	ttacc	agtt-	TTTCCAAGAATGTG	cgtagc	gtattt	gagggcag	-----	..166..	actttg	ctgcag	gagtggag
	* ***			*	*** *	*	*****	* * *	*****	*	*****	*	*****	***	*****	*****	

id=493883 gene=ENSG0000015479 name=MATR3 segment=chr5.138645732.138650363.1 type=AN

Figure 66: CS=12.6



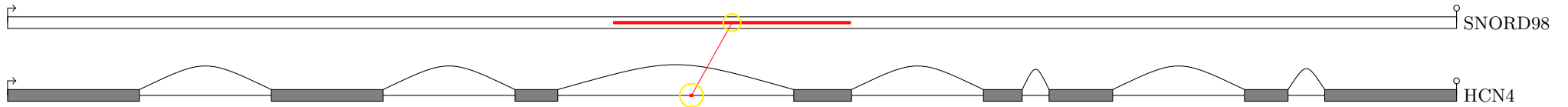
H. Sap	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAATg	CAGTGTGGAACA	caatgaactgaactc	ttccttga-
R. Mac	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAATg	CAGTGTGGAACA	caatgaactgaactc	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAATg	CAGTGTGGAACA	caatgaactgaactc	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAATg	CAGTGTGGAACA	caatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAATg	CAGTGTGGAACA	caatgaactgaactc	ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
R. Nor	tagaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
C. Por	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
O. Cun	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
C. Fam	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
F. Cat	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
B. Tau	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
E. Cab	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
O. Avi	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
L. Afr	agaaggat	gagttatga--tgtgtaaatcctat	TCCAttGCTGAAATGc	AGTgtggaacataatgaactgaactc	ttccttga-	
	****	*****	***	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	aagaaca	gtgagtgttgtt...2431...---	tctaagaacattaaggcaa	TGTTa	TTGCTATTGTT---	TTGCAG	cTGGatga
R. Mac	aagaaca	gtgagtgttgtt...2465...---	cctaagaacattaaggcaa	TGTTa	TTGCTATTGTT---	TTGCAG	cTGGatga
P. Tro	aagaaca	gtgagtgttgtt...2372...---	tctaagaacattaaggcaa	TGTTa	TTGCTATTGTT---	TTGCAG	cTGGatga
P. Abe	aagaaca	gtgagtgttgtt...2442...---	cctaagaacattaaggcaa	TGTTa	TTGCTATTGTT---	TTGCAG	cTGGatga
C. Jac	aaaaaca	gtgagtgttgtt...2421...---	ccctaagaacattaaggcaa	TGTTa	TTGCTATTGTT---	TTGCAG	cTGGatga
M. Mus	aagaaca	gtgagttctgtt...2166...---	gggtgggttctgaggctgtgt---	TGCTct	TGTT---	TtcCAG	CTGGatga
R. Nor	aagaaca	gtgagtttctgtt...2123...---	tggtaggttctgaggcagtg---	TCGctc	TTGTT---	TTTCAG	CTGGatga
C. Por	aagaaca	gtgagtttctgtt...2204...---	cccatgaa--attcaacaatg	CCGTt	GCTGTTGTT---	TtcCAG	CTGGatga
O. Cun	aagaaca	gtgagtttctgtt...3181...---	gaagaacactaaaacaatg---	TTTGTCT	GTTGTT---	TtcCAG	CTGGatga
C. Fam	aagaaca	gtgagtttctgtt...2474...---	aaacattaaaacagtattgt	TACTat	TGTT---	TtcCAG	CTGGatga
F. Cat	aaaaaca	gtgagtttctgtt...2671...---	cattaaaacagtgtgttac	CGTTGTT---		TtcCAG	CTGGatga
B. Tau	aagaagca	gtgagtttctgtt...2572...---	ccaagaacattaaaacag--	TTGTT	ACTGTtGTT---	TtcCAG	CTGGatga
E. Cab	aagaaca	gtgagtttctgtt...2470...---	ccaagaacattaaaacaa	TATTGTT	CCTGTTGTT---	TtcCAG	CTGGatga
O. Avi	aagaagca	gtgagtttctgtt...2570...---	gccataaacattaaaacag--	TTGTT	ACTGTtGTT---	TtcCAG	CTGGatga
L. Afr	aagaaca	gtgagtttctgtt...2990...---	cctcctaagaacattaaaac--	CAATct	TGTTgTTGTTTTCAG		CTGGatga
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id=758794 gene=ENSG00000101333 name=PLCB4 segment=chr20.9343623.9346107.1 type=IN

Figure 67: CS=17.7



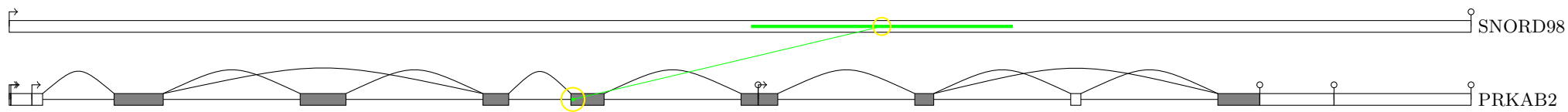
H. Sap	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacaatgaactgaactc	ttccttga-
R. Mac	aaaaggat	gagttatgatgtgtgtaaat	CTATTCCATTGCTGA	Aaatgcagtggtgaacacaatgaactgaactc	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacaatgaactgaactc	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacaatgaactgaactc	ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacataatgaactgaactc	ttccttga-
R. Nor	tagaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	-tccttgac
C. Por	agagggat	gagttatga--tgtgtaaat	CTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
O. Cun	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
C. Fam	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
F. Cat	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
B. Tau	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
E. Cab	agaaggat	gagttatga--tgtgtaaat	CTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
S. Sus	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
O. Avi	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
L. Afr	agaaggat	gagttatga--tgtgtaaat	CCTATTCCATTGCTGA	Aaatgcagtggtgaacacatgaactgaactc	ttccttga-
	****	*****	***	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	acatggtg	gtgagtgcccc...1903...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctgttta-----	..356...	gtctgtccacag	aacaactc
R. Mac	acatggtg	gtgagtgcccc...1904...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctgttta-----	..373...	gtctgtccacag	aacaactc
P. Tro	acatggtg	gtgagtgcccc...1904...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctgttta-----	..356...	gtctgtccacag	aacaactc
P. Abe	acatggtg	gtgagtgcccc...1931...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggtagctgttta-----	..353...	gtctgtccacag	aacaactc
C. Jac	acatggtg	gtgagtgcccc...1913...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggc--tatttaggg---	..369...	gtctgtccacag	aacaactc
M. Mus	gcatggtg	gtaagtatacat...1531...	tgctagctttataattgagg	TCAGTGGGGAA	ATGGG	ctcacttggcagctgttta-----	..369...	ctctgtgtgcag	aataactc
R. Nor	gcatggtg	gtgagtatacat...1502...	cgctagccttataattgagg	TCAGTGGGGAA	ATGGG	ctcacttggtagctgttta-----	..430...	ttctgtgtgcag	aataactc
C. Por	acatggtg	gtgagtgcccc...1523...	agattgtgtacaattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctattgggtatg..	..370...	atctgtccacag	aacaactc
O. Cun	acatggtg	gtgagtgcccc...1180...	tgctggctcatgattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctgttta-----	..267...	gtctgtccacag	aacaactc
C. Fam	acatggtg	gtgagtgcccc...1530...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagtagttg-----	..366...	atctgtccacag	aacaactc
F. Cat	acatggtg	gtgagcgtgccc...1630...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagctattg-----	..224...	atctgtccacag	aacaactc
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S. Sus	acatggtg	gtgagcaccct...1568...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagtagttg-----	..364...	gtctgtccacag	aacaactc
O. Avi	atatggtg	gtgagcgcaccag...1555...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagtagctg-----	..394...	atctgtcctcag	aacaactc
L. Afr	acatggtg	gtgagcacacc...1607...	atctggttttataattgagg	TCAGTGGGGAA	ATGGG	cttcacttggcagtagctg-----	..433...	gtctgtccacag	aacaactc
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Figure 68: CS=12.48



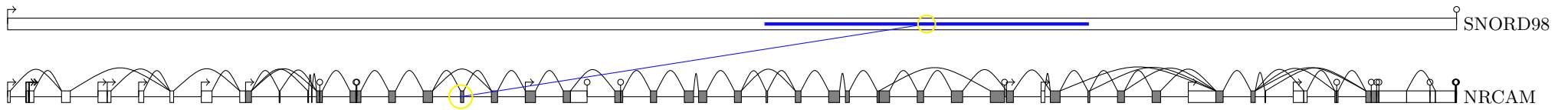
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C.Jac	agaaggat	gagttatgatgtgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	cacaatgaactgaactc	ttccttga-
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R.Nor	tagaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	ATGATGAA	TGAA
O.Cun	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	ACGAT	tgaactgaactc
C.Fam	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	CGAT	tgaactgaactc
F.Cat	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	CGAT	tgaactgaactc
B.Tau	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	catgatgaactgaactc	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	cacgatgaactgaactc	ttccttga-
S.Sus	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	cacgatgaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATGCAGTGTGGAA	CATG	tgaactgaactc
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id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

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R.Mac	catcagag	gtaaggccttga...175...-----ttgaaagattcaataa-tttt-----	TTGTa	ttCACTGTTTCAG	CctGTGGt
P.Tro	catcagag	gtaaggccttga...177...-----aagagagattcaataa-tttt-----	TTCTA	ttCACTGTTTCAG	CctGTGGt
P.Abe	catcagag	gtaaggccttga...177...-----aagagagattcaataa-tttt-----	TTCTA	ttCACTGTTTCAG	CctGTGGt
C.Jac	catcagag	gtaaggccttga...190...-----tca-gta-tttttttcttttcc-----		CTGTTTCAG	CctGTGGt
M.Mus	cgtcagag	gtaaggccttga...129...-----atccagtttgattttatatta	TTTGT	TTGTTTTCAGT	CctGTGGt
R.Nor	catcagag	gtaaggccttga...145...-----tttattta-tttg--tttgttta	TTTGT	TTGTTTTCAGT	CctGTGGt
O.Cun	catcagag	gtaaggccttga...178...--tgaaaaggggattgagtgat-t-----	TCGT	TCTA	ttCACTGTTTCAG
C.Fam	cgtcagag	gtaaggccttga...178...a-ttaaacagggtttatgaa-----	TGTT	ttCCAT	tcGTTGTTTCAG
F.Cat	cgtcagag	gtaaggccttga...177...atttgaaacgggtttatga-----	ATTG	TTCAT	tcCATGTTTCAG
B.Tau	catcagag	gtaagaccttga...165...-----gattcatgaa-tttttttttt-----	TTCCA	ttCACTGTTTCAG	CctGTGGt
E.Cab	catcagag	gtaagccttga...181...-----aatggggattcatg-a-ttttt-----	TTCCA	ttCGCTGTTTCAG	CctGTGGt
S.Sus	catcagag	gtaagccttga...188...-----tggggattcatgta-ttttt-----	TTCCA	ttCACTGTTTCAG	CctGTGGt
L.Afr	catcagag	gtaagaccttga...200...-----aagaggattcatgaa-ttttt-----	TGTG	TTCAT	ttCACTGTTTCAG
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Figure 69: CS=10.92



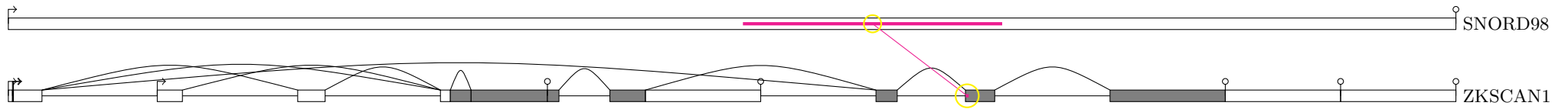
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R. Mac	aaaaggat	gagttatgatgtgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacacaatgaactgaactc	ttccttga
P. Tro	aaaaggat	gagttatgatgtgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacacaatgaactgaactc	ttccttga
P. Abe	aaaaggat	gagttatgatgtgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacacaatgaactgaactc	ttccttga
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M. Mus	tagaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacataatgaactgaactc	ttccttga
C. Por	agaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
O. Cun	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
F. Cat	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
B. Tau	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
E. Cab	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
S. Sus	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
O. Avi	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATGCAG	tgtggaacacgatgaactgaactc	ttccttga
L. Afr	agaaggat	gagttatga--tgtgtaaatcctattc	CATTGCTGAAATACAG	tgtggaacatgttgaactgaactc	ttccttga
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id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

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R. Mac	gatttcag	gtaagagttcag...461...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
P. Tro	gatttcag	gtaagagttcag...461...	tatgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
P. Abe	gatttcag	gtaagagttcag...462...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
C. Jac	gatttcag	gtaagagttcag...460...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
M. Mus	gatttcag	gtaagagttcag...438...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
C. Por	gatttcag	gtaagagttcag...459...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
O. Cun	gatttcag	gtgagggcgag...379...	tgtgccctcttcataatatt	CTGTtTATTCAG	TgGATGaa
F. Cat	gatttcag	gtaagagttcag...694...	cttgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
B. Tau	gatttcag	gtaagagttcag...534...	tttgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
E. Cab	gatttcag	gtaagagttcag...469...	tgtgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
S. Sus	gacttcag	gtaagagttcag...675...	tttgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
O. Avi	gatttcag	gtaagagttcag...535...	tttgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
L. Afr	gatttcag	gtaagagttcag...466...	tgtgattcttcataatatt	CTGTtTATTCAG	TgGATGaa
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Figure 70: CS=14.56



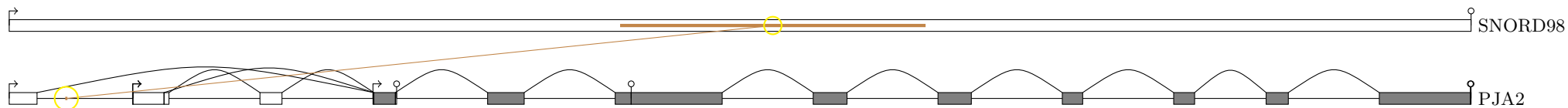
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R.Nor	tagaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATGCAG	gtggaacatgatgaactgaactc	-tccttgac	
C.Por	agaaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATGCAG	gtggaacacgatgaactgaactc	ttccttga-	
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E.Cab	agaaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATgc	AGTG	tggaaacacgatgaactgaactc	ttccttga-
S.Sus	agaaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATGCAG	gtggaacacgatgaactgaactc	ttccttga-	
O.Avi	agaaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATgc	AGTGTGG	aacacgatgaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaaatcctatt	CCATTGCTGAAATca	GTGTGG	aacatggtgaactgaactc	ttccttga-
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P.Tro	attcccag	gtgagctgtggc...250...	ggggaaatgaccgtttc---tc	TTGTGTTATTTTg	gCAATGGt
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M.Mus	attcccag	gtgagccatggg...250...	----gagctgagtatgagga-tctc	CTGTtATTTCAG	gCAATGGt
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C.Por	attctcag	gtgagctgtgca...239...	----aactaagtgtgggaactctc	CTGTtATTTCAG	gCAATGGt
C.Fam	attcccag	gtgagctgtggg...212...	--gggaactgagtgtgggga-tc	TCATATTATTTCAG	gCAATGGt
F.Cat	attcccag	gtgagctgtggg...230...	--gagaactgagtgtgggga-tc	TCATATTATTTCAG	gCAATGGt
B.Tau	attcccag	gtgagctgtggg...221...	--gggaactgagtgtgggga-tc	TCGTGTTATTTTg	gCAATGGt
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Figure 71: CS=11.9



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C.Jac	agaaggat	gagttatgatgtgtgtaaat	CCTAtt	CCATt	GCTG	aaatgcagtggtggaacacaatgaactgaactc	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaaat	CCTAtt	CCATt	GCTG	aaatgcagtggtggaacataatgaactgaactc	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaaat	CCTAtt	CCATt	GCTG	aaatgcagtggtggaacatgatgaactgaactc	-tccttgac
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O.Cun	agaaggat	gagttatga--tgtgtaaat	CCTAtt	CCATt	GCTG	aaatgcagtggtggaacacgatgaactgaactc	ttccttga-
B.Tau	agaaggat	gagttatga--tgtataaat	CCTAtt	CCATt	GCTG	aaatgcagtggtggaacatgatgaactgaactc	ttccttga-
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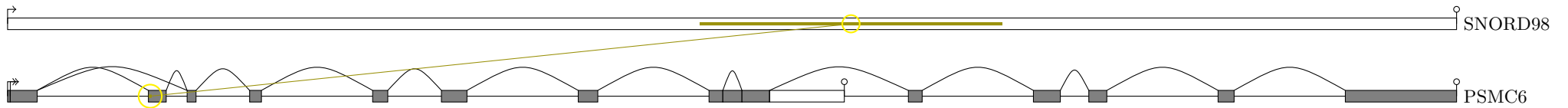
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S.Sus	acagttcg	gtgaggggatt...117...	-ctgtccctgg-tccgtgc-gc	CGGCc	ATGGTGGG	----tggggttgatggctgtgaga...	344...	--ttgactgtatt	gcattttc
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Figure 72: CS=11.7





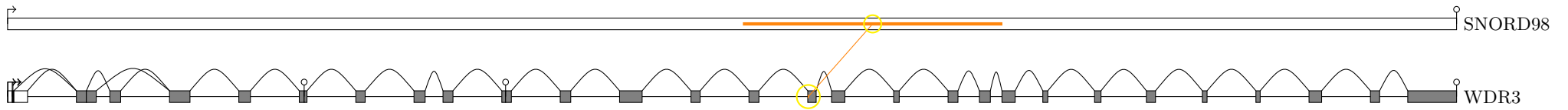
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P. Abe	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacaatgaactgaactc	ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGt	tggaacataatgaactgaactc	ttccttga-
R. Nor	tagaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGt	gAACaTGATG	aactgaactc
C. Por	agagggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacgatgaactgaactc	ttccttga-
O. Cun	agaaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	GCA	agtgtgga	aacacgatgaactgaactc	ttccttga-
C. Fam	agaaggat	gagttatga--tgtataaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacgatgaactgaactc	ttccttga-
B. Tau	agaaggat	gagttatga--tgtataaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacatgatgaactgaactc	ttccttga-
S. Sus	agaaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacgatgaactgaactc	ttccttga-
O. Avi	agaaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	gc	AGTGTGG	aacacgatgaactgaactc	ttccttga-
L. Afr	agaaggat	gagttatga--tgtgtaaatccta	TTCCa	TTGCTGAAAT	ca	GTGTGG	aacatggtgaactgaactc	ttccttga-
	****	*****	***	*****	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

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P. Tro	taaggagt	gtgagtgcacct...957...	-----	ttcaattaaaaatggtcaaa	TTGTATTATTTCAG	TAAgGGAa
P. Abe	taaggagt	gtgagtgcacct...954...	-----	ttcaattaaaaatggtcaaa	TTGTATTATTTCAG	TAAgGGAa
C. Jac	taaggagt	gtgagcgcaccc...966...	-----	ttcaactaaaaatggtcaaa	TTGTATTATTTCAG	TAAgGGAa
M. Mus	taaggagc	gtgagtgcacct...854...	-----	aatttaaatgtcaaaattt	TATTATTTCAG	TAAgGGAa
R. Nor	taaggagc	gtgagtgcacct...866...	g	tattgttttaatttaag	TGTCAcGTTTTATTATTTCAG	TAAgGGAa
C. Por	gaaggagt	gtgagtgcaccg...884...	-----	tgtaacttaaaatgtccaaa	TTATATTATTTCAG	TAAgGGAa
O. Cun	taaggagc	gtgagtgcacct...921...	-----	aatttaaatgtccaaatta	TGTAATTTCAG	TAAgGGAa
C. Fam	caaggagt	gtgagtgcacct...980...	-----	ttaattaaaaatggtcaaa	TTGTATTATTTCAG	TAAgGGAa
B. Tau	caaggagt	gtgagtgcacct...928...	-----	cttaattcaaaatggtcaaa	TTATATTATTTCAG	TAAgGGAa
S. Sus	caaggagt	gtgagtgcacct...984...	-----	ttaatttaaaatattcaaa	TTATATTATTTCAG	TAAgGGAa
O. Avi	caaggagt	gtgagtgcacct...930...	-----	cttaattcaaaatggtcaaa	TTATATTATTTCAG	TAAgGGAa
L. Afr	aaaggaat	gtgagtgcacct...914...	-----	cttaattaaaaatggtcaaa	TTATATTATTTCAG	TAAgGGAa
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id=680700 gene=ENSG00000100519 name=PSMC6 segment=chr14.53174023.53175026.1 type=IN

Figure 73: CS=16.9



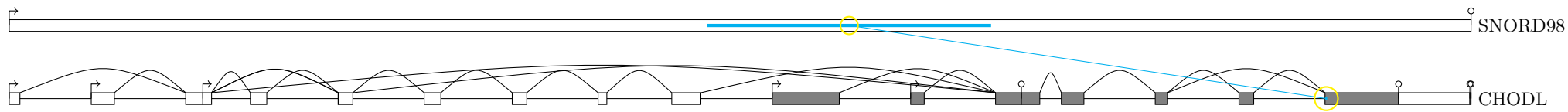
H.Sap	aaaaggat	gagttatgatgtgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacaatgaactgaactc	ttccttga-
R.Mac	aaaaggat	gagttatgatgtgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacaatgaactgaactc	ttccttga-
P.Abe	aaaaggat	gagttatgatgtgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacaatgaactgaactc	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacaatgaactgaactc	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacataatgaactgaactc	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacatgatgaactgaactc	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
O.Cun	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
C.Fam	agaaggat	gagttatga--tgtataaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
F.Cat	agaaggat	gagttatga--tgtataaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
B.Tau	agaaggat	gagttatga--tgtataaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
S.Sus	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaaatcctatt	CCATtGCTGAAATgcAGTG	tggaacacgatgaactgaactc	ttccttga-
	****	*****	*** *****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

H.Sap	cagatcag	gtaactaaacca...1198...	atagtttttaattgaaat	CATTtgATTTtCAG	CGTGGctt
R.Mac	cagatcag	gtaactaaacca...1266...	gtagtttttaattgaaat	CATTtgATTTtCAG	CGTGGctt
P.Abe	cagatcag	gtaactaaatca...1223...	atagtttttaattgaaat	CATTtgATTTtCAG	CGTGGctt
C.Jac	cagatcag	gtaactaaacca...1244...	-----tcaattgaaat	tcctttgATTTtCAG	CGTGGctt
M.Mus	cagatcag	gtaactgcaccg...1272...	atgtttttaactgaagt	gCATTtgATTTtCAG	CGTGGctt
R.Nor	cagatcag	gtaactgtacag...1231...	atagcttttaactgaagt	gCACTtgATTTtCAG	CGTGGctt
C.Por	cagatcag	gtaactaaacag...1569...	acggttttaataat	caatgtgCATTtaATTTtCAG	CGTGGctt
O.Cun	cagatcag	gtaactaaacca...1537...	atagtttttaattgaaat	atCATTtaATTTtCAG	CGTGGctt
C.Fam	cagatcag	gtaactaaatca...1700...	atatttttaattgcaat	atCATTtgATTTtCAG	CGTGGctt
F.Cat	cagatcag	gtaactaagcca...1522...	atatttttaattgcaat	gtCATTtgATTTtCAG	CGTGGctt
B.Tau	cagatcag	gtaactgaacca...2007...	tct-----aacagaa	atgtcctttgATTTtCAG	CGTGGctt
S.Sus	ccgatcag	gtaactaaacca...1929...	tttttttaaacagaaat	gtCATTtgATTTtCAG	CGTGGctt
L.Afr	cagatcag	gtaccxaaacta...1330...	atagtttttaactgaaat	gtCATTtgATTTtCAG	CGTGGctt
	* *****	*** *	**	* ** * **** **	*****

id=393108 gene=ENSG0000065183 name=WDR3 segment=chr1\_118491130\_118492373.1 type=IN

Figure 74: CS=18.33



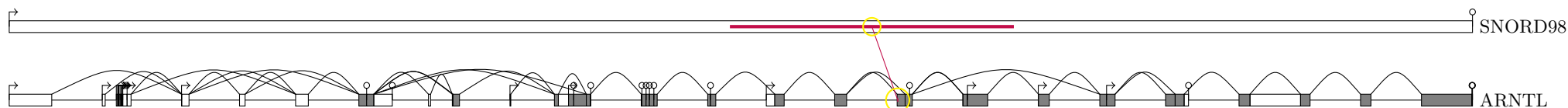
H. Sap	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
R. Mac	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
P. Tro	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
P. Abe	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
M. Mus	tagaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
C. Por	agaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
O. Cun	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	TCAGtcggtggaacacacatgaactgaactc	ttccttga
C. Fam	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
B. Tau	agaaggat	gagttatga--tgtataaatccta	TTCCA	TTGCTGAAA	TCAGtcggtggaacacacatgaactgaactc	ttccttga
E. Cab	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	tcagtggtggaacacacatgaactgaactc	ttccttga
S. Sus	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	TCAGtcggtggaacacacatgaactgaactc	ttccttga
O. Avi	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	TCAGtcggtggaacacacatgaactgaactc	ttccttga
L. Afr	agaaggat	gagttatga--tgtgtaaatccta	TTCCA	TTGCTGAAA	TCAGtcggtggaacacacatgaactgaactc	ttccttga
	****	*****	***	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	cataaaag	gtaaataactca...3022...-----	taaacatttttcttatggtt----	TTTCAG	TAAaGGAA
R. Mac	cataaaag	gtaaataactca...2899...-----	aacttatttttcttatggtt----	TTTCAG	TAAaGGAA
P. Tro	cataaaag	gtaaataactca...2986...-----	taaacatttttcttatggtt----	TTTCAG	TAAaGGAA
P. Abe	cataaaag	gtaaataactca...4867...-----	taaacatttttcttatggtt----	TTTCAG	TAAaGGAA
M. Mus	cataaaag	gtaaaaaacata...3554...-----	ttatttcttcttatgttttt	TTTCAG	TAAaGGAA
C. Por	catcgaag	gtaacaattta...2888...-----	atattatttcttcttatggtt----	TTTCAG	TAAaGGAA
O. Cun	cataaaag	gtaaataattc...3109...tacactgaacttacttctcc---	TTGTGT	TTTCAG	TAAaGGAA
C. Fam	cataaaag	gtaaataattca...3010...-----	aacttacgtcttcttatggtt----	TTTCAG	TAAaGGAA
B. Tau	cataaaag	gtaaataattca...3109...--cattgaattacttcttctt---	CTGT	TTTCAG	TAAaGGAA
E. Cab	cataaaag	gtaaataattca...3290...-----	aacttacttcttcttatggtt----	TTTCAG	TAAaGGAA
S. Sus	cataaaag	gtaaataattca...3473...--catttacttacttcttctt---	CTGT	TTTCAG	TAAaGGAA
O. Avi	cataaaag	gtaaataattca...3108...--attgaattacttcttcttctt---	TATTTTCAG	TAAaGGAA	
L. Afr	catagaag	gtaaataattca...3538...--actgaagtgcttttctta---	TGTTTTTCAG	TAAaGGAA	
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id=384669 gene=ENSG00000154645 name=CHODL segment=chr21.19635211.19638270.1 type=IN

Figure 75: CS=17.16



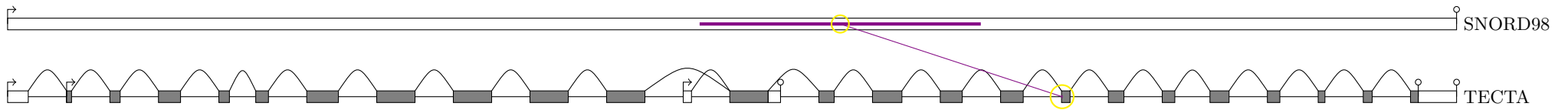
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R. Mac	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	cacaatgaactgaactc	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	cacaatgaactgaactc	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	cacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	caATGAACTGA	actc ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	cataatgaactgaactc	ttccttga-
R. Nor	tagaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	atgatgaactgaactc	-tccttgac
C. Por	agagggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acGATGAACTGA	actc ttccttga-
O. Cun	agaaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acGATGAACTGA	actc ttccttga-
C. Fam	agaaggat	gagttatga--tgtataaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acgatgaactgaactc	ttccttga-
F. Cat	agaaggat	gagttatga--tgtataaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acgatgaactgaactc	ttccttga-
B. Tau	agaaggat	gagttatga--tgtataaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	caTGATGAACTGA	actc ttccttga-
E. Cab	agaaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acgatgaactgaactc	ttccttga-
S. Sus	agaaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acgatgaactgaactc	ttccttga-
L. Afr	agaaggat	gagttatga--tgtgtaaatcctat	TCCA	AttGCTGAAATg	CAGTGTGGAA	acatggtgaactgaactc	ttccttga-
	****	*****	***	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	tgcaaaaa	gtgagtaccaga...2783...	-actgctctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
R. Mac	tgcaaaaa	gtgagtaccaca...2802...	-actgctctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
P. Tro	tgcaaaaa	gtgagtaccaga...2795...	-actgctctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
P. Abe	tgcaaaaa	gtgagtaccaga...2962...	-actgctctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
C. Jac	tgcaaaaa	gtgagtaccaga...2764...	-cctgacgaaaacactgcac	TCAGTTTAT	ca	TGTTT	tgTATTGATTg	CAG	CTGGA	ctt
M. Mus	tgccaaga	gtgagtgcagg...2098...	-tctgcctcatttcaccaca	-----	TTT	-TGTGTTGATTg	CAG	CTGGA	ctt	
R. Nor	tgccaaga	gtgagtgcagg...2237...	tcctgcctcctttcaccac	-----	GTTT	-TGTGTTGATTg	CAG	CTGGA	ctt	
C. Por	tgcaaaaa	gtgagtacagg...2883...	-ccggccagacaacactcctc	TCAG-TCATC	cc	GTTT	tgTGTGTTGATTg	CAG	CTGGA	ctt
O. Cun	cgcaaaaa	gtgagttagagga...2201...	-cctgacggacgacactgcgc	TCAGTTTAT	Cac	GTTT	tgTGTGTTGATTg	CAG	CTGGA	ctt
C. Fam	tgcaaaaa	gtgagtccagga...1672...	-actactctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
F. Cat	tgcaaaaa	gtgagtacagga...2178...	-actactctcggtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
B. Tau	tgcaaaaa	gtgagttcggga...2401...	-cctgacagacgacacgacc	TCAGTTTAT	CA	GTTT	tgTATTGATTg	CAG	CTGGA	ctt
E. Cab	cgcaaaaa	gtgagtgcggga...2404...	-actacctcagtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
S. Sus	cgcaaaaa	gtgagttaggga...3084...	-accacccctcggtttatcaca	-----	TTTTG	tgTATTGATTg	CAG	CTGGA	ctt	
L. Afr	tgcaaaaa	gtgagtaccagga...3295...	-ctgctctcagtttatcaca	-----	TTTG	tgTATTGATTg	CAG	CTGGA	ctt	
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id=710653 gene=ENSG00000133794 name=ARNTL segment=chr11.13388330.13391164.1 type=IN

Figure 76: CS=14.25



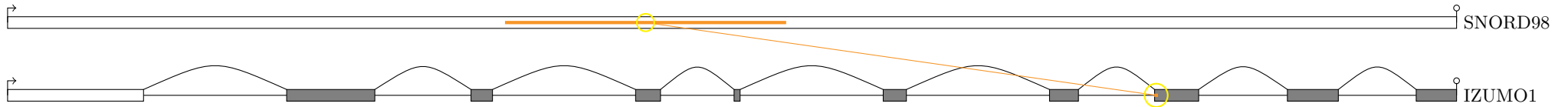
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R.Mac	aaaaggat	gagttatgatgtgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacaatgaactgaactc	ttccttga-
P.Tro	aaaaggat	gagttatgatgtgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacaatgaactgaactc	ttccttga-
P.Abe	aaaaggat	gagttatgatgtgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacaatgaactgaactc	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacaatgaactgaactc	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacataatgaactgaactc	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacatgatgaactgaactc	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacgatgaactgaactc	ttccttga-
O.Cun	agaaggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacgatgaactgaactc	ttccttga-
C.Fam	agaaggat	gagttatga--tgtataaatcct	ATTCCat	TGCTGAAA	tcagtggtggaacacgatgaactgaactc	ttccttga-
B.Tau	agaaggat	gagttatga--tgtataaatcct	ATTCCat	TGCTGAAA	tcagtggtggaacatgatgaactgaactc	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacgatgaactgaactc	ttccttga-
O.Avi	agaaggat	gagttatga--tgtgtaaactct	ATTCCat	TGCTGAAA	tcagtggtggaacacgatgaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaaactc	TATTCCat	TGCTGAAA	tacagtggtggaacatggtgaactgaactc	ttccttga-
	****	*****	***	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

H.Sap	gaattgct	gtaagagaatta..2864..	atgtttctgtgtgt-ttttct-	TTTTAG	CAGGAGTg
R.Mac	gaattgct	gtaagagaatta...2604..	atgtttctgtgtgt-ttttct-	TTTTAG	CAGGAGTg
P.Tro	gaattgct	gtaagagaatta...2863..	atgtttctgtgtgt-ttttct-	TTTTAG	CAGGAGTg
P.Abe	gaattgct	gtaagagaatta...2605..	atgtttctgtgtgt-ttttct-	TTTTAG	CAGGAGTg
C.Jac	gaattgct	gtaagagaatta...2866..	atgtttctgtgtgt-ttttct-	TTTTAG	CAGGAGTg
M.Mus	gaattgct	gtaagagaattc...3222..	gtgctttctgtgt-tttcct-	TTTTAG	CAGGAGTg
R.Nor	gaattgct	gtaagagaattc...3478..	gtgtgtttctgtgt-tttcct-	TTTTAG	CAGGAGTg
C.Por	gaattgct	gtaagagaatta...2521..	ttgtgtttctgtgt-tttcct-	TTTTAG	CAGGAGTg
O.Cun	gaattgct	gtaagagaatcg...4144..	gtcctttccgtgtgt-tttcct-	TTTTAG	CAGGAGTg
C.Fam	gaattgct	gtaagagaatta...2525..	gtgtttctgtttgt-tttcct-	TTTTAG	CAGGAGTg
B.Tau	gaattgct	gtaagagaatta...3082..	gtgtttctgtttgt-tttcct-	TTTTAG	CAGGAGTg
E.Cab	gaattgct	gtaagagaatta...2283..	gtgtttctgtttgt-tttcct-	TTTTAG	CAGGAGTg
O.Avi	gaattgct	gtaagagaatta...3078..	gtgtttctgtttgt-tttcct-	TTTTAG	CAGGAGTg
L.Afr	gaattgct	gtaagagaattc...2658..	-tgtgtttctgtgttttct-	TTTTAG	CAGGAGTg
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id=391850 gene=ENSG00000109927 name=TECTA segment=chr11\_121033080\_121035981.1 type=IN

Figure 77: CS=17.92



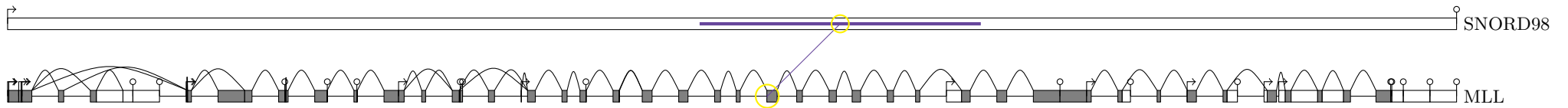
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R. Mac	aaaaggat	gagttatgatgtgtg	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacaatgaactgaactc	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtg	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacaatgaactgaactc	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtg	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtg	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacaatgaactgaactc	ttccttga-
M. Mus	tagaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacataatgaactgaactc	ttccttga-
R. Nor	tagaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacatgatgaactgaactc	-tccttgac
C. Por	agagggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
O. Cun	agaaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
F. Cat	agaaggat	gagttatgatgta--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
B. Tau	agaaggat	gagttatgatgta--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacatgatgaactgaactc	ttccttga-
E. Cab	agaaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
S. Sus	agaaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
O. Avi	agaaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacacgatgaactgaactc	ttccttga-
L. Afr	agaaggat	gagttatgatgtg--	TAAATCCTAT	TCCA	attgctgaaatgcagtg	tgaacatggtgaactgaactc	ttccttga-
	****	*****	*****	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	tttacagg	gtgagggcctca...	225...	cctcagtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
R. Mac	tttacagg	gtgagggcctca...	218...	cctcagtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
P. Tro	tttacagg	gtgagggcctca...	225...	cctcagtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
P. Abe	tttacagg	gtgagggcctca...	225...	cctcagtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
C. Jac	tttacagg	gtgattgcagct...	222...	cctcagtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
M. Mus	tttacagg	gtgggaacatcc...	278...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGgga
R. Nor	tctacagg	gtggggacagcc...	289...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
C. Por	tttacagg	gtggggcctcc...	200...	cctctgtgatc	ccttgagct-TGGGtcTAG	GTTTGgga
O. Cun	tttacagg	gtggggccccca...	164...	cctcggtgacc	cctcgagct-TGGGtcTAG	GTTTGggg
F. Cat	tttacagg	gtggggcctcca...	219...	-cctctgtgacc	ccttgagct-TGGGccTAG	GTTTGggg
B. Tau	tttacagg	gtggggcctcc...	231...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGgaa
E. Cab	tttacagg	gtggggcctcc...	232...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGggg
S. Sus	tttacagg	gtgaggtcctcc...	231...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGgaa
O. Avi	tttacagg	gtggggcctcc...	231...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGgaa
L. Afr	tttacagg	gtggggccccct...	190...	cctctgtgacc	ccttgagct-TGGGtcTAG	GTTTGgga
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id=141668 gene=ENSG00000182264 name=IZUMO1 segment=chr19.49245200.49245465.-1 type=IN

Figure 78: CS=10.5



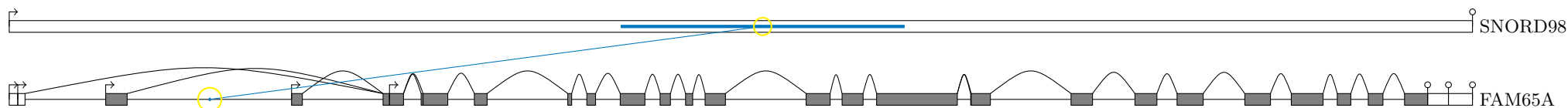
H. Sap	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCATTGCTGAAATG	cagtgtggaacacaatgaactgaactc	ttccttga-
R. Mac	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCATTGCTGAAATG	cagtgtggaacacaatgaactgaactc	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCATTGCTGAAATG	cagtgtggaacacaatgaactgaactc	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtgtaaatccta	TTCCATTGCTGAAATG	cagtgtggaacacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaaatccta	TTCCATTGCTGAAATGCAGT	gtggaacacaatgaactgaactc	ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATg	CAGTgtggaacataatgaactgaactc	ttccttga-
R. Nor	tagaggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATGCAGTGTGG	aacatgatgaactgaactc	-tccttgac
C. Por	agagggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATGCAGT	gtggaacacgatgaactgaactc	ttccttga-
O. Cun	agaaggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATg	CAGTgtggaacacgatgaactgaactc	ttccttga-
C. Fam	agaaggat	gagttatga--tgtataaatccta	TTCCATTGCTGAAATG	cagtgtggaacacgatgaactgaactc	ttccttga-
B. Tau	agaaggat	gagttatga--tgtataaatccta	TTCCATTGCTGAAATg	CAGTgtggaacacgatgaactgaactc	ttccttga-
E. Cab	agaaggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATGCAGT	gtggaacacgatgaactgaactc	ttccttga-
L. Afr	agaaggat	gagttatga--tgtgtaaatccta	TTCCATTGCTGAAATA	cagtgtggaacacgatgaactgaactc	ttccttga-
	****	*****	*** *****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	tcaagcaa	gtaagtgaattt...891...-----	taaagccttgttgaatcaat-----	TATTTTCAG	CAGTGGG
R. Mac	tcaagcaa	gtaagtgaattt...869...-----	taaagccttgttgaatcaat-----	TATTTTCAG	CAGTGGG
P. Tro	tcaagcaa	gtaagtgaattt...888...-----	taaagccttgttgaatcaat-----	TATTTTCAG	CAGTGGG
P. Abe	tcaagcaa	gtaagtgaattt...885...-----	taaagccttgttgaatcaat-----	TATTTTCAG	CAGTGGG
C. Jac	tcaagcaa	gtgagtaattt...568...gttcaataaatgcttgttga	-----	ATTGatTATTTTCAG	CAGTGGG
M. Mus	tcaacaa	gtaagtgaattt...735...-----	agtaagtacttactgactcg-----	ATTGTTTCcAG	CAGTGGG
R. Nor	tcaacaa	gtaagtgaattt...752...-----	cgcaggcactcagtaagtacCTGTcgGCTG	atTGTTCcAG	CAGTGGG
C. Por	tcaagcaa	gtaagtgaattt...545...-----	aataaatacttgttgaatca-----	ATTGTTTCcAG	CAGTGGG
O. Cun	tcaagcaa	gtaagtgaattt...567...-----	aataaatacttgttgaatcg-----	ATTGTTTCcAG	CAGTGGG
C. Fam	tcaagcaa	gtaagtgaattt...577...-----	taaatacttgttgaatcaat-----	TATTTTCAG	CAGTGGG
B. Tau	tcaagcaa	gtgagtaattt...561...-----	aataaatacttgttgaatcg-----	ATTGTTTCcAG	CAGTGGG
E. Cab	tcaagcaa	gtaagtgaattt...817...-----	aataaatacttgttgaatcg-----	ATTGTTTCcAG	CAGTGGG
L. Afr	tcaagcaa	gtgagtaattt...598...-----	taaatacttgttgaatcaat-----	TATTTTCAG	CAGTGGG
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id=464761 gene=ENSG00000118058 name=MLL segment=chr11.118365483.118366414.1 type=IN

Figure 79: CS=14.95



H. Sap	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
R. Mac	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
P. Tro	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
P. Abe	aaaaggat	gagttatgatgtgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
C. Jac	agaaggat	gagttatgatgtgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
M. Mus	tagaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
C. Por	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
O. Cun	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
C. Fam	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
F. Cat	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
B. Tau	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
E. Cab	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
S. Sus	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
O. Avi	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
L. Afr	agaaggat	gagttatga--tgtgtaaat	CCTATTCC	TGCTG	aaatgcagtggtggaacacacaaatgaactgaactc	ttccttga
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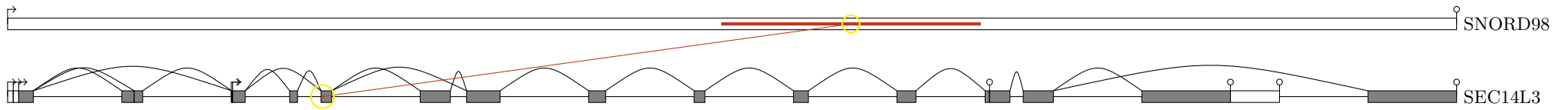
id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	ccagagag	ggt-agtagtatt...4850...	tccaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...61..	ggccagggcggg	aaggtccg---
R. Mac	ccagagag	ggt-agtagtatt...4850...	tccaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...61..	ggccagggcctgc	agagtccg---
P. Tro	ccagagag	ggt-agtagtatt...4850...	tccaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...61..	ggccagggcggg	aaggtccg---
P. Abe	ccagagag	ggt-agtagtatt...4850...	tccaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...61..	ggctagggcggg	agggtccg---
C. Jac	ccagagag	ggt-agtaaatatt...4850...	tacaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...61..	ggccagggtcgg	agggtcgt---
M. Mus	ccagagag	ggt-agcagcatt...4847...	-cccggcgggctgagtcagg	GGCAGGAA	TGGG	cggg-gggcggcgccgggagg...65..	accggggccag	cgggacac---
C. Por	tcagagag	att-tgtaacatt...4849...	-cccggcgggctgagtcagg	GGCAGGAA	TGGG	cggg-gggcggcgccgggagg...63..	gacctgggccc	caggggcg---
O. Cun	ccagagac	ggt-attcacagc...4869...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...42..	catctgggccc	cggggtcg---
C. Fam	ccagagat	gtgaagtaacat...4847...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...64..	gacctgggccc	cagggaca---
F. Cat	ccagagag	ggttaagtagtat...4847...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...64..	gacctgggccc	tggggacg---
B. Tau	ccagagag	ggttaagtaatat...4847...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...64..	gacctgggccc	ctgggact---
E. Cab	ccagagag	ggttaagtaatat...4844...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...67..	---ctggactgg	cggagacactg
S. Sus	ccagagag	attaagtaatat...4847...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...64..	gacctgggccc	ctgggaca---
O. Avi	ccagagag	ggttaagtaatat...4847...	tcccggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...64..	gacctgggccc	ctgggact---
L. Afr	ccagaaag	cttaagtaatat...4848...	tcccaggcgggctgagtcagg	CGGCAGGAA	TGGG	cggg-gggcggcgccgggagg...63..	accctgggccc	cagggctg---
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id=591778 gene=ENSG00000039523 name=FAM65A segment=chr16.67563763.67571433.1 type=IN

Figure 80: CS=10.5





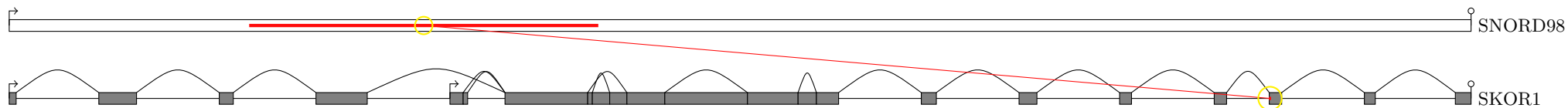
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R.Mac	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacaatgaactgaactc	ttccttga-
P.Tro	aaaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacaatgaactgaactc	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacaatgaactgaactc	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	TGcagtgtggaacatgatgaactgaactc	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacgatgaactgaactc	ttccttga-
O.Cun	agaaggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacgatgaactgaactc	ttccttga-
C.Fam	agaaggat	gagttatga--tgtataaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacgatgaactgaactc	ttccttga-
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B.Tau	agaaggat	gagttatga--tgtataaatcctat	TCCATTGCTGAAA	tgcagtgtggaacatgatgaactgaactc	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacgatgaactgaactc	ttccttga-
O.Avi	agaaggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	tgcagtgtggaacacgatgaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaaatcctat	TCCATTGCTGAAA	Tacagtgtggaacatggtgaactgaactc	ttccttga-
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id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

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R.Mac	tccgcaag	gtgagacctatc...95...-----ggtccttaccactcatttccc	TTTCAG	TAcATGGa
P.Tro	tccgcaag	gtgagacctatc...95...-----gatccttaccactcatttccc	TTTCAG	TAcATGGa
C.Jac	tccgcaag	gtgagacctagc...95...-----ggtccttaccactcatttccc	TTTCAG	TAcATGGa
R.Nor	tccgcaag	gtaaataccatc...88...cctcacgggcctaaccctt---CATTTTCAG	TAcATGGa	
C.Por	tccgcaag	gtgagaccacc...74...-----ggccttactatcccttccct	TTTCAG	TAcATGGa
O.Cun	tccgcaag	gtgaaaccacc...96...-----accctcaccatcatttccc	TTTCAG	TAcATGGa
C.Fam	tccgcaag	gtgagacctgtc...95...-----ggccttacctctcttttccc	TTTCAG	TAcATGGa
F.Cat	tccgcaag	gtgagacgcatc...83...-----gaccttacctctcctctctc	TTTCAG	TAcATGGa
B.Tau	tccgcaag	gtgagacctatc...54...-----tctatctccactcatttccc	TTTCAG	TAcATGGa
E.Cab	tccgcaag	gtgagaccatc...98...-----ggccttactactcacctccc	TTTCAG	TAcATGGa
O.Avi	tccgcaag	gtgagatgtatc...68...-----ctccttaccactcatttccc	TTTCAG	TAcATGGa
L.Afr	tccgcaag	gtgagactatc...93...-----gggccttaccacatatttcc	ATTTCAG	TAcATGGa
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id=424910 gene=ENSG00000100012 name=SEC14L3 segment=chr22\_30866066\_30866198.-1 type=IN

Figure 81: CS=10.14



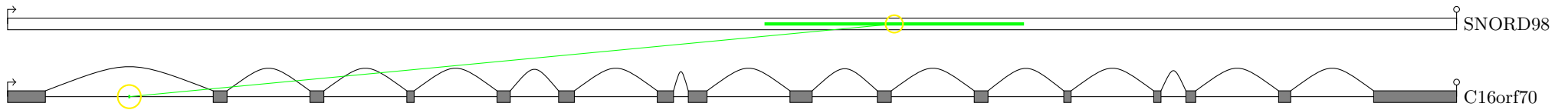
H. Sap	aaaaggat	GAGTTATgaTGTGgTAAAT	cctattccattgctgaaatgcagtggtggaacacaatgaactgaactc	ttccttga-
R. Mac	aaaaggat	GAGTTATgaTGTGgTAAAT	cctattccattgctgaaatgcagtggtggaacacaatgaactgaactc	ttccttga-
P. Tro	aaaaggat	GAGTTATgaTGTGgTAAAT	cctattccattgctgaaatgcagtggtggaacacaatgaactgaactc	ttccttga-
P. Abe	aaaaggat	GAGTTATgaTGTGgTAAAT	cctattccattgctgaaatgcagtggtggaacacaatgaactgaactc	ttccttga-
C. Jac	agaaggat	GAGTTATgaTGTGgTAAAT	cctattccattgctgaaatgcagtggtggaacacaatgaactgaactc	ttccttga-
M. Mus	tagaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacataatgaactgaactc	ttccttga-
R. Nor	tagaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacatgatgaactgaactc	-tccttgac
C. Por	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgaactgaactc	ttccttga-
O. Cun	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgaactgaactc	ttccttga-
E. Cab	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgaactgaactc	ttccttga-
S. Sus	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgaactgaactc	ttccttga-
O. Avi	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgaactgaactc	ttccttga-
L. Afr	agaaggat	GAGTTATga--TGTGTAAAT	cctattccattgctgaaatgcagtggtggaacacgatgttgaactgaactc	ttccttga-
	****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	tctcaaag	gtaccactgccc...216...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
R. Mac	tctcaaag	gtaccactgccc...223...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
P. Tro	tctcaaag	gtaccactgccc...216...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
P. Abe	tctcaaag	gtaccactgccc...517...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
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M. Mus	tctcaaag	gtacttccttcc...186...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
R. Nor	tctcaaag	gtacttccttcc...170...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
C. Por	tctcaaag	gtacttccttcc...185...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
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E. Cab	tctcaaag	gtaccctatcc...191...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
S. Sus	cctcaaag	gtaccctatcc...186...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
O. Avi	tctcaaag	gtaccctatcc...215...	-taacagctctcacttaatca	ATTGCACA	g	ATAATTT	t
L. Afr	tctcaaag	gtacccttggac...145...	-taacagctcccacttaatca	ATTGCACA	g	ATAATTT	t
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id=161935 gene=ENSG00000188779 name=SKOR1 segment=chr15.68124687.68124944.1 type=IN

Figure 82: CS=10.14



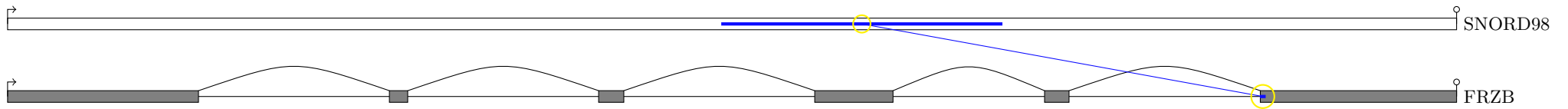
H. Sap	aaaaggat	gagttatgatgtgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacaat	gaactgaact	ttccttga-
R. Mac	aaaaggat	gagttatgatgtgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	GGAACacaat	gaactgaact	ttccttga-
P. Tro	aaaaggat	gagttatgatgtgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacaat	gaactgaact	ttccttga-
P. Abe	aaaaggat	gagttatgatgtgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacaat	gaactgaact	ttccttga-
C. Jac	agaaggat	gagttatgatgtgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacaat	gaactgaact	ttccttga-
M. Mus	tagaggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacataat	gaactgaact	ttccttga-
R. Nor	tagaggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	cagtgtggaacat	gatgaactgaact	-tccttgac
C. Por	agagggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	GGAACACgat	gaactgaact	ttccttga-
O. Cun	agaaggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	GGAACcagat	gaactgaact	ttccttga-
C. Fam	agaaggat	gagttatga--tgtataa	ctattc	CATTg	CTGAAATGc	AGTGt	cagtgtggaacac	gatgaactgaact	ttccttga-
F. Cat	agaaggat	gagttatga--tgtataa	ctattc	CATTg	CTGAAATGc	AGTGt	GGAACA	cgatgaactgaact	ttccttga-
B. Tau	agaaggat	gagttatga--tgtataa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacatgat	gaactgaact	ttccttga-
E. Cab	agaaggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacgat	gaactgaact	ttccttga-
O. Avi	agaaggat	gagttatga--tgtgtaa	ctattc	CATTg	CTGAAATGc	AGTGt	ggaacacgat	gaactgaact	ttccttga-
	****	*****	***	*****	*****	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10.70514929.70514995.1 type=EN

H. Sap	cacgctgg	gtgagtttgggg...	4944...	-----	aaataaccacata-ggtgtct-	TGCTt	TATTTcag	gAATGcct	
R. Mac	cacgctgg	gtgagtttgggg...	4938...	tagc	aaaataaccacaca-g-	GTTTc	TGCTt	TATTTcag	gAATGcct
P. Tro	cacgctgg	gtgagtttgggg...	4944...	-----	aaataaccacata-ggtgtct-	TGCTt	TATTTcag	gAATGcct	
P. Abe	cacgctgg	gtgagtttgggg...	4944...	-----	aaataaccacaca-ggtgtct-	TGCTt	TATTTcag	gAATGcct	
C. Jac	cacactgg	gtgagtttgggg...	4944...	-----	caataaccacaga-ggtgtct-	TGCTt	TATTTcag	gAATGcct	
M. Mus	cactctgg	gtgagtttgggg...	4944...	-----	atagacacacacggcgtcct	TGCTt	TATTTcag	gAATGcct	
R. Nor	cacactgg	gtgagtttgggg...	4949...	-----	accacaca--gtgtccttcctt	TATTTcag	gAATGcct	gAATGcct	
C. Por	cacactgg	gtgagtttgggg...	4937...	tagct	caagtaaccacaca-a	TGTTCTTGCTt	TATTTcag	gAATGcct	
O. Cun	cacgctgg	gtgagtttgggg...	4940...	---	tctaagtaatcacaca-ggta	TTCTTGCTt	TATTTcag	gAATGcct	
C. Fam	cacgctgg	gtgagtttgggg...	4949...	-----	ccacaca-ggtatccttcctt	TATTTcag	gAATGcct	gAATGcct	
F. Cat	cacgctgg	gtgagtttgggg...	4938...	---	agcccaggtaaccacaca-gt	TGTTCTTGCTt	TATTTcag	gAATGcct	
B. Tau	cgcgcttg	gtgagtttgggg...	4944...	-----	agtaaccacaca-ggtgtcct	TACTt	TATTTcag	gAATGcct	
E. Cab	cacgctgg	gtgagtttgggg...	4944...	-----	agtaagcacacc-agcatcct	TGCTt	TATTTcag	gAATGcct	
O. Avi	cgcgctgg	gtgagtttgggnn...	4944...	-----	agtaaccacaca-aatgtcct	TGTTt	TATTTcag	gAATGcct	
	* * * *	****	*		****	*	*	*****	*****

id=440535 gene=ENSG00000125149 name=C16orf70 segment=chr16.67144143.67154014.1 type=IN

Figure 83: CS=17.64



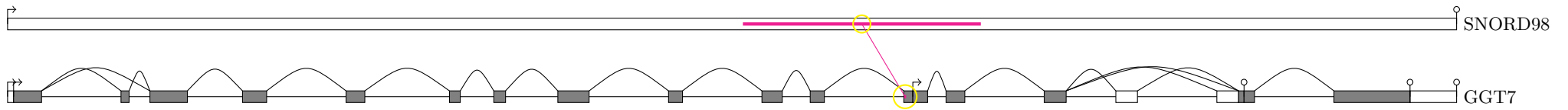
H.Sap	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacaat	gaactgaact	ttccttga-
R.Mac	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	TGCTGAAATG	cagtg	tggaacacaat	gaactgaact	ttccttga-
P.Tro	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacaat	gaactgaact	ttccttga-
P.Abe	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	TGCTGAAAT	gc	AGTGTGGAA	cacaatgaactgaact	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacaat	gaactgaact	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAATG	cagtg	tggaacataat	gaactgaact	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAATG	cagtg	tggaacatgat	gaactgaact	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
O.Cun	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
C.Fam	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
B.Tau	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
S.Sus	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaa	ccta	TTCCA	TGCTGAAAT	gcagtg	tggaacacgat	gaactgaact	ttccttga-
	****	*****	***	*****	*****	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

H.Sap	aagttaag	gtaagcctgtat...2942...	-----	gtgactat	tttctattttaa	ATTTCacAG	CGcTGGGa
R.Mac	aagttaag	gtaagcctgtat...2946...	-----	tgtgactat	tttctattttaa	CATTTCacAG	CGcTGGGa
P.Tro	aagttaag	gtaagcctgtat...2951...	-----	gtgactat	tttctattttaa	ATTTCacAG	CGcTGGGa
P.Abe	aagttaag	gtaagcctgtat...2943...	gat	atgtgctt	gtgactatt	TTCTATGTTaaATTTCacAG	CGcTGGGa
C.Jac	aagttaag	gtaagcctgtat...3230...	-----	gtgactat	tttctattttaa	ATTTCacAG	CGcTGGGa
M.Mus	aagtcaag	gtaagcctggat...4378...	-----	cgtgactg	tctctctttta	CATTTCacAG	CGcTGGGa
R.Nor	aagtcaag	gtaggctggat...3524...	-----	tgtgactg	tctctctttta	CATTTCacAG	CGcTGGGa
C.Por	aagttaag	gtaagcctatatac...2798...	-----	gtggctg	tttctcttttga	ATTTCacAG	CGcTGGGa
O.Cun	aagttaag	gtaagcctatat...2873...	-----	cgtgactg	ttttc-attttaa	ATTTCacAG	CGtTGGGa
C.Fam	aagtcaag	gtaagcctgtac...3006...	-----	gtgaccat	tctctgttttga	ATTTCacAG	CGcTGGGa
B.Tau	aagttaag	gtaagcctaataa...2920...	-----	gtgactg	tctctgtttttaa	ATTTCacAG	CGGTGGGa
E.Cab	aagttaag	gtaggctatgt...3013...	-----	gtgaccat	tctctgtttttaa	ATTTCacAG	CGcTGGGa
S.Sus	aagttaag	gtaagcctcaat...3715...	-----	atgaccg	tgttctgttctaa	ATTTCacAG	CGcTGGGa
L.Afr	aagttaag	gtaagcctgtat...3224...	-----	gtgaacat	tttctgtttttaa	ATTTCacAG	CGcTGGGa
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id=638467 gene=ENSG00000162998 name=FRZB segment=chr2\_183699693\_183702675.-1 type=IN

Figure 84: CS=19.32



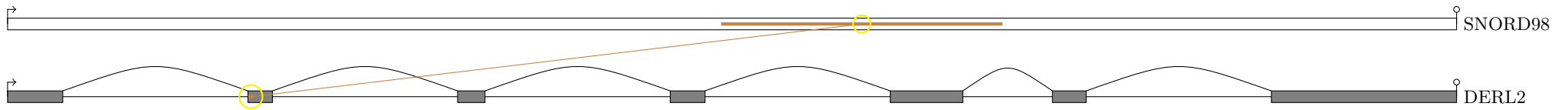
H.Sap	aaaaggat	gagttatgatgtgtgtaa	cctatt	CCATTGCTGAAA	GCAG	tgtggaacacaatgaact	gaact	ttccttga-
R.Mac	aaaaggat	gagttatgatgtgtgtaa	cctatt	CCATTGCTGAAA	GCAG	tgtggaacacaatgaact	gaact	ttccttga-
P.Tro	aaaaggat	gagttatgatgtgtgtaa	cctatt	CCATTGCTGAAA	GCAG	tgtggaacacaatgaact	gaact	ttccttga-
P.Abe	aaaaggat	gagttatgatgtgtgtaa	cctatt	CCATTGCTGAAA	GCAG	tgtggaacacaatgaact	gaact	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaa	cctatt	CCATTGCTGAAA	GCAG	tgtggaacacaatgaact	gaact	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacataat	gaact	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacatgat	gaact	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
F.Cat	agaaggat	gagttatga--tgtataa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
B.Tau	agaaggat	gagttatga--tgtataa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
S.Sus	agaaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
O.Avi	agaaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	GCAG	gcagtggtggaacacgat	gaact	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaa	cctatt	CCATTGCTGAAA	TACAG	gcagtggtggaacacgat	gaact	ttccttga-
	****	*****	***	*****	*****	*****	*****	*****

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

H.Sap	atgctcag	gtgggtccttggg...	1948...	gtttgctcatctc-ccacccc	TTGTctTTTCAG	CaaGGTGg
R.Mac	atgctcag	gtgggtccttggg...	1939...	gtttgctcatctc-ccacccc	TTGTctTTTCAG	CaaGGTGg
P.Tro	atgctcag	gtgggtccttggg...	1957...	gtttgctcatctc-ccacccc	TTGTctTTTCAG	CaaGGTGg
P.Abe	atgctcag	gtgggtccttggg...	1947...	gtttgctcatctc-ccacccc	TTGTcGTTTCAG	CaaGGTGg
C.Jac	atgctcag	gtgggtccttggg...	2058...	gtttgctcatctc-ccacttc	TTGTctTTTCAG	CaaGGTGg
M.Mus	atgctcag	gtttgtccttggg...	2701...	-----tcctttctttacca-ctccct	TTTCAG	CaaGGTGg
R.Nor	atgctcag	gtttgtccttggg...	2884...	-----cctttctttaccacctccct	TTTCAG	CaaGGTGg
C.Por	atgctcag	gtagggtccttggg...	2687...	-----taatacc-ctactccttatct	TTTCAG	CaaGGTGg
F.Cat	atgctcag	gtgggtcccagg...	1612...	gtgtattcatctc-ctgcccc	TTGTctTTTCAG	CaaGGTGg
B.Tau	atgctcag	gtgggtcccagg...	668...	-----tcatctc-ctacttcttatct	TTTCAG	CaaAGTGg
E.Cab	atgctcag	gtgggtccttggg...	1609...	gtgtgttcacctc-ctacccc	TTGTctTTTCAG	CaaGGTGg
S.Sus	atgctcag	gtgggtccttggg...	2081...	atatttcatctc-ctacccc	TTGTctTTTCAG	CaaGGTGg
O.Avi	atgctcag	gtgggtcccagg...	654...	---tgttcatctc-ttactta---	TTTCAG	CaaAGTGg
L.Afr	atgctcag	gtgggtccttggg...	2148...	-tgtgttcatctcctcctacccc	TTGTATTTTCAG	CaaGGTGg
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id=183342 gene=ENSG00000131067 name=GGT7 segment=chr20\_33440342\_33442333.-1 type=IN

Figure 85: CS=18.2



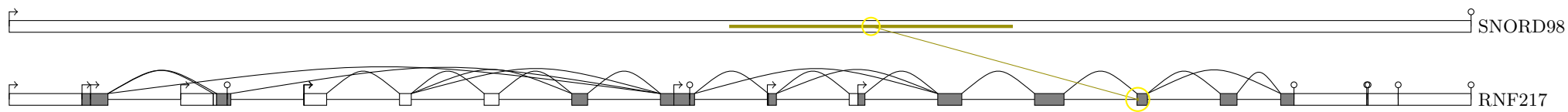
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R.Mac	aaaaggat	gagttatgatgtgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacaat	gaactgaactc	ttccttga-
P.Tro	aaaaggat	gagttatgatgtgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacaat	gaactgaactc	ttccttga-
P.Abe	aaaaggat	gagttatgatgtgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacaat	gaactgaactc	ttccttga-
C.Jac	agaaggat	gagttatgatgtgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacaat	gaactgaactc	ttccttga-
M.Mus	tagaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacataat	gaactgaactc	ttccttga-
R.Nor	tagaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacatgat	gaactgaactc	-tccttgac
C.Por	agagggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacgat	gaactgaactc	ttccttga-
O.Cun	agaaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacgat	gaactgaactc	ttccttga-
C.Fam	agaaggat	gagttatga--tgtataa	cctat	TCCATTGCTGAAATG	tcagtgtggaacacgat	gaactgaactc	ttccttga-
B.Tau	agaaggat	gagttatga--tgtataa	cctat	TCCATTGCTGAAATG	cagtgtggaacatgat	gaactgaactc	ttccttga-
E.Cab	agaaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacgat	gaactgaactc	ttccttga-
O.Avi	agaaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATG	cagtgtggaacacgat	gaactgaactc	ttccttga-
L.Afr	agaaggat	gagttatga--tgtgtaa	cctat	TCCATTGCTGAAATA	cagtgtggaacatg	gaactgaactc	ttccttga-
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id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

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R.Mac	ccgccgtg-	gtgagcagctgc...	805...	gctttaagaagctctttttc-----	TATTTTCAG	CAGtTGGa
P.Tro	-cgccgtga	gtgagcagctgc...	817...	gctttaagaagctctttttc-----	TATTTTCAG	CAGtTGGa
P.Abe	ccgccgtg-	gtgagcagctgc...	813...	gctttaagaagctctttttc-----	TATTTTCAG	CAGtTGGa
C.Jac	cagccgtg-	gtgagcagcctc...	809...	gctttaagaagctctttttc-----	TATTTTCAG	CAGtTGGa
M.Mus	cggccgtg-	gtgagcagctgt...	726...	gcttcaagaagctctttttc-----	CATTTTCAG	CAGtTGGa
R.Nor	gggccgtg-	gtgagcagctgt...	738...	-cttcaagaagctctttttc-----	CATTTTCAG	CAGtTGGa
C.Por	cgccgtg-	gtgagcagcttc...	751...	gctttaagcagctctttttc-----	TATTTTCAG	CAGtTGGa
O.Cun	ccgccgtg-	gtgagcagctgc...	1461...	gctgaaagcagctctttttc-----	CATTTTCAG	CAGtTGGa
C.Fam	ccgctgtg-	gtgagcagctgc...	634...	-----cagcttttttttttttttt	TTTCAG	CAGtTGGa
B.Tau	ccgctgtg-	gtgagcagctgc...	808...	gcttgaagaagctgtttttc-----	TATTTTCAG	CAGtTGGa
E.Cab	ccgctgtg-	gtgagcagctgc...	792...	gctctaagaagctctttttc-----	TATTTTCAG	CAGtTGGa
O.Avi	ccgctgtg-	gtgagcagctgc...	840...	gcttgaagaagttgtttttc-----	TATTTTCAG	CAGtTGGa
L.Afr	ccgctgtg-	gtgagcagctgc...	828...	gctttaagaagccctttttc-----	TATTTTCAG	CAGtTGGa
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id=752382 gene=ENSG00000072849 name=DERL2 segment=chr17\_5388537\_5389388\_-1 type=IN

Figure 86: CS=17.92



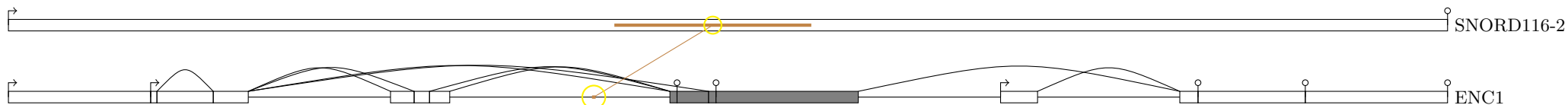
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R. Mac	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacacaat	gaact	gaactc	ttc	cttga-	
P. Tro	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	AttGCTGAAATG	cAGTGTGGAA	cacaat	gaact	gaactc	ttc	cttga-	
P. Abe	aaaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacacaat	gaact	gaactc	ttc	cttga-	
C. Jac	agaaggat	gagttatgatgtgtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacacaat	gaact	gaactc	ttc	cttga-	
M. Mus	tagaggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATG	cAGTGTGG	aacata	atgaact	gaactc	ttc	cttga-
R. Nor	tagaggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacat	gatgaact	gaactc	-tc	cttgac
C. Por	agagggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacac	gatgaact	gaactc	ttc	cttga-
O. Cun	agaaggat	gagttatga--t	gtgtaa	ccta	TTCCATTGCT	GAAATG	cagtg	tggaacac	gatgaact	gaactc	ttc	cttga-
C. Fam	agaaggat	gagttatga--t	gtataaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacac	gatgaact	gaactc	ttc	cttga-
B. Tau	agaaggat	gagttatga--t	gtataaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacat	gatgaact	gaactc	ttc	cttga-
E. Cab	agaaggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacac	gatgaact	gaactc	ttc	cttga-
O. Avi	agaaggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATG	cagtg	tggaacac	gatgaact	gaactc	ttc	cttga-
L. Afr	agaaggat	gagttatga--t	gtgtaa	ccta	TTCCA	AttGCTGAAATA	cagtg	tggaacat	ggtgaact	gaactc	ttc	cttga-
	****	*****	***	*****	*****	*****	*****	*****	*****	*****	*****	

id=278449 gene=ENSG00000221182 name=SNORD98 segment=chr10\_70514929\_70514995.1 type=EN

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R. Mac	agtctgtg	gtgagtgctga...	4517...	-----	ccttaaataat	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa		
P. Tro	agtctgtg	gtgagtgctga...	4528...	ttt	taagactc	cttaaataa	-----	TTTTGCGTT	TGTTT	tcCAG	CTGGAA	aa	
P. Abe	agtctgtg	gtgagtgctga...	4531...	-----	ccttaaataat	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa		
C. Jac	agtctgtg	gtgagtgctga...	2383...	-----	cctgaaat	at	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa	
M. Mus	agtctgtg	gtaagtagcaca...	1899...	-----	gcagtgagag	cc	tttaact	TTATACT	ttTGTTT	tcCAG	CTGGAA	ag	
R. Nor	agtctgtg	gtgagtagcaca...	2575...	-----	acctttcat	-ctt	atccctt	-----	TGTTT	tcCAG	CTGGAA	ag	
C. Por	cgtctgtg	gtgcgtgtctga...	1165...	-----	ctgttcatt	tttttt	cttt	-----	TGTTT	tcCAG	CTGGAA	aa	
O. Cun	cgtctgtg	gtgagtatctga...	4947...	-----	ttctaagt	gacttt	acctt	-----	TGTTT	TCAG	CTGGAA	aa	
C. Fam	ggtctg	gtgagtatctga...	4947...	-----	ctctaaat	g	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa	
B. Tau	agtctgtg	gtgagtgtccaa...	4947...	-----	tctctaaat	gg-	ttg	cttt	-----	TGTTT	tcCAG	CTGGAA	aa
E. Cab	ggtctgtg	gtgagtatccc...	4947...	-----	ctttaa	atg	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa	
O. Avi	agtctgtg	gtgagtgtccaa...	4947...	-----	tctctaaat	gg-	ttg	cttt	-----	TGTTT	tcCAG	CTGGAA	aa
L. Afr	ggtctgtg	gtgagtatctaa...	4328...	-----	ctttaa	atg	tttgcctt	-----	TGTTT	tcCAG	CTGGAA	aa	
	****	*	**	*	*	*	*	*	*****	***	*****		

id=476816 gene=ENSG00000146373 name=RNF217 segment=chr6\_125398005\_125402581.1 type=IN

Figure 87: CS=17.22



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R. Mac	atgtgctt	ggatcgatgatgagtc	ccccataaaaaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gagaactcat	-accgtcgttctcatcggaactgaggtcc	agcacatt
P. Tro	atgtgctt	ggatcgatgatgagtc	ccccaaaaaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gaaaactcat	-accgtcgttctcatcggaactgaggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgagtc	ccccaaaaaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gaaaactcat	-accgtcgttctcatcggaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgatgatcagtc	cctcaaaaaaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	aaaaactcat	-accgttgctctcatcacaactgaggtcc	agcacatt
C. Por	atgtgctt	ggatcgatgatgagtc	cccc-aaaaaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gagagctcta	atccgtcactctcatcgctgaggtcc	agcacatt
D. Cun	atgtgctt	ggatcaatgatgact	cccc-ataaacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gagaactcaca	accgtcgttctcatcgactgaggtcc	agcacatt
C. Fam	aagtgctt	ggatcgatgatgact	ccttc-aattgcattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gagaactcc	ctactgtcttctcgtaaacactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgact	cccac-aa-atgcattc	-----	CTTGG-AAA	CTGA	acaaaatgagt	gagcctcact	accgtc-tcctcatcggaactgaggtcc	agcacgtt
E. Cab	agtgctt	ggatcgatgatgact	ccctc-aa-atgcattc	-----	CTTGG-AAA	CTGA	acaaaatgagt	gagaactcact	accgtcgttctcgccgagactgaggtcc	agcacgtt
S. Sus	ccgtgctt	ggatcgatgatgact	ccctc-ta-aagcattc	-----	CTTGG-AAA	CTGA	acaaaatgagt	gagaactcact	accgtc-tcctcatcgaaactgaggtcc	agcacgtt
D. Avi	acatgctt	ggatcagtgatgac	-----aactttcata	TTTAT	CTTGAAAA	CTGA	acaaaatgagt	gagaactcact	accatc-tcctcatgatactgagctt	agcacgtt
L. Afr	acgtgcat	ggattgatgactgct	atctata-aacattc	-----	CTTGAAAAg	CTGA	acaaaatgagt	gaaaactcct	accgtcactcattg-aactgaggtcc	agcacatt
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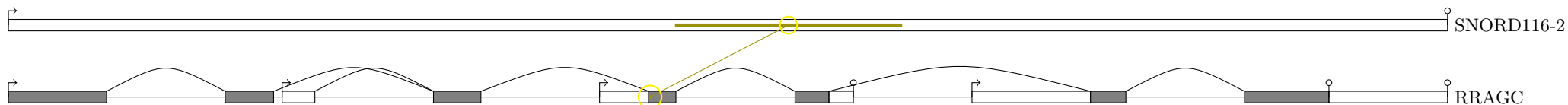
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R. Mac	caagacag	gtagttggtgat...666...	aatggcctgaaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgctttttatgca	----	...317...	tattat	tttttag	gagtggaa
P. Tro	caagacag	gtagttggtgat...681...	aatggcctgaaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgctttttatgca	----	...237...	tattat	tttttag	gagtggaa
P. Abe	caagacag	gtagttggtgat...682...	aatggcctgaaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgctttttatgca	----	...237...	tattat	tttttag	gagtggaa
C. Jac	caagacag	gtagtcggtgat...700...	aatggcctgaaagt	tgccg	TCAGg	TTTTCCAAG	atgaacctgctttttatgca	----	...231...	tattat	tttttag	gagtggaa
C. Por	caagaaag	atgggtggccat...403...	aggatcctgaaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgcttttaagcag	----	...245...	ttgttt	atag	gagtggaa
D. Cun	caagaaag	atgggtggcaac...756...	agtatccacaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgcttttaagcag	----	...197...	ttgttt	tttttag	gagtggaa
C. Fam	caagacac	atgggtggtgat...440...	agtctcctcaaagt	tgca	TCAGg	TTTTCCAAG	atgaacctgcttccgagccg	----	...224...	tctgtg	tttttag	gagaggaa
B. Tau	cagaaaag	gtgggtggtaag...440...	aacatcctgaaagt	tgca	TCAGGTT	TCCAAG	atgaacctgctcttgagcag	----	...242...	ggtttt	ttccag	gagtggaa
E. Cab	caagaaag	atgggtggtgat...447...	aatctctgagagt	tgca	TCAGGTT	TCCAAG	atgaacctgcttttaagcag	----	...225...	ttgttt	tttttag	gagtggaa
S. Sus	caagaaag	gtgggtggtgat...445...	aacatcctcaaagt	tgca	TCAGGTT	TCCAAG	acagacctgcccctaagcag	----	...220...	ttgttt	tttttag	gagtggaa
O. Avi	cagaaaag	gtgggtggtgat...446...	aacatcctgaaagt	tgca	TCAGGTT	TCCAAG	atgaacctgctcttgagcag	----	...234...	ggtttt	ttgtcag	gagtggaa
L. Afr	caagaaag	atgggtggtgat...430...	agtatcctgaaagt	tgccg	TCAGg	TTTTCCAAG	atgaacctgct-ttgagcag	----	...238...	ttgttt	tttttag	gagtggaa
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id=57829 gene=ENSG00000171617 name=ENC1 segment=chr5.73932324.73933318.-1 type=I5

Figure 88: CS=11.7





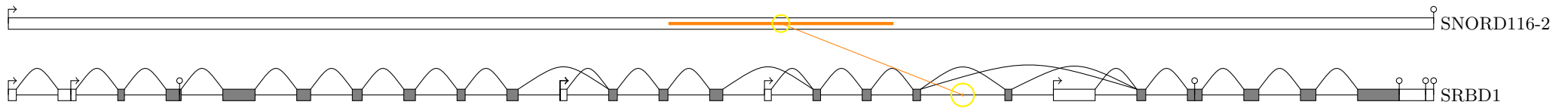
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R.Mac	atgtgctt	ggatc	gatgatgag	ccccataaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	agaactcat-accgtcgttctcatcggatctgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactcat-accgtcgttctcatcggaactgaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactcat-accgtcgttctcatcggaactgaggtcc	agcacgtt
C.Jac	atgtgctt	ggatc	gatgatcagt	ccccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactcat-accgttgctctcatcacaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	ctatgatgattccc	--agtcaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R.Nor	gctgctt	ggatc	gatgatgattttcc	--aataaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactcaataccgccactctcatcgtgactgaggtcc	agcacctg
C.Por	atgtgctt	ggatc	gatgatgatgcccc	--aaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	agagctctaataccgtcactctcatcgtgctgaggtcc	agcacatt
O.Cun	atgtgctt	ggatc	aatgatgactccccat	--aacattccttg	GAAAaGCTGAac	AAAATGAGTG	agaactcaaacaccgtcgttctcatcgtgactgaggtcc	agcacatt
C.Fam	aagtgctt	ggatc	gatgatgactccttcaat	-ttgattccttg	GAAAaGCTGAac	AAAATGAGTG	agaactcctactgtcgttctcgtcaaaactgaggtcc	agcacgtt
E.Cab	aggctgctt	ggatc	gatgatgactcctcaa	--atgattccttg	GAAAaGCTGAac	AAAATGAGTG	agaactcactaccgtcgttctcgtcggagactgaggtcc	agcacctg
S.Sus	cogtgcctt	ggatc	gatgatgactcctcta	--aagattccttg	GAAAaGCTGAac	AAAATGAGTG	agaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgactgct	--atctaaacattccttg	GAAAaGCTGAac	AAAATGAGTG	aaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15\_25299357\_25299451\_1 type=EN

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R.Mac	ttcagttg	ccctctgtgtaa-...160...	--ttttcaattaatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
P.Tro	ttcagttg	ccccctgtgtaa-...160...	--ttttcaattaatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
P.Abe	ttcagttg	cccc-gtgtaa-...159...	--ttttcaattaatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
C.Jac	ttcagttg	ctctttgtgtaa-...169...	--ttttcaattaatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	att
M.Mus	ctcagtta	ccctctgtgtaa-...125...	--ttttacgaataaccatcctg	TGTTg	TATTTTTTCAG	CTTTT	att
R.Nor	ctcagttg	ctttctacgtaa-...130...	-----taaataaccatcctg	gtgtg	TGTTTTTCAG	CTTTT	att
C.Por	cgtggttc	ccctctgtgtaa-...389...	--tttccaagttaatcgtacta	TGTTg	TATTTTTTCAG	CTTTT	att
O.Cun	gttgcatg	ccatccgtgcag-...177...	--atgttcattaattaactg	TGTTg	TGTTTTTCAG	CTTTT	att
C.Fam	-gaaattg	ccctctttataa-...171...	--ttttcaattaattaactg	TGTTg	TGTTTTTCAG	CTTTT	atc
E.Cab	ttcaatcg	cccgcatgtga-...165...	--ttttcaattaatcaaac-	TGTTg	TGTTTTTCAG	CTTTT	att
S.Sus	ctcagtta	c-ctcagttgaa-...168...	agttttcaattaatcaaac-	TATTg	TGTTTTTCAG	CTTTT	att
L.Afr	ctcagttg	ccatcagttgga-...170...	--ttttcaattaatcaactg	TGTTg	TGTTTTTCAG	CTTTT	att
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id=665160 gene=ENSG00000116954 name=RRAGC segment=chr1\_39318161\_39318367\_-1 type=AN

Figure 89: CS=15.6



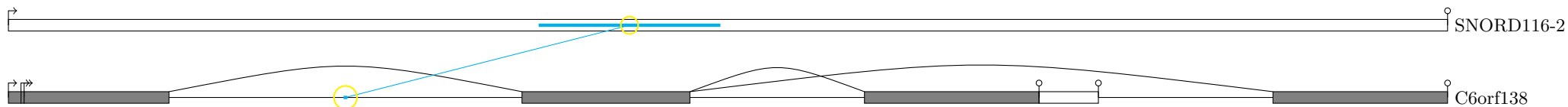
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P. Tro	atgtgctt	ggatcgatgatgagtc	ccccaaa-aaacattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctca-taccgtcgttctcatcggaactgagg	tcc	agcacgtt
M. Mus	acgtgctt	ggatctatgatgatt	cccagctcaa--acattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctctgtaccgccactctcatcggaactgagg	tcc	agcatcct
R. Nor	gcgtgctt	ggatcgatgatgatt	tcca--ata-aaacattcct	TGG-AAAagCTGAACAAAATGAGTGAAAA	Ctcaataccgccactctcatcggtgactgagg	tcc	agcacctg
C. Por	atgtgctt	ggatcgatgatgagtc	cccc--aaa-aaacattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctcaacaccgtcgttctcatcggtgactgagg	tcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgact	cccc--cat-aaacattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctcaacaccgtcgttctcatcggtgactgagg	tcc	agcacatt
C. Fam	aagtgcctt	ggatcgatgatgact	cctt--caatttgattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacgtt
F. Cat	atgtgctt	agattgatgatgcct	cctt--caa-caccattcc	GTGGAAAGCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgact	ccca--caa-atgcattcct	TGG-AAAatCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacgtg
E. Cab	aggtgctt	ggatcgatgatgact	ccct--caa-atgcattcct	TGG-AAAatCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacctg
S. Sus	ccgtgctt	ggatcgatgatgact	ccct--cta-aagcattcct	TGG-AAAatCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	ggcacgtg
O. Avi	acatgctt	ggatcagtgatgaca	actt--tcatatttattcct	TGGAAAatCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacgtt
L. Afr	acgtgcat	ggattgatgatgact	gctatctaa--acattcct	TGGAAAagCTGAACAAAATGAGTGAAAA	Ctcaactcactcctcactcgttctcatcggaactgagg	tcc	agcacatt
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R. Mac	aagtgcag	gtaagaactat	...4934...--tttcacatt-aagtcatacttGTTTTCTgATTCTA-TTTTTTCAG-TTCCAta
P. Tro	aagtgcag	gtaagaactat	...4934...--tttcacatt-aagtcatacttGTTTTCTgATTCTG-TTTTTTCAG-TTCCAta
M. Mus	aagtgcag	gtgagaagctgt	...4933...--tttcacatt-aaatcgtacttGTTTTCTgATTCTGTTTTtTTCAG-TTCCAta
R. Nor	aagtgcag	gtgagaagctgt	...4935...--tttcacatt-aaacatacttaTTTTCTgATTCTG-TTTTTTCAG-TTCCAta
C. Por	aagtgcag	gtaagaagctat	...4942...-----t-aagtcatacttgttctgATTCTG-TTTTTTCAG-TTCCAta
O. Cun	aagtgcag	gtaagaatgat	...4935...--tttcacatt-aagtcatacttGTTTTCTgATTCTG-TTTTTTCAG-TTCCAta
C. Fam	aagtgcag	gtaagaacaat	...4946...-----att-aagccatacttattttc-----TG-TTTTTTCAG-TTCCAta
F. Cat	aagtgcag	gtaagaactac	...4937...cttttcacattaagccata--CTTAtt--TTCTG-TTTTTTCAG-TTCCAt-
B. Tau	aagtgcag	gtaagaactgt	...4942...-----t-aagccatacttgttttctgATTCTG-TTTTTTCAG-TTCCAta
E. Cab	aagtgcag	gtaggaaactat	...4936...--tttcacatt-aagccatgcttaTTTTCTgATTt--cTTTTTCAG-TTCCAta
S. Sus	aagtgcag	gtaagaactaa	...4934...--tttcacatt-aagtcatacttGTTTTCTgATTCTG-TTTTTTCAG-TTCCAta
O. Avi	aagtgcag	gtaagaactat	...4934...--tttcacatt-aagtcatacttGTTTTCTgATTCTG-TTTTTTCAG-TTCCAta
L. Afr	gagtgcat	gtaagaaccgt	...4947...--ttctgtttt-----tttttttttt-----TTTTTTTCAG-TTCCAta
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Figure 90: CS=16.1



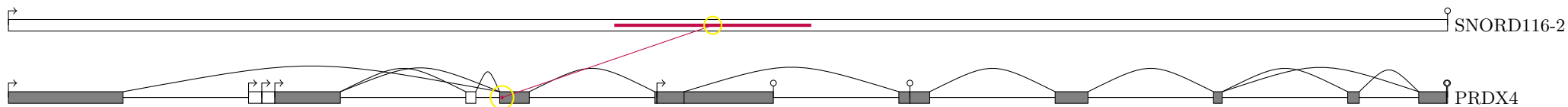
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M. Mus	acgtgctt	ggatc	ctatgatgatt	cccagtaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagt	gaaaactctgt	accgccactctcat	cggaaactgaggtcc	agcatctt		
C. Por	atgtgctc	ggatc	gatgatgatg	cccc--aaaaa	CATT	CTTGGAAAAGC	TGAA	caaaatgagt	gagagctctaat	ccgtcactctcat	ctgtgctgaggtcc	agcacact	
O. Cun	atgtgctt	ggatc	aatgatgact	ccccataaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagt	gagaactcaca	accgtcgttctcat	ctgactgaggtcc	agcacatt		
C. Fam	aagtgctt	ggatc	gatgatgact	ccttcaattg	CATT	CTTGGAAAAGC	agctgaacaaaatgagt	gagaactccct	actgtcgttctct	gtcaaaactgaggtcc	agcacgtt		
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa-atg	CATT	CTTGGAAAAT	-ctgaacaaaatgagt	gagccatcact	accgtc-tcctcat	cggaaactgaggtcc	agcacgtg		
E. Cab	aggtgctc	ggatc	gatgatgact	ccctcaa-atg	CATT	CTTGGAAAAT	-ctgaacaaaatgagt	gagaactcact	accgtcgttctc	gccgagactgaggtcc	agcacctg		
S. Sus	cogtgctc	ggatc	gatgatgact	ccctcta-aag	CATT	CTTGGAAAAT	-ctgaacaaaatgagt	gagaactcact	accgtc-tcctcat	cggaaactgaggtcc	ggcacgtg		
L. Afr	acgtgcat	ggatt	gatgatgact	gctatctaaa	CATT	CTTGGAAAAGC	TGAA	cAAAA	tgagtgaaaactcct	taccgtctcactcattg	-aactgaggtcc	agcacatt	
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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P. Tro	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
P. Abe	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
C. Jac	aaatgaag	gtgaactacaag...4948...	-----cagaagtctcttcttttct---	GTTTCAAG	GATG	ggag
M. Mus	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Por	aaatgaag	gtgaaccacagg...4943...	ggtaacttaagtctcccctt---	TTCA	GTTTCAAG	GATG
O. Cun	aaatgaag	gtgaaccacaag...4948...	-----cttaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Fam	aaatgaag	gtgaaccacaag...4949...	-----ttaagtctccccttttcta---	TTTCAAG	GATG	ggag
B. Tau	aaatgaag	gtgaactacaag...4948...	-----cttcagtctccccttttct---	GTTTCAAG	GATG	ggag
E. Cab	aaatgaag	gtgaaccacaag...4948...	-----cttaagtttccccttttct---	GTTTCAAG	GATG	ggag
S. Sus	aaatgaag	gtgaaccacaag...4948...	-----ctcaagtctccccttttct---	GTTTCAAG	GATG	ggag
L. Afr	agatgaag	gtgaaccacaag...4941...	--taacttaagtctccccttt	TTTTTT	GTTTCAAG	GATG
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Figure 91: CS=14.04



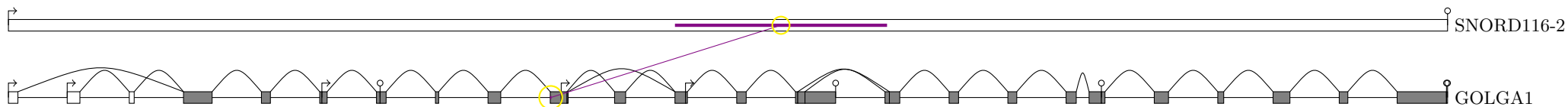
H. Sap	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattc	CTTGGaa	AAGCTGAac	AAAATGAGTG	aaaactcat-accgtcattctcatc	ggaactgaggtcc	agcacgtt				
R. Mac	atgtgctt	ggatc	gatgatgag	ccccataaaaaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gaaactcat-accgtcgttctcatc	ggatctgaggtcc	agcacatt				
P. Abe	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gaaactcat-accgtcgttctcatc	ggaactgaggtcc	agcacgtt				
C. Jac	atgtgctt	ggatc	gatgatcag	ccccaaaaaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	taaaactcat-accgttgctctcatc	cacaactgaggtcc	agcacatt				
R. Nor	cgctgctt	ggatc	gatgatgatt	tcc--aataaaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gaaactcaataccgccactctcatc	gtgactgaggtcc	agcacgtg				
C. Por	atgtgctt	ggatc	gatgatgatg	cccc--aaaaaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gagagctctaaccgtcactctcatc	gtgactgaggtcc	agcacatt				
O. Cun	atgtgctt	ggatc	aatgatgact	ccccat--aaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gagaactcacaaccgtcgttctcatc	gtgactgaggtcc	agcacatt				
C. Fam	aagtgctt	ggatc	gatgatgact	ccttcaat-ttgcatc	CTTGGaa	AAGCTGAac	AAAATGAGTGA	gaactccctactgtcgttctcgtc	aaaactgaggtcc	agcacgtt				
B. Tau	acgtgctt	ggatc	gatgatgact	ccccaaa--atgcattc	CTTGGaa	AAATCTGA	acaaaatgagt	gagccatcactaccgtc-tcctcatc	ggaactgaggtcc	agcacgtg				
E. Cab	aggtgctt	ggatc	gatgatgact	ccctcaa--atgcattc	CTTGGaa	AAATCTGA	acaaaatgagt	gagaactcactaccgtcgttctcgcg	gagactgaggtcc	agcacctg				
S. Sus	ccgtgctt	ggatc	gatgatgact	ccctcta--aagcattc	CTTGGaa	AAATCTGA	acaaaatgagt	gagaactcactaccgtc-tcctcatc	gaaactgaggtcc	ggcacgtg				
O. Avi	acatgctt	ggatc	cagtgatgaca	actttcat-atattc	CTTGGAAAt	CTGA	acaaaatgagt	gagaactcactaccatc-tcctcatc	gatactgaggtcc	agcacgtt				
L. Afr	acgtgcat	ggatt	gatgatgact	gctatct--aaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gaaactccttaccgtctcactcattg	-aactgaggtcc	agcacatt				
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15\_25299357\_25299451.1 type=EN

H. Sap	atctaaag	gt----	agccctgatt...47...	cagtggtacagaacatcatg-----	TATTT	TATTT	TTAG	TTTCCAAg		
R. Mac	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg		
P. Abe	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg		
C. Jac	aaataaag	gt----	agccctgatt...59...	-----	acatcatgtat	ttttctttc	TTAG	TTTCCAAg		
R. Nor	atthagaa	gccaagt	ttta----...51...	-----	tagataat-tg	ctttctttc	TTAG	TTTCCAAg		
C. Por	atctgagg	gtgtag	----ctcagt...99...	-----	acatcgtgtc	ttttctttc	TTAG	TTTCCAAg		
O. Cun	gtccaaag	atthagag	cct-----...51...	-----	aatcatcctat	ctttctttc	TTAG	TTTCCAAg		
C. Fam	atccaaag	atthagag	cct-----...46...	-----	tttctcagtg	ttttagaata	TTATa	TATTT	TTAG	TTTCCAAg
B. Tau	gtccaaag	atcc--	---cctccaaa...67...	-----	acatcatatg	ttttctttc	TTAG	TTTCCAAg		
E. Cab	gtccagag	gattaga	agcct-----...64...	-----	acatcatat	atttttctttc	TTAG	TTTCCAAg		
S. Sus	-----	cag	actcagaagc	ttgatt...59...	-----	gaatcatata--	tttctttc	TTAG	TTTCCAAg	
O. Avi	gtccaaag	atcc--	---cctccgaa...65...	-----	acatcatatg	ctttctttc	TTAG	TTTCCAAg		
L. Afr	atccaaag	gttaaga	agccc-----...67...	-----	tcatgta	atctttctttc	TTAG	TTTCCAAg		
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id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX\_23689551\_23689645.1 type=IN

Figure 92: CS=15.6



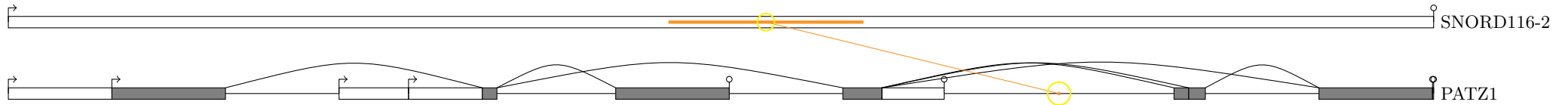
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R. Mac	atgtgctt	ggatcgatgatgagtc	cccctataaaaaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTGAG	aac--tcat-accgtcgttctcatcggaactgaggtcc	agcacatt						
P. Tro	atgtgctt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTGAA	aac--tcat-accgtcgttctcatcggaactgaggtcc	agcacgtt						
P. Abe	atgtgctt	ggatcgatgatgagtc	cccccaaaaaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTGAA	aac--tcat-accgtcgttctcatcggaactgaggtcc	agcacgtt						
C. Jac	atgtgctt	ggatcgatgatcagtc	ccctcaaaaaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTAAA	aac--tcat-accgttgctctcatcacaactgaggtcc	agcacatt						
C. Por	atgtgctc	ggatcgatgatgatg	cccc--aaaaaacattc	ccttg	GAAAa	GCTGAACAAA	--atgagtgagagctcta	atccgtcactctcatcggtcctgaggtcc	agcacatt						
O. Cun	atgtgctt	ggatcaatgatgact	cccc--ataaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTAA	gagaaac--tcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt						
C. Fam	aagtgctt	ggatcgatgatgact	ccctc--aatttgcattc	ccttg	GAAAa	GCTGAACAAA	--atgagtgagaactcc	ctactgtcgttctcgtcaaaactgaggtcc	agcacgtt						
F. Cat	atgtgctc	agattgatgatgcct	ccatc--aacaccattc	cggtg	GAAAAGCTGAACAAA	--aagagtgagaactcactatagtc	attctcatcgaaattgagatcc	agcacgtt							
B. Tau	acgtgctt	ggatcgatgatgact	cccac--aa-atgcattc	ccttg	GAAAa	CTGAACAAA	--atgagtgagccatcactaccgtc	-tcctcatcggaactgaggtcc	agcacgtg						
E. Cab	aggtgctc	ggatcgatgatgact	ccctc--aa-atgcattc	ccttg	GAAAa	CTGAACAAA	--atgagtgagaactcactaccgtc	gttctcgccgagactgaggtcc	agcacctg						
acatgctc	ggatcagtgatgaca	acttt--catatttattc	ccttg	GAAAa	CTGAACAAA	--atgagtgagaactcactaccatc	-tcctcatcgatactgagctct	agcacgtt							
O. Avi	acgtgcat	ggattgatgatgact	gctat--ctaaacattc	ccttg	GAAAa	GCTGAACAAAATG	agTGAA	aac--tccttaccgtctcactcattg--aactgaggtcc	agcacatt						
L. Afr															
	* **	***	*		*****	**	*****	*	*	**	*	***	****	**	****

id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

H. Sap	agcacatg	gtatgcattttt...	1152...	ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
R. Mac	agcacatg	gtatgcattttt...	1162...	ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
P. Tro	agcacatg	gtatgcattttt...	1190...	ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
P. Abe	agcacatg	gtatgcattttt...	1140...	ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
C. Jac	agcacatg	gtatgcattttt...	1563...	ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
C. Por	agcacatg	gtatgtattttg...	867...	-----acctaagcaatc	ttatgtcTTTGaa	TCAG	CTTTTaaa
O. Cun	agcacatg	gtatgtttacat...	1286...	tagcagtagcctagt	gaaacTGTGTg	TCAG	CTTTTaac
C. Fam	agcacatg	gtgcgcatthta...	283...	-----gccagtgaaact	ttatacTTTGTa	TCAG	CTTTTaaa
F. Cat	agcacatg	gtacgcattttt...	286...	-----gcctaagtaaac	ttataccTTGTa	TCAG	CTTTTaaa
B. Tau	agcacatg	gtgcgcatthta...	448...	-----gccagtgaaact	ttgtgtcTTTGTa	TCAG	cTTTTaaa
E. Cab	agcacatg	gtgcgcatthta...	274...	-----gcctagtgaaact	ttgtatcTTTGTa	TCAG	cTTTTaaa
O. Avi	agcacatg	gtgcgcatthta...	454...	-----cccagtgaaact	ttctgtcTTTGTa	TCAG	cTTTTaaa
L. Afr	agcacatg	gtgcgcatthta...	254...	gtcaagtgccaatgaaac	TTTACATTTTGTg	TCAG	CTTTTaaa
	*****	** *			** * * * *	*	*****

id=391479 gene=ENSG00000136935 name=GOLGA1 segment=chr9.127684172.127685373.-1 type=IN

Figure 93: CS=26.13



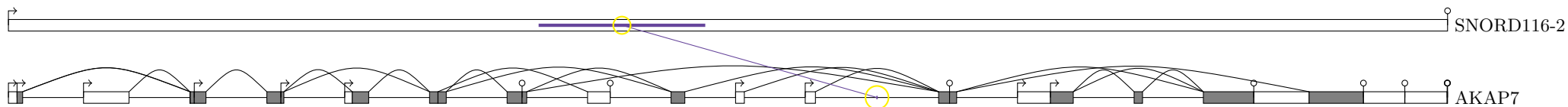
H. Sap	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactcat-accgtcattctcatc	ggaactgaggtcc	agcacgtt		
R. Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	GAGAActcat-accgtcgttctcatc	ggatctgaggtcc	agcacatt		
P. Tro	atgtgctt	ggatc	gatgatgagtc	cccccaaaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactcat-accgtcgttctcatc	ggaactgaggtcc	agcacgtt		
P. Abe	atgtgctt	ggatc	gatgatgagtc	cccccaaaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactcat-accgtcgttctcatc	ggaactgaggtcc	agcacgtt		
C. Jac	atgtgctt	ggatc	gatgatcagtc	cctcaaaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	taaaaactcat-accgttgctctcatc	cacaactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactctgtaccgccactctcatc	ggaactgaggtcc	agcatcct		
R. Nor	gcgtgctt	ggatc	gatgatgatttcc	--aataaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactcaataccgccactctcatc	gtgactgaggtcc	agcacctg		
C. Por	atgtgctt	ggatc	gatgatgatgccc	--aaaaaacattc	cttGGAAAagCTGAACAAaATGAGt	GAGAAgctctaaccgtcactctcatc	gtgctgaggtcc	agcacact		
O. Cun	atgtgctt	ggatc	aatgatgactcccc	cat--aaacattc	cttGGAAAagCTGAACAAaATGAGt	GAGAActcacaaccgtcgttctcatc	gtgactgaggtcc	agcacatt		
C. Fam	aagtgctt	ggatc	gatgatgactcct	caat-ttgattc	cttGGAAAagCTGAACAAaATGAGt	GAGAActccactactgtcgttctcgtc	aaaactgaggtcc	agcacgtt		
B. Tau	acgtgctt	ggatc	gatgatgactcc	caaa--atgcattc	cttGGAAAagCTGAACAAaATGAGt	gagccatcactaccgtc-tcctcatc	ggaactgaggtcc	agcacgtg		
E. Cab	aggctgctc	ggatc	gatgatgactcct	caa--atgcattc	cttGGAAAagCTGAACAAaATGAGt	GAGAActcactaccgtcgttctcgcg	gagactgaggtcc	agcacctg		
S. Sus	cgtgctc	ggatc	gatgatgactcct	cta--aagattc	cttGGAAAagCTGAACAAaATGAGt	GAGAActcactaccgtc-tcctcatc	gaaactgaggtcc	ggcacgtt		
O. Avi	acatgctc	ggatc	cagtgatgaca	acttttcat-at	tattccttGGAAAagCTGAACAAaATGAGt	GAGAActcactaccatc-tcctcatc	gatactgaggtcc	agcacgtt		
L. Afr	acgtgcat	ggatt	gatgatgactgct	--atctaaacattc	cttGGAAAagCTGAACAAaATGAGt	gaaaactccttaccgtctcactcattg	-aactgaggtcc	agcacatt		
	***	****	**** *	*	***** * *** *****	***** * **	*	***	**** * *	***

id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R. Mac	aactctca	cctgctactcag...	4937...	-ttgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
P. Tro	aactctca	cctgctactcag...	4943...	-----g	ccgcgggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
P. Abe	aactctca	cctgctactcag...	4943...	-----g	ccgcgggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
C. Jac	aactcca	cctgctactcag...	4943...	-----g	ccctcgggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
M. Mus	cagataca	cctgctcaagt...	4943...	-----g	ctgtgggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
R. Nor	cagatgca	cctgctcaagt...	4943...	-----g	ctgtgggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
C. Por	caaacata	cctgctgcttag...	4937...	-ttgctg	gctgcccgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
O. Cun	gtaacaca	cctgttgcccag...	4937...	-ttgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
C. Fam	tcataaca	tgtgctgtgtgg...	4937...	-gtgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
B. Tau	atgacgca	cctgctgcccc...	4943...	-----g	gcgc-ggatctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
E. Cab	gtagcaca	tctgctgctcag...	4937...	-gtgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
S. Sus	gtaataca	gctgctgctgg...	4937...	-gtgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
O. Avi	atgacgca	cctgctgcccc...	4937...	-gtgctg	ggcgggatctcaTCTCct	TTTGTcTTGTTTAG	gTTTCTcc
L. Afr	acaaaaca	cctgctgctcag...	4943...	-----g	ccgcggggtctcatctcct	TTTGTcTTGTTTAG	gTTTCTcc
		*	** *	*	** ** *****	*****	*****

id=182225 gene=ENSG00000100105 name=PATZ1 segment=chr22.31724911.31731403.-1 type=IN

Figure 94: CS=13.5



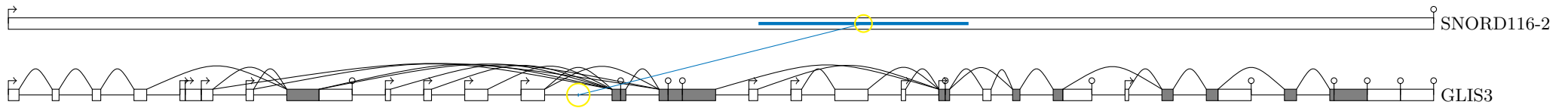
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R.Mac	atgtgctt	ggatc	gatgatgag	gtcccc	tataaaaa	CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	-accgt	cgttct	catc	ggatct	gaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgag	gtcccc	aaaaaaaa	CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgag	gtcccc	aaaaaaaa	CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacgtt
C.Jac	atgtgctt	ggatc	gatgatc	agtc	cccc	aaaaaaaa	CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	-accgt	tgtctc	catc	caactg	agcacatt
M.Mus	acgtgctt	ggatc	ctatgat	gattcc	caagt	caaaa	-CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	gtacc	gcactc	catc	ggaact	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatg	attcca	ataaaa	-CATTCCTGGAA	agctga	acaaaat	gagtga	aaactcat	accgc	cactct	catc	gtgact	agcacctg	
C.Por	atgtgctt	ggatc	gatgatg	atgccc	-aaaaa	CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	aatcc	gctc	catc	gtgctt	agcacatt	
O.Cun	atgtgctt	ggatc	caatgat	gactcccc	cataaaa	-CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	caacc	gcttct	catc	gtgact	agcacatt	
C.Fam	aatgtgctt	ggatc	gatgatg	actcctt	caattt	-CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	ctact	gtcgtt	ctc	gtgact	agcacgtt	
B.Tau	acgtgctt	ggatc	gatgatg	actccc	acaaat	-CATTCCTGGAA	agctga	acaaaat	gagtga	aaactcat	ctacc	gctc	tcct	catc	agcacgtg	
E.Cab	aggtgctt	ggatc	gatgatg	actcct	caaatg	-CATTCCTGGAA	agctga	acaaaat	gagtga	aaactcat	ctacc	gcttct	c	gagact	agcacctg	
L.Afr	acgtgcat	ggatt	gatgatg	actgct	atctaaa	-CATTCCTGGAA	aagctga	acaaaat	gagtga	aaactcat	cctacc	gctc	catc	attg	agcacatt	
	****	****	*****	*	*	*****	*	***	****	*	**	*	*	****	*****	****

id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R.Mac	tggtgaag	gtaatat	ctcca	..4950	..ttgactta	-tttgttttttca	-----TTTCAAG	gGAGTGaa	
P.Tro	tggtgaag	gtaatat	ctccg	..4950	..ttgattga	-tttgttttttca	-----TTTCAAG	gGAGTGaa	
P.Abe	tggtgaag	gtaatat	ctccg	..4950	..ttgattga	-tttgttttttca	-----TTTCAAG	gGAGTGaa	
C.Jac	tggtgaag	gtaatat	ctcca	..4950	..ttgattga	-tttgttttttca	-----TTTCAAG	gGAGTGaa	
M.Mus	ttgtgaag	gtaatt	ccccta	..4938	..--aatgag	tcctgacatgga	-TTTGT TTTGt	CTTTCAAG	gGAGTGag
R.Nor	tggtgaag	gtaatt	ccccta	..4950	..-gacatgg	-atttgttttgtca	-----TTTCAAG	gGAGTGag	
C.Por	tgctgaag	gtaatat	ccccca	..4950	..-atgtgat	ttttgtttgtt	-----TTTCAAG	gGAGTGaa	
O.Cun	tggtgaag	gtaatt	ctcca	..4950	..-atgtgat	ttttctttgtta	-----TTTCAAG	gGAGTGaa	
C.Fam	tggtgaag	gtaata	cccaca	..4950	..-gatgtga	-ttttgtttatca	-----TTTCAAG	gGAGTGaa	
B.Tau	tggtgaag	gtaatg	cccaca	..4949	..tgatgtga	-ttttgtcttgc	-----ATTCAAG	gGAGTGaa	
E.Cab	tggtgaag	gtaatat	ctgcg	..4936	..tgaatga	-ctgattgatgtg	ATTTGT TTTGt	ATTCAAG	gGAGTGaa
L.Afr	tggtgaag	gtaatt	gtcccc	..4950	..-gatgtaa	-ttttgttttgc	-----TTTCAAG	gGAGTGaa	
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id=215573 gene=ENSG00000118507 name=AKAP7 segment=chr6.131522051.131540800.1 type=IN

Figure 95: CS=19.24



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R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaaaacattc	ccttg	gaaaag	GAACA	ATGAGT	gagaactcat-	accgtcgtt	ctcatc	ggatctgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gaaaactcat-	accgtcgtt	ctcatc	ggaactgaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gaaaactcat-	accgtcgtt	ctcatc	ggaactgaggtcc	agcacgtt
C.Jac	atgtgctt	ggatc	gatgatcagtc	ccccaaaaaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	aaaaactcat-	accgttgct	ctcatc	cacaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gaaaactctgt	accgccact	ctcatc	ggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgattcc	--aataaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gaaaactcaata	accgccact	ctcatc	gtgactgaggtcc	agcacctg
C.Por	atgtgctc	ggatc	gatgatgatgccc	--aaaaaacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gagagctctaat	cgcctcact	ctcatc	gtgctgaggtcc	agcacact
O.Cun	atgtgctt	ggatc	aatgatgactcccc	cat--aacattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gagaactcaca	accgctg	ttctcatc	gtgactgaggtcc	agcacatt
C.Fam	aagtgctt	ggatc	gatgatgactcctt	caat-ttgcattc	ccttg	gaaaag	CTGAACAA	ATGAGT	gagaactccct	actgtcgtt	ctcgtc	gaaactgaggtcc	agcacgtt
F.Cat	atgtgctc	agatt	gatgatgctccat	caa--caccattc	cgttg	gaaaag	CTGAACAA	aaGAGT	gagaactcact	atagtcatt	ctcatc	gaaattgagatcc	agcacgtt
E.Cab	aggtgctc	ggatc	gatgatgactcct	caa--atgcattc	ccttg	gaaa	TCTGAACAA	ATGAGT	gagaactcact	accgctg	ttctc	gccgagactgaggtcc	agcacctg
O.Avi	acatgctc	ggatc	cagtgatgacaact	tttcat-at	tattccttg	gaaa	TCTGAACAA	ATGAGT	gagaactcact	accatc-	tcctcatc	gatactgagctc	agcacgtt
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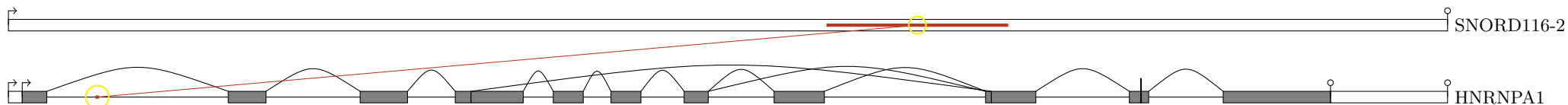
id=728827 gene=ENSG00000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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P.Tro	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
P.Abe	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
C.Jac	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
M.Mus	taatacag	gtaagttttg	tt...4941...	gggacatacaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
R.Nor	taatacag	gtaagttttt	tt...4941...	gggacataaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
C.Por	caatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
O.Cun	gaatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
C.Fam	taatacag	gtaagttttg	tt...4941...	ggcacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
F.Cat	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
E.Cab	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
O.Avi	taatacag	gtaagttttg	tt...4941...	gggacatgaaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
L.Afr	taatacag	gtaagttttg	tt...4941...	ggggcacagaagcta	acctg	ATTCATTG	TtTTAG	gggctc	tt
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Figure 96: CS=12.6





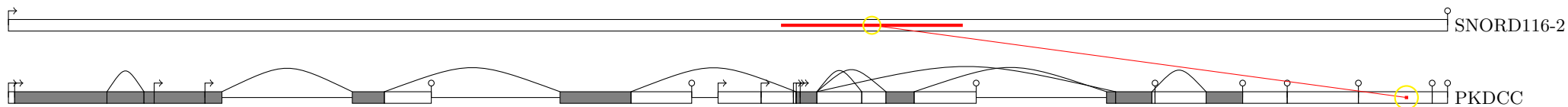
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P. Tro	atgtgctt	ggatcgatgatgagtc	ccccaaa	-aaacattc	cctggaaa	agctga	ACAAAATG	GTGA	aaactcat	-accgtcgtt	tctcatc	ggaaactg	agcaggtt		
M. Mus	acgtgctt	ggatctatgatgatt	cccagtc	-acattc	cctggaaa	agctga	ACAAAATG	GTGA	aaactctgt	accgccact	tctcatc	ggaaactg	agcatctt		
R. Nor	gcgtgctt	ggatcgatgatgatt	tcca	-ata-aaacattc	cctgg-	aaagctga	ACAAAATG	GTGA	aaactcaat	accgccact	tctcatc	ggtgactg	agcacctg		
C. Por	atgtgctc	ggatcgatgatgatg	cccc	-aaa-aaacattc	cctggaaa	agctga	ACAAAATG	GTGA	gagctcaat	ccgtcact	tctcatc	gctgaggtt	agcacact		
O. Cun	atgtgctt	ggatcaatgatgact	cccc	-cat-aaacattc	cctggaaa	agctga	ACAAAATG	GTGA	gaactcaca	accgctc	gttctcatc	ggtgactg	agcacatt		
C. Fam	aagtgctt	ggatcgatgatgact	cctt	-caatttgc	cctggaaa	agctga	ACAAAATG	GTGA	gaactccct	actgctg	ttctcgt	caaaactg	agcacgtt		
B. Tau	acgtgctt	ggatcgatgatgact	ccca	-caa-atgcattc	cctgg-	aaatctga	ACAAAATG	GTGA	gccatcact	accgtc-	tcctcatc	ggaaactg	agcacgtg		
E. Cab	aggtgctc	ggatcgatgatgact	ccct	-caa-atgcattc	cctgg-	aaatctga	ACAAAATG	GTGA	gaactcact	accgtc	gttctc	gagactg	agcacctg		
S. Sus	ccgtgctc	ggatcgatgatgact	ccct	-cta-aagcattc	cctgg-	aaatctga	ACAAAATG	GTGA	gaactcact	accgtc-	tcctcatc	gaaactg	ggcacgtg		
O. Avi	acatgctc	ggatcagtgatgaca	actt	-tcatattt	cctggaaa	atctga	ACAAAATG	GTGA	gaactcact	accatc-	tcctcatc	gatactg	agcacgtt		
L. Afr	acgtgcat	ggattgatgatgact	gtatct	aa--acattc	cctggaaa	agctga	ACAAAATG	GTGA	aaactcctt	accgtc	tactcattg	-aactgaggtt	agcacatt		
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R. Mac	agtcagag	gtgagttaggcg	..113..	-----	taccctc	-ccaaagt	tcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	..377..	ccccact	ccag	tctcctaa
P. Tro	agtcagag	gtgagttaggcg	..111..	-----	taccctc	-ccaaagt	tcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	..375..	ccccact	ttag	tctcctaa
M. Mus	agtccgag	gtaagttggatg	..106..	-----	tacttta	aaaaaat	gcagg	TCGCCATTTGT	cctcatagt	caccatg	aggc---	..369..	ctccact	ttag	tctcccaa
R. Nor	agtcagag	gtgagttgagcg	..105..	-----	ctactctt	-aaaaat	gcagg	TCGCCATTTGT	cctcatagt	caccatg	aggc---	..361..	actttatt	ttag	tccccaa
C. Por	agtcagag	gtaagcgtat	..103..	-----	gcctgctc	-ccaaagt	tcagg	TCGCCATTTGT	cctcg---	tcgcatg	aggcgc	..327..	cttccact	ttag	tctcctaa
O. Cun	agtcagag	gtgaggagctcc	..102..	-----	aaggcct	accctc	-ccaaag	TCGCCATTTGT	cctcgtc	gctgccc	atgagg	---.378..	tctccc	gcccag	tccccaa
C. Fam	agtcagag	gtgagtaaacacg	..112..	-----	ttcccctc	-ccgaagt	tgagg	TCGCCATTTGT	cctcgtc	gctgccc	atgagg	---.363..	ccccgct	cctag	tctcccaa
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E. Cab	agtcagag	gtgagtaggacg	..111..	-----	taccctc	-ccaaagt	tcagg	TCGCCATTTGT	cctcgtc	gctgccc	atgagg	---.359..	tcctact	cctag	tctcccaa
S. Sus	agtcagag	gtgagtgagact	..111..	-----	taccctc	-cctgagt	tcagg	TCGCCATTTGT	cctcg---	tcgcatg	aggctgt	..358..	ccctact	cctag	tctcccaa
O. Avi	aatcagag	gtgggtaagacg	..111..	-----	tcccctc	-cctgagt	tgagg	TCGCCATTTGT	cctcg---	tcgcatg	aggctgc	..366..	ctcact	cctag	tctcccaa
L. Afr	agtcagag	gtaagctaccct	..108..	-----	taccctc	-ccaaagt	tgagg	TCGCCATTTGT	cctcgtc	gctgccc	atgagg	---.389..	ttccacc	attag	tctcctaa
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Figure 97: CS=16.25



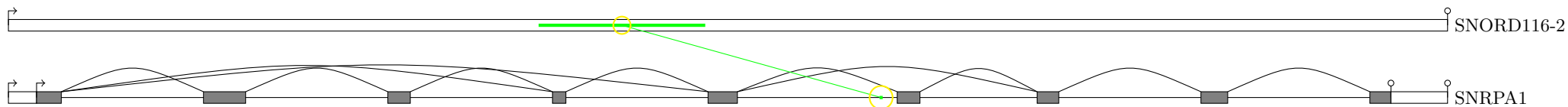
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P.Tro	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattccttggaaaagc	TGAACAAA	TGAG	t	gaaaactcata	-ccgtcgttctcatc	ggaactgaggtcc	agcacgtt	
P.Abe	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattccttggaaaagc	TGAACAAA	TGAG	t	gaaaactcata	-ccgtcgttctcatc	ggaactgaggtcc	agcacgtt	
C.Jac	atgtgctt	ggatc	gatgatcag	tcccaaaaaaacattccttggaaaagc	TGAACAAA	TGAG	t	aaaaactca	-taccgttgctctcatc	cacaactgaggtcc	agcacatt	
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R.Nor	gcgtgctt	ggatc	gatgatgatt	tcc--aataaaacattccttggaaaagc	GCTGAACAAA	TGAG	t	gaaaactcaata	accgccactctcatc	gtgactgaggtcc	agcacctg	
C.Por	atgtgctc	ggatc	gatgatgatg	cccc--aaaaaacattccttggaaaagc	TGAACAAA	TGAG	t	AGAG	ctctaaccgtcactctcatc	gtgctgaggtcc	agcacact	
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B.Tau	acgtgctt	ggatc	gatgatgact	cccacaa--atgcattccttggaaaagc	CTGAACAAA	TGAG	t	gagccatcact	accgtc-tcctcatc	ggaactgaggtcc	agcacgtg	
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L.Afr	acgtgcat	ggatt	gatgatgact	gct--atctaaacattccttggaaaagc	GCTGAACAAA	TGAG	t	gaaaactcct	taccgtcactcattg	-aactgaggtcc	agcacatt	
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P.Abe	tgtgggtg	attctgtac	ctg...138...	-----tggggccggggcctttctgc-	CTCATTG	ct	TTCA	atgaaagccgcaaagcagcc--...	.67...	ttgtttat	tttt	gtaaaaa
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M.Mus	tgtgagt	aaccagc	actgg...137...	-----tagggtcggggccttctgc-	CTCATTG	ct	TTCA	atgaaagccgcaaagcagcc--...	.67...	ttgtttat	tttt	gtaaaaa
R.Nor	tgtgagg	agccagc	ctg...134...	-----tagggtcggggcctttctgc-	CTCATTG	ct	TTCA	atgaaagccgcaaagcagcc--...	.66...	ttgtttat	tttt	gtaaaaa
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E.Cab	tgtggg	ctg	ctccc...131...	...tggggctggggcggggcct-	TTCT	gc	TTCA	atgaaagccgcaaagcagcca...	.66...	atgtttat	tttt	gtaaaaa
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Figure 98: CS=10.14



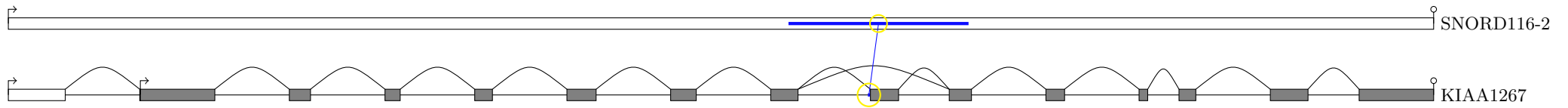
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C. Por	atgtgctc	ggatc	gatgatg	atgccccaa	aaaa	CATTCCTGGAA	AAGC	aagctga	acaaaatg	agtga	aaactc	taacc	gctcact	ctcatc	gtg	actgag	gtcc
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C. Fam	aagtgctt	ggatc	gatgatg	actcct-t	caatt	TGCATTCCTGGAA	AAGC	tgaaca	aaaatg	agtga	aaactc	ctact	gtcgtt	ctcgt	caaa	actgag	gtcc
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O. Cun	agctaaaa	gtaag	tgtt	gt...439...	g	cg	gaaa	aattg	cctt	gtgt	GTTTTCTGAGGAATG	cat	ct	ac	atg	cat	gtg	tattg	ctaat	tcatt	-act	ctg	tgtg	gtg	tcg	ctg	tag	gag	ctca
C. Fam	aactaaaa	gtaag	tattg	tt...528...	tcagg	ag	agatt	cttcc	atgtc	GTTTTCTGAGGAATG	ca	t	ta	aatg	cat	gtg	tattc	ctatt	tcatta	actct	gtg	tgtg	gtg	ttg	ctg	tag	gag	ctca	
B. Tau	aactaaaa	gtaag	tgtt	act...485...	---agg	ag	aattt	cttcc	atgt	TTCTGAGGAATGCAT	ct	aa	atg	cat	gtg	tattc	ctatt	tcatta	actct	gtg	tgtg	gtg	tcg	ctg	tag	gag	ctca		
E. Cab	aactaaaa	gtaag	tatt	tt...736...	---agg	ag	aattt	cttcc	atgt	TTCTGAGGAATGCAT	ct	aa	atg	cat	gtg	tattc	ctatt	tcatta	actct	gtg	tgtg	gtg	tcg	ctg	tag	gag	ctca		
L. Afr	aactgaaa	gtaag	tatt	agc...488...	tcagg	gc	gctatt	cttcc	gt	GTTTTCTGAGGAATG	cat	ta	aatg	cat	gtg	tattc	ctatt	tcatta	actct	gtg	tgtg	gtg	tcg	ctg	tag	gag	ctca		
	* * * *	* * * *	*	*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			

id=143334 gene=ENSG00000131876 name=SNRPA1 segment=chr15.101826499.101827112.-1 type=IN VIEW

Figure 99: CS=13



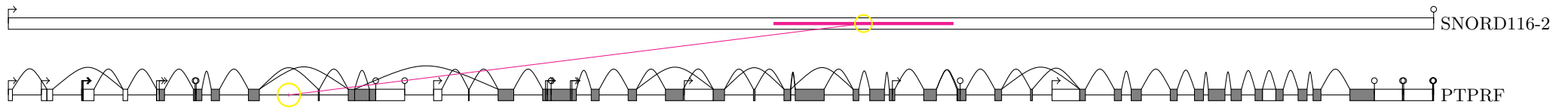
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R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaaaacattccttggaaaagct	GAACAAAA	GAGT	gaaaactcat-accgtcgttctcatc	ggaactgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattccttggaaaagct	GAACAAAA	GAGT	gaaaactcat-accgtcgttctcatc	ggaactgaggtcc	agcacgtt
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C.Jac	atgtgctt	ggatc	gatgatcagtc	cctcaaaaaaacattccttggaaaagct	GAACAAAA	GAGT	aaaaactcat-accgttgctctcatc	cacaactgaggtcc	agcacatt
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	--aataaaacattccttgg-aaagct	GAACAAAA	GAGT	gaaaactcaataccgccactctcatc	gtgactgaggtcc	agcacctg
C.Por	atgtgctt	ggatc	gatgatgatgccc	--aaaaaacattccttggaaaagct	GAACAAAA	GAGT	gctctaaccgtcactctcatc	gtgctgaggtcc	agcacact
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C.Fam	aagtgcct	ggatc	gatgatgactccttcaat	-ttgattccttggaaaagct	GAACAAAA	GAGT	gaaaactccctactgtcgttctc	gtgactgaggtcc	agcacgtt
F.Cat	atgtgctt	agatt	gatgatgctccatcaa	--caccattccttgg-aaagct	GAACAAAA	GAGT	gaaaactcactatagtcattctcatc	gaaattgagattcc	agcacgtt
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S.Sus	cogtgctc	ggatc	gatgatgactcctcta	--aagattccttgg-aaatct	GAACAAAA	GAGT	gaaaactcactaccgtc-tcctcatc	gaaactgaggtcc	ggcacgtg
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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P.Tro	aacagcca	gtaag	gtcagg	..429..	-----	ttgagaggacatatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
P.Abe	aacagcca	gtaag	gtcagg	..429..	-----	ttgagaggacatatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
C.Jac	aacagcca	gtaag	gtcagg	..428..	-----	tcgagagaacatatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
R.Nor	aacatcca	gtaag	tttctga	..386..	-----	ttgagtaaatgtatttcaca	GCTCt	TTTT	TGTC	ccctcttcag	agctgtcc
C.Por	aacagcca	gtaag	ctcggg	..431..	aaagatttgagagaaggt	-TCTCaa	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
O.Cun	aactgcca	gtaag	ttttagg	..392..	-----	ttgagaggaggtatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
C.Fam	aacagcca	gtaag	tttcagg	..429..	-----	gtttgagagaag--atttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
F.Cat	aacagcca	gtaag	tttcagg	..469..	-----	gattgagagaag--atttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
B.Tau	aacagcca	gtaag	tttcagg	..375..	-----	ttgagagaagatatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
E.Cab	aacagcca	gtaag	tttcagg	..436..	-----	ttcagagaagatatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
S.Sus	aacagcca	gtaag	tttcagg	..428..	-----	atgagaaaagataatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
L.Afr	aacagcca	gtaag	tttcagg	..425..	-----	ttgagagaaggtatttcaca	GCTCt	TTTTct	GTC	ccctcttcag	agctgtcc
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id=757041 gene=ENSG00000120071 name=KIAA1267 segment=chr17.44116582.44117067.-1 type=IN

Figure 100: CS=14



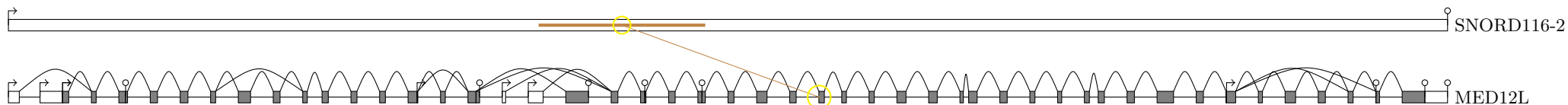
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R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagaactcat	-accgt	cggtctcat	c	ggatctgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gaaaactcat	-accgt	cggtctcat	c	ggaactgaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gaaaactcat	-accgt	cggtctcat	c	ggaactgaggtcc	agcacgtt
C.Jac	atgtgctt	ggatc	gatgatcagtc	ccccaaaaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	aaaaactcat	-accgt	tgctctcat	c	cacaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gaaaactctgt	accgccactct	catc	ggaactgaggtcc	agcatctt	
R.Nor	gcgtgctt	ggatc	gatgatgattccc	--aataaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gaaaactcaata	accgccactct	catc	gtgactgaggtcc	agcacctg	
C.Por	atgtgctc	ggatc	gatgatgatgccc	--aaaaaacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagagctctaat	ccgtcactct	catc	gtgctgaggtcc	agcacact	
O.Cun	atgtgctt	ggatc	aatgatgactcccc	cat--aacattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagaactcaaac	ccgtcggtct	catc	gtgactgaggtcc	agcacatt	
C.Fam	aagtgctt	ggatc	gatgatgactcctt	caat-ttgcattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagaactccct	actgtcgtt	ctc	gtcaaaactgaggtcc	agcacgtt	
B.Tau	acgtgctt	ggatc	gatgatgactccc	acaa--atgcattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagccatcact	accgtc-tcct	catc	ggaactgaggtcc	agcacgtg	
E.Cab	agggtgctc	ggatc	gatgatgactcc	ctcaa--atgcattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagaactcact	accgtcggt	ctc	gccgagactgaggtcc	agcacctg	
S.Sus	ccgtgctc	ggatc	gatgatgactcc	ctcta--aagcattc	ccttg	gaaaagc	TGAACAAA	TGAG	t	gagaactcact	accgtc-tcct	catc	gaaactgaggtcc	ggcacgtg	
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R.Mac	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Tro	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Abe	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C.Jac	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M.Mus	gcgatcag	gtgagctgagtt	...4929...	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R.Nor	gcgttcag	gtgagctgaggg	...4929...	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C.Por	gcgttcag	gtgagcagaggg	...4929...	tactaatgctttctctctgat	CTTATTTG	caTTCA	aattacctcaccag	gtggttca
O.Cun	gcgttcag	gtgagctgaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	cgTTCA	aattacctcgccag	gtggttca
C.Fam	acgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B.Tau	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E.Cab	gcgttcag	gtgagcagagag	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S.Sus	gcgttcag	gtgagcacaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
L.Afr	gcgttcag	gtgaggagaggg	...4929...	tactaatgctttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 101: CS=12.6



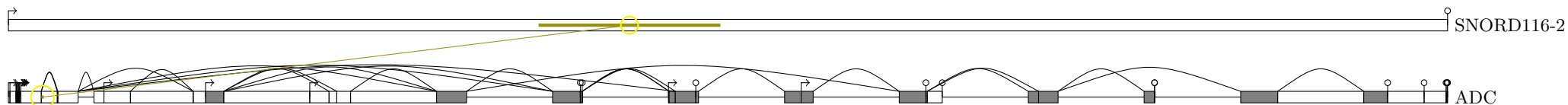
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R. Mac	atgtgctt	ggatc	gatgatgag	tcccc	tataaaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gagaact	cat-acc	gtcggtt	ctcatc	ggaact	gaggtcc	agcac	att		
P. Tro	atgtgctt	ggatc	gatgatgag	tcccc	aaaaaaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	cat-acc	gtcggtt	ctcatc	ggaact	gaggtcc	agcac	gtt		
P. Abe	atgtgctt	ggatc	gatgatgag	tcccc	aaaaaaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	cat-acc	gtcggtt	ctcatc	ggaact	gaggtcc	agcac	gtt		
C. Jac	atgtgctt	ggatc	gatgatc	agtc	cccc	aaaaaaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	cat-acc	gttgctt	ctcatc	caact	gaggtcc	agcac	att	
M. Mus	acgtgctt	ggatc	tatgatg	attccc	agtc	caaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	ctgtac	cgcact	ctcatc	ggaact	gaggtcc	agcat	ctt	
R. Nor	gcgtgctt	ggatc	gatgatg	attcca	ataaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	caatac	cgcact	ctcatc	ctgact	gaggtcc	agcac	ctg		
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O. Cun	atgtgctt	ggatc	caatgat	gactccc	cataaaa	-----	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gagaact	cctact	gctgctt	ctcatc	ctgact	gaggtcc	agcac	att	
C. Fam	aagtgctt	ggatc	gatgatg	actcctt	caattt	g	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gagaact	cctact	gctgctt	ctcatc	ctgact	gaggtcc	agcac	gtt	
B. Tau	acgtgctt	ggatc	gatgatg	actccc	acaa	-atg	CATTCCTTGGAAAAGC	tctga	acaaaatgagt	gagccat	cactac	cgctc	-tcct	catc	ggaact	gaggtcc	agcac	gtg
S. Sus	ccgtgctt	ggatc	gatgatg	actcctt	ctaaag	-	CATTCCTTGGAAAAGC	tctga	acaaaatgagt	gagaact	cactac	cgctc	-tcct	catc	ggaact	gaggtcc	ggcac	gtg
L. Afr	acgtgcat	ggatt	gatgatg	actgct	atctaaa	-	CATTCCTTGGAAAAGC	tgaac	aaaatgagt	gaaaact	ccttac	cgctcact	cattg	-aact	gaggtcc	agcac	att	
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R. Mac	ctgtagat	gtaag	ttttctt	...1596...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
P. Tro	ctgtagat	gtaag	ttttctt	...1611...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
P. Abe	ctgtagat	gtaag	ttttctt	...1599...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
C. Jac	ctgtagat	gtaag	tagtttc	...1911...	aagtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
M. Mus	cggtggat	gtaag	ttttctt	...1434...	gggtatt	aaaac	ctgtcaat	GTTTTTCT	taAAG	Gtg	AGTGa
R. Nor	ctgtggat	gtaag	ttttctt	...1318...	gcatt	aaaac	ctgtccat	TTTTTCT	taAAG	Gtg	AGTGa
C. Por	ctgtagat	gtaag	ttttctt	...1542...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
O. Cun	ctgtcgat	gtaag	tttgctt	...1690...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
C. Fam	ctgtggat	gtaag	ttttctt	...1568...	aggtatt	aaaac	ctgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
B. Tau	ctgtcgat	gtaag	ttttctg	...1572...	---tatt	aaaac	atgtcaat	TTTTCT	tgAAG	Gtg	AGTGa
S. Sus	ctgtagat	gtaag	ttttctt	...1671...	---tatt	aaaac	ctgtcaat	TTTTCT	tgAAG	Gtg	AGTGa
L. Afr	ccgtcgat	gtaag	ttttctt	...2099...	aggtatt	aaaac	atgtcaat	GTTTTTCT	tgAAG	Gtg	AGTGa
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id=595784 gene=ENSG0000144893 name=MED12L segment=chr3.151083780.151085433.1 type=IN

Figure 102: CS=15.6



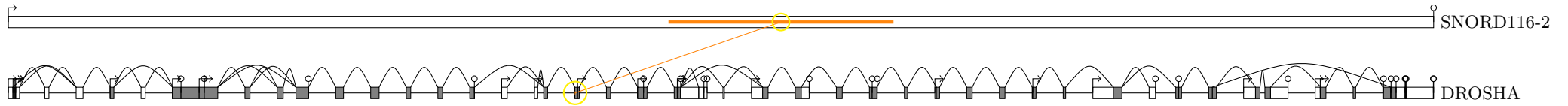
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R. Mac	atgtgctt	ggatcgatgatgagtc	cccctataaaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	cat-accgt	cgttct	catcgga	ctgaggt	cc	agcacatt	
P. Abe	atgtgctt	ggatcgatgatgagtc	ccccaaaaaaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	cat-accgt	cgttct	catcgga	actgaggt	cc	agcacgtt	
C. Jac	atgtgctt	ggatcgatgatcagtc	ccctcaaaaaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	aaaaact	cat-accgt	tgtct	catcaca	actgaggt	cc	agcacatt	
M. Mus	acgtgctt	ggatcctatgatgatt	cccagtc	caaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	ctgtacc	gcaact	ctcatcgga	actgaggt	cc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgatt	ttccaataaaa	CATTCC	TGGAAA	AGC	agctgaac	aaatgagt	gaaaact	caatacc	gcaact	ctcatcggt	actgaggt	cc	agcacctg
C. Por	atgtgctc	ggatcgatgatgatg	ccccaaaaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gagagct	ctaatcc	gcaact	ctcatcggt	gctgaggt	cc	agcacact	
O. Cun	atgtgctt	ggatcaatgatgact	ccccataaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	cacaacc	gctgtt	ctcatcggt	actgaggt	cc	agcacatt	
C. Fam	aagtgctt	ggatcgatgatgact	cct-tcaa	TTCATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	ccctact	gctgtt	ctcgta	aaaactgaggt	cc	agcacgtt	
B. Tau	acgtgctt	ggatcgatgatgact	ccc--acaaa	TGCATTCC	TGGAAA	T	agctgaac	aaatgagt	gagccat	cactacc	gctc	tcctcatcgga	actgaggt	cc	agcacgtg
E. Cab	aggtgctc	ggatcgatgatgact	ccctc-aaa	TGCATTCC	TGGAAA	T	agctgaac	aaatgagt	gaaaact	cactacc	gctgtt	ctcgccgag	actgaggt	cc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgact	ccctctaaa	GCATTCC	TGGAAA	T	agctgaac	aaatgagt	gaaaact	cactacc	gctc	tcctcatcgaa	actgaggt	cc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgact	gctatctaaa	CATTCC	TGGAAA	agctgaac	aaatgagt	gaaaact	ccctacc	gctcact	cattg-aact	gaggt	cc	agcacatt	
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id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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R. Mac	gTTTAAAG	GcgAGTGC	-----	ggaaagtggcctggggagc	-----	..54..	-gcctcctgtcag	caggggcc
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M. Mus	gTTTAAAG	GcgAGTGC	-----	aggagatggctggggggga	-----	..57..	-gcctcctctcag	caggggcc
R. Nor	gTTTAAAG	GcgAGTGC	-----	agcagatggctggggggag	-----	..58..	-gcctcctctcag	caggggcc
C. Por	gTTTAAAG	GcgAGTGC	cag-	ggggatgctcgggga	-----	..57..	-gcctcctttcag	caggagcc
O. Cun	gTTTAAAG	GcgAGTGC	-----	gggggtggctggggagcc	-----	..54..	-gcctcctctcag	caggggcc
C. Fam	gTTTAAAG	GcgAGTGC	GGG	gagtgctcggggagcctc	....	..48..	-gcctcctcccag	caggggcc
B. Tau	gTTTAAAG	GcgAGTGC	G	gggagaccctcggggagcct	....	..51..	-gcctcctctcag	caggggcc
E. Cab	gTTTAAAG	GcgAGTGC	G	gggagtgctcggggagcct	....	..51..	-gcctcctcatag	caggggcc
S. Sus	gTTTAAAG	GcgAGTGC	-----	ggggagtggctcggggagc	-----	..52..	-gcctcctctcag	caggggcc
L. Afr	gTTTAAAG	GcgAGTGC	-----	ggggaggaggtggcttg	-----	..69..	-tccttcctcag	caggggcc
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id=513845 gene=ENSG0000142920 name=ADC segment=chr1.33546896.33546988.1 type=AN

Figure 103: CS=10.14



H.Sap	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	actca-taccgtcatttctcatc	ggaactgaggtcc	agcacgtt
R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAGAA	actca-taccgtcgttctcatc	ggatctgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	actca-taccgtcgttctcatc	ggaactgaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	actca-taccgtcgttctcatc	ggaactgaggtcc	agcacgtt
C.Jac	atgtgctt	ggatc	gatgatcagtc	ccccaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTAAAA	actca-taccgttgctctcatc	cacaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	actctgtaccgccactctcatc	ggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	--aataaaacattcctt	TGGAAA	agCTGA	acAAAATGAGTgAAAA	cTCAA	taccgccactctcatc	gtgactgaggtcc
C.Por	atgtgctc	ggatc	gatgatgatgccc	--aaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAGAA	gctctaatcgtcactctcatc	gtgctgaggtcc	agcacact
O.Cun	atgtgctt	ggatc	aatgatgactccccat	--aacattcctt	GGAAA	agCTGA	acAAAATGAGTGAGAA	actcaaacctcgttctcatc	gtgactgaggtcc	agcacatt
C.Fam	aagtgctt	ggatc	gatgatgactccttcaat	-ttgcattcctt	GGAAA	agCTGA	acAAAATGAGTGAGAA	actcctactgtcgttctc	gtcgaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactcccacaa	--atgcattcctt	TGGAAA	agCTGA	acAAAATGAGTgagcc	actaccgtc-tcctcatc	ggaactgaggtcc	agcacgtg
E.Cab	aggtgctc	ggatc	gatgatgactcctcaa	--atgcattcctt	TGGAAA	agCTGA	acAAAATGAGTGAGAA	actcactaccgtcgttctc	gccgagactgaggtcc	agcacctg
S.Sus	cogtgctc	ggatc	gatgatgactcctcta	--aagcattcctt	TGGAAA	agCTGA	acAAAATGAGTGA	GAAC	tactaccgtc-tcctcatc	gaaactgaggtcc
L.Afr	acgtgcat	ggatt	gatgatgactgct	--atctaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	actcctaccgtcactcattg	-aactgaggtcc	agcacatt
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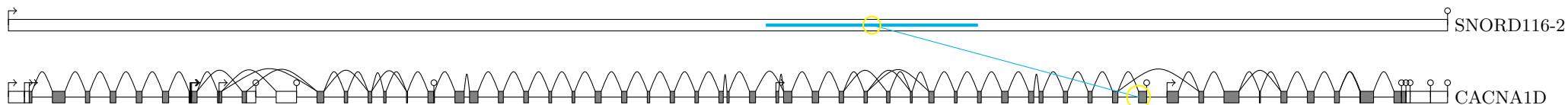
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R.Mac	tgccagag	gtaagg	gaaaag...1483	..----	gccaatttacagtaatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg
P.Tro	tgccggag	gtaagg	gaaaag...1489	..----	gccaactacagtaatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg
P.Abe	tgccggag	gtaagg	gaaaag...1488	..----	gccaactacagtaatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg
C.Jac	tgccagag	gtaagg	gaaaat...1497	..----	tgccaactacagt-atttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg
M.Mus	tgctgag	gtaag	agctgct...1414	..----	gcagatctatagtaatttga	---	TTTTg	ACTTATTTTCAG	aaTTTTg
R.Nor	tgctgag	gtaag	gagagaag...1461	..at	ttgcagatcaatagtaatttga	---	TTGATTTg	ACTTATTTTCAG	aaTTTTg
C.Por	tgcccagag	gtaagg	gaaaag...1468	..----	gcagatccacaataatttga	---	TTTTg	ATTATTTTCAG	aaTTTTg
O.Cun	tgcccagag	gtaagg	gaaaag...1492	..----	gcagatcttcagtaatttga	---	TTTTg	GCTTATTTTCAG	aaTTTTg
C.Fam	tgctgag	gtaag	gaaaag...1721	..----	acgatactatagtaatttga	---	TTTg	ggTTTATTTTCAG	aaTTTTg
B.Tau	tgctgag	gtaag	gagagaag...1570	..----	acagtaatttggggttctg	---	GTTTg	TTTATTTTCAG	AaTTTTg
E.Cab	tgctgag	gtaag	gaaaag...1526	..----	gcagtagcagtaatttga	---	TTTTg	GTTTATTTTCAG	AaTTTTg
S.Sus	tgctgag	gtaag	gaaagat...1814	..--	ttgcatactatagttattt	---	GGTTTTg	GCTTtATTTCAG	AaTTTTg
L.Afr	tgctgag	gtaag	gaaaac...2148	..----	gcagtagacaataatttga	---	TTTTg	TTTATTTTCAG	aaTTTTg
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id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 104: CS=22.96





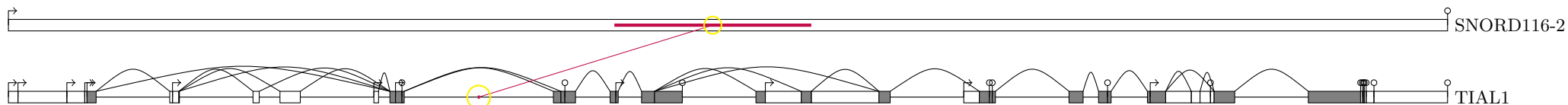
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P. Tro	atgtgctt	ggatc	gatgatgag	gtcccc	aaaaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gaaaactca-taccg	tggtctcatc	ggaactgaggtcc	agcacgtt
P. Abe	atgtgctt	ggatc	gatgatgag	gtcccc	aaaaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gaaaactca-taccg	tggtctcatc	ggaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatc	gatgatcag	tcctca	aaaaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	aaaaactca-taccg	tggtctcatc	cacaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	tatgatgatt	ccc--	agtcaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gaaaactctgtacc	gccactctcatc	ggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatc	gatgatgatt	ttcc--	aataaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gaaaactcaatacc	gccactctcatc	gtgactgaggtcc	agcacctg
C. Por	atgtgctc	ggatc	gatgatgatg	cccc--	aaaaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gagagctcta	atccgtcactct	catcgtgctgaggtcc	agcacact
O. Cun	atgtgctt	ggatc	aatgatgact	ccccca--	taaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gagaactcaca	accgctggtct	catcgtgactgaggtcc	agcacatt
C. Fam	aagtgctt	ggatc	gatgatgact	ccttcaa-	ttgcattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gagaactccct	actgtcgttct	cgtcaaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa-	atgcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	AGCCA	tactaccg	tc-tcctcatc	ggaactgaggtcc	agcacgtg
E. Cab	aggtgctc	ggatc	gatgatgact	ccctcaa-	atgcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	gagaactcact	accgctggtct	cgcggagactgaggtcc	agcacctg	
S. Sus	cogtgctc	ggatc	gatgatgact	ccctcta-	aagcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	gagaactcact	accgctc-tcctcatc	gaaactgaggtcc	ggcacgtg	
L. Afr	acgtgcat	ggatt	gatgatgact	gct--	atctaaacattc	ccttgg	aaaag	CTGAACAA	ATGAGT	gaaaactcctt	accgctcactcattg-	aactgaggtcc	agcacatt
	****	****	*****	*	*	*****	*	*	*	*****	*	*	*****

id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

H. Sap	ccctacag	gtgaattgtt	gt...3981...	-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
P. Tro	ccctacag	gtgaattgtt	gt...3968...	-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
P. Abe	ccctacag	gtgaattgtt	gt...4942...	-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Jac	ccctacag	gtgaattgtt	gt...4042...	-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
M. Mus	ccctacag	gtgaattgcct	...4388...	-----	agatgacattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
R. Nor	ccctacag	gtgaattgcc	ct...3973...	-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Por	ccctacag	gtgaattgtt	ct...3914...	-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	atgcttga
O. Cun	ccctgcag	gtgaattgtcc	...3807...	-----	tgatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Fam	ccctacag	gtgaattgtc	ct...3925...	-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	atgcttga
B. Tau	ccctacag	gtgaattgtt	gt...3814...	gctaacagata	aagatttcac	TGGCTg	ATTCATTTGT	TCAG	ATgcTTGa
E. Cab	ccctacag	gtgaattgtt	gt...3950...	-----	agatgagattt	caccggctg	ATTCATTTGT	TCAG	ATgcTTGa
S. Sus	ccctacag	gtgaattatt	gt...3900...	-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	ATgcTTGa
L. Afr	ccctacag	gtgaattatc	gt...3984...	-----	agataagattt	caccggctg	ATTCATTTGT	TCAG	atgcttga
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id=617953 gene=ENSG00000157388 name=CACNA1D segment=chr3.53820980.53825007.1 type=IN

Figure 105: CS=15.6



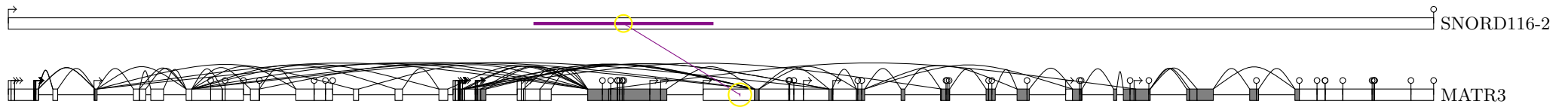
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P.Tro	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattc	CTTGga	AAAGCTGAACA	aatgagt	gaaaactcat	-accgtcgttctcatcggaactgaggtcc	agcacgtt					
P.Abe	atgtgctt	ggatc	gatgatgag	ccccaaaaaacattc	CTTGga	AAAGCTGAACA	aatgagt	gaaaactcat	-accgtcgttctcatcggaactgaggtcc	agcacgtt					
C.Jac	atgtgctt	ggatc	gatgatcagt	ccccaaaaaacattc	CTTGga	AAAGCTGAACA	aatgagt	taaaactcat	-accgttgcctcatcacaactgaggtcc	agcacatt					
C.Por	atgtgctt	ggatc	gatgatgag	cccc--aaaaaacattc	CTTGga	AAAGCTGAACA	acaaaaatgagt	gagagctc	taatccgtcactctcatcgtgctgaggtcc	agcacatt					
O.Cun	atgtgctt	ggatc	aatgatgact	cccc--ataaacattc	CTTGga	AAAGCTGAACA	aatgagt	gagaactcaca	accgtcgttctcatcgtgactgaggtcc	agcacatt					
C.Fam	aagtgcct	ggatc	gatgatgact	ccttc--aattgcatc	CTTGga	AAAGCTGAACA	aatgagt	gagaactcc	tactgtcgttctcgtcaaaactgaggtcc	agcacgtt					
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E.Cab	aggtgcct	ggatc	gatgatgact	ccctc--aa-atgcattc	CTTGG--AAATCTGA	acaaaaatgagt	gagaactcact	accgtcgttctcgcgagactgaggtcc	agcacctg						
S.Sus	ccgtgctc	ggatc	gatgatgact	cctc--ta-aagcattc	CTTGG--AAATCTGA	acaaaaatgagt	gagaactcact	accgtc--tcctcatcgaaactgaggtcc	ggcacgtg						
O.Avi	acatgctc	ggatc	cagtgatgaca	acttt--catatttattc	CTTGGAAAaTCTGA	acaaaaatgagt	gagaactcact	accatc--tcctcatcgatactgaggtcc	agcacgtt						
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	***	****	****	*	*	*****	***	*****	*	**	*	*	***	****	****

id=728827 gene=ENSG0000207001 name=SNORD116-2 segment=chr15.25299357.25299451.1 type=EN

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P.Tro	taacagag	gtaagatccttc...4874...	---tttaaatccttattttaa--aag	TGTTAGGCTTT	caTAAG	cctatg	cagtcctcac	cttgt...34...ttttcttctcag	caaccgga			
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O.Avi	tcacagag	gtaagagccttc...4876...	---ggtgtaaatccttat---a--aagta	TTAGGCTTTC	caTAAG	cctatg	cagtcctcac	ctcatt...34...ttttcttctcag	caaccgga			
L.Afr	taacagag	gtaagatccttc...4874...	---tgtaaatccttattttaa--gag	TGTTAGGCTTT	caTAAG	cctatg	caatcctcac	tgtgt...34...ttttcttctcag	caaccgga			
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Figure 106: CS=11.7



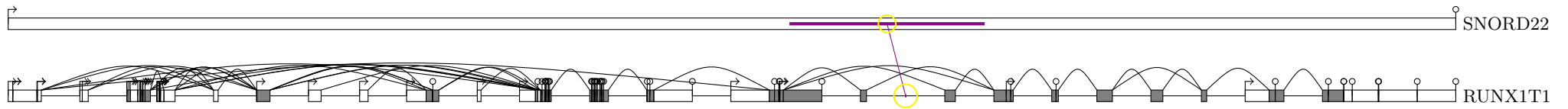
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R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaa	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gaaactcat	-accgt	cggtctcatc	ggaact	gaggtcc	agcacatt		
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P.Abe	atgtgctt	ggatc	gatgatgagtc	ccccaaaaaa	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gaaaactcat	-accgt	cggtctcatc	ggaact	gaggtcc	agcacgtt		
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M.Mus	acgtgctt	ggatc	tatgatgatt	cccagtc	aaa--	CATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gaaaactct	gtacc	gccactct	catc	ggaact	gaggtcc	
R.Nor	gcgtgctt	ggatc	gatgatgatt	ccaataaa	--	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gaaaactca	ataacc	gccactct	catc	gtgact	gaggtcc	
C.Por	atgtgctc	ggatc	gatgatgatg	ccccaaaa	--	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagagct	taacc	gctctcat	ctg	gctg	gaggtcc	
O.Cun	atgtgctt	ggatc	aatgatgact	ccccataa	--	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagaactca	caacc	gctg	ctcat	ctgact	gaggtcc	
C.Fam	aagtgctt	ggatc	gatgatgact	ccttcaatt	-	TGCATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagaactcc	ctact	gtgctt	ctg	tcaaaact	gaggtcc	
B.Tau	acgtgctt	ggatc	gatgatgact	cccacaaa	--	TGCATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagccat	cactacc	gctc	tcct	catc	ggaact	gaggtcc
E.Cab	aggtgctc	ggatc	gatgatgact	ccctc-aaa	-	TGCATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagaactca	cactacc	gctg	ctc	gcc	gagact	gaggtcc
S.Sus	cogtgctc	ggatc	gatgatgact	ccctctaaa	--	GCATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gagaactca	cactacc	gctc	tcct	catc	gaaact	gaggtcc
L.Afr	acgtgcat	ggatt	gatgatgact	gctatctaa	--	ACATTc	CTTGAAAAGCTG	aacaaaat	gagtg	gaaaactcc	ttacc	gctc	ctc	attg	-aact	gaggtcc
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Figure 107: CS=12.6



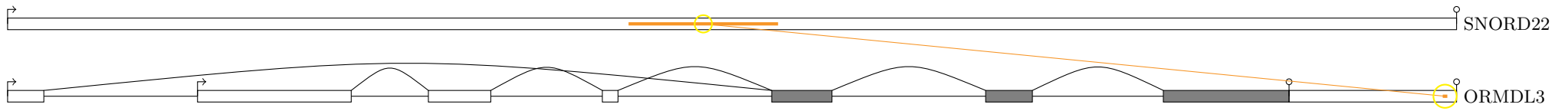
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507\_-1 type=EN

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Figure 108: CS=12.6



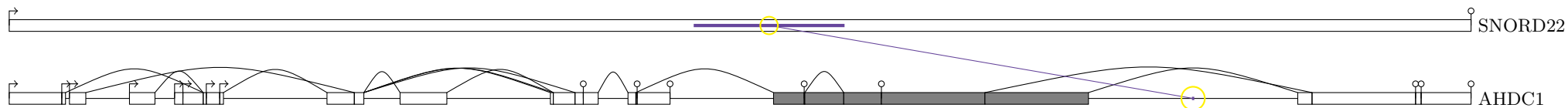
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Figure 109: CS=12.6



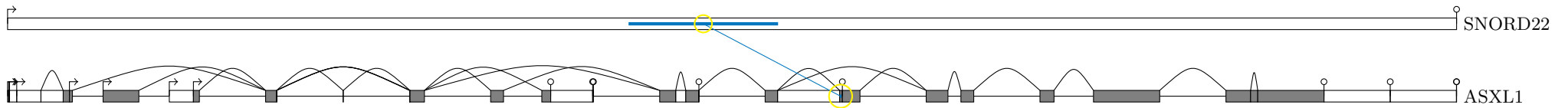
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Figure 110: CS=17.94



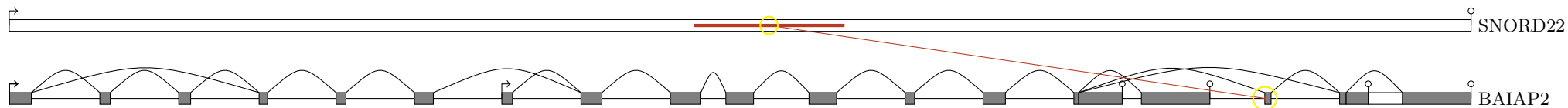
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id=387384 gene=ENSG00000171456 name=ASXL1 segment=chr20.31017235.31017703.1 type=AN

Figure 111: CS=11.7



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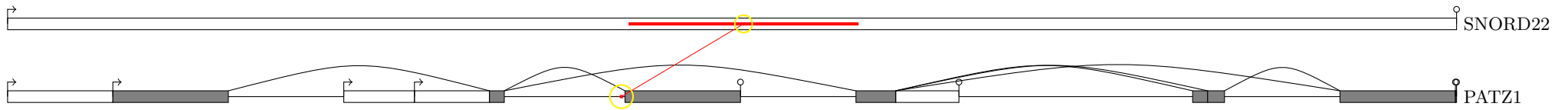
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Figure 112: CS=20.8





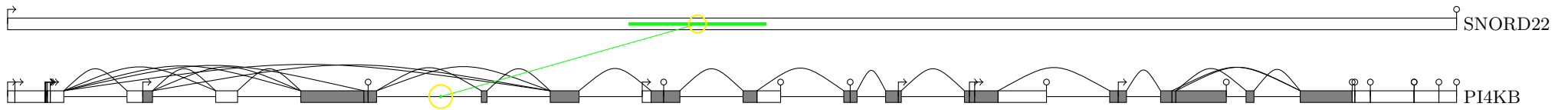
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B. Tau	ttaaaatt----	tcccagtgagaactttcacacgtcttacttctctgtcctagtccc	<b>AGAGccTGTAaAGGTgaACCC</b> actggggctggctgggggaa...27...tgtctgaggg-at	catgagag
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Figure 113: CS=10.14



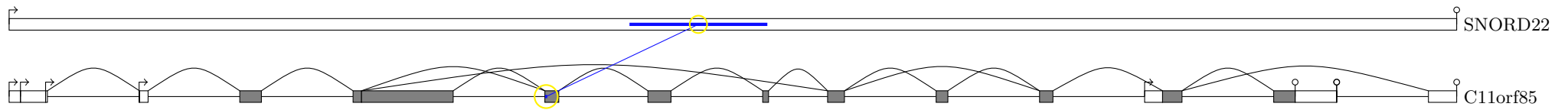
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Figure 114: CS=13



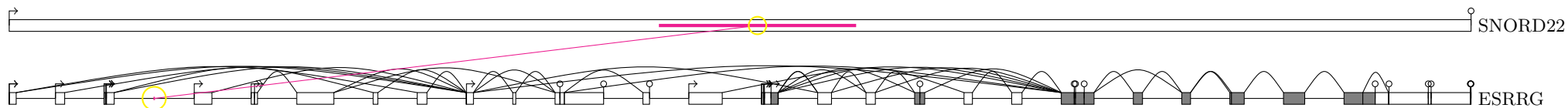
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L. Afr	----aattcaga	tcccgatgaagaacatgtacagcttacttctgtcctagtc	AGAGCCTGtAAAGGTG	gaaccactggggctggct---	34...	agtctgaggg-at	caagggga
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C. Fam	acaactca	gtgatttatgac...	2136...	----ttaaagttatttc----	actttt	TTTTTCAG	GaTTCTAt
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E. Cab	acaactcg	gtgatttatgac...	2074...	.agtattaaagtcatttc----	aaa	TATTTTTcCAG	GaTTCTAt
S. Sus	acaatgca	gtgatctatgag...	2989...	----atataaatcctta	aaaaatt	TTTTTCAG	GaTTCTAt
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Figure 115: CS=21.96



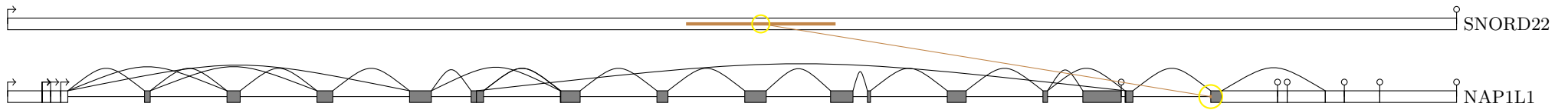
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S. Sus	----aaat	taaat	taaat	taaat	taaat	taaat
O. Avi	ttaaaaat----	tcccagtgaggaagcactcacacgtcttactctctgtcctagtcccag	AGCCTGTAAAGGtGAACC	cactgggactggctggggga...28..	tgtctgaggg-at	catgagaa
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507.-1 type=EN

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R. Mac	ctgccaag	gtaactggtcca...4909..	tgccattggttttcagtaaa	GGTTCCTTTcTGCAGGGCT	gcaaacacagatcagctgctactgtgtat	acacaacc--
P. Tro	ctgccaag	gtaactggtcca...4909..	tgccattggttttcagtaaa	GGTTCCTTTcTGCAGGGCT	gcaaacacagatcagctgctactgtgtat	acacaacc--
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id=218639 gene=ENSG00000196482 name=ESRRG segment=chr1.217251703.217262848.-1 type=IN

Figure 116: CS=10.14



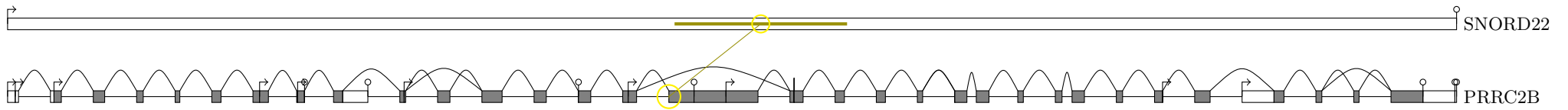
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507.-1 type=EN

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P.Abe	accCAAAG	gtgagcaaaatt...689...-agaagatagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
C.Jac	accgAAG	gtgagcaaaatt...721...-agaagatagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
C.Por	accgAAG	gtgagcaaaatt...943...-agcagttagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
O.Cun	accCAAAG	gtgagcaaaatt...1417...-agaagatagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
C.Fam	actCAAAG	gtgagcaaaatt...1598...-agaagatagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
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S.Sus	accCAAAG	gtgagcaaaatt...1436...-aacagatagattgacttggt	<b>GTTTtCCTTTaACAG</b>	aaggatca
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L.Afr	acgtAAG	gtgagcaaaatc...975...-agaagatagattgacttatt	<b>GTTTtCCTTTaACAG</b>	aaggatca
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id=313753 gene=ENSG00000187109 name=NAP1L1 segment=chr12.76442245.76442979.-1 type=IN

Figure 117: CS=16.25



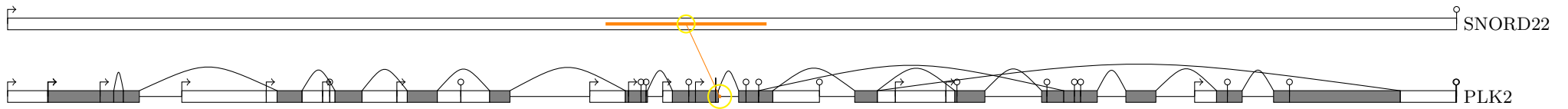
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11\_62620382\_62620507\_-1 type=EN

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P. Tro	cgtgtcag	gtgagatgaagc...684...	tcgacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
P. Abe	cgtgtcag	gtgagatgaagc...676...	tcacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
C. Jac	cgtgtcag	gtgagatgaagc...634...	tcatgttgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
C. Por	cacatcag	gtgagccaccgc...490...	tcacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
O. Cun	cacgtcag	gtgagatgcctt...541...	ccccgttgactggttttctGGTTCCTTTTCAG	Gaaggaaa
C. Fam	catgtcag	gtgagatgaaac...636...	tcacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
F. Cat	cacgtcag	gtgagctggaac...605...	tcacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
B. Tau	catgtcag	gtgagcgcagc...584...	tcacattgactgatttttctGGTTCCTTTTCAG	Gagtgaaa
E. Cab	catgtcag	gtgagacgaaac...620...	tcgacattgactgatttttctGGTTCCTTTTCAG	Gagtgaaa
S. Sus	cacgtcag	gtgagagacaaa...629...	tcgacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
L. Afr	catgtcag	gtgagacgaaac...707...	tcacattgactgatttttctGGTTCCTTTTCAG	Gaatgaaa
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id=268599 gene=ENSG00000130723 name=PRRC2B segment=chr9\_134349112\_134349840\_1 type=IN

Figure 118: CS=10.14



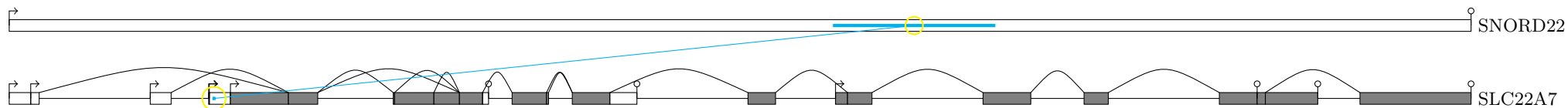
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S. Sus	----aattaat	tcctgtgaagaacattcacacatcttgccttctgtcctagtc	CCAGag	CCTGTA AAG	gtgaaccactggggctggc...35...-gtatgagggaat	cataagaa
O. Avi	ttaaaatt----	tcccagtgagaaatcctcacaagtcttacttctgtcctAGTCCCAGag	CCAGag	CCTGTA AAG	gtgaaccactggggctggc...35...tgtctgaggg-at	catgagaa
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11\_62620382\_62620507\_-1 type=EN

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C. Jac	tTTGCAG	GTTGG	-----	ttgccatcttcttctttttt...54...aatattccacag	ggcttcac
C. Por	tTTGCAG	GTTGG	-----	tacattattttacgtcttat...57...gatactccacag	ggcttcac
O. Cun	tTTGCAG	GTTGG	-----	tgcactccttatgtctttct...52...aatattccacag	ggcttcac
C. Fam	tTTGCAG	GTTGG	-----	tgcctttctgtgtctttt...53...gacactccacag	ggcttcac
F. Cat	tTTGCAG	GTTGG	-----	catgtttctgtgtctttt...52...gacactcgcag	ggcttcac
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S. Sus	tTTGCAG	GTTGG	-----	tactctttttttttttttt...68...tatactttacag	ggtttcac
O. Avi	tTTGCAG	GTTGG	tgGATT	ttttttttttcatctttt...51...tatgcttccacag	ggcttcac
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id=82410 gene=ENSG00000145632 name=PLK2 segment=chr5\_57752920\_57753007\_-1 type=IN

Figure 119: CS=14



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C. Jac	ctaaaaat	tcccaatgaaga...31...---	cccagagcctgtaaaaggtga	ACCCac	TGGGg	CTGGc	tgggggagaagaggaagcttt	gttccacaaggaactgtctgaggg-	ac	cataaata	
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L. Afr	aattcaga	tcccagtgaga...31...---	cccagagcctgtaaaaggtga	ACCCac	TGGGg	CTGGc	TGGGGGAGAGGAaggagagctt	gttccagaaggaactgtctgaggg-	at	caagggga	
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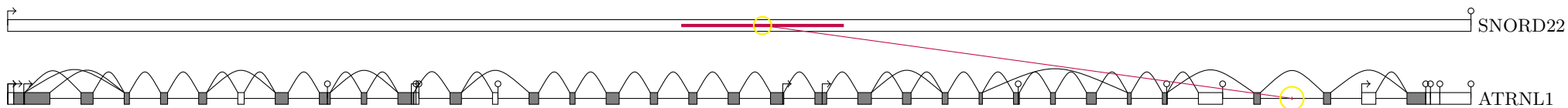
id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507.-1 type=EN

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R. Mac	atcca	ctc	ccgcct	CCAGag	TCCAaGGGT	ctatgcggtgggcagtttga---	.42...tgggagagcagc	atgagttt
P. Tro	atcca	ctc	ccacct	CCAGag	TCCAaGGGT	ctatgtggtgggcagtttga---	.42...tgggtgagcagc	atgggctt
P. Abe	atcca	ctc	ccacct	CCAGag	TCCAaGGGT	ctatgttgggtgggcagtttga---	.42...tgggtgagcagc	atgggctt
C. Jac	atcca	ctc	ccgcct	CCAGag	TCCAaGGGT	ctatgtggtgggcagtttga---	.42...tgggtgagcagc	atgggctt
C. Por	gttgg	-TC	CCCAcc	CCAGag	TCCAaGGGT	ctgtgtggtgagcagctggg---	.29...gcctcaggcagc	atgggctt
O. Cun	atctg	ctt	gcactt	CCAGag	TCCAGGGGT	ccactggtgagcaggttga---	.46...tgggtgggcagc	atgggctt
C. Fam	aactg	ctc	ctacct	CCAGag	TCCAaGGGT	ccaagcaatggattggctgt---	.45...tgggtgggcagc	atgagatt
B. Tau	tgtct	ctc	ccgcct	CCAGag	TCCAaGGGT	TCAagtgggtgggtggtttagct...	.42...tgggtaagcagc	atgggatt
E. Cab	atcca	ctc	ccacct	CCAGag	TCCAaGGGT	ccaagcggtgggtgggtgga---	.45...tgggtgggcagc	atgggatt
S. Sus	ctcca	ctc	ccgcct	CCAGag	TCCAaGGGT	ccaagtggtaggctggttga---	.45...tgggtgggcagc	atggcatt
O. Avi	tgtct	ctc	ccgcct	CCAGag	TCCAaGGGT	TCAagtgggtgggtggtttagct...	.42...tgggtaagcagc	atgggatt
L. Afr	aTCCT	gCT	CCTCG	CCAGag	TCCAaGGGT	ccaggtggcagcagactga---	.45...tgggtgggcagc	atgggctt
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id=336561 gene=ENSG00000137204 name=SLC22A7 segment=chr6.43266002.43266096.1 type=AN

Figure 120: CS=11.7





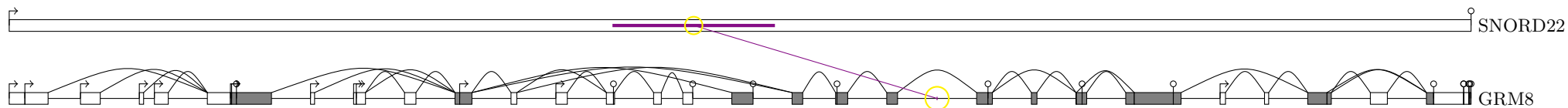
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C. Jac	ctaaaatt----	tccaatgaagaaactttcacacgtcttactctctgtcctagtcccagag	CCTGtAAAGGtGAACCCACTGGG	actggctgggggagaagaggaagcttgtccacaaggaactgtctgaggg-ac	cataaata
C. Por	ctaaaatt----	tcccagtgatgaaatagtcacgagtcctactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCACTGGG	gctggctgggggaaaagaggaagatttctagaaggaactgtctgaggg-at	catcaaat
O. Cun	ctagaatt----	tcccagtgaggaagcactcacagctcttactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctggggagaaaagaggaagtggtccagaaggaactgtctgaggg-ac	aataaagg
C. Fam	ctagaagc----	tcccagtgagaaacagtcacatgtcttactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctgggggaaagaggaagatttgtccagaaggaactgtctgaggg-at	cataaggg
F. Cat	ttaaaact----	tcccagtgagaaacagtcacatgtcttactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctgggggaaagaggaag-cttgtccagaaggaacagtcgaggg-at	tacaagag
B. Tau	ttaaaatt----	tcccagtgagaaataactcacaagtcttactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCACTGGG	gctggctgggggagaagaggaagcttgtccagaaggaactgtctgaggg-at	catgagag
E. Cab	ttaaaatt----	tcccagtgagaaactttcacacgtcttactcctgtcctagtcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctgggggaaaagaggaagcttgtccagaaggaactgtctgaggg-at	cataagga
S. Sus	----aattaat	tccctgtgagaaacattcacacatcttgccttctgtcctagtcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctggg-gagaagaggaagcttattccagagagaactgtatgagggaat	cataagaa
L. Afr	----aattcaga	tcccgatgaagaaacatgtacacgtcttactcctgtcctaggctcccagag	CCTGtAAAGGtGAACCCA	ctggggctggctgggggagaggaagagcttgtccagaaggaacagtcgaggg-at	caagggga
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507\_-1 type=EN

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R. Mac	cattagag	gtaggaacagca...4933...	-tgctatgtcaatttgcaaaa-CTTAaaGTGGGTTTTCTTTttCAG	Ggggcacc
P. Tro	cattagag	gtaggaacagcg...4933...	-tgctatgtcaattttgcaga-CTTAaaGTGGGTTTTCTTTttCAG	Ggggcacc
P. Abe	cattagag	gtaggaacagcg...4933...	-tgctatgtcaattatgcaaaa-CTTAaaGTGGGTTTTCTTTttCAG	Ggggcacc
C. Jac	cattagag	gtaggagcagca...4933...	-tgctgggtcaattatgcaaaa-CTTAaaGTGGGTTTTCTTTttCAG	Ggggcacc
C. Por	cattagag	gtaggaacaatg...4933...	atgtcctgtcagct-tacaaa-CTTAcaGTGGGTTTTCTTTttCAG	Ggggctcc
O. Cun	cattagag	gtaggaacagtg...4940...	-----caattatgcaaatgaaa-TGGGTTTTCTTTttCAG	Ggagcgcc
C. Fam	cattagag	gtaggaactgtg...4940...	-----caattatgcaaatgaaa-TGGGTTTTCTTTttCAG	Ggagcacc
F. Cat	cagtggag	gtaggaccggtg...4943...	-----ttaggcaattgaaaattctGTTTCTTTttCAG	Ggggcacc
B. Tau	cattagag	gtaggaacagtg...4933...	-tatcgtgtaacaatgcaaaa-TTAGaaTGGGTTTTCTTTttCAG	Ggagcacc
E. Cab	cgttggag	gtaggaacagtg...4942...	-----aattgtgaagattgaaaata-GGTTTTCTTTttCAG	Ggggcacc
S. Sus	cattagag	gtagggcagtg...4940...	-----taactatgcaaatgaaa-TGGGTTTTCTTTttCAG	Ggagcacc
L. Afr	cattagag	gtaggaacagtg...4940...	-----tcaattatgcaaatgaaa-TGGGTTTTCTTTttCAG	Ggggcacc
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id=803449 gene=ENSG00000107518 name=ATRNL1 segment=chr10.117486866.117607387\_1 type=IN

Figure 121: CS=22.1



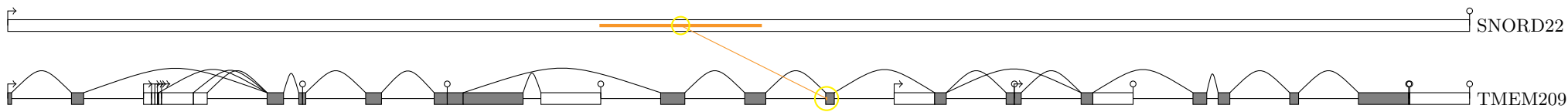
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R. Mac	ctaaaaat----	tcccaatgaagaaactttcacacgtcttactctctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggactggctgggg...30...tgtctgaggg-at	gacaata
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C. Por	ctaaaatt----	tcccagtgatgaaatagtcacaggtcttacttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggctggctgggg...30...tgtctgaggg-at	catcaaat
O. Cun	ctagaatt----	tcccagtgaggaagcactcacacgtcttacttctgtcctagtc	CCAGag	GCCTGTAAGGTGAA	cccactgggctggctggga...30...tgtctgaggg-ac	aataagg
C. Fam	ctagaagc----	tcccagtgaggaacagtcatatgtcttacttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggctggctgggg...29...tgtctgaggg-at	cataaggg
F. Cat	ttaaaact----	tcccagtgaggaacagtcatatgtcttacttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggactggctgggg...29...agtctgaggg-at	tacaagag
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S. Sus	----aaattaat	tcctgtgaagaaacattcacacatcttgccttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggctggctggg--...31...-gtatgaggaat	cataagaa
O. Avi	ttaaaatt----	tcccagtgagaaatctcacaagtcttacttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	aacccactgggctggctgg--...32...tgtctgaggg-at	catgagaa
L. Afr	----aattcaga	tcccagtgagaaacatgtacacgtcttacttctgtcctagtc	CCAGag	CCTGTAAGGTGAA	cccactgggctggctgggg...30...agtctgaggg-at	caagggga
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507.-1 type=EN

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P. Tro	atgcacag	gtaaccactcaa...4945...-----caactgatggtttt---actttTTTA---TTTTGCAG	GgCTGGag
P. Abe	atgcacag	gtaaccactcaa...4945...-----caactatggtttt---actttTTTA---TTTTGCAG	GgCTGGag
C. Jac	gtgcacag	gtaaccattcag...4945...-----tgatggtttctttaaattttTTTA---TTTTGCAG	GaCTGGag
C. Por	atgcacag	gtaaccatttaa...4945...-----acaattgatggtttc-----ccttTTTA---TTTTGCAG	GgCTGGag
O. Cun	atgcacag	gtattcacttaa...4945...-----tgccaactgatggttt-----ccttTTG---TTTTGCAG	GCCTGGag
C. Fam	atgcacag	gtaccgctgaa...4945...-----ccaattaatggtttt-----ctttTTTA---TTTTGCAG	GgCTGGaa
F. Cat	atgcacag	gtaaccagttaa...4942...-----ccaattgatggtttt-----ttttTTTAaaTTTTGCAG	GgCTGGag
E. Cab	atgcacag	gtagccacttaa...4948...-----aattgatggtttc-----cctttttC---TTTTGCAG	GgCTGGag
S. Sus	atgcacag	gtagtactgaa...4946...-----ccagtgatggtttt-----ccttgTTA---TTTTGCAG	GgCTGGag
O. Avi	atgtacag	gtaaccatttaa...4944...-----aacccagctgatggtttc-----CATTc---TTTTACAG	GgCTGGag
L. Afr	atgcacag	gtagccacttaa...4945...-----ggggattgacgggacc-----ccttTTG---TTTTGCAG	GgCTGGag
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id=646837 gene=ENSG00000179603 name=GRM8 segment=chr7.126410120.126542595.-1 type=IN

Figure 122: CS=14.04



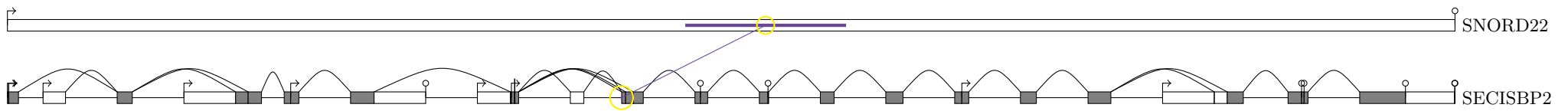
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P. Tro	ctaaaaat----	tcccaatgaagaaactttcacatgtcttactctctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactgggactggctg-...33...	tgtctgaggg-at	gataaaga
P. Abe	ctaaaaat----	tcccaatgaagaaactttcacatgtcttactctctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactgggactggctg-...33...	tgtctgaggg-at	gataaaga
C. Jac	ctaaaaatt----	tcccaatgaagaaactttcacacgtcttactctctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactgggactggctg-...33...	tgtctgaggg-ac	cataaata
C. Por	ctaaaaatt----	tcccagtgatgaatatgtcacgagcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	aaccactggggctggctgg...32...	tgtctgaggg-at	catcaaat
O. Cun	ctagaatt----	tcccagtgaagaacagtcacacgtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactggggctggctgg...32...	tgtctgaggg-ac	aataaagg
C. Fam	ctagaagc----	tcccagtgaagaacagtcacatgtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	aaccactggggctggctgg...31...	tgtctgaggg-at	cataaggg
F. Cat	ttaaaact----	tcccagtgaagaacagtcacatgtcttacttctgttctagt	CCCAGaGCCTGTAAAGGT	aaccactgggactggctgg...31...	agtctgaggg-at	tacaagag
B. Tau	ttaaaatt----	tcccagtgaagaacttcacaagtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactggggctggct--...34...	tgtctgaggg-at	catgagag
E. Cab	ttaaaatt----	tcccagtgaagaactttcacacgtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	aaccactggggctggctgg...32...	tgtctgaggg-at	cataagga
S. Sus	----aaattaat	tcctctgtgaagaacattcacacatcttgccttctgtcctagt	CCCAGaGCCTGTAAAGGT	aaccactggggctggctgg...32...	-gtatgagggaat	cataagaa
O. Avi	ttaaaatt----	tcccagtgaagaacttcacaagtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	gaaccactggggctggct--...34...	tgtctgaggg-at	catgagaa
L. Afr	----aattcaga	tcccgatgaagaacatgtacacgtcttacttctgtcctagt	CCCAGaGCCTGTAAAGGT	aaccactggggctggctgg...32...	agtctgaggg-at	caagggga
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507\_-1 type=EN

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P. Tro	cagaagag	gtaagtggaaaa...889...	-----actgttcattttaaacatga-	ATTTTATAG	GTCTGGGc
P. Abe	cagaagag	gtaagtggaaaa...892...	-----attgttcattttaaacatga-	ATTTTATAG	GTTTGGGc
C. Jac	cagaagag	gtaagtggaaaa...583...	-----actgttcattttaaacatga-	ATTTTATAG	GTTTGGGc
C. Por	cagaagag	gtaaatggaaaa...546...	--tgttctcattatt--tcctaaa---	CATTTTAAaTAG	GTTTGGGc
O. Cun	cagaagag	gtaagtggaaaa...529...	----ttctgac--ttcattttaaaca--	TATTTTAAaTAG	GTTTGGGc
C. Fam	cagaggaa	gtaagtggaaaa...1067...	----ctgattgttcattttaaaca--	TATTTTAAaTAG	GTTTGGGc
F. Cat	cagaggag	gtaaatggaaaa...575...	----ctgattgttcatttgaaca--	TATTTTAAaTAG	GTTTGGGc
B. Tau	cagaggag	gtaaatggaaaa...776...	----ttctaaacattttttt--ttt-	TTTTTAAaCAG	GTTTGGGc
E. Cab	cagaagag	gtaaatggaaaa...583...	----ctgattattcattttaaaca--	TATTTTAAaTAG	GTTTGGGc
S. Sus	cagaggag	gtaaatggaaaa...557...	----ttgattgttcatttaaaaaa--	TGTTTTTAAaTAG	GTTTGGGc
O. Avi	cagaggag	gtaagtggaaaa...771...	nnnnnnnnnnnnnnnttt-----	TTTTTAAaCAG	GTTTGGGc
L. Afr	cagaagag	gtaaatggaaaa...579...	-----gattattcattttgaacata	TATTTTAAaTAG	GTTTGGGc
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id=66742 gene=ENSG00000146842 name=TMEM209 segment=chr7.129824096.129825031\_-1 type=IN

Figure 123: CS=22.1



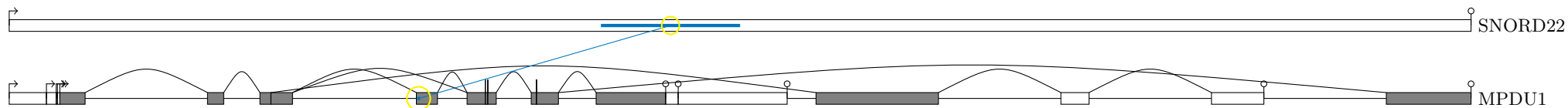
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O. Cun	ctagaatt----	tcccagtgaggaagcactcacacgtcttactcctgtcctagcccagagc	CTGTAAAGGTgAACCC	cactgggctggctggggga...28..	tgtctgaggg-ac	aataaagg
C. Fam	ctagaagc----	tcccagtgaagaaacagtcacatgtcttactcctgtcctagtcccagagc	CTGTAAAGGTgAACCC	cactgggctggctggggga...27..	tgtctgaggg-at	cataaggg
F. Cat	ttaaaact----	tcccagtgaagaaacagtcacatgtcttactcctgtcctagtcccagagc	CTGTAAAGGTgAACCC	cactgggactggctggggga...27..	agtctgaggg-at	tacaagag
B. Tau	ttaaaatt----	tcccagtgaagaaactcacaagcttactcctgtcctagtcccagagc	CTGTAAAGGTgAACCC	cactgggctggctggggga...28..	tgtctgaggg-at	catgagag
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S. Sus	----aattaat	tccctgtgaagaaacattcacacatcttgccttctgtcctagtcccagagc	CTGTAAAGGTgAACCC	cactgggctggctggggga...28..	gtatgagggaat	cataagaa
L. Afr	----aattcaga	tcccgatgaagaaacatgtacacgtcttactcctgtcctagcccagagc	CTGTAAAGGTgAACCC	cactgggctggctggggga...28..	agtctgaggg-at	caagggga
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id=634654 gene=ENSG00000207487 name=SNORD22 segment=chr11.62620382.62620507.-1 type=EN

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P. Tro	acttcaag	gttagttagggcc---...315..	tgagattgttcaacaat	GGTTATCTTTgaGCAG	agttatct
P. Abe	acttcaag	gttagttagggcc---...318..	tgagattgttcaacaat	GGTTATCTTTgaGCAG	agttatct
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C. Por	acaccagg	cttagcagggcc---...308..	gttgttgttcaacgt	GGTTATCTTTgaGCAG	agttatct
O. Cun	acatcaag	gttagttagggcc---...305..	tgagattgttcaacaat	GGTTATCTTTgaGCAG	agttatct
C. Fam	atagcaag	gttagttagggct---...252..	tgagattgttcaacaat	GGTTATCTTTgaGCAG	agttatct
F. Cat	ctttcgaa	gt---cagggccaag...293..	tgagattgttcaacgat	GGTTATCTTTgaGCAG	agttatct
B. Tau	acatcaag	gttagttagggcc---...302..	tgggattgttcaacaat	GGTTATCTTTgaGCAG	aattatct
E. Cab	acatcaag	gtcagtagggct---...308..	tgagattgttcaacact	GGTTATCTTTgaGCAG	agttatct
S. Sus	acatcaag	gttagttagggcc---...315..	tgagattgttcaacaat	GGTTATCTTTgaGCAG	aattatct
L. Afr	acatccag	gttagttagggct---...308..	tgggattgttcaacaat	GGTTATCTTTgaGCAG	agttatct
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Figure 124: CS=14.04



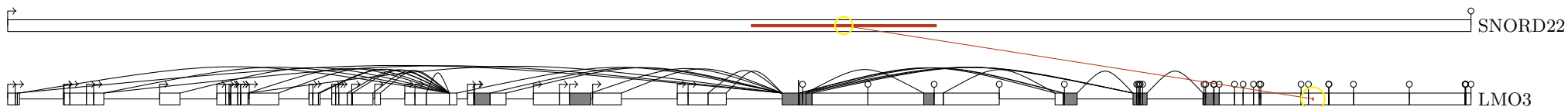
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C. Por	ctaaaatt----	tcccagtgatgaatagtcacagcttacttctgtcctagt	CCCAGAGC	TGTA	aaggtgaaccactggggct...38...tgtctgaggg-at	catcaaat
O. Cun	ctagaatt----	tcccagtgaggaagcactcacacgtcttacttctgtcctagt	CCCAGAGC	TGTA	aaggtgaaccactggggct...38...tgtctgaggg-ac	aataaagg
C. Fam	ctagaagc----	tcccagtgagaacagctcacatgtcttacttctgtcctagt	CCCAGAGC	TGTA	aaggtgaaccactggggct...37...tgtctgaggg-at	cataaggg
B. Tau	ttaaaatt----	tcccagtgagaactcacaagtcttacttctgtcctagt	CCCAGAGC	TGTA	aaggtgaaccactggggct...38...tgtctgaggg-at	catgagag
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C. Jac	ccattcag	gtgaggggccac...740...ttcctccaactcttgactc	TGCAG	CTCtTGGg
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C. Fam	cccttcag	gtgaggggagcc...234...ttcctccaactcttgactc	TGCAG	CTCtTGGg
B. Tau	cccttcag	gtaaggggacct...299...ttcctccaactcttgactc	TGCAG	CTCtTGGg
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Figure 125: CS=15.6



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C. Fam  ctagaagc----tcccagtgagaagacagtcacatgtcttactctctgtcctagtcccagagcctgtaAAGGTgAACCCacTGGGGctggctgggggagaagaggaagcttgttccagaaggaactgtctgaggg-at  cataaggg
B. Tau  ttaaaatt----tcccagtgagaagaaactcacaagcttactctctgtcctagtcccagagcctgTAAAGGTgAACCCacTGGGGctggctgggggagaagaggaagcttgttccagaaggaactgtctgaggg-at  catgagag
E. Cab  ttaaaatt----tcccagtgagaagaaactttcacacgtcttactctctgtcctagtcccagagcctgtaAAGGTgAACCCacTGGGGctGGTgggggaaaagaggaagcttgttccagaaggaactgtctgaggg-at  cataagga
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O. Avi  ttaaaatt----tcccagtgagaagaaactcacaagcttactctctgtcctagtcccagagcctgtaAAGGTgAACCCacTGGGGctggctgggggagaagaggaagcttgttccagaaggaactgtctgaggg-at  catgagaa
L. Afr  ----aattcaga  tcccgatgaagaaacatgtacacgtcttactctctgtcctaggctcccagagcctgtaAAGGTgAACCCacTGGGGctggctgggggagagagagcttgttccagaaggaacagctctgaggg-at  caagggga
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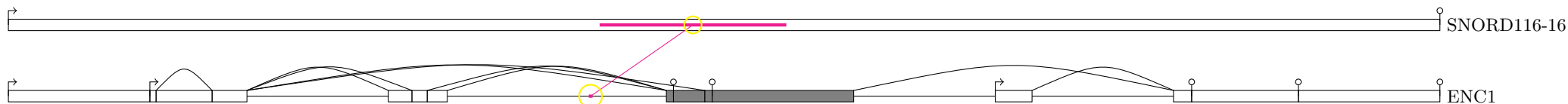
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P. Tro	aactagtg	cctttgggtatcacgtaaaatTTCCAaaGGGTTACTTT	-----aaaaatctgttaccacaatt--...108...--acactgaaaaga	tttgagtg
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C. Jac	aactagtg	cctttgggtatcatgtaaaatTTCCAaaGGGTTACTTT	-----gcaaatctgttaccacaatt--...105...--gcaactgaaaaga	tttgagtg
C. Por	aactagtg	cctttgggtatcatataaaatTTCCAaaGGGTTACTTT	-----aaaaagtgttaccacaatga...103...--gcaactgaaaaga	tctgagtg
O. Cun	aactagtg	cctttgggtatcatgtaaaatTTCCAaaGGGTTACTTT	-----aaaaactgttaccacaact--...98...tggcactg--aaga	tttgagtg
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E. Cab	aactagtg	cctttgggtatcatttaaAATTtTTCCAaaGGGTTACTTT	-----aaaaagtgttaccacaatt--...104...--gcaactaaaagga	tttgagtg
S. Sus	aactagtg	cctttgggtatcattttaaTTCCAaaGGGTTACTTT	-----aaaaagtgttactgcaatt--...101...--gcaactaaaaggt	tttgagtg
O. Avi	aactagtg	cctttgggtatcattttaa-aattTTCCAaaGGGTTACTTT	-----aaaaagtgttactgcaatt--...100...--gcaactaaaaggt	tttgagtg
L. Afr	aactagtg	cctttgggtattgtgtgaaatTTCCAaaGGGTTACTTT	-----aaagaactgttaccacaact--...100...--gcaactaaaaga	tttaagtg
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Figure 126: CS=10.14



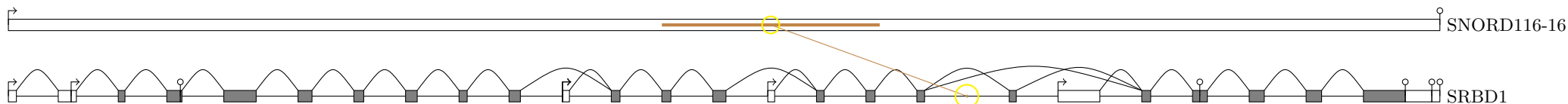
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P. Tro	ctgtgcat	ggatcgatgatg--actttcatacatgcattcCTTGG-AAAGCTGA	acaaaatgagt	gaaaactctataccg	tcacctcctcgtcga-actgaggtcc	agcacatt
P. Abe	ctgtgcat	ggatcgatgatg--actttcatacatgcattcCTTGG-AAAGCTGA	acaaaatgagt	gaaaactctataccg	tcacctcctcgtcga-actgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatg--acttccatatacatcCTTGG-AAAGCTGA	acaaaatgagt	gaaactctataccg	tcacctcctcgttga-actgaggtcc	tgacggtt
C. Por	acgtgctt	ggatcagtgatg--acactcacaatgcattcCTTGG-AAAGCTGA	acaaaatgagt	gaaaacctgtaccg	tattctcgcga-actgaggtcc	agcacatt
O. Cun	atgtgctt	ggatcgatgatg--actccccataaacattcCTTGGAAAAGCTGA	acaaaatgagt	gagaactcacaaccg	tcctcctcgttctcgcgaactgaggtcc	agcacatt
F. Cat	atgtgctc	ggatcgatgatg--actccctcaacagcattcCTTGGAAAAGCTGA	acaaaatgagt	gagaactcctccctcgt	tctcgcgaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatg--actccccacaatgcattcCTTGG-AAATCTGA	acaaaatgagt	gagccatcactaccg	tcctcctcgcgaactgaggtcc	ggcacgtg
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O. Avi	acatgctc	ggatcagtgatgacaactttcata--TTTATcCTTGGAAAATCTGA	acaaaatgagt	gagaactcactaccg	tcctcctcgcgaactgaggtcc	agcacgtt
L. Afr	acgtgcat	ggatcgatgatg--actgctatcctaaacattcCTTGGAAAAGCTGA	acaaaatgagt	gaaaactcctaccg	tcctcctcgcgaactgaggtcc	agcacatt
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P. Abe	caagacag	gtagttggtgat...682...aatggcctgaaagtggcaaTCAGgTTTTCCAAG	atgaacctgctttttatgca-----	...237...tattatthtttag	gagtgga
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C. Por	caagaaag	atgggtggccat...403...aggatcctgaaagtggcaaTCAGgTTTTCCAAG	atgaacctgcttttaagcag-----	...245...ttgttttag	gagtgga
O. Cun	caagaaag	atgggtggcaac...756...agatccacaagtggcaaTCAGgTTTTCCAAG	atgaacctgcttttaagcag-----	...197...ttgttttag	gagtgga
F. Cat	caagaaag	atgggtggtgat...432...agatcctgaaagtggcagTCAGgTTTTCCAAG	atgaacctgctttcaagcag-----	...261...ttgttttag	gagtgga
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Figure 127: CS=11.7



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P. Tro	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattcct	TGGA-AAg	CTGAAC	AAAATGAGT	GAAAAAC	ctataccg	tcacctcgtcg-aactgaggtcc	agcacatt				
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R. Nor	gctgtcct	ggatc	cgatgatgat-ttcca	ataaaacattcct	TGGA-AAg	CTGAAC	AAAATGAGT	GAAAAAC	ctcaataccgccactgtcatcgtgactgaggtcc	agctcctg					
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O. Cun	atgtgctt	ggatc	cgatgatgac-tcccc	ataaacattcct	TGGA	AAg	CTGAAC	AAAATGAGT	GAGAAAC	tcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt				
F. Cat	atgtgctt	ggatc	cgatgatgac-tccct	caacagcattcct	TGGA	AAg	CTGAAC	AAAATGAGT	GAGAAAC	agtgagaactcctccgctcgttctcatcgaaactgaggtcc	agcacatt				
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E. Cab	acgtgctt	ggatc	cgatgatgac-tccct	catatgcattcct	TGGA	AAg	CTGAAC	AAAATGAGT	GAGAAAC	ctcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt				
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O. Avi	acatgctt	ggatc	cagtgatgacacatt	tttcatatttattcct	TGGA	AAg	CTGAAC	AAAATGAGT	GAGAAAC	ctcactaccgtc-tcctcatcgatactgaggtcc	agcacatt				
L. Afr	acgtgcat	ggatt	gatgatgac-tgcta	tctaacattcct	TGGA	AAg	CTGAAC	AAAATGAGT	GAGAAAC	ctcactaccgtc-tcctcatcgatactgaggtcc	agcacatt				
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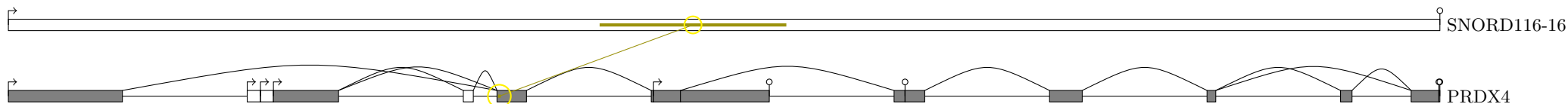
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P. Tro	aagtgcag	gtaagaa	actat...4934...	tttcacatt--aagtcatactt	GTTTTCTg	ATTCTG-	TTTTTTCAG-	TTTCCAta
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O. Cun	aagtgcag	gtaaga	aatgat...4935...	tttcacatt--aagtcatactt	GTTTTCTg	ATTCTG-	TTTTTTCAG-	TTTCCAta
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O. Avi	aagtgcag	gtaaga	aatgat...4934...	tttcacatt--aagtcatactt	GTTTTCTg	ATTCTG-	TTTTTTCAG-	TTTCCAta
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Figure 128: CS=14.95





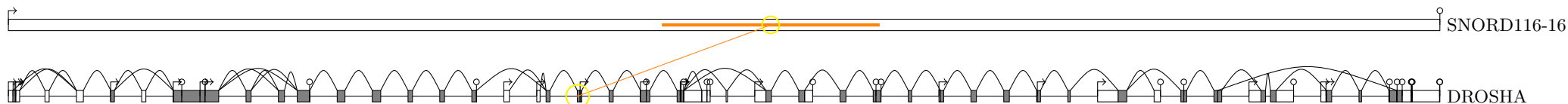
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C. Por	acgtgctt	ggatc	cgatgatgac-actc	acaaatgcattc	CTTGG-a	AAGCTGA	acaaaatgagt	gaaaac	cctgtaccg	tattc	catcga-act	gaggtcc	agcacatt
O. Cun	atgtgctt	ggatc	cgatgatgac-tcccc	ataaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gagaactcaca	accg	tcgttctcatc	gtgactgaggtcc	agcacatt	
F. Cat	atgtgctc	ggatc	cgatgatgac-tccct	caacagcattc	CTTGGaa	AAGCTGA	acaaaatgagt	gagaactcctc	ccc	tcgttctcatc	gaaactgaggtcc	agcacatt	
B. Tau	acgtgctt	ggatc	cgatgatgac-tccc	acaaatgcattc	CTTGG-AAA	tCTGA	acaaaatgagt	gagccatcact	accg	tcctcatc	ggaactgaggtcc	agcacatt	
E. Cab	acgtgctc	ggatc	cgatgatgac-tccct	catatgcattc	CTTGGAAA	atCTGA	acaaaatgagt	gagaactcact	accg	tcgttctcatc	gaaactgaggtcc	ggcacatt	
S. Sus	ccgtgctc	ggatc	cgatgatgac-tccct	ctaagcattc	CTTGG-AAA	tCTGA	acaaaatgagt	gagaactcact	accg	tcctcatc	gaaactgaggtcc	ggcacatt	
O. Avi	acatgctc	ggatc	cgatgatgac-tccct	ctaagcattc	CTTGGaa	AAGCTGA	acaaaatgagt	gagaactcact	accg	tcctcatc	gataactgaggtcc	agcacatt	
L. Afr	acgtgcat	ggatt	gatgatgac-tgcta	tctaacattc	CTTGGaa	AAGCTGA	acaaaatgagt	gaaaactcct	taccg	tcctcatc	attga-act	gaggtcc	agcacatt
	***	****	*****		*****	***	*****	*	**	*	**	*****	**

id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

H. Sap	atctaaag	gt----	agccctgatt---	..47..	cagtg	ttacagaacatcatg	TATTT	ATTTT	TTAG	TTTCAA	g
R. Mac	atctaaag	gt----	agccctgatt---	..59..	-----	acatcatg	tatttttctttc	TTAG	TTTCAA	g	
P. Abe	atctaaag	gt----	agccctgatt---	..59..	-----	acatcatg	tatttttctttc	TTAG	TTTCAA	g	
C. Jac	aaataaag	gt----	agccctgatt---	..59..	-----	acatcatg	tatttttctttc	TTAG	TTTCAA	g	
R. Nor	-----	at	tagaagcccaag	tttta..	..51..	-----	tagataat-tg	cttttctttc	TTAG	TTTCAA	g
C. Por	atctgagg	gtgtag---	ctcagt----	..99..	-----	acatcgtg	tcttttctttc	TTAG	TTTCAA	g	
O. Cun	gtccaaag	atttaga	agcct-----	..51..	-----	aatcatc	tcttctttc	TTAG	TTTCAA	g	
F. Cat	gtccaaag	gttaga	aatcct-----	..64..	-----	actcatat	tattttctttc	TTAG	TTTCAA	g	
B. Tau	gtccaaag	attc----	cctccaaa---	..67..	-----	acatcatatg	tattttctttc	TTAG	TTTCAA	g	
E. Cab	gtccagag	gattaga	agcct-----	..64..	-----	acatcatat	tattttctttc	TTAG	TTTCAA	g	
S. Sus	----cag	actcaga	agccttgatt---	..59..	-----	gaatat	catata--	tttctttc	TTAG	TTTCAA	g
O. Avi	gtccaaag	attc----	cctccgaa---	..65..	-----	acatcatatg	cttttctttc	TTAG	TTTCAA	g	
L. Afr	atccaaag	gttaaga	agccc-----	..67..	-----	tcatg	taattcttttctttc	TTAG	TTTCAA	g	
			*			*	*	*****	*****		

id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX.23689551.23689645.1 type=IN

Figure 129: CS=15.6



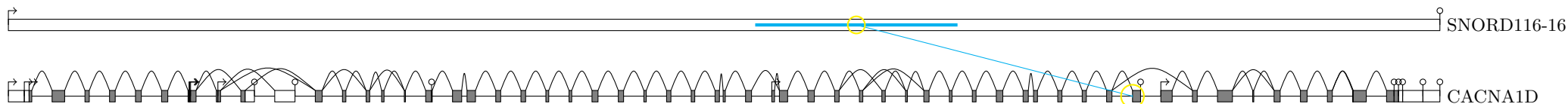
H. Sap	ctgtgcat	ggatc	gatgatgactttc	atacatgcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
R. Mac	ctgtgcat	ggatc	gatgatgactttc	atacatgcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
P. Tro	ctgtgcat	ggatc	gatgatgactttc	atacatgcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
P. Abe	ctgtgcat	ggatc	gatgatgactttc	atacatgcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatc	gatgatgacttcc	ataatacatcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	ctatgatgattccc	agcaaacattcctt	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
R. Nor	gcgtgctt	ggatc	gatgatgatttcca	ataaacattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
C. Por	acgtgctt	ggatc	cagtgatgactcaca	aatgcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
O. Cun	atgtgctt	ggatc	gatgatgactcccc	ataaacattcctt	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
B. Tau	acgtgctt	ggatc	gatgatgactccc	ataaacattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
E. Cab	acgtgctc	ggatc	gatgatgactccct	catatgcattcctt	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
S. Sus	ccgtgctc	ggatc	gatgatgactccct	ctaaagcattcct-	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
L. Afr	acgtgcat	ggatt	gatgatgactgct	atcctaaacattcctt	TGGAAA	gCTGA	ac	AAAAATGAGT	GAAA	actctata	accg	tcac	cctc	gtcg-	aactgaggtcc	agcacatt
	****		****	*****	*	*****	*	***	*****	*	****	*	**	*	*****	**

id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

H. Sap	tgccggag	gtaagg	gaaaag...1478	...----	gccaact	acag	taatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg	
R. Mac	tgccagag	gtaagg	gaaaag...1483	...----	gccaatt	acag	taatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg	
P. Tro	tgccggag	gtaagg	gaaaag...1489	...----	gccaact	acag	taatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg	
P. Abe	tgccggag	gtaagg	gaaaag...1488	...----	gccaat	ctat	agtaatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg	
C. Jac	tgccagag	gtaagg	gaaaat...1498	...----	gccaat	ctac	agtaatttaa	---	TTTTg	TTTATTTTCAG	aaTTTTg	
M. Mus	tgccagag	gtaagg	gctgct...1414	...----	gcagat	ctat	agtaatttga	---	TTTTg	ACTTATTTTCAG	aaTTTTg	
R. Nor	tgccagag	gtaagg	gagaag...1461	...----	atgtg	cagat	caatagta	---	TTTTg	ACTTATTTTCAG	aaTTTTg	
C. Por	tgcccgag	gtaagg	gaaaag...1468	...----	gcagat	ccaca	ataatttga	---	TTTTg	ATTATTTTCAG	aaTTTTg	
O. Cun	tgcccgag	gtaagg	gaaaag...1492	...----	gcagat	cttc	agtaatttga	---	TTTTg	CTTATTTTCAG	aaTTTTg	
B. Tau	tgccagag	gtaagg	gagaag...1570	...----	acag	taatt	gggtttctg	---	TTTTg	ATTATTTTCAG	aaTTTTg	
E. Cab	tgccagag	gtaagg	gaaaag...1526	...----	gcagt	accag	agtaatttga	---	TTTTg	GTTTATTTTCAG	aaTTTTg	
S. Sus	tgccagag	gtaagg	gagaag...1814	...----	tttg	cata	ctatagttattt	---	TTTTg	GTTTATTTTCAG	aaTTTTg	
L. Afr	tgccagag	gtaagg	gaaaac...2148	...----	gcag	tat	gacaataatttga	---	TTTTg	TTTATTTTCAG	aaTTTTg	
	****	***	*****	*					*	**	*****	*****

id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 130: CS=21.32



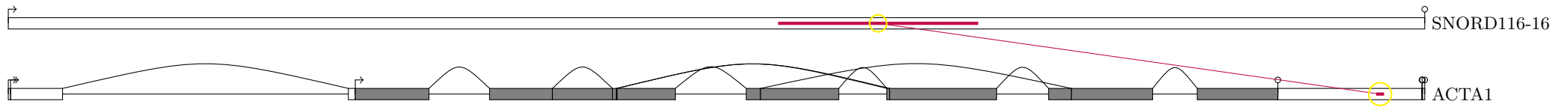
H. Sap	ctgtgcat	ggatc	cgatgatgactttcat-acatgcattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt		
P. Tro	ctgtgcat	ggatc	cgatgatgactttcat-acatgcattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt		
P. Abe	ctgtgcat	ggatc	cgatgatgactttcat-acatgcattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt		
C. Jac	atgtgcat	ggatc	cgatgatgactttcat-acatgcattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatc	atgatgatgattcccag-tcaaacattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt		
R. Nor	cggtgctt	ggatc	cgatgatgatttccaa-taaaacattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactcaataccgccactgtcatcgtgactgaggtcc	agctcctg		
C. Por	acgtgctt	ggatc	cgatgatgactcacc-aaatgcattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactgtaccgccactctcatcg-aactgaggtcc	agcacact		
U. Cun	atgtgctt	ggatc	cgatgatgactcccc-ataaacattccttg	gaaag-CTGAACAAA	TGAGTg	gagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt		
C. Fam	aagtgctc	caatggatcatgactc	cctcaatctgctttccttg	gaaag-TTGAACAAA	TGAGTg	gagaactcctcctgccctcattctcatcgcaactgaggtcc	agcacggt		
B. Tau	acgtgctt	ggatc	cgatgatgactccac-aaatgcattc	-TTGGaa	ATCTGAACAAA	TGAGTg	AGCCA	cactaccgtc-tcctcatcggaactgaggtcc	agcacggt
E. Cab	acgtgctc	ggatc	cgatgatgactcctc-atatgcattccttg	gaaag-ATCTGAACAAA	TGAGTg	gagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacggt		
S. Sus	ccgtgctc	ggatc	cgatgatgactcctc-taaagcattc	-TTGGaa	ATCTGAACAAA	TGAGTg	gagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacggt	
L. Afr	acgtgcat	ggattgatgatgactgctat-ctaaacattccttg	gaaag-CTGAACAAA	TGAGTg	aaaactccttaccgtcactcattg-aactgaggtcc	agcacatt			
	****	**	* ****	* **** * * *	*****	* ** * *	** * *****	**	

id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

H. Sap	ccctacag	gtgaattgttgt...3981...-----	agatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
P. Tro	ccctacag	gtgaattgttgt...3968...-----	agatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
P. Abe	ccctacag	gtgaattgttgt...4942...-----	agatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
C. Jac	ccctacag	gtgaattgttgt...4042...-----	agatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
M. Mus	ccctacag	gtgaattgccct...4388...-----	agatgacatttactggctg	ATTCGTTTg	TTCAG	atgcttga
R. Nor	ccctacag	gtgaattgccct...3973...-----	agatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
C. Por	ccctacag	gtgaattgttct...3914...-----	agatgagatttactggctg	ATTCATTg	TTCAG	atgcttga
U. Cun	ccctgcag	gtgaattgtccc...3807...-----	tgatgagatttactggctg	ATTCGTTTg	TTCAG	atgcttga
C. Fam	ccctacag	gtgaattgtcct...3925...-----	agatgagatttactggctg	ATTCATTg	TTCAG	atgcttga
B. Tau	ccctacag	gtgaattgttgt...3814...gctaacagataagattt	cacTGGCTg	ATTCATTg	TTCAG	ATgcTTGa
E. Cab	ccctacag	gtgaattgttgt...3950...-----	agatgagatttaccggctg	ATTCATTg	TTCAG	ATgcttga
S. Sus	ccctacag	gtgaattattgt...3900...-----	agatgagatttactggctg	ATTCATTg	TTCAG	ATgcTTGa
L. Afr	ccctacag	gtgaattatcgt...3984...-----	agataagatttaccggctg	ATTCATTg	TTCAG	atgcttga
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id=617953 gene=ENSG00000157388 name=CACNA1D segment=chr3.53820980.53825007.1 type=IN

Figure 131: CS=15.6



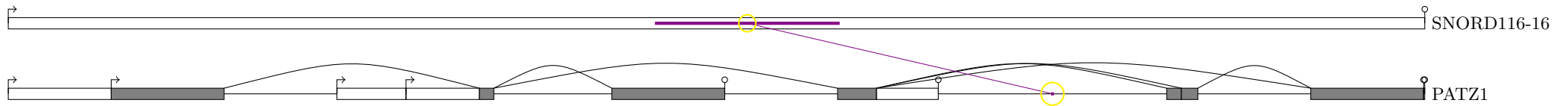
H. Sap	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aaactctata	accg	tc	cctc	gtcg-aact	gaggtcc	agcacatt
R. Mac	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aaactctata	accg	tc	cctc	gtcg-aact	gaggtcc	agcacatt
P. Tro	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aaactctata	accg	tc	cctc	gtcg-aact	gaggtcc	agcacatt
P. Abe	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aaactctata	accg	tc	cctc	gtcg-aact	gaggtcc	agcacatt
C. Jac	atgtgcat	ggatc	gatgatgac-ttcc	ataatacattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-acactctata	accg	tc	cctc	gttg-aact	gaggtcc	tgccagtt
M. Mus	acgtgctt	ggatc	atgatgat-tccc	agcaaacattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-actctgtacc	gccact	tc	catc	ggaact	gaggtcc	agcatcct
R. Nor	gcgtgctt	ggatc	gatgatgat-ttcc	ataaaaacattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-actcaata	accg	ccact	gtc	atc	gtgact	gaggtcc
C. Por	acgtgctt	ggatc	gatgatgac-actc	acaatgcattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aaaacctgt	accg	tc	catt	ctcatc	g-aact	gaggtcc
O. Cun	atgtgctt	ggatc	gatgatgac-tcccc	ataaacattc	ccttgg-aaagctg	<b>AACAAAATGAGTGA</b>	-aactcaca	accg	tc	gtt	ctcatc	gtgact	gaggtcc
C. Fam	aagtgctc	caatgg	atcatgactc	ctcaatctgctt	cc-TTGG	<b>AAATgAACAAAATGAGTGA</b>	-aactccctg	ccg	tc	catt	ctcatc	gcaact	gaggtcc
B. Tau	acgtgctt	ggatc	gatgatgac-tccc	acaatgcattc	ccttgg-aaatctg	<b>AACAAAATGAGTGA</b>	ca-tcact	accg	tc	cct	catc	ggaact	gaggtcc
E. Cab	acgtgctc	ggatc	gatgatgac-tcc	ctcatatgcattc	ccttgg-aaatctg	<b>AACAAAATGAGTGA</b>	-aactcact	accg	tc	gtt	ctcatc	gaaact	gaggtcc
S. Sus	cogtgc	ggatc	gatgatgac-tcc	ctctaagcattc	ccttgg-aaatctg	<b>AACAAAATGAGTGA</b>	-aactcact	accg	tc	cct	catc	gaaact	gaggtcc
O. Avi	acatgctc	ggatc	agtgatgaca	actttcatattt	tattccttgg-aaatctg	<b>AACAAAATGAGTGA</b>	-aactcact	accat	c	-tc	ctcatc	gatact	gagctc
	***		**	* ****		**** * * **	*****		*	*	**	*	***** **

id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

H. Sap	aatgcttc	tagacacactcc...132...	-----cgtgtacata	cattaactta--TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccct	-----	..41..	ctg	taagctgc-	gtaaagtg	
R. Mac	aatgcttc	tagacacactcc...129...	-----cgtgtacata	cattaactta--TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccct	-----	..41..	ctg	taagctgc-	gtaaagtg	
P. Tro	aatgcttc	tagacacactcc...132...	-----cgtgtacata	cattaactta--TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccct	-----	..41..	ctg	taagctgc-	gtaaagtg	
P. Abe	aatgcttc	tagacacactcc...132...	-----cgtgtacata	cattaactta--TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccct	-----	..43..	ctg	taagctgc-	gtaaagtg	
C. Jac	aatgcttc	tagacacactcc...128...	-----cgtgtacata	cattaactta--TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccct	-----	..41..	ctg	taagctgc-	gtaaagtg	
M. Mus	aatgcttc	tagg	cgactcg...120...	-----cgtgtacata	gattgactcgTTTACc	TCATTTTGT	Tat	ttttc	caacaaagccctg	-----	..43..	-tg	tttctcca	
R. Nor	aatgcttc	tagg	cgaccgg...120...	-----cgtgtacata	gattgactcgTTTACc	TCATTTTGT	Tat	ttttc	caacaaagccctg	-----	..42..	-tg	tttctcca	
C. Por	aatgcttc	taagg	ggcggg...34...	-----tg	tacatacagtgactcg	TTACc	TCATTTTGT	Tat	ttttc	aaaacaaagccctg	-----	..39..	at	cttaaacgc-
O. Cun	aatgcttc	tagac	gcgcgag...120...	-----gt	tacatacattcacctac	TTACc	TCATTTTGT	Tat	ttttc	gaaacaaagccctg	-----	..42..	ctg	tagactac-
C. Fam	aatgcttc	tagac	cccacgc...137...	-----cgtgtacata	cattaactta--TTTACc	TCATTTTGT	TATTTTAA	-aaca	aaagccctg	ggaagga...32..	tct	gtctgtgc-	gtaaagtt	
B. Tau	aatgcttc	tagac	gcctctc...125...	ttataat	gtgtacatacatt-----	TTTTACc	TCATTTTGT	Tat	ttttc	aaaacaaagccctg	-----	..41..	ctg	tttctgc-
E. Cab	aatgcttc	tagac	cccactc...130...	-----tg	tgtacatacattaactta--TTTACc	TCATTTTGT	Tat	ttttc	aaaacaaagccctg	-----	..40..	ctg	ttacgcagc-	
S. Sus	aatgcttc	taaac	cccattc...128...	-----cgt	tacatacattaactta--TTTACc	TCATTTTGT	Tat	ttttc	aaaacaaagccctg	-----	..41..	ctg	tatgcgc-	
O. Avi	aatgcttc	tagac	gcctctc...124...	-tataat	gtgtacatacattg-----	TTTTACc	TCATTTTGT	Tat	ttttc	aaaacaaagccctg	-----	..41..	ctg	tttctgc-
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id=727623 gene=ENSG00000143632 name=ACTA1 segment=chr1.229566997.229567248.-1 type=EN

Figure 132: CS=12.6



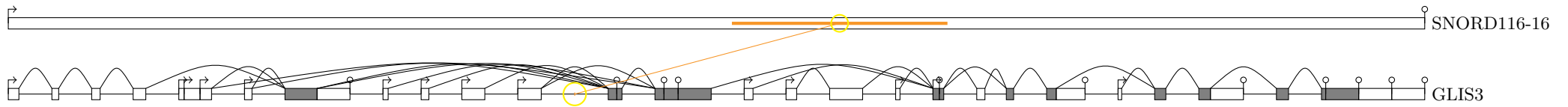
H. Sap	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
R. Mac	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
P. Tro	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
P. Abe	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
C. Jac	atgtgcat	ggatc	cgatgatgac-ttcc	ataatacatcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	atgatgat-tccc	agtaaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
R. Nor	gcgtgctt	ggatc	cgatgatgac-ttcc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
C. Por	acgtgctt	ggatc	cgatgatgac-actc	acaataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
O. Cun	atgtgctt	ggatc	cgatgatgac-tccc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
B. Tau	acgtgctt	ggatc	cgatgatgac-tccc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
E. Cab	acgtgctt	ggatc	cgatgatgac-tccc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
S. Sus	ccgtgctt	ggatc	cgatgatgac-tccc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
O. Avi	acatgctt	ggatc	cgatgatgac-tccc	ataataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
L. Afr	acgtgcat	ggatc	atgatgatgac-tg	ctataaacattcctt-	GGAAA	CTGAACAAA	ATGAG	Tgaaa	actctataccg	tcatcctc	gtcg-aact	gaggtcc	agcacatt
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id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

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R. Mac	aactctca	cctgctactcag...	4943...	-----g	ccgtgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
P. Tro	aactctca	cctgctactcag...	4943...	-----g	ccgcgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
P. Abe	aactctca	cctgctactcag...	4943...	-----g	ccgcgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
C. Jac	aactcca	cctgctactcag...	4943...	-----g	ccctcgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
M. Mus	cagataca	cctgctcaagt...	4943...	-----g	ctgtgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
R. Nor	cagatgca	cctgctcaagt...	4943...	-----g	ctgtgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
C. Por	caaacata	cctgctgcttag...	4943...	-----g	ctgcgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
O. Cun	gtaacaca	cctgttgcccag...	4937...	-ttgctg	gcccgggatctcaTCTC	ctTTTGT	TTGTTAG	gTTTCT	cc
B. Tau	atgacgca	cctgctgcccc...	4943...	-----g	ccgcg-gatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
E. Cab	gtagcaca	tctgctgctcag...	4937...	-gtgctg	gcccgggatctcaTCTC	ctTTTGT	TTGTTAG	gTTTCT	cc
S. Sus	gtaataca	gctgctgctgg...	4937...	-gtgctg	gcccgggatctcaTCTC	ctTTTGT	TTGTTAG	gTTTCT	cc
O. Avi	atgacgca	cctgctgcccc...	4937...	-ttgctg	gcccgggatctcaTCTC	ctTTTGT	TTGTTAG	gTTTCT	cc
L. Afr	acaaaaca	cctgctgctcag...	4943...	-----g	ccgcgggatctcatctcct	TTTGT	TTGTTAG	gTTTCT	cc
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id=182225 gene=ENSG00000100105 name=PATZ1 segment=chr22.31724911.31731403.-1 type=IN

Figure 133: CS=12.6



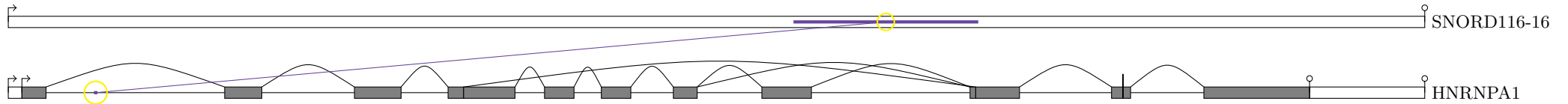
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R. Mac	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattc	ccttg	gaaagct-GAACAA	AATGAGT	gaaaactctata	accgtcatc	cctcgtcg-aact	gaggtcc	agcacatt			
P. Tro	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactctata	accgtcatc	cctcgtcg-aact	gaggtcc	agcacatt			
P. Abe	ctgtgcat	ggatc	cgatgatgac-tttc	atacatgcattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactctata	accgtcatc	cctcgtcg-aact	gaggtcc	agcacatt			
C. Jac	atgtgcat	ggatc	cgatgatgac-ttcc	ataatacatatt	ccttg	gaaag-CTGAACAA	ATGAGT	gaaactctata	accgtcatc	cctcgttg-aact	gaggtcc	tgcacgtt			
M. Mus	acgtgctt	ggatc	atgatgat-tccc	agtaaacattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactctgt	accgccacttc	catcggaact	gaggtcc	agcatctt			
R. Nor	gcgtgctt	ggatc	cgatgatgat-ttcc	ataaaaacattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactcaata	accgccactgc	atcgtgact	gaggtcc	agctcctg			
C. Por	acgtgctt	ggatc	cgatgatgac-act	cacaatgcattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactgtacc	gcattctcat	cg-aact	gaggtcc	agcacact			
U. Cun	atgtgctt	ggatc	cgatgatgac-tccc	cataaacattc	ccttg	gaaag-CTGAACAA	ATGAGT	gagaactcaca	accgtcgtt	tctcatcgt	gactgaggtcc	agcacatt			
C. Fam	aagtgctc	caatggat	catgactc	ccctcaatctg	cttcttg	gaaatt-GAACAA	AATGAGT	gagaactc	ccctgccctc	attctcat	cgcaact	gaggtcc	agcacgtt		
F. Cat	atgtgctc	ggatc	cgatgatgac-tc	ctcaacagcattc	ccttg	gaaag-CTGAACAA	ATGAGT	gagaactc	ccctccgtc	gttctcat	cgaaact	gaggtcc	agcacgtt		
E. Cab	acgtgctc	ggatc	cgatgatgac-tc	ctcatatgcattc	ccttg	gaaag-TCTGAACAA	ATGAGT	gagaactc	actaccgtc	gttctcat	cgaaact	gaggtcc	ggcacgtt		
O. Avi	acatgctc	ggatc	cgatgatgac-tg	ctatcatttatt	ccttg	gaaag-TCTGAACAA	ATGAGT	gagaactc	actaccatc	-tcctcat	cgatact	gagctct	agcacgtt		
L. Afr	acgtgcat	ggatt	gatgatgac-tg	ctatc	taaacattc	ccttg	gaaag-CTGAACAA	ATGAGT	gaaaactc	ctaccgtc	ctcactcattg	-aact	gaggtcc	agcacatt	
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id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

H. Sap	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
R. Mac	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
P. Tro	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
P. Abe	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
C. Jac	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
M. Mus	taatacag	gtaagttttg	ttt...4941...	gggacataca	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
R. Nor	taatacag	gtaagttttt	ttt...4941...	gggacataaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
C. Por	caatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
U. Cun	gaatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
C. Fam	taatacag	gtaagttttg	ttt...4941...	ggcacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
F. Cat	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
E. Cab	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
O. Avi	taatacag	gtaagttttg	ttt...4941...	gggacatgaa	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
L. Afr	taatacag	gtaagttttg	ttt...4941...	ggggcacaga	gtaaacctg	ATTCATTG	TtTTAG	gggctc	tt
	*****	***	** ** *		** **	*****	*****	*****	*****

id=609102 gene=ENSG00000107249 name=GLIS3 segment=chr9.4125942.4144838.-1 type=IN

Figure 134: CS=12.6



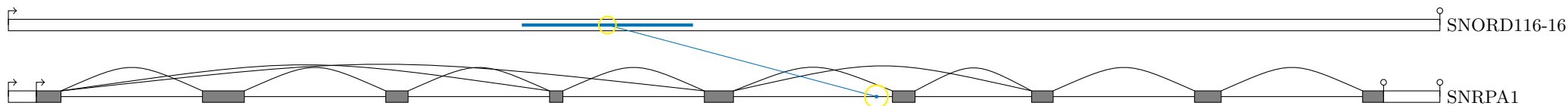
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R. Mac	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctga	ACAAAATG	GTGA	aaactctataccg	tatcctcgtcg-aactgaggtcc	agcacatt				
P. Tro	ctgtgcat	ggatc	gatgatgac-tttc	atacatgcattc	ccttgg-aaagctga	ACAAAATG	GTGA	aaactctataccg	tatcctcgtcg-aactgaggtcc	agcacatt				
C. Jac	atgtgcat	ggatc	gatgatgac-ttcc	ataatacattc	ccttgg-aaagctga	ACAAAATG	GTGA	aaactctataccg	tatcctcgtcg-aactgaggtcc	agcacatt				
M. Mus	acgtgctt	ggatc	atgatgat-tccc	agtaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactctgtaccg	cactctcatcggaactgaggtcc	agcatcct				
R. Nor	gcgtgctt	ggatc	gatgatgac-ttcc	ataataaacattc	ccttgg-aaagctga	ACAAAATG	GTGA	aaactcaataccg	cactgtcatcgtgactgaggtcc	agctcctg				
C. Por	acgtgctt	ggatc	agtgatgac-actc	aaaatgcattc	ccttgg-aaagctga	ACAAAATG	GTGA	aaaactgtaccg	tattctcatcg-aactgaggtcc	agcacatt				
O. Cun	atgtgctt	ggatc	gatgatgac-tcccc	ataaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcacaaccg	tcttcatcgtgactgaggtcc	agcacatt				
C. Fam	aagtgctc	caatggat	catgactccct	caatctgctttc	ccttgg-aaaattga	ACAAAATG	GTGA	gaactccctg	ccgtcattctcatcgcaactgaggtcc	agcacatt				
F. Cat	atgtgctc	ggatc	gatgatgac-tcct	caacagattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactccctc	ccgtcgttctcatcgaaactgaggtcc	agcacatt				
B. Tau	acgtgctt	ggatc	gatgatgac-tccc	acaaatgcattc	ccttgg-aaatctga	ACAAAATG	GTGA	gccaactaccg	tc-tcctcatcggaactgaggtcc	agcacatt				
E. Cab	acgtgctc	ggatc	gatgatgac-tcct	catatgcattc	ccttggaaaatctga	ACAAAATG	GTGA	gaactcactaccg	tcttctcatcgaaactgaggtcc	agcacatt				
S. Sus	ccgtgctc	ggatc	gatgatgac-tcct	ctaagcattc	ccttgg-aaatctga	ACAAAATG	GTGA	gaactcactaccg	tc-tcctcatcgaaactgaggtcc	agcacatt				
O. Avi	acatgctc	ggatc	agtgatgacaa	ctttcatattt	tattccttggaaaatctga	ACAAAATG	GTGA	gaactcactaccg	tc-tcctcatcgatactgaggtcc	agcacatt				
L. Afr	acatgctc	ggatc	atgatgatgac-tg	ctatcctaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaaactcctaccg	tctcattg-aactgaggtcc	agcacatt				
	***	**	*	****	*****	***	*****	*	**	*	**	*	*****	**

id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

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R. Mac	agtcagag	gtgag	ttaggcg...113...-----	taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---	...377...ccccactccag	tctcctaa					
P. Tro	agtcagag	gtgag	ttaggcg...111...-----	taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---	...375...ccccactctag	tctcctaa					
C. Jac	agtcagag	gtgag	ttaggcg...106...-----	ctaccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---	...371...ccccactgtag	tctcctaa					
M. Mus	agtccgag	gtaag	ttggatg...106...-----	ctactttaaaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---	...369...ctcccactttag	tctcccaa					
R. Nor	agtcagag	gtgag	ttaggcg...105...-----	cctacttt-aaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---	...361...actttattttag	tctcccaa					
C. Por	agtcagag	gtaag	ctatttt...103...-----	gcctgctc-ccaaagttcagg	TCGCCATTTTGT	cctcg---tcgccaatgaggccgc...	...327...cttccactctag	tctcctaa					
O. Cun	agtcagag	gtgag	gagctcc...102...aag	gcctaccctc-ccaaag-----	TCGCCATTTTGT	cctctgctgcgccatgaggc---	...378...tctcccgccag	tctcccaa					
C. Fam	agtcagag	gtgag	taacacg...112...-----	ttcccctc-cggaagttgagg	TCGCCATTTTGT	cctctgctgcgccatgaggc---	...363...ccccctcctag	tctcccaa					
F. Cat	agtcagag	gtgag	taacacg...113...-----	taccctc-ccaaagttcagg	TCGCCATTTTGT	cctctgctgcgccatgaggc---	...378...cccactcctag	tctcccaa					
B. Tau	aatcagag	gtggg	taagacg...111...-----	tcccctc-cctaaagttgagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgc...	...362...ctcctcctag	tctcccaa					
E. Cab	agtcagag	gtgag	taggacg...111...-----	taccctc-ccaaagttcagg	TCGCCATTTTGT	cctctgctgcgccatgaggc---	...359...tctactcctag	tctcccaa					
S. Sus	agtcagag	gtgag	tgagact...111...-----	taccctc-cctaaagttcagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgt...	...358...ccctactcctag	tctcccaa					
O. Avi	aatcagag	gtggg	taagacg...111...-----	tcccctc-cctaaagttgagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgc...	...366...ctccactcctag	tctcccaa					
L. Afr	agtcagag	gtaag	ctaccc...108...-----	taccctc-ccaaagttgagg	TCGCCATTTTGT	cctctgctgcgccatgaggc---	...389...ttcccattag	tctcctaa					
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id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 135: CS=18.75



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P. Tro	ctgtgcat	ggatcgatgatgactttcatac---ATGCATTCCCTGGAA	-agctgaacaaaatgagtgaaaactctataccgctcatcctcgtcg-aactgaggtcc	agcacatt							
P. Abe	ctgtgcat	ggatcgatgatgactttcatac---ATGCATTCCCTGGAA	-agctgaacaaaatgagtgaaaactctataccgctcatcctcgtcg-aactgaggtcc	agcacatt							
C. Jac	atgtgcat	ggatcgatgatgacttccatata---CATTCCCTGGAA	-agctgaacaaaatgagtgaacactctataccgctcatcctcgttg-aactgaggtcc	tgcaagtt							
M. Mus	acgtgctt	ggatcctatgatgattcccagtc---CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactctataccgctcatcctcgttg-aactgaggtcc	agcatcct							
R. Nor	gcgtgctt	ggatcgatgatgattccaataaaa---CATTCCCTGGAAAAGC	-tgaacaaaatgagtgaaaactcaataccgctcatcctcgttg-aactgaggtcc	agctcctg							
C. Por	acgtgctt	ggatcagtgatgacactcaca---ATGCATTCCCTGGAA	-agctgaacaaaatgagtgaaaactctataccgctcattctcctcg-aactgaggtcc	agcacact							
O. Cun	atgtgctt	ggatcgatgatgactccccataaa---CATTCCCTGGAAAAGC	tgaacaaaatgagtgaacactcacaaccgctcgttctcctcgttg-aactgaggtcc	agcacatt							
F. Cat	atgtgctt	ggatcgatgatgactccccataaa---GCATTCCCTGGAAAAGC	tgaacaaaatgagtgaacactcacaaccgctcgttctcctcgttg-aactgaggtcc	agcacatt							
B. Tau	acgtgctt	ggatcgatgatgactccccac---aaATGCATTCCCTGGAAA	-tctgaacaaaatgagtgaacactcacaaccgctcgttctcctcgttg-aactgaggtcc	agcacatt							
E. Cab	acgtgctt	ggatcgatgatgactccccac---ATGCATTCCCTGGAAA	-tctgaacaaaatgagtgaacactcacaaccgctcgttctcctcgttg-aactgaggtcc	agcacatt							
L. Afr	acgtgcat	ggattgatgatgactgctatcctaaa---CATTCCCTGGAAAAGC	tgaacaaaatgagtgaacactcacaaccgctcgttctcctcgttg-aactgaggtcc	agcacatt							
	****	****	*****	*****	*	***	*	**	*	*****	**

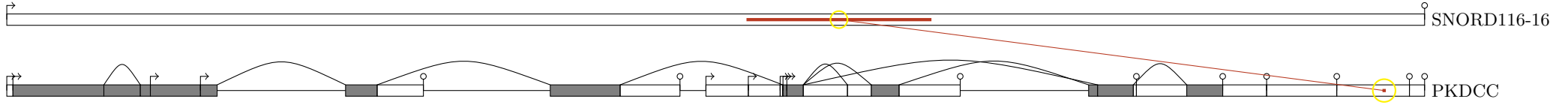
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R. Mac	aactaaaa	gtaagtagtaat...505...--ggagagttcgcttccatgct	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
P. Tro	aactaaaa	gtaagtagtaat...512...--ggagagttcgcttccatgct	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
P. Abe	aactaaaa	gtaagtagtaat...512...--ggagagttcgcttccatgct	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
C. Jac	aactaaaa	gtaagtagtaat...472...--ggagagttcacttccatgct	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
M. Mus	aactcaaa	gtgagtattgct...487...tcaggagaattctcttccat	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
R. Nor	aactaaaa	gtgagtattgct...467...tcaggagaattctcttccat	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
C. Por	aactaaaa	gtaagtgttctt...457...--gcagcattctctcccgctg	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
O. Cun	agctaaaa	gtaagtgttctt...439...gcgggaaaattgcttctgct	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
F. Cat	aactgaaa	gtaagtattttc...545...tcagaagagtttcttccgt	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
B. Tau	aactaaaa	gtaagtgttctt...485...--aggagagtttcttccatgct	TTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
E. Cab	aactaaaa	gtaagtagtaat...734...tcaggagaatttcttccat	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
L. Afr	aactgaaa	gtaagtagtaat...488...tcaggagcgtattcttccgt	GTTTCTGAGGAATGCAT	cataatgcatgtggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
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id=143334 gene=ENSG00000131876 name=SNRPA1 segment=chr15.101826499.101827112.-1 type=IN VIEW

Figure 136: CS=13





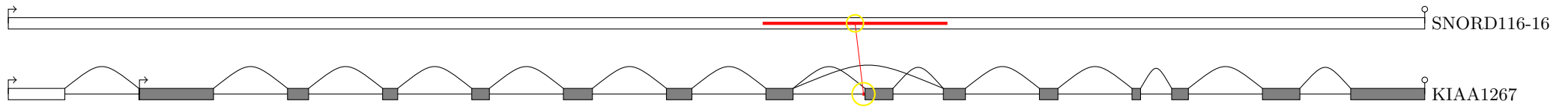
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P. Tro	ctgtgcat	ggatcgatgatgactttcat-acatgattccttggaagc-TGAACAAAaTGAGTgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
P. Abe	ctgtgcat	ggatcgatgatgactttcat-acatgattccttggaagc-TGAACAAAaTGAGTgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgactttcat-acatgattccttggaagc-TGAACAAAaTGAGTgaaaactctataccgtcatcctcgtcg-aactgaggtcc	tgcaactt
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R. Nor	cggtgctt	ggatcgatgatgactttcaa-taaaacattccttggaagc-GCTGAACAAAaTGAGTgaaaactcaataccgccactgtcatcgtgactgaggtcc	agctcctg
C. Por	acgtgctt	ggatcgatgatgactttcaa-taaaacattccttggaagc-TGAACAAAaTGAGTgaaaactcaataccgccactgtcatcgtgactgaggtcc	agcacatt
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C. Fam	aagtgtc	caatggatcatgactcctcaatcgtttccttggaagc-ATTGAACAAAaTGAGTgAGAActcactaccgtcgttctcatcgaaactgaggtcc	agcacatt
F. Cat	atgtgctt	ggatcgatgatgactttcaa-taaaacattccttggaagc-GCTGAACAAAaTGAGTgAGAActcactaccgtcgttctcatcgaaactgaggtcc	agcacatt
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S. Sus	ccgtgctt	ggatcgatgatgactttcaa-taaaacattccttggaagc-CTGAACAAAaTGAGTgAGAActcactaccgtc-tcctcatcgaaactgaggtcc	agcacatt
L. Afr	acgtgcat	ggatcgatgatgactttcaa-taaaacattccttggaagc-CTGAACAAAaTGAGTgaaaactcctaccgtcactcattg-aactgaggtcc	agcacatt
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R. Nor	tgtgagtg	agccagcactgg...134...-----tagggtcggggcctttctgc-CTCATTGctTTCAGTgaaagccaggagcagccg...64...ttgtttatttt	gtaaaaaa
C. Por	tgtgagtg	agccagcactgg...142...-----tagggtcggggcctttctgc-CTCATTGctTTCAtgaaagccaggagcagcc--...66...ttgtttatttt	gtaaaaaa
O. Cun	tgtgggca	atcctggacctt...131...ctggggcggggcctttctgc-TTCTgcCTCATTGctTTCAGTgaaagccaggagcagcc...66...ttgtttatttt	gtaaaaaa
C. Fam	tgtgggca	atcctggacctt...135...-ggggcggggcctttctgc-TTCTgcCTCATTGctTTCAGTgaaagccaggagcagcc...64...atgtttatttt	gtaaaaaa
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B. Tau	tgtgggca	atcctggacctt...136...-----tggggcggggcctttctgc-CTCATTGctTTCAGTgaaagccaggagcagcc--...66...atgtttatttt	gtaaaaaa
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Figure 137: CS=10.92



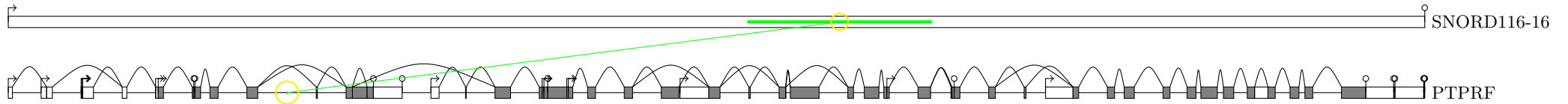
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B. Tau	acgtgctt	ggatc	cgatgatgactcccc	ca	-atgcattccttgg-aaatct	GAACAAAA	GAGT	gagccatcactaccg	tcctcatcggaactgaggtcc	agcacatt						
E. Cab	acgtgctt	ggatc	cgatgatgactcctc	at	-atgcattccttgg-aaaatt	GAACAAAA	GAGT	gagaactcactaccg	tctcctcgttctcgaactgaggtcc	ggcacatt						
S. Sus	ccgtgctt	ggatc	cgatgatgactcctc	ta	-aagcattccttgg-aaatct	GAACAAAA	GAGT	gagaactcactaccg	tcctcatcgaaactgaggtcc	ggcacatt						
L. Afr	acgtgcat	ggatt	gatgatgactgctat	ct	-aaacattccttgg-aaagct	GAACAAAA	GAGT	gaaaactcctaccg	tctcactcattg-aactgaggtcc	agcacatt						
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P. Abe	aacagcca	gtaagtgtcagg...	429...	--ttgagaggacatatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
C. Jac	aacagcca	gtaagtgtcagg...	428...	--tcgagagaacatatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
R. Nor	aacatcca	gtaagtttctga...	386...	--ttgagtaaatgtatttcaca	GCTCtTTTT	TGTTc	ccctcttcag	agctgtcc	
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O. Cun	aactgcca	gtaagttttagg...	392...	-tttgagaggaggtatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
C. Fam	aacagcca	gtaagttttcagg...	429...	.gtttgagagaag--atttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
F. Cat	aacagcca	gtaagttttcagg...	469...	.gattgagagaag--atttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
B. Tau	aacagcca	gtaagttttcagg...	375...	-tttgagagaagatatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
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S. Sus	aacagcca	gtaagttttcagg...	428...	-atgagaaaagatatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
L. Afr	aacagcca	gtaagttttcagg...	425...	-ttgagagaaggtatttcaca	GCTCtTTTT	ctGTTc	ccctcttcag	agctgtcc	
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Figure 138: CS=14



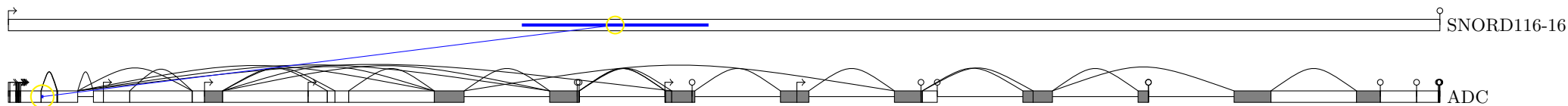
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O. Cun	atgtgctt	ggatc	cgatgatgactttcat-acatgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt	
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F. Cat	atgtgctt	ggatc	cgatgatgactttcat-acatgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt	
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R. Mac	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P. Tro	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P. Abe	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Jac	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M. Mus	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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L. Afr	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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Figure 139: CS=13.5



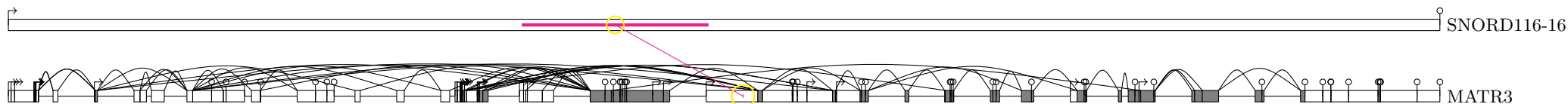
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P. Abe	ctgtgcat	ggatcgatgatgactttcataca--TGCATTCCTTGGAAAGC--tgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgacttccatatata--CATTCCTTGGAAAGC--tgaacaaaatgagtgaacactctataccgtcatcctcgtt-gaactgaggtcc	tgcaagtt
M. Mus	acgtgctt	ggatcctatgatgattcccagtcaca--CATTCCTTGGAAAGC--tgaacaaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcacatt
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L. Afr	acgtgcat	ggattgatgatgactgctatctaaa--CATTCCTTGGAAAGC--tgaacaaaatgagtgagaactcctaccgtcctcatt-gaactgaggtcc	agcacatt
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M. Mus	gTTTTAAG	GcgAGTG	-----caggagatggctgggggga--...57...-gcctcctcag	caggggccc
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C. Por	gTTTTAAG	GcgAGTGCA	-----gggggatagctcggggagc--...55...-gcctcctcag	caggggccc
O. Cun	gTTTTAAG	GcgAGTG	-----cggggggtggctggggagcc--...54...-gcctcctcag	caggggccc
F. Cat	gTTTTAAG	GcgAGTG	-----ggggagtggtcggggagcc--...51...-gcctcctcag	caggggccc
B. Tau	gTTTTAAG	GcgAGTGCG	-----gggagaccctcggggagcct...51...-gcctcctcag	caggggccc
E. Cab	gTTTTAAG	GcgAGTGCG	-----gggagtggtcggggagcct...51...-gcctcctcag	caggggccc
S. Sus	gTTTTAAG	GcgAGTG	-----ggggagtggtcggggagcc--...52...-gcctcctcag	caggggccc
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Figure 140: CS=10.14



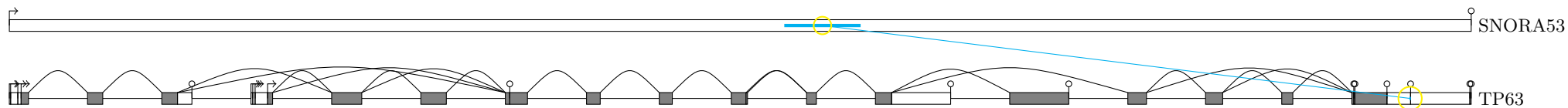
H. Sap	ctgtgcat	ggatcgatgatgactttcataca-	TGCATTcCTTGG	AAAGCTG	-aacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacatt
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P. Tro	ctgtgcat	ggatcgatgatgactttcataca-	TGCATTcCTTGG	AAAGCTG	-aacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacatt
P. Abe	ctgtgcgt	ggatcgatgatgactttcataca-	TGCATTcCTTGG	AAAGCTG	-aacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgacttccatata-	TACATTcCTTGG	AAAGCTG	-aacaaaatgagtgaacctctataccgtcatcctcgtt-gaactgaggtcc	tgacagtt
M. Mus	acgtgctt	ggatcctatgatgattccagtcaaa-	CATTcCTTGG	AAAAGCTG	-aacaaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgattccaataaa-	ACATTcCTTGG	AAAGCTG	-aacaaaatgagtgaaaactcaataccgccactgtcatcgtgactgaggtcc	agctcctg
C. Por	acgtgctt	ggatcagtgatgacactcaca-	TGCATTcCTTGG	AAAGCTG	-aacaaaatgagtgaaaactgtaccgtcattctcatc-gaactgaggtcc	agcacatt
O. Cun	atgtgctt	ggatcgatgatgactcccataa-	ACATTcCTTGG	AAAAGCTG	-aacaaaatgagtgagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgactcccaca-	TGCATTcCTTGG	AAA	-tctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactccc-	TCATaTGCATTcCTTGG	AAA	-tctgaacaaaatgagtgagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt
S. Sus	cogtgctc	ggatcgatgatgactcccttaa-	GCATTcCTTGG	AAA	-tctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgactgctatctaa-	ACATTcCTTGG	AAAAGCTG	-aacaaaatgagtgaaaactccttaccgtctcactcatt-gaactgaggtcc	agcacatt
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id=63669 gene=ENSG00000207263 name=SNORD116-16 segment=chr15.25327915.25328006.1 type=EN

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R. Mac	--aaaggaac	aca--acggaacca...4336...	-agtatgttga-caagttaatc	CAGTTTTTCCAAGAATGTG	catagcgtatattgagggcag-----	...168...	actttgctgcag	gagtgagg
P. Tro	--aaaggaac	aca--atggaacca...4351...	-agtatgttga-caagttaatc	CAGTTTTTCCAAGAATGTG	catagcgtatattgagggcag-----	...168...	actttgctgcag	gagtgagg
P. Abe	--aaaggaac	aca--atggaacca...4336...	-agtatgttga-caagttaatc	CAGTTTTTCCAAGAATGTG	catagcgtatattgagggcag-----	...168...	actttgctgcag	gagtgagg
C. Jac	--aaaggaac	aca--gtggaacca...4649...	-aagtatgttggc--aagtgatc	CAGTTTTTCCAAGAATGTG	catagcgtatattgagggcag-----	...168...	actttgctgcag	gagtgagg
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R. Nor	ctattggaag	a----aaggaacat...2638...	-ttgtattgatcaagttaatc	CAGTTTTTCCAAGAATGT	catagagtattgagggcag-----	...150...	actttgctgcag	gagtgagg
C. Por	ataaagaaac	a----gaagaatct...2912...	-gtatgttgaccaagttaatc	CAGTTTTTCCAAGAATGTG	catggcgtatattgagggcag-----	...165...	actttgctgcag	gagtgagg
O. Cun	--aaaagaac	acagaaaggaac--...3762...	-attatgttgaccaaatcaac	CAGTTTTTCCAAGAATGT	catagcgtatattgagggcag-----	...167...	actttgctgcag	gagtgagg
B. Tau	----aggaac	acaaaaggaatca...2653...	----tgttaaccaagtta-ccagtt-	TTTTCCAAGAATGTG	catggagtattgagggcag-----	...155...	actttgctgcag	gagtgagg
E. Cab	----aataac	acagaaggaacca...2815...	----tgttaaccaagtta-ccagtt-	TTTTCCAAGAATGTG	catggcgtatattgagggcag-----	...161...	actttgctgcag	gagtgagg
S. Sus	----aaaaac	acaaaaggaacca...2799...	----gttaaccaagtta-ccagtt-	TTTTCCAAGAATGTG	catggcgtatattgagggcag-----	...164...	actttgctgcag	gagtgagg
L. Afr	--aaaggaac	aag--aggaacca...2779...	-agtatgctaaccatt-acc	CAGTTTTTCCAAGAATGT	gcgtagcgtatattgagggcag-----	...167...	actttgctgcag	gagtgagg
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id=493883 gene=ENSG0000015479 name=MATR3 segment=chr5.138645732.138650363.1 type=AN

Figure 141: CS=11.7



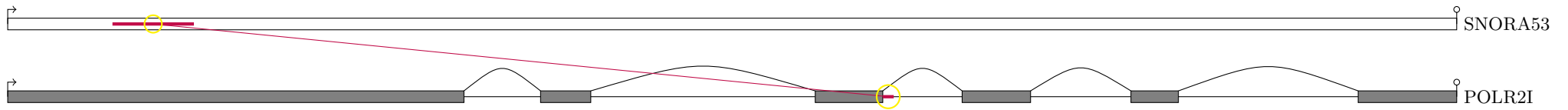
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R. Mac	atgactac	aacatgcttcct-...89...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtaagagaaat	-----	..78..	tgtgcgacact	tgtgttaa
P. Tro	atgaccac	aacatgcttcct-...89...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtaagagaaat	-----	..78..	tgtgcgacatt	tctgttaa
C. Jac	cagaccac	aacatgcttcct-...90...-ttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagagaaat	-----	..78..	tgtgcgacact	tttgttaa
M. Mus	cagatgcc	aacatgcttcct-...88...-actttgtggttgatatagtc	GAAGGtg	CTTGAGTCA	attggcatgtgagactaata	-----	..78..	tgtgcgacacg	tctgtgga
R. Nor	tggatgcc	aacatgcttcct-...89...-ctttgtggttgatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagactaata	-----	..78..	tgtgcgacact	tctgtaga
C. Por	caggcctc	aacatgcttcct-...88...-actttttggttgatagtc	GAAGGtg	CTTGAGTCA	attggcatgtgagagaaata	-----	..79..	tgtgcgacact	tgtgttaa
O. Cun	aaggccac	aacatgcttcct-...89...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagataaata	-----	..78..	tgtgcgacact	tctgttaa
C. Fam	ctggtcac	tacatgcttcct-...90...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagataaata	-----	..78..	tgtgcgacact	tttgttaa
B. Tau	caggccac	-acatgcttcct-...90...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtaagataaata	-----	..72..	tgtgcgacact	tccgttag
E. Cab	cagaccac	aacatgcttcct-...91...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagataaata	-----	..80..	tgtgcgacact	tctgttaa
O. Avi	caggccac	-acatgcttcct-...90...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtaagataaata	-----	..78..	tgtgcgacact	tctgttag
L. Afr	caagccgc	aacatgcttcct-...90...-cttttttggttgatatagtc	AAGGtg	CTTGAGTCA	attggcatgtgagattaata	-----	..78..	tgtgcgacagt	tctgttaa
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id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661.1 type=EN

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R. Mac	gggagtga	gc-ctcaccacgt-...152...-ctggcatctaattctgattc	TGGCTt	TAAGCCTT	caaaa	ctatagct	
P. Tro	gggagtga	gc-ctcaccatgt-...149...-ctggcatctaattctgattc	TGGCTt	TAAGCCTT	caaaa	ctatagct	
C. Jac	gggagtga	gg-ctcgccaagt-...152...-ctggcatctaattctgattc	TGGCTt	TAAGCCTT	caaaa	ctatagct	
M. Mus	gagaatga	gcgcccattgcg-...152...-ctgtcacctgattctgattc	TGGCTt	TAAGCCTT	caata	ctcttgct	
R. Nor	gagaatga	acgtccgtcgc-...152...-ctgtcacctgattctgattc	TGGCTt	TAAGCCTT	caata	ctcttgct	
C. Por	gggagtga	at-ccctccgtgt-...157...-tggcatctgattctgattc	GGCTt	TAAGCCTT	caag	ctattgct	
O. Cun	gggaatga	gc-tcctttacgt-...142...-ctggcgtctgattccgattc	TGGCTt	TAAGCCTT	caaaa	ctattgct	
C. Fam	gagagtga	gc-accagggtgt-...155...-ctggcatctgattctggttc	TGGCTt	TAAGCCTT	caaat	ctattgct	
B. Tau	gggagtga	gc-tgag-agttgt-...154...-tctgacctggcgctgattc	TGTTtc	TGGCTt	TAAGCCTT	cagct	
E. Cab	gggagtga	gc-cctactgcat-...155...-ctgatctgattctgattc	TGGCTt	TAAGCCTT	caaat	ctattgct	
O. Avi	gggagtga	gc-tgagcagttg-...205...-nnnnnccctgattcgttttc	TGGCTt	TAAGCCTT	cagct	ccctgtt	
L. Afr	gagagtga	gc-ccatttgtgt-...156...-ctgatgcctgattgcatttc	TGGCTt	TAAGCCTT	cagat	ctattgct	
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id=440709 gene=ENSG00000073282 name=TP63 segment=chr3\_189612292\_189612491.1 type=E3

Figure 142: CS=10.14



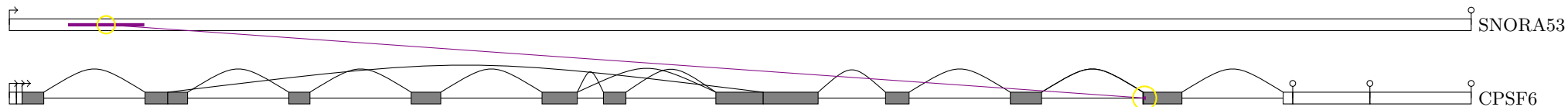
H. Sap	atgaccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...192...tgtgc-ggacatt	tctgttaa
R. Mac	atgactac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...189...tgtgc-ggacact	tgtgttaa
P. Tro	atgaccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...189...tgtgc-ggacatt	tctgttaa
P. Abe	atgaccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...191...-gtgcgggacatt	tctgttaa
C. Jac	cagaccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...190...tgtgc-ggacact	tttgttaa
M. Mus	cagatgcc	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--ggtcttgactga...189...tgtgc-ggacacg	tctgtgga
R. Nor	tggatgcc	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...189...tgtgc-ggacact	tctgtaga
C. Por	caggcctc	aacatgcttcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...189...tgtgc-ggacact	tgtgttaa
O. Cun	aaggccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatg--aatcttgaactga...189...tgtgc-ggacact	tctgttaa
C. Fam	ctggtcac	tacaTGCTtcCTTAgaTCCACCTTTgtggatgctagtcttgaact--...190...tgtgc-ggacact	tttgttaa
F. Cat	ctggccac	aacaTGCTtcCTTAgaTCCACCTTTgtggatgctaatcttgaact--...194...tgtgc-ggacact	tctgttaa
E. Cab	cagaccac	aacatgcttcCTTAgaTCCACCTTTgtggatgctagtcttgaact--...193...tgtgc-ggacact	tctgttaa
S. Sus	caggctgc	cacaTGCTtcCTTAgaTCCACCTTTgtggatgccaatcttggact--...191...tgtgc-ggacact	ttgtgttag
L. Afr	caagccgc	aacaTGCTtcCTTAgaTCCACCTTTgtggatgccaatcttgaact--...190...tgtgc-ggacagt	tctgttaa
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id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661\_1 type=EN

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R. Mac	gAAGTGA	gTGAGtGGCGggcc--ctgagctggggcggg---...45...acgtgcctgcag	cgaaactga
P. Tro	gAAGTGA	gTGAGtGGCGggcc--ctgagctggggcggg---...45...gcgtccctgcag	cgaaactga
P. Abe	gAAGTGA	gTGAGtGGCAggcc--ctgagctggggcggg---...45...gcgtccctgcag	cgaaactga
C. Jac	gAAGTGA	gTGAGtGGCGgtcc--cggagctggggcggg---...45...gcgtccctgcag	cgaaactga
M. Mus	gAAGTGA	gTGAGtGGCGggac--ctcgcttggggcacgg---...41...ctatgcctgcag	cgagctga
R. Nor	gAAGTGA	gTGAGtGGCGggac--cctggctcgggtacg---...41...ccatccctgcag	cgagctga
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C. Fam	gAAGTGA	gTGAGtGGCAggact-agagcctggg---gacgg...43...ctgctccccag	cgaaactga
F. Cat	gAAGTGA	gTGAGtGGCAggactcagagcctggg---gaag...46...ctgttccctcag	cgaaactga
E. Cab	gAAGTGA	gTGAG----tggc--cggaccggaactttgg---...50...cttccctcag	cgaaactga
S. Sus	gAAGTGA	gTGAGtGGCAggac--gggagctcggggcggg---...46...cttccatcag	cgaaactaa
L. Afr	gAAGTGA	gTGAGtGGCGggac--cggagccgaaggggga---...51...ctccttccgcag	cgagctga
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id=482876 gene=ENSG00000105258 name=POLR2I segment=chr19\_36605154\_36605240\_-1 type=IN

Figure 143: CS=12.6



H. Sap	atgaccac	aaCATGCTTCctTAGAtccacctttgtggatgaatc...201...tgtgcg-gacatt	tctgttaa
P. Tro	atgaccac	aaCATGCTTCctTAGAtccacctttgtggatgaatc...198...tgtgcg-gacatt	tctgttaa
P. Abe	atgaccac	aaCATGCTTCctTAGAtccacctttgtggatgaatc...200...-gtgcg-gacatt	tctgttaa
C. Jac	cagaccac	aaCATGCTTCctTAGAtccacctttgtggatgaatc...199...tgtgcg-gacact	ttgttaa
M. Mus	cagatgcc	aaCATGCTTCctTAGAtccacctttgtggatgggtc...198...tgtgcg-gacacg	tctgtgga
R. Nor	tggatgcc	aaCATGCTTCctTAGAtccacctttgtggatgaatc...198...tgtgcg-gacact	tctgtaga
C. Por	caggcctc	aaCATGCTTCctTAGAtccacctttgtggatgaatc...198...tgtgcg-gacact	tgtgttaa
O. Cun	aaggccac	aaCATGCTTCctTAGAtccacctttgtggatgaatc...198...tgtgcg-gacact	tctgttaa
C. Fam	ctggtcac	taCATGCTTCctTAGAtccacctttgtggatgctag...199...tgtgcg-gacact	ttgttaa
F. Cat	ctggccac	aaCATGCTTCctTAGAtccacctttgtggatgctaa...203...tgtgcg-gacact	tctgttaa
E. Cab	cagaccac	aaCATGCTTCctTAGAtccacctttgtggatgctag...202...tgtgcg-gacact	tctgttaa
L. Afr	caagccgc	aaCATGCTTCctTAGAtccacctttgtggatgcca...199...tgtgcg-gacagt	tctgttaa
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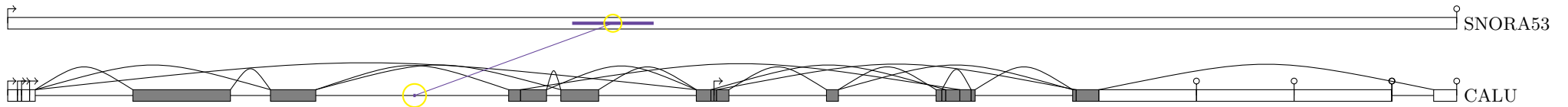
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P. Tro	ggatcaag	gtaaaactttcc...2132...gcattaatccagtaatttctTTAG	AAGaCGTg
P. Abe	ggatcaag	gtaaaactttcc...2131...gcattaatccagtaatttctTTAG	AAGaCGTg
C. Jac	ggatcaag	gtaaaactttcc...2126...gcattaatccagtaatttctTTAG	AAGaCGTg
M. Mus	ggatccag	gtaaaatggtcc...2828...gcattaatccagtaatttctTTAG	AAGaCGTg
R. Nor	ggatcaag	gtaaaatggtcc...2728...gcattaatccagtaatttctTTAG	AAGaCGTg
C. Por	ggatcgag	gtaaaactttcc...2940...gcattaatccagtaatttctTTAG	AAGaCGTg
O. Cun	ggatcaag	gtaaaactttcc...2536...gcattaatccagtaatttctTTAG	AAGaCGTg
C. Fam	ggatcaag	gtaaaactttcc...2409...gcattaatccagtaatttctTTAG	AAGaCGTg
F. Cat	ggatcaag	gtaaaactttcc...2710...gcattaatccagtaatttctTTAG	AAGaCGTg
E. Cab	ggatcaag	gtaaaactttcc...2045...gcattaatccagtaatttctTTAG	AAGaCGTg
L. Afr	ggatcaag	gtaaaacttttt...1970...gcattaatccagtaatttctTTAG	AAGaCGTg
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id=422175 gene=ENSG00000111605 name=CPSF6 segment=chr12\_69653978\_69656149\_1 type=IN VIEW

Figure 144: CS=12.96







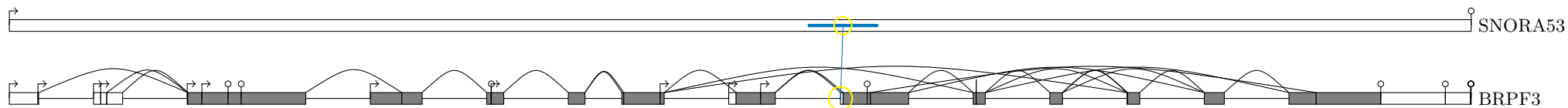
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R. Mac	atgactac	aacatgcttcct-...54...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tgtgttaa
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C. Jac	cagaccac	aacatgcttcct-...54...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tttgttaa
M. Mus	cagatgcc	aacatgcttcct-...54...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
R. Nor	tgatgcc	aacatgcttcct-...54...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
C. Por	caggcctc	aacatgcttcct-...54...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
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C. Fam	ctggtcac	tacatgcttcct-...145...acctgcatgttagtctt---aggTTCTGTAGAAATG-----:gctgtcaggactcgactcgtgtgc-ggacatt	tttgttaa
F. Cat	ctggccac	aacatgcttcct-...53...ctgtttctttagtctt---agt---CAGAGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::gctatcaggactcgactcgtgtgc-ggacatt	tctgttaa
B. Tau	caggccac	-acatgcttcct-...55...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tccgttag
E. Cab	cagaccac	aacatgcttcct-...53...ttgtttctttagtctt---ggg---CAGAGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
S. Sus	caggctgc	caatgcttcct-...56...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	ttgttag
O. Avi	caggccac	-acatgcttcct-...55...---tttcttgggttcc---agtcaa---AGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
L. Afr	caagccgc	aacatgcttcct-...52...ttgtttctttagtctt---agt---CAGAGAAacATCCAGCAA-cttttttggttgatagtagtcaaaggtgcttgagtcattgg:::actatcaggactcgactcgtgtgc-ggacatt	tctgttaa
	*	*****	** ***** * * * ***** ***** * **

id=26109 gene=ENSG0000212443 name=SNORA53 segment=chr12\_98993413\_98993661.1 type=EN

H. Sap	aggcttgg	gtaaggtaccac-...4929...ttctgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
R. Mac	aggcttgg	gtaaggtgccag-...4929...ttctgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
P. Tro	aggcttgg	gtaaggtaccac-...4929...ttctgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
P. Abe	aggcttgg	gtaaggtaccag-...4929...ttctgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
C. Jac	aggcttgg	gtaaggtgctag-...4929...ttctgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
M. Mus	aggcttgg	gtaagatgtctg-...4536...acctgtggttttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
R. Nor	aggcttgg	gtaagatgtctg-...4929...tgtttttttttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
C. Por	aggctggg	gtaaggtaccag-...4929...ctttgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaaattg
O. Cun	aggcttgg	gtaagatgccc-...4929...ccttgtgtcttttaacctTTGCTGGATTCTctgcattttctacag	aaagattg
C. Fam	aggcttgg	gtaaggtgccaa-...4945...cctctgtgctgatttctctg---CATTtTCTACAGAA-----	--aattg
F. Cat	agacttgg	gtaaggtgccag-...4929...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
B. Tau	agacttgg	gtaa-gtgccagc-...4742...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
E. Cab	agacttgg	gtaaggtgccag-...4776...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
S. Sus	agacttgg	gtgagctaccag-...4929...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
O. Avi	agacttgg	gtaaggtgccag-...4731...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
L. Afr	aggcttgg	gtaaggtgccac-...4728...ccttgtgtcttttaacctTTGCTGGATTCTCTGcattttctacag	aaagattg
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id=606 gene=ENSG0000128595 name=CALU segment=chr7\_12838859\_128394315.1 type=IN

Figure 146: CS=11.2



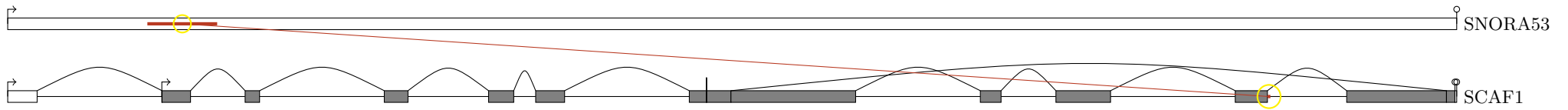
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R. Mac	atgactac	aacatgcttcct-...93...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtaagagaaatatac...	76...	tgtcggacact	tgtgttaa
P. Tro	atgaccac	aacatgcttcct-...93...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtaagagaaatatac...	76...	tgtcggacatt	tctgttaa
M. Mus	cagatgcc	aacatgcttcct-...93...	gttggttgtatagtcgaagg	TGCTTGAGt	CATT	ggcatgtgagactaatatac...	76...	tgtcggacacg	tctgtgga
R. Nor	tggatgcc	aacatgcttcct-...93...	gttggttgtacagtcgaagg	TGCTTGAGt	CATT	ggcatgtgagactaatatac...	76...	tgtcggacact	tctgtaga
C. Por	caggcctc	aacatgcttcct-...93...	tttggttgtacagtcgaagg	TGCTTGAGt	CATT	ggcatgtgagagaaatatac...	76...	tgtcggacact	tgtgttaa
O. Cun	aaggccac	aacatgcttcct-...93...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtgagataaatatac...	76...	tgtcggacact	tctgttaa
C. Fam	ctggtcac	tacatgcttcct-...94...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtgagataaatatac...	76...	tgtcggacact	tttgttaa
B. Tau	caggccac	-acatgcttcctt...94...	tttggttgtatagtcgaagg	TGCTTGAGt	CATT	ggcatgtaagataaatatac...	76...	tgtcggacact	tccgttag
E. Cab	cagaccac	aacatgcttcct-...95...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtgagataaatatac...	78...	tgtcggacact	tctgttaa
S. Sus	caggctgc	acatgcttcct-...95...	tttggttgtatagtcaaagg	TGCTTGAGt	CATT	ggcatgtgagataaatatac...	76...	tgtcggacact	ttgttag
O. Avi	caggccac	-acatgcttcctt...94...	tttggttgtatagtcgaagg	TGCTTGAGt	CATT	ggcatgtaagataaatatac...	76...	tgtcggacact	tctgttag
L. Afr	caagccgc	aacatgcttcct-...94...	tttggttgtatagtcgaagg	TGCTTGAGt	CATT	ggcatgtgagatataatatac...	76...	tgtcggacagt	tctgttaa
*	*****	*****	*****	*****	*****	*****	*****	*****	* **

id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661.1 type=EN

H. Sap	ggacagag	gtgagagatagt...2254...	taggagcagactctttctaa	AATGTTCAAGCAg	attctctt
R. Mac	ggacagag	gtgagagatagt...1845...	taggagcagactctttctaa	AATGTTCAAGCAg	gttctctt
P. Tro	ggacagag	gtgagagatagt...1948...	taggagcagactctttctaa	AATGTTCAAGCAg	attctctt
M. Mus	ggacagag	gtgagagagtct...2382...	taggagcagactgtttctag	AATGTTCAAGCAg	gttctctt
R. Nor	ggaccgag	gtgagagaggca...2452...	taggagcagactgtttctag	AATGTTCAAGCAg	gttctctt
C. Por	ggacagag	gtgagagagagg...1328...	cagggcagacgctttctaa	AATGTTCAAGCAg	gttctctt
O. Cun	ggacagag	gtgagagaaact...1769...	tagtggcagactctttctaa	AATGTTCAAGCAg	gttctctt
C. Fam	ggacagag	gtgagagacagg...1503...	taggtacagactttttctaa	AATGTTCAAGCAg	gttctctt
B. Tau	ggacagag	gtgagagacagt...1749...	tagggcagactttttctaa	AATGTTCAAGCAg	gttctctt
E. Cab	ggacagag	gtgagaggcagt...1583...	tagggcagactttttctaa	AATGTTCAAGCAg	gttctttt
S. Sus	ggacagag	gtgagagacagt...1536...	tagcaacagactttttctaa	AATGTTCAAGCAg	gttctctt
O. Avi	ggacagag	gtgagagacagt...1722...	nagggcagactttttctaa	AATGTTCAAGCAg	gttctctt
L. Afr	ggacagag	gtgagagagagt...1771...	tagggcagactctttctaa	AATGTTCAAGCAg	gttctctt
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id=226825 gene=ENSG00000096070 name=BRPF3 segment=chr6\_36179338\_36181636.1 type=IN

Figure 147: CS=19.37



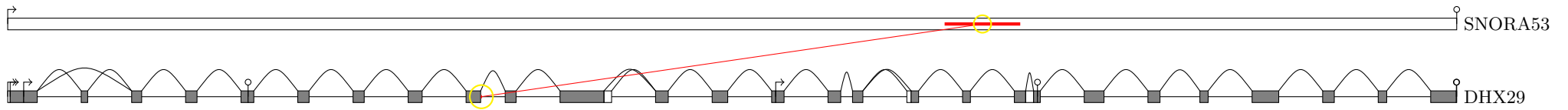
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R. Mac	atgactac	aacatgcttccttaga	TCCACCT	TGTGGA	tg--aatcctgaactgagttcc...184...tgtgcgacact	tgtgttaa			
C. Jac	cagaccac	aacatgcttccttaga	TCCACCT	TGTGGA	tg--aatcctgaactgagttct...185...tgtgcgacact	tttgttaa			
M. Mus	cagatgcc	aacatgcttccttaga	TCCACCT	TGTGGA	tg--ggtcctggactgagttct...184...tgtgcgacacg	tctgtgga			
R. Nor	tgatgcc	aacatgcttccttaga	TCCACCT	TGTGGA	tg--aatcctgaactgagttct...184...tgtgcgacact	tctgtaga			
C. Por	caggcctc	aacatgcttccttaga	TCCACCT	TGTGGA	tg--aatcctgaactgagttct...184...tgtgcgacact	tgtgttaa			
O. Cun	aaggccac	aacatgcttccttaga	TCCACCT	TGTGGA	tg--aatcctaaactgagttct...184...tgtgcgacact	tctgttaa			
C. Fam	ctggtcac	tacatgcttccttaga	TCCACCT	TGTGGA	tgctagtcctgaactgagtt...185...tgtgcgacact	tttgttaa			
F. Cat	ctggccac	aacatgcttccttaga	TCCACCT	TGTGGA	tgctaatcctgaactgagtt...189...tgtgcgacact	tctgttaa			
E. Cab	cagaccac	aacatgcttccttaga	TCCACCT	TGTGGG	tgtagtcctgaactgtgtt...188...tgtgcgacact	tctgttaa			
S. Sus	caggctgc	cacatgcttccttaga	TCCACCT	TGTGGA	tgccaatcctggactgagtt...186...tgtgcgacact	ttgttag			
L. Afr	caagcgc	aacatgcttccttaga	TCCACCT	TGTGGA	tgccaatcctgaactgagtt...185...tgtgcgacagt	tctgttaa			
	*	*****	*****	**	***	****	*****	*	**

id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661\_1 type=EN

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R. Mac	tCCACAAG	GTGGG	----caccagagagaggggcaga----	...270...ccggccccccag	atctgcca		
C. Jac	tCCACAAG	GTGGG	----cacctggagagaggggcaga----	...269...ccggtccccccag	atctgcca		
M. Mus	tCCACAAG	GTGGG	----gccaaggggactgactgggg----	...88...ctggttctgcag	atctgcca		
R. Nor	tCCACAAG	GTGGG	----gccaagggactt--tgggattg...	82...ctggttctgcag	atctgcca		
C. Por	tCCACAAG	GTGGG	----gcatgggtccgaggcatgt---	99...ctggctccccag	atctgcca		
O. Cun	tCCACAAG	GTGGG	gcgaggccaggccggggg-----	115...cctgccccccag	atctgtca		
C. Fam	tCCACAAG	GTGGG	----gccc--agaggggaacagatca...	245...ctcactccctag	atctgcca		
F. Cat	tCCACAAG	GTGGG	----gccc--agcgggggacagatcc...	257...ctcacccttag	atctgcca		
E. Cab	tCCACAAG	GTGGG	----gccccggggcagatacacg----	250...ctcgtccccccag	atctgcca		
S. Sus	tCCACAAG	GTGGG	----gccc--cagggacagaaagc...	259...ctcgccccccag	atctgcca		
L. Afr	tCCACAAG	GTGGG	----gcacagacggggatggagga---	250...cttgctgcccag	atctgcca		
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id=465896 gene=ENSG00000126461 name=SCAF1 segment=chr19\_50161147\_50161464\_1 type=IN

Figure 148: CS=15.36



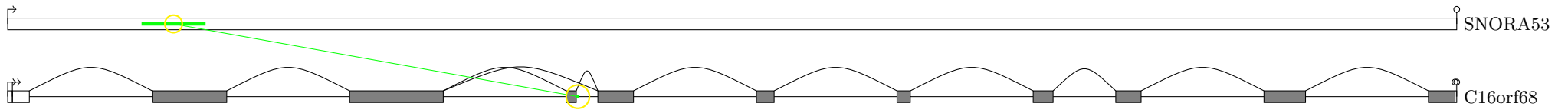
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R. Mac	atgactac	aacatgcttcct...111...-----ggtgcttgagtcattggcat	<b>GTAAGAGAAAATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tgtgttaa
P. Tro	atgaccac	aacatgcttcct...105...gtcaaagggtgcttgagtc	<b>TGGCATGTAAGAGAAAATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacatt	tctgttaa
P. Abe	atgaccac	aacatgcttcct...105...gtcaaagggtgcttgagtc	<b>TGGCATGTAAGAGAAAATACCTGCAT</b>	gttagt-ctaactgttctgata...52...-gtgcgggacatt	tctgttaa
C. Jac	cagaccac	aacatgcttcct...115...-----gcttgagtcattggcatgtg	<b>AGAGAAAATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tttgttaa
R. Nor	tggatgcc	aacatgcttcct...113...-----tgcttgagtcattggcatgt	<b>GAGActAAATcACCTGCAT</b>	gttagt-cctcagggttctgac...50...tgtgc-ggacact	tctgtaga
C. Por	caggcctc	aacatgcttcct...112...-----gtgcttgagtcattggcatg	<b>TGAGAGAAAATACCTGCAT</b>	atcagt-ccaaagtctgata...50...tgtgc-ggacact	tgtgttaa
O. Cun	aaggccac	aacatgcttcct...118...-----gagtcattggcatgtgagat	<b>AAATATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tctgttaa
C. Fam	ctggtcac	tacatgcttcct...119...-----gagtcattggcatgtgagat	<b>AAATATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tttgttaa
B. Tau	caggccac	-acatgcttcct...119...-----gagtcattggcatgtaagat	<b>AAATATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tccgttaa
E. Cab	cagaccac	aacatgcttcct...114...-----gtgcttgagtcattggcatg	<b>TGAGatAAATATACCTGCAT</b>	gttagt-ctaactgttctgata...52...tgtgc-ggacact	tctgttaa
S. Sus	caggctgc	cacatgcttcct...120...-----gagtcattggcatgtgagat	<b>AAATATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	ttgtgtta
O. Avi	caggccac	-acatgcttcct...119...-----gagtcattggcatgtaagat	<b>AAATATACCTGCAT</b>	gttagt-ctaactgttctgata...50...tgtgc-ggacact	tctgttaa
L. Afr	caagccgc	aacatgcttcct...114...-----tgcttgagtcattggcatgt	<b>GAGAttAAATATACCTGCAT</b>	gttagt-cgtaggttctgata...50...tgtgc-ggacagt	tctgttaa
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id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661.1 type=EN

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R. Mac	aa <b>ATGTAG</b>	<b>GTATGTTTgTTTTGTTTT</b>	gtttttgtttttttttga-----...240...-gcttcctttag	ggtaggg
P. Tro	aa <b>ATGTAG</b>	<b>GTATGTTTTTgTTGTTGTTG</b>	-ttttaattaactgaatgaa-----...226...-gcttcctttag	ggtaggg
P. Abe	aa <b>ATGTAG</b>	<b>GTATGTTTTTTTgTTGTTGTTG</b>	---ttgttgtttttaataac-----...227...-gcttcctttag	ggtaggg
C. Jac	aa <b>ATGTAG</b>	<b>GTATGTTTTTTT</b>	-----aattaactcaacgaacttt-----...221...-gcttcctttag	ggtagga
R. Nor	aa <b>ATGTAG</b>	<b>GTaTGTTTTTC</b>	-----tggttaactgaatgaactt-----...397...-gcttcctttag	ggtaagag
C. Por	aa <b>ATGTAG</b>	<b>GTATGTTTCTgCTTA</b>	-----actgagagaacttctaataa...216...-cttcctttag	agtaaggg
O. Cun	aa <b>ATGTAG</b>	<b>GTATGTTT</b>	-----ttccgattaactgaac---ttt-----...220...-gcttcctttag	ggtaggg
C. Fam	aa <b>ATGTAG</b>	<b>GTATGTTT</b>	-----ttctaactg--tgaatgaactc-----...211...-gcttcctttag	ggtaggg
B. Tau	aa <b>ATGTAG</b>	<b>GTATGTTT</b>	-----ttgttaactgagtgactt-----...221...-gcttcctttag	ggtaggg
E. Cab	aa <b>ATGTAG</b>	<b>GTATGTTTTTTG</b>	-----gtagccaaatgaactttta-----...218...-gcttcctttag	ggtaggg
S. Sus	aa <b>ATGTAG</b>	<b>GTATGTTT</b>	-----ttgtgaactgagtgactt-----...219...-gcttcctttag	ggtaggg
O. Avi	aa <b>ATGTAG</b>	<b>GTATGTTT</b>	-----ttgttaactgagtgactt-----...220...-gcttcctttag	ggtaggg
L. Afr	aa <b>ATGTAG</b>	<b>GTATGTTTTTC</b>	-----tgaataactgaatgaactt-----...356...-gcttcctttag	ggtaggg
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id=232346 gene=ENSG0000067248 name=DHX29 segment=chr5\_54581245\_54581523\_-1 type=IN

Figure 149: CS=13.3



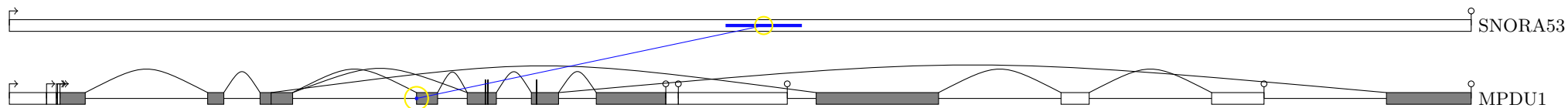
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R.Mac	atgactac	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...187...tgtgc-ggacact	tgtgttaa					
P.Tro	atgaccac	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...187...tgtgc-ggacatt	tctgttaa					
P.Abe	atgaccac	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...189...-gtgcgggacatt	tctgttaa					
C.Jac	cagaccac	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...188...tgtgc-ggacact	tttgttaa					
M.Mus	cagatgcc	aacatgcttccttag	ATCCACCTTTGT	ggatg--ggtcttggactgagt...187...tgtgc-ggacacg	tctgtgga					
R.Nor	tggatgcc	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...187...tgtgc-ggacact	tctgtaga					
C.Por	caggcctc	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttgaactgagt...187...tgtgc-ggacact	tgtgttaa					
O.Cun	aaggccac	aacatgcttccttag	ATCCACCTTTGT	ggatg--aatcttaactgagt...187...tgtgc-ggacact	tctgttaa					
C.Fam	ctggtcac	tacatgcttccttag	ATCCACCTTTGT	ggatgctagtcttgaactga--...188...tgtgc-ggacact	tttgttaa					
F.Cat	ctggccac	aacatgcttccttag	ATCCACCTTTGT	ggatgctaatcttgaactga--...192...tgtgc-ggacact	tctgttaa					
E.Cab	cagaccac	aacatgcttccttag	ATCCACCTTTGT	gggtgttagtcttgaactgt--...191...tgtgc-ggacact	tctgttaa					
S.Sus	caggctgc	caacatgcttccttag	ATCCACCTTTGT	ggatgccaatcttggactga--...189...tgtgc-ggacact	ttgttag					
L.Afr	caagccgc	aacatgcttccttag	ATCCACCTTTGT	ggatgccaatcttgaactga--...188...tgtgc-ggacagt	tctgttaa					
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id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12.98993413.98993661.1 type=EN

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R.Mac	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...49...tcttccctccag	gtatggcg		
P.Tro	gCAAGcaG	GTGGGT	aggcttgtccgcttctgt...50...tcttccctccag	gtgtggcg		
P.Abe	gCAAGcaG	GTGGGT	aggcttgtccgcttctgt...50...tcttccctccag	gtgtggcg		
C.Jac	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...50...tcttccctccag	gtgtggcg		
M.Mus	gCAAGcaG	GTGGGT	aggcttgtccgcttctgt...50...tcttccctccag	gtgtggcg		
R.Nor	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...48...tcttccctccag	gtgtggcg		
C.Por	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...47...tcttccctccag	gtgtggca		
O.Cun	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...42...tcttccctccag	gtgtggcg		
C.Fam	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...51...tcttccctccag	gtgtggcg		
F.Cat	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...51...tcttccctccag	gtgtggcg		
E.Cab	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...51...tcttccctccag	gtgtggcg		
S.Sus	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...52...tcttccctccag	gtgtggcg		
L.Afr	gCAAGcaG	GTGGGT	aggcttgtccgcttcccg...51...atgtccctccag	gtgtggcg		
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id=384238 gene=ENSG0000067365 name=C16orf68 segment=chr16.8728937.8729024.1 type=IN

Figure 150: CS=10.92



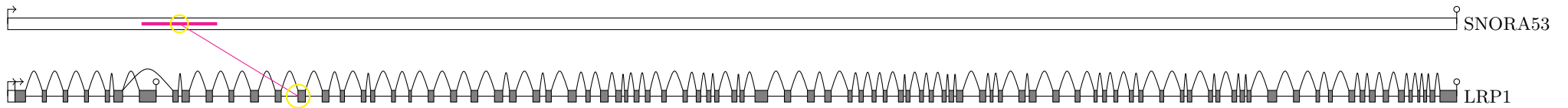
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R.Mac	atgactac	aacatgcttcct-...76...aaacatccagcaacttttttGGTTGTAAGTCA	AAGG	tgcttgagtcattggcatgt--...89...tgtgc-ggacatt	tgtgttaa
P.Tro	atgaccac	aacatgcttcct-...76...aaacatccagcaacttttttGGTTGTAAGTCA	AAGG	tgcttgagtcattggcatgt--...89...tgtgc-ggacatt	tctgttaa
P.Abe	atgaccac	aacatgcttcct-...76...aaacatccagcaacttttttGGTTGTAAGTCA	AAGG	tgcttgagtcattggcatgt--...91...-gtgcgggacatt	tctgttaa
R.Nor	tggatgcc	aacatgcttcct-...76...aaacatccagcaactttgtGGTTGTAcAGTCA	AAGGTG	cttgagtcattggcatgtga...87...tgtgc-ggacatt	tctgttaa
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S.Sus	caggctgc	cacatgcttcct-...78...aagcatccagcaacttttttGGTTGTAcAGTCA	AAGGTG	cttgagtcattggcatgt--...89...tgtgc-ggacatt	ttggttag
O.Avi	caggccac	-acatgcttcctt...77...aaacatccagcaacttttttGGTTGTAcAGTCA	AAGGTG	cttgagtcattggcatgt--...89...tgtgc-ggacatt	tctgttag
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P.Tro	ccattcag	gtgaggggccca...572...----ccgcctttcttctcccaac	TCTTGACTcTGCAG	CTcttggg
P.Abe	ccattcag	gtgaggggccca...566...----ccgcctttcttctcccaac	TCTTGACTcTGCAG	CTcttggg
R.Nor	cccttcag	gtgagagtcac...389...aggcctgccttttcttctccCACCTCTTGACTcTGCAG	CTcttggg	
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O.Avi	cccttcag	gtgagggaaagc...295...----ctgcctttcttcttcccaac	TCTTGACTcTGCAG	CTcttggg
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Figure 151: CS=11.7



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R. Mac	atgactac	aacatgcttccttag	ATCCACCttTGTGG	--atg--aatcttgaactgagttc----	...185...	tgtgc-ggacact	tgtgttaa
P. Tro	atgaccac	aacatgcttccttag	ATCCACCttTGTGG	--atg--aatcttgaactgagttc----	...185...	tgtgc-ggacatt	tctgttaa
P. Abe	atgaccac	aacatgcttccttag	ATCCACCttTGTGG	--atg--aatcttgaactgagttc----	...187...	-gtgcggacatt	tctgttaa
M. Mus	cagatgcc	aacatgcttccttag	ATCCACCttTGTGG	--atg--ggtcttgactgagttc----	...185...	tgtgc-ggacacg	tctgtgga
R. Nor	tggatgcc	aacatgcttccttag	ATCCACCttTGTGG	--atg--aatcttgaactgagttc----	...185...	tgtgc-ggacact	tctgtaga
C. Por	caggcctc	aacatgcttccttag	ATCCACCttTGTGG	--atg--aatcttgaactgagttc----	...185...	tgtgc-ggacact	tgtgttaa
O. Cun	aaggccac	aacatgcttccttag	ATCCACCttTGTGGATG	----aatcttaactgagttctac...	...182...	tgtgc-ggacact	tctgttaa
C. Fam	ctggtcac	tacatgcttccttag	ATCCACCttTGTGG	--atgctagtcttgaactgagt-----	...186...	tgtgc-ggacact	tttgttaa
F. Cat	ctggccac	aacatgcttccttag	ATCCACCttTGTGG	--atgctaactcttgaactgagt-----	...190...	tgtgc-ggacact	tctgttaa
E. Cab	cagaccac	aacatgcttccttag	ATCCACCttTGTGGGTGTTA	--gtcttgaactgtgttctact...	...183...	tgtgc-ggacact	tctgttaa
S. Sus	caggctgc	caacatgcttccttag	ATCCACCttTGTGGATG	cc--aatcttgactgagttct---	...184...	tgtgc-ggacact	ttgtgttag
L. Afr	caagccgc	aacatgcttccttag	ATCCACCttTGTGG	--atgccaatctcgaactgagt-----	...186...	tgtgc-ggacagt	tctgttaa
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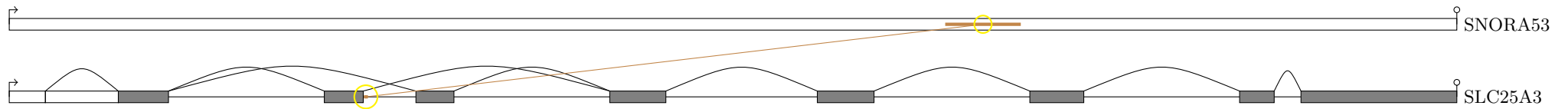
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R. Mac	ctcaatgg	gtgagtcctccc...855...	-----tggtgctgaccagtcactgc	CCACAG	GTGGATgt
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M. Mus	ctcaatgg	gtgagtcctccc...741...	-----tggtgctgaccagtcactgc	CCACAG	GTGGATgt
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C. Por	ctcaatgg	gtgagtcctccc...803...	-----tggtgctgaccagtcactgc	CCACAG	GTGGATgt
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E. Cab	ctcaatgg	gtgagtcctccc...817...	gcatgtgtggtgctgaccaa	TGGCtGCCACAG	GTGGATgt
S. Sus	ctcaatgg	gtgagtcctccc...790...	----agggggtgctgaccagccgc	TGTCCACAG	GTGGATgt
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id=153604 gene=ENSG00000123384 name=LRP1 segment=chr12\_57553789\_57554675\_1 type=IN VIEW

Figure 152: CS=14.04





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P. Tro  atgaccac aacatgcttcct-...117...tgagtcattggcatgtaagaGAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacatt tctgttaa
P. Abe  atgaccac aacatgcttcct-...117...tgagtcattggcatgtaagaGAATAACCTGCATgtagtctaactgtctgata...52...-gtgcgggacatt tctgttaa
C. Jac  cagaccac aacatgcttcct-...118...tgagtcattggcatgtagaGAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
C. Por  caggcctc aacatgcttcct-...118...-gagtcattggcatgtagagAAATAACCTGCATatcagtcctaaagtctgata...50...tgtgcg-gacact tctgttaa
O. Cun  aaggccac aacatgcttcct-...118...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
C. Fam  ctggtcac tacatgcttcct-...119...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
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B. Tau  caggccac -acatgcttcct-...119...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
E. Cab  cagaccac aacatgcttcct-...120...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...52...tgtgcg-gacact tctgttaa
S. Sus  caggctgc cacatgcttcct-...120...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
O. Avi  caggccac -acatgcttcct-...119...-gagtcattggcatgtagagAAATAACCTGCATgtagtctaactgtctgata...50...tgtgcg-gacact tctgttaa
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R. Mac  -----
P. Tro  -----
P. Abe  a-----
C. Jac  -----
C. Por  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaaccatacagcattgggttcctctagatctggt
O. Cun  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt
C. Fam  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt
F. Cat  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt
B. Tau  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt
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S. Sus  -----
O. Avi  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt
L. Afr  aacagagcagtatagctgtgactatggatctggcagattccttatcctttgtggacttggaggaattatagctgtggcacaacacatacagcattgggttcctctagatctggt

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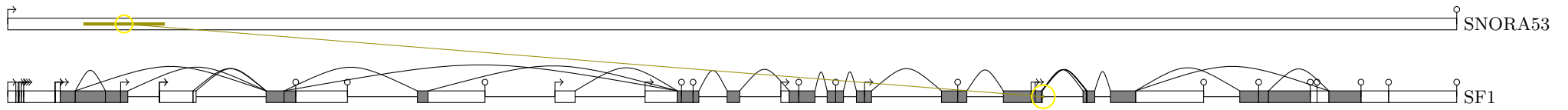
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P. Tro  -----gaATG-CAG GTTGTGTTT-gcatgctggac----tagagcata---ttgaagcatga::: :taaaatgcatggtgtgtcttctcttactacag agtacagt
P. Abe  -----ATGCcAG GTTGTGTTT-gcatgctggac----tagagcata---ttgaagcatga::: :taaaatgcatggtgtgtcttctcttactacag agtacagt
C. Jac  -----gaATG-CAG GTTGTGTTT-gcatgctggac----tagagcata---ttgaagcatga::: :taaaatgcatggtgtgtcttctcttactacag agtacagt
C. Por  taaatgcagaATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
O. Cun  taaatgcagaATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
C. Fam  taaatgcaggATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
F. Cat  taaatgcagaATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
B. Tau  taaatgcaggATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
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S. Sus  -----gaATG-CAG GTTGTGTTT-ttgcaggttggactaaataaagcatatgttgaagcatgg::: :taaaatgcatggtgtgtcttctcttactacag agtacagt
O. Avi  taaatgcaggATG-CAG GTTGTGTT-----: : : :taaaatgcatggtgtgtcttctcttactacag -----t
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Figure 153: CS=16.52



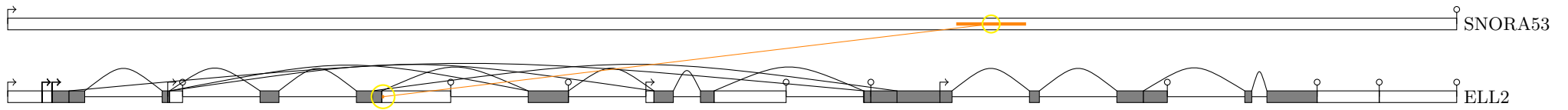
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P. Tro	atgaccac	aacATGCTTcCTTAgaTCCA	cctttgtggatg--aatcctga...	194...	tgtgc-ggacatt	tctgttaa
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M. Mus	cagatgcc	aacATGCTTcCTTAgaTCCA	cctttgtggatg--ggtccttg...	194...	tgtgc-ggacacg	tctgtgga
R. Nor	tggatgcc	aacATGCTTcCTTAgaTCCA	cctttgtggatg--aatcctga...	194...	tgtgc-ggacact	tctgtaga
C. Por	caggcctc	aacATGCTTcCTTAgaTCCA	cctttgtggatg--aatcctga...	194...	tgtgc-ggacact	tgtgttaa
O. Cun	aaggccac	aacATGCTTcCTTAgaTCCA	cctttgtggatg--aatcctaa...	194...	tgtgc-ggacact	tctgttaa
C. Fam	ctggtcac	tacATGCTTcCTTAgaTCCA	cctttgtggatgctagtctt--...	195...	tgtgc-ggacact	tttgttaa
F. Cat	ctggccac	aacATGCTTcCTTAgaTCCA	cctttgtggatgctaatcct--...	199...	tgtgc-ggacact	tctgttaa
E. Cab	cagaccac	aacATGCTTcCTTAgaTCCA	cctttgtggatgctagtctt--...	198...	tgtgc-ggacact	tctgttaa
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L. Afr	caagccgc	aacATGCTTcCTTAgaTCCA	cctttgtggatgccaatctc--...	195...	tgtgc-ggacagt	tctgttaa
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R. Mac	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	250...	tgtcctgctaag	tccttgct
P. Tro	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggg...	251...	tgtcctgctaag	tccttgct
P. Abe	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	255...	tgtcctgctaag	tccttgct
C. Jac	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	249...	tgtcctgctaag	tccttgct
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C. Por	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	186...	tgtcctgctaag	ttcctgct
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F. Cat	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	267...	tgtcctgctaag	tccttgct
E. Cab	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	261...	tgtcctgctaag	tccttgct
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L. Afr	aTGG	GTAA	GtAAGTGT	cagaccagaaaccttggggc...	216...	tgtcctgctaag	tccttgct
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Figure 154: CS=10.92



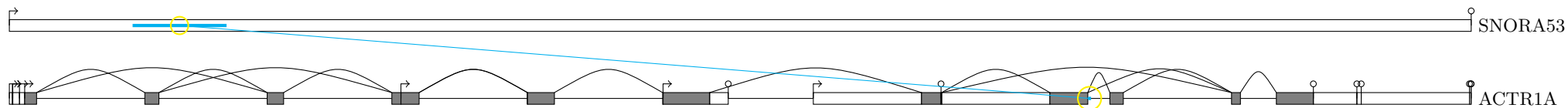
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M. Mus	cagatgcc	aacatgcttcct-...120..gtcattggcatgtgagactaa	ATATACCTGCATG	ctagtcttcaggttctgatg--...49...tgtgc-ggacacg	tctgtgga
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O. Cun	aaggccac	aacatgcttcct-...120..gtcattggcatgtgagataaa	ATATACCTGCATGT	tagtcta-atggttctgataga...48...tgtgc-ggacact	tctgttaa
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H. Sap	aTATGTAG	GTttGTAT	agatatctttcttctccttg...405...tttgcttacatt	ttcagagc
R. Mac	aTATGTAG	GTttGTAT	agatacctttcttctccttg...405...tttgcttacatt	ttcagagc
P. Tro	aTATGTAG	GTttGTAT	agatatctttcttctccttg...403...tttgcttacatt	ttcagagc
P. Abe	aTATGTAG	GTttGTAT	agatatctttcttctccttg...405...tttacttacatt	ttcagagc
C. Jac	aTATGTAG	GTttGTAT	agatacctttcttctccttg...402...tttgcacacatt	ttcagagc
M. Mus	aTATGTAG	GTttGTAT	agatgtatttctccatcaca...374...tttgcttctggt	ttcagagg
C. Por	aTATGTAG	GTttGTAT	agatgtctttcttctccttg...401...agattttatatt	ttctgagg
O. Cun	gTATGTAG	GTttGTAT	atatagttcttcttctccct...376...tttcttatagt	ttcaaaga
C. Fam	aTATGTAG	GTttGTAT	agatatcgttctccttctca...371...cattagtagaat	ttcagagg
F. Cat	aTATGTAG	GTttGTAT	agatatcgttctccttctca...330...cattgtagaat	ttcagagg
B. Tau	aTATGTAG	GTtgGTAT	agatatatttctccttcttg...370...tttctattaga	gtcaaagg
E. Cab	aTATGTAG	GTttGTAT	agatacctttctccttctcg...393...tttgcttacgtt	ttcagagg
S. Sus	aTATGTAG	GTttGTAT	agatatcttcttcttctca...372...tattagtagaat	ttcaaagg
L. Afr	gTATGTAG	GTttGTAT	agatatcttctcctccttag...396...tttgcttacatt	tttaggtg
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id=71619 gene=ENSG00000118985 name=ELL2 segment=chr5\_95249030\_95249474.-1 type=AN

Figure 155: CS=10.92



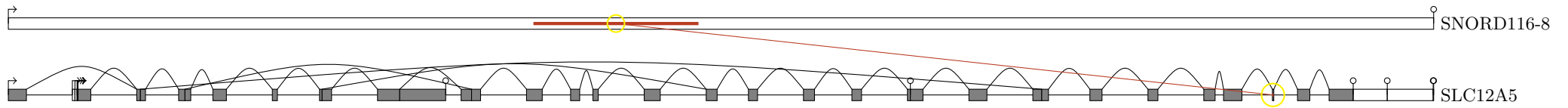
H. Sap	atgaccac	aacatgcttccttAGATccACCTTtgTGGAtg--aatcttgaactgagttcc...187...tgtgcg-gacatt	tctgttaa
R. Mac	atgactac	aacatgcttccttAGATCcacCTTtgTGGAtg--aatcttgaactgagttcc...184...tgtgcg-gacact	tgtgttaa
P. Tro	atgaccac	aacatgcttccttAGATccACCTTtgTGGAtg--aatcttgaactgagttcc...184...tgtgcg-gacatt	tctgttaa
P. Abe	atgaccac	aacatgcttccttAGATccACCTTtgTGGAtg--aatcttgaactgagttcc...186...-gtgcg-gacatt	tctgttaa
C. Jac	cagaccac	aacatgcttccttAGATCcacCTTtgTGGAtg--aatcttgaactgagttct...185...tgtgcg-gacact	tttgttaa
M. Mus	cagatgcc	aacatgcttccttAGATCcacCTTtgTGGAtg--ggcttggactgagttct...184...tgtgcg-gacacg	tctgtgga
R. Nor	tggatgcc	aacatgcttccttAGATCcacCTTtgTGGAtg--aatcttgaactgagttct...184...tgtgcg-gacact	tctgtaga
C. Por	caggcctc	aacatgcttccttAGATCcacCTTtgTGGAtg--aatcttgaactgagttct...184...tgtgcg-gacact	tgtgttaa
O. Cun	aaggccac	aacatgcttccttAGATCcacCTTtgTGGAtg--aatcttgaactgagttct...184...tgtgcg-gacact	tctgttaa
C. Fam	ctggtcac	tacatgcttccttAGATCcacCTTtgTGGAtgctagtcttgaactgagtt--...185...tgtgcg-gacact	tttgttaa
F. Cat	ctggccac	aacatgcttccttAGATCcacCTTtgTGGAtgctaactcttgaactgagtt--...189...tgtgcg-gacact	tctgttaa
S. Sus	caggctgc	cacatgcttccttAGATCcacCTTtgTGGAtgccaactcttggactgagtt--...186...tgtgcg-gacact	ttgttag
L. Afr	caagccgc	aacatgcttcctTAGATCcacCTTtgTGGAtgccaactctcgaactgagtt--...185...tgtgcg-gacagt	tctgttaa
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id=26109 gene=ENSG00000212443 name=SNORA53 segment=chr12\_98993413\_98993661\_1 type=EN

H. Sap	gTTCAAAG	GTtGTCT	tcttctcttggagccc-ttccc-...62...tgcccattcag	gttttggt
R. Mac	gTTCAAAG	GTtGGTCT	tttctcttggagccc-ttccc-...62...tgccctgtcag	gttttggt
P. Tro	gTTCAAAG	GTtGTCT	tcttctcttggagccc-ttccc-...62...tgtccattcag	gttttggt
P. Abe	gTTCAAAG	GTtGTCT	tcttctcttggagccc-ttccc-...62...tgccattcag	gttttggt
C. Jac	gTTCAAAG	GTtGGTCT	ttgctcttggagccc-tccc-...63...ctgccattcag	gttttggt
M. Mus	gTTCAAAG	GTtGGTCT	ttcctctctgagccc-tacag-...67...tttttttttag	gttttgga
R. Nor	cTTCAAAG	GTtGGTCT	ttgctcttgggagccc-ttgc-...57...gctctttgtag	gttttggg
C. Por	gTTCAAAG	GTtGGTCT	tttacttgaagccc-ttcc-...60...ctgcacattag	gttttggt
O. Cun	gTTCAAAG	GTtGGTCT	ttgctcatagggcct-ttccc-...63...ctgccattcag	gttttggt
C. Fam	aTTCAAAG	GTtGGTCT	tagctctcagggccatctc--...64...ctgccattcag	gttttggt
F. Cat	gTTCAAAG	GTtGGTCT	ttgctctca-gcccatctcca...61...tgcccattcag	gttttggt
S. Sus	gTTCAAAG	GTtGGTCT	ttgcctcgggccc-tgccc-...64...tgcccattcag	gttttggt
L. Afr	gTTCAAAG	GTtGGTCT	tgctctcgggccc-tccc...61...ctgccattcag	gttttggt
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id=461471 gene=ENSG00000138107 name=ACTR1A segment=chr10\_104241656\_104241757\_-1 type=IN

Figure 156: CS=10.14



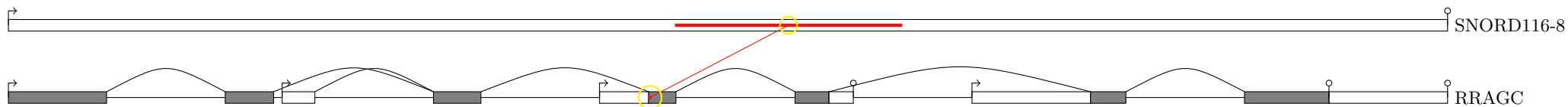
H.Sap	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaact-cataccgctggttctcatcggaactgaggtcc	agcacatt
R.Mac	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaact-cataccgctggttctcatcggaactgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaact-cataccgctggttctcatcggaactgaggtcc	agcacatt
P.Abe	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaact-cctaccgctggttctcatcggaactgaggtcc	agcacatt
C.Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgaaagct-cataccgctgcttctcatcggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgattcccagtcaaa--	<b>CATTCCTTGGAAAAGCTGAA</b>	caaaatgagtgaaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgatattccaataaaa--	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgaaaactcaataaccgccactctcatcgtgactgaggtcc	agcacctg
C.Por	atgtgctc	ggatc	gatgatgatgcc--ccaaaaaa	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagagctctaatccgtcactctcgtcgtgactgaggtcc	agcacact
C.Fam	aagtgctt	ggatc	gatgatgactccc-tcaatctg	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaactccctgcccgtggttctcatcggaactgaggtcc	agcacgtt
F.Cat	atgtgctc	ggatc	gatgatgactccc-tcaa-cag	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgagaactccctcccgtcgttctcatcggaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactccc-aca-atg	<b>CATTCCTTGGAAAAT</b>	ctgaacaaaatgagtgagccactaccgctc-tcctcatcggaactgaggtcc	agcacgtg
E.Cab	agggtgctc	ggatc	gatgatgactccc-cca-atg	<b>CATTCCTTGGAAAAT</b>	ctgaacaaaatgagtgagaactcactaccgctggttctcggcagactgaggtcc	agcacctg
S.Sus	cogtgctc	ggatc	gatgatgactccc-tcta-aag	<b>CATTCCTTGGAAAAT</b>	ctgaacaaaatgagtgagaactcactaccgctc-tcctcatcggaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgactgctatctaaa--	<b>CATTCCTTGGAAAAGC</b>	tgaacaaaatgagtgaaaactccttaccgctcactcattg-aactgaggtcc	agcacatt
	****	****	*****	*	*****	*****

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

H.Sap	atgaagcc	gtacgggcctgg...	.289...	-----tctctctttgcatctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
R.Mac	atgaagcc	gtacgggcctgg...	.290...	-----tctctctttgcatctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
P.Tro	atgaagcc	gtacgggcctgg...	.289...	-----tctctctttgcatctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
P.Abe	atgaagcc	gtacgggcctgg...	.267...	-----tctctctttgcatctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
C.Jac	atgaagcc	gtatgggcctgg...	.278...	-----ttctcttttgcactcttctgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
M.Mus	atgaagcc	gtacgggcctgg...	.297...	--tctttctctcttctctctc	<b>TTTtGTTTCCTGAAG</b>	<b>GGAGTG</b> gg
R.Nor	atgaagcc	gtacgggcctgg...	.273...	-----ttctctctttgcttctctc-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
C.Por	atgaagcc	gtatgggcctgg...	.271...	tttctttctccctttgcttc-	<b>TGTTGTTTTCCTgAAG</b>	<b>GgAGTG</b> gg
C.Fam	atgaagcc	gtatgggcctgg...	.278...	-----cctctcgttgcttctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
F.Cat	atgaagcc	gtatgggcctgg...	.298...	-----cctctctttgcttctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
B.Tau	atgaagcc	gtacgggctg...	.296...	-----cctctccttgcttctctt-	<b>GTTTCctgAAG</b>	<b>GgAGTG</b> gg
E.Cab	atgaagcc	gtatgggcctg...	.299...	-----cctcactttgcttctcttgt-	<b>GTTTCcgAAG</b>	<b>GgAGTG</b> gg
S.Sus	atgaagcc	gtacgggcctgg...	.305...	-----cctctctttgcttctcttgt-	<b>GTTTCcgAAG</b>	<b>GgAGTG</b> gg
L.Afr	atgaagcc	gtatgggcctgg...	.288...	-----cttttctttgcttctcttgt-	<b>GTTTCCTGAAG</b>	<b>GGAGTG</b> gg
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id=543329 gene=ENSG0000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 157: CS=11.9



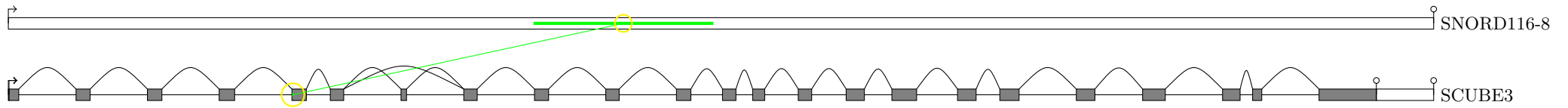
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R.Mac	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactca-taccgctg	tctcatc	ggaactgaggtcc	agcacatt
P.Tro	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactca-taccgctg	tctcatc	ggaactgaggtcc	agcacatt
P.Abe	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactcc-taccgctg	tctcatc	ggaactgaggtcc	agcacatt
C.Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	aaAGCTca-taccgctg	tctcatc	ggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	ctatgatgattcc--cagtc	aaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	aaaactctgtaccg	cactgtcatc	ggaactgaggtcc
R.Nor	gcgtgctt	ggatc	gatgatgatttc--caata	aaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agtgaactcaata	cggcactctcatc	gtgactgaggtcc
C.Por	atgtgctc	ggatc	gatgatgatgcc--c	aaaaaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agagctctaata	cggcactctctc	gtgactgaggtcc
O.Cun	atgtgctt	ggatc	gatgatgactcccc--ata	aacattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactcaaac	cgctgttctcatc	gtgactgaggtcc
C.Fam	aagtgctt	ggatc	gatgatgactccctc--a	atctgattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactcctg	ccgctgttctcatc	gcaactgaggtcc
E.Cab	aggtgctc	ggatc	gatgatgactcccc--a	aatgattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactcactacc	cgctgttctc	gccgagactgaggtcc
S.Sus	cogtgctc	ggatc	gatgatgactccctc--t	aaagattccttg	GAAAaGCTGAac	AAAATGAGTGA	agaactcactacc	gctc-tcctcatc	gaaactgaggtcc
L.Afr	acgtgcat	ggatt	gatgatgactgctat--c	taaacattccttg	GAAAaGCTGAac	AAAATGAGTGA	aaaactccttacc	gctcactcattg	-aactgaggtcc
	****	****	*****	*	*****	***	*****	***	***

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15\_25315579\_25315673\_1 type=EN

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R.Mac	ttcagttg	ccctctgtgtaa...	160...	-----ttttca	aatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
P.Tro	ttcagttg	ccccctgtgtaa...	160...	-----ttttca	aatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
P.Abe	ttcagttg	cccc-gtgtaa...	159...	-----ttttca	aatcaagcta	TGTTg	TGTTTTTCAG	CTTTT	atc
C.Jac	ttcagttg	ctctttgtgtaa...	164...	ggtattttta	aaatcaagcta	AGCTa	TGTTg	TGTTTTTCAG	CTTTT
M.Mus	ctcagtta	ccctctgtgtaa...	125...	-----ttttca	gaataaccctg	TGTTg	TATTTTTTCAG	CTTTT	att
R.Nor	ctcagttg	ctttctacgtaa...	130...	-----taa	ataaccctg	gtgtgg	TGTTTTTCAG	CTTTT	att
C.Por	cgtggttc	ccctctgtgtaa...	389...	-----ttt	caagttaatc	gtacta	TGTTg	TATTTTTTCAG	CTTTT
O.Cun	gttgcatg	ccatccgtgcag...	177...	---attt	gtc--atta	taaactg	TGTTg	TGTTTTTCAG	CTTTT
C.Fam	-gaaattg	ccctctttataa...	171...	-----ttttca	aatataaactg	TGTTg	TGTTTTTCAG	CTTTT	atc
E.Cab	ttcaatcg	ccgcgatgtga...	165...	-----tttt	caaatcaaac	cc--	TGTTg	TGTTTTTCAG	CTTTT
S.Sus	ctcagtta	c-ctcagttgaa...	168...	---agt	tttcaaatcaaac	cc--	TATTg	TGTTTTTCAG	CTTTT
L.Afr	ctcagttg	ccatcagttgga...	170...	-----tttt	caaatcaaac	ctg	TGTTg	TGTTTTTCAG	CTTTT
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id=665160 gene=ENSG00000116954 name=RRAGC segment=chr1\_39318161\_39318367\_-1 type=AN

Figure 158: CS=11.7



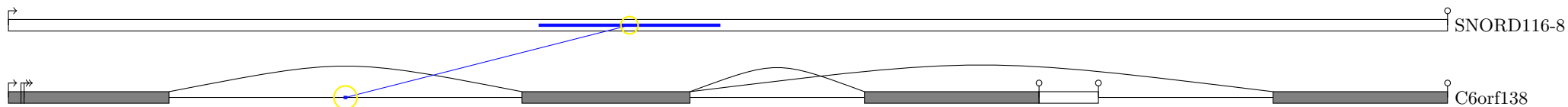
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R.Mac	atgtgctt	ggatc	gatgatgagtcctc	caaaaaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactca-taccg	tcgttctcatc	ggaactgaggtcc	agcacatt	
M.Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactctgtacc	gccactgtcatc	ggaactgaggtcc	agcatcct	
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	--aataaaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactcaatacc	gccactctcatc	gtgactgaggtcc	agcacctg	
C.Por	atgtgctt	ggatc	gatgatgatgcccc	aaa-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagagctcta	atccgtcactct	cgctgactgaggtcc	agcacact	
O.Cun	atgtgctt	ggatc	gatgatgactcccc	cat-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcaca	accgctcgttct	catcgtgactgaggtcc	agcacgtt	
C.Fam	aagtgctt	ggatc	gatgatgactccct	caatctg-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcctt	gcgctcgttct	catcgaaactgaggtcc	agcacgtt	
F.Cat	atgtgctt	ggatc	gatgatgactccct	caa-cag-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcctt	cccgtcgttct	catcgaaactgaggtcc	agcacgtt	
B.Tau	acgtgctt	ggatc	gatgatgactccc	caa-atg-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagccactacc	cgctc-tcctcatc	ggaactgaggtcc	agcacgtg	
E.Cab	aggtgctt	ggatc	gatgatgactcccc	caa-atg-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcact	accgctcgttct	cgcgagactgaggtcc	agcacctg	
S.Sus	ccgtgctt	ggatc	gatgatgactccct	cta-aag-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcact	accgctc-tcctcatc	gaaactgaggtcc	ggcacgtg	
L.Afr	acgtgcat	ggatt	gatgatgactgct	--atctaaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactcctt	accgctcactc	attg-aactgaggtcc	agcacatt	
	****	****	*****	*	*****	*****	*****	**	***	*	*****	***

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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R.Mac	gccagaag	gtcagccc	atga-...955...	-cattcac	cccccttcttct	CTTTtag	AAGGAATg
M.Mus	gccagaag	gtcagccc	acgg-...695...	gcgcca	acgtctcttctcc	CTTTtag	AAGGAATg
R.Nor	gccagaag	gtcagccc	acggg-...712...	ggagc	gtcagctctctcc	CTTTtag	AAGGAATg
C.Por	gccagaag	gt-agccc	atgag...865...	-actcacc	ctctcttct	CTTTtag	AAGGAATg
O.Cun	gccagaag	gtcagccc	gtga-...863...	-catgc	ccccctcttct	CTTTtag	AAGGAATg
C.Fam	gccagaag	gtcagccc	atga-...1137...	cactcac	ctctctcttct	CTTTtag	AAGGAATg
F.Cat	gccagaag	gtcagccc	atga-...2802...	cactcac	ctctctcttct	CTTTtag	AAGGAATg
B.Tau	gccggaag	gtcagcct	ctgg-...989...	-ca-ccc	gcctctcttccc	TTTtag	AAGGAATg
E.Cab	gccggaag	gtcagccc	atga-...1162...	--ttc	attgccacctcttccc	TTTtag	AAGGAATg
S.Sus	gccagaag	gtcagcct	atga-...882...	-gcgc	ctctcttccc	TTTtag	AAGGAATg
L.Afr	accagaag	gtcagccc	ctgc-...963...	-tttca	ccccctcttccc	CTTTtag	AAGGAATg
	** ****	** ****	*	*****	*****	*****	*****

id=478871 gene=ENSG0000146197 name=SCUBE3 segment=chr6.35199637.35200626.1 type=IN

Figure 159: CS=19.56



H. Sap	atgtgctt	ggatc	gatgatgatgagtcctccaaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgctcgttctcatcggaactgagg	tcc	agcacatt
R. Mac	atgtgctt	ggatc	gatgatgatgagtcctccaaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgctcgttctcatcggaactgagg	tcc	agcacatt
P. Tro	atgtgctt	ggatc	gatgatgatgagtcctccaaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgctcgttctcatcggaactgagg	tcc	agcacatt
P. Abe	atgtgctt	ggatc	gatgatgatgagtcctccaaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgagaactcc-taccgctcgttctcatcggaactgagg	tcc	agcacatt
C. Jac	atgtgctc	ggatc	gatgatgatgagtcctataaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgaaagtca-taccgctcgttctcatcggaactgagg	tcc	agcacatt
M. Mus	acgtgctt	ggatc	ctatgatgattcc--cagtcaaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgaaaactctgtaccgacctgtcatcggaactgagg	tcc	agcatctt
C. Por	atgtgctc	ggatc	gatgatgatgacc--ccaaaaa	CATT	CTTGGAAAAGCTGAA	caaaatgagtgagagctctaataccgctcactctcgtcgtgactgagg	tcc	agcacact
O. Cun	atgtgctt	ggatc	gatgatgactccccat-aaa	CATT	CTTGGAAAAGC	tgaacaaaatgagtgagaactcacaaccgctcgttctcatcgtgactgagg	tcc	agcacgtt
C. Fam	aagtgctt	ggatc	gatgatgactcctcaatctg-	CATT	CTTGGAAA	agctgaacaaaatgagtgagaactccctgacctcgttctcatcgcaactgagg	tcc	agcacgtt
B. Tau	acgtgctt	ggatc	gatgatgactcccacaa-atg-	CATT	CTTGGAAAT	-ctgaacaaaatgagtgagccatcactaccgctc-tcctcatcggaactgagg	tcc	agcacgtg
E. Cab	aggtgctc	ggatc	gatgatgactcc--ccaaatg	CATT	CTTGGAAAT	-ctgaacaaaatgagtgagaactcactaccgctcgttctcgcgagactgagg	tcc	agcacctg
S. Sus	cogtgctc	ggatc	gatgatgactcc--ctctaaag	CATT	CTTGGAAAT	-ctgaacaaaatgagtgagaactcactaccgctc-tcctcatcgaaactgagg	tcc	ggcacgtg
L. Afr	acgtgcat	ggatt	gatgatgactgc--tatctaaa	CATT	CTTGGAAAAGC	TGAACAAAAtgagtgaaaactccttaccgctcactcattg-aactgagg	tcc	agcacatt
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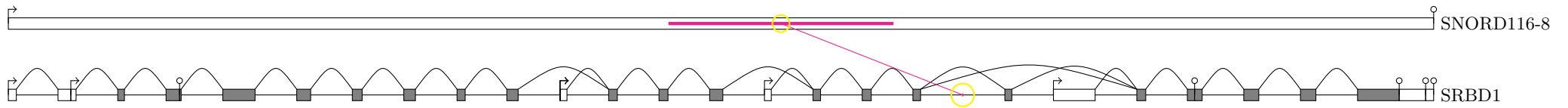
id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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R. Mac	aaatgaag	gtgaaccacaag...4948...	-----ttgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
P. Tro	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
P. Abe	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctcttcttttct---	GTTTCAAG	GATG	ggag
C. Jac	aaatgaag	gtgaactacaag...4948...	-----cagaagtctcttcttttct---	GTTTCAAG	GATG	ggag
M. Mus	aaatgaag	gtgaaccacaag...4948...	-----ctgaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Por	aaatgaag	gtgaaccacagg...4943...	ggtaacttaagtctcccctt---	TTCA	GTTTCAAG	GATG
O. Cun	aaatgaag	gtgaaccacaag...4948...	-----cttaagtctccccttttct---	GTTTCAAG	GATG	ggag
C. Fam	aaatgaag	gtgaaccacaag...4949...	-----ttaagtctccccttttcta---	TTTCAAG	GATG	ggag
B. Tau	aaatgaag	gtgaactacaag...4948...	-----cttcagtctccccttttct---	GTTTCAAG	GATG	ggag
E. Cab	aaatgaag	gtgaaccacaag...4948...	-----cttaagtttccccttttct---	GTTTCAAG	GATG	ggag
S. Sus	aaatgaag	gtgaaccacaag...4948...	-----ctcaagtctccccttttct---	GTTTCAAG	GATG	ggag
L. Afr	agatgaag	gtgaaccacaag...4941...	--taacttaagtctccccttt	TTTTTT	GTTTCAAG	GATG
	* *****	*****	*** *	*** ** *	*	*****

id=9880 gene=ENSG0000244694 name=C6orf138 segment=chr6.47976851.48035965.-1 type=IN

Figure 160: CS=10.14





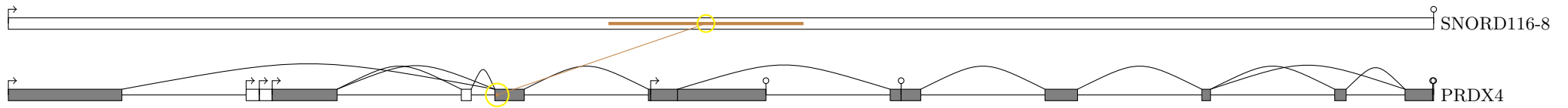
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P.Tro	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	-tcataccgctggttctcatcggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgattcccag--tcaaacattcct	TGGAAA	agCTGAA	AAAAATGAGTGAAAA	tctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgatttccaa--taaacattcct	TGG-AAA	agCTGAA	AAAAATGAGTGAAAA	ctcaataccgccactctcatcgtgactgaggtcc	agcacctg
C.Por	atgtgctc	ggatc	gatgatgatgcccc--aaaaacattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	tcacaaccgctggttctcatcgtgactgaggtcc	agcacatt
O.Cun	atgtgctt	ggatc	gatgatgactcccc--ataaacattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	tcacaaccgctggttctcatcgtgactgaggtcc	agcacgtt
C.Fam	aagtgcct	ggatc	gatgatgactcctc--aatctgattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	tcactaccgctggttctcatcggaactgaggtcc	agcacgtt
F.Cat	atgtgctc	ggatc	gatgatgactcctc--aacgattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	tcactaccgctggttctcatcggaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactccac--aa-atgattcct	TGG-AAA	atCTGAA	AAAAATGAGTGAGAAC	tcactaccgctggttctcatcggaactgaggtcc	agcacgtg
E.Cab	aggtgctc	ggatc	gatgatgactcccc--aaatgattcct	TGG-AAA	atCTGAA	AAAAATGAGTGAGAAC	tcactaccgctggttctcatcggaactgaggtcc	agcacctg
S.Sus	cctgctc	ggatc	gatgatgactcctc--taagcattcct	TGG-AAA	atCTGAA	AAAAATGAGTGAGAAC	tcactaccgctggttctcatcggaactgaggtcc	ggcacgtt
O.Avi	acatgctc	ggatc	gatgatgacaacttt--catatttattcct	TGGAAA	atCTGAA	AAAAATGAGTGAGAAC	tcactaccatc--tcctcatcgatactgaggtcc	agcacgtt
L.Afr	acgtgcat	ggatt	gatgatgactgctat--ctaaacattcct	TGGAAA	agCTGAA	AAAAATGAGTGAGAAC	tcactaccatc--tcctcatcgatactgaggtcc	agcacatt
	***	****	*****	*	*****	*****	** * ** * *****	***

id=203758 gene=ENSG00000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

H.Sap	aagtgcag	gtaagaa	actat...4934...tttcacattaagtcatactt	GTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
R.Mac	aagtgcag	gtaagaa	actat...4934...tttcacattaagtcatactt	GTTTTT	CtgATTCTA-	TTTTTTCAG-	TTTCCA	a
P.Tro	aagtgcag	gtaagaa	actat...4934...tttcacattaagtcatactt	GTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
M.Mus	aagtgcag	gtgaga	aagctgt...4933...tttcacattaagtcatactt	GTTTTT	CtgATTCTGTTTT	TTTCAG-	TTTCCA	a
R.Nor	aagtgcag	gtgaga	aagctgt...4935...tttcacattaagtcatactt	TTTTC	tgATTCTG-	TTTTTTCAG-	TTTCCA	a
C.Por	aagtgcag	gtaaga	aagctat...4942...-----taagtcatactt	gTTTTC	tgATTCTG-	TTTTTTCAG-	TTTCCA	a
O.Cun	aagtgcag	gtaaga	aagctat...4935...tttcacattaagtcatactt	GTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
C.Fam	aagtgcag	gtaaga	aacaat...4946...-----attaagccatactt	atTTTC	-----TG-	TTTTTTCAG-	TTTCCA	a
F.Cat	aagtgcag	gtaaga	aactac...4946...-----ttaagccatactt	atTTTC	-----TG-	TTTTTTCAGT	TTTCCA	-
B.Tau	aagtgcag	gtaaga	aactgt...4942...-----taagccatactt	gTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
E.Cab	aagtgcag	gtagga	aactat...4936...-tttcacattaagccatgctta	TTTTTC	tgATTTC	-----cTTTTTTCAG-	TTTCCA	a
S.Sus	aagtgcag	gtaaga	aactaa...4934...tttcacattaagtcatactt	GTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
O.Avi	aagtgcag	gtaaga	aactat...4934...tttcacattaagtcatactt	GTTTTT	CtgATTCTG-	TTTTTTCAG-	TTTCCA	a
L.Afr	gagtgcag	gtaaga	aaccgt...4947...ttctgttttttttttttttt	-----	TTTTTTCAG-	TTTTTTCAG-	TTTCCA	a
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id=181516 gene=ENSG0000068784 name=SRBD1 segment=chr2.45704215.45715378.-1 type=IN

Figure 161: CS=11.9



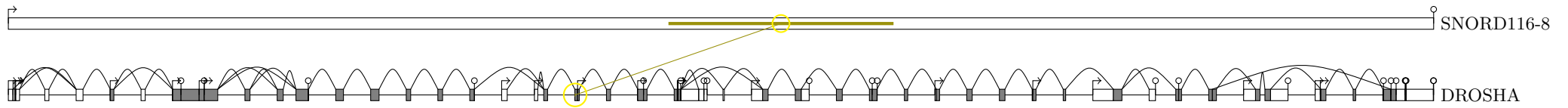
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R.Mac	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gagaactca-taccgctg	tctcatc	ggaactgaggtcc	agcacatt		
P.Abe	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gagaactcc-taccgctg	tctcatc	ggaactgaggtcc	agcacatt		
C.Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gaaagtca-taccgctg	tctcatc	ggaactgaggtcc	agcacatt		
R.Nor	gcgtgctt	ggatc	gatgatgatttc--caataaaacattc	CTTGG	-aAAGCTGA	acaaaaatgagt	gaaaactcaataccg	cactctcatc	gtagt	agcacctg		
C.Por	atgtgctc	ggatc	gatgatgatgcc--ccaaaaaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gagagctctaatc	cgctcactct	cgtagt	agcacatt		
O.Cun	atgtgctt	ggatc	gatgatgactccccca--taaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gagaactcacaacc	gctgctcatc	gtagt	agcacgtt		
C.Fam	aagtgcct	ggatc	gatgatgactcctca-atctgcattc	CTTGG	aaAAGCTGA	acAAAATGAGTG	gaaactccctg	cgctgctcatc	gcaactgaggtcc	agcacgtt		
F.Cat	atgtgctc	ggatc	gatgatgactcctca--acagcattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gagaactccctcc	gctgctcatc	gaaactgaggtcc	agcacgtt		
B.Tau	acgtgctt	ggatc	gatgatgactccccaca-a-atgcattc	CTTGG	-AAAtCTGA	acaaaaatgagt	gagccatcactacc	gctc-tcctcatc	ggaactgaggtcc	agcacgtg		
E.Cab	aggtgctc	ggatc	gatgatgactccccca--aatgcattc	CTTGG	-AAAtCTGA	acaaaaatgagt	gagaactcactacc	gctgctcgcg	gagactgaggtcc	agcacctg		
S.Sus	ccgtgctc	ggatc	gatgatgactcctct--aaagcattc	CTTGG	-AAAtCTGA	acaaaaatgagt	gagaactcactacc	gctc-tcctcatc	gaaactgaggtcc	ggcacgtg		
O.Avi	acatgctc	ggatc	cagtgatgacaactttc-atatatttc	CTTGG	AAAtCTGA	acaaaaatgagt	gagaactcactacc	atc-tcctcatc	gatactgaggtcc	agcacgtt		
L.Afr	acgtgcat	ggatt	gatgatgactgctatc--taaacattc	CTTGG	aaAAGCTGA	acaaaaatgagt	gaaaactccttacc	gctcactcattg	-aactgaggtcc	agcacatt		
	***	****	***** *	***** **	*****	**	**	*	***	*	***** **	****

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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R.Mac	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtat	tttttctttc	TTAG	TTTCCAAg			
P.Abe	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtat	tttttctttc	TTAG	TTTCCAAg			
C.Jac	aaataaag	gt----	agccctgatt...59...	-----	acatcatgtat	tttttctttc	TTAG	TTTCCAAg			
R.Nor	atthagaa	gccaag	tttta-----	...51...	-----	tagataat-tgct	tttttctttc	TTAG	TTTCCAAg		
C.Por	atctgagg	gtgtag	ctcagt-----	...99...	-----	acatcgtgtc	tttttctttc	TTAG	TTTCCAAg		
O.Cun	gtccaaag	atthag	aagcct-----	...51...	-----	aatcatcct	atcttttctttc	TTAG	TTTCCAAg		
C.Fam	atccaaag	atthag	atcct-----	...46...	-----	tttctcagt	gttttagaata	TTATa	TATTT	TTAG	TTTCCAAg
F.Cat	gtccaaag	gttaga	atcct-----	...64...	-----	actcatat	attttttctttc	TTAG	TTTCCAAg		
B.Tau	gtccaaag	atc----	cctccaaa...67...	-----	acatcatat	gttttttctttc	TTAG	TTTCCAAg			
E.Cab	gtccagag	gattaga	aagcct-----	...64...	-----	acatcatat	attttttctttc	TTAG	TTTCCAAg		
S.Sus	-----	cag	actcaga	agccttgatt...59...	-----	gaatcatata	--tttctttc	TTAG	TTTCCAAg		
O.Avi	gtccaaag	atc----	cctccgaa...65...	-----	acatcatat	gctttttctttc	TTAG	TTTCCAAg			
L.Afr	atccaaag	gttaaga	agccc-----	...67...	-----	tcatgta	atcttttttctttc	TTAG	TTTCCAAg		
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id=744573 gene=ENSG0000123131 name=PRDX4 segment=chrX.23689551.23689645.1 type=IN

Figure 162: CS=12.6



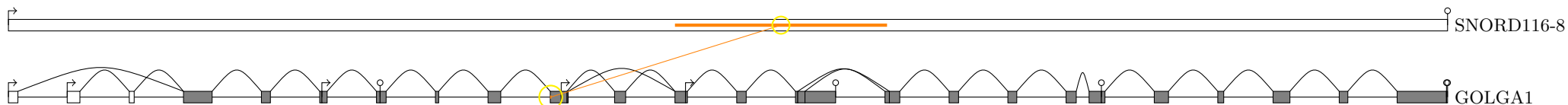
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R.Nor	gcgtgctt	ggatc	gatgatgatctc--caataaaacattcctTGGAAAagCTGAacAAAATGAGTGAAAacTCAAaccgccactctcatcgtgactgaggtcc	agcacctg
C.Por	atgtgctc	ggatc	gatgatgatgcc--ccaaaaaacattccttGGAAAagCTGAacAAAATGAGTGAGAgctctaatcgtcactctcgtcgtgactgaggtcc	agcacact
O.Cun	atgtgctt	ggatc	gatgatgactcccc--ataaacattccttGGAAAagCTGAacAAAATGAGTGAGActcaaacctgctggttctcatcgtgactgaggtcc	agcacgtt
C.Fam	aagtgctt	ggatc	gatgatgactcctc-aatctgcattccttGGAAAagCTGAacAAAATGAGTGAGActcctcctgcccgtcgttctcatcggaaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactccac-aa-atgcattcctTGGAAAATCTGAacAAAATGAGTgagccatcactaccgctc-tcctcatcggaaactgaggtcc	agcacgtg
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S.Sus	cogtgctc	ggatc	gatgatgactcctc--taaagcattcctTGGAAAATCTGAacAAAATGAGTGAaGAACtactaccgctc-tcctcatcggaaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgactgctat--ctaaacattccttGGAAAagCTGAacAAAATGAGTGAAAactccttaccgctcactcattg-aactgaggtcc	agcacatt
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id=203758 gene=ENSG00000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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P.Tro	tgccggag	gtaagg	gaaaag...1489...----gccaactacagtaatttaa---TTTTgGTTTATTTTCAG	aaTTTTg
P.Abe	tgccggag	gtaagg	gaaaag...1488...----gccaactacagtaatttaa---TTTTgGTTTATTTTCAG	aaTTTTg
C.Jac	tgccagag	gtaagg	gaaaat...1497...----tgccaactacagt-atttaa---TTTTgGTTTATTTTCAG	aaTTTTg
M.Mus	tgccagag	gtaagg	gctgct...1414...----gcagatctatagtaatttga---TTTTgACTTATTTTCAG	aaTTTTg
R.Nor	tgccagag	gtaagg	gagaag...1461...atctgcagatcaatagtaat---TTGATTTgACTTATTTTCAG	aaTTTTg
C.Por	tgcccgag	gtaagg	gaaaag...1468...----gcagatccacaataatttga---TTTTgATTATTTTCAG	aaTTTTg
O.Cun	tgcccgag	gtaagg	gaaaag...1492...----gcagatcttcagtaatttga---TTTTgGTTTATTTTCAG	aaTTTTg
C.Fam	tgccagag	gtaagg	gaaaag...1721...----acgatactatagtaatttga---TTTTgGTTTATTTTCAG	aaTTTTg
B.Tau	tgccagag	gtaagg	gagaag...1570...-----acagtaatttggggttctgGTTTATTTTCAG	AaTTTTg
E.Cab	tgccagag	gtaagg	gaaaag...1526...----gcagtagcagtaatttga---TTTTgGTTTATTTTCAG	AaTTTTg
S.Sus	tgccagag	gtaagg	gagaag...1814...--ttgcatactatagttatt---GGTTTTGCTTtATTTCAG	AaTTTTg
L.Afr	tgccagag	gtaagg	gaaaag...2148...----gcagtagcacaataatttga---TTTTgGTTTATTTTCAG	aaTTTTg
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id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 163: CS=18.76



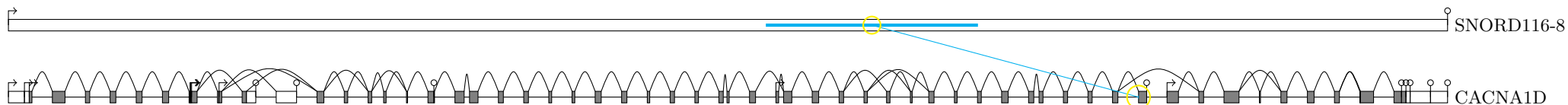
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C. Jac	atgtgctc	ggatcgatgatgagtcctataaaaaaacattccttg	GAAAAGCTGAACAAAATGag	TGAAa	-----	gctcataccgctcgttctcatcggaaactgaggtcc	agcacatt
C. Por	atgtgctc	ggatcgatgatgagtcctcaaaaaaacattccttg	GAAAAGCTGAACAAA	-----	atgagtgagagctcaatccgctcactctcgtcgtgactgaggtcc	agcacact	
O. Cun	atgtgctt	ggatcgatgatgactcccc--ataaacattccttg	GAAAAGCTGAACAAAATGAGTG	-----	agaactcacaaccgctcgttctcatcgtgactgaggtcc	agcacgtt	
C. Fam	aagtgctt	ggatcgatgatgactcccc--aatctgcattccttg	GAAAAGCTGAACAAA	-----	atgagtgagaactccctcgcgttctcatcggaaactgaggtcc	agcacgtt	
F. Cat	atgtgctc	ggatcgatgatgactccctc--aacagcattccttg	GAAAAGCTGAACAAA	-----	atgagtgagaactccctcgcgttctcatcggaaactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatcgatgatgactcccac--aa-atgcattccttg	GAAAAGCTGAACAAA	-----	atgagtgagcactcactaccgctc--tctcatcggaaactgaggtcc	agcacgtg	
E. Cab	aggtgctc	ggatcgatgatgactcccc--aaatgcattccttg	GAAAAGCTGAACAAA	-----	atgagtgagaactcactaccgctcgttctcgcgagactgaggtcc	agcacgtg	
O. Avi	acatgctc	ggatcagtgatgacaacttt--catatattccttg	GAAAAGCTGAACAAA	-----	atgagtgagaactcactaccatc--tctcatcgaactgaggtcc	agcacgtt	
L. Afr	acgtgcat	ggattgatgatgactgctat--ctaaacattccttg	GAAAAGCTGAACAAAATGag	TGAA	-----	aactccttaccgctcactcattg--aactgaggtcc	agcacatt
	* **	**** * **	***** ** *	*****		** ** ** *	***** **

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15\_25315579\_25315673.1 type=EN

H. Sap	agcacatg	gtatgcattttt...1152...ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
R. Mac	agcacatg	gtatgcattttt...1162...ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
P. Tro	agcacatg	gtatgcattttt...1190...ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
P. Abe	agcacatg	gtatgcattttt...1140...ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
C. Jac	agcacatg	gtatgcattttt...1563...ttagcatagccaatgaaac	TTTGTATTTTGTg	TCAG	CTTTTaaa
C. Por	agcacatg	gtatgtattttg...867...-----acctaagcaatccttatgtc	TTTGaa	TCAG	CTTTTaaa
O. Cun	agcacatg	gtatgtttacat...1286...tagcagtagcctagtgaac	TGTTTGT	TTTGTg	TCAG
C. Fam	agcacatg	gtgcgcatthta...283...-----gcccagtgaaactttatac	TTTGTa	TCAG	CTTTTaaa
F. Cat	agcacatg	gtacgcattttt...286...-----gcctaagaaactttatacc	TTTGTa	TCAG	CTTTTaaa
B. Tau	agcacatg	gtgcgcatthta...448...-----gcccagtgaaactttgtgtc	TTTGTa	TCAG	cTTTTaaa
E. Cab	agcacatg	gtgcgcatthta...274...-----gctagtgaactttgtatc	TTTGTa	TCAG	cTTTTaaa
O. Avi	agcacatg	gtgcgcatthta...454...-----ccccagtgaaactttctgtc	TTTGTa	TCAG	cTTTTaaa
L. Afr	agcacatg	gtgcgcatthta...254...gtcaagtgcccgaatgaaac	TTTACATTTTGTg	TCAG	CTTTTaaa
	*****	** *	** * ** *	*****	*****

id=391479 gene=ENSG00000136935 name=GOLGA1 segment=chr9\_127684172\_127685373.-1 type=IN

Figure 164: CS=22.23



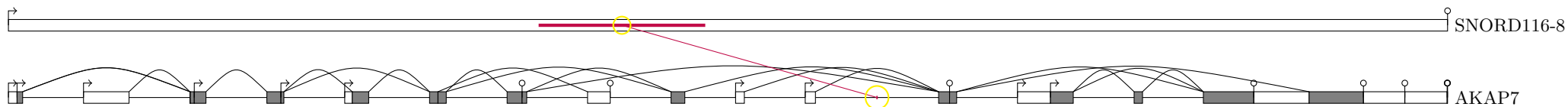
H. Sap	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttggaaaag	CTGAACAA	ATGAGT	gagaactca-taccgctggttctcatcggaaactgaggtcc	agcacatt						
P. Tro	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttggaaaag	CTGAACAA	ATGAGT	gagaactca-taccgctggttctcatcggaaactgaggtcc	agcacatt						
P. Abe	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttggaaaag	CTGAACAA	ATGAGT	gagaactcc-taccgctggttctcatcggaaactgaggtcc	agcacatt						
C. Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaaacattccttggaaaag	CTGAACAA	ATGAGT	gaaagctca-taccgctgcttctcatcggaaactgaggtcc	agcacatt						
M. Mus	acgtgctt	ggatc	tatgatgattcc--cagtcaaacattccttggaaaag	CTGAACAA	ATGAGT	gaaaactctgtaccgccactgtcatcggaaactgaggtcc	agcatctt						
R. Nor	gcgtgctt	ggatc	gatgatgatttc--caataaaacattccttggaaaag	CTGAACAA	ATGAGT	gaaaactcaataaccgccactctcatcgtgactgaggtcc	agcacctg						
C. Por	atgtgctc	ggatc	gatgatgatgcc--ccaaaaaacattccttggaaaag	CTGAACAA	ATGAGT	gagagcttaataccgctcactctcgtcgtgactgaggtcc	agcacact						
O. Cun	atgtgctt	ggatc	gatgatgactcc-ccc-ataaacattccttggaaaag	CTGAACAA	ATGAGT	gagaactcacaaccgctggttctcatcgtgactgaggtcc	agcacgtt						
C. Fam	aagtgctt	ggatc	gatgatgactcc-ctcaatctgcattccttggaaaag	CTGAACAA	ATGAGT	gagaactcctcctgctggttctcatcgaactgaggtcc	agcacgtt						
B. Tau	acgtgctt	ggatc	gatgatgactcc--cacaaatgcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	AGCCAtcactaccgctc-tcctcatcggaaactgaggtcc	agcacgtg					
E. Cab	aggtgctc	ggatc	gatgatgactcc--ccaaatgcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	gagaactcactaccgctggttctcgcgagactgaggtcc	agcacctg					
S. Sus	cogtgctc	ggatc	gatgatgactcc--ctctaaagcattcc-	TTGGaa	ATCTGAACAA	ATGAGT	gagaactcactaccgctc-tcctcatcgaactgaggtcc	ggcacgtg					
L. Afr	acgtgcat	ggatt	gatgatgactgc--tatctaaacattccttggaaaag	CTGAACAA	ATGAGT	gaaaactccttaccgctcactcattg-aactgaggtcc	agcacatt						
	****		****	*****	*	*****	**	***	*	**	*	*****	***

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

H. Sap	ccctacag	gtgaattgttgt...3981...-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
P. Tro	ccctacag	gtgaattgttgt...3968...-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
P. Abe	ccctacag	gtgaattgttgt...4942...-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Jac	ccctacag	gtgaattgttgt...4042...-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
M. Mus	ccctacag	gtgaattgcct...4388...-----	agatgacattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
R. Nor	ccctacag	gtgaatggcct...3973...-----	agatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Por	ccctacag	gtgaattgttct...3914...-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	atgcttga
O. Cun	ccctgacag	gtgaattgtccc...3807...-----	tgatgagattt	cactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Fam	ccctacag	gtgaattgtcct...3925...-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	atgcttga
B. Tau	ccctacag	gtgaattgttgt...3814...gctaacagataagatttcac	TGGCTg	ATTCATTTGT	TCAG	ATgcTTGa	atgcttga
E. Cab	ccctacag	gtgaattgttgt...3950...-----	agatgagattt	caccggctg	ATTCATTTGT	TCAG	ATgcTTGa
S. Sus	ccctacag	gtgaattattgt...3900...-----	agatgagattt	cactggctg	ATTCATTTGT	TCAG	ATgcTTGa
L. Afr	ccctacag	gtgaattatcgt...3984...-----	agataagattt	caccggctg	ATTCATTTGT	TCAG	atgcttga
	****	***	****	*****	*****	*****	*****

id=617953 gene=ENSG00000157388 name=CACNA1D segment=chr3.53820980.53825007.1 type=IN

Figure 165: CS=11.7



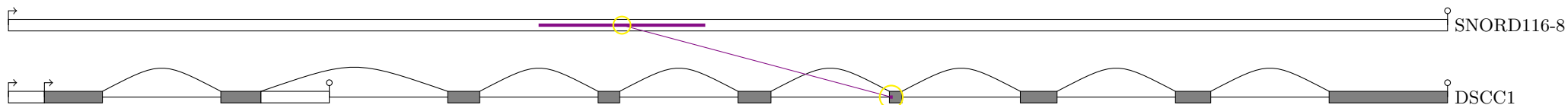
H.Sap	atgtgctt	ggatc	gatgatgagtcctcc	caaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatc	ggaactgagg	tcc	agcacatt							
R.Mac	atgtgctt	ggatc	gatgatgagtcctcc	caaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatc	ggaactgagg	tcc	agcacatt							
P.Tro	atgtgctt	ggatc	gatgatgagtcctcc	caaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatc	ggaactgagg	tcc	agcacatt							
P.Abe	atgtgctt	ggatc	gatgatgagtcctcc	caaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgagaact-cctaccgctcgttctcatc	ggaactgagg	tcc	agcacatt							
C.Jac	atgtgctc	ggatc	gatgatgagtcctata	aaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgaagct-cataccgctcgttctcatc	ggaactgagg	tcc	agcacatt							
M.Mus	acgtgctt	ggatc	ctatgatgattcc--	cagtcaaa	CATTCCTTGGAAAGcTGAACAAA	atgagtgaactctgtaccgcaactgtcatc	ggaactgagg	tcc	agcatctt							
R.Nor	gctgctt	ggatc	gatgatgatttc--	caataaaa	CATTCCTTGGAA	-agctgaacaaaatgagtgaactcaataccgcaactctcatc	gtgactgagg	tcc	agcacctg							
C.Por	atgtgctc	ggatc	gatgatgatgcc--	caaaaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgaagctcctaaccgctcactctcgtc	gtgactgagg	tcc	agcacatt							
O.Cun	atgtgctt	ggatc	gatgatgactccccat-aaa-		CATTCCTTGGAAA	agctgaacaaaatgagtgaactcaaacgctcgttctcatc	gtgactgagg	tcc	agcacgtt							
C.Fam	aagtgctt	ggatc	gatgatgactcctcaatctg-		CATTCCTTGGAA	aagctgaacaaaatgagtgaactcctgcccgtcgttctcatc	gcaactgagg	tcc	agcacgtt							
B.Tau	acgtgctt	ggatc	gatgatgactcccaca-atg-		CATTCCTTGGAAAT	-ctgaacaaaatgagtgaactcactaccgctc-tcctcatc	ggaactgagg	tcc	agcacgtg							
E.Cab	aggtgctc	ggatc	gatgatgactcc--	ccaaatg	CATTCCTTGGAAATcTGAACAAAAT	-gagtgaactcactaccgctcgttctcgc	gagactgagg	tcc	agcacctg							
L.Afr	acgtgcat	ggatt	gatgatgactgc--	tatctaaa	CATTCCTTGGAA	aagctgaacaaaatgagtgaactccttaccgctcactcattg-aactgagg	tcc		agcacatt							
	****		****	*****	*	*****	*	***	*****	*	***	*	**	*	*****	****

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

H.Sap	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgtttttca-----	TTTCAAG	gGAGTGaa
R.Mac	tggtgaag	gtaatatctcca...	4950...	ttgactta--tttgtttttca-----	TTTCAAG	gGAGTGaa
P.Tro	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgtttttca-----	TTTCAAG	gGAGTGaa
P.Abe	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgtttttca-----	TTTCAAG	gGAGTGaa
C.Jac	tggtgaag	gtaatatctcca...	4950...	ttgattga--tttgtttttca-----	TTTCAAG	gGAGTGaa
M.Mus	ttgtgaag	gtaattccccta...	4938...	--aatgagtcctgacatgga--TTTgTTGtc	CTTCAAG	gGAGTGag
R.Nor	tggtgaag	gtaattccccta...	4950...	-gacatgg-atTTgtttttgtca-----	TTTCAAG	gGAGTGag
C.Por	tgctgaag	gtaatatcccca...	4950...	--atgtgattttgtttgttg-----	TTTCAAG	gGAGTGaa
O.Cun	tggtgaag	gtaattccca...	4950...	--atgtgattttctttgtta-----	TTTCAAG	gGAGTGaa
C.Fam	tggtgaag	gtaataccaca...	4950...	-gatgtga-tttgttttatca-----	TTTCAAG	gGAGTGaa
B.Tau	tggtgaag	gtaatgccaca...	4949...	tgatgtga-tttgtcttctgc-----	ATTCAAG	gGAGTGaa
E.Cab	tggtgaag	gtaatatctcgc...	4936...	tgaatga-ctgattgatgATTTTgTTGtc	ATTCAAG	gGAGTGaa
L.Afr	tggtgaag	gtaatgtccca...	4950...	-gatgtaa-tttgtttttgtca-----	TTTCAAG	gGAGTGaa
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id=215573 gene=ENSG00000118507 name=AKAP7 segment=chr6.131522051.131540800.1 type=IN

Figure 166: CS=15.34



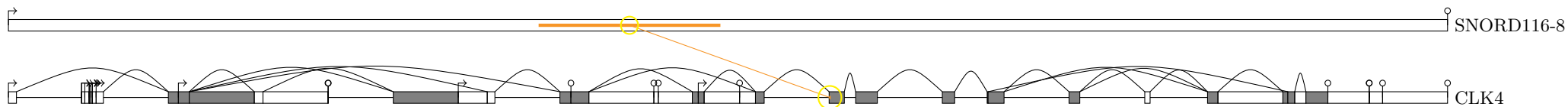
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaa	CATTCCTTGGAAAAG	TGAA	-caaatgagtgagaactca-taccgctgttctcatcggaaactgaggtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaa	CATTCCTTGGAAAAG	TGAA	-caaatgagtgagaactcc-taccgctgttctcatcggaaactgaggtcc	agcacatt
C. Jac	atgtgctc	ggatcgatgatgagtcctataaaaaa	CATTCCTTGGAAAAG	TGAA	-caaatgagtgaaagctca-taccgctgttctcatcggaaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattcc--cagtc	CAATTCCTTGGAAAAG	TGAA	-caaatgagtgaaaactctgtaccgcaactgtcatcggaaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgatttc--caataaaa	CATTCCTTGG-AAAAG	TGAA	-caaatgagtgaaaactcaataccgcaactctcatcgtgactgaggtcc	agcacctg
O. Cun	atgtgctt	ggatcgatgatgactccccat-aaa	CATTCCTTGGAAAAG	TGAA	-caaatgagtgagaactcacaaccgctgttctcatcgtgactgaggtcc	agcacgtt
C. Fam	aagtgctt	ggatcgatgatgactccctcaatctg-	CATTCCTTGG-AAA	agctgaacaaatgagtgagaactccctg	ccgctgttctcatcgcactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgactccctcaa-cag-	CATTCCTTGGAAAAG	TGAA	-caaatgagtgagaactccctccgctgttctcatcgaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccacaa-atg-	CATTCCTTGG-AAA	tGAACA	-aaatgagtgagccactactaccgctc-tcctcatcggaaactgaggtcc	agcacgtg
E. Cab	aggtgctc	ggatcgatgatgactccccaa-atg-	CATTCCTTGG-AAA	TGAA	-caaatgagtgagaactcactaccgctgttctcgcgagactgaggtcc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgactccctcta-aag-	CATTCCTTGG-AAA	tGAACA	-aaatgagtgagaactcactaccgctc-tcctcatcgaactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgactgc--tatc	taaaCATTCCTTGG-AAA	agctgaacaaatgagtgaaaactccttaccgctcactcattg-aactgaggtcc	agcacatt	
	****	****	***** * *	***** **	***** ** * * * * *	*** *

id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

H. Sap	gagccaga	gtaagtatttta...734...	---ataacttttcaagtgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
R. Mac	gagccaga	gtaagtatttta...729...	---ataacttttcaaatgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
P. Abe	gagccaga	gtaagtatttta...751...	---ataacttttcaagtgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
C. Jac	gagccaga	gtaagtatttta...608...	---agaacttttcaaatgtgtg	-----TTTAaaTTTTTCAG	GGaAATGa
M. Mus	gagccaga	gtgagtatttgc...905...	-tcataagttcttctgtgtgc	-----TTTAaaTTTTTCAG	GGaAATGa
R. Nor	gagccaga	gtgagtatttgc...1060...	-tcataagttcttctgtgtgc	-----TTTAaaTTTTTCAG	GGaAATGa
O. Cun	gagccaga	gtaagtatttta...403...	-gaatagttctca--tgagtgt	-----TTTAaaTTTTTCAG	GGaAATGa
C. Fam	gagccaga	gtaagtattttt...640...	-----ttcaaatgagtgttttaaaa	-----TTTTTCAG	GGaAATGa
F. Cat	gagccaga	gtaagtatttta...426...	---taacttttcaaatgagtatt	-----TTTAaaTTTTTCAG	GGaAATGa
B. Tau	gagccaga	gtaagtatttat...450...	.gtgaaaacttttcaataag	-----TGTTTAaaATTTTTTCAG	GGaAATGa
E. Cab	gaaccaga	gtaagtatttta...728...	---gtaacttttcaaatgaggt	-----TTTAaTTTTTCAG	GGaAATGa
S. Sus	gagccaga	gtaagtatttta...323...	---tcataaaatgtgaagaag	TGTTTAAaaATTTTTTCAG	GGaAATGa
L. Afr	gaaccaga	gtaagtatttta...399...	---ttcaaatgggtgttttaaaa	-----TTTTTCAG	GGaAATGa
	** *****	** * * * *	*	*****	*****

id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 167: CS=19.24



H. Sap	atgtgctt	ggatcgatgatgagtcctccaaaaaa	CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactca-taccgctgttctcatcggaaactgaggtcc	agcacatt	
P. Tro	atgtgctt	ggatcgatgatgagtcctccaaaaaa	CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactca-taccgctgttctcatcggaaactgaggtcc	agcacatt	
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaa	CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactcc-taccgctgttctcatcggaaactgaggtcc	agcacatt	
C. Jac	atgtgctc	ggatcgatgatgagtcctataaaaaa	CATTCCTTGG	-AAA	agctgaacaaaatgagtgaaagctca-taccgctgctctcatcggaaactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatctatgatgattcc--cagtcaaa	CATTCCTTg	GAAAAG	TGAA	-caaatgagtgaaaactctgtaccgcaactgtcatcggaaactgaggtcc	agcatctt	
R. Nor	gcgtgctt	ggatcgatgatgatttc--caataaaa	CATTCCTTGG	-AAA	gcTGAA	-caaatgagtgaaaactcaataccgcaactctcatcgtgactgaggtcc	agcacctg	
O. Cun	atgtgctt	ggatcgatgatgactccccat-aaa	CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactcacaaccgctgttctcatcgtgactgaggtcc	agcacgtt	
C. Fam	aagtgctt	ggatcgatgatgactccctcaatctg	-CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactccctgcccgtgttctcatcgcaactgaggtcc	agcacgtt	
F. Cat	atgtgctc	ggatcgatgatgactccctcaa-cag	-CATTCCTTg	GAAAAG	TGAA	-caaatgagtgagaactccctcccgtgttctcatcgaaactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatcgatgatgactcccacaa-atg	-CATTCCTTGG	-AAA	tcTGAA	-caaatgagtgagccatcactaccgctc-tcctcatcggaaactgaggtcc	agcacgtg	
E. Cab	aggtgctc	ggatcgatgatgactccccaa-atg	-CATTCCTTg	G	-AAA	tcTGAA	-caaatgagtgagaactcactaccgctgttctcgcgagactgaggtcc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgactccctcta-aag	-CATTCCTTGG	-AAA	tcTGAA	-caaatgagtgagaactcactaccgctc-tcctcatcgaaactgaggtcc	ggcacgtg	
L. Afr	acgtgcat	ggattgatgatgactgc--tatctaaa	CATTCCTTGG	GAAAAG	TGAA	-caaatgagtgaaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt	
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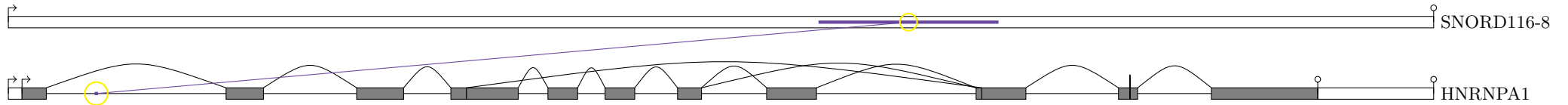
id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15\_25315579\_25315673.1 type=EN

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P. Tro	catggcat	gtaagtttgctt...2993...----	tttat---	catttttatcttaat	TTTATTTTAAAG	GGATG	gca
P. Abe	catggcat	gtaagtttgctt...2998...----	tttat---	catttttatcttaat	TTTATTTTAAAG	GGATG	gca
C. Jac	catggcat	gtaagtttgctt...3178...----	atttat---	cacttttatctta	TTTATTTTAAAG	GGATG	gca
M. Mus	cacggcat	gtaagtttgctt...1540...t--	tttagcatcatcatct---		TTTGTTTCAAG	GGATG	gct
R. Nor	catggcat	gtaagtttgctt...1496...tac	atttag--	catcatcatct---	TTTGTTTCAAG	GGATG	gct
O. Cun	catggcat	gtaagtttgctt...2567...----	tatac---	catattcatcttaat	TTTGTTTCAAG	GGATG	gca
C. Fam	catggcat	gtaagtttgctt...3759...----	tatat---	cttttcaccttaat	TTTGTTTCAAG	GGATG	gca
F. Cat	catggcat	gtaagtttgctt...2893...----	tctac---	cgttttcatcttaat	TTTGTTTCAAG	GGATG	gca
B. Tau	catgacat	gtaagtttgctt...3284...----	tgtac---	atttatcattttcat	TTTGTTTCAAG	GGATG	gca
E. Cab	catggcat	gtaagtttgctt...2877...----	atttac---	cattttcatctt-at	TTTGTTTCAAG	GGATG	gca
S. Sus	catggcat	gtaagtttgctt...4259...tt	catttac---	cattttca--t-at	TTTGTTTCAAG	GGATG	gca
L. Afr	catggcat	gtaagtttgctt...1359...----	tttac---	caattcatcttcat	TTTGCTTTTAAAG	GGATG	gca
	** * **	*****		* **	* *	*** **	*****

id=746901 gene=ENSG00000113240 name=CLK4 segment=chr5\_178040845\_178043882.-1 type=IN

Figure 168: CS=18.85





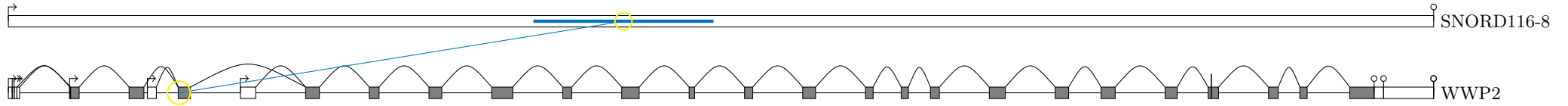
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R. Mac	atgtgctt	ggatc	gatgatgagtcctccaaaaaacattccttggaaaagctga	ACAAAATG	GTGA	gaactca-taccgctggttctcatcggaactgaggtcc	agcacatt
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C. Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaaacattccttggaaaagctga	ACAAAATG	GTGA	aagctca-taccgctgctctcatcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	tatgatgattcc--cagtcaaacattccttggaaaagctga	ACAAAATG	GTGA	aaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatc	gatgatgatttc--caataaaacattccttgg--aaagctga	ACAAAATG	GTGA	aaactcaataccgccactctcatcggtactgaggtcc	agcacctg
C. Por	atgtgctc	ggatc	gatgatgatgccc--caaaaaaacattccttggaaaagctga	ACAAAATG	GTGA	gagctctaaccgctcactctcgtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatc	gatgatgactccccca--taaacattccttggaaaagctga	ACAAAATG	GTGA	gaactcaaacctgcttctcatcggtactgaggtcc	agcacgtt
C. Fam	aagtgctt	ggatc	gatgatgactcctca-atctgattccttggaaaagctga	ACAAAATG	GTGA	gaactcctcgctgcttctcatcgcaactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatc	gatgatgactcctca--acagcattccttggaaaagctga	ACAAAATG	GTGA	gaactcctcctcctgcttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	gatgatgactccccca--aatgcattccttgg--aaatctga	ACAAAATG	GTGA	gccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	aggtgctc	ggatc	gatgatgactccccca--aatgcattccttgg--aaatctga	ACAAAATG	GTGA	gaactcactaccgtcgttctcgcgagactgaggtcc	agcacctg
S. Sus	ccgtgctc	ggatc	gatgatgactcctct--aaagcattccttgg--aaatctga	ACAAAATG	GTGA	gaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
O. Avi	acatgctc	ggatc	cagtgatgacaactttc-atatttattccttggaaaatctga	ACAAAATG	GTGA	gaactcactaccatc-tcctcatcgatactgaggtcc	agcacgtt
L. Afr	acgtgcat	ggatt	gatgatgactgc--tatctaaacattccttggaaaagctga	ACAAAATG	GTGA	aaactccttaccgtctcactcattg-aactgaggtcc	agcacatt
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id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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R. Mac	agtcagag	gtgag	ttaggcg...113...-----taccctc-ccaaagtccaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...377...ccccactccag	tctcctaa	
P. Tro	agtcagag	gtgag	ttaggcg...111...-----taccctc-ccaaagtccaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...375...ccccactctag	tctcctaa	
C. Jac	agtcagag	gtgag	ttaggcg...106...-----ctaccctc-ccaaagtccaag	TCGCCATTTTGT	cctgttgatcgccatgaggc---...371...ccccactgtag	tctcctaa	
M. Mus	agtcagag	gtaag	ttaggcg...106...-----ctactttaaaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---...369...ctcccactttag	tctcccaa	
R. Nor	agtcagag	gtgag	ttaggcg...105...-----cctacttt-aaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---...361...actttattttag	tctcccaa	
C. Por	agtcagag	gtaag	cgtattt...103...-----gcctgctc-ccaaagtccagg	TCGCCATTTTGT	cctcg---tcgccaatgaggccgc...327...cttccactctag	tctcctaa	
O. Cun	agtcagag	gtgag	gagtc...102...aagcctaccctc-ccaaag-----	TCGCCATTTTGT	cctgctgctcgccaatgaggc---...378...tctcccgccag	tcgcccua	
C. Fam	agtcagag	gtgag	taaacag...112...-----ttcccctc-cggaagttagg	TCGCCATTTTGT	cctcgtcgtcgccaatgaggc---...363...ccccctcctag	tctcccaa	
F. Cat	agtcagag	gtgag	taaacag...113...-----taccctc-ccaaagtccagg	TCGCCATTTTGT	cctcgtcgtcgccaatgaggc---...378...cccactcctag	tctcccaa	
B. Tau	aatcagag	gtggg	taaacag...111...-----tcccctc-cctaaagttagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgc...362...ctcctcctag	tctcccaa	
E. Cab	agtcagag	gtgag	taggacg...111...-----taccctc-ccaaagttagg	TCGCCATTTTGT	cctcgtcgtcgccaatgaggc---...359...tctactcctag	tctcccaa	
S. Sus	agtcagag	gtgag	ttaggcg...111...-----taccctc-cctaaagttagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgt...358...ccctactcctag	tctcccaa	
O. Avi	aatcagag	gtggg	taaacag...111...-----tcccctc-cctaaagttagg	TCGCCATTTTGT	cctcg---tcgccaatgaggctgc...366...ctccactcctag	tctcccaa	
L. Afr	agtcagag	gtaag	ctaccc...108...-----taccctc-ccaaagttagg	TCGCCATTTTGT	cctcgtcgtcgccaatgaggc---...389...ttccaccattag	tctcctaa	
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id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 169: CS=14.25



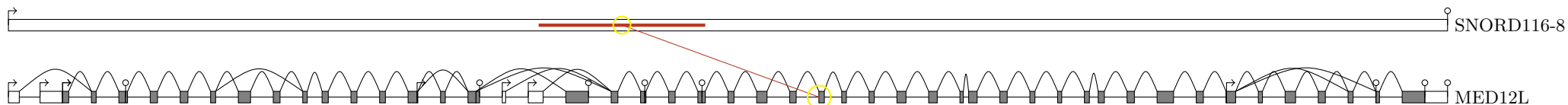
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaa-ACATTCCtTGGAAAAgTGA	caaatgagtgagaactca-taccgtcgttctcatcggaactgaggtcc	agcacatt
P. Tro	atgtgctt	ggatcgatgatgagtcctccaaaaaa-ACATTCCtTGGAAAAgTGA	caaatgagtgagaactca-taccgtcgttctcatcggaactgaggtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaa-ACATTCCtTGGAAAAgTGA	caaatgagtgagaactcc-taccgtcgttctcatcggaactgaggtcc	agcacatt
C. Jac	atgtgctc	ggatcgatgatgagtcctataaaaa-ACATTcCTTGGAAAAAGC	tgaacaaatgagtgaaagtca-taccgtcgttctcatcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattcc--cagtcaaAACATTCCtTGGAAAAAGC	tgaacaaatgagtgaaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgatttcc---aataaaACATTCCtTGG-AAAAGC	TGA caaatgagtgaaaactcaataccgccactctcatcgtgactgaggtcc	agcacctg
C. Por	atgtgctc	ggatcgatgatgatgcc--ccaaaaa-ACATTCCtTGGAAAAAGC	tgaacaaatgagtgagaactcaatccgctcactctcgtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgactccccataaa---ACATTCCtTGGAAAAAGC	TGA caaatgagtgagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacggt
C. Fam	aagtgctt	ggatcgatgatgactcctcaatct--GCATTCCtTGGAAAAAGC	tgaacaaatgagtgagaactccctgcgctggttctcatcgaactgaggtcc	agcacggt
F. Cat	atgtgctc	ggatcgatgatgactcctcaaca---GCATTCCtTGGAAAAAGC	TGA caaatgagtgagaactccctcccgtcgttctcatcgaactgaggtcc	agcacggt
B. Tau	acgtgctt	ggatcgatgatgactcccacaat---GCATTCCtTGG-AAAAGC	TGA caaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
L. Afr	acgtgcat	ggattgatgatgactgctatctaa---ACATTCCtTGGAAAAAGC	TGA caaatgagtgaaaactccttaccgtctcactcatg-aactgaggtcc	agcacatt
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id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15.25315579.25315673.1 type=EN

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R. Mac	---tacccaac	gtgcctctcttt...175...--tggatgtaatgaatccggtatTTGTTTTCCAG	GAATGTca
P. Tro	---tacccaag	gtgactcttttt...175...--tggatgtaatgaatcaggtatTTGTTTTCCAG	GAATGTca
P. Abe	---tacccaag	gtggctctcttt...175...--tggatgtaatgaatcaggtatTTGTTTTCCAG	GAATGTca
C. Jac	---tacccaag	atgcctctcttt...177...----atgtagtgaatcaggtatctGTTCCAG	GAATGTca
M. Mus	---ccccatg	gtgctctcttt...170...----ctgtgatgagtcacttacttGTTCCAG	GAATGTca
R. Nor	---ccccatg	gtgctctcttt...166...--gggctgtgatgaatcacttatTTGTTTTCCAG	GAATGTa
C. Por	agggtcccggg	g---ctctgtcc...173...----acatgatgaatcaggtacttGTTCCAG	GAATGTca
O. Cun	---tacccaag	gtgcctctcttt...163...--tggatgtagatgaaccaagtcTTGTTTTCCAG	GAATGTca
C. Fam	---tacccaag	ggacctctcttc...184...----atttgatcaatcaagtatctGTTCCAG	GAATGTca
F. Cat	---tacccaag	gcacctctcttc...180...--tggatgtagatgaatcaagtatTTGTTTTCCAG	GAATGTca
B. Tau	---tacctgag	gcacctctcttc...191...--tggatgtagatgaatcaagtatTTGTTTTCCAG	GAATGTca
L. Afr	---tacctgaa	gcacctctcttt...145...cttggaagtgaatcagTGTTTTATTTCCAG	GAATGTca
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id=149604 gene=ENSG00000198373 name=WWP2 segment=chr16.69832858.69833076.1 type=IN

Figure 170: CS=11.7



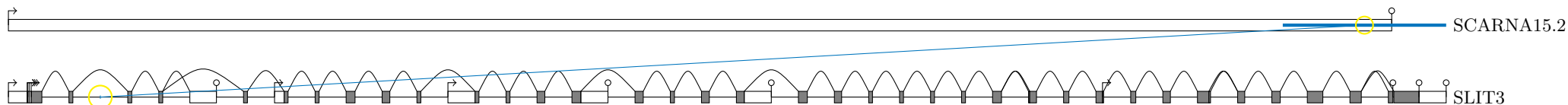
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R. Mac	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgctggttctcatcggaaactgaggtcc	agcacatt	
P. Tro	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtgagaactca-taccgctggttctcatcggaaactgaggtcc	agcacatt	
P. Abe	atgtgctt	ggatc	gatgatgagtcctccaaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtgagaactcc-taccgctggttctcatcggaaactgaggtcc	agcacatt	
C. Jac	atgtgctc	ggatc	gatgatgagtcctataaaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagtgaagctca-taccgctgctctcatcggaaactgaggtcc	agcacatt	
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R. Nor	gctgctt	ggatc	gatgatgatttc--caata	aaaaCATTCCTTGGAAAAG	-ctgaacaaaatgagtgaaaactcaataccgcaactctcatcgtgactgaggtcc	agcacctg	
C. Por	atgtgctc	ggatc	gatgatgatgcc--ccaaaa	aaCATTCCTTGGAAAAGC	tgaacaaaatgagtgagagctctaatccgctcactctcgtcgtgactgaggtcc	agcacatt	
O. Cun	atgtgctt	ggatc	gatgatgactccccat-aaa	-CATTCCTTGGAAAAGC	tgaacaaaatgagtgagaactcacaaccgctggttctcatcgtgactgaggtcc	agcacgtt	
C. Fam	aagtgctt	ggatc	gatgatgactccctcaatctg	-CATTCCTTGGAAAAGC	tgaacaaaatgagtgagaactcctgcccgtggttctcatcgcaactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatc	gatgatgactcccaca-atg	-CATTCCTTGGAAA	-tctgaacaaaatgagtgagccatcactaccgctc-tcctcatcggaaactgaggtcc	agcacgtg	
S. Sus	cgtgctc	ggatc	gatgatgactcctctaag--	CATTCCTTGGAAA	-tctgaacaaaatgagtgagaactcactaccgctc-tcctcatcgaaactgaggtcc	ggcacgtg	
L. Afr	acgtgcat	ggatt	gatgatgactgctatctaaa--	CATTCCTTGGAAAAGC	tgaacaaaatgagtgaaaactccttaccgctcactcattg-aactgaggtcc	agcacatt	
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id=203758 gene=ENSG0000207093 name=SNORD116-8 segment=chr15\_25315579\_25315673.1 type=EN

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R. Mac	ctgtagat	gtaagttttctt...1596...	aggtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Tro	ctgtagat	gtaagttttctt...1611...	aggtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Abe	ctgtagat	gtaagttttctt...1599...	aggtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Jac	ctgtagat	gtaagtagtttc...1911...	aagtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
M. Mus	cgtggat	gtaagttttctt...1434...	gggtattaaacctgtcaat	GTTTTTCTtaAAG	GtgAGTGa
R. Nor	ctgtggat	gtaagttttctc...1318...	--gcatataaacctgtccatgt	TTTTTCTtaAAG	GtgAGTGa
C. Por	ctgtagat	gtaagttttctt...1542...	aggtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
O. Cun	ctgtcgat	gtaagtttgctt...1690...	aggtattaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Fam	ctgtggat	gtaagttttctt...1568...	aggtattaaacgtgtcaat	GTTTTTCTtgAAG	GtgAGTGa
B. Tau	ctgtcgat	gtaagttttctg...1572...	---tattaaacatgtcaatgtt	TTTTTCTtgAAG	GtgAGTGa
S. Sus	ctgtagat	gtaagttttctt...1671...	---tattaaacgtgtcaatgtt	TTTTTCTtgAAG	GtgAGTGa
L. Afr	ccgtcgat	gtaagttttctta...2099...	aggtattaaacatgtcaat	GTTTTTCTtgAAG	GtgAGTGa
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id=595784 gene=ENSG0000144893 name=MED12L segment=chr3\_151083780\_151085433.1 type=IN

Figure 171: CS=11.7



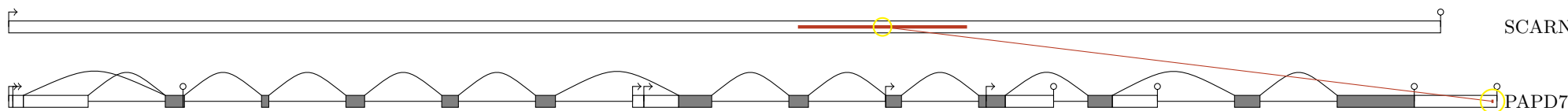
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R.Mac	ataacat	ctgaagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	-----ca	attataca
P.Tro	ataacat	ctgaagactagg...76...tgcaaaataaattcaagacc	TACTT	atCTACCGACAG	-----ca	attataca
C.Jac	atgttctt	ctggagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	-----ca	attatattg
M.Mus	atattcct	ctggagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	ccATTGcct a-----	
R.Nor	atattcct	ttggagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	-----ct	attaccta
C.Por	ggtggtgt	tggagactgag...76...tgcaaaagaaacccaagacc	TACTT	atCTACCaACAG	-----caa	attagaca
O.Cun	gtcacatt	ctggagactaag...76...cgcaaaaggaattcaagacc	TACTT	atCTACCaACAG	-----ca	agtatgca
B.Tau	atgttctt	ctggagactaac...76...tgcaaaatgaattcaagacc	TACTT	atCTACCaACAG	-----ca	atgataac
E.Cab	atgttctt	ctggagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	-----ca	atggtacg
S.Sus	aggttctt	ctggagactaag...76...tgcaaatgaattcaagacc	TACTT	ttCTACCaACAG	-----ca	attacaca
O.Avi	atgctcct	ctggagactaac...76...tgcaaaatgaattcaagacc	TACTT	atCTACCaACAG	-----ca	atgataac
L.Afr	atgttttt	ctggagactaag...76...tgcaaaataaattcaagacc	TACTT	atCTACCaACAG	-----ta	attagaca
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id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

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P.Tro	cgagtctt	gtaagtagttga...4744...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	165...ctgtggtttag	gcatctgg
C.Jac	cgagtctt	gtaagtagttga...4744...----atagagacatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	165...ctgtggtttag	gcatctgg
M.Mus	cgagtctt	gtaagtagcaga...4742...taaaatagacatggaagc	CAATCTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	163...ttctgattctag	gcatctgg
R.Nor	cgagtctt	gtaagtagcaga...4747...----atagagatgtggaagccagt	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	162...ttctgattctag	gcatctgg
C.Por	cgagtctt	gtaagtagcaaa...4747...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	162...tttggttctag	gcatctgg
O.Cun	cgagtctt	gtaagtagcaga...4747...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	162...cttggttctag	gcatctgg
B.Tau	cgagtctt	gtaagtagcatg...4735...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	174...cttggttccag	gcatctgg
E.Cab	cgagtctt	gtaagtagcaca...4746...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	163...ctctgcttctag	gcatctgg
S.Sus	cgagtctt	gtaagtagcaca...4742...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	167...ctgtgcttccag	gcatctgg
O.Avi	cgagtctt	gtaagtagcctg...4736...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	173...cttggttccag	gcatctgg
L.Afr	cgagtctt	gtaagtagcaga...4776...----atagaggcatggaaccaat	CTGT	caGGTAGAAGTG	tcaggcggcgaaccctgg...	133...ttgtggttctag	gcatctgg
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Figure 172: CS=10.14



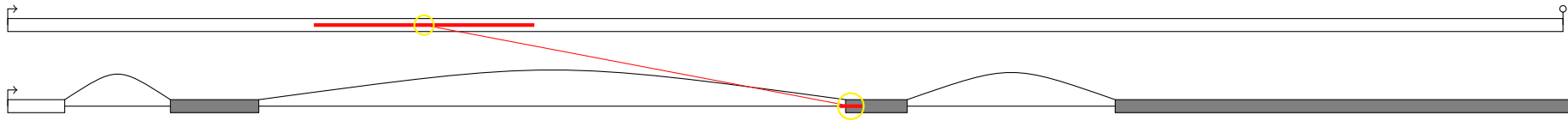
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R. Mac	ataacat	ctgaagactaagaaaatagagtccttaaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	attataca
P. Tro	ataacat	ctgaagactagggaaaatagagtccttaaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccgacagc-a	attataca
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C. Jac	atgttctt	ctggagactaagagaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	attatattg
R. Nor	atattctt	ttggagactaagacaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-t	attacctta
C. Por	ggtggtgt	tccgagactgagaaaacagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	attagaca
O. Cun	gtcacatt	ctggagactaagaaaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	agtatgca
C. Fam	ttggttgt	ctggagactaagaaaacagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	attacata
B. Tau	atgttctt	ctggagactaagaaaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	atgataac
E. Cab	atgttctt	ctggagactaagaaaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	atggttacg
S. Sus	aggttctt	ctggagactaagaaaacagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caagatgaattcaagacctactt-ttctaccaacagc-a	attacaca
O. Avi	atgctctt	ctggagactaagaaaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AAATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	atgataac
L. Afr	atgttttt	ctggagactaagaaaatagagtccttgaagtc	caagctgagctctgctgttagcctcct	AGATg	AAAAGGTAGAc	AGAAC	aggctcttggttg	caaaataaattcaagacctactt-atctaccaacagc-a	attagaca
	*	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

H. Sap	tttcacat	aagttatattta...1486...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
R. Mac	tttcacat	aagttatattta...1484...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
P. Tro	tttcacat	aagttatattta...1488...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
P. Abe	tttcacat	aagttatattta...1487...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
C. Jac	tttcacat	aagttatattta...1475...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
R. Nor	tttcacat	aagttatattta...1387...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
C. Por	tttcacat	aagttatattta...1356...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
O. Cun	tttcacat	aagttatattta...1339...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagttt	tgtgtttg
C. Fam	tttcacat	aagttatattta...1518...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	ataaaactttggaaccag-gt	ggtgtttg
B. Tau	tttcacat	aagttatattga...1425...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccag-gt	ggtgtttg
E. Cab	tttcacat	aagttatattta...1494...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccag-gt	ggtgtttg
S. Sus	tttcacat	aagttatattta...1422...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccag-gt	ggtgtttg
O. Avi	tttcacat	aagttatattga...1423...	nnnnntatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccag-gt	ggtgtttg
L. Afr	tttcacgt	aagttatattta...1357...	ttgacatatttttatgtaaa	GTTTTTCTAT	CCTTTg	ATTTT	taataaaactttggaaccagct	tgggttta
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id=454805 gene=ENSG00000112941 name=PAPD7 segment=chr5\_6755600.6757161.1 type=E3

Figure 173: CS=10.92



SCARNA15.2

AC087491.2

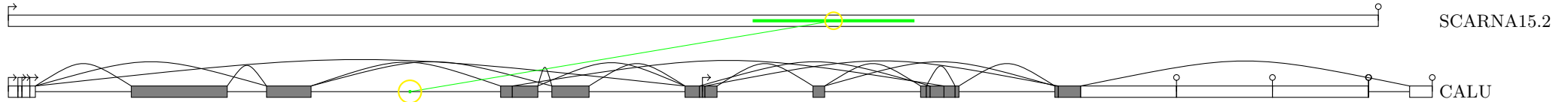
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R. Mac	ataacat	ctgaagactaagaaaat-AGAGTCCTtAAAGTcAAGC	tgactctgcttttagcctcc...59...ctaccaacagc-a	attataca
P. Tro	ataacat	ctgaagactagggaaaat-AGAGTCCTtAAAGTcAAGC	tgagtctgctgtagcctcc...59...ctaccgacagc-a	attataca
P. Abe	ataactat	ctgaagactaagaaaat-AGAGTCCTtAAAGTcAAGC	tgactctgctgtagcctcc...59...ctaccgacagc-a	attataca
C. Jac	atgttctt	ctggagactaagagaat-AGAGTCCTtGAAGTcAAGC	tgactctgctgtagcctcc...59...ctaccaacagc-a	attatattg
M. Mus	atattctt	ctggagactaagacaat-AGAGTCCTtGAAGTcAAGC	tgactctgccttttagcctcc...59...ctaccaacagc-c	atggccta
R. Nor	atattctt	ttggagactaagacaat-AGAGTCCTtGAAGTcAAGC	tgactctgccttttagcctcc...59...ctaccaacagc-t	attacctt
C. Por	ggtggtgt	tgggagactgagaaaac-AGAGTCCTtGAAGTcAAGC	tgactctgcattttagcctcc...60...-taccaacagcaa	attagaca
O. Cun	gtcacatt	ctggagactaaga-aatGAGAGTCCTtGAAGTcAAGC	cgactctgccttttagcctcc...59...ctaccaacagc-a	agtatgca
C. Fam	ttggttgt	ctggagactaagaaaac-AGAGTCCTtGAAGTcAAGC	caactctgctatttagcctcc...60...ctaccaacagc-a	attacata
F. Cat	ttggtcct	ctggagactaagaaaat-AGAGTCCTtGAAGTcAAGC	cgactctgctgtagcctcc...59...ctaccaacagc-a	tttatagc
B. Tau	atgttctt	ctggagactaacaaaat-AGAGTCCTtGAAGTcAAGC	tgactctgcttttagcctcc...59...ctaccaacagc-a	atgataac
E. Cab	atgttctt	ctggagactaagaaaat-AGAGTCCTtGAAGTcAAGC	tgactctgcttttagcctcc...59...ctaccaacagc-a	atggtacg
S. Sus	aggttctt	ctggagactaagaaaac-AGAGTCCTtGAAGTcAAGC	cgattctgcttttagcctcc...59...ctaccaacagc-a	attataca
	*	* * * * *	* * * * *	* * * * *

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

H. Sap	cccagaag	gtaggttctgga...1970...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
R. Mac	cccagaag	gtaggttctgga...1960...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
P. Tro	cccagaag	gtaggttctgga...1969...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
P. Abe	cccagaag	gtaggttctgga...1968...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
C. Jac	ccaagaag	ataggttctggg...2853...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
M. Mus	attaggat	ggaggttctggg...1940...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
R. Nor	atcgggtc	gtaggttctggg...1754...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
C. Por	tggactag	gaggttctggg...1196...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
O. Cun	gccagggg	gcagcctgcaga...2211...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
C. Fam	cccaggag	gtaggttctggg...1596...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
F. Cat	cctaggag	gaaggttctggg...1592...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
B. Tau	cctaagag	ggagggactggg...1794...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
E. Cab	cccaggag	ggaggttctggg...1646...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
S. Sus	gccaggaa	gtagattctggg...2037...tggtttataaattaacagctGTTTtaACTTTAG	GGcCTCTt
		* * * * *	* * * * *

id=8797 gene=ENSG00000214546 name=AC087491.2 segment=chr17\_37776082\_37778096\_1 type=IN

Figure 174: CS=10.92



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C. Jac -atgttcttctggagactaag... 29...-ctgctgttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaaaataaattcaagacctactt-atctaccaacagc-aattatgt
M. Mus -atattcttctggagactaag... 29...-ctgccttagcctcctacatGAAAAGGTAGatAGAAcaggtctgtttgcaaaataaattcaagacctactt-atctaccaacagc-cattgcta
R. Nor -atattcttctggagactaag... 29...-ctgccttagcctcctacatGAAAAGGTAGatAGAAcaggtctgtttgcaaaataaattcaagacctactt-atctaccaacagc-tattaccta
C. Por ggtgggttc-ggagactgag... 29...-ctgcatttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaaaagaaaccaagacctactt-atctaccaacagcaaatagaca
O. Cun -gtcacattctggagactaag... 29...-ctgccttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaaaagaaagttcaagacctactt-atctaccaacagc-aagtatgca
C. Fam -ttggttctctggagactaag... 28...tctgctatttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgttagcaaaataaattcaagacctactt-aatctaccaacagc-aattacata
F. Cat -ttggttctctggagactaag... 29...-ctgctgttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaaaacaaattcaagacctactt-atctaccaacagc-atTTatagc
B. Tau -atgttcttctggagactaac... 29...-ctgcttttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtgtgcaaaatgaattcaagacctactt-atctaccaacagc-aatgataac
E. Cab -atgttcttctggagactaag... 29...-ctgcttttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaaaataaattcaagacctactt-atctaccaacagc-aatggtagc
S. Sus -aggttcttctggagactaag... 29...-ctgcttttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtttgcaagatgaattcaagacctactt-ttctaccaacagc-aattacaca
O. Avi -atgcttctctggagactaac... 29...-ctgcttttagcctcctaagtGAAAAGGTAGatAGAAcaggtctgtgtgcaaaatgaattcaagacctactt-atctaccaacagc-aatgataac
L. Afr -atgtttttctggagactaag... 29...-ctgcttttagcctcctagatGAAAAGGTAGAcAGAAcaggtctgtttgcaaaataaattcaagacctactt-atctaccaacagc-aattagaca
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

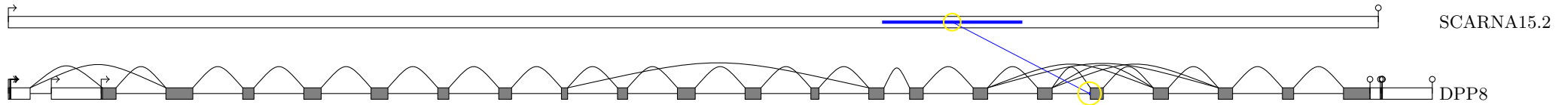
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C. Jac aggcttgggtaaggtgctag-... 4938... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
M. Mus aggcttgggtaagatgtctg-... 4545... ttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
R. Nor aggcttgggtaagatgtctg-... 4938... ttttaacgcttctgctggatTTCTCTGCgTTTTCtacagaaagattg
C. Por aggcttgggtaagcaccacaa-... 4938... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaaattg
O. Cun aggcttgggtaagatgccc-... 4938... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
C. Fam aggcttgggtaaggtgccaa-... 4938... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaaattg
F. Cat agacttgggtaaggtgccag-... 4938... ttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
B. Tau agacttgggtaaggtgccag-... 4751... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
E. Cab agacttgggtaaggtgccag-... 4785... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
S. Sus agacttgggtgagctaccag-... 4938... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
O. Avi agacttgggtaaggtgccag-... 4740... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
L. Afr aggcttgggtaaggtgccac-... 4737... cttttaacgcttctgctggatTTCTCTGCaTTTTCtacagaaagattg
** ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=606 gene=ENSG00000128595 name=CALU segment=chr7\_128388859\_128394315\_1 type=IN

Figure 175: CS=12



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R. Mac	ataacat	ctgaagactaag...36...-tagcctccta	aatgaaa	gga	TAGAc	AGAA	CAGGT	TTGT	TGCAA	ttgaaa	aataaatt	caagac	tactt	-atctacc	aacagca	attataca
P. Tro	ataacat	ctgaagactaag...36...-tagcctccta	aatgaaa	gga	TAGAc	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacc	gacagca	attataca	
P. Abe	ataacat	ctgaagactaag...36...-tagcctccta	aatgaaa	gga	TAGAc	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacc	gacagca	attataca	
C. Jac	atgttctt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagca	attatgat	
M. Mus	atattcct	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagcc	attgccta	
R. Nor	atattcct	ttggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagct	attaccta	
O. Cun	gtcacatt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	CGCAa	AGGAAG	ttcaagac	tactt	-atctacca	acagca	agtatgca	
C. Fam	ttggttgt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagca	attacata	
F. Cat	ttggtcct	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagca	tttatagc	
B. Tau	atgttctt	ctggagactaac...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aatgaatt	caagac	tactt	-atctacca	acagca	atgataac	
E. Cab	atgttctt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagca	atggtacg	
S. Sus	aggttctt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	atgaatt	caagac	tactt	-ttctacca	acagca	attacaca	
O. Avi	atgctcct	ctggagactaac...35...ttagcctccta	aatgaaa	gga	GTAGAt	AGAA	CAGGT	TTGT	TGCAA	aatgaatt	caagac	tactt	-atctacca	acagca	atgataac	
L. Afr	atgttttt	ctggagactaag...35...ttagcctccta	aatgaaa	gga	GTAGAc	AGAA	CAGGT	TTGT	TGCAA	aataaatt	caagac	tactt	-atctacca	acagta	attagaca	
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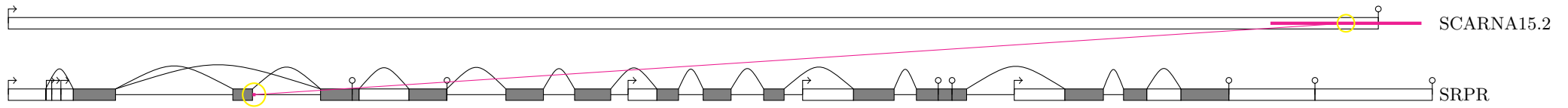
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R. Mac	ataaaatg	gtgtgtgagcat...346...-----ctg	gttagt	gcctt	cctt	gtGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
P. Tro	ataaaatg	gtgtgtgagcat...326...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
P. Abe	ataaaatg	gtgtgtgagcat...327...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
C. Jac	ataaaatg	gtgtgtgagcat...342...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
M. Mus	ataaaatg	gtgtgtgaacat...298...-----cga	ctggt	ttc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTG	cag	gaagc	ttt	
R. Nor	ataaaatg	gtgtgtgagcac...302...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTG	cag	gaagc	ttt	
O. Cun	ataaaatg	gtgtgtgagcat...345...gggaa	accaact	-ttagt	gc	CTTCCT	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt
C. Fam	acaaaatg	gtgtgtgagcat...378...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
F. Cat	ataaaatg	gtgtgtgagcat...413...-----tca	actgatt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
B. Tau	ataaaatg	gtgtgtgagcat...347...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
E. Cab	ataaaatg	gtgtgtgaacat...336...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
S. Sus	ataaaatg	gtgtgtgacgt...348...-----cca	actggt	tagtgc	cttcc	CTTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
O. Avi	ataaaatg	gtgtgtgagcat...346...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
L. Afr	acaaaatg	gtgtgtgagcat...352...-----cca	actggt	tagtgc	cttcc	TTGTGACA	AGCCT	ctTTCT	cTCTA	cag	gaagc	ttt	
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Figure 176: CS=11.7





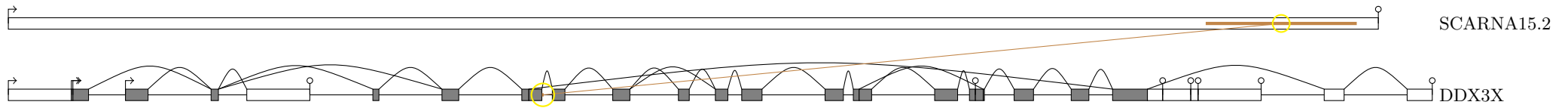
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 C. Jac atgttcttctggagactaag...73...-gtttgcaaaataaattcaag**ACCTACTT**-At**CTAC****CAACA**gc-aattatag  
 M. Mus atattcttctggagactaag...74...--tttgcaaaataaattcaaga**CCTACTT**-At**CTAC****AACA**gc-cattgccta  
 R. Nor atattcttctggagactaag...72...gtttgcaaaataaattcaag**GACCTACTT**-At**CTAC****CAACA**gc-tattaccta  
 C. Por ggtggtgttcggagactgag...74...--tttgcaaaagaacccaaga**CCTACTT**-At**CTAC****CAACA**gcaattagaca  
 O. Cun gtcacattctggagactaag...74...--ttcgcaaaaggagttcaaga**CCTACTT**-At**CTAC****CAACA**gc-aagtatgca  
 C. Fam ttggttctctggagactaag...73...-gttagcaaaataaattcaag**ACCTACTT**At**CTAC****CAACA**gc-aattacata  
 F. Cat ttggttctctggagactaag...74...--tttacaaaacaattcaaga**CCTACTT**-At**CTAC****CAACA**gc-atttatagc  
 B. Tau atgttcttctggagactaac...73...-gtgtgcaaaatgaattcaag**ACCTACTT**-At**CTAC****CAACA**gc-aatgataac  
 E. Cab atgttcttctggagactaag...74...--tttgcaaaataaattcaaga**CCTACTT**-At**CTAC****AACA**gc-aatggtacg  
 S. Sus aggttcttctggagactaag...74...--tttgcaagatgaattcaaga**CCTACTT**-tt**CTAC****CAACA**gc-aattacaca  
 O. Avi atgctcttctggagactaac...76...---tgcaaaatgaattcaagacc**TACTT**-At**CTAC****CAACA**gc-aatgataac  
 L. Afr atgttttctggagactaag...74...--tttgcaaaataaattcaaga**CCTACTT**-At**CTAC****CAACA**gt-aattagaca  
 \* \* \*\*\*\*\* \* \*\* \* \*\*\*\*\* \*\*\*\*\*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

R. Mac t**GTT**t**GTGGTAAG**--**TGGG**---atgtttagaggagcatta-----...250...tcccctaaacaggttggttt  
 C. Jac t**GTT**t**GTGGTAAG**--**TgGGGT**---gtttagaggacaatgatt-----...252...tctcctaaacaggttggttt  
 M. Mus t**GTT**t**GTGGTAAG**--**TGGG**--ggtatgttagaaagacaagt-----...231...ttccataaacaggttggttt  
 R. Nor t**GTT**t**GTGGTAAG**--**TgGGGT**--atgttagaaagacaagtat-----...228...ttccataaacaggttggttt  
 C. Por t**GTT**t**GTGGTAAG**--**TGGG**acagtgttt-----acgttttcacc...242...tcccctaaacaggttggttt  
 O. Cun t**GTT**t**GTGGTAAGT**t**TGGG**--agtatttagaaagacaacg-----...255...tcccctaaacaggttggttt  
 C. Fam t**GTT**t**GTGGTAAG**--**TggAGGT**--actcccagacgtcgcggtc-----...219...ctccctgaacaggttggttt  
 F. Cat t**GTT**t**GTGGTAAG**--**TGGG**--gctatttagaaggataatg-----...229...ctccctgaacaggttggttt  
 B. Tau t**GTT**t**GTGGTAAG**--**TgaGGGT**--atatttagagggtaacgatt-----...251...ttccctgaacaggttaggttt  
 E. Cab t**GTT**t**GTGGTAAG**--**TGGG**--agtatttcagggggacaatg-----...254...tcccctaaacaggttggttt  
 S. Sus t**GTT**t**GTGGT**t**AAG**--**TGGG**--ggtatttagaggggcaatg-----...131...tcccctaaacaggttggttt  
 O. Avi t**GTT**t**GTGGTAAG**--**TG**--agtgtatttagagggttaa-----...256...tcccctgaacaggttaggttt  
 L. Afr t**GTT**t**GTGGTAAG**--**TGGG**--ggtatttcagagggttagtg-----...255...ttccctgaacaggttggttt  
 \*\*\* \*\*\*\*\* \*\* \* \*\*\*\*\* \*\* \*\*

id=130378 gene=ENSG00000182934 name=SRPR segment=chr11\_126137608\_126137897\_-1 type=IN

Figure 177: CS=13



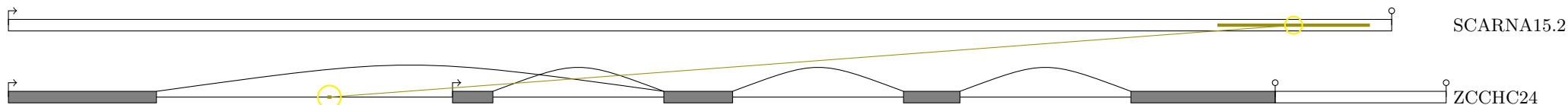
H. Sap	ataacat	ctgaagactaag...67...--ggtcttgtttgcaaaataaa	TTCAAGAC	TACT	taTCTA	ccgacagc-a	attataca
R. Mac	ataacat	ctgaagactaag...67...--ggtcttgtttgcaaaataaa	TTCAAGAC	TACT	taTCTA	ccaacagc-a	attataca
P. Abe	ataacat	ctgaagactaag...70...-----ctgtttacaaaataaattc	AAAGAC	TACT	taTCTA	ccgacagc-a	attataca
C. Jac	atgttctt	ctggagactaag...67...--ggtcttgtttgcaaaataaa	TTCAAGAC	TACT	taTCTA	ccaacagc-a	attatatg
M. Mus	atattctt	ctggagactaag...64...acaggtcttgtttgcaaaat	AAATTca	AGAC	TACT	taTCTA	ccaacagc-c
R. Nor	atattctt	ttggagactaag...67...--ggtcttgtttgcaaaataaa	TTCAAGAC	TACT	taTCTA	ccaacagc-t	attaccta
C. Por	ggtggtgt	ctggagactgag...70...-----ctgtttgcaaaagaaccc	AAAGAC	TACT	taTCTA	ccaacagcaa	attagaca
O. Cun	gtcacatt	ctggagactaag...70...-----ctgtttcgaaggagttc	AAAGAC	TACT	taTCTA	ccaacagc-a	agtatgca
F. Cat	ttgttctt	ctggagactaag...67...--ggtcttgttttcaaaaacaaa	TTCAAGAC	TACT	taTCTA	ccaacagc-a	tttatacg
B. Tau	atgttctt	ctggagactaac...67...--ggtcttggtgcaaaatgaa	TTCAAGAC	TACT	taTCTA	ccaacagc-a	atgataac
E. Cab	atgttctt	ctggagactaag...70...-----ctgtttgcaaaataaattc	AAAGAC	TACT	taTCTA	ccaacagc-a	atggtacg
S. Sus	aggttctt	ctggagactaag...67...--ggtcttgtttgcaaatgaa	TTCAAGAC	TACT	TTTTCTA	ccaacagc-a	attacaca
L. Afr	atgttttt	ctggagactaag...67...--ggtcttgtttgcaaaataaa	TTCAAGAC	TACT	taTCTA	ccaacagt-a	attagaca
	*	* * * * *	*	*	*	* * * * *	* * * * *

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

H. Sap	tTGAacA	GTAAGTTT	TGAA	----gtgtatgttactt	gtgatga	---.38...ttttgatttgag	ggaactct	
R. Mac	tTGAacA	GTAAGTTT	TGAA	----gtgtatgttactt	gtgatga	---.33...ttttgatttgag	ggaactct	
P. Abe	tTGAacA	GTAAGTTT	TGAA	----cgaagtgtatgtt	actt	gtg	---.42...ttttgatttgag	ggaactct
C. Jac	tTGAacA	GTAAGTTT	TGAA	----atgtatgttactt	gtgatga	---.38...ttttgatttgag	ggaactct	
M. Mus	tTGAacA	GTAAGTTT	AGTTT	ttaaa-gtatgtga	---t	gaaatc	---.34...tatttatccag	ggaactct
R. Nor	tTGAacA	GTAAGTTT	TGAA	----gtatgctat	ttgcggtgaaa	...32...gatctatttcag	ggaactct	
C. Por	tTGAacA	GTAAGTTT	TGAA	----tgaatgcatgt	taattgtg	---.38...ttttaattttag	ggaactct	
O. Cun	tTGAacA	GTAAGTTT	TGAA	----taaatgtatgt	taagtgtg	---.38...gtttgatcccag	ggaactct	
F. Cat	tTGAacA	GTAAGTTT	TGAA	----cgatgttaatt	gtgataaa	...36...tcttgatttcag	ggaactct	
B. Tau	tTGAacA	GTAAGTTT	TGAA	----atgtatgtta	attgtgatga	---.35...ttctgatttcag	agaactct	
E. Cab	tTGAacA	GTAAGTTT	TGAA	----tcaaatgttt	gttaattgtg	---.42...ttctgattttag	ggaactct	
S. Sus	tTGAacA	GTAAGTTT	TGAA	----atgtgtgta	aattatgatga	---.43...ttttgatttaag	ggaactct	
L. Afr	cTGAacA	GTAAGTTT	TGAA	----acatatgtta	attgtgataa	---.42...ttttatccttag	ggaactct	
	*** **	*****		** *		**	*****	

id=566243 gene=ENSG00000215301 name=DDX3X segment=chrX\_41201907\_41201989.1 type=IN

Figure 178: CS=13



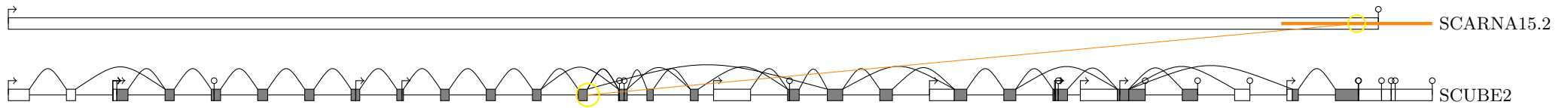
H. Sap	ataacat	ctgaagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccgacagc-a	attataca
R. Mac	ataacat	ctgaagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	attataca
P. Tro	ataacat	ctgaagactagg...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccgacagc-a	attataca
P. Abe	ataactat	ctgaagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccgacagc-a	attataca
M. Mus	atattctt	ctggagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-c	attgccta
R. Nor	atattctt	ttggagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-t	attaccta
C. Por	ggtggtgt	tcggagactgag...70...--cttgtttgaaaagaacc	AAGACCT	ACTT	-aTCTA	ccaacagcaa	attagaca
O. Cun	gtcacatt	ctggagactaag...67...ggtcttgtttgaaaagaag	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	agtatgca
C. Fam	ttggttgt	ctggagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	attacata
F. Cat	ttggtctt	ctggagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	tttatagc
B. Tau	atgttctt	ctggagactaac...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	atgataac
E. Cab	atgttctt	ctggagactaag...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	atggtacg
O. Avi	atgtctct	ctggagactaac...67...ggtcttgtttgaaaataaa	TTCAAGACCT	ACTT	-aTCTA	ccaacagc-a	atgataac
		*	* ****	****	***	*	*****

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

H. Sap	gcgagag	gtgggtgcccc...569...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...324...--ggaatttcagac	accatct
R. Mac	gcgagag	gtgggtgcccc...561...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...320...--ggaatttcagac	accatct
P. Tro	gcgagag	gtgggtgcccc...569...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...320...--ggaatttcagac	accatct
P. Abe	gcgagag	gtgggtgcccc...583...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...320...--ggaatttcagac	actatct
M. Mus	gcgagag	gtgggtgcccc...540...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...305...--gaaattgccaat	acccttg
R. Nor	gcgagag	gtgggtgcccc...547...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...300...--gaaattgctggt	acccttg
C. Por	gcgagag	gtgggtgctccg...445...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...346...--gaaatcgaggc	acccttg
O. Cun	gcgagag	gtgggtgcccc...486...-ccgcctctcccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...271...tggaattgtag--	accctct
C. Fam	gcgagag	gtgggtgcccc...534...-cgtgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...340...--ggaattacagat	acccttct
F. Cat	gcgagag	gtgggtgcccc...544...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...331...--ggaattgcagat	acccttct
B. Tau	gcgagag	gtgggtgcccc...553...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...344...--agaaccgagac	acccttct
E. Cab	gggagag	gtgggtgcccc...553...-gcttgcctc-ctcagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...325...--ggaatttcagac	acccttct
O. Avi	gcgagag	gtgggtgcccc...550...-ctgcctccccagccaca	TAGGAAGTGGTTT	TGAG	ggccttgaccccacagactgc...344...--agaaccgagac	acccttct
		* *****	*****	**	*****	**

id=703472 gene=ENSG00000165424 name=ZCCHC24 segment=chr10\_81203976\_81204950\_-1 type=IN

Figure 179: CS=11.7



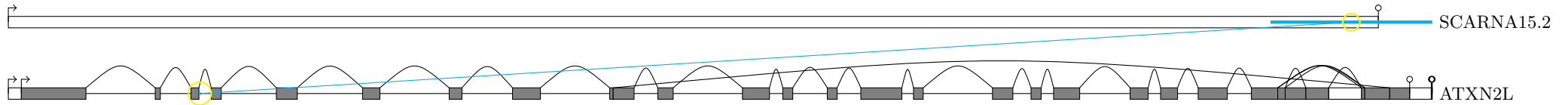
H. Sap	ataacat	ctgaagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcgACAG	-ca	attataca
R. Mac	ataacat	ctgaagactaag...78...-----	gaaaataaattcaagaccta	CTT-ATCTACcaACAG	-ca	attataca
P. Tro	ataacat	ctgaagactagg...78...-----	caaaataaattcaagaccta	CTT-ATCTACcgACAG	-ca	attataca
P. Abe	ataactat	ctgaagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcgACAG	-ca	attataca
C. Jac	atgttctt	ctggagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcaACAG	-ca	attatatag
M. Mus	atattcct	ctggagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcaACAG	-cc	attgccta
R. Nor	atattcct	ttggagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcaACAG	-ct	attaccta
C. Por	ggtggtgt	tccgagactgag...78...-----	caaaagaaacccaagaccta	CTT-ATCTACcaACAG	caa	attagaca
C. Fam	ttggtgt	ctggagactaag...73...gttagcaaaataaattcaag	ACCTaCTTAATCTACcaACAG	-ca	attacata	
F. Cat	ttggtcct	ctggagactaag...73...gtttacaacaaattcaag	ACCTaCTT-ATCTACcaACAG	-ca	tttatacg	
B. Tau	atgttctt	ctggagactaac...78...-----	caaaatgaattcaagaccta	CTT-ATCTACcaACAG	-ca	atgataac
E. Cab	atgttctt	ctggagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcaACAG	-ca	atggtacg
O. Avi	atgctcct	ctggagactaac...78...-----	caaaatgaattcaagaccta	CTT-ATCTACcaACAG	-ca	atgataac
L. Afr	atgttttt	ctggagactaag...78...-----	caaaataaattcaagaccta	CTT-ATCTACcaACAG	-ta	attagaca
		*	* * *****	**** ** *****	***** ** *	*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

H. Sap	cTGTGTGG	GTAAG	gggaaccga	---ggcacagactc---	...384...tgtcctgtctag	aagtgaag
R. Mac	cTGTGTGG	GTAAG	gggaaccga	---ggcacagactc---	...384...tgtcctgtctag	aagtgaag
P. Tro	cTGTGTGG	GTAAG	gggaaccga	---ggcacagactc---	...384...cgtcctgtctag	aagtgaag
P. Abe	cTGTGTGG	GTAAG	gggaactga	---ggcacagactc---	...384...tgtcctgtctag	aagtgaag
C. Jac	cTGTGTGG	GTAAG	ggccacca	---ggcacacactc---	...384...tgtcctatctag	aagtgaag
M. Mus	cTGTGTGG	GTAAG	aggctccat	---ccttcccata---	...385...tgtcctgtctag	aagtgaag
R. Nor	cTGTGTGG	GTAAG	aggctccat	---ccttcgatagt---	...382...tgtcctgtctag	aagtaaag
C. Por	cTGTGTGG	GTAAG	gggggccaccttggcacag	-----	...401...tatcctgtttag	aagtaaag
C. Fam	cTGTGTGG	GTAAGGGGT	accga	---gtctcacagtttagcg...	...387...tgtcctatctag	aagtgaag
F. Cat	cTGTGTGG	GTAAGGGGT	accga	---ggctcacagtcagcg...	...386...tgtcctgtctag	aagtgaag
B. Tau	cTGTGTGG	GTAAG	agtcctg	---ggctcaggctc---	...376...tgtcctgtctag	aagtgaag
E. Cab	cTGTGTGG	GTAAG	ggcgccga	---ggctcactc---	...394...tgtcctgtctag	aagagaag
O. Avi	cTGTGTGG	GTAAG	agtcctg	---ggctcaggctc---	...381...tgtcctgtctag	aagtgaag
L. Afr	cTGTGTGG	GTAAG	ggcgctga	---ggcgacagactc---	...413...tgtcctgtttag	aagtgaag
	*****	*****	* * *	*	**** * ***	*** **

id=364368 gene=ENSG00000175356 name=SCUBE2 segment=chr11\_9074763\_9075183\_-1 type=IN

Figure 180: CS=10.92



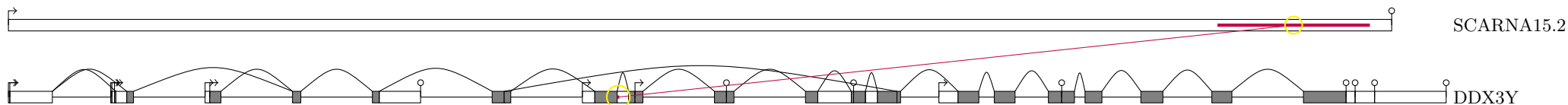
H.Sap	ataacat	ctgaagactaag...77...-----gcaaaataaattcaagacctACTTA-tCTACGACAG-ca	attataca
R.Mac	ataacat	ctgaagactaag...77...-----ggaaaataaattcaagacctACTTA-tCTACCAACAG-ca	attataca
P.Tro	ataacat	ctgaagactagg...77...-----gcaaaataaattcaagacctACTTA-tCTACGACAG-ca	attataca
P.Abe	ataactat	ctgaagactaag...77...-----acaaaataaattcaagacctACTTA-tCTACGACAG-ca	attataca
C.Jac	atgttctt	ctggagactaag...77...-----gcaaaataaattcaagacctACTTA-tCTACAACAG-ca	attatatg
M.Mus	atattctt	ctggagactaag...76...-----tgcaaaataaattcaagacctACTTA-TCTACcaACAG-cc	attgccta
R.Nor	atattctt	ttggagactaag...76...-----tgcaaaataaattcaagacctACTTA-TCTACcaACAG-ct	attaccta
C.Por	ggtggtgt	ctggagactgag...76...-----tgcaaaagaaaccgaagacctACTTA-tCTACAACAGcaa	attagaca
C.Fam	ttggtgtg	ctggagactaag...77...-----gcaaaataaattcaagacctACTTAatCTACCAACAG-ca	attacata
F.Cat	ttggtctt	ctggagactaag...72...tgtttcaaaaacaattcaagGACCTACTTA-tCTACCAACAG-ca	tttatacg
B.Tau	atgttctt	ctggagactaac...74...--tgtgcaaaatgaattcaagaCCTACTTA-tCTACCAACAG-ca	atgataac
E.Cab	atgttctt	ctggagactaag...73...-gtttgcaaaataaattcaagACCTACTTA-tCTACCAACAG-ca	atggtacg
S.Sus	aggttctt	ctggagactaag...73...-gtttgcaagatgaattcaagACCTACTTt-tCTACCAACAG-ca	attacaca
O.Avi	atgctctt	ctggagactaac...74...-tgtgcaaaatgaattcaagaCCTACTTA-tCTACCAACAG-ca	atgataac
L.Afr	atgttttt	ctggagactaag...73...-gtttgcaaaataaattcaagACCTACTTA-tCTACCAACAG-ta	attagaca
	*	* * ***** ** * * ***** ***** *	*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

H.Sap	cTGTGTG	GTAAGT	tggtacttaacccccgggtt-----...51...ccactctgcc-ag	ggctccac
R.Mac	cTGTGTG	GTAAGT	tggtacttaaccctgggtt-----...51...ctactctgcc-ag	ggctccac
P.Tro	cTGTGTG	GTAAGT	tggtagttaacccccgggtt-----...51...ccactctgcc-ag	ggctccac
P.Abe	cTGTGTG	GTAAGT	tggtacttaacccccgggtt-----...51...ccactctgcc-ag	ggctccac
C.Jac	cTGTGTG	GTAAGT	tggtacttaaccctgggtt-----...44...cctctctgcc-ag	ggctccac
M.Mus	cTGTAGT	GTAAGTA	acagctttaac-ctgggtgtc---...42...tcactctgct-ag	ggttctac
R.Nor	cTGTAGT	GTAAGT	Gagagctttaacgttgggtgt---...43...tcactctgct-ag	ggttctac
C.Por	cTGTGTG	GTAAGTA	cacacaaacgataggttgg---...47...-cactcttctag	ggctccac
C.Fam	cTGTGTG	GTAAGT	tggtagctaaaccctaggtt-----...49...ccactcttcc-ag	ggctccac
F.Cat	cTGTGTG	GTAAGTGGGT	cctagcccgtaggttgtttg...42...cctctgttcc-ag	ggctccac
B.Tau	cTGTGTG	GTAAGTGGG	ccccttctgctagcttag--...48...ctgctcttcc-ag	ggttccac
E.Cab	cTGTGTG	GTAAGTGGGT	acctaaccctaggttagg-...40...ccactctccc-ag	ggctccac
S.Sus	cTGTGTG	GtAAGTGGGT	acctaactcttaggaatgt-...38...ccgctcttcc-ag	ggctctac
O.Avi	cTGTGTG	GTAAGTGGG	cccttctgctagcttag--...48...ctgctcttcc-ag	ggttccac
L.Afr	cTGTGTG	GTAAGTGGGT	acttaaccctaggttgttt-...43...tcattctcct-ag	ggctctac
	**** *	*****	* ** ** *	**** ** *

id=185939 gene=ENSG00000168488 name=ATXN2L segment=chr16\_28837002\_28837090.1 type=IN

Figure 181: CS=19.5



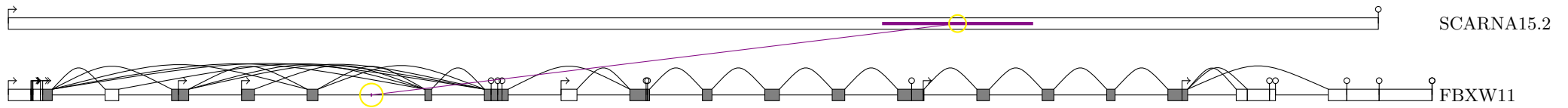
H. Sap	ataacat	ctgaagactaag...67...---	ggtcttg	tttgcaaaataaa	TTCAAGAC	TACTta	TCTA	ccgacagc-a	attataca
R. Mac	ataacat	ctgaagactaag...67...---	ggtcttg	tttgcaaaataaa	TTCAAGAC	TACTta	TCTA	ccaacagc-a	attataca
P. Tro	ataacat	ctgaagactagg...67...---	ggtcttg	tttgcaaaataaa	TTCAAGAC	TACTta	TCTA	ccgacagc-a	attataca
P. Abe	ataactat	ctgaagactaag...70...---	cttg	tttcaaaataaattc	AAGAC	TACTta	TCTA	ccgacagc-a	attataca
M. Mus	atattctt	ctggagactaag...64...acaggtcttg	tttgcaaaat	AAATTca	AGAC	TACTta	TCTA	ccaacagc-c	attgccta
R. Nor	atattctt	ttggagactaag...67...---	ggtcttg	tttgcaaaataaa	TTCAAGAC	TACTta	TCTA	ccaacagc-t	attaccta
C. Por	ggtggtgt	tcggagactgag...70...---	cttg	ttgcaaaagaacctc	AAGAC	TACTta	TCTA	ccaacagcaa	attagaca
O. Cun	gtcacatt	ctggagactaag...70...---	cttg	ttgcaaaaggagttc	AAGAC	TACTta	TCTA	ccaacagc-a	agtatgca
F. Cat	ttggtctt	ctggagactaag...67...---	ggtcttg	ttttcaaaacaaa	TTCAAGAC	TACTta	TCTA	ccaacagc-a	tttatacg
B. Tau	atgttctt	ctggagactaac...67...---	ggtcttg	ttgtgcaaaatgaa	TTCAAGAC	TACTta	TCTA	ccaacagc-a	atgataac
E. Cab	atgttctt	ctggagactaag...70...---	cttg	tttcaaaataaattc	AAGAC	TACTta	TCTA	ccaacagc-a	atggtacg
S. Sus	aggttctt	ctggagactaag...67...---	ggtcttg	tttgcaaatgaa	TTCAAGAC	TACTTTTCTA		ccaacagc-a	attacaca
L. Afr	atgttttt	ctggagactaag...67...---	ggtcttg	tttgcaaaataaa	TTCAAGAC	TACTta	TCTA	ccaacagt-a	attagaca
	*	* * * * *	****	**	*	*****	*****	****	*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

H. Sap	tTGGAgcA	GTAAGTTT	TGAA	----atgtatgttaattgttatga---	...35...gtttgatttcag	agaactgt
R. Mac	tTGGAAcA	GTAAGTTT	TGAA	----gtgtatgttacttgtgatga---	...33...ttttgatttgag	ggaactct
P. Tro	tTGGAgcA	GTAAGTTT	TGAA	----atgtatgttaattgttatga---	...35...gtttgatttcag	agaactgt
P. Abe	tTGGAAcA	GTAAGTTT		----cgaagtgtatgttacttgtg-----	...42...ttttgatttgag	ggaactct
M. Mus	tTGGAAcA	GTAAGTTT	AGTTT	ttaa-gtatgtga---tgaatc-..	34...tattatccag	ggaactct
R. Nor	tTGGAAcA	GTAAGTTT	TGAA	----gtatgctatttcggtgaaa...	32...gatctatttcag	ggaactct
C. Por	tTGGAgcA	GTAAGTTT		----tgaatgcatgttaattgtg-----	...38...ttttaatttag	ggaactct
O. Cun	tTGGAAcA	GTAAGTTT		----taaatgtatgttaagtgt-----	...38...gttgatcccag	ggaactct
F. Cat	tTGGAAcA	GTAAGTTT	TGAA	----cgatgttaattgtgataaa...	36...tcttgatttcag	ggaactct
B. Tau	tTGGAAcA	GTAAGTTT	TGAA	----atgtatgttaattgtgatga---	...35...ttctgatttcag	agaactct
E. Cab	tTGGAAcA	GTAAGTTT		----tcaaatgtttgttaattgtg-----	...42...ttctgatttag	ggaactct
S. Sus	tTGGAAcA	GTAAGTTT	TGAA	----atgtgtgtaaatatgatga---	...43...ttttgatttaag	ggaactct
L. Afr	cTGGAgcA	GTAAGTTT	TGAA	----acatagtttaattgtgataa---	...42...ttttatcttag	ggaactct
	*** **	*****		** *		** ***** *

id=121057 gene=ENSG0000067048 name=DDX3Y segment=chrY\_15024795\_15024874.1 type=AN

Figure 182: CS=15.6



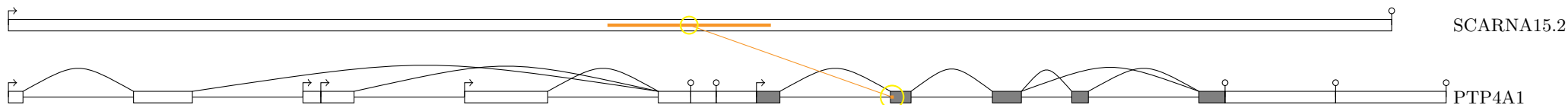
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R.Mac	ataacat	ctgaagactaag...41...tcctaatgaaaagatagac	AGAACAGGtc	TTGTTTGGa	aaataaattcaagacctactt-atctaccaacagc-a	attataca
P.Tro	ataacat	ctgaagactagg...41...tcctaatgaaaaggatagac	AGAACAGGtc	TTGTTTG	caaaataaattcaagacctactt-atctaccgacagc-a	attataca
P.Abe	ataactat	ctgaagactaag...41...tcctaatgaaaagatagac	AGAACAGGtc	TTGTTT	caaaataaattcaagacctactt-atctaccgacagc-a	attataca
C.Jac	atgttctt	ctggagactaag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTTTG	caaaataaattcaagacctactt-atctaccaacagc-a	attatgat
R.Nor	atattctt	ttggagactaag...41...tcctacatgaaaaggtagat	AGAACAGGtc	TTGTTTG	caaaataaattcaagacctactt-atctaccaacagc-t	attaccta
C.Por	ggtggtgt	ctggagactgag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTTTG	caaaagaaaccaagacctactt-atctaccaacagcaa	attagaca
O.Cun	gtcacatt	ctggagactaag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTT	cgaaaggaattcaagacctactt-atctaccaacagc-a	agtatgca
C.Fam	ttggttgt	ctggagactaag...41...tcctaaaggaaaaggtagat	AGAACAGGtc	TTGTT	agcaaaataaattcaagacctacttaatctaccaacagc-a	attacata
F.Cat	ttggtctt	ctggagactaag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTTT	caaaaataaattcaagacctactt-atctaccaacagc-a	tttatag
B.Tau	atgttctt	ctggagactaac...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGT	gtgcaaaatgaattcaagacctactt-atctaccaacagc-a	atgataac
E.Cab	atgttctt	ctggagactaag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTTTG	caaaataaattcaagacctactt-atctaccaacagc-a	atggtag
S.Sus	aggttctt	ctggagactaag...41...tcctaatgaaaaggtagat	AGAACAGGtc	TTGTTTG	caagatgaattcaagacctactt-ttctaccaacagc-a	attacaca
L.Afr	atgttttt	ctggagactaag...41...tcctagatgaaaaggtagac	AGAACAGGtc	TTGTTTG	caaaataaattcaagacctactt-atctaccaacagt-a	attagaca
*		* * * * *			* * * * *	

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

H.Sap	gtctccag	gtgcctctcttc...4931...--ttgcaaaacttggtataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
R.Mac	gtctccag	gtgcctttcttc...4929...atgtgcaaaacttggtataa	TTCAAATAACCTGt	TTTT	ccccccctag	aacacttc
P.Tro	gtctccag	gtgcctctcttc...4931...--ttgcaaaacttggtataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
P.Abe	gtctccag	gtgcctctcttc...4932...--tgcaaaacttggtataaatt	AAATAACCTGt	TTTT	ccccccctag	aacacttc
C.Jac	gtctccag	gtgcctctcttc...4931...--ttgcaaaacttggtataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
R.Nor	gtctccag	gtgcctctcttc...4931...--ttgcagaacttggtataaatt	CAAATAACCTGt	TTTT	cccccttag	aacacttc
C.Por	gtctccag	gtgcctctcttc...4931...--ctgcaaaacttggtataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
O.Cun	gtctccag	gtgcctctcttc...4933...----gcaaaacttggtataaatt	CAATAACCTGt	TTTT	ccccccctag	aacacttc
C.Fam	gtctccag	gtgcctctcttc...4933...----gcaaaactcggcataaatt	CAATAACCTGt	TTTT	ccccccctag	aacacttc
F.Cat	gtctccag	gtgcctctcttc...4932...--tgcaaaactcggcataaatt	AAATAACCTGt	TTTT	ccccccctag	aacacttc
B.Tau	gtctccag	gtgcctctcttc...4934...----caaaactcggcataaatt	CAATAACCTGt	TTTT	ccccccctag	aacacttc
E.Cab	gtctccag	gtgcctctcttc...4931...--ttgcaaaactcggtgatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
S.Sus	gtctccag	gtgcctctcttc...4931...--ttgcaaaactcggcataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
L.Afr	gtctccag	gtgcctctcttc...4931...--ttgcaaaactcggcataaatt	CAAATAACCTGt	TTTT	ccccccctag	aacacttc
*		*****			*****	

id=666545 gene=ENSG0000072803 name=FBXW11 segment=chr5\_171341410\_171384600\_-1 type=IN

Figure 183: CS=12.6



H.Sap	ataacat	ctgaagactaagaaaatagagtccttaaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggatagacagaacaggtcctt...	30...	ctaccgacagc-a	attataca
R.Mac	ataacat	ctgaagactaagaaaatagagtccttaaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggatagacagaacaggtcctt...	30...	ctaccaacagc-a	attataca
P.Tro	ataacat	ctgaagactaagaaaatagagtccttaaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggatagacagaacaggtcctt...	30...	ctaccgacagc-a	attataca
P.Abe	ataacat	ctgaagactaagaaaatagagtccttaaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggatagacagaacaggtcctt...	30...	ctaccgacagc-a	attataca
C.Jac	atgttctt	ctggagactaagagaatagagtccttgaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	31...	ctaccaacagc-a	attatag
C.Por	gggtgtgt	tcggagactgagaaaacagagtccttgaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	31...	-taccaacagcaa	attagaca
O.Cun	gtcacatt	ctggagactaagaaaatgagagtccttgaagtcaagccgactctgcct	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	30...	ctaccaacagc-a	agtatgca
F.Cat	ttgttctt	ctggagactaagaaaatgagagtccttgaagtcaagccgactctgcct	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	30...	ctaccaacagc-a	tttatac
B.Tau	atgttctt	ctggagactaagaaaatgagagtccttgaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	29...	ctaccaacagc-a	atgataac
E.Cab	atgttctt	ctggagactaagaaaatgagagtccttgaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	30...	ctaccaacagc-a	atggtac
S.Sus	aggttctt	ctggagactaagaaaacagagtccttgaagtcaagccgactctgcct	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	30...	ctaccaacagc-a	attacac
O.Avi	atgctctt	ctggagactaagaaaatgagagtccttgaagtcaagctgagctgctg	TTAGcc	TCCTaa	ATGAAA	aggtagatagaacaggtcctt...	29...	ctaccaacagc-a	atgataac
L.Afr	atgttttt	ctggagactaagaaaatgagagtccttgacatcaaggtgagctgctg	TTAGcc	TCCTAGATGAAA	aggtagacagaacaggtcctt...	30...	ctaccaacagt-a	attagaca	
	*	* * * * *	*	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *

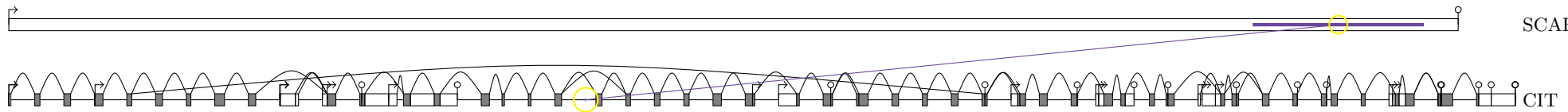
id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007.1 type=EN

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R.Mac	ttatagag	gtaa-gatttgat...1450...--taagattttttta----atgtatg-	TTTTATccAG	GAacTTAa
P.Tro	ttatagag	gtaa-gatttgat...1613...--taagattttttta----atgtacg-	TTTTATccAG	GAacTTAa
P.Abe	ttatagag	gtaa-gatttgat...1960...--taagattttttta----atgtacg-	TTTTATccAG	GAacTTAa
C.Jac	ttatagag	gtaa-gatttgat...1507...--taagattttttta----atgtatg-	TTTTATccAG	GAacTTAa
C.Por	ttatagag	gtaa-gatttgat...1134...--ttttttttttta----atgtata-	TTTTATccAG	GAacTTAa
O.Cun	ttattgag	gtga-gttttgat...1010...--tgaagttctttta----atatgtg-	TTTTATccAG	GAacTTAa
F.Cat	ttatagag	gtaa-gttttgat...1241...--tgaagttctttta----atgtatg-	TTTTATccAG	GAacTTAa
B.Tau	ttatagag	gtga-gttttgat...1155...--aacccgtctctgtt-----tccatg	TTTTATccAG	GAacTTAa
E.Cab	tcatagag	gtaa-gttttgat...1467...--attgtgtttttta----atgtatg-	TTTTATccAG	GAacTTAa
S.Sus	ttatagag	gtga-gttttgat...1074...--tcatattttttta----atatatg-	TTTTATccAG	GAacTTAa
O.Avi	ttatagag	gtaa-gttttgat...1151...--aacccgtctctgtt-----tccatg	TTTTATccAG	GAacTTAa
L.Afr	ttatagag	gtaa-gttttgat...1645...--ttcttttaaatatataatg-	TTTTATCTAG	GAacTTAa
	*	* * * * *	*	* * * * *

id=258861 gene=ENSG00000112245 name=PTP4A1 segment=chr6\_64286891\_64288341.1 type=IN VIEW

Figure 184: CS=20.8





SCARNA15.2

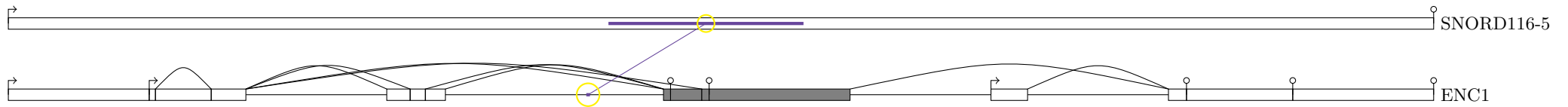
H. Sap	ataacat	ctgaagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accgacagc-a	attataca		
R. Mac	ataacat	ctgaagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accaacagc-a	attataca		
P. Tro	ataacat	ctgaagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accgacagc-a	attataca		
P. Abe	ataactat	ctgaagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accgacagc-a	attataca		
C. Jac	atgttctt	ctggagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accaacagc-a	attatattg		
M. Mus	atattctt	ctggagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accaacagc-c	attgccta		
R. Nor	atattctt	ctggagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accaacagc-t	attaccta		
C. Por	ggtggtgt	ctggagactgag...68...gtcttg	tgttgcaaaagaac	CCAAGACCTACT	T-ATCT	accaacagcaa	attagaca		
O. Cun	gtcacatt	ctggagactaag...68...gtcttg	tgttcgcaaaaggaagt	TCAAGACCTACT	T-ATCT	accaacagc-a	agtatgca		
C. Fam	ttggttgt	ctggagactaag...68...gtcttg	tgttagcaaaataaat	TCAAGACCTACT	taATCT	accaacagc-a	attacata		
B. Tau	atgttctt	ctggagactaac...68...gtcttg	tgtgtgcaaaatgaat	TCAAGACCTACT	T-ATCT	accaacagc-a	atgataac		
D. Avi	atgctctt	ctggagactaac...68...gtcttg	tgtgtgcaaaatgaat	TCAAGACCTACT	T-ATCT	accaacagc-a	atgataac		
L. Afr	atgttttt	ctggagactaag...68...gtcttg	tgttgcaaaataaat	TCAAGACCTACT	T-ATCT	accaacagt-a	attagaca		
	*	* * * * *	*****	***	*	*****	*****	***	*

id=813637 gene=ENSG00000252218 name=SCARNA15.2 segment=chr6\_43511881\_43512007\_1 type=EN

H. Sap	aagctgag	gtgagcagggaa...1599...atgcctag	-gtggcactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...catgatctacag	gaacgccg	
R. Mac	aagccgag	gtgagcagggaa...1598...-tgcctag	cgtggcactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...catgatctacag	gaacgccg	
P. Tro	aagctgag	gtgagcagggaa...1601...atgcctag	-gtggcactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...catgatctacag	gaacgccg	
P. Abe	aagctgag	gtgagcagggaa...1600...atgcctag	-gtggcactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...catgatctacag	gaacgccg	
C. Jac	aagccgag	gtgagcagggaa...1616...-tgccta	actgtggcactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...catgatctacag	gaacgccg	
M. Mus	aagccgag	gtgagcagggaa...1553...-cgccc	agtgtggtcctttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...175...cacgaccacag	gaacgccg	
R. Nor	aagctgag	gtgagcagggaa...1468...-tgcctag	tgtggtactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...178...cacgaccacag	gaacgccg	
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O. Cun	aagccgag	gtgagcagggaa...1619...-tgcctag	cggggtgctttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...178...cacgatctacag	gaacgccg	
C. Fam	aggctgag	gtgagcagggaa...1551...-tgcctag	tgtgatactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...cacgatctacag	gaacgccg	
B. Tau	aggccgag	gtgagcagggaa...1605...-tgcctag	tgtgactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...183...cacgatctgag	gaacgccg	
O. Avi	aggccgag	gtgagcagggaa...1611...-tgcctag	tgtggtactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...183...cacgatctgag	gaacgccg	
L. Afr	aggctgag	gtgagcagggaa...1636...-tgcctag	tgtggtactttgc	AGATAGTAGGTg	CTTGG	taaatattg	aatgaa...179...cacgatctacag	gaacgccg	
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Figure 185: CS=11.7



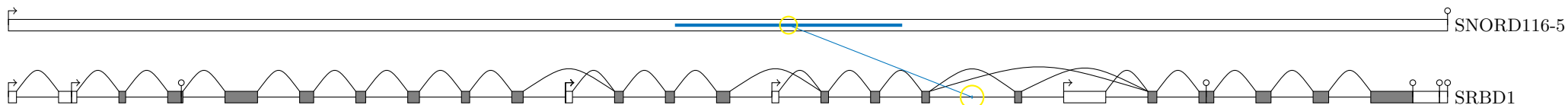
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R.Mac	acgtgctt	ggatc	gatgat	gagtc	ccccaaaa	aaaaacattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	actca-	taccgtc	ggttct	catcaga	actgagg	tcc	agcacgtt							
P.Tro	atgtgctt	ggatc	gatgat	gagtc	ccccata	aaaaacattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	actca-	taccgtc	ggttct	catcaga	actgagg	tcc	agcacgtt							
P.Abe	atgtgctt	ggatc	gatgat	gagtc	ccccata	aaaaacattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	actca-	taccgtc	ggttct	catcaga	actgagg	tcc	agcacgtt							
C.Jac	atgtgctt	ggatc	gacaat	gagtc	ccccag	taaaaacattc	::::	gtgctt	ggatc	gatgat	gagtc	gcccc	caaaaa	acattc	CTTGGAAA	gCTGA	acaaaat	gagtgaga	actca-	tactgtc	actgtc	atc	cggaact	gagg	tcc	agcacatt
C.Por	atgtgctc	ggatc	gatgat	gagtc	ccccaa	---aaacattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	gctc	taaac	cgctc	gtctc	atc	cgctg	cc	agcacatt						
O.Cun	atgtgctt	ggatc	aatgat	gagtc	ccccat	---aaacattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	ctca	caacc	cgctc	gttct	catc	gact	gactcc	agcacgtt						
C.Fam	aagtgcct	ggatc	gaggat	gagtc	ccctca	---atctgcattc	::::	-----	CTTGGAAA	gCTGA	acaaaat	gagtgaga	ctcc	tcacc	gctc	attct	catc	gcaact	gagg	tcc	agcacgtt					
F.Cat	atgtgctc	ggatc	gatgat	gagtc	ccctca	---acagcattc	::::	-----	CTTGG	---AAAGCTGA	acaaaat	gagtgaga	actcc	ctacc	gctt	tctc	gtaact	gagg	tcc	agcacatt						
B.Tau	acgtgcct	ggatc	gatgat	gagtc	cccaca	---aatgcattc	::::	-----	CTTGG	---AAATCTGA	acaaaat	gagtgaga	ctc	actacc	gctc	tcct	catc	ggaact	gagg	tcc	agcacgtg					
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S.Sus	ccgtgcct	ggatc	gatgat	gagtc	ccctc	---aaagcattc	::::	-----	CTTGG	---AAATCTGA	acaaaat	gagtgaga	ctc	actacc	gctc	tcct	catc	ggaact	gagg	tcc	ggcacgtg					
O.Avi	acatgcct	ggatc	agtgat	gagtc	-----	---aactttc	::::	-----	TTTAT	tc	CTTGGAAA	AAATCTGA	acaaaat	gagtgaga	actc	actacc	ctc	tcct	catc	gatact	gagtc	tcc	agcacgtt			
L.Afr	gtgtactt	tgatc	gatgat	gagtc	ccgca	---tatacattc	::::	-----	CTTGG	---AAATCTGA	acaaaat	gagtgaga	aaactc	ctact	gctc	ctc	actc	atcg	---ac	ctgaggt	tcc	actacatt				
	** **	****	****	****	****	****	****	****	****	***	*****	*****	*****	*****	*	**	**	*	****	*	**	**				

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R.Mac	caagacag	gtagttg	ggtgat	...666...	aatggc	ctgaa	agttgg	caaTCAGg	TTTTCCAAG	atgaac	ctgctt	ttttat	gca----	...317...	tattat	ttttag	gagtg	gaa
P.Tro	caagacag	gtagttg	ggtgat	...681...	aatggc	ctgaa	agttgg	caaTCAGg	TTTTCCAAG	atgaac	ctgctt	ttttat	gca----	...237...	tattat	ttttag	gagtg	gaa
P.Abe	caagacag	gtagttg	ggtgat	...682...	aatggc	ctgaa	agttgg	caaTCAGg	TTTTCCAAG	atgaac	ctgctt	ttttat	gca----	...237...	tattat	ttttag	gagtg	gaa
C.Jac	caagacag	gtagtc	ggtgat	...700...	aatggc	ctgaa	agttgg	cggTCAGg	TTTTCCAAG	atgaac	ctgctt	ttttat	gca----	...231...	tattat	ttttag	gagtg	gaa
C.Por	caagaaag	atgggtg	ggccat	...403...	aggatc	ctgaa	agttgg	caaTCAGg	TTTTCCAAG	atgaac	ctgctt	tttaag	cag----	...245...	ttgttt	atagg	gagtg	gaa
O.Cun	caagaaag	atgggtg	ggcaac	...756...	agtatc	caaa	agttgg	caaTCAGg	TTTTCCAAG	atgaac	ctgctt	tttaag	cgg----	...197...	ttgttt	ttttag	gagtg	gaa
C.Fam	caagacac	atgggtg	ggtgat	...440...	agtctc	ctcaa	agttgg	cagTCAGg	TTTTCCAAG	atgaac	ctgctt	ccgag	ccg----	...224...	tctgtt	ttttag	gagag	gaa
F.Cat	caagaaag	atgggtg	ggtgat	...432...	agtatc	ctgaa	agttgg	cagTCAGg	TTTTCCAAG	atgaac	ctgctt	ttcaag	cag----	...261...	tttgct	ttttag	gagtg	gaa
B.Tau	cagaaaag	gtgggtg	ggtgat	...440...	aacatc	ctgaa	agttgg	caaTCAGGTT	TTCCAAG	atgaac	ctgctt	ttgag	cag----	...242...	ggtttt	ttccag	gagtg	gaa
E.Cab	caagaaag	atgggtg	ggtgat	...447...	aatatc	ctgag	agttgg	caaTCAGGTT	TTCCAAG	atgaac	ctgctt	tttaag	cag----	...225...	ttgttt	ttttag	gagtg	gaa
S.Sus	caagaaag	gtgggtg	ggtgat	...445...	aacatc	ctcaa	agttgg	caaTCAGGTT	TTCCAAG	atgaac	ctgctt	gcaag	cag----	...220...	ttgttt	ttttag	gagtg	gaa
O.Avi	cagaaaag	gtgggtg	ggtgat	...446...	aacatc	ctgaa	agttgg	caaTCAGGTT	TTCCAAGATGAA	atgaac	ctgctt	ttgag	cagtc	...234...	ggtttt	ttttag	gagtg	gaa
L.Afr	caagaaag	agtgggt	ggtgat	...430...	agtatc	ctgaa	agttgg	caaTCAGGTT	TTCCAAG	atgaac	ctgctt	ttgag	cagg----	...238...	ttgttt	ttttag	gagtg	gaa
	** * *	*	** *	*	**	*	**	*****	*****	*	*	*	*	*	*	*	***	***

id=57829 gene=ENSG00000171617 name=ENC1 segment=chr5\_73932324\_73933318.-1 type=I5

Figure 186: CS=12.6



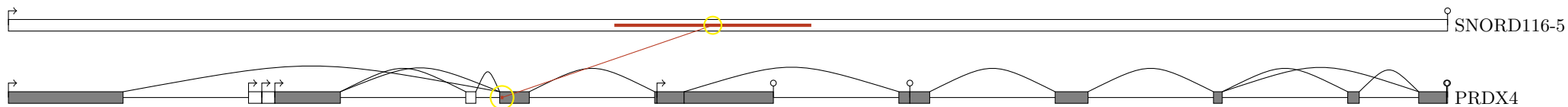
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R.Mac	acgtgctt	ggatc	gatgat	gagtc	ccccaaaa	aaacatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tca-tacc	gctg	ttct	catc	ggatct	gaggtcc	agcacgtt
P.Tro	atgtgctt	ggatc	gatgat	gagtc	ccccata	aaaacatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tca-tacc	gctg	ttct	catc	ggaact	gaggtcc	agcacgtt
M.Mus	acgtgctt	ggatc	tatgat	gattc	ccagtc	--aacatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tctgtacc	gccact	ctcatc	ggaact	gaggtcc	agcatc	tt
C.Por	atgtgctc	ggatc	gatgat	gagtc	ccccaaa	--aacatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tcaacc	gctg	ctct	catc	gctg	cctgaggtcc	agcacatt
O.Cun	atgtgctt	ggatc	aatgat	gactc	ccccat	--aacatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tcacaacc	gctg	ttct	catc	gtagt	gaactcc	agcacgtt
C.Fam	aagtgc	ggatc	gaggat	gactc	cctcaa	-tctgatt	cct	TGGAAA	ag	CTGAA	AAAA	TGAGT	GAGAAC	tcctg	ccgt	catt	ctcatc	gaaact	gaggtcc	agcacgtt
F.Cat	atgtgctc	ggatc	gatgat	gactc	cctcaa	--cagatt	cct	TGGA	-AAG	CTGAA	AAAA	TGAGT	GAGAAC	tcactacc	gctg	ttct	ctg	gaaact	gaggtcc	agcacatt
B.Tau	acgtgctt	ggatc	gatgat	gactc	ccacaa	--atgatt	cct	TGGA	-AAT	CTGAA	AAAA	TGAGT	GAGAAC	tgagcc	actacc	gctc	tcct	catc	ggaact	gaggtcc
E.Cab	aggtgctc	ggatc	gatgat	gactc	cctcaa	--atgatt	cct	TGGA	-AAT	CTGAA	AAAA	TGAGT	GAGAAC	tcactacc	gctg	ttct	ctg	cggag	actgaggtcc	agcacctg
S.Sus	ccgtgctc	ggatc	gatgat	gactc	cctcta	--aagatt	cct	TGGA	-AAT	CTGAA	AAAA	TGAGT	GAGAAC	tcactacc	gctc	tcct	catc	gaaact	gaggtcc	ggcacgtg
O.Avi	acatgctc	ggatc	cagt	gatgaca	actttca	-tatttatt	cct	TGGAAA	at	CTGAA	AAAA	TGAGT	GAGAAC	tcactacc	atc	tcct	catc	gatact	gaggtcc	agcacgtt
L.Afr	gtgtactt	tgatc	gatgat	gactc	ccgcat	--atacatt	cct	TGGA	-AAT	CTGAA	AAAA	TGAGT	GAGAAC	tcactacc	atc	tcct	catc	gtagt	ctc	actacatt
		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

H.Sap	aagtgcag	gtaagaa	actat	...4934	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
R.Mac	aagtgcag	gtaagaa	actat	...4934	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	A-	TTTTT	CAG-	TTTCCA	ta
P.Tro	aagtgcag	gtaagaa	actat	...4934	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
M.Mus	aagtgcag	gtgaga	aagctg	...4933	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	GTTTT	t	TTCAG-	TTTCCA	ta
C.Por	aagtgcag	gtaaga	aagctat	...4942	..-----	taagt	catactt	gtt	gtctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
O.Cun	aagtgcag	gtaaga	aatgat	...4935	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
C.Fam	aagtgcag	gtaaga	aacaat	...4946	..-----	atta	agccata	ctt	at	tttc	-----	TG-	TTTTT	CAG-	TTTCCA
F.Cat	aagtgcag	gtaaga	aactac	...4946	..-----	ttaa	agccata	ctt	at	tttc	-----	TG-	TTTTT	CAGT	TTTCCA
B.Tau	aagtgcag	gtaaga	aactgt	...4942	..-----	taag	catactt	gtt	ttctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
E.Cab	aagtgcag	gtagga	aactat	...4936	..-ttcac	attaag	ccatg	ctta	TTTT	Ctg	ATT	T-	cTTTT	CAG-	TTTCCA
S.Sus	aagtgcag	gtaaga	aactaa	...4934	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
O.Avi	aagtgcag	gtaaga	aactat	...4934	..tttcac	attaag	tacactt	GTTTT	Ctg	ATTCT	G-	TTTTT	CAG-	TTTCCA	ta
L.Afr	gagtgcag	gtaaga	aaccgt	...4947	..-----	ttct	gttt	tttt	tttt	tttt	tttt	tttt	tttt	TTTCCA	ta
		*	*	*	*	*	*	*	*	*	*	*	*	*	*

id=181516 gene=ENSG0000068784 name=SRBD1 segment=chr2.45704215.45715378.-1 type=IN

Figure 187: CS=14.95



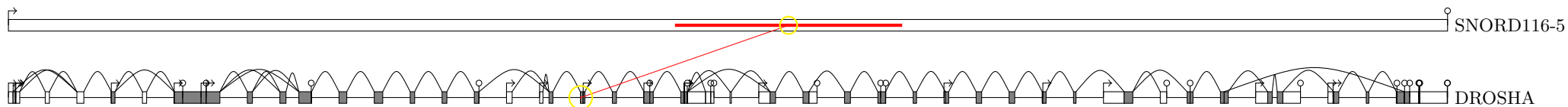
H. Sap	atgtgctt	ggatc	gatgatgatgagtc	ccccataaaaacattc	:::--	CTTGG	aaAAGCTGA	acAAAATGAGTG	agaactca-taccg	tcggttctcatcagaactgaggtcc	agcacgtt				
R. Mac	acgtgctt	ggatc	gatgatgatgagtc	cccccaaaaaacattc	:::--	CTTGG	aaAAGCTGA	acaaaatgagtgagaactca-taccg	tcggttctcatcggatctgaggtcc	agcacgtt					
P. Abe	atgtgctt	ggatc	gatgatgatgaat	ccccataaaaacattc	:::--	CTTGG	aaAAGCTGA	acaaaatgagtgagaactca-taccg	tcggttctcatcggactgaggtcc	agcacgtt					
C. Jac	atgtgctt	ggatc	gacaatgagtc	ccccagtaaaaacattc	:::gtgcttggatc	gatgatgagtc	gccctcaaaaaacattc	CTTGG	aaAAGCTGA	acaaaatgagtgaaaactca-tactg	tcactgtcatcggactgaggtcc	agcacatt			
C. Por	atgtgctc	ggatc	gatgatgatgccccaa	--aaacattc	:::--	CTTGG	aaAAGCTGA	acaaaatgagtgagagctctaaaccg	tcgctctcatcgctgaggtcc	agcacatt					
O. Cun	atgtgctt	ggatc	aatgatgatgactccccat	--aaacattc	:::--	CTTGG	aaAAGCTGA	acaaaatgagtgagaactcacaaccg	tcggttctcatcgactgactcc	agcacgtt					
C. Fam	aagtgctt	ggatc	gaggatgactccctca	-atctgattc	:::--	CTTGG	aaAAGCTGA	acAAAATGaGTG	agaactccctgcccgtcattctcatcgcaactgaggtcc	agcacgtt					
F. Cat	atgtgctc	ggatc	gatgatgactccctca	--acagcattc	:::--	CTTGG	-aAAGCTGA	acaaaatgagtgagaactccctaccg	tccttctcgtcgaactgaggtcc	agcacatt					
B. Tau	acgtgctt	ggatc	gatgatgactcccaca	--aatgattc	:::--	CTTGG	-AAAtCTGA	acaaaatgagtgagccatcactaccg	tc-tcctcatcggaactgaggtcc	agcacgtg					
E. Cab	aggtgctc	ggatc	gatgatgactccctca	--aatgattc	:::--	CTTGG	-AAAtCTGA	acaaaatgagtgagaactcactaccg	tcggttctcgcagactgaggtcc	agcacgtg					
S. Sus	ccgtgctc	ggatc	gatgatgactccctct	--aaagcattc	:::--	CTTGG	-AAAtCTGA	acaaaatgagtgagaactcactaccg	tc-tcctcatcgaaactgaggtcc	ggcacgtg					
O. Avi	acatgctc	ggatc	agtgatgacaactttc	-atatttattc	:::--	CTTGG	AAAtCTGA	acaaaatgagtgagaactcactaccatc-tcctcatcgatactgaggtcc	actacatt						
L. Afr	gtgtactt	tgatc	gatgatgacttccgca	--tatacattc	:::--	CTTGG	-AAAtCTGA	acaaaatgagtgaaaaactcctactgtctcactcatcg-acctgaggtcc							
	* **	****	****	*	****	****	***	*****	*	**	**	*	****	*	**

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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R. Mac	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtattttctttc	TTAG	TTTCCAAg	
P. Abe	atctaaag	gt----	agccctgatt...59...	-----	acatcatgtattttctttc	TTAG	TTTCCAAg	
C. Jac	aaataaag	gt----	agccctgatt...59...	-----	acatcatgtattttctttc	TTAG	TTTCCAAg	
C. Por	atctgagg	gtgtag---	ctcagt...99...	-----	acatcgtgtcttttctttc	TTAG	TTTCCAAg	
O. Cun	gtccaaag	atcttagaagcct	...51...	-----	aatcatcctatcttctttc	TTAG	TTTCCAAg	
C. Fam	atccaaag	atcttagatcct	...46...	-----	tttctcagtgttttagaata	TTATaTATTTT	TTAG	TTTCCAAg
F. Cat	gtccaaag	gtttagaacct	...64...	-----	acttcataattttctttc	TTAG	TTTCCAAg	
B. Tau	gtccaaag	attc----	cctccaaa...67...	-----	acatcatatgttttctttc	TTAG	TTTCCAAg	
E. Cab	gtccagag	gattagaagcct	...64...	-----	acatcatatattttctttc	TTAG	TTTCCAAg	
S. Sus	-----	cag	actcagaagccttgatt...59...	-----	gaatatcatata--tttctttc	TTAG	TTTCCAAg	
O. Avi	gtccaaag	attc----	cctccgaa...65...	-----	acatcatatgcttttctttc	TTAG	TTTCCAAg	
L. Afr	atccaaag	gttaagaagccc	...67...	-----	tcagttaacttttctttc	TTAG	TTTCCAAg	
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id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX.23689551.23689645.1 type=IN

Figure 188: CS=15.6



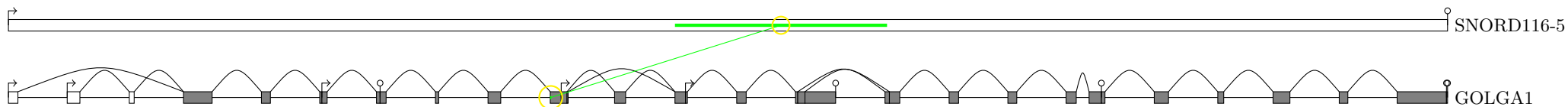
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R. Mac	acgtgctt	ggatcgatgatgagtc	ccccataaaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-actc-ataccgtcgttctcatcagaactgaggtcc	agcacgtt
P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-actc-ataccgtcgttctcatcagaactgaggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgagtc	ccccataaaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-actc-ataccgtcgttctcatcagaactgaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgacaatgagtc	ccccagtaaaacattc	::::	cttggatcgatgatgactgcccctcaaaaaacattcctt	GGAAA	agCTGA	acAAAATGAGTGAAA	-actc-atactgtcactgtcatcggaaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattccc	-agtcaaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAAA	-actcgtaccgccactctcatcggaaactgaggtcc	agcatctt
C. Por	atgtgctt	ggatcgatgatgatgccc	caa-aaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-gctctaaccgtcgtctcatcgtgcctgaggtcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgactcccc	cat--aaacattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-actcacaaccgtcgttctcatcgtgactgaaactcc	agcacgtt
C. Fam	aagtgctt	ggatcgaggatgactcc	ctca-atctgcattc	::::	-----	GGAAA	agCTGA	acAAAATGAGTGAGA	-aactccctgccgtcattctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactccc	caca-aatgcattc	::::	-----	TGAAA	ATCTGA	acAAAATGAGTgagccatca-ctaccgtc-tcctcatcggaaactgaggtcc	agcacgtg	
E. Cab	aggtgctt	ggatcgatgatgactccc	ctca-aatgaattc	::::	-----	TGAAA	ATCTGA	acAAAATGAGTGAGA	-actcactaccgtcgttctcgcgagactgaggtcc	agcacctg
S. Sus	ccgtgctt	ggatcgatgatgactccc	ctct--aaagcattc	::::	-----	TGAAA	ATCTGA	acAAAATGAGTgAACTca-ctaccgtc-tcctcatcggaaactgaggtcc	ggcacgtg	
L. Afr	gtgtactt	tgatcgatgatgacttcc	gcga--tatacattc	::::	-----	TGAAA	ATCTGA	acAAAATGAGTGAAA	aaactc-ctactgtctcactcatcg-acctgaggttc	actacatt
	** **	**** *	**** *	**	****	*	***	*****		*

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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R. Mac	tgccagag	gtaagggaaaag	...1483...	--gccaatttacagtaatttaa--	TTTTgGTTATTTTTCAG	aaTTTTg
P. Tro	tgccggag	gtaagggaaaag	...1489...	--gccaactacagtaatttaa--	TTTTgGTTATTTTTCAG	aaTTTTg
P. Abe	tgccggag	gtaagggaaaag	...1488...	--gccaactacagtaatttaa--	TTTTgGTTATTTTTCAG	aaTTTTg
C. Jac	tgccagag	gtaagggaaaat	...1497...	-tgccaactacagt-atttaa--	TTTTgGTTATTTTTCAG	aaTTTTg
M. Mus	tgccctgag	gtaagagctgct	...1414...	--gcagatctatagtaatttga--	TTTTgACTTATTTTTCAG	aaTTTTg
C. Por	tgcccagag	gtaagggaaaag	...1468...	--gcagatccacaataatttga--	TTTTgATTTATTTTTCAG	aaTTTTg
O. Cun	tgcccagag	gtaagggaaaag	...1492...	--gcagatcttcagtaatttga--	TTTTgCTTTATTTTTCAG	aaTTTTg
C. Fam	tgccctgag	gtaagagaaaag	...1721...	--acgatactatagtaatttga--	TTTTgGGTTTATTTTTCAG	aaTTTTg
B. Tau	tgccctgag	gtaagagagaag	...1570...	-----acagtaatttggggttctg	TTTTgGTTATTTTTCAG	AaTTTTg
E. Cab	tgccctgag	gtaagggaaaag	...1526...	--gcagtagcagtaatttga--	TTTTgGTTATTTTTCAG	AaTTTTg
S. Sus	tgccctgag	gtaagggaaagat	...1814...	tttgatactatagttattt--	GGTTTTGCTTTATTTTTCAG	AaTTTTg
L. Afr	tgccctgag	gtaagggaaaac	...2148...	--gcagtagcacaataatttga--	TTTTgGTTTATTTTTCAG	AaTTTTg
	**** **	***** *		* * * *	** *	*****

id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 189: CS=21.32



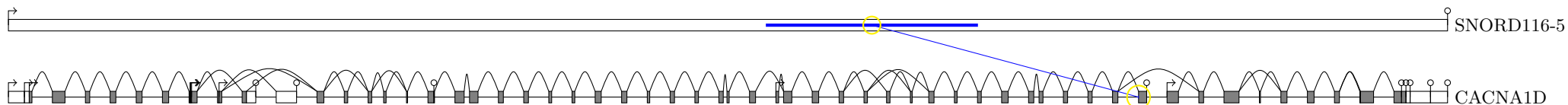
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P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGagTGAG	-aactca---	taccgtcgttctcatcagaactgagg	tcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgaat	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGagTGAG	-aactca---	taccgtcgttctcatcagaactgagg	tcc	agcacgtt
C. Jac	atgtgctt	ggatcgacaatgagtc	ccccagtaaaaacattc	::::	ttggatcgatgatgactgcccctcaaaaaacattccttg	GAAAaGCTGAACAAAATGagTGAA	-aactca---	tactgtcactgtcatcagaactgagg	tcc	agcacatt
C. Por	atgtgctc	ggatcgatgatgagtc	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGagTGAG	-aactca---	taccgtcgttctcatcagaactgagg	tcc	agcacatt
O. Cun	atgtgctt	ggatcaatgatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacgtt
C. Fam	aagtgctt	ggatcgaggatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacgtt
E. Cab	agggtgctc	ggatcgatgatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacgtt
O. Avi	acatgctc	ggatcagtgatgaca	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	agcacgtt
L. Afr	gtgtactt	ggatcagtgatgact	ccccataaaaacattc	::::	-----	GAAAaGCTGAACAAAATGAGTG	-agaactca---	caaccgtcgttctcatcagaactgagg	tcc	actacatt
	* **	****	****	*	*	****				* **

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

H. Sap	agcacatg	gtatgcattttt...	1152...	ttagcatagccaatgaaac	TTTGTATTTTGTgTCAG	CTTTTaaa
R. Mac	agcacatg	gtatgcattttt...	1162...	ttagcatagccaatgaaac	TTTGTATTTTGTgTCAG	CTTTTaaa
P. Tro	agcacatg	gtatgcattttt...	1190...	ttagcatagccaatgaaac	TTTGTATTTTGTgTCAG	CTTTTaaa
P. Abe	agcacatg	gtatgcattttt...	1140...	ttagcatagccaatgaaac	TTTGTATTTTGTgTCAG	CTTTTaaa
C. Jac	agcacatg	gtatgcattttt...	1563...	ttagcatagccaatgaaac	TTTGTATTTTGTgTCAG	CTTTTaaa
C. Por	agcacatg	gtatgtattttg...	867...	acctaagcaatccttatgtc	TTTGTgTCAG	CTTTTaaa
O. Cun	agcacatg	gtatgtttacat...	1286...	tagcagtagcctagtgaac	TTTGTgTCAG	CTTTTaaa
C. Fam	agcacatg	gtgcgcatTTT...	283...	gcccagtgaaactttata	TTTGTgTCAG	CTTTTaaa
F. Cat	agcacatg	gtacgcattttt...	286...	gcctaagcaactttata	TTTGTgTCAG	CTTTTaaa
B. Tau	agcacatg	gtgcgcatTTT...	448...	gcccagtgaaactttgt	TTTGTgTCAG	CTTTTaaa
E. Cab	agcacatg	gtgcgcatTTT...	274...	gcccagtgaaactttgt	TTTGTgTCAG	CTTTTaaa
O. Avi	agcacatg	gtgcgcatTTT...	454...	gcccagtgaaactttct	TTTGTgTCAG	CTTTTaaa
L. Afr	agcacatg	gtgcgcatTTT...	254...	gtcaagtgcccgaatgaa	TTTGTgTCAG	CTTTTaaa
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id=391479 gene=ENSG00000136935 name=GOLGA1 segment=chr9.127684172.127685373.-1 type=IN

Figure 190: CS=26.13



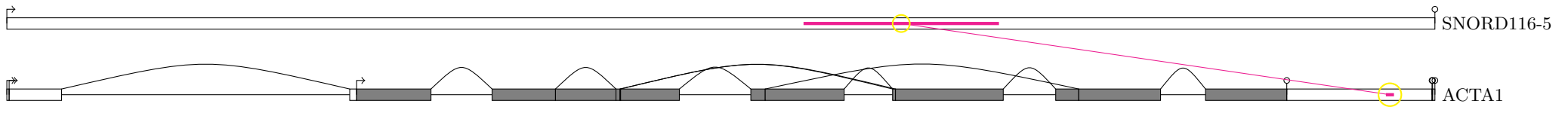
H. Sap	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	.....	-----	CTGAACAAa	ATGAGT	gagaactca-taccgtcgttctcatcagaactgaggtcc	agcacgtt				
P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	.....	-----	CTGAACAAa	ATGAGT	gagaactca-taccgtcgttctcatcagaactgaggtcc	agcacgtt				
P. Abe	atgtgctt	ggatcgatgatgaat	ccccataaaaacattc	.....	-----	CTGAACAAa	ATGAGT	gagaactca-taccgtcgttctcatcagaactgaggtcc	agcacgtt				
C. Jac	atgtgctt	ggatcgacaatgagtc	ccccagtaaaaacattc	.....	cgatgatgactgcccctcaaaaaaacattccttgga	CTGAACAAa	ATGAGT	gaaaactca-tactgtcactgtcatcagaactgaggtcc	agcacatt				
M. Mus	acgtgctt	ggatc	tatgatgattccc	--agtcaaacattc	.....	-----	CTGAACAAa	ATGAGT	gaaaactctgtaccgccactctcatcagaactgaggtcc	agcatctt			
R. Nor	gtctgact	ggatc	-atgatgattctc	--agtcaaacattc	.....	-----	CTGAACAAa	ATGAGT	gaaaactcagcaccgctattgtcatcagaactgatgtcc	ggcacctt			
C. Por	atgtgctt	ggatcgatgatgatg	ccccaa	--aaaacattc	.....	-----	CTGAACAAa	ATGAGT	gagagctctaaaccgtcgtctcatcgtgcctgaggtcc	agcacact			
O. Cun	atgtgctt	ggatcaatgatgact	ccccat	--aaacattc	.....	-----	CTGAACAAa	ATGAGT	gagaactcacaaccgtcgttctcatcgtgactgaactcc	agcacgtt			
C. Fam	aagtgctt	ggatcgaggatgact	ccctca	-atctgcattc	.....	-----	CTGAACAAa	ATGAGT	gagaactcctgcctcattctcatcgaactgaggtcc	agcacgtt			
B. Tau	acgtgctt	ggatcgatgatgact	ccc	--acaatgcattc	.....	-----	TTGga	ATCTGAACAAa	ATGAGT	AGCCA	tactaccgtc-tcctcatcagaactgaggtcc	agcacgtg	
E. Cab	aggtgctt	ggatcgatgatgact	ccctca	--aatgaattc	.....	-----	TTGga	aaATCTGAACAAa	ATGAGT	gagaactcactaccgtcgttctcgcgagactgaggtcc	agcacctg		
S. Sus	ccgtgctt	ggatcgatgatgact	ccctct	--aaagcattc	.....	-----	TTGga	aaATCTGAACAAa	ATGAGT	gagaactcactaccgtc-tcctcatcagaactgaggtcc	ggcacgtg		
L. Afr	gtgtactt	tgatcgatgatgact	tcgca	--tatacattc	.....	-----	TTGga	aaATCTGAACAAa	ATGAGT	gaaaaactcctactgtctcactcatcg-acctgaggttc	actacatt		
	*	**** *	**** *	****			*****		*	*	*	**** *	*

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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P. Tro	ccctacag	gtgaattgttgt...	3968...	-----	agatgagatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
P. Abe	ccctacag	gtgaattgttgt...	4942...	-----	agatgagatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Jac	ccctacag	gtgaattgttgt...	4042...	-----	agatgagatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
M. Mus	ccctacag	gtgaattgccct...	4388...	-----	agatgacatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
R. Nor	ccctacag	gtgaatggccct...	3973...	-----	agatgagatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Por	ccctacag	gtgaattgttct...	3914...	-----	agatgagatttcactggctg	ATTCATTGT	TCAG	atgcttga
O. Cun	ccctacag	gtgaattgtccc...	3807...	-----	tgatgagatttcactggctg	ATTCGTTTGT	TCAG	atgcttga
C. Fam	ccctacag	gtgaattgtcct...	3925...	-----	agatgagatttcactggctg	ATTCATTGT	TCAG	atgcttga
B. Tau	ccctacag	gtgaattgttgt...	3814...	gctaacagataagatttcac	TGGCTg	ATTCATTGT	TCAG	ATgcTTGa
E. Cab	ccctacag	gtgaattgttgt...	3950...	-----	agatgagatttcaccggctg	ATTCATTGT	TCAG	ATgcTTGa
S. Sus	ccctacag	gtgaattattgt...	3900...	-----	agatgagatttcactggctg	ATTCATTGT	TCAG	ATgcTTGa
L. Afr	ccctacag	gtgaattatcgt...	3984...	-----	agataagatttcaccggctg	ATTCATTGT	TCAG	ATgcTTGa
	**** *	*****			*** * *****	*****	*****	*****

id=617953 gene=ENSG00000157388 name=CACNA1D segment=chr3.53820980.53825007.1 type=IN

Figure 191: CS=15.6



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R. Mac	acgtgctt	ggatcgatgatgagtgccccataaaaacattc:::::-----	AACAAAATGAGTGGA	--gaactca-taccgtcgttctcatcggatctgagggtcc	agcacgtt
P. Tro	atgtgctt	ggatcgatgatgagtgccccataaaaacattc:::::-----	AACAAAATGAGTGGA	--gaactca-taccgtcgttctcatcggaaactgagggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgaatccccataaaaacattc:::::-----	CAAAAATGAGTGGA	--gaactca-taccgtcgttctcatcggaaactgagggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgacaatgagtgccccagtaaaaacattc:::::tgatgactgccccccaiaaaaacattccttgaaaagctg	AACAAAATGAGTGGA	--aaactca-tactgtcactgtcatcggaaactgagggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattccc--agtcaaacattc:::::-----	AACAAAATGAGTGAAA	--actctgtaccgccactctcatcggaaactgagggtcc	agcatctt
R. Nor	gtctgact	ggatc-atgatgattctc--agtcaaacattc:::::-----	AACAAAATGAGTGAAA	--actcagcaccgtattgtcatcagaactgatgtcc	ggcacctt
C. Por	atgtgctc	ggatcgatgatgatgccc--aaaacattc:::::-----	AACAAAATGAGTGAG	--agctctaaccgtcgtctcatcgtgacctgagggtcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgactccccat--aaacattc:::::-----	AACAAAATGAGTGAG	--aactcacaaccgtcgttctcatcgtgactgaactcc	agcacgtt
C. Fam	aagtgtt	ggatcgaggatgactccctca-atctgcattc:::::-----	AACAAAATGAGTGAG	--aactccctgccgtcattctcatcgcactgagggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccaca--aatgcattc:::::-----	AACAAAATGAGTGAGC	catcac--taccgtc-tcctcatcggaaactgagggtcc	agcacgtg
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S. Sus	ccgtgctc	ggatcgatgatgactccctct--aaagcattc:::::-----	AACAAAATGAGTGAG	--aactcactaccgtc-tcctcatcgaactgagggtcc	ggcacgtg
O. Avi	acatgctc	ggatcagtgatgacaactttc-atatattc:::::-----	AACAAAATGAGTGAG	--aactcactaccatc-tcctcatcgaactgagggtcc	agcacgtt
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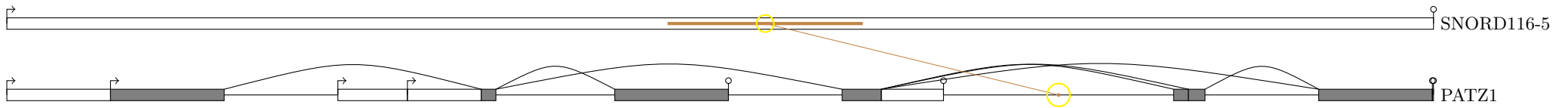
id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15\_25307480\_25307574.1 type=EN

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R. Mac	aatgcttc	tagacacactcc...129...-----cgtgtacatacattaactta--TTAC	TCATTTTGTT	atTTTTGcaaaaagccct--...41...ctgttaagctgc-	gtaaagtg
P. Tro	aatgcttc	tagacacactcc...132...-----cgtgtacatacattaactta--TTAC	TCATTTTGTT	atTTTTGcaaaaagccct--...41...ctgttaagctgc-	gtaaagtg
P. Abe	aatgcttc	tagacacactcc...132...-----cgtgtacatacattaactta--TTAC	TCATTTG	ctatTTTTGcaaaaagccct--...43...ctgttaagctgc-	gtaaagtg
C. Jac	aatgcttc	tagacacactcc...128...-----cgtgtacatacattaactta--TTAC	TCATTTTGTT	atTTTTGcaaaaagccct--...41...ctgttaagctgc-	gtaaagtg
M. Mus	aatgcttc	tagggcgactcg...120...-----cgtgtacatagattgactcgTTT	TTAC	TCATTTTGTT	atTTTT-caaaaagccctg--...43...-tgtttgtcca
R. Nor	aatgcttc	tagggcgactcg...120...-----cgtgtacatagattgactcgTTT	TTAC	TCATTTTGTT	atTTTT-caaaaagccctg--...42...-tgtttgtcca
C. Por	aatgcttc	taaggcgccgg...33...-----gtgtacatacattcactcactTTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...39...atctaaaccg-
O. Cun	aatgcttc	tagacgcggag...120...-----gtgtacatacattcactcactTTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...42...ctgttagactac-
C. Fam	aatgcttc	tagacacacgc...137...-----cgtgtacatacattaactta--TTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...40...tctgtctgttc-
B. Tau	aatgcttc	tagacacactc...125...ttataatgtgtacatacatt----GTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...41...ctgtttgtgc-
E. Cab	aatgcttc	tagacacactc...130...-----tgtgtacatacattaactta--TTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg...40...ctgttacgcagc-
S. Sus	aatgcttc	taaacaccattc...128...-----cgtgtacatacattaactta--TTT	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...41...ctgttatgctgc-
O. Avi	aatgcttc	tagacacactc...124...-tataatgtgtacatacattg----T	TTAC	TCATTTTGTT	atTTTT-gaaaagccctg--...41...ctgtttgtgc-
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id=727623 gene=ENSG00000143632 name=ACTA1 segment=chr1\_229566997\_229567248\_-1 type=EN

Figure 192: CS=12.6





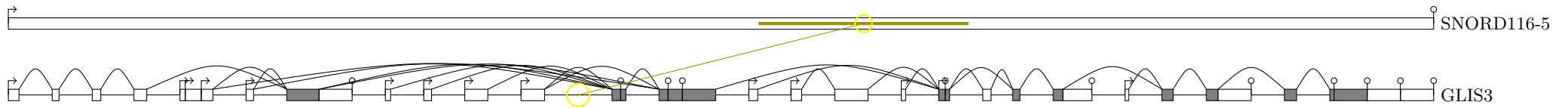
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R. Mac	acgtgctt	ggatc	gatgatg	agtc	ccccaaaa	aaaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actca-taccgtcgtttctcatcggactgaggtcc	agcacgtt				
P. Tro	atgtgctt	ggatc	gatgatg	agtc	ccccata	aaaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actca-taccgtcgtttctcatcggactgaggtcc	agcacgtt				
P. Abe	atgtgctt	ggatc	gatgatg	aat	ccccata	aaaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actca-taccgtcgtttctcatcggactgaggtcc	agcacgtt				
C. Jac	atgtgctt	ggatc	gacaatg	agtc	ccccag	taaaaacattc	:::::	cttggatc	gatgatg	agtc	gcccc	tcaaaaaacattc	cttGGAAA	ag	CTGAACAA	ATGAG	TGAAA	-actca-tactgtcactgtcatcggactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	atgatg	at	ccccag	t--caaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAAA	-actctgtaccgccactctcatcggactgaggtcc	agcatctt				
C. Por	atgtgctt	ggatc	gatgatg	atg	ccccaa	-aaaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-gctctaaccgtcgttctcatcgtgactgaggtcc	agcacact				
O. Cun	atgtgctt	ggatc	aatgatg	atg	ccccat	--aaacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actcacaaccgtcgttctcatcgtgactgaggtcc	agcacgtt				
C. Fam	aagtgctt	ggatc	gaggatg	atg	ccccat	-atctgcattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actcctgcctgattctcatcggactgaggtcc	agcacgtt				
B. Tau	acgtgctt	ggatc	gatgatg	atg	ccccaa	-aatgcattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-gagccatcac-taccgtc-tcctcatcggactgaggtcc	agcacgtg				
E. Cab	aggtgctt	ggatc	gatgatg	atg	ccccat	-aatgaattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actcactaccgtcgttctcgcgagactgaggtcc	agcacgtg				
S. Sus	ccgtgctt	ggatc	gatgatg	atg	ccccat	-aaagcattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actcactaccgtc-tcctcatcggactgaggtcc	ggcacgtg				
D. Avi	acatgctt	ggatc	agtgatg	atg	ccccat	-atatttattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-actcactaccatc-tcctcatcggactgaggtcc	agcacgtt				
L. Afr	gtgtactt	ggatc	gatgatg	atg	ccccat	-tatacattc	:::::	-----	GGAAA	ag	CTGAACAA	ATGAG	TGAGA	-gaaaaactcc-tactgtcactcatcg-acctgaggtcc	actacatt				
	* **	****	****	*	****				* **	*****				* * ** * **** *	*				

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

H. Sap	aactctca	cctgctactcag...4937...	-ttgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
R. Mac	aactctca	cctgctactcag...4937...	-ttgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
P. Tro	aactctca	cctgctactcag...4937...	-ttgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
P. Abe	aactctca	cctgctactcag...4937...	-ttgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
C. Jac	aactccca	cctgctactcag...4943...	-----gcctcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
M. Mus	cagataca	cctgctcaagt...4943...	-----gctgtgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
C. Por	caaacata	cctgctgcttag...4937...	-ttgctggctgcccgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
O. Cun	gtaacaca	cctgttgcccag...4937...	-ttgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
C. Fam	tcataaca	tgtgctgtgtgg...4937...	-gtgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
B. Tau	atgacgca	cctgctgcccc...4943...	-----ggccgc-ggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
E. Cab	gtagcaca	tctgctgctcag...4937...	-gtgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
S. Sus	gtaataca	gctgctgcctgg...4937...	-gtgctggccgcgggatctca	TCTCct	TTTATc	TTGTTTAG	gTTTCTcc
O. Avi	atgacgca	cctgctgcccc...4937...	-gtgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc
L. Afr	acaaaaca	cctgctgctcag...4943...	-----gcccgcgggtctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc	
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id=182225 gene=ENSG00000100105 name=PATZ1 segment=chr22.31724911.31731403.-1 type=IN

Figure 193: CS=12.6



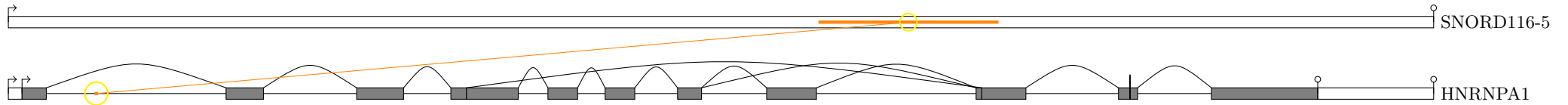
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P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	:::::-----	CTGAACAAa	ATGAGT	gagaactca-taccgtcgttctcatcaggactgagggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgaat	ccccataaaaacattc	:::::-----	CTGAACAAa	ATGAGT	gagaactca-taccgtcgttctcatcaggactgagggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgacaatgagtc	ccccagtaaaaacattc	:::::cgatgatgactgcccctcaaaaaaacattccttg	CTGAACAAa	ATGAGT	gaaaactca-tactgtcactgtcatcaggactgagggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattccc	--agtcaaacattc	:::::-----	CTGAACAAa	ATGAGT	gaaaactctgtaccgccactctcatcaggactgagggtcc	agcatctt
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C. Por	atgtgctc	ggatcgatgatgatgccc	caaa--aaacattc	:::::-----	CTGAACAAa	ATGAGT	gagagctctaaaccgtcgtctcatcgtgcctgagggtcc	agcacact
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F. Cat	atgtgctc	ggatcgatgatgactccctca	--acagcattc	:::::-----	CTGAACAAa	ATGAGT	gagaactccctaccgtcttctcgtcgaaactgagggtcc	agcacatt
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O. Avi	acatgctc	ggatcagtgatgacaactttc	-atatttattc	:::::-----	TCTGAACAAa	ATGAGT	gagaactcactaccatc-tcctcatcgatactgagctct	agcacgtt
L. Afr	gtgtactt	tgatcgatgatgacttccgca	--tatacattc	:::::-----	TCTGAACAAa	ATGAGT	gaaaactcctactgtctcactcatcg-acctgagggtcc	actacatt
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id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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R. Mac	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	tttag	gggctc	tt
P. Tro	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
P. Abe	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
C. Jac	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
M. Mus	taatacag	gtaagttttg	tt...4941...gggacatacaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
R. Nor	taatacag	gtaagttttt	tt...4941...gggacataaaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
C. Por	caatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
O. Cun	gaatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
C. Fam	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
F. Cat	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	gggctc	tt
E. Cab	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	Gggctc	tt
O. Avi	taatacag	gtaagttttg	tt...4941...gggacatgaaagctaacctg	ATTCA	TTTGT	ttTTAG	Gggctc	tt
L. Afr	taatacag	gtaagttttg	tt...4941...ggggcacagaagctaacctg	ATTCA	TTTGT	ttTTAG	Gggctc	tt
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id=609102 gene=ENSG00000107249 name=GLIS3 segment=chr9.4125942.4144838.-1 type=IN

Figure 194: CS=12.6



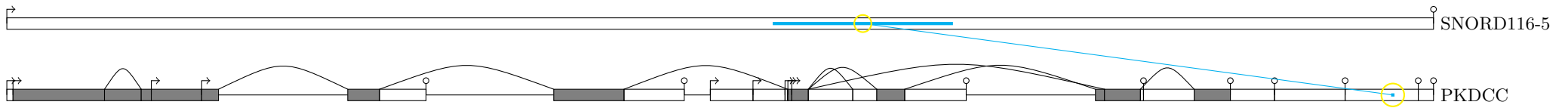
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R. Mac	acgtgctt	ggatcgatgatgag-tccccaaaaaacatt:::--:-----	ACAAAATG	GTGA	gaactca-taccgtcgttctcatcggactgaggtcc	agcacgtt					
P. Tro	atgtgctt	ggatcgatgatgag-tccccataaaaacatt:::--:-----	ACAAAATG	GTGA	gaactca-taccgtcgttctcatcggactgaggtcc	agcacgtt					
C. Jac	atgtgctt	ggatcgacaatgag-tccccagtaaaaacatt:::--:gatgactgcccctcaaaaaacattccttggaaaagctga	ACAAAATG	GTGA	aaactca-tactgtcactgtcatcggactgaggtcc	agcacatt					
M. Mus	acgtgctt	ggatctatgatgat-tccc--agtcaaacatt:::--:-----	ACAAAATG	GTGA	aaactctgtaccgccactctcatcggactgaggtcc	agcatctt					
R. Nor	gtctgact	ggatc-atgatgat-tctc--agtcaaacatt:::--:-----	ACAAAATG	GTGA	aaactcagcaccgctattgtcatcagaactgatgtcc	ggcacctt					
C. Por	atgtgctt	ggatcgatgatgat-gcccaa--aaaacatt:::--:-----	ACAAAATG	GTGA	gagctctaaccgtcgtctcatcgtgcctgaggtcc	agcacatt					
O. Cun	atgtgctt	ggatcaatgatgac-tccccat--aaacatt:::--:-----	ACAAAATG	GTGA	gaactcacaaccgtcgttctcatcgtgactgaactcc	agcacgtt					
C. Fam	aagtgctt	ggatcgaggatgac-tccctca-atctgcatt:::--:-----	ACAAAATG	GTGA	gaactccctgccgtcattctcatcgaactgaggtcc	agcacgtt					
F. Cat	atgtgctt	ggatcgatgatgac-tccctca--acagcatt:::--:-----	ACAAAATG	GTGA	gaactccctaccgtcttctcgtcgaactgaggtcc	agcacatt					
B. Tau	acgtgctt	ggatcgatgatgac-tcccaca--aatgcatt:::--:-----	ACAAAATG	GTGA	gccatcactaccgtc-tcctcatcggactgaggtcc	agcacgtg					
E. Cab	aggtgctc	ggatcgatgatgac-tccctca--aatgaatt:::--:-----	ACAAAATG	GTGA	gaactcactaccgtcgttctcggcagactgaggtcc	agcacgtg					
S. Sus	ccgtgctc	ggatcgatgatgac-tccctct--aaagcatt:::--:-----	ACAAAATG	GTGA	gaactcactaccgtc-tcctcatcgaactgaggtcc	ggcacgtg					
O. Avi	acatgctc	ggatcagtgatgacaactttca--tatttatt:::--:-----	ACAAAATG	GTGA	gaactcactaccatc-tcctcatgatactgagctcc	agcacgtt					
L. Afr	gtgtactt	tgatcgatgatgac-ttcgca--tatacatt:::--:-----	ACAAAATG	GTGA	aaaactcctactgtctcactcatcg-acctgaggtcc	actacatt					
	*	****	****	***	*****	*	**	*	****	*	*

id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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R. Mac	agtcagag	gtgagttaggcg...113...-----taccctc-ccaaagttcaag	TCGCCATTTGT	cctcttgatcgccatgaggc---...377...ccccactccag	tctcctaa					
P. Tro	agtcagag	gtgagttaggcg...111...-----taccctc-ccaaagttcaag	TCGCCATTTGT	cctcttgatcgccatgaggc---...375...ccccactctag	tctcctaa					
C. Jac	agtcagag	gtgagttaggcg...106...-----ctaccctc-ccaaagttcaag	TCGCCATTTGT	cctcttgatcgccatgaggc---...371...ccccactgtag	tctcctaa					
M. Mus	agtcagag	gtgagttaggcg...106...-----ctactttaaaaaaatgcagg	TCGCCATTTGT	cctcatagtcaccatgaggc---...369...ctccactttag	tctcccaa					
R. Nor	agtcagag	gtgagttaggcg...105...-----cctacttt-aaaaaatgcagg	TCGCCATTTGT	cctcatagtcaccatgaggc---...361...actttattttag	tctcccaa					
C. Por	agtcagag	gtaagcgtatatt...103...-----gcctgctc-ccaaagttcagg	TCGCCATTTGT	cctcg---tcgcatgaggccgc...327...cttccactctag	tctcctaa					
O. Cun	agtcagag	gtgaggagctcc...102...aaggcctaccctc-ccaaag-----	TCGCCATTTGT	cctctgctgcgcatgaggc---...378...tctcccgccag	tgcgccaa					
C. Fam	agtcagag	gtgagtaaacacg...112...-----ttcccctc-cggaagttgagg	TCGCCATTTGT	cctctgctgcgcatgaggc---...363...ccccctcctag	tctcccaa					
F. Cat	agtcagag	gtgagtaaacacg...113...-----taccctc-ccaaagttcagg	TCGCCATTTGT	cctctgctgcgcatgaggc---...378...cccactcctag	tctcccaa					
B. Tau	aatcagag	gtgggtaagacg...111...-----tcccctc-cctaaagttgagg	TCGCCATTTGT	cctcg---tcgcatgaggctgc...362...ctcctcctag	tctcccaa					
E. Cab	agtcagag	gtgagtaggacg...111...-----taccctc-ccaaagttcagg	TCGCCATTTGT	cctctgctgcgcatgaggc---...359...tctactcctag	tctcccaa					
S. Sus	agtcagag	gtgagtaggacg...111...-----taccctc-cctgagttcagg	TCGCCATTTGT	cctcg---tcgcatgaggctgc...358...ccctactcctag	tctcccaa					
O. Avi	aatcagag	gtgggtaagacg...111...-----tcccctc-cctgagttgagg	TCGCCATTTGT	cctcg---tcgcatgaggctgc...366...ctcactcctag	tctcccaa					
L. Afr	agtcagag	gtaagctaccct...108...-----taccctc-ccaaagttgagg	TCGCCATTTGT	cctctgctgcgcatgaggc---...389...ttccaccattag	tctcctaa					
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id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 195: CS=18.75



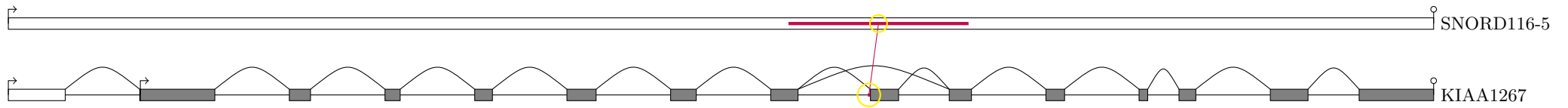
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P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	::::	-----	-----	TGAACAAA	TGAGtg	AGAA	ctca-taccgtcgttctcatcagaactgagggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgaat	ccccataaaaacattc	::::	-----	-----	TGAACAAA	TGAGtg	AGAA	ctca-taccgtcgttctcatcagaactgagggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgacaatgagtc	ccccagtaaaaacattc	::::	gatgatgactgccct	caaaaaaacattc	ccttggaaaagc	TGAACAAA	TGAGtg	gaaaactca-tactgtcactgtcatcagaactgagggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgatt	ccccagtc	-----	-----	-----	GCTGAACAAA	TGAGtg	gaaaactctgtaccgccactctcatcagaactgagggtcc	agcatcct	
R. Nor	gtctgact	ggatc-atgatgatt	ctcagtc	-----	-----	-----	GCTGAACAAA	TGAGtg	gaaaactctgtaccgccactctcatcagaactgagggtcc	agcacctt	
C. Por	atgtgctc	ggatcgatgatgagtc	ccccaa	-----	-----	-----	TGAACAAA	TGAGtg	AGAG	ctctaaccgtcgtctcatcgtgactgagggtcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgact	ccccat	-----	-----	-----	GCTGAACAAA	TGAGtg	AGAA	ctcacaaccgtcgttctcatcgtgactgagggtcc	agcacgtt
C. Fam	aagtgctt	ggatcgaggatgact	ccccat	-----	-----	-----	GCTGAACAAA	TGAGtg	AGAA	ctccctgccgtcattctcatcgaactgagggtcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgact	ccccat	-----	-----	-----	GCTGAACAAA	TGAGtg	AGAA	ctccctgccgtcattctcatcgaactgagggtcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgact	ccccat	-----	-----	-----	CTGAACAAA	TGAGtg	AGAA	ctcactaccgtcgttctcatcgaactgagggtcc	agcacgtg
E. Cab	aggtgctc	ggatcgatgatgact	ccccat	-----	-----	-----	CTGAACAAA	TGAGtg	AGAA	ctcactaccgtcgttctcatcgaactgagggtcc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgact	ccccat	-----	-----	-----	CTGAACAAA	TGAGtg	AGAA	ctcactaccgtcgttctcatcgaactgagggtcc	ggcacgtg
L. Afr	gtgtactt	tgatcgatgatgact	ccccat	-----	-----	-----	CTGAACAAA	TGAGtg	AGAA	ctcactaccgtcgttctcatcgaactgagggtcc	actacatt
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id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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P. Tro	tgtgggtg	attctgtacctg...	132...	cgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	tgaaagccgcaaagcagcca--...	66...	ttgtttatttt	gtaaaaa
P. Abe	tgtgggtg	attctgtacctg...	132...	cgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	67...	ttgtttatttt	gtaaaaa
C. Jac	tgtgggtg	attctgtacctg...	137...	-----tggggctggggccttctgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	67...	ttgtttatttt	gtaaaaa	
M. Mus	tgtgagt	aaccagcactgg...	137...	-----tagggtcggggccttctgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	67...	ttgtttatttt	gtaaaaa	
R. Nor	tgtgagg	agccagcctgg...	134...	-----tagggtcggggccttctgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	64...	ttgtttatttt	gtaaaaa	
C. Por	tgtagg	agccgcttccg...	136...	tgggggtgaggctggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	66...	ttgtttatttt	gtaaaaa
O. Cun	tgtgggca	atcctggacct...	131...	ctggggcggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	66...	ttgtttatttt	gtaaaaa
C. Fam	tgtggggg	attctgtacca...	135...	-----tgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	64...	atgtttatttt	gtaaaaa
F. Cat	tgtgggaa	actccgtacctg...	134...	tgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	65...	atgtttatttt	gtaaaaa
B. Tau	tgtggg	attctgtacccc...	136...	-----tggggcggggccttctgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	66...	atgtttatttt	gtaaaaa	
E. Cab	tgtggg	atccataacctg...	131...	tgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	66...	atgtttatttt	gtaaaaa
S. Sus	tgtggg	aatctgtacctg...	128...	tgggggtggggcggggcct	TTCTgc	CTCATTGct	TTCA	atgaaagccgcaaagcagcc--...	66...	atgtttatttt	gtaaaaa
L. Afr	cgtgggtg	actctggcctcc...	119...	-----tggggcggggccttctgc	CTCATTGct	TTCA	atgaaagcagctcggcagctg--...	65...	ttgtttatttt	gtaaaaa	
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id=707208 gene=ENSG00000162878 name=PKDCC segment=chr2.42285327.42285609.1 type=EN

Figure 196: CS=10.92



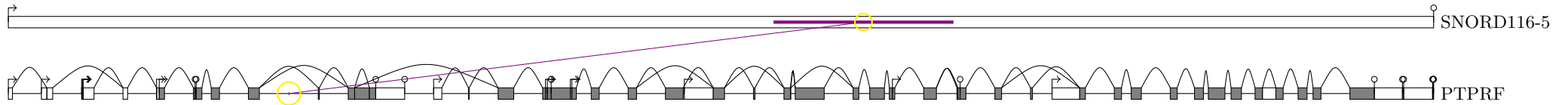
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R.Mac	acgtgctt	ggatc	gatgatgagtc	ccccaaaaaacattc	:::::-----	GAACAAAA	GAGT	gagaactca-taccg	tcgttctcatcggaactgaggtcc	agcacgtt	
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P.Abe	atgtgctt	ggatc	gatgatgagtc	ccccataaaaacattc	:::::-----	GAACAAAA	GAGT	gagaactca-taccg	tcgttctcatcggaactgaggtcc	agcacgtt	
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C.Por	atgtgctc	ggatc	gatgatgagtc	ccccaa--aaaacattc	:::::-----	GAACAAAA	GAGT	GAGAG	gctctaaccgtcgttctcatcgtg	cctgaggtcc	
O.Cun	atgtgctt	ggatc	aatgatgagtc	ccccat--aaacattc	:::::-----	GAACAAAA	GAGT	gagaactcacaaccg	tcgttctcatcgtgactgaactcc	agcacgtt	
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S.Sus	cogtgctc	ggatc	gatgatgagtc	ccctct--aaagcattc	:::::-----	GAACAAAA	GAGT	gagaactcactaccg	tcctcatcgaaactgaggtcc	ggcacgtg	
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id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

H.Sap	aacagcca	gtaagtgtcagg	..429..	-----	ttgagaggacatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
R.Mac	aacagcca	gtaagtgtcagg	..428..	-----	ttgagaggacatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
P.Tro	aacagcca	gtaagtgtcagg	..429..	-----	ttgagaggacatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
P.Abe	aacagcca	gtaagtgtcagg	..429..	-----	ttgagaggacatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
C.Jac	aacagcca	gtaagtgtcagg	..428..	-----	tcgagagaacatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
R.Nor	aacatcca	gtaagtttctga	..386..	-----	ttgagtaaatgtatttcaca	GCTCtTTTT	TGTC	ccctcttcag	agctgtcc
C.Por	aacagcca	gtaagtctcggg	..431..	aaaggattgagagaaggta	TCTCaaGCTCtTTTT	ctGTC	ccctcttcag	agctgtcc	
O.Cun	aactgcca	gtaagttttagg	..392..	-----	ttgagaggaggtatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
C.Fam	aacagcca	gtaagtttcagg	..429..	-----	gttgagagaag--atttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
F.Cat	aacagcca	gtaagtttcagg	..469..	-----	gattgagagaag--atttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
B.Tau	aacagcca	gtaagtttcagg	..375..	-----	ttgagagaagatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
E.Cab	aacagcca	gtaagtttcagg	..436..	-----	ttcagagaagatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
S.Sus	aacagcca	gtaagtttcagg	..428..	-----	atgagaaaagatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
L.Afr	aacagcca	gtaagtttcagg	..425..	-----	ttgagagaaggatatttcaca	GCTCtTTTT	ctGTC	ccctcttcag	agctgtcc
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id=757041 gene=ENSG00000120071 name=KIAA1267 segment=chr17.44116582.44117067.-1 type=IN

Figure 197: CS=14



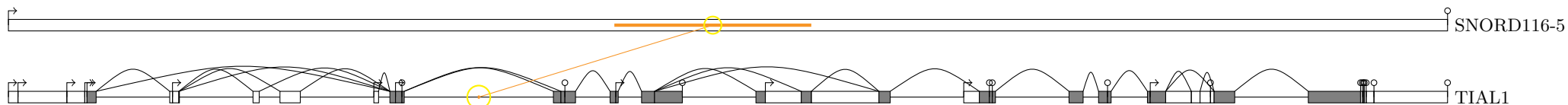
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R. Mac	acgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	.....	TGAACAAA	TGAG	tgagaactca-taccgtcgttctcatcaggatctgaggtcc	agcacgtt			
P. Tro	atgtgctt	ggatcgatgatgagtc	ccccataaaaacattc	.....	TGAACAAA	TGAG	tgagaactca-taccgtcgttctcatcaggactgaggtcc	agcacgtt			
P. Abe	atgtgctt	ggatcgatgatgaat	ccccataaaaacattc	.....	TGAACAAA	TGAG	tgagaactca-taccgtcgttctcatcggactgaggtcc	agcacgtt			
C. Jac	atgtgctt	ggatcgacaatgagtc	cccagtaaaaacattc	.....	gatgatgactgccct	caaaaaacattc	ccttggaaaagc	TGAACAAA	TGAG	tgaaaactca-tactgtcactgtcatcggactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattccc	-agtcaaacattc	.....	TGAACAAA	TGAG	tgaaaactctgtaccgccactctcatcggactgaggtcc	agcatctt			
R. Nor	gtctgact	ggatc-atgatgattctc	-agtcaaacattc	.....	TGAACAAA	TGAG	tgaaaactcagcaccgctattgtcatcagaactgatgtcc	ggcacctt			
C. Por	atgtgctc	ggatcgatgatgatg	ccccaa-aaaacattc	.....	TGAACAAA	TGAG	tgagagctctaaccgtcgtctcatcgtgcctgaggtcc	agcacact			
O. Cun	atgtgctt	ggatcaatgatgact	ccccat-aaacattc	.....	TGAACAAA	TGAG	tgagaactcacaaccgtcgttctcatcgtgactgaactcc	agcacgtt			
C. Fam	aagtgctt	ggatcgaggatgact	ccctca-atctgattc	.....	TGAACAAA	TGAG	tgagaactccctgccgtcattctcatcgcaactgaggtcc	agcacgtt			
F. Cat	atgtgctc	ggatcgatgatgact	ccctca-acagcattc	.....	TGAACAAA	TGAG	tgagaactccctaccgtcttctcgtcgaactgaggtcc	agcacatt			
B. Tau	acgtgctt	ggatcgatgatgact	cccaca-aatgcattc	.....	TGAACAAA	TGAG	tgagccatcactaccgtc-tcctcatcggactgaggtcc	agcacgtg			
E. Cab	aggtgctc	ggatcgatgatgact	ccctca-aatgaattc	.....	TGAACAAA	TGAG	tgagaactcactaccgtcgttctcgcgagactgaggtcc	agcacctg			
S. Sus	ccgtgctc	ggatcgatgatgact	ccctct--aaagcattc	.....	TGAACAAA	TGAG	tgagaactcactaccgtc-tcctcatcgaactgaggtcc	ggcacgtg			
L. Afr	gtgtactt	tgatcgatgatgact	tcgca--tatacattc	.....	TGAACAAA	TGAG	tgaaaactcctactgtctcactcatcg-acctgaggttc	actacatt			
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id=461832 gene=ENSG0000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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P. Tro	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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C. Jac	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M. Mus	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R. Nor	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Por	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcaccag	gtggttca
O. Cun	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	cgTTCA	aattacctcgccag	gtggttca
C. Fam	acgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
F. Cat	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B. Tau	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E. Cab	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S. Sus	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
L. Afr	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 198: CS=13.5



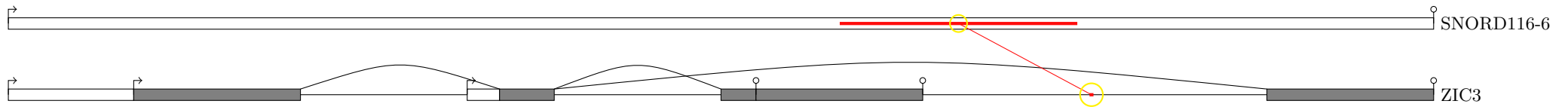
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R. Mac	acgtgctt	ggatc	gatgatgagtccccataaaaacattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactca-taccg	tcgttctcatcagaactgaggtcc	agcacgtt				
P. Tro	atgtgctt	ggatc	gatgatgagtccccataaaaacattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactca-taccg	tcgttctcatcagaactgaggtcc	agcacgtt				
P. Abe	atgtgctt	ggatc	gatgatgagtccccataaaaacattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactca-taccg	tcgttctcatcagaactgaggtcc	agcacgtt				
C. Jac	atgtgctt	ggatc	gacaatgagtccccagtaaaaacattc	::::	gtgctt	ggatc	gatgatgagtccccataaaaacattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactca-tactg	tcactgtcatcagaactgaggtcc	agcacatt
C. Por	atgtgctc	ggatc	gatgatgagtccccaa--aaaacattc	::::	-----	CCTTG	gaAAAGCTGAACA	acaaaatgagt	gagagctcaaac	ccgctctcatcagctgaggtcc	agcacact				
O. Cun	atgtgctt	ggatc	aatgatgactccccat--aaacattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactcacaacc	gcgttctcatcagctgaggtcc	agcacgtt				
C. Fam	aagtgctt	ggatc	gaggatgactccctca-atctgattc	::::	-----	CTTG	gaAAAGCTGAACA	aaatgagt	gagaactccctgc	ccgtcattctcatcgaactgaggtcc	agcacgtt				
B. Tau	acgtgctt	ggatc	gatgatgactcccaca--aatgattc	::::	-----	CTTG	gaAAAGCTGAACA	acaaaatgagt	gagccatcactacc	gcgtc-tcctcatcgaactgaggtcc	agcacgtg				
E. Cab	aggtgctc	ggatc	gatgatgactccctca--aatgaattc	::::	-----	CTTGG	-AAATCTGA	acaaaatgagt	gagaactcactacc	gcgttctcgcagactgaggtcc	agcacgtg				
S. Sus	ccgtgctc	ggatc	gatgatgactccctc--aaagcattc	::::	-----	CTTGG	-AAATCTGAACA	aatgagt	gagaactcactacc	gcgtc-tcctcatcgaactgaggtcc	ggcacgtg				
O. Avi	acatgctc	ggatc	agtgatgactccctc--atatttattc	::::	-----	CTTGGAAA	aTCTGA	acaaaatgagt	gagaactcactacc	atc-tcctcatcgatactgaggtcc	agcacgtt				
L. Afr	gtgtactt	tgatc	gatgatgactccgca--tatacattc	::::	-----	CTTGG	-AAATCTGA	acaaaatgagt	gaaaaactcactacc	tcactgtctcactcatcg-acctgaggtcc	actacatt				
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id=461832 gene=ENSG00000207191 name=SNORD116-5 segment=chr15.25307480.25307574.1 type=EN

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P. Tro	taacagag	gtaagatccttc...4874...	---tttaaatcctattttaa-aag	TGTTAGGCTTT	caTAAG	cctatg	cagctctcacctt	gt...34...	ttttcttctcag	caaccgga	
P. Abe	taacagag	gtaagatccttc...4874...	---tttaaatcctattttaa-aag	TGTTAGGCTTT	caTAAG	cctatg	cagctctcacctt	gt...34...	ttttcttctcag	caaccgga	
C. Jac	taacagag	gtaagatccttc...4874...	---tttaaatcctattttaa-aag	TGTTAGGCTTT	caTAAG	cctatg	cagctctcacctt	gt...34...	ttttcttctcag	caaccgga	
C. Por	taacagag	gtaaggtccttc...4876...	---tcttttcttctttt---aagca	TTAGCTTT	caTAAGG	ttttg	cagctctcactttt	ta...33...	ttttcttctcag	caaccgga	
O. Cun	tcacagag	gtaaggtccttc...4874...	---tgtaaatcatattttaa-aag	TGTTAGGCTTT	cgTAAG	cctatg	caatctcacctt	gt...34...	ttttcttctcag	caaccgga	
C. Fam	taacagag	gtaagatccttc...4597...	---ttatttttatttttataag	TGTTAGGCTTT	caTAAG	cctttg	caatctcacctt	gt...34...	ttttcttctcag	caaccgga	
B. Tau	tcacagag	gtaagagccttc...4876...	...gtgttcggctttgt---a-aagt	TTAGCTTTC	caTAAG	cctata	cagctctcacctc	gt...34...	ttttcttctcag	caaccgga	
E. Cab	taacagag	gtaaggtccttc...4667...	---taaatcctattttaa-aagt	TTAGCTTTC	caTAAG	cctatg	caatctcacctt	gt...34...	ttttcttctcag	caaccgga	
S. Sus	taacagag	gtaagatccttc...4873...	...gtgtaaatttatttga-aa	TGTTAGGCTTTC	caTAAG	cctgtg	cagctctcacctc	gt...34...	ttttcttctcag	caaccgga	
O. Avi	tcacagag	gtaagagccttc...4876...	...ggtgtaaatcctat---a-aag	TTAGCTTTC	caTAAG	cctatg	cagctctcacctc	at...34...	ttttcttctcag	caaccgga	
L. Afr	taacagag	gtaagatccttc...4876...	---taaatcctattttaa-gagt	TTAGCTTTC	caTAAG	cctatg	caatctcactgt	gt...34...	ttttcttctcag	caaccgga	
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id=126951 gene=ENSG00000151923 name=TIAL1 segment=chr10.121342121.121347663.-1 type=IN

Figure 199: CS=11.7



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R.Mac	atgtgctt	ggatc	gatgatgagtcctc	caaaaaaacattcc	TTGGA	AAAGct	GAACAAAA	tg	AGTGaa	AACT-	cataccgtcgttctcatc	ggaaactgag--gtcc	agcacatt
P.Tro	atgtggtt	ggatc	gatgatgagtcctc	caaaaaaacattcc	TTGGA	AAAGct	GAACAAAA	tg	AGTGaa	AACT-	cataccgtcgttctcatc	ggaaactgaggtgtcc	agcacatt
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M.Mus	acgtgctt	ggatc	tatgatgattccc	---agtcaaacattc	cttggaaaagct	GAACAAAA	tg	AGTGaa	AACT	ctgtaccgccactctcatc	ggaaactgag--gtcc	agcatcct	
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	---aataaaacattc	cttggaaaagct	GAACAAAA	tg	AGTGaa	AACT	caataccgccactctcatc	gtgactgag--gtcc	agcacctg	
O.Cun	atgtgctt	ggatc	aatgatgactcccc	ca---taaacattc	cttggaaaagct	GAACAAAA	tg	AGTGaa	AACT	cacaaccgtcgttctcatc	gtgacttag--gtcc	agcacatt	
C.Fam	aagtgctt	ggatc	gatgatgactccct	caa---tctgattcc	TTGGA	AAAGct	GAACAAAA	tg	AGTGaa	AACT	ccctgccgtcgttctcatc	gcaactgag--gtcc	agcacgtt
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O.Avi	acatgctc	ggatc	cagtgatgacaactt	ca--tatttattc	cttggaaaagct	GAACAAAA	tg	AGTGaa	AACT	cactaccatc-tcct	catgatactgag--gtcc	agcacgtt	
L.Afr	acgtgcat	ggatt	gatgatgactgct	---atcctaaacattc	cttggaaaagct	GAACAAAA	tg	AGTGaa	AACT	ccttaccgtcactcattg	-aactgag--gtcc	agcacatt	
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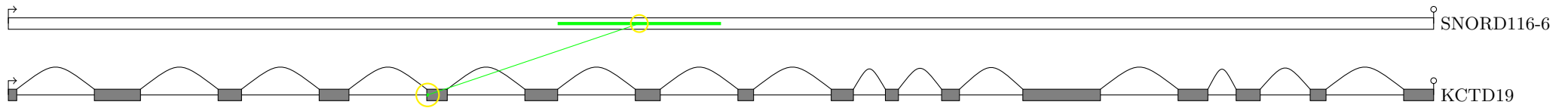
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R.Mac	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTTTTTg	CCAG	tgttgctc
P.Tro	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTTTTTg	CCAG	tgttgctc
P.Abe	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTTTTTg	CCAG	tgttgctc
C.Jac	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTTTTTg	CCAG	tgttgctc
M.Mus	ataactgc	agcagttcctaa...	4932...	agaaaatttgac	ctatctgc	AGTTCACTTTTTGTTTTT	tcttgccag	tgttgctc
R.Nor	ataactgc	agcagttcctaa...	4932...	aaaaaatttgac	ctatctgc	AGTTCACTTTTTGTTTT	tcttgccag	tgttgctc
O.Cun	ataactgc	aacagttctgaa...	4932...	gcctattttgac	ctatctgc	AGTTCACTTTTTGTTTT	tcttgccag	tgttgctc
C.Fam	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTTTTTg	CCAG	tgttgctc
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S.Sus	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTT	ctttgcccag	tgttgctc
O.Avi	ataactgc	agcagttctgaa...	4932...	gcctgttttgac	ctatctgc	AGTTCACTTTTTGTTTT	tcttgcccag	tgttgctc
L.Afr	ataactgc	agcagttctgaa...	4932...	gcctattttaac	ctatctgc	AGTTCACTTTTTGTTTT	tcttgcccag	tgttgctc
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Figure 200: CS=14





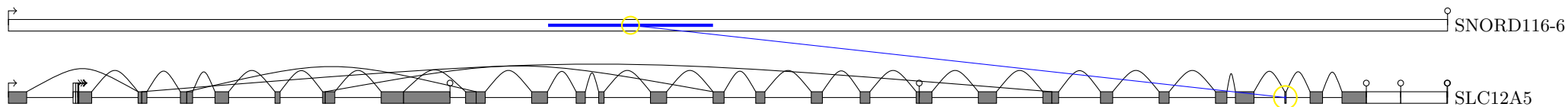
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F.Cat	atgtgctc	ggatc	gatgatgactccctc	--aa-cagc	ATTCCTTGGAAAA	AGC	TGA	Acaaaatgagt	gaaaactcctcctcgttctcatcgaaactgag--gtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactcccac	--aa-atgc	ATTCCTTGGAAAA	-tc	TGA	Acaaaatgagt	gagcactaccgtc-tcctcatcggaactgag--gtcc	agcacgtg
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P.Tro	cttcattg	gtgattgctctg...	1178...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
P.Abe	cttcattg	gtgattgctctg...	1179...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
C.Jac	cttcacg	gtgattgctctg...	1175...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
M.Mus	cttcattg	gtgattgctctg...	1271...	---aacacatgtgttcttct	GCTTTTCAAG	tGAAT	ttt
R.Nor	cttcattg	gtgattgctctg...	1272...	---aactcatgtgttcttct	GCTTTTCAAG	tGAAT	ttt
C.Por	ctttattg	gtgatggtctctg...	1505...	gttaactcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
O.Cun	cttcattg	gtgattgctctg...	1407...	---aattcatctgttcccatt	GCTTTTCAAG	tGAAT	ttt
C.Fam	cttcattg	gtgattgctctg...	1173...	ccttaactcatttgttccc	TTTGTTTTCAAG	tGAAT	ttt
F.Cat	cttcattg	gtgattgctctg...	1164...	cttatctcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
B.Tau	ctttattg	gtgattgctctg...	1184...	----ccatttgttcccctgc	TTTCAAG	tGAAT	ttt
E.Cab	cttcattg	gtgattgctctg...	1210...	gttaactcatttgttccc	TTTGTTTTCAAG	tGAAT	ttt
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Figure 201: CS=10.92



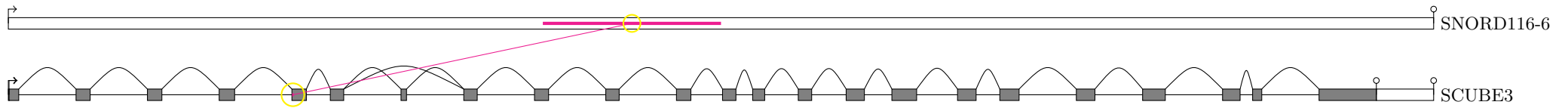
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R. Nor	gcgtgctt	ggatcgatgatgatttccaata-aaa---	CATTCCTTGAAAAGC	tgaaacaaaatgagtgaaaactcaatccgccactctcatcggtgactgaggtcc	agcacctg
C. Por	atgtgctt	ggatcgatgatgatgcccaaa-aaa---	CATTCCTTGAAAAGC	tgAACAAaatgagtgagagctctaataccgtcactctcgtcgtgactgaggtcc	agcacact
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F. Cat	atgtgctc	ggatcgatgatgactcctcaa-cag---	CATTCCTTGAAAAGC	tgaaacaaaatgagtgagaactcctcctcctcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccacaa-atg---	CATTCCTTGAAAAT	ctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	aggtgctc	ggatcgatgatgactcctcaa-atg---	CATTCCTTGAAAAT	ctgaacaaaatgagtgagaactcactaccgtcgttctcgcgagactgaggtcc	agcacctg
cggtgctc	ggatcgatgatgactcctcta-aag---	CATTCCTTGAAAAT	ctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg	
L. Afr	acgtgcat	ggattgatgatgactgctatct-aaa---	CATTCCTTGAAAAGC	tgaaacaaaatgagtgaaaactcctaccgtcctcactcattg-aactgaggtcc	agcacatt
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id=676284 gene=ENSG0000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

H. Sap	atgaagcc	gtacgggcctgg...289...-----	tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
R. Mac	atgaagcc	gtacgggcctgg...290...-----	tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
P. Abe	atgaagcc	gtacgggcctgg...267...-----	tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
C. Jac	atgaagcc	gtatgggcctgg...278...-----	tttcttttggcatctcttgt	GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggactgg...297...--	tcttctctcttctctctc	TTTGtGTTTCCTGAAG	GGAGTGgg
R. Nor	atgaagcc	gtacgggcctgg...273...-----	ttctctcttctctctctc	GTTTCCTGAAG	GGAGTGgg
C. Por	atgaagcc	gtatgggcctgg...271...--	tttctttctcccttctctc	TGTTGTTTTTCctgAAG	GgAGTGgg
C. Fam	atgaagcc	gtaggggcctgg...278...-----	cctctcgttctctcttctt	GTTTCCTGAAG	GGAGTGgg
F. Cat	atgaagcc	gtaggggcctgg...298...-----	cctctcttctctctcttct	GTTTCCTGAAG	GGAGTGgg
B. Tau	atgaagcc	gtacgggtctgg...296...-----	cctctccttctctctctat	GTTTCctgAAG	GgAGTGgg
E. Cab	atgaagcc	gtatgggcctag...299...-----	cctcacttctctctcttct	GTTTCcgAAG	GgAGTGgg
S. Sus	atgaagcc	gtacgggcctgg...305...-----	cctctcttctctctcttct	GTTTCcgAAG	GgAGTGgg
L. Afr	atgaagcc	gtatgggcctgg...288...-----	cttttcttctcttctctt	GTTTCCTGAAG	GGAGTGgg
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id=543329 gene=ENSG0000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 202: CS=14.95



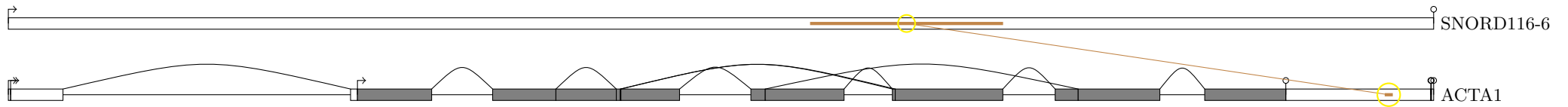
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaa-aaaaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaact-cataccg	tcgttctcatcggaactgaggtcc	agcacatt							
M. Mus	acgtgctt	ggatcctatgatgattcccagtc-aaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgaaaactctgtacc	gccactctcatcggaactgaggtcc	agcatcct							
R. Nor	gcgtgctt	ggatcgatgatgattccaata-aaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgaaaactcaatacc	gcactctcatcggtgactgaggtcc	agcacctg							
C. Por	atgtgctt	ggatcgatgatgagtcctccaa-aaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagagcttaatac	cgctcactctcggtgactgaggtcc	agcacatt							
O. Cun	atgtgctt	ggatcaatgatgactccccat-aaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaactcacaacc	tcgttctcatcggtgacttaggtcc	agcacatt							
C. Fam	aagtgctt	ggatcgatgatgactcctcaatctg	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaactcctgcc	tcgttctcatcgcaactgaggtcc	agcacgtt							
F. Cat	atgtgctc	ggatcgatgatgactcctcaa-cag	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaactcctccc	tcgttctcatcgaaactgaggtcc	agcacgtt							
B. Tau	acgtgctt	ggatcgatgatgactcccacaa-atg	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagcactactacc	tc-tcctcatcggaactgaggtcc	agcacgtg							
E. Cab	aggtgctc	ggatcgatgatgactcctcaa-atg	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaactcactacc	tcgttctcgccgagactgaggtcc	agcacctg							
S. Sus	ccgtgctc	ggatcgatgatgactcctcta-aag	CATTCCTTgGAAAAG	ctgaacaaaatgagtgagaactcactacc	tc-tcctcatcgaaactgaggtcc	ggcacgtg							
L. Afr	acgtgcat	ggattgatgatgactgctatct-aaa	CATTCCTTgGAAAAG	ctgaacaaaatgagtgaaaactcctacc	tcctcactcattg-aactgaggtcc	agcacatt							
	***	***	*****	*	*****	*	***	*	***	*	***	*****	***

id=676284 gene=ENSG0000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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R. Mac	gccagaag	gtcagccc	atga-...955...-cattcac	cccccttcttctCTTTAg	AAGGAATg
M. Mus	gccagaag	gtcagccc	acgg-...695...gcgcca	acgtctccttctccCTTTTAg	AAGGAATg
R. Nor	gccagaag	gtcagccc	aggg-...712...ggagc	gtcagcctcctccCTTTTAg	AAGGAATg
C. Por	gccagaag	gt-agccc	atgag...865...-actcacc	ctctccttctCTTTAg	AAGGAATg
O. Cun	gccagaag	gtcagccc	gtga-...863...-catgc	ccccctccttctCTTTAg	AAGGAATg
C. Fam	gccagaag	gtcagccc	atga-...1137...cactcac	ctcctcctctCTTTTAg	AAGGAATg
F. Cat	gccagaag	gtcagccc	atga-...2802...cactcac	ctcctcctctCTTTTAg	AAGGAATg
B. Tau	gccggaag	gtcagcct	ctgg-...989...-ca-ccc	gcctccttctctCTTTAg	AAGGAATg
E. Cab	gccggaag	gtcagccc	atga-...1162...-ttcatt	gcccacctctctCTTTAg	AAGGAATg
S. Sus	gccagaag	gtcagcct	atga-...882...-gcgc	cctcctcctctCTTTAg	AAGGAATg
L. Afr	accagaag	gtcagccc	ctgc-...963...-tttca	ccccctccttctCTTTAg	AAGGAATg
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id=478871 gene=ENSG0000146197 name=SCUBE3 segment=chr6.35199637.35200626.1 type=IN

Figure 203: CS=23.16



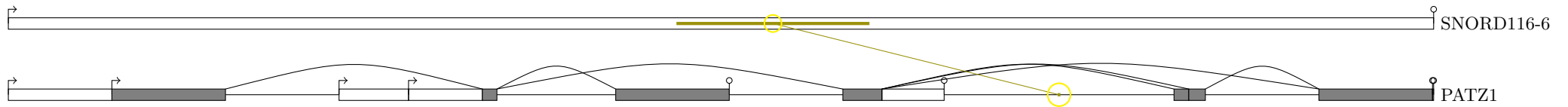
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaaacattccttggaaaagctg	<b>AACAAAATGAGTGA</b>	-gaactca-taccgtcgttctcatcggaaactgag--gtcc	agcacatt
P. Tro	atgtgggt	ggatcgatgatgagtcctccaaaaaaatattccttggaaaagctg	<b>AACAAAATGAGTGA</b>	-aaactca-taccgtcgttctcatcggaaactgaggtgtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaaacattccttggaaaagctg	<b>CAAAAATGAGTGA</b>	-aaactca-taccgtcgttctcatcggaaactgag--gtcc	agcacatt
C. Jac	atgtgctt	ggatcgatgatgagtcctccaaaaaaacattccttggaaaagctg	<b>AACAAAATGAGTGA</b>	-aaactca-taccgtcgttctcatcggaaactgag--gtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattccc---agtcaaacattccttggaaaagctg	<b>AACAAAATGAGTGAAA</b>	-actctgtaccgccacttctcatcggaaactgag--gtcc	agcatcct
R. Nor	gcgtgctt	ggatcgatgatgatttccc---aataaaacattccttgg---aaagctg	<b>AACAAAATGAGTGA</b>	-actcaataaccgccacttctcatcgtgactgag--gtcc	agcacctg
C. Por	atgtgctt	ggatcgatgatgatgcccc---aaaaaacattccttggaaaagctg	<b>AACAAAATGAGTGA</b>	-agctctaataccgtcacttctcgtcgtgactgag--gtcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgactcccc---ataaacattccttgg	<b>AAAAGctTAACAAAATGAGTGA</b>	-aactcaaacctcgttctcatcgtgacttag--gtcc	agcacatt
C. Fam	aagtgctt	ggatcgatgatgactccctc---aatctgcattccttggaaaagctg	<b>AACAAAATGAGTGA</b>	-aactccctgcctcgttctcatcggaaactgag--gtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccac---aa-atgcattccttgg---aaatctg	<b>AACAAAATGAGTGA</b>	-ca-tcactaccgtc-tcctcatcggaaactgag--gtcc	agcacgtg
E. Cab	aggtgctc	ggatcgatgatgactccctc---aa-atgcattccttgg---aaatctg	<b>AACAAAATGAGTGA</b>	-aactcactaccgtcgttctcgcgagactgag--gtcc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgactccctc---ta-aagcattccttgg---aaatctg	<b>AACAAAATGAGTGA</b>	-aactcactaccgtc-tcctcatcggaaactgag--gtcc	ggcacgtg
O. Avi	acatgctc	ggatcagtgatgacaacttt---catatttattccttggaaaatctg	<b>AACAAAATGAGTGA</b>	-aactcactaccatc-tcctcatcgatactgag--ctct	agcacgtt
	** *	***** * *	***** * *	** * * * * * * * * * * * * * *	** * * * * * * *

id=676284 gene=ENSG00000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

H. Sap	aatgcttc	tagacacactcc...132...-----cgtgtacatacattaactta	-TTAC	<b>TCATTTTGT</b>	atTTTTcgaacaaagccct-----..41...ctgttaagctgc-	gtaaagtg	
R. Mac	aatgcttc	tagacacactcc...129...-----cgtgtacatacattaactta	-TTAC	<b>TCATTTTGT</b>	atTTTTcgaacaaagccct-----..41...ctgttaagctgc-	gtaaagtg	
P. Tro	aatgcttc	tagacacactcc...132...-----cgtgtacatacattaactta	-TTAC	<b>TCATTTTGT</b>	atTTTTcgaacaaagccct-----..41...ctgttaagctgc-	gtaaagtg	
P. Abe	aatgcttc	tagacacactcc...132...-----cgtgtacatacattaactta	-TTAC	<b>TCATTTTGT</b>	ctatTTTTcgaacaaagccct-----..43...ctgttaagctgc-	gtaaagtg	
C. Jac	aatgcttc	tagacgactcc...128...-----cgtgtacatacattaactta	-TTAC	<b>TCATTTTGT</b>	atTTTTcgaacaaagccct-----..41...ctgttaagctgc-	gtaaagtg	
M. Mus	aatgcttc	taggcgactcg...120...-----cgtgtacatagattgactcg	<b>TTTTAC</b>	<b>TCATTTTGT</b>	-atTTTTcaaacaaagccctg-----..43...-tgTTTTgctcca	ataaactg	
R. Nor	aatgcttc	taggcgactcc...120...-----cgtgtacatagattgactcg	<b>TTTTAC</b>	<b>TCATTTTGT</b>	-atTTTTcaaacaaagccctg-----..42...-tgTTTTgctcca	ataaagtg	
C. Por	aatgcttc	taaggcggcggg...33...-----gtgtacatacagtgactcg	<b>CTTACCTCATTTTGT</b>	<b>TCATTTTGT</b>	-atTTTTaaacaaagccctg-----..39...atcttaaacccg-	atgaagcg	
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C. Fam	aatgcttc	tagaccccacgc...137...-----cgtgtacatacattaactta	-TTTAC	<b>TCATTTTGT</b>	-atTTTTaaacaaagccctg-----..40...tctgtctgttgc-	gtaaagtt	
B. Tau	aatgcttc	tagacgcctctc...125...ttataatgtgtacatacatt	-----	<b>GTTTAC</b>	<b>TCATTTTGT</b>	-atTTTTaaacgaagccctg-----..41...ctgttttctgc-	gtaaagtt
E. Cab	aatgcttc	tagaccccacgc...130...-----tggtacatacattaactta	-TTTAC	<b>TCATTTTGT</b>	-atTTTTaaacaaagccctg-----..40...ctgttacgacg-	gcaaaatt	
S. Sus	aatgcttc	taaaccattc...128...-----cgtgtacatacattaactta	-TTTAC	<b>TCATTTTGT</b>	-atTTTTaaacgaagccctg-----..41...ctgttatgctgc-	gtaaagtt	
O. Avi	aatgcttc	tagacgcctctc...124...tataatgtgtacatacattg	-----	<b>TTTTAC</b>	<b>TCATTTTGT</b>	-atTTTTaaacgaagccctg-----..41...ctgttttctgc-	gtaaagtt
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id=727623 gene=ENSG00000143632 name=ACTA1 segment=chr1.229566997.229567248.-1 type=EN

Figure 204: CS=12.6



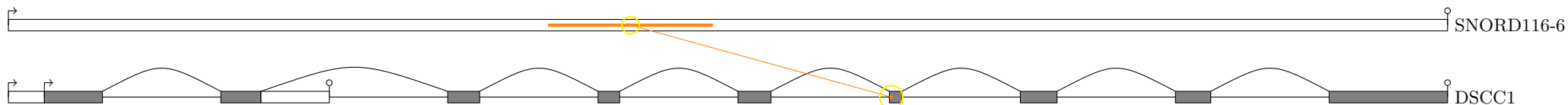
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R.Mac	atgtgctt	ggatc	gatgatgatgagtcctc	caaaaaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	-ataccgtcgttctcatc	ggaaactgag--gtcc	agcacatt					
P.Tro	atgtggtt	ggatc	gatgatgatgagtcctc	caaaaaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	-ataccgtcgttctcatc	ggaaactgag--gtcc	agcacatt					
P.Abe	atgtgctt	ggatc	gatgatgatgagtcctc	caaaaaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	-ataccgtcgttctcatc	ggaaactgag--gtcc	agcacatt					
C.Jac	atgtgctt	ggatc	gatgatgatgagtcctc	caaaaaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	-ataccgtcgttctcatc	ggaaactgag--gtcc	agcacatt					
M.Mus	acgtgctt	ggatc	ctatgatgattccc	---agtcaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	gtaccgccactctcatc	ggaaactgag--gtcc	agcacctt					
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	---aataaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	caataccgccactctcatc	ggaaactgag--gtcc	agcacctg					
C.Por	atgtgctt	ggatc	gatgatgatgcccc	---aaaaaacattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	taaccgtcactctcgtc	ggaaactgag--gtcc	agcacact					
C.Fam	aagtgctt	ggatc	gatgatgactccctc	--aatctgcattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	cctgccgtcgttctcatc	ggaaactgag--gtcc	agcacgtt					
B.Tau	acgtgctt	ggatc	gatgatgactccac	--aa-atgcattcctt	GGAAAag	CTGAACAAA	ATGAGt	gagccatcactaccgtc	-tcctcatcggaaactgag--gtcc	agcacctg	agcacctg					
E.Cab	agggtctc	ggatc	gatgatgactccctc	--aa-atgcattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	actaccgtcgttctcgc	ggaaactgag--gtcc	agcacctg					
S.Sus	ccgtgctc	ggatc	gatgatgactccctc	--ta-aagcattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	actaccgtc-tcctcatc	ggaaactgag--gtcc	ggcacgtt					
O.Avi	acatgctc	ggatc	cagtgatgacaacttt	--catatttattcctt	GGAAAag	CTGAACAAA	ATGAGt	GAGAAactc	actaccatc-tcctcatc	ggaaactgag--gtcc	agcacgtt					
L.Afr	acgtgcat	ggatt	gatgatgactgct	---atctaaactcctt	GGAAAag	CTGAACAAA	ATGAGt	gaaaactc	cctaccgtcactcattg	-aactgag--gtcc	agcacatt					
	**	****	*****	*	*****	*	***	*****	**	**	*	***	*	*****	**	***

id=676284 gene=ENSG00000207442 name=SNORD116-6 segment=chr15\_25310173\_25310268.1 type=EN

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P.Tro	aactctca	cctgctactcag...4943...	-----gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
P.Abe	aactctca	cctgctactcag...4943...	-----gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
C.Jac	aactccca	cctgctactcag...4943...	-----gcctcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
M.Mus	cagataca	cctgctcaagt...4943...	-----gctgtgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
R.Nor	cagatgca	cctgctcaagt...4943...	-----gctgtgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
C.Por	caaacata	cctgctgcttag...4937...	-ttgctggctgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc	
C.Fam	tcataaca	tgtgctgtgtg...4937...	-gtgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc	
B.Tau	atgacgca	cctgctgcccc...4943...	-----ggccgc-ggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
E.Cab	gtagcaca	tctgctgctcag...4937...	-gtgctggccgcgggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc	
S.Sus	gtaataca	gctgctgctgg...4937...	-gtgctggccgcgggatctca	TCTCct	TTTATc	TTGTTTAG	gTTTCTcc	
O.Avi	atgacgca	cctgctgcccc...4937...	tgtgccggccgc-ggatctca	TCTCct	TTTGTc	TTGTTTAG	gTTTCTcc	
L.Afr	acaaaaca	cctgctgctcag...4943...	-----gccgcgggatctcatctcct	TTTGTc	TTGTTTAG	gTTTCTcc		
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Figure 205: CS=12.6



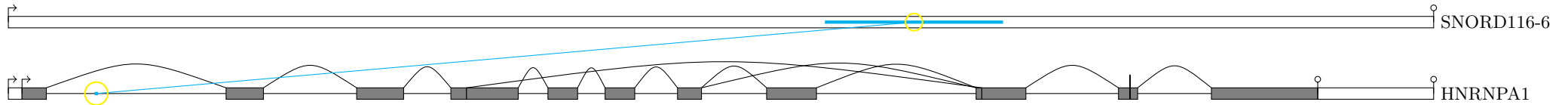
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C. Jac	atgtgctt	ggatcgatgatgagtcctccaaaaaaa	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgaaaactcat-accgtcgttctcatcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattcccagtc-aaa-	CATTCCTTGGAAAAGc	TGAA	-caaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatcct
R. Nor	gcgtgctt	ggatcgatgatgattccaata-aaa-	CATTCCTTGG-AAAAGc	TGAA	-caaaatgagtgaaaactcaataccgccactctcatcggtgactgaggtcc	agcacctg
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B. Tau	acgtgctt	ggatcgatgatgactcccaca-atg-	CATTCCTTGG-AAATc	TGAACA	-aaatgagtggacatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	aggtgctt	ggatcgatgatgactcctcaa-atg-	CATTCCTTGG-AAATc	TGAA	-caaaatgagtgagaactcactaccgtcgttctcgccgagactgaggtcc	agcacctg
S. Sus	ccgtgctt	ggatcgatgatgactcctcta-aag-	CATTCCTTGG-AAATc	TGAACA	-aaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgactgctatct-aaa-	CATTCCTTGG-AAA	agctgaacaaaatgagtgaaaactcctaccgtcactcattg-aactgaggtcc	agcacatt	
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id=676284 gene=ENSG0000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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R. Mac	gagccaga	gtaagtatttta...729...	---ataacttttcaaatgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
P. Abe	gagccaga	gtaagtatttta...751...	---ataacttttcaagtgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
C. Jac	gagccaga	gtaagtatttta...608...	---agaacttttcaaatgtgtg	-----TTTAaaTTTTTCAG	GGaAATGa
M. Mus	gagccaga	gtgagtatttgc...905...	-tcataagttcttttgtgtgc	-----TTTAaaTTTTTCAG	GGaAATGa
R. Nor	gagccaga	gtgagtatttgc...1060...	-tcataagttctttgtgtgc	-----TTTAaaTTTTTCAG	GGaAATGa
O. Cun	gagccaga	gtaagtatttta...404...	---aatagttctca--tgagtgt	-----TTAAaTTTTTCAG	GGaAATGa
C. Fam	gagccaga	gtaagtattttt...640...	-----ttcaaatgagtgttttaaaa	-----TTTTTCAG	GGaAATGa
F. Cat	gagccaga	gtaagtatttta...426...	---taacttttcaaatgagtatt	-----TTTAaaTTTTTCAG	GGaAATGa
B. Tau	gagccaga	gtaagtatttat...450...	.gtgaaaacttttcaataag	-----TGTTTAaaATTTTTTCAG	GGaAATGa
E. Cab	gaaccaga	gtaagtatttta...728...	---gtaacttttcaaatgagggt	-----TTTAaTTTTTCAG	GGaAATGa
S. Sus	gagccaga	gtaagtatttta...323...	-----tcataaaaatgtgaagaag	TGTTTAaaATTTTTTCAG	GGaAATGa
L. Afr	gaaccaga	gtaagtatttta...399...	-----ttcaaatgggttttaaaa	-----TTTTTCAG	GGaAATGa
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id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 206: CS=23.14



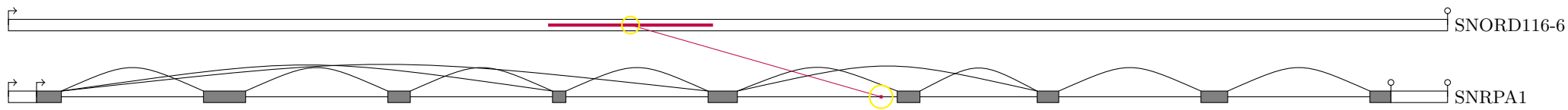
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R.Mac	atgtgcct	ggatc	gatgatgagt	cctcc	aaaaaa	acattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cata	-ccgt	cgttct	catcg	gaact	gag--	gtcc	agcacatt			
P.Tro	atgtgggt	ggatc	gatgatgagt	cctcc	aaaaaa	aatatt	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cata	-ccgt	cgttct	catcg	gaact	gaggt	gtcc	agcacatt			
C.Jac	atgtgcct	ggatc	gatgatgagt	cctcc	aaaaaa	acattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cata	-ccgt	cgtctc	catcg	gaact	gag--	gtcc	agcacatt			
M.Mus	acgtgcct	ggatc	tatgatgatt	ccca	---	gtca	acattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	ctgt	accg	cactct	catcg	gaact	gag--	gtcc	agcatcct		
R.Nor	gcgtgcct	ggatc	gatgatgatt	tcc	---	aata	aaacatt	ccttg	aaag	ctga	ACAAAATG	GTGA	aaact	caat	accg	cactct	catcg	gact	gag--	gtcc	agcacctg		
C.Por	atgtgcct	ggatc	gatgatgatg	cccc	---	aaaa	acattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	agact	ctaat	ccgt	cactct	cgct	gact	gag--	gtcc	agcacatt		
O.Cun	atgtgcct	ggatc	aatgatgact	cccc	---	ataa	acattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	caca	accg	cgttct	catcg	gact	gag--	gtcc	agcacatt		
C.Fam	aagtgcct	ggatc	gatgatgact	ccctc	---	aatc	tgattc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	ccct	ccgt	cgttct	catcg	caact	gag--	gtcc	agcacctg		
F.Cat	atgtgcct	ggatc	gatgatgact	ccctc	---	aa	cagatt	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	ccct	ccgt	cgttct	catcg	aaact	gag--	gtcc	agcacctg		
B.Tau	acgtgcct	ggatc	gatgatgact	ccca	---	aa	atgc	attc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	gcat	cact	accg	ctc	tcct	catcg	gaact	gag--	gtcc	agcacctg
E.Cab	aggtgcct	ggatc	gatgatgact	ccctc	---	aa	atgc	attc	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cact	accg	ctc	tcct	cgcc	gagact	gag--	gtcc	agcacctg
S.Sus	ccgtgcct	ggatc	gatgatgact	ccctc	---	ta	aagatt	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cact	accg	ctc	tcct	catcg	aaact	gag--	gtcc	ggcacctg	
O.Avi	acatgcct	ggatc	cagtgatg	acaact	tt	---	catat	tatt	ccttg	gaaaag	ctga	ACAAAATG	GTGA	aaact	cact	accg	ctc	tcct	catcg	act	gag--	ctct	agcacctg
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R.Mac	agtca	gag	gtgag	ttagg	cg...	113	...	-----	tacc	cctc	-ccaa	agtt	caag	TCGCC	ATTTGT	cctct	tgat	cgcc	atgag	gc---	...	377	...	cccc	act	ccag	tctc	ctaa	
P.Tro	agtca	gag	gtgag	ttagg	cg...	111	...	-----	tacc	cctc	-ccaa	agtt	caag	TCGCC	ATTTGT	cctct	tgat	cgcc	atgag	gc---	...	375	...	cccc	act	ctag	tctc	ctaa	
C.Jac	agtca	gag	gtgag	ttag	cg...	106	...	-----	ctac	cctc	-ccaa	agtt	caag	TCGCC	ATTTGT	cctgt	tgat	cgcc	atgag	gc---	...	371	...	cccc	act	gtag	tctc	ctaa	
M.Mus	agtcc	gag	gtaag	ttggat	g...	106	...	-----	ctac	ttta	aaaa	aatg	cgagg	TCGCC	ATTTGT	cctca	tagt	cacc	atgag	gc---	...	369	...	cctc	act	ttag	tctccc	aa	
R.Nor	agtca	gag	gtgag	ttgag	cg...	105	...	-----	ccta	cttt	-aaaa	aatg	cgagg	TCGCC	ATTTGT	cctca	tagt	cacc	atgag	gc---	...	361	...	actt	tatt	ttag	tcccc	aa	
C.Por	agtca	gag	gtaag	ctat	tt...	103	...	-----	gc	ctg	ctc	-ccaa	agtt	cagg	TCGCC	ATTTGT	cctcg	---	tc	gcat	gag	gc...	327	...	ctt	cact	ctag	tctc	ctaa
O.Cun	agtca	gag	gtgag	gag	ctcc...	102	...	-----	aag	gc	ctac	ccctc	-ccaa	g	TCGCC	ATTTGT	cctog	ctg	cgcc	atgag	gt---	...	378	...	tct	ccc	gcccag	tcgccc	aa
C.Fam	agtca	gag	gtgag	taac	acg...	112	...	-----	tt	ccctc	-ccg	agtt	gagg	TCGCC	ATTTGT	cctcg	ctg	cgcc	atgag	gc---	...	363	...	cccc	ct	cctag	tctccc	aa	
F.Cat	agtca	gag	gtgag	taac	acg...	113	...	-----	tacc	cctc	-ccaa	agtt	cgagg	TCGCC	ATTTGT	cctcg	ctg	cgcc	atgag	gc---	...	378	...	ccc	gact	ctag	tctccc	aa	
B.Tau	aatca	gag	gtggg	taag	acg...	111	...	-----	tccc	ctc	-cct	agtt	gagg	TCGCC	ATTTGT	cctcg	---	tc	gcat	gag	gtgc...	362	...	ctc	ct	cctag	tctccc	aa	
E.Cab	agtca	gag	gtgag	tagg	acg...	111	...	-----	tacc	ctc	-ccaa	agtt	cagg	TCGCC	ATTTGT	cctcg	ctg	cgcc	atgag	gc---	...	359	...	tct	act	cctag	tctccc	aa	
S.Sus	agtca	gag	gtgag	tgag	act...	111	...	-----	tacc	ctc	-cct	agtt	gagg	TCGCC	ATTTGT	cctcg	---	tc	gcat	gag	gtgt...	358	...	ccc	tact	cctag	tctccc	aa	
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L.Afr	agtca	gag	gtaag	ctac	ct...	108	...	-----	tacc	ctc	-ccaa	agtt	ggagg	TCGCC	ATTTGT	cctcg	ctg	cgcc	atgag	gc---	...	389	...	ttc	cacc	attag	tctc	ctaa	
	**	***	**	*		*		*****	*	*	*****	*****	**	*****	**	*****	**	*****	**	*****	**	*****	**	*****	**	*****	**	*****	

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 207: CS=18.75



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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaaaa	CATTCCCTGGAAA	aaagctgaacaaaatgagtgaaaactc-ataccgtcgtttctcatcggaaactgaggtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaaaa	CATTCCCTGGAAA	aaagctgaacaaaatgagtgaaaactc-ataccgtcgtttctcatcggaaactgaggtcc	agcacatt
C. Jac	atgtgctt	ggatcgatgatgagtcctccaaaaaaaa	CATTCCCTGGAAA	aaagctgaacaaaatgagtgaaaactc-ataccgtcgtttctcatcggaaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgattcccagtcaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactctgtaccgccactctcatcggaaactgaggtcc	agcacct
R. Nor	gcgtgctt	ggatcgatgatgattccaataaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactcaataaccgccactctcatcgtgactgaggtcc	agcacctg
C. Por	atgtgctt	ggatcgatgatgatgcccaaaaaa	CATTCCCTGGAAA	aaagctgaacaaaatgagtgagagctctaaccgtcactctcgtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcaatgatgactccccataaaa	CATTCCCTGGAAAAGC	ttaacaaaatgagtgagaactcacaaccgtcgtttctcatcgtgacttaggtcc	agcacatt
C. Fam	aagtgcct	ggatcgatgatgactccc-tcaatc	TGCATTCCCTGGAAAAGC	tgaacaaaatgagtgagaactccctgcccgtcgtttctcatcgaactgaggtcc	agcacgtt
F. Cat	atgtgctt	ggatcgatgatgactccc-tcaaca	GCATTCCCTGGAAAAGC	tgaacaaaatgagtgagaactccctcccgtcgtttctcatcgaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactccc-aca	ATGCATTCCCTGGAAA	-tctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaaactgaggtcc	agcacgtg
E. Cab	aggtgctt	ggatcgatgatgactccc-tcaa	ATGCATTCCCTGGAAA	-tctgaacaaaatgagtgagaactcactaccgtcgtttctcggagactgaggtcc	agcacctg
L. Afr	acgtgcat	ggattgatgatgactgctatctaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagtgaaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt
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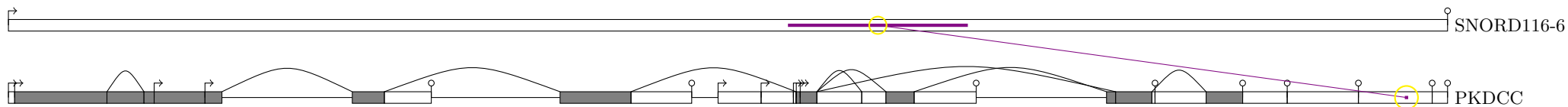
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R. Mac	aactaaaa	gtaagtagtaat...505...--ggagagttcgcttccatgct	TTCTGAGGAATG	catctaaatgcatgtggtattcctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
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R. Nor	aactaaaa	gtgagtattgct...467...ttcagagagaattccttccat	GTTTCTGAGGAATG	catctaaatgcatgtggtattcctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
C. Por	aactaaaa	gtaagtgttctt...457...--gcagcattctctcccgcgtg	TTCTGAGGAATG	cgctctaaatgcgtgtggtgctccctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
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C. Fam	aactaaaa	gtaagtattgct...528...tcaggagagtttcttccat	GTTTCTGAGGAATGCA	ttaaataatgcatgtggtattcctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
F. Cat	aactgaaa	gtaagtatttct...545...tcagaagagtttcttccgt	GTTTCTGAGGAATG	catctaaatgcatgtggtattcctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
B. Tau	aactaaaa	gtaagtattgct...485...--aggagagtttcttccatgct	TTTCTGAGGAATGCAT	ctaaatgcatgtggtattcctatttccattaactctgtgtgtggtgctgctgtag	gagcgtca
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L. Afr	aactgaaa	gtaagtatttagc...488...tcaggggcgtattcttccgt	GTTTCTGAGGAATG	catctaaatgcatgtggtattcctgttccattaactctgtgtgtggtgctgctgtag	gagcgtca
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Figure 208: CS=13





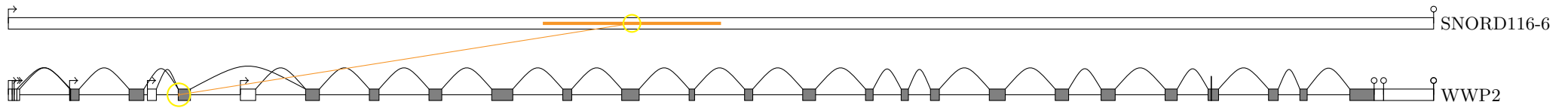
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C. Fam	aagtgctt	ggatc	gatgatgactccctc---	aatctgcattccttggaaaagc	GCTGAACAAA	TGAG	tgAGAActccctgccgtcgttctcatcgaaactgag--gtcc	agcacgtt						
F. Cat	atgtgctc	ggatc	gatgatgactccctc---	aa-cagcattccttggaaaagc	GCTGAACAAA	TGAG	tgAGAActccctcccgtcgttctcatcgaaactgag--gtcc	agcacgtt						
B. Tau	acgtgctt	ggatc	gatgatgactcccac---	aa-atgcattccttggaaaagc	CTGAACAAA	TGAG	tgagccatcactaccgtc-tcctcatcggaactgag--gtcc	agcacgtg						
E. Cab	agggtgctc	ggatc	gatgatgactccctc---	aa-atgcattccttggaaaagc	CTGAACAAA	TGAG	tgAGAActcactaccgtcgttctcgcgcagactgag--gtcc	agcacctg						
S. Sus	ccgtgctc	ggatc	gatgatgactccctc---	ta-aagcattccttggaaaagc	CTGAACAAA	TGAG	tgAGAActcactaccgtc-tcctcatcgaaactgag--gtcc	ggcacgtg						
L. Afr	acgtgcat	ggatt	gatgatgactgcta---	tcaaacattccttggaaaagc	GCTGAACAAA	TGAG	tgaaaactccttaccgtcactcattg-aactgag--gtcc	agcacatt						
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P. Tro	tgtgggtg	attctgtacctg...	138...	-----tggggccggggcctttctgc-	CTCATTG	ctTTC	A-tgaaagccgcaaagcagcca-...	66...	ttgtttat	tttt	gtaaaaa
P. Abe	tgtgggtg	attctgtacctg...	138...	-----tggggccggggcctttctgc-	CTCATTG	ctTTC	Aatgaaagccgcaaagcagcc--...	67...	ttgtttat	tttt	gtaaaaa
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M. Mus	tgtgagtg	aaccagcactgg...	137...	-----tagggtcggggcctctctgc-	CTCATTG	ctTTC	AGTgaaagccaggagcagccg...	113...	ttgtttat	tttt	gtaaaaa
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Figure 209: CS=10.14



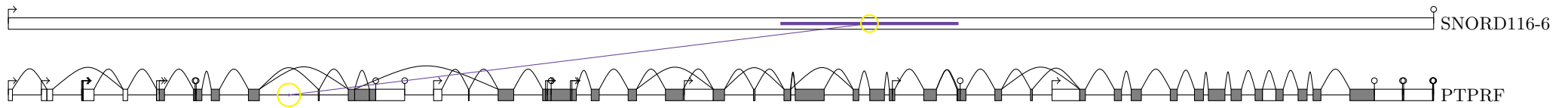
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaa	ACATTCCc	TGGAAAAGc	TGAAcaaatgagtgaaaactc-ataccgtcgttctcatcggaaactgaggtcc	agcacatt						
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaa	ACATTCCc	TGGAAAAGc	TGAAcaaatgagtgaaaactc-ataccgtcgttctcatcggaaactgaggtcc	agcacatt						
C. Jac	atgtgctt	ggatcgatgatgagtcctccaaaaaa	ACATTCCCTGGAAAAGc	TGAA	caaatgagtgaaaactc-ataccgtcgttctcatcggaaactgaggtcc	agcacatt						
M. Mus	acgtgctt	ggatcctatgatgattcccagtc	aaACATTCCc	TGGAAAAGc	TGAAcaaatgagtgaaaactcgtaccgccactctcatcggaaactgaggtcc	agcatcct						
R. Nor	gcgtgctt	ggatcgatgatgatttc--caataa	AAcATTCCc	TGG-AAAGc	TGAAcaaatgagtgaaaactcaataccgccactctcatcgtgactgaggtcc	agcacctg						
C. Por	atgtgctt	ggatcgatgatgactccccataa	---ACATTCCc	TGGAAAAGc	TGAAcaaatgagtgagagcttaatccgtcactctcgtcgtgactgaggtcc	agcacact						
O. Cun	atgtgctt	ggatcaatgatgactccccataa	---ACATTCCc	TGGAAAAGc	TGAAcaaatgagtgagagctcaaccgtcgttctcatcgtgacttaggtcc	agcacatt						
C. Fam	aagtgctt	ggatcgatgatgactccctcaatct	---GCATTCCc	TGGAAAAGc	TGAAcaaatgagtgagagctccctgccgtcgttctcatcgaactgaggtcc	agcacgtt						
F. Cat	atgtgctc	ggatcgatgatgactccctcaaca	---GCATTCCc	TGGAAAAGc	TGAAcaaatgagtgagagctccctcccgtcgttctcatcgaactgaggtcc	agcacgtt						
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L. Afr	acgtgc	ggattgatgatgactgctatctaa	---ACATTCCc	TGGAAAAGc	TGAACAcaaatgagtgaaaactccttaccgtcactcattg-aactgaggtcc	agcacatt						
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id=676284 gene=ENSG0000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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R. Mac	---tacccaac	gtgcctctctt...175...	--tggatgtaatgaatccggt	TTGTTTTCCAG	GAATGTca
P. Abe	---tacccaag	gtggctctctt...175...	--tggatgtaatgaatcaggt	TTGTTTTCCAG	GAATGTca
C. Jac	---tacccaag	atgcctctctt...177...	----atgtagtgaatcaggtatct	GTTTCCAG	GAATGTca
M. Mus	---ccccatg	gtgctcctctt...170...	----ctgtgatgactcactactt	GTTTCCAG	GAATGTca
R. Nor	---ccccatg	gtgctcctctt...166...	--gggctgtgatgaatcactta	TTGTTTTCCAG	GAATGTca
C. Por	agggtcccggg	g---ctctgtcc...173...	----acatgatgaatcaggtactt	GTTTCCAG	GAATGTca
O. Cun	---tacccaag	gtgcctctctt...166...	----atgtgatgaaccaagtctt	GTTTCCAG	GAATGTca
C. Fam	---tacccaag	ggacctctctt...184...	----atgtgatcaatcaagtatct	GTTTCCAG	GAATGTca
F. Cat	---tacccaag	gcacctctctt...180...	--tggatgtgatgaatcaagta	TTGTTTTCCAG	GAATGTca
B. Tau	---tacctgag	gcacctctctt...191...	--tggatgtgatgaatcaagta	TTGTTTTCCAG	GAATGTca
L. Afr	---tacctgaa	gcacctctctt...145...	cttggaaagtgatgaatccag	TGTTTATTTCCAG	GAATGTca
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id=149604 gene=ENSG00000198373 name=WWP2 segment=chr16.69832858.69833076.1 type=IN

Figure 210: CS=14.4



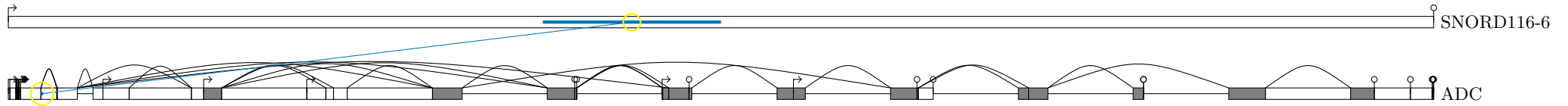
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R.Mac	atgtgctt	ggatc	gatgatgagtcctc	caaaaaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgagaactc-ataccg	tcttctcatcggaact	gag--gtcc	agcacatt	
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P.Abe	atgtgctt	ggatc	gatgatgagtcctc	caaaaaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgaaaactc-ataccg	tcttctcatcggaact	gag--gtcc	agcacatt	
C.Jac	atgtgctt	ggatc	gatgatgagtcctc	caaaaaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgaaaactc-ataccg	tcttctcatcggaact	gag--gtcc	agcacatt	
M.Mus	acgtgctt	ggatc	tatgatgattccca	---gtcaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgaaaactctgtaccg	cactctcatcggaact	gag--gtcc	agcatcct	
R.Nor	gcgtgctt	ggatc	gatgatgatttcc	---aataaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgaaaactcaataccg	cactctcatcgtagt	gag--gtcc	agcacctg	
C.Por	atgtgctt	ggatc	gatgatgatgcccc	---aaaaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgagagctctaataccg	tctctgtagt	gag--gtcc	agcacact	
C.Fam	aagtgctt	ggatc	gatgatgactccctc	--aatctgattcctt	ggaaaagc	TGAACAAA	TGAG	tgagaactcctgccg	tcttctcatcgcaact	gag--gtcc	agcacgtt	
F.Cat	atgtgctc	ggatc	gatgatgactccctc	--aa-cagcattcctt	ggaaaagc	TGAACAAA	TGAG	tgagaactcctcccg	tcttctcatcgaaact	gag--gtcc	agcacgtt	
B.Tau	acgtgctt	ggatc	gatgatgactcccac	--aa-atgattcctt	ggaaaagc	TGAACAAA	TGAG	tgagcactaccg	tcctcatcggaact	gag--gtcc	agcacgtg	
E.Cab	aggtgctc	ggatc	gatgatgactccctc	--aa-atgattcctt	ggaaaagc	TGAACAAA	TGAG	tgagaactcactaccg	tcttctcgccgag	gag--gtcc	agcacctg	
S.Sus	cogtgctc	ggatc	gatgatgactccctc	--ta-aagcattcctt	ggaaaagc	TGAACAAA	TGAG	tgagaactcactaccg	tcctcatcgaaact	gag--gtcc	ggcacgtg	
L.Afr	acgtgcat	ggatt	gatgatgactgcta	---tctaaacattcctt	ggaaaagc	TGAACAAA	TGAG	tgaaaactcctaccg	tctcactcattg-aact	gag--gtcc	agcacatt	
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id=676284 gene=ENSG0000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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R.Mac	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Tro	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Abe	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C.Jac	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M.Mus	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R.Nor	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C.Por	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcaccag	gtggttca
C.Fam	acgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
F.Cat	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B.Tau	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E.Cab	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S.Sus	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
L.Afr	gcgttcag	gtgagcagaggg	..4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 211: CS=12.6



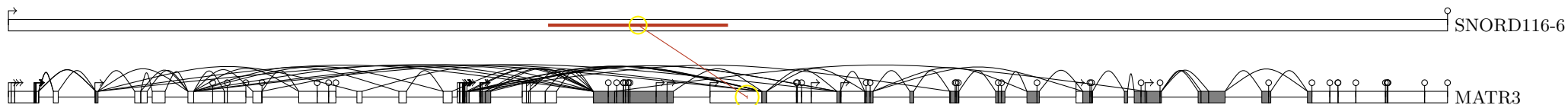
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactc-ataccgtcgttctcatcggaactgagggtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactc-ataccgtcgttctcatcggaactgagggtcc	agcacatt
C. Jac	atgtgctt	ggatcgatgatgagtcctccaaaaaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactc-ataccgtcgttctcatcggaactgagggtcc	agcacatt
M. Mus	acgtgctt	ggatctatgatgattcccagtcaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactctgtaccgccactctcatcggaactgagggtcc	agcatcct
R. Nor	gcgtgctt	ggatcgatgatgattccaataaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactcaataccgccactctcatcgtgactgagggtcc	agcacctg
C. Por	atgtgctt	ggatcgatgatgagtcctccaaaaaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgagagcttaacccgtcactctcgtcgtgactgagggtcc	agcacatt
O. Cun	atgtgctt	ggatcaatgatgactccccataaaa	CATTCCTTGGAAA	agcttaacaaaatgagtgagaactcacaaccgtcgttctcatcgtgacttaggtcc	agcacatt
C. Fam	aagtgctt	ggatcgatgatgactccc-tcaaa	TCTGCATTCCCTTGGAAA	agctgaacaaaatgagtgagaactccctgccgtcgttctcatcgcaactgagggtcc	agcacgtt
F. Cat	atgtgctt	ggatcgatgatgactccc-tcaaca	GCATTCCTTGGAAA	agctgaacaaaatgagtgagaactccctccggtcgttctcatcgaaactgagggtcc	agcacgtt
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E. Cab	aggtgctt	ggatcgatgatgactccc-tcaa-a	TGCATTCCCTTGGAAA	agctgaacaaaatgagtgagaactcactaccgtcgttctcgcgagactgagggtcc	agcacctg
S. Sus	ccgtgctt	ggatcgatgatgactccc-tctaaa	GCATTCCTTGGAAA	agctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgagggtcc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgactgctatctaaa	CATTCCTTGGAAA	agctgaacaaaatgagtgaaaactccttaccgtctcactcattg-aactgagggtcc	agcacatt
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id=676284 gene=ENSG00000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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P. Abe	gTTTAAAG	GcgAGTGC	-----gaaagtggcctggggagc-----	..54...-gcctcccgtcag	caggggccc
C. Jac	gTTTAAAG	GcgAGTGC	-----ggggagtggcctggggagc-----	..54...-gcctcctctcag	caggggccc
M. Mus	gTTTAAAG	GcgAGTGC	-----aggagatggctggggggga-----	..57...-gcctcctctcag	caggggccc
R. Nor	gTTTAAAG	GcgAGTGC	-----agcagatggctggggggag-----	..58...-gcctcctctcag	caggggccc
C. Por	gTTTAAAG	GcgAGTGC	cag-----ggggatgctcggggga-----	..57...-gcctcctttcag	caggagccc
O. Cun	gTTTAAAG	GcgAGTGC	-----gggggtggctggggagcc-----	..54...-gcctcctctcag	caggggccc
C. Fam	gTTTAAAG	GcgAGTGC	-----gagtggtcggggagcctcc-----	..48...-gcctcctcccag	caggggccc
F. Cat	gTTTAAAG	GcgAGTGC	-----ggggagtggctcggggagcc-----	..51...-gcctcctttcag	caggggccc
B. Tau	gTTTAAAG	GcgAGTGC	-----gggagacctcggggagcct-----	..51...-gcctcctctcag	caggggccc
E. Cab	gTTTAAAG	GcgAGTGC	-----gggagtggctcggggagcct-----	..51...-gcctcctctcag	caggggccc
S. Sus	gTTTAAAG	GcgAGTGC	-----ggggagtggctcggggagcc-----	..52...-gcctcctctcag	caggggccc
L. Afr	gTTTAAAG	GcgAGTGC	ggggaggaggtggctt-----	..69...tgcttc-ctcag	caggggccc
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Figure 212: CS=10.92



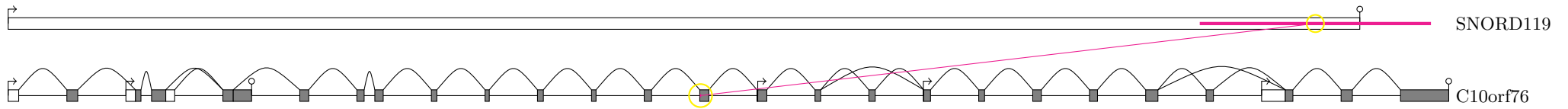
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R. Mac	atgtgctt	ggatcgatgatgagtcctccaaaaaa	ACATTcCTTGGAAAAGCTG	aacaaaatgagtgagaact-cataccgctggttctcatcggaactgaggtcc	agcacatt
P. Abe	atgtgctt	ggatcgatgatgagtcctccaaaaaa	ACATTcCTTGGAAAAGCTG	aacaaaatgagtgaaaact-cataccgctggttctcatcggaactgaggtcc	agcacatt
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L. Afr	acgtgcat	ggattgatgatgactgctatctaa	---ACATTcCTTGGAAAAGCTG	aacaaaatgagtgaaaactccttaccgctcactcattg-aactgaggtcc	agcacatt
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id=676284 gene=ENSG00000207442 name=SNORD116-6 segment=chr15.25310173.25310268.1 type=EN

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P. Abe	-----aaaggaac	ac--aatggaacca...4336...	-agtatgttga-caagttaatc	CAGTTTTTCCAAGAATGT	gcatagcgtatttgagggca...169...	actttgctgcag	gagtggag
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R. Nor	ctattggaagaaggaac	at-----	...2638...	-ttgtattgatcaagttaatc	CAGTTTTTCCAAGAATGT	gcatagagtatttgagggca...150...	actttgctgcag
C. Por	-----ataaagaac	----agaagaatct...2912...	-gtatgttgacc	caagttaatc	CAGTTTTTCCAAGAATGT	gcatagcgtatttgagggca...166...	actttgctgcag
O. Cun	-----aaaagaac	acagaaaggaac--...3763...	-ttatgttgacc	aaattaacc-	AGTTTTTCCAAGAATGT	gcatagcgtatttgagggca...167...	actttgctgcag
C. Fam	-----aaaggaac	acaaaaggaac--...2732...	-agtatgttaatcaagtt-acc	CAGTTTTTCCAAGAATGTG	catggcgtatttgagggcag...166...	actttgctacag	gagtggag
B. Tau	-----aggaac	acaaaaggaatca...2653...	----tgtaaccaagtta-ccagtt-	TTTCCAAGAATGTG	catggagatttgagggcag...155...	actttgctacag	gagtggag
E. Cab	-----aataac	acagaaggaacca...2816...	----gttaaccaagttatccagtt-	TTTCCAAGAATGTG	catggcgtatttgagggcag...166...	actttgctgcag	gagtggag
S. Sus	-----aaaaac	acaaaagaaacca...2799...	----gttaaccaagttatccagtt-	TTTCCAAGAATGTG	catggcgtatttgagggca...164...	actttgctgcag	gagtggag
L. Afr	-----aaaggaac	aa--gagagaacca...2779...	-agtatgctaacc	aaattatc-	CAGTTTTTCCAAGAATGT	gcatagcgtatttgagggca...167...	actttgctgcag
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Figure 213: CS=11.7



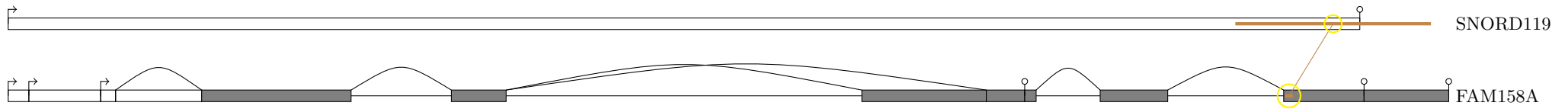
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P.Tro	tcttagct	ggattaatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcgtggc
P.Abe	ccttagct	ggattaatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agtgtggc
C.Jac	ccttagct	ggattcatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcatggg
M.Mus	ccttagct	ggattcatgatg...27...tgcgtctgtgtaattaagcaGGATtaCTCTGAGAtcc	agcctggc
R.Nor	ccttagct	ggattcatgatg...27...tgagtttggttattaagcaGGATtaCTCTGAGAtcc	agcctggc
C.Por	cactagct	ggattcatgatg...27...tgcatttgtgtaataagcaGGATtACTCTGAGAtcc	ggcttaaa
O.Cun	gcttagct	ggattcatgatg...27...tgggtttgtgtaattcagcaGGATtACTCTGAGAtcc	agcttggc
C.Fam	cctgagct	ggattcatgatg...27...tgagtttggttaattaagcaGGATtACTCTGAGAtcc	agcgtgac
R.Cat	cctgagct	ggattcatgatg...27...tgagtttggttaattaagcaGGATtACTCTGAGAtcc	agccttga
E.Cab	cctgagct	ggattcatgatg...27...tgagtttggttaattaagcaGGATtACTCTGAGAtcc	cgctggc
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P.Abe	tagctcag	gttggttacatt...2686...--cttacacatctgtgtatcct--TTTCAG	AGccATC
C.Jac	tagctcag	gttggttacatt...1984...-tcttacacatctgtgt-tcct--TTTCAG	AGccATC
M.Mus	tagctcag	gttggtgacccc...1831...-tcttaccacctgtgt-cctc--TTTCAG	AGccATC
R.Nor	tagctcag	gttggtgacccc...1893...-tctttccttctgtgt-cctc--TTTCAG	AGccATC
C.Por	tagctcag	gttggttcatt...2234...-ttttagccaccatgt-cctc--TTTCAG	AGTcATC
O.Cun	tggtcag	gttggttacatt...2389...-ttttctgttttctta-attc--TTTCAG	AGTcATC
C.Fam	tagcccag	gttggttatatt...2451...-tcttgctgcttctgt-tttc--TTTCAG	AGTcATC
F.Cat	tagcccag	gttggttatatt...1554...-tcttacctgcttctgt-tctc--TTTCAG	AGTcATC
E.Cab	tagcccag	gttggttatatt...1442...-tcttgctgcttctgt-tatt--TTTCAG	AGTcATC
L.Afr	tagcccag	gttggttcatt...2817...-ttttctatgtttcctt-tttATCTTCAG	AGTcATC
	** ** **	***** * * *****	** ** **

id=616078 gene=ENSG00000120029 name=C10orf76 segment=chr10\_103766391\_103769130\_-1 type=IN

Figure 214: CS=21.96



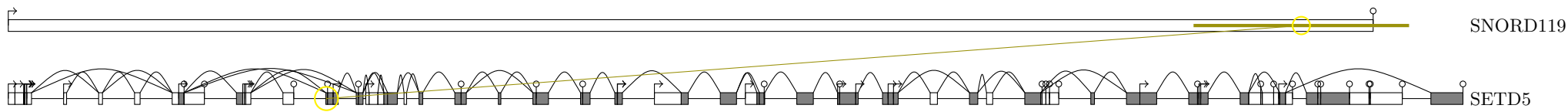
H. Sap	ccttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGATcc	agcgtggc
R. Mac	ccttagct	ggattaatgatg...28...agtttatgtaattaagcagg	ATTACTCTGAGATcC	AGCgtggc
P. Tro	tcttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGATcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGATcc	AGTGtggc
M. Mus	ccttagct	ggattcatgatg...29...cgtctgtgtaattaagcagg	ATTACTCTGAGATcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...29...agtttggttattaagcagg	ATTACTCTGAGATcc	agcctggc
C. Por	cactagct	ggattcatgatg...29...catttgtaataagcagg	ATTACTCTGAGATcc	ggcttaaa
O. Cun	gcttagct	ggattcatgatg...29...ggttgtaataagcagg	ATTACTCTGAGATcC	AGCttggc
C. Fam	cctgagct	ggattcatgatg...29...agtttggttaattaagcagg	ATTACTCTGAGATcc	agcgtgac
F. Cat	cctgagct	ggattcatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGATcc	agccttga
B. Tau	ccttagct	ggatttatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGATcc	agccttgg
E. Cab	cctgagct	ggatttatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGATcc	cgctggc
O. Avi	ccttagct	ggatttatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGATcc	agccttgg
L. Afr	ccttggct	ggattcatgatg...29...agtttgataattaagcagg	ATTACTCTGAGATcc	agccttagc
	***	*****	*****	* * * * *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608.2443683\_-1 type=EN

H. Sap	aagaactt	gtgagtacccca...124...-----tgacctccatgggggttact	ATTTCAG	AGTGATgt
R. Mac	aagaactt	gtgagtacccca...118...gctgttgacctccatgggg	GTTGctATTTCAG	AGTGATgt
P. Tro	aagaactt	gtgagtacccca...124...-----tgacctccatgggggttact	ATTTCAG	AGTGATgt
P. Abe	aagaactt	gtgagtacccca...120...--gtttgacctccatgggggt	TACTATTTCAG	AGTGATgt
M. Mus	aagaactt	gtgagtgtccc...98...---gtttcacatccgtg---ttttca	ATTTCAG	AGTGATgt
R. Nor	aagaactt	gtgagtgtccc...105...---gtttgacatccgtg---ttttaa	ATTTCAG	AGTGATgt
C. Por	aagaactt	gtgagtgtcga...331...---gtgtg---cacatagagttttct	GTTTCAG	AGTGATgt
O. Cun	aagaactt	gtgagtgtccc...117...caggttgacctccgtggat	GTTGctATTTCAG	AGTGATgt
C. Fam	aagaactt	gtgagtgtccc...123...-----tgacctccacgggggttatt	ATTTCAG	AGTGATgt
F. Cat	aagaactt	gtgagtgtccc...114...---tactgagtt---tgggggttatt	ATTTCAG	AGTGATgt
B. Tau	aagaactt	gtgagtgtccc...110...-----tgactgccatgggggttatt	ATTTCAG	AGTGATgt
E. Cab	aagaactt	gtgagtgtccc...121...-----tgacctccatgggggttatt	ATTTCAG	AGTGATgt
O. Avi	aagaactt	gtgagtgtccc...109...-----tgactgccatggaggttatt	ATTTCAG	AGTGATgt
L. Afr	aagaactt	gtgagtgtccc...115...-----tgacttccatgggttact	ATTTCAG	AGTGATgt
	*****	*****	*	** *****

id=30693 gene=ENSG00000100908 name=FAM158A segment=chr14\_24608406.24608568\_-1 type=IN

Figure 215: CS=12.6



H. Sap	ccttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcgtggc
P. Tro	tcttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agtgtggc
C. Jac	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcctggc
C. Por	cactagct	ggattcatgatg...26...atgcatttgtaataagc	AGGATtACTCTGAGA	tcc	ggctaaa
O. Cun	gcttagct	ggattcatgatg...26...atgggtttgtgtaattcagc	AGGATtACTCTGAGA	tcc	agcctggc
C. Fam	cctgagct	ggattcatgatg...26...atgagtttggtaattaagc	AGGATtACTCTGAGA	tcc	agcgtgac
B. Tau	ccttagct	ggatttatgatg...26...acgagtttgtaattaagc	AGGATtACTCTGAGA	tcc	agcctggc
E. Cab	cctgagct	ggatttatgatg...26...atgagtttgtaattaagc	AGGATtACTCTGAGA	tcc	cgctggc
O. Avi	ccttagct	ggatttatgatg...26...acgagtttgtaattaagc	AGGATtACTCTGAGA	tcc	agcctggc
L. Afr	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATtACTCTGAGA	tcc	agcctggc
	***	*****	*****		* *

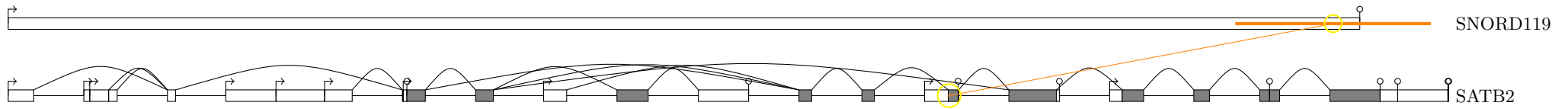
id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

H. Sap	atgtttca	ctccatgtgttc...1454...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
P. Tro	atgtttca	ctccatgtgttc...1456...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
P. Abe	atgtttca	ctccatgtgttc...1450...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
C. Jac	atgtttca	ccccatgtgttc...1453...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
M. Mus	ttatttca	ccccatgtgttc...1321...cattgtttttgacctgtactt	TCTTCAG	GGTATCCt
R. Nor	ttatttca	ccccatgtgttc...1366...cattgtttttgacctgtactt	TCTTCAG	GGTATCCt
C. Por	atgtttca	ctccatgtgttc...1393...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
O. Cun	atgtttca	cccatgtgttc...1397...cgttgtttttacctgtactt	TCTTCAG	GGTATCCt
C. Fam	atgtttca	ccccatgtgttc...1465...cgttgtttttacctgtactt	TCTTCAG	GGTATCCt
B. Tau	atgtttca	ccccatgtgttc...1460...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
E. Cab	atgtttca	ccccatgtgttc...1461...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
O. Avi	atgtttca	ccccatgtgttc...1473...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
L. Afr	atgtttca	ccccatgtgttc...1485...cattgtttttacctgtactt	TCTTCAG	GGTATCCt
	* *****	* * * * *	* *****	*****

id=484695 gene=ENSG00000168137 name=SETD5 segment=chr3\_9473561\_9475053\_1 type=IN

Figure 216: CS=10.14





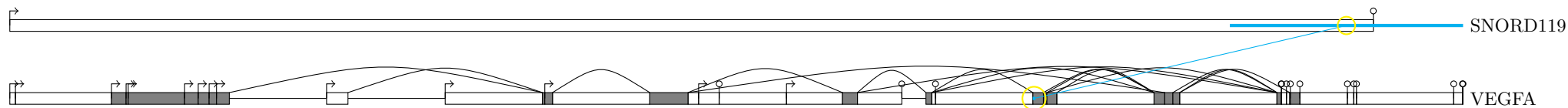
H. Sap	ccttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGAtcc	agcgtggc
P. Tro	tcttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGAtcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGAtcc	agtgtggc
C. Jac	ccttagct	ggattcatgatg...29...agtttgataattaagcagg	ATTACTCTGAGAtcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...29...cgtctgtgtaattaagcagg	ATTACTCTGAGAtcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...29...agtttggttattaagcagg	ATTACTCTGAGAtcc	agcctggc
C. Por	cactagct	ggattcatgatg...29...catttgtgtaattaagcagg	ATTACTCTGAGAtcc	ggcttaaa
O. Cun	gcttagct	ggattcatgatg...29...ggtttgtgtaattcagcagg	ATTACTCTGAGAtcc	agcctggc
C. Fam	cctgagct	ggattcatgatg...29...agtttggtgtaattaagcagg	ATTACTCTGAGAtcc	agcgtgac
F. Cat	cctgagct	ggattcatgatg...29...agtttggtgtaattaagcagg	ATTACTCTGAGAtcc	agccttga
E. Cab	cctgagct	ggattcatgatg...29...agtttggtgtaattaagcagg	ATTACTCTGAGAtcc	cgcttggc
L. Afr	cctggct	ggattcatgatg...29...agtttgataattaagcagg	ATTACTCTGAGAtcc	agcctagc
	***	*****	*****	* *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

H. Sap	ctgtcccc	tccattggtgac...198...aaaataactataattttttt--	TTTCAG	AGtaTGat
P. Tro	ctgtcccc	tccattggtgac...198...aaaataactataattttttt--	TTTCAG	AGtaTGat
P. Abe	ctgtcccc	tccattggtgac...199...aaaataactataattttttt--	TTTCAG	AGtaTGat
C. Jac	ctgtccct	tccattggtgac...183...gaaaaataattttttt--	TTTCAG	AGtaTGat
M. Mus	ctaacctc	tctgtctttgac...213...ctaattcatctcctccttct--	TTTCAG	AGtaTGat
R. Nor	ctggcctc	tccgactttgac...204...ctaactgagctcctccttct--	TTTCAG	AGtaTGat
C. Por	tcagcctc	tcct-ctttgac...198...taactgaatgttttcttct--	TTTCAG	AGtaTGat
O. Cun	gcattcct	tccagctttgac...155...-gaataactccttctgttct--	TTTCAG	AGtaTGat
C. Fam	ctgcctcc	tccatctttgac...205...ctattatgttttttttct--	TTTCAG	AGtaTGat
F. Cat	ctgcctcc	tccatctttgac...216...-tattaatatattttcctt--	TTTCAG	AGtaTGat
E. Cab	ctgtcccc	tccatctttggc...204...-actaactggttttctcctt	TTTCAG	AGtaTGat
L. Afr	cctccccg	tccccaatcccc...203...-aaataactgttttattttt	TTTCAG	AGtaTGat
	**	*	*	** **

id=337263 gene=ENSG00000119042 name=SATB2 segment=chr2\_200233431\_200233666\_-1 type=AN

Figure 217: CS=13.8



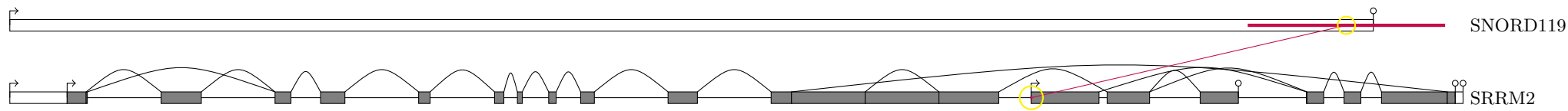
H.Sap	ccttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTacTCTGAGATcc	agcgtggc
P.Tro	tcttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTacTCTGAGATcc	agcgtggc
P.Abe	ccttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTacTCTGAGATcc	agtgtggc
C.Jac	ccttagct	ggattcatgatg...28...gagtttgataattaagcag	GATTacTCTGAGATcc	agcatggg
M.Mus	ccttagct	ggattcatgatg...28...gcgtctgtgtaattaagcag	GATTacTCTGAGATcc	agcctggc
R.Nor	ccttagct	ggattcatgatg...28...gagtttggttattaagcag	GATTacTCTGAGATcc	agcctggc
C.Por	cactagct	ggattcatgatg...28...gcatttggtgaatgaagcag	GATTacTCTGAGATcc	ggcttaa
O.Cun	gcttagct	ggattcatgatg...28...gggttggtgaattcagcag	GATTacTCTGAGATcc	agcctggc
C.Fam	cctgagct	ggattcatgatg...28...gagtttgggtaattaagcag	GATTacTCTGAGATcc	agcgtgac
F.Cat	cctgcgct	ggattcgtgatg...28...gagtttggtgaattaagcag	GATTacTCTGAGATcc	agccttga
B.Tau	ccttagct	ggattatgatg...28...gagtttggtgaattaagcag	GATTacTCTGAGATcc	agcctggg
E.Cab	cctgagct	ggatttgatgatg...28...gagtttggtgaattaagcag	GATTacTCTGAGATcc	cgcctggc
L.Afr	ccttggtc	ggattcatgatg...28...gagtttgataattaagcag	GATTacTCTGAGATcc	agcctagc
	***	*****	*****	* * * * *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

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P.Tro	tgacttta	gcacttctccct...1756...-ctctctgtctctgttttttt	ATTTtcCAG	AaAATCag
P.Abe	tgacttca	gcacttctccct...1752...-ctctctgtctctgttttttt	ATTTtcCAG	AaAATCag
C.Jac	tgacttta	gcacttctccct...2565...-ctctctgtctctgttttttt	ATTTtcCAG	AaAATCag
M.Mus	acgtgcta	gcatttctttcc...1657...-ctgtctgtttctgtttttat	ATTTtcCAG	AaAATCag
R.Nor	acatgta	acatctctttcc...1650...-ctgtctgtttctgtttttat	ATTTtcCAG	AaAATCag
C.Por	tgacttta	gtcttctcttct...1386...-ctctctgtctctctcttttt	ATTTtcCAG	AaAATCag
O.Cun	tgacttta	gcactcttttct...1484...-ctgtctgtctctgtttttt	ATTTtcCAG	AaAATCag
C.Fam	tgacttta	gctcctctccct...1830...-ttgtctgtctctgttttttt	ATTTtcCAG	AaAATCaa
F.Cat	tgacttta	gctcctctccct...1845...-ttgtctgtctctgttttttt	ATTTtcCAG	AaAATCag
B.Tau	cgattttc	gcccttctccct...2996...-ctgtctgtctctgttttttt	ATTTtcCAG	AaAATCag
E.Cab	tgacttta	gctcttctccca...1847...-ctctctgtctctgttttttt	ATTTtcCAG	AaAATCag
L.Afr	tgacttta	gcacatctctat...1799...tttgtctgatctgtttttt	-ATTTtcCAG	AaAATCag
			* * * * *	*****

id=627653 gene=ENSG00000112715 name=VEGFA segment=chr6\_43746675\_43748468\_1 type=AN

Figure 218: CS=16.25



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P. Tro	tcttagct	ggattaatgatg...29...agtttgataattaagcagg	ATTACTCTGAGA	tcc	agcgtggc
C. Jac	ccttagct	ggattcatgatg...29...agtttgataattaagcagg	ATTACTCTGAGA	tcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...29...cgtctgtgtaattaagcagg	ATTACTCTGAGA	tcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...29...agtttggttattaagcagg	ATTACTCTGAGA	tcc	agcctggc
C. Por	cactagct	ggattcatgatg...29...catttgtaataagcagg	ATTACTCTGAGA	tcc	ggcttaa
O. Cun	gcttagct	ggattcatgatg...29...ggttgtaattcagcagg	ATTACTCTGAGA	tcc	AGCTTggc
C. Fam	cctgagct	ggattcatgatg...29...agtttggtaattaagcagg	ATTACTCTGAGA	tcc	agcgtgac
F. Cat	cctgagct	ggattcgtgatg...29...agtttgtaattaagcagg	ATTACTCTGAGA	tcc	agccttga
B. Tau	ccttagct	ggatttatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGA	tcc	agccttgg
E. Cab	cctgagct	ggatttgatg...29...agtttgtaattaagcagg	ATTACTCTGAGA	tcc	cgctggc
O. Avi	ccttagct	ggatttatgatg...29...agtttgtaattaagcagg	ATTACTCTGAGA	tcc	agccttgg
L. Afr	cctggct	ggattcatgatg...29...agtttgataattaagcagg	ATTACTCTGAGA	tcc	agcctagc

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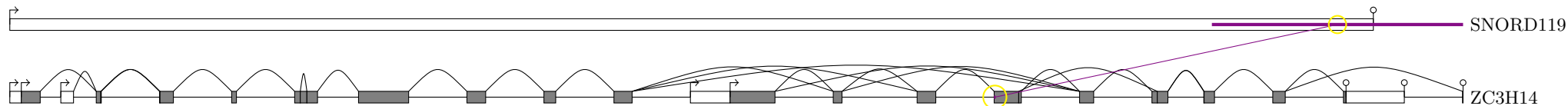
id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608.2443683.-1 type=EN

H. Sap	ctgaagag	gtgagggagctt...174...-----aaaagtctccgaaggttcat	TCTCtAGAGgaTA	ATgataag
P. Tro	ctgaagag	gtgagggagctt...174...-----aaaagtctccgaaggttcat	TCTCtAGAGgaTA	ATgataag
C. Jac	ctgaagag	gtgaggcagctt...174...-----aaaagtctccgaaggttcat	TCTCtAGAGgaTA	ATgataag
M. Mus	ctgaaaag	gtgaggcaatta...161...-----aaaagtctcgaaggttaat	TCTCtAGAGgaTA	ATgataag
R. Nor	ctgaaaag	gtgaggaatta...155...-----aaaaatctcgaaggttaat	TCTCtAGAGgaTA	ATgataag
C. Por	gtgaaaag	gtgaggggattt...175...-----aaaagtctcgaagattaat	TCTCtAGAGgaTA	ATgataag
O. Cun	ctaaaagag	gtgaggggactt...166...ggacagatgaaagtctccgaAGGTTGat	TCTCtAGAGgaTA	ATgataag
C. Fam	ctgaagag	gtgagaggcttg...176...-----aaaagtctcctaaggttaat	TCTCtAGAGgaTA	ATgatgag
F. Cat	ctgaagag	gtgagggggctt...171...-----aaaagtctcctaaggttcat	TCTCtAGAGgaTA	ATgataag
B. Tau	ctgaagag	gtgaggggactt...172...-----aaaagtctcgaaggttaat	TCTCtAGAGgaTA	ATgataag
E. Cab	ctgaagag	gtgagaggctt...172...-----aaaagtctcgaaggttaat	TCTCtAGAGgaTA	ATgataag
O. Avi	ctgaagag	gtgaggggactc...172...-----aaaagtctcgaaggttaat	TCTCtAGAGgaTA	ATgataag
L. Afr	ctgaagag	gtgaggggactt...170...-----gaaagtcgcgaaggttaat	TCTCtAGAGgaTA	ATgataag

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

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Figure 219: CS=10.14



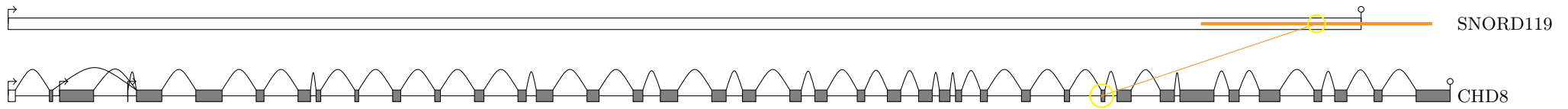
H.Sap	ccttagct	ggattaatgatg...25...gatgagtttgataattaag	CAGGAT	taCTCTGAGAT	cc	agcgtggc
P.Tro	tcttagct	ggattaatgatg...25...gatgagtttgataattaag	CAGGAT	taCTCTGAGAT	cc	agcgtggc
P.Abe	ccttagct	ggattaatgatg...25...aatgagtttgataattaag	CAGGAT	taCTCTGAGAT	cc	agtgtggc
C.Jac	ccttagct	ggattcatgatg...25...gatgagtttgataattaag	CAGGAT	taCTCTGAGAT	cc	agcatggg
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C.Por	cactagct	ggattcatgatg...25...gatgcatttgtaataagaag	CAGGAT	taCTCTGAGAT	cc	ggcttaaa
O.Cun	gcttagct	ggattcatgatg...25...gatgggtttgtgtaattcag	CAGGAT	taCTCTGAGAT	cc	agcttggc
C.Fam	cctgagct	ggattcatgatg...25...gatgagtttgggtaattaag	CAGGAT	taCTCTGAGAT	cc	agcgtgac
F.Cat	cctgagct	ggattcatgatg...25...gatgagtttgggtaattaag	CAGGAT	taCTCTGAGAT	cc	agccttga
B.Tau	ccttagct	ggatttcatgatg...25...gacgagtttgtgtaattaag	CAGGAT	taCTCTGAGAT	cc	agccttgg
E.Cab	cctgagct	ggatttcatgatg...25...gatgagtttgggtaattaag	CAGGAT	taCTCTGAGAT	cc	cgcttggc
L.Afr	cctgggct	ggattcatgatg...25...gatgagtttgggtaattaag	CAGGAT	taCTCTGAGAT	cc	agccttagc
	***	*****	*****	*****	*****	*****

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

H.Sap	cagacacg	gtagatggtttc...703...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
P.Tro	cagacacg	gtagatggtttc...702...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
P.Abe	cagacacg	gtagatggtttc...703...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
C.Jac	cagacacg	gtagatggtttc...688...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
M.Mus	cagacacg	gtagatggtttc...739...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
C.Por	cagacacg	gtagatggtttc...979...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
O.Cun	cagacacg	gtagatggtttc...717...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
C.Fam	cagacacg	gtagatggtttc...727...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
F.Cat	cagacacg	gtagatggtttc...722...ttctctggtatTTTTtct	GTCTggCAG	AGATCTTg
B.Tau	cagacacg	gtagatggcttc...701...ttctgtggtatTTTTtct	GTCTggCAG	AGATCTTg
E.Cab	cagacacg	gtagatggtttc...708...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
L.Afr	acaccacg	gtagatggtttc...702...ttctatggtatTTTTtct	GTCTggCAG	AGATCTTg
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id=243497 gene=ENSG00000100722 name=ZC3H14 segment=chr14\_89068428\_89069171.1 type=IN

Figure 220: CS=12.96



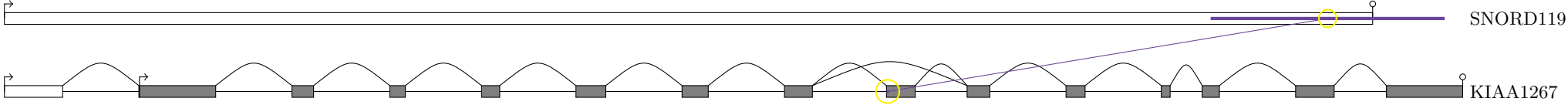
H. Sap	ccttagct	ggattaatgatg...27...tgagttgtataattaagca	GGATTACTCTGAGAtcc	agcgtggc
P. Tro	tcttagct	ggattaatgatg...27...tgagttgtataattaagca	GGATTACTCTGAGAtcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...27...tgagttgtataattaagca	GGATTACTCTGAGAtcc	agtgtggc
C. Jac	ccttagct	ggattcatgatg...27...tgagttgtataattaagca	GGATTACTCTGAGAtcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...27...tgcgtctgtgtaattaagca	GGATTACTCTGAGAtcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...27...tgagttgtgttattaagca	GGATTACTCTGAGAtcc	agcctggc
C. Por	cactagct	ggattcatgatg...27...tgcatttgtgtaatgaagca	GGATTACTCTGAGAtcc	ggcttaa
O. Cun	gcttagct	ggattcatgatg...27...tgggttgtgtaattcagca	GGATTACTCTGAGAtcc	agcttggc
C. Fam	cctgagct	ggattcatgatg...27...tgagttgggtaattaagca	GGATTACTCTGAGAtcc	agcgtgac
F. Cat	cctgagct	ggattcatgatg...27...tgagttgtgtaattaagca	GGATTACTCTGAGAtcc	agccttga
B. Tau	ccttagct	ggattatgatg...27...cgagttgtgtaattaagca	GGATTACTCTGAGAtcc	agcttggc
E. Cab	cctgagct	ggatttggatg...27...tgagttgtgtaattaagca	GGATTACTCTGAGAtcc	cgctggc
O. Avi	ccttagct	ggattatgatg...27...cgagttgtgtaattaagca	GGATTACTCTGAGAtcc	agcttggc
L. Afr	ccttagct	ggattcatgatg...27...tgagttgtataattaagca	GGATTACTCTGAGAtcc	agcctagc
	***	*****	*****	* * *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608.2443683\_-1 type=EN

H. Sap	atgatgag	gtaaggaattct...425...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
P. Tro	atgatgag	gtaaggaattct...425...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
P. Abe	atgatgag	gtaaggaattct...425...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
C. Jac	atgatgag	gtaaggaattct...438...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
M. Mus	atgatgag	gtaagaaattgt...661...-tcctgtgggtggatctcct	TCTCtAG	GGTGATC
R. Nor	atgatgag	gtaagaaattgt...660...-tcctgtgggtggatctcct	TCTCtAG	GGTGATC
C. Por	atgatgag	gtaaacattct...696...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
O. Cun	atgatgag	gtaaggaattct...419...-tcctctgggtggatctcct	TCTCtAG	GGTGATC
C. Fam	atgatgag	gtgaggaattct...402...-tcctattgggtggatctcct	TCTCtAG	GGTGATC
F. Cat	atgatgag	gtgaggaattct...231...-tcctgtgggtggatctcct	TCTCtAG	GGTGATC
B. Tau	atgatgag	gtgaggaatttt...419...-tcctgctgggtggatctcct	TCTCtAG	GGTGATC
E. Cab	atgatgag	gtaagaaattct...407...-tcctgtgggtggatctcct	TCTCtAG	GGTGATC
O. Avi	atgatgag	gtgaggaatttt...415...atcctgctgggtggatctcc	TCTCtAG	GGTGATC
L. Afr	atgatgag	gtaaggaattct...449...-tcctgtgggtggatctcct	TCTCtAG	GGTGATC
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id=300909 gene=ENSG00000100888 name=CHD8 segment=chr14\_21863512.21863975\_-1 type=IN

Figure 221: CS=12.6



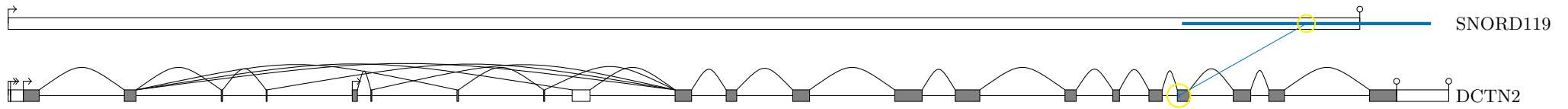
H.Sap	ccttagct	ggattaatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcgtggc
P.Tro	tcttagct	ggattaatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcgtggc
P.Abe	ccttagct	ggattaatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agtgtggc
C.Jac	ccttagct	ggattcatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcatggg
R.Nor	ccttagct	ggattcatgatg...27...tgagtttggttattaagcaGGATtaCTCTGAGAtcc	agcctggc
C.Por	cactagct	ggattcatgatg...27...tgcatttggtaatgaagcaGGATtaCTCTGAGAtcc	ggcttaaa
O.Cun	gcttagct	ggattcatgatg...27...tgggtttggtaatcagcaGGATtaCTCTGAGAtcc	agcttggc
C.Fam	cctgagct	ggattcatgatg...27...tgagtttgggtaattaagcaGGATtaCTCTGAGAtcc	agcgtgac
F.Cat	cctgcgct	ggattcgtgatg...27...tgagtttggtaatgaagcaGGATtaCTCTGAGAtcc	agccttga
B.Tau	ccttagct	ggatttatgatg...27...cgagtttggtaatgaagcaGGATtaCTCTGAGAtcc	agcttggc
E.Cab	cctgagct	ggatttgatgatg...27...tgagtttggtaatgaagcaGGATtaCTCTGAGAtcc	cgctggc
L.Afr	ccttggct	ggattcatgatg...27...tgagtttgataattaagcaGGATtaCTCTGAGAtcc	agcctagc
	***	***** * * * * *	* * *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683.-1 type=EN

H.Sap	aacagcca	gtaagtgtcagg...447...-cagctcttttctgttccccTCTTcAG	AGctGTCc
P.Tro	aacagcca	gtaagtgtcagg...447...-cagctcttttctgttccccTCTTcAG	AGctGTCc
P.Abe	aacagcca	gtaagtgtcagg...447...-cagctcttttctgttccccTCTTcAG	AGctGTCc
C.Jac	aacagcca	gtaagtgtcagg...446...-cagctcttttctgttccccTCTTcAG	AGctGTCc
R.Nor	aacatcca	gtaagtttctga...403...acagctctttt-tgttccccTCTTcAG	AGctGTCc
C.Por	aacagcca	gtaagtctcagg...455...-aagctcttttctgttccccTCTTcAG	AGctGTCc
O.Cun	aactgcca	gtaagttttagg...410...-cagctcttttctgttccccTCTTcAG	AGctGTCc
C.Fam	aacagcca	gtaagtttcagg...447...-cagctcttttctgttccccTCTTcAG	AGctGTCc
F.Cat	aacagcca	gtaagtttcagg...487...-cagctcttttctgttccccTCTTcAG	AGctGTCc
B.Tau	aacagcca	gtaagtttcagg...393...-cagctcttttctgttccccTCTTcAG	AGctGTCc
E.Cab	aacagcca	gtaagtttcagg...454...-cagctcttttctgttccccTCTTcAG	AGctGTCc
L.Afr	aacagcca	gtaagtttcagg...443...-cagctcttttctgttccccTCTTcAG	AGctGTCc
	***	***** * * * * *	*****

id=757041 gene=ENSG00000120071 name=KIAA1267 segment=chr17\_44116582\_44117067.-1 type=IN

Figure 222: CS=12



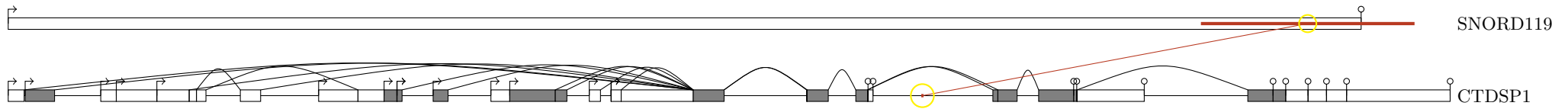
H. Sap	ccttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcgtggc
P. Tro	tcttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agtgtggc
C. Jac	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcctggc
C. Por	cactagct	ggattcatgatg...26...atgcatttgtgtaataagc	AGGATt	ACTCTGAGAtcc	ggcttaaa
O. Cun	gcttagct	ggattcatgatg...26...atgggttggtaattcagc	AGGATt	ACTCTGAGAtcc	agcctggc
C. Fam	cctgagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcgtgac
F. Cat	cctgagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agccttga
E. Cab	cctgagct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcctggc
L. Afr	ccttggct	ggattcatgatg...26...atgagtttgataattaagc	AGGATt	ACTCTGAGAtcc	agcctagc
	***	*****	*****	*** * ** * **	***** * *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

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P. Tro	ggctacag	gtattaaatgga...51...-atcaacctt-aaaatctgtgt	TTCAG	AGTGTCCt
P. Abe	ggctacag	gtattaaatgga...51...-atcaacctt-aaaatctgtgt	TTCAG	AGTGTCCt
C. Jac	ggctacag	gtaaaactgagg...49...-tcaaccttaaaaatctgtgt	TTCAG	AGTGTCCt
M. Mus	ggctacag	gtattaaagtga...56...-gtcacctt-aaccctgtgc	TTCAG	AGTGTCCt
R. Nor	gactgcag	gtattaaagtga...56...-gtcacctt-aacacctgtgc	TTCAG	AGTGTCCt
C. Por	ggctacag	gtattgaggtgg...55...-gtcagttt-aaaatctgtgc	TTCAG	AGTGTCCt
O. Cun	ggctacag	gtattaaagtga...51...-atcaatctt-aacgtctgtgc	TTCAG	AGTGTCCt
C. Fam	ggctacag	gtatcgaatgga...43...-gtcagcctt-aaaatctgtgt	TTCAG	AGTGTCCt
F. Cat	ggctacag	gtactaagtgga...50...tgtaacctt--aagtctgtgc	TTCAG	AGTGTCCt
E. Cab	ggctacag	gtattaaagtgga...54...tatcatcctt--aaatctgtgc	TTCAG	AGTGTCCt
L. Afr	ggctacag	gtattaaagtgga...55...-cctaactt-aaaatctatgc	TTCAG	AGTGTCCt
	* ** **	***	*	* ** * ** ** * ** ** * ** ** *

id=614497 gene=ENSG00000175203 name=DCTN2 segment=chr12\_57926427\_57926515\_-1 type=IN

Figure 223: CS=10.8



H. Sap	ccttagct	ggattaatgatg...27...tgagtttgataattaagca	GGATTACT	CGAG	atcc	agcgtggc
P. Tro	tcttagct	ggattaatgatg...27...tgagtttgataattaagca	GGATTACT	CGAG	atcc	agcgtggc
P. Abe	ccttagct	ggattaatgatg...27...tgagtttgataattaagca	GGATTACT	CGAG	atcc	agtgtggc
C. Jac	ccttagct	ggattcatgatg...27...tgagtttgataattaagca	GGATTACT	CGAG	atcc	agcatggg
M. Mus	ccttagct	ggattcatgatg...27...tgcgtctgtgtaattaagca	GGATTACT	CGAG	atcc	agcctggc
R. Nor	ccttagct	ggattcatgatg...27...tgagtttggttattaagca	GGATTACT	CGAG	atcc	agcctggc
C. Por	cactagct	ggattcatgatg...27...tgcatttgtgtaatgaagca	GGATTACT	CGAG	atcc	ggcttaaa
O. Cun	gcttagct	ggattcatgatg...27...tgggtttgtgtaattcagca	GGATTACT	CGAG	atcc	agcttggc
C. Fam	cctgagct	ggattcatgatg...27...tgagtttgggtaattaagca	GGATTACT	CGAG	atcc	agcgtgac
F. Cat	cctgagct	ggattcatgatg...27...tgagtttgtgtaattaagca	GGATTACT	CGAG	atcc	agccttga
B. Tau	ccttagct	ggattatgatg...27...cgagtttgtgtaattaagca	GGATTACT	CGAG	atcc	agcttggc
L. Afr	ccttagct	ggattcatgatg...27...tgagtttgataattaagca	GGATTACT	CGAG	atcc	agcctagc
	***	*****	*****			* * *

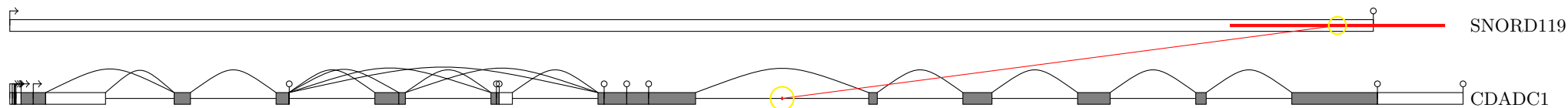
id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608\_2443683\_-1 type=EN

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P. Tro	cagtgggtg	gg--cttggcatct...193...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...312...actggcccgcag	ccccctca
P. Abe	cagcgggtg	gg--cttggcatct...193...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...304...actgcccgcag	ccccctca
C. Jac	cagtgggtg	gg--cttggcctct...192...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...305...actggcctgcag	cctcctca
M. Mus	aggtggggg	ag--cttgggtgtc...193...ccctactgcccgggaccag	TTCAAGTAATTC	aggataggttg	gtggtgtga...248...gttggccagcag	ctcctca
R. Nor	aggtggggg	gg--tttgggtgtc...192...ccccactgcccgggaccag	TTCAAGTAATTC	aggataggttg	gtgctgtg...262...gtggccagcag	cctcctca
C. Por	agatgggtg	gc--cttggcattt...173...tcccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...276...ccatggccacag	ccccctca
O. Cun	cggtgggtg	gggtcctggcac--...146...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...252...ctccccagcag	tcccctca
C. Fam	aggcggcgg	gg--cttggcatct...180...ccacgttggcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...272...ctggcctgcag	gcccctca
F. Cat	aggtggggg	gg--cttggcatct...179...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...315...gcaggcctgcag	ttccctca
B. Tau	aggtgggtg	gg--gttggcatct...189...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...333...atggcccagcag	tcccctca
L. Afr	ggagggtg	gg--ttaggcttgg...197...ccaccctgcccgggaccag	TTCAAGTAATTC	aggataggttg	-gtgctgtc...302...cgtggccagcag	tcccctca
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id=41883 gene=ENSG00000144579 name=CTDSP1 segment=chr2\_219267155\_219267733\_1 type=IN

Figure 224: CS=10.8





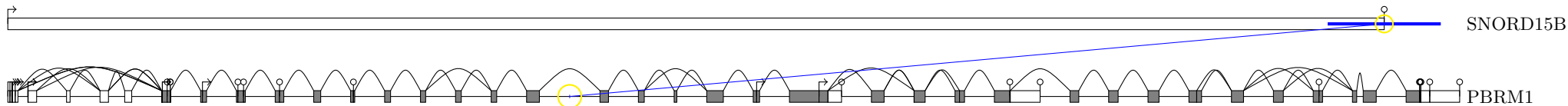
H.Sap	ccttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTaCTCTGAGATcc	agcgtggc
P.Tro	tcttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTaCTCTGAGATcc	agcgtggc
P.Abe	ccttagct	ggattaatgatg...28...gagtttgataattaagcag	GATTaCTCTGAGATcc	agtgtggc
C.Jac	ccttagct	ggattcatgatg...28...gagtttgataattaagcag	GATTaCTCTGAGATcc	agcatggg
M.Mus	ccttagct	ggattcatgatg...28...gcttctgtgtaattaagcag	GATTaCTCTGAGATcc	agcctggc
R.Nor	ccttagct	ggattcatgatg...28...gagtttggttattaagcag	GATTaCTCTGAGATcc	agcctggc
O.Cun	gcttagct	ggattcatgatg...28...gggttggttaattcagcag	GATTaCTCTGAGATcc	agcctggc
C.Fam	cctgagct	ggattcatgatg...28...gagtttggtaattaagcag	GATTaCTCTGAGATcc	agcgtgac
F.Cat	cctgcgct	ggattcgtgatg...28...gagtttggttaattaagcag	GATTaCTCTGAGATcc	agccttga
B.Tau	ccttagct	ggatttatgatg...28...gagtttggttaattaagcag	GATTaCTCTGAGATcc	agccttgg
E.Cab	cctgagct	ggatttgatgatg...28...gagtttggttaattaagcag	GATTaCTCTGAGATcc	cgcttggc
O.Avi	ccttagct	ggatttatgatg...28...gagtttggttaattaagcag	GATTaCTCTGAGATcc	agccttgg
L.Afr	ccttggct	ggattcatgatg...28...gagtttgataattaagcag	GATTaCTCTGAGATcc	agcctagc
	** **	***** **	* * * * * *****	* *

id=309534 gene=ENSG00000251806 name=SNORD119 segment=chr20\_2443608.2443683\_-1 type=EN

H.Sap	tcgaactg	gtgagttacata...4948...--tactgagttaaatgccat	ATCTTTTCAG	AGGATC	at
P.Tro	tcgaactg	gtgagttacata...4948...--tactgagttaaatgccat	ATCTTTTCAG	AGGATC	at
P.Abe	tcgaactg	gtgagttacata...4948...--tactgagttaaatgccat	ATCTTTTCAG	AGGATC	at
C.Jac	tcgaactg	gtgagttacata...4948...--tactgagttaaatgccat	ATCTTTTCAG	AGGATC	at
M.Mus	tcgaactg	gtgagttcaatg...4623...tttactgagataaacatcct--	GTCTTTTCAG	AGGATC	at
R.Nor	tcgaactg	gtgagttcaatg...4382...tttactgagataaacatcct--	GTCTTTTCAG	AGGATC	at
O.Cun	tcgaactg	gtgagttacatg...4948...--tactgaattaaatgacat	ATCTTTTCAG	AGGATC	ac
C.Fam	tcgaactg	gtgagttacttg...4948...--tactgagttaaatgacatt	ATCTTTTCAG	AGGATC	at
F.Cat	tcgaactg	gtgagttacatg...4948...--tgctgtgtaaatgacatt	ATCTTTTCAG	AGGATC	at
B.Tau	tcgaactg	gtgagttacacg...3995...--cactgagtcacatgccatgt	ATCTTTTCAG	AGGATC	at
E.Cab	tcgaactg	gtgagttacacg...4948...--tactgagttgcatgccatgt	GTCTTTTCAG	AGGATC	at
O.Avi	tcgaactg	gtgagttacatg...3992...--cactgagtcacatgccatgt	ATCTTTTCAG	AGGATC	at
L.Afr	tcgaactg	gtgagttatata...4049...tctactgcattaaatgccat--	GTCTTTTCAG	AGGATC	at
	*****	*****	***	* * *	*****

id=301525 gene=ENSG00000102543 name=CDADC1 segment=chr13\_49842196.49848426\_1 type=IN

Figure 225: CS=18.85



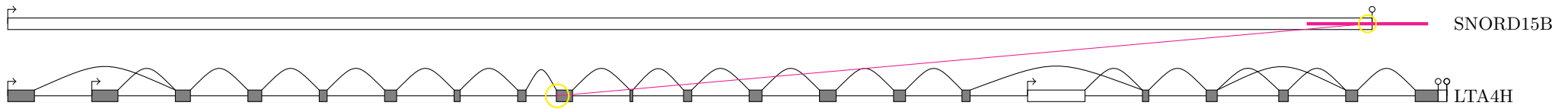
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P.Tro	tgtgtacc	c--tcagtgatgac...96...-tattgatcgatttagaggca	TTTGTCTGaGAAGG	GtcCAGAc-
P.Abe	tgtgtacc	c-ttcagtgatga-...100...-tattgatcgatttagaggca	TTTGTCTGaGAAGG	GtcCAGAc-
C.Jac	tgtgtacc	ctttcagtgatg-...104...-cattgattgatttagaggca	TTTGTCTGaGAAGG	GacCAGAc-
M.Mus	tctgtgcc	c-ttcagtgatga-...99...-cactgattgatttagaggca	TTTGTCTGAGAAGG	gaACAG-cg
R.Nor	tctgtgtc	c-ttcggtgatga-...99...-tactgattgatttagaggca	TTTGTCTGaGAAGG	gaACAGAg-
C.Por	tacgtacc	c-ttcagtgatga-...100...-tattgattgatttagaggca	TTTGTCTGaGAAGG	GaTGAGAt-
O.Cun	tgtgtacc	c-ttcggtgatga-...100...-cattgattgatttagaggca	TTTGTCTGaGAAGG	GacCAGAt-
C.Fam	tatgtacc	c-ttcggtgatga-...99...ttattgattga-ttagaggca	TTTGTCTGaGAAGG	GacTGGAt-
F.Cat	tgtgtacc	c-ttcggtgatga-...99...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	GacCAGAc-
B.Tau	ggtgtacc	c-ttcagtgatga-...98...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	GgcCAGAc-
E.Cab	tgtgtacc	c-ttcagtgatga-...99...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	Gaccagac-
O.Avi	nnnnnnnn	c-ttccatgatga-...98...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	GgcCAGAc-
		* ** ***** * **** * ***** * * * *		

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H.Sap	cagatccg	gtaagatgtctt...4943...-cagaaaattctagcaat---ttc-----	TTTGTCTTTCaCAG	AaCAAAac
P.Tro	cagatccg	gtaagatgtctt...4943...-cagaaaattctagcaat---ttc-----	TTTGTCTTTCaCAG	AaCAAAac
P.Abe	cagatccg	gtaagatgtctt...4943...-cagaaaattctagcaat---ttc-----	TTTGTCTTTCaCAG	AaCAAAgc
C.Jac	cagatccg	gtaagatgtctt...4943...-aggacaattctagcaat---ttc-----	TTTGTCTTTCaCAG	AaCAAAgc
M.Mus	cagatcag	gtaagacttttt...1883...-aagaacttacaatcatttat-----	TTTGTCTTTaCAG	AaCAAAgc
R.Nor	cagatcag	gtaaggctgttt...1957...-taagaacttaaatcattta-----	TTTGTCTTTCaCAG	AaCAAAac
C.Por	cagatcag	gtaaggctcactt...4941...-----ttcataatctttttttttttTTTGTCTTTCaCAG	TTTGTCTTTCaCAG	AaCAAAgc
O.Cun	cagatcag	gtaaggctctctc...4942...---caaaatatt-ttcataatctt---GTTTGCCTTTCaCAG	GTTTGCCTTTCaCAG	AaCAAAgc
C.Fam	cagatcag	gtaaggctgcctt...2687...atggtaaattgtagccatgt-----	GTTTGCCTTTCaCAG	AaCAAAgc
F.Cat	cagatcag	gtaagatgtctt...3344...aaggcaagtgtagctatgt-----	GTTTGCCTTTCaCAG	AaCAAAgc
B.Tau	cagatcag	gtaatacatcat...2747...atggaaggcttagccctgt-----	GTTTGCCTTTCaCAG	AaCAAAgc
E.Cab	cagatcag	gtaagatgtttc...3724...---aaaattctagccatgtattt-----	TTCTTTCaCAG	AaCAAAgc
O.Avi	cagatcag	gtaatatatcat...2726...atggaaggcttagccctgt-----	GTTTGCCTTTCaCAG	AaCAAAgc
		***** * **** * * **** * **** * ***** *		

id=69974 gene=ENSG00000163939 name=PBRM1 segment=chr3.52663052.52668617.-1 type=IN

Figure 226: CS=14.43



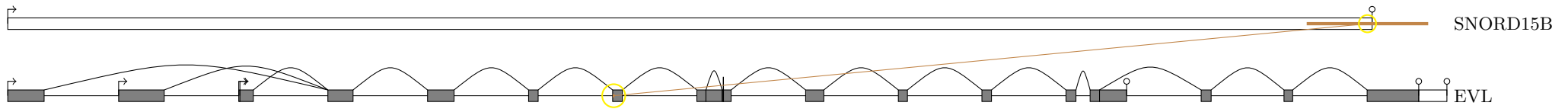
H.Sap	tgtgtacc	c-ttcagtgatga-...99...-ttattgatcgatttagaggc	ATTGTCTGAGAAGG	GTC	-----cagac
R.Mac	tgtgtacc	c-ttcagtgatga-...99...-tcattgattgatttagaggc	ATTGTCTGAGAAG-		-----ggaccagac
P.Tro	tgtgtacc	c--tcagtgatgac...95...-ttattgatcgatttagaggc	ATTGTCTGAGAAGG	GTC	-----cagac
P.Abe	tgtgtacc	c-ttcagtgatga-...99...-ttattgatcgatttagaggc	ATTGTCTGAGAAGG	GTC	-----cagac
C.Jac	tgtgtacc	ctttcagtgatg--...103...-tcattgattgatttagaggc	ATTGTCTGAGAAG-		-----ggaccagac
M.Mus	tctgtgcc	c-ttcagtgatga-...98...-gactgattgatttagaggc	ATTGTCTGaGAAGG	GAA	-----cagcg
R.Nor	tctgtgtc	c-ttcggtgatga-...98...-atactgattgatttagaggc	ATTGTCTGaGAAGG	GAACAGAg	-----
C.Por	tacgtacc	c-ttcagtgatga-...99...-ttattgattgatttagaggc	ATTGTCTGAGAAGG	GATG	-----agat
O.Cun	tgtgtacc	c-ttcggtgatga-...99...-tcattgattgatttagaggc	ATTGTCTGAGAAG-		-----ggaccagat
C.Fam	tatgtacc	c-ttcggtgatga-...98...tttattgattga-ttagaggc	ATTGTCTGaGAAGG		-----gactggat
B.Tau	ggtgtacc	c-ttcagtgatga-...97...ttcattgattga-ttagaggc	ATTGTCTGaGAAGG		-----ggccagac
E.Cab	tgtgtacc	c-ttcagtgatga-...98...ttcattgattga-ttagaggc	ATTGTCTGaGAAGG		-----gaccagac
S.Sus	tgcgtacc	c-ttcagtgatga-...98...ttcattggttga-ttagaggc	ATTGTCTGaGAAGG		-----ggccagac
L.Afr	tgtgtacc	c-ttcggtgatga-...99...-tcattggtttagatttagaggc	ATTGTCTGAGAAG-		-----ggaccaaca
	** *	** *****	* * * * *	*****	

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H.Sap	tttctgag	gttggtcattta...222...catacagacatatatgtt	-----GATTTTCAG	ACTGAATc
R.Mac	tttctgag	gttggtcatgca...221...--catacaaatatatgttga	-----TTTTTCAG	ACTGAATc
P.Tro	tttctgag	gttggtcataata...222...catacagacatatatgtt	-----GATTTTCAG	ACTGAATc
P.Abe	tttctgag	gttggtcataatt...222...catacagacatatatgtt	-----GATTTTCAG	ACTGAATc
C.Jac	tttctgag	gttggtcatgta...436...--tacaacatatatgttga	-----TTTTTCAG	ACTGAATc
M.Mus	tttctgag	gttggtcagaca...176...--aagagatttgtatgcattca	-----TTTTTTCCAG	AcCGAATc
R.Nor	tctctgag	gttggtcatgca...189...-gtgcactcattcat-tgtttg	TTTTTTTgTTTTCCAG	ACTGAATc
C.Por	tttctgag	gttagtcatagt...197...--cagaccatgaatatatcta	---CATTCaTTTTTCAG	ACCGAATc
O.Cun	tttctgag	gttggttctata...184...--tgcaaatattttagcattca	-----TTTTTCAG	ACTGAATc
C.Fam	tttccgag	gttggtcataata...427...--tgcaaatattgtacattaa	-----CTTTCTAG	ACTGAATc
B.Tau	tttctgag	gttggtcataaaa...233...--tacaatatatatgcattca	-----TTTTCCAG	ACTGAATc
E.Cab	tttctgag	gttggtcataatg...227...--tacaatatatatgcattaa	-----TTTTCCAG	ACTGAATc
S.Sus	tttccgag	gttggtcataaaa...220...--tataaatatatctgcattaa	-----TTTTCCAG	ACTGAATc
L.Afr	tttctgag	gttggtcacgca...222...--catacatatatacattaa	-----TTTTTCAG	ACTGAATc
	* * * *	*** **	* * *	** ** * * * *

id=134283 gene=ENSG00000111144 name=LTA4H segment=chr12.96412682.96412945.-1 type=IN

Figure 227: CS=14.56



H.Sap	tgtgtacc	c-ttcagtgatga...98...-tttattgatcgatttagagg	CATTGTCTGaGAAGG	GTCcagac
R.Mac	tgtgtacc	c-ttcagtgatga...98...-ttcattgattgatttagagg	CATTGTCTGAGAAGG	GACCAgac
P.Abe	tgtgtacc	c-ttcagtgatga...98...-tttattgatcgatttagagg	CATTGTCTGAGAAGG	GTCcagac
C.Jac	tgtgtacc	ctttcagtgatg-...102...-ttcattgattgatttagagg	CATTGTCTGAGAAGG	GACCAgac
M.Mus	tctgtgcc	c-ttcagtgatga...98...-gcactgattgatttagaggc	ATTGTCTGaGAAGG	gaacagcg
R.Nor	tctgtgtc	c-ttcggtgatga...98...-atactgattgatttagaggc	ATTGTCTGAGAAGG	GAACagag
C.Por	tacgtacc	c-ttcagtgatga...98...-cttattgattgatttagagg	CATTGTCTGaGAAGG	gaTGAGat
O.Cun	tgtgtacc	c-ttcggtgatga...98...-ttcattgattgatttagagg	CATTGTCTGAGAAGG	gaccagat
C.Fam	tatgtacc	c-ttcggtgatga...97...gtttattgattga-ttagagg	CATTGTCTGAGAAGG	gactggat
F.Cat	tgtgtacc	c-ttcggtgatga...97...gttcattgattga-ttagagg	CATTGTCTGAGAAGG	gaccagac
E.Cab	tgtgtacc	c-ttcagtgatga...97...gttcattgattga-ttagagg	CATTGTCTGAGAAGG	gaccagac
S.Sus	tgcgatcc	c-ttcagtgatga...97...gttcattgattga-ttagagg	CATTGTCTGAGAAGG	ggccagac
L.Afr	tgtgtacc	c-ttcggtgatga...98...-ttcattgattgatttagagg	CATTGTCTGAGAAGG	GACcaaca
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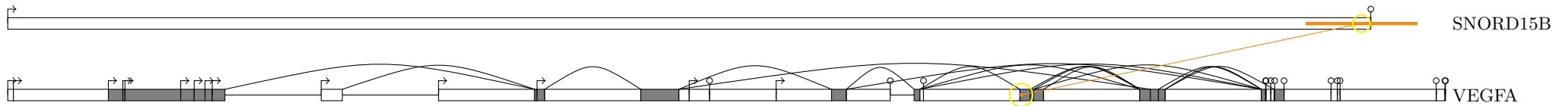
id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H.Sap	cagagaag	gtaaccagcac...3059...-gagtcagactgcctgctgtg-	GATTaCTTTCCAG	ACAAGTGa
R.Mac	cagagaag	gtaaccagcac...3045...-gaagtcagactgccccgctg-	TGGTTgCTTTTCAG	ACAAGTGa
P.Abe	cagagaag	gtaaccagcac...2944...-gagtcaaactgcctgctgtg-	GATTaCTTTTCAG	ACAAGTGa
C.Jac	cagagaag	gtaaccagcac...4943...-gaagtcagactgccccactg-	TGGTTgCTTTTCAG	ACAAGTGa
M.Mus	cagagaag	gtaaccccacgt...1014...-----caaggtgtctgctgtgattg-	CTTTCCAG	ACAAGTaa
R.Nor	cagagaag	gtaaccccgtac...818...-agctcaaggtgtctgctgtg-	GTTTCCTTTCAG	ACAAGTaa
C.Por	cagagaag	gtaatcccacac...2060...-agaagggcagttgtgctctg-	CTTGCTTTCAG	ACAAGTGa
O.Cun	cagagaag	gtaacccccacc...2029...-cagcccgctgctcctctg-	-----CCTTTCAG	ACAAGTGa
C.Fam	cagagaag	gtaatccccag...3300...-----tcagatctgctctgctgttg-	TTTTTCAG	ACAAGTGa
F.Cat	cagagaag	gtaaccccctgc...2979...-----gaccgctctgcccattgttg-	TCTTTCAG	ACAAGTGa
E.Cab	cagagaag	gtaacccccac...3256...-----gaccagctctgatattgttg-	CTTTTCAG	ACAAGTGa
S.Sus	cagagaag	gtaacccccgcc...2877...-ggccca----ctctgctcccattg-	CTTTTCAG	ACAAGTGa
L.Afr	cagagaag	gtaacgaacacc...3127...-ttctggggctcaggtggac	GTTCTTTTCAG	ACAAGTGa
	*****	****	** ***	***** *

id=664368 gene=ENSG00000196405 name=EVL segment=chr14.100589940.100593043.1 type=IN

Figure 228: CS=19.89





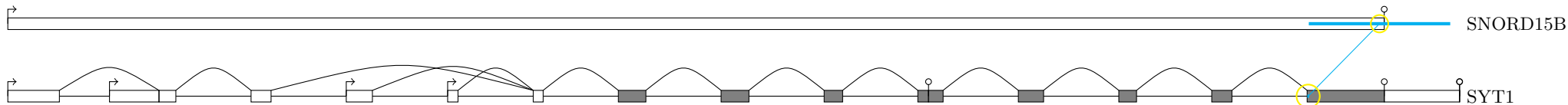
H. Sap	tgtgtacc	c-ttcagtgatga...99...-ttattgatcgatttagaggc	ATTg	TCTGAGAAGG	gtccagac
P. Abe	tgtgtacc	c-ttcagtgatga...99...-ttattgatcgatttagaggc	ATTg	TCTGAGAAGG	gtccagac
C. Jac	tgtgtacc	ctttcagtgatg-...103...-tcattgattgatttagaggc	ATTg	TCTGAGAAGG	GAccAGAc
M. Mus	tctgtgcc	c-ttcagtgatga...98...-gcactgattgatttagaggc	ATTg	TCTGAGAAGG	gaacagcg
R. Nor	tctgtgtc	c-ttcagtgatga...98...-atactgattgatttagaggc	ATTg	TCTGAGAAGG	gaacagag
C. Por	tacgtacc	c-ttcagtgatga...99...-ttattgattgatttagaggc	ATTg	TCTGAGAAGG	GAtGAGAt
O. Cun	tgtgtacc	c-ttcagtgatga...99...-tcattgattgatttagaggc	ATTg	TCTGAGAAGG	GACCAGAt
C. Fam	tatgtacc	c-ttcagtgatga...98...-tttattgattga-ttagaggc	ATTg	TCTGAGAAGG	GAcTGGAt
F. Cat	tgtgtacc	c-ttcagtgatga...98...-ttcattgattga-ttagaggc	ATTg	TCTGAGAAGG	GAccAGAc
E. Cab	tgtgtacc	c-ttcagtgatga...98...-ttcattgattga-ttagaggc	ATTg	TCTGAGAAGG	GACCAGAc
S. Sus	tgcgacc	c-ttcagtgatga...98...-ttcattgattga-ttagaggc	ATTg	TCTGAGAAGG	GGccAGAc
L. Afr	tgtgtacc	c-ttcagtgatga...99...-tcattgattgatttagaggc	ATTg	TCTGAGAAGG	GAccAAcA
	* ** *	* ** * ** *	*****		

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H. Sap	tgacttta	gcacttctccct...1754...tctctgtctctgttttttta	-----	TTTTCCAG	AAAAATcag
P. Abe	tgacttca	gcacttctccct...1753...tctctgtctctgttttttta	-----	TTTTCCAG	AAAAATcag
C. Jac	tgacttta	gcacttctccct...2557...-cctgtctctctctgtctct	--	GTTTTTTT	taTTTTcCAG AAAATcag
M. Mus	acgtgcta	gcatttctttcc...1658...tgtctgtttctgtttttata	-----	TTTTCCAG	AAAAATcag
R. Nor	acatgtta	acatctctttcc...1651...tgtctgtttctgtttttata	-----	TTTTCCAG	AAAAATcag
C. Por	tgacttta	gtcttctcttct...1376...-gtcttgcgctctctctgtct	--	GTCTCTTTT	taTTTTcCAG AAAATcag
O. Cun	tgacttta	gcacttctttct...1473...tcgctcgtctctgtctgtc	--	TCTGtTTTT	taTTTTcCAG AAAATcag
C. Fam	tgacttta	gctcctctccct...1819...ttgtctctctttgtctgtc	--	TCTGtTTTT	taTTTTcCAG AAAATcaa
F. Cat	tgacttta	gctcctctccct...1837...-ctctctctttgtctgtctct	--	GTTTTTTT	taTTTTcCAG AAAATcag
E. Cab	tgacttta	gctcttctccca...1836...ccctcgtctctctctgtc	--	TCTGtTTTT	taTTTTcCAG AAAATcag
S. Sus	tgacttta	gctcttctctct...1912...-ctctctctgtctgtctct	--	GTTTTTTT	taTTTTcCAG AAAATcag
L. Afr	tgacttta	gcacatctctat...1791...-cgtctctttgtctgtatc	TGT	----	TTTTTtaTTTTcCAG AAAATcag
	*	*	** * * *	*****	*****

id=627653 gene=ENSG00000112715 name=VEGFA segment=chr6.43746675.43748468.1 type=AN

Figure 230: CS=11.4



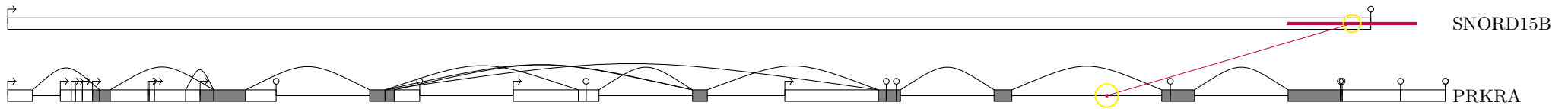
H. Sap	tgtgtacc	cttcagtgatga...97...-atttattgatcgatttagag	GCATTgTCTGaGAAGG	GTC-----cagac
R. Mac	tgtgtacc	cttcagtgatga...97...-attcattgattgatttagag	GCATTgTCTGaGAAGG	GAC-----cagac
P. Abe	tgtgtacc	cttcagtgatga...97...-atttattgatcgatttagag	GCATTgTCTGAGAAGG	-----gtccagac
M. Mus	tctgtgcc	cttcagtgatga...96...-gcgcaactgattgatttagag	GCATTgTCTGAGAAGG	GAACAGcg-----
R. Nor	tctgtgtc	cttcggtgatga...96...-gcatactgattgatttagag	GCATTgTCTGaGAAGG	G-----aacagag
C. Por	tacgtacc	cttcagtgatga...97...-gcttattgattgatttagag	GCATTgTCTGAGAAGG	G-----atgagat
O. Cun	tgtgtacc	cttcggtgatga...97...-gttcattgattgatttagag	GCATTgTCTGaGAAGG	G-----accagat
C. Fam	tatgtacc	cttcggtgatga...96...-tgtttattgattga-ttagag	GCATTgTCTGaGAAGG	GACTION-----t
F. Cat	tgtgtacc	cttcggtgatga...96...-tgttcattgattga-ttagag	GCATTgTCTGAGAAGG	GACcCAGA-----c
E. Cab	tgtgtacc	cttcagtgatga...96...-tgttcattgattga-ttagag	GCATTgTCTGaGAAGG	GAC-----cagac
S. Sus	tgcgtacc	cttcagtgatga...96...-cgttcattggttga-ttagag	GCATTgTCTGaGAAGG	GGCCAGA-----c
L. Afr	tgtgtacc	cttcggtgatga...97...-gttcattggtttagatttagag	GCATTgTCTGaGAAGG	GAC---caaca---
	* ** *	**** *****	* ** * ** *****	*****

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465-75115610.1 type=EN

H. Sap	aaatccag	gtaatgtcaaac...4667...-----atgattcatattcatttcat	GGCTtCTTTCAG	AAAGTGCa
R. Mac	aaatccag	gtaatgtcaaac...4945...-----atgattcatattcgtttcat	GTCTtCTTTCAG	AAAGTGCa
P. Abe	aaatccag	gtaatgtcaaac...4635...-----tgattcatattcatttcat	TCTTCTTTCAG	AAAGTGCa
M. Mus	aaatccag	gtaacgacaggg...3602...-tggtgacactgggtcattc-----	TTGTgTCCTCTTTCAG	AAAGTGCa
R. Nor	aaatccag	gtaggtctgac...3211...-----cactgtgcattcgtgtgtc-----	CTCTTTCAG	AAAGTGCa
C. Por	aaatccag	gtaatttcaggc...4066...-----ggcttcatgttggttatgtg	CCCTTTtTCAG	AAAGTGCa
O. Cun	aaatccag	gtaatgtcaaac...4948...-----attaacatttatgttcatc	CTCTTTCAG	AAAGTGCa
C. Fam	aaatccag	gtaatgtcaaac...4162...-----gttggatgattaatgtttct	TTTGTGTCCTtCTTTCAG	AAAGTGCa
F. Cat	aaatccag	gtaatgtcaaac...4368...-----gctggatgattcatgtttat	TCTGcaTCCTCTTTCAG	AAAGTGCa
E. Cab	aaatccag	gtaatgtcaaat...4051...-----atgattaatgtttatTTTT	GTCTtCTTTCAG	AAAGTGCa
S. Sus	aaatccag	gtaatgtcaaac...4939...-----agctggacgattaatgttta	TTTGTGTCCTtCTTTCAG	AAAGTGCa
L. Afr	aaatccag	gtaatgtcaaac...4945...-----ctgattaatatttcttctgt	GTCCTTTTCAG	AAAGTGCa
	*****	*** *	**	* ** ** *****

id=141068 gene=ENSG00000067715 name=SYT1 segment=chr12.79837987-79842697.1 type=IN

Figure 231: CS=18.84



H.Sap	tgtgtacc	c-ttcagtgatga...97...-atttattgatcgatttagag	GCATTTGTCTGAGAAGG	GtcCAGA--c
R.Mac	tgtgtacc	c-ttcagtgatga...97...-attcattgattgatttagag	GCATTTGTCTGAGAAGG	GacCAGA--c
P.Abe	tgtgtacc	c-ttcagtgatga...97...-atttattgatcgatttagag	GCATTTGTCTGAGAAGG	GtcCAGA--c
C.Jac	tgtgtacc	ctttcagtgatg-...101...-attcattgattgatttagag	GCATTTGTCTGAGAAGG	GA--ccagac
R.Nor	tctgtgtc	c-ttcggtgatga...96...-gcatactgattgatttagag	GCATTTGTCTGAGAAGG	GaaCAGAg--
C.Por	tacgtacc	c-ttcagtgatga...97...-gcttattgattgatttagag	GCATTTGTCTGAGAAGG	GatGAGA--t
O.Cun	tgtgtacc	c-ttcggtgatga...97...-gttcattgattgatttagag	GCATTTGTCTGAGAAGG	GA--ccagat
C.Fam	tatgtacc	c-ttcggtgatga...96...-tgtttattgattga-ttagag	GCATTTGTCTGAGAAGG	GacTGA--t
F.Cat	tgtgtacc	c-ttcggtgatga...96...-gttcattgattga-ttagag	GCATTTGTCTGAGAAGG	GA--ccagac
E.Cab	tgtgtacc	c-ttcagtgatga...96...-tgttcattgattga-ttagag	GCATTTGTCTGAGAAGG	GA--ccagac
S.Sus	tgcgtagc	c-ttcagtgatga...96...-cgttcattggttga-ttagag	GCATTTGTCTGAGAAGG	GgcCAGA--c
L.Afr	tgtgtacc	c-ttcggtgatga...97...-gttcattggtttagatttagag	GCATTTGTCTGAGAAGG	-ggaccaaca
	* ** *	* ** * *****	* ** * ** *****	*

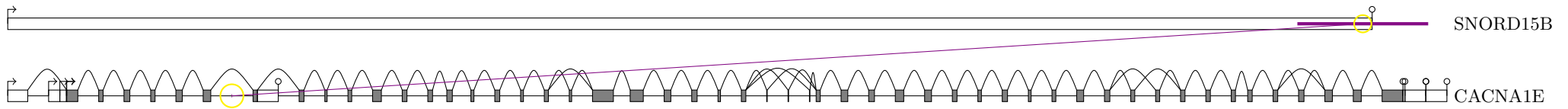
id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H.Sap	tttcttta	gtgagtaatggt...4945...-----caagagt-ctaatcttcac	TCTGTTTTTCAG	ACAAATGt
R.Mac	tttcttta	gtgagtaatggt...4945...-----caagagt-ctaatcttcatt	TCTGTTTTTCAG	ACAAATGt
P.Abe	tttcttta	gtgagtaatggt...4945...-----caagagt-ctaatgttcac	TCTGTTTTTCAG	ACAAATGt
C.Jac	tttcttta	gtgagtaatggt...1571...----gtaagagt-ctaatcttta	TCTCTgTTTTTCAG	ACAAATGt
R.Nor	tttctcta	gtaagtaataat...4690...-----ggaactgaagttccctcgt	CTCTGCCTTTTAG	ACGAATGt
C.Por	tttctcta	gtgagtaatgat...4944...----gtaagagt-ctgaaccctcc	TCTCT-TTTTCCAG	ACGAATGt
O.Cun	tttcttta	gtgagtaacaat...4943...----gtaagagg-ctaatattca	TCTTtgTTTTTCAG	ACCAATGt
C.Fam	tttcttta	gtgagtaatgat...4939...ctgagtaagagt-cttaatc	TTTATCTCtgTTTTTCAG	ACAAATGt
F.Cat	tttcttta	gtgagtaatgat...4943...----gttaaaagt-cttaattttca	TCTCTgTTTTTCAG	ACAAATGt
E.Cab	tttcttta	gtgagtaatgat...4943...----gtaagaat-cttaatcttca	TCTCTgTTTTTCAG	ACGAATGt
S.Sus	tttctttg	gtgagtactgat...4945...-----aagagtccttaatcttcac	TCTGCTTTTCAG	ACAAATGt
L.Afr	tttcttta	gtgagtaatgct...727...----agtgaagt-cttcactctgt	TTTTTCAG	ACAAATGt
	***** *	** *****	** *	** ** ** *****

id=606733 gene=ENSG00000180228 name=PRKRA segment=chr2.179301047.179306336.-1 type=IN

Figure 232: CS=12.48





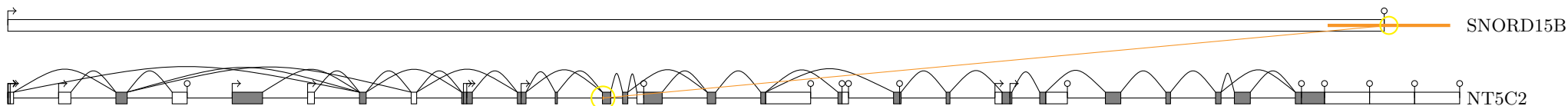
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R. Mac	tgtgtacc	c-ttcagtgatga-...98...-ttcattgattgatttagagg	CATTtGTCTGAGAAGG	GA	---ccagac
P. Tro	tgtgtacc	c--tcagtgatgac...94...-tttattgatcgatttagagg	CATTtGTCTGAGAAGG	G	---tccagac
P. Abe	tgtgtacc	c-ttcagtgatga-...98...-tttattgatcgatttagagg	CATTtGTCTGAGAAGG	G	---tccagac
C. Jac	tgtgtacc	ctttcagtgatg-...102...-ttcattgattgatttagagg	CATTtGTCTGAGAAGG	GA	---ccagac
M. Mus	tctgtgcc	c-ttcagtgatga-...97...-cgcactgattgatttagagg	CATTtGTCTGAGAAGG	GA	---Acagcg
C. Por	tacgtacc	c-ttcagtgatga-...98...-cttattgattgatttagagg	CATTtGTCTGaGAAGG	GAT	--GA--gat
O. Cun	tgtgtacc	c-ttcagtgatga-...98...-ttcattgattgatttagagg	CATTtGTCTGaGAAGG	GA	cCAGA----t
C. Fam	tatgtacc	c-ttcagtgatga-...97...gtttattgattga-ttagagg	CATTtGTCTGAGAAGG	GA	ctGGA----t
F. Cat	tgtgtacc	c-ttcagtgatga-...97...gttcattgattga-ttagagg	CATTtGTCTGAGAAGG	GA	---ccagac
B. Tau	ggtgtacc	c-ttcagtgatga-...96...gttcattgattga-ttagagg	CATTtGTCTGAGAAGG	GG	---ccagac
E. Cab	tgtgtacc	c-ttcagtgatga-...97...gttcattgattga-ttagagg	CATTtGTCTGAGAAGG	GA	---ccagac
S. Sus	tgcgtacc	c-ttcagtgatga-...97...gttcattgattga-ttagagg	CATTtGTCTGAGAAGG	GG	---ccagac
L. Afr	tgtgtacc	c-ttcagtgatga-...98...-ttcattgattgatttagagg	CATTtGTCTGAGAAGG	GA	---ccaaca-
		** ** *	** ** ** *		*****

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H. Sap	tgtacaat	gtgagtagagct...4946...-----agta-ttaaggaaccattttt--	CTTTCTTTTCAG	ACc	AATGa
R. Mac	tgtacaat	gtgagtagagct...4945...-----agtatttaaggaaccattttt--	TCTTTCTTTTCAG	ACc	AATGa
P. Tro	tgtacaat	gtgagtagagct...4946...-----agta-ttaaggaaccattttt--	CTTTcTTTTCAG	ACc	AATGa
P. Abe	tgtacaat	gtgagtagagct...4946...-----agta-ttaaggaaccggttttt--	CTTTCTTTTCAG	ACc	AATGa
C. Jac	tgtacaat	gtaagtagagct...4945...-----agtg-ttaaggaaccattttt--	TCTTTCTTTTCAG	ACc	AATGa
M. Mus	tgtacaat	gtgagtgagctg...4944...-----taaadc-ttacgaaaccattt--	TTCTTTCTTTTCAG	ACc	AATGa
C. Por	tgtacaat	gtgagtagagctg...4943...--tgtgaagtg-ctaaagagcaa----	TTGTtTTCTTTTCAG	ACc	AATGa
O. Cun	tgtacaat	gtgaggggctga...4943...ggctgtgagta--acaggagcc----	TCTGTTTCTTTTCAG	ACc	AATGa
C. Fam	tgtacaat	gtgagtagagat...4940...-tggtaaaata-ttaaggaacc--	ATTTTTCTgtTTTTTCAG	ACc	AATGa
F. Cat	tgtacaat	gtgagtagagct...4945...-----aaata-ttaaggaagcgttat--	TCTTTCTTTTCAG	ACc	AATGa
B. Tau	tgtacaat	gtgagtagagct...4945...-----taata-ctaaagaaccattttt--	TCTTTcTTTTCAG	ACc	AATGa
E. Cab	tgtacaat	gtgagtagagct...4945...-----agta-ttaaggaagcattttt--	TCTTTCTTTTCAG	ACc	AATGa
S. Sus	tgtacaat	gtgagtagagcc...4945...-----gta-ttgaggaacaatttctt	TCTTTCTTTTCAG	ACc	AATGa
L. Afr	tgtacaat	gtgagtgagca...4945...-----aaata-ttaaggaaccattttt--	TCTTTCTTTTCAG	ACc	AATGa
		*****	** ** *		*****

id=175998 gene=ENSG00000198216 name=CACNA1E segment=chr1.181549913.181620473.1 type=IN

Figure 233: CS=18.76



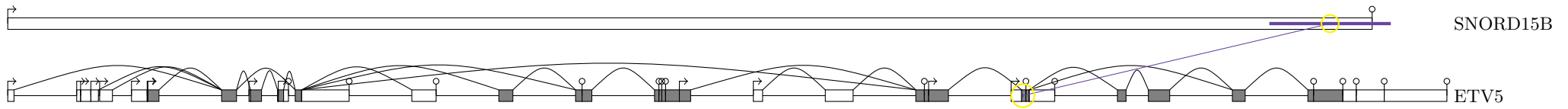
H.Sap	tgtgtacc	c-ttcagtgatga...100...-tattgatcgatttagaggca	TTTGTCTGAGAAGG	GT--ccagac
R.Mac	tgtgtacc	c-ttcagtgatga...100...-cattgattgatttagaggca	TTTGTCTGaGAAGG	GA--ccagac
P.Abe	tgtgtacc	c-ttcagtgatga...100...-tattgatcgatttagaggca	TTTGTCTGAGAAGG	GT--ccagac
C.Jac	tgtgtacc	ctttcagtgatg-...104...-cattgattgatttagaggca	TTTGTCTGaGAAGG	GA--ccagac
M.Mus	tctgtgcc	c-ttcagtgatga...99...-cactgattgatttagaggca	TTTGTCTGAGAAGG	GAA--cagcg
R.Nor	tctgtgtc	c-ttcggtgatga...99...-tactgattgatttagaggca	TTTGTCTGAGAAGG	GAACAGAg--
C.Por	tacgtacc	c-ttcagtgatga...100...-tattgattgatttagaggca	TTTGTCTGaGAAGG	GAT--gagat
O.Cun	tgtgtacc	c-ttcggtgatga...100...-cattgattgatttagaggca	TTTGTCTGaGAAGG	GA--ccagat
C.Fam	tatgtacc	c-ttcggtgatga...99...ttattgattga-ttagaggca	TTTGTCTGAGAAGG	GACT--ggat
F.Cat	tgtgtacc	c-ttcggtgatga...99...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	GA--ccagac
E.Cab	tgtgtacc	c-ttcagtgatga...99...tcattgattga-ttagaggca	TTTGTCTGaGAAGG	GA--ccagac
S.Sus	tgcgatcc	c-ttcagtgatga...99...tcattggttga-ttagaggca	TTTGTCTGaGAAGG	GG--ccagac
L.Afr	tgtgtacc	c-ttcggtgatga...100...-cattggtttagaggca	TTTGTCTGaGAAGG	GA--ccaaca
	* ** *	* *** *****	* ** * ** *****	*

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H.Sap	cagaagag	gtatgtatataa...3986...--aaaaatcagttaatttttaa----	ATTTTCTTTTCAG	AcCAGAAaa
R.Mac	caaaagag	gtatgtatataa...4293...-----aatcatttaatttttaaatt----	TTTCTTTTCAG	AcCAGAAaa
P.Abe	cagaagag	gtatgtatataa...3988...--aaaaatcagttaatttttaa----	ATTTTCTTTTCAG	AcCAGAAaa
C.Jac	cagaagag	gtatgtatataa...4947...-----aattagttaatttttaaatt----	TTTCTTTTCAG	AcCAGAAaa
M.Mus	cagaagaa	atacacacataa...4119...-----tcaattaattttttttaca--	TTTCTTTaCAG	AcCAGAAaa
R.Nor	cagaagag	atacacagcaaa...2818...---agtatcaactaatttttttt	TTTcaTTTCTTgCAG	AcCAGAAaa
C.Por	ccgaagag	gtatatacataa...1507...---attgatagctaatttttaaa----	AT-TTTCTTTTCAG	AcCAGAAaa
O.Cun	cagaagag	gtacgtacataa...4157...-----tgccagttaatttttaaaaat----	TTTCTTTTCAG	AcCAGAAaa
C.Fam	cagaagag	gtatgtatataa...4615...ttgaatgtcagttaa--tttaa--	AGTTTTTCTTTTCAG	AcCAGAAaa
F.Cat	cagaagag	gtatgtatataa...4947...---atgtcagttaa--tttaaattt----	TTTCTTTTCAG	AcCAGAAaa
E.Cab	cagaagag	gtatgtacataa...4094...-----gtcagttcatttttaaaaatt----	TTTCTTTTCAG	AcCAGAAaa
S.Sus	cagaagag	gtatgtacgtaa...4820...-----gtcagttaa--tttaaattttt--	TTTCTTTTCAG	AcCAGAAaa
L.Afr	caaaagag	gtatgtacataa...4947...---tatcagttaattttttgaat----	TTTCTTTTCAG	AcCAGAAaa
	* ****	** * **	* * * **	***** ** *****

id=208977 gene=ENSG00000076685 name=NT5C2 segment=chr10.104861084.104865114.-1 type=IN

Figure 234: CS=16.64



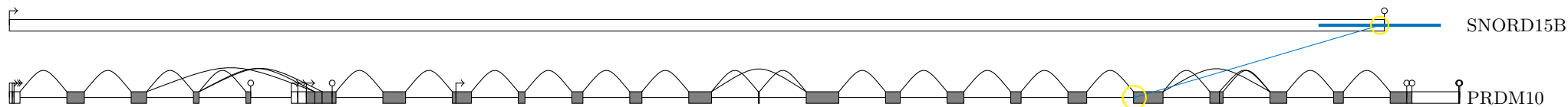
H. Sap	tgtgtacc	c-ttcagtgatga...95...-ctatttattgatcgatttag	AGGCATTg	TCTGAGAAGG	GtcCAGAc-----
R. Mac	tgtgtacc	c-ttcagtgatga...95...-ctattcattgattgatttag	AGGCATTg	TCTGAgAAGG	GAcCAGAc-----
P. Abe	tgtgtacc	c-ttcagtgatga...95...-ctatttattgatcgatttag	AGGCATTg	TCTGAGAAGG	GtcCAGAc-----
C. Jac	tgtgtacc	cttcagtgatg-...99...-ctattcattgattgatttag	AGGCATTg	TCTGAgAAGG	GAcCAGAc-----
M. Mus	tctgtgcc	c-ttcagtgatga...94...-ctgcccactgattgatttag	AGGCATTg	TCTGAgAAGG	GAACAGCg-----
R. Nor	tctgtgtc	c-ttcagtgatga...94...-ctgcatactgattgatttag	AGGCATTg	TCTGAgAAGG	GAA----cagag--
C. Por	tacgtacc	c-ttcagtgatga...95...-ctgcttattgattgatttag	AGGCATTg	TCTGAGAAGG	G-----atgagat
O. Cun	tgtgtacc	c-ttcagtgatga...95...-ctgttcattgattgatttag	AGGCATTg	TCTGAGAaGG	GACCAGAt-----
C. Fam	tatgtacc	c-ttcagtgatga...94...-cctgtttattgattga-ttag	AGGCATTg	TCTGAGAAGG	GACTGGA-----
F. Cat	tgtgtacc	c-ttcagtgatga...94...-cctgttcattgattga-ttag	AGGCATTg	TCTGAGAAGG	GACcAGAc-----
E. Cab	tgtgtacc	c-ttcagtgatga...94...-cctgttcattgattga-ttag	AGGCATTg	TCTGAGAAGG	GACCAGAc-----
L. Afr	tgtgtacc	c-ttcagtgatga...95...-ctgttcattgattgatttag	AGGCATTg	TCTGAgAAGG	GAccAACa-----
	* ** *	* ** * ** *	** * ** * ** *	*****	*

id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H. Sap	ggggcttt	accacagagct-g...36...------ttgacagga-t-t-----	gtgtccacc	TTTGCTTccTTTCAG	AAGTGCCt
R. Mac	ggggcttt	accacagagct-g...36...------ttgacagga-t-t-----	gtgtccacc	TTGctTTCCCTTCAG	AAGTGCCt
P. Abe	ggggcttt	accacagagct-g...36...------ttgacagga-t-t-----	gtgtccacc	TTGTTTTccTTTCAG	AAGTGCCt
C. Jac	aggcttta	accacagggt-g...36...------ttgatgga-t-t-----	gtgtccacc	TTGttTCCTTCAG	AAGTGCCt
M. Mus	-gggcctt	ggctgccagcgtg...39...gtagggattgttgcctaaagag-----		TGCTGTgtTTCCCTTCAG	AAGTGCCt
R. Nor	agaccatc	accactgaggg-a...273...-----ccattgctaagccgtt-----	gtct-----	TTCCCTTCAG	AAGTGCCt
C. Por	agggtggt	actgctgccgt-g...32...-----caaggtgtgtgatct-----	gtgc-----	TTCTgTTTCAG	AAGTGCCt
O. Cun	gggacttt	actgcagagct-g...34...-----cactgatgggagt-t-----	gtgtc-	GTCTgtGTTTcaTTTCAG	AAGTGCCt
C. Fam	ggggcttt	actgcagggt-g...27...-----acagaaat-tactgatggtgt-	GTC--	TGTTTgtCTTCAG	AAGTGCCt
F. Cat	ggggcctt	actggagagcg-g...31...-----aaactactgacaactg-----	gtgt-	GTC--TGTTTCTcTTTCAG	AAGTGCCt
E. Cab	aggccttg	actgcagagct-g...34...-----cgattgacaggagtgt-----	gtgt-	GTCTgtGTTTCTcTTTCAG	AAGTGCCt
L. Afr	ggggcttc	actgcagagct-g...39...-----gacagtagct-----	gtacatctg--	TGTTTCCCTTCAG	AAGTGCCt
	* *			** *****	*****

id=437693 gene=ENSG00000244405 name=ETV5 segment=chr3.185782266.185782349.-1 type=AN

Figure 235: CS=11.4



H. Sap	tgtgtacc	cttcagtgatga...	99	..	-ttattgatcgatttagaggc	ATTTGTCTGAGAAGG	GTccagac
R. Mac	tgtgtacc	cttcagtgatga...	99	..	-tcattgattgatttagaggc	ATTTGTCTGAGAAGG	gaccagac
P. Tro	tgtgtacc	c-tcagtgatgac...	95	..	-ttattgatcgatttagaggc	ATTTGTCTGAGAAGG	GTccagac
P. Abe	tgtgtacc	cttcagtgatga...	99	..	-ttattgatcgatttagaggc	ATTTGTCTGAGAAGG	GTccagac
M. Mus	tctgtgcc	cttcagtgatga...	98	..	-gcactgattgatttagaggc	ATTTGTCTGAGAAGG	GAAcagcg
R. Nor	tctgtgtc	cttcggtgatga...	98	..	-atactgattgatttagaggc	ATTTGTCTGAGAAGG	GAAcagag
C. Por	tacgtacc	cttcagtgatga...	99	..	-ttattgattgatttagaggc	ATTTGTCTGAGAAGG	gaTGAGAt
O. Cun	tgtgtacc	cttcggtgatga...	99	..	-tcattgattgatttagaggc	ATTTGTCTGAGAAGG	gaccagat
C. Fam	tatgtacc	cttcggtgatga...	98	..	-tttattgattga-ttagaggc	ATTTGTCTGAGAAGG	gactggat
F. Cat	tgtgtacc	cttcggtgatga...	98	..	-ttcattgattga-ttagaggc	ATTTGTCTGAGAAGG	gaccagac
B. Tau	ggtgtacc	cttcagtgatga...	97	..	-ttcattgattga-ttagaggc	ATTTGTCTGAGAAGG	ggccagac
E. Cab	tgtgtacc	cttcagtgatga...	98	..	-ttcattgattga-ttagaggc	ATTTGTCTGAGAAGG	gaccagac
L. Afr	tgtgtacc	cttcggtgatga...	99	..	-tcattggttgatttagaggc	ATTTGTCTGAGAAGG	Gaccaaca
	** *	* ** *****			* ** * ** *****		*

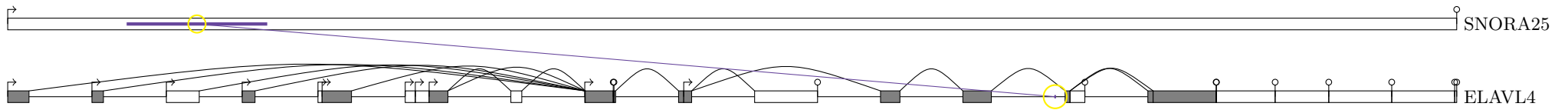
id=402446 gene=ENSG00000207445 name=SNORD15B segment=chr11.75115465.75115610.1 type=EN

H. Sap	gcagcaag	gtagggggagtt...	599	..	-----ttattcctgtttttgcctt--	GCTTTTCAG	ACcaAGAt
R. Mac	gcagcaag	gtagggacggtc...	605	..	-----aattcctgtttttgccttg--	CTTTTCAG	ACcaAGAt
P. Tro	gcagcaag	gtagggggagtt...	600	..	-----ttattcctgtttttgcctt--	GCTTTTCAG	ACcaAGAt
P. Abe	gcagcaag	gtagggggagtt...	599	..	-----ttattcctgtttttgcctt--	GCTTTTCAG	ACcaAGAt
M. Mus	gcagcaag	gtatggtgctgg...	1617	..	gctgcagtaattgttattt--	TTCTTcaTTTCCAG	ACcaAGAt
R. Nor	gcagcaag	gtatggtgctga...	1706	..	---gcagtaattgttattttt-	TTCTTcaTTTCCAG	ACcaAGAt
C. Por	gcagcaag	gtgaggcccagt...	869	..	---cagttactattcctggctt--	GTCTTcaCTTTTCAG	ACcaAGAt
O. Cun	gcagcaag	gtacgactcccc...	870	..	-----actcctggtttttgcctta-	CTTTTCAG	ACcaAGAt
C. Fam	gcagcaag	gtatgggaagg...	622	..	-----tgattcctcgtttt-gccata-	CTTTTCAG	ACcaAGAt
F. Cat	gcagcaag	gtatgggaaag...	639	..	-----tattcctggtttc-ccgtaa-	TTTTTCAG	ACcaAGAt
B. Tau	gcagcaag	gtactggaaag...	623	..	-----attattcctggttttgcc--a-	TTTTTCAG	ACcaAGAt
E. Cab	gcagcaag	gtatgggaaag...	631	..	-----t-attcctggtttt-gccataa-	TTTTTCAG	ACcaAGAt
L. Afr	gcagcaag	gtacgggcaagg...	779	..	-----ttcctggtttttgcctgaa	TTTTTTTCAG	ACcaAGAt
	*****	** *			* ** * *	*** **	*****

id=156019 gene=ENSG00000170325 name=PRDM10 segment=chr11.129784914.129785554.1 type=IN VIEW

Figure 236: CS=18.33





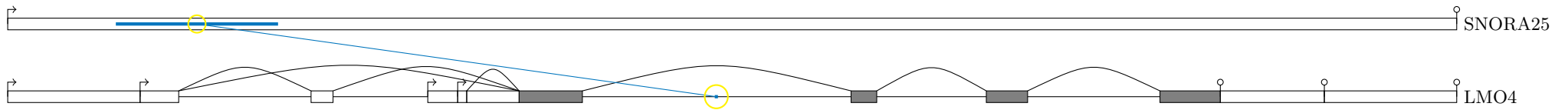
H. Sap	-----at	gggTCATTTC	CAAGAGGG	cttatgagg	ctgtgaa	acc--...84	...--gg	gagata	aaaa	cgtaataa
R. Mac	-----at	aggTCATTTC	CAAGAGGG	ctcatgagg	ctgtgaa	acc--...83	...--gg	gagata	aaaa	cttaataa
P. Tro	-----at	gggTCATTTC	CAAGAGGG	ctcatgagg	ctgtgaa	acc--...84	...--gg	gagata	aaaa	cgtaataa
P. Abe	-----at	gggTCATTTC	CAAGAGGG	ctcatgagg	ctgtgaa	acc--...83	...--gg	gagata	aaaa	cgtaataa
C. Jac	-----t	aggTCATTTC	CAAGAGGG	ctcatgagg	ctgtgaa	acc--...83	...--gg	gagata	aaaa	cttaataa
M. Mus	tcccatata	acatacaat	gaaggTCATTTC	CAAGAGGG	cttttggg	ctataaaa	acc--...83	...--ga	agataa	caatac
R. Nor	-----g	gtagcga	aggTCATTTC	CAAGAGGG	cttg-gtgg	ctgtgaa	acc--...77	...gaga	agataa	catc--
C. Por	-----a	actatac	aggTCATTTC	CAAGAGGG	cttgggga	atgtgaa	acc--...76	...--tg	aggaga	aaaga
O. Cun	-----a	aataataa	aggTCATTTC	CAAGAGGG	cttgggac	catgag	acc--...82	...--gg	agatac	aaaga
C. Fam	-----c	ttgcagt	aggTCATTTC	CAAGAGGG	cttgggac	--taaa	acc--...79	...--gg	agatac	aaaga
F. Cat	-----t	aatttat	aggTCATTTC	CAAGAGGG	cttgggac	--taaa	acc--...77	...--gg	agatac	aaaga
B. Tau	-----g	ttttgt	aggTCATTTC	CAAGAGGG	ctgatggg	ac--caat	cctgg...77	...--gg	agatac	aaaga
E. Cab	-----t	tatgtat	aggTCATTTC	CAAGAGGG	cttatggg	actgtgaa	acc--...75	...--gg	agatac	aaaga
L. Afr	-----a	agatac	aggTCATTTC	CAAGAGGG	cttgggag	ttgtgag	acc--...82	...--gg	agatac	aaaga
			*****	*****						

id=614967 gene=ENSG00000207112 name=SNORA25 segment=chr11.93463679\_93463812\_-1 type=EN

H. Sap	aggttcag	gtaggc	atgccc...1515	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
R. Mac	aggttcag	gtaggc	atgccc...1514	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
P. Tro	aggttcag	gtaggc	atgccc...1504	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
P. Abe	aggttcag	gtaggc	atgccc...1517	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
C. Jac	aggttcag	gtaggc	atgccc...1502	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
M. Mus	agattcag	gtaggc	atgccc...1520	..ggg	gaaagt	gtgcaag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
R. Nor	agattcag	gtaggc	acctgc...1493	..ggg	gaaagt	gtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
C. Por	aggttcag	gtaggc	cctgccc...1434	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
O. Cun	aggttcag	gtaggc	atgccc...1514	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
C. Fam	aggttcag	gtaggc	acagccc...1500	..ggg	gaaagt	tattgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
F. Cat	agattcag	gtaggc	acacccc...2317	..ggg	gaaagt	gtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
B. Tau	aggttcag	gtaggt	gtacccc...1475	..ggg	gaaagt	ttttgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
E. Cab	aggttcag	gtaggc	atgccc...1480	..ggg	gaaagt	gtgtgag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
L. Afr	aggttcag	gtaggt	atgccc...1726	..ggg	gaaagt	gtggag	ctttTCTTCTTTGAAa	ATGG	agcatt	cctatta	atagttc...47	..ttc	tctttg	cag	gctggaca
	** **	****	****	*	*****	*	*****	*****	*****	*****	*****	*****	*****	*****	*****

id=761797 gene=ENSG00000162374 name=ELAVL4 segment=chr1.50661459\_50663100\_1 type=IN

Figure 238: CS=10.92



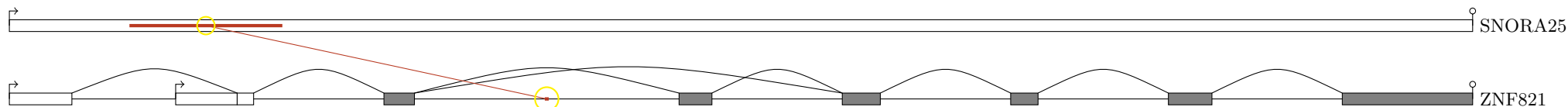
H. Sap	-----aTTTGTAT	GGGTCA	ttTCAAAg	AGGG	cttatgaggctgtgaa	accagagctctta	acgctgtgac	caaagatgga	agtttctctatag	gaagccatag-cact	cctaatgtttg	gtgcta-tg--	ttttc	tga-ggagata	aaaa	cgtaataa	
R. Mac	attt-----GTAT	aGGTCA	ttTCAAAg	AGGG	ctcatgaggctgtgaa	accagagctctta	acgctgtgac	caaagatgga	agtttctctatag	gaagccatag-cact	cctaatgtttg	gtgcta-tg--	ttttc	tga-ggagata	aaaa	cttaataa	
P. Tro	-----aTTTGTAT	GGGTCA	ttTCAAAg	AGGG	ctcatgaggctgtgaa	accagagctctta	acgctgtgac	caaagatgga	agtttctctatag	gaagccatag-cact	cctaatgtttg	gtgcta-tg--	ttttc	tga-ggagata	aaaa	cgtaataa	
P. Abe	-----aTTTGTAT	GGGTCA	ttTCAAAg	AGGG	ctcatgaggctgtgaa	accagagctctta	acgctgtgac	caaagatgga	agtttctctatag	gaagccatag-cact	cctaatgtttg	gtgcta-tg--	ttttc	tga-ggagata	aaaa	cgtaataa	
C. Jac	tttt-----GTAT	aGGTCA	ttTCAAAg	AGGG	ctcatgaggctgtgaa	accagagctctta	acgctgtgac	caaagatgga	agtttctctatag	gaagccatag-cact	cctaatgtttg	gtgcta-tg--	ttttc	tga-ggagata	aaaa	cttaataa	
R. Nor	ggtagcgaa-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattgat	gtttctccacagag	cagaccatgcactt	---tgtgat	agtgctg	----	ttttc	tga-gaagat--	aacatgcatttc
C. Por	aactataca-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattgat	gtttctccacagag	cagaccatgcactt	---tgtgat	agtgctg	----	ttttc	tga-ggaga---	aagatgcattgataa
O. Cun	aataataaa-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattgat	gtttctccacagag	cagaccatgcactt	---tgtgat	agtgctg	----	ttttc	tga-ggagata	acaagattgagcca
C. Fam	cttgacgta-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattgat	gtttctccacagag	cagaccatgcactt	---tgtgat	agtgctg	----	ttttc	tga-ggagata	acaagattgagcca
B. Tau	gtttttga-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattgat	gtttctccacagag	cagaccatgcactt	---tgtgat	agtgctg	----	ttttc	tga-ggagata	acaagattgagcca
E. Cab	ttat-----GTAT	aGGTCA	ttTCAAAg	AGGG	cttatgaggctgtgaa	accagagctctta	acgctgtgac	caaagattga	gtttctccacagag	tgcc--agtcagtc	----agtagt	gctg	tg--	tttc	tga-ggagata	aaaa	tggtggcaa
S. Sus	aatattata-----	-GGTCA	ttTCAAAg	AGGG	ctgatggg	acca--aatccag	gagctctta	acgctgtgac	caaagattga	attctccatag	gatgtaatagtcactt	---gatag	tgcta-tg--	ttttc	tga-ggagata	acaagattgagcca	
O. Avi	atttttgta-----	-GGTCA	ttTCAAAg	AGGG	ctgatggg	acca--aatccag	gagctctta	acgctgtgac	caaagattga	attctccatag	gatgtaatagtcactt	---gatag	tgcta-tg--	ttttc	tga-ggagata	acaagattgagcca	
L. Afr	aaagataca-----	-GGTCA	ttTCAAAg	AGGG	cttgggaa	tggtgtaaaa	ccaaagctctta	acgctgtgac	caaagattga	gtttctccacagag	ccacagtcactt	---ggtag	tgctg	ttt--	ttttc	tga-ggagata	acaagattgagcca
		*****	***	*****		*	**	**	**	***	***						

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H. Sap	tacattag	gtaagactttgc...	4546...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	CATATc	TGAA	gatatgattaa	agtacaaaa...	355...	tctttg	tttcag	gttatttg
R. Mac	tacattag	gtaagactttgc...	4543...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	cATAT	ctcaagat	atgattaa	agta-----	363...	tctttg	tttcag	gttatttg
P. Tro	tacattag	gtaagactttgc...	4548...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	CATATc	TGAA	gatatgattaa	agtacaaaa...	353...	tctttg	tttcag	gttatttg
P. Abe	tacattag	gtaagactttgc...	4551...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	CATc	TGAA	--gatatgattaa	agtacaaaa...	352...	tctttg	tttcag	gttatttg
C. Jac	tacattag	gtaagactttgc...	4540...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	cATAT	ctcaagat	atgattaa	agta-----	366...	tctttg	tttcag	gttatttg
R. Nor	tacattag	gtaagactttgc...	4496...	agatata	caaatcctct	TTAAC	CCCTTTTGATGACT	catctct	caagat	atgatta-----	411...	tctctg	ctgcag	gttatttg
C. Por	tacattag	gtaagactttgc...	4551...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	360...	tctttg	tttcag	gttatttg	
O. Cun	tacattag	gtaagactttgc...	4513...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	cgagat	atgatta-----	398...	tctctg	tttcag	gttatttg	
C. Fam	tacattag	gtaagactttgc...	4521...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	390...	tctttg	tttcag	gttatttg	
B. Tau	tacattag	gtaagactttgc...	4534...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	377...	tctttg	tttcag	gttatttg	
E. Cab	tacattag	gtaagactttgc...	4540...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	cATAT	ctcaagat	atgattaa	agta-----	366...	tctgtg	tttcag	gttatttg
S. Sus	tacattag	gtaagactttgc...	4520...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	391...	tctctg	tttcag	gttatttg	
S. Sus	tacattag	gtaagactttgc...	4535...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	376...	tctttg	tttcag	gttatttg	
O. Avi	tacattag	gtaagactttgc...	4535...	----atacaat	caaatcctcttaa	CCCTTTTGATGACT	catatct	caagat	atgatta-----	376...	tctttg	tttcag	gttatttg	
L. Afr	tacattag	gtaagactttgc...	4540...	----acacaat	caaatcctcttaa	CCCTTTTGATGACT	catagct	caagat	atgatta-----	371...	tctttg	tttcag	gttatttg	
	*****	*****		*	*****	*****	*****	*****		***	*	***	*****	

id=781913 gene=ENSG00000143013 name=LMO4 segment=chr1.87797935\_87805218.1 type=IN

Figure 239: CS=10.92



H. Sap	at tt t g t a - T	<b>GGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t a t g a g g c t g t g a a a c c c a g a g c t c t t a a c g c t g t g a c c a a a g a t g g a a g t t c t c t a t a g g a a g c c a t a g - c a c t c c t a a t g t t t g g t g c t a t g - - t t t t c c t g a - g g a g a t a t a a a a	c g t a a t a a
R. Mac	at tt t g t a - T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t c a t g a g g c t g t g a a a c c c a g a g c t c t t a a c g c t g t g a c c a a a g a t g g a a g t t c t c t a t a g g a t g c c a t a g - c a c t c c t - a t g t t t g g t g c t a t g - - t t t t c c t g a - g g a g a t a t a a a a	c t t a a t a a
P. Tro	at tt t g t a - T	<b>GGGTCAT</b>	<b>TCAAAGAGGG</b>	c t c a t g a g g c t g t g a a a c c c a g a g c t c t t a a c g c t g t g a c c a a a g a t g g a a g t t c t c t a t a g g a a g c c a t a g - c a c t c c t a a t g t t t g g t g c t a t g - - t t t t c c t g a - g g a g a t a t a a a a	c g t a a t a a
P. Abe	at tt t g t a - T	<b>GGGTCAT</b>	<b>TCAAAGAGGG</b>	c t c a t g a g g c t g t g a a a c c c a g a g c t c t t a a c g c t g t g a c c a a a g a t g g a a g t t c t c t a t a g g a a g c c a t a g - c a c t c c t - a t g t t t g g t g c t g t g - - t t t t c c t g a - g g a g a t a c a a a a	c g t a a t a a
C. Jac	t t t t g t a - T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t c a t g a g g c t g t g a a a c c c a g a g c t c t t a a c g c t g t g a c c a a a g a t a g a a g t t c t c t a t g g g a t g c c a t a g - c a c t c t t - a t g t t t g g t g c t g t g - - t t t t c c c a - g g a g a t a t a a a a	c t t a a t a a
R. Nor	g g t a g c g a a	g - <b>GTCAT</b>	<b>TCAAAGAGGG</b>	c t t g - g t g g c t g t a a a a c c a a a a g c t c t t a a c g c t g t g a c c a a a t a t t g g a g t t c t c c a c a g a g a t g a a g t t c t c c a c a g a g c a c c a t g c a c t t t g t g - - a t a g t g c t g - - - - t t t t c t g a - g a a g a t - - a a c a	t g c a t t t c
C. Por	a a c t a t a - C	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t g t g g g a a t g t g a a a c c a a g a g c t c t t a a c g c a g t g a c c a c a g a a t g a a g t t c t c c a c a g t a c g t c a t a g t c a c t c - - - a - - - g t a g t g c t a t g - - t t t t c c t g a - g g a g a - - - a a g a	c a t g a t a a
O. Cun	a a t a t a a -	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t g t g g a g c c a t g a g a c c a a g a g c t c t t a a c g c t g t g a c c a a a g a c t g a t g t t c t c c a c a g g a t g c c a t a a t c a c t c a g t a - - - g t a g t g c t g t g - - t t t t c c t g a - g g a g a t a c a a g a	t t g a g c c a
C. Fam	- c t t g c a g T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t g t g g g a c - - t a a a a c c a a g a g c t c t t a a c g c t g t g a c c a a a t a t t g g a g t t c t c c a t a g g a t g t a a t a g t t a c t c - - - a - - - a t a g t c t a t g t t t t t c c t g a - g g a g a t a c a g g a	t t t a g c t g
B. Tau	g t t t t - G T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t <b>GATGGG</b> - - a c c a a t c c t g g a g c c t t a a c g c t g t g a c c a a a g a c t g a - a t t c t c c a t t g g a t a t a a t a g t c a c t t g - - - - - a t a g t g c t a t g - - t t t t c c t g a t g g a g a t a c a a g c	c a c t c a t a
E. Cab	t t a t g t a - T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t a t g g a g c t g t g a a a c c a g g a g c t c t t a a c g c t a t g a c c a a a g a t t g a - g t t c t c c a t a g g a t g c c - - a g t c a g t c - - - a - - - g t a g t g c t g t g - - t t t c c t g a - g g a g a t a c a a a a	t g t g g c a a
O. Avi	a t t t t - G T	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t <b>GATGGG</b> - - a c c a a t c c t g g a g c c c t c a a c g c t g t g a - - - - - a t a g t g c t a t g t t t t t c c t g a - - - - - t t t c c t g a - g g a g a t a c a a a a	- - - - -
L. Afr	a a a g a t a - C	<b>AGGTCAT</b>	<b>TCAAAGAGGG</b>	c t t g t g g a t t g t g a g a c c a g g g c t c t t a a c g c t g t g a c c t a a g a t g a a a g t t c t c c a c a g a a c g c c a c a g t c a c t c g g t a - - - g t - g t g c t g t t - t t t t c c t g a - g g a g a t a c a a g a	t g a t a t g c
		**** * * * * * * * * * * *			

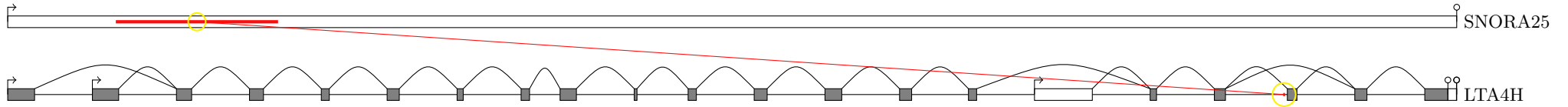
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H. Sap	ag t t c a c t	g t g a g t a t c g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
R. Mac	ag t t c a c t	g t g a g t a t c g g a . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
P. Tro	ag t t c a c t	g t g a g t a t c g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
P. Abe	ag t t c a c t	g t g a g t a t c g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
C. Jac	ag t t c a c t	g t g a g t a t t g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t a c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
R. Nor	ag t t c a c t	g t g a g t a c t g g g . . . 4 8 6 7 . . . - - - - - - a c t c a g g g t a c t t g c c t c t c	<b>TCCT</b> cc	<b>TTTGAATGGT</b>	g t g a g c t t c c g a c t a g t t t g - - - . . . 4 1 . . . t g t g a c c a c c a g	g g g a t c a a
C. Por	ag t t c a c t	g t g a g t a c t g a g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c c t t c c a a t g a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
O. Cun	ag t t c a c t	g t g a g t a t t g g g . . . 4 8 6 6 . . . - - - - - - a c c a c - g g g t a c c t g c c t g t c	<b>TCC</b> - <b>TC</b>	<b>TTTGAATGGTCTG</b>	a c c t t c c a g c c a g c t t g c c - - . . . 4 1 . . . t g t g a c c a c c a g	g g g a t c a a
C. Fam	ag t t c a c t	g t g a g t a c t g g g . . . 4 8 6 3 . . . - - - - - - c c a t a g g g t a c c t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c t t t t c a a c c a g c t t g c c t - . . . 4 2 . . . t g t g a c c a c c a g	g g g a t c a a
B. Tau	ag t t c a c t	g t g a g t a t g g g a . . . 4 8 5 9 . . . a c c c a c c a c a g g g t a c c t g c	<b>CCTGTCTCCT</b> ac	<b>CTTTGAATGGTCTG</b>	c t t t c c a a c c a g c t t g c c t g . . . 3 9 . . . t g t g a c c a c c a g	g g g a t c a a
E. Cab	ag t t c a c t	g t g a g t a t a g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t t c t t g c c t g t c	<b>TCCT</b> ac	<b>CTTTGAATGGTCTG</b>	a c t t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
O. Avi	ag t t c a c t	g t g a g t a t g g g g . . . 4 8 5 9 . . . a c c c a c c a c a g g g t a c c t g c	<b>CCTGTCTCCT</b> ac	<b>CTTTGAATGGTCTG</b>	c t t t c c a a c c a g c t t g c c t g . . . 3 9 . . . t g t g a c c a c c a g	g g g a t c a a
L. Afr	ag t t c a c t	g t g a g t a c t g g g . . . 4 8 6 5 . . . - - - - - - c c a c a g g g t a c c t g c c t g t c	<b>TCCT</b> TC	<b>TTTGAATGGTCTG</b>	a c c t t c c a a c c a g c t t g c c t - . . . 4 0 . . . t g t g a c c a c c a g	g g g a t c a a
		***** * * * * * * * * * * *				

id=708640 gene=ENSG00000102984 name=ZNF821 segment=chr16.71901941.71913809.-1 type=IN

Figure 240: CS=10.14





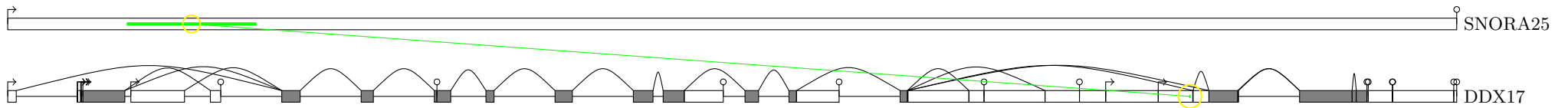
H. Sap	at ttgtat	gg-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttatgaggctgtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgtttggtgctatg---ttttcctga-ggagatataaaa	cgtaataa					
R. Mac	at ttgtat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctcatgaggctgtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcct-atgtttggtgctatg---ttttcctga-ggagatataaaa	cttaataa					
P. Tro	at ttgtat	gg-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctcatgaggctgtgaaaccagagctcttgacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgtttggtgctatg---ttttcctga-ggagatataaaa	cgtaataa					
P. Abe	at ttgtat	gg-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctcatgaggctgtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcct-atgtttggtgctatg---ttttcctga-ggagatataaaa	cgtaataa					
C. Jac	ttttgtat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctcatgaggctgtgaaaccagagctcttcacgctgtgaccaaagatagaagtctctatgggatgccatag-cactcct-atgtttggtgctatg---ttttcccca-ggagatataaaa	cttaataa					
M. Mus	tcccatat	acataca	<b>ATGAA</b>	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	<b>TTTTGGG</b>	ctataaaaccacagctcttaacgctgtgaccaaagattgatgttcttcacagagaaaatcctgcactgtttt-gatagtgcctgtg---ttttcctga-gaagataacata	ccctgaat			
R. Nor	ggtagcga	a-----	<b>GGTCA</b>	<b>TTCAA</b>	ag	<b>AGGG</b>	cttg-gtggctgtaaaacaaaagctcttaacgctgtgaccaaagatgtatgttcttcacagagcagaccatgcact-ttgt--gatagtgc--tg---ttttcctga-gaagataacatg	catttc--				
O. Cun	aataataa	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttgaggccatgagaccaagagctcttaacgctgtgaccaaagactgatgttctccacagagatgccataatcactc---agtagtagtgcctgtg---ttttcctga-ggagatacaaga	ttgagcca					
C. Fam	cttgcaat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttgaggacta--aaaccaagagctcttaacgctgtgaccaaattggagtctccataggaatgtaatagttactc-----aatagtgcctatg-tttttcctga-ggagatacagga	tttagctg					
F. Cat	taatttat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttgaggacta--aaaccaagagcccttaacgctgtgaccaaagactgatgttctccataggaatgtaatagttactc-----agtagtgcctatg---ttttcctga-ggagatacaaga	tttagctc					
B. Tau	gtttttgt	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttgaggacta--aaaccaagagcccttaacgctgtgaccaaagactgaa-ttctccattggatataatagtcactc-----gatagtgcctatg---ttttcctga-ggagatacaaga	cactcata					
E. Cab	ttatgtat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	cttatggagctgtgaaaccagagctcttaacgctatgaccaaagattga-gtctccatagatgcc--agtcagtc-----agtagtgcctgtg---ttttcctga-ggagatacaaaa	tgtagcaa					
S. Sus	aattttat	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctgatgggacca--aatccaggagctcttaacgctgtgaccaaagattgaa-ttctccataggaatgtaatagtcactc-----gatagtgcctatg---ttttcctgatggagatacagaa	tttagctac					
O. Avi	at tttgt	ag-----	<b>GTCATTCAA</b>	ag	<b>AGGG</b>	ctgatgggacca--aatccaggagccctcaacgctgtga	-----					
L. Afr	aaagatac	ag-----	<b>GTCAT</b>	<b>cTCAA</b>	ag	<b>AGGG</b>	<b>CTTG</b>	tgtagaccaggggctcttaacgctgtgacctaagatgaaagtctccacagaaagccacagtcactc-----gtagtgcctgtgtttttcctga-ggagatacaaga	tgatagtc			
			*****	***	*****		*	**	**	*	*****	***

id=614967 gene=ENSG00000207112 name=SNORA25 segment=chr11.93463679\_93463812\_-1 type=EN

H. Sap	tccagagg	gtaagtactagc...2318...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
R. Mac	tccagagg	gtaagtactagc...2264...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
P. Tro	tccagagg	gtaagtactagc...2323...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
P. Abe	tccagagg	gtaagtactagc...2308...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
C. Jac	tccagaag	gtaagtactagc...2607...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
M. Mus	ttcagaag	gtgagccccagc...1379...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
R. Nor	ttcagaag	gtgagccccagc...1352...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
O. Cun	tgagagaa	gtaagcacacc...1746...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
C. Fam	tccagaaa	gtaagtactagc...2122...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
F. Cat	tccagaaa	gtaagtactagc...2234...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
B. Tau	tccagaat	gtaagtactagc...2593...	-----	cactcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
E. Cab	tccagaga	gtaagtactggc...2009...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
S. Sus	tccagaaa	gtaagtactagc...1891...	-----	agctcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
O. Avi	tccagagt	gtaagtactagt...2603...	-----	cactcctttcttccaaggaa	<b>TCCTgTTGAAATGAT</b>	acggtatacttctttat tttgtctcttag	gcacctct			
L. Afr	tccagaaa	gtaagtactagc...2485...	aat ttttctccagctcctt	<b>CTTC</b>	<b>cCAGG</b>	aa <b>TCCTgTTGAA</b>	<b>ATGAT</b>	acggtatgcttctttat tttgtctcttag	gcacctct	
			* ****	** **		** *****	*****	* * ****	** **	*****

id=134303 gene=ENSG00000111144 name=LTA4H segment=chr12.96397699\_96400091\_-1 type=IN

Figure 241: CS=16.2



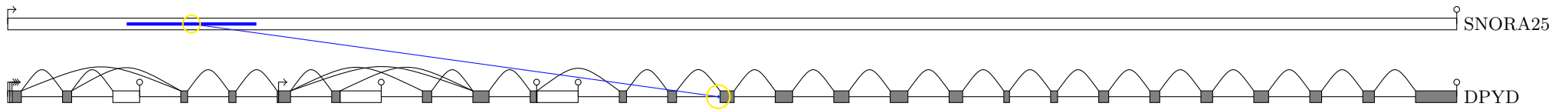
H. Sap	at ttgtat	ggg-----TCATTTCAAAGAG	ggcttatgaggctgtgaaaccagagctcttaacgctgtg:::::gtgctatg--ttttcctga-ggagatataaaa	cgtaataa
R. Mac	at ttgtat	agg-----TCATTTCAAAGAG	ggctcatgaggctgtgaaaccagagctcttaacgctgtg:::::gtgctatg--ttttcctga-ggagatataaaa	cctaataa
P. Tro	at ttgtat	ggg-----TCATTTCAAAGAG	ggctcatgaggctgtgaaaccagagctcttgacgctgtg:::::gtgctatg--ttttcctga-ggagatataaaa	cgtaataa
P. Abe	at ttgtat	ggg-----TCATTTCAAAGAG	ggctcatgaggctgtgaaaccagagctcttaacgctgtg:::::gtgctgtg--ttttcctga-ggagatacaaaa	cgtaataa
C. Jac	ttttgtat	agg-----TCATTTCAAAGAG	ggctcatgaggctgtgaaaccagagctcttcacgctgtg:::::gtgctgtg--ttttcccca-ggagatataaaa	cctaataa
M. Mus	tcccatat	acaTACAAtGAAGGTCATTTCAAAGAG	ggctttttgggctataaaaaccacagctcttaacgctgtg:::::gtgctgtg--tttttctga-gaagataacata	ccctgaat
R. Nor	-----	--gGTAGcGAAGGTCATTTCAAAGAG	ggcttggg--ggctgtaaaacaaaagctcttaacgctgtg:::::gtgc--tg--tttttctga-gaagataacatg	catttc--
C. Por	aactatac	agg-----TCATTTCAAAGAG	ggcttggggaatgtgaaaccagagctcttaacgctgtg:::::gtgctatg--ttttcctga-ggaga--aaga	catgataa
O. Cun	aataata-	-----AAGGTCATTTCAAAGAG	ggcttgggagccatgagaccaagagctcttaacgctgtg:::::gtgctgtg--ttttcctga-ggagatacaaga	ttgagcca
C. Fam	cttgca	agg-----TCATTTCAAAGAG	ggcttggggac--taaaaccaagagctcttaacgctgtg:::::gtgctatgttttttctga-ggagatacagga	tttagctg
F. Cat	taatttat	agg-----TCATTTCAAAGAG	ggcttggggc--taaaaccaagagcccttaacgctgtg:::::ttgctatg--ttttcctga-ggagatacaaga	tttagctc
B. Tau	gtttttgt	agg-----TCATTTCAAAGAG	ggctgatgggac--caaactctggagcccttaacgctgtg:::::gtgctatg--ttttcctgatggagatacaagc	cactcata
E. Cab	ttatgtat	agg-----TCATTTCAAAGAG	ggcttatggagctgtgaaaccagagctcttaacgctatg:::::gtgctgtg--tttcctga-ggagatacaaaa	tgtggcaa
O. Avi	at ttgtat	agg-----TCATTTCAAAGAG	ggctgatgggac--caaactctggagccctcaacgctgtg:::::-----	-----
L. Afr	aaagatac	agg-----TCATCTCAAAGAGGGctTGTG	agttgtgagaccagggctcttaacgctgtg:::::gtgctgtt--tttttctga-ggagatacaaga	tgatatgc

id=614967 gene=ENSG00000207112 name=SNORA25 segment=chr11.93463679\_93463812.-1 type=EN

H. Sap	tccaaca	gagtagaagtga..213..	----gaatcagtaaatcctcttttaCTCTgTTGGGATGA	----gtcttttttgtttctgttcagag	tggttact
R. Mac	tccaaca	gagtagaagtga..213..	----gaatcgtaaatcctcttttaCTCTgTTGGGATGA	----gtcttttttgtttctgttcagag	tggttact
P. Tro	tccaaca	gagtagaagtga..213..	----gaatcagtaaatcctcttttaCTCTgTTGGGATGA	----gtcttttttgtttctgttcagag	tggttact
P. Abe	tccaaca	gagtagaagtga..213..	----gaatcagtaaatcctcttttaCTCTgTTGGGATGA	----gtcttttttgtttctgttcagag	tggttact
C. Jac	tccaaca	gagtagaagtga..211..	----caggaatcagtaaatcctcttttaCTCTgTTGGGATGA	----gtctcttttgtttctgttcagag	tggttact
M. Mus	tccaaca	gagtagaagtga..207..	----gtggcactgatcctcttttaCTCTgTTGGGATGAgtCTTTTttTTGTA	----cctactcaggg	cagttact
R. Nor	tccaaca	gagtagaagtga..206..	----acggcactgatcctcttttaCTCTgTTGGGATGA	----acctactcaggg	tggtcact
C. Por	tccaaca	gagtagaagtga..210..	----gaaccactaatcctcttctaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
O. Cun	tccaaca	gagtagaagtga..189..	----cactaatcaatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
C. Fam	tccaaca	gagtagaagtaa..192..	----gaatcattcatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
F. Cat	tccaaca	gagtagaagtaa..189..	----gaatcagtaaatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
B. Tau	tccaaca	gagtagaagtga..181..	----gcatcattaatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
E. Cab	tccaaca	gagtagaagtga..193..	----gaatcattaatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
O. Avi	tccaaca	gagtagaagtga..181..	----gcatcattaatcctcttttaCTCTgTTGGGATGA	----gtc-ttttttgttccttcagag	tggttact
L. Afr	tccaaca	gagtagaagtga..210..	cccagaatcactaatcctcTTGTTACTCTgTTGGGATGA	----gtc-ttttttgtttctgttcagag	tggttact

id=495331 gene=ENSG00000100201 name=DDX17 segment=chr22.38884253\_38884535.-1 type=AN

Figure 242: CS=14.4



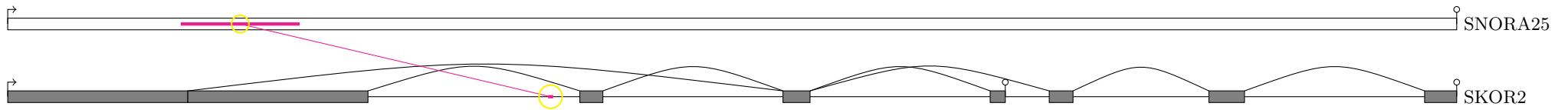
H. Sap	-----atttgtat	ggg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TTAT</b>	gaggctgtga	aaccagagc	---.79...	--ggagatataaaa	cgtaataa
R. Mac	-----atttgtat	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TCAT</b>	gaggctgtga	aaccagagc	---.78...	--ggagatataaaa	cttaataa
P. Tro	-----atttgtat	ggg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TCAT</b>	gaggctgtga	aaccagagc	---.79...	--ggagatataaaa	cgtaataa
P. Abe	-----atttgtat	ggg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TCAT</b>	gaggctgtga	aaccagagc	---.78...	--ggagatacaaaa	cgtaataa
C. Jac	-----ttttgtat	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TCAT</b>	gaggctgtga	aaccagagc	---.78...	--ggagatataaaa	cttaataa
M. Mus	tcccatatac	aat	<b>GAAGGTC</b> ATTTC <b>AAAGAGGGCTTTT</b> <b>TG</b>	ggctataaaa	accacagctc	..76...	--gaagataacata	ccctgaat
R. Nor	-----ggt	agg	<b>GAAGGTC</b> ATTTC <b>AAAGAGGGCT</b> <b>TG</b>	gtggctgt	aaaacaaaa	---.75...	gagaagataacatg	catttc--
C. Por	-----aactatac	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TTGT</b>	gggaatgtga	accaagagc	---.71...	--tggagagaaga	catgataa
O. Cun	-----aataata-	---	<b>AAGGTC</b> ATTTC <b>AAAGAGGGC</b> <b>TTGT</b>	ggagccatg	agaccaagagc	---.77...	--ggagatacaaga	ttgagcca
C. Fam	-----cttgcagt	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TTGT</b>	gggac--	taaaaccaagagctc	..74...	--ggagatacagga	tttagctg
F. Cat	-----taatttat	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TG</b>	tgtgggc--	taaaaccaagag	---.75...	--ggagatacaaga	tttagctc
E. Cab	-----ttatgtat	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>TTAT</b>	ggagctgtga	aaccagagc	---.70...	--ggagatacaaaa	tgtggcaa
S. Sus	-----aattttat	agg----	<b>TCATTTC</b> AAAGAGGG <b>C</b> <b>CTG</b>	atgggacca	aatccagagc	---.74...	--ggagatacagaa	ttagctac
L. Afr	-----aaagatac	agg----	<b>TCAT</b> c <b>TCAAAGAGGGC</b> <b>TTGT</b>	ggagttgtg	agaccaggggc	---.77...	--ggagatacaaga	tgatatgc
			**** * * * * *		* * *		**	

id=614967 gene=ENSG00000207112 name=SNORA25 segment=chr11.93463679\_93463812\_-1 type=EN

H. Sap	taaagcag	gtat-aacatatt...1595...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
R. Mac	taaagcag	gtat-aacatatt...1640...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
P. Tro	taaagcag	gtat-aacatatt...1597...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
P. Abe	taaagcag	gtat-aacatatt...1600...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
C. Jac	taaagcag	gtataaacatatt...1626...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgt
M. Mus	taaaacag	gtaa-aaccatt...1884...	gtatctttt	gagctgtcatg <b>CAGAA</b> at <b>GGTT</b> t <b>CTCT</b> ac <b>TTGAAa</b> <b>ATGG</b> gg <b>TTTT</b> C	ctttcatcgttcag	gaatgtgc
R. Nor	caaaccag	gtaa-aatctatt...1926...	-----ttgagctgtcatgcagaa	at <b>GGTT</b> t <b>CTCT</b> ac <b>TTGAAa</b> <b>ATGG</b> gg <b>TTTT</b> C	ctttcatcgttcag	gaatgtgc
C. Por	taaaccag	gtaa-aatatgtt...1657...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgt
O. Cun	taaagcag	gtat-aacatatt...1561...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b> gg <b>TTTT</b> C	ctttcatcattcag	gaatgtgc
C. Fam	taaagcag	gtat-aacattgt...1726...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
F. Cat	taaagcag	gtat-agtgttat...1421...	-----tcctactgatnnnnnnnn	<b>GGTT</b> t <b>CTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	ggatgtgc
E. Cab	taaaccag	gtat-aacatatt...1877...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
S. Sus	taaagcag	gtat-cacatatt...1932...	-----ttttgagctgtcatgcagaa	<b>TGGT</b> t <b>TCTCT</b> ac <b>CTT</b> g <b>AAATGG</b>	ggttttcctttcatcattcag	gaatgtgc
L. Afr	taaaccag	gtat-aacatatt...1888...	-----ttttgagctgtcatgcagaa	<b>ATGGT</b> <b>TTCTCT</b> ac <b>TTGAAa</b> <b>ATGG</b>	ggttttcctttcatcattcag	gaatgtgc
	*** **	***	* **	*****	*****	* ****

id=692815 gene=ENSG00000188641 name=DPYD segment=chr1.98058944\_98060614\_-1 type=IN

Figure 243: CS=10.92



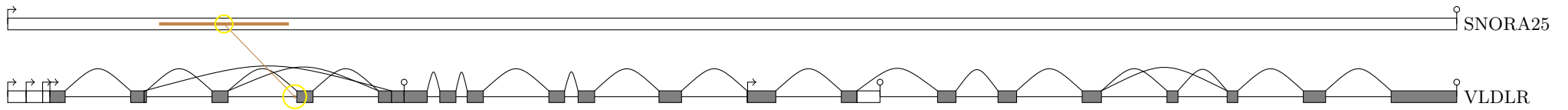
H. Sap	-----at	gggtcatt	<b>TCAAAGAGGGCTTATG</b>	<b>GGCT</b>	gtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cact-ccta	atgtttgg	gctatg	--ttttc	tga-ggagata	aaaa	cgtaataa											
R. Mac	-----at	aggtcatt	<b>TCAAAGAGGGCTCATG</b>	<b>GGCT</b>	gtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cact-cct	atgtttgg	gctatg	--ttttc	tga-ggagata	aaaa	cttaataa											
P. Tro	-----at	gggtcatt	<b>TCAAAGAGGGCTCATG</b>	<b>GGCT</b>	gtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cact-ccta	atgtttgg	gctatg	--ttttc	tga-ggagata	aaaa	cgtaataa											
P. Abe	-----at	gggtcatt	<b>TCAAAGAGGGCTCATG</b>	<b>GGCT</b>	gtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cact-cct	atgtttgg	gctatg	--ttttc	tga-ggagata	aaaa	cgtaataa											
M. Mus	tccatata	acatacatga	aggtcatt	<b>TCAAAGAGGGCTTT</b>	<b>TGGG</b>	ctataaaaccacagctcttaacgctgtgaccaaagattgatgttcttcacagagaaaatcctgcactgtttg	---atag	tgctgtg	--ttttc	tga-gaagata	aacata											
R. Nor	-----g	gtagcga	aggtcatt	<b>TCAAAGAGGGCTTg</b>	<b>GTGG</b>	-ctgtaaaccaaaagctcttaacgctgtgaccaaagattgatgttcttcacagagcagaccatg	cact-tt	gtg	---atag	tg	--ttttc	tga-gaagata	aacatg									
C. Por	-----a	aactatac	aggtcatt	<b>TCAAAGAGGGCTTg</b>	<b>TGGG</b>	aatgtgaaaccaagagctcttaacgctgtgaccaaagattgatgttcttcacagtagctatagtcact-c	---a	---	gtagt	gctatg	--ttttc	tga-ggaga	---aaga									
O. Cun	-----a	aataataa	aggtcatt	<b>TCAAAGAGGGCTTGTG</b>	<b>gag</b>	ccatgatgaccaaagagctcttaacgctgtgaccaaagactgatgttcttcacagtagc	cataat	cact-cag	t	---	gtagt	gctatg	--ttttc	tga-ggagata	acaaga							
C. Fam	-----c	ttgcagt	aggtcatt	<b>TCAAAGAGGGCTTGTGGG</b>		---actaaaaccaagagctcttaacgctgtgaccaaatttggagttctccataggtgat	aatag	tact-c	---	a---	atag	tctatg	ttttt	cctga-ggagata	acagga							
F. Cat	-----t	aatattat	aggtcatt	<b>TCAAAGAGGGCTTGTGGGCT</b>		---aaaaaccaagagcctttaa	cgctgtgaccaaagattgatgttcttcacagtagc	atag	tact-c	---	a---	gtgtt	gctatg	--ttttc	tga-ggagata	acaaga						
B. Tau	-----g	ttttt	aggtcatt	<b>TCAAAGAGGGCTg</b>	<b>ATGGG</b>	---acaaatcctggagcccttaa	cgctgtgaccaaagactga	-attt	c	caatggatata	aatag	tact-t	---	g---	atag	tctatg	--ttttc	tga-ggagata	acaagc			
E. Cab	-----t	tatgtat	aggtcatt	<b>TCAAAGAGGGCTTATGG</b>	<b>ag</b>	ctgtgaaaccagagctcttaacgctatgaccaaagattga	-gtt	c	caatag	g	---	ag	t	---	gt	g	ct	atg	---	ttttc	tga-ggagata	acaaaa
O. Avi	-----a	ttttt	aggtcatt	<b>TCAAAGAGGGCT</b>		---gatgggacaaatcctggagccctca	cgctgtga															
L. Afr	-----a	aagatac	aggtcatt	<b>TCAAAGAGGGCTTGTGGAGTT</b>		gtgagaccagggctcttaacgctgtgac	taagatgaaagtcttcacagaa	ccacag	t	cact-cg	ta	---	gt	-gt	g	ct	g	tt	---	ttttc	tga-ggagata	acaaga
				*****	*****		*	**	**	**	****	***										

id=614967 gene=ENSG00000207112 name=SNORA25 segment=chr11.93463679\_93463812.-1 type=EN

H. Sap	acaagat	gtaaatatcccc...871...caaaaaatgatgtctcctga	<b>GGCTcCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttttccacacag	agtcagaa											
R. Mac	acaagat	gtaaatatcccc...898...aaaaaatgatgtctcctga	<b>GGCTcCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttttccacacag	agtcagaa											
P. Tro	acaagat	gtaaatatcccc...879...caaaaaatgatgtctcctga	<b>GGCTcCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttttccacacag	agtcagaa											
P. Abe	acaagat	gtaaatatcccc...1769...caaaaaatgatgtctcctga	<b>GGCTcCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttttccacacag	agtcagaa											
M. Mus	acaagat	gtaaatatcccc...784...-----aaaaaatgtctccgaggc	<b>TCCATGGAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttgtccacacag	aatcagaa											
R. Nor	acaagat	gtaaatatctc...804...-----aaaa-aaagtctcctgaggc	<b>CCATgGAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttgtccacacag	aatcagaa											
C. Por	acaagat	gtaaatatcccc...886...-----aaatgatgtctcctgaggc	<b>CCCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttctccacacag	aatcagaa											
O. Cun	acaagat	gtaaatatcccc...773...-----aaatgatgtctcctgaggc	<b>CGTgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttctccacacag	aatcagaa											
C. Fam	acaagat	gtaaatatcccc...900...-----aaatgatgtctcctgaggc	<b>TCCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttctcctcagag	aatcagaa											
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O. Avi	acaagat	gtaaatatcccc...901...-----agtctcctgaggctccacgg	<b>AGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttctccacacag	aatcagaa											
L. Afr	acaagat	gtaaatatcccc...1023...caaaaaatgatgtctcctgg	<b>GGCTCCATGgAGTCaCTTT</b>	<b>TTGA</b>	tgcttcttctgctgactgt...49...ttctccacacag	aatcagaa											
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Figure 244: CS=13.44



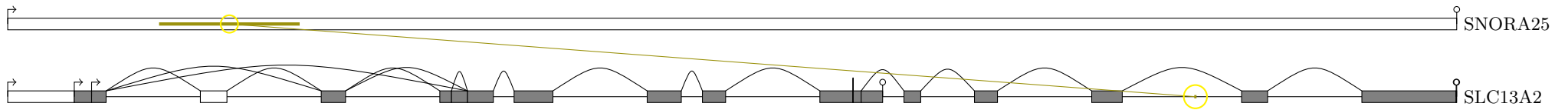
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R. Mac	-----at	agggtca	TTTCAAAGAGGGCTCA	tgAGGCTG	tgaaaccagag	ctcttaacg	ctgtg	acc	aaagatgga	agttctctat	aggaagccatag	-	ca	ct-cctaatg	tttgg	tgctatg	--	tttctga	-	ggagata	ataaaa	cttaataa		
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P. Abe	-----at	gggtca	TTTCAAAGAGGGCTCA	tgAGGCTG	tgaaaccagag	ctcttaacg	ctgtg	acc	aaagatgga	agttctctat	aggaagccatag	-	ca	ct-cctaatg	tttgg	tgctatg	--	tttctga	-	ggagata	ataaaa	cgtaataa		
C. Jac	-----	agggtca	TTTCAAAGAGGGCTCA	tgAGGCTG	tgaaaccagag	ctcttaacg	ctgtg	acc	aaagatgga	agttctctat	aggaagccatag	-	ca	ct-ctt	atg	tttgg	tgctatg	--	tttctga	-	ggagata	ataaaa	cttaataa	
M. Mus	tcccatata	caacaatga	agggtca	TTTCAAAGAGGGCTTTT	GGGCT	ataaaaacc	acagctct	taacgctgtg	acc	aaagattgat	gttcttcac	agagaaa	atcctg	ca	ctgtttt	g	--	atag	tgctgtg	--	tttctga	-	gaagata	aacata
R. Nor	-----	ggtagcga	agggtca	TTTCAAAGAGGGCTTGGT	GCTG	-	taaaac	aaaagctct	taacgctgtg	acc	aaagattgat	gttcttcac	agagc	ac	atg	ca	ct	-	tttctga	-	gaagata	aacatg	catttc	
C. Por	-----	aactatac	agggtca	TTTCAAAGAGGGCTTGGGA	atgtg	aaac	caagagctct	taacg	ctgtg	acc	acagaatga	agttcttcac	agtag	ct	ca	ct	at	g	ca	ct	at	g	ca	ta
O. Cun	-----	aataataa	agggtca	TTTCAAAGAGGGCTTGGAGC	catg	ag	ccaagagctct	taacg	ctgtg	acc	aaagactgat	gttcttcac	agga	g	ca	ct	at	g	ca	ct	at	g	ca	aa
C. Fam	-----	cttgca	agggtca	TTTCAAAGAGGGCTTGGG	actg	aa	caagagctct	taacg	ctgtg	acc	aaagattgat	gttcttcac	agga	g	ca	ct	at	g	ca	ct	at	g	ca	aa
F. Cat	-----	taatttat	agggtca	TTTCAAAGAGGGCTTGGG	-	g	ctaa	caagagcc	cttaacg	ctgtg	acc	aaagattgat	gttcttcac	agga	g	ca	ct	at	g	ca	ct	at	g	ca
B. Tau	-----	gtttttgt	agggtca	TTTCAAAGAGGGCTTGGG	-	ac	caat	cctgg	agcccttaacg	ctgtg	acc	aaagactga	attc	ca	ct	at	g	ca	ct	at	g	ca	aa	gc
E. Cab	-----	ttatgtat	agggtca	TTTCAAAGAGGGCTTGGGA	gctg	ta	aa	caagagctct	taacg	ctatg	acc	aaagattga	gttcttcac	agga	g	ca	ct	at	g	ca	ct	at	g	ca
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C. Por	gcagtgc	gtgagtgtgact...1313...	ag	cagcctg	acactgac	-----	TTCT	TGAGG	-	CTCTTTTGAGA	ctgtatatcatcaacag	atatgaga	
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C. Fam	acagtgc	gtgagtgtgact...1344...	-----	ctttgcactgat	gattgag	-----	AGG	-	CTCTTTTGAGA	ctgtatatcatcaacag	atatgaga		
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O. Avi	acagtgc	gtgagtgtgact...1319...	-----	ttt	gtgctgatgag	ttt	gga	-----	GG	-	CTCTTTTGAGA	ctgtatgtcatcaacag	atatgaga

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Figure 245: CS=16.52



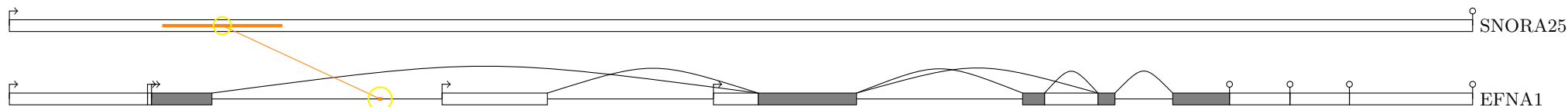
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M. Mus	tcccatatacacaatga	AGGTcATTTCAAAGaGGGCTT	--tttggctataaaaccacagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	ccctgaat
R. Nor	-----ggtagcga	AGGTcATTTCAAAGaGGGCTTGGt	--ggctgtaaaaccaaaagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	catttc--
C. Por	-----aaCTATAc	AGGTcATTTCAAAGaGGGCTTgTGGG	--aatgtgaaaccaagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	catgataa
O. Cun	-----aataataa	AGGTcATTTCAAAGaGGGCTT	--gtggagccatgagaccaagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	ttgagcca
C. Fam	-----cttgca	AGGTcATTTCAAAGaGGGCTTgTGGG	--actaaaaccaagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	tttagctg
F. Cat	-----taaTTTAT	AGGTcATTTCAAAGaGGGCTTgTGGG	--ctaaaaccaagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	tttagctc
B. Tau	-----ggtTTTGT	AGGTcATTTCAAAGaGGGCTgTGGG	--accaaatcctggagcccttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	cactcata
E. Cab	-----ttaTGTAT	AGGTcATTTCAAAGaGGGCTT	--atgagctgtgaaaccagagctcttaacgctgtgaccaaagatggaagtctctataggaagccatag-cactcctaagtgttggtgctatg--ttttcctga-ggagataataaa	tgtggcaa
O. Avi	-----attTTTGT	AGGTcATTTCAAAGaGGGCTgTGGG	--accaaatcctggagccctcaacgctgtga	-----
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P. Tro	cctccatg	gtgagctggccc...341..	-----agcctttgatgacacccccg	GAGCCCCCTTTGAGAT	cGGTTTTATGGG	cccctcccctcaccacacc...201..	ctcccactccag	gcccaggc
P. Abe	cctccatg	gtgagctggccc...341..	-----agcctttgatgacacccccg	GAGCCCCCTTTGAGAT	cGGTTTTATGGG	cccctcccctcaccacacc...201..	ctcccactccag	gcccaggc
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E. Cab	cctccatg	gtgagctggccc...326..	-----cagcctttgatgacacccccg	GAGCCCCCTTTGAGAT	ccGTTTTATGGG	cccctcccctcaccacacc...196..	ctcccactccag	gcccaggc
O. Avi	nnnnnnng	gtgagctggccc...328..	-----gcagcctttgatgacacccccg	CTGAGCCCCCTTTGAGAT	ccGTTTTATGGG	cccctcccctcaccacacc...209..	ctcccactccag	gcccaggc
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Figure 246: CS=13.44



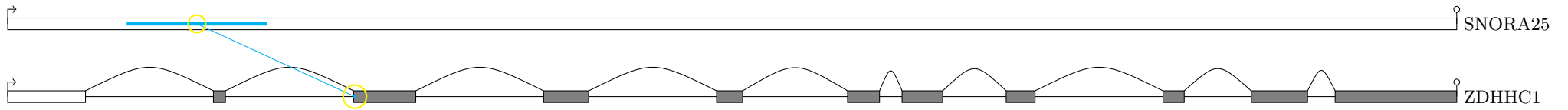
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R. Nor	-----ggtagcga	aggccaTTTCAAAGAGGG	GCTGGT	-gtaaaacc	aaagctcttaac	gctgtgaccaa	agatggaagtctct	ataggaagccatag	-cactcct-atg	tttgggtgctatg--	tttctga-ggagata	aaaa	cgtaataa	
C. Por	-----aactatac	aggccaTTTCAAAGAGGG	GCTGGT	tggaatgtga	aaccagagctctta	acgctgtgaccaa	agatggaagtctct	ataggaagccatag	-cactcct-atg	tttgggtgctg	--tttctga-ggagata	aaaa	cgtaataa	
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E. Cab	-----ttatgtat	aggccaTTTCAAAGAGGG	GCTGGT	cttatgagc	gtgaaccagagc	cttaacgctatgac	caaagatggaagtctct	ataggaagccatag	-cactcct-atg	tttgggtgctatg--	tttctga-ggagata	aaaa	cgtaataa	
O. Avi	-----atthttgt	aggccaTTTCAAAGAGGG	GCTGGT	ctgatggacca	-aatcctggagc	ctcaacgctgtga						tggtgcaa		

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O. Avi	aaccccaa	gtaagcctcgag	..1793..	-----ttccaagctcccaggtttc	-----CTCTCTTT	caGGAA	aggagcctttccttaccac	..145..	caacactgcta	tgccagg	

id=820538 gene=ENSG00000169242 name=EFNA1 segment=chr1\_155100546\_155102037\_1 type=IN

Figure 247: CS=10.14



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R. Nor	-----gtagcga	aggTCATTTCAaaAGAGGGcttggg--ggctgtaaaaccaaagctcttaacgctgtgacaaagatggaagtctctacagagaaaatcctgcactggtttg--atagtgtgctg--ttttcctga-gaagataacata	catttc--
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B. Tau	-----gtttttgt	aggTCATTTCAaaAGAGGGctgtagggac--caaatcctggagccttaacgctgtgacaaagatggaagtctctacagagaaaatcctgcactggtttg--atagtgtgctg--ttttcctga-ggagatacaagc	cactcata
E. Cab	-----ttatgtat	aggTCATTTCAaaAGAGGGcttggg--ggctgtaaaaccaaagctcttaacgctgtgacaaagatggaagtctctacagagaaaatcctgcactggtttg--atagtgtgctg--ttttcctga-ggagatacaaaa	tgtggcaa
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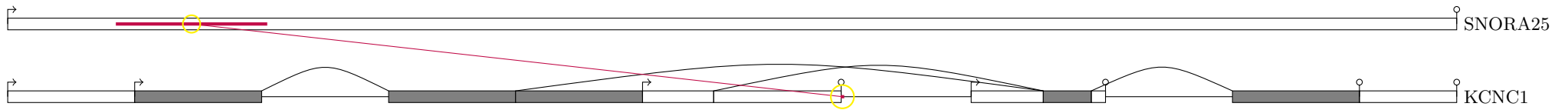
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P. Tro	tgtacaag	gtacaattttgg-...1282...--atgctctctactgtttct	CCCTCTgGAG	ATGA	acat
P. Abe	tgtacaag	gtacaattctgg-...1283...--atgctctctactgtttct	CCCTCTgGAG	ATGA	acat
M. Mus	cgtacaag	gtatagctcctg-...1636...ctaagtctctactc--ttct	CCCTCTgGAG	ATGA	acat
R. Nor	tatacaag	gtatagctcctg-...1582...ctaagtctctactc--ttct	CCCTCTgGAG	ATGA	acat
C. Por	agtacaag	gtatagttctgg-...1268...-taatgctt--ctattcttct	CCCTCTgGAG	ATGA	acat
O. Cun	tgtacaag	gtacagttctgg-...1345...--aatgctctctactccttc-	CCCTCTgGAG	ATGACC	at
C. Fam	ggtacaag	gtat-gttgaggg...1561...-taatgc--tctgtacttttct	TCCTCTgGAG	ATGA	acat
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E. Cab	tgtacaag	gta-gttctggg...1351...--atgctctctactgtttct	CCCTCTgGAG	ATGA	acat
O. Avi	tgcacaag	gtat-gttctgca...1357...--atgctgtctactcttct	CCCTCTgGAG	ATGA	acat

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Figure 248: CS=12.48





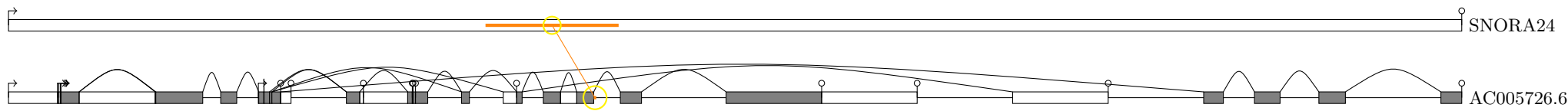
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R. Mac	atttgtat	a-----GGTCAttTCAAAGAGGG-----	ctcatgaggctgtgaaccagagctcttaacgctgtgaccaaagatggaagttctctataggaagccatag-cactcct	-atggtttggtgctatg--ttttcctga-ggagataaaaa	cttaataa
P. Tro	atttgtat	g-----GGTCAttTCAAAGAGGG-----	ctcatgaggctgtgaaccagagctcttaacgctgtgaccaaagatggaagttctctataggaagccatag-cactccta	atggtttggtgctatg--ttttcctga-ggagataaaaa	cgtaataa
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C. Jac	ttttgtat	a-----GGTCAttTCAAAGAGGG-----	ctcatgaggctgtgaaccagagctcttaacgctgtgaccaaagatggaagttctctataggaagccatag-cactcct	-atggtttggtgctatg--ttttcctga-ggagataaaaa	cttaataa
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R. Nor	-----	---ggtagcgaGGTCAttTCAAAGAGGG-----	cttttgggctataaaaccacagctcttaacgctgtgaccaaagatggaagttctctacagagaaaatcctgcactg	ttt--gatagtgctg--ttttcctga-gaagataacata	catttc--
C. Por	aactatac	a-----GGTCAttTCAAAGAGGG-----	cttgtgggaatgtgaaccagagctcttaacgctgtgaccaaagatggaagttctccacagtagcatagtcactc	-----agtagtgctatg--ttttcctga-ggaga---	aagataaa
O. Cun	aataataa	a-----GGTCAttTCAAAGAGGG-----	cttgtgggacatgagaccaagagctcttaacgctgtgaccaaagatggaagttctccacagtagcatagtcactc	-----agtagtgctatg--ttttcctga-ggagatacaga	tttagcca
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E. Cab	ttatgtat	a-----GGTCAttTCAAAGAGGG	cttatggagctgtgaaccagagctcttaacgctgtgaccaaagatggaagttctccacagtagcatagtcactc	-----aatagtgctatg--ttttcctga-ggagatacaga	tttagctc
O. Avi	atttttgt	a-----GGTCAttTCAAAGAGGGctGATGgGACC	ctt--aaaccagagctcttaacgctgtgaccaaagatggaagttctccacagtagcatagtcactc	-----aatagtgctatg--ttttcctga-ggagatacaga	tttagctc

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C. Jac	-gggcctgg	gcaagcgggagg-...4014...	-----aataaacctgattggtccatTTCTCTtTTGA	cTGACTgc
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C. Por	-tgcaatag	atgagagattag-...3522...	-----aataaatctgattggtccatTTCTCTtTTGA	cTGACTgc
O. Cun	-aggcacag	gggagcgggaga-...3783...	-----aataaacctgattggtccatTTCTCTtTTGA	cTGACTgc
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F. Cat	-agtgccgg	ggtg-agggaggc...4163...	-----aataaacctgattggtccatTTCTCTtTTGA	cTGACTgc
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E. Cab	gagtccgg	cgtagggagg-...4093...	-----aataaacctgattggtccatTTCTCTtTTGA	cTGACTgc
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Figure 249: CS=13.44



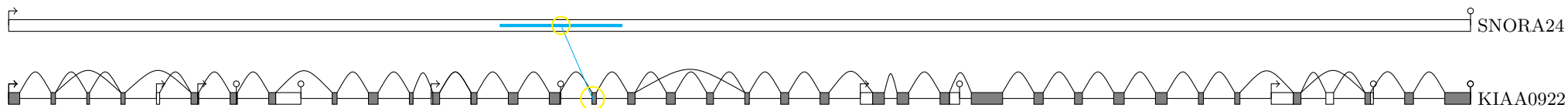
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R. Nor	ttgtgaaa	ctatccatgatccttgggacctgtcagccgtggcag	<b>TCTCCCTT</b>	<b>CTAG</b>	ccatggaagagcatatcctt...54...----taacattcaaag	actgttaa
C. Por	tcttgaat	c--tccatgatccttgggacctgtcagccgtggcag	<b>TCTCCCTT</b>	<b>CTAG</b>	ccatggaagagcatatcctt...54...gtaacattcttc---	actgtaa
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L. Afr	ttgggaat	g--tccatgatccttgggacctgtcagccgtggcag	<b>GTCTCCCTT</b>	<b>CTAG</b>	ccatggaagagcatatcctt...54...gtaacattctta---	gctgttaa
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P. Abe	c <b>TGGaAAG</b>	Gt <b>GAGA</b>	-gaatag-tagtagtttgggc-----...101...ctcttaactcag	tttccagt
C. Jac	c <b>TGGaAAG</b>	Gt <b>GAGA</b>	-gaat---agtagtttgggcaga-----...89...ctcttaactcag	tttccagt
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L. Afr	c <b>TGGaAAG</b>	Gt <b>GAGAc</b>	aattgg-gcaggacttggc-----...70...gcttaactcag	ttccagt
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Figure 250: CS=11.05



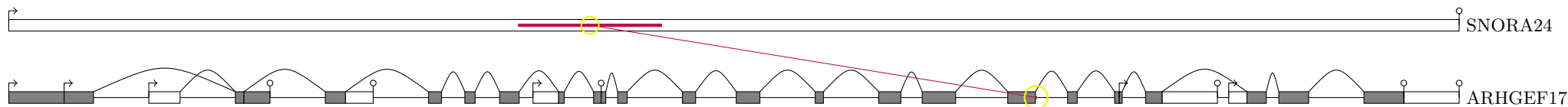
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L. Afr	ttgggaat	g--tccatgatcctttgggacctgtcagctgtggcagt	<b>CTCCCTTCCTAG</b>	ccatggaagagcatatcctt...54...---gtaacatccta---	gctgttaa
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P. Tro	attttcta	ca-atactatg...1318...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
P. Abe	attttcta	ca-atactatg...1319...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
C. Jac	attttcta	ta-atactatg...1349...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
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C. Por	attgttta	ca-acatcctgtg...1393...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
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C. Fam	attgttta	ca-gcactatgtg...1280...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
B. Tau	attgttga	ca-actcctatg...1253...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
E. Cab	attgtttg	ca-actcctatg...1271...ttcatatattacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
L. Afr	attgttta	ca-acactgcatg...1621...ttcatctgttacttttcaat	<b>CTAG</b>	<b>GAAGGGAg</b>
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Figure 251: CS=11.7



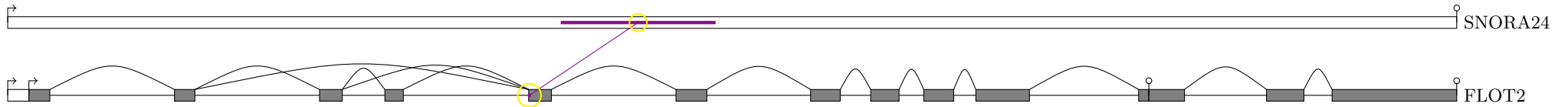
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P. Abe	ttgtgaat	c--tccatgtatctttgggacctgtcagccgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...50...---gtaacattatc---	actgttaa
C. Jac	tctgaat	c--tccatgtatctttgggacctgtcaaccgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...50...---gtaacattctc---	actgttaa
M. Mus	ctgtgaaa	c--tccatgtatctttgggacctgcccctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatgttcttgttt...50...---tgacattctaa---g	attgtaag
R. Nor	ttgtgaaa	ctatccatgtatctttgggacctgcctcctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatgttcttgttt...50...---taaca---ttcaaag	actgttaa
C. Por	tcttgaat	c--tccatgtgtctttgggacctgtcagttgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...50...---gtaacattctc---	actgtaaa
O. Cun	ctgtggaat	c--tccatgtgtctttgggacctgtcagccgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...50...---gtaacattctta---	aatgaaga
C. Fam	ttgtgaac	c--tccatgtatctttgggacctgtcagctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...47...caagtaacattctc---	atttg---
B. Tau	ttatgaat	c--tccatgtatctttgggacctgtcggctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...47...caagtaaca---ttc---	actttaa
S. Sus	ttatgaat	c--tccatgtgtctttgggacctgtcagctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagcatatccttgttt...50...---gtgacattctc---	actttaa
L. Afr	ttgggaat	g--tccatgtatctttgggacctgtcagctgtggcagtc	<b>TCCCTtcCTAGCCAT</b>	ggaagagtatgttcttgttt...50...---gtaacatcctta---	gctgttaa
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id=664566 gene=ENSG00000206823 name=SNORA24 segment=chr4.119200345.119200475.1 type=EN

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R. Mac	<b>gATGGCTG</b>	<b>GtAGGGA</b> caggggaggac--tagggata-...252...cccgatccacag	tgtccacg
P. Tro	<b>gATGGCTG</b>	<b>GtAGGGA</b> caggggaggac--tagggaca-...252...cccgatccacag	tgtccacg
P. Abe	<b>gATGGCTG</b>	<b>GtAGGGA</b> caggggaggac--tagggaca-...252...ctcgatccacag	tgtccacg
C. Jac	<b>gATGGCTG</b>	<b>GtAGGGA</b> caggggaggac--tggggaca-...236...ccaatccacag	tgtccacg
M. Mus	<b>gATGGCTG</b>	<b>GtAGGGG</b> caggggagtcc--taaagcaa-...185...cctaaccacag	tgtccacg
R. Nor	<b>gATGGCTG</b>	<b>GtAGGGG</b> cagagg-agtcc--taaagcaag...189...cctaaccacag	tgtccacg
C. Por	<b>gATGGCTG</b>	<b>GtAGGGG</b> cagggaggagt--gtcagaat-...207...cctgatctgcag	tgtccatg
O. Cun	<b>gATGGCTG</b>	<b>GtAGGGA</b> caca--aaggctgtactccct-...216...cccgtccacag	cgtccacg
C. Fam	<b>gATGGCTG</b>	<b>GtAGGGA</b> caggagagggc--tgggaaca-...203...tccgatccacag	tgtccacg
B. Tau	<b>gATGGCTG</b>	<b>GtAGGGA</b> cacaggagaggc--tggagtct-...236...actgatccacag	tgtccacg
S. Sus	<b>gATGGCTG</b>	<b>GtAGGG</b> cagggcggggc--tggggccc-...441...cccgtccacag	cgtgcacg
L. Afr	<b>gATGGCTG</b>	<b>GtAGGGG</b> cagggcgggaccatgggtg-...256...cctgatccacag	tgtccatg
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id=590309 gene=ENSG00000110237 name=ARHGEF17 segment=chr11.73074501.73074791.1 type=IN

Figure 252: CS=14.04



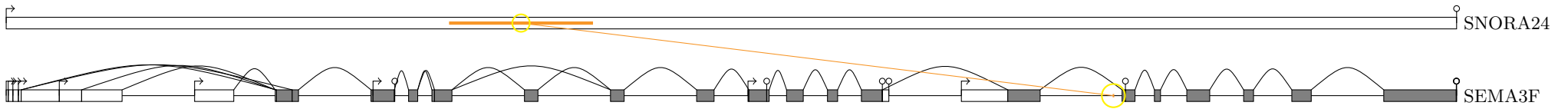
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P. Abe	ttgtgaat	c--tccatgtatctttgggacctgtcagccgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.45...	---gtaacattattc---	actgttaa
C. Jac	tcgtgaat	c--tccatgtatctttgggacctgtcaaccgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.45...	---gtaacattcctc---	actgttaa
M. Mus	ctgtgaaa	c--tccatgtatctttgggacctgcccctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatgttcttg-ttattggc...	.45...	----tgaca---ttctaag	attgtaag
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O. Cun	ctgtggat	c--tccatgtgtcctttgggacctgtcagccgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.45...	---gtaacattctta---	aatgaaga
C. Fam	ttgtgaac	c--tccatgtatctttgggacctgtcagctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.42...	caagtaacattcttc---	atttg---
B. Tau	ttatgaat	c--tccatgtatctttgggacctgtcggctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.42...	caagtaaca---ttc---	actttaa
E. Cab	ttgtgaat	c--tccatgtgtcctttgggacctgtcagctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.42...	caagtaaca---ttc---	acctgtaa
S. Sus	ttatgaat	c--tccatgtgtcctttgggacctgtcagctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.45...	---gtgacattcttc---	actttaa
O. Avi	ttatgaat	c--tccatgtatctttgggacctgtcggctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatattcctgtttattgg...	.42...	caagtaaca---ttc---	actttaa
L. Afr	ttgggaat	g--tccatgtatctttgggacctgtcagctgtggcagtcctccct	TCCTaGCCAtGGAAG	agcatgttcttg-ttattgg...	.45...	---gtaacacctta---	gctgttaa
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id=664566 gene=ENSG00000206823 name=SNORA24 segment=chr4.119200345.119200475.1 type=EN

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P. Tro	gtctgcca	gtgagtgtccct...1266...	accatg-ccctgttttgcg	TTTCTTGGCAG	GAttccc
P. Abe	gtctgcca	gtgagtgtccct...1273...	accatg-ccctgttttgcg	TTTCTTGGCAG	GAttccc
C. Jac	gtctgcca	gttagtgtccca...1244...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
M. Mus	ctcacc	gtgggcaccatg...1046...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
R. Nor	gtcatccg	atggctagcaag...1163...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
C. Por	gtcagcca	gtgtatctactt...1213...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
O. Cun	gtctgcca	ggggcgctctt...1448...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
C. Fam	gtctgcca	gtgggtgtcctt...1875...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
B. Tau	gtctgcca	gggggtgtcctt...1767...	ccatggcccctgttttgca	TTTCTTGGCAG	GAttccc
E. Cab	gtctgcca	gtgagtgtcctt...2061...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
S. Sus	gcctgcca	gtgggtgtcctt...1730...	accatg-ccctgttttgcg	TTTCTTGGCAG	GAttccc
O. Avi	gtctgcca	gggggtgtcctt...1736...	ccatggcccctgttttgca	TTTCTTGGCAG	GAttccc
L. Afr	gttcacca	gtgggtgtcctt...1792...	accatg-ccctgttttgca	TTTCTTGGCAG	GAttccc
	**	***** *****	***** *****	*****	*****

id=612909 gene=ENSG00000132589 name=FL0T2 segment=chr17.27211334.27212629.-1 type=IN

Figure 253: CS=13.5



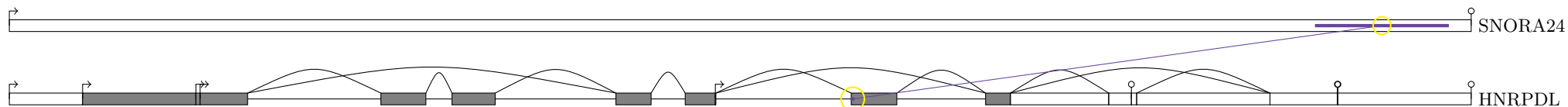
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P. Tro	ttgtgaat	c--tccatgatctttgggacctgtcagccgtgg	CAGTCTCCCTTCCTAG	ccatggaagagcatatcctt	... 51 ... caagtaaca	---ttc---	actgttaa
C. Jac	tcgtgaat	c--tccatgatctttgggacctgtcaaccctgg	CAGTCTCCCTTCCTAG	ccatggaagagcatatcctt	... 51 ...	---gtaacattcttc---	actgttaa
M. Mus	ctgtgaaa	c--tccatgatctttgggacctgcccctgtgg	CAGTCTCCCTTCCTAG	ccatggaagagcatgttctt	... 51 ...	---tgacattctaa---	attgtaag
R. Nor	ttgtgaaa	ctatccatgatctttgggacctgcctcctgtgg	CAGTCTCCCTTCCTAG	ccatggaagagcatgttctt	... 51 ...	---taaca---ttcaag	actgttaa
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L. Afr	ttgggaat	g--tccatgatctttgggacctgtcagctgtgg	CAGTCTCCCTTCCTAG	ccatggaagagcatattcctt	... 51 ...	---gtaacattcttc---	gctgttaa

id=664566 gene=ENSG00000206823 name=SNORA24 segment=chr4\_119200345\_119200475\_1 type=EN

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R. Mac	gggcacag	gtaccactgct...	511...	-gccctaggggggtttgggccc	CTGGtGGGGAAGGG	GCTGaggctggtacc	ccttcccagcatcccagccccca	-ctgaggccctgcccggcccgttccag	accgcggg
P. Tro	gggcacag	gtaccactgct...	516...	-gccctaggggggtttgggccc	CTGGtGGGGAAGGG	GCTGaggctggtacc	ccttcccagcatcccagccccca	-ctgaggccctgcccggcccgttccag	accgcggg
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M. Mus	gggcacag	gtaccactgct...	439...	-ccctagaggagatggggcctt	TGGT-gGGGAAGGG	GCTGaggnt-ttgc	ccttcccagcatctcagccccca	-ctgaggctctgcccggcccgttccag	accgcggg
R. Nor	gggcacag	gtaccactgct...	441...	-ccctagaggagatggggcctt	TGGT-gGGGAAGGG	GCTGaggnt-ttgc	ccttcccagcatctcagccccca	-ctgaggctctgcccggcccgttccag	accgcggg
C. Por	gggcacag	gtaccactgct...	504...	-ccctagaggagatggggcctt	TGGT-gGGGAAGGG	GCTGaggnt-ttgc	ccttcccagcatctcagccccca	-ctgaggctctgcccggcccgttccag	accgcggg
O. Cun	gggcacag	gtaccactgct...	430...	-gggagggggctgtggccc	TGGT-aGGGAAGGG	GCTGaggctggtgc	ccttcccagcatcccagccccca	-ctgaggccctgcccggcccgttccag	accgcggg
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O. Avi	gggcacag	gtaccactgct...	520...	-tgccct-gggggtctgggccc	CTGGtGGGGAAGGG	GCTGaggctggtgc	ccttcccagcatcccagccccca	-ctgaggccctgcccggcccgttccag	accgcggg
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Figure 254: CS=10.14



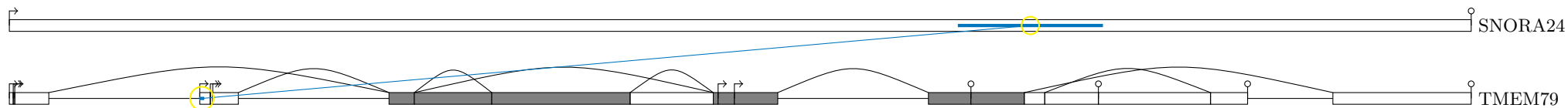
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C.Fam	ttgtgaac	ctccatgatct...75...accatctaattggtatcaga	TTCTGACTTGcACAA	gtaacattcttc	atttg---
B.Tau	ttatgaat	ctccatgatct...75...accatttaattggtatcaga	TTCTGACTTGcACAA	gtaaca---ttc	actttaaa
E.Cab	ttgtgaat	ctccatggtct...75...accatttaattggtatcaga	TTCTGACTTGcACAA	gtaaca---ttc	acctgtaa
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O.Avi	ttatgaat	ctccatgatct...75...accatttaattggtatcaga	TTCTGACTTGcACAA	gtaaca---ttc	actttaaa
L.Afr	ttgggaat	gtccatgatct...75...accatttaattggtatcaga	TTCTGACTTGcACAA	gtaacatccta	gctgttaa
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id=664566 gene=ENSG00000206823 name=SNORA24 segment=chr4.119200345\_119200475\_1 type=EN

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P.Tro	tggccg	ag	gtgagacttaat...515...--ttcctaacaatcattgtgca	TTGTttCAG	GTCAGGGc
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C.Jac	tggccg	ag	gtgagacttaat...495...--ttcctaacaatcattgtgca	TTGTttCAG	GTCAGGGc
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C.Fam	tggacg	ag	gtgagacttaat...466...--ttcctaacaatcattgtgca	TTGTttCAG	GTCAGGGc
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O.Avi	aggccg	ag	gtgagacctaata...497...--ttcctaacaatcattgtgca	TTGTttCAG	GTCAGGGc
L.Afr	tggacg	ag	gtaagacttgat...402...--ttgctaacaattgtgca	TTGTttCAG	GTCAGGGc
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Figure 255: CS=10.14



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R. Mac	ttgtgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaacattattc	actgctaa
P. Tro	ttgtgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaac---attc	actgttaa
P. Abe	ttgtgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaacattattc	actgttaa
C. Jac	tcgtgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaacattcttc	actgttaa
C. Por	tcttgaat	ctccatgtgtct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaacattcttc	actgttaa
O. Cun	ctgtggat	ctccatgtgtct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaacattctta	aatgaaga
C. Fam	ttgtgaac	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tctaattggatcagattctgacttg	cacaagtaacattcttc	atttg---
B. Tau	ttatgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaac---attc	actttaa
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O. Avi	ttatgaat	ctccatgtatct...45...agcatatccttgtttattgg	CAAAGCTGTCACCA	tttaattggatcagattctgacttg	cacaagtaac---attc	actttaa
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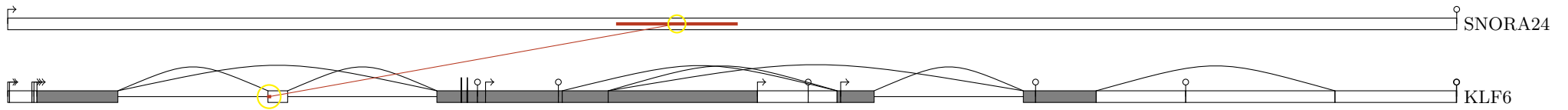
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P. Tro	cagggcag	gtgagcttacag...1171...aagctgggccccacctgctc	TGGTcaGAC	AgGTTTTg
P. Abe	cagggcag	gtgagcttacag...1188...aatctgggccccacctgctc	TGGTcaGAC	AgGTTTTg
C. Jac	cagggcag	gtgagctcacag...1860...aatctgggccccacctgctc	TGGTcaGAC	AgGTTTTg
C. Por	atgggcaa	gtgggagcgtga...2092...aacttgggccccacctgctc	TGGTcaGAC	AgGTTTTg
O. Cun	cggggtaa	gctggctcacag...1674...aatctgggccccacctgctc	TGGTcaGAC	AGGTTTGg
C. Fam	ggctgccg	atgggctcgaag...1068...aatctgggccccacctgctc	TGGTcaGAC	AGGTTTGg
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E. Cab	cggggcag	atgggctcacag...1162...aatctgggccccacctgctc	TGGTcaGAC	AGGTTTGg
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O. Avi	ctgggcag	atgggctcgaca...1377...aaactgggccccacctgctc	TGGTcaGAC	AGGTTTGg
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Figure 256: CS=10.14





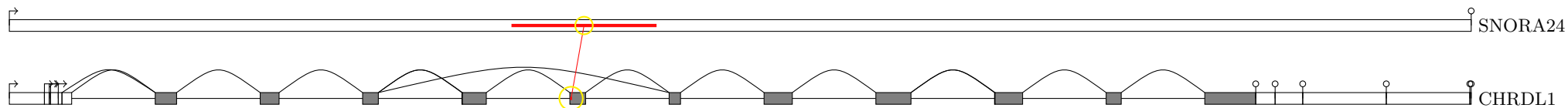
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id=664566 gene=ENSG00000206823 name=SNORA24 segment=chr4.119200345.119200475.1 type=EN

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P. Tro	ggcaacag	gtaaacgcagcc...1600...	taaaatgtttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
P. Abe	ggcaacag	gtaaacgcagcc...1602...	taaaatgtttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
C. Jac	ggcaacag	gtaaacgcagcc...1523...	taaaatgtttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
M. Mus	ggcaacag	gtaaatcggat...1672...	taaaatccttcct-----accgttt	TTCTTTTCCA	TGGCTAG	-----	-----	a
R. Nor	ggcaacag	gtaaatcggat...1808...	aaaaatcttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
C. Por	ggcaacag	gtaagcggcgc...1374...	ctaaatcttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
O. Cun	ggcaacag	gtaaataggat...1661...	taaaatgtttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
C. Fam	ggcaacag	gtaagcggcgt...1787...	-----tccccctcctgaaaccatt	TTCT--TCCA	TGGC	ccccntgctgcaatgagccattgtactgtatacatttaa	ctaaaatgtttcctaccgttttctttccagtggtaga	a
B. Tau	ggcaacag	gtaaataggat...1725...	taaaatgtttcct-----accgttt	TTCTTTTCCA	TGGCTAG	-----	-----	a
E. Cab	ggcaacag	gtaaataggat...1700...	taaaatgtttcct-----accgttt	TTCTTTTCCA	TGGCTAG	-----	-----	a
L. Afr	ggcaacag	gtaaataggat...1678...	taaaatgtttcct-----accattt	TTCTTTTCCA	TGGCTAG	-----	-----	a
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Figure 257: CS=10.14



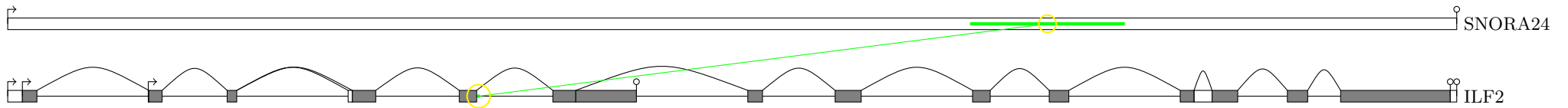
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P. Abe	gctgttcg	gtaagaccctac...1406...	gatgcttctaattc	TGTTTCTGct	TGGCAG
C. Jac	gctgttcg	gtaagaccctac...1554...	-----atcttaattctgtttctcct	-----TGGCAG	GAGGGAaa
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R. Nor	gctgttcg	gtaagaccctgc...1815...	-----tcacctagaagtaattctc	-----CTTTTCCt	TGGCAG
C. Por	gctgttcg	gtaagaccctgc...1466...	-----atctcaattgtttctcct	-----TGGCAG	GAAGGGAa
O. Cun	gctgttcg	gtaagaccctgc...1348...	-----atcttaattttgtttctcct	-----TGGCAG	GAGGGGAa
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E. Cab	gctgttcg	gtaagaccctgc...1382...	-----accttaattctgtttctcct	-----TGGCAG	GAGGGAaa
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Figure 258: CS=15.34



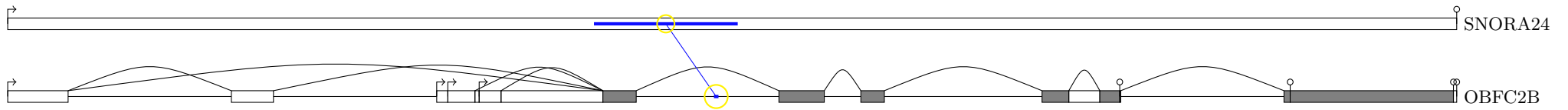
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P. Tro	tTGAAGTG	GTGAGTTTTGATGA	--ttagt	tttaggaaaggca-----	...293...	ttttccaacag	caaattga
P. Abe	tTGAAGTG	GTGAGTTTTGATGA	--ttagt	tttaggaaaggca-----	...295...	ttttccaacag	caaattga
C. Jac	tTGAAGTG	GTGAGTTTTGATGA	--ttagt	tttaggaaaggca-----	...300...	ttttccaacag	caaattga
R. Nor	tTGAAGTG	GTGAGTTTTGATTAAT	-----	ccaagaacgggcacccttg...	...270...	cccttcaatag	caaattga
C. Por	tTGAAGTG	GTGAGTTTTGATAA	--cttagt	tttagatagcggtc-----	...280...	cttctactag	caaattga
O. Cun	tTGAAGTG	GTGAGTTTCTGATGACAG	----	cccaggaaaggcggcctt...	...269...	ctttccaacag	caaattga
B. Tau	tTGAAGTG	GTGAGTTTTGAAGA	--Ttagt	cctaggaagggaag-----	...250...	ctttccaacag	caaattga
E. Cab	tTGAAGTG	GTGAGTTTTGATGA	--ttagt	ccttaggaaaggca-----	...290...	ctttctaacag	caaattga
S. Sus	tTGAAGTG	GTGAGTTTGTATGA	--Ttagt	cctaggaagggtgg-----	...55...	cttccaacag	caaattga
O. Avi	tTGAAGTG	GTGAGTTTTGAAGA	--Ttagt	cctaggaagggaag-----	...260...	ctttccaacag	caaattga
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Figure 259: CS=12.35



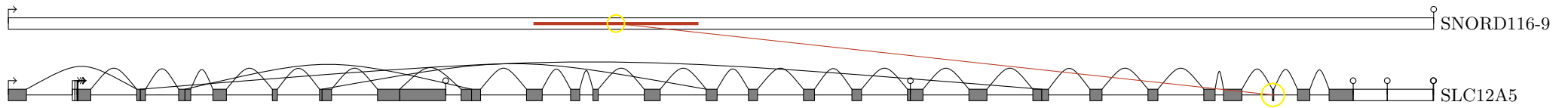
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C. Jac	ggagacag	gtgtctatactg...202...g--cctctttccacacagggcc	CTCTCCATGgt	GCTGGcctctgaactacaccccc--...164...tgttccgttcag	gccgagtg
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R. Nor	ggagacag	gtggctatgcat...213...gggcctttttccactcagg	GCTCTcTCCATGgt	GCTGGaccctccacaaccgcac-cat...131...cttcctgaaag	gtcgggtg
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C. Fam	ggagacag	gtggctattcgg...185...--ctcccgcgccgctcaggccc	CTCTCCATGgt	GCTG-tcccctcggcccctccgcc--...46...tgttcccttcag	gccgagtg
B. Tau	ggagacag	gtggctctgctg...192...g--ccttttccactcagggcc	CTCTCCATGgt	GCTGGctcctccctgcccagggat--...101...tattcctccag	gccgagtg
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L. Afr	ggagacag	gtagctgtgcta...178...g--cctctttccactcagggcc	CTCTCCATGgt	GCTGGcccgtccacaatccccttcc--...142...tgttccgtccag	gccgagtg
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id=28366 gene=ENSG00000139579 name=OBFC2B segment=chr12\_56618720\_56619156\_1 type=IN

Figure 260: CS=14.76



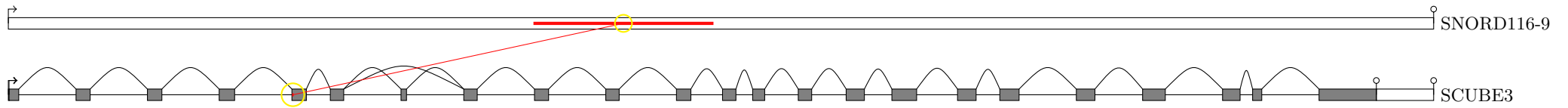
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R.Mac	atgtgctt	ggatc	gatgatgag	tccccataaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagaact-cataccg	tcgttctcatc	ggaactgaggtcc	agcacatt	
P.Tro	atgtgctt	ggatc	gatgatgag	tccccataaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagaact-cataccg	tcgttctcatc	ggaactgaggtcc	agcacatt	
P.Abe	atgtgctt	ggatc	aatgatgag	tccccataaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagaact-cataccg	tcgttctcatc	ggaactgaggtcc	agcacatt	
C.Jac	atgtgctt	ggatc	gatgatgag	tctacataaaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gaaagtca-tactgg	cactctcgtc	ggaactgaggtcc	agcacatt	
M.Mus	acgtgctt	ggatc	tatgatgatt	ccc--agtcaaa	CATTCCTTGGAAAAGCTGAA	caaaatgagt	gaaaactctgtacc	gccactctcatc	ggaactgaggtcc	agcacatt	
R.Nor	gtatgctt	ggatc	gatgatgatt	ccc--agtcaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gaaaactcagcacc	gcaactgtcatc	ggaactgaggtcc	agcacatt	
C.Por	atgtgctt	ggatc	gatgatgag	tccccataaaa-aaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagagctctaat	ccgctcgtctc	ggtcgtgctgaggtcc	agcacatt	
C.Fam	aagtgctt	ggatc	gatgatgact	ccctcaatctg-	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagaactccctg	ccgctcgttctcatc	gcaactgaggtcc	agcacatt	
F.Cat	atgtgctt	ggatc	gatgatgact	ccctcaa-cag-	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gagaactccctcc	cgctcgttctcatc	ggaactgaggtcc	agcacatt	
B.Tau	acgtgctt	ggatc	gatgatgact	cccacaa-atg-	CATTCCTTGGAAAAT	-ctgaacaaaatgagt	gagccatcactacc	gctc-tcctcatc	ggaactgaggtcc	agcacatt	
E.Cab	acgtgctt	ggatc	gatgatgact	ccctcat-atg-	CATTCCTTGGAAAAT	-ctgaacaaaatgagt	gagaactcactacc	gctcgttctcatc	ggaactgaggtcc	agcacatt	
S.Sus	cggtgctt	ggatc	gatgatgact	ccctcta-aag-	CATTCCTTGGAAAAT	-ctgaacaaaatgagt	gagaactcactacc	gctc-tcctcatc	ggaactgaggtcc	agcacatt	
L.Afr	acgtgcat	ggatt	gatgatgact	gct--atctaaa	CATTCCTTGGAAAAGC	tgaacaaaatgagt	gaaaactccctacc	gctcactcattg-	aactgaggtcc	agcacatt	
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id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H.Sap	atgaagcc	gtacgggcctgg	...289...-----tctctctttgcatctctt	gt-GTTTCCTGAAG	GGAGTGgg		
R.Mac	atgaagcc	gtacgggcctgg	...290...-----tctctctttgcatctctt	gt-GTTTCCTGAAG	GGAGTGgg		
P.Tro	atgaagcc	gtacgggcctgg	...289...-----tctctctttgcatctctt	gt-GTTTCCTGAAG	GGAGTGgg		
P.Abe	atgaagcc	gtacgggcctgg	...267...-----tctctctttgcatctctt	gt-GTTTCCTGAAG	GGAGTGgg		
C.Jac	atgaagcc	gtatgggcctgg	...278...-----tttcttttggcatctctt	gt-GTTTCCTGAAG	GGAGTGgg		
M.Mus	atgaagcc	gtacgggcctgg	...297...--tctttctctcttctctc	TTTgtGTTTCCTGAAG	GGAGTGgg		
R.Nor	atgaagcc	gtacgggcctgg	...273...-----ttctctcttctctctct-	gt-GTTTCCTGAAG	GGAGTGgg		
C.Por	atgaagcc	gtatgggcctgg	...271...tttctttctcccttctctc	-TGTGTGTTTTCCTgAAG	GgAGTGgg		
C.Fam	atgaagcc	gtatgggcctgg	...278...-----cctctcgttgcctctctt	gt-GTTTCCTGAAG	GGAGTGgg		
F.Cat	atgaagcc	gtatgggcctgg	...298...-----cctctcttctctctctt	gt-GTTTCCTGAAG	GGAGTGgg		
B.Tau	atgaagcc	gtacgggcctgg	...296...-----cctctccttctctctt	at-GTTTCCTgAAG	GgAGTGgg		
E.Cab	atgaagcc	gtatgggcctgg	...299...-----cctcacttctctctctt	gt-GTTTCCTGAAG	GGAGTGgg		
S.Sus	atgaagcc	gtacgggcctgg	...305...-----cctctcttctctctctt	gt-GTTTCCTgAAG	GgAGTGgg		
L.Afr	atgaagcc	gtatgggcctgg	...288...-----cttttcttctctctctt	gt-GTTTCCTGAAG	GGAGTGgg		
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id=543329 gene=ENSG0000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 261: CS=11.9



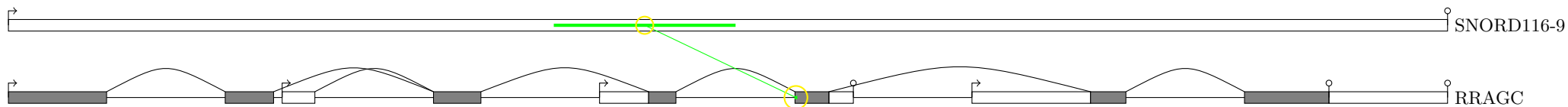
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R. Mac	atgtgctt	ggatcgatgatgagtc	ccccat-aaaa	CATTCTTgGAAAAG	ctgaacaaaatgagt	gagaactcat-accg	tcgttctcatcg	gaactgaggtcc	agcacgtt			
M. Mus	acgtgctt	ggatctatgatgatt	cccagtc-aaa	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gaaaactctgtacc	gccactctcatcg	gaactgaggtcc	agcatcct			
R. Nor	gtatgcct	ggatcgatgatgatt	cccagtc-aaa	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gaaaactcagcacc	gcaactgtcatcg	gaaatgaggtcc	ggcacctt			
C. Por	atgtgctc	ggatcgatgatgatg	ccccaaa-aaa	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gagagcttaacccg	tcgctctgctg	cctgaggtcc	agcacact			
O. Cun	atgtgctt	ggatcaatgatgact	ccccat-aaa	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gagaactcacaacc	gtcgttctcatcg	tactgaggtcc	agcacatt			
C. Fam	aagtgctt	ggatcgatgatgact	ccctcaatctg-	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gagaactccctgcc	gtcgttctcatcg	caactgaggtcc	agcacgtt			
F. Cat	atgtgctc	ggatcgatgatgact	ccctcaa-cag-	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gagaactccctccc	gtcgttctcatcg	aaactgaggtcc	agcacgtt			
B. Tau	acgtgctt	ggatcgatgatgact	cccacaa-atg-	-CATTCTTGGAAA	-tctgaacaaaatgagt	gagccatcactacc	gtc-tcctcatcg	gaactgaggtcc	agcacgtg			
E. Cab	acgtgctc	ggatcgatgatgact	ccctcat-atg-	-CATTCTTGGAAA	atctgaacaaaatgagt	gagaactcactacc	gtcgttctcatcg	aaactgaggtcc	ggcacgtt			
S. Sus	ccgtgctc	ggatcgatgatgact	ccctcta-aag-	-CATTCTTGGAAA	-tctgaacaaaatgagt	gagaactcactacc	gtc-tcctcatcg	aaactgaggtcc	ggcacgtg			
L. Afr	acgtgcat	ggattgatgatgact	gctatct-aaa-	-CATTCTTgGAAAAG	ctgaacaaaatgagt	gaaaactccttacc	gtctcactcattg-	aactgaggtcc	agcacatt			
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id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H. Sap	gccagaag	gtcagccc	atga-...951...	-cattcac	cccccttcttct	CTTTAg	AAGGAATg
R. Mac	gccagaag	gtcagccc	atga-...955...	-cattcac	cccccttcttct	CTTTAg	AAGGAATg
M. Mus	gccagaag	gtcagccc	acgg-...695...	gcgcca	acgtctccttctcc	CTTTTAg	AAGGAATg
R. Nor	gccagaag	gtcagccc	aggg-...712...	ggagc	gtcagcctcctcc	CTTTTAg	AAGGAATg
C. Por	gccagaag	gt-agccc	atgag...865...	-actcacc	ccctccttctct	CTTTAg	AAGGAATg
O. Cun	gccagaag	gtcagccc	gtga-...863...	-catgc	ccccctccttct	CTTTAg	AAGGAATg
C. Fam	gccagaag	gtcagccc	atga-...1137...	cactcac	ctccctccttct	CTTTTAg	AAGGAATg
F. Cat	gccagaag	gtcagccc	atga-...2802...	cactcac	ctccctccttct	CTTTTAg	AAGGAATg
B. Tau	gccggaag	gtcagcct	ctgg-...989...	-ca-ccc	cgccctccttctcc	TTTTAg	AAGGAATg
E. Cab	gccggaag	gtcagccc	atga-...1162...	-ttcatt	gccaccttctcc	TTTTAg	AAGGAATg
S. Sus	gccagaag	gtcagcct	atga-...882...	-gcgc	cttctccttctcc	TTTTAg	AAGGAATg
L. Afr	accagaag	gtcagccc	ctgc-...963...	-tttca	ccccctccttctcc	CTTTAg	AAGGAATg
	** ****	** ****	*		** *	*****	*****

id=478871 gene=ENSG0000146197 name=SCUBE3 segment=chr6.35199637.35200626.1 type=IN

Figure 262: CS=19.56



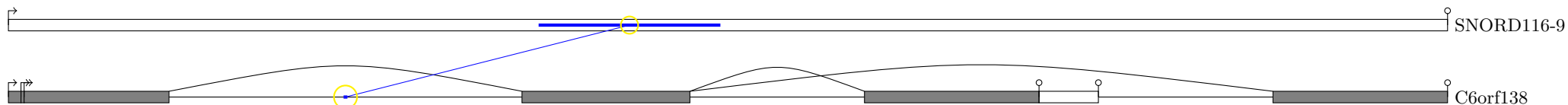
H. Sap	atgtgctt	ggatcgatgatgag-tccccataaaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcat-accgtcgttctcatcggaaactgaggtcc	agcacatt							
R. Mac	atgtgctt	ggatcgatgatgag-tccccataaaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcat-accgtcgttctcatcggaaactgaggtcc	agcacgtt							
P. Tro	atgtgctt	ggatcgatgatgag-tccccataaaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcat-accgtcgttctcatcggaaactgaggtcc	agcacatt							
P. Abe	atgtgctt	ggatcaatgatgag-tccccataaaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcat-accgtcgttctcatcggaaactgaggtcc	agcacatt							
C. Jac	atgtgctt	ggatcgatgatgag-tcctacaaaaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgaaagctcat-actggcactctcgtcggaaactgaggtcc	agcacgtt							
M. Mus	acgtgctt	ggatctatgatgat-tccc--agtcaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgaaaactctgtaccgccactctcatcggaaactgaggtcc	agcatctt							
R. Nor	gtatgcct	ggatcgatgatgat-tccc--agtcaaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgaaaactcagcaccgcaactgtcatcggaaatgaggtcc	ggcacctt							
C. Por	atgtgctc	ggatcgatgatgat-gccccaaa--aaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagagctcfaatccgtcgtctggtcgtgcctgaggtcc	agcacact							
O. Cun	atgtgctt	ggatcaatgatgac-tccccat--aaac	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacatt							
C. Fam	aagtgctt	ggatcgatgatgac-tcctcaa-TCTGc	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactccctgcctcgttctcatcgaactgaggtcc	agcacgtt							
E. Cab	acgtgctc	ggatcgatgatgac-tcctcat--atgc	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcactaccgtcgttctcatcgaactgaggtcc	ggcacgtt							
O. Avi	acatgctc	ggatcagtgatgacaactttcat--at	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgagaactcactaccatc-tcctcatcgatactgagctct	agcacgtt							
L. Afr	acgtgcat	ggattgatgatgac-tgct--atc	ATTTC	TTGGAAAAGc	TGAA	caaatgagtgaaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt							
	***	****	*****	*	*****	*****	***	*	*	*	****	**	***	*

id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15\_25318254\_25318348.1 type=EN

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R. Mac	ttatatca	gtaagtgagcaa...574...--aaatactgaacagtttccca--	TTTG	TTTTCCAAG	AAT	tcagg				
P. Tro	ttatatca	gtaagtgagcaa...570...--aaatactgaacagtttccca--	TTTG	TTTTCCAAG	AAT	tcagg				
P. Abe	ttatatca	gtaagtgagcaa...574...--aaatactgaacagtttccca--	TTTG	TTTTCCAAG	AAT	tcagg				
C. Jac	ttatatca	gtaagtgagaaa...555...--aaatactgaacagtttccca--	TTTG	TTTTCCAAG	AAT	tcagg				
M. Mus	ttatatca	gtaagtaaatta...625...----aaagaaacacttacccaat	TTTG	TTTTCCAAG	AAT	tcagg				
R. Nor	ttatatca	gtaagtaaatta...607...----aaagaaacacttacccaat	TTTG	TTTTCCAAG	AAT	tcagg				
C. Por	ttatttca	gtaagtaagcta...1108...----gaaactgaacactttcfaat	TTTG	TTTTCCAAG	AAT	tcagg				
O. Cun	ttatatca	gtaagtgagcta...1855...----atactgaatactttcccaat	TTTG	TTTTCCAAG	AAT	tcagg				
C. Fam	ttatatca	gtaagtgagcta...943...----aaactgaatacttccccaat	TTTG	TTTTCCAAG	AAT	CAGg				
E. Cab	ttatatca	gtaagtgagcta...930...----atacacaacacttccccat	TTTG	TTTTCCAAG	AAT	tcagg				
O. Avi	ttatatca	gtaagtgtgcta...1468...tgtagaaatgaacacttga----	TTTG	TTTTCCAAG	AAT	tcagg				
L. Afr	ttatatca	gtaagtgagccg...2086...----gaactgaacacttactaat	TTTG	TTTTCCAAG	AAT	tcagg				
	****	***	*****	*	**	**	****	****	*****	*****

id=665162 gene=ENSG00000116954 name=RRAGC segment=chr1\_39317430\_39318045\_-1 type=IN

Figure 263: CS=12.35



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R. Mac	atgtgctt	ggatc	gatgatgag	tccccataaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgag	tgagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacgtt				
P. Tro	atgtgctt	ggatc	gatgatgag	tccccataaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgag	tgagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacatt				
P. Abe	atgtgctt	ggatc	aatgatgag	tccccataaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgag	tgagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacatt				
C. Jac	atgtgctt	ggatc	gatgatgag	tctacaaaaaaa	CATT	CTTGGAAAAGC	tgaacaaaatgag	tgaagctcat	-actggcactctcgtc	ggaactgaggtcc	agcacgtt				
M. Mus	acgtgctt	ggatc	ctatgatgatt	cccagtaaaa	-CATT	CTTGGAAAAGC	tgaacaaaatgag	tgaagctctgt	accgcaactctcatc	ggaactgaggtcc	agcatctt				
C. Por	atgtgctc	ggatc	gatgatgatg	ccccaaaa-aaa	-CATT	CTTGGAAAAGC	TGAA	caaaaatgag	tgaagctctaatc	cgctcgtctggctg	ctgctgaggtcc	agcacact			
O. Cun	atgtgctt	ggatc	aatgatgact	ccccataaaa	-CATT	CTTGGAAAAGC	tgaacaaaatgag	tgaagctcaca	accgctcgttctcatc	gtgactgaggtcc	agcacatt				
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaatctg	-CATT	CTTGGAAAAGC	agctgaacaaaatgag	tgaagctccctg	ccgctcgttctcatc	gcaactgaggtcc	agcacgtt				
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa-atg	-CATT	CTTGGAAAAT	-ctgaacaaaatgag	tgaagctcact	accgctc-tcctcatc	ggaactgaggtcc	agcacgtg				
E. Cab	acgtgctc	ggatc	gatgatgact	ccctcat-atg	-CATT	CTTGGAAAAT	ctgaacaaaatgag	tgaagctcact	accgctcgttctcatc	gaaactgaggtcc	ggcacgtt				
S. Sus	cogtgc	ggatc	gatgatgact	ccctcta-aag	-CATT	CTTGGAAAAT	-ctgaacaaaatgag	tgaagctcact	accgctc-tcctcatc	gaaactgaggtcc	ggcacgtg				
L. Afr	acgtgcat	ggatt	gatgatgact	gctatctaaa	-CATT	CTTGGAAAAGC	TGAA	cAAAA	tgaagctccttacc	gctcactcattg	-aactgaggtcc	agcacatt			
	****	****	*****	*	*****	*****	*****	*****	**	*	*	*	*	*****	***

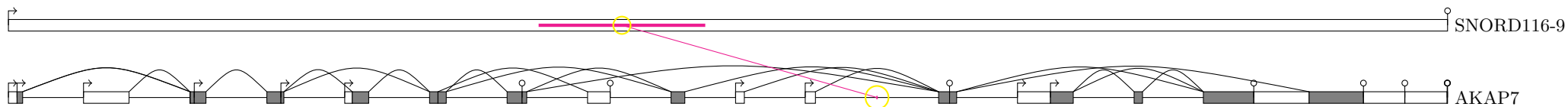
id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

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P. Tro	aaatgaag	gtgaaccacaag...4948...	-----ctgaagctctcttcttttct---	GTTTCAAG	GATG	ggag
P. Abe	aaatgaag	gtgaaccacaag...4948...	-----ctgaagctctcttcttttct---	GTTTCAAG	GATG	ggag
C. Jac	aaatgaag	gtgaactacaag...4948...	-----cagaagctctcttcttttct---	GTTTCAAG	GATG	ggag
M. Mus	aaatgaag	gtgaaccacaag...4948...	-----ctgaagctctccctcttttct---	GTTTCAAG	GATG	ggag
C. Por	aaatgaag	gtgaaccacagg...4943...	ggtaacttaagctctccctt---	TTCA	GTTTCAAG	GATG
O. Cun	aaatgaag	gtgaaccacaag...4948...	-----cttaagctctcccttttct---	GTTTCAAG	GATG	ggag
C. Fam	aaatgaag	gtgaaccacaag...4949...	-----ttaagctctccctctttct---	TTTCAAG	GATG	ggag
B. Tau	aaatgaag	gtgaactacaag...4948...	-----cttcagctctcccttttct---	GTTTCAAG	GATG	ggag
E. Cab	aaatgaag	gtgaaccacaag...4948...	-----cttaagtttcccttttct---	GTTTCAAG	GATG	ggag
S. Sus	aaatgaag	gtgaaccacaag...4948...	-----ctcaagctctcccttttct---	GTTTCAAG	GATG	ggag
L. Afr	agatgaag	gtgaaccacaag...4941...	--taacttaagctctcccttt	TTTTTT	GTTTCAAG	GATG
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id=9880 gene=ENSG0000244694 name=C6orf138 segment=chr6.47976851.48035965.-1 type=IN

Figure 264: CS=10.14





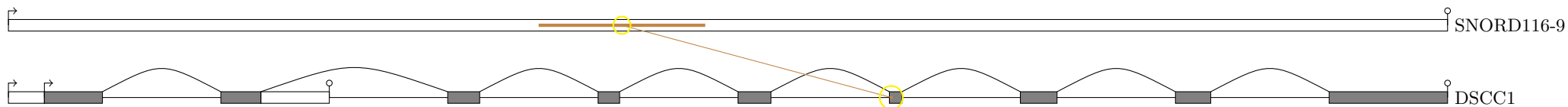
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R.Mac	atgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatcggaaactgaggtcc	agcacgtt						
P.Tro	atgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatcggaaactgaggtcc	agcacatt						
P.Abe	atgtgctt	ggatc	aatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgagaact-cataccgctcgttctcatcggaaactgaggtcc	agcacatt						
C.Jac	atgtgctt	ggatc	gatgatgag	cctacaaaaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacgtt						
M.Mus	acgtgctt	ggatc	ctatgatgatt	cccagtcaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcatctt						
R.Nor	gtatgctt	ggatc	gatgatgatt	cccagtcaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	ggcacctt						
C.Por	atgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacatt						
O.Cun	atgtgctt	ggatc	aatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacatt						
C.Fam	aagtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacgtt						
B.Tau	acgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacgtt						
E.Cab	acgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacgtt						
L.Afr	acgtgcat	ggatt	gatgatgag	ccccataaaa	CATTCCTGGAA	aagctgaacaaaatgagtgaagctca-tactggcactctcgtcggaaactgaggtcc	agcacatt						
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id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H.Sap	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgttttttca-----	TTTCAAG	gGAGTGaa
R.Mac	tggtgaag	gtaatatctcca...	4950...	ttgactta--tttgttttttca-----	TTTCAAG	gGAGTGaa
P.Tro	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgttttttca-----	TTTCAAG	gGAGTGaa
P.Abe	tggtgaag	gtaatatctccg...	4950...	ttgattga--tttgttttttca-----	TTTCAAG	gGAGTGaa
C.Jac	tggtgaag	gtaatatctcca...	4950...	ttgattga--tttgttttttca-----	TTTCAAG	gGAGTGaa
M.Mus	ttgtgaag	gtaattccccta...	4938...	--aatgagtcctgacatgga--TTTgTTGtC	TTTCAAG	gGAGTGag
R.Nor	tggtgaag	gtaattccccta...	4950...	-gacatgg--atgtttttgtca-----	TTTCAAG	gGAGTGag
C.Por	tgctgaag	gtaatatccccca...	4950...	--atgtgattttttttgttg-----	TTTCAAG	gGAGTGaa
O.Cun	tggtgaag	gtaatatccccca...	4950...	--atgtgattttttttgttg-----	TTTCAAG	gGAGTGaa
C.Fam	tggtgaag	gtaataaccaca...	4950...	-gatgtga--tttgtttttatca-----	TTTCAAG	gGAGTGaa
B.Tau	tggtgaag	gtaatgccaca...	4949...	-tgatgtga--tttgtttttgtc-----	TTTCAAG	gGAGTGaa
E.Cab	tggtgaag	gtaatatctcgc...	4936...	-tgaatga--ctgattgatgtgATTITGtTTGtC	TTTCAAG	gGAGTGaa
L.Afr	tggtgaag	gtaatgtccccca...	4950...	-gatgtaa--tttgtttttgtca-----	TTTCAAG	gGAGTGaa
	*	****	*****	*	*****	*****

id=215573 gene=ENSG00000118507 name=AKAP7 segment=chr6.131522051.131540800.1 type=IN

Figure 265: CS=15.34



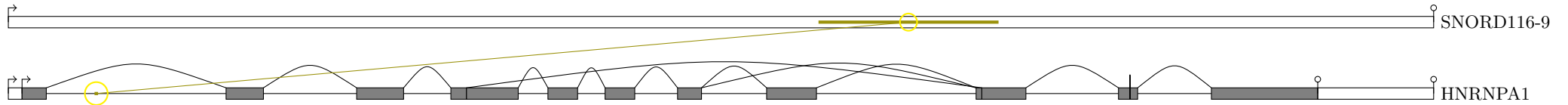
H.Sap	atgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTTGGAAAAGc	TGAA	caaatgagt	gagaactcat	-accg	cggttctcat	cggaactgaggtcc	agcacatt	
R.Mac	atgtgctt	ggatc	gatgatgag	ccccataaaa	CATTCCTTGGAAAAGc	TGAA	caaatgagt	gagaactcat	-accg	cggttctcat	cggaactgaggtcc	agcacgtt	
P.Abe	atgtgctt	ggatc	aatgatgag	ccccataaaa	CATTCCTTGGAAAAGc	TGAA	caaatgagt	gagaactcat	-accg	cggttctcat	cggaactgaggtcc	agcacatt	
C.Jac	atgtgctt	ggatc	gatgatgag	cctacataaaa	CATTCCTTGGAAAAGc	TGAA	caaatgagt	gaaagctcat	-actg	gcactctc	gcggaactgaggtcc	agcacgtt	
M.Mus	acgtgctt	ggatc	tatgatgatt	cccagtc	aaa--CATTCCTTGGAAAAGc	TGAA	caaatgagt	gaaactctgt	accg	cactctcat	cggaactgaggtcc	agcatctt	
R.Nor	gtatgcct	ggatc	gatgatgatt	cccagtc	aaa--CATTCCTTGGAAAAGc	TGAA	caaatgagt	gaaactcag	caccg	caactgtcat	cggaactgaggtcc	ggcacctt	
O.Cun	atgtgctt	ggatc	aatgatgact	ccccataaaa	--CATTCCTTGGAAAAGc	TGAA	caaatgagt	gagaactcaca	accg	cggttctcat	ctgtgactgaggtcc	agcacatt	
C.Fam	aagtgcct	ggatc	gatgatgact	cctcaatctg	--CATTCCTTGGAAA	agctga	caaatgagt	gagaactc	cctg	cggttctcat	cggaactgaggtcc	agcacgtt	
F.Cat	atgtgctt	ggatc	gatgatgact	cctcaa-cag	--CATTCCTTGGAAAAGc	TGAA	caaatgagt	gagaactc	cctc	cggttctcat	cggaactgaggtcc	agcacgtt	
B.Tau	acgtgctt	ggatc	gatgatgact	cccacaa-atg	--CATTCCTTGGAAA	-TcTGAACA	aaatgagt	gagccat	cactacc	gctc	tcctcat	cggaactgaggtcc	agcacgtg
E.Cab	acgtgctt	ggatc	gatgatgact	cctcat-atg	--CATTCCTTGGAAAATc	TGAA	caaatgagt	gagaactcact	accg	cggttctcat	cggaactgaggtcc	ggcacgtt	
S.Sus	cogtgctt	ggatc	gatgatgact	cctcta-aag	--CATTCCTTGGAAA	-TcTGAACA	aaatgagt	gagaactcact	accg	gctc	tcctcat	cggaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgact	gctatctaaa	--CATTCCTTGGAAA	agctga	caaatgagt	gaaactc	cttac	cggttctcat	cattg-aactgaggtcc	agcacatt	
	***	****	*****	* *	*****	*****	**	*	*	**	* *	*****	***

id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H.Sap	gagccaga	gtaagtatttta	...734	...-ataactttt	caagtgggtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
R.Mac	gagccaga	gtaagtatttta	...729	...-ataactttt	caaatgggtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
P.Abe	gagccaga	gtaagtatttta	...751	...-ataactttt	caagtgggtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
C.Jac	gagccaga	gtaagtatttta	...608	...-agaactttt	caaatgtgtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
M.Mus	gagccaga	gtgagtatttgc	...905	...-tcataagtt	cctttgtgtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
R.Nor	gagccaga	gtgagtatttgc	...1060	...-tcataagtt	cctttgtgtg	-----	TTTAaa	TTTTTCAG	GGaAATGa
O.Cun	gagccaga	gtaagtatttta	...403	...-gaatagtt	cctca--tgagtgt	-----	TTTAaa	TTTTTCAG	GGaAATGa
C.Fam	gagccaga	gtaagtatttta	...640	...-ttcaaatg	agtgttttaaaa	-----	TTTTTCAG	GGaAATGa	
F.Cat	gagccaga	gtaagtatttta	...426	...-taactttt	caaatgagtatt	-----	TTTAaa	TTTTTCAG	GGaAATGa
B.Tau	gagccaga	gtaagtatttat	...450	...gtgaaa	acttttcaataag	-----	TGTTTAAaa	ATTTTTTCAG	GGaAATGa
E.Cab	gaaccaga	gtaagtatttta	...728	...-gtaactttt	caaatgaggt	-----	TTTAaa	TTTTTCAG	GGaAATGa
S.Sus	gagccaga	gtaagtatttta	...323	...-tcataaaa	atgtgaagaag	TGTTTAAaa	ATTTTTTCAG	GGaAATGa	
L.Afr	gaaccaga	gtaagtatttta	...399	...-ttcaaat	tggttttaaaa	-----	TTTTTCAG	GGaAATGa	
	**	*****	**	***	*	*	*****	*****	*****

id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 266: CS=19.24



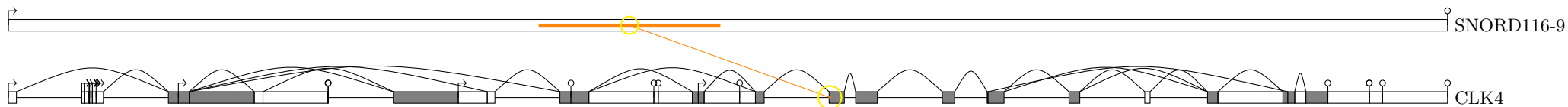
H. Sap	atgtgctt	ggatcgatgatgagtc	ccccat-aaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcat-accgtc	gttctcatcggaact	gaggtcc	agcacatt	
R. Mac	atgtgctt	ggatcgatgatgagtc	ccccat-aaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcat-accgtc	gttctcatcggaact	gaggtcc	agcacgtt	
P. Tro	atgtgctt	ggatcgatgatgagtc	ccccat-aaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcat-accgtc	gttctcatcggaact	gaggtcc	agcacatt	
C. Jac	atgtgctt	ggatcgatgatgagtc	ctacaa-aaaaacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaagctcat-actggc	actctcgtcggaact	gaggtcc	agcacgtt	
M. Mus	acgtgctt	ggatctatgatgatt	cccagtc-a--aacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactctgtacc	gccactctcatcggaact	gaggtcc	agcatctt	
R. Nor	gtatgcct	ggatcgatgatgatt	cccagtc-a--aacattc	ccttggaaaagctga	ACAAAATG	GTGA	aaactcagcacc	gcgaactgtcatcggaat	gaggtcc	ggcacctt	
C. Por	atgtgctc	ggatcgatgatgatg	ccccaaa-a--aacattc	ccttggaaaagctga	ACAAAATG	GTGA	gagctctaaccgtc	gctctgtgctgaggtcc		agcacatt	
D. Cun	atgtgctt	ggatcaatgatgact	ccccat-a--aacattc	ccttggaaaagctga	ACAAAATG	GTGA	gaactcacaacc	gctgcttctcatcgta	gaggtcc	agcacatt	
C. Fam	aagtgctt	ggatcgatgatgact	ccctcaatc--tg	cattccttggaaaagctga	ACAAAATG	GTGA	gaactccctgcc	gctgcttctcatcg	caactgaggtcc	agcacgtt	
F. Cat	atgtgctc	ggatcgatgatgact	ccctcaa-c--ag	cattccttggaaaagctga	ACAAAATG	GTGA	gaactccctccc	gctgcttctcatcg	aaactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatcgatgatgact	cccacaa-a--tg	cattccttggaaaagctga	ACAAAATG	GTGA	gcatcactaccgtc	-tcctcatcggaact	gaggtcc	agcacgtg	
E. Cab	acgtgctc	ggatcgatgatgact	ccctcat-a--tg	cattccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	gctgcttctcatcg	aaactgaggtcc	ggcacgtt	
S. Sui	ccgtgctc	ggatcgatgatgact	ccctcta-a--ag	cattccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	gctc-tcctcatcg	aaactgaggtcc	ggcacgtg	
O. Avi	acatgctc	ggatcagtgatgaca	actttcata--tt	tattccttggaaaagctga	ACAAAATG	GTGA	gaactcactacc	atc-tcctcatcg	atactgaggtcc	agcacgtt	
L. Afr	acgtgcat	ggattgatgatgact	gctatct-a--aac	attccttggaaaagctga	ACAAAATG	GTGA	aaactccttacc	gtctcactcattg-	aactgaggtcc	agcacatt	
	***	****	*****	*	*****	***	*****	**	*	* * *	***

id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H. Sap	agtcagag	gtgagttaggcg	...111...-----	taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcg	ccatgaggc---	...376...ccccactctag	tctcctaa
R. Mac	agtcagag	gtgagttaggcg	...113...-----	taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcg	ccatgaggc---	...377...ccccactccag	tctcctaa
P. Tro	agtcagag	gtgagttaggcg	...111...-----	taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcg	ccatgaggc---	...375...ccccactctag	tctcctaa
C. Jac	agtcagag	gtgagttaggcg	...106...-----	ctaccctc-ccaaagttcaag	TCGCCATTTTGT	cctgttgatcg	ccatgaggc---	...371...ccccactgtag	tctcctaa
M. Mus	agtcagag	gtaagttggatg	...106...-----	ctactttaaaaaatgcagg	TCGCCATTTTGT	cctcatagtc	accatgaggc---	...369...cctccacttag	tctcccaa
R. Nor	agtcagag	gtgagttgagcg	...105...-----	cctacttt-aaaaaatgcagg	TCGCCATTTTGT	cctcatagtc	accatgaggc---	...361...actttatttag	tccccaa
C. Por	agtcagag	gtaagctatatt	...103...-----	gcctgctc-ccaaagttcagg	TCGCCATTTTGT	cctcg---	tcgcatgaggccgc	...327...cttccactctag	tctcctaa
O. Cun	agtcagag	gtgaggagctcc	...102...aag	gcctaccctc-ccaaag-----	TCGCCATTTTGT	cctogtctg	tcgcatgaggc---	...378...tctcccgccag	tgcccaa
C. Fam	agtcagag	gtgagtaacacg	...112...-----	ttcccctc-cggaagttgagg	TCGCCATTTTGT	cctcgtcgtc	gcgcatgaggc---	...363...ccccctcctag	tctcccaa
F. Cat	agtcagag	gtgagtaacacg	...113...-----	taccctc-ccaaagttcagg	TCGCCATTTTGT	cctcgtcgtc	gcgcatgaggc---	...378...cccactcctag	tctcccaa
B. Tau	aatcagag	gtgggtaagacg	...111...-----	tcccctc-cctaaagttgagg	TCGCCATTTTGT	cctcg---	tcgcatgaggcgtgc	...362...ctcctcctag	tctcccaa
E. Cab	agtcagag	gtgagtaggacg	...111...-----	taccctc-ccaaagttcagg	TCGCCATTTTGT	cctcgtcgtc	gcgcatgaggc---	...359...tctactcctag	tctcccaa
S. Sus	agtcagag	gtgagtgagact	...111...-----	taccctc-cctaaagttcagg	TCGCCATTTTGT	cctcg---	tcgcatgaggcgtgc	...358...ccctactcctag	tctcccaa
O. Avi	aatcagag	gtgggtaagacg	...111...-----	tcccctc-cctaaagttgagg	TCGCCATTTTGT	cctcg---	tcgcatgaggcgtgc	...366...ctccactcctag	tctcccaa
L. Afr	agtcagag	gtaagctacct	...108...-----	taccctc-ccaaagttgagg	TCGCCATTTTGT	cctcgtcgtc	gcgcatgaggc---	...389...ttccaccattag	tctcctaa
	* * * * *	**	*	*	*****	**	*****	**	* * * * *

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 267: CS=14.25



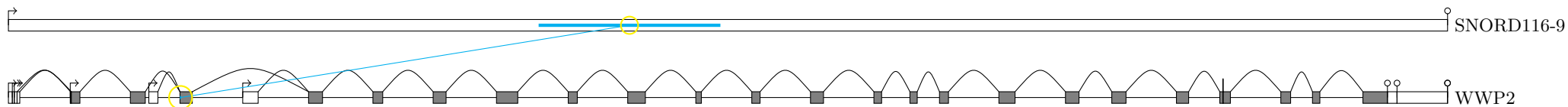
H. Sap	atgtgctt	ggatc	gatgatgagtc	ccccataaaaa	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactcat-	accgtcgttctcatc	ggaactgaggtcc	agcacatt				
P. Tro	atgtgctt	ggatc	gatgatgagtc	ccccataaaaa	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactcat-	accgtcgttctcatc	ggaactgaggtcc	agcacatt				
P. Abe	atgtgctt	ggatc	aatgatgagtc	ccccataaaaa	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactcat-	accgtcgttctcatc	ggaactgaggtcc	agcacatt				
C. Jac	atgtgctt	ggatc	gatgatgagtc	ctacataaaaa	CATTCCTTg	GAAAAGc	TGAA	agctgaac	caaaatgagt	gaaagctca-	tactggcactctc	gtc	ggaactgaggtcc	agcacgtt		
M. Mus	acgtgctt	ggatc	tatgatgatt	cccagtc	caaa-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gaaaactctgt	accgccactctcatc	ggaactgaggtcc	agcatctt			
R. Nor	gtatgctt	ggatc	gatgatgatt	cccagtc	caaa-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gaaaactcagc	accgcaactgtcatc	ggaactgaggtcc	ggcacctt			
O. Cun	atgtgctt	ggatc	aatgatgact	ccccataaaa-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactcaca	accgtcgttctcatc	gtgactgaggtcc	agcacatt				
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaatctg-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactccct	gccgtcgttctcatc	gcaactgaggtcc	agcacgtt				
F. Cat	atgtgctc	ggatc	gatgatgact	ccctcaa-	cag-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactccct	cccgtcgttctcatc	gaaactgaggtcc	agcacgtt			
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa-	atg-	CATTCCTTg	GGAAA-	tc	TGAA	caaaatgagt	gagccatcact	accgtc-	tcctcatc	ggaactgaggtcc	agcacgtg	
E. Cab	acgtgctc	ggatc	gatgatgact	ccctcat-	atg-	CATTCCTTg	GAAAAGc	TGAA	caaaatgagt	gagaactcact	accgtcgttctcatc	gaaactgaggtcc	ggcacgtt			
S. Sus	cogtgc	ggatc	gatgatgact	ccctcta-	aag-	CATTCCTTg	GGAAA-	tc	TGAA	caaaatgagt	gagaactcact	accgtc-	tcctcatc	gaaactgaggtcc	ggcacgtg	
L. Afr	acgtgc	ggatt	gatgatgact	gctatctaaa-	CATTCCTTg	GGAAAAGc	TGAA	caaaatgagt	gaaaactcctt	accgtcctcact	cattg-	aactgaggtcc	agcacatt			
	***	****	*****	*	*	*****	*****	*****	**	*	*	**	*	*****	***	*

id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15\_25318254\_25318348.1 type=EN

H. Sap	catggcat	gtaagtttg	ttt...	2994...	----	tttat---	cattttatcttaat	TTTATTTTAAAG	GGATG	gca
P. Tro	catggcat	gtaagtttg	ttt...	2993...	----	tttat---	cattttatcttaat	TTTATTTTAAAG	GGATG	gca
P. Abe	catggcat	gtaagtttg	ttt...	2998...	----	tttat---	cattttatcttaat	TTTATTTTAAAG	GGATG	gca
C. Jac	catggcat	gtaagtttg	ttt...	3178...	----	atttat---	cactttatctta-	TTTTTAAAG	GGATG	gca
M. Mus	cacggcat	gtaagtttg	ctt...	1540...	t---	tttagcatcatcatct---	TTTGTTTTCAAG	GGATG	gct	
R. Nor	catggcat	gtaagtttg	ctt...	1496...	tacatttag---	catcatcatct---	TTTGTTTTCAAG	GGATG	gct	
O. Cun	catggcat	gtaagtttg	ctt...	2567...	----	tatac---	catattcatcttaat	TTTGTTTTAAAG	GGATG	gca
C. Fam	catggcat	gtaagtttg	ctt...	3759...	----	tatat---	cttttcaccttaat	TTTGTTTTAAAG	GGATG	gca
F. Cat	catggcat	gtaagtttg	ctt...	2893...	----	tctac---	cgttttcatcttaat	TTTGTTTTAAAG	GGATG	gca
B. Tau	catgacat	gtaagtttg	ctt...	3284...	----	tgtac---	atttatcatcttcat	TTTGTTTTAAAG	GGATG	gca
E. Cab	catggcat	gtaagtttg	ctt...	2877...	----	atttac---	cattttcatctt-at	TTTGTTTTAAAG	GGATG	gca
S. Sus	catggcat	gtaagtttt	ttt...	4259...	ttcatttac---	cattttca---	t-at	TTTGTTTTAAAG	GGATG	gca
L. Afr	catggcat	gtaagtttt	ttt...	1359...	----	tttac---	caattcatcttcat	TTTGTTTTAAAG	GGATG	gca
	** * **	*****				**	**	*	*** **	*****

id=746901 gene=ENSG0000113240 name=CLK4 segment=chr5\_178040845\_178043882.-1 type=IN

Figure 268: CS=18.85



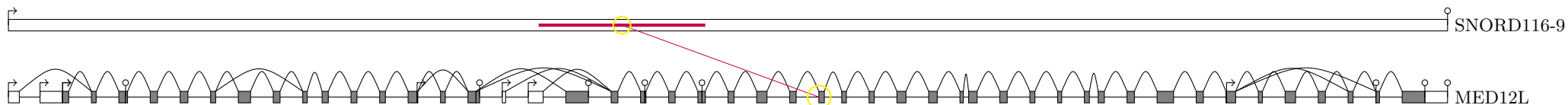
H. Sap	atgtgctt	ggatc	gatgatgagtc	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactcat	-accgtc	ggttctcat	cggaa	ctgaggtcc	agcacatt
R. Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactcat	-accgtc	ggttctcat	cggaa	ctgaggtcc	agcacgtt
P. Tro	atgtgctt	ggatc	gatgatgagtc	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactcat	-accgtc	ggttctcat	cggaa	ctgaggtcc	agcacatt
P. Abe	atgtgctt	ggatc	aatgatgagtc	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactcat	-accgtc	ggttctcat	cggaa	ctgaggtcc	agcacatt
C. Jac	atgtgctt	ggatc	gatgatgagtc	ctacaaaaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gaaagctcat	-actggc	actctcgtc	cggaa	ctgaggtcc	agcacgtt
M. Mus	acgtgctt	ggatc	tatgatgatt	cccagtc	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gaaaactctgt	accgc	actctcat	cggaa	ctgaggtcc	agcatctt
R. Nor	gtatgctt	ggatc	gatgatgatt	cccagtc	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gaaaactcagc	caccg	caactgtc	cggaa	ctgaggtcc	ggcacctt
C. Por	atgtgctt	ggatc	gatgatgagtc	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagagctc	taacc	gctcgtc	ggc	ctgaggtcc	agcacatt
O. Cun	atgtgctt	ggatc	aatgatgact	ccccataaaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactc	caacc	gctcgtc	ctc	ctgaggtcc	agcacatt
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaatct	GCATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactc	cctgc	gctcgtc	ctc	ctgaggtcc	agcacgtt
F. Cat	atgtgctt	ggatc	gatgatgact	ccctcaaca	GCATTCC	TGGAAAAG	CGAA	caaatgagt	gagaactc	ccctc	gctcgtc	ctc	ctgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaaat	GCATTCC	TGG-AAA	CGAA	caaatgagt	gagccat	cactacc	gctc	ctc	ctgaggtcc	agcacgtg
L. Afr	acgtgcat	ggatt	gatgatgact	gctatctaa	ACATTCC	TGGAAAAG	CGAA	caaatgagt	gaaaactc	cttacc	gctcact	cattg	-aactgaggtcc	agcacatt
	***	****	*****	*	*****	***	*****	*****	**	*	*	*	*****	***

id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

H. Sap	---tacccaag	gtgactctttt	...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca
R. Mac	---tacccaac	gtgctctcttt	...175...	--tggatg	taatgaatccg	gtaTTGTTTTCCAG	GAATGTca
P. Tro	---tacccaag	gtgactctttt	...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca
P. Abe	---tacccaag	gtggctctctt	...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca
C. Jac	---tacccaag	atgcctctctt	...177...	----atg	tagtgaatcag	tatctGTTTCCAG	GAATGTca
M. Mus	---ccccatg	gtgctctcttt	...170...	----ctg	tgatgagtcact	tacttGTTTCCAG	GAATGTca
R. Nor	---ccccatg	gtgctctcttt	...166...	--ggg	ctgtgatgaat	cacttaTTGTTTTCCAG	GAATGTTa
C. Por	agggtccggg	g---ctctgtc	...173...	----acat	gatgaatcag	tacttGTTTCCAG	GAATGTca
O. Cun	---tacccaag	gtgctctcttt	...163...	--tggatg	tgatgaacca	agtcTTGTTTTCCAG	GAATGTca
C. Fam	---tacccaag	ggacctctctt	...184...	----att	tgatcaatca	agtatctGTTTCCAG	GAATGTca
F. Cat	---tacccaag	gcacctctctt	...180...	--tggatg	tgatgaatca	agtaTTGTTTTCCAG	GAATGTca
B. Tau	---tacctgag	gcacctctctt	...191...	--tggatg	tgatgaatca	agtaTTGTTTTCCAG	GAATGTca
L. Afr	---tacctgaa	gcacctctctt	...145...	ctt	ggaagtgaat	cagTGTTTATTTCCAG	GAATGTca
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id=149604 gene=ENSG0000198373 name=WWP2 segment=chr16.69832858.69833076.1 type=IN

Figure 269: CS=11.7



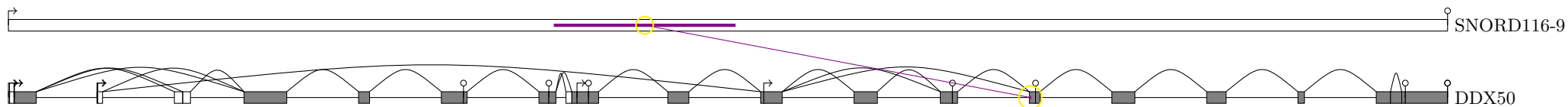
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R. Mac	atgtgctt	ggatc	gatgatgag	gtccccataaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagaactcat-accgtcg	ttctcatcggaactgaggtcc	agcacgtt		
P. Tro	atgtgctt	ggatc	gatgatgag	gtccccataaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagaactcat-accgtcg	ttctcatcggaactgaggtcc	agcacatt		
P. Abe	atgtgctt	ggatc	aatgatgag	gtccccataaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagaactcat-accgtcg	ttctcatcggaactgaggtcc	agcacatt		
C. Jac	atgtgctt	ggatc	gatgatgag	gtcctacaaaaaa	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gaaagctcat-actggcact	ctcgtcggaactgaggtcc	agcacgtt		
M. Mus	acgtgctt	ggatc	ctatgatgatt	cccagtcaaa--	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gaaaactctgtaccg	cactctcatcggaactgaggtcc	agcatctt		
R. Nor	gtatgctt	ggatc	gatgatgatt	cccagtcaaa--	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gaaaactcagcaccg	caactgtcatcggaatgaggtcc	ggcacctt		
C. Por	atgtgctt	ggatc	gatgatgatg	gtccccaaa-aaa	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagagctc	taatccgtcgctcgtgctgaggtcc	agcacatt		
O. Cun	atgtgctt	ggatc	aatgatgact	gtccccataaaa--	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagaactcacaaccg	tcgttctcatcgtgactgaggtcc	agcacatt		
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaatctg-	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gagaactcctg	ccgctggttctcatcgcaactgaggtcc	agcacgtt		
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa-atg-	CATTCCCTGGAAAAGC	tctgacaaaatgagt	gagccatcactaccg	tc-tcctcatcggaactgaggtcc	agcacgtg		
S. Sus	ccgtgctt	ggatc	gatgatgact	ccctcta-aag-	CATTCCCTGGAAAAGC	tctgacaaaatgagt	gagaactcactaccg	tc-tcctcatcggaactgaggtcc	ggcacgtg		
L. Afr	acgtgcat	ggatt	gatgatgact	gtcatctaaa--	CATTCCCTGGAAAAGC	tgaacaaaatgagt	gaaaactccttaccg	tcctcactcattg-aactgaggtcc	agcacatt		
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id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15\_25318254\_25318348.1 type=EN

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R. Mac	ctgtagat	gtaagttttctt...1596...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Tro	ctgtagat	gtaagttttctt...1611...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
P. Abe	ctgtagat	gtaagttttctt...1599...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Jac	ctgtagat	gtaagtagtttc...1911...	aagtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
M. Mus	cggtggat	gtaagttttctt...1434...	gggtattaaac	ctgtcaat	GTTTTTCTtaAAG	GtgAGTGa
R. Nor	ctgtggat	gtaagttttctt...1316...	gggcattaaac	ctgtccat	GTTTTTCTtaAAG	GtgAGTGa
C. Por	ctgtagat	gtaagttttctt...1542...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
O. Cun	ctgtcgat	gtaagtttgctt...1690...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
C. Fam	ctgtggat	gtaagttttctt...1568...	aggtattaaac	ctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
B. Tau	ctgtcgat	gtaagttttctg...1572...	---tattaaac	atgtcaatgtt	TTTCTtgAAG	GtgAGTGa
S. Sus	ctgtagat	gtaagttttctt...1671...	---tattaaac	ctgtcaatgtt	TTTCTtgAAG	GtgAGTGa
L. Afr	ccgtcgat	gtaagttttctt...2099...	aggtattaaac	atgtcaat	GTTTTTCTtgAAG	GtgAGTGa
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id=595784 gene=ENSG0000144893 name=MED12L segment=chr3\_151083780\_151085433.1 type=IN

Figure 270: CS=11.7



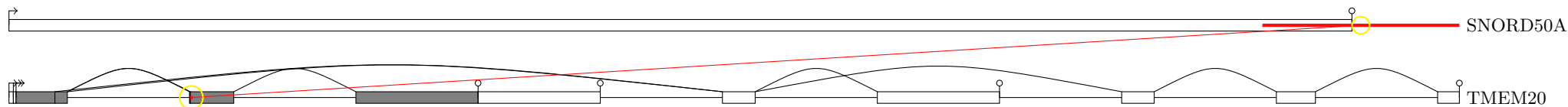
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R.Mac	atgtgctt	ggatc	gatgatgagtc	ccccataaaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacgtt		
P.Tro	atgtgctt	ggatc	gatgatgagtc	ccccataaaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacatt		
P.Abe	atgtgctt	ggatc	aatgatgagtc	ccccataaaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacatt		
C.Jac	atgtgctt	ggatc	gatgatgagtc	ctacaaaaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gaaagtc	-actggcactctcgtc	ggaactgaggtcc	agcacgtt		
M.Mus	acgtgctt	ggatc	ctatgatgatt	cccag--tcaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gaaaactcgt	accgccactctcatc	ggaactgaggtcc	agcatctt		
R.Nor	gtatgctt	ggatc	gatgatgatt	cccag--tcaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gaaaactcag	caccgcaactgtcatc	ggaatgaggtcc	ggcacctt		
C.Por	atgtgctt	ggatc	gatgatgatg	cccca--aaaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagagctc	taatccgtcgtc	tgctgaggtcc	agcacact		
O.Cun	atgtgctt	ggatc	aatgatgact	ccccat--aaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactc	caaccgtcgttctcatc	gtgactgaggtcc	agcacgtt		
C.Fam	aagtgctt	ggatc	gatgatgact	ccctca-atctgc	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactc	cctgccgtcgttctcatc	gcaactgaggtcc	agcacgtt		
F.Cat	atgtgctt	ggatc	gatgatgact	ccctc--aacagc	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactc	ccctccgtcgttctcatc	gaaactgaggtcc	agcacgtt		
E.Cab	acgtgctt	ggatc	gatgatgact	ccctc--atatgc	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gagaactc	actaccgtcgttctcatc	gaaactgaggtcc	ggcacgtt		
L.Afr	acgtgcat	ggatt	gatgatgact	gctat--ctaaac	ATTCCTTg	GAAAAgc	TGAA	caaaatgagt	gaaaactc	cttaccgtcactcattg	-aactgaggtcc	agcacatt		
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id=313896 gene=ENSG0000206727 name=SNORD116-9 segment=chr15.25318254.25318348.1 type=EN

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P.Tro	aaaaagca	gtaagtagagtt	...1041...	ttttctttaatgtaactct	TTCATTTTCAG	GGAATtac
P.Abe	aaaaagca	gtaagtagagtt	...1048...	ttttctttaatgtaactct	TTCATTTTCAG	GGAATtac
C.Jac	aaaaagca	gtaagtagagtt	...1024...	ttttgtttaatgtaactct	TTCATTTTCAG	GGAATtac
M.Mus	agaaagct	gtaagtaaattg	...901...	ttttctttaataataattct	TTCATTTTCAG	GGAATtac
R.Nor	agaaagca	gtaagtaaagtg	...694...	ttttctttaataataattct	TTCATTTTCAG	GGAATtac
C.Por	aaaaagca	gtaagtattact	...1256...	ttttctttaataataattct	TTCATTTTCAG	GGAATtac
O.Cun	aaaaagca	gtaagtagagtt	...712...	ttttctttaatgtaattct	TTCATTTTCAG	GGAATtac
C.Fam	aaaaagca	gtaagtacagtt	...752...	ttttctttaatgtaattct	TTCATTTTCAG	GGAATtac
F.Cat	aaaaagca	gtaagtagagtt	...962...	ttttctttaatgtaattct	TTCATTTTCAG	GGAATtac
E.Cab	aaaaagca	gtaagtcgagtt	...721...	ttttctttaataataattct	TTCATTTTCAG	GGAATtac
L.Afr	aaaaagca	gtaagttgaatt	...692...	ttttctttaatgtaattct	TTCATTTTCAG	GGAATtac
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id=146833 gene=ENSG0000107625 name=DDX50 segment=chr10.70694675.70695761.1 type=IN

Figure 271: CS=11.7



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R.Mac	cttggctt	t-atctgtgatga...28...aaaaaaaacttttacggatc	TGGCTTCTGAGAT	ggaccatt
P.Tro	cttggctt	t-atctgtgatga...28...aaaaaaaacttttacggatc	TGGCTTCTGAGAT	ggaccgtt
P.Abe	cttggctt	t-atctgtgatga...28...aaaaaaaacttttacggatc	TGGCTTCTGAGAT	ggaccgtt
C.Jac	cttggctt	t-atctgtgatga...25...tgaaaaaaaactacggatc	TGGCTTCTGAGAT	ggaccatt
M.Mus	gttggctt	a-gtctatgatga...27...aaaaccatacttacggatc	TGGCTTCTGAGAT	ggaccatt
R.Nor	accgttct	g-atctatgatga...27...aaaaatataattacggatc	TGGCTTCTGAGAT	ggaccgtt
C.Por	tttggctt	t-atctatgatga...25...tgaaaaaacatttacggatc	TGGCTTCTGAGAT	TGAccatt
O.Cun	tctggctt	t-atctatgatga...29...aaaaaaacgtatacggatc	TGGCTTCTGAGAT	agaccatt
C.Fam	cttggctt	taatctatgatg...26...tgagaaaaccaatacggatc	TGGCTTCTGAGAT	agaccatt
F.Cat	cttggctt	taaccatgatg...26...tgagaaaacttatacggatc	TGGCTTCTGAGAT	agaccgtt
E.Cab	cttggctt	t-atcgatgatga...25...tgaaaaaacttatacggatc	TGGCTTCTGAGAT	agaccatt
L.Afr	cttggctt	t-atctatgatga...25...tgaaaaaacttatacggatc	TGGCTTCTGAGAT	ggaccatt
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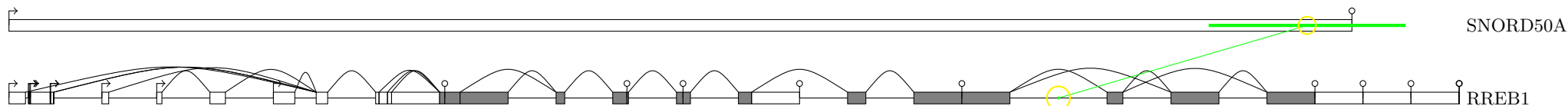
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R.Mac	cgagccgg	gtgagtgcgagg...4646...-----actaaccagaatttaattcTTTCAG	AAGCCAag
P.Tro	cgagccgg	gtgagtgcgagg...4312...-----actaaccagaatttaattcTTTCAG	AAGCCAag
P.Abe	ggagtcgg	gtgagtgcgagg...4319...-----actaaccagaatttaattcTTTCAG	AAGCCAag
C.Jac	ggagccgg	gtgagtgcgagg...4753...-----actaaccagaatttaattcTTTCAG	AAGCCAag
M.Mus	ggagccgg	gtgagtgcgggc...4094...-----actaaccagaacttaattcTTTCAG	AAGCCAag
R.Nor	ggagccgg	gtgagtgcgggc...3508...-----actaaccagaatttaattcTTTCAG	AAGCCAag
C.Por	ggagccgg	gtgagtgcgggc...4774...aagcaaggactaaccagaatTTAAcTTTTCAG	AAGCCAag
O.Cun	ggagccgg	gtgagtgcgagc...3997...-----actaatccgaatttgatctcTTTCAG	AAGCCAag
C.Fam	accgcggg	gccaggttgag...4951...-----actaaccagaacttaattcTTTCAG	AAGCCAag
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E.Cab	tcaaccgg	gtgagtgcggcg...4314...-----actaactagaatttaattcTTTCAG	AAGCCAag
L.Afr	ggagtcgg	gtgagtgcgggg...4951...-----actaaccagaatttaattcTTTCAG	AAGCCAag
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id=240898 gene=ENSG00000176273 name=TMEM20 segment=chr10.95653969.95658327\_1 type=IN

Figure 272: CS=14.04





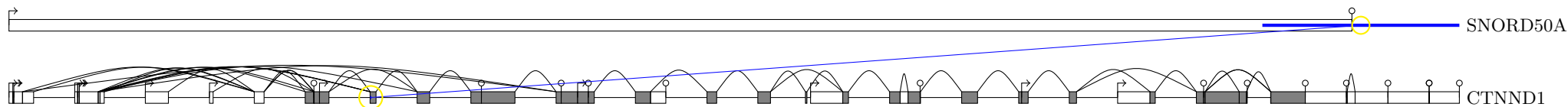
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P. Tro	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttga-aaaaaaaaacttt--tacgg	ATCTGGCTTCTG	agat	ggaccgtt
P. Abe	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttga-aaaaaaaaacttt--tacgg	ATCTGGCTTCTG	agat	ggaccgtt
C. Jac	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttga-aaaaaaaaac-----tacgg	ATCTGGCTTCTG	agat	ggaccatt
M. Mus	gttggct	a-gtctatgatgatccttatcccgaacctgaa-ttcctgttga-----aaaaaccatacttacgg	ATCTGGCTTCTG	agat	ggaccatt
R. Nor	accggct	g-atctatgatgatccttatcccgaacctgaa-ttcctgttga-----aaaaataataattacgg	ATCTGGCTTCTG	agat	ggaccgtt
C. Por	tttggca	t-atctatgatgatccttatcccgaacctgaa-tttctgttga-----aaaaaacatt--tacgg	ATCTGGCTTCTG	agat	tgaccatt
O. Cun	tctggct	t-atctatgatgatccttatcccgaacctgaa-tttctgttga-----aaaaaaacgcta--tacgg	ATCTGGCTTCTG	agat	agaccatt
C. Fam	cttggct	taatctatgatgatccttatcccgaacctgaa-tacatgttga-----agaaaaccaa--tacgg	ATCTGGCTTCTG	agat	agaccatt
F. Cat	cttggct	taatccatgatgatccttatcccgaacctgaa-tatctgttga-----agaaaactta--tacgg	ATCTGGCTTCTG	agat	agaccgtt
E. Cab	cttggct	t-atcgtatgatgatccttatcccgaacctgaa-tttctgttga-----aaaaaactta--tacgg	ATCTGGCTTCTG	agat	agaccatt
L. Afr	cttggct	t-atctatgatgatccttatcccgaacctgaa-tttctgttga-----aaaaaactta--tacgg	ATCTGGCTTCTG	aGAT	GGAccatt
	****	** ***** ***** ***** ***** ***** * ** ***** ***** *****			**** **

id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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R. Mac	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
P. Tro	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
P. Abe	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
C. Jac	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
M. Mus	acacactg	gtaagagggccca...4916...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatgcgtattttttttcctgcttcag	gtcagaaa
R. Nor	acacactg	gtaagagggccca...4916...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
C. Por	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
O. Cun	acacaccg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
C. Fam	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
F. Cat	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
E. Cab	acacactg	gtaagagggccca...4917...-----acttttctatttcattgcag	TAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaaa
L. Afr	gcacacag	gtaagagggccca...4914...aagcaacttttacttttcatt	TTCATTAGAAaGCCAGAT	aaatatata-tttttttcctgcttcag	gtcagaag
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id=63855 gene=ENSG00000124782 name=RREB1 segment=chr6.7232141.7240670.1 type=IN VIEW

Figure 273: CS=15.6



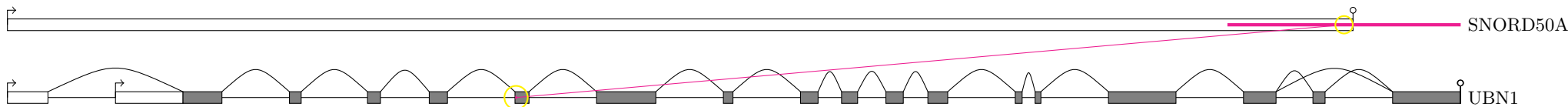
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P.Abe	cttggctct	t-atctgtgatga...28...aaaaaaaacttttacggatc	TGGCTTCTGAGAT	GGaccgtt
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E.Cab	cttggctct	t-atcgatgatga...25...tgaaaaaacttatacggatc	TGGCTTCTGAGAT	AGaccatt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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P.Tro	ggcatcag	gtaaccctctc...2309...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
P.Abe	ggcatcag	gtaaccctctc...2288...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
C.Jac	ggcatcag	gtaaccctctc...2028...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
M.Mus	ggcatcag	gtaaccctctc...2145...-acatgaattg---tttgtgggc	TCTGTTTCAG	AacGGCCg
R.Nor	ggcatcag	gtaacccttct...2111...aaatgaattg---tcttgtggg	CTATgTTTCAG	AacGGCCg
C.Por	ggcaccag	gtaaccctctc...2292...-----aactgtgttc-tgtgggctgt	GTTTCAG	AatGGCCg
O.Cun	ggcatcag	gtaaccctctc...2776...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
C.Fam	ggcatcag	gtaaccctctc...1900...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
F.Cat	ggcatcag	gtaaccctctc...2163...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
E.Cab	ggcatcag	gtaaccctctc...1986...---atgaattgtcttcttgtggg	CTGTgTTTCAG	AacGGCCg
L.Afr	ggcatcag	gtaaccctctc...2240...---ctgaattgtattcttgtggg	CTATgTTTCAG	AacGGCCg
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id=154201 gene=ENSG00000198561 name=CTNND1 segment=chr11.57559146.57561481.1 type=IN

Figure 274: CS=11.7



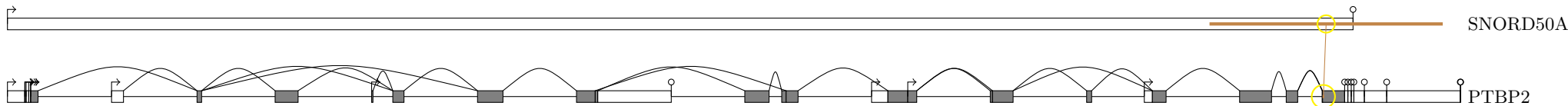
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R.Mac	cttggtct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg-----aaaaaaaacttt--tacgga	TCTGgCTTCTGAGAT	GGA	ccatt
P.Tro	cttggtct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacgga	TCTGgCTTCTGAGAT	GGA	ccgtt
P.Abe	cttggtct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacgga	TCTGgCTTCTGAGAT	GGA	ccgtt
C.Jac	cttggtct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaac-----tacgga	TCTGgCTTCTGAGAT	GGA	ccatt
M.Mus	gttggtct	a-gtctatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaccatacttacgga	TCTGgCTTCTGAGAT	GGA	ccatt
R.Nor	accggtct	g-atctatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaataataattacgga	TCTGgCTTCTGAGAT	GGA	ccgtt
C.Por	tttggtca	t-atctatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaaacatt--tacgga	TCTGgCTTCTGAGAT	TGA	ccatt
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C.Fam	cttggtct	taatctatgatgatccttatcccgaacctgaa-tacatgttg-----agaaaaccaa--tacgga	TCTGgCTTCTGAGAT	AGA	ccatt
F.Cat	cttggtct	taatccatgatgatccttatcccgaacctgaa-tatctgttg-----agaaaactta--tacgga	TCTGgCTTCTGAGAT	AGA	ccgtt
B.Tau	cttggtct	t-acctatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaaacctta--tacgga	TCTGgCTTCTGAGAT	GGA	ccatt
E.Cab	cttggtct	t-atcgatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaaacctta--tacgga	TCTGgCTTCTGAGAT	AGA	ccatt
L.Afr	cttggtct	t-atctatgatgatcctatcccgaacctgaa-ttctgttg-----aaaaaacctta--tacgga	TCTGgCTTCTGAGAT	GGA	ccatt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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R.Mac	ctccaaag	gtagaatgtgc...661...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
P.Tro	ctccaaag	gtagaatgtgc...662...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
P.Abe	ctccaaag	gtagaatgtgt...660...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
C.Jac	ctccaaag	gtagaatgtgc...670...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
M.Mus	ctccgaag	gtaggatattc...554...--ttgtgtaac--tgctttttttTTTAatTCTCAG	AAGCGGAa
R.Nor	ctccaaag	gtaggatattc...567...aattgtgtaac--tgcttgtc--TTTAatTCTCAG	AAGCGGAa
C.Por	ctccaaag	gtagaacatgc...612...--cgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
O.Cun	ctccaaag	gtagagcctgc...970...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
C.Fam	ctccaaag	gtagaataata...662...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
F.Cat	ctccaaag	gtagaacaata...669...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
B.Tau	ctccaaag	gtagaacattg...644...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
E.Cab	ctccaaag	gtagaacgatg...682...--ccgtgtaactgtgccttgtc--TTTAatTCTCAG	AAGCGGAa
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id=477029 gene=ENSG00000118900 name=UBN1 segment=chr16.4909161.4909865.1 type=IN

Figure 275: CS=12.6



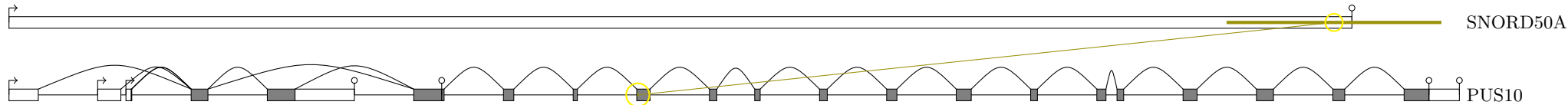
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P.Tro	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--tacggATCTggCTTCTGAGAT	GGA	ccgtt
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M.Mus	gttggctc	ag-tctatgatgatcctatcccgaacctgaa-ttctgttg----aaaaccatacttacggATCTggCTTCTGAGAT	GGA	ccatt
R.Nor	accgtctc	ga-tctatgatgatcctatcccgaacctgaa-ttctgttg----aaaaataataattacggATCTggCTTCTGAGAT	GGA	ccgtt
C.Por	tttggcca	ta-tctatgatgatcctatcccgaacctgaa-tttctgttg----aaaaaacatt--tacggATCTggCTTCTGAGAT	tgaccatt	
O.Cun	tctggctc	ta-tctatgatgatccttatcccgaacctgaattttctgttg--aaaaaaacgcta--tacggATCTggCTTCTGAGAT	AGA	ccatt
C.Fam	cttggctc	taatctatgatgatccttatcccgaacctgaa-tacatgttg----agaaaaaccaa--tacggATCTggCTTCTGAGAT	AGA	ccatt
B.Tau	cttggctc	ta-cctatgatgatcctatcccgaacctgaa-tttctgttg----aaaaaaccta--tacggATCTggCTTCTGAGAT	GGA	ccatt
E.Cab	cttggctc	ta-tcgatgatgatcctatcccgaacctgaa-tttctgttg----aaaaaaccta--tacggATCTggCTTCTGAGAT	AGA	ccatt
O.Avi	cttggctc	ta-cctatgatgatcctatcccgaacctgaa-tttctgttg----aaaaaaccta--tacggATCTggCTTCTGAGAT	GGA	ccatt
L.Afr	cttggctc	ta-tctatgatgatcctatcccgaacctgaa-tttctgttg----aaaaaaccta--tacggATCTggCTTCTGAGAT	GGA	ccatt
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P.Tro	ttttttca	gtaagcaagctt...128...gaagtatctaattttataatTTGTTCAG	AAGAGATc
P.Abe	ttttttca	gtaagcaagctt...128...aaagtatctaattttataatTTGTTCAG	AAGAGATc
C.Jac	ttttttca	gtaagcaagctt...128...gaagtatctaattttataatTTGTTCAG	AAGAGATc
M.Mus	ttttttca	gtaagcaagctt...104...gaagtatctaatttcataatTTGTTCAG	AAGAGATc
R.Nor	ttttttca	gtaagcaagctt...105...gaagtatctaatttcataatTTGTTCAG	AAGAGATc
C.Por	ttttttca	gtaagcaagctt...135...--gtgtctaatttcataatTTGTTCAG	AAGAGATc
O.Cun	ttttttca	gtaagcaagctt...123...aaagtatctaatttgataatTTGTTCAG	AAGAGATc
C.Fam	ttttttca	gtaagcaagctt...123...gaagtatctaatttcataatTTGTTCAG	AAGAGATc
B.Tau	ttttttca	gtaagcaagctt...120...gaagtatctaatttcataatTTGTTCAG	AAGAGATc
E.Cab	ttttttca	gtaagcaagctt...150...gaagtatctaatttcataatTTGTTCAG	AAGAGATc
O.Avi	ttttttca	gtaagcaagctt...120...nnntatctaatttcataatTTGTTCAG	AAGAGATc
L.Afr	ttttttca	gtaagcaagctt...130...aaagtatctaatttcataatTTGTTCAG	AAGAGATc
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id=174350 gene=ENSG00000117569 name=PTBP2 segment=chr1.97278663.97278828.1 type=IN

Figure 276: CS=10.92



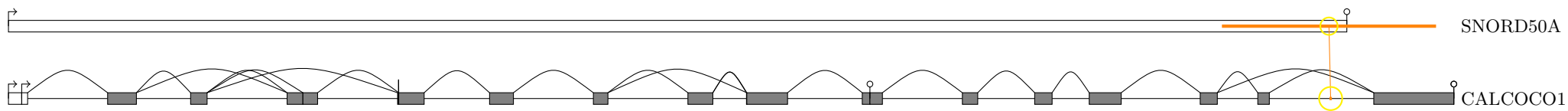
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R.Mac	cttggtct	ta-tctgtgatgatccttatcccgaacctgaa-cttctggtg--aaaaaaaaaacttt--tacgga	TCTGgc	TTCTGAGAT	GGaccatt
P.Tro	cttggtct	ta-tctgtgatgatccttatcccgaacctgaa-cttctggtg--aaaaaaaaaacttt--tacgga	TCTGgc	TTCTGAGAT	GGaccgtt
P.Abe	cttggtct	ta-tctgtgatgatccttatcccgaacctgaa-cttctggtg--aaaaaaaaaacttt--tacgga	TCTGgc	TTCTGAGAT	GGaccgtt
C.Jac	cttggtct	ta-tctgtgatgatccttatcccgaacctgaa-cttctggtg--aaaaaaaaaac----tacgga	TCTGgc	TTCTGAGAT	GGaccatt
M.Mus	gttggtct	ag-tctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaccatacttacgga	TCTGgc	TTCTGAGAT	GGaccatt
R.Nor	accggtct	ga-tctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaatataattacgga	TCTGgc	TTCTGAGAT	GGaccgtt
C.Por	tttggca	ta-tctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaacatt--tacgga	TCTGgc	TTCTGAGAT	TGACcatt
O.Cun	tctggtct	ta-tctatgatgatccttatcccgaacctgaa-ttcctggtg--aaaaaaacgcta--tacgga	TCTGgc	TTCTGAGAT	Agaccatt
C.Fam	cttggtct	taatctatgatgatccttatcccgaacctgaa-tacatggtg----agaaaacaa--tacgga	TCTGgc	TTCTGAGAT	AGaccatt
F.Cat	cttggtct	taatccatgatgatccttatcccgaacctgaa-tatctggtg----agaaaactta--tacgga	TCTGgc	TTCTGAGAT	AGaccgtt
B.Tau	cttggtct	ta-cctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaactta--tacgga	TCTGgc	TTCTGAGAT	GGaccatt
E.Cab	cttggtct	ta-tcgatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaactta--tacgga	TCTGgc	TTCTGAGAT	AGaccatt
O.Avi	cttggtct	ta-cctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaactta--tacgga	TCTGgc	TTCTGAGAT	GGaccatt
L.Afr	cttggtct	ta-tctatgatgatccttatcccgaacctgaa-ttcctggtg----aaaaaactta--tacgga	TCTGgc	TTCTGAGAT	GGaccatt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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P.Tro	gaaatggg	gtaagtaattta...3866...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
P.Abe	gaaatggg	gtaagtaattta...3861...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
C.Jac	gaaatggg	gtaagtaattta...4031...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
M.Mus	gaaatggg	gtaagtaattga...2885...-----	gttttaattgaattcctataTTATT	CAGAAagCAGa
R.Nor	gaaatggg	gtaagtaatttt...2130...tcacgcagta--	aattaattctTCTGtaTTATT	CAGAAagCAGa
C.Por	gaaatggg	gtaagtaatttt...2717...-atactggtg--	aattaatttt--GTTATT	CAGAAagCAGa
O.Cun	gaaatggg	gtaagtaatttc...4947...--tcaatg	tcagtgaaatttttaTGTTCTT	CAGAAagCAGa
C.Fam	gaaatggg	gtaagtaattag...4308...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
F.Cat	gaaatggg	gtaagtaattta...4949...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
B.Tau	gaaatggg	gtaagtaattta...2852...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
E.Cab	gaaatggg	gtaagtaattta...3163...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
O.Avi	gaaatggg	gtaagtaattta...2860...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
L.Afr	gaaatggg	gtaagtaattta...3702...----	tcagtg--aattaattttatgTTATT	CAGAAagCAGa
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id=567152 gene=ENSG00000162927 name=PUS10 segment=chr2.61194749.61198657.-1 type=IN

Figure 277: CS=15



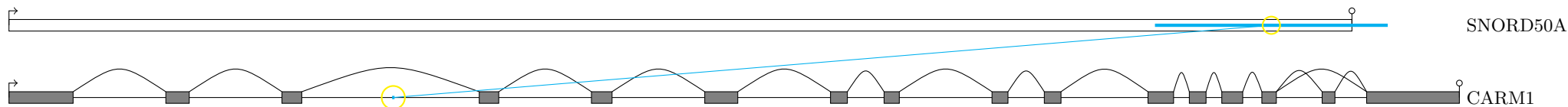
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R. Mac	cttggctt	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccatt
P. Tro	cttggctt	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccggtt
P. Abe	cttggctt	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccggtt
C. Jac	cttggctt	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaac----tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccatt
R. Nor	accggtct	g-atctatgatgatcctatcccgaactgaa-ttctgttg----aaaaataataattacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccggtt
C. Por	tttggcca	t-atctatgatgatcctatcccgaacctgaa-ttctgttg----aaaaaacatt--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>TGA</b> ccatt
O. Cun	tctggctt	t-atctatgatgatccttatcccgaacctgaatttctgttg--aaaaaaacgcta--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	agaccatt
C. Fam	cttggctt	taatctatgatgatccttatcccgaacctgaa-tacatgttg----agaaaaccaa--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	agaccatt
F. Cat	cttggctt	taatccatgatgatccttatcccgaacctgaa-tatctgttg----agaaaactta--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	agaccgtt
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E. Cab	cttggctt	t-atcgtatgatgatcctatcccgaacctgaa-ttctgttg----aaaaactta--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	agaccatt
O. Avi	cttggctt	t-acctatgatgatcctatcccgaacctgaa-ttctgttg----aaaaactta--tacgga	<b>TCTGGCTT</b>	<b>CTGAGGT</b>	<b>GGA</b> ccatt
L. Afr	cttggctt	t-atctatgatgatcctatcccgaacctgaa-ttctgttg----aaaaactta--tacgga	<b>TCTGGCTT</b>	<b>CTGAGaT</b>	<b>GGA</b> ccatt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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L. Afr	actaccag	ggaggcacctaa...327...aggacgatgtcagactcatt	<b>TTCAgcCTCA</b>	<b>ttAGGCagCAGA</b>	cagaa-atggagggaagagagc-...207...-atctctcttag	tggctttg
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id=500298 gene=ENSG0000012822 name=CALCOCO1 segment=chr12.54105906.54106558.-1 type=IN

Figure 278: CS=10.92



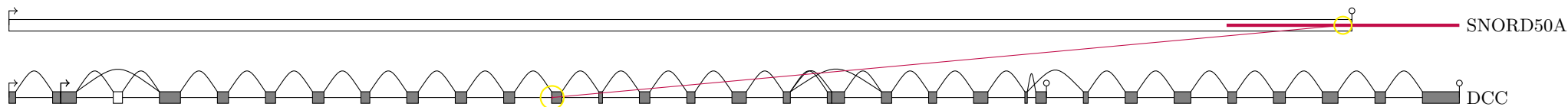
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R. Mac	cttggctct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--ta	CGGATCTGGCTTCT	gagat	ggaccatt
P. Tro	cttggctct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--ta	CGGATCTGGCTTCT	gagat	ggaccgtt
P. Abe	cttggctct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--ta	CGGATCTGGCTTCT	gagat	ggaccgtt
C. Jac	cttggctct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaac-----ta	CGGATCTGGCTTCT	gagat	ggaccatt
M. Mus	gttggctct	a-gtctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaccataccta	CGGATCTGGCTTCT	gagat	ggaccatt
R. Nor	accggtct	g-atctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaataata	ATTACGGATCTGGCTTCT	gagat	ggaccgtt
C. Por	tttggctca	t-atctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaacatt--ta	CGGATCTGGCTTCT	gagat	tgaccatt
O. Cun	tctggctct	t-atctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaaacgcta--ta	CGGATCTGGCTTCT	gagat	agaccatt
C. Fam	cttggctct	taatctatgatgatccttatcccgaacctgaa-tacatgttg-----agaaaaccaa--ta	CGGATCTGGCTTCT	gagat	agaccatt
B. Tau	cttggctct	t-acctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaactta--ta	CGGATCTGGCTTCT	gaggt	ggaccatt
O. Avi	cttggctct	t-acctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaactta--ta	CGGATCTGGCTTCT	gaggt	ggaccatt
L. Afr	cttggctct	t-atctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaactta--t	ACGGATCTGGCTTCT	gagat	ggaccatt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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P. Tro	acttcag	gtgggttgact...448...--tatgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.422...-tctctgttcag	ttttatgg
P. Abe	acttcag	gtgggttgact...449...--tatgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.401...-tctctgttcag	ttttatgg
C. Jac	acttcag	gtgggttgact...448...--tatgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.431...-tctctgttcag	ttttatgg
M. Mus	acttcag	gtgagctggcac...345...--tatgcaacagagccaagatg-	GGAAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.396...-tctctgttcag	ttttatgg
R. Nor	acttcag	gtgagctggcac...330...--tatgcaacagagccaagatg-	GGAAAGCCAGGTCTG	ccTGATgccccagcctgtgc-----	.412...-tctctgttcag	ttttatgg
C. Por	acttcag	gtagggtgcctg...315...--tacgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.421...-tctctgttcag	ttttatgg
O. Cun	atttcag	gtgggtgggtgc...428...--tctgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.330...-tctctgttcag	ttttatgg
C. Fam	atttcag	gtgggttgact...422...--tatgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.428...-tctctgttcag	ttttatgg
B. Tau	atttcag	gtgggtacatgg...418...--tatgcaacagagccaagatg-	GGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.414...-tctctgttcag	ttttatgg
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L. Afr	acttcag	gtgggttgact...451...--tatgcaacagagccaagatg-	CGGGAAGCCAGGTCTG	cctgatgccaaagcctgtgc-----	.430...-tctctgttcag	ttttatgg
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id=528752 gene=ENSG00000142453 name=CARM1 segment=chr19.11018822.11019778.1 type=IN

Figure 279: CS=10.14



H.Sap	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttgaaaaaaaaaacttt--tacggaTCTGgcTTCTGAGAT	GGA	ccgtt
R.Mac	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttg-----aaaaaaaacttt--tacggaTCTGgcTTCTGAGAT	GGA	ccatt
P.Tro	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaacttt--tacggaTCTGgcTTCTGAGAT	GGA	ccgtt
P.Abe	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttg-----aaaaaaaacttt--tacggaTCTGgcTTCTGAGAT	GGA	ccgtt
C.Jac	cttggctc	ta-tctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaac-----tacggaTCTGgcTTCTGAGAT	GGA	ccatt
M.Mus	gttggctc	ag-tctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaccatacttacggaTCTGgcTTCTGAGAT	GGA	ccatt
R.Nor	accggtct	ga-tctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaataataattacggaTCTGgcTTCTGAGAT	GGA	ccgtt
C.Por	tttggctc	ta-tctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaacatt--tacggaTCTGgcTTCTGAGAT	tgacc	catt
O.Cun	tctggctc	ta-tctatgatgatccttatcccgaacctgaa-ttcctgttg--aaaaaaaacgcta--tacggaTCTGgcTTCTGAGAT	AGA	ccatt
C.Fam	cttggctc	taatctatgatgatccttatcccgaacctgaa-tacatgttg-----agaaaaccaa--tacggaTCTGgcTTCTGAGAT	AGA	ccatt
F.Cat	cttggctc	taatccatgatgatccttatcccgaacctgaa-tatctgttg-----agaaaactta--tacggaTCTGgcTTCTGAGAT	AGA	ccgtt
E.Cab	cttggctc	ta-tcgatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaactta--tacggaTCTGgcTTCTGAGAT	AGA	ccatt
L.Afr	cttggctc	ta-tctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaactta--tacggaTCTGgcTTCTGAGAT	GGA	ccatt
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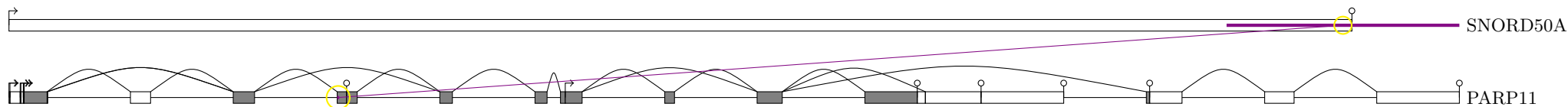
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R.Mac	aagaacag	gtaggtgaagga...2375...-cttgataacag-ttttgggtgt-TTTAtgTCTCAG	AAAta	TAGa
P.Tro	aagaacag	gtaggtgaagga...2456...-cttgataacag-ttttgggtgt-TTTAtgTCTCAG	AAAta	TAGa
P.Abe	aagaacag	gtaggtgaagga...1991...-cttgataacag-ttttgggtgt-TTTAtgTCTCAG	AAAta	TAGa
C.Jac	aagaacag	gtaggtgaagga...1634...-cttgataaccg-ttttaagt-TTGTgTCTCAG	AAAta	TAGa
M.Mus	aagaacag	gtgggtaagaaa...1516...-cttaataacta-ttctggcat-TTTAtgTCTCAG	AAAta	TAGa
R.Nor	aagaacag	gtgggtaagaaa...1006...-cttaataacga-ttctggcat-TTTAtaTCTCAG	AAAta	TAGa
C.Por	aagaacag	gtaggtaagga...1559...-gtaacag--tttggcatttat-GTCTCAG	AAAta	TAGa
O.Cun	aagaacag	gtaggtcatgga...1670...-ttaatagcagtttttgggtgt-TTTAtgTCTCAG	AAAta	TAGa
C.Fam	aagaacag	gtaggcaagga...1653...cctgaataacag--tttggcat-TTTAtgTCTCAG	AAAta	TAGa
F.Cat	aagaacag	gtaggcaagga...1612...cctgaataacag--tttggcat-TTTAtgTCTCAG	AAAta	TAGa
E.Cab	aggaacag	gtaggtagagga...1599...-gtgaataacag-ttttgggtgt-TTTAtgTCTCAG	AAAta	TAGa
L.Afr	aagaacag	gtaggaagaga...2012...-cttaataacag--tttgggctt-TTTAtgTCTCAG	AAAta	TAGa
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id=787489 gene=ENSG00000187323 name=DCC segment=chr18.50731735.50734048.1 type=IN

Figure 280: CS=11.7





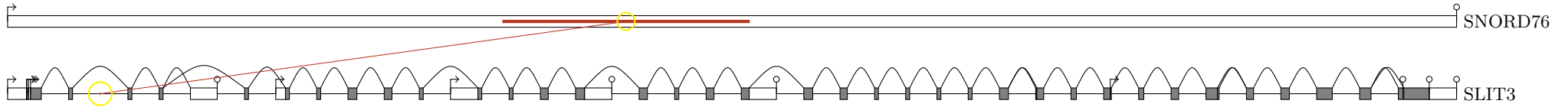
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R. Mac	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaattt--tacgg	ATCTGGCTT	CGGAT	GGACCA	tt
P. Tro	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--tacgg	ATCTGGCTT	CGGAT	GGACCG	tt
P. Abe	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaacttt--tacgg	ATCTGGCTT	CGGAT	GGACCG	tt
C. Jac	cttggct	t-atctgtgatgatccttatcccgaacctgaa-cttctgttg--aaaaaaaaaac-----tacgg	ATCTGGCTT	CGGAT	GGACCA	tt
M. Mus	gttggct	a-gtctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaaccatacttacgg	ATCTGGCTT	CGGAT	GGACCA	tt
R. Nor	accggtc	g-atctatgatgatccttatcccgaacctgaa-ttcctgttg-----aaaaataataattacgg	ATCTGGCTT	CGGAT	GGACCG	tt
C. Por	tttggca	t-atctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaacatt--tacgg	ATCTGGCTT	CGGAT	tGACCA	tt
O. Cun	tctggct	t-atctatgatgatccttatcccgaacctgaa-tttctgttg--aaaaaaaacgcta--tacgg	ATCTGGCTT	CGGAT	AGACCA	tt
C. Fam	cttggct	taatctatgatgatccttatcccgaacctgaa-tacatgttg-----agaaaaccaa--tacgg	ATCTGGCTT	CGGAT	AGACCA	tt
F. Cat	cttggct	taatccatgatgatccttatcccgaacctgaa-tatctgttg-----agaaaactta--tacgg	ATCTGGCTT	CGGAT	AGACCG	tt
E. Cab	cttggct	t-atcgatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaactta--tacgg	ATCTGGCTT	CGGAT	AGACCA	tt
L. Afr	cttggct	t-atctatgatgatccttatcccgaacctgaa-tttctgttg-----aaaaaactta--tacgg	ATCTGGCTT	CGGAT	GGACCA	tt
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id=711400 gene=ENSG00000207066 name=SNORD50A segment=chr6.86387012.86387086.-1 type=EN

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R. Mac	tgtttcag	gtatcttcttc...829...cgctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
P. Tro	tgtttcag	gtacctccttc...812...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
P. Abe	tgtttcag	gtacctccttc...809...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
C. Jac	tgtttcag	gtatctccttc...1135...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
M. Mus	tgtttcag	gtacctgcccc...670...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
R. Nor	tgtttcag	gtacctgcccc...636...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
C. Por	tgtttcag	gtacatctccct...743...agctggtaaacgaaactctc	TGGTctGTCTTAAAG	CCGGAT	gc
O. Cun	tgtttcag	gtatcttcttc...936...agctggtaataaaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
C. Fam	tgtttcag	gtatctccttc...784...agctggtaaatgaaactctc	TGGTTTGTCTTAAAG	CCGGAT	ac
F. Cat	tgtttcag	gtacctccttc...1023...agctggtaaatgaaactctc	TGGTTTGTCTTAAAG	CCGGA	cac
E. Cab	tgtttcag	gtatctccttc...810...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
L. Afr	tgtttcag	gtatctccttc...1285...agctggtaaatgaaactttc	TGGTTTGTCTTAAAG	CCGGAT	ac
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id=310221 gene=ENSG00000111224 name=PARP11 segment=chr12.3938197.3939055.-1 type=IN

Figure 281: CS=14.95



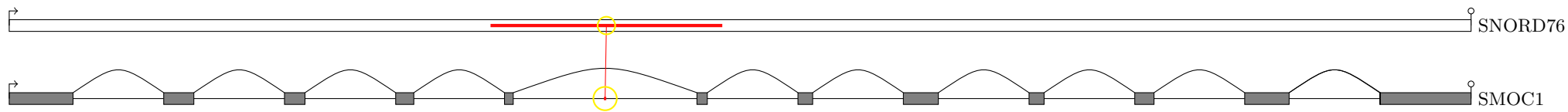
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R. Mac	actggatg	tgccacaatgatgacagtt	TATTTg	CTACTc	TTGAC	tgctagaatgatgaggagc	tt-aaccaccattatc	---ttaactgaggca	cccaaat
P. Tro	attggatg	tgccacaatgatgacagtt	TATTTg	CTACTc	TTGAC	gtgctagaatgatgaggatc	tt-aaccaccattatc	---ttaactgaggca	cccaaat
C. Jac	actgaatg	tgccacaatgatgacagtt	TATTTg	CTACTc	TTGAC	tgctagaatgacgagagtc	tt-aaccacca--atc	---ttacctgaggca	cccaact
M. Mus	aaggacag	tgccacaatgatgacat	CATATTTg	CTACTc	TTGAC	ctggggtgacgatagct	ttaaacaccatgatt	---ataactgaggca	cacaaat
C. Por	aaaacaag	tgccacaatgatgacat	TATATTTg	CTACTc	TTGAC	tgctagaatgacgataat	ctt-aaccaccattatc	---ctaactgaggca	cagaaaac
O. Cun	agagagtg	tgccacaatgatgacatt	TATTTg	CTACTc	TTGAC	tgccggtatgacgagagtc	ttaaacaccattacc	---gtaactgaggca	cacaaat
C. Fam	cttgaaag	tgctgcaatgatgacatt	TATTTg	CTACTc	TTGAC	tgtagaatgacgagaatt	at-taccaccgttaaa	---ctaactgaggca	cccaaat
B. Tau	cctgaatg	tgccacaatgatgagagtt	TATTTg	CTACTc	TTGAC	tgtagaatgacgagaatt	at-taccaccattatt	---ctaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacatt	TATTTg	CTACTc	TTGAC	tgtaagaatgacgagaatt	at-taccaccgttatc	---ctaactgaggca	cacagaat
S. Sus	ttcctttg	tgccataatgatgacatt	TATTTg	CTACTc	TTGAC	tgaggatgacgagaat	cct-taccaccattatt	---ctaactgaggca	cacaaaac
O. Avi	actgaacg	tgccacaatgatgagagtt	TATTTg	CTACTc	TTGAC	tgtagaatgacgagaatt	ct-taccaccattatt	---ctaactgaggca	cacgaaat
L. Afr	aaagtacg	tgccactgtgatgacgttt	TATTTg	CTACTc	TTGAC	cttgagagtgatgagagtt	at-taccaccaatata	ctaataaactgaggca	cccttaac
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id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

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P. Tro	cgagtcctt	gtaagtagttga...4747...	--gagggcatgga	aaccaatctg	TCAGGTAG	AAGTG	tcaggcggc	aaaaccctgg--...165...	ctgtggttag	gcatctgg
C. Jac	cgagtcctt	gtaagtagttga...4746...	--agagacatgga	aaccaatct	GTCAGGTAG	AAGTG	tcaggcggc	aaaaccctgg--...165...	ctgtggttag	gcatctgg
M. Mus	cgagtcctt	gtaagtagcaga...4746...	atagagacatgga	aaccaat	CTGTCAGGTAG	AAGTGTG	cgggtgtt	gaatccctttt...161...	ttctgatttag	gcatctgg
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C. Fam	cgagtcctt	gtaagtagcaga...4737...	--agaggcatgga	aaccaatct	GTCAGGTAG	AAGTG	tcaggcggg	aaaaccctgg--...173...	ctgtggttag	gcatctgg
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id=605007 gene=ENSG00000184347 name=SLIT3 segment=chr5\_168671781\_168678391\_-1 type=IN

Figure 282: CS=12.48



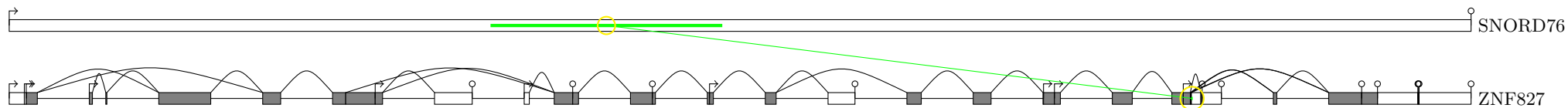
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R. Mac	actggatg	tgccacaatgatgacagtt	TATTtg	CTACTCTTg	actgctagaatgatgaggagctt	-aaccaccattatc	---ttaactgaggca	cccaaat	
P. Tro	attggatg	tgccacaatgatgacagtt	TATTtg	CTACTCTTg	AGTGCT	agaatgatgaggatc	tt-aaccaccattatc	---ttaactgaggca	cccaaat
C. Jac	actgaatg	tgccacaatgatgacagtt	TATTtg	CTACTCTTg	actgctagaatgacgagagctt	-aaccacca--atc	---ttaactgaggca	cccaact	
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C. Por	aaaacaag	tgccacaatgatgacatt	ATATTtg	CTACTCTTg	actgtcagaatgacgataatc	tt-aaccaccattatc	---ctaactgaggca	cagaaac	
O. Cun	agagagtg	tgccacaatgatgacatt	TATTtg	CTACTCTTg	actgcccgtatgacgagagctt	aaaccaccattacc	---gtaactgaggca	cacaaat	
C. Fam	cttgaaag	tgctgcaatgatgacatt	TATTtg	CTACTCTTg	actgtgagaatgacgagaattat	-taccaccgttaaa	---ctaactgaggca	cccaaat	
B. Tau	cctgaatg	tgccacaatgatgagagtt	TATTtg	CTACTCTTg	actgtgaggatgacgagaattat	-taccaccattatt	---ctaactgaggca	cacgaat	
E. Cab	gctgaatg	tgccacaatgatgacatt	TATTtg	CTACTCTTg	actgtaagaatgacgagaattat	-taccaccgttatc	---ctaactgaggca	cacagaat	
S. Sus	ttcctttg	tgccataatgatgacatt	TATTtg	CTACTCTTg	acAGTG	aggatgacgagaatc	ct-taccaccattatt	---ctaactgaggca	cacaaac
O. Avi	actgaacg	tgccacaatgatgagagtt	TATTtg	CTACTCTTg	actgtgaggatgacgagaattct	-taccaccattatt	---ctaactgaggca	cacgaat	
L. Afr	aaagttag	tgccactgtgatgacgttt	TATTtg	CTACTCTTg	acacttgagagtgatgagagttat	-taccaccaat	atctaataaactgaggca	cccttaac	
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id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772.173835853.-1 type=EN

H. Sap	aaggaag	gtgagtggagtt	..4884..	-----acaaccccaaccattcaac	AGTGCTg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacggg	
R. Mac	aaggaag	gtgagtggagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacgga		
P. Tro	aaggaag	gtgagtggagtt	..4884..	-----acaaccccaaccattcaac	AGTGCTg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacggg	
C. Jac	aaggaag	gtgagtggagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacgga		
M. Mus	aaggaag	gtgagtggagtt	..4877..	ggacttgtacaaccccaac	-----CATCaa	CAGTTC	TGAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgatggc
C. Por	aaagaaag	gtgagtggagtt	..4891..	-----caatcattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacgga		
O. Cun	aaggaag	gtgagtggagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacgga		
C. Fam	aaggaag	gtgagttagagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacgga		
B. Tau	aaggaag	gtgagtggagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgatggg		
E. Cab	aaggaag	gtgagttagagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgatggg		
S. Sus	aaggaag	gtgagtggagtt	..4886..	-----aaaccccaaccattcaacag	TGCTG	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacggg	
O. Avi	aaggaag	gtgagtggagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgacggg		
L. Afr	aaggaag	gtgagttagagtt	..4891..	-----ccaaccattcaacagtgctg	-----GAGAGTAGat	AGTAtttac	ctcaataatggtagtctc	tttcgattcttttaaccctcaattcag	atgatgga		
	**	****	*****	*****	*	**	*	*****	*****	*****	

id=818032 gene=ENSG00000198732 name=SMOC1 segment=chr14\_70444683.70459133.1 type=IN

Figure 283: CS=14.04



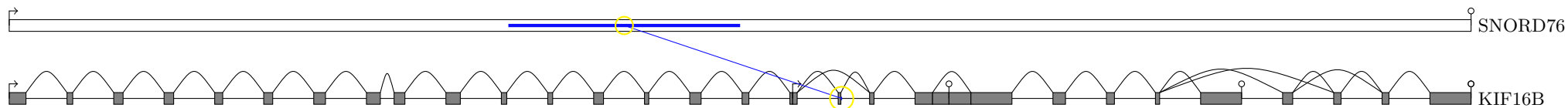
H. Sap	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTT	gagtgctagaatgatgaggat	-cttaaccaccattat	-c---ttaactgaggca	cccaaaat
R. Mac	actggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTT	gactgctagaatgatgaggag	-cttaaccaccattat	-c---ttaactgaggca	cccaaaat
P. Tro	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTT	gagtgctagaatgatgaggat	-cttaaccaccattat	-c---ttaactgaggca	cccaaaat
P. Abe	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTT	gagtgctagaatgatgaggat	-cttaaccaccattat	-c---ttaactgaggca	cccaaaat
C. Jac	actgaatg	tgccacaatgatgacagtt	TATTTGCT	acTCTT	gactgctagaatgacgagagt	-cttaaccacca--at	-c---ttacctgaggca	cccaaat
M. Mus	aaggacag	tgccacaatgatgacatca	TATTTGCT	acTCTT	gacagctggggtgacgata	gctttaaaccaccatgat	-t---ataactgaggca	cacaaaat
C. Por	aaacaag	tgccacaatgatgacatta	TATTTGCT	acTCTT	gactgtcagaatgacgataat	-cttaaccaccattat	-c---ctaactgaggca	cagaaaac
O. Cun	agagatg	tgccacaatgatgacattt	TATTTGCT	acTCTT	gactgccggtatgacgagagt	cttaaaccaccattac	-c---gtaactgaggca	cacaaaat
C. Fam	cttgaag	tgctgcaatgatgacattt	TATTTGCT	acTCTT	gactgtgagaatgacgagaat	-tattaccaccgttaa	-a---ctaactgaggca	cccaaat
F. Cat	actaaatg	tgctacaatgatgacatta	TATTTGCT	acTCTT	gactgtgagaatgacgagagt	-tactaccaccattac	-c---ttaactgaggca	cacaaaag
B. Tau	cctgaatg	tgccacaatgatgagattt	TATTTGCT	acTCTT	gactgtgaggatgacgagaat	-tattaccaccattat	-t---ctaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacattt	TATTTGCT	acTCTT	gactgtaagaatgacgagaat	-tattaccaccgttat	-c---ctaactgaggca	cacagaat
L. Afr	aaagtcatg	tgccactgtgatgac	GTTTTATTTGCT	acTCTT	gaccttgagagtgatgagagt	-tattaccaccaat	-ctaataaactgaggca	cccttaac
			***	*	*****	*****	*	*****

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

H. Sap	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggagtcagggag	aaggggag
R. Mac	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggagtcagggag	aaggggag
P. Tro	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggagtcagggag	aaggggag
P. Abe	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggagtcagggag	aaggggag
C. Jac	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggagtcagggag	aaggggag
M. Mus	tAAGGcaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	ggggtcacagaa	ttggggag
C. Por	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...50...	ggggtcctggag	acaggtta
O. Cun	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...52...	ggggtcagggag	agggggag
C. Fam	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...50...	ggggtcatgaag	aaggggag
F. Cat	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...51...	ggggtcatcgag	aggggag
B. Tau	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...55...	ggggtcatggag	agggcgag
E. Cab	tAAGGAaa	GCAAGTA	cagaaccttttactgcgctt	g-----	...53...	gggtacatggag	agggggag
L. Afr	tAAGGAaa	GCAAGTA	caGAAC	cttttactgcgctt	gttacta...45...	ggggtcttagag	aggggag
	****	**	*****	**	*****	**	**

id=134792 gene=ENSG00000151612 name=ZNF827 segment=chr4\_146686039\_146686130\_-1 type=AN

Figure 284: CS=10.14



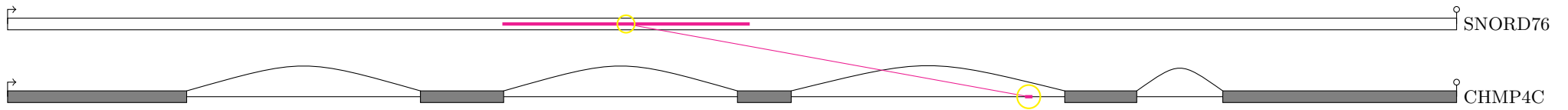
H. Sap	attggatg	tgccacaatgatgacagttt	ATTTgCTACT	CTTG	agtgctagaatgatgaggat	-cttaaccaccattat-c---t	taactgaggca	cccaaaat
R. Mac	actggatg	tgccacaatgatgacagttt	ATTTgCTACT	CTTG	actgctagaatgatgaggag	-cttaaccaccattat-c---t	taactgaggca	cccaaaat
P. Tro	attggatg	tgccacaatgatgacagttt	ATTTgCTACT	CTTG	agtgctagaatgatgaggat	-cttaaccaccattat-c---t	taactgaggca	cccaaaat
P. Abe	attggatg	tgccacaatgatgacagttt	ATTTgCTACT	CTTG	agtgctagaatgatgaggat	-cttaaccaccattat-c---t	taactgaggca	cccaaaat
C. Jac	actgaatg	tgccacaatgatgacagttt	ATTTgCTACT	CTTG	actgctagaatgacgagagt	-cttaaccacca--at-c---t	tacctgaggca	cccaaat
C. Por	aaaacaag	tgccacaatgatgacattat	ATTTgCTACT	CTTG	actgtcagaatgacgataat	-cttaaccaccattat-c---t	taactgaggca	cagaaaaac
O. Cun	agagagtg	tgccacaatgatgacattat	ATTTgCTACT	CTTG	actgctagaatgacgagagt	-cttaaccaccattat-c---t	taactgaggca	cacaaaaat
C. Fam	cttgaag	tgctgcaatgatgacattat	ATTTgCTACT	CTTG	actgtgagaatgacgagaat	-tattaccaccgttaa-a---t	taactgaggca	cccaaaat
F. Cat	actaaatg	tgctacaatgatgacattat	ATTTgCTACT	CTTG	actgtgagaatgacgagagt	-tactaccaccattacac---t	taactgaggca	cacaaaag
B. Tau	cctgaatg	tgccacaatgatgagagttt	ATTTgCTACT	CTTG	actgtgaggatgacgagaat	-tattaccaccattat-t---t	taactgaggca	cacgaaat
S. Sus	ttccttgg	tgccataatgatgacattat	ATTTgCTACT	CTTG	actgtgaggatgacgagaat	-ccttaccaccattat-t---t	taactgaggca	cacaaaaac
O. Avi	actgaacg	tgccacaatgatgagagttt	ATTTgCTACT	CTTG	actgtgaggatgacgagaat	-tcttaccaccattat-t---t	taactgaggca	cacgaaat
L. Afr	aaagtcat	tgccactgtgatgacgttt	TATTTgCTACT	CTTG	actgtgaggatgacgagagt	-tattaccaccaatata-ct	taataaactgaggca	cccttaac

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

H. Sap	tgtcTAAG	GTAGAGAT	tctccattttatataactca...	310...	tgattttattag	acttgaat
R. Mac	tgtcTAAG	GTAGAGAT	tctccattttatataactca...	314...	tgattttattag	acttgaat
P. Tro	tgtcTAAG	GTAGAGAT	tctccattttatataactca...	310...	tgattttattag	acttgaat
P. Abe	tgtcTAAG	GTAGAGAT	tctccattttatataactca...	297...	tgattttattag	acttgaat
C. Jac	tgtcTAAG	GTAGAGAT	tctcctttttatgtattaa...	319...	tgattttattag	acttgaat
C. Por	tgtcTAAG	GTAGAGAT	tctgcatttttacataactca...	313...	tcattttattag	acttgaat
O. Cun	tgtcTAAG	GTAGAGAT	cctccattttatataactca...	314...	tgattttattag	acttgaat
C. Fam	tgtcTAAG	GTAGAGAT	tctccattttatataactca...	304...	atctttctattag	acttgaat
F. Cat	tgtcTAAG	GTAGAGAT	tctcta-ttttatataactca...	307...	gattttattag	acttgaat
B. Tau	tgtcTAAG	GTAGAGAT	tcttcattttttgtactaa...	328...	tgattttattag	acttgaat
S. Sus	tgtcTAAG	GTAGAGAT	tttccattttatataactca...	308...	tgattttattag	acttgaat
O. Avi	tgtcTAAG	GTAGAGAT	tctcattttttgtactaa...	330...	tgattttcttag	acttgaat
L. Afr	tgtcTAAG	GTAGAGAT	ctccattttatataactcac...	305...	tgctttcttag	acttgaat

id=713021 gene=ENSG00000089177 name=KIF16B segment=chr20\_16362393\_16362742\_-1 type=IN

Figure 285: CS=12.48



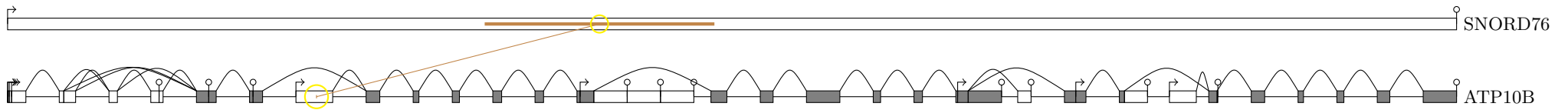
H. Sap	attggatg	tgccacaatgatgacagtt	TATTTGCTACTCTTGA	gtgctagaatgatgaggat	-c-ttaaccaccattat	-c--ttaactgaggca	cccaaat	
R. Mac	actggatg	tgccacaatgatgacagtt	TATTTGCTACTCTTGA	ctgctagaatgatgaggag	-c-ttaaccaccattat	-c--ttaactgaggca	cccaaat	
P. Tro	attggatg	tgccacaatgatgacagtt	TATTTGCTACTCTTGA	gtgctagaatgatgaggat	-c-ttaaccaccattat	-c--ttaactgaggca	cccaaat	
P. Abe	attggatg	tgccacaatgatgacagtt	TATTTGCTACTCTTGA	gtgctagaatgatgaggat	-c-ttaaccaccattat	-c--ttaactgaggca	cccaaat	
C. Jac	actgaatg	tgccacaatgatgacagtt	TATTTGCTACTCTTGA	ctgctagaatgacgagagt	-c-ttaaccacca--at	-c--ttacctgaggca	cccaact	
M. Mus	aaggacag	tgccacaatgatgacatc	ATATTTGCTACTCTTGA	cagctggggtgacgatagct	ttaaccaccatgat	-t--ataactgaggca	cacaaat	
O. Cun	agagagtg	tgccacaatgatgacattt	TATTTGCTACTCTTGA	ctgcccgtatgacgagagt	c-ttaaccaccattac	-c--gtaactgaggca	cacaaat	
C. Fam	cttgaatg	tgcctacaatgatgacattt	TATTTGCTACTCTTGA	CTGTGAGAAT	gacgagaat	-tattaccaccgttaa	-a--ctaactgaggca	cccaaat
F. Cat	actaaatg	tgcctacaatgatgacatt	TATTTGCTACTCTTGA	CTGTGAGAAT	gacgagagt	-tactaccaccattacac	-t--ttaactgaggca	cacaaaag
B. Tau	cctgaatg	tgcCACAATGATGAGAG	ttTATTTGCTACTCTTGA	CTGTGAGGAT	gacgagaat	-tattaccaccattat	-t--ctaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacattt	TATTTGCTACTCTTGA	ctgtaagaatgacgagaat	-tattaccaccgttat	-c--ctaactgaggca	cacagaat	
S. Sus	ttcctttg	tgccacaatgatgacattt	TATTTGCTACTCTTGA	cagtggaggatgacgagaat	-ccttaccaccattat	-t--ctaactgaggca	cacaaaac	
O. Avi	actgaacg	tgcCACAATGATGAGAG	ttTATTTGCTACTCTTGA	CTGTGAGGAT	gacgagaat	-tcttaccaccattat	-t--ctaactgaggca	cacgaaat
L. Afr	aaagttag	tgccactgtgatgacgctt	TATTTGCTACTCTTGA	ccttgagagtgatgagagt	-tattaccaccaat	atctaataaactgaggca	cccttaac	
		***	*****	*****	*	***	*	

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

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R. Mac	ttgatgag	gtacgtaacca...	2897...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
P. Tro	ttgatgag	gtacgtaacca...	2530...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
P. Abe	ttgatgag	gtacgtaacca...	2544...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
C. Jac	ttgatgag	gtacgtaacca...	2799...	-----	tttactggattctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
M. Mus	tcgatgag	gtaggtgaaca...	2273...	-----	ttccactgggttcccacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..41..	tccogtttcag	gctgagct
O. Cun	ttgatgag	gtgagtaagaca...	3058...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..47..	tcctgtattcag	gatgaact
C. Fam	ttgatgag	gtaggtatcaca...	2973...	taaatattccattcaccgg	GTTCTCACATA	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcttatgtttcag	gatgagtt
F. Cat	ttgatgag	gtaggtaacaca...	2583...	taaatattccgtttcactgg	GTTCTCACATA	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..42..	tcctatgtttcag	gatgagtt
B. Tau	ttgatgag	gtgggtgacgca...	3011...	taaatattccattcactgg	ATTCTCACATA	TCAAtt	GGGTAGCAGATG	TTTTTTGTTATTGTG	tttgaggaaccacgtcct	..29..	tcctgtttcag	gatgagct
E. Cab	tcgatgag	gtgggtaacaca...	2899...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
S. Sus	ttgatgag	gtgagtaacaca...	3390...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..44..	tcctatgtttcag	gatgagtt
O. Avi	ttgatgag	gtgggtgcaca...	2985...	taaatattccattcactgg	ATTCTCACATA	TCAAtt	GGGTAGCAGATG	TTTTTTGTTATTGTG	tttgaggaaccacgtcct	..29..	tcctatgtttcag	gatgagct
L. Afr	ttgatgag	gtgggtaacacg...	3574...	-----	tttactgggttctcacata	TCAAtt	GGGTAGCAGATG	ttcctgttattgtgtttgag	-----	..43..	tcctgtttcag	gatgagtt
		* ** ** *			** ** *	** ** *	** ** *	** ** *		**	* ** ** *	* ** *

id=402565 gene=ENSG00000164695 name=CHMP4C segment=chr8\_82667720\_82670376\_1 type=IN

Figure 286: CS=10.92



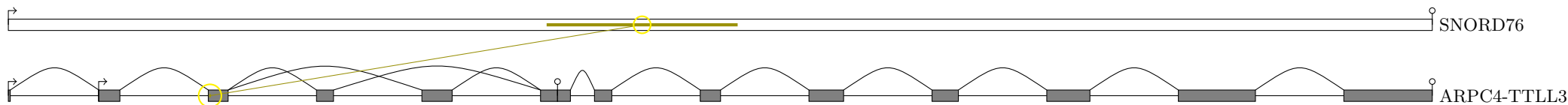
H. Sap	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTTGA	gtgctagaatgatgaggat	-cttaaccaccattat-c---ttaactgaggca	cccaaat
R. Mac	actggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTTGA	ctgctagaatgatgaggag	-cttaaccaccattat-c---ttaactgaggca	cccaaat
P. Tro	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTTGA	gtgctagaatgatgaggat	-cttaaccaccattat-c---ttaactgaggca	cccaaat
P. Abe	attggatg	tgccacaatgatgacagtt	TATTTGCT	acTCTTGA	gtgctagaatgatgaggat	-cttaaccaccattat-c---ttaactgaggca	cccaaat
C. Jac	actgaatg	tgccacaatgatgacagtt	TATTTGCT	acTCTTGA	ctgctagaatgacgagagt	-cttaaccacca--at-c---ttacctgaggca	cccaaat
M. Mus	aaggacag	tgccacaatgatgacatca	TATTTGCT	acTCTT	gacagctggggtgacgata	gctttaaaccaccatgat-t---ataactgaggca	cacaaat
C. Por	aaaacaag	tgccacaatgatgacat	TATTTGCT	acTCTTGA	ctgtcagaatgacgataat	-cttaaccaccattat-c---ctaactgaggca	cagaaaac
O. Cun	agagagtg	tgccacaatgatgacat	TATTTGCT	acTCTTGA	ctgcccgtatgacgagagt	cttaaccaccattac-c---gtaactgaggca	cacaaat
C. Fam	cttgaag	tgctgcaatgatgacat	TATTTGCT	acTCTTGA	ctgtgagaatgacgagaat	-tattaccaccgttaa-a---ctaactgaggca	cccaaat
F. Cat	actaaatg	tgctacaatgatgacatta	TATTTGCT	acTCTTGA	ctgtgagaatgacgagagt	-tactaccaccattacac---ttaactgaggca	cacaaaag
B. Tau	cctgaatg	tgccacaatgatgagagtt	TATTTGCT	acTCTTGA	ctgtgaggatgacgagaat	-tattaccaccattat-t---ctaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacat	TATTTGCT	acTCTTGA	ctgtgagaatgacgagaat	-tattaccaccgttat-c---ctaactgaggca	cacgaaat
O. Avi	actgaacg	tgccacaatgatgagagtt	TATTTGCT	acTCTTGA	ctgtgaggatgacgagaat	-tcttaccaccattat-t---ctaactgaggca	cacgaaat
L. Afr	aaagtcat	tgccactgtgatgacgttt	TATTTGCT	acTCTTGA	ctgtgaggatgacgagaat	-tattaccaccaatata-ctaataaactgaggca	cccttaac
		*** * *****	*****		* ** *	***** * * *****	*

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772.173835853.-1 type=EN

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P. Tro	acacacct	g-ttctctgcagg...260...-----	acatcatcgtgggaatcaaa	TCAAGAccAGCAAGTA	caccgtgtgtgccttcgtcc--..211...catctacagcag	gtaaagca	
P. Abe	acacacct	g-ttctctgcagg...259...-----	acatcatcgtgggaatcaaa	TCAAGAccAGCAAGTA	caccgtgtgtgccttcgtcc--..211...catctacagcag	gtaaagca	
C. Jac	acacacct	g-ttcaccgcagg...258...-----	acatcatcgtgggaatcaga	TCAAGAccAGCAAGTA	caccgtgtgtgccttcgtcc--..211...catctacagcag	gtaaagca	
M. Mus	acacacct	a-ttctcagcaaa...300...-----	attatcgggggaaccaagt	AAGAccAGCAAGTA	cactgtgtgtgccttcgtcc--..211...ggtctacagcag	gtaaatct	
C. Por	acacacct	c-ttctccgcagg...246...-----	acaatacgggggaatcaaa	TTAAGAccAGCAAGTATA	ccatactgtccttcgtcc--..209...cgtctacagcag	gtaaagga	
O. Cun	acacacct	g-ttctctgcctt...244...-----	gcattactgtgggaatgaaa	TCAAGAccAGCAAGTA	cactgtgtgtgccttcgtcc--..211...gatctatagcag	gtaaagca	
C. Fam	gtacacct	g-ttctccgcaag...328...-----	gaattactgtgggaatcaaa	TTAAGAccAGCAAGTA	cactgtgtgtgccttcgtcc--..211...catctatagcag	gtaaagca	
F. Cat	gcacacct	gtttctctgcca...333...-----	gcattattgtgggaatcaaa	TTAAGAccAGCAAGTA	caccgtgtgtgccttcgtcc--..211...catctatagcag	gtaaagca	
B. Tau	acacacct	g-ttctctgcaag...322...-----	acattatcgtgggaatcaaa	TCAAGAccAGCAAGTA	cactgtgtgtgccttcgtcc--..211...cgtctatagcag	gtaaagcc	
E. Cab	gcacacct	g-ttctctgtgag...329...-----	acattatcgtgggaatcaaa	TTAAGAccAGCAAGTA	cactgtgtgtgccttcgtcc--..211...cgtctatagcag	gtaaagca	
O. Avi	acacacct	g-ttctctgcaag...322...-----	acattatcgtgggaatcaaa	TCAAGAccAGCAAGTA	caccgtgtgtgccttcgtcc--..211...cgtctatagcag	gtaaagcc	
L. Afr	gcacacct	g-ttctctgcaaa...314...aacaagcactattgtgggaa	TCGGGTTAAGAccAGCAAGTA	cactgtctgtgccttcgtcc--..211...catttacagcag	gtaaagca	****	
		*** **	*** * *	* * * *****	* *****	* * ***** * * *****	*** * **

id=116327 gene=ENSG00000118322 name=ATP10B segment=chr5\_160111842.160112392.-1 type=AN

Figure 287: CS=13.44



H. Sap	attggatg	tgccacaatgatgacagtttatt	TGCTACTCTTGAG	tgctagaatgatgaggat-cttaaccaccattat-c---ttaactgaggca	cccaaaat
R. Mac	actggatg	tgccacaatgatgacagtttatt	TGCTACTCTTGA	ctgctagaatgatgaggag-cttaaccaccattat-c---ttaactgaggca	cccaaaat
P. Tro	attggatg	tgccacaatgatgacagtttatt	TGCTACTCTTGAGTGC	tagaatgatgaggat-cttaaccaccattat-c---ttaactgaggca	cccaaaat
P. Abe	attggatg	tgccacaatgatgacagtttatt	TGCTACTCTTGAGTGC	tagaatgatgaggat-cttaaccaccattat-c---ttaactgaggca	cccaaaat
C. Jac	actgaatg	tgccacaatgatgacagtttatt	TGCTACTCTTGA	ctgctagaatgacgagagt-cttaaccacca--at-c---ttacctgaggca	cccaaat
C. Por	aaaacaag	tgccacaatgatgacattatatt	TGCTACTCTTGA	ctgtcagaatgacgataat-cttaaccaccattat-c---ctaactgaggca	cagaaaaac
O. Cun	agagagtg	tgccacaatgatgacatttatt	TGCTACTCTTGA	ctgcccgtatgacgagagtcttaaccaccattac-c---gtaactgaggca	cacaaaaat
C. Fam	cttgaag	tgctgcaatgatgacatttatt	TGCTACTCTTGA	ctgtgagaatgacgagaat-tattaccaccgttaa-a---ctaactgaggca	cccaaaat
F. Cat	actaaatg	tgctacaatgatgacattatatt	TGCTACTCTTGA	ctgtgagaatgacgagagt-tactaccaccattacac---ttaactgaggca	cacaaaaag
B. Tau	cctgaatg	tgccacaatgatgagagtttatt	TGCTACTCTTGA	ctgtgaggatgacgagaat-tattaccaccattat-t---ctaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacatttatt	TGCTACTCTTGA	ctgtaagaatgacgagaat-tattaccaccgttat-c---ctaactgaggca	cacagaat
O. Avi	actgaacg	tgccacaatgatgagagtttatt	TGCTACTCTTGA	ctgtgaggatgacgagaat-tcttaccaccattat-t---ctaactgaggca	cacgaaat
L. Afr	aaagtcag	tgccactgtgatgacgttttatt	TGCTACTCTTGA	cccttgagagtgatgagagt-tattaccaccaat-ctaataaactgaggca	cccttaac
		*** * ***** * *****		* ** * ***** * *****	*

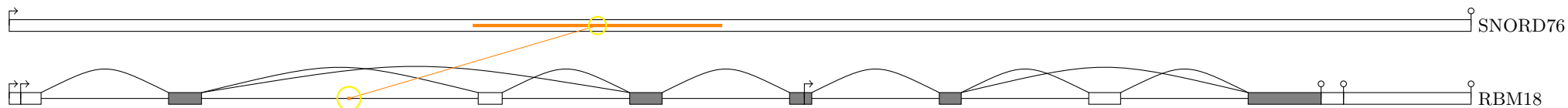
id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772.173835853.-1 type=EN

H. Sap	gaagtcag	gtagggaaggac...2370...-----gtactctgtcacattatggtt-	TCAG	GAGTAGCa
R. Mac	gaagtcag	gtagggaaggac...3510...-----gactctgtcacattgtgttt-	TCAG	GAGTAGCa
P. Tro	gaagtcag	gtagggaaggac...2346...--tacaagtactctgtcacatt-	GTGTt	TCAG GAGTAGCa
P. Abe	gaagtcag	gtagggaaggac...2350...--tacaagtactctgtcacatt-	GTGTt	TCAG GAGTAGCa
C. Jac	gaagtcag	gtagggaaggac...2488...-----tactctgtgacattgtgttt-	TCAG	GAGTAGCa
C. Por	gaagtcag	gtagggaagggt...1757...-----tttctgtgactttgtgttc-	TCAG	GAGTAGCa
O. Cun	gaagtcag	gtagggaaggaa...1948...-----gtctctgccactttgtgttt-	TCAG	GAGTAGCa
C. Fam	gaagtcag	gtagggaagaaa...1177...-----gcctctgtgacattgtatt-	TCAG	GAGTAGCa
F. Cat	gaagtcag	gtagggcagaga...1171...gtacagaggcctctgtgaca-	TGTGt	TCAG GAGTAGCa
B. Tau	gaagtcag	gtatgggaggaa...1178...-----acctctgtcattttgtgttc-	TCAG	GAGTAGCa
E. Cab	gaagtcag	gtagggaggaa...1037...-----gcctctgtgacattgtgttt-	TCAG	GAGTAGCa
O. Avi	gaagtcag	gtatgggaggaa...1147...-----acctctgtcattttgtgttc-	TCAG	GAGTAGCa
L. Afr	gaagtcag	gtagggaggaa...1161...-----gcctctgtggcattgttt-	TCAG	GAGTAGCa
		***** ** * *	****	**** *****

id=210669 gene=ENSG00000250151 name=ARPC4-TLL3 segment=chr3\_9839462.9841868.1 type=IN

Figure 288: CS=15.34





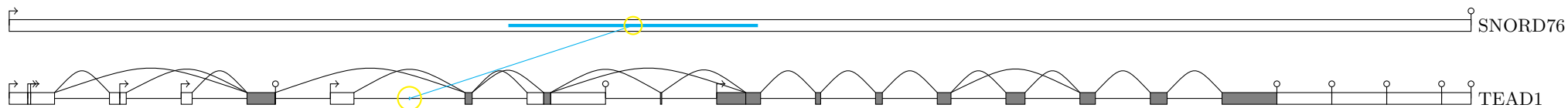
H. Sap	attggatg	tgccacaatgatgacagt	TTATTGCT	TCTTG	agtgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
R. Mac	actggatg	tgccacaatgatgacagt	TTATTGCT	TCTTG	actgctagaatgatgaggag	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
P. Tro	attggatg	tgccacaatgatgacagt	TTATTGCT	TCTTG	agtgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
P. Abe	attggatg	tgccacaatgatgacagt	TTATTGCT	TCTTG	agtgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
C. Jac	actgaatg	tgccacaatgatgacagt	TTATTGCT	TCTTG	actgctagaatgacgagagt	-cttaaccacca--at	-c---t	ttaactgaggca	cccaaaat
C. Por	aaaacaag	tgccacaatgatgac	ATTATA	TTTGCT	actgtcagaatgacgataat	-cttaaccaccattat	-c---t	taactgaggca	cagaaaaac
O. Cun	agagatg	tgccacaatgatgacatt	TTATTGCT	TCTTG	actgcccgtatgacgagagt	-cttaaccaccattac	-c---g	taactgaggca	cacaaaaat
C. Fam	cttgaag	tgctgcaatgatgacatt	TTATTGCT	TCTTG	actgtgagaatgacgagaat	-tattaccaccgtaa	-a---c	taactgaggca	cccaaaat
F. Cat	actaaatg	tgctacaatgatgac	ATTATA	TTTGCT	actgtgagaatgacgagagt	-tactaccaccattac	-c---t	taactgaggca	cacaaaaag
B. Tau	cctgaatg	tgccacaatgatgagagt	TTATTGCT	TCTTG	actgtgaggatgacgagaat	-tattaccaccattat	-t---c	taactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacatt	TTATTGCT	TCTTG	actgtaagaatgacgagaat	-tattaccaccgttat	-c---c	taactgaggca	cacagaaat
S. Sus	ttccttg	tgccataatgatgacatt	TTATTGCT	TCTTG	acagtggagatgacgagaat	-ccttaccaccattat	-t---c	taactgaggca	cacaaaaac
L. Afr	aaagtcag	tgccactgtgatgacgtt	TTATTGCT	TCTTG	accctgagagtgatgagagt	-tattaccaccaat	-c---t	taactgaggca	cccttaac

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

H. Sap	attaccga	gtaagtctaagt...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
R. Mac	attaccga	gtgagtctaaat...4916...	gagcctgcagtt	tcccattctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
P. Tro	attaccga	gtaagtctaagt...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
P. Abe	attaccga	gtaagtctgaat...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
C. Jac	attaccga	gtaagtctaaat...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
C. Por	atcacaga	gtaagtccaagt...4916...	gagcctgcagtc	caccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tattgtga
O. Cun	atcacaga	gtaagtctaagt...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
C. Fam	atcacaga	gtaagtctaagt...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
F. Cat	atcacaga	gtgagtctaaat...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
B. Tau	atcacaga	gtaagtctaaat...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
E. Cab	atcacaga	gtaagtctaaat...4917...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
S. Sus	atcacaga	gtaagtccgagc...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga
L. Afr	atcacaga	gtaagtctaaat...4916...	gagcctgcagtc	ccccatctc	CAGGAAGCAA	AATAG	taaacatttcattc	cttttgtttcg	tggtccga

id=243906 gene=ENSG00000119446 name=RBM18 segment=chr9\_125016647\_125023658\_-1 type=IN

Figure 289: CS=12.48



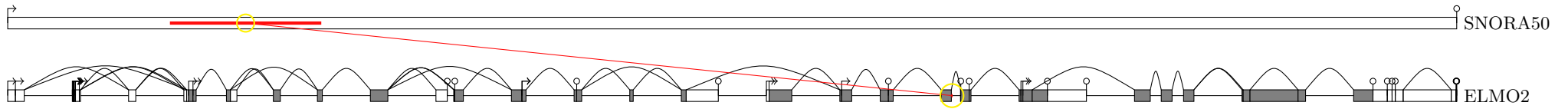
H. Sap	attggatg	tgccacaatgatgacagttt	ATTTgCTACTc	TTGAG	tgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
R. Mac	actggatg	tgccacaatgatgacagttt	ATTIgCTACTc	TTGAG	ctgctagaatgatgaggag	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
P. Tro	attggatg	tgccacaatgatgacagttt	ATTTgCTACTc	TTGAG	tgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
P. Abe	attggatg	tgccacaatgatgacagttt	ATTTgCTACTc	TTGAG	tgctagaatgatgaggat	-cttaaccaccattat	-c---t	ttaactgaggca	cccaaaat
C. Jac	actgaatg	tgccacaatgatgacagttt	ATTTgCTACTc	TTGAG	ctgctagaatgacgagagt	-cttaaccacca--at	-c---t	ttaactgaggca	cccaaaat
C. Por	aaaacaag	tgccacaatgatgacattat	ATTTgCTACTc	TTGAG	ctgtcagaatgacgataat	-cttaaccaccattat	-c---t	ttaactgaggca	cagaaaaac
O. Cun	agagagtg	tgccacaatgatgacattat	ATTTgCTACTc	TTGAG	ctgctagaatgacgagagt	-cttaaccaccattat	-c---t	ttaactgaggca	cacaaaaat
C. Fam	cttgaatg	tgctacaatgatgacattat	ATTTgCTACTc	TTGAG	ctgtgagaatgacgagaat	-tattaccaccgttaa	-a---t	ttaactgaggca	cccaaaat
F. Cat	actaaaag	tgctacaatgatgacattat	ATTTgCTACTc	TTGAG	ctgtgagaatgacgagagt	-tactaccaccattacac	----t	ttaactgaggca	cacaaaag
B. Tau	cctgaatg	tgccacaatgatgagagttt	ATTTgCTACTc	TTGAG	ctgtgaggatgacgagaat	-tattaccaccattat	-t---t	ttaactgaggca	cacgaaat
E. Cab	gctgaatg	tgccacaatgatgacattat	ATTTgCTACTc	TTGAG	ctgtaagaatgacgagaat	-tattaccaccgttat	-c---t	ttaactgaggca	cacagaaat
O. Avi	actgaacg	tgccacaatgatgagagttt	ATTTgCTACTc	TTGAG	ctgtgaggatgacgagaat	-tcttaccaccattat	-t---t	ttaactgaggca	cacgaaat
L. Afr	aaagtcat	tgccactgtgatgacgtttt	ATTTgCTACTc	TTGAG	ccttgagatgatgagagt	-tattaccaccaat	-t---t	ttaactgaggca	cccttaac
			*	***	*	*****	*	*****	*

id=752544 gene=ENSG00000200016 name=SNORD76 segment=chr1\_173835772\_173835853\_-1 type=EN

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R. Mac	atggcg--ct	gtatgttcatat...4953...	-atggtaaatccttctatctt	TCAG	GTAGGAA
P. Tro	atggcg--ct	gtatgttcatat...4952...	catggtaaatccttcttctt	TCAG	GTAGGAA
P. Abe	atggcg--ct	gtatgttcatat...4952...	catggtaaatccttcttctt	TCAG	GTAGGAA
C. Jac	atggtg--ct	gtatgttcatat...4953...	-atggtaaatccttcttctt	TCAG	GTAGGAA
C. Por	gtggtggtgt	gtatgttcat--...4953...	-atcttaaatccttcttctt	TCAG	GTAGGAA
O. Cun	acggcgctgt	gt-tgttcata...4953...	-attgtaaatccttcttctt	TCAG	GTAGGAA
C. Fam	atggcg--ct	gtatgttcatat...4953...	-attgtaaatccttcttctt	TCAG	GTAGGAA
F. Cat	atggcg--ct	gtatgttcatat...4953...	-attgtaaatccttcttctt	TCAG	GTAGGAA
B. Tau	atggtc--tt	gtatgttcatat...4953...	-attgtaaatccttcttctt	TCAG	GTAGGAA
E. Cab	atggcc--ct	gtgtgttcatat...4953...	-attgtaaatattcttcttctt	TCAG	GTAGGAA
O. Avi	atggtc--tt	gtatgttcatat...4953...	-attgtaaatccttcttctt	TCAG	GTAGGAA
L. Afr	tggccg--ct	gtatgttcatat...4953...	-attgtgaattccttcttatt	TCAG	GTAGGAA
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id=194978 gene=ENSG00000187079 name=TEAD1 segment=chr11\_12849883\_12883796\_1 type=IN

Figure 290: CS=21.58



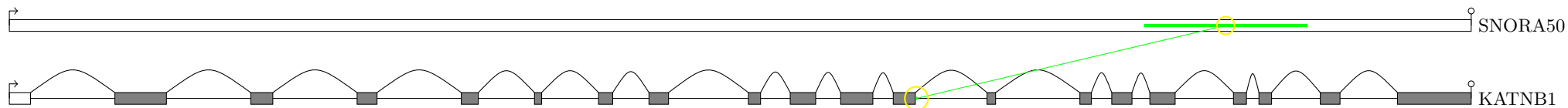
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R. Mac	agacctaa	gca	CTGCCTTT	ga	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
P. Tro	agacataa	gca	CTGCCTTT	ga	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
P. Abe	agacataa	gca	CTGCCTTT	ga	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
C. Jac	agacataa	g	CACTGCCTTT	Gaa	CCTGat	ATGT	ctt	gtt	gtag	ctt	cacg	ggg	..	78	..	caag	tac	attt	aag	tact
C. Por	agaataa	gcact	gcCTTT	Gaa	CCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
O. Cun	aaaaataa	gca	CTGCCTTT	ga	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
C. Fam	agaataa	gcact	gcCTTT	Gaa	CCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
F. Cat	agaataa	gcact	GCCTTT	Gaa	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
B. Tau	agaataa	gcact	GCCTTT	Gaa	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
E. Cab	agaataa	gcact	GCCTTT	Gaa	CCTGat	ATGT	ctt	gtt	gtag	ctt	cacg	ggg	..	78	..	caag	tac	attt	aag	tact
O. Avi	agaataa	gcact	GCCTTT	Gaa	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
L. Afr	agaataa	g	CACTGCCTTT	Gaa	ACCTGATGT	gtc	ctt	gtt	gtag	ctt	cacg	--	..	80	..	caag	tac	attt	aag	tact
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id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16.58593700.58593833.-1 type=EN

H. Sap	a	CATC	CGG	G	TAAAGGCAG	ggg	agct	ggcct	-	tct	cagtc	---	..	53	..	ttcccc	gacag	att	gtctt
R. Mac	a	CATC	CGG	G	TAAAGGCAG	ggg	agct	ggc	---	ctc	agtcctg	..	..	50	..	ttctct	gacag	att	gtctt
P. Tro	a	CATC	CGG	G	TAAAGGCAG	ggg	agct	ggcct	-	tct	cagtc	---	..	53	..	ttcccc	gacag	att	gtctt
P. Abe	a	CATC	CGG	G	TAAAGGCAG	ggg	agct	ggcct	-	tct	cagtc	---	..	53	..	ttcccc	gacag	att	gtctt
C. Jac	a	CATC	CGG	G	TAAAGGCAGTG	ggc	ctggcct	-	tct	cagtcct	..	..	..	51	..	ttcccc	gacag	att	gtctt
C. Por	a	CAT	tCGG	G	TAAAG	---	atgggttggcct	-	ctc	attca	---	..	..	51	..	cctc	acccccag	att	gtcct
O. Cun	a	CATC	CGG	G	TAAAGGC	---	ggccttccc	-	tcct	gctcctg	..	..	..	60	..	ctcccc	gacag	atc	gtctt
C. Fam	a	CATC	CGG	G	TAAAG	-	actggggccaactg	-	gctca	-----	..	..	..	39	..	cctcccc	aacag	atc	gtcct
F. Cat	a	CATC	CGG	G	TAAAGGC	-	tggggccagctg	-	gctcagc	----	..	..	..	37	..	ctgtcct	gacag	atc	gtctt
B. Tau	a	CATC	CGG	G	TAAAGGC	-	tggggcagctg	-	cccccgcg	---	..	..	..	43	..	cctgc	ccccgacag	atc	gtcct
E. Cab	a	CATC	CGG	G	TAAAGGC	-	tggggccagctt	-	tctcag	----	..	..	..	46	..	ttctcccc	atag	att	gtctt
O. Avi	a	CATC	CGG	G	TAAAGGC	-	tggggccagct	-	acccccgc	----	..	..	..	45	..	cctcccc	gacag	atc	gtcct
L. Afr	a	CATC	CGG	G	TAAAGGC	G	ggcctggctc	-	accctgtccc	...	..	..	..	50	..	ccccct	gacag	att	gtttt
		*** **	*****		*****		*	*	*		*****					*	**	*** **	*

id=473247 gene=ENSG00000062598 name=ELMO2 segment=chr20.45003080.45003174.-1 type=IN

Figure 291: CS=12.35



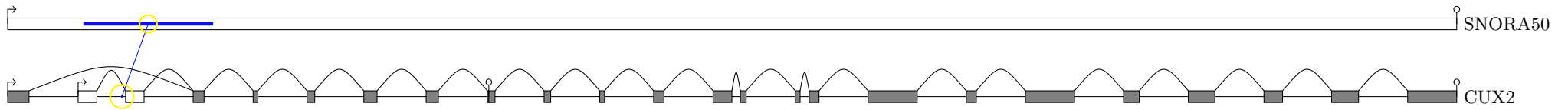
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R. Mac	agacctaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
P. Tro	agacataa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
P. Abe	agacataa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
C. Por	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaagacaaggtacattt	aagtcact
O. Cun	aaaaataa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
C. Fam	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
F. Cat	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
B. Tau	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
E. Cab	agaataaa	gcactgcctttg...58...acttggtataactggggctc	TTCAGctCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
S. Sus	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
O. Avi	agaataaa	gcactgcctttg...64...-----tataactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagttact
L. Afr	agaataaa	gcactgcctttg...64...-----tagaactggggctcttcagc	TCTCaACTGAacTGCT	cttttaaaaaacaaggtacattt	aagatact
	* * *	*****	**	*****	*** **

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16.58593700.58593833.-1 type=EN

H. Sap	cAGCATCA	GTGA	-----GG	ccgggctcccggccccagcc-...387...	tctcctctgcag	gtcggacg
R. Mac	cAGCATCA	GTGA	-----GG	ccgggctcccggccccagcc-...385...	tctcctctgcag	gtcggaca
P. Tro	cAGCATCA	GTGA	-----GG	ccgggctcccggccccagcc-...387...	tctcctctgcag	gtcggacg
P. Abe	cAGCATCA	GTGA	-----GG	ccgggctcccggccccagcc-...386...	tctcctctgcag	gtcggaca
C. Por	cAGCATCA	GTGA	-----GG	ccactcaccacctgcagcc-...343...	ttgtcttgagcag	gtcggaca
O. Cun	cAGCATCA	GTGA	-----GG	ccggccccccgctgttcc-...160...	ccacctctgcag	gccggaca
C. Fam	cAGCATCA	GTGA	-----GG	cctgccccccgccccccac-...381...	ttgcctctgcag	gtcggaca
F. Cat	cAGCATCA	GTGA	-----GG	ccgcccccccgccccctgcc-...373...	ttgcctctgcag	gtcggaca
B. Tau	cAGCATCA	GTGA	-----GG	ctctcccctccctcccatc-...372...	tcacctctgcag	gtcggacg
E. Cab	cAGCATCA	GTGAG	ccCTGGG	ccccggtgtccctccgagcc-...376...	tcgcctctgcag	gtcggaca
S. Sus	cAGCATCA	GTGA	-----GG	ccgggcccccttccgccccctg-...306...	ttgcctctgcag	gtcggaca
O. Avi	cAGCATCA	GTGA	-----GG	ccctcccctcttcccatcc-...370...	tcacctctgcag	gtcggacg
L. Afr	cAGCATCA	GTGA	-----GG	ccagcccgcctgcagggc-...440...	ttgcctctgcag	gtcggaca
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id=460746 gene=ENSG00000140854 name=KATNB1 segment=chr16.57787432.57787856.1 type=IN VIEW

Figure 292: CS=14.43



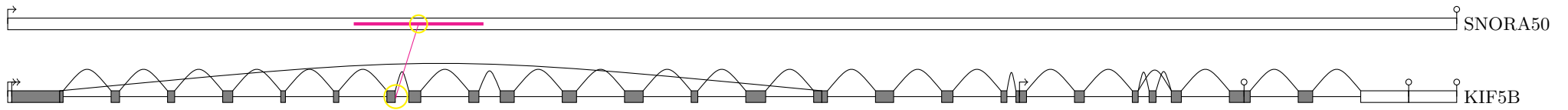
H. Sap	-----aGACATaA	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
R. Mac	agaccta-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
P. Tro	-----aGACATaA	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
P. Abe	-----aGACATaA	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
C. Jac	-----aGACATaA	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
C. Por	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
O. Cun	aaaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
C. Fam	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
F. Cat	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
B. Tau	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
S. Sus	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
O. Avi	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagttact
L. Afr	agaaata-----A	GCAcTGCCTTTG	aacctgatgtgtcttgtttg...90...caaggtacattt	aagatact
	*	*	*****	*** **

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16.58593700.58593833.-1 type=EN

H. Sap	tggctggg	gtgagatggagt...	208...	cgtctggctcaatcgagagc	CAAAgaGGTA	TGCTaATGTC	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
R. Mac	tggctagg	gtgagacagagt...	207...	cgtctggctcgatcgagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
P. Tro	tggctggg	gtgagatggagt...	208...	cgtctggctcaatcgagagc	CAAAgaGGTA	TGCTaATGTC	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
P. Abe	tggctggg	gtgagacggagt...	208...	cgtctggctcaatcgagagc	CAAAgaGGTA	TGCTaATGTC	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
C. Jac	tgggtggg	gagagacagagt...	213...	cgtctggctcgatcgagagc	CAAAgaGGTA	TGCTaATGTC	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
C. Por	tagctggg	atgagacaggcc...	217...	cgtctggctggatggagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
O. Cun	tggagggg	gtgagctggact...	203...	tggctggctggctggggagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgc--ag	agcagaac
C. Fam	tgactgga	gtgagagagagt...	214...	cgtctggctggatggagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcagaac
F. Cat	tagctgga	gtgagagagagt...	214...	cgtctggctagctggagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcagaac
B. Tau	tggctgga	gtgaaacagaat...	225...	cgtctggctggatcgagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcaga--
S. Sus	cggctgga	gagagacaggat...	221...	cgtctggctggatcgagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcaga--
O. Avi	tggctgga	gtgagacagaat...	231...	cgtctggctggatcgagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcagaac
L. Afr	tgactgga	g-gaaatggaatt...	215...	cgtctggctgcatagagagc	CAAAgaGGTA	TGCTaatgtc	ttttaaattagaatgaaatgtttattgcagag	agcaga--
	*	**	*	*	*****	*	*****	***** **

id=519813 gene=ENSG00000111249 name=CUX2 segment=chr12.111537441.111537733.1 type=IN

Figure 293: CS=10.14



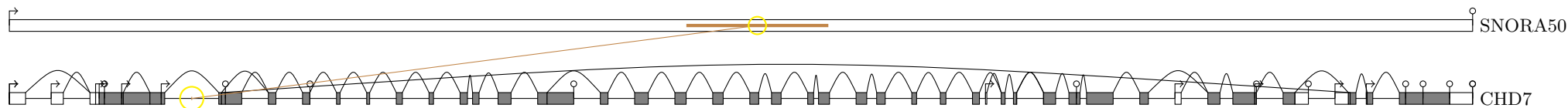
H. Sap	agacataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
R. Mac	agacctaa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
P. Tro	agacataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
P. Abe	agacataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
C. Jac	agacataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
M. Mus	gagactaa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagta...	64...	caaggtacattt	aagttact
C. Por	agaaataa	gcactgcctttgaacct	GATGTGCTCTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
O. Cun	aaaaataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggccatgcaacagtg...	65...	caaggtacattt	aagttact
C. Fam	agaaataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
B. Tau	agaaataa	gcactgcctttgaac	CTGATGTGCTCTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
S. Sus	agaaataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
O. Avi	agaaataa	gcactgcctttgaac	CTGATGTGCTCTTGTTTGTAGCT	tcacgggcccaagcaacagtg...	65...	caaggtacattt	aagttact
L. Afr	agaaataa	gcactgcctttgaacctgatgtgt	CTTGTTTGTAGCT	tcacgggccaaagcagcagtg...	65...	caaggtacattt	aagttact
	***	*****	*****	*****	*****	*****	*** **

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16\_58593700\_58593833\_-1 type=EN

H. Sap	aGTTACAA	GTAAG	-tagaaaa-----taacactggtag-----	...104...	atttccttgtag	atatgaat
R. Mac	aGTTACAA	GTAAG	-tagaaaa-----taacaccggttag-----	...100...	atttccttgtag	atatgaat
P. Tro	aGTTACAA	GTAAG	-tagaaaa-----taacactggtag-----	...104...	atttccttgtag	atatgaat
P. Abe	aGTTACAA	GTAAG	-tagaaaa-----taacactggtag-----	...104...	atttccttgtag	atatgaat
C. Jac	aGTTACAA	GTAAG	-tagaaaa-----taacaccggttag-----	...107...	attacattgtag	atatgaat
M. Mus	aGTTACAA	GTAAG	-----tg-ggatattcattagtagtactc-----	...117...	atttcattgtag	atatgaat
C. Por	aGTTACAA	GTAAG	taGTTGTTT-tattgacattagttaggtagta-----	...130...	atatcattgtag	atatgaat
O. Cun	aGTTACAA	GTAAG	-----tatttaacatttggtaaggt-----	...143...	ttttcattgtag	atatgaat
C. Fam	aGTTACAA	GTAAG	-taaaatgtc--ttaacactagt-----	...122...	atttcattgtag	atatgaat
B. Tau	aGTTACAA	GTAAG	tgGCATAtTTAG-taatactagtttaaggtatag...	...90...	atttccttgtag	atatgaat
S. Sus	aGTTACAA	GTAAG	-tagactacttattaagg--gat-----	...108...	atttcattgtag	atatgaat
O. Avi	aGTTACAA	GTAAG	tgGCATAtTTAG-taatactagtttaaggtatag...	...90...	atttccttgtag	atatgaat
L. Afr	aGTTACAA	GTAAG	ttagaatatttattaacact-----	...221...	aatttattgtag	atatgaat
	*****	*****	*		*** **	*****

id=779403 gene=ENSG00000170759 name=KIF5B segment=chr10\_32326307\_32326447\_-1 type=IN

Figure 294: CS=11.05



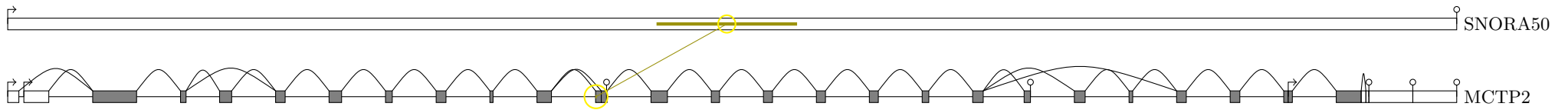
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R. Mac	agacctaa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
P. Tro	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
P. Abe	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
C. Jac	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
C. Por	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
O. Cun	aaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
C. Fam	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
B. Tau	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
E. Cab	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
S. Sus	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
O. Avi	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
L. Afr	agaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaaagcaac	AGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagt tact
		*****	*****	*****	*****

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16\_58593700\_58593833\_-1 type=EN

H. Sap	tgcatcag	gtaaggggacac...4944...-aaactaatttcaattcctat	TTGTGtCTCTcAG	CATTcccc
R. Mac	tgcatcag	gtaaggggacac...4944...-aaactaatttcaattgctat	TTGTGtCTCTtAG	CATTctcc
P. Tro	tgcatcag	gtaaggggacac...4944...-aaactaatttcaattcctat	TTGTGtCTCTtAG	CATTcccc
P. Abe	tgcatcag	gtaaggggacac...4944...-aaactaatttcaattcctat	TTGTGtCTCTtAG	CATTcccc
C. Jac	tgcatcag	gtaaggggacac...4944...-aaactaatttcaaatcctat	TTGTGtCTCTtAG	CATTcgcc
C. Por	tccatcag	gtaagcgggtgca...4944...-aaactaatttcagttcctat	TTGTGtCTCTtAG	CATTctcc
O. Cun	tgcatcag	gtaaggggacgc...4944...-aaactaatttcaattcctat	TTGTGtCTCTcAG	CATTctcc
C. Fam	tgctcag	gtaaggggaacc...4943...taactaatttcaattccta	TTGTGtCTCTtAG	CATTctcc
B. Tau	tgctcag	gtaagggggggc...4943...taactaatttcaattccta	TTGTGtCTCTtAG	CATTctcc
E. Cab	tgctcag	gtaaggggaacc...4943...taactaatttcaattccta	TTGTGtCTCTtAG	CATTctcc
S. Sus	tgccgag	gtaaggggttggg...4943...taactaatttcaattccta	TTGTGtCTCTtAG	CATTctcc
O. Avi	tgccgag	gtaagggggcgg...4943...taactaatttcaattccta	TTGTGtCTCTtAG	CATTctcc
L. Afr	tgctcag	gtaagttgtgt...4943...taactaatttcaattccta	TTGTGtCTCTcAG	CATTctcc
		*****	*****	*****

id=534357 gene=ENSG00000171316 name=CHD7 segment=chr8\_61655657\_61693558\_1 type=IN

Figure 295: CS=11.7



H. Sap	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
R. Mac	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
P. Tro	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
P. Abe	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
C. Jac	agacataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
M. Mus	gagactaa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTACTAGAGCAT	aaggacttgttataactggg...35...caaggtacattt	aagttact
C. Por	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
D. Cun	aaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aacgacttgttataactggg...36...caaggtacattt	aagttact
C. Fam	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aaggacttgttataactggg...36...caaggtacattt	aagttact
B. Tau	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aaggacttgttataactggg...36...caaggtacattt	aagttact
E. Cab	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aaggacttgttataactggg...36...caaggtacattt	aagttact
S. Sus	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aaggacttgttataactggg...36...caaggtacattt	aagttact
D. Avi	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	ACAGTGCTAGAGCAT	aaggacttgttataactggg...36...caaggtacattt	aagttact
L. Afr	agaaataa	gcactgcctttgaacctgatgtgtcttgttttagcttcacgggccaagca	GCAGTGCTAGAGCAT	aaggacttgttagaactggg...36...caaggtacattt	aagatact
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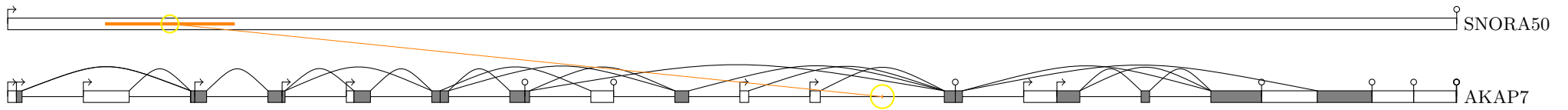
id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16\_58593700\_58593833\_-1 type=EN

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R. Mac	aaagtaag	gtaagttctatc...2130...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
P. Tro	aaagtaag	gtaagttccatc...2153...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
P. Abe	aaagtaag	gtaagttccatc...2120...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
C. Jac	aaagtaag	gtaagttctatc...2121...aaaataaataactataactgc	ATGTTtCTAG	aCACTGTg
M. Mus	aaagcaag	gtaagttctggt...2175...aaagtaaatcctgtaactgc	ATGTTtCTAG	acACTGTg
C. Por	aaagtaag	gtaagttttgtc...2100...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
O. Cun	agagtaag	gtaagttctgtc...2017...aaaataaatgtcataactgc	ATGTTtCTAG	aCACTGTg
C. Fam	aaagtaag	gtaagttctgtc...2201...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
B. Tau	aaagtaag	gtaagttctgtc...2237...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
E. Cab	aaagtaag	gtaagttctggc...2121...aaaataaatgttataactgc	ATGTTtCTAG	aCACTGTg
S. Sus	aaagtaag	gtaagttctgtc...2248...aaaataaataactataactgc	ATGTTtCTAG	aCACTGTg
O. Avi	aaagtaag	gtaagttctgtc...2219...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
L. Afr	aaagtaag	gtaagttctgtc...2104...aaaataaatattataactgc	ATGTTtCTAG	aCACTGTg
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id=39946 gene=ENSG00000140563 name=MCTP2 segment=chr15\_94899531\_94901710\_1 type=IN

Figure 296: CS=14





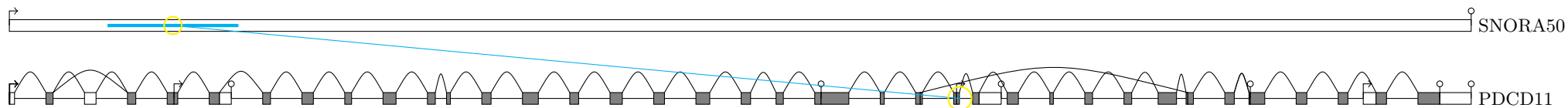
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R. Mac	agacataa	gCACTgCCTTTGAA	cctgatgtgtccttgtttgta-----	..88...	caaggtacattt	aagttact
P. Tro	agacataa	gCACTgCCTTTGAA	cctgatgtgtccttgtttgta-----	..88...	caaggtacattt	aagttact
P. Abe	agacataa	gCACTgCCTTTGAA	cctgatgtgtccttgtttgta-----	..88...	caaggtacattt	aagttact
C. Jac	agacataa	gCACTgCCTTTGAA	cctgatgtgtccttgtttgta-----	..88...	caaggtacattt	aagttact
M. Mus	gagactaa	gCACTgCCTTTGAA	ctgatgtgtccttgtttgta-----	..87...	caaggtacattt	aagttact
C. Por	agaaataa	gCACTgCCTTTGAA	ctGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagtcact
O. Cun	aaaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagttact
C. Fam	agaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagttact
B. Tau	agaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagttact
E. Cab	agaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagttact
O. Avi	agaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagttact
L. Afr	agaaataa	gCACTgCCTTTGAA	ccTGATGgtccttgtttgtagcttcac..	..81...	caaggtacattt	aagatact
	***	*****	*****	*****	*****	*** **

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16\_58593700\_58593833\_-1 type=EN

H. Sap	tggtgaag	gtaatatctccg...4951...	tgattgattgt-tttttcat-----	TTCAAG	GGAGTGaa
R. Mac	tggtgaag	gtaatatctcca...4951...	tgacttattgt-tttttcat-----	TTCAAG	GGAGTGaa
P. Tro	tggtgaag	gtaatatctccg...4951...	tgattgattgt-tttttcat-----	TTCAAG	GGAGTGaa
P. Abe	tggtgaag	gtaatatctccg...4951...	tgattgattgt-tttttcat-----	TTCAAG	GGAGTGaa
C. Jac	tggtgaag	gtaatatctcca...4951...	tgatttattgt-tttttcat-----	TTCAAG	GGAGTGaa
M. Mus	ttgtgaag	gtaattccccta...4951...	acatggattgt-tttgtcct-----	TTCAAG	GGAGTGag
C. Por	tgctgaag	gtaatatcccca...4945...	-gattgatgtgatttttgttt	TGTTGTTTCAAG	GGAGTGaa
O. Cun	tggtgaag	gtaatatcccca...4945...	-gattgatgtgatttttcttt	TGTTATTTCAAG	GGAGTGaa
C. Fam	tggtgaag	gtaatacccaca...4945...	tgagtgatgtga-ttttgttt	TATCATTTCAAG	GGAGTGaa
B. Tau	tggtgaag	gtaatgccaca...4945...	tgattgatgtga-ttttgtct	TGTCAATTTCAAG	GGAGTGaa
E. Cab	tggtgaag	gtaatatctcgc...4945...	tgattgatgtga-ttttgttt	TGTCAATTTCAAG	GGAGTGaa
O. Avi	tggtgaag	gtaatacccaca...4945...	tgattgatgtga-ttttgtct	TGTCAATTTCAAG	GGAGTGaa
L. Afr	tggtgaag	gtaatgtcccca...4945...	tcattgatgtaa-ttttgttt	TGTCAATTTCAAG	GGAGTGaa
	* *****	*****	* ** * ** *	*****	*****

id=215573 gene=ENSG00000118507 name=AKAP7 segment=chr6\_131522051\_131540800\_1 type=IN

Figure 297: CS=15.34



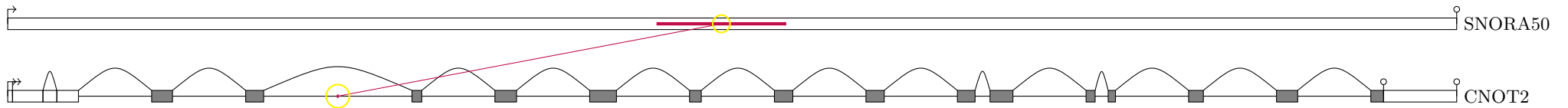
H. Sap	agacaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
R. Mac	agaccTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
P. Tro	agacaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
P. Abe	agacaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
C. Jac	agacaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
M. Mus	gagactaa	GCACTGcCTTTGAA	atcgtatgtgtccttgttga-...87...caaggtacattt	aagttact
C. Por	agaataa	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
O. Cun	aaaaataa	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
C. Fam	agaataa	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
F. Cat	agaaaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
B. Tau	agaataa	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
E. Cab	agaaaTAA	GCACTGcCTTTGAA	cctgatgtgtccttgttga-...88...caaggtacattt	aagttact
L. Afr	agaaaTAA	GCACTGCCTTTGAA	ctgatgtgtccttgtttag...87...caaggtacattt	aagttact
	***	*****	*****	*****

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16\_58593700\_58593833\_-1 type=EN

H. Sap	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagagggacc-----...165...ttatccttcag	gttctgaa
R. Mac	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagagggacc-----...164...ttatccttcag	gttctgaa
P. Tro	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagagggacc-----...165...ttatccttcag	gttctgaa
P. Abe	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagagggacc-----...164...ttatccttcag	gttctgaa
C. Jac	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagagggacc-----...164...ttatccttcag	gttctgaa
M. Mus	gcTTCAAG	GtCAGTGT	-----ctggagaaaagattcaagag...127...aatccttcag	gttctgaa
C. Por	gcTTCAAG	GtCAGTGT	atatgaggtccctggagagg-----...160...ctgtccttctag	gttctgaa
O. Cun	gcTTCAAG	GtCAGTGT	----ggctgtctgagctgactca-----...145...ttatccttcag	gttctgaa
C. Fam	gcTTCAAG	GtCAGTGT	gctcagaattcctggagagg-----...142...ttgtccttctag	gttctgaa
F. Cat	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagaggaaacc-----...183...ttgtccttcag	gttctgaa
B. Tau	gcTTCAAG	GtCAGTGT	gcctgagatgcctggagagg-----...138...ttgtccttctag	gttctgaa
E. Cab	gcTTCAAG	GtCAGTGtgCTTG	agatccctggagaggaaacc-----...165...ttgtccttcag	gttctgaa
L. Afr	gTTCAAG	GtCAGTGtgCTTG	--atatctggagaggattca----...164...ttgtccttcag	gttctgaa
	* *****	*****	***	* ** * ** * ** *

id=329751 gene=ENSG00000148843 name=PDCD11 segment=chr10\_105193795\_105194004\_1 type=IN

Figure 298: CS=10.14



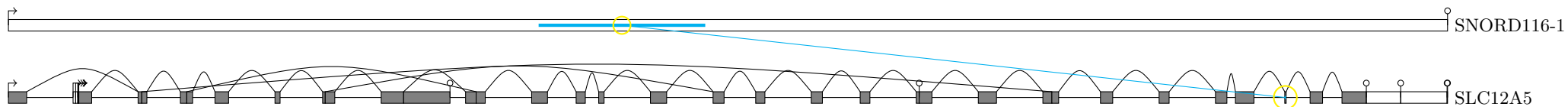
H. Sap	agacataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
R. Mac	agacctaa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
P. Tro	agacataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
P. Abe	agacataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
C. Jac	agacataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
M. Mus	gagactaa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTACTAGAGCATAA	cgacttgttataactggggc-...32...caaggtacatt	aagttact
C. Por	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
O. Cun	aaaaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...34...caaggtacatt	aagttact
B. Tau	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...33...caaggtacatt	aagttact
E. Cab	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...33...caaggtacatt	aagttact
S. Sus	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...33...caaggtacatt	aagttact
O. Avi	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...33...caaggtacatt	aagttact
L. Afr	agaataa	gcaactgcctttgaacctgatgtgtccttgtttgtagcttcacgggccaaagcaa	CAGTGCTAGAGCATAA	cgacttgttataactggggc-...33...caaggtacatt	aagttact
	***	*****	*****	*****	*** **

id=192101 gene=ENSG00000206952 name=SNORA50 segment=chr16.58593700.58593833.-1 type=EN

H. Sap	aaaaagat	gtaagttaatca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
R. Mac	aaaaagat	gtaagttaatca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
P. Tro	aaaaagat	gtaagttaatca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
P. Abe	aaaaagat	gtaagttaatca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
C. Jac	aaaaagat	gtaagttattca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
M. Mus	agaaagat	gtaagttacgct...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
C. Por	aaaaagat	gtaagttgatca...4947...-tatgctctaataataa	TTGTTTCTAG	aTGCTGgc
O. Cun	aaaaagat	gtaagttaatca...4947...-tatactctaataataa	TTGTTTCTAG	aTGCTGgc
B. Tau	aaaaagat	gtaagttaaccg...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
E. Cab	agaaagat	gtaagtagatgt...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
S. Sus	aaaaagat	gtaagttaatca...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
O. Avi	aaaaagat	gtaagttaaccg...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
L. Afr	aaaaagat	gtaagttaatca...4946...ttatgctctaataataa	TTGTTTCTAG	aTGCTGgc
	* **	*****	*** ***** *	*****

id=339948 gene=ENSG00000111596 name=CNOT2 segment=chr12.70704798.70713077.1 type=IN

Figure 299: CS=13.52



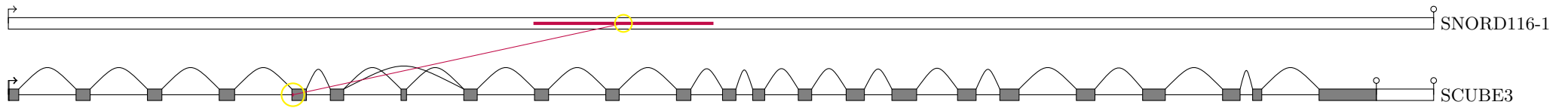
H. Sap	atgtgctt	ggatc	gatgatgag	ccc	tata	aaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actca-	taac	gtcatt	tctcat	cgg	aactgag	gtcc	agcat	gtt
R. Mac	acgtgctt	ggatc	gatgatgag	ccc	tata	aaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actca-	tacc	gtcgtt	tctcat	cgg	aactgag	gtcc	agcac	gtt
P. Abe	atgtgctt	ggatc	gatgatgag	ccc	tata	aaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actca-	tacc	gtcgtt	tctcat	cgg	aactgag	gtcc	agcat	gtt
C. Jac	gtgtgctt	ggatc	gatgatgag	ccc	caaaa	aaaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actca-	tacc	gtcgtt	tctcat	cgg	aactgag	gtcc	agcac	att
M. Mus	acgtgctt	ggatc	tatgatg	att	ccc-	agt	caaa	CATTCCTTGGAAAAGC	TGAA	caaa	atgag	tgaaa	actctg	tacc	gcc	aactt	c	atc	gag
R. Nor	gtatgctt	ggatc	gatgatg	att	ccc-	agt	caaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actcag	cacc	gca	actg	tcat	cgg	aatgag	gtcc
C. Por	atgtgctt	ggatc	gatgatg	atg	ccc	aaa-	aaa	CATTCCTTGGAAAAGC	TGAA	aaatgag	tgaga	actc	taac	ctg	ctc	gtc	gtg	actgag	gtcc
C. Fam	aagtgctt	ggatc	gatgatg	act	cc	caat	ctg-	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	tact	gtc	att	tct	cat	caaa	aactgag
F. Cat	atgtgctt	ggatc	gatgatg	act	cc	caa-	cag-	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	ctac	ctc	ttt	ctc	atc	gaa	aactgag
B. Tau	acgtgctt	ggatc	gatgatg	act	ccc	caa-	atg-	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	ctac	ctc	ttt	ctc	atc	gaa	aactgag
E. Cab	acgtgctt	ggatc	gatgatg	act	cc	cat-	atg-	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	ctac	ctc	ttt	ctc	atc	gaa	aactgag
S. Sus	cggtgctt	ggatc	gatgatg	act	cc	ctc	t-aag-	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	ctac	ctc	ttt	ctc	atc	gaa	aactgag
L. Afr	acgtgcat	ggatt	gatgatg	act	g	ct-aa	aaa	CATTCCTTGGAAAAGC	tgaac	aaaatgag	tgaga	actc	ctac	ctc	ttt	ctc	atc	gaa	aactgag
	***	****	*****	*	*****	*****	*****	*****	*	*	**	*	***	****	***	****	***	****	***

id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	atgaagcc	gtacggg	cctgg	..289	..-----	tctctctt	tgatctct	ttgt	GTTTCCTGAAG	GGAGTG	gg
R. Mac	atgaagcc	gtacggg	cctgg	..290	..-----	tctctctt	tgatctct	ttgt	GTTTCCTGAAG	GGAGTG	gg
P. Abe	atgaagcc	gtacggg	cctgg	..267	..-----	tctctctt	tgatctct	ttgt	GTTTCCTGAAG	GGAGTG	gg
C. Jac	atgaagcc	gtatggg	cctgg	..278	..-----	tttctttt	tgatctct	ttgt	GTTTCCTGAAG	GGAGTG	gg
M. Mus	atgaagcc	gtacggg	actgg	..297	..--	tcttctct	ctttgctt	ctc	TTTGTGTTTCCTGAAG	GGAGTG	gg
R. Nor	atgaagcc	gtacggg	cctgg	..273	..-----	tttctctt	tgatctct	ttgt	GTTTCCTGAAG	GGAGTG	gg
C. Por	atgaagcc	gtatggg	cctgg	..271	..	tttctttt	ctccctt	gcttc-	TGTTGTTTTTCCTgAAG	GgAGTG	gg
C. Fam	atgaagcc	gtagggg	cctgg	..278	..-----	cctctcgt	ttgctt	ctttgt	GTTTCCTGAAG	GGAGTG	gg
F. Cat	atgaagcc	gtagggg	cctgg	..298	..-----	cctctctt	tgcttct	ttgt	GTTTCCTGAAG	GGAGTG	gg
B. Tau	atgaagcc	gtacggg	ctgg	..296	..-----	cctctcct	tgcttct	ttat	GTTTCCTgAAG	GgAGTG	gg
E. Cab	atgaagcc	gtatggg	cctag	..299	..-----	cctcactt	tgcttct	ttgt	GTTTCCTGAAG	GGAGTG	gg
S. Sus	atgaagcc	gtacggg	cctgg	..305	..-----	cctctctt	tgcttct	ttgt	GTTTCCTgAAG	GgAGTG	gg
L. Afr	atgaagcc	gtatggg	cctgg	..288	..-----	ctttctt	tgcttct	ttgt	GTTTCCTGAAG	GGAGTG	gg
	*****	***	***	**	*	*	****	*	*****	*****	*****

id=543329 gene=ENSG0000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 300: CS=11.05



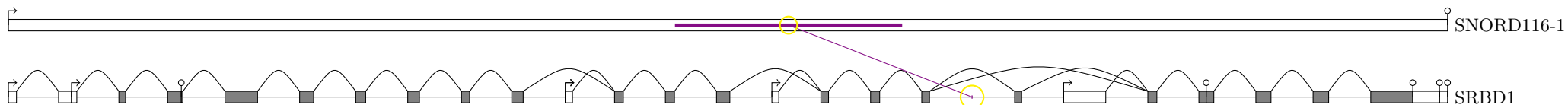
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R.Mac	acgtgctt	ggatc	gatgatgagtc	ccctataaaaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcat	-accgtcgttctcatc	ggatctgaggtcc	agcacgtt
M.Mus	acgtgctt	ggatc	tatgatgattccc	agtc-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactctgtacc	gccactctcatc	ggaaactgaggtcc	agcatcct
R.Nor	gtatgcct	ggatc	gatgatgattccc	agtc-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactcagcacc	gcaactgtcatc	ggaaatgaggtcc	ggcacctt
C.Por	atgtgctc	ggatc	gatgatgatgcccc	aaaa-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagagctcta	atccgtcactctc	gtcgtgactgaggtcc	agcacact
O.Cun	atgtgctt	ggatc	gatgatgactcccc	cat-aaa	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcaca	accgtcgttctcatc	gtgactgaggtcc	agcacgtt
C.Fam	aagtgcct	ggatc	gatgatgactccct	caatctg-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gagaactcttact	gtcattctcatc	aaaactgaagtcc	agcacatt
F.Cat	atgtgctc	ggatc	gatgatgactccct	caa-cag-	CATTCCTTg	GGAAAAG	-ctgaacaaaatgagt	gagaactccctacc	gtcttctcatc	gaaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactccc	acaa-atg-	CATTCCTTg	GGAAAAG	-tctgaacaaaatgagt	gagccacc	ccctaccgtc-tcct	catcggaaactgaggtcc	agcacgtg
E.Cab	acgtgctc	ggatc	gatgatgactccct	cat-atg-	CATTCCTTg	GGAAAAG	atctgaacaaaatgagt	gagaactcactacc	gtcgttctcatc	gaaactgaggtcc	ggcacgtt
S.Sus	cggtgctc	ggatc	gatgatgactccct	cta-aag-	CATTCCTTg	GGAAAAG	-tctgaacaaaatgagt	gagaactcactacc	gtc-tcct	catcggaaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgactgct	atct-aaa-	CATTCCTTg	GAAAAG	ctgaacaaaatgagt	gaaaactccttacc	gtctcactcattg-	aactgaggtcc	agcacatt
	***	****	*****	*	*****	*****	*	*	**	*	***

id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H.Sap	gccagaag	gtcagccc	atga-...951...	-cattcac	cccccttcttct	CTTTAg	AAGGAATg
R.Mac	gccagaag	gtcagccc	atga-...955...	-cattcac	cccccttcttct	CTTTAg	AAGGAATg
M.Mus	gccagaag	gtcagccc	acgg-...695...	gcgcca	acgtctccttctcc	CTTTTAg	AAGGAATg
R.Nor	gccagaag	gtcagccc	aggg-...712...	ggagc	gtcagcctcctcc	CTTTTAg	AAGGAATg
C.Por	gccagaag	gt-agccc	atgag...865...	-actcacc	ctctccttct	CTTTAg	AAGGAATg
O.Cun	gccagaag	gtcagccc	gtga-...863...	-catgc	ccccctccttct	CTTTAg	AAGGAATg
C.Fam	gccagaag	gtcagccc	atga-...1137...	cactcac	ctcctccttct	CTTTTAg	AAGGAATg
F.Cat	gccagaag	gtcagccc	atga-...2802...	cactcac	ctcctccttct	CTTTTAg	AAGGAATg
B.Tau	gccggaag	gtcagcct	ctgg-...989...	-ca-ccc	gccccctccttccc	TTTAg	AAGGAATg
E.Cab	gccggaag	gtcagccc	atga-...1162...	--ttc	attgccaccttctcc	TTTAg	AAGGAATg
S.Sus	gccagaag	gtcagcct	atga-...882...	-gcgc	cctcctccttccc	TTTAg	AAGGAATg
L.Afr	accagaag	gtcagccc	ctgc-...963...	-tttca	ccccctccttccc	CTTTAg	AAGGAATg
	**	****	**	****	*	**	*****

id=478871 gene=ENSG0000146197 name=SCUBE3 segment=chr6.35199637.35200626.1 type=IN

Figure 301: CS=19.56



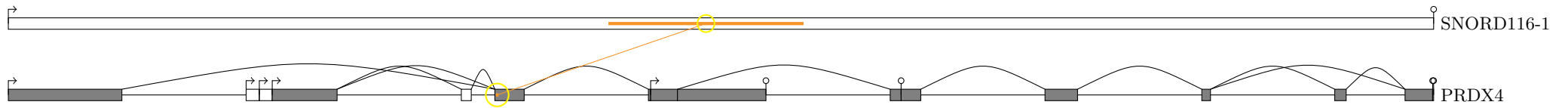
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R. Mac	acgtgctt	ggatc	gatgatgag	cccc	tataaaa	acattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	tcat-acc	gctgtt	cctcat	cgg	atctgag	gtcc	agcacg	tt		
M. Mus	acgtgctt	ggatc	tatgatgatt	ccc	ag--	caaacattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	tctgtacc	gccact	cctcat	cgg	aactgag	gtcc	agcatc	tt		
R. Nor	gtatgcct	ggatc	gatgatgatt	ccc	ag--	caaacattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	ctcagc	accg	caact	gtcat	cgg	aatgag	gtcc	ggcac	tt	
C. Por	atgtgctc	ggatc	gatgatgatg	cccc	aa--	aaaacattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	ctcaat	ccgtcact	cctc	gtcgtg	actgag	gtcc	agcac	tt		
O. Cun	atgtgctt	ggatc	gatgatgact	cccc	a-t	aaacattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	tcaca	accg	ctgtt	cctcat	cgtg	actgag	gtcc	agcac	tt	
C. Fam	aagtgcct	ggatc	gatgatgact	cc	ca-at	atcgcattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	ctcact	gtcatt	cctcat	caaa	actgag	gtcc	agcac	tt		
F. Cat	atgtgctc	ggatc	gatgatgact	cc	ctca--	acagcattcct	TGGAA	-AGCTGAA	AAAA	TGAGT	GAGAAC	ctcact	accg	cttct	cctcat	cgg	aactgag	gtcc	agcac	tt	
B. Tau	acgtgctt	ggatc	gatgatgact	cc	ca-a	atgcattcct	TGGAA	-AtCTGAA	AAAA	TGAGT	GAGAAC	gagc	acc	ctacc	gtc-t	cctcat	cgg	aactgag	gtcc	agcac	tt
E. Cab	acgtgctc	ggatc	gatgatgact	cc	ctca--	tatgcattcct	TGGAAA	atCTGAA	AAAA	TGAGT	GAGAAC	ctcact	accg	ctgtt	cctcat	cgg	aactgag	gtcc	ggcac	tt	
S. Sus	ccgtgctc	ggatc	gatgatgact	cc	ct--	aaagcattcct	TGGAA	-AtCTGAA	AAAA	TGAGT	GAGAAC	ctcact	accg	ctc	cctcat	cgg	aactgag	gtcc	ggcac	tt	
O. Avi	acatgctc	ggatc	agtgatgaca	act	ttc-at	atatttattcct	TGGAAA	atCTGAA	AAAA	TGAGT	GAGAAC	ctcact	acc	ctc	cctcat	gata	actgag	gtcc	agcac	tt	
L. Afr	acgtgc	ggatt	gatgatgact	g	ctatc--	taaacattcct	TGGAAA	agCTGAA	AAAA	TGAGT	GAGAAC	ctcact	acc	ctc	cctcat	cattg-a	aactgag	gtcc	agcac	tt	
	***	****	*****	*	*****	*****	*	*****	*****	*	*****	*	**	*	***	**	***	**	***	**	

id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	aagtcag	gta	gaa	actat	...4934	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a	
R. Mac	aagtcag	gta	gaa	actat	...4934	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtA-	TTTT	TCAG-	TTT	CC	A	a	
M. Mus	aagtcag	gtg	aga	agctgt	...4933	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-TTTT	TCAG-	TTT	CC	A	a		
R. Nor	aagtcag	gtg	aga	agctgt	...4935	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a	
C. Por	aagtcag	gta	gaa	agctat	...4942	...taagtcatactt	gtt	gtc	ttg	ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A
O. Cun	aagtcag	gta	gaa	aatgat	...4935	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a	
C. Fam	aagtcag	gta	gaa	acaat	...4946	...atgaagtcatactt	at	tttc	-----	TG-	TTTT	TCAG-	TTT	CC	A	a	
F. Cat	aagtcag	gta	gaa	aaactac	...4946	...tttaagtcatactt	at	tttc	-----	TG-	TTTT	TCAGT	TTT	CC	A	a	
B. Tau	aagtcag	gta	gaa	aaactgt	...4942	...taagtcatactt	gtt	ttt	ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a
E. Cab	aagtcag	gtag	gaa	actat	...4936	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	Tt--	TTTT	TCAG-	TTT	CC	A	a	
S. Sus	aagtcag	gta	gaa	aaactaa	...4934	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a	
O. Avi	aagtcag	gta	gaa	aaactat	...4934	...tttcacattaagtcatactt	GTTTT	Ctg	ATT	CtG-	TTTT	TCAG-	TTT	CC	A	a	
L. Afr	gagtcag	gta	gaa	aacctg	...4947	...tttctgttttttttttt	-----	TTTT	TCAG-	TTT	CC	A	a				
	*****	**	***				*	**		*****	*****						

id=181516 gene=ENSG0000068784 name=SRBD1 segment=chr2.45704215.45715378.-1 type=IN

Figure 302: CS=11.05



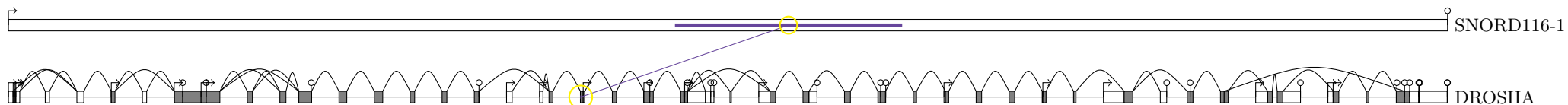
H. Sap	atgtgctt	ggatc	gatgatgag	cccc	tataaaa	aacattc	CTTGG	aaAAGCTGA	acAAAATGAGTG	gaga	actcat	-aacgt	cattct	catc	ggaact	gaggtcc	agcatg	tt		
R. Mac	acgtgctt	ggatc	gatgatgag	cccc	tataaaa	aacattc	CTTGG	aaAAGCTGA	acaaaa	atgagt	gaga	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacg	tt	
P. Abe	atgtgctt	ggatc	gatgatgag	cccc	tataaaa	aacattc	CTTGG	aaAAGCTGA	acaaaa	atgagt	gaga	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcatg	tt	
C. Jac	gtgtgctt	ggatc	gatgatgag	cccc	aaaaaa	aacattc	CTTGG	aaAAGCTGA	acaaaa	atgagt	gaga	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacatt		
R. Nor	gtatgcct	ggatc	gatgatgatt	cccc	ag	--caaac	attcCTTGG	aaAAGCTGA	acaaaa	atgagt	gaaa	actcag	caccg	caact	gtcat	cggaat	gaggtcc	ggcacctt		
C. Por	atgtgctc	ggatc	gatgatgatg	cccc	aa	--aaaac	attcCTTGG	aaAAGCTGA	acaaaa	atgagt	gagag	ctctaat	ccgtc	actct	ctcgt	ctgact	gaggtcc	agcacatt		
O. Cun	atgtgctt	ggatc	gatgatgact	cccc	cat	--aaac	attcCTTGG	aaAAGCTGA	acaaaa	atgagt	gaga	actcaca	accgt	cgttct	catc	gtgact	gaggtcc	agcacg	tt	
C. Fam	aagtgcct	ggatc	gatgatgact	cccc	ca	-atctg	cattcCTTGG	aaAAGCTGA	acAAAATG	AGTGA	gaact	ctctact	gtcatt	ctcat	caaa	actga	aggtcc	agcacatt		
F. Cat	atgtgctc	ggatc	gatgatgact	cccc	ca	--acag	cattcCTTGG	-aaAAGCTGA	acaaaa	atgagt	gaga	actcc	taccg	tctt	ctcat	cgaa	actgag	gtcc	agcacg	tt
B. Tau	acgtgctt	ggatc	gatgatgact	cccc	aca	-a	atgcattcCTTGG	-AAAatCTGA	acaaaa	atgagt	gagcc	accct	accgtc	-tcct	catc	ggaact	gaggtcc	agcacgtg		
E. Cab	acgtgctc	ggatc	gatgatgact	cccc	ca	--tatg	cattcCTTGG	AAAatCTGA	acaaaa	atgagt	gaga	actcact	accgt	cgttct	ctcat	cgaa	actgag	gtcc	ggcacg	tt
S. Sus	ccgtgctc	ggatc	gatgatgact	cccc	ct	--aaag	cattcCTTGG	-AAAatCTGA	acaaaa	atgagt	gaga	actcact	accgtc	-tcct	catc	gaa	actgag	gtcc	ggcacg	tt
O. Avi	acatgctc	ggatc	cagtgatgaca	actttc	-atatt	tattcCTTGG	AAAatCTGA	acaaaa	atgagt	gaga	actcact	accatc	-tcct	catc	gata	actgag	ctc	agcacg	tt	
L. Afr	acgtgcat	ggatt	gatgatgact	gctatc	--taaac	attcCTTGG	aaAAGCTGA	acaaaa	atgagt	gaaa	actcct	taccg	tctcact	cattg	-aact	gaggtcc	agcacatt			
	***	****	*****	*		*****	***	*****	*			**	*	***	**	***	**	***		

id=282208 gene=ENSG00000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	atctaaag	gt----	agccctgatt	...47...	cagtgt	tacaga	acatcatg	-----	TATTT	TATTT	TTAG	TTTCCAA	g		
R. Mac	atctaaag	gt----	agccctgatt	...59...			acatcatg	tattttt	ctttc	-----	TTAG	TTTCCAA	g		
P. Abe	atctaaag	gt----	agccctgatt	...59...			acatcatg	tattttt	ctttc	-----	TTAG	TTTCCAA	g		
C. Jac	aaataaag	gt----	agccctgatt	...59...			acatcatg	tattttt	ctttc	-----	TTAG	TTTCCAA	g		
R. Nor	atthagaa	gccaag	tttta	-----	...51...		tagata	at	tgctttt	ctttc	-----	TTAG	TTTCCAA	g	
C. Por	atctgagg	gtgtag	ctcagt	-----	...99...		acatcgt	gtc	ttttt	ctttc	-----	TTAG	TTTCCAA	g	
O. Cun	gtccaaag	atthag	aagcct	-----	...51...		aatcat	c	ctatc	ttt	ctttc	-----	TTAG	TTTCCAA	g
C. Fam	atccaaag	atthag	atcct	-----	...46...		tttctc	ag	gtttt	agaata	TTATa	TATTT	tcTTAG	TTTCCAA	g
F. Cat	gtccaaag	gttaga	atcct	-----	...64...		actcat	at	tattttt	ctttc	-----	TTAG	TTTCCAA	g	
B. Tau	gtccaaag	atc----	cctccaaa	...67...			acatcat	atg	ttttt	ctttc	-----	TTAG	TTTCCAA	g	
E. Cab	gtccagag	gattaga	aagcct	-----	...64...		acatcat	at	tattttt	ctttc	-----	TTAG	TTTCCAA	g	
S. Sus	-----	cag	actcaga	agccttgatt	...59...		gaat	cat	atata	---ttc	tttc	-----	TTAG	TTTCCAA	g
O. Avi	gtccaaag	atc----	cctccgaa	...65...			acatcat	atg	ctttt	ctttc	-----	TTAG	TTTCCAA	g	
L. Afr	atccaaag	gttaaga	agccc	-----	...67...		tc	atg	aatc	ttttt	ctttc	-----	TTAG	TTTCCAA	g
												****	*****		

id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX.23689551.23689645.1 type=IN

Figure 303: CS=12.6



H. Sap	atgtgctt	ggatc	gatgatgag	cccc	tataaaa	acattc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	actcat	-aacgt	cattct	catc	ggaact	gaggtcc	agcatg	tt
R. Mac	acgtgctt	ggatc	gatgatgag	cccc	tataaaa	acattc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacg	tt
P. Abe	atgtgctt	ggatc	gatgatgag	cccc	tataaaa	acattc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcatg	tt
C. Jac	gtgtgctt	ggatc	gatgatgag	cccc	caaaaa	acattc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	actcat	-accgt	cgttct	catc	ggaact	gaggtcc	agcacatt	
M. Mus	acgtgctt	ggatc	atgatgatt	cccagtc	--aac	attc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAAA	actctgt	accg	cactct	catc	ggaact	gaggtcc	agcatc	tt
R. Nor	gtatgctt	ggatc	gatgatgatt	cccagtc	--aac	attc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	gAAAA	cTCAG	caccg	caactc	ctc	ggaact	gaggtcc	ggcact	tt
C. Por	atgtgctt	ggatc	gatgatgag	cccc	caaaa	--aac	attc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	gctctaat	ccgtc	actctc	gctg	gactgaggtcc	agcacact	
O. Cun	atgtgctt	ggatc	gatgatgact	cccc	cat--	aac	attc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	actcaca	accgt	cgttct	catc	gactgaggtcc	agcacg	tt
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaa	-tctg	cattc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAGA	aaactct	actgtc	attctc	atc	caaaact	gaagttcc	agcacatt	
B. Tau	acgtgctt	ggatc	gatgatgact	cccacaa	--atg	cattc	cctt	TGAAA	ATCTGA	ac	AAAATGAGT	gagcc	accctacc	gctc	-tcct	catc	ggaact	gaggtcc	agcacg	tg	
E. Cab	acgtgctt	ggatc	gatgatgact	ccctcat	--atg	cattc	cctt	GGAAA	ATCTGA	ac	AAAATGAGT	GAGA	actcact	accgt	cgttct	catc	gaaact	gaggtcc	ggcacg	tt	
S. Sus	cggtgctt	ggatc	gatgatgact	ccctcta	--aag	cattc	cctt	TGAAA	ATCTGA	ac	AAAATGAGT	GAGAA	CT	cactacc	gctc	-tcct	catc	gaaact	gaggtcc	ggcacg	tt
L. Afr	acgtgcat	ggatt	gatgatgact	gctatct	--aac	attc	cctt	GGAAA	ag	CTGA	ac	AAAATGAGT	GAAA	actcctt	accgt	ctc	actcattg	-aactg	aggtcc	agcacatt	
	***	****	*****	*	*****	*	***	*****	*	*	*	*****	*	*	*	*	*	*	***	****	***

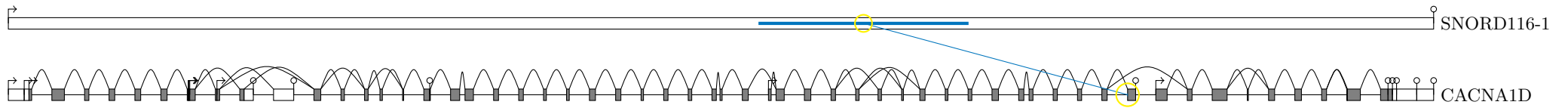
id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	tgccggag	gtaagg	gaaaag	..1478	..----	gccaact	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
R. Mac	tgccagag	gtaagg	gaaaag	..1483	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
P. Abe	tgccggag	gtaagg	gaaaag	..1488	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
C. Jac	tgccagag	gtaagg	gaaaag	..1497	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
M. Mus	tgccagag	gtaagg	gaaaag	..1492	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
R. Nor	tgccagag	gtaagg	gaaaag	..1461	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
C. Por	tgccagag	gtaagg	gaaaag	..1468	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
O. Cun	tgccagag	gtaagg	gaaaag	..1492	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
C. Fam	tgccagag	gtaagg	gaaaag	..1721	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
B. Tau	tgccagag	gtaagg	gaaaag	..1570	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
E. Cab	tgccagag	gtaagg	gaaaag	..1526	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
S. Sus	tgccagag	gtaagg	gaaaag	..1814	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
L. Afr	tgccagag	gtaagg	gaaaag	..2148	..----	gccaatt	acagta	aatttaa	---	TTTTg	GTTTATTTTCAG	aaTTTTg
	****	***	*****	*		*	*	*	*	*	*****	*****

id=770724 gene=ENSG00000113360 name=DROSHA segment=chr5.31485070.31486597.-1 type=IN

Figure 304: CS=17.42





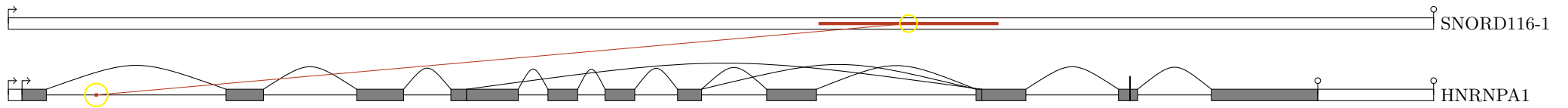
H. Sap	atgtgctt	ggatcgatgatgagtc	ccctataaaaacattc	ccttggaag	CTGAACAAATGAGT	-gagaactcat-aacgtcattctcatcggaactgaggtcc	agcatgtt
P. Abe	atgtgctt	ggatcgatgatgagtc	ccctataaaaacattc	ccttggaag	CTGAACAAATGAGT	-gagaactcat-accgtcgttctcatcggaactgaggtcc	agcatgtt
C. Jac	gtgtgctt	ggatcgatgatgagtc	ccccaaaaaacattc	ccttggaag	CTGAACAAATGAGT	-gagaactcat-accgtcgttctcatcggaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgatt	cccagtc--aaacattc	ccttggaag	CTGAACAAATGAGT	-gaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	gtatgctt	ggatcgatgatgatt	cccagtc--aaacattc	ccttggaag	CTGAACAAATGAGT	-gaaaactcagcaccgcaactgtcatcggaactgaggtcc	ggcacctt
C. Por	atgtgctc	ggatcgatgatgatg	ccccaaa--aaacattc	ccttggaag	CTGAACAAATGAGT	-gagagctctaatccgtcactctcgtcgtgactgaggtcc	agcacact
O. Cun	atgtgctt	ggatcgatgatgact	cccccat--aaacattc	ccttggaag	CTGAACAAATGAGT	-gagaactcacaaccgtcgttctcatcgtgactgaggtcc	agcacgtt
C. Fam	aagtgctt	ggatcgatgatgact	ccctcaa-tctgcattc	ccttggaag	CTGAACAAATGAGT	-gagaactcttactgtcattctcatcaaaactgaagtcc	agcacatt
B. Tau	acgtgctt	ggatcgatgatgact	cccacaa--atgcattc	-TTGGaaATCTGAACAAATGAGT	AGCCA	ccccct-accgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgact	ccctcat--atgcattc	ccttggaag	ATCTGAACAAATGAGT	-gagaactcactaccgtcgttctcatcgaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctcta--aagcattc	-TTGGaaATCTGAACAAATGAGT		-gagaactcactaccgtc-tcctcatcgaactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggattgatgatgact	gctatct--aaacattc	ccttggaag	CTGAACAAATGAGT	-gaaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt
	***	****	*****	*	*****	* * * * *	***

id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	ccctacag	gtgaattgttgt...	3981...-----	agatgagattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
P. Abe	ccctacag	gtgaattgttgt...	4942...-----	agatgagattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
C. Jac	ccctacag	gtgaattgttgt...	4042...-----	agatgagattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
M. Mus	ccctacag	gtgaattgccct...	4388...-----	agatgacattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
R. Nor	ccctacag	gtgaatggccct...	3973...-----	agatgagattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
C. Por	ccctacag	gtgaattgttct...	3914...-----	agatgagattt	cactggctg	ATTCATTTGTtTCAG	atgcttga
O. Cun	ccctgcag	gtgaattgtccc...	3807...-----	tgatgagattt	cactggctg	ATTCGTTTGTtTCAG	atgcttga
C. Fam	ccctacag	gtgaattgtcct...	3925...-----	agatgagattt	cactggctg	ATTCATTTGTtTCAG	atgcttga
B. Tau	ccctacag	gtgaattgttgt...	3814...gctaacagataagattt	cacTGGCTg	ATTCATTTGTtTCAG	ATgcTTG	atgcttga
E. Cab	ccctacag	gtgaattgttgt...	3950...-----	agatgagattt	caccggctg	ATTCATTTGTtTCAG	ATgcttga
S. Sus	ccctacag	gtgaattattgt...	3900...-----	agatgagattt	cactggctg	ATTCATTTGTtTCAG	ATgcTTG
L. Afr	ccctacag	gtgaattatcgt...	3984...-----	agataagattt	caccggctg	ATTCATTTGTtTCAG	atgcttga
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id=617953 gene=ENSG0000157388 name=CACNA1D segment=chr3.53820980.53825007.1 type=IN

Figure 305: CS=10.8



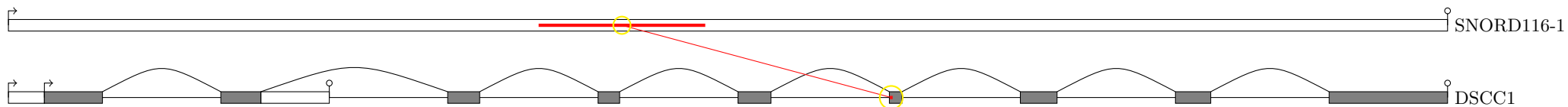
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R.Mac	acgtgctt	ggatc	gatgatgag	cccc	tataaaa	aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcat	-accgt	cgttctc	atc	cggaact	gaggtcc	agcacg	tt
C.Jac	gtgtgctt	ggatc	gatgatgag	cccc	caaaaa	aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcat	-accgt	cgtctct	atc	cggaact	gaggtcc	agcacatt	
M.Mus	acgtgctt	ggatc	tatgatgatt	cccagtc	--aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	aaactctgt	accgccact	ctc	atc	cggaact	gaggtcc	agcatctt		
R.Nor	gtatgcct	ggatc	gatgatgatt	cccagtc	--aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	aaactcagc	caccgcaact	gtc	atc	cggaat	gaggtcc	ggcacctt		
C.Por	atgtgctc	ggatc	gatgatgatg	ccccaaa	--aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gagctctaat	ccgtcact	ctc	gtc	gtgact	gaggtcc	agcacatt		
O.Cun	atgtgctt	ggatc	gatgatgact	ccccat	--aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcaca	accgctgtt	ctc	atc	gtgact	gaggtcc	agcacg	tt	
C.Fam	aagtgcct	ggatc	gatgatgact	cctcaa	-tctgcattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcctact	gtcattt	ctc	atc	caaaact	gaagtcc	agcacatt		
F.Cat	atgtgctc	ggatc	gatgatgact	cctcaa	--cagcattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcc	taccgctt	tct	atc	gaaact	gaggtcc	agcacg	tt	
B.Tau	acgtgctt	ggatc	gatgatgact	ccccaaa	--atgcattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gccacc	ccctaccg	ctc	atc	cggaact	gaggtcc	agcacg	tg	
E.Cab	acgtgctc	ggatc	gatgatgact	ccctcat	--atgcattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accgctgtt	ctc	atc	gaaact	gaggtcc	ggcacg	tt	
S.Sus	ccgtgctc	ggatc	gatgatgact	ccctcta	--aagcattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accgctc	-tct	atc	gaaact	gaggtcc	ggcacg	tg	
O.Avi	acatgcct	ggatc	cagtgatgaca	actttca	-tatttattc	ccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accatc	-tct	atc	gatact	gaggtcc	agcacg	tt	
L.Afr	acgtgcct	ggatt	gatgatgact	gctatct	--aacattc	ccttgg	aaaagctga	ACAAAATG	GTGA	aaactcctt	accgctc	act	cattg	-aact	gaggtcc	agcacatt		
	***	****	*****	*		*****	***	*****	*****	*		**	*	***	**	***		

id=282208 gene=ENSG0000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H.Sap	agtcagag	gtgag	ttagcgc	...111...	-----	taccctc	-ccaa	agttcaag	TCGCCATTTTGT	cctctt	gatcg	ccatgag	gc---	...376...	ccccact	ctag	tctc	ctaa	
R.Mac	agtcagag	gtgag	ttagcgc	...113...	-----	taccctc	-ccaa	agttcaag	TCGCCATTTTGT	cctctt	gatcg	ccatgag	gc---	...377...	ccccact	ccag	tctc	ctaa	
C.Jac	agtcagag	gtgag	ttagcgc	...106...	-----	ctaccctc	-ccaa	agttcaag	TCGCCATTTTGT	cctgtt	gatcg	ccatgag	gc---	...371...	ccccact	gtag	tctc	ctaa	
M.Mus	agtcagag	gtaag	ttggatg	...106...	-----	tactt	t	aaaaaatgcagg	TCGCCATTTTGT	cctcat	agtc	acatgag	gc---	...369...	ctccact	ttag	tctc	ccaa	
R.Nor	agtcagag	gtgag	ttgagcgc	...105...	-----	ctacttt	-aaaa	atgcagg	TCGCCATTTTGT	cctcat	agtc	acatgag	gc---	...361...	actttatt	ttag	tcccc	caa	
C.Por	agtcagag	gtaag	cgatatt	...103...	-----	gcctgctc	-ccaa	agttcagg	TCGCCATTTTGT	cctcg---	tcg	ccatgag	gcgc...	...327...	cttccact	ctag	tctc	ctaa	
O.Cun	agtcagag	gtgag	gagctcc	...102...	-----	aaggc	t	accctc	TCGCCATTTTGT	cctcgt	cgctg	ccatgag	gt---	...378...	ttccc	gccag	tcg	ccaa	
C.Fam	agtcagag	gtgag	taacacg	...112...	-----	ttcccctc	-ccg	agttgagg	TCGCCATTTTGT	cctcgt	cgctg	ccatgag	gc---	...363...	ccccg	ctc	ctag	tctc	caa
F.Cat	agtcagag	gtgag	taacacg	...113...	-----	taccctc	-ccaa	agttcggg	TCGCCATTTTGT	cctcgt	cgctg	ccatgag	gc---	...378...	ccgact	cctag	tctc	caa	
B.Tau	aatcagag	gtggg	taagacg	...111...	-----	tcccctc	-cct	agttgagg	TCGCCATTTTGT	cctcg---	tcg	ccatgag	gtgc...	...362...	ctcct	cctag	tctc	caa	
E.Cab	agtcagag	gtgag	taggacg	...111...	-----	taccctc	-ccaa	agttcagg	TCGCCATTTTGT	cctcgt	cgctg	ccatgag	gc---	...359...	tctact	cctag	tctc	caa	
S.Sus	agtcagag	gtgag	tgagact	...111...	-----	taccctc	-cct	gagttcagg	TCGCCATTTTGT	cctcg---	tcg	ccatgag	gtgt...	...358...	ccctact	cctag	tctc	caa	
O.Avi	aatcagag	gtggg	taagacg	...111...	-----	tcccctc	-cct	gagttgagg	TCGCCATTTTGT	cctcg---	tcg	ccatgag	gtgc...	...366...	ctccact	cctag	tctc	caa	
L.Afr	agtcagag	gtaag	ctaccct	...108...	-----	taccctc	-ccaa	agttggag	TCGCCATTTTGT	cctcgt	cgctg	ccatgag	gc---	...389...	ttccacc	attag	tctc	ctaa	
	***	**	*			*	*		*****	**	*****			**	***	**	***		

id=165449 gene=ENSG0000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 306: CS=13.3



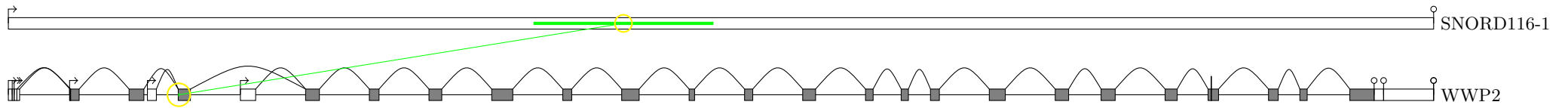
H.Sap	atgtgctt	ggatc	gatgatgag	cccc	tataaaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcattt	ctcatc	ggaactgaggtcc	agcatggt
R.Mac	acgtgctt	ggatc	gatgatgag	cccc	tataaaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgtt	ctcatc	ggatctgaggtcc	agcacgtt
P.Abe	atgtgctt	ggatc	gatgatgag	cccc	tataaaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgtt	ctcatc	ggaactgaggtcc	agcatggt
C.Jac	gtgtgctt	ggatc	gatgatgag	cccc	caaaaaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgtt	ctcatc	ggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgatt	ccc--	agtcaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gaaaactctgt	accgccact	ctcatc	ggaactgaggtcc	agcatctt
R.Nor	gtatgctt	ggatc	gatgatgatt	ccc--	agtcaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gaaaactcagc	accgcaact	gtcatc	ggaactgaggtcc	ggcacctt
O.Cun	atgtgctt	ggatc	gatgatgact	cccc	cat-aaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcaca	accgtcgtt	ctcatc	gtgactgaggtcc	agcacgtt
C.Fam	aagtgctt	ggatc	gatgatgact	ccct	caatctg	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactctct	actgtcatt	ctcatc	aaaactgaagtcc	agcacatt
F.Cat	atgtgctt	ggatc	gatgatgact	ccct	caa-cag	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactccct	accgtcctt	ctcatc	gaaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgact	ccc	acaa-atg	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagccacc	ccctaccgtc	-tcctcatc	ggaactgaggtcc	agcacgtg
E.Cab	acgtgctt	ggatc	gatgatgact	ccct	cat-atg	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcact	accgtcgtt	ctcatc	gaaactgaggtcc	ggcacgtt
S.Sus	cggtgctt	ggatc	gatgatgact	ccct	cta-aag	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcact	accgtc	-tcctcatc	gaaactgaggtcc	ggcacgtg
L.Afr	acgtgcat	ggatt	gatgatgact	gct--	atctaaa	CATTCCTTGGAAAAGc	TGAA	caaaatgagt	gaaaactcct	taccgtc	ctcattg	-aactgaggtcc	agcacatt
	***	****	*****	* *	*****	*****	*****	*	*	*	****	***	****

id=282208 gene=ENSG00000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H.Sap	gagccaga	gtaagtatttta	...734	...--ataactttt	caagtgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
R.Mac	gagccaga	gtaagtatttta	...729	...--ataactttt	caaatgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
P.Abe	gagccaga	gtaagtatttta	...751	...--ataactttt	caagtgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
C.Jac	gagccaga	gtaagtatttta	...608	...--agaactttt	caaatgtgtg	-----TTTAaa	TTTTTCAG	GGaAATGa
M.Mus	gagccaga	gtgagtatttgc	...905	...-tcataagtt	cttttgtgtg	-----TTTAaa	TTTTTCAG	GGaAATGa
R.Nor	gagccaga	gtgagtatttgc	...1060	...-tcataagtt	ctcttgtgtg	-----TTTAaa	TTTTTCAG	GGaAATGa
O.Cun	gagccaga	gtaagtatttta	...403	...-gaatagtt	cttca--tgagtg	-----TTTAaa	TTTTTCAG	GGaAATGa
C.Fam	gagccaga	gtaagtatttta	...640	...-----	ttcaaatgagt	tttttaaaa	-----TTTTTCAG	GGaAATGa
F.Cat	gagccaga	gtaagtatttta	...426	...--taactttt	caaatgagtatt	-----TTTAaa	TTTTTCAG	GGaAATGa
B.Tau	gagccaga	gtaagtatttat	...450	...gtgaaaact	tttcaataag	-----TGTTTAaa	ATTTTTTCAG	GGaAATGa
E.Cab	gaaccaga	gtaagtatttta	...728	...--gtaactttt	caaatgagggt	-----TTTAaa	TTTTTCAG	GGaAATGa
S.Sus	gagccaga	gtaagtatttta	...323	...-----	tcataaaaat	gtgaagaag	TGTTTAaa	ATTTTTTCAG
L.Afr	gaaccaga	gtaagtatttta	...399	...-----	ttcaaatg	ggttttttaaaa	-----TTTTTCAG	GGaAATGa
	**	*****	**	***	*	*	*****	*****

id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 307: CS=19.24



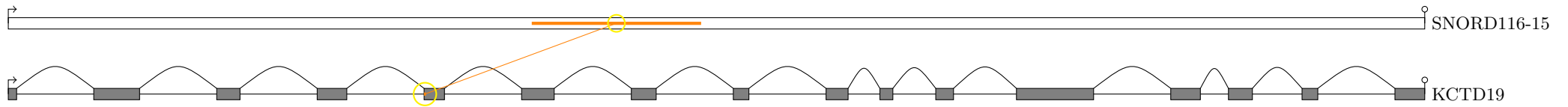
H. Sap	atgtgctt	ggatc	gatgatgagtc	ccctataaaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcattctcatc	ggaactgaggtcc	agcatgtt				
R. Mac	acgtgctt	ggatc	gatgatgagtc	ccctataaaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggatctgaggtcc	agcacgtt				
P. Abe	atgtgctt	ggatc	gatgatgagtc	ccctataaaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcatgtt				
C. Jac	gtgtgctt	ggatc	gatgatgagtc	ccccaaaaaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcacatt				
M. Mus	acgtgctt	ggatc	ctatgatgatt	cccagtc	AAACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	agcatctt				
R. Nor	gtatgctt	ggatc	gatgatgatt	cccagtc	AAACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-accgtcgttctcatc	ggaactgaggtcc	ggcacctt				
C. Por	atgtgctt	ggatc	gatgatgatt	ccccaaaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacatt				
O. Cun	atgtgctt	ggatc	gatgatgatt	ccccataa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacgtt				
C. Fam	aagtgctt	ggatc	gatgatgatt	ccctcaatct	GCATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacatt				
F. Cat	atgtgctt	ggatc	gatgatgatt	ccctcaaca	GCATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacgtt				
B. Tau	acgtgctt	ggatc	gatgatgatt	cccacaaat	GCATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacgtt				
L. Afr	acgtgcat	ggatt	gatgatgatt	ctctctaa	ACATTCCTTGGAAAAGc	TGAA	caaaatgagt	gagaactcat	-aacgtcgttctcatc	ggaactgaggtcc	agcacatt				
	***	****	*****	*	*****	***	*****	*****	*	*	**	*	***	****	***

id=282208 gene=ENSG00000207063 name=SNORD116-1 segment=chr15.25296624.25296718.1 type=EN

H. Sap	---tacc	caag	gtgactct	tttt...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca							
R. Mac	---tacc	caac	gtgcctct	cttt...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca							
P. Abe	---tacc	caag	gtggctct	cttt...175...	--tggatg	taatgaatcag	gtaTTGTTTTCCAG	GAATGTca							
C. Jac	---tacc	caag	atgcctct	cttt...177...	----atg	tagtgaatcag	tatctGTTTCCAG	GAATGTca							
M. Mus	---cccc	atg	gtgctcct	cttt...170...	----ctg	tatgagtcact	tacttGTTTCCAG	GAATGTca							
R. Nor	---cccc	atg	gtgctcct	cttt...166...	--ggctg	tatgagtcact	tacttGTTTCCAG	GAATGTca							
C. Por	agggtc	ccggg	g---ctc	tgtcc...173...	----acat	gatgaatcag	tacttGTTTCCAG	GAATGTca							
O. Cun	---tacc	caag	gtgcctct	cttt...163...	--tggatg	tatgagtcact	tacttGTTTCCAG	GAATGTca							
C. Fam	---tacc	caag	ggacctct	cttc...184...	----attg	atcaatcaag	tatctGTTTCCAG	GAATGTca							
F. Cat	---tacc	caag	gcacctct	cttc...180...	--tggatg	tatgagtcact	tacttGTTTCCAG	GAATGTca							
B. Tau	---tac	ctgag	gcacctct	cttt...191...	--tggatg	tatgagtcact	tacttGTTTCCAG	GAATGTca							
L. Afr	---tac	ctgaa	gcacctct	cttt...145...	cttgaa	tatgagtcact	tacttGTTTATTTCCAG	GAATGTca							
		**			*	*	*	*	*	*	*	*	*	*	*

id=149604 gene=ENSG00000198373 name=WWP2 segment=chr16.69832858.69833076.1 type=IN

Figure 308: CS=10.8



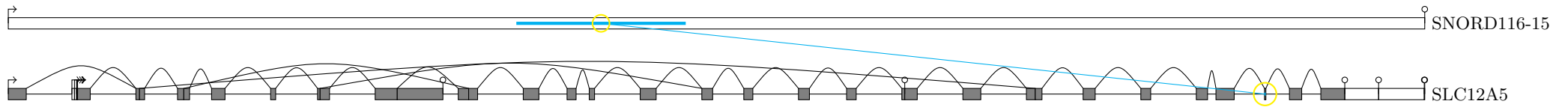
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R. Mac	ttgtgtgt	ggatc	gatgatgacttccatat-atac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact	
P. Tro	ttgtgtgt	ggatc	gatgatgacttccatat-atac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact	
P. Abe	ttgtgtgt	ggatc	gatgatgacttccatat-atac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact	
C. Jac	atgtg	cggt	ggatc	gatgatgacttccgtat-atac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactctataccgtcatcctcgttg-aactgaggtcc	agcacggt
M. Mus	acgag	cctt	ggatc	atgatgatgattcccagtc-aaac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatcct
R. Nor	gcgtg	cctt	ggatc	gatgatgatttccaata-aaac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg
C. Por	acgtg	cctt	ggatc	cagtgatgactcacaatg-aaac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgaaaactgtaccgtcattctcatcg-aactgaggtcc	agcacact
U. Cun	atgtg	cctt	ggatc	gatgatgactcctcat-aaac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcacaaccgtcatttctcatcgtgactgaggtcc	agcacatt
C. Fam	aagtg	cctt	ggatc	gatgatgactcctcctcaatctgc	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcctaccgtcttctcatcacaactgaggtcc	agcacggt
F. Cat	atgtg	cctt	ggatc	gatgatgactcctcaa-cagc	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcctccgctgttctcatcgaaactgaggtcc	agcacggt
B. Tau	acgtg	cctt	ggatc	gatgatgactcccacaatg-aaac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcactaccgtc-tcctcatcggaactgaggtcc	agcacggt
E. Cab	acgtg	cctt	ggatc	gatgatgactcctcat-atac	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacggt
S. Sus	cggtg	cctt	ggatc	gatgatgactcctcta-aagc	ATTCCTTGG	AAAGc	TGAA	caaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacggt
	* *		****	*** *		*****	***	*****	***

id=674584 gene=ENSG00000207174 name=SNORD116-15 segment=chr15\_25326434\_25326525\_1 type=EN

H. Sap	cttcattg	gtgattg	cctctg...1178...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
R. Mac	cttcattg	gtgattg	cctctg...1172...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
P. Tro	cttcattg	gtgattg	cctctg...1178...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
P. Abe	cttcattg	gtgattg	cctctg...1179...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
C. Jac	cttcacg	gtgattg	cctctg...1175...	attaactcactgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
M. Mus	cttcattg	gtgattg	ccctg...1271...	---aacacatgtgttcttct	GCTTTTCAAG	tGAAT	ttt
R. Nor	cttcattg	gtgattg	cctctg...1272...	---aactcatgtgttcttct	GCTTTTCAAG	tGAAT	ttt
C. Por	ctttattg	gtgatg	gttctg...1505...	gttaactcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
O. Cun	cttcattg	gtgattg	cctctg...1407...	---aattcatctgttccatt	GCTTTTCAAG	tGAAT	ttt
C. Fam	cttcattg	gtgattg	cctcta...1173...	ccttaactcatttgttccc	TTTGTTTTCAAG	tGAAT	ttt
F. Cat	cttcattg	gtgattg	cctcta...1164...	cttatctcatgtgttccc	TTTGTTTTCAAG	tGAAT	ttt
B. Tau	ctttattg	gtgattg	tttcta...1184...	----ccatttgttccccttgc	TTTCAAG	tGAAT	ttt
E. Cab	cttcattg	gtgattg	tttcta...1210...	gttaactcatttgttccc	TTTGTTTTCAAG	tGAAT	ttt
S. Sus	cttcattg	gtgattg	cctcta...1409...	gttaaccatttgttctt	TTTGTTTTCAAG	tGAAT	ttt
	*** ** *	*****	* *		** **** *	** ** *	*****

id=204363 gene=ENSG00000168676 name=KCTD19 segment=chr16\_67335826\_67337048\_-1 type=IN

Figure 309: CS=10.92



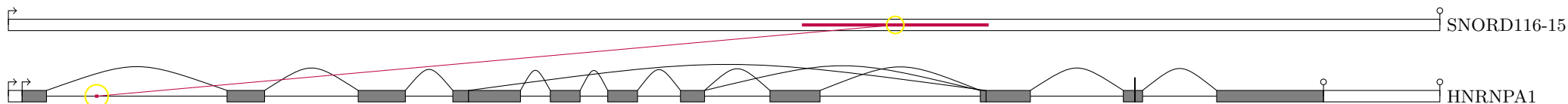
H. Sap	ttgtgtgt	ggatc	cgatgatgacttccatat-ata	CATTCCCTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact	
R. Mac	ttgtgtgt	ggatc	cgatgatgacttccatat-ata	CATTCCCTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact	
P. Tro	ttgtgtgt	ggatc	cgatgatgacttccatat-ata	CATTCCCTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact	
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C. Jac	atgtg	cgatgatgacttccgtat-ata	CATTCCCTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgttg-aactgaggtcc	agcacggt		
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R. Nor	gcgtg	cgatgatgatttccaata-aaa	CATTCCCTGGAAAGC	-tgaacaaaatgagtgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg		
C. Por	acgtg	cagtgacactcaca-atg	CATTCCCTGGAAAGC	gAACAA-aaatgagtgaaaactgtaccgtcatttctcatcg-aactgaggtcc	agcacact		
C. Fam	aagtg	ctgatgactcctcaatctg	CATTCCCTGGAAAGC	tgaacaaaatgagtgagaactcctaccgtcttctcatcacaactgaggtcc	agcacg		
F. Cat	atgtg	ctgatgactcctcaa-cag	CATTCCCTGGAAAGC	tgaacaaaatgagtgagaactcctcccgtcgttctcatcgaaactgaggtcc	agcacg		
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L. Afr	atgtttt	gaattgacgatgacttccacat-ata	CATTCCCTGGGAA	-tctgaacaaaatgagtgaaaactgtattgtctagctcattg-acctgtggtcc	agtacatt		
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P. Tro	atgaagcc	gtacgggcctgg...289...-----tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
P. Abe	atgaagcc	gtacgggcctgg...267...-----tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
C. Jac	atgaagcc	gtatgggcctgg...278...-----tttcttttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggactgg...297...--tctttctctcttgccttctc	TTTGTGTTTCCTGAAG	GGAGTGgg
R. Nor	atgaagcc	gtacgggcctgg...273...-----ttctctcttgccttctctc	GTTTCCTGAAG	GGAGTGgg
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Figure 310: CS=16.1



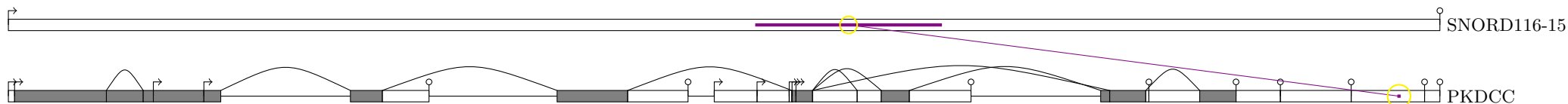
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R. Mac	ttgtgtgt	ggatc	cgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact		
P. Tro	ttgtgtgt	ggatc	cgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatcctcgtca-aactgaggtcc	agcacact		
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M. Mus	acgagc	tt	gatc	atgatgattcccagtc-aaacattccttggaaaagctga	ACAAAATG	aGTGA	aaactctgtaccgccactctcatcggaactgaggtcc	agcatc	
R. Nor	gcgtg	c	tt	ggatc	cgatgatgatttccaata-aaacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactcaataccgccactatcatcgtgactgaggtcc	agcacctg
C. Por	acgtg	c	tt	ggatc	cgatgatgactcacaatg-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactcaataccgccactatcatcgtgactgaggtcc	agcacact
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C. Fam	aagtgc	tt	ggatc	cgatgatgactcctcctcaatctgcattccttggaaaagctga	ACAAAATG	aGTGA	gaactccttaccgtcttctcatcacaactgaggtcc	agcacg	
F. Cat	atgtg	c	tt	ggatc	cgatgatgactcctcaa-cagcattccttggaaaagctga	ACAAAATG	aGTGA	gaactcctcccgtcgttctcatcgaaactgaggtcc	agcacg
B. Tau	acgtg	c	tt	ggatc	cgatgatgactcccacaa-atgattccttgg-aaatctga	ACAAAATG	aGTGA	gcatcactaccgtc-tcctcatcggaactgaggtcc	agcacg
E. Cab	acgtg	c	tt	ggatc	cgatgatgactcctcat-atgattccttggaaaatctga	ACAAAATG	aGTGA	gaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacg
S. Sus	ccgtgc	c	tt	ggatc	cgatgatgactcctcctca-aagcattccttgg-aaatctga	ACAAAATG	aGTGA	gaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacg
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R. Mac	agtcagag	gtgag	ttaggcg...113...-----taccctcccaaagttcaag	TGCCATTTGT	cctcttgatcgccatgaggc---...377...ccccactccag	tctcctaa	
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C. Jac	agtcagag	gtgag	ttaggcg...106...-----ctaccctcccaaagttcaag	TGCCATTTGT	cctcttgatcgccatgaggc---...371...ccccactgtag	tctcctaa	
M. Mus	agtcagag	gtaag	ttggatg...106...-----ctactttaaaaaaatgcagg	TGCCATTTGT	cctcatagtcaccatgaggc---...369...cctccactttag	tctcccaa	
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C. Fam	agtcagag	gtgag	taaacacg...112...-----ttcccctccggaagttgagg	TGCCATTTGT	cctcgtcgtcgccatgaggc---...363...cccgcctcctag	tctcccaa	
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Figure 311: CS=16.25



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P. Abe	ttgtgtgt	ggatc	gatgatgacttccat	atatacattccttggaaagc	TGAACAAAaTGAG	-----	tgaaaactctataccg	tcacctcgtca	-aactgaggtcc	agcacact	
C. Jac	atgtgctg	ggatc	gatgatgacttccg	atatacattccttggaaagc	TGAACAAAaTGAG	-----	tgaaaactctataccg	tcacctcgtg	-aactgaggtcc	agcacggt	
M. Mus	acgagc	ggatc	atgatgatgattcc	agtc-aaacattccttggaaa	GCTGAACAAAaTGAG	-----	tgaaaactctgtacc	gccactctcatc	ggaactgaggtcc	agcactct	
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O. Cun	atgtgctt	ggatc	gatgatgactcctc	at-aaacattccttggaaa	GCTGAACAAAaTGAG	tgAGAA	ctcaca	-----	accgtcattctc	atcgtgactgaggtcc	agcacat
C. Fam	aagtgctt	ggat	tgatgatcactcc	ctcaatctgcattccttggaaa	GCTGAACAAAaTGAG	tgAGAA	-----	ctccttaccgtc	ttctcatcaca	actgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatc	gatgatgactcctc	aa-cagcattccttggaaa	GCTGAACAAAaTGAG	tgAGAA	-----	ctcctcccgtc	gttctcatcga	actgaggtcc	agcacgtt
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S. Sus	cgtgctc	ggatc	gatgatgactcctc	ta-aagcattccttggaaat	CTGAACAAAaTGAG	tgAGAA	-----	ctcactaccgtc	-tcctcatcga	actgaggtcc	ggcacgtg
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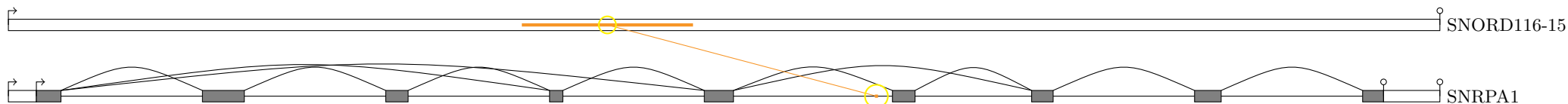
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C. Por	tgtagggtg	agcccgt	tccc...142...	-----	tgaggctggggccttctgc	CTCATTTGct	TTCA	atgaaagccacagcagcc	---...66...	ttgtttat	tttt	gtaaaaa
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Figure 312: CS=10.14





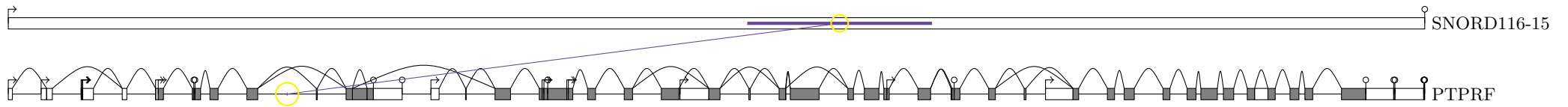
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B. Tau	acgtgctt	ggatcgatgatgactcccac--	aaATGCATTCCCTGGAAA	-tctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaaactgaggtcc	agcacgtg
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M. Mus	aactcaaa	gtgagtattgcg...487...tcaggagaattctcttccat	GTTTTCTGAGGAATG	catctaaatgcatatggtattcctatttcaattaactctgtgtgtggtgttgcctgtag	gagcgtca	
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Figure 313: CS=13



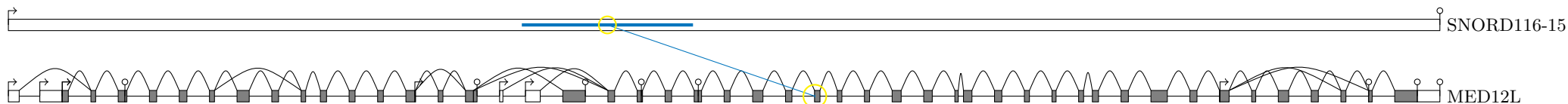
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P. Tro	ttgtgtgt	ggatc	gatgatgacttccat	at-acattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact						
P. Abe	ttgtgtgt	ggatc	gatgatgacttccat	at-acattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact						
C. Jac	atgtgcgt	ggatc	gatgatgacttccgt	at-acattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcctcgttg-aactgaggtcc	agcacgtt						
M. Mus	acgagctt	ggatc	atgatgatgattcccagtc	-aaacattccttggaaaagc	TGAACAAA	TGAG	tgaaaactctgtaccgccactctcatcggaactgaggtcc	agcacttt						
R. Nor	gcgtgctt	ggatc	gatgatgatttccaata	-aaacattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg						
C. Por	acgtgctt	ggatc	agtgatgacactcaca	-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactgtaccgtcatttctcatcg-aactgaggtcc	agcacact						
O. Cun	atgtgctt	ggatc	gatgatgactcctcat	-aaacattccttggaaaagc	TGAACAAA	TGAG	tgagaactcacaaccgtcatttctcatcgtgactgaggtcc	agcacatt						
C. Fam	aagtgctt	ggat	tgatgactcctcctca	atccttggaaaagc	TGAACAAA	TGAG	tgagaactccttaccgtcttctcatcacaactgaggtcc	agcacgtt						
F. Cat	atgtgctc	ggatc	gatgatgactcctcaa	-cagcattccttggaaaagc	TGAACAAA	TGAG	tgagaactcctcctcctcgttctcatcgaaactgaggtcc	agcacgtt						
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E. Cab	acgtgctc	ggatc	gatgatgactcctcat	-atgcattccttggaaaatc	TGAACAAA	TGAG	tgagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt						
S. Sus	ccgtgctc	ggatc	gatgatgactcctcta	-aagcattccttgg-aaatc	TGAACAAA	TGAG	tgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg						
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id=674584 gene=ENSG00000207174 name=SNORD116-15 segment=chr15.25326434.25326525.1 type=EN

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P. Tro	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P. Abe	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Jac	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M. Mus	gcgatcag	gtgagctgagtt...	.4929..	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R. Nor	gcgttcag	gtgagctgaggg...	.4929..	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
C. Por	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcaccag	gtggttca
O. Cun	gcgttcag	gtgagctgaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	cgTTCA	aattacctcgccag	gtggttca
C. Fam	acgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
F. Cat	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B. Tau	gcgttcag	gtgagcagaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E. Cab	gcgttcag	gtgagcagagag...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S. Sus	gcgttcag	gtgagcacaggg...	.4929..	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 314: CS=12.6



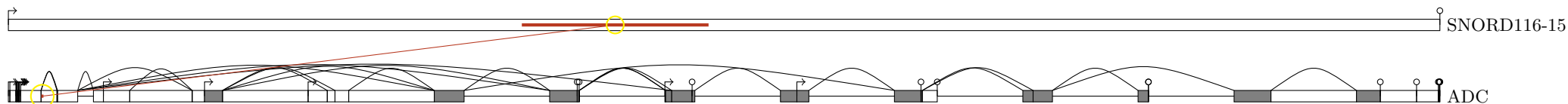
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R. Mac	ttgtgtgt	ggatcgatgatgacttccatat-ata	CATTCCCTGGAAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact										
P. Tro	ttgtgtgt	ggatcgatgatgacttccatat-ata	CATTCCCTGGAAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact										
P. Abe	ttgtgtgt	ggatcgatgatgacttccatat-ata	CATTCCCTGGAAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact										
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M. Mus	acgagctt	ggatcctatgatgattcccagtc-aaa	CATTCCCTGGAAAG	CTgaacaaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt										
R. Nor	gctgctt	ggatcgatgatgatttccaata-aaa	CATTCCCTGGAAAG	-ctgaacaaaatgagtgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg										
C. Por	acgtgctt	ggatcagtgatgacactcaca-atg	CATTCCCTGGAAAG	-ctgaacaaaatgagtgaaaactgtaccgtcatttctcatcg-aactgaggtcc	agcacact										
O. Cun	atgtgctt	ggatcagtgatgactccctcat-aaa	CATTCCCTGGAAAG	CTgaacaaaatgagtgagaactcacaaccgtcatttctcatcgtgactgaggtcc	agcacatt										
C. Fam	aagtgctt	ggattgatgactcctcaatctg	CATTCCCTGGAAAG	CTgaacaaaatgagtgagaactccttaccgtcttctcatcacaactgaggtcc	agcacgtt										
B. Tau	acgtgctt	ggatcagtgatgactcccaca-atg	CATTCCCTGGAAAG	-tctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg										
S. Sus	ccgtgctt	ggatcagtgatgactccctcta-aag	CATTCCCTGGAAAG	-tctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg										
L. Afr	atgttttt	gaattgacgatgacttccacat-ata	CATTCCCTGGAAAG	-tctgaacaaaatgagtgaaaactgtattgtctagtcattg-acctgtggtcc	agtacatt										
	*	**	***	*	*****	**	*****	****	*	*	*	**	***	*****	*

id=674584 gene=ENSG00000207174 name=SNORD116-15 segment=chr15\_25326434\_25326525\_1 type=EN

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P. Tro	ctgtagat	gtaagttttctt...1613...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
P. Abe	ctgtagat	gtaagttttctt...1601...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
C. Jac	ctgtagat	gtaagtagtttc...1913...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
M. Mus	cggtagat	gtaagttttctt...1434...gggtattaaaacctgtcaat	GTTTTTCTtaAAG	GtgAGTGa					
R. Nor	ctgtggat	gtaagttttctt...1318...--gcattaaaacctgtccatgt	TTTTCTtaAAG	GtgAGTGa					
C. Por	ctgtagat	gtaagttttctt...1544...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
O. Cun	ctgtcgat	gtaagtttgctt...1690...aggtattaaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa					
C. Fam	ctgtggat	gtaagttttctt...1568...aggtattaaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa					
B. Tau	ctgtcgat	gtaagttttctg...1572...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
S. Sus	ctgtagat	gtaagttttctt...1671...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
L. Afr	ccgtcgat	gtaagttttctt...2103...--attaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa					
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id=595784 gene=ENSG00000144893 name=MED12L segment=chr3\_151083780\_151085433\_1 type=IN

Figure 315: CS=15.6



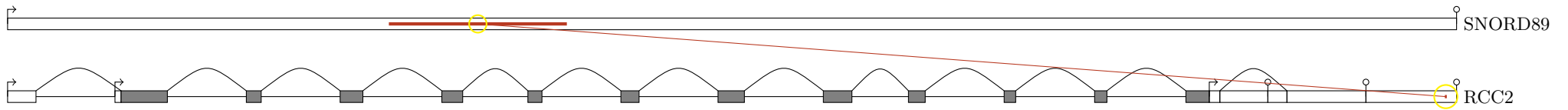
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R. Mac	ttgtgtgt	ggatcgatgatgacttccatatata---	<b>CATTCCTTGAAAAGC</b>	-tgaacaaaatgagtgaaaactctacaccgtcatcctcgtcg-aactgaggtcc	agcacact
P. Abe	ttgtgtgt	ggatcgatgatgacttccatatata---	<b>CATTCCTTGAAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtca-aactgaggtcc	agcacact
C. Jac	atgtgcgt	ggatcgatgatgacttccgtatata---	<b>CATTCCTTGAAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcatcctcgttg-aactgaggtcc	agcacgtt
M. Mus	acgagcct	ggatcctatgatgattcccagtcaaa---	<b>CATTCCTTGAAAAGC</b>	agctgaacaaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatcct
R. Nor	gcgtgctt	ggatcgatgatgatttccaataaaa---	<b>CATTCCTTGAAAAGC</b>	-tgaacaaaatgagtgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg
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O. Cun	atgtgctt	ggatcgatgatgactcctcatata---	<b>CATTCCTTGAAAAGC</b>	agctgaacaaaatgagtgagaactcacaaccgtcatttctcatcgtgactgaggtcc	agcacatt
C. Fam	aagtgctt	ggattgatgatcactcctc---aa---	<b>TCTGCATTCCTTGAAAAGC</b>	agctgaacaaaatgagtgagaactcctaccgtcttctcatcacaactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgactcctca-aca---	<b>GCATTCCTTGAAAAGC</b>	agctgaacaaaatgagtgagaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcc--cacaaa---	<b>TGCATTCCTTGAAAAGC</b>	-ctgaacaaaatgagtgagccactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactcctc--ata---	<b>TGCATTCCTTGAAAAGC</b>	ctgaacaaaatgagtgagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgactcctcct-aaa---	<b>GCATTCCTTGAAAAGC</b>	-ctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
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id=674584 gene=ENSG00000207174 name=SNORD116-15 segment=chr15\_25326434\_25326525\_1 type=EN

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P. Abe	gTTTAAAG	GcgAGTG	--cggaaagtggcctggggagc----	..54..gcctcctgtcag	caggggccc
C. Jac	gTTTAAAG	GcgAGTG	--cgggagtggtcctggggagc----	..54..gcctcctcag	caggggccc
M. Mus	gTTTAAAG	GcgAGTG	--caggagatggctgggggga----	..57..gcctcctcag	caggggccc
R. Nor	gTTTAAAG	GcgAGTG	--cagcagatggctgggggag----	..58..gcctcctcag	caggggccc
C. Por	gTTTAAAG	GcgAGTGCA	gggggatagctcggggagc----	..55..gcctcctcag	caggggccc
O. Cun	gTTTAAAG	GcgAGTG	--cgggggtggctggggagc----	..54..gcctcctcag	caggggccc
C. Fam	gTTTAAAG	GcgAGTGCGG	--gagtgctcggggagcctcc..	..48..gcctcctccag	caggggccc
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B. Tau	gTTTAAAG	GcgAGTGC	--gggagaccctcggggagcct--	..51..gcctcctcag	caggggccc
E. Cab	gTTTAAAG	GcgAGTGCG	--gggagtggctcggggagcct--	..51..gcctcctcag	caggggccc
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id=513845 gene=ENSG00000142920 name=ADC segment=chr1\_33546896\_33546988\_1 type=AN

Figure 316: CS=10.14



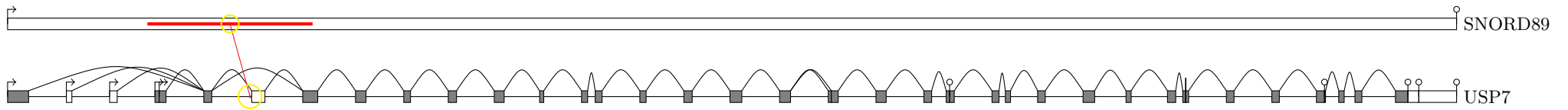
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C. Jac	ctccagct	actgaggaatg	ATGAcAAGAAAAGGC	cgAATTGCAGTGT	ctctatcagcagtttgctct--..45..tctgacctcagt	aacaggac
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C. Fam	ctgcagtc	actgaggagtgatgacaat	AAAAGGC	cgAATTGCAGTGTGC	ccattagcagtttgctctct..42..tctgacctcagt	aacatcag
F. Cat	ctgcagtc	actgaggagtgatgac	AATAaaAGGC	cgAATTGCAGTGTGC	ccatcagcagtttgctctct..42..tctgacctcagt	aacctcag
E. Cab	ctgtggtt	actggggaatgatgac	AGTAaaAGGC	cgAATTGCAGTGT	--cctccagcagtttgctctct..43..tctgacctcagt	aaccgcaa
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L. Afr	ccacagtt	actgagggtgatgacaat	AAAAGGC	cgAATTGCAGTGC	ctccataagcagtttgctct--..45..tctgacctcagt	aactctgg
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E. Cab	ggtctgga	ctggtttgggtg...946...	ggtcgaaggtgcctggttta	GTGCTG-	TAATTGTCTTATT	---ttttttatataatatttcttggagtaaacatttttaataaataatgacatcgtttttactctgtc	tcggcttt		
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L. Afr	ggtctgga	ctggtttgggtg...971...	ggtcacaggtgcctggttta	GTGCTG-	TAATTGTCTTTT	---tttaataatataatataatatttcttggagtaaacatttttaataaacaacacacattgtttactctgtt	ttggcttt		
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Figure 317: CS=16.25



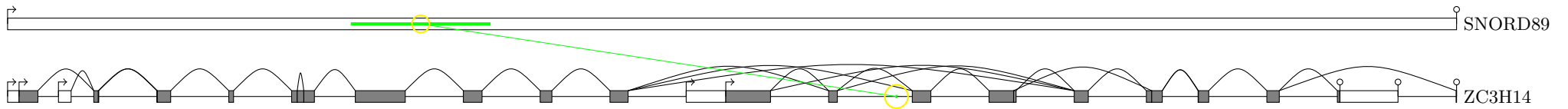
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C.Jac	ctccagct	ac	FGAGGA	TGATGACA	agaaaaggccgaattgcagt--..67..tctgacctcagt	aacaggac
M.Mus	ccatggct	gc	FGAGGA	TGATGACAT	-aaaaggccgaattgcagtgt...60..tctgacctcagt	gatgccag
C.Por	ctgtgcct	gc	FGAGGA	TGATGACA	-caaaaggccgaattgcagt-..64..tctgacctcagc	agtgccag
O.Cun	ctgcagct	ac	FGAGGA	TGATGACA	ataaaaggccgaattgcagt--..65..tctgacctcagt	aatgtcag
C.Fam	ctgcagct	ac	FGAGGA	TGATGACA	ataaaaggccgaattgcagt--..66..tctgacctcagt	aacatcag
F.Cat	ctgcagct	ac	FGAGGA	TGATGACA	ataaaaggccgaattgcagt--..66..tctgacctcagt	aacctcag
B.Tau	ccacagtt	ac	FGAGGA	TGATGACAC	tataaaggccgaattgcagt-..64..tctgacctcagt	aacgtcgg
S.Sus	ctgtgctc	ac	FGAGGA	TGATGACA	ctaaaaggccgaattgcagt--..61..tctgacctcagt	aacatcgg
L.Afr	ccacagtt	ac	FGAGGG	TGATGACA	ataaaaggccgaattgcagt--..67..tctgacctcagt	aactctgg
*			*****	*****	*****	*****

id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398\_101889511\_-1 type=EN

H.Sap	ggaggatg	gtaagtgcctgt...680...--ccatgttctgtcaaaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
R.Mac	ggaggatg	gtaagtgcctat...669...--ccatgttctgtcaaaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
P.Tro	ggaggatg	gtaagtgcctgt...665...--ccatgttctgtcaaaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
P.Abe	ggaggatg	gtaagtgcctgt...669...--ccatgttctgtcaaaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
C.Jac	ggaggatg	gtaagtgcctct...661...--ccatgttctgtcaaaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
M.Mus	ggaggatg	gtaagtaccact...525...aaacatgttctgta--caagc-	ATGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
C.Por	ggaggacg	gtaagtgtgcc...664...-aacatgttctgta--caaaca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
O.Cun	ggaggacg	gtgagtacctgt...645...-aacgtgttctgtc--aaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
C.Fam	ggaggatg	gtgagtacttgt...653...--accatgttctgtc-aaaagcc-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
F.Cat	ggaggatg	gtgagtacatgt...682...--accatgttctgtc-aaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
B.Tau	ggaggacg	gtgagtaccgg...664...-aacgtgttctgtc-aaaagcc-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
S.Sus	ggaggatg	gtaagtacctgt...653...--accatgttctgtc-aaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
L.Afr	ggaggatg	gtaagtccctgt...696...--accatgttctgtc-gaaagca-	TGTC	ATCA	TCCTCA	tgagggttgtgccttcccag	gggagtaa
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id=493206 gene=ENSG00000187555 name=USP7 segment=chr16\_9023401\_9024149\_-1 type=IN

Figure 318: CS=10.14



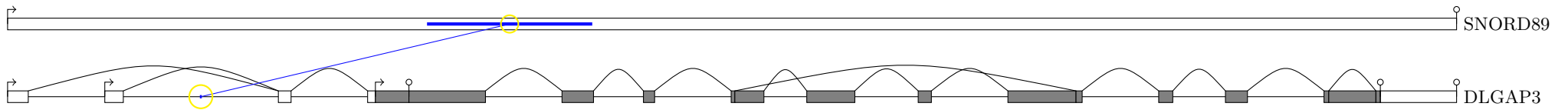
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R. Mac	ctccagct	actgaggaatgatga	CAAGAAAAGGCCGAAT	tcagtgctccatcagcag--...51...tctgacctcagt	agcaggat
P. Tro	ctccagct	actgaggaatgatga	CAAGAAAAGGCCGAAT	tcagtgctccatcagcag--...51...tctgacctcagt	agcaggat
P. Abe	ctccagct	actgaggaatgatga	CAAGAAAAGGCCGAAT	tcagtgctccatcagcag--...51...tctgacctcagt	agcaggat
C. Jac	ctccagct	actgaggaatgatga	CAAGAAAAGGCCGAAT	tcagtgctcctatcagcag--...53...tctgacctcagt	aacaggac
M. Mus	ccatggct	gctgaggagtgatgac-at	AAAAGGCCGAAT	tcagtgctccatcaacag--...48...tctgacctcagt	gatgccag
R. Nor	ccaaggct	gctgaggaatgatgacaat	AAAAGGCCGAAT	tcagtgctccatcaacag--...52...tctgacctcagt	agtgccag
C. Por	ctgtgcct	gctgaggaatgatgacac-	AAAAGGCCGAAT	tcagtgctcccgtctacag--...51...tctgacctcagc	agtgccag
O. Cun	ctgcagtc	actgaggaatgatgacaat	AAAAGGCCGAAT	tcagtgctcctgtaaacag--...51...tctgacctcagt	aatgtcag
C. Fam	ctgcagtc	actgaggagtgatgacaat	AAAAGGCCGAAT	tcagtggtcccattagcag--...52...tctgacctcagt	aacatcag
F. Cat	ctgcagtc	actgaggagtgatgacaat	AAAAGGCCGAAT	tcagtggtcccattagcag--...52...tctgacctcagt	aacctcag
E. Cab	ctgtgggt	actggggaatgatgacagt	AAAAGGCCGAAT	tcagtgctcctc--cagcagtt...51...tctgacctcagt	aaccgcaa
O. Avi	ccacagtt	actgaggaatgatgacact	AAAAGGCCGAAT	tcagtggtccccttgccag--...86...atgggcctttcc	agcaagct
L. Afr	ccacagtt	actgagggtgatgacaat	AAAAGGCCGAAT	tcagtgctccataagcag--...53...tctgacctcagt	aactctgg
	*	*** ** *****	*****	***	* ***

id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398\_101889511\_-1 type=EN

H. Sap	gagtcaag	gttgtaagtgtt...4931...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTTTTG	gctcag	attactat
R. Mac	gagtcaag	gttgtaagtgtt...4931...--aggtatattcagaagtaaac	ATTGtGGCCaaTTTTTTG	gctcag	attactat
P. Tro	gagtcaag	gttgtaagtgtt...4931...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTTTTG	gctcag	attactat
P. Abe	gagtcaag	gttgtaagtgtt...4931...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTTTTG	gctcag	attactat
C. Jac	cagttggg	gttgtaagtgtt...4931...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTTTTG	gctcag	attactat
M. Mus	gagtcaag	gtggtagtggtt...4730...--aggtatattcagaagtaaac	ATTatGGCCaaTTTT	tgtggctcag	attactat
R. Nor	gagtcaag	gtggtagtggtt...4931...--aggtatattcagaagtaaac	ATTatGGCCaaTTTT	tgtggctcag	attactat
C. Por	gagtcaag	gttggtagact...4931...--agatttattcaaaagcaaac	ATTatGGCCaaTTTT	tgtggctcag	attactat
O. Cun	tagtcaag	gttagtaattta...4931...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTT	tgtggctcag	attactat
C. Fam	cagtcaag	gttgtaataat...4487...--aggtatattcaaaagtaaac	ATTatGGCCaaTTTT	tgtggctcag	attactat
F. Cat	cagtcaag	gttgtaataat...4505...--aggtatattcaaaagtaaac	ATTatGGCCaaTTTT	tgtggctcag	attactat
E. Cab	cagtcaag	gttgtaataat...4882...caaggtata--caaaagtaaac	ATTGtGGCCaaTTTT	tgtggctcag	attactat
O. Avi	cagtcaag	gttggtaataat...4931...--agttatattcaaaagtaaac	ATTGtGGCCaaTTTT	tgtggctcag	attactat
L. Afr	cagtcaag	gttgtaataat...4569...--aggtatattcaaaagtaaac	ATTGtGGCCaaTTTT	tgtggctcag	attactat
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id=243495 gene=ENSG00000100722 name=ZC3H14 segment=chr14\_89063153\_89068267\_1 type=IN

Figure 319: CS=14



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R.Mac	ctccagct	actgaggaatgatgacaagaaaagg	CCGA	TTGCAGTGTCT	ccatcagcagtttgctctct...	41...	tctgacctcagt	agcaggat
P.Tro	ctccagct	actgaggaatgatgacaagaaaagg	CCGA	TTGCAGTGTCT	ccatcagcagtttgctctcc...	41...	tctgacctcagt	agcaggat
P.Abe	ctccagct	actgaggaatgatgacaagaaaagg	CCGA	TTGCAGTGTCT	ccatcagcagtttgctctct...	41...	tctgacctcagt	agcaggat
C.Jac	ctccagct	actgaggaatgatgacaagaaaagg	CCGA	TTGCAGTGTCT	ctatcagcagtttgctctct...	43...	tctgacctcagt	aacaggac
M.Mus	ccatggct	gctgaggagtgatgac-ataaaagg	CCGA	TTGCAGTGTCT	ccatcaacagttggctctct...	38...	tctgacctcagt	gatgccag
R.Nor	ccaaggct	gctgaggaatgatgacaataaaaagg	CCGA	TTGCAGTGTCT	ccatcaacagtttgctctcc...	42...	tctgacctcagt	agtgccag
C.Por	ctgtgctt	gctgaggaatgatgac-acaaaagg	CCGA	TTGCAGTGTCT	cccctctacagtttgctctc...	42...	tctgacctcagc	agtgccag
O.Cun	ctgagctt	actgaggaatgatgacaataaaaagg	CCGA	TTGCAGTGTCT	ccgttaacagttggctctct...	41...	tctgacctcagt	aatgtcag
C.Fam	ctgagctt	actgaggaatgatgacaataaaaagg	CCGA	TTGCAGTGTCT	gccccattagcagtttgctct...	44...	tctgacctcagt	aacatcag
F.Cat	ctgagctt	actgaggaatgatgacaataaaaagg	CCGA	TTGCAGTGTCT	gccccattagcagtttgctct...	44...	tctgacctcagt	aacctcag
B.Tau	ccacagtt	actgaggaatgatgacactaaaagg	CCGA	TTGCAGTGTCT	gccccctggcagttggctct...	43...	tctgacctcagt	aacgtcgg
E.Cab	ctgtggtt	actggggaatgatgacagtaaaaagg	CCGA	TTGCAGTGTCT	ctccagcagtttgctctct...	42...	tctgacctcagt	aaccgcaa
O.Avi	ccacagtt	actgaggaatgatgacactaaaagg	CCGA	TTGCAGTGTCT	gccccctggcagttggctct...	78...	atgggcctttcc	agcaagct
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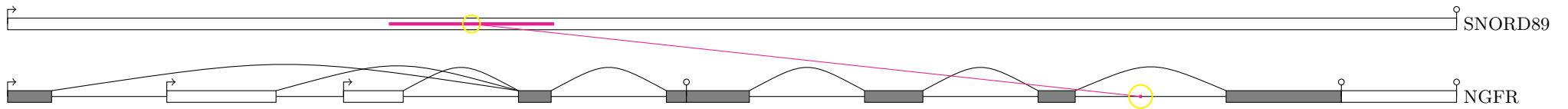
id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398.101889511.-1 type=EN

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R.Mac	gccccac	gtgagtatttct...	4725...	gcacatggacagatcccac	AGACACCTGCAGTTGG	aggtagtccaacctgtaagc...	184...	ctttccatcag	gaaccagt
P.Tro	gccccac	gtgagtatttct...	4726...	gcacatggacagatcccac	AGACACCTGCAGTTGG	aggtagtccaacctgtaagc...	183...	ctttccatcag	gattcagt
P.Abe	gccccac	gtgagtatttct...	4726...	gcacatggacagatcccac	AGACACCTGCAGTTGG	aggtaatccaacctgtaagc...	183...	ctttccatcag	gattcagt
C.Jac	gccccat	gtgagtatttct...	4727...	gcacatggacagatcccac	AGACACCTGCAGTTGG	aggtagtccaacctgtacac...	182...	ctttccatcag	gagccagt
M.Mus	gccccac	gtgagtatttct...	4732...	gcacatggacagatcacac	AGACACCTGCAGTTGG	aggtagtccaacctgtgagc...	177...	ctttccatcag	gagccagt
R.Nor	gccccac	gtaagtatttct...	4731...	gcctcatggacagatcacac	AGACACCTGCAGTTGG	aggtagtccaacctgtgccc...	178...	ctttccatcag	gagccagt
C.Por	gccccac	gtgagtatttct...	4727...	-cacaacggacagatcacgca	GACACCTGCAGTTGG	aggtagtccaacctgtgagc...	183...	gtttccatcag	gagccagt
O.Cun	gccccac	gtgagtatttct...	4707...	gcacatggacagatcacac	AGACACCTGCAGTTGG	aggtagtccaacctatagc...	202...	ctttccatcag	gagccagt
C.Fam	gccccac	gtgagtatttct...	4738...	--accatggacagatcacagag	ACACcTGCACcTTGG	aggtagtccaacctgtcagc...	173...	tcttccatgtag	gagccagt
F.Cat	gccccac	gtgagtatttct...	4736...	--accatggacagatcacacag	ACACcTGCAGTTGG	aggtagtccaacctgtaagc...	175...	ctttccatcag	gagccagt
B.Tau	gccccac	gtgagtatttct...	4729...	--accacggacagatcacacag	ACACcTGCAGTTGG	aggtagtccaacctgtaagc...	182...	ctttccatcag	gagccagt
E.Cab	gccccac	gtgagtatttct...	4732...	tggtctagaca-atcacaca	GACACCTGCAGTTGG	aggtagtccaacctgtaagc...	178...	ctttccatcag	gagccagt
O.Avi	gccccac	gtgagtatttct...	4728...	--accacggacagatcacacag	ACACcTGCAGTTGG	aggtagtccaacctgtaagc...	183...	ctttccatgtag	gagccagt
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id=818548 gene=ENSG00000116544 name=DLGAP3 segment=chr1\_35373039.35390974.-1 type=IN

Figure 320: CS=10.92





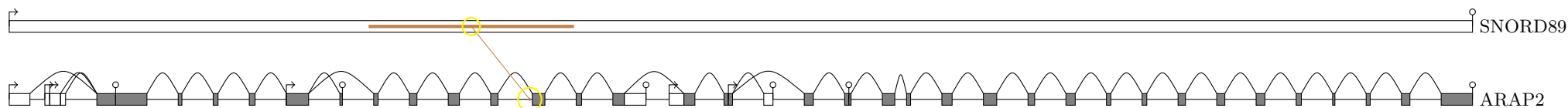
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P. Tro	ctccagct	actgaggaatgatgacaagaaaAGGCcgAATTGCAGT	gtctccatcagcagtttgct	----..45..tctgacctcagt	agcaggat
P. Abe	ctccagct	actgaggaatgatgacaagaaaAGGCcgAATTGCAGT	gtctccatcagcagtttgct	----..45..tctgacctcagt	agcaggat
C. Jac	ctccagct	actgaggaatgatgacaagaaaAGGCcgAATTGCAGT	gtctccatcagcagtttgct	----..46..tctgacctcagt	aacaggac
M. Mus	ccatggct	gctgaggagtgatgac-ataaaAGGCcgAATTGCAGT	gtctccatcaacagttggct	----..42..tctgacctcagt	gatgccag
R. Nor	ccaaggct	gctgaggaatgatgacaataaaAGGCcgAATTGCAGT	gtctccatcaacagtttgct	----..46..tctgacctcagt	agtgccag
C. Por	ctgtgcct	gctgaggaatgatgac-acaaaAGGCcgAATTGCAGT	gtccccgtctacagtttgct	----..45..tctgacctcagc	agtgccag
O. Cun	ctgcagct	actgaggaatgatgacaataaaAGGCCgAATTGCAGT	gtctccgttaacagttggct	----..45..tctgacctcagt	aatgtcag
C. Fam	ctgcagtc	actgaggagtgatgacaataaaAGGCcgAATTGCAGT	gtccccatcagcagtttgct	----..42..tctgacctcagt	aacatcag
F. Cat	ctgcagtc	actgaggagtgatgacaataaaAGGCcgAATTGCAGT	gtccccatcagcagtttgct	----..46..tctgacctcagt	aacctcag
B. Tau	ccacagtt	actgaggaatgatgacactaaaAGGCcgAATTGCAGT	gtgccccctggcagtttgct	----..45..tctgacctcagt	aacgtcgg
E. Cab	ctgtggtt	actggggaatgatgacagtaaaAGGCcgAATTGCAGT	-gtcctccagcagtttgct	----..45..tctgacctcagt	aaccgcaa
L. Afr	ccacagtt	actgagggtgatgacaataaaAGGCcgAATTGCAGT	gcctccataagcagtttgct	----..47..tctgacctcagt	aactctgg
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id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398.101889511.-1 type=EN

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R. Mac	gggccagg	gtgagcagcggc...242...--gctaattactgccaaaagtaGCTGCAATTaGCCT	cctgccctggacttctgggg-	...340...ggttctctgcag	ccctcaag
P. Tro	gggccagg	gtgagcagcggc...239...--gctaattactgccaaaagtaGCTGCAATTaGCCT	cctgccctggacttctgggg-	...340...gtttctctgcag	ccctcaag
P. Abe	gggccagg	gtgagcagcggc...238...--gctaattgctgccaaaagtaGCTGCAATTaGCCT	cctgccctggacttctgggg-	...346...ggttctctgcag	ccctcaag
C. Jac	aggccagg	gtgagcagcggc...223...--gggctaattactgc-taaagtTGCTGCAATTaGCCT	cctgtcctggacttctgggg-	...321...ggtttctgcag	ccctcaag
M. Mus	aggccaag	gtgagtgagaag...233...--gttaattactgccaaaagtgGCTGCAATTaGCCT	cctgccctggacttctagga-	...413...tgttctctgcag	ccctcaag
R. Nor	aggccagg	gtgagtgagaag...191...--gttaattactgccaaaagtaGCTGCAATTaGCCT	cctgccctggacttctagga-	...357...cgttctctgcag	ccctcaag
C. Por	gggccagg	gtgagtgagaag...202...--gctaattactgcgcaagtaACTGCAATTaGCCT	cctgccctggacttctgggg-	...292...gggtcccgcag	ctctcaag
O. Cun	gggccagg	gtgagcggcctgg...163...--gctaattactgccagagtgGCTGCAATTGGCCT	cctgccccggacttctgggg-	...218...ggttcccggcag	ccctgaag
C. Fam	aggccagg	gtgagcagtgag...198...agggctaattactccccaaa-GTGTGCAATTaGCCT	cccgccctggacttctgggg-	...365...ggttcttgccag	ccctcaag
F. Cat	cggccagg	gtgagcagtgag...195...--gctaattactccccaaagtgGCTGCAATTaGCCT	cctgctccggacttctgggg-	...382...ggttcttgccag	ccctcaag
B. Tau	aggccagg	gtgagtagcagg...209...--gctaattactccgcagagtgGCTGCAATTaGCCT	cctgcccaggacttctgggg-	...375...ggttcttgccag	ccctcaag
E. Cab	aggccagg	gtgagcagcaag...219...--gctaattactccccaaagtgGCTGCAATTaGCCT	cctgccctggacttctgggg-	...363...ggttcttgccag	ccctcaag
L. Afr	aggccagg	gtgaggagcag...268...--ggctaattacc-ccaaaagtaGCTGCAATTaGCCT	cctg-cctggacttctgggga...	...363...ggttcttaacag	ccctcaag
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id=753078 gene=ENSG00000064300 name=NGFR segment=chr17\_47589415.47590069.1 type=IN

Figure 321: CS=14



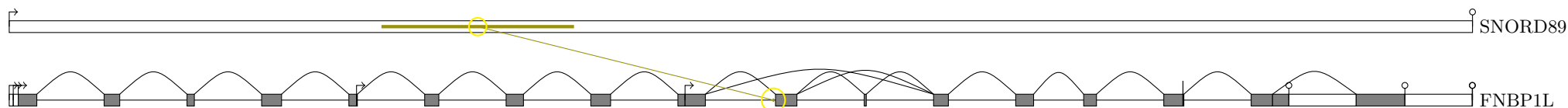
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P. Tro	ctccagct	actgaggaatgatgacaaga	AAAGGCCG	AATTGCAGTGT	ctccatcagcagtttgctct--..43..tctgacctcagt	agcaggat
P. Abe	ctccagct	actgaggaatgatgacaaga	AAAGGCCG	AATTGCAGTGT	ctccatcagcagtttgctct--..43..tctgacctcagt	agcaggat
C. Jac	ctccagct	actgaggaatgatgacaaga	AAAGGCCG	AATTGCAGTGT	ctctatcagcagtttgctct--..45..tctgacctcagt	aacaggac
M. Mus	ccatggct	gctgaggagtgatgac-ata	AAAGGCCG	AATTGCAGTGT	ctccatcaacagttggctct--..40..tctgacctcagt	gatgccag
R. Nor	ccaagct	gctgaggaatgatgacaata	AAAGGCCG	AATTGCAGTGT	gtctccatcaacagtttgctct--..47..tctgacctcagt	agtgccag
C. Por	ctgtgcct	gctgaggaatgatgac-aca	AAAGGCCG	AATTGCAGTGT	ccccgtctacagtttgctct--..43..tctgacctcagc	agtgccag
O. Cun	ctgcagct	actgaggaatgatgacaata	AAAGGCCG	AATTGCAGTGT	ctccgttaacagttggctct--..44..tctgacctcagt	aatgtcag
C. Fam	ctgcagct	actgaggaatgatgacaata	AAAGGCCG	AATTGCAGTGT	cccattagcagtttgctctc-..43..tctgacctcagt	aacatcag
F. Cat	ctgcagct	actgaggaatgatgacaata	AAAGGCCG	AATTGCAGTGT	cccattagcagtttgctctc-..43..tctgacctcagt	aacctcag
B. Tau	ccacagtt	actgaggaatgatgacacta	AAAGGCCG	AATTGCAGTGT	ccccctggcagttggctctc-..42..tctgacctcagt	aacgtcgg
E. Cab	ctgtggtt	actggggaatgatgacagta	AAAGGCCG	AATTGCAGTGT	--cctccagcagtttgctctc-..43..tctgacctcagt	aaccgcaa
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O. Avi	ccacagtt	actgaggaatgatgacacta	AAAGGCCG	AATTGCAGTGT	cccctggcagttggctctc-..77..atgggcctttcc	agcaagct
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id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398.101889511.-1 type=EN

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R. Mac	agtttcag	gtaagctatattg...1776...	-aatgaatatgcaaaactgaac	ATACTGCTt	AATTGGCCTTT	acaaggagatcgataaacacagaaacgttaattgtttcag	ctttacag
P. Tro	agtttcag	gtaagctatattt...1732...	-aatgaatatgcaaaactgaac	ATACTGCTt	AATTGGCCTTT	acaaggagatcgataaacacagaaacgttaattgtttcag	ctttacag
P. Abe	agtttcag	gtaagctatattt...1731...	-aatgaatatgcaaaactgaac	ATACTGCTt	AATTGGCCTTT	acaaggagatcgataaacacagaaacgttaattgtttcag	ctttacag
C. Jac	agtttcag	gtaagctatattt...1757...	-aatgaatatgcaaaactgaac	ATACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcaggaacgttcatgtttcag	ctttacag
M. Mus	agtttcag	gtaagctatattt...1914...	-aatgaatatgcaaaactgaac	ACACTGCTt	AATTGGCCTTT	acaaggagatcaataatgcagaaatgttaattgtttcag	ctttacag
R. Nor	agtttcag	gtaagctatattt...1868...	---gaatatgcaaaactgaac	CTGCTt	AATTGGCCTTT	acaaggagatcaataatgcagaaatgttaattgtttcag	ctttacag
C. Por	agtttcag	gtaagctatattt...3383...	-aatgaatatgcaaaactgaac	ATACTGCTt	AATTGGCCTTT	gcaaggagatcgataaatgcagaaacgtttattgtttcag	ctttacag
O. Cun	agtttcag	gtaagctatattt...2240...	--atgaatatgcaaaactgagct	TACTGCTt	AATTGGCCTTT	acaagcaagatcaataatgcagaaacgttaattgtttcag	ctttacag
C. Fam	agttttag	gtaagctatattt...2591...	aatgaatatgcaaaactgaa	CATACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcagaaacatttaattgtttcag	ctttacag
F. Cat	agttttag	gtaagctatattt...2818...	aatgaatatgcaaaactgaa	CATACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcagaaacatttaattgtttcag	ctttacag
B. Tau	agttttag	gtaagctatattt...3973...	aatgaatatacaaaactgaa	CATACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcagaaacgttaattgtttcag	ctttacag
E. Cab	agttttag	gtaagctatattt...2780...	-aatgaatatgcaaaactgaa	ATACTGCTt	AATTGGCCTTT	acaagcaagatcgataaatgaaggaaatgttaattgtttcag	ctttacag
S. Sus	agttttag	gtaagctatattt...3783...	-atgaatatgcaaaactgaa	TACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcagaaacgttaattgtttcag	ctttacag
O. Avi	agttttag	gtaagctatattt...3982...	aatgaatatacaaaactgaa	CATACTGCTt	AATTGGCCTTT	acaaggagatcgataaatgcagaaacgttaattgtttcag	ctttacag
	**** *	*****	***** ** *	*****	*****	**** * ** *	**** *

id=43939 gene=ENSG0000047365 name=ARAP2 segment=chr4\_36166736.36168553.-1 type=IN

Figure 322: CS=11.7



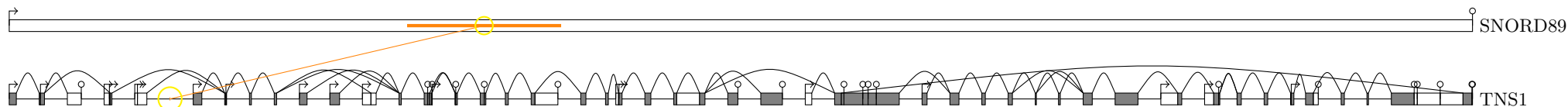
H. Sap	ctccagct	actgaggaatgatgacaagaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcagcagtttgctc-----	..44..	tctgacctcagt	agcaggat
R. Mac	ctccagct	actgaggaatgatgacaagaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcagcagtttgctc-----	..44..	tctgacctcagt	agcaggat
P. Tro	ctccagct	actgaggaatgatgacaagaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcagcagtttgctc-----	..44..	tctgacctcagt	agcaggat
P. Abe	ctccagct	actgaggaatgatgacaagaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcagcagtttgctc-----	..44..	tctgacctcagt	agcaggat
C. Jac	ctccagct	actgaggaatgatgacaagaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctctatcagcagtttgctc-----	..46..	tctgacctcagt	aacaggac
M. Mus	ccatggct	gctgaggagtgatgac	<b>ATAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcaacagttggctc-----	..41..	tctgacctcagt	gatgccag
R. Nor	ccaaggct	gctgaggaatgatgac	<b>AATAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcaacagtttgctc-----	..45..	tctgacctcagt	agtgccag
C. Por	ctgtgcct	gctgaggaatgatgacacaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcagcagtttgctc-----	..44..	tctgacctcagc	agtgccag
O. Cun	ctgcagct	actgaggaatgatgac	<b>AATAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccatcaacagtttgctc-----	..44..	tctgacctcagt	aatgtcag
C. Fam	ctgcagtc	actgaggagtgatgac	<b>AATAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	gtcccattagcagtttgctc-----	..45..	tctgacctcagt	aacatcag
B. Tau	ccacagtt	actgaggaatgatgacactaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	gtcccctggcagttggctc-----	..44..	tctgacctcagt	aacgtcgg
E. Cab	ctgtggtt	actggggaatgatgac	<b>AGTAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	---tcctccagcagtttgctcctc---	..44..	tctgacctcagt	aaccgcaa
S. Sus	ctgtggtc	actgaggaatgatgacactaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGGGCC</b>	---cctgcagttggctcctctggg...	..36..	tctgacctcagt	aacatcgg
O. Avi	ccacagtt	actgaggaatgatgacactaa	<b>AAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	gtcccctggcagtttgctc-----	..79..	atgggccttcc	agcaagct
L. Afr	ccacagtt	actgagggtgatgac	<b>AATAAAAGGcc</b>	<b>GAATtg</b>	<b>CAGTGt</b>	ctccataagcagtttgctc-----	..46..	tctgacctcagt	aactctgt
	*	*** ** *	*****	* *****	*****	*****		*	***

id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398.101889511.-1 type=EN

H. Sap	agccaaag	gtaaaagtcata...	1361...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacagtc	
R. Mac	aaccaaag	gtaaaagtcata...	1357...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacagtc	
P. Tro	agccaaag	gtaaaagtcata...	1363...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacagtc	
P. Abe	agccaaag	gtaaaagtcata...	1356...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacagtc	
C. Jac	agccaaag	gtaaaagtcata...	1342...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacagtc	
M. Mus	agccaaag	gtaaaaccata...	1270...	----	caaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	ccacagtc	
R. Nor	agccaaag	gtaaaaattat...	1203...	----	aaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	ccacagtc	
C. Por	agccaaag	gtgagtataaa...	1222...	----	aagactgtgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatgtag	ccacagtc	
O. Cun	agccaaag	gtaaaaatcat...	1658...	----	aaagcaatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	ccacagtc	
C. Fam	agccaaag	gtaaaagtccta...	1347...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	ccacagtc	
B. Tau	agccaaag	gtaaaagtatt...	1366...	----	aaaggtatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacaatc	
E. Cab	agcctaag	gtaaaagtcaaa...	1372...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	ccacagtc	
S. Sus	agccaaag	gtaaaattatgc...	1341...	----	aaaaaaagctatgcatttggct	<b>GGCTTATTGATTCCTTT</b>	ctttatttccgtattag	ccacagtc	
O. Avi	agccaaag	gtaaaagtatt...	1388...	----	aaagctatgcacatttggct	<b>TATTGATTCCTTT</b>	ctttatttccatattag	ccacaatc	
L. Afr	agccaaag	gtaaaagtata...	1383...	----	aaaactatgcacatttggct	<b>TATTGATTCCTTT</b>	ct <b>TTAT</b> tccatattag	cctcagtc	
	*	** ** *	** *		*	*****	*****	*	** ** *

id=400196 gene=ENSG00000137942 name=FBNP1L segment=chr1\_94000466.94001888.1 type=IN

Figure 323: CS=13.5



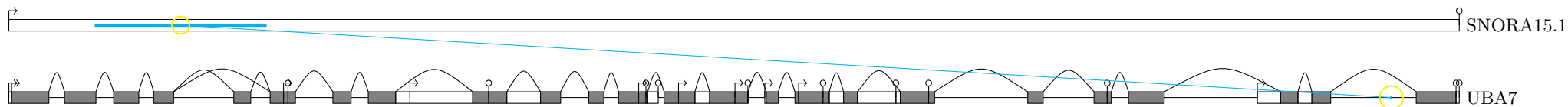
H. Sap	ctccagct	actgaggaatgatgacaagaaaa	GGCCgAATTGCAG	gtctccatcagcagtttgc	-----	..46..	tctgacctcagt	agcaggat
R. Mac	ctccagct	actgaggaatgatgacaagaaaa	GGCCgAATTGCAG	gtctccatcagcagtttgc	-----	..46..	tctgacctcagt	agcaggat
P. Tro	ctccagct	actgaggaatgatgacaagaaaa	GGCCgAATTGCAG	gtctccatcagcagtttgc	-----	..46..	tctgacctcagt	agcaggat
P. Abe	ctccagct	actgaggaatgatgacaagaaaa	GGCCgAATTGCAG	gtctccatcagcagtttgc	-----	..46..	tctgacctcagt	agcaggat
C. Jac	ctccagct	actgaggaatgatgacaagaaaa	GGCCgAATTGCAG	gtctctatcagcagtttgc	-----	..48..	tctgacctcagt	aacaggac
M. Mus	ccatggct	gctgaggagtgatgac-ataaaaa	GGCCgAATTGCAG	gtctccatcaacagttggc	-----	..43..	tctgacctcagt	gatgccag
R. Nor	ccaaggct	gctgaggaatgatgacaataaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..47..	tctgacctcagt	agtgccag
C. Por	ctgtgcct	gctgaggaatgatgac-acaaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..46..	tctgacctcagt	agtgccag
O. Cun	ctgcagct	actgaggaatgatgacaataaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..46..	tctgacctcagt	aactgtcag
C. Fam	ctgcagct	actgaggaatgatgacaataaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..47..	tctgacctcagt	aactgtcag
B. Tau	ccacagtt	actgaggaatgatgacactaaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..46..	tctgacctcagt	aactgtcag
S. Sus	ctgtgtgc	actgaggaatgatgacactaaaa	GGCCgAATTGCAGTGGG	--cccctgcagttggctctctg	..38..	tctgacctcagt	aactgtcag	aactgtcag
L. Afr	ccacagtt	actgaggaatgatgacaataaaa	GGCCgAATTGCAG	gtctccatcaacagtttgc	-----	..48..	tctgacctcagt	aactgtcag
*		*****	*****	*****		*****	*****	*****

id=517982 gene=ENSG00000212283 name=SNORD89 segment=chr2\_101889398.101889511.-1 type=EN

H. Sap	caggaaa	gtgagtgaatga..4557..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..353..	cagagtgttct	gcaaaacg
R. Mac	caggaaa	gtgagtgaatga..4564..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..346..	cagagtgttct	gcaaaacg
P. Tro	caggaaa	gtgagtgaatga..4565..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..345..	cagagtgttct	gcaaaacg
P. Abe	caggaaa	gtgagtgaatga..4563..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..347..	cagagtgttct	gcaaaacg
C. Jac	caggcaa	gtgagtgaatga..4561..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..349..	cagagtgttct	gcaaaacg
M. Mus	ttgcaaa	gtgagcgggtgc..4603..	-gcagtcgctggcaggaagtc	CTGCctGATT	agGGCC	ctaataccggctgagactc..306..	gtagacgttct	acaaaaaa
R. Nor	tggaaa	gtgagcgggtgc..4600..	-gcagtcgctggcaggaagtc	CTGCctGATT	agGGCC	ctaataccggctgagactc..309..	gatagcttct	gcaaaatg
C. Por	tggaaa	gtgagcgggtgc..4568..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..342..	cagagtgttct	gcaaaatg
O. Cun	ccgaaa	gtgagtgaatga..4596..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..314..	gaccgggttct	gcaaaatg
C. Fam	ctgggaa	gtgagtgtggg..4605..	-gcaatcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..305..	tggatgttct	gccccatg
B. Tau	ccgaaa	gtgagcgtggg..4580..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..330..	tggaggttct	gcaaaatg
S. Sus	ccgaaa	gtgagtgtggc..4612..	-ggcaatcgctggcaggaagtc	CCTG-CTGATT	agGGCC	ctaataccggctgagactc..297..	cagaggttct	acacatgc
L. Afr	ccgaaa	gtgagtgttgc..4560..	-gcagtcgctggcaggaagtc	CTG-CtGATT	agGGCC	ctaataccggctgagactc..350..	accgagattct	gcaaaactg
*	***	*****	***	*****	*****	*****	*****	**

id=42779 gene=ENSG0000079308 name=TNS1 segment=chr2\_218801886.218808587.-1 type=IN VIEW

Figure 324: CS=11.7



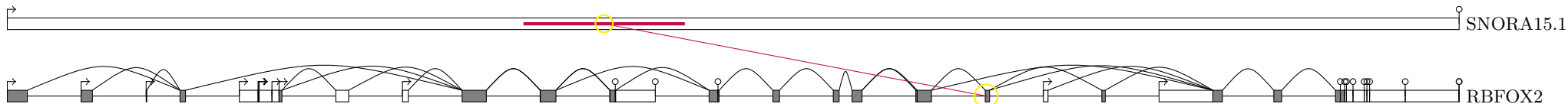
H. Sap	-tctgaaAA	GCATggCTGAAtACTGT	gttc-ttttatcagtagttta-----	..86..	gtgaatacaaat	aaatgaac
R. Mac	-tctgaaAA	GCATggCTGAAtACTGT	gttg-ttttatcagtagttta-----	..86..	gtgaatacaaat	aaatgaac
P. Abe	-tctgaaAA	GCATggCTGAAtACTGT	gttc-ttttatcagtagtcca-----	..86..	gtgaatacaaat	aaatgaac
C. Jac	-tctgaaAG	GCATggCTGAAtACTGT	gttc-ttttatcagtagttta-----	..86..	gtgaatacaaat	aaatgaac
M. Mus	-tctaaaAG	GCATggCTGAAtACTGT	gttc-ttttagtcagtaattta-----	..82..	gtgagtacaagt	aagtggct
R. Nor	-tctaacAG	GCATggCTGAAtACTGT	gttc-ttttagtcagtaattta-----	..82..	gtgagtacaagt	aagtggct
C. Por	-tctagaAG	GCATggCTGAAtACTGT	gttc-tttatcagtagttta-----	..85..	gtgattacaagt	aatgaagc
O. Cun	-tctgaaAG	GCATggCTGAAtACTGT	gttc-ttttgtcagtagttta-----	..86..	gtgaatacaaat	aaactaat
C. Fam	-taaaaaAA	GCATggCTGAAtACTGT	gttcctttttatcagtagttt-----	..91..	gtgaatacaagt	aggtaacc
F. Cat	-tgtgaaAG	GCATggCTGAAtACTGT	gttcctttttatcagtaattt-----	..91..	gtggatacaagt	aaatgaac
E. Cab	-tctaaaAG	GCATggCTGAAtACTGT	gTTTT-tttatcagtagtttacacag..	..83..	gtggatacaagt	aaatgaac
S. Sus	-tttaaaAG	GCATggCTGAAtACTGT	gttcctttttatcagtaattt-----	..93..	ggggatacaagt	aaatgaac
L. Afr	atctaa-AA	GCATggCTGAAtACTGT	gttcctttttatcagtaattt-----	..91..	gtgaatacaagt	aaatgaaa
	*	*	*****	**	*****	**

id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7.65225039.65225173.1 type=EN

H. Sap	ccctcag	gtgagcccactt...279..	cctc---atcagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcagctcctg-...100..	caccctaccag	ggtgacag
R. Mac	ccctcag	gtgagcccacat...280..	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagtagctcttg-...101..	caccccactag	ggtgacag
P. Abe	ccctcag	gtgagcccactt...283..	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcagctcctg-...101..	caccaccaccag	ggtgacag
C. Jac	ccctcag	gtgagcccactc...276..	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcggctcctg-...101..	caccccaccag	ggtgacag
M. Mus	tgccctcag	gtgagccggtcg...273..	cccc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgaggcgcctcctg-...100..	ctccataccag	ggtgacag
R. Nor	ggcctcag	gtgagccaggct...267..	cccc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgagccgctcatg-...100..	ttccataccag	ggtgacag
C. Por	ccctcag	gtgagcctgcat...275..	gccca---gccaaactgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagctactcctg-...81..	atccataccag	ggtgacag
O. Cun	ccctcag	gtgagcccatac...273..	cagc---gtcagcagctcctaaa	ATAGTTTCAGATGTTT	cctgtc-tgagttgctcccgc...102..	tcttctaccag	cgtgacag
C. Fam	gcctcag	gtgagcccacat...279..	ccct---gcctgctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgagctcctcctg-...106..	ccatactaccag	ggtgacgg
F. Cat	gcctcag	gtgagcccgcac...303..	ccct---gcctgctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttaagctgctcctg-...109..	ccactaccag	ggtgacca
E. Cab	tctctcag	gtgagatcacac...278..	ctgcccggccagcagctcct	AAAAATAGTTTCAGATGTTT	cctgtcttgagctgctcctg-...106..	ccaccaccag	ggtgacgg
S. Sus	tcctcag	gtgagcccacac...282..	cccc---gccagctactcctaaa	ATAGTTTCAGATGTTT	cctgtcttgaggctgctgctg-...108..	tctgcccaccag	ggtgacag
L. Afr	ccctcaa	gtgagtcacatgc...252..	cccc---accagcactcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagctgctctgg-...105..	ctccccaccag	ggtgacag
	**	*****	*	*	*****	*	*

id=236528 gene=ENSG00000182179 name=UBA7 segment=chr3.49842871.49843329.-1 type=IN

Figure 325: CS=10.14



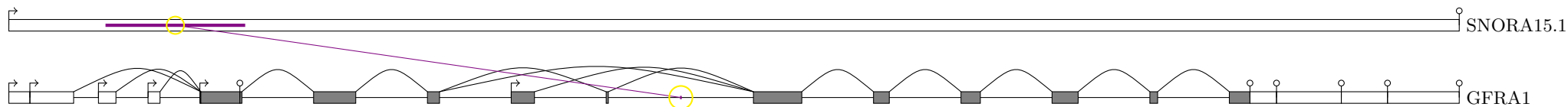
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R. Mac	tctgaaaa	gcatggctgaatactgtgttg-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	--cagtcttcctttagaatga-----	...43...	gtgaatacaaat	aatgaac
P. Tro	tctgaaaa	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	--cagtcttcctttagaatga-----	...43...	gtgaatacaaat	aatgaac
P. Abe	tctgaaaa	gcatggctgaatactgtgttc-tttatcagtagttcac	AGCCagACACcaTGCAAAAG	AGTCT--tcctttagaatgactgatg...	...37...	gtgaatacaaat	aatgaac
C. Jac	tctgaaa	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	--cagtcttcacttgagaatgg-----	...43...	gtgaatacaaat	aatgaac
M. Mus	tctaaaag	gcatggctgaatactgtgttc-tttagtcagtaatttac	AGCCagACACcaTGCAAAAG	Taaagctcttccttttaagatg-----	...38...	gtgagtacaagt	aagtggct
R. Nor	tctaacag	gcatggctgaatactgtgttc-tttagtcagtaatttac	AGCCagACACcaTGCAAAAG	Taaagctcttccttttaagatg-----	...38...	gtgagtacaagt	aagtggct
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagtagtttac	AGCCagACACcaTGCAAAAG	Taaaactcttccttttaaatg-----	...41...	gtgattacaagt	aatgaac
O. Cun	tctgaaa	gcatggctgaatactgtgttc-tttgtcagtagtttac	AGCCagACACcaTGCAAAAG	Taaaagcttcctttggaatc-----	...42...	gtgaatacaagt	aaactaat
C. Fam	taaaaaa	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	Taaagctcttccttttaaatg-----	...46...	gtgaatacaagt	aggtaacc
E. Cab	tctaaaag	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	Taaagctcttcttttaaatg-----	...44...	gtggatacaagt	aatgaac
S. Sus	tttaaaag	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	Taaagctcttccttttaaatg-----	...48...	ggggatacaagt	aatgaac
L. Afr	atctaaaa	gcatggctgaatactgtgttc-tttatcagtagtttac	AGCCagACACcaTGCAAAAG	Taaagctcttccttttaaatg-----	...41...	gtgaatacaagt	aatgaac
	*	*****	*** *****	*****	*	** **	* * * * * *

id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7.65225039.65225173.1 type=EN

H. Sap	tatccagg	gtaagcgttaga...	3701...-tgTTTTgTTTTgtgtgga	TTTTcTGCAG	TGTGGTTt
R. Mac	tatccagg	gtaagcattaga...	3680...-tgTTTTgTTTTgtgtgga	TTTTcTGCAG	TGTGGTTt
P. Tro	tatccagg	gtaagcgttaga...	3687...-tgTTTTgTTTTgtgtgga	TTTTcTGCAG	TGTGGTTt
P. Abe	tatccagg	gtaagcgttaga...	3693...-ttttgTTTTgTTTTgtgtgga	GGATTTCTGCAG	TGTGGTTt
C. Jac	tatccagg	gtaagcattaga...	3708...-tgTTTTgTTTTgtgtgga	TTTTcTGCAG	TGTGGTTt
M. Mus	tatccagg	gtaagcattaga...	3407...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
R. Nor	tatccagg	gtaagcattaga...	3417...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
C. Por	tatccagg	gtaagcattaga...	3541...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
O. Cun	taccagg	gtaagcgttga...	3646...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
C. Fam	tatccagg	gtaagcactaga...	3658...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
E. Cab	taccagg	gtaagcattaga...	3668...-tgTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
S. Sus	tatccagg	gtaagcattaga...	3661...-tttTTTTgTTTTgtgtgg	ATTTcTGCAG	TGTGGTTt
L. Afr	tatccagg	gtaagcattaga...	3686...tttttTTTTgTTTTgt	GTGGATTTcTGCAG	TGTGGTTt
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id=369939 gene=ENSG00000100320 name=RBFox2 segment=chr22.36152192.36155934.-1 type=IN

Figure 326: CS=10.14



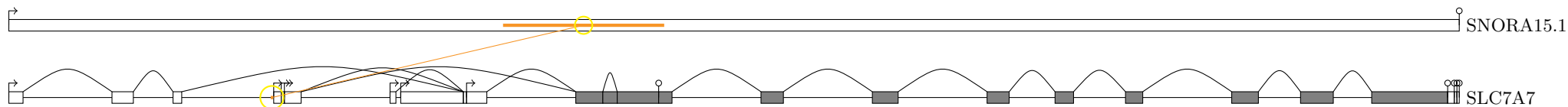
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R. Mac	-tctgaaaa	GCATGgCTGAaTACTGTGT	tg-ttttatcagtagtttaca...84...gtgaatacaaat	aaatgaac
P. Tro	-tctgaaaa	GCATGgCTGAaTACTGTGT	tc-ttttatcagtagtttaca...84...gtgaatacaaat	aaatgaac
P. Abe	-tctgaaaa	GCATGgCTGAaTACTGTGT	tc-ttttatcagtagttcaca...84...gtgaatacaaat	aaatgaac
M. Mus	-tctaaaaa	GCATGgCTGAaTACTGTGT	tc-ttttagtcagtaatttaca...80...gtgagtacaaat	aagtggct
R. Nor	-tctaaaca	GCATGgCTGAaTACTGTGT	tc-ttttagtcagtaatttaca...80...gtgagtacaaat	aagtggct
C. Por	-tcTAGAAg	GCATGgCTGAaTACTGTGT	tc-ttttaacagtagtttaca...83...gtgattacaaat	aatgaagc
O. Cun	-tctgaaa	GCATGgCTGAaTACTGTGT	tc-tttttagtcagtagtttaca...84...gtgaatacaaat	aaactaat
C. Fam	-taaaaaaa	GCATGgCTGAaTACTGTGT	tctttttatcagtagtttac...89...gtgaatacaagt	aggtaacc
F. Cat	-tgtgaaag	GCATGgCTGAaTACTGTGT	tctttttatcagtaatttac...89...gtggatacaaat	aaatgaac
E. Cab	-tctaaaag	GCATGgCTGAaTACTGTGT	tt-ttttatcagtagtttaca...86...gtggatacaaat	aaatgaac
S. Sus	-tttaaaag	GCATGgCTGAaTACTGTGT	tctttttatcagtaatttac...91...ggggatacaaat	aaatgaac
L. Afr	atctaaaa-	GCATGgCTGAaTACTGTGT	tctttttatcagtaatttgc...89...gtgaatacaaat	aaatgaaa
	*	*	*****	*

id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7.65225039.65225173.1 type=EN

H. Sap	tcagcaag	gtaagttcactg...4494...catgtaattactgtgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...413...ctgcatttgcag	tggagcac
R. Mac	tcagcaag	gtaagttcactg...4496...catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...411...ctgcatttgcag	tggagcac
P. Tro	tcagcaag	gtaagttcactg...4495...catgtaattactgtgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...412...ctgcatttgcag	tggagcac
P. Abe	tcagcaag	gtaagttcactg...4495...catgtaattactgtgtaatc	GTATAGTAaTTAGCATGT	actatatgcatttattacat----	...412...ctgcatttgcag	tggagcac
M. Mus	ccagcaag	gtaagtgtcacc...4507...catgtaattactctgtaatc	ATATAGTAaTTAGCATGTT	ctatagcatttattacata---	...399...tctgccttgcag	tggaacac
R. Nor	ccagcaag	gtaagtttacc...4500...catgtaattactcogtaatc	ATATAGTAaTTAGCATGTT	ctatagcatttattacata---	...406...tctgccttgcag	tggaacac
C. Por	tcagcaag	gtaagtaagttt...4493...catgtagttactgtgtaatc	ATATAGTAaTTAGCATGTTCTA	tatgcatttattacataaatt...410...tctgccttgcag	tggagcat	tggagcac
O. Cun	tcagcaag	gtaagtctctgc...4489...catgtaattactctataatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...418...tctgtttcgcag	tggaacac
C. Fam	acagcaag	gtaagttcaccg...4462...catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...445...tctccttgcag	tggagcac
F. Cat	ccagcaag	gtaagttcactg...4463...catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...444...tctccttgcag	tggagcac
E. Cab	gcagcaag	gtaagctcactg...4483...catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...424...ctccttgcag	tggagcac
S. Sus	ccagcaag	gtaagctcactg...4465...catgcaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...442...ctccttgcag	tggagcac
L. Afr	tcagcaag	gtaagttcactg...4469...tgtgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	...438...ctgtttgcag	tggagcac
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id=490250 gene=ENSG00000151892 name=GFRA1 segment=chr10.117885069.117971142.-1 type=IN

Figure 327: CS=13



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R. Mac	tctgaaaa	gcatggctgaatactgtgttg-ttttatcagtagtttac	ACAGcc	AGACAc	CATG	caaaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
P. Tro	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagtttac	ACAGcc	AGACAc	CATG	caaaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
P. Abe	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagtttac	ACAGcc	AGACAc	CATG	cagaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagtagtttac	ACAGcc	AGACAc	CATG	caaaagca--gtcttcacttga...49...	gtgaatacaaat	aatgaac
M. Mus	tctaaaag	gcatggctgaatactgtgttctt-tagtcagtaatttac	ACAGcc	AGACAc	CATG	caaaagtaaaagtcttccttt--...45...	gtgagtacaaat	aagtggct
R. Nor	tctaacag	gcatggctgaatactgtgttctt-tagtcagtaatttac	ACAGcc	AGACAc	CATG	caaaagtaaaaggcttccttt--...45...	gtgagtacaaat	aagtggct
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagtagtttac	ACAGcc	AGACAc	CATG	caaaagtaaaaacttccttt--...48...	gtgattacaaat	aatgaagc
O. Cun	tctgaaag	gcatggctgaatactgtgttc-ttttgtcagtagtttac	ACAGcc	AGACAc	CATG	caaaagtaaaagtcttccttt--...49...	gtgaatacaaat	aaactaat
C. Fam	taaaaaaa	gcatggctgaatactgtgttctttttatcagtagtttac	ACAGcc	AGACAc	CATG	caaaagtaaaagtgttccttt--...53...	gtgaatacaagt	aggtaacc
F. Cat	tgtgaaag	gcatggctgaatactgtgttctttttatcagtaatttac	ACAGcc	AGACAc	CATG	caaaagtaaaactcttccttt--...53...	gtggatacaaat	aatgaac
S. Sus	tttaaaag	gcatggctgaatactgtgttctttttatcagtaatttac	ACAGcc	AGACAc	CATG	caaaagtaagattttccttt--...55...	ggggatacaatt	aatgaac
L. Afr	atctaaaa	gcatggctgaatactgtgttctttttatcagtaatttg	ACAGcc	AGACAc	CATG	caaaagtatcatcttccttt--...53...	gtgaatacaaat	aatgaaa
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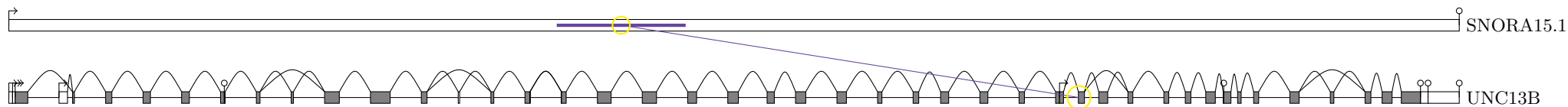
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H. Sap	ggactccg	g	tatcctgggccc...3175...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
R. Mac	gcactccg	t	tatcctgggccc...3195...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
P. Tro	ggactccg	g	tatcctgggccc...3199...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
P. Abe	ggactccg	g	tatcctgggccc...3207...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
C. Jac	ggactccg	a	tctcctgggcca...2915...	cgctgctggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
M. Mus	caagttca	g	ttttcgtgtct...3980...	caccgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtcccag
R. Nor	caagtttg	g	tcttcgagtc...3770...	caccgccggtc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtcccag
C. Por	ggattccg	a	ctgtgaaac...2976...	ctgcccgtcggagagtcgca	CATGTGTTTtc	CTGT	tttccatttc	ggtcccgt
O. Cun	agattcca	g	cctccctggca...3376...	cactgccggcc--agagtcgca	CATGTGTTTtc	CTGT	tttccaattc	ggtccccg
C. Fam	ggactcca	a	ccactacagcc...3241...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
F. Cat	gcactcca	g	cctctcagca...2896...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
S. Sus	ggactcca	g	tctcgggcca...2969...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
L. Afr	gaggttct	g	cctccccggca...3046...	cgctcccgtc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
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id=51240 gene=ENSG00000155465 name=SLC7A7 segment=chr14.23289001.23292232.-1 type=I5

Figure 328: CS=13





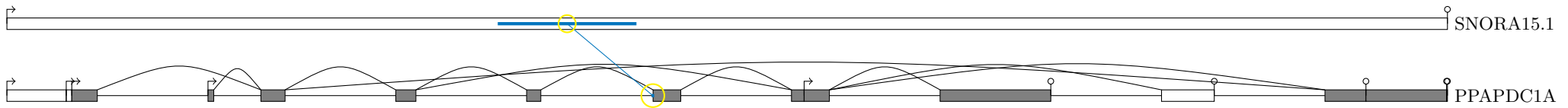
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R. Mac	tctgaaaa	gcatggctgaatactgtgttg-ttttatcagtagtttacacagc	CAGACACCa	TGCAaaagca--gtcttcccttaga-...47...gtgaatacaaat	aatgaac						
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P. Abe	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagtttacacagc	CAGACACCa	TGCAGaagca--gtcttcccttagaa...46...gtgaatacaaat	aatgaac						
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagtagtttacacagc	CAGACACCa	TGCAaaagca--gtcttcacttgaga-...47...gtgaatacaaat	aatgaac						
R. Nor	tctaacag	gcatggctgaatactgtgttc-tttatcagtaatttacacagc	CAGACACCa	TGCAaaagtaaaaggcttccgtttt---...43...gtgagtacaagt	aagtggct						
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S. Sus	tttaaaag	gcatggctgaatactgtgttctttttatcagtaatttacacagc	CAGACACCa	TGCAaaagtaagatttcccttta---...53...ggggatacaat	aatgaac						
L. Afr	atctaaaa	gcatggctgaatactgtgttctttttatcagtaatttacacagc	CAGACACCa	TGCAaaagtatcatcttcccttta---...51...gtgaatacaaat	aatgaaa						
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id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7.65225039.65225173.1 type=EN

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R. Mac	taccagc	gtgagtcacatcat...207...-ccctgttctcctgctctgac	TGCAG	GTGgTTTg			
P. Tro	taccagc	gtgagtcacatcat...201...-ccctgttctcctgctgtggc	TGCAG	GTGgTTTg			
P. Abe	taccagc	gtgagtcacatcat...200...ccctgttctcctgctctggc	TGCAG	GTGgTTTg			
C. Jac	taccagc	gtgagtcacatcat...171...-cccagttctcctgctttggc	TGCAG	GTGgTTTg			
R. Nor	taccagc	gtgagtggtgg...184...-ctcagtcctcctgctcctaac	TGCAG	GTGgTTTg			
C. Por	taccagc	gtgagtcactgg...195...cttcaacctcctt-ctctggc	TGCAG	GTGgTTTg			
O. Cun	taccagc	gtgagtcacccc...161...-cccaattctcctgctgtggc	TGCAG	GTGgTTTg			
C. Fam	taccagt	gtgagtcacct...222...ccccatttctcctgt-ctggc	TGCAG	GTGgTTTg			
F. Cat	taccagt	gtgagtcacatcat...214...ccccatttctcctgcc-tggc	TGCAG	GTGgTTTg			
E. Cab	tatcctgc	gtgagtcacatcat...202...ccccggttctcctgcc-tggc	TGCAG	GTGgTTTg			
S. Sus	taccagc	gtgagttgcat...93...ccccaccttctcctgcc-tggc	TGCAG	GTGgTTTg			
L. Afr	taccagc	gtgagttttac...199...ccccaatctctt-ctctggc	TGCAG	GTGgTTTg			
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id=625529 gene=ENSG00000198722 name=UNC13B segment=chr9.35396600.35396837.1 type=IN

Figure 329: CS=16.9



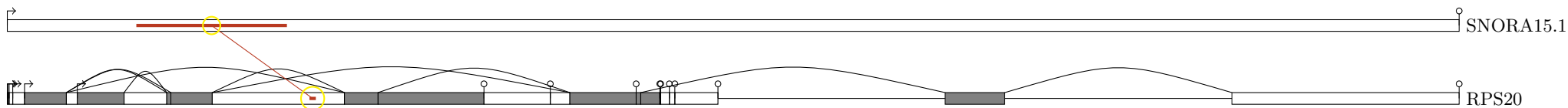
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P. Abe	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagttcac	ACAGccAGACACCATG	cagaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac	
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagtaGTTT	acACAGccAGACACCATG	caaaagca--gtcttcacttga...49...	gtgaatacaaat	aatgaac	
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R. Nor	tctaacag	gcatggctgaatactgtgttc-ttttagtcagtaatttac	ACAGccAGACACCATG	caaaagtaaaaggcttccttt--...45...	gtgagtacaaat	aagtggct	
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagtaGTTT	acACAGccAGACACCATG	caaaagtaaaaacttccttt--...48...	gtgattacaaat	aatgaagc	
O. Cun	tctgaaag	gcatggctgaatactgtgttc-ttttgtcagtaGTTT	acACAGccAGACACCATG	caaaagtaaaaagcttccttcc---...51...	gtgaatacaaat	aaactaat	
C. Fam	taaaaaaa	gcatggctgaatactgtgttc-ttttatcagtaGTTT	acACAGccAGACACCATG	caaaagtaaaagtgttccttt--...53...	gtgaatacaagt	aggtaacc	
F. Cat	tgtgaaag	gcatggctgaatactgtgttc-tttttatcagtaatttac	ACAGccAGACACCATG	caaaagtaaaactcttccttt--...53...	gtggatacaaat	aatgaac	
E. Cab	tctaaaag	gcatggctgaatactgtgttt-ttttatcagtaGTTT	acACAGccAGACACCATG	caaaagtaaaagtcttctttt--...51...	gtggatacaaat	aatgaac	
S. Sus	tttaaaag	gcatggctgaatactgtgttc-tttttatcagtaatttac	ACAGccAGACACCATG	caaaagtaagatcttccttt--...55...	ggggatacaatt	aatgaac	
L. Afr	atctaaaa	gcatggctgaatactgtgttc-tttttatcagtaatttg	ACAGccAGACACCATG	caaaagtatcatcttccttt--...53...	gtgaatacaaat	aatgaaa	
		***** **		***** **		***** **	

id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7\_65225039\_65225173.1 type=EN

H. Sap	gtgggaag	gtaagttccaag...2025...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
R. Mac	gtgggaag	gtaagttccaag...2040...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
P. Tro	gtgggaag	gtaagttccaag...2029...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
P. Abe	gtgggaag	gtaagttccaag...2176...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
C. Jac	gtgggaag	gtaagttccaag...1929...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
M. Mus	gtgggaag	gtaagttccaag...1761...	tgttgatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
R. Nor	gtgggaag	gtaagttccaca...1638...	cattctatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
C. Por	gtgggaag	gtaagtttcaaa...1802...	catcttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
O. Cun	gtgggaag	gtaagttcctca...1915...	--ttttatattgaaaatgtccc	TGGTGTCT	TTGTAG	ACctcgcc	
C. Fam	gtgggaag	gtaagtttggga...1524...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
F. Cat	gtgggaag	gtaagttgcaaa...1538...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
E. Cab	gtgggaag	gtaagttccaca...1955...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
S. Sus	gtgggaag	gtaagttcctca...1957...	cttttatagtgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
L. Afr	gtgggaag	gtaagttcctca...1851...	cattttatagtgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc	
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Figure 330: CS=16.1



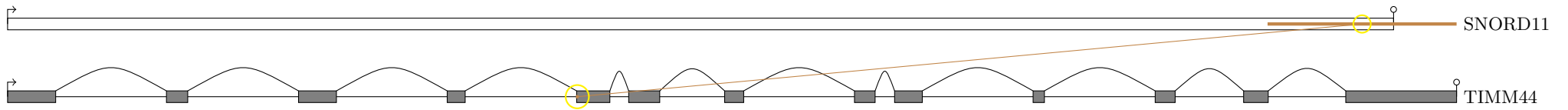
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R. Mac	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tg-ttttatcagtagtttaca-...84...gtgaatacaaat	aaatgaac
P. Tro	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagtttaca-...84...gtgaatacaaat	aaatgaac
P. Abe	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttcaca-...84...gtgaatacaaat	aaatgaac
C. Jac	tctgaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagtttaca-...84...gtgaatacaaat	aaatgaac
M. Mus	tctaaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttagtcagtaatttaca-...80...gtgagtacaat	aagtggct
R. Nor	tctaacag	gca	TGGCTGAATA	ctGTGT	tc-ttttagtcagtaatttaca-...80...gtgagtacaat	aagtggct
C. Por	tctagaag	gca	TGGCTGAATA	ctGTGT	tc-tttaatcagtagtttaca-...83...gtgattacaat	aatgaagc
O. Cun	tctgaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagtttaca-...83...gtgaatacaaat	aaactaat
C. Fam	taaaaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagtttaca-...89...gtgaatacaagt	aggtaacc
E. Cab	tctaaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagtttaca-...86...gtggatacaaat	aaatgaac
S. Sus	tttaaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtaatttaca-...91...ggggatacaat	aaatgaac
L. Afr	atctaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtaatttgc-...89...gtgaatacaaat	aaatgaaa
	*		*****	***	*****	**

id=346910 gene=ENSG00000206785 name=SNORA15.1 segment=chr7.65225039.65225173.1 type=EN

H. Sap	ggaaaagg	gtcagtgattc...	174...	---agtaacggtgata-attttat	ACGCTATTC	tgAGCCA	gcagaagtgaggccttaag--...37...tattcctgtag	tgtgtgct
R. Mac	ggaaaagg	gtcagtgattc...	175...	---aataacggtgata-gttttat	ACGCTATTC	tgAGCCA	gtagaagtgaggccttaag--...38...tattcctgtag	tgtgtgct
P. Tro	ggaaaagg	gtcagtgattc...	182...	---agtaacggtgata-attttat	ACGCTATTC	tgAGCCA	gcagaagtgaggccttagg--...37...tattcctatag	tgtgtgct
P. Abe	ggaaaagg	gtcagtgattc...	174...	---agtaacggtgata-attttat	ACGCTATTC	tgAGCCA	gcagaagtgaggccttaag--...37...tattcctgtag	tgtgtgct
C. Jac	ggagaagg	gtcagtgattc...	169...	---agcgacggtgata-ctttcat	ACGCTATTC	tgAGCCA	gcagaagtgaggccttacg--...39...ctttcctgtag	tgtgtgct
M. Mus	ggagaagg	gtcagtgattc...	62...	---gttatagtgatatttcttat	ACGCTATTC	tgAGCCA	gtagg--cgaacttggttaaaa...40...cttaaccgtag	tttgtgct
R. Nor	ggaaaagg	gtcagtgattc...	75...	---attatggtgata-attttat	ACGCTATTC	tgAGCCA	gtagg--ctaacttggttaaaa...41...gttcacctgtag	tttgtgct
C. Por	ggagaagg	gtcagtgattc...	148...	---aattacaatgata-ggtttat	ACGCTATTC	tgAGCCA	gcagc--tgaggtttcttaaac...52...attcctgtag	tgtgtgct
O. Cun	ggagaagg	gtcagtgattc...	278...	ttgaattatggtgataactt-	AATACGCTATTC	tgAGCCA	gctgaaacgggagttgttcg--...38...ttttcctgtag	tgtgtgct
C. Fam	ggaaaagg	gtcagtgattc...	188...	---aataatgatgata-gttctat	ACGCTATTC	tgAGCCA	gcaggagtgaaatttctta--...42...attcctgtag	tgtgtgct
E. Cab	ggagaagg	gtcagtgattc...	180...	---aattacggtgata-gttttat	ACGCTATTC	tgAGCCA	gcagtagttcaatttctta--...40...gtttcccgtag	tgtgtgct
S. Sus	ggagaagg	gtcagtgattc...	116...	---aactacagtgata-gttttat	ACGCTATTC	tgAGCCA	gcagcgttaagattcgttac--...37...gtttcctgtag	tgtgtgct
L. Afr	ggagaagg	gtcagtgattc...	190...	---aattatggtgata-gttctat	ACGCTATTC	tgAGCCA	gcaccagttgacttgtgaa--...41...ttttcctgtag	tgtgtgct
	***	****	**	**	*	***	*	*****

id=585478 gene=ENSG0000008988 name=RPS20 segment=chr8.56986328.56986618.-1 type=AN

Figure 331: CS=16.25



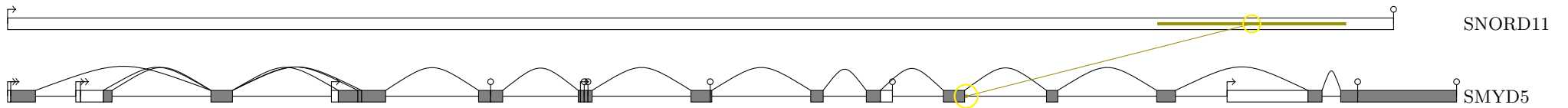
H. Sap	taagggcc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctT	GTGG-tcca
R. Mac	taagggcc	aggtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctT	GTAG-tcca
P. Tro	taagggcc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctT	GTGG-tcca
P. Abe	taagggcc	aagtgttcaatg...40...aaggcatctgtagt	cactac	CTCTt	CTGAGACA	ctT	GTGG-tcca
C. Jac	taagggcc	aagtgttcagt...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctT	GGGG-ttta
M. Mus	taaagacc	atgtgttcaatg...40...agggcagcttcagt	cactac	CTCTt	CTGAGACA	cc	g-tggtcct
R. Nor	tggagacc	atgtgttcaatg...40...agggcagcttcagt	cactac	CTCTt	CTGAGACA	ct	g-tggtcct
C. Por	aatggcc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	g-tggtcca
O. Cun	aagggcc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	g-tggtcca
C. Fam	taaggacc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	g-tggtccg
B. Tau	taaggacc	aagtgttcgatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	g-tggtcca
E. Cab	taaggacc	aagtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	ggcggtcca
S. Sus	taaggacc	aggtgttcaatg...40...aaggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	g-tggtcca
L. Afr	taaggacc	aagtgttgaatg...40...agggcatctttagt	cactac	CTCTt	CTGAGACA	ctt	a-tggtcca
		* **					* *

id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2.203157772\_203157859\_1 type=EN

H. Sap	tgaaggag	gtaacagttcca...776...---	ccggtgccaacgccccctct	CTGTGtc	TGTCTCAGtAG	AGccttca
R. Mac	tgaaggag	gtaacagtgcca...671...---	ccggtgccaatgccccctct	CTGTGtc	TGTCTCAGtAG	AGccttca
P. Tro	tgaaggag	gtaacagttcca...776...---	ccggtgccaacgccccctct	CTGTGtc	TGTCTCAGtAG	AGccttca
P. Abe	tgaaggag	gtaacagtcca...674...---	ccggtgccaacgccccctct	CTGTGtc	TGTCTCAGtAG	AGtcttca
C. Jac	tgaaggag	gtaagagtcca...601...ggtctggtgccaacgcccc---	CTTGTGtc	TGTCTCAGtAG	AGccttca	
M. Mus	tgaaggag	gtaaggcccag...243...-----	gacatcttcccctctgcctc--	TGTCTCAGtAG	AGtcttga	
R. Nor	tgaaggag	gtaaggctgagg...238...-----	aacatcctcccctctgtctc--	TGTCTCAGtAG	AGtcttga	
C. Por	tgaaggag	gtaacaggcggg...633...-----	gagagtgacagccccctctgtc---	TGTCTCAGtAG	AGtctcga	
O. Cun	tgaaggag	gtaatggcccag...456...-----	agcgctctctcccctctc--	TGTCTCAGtAG	AGtcttga	
C. Fam	tgaaggag	gtaatggtcgag...665...-----	gagctgacacctcca--tcctc--	TGTCTCAGtAG	AGtcttga	
B. Tau	tcaaggag	gtaatggcctca...883...-----	gttgacacctccccttctc--	TGTCTCAGtAG	AGtcttga	
E. Cab	tgaaggag	gtaacggctcc...680...-----	ccccacccccatccccacc--	TGTCTCAGtAG	AGtcttga	
S. Sus	tgaaggag	gtaatggcctct...583...-----	ccctggcaccatcccctctc--	TGTCTCAGtAG	AGtctcga	
L. Afr	tgaaggag	gtgagggtgagg...1123...-----	tctctctctctctgtctt--	TGTCTCAGtAG	AGtcttga	
		* **				* ** *

id=483476 gene=ENSG00000104980 name=TIMM44 segment=chr19.7999124\_7999949\_-1 type=IN

Figure 332: CS=23.38



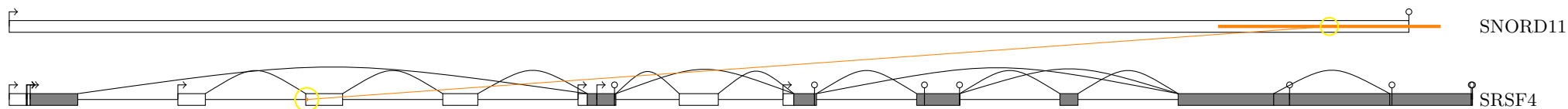
H. Sap	taagggcc	aagtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca		
R. Mac	taagggcc	aggtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtagtcca		
P. Tro	taagggcc	aagtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca		
P. Abe	taagggcc	aagtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>AAGGCa</b>	<b>TCTGT</b>	<b>ag</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca
M. Mus	taaagacc	atgtgttcaatgatgatttctgatgctttgcctgagttcctttgataatgaaggcat	<b>GAGGGCAG</b>	<b>cTTCA</b>	<b>g</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcct
R. Nor	tggagacc	atgtgttcaatgatgatttctgatgctttgcctgagttcctttgataatgaaggcat	<b>GAGGGCAG</b>	<b>cTTCA</b>	<b>g</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcct
C. Por	aaatggcc	aagtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>TC</b>	<b>TTA</b>	<b>g</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca
D. Cun	aaggggcc	aagtgttcaatgatgacatttattttttgcctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca		
C. Fam	taaggacc	aagtgttcaatgatgatttctaatgtgatgctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcct		
B. Tau	taaggacc	aagtgttcaatgatgatttctattgtatgctgatttcctttcgatagtgaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca		
E. Cab	taaggacc	aagtgttcaatgatgatttctgttatatgcccatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gctgtcca		
S. Sus	taaggacc	aggtgttcaatgatgatttctattgtatgctgatttccttttgataatgaaggcat	<b>CTTTAg</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	gtggtcca		
L. Afr	taaggacc	aagtgttcaatgatgatttctattgtttgcctgatttccttttgataatgaaggcat	<b>AAGGCa</b>	<b>TCTT</b>	<b>ta</b>	<b>TC</b>	<b>ACT</b>	<b>ACCT</b>	<b>CTTC</b>	tgagacactt	atggtcca
		* **	* **	* **	* **	* **	* **	* **	* **	* **	

id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2.203157772\_203157859\_1 type=EN

H. Sap	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
R. Mac	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccacccat----	...367...	actgtcttacag	caactgga
P. Tro	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
P. Abe	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
M. Mus	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
R. Nor	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
C. Por	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
D. Cun	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
C. Fam	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
B. Tau	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
E. Cab	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
S. Sus	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
L. Afr	cGAGGcAG	GTtGGTGAgaTAGGG	-----ccttggcctcaccagccat----	...367...	actgtcttacag	caactgga
	*****	** **	*		*** ** *	* ** *

id=677180 gene=ENSG00000135632 name=SMYD5 segment=chr2.73450661.73451074\_1 type=IN VIEW

Figure 333: CS=12.35



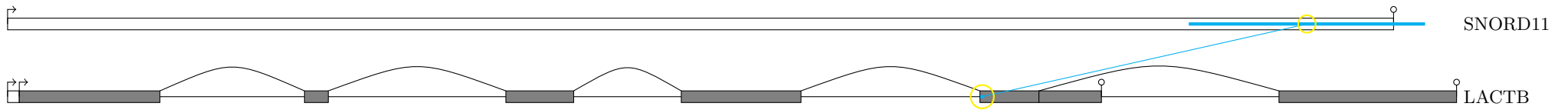
H. Sap	taagggcc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
R. Mac	taagggcc	agtggttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtagtcca	
P. Tro	taagggcc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
P. Abe	taagggcc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
C. Jac	taagggcc	aagtgttcagtg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	ggggttta	
M. Mus	taaagacc	atgtgttcaatg...36...	aatgagggcagcttcagtca	CTACctCTTCtGAGAcac-c-	gtggtcct	
R. Nor	tggagacc	atgtgttcaatg...36...	aatgagggcagcttcagtca	CTACctCTTCtGAGAcac-t	gtggtcct	
C. Por	aaatggcc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
O. Cun	aaggggcc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
C. Fam	taaggacc	aagtgttcaatg...36...	agtgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtccg	
B. Tau	taaggacc	aagtgttcgatg...36...	agtgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
E. Cab	taaggacc	aagtgttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcacttg	gcggtcca	
S. Sus	taaggacc	agtggttcaatg...36...	aatgaaggcatctttagtca	CTACctCTTCtGAGAcactt-	gtggtcca	
L. Afr	taaggacc	aagtgttgaatg...36...	aatgagggcatctttagtca	CTACctCTTCtGAGAcactt-	atggtcca	
		* **	* **** *	* ** * ** *	*****	**

id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2\_203157772\_203157859\_1 type=EN

H. Sap	gccccaa	gtcaatttcttt...1549...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
R. Mac	gccccaa	gtcaatttctat...1554...	catcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
P. Tro	gccccaa	gtcaatttcttt...1555...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
P. Abe	gccccaa	gtcaatttcttt...1549...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
C. Jac	gccccaa	gtcaatttcttt...1195...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
M. Mus	accctgag	accagtgtcctt...856...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
R. Nor	accctgag	accagtgtcctt...895...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
C. Por	gccccaa	atcagtgtcctt...948...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
O. Cun	gccccaa	gtcaatttcttt...878...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
C. Fam	gccccaa	atcaatttcttt...927...	tatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
B. Tau	gccccaa	atcaatttcttt...1043...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
E. Cab	gccccaa	atcagtgtgat...916...	agtcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
S. Sus	gccccgag	atcaatttcttt...930...	aatcatgag----	gtaggttttctTCTTtGAAG	GTGGggaa
L. Afr	gtcccatg	atgagttttttt...916...	----atgaggtaggtaggttttct	TCTTtGAAG	GTGGggaa
	**	* * *	****	*****	*****

id=284861 gene=ENSG00000116350 name=SRSF4 segment=chr1\_29493425\_29495014\_-1 type=IN

Figure 334: CS=11.9



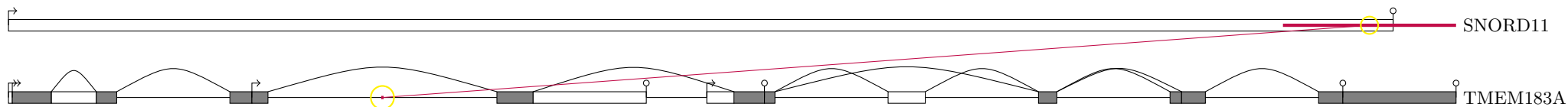
H.Sap	taagggcc	aagtgttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
R.Mac	taagggcc	agggtttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-agtcca
P.Tro	taagggcc	aagtgttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
P.Abe	taagggcc	aagtgttcaatg...35...taatgaaggcatctgtagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
C.Jac	taagggcc	aagtgttcagt...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	ct	tggggttta
M.Mus	taaagacc	atgtgttcaatg...35...taatgagggcagcttcagtc	ACTA	ccTCTTctGAGACA	--c	cgtggtcct
R.Nor	tggagacc	atgtgttcaatg...35...taatgagggcagcttcagtc	ACTA	ccTCTTctGAGACA	--c	tgtggtcct
C.Por	aaatggcc	aagtgttcaatg...35...caatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
O.Cun	aaggggcc	aagtgttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	-ca	tgtggtcca
C.Fam	taaggacc	aagtgttcaatg...35...tagtgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
B.Tau	taaggacc	aagtgttcgatg...35...tagtgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
E.Cab	taaggacc	aagtgttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	ctt	ggcggcca
S.Sus	taaggacc	agggtttcaatg...35...taatgaaggcatcttagtc	ACTA	ccTCTTctGAGACA	TT	GT-ggtcca
L.Afr	taaggacc	aagtgttgaatg...35...taatgagggcagcttcagtc	ACTA	ccTCTTctGAGACA	TT	AT-ggtcca
		* ** * ***** ** * ** * ** * ** * ***** ** *				**

id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2.203157772.203157859.1 type=EN

H.Sap	caaacctg	gtgagtgttaat...1750...ttatTTTTTctcctcgca	ATGATGTCTCAAG	GTAGT	cag
R.Mac	taagcctg	gtgagtgttcat...1770...ttctTTTTTctccttgca	ATGATGTCTCAAG	GTAGT	cag
P.Tro	caaacctg	gtgagtgttaat...1737...tattTTTTTctcctcgca	ATGATGTCTCAAG	GTAGT	cag
P.Abe	taaacctg	gtgagtgttaat...1947...ttatTTTTTctcctcaca	ATGATGTCTCAAG	GTAGT	cag
C.Jac	taaacctg	gtgagtgttaag...2062...----TTTTTctccttgcaatga	TGTCTCAAG	GTAGT	cag
M.Mus	taaacctg	gtgagtcctgac...2696...----cccctctccccatg	GTCTCAAG	GTAGT	cag
R.Nor	taaacctg	gtgagtcctgac...2553...----cccctttcccatg	GTCTCAAG	GTAGT	cag
C.Por	taagcctg	gtgagtattatt...2444...tctTTTTgttctccttgca	ATGATGTCTCAAG	GTAGT	cag
O.Cun	taaacctg	gtgagtgttaat...1178...----ctcacccttgcaatgata	TCTCAAG	GTAGT	cag
C.Fam	taaacctg	gtgagtgttaat...2058...ccccccaccctcacctgca	ATGATGTCTCAAG	GTAGT	cag
B.Tau	caaacctg	gtgagtgttaat...844...TTTTTTTTcccccttgca	ATGATGTCTCAAG	GTAGT	cag
E.Cab	taaacctg	gtgagtgttaat...1181...----TTTTTctccttgcaatga	TGTCTCAAG	GTAGT	cag
S.Sus	taaacctg	gtgagtattaat...1467...TTTTTTTTcccccttgca	ATGATGTCTCAAG	GTAGT	cag
L.Afr	taaacctg	gtgagtgttaat...1280...TTTTTTTTcccccttgca	ATGATGTCTCAAG	GTAGT	cag
	** **** ***** *		* * **** *****	*****	

id=86704 gene=ENSG00000103642 name=LACTB segment=chr15.63419889.63421683.1 type=IN

Figure 335: CS=14.56



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R.Mac	taagggcc	aggtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtagtcca
P.Tro	taagggcc	aagtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtggtcca
P.Abe	taagggcc	aagtgttcaatg...41...aggcatctgtagtcactacc	TCTTCTGAGACA	ctt-	gtggtcca
C.Jac	taagggcc	aagtgttcagtg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	ggggtta
M.Mus	taaagacc	atgtgttcaatg...41...gggcagcttcagtcactacc	TCTTCTGAGACA	-cc	gtggtcct
R.Nor	tggagacc	atgtgttcaatg...41...gggcagcttcagtcactacc	TCTTCTGAGACA	-ct	gtggtcct
C.Por	aaatggcc	aagtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtggtcca
O.Cun	aaggggcc	aagtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtggtcca
C.Fam	taaggacc	aagtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtggtccg
E.Cab	taaggacc	aagtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	cttg	gcggtcca
S.Sus	taaggacc	aggtgttcaatg...41...aggcatctttagtcactacc	TCTTCTGAGACA	ctt-	gtggtcca
L.Afr	taaggacc	aagtgttgaatg...41...gggcacatctttagtcactacc	TCTTCTGAGACA	ctt-	atggtcca
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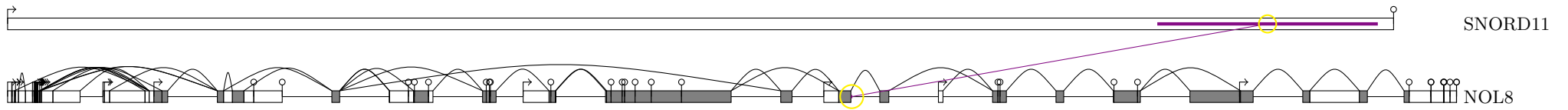
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P.Tro	acacaaag	gtatggagcttg...4949...tcagagattat---tcctttttt-	TGTTTCAG	AAGA	actg
P.Abe	acacaaag	gtatggagcttg...4949...tcagagattat---tcctttttt-	TGTTTCAG	AAGA	actg
C.Jac	gcacaaag	gtatggagcttg...4949...tcaaagattat---tcctttttt-	TGTTTCAG	AAGA	actg
M.Mus	acataaag	gtacgggttgct...4949...----agaacacagaatcttcttct	TGTTTCAG	AAGA	cccg
R.Nor	acacaaag	gtacaggttgct...4949...gaacatgattt---tcctttttt-	TGTTTCAG	AAGA	cctg
C.Por	atacaaaag	gtacagggcttg...4551...----ttcttgTTTTTTTTTTTTT	TGTTTCAG	AAGA	cctg
O.Cun	gcacagag	gtgcgggccttg...4949...aagattattat---tgtaatttc-	TGTTTCAG	AAGA	cctg
C.Fam	gcacaaag	gtatgg-gttcgc...3860...---gaggtcatagctctttttt-	TGTTTCAG	AAGA	cctg
E.Cab	gcacaaag	gtaccgggccttg...4949...---aaaggtgata-ctctttttt-	TGTTTCAG	AAGA	cctg
S.Sus	gcacaaag	gtacagggcctg...2666...----tgTTTTTTTTTTTTTTTTT	TGTTTCAG	AAGA	cctg
L.Afr	gcacagag	gtataggctgt...3721...---aaagttgtg-gttcttttt-	TGTTTCAG	AAGA	cctg
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id=31851 gene=ENSG00000163444 name=TMEM183A segment=chr1.202977939\_202984016\_1 type=IN

Figure 336: CS=19.37





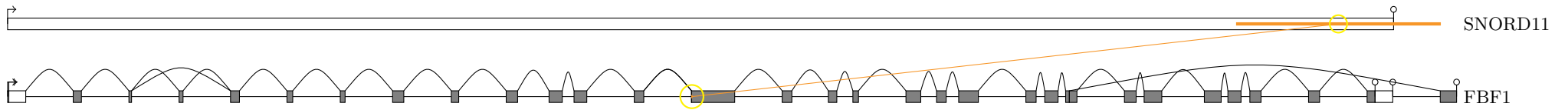
H. Sap	taagggcc	aagtgttcaatg...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
R. Mac	taagggcc	aggtgttcaatg...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtagtcca
P. Tro	taagggcc	aagtgttcaatg...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
P. Abe	taagggcc	aagtgttcaatg...33...----	gataatgaaggcatctgtag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
C. Jac	taagggcc	aagtgttcagt...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	ggggttta
R. Nor	tggagacc	atgtgttcaatg...33...----	aataatgagggcagcttcag	TCACTACCT	ctTCTG	gagacac-t	gtggtcct
C. Por	aatgggcc	aagtgttcaatg...33...----	gacaatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
O. Cun	aaggggcc	aagtgttcaatg...28...ttttg	gataatgaaggcatc	TTTAGTCACTACCT	ctTCTG	gagacactt-	gtggtcca
C. Fam	taaggacc	aagtgttcaatg...33...----	gatagtgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtccg
B. Tau	taaggacc	aagtgttcgatg...33...----	gatagtgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
E. Cab	taaggacc	aagtgttcaatg...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacacttg	gcggtcca
S. Sus	taaggacc	aggtgttcaatg...33...----	gataatgaaggcatctttag	TCACTACCT	ctTCTG	gagacactt-	gtggtcca
L. Afr	taaggacc	aagtgttgaatg...33...----	gataatgagggcatctttag	TCACTACCT	ctTCTG	gagacactt-	atggtcca
		* ** * ***** **	* * ** * ** * ** *	*****			**

id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2.203157772.203157859.1 type=EN

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R. Mac	gaCAGAAG	GTtAGTGA	-----	agactgaaaataattaaact...251...ctgtctgtgtag	ctcatgga
P. Tro	gaCAGAAG	GTtAGTGA	-----	agactgaaaataattagact...252...ctgtctgtgtag	ctcatgga
P. Abe	gaCAGAAG	GTtAGTGA	-----	agactgaaaattattaaact...252...ctgtctgtgtag	ctcatgga
C. Jac	gaCAGAAG	GTtAGTGA	-----	agactgaaaagaattaaact...233...ttgtctgtgtag	ctcatgga
R. Nor	gcCAGAAG	GTtAGTGA	-----	agactgaaaatagcagttgc...206...ttttctgtgtag	cttatgga
C. Por	gaCAGAAG	GTtGGTGA	-----	aggctaaaaactgaacccct...240...tcatctgtgtag	ctcatgga
O. Cun	gaCAGAAG	GTtAGTGA	gaCTGAA	aatagtaaaacttgcaacat...221...ttttgtctgtgtag	ctcatgga
C. Fam	ggCAGAAG	GTtAGTGA	-----	agaccagataatcccacctg...139...gtgtctgtgtag	ctcatgga
B. Tau	gaCAGAAG	GTtAGTGA	-----	agactgaaaataaaaaaatt...242...ttttgtctttag	ctcatgaa
E. Cab	gaCAGAAG	GTtAGTGA	-----	agactgaaaataaaacctgc...245...ttgtctgtgcag	ctcatgca
S. Sus	gaCAGAAG	GTtGGTGA	-----	atactgaaaataatgaaact...245...ttttgtttatag	ctcatgga
L. Afr	gaCAGAAG	GTtAGTGA	-----	agactggaagtgtgtagaact...207...ttttatctgtgtag	ctcatgga
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id=546690 gene=ENSG00000198000 name=NOL8 segment=chr9.95072544.95072834.-1 type=IN

Figure 337: CS=11.05



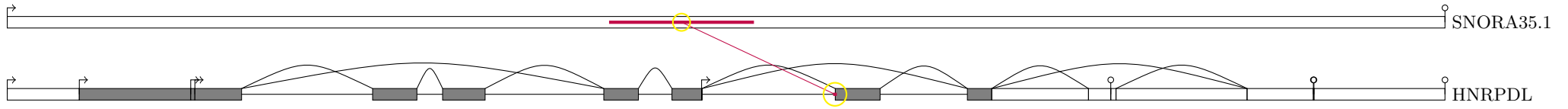
H.Sap	taagggcc	aagtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
R.Mac	taagggcc	aggtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtagtcca
P.Tro	taagggcc	aagtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
P.Abe	taagggcc	aagtgttcaatg...38...	tgaaggcatctgtagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
C.Jac	taagggcc	aagtgttcagt...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	ggsgtta
M.Mus	taaagacc	atgtgttcaatg...38...	tgaaggcagcttcagtcact	ACCTCTTC	GAGACA	-cc-	gtggtcct
R.Nor	tggagacc	atgtgttcaatg...38...	tgaaggcagcttcagtcact	ACCTCTTC	GAGACA	-ct-	gtggtcct
C.Por	aatgggcc	aagtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
O.Cun	aaggggcc	aagtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
B.Tau	taaggacc	aagtgttcgatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
E.Cab	taaggacc	aagtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	cttg	gcggtcca
S.Sus	taaggacc	aggtgttcaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	gtggtcca
L.Afr	taaggacc	aagtgttgaatg...38...	tgaaggcatctttagtcact	ACCTCTTC	GAGACA	ctt-	atggtcca
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id=403632 gene=ENSG00000238317 name=SNORD11 segment=chr2\_203157772\_203157859\_1 type=EN

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R.Mac	tctgttag	gtaag--tggggcc...1957...	ctgcctgacaccctcctttc-	TGTCTTGAAG	tAGGTtct
P.Tro	tctgtcag	gtaag--tggggcc...1659...	ctgcctgacaccctcctttc-	TGTCTTGAAG	tAGGTtct
P.Abe	tctgtcag	gtaag--tggggcc...1666...	ctgcctgacaccctcctttc-	TGTCTTGAAG	tAGGTtct
C.Jac	tctgtcag	gtaag--tggggcc...2262...	ctcctgacatttcctttc-	TGTCTTGAAG	tAGGTtct
M.Mus	tcagtcag	gtaagacctacg--...963...	ccgtccaataccctcctctt-	TGTCTTGAAG	cAGGTtct
R.Nor	tcagtcag	gtaagaccgagg--...1092...	ctgtccaacagcctcctctt-	TGTCTTGAAG	cAGGTtct
C.Por	tctgtcag	gtgag--cagggcc...1487...	ctgtctgacaccttctgttt-	TGTCTTGAAG	cAGGTtct
O.Cun	tcggtcag	gtaag--cagcttg...435...	ccgcctcacacctgcctctc-	TGTCTTGAAG	tAGGTtct
B.Tau	tctgtcag	gtaagcctgagg--...1164...	-ccttagactccctctctctc-	TGTCTTGAAG	tAGGTtct
E.Cab	tcagtcag	gtaag--tggggcc...1091...	gccttagac-cccttctctc-	TGTCTTGAAG	tAGGTtct
S.Sus	tccgtccg	gtaagcatggag--...947...	-tgcctcgaccctctctc-	TGTCTTGAAG	tAGGTtcc
L.Afr	tcggtcag	gtaaa--ctgggcc...958...	cc-tcagacacccttctctc-	TGTCTTGAAG	tAGGTtct
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id=222541 gene=ENSG00000188878 name=FBF1 segment=chr17\_73919723\_73921427\_-1 type=IN

Figure 338: CS=19.37



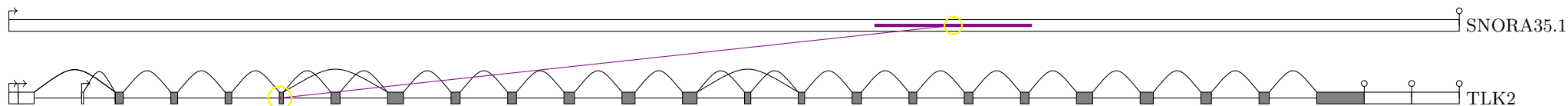
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P. Tro	aagtactt	cagcattgtgcaatggcctttgg-tttttcttgaaccagtt---aGGTCTGAAACCAATGCAAaagaaatctctttttccac-...37...gaggttacacgt	ttttggga
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B. Tau	aaatactt	cagcattgtgcaatggcctttgg-tttttctcataaccaatt---aGGTCTGAAAGCAATGCAAaagaaactctctttttccac-...37...gaggttacactt	ttcctagc
E. Cab	aagtactt	tagcattgtacaatggcctttgg-tttttctcgtaaccaatt---aGGTCTGAAAGCAATGCAAaagaaactctctttttccac-...37...gaggttacacaa	ttcctagc
S. Sus	aagtattt	cagcattgtgcaatggcctttgg-tttttctcataaccaatt---aGGTCTGAAAGCAATGCAAaagaaactctctttttccac-...37...gaggttacacat	ttcctagc
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L. Afr	atgtaatt	cagcattgtgcaatggcctttgg-tttttcttgaaccaattcgca---TGAAAGCAATGCAAaagaaatctctttttccac-...37...gaggttacacat	tttatggga
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R. Mac	tggccg	ag	gtgagacttaat...497...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
P. Tro	tggccg	ag	gtgagacttaat...508...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
P. Abe	tggccg	ag	gtgagacttaat...512...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
C. Jac	tggccg	ag	gtgagacttaat...488...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
M. Mus	tggaaag	ag	gtgagacctcct...162...--aagttgtttcctaaccttgcTTGTGCATTGTTTCAG	GTCagggc
R. Nor	cggaaag	ag	gtgagccttgct...182...ccaagttg-ttcctaaccatcCTTGTgCATTGTTTCAG	GTCagggc
O. Cun	tggccg	ag	gtgagccttaat...475...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
C. Fam	tggacg	ag	gtgagacttaat...459...--aagtcgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
B. Tau	aggccg	ag	gtgagacctaat...490...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
E. Cab	tggccg	ag	gtgagacttaat...490...--aagttgtttcctaacgatcaTTGTGCATTGTTTCAG	GTCagggc
S. Sus	tggacg	ag	gtgagactttgc...1355...--aaggtatttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
O. Avi	aggccg	ag	gtgagacctaat...490...--aagttgtttcctaacaatcaTTGTGCATTGTTTCAG	GTCagggc
L. Afr	tggacg	ag	gtaagacttgat...395...--aagttgtttgctaacaattgTTGTGCATTGTTTCAG	gtcagggc
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Figure 339: CS=10.92



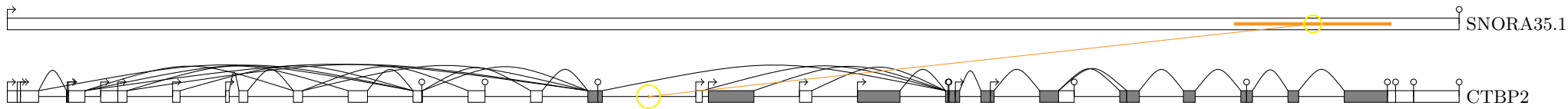
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P. Tro	aagtactt	cagcattgtgca...37...aaccaatgcaaaagaat	CCTT	TTCC	acGAGAA	acatccctgcagtg	gggtttcctatcgacaggaggttacacgt	ttttggga
C. Jac	aagtattt	cagcattgtgca...37...aagcaatgcaaaagaat	CCTT	TTCC	acGAGAA	acatccctgcagtg	gggtttcctatcgacaggaggttacacat	ttttggga
M. Mus	tttcctt	gagcattgtgca...37...aaacaatgcaagagaat	gtCCTT	TTCC	acGAGAA	acaatcctgcagtg	gggtttcctatcgacaggaggttacactt	ttgcaggc
R. Nor	tttcctt	aagcattgggca...37...aaacaatgcaagagaat	gtCCTT	TTCC	acGAGAA	acatccctgcagtg	gggtttcctatcgacaggaggttacactt	ttgctggc
C. Por	aggcactt	tagcattgtaca...37...aagcaatgcaagagaat	ttCCTT	TTCC	acGAGAA	acatccctgtagt	gggtttcctatcgacaggaggttacacat	ttcctggc
O. Cun	tagcactt	cagcattgtgca...37...aagcaatgcaagagaact	tCCTT	TTCC	acGAGAA	acatccctgcagtg	gggtttcctatcgacaagggttacaaat	ttccctgca
C. Fam	aagtactt	cagcattgtgca...37...aagcaatgcaagagaact	tCCTT	TTCC	acGAGAA	acttccctgtg	gggtttcctatcgacagaagggttacacat	ttactggc
B. Tau	aaatactt	cagcattgtgca...37...aagcaatgcaagaaaaact	tCCTT	TTCC	acGAGAA	acatccctgtagt	gggtttcctatcgacaagggttacactt	ttcctagc
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S. Sus	aagtattt	cagcattgtgca...38...aagcaatgcaagaaaaact	tCCTT	TTCC	acGAGAA	acatccctgaagt	gggtttcctatcgacaagggttacatac	ttcctagc
L. Afr	atgtaatt	cagcattgtgca...37...aagcaatgcaaaagaat	ttCCTT	TTCC	acGAGAA	acatccctgtg	gggtttcctatcgacaagggttacacat	tttatgga
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P. Tro	tagccaag	gtagtaataatt...819...ctgtattt-actttggtttca	TTTTCaG	GGAAAGGc
C. Jac	tagccaag	gtagtagtaatt...778...ctgtattt-actttggtttca	TTTTCaG	GGAAAGGc
M. Mus	tagccaag	gtagtggccatc...833...-tgtacttaactttggtttca	TTTTCaG	GGAAAGGc
R. Nor	tagccaag	gtagtggtcatt...811...-tgtacttaactttggtttca	TTTTCaG	GGAAAGGc
C. Por	taaccaag	gtaataataatt...891...ctgtactt-actttggtttca	TTTTCaG	GGAAAGGc
O. Cun	tagccaag	gtagtcatgatt...942...ctgtattt-actttggtttca	TTTTCaG	GGAAAGGc
C. Fam	tagccaag	gtagtaataatt...967...ctatactt-actttggtttca	TTTTCaG	GGAAAGGc
B. Tau	tagccaag	gtagtaataatt...968...ctatactt-actttggtttca	TTTTCaG	GGAAAGGc
E. Cab	tagccaag	gtagtaataatt...978...ttatactt-actttggtttc	TTTTCaG	GGAAAGGc
S. Sus	tagccaag	gtagtaataatt...923...ccatactt-actttggtttca	TTTTCaG	GGAAAGGc
L. Afr	tagccaag	gtagtaataatt...966...ctgtactt-actttggtttca	TTTTCaG	GGAAAGGc
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Figure 340: CS=13



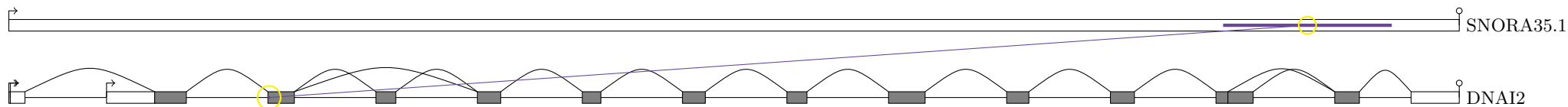
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R.Mac	aagtactt	cagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacacct	ttttggaa
P.Tro	aagtactt	cagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacacgt	ttttggga
P.Abe	aagtactt	cagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacacgt	ttttggga
C.Jac	aagtattt	cagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacacat	ttttggga
M.Mus	tttcctt	gagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacactt	ttgcaggc
C.Por	aggcactt	tagcattgtaca...69...agaaacatccctgtagtggg	TTGTTcCTATcGACA	aggaggttacacat	ttcctggc
O.Cun	tagcactt	cagcattgtgca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacaaat	ttcctgca
C.Fam	aagtactt	cagcattgtgca...69...agaaacttccctgtggtggg	TTGTTcCTATcGACA	aggaggttacacat	ttactggc
B.Tau	aaataactt	cagcattgtgca...69...agaaacatccctgtagtggg	TTGTTcCTATcGACA	aggaggttacactt	ttcctagc
E.Cab	aagtactt	tagcattgtaca...69...agaaacatccctgcagtggg	TTGTTcCTATcGACA	aggaggttacacaa	ttcctagc
S.Sus	aagtattt	cagcattgtgca...70...agaaacatccctgaagtggg	TTGTTcCTATcGACA	aggaggttacat	ttcctagc
O.Avi	aaataactt	cagcattgtgca...69...agaaacatccctgtagtggg	TTGTTcCTATcGACA	aggaggttacactt	ttcctagc
L.Afr	atgtaatt	cagcattgtgca...69...agaaacatccctgtggtggg	TTGTTcCTATcGACA	aggaggttacacat	tttatgga
	**	***** **	***** **	***** **	*

id=722188 gene=ENSG00000222687 name=SNORA35.1 segment=chrX.114360879.114361007.-1 type=EN

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R.Mac	ttgtgaag	gtaagagcgtgt...4841...--gcttcatcagtcctaacgaga	TGTCacATGGAACAA	-agctttaggggttttattta...69...ggctggggacag--	cctcctct
P.Tro	ttgtgaag	gtaagagcgtgt...4841...--gcttcatcagtcctaacgaga	TGTCacATGGAACAA	-agctttaggggttttattta...69...ggctggggacag--	cctcctct
P.Abe	ttgtgaag	gtaagagcgtgt...4841...--gcttcatcagtcctaacgaga	TGTCacATGGAACAA	-agctttaggggttttattta...69...ggctggggacag--	cctcctct
C.Jac	ttgtgaag	gtaagagcattt...4841...--gcttcatcagtcctaacgaga	TGTCacATGGAACAA	-agctttaggggttttattta...69...ggctggggacag--	cctcctct
M.Mus	ttgtgaag	gtaagagccagc...4838...ccagcttcatcagtc--cgaga	TGTCacATGGAACAA	aagctttaggggttttattt...72...gctggagcacag--	cctcctgc
C.Por	ttgtgaag	gtaagagccagc...4846...--gcttcatcagtcctaacgtga	TGTCacATGGAACAA	aagctttaggggttttattt...64...tggcagggacag--	cctcctct
O.Cun	ttgtgaag	gtaagagccggc...4843...--gcttcatcactctaacgcga	TGTCacATGGAACAA	aagctttaggggttttattt...67...ggctgaggcccg--	cccagagc
C.Fam	ttgtgaag	gtaagagccagc...4840...--gcgtcctcctcgtctaacgaga	TGTCacATGGAACAA	agctttaggggttttattt...70...agcctggcacag--	cctcctct
B.Tau	ttgccaag	gtaagagccagc...4834...--gtttcatcagtcctaacgaga	TGTCacATGGAACAA	aagctttaggggttttattt...76...ggctggctgcag--	cctcctct
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O.Avi	ttgccaag	gtaagagccagc...4835...--gttcatcagtcctaacgaga	TGTCacATGGAACAA	aagctttaggggttttattt...75...ggctggctgcag--	cctcctct
L.Afr	ttgccaag	gtaagagccagc...4837...--gtttcatcagcctaagtgtgg	TGTCacATGGAACAA	aagctttaggggttttattt...73...--ttgctgcagca	cccccttt
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id=385168 gene=ENSG00000175029 name=CTBP2 segment=chr10.126716598.126727565.-1 type=IN

Figure 341: CS=10.92



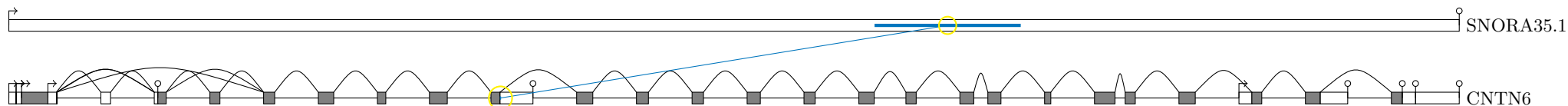
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P. Tro	aagtactt	cagcattgtgca...67...cgagaaacatccctgcagtgg	GGTTGtt	CCTA	tc	GACAGGAG	gttacacgt	ttttggga
P. Abe	aagtactt	cagcattgtgca...67...cgagaaacatccctgcagtgg	GGTTGtt	CCTA	tc	GACAGGAG	gttacacgt	ttttggga
C. Jac	aagtattt	cagcattgtgca...68...-gagaaacatccctgcagtgg	GTTGtt	CCTA	tc	GACAGGAG	TTACAc	cat
M. Mus	tttcctt	gagcattgtgca...68...-gagaaacatccctgcagtgg	GTTGtt	CCTA	tc	GACAG	GAGGTTACA	ctt
R. Nor	tttcctt	aagcattgggca...68...-gagaaactatccctgcagtgg	GTTGtt	CCTA	tc	GACAGGAG	gTTAC	actt
C. Por	aggcactt	tagcattgtaca...68...-gagaaacatccctgtagtgg	GTTGtt	CCTA	tc	GACAG	ggaggttacacat	ttcctggc
O. Cun	tagcactt	cagcattgtgca...68...-gagaaacatccctgcagtgg	GTTGtt	CCTA	tc	GACAG	agaggttacacat	tcctgca
C. Fam	aagtactt	cagcattgtgca...68...-gagaaacttccctgtgtgg	GTTGtt	CCTA	tc	GACAG	AGGGT	acacat
B. Tau	aaatactt	cagcattgtgca...68...-gagaaacatccctgtagtgg	GTTGtt	CCTA	tc	GACAG	GAGGGTACA	ctt
E. Cab	aagtactt	tagcattgtaca...68...-gagaaacatccctgcagtgg	GTTGtt	CCTA	tc	GACAGGAG	ggttacacaa	ttcctagc
L. Afr	atgtaatt	cagcattgtgca...68...-gagaaacatccctgtgtgg	GTTGtt	CCTA	tc	GACAG	GAGGGTACA	cat
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id=722188 gene=ENSG00000222687 name=SNORA35.1 segment=chrX.114360879.114361007.-1 type=EN

H. Sap	aacacgag	gtgggtccctgc...2995...-----tgacgtcttccctcctg-cgg	CTCTc	TGTTTAG	Gc	CAACTc
R. Mac	aacatgag	gtgggtccctgc...3307...-----tgacatcttccctcctg-cgg	CTCTc	TGTTTAG	Gc	CAACAc
P. Tro	aacacgag	gtgggtccctgc...2986...-----tgacgtcttccctcctg-cgg	CTCTc	TGTTTAG	Gc	CAACTc
P. Abe	aacacgag	gtgggtccctgc...3017...-----tgacgtcttccctcctg-cgg	CTCTc	TGTTTAG	Gc	CAACTc
C. Jac	agcacgag	gtgggtccctgc...4940...cagggtgatgcctttccttc-	TGTGGCTCTc	TGTTTAG	Gc	CAACAc
M. Mus	aacacgag	gtgggtccctgc...1385...gagacaaatgtcgtctcccc--	TGTGCTTCTGTTTAG	Gc	CAACAc	
R. Nor	aacatgag	gtgggtccctgc...1263...-agacaaacgtcttctcacc--	TGTGCTTCTGTTTAG	Gc	CAACAc	
C. Por	agcacgag	gtgggtccctgc...2393...-----cttaccatcgacgggctg-	TGTTTAG	Gc	CAACAc	
O. Cun	aacacgag	gtgcgtcctgcc...2111...-----gtcctctcaccgc-cgcgctc-	TGTTTAG	Gc	CAACAc	
C. Fam	agcatgag	gtgggtccctgc...1389...----caggcatgttctcagccg-tg	GCTCTTTGTTTAG	Gc	CAACAc	
B. Tau	aacatgag	gtgggtccctgc...2413...agggccaggctcttctcacc-	TGTG	CTCTGTTTAG	Gc	CAACAc
E. Cab	aacacgag	gtgggtccctgc...1425...----gggcatcctctcactg-ggg	CTCTG	TGTTTAG	Gc	CAACAc
L. Afr	agcatgag	gtgtgtccctgg...1270...tgggtgggcatcttctcact-	TGTAG	CTCTGTTTAG	Gc	CAACAc
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id=343432 gene=ENSG00000171595 name=DNAI2 segment=chr17.72278140.72281178.1 type=IN

Figure 342: CS=20.02



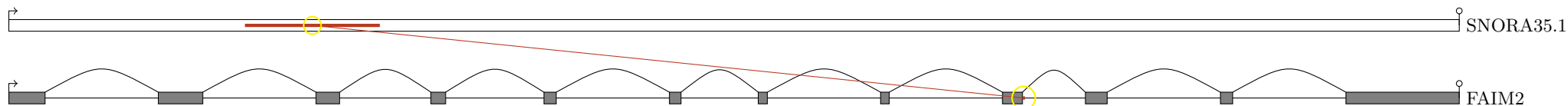
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R. Mac	aagtactt	cagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacacgt	ttttggaa	
P. Tro	aagtactt	cagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacacgt	ttttggga	
P. Abe	aagtactt	cagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacacgt	ttttggga	
C. Jac	aagtattt	cagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacacgt	ttttggga	
M. Mus	tttcctt	gagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	GCAAGAGAAATG	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacactt	
R. Nor	tttcctt	aagcattgggcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	AAGAGAAATG	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaggaggttacactt	
C. Por	aggcactt	tagcattgtacaatggcctttggtttttcttgaaccagtt	AGGTctGAAAGCAA	GCAAGAGAAATt	CCTTTTTC	caCGAG	
O. Cun	tagcactt	cagcattgtgcaatggcctttggtttttcttgaaccagttaggtctgaaaccaatgcaaaagaattt	AGAAACTt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaaggaggttacaat	
C. Fam	aagtactt	cagcattgtgcaatggcctttggtttttctatagcaataggtctgaaaccaatgcaaaagaattt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaaggaggttacacat	ttactggc	
B. Tau	aaatactt	cagcattgtgcaatggcctttggtttttctcataaccaataggtctgaaaccaatgcaaaagaattt	AAGAAAAACt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaaggaggttacactt	
O. Avi	aaatactt	cagcattgtgcaatggcctttggtttttctcataaccaataggtctgaaaccaatgcaaaagaattt	AAGAAAAACt	CCTTTTTC	caCGAG	aaacatccctgcagtgagggtgttcctatcgacaaggaggttacactt	
L. Afr	atgtaatt	cagcattgtgcaatggcctttggtttttcttgaaccagttcggtc	ATGAAaGCAA	GCAAAAGAAATt	CCTTTTTC	caCGAG	
**	*****	*****	*****	*****	*****	*****	*****

id=722188 gene=ENSG00000222687 name=SNORA35.1 segment=chrX.114360879.114361007.-1 type=EN

H. Sap	cTTGGAAA	gtAAGG	-----	ttttgttttggttttgtt...340..	atacat-tgcctg	gagtattt
R. Mac	cTTGGAAA	gtAAGG	-----	ttttgttttggttttcctg...337..	atacat-tgcctg	gagtattt
P. Tro	cTTGGAAA	gtAAGG	-----	ttttgttttggttttcctg...334..	atacat-tgcctg	gagtattt
P. Abe	cTTGGAAA	gtAAGG	-----	ttttgttttggttttcctg...334..	atacat-tgcctg	gagtattt
C. Jac	cTTGGAAA	gtAAGG	-----	ttttgttttggttttcctg...335..	atacat-tgcctg	gagaattt
M. Mus	cTTGGAAA	gtAAGG	TGTTTTgTTTTG	-----	tttgccttggttttgtt...326..	atagac-tgcctg
R. Nor	cTTGGAAA	gtAAGG	TGTTTTTTTT	-----	tatgggtgttttaattttt...295..	atagac-tacttg
C. Por	cTTGGAAA	gtAAGG	tGTTTTgTTTTGctTTGTTTTtGTTT	ttgttttttaaaactggtt...298..	gtatgc-tgcctg	gagtgtct
O. Cun	cTTGGAAA	gtAAGG	tGTTTCT	-----	ggttttgtttttgtttct...293..	-cacgaggcctg
C. Fam	cTTGGAAA	gtAAGG	-----	ttttttgttttggttttgt...307..	atata-tgcctg	gagtattt
B. Tau	cTTGGAAA	gtAAGG	tGTTTtTTCTT	-----	tttctaattgttttaattaa...302..	atata-tacctg
O. Avi	cTTGGAAA	gtAAGG	tGTTTgTTTT	-----	tttctaactgttttaattaa...301..	atata-tacctg
L. Afr	cTTGGAAA	gtAAGG	cGTTTTgTTTTGTTTTCAT	-----	tttccaactgttttaattt...279..	gtatata-tgcctg
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id=816288 gene=ENSG00000134115 name=CNTN6 segment=chr3.1339676.1340053.1 type=AN

Figure 343: CS=12.35



H. Sap	aagtactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacacgt	ttttggga
R. Mac	aagtactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacacct	ttttggaa
P. Tro	aagtactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacacgt	ttttggga
P. Abe	aagtactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacacgt	ttttggga
C. Jac	aagtattt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaccagtaggtc...71...	gaggttacacat	ttttggga
M. Mus	tttcctt	gagcattgtgcaa	TGGCCT	TGGTTT	-tcctt	gtaaccaataggtc...71...	gaggttacactt	ttgcaggc
R. Nor	tttcctt	aagcattGGGCaa	TGGCCT	TGGTTT	-tcctt	gtaaccaataggtc...71...	gaggttacactt	ttgctggc
C. Por	aggcactt	tagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacacat	ttcctggc
O. Cun	tagcactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccagtaggtc...71...	gaggttacaat	tcctgca
C. Fam	aagtactt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttct	catagccaataggtc...71...	aagggtacacat	ttactggc
E. Cab	aagtactt	tagcattgtgcaa	TGGCCT	TGGTTT	-ttct	cgtaaccaataggtc...71...	gaggttacacaa	tcctagc
S. Sus	aagtattt	cagcattgtgcaa	TGGCCT	TGGTTT	ttct	cataaccaatagg-...72...	gaggttacatac	ttcctagc
L. Afr	atgtaatt	cagcattgtgcaa	TGGCCT	TGGTTT	-ttctt	gtaaccaattcggca...71...	gaggttacacat	tttatgga
	**	*****	*****	*****	* **	** ** *	*** ** *	*

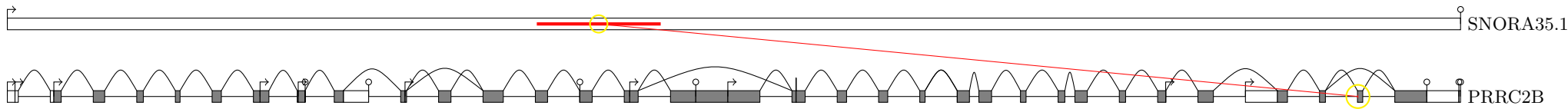
id=722188 gene=ENSG00000222687 name=SNORA35.1 segment=chrX.114360879.114361007.-1 type=EN

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P. Tro	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..242...	ctgtccccacag	ttcgactt
P. Abe	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..239...	ctgtccccacag	ttcgactt
C. Jac	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..242...	ctgtccccgcag	ttcgactt
M. Mus	aGACCAAG	GTCAG	gccctggagcctgtaggcag	----..153...	gtgtccccgcag	tttgactt
R. Nor	aGACCAAG	GTCAGCCC	tggagctggtgggcatggga	...177...	tgtgtcctgcag	tttgactt
C. Por	aGACCAAG	GTCAG	gctttgaggcatgtgggc	----ta...216...	ctgtccccgcag	tttgactt
O. Cun	aGACCAAG	GTCAG	ggttcagggggcccagtttc	----..221...	ctgtctccacag	tttgactt
C. Fam	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..236...	ccttcctgcag	tttgactt
E. Cab	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..244...	ccatgtctgcag	tttgactt
S. Sus	aGACCAAG	GTCAG	gctctggggcctgcaggcag	----..238...	ctgtccccgcag	ttcgactt
L. Afr	aGACCAAG	GTCAG	gatctggggcctgtgggcag	----..253...	ctgtccccgcag	tttgactt
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id=254713 gene=ENSG00000135472 name=FAIM2 segment=chr12.50282986.50283263.-1 type=IN

Figure 344: CS=14.95





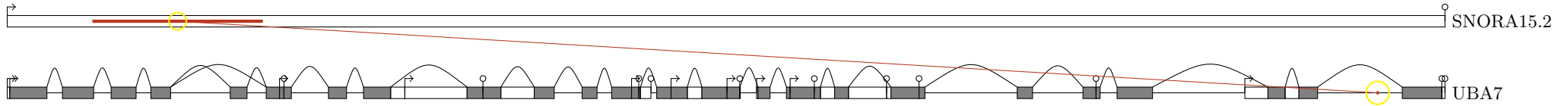
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C.Jac	aagtattt	cagcattgtgcaatggccttgg-ttttcttgaacc	AGTTAGGTCTGAAAGC	aatgcaaaagaaatttcctt--...44...	gaggttacacat	ttttggga
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C.Por	aggcactt	tagcattgtacaatggccttgg-ttttcttgaacc	AGTTAGGTCTGAAAGC	aatgcaagagaaatttcctt--...44...	gaggttacacat	ttcctggc
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S.Sus	aagtattt	cagcattgtgcaatggccttgg-ttttctcagacc	TTAGGTCTGAAAGC	aatgcaagagaaatttcctt--...44...	gaggttacacac	ttcctagc
O.Avi	aaataactt	cagcattgtgcaatggccttgg-ttttctcagacc	TTAGGTCTGAAAGC	aatgcaagagaaatttcctt--...44...	gaggttacactt	ttcctagc
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id=722188 gene=ENSG00000222687 name=SNORA35.1 segment=chrX.114360879.114361007.-1 type=EN

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R.Mac	acctacag	gtaaagccactc-...2066...	tgtattctcaaccctgcct	TTGGTTTTTCAG	GCCTAGct
P.Tro	acctacag	gtaaagccactc-...2098...	tgtattctcaaccctgcct	TTGGTTTTTCAG	GCCTAGct
P.Abe	acctacag	gtaaagccactc-...2133...	tgtattctcaaccctgcct	TTGGTTTTTCAG	GCCTAGct
C.Jac	acctacag	gtaaagccactc-...2074...	---attctcaaccctgccttgg	GTTTTTCAG	GCCTAGct
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R.Nor	gcctacag	gt-aagatgagc-...1882...	---tattctcaa-cctgccttgg	GTTTTTCAG	GCCTAGct
C.Por	acctacag	gtacagaccctg-...1847...	---attctcaaccctgccttgg	GTTTTTCAG	GCCTAGct
O.Cun	gcctacag	gtaaacacagggc-...1745...	---attctcaaccctgccttgg	GTTTTTCAG	GCCTAGct
C.Fam	acttacag	gtaaagaaatgc-...2081...	-----ctcaccctgccttagaat	TTTTTCAG	GCCTAGct
B.Tau	gcctacag	gtaaagccatc-...2604...	---gtttctcaccctc-ccttgg	GTTTTTCAG	GCCTAGct
E.Cab	gcctacag	gt-aagaagggcc-...2045...	---gtttctcaccctc-ccttgg	GTTTTTCAG	GCCTAGct
S.Sus	acctacag	gtaaggggatgc-...2017...	---gtttctcaccctc-ccttgg	GTTTTTCAG	GCCTAGct
O.Avi	acctacag	gtaaagcatcac-...2591...	---gtttctcaccctc-ccttgg	GTTTTTCAG	GCCTAGct
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id=268636 gene=ENSG00000130723 name=PRRC2B segment=chr9.134367648.134369791.1 type=IN

Figure 345: CS=14



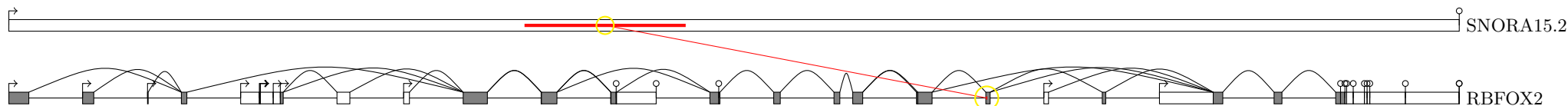
H.Sap	-tctgaaAA	GCATggCTGAA	ACTGT	gttc-ttttatcagtagt	tta-----	...86...	gtgaatacaaat	aaatgaac
R.Mac	-tctgaaAA	GCATggCTGAA	ACTGT	gttg-ttttatcagtagt	tta-----	...86...	gtgaatacaaat	aaatgaac
P.Abe	-tctgaaAA	GCATggCTGAA	ACTGT	gttc-ttttatcagtagt	tca-----	...86...	gtgaatacaaat	aaatgaac
C.Jac	-tctgaaAG	GCATggCTGAA	ACTGT	gttc-ttttatcagtagt	tta-----	...86...	gtgaatacaaat	aaatgaac
M.Mus	-tctaaaAG	GCATggCTGAA	ACTGT	gttc-ttttagtcagta	aattta-----	...82...	gtgagtacaat	aagtggct
R.Nor	-tctaacAG	GCATggCTGAA	ACTGT	gttc-ttttagtcagta	aattta-----	...82...	gtgagtacaagt	aagtggct
C.Por	-tctagaAG	GCATggCTGAA	ACTGT	gttc-tttaatcagtagt	tta-----	...85...	gtgattacaat	aatgaagc
O.Cun	-tctgaaAG	GCATggCTGAA	ACTGT	gttc-ttttgtcagtagt	tta-----	...86...	gtgaatacaaat	aaactaat
C.Fam	-taaaaaAA	GCATggCTGAA	ACTGT	gttcctttttatcagtagt	ttt-----	...282...	agtgatagaaga	aaatgaac
F.Cat	-tgtgaaAG	GCATggCTGAA	ACTGT	gttcctttttatcagta	attt-----	...91...	gtggatacaat	aaatgaac
E.Cab	-tctaaaAG	GCATggCTGAA	ACTGT	gttttttatcagtagt	tttacacag...	...83...	gtggatacaat	aaatgaac
S.Sus	-tttaaaAG	GCATggCTGAA	ACTGT	gttcctttttatcagta	aattt-----	...93...	ggggatacaat	aaatgaac
L.Afr	atctaa-AA	GCATggCTGAA	ACTGT	gttcctttttatcagta	aattt-----	...91...	gtgaatacaaat	aaatgaaa
	*	*	*****	**	*****	**	**	**

id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

H.Sap	ccctcag	gtgagcccactt...279...	cctc---atcagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcagctcctg-...100...	caccctaccag	ggtgacag	
R.Mac	ccctcag	gtgagcccactt...280...	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagtagctcttg-...101...	caccccactag	ggtgacag	
P.Abe	ccctcag	gtgagcccactt...283...	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcagctcctg-...101...	cacccaaccag	ggtgacag	
C.Jac	ccctcag	gtgagcccactc...276...	cctc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagcggctcctg-...101...	caccccaccag	ggtgacag	
M.Mus	tgccctcag	gtgagccggtcg...273...	cccc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgaggcggcctcctg-...100...	ctccataccag	ggtgacag	
R.Nor	ggcctcag	gtgagccaggct...267...	cccc---accagctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgagccgctcatg-...100...	ttccataccag	ggtgacag	
C.Por	ccctcag	gtgagcctgcat...275...	gcc---gccaaactgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagctactcctg-...81...	atccataccag	ggtgacag	
O.Cun	ccctcag	gtgagcccatac...273...	cagc---gtcagcagctcctaaa	ATAGTTTCAGATGTTT	cctgtc-tgagttgctcccgc-...102...	tcttctaccag	cgtgacag	
C.Fam	gcccctcag	gtgagcccacat...279...	ccct---gcctgctgctcctaaa	ATAGTTTCAGATGTTT	cctgccttgagctcctcctg-...106...	ccatactaccag	ggtgacgg	
F.Cat	gcccctcag	gtgagcccgcac...303...	ccct---gcctgctgctcctaaa	ATAGTTTCAGATGTTT	cctgtcttaagctgctcctg-...109...	ccactaccag	ggtgacca	
E.Cab	tctctcag	gtgagatcacac...278...	ctgcccggccagcagctcct	AAAAATAGTTTCAGATGTTT	cctgtcttgagctgctcctg-...106...	ccaccaccag	ggtgacgg	
S.Sus	tcccctcag	gtgagcccacac...282...	cccc---gccagctactcctaaa	ATAGTTTCAGATGTTT	cctgtcttgaggctgctgctg-...108...	tctgcccaccag	ggtgacag	
L.Afr	ccctcaa	gtgagtcacatg...252...	cccc---accagcactcctaaa	ATAGTTTCAGATGTTT	cctgtcttgagctgctctgg-...105...	ctccccaccag	ggtgacag	
	**	*****	*	*	*****	*	*	**

id=236528 gene=ENSG00000182179 name=UBA7 segment=chr3.49842871.49843329.-1 type=IN

Figure 346: CS=10.14



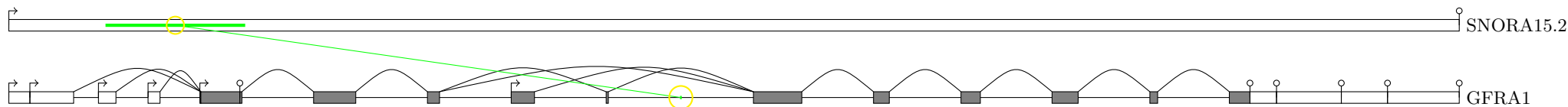
H.Sap	tctgaaa	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAG	--cagtcctccctttagaatga-----	...43...	gtgaatacaaat	aaatgaac
R.Mac	tctgaaa	gcatggctgaatactgtgttg-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAG	--cagtcctccctttagaatga-----	...43...	gtgaatacaaat	aaatgaac
P.Tro	tctgaaa	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAG	--cagtcctccctttagaatga-----	...43...	gtgaatacaaat	aaatgaac
P.Abe	tctgaaa	gcatggctgaatactgtgttc-tttatcagtagttcacac	AGCCagACACca	TGCAAAAAG	AGTCT--tccctttagaatgactgatg...	...37...	gtgaatacaaat	aaatgaac
C.Jac	tctgaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAG	--cagtcctcacttgagaatgg-----	...43...	gtgaatacaaat	aaatgaac
M.Mus	tctaaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaagtcctccttttaagatg-----	...38...	gtgagtacaagt	aagtggct
R.Nor	tctaacag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaagtcctccttttaagatg-----	...38...	gtgagtacaagt	aagtggct
C.Por	tctagaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaaaacttccttttaaatg-----	...41...	gtgattacaagt	aatgaagc
O.Cun	tctgaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaaagtcctcctttggaatc-----	...42...	gtgaatacaaat	aaactaat
C.Fam	tctgaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaagtgctccttttaaatg-----	...237...	agtgatagaaga	aaatgaac
E.Cab	tctaaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaagtcctccttttaaatg-----	...44...	gtggatacaagt	aaatgaac
S.Sus	ttttaaag	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aaagtcctccttttaaatg-----	...48...	gggatacaagt	aaatgaac
L.Afr	atctaaaa	gcatggctgaatactgtgttc-tttatcagtagtttacac	AGCCagACACca	TGCAAAAAGT	aagatcttccttttaaatg-----	...41...	gtgaatacaaat	aaatgaac
	*	*****	***	*****	***	*	**	**

id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

H.Sap	tatccagg	gtaagcgttaga...3701...----	tgttttgttttgtgtgga	TTTTcTGCAG	TGTGGTTt
R.Mac	tatccagg	gtaagcattaga...3680...----	tgttttgttttgtgtgga	TTTTcTGCAG	TGTGGTTt
P.Tro	tatccagg	gtaagcgttaga...3687...----	tgttttgttttgtgtgga	TTTTcTGCAG	TGTGGTTt
P.Abe	tatccagg	gtaagcgttaga...3693...----	tgttttgttttgtgtgga	TTTTcTGCAG	TGTGGTTt
C.Jac	tatccagg	gtaagcattaga...3708...----	tgttttgttttgtgtgga	TTTTcTGCAG	TGTGGTTt
M.Mus	tatccagg	gtaagcattaga...3407...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
R.Nor	tatccagg	gtaagcattaga...3417...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
C.Por	tatccagg	gtaagcattaga...3541...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
O.Cun	taccagg	gtaagcgtttga...3646...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
C.Fam	tatccagg	gtaagcactaga...3658...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
E.Cab	taccagg	gtaagcattaga...3668...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
S.Sus	tatccagg	gtaagcattaga...3661...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
L.Afr	tatccagg	gtaagcattaga...3686...----	tgttttgttttgtgtgg	ATTTcTGCAG	TGTGGTTt
	** *****	*****	*	*****	*****

id=369939 gene=ENSG00000100320 name=RBF0X2 segment=chr22.36152192.36155934.-1 type=IN

Figure 347: CS=10.14



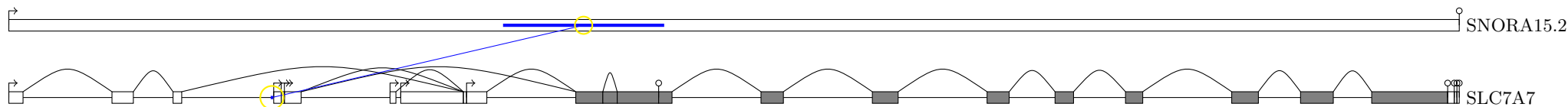
H.Sap	-tctgaaaa	GCATGgCTGAaTACTGTGTtc-ttttatcagtagtttaca...	84...	gtgaatacaaat	aaatgaac
R.Mac	-tctgaaaa	GCATGgCTGAaTACTGTGTtg-ttttatcagtagtttaca...	84...	gtgaatacaaat	aaatgaac
P.Tro	-tctgaaaa	GCATGgCTGAaTACTGTGTtc-ttttatcagtagtttaca...	84...	gtgaatacaaat	aaatgaac
P.Abe	-tctgaaaa	GCATGgCTGAaTACTGTGTtc-ttttatcagtagttcaca...	84...	gtgaatacaaat	aaatgaac
M.Mus	-tctaaaaa	GCATGgCTGAaTACTGTGTtc-ttttagtcagtaatttaca...	80...	gtgagtacaagt	aagtggct
R.Nor	-tctaaaca	GCATGgCTGAaTACTGTGTtc-ttttagtcagtaatttaca...	80...	gtgagtacaagt	aagtggct
C.Por	-tcTAGAAg	GCATGgCTGAaTACTGTGTtc-tttaatcagtagtttaca...	83...	gtgattacaagt	aatgaagc
O.Cun	-tctgaaag	GCATGgCTGAaTACTGTGTtc-ttttgcagtagtttaca...	84...	gtgaatacaaat	aaactaat
C.Fam	-taaaaaaa	GCATGgCTGAaTACTGTGTtctttttatcagtagtttaca...	280...	agtgatagaaga	aaatgaac
F.Cat	-tgtgaaag	GCATGgCTGAaTACTGTGTtctttttatcagtaatttaca...	89...	gtggatacaagt	aaatgaac
E.Cab	-tctaaag	GCATGgCTGAaTACTGTGTt-ttttatcagtagtttaca...	86...	gtggatacaagt	aaatgaac
S.Sus	-tttaaaag	GCATGgCTGAaTACTGTGTtctttttatcagtaatttaca...	91...	ggggatacaagt	aaatgaac
L.Afr	atctaaaa-	GCATGgCTGAaTACTGTGTtctttttatcagtaatttgc...	89...	gtgaatacaaat	aaatgaaa
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id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

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R.Mac	tcagcaag	gtaagttcactg...	4496...	catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	411...	ctgcatttgcag	tggagcac
P.Tro	tcagcaag	gtaagttcactg...	4495...	catgtaattactgtgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	412...	ctgcatttgcag	tggagcac
P.Abe	tcagcaag	gtaagttcactg...	4495...	catgtaattactgtgtaatc	GTATAGTAaTTAGCATGT	actatatgcatttattacat----	412...	ctgcatttgcag	tggagcac
M.Mus	ccagcaag	gtaagtgtcacc...	4507...	catgtaattactctgtaatc	ATATAGTAaTTAGCATGTT	ctatagcatttattacata---	399...	tctgccttgcag	tggaacac
R.Nor	ccagcaag	gtaagtttacc...	4500...	catgtaattactcogtaatc	ATATAGTAaTTAGCATGTT	ctatagcatttattacata---	406...	tctgccttgcag	tggaacac
C.Por	tcagcaag	gtaagtaagttt...	4493...	catgtagtactgtgtaatc	ATATAGTAaTTAGCATGTTCTA	tatgcatttattacataaatt..	410...	tctgccttgcag	tggagcat
O.Cun	tcagcaag	gtaagtctctgc...	4489...	catgtaattactctataatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	418...	tctgtttcgcag	tggaacat
C.Fam	acagcaag	gtaagttcaccg...	4462...	catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	445...	tctccttgcag	tggagcac
F.Cat	ccagcaag	gtaagttcactg...	4463...	catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	444...	tctccttgcag	tggagcac
E.Cab	gcagcaag	gtaagctcactg...	4483...	catgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	424...	ctccttgcag	tggagcac
S.Sus	ccagcaag	gtaagctcactg...	4465...	catgcaattactctgtaatc	ATATAGTAaTTAGCATGT	actatgtgcatttattacat----	442...	ctccttgcag	tggagcac
L.Afr	tcagcaag	gtaagttcactg...	4469...	tgtgtaattactctgtaatc	ATATAGTAaTTAGCATGT	actatatgcatttattacat----	438...	ctgtttgcag	tggagcac
	*****	*****		** * *****	*****	*****		* *****	*****

id=490250 gene=ENSG00000151892 name=GFRA1 segment=chr10.117885069.117971142.-1 type=IN

Figure 348: CS=13



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R. Mac	tctgaaa	gcatggctgaatactgtgttg-ttttatcagtagtttac	ACAGccAGACA	CATG	caaaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
P. Tro	tctgaaa	gcatggctgaatactgtgttc-ttttatcagtagtttac	ACAGccAGACA	CATG	caaaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
P. Abe	tctgaaa	gcatggctgaatactgtgttc-ttttatcagtagttcac	ACAGccAGACA	CATG	cagaagca--gtcttccttta...49...	gtgaatacaaat	aatgaac
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagtagtttac	ACAGccAGACA	CATG	caaaagca--gtcttcactga...49...	gtgaatacaaat	aatgaac
M. Mus	tctaaaag	gcatggctgaatactgtgttc--tagtcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaagtcttcctt--...45...	gtgagtacaat	aagtggct
R. Nor	tctaacag	gcatggctgaatactgtgttc--tagtcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaaggcttcctt--...45...	gtgagtacaagt	aagtggct
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaaactcttcctt--...48...	gtgattacaat	aatgaagc
O. Cun	tctgaaag	gcatggctgaatactgtgttc-ttttgtagtagtttac	ACAGccAGACA	CATG	caaaagtaaaagtcttcctt--...49...	gtgaatacaaat	aaactaat
C. Fam	taaaaaa	gcatggctgaatactgtgttc-tttttatcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaagtgttcctt--...244...	agtgatagaaga	aatgaac
F. Cat	tgtgaaag	gcatggctgaatactgtgttc-tttttatcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaactcttcctt--...53...	gtggatacaaat	aatgaac
S. Sus	tttaaaag	gcatggctgaatactgtgttc-tttttatcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaagtcttcctt--...55...	ggggatacaat	aatgaac
L. Afr	atctaaaa	gcatggctgaatactgtgttc-tttttatcagtagtttac	ACAGccAGACA	CATG	caaaagtaaaagtcttcctt--...53...	gtgaatacaaat	aatgaac

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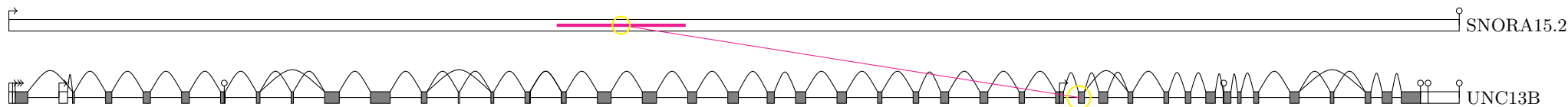
id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

H. Sap	ggactccg	gtatcctgggccc...3175...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
R. Mac	gactccg	ttatcctgggccc...3195...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
P. Tro	ggactccg	gtatcctgggccc...3199...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
P. Abe	ggactccg	gtatcctgggccc...3207...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
C. Jac	ggactccg	atctcctgggcca...2915...	cgctgctggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtccccg
M. Mus	caagttca	gttttcgtgtct...3980...	caccgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtcccag
R. Nor	caagtttg	gtcttcgagtc...3770...	caccgccggtc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	agtcccag
C. Por	ggattccg	acctgtgaaac...2976...	ctgccggtcggagagtcgca	CATGTGTTTtc	CTGT	tttccatttc	ggtcccgt
O. Cun	agattcca	gcctccctggcca...3376...	cactgccggcc--agagtcgca	CATGTGTTTtc	CTGT	tttccaattc	ggtccccg
C. Fam	ggactcca	accactacagcc...3241...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
F. Cat	gcactcca	gcctctccgaca...2896...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
S. Sus	ggactcca	gtctcgcgggcca...2969...	cgctgccggcc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg
L. Afr	gaggttct	gcctccccgggcca...3046...	cgctgccggtc--agagtcaca	CATGTGTTTtc	CTGT	tttccatttc	ggtccccg

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id=51240 gene=ENSG00000155465 name=SLC7A7 segment=chr14.23289001.23292232.-1 type=I5

Figure 349: CS=13



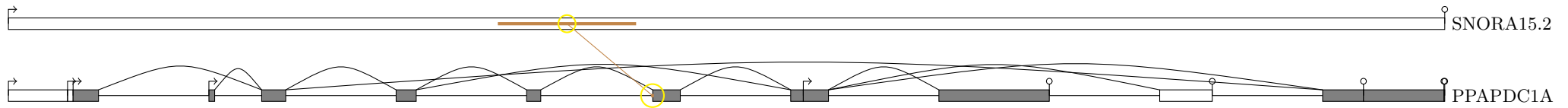
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R. Mac	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagtttacacagc	CAGACACCA	TGCA	aaagca--gtcttcctttaga-... 47...gtgaatacaaat	aaatgaac
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P. Abe	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagtttacacagc	CAGACACCA	TGCA	aaagca--gtcttcctttaga-... 46...gtgaatacaaat	aaatgaac
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagtagtttacacagc	CAGACACCA	TGCA	aaagca--gtcttcacttgaga-... 47...gtgaatacaaat	aaatgaac
R. Nor	tctaacag	gcatggctgaatactgtgttc-ttttagtcagtaatttacacagc	CAGACACCA	TGCA	aaagtaaaagccttcctgtttt---... 43...gtgagtacaagt	aagtggct
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagtagtttacacagc	CAGACACCA	TGCA	aaagtaaaacttcctttta---... 46...gtgattacaat	aatgaagc
O. Cun	tctgaaag	gcatggctgaatactgtgttc-tttttgtagtagtttacacagc	CAGACACCA	TGCA	aaagtaaaagccttcctttgg---... 47...gtgaatacaaat	aaactaat
C. Fam	taaaaaaa	gcatggctgaatactgtgttcctttttatcagtagtttacacagc	CAGACACCA	TGCA	aaagtaaaagccttcctttta---... 242...agtgataaga	aaatgaac
F. Cat	tgtgaaag	gcatggctgaatactgtgttcctttttatcagtaatttacacagc	CAGACACCA	TGCA	aaagtaaaacttcctttta---... 51...gtggatacaaat	aaatgaac
E. Cab	tctaaaag	gcatggctgaatactgtgttt-ttttatcagtagtttacacagc	CAGACACCA	TGCA	aaagtaaaagccttcctttta---... 49...gtggatacaaat	aaatgaac
S. Sus	tttaaaag	gcatggctgaatactgtgttcctttttatcagtaatttacacagc	CAGACACCA	TGCA	aaagtaaaagccttcctttta---... 53...gggatacaaat	aaatgaac
L. Afr	atctaaaa	gcatggctgaatactgtgttcctttttatcagtaatttcacagc	CAGACACCA	TGCA	aaagtaaaagccttcctttta---... 51...gtgaatacaaat	aaatgaaa
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id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

H. Sap	taccagc	gtgagtcacatcat...201...-ccctgttctcctgctgtggc	TGCAG	GTGgTTTg
R. Mac	taccagc	gtgagtcacatcat...207...-ccctgttctcctgctgtggc	TGCAG	GTGgTTTg
P. Tro	taccagc	gtgagtcacatcat...201...-ccctgttctcctgctgtggc	TGCAG	GTGgTTTg
P. Abe	taccagc	gtgagtcacatcat...200...ccctgttctcctgctgtggc	TGCAG	GTGgTTTg
C. Jac	taccagc	gtgagtcacatcat...171...-cccagttctcctgctgtggc	TGCAG	GTGgTTTg
R. Nor	taccagc	gtgagtggtggtg...184...-ctcagtcctcctgctgtggc	TGCAG	GTGgTTTg
C. Por	taccagc	gtgagtcactgg...195...cttcaacctcct-ctctggc	TGCAG	GTGgTTTg
O. Cun	taccagc	gtgagtcacatccc...161...-cccaattctcctgctgtggc	TGCAG	GTGgTTTg
C. Fam	taccagt	gtgagtcacatcct...222...ccccatttctcctgt-ctggc	TGCAG	GTGgTTTg
F. Cat	taccagt	gtgagtcacatcat...214...cccccaattctcctgctg-ggc	TGCAG	GTGgTTTg
E. Cab	tatcctgc	gtgagtcacatcat...202...ccccggttctcctgctg-ggc	TGCAG	GTGgTTTg
S. Sus	taccagc	gtgagttgtcat...93...ccccaccttctcctgctg-ggc	TGCAG	GTGgTTTg
L. Afr	taccagc	gtgagtttttac...199...cccccaatctctt-ctctggc	TGCAG	GTGgTTTg
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id=625529 gene=ENSG00000198722 name=UNC13B segment=chr9.35396600.35396837.1 type=IN

Figure 350: CS=16.9



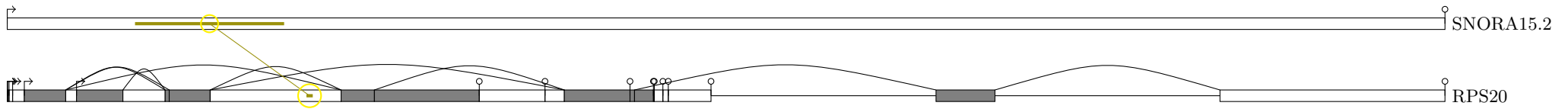
H. Sap	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagca--gtcttccttta...49..	gtgaatacaaat	aaatgaac
R. Mac	tctgaaaa	gcatggctgaatactgtgttg-ttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagca--gtcttccttta...49..	gtgaatacaaat	aaatgaac
P. Tro	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagca--gtcttccttta...49..	gtgaatacaaat	aaatgaac
P. Abe	tctgaaaa	gcatggctgaatactgtgttc-ttttatcagtagttcac	ACAGcc	AGACACCATG	cagaagca--gtcttccttta...49..	gtgaatacaaat	aaatgaac		
C. Jac	tctgaaag	gcatggctgaatactgtgttc-ttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagca--gtcttcactga...49..	gtgaatacaaat	aaatgaac
M. Mus	tctaaaa	gcatggctgaatactgtgttc-ttttagtcagtaatttac	ACAGcc	AGACACCATG	caaaagtaaaagtcttccttt--...45..	gtgagtacaat	aagtggct		
R. Nor	tctaacag	gcatggctgaatactgtgttc-ttttagtcagtaatttac	ACAGcc	AGACACCATG	caaaagtaaaaggcttccttt--...45..	gtgagtacaat	aagtggct		
C. Por	tctagaag	gcatggctgaatactgtgttc-tttaatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagtaaaaacttccttt--...48..	gtgattacaat	aatgaagc
O. Cun	tctgaaag	gcatggctgaatactgtgttc-ttttgcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagtaaaagcttccttcc--...51..	gtgaatacaaat	aaactaat
C. Fam	taaaaaaa	gcatggctgaatactgtgttcctttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagtaaaagtgttccttt--...244..	agtgatagaaga	aatgaac
F. Cat	tgtgaaag	gcatggctgaatactgtgttcctttttatcagtaatttac	ACAGcc	AGACACCATG	caaaagtaaaactcttccttt--...53..	gtggatacaat	aatgaac		
E. Cab	tctaaaa	gcatggctgaatactgtgttt-ttttatcagta	GTTT	ac	ACAGcc	AGACACCATG	caaaagtaaaagtcttccttt--...51..	gtggatacaat	aatgaac
S. Sus	tttaaaag	gcatggctgaatactgtgttcctttttatcagtaatttac	ACAGcc	AGACACCATG	caaaagtaaaagtcttccttt--...55..	ggggatacaat	aatgaac		
L. Afr	atctaaaa	gcatggctgaatactgtgttcctttttatcagtaatttg	ACAGcc	AGACACCATG	caaaagtaaaagtcttccttt--...53..	gtgaatacaat	aatgaac		
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id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7\_64530916\_64531050\_1 type=EN

H. Sap	gtgggaag	gtaagttccaag...2025...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
R. Mac	gtgggaag	gtaagttccaag...2040...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
P. Tro	gtgggaag	gtaagttccaag...2029...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
P. Abe	gtgggaag	gtaagttccaag...2176...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
C. Jac	gtgggaag	gtaagttccaag...1929...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
M. Mus	gtgggaag	gtaagttccaag...1761...	tggtgatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
R. Nor	gtgggaag	gtaagttccaag...1638...	cattctatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
C. Por	gtgggaag	gtaagttccaag...1802...	catctatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
O. Cun	gtgggaag	gtaagttccaag...1915...	ttttatattgaaaatgtccc	TGGTGTCT	TTGTAG	ACctcgcc
C. Fam	gtgggaag	gtaagttccaag...1524...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
F. Cat	gtgggaag	gtaagttccaag...1538...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
E. Cab	gtgggaag	gtaagttccaag...1955...	cattttatattgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
S. Sus	gtgggaag	gtaagttccaag...1957...	cttttatagtgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
L. Afr	gtgggaag	gtaagttccaag...1851...	cattttatagtgaaaatgtc	CATGGTGTCT	TTGTAG	ACctcgcc
	*****	*****		* **** * *****	*****	*****

id=483705 gene=ENSG00000203805 name=PPAPDC1A segment=chr10\_122278409\_122280482\_1 type=IN

Figure 351: CS=16.1



H.Sap	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttaca-...84...gtgaatacaaat	aaatgaac
R.Mac	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tg-ttttatcagtagttaca-...84...gtgaatacaaat	aaatgaac
P.Tro	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttaca-...84...gtgaatacaaat	aaatgaac
P.Abe	tctgaaaa	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttaca-...84...gtgaatacaaat	aaatgaac
C.Jac	tctgaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttaca-...84...gtgaatacaaat	aaatgaac
M.Mus	tctaaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttagtcagtaattaca-...80...gtgagtacaagt	aagtggct
R.Nor	tctaacag	gca	TGGCTGAATA	ctGTGT	tc-ttttagtcagtaattaca-...80...gtgagtacaagt	aagtggct
C.Por	tctagaag	gca	TGGCTGAATA	ctGTGT	tc-tttaatcagtagttaca-...83...gtgattacaagt	aatgaagc
O.Cun	tctgaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttagtcagtagttaca-...83...gtgaatacaaat	aaactaat
C.Fam	taaaaaaa	gca	TGGCTGAATA	ctGTGT	tc-tttttatcagtagttac-...280...agtgatagaaga	aaatgaac
E.Cab	tctaaaag	gca	TGGCTGAATA	ctGTGT	tc-ttttatcagtagttaca-...86...gtggatacaaat	aaatgaac
S.Sus	tttaaaag	gca	TGGCTGAATA	ctGTGT	tc-tttttatcagtaattac-...91...ggggatacaatt	aaatgaac
L.Afr	atctaaaa	gca	TGGCTGAATA	ctGTGT	tc-tttttatcagtaattgc-...89...gtgaatacaaat	aaatgaaa
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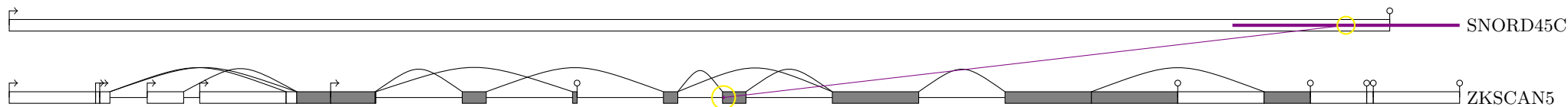
id=108336 gene=ENSG00000207062 name=SNORA15.2 segment=chr7.64530916.64531050.1 type=EN

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R.Mac	ggaaaagg	gtcagtgcatc...	175...	---aataacgggtgata-gttttat	ACGCTATTC	tgAGCCA	gtagaagtgaaggccttaag--...38...tattcctgtag	tgtgtgct
P.Tro	ggaaaagg	gtcagtgcatc...	182...	---agtaacgggtgata-attttat	ACGCTATTC	tgAGCCA	gcagaagtgaaggccttagg--...37...tattcctatag	tgtgtgct
P.Abe	ggaaaagg	gtcagtgcatc...	174...	---agtaacagtgata-attttat	ACGCTATTC	tgAGCCA	gcagaagtgaaggccttaag--...37...tatttctgtag	tgtgtgct
C.Jac	ggagaagg	gtcagtgcatc...	169...	---agcgcgggtgaaa-ctttcat	ACGCTATTC	tgAGCCG	gcagaagtggaggtccttacg--...39...cttttctgtag	tgtgtgct
M.Mus	ggagaagg	gtcagtgcatc...	62...	---gttatagtgatatttcttat	ACGCTATTC	tgAGCCG	atagg--cgaacttggttaaaa...40...cttaaccgcag	tttgtgct
R.Nor	ggaaaagg	gtcagtgcatc...	75...	---attatgggtgataatttcttat	ACGCTATTC	tgAGCCG	atagg--ctaacttggttaaat...41...gttcacctgtag	tttgtgct
C.Por	ggagaagg	gtcagtgcatc...	148...	---aattacaatgata-ggtttat	ACGCTATTC	tgAGCCA	gcagc--tgaggttcttaaac...52...atttcctgtag	tgtgtgct
O.Cun	ggagaagg	gtcagtgcaaaa...	278...	...ttgaattatgggtgataactt-	AATACGCTATTC	tgAGCCA	gctgaaacgggagttgttcg--...38...ttttcctgtag	tgtgtgct
C.Fam	ggaaaagg	gtcagtgcatc...	188...	---aataatgatgata-gttctat	ACGCTATTC	tgAGCCA	gcaggagttaaaattccta--...42...atttcctgtag	tgtgtgct
E.Cab	ggagaagg	gtcagtgcatc...	180...	---aattacgggtgata-gttttat	ACGCTATTC	tgAGCCA	gcagtagttcaatttctca--...40...gtttcccgtag	tgtgtgct
S.Sus	ggagaagg	gtcagtgcatc...	116...	---aactacagtgata-gttttat	ACGCTATTC	tgAGCCA	gcagcgttaagattcgttac--...37...gtttcctgtag	tgtgtgct
L.Afr	ggagaagg	gtcagtgcatc...	190...	---aattatgggtgata-gttctat	ACGCTATTC	tgAGCCA	gcaccagttgacttgtgaa--...41...ttttcctgtag	tgtgtgct
	***	***	**	**	*	***	*	**

id=585478 gene=ENSG0000008988 name=RPS20 segment=chr8.56986328.56986618.-1 type=AN

Figure 352: CS=16.25





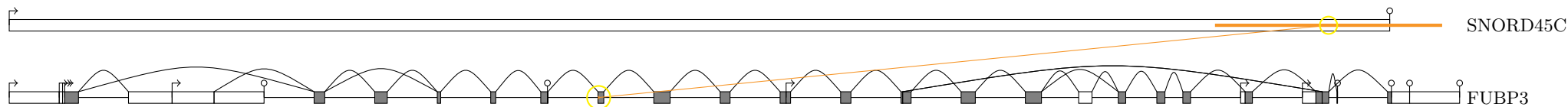
H. Sap	atTTTTg	ggtcaatgatga...30...tattactactttagctctag	AATTac	TCTGAGACctg	aaaattac
R. Mac	atTTTTg	ggtcaatgatga...30...tattaatactttagctctag	AATTac	TCTGAGACctg	aaaattac
P. Tro	atTTTTg	ggtcaatgatga...30...tattactactttagctctag	AATTac	TCTGAGACctg	aaaattac
P. Abe	atTTTTg	ggtcaatgatga...29...ttttactactttagctctag	AATTac	TCTGAGACctg	aaaattac
C. Jac	atTTTTg	ggtcgaatgatga...30...tattactactttagctctag	AATTac	TCTGAGACctg	aaaattac
C. Por	aatTTTTg	ggtcagtgatga...30...tattactgctttagctctag	AATTac	TCTGAGACctg	aaaaatac
O. Cun	ttttttca	ggtcaatgatga...30...tattactactttagctctag	AATTac	TCTGAGACctg	aaaaatac
C. Fam	tggtcctg	ggtcgaatgatga...30...gattactccttagctctag	AATTac	TCTGAGACcTG	AGAatac
F. Cat	atTTTTg	ggtcaatgatga...30...tattactacggttagctctag	AATTac	TCTGAGACctg	aaaaatta
B. Tau	gtTTTTg	ggtcgaatgatga...30...tattactactttagctctag	AATTac	TCTGAGACctg	aagaacac
E. Cab	atTTTTg	ggtcgaatgatga...30...tattactacttagctctag	AATTac	TCTGAGACctg	aaaaatac
S. Sus	tatTTTTg	ggtcgaatgatga...30...tagtactactttagctctag	AATTac	TCTGAGACctg	aaaaatac
L. Afr	atTTTTg	ggtcgaatgatga...30...tattgctaattagctctag	AATTac	TCTGAGACctg	gaaagtaa
	* *	**** *****	* * *	*****	*

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

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R. Mac	ggtcccag	gtgagctggtgc...218...-----gaatttagtggagatctcct	GTTTCAG	AAGTTggt
P. Tro	ggtcccag	gtgagctggtgc...220...-----gaatttagtggagatctcct	GTTTCAG	AAGTTggt
P. Abe	ggtcccag	gtgagctggtgc...220...-----gaatttagtggagatctcct	GTTTCAG	AAGTTggt
C. Jac	ggtcccag	gtgagctggcac...218...-----gaatttagtagagatctcct	GTTTCAG	AAGTTggt
C. Por	ggtcccag	gtgagctggcac...249...-----gaatttagcagagatctcct	GTTTCAG	AAGTTggt
O. Cun	ggtcccag	gtgagctggtgc...248...-----gaatttagtggagcgtctccc	GTTTCAG	AAGTTgat
C. Fam	ggtcccag	gtgagccggcat...232...gaatgggaatttagtggcaa	TCTCA	GTTTCAG
F. Cat	ggtcccag	gtgagccggcgt...240...-----gaatttagtggagatctcat	GTTTCAG	AAGTTggt
B. Tau	ggtcccag	gtgagccggcgt...187...-----gagatttatggtgatctcgt	GTTTCAG	AAGTTggt
E. Cab	ggtcccag	gtgagctgacgt...239...-----gaatttagtggagatctcat	GTTTCAG	AAGTTggt
S. Sus	ggtcccag	gtgagccggagt...210...-----ttcagcggcggcaatctcgt	GTTTCAG	AAGTTggt
L. Afr	ggtcccag	gtgagctggtgt...251...-----gaatttagtggagatctcat	GTTTCAG	AAGTTggt
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id=1016 gene=ENSG00000196652 name=ZKSCAN5 segment=chr7\_99117533\_99117791.1 type=IN

Figure 353: CS=10.14



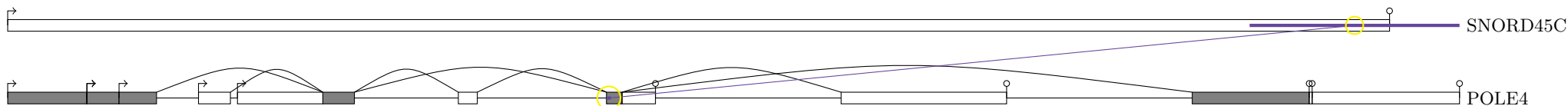
H.Sap	atTTTTg	ggtcaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
R.Mac	atTTTTg	ggtcaatgatga...28...	attattaactttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
P.Tro	atTTTTg	ggtcaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
C.Jac	atTTTTg	ggtcgaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
M.Mus	aagattcg	ggtcaatgatga...29...	ttataaaccactttagctct	AGAATTa	CTCTGAGAcctg	aaagaaaa
R.Nor	agaattcg	ggtcaatgatga...29...	ttataaaccactttagctct	AGAATTa	CTCTGAGAcctg	aaaaaaaa
C.Por	aatTTTTg	ggtcagtgatga...28...	attattactgctttagctct	AGAATTa	CTCTGAGAcctg	aaaaatc
O.Cun	tTTTTtca	ggtcaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aaaaatc
C.Fam	tggtcttg	ggtcgaatgatga...28...	gtgattactcctcagctct	AGAATTa	CTCTGAGAcctg	agaaatc
B.Tau	gtTTTTg	ggtcgaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aagaacac
E.Cab	atTTTTg	ggtcgaatgatga...28...	attattactactcagctct	AGAATTa	CTCTGAGAcctg	aaaaatc
O.Avi	gtTTTTg	ggtcgaatgatga...28...	attattactactttagctct	AGAATTa	CTCTGAGAcctg	aagaatc
L.Afr	atTTTTg	ggtcgaatgatga...28...	attattgctaaatgctct	AGAATTa	CTCTGAGAcctg	gaaagtaa
	*	**** *****	*	*	*****	*

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

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R.Mac	tgc	ttcag	gtaagggtttt-...1221...	cccctcatcttcttgattct	TCTTatAG	AGAGTTCt
P.Tro	tgc	ttcag	gtaagggtttt-...1221...	cccctcatcttcttgattct	TCTTatAG	AGAGTTCt
C.Jac	tgc	ttcag	gtaagggtttt-...1233...	cccctcatcttcttgattct	TCTTatAG	AGAGTTCt
M.Mus	tgc	ctcag	gtaagggtact-...1232...	cacctcatcttcttgattct	TCTTatAG	AGAGTTCt
R.Nor	tgc	ctcag	gtaa-ggctact-...1158...	cacctcatcttcttgattct	TCTTatAG	AGAGTTCt
C.Por	tgc	ttcag	gtaagatttct-...1012...	cacctcatcttcttgattct	TCTTgtAG	AGAGTTCt
O.Cun	tgc	ttcag	gtaagatttcc-...1171...	cacctcatcttcttgattct	TCTTgtAG	AGAGTTCt
C.Fam	tgc	ttcag	gtaaggcttct-...1219...	cacctcatcttcttgattct	TCTTatAG	AGAGTTCt
B.Tau	tgc	gtcag	gtaagggtgct-...1353...	cacctcgtcttcttgattct	TCTTgtAG	AGAGTTCt
E.Cab	tgc	ttcag	gtaagggtttt-...1235...	cacctcatcttcttgattct	TCTTatAG	AGAGTTCt
O.Avi	tgc	ctcag	gtaagggtgat-...1380...	cacctcgtcttcttgattct	TCTTgtAG	AGAGTTCt
L.Afr	tgc	ttcag	gtaagggtttt-...1236...	cacctcatcttcttgattct	TCTTatAG	AGAGTTCt
	***	****	**** *	*	**** *****	*****

id=751301 gene=ENSG00000107164 name=FUBP3 segment=chr9\_133488415\_133489674.1 type=IN

Figure 354: CS=12.35



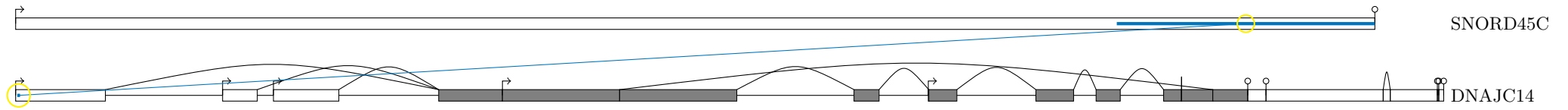
H.Sap	atTTTTTg	ggtcaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaattac
R.Mac	atTTTTTg	ggtcaatgatga...31...attaatacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaattac
P.Tro	atTTTTTg	ggtcaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaattac
C.Jac	atTTTTTg	ggtcgaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaattac
C.Por	aatTTTTg	ggtcagtgatga...31...attactgcttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaaatac
O.Cun	tTTTTTca	ggtcaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaaatac
C.Fam	tggTcttg	ggtcgaatgatga...31...attactccttcagctctaga	ATTAcTCTGAGAC	---ctg	agaaatac
F.Cat	atTTTTTg	ggtcaatgatga...31...attactacgttagctctaga	ATTAcTCTGAGAC	---ctg	aaaaatac
B.Tau	gtTTTTTg	ggtcgaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGACcTGAAG	---	aacac
E.Cab	atTTTTTg	ggtcgaatgatga...31...attactacttcagctctaga	ATTAcTCTGAGAC	---ctg	aaaaatac
S.Sus	tatTTTTg	ggtcgaatgatga...31...agtactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aaaaatac
O.Avi	gtTTTTTg	ggtcgaatgatga...31...attactacttttagctctaga	ATTAcTCTGAGAC	---ctg	aagaatac
L.Afr	atTTTTTg	ggtcgaatgatga...31...attgctaatttagctctaga	ATTAcTCTGAGACcTGAAG	aa	GTAa----
	* *	**** * * * * *	*****		*

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1.76252757.76252835.1 type=EN

H.Sap	tcacctgg	gtaagatttcgt...309...-----caggtgtctcttttcctt	gtTTTCAG	ATAATgca
R.Mac	tcacctgt	gtaagctttcat...310...-----caggtgtctctttgcctt	gtTTTCAG	ATAATgca
P.Tro	tcacctgt	gtaagatttcgt...306...-----caggtatctctttcctt	gtTTTCAG	ATAATgca
C.Jac	tgacctgt	gtaagattttat...308...-----caggtgttcctttacgtt	atTTTCAG	ATAATgca
C.Por	gcacatgt	ggagactttgat...288...-----aaggtttgcccttaccat	gtTTTCAG	ATAATgca
O.Cun	gcacatgt	gtaagctttcat...287...-----caggtatctctttgcctt	gtTTTCAG	ATAATgca
C.Fam	gtacatgt	gaaagattttgt...276...-----caaaggtccctttaccat	gtTTTCAG	ATAATgca
F.Cat	gtacatgt	gtaaacttttgt...275...-----caggtgtccctttacatt	gtTTTCAG	ATAATgca
B.Tau	aaacgtgt	gtaaactcatat...387...----gtcagtcagatgtccctt	taCTTTGtTTTCAG	ATAATgca
E.Cab	acacatgt	gtaagctttcat...278...-----caggtgtccctttacctt	gtTTTCAG	ATAATgca
S.Sus	gaatgtgt	gtaaattttcgt...262...-----caggtgtccctttacctt	gtTTTCAG	ATAATgca
O.Avi	gaacatgt	gtaaacttatat...390...-----cagatgtccctttactct	gtTTTCAG	ATAATgca
L.Afr	aaacatgt	gtaagctttcac...497...cggagttagtcagtgtcct-	TTACTTTGtTTTCAG	ATAATgca
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id=288538 gene=ENSG00000115350 name=POLE4 segment=chr2.75186884.75187231.1 type=IN

Figure 355: CS=15.34



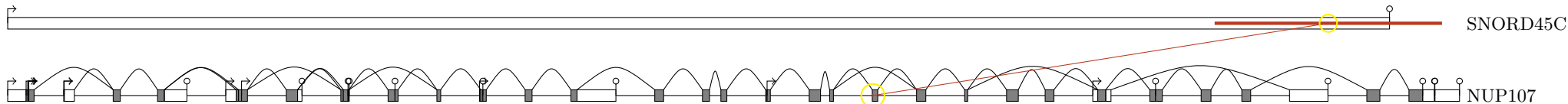
H. Sap	atTTTTTg	ggTcaatgatgagttggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGA	cctg	aaaattac
R. Mac	atTTTTTg	ggTcaatgatgagctggcatgtattctgaatctaaagttgattat-taatacttta	GCTCTagAATTaCTCTGAGAcctg	aaaattac	aaaattac
P. Tro	atTTTTTg	ggTcaatgatgagttggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGA	cctg	aaaattac
C. Jac	atTTTTTg	ggTc gatgatgagctggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGAcctg	aaaattac	aaaattac
M. Mus	aagattcg	ggTcaatgatgagctggcatgtattctgaatctaaagttgattataaaccacttta	GCTCTagAATTaCTCTGAGAcctg	aaagaaaa	aaagaaaa
C. Por	aatTTTTg	ggTcagtgatgagatggcatgtattctgaatctaaagttgattat-tactgcttta	GCTCTagAATTaCTCTGAGAcctg	aaaaatac	aaaaatac
O. Cun	tTTTTTca	ggTcaatgatgagctggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGAcctg	aaaaatac	aaaaatac
C. Fam	tggTcttg	ggTc gatgatgagctggcatgtattctgaatctgcagttggTgat-tactccttca	GCTCTagAATTaCTCTGAGAcctg	agaaatac	agaaatac
F. Cat	atTTTTTg	ggTcaatgatgagctggcatgtattctgaatcgaagttgattat-tactacgtta	GCTCTagAATTaCTCTGAGAcctg	aaaaatta	aaaaatta
B. Tau	gtTTTTTg	ggTc gatgatgagctggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGAcctg	aagaacac	aagaacac
E. Cab	atTTTTTg	ggTc gatgatgagcggcatgtattctgaatctaaagttgattat-tactacttca	GCTCTagAATTaCTCTGAGAcctg	aaaaatac	aaaaatac
S. Sus	tatTTTTg	ggTc gatgatgagctggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGAcctg	aaaaatac	aaaaatac
O. Avi	gtTTTTTg	ggTc gatgatgagctggcatgtattctgaatctaaagttgattat-tactacttta	GCTCTagAATTaCTCTGAGAcctg	aagaatac	aagaatac
L. Afr	atTTTTTg	ggTc gatgatgagttggcatgtattctgaatctaaagttgattat-tgctaaatta	GCTCTagAATTaCTCTGAGAcctg	gaaagtaa	gaaagtaa
	*	**** *	*****	*	*****

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

H. Sap	cacTTTCC	AGAGAATTGGAGT	attgtctctctggagaaccgg...338...	gggcggatccag	gtataagg-
R. Mac	cacttccC	AGAGAATTGGAGT	attgtctctctggagaccgg...344...	gggaggatccag	gtataagg-
P. Tro	cacTTTCC	AGAGAATTGGAGT	attgtctctctggagaaccgg...338...	gggcggatccag	gtataagg-
C. Jac	cacttccC	AGAGAATTGGAGT	attgtctctctcaagaaccgg...358...	gggcggatccag	gtcgtggg-
M. Mus	cacttccC	AGAGAATTGGAGT	attgtctctctggggaaccgg...329...	gggcggatccag	ggcgtgga-
C. Por	cacttccC	AGAGAATTGGAGT	attgtctctctggagatctgg...346...	gggcgggcccgg	ggcgtgga-
O. Cun	cacttccC	AGAGAATTGGAGT	attgtctctctggagaaccgg...351...	gggcggatccaa	gccgtgag-
C. Fam	cacttccC	AGAGAATTGGAGT	attgtctctcgacagaccgg...317...	ggcgggatccg	gccgtggg-
F. Cat	cacttccC	AGAGAATTGGAGT	attgtctctctggagaaccctg...352...	gggtgggtctgg	gccgtggg-
B. Tau	cacttccC	AGAGAATTGGAGT	attgtctctctggagaacttg...347...	gggcggatccgg	gccgtggg-
E. Cab	cacttccC	AGAGAATTGGAGT	attgtctctctggagaacttg...351...	gggcagatctag	gccgtggg-
S. Sus	cacttccC	AGAGAATTGGAGT	attgtctctctggagaacttg...365...	gggcggatccgg	gccgtggg-
O. Avi	cacttccC	AGAGAATTGGAGT	attgtctctctggagaacttg...348...	gggcggatccgg	gccgtggg-
L. Afr	cacgtccC	AGAGAATTGGAGT	attgtctctctggagaacttg...364...	gggcggatccgg	gccgtggg-
	*** **	*****	* * * *	** *	*

id=484825 gene=ENSG00000135392 name=DNAJC14 segment=chr12\_56223960\_56224342.-1 type=E5

Figure 356: CS=11.9



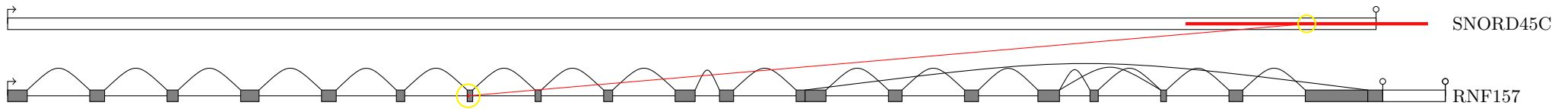
H.Sap	atTTTTTg	ggTcaatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
R.Mac	atTTTTTg	ggTcaatgatga...28...	attattaactcttttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
P.Tro	atTTTTTg	ggTcaatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
P.Abe	atTTTTTg	ggTcaatgatga...27...	gattttactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
C.Jac	atTTTTTg	ggTc gatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaattac
M.Mus	aagattcg	ggTcaatgatga...29...	ttataaaccacttttagctct	AGAATTa	CTCTGAGAcctg	aaagaaaa
R.Nor	agaattcg	ggTcaatgatga...29...	ttataaaccacttttagctct	AGAATTa	CTCTGAGAcctg	aaaaaaaa
C.Por	aatTTTTg	ggTcagtgatga...28...	attattactgcttttagctct	AGAATTa	CTCTGAGAcctg	aaaaatac
O.Cun	tTTTTTca	ggTcaatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaaatac
C.Fam	tggtcctg	ggTc gatgatga...28...	gtgattactccttcagctct	AGAATTa	CTCTGAGAcctg	agaaatac
F.Cat	atTTTTTg	ggTcaatgatga...28...	attattactactgcttagctct	AGAATTa	CTCTGAGAcctg	aaaaatta
B.Tau	gtTTTTTg	ggTc gatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aagaacac
E.Cab	atTTTTTg	ggTc gatgatga...28...	attattactacttcagctct	AGAATTa	CTCTGAGAcctg	aaaaatac
S.Sus	tatTTTTg	ggTc gatgatga...28...	attagtactacttttagctct	AGAATTa	CTCTGAGAcctg	aaaaatac
O.Avi	gtTTTTTg	ggTc gatgatga...28...	attattactacttttagctct	AGAATTa	CTCTGAGAcctg	aagaatac
L.Afr	atTTTTTg	ggTc gatgatga...28...	attattgctaaatgctct	AGAATTa	CTCTGAGAcctg	gaaagtaa
	*	**** *****		* *****		*

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

H.Sap	acaaaaag	gTaaatgttaat...3536...	--tggaaaat-taaaaactttt	TTCAG	AGAGTTCt
R.Mac	ataaaaaag	gTaaatgttaat...3520...	--tggaaaat-taaaaactttt	TTCAG	AGAGTTCt
P.Tro	ataaaaaag	gTaaatgttaat...3529...	--tggaaaat-taaaaactttt	TTCAG	AGAGTTCt
P.Abe	ataaaaaag	gTaaatgttaat...3257...	--tggaaaat-taaaaactttt	TTCAG	AGAGTTCt
C.Jac	ataaaaaag	gTaaatgttaat...3833...	--tggaaaat-ttaaaaattctt	TTCAG	AGAGTTCt
M.Mus	ataaaaaag	gTaaatgttaac...3746...	tatgg-caatgt--aaaactttt	TTCAG	AGAGTTCt
R.Nor	ataagaag	gTaaatgttaac...3383...	aatgg-cgatgt--aaacctctt	TTCAG	AGAGTTCt
C.Por	ataaaaaag	gTaaatgttagat...1186...	--cagaaaatgtaaaaaaat-tt	TTCAG	AGAGTTCt
O.Cun	ataaaaaag	gTaaatgttaat...1897...	--ggaaaatgtaacaaatatt	TTCAG	AGAGTTCt
C.Fam	ataaaaaag	gTaaatattaat...3407...	-atagaaaat--aacaatttt	TTCAG	AGAGTTTt
F.Cat	ataaaaaag	gTaaatattggt...4848...	tatggaaaatgt--aaacat-tt	TTCAG	AGAGTTCt
B.Tau	ataaaaaag	gTaaatattaat...3801...	tatagaaaatgt--aaaaat-tt	TTCAG	AGAGTTCt
E.Cab	ataaaaaag	gTaaatattaaa...3258...	tatgaaaatgt--aaaaat-tt	TTCAG	AGAGTTCt
S.Sus	ataaaaaag	gTaaatattaat...3765...	tacagaaaatgt--aaaaat-tt	TTCAG	AGAGTTCt
O.Avi	ataaaaaag	gTaaatattaat...3848...	tacagaaaatgt--gaaaat-tt	TTCAG	AGAGTTCt
L.Afr	ataaaaaag	gTaaatattagt...2221...	tat-gaaaatgta-aaatat-tt	TTCAG	AGAGTTCt
	* * * *	**** *		** *	* *****

id=37970 gene=ENSG00000111581 name=NUP107 segment=chr12\_69115933\_69119506.1 type=IN

Figure 357: CS=17.28



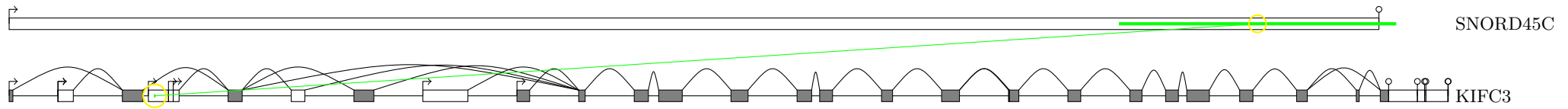
H.Sap	atTTTTTg	ggtcaatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaattac
R.Mac	atTTTTTg	ggtcaatgatga...28..	attat-taatacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaattac
P.Tro	atTTTTTg	ggtcaatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaattac
C.Jac	atTTTTTg	ggtcgatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaattac
M.Mus	aagattcg	ggtcaatgatga...29..	-ttataaaccacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaagaaaa
C.Por	aatTTTTg	ggtcagtgatga...28..	attat-tactgcttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaataac
O.Cun	tTTTTTca	ggtcaatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	ccTGAA	-----	---aaatac
C.Fam	tggTcttg	ggtcgatgatga...28..	gtgat-tactccttcagctct	AGAATt	ACTCTGAGA	ccTGAGAAATAc	-----	-----
F.Cat	atTTTTTg	ggtcaatgatga...28..	attat-tactactgttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaaatta
B.Tau	gtTTTTTg	ggtcgatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aagaacac
E.Cab	atTTTTTg	ggtcgatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaaatac
S.Sus	tatTTTTg	ggtcgatgatga...28..	attag-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aaaaatac
O.Avi	gtTTTTTg	ggtcgatgatga...28..	attat-tactacttttagctct	AGAATt	ACTCTGAGA	-----	cctg	aagaatac
L.Afr	atTTTTTg	ggtcgatgatga...28..	attat-tgctaatttagctct	AGAATt	ACTCTGAGA	-----	cctg	gaaagtaa
	*	****	*****	*	*	*****	*****	

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

H.Sap	aggagacg	gtaggggcgatt-...877..	-----	cactcacgtgcctttgtttc	-----	TTCAG	AGTATTTt
R.Mac	aggagacg	gtaggggcgatt-...873..	-----	cactcacatgcctttgtttc	-----	TTCAG	AGTATTTt
P.Tro	aggagacg	gtaggggcgatt-...879..	-----	cactcacgtgcctttgtttc	-----	TTCAG	AGTATTTt
C.Jac	aggagacg	gtaggggcgatt-...1192..	-----	cactcacatgcctttgtttc	-----	TTCAG	AGTATTTt
M.Mus	aggagatg	gtaaggagactt-...225..	---	cttcagccttgcct--tttc	-----	TTCAG	AGTATTTt
C.Por	aggagatg	gtaggggcagtt-...252..	---	tcacc-tttgcctttgtttc	-----	TTCAG	AGTATTTt
O.Cun	aggagacg	gtaggggcgatt-...189..	---	ggcctccttcacgcggtgcc	TTCGtt	TCITTCAG	AGTATTTt
C.Fam	aggagatg	gtaatggcacct-...235..	cctttt	catccgtatgcctt-TATTTt	TTTgt	TTTTTCAG	AGTATTTt
F.Cat	aggagacg	gtaatgggcgctt-...265..	---	catccgcgtgcctttatTTT	-----	TTCAG	AGTATTTt
B.Tau	aggcgatg	gtac-ggtgcttc...249..	---	catccgtgtgcctttctttc	-----	TTCAG	AGTATTTt
E.Cab	aggagacg	gtatggcgcttt-...233..	---	cttccatgtgcctttatTTT	-----	TTCAG	AGTATTTt
S.Sus	aggagacg	gtacgggcgcct-...216..	---	catccctgtgccttcctttc	-----	TTCAG	AGTATTTt
O.Avi	aggTgatg	gtacgggtgctt-...246..	---	catccatgtgcctttctttc	-----	TTCAG	AGTATTTt
L.Afr	aggcgatg	gtaggggtgatt-...275..	---	catccacgtgcctttctttc	-----	TTCAG	AGTATTTt
	*** ** *	*** * *		*	*	*****	*****

id=352938 gene=ENSG00000141576 name=RNF157 segment=chr17\_74161627\_74162541.-1 type=IN

Figure 358: CS=22.4



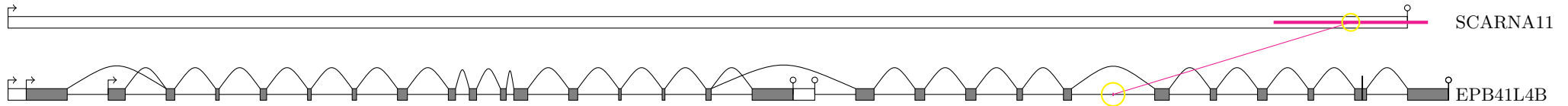
H. Sap	atTTTTg	ggtcaatgatgagttggcatgtattctgaatctaaagttgattatt-actacttta	GCTCT	agAATTAC	CTGAgacctg	aaaattac
R. Mac	atTTTTg	ggtcaatgatgagctggcatgtattctgaatctaaagttgattatt-aatacttta	GCTCT	agAATTAC	CTGAgacctg	aaaattac
P. Tro	atTTTTg	ggtcaatgatgagttggcatgtattctgaatctaaagttgattatt-actacttta	GCTCT	agAATTAC	CTGAgacctg	aaaattac
M. Mus	aagattcg	ggtcaatgatgagctggcatgtattctgaatctaaagttgattataaacacttta	GCTCT	agAATTAC	CTGAgacctg	aaagaaaa
R. Nor	agaattcg	ggtcaatgatgagctggcatgtattctgaatctaaagttgattaataaccacttta	GCTCT	agAATTAC	CTGAgacccg	aaaaaaaa
C. Por	aatTTTTg	ggtcagtgatgagatggcatgtattctgaatctaaagttgattatt-actgcttta	GCTCT	agAATTAC	CTGAgacctg	aaaaatac
O. Cun	tTTTTca	ggtcaatgatgagctggcatgtattctgaatctaaagttgattatt-actac	TTTAGCTCT	agAATTAC	CTGAgacctg	aaaaatac
C. Fam	tggctctg	ggtcagtgatgagctggcatgtattctgaatctgcagttgggtgatt-actccttca	GCTCT	agAATTAC	CTGAgacctg	agaaatac
F. Cat	atTTTTg	ggtcaatgatgagctggcatgtattctgaatcgaagttgattatt-actagctta	GCTCT	agAATTAC	CTGAgacctg	aaaaatta
B. Tau	gtTTTTg	ggtcagtgatgagctggcatgtattctgaatctaaagttgattatt-actacttta	GCTCT	agAATTAC	CTGAgacctg	aagaacac
E. Cab	atTTTTg	ggtcagtgatgagcggcatgtattctgaatctaaagttgattatt-actacttca	GCTCT	agAATTAC	CTGAgacctg	aaaaatac
S. Sus	tatTTTTg	ggtcagtgatgagctggcatgtattctgaatctaaagttgattagt-actacttta	GCTCT	agAATTAC	CTGAgacctg	aaaaatac
O. Avi	gtTTTTg	ggtcagtgatgagctggcatgtattctgaatctaaagttgattatt-actacttta	GCTCT	agAATTAC	CTGAgacctg	aagaatac
L. Afr	atTTTTg	ggtcagtgatgagttggcatgtattctgaatctaaagttgattatt-gctaaatta	GCTCT	agAATTAC	CTGAgacctg	gaaagtaa
	*	**** *	*****	*****	*****	*

id=706949 gene=ENSG00000206620 name=SNORD45C segment=chr1\_76252757\_76252835.1 type=EN

H. Sap	cagatacc	agagatgagactgaggTTTTctca-cggttcctaagcccagtcagagctg	TCAGGTAATT	acAGGGT	---aacga-cagcccag---agccag-...107...-acagagcagggg	gaatcagc-
R. Mac	cagatacc	agagatgagactgaggTTTTctca-cggttcctaagcccagtcagagctg	TCAGGTAATT	acAGGGT	---aacga-cagcccag---agccgg-...106...-acagagcagggg	g-atcagct
P. Tro	cagatacc	agagatgagactgaggTTTTctca-cggttcctaagcccagtcagagctg	TCAGGTAATT	acAGGGT	---aacga-cagcccag---agccgg-...106...-acagagcagggg	gaatcagc-
M. Mus	cagatccc	agagatgagactgaggcttctcg--cggttcctaactcagtcagagctg	TCAGGTAATT	acAGGGT	---agccag-cagcccag---agccgg-...96...catagcaccgcg	cat-cagc-
R. Nor	cagatccc	agagatgagactgaggcttctcg--cggttcctaactcagtcagagctg	TCAGGTAATT	acAGGGT	---agccag-cagcccag---agccgg-...104...cgtagcagcagcg	cat-cagc-
C. Por	cagatact	agagatgagcctaaggTTTTctcg--aggttcctaactcagtc-gagctg	TCAGGTAATT	acAGGGT	agcagtcagg-cagctc---agcg---...77...-aaggcgcagggg	gaatcgac-
O. Cun	cagatcgc	agagatgagactgaggTTTTctcgcccggTTcct----cagtcagagctg	TCAGGTAATT	acAGGGTAAG	---cgg-cagcccagcagcagggcg-...104...-aaaggg-aggaa	ggacaacca
C. Fam	cagatagc	agcagtgaggccgggctctctcg-caagttcctaggctcagtcagggctg	TCAGGTAATT	acAGGGT	---g-cgg-cagcccag--ggccgg-...411...-gccagcggggg	gcgggagg-
F. Cat	cagatagc	agtgatgaggccgggcttctcg-caagttcctaggctcagtcagagctg	TCAGGTAATT	acAGGGT	---gccgg-cagcccag--ggccg-...114...-acaacgcgccc	aaaccagc-
B. Tau	cagatacc	aacgatgagactgggTTTTctcg-caagttcctagactcagtcagagctg	TCAGGTAATT	acAGGGT	---a-cgg-cagcccag--agccgg-...112...-gcag-aacgcgg	cggacagcc
E. Cab	cagatacc	agagatgagactgggcttctcg-caagttcctaggctcagtcagagctg	TCAGGTAATT	acAGGGT	---cggcggcagcccag--agcc-...101...-ctagagcagagg	gagaagcc-
S. Sus	cagatacc	agcagtgagactgggTTTTctcg-caagttcctaggctcagtcagagctg	TCAGGTAATT	acAGGGT	---accg--cagcccag--cgccgg-...102...-gcagtgagggaga	acaccgcc-
O. Avi	cagatacc	aacgatgagactgggTTTTctcg-caagttcctagactcagtcagagctg	TCAGGTAATT	acAGGGT	---a-cgg-cagcccag--agccgg-...111...cgggg-aacgcgg	cggacagc-
L. Afr	cagatacc	agagatgagactgaggTTTTctca-cagttcctaactcagtcagagctg	TCAGGTAATT	acAGGGT	---aacagg-cagcca---agccgc-...93...-gtagagcagggg	aaaacc-
	****	* **** *	*****	*****	*****	*** *

id=530387 gene=ENSG00000140859 name=KIFC3 segment=chr16\_57831725\_57831929.-1 type=AN

Figure 359: CS=10.92



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R.Mac	ctctcttt	ttgtcctggcct...84...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acag-t	ttaagatg
P.Tro	ctctcttt	ttgtcctggcct...83...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagatg
P.Abe	tctctttt	ttgtcctggcct...92...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagatg
C.Jac	tccctccc	ttgtcctggcct...84...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagatg
M.Mus	caaaaatc	ttgtcctgtgcc...83...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaggaga
R.Nor	aaacaatc	ttgtcctgtgcc...83...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ctaggtgg
C.Por	gtctcttt	gtgtcctggcct...84...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagatg
O.Cun	ccctgtct	ctgtcctggcct...77...ggccgtcctaagaatggggc	TGGTTc	TTAAAGGCACG	GAGG	acaa-t
C.Fam	ttcttttt	ttttttttttt...99...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaatt	ttaagata
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B.Tau	tcttcttt	ttgtcctggcct...85...-----cctgagaatagggtggctc	TTAAAGGCACG	GAGG	acag-t	ttaagatg
S.Sus	tctgtttc	ttgtcctggcct...87...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagacg
O.Avi	ttctcttc	ttgtcctggcct...85...-----cctgagaatagggtggctc	TTAAAGGCACG	GAGG	acag-t	ttaagatg
L.Afr	cacgtctc	ttgtcctggcct...87...-----cctaagaatagggtggctc	TTAAAGGCACG	GAGG	acaa-t	ttaagatg
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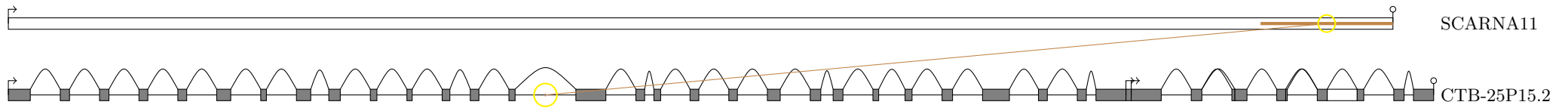
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P.Abe	tatagttt	gtgagttctgta...4932...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
C.Jac	tatagttt	gtgagttctgta...4671...tatttttgaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
M.Mus	tatagttt	gtgagttctgca...4322...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
R.Nor	tatagttt	gtgagttctgca...3894...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
C.Por	tatagttt	gtgagttctgta...2888...tataattgtaatgaacagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
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C.Fam	tacagttt	gtgagttctgta...4932...tattgtcgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
F.Cat	tacagttt	gtgagttttgta...4932...tattgttgaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
B.Tau	tacagttt	gtgagttccatg...4932...tattgttgaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
S.Sus	tacagttt	gtgagttctgtg...4932...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	caaccgcag	tgacgaag
O.Avi	tacagttt	gtgagttccatg...4932...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
L.Afr	tacagttt	gtgagttctgta...4932...tattattgtaatgagcagag	CTTCa	TGTGCTTTTAG	taaccgcag	tgatgaag
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Figure 360: CS=11.7





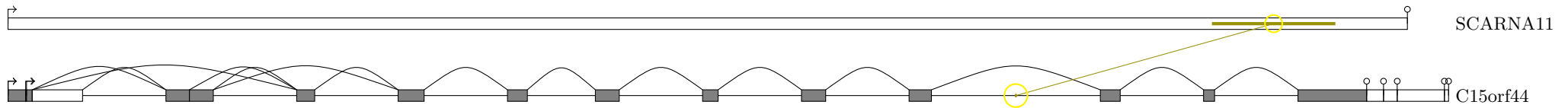
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R.Mac	ctctcttt	ttgtcctggcct...83...tcctaagaatagggctggct	CTTAA	agGCACGAGAGGA	caGTT	TAAGA-tg
P.Abe	tctctttt	ttgtcctggcct...91...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaagatg
C.Jac	tccctccc	ttgtcctggcct...83...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaagatg
M.Mus	caaaaatc	ttgtcctgtgcc...82...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaggaga
R.Nor	aaacaatc	ttgtcctgtgcc...82...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ctaggtgg
C.Por	gtctcttt	gtgtcctggcct...83...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaagatg
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C.Fam	ttcttttt	ttttttttttt...98...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaat	ttaagata
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E.Cab	ctctcttc	ttgtcctggcct...88...tcctgagaataggtctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaaaatg
S.Sus	tcctgttc	ttgtcctggcct...86...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaagacg
O.Avi	ttctcttc	ttgtcctggcct...84...tcctgagaatagggctggct	CTTAA	agGCACGAGAGGA	caGTT	TAAGAT-g
L.Afr	cacgcctc	ttgtcctggcct...86...tcctaagaatagggctggct	CTTAA	agGCACGAGAGG	caaa-t	ttaagatg
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id=11828 gene=ENSG00000251898 name=SCARNA11 segment=chr12.6690640.6690775.-1 type=EN

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P.Abe	gcaaaaag	gtagttattga...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
C.Jac	gcaaaaag	gtagttattga...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
M.Mus	acaaaaag	gtagttgttga...4941...-----gcatggcacatctttcaaca	TTTTTC	atGTGCTTAG	Gtgcaccc
R.Nor	acaaaaag	gtagttgttga...4941...-----gcatggcacatctttcaaca	TTTTTC	atGTGCTTAG	Gtgcaccc
C.Por	acagaaag	gtagttgttga...4941...-----gcatggcactctttcaaca	TTTTTC	gtGTGCTTAG	Gtacatcc
O.Cun	acagaaag	gtagctattaa...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtccatcc
C.Fam	acaaaaag	gtagttattga...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
B.Tau	acaaaaag	gtagttcctga...4929...tttttttttagcatggca	CATTTT	AAACatTTTTCaTGTGCTTAG	Gtacatcc
E.Cab	acagaaag	gtagttgttga...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
S.Sus	acagaaag	gtagttattga...4941...-----ccatggcacatctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
O.Avi	acaaaaag	gtagttcctga...4929...tttttttttagcatggca	CATTTT	AAACatTTTTCaTGTGCTTAG	Gtacatcc
L.Afr	acagaaag	gtagttattga...4941...-----gcatggcactctttcaaca	TTTTTC	atGTGCTTAG	Gtacatcc
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id=519079 gene=ENSG00000254996 name=CTB-25P15.2 segment=chr5.13986646.139876104.1 type=IN

Figure 361: CS=10.92



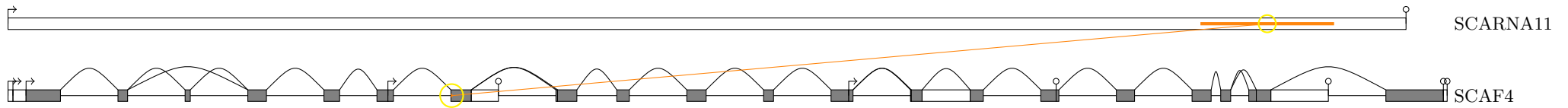
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R.Mac	ctctcttt	ttgtcctggcct...78...ggccgtcctaagaatggggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacag-t	ttaagatg
P.Tro	ctctcttt	ttgtcctggcct...77...ggccgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaagatg
P.Abe	tctctttt	ttgtcctggcct...86...ggccgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaagatg
M.Mus	caaaaatc	ttgtcctgtgcc...77...ggctgtcctaagaatggggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaggaga
R.Nor	aaacaatc	ttgtcctgtgcc...77...ggctgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ctaggtgg
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F.Cat	tctgtcct	ttgtccttggcct...81...agccgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-c	ttaagatg
B.Tau	tcttcttt	ttgtcctggcct...79...ggccgtcctgagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacag-t	ttaagatg
E.Cab	ctctcttc	ttgtcctggcct...83...ggccgtcctgagaataggtc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaaaatg
S.Sus	tcctgttc	ttgtcctggcct...81...ggctgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaagacg
O.Avi	ttctcttc	ttgtcctggcct...79...ggccgtcctgagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacag-t	ttaagatg
L.Afr	cacgcttc	ttgtcctggcct...81...ggctgtcctaagaatagggc	<b>TGGCTCTTAAAGG</b>	cacgagaggacaa-t	ttaagatg
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R.Mac	tatttcag	gtataatccaga...4949...-tca-tttcaagaatgtctttt	<b>CTTTAAG</b>	AtGCTAaa
P.Tro	tatttcag	gtataatccaga...4949...-tca-tttcaagaatgtctttt	<b>CTTTAAG</b>	AtGCTAaa
P.Abe	tatttcag	gtataatccaga...4949...-tca-tttcaagaatgtctttt	<b>CTTTAAG</b>	AtGCTAaa
M.Mus	catctcag	gtataatgcaga...2040...-tgtcttcaaaatgtctttt	<b>TCTTTAAG</b>	AtGCTAaa
R.Nor	catttcag	gtacaaccgga...1925...--cattttcaaaactatctttt	<b>TCTTTAAG</b>	AtGCTAaa
C.Por	tatttcag	gtacagcccaga...4949...-tca-tttcaagaatgtctttt	<b>TCTTTAAG</b>	AtGCTAaa
F.Cat	tatttcag	gtataaccgga...4949...--ca-tttcaagaatgtctttt	<b>CTTTAAG</b>	AtGCTAaa
B.Tau	aatttcag	gtataaccgga...4949...--ca-tttcaagcttgtttttt	<b>CTTTAAG</b>	AtGCTAaa
E.Cab	tatttcag	gtatcaccgga...4949...--ca-tttcaagaatgtattttt	<b>CTTTAAG</b>	AtGCTAaa
S.Sus	catttcag	gtataaccgga...4949...--ta-tttcaagaatgtattttt	<b>CTTTAAG</b>	AtGCTAaa
O.Avi	aatttcag	gtataaccgga...4949...gtca-tttcaagc-tgtttttt	<b>CTTTAAG</b>	AtGCTAaa
L.Afr	tatttcag	gtataatccaga...4949...--ca-tttcaagaatgtctttt	<b>CTTTAAG</b>	AtGCTAaa
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Figure 362: CS=11.9



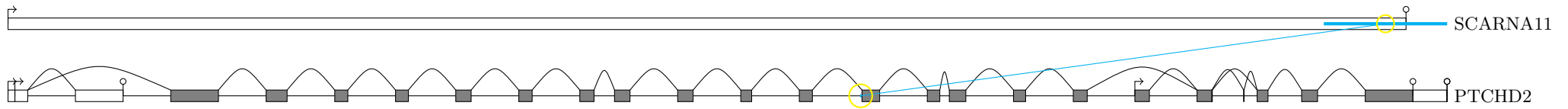
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C. Jac	tcctccc	ttgtcctggcct...76...agggccatcctaagaatagg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaagatg
M. Mus	caaaaatc	ttgtcctgtgcc...75...agggctgtcctaagaatggg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaggaga
R. Nor	aaacaatc	ttgtcctgtgcc...75...agggctgtcctaagaatagg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ctaggtgg
C. Por	gtctcttt	gtgtcctggcct...76...agggctgtcctaagaatagg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaagatg
O. Cun	ccctgtct	ctgtcctggcct...75...gaggccgtcctaagaatggg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaagatg
C. Fam	ttcttttt	ttttttttttt...91...agagccgtcctaagaatagg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaagata
B. Tau	tcttcttt	ttgtcctggcct...77...agggccgtcctgagaatagg	GCTGGct	CTTAAAGG	cacgagaggacag-t	ttaagatg
E. Cab	ctctcttc	ttgtcctggcct...82...gggccgtcctgagaatagg	CTGGct	CTTAAAGG	cacgagaggacaa-t	ttaaaatg
O. Avi	ttctcttc	ttgtcctggcct...77...agggccgtcctgagaatagg	GCTGGct	CTTAAAGG	cacgagaggacag-t	ttaagatg
L. Afr	cacgcttc	ttgtcctggcct...79...agggctgtcctaagaatagg	GCTGGct	CTTAAAGG	cacgagaggacaa-t	ttaagatg
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P. Tro	gccaacag	gtaaactgtcta...564...tgatttattggttttcccat	TCTTTAAG	ctTCAGCa
P. Abe	gccaacag	gtaaactgtcca...566...tgatttattggttttcccat	TCTTTAAG	ctTCAGCa
C. Jac	gccaacag	gtaaagtgtcta...574...tgatttactggttttcccat	TCTTTAAG	ctTCAGCa
M. Mus	gccagcag	gtaagcagcttg...539...tggtttatcagttttcccat	TCTTTAAG	ctTCAGCa
R. Nor	gccagcag	gtaagctgcttg...510...tggtttatcagttcttccgt	TCTTTAAG	ctTCAGCa
C. Por	gtcagcag	gtaagctaccta...544...tggtttatcagttttcccat	TCTTTAAG	ctTCAGCa
O. Cun	gtcaacag	gtaaagcaccta...573...tggtttatcagttttcccg	TCTTTAAG	ctTCAGCa
C. Fam	gtcaacag	gtaaactaccta...773...tgcttatcagttttcccat	TCTTTAAG	ctTCAGCa
B. Tau	gtcaacag	gtaaactgtcta...542...tggtttatcagttttcccat	TCTTTAAG	ctTCAGCa
E. Cab	gtcaacag	gtaaacaccta...583...tggtttatcagttttcccg	TCTTTAAG	ctTCAGCa
O. Avi	gtcaacag	gtaaactgtcta...544...tggtttatcagttttcccat	TCTTTAAG	ctTCAGCa
L. Afr	ggcaacag	gtaagccacca...577...tctgttatgcggtttatcat	TCTTTAAG	ctTCAGCa
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id=182544 gene=ENSG00000156304 name=SCAF4 segment=chr21.33073485.33074088.-1 type=IN

Figure 363: CS=13.3



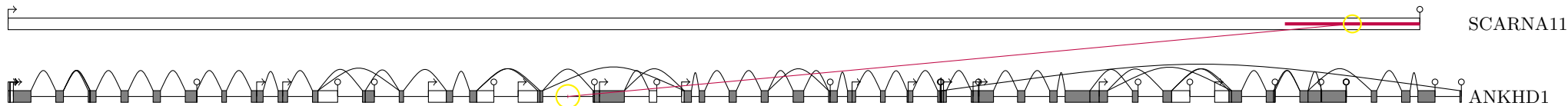
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P.Tro	ctctcttt	ttgtcctggcct...88...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ttaagatg		
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R.Nor	aaacaatc	ttgtcctgtgcc...88...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ctaggtgg		
C.Por	gtctcttt	gtgtcctggcct...89...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ttaagatg		
O.Cun	ccctgtct	ctgtcctggcct...88...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ttaagatg		
F.Cat	tctgtctt	ttgtccttgccct...92...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	ac	ttaagatg		
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S.Sus	tcctgttc	ttgtcctggcct...92...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ttaagacg		
O.Avi	ttctcttc	ttgtcctggcct...90...	gaatagggctggctcttaaa	GGCAcGAGAGGACAG	t	ttaagatg		
L.Afr	cacgcttc	ttgtcctggcct...92...	gaatagggctggctcttaaa	GGCAcGAGAGGACA	Aat	ttaagatg		
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id=11828 gene=ENSG00000251898 name=SCARNA11 segment=chr12.6690640.6690775.-1 type=EN

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R.Mac	ccttcag	gtgagcctgggc...1270...	ggcagccccccgagtcaca	TGTCTgTCTCTGTC	aaccactgcttag	gtgtatag		
P.Tro	ccttcag	gtgagcctgggc...1285...	ggcagccccccgagtcaca	TGTCTgTCTCTGTC	aaccactgcttag	gtgtatag		
P.Abe	ccttcag	gtgagcctgggc...2147...	ggcagccccccgagtcacg	TGTCTgTCTCTGTC	aaccactgcttag	gtgtatag		
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R.Nor	ccttcag	gtgagcccaaac...1058...	ggcagcctccccgagtcacg	TGTCTgTCTCTGTC	aaccactgcttag	gtgtatag		
C.Por	ccttcag	gtgagctcgggc...1358...	ggcgcctccccgagtcacg	TGTCTgTCTCTGTC	gatccactgcttag	gtgtatag		
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L.Afr	ccttcag	gtgagccgaggc...1029...	agcagccccccgagtcaca	TGTCTgTCTCTGTC	aatccactgcttag	gtgtatag		
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Figure 364: CS=13.3



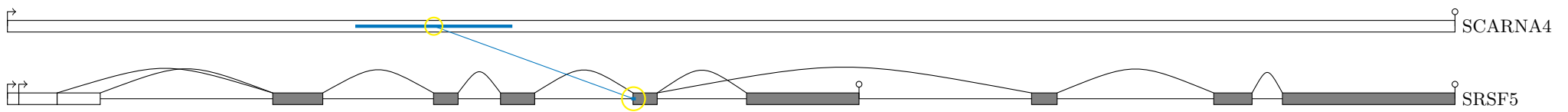
H.Sap	ctctcttt	ttgtcctggcct...82...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
R.Mac	ctctcttt	ttgtcctggcct...83...tcctaagaatagggctggct	CTTAAagGCACGAGAGGA	caGTT	TAAGA-tg
P.Abe	tctctttt	ttgtcctggcct...91...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
C.Jac	tccctccc	ttgtcctggcct...83...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
M.Mus	caaaaatc	ttgtcctgtgcc...82...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaggaga
C.Por	gtctcttt	gtgtcctggcct...83...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
O.Cun	ccctgtct	ctgtcctggcct...82...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
C.Fam	ttcttttt	ttttttttttt...98...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaatt	ttaagata
B.Tau	tcttcttt	ttgtcctggcct...84...tcctgagaatagggctggct	CTTAAagGCACGAGAGGA	caGTT	TAAGAT-g
E.Cab	ctctcttc	ttgtcctggcct...88...tcctgagaataggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaaaatg
S.Sus	tcctgttc	ttgtcctggcct...86...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagacg
O.Avi	ttctcttc	ttgtcctggcct...84...tcctgagaatagggctggct	CTTAAagGCACGAGAGGA	caGTT	TAAGAT-g
L.Afr	cacgcctc	ttgtcctggcct...86...tcctaagaatagggctggct	CTTAAagGCACGAGAGG	acaa-t	ttaagatg
		* * *	**** ***** ** **** *****		* * *

id=11828 gene=ENSG00000251898 name=SCARNA11 segment=chr12.6690640.6690775.-1 type=EN

H.Sap	gcaaaaag	gtagttattga...4941...-----gcatggcactcttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
R.Mac	gcaaaaag	gtagttactga...4931...-tttttttttagcatggcact	TTTTcAAACatTTTTcTGTGCTTAG	Gtacatcc
P.Abe	gcaaaaag	gtagttattga...4941...-----gcatggcactcttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
C.Jac	caaaaag	gtagttattga...4941...-----gcatggcacttttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
M.Mus	acaaaaag	gtagttgttga...4941...-----gcatggcacattttcaaca	TTTTTCatGTGCTTAG	Gtgcattcc
C.Por	acagaaag	gtagttgttga...4941...-----gcatggcacttttcaaca	TTTTTCgtGTGCTTAG	Gtacatcc
O.Cun	acagaaag	gtagctattaa...4941...-----gcatggcacttttcaaca	TTTTTCatGTGCTTAG	Gtccatcc
C.Fam	acaaaaag	gtagttattga...4941...-----gcatggcacttttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
B.Tau	acaaaaag	gtagttcctga...4929...tttttttttagcatggca	CATTTTcAAACatTTTTcTGTGCTTAG	Gtacatcc
E.Cab	acagaaag	gtagttgttga...4941...-----gcatggcacttttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
S.Sus	acagaaag	gtagttattga...4941...-----ccatggcacattttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
O.Avi	acaaaaag	gtagttcctga...4929...tttttttttagcatggca	CATTTTcAAACatTTTTcTGTGCTTAG	Gtacatcc
L.Afr	acagaaag	gtagttattga...4941...-----gcatggcacttttcaaca	TTTTTCatGTGCTTAG	Gtacatcc
	** ****	***** * * *	***** *****	** *****

id=216285 gene=ENSG00000131503 name=ANKHD1 segment=chr5.139866646.139876104.1 type=IN

Figure 365: CS=10.14



```

H. Sap  tga--tgaca actggaggactaagaaggctgagTCTGAtGAAGtAAGcTTTgctgatacattcctcctagaa...54...taccacacactc  taccccag
R. Mac  ---acttgata actggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacattcctcctagaa...54...taccacacactc  tatcccg
P. Tro  tga--tgaca actggaggactaagaaggctgagTCTGAtGAAGtAAGcTTTgctgatacattcctcctagaa...54...taccacacactc  taccccag
P. Abe  tga--tgaca actggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacattcctcctagaa...54...taccacacactc  taccccag
C. Jac  tga--taata agtggaggactaagaaggctgagTCTGAtGAAGtAAGcTTTgctgatacattcctc-----..58...taccacacactc  tgctccag
C. Por  ttg---tggct actggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacattcctc-----..59...taccacacattc  tagtctag
D. Cun  tga---tggca gctggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacattcctc-----..60...taccgacattc  tghtccgg
C. Fam  tga---tggca gctggaggactaagaaggcggagTCTGGtGAAGtAAGcTTTgctgatacaatcctc-----..59...gaccacacatgc  tactctag
F. Cat  tga---cggca gctggaggactaagaaggctgagTCTGGtGAAGcAAGcTTTgctgatacaatcctc-----..59...gaccgacacgc  cgctatcg
B. Tau  taaactt--a actggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacaatcctc-----..65...gaccgacattc  tactccat
E. Cab  tga---tggca gctggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacaatcctc-----..59...taccacacactc  cactccag
S. Sus  tga---tggca gctggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacattcctc-----..61...taccgacattc  tgctccag
O. Avi  taaactt--a actggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacaatcctc-----..65...taccgacattc  tactccag
L. Afr  taa---tggca gctggaggactaagaaggctgagTCTGAtGAAGcAAGcTTTgctgatacaatcctc-----..59...tgccacacattc  tagtccat
***** ** ***** ** *

```

id=730554 gene=ENSG00000252808 name=SCARNA4 segment=chr1.155895749.155895877.-1 type=EN

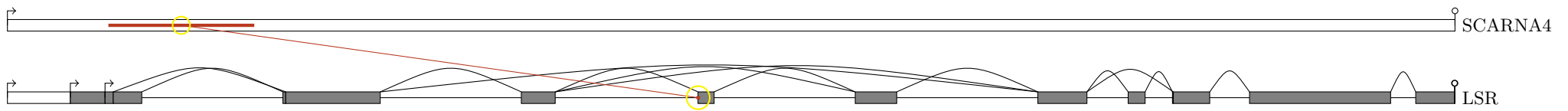
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H. Sap  gatagacg gtagtgtagg...236...catttctccattgtgaataCGAATTTCTTCcTCAG Aaatgctc
R. Mac  gatagacg gtagtgtagg...237...catttctccattgtgaataCGAATTTCTTCcTCAG Aaatgctc
P. Tro  gatagacg gtagtgtagg...236...catttctccattgtgaataCGAATTTCTTCcTCAG Aaatgctc
P. Abe  gatagacg gtagtgtagg...236...catttctccattgtgaataCGAATTTCTTCcTCAG Aaatgctc
C. Jac  gatagacg gtagtgtagg...507...----tcttccattgtgaataCTTTCTTCcTCAG Aaatgctc
C. Por  gatagacg gtagtgtagg...239...----tcttccattgtgaataCTTTCTTCcTCAG Aaatgctc
O. Cun  gatagacg gtagtgtagg...242...----tcttccattgtgaataCTTTCTTCcTCAG Aaatgctc
C. Fam  gatagacg gtagtgtagg...261...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
F. Cat  gatagacg gtagtgtagg...258...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
B. Tau  gatagacg gtagtgtagg...244...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
E. Cab  gatagacg gtagtgtagg...258...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
S. Sus  gatagacg gtagtgtagg...235...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
O. Avi  gatagacg gtagtgtagg...244...----tcttccattgtgagtactcaTTTCTTCcTCAG Aaatgctc
L. Afr  gatagacg gtagtgtagg...232...----tcttctttttagtactcaTTTCTTCcTCAG Aaatgctc
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```

id=251880 gene=ENSG00000100650 name=SRSF5 segment=chr14.70235614.70235898.1 type=IN

Figure 366: CS=10.92



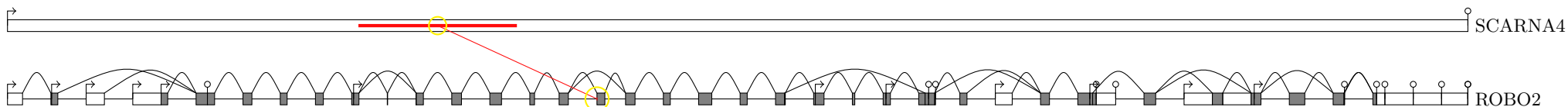
H. Sap	tgatgaca	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagtaagac-----	..78..	tacccaacactc	taccccag
R. Mac	acttgata	aCTGGAGGACtAAGAAGGCt	GAGTctgatgaagcaagactttgc...	73..	tacccaacactc	tatcccag
P. Tro	tgatgaca	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagtaaga-----	..79..	tacccaacactc	taccccag
P. Abe	tgatgaca	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..78..	tacccaacactc	taccccag
C. Por	ttgtggct	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..78..	tacccaacattc	tagtctag
O. Cun	tgatggca	gCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..79..	tacccgacattc	tgttccgg
C. Fam	tgatggca	gCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..75..	gacccaacatgc	tactctag
F. Cat	tgacggca	gCTGGAGGACtAAGAAGGCt	gagctctggtgaagcaagac-----	..78..	gacccgacacgc	cgctatcg
B. Tau	taaaccta	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..84..	gacccgacattc	tactccat
E. Cab	tgatggca	gCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..78..	tacccaacactc	cactccag
S. Sus	tgatggca	gCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..80..	tacccgacattc	tgctccag
O. Avi	taaaccta	aCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..84..	tacccgacattc	tactccag
L. Afr	taatggca	gCTGGAGGACtAAGAAGGCt	gagctctgatgaagcaagac-----	..78..	tgccaacattc	tagtccat
		***** ** ***** **			*** ** *	

id=730554 gene=ENSG00000252808 name=SCARNA4 segment=chr1\_155895749\_155895877\_-1 type=EN

H. Sap	cgtccttg	gtgagtggcct...2807...	---ggctctggccagcataatct---	GTTTcTCTTTGTCCcTCCAG	ggaggacc
R. Mac	cgtccttg	gtgagtggcct...2505...	---ggctctggccagcataatct---	ATTTcTCTTTGTCCcTCCAG	ggaggacc
P. Tro	cgtccttg	gtgagtggcct...3584...	-----tggccagcataatcttttc---	TCTTTGTCCcTCCAG	ggaggacc
P. Abe	tgctcctg	gtgagtggcca...2829...	---ggctctggccagcataatct---	GTTTcTCTTTGTCCcTCCAG	ggaggacc
C. Por	tgtcctcg	gtaagtgggct...2577...	-----tctggccaccataatttcct	GTTTcTCTTTGTCCcTCCAG	gcaggacc
O. Cun	cgtcctgg	gtgagtgagcg...3185...	---ggctctggccagcgtaatct---	GTTTcTCTTTGTCCcTCCAG	gcaggacc
C. Fam	cgtcctgg	gtgagtgggtg...1734...	gctggcccttggccagcataa---	TCTGTCTcTCTTTGTCCcTCCAG	gcaggacc
F. Cat	cgttctgg	gtgagtggcct...1658...	---ggcccctggccagcataatct---	GTCTcTCTTTGTCCcTCCAG	gcaggacc
B. Tau	cgtcctgg	gtgagtctggc...1995...	---ggccctggtcagcataatct---	GTCTcTCTTTGTCCcTCCAG	gcaggacc
E. Cab	cgtcctgg	gtgagtggcctg...1845...	---ggtccttggccagcataatct---	GTCTcTCTTTGTCCcTCCAG	ggaggacc
S. Sus	cgtcctgg	gtgagtggcac...1867...	---ggctcttggccagcgtaatct---	GTCTcTCTTTGTCCcTCCAG	gcaggacc
O. Avi	cgtcctag	gtgagtctggc...1994...	---ggccctggtcagcataatct---	GTCTcTCTTTGTCCcTCCAG	gcaggacc
L. Afr	cgttctgg	gtgagtgtggg...1982...	-----tcttggccagcataatctcct	GTTTcTCTTTGTCCcTCCAG	gcaggacc
		** ** *	** ** *	***** **	* ** ** *

id=152388 gene=ENSG00000105699 name=LSR segment=chr19\_35749968\_35752827\_1 type=IN

Figure 367: CS=14.95



H. Sap	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
R. Mac	---acttgata	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...59...tacccaacactc	tatcccag
P. Tro	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
P. Abe	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
C. Jac	tga---taata	agtggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...58...tacccaacactc	tgctccag
C. Por	ttg---tggct	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctttgctgatacattcctcc...59...tacccaacattc	tagtctag
O. Cun	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctcggctgatacactcctcc...60...taccgacattc	tgctccgg
C. Fam	tga---tggca	gctggaggactaagaaggcga	GTCTG	TGAAG	AAGA	ctctgctgatacaatcctcc...59...gacccaacatgc	tactctag
B. Tau	taaaact---ta	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctctgctgatacaatcctcc...65...gaccgacattc	tactccat
E. Cab	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctcggctgatacaatcctcc...59...tacccaacactc	cactccag
S. Sus	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctctgctgatacactcctcc...61...taccgacattc	tgctccag
O. Avi	taaaact---ta	actggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctctgctgatacaatcctcc...65...taccgacattc	tactccag
L. Afr	taa---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	AAGA	ctctgctgatacaatcctcc...59...tgccaacattc	tagtccat
***** ** ***** ** ** ***** ***** ***** ** ** *							

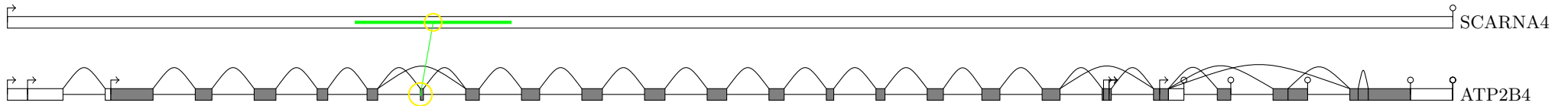
id=730554 gene=ENSG00000252808 name=SCARNA4 segment=chr1\_155895749\_155895877\_-1 type=EN

H. Sap	gctttcag	gtatgggacaat...1075...tattcattacatgcttcctc	TCTT	TTTTACAG	AT	atgtag
R. Mac	gctttcag	gtatgggacaat...1067...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
P. Tro	gctttcag	gtatgggacaat...1074...tattcattacatgcttcctc	TCTT	TTTTACAG	AT	atgtag
P. Abe	gctttcag	gtatgggacaat...1075...tattcattacatgcttcctc	TCTT	TTTTACAG	AT	gtgtag
C. Jac	gctttcag	gtacgggacaat...1073...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
C. Por	gctttcag	gtatgggacaat...1021...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
O. Cun	gctttcag	gtatgggacaat...1049...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
C. Fam	gctttcag	gtatgggacagt...1015...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
B. Tau	gctttcag	gtatgggacagt...1050...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
E. Cab	gctttcag	gtatgggacagt...1035...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
S. Sus	gctttcag	gtatgggacagt...1060...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
O. Avi	gctttcag	gtatgggacagt...1049...tattcattacatgcttcctt	TCTT	TTTTACAG	AT	atgtag
L. Afr	gcattcag	gtatgggacagt...998...tattcattacatgcttcctc	TCTT	TTTTACAG	AT	atgtag
** ***** ** ** * ** * ***** ***** ***** ** *****						

id=371792 gene=ENSG00000185008 name=ROBO2 segment=chr3\_77612481\_77613600\_1 type=IN

Figure 368: CS=11.7





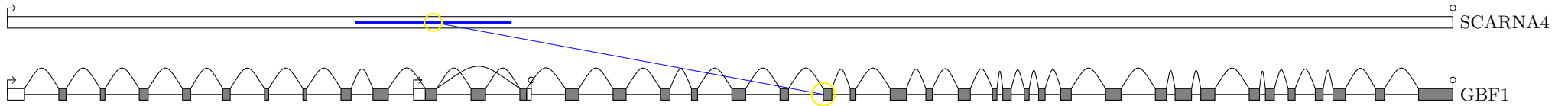
H. Sap	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	TAAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
R. Mac	---acttgata	actggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctttgctgatacattcctcc...59...tacccaacactc	tatcccag
P. Tro	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	TAAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
P. Abe	tga---tgaca	actggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctttgctgatacattcctcc...59...tacccaacactc	taccccag
C. Jac	tga---taata	agtggaggactaagaaggctga	GTCTG	TGAAG	TAAGA	ctttgctgatacattcctcc...58...tacccaacactc	tgctccag
M. Mus	---gcttggt	actggaggatcaagaaggctga	GTCTG	TGAAG	CAAGA	ctttgctgatacattcctcc...58...tacccaacattt	tccagcac
C. Por	ttg---tggct	actggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctttgctgatacattcctcc...59...tacccaacattc	tagtctag
O. Cun	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctcggtgatatacattcctcc...60...taccgacattc	tggtccgg
C. Fam	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	TAAGA	ctctgctgatacaatcctcc...59...gaccacatgc	tactctag
F. Cat	tga---cggca	gctggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctctgctgatacaatcctcc...59...gaccgacacgc	cgctatcg
B. Tau	taact---ta	actggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctctgctgatacaatcctcc...65...gaccgacattc	tactccat
E. Cab	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctcggtgatatacattcctcc...59...tacccaacactc	cactccag
S. Sus	tga---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctctgctgatacattcctcc...61...taccgacattc	tgctccag
O. Avi	taact---ta	actggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctctgctgatacaatcctcc...65...taccgacattc	tactccag
L. Afr	taa---tggca	gctggaggactaagaaggctga	GTCTG	TGAAG	CAAGA	ctctgctgatacaatcctcc...59...tgccaacattc	tagtccat
		*****	*****	*****	*****	*****	*** **

id=730554 gene=ENSG00000252808 name=SCARNA4 segment=chr1\_155895749\_155895877\_-1 type=EN

H. Sap	gaagaaag	gtaaggggcatc...1074...	-ttcgacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
R. Mac	gaagaaag	gtaaggggcatc...1069...	-ttcgacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaag
P. Tro	gaagaaag	gtaaggggcatc...1074...	-ttcgacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
P. Abe	gaagaaag	gtaaggggcatc...1074...	-ttcgacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
C. Jac	gaagaaag	gtaaggggcatc...1073...	-ttcgacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
M. Mus	gaagaaag	gtaaggggcgtg...1292...	tctccaccccgct-tttttctt	TCTTGTTC	aaCAG	GTaaaaaa
C. Por	gaagaaag	gtaataaagtgt...1070...	-ctccacccacttttttctt	TCTTCTTC	aaCAG	GTaaaaaa
O. Cun	gaagaaag	gtaaggggcctc...774...	-ctccacccactttgttctt	TCTTGTTC	aaCAG	GTaaaaaa
C. Fam	gaagaaag	gtaaagggtatt...1056...	-ctccacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
F. Cat	gaaaaaag	gtaaggggcgtt...1070...	-ctccacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
B. Tau	gaagaaag	gtaagggcctt...2756...	-ccccacccatttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
E. Cab	gaaaaaag	gtaaggagcatt...1093...	-ctccacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
S. Sus	gaagaaag	gtaaagggcctt...1074...	-ctccacccacttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
O. Avi	gaagaaag	gtaagggcctt...2750...	tccccaccca-ttttttctt	TCTTGTTC	aaCAG	GTaaaaaa
L. Afr	gaagaaag	gtaaggggcgct...1127...	-ctccacccacattttttctt	TCTTGTTC	aaCAG	GTaaaaaa
		*** **	**** *	* ****	** *****	*****

id=517880 gene=ENSG0000058668 name=ATP2B4 segment=chr1\_203670052\_203671171\_1 type=IN VIEW

Figure 369: CS=11.7



H. Sap	tga---tgaca	actggaggactaagaaggctgag	TCTGAt	GAAGTAAGA	TTTGCT	gatacattcctcctagaaaa...	52...	tacccaacactc	taccccag
R. Mac	---acttgata	actggaggactaagaaggctgag	TCTGAt	GAAGCAAGA	TTTGCT	gatacattcctcctagaaaa...	52...	tacccaacactc	tatcccag
P. Tro	tga---tgaca	actggaggactaagaaggctgag	TCTGAt	GAAGTAAGA	TTTGCT	gatacattcctcctagaaaa...	52...	tacccaacactc	taccccag
P. Abe	tga---tgaca	actggaggactaagaaggctgag	TCTGAt	GAAGCAAGA	TTTGCT	gatacattcctcctagaaaa...	52...	tacccaacactc	taccccag
C. Jac	tga---taata	agtggaggactaagaaggctgag	TCTGAt	GAAGTAAGA	TTTGCT	gatacattcctcctagaaaa...	51...	tacccaacactc	tgctccag
M. Mus	---gcttggtta	actggaggatcaagaaggctgag	TCTGAt	GAAGCAAGACTTTG	CTGAt	gatacactcctcctagac---	53...	tacccaacattt	tccagcac
C. Por	ttg---tggct	actggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTTTG	CTGAt	gatacattcctcctaaaaaaa...	51...	tacccaacattc	tagtctag
O. Cun	tga---tggca	gctggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCG	gctgatacactcctcctaga---	56...	taccgacattc	tggtccgg	
C. Fam	tga---tggca	gctggaggactaagaagGCGGag	TCTGGt	GAAGTAAGACTCTG	CTGAt	gatacaatcctcctagaaaa...	52...	gacccaacatgc	tactctag
F. Cat	tga---cggca	gctggaggactaagaaggctgag	TCTGGt	GAAGCAAGACTCTG	CTGAt	gatacaatcctcctagag---	54...	gaccgacacgc	cgctatcg
B. Tau	taaact---ta	actggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCTG	CTGAt	gatacaatcctcctagaaaa...	58...	gaccgacattc	tactccat
E. Cab	tga---tggca	gctggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCG	gctgatacaatcctcctag---	56...	tacccaacactc	caactccag	
S. Sus	tga---tggca	gctggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCTG	CTGAt	gatacactcctcctagaata...	54...	taccgacattc	tgctccag
D. Avi	taaact---ta	actggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCTG	CTGAt	gatacaatcctcctagaaaa...	58...	taccgacattc	tactccag
L. Afr	taa---tggca	gctggaggactaagaaggctgag	TCTGAt	GAAGCAAGACTCTG	CTGAt	gatacaatcctcctagaaaa...	52...	tgccaacattc	tagtccat

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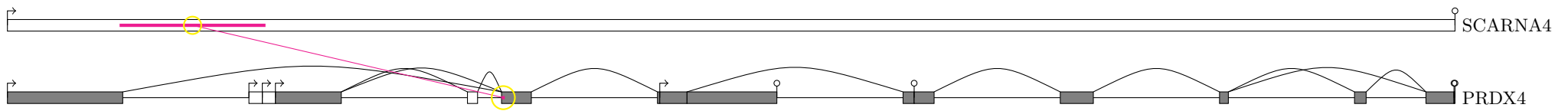
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R. Mac	ggttgatg	gtgagtttgagt...	606...	-cagagaagggcattgacaca	GGCGGGa	TCTTtGCTTtTCAG	A-attgtaa
P. Tro	ggttgatg	gtgagtttgagt...	522...	-cagagaagggcattgacaca	GGCGGGa	TCTTtGCTTtTCAG	A-attgtaa
P. Abe	ggttgatg	gtgagtttgagt...	518...	-cagagaagggcattgacaca	GTTGGGa	TCTTtGCTTtTCAG	A-attgtaa
C. Jac	ggttgatg	gtgagtttgagt...	532...	-cagagaagggcattgacaga	GGCGGGa	TCTTtGCTTtTCAG	A-attgtaa
M. Mus	actggagg	gtaagtcttagt...	222...	---gaaaaggacattaacacaga	TGGAG	TCTTTGCTTtTCAG	A-gttgtaa
C. Por	actggagg	gtgagttggat...	248...	cagtgaaaggtattgacaa	TGGTGGG	TCTTTGCTTtTCAG	A-attgtaa
O. Cun	attggagg	gtgagtttgagt...	226...	--agagaagggcattgatacag-	TGGGgc	TCTTtGCTTtTCAG	A-attgtaa
C. Fam	attggagg	gtgag-ttgagt...	286...	-cagagaagtgattgataca	GTTGGGG	TCTTTGCTTtTCAG	AaTTGT-aa
F. Cat	attggagg	gtgag-ttgagt...	214...	---gagaagggcattgacacaga	TGGGG	TCTTTGCTTtTCAG	Aaattgta-
B. Tau	attggagg	gtgagtttgagt...	235...	-cagagaagagcattgacata	GGCGGGG	TCTTTGCTTtTCAG	A-attgtaa
E. Cab	attggagg	gtaagtttgagt...	233...	----gcagggcattgacacaagt	GGG	TCTTTGCTTtTCAG	A-attgtaa
S. Sus	attggagg	gtgag-ttgagt...	226...	-cagagaagggcattgacaca	GGCGGGG	TCTTTGCTTtTCAG	A-attgtaa
O. Avi	attggagg	gtgagtttgagt...	233...	-cagagaagagcattgacata	GGCGGGG	TCTTTGCTTtTCAG	A-attgtaa
L. Afr	attggagg	gtgagtttgagt...	410...	-cagacaagagcattgacaca	GTTGGGG	TCTTTGCTTtTCAG	A-attgtaa

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id=574900 gene=ENSG00000107862 name=GBF1 segment=chr10\_104126264\_104126841.1 type=IN

Figure 370: CS=13.5



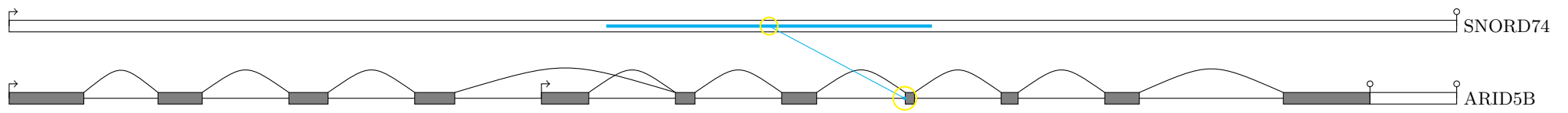
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R. Mac	acttgataac	--	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactttgc...	73...	tacccaacactc	tatcccag	
P. Abe	---tgatgaca	ac	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactttgc...	73...	tacccaacactc	taccccag	
C. Jac	---tgataata	ag	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagtaagactttgc...	72...	tacccaacactc	tgctccag	
C. Por	---ttgtggct	ac	TGGAg	GACTAAGAAGG	ctgagctgatgaagcaaga	-----	79...	tacccaacattc	tagtctag	
O. Cun	---tgatggca	gc	TGGAg	GACTAAGAAGG	ctgagctgatgaagcaaga	-----	80...	tacccgacattc	tgttccgg	
C. Fam	---tgatggca	gc	TGGAg	GACTAAGAAGG	cggagctctggtgaagtaaga	-----	79...	gaccacacatgc	tactctag	
F. Cat	---tgacggca	gc	TGGAg	GACTAAGAAGG	ctGAGT	ctggtgaagcaagactctgc...	73...	gaccgacacgc	cgctatcg	
B. Tau	---taaactta	ac	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactctgc...	79...	gaccgacattc	tactccat	
E. Cab	---tgatggca	gc	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactcggc...	73...	tacccaacactc	cactccag	
S. Sus	---tgatggca	gc	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactctgc...	75...	tacccgacattc	tgctccag	
O. Avi	---taaactta	ac	TGGAg	GACTAAGAAGG	ctGAGT	ctgatgaagcaagactctgc...	79...	tacccgacattc	tactccag	
L. Afr	---taatggca	gc	TGGAg	GACTAAGAAGG	ctgagctgatgaagcaaga	-----	79...	tgcccaacattc	tagtccat	
	*		***** ** ***** **						*** ** *	*

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R. Mac	atctaaag	gt	----	agccctgatt	...	48...	agt	gtttacagaacatcatgt	---	ATTTttCTTTCTTAG	TTTCCAag	
P. Abe	atctaaag	gt	----	agccctgatt	...	48...	agt	gtttacagaacatcatgt	---	ATTTttCTTTCTTAG	TTTCCAag	
C. Jac	aaataaag	gt	----	agccctgatt	...	48...	agt	gtttacagaacatcatgt	---	ATTTttCTTTCTTAG	TTTCCAag	
C. Por	atctgagg	gt	gtag	----	ctcagt	..	94...	-----	acagaacatcgtgt	-----	ctttttCTTTCTTAG	TTTCCAag
O. Cun	gtccaaag	at	ttagaagcct	-----	...	46...	---	ttataaatcatcctatcct	-----	CTTTCTTAG	TTTCCAag	
C. Fam	atccaaag	at	ttaggatcct	-----	...	54...	---	gttttagaatattatata	-----	TTTTCTTAG	TTTCCAag	
F. Cat	gtccaaag	gt	ttagaatcct	-----	...	53...	att	gttttagaacttcatat	---	ATTTttCTTTCTTAG	TTTCCAag	
B. Tau	gtccaaag	attc	-----	cctccaaa	...	56...	gtc	gttttaagaacatcatat	---	GTTTttCTTTCTTAG	TTTCCAag	
E. Cab	gtccagag	gatt	agaagcct	-----	...	53...	agc	gtttacaaaacatcatat	---	ATTTttCTTTCTTAG	TTTCCAag	
S. Sus	-----	cag	actcagaagccttgatt	...	50...	att	gtc	cagaatattatcatat	---	ATTTCTTTCTTAG	TTTCCAag	
O. Avi	gtccaaag	attc	-----	cctccgaa	...	54...	atc	gttttaagaacatcatat	---	GCTTttCTTTCTTAG	TTTCCAag	
L. Afr	atccaaag	gt	taagaagccc	-----	...	62...	-----	aaacatcatgtaatctttt	-----	CTTTCTTAG	TTTCCAag	
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id=744573 gene=ENSG00000123131 name=PRDX4 segment=chrX\_23689551\_23689645\_1 type=IN

Figure 371: CS=11.7



```

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R.Mac -cggctctc gtgcc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG agtaatgatgaatgccaaccgctctgatggtggcac atgccgag
P.Tro -cggctctc gtgcc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG agtaatgatgaatgccaaccgctctgatggtggcac atgccgag
P.Abe -cggctctc gtgcc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG agtgatgatgaatgccaaccgctctgatggtggcac atgccgag
C.Jac -cggctctt gtgcc--ttgcctctgatgaagcctg GTTGGtAGGGACA tTGAG agtaatgatgaatgccaaccgctctgatggtggcac atgtcgag
M.Mus -cagcatgc gtgtt--catgctatgatgaa GGCT atGTTGGtAGGGACA tTGAG ctTGTGATGA ataccaacgattctgatggcagagc atgtctgag
C.Por -gggctcgc gtgcc--ttgctcatgatgaagcctg TGTGGtAGGGACA tTGAG TG--ctgatgaatgccaaccgctctgatggcggcgc atgcagag
D.Cun -cggctgcc gtgcctgccactctgatgaagtctg TGTGGtAGGGACA tTGAG agcgctgatgaatgccaaccgctctgatggcggccc gcgcgagc
C.Fam -gggctcgc gcttc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG acTGTGATGA atgccaaccgctctgatggcggcgc ttgccggg
F.Cat -gggctcgc gttcc--ctgcctctgatgaagcctg GTTGGtAGGGACA tTGAG acTGTGATGA acgccaaccgctctgatggcggcgc gtgccgag
B.Tau -cagctcgt ttgct--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG atTGTGATGA atgccaaccgctctgatggcggcgt aaccgagc
E.Cab -cggctcgc gtgtc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG acTGTGATGA atgccaaccgctctgatggcggcgc atgtctgag
S.Sus tcggctcg -gggcc--ctgcctctgatgaagcctg TGTGGtAGGGACA tTGAG --acttgatgaatgccaaccgctctgatggcggcgtc ttgccgag
L.Afr -ttgctcgc gtgcc--cttcctctgatgaaacctg TGTGGtAGGGACA tTGAG --acttgatgaatgccaacttctctgatggcagcgtc atgccggg
**             ***** ** ***** ***** ** ***** ***** *
  
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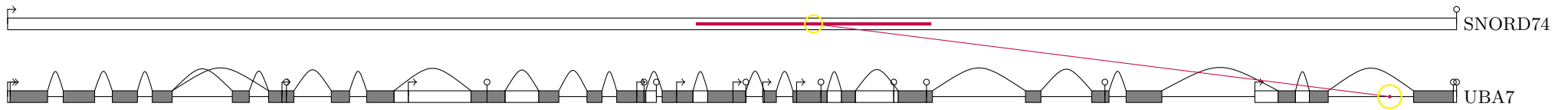
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P.Tro taaacaga gtgagtatactt...1866...-----atgcaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
P.Abe taaacaga gtgagtatactt...1875...-----atgcaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
C.Jac taaacaga gtgagtatgctt...1886...-----atgcaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
M.Mus caaacaga gtaagatcctt...1975...gaagtgtgtaatgcaatgc TTATC taAATACTTATTGTCCCTCTAACA G TT aacctt
C.Por taaacaga gtaagtatactt...2086...-----taatgcaatgcttatctaaa TACTTA tTGTCCCTCTAACA g ttaacctt
D.Cun taaacaga gtaagtatactt...1859...-----atgcaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
C.Fam taaacaga gtaagtatgctt...1890...gaagtatgtaatgcaatgc TTATC taAATACTTA tTGTCCCTCTAACA g ttaacctt
F.Cat taaacaga gtaagtatgctt...1868...gaaatgtgtaatgcaatgc TTATC taAATACTTA tTGTCCCTCTAACA g ttaacctt
B.Tau taaacaga gtaagtatactt...1857...gaaatgtgtaatgcaatgc TTATC taAATACTTA tTGTCCCTCTAACA g ttaacctt
E.Cab taagcaga gtaagtatactt...1864...gaaatgtgtaatgcaatgc TTATC taAATACTTA tTGTCCCTCTAACA g ttaacctt
S.Sus caaacaga gtaagtatactt...1901...-----atgcaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
L.Afr taaacaga gtaagtatactt...1923...-----atgtaatgcttatctaaata CTTA tTGTCCCTCTAACA g ttaacctt
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Figure 372: CS=10.92



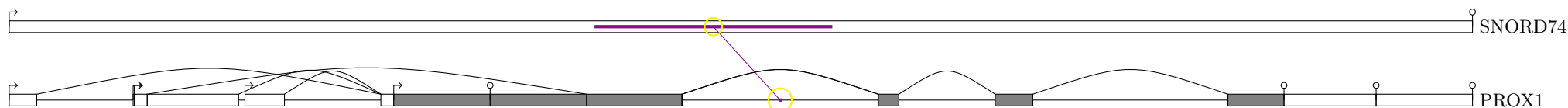
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R. Mac	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTgTTGGTAGGGACATCTGAGA</b>	gtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
P. Tro	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTgTTGGTAGGGACATCTGAGA</b>	gtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
P. Abe	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTgTTGGTAGGGACATCTGAGA</b>	gtgatgatgaatgccaaccgctctgatggtggcac	atgccgag
C. Jac	-cggctctt	gtgcc--ttgcctctgatgaagc	<b>CTGCgTTGGTAGGGACATCTGAGA</b>	gtaatgatgaatgccaaccgctctgatggtggcac	atgctgag
C. Por	-gggctcgc	gtgcc--ttgctcatgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGtGCTG</b>	--atgaatgccaaccgctctgatggcggcgc	atgcagag
O. Cun	-cggctcgc	gtgcctgccgactctgatgaagtctgtt	<b>TTGGTAGGGACATCTGAGAGC</b>	gctgatgaatgccaaccgctctgatggcggccc	gcgcgagc
C. Fam	-gggctcgc	gcttc--ctgcctctgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGACTGTT</b>	gatgaatgccaaccgctctgatggcggcgc	ttgccggg
F. Cat	-gggctcgc	gttcc--ctgcctctgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGACTGTT</b>	gatgaatgccaaccgctctgatggcggcgc	gtgccgag
B. Tau	-cagctcgt	ttgct--ctgcctctgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGACTTGT</b>	gatgaatgccaaccgctctgatggcggcgc	aaccgac
E. Cab	-cggctcgc	gtgtc--ctgcctctgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGACTGTT</b>	gatgaatgccaaccgctctgatggcggcgc	atgctgag
S. Sus	tggctcgc	gggcc--ctgcctctgatgaagcctgtgtt	<b>GTTAGGGACATCTGAGACT</b>	--tgatgaatgccaaccgctctgatggcggcgc	ttgccgag
L. Afr	-ttgctcgc	gtgcc--cttcctctgatgaacctgtgtt	<b>GTTAGGGACATCTGAGACT</b>	--tgatgaatgccaacttctctgatggcagtc	atgccggg
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R. Mac	cccctcag	gtgagcccactt...284...-----accagctgctcctaaaatag-	<b>TTTCAGATGtTTCCTGtcTTGAGTAG</b>	ctctctgctctggccttgggc...87...caccctaccag	ggtgacag
P. Tro	cccctcag	gtgagcccactt...283...-----atcagctgctcctaaaatag-	<b>TTTCAGATGtTTCCTGtcTTGAGCAG</b>	ctctctgctctggccttgggc...87...caccctaccag	ggtgacag
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O. Cun	cccctcag	gtgagcccatac...276...--cgtcagcagctcctaaaata	<b>G-TTTCAGATGtTTCCTGtCTGA</b>	-gttgctcccctccttgcct-----...93...tcttctaccag	cgtgacag
C. Fam	gccctcag	gtgagcccacat...278...gccctgctgctgctcctaa	<b>AATAG-TTTCAGATGtTTCCTGCC</b>	ttgagctcctcctgcccctg-----...100...ccactactaccag	ggtgacgg
F. Cat	gcccttcg	gtgagcccgcac...302...gccctgctgctgctcctaa	<b>AATAG-TTTCAGATGtTTCCTGTC</b>	ttaagctgctcctgcccctg-----...103...ccactactaccag	ggtgacca
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E. Cab	tctctcag	gtgagatcacac...280...gccgggcccagcagctcctaa	<b>AATAG-TTTCAGATGtTTCCTGTC</b>	ttgagctgctcctgctcctg-----...100...ccacaccaccag	ggtgacgg
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L. Afr	cccctcaa	gtgagtccatgc...254...--ccaccagcactcctaaaat	<b>AG-TTTCAGATGtTTCCTGTC</b>	ttgagctgctcctgctcctg-----...99...ctccccaccag	ggtgacag
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Figure 373: CS=10.14



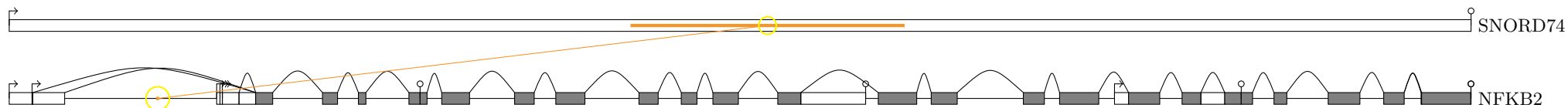
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C.Jac	-cggctctt	gtgcc--ttgcctctgatgaagcctgc	<b>GTTG</b>	<b>TAGGGACA</b>	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgctgag
M.Mus	-cagcatcg	gtgtt--catgctatgatgaaggcta	<b>TGTTG</b>	<b>TAGGGACA</b>	actgagcttgttgatgaataccaacgattctgatggcagagc	atgctgag
C.Por	-gggctcgc	gtgcc--ttgctcatgatgaagcc	<b>TGTGTTG</b>	<b>TAGGGACA</b>	tctgag--tgctgatgaatgccaaccgctctgatggcggcgc	atgcagag
O.Cun	-cggctgcc	gtgcctgccgactctgatgaagtctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagagcctgatgaatgccaaccgctctgatggcggccc	gcgcgagc
C.Fam	-gggctcgc	gcttc--ctgcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagactgttgatgaatgccaaccgctctgatggcggcgc	ttgccggg
F.Cat	-gggctcgc	gttcc--ctgcctctgatgaagcctgc	<b>GTTG</b>	<b>TAGGGACA</b>	tctgagactgttgatgaacccaaccgctctgatggcggcgc	gtgccgag
B.Tau	-cagctcgt	ttgct--ctgcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagattgttgatgaatgccaaccgctctgatggcggcgt	aaccgac
E.Cab	-cggctcgc	gtgtc--ctgcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagactgttgatgaatgccaaccgctctgatggcggcgc	atgctgag
S.Sus	tcggctcg-	gggccc--ctgcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagac--ttgatgaatgccaaccgctctgatggcggcgc	ttgccgag
O.Avi	-cagctcgt	ttgct--ctgcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagagtggtgatgaatgccaaccgctctgatggcggcgt	aacccac
L.Afr	-ttgctcgc	gtgcc--cttcctctgatgaagcctg	<b>TGTTG</b>	<b>TAGGGACA</b>	tctgagac--ttgatgaatgccaacttctctgatggcagtc	atgccggg
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P.Tro	agtgca	at	atccttttattt...4631...-tagtacatggtgggtgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacgtatagatagcct----.278...attgcatcctac	atgcagga
P.Abe	agtgca	at	atccttttattt...4631...-tagtacatggtgggtgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacgtatagatagcct----.278...attgcatcctac	atgcagga
C.Jac	agtgca	at	atccttttattt...4631...-cagtaccggtgggtgcgtt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacatagatagcct----.279...attgcatcctac	atgcagga
M.Mus	agcgca	at	atccttttatct...4630...gtagtcggccttaggctgac-	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaatgtagatagcctac...279...gttgcaccccac	atgcagga
C.Por	agtgca	at	atccttttattt...4689...gtggcccatattgggtgcgt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACACG</b>	tgagcatatggagaacacac--.217...attgcatcctac	atgcagga
O.Cun	agtgca	at	atccttttattt...4632...-tactacctgctggatgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacatagatctac----.277...gttgcacccac	atgcagga
C.Fam	agtgca	at	atccttttattt...4637...-tgatacgtggtgggtgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacgtataggtaacat----.272...aatgcctcctac	atgcagga
F.Cat	agtgca	at	atccttttattt...4630...-tacaaaatggtgggtacatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacatatacgtagc-----.280...aatgcatcctac	atgcagga
B.Tau	agtgca	at	atcctttcattt...4638...-caatacctggtgggcgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacatagatagcct----.271...actgcatcctac	atgcagga
E.Cab	agtgca	at	atccttttattt...4647...gcagtagctggt-ggtgcgtt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacgtatagataggac----.262...attgcatcctac	atgcagga
S.Sus	agtgca	at	atcctttcgttt...4626...-tgatacgtggtgggtgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacgtatagcctagc-----.283...ctgcatcctac	atgcagga
O.Avi	agtgca	at	atcctttcattt...4632...-caatacctggtgggcgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaacacgtatagaga----.277...attgcatcctac	atgcagga
L.Afr	agtgca	at	atccttttcaaa...4633...-tggcccatggtgggtgcatt	<b>TGTC</b>	<b>CTTAG</b>	<b>CAACA</b>	agtgaaggtatagacagc-----.276...cattcatcctac	atgcagga
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id=672498 gene=ENSG00000117707 name=PROX1 segment=chr1\_214171606\_214178507\_1 type=IN VIEW

Figure 374: CS=13.5



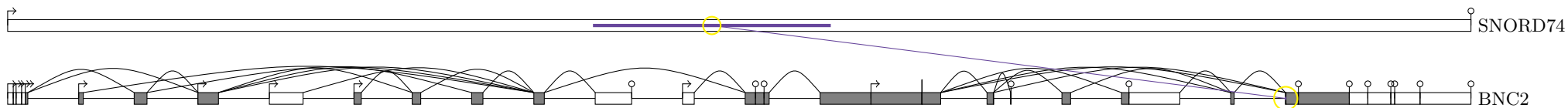
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R. Mac	-cggctctc	gtgcc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	agagtaaatgatgaatgccaaccgctctgatggtggcac	atgccgag
P. Tro	-cggctctc	gtgcc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	agagtaaatgatgaatgccaaccgctctgatggtggcac	atgccgag
P. Abe	-cggctctc	gtgcc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	agagtgatgatgaatgccaaccgctctgatggtggcac	atgccgag
C. Jac	-cggctctt	gtgcc--ttgcctctgatgaagcctg	<b>TTGGtaGGGACATCTGAG</b>	agtaaatgatgaatgccaaccgctctgatggtggcac	atgtcgag
C. Por	-gggctcgc	gtgcc--ttgctcatgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	--agtgcctgatgaatgccaaccgctctgatggcggcgc	atgcagag
O. Cun	-cggctgcc	gtgcctgccactctgatgaagtctgtg	<b>TTGGtaGGGACATCTG</b>	gagcgcctgatgaatgccaaccgctctgatggcggccc	gcgcgagc
C. Fam	-gggctcgc	gcttc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	gagactgttgatgaatgccaaccgctctgatggcggcgc	ttgccggg
B. Tau	-cagctcgt	ttgct--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	agattgttgatgaatgccaaccgctctgatggcggcgt	aaccggac
E. Cab	-cggctcgc	gtgtc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	gagactgttgatgaatgccaaccgctctgatggcggcgc	atgtcgag
S. Sus	tcggctcg-	gggccc--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	gagac--ttgatgaatgccaaccgctctgatggcggcgc	ttgccgag
O. Avi	-cagctcgt	ttgct--ctgcctctgatgaagcctgtg	<b>TTGGtaGGGACATCTG</b>	agagtgttgatgaatgccaaccgctctgatggcggcgc	aaccggac
L. Afr	-ttgctcgc	gtgcc--cttcctctgatgaacctgtg	<b>TTGGtaGGGACATCTG</b>	gagac--ttgatgaatgccaacttctctgatggcggcgc	atgccggg
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id=541858 gene=ENSG00000200954 name=SNORD74 segment=chr1\_173836809\_173836888\_-1 type=EN

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R. Mac	acggacc	gtacgtacacct...505..-aaggggaggccatcagacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagcccc-gggtttatcagc...288...ccgctcccctt	ggtatatt
P. Tro	gcggacc	gtacgtacacct...517..-aaggggaggcctccgacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtttatcag-...289...ccgctcccctt	ggtatatt
P. Abe	gcggacc	gtacgtacacct...515..-aaggggaggcctccgacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtttatcag-...289...ccgctcccctt	ggtatatt
C. Jac	gcggacc	gtacgtacacct...465..-tacaggcagttcgaagaggc <b>CTCAGG</b> aa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtttatcag-...282...ccgctcccctt	ggtatatt
C. Por	cggaacc	gtaagtacacct...450..-aagaggcggctttccgactg--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtgaatcag-...270...ccgctcccctt	ggtatatt
O. Cun	acatccc	gc-cgtgcacctg...311..tcagaggaggcc-tccggcag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtgaatcag-...298...ccccccccctt	ggtatatt
C. Fam	gcggacc	atacgtgcacct...486..-gaaaggaggccttctctacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagcccc-gggtgaatcagc...298...ccgctcccctt	ggaattt
B. Tau	cacggggc	gtacgtccatct...474..-gggaggaggccttctctacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtgaatcag-...304...cctcccctt	ggtatatt
E. Cab	gctgacc	gtacgtacacct...520..-gggaggaggccttctctca--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtgaatcag-...294...ccgctcccctt	ggtatatt
S. Sus	gcgggccc	ttgttacacct...495..-gggagtaggccttctactg--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccagggtgattcag-...297...ccgctcccctt	ggtatatt
O. Avi	tatgggccc	gtacgtccatct...471..-gggtggaggccttctctacag--CAGGaa	<b>TGTCCC</b>	<b>CCAA</b>	aagccccggggtgaatcag-...334...ccgctcccctt	ggtatatt
L. Afr	gcggacct	gaacattacacct...528..-gagtggggtgctcctacag--CAGGaa	<b>TGT</b>	<b>CCCCCAA</b>	aagccccagggtgaatcag-...276...ccgctcccctt	ggtatatt
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id=67855 gene=ENSG00000077150 name=NFKB2 segment=chr10\_104154532\_104154531\_1 type=I5

Figure 375: CS=10.14



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R. Mac	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag	
P. Tro	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag	
P. Abe	-cggctctc	gtgcc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagagtgatgatgaatgccaaccgctctgatggtggcac	atgccgag	
M. Mus	-cagcatgc	gtgtt--catgctatgatgaaggcta	<b>TGTT</b>	<b>ggTAGGGACAA</b>	ctgagcttgttgatgaataccaacgattctgatggcagagc	atgctgag	
C. Por	-gggctcgc	gtgcc--ttgctcatgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgag--tgctgatgaatgccaaccgctctgatggcggcgc	atgcagag	
O. Cun	-cggctcgc	gtgcctgccgactctgatgaagt	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagagcgctgatgaatgccaaccgctctgatggcggccc	gcgcgagc	
C. Fam	-gggctcgc	gcttc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagactgttgatgaatgccaaccgctctgatggcggcgc	ttgccggg	
B. Tau	-cagctcgt	ttgct--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagattgttgatgaatgccaaccgctctgatggcggcgt	aaccgac	
E. Cab	-cggctcgc	gtgtc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagactgttgatgaatgccaaccgctctgatggcggcgc	atgctgag	
S. Sus	tcggctcg-	gggcc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagac--ttgatgaatgccaaccgctctgatggcggcgc	ttgccgag	
O. Avi	-cagctcgt	ttgct--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagagtgatgatgaatgccaaccgctctgatggcggcgc	aaccgac	
L. Afr	-ttgctcgc	gtgcc--ctgcctctgatgaagc	<b>CTGTGTT</b>	<b>ggTAGGGACA</b>	tctgagac--ttgatgaatgccaacttctctgatggcagcgc	atgccggg	
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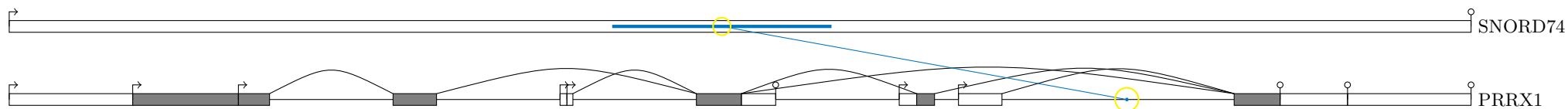
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R. Mac	gtcacaag	gtaagctcagcc...1492...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
P. Tro	gtcacaag	gtaagctcagcc...1574...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
P. Abe	gtcacaag	gtaagctcagcc...1801...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
M. Mus	gtcacaag	gtaagctcagcc...1414...	tgcgcctccccctccccct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACA</b>	cagtg
C. Por	atcacaag	gtaagctcagcc...1456...	cacctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
O. Cun	atcacaag	gtaagctcagcc...1521...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
C. Fam	atcacaag	gtaagctcagcc...1503...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
B. Tau	atcacaag	gtaagctcagcc...1566...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
E. Cab	atcacaag	gtaagctcagcc...1542...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
S. Sus	atcacaag	gtaagctcagcc...1524...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
O. Avi	atcacaag	gtaagctcagcc...1570...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
L. Afr	atcacaag	gtaagctcagcc...1534...	-acctaccccccttcctct	<b>TGTT</b>	<b>ttCCTAG</b>	<b>ACACAG</b>	tg
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Figure 376: CS=11.7





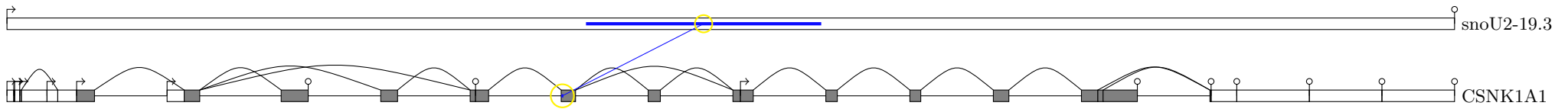
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P. Tro	-cggctctc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
P. Abe	-cggctctc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
C. Jac	-cggctctc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
M. Mus	-cagcatgc	gtgtt--catgctatgatgaagccta	GTGTTG	TAGGGACA	ctgagcttgttgatgaatgccaaccgctctgatggtggcac	atgccgag
C. Por	-gggctcgc	gtgcc--ttgctcatgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
O. Cun	-cggctcgc	gtgcc--ttgctcatgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
C. Fam	-gggctcgc	gtgcc--ttgctcatgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
F. Cat	-gggctcgc	gtgcc--ttgctcatgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
B. Tau	-cagctcgt	ttgct--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
E. Cab	-cggctcgc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
S. Sus	tggctcgc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
L. Afr	-ttgctcgc	gtgcc--ctgcctctgatgaagcct	GTGTTG	TAGGGACA	tctgagagtaatgatgaatgccaaccgctctgatggtggcac	atgccgag
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id=541858 gene=ENSG00000200954 name=SNORD74 segment=chr1\_173836809\_173836888\_-1 type=EN

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R. Mac	aagtccag	ggtggagcttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
P. Tro	aattccag	gttggagcttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
P. Abe	aagtccag	ggtggagcttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
C. Jac	aagtccag	ggtggagcttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
M. Mus	aagtctag	agtggagttgga...4945...	tatttccctgctctctcctt	TGTCCTACAG	CGCcatgg
C. Por	aggtctag	ggtgggcttctt...4118...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
O. Cun	aggtctag	ggtgggcttctt...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
C. Fam	aagtctgg	agcaggacttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
F. Cat	gagtctgg	agcaggacttgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
B. Tau	gaatctag	ggcaagacctgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
E. Cab	aggtctgg	agcaggacctgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
S. Sus	gagtctgt	ggcaggacctgg...4946...	-atttccctgctctctcctt	TGTCCTACAG	CGCcatgg
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Figure 377: CS=10.92



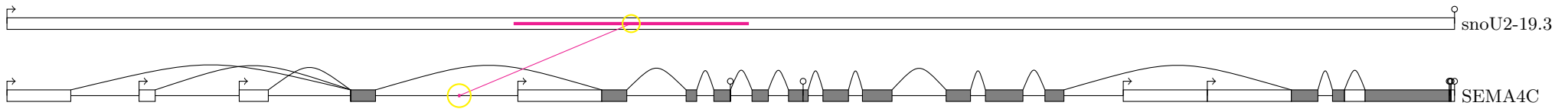
H. Sap	gtgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
R. Mac	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Tro	gtgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcagtgatgaaactagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tgcctgatgcatgatctctacatttctgaga	agcaaaac
C. Jac	ccgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaaac
M. Mus	ctgaaata	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAGG	ccttttgggt----ctggggcatgatctctctagtctgaga	agcaaaac
R. Nor	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	ccttttgggt-ggctgggtgcatgatctccatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	ccttttgggt-tccctgatgcatgatctctatagttctgaga	agcagatt
O. Cun	ccaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	cctttctagttctacctgatgcatgatctccattgttctgaga	agcaaaac
C. Fam	ctgtagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	cctttccagtc-tacctgatgcatgatctctctagtctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAGG	ccaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	cctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
S. Sus	cagaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	cctttctgtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
L. Afr	atgaagtg	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAGG	cctttctagtc-tacctgatgcatgatctctatagttctgaga	agcaaatcg
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id=69209 gene=ENSG0000201199 name=snoU2\_19.3 segment=chr11\_93454708\_93454787\_1 type=EN

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R. Mac	ctgaccag	gtagtgaaatt...4949...	---aattatctctcccttctttt-TTTCcaG	ATGATCAG
P. Tro	ctgaccag	gtagtgaaatt...4624...	---attatctctcccttctttt-TTTCcaG	ATGATCAG
P. Abe	ctgaccag	gtagtgaaatt...4604...	---aattatctctcccttctttt-TTTCcaG	ATGATCAG
C. Jac	ctgaccag	gtagtgaaatt...4948...	.tcaattatctctcccttct--TTTTTCaG	ATGATCAG
M. Mus	ctgaccag	gtagtgaaatt...1032...	.tcacctcttctaccctttt--CTTTTCaG	ATGATCAG
R. Nor	ctgaccag	gtagtgaaatt...650...	---acctgttctacccttttct--CTTTCaG	ATGATCAG
C. Por	ctgatcag	gtagtgaaatt...3828...	---catttgctccccctctttt-TTTTTTCaG	ATGATCAG
O. Cun	ctgaccag	gtagtgaaatt...4262...	---tgcctcttcccttctttttt--TTTTTCaG	ATGATCAG
C. Fam	ctgaccag	gtagtgaaatt...3356...	.ttatctttcaccctctttt--TTTTTCaG	ATGATCAG
B. Tau	ctgaccag	gtagtgaaatt...3168...	---tgattttctctcctccctt--TTTTTCaG	ATGATCAG
E. Cab	ctgaccag	gtagtgaaatt...3560...	---catttgctctcctctttt--TTTTTCaG	ATGATCAG
S. Sus	ccgaccag	gtagtgaaatt...3177...	.tcaattatctctccccctt--TTTTTCaG	ATGATCAG
L. Afr	ctgaccag	gtagtgagatt...3328...	---tccttccccctccccctttt-TTTTTTCaG	ATGATCAG
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id=54105 gene=ENSG0000113712 name=CSNK1A1 segment=chr5\_14889952\_148904607\_-1 type=IN

Figure 378: CS=19.04



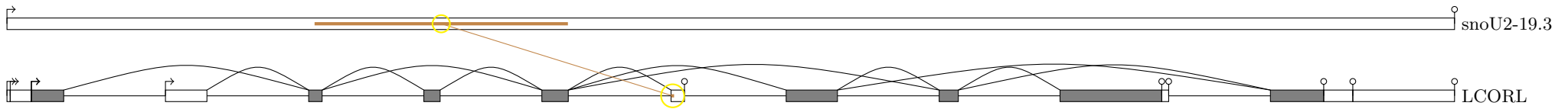
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P. Tro	gtgaagtg	gatcaatgatgaaactagc	CAAATCTGAGCATCA	gaagtctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
C. Jac	ccgaagtg	gatcaatgatgaaactagc	CAAATCTGAGCATCA	gaaggctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaaac
M. Mus	ctgaaata	gatcagtgatgaaaatagc	CAAATCTGAGCATCA	gaaggccttttgggt---ctggg-gcatgatctctctagttctgaga	agcaaaac
R. Nor	ctgaaagtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaaggccttttgggtc-ggctgggtgcatgatctccatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaagactttcggtc-tccctgatgcatgatctctatagttctggga	agcagatt
O. Cun	ccaagtgtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaagaccttctagttctacctgatgcatgatctccattgttctgaga	agcaaaac
F. Cat	ctgaaagtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaagactttgagtc-tatctgatgcatgatctctgtagttctgaga	agcaaaag
B. Tau	ctgaaagtg	gatcagtgatgaaagttagc	CAAATCTGAGCATCA	gaagaccaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag
E. Sub	ctgaaagtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
S. Sus	cagaagtgtg	gatcaatgatgaaaatagc	CAAATCTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
L. Afr	atgaaagtgtg	gatcagtgatgaaaatagc	CAAATCTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctatagttctggga	agcaatcg
	*	*	*****	*****	*****

id=69209 gene=ENSG0000201199 name=snoU2\_19.3 segment=chr11\_93454708\_93454787\_1 type=EN

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P. Tro	ttctgggg	gtgagtcctgg...	449...	gcacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgcgctctggg...	316...	-----	cctagtgccctg	ctatgctc
C. Jac	ttctgggg	gtgagtcctgg...	449...	gcacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagctgtgtgctctggg...	316...	-----	cctagtgccctg	ctgtgctc
M. Mus	ttctgggg	gtgagtcctga...	577...	-cgacacaccctgtgagagg---	TGATGTCAGgtGTTTG	tatcatctctgtgctctgg...	297...	-----	gccagtcctgccc	ctg-----
R. Nor	ttctgggg	gtgagtcctga...	608...	---acacctgtatggagagg---	TGATGTCAGgtGTTTG	tatcatccctgtgctctgg...	285...	-----	ccacctgacat	ctgtgtgt
C. Por	ttctgggg	gtgagtcctga...	489...	-cacacaccctgtgaaagagg---	TGATGTCAGgtGTTTG	gtcatccctgcgctctgg...	286...	-----	caactatgccag	ctgtgggt
O. Cun	ttctgggg	gtgagtcctga...	534...	-catgcacaccctgtgaaagagg---	TGATGTCAGgtGTTTG	tatcatccctgtgctctgg...	280...	-----	cccaatggccag	ctgtgctt
F. Cat	ttctgggg	gtgagtcctaa...	489...	-cacacaccctgtagtaagaga---	TGATGTCAGgtGTTTG	tatcatcactgtgctctgg...	314...	-----	cccagcagccag	ttgctctc
B. Tau	ttctgggg	gtgagtcctga...	519...	-cacacaccctgtatgagagg---	TGATGTCAGgtGTTTG	tatcatccctgcgctctgg...	305...	-----	tccatggccgg	ctctgctc
E. Cab	ttctgggg	gtgagtcctga...	525...	-tatgcacaccctgtgagagg---	TGATGTCAGgtGTTTG	tatcatccatgtgctctgg...	308...	-----	cgagcggccag	ctgtgctt
S. Sus	ttctgggg	gtgagtcctgg...	446...	-cacacaccctgtatgagagg---	TGATGTCAGgtGTTTG	tatcatccatgactctgg...	294...	-----	gtccatggctag	ctctgctt
L. Afr	cactgggg	gtgagtcctga...	584...	-cacacaccctgtgcaagagg---	TGATGTCAGgtGTTT	atatcatctctgcac-cctgg...	276...	-----	tccagccccag	ctgtgctt
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id=224398 gene=ENSG0000168758 name=SEMA4C segment=chr2\_97532668\_97533514\_-1 type=IN

Figure 379: CS=10.2



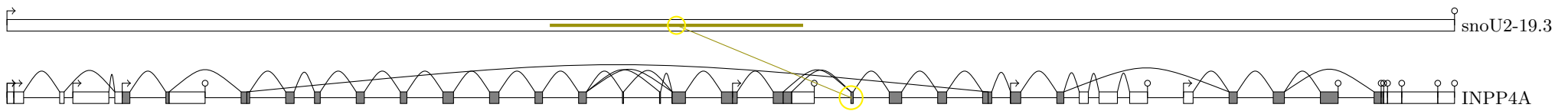
H. Sap	gtgaagtg	gatcaatga	TGAAacTAGCCAAAT	ctgagcatcagaagctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
R. Mac	ctgaagtg	gatcaatga	TGAAacTAGCCAAAT	ctgagcatcagaaggctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Tro	gtgaagtg	gatcaatga	TGAAacTAGCCAAAT	ctgagcatcagaagctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcagtg	TGAAacTAGCCAAAT	ctgagcatcagaaggctttccagtc-tgacctgatgcatgatctctacatttctgaga	agcaaaac
C. Jac	ccgaagtg	gatcaatga	TGAAacTAGCCAAAT	ctgaacatcagaaggctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaaac
M. Mus	ctgaaata	gatcagtg	TGAAaaTAGCCAAAT	ctgagcatcagaaggccttttgggt---ctggg-gcatgatctctctagtctgaga	agcaaaac
R. Nor	ctgaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaaggccttttgggt-ggctgggtgcatgatctccatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttcggtc-tccctgatccatgatctctatagttctggga	agcagatt
O. Cun	ccaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttctagtcttacctgatgcatgatctccattgttctgaga	agcaaaac
C. Fam	ctgtagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttccagtc-tacctgatgcatgatctctctagtctgaga	agcaaaag
F. Cat	ctgaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttcgagtc-tatctgatgcatgatctctgtagttctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtg	TGAAagTAGCCAAAT	ctgagcatcagaagaccaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
S. Sus	cagaagtg	gatcaatga	TGAAaaTAGCCAAAT	ctgagcatcagaagactttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
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id=69209 gene=ENSG0000201199 name=snoU2.19.3 segment=chr11\_93454708\_93454787\_1 type=EN

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R. Mac	aaagaaag	gtaatattggta...	1540...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
P. Tro	aaagaaag	gtaatattggta...	1552...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
P. Abe	aaagaaag	gtaatattggta...	1609...	-aggtaaaaactttggtact-ATTTcaG	CTGaTTCa
C. Jac	aaagaaag	gtaatattggta...	1585...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
M. Mus	aaagaaag	gtaatactggca...	1288...	-tcagtaaaaaacttggtact-ATTTcaG	CTGaTTCa
R. Nor	aaagaaag	gtaatactggca...	1261...	-tcagtaaaaaacttggtact-ATTTcaG	CTGaTTCa
C. Por	aaagaaag	gtaatactggca...	1366...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
O. Cun	aaagaaag	gtaatactggta...	1194...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
C. Fam	aaagaaag	gtaatattggta...	2523...	atcaga-aaacacttggtact-ATTTcaG	CTGaTTCa
F. Cat	aaagaaag	gtaatattggta...	1431...	atcagt-aaacacttggtact-ATTTcaG	CTGaTTCa
B. Tau	aaagaaag	gtaatattgata...	1408...	atcagt-aaaaaatttggtact-ATTTcaG	CTGaTTCa
E. Cab	aaagaaag	gtaatattgata...	1420...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
S. Sus	aaagaaag	gtaacattgata...	2012...	atcagt-aaaaacttggtact-ATTTcaG	CTGaTTCa
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Figure 380: CS=10.92



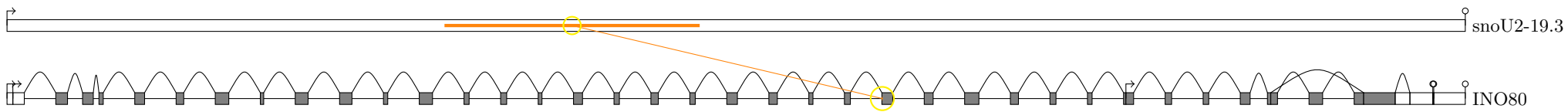
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R. Mac	ctgaagtg	gatcaatgatgaaactagcca	AATCTgaGCATcAGAAG	gctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Tro	gtgaagtg	gatcaatgatgaaactagcca	AATCTgaGCATcAGAAGT	ctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcagtgatgaaactagcca	AATCTgaGCATcAGAAG	gctttccagtc-tgcctgatgcatgatctctacatttctgaga	agcaaaac
R. Nor	tgaagtg	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	gccttttggtc-ggctgggtgcatgatctccatagttctgaga	agcaaaac
C. Por	tcaaatg	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	acctttcggtc-tccctgattcatgatctctatagttctggga	agcagatt
O. Cun	ccaagtg	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	acctttcagtc-tacctgatgcatgatctccattgttctgaga	agcaaaac
C. Fam	ctgtagt	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	acctttccagtc-tacctgatgcatgatctcttagttctgaga	agcaaaag
F. Cat	ctgaagtg	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	actttgagtc-tatctgatgcatgatctctgtagttctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgatgaaagttagcca	AATCTgaGCATcAGAAG	accaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	acctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
S. Sus	cagaagt	gatcaatgatgaaatagcca	AATCTgaGCATcAGAAG	acctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag
L. Afr	atgaagt	gatcagtgatgaaatagccaa	ATCTgaGCATcAGAAG	acctttcagtc-tacctgatgcatgatctctatagttctggga	agcaaatcg
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P. Tro	aatctgag	aacctgaaggag...	3301...	aatcatccatgtcgccctcc	ATTCTGTGCAG	ATTgcagt
P. Abe	aatctgag	aacctgaaggag...	3305...	-atcatccatgtcgccctcca	TTTCTGTGCAG	ATTgcagt
R. Nor	gacctgag	aagctgacgggg...	2200...	-atcaccctgtcgccctcca	TTTCTGTGCAG	ATTgcagc
C. Por	aacctgag	agcccaaagggtg...	3021...	-atcaccctgtcgccctcca	TTTCTGTGCAG	ATTgcagt
O. Cun	aacctgag	gacctgaaggaa...	3890...	-atcatccgtgttaccctcca	TTTCTGTGCAG	ATTgcagc
C. Fam	agcctgag	cacctgaaggag...	3315...	-atcatccgtgtcaccctcca	TTTCTGTGCAG	ATTgcagc
F. Cat	aatctgag	aacctgaaggag...	3312...	-atcatccatgtcgccctcca	TTTCTGTGCAG	ATTgcagc
B. Tau	cacctggg	aacctgaaggag...	3129...	aatcatccatgtca-cctcca	TTTCTGTGCAG	ATTgcagc
E. Cab	aatctgag	gacctgaaggag...	3310...	-atcatccatgtcgccctccg	TTTCTGTGCAG	ATTgcagc
S. Sus	agtctgag	aacctgaaggag...	3000...	-atcatccatgtcaccctcca	TTTCTGTGCAG	ATTgcagt
L. Afr	agtccgag	accctgaaggag...	4946...	-accctccgtgttaccctcca	TTTCTGTGCAG	ATTgcagc
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Figure 381: CS=10.14



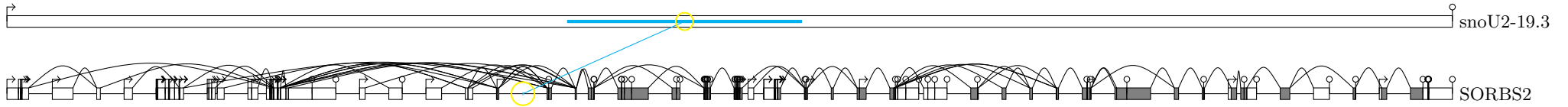
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R. Mac	ctgaagtg	gatcaatgatgaaa	CTAGCCaa	ATCTGAGCATCA	gaaggctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Tro	gtgaagtg	gatcaatgatgaaa	CTAGCCaa	ATCTGAGCATCA	gaagtctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcagtgatgaaa	CTAGCCaa	ATCTGAGCATCA	gaaggctttccagtc-tgcctgatgcatgatctctacatttctgaga	agcaaaac
C. Jac	ccgaagtg	gatcaatgatgaaactagccaaat	CTGAaCATCa	GAAGgctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaaac	
C. Por	tcaaatg	gatcaatgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttcggtc-tccctgattcatgatctctatagttctggga	agcagatt
O. Cun	ccaagtg	gatcaatgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttcagtc-tacctgatgcatgatctcattgttctgaga	agcaaaac
C. Fam	ctgtagt	gatcaatgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttccagtc-tacctgatgcatgatctcttagttctgaga	agcaaaag
F. Cat	ctgaagtg	gatcaatgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttcggtc-tatctgatgcatgatctctgtagttctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgatgaaag	TAGCCaa	ATCTGAGCATCA	gaagaccaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag
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S. Sus	atgaagt	gatcagtgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttcagtc-tacctgatgcatgatctctatagttctggga	agcaatcg
L. Afr	atgaagt	gatcagtgatgaaaa	TAGCCaa	ATCTGAGCATCA	gaagacctttcagtc-tacctgatgcatgatctctatagttctggga	agcaatcg
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R. Mac	ttggccag	gtgagaggtttg...	2566...	ctgaataagtgtctgctg	TGGTtTGTTCAG	ATGGTTAg
P. Tro	ttggccag	gtgagaggtttg...	2326...	ctgaataagcgtgtctgctg	TGGTtTGTTCAG	ATGGTTAg
P. Abe	ttggccag	gtgagaggtttg...	2296...	ctgaataagcgtgtctgctg	TGGTtTGTTCAG	ATGGTTAg
C. Jac	ttggccag	gtgagaggtttg...	2329...	-----agcgtgtctgctg	tggttTTTCaG	ATGgTTAg
C. Por	ttggccag	gtgaggagtttg...	983...	ctgaataagcatgtctgctg	TGGTcTGTTCAG	ATGGTTAg
O. Cun	ttggccag	gtgagaagtttg...	1468...	ctgaatgaacgtatctgctg	TGGTtTGTTCAG	ATGGTTAg
C. Fam	ttggccag	gtgagaagtttg...	725...	ctgaataagcatgtctgctg	TGGTcTGTTCAG	ATGGTTAg
F. Cat	ttggccag	gtgagaagtttg...	726...	ctgaataagcatgtctgctg	TGGTtTGTTCAG	ATGGTTAg
B. Tau	ttagccag	gtgagaagtttg...	718...	ctgaataagcatgtctgctg	TGGTtTGTTCAG	ATGGTTAg
E. Cab	ttggccag	gtgagaagtttg...	719...	ctgaataagcatgtctgctg	TGGTtTGTTCAG	ATGGTTAg
S. Sus	ttggccag	gtgagaagtttg...	1124...	ctgaataagcatgtctgctg	TGGTtTGTTCAG	ATGGTTAg
L. Afr	ttggccag	gtgaggagtttg...	747...	ctgaataagcatgtctgctg	TGGTtTGTTCAG	ATGGTTAg
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id=400811 gene=ENSG00000128908 name=INO80 segment=chr15\_41337274\_41339605\_-1 type=IN

Figure 382: CS=11.05



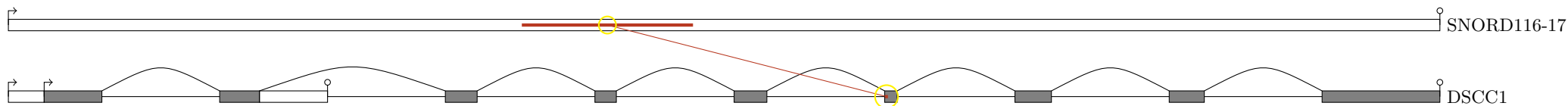
H. Sap	gtgaagtg	gatcaatgatgaaactagccaa	ATCTGAGCA	tc	AGAAGT	ctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Tro	gtgaagtg	gatcaatgatgaaactagccaa	ATCTGAGCA	tc	AGAAGT	ctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcagtgatgaaactagccaa	ATCTGAGCA	tc	AGAAGG	ctttccagtc-tgctgatgcatgatctctacatttctgaga	agcaaaac
M. Mus	ctgaaata	gatcagtgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	ggccttttgggt---ctggg-gcatgatctctagttctgaga	agcaaaac
R. Nor	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	ggccttttgggtc-ggctgggtgcatgatctccatagttctgaga	agcaaaac
C. Por	tcaaatg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttgagtc-tccctgattcatgatctctatagttctggga	agcagatt
O. Cun	caaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttgagtc-tacctgatgcatgatctccattgttctgaga	agcaaaac
C. Fam	ctgtagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttccagtc-tacctgatgcatgatctctctagttctgaga	agcaaaaag
F. Cat	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttgagtc-tatctgatgcatgatctctgtagttctgaga	agcaaaaag
B. Tau	ctgaagtg	gatcagtgatgaaagttagccaa	ATCTGAGCA	tc	AGAAG	Accaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaaag
E. Cab	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaaag
S. Sus	cagaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	Acctttctgtc-tacctgatgcatgatctctgtagttctgaga	agcaaaaag
L. Afr	atgaagtg	gatcagtgatgaaatagccaa	ATCTGAGCA	tc	AGAAG	gaccttctagtc-tacctgatgcatgatctctatagttctggga	agcaaatcg
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id=69209 gene=ENSG0000201199 name=snoU2.19.3 segment=chr11\_93454708\_93454787\_1 type=EN

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P. Abe	gaatacag	gtatgctgtctg...4942...	-ccttggcctctgctatatca	TTTTTT	TGCTtc	CAG	AT	agcgg
M. Mus	gaatacag	gtacactgtctc...4944...	---ttggcctctgccatatcatg	TTTTTT	TGCTtc	CAG	AT	agcgg
R. Nor	gaatacag	gtataccatctc...4944...	---ttggcctctgctatatcatg	TTTTTT	TGCTtc	CAG	AT	agcgg
C. Por	gaatacag	gtatgctgtctc...4194...	-ccttggcctctgctatgtca	TTTTTT	TGCTtc	CAG	AT	agcgg
O. Cun	gaatacag	gtatgctgtctc...4324...	-ccttggcctctgctatttca	TTTTTT	TGCTtc	CAG	AT	agcgg
C. Fam	gaatacag	gtacgctgtctc...4534...	-ctgtggcctctgctatatca	TTTTTT	TGCTtt	CAG	AT	agcgg
F. Cat	gaatacag	gtatgctgtttc...4334...	-ctgtggcctctgctatatca	TTTTTT	TGCTtt	CAG	AT	agcgg
B. Tau	gaacacag	gtatgctgtctc...4942...	-ctgtggcctctgctatgtca	TTTTTT	TGCTtc	CAG	AT	agcgg
E. Cab	gaatacag	gtatgctgtctc...4567...	-ctgtggcctctgctatatca	TTTTTT	TGCTtc	CAG	AT	agcgg
S. Sus	gaatacag	gtatgctgtctc...4942...	-ctatggcctttgctatatca	TTTTTT	TGCTtc	CAG	AT	agcgg
L. Afr	gaatacag	gtatgacatctc...4944...	---tcggcctctgctatgtcatg	TTTTTT	TGCTtc	CAG	AT	agcgg
	***	****	***	*	*	*****	**	*****

id=721998 gene=ENSG00000154556 name=SORBS2 segment=chr4\_186606001\_186611715\_-1 type=IN

Figure 383: CS=10.14



H.Sap	atgtgcat	ggatc	gatgatgacttccat	atata	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gaaaactctata	accgtcatcctc	gtc-gaactgaggtcc	agcacact
R.Mac	atgtgcat	ggatc	gatgatgacttccat	atata	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gaaaactctata	accgtcatcctc	gtc-gaactgaggtcc	agcacact
P.Abe	atgtgcat	ggatc	gatgatgacttccat	atata	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gaaaactctata	accgtcatcctc	gtc-gaactgaggtcc	agcatact
C.Jac	atgtgtgt	ggatc	gatgatgacttccat	atata	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gaaaactctata	accgtcatcctc	gtc-gaactgaggtcc	ggcacact
M.Mus	acgtgctt	ggatc	tatgatgattcccagtc	-aaa	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gaaaactctgtacc	gccactgtcatc	ggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgattccagta	-aaa	CATTCCTTGG	AAAGc	TGAA	-cgaatgagt	gaaaactcagtacc	gccactatcatc	gtgactgaggtcc	agcacctg
O.Cun	atgtgctt	ggatc	gatgatgactcctgcaa	-ata	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gagaactcata	accgtcgttctc	attgtgactgaggtcc	agcacgtt
C.Fam	aagtgctc	agatt	gatgatgactcctcaactc	g	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gagaactcctact	gtcatttctcat	caaaactgaggtcc	agcatggt
F.Cat	atgtgctc	ggatc	gatgatgactcctcaa	-cag	CATTCCTTGG	AAAGc	TGAA	-caaaatgagt	gagaactcctc	ccgtcgttctc	atcgaaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactcccacaa	-atg	CATTCCTTGG	AAATc	TGAACA	-aaatgagt	gagccaccctacc	gtc-tcctcatc	ggaactgaggtcc	agcacgtg
E.Cab	acgtgctc	ggatc	gatgatgactcctcat	-atg	CATTCCTTGG	AAAAATc	TGAA	-caaaatgagt	gagaactcactacc	gtcgttctcatc	gaaactgaggtcc	ggcacgtt
S.Sus	cogtgcct	ggatc	gatgatgactcctcta	-aag	CATTCCTTGG	AAATc	TGAACA	-aaatgagt	gagaactcactacc	gtc-tcctcatc	gaaactgaggtcc	ggcacgtg
L.Afr	atgtgctt	ggatc	gtttatgacttccacac	-ata	CATTCCTTGG	AAATc	TGAA	-caaaatgagt	gagaaccctact	gtcctcttagc	-aacctgaggtcc	agcatacc
	***		***		*****	**	*	*****		*	*****	***

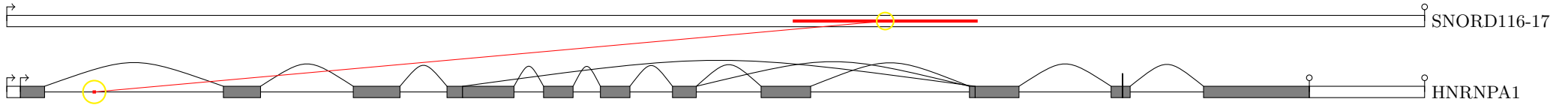
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P.Abe	gagccaga	gtaagtatttta	...751...	---ataacttttcaagtgggtg	-----TTTAaaTTTTTCAG	GGaAATGa
C.Jac	gagccaga	gtaagtatttta	...608...	---agaacttttcaaatgtgtg	-----TTTAaaTTTTTCAG	GGaAATGa
M.Mus	gagccaga	gtgagtatttgc	...905...	-tcataagtttctt--tgtgtg	-----TTTAaa--TTTTTCAG	GGaAATGa
R.Nor	gagccaga	gtgagtatttgc	...1060...	-tcataagtttctt--tgtgtg	-----TTTAaa--TTTTTCAG	GGaAATGa
O.Cun	gagccaga	gtaagtatttta	...403...	-gaatagcttctca--tgagtgt	-----TTTAaaTTTTTCAG	GGaAATGa
C.Fam	gagccaga	gtaagtatttta	...640...	-----ttcaaatgagtgttttaaaa	-----TTTTTCAG	GGaAATGa
F.Cat	gagccaga	gtaagtatttta	...426...	---taacttttcaaatgagtatt	-----TTTAaaTTTTTCAG	GGaAATGa
B.Tau	gagccaga	gtaagtatttat	...450...	gtgaaaacttttcaataag	-----TGTTTAaaATTTTTTCAG	GGaAATGa
E.Cab	gaaccaga	gtaagtatttta	...728...	---gtaacttttcaaatgaggt	-----TTTAaTTTTTCAG	GGaAATGa
S.Sus	gagccaga	gtaagtatttta	...323...	-----tcataaaaatgtgaagaag	TGTTTAAaaATTTTTTCAG	GGaAATGa
L.Afr	gaaccaga	gtaagtatttta	...392...	---ataacttttcaaatgggtg	-----TTTAaaATTTTTTCAG	GGaAATGa
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id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8\_120855069\_120855848\_-1 type=IN

Figure 384: CS=23.14





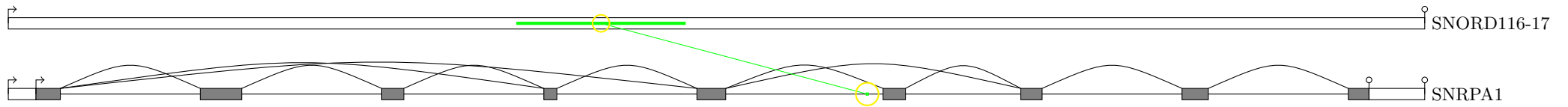
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R. Mac	atgtgcat	ggatc	cgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact
P. Tro	atgtgcat	ggatc	cgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact
C. Jac	atgtgtgt	ggatc	cgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	--aactgtgcccgtcatcctcgtcg-aactgaggtcc	ggcacact
M. Mus	acgtgctt	ggatc	atgatgatgattcccagtc-aaacattccttggaaaagctga	ACAAAATG	aGTGA	aaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
C. Por	atgtgcct	ggatc	cgatgatgacactcataa-atgcattccttgg-aaagctga	ACAAAATG	aGTGA	aaaacctataccgtcatttcatcg-aactgaggtcc	agcacact
O. Cun	atgtgcct	ggatc	cgatgatgactcctgcaa-atacattccttgg--aagctga	ACAAAATG	aGTGA	gaacctcataccgtcgttctcattgtgactgaggtcc	agcacgtt
C. Fam	aagtgctc	agatt	gatgatgactcctcaacctgcattccttggaaaagctga	ACAAAATG	aGTGA	gaactcctactgtcatttcatcaaaactgaggtcc	agcatgtt
F. Cat	atgtgctc	ggatc	cgatgatgactcctcaa-cagcattccttggaaaagctga	ACAAAATG	aGTGA	gaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	cgatgatgactcccacaa-atgcattccttgg-aaatctga	ACAAAATG	aGTGA	gccaccctaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatc	cgatgatgactcctcat-atgcattccttggaaaatctga	ACAAAATG	aGTGA	gaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatc	cgatgatgactcctcta-aagcattccttgg-aaatctga	ACAAAATG	aGTGA	gaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	atgtgcct	ggatc	cgtttatgacttccacac-atacattccttgg-aaatctga	ACAAAATG	aGTGA	gaaacccctactgtctctttagca-acctgaggtcc	agcatacc
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R. Mac	agtcagag	gtgagttaggcg...113...-----taccctcccaaagttcaag	TCGCCATTTTGT	cctcctgatcgccatgaggc---...377...ccccactccag	tctcctaa	
P. Tro	agtcagag	gtgagttaggcg...111...-----taccctcccaaagttcaag	TCGCCATTTTGT	cctcctgatcgccatgaggc---...375...ccccactctag	tctcctaa	
C. Jac	agtcagag	gtgagttaggcg...106...-----ctaccctcccaaagttcaag	TCGCCATTTTGT	cctcctgatcgccatgaggc---...371...ccccactgtag	tctcctaa	
M. Mus	agtcagag	gtaagttggatg...106...-----ctactttaaaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---...369...cctccactttag	tctcccaa	
C. Por	agtcagag	gtaagctgattt...103...-----gcctgctcccaaagttcagg	TCGCCATTTTGT	cctcgt---tcgccatgaggccgc...327...cttccactctag	tctcctaa	
O. Cun	agtcagag	gtgaggagctcc...102...aaggcctaccctcccaaag-----	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...378...tctcccgccag	tcgcccaa	
C. Fam	agtcagag	gtgagtaacacg...112...-----ttcccctcccgaagttgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...363...ccccgctcctag	tctcccaa	
F. Cat	agtcagag	gtgagtaacacg...113...-----taccctcccaaagttcggg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...378...cccgactcctag	tctcccaa	
B. Tau	aatcagag	gtgggtaagacg...111...-----tcccctccctaagttgagg	TCGCCATTTTGT	cctcgt---tcgccatgaggctgc...362...ctcctcctag	tctcccaa	
E. Cab	agtcagag	gtgagtaggacg...111...-----taccctcccaaagttcagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...359...tctactcctag	tctcccaa	
S. Sus	agtcagag	gtgagtgagact...111...-----taccctccctaagttcagg	TCGCCATTTTGT	cctcgt---tcgccatgaggctgt...358...ccctactctag	tctcccaa	
L. Afr	agtcagag	gtaagctacct...108...-----taccctcccaaagttgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...389...tccaccattag	tctcctaa	
	** ** *	** *	*	*****	** *****	** ** ** *

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12\_54674607\_54675169\_1 type=IN

Figure 385: CS=16.25



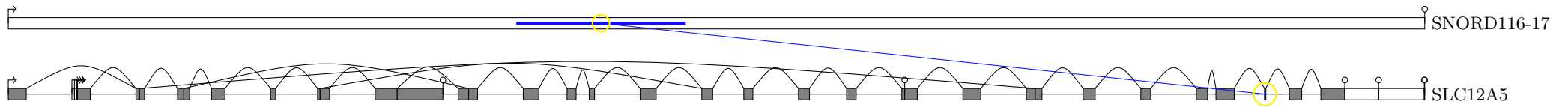
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M. Mus	acgtgctt	ggatc	atgatgatgattccc	agtaaa-CATT	CCTTGGAAAGC	-tgaac	aaaatgagtg	aaaactctgt	accgccactgt	catcgg	aactgaggtcc	agcatctt	
R. Nor	gcgtgctt	ggatc	cgatgatgatttcc	agtaaa-CATT	CCTTGGAAAGC	-tgaac	aaaatgagtg	aaaactcagt	accgccactat	catcgtg	aactgaggtcc	agcacctg	
C. Por	atgtgcct	ggatc	cgatgatgactcata	aa-ATGC	ATTCTTGGAA	-agctga	acaaaatgagtg	aaaactccta	accgtcattct	catc-ga	actgaggtcc	agcacact	
U. Cun	atgtgctt	ggatc	cgatgatgactcct	gaaata-CATT	CCTTGGAAAGC	--tga	acaaaatgagtg	gagaactca	accgtcgttct	cattgtg	aactgaggtcc	agcacgtt	
C. Fam	aagtgctt	agattg	atgatgactcctca	accTGC	ATTCTTGGAAAGC	tgaac	aaaatgagtg	gagaactcct	actgtcatct	catcaaa	aactgaggtcc	agcatggt	
F. Cat	atgtgctt	ggatc	cgatgatgactcct	caaca-GC	ATTCTTGGAAAGC	tgaac	aaaatgagtg	gagaactcct	cccgctgtt	tcatcga	aactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatc	cgatgatgactccc	acaa-ATGC	ATTCTTGGAAA	-tctga	acaaaatgagtg	agcaccct	accgtc-tc	cctcatcg	aactgaggtcc	agcacgtg	
E. Cab	acgtgctt	ggatc	cgatgatgactcct	cat-ATGC	ATTCTTGGAAAAT	ctga	acaaaatgagtg	gagaactc	actaccgtc	gttctcat	cgaactgaggtcc	ggcacgtt	
L. Afr	atgtgctt	ggatc	cgatttatgactt	ccacacata-CATT	CCTTGGAAA	-tctga	acaaaatgagtg	gagaacccct	actgtctct	cttagc-a	acctgaggtcc	agcatacc	
***	***	***	* ****	*****	*****	*****	*****	*	*	*	*	*****	***

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R. Mac	aactaaaa	gtaagtagtaat	...505...	---ggagagtt	cgcttccatg	ttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	tcgctgtag	gagcgtca
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C. Jac	aactaaaa	gtaagtagtaat	...472...	---ggagagtt	caactccatg	ttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	tcgctgtag	gagcgtca
M. Mus	aactcaaa	gtgagtagtgc	...487...	tcaggaga	atctcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	ttgctgtag	gagcgtca
R. Nor	aactaaaa	gtgagtagtgc	...467...	ttcagaga	atctcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	ttgctgtag	gagcgtca
C. Por	aactaaaa	gtaagtgctt	...457...	---gcagc	attctctccg	gtttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	ttgctgtag	gagcgtca
U. Cun	agctaaaa	gtaagtggtt	...439...	gcgggaaa	atgcttctgt	gttttctgaggaatg	catctaaatgc	atggtattg	ctaaattccatt	-actctg	tgtggtg	tcgctgtag	gagcgtca
C. Fam	aactaaaa	gtaagtagtgc	...528...	tcaggaga	gtttcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	ttgctgtag	gagcgtca
F. Cat	aactgaaa	gtaagtagtgc	...545...	tcagaag	gtttcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	ttgctgtag	gagcgtca
B. Tau	aactaaaa	gtaagtagtgc	...485...	---aggaga	gtttcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	tcgctgtag	gagcgtca
E. Cab	aactaaaa	gtaagtagtgc	...734...	tcaggaga	attttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	tcgctgtag	gagcgtca
L. Afr	aactgaaa	gtaagtagtag	...490...	---agggc	gtattcttccat	gttttctgaggaatg	catctaaatgc	atggtattc	ctatttcatta	aactctgtg	tgtggtg	tcgctgtag	gagcgtca
* ** **	** ** *	** ** *	*	*	*	*****	*	*	*	*	*	*	*****

id=143334 gene=ENSG00000131876 name=SNRPA1 segment=chr15\_101826499\_101827112\_-1 type=IN VIEW

Figure 386: CS=14



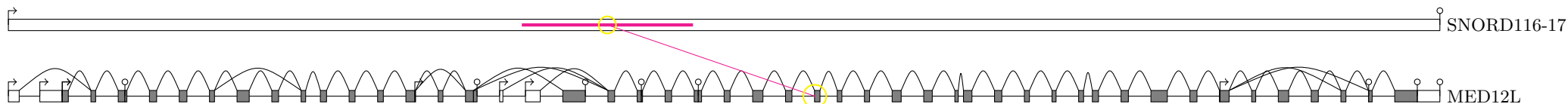
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R. Mac	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact
P. Tro	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact
P. Abe	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcact
C. Jac	atgtgtgt	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAAGC	-tgaacaaaatgagtg--aacactgtgccgtcatcctcgtcg-aactgaggtcc	ggcacact
M. Mus	acgtgctt	ggatc	atgatgatgattcccagtc-aaa	CATTCCCTTGGAAAGCTGAA	caaaaatgagtgaaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatc	cgatgatgatttccagta-aaa	CATTCCCTTGGAAAGC	-tgaacaaaatgagtgaaaactcagtagccactatcatcgtgactgaggtcc	agcacctg
C. Por	atgtgcct	ggatc	cgatgatgactcctcaaa-atg	CATTCCCTTGGAAAGC	gAACAA-aaatgagtgaaaactataccgtcatttctcatcg-aactgaggtcc	agcacact
C. Fam	aagtgctc	agatt	gatgatgactcctcaaacctg	CATTCCCTTGGAAAGC	gAACAAatgagtgagaactcctactgtcatttctcatcaaaactgaggtcc	agcatgtt
F. Cat	atgtgctc	ggatc	cgatgatgactcctcaaa-cag	CATTCCCTTGGAAAGC	gAACAAatgagtgagaactcctcctcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	cgatgatgactcccacaa-atg	CATTCCCTTGGAAAT	-ctgaacaaaatgagtgagccaccctaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatc	cgatgatgactcctcat-atg	CATTCCCTTGGAAAT	ctgaacaaaatgagtgagaactcactaccgtcgttctcatcgaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatc	cgatgatgactcctcta-aag	CATTCCCTTGGAAAT	-ctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatc	cgatttatgacttccacac-ata	CATTCCCTTGGAAAT	-ctgaacaaaatgagtgagaaccctactgtctctttagc-aactgaggtcc	agcatacc
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id=603549 gene=ENSG00000206656 name=SNORD116-17 segment=chr15.25328735.25328826.1 type=EN

H. Sap	atgaagcc	gtacgggcctgg...	.289...	-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
R. Mac	atgaagcc	gtacgggcctgg...	.290...	-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
P. Tro	atgaagcc	gtacgggcctgg...	.289...	-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
P. Abe	atgaagcc	gtacgggcctgg...	.267...	-----tctctctttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
C. Jac	atgaagcc	gtatgggcctgg...	.278...	-----tttctttttgcatctcttgt-	GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggcctgg...	.297...	--tctttctctcttctcttctc	TTTGTGTTTCCTGAAG	GGAGTGgg
R. Nor	atgaagcc	gtacgggcctgg...	.273...	-----ttctctctttgcttctctc-	GTTTCCTGAAG	GGAGTGgg
C. Por	atgaagcc	gtatgggcctgg...	.271...	tttctttctccttttcttc-	TGTTGTTTTCCTGAAG	GGAGTGgg
C. Fam	atgaagcc	gtatgggcctgg...	.278...	-----cctctcgttgccttcttgt-	GTTTCCTGAAG	GGAGTGgg
F. Cat	atgaagcc	gtatgggcctgg...	.298...	-----cctctctttgcttcttgt-	GTTTCCTGAAG	GGAGTGgg
B. Tau	atgaagcc	gtacgggtctgg...	.296...	-----cctctccttgccttcttct-	GTTTCctgAAG	GgAGTGgg
E. Cab	atgaagcc	gtatgggccttag...	.299...	-----cctcactttgcttcttgt-	GTTTCCGAAG	GGAGTGgg
S. Sus	atgaagcc	gtacgggcctgg...	.305...	-----cctctctttgcttcttgt-	GTTTCCcgAAG	GgAGTGgg
L. Afr	atgaagcc	gtatgggcctgg...	.288...	-----cttttctttgcttcttgt-	GTTTCctgAAG	GgAGTGgg
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id=543329 gene=ENSG00000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 387: CS=16.1



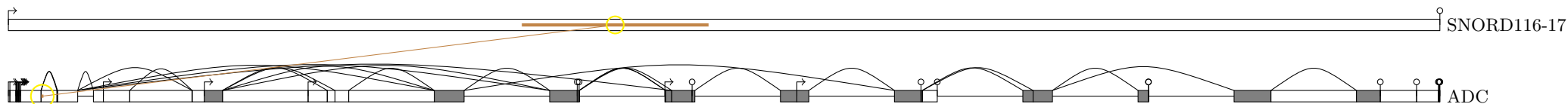
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R. Mac	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacact	
P. Tro	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacact	
P. Abe	atgtgcat	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacact	
C. Jac	atgtgtgt	ggatc	cgatgatgacttccatat-ata	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaca--ctgtgccgtcatcctcgtc-gaactgaggtcc	ggcacact	
M. Mus	acgtgctt	ggatc	ctatgatgattcccagtc-aaa	CATTCCCTTGGAAG	CTgaacaaaatgagtgaaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt	
R. Nor	gctgtcct	ggatc	cgatgatgatttccagta-aaa	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaaactcagtaccgccactatcatcgtgactgaggtcc	agcacctg	
C. Por	atgtgcct	ggatc	cgatgatgacactcataa-atg	CATTCCCTTGGAAG	-ctgaacaaaatgagtgaaaactctataccgtcatttctcatc-gaactgaggtcc	agcacact	
O. Cun	atgtgctt	ggatc	cgatgatgactcctgcaa-ata	CATTCCCTTGGAAG	--ctgaacaaaatgagtgagaacctataccgtcgttctcattgtgactgaggtcc	agcacgtt	
C. Fam	aagtgctc	agatt	gatgatgactcctcaacctg	CATTCCCTTGGAAG	AGCTgaacaaaatgagtgagaactcctactgtcatttctcatcaaaactgaggtcc	agcatgtt	
B. Tau	acgtgctt	ggatc	cgatgatgactcccacaa-atg	CATTCCCTTGGAAG	-tctgaacaaaatgagtgagcaccctaccgtc-tcctcatcggaactgaggtcc	agcacgtg	
S. Sus	ccgtgctc	ggatc	cgatgatgactcctcta-aag	CATTCCCTTGGAAG	-tctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg	
L. Afr	atgtgctt	ggatc	cgtttatgacttccacac-ata	CATTCCCTTGGAAG	-tctgaacaaaatgagtgagaacccctactgtctctttagc-aacctgaggtcc	agcatacc	
	***	***	* ****	*****	***** *****	* * * * * *****	***

id=603549 gene=ENSG00000206656 name=SNORD116-17 segment=chr15\_25328735\_25328826\_1 type=EN

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R. Mac	ctgtagat	gtaagttttctt...1598...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
P. Tro	ctgtagat	gtaagttttctt...1613...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
P. Abe	ctgtagat	gtaagttttctt...1601...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
C. Jac	ctgtagat	gtaagtagttt...1913...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
M. Mus	cggtagat	gtaagttttctt...1434...gggtattaaaacctgtcaat	GTTTTTCTtaAAG	GtgAGTGa
R. Nor	ctgtggat	gtaagttttctt...1318...--gcattaaaacctgtccatgt	TTTTCTtaAAG	GtgAGTGa
C. Por	ctgtagat	gtaagttttctt...1544...--gtattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
O. Cun	ctgtcgat	gtaagtttgctt...1693...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
C. Fam	ctgtggat	gtaagttttctt...1568...aggtattaaaacctgtcaat	GTTTTTCTtgAAG	GtgAGTGa
B. Tau	ctgtcgat	gtaagttttctg...1572...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
S. Sus	ctgtagat	gtaagttttctt...1671...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
L. Afr	ccgtcgat	gtaagtttctta...2102...--tattaaaacctgtcaatgt	TTTTCTtgAAG	GtgAGTGa
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id=595784 gene=ENSG00000144893 name=MED12L segment=chr3\_151083780\_151085433\_1 type=IN

Figure 388: CS=15.6



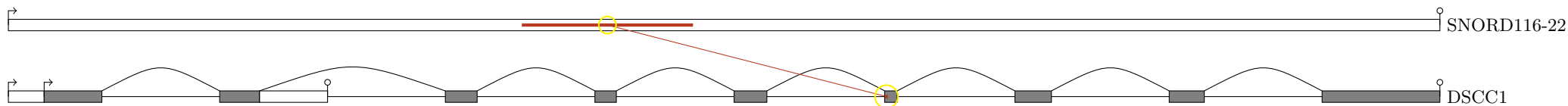
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R. Mac	atgtgcat	ggatcgatgatgacttccatatata---CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcacact
P. Abe	atgtgcat	ggatcgatgatgacttccatatata---CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtc-gaactgaggtcc	agcact
C. Jac	atgtgtgt	ggatcgatgatgacttccatatata---CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaca--ctgtgccgtcatcctcgtc-gaactgaggtcc	ggcacact
M. Mus	acgtgctt	ggatctatgatgattccagtcaaa---CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactctgtaccgccactgtcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgattccagtcaaa---CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactcagtaccgccactatcatcgtgactgaggtcc	agcacctg
C. Por	atgtgcct	ggatcgatgatgactca--taaa--TGCATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactataccgtcatttctcatc-gaactgaggtcc	agcacact
C. Fam	aagtgcct	agattgatgatgactccct---caaCCTGCATTCCCTTGAAAGC	-tgaacaaaatgagtgagaactccctactgtcatttctcatcaaaactgaggtcc	agcatggt
F. Cat	atgtgctc	ggatcgatgatgactccct-caaca---GCATTCCCTTGAAAGC	-tgaacaaaatgagtgagaactccctccgtcttctcatcgaaactgaggtcc	agcacggt
B. Tau	acgtgctt	ggatcgatgatgactccca--caaa--TGCATTCCCTTGAAAGC	-tgaacaaaatgagtgagccaccctaccgtc-tcctcatcggaactgaggtcc	agcacggt
E. Cab	acgtgctc	ggatcgatgatgactccct-c-ata--TGCATTCCCTTGAAAGC	-tgaacaaaatgagtgagaactcactaccgtcttctcatcgaaactgaggtcc	ggcacggt
S. Sus	ccgtgctc	ggatcgatgatgactccct-ctaaa--GCATTCCCTTGAAAGC	-tgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacggt
L. Afr	atgtgctt	ggatcgatgatgacttccacacata---CATTCCCTTGAAAGC	-tgaacaaaatgagtgagaacccctactgtctctcttagc-aacctgaggtcc	agcatacc
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id=603549 gene=ENSG00000206656 name=SNORD116-17 segment=chr15\_25328735\_25328826\_1 type=EN

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R. Mac	gTTTAAAG	GcgAGTG	--c---ggaagtggcctggggagc---. . .54. .-gcctcctgtcag	caggggcc
P. Abe	gTTTAAAG	GcgAGTG	--c---ggaagtggcctggggagc---. . .54. .-gcctcctgtcag	caggggcc
C. Jac	gTTTAAAG	GcgAGTG	--c---gggagtggtgggggga---. . .57. .-gcctcctcag	caggggcc
M. Mus	gTTTAAAG	GcgAGTG	--c---aggagatggctgggggga---. . .57. .-gcctcctcag	caggggcc
R. Nor	gTTTAAAG	GcgAGTG	--c---agcagatggctgggggag---. . .58. .-gcctcctcag	caggggcc
C. Por	gTTTAAAG	GcgAGTGCAg	-----gggatagctcggggagc---. . .55. .-gcctcctcag	caggggcc
C. Fam	gTTTAAAG	GcgAGTGCGG	-----gagtggctcggggagcctcc. . .48. .-gcctcctcag	caggggcc
F. Cat	gTTTAAAG	GcgAGTGC	-----gggagtggtcggggagcc---. . .51. .-gcctcctcag	caggggcc
B. Tau	gTTTAAAG	GcgAGTGCG	-----gggagaccctcggggagcct-. . .51. .-gcctcctcag	caggggcc
E. Cab	gTTTAAAG	GcgAGTGCG	-----gggagtggtcggggagcct-. . .51. .-gcctcctcag	caggggcc
S. Sus	gTTTAAAG	GcgAGTGC	-----gggagtggtcggggagcc---. . .52. .-gcctcctcag	caggggcc
L. Afr	gTTTAAAG	GcgAGTG	--cggggagggaggtggcttg---. . .69. .-gcctc-ctcag	caggggcc
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id=513845 gene=ENSG00000142920 name=ADC segment=chr1\_33546896\_33546988\_1 type=AN

Figure 389: CS=10.14



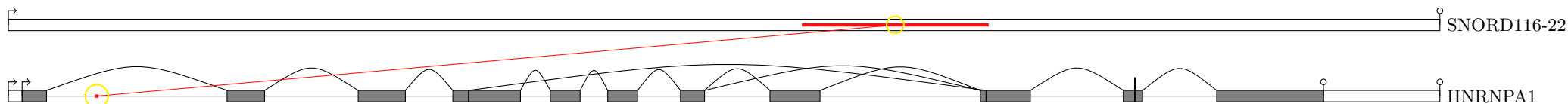
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R.Nor	-----gctgctt	ggatcgatgatgattccaata-aaa	CATTCCCTGG	AAAGcTGAA	-caaaatgagtgaaaactcaataccgacctatcatcgtgactgagggtcc	agcacctg
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L.Afr	-----atgtgctt	ggatcgatgatgactcctcac-ata	CATTCCCTGG	AAAGcTGAA	-caaaatgagtgagaacctataccgctgttctcatcgtgactgagggtcc	agcatacc
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id=720441 gene=ENSG00000207159 name=SNORD116-22 segment=chr15\_25335070\_25335161\_1 type=EN

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P.Abe	gagccaga	gtaagtatttta...751...	---ataacttttcaagtgggtg	-----TTTAAaTTTTTCAG	GGaAATGa
C.Jac	gagccaga	gtaagtatttta...608...	---agaacttttcaaatgtgtg	-----TTTAAaTTTTTCAG	GGaAATGa
M.Mus	gagccaga	gtgagtatttgc...905...	-tcataagtttctt--tgtgtg	-----TTTAAa--TTTTTCAG	GGaAATGa
R.Nor	gagccaga	gtgagtatttgc...1060...	-tcataagtttctt--tgtgtg	-----TTTAAa--TTTTTCAG	GGaAATGa
O.Cun	gagccaga	gtaagtatttta...403...	-gaatagcttctca--tgagtgt	-----TTTAAaTTTTTCAG	GGaAATGa
C.Fam	gagccaga	gtaagtatttta...640...	-----ttcaaatgagtgttttaaaa	-----TTTTTCAG	GGaAATGa
F.Cat	gagccaga	gtaagtatttta...426...	---taacttttcaaatgagtatt	-----TTTAAaTTTTTCAG	GGaAATGa
B.Tau	gagccaga	gtaagtatttat...450...	.gtgaaaacttttcaataag	-----TGTTTAAaTTTTTCAG	GGaAATGa
E.Cab	gaaccaga	gtaagtatttta...728...	---gtaacttttcaaatgagggt	-----TTTAAaTTTTTCAG	GGaAATGa
S.Sus	gagccaga	gtaagtatttta...323...	-----tcataaaaatgtgaagaag	TGTTTAAaTTTTTCAG	GGaAATGa
L.Afr	gaaccaga	gtaagtatttta...392...	---ataacttttcaaatgggtg	-----TTTAAaTTTTTCAG	GGaAATGa
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Figure 390: CS=23.14



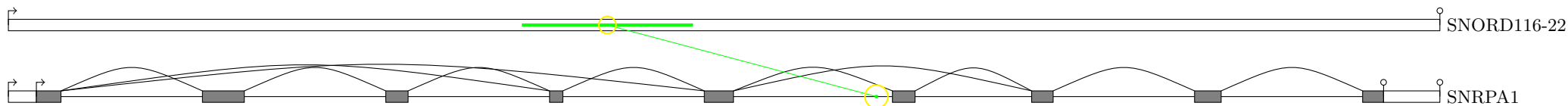
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P. Tro	---ca---aggact	ggatcgatgacgacttccatattgacttcccttgg-aaagctga	ACAAAATG	GTGA	aaactctataaccgtcatcctcgtcg-aactgaggtcc	agcacatt
C. Jac	---at---gtgcat	ggatcgatgatgacttccgtatatacacattccttgg-aaagctga	ACAAAATG	GTGA	aaactctataaccgtcatcctcgtcg-aactgaggtcc	ggcacact
M. Mus	---ac---gagcct	ggatcctatgatgattcccagtcacacattccttggaaaagctga	ACAAAATG	GTGA	aaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	---gc---gtgctt	ggatcgatgatgatttccaataaaacattccttgg-aaagctga	ACAAAATG	GTGA	aaactcaataaccgccactatcatcgtgactgaggtcc	agcacctg
C. Por	---ac---gtgctt	ggatcagtgatgactcacaatgacattccttgg-aaagctga	ACAAAATG	GTGA	aaactcaataaccgccactatcatcgtgactgaggtcc	agcacact
O. Cun	---at---gtgctt	ggatcgatgatgactcccacaataacattccttgg-aag-ctga	ACAAAATG	GTGA	aaactcaataaccgccactatcatcgtgactgaggtcc	agcacgtt
F. Cat	---at---gtgctc	ggatcgatgatgactcctcaacagcattccttggaaaagctga	ACAAAATG	GTGA	aaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	---ac---gtgctt	ggatcgatgatgactcccacaatgacattccttgg-aaactctga	ACAAAATG	GTGA	aaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtg
E. Cab	---ag---gtgctc	ggatcgatgatgactccctcaaatgacattccttgg-aaactctga	ACAAAATG	GTGA	aaactcctcccgtcgttctcatcgaaactgaggtcc	agcacctg
S. Sus	cggagcccgtgctc	ggatcgatgatgactccctcctaagcattccttgg-aaactctga	ACAAAATG	GTGA	aaactcctcccgtcgttctcatcgaaactgaggtcc	ggcacgtg
L. Afr	---at---gtgctt	ggatcgtttatgacttccacacatacacattccttgg-aaactctga	ACAAAATG	GTGA	aaaccctcactgttctccttagca-acctgaggtcc	agcatacc
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id=720441 gene=ENSG00000207159 name=SNORD116-22 segment=chr15\_25335070\_25335161\_1 type=EN

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R. Mac	agtccagag	gtgagttaggcg...113...-----taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...377...ccccactccag	tctcctaa	
P. Tro	agtccagag	gtgagttaggcg...111...-----taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...375...ccccactctag	tctcctaa	
C. Jac	agtccagag	gtgagttaggcg...106...-----ctaccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...371...ccccactgtag	tctcctaa	
M. Mus	agtccagag	gtgagttaggcg...106...-----ctactttaaaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---...369...ctcccactttag	tctcccaa	
R. Nor	agtccagag	gtgagttaggcg...105...-----cctacttt-aaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc---...361...actttattttag	tccccaa	
C. Por	agtccagag	gtaagcgtat...103...-----gcctgctc-ccaaagttcagg	TCGCCATTTTGT	cctcg---tcgcatgaggccgc...327...cttccactctag	tctcctaa	
O. Cun	agtccagag	gtgagtagctcc...102...aaggcctaccctc-ccaaag------	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...378...tctcccgccag	tcgcccaa	
F. Cat	agtccagag	gtgagtaaacag...113...-----taccctc-ccaaagttcagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...378...ccgactcctag	tctcccaa	
B. Tau	aatccagag	gtggtaaacag...111...-----tcccctc-cctaaagttgagg	TCGCCATTTTGT	cctcg---tcgcatgaggc---...362...ctcctcctag	tctcccaa	
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L. Afr	agtccagag	gtaagctaccct...108...-----taccctc-ccaaagttgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc---...389...ttccaccattag	tctcctaa	
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id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12\_54674607\_54675169\_1 type=IN

Figure 391: CS=16.25



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R. Mac	caaaagact	ggatc	gatgatgacttccat	atataca-CATTCCCTGGAA	-agctgaacaaaatgagt	gaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacact
P. Abe	caaggact	ggatc	gatgatgacttccat	atata-CATTCCCTGGAA	-agctgaacaaaatgagt	gaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcatact
C. Jac	atgtgcat	ggatc	gatgatgacttccgt	atata-CATTCCCTGGAA	-agctgaacaaaatgagt	gaaactctataccgtcatcctcgtcg-aactgaggtcc	ggcacact
M. Mus	acgagctt	ggatc	atgatgatgattcccag	tcaaa-CATTCCCTGGAAAGC	tgaacaaaatgagt	gaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatc	gatgatgatttcca	ataaaa-CATTCCCTGGAAAGC	-tgaacaaaatgagt	gaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg
C. Por	acgtgctt	ggatc	agtgatgactcaca	aa-ATGCATTCCCTGGAA	-agctgaacaaaatgagt	gaaaactgtaccgtcatttctcatcg-aactgaggtcc	agcacact
U. Cun	atgtgctt	ggatc	gatgatgactcccaca	ata-CATTCCCTGGAAAGC	--tgaacaaaatgagt	gagaactcctaccgtcgttctcatcgtgactgaggtcc	agcacgtt
C. Fam	aagtgctt	ggatc	gatgatgactcctc	aatcTGCATTCCCTGGAAAGC	tgaacagaatgagt	gagaactcctgccgtcgttctcatcgcaactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatc	gatgatgactcctc	aaaca-GCATTCCCTGGAAAGC	tgaacaaaatgagt	gagaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	gatgatgactcccaca	aa-ATGCATTCCCTGGAAA	-tctgaacaaaatgagt	gagccaccctaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	agtgctc	ggatc	gatgatgactcctc	aa-ATGCATTCCCTGGAAA	-tctgaacaaaatgagt	gagaactcactaccgtcgttctcgccgagactgaggtcc	agcacgtg
L. Afr	atgtgctt	ggatc	ggtttatgacttccac	acata-CATTCCCTGGAAA	-tctgaacaaaatgagt	gagaaccctactgtctcttagca-acctgaggtcc	agcatacc
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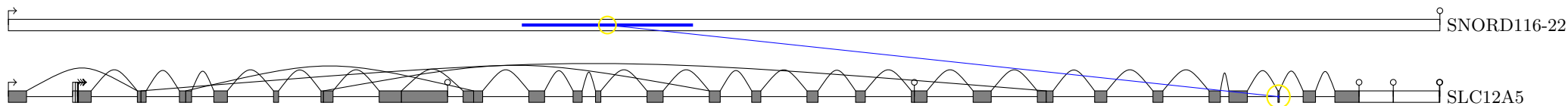
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R. Mac	aactaaaa	gtaagtagtaat...505...	---ggagagttcgcttccatg	tcTTCTGAGGAATG	catc	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
P. Abe	aactaaaa	gtaagtagtaat...512...	---ggagagttcgcttccatg	tcTTCTGAGGAATG	catc	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
C. Jac	aactaaaa	gtaagtagtaat...472...	---ggagagttcacttccatg	tcTTCTGAGGAATG	cat	t	aaatgcatg	tggtattcctatttccattaactctgtgtggtgtcgctgtag	gagcgtca
M. Mus	aactcaaa	gtgagtattgcg...487...	tcagagagaattctcttccat	GTTTTCTGAGGAATG	catc	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgttgcgtag	gagcgtca
R. Nor	aactaaaa	gtgagtattgct...467...	ttcagagagaattctcttccat	GTTTTCTGAGGAATG	catc	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgttgcgtag	gagcgtca
C. Por	aactaaaa	gtaagtgttctt...457...	---gcagcattctctcccgcgtg	TTCTGAGGAATGCGT	c	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgttgcgtag	gagcgtca
U. Cun	agctaaaa	gtaagtgttgtt...439...	gctgggaaaatgcttctg	gtGTTTTCTGAGGAATG	catc	t	atgcatg	tggtattgctaattccatt-actctgtgtggtgtcgctgtag	gagcgtca
C. Fam	aactaaaa	gtaagtattgtt...528...	tcaggagagtttcttccat	GTTTTCTGAGGAATGCA	t	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgttgcgtag	gagcgtca
F. Cat	aactgaaa	gtaagtattttc...545...	tcagaagagtttcttccgt	GTTTTCTGAGGAATGCA	catc	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgttgcgtag	gagcgtca
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E. Cab	aactaaaa	gtaagtattatt...736...	---aggagaatttttccatg	TTTCTGAGGAATGCA	t	taa	atgcatg	tggtattcctatttccattaactctgtgtggtgtcactgtag	gagcgtca
L. Afr	aactgaaa	gtaagtatttagc...490...	---aggggcgtattctcgtg	TTTCTGAGGAATG	catc	taa	atgcatg	tggtattcctgtttccattaactctgtgtggtgtcgctgtag	gagcgtca
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Figure 392: CS=13





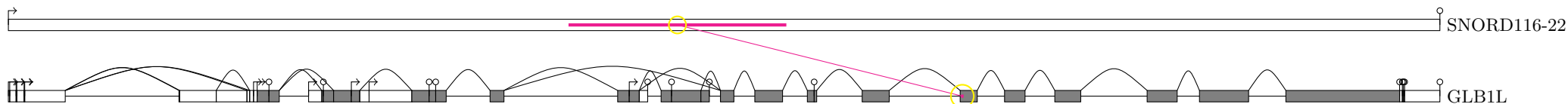
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P. Abe	-----caaggact	ggatcgatgatgacttccatat-ata	CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactctataccg	catcctcgtcg-aactgaggtcc	agcatact
C. Jac	-----atgtgcat	ggatcgatgatgacttccgat-ata	CATTCCCTTGAAAGC	-tgaacaaaatgagtgaacactctataccg	catcctcgtcg-aactgaggtcc	ggcacact
M. Mus	-----acgagctt	ggatctatgatgattcccagtc-aaa	CATTCCCTTGAAAGCTGAA	caaaatgagtgaaaactctgtaccg	cactctcatcggaactgaggtcc	agcatctt
R. Nor	-----gcgtgctt	ggatcgatgatgattccaata-aaa	CATTCCCTTGAAAGC	-tgaacaaaatgagtgaaaactcaataccg	cactatcatcgtgactgaggtcc	agcacctg
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C. Fam	-----aagtgctt	ggatcgatgatgactccctcaatctg	CATTCCCTTGAAAGC	tgaacagaatgagtgagaactcctc	gccgtcttcatcgaaactgaggtcc	agcacgtt
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B. Tau	-----acgtgctt	ggatcgatgatgactcccacaa-atg	CATTCCCTTGAAAT	-ctgaacaaaatgagtgagccaccctaccg	tcctcatcggaactgaggtcc	agcacgtg
E. Cab	-----agtgctc	ggatcgatgatgactccctcaa-atg	CATTCCCTTGAAAT	-ctgaacaaaatgagtgagaactcactaccg	tcctcgcgagactgaggtcc	agcacctg
S. Sus	cggagcccgtgctc	ggatcgatgatgactccctcta-aag	CATTCCCTTGAAAT	-ctgaacaaaatgagtgagaactcactaccg	tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	-----atgtgctt	ggatcgtttatgacttccacac-ata	CATTCCCTTGAAAT	-ctgaacaaaatgagtgagaaccctactg	tctcttagca-acctgaggtcc	agcatact
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id=720441 gene=ENSG00000207159 name=SNORD116-22 segment=chr15.25335070.25335161.1 type=EN

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P. Abe	atgaagcc	gtacgggcctgg...267...	-----tctctctttgcatctctt	gt-GTTTCCTGAAG	GGAGTGgg
C. Jac	atgaagcc	gtatgggcctgg...278...	-----tttcttttgcacatctt	gt-GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggactgg...297...	--tcttctctctttgcttctc	TTTGTGTTTCCTGAAG	GGAGTGgg
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C. Por	atgaagcc	gtatgggcctgg...271...	tttcttttccctttgcttc	-TGTTGTTTTTCCTGAAG	GGAGTGgg
C. Fam	atgaagcc	gtaggggcctgg...278...	-----cctctcgttgcttctctt	gt-GTTTCCTGAAG	GGAGTGgg
F. Cat	atgaagcc	gtaggggcctgg...298...	-----cctctctttgcttctctt	gt-GTTTCCTGAAG	GGAGTGgg
B. Tau	atgaagcc	gtacgggtctgg...296...	-----cctctccttgcttctctt	at-GTTTCctgAAG	GgAGTGgg
E. Cab	atgaagcc	gtatgggcctag...299...	-----cctcactttgcttctctt	gt-GTTTCcgaAAG	GgAGTGgg
S. Sus	atgaagcc	gtacgggcctgg...305...	-----cctctctttgcttctctt	gt-GTTTCcgaAAG	GgAGTGgg
L. Afr	atgaagcc	gtatgggcctgg...288...	-----cttttctttgcttctctt	gt-GTTTCctgAAG	GgAGTGgg
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Figure 393: CS=14.95



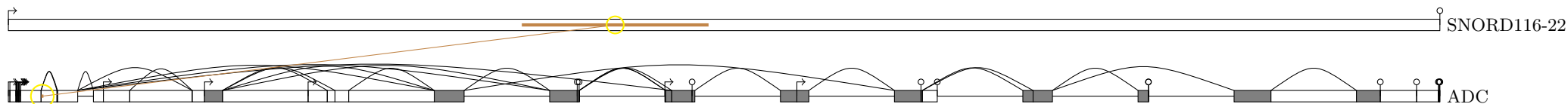
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P. Tro	-----caaggact	ggatcgatgatgacttccatattgtactt	-----TCCTTGGAAagCTGA	acaaaatgagt	gaaaactctata	accgctcatcctcgtcg	-aactgaggtcc	agcacatt
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C. Jac	-----atgtgcat	ggatcgatgatgacttccgtatatacat	-----TCCTTGGAAagCTGA	acaaaatgagt	gaaactctata	accgctcatcctcgtcg	-aactgaggtcc	ggcacact
M. Mus	-----acgagcct	ggatcctatgatgattccaggtcaaacatt	-----TCCTTGGAAagCTGA	acaaaatgagt	gaaaactctgtacc	ccactctcatcGGAAGTGA	GTCCAGcaTCT	-----t
R. Nor	-----gctgctt	ggatcgatgatgattccaataaacat	-----TCCTTGGAAagCTGA	acaaaatgagt	gaaaactcaat	accgccactatcatcgtgactgaggtcc		agcacctg
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O. Cun	-----atgtgctt	ggatcgatgatgactcccacaaatcat	-----TCCTTGG-AAagCTGA	acaaaatgagt	gagaaacctc	ataccgctgttctcatcgtgactgaggtcc		agcacgtt
B. Tau	-----acgtgctt	ggatcgatgatgactcccacaaatgcat	-----TCCTTGGAAatCTGA	acaaaatgagt	gagccccc	ctaccgctc-tcctcatcggaactgaggtcc		agcacgtg
E. Cab	---ag---gtgctc	ggatcgatgatgactccctcaaagcat	-----TCCTTGGAAatCTGA	acaaaatgagt	gagaactc	actaccgctgttctcgcgagactgaggtcc		agcacctg
S. Sus	cggagcccgtgctc	ggatcgatgatgactccctctaagcat	-----TCCTTGGAAatCTGA	acaaaatgagt	gagaactc	actaccgctc-tcctcatgaaactgaggtcc		ggcacgtg
L. Afr	-----atgtgctt	ggatcgtttatgacttccacacatacat	-----TCCTTGGAAatCTGAAC	AAAAAG	gagtgagaa	accctactgtctctcttagca-acctgaggtcc		agcatacc
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R. Nor	tcagcaag	gtgcccttttaa...237...	-----actactgagggaaatttgggc	TCAG	TTCCAGGa
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Figure 394: CS=14.95



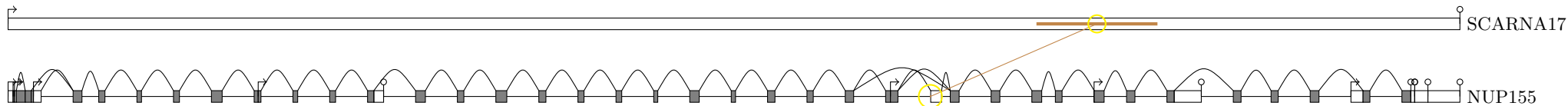
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P.Abe	-----caaggact	ggatcgatgatgacttccatata	tata-	CATTCCTTGGAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-	aactgagggtcc	agcatact
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R.Mac	gTTTAAAG	GcgAGTG	--c----	ggaaagtggcctggggagc----	..54..	-gcctcctgtcag	caggggcc
P.Abe	gTTTAAAG	GcgAGTG	--c----	ggaaagtggcctggggagc----	..54..	-gcctccgtcag	caggggcc
C.Jac	gTTTAAAG	GcgAGTG	--c----	ggggagtggcctggggagc----	..54..	-gcctcctcag	caggggcc
M.Mus	gTTTAAAG	GcgAGTG	--c----	aggagatggctgggggga----	..57..	-gcctcctcag	caggggcc
R.Nor	gTTTAAAG	GcgAGTG	--c----	agcagatggctgggggag----	..58..	-gcctcctcag	caggggcc
C.Por	gTTTAAAG	GcgAGTGCAg	-----	gggatagctcggggagc----	..55..	-gcctcctcag	caggagcc
C.Fam	gTTTAAAG	GcgAGTGCGG	-----	gagtggctcggggagcctcc..	..48..	-gcctcctccag	caggggcc
F.Cat	gTTTAAAG	GcgAGTGC	-----	gggagtggctcggggagcc----	..51..	-gcctcctcag	caggggcc
B.Tau	gTTTAAAG	GcgAGTGC	-----	gggagacctcggggagcct--	..51..	-gcctcctcag	caggggcc
E.Cab	gTTTAAAG	GcgAGTGC	-----	gggagtggctcggggagcct--	..51..	-gcctcctcag	caggggcc
S.Sus	gTTTAAAG	GcgAGTGC	-----	ggggagtggctcggggagcc----	..52..	-gcctcctcag	caggggcc
L.Afr	gTTTAAAG	GcgAGTG	--cgggggagggtggcttg	-----	..69..	-tccttc-ctcag	caggggcc
	*****	*****		* *		**** *	** *** **

id=513845 gene=ENSG00000142920 name=ADC segment=chr1\_33546896\_33546988\_1 type=AN

Figure 395: CS=10.14



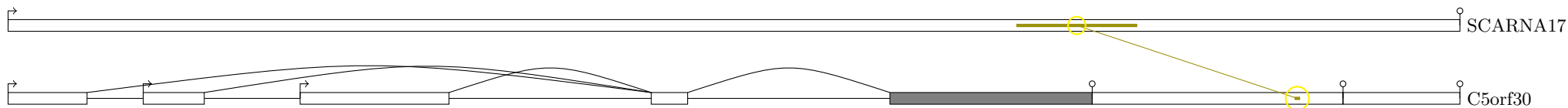
H.Sap	ctagggcg	ctttcgggtccc...62..gcg	cgcttgccc-ggagcct	GAGAGGATTATGAAAA	-----	-----	tggagcaggggcg
R.Mac	ctagggcg	ctttcgggtccc...62..gcg	cagcttgccc-ggagcct	GAGAGGATTATGAAAA	-----	-----	tggagcaggggcg
P.Tro	ctagggcg	ctttcgggtccc...62..gcg	cgcttgccc-ggagcct	GAGAGGATTATGAAAA	-----	-----	tggagcaggggcg
P.Abe	ctagggcg	ctttcgggtccc...62..gcg	cgcttgccc-ggagcct	GAGAGGATTATGAAAA	-----	-----	tggagcaggggcg
C.Jac	ctagggcg	ctttcgggtccc...57..ggg	ccgttgccc-ggagcct	GAGAGGATTATGAAAA	-----	-----	cggagctggggcg
M.Mus	gcagggag	cgcttggtccc...60..gcg	ctggttt-ggagcct	GAGAGGATTATGA	-----	a:::--	tggagcaggggaag
R.Nor	gcagggag	cgcttggtccc...60..gcg	ctggttt-ggagcct	GAGAGGATTATGA	-----	a:::--	tggagcaggggaag
C.Por	actgcgtt	ctccaggtccc...60..gcg	ctgcatgct-ggagcct	GAGAGGATTATGAAA	-----	-----	tggagcaggggaag
O.Cun	gtagggcg	cgcccgacccc...63..-gg	ccgcttgcttcagggcct	GAGAGGATTATGAAAA	-----	-----	gggagcaggggcg
C.Fam	gcgggaag	tcccccaagttccc...57..gc	cacgtgacct-ggagcct	GAGAGGATTATGAAAA	cgtgtgggt	taaaaaaa	aaaaaaacgtgtggggtaaggtggggc
B.Tau	cagggtcg	cccccggtcca...62..gcg	ccgctggccc-ggagcct	GAGAGGATTATGAAAA	caTGTC	-----	ggggcaggggcg
E.Cab	gcaggggt	gccccgtggtccc...62..gg	cgcttgccc-ggagcct	GAGAGGATTATGAAAA	cgTGT	-----	cgggaggggcg
L.Afr	gttgggcg	tttccgatccc...62..gcg	ctgcttgccc-ggagcct	GAGAGGATTATGAAAA	T	-----	gggtgcgggaaa
	*	*	*	*****			** ** *

id=329100 gene=ENSG00000251992 name=SCARNA17 segment=chr18.47340503-47340646.1 type=EN

H.Sap	gttctaag	gtagatgacttt...924...----	aattagagttaatgggggca-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
R.Mac	gttccaag	gtagatgacttt...908...----	aattagagttaatgggggca-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
P.Tro	gttctaag	gtagatgacttt...924...----	aattagagttaatgggggca-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
P.Abe	gttctaag	gtagatgacttt...931...----	aattagagttaatgggggca-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
C.Jac	gttctaag	gtagatgacttt...940...----	aattagagttaatgggggca-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
M.Mus	gttctaag	gtagatgacttt...564...----	caaagttaatgaggcaattc-	TTATtGATCCTTTC	ctacag	gagaaaaa
R.Nor	gttccaag	gtagatgacttt...573...----	caaagttaatgaggcaattc-	TTATtGATCCTTTC	ctacag	gtgaaaaa
C.Por	gttctaag	gtagatgacttt...368...----	attaggttagtagagcaat-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
O.Cun	gttctaag	gtagatgacttt...689...----	aatagagttaatgggggcaa-	TTTTTATtGATCCTTTC	ctacag	gtggaaaa
C.Fam	gttctaag	gtagatgacttt...287...---	taagtt--agttaatggggcaa-	TTTTTATtGATCCTTTC	ctacag	gtgaaaaa
B.Tau	gttctaag	gtagatgacttt...282...---	taataaattagagttaatg-	GGCAaTTTTTATtGATCCTTTC	ctacag	gtgaaaaa
E.Cab	gttctaag	gtagatgacttt...309...---	taataaattagagttaatg-	AGCAaTTTTTATtGATCCTTTC	ctacag	gtgaaaaa
L.Afr	gttctaag	gtagatgacttt...322...---	gattagagttaatgg-gaca	ATTTTTATtAATCCTTTC	ctacag	gtgaaaaa
	**** **	** *	**** *	* *****	*****	**** * * * *

id=540810 gene=ENSG00000113569 name=NUP155 segment=chr5.37309675-37310653.-1 type=IN

Figure 396: CS=21.32



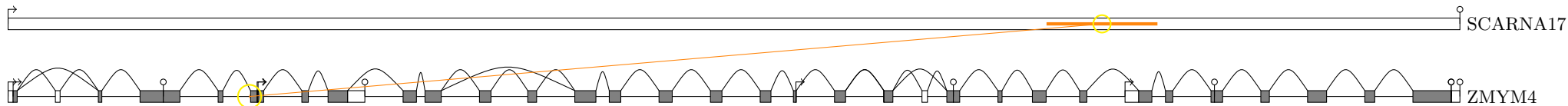
H. Sap	ctagggcg	ctttcgggtccc...60...-cggcgcgcttgccc-ggagc	CTGAgAGGATTAT	gaaaaactggcg	-----	tggagcagggg
R. Mac	ctagggcg	ctttcgggtccc...60...-cggcgcgcttgccc-ggagc	CTGAgAGGATTAT	gaaaaactggcg	-----	tggagcagggg
P. Tro	ctagggcg	ctttcgggtccc...60...-cggcgcgcttgccc-ggagc	CTGAgAGGATTAT	gaaaaactggcg	-----	tggagcagggg
P. Abe	ctagggcg	ctttcgggtccc...60...-cggcgcgcttgccc-ggagc	CTGAgAGGATTAT	gaaaaactggcg	-----	tggagcagggg
C. Jac	ctagggcg	ctttcgggtccc...55...gtgg-gccgttgccc-ggagc	CTGAgAGGATTAT	gaaaaactggcg	-----	cggagctgggg
M. Mus	gcagggag	cgcttgggtccc...58...-cggcgcgctgctgtt-ggagc	CTGAgAGGATTAT	gaaaaactggca	-----	tggagcggggaag
R. Nor	gcagggag	cgcttgggtccc...58...-cggcgcgctgctgtt-ggagc	CTGAgAGGATTAT	gaaaaactggca	-----	tggagcggggagc
C. Por	actgcgctt	ctccaggttccc...58...-cagcgcgctgcatgct-ggagc	CTGAgAGGATTAT	gaaatgtgcct	-----	tggagcggggagaa
O. Cun	gtagggcg	cgccccggacccc...61...-gaggccgcttgtttcagggc	CTGAgAGGATTAT	gaaaaactggca	-----	gggagcggggcag
C. Fam	gcgggaag	tccccaaagtccc...55...-tggcacagctgacct-ggagc	CTGAgAGGATTAT	gaaaaactgggtaaaaaaaaaaaaaaaaaaaaaa	aaaaa	acaaaactgtgggtaaggtggggctggggac
B. Tau	cagggctcg	ccccgggtcca...60...-cggcgcgctgccc-ggagc	CTGAgAGGATTAT	gaaaacatgtca	-----	ggggcctgggagg
E. Cab	gcagggtt	gccccgtggtcc...60...gaggcgcgcttgcct-ggagc	CTGAgAGGATTAT	gaaaaactgttg	-----	cggggcgggcaga
L. Afr	gttggg	cttccgatccc...60...-cggcgcgctgcttccc-ggagc	CTGAgAGGATTAT	gaaaatacttca	-----	gggtgcgggaaaa
	*	*	*	*****	***	** ** *

id=329100 gene=ENSG00000251992 name=SCARNA17 segment=chr18.47340503.47340646.1 type=EN

H. Sap	aaattaa	tttgggatacaa...983...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	acattggt
R. Mac	aaattaa	tttgggatacaa...990...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	acattggt
P. Tro	aaattaa	tttgggatacaa...983...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	acattggt
P. Abe	aaattaa	tttgggatacaa...984...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	acattggt
C. Jac	aaattaa	tttgggatacaa...979...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	acattggt
M. Mus	aaattaa	tttgggatacaa...953...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...80...tgatgtaaacac	ccattggt
R. Nor	aaattaa	tttgggatacaa...946...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...80...tgatgtaaacac	acactggt
C. Por	aaattaa	tttgggatacaa...987...aattactagtttgacaagaa-ATAGaa	TCCTaTCAG	atgccaaagagtgggatttt...81...tgatgtaaacac	ttattggt
O. Cun	acattaa	tttgggatacaa...975...ctttatctatacagtcaga-CATAGaa	ATCCTgTCAG	atgccaaagagtgggatttt...82...tgatgtaaacac	acattggt
C. Fam	caattaa	tttgggatacaa...1000...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...83...tgatgtaaacac	acattggt
B. Tau	aaattaa	tttgggatacaa...984...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...82...tgatgtaaacac	acattggt
E. Cab	aaattaa	tttgggatacaa...996...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...82...tgatgtaaacac	acattggt
L. Afr	aaattaa	tttgggatacaa...996...agtcattagtttgacaagaa-ATAGaa	TCCTgTCAG	atgccaaagagtgggatttt...203...ccacctgagcac	ttattggt
	*****	*****	**	*****	**

id=43279 gene=ENSG00000181751 name=C5orf30 segment=chr5.102612930.102614072.1 type=E3

Figure 397: CS=11.7



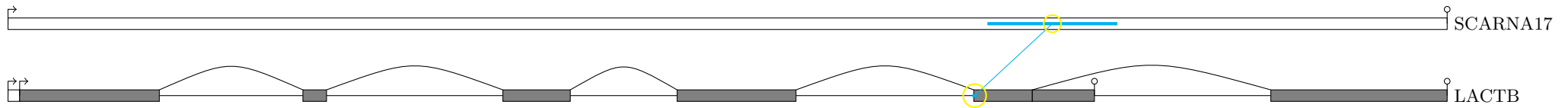
H. Sap	ctagggcg	ctttcgggtccc...63...cgccgcttgccc-ggagcctg	AGAGGATTATGAA	aacgtggcg	-----	tggagcaggggcg
R. Mac	ctagggcg	ctttcgggtccc...63...cgagccttgccc-ggagcctg	AGAGGATTATGAA	aacgtggcg	-----	tggagcaggggcg
P. Tro	ctagggcg	ctttcgggtccc...63...cgccgcttgccc-ggagcctg	AGAGGATTATGAA	aacgtggcg	-----	tggagcaggggcg
P. Abe	ctagggcg	ctttcgggtccc...63...cgccgcttgccc-ggagcctg	AGAGGATTATGAA	aacgtggcg	-----	tggagcaggggcg
C. Jac	ctagggcg	ctttcgggtccc...58...ggccgcttgccc-ggagcctg	AGAGGATTATGAA	aacgtggcg	-----	cggagctggggcg
M. Mus	gcagggag	cgcttggtccc...61...cgctgctggttt-ggagcctg	AGAGGATTATGAA	aacgtggca	-----	tggagcaggggag
R. Nor	gcagggag	cgcttggtccc...61...cgctgctggtct-ggagcctg	AGAGGATTATGAA	aacgtggca	-----	tggagcaggggagc
C. Por	actgctt	ctccaggtccc...61...cgctgcatgcct-ggagcctg	AGAGGATTATGA	aatgtgcct	-----	tggcgaggagaa
O. Cun	gtagggcg	cgccgggacccc...64...-gcccgttgcttcaggcctg	AGAGGATTATGAA	aacgagga	-----	gggcgagggcag
C. Fam	gcgggaag	tccccaaagtc...58...cacagctgacct-ggagcctg	AGAGGATTATGAA	aacgtgtgggtaaaaaaaaaaaaaaaaaaaaaatagg	:::::aaaaaaaaaaaaaacgtgtgggtaagg	tgggctggggac
B. Tau	cagggcg	ccccgggtcca...63...cgccgctggccc-ggagcctg	AGAGGATTATGAA	aacatgtca	-----	ggggctggagg
E. Cab	gcagggtt	gccccgtggtcc...63...gcccgttgccc-ggagcctg	AGAGGATTATGAA	aacgtgttg	-----	cgggagggcaga
L. Afr	gtagggcg	tttcccgatccc...63...cgctgcttgccc-ggagcctg	AGAGGATTATGAA	aatacttca	-----	gggtgcgggaaa
	*	*	*	*****		** ** *

id=329100 gene=ENSG00000251992 name=SCARNA17 segment=chr18.47340503.47340646.1 type=EN

H. Sap	actttagg	gtaagttttcag...303...-atcatttttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
R. Mac	actttagg	gtaagttttcag...294...-atcatttttaagtctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
P. Tro	actttagg	gtaagttttcag...301...-atcatttttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
P. Abe	actttagg	gtaagttttcag...303...-atcatttttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
C. Jac	actttagg	gtaagttttcag...291...-atcatttttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
M. Mus	actttagg	gtaagttttcag...274...-ataattttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
R. Nor	actttagg	gtaagttttcag...293...-ataattttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
C. Por	actttagg	gtaagttttcag...289...-taattttaacatttgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
O. Cun	actttagg	gtaagttttcag...353...aataattttaaaa-ctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
C. Fam	actttagg	gtaagttttcag...297...-ataattttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
B. Tau	actttagg	gtaagttttcag...290...-ataattttaaaa-ctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
E. Cab	actttagg	gtaagttttcag...287...-ataattttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
L. Afr	actttagg	gtaagttttcag...273...-ataattttaaatctgaata	TTTAT	AATCCTTT	atattgtgttttag	gattccag
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id=217235 gene=ENSG00000146463 name=ZMYM4 segment=chr1.35826857.35827219.1 type=IN

Figure 398: CS=11.7



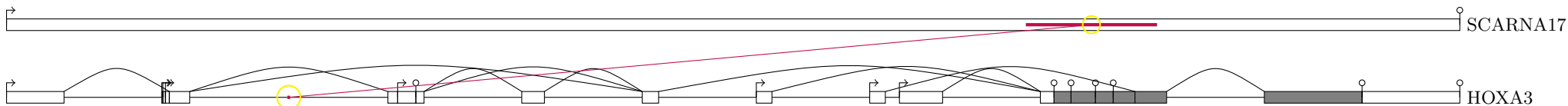
H.Sap	ctagggcg	ctttcgggtccc...58...-----ggcggcgccgcttgcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggcg-----	.....	-----tggagcagggggcg
R.Mac	ctagggcg	ctttcgggtccc...58...-----ggcggcgagcttgcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggcg-----	.....	-----tggagcagggggcg
P.Tro	ctagggcg	ctttcgggtccc...58...-----ggcggcgccgcttgcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggcg-----	.....	-----tggagcagggggcg
P.Abe	ctagggcg	ctttcgggtccc...53...-ttgcggggcggcgcgcttgc- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggcg-----	.....	-----tggagcagggggcg
C.Jac	ctagggcg	ctttcgggtccc...53...-ttgtgg-----gccgtttgcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggcg-----	.....	-----cggagctggggcg
M.Mus	gcagggag	cgcttgggtccc...51...-tcgtaaccggcgctgctggt- <b>TTGgaGCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggca-----	.....	-----tggagcaggggagc
R.Nor	gcagggag	cgcttgggtccc...51...-tcctagccggcgctgctggt- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggca-----	.....	-----tggagcaggggagc
C.Por	actgcgctt	ctccaggttccc...51...-ttgtgggcagcgtgcatgc- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> -gaaatgtgcct-----	.....	-----tggagcaggggagc
O.Cun	gtagggcg	gccccggacccc...59...-----gagggccgcttgtttcagg <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggca-----	.....	-----gggagcaggggagc
C.Fam	gcgggag	tccccaagtccc...48...-ctccgcttggcacagctgac- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtgggtaaaaaaaaaaaaaaaaaaaaaaaaa	.....	-----gggagcaggggagc
B.Tau	cagggctgc	cccccggtcca...58...-----gacggcgccgctggcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggca-----	.....	-----gggagcaggggagc
E.Cab	gcagggctt	gccccgtggtcc...53...actgctggcggcgc-gcttgc- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> gaaaacgtggtg-----	.....	-----cggagcaggggagc
S.Sus	cgagggcg	ccccctgttcca...57...-ttggcagcgtgctgctgctggc- <b>CTGGaGCCTGAGA</b> gg <b>ATTAT</b> -aatacgtgact-----	.....	-----gggagcaggggagc
L.Afr	gttgggag	tttccgatccc...58...-----ggcggcgctgcttggcccgga- <b>GCCTGAGA</b> gg <b>ATTAT</b> gaaaatacttca-----	.....	-----gggagcaggggagc

id=329100 gene=ENSG00000251992 name=SCARNA17 segment=chr18.47340503.47340646.1 type=EN

H.Sap	caaacctg	gtgagtgtaaat...1750...ttatTTTTTtctcctcgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
R.Mac	taagcctg	gtgagtgtaaat...1770...ttctTTTTTtctccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
P.Tro	caaacctg	gtgagtgtaaat...1737...tattTTTTTtctcctcgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
P.Abe	taaacctg	gtgagtgtaaat...1947...ttatTTTTTtctcctcaca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
C.Jac	taaacctg	gtgagtgtaaat...2058...ttctTTTTTtctccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
M.Mus	taaacctg	gtgagtcctgac...2692...ttctccccctccccatgca <b>GTGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
R.Nor	taaacctg	gtgagtcctgac...2549...ttctccccctttcccagca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
C.Por	taagcctg	gtgagtgtaaat...2444...tctTTTTtctccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
O.Cun	taaacctg	gtgagtgtaaat...1172...tctccccctcacccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
C.Fam	taaacctg	gtgagtgtaaat...2058...ccccccaccctcaccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
B.Tau	caaacctg	gtgagtgtaaat...844...ttTTTTTtcccccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag
E.Cab	taaacctg	gtgagtgtaaat...1177...ttctTTTTTtcccccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
S.Sus	taaacctg	gtgagtgtaaat...1467...ttTTTTTtcccccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> ag <b>TCAg</b>
L.Afr	taaacctg	gtgagtgtaaat...1280...ttTTTTTtcccccttgca <b>ATGATgTCTCaAG</b> <b>GT</b> agtcag

id=86704 gene=ENSG00000103642 name=LACTB segment=chr15.63419889.63421683.1 type=IN

Figure 399: CS=22.96



H.Sap	ctaggggc	ctttcgggtccc...	61...	-ggcgccgcttgccc-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggcg
R.Mac	ctaggggc	ctttcgggtccc...	61...	-ggcgagcttgccc-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggcg
P.Tro	ctaggggc	ctttcgggtccc...	61...	-ggcgccgcttgccc-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggcg
P.Abe	ctaggggc	ctttcgggtccc...	61...	-ggcgccgcttgctt-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggcg
C.Jac	ctaggggc	ctttcgggtccc...	56...	-tggcgcttgccc-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggcg
M.Mus	gcagggag	cgcttgggtccc...	59...	-ggcgctgctggttt-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	ggggaag
R.Nor	gcagggag	cgcttgggtccc...	59...	-ggcgctgctggtct-ggagcc	YGAGagGATTATGA	aaaactgtgg-----	:	:	:	:	-----	gggagc
C.Por	actgcgct	ctccaggttccc...	59...	-agcgctgcatgcct-ggagcc	YGAGagGATTATGA	-aatgtgc-----	:	:	:	:	-----	ggagaa
O.Cun	gtagggcg	cgcccgaacccc...	62...	-aggccgcttgttcagggc	YGAGagGATTATGA	aaaacgagg-----	:	:	:	:	-----	gggcag
C.Fam	gcgggaag	tcccccaagtccc...	56...	-ggcacagctgacct-ggagcc	YGAGagGATTATGA	aaaactgtgggtaaaaaaaaaaaaaaaaaaaaaaatag	:	:	:	:	aaacacaaaacgtgtggggttaaggtgggctggggac	ggagat
F.Cat	gcagggat	gccccgagtccc...	60...	-gtcgccactaacc-agagcc	YGAGaaGATTATGA	aaaatgtgt-----	:	:	:	:	-----	gggagg
B.Tau	cagggctg	ccccgggtcca...	61...	-ggcgccgctgccc-ggagcc	YGAGagGATTATGA	aaaacatgt-----	:	:	:	:	-----	ggcaga
E.Cab	gcaggggt	gccccgtggtcc...	61...	-ggcg-cgcttgctt-ggagcc	YGAGagGATTATGA	aaaactgt-----	:	:	:	:	-----	ggaaaa
L.Afr	gttggggc	tttcccgatccc...	61...	-ggcgctgcttgccc-ggagcc	YGAGagGATTATGA	aaaatactt-----	:	:	:	:	-----	**
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id=329100 gene=ENSG00000251992 name=SCARNA17 segment=chr18.47340503.47340646.1 type=EN

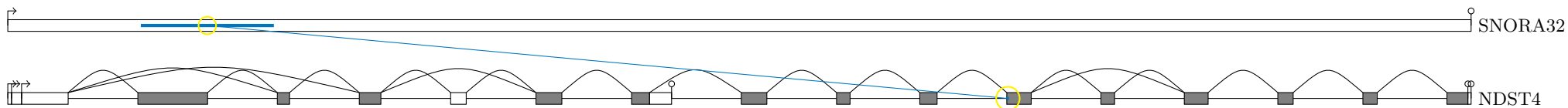
H.Sap	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	aacaataa	acttctttg	taattcaacag	caattctg
R.Mac	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	aacaataa	acttctttg	taattcaacag	caattctg
P.Tro	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	aacaataa	acttctttg	taattcaacag	caattctg
P.Abe	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	aacaataa	acttctttg	taattcaacag	caattctg
C.Jac	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
M.Mus	atgttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
R.Nor	atgttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacgataa	acttctttg	taattcaacag	caattctg
C.Por	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
O.Cun	cagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
C.Fam	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
F.Cat	gagttaag	gtaagcttgcct...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
B.Tau	gagttaag	gtaagcttctcc...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
E.Cab	gagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
L.Afr	aagttaag	gtaagctcgctt...	4912...	.aatagcaat	tttcccaggaaTCATt	AAATCacCTCA	tacaataa	acttctttg	taattcaacag	caattctg
	*****	*****	*		*****	*****	**			*****

id=99416 gene=ENSG00000105997 name=HOXA3 segment=chr7.27166690.27179701.-1 type=IN

Figure 400: CS=12.6







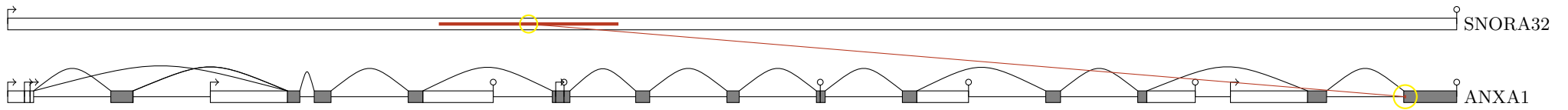
H. Sap	gggtgt-aa	tggTCATTACCAAGGC	ttttagaatgcagtttctca...73...ttgggaacagtt	gattaact
R. Mac	gggtat-aa	tggTCATTACCAAGGC	ttttagaatgcagtttctca...73...ttgggaacagct	gattaact
P. Tro	gggtgt-aa	tggTCATTACCAAGGC	ttttagaatgcagtttctca...73...ttgggaacagtt	gattaact
P. Abe	-ggtgtaaa	tggTCATTACCAAGGC	ttttagaatgcagtttctca...73...ttgggaacagct	gattaacc
C. Jac	gggcat-aa	tggTCATTACCAAGGC	ttttagaatgctgtttctca...74...ttgggaacattt	gattaact
C. Por	tattat-ga	tggTCATTACCAAGGC	tattagaatgaagtttctca...73...ttgggaacatta	cattgcct
O. Cun	aaagtt-ga	aggTCATTACCAAGGC	tttagaatgcagtttctca...73...ctgggaacattt	aatcaagt
C. Fam	ccatat-aa	tggTCATTACCAAGGC	tttgagaatgcagtttctca...78...ttgggaacattt	ttaccaac
F. Cat	tggtat-aa	tggTCATTACCAAGGC	tttgagaatgtagtttctca...77...ttgggaacattt	acaacagc
B. Tau	gatttt-ga	tggTCATTACCAAGGC	ttttagaacgcagtttctaa...75...ttgggaacattt	tattagcc
E. Cab	agggat-aa	tggTCATTACCAAGGC	ttttagaatgcagtttctc...77...ttgggaacattt	tgtaacc
O. Avi	gttttt-ca	tggTCATTACCAAGGC	ttttagaatgcagtttctca...74...ttgggaacattt	tattagcc
L. Afr	gggtac-aa	tggTCATTACCAAGGC	ttttagaatgcagtttctg...77...ttgggaacattt	tatactct
	*	*****	**** * *****	*****

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11\_93464145\_93464265\_-1 type=EN

H. Sap	atagactg	gtaagaaaata...2177...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
R. Mac	ttagactg	gtaagaaaagta...1868...-ttaattagttgtctttctctGCCTTcaG	GTAATGg
P. Tro	atagactg	gtaagaaaata...1861...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
P. Abe	atagactg	gtaagaaaata...1855...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
C. Jac	atagactg	gtaagaaaaaat...1890...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
C. Por	attgactg	gtaagaaaata...1843...-caagttaattatctccctctGCCTTcaG	GTAATGg
O. Cun	attgactg	gtaagataaata...1755...-tagattaattgtgttctctGCCTTcaG	GTAATGg
C. Fam	attgattg	gtaaggaaaata...1843...-atctcagattattttctctGCCTTcaG	GTAATGg
F. Cat	attgattg	gtaaggaaaata...2331...-ttaattaattatctttctctGCCTTcaG	GTAATGg
B. Tau	attgactg	gtaagcaaaata...2084...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
E. Cab	attgactg	gtaagaaaata...1889...-ttaatgaattgttttctcca-CCTTcaG	GTAATGg
O. Avi	attgactg	gtaagaaaata...2091...-ttaattaattgtctttctctGCCTTcaG	GTAATGg
L. Afr	attgactg	gtaagaaaatc...3108...gttaattcattcttttctc-CCTTcaG	GTAATGg
	* * * *	***** **	***** *****

id=458302 gene=ENSG00000138653 name=NDST4 segment=chr4\_115767154\_115769370\_-1 type=IN

Figure 402: CS=13.52



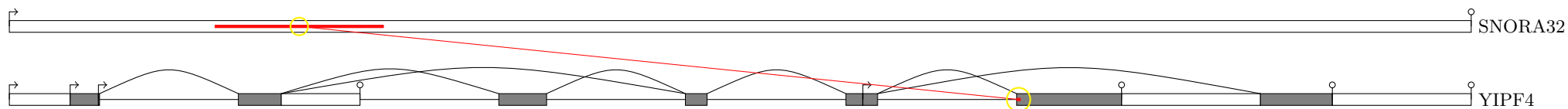
H. Sap	gggtgt-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.45...	ttgggaacagtt	g----	attaact
R. Mac	gggtat-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.45...	ttgggaacagct	g----	attaact
P. Tro	gggtgt-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.45...	ttgggaacagtt	g----	attaact
P. Abe	-ggtgtaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.45...	ttgggaacagct	g----	attaacc
C. Jac	gggcat-aa	tggtcattaccaaggcttttagaatgct	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.46...	ttgggaacattt	g----	attaact
M. Mus	-aatttaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGTGGACA	tgaccataaagaaaaattcc	..	.44...	---ggaacagt	g	ttg--atgaaca
R. Nor	-agaacaaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaagaaaa	-----	.51...	----aacattt	t	taaaaaataaaat
C. Por	tattat-ga	tggtcattaccaaggctattagaatgaa	GTTT	TCATT	tgCTGT	ggacatggccataaaaaaat	-----	.45...	ttgggaacatta	c----	attgcct
O. Cun	-aaagttga	aggtcattaccaaggcttatagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaagaaaa	-----	.45...	ctgggaacattt	a----	atcaagt
C. Fam	ccatat-aa	tggtcattaccaaggctttgagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.50...	ttgggaacattt	t----	taccaac
F. Cat	tggtat-aa	tggtcattaccaaggctttgagaatgta	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.49...	ttgggaacattt	a----	caacagc
E. Cab	agggat-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccagaaaaaaa	-----	.48...	ttgggaacattt	t----	gtaacc
S. Sus	-agggtata	tggtcattaccaaggctcttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat	-----	.46...	ctgggaacattt	t----	attagca
O. Avi	-gtttttca	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaacaaa	-----	.46...	ttgggaacattt	t----	attagcc
	*	*****	*****	*****	*****	*****	***	***	*	****	

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11.93464145.93464265.-1 type=EN

H. Sap	ccatcctg	gtagtgtttgat	...860...	-----gtatacctt-tttttgaatca	ACAG	GATGAAA	c
R. Mac	ccatcctg	gtagtgtgtgat	...857...	-----catactttacttttgaatca	ACAG	GATGAAA	c
P. Tro	ccatcctg	gtagtgtgtgat	...856...	-----gtatacctt-tttttgaatca	ACAG	GATGAAA	c
P. Abe	ccatcctg	gtagtgtgtgat	...862...	-----gtatacctt-tttttgaatca	ACAG	GATGAAA	c
C. Jac	ccatcctg	gtagtgtgtgat	...937...	-----tatactttgcttttgaatca	ACAG	GATGAAA	c
M. Mus	ccatcctg	gtagtgtgtatt	...1411...	...tgtcaacatattctcttt	TGTCT	caACAG	GATGAAA
R. Nor	ccatcctg	gtagtgtgtatt	...825...	-----tatacttctcttttgcacca	ACAG	GATGAAA	c
C. Por	ccatcctg	gtagtgtgtgag	...599...	-----tggtctctatttctgaatca	ACAG	GATGAAA	c
O. Cun	ccatcctg	gtagtgtgtgt	...972...	-----tgtcctccatcttgcacatca	ACAG	GATGAAA	c
C. Fam	ccatcctg	gtacgttataat	...860...	-----tatactctatttcttaataca	ACAG	GATGAAA	c
F. Cat	ccatcctg	gtagtgtgtggt	...866...	-----tatactctatttcttcatca	ACAG	GATGAAA	c
E. Cab	ccatcctg	gtagtgtgtgat	...615...	-----cctactctatgttttaataca	ACAG	GATGAAA	c
S. Sus	ccatcctg	gtagtgtgtat	...1127...	-----tatactttatttttaataca	ACAG	GATGAAA	c
O. Avi	ccatcctg	gtagtgtgtaat	...974...	-----agcatactttatttt--atca	ACAG	GATGAAA	c
	*****	***	*	*	*	*****	*****

id=330877 gene=ENSG00000135046 name=ANXA1 segment=chr9.75784071.75784966.1 type=IN

Figure 403: CS=17.64



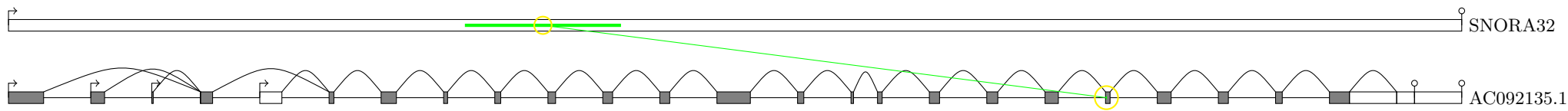
H. Sap	gggtgt-aa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.65...	ttgggaacagtt	g----	attaact
R. Mac	gggtat-aa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.65...	ttgggaacagct	g----	attaact
P. Tro	gggtgt-aa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.65...	ttgggaacagtt	g----	attaact
P. Abe	-ggtgtaa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.65...	ttgggaacagct	g----	attaacc
C. Jac	gggcat-aa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.66...	ttgggaacattt	g----	attaact
M. Mus	-aatttaa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.69...	---ggaacagt	g	ttg--atgaaca
R. Nor	-agaacaaa	tggtcatta	CCAAGGCTTTAGAA	GCAG	tttctcatttgctgtggaca	..66...	----aacattt	t	taaaaaataaaat
O. Cun	-aaagttga	aggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.65...	ctgggaacattt	a----	atcaagt
C. Fam	ccatat-aa	tggtcatta	CCAAGGCTTTAGAA	GCAG	tttctcatttgctgtggaca	..65...	ttgggaacattt	t----	taccaac
F. Cat	tggtat-aa	tggtcatta	CCAAGGCTTTAGAA	GTAG	tttctcatttgctgtggaca	..64...	ttgggaacattt	a----	caacagc
B. Tau	-gattttga	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.67...	ttgggaacattt	t----	attagcc
E. Cab	agggat-aa	tggtcatta	CCAAGGCTTTAGAA	GCAG	tttctcatttgctgtggaca	..63...	ttgggaacattt	t----	gtaaac
O. Avi	-gtttttca	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.66...	ttgggaacattt	t----	attagcc
L. Afr	gggtac-aa	tggtcatta	CCAAGGCTTTAGAA	tcagtttctcatttgctgt	-----	.68...	ttgggaacattt	t----	atactct
	*	*****	*****	*** *	*****	*****	****	*	*

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11.93464145.93464265.-1 type=EN

H. Sap	ttataaaa	gtaagttaagga	...3952...	-----gcctt-ttgtcttttttcctt	----	TTTTTAAAG	CTgt	TTGg
R. Mac	ttataaaa	gtaagttaagga	...3635...	-----tgcctt-ttgtcttttttcct	----	TTTTTAAAG	CTgt	TTGg
P. Tro	ttataaaa	gtaagttaagga	...3946...	-----cctt-ttgtcttttttcctt	----	TTTTTAAAG	CTgt	TTGg
P. Abe	ttataaaa	gtaagttaagga	...3927...	-----gcctt-ttgtcttttttcctt	----	TTTTTAAAG	CTgt	TTGg
C. Jac	ttataaaa	gtaagttaagga	...4948...	-----tt-ttgtcttttttccttttt	----	TTTTTAAAG	CTgt	TTGg
M. Mus	ttataaaa	gtaagttgtaca	...508...	-----ttgttctttctttttctttt	----	TTTTTAAAG	CTgt	TTGg
R. Nor	ttataaaa	gtaagttatag	...484...	taatatgctgccttattcctt	-----	TTGTTTTAAAG	CTat	TTGg
O. Cun	ttataaaa	gtaagttatgta	...4540...	-----tgcctt-tgtc-tttttt	----	TTTTTAAAG	CTgt	TTGg
C. Fam	ttataaaa	gtaagtagaatg	...3126...	-----ctgcctt-tgtc-tttttt	TTGT	TTTTTAAAG	CTgt	TTGg
F. Cat	ttataaaa	gtaagtagtga	...4463...	-----ctgcctt-tgtc-tttttt	TTGT	TTTTTAAAG	CTgt	TTGg
B. Tau	ttataaaa	gtaagtagtga	...3157...	-----cctt-ttgtctttttttttt	----	TTTTTAAAG	CT	ctTTGg
E. Cab	ttataaaa	gtaagtagtga	...2822...	-----gccttttgtctttttttt	TTGT	TTTTTAAAG	CTgt	TTGg
O. Avi	ttataaaa	gtaagtagtga	...3172...	-----cctt-ttgtctttttttttt	----	TTTTTAAAG	CT	ctTTGg
L. Afr	ttataaaa	gtaagttacgta	...2820...	-----gttgctt-tttttttttt	----	TTTTTAAAG	CTgt	TTGg
	*****	*****		** ** *		**** *	**	****

id=759581 gene=ENSG00000119820 name=YIPF4 segment=chr2.32526565.32530557.1 type=IN

Figure 404: CS=11.9



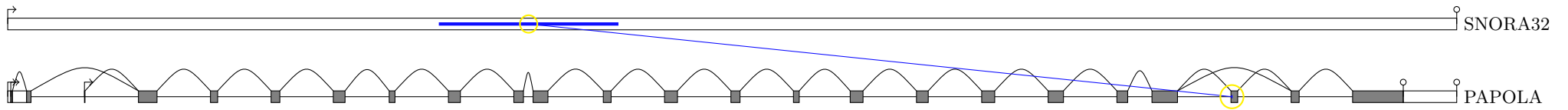
H. Sap	gggtgtaa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACCA	-aaaaaatttcccagtagg...34... ttgggaacagtt	g----	attaact
R. Mac	gggtataa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACCA	-aaaaaatttcccagtagg...34... ttgggaacagct	g----	attaact
P. Tro	gggtgtaa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACCA	-aaaaaatttcccagtagg...34... ttgggaacagtt	g----	attaact
C. Jac	gggcataa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACCA	taaaaaaatttcccagtagg...35... ttgggaacattt	g----	attaact
M. Mus	aatttaaa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTGGA	-catgaccataaa	gaaaaaatt	-----..46... ---ggaacacgt	g	ttg--atgaaca
R. Nor	agaacaaa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTGGA	-catgaccataaa	gaaaaaatt	-----..48... ----aacattt	t	taaaaaataaaat
C. Por	tattatga	tggtcattaccaaggcttattagaatgaagt	TTCTca	TTTGCTGTGG	-acatggccataaa	gaaaaaatt	-----..43... ttgggaacatta	c----	attgcct
O. Cun	aaagtga	aggtcattaccaaggcttattagaatgcagt	TTCTca	TTTGCTGTg	GACA	-tgaccataaa	gaaatttccc-----..40... ctgggaacattt	a----	atcaagt
C. Fam	ccatataa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACA	-tgaccataaa	gaaaaaatttccc-----..45... ttgggaacattt	t----	taccaac
F. Cat	tggtataa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACC	-ataaaaaatttccactag-...39... ttgggaacattt	a----	caacagc
B. Tau	gattttga	tggtcattaccaaggcttttagaacgcagt	TTCTaa	TTTGCTGTGGA	-tgaccgtaaa	caaaatccc-----..42... ttgggaacattt	t----	attagcc	
E. Cab	agggataa	tggtcattaccaaggcttttagaatgcagt	TTCTca	TTTGCTGTg	GACAt	GACCAG	aaaaaaatttcccactggg...36... ttgggaacattt	t----	gttaacc
L. Afr	gggtacaa	tggtcattaccaaggcttttagaatgcagt	TTCTga	TTTGCTGTGG	-acttgaccataaa	gaaaaaatt	-----..46... ttgggaacattt	t----	atactct
	*	*****	***	*	*****	*****		*	***

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11\_93464145\_93464265\_-1 type=EN

H. Sap	aggagctg	gtgagtc	ccccgg...774...aagaat-gg	ttgtaaccagcc--	TGTTtc	TGTTGCAG	CAAAGGAa
R. Mac	aggagctg	gtgagtc	ccccgg...790...aagaat-gg	ttgtaaccagcc--	TGTTtc	TGTTGCAG	CAAAGGAa
P. Tro	aggagctg	gtgagtc	ccccgg...774...aagaat-gg	ttgtaaccagcc--	TGTTtc	TGTTGCAG	CAAAGGAa
C. Jac	aggagctg	gtgagtc	ccccgg...791...gaggat-gg	ttgtaaccagtc--	TGTTtc	TGTTGCAG	CAAAGGAa
M. Mus	aggagctg	gtgagtc	ccccgg...563...-----	tctcaactgatcttatttct--	TTGCAG	CAAAGGAa	
R. Nor	aggagctg	gtgagtc	ccccgg...526...-----	ctcaactggcctcatttctt--	TTGCAG	CAAAGGAa	
C. Por	aggagctg	gtgggt	ccccgg...476...-----	cctcacc--cctcattttcca	TTGCAG	CAAAGGAa	
O. Cun	aggagctg	gtgagtc	ccccgg...528...-----	gccttgaccagcctgatctc--	TGTTGCAG	CAAAGGAa	
C. Fam	aggagctg	gtgagtc	ccccgg...647...-----	ggtcttgatcagtcgcttc--	TGTTGCAG	CAAAGGAa	
F. Cat	aggagctg	gtgagtc	ccccgg...708...--gaacgg	gtcgtcatcagtc--	GGTTtc	TGTTGCAG	CAAAGGAa
B. Tau	aggagctg	gtgagtc	ccccgg...294...-----	ggtcgtaccagctggcttc--	TGTTGCAG	CAAAGGAa	
E. Cab	aggagctg	gtgagtc	ccccgg...766...aagacgg	gtcgtatcagtc--	CTGGTTtc	TGTTGCAG	CAAAGGAa
L. Afr	aggagctg	gtgagtc	ccccgg...750...-----	gtaaatcagtggtttctg--	TTGCAG	CAAAGGAa	
	****	**	**	*	*****	*****	*****

id=771035 gene=ENSG00000153815 name=AC092135.1 segment=chr16\_81735406\_81736226\_1 type=IN

Figure 405: CS=20.67



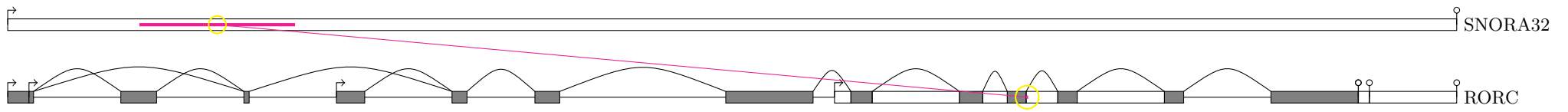
H. Sap	gggtgt-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...45...	ttgggaacagtt	g----attaact
R. Mac	gggtat-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...45...	ttgggaacagct	g----attaact
P. Tro	gggtgt-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...45...	ttgggaacagtt	g----attaact
P. Abe	-ggtgtaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...45...	ttgggaacagct	g----attaacc
C. Jac	gggcat-aa	tggtcattaccaaggcttttagaatgct	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...46...	ttgggaacattt	g----attaact
M. Mus	-aatttaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaagaaaa...49...	---ggaacacgt	gttg--atgaaca
R. Nor	-agaacaaa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaagaaaa...51...	----aacattt	ttaaaaataaat
C. Por	tattat-ga	tggtcattaccaaggctattagaatgaa	GTTT	TCATT	tgCTGT	ggacatggcataaaaaaat...45...	ttgggaacatta	c----attgcct
O. Cun	-aaagtga	aggtcattaccaaggctttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaagaaat...45...	ctgggaacattt	a----atcaagt
C. Fam	ccatat-aa	tggtcattaccaaggctttgagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...50...	ttgggaacattt	t----taccac
F. Cat	tggtat-aa	tggtcattaccaaggctttgagaatgta	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaat...49...	ttgggaacattt	a----caacagc
E. Cab	agggat-aa	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccagaaaaaaa...48...	ttgggaacattt	t----gttaacc
S. Sus	-agggtata	tggtcattaccaaggctcttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaaaaat...46...	ctgggaacattt	t----attagca
O. Avi	-gtttttca	tggtcattaccaaggcttttagaatgca	GTTT	TCATT	tgCTGT	ggacatgaccataaaacaaa...46...	ttgggaacattt	t----attagcc
*	*****	*****	*****	*****	*****	*** ** *	*****	****

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11\_93464145\_93464265\_-1 type=EN

H. Sap	cagaagag	gtatatatatga...4199...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
R. Mac	cagaagag	gtatatatataa...4496...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
P. Tro	cagaagag	gtatatatatga...4172...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
P. Abe	cagaagag	gtatatatataa...4167...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
C. Jac	cagaagag	gtatatatataa...4140...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
M. Mus	cagaagag	gtaaatgtgcat...3786...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
R. Nor	cagaagag	gtatatgtgcac...3664...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
C. Por	ctgatgag	gtatatatgtgt...3559...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
O. Cun	cagaagag	gtatatatatgc...3371...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
C. Fam	cagaagag	gtatctatatat...3687...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
F. Cat	cagaagag	gtatctatatat...3761...	taaagctttttttttcaaaa	ACAG	GATGAAA	c
E. Cab	cagaagag	gtatctatatat...3607...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
S. Sus	cagaagag	gtatctatatgt...4516...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
O. Avi	cagaagag	gtatctatatatt...3628...	taaagcttttttttttaaaa	ACAG	GATGAAA	c
*	** ** *	*** * *	*****	*****	*****	*****

id=445603 gene=ENSG0000090060 name=PAPOLA segment=chr14\_97022751\_97026985.1 type=IN

Figure 406: CS=10.92



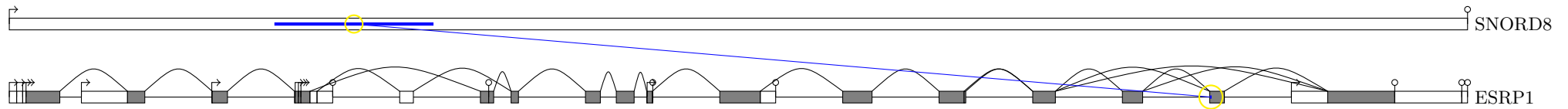
H.Sap	gggtgt-aa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...72...ttgggaacag---tt	gattaact-----
R.Mac	gggtat-aa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...72...ttgggaacag---ct	gattaact-----
P.Tro	gggtgt-aa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...72...ttgggaacag---tt	gattaact-----
P.Abe	-ggtgtaa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...72...ttgggaacag---ct	gattaacc-----
M.Mus	-aatTTAAA	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...76...---ggaacacgtgtt	gatgaaca-----
R.Nor	-agaacaaa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...78...-----aacat---tt	ttaaaataaaat
C.Por	tattat-ga	tggTCATtaCCAAGGCTattagaatgaagtttctcat...72...ttgggaacat---ta	cattgcct-----
O.Cun	-aaagtga	aggTCATtaCCAAGGCTtatagaatgcagtttctcat...72...ctgggaacat---tt	aatcaagt-----
C.Fam	ccatat-aa	tggTCATtaCCAAGGCTttgagaatgcagtttctcat...77...ttgggaacat---tt	ttaccaac-----
F.Cat	tggtat-aa	tggTCATtaCCAAGGCTttgagaatgtagtttctcat...76...ttgggaacat---tt	acaacagc-----
B.Tau	gatttt-ga	tggTCATtaCCAAGGCTtttagaacgcagtttctaat...74...ttgggaacat---tt	tattagcc-----
E.Cab	agggat-aa	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...75...ttgggaacat---tt	tgTTAAC-----
O.Avi	-gttttca	tggTCATtaCCAAGGCTtttagaatgcagtttctcat...73...ttgggaacat---tt	tattagcc-----
L.Afr	gggtac-aa	tggTCATtaCCAAGGCTtttagaatgcagtttctgat...75...ttgggaacat---tt	tatactct-----
	*	*****	**** * ***** **

id=303968 gene=ENSG00000206799 name=SNORA32 segment=chr11\_93464145\_93464265\_-1 type=EN

H.Sap	aGCCTTGG	GTGA-ggggcagggagaaatgagag-...145...ccactccatcag	gctgcagc
R.Mac	aGCCTTGG	GTGA-ggggcagggagaaatgagag-...134...ccactccaacag	gctgcagc
P.Tro	aGCCTTGG	GTGA-gggacagggagaaatgagag-...145...ccactccatcag	gctgcagc
P.Abe	aGCCTTGG	GTGA-ggggcagggagaaatgagag-...136...ccactccatcag	gctgcagc
M.Mus	aGCCTTGG	GTGA--gggcagtgggaattgagaaa...121...ccactccggcag	gctgcagc
R.Nor	aGCCTTGG	GTGA--gggcagtgggaattgagaaag...100...ccactccggcag	gctgcagc
C.Por	aGCCTTGG	GTGA-ggggcagggggcaacaagag-...140...ccaccaccag	gctgcagc
O.Cun	aGCCTTGG	GTGA-gggagcaggggggaaccga--...141...cgctcccag	gctgcagc
C.Fam	aGCCTTGG	GTGA-ggggca-gagggaaatgagagg...127...tctctccctcag	gctgcagc
F.Cat	aGCCTTGG	GTGA-ggggcagggggaatgagaga-...146...tccgtcccttag	gctgtggg
B.Tau	aGCCTTGG	GTGA-ggggcaggggagatgagca-...146...ccaccctccag	gctgcagt
E.Cab	aGCCTTGG	GTGA-ggggcagggggaatgaaag-...141...ccactccatcag	gctgcagt
O.Avi	aGCCTTGG	GTGA-ggggcaggggagatgagca-...146...ccaccctccag	gctgcagt
L.Afr	aGCCTTGG	GTGA-ggggcagggggaatgagag-...146...cgcccctcag	gctgcagc
	*****	**** * ** *	* * ** **** *

id=209180 gene=ENSG00000143365 name=RORC segment=chr1\_151785534\_151785714\_-1 type=AN

Figure 407: CS=14



H.Sap	aaaacatg	tcccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gatctgaggggc	atgtgaaa
R.Mac	aatacatg	tcccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gatctgaggggc	atgtgaaa
P.Tro	aaaacatg	tcccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gatctgaggggc	atgtgaaa
P.Abe	aaaacatg	tcccagtgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gatctgaggggc	atgtgaaa
C.Jac	aatacatg	tcccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...tacctgaggggc	atgtgaaa
R.Nor	ggaatatg	tcccgatgatga	GTTGC	ATGCTAA	tactgagtcaccagcaggg...53...gacctgagggac	attgtgca
C.Por	aatgcatg	tcccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gacctgagggac	atataaaa
O.Cun	gatgcatg	ccccaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gacctgaggggc	atgtgaaa
B.Tau	agtccatg	cctcagtgatga	GTTGC	ATGCTAA	tactgagccaccagctaggg...53...gacctgaggggc	atgtgaaa
E.Cab	gatacatg	cctcaatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gacctgagggc	atgtgaaa
S.Sus	gatacatg	cctcgatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gacctgaggggc	atgtgaaa
O.Avi	agtccatg	cctcagtgatga	GTTGC	ATGCTAA	tactgagccaccagctaggg...53...gatctgaggggc	atgtgaaa
L.Afr	gatacatg	tcccgatgatga	GTTGC	ATGCTAA	tactgagccaccaggtaggg...53...gacctgaggggc	atgtgaaa
***	* * *	*****	*****	*****	*****	*****

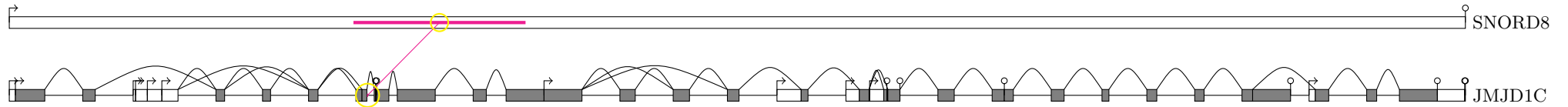
id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451.21865560.-1 type=EN

H.Sap	gttaccag	gtcagtagcttg...3988...tgtttgtttaacttgcat	TTAG	TATGCAAc
R.Mac	gttaccag	gtcagtagcttg...4633...tgtttgtttaacttgcat	TTAG	TATGCAAc
P.Tro	gttaccag	gtcagtagcttg...4037...tgtttgtttaacttgcat	TTAG	TATGCAAc
P.Abe	gttaccag	gtcagtagcttg...4120...tgtttgtttaacttgcat	TTAG	TATGCAAc
C.Jac	gttaccag	gtcagtagcttg...4270...tgtttgtttaacttgcat	TTAG	TATGCAAc
R.Nor	gttaccag	gtcagtagcttg...4953...tgttgtctcaacttgcat	TTAG	TATGCAAc
C.Por	gttaccag	gtcagtagcttg...4059...tgtttgtttaacttgcat	TTAG	TATGCAAc
O.Cun	gttaccag	gtcagtagcttg...4502...tgtttgttgaacttgcat	TTAG	TATGCAAc
B.Tau	gttaccag	gtcagtagcttg...3087...tgtttgtttaacttgcat	TTAG	TATGCAAc
E.Cab	gttaccag	gtcagtagcttg...3341...ttdtttgtttaacttgcat	TTAG	TATGCAAc
S.Sus	gttaccag	gtcagtagcttg...3851...tgtttgtttaacttgcat	TTAG	TATGCAAc
O.Avi	gttaccag	gtcagtagcttg...3144...-gttttgtttaacttgcat	TTAG	TATGCAAc
L.Afr	gttaccag	gtcagtagcttg...3423...gttcatttgaacttgcat	TTAG	TATGCAAc
*****	*****	*****	*****	*****

id=675656 gene=ENSG00000104413 name=ESRP1 segment=chr8.95705056.95709079.1 type=IN

Figure 408: CS=13





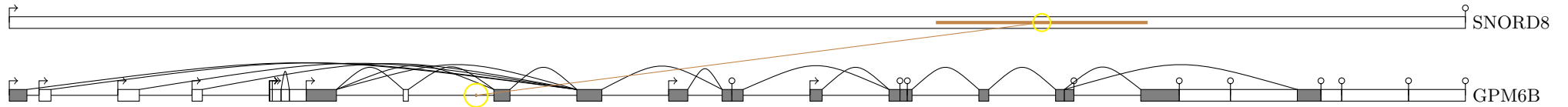
H. Sap	aaaacatg	tccaatgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gatctgaggggc	atgtgaaa
R. Mac	aatacatg	tccaatgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gatctgaggggc	atgtgaaa
P. Tro	aaaacatg	tccaatgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gatctgaggggc	atgtgaaa
P. Abe	aaaacatg	tccagtgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gatctgaggggc	atgtgaaa
C. Jac	aatacatg	tccaatgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	tacctgaggggc	atgtgaaa
M. Mus	tgactgtg	tcccgatgatgagctgc	CATGC	ta	ATACTGAGT	caccaggcagggcagtggtg...	45...	gacctgagggac	atgtgca
R. Nor	ggaatatg	tcccgatgatgagttgc	CATGC	ta	ATACTGAGT	caccaggcagggcagtggtg...	45...	gacctgagggac	atgtgca
C. Por	aatgcatg	tccaatgatgagttgc	CATGC	ta	ATACTGAGC	caccagttagggcagagtggtg...	45...	gacctgagggac	atataaaa
O. Cun	gatgcatg	cccaatgatgagttgcc	ATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gacctgaggggc	atgtgaaa
C. Fam	gataaatg	cctcaatgatgagttgc	CATGC	ta	ATACTGAGT	caccaggtagggcagtggtg...	45...	gacctgaggggc	atgtgaaa
B. Tau	agtccatg	cctcagtgatgagttgc	CATGC	ta	ATACTGAGC	caccagctagggcagtggtg...	45...	gacctgaggggc	atgtgaaa
E. Cab	gatacatg	cctcaatgatgagttgcc	ATGC	ta	ATACTGAGC	caccaggtagggcagcagtggtg...	45...	gacctgaggggc	atgtgaaa
S. Sus	gatacatg	cctcagtgatgagttgcc	ATGC	ta	ATACTGAGC	caccaggtagggcagcagtggtg...	45...	gacctgaggggc	atgtgaaa
O. Avi	agtccatg	cctcagtgatgagttgc	CATGC	ta	ATACTGAGC	catcagctagggcagtggtg...	45...	gatctgaggggc	atgtgaaa
L. Afr	gatacatg	tcccgatgatgagttgc	CATGC	ta	ATACTGAGC	caccaggtagggcagtggtg...	45...	gacctgaggggc	atgtgaaa
	**	* * * * * *	*****	*****	** * * *	*****	**	* * * * *	** * *

id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451.21865560.-1 type=EN

H. Sap	ctGTTCAc	GTATGTATG	ttattagga-tgaatttctg...	56...	ggttatttttag	agccatta
R. Mac	ctGTTCAc	GTATGTATG	ttattagga-tggatttctg...	56...	ggttgtttttag	agccatta
P. Tro	ctGTTCAc	GTATGTATG	ttattagga-tgaatttctg...	56...	ggttatttttag	agccatta
P. Abe	ctGTTCAc	GTATGTATG	ttattagga-tgaatttctg...	56...	ggttatttttag	agccatta
C. Jac	ctGTTCAc	GTATGTATG	ttattagga-tgaatttctg...	56...	ggttacttttag	agtcatta
M. Mus	ctGTTCAc	GTATGTATG	ttattagtaa-tgcatttta...	54...	atttatttttag	ggtcatta
R. Nor	ctGTTCAc	GTATGTATG	ttattagtaa-tgcatttta...	53...	atttatttttag	ggtcatta
C. Por	ctGTTCAc	GTATGTATG	ttactggtaa-taagtttta...	53...	ggttatttttag	ggtcatta
O. Cun	ctGTTCAc	GTATGTATG	attattaatcagcagatttt...	56...	ggttatttttag	ggtcatta
C. Fam	caGTTCAc	GTATGTATG	ttgttagtga-tgtattatta...	52...	aattatttttag	agtcatta
B. Tau	ctGTTCAc	GTATGTATG	ttgttagtga-tggattatg...	52...	aattatttttag	ggtcatta
E. Cab	ttGTTCAc	GTATGTATG	attgttagtga-tggattatt...	56...	ggtttcttttag	agtcatta
S. Sus	ctGTTCAc	GTATGTATG	attgttagtga-tgaattact...	57...	ggttatttttag	ggtcatta
O. Avi	ctGTTCAc	GTATGTATG	ttgttagtga-tggattatg...	52...	aattatttttag	ggtcatta
L. Afr	ctGTTCAc	GTATGTATG	ttatcagtgga-tggattatg...	56...	ggttatttttag	ggtcatta
	*****	*****	**	**	** *****	* *****

id=167710 gene=ENSG00000171988 name=JMJD1C segment=chr10.64975216.64975312.-1 type=IN

Figure 409: CS=10.5



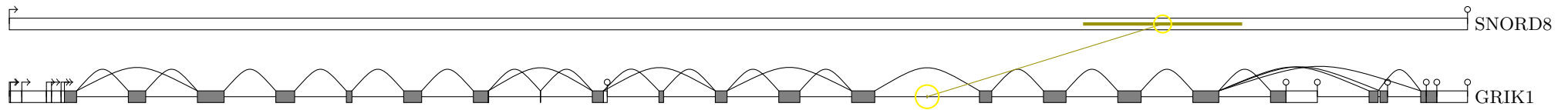
H. Sap	aaaacatg	tccaatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatgaagatctgaggggc	a-tgtgaaa
R. Mac	aatacatg	tccaatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatgaagatctgaggggc	a-tgtgaaa
P. Tro	aaaacatg	tccaatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatgaagatctgaggggc	a-tgtgaaa
P. Abe	aaaacatg	tccaatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatgaagatctgaggggc	a-tgtgaaa
C. Jac	aatacatg	tccaatgatga...30...gggcagtattgccctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatgaatacctgaggggc	a-tgtgaaa
M. Mus	tgactgtg	tcccgatgatga...30...gggcagtattgccctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgagggac	attgtgca-
R. Nor	ggaatatg	tcccgatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgagggac	attgtgca-
C. Por	aatgcatg	tccaatgatga...30...gggcagagtgtgccctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacgtggagacctgagggac	a-tataaaa
C. Fam	gataaatg	cctcaatgatga...30...gggcagtgttgccttagtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacgtggagacctgaggggc	a-tgtgaaa
F. Cat	gatacatg	cctcgatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacatggagacctgaggggc	a-tgttcag
B. Tau	agtccatg	cctcagtgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgaggggc	a-tgtgaaa
E. Cab	gatacatg	cctcaatgatga...30...gggcagcattgccctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcacgtggagacctgaggggc	a-tgtgaaa
S. Sus	gatacatg	cctcgatgatga...30...gggcagcattgctctgcttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgaggggc	a-tgtgaaa
D. Avi	agtccatg	cctcagtgatga...30...gggcagtattgccctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgaggggc	a-tgtgaaa
L. Afr	gatacatg	tcccgatgatga...30...gggcagtgttgcctggtttGGGTgcCAGTGA	GTTTAc	acaaaacttctcatgtggagacctgaggggc	a-tgtgaaa
	**	* * * * *	*****	** * * * *	** * * *

id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451\_21865560\_-1 type=EN

H. Sap	gccatttg	gtacatcttcta...4921...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
R. Mac	gccatttg	gtacatcttcta...4836...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
P. Tro	gccatttg	gtacatcttcta...4810...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
P. Abe	gccatttg	gtacatcttcta...4921...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
C. Jac	gccatttg	ttacatcttcta...4892...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
M. Mus	gtgagttg	gtctagctgttc...4504...-atagaatc	tttgctggaga--AGACACTGACTC	tttgcca-ctgaaattggcag	tgaacagc
R. Nor	gcgagttg	gtctagccgttc...4495...ttatagact	ccttgct-gaga--TAGACACTGACTC	tttgcca-ctgaaattggcag	tgaacagc
C. Por	gccatttg	gtg-atctgctac...4129...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
C. Fam	gccatttg	gcgcatctccta...3903...-tgtagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
F. Cat	gccatgtg	gtgcatctccta...4921...-taaataatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
B. Tau	gccagttg	gtacctctccta...4570...-tgtagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
E. Cab	gtcatttg	gtgcatctccta...4164...-tatagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
S. Sus	gccatttg	gggcatcgctc...4921...-tgtggaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
O. Avi	gccagttg	gtacctctccta...4530...-tgtagaatc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
L. Afr	accatttg	gtgtatctccta...4596...-tgtagactc	tttgctggagaTAGAGACACTGACTC	tttgccacctgaaattggcag	tgaacagc
	* **	* *	* *****	*****	*****

id=556671 gene=ENSG00000046653 name=GPM6B segment=chrX.13825889\_13830989\_-1 type=IN

Figure 410: CS=10.5



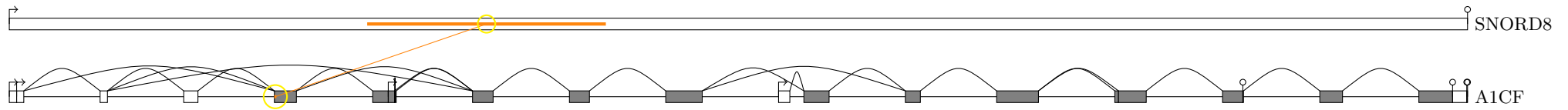
H.Sap	aaaacatg	tccaatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatgaagatctgaggggc	a-tgtgaaa
R.Mac	aatacatg	tccaatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatgaagatctgaggggc	a-tgtgaaa
P.Tro	aaaacatg	tccaatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatgaagatctgaggggc	a-tgtgaaa
P.Abe	aaaacatg	tccagtgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatgaagatctgaggggc	a-tgtgaaa
C.Jac	aatacatg	tccaatgatga...41...-----ccctggtttgggtgacagtg	AGTTAACAAAAC	ttctcacatgaatcctgaggggc	a-tgtgaaa
M.Mus	tgactgtg	tccgatgatga...41...-----tcttggtttgggtgccagtg	AGTTAACAAAAC	ttctcatgtggagacctgagggac	attgtgca-
R.Nor	ggaatgatg	tccgatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcatgtggagacctgagggac	attgtgca-
O.Cun	gatgcatg	cccaatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatgaagacctgaggggc	a-tgtgaaa
C.Fam	gataaatg	cctcaatgatga...36...tgttgcctagtttgggtgc	CAGTAGTTAACAAAAC	ttctcacatggagacctgaggggc	a-tgtgaaa
F.Cat	gatacgtg	cctcagtgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatggagacctgaggggc	a-tgttcag
B.Tau	agtccatg	cctcagtgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcatgtggagacctgaggggc	a-tgtgaaa
E.Cab	gatacatg	cctcaatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcacatggagacctgaggggc	a-tgtgaaa
S.Sus	gatacatg	cctcagtgatga...36...cattgctctgctttgggtgc	CAGTAGTTAACAAAAC	ttctcatgtggagacctgaggggc	a-tgtgaaa
L.Afr	gatacatg	tccgatgatga...41...-----ccctggtttgggtgccagtg	AGTTAACAAAAC	ttctcatgtggagacctgaggggc	a-tgtgaaa
	**	* * * * *	** * * * * *	* * * * * *	* * * * *

id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451.21865560.-1 type=EN

H.Sap	attgcaag	gtaagtttgaga...4937...ttctctgatatttac-agact	GTTTC	TGTTAACT	accacag	gtttacac
R.Mac	attgcaag	gtaagtttgaga...4937...ttctctgatatttac-agact	GTTTC	TGTTAACT	accacag	gtttacac
P.Tro	attgcaag	gtaagtttgaga...4937...ttctctgatatttac-ggact	GTTTC	TGTTAACT	accacag	gtttacac
P.Abe	atagcaag	gtaagtttgaga...4937...ttctctgatatttac-agact	GTTTC	TGTTAACT	accacag	gtttacac
C.Jac	attgcaag	gtaagtttaaga...4937...ttgtctgatatttac-agcct	GTTTC	TGTTAACT	accacag	gtttacac
M.Mus	attgcaag	gtaagtttcgaga...4937...gtgtgtgatatttac-aaact	GTTTC	TGTTAACT	atcacag	gttcacac
R.Nor	attgcaag	gtaagtttagga...4937...-tatctgatgcttataaaaact	GTTTC	TGTTAACT	atcgag	gttcacac
O.Cun	attgcaag	gtaagttcaaga...4937...tgaactgatatttac-agact	GTTTC	TGTTAACT	accacag	gtttacac
C.Fam	attgcaag	gtaagtttgaga...4937...ttatctgatgtttac-agact	GTTTC	TGTTAACTACTG	cag	gtttacac
F.Cat	attgcaag	gtgagttcgaga...4938...ttatctgatgtttac-agact	GTTTC	TGTTAACT	-atcgag	gtttacac
B.Tau	attgcaag	gtaagtttagaga...4937...ctacctcatgtttac-agact	GTTTC	TGTTAACT	accgcag	gtttacac
E.Cab	atcgcaag	gtaagtttcgaga...4937...ttatctgatgtttac-agact	GTTTC	TGTTAACT	accacag	gtttacac
S.Sus	atcgcaag	gtaagttccaga...4937...tgatctgatgtttac-agact	GTTTC	TGTTAACTACTG	cag	gtttacac
L.Afr	atcgcaag	gtaagttcaagg...4937...ttgcctgatgtttac-agact	GTTTC	TGTTAACT	accgcag	gtttacac
	** * * *	** * * * *	** * * *	* * * * *	** * * *	** * * *

id=785946 gene=ENSG00000171189 name=GRIK1 segment=chr21.30953864.30959685.-1 type=IN

Figure 411: CS=10.92



```

H.Sap  aaacatg tcccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gatctgaggggc atgtgaaa
R.Mac  aatacatg tcccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gatctgaggggc atgtgaaa
P.Tro  aaacatg tcccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gatctgaggggc atgtgaaa
P.Abe  aaacatg tcccagtgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gatctgaggggc atgtgaaa
C.Jac  aatacatg tcccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...tacctgaggggc atgtgaaa
M.Mus  tgactgtg tcccgatgatgagctgccatGCTaaTACTGAGtcACCAGGcagggcagtgattgtcctggt-----...38...gacctgagggac attgtgca
R.Nor  ggaatag tcccgatgatgagttgccatGCTaaTACTGAGccACCAGGcagggcagtggttgcctggt-----...38...gacctgagggac attgtgca
C.Por  aatgcatg tcccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgagggac atataaaa
O.Cun  gatgcatg ccccaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgaggggc atgtgaaa
C.Fam  gataaatg cctcaatgatgagttgccatGCTaaTACTGAGtcACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgaggggc atgtgaaa
B.Tau  agtccatg cctcagtgatgagttgccatGCTaaTACTGAGccACCAGctagggcagtggttgcctggt-----...39...gacctgaggggc atgtgaaa
E.Cab  gatacatg cctcaatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgaggggc atgtgaaa
S.Sus  gatacatg cctcagtgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgaggggc atgtgaaa
L.Afr  gatacatg tcccgatgatgagttgccatGCTaaTACTGAGccACCAGGTAGGGcagtggttgcctggtttggg-----...33...gacctgaggggc atgtgaaa
** * * ***** ***** ***** ***** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451.21865560.-1 type=EN

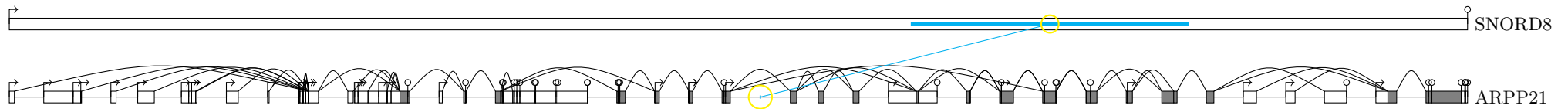
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R.Mac  --tcaaagag ctgtaaacgta...2442...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
P.Tro  --tcaaagag gtgtaacacata...2858...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
P.Abe  --tcaaagag gtgcaacacata...2870...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
C.Jac  --tttaaaga gcctaagacata...2395...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
M.Mus  --ttgaaact at-taaggacat...1659...-----tttacttaattatcttaaaTTGGTTTCAG TGAGCAac
R.Nor  tgtcaaagct at-taaggtat...1269...-----tttacttaattatcttaaaTTGGTTTCAG TGAGCAac
C.Por  --ttaaataa atagctgttaag...3047...ctaggcaacaataatttattAATTTaTCTTAaaACTTGGTTTCAG TGAGCAac
O.Cun  --tccaagag ctggaagacata...2244...-----atattaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
C.Fam  --tcaaacat ctgtaagacaca...2001...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
B.Tau  --tctaacat ctgtaacacaca...3016...-----ttacttaattatcttaaaTTGGTTTCAG TGAGCAac
E.Cab  --ttaaacad ctgtaagacaca...2025...-----gagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
S.Sus  --ttgaacat ctgtaagacacg...1999...-----atagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
L.Afr  --tcaaatag ctgtaagataca...2278...-----acagtaatttacttaatttaTCTTAaaTTGGTTTCAG TGAGCAac
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=245182 gene=ENSG00000148584 name=A1CF segment=chr10.52619746.52622648.-1 type=IN

Figure 412: CS=14



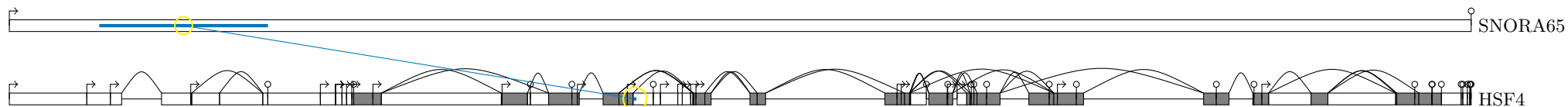
H. Sap	aaaacatg	tcccaatgatga...27...--gtagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacatgaagatctgaggggc	a-tgtgaaa
P. Tro	aaaacatg	tcccaatgatga...27...--gtagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacatgaagatctgaggggc	a-tgtgaaa
P. Abe	aaaacatg	tcccagtgatga...27...--gtagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacatgaagatctgaggggc	a-tgtgaaa
M. Mus	tgactgtg	tcccgatgatga...27...--gcagggcagttatgtcctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgagggac	attgtgca-
R. Nor	ggaatatg	tcccgatgatga...27...--gcagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgagggac	attgtgca-
C. Por	aatgcatg	tcccaatgatga...27...--ttagggcagagttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacgtggagacctgagggac	a-tataaaa
O. Cun	gatgcatg	cccaatgatga...27...--gtagggcattattgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacatgaagacctgaggggc	a-tgtgaaa
C. Fam	gataaatg	cctcaatgatga...27...--gtagggcagtgttgccctag	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacgtggagacctgaggggc	a-tgtgaaa
B. Tau	agtcctatg	cctcagtgatga...27...--ctagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgaggggc	a-tgtgaaa
E. Cab	gatacatg	cctcaatgatga...27...--gtagggcagcattgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcacgtggagacctgaggggc	a-tgtgaaa
S. Sus	gatacatg	cctcagtgatga...25...aggtagggcagcattgctct	GCTTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgaggggc	a-tgtgaaa
O. Avi	agtccatg	cctcagtgatga...27...--ctagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgaggggc	a-tgtgaaa
L. Afr	gatacatg	tcccgatgatga...27...--gtagggcagtgttgccctgg	TTTGGG	TGCCAGTGAGT	ttAACAA	aaacttctcatgtggagacctgaggggc	a-tgtgaaa
	**	* * * * * *	*****	***	**	*****	** * * * * *

id=745760 gene=ENSG00000200785 name=SNORD8 segment=chr14.21865451.21865560.-1 type=EN

H. Sap	accagaat	gtaagccccatc...4938...gaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
P. Tro	accagaat	gtaagccccatc...4938...aaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
P. Abe	accagaat	gtaagccccatc...4938...aaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
M. Mus	accaggat	gtaagtcccac...4938...aaacttctttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
R. Nor	accagaat	gtaagtcccagc...4938...aacacttctttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
C. Por	actagaat	gtaagctctagt...4938...aaaaatttttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
O. Cun	accagaat	gtaagccctatg...4938...agaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
C. Fam	acaagaat	gtaagcccattg...4938...gaaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
B. Tau	acgagaat	gtaagccccttc...4938...aaaaaactttttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
E. Cab	acaagaat	gtaagcttcatc...4938...aaaactttttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
S. Sus	acaagaat	gtaagccccatc...4938...gaaaaaactttttattgata	TGTTtt	ACTTt	GCTGGCAg	CCAGAgc
O. Avi	acaagaat	gtaagccccttc...4938...aaaaaactttttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
L. Afr	accagaat	gtaagcccctgt...4938...aaaagcctttttttattgata	TGTTtt	ACTTt	GCTGGCAg	aCCAGAgc
	** * * *	*****	*	*****	*****	*****

id=414704 gene=ENSG00000172995 name=ARPP21 segment=chr3.35732498.35748465.1 type=IN

Figure 413: CS=11.7



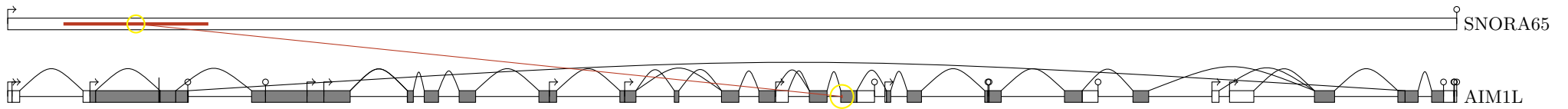
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R.Mac	ctcagcca	CCCGC	ACTG	ca	CCTGA	accaggtctctgttggctggt--...81...atgggaacagcc	tagaaatg	
P.Tro	ctcagcca	CCCGC	ACTG	ca	CCTGA	accaggtctctgttggctggt--...81...atgggaacagcc	tagaaaca	
P.Abe	ctcagcca	CCCGC	ACTG	ca	CCTGA	accaggtctctgttggctggt--...81...atgggaacagtc	tagaaacg	
M.Mus	cccagcca	CCCGC	ACTG	ca	CCTGA	accagtatt--gttggctggtgc...81...atgggaacagcc	cagcgata	
R.Nor	cctagcca	CCCGC	ACTG	ca	CCTGA	accagtatt--attggctggtgc...81...gtgggacagcc	tagacata	
C.Por	cttagc	CA	CCCGC	ACTG	ca	CCTGA	accacttccccgctggctggt--...80...atgggcacagcc	caaggcag
O.Cun	cccagcca	CCCGC	ACTG	cg	CCTG	-cccatgct--gctggctggcgc...79...acgggaacagcc	tgccacgg	
C.Fam	cccagcca	CCCGC	ACTG	ca	CCTGA	tcagtttctgttggctggt--...81...atgggaacagcc	tggaaatt	
B.Tau	tctagcca	CCCGC	ACTG	ca	CCTGA	accagtatttctgttggctggt--...80...atgggaacagcc	tagaaatg	
E.Cab	cctagcca	CCCGC	ACTG	ca	CCTGA	accagttctc--ttggctggtgc...79...atgggaacagcc	tggaaaca	
S.Sus	cctagcca	CCCGC	ACTG	ca	CCTGA	accagtatttctgttggctggt--...81...atgggacagct	tgggaatg	
L.Afr	cgtagcca	CCCGC	ACTG	ca	CCTGA	tcagttctctgttggctggt--...81...atgggaacagcc	tagggaag	
		*****	*****	****	*	*****	*** **	

id=488694 gene=ENSG00000201302 name=SNORA65 segment=chr9\_130210780\_130210909\_-1 type=EN

H.Sap	-c	TCAGGCA	GTGCGGG	-----	ggcgggcggggaagagggg--...45...agttctgggcag	ccccttcc
R.Mac	-c	TCAGGCA	GTGCGGG	-----	ggcgggtgggaaagagggg--...46...ggttctgggcag	ccccttcc
P.Tro	-c	TCAGGCA	GTGCGGG	-----	ggcgggcggggaagagggg--...45...agttctgggcag	ccccttcc
P.Abe	-c	TCAGGCA	GTGCGGG	-----	ggcgggcggggaagagggg--...45...agttctgggcag	ccccttcc
M.Mus	-c	TCAGGCA	GTGCGGG	-----	acaggaaggaaggtggag--...31...ggttctgggcag	ctccttcc
R.Nor	-c	TCAGGCA	GTGCGGG	-----	acaggaaggaaggtggag--...30...ggttctgggcag	ttccttcc
C.Por	-c	TCAGGCA	GTGCGGGT	-----	ccaggaagacagggcagagg--...32...ggttctgggcag	cccctgcc
O.Cun	ct-	CAGGCA	GTGCGGG	-----	ggacacgaaggtggcggg--...32...ggttctgggcag	ccccttac
C.Fam	-c	TCAGGCA	GTGCGGG	-----	ggcggggcgggagggggg--...52...tttctggacag	ctccttcc
B.Tau	-c	TCAGGCA	GTGCGGG	-----	gggagggggcggaggggtt--...48...ggttctgggcag	ctccttcc
E.Cab	-c	TCAGGCA	GTGCGGG	-----	gggagggggcagaggaggt--...47...ggttctgggcag	ctccttcc
S.Sus	-c	TCAGGCA	GTGCGGG	-----	ggagggggcagaggagcatg...51...ggttctgggcag	ctctttt
L.Afr	-c	TCAGGCA	GTGCGGG	-----	acagggcgggtgggc-----ggg--...25...ggcttaggcag	ccccttcc
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id=223670 gene=ENSG00000102878 name=HSF4 segment=chr16\_67199974\_67200057\_1 type=AN

Figure 414: CS=11.7



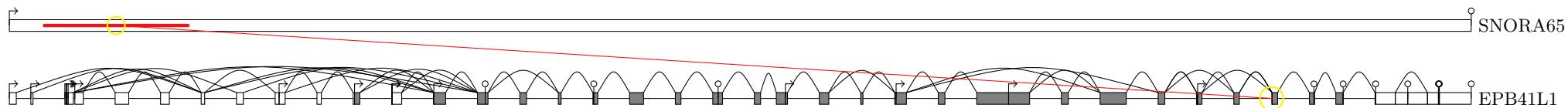
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R. Mac	ctcagCCA	CCCGCcaCTGCA	cctgaccaggtctctgttgg----	86...	atgggaacagcc	tagaaatg
P. Tro	ctcagCCA	CCCGCcaCTGCAC	ctgaccacgtctctgttggc---	85...	atgggaacagcc	tagaaaaca
P. Abe	ctcagCCA	CCCGCcaCTGCA	cctgaccaggtctctgttgg----	86...	atgggaacagtc	tagaaacg
C. Jac	cttagCCA	CCCGCcaCTGCA	cctgaccaggtctctgttgg----	86...	atgggaacagcc	tagaaatg
M. Mus	cccagCCA	CCCGCcaCTGC	acctgaccagtattg--ttggc---	87...	atgggaacagcc	cagcgata
R. Nor	cctagCCA	CCCGCcaCTGC	acctgaccagtatta--ttggc---	87...	gtggggacagcc	tagacata
C. Por	cttagCCA	CCCGCcaCTGCA	cctgaccacttcccgttgg----	85...	atgggcacagcc	caaggcag
O. Cun	cccagCCA	CCCGCcaCTGCGC	ctgccc---tgctgctggctgg...	82...	acgggaacagcc	tgccacgg
C. Fam	cccagCCA	CCCGCcaCTGCA	cctgatcagttttctgttgg----	86...	atgggaacagcc	tggaatt
F. Cat	cccagCCA	CCCGCcaCTGCA	cctgatcagttctc--gtggct--	84...	atgggaacagcc	tgaaaata
B. Tau	tctagCCA	CCCGCcaCTGCA	cctgaccagttttctgttgg----	85...	atgggaacagcc	tagaaatg
E. Cab	cctagCCA	CCCGCcaCTGCA	cctgaccagttctc--ttggct--	84...	atgggaacagcc	tggaata
O. Avi	tctagCCA	CCCGCcaCTGCA	cctgaccagttttctgttgg----	85...	atgggaacagcc	tagaaatg
	****	*****	**** **		***	**** *

id=488694 gene=ENSG00000201302 name=SNORA65 segment=chr9\_130210780\_130210909\_-1 type=EN

H. Sap	agcggcgt	gtaagtgaccg...	71...----	gactcgcgccccgccttcc	TGCAG	GTGGGTGg
R. Mac	agcggcgt	gtaagtgaccg...	71...----	gaccgcgccccgtccttcc	TGCAG	GTGGGTGg
P. Tro	agcggcgt	gtaagtgaccg...	70...----	tgaccgcgccccgccttcc	TGCAG	GTGGGTGg
P. Abe	agtggcgt	gtaagtgaccg...	71...----	gaccgcgccccgccttcc	TGCAG	GTGGGTGg
C. Jac	agcggcgt	gtaagtgaccg...	66...----	gaccgcgccccactccttcc	TGCAG	GTGGGTGg
M. Mus	agcggcgt	gtgagtaatccc...	51...-----	acccatcccacgcctcccc	GCAG	GTGGGTGg
R. Nor	agcggcgt	gtgagtaatccc...	51...-----	acccatcccacgcctcccc	GCAG	GTGGGTGg
C. Por	agcggcgt	gtaagtgatcct...	66...----	tgaccgcgctcgccttcc	TGCAG	GTGGGTGg
O. Cun	agtggcgt	gtgagtaccg...	63...ccgctgaccgctaccctct---		GTGCAG	GTGGGTGg
C. Fam	agcggcgt	gtgagtaccg...	60...----	gaccgcgccccgccttcc	TGCAG	GTGGGTGg
F. Cat	agcggcgt	gtgagtaccg...	60...----	gaccgcgccccgccttcc	TGCAG	GTGGGTGg
B. Tau	agcggcgt	gtgagtaccg...	63...----	gaccgcacccccgccttcc	TGCAG	GTGGGTGg
E. Cab	agcggcgt	gtgagtaccg...	53...----	gaccgcgccccgccttcc	TGCAG	GTGGGTGg
O. Avi	agcggcgt	gtgagtaccg...	63...----	gaccgcacccccgccttcc	TGCAG	GTGGGTGg
	** *****	** *** *		** * *	****	*****

id=137077 gene=ENSG00000176092 name=AIM1L segment=chr1\_26663224\_26663331\_-1 type=IN

Figure 415: CS=13.3



H.Sap	ctc--AGCCA	CCCgC	CACTg	cacctgaccaggtctctgt...89...atgggaacagcc	tagaaatg
R.Mac	ctc--AGCCA	CCCgC	CACTg	cacctgaccaggtctctgt...89...atgggaacagcc	tagaaatg
P.Tro	ctc--AGCCA	CCCgC	CACTg	cacctgaccaggtctctgt...89...atgggaacagcc	tagaaaca
P.Abe	ctc--AGCCA	CCCgC	CACTg	cacctgaccaggtctctgt...89...atgggaacagtc	tagaaacg
C.Jac	-ct-TAGCCA	CCCgC	CACTg	cacctgaccaggtctctgt...89...atgggaacagcc	tagaaatg
M.Mus	-cc-CAGCCA	CCCgC	CACTg	cacctgaccagtattgtg...89...atgggaacagcc	cagcgata
R.Nor	-cc-TAGCCA	CCCgC	CACTg	cacctgaccagtattatg...89...gtgggacagcc	tagacata
C.Por	-ct-TAGCCA	CCCgC	CACTg	cacctgaccacttccccgt...88...atgggacagcc	caaggcag
O.Cun	-cc-CAGCCA	CCCgC	CACTg	cgccctgcccattgctgtg...86...acgggaacagcc	tggcacgg
C.Fam	ccc--AGCCA	CCCgC	CACTg	cacctgatcagttttctgt...89...atgggaacagcc	tggaaatt
E.Cab	-cc-TAGCCA	CCCgC	CACTg	cacctgaccagttctctgt...87...atgggaacagcc	tggaaaca
S.Sus	-cc-TAGCCA	CCCgC	CACTg	cacctgaccagttttctgt...89...atgggacagct	tgggaatg
L.Afr	--GTAGCCA	CCCgC	CACTg	cacctgatcagttctctgt...89...atgggaacagcc	tagggaag
		****	*****	**** **	*** **

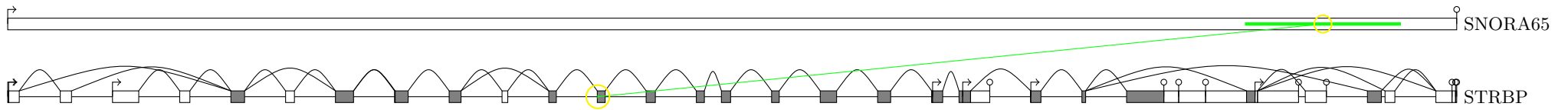
id=488694 gene=ENSG00000201302 name=SNORA65 segment=chr9\_130210780\_130210909\_-1 type=EN

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R.Mac	tttctccg	gtaagtgggcaa...743...-tgtccttacctgacaccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
P.Tro	tttctccg	gtaagtgggcaa...965...-tgtccttacctgacaccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
P.Abe	tttctccg	gtaagtgggcaa...743...-tgtcctcacctgacaccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
C.Jac	tttctccg	gtaagtgggcaa...722...-tgtccttacctgacaccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
M.Mus	tttcaccg	gtaagtgggcaa...762...-tgccctgacctgacccccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
R.Nor	tttcaccg	gtaagtgggcaa...881...-tgccctgacctgacccccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
C.Por	tttctccg	gtaagtgggcaa...693...-tgtcctgacctgatccccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
O.Cun	tttctccg	gtaagtgggcaa...740...-tgccctcagctgacgccccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
C.Fam	tttctccg	gtaagtgggcaa...726...-tgtccttacctgacaccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
E.Cab	tttctccg	gtaagtgggcaa...723...gtgtcctca-ctgacccccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
S.Sus	tttctccg	gtaagtgggcaa...745...gcatcctcacctgac-cccgg	GGTGGg	GGGTGGTT	atat	tctgcaga
L.Afr	tttctccg	gtaagtgggcaa...884...-tgtccttacctgataccctg	GGTGGg	GGGTGGTT	atat	tctgcaga
	*** **	*****	*	*	*** **	*****

id=644751 gene=ENSG0000088367 name=EPB41L1 segment=chr20\_34806885\_34807675\_1 type=IN

Figure 416: CS=11.7





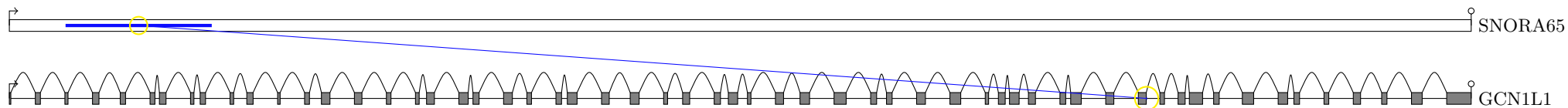
H.Sap	ctcagcca	cccgccactgca...71...	gttgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaatg
R.Mac	ctcagcca	cccgccactgca...71...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaatg
P.Tro	ctcagcca	cccgccactgca...71...	gtgttcttcatgtggacga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaaca
P.Abe	ctcagcca	cccgccactgca...71...	gttgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagtc	tagaaacg
C.Jac	cttagcca	cccgccactgca...71...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaatg
R.Nor	cctagcca	cccgccactgca...71...	gtgtcctacatgtgggtga	CTCTgTGCCgAAAGCGTGGGG	acagcc	tagacata
O.Cun	cccagcca	cccgccactgca...68...	gtgtcctccacgtggatga	CTCTgTGCCgAAAGCACGGGA	acagcc	tgccacgg
C.Fam	cccagcca	cccgccactgca...71...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tggaaatt
F.Cat	cccagcca	cccgccactgca...69...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tgaaaata
B.Tau	tctagcca	cccgccactgca...70...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaatg
E.Cab	cctagcca	cccgccactgca...69...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tggaaaca
S.Sus	cctagcca	cccgccactgca...71...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagct	tgggaatg
O.Avi	tctagcca	cccgccactgca...70...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagaaatg
L.Afr	cgtagcca	cccgccactgca...71...	gtgttcttcatgtggatga	CTCTgTGCCgAAAGCATGGGA	acagcc	tagggaag
	*****	*****	** ** *	*****	***	*

id=488694 gene=ENSG00000201302 name=SNORA65 segment=chr9\_130210780\_130210909\_-1 type=EN

H.Sap	ggtttcag	gttggctttttg...467...	-aataggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
R.Mac	ggtttcag	gttggctttttg...478...	-aataggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
P.Tro	ggtttcag	gttggctttttg...468...	-aataggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
P.Abe	ggtttcag	gttggctttttg...473...	-aacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
C.Jac	ggtttcag	gttggctttttg...505...	-aataggatctggaataa	TTTTGTttGTTTtAg	GCAAGGGc
R.Nor	ggtttcag	gttggcgttttg...986...	ctacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
O.Cun	agtttcag	gttggctctttg...462...	caacaggatctggaataa	TTTTGTttGTTTtAg	GCAAGGGc
C.Fam	ggtttcag	gttggctctttg...485...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
F.Cat	ggtttcag	gttggctctttg...493...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
B.Tau	ggtttcag	gttggctttttg...464...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
E.Cab	ggtttcag	gttggctctttg...488...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
S.Sus	ggtttcag	gttggctctttg...477...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
O.Avi	ggtttcag	gttggctttttg...531...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
L.Afr	ggtttcag	gttggctttttg...447...	caacaggatctggaatca	TTTTGTttGTTTtAg	GCAAGGGc
	*****	*****	**	*****	*****

id=9947 gene=ENSG00000165209 name=STRBP segment=chr9\_125922742\_125923255\_-1 type=IN VIEW

Figure 417: CS=10.92



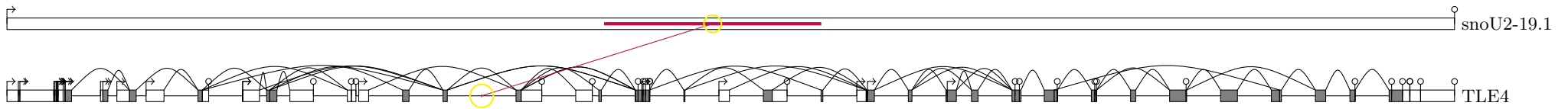
H. Sap	ctcagCCA	CcCGGCCACTGC	acctgaccagggtctctgttg...87...atgggaacagcc	tagaaatg
R. Mac	ctcagCCA	CcCGGCCACTGC	acctgaccagggtctctgttg...87...atgggaacagcc	tagaaatg
P. Tro	ctcagCCA	CcCGGCCACTGC	acctgaccagggtctctgttg...87...atgggaacagcc	tagaaaca
P. Abe	ctcagCCA	CcCGGCCACTGC	acctgaccagggtctctgttg...87...atgggaacagtc	tagaaacg
M. Mus	cccagCCA	CcCGGCCACTGC	acctgaccagtattgttggc...87...atgggaacagcc	cagcgata
R. Nor	cctagCCA	CcCGGCCACTGC	acctgaccagtattattggc...87...gtggggacagcc	tagacata
C. Por	cttagCCA	CcCGGCCACTGC	acctgaccacttccccgttg...86...atgggcacagcc	caaggcag
O. Cun	cccagCCA	CcCGGCCACTGC	gcctgccatgctgctggct...84...acgggaacagcc	tgccacgg
C. Fam	cccagCCA	CcCGGCCACTGC	acctgatcagttttctgttg...87...atgggaacagcc	tggaaatt
B. Tau	tctAGCCA	CcCGGCCACTGC	acctgaccagttttctgttg...86...atgggaacagcc	tagaaatg
E. Cab	cctagCCA	CcCGGCCACTGC	acctgaccagtctctgttg...85...atgggaacagcc	tggaaaca
S. Sus	cctAGCCA	CcCGGCCACTGC	acctgaccagttttctgttg...87...atggggacagct	tgggaatg
L. Afr	cGTAGCCA	CcCGGCCACTGC	acctgatcagttctctgttg...87...atgggaacagcc	tagggaag
	*****	*****	*** **	*** **

id=488694 gene=ENSG00000201302 name=SNORA65 segment=chr9\_130210780\_130210909\_-1 type=EN

H. Sap	aGCAGcTG	GTGaGTGG	atctaccacacacctaccta-----...239...caccctctgcag	gatgacga
R. Mac	aGCAGcTG	GTGaGTGG	atctaccacacacctaccta-----...239...caccctctgcag	gatgatga
P. Tro	aGCAGcTG	GTGaGTGG	atctaccacacacctaccta-----...239...caccctctgcag	gatgacga
P. Abe	aGCAGcTG	GTGaGTGG	atctaccacacacctaccta-----...239...caccctctgcag	gatgacga
M. Mus	aGCAGcTG	GTGaGTGG	gtctccacacacctaccag-----...166...gctcctctgcag	gacgacga
R. Nor	aGCAGcTG	GTGaGTGG	gtctcctcacaccgaccaa-----...209...tgctcctctgcag	gatgacga
C. Por	aGCAGcTG	GTGaGTGG	atctgctgcatacctaccaa-----...235...atccttctgcag	gatgatga
O. Cun	aGCAGcTG	GTGaGTGG	atctgccacacacctaccag-----...229...gcccactctgcag	gaagacga
C. Fam	aGCAGcTG	GTGaGTGG	atctgccacacacctaccag-----...243...gcccctctgcag	gatgatga
B. Tau	aGCAGcTG	GTGaGTGGCT	ctgcctcaccctgcccagga----...190...gcccctctgcag	gatgacga
E. Cab	aGCAGcTG	GTGaGTGG	atctgccacacacctaccag-----...241...gcccctctgcag	gatgatga
S. Sus	aGCAGcTG	GTGaGTGGCT	ctgcctcaccctaccagtt----...237...gcccctcgcag	gatgatga
L. Afr	aGCAGcTG	GTGaGTGG	gtCTGGccacacctgcccagtttgg...233...cccctctgcag	gaagacga
	*****	*****	** * ** ** *	*** ** ** **

id=21916 gene=ENSG00000089154 name=GCN1L1 segment=chr12\_120576220\_120576498\_-1 type=IN

Figure 418: CS=11.7



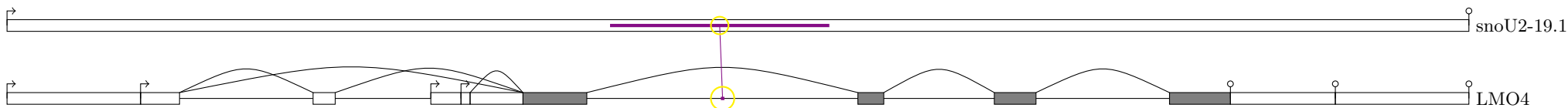
H. Sap	ctgaagtg	gatcgatgatgaaaataagcaagtt	TGAGcATCAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac						
R. Mac	ctgaagtg	gatcaatgatgaaactagcctcaaatc	TGAGcATCAGAAGGC	tttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac						
P. Tro	ctgaagtg	gatcaatgatgaaaataagcaagtt	TGAGcATCAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac						
C. Jac	ctgaagtg	gatcaatgattaaagtaaccaaat	TGAGcATCAGAAGAC	cttccagtc-tacttgatgcatgagctgtacagttttgaga	agcaaaac						
M. Mus	ctgaaata	gatcagtgatgaaaatagcctcaaatc	TGAGcATCAGAAGGC	cttttgggt----ctggggcatgatctctctagttctgaga	agcaaaac						
R. Nor	ctgaagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGGC	cttttgggtc-ggctgggtgcatgatctccatagttctgaga	agcaaaac						
C. Por	tcaaagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	ctttcagtc-tccctgattcatgatctctatagttctggga	agcagatt						
O. Cun	ccaaggtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttctagtcctacctgatgcatgatctccatggtctgaga	agcaaaac						
C. Fam	ctgtagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttccagtc-tacctgatgcatgatctctctagttctgaga	agcaaaag						
F. Cat	ctgaagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttccagtc-tacttgatgcatgatctctgtagttctgaga	agcaaaag						
B. Tau	ctgaagtg	gatcagtgatgaaagtagcctcaaatc	TGAGcATCAGAAGAC	caccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag						
E. Cab	ctgaagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttccagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag						
S. Sus	cagaagtg	gatcaatgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttctcgtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag						
L. Afr	atgaagtg	gatcagtgatgaaaatagcctcaaatc	TGAGcATCAGAAGAC	cttctagtc-tacctgatgcatgatctctatagttctggga	agcaaatc						
	*	****	****	***	**	*****	**	*	*****	**	****

id=181127 gene=ENSG00000199231 name=snoU2\_19.1 segment=chr7.62636318.62636397\_-1 type=EN

H. Sap	cccaagag	gtaaggtagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
R. Mac	cccaagag	gtaaggcagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
P. Tro	cccaagag	gtaaggtagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
C. Jac	cccaagag	gtaagatagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
M. Mus	cccaagag	gtaagattgttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
R. Nor	cccaagag	gtaagattgttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
C. Por	cccaagag	gtaaggcagttc...4936...	gaagacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
O. Cun	cccaagag	gtaaggtagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
C. Fam	cccaagag	gtaaggcagttg...4936...	aaagcaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
F. Cat	cccaagag	gtaaggcagttg...4936...	aaagcaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
B. Tau	cccaagag	gtaaggcaggtg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
E. Cab	cccaagag	gtaaggcagctg...4936...	gacacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
S. Sus	ctcaagag	gtaagacagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
L. Afr	cccaagag	gtaaggcagttg...4936...	aaacaataaattgattct	GTTTCTGATcTTC	Atttatag	caccagca
	*	*****	*****	*	*	*****

id=172631 gene=ENSG00000106829 name=TLE4 segment=chr9.82227634.82242288\_1 type=IN

Figure 419: CS=16.52



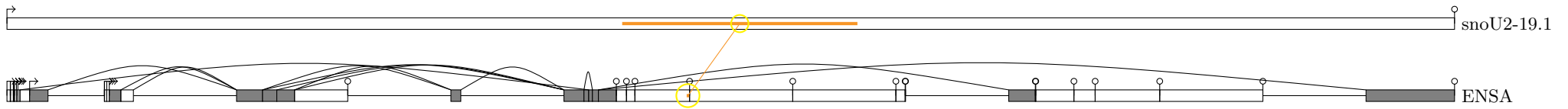
H. Sap	ctgaagtg	gatc	gatgatg	aaaataagcaagt	<b>TGAGCATCAGAAG</b>	accttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac
R. Mac	ctgaagtg	gatcaatgat	gaaaactagc	caaatc	<b>TGAGCATCAGAAGG</b>	cctttccagtc-tacctgatgcatgctctacagttctgaga	agcaaaac
P. Tro	ctgaagtg	gatcaatgat	gaaaataagcaagt	<b>TGAGCATCAGAAG</b>	accttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac	
P. Abe	ttgaagtg	gatcaaggat	gaaaataaccaaatt	<b>TGAGCATCAGAAG</b>	accttccagtc-tacttgatgcatgagctctacagttttaaga	aacaaaac	
C. Jac	ctgaagta	gatcaatgat	taaagtaaccaaatt	<b>TGAGCATCAGAAG</b>	accttccagtc-tacttggtgcatgagctgtacagttttgaga	agcaaaac	
R. Nor	ctgaagtg	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAGG</b>	ccttttggtc-ggctgggtgcatgctccatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	acctttcggtc-tccctgatctcatgctctatagttctggga	agcagatt
O. Cun	ccaagtg	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	accttctagtcttacctgatgcatgctccattgttctgaga	agcaaaac
C. Fam	ctgtagt	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	accttccagtc-tacctgatgcatgctctctagtctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgat	gaaagtagc	caaatc	<b>TGAGCATCAGAAG</b>	accaccagtg-tatctgatgcatgctctgtagttctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	accttccagtc-tacctgatgcatgctctgtagttctgaga	agcaaaag
S. Sus	cagaagt	gatcaatgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	accttctgctc-tacctgatgcatgctctgtagttctgaga	agcaaaag
L. Afr	atgaagt	gatcagtgat	gaaaatagc	caaatc	<b>TGAGCATCAGAAG</b>	accttctagtc-tacctgatgcatgctctatagttctggga	agcaaatc
		**	****	*** ** *	** * ***** *	** * * ***** *	*** * ** * **

id=181127 gene=ENSG00000199231 name=snoU2\_19.1 segment=chr7.62636318.62636397\_-1 type=EN

H. Sap	tacattag	gtaagactttgc...4548...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctgaagatgatgattaaa--...363...tctttgtttcag	gttatttg
R. Mac	tacattag	gtaagactttgc...4544...	tacaatcaaatcctccttaac	<b>CCTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...366...tctttgtttcag	gttatttg
P. Tro	tacattag	gtaagactttgc...4550...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctgaagatgatgattaaa--...361...tctttgtttcag	gttatttg
P. Abe	tacattag	gtaagactttgc...4553...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> --tctgaagatgatgattaaa--...358...tctttgtttcag	gttatttg
C. Jac	tacattag	gtaaggctttgc...4542...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...369...tctttgtttcag	gttatttg
R. Nor	tacattag	gtaagttggctg...4501...	tacaatcaaatcctccttaac	<b>CCTTTTGATG</b>	<b>CTCA</b> tctctcaagatgatgattaaa--...409...tctctgctgcag	gttatttg
C. Por	tacattag	gtaagtttgctt...4553...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...358...tctttgtttcag	gttatttg
O. Cun	tacattag	gtaagactgctg...4515...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcgagatgatgattaaa--...396...tcttcgtttcag	gttatttg
C. Fam	tacattag	gtaagacttggc...4523...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...388...tctttgtttcag	gttatttg
B. Tau	tacattag	gtaagacttggc...4536...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...375...tctttgtttcag	gttatttg
E. Cab	tacattag	gtaagacttggc...4542...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...369...tctgtgtttcag	gttatttg
S. Sus	tacattag	gtaaggcttggc...4522...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tatctcaagatgatgattaaa--...389...tctctgttcag	gttatttg
L. Afr	tacattag	gtaaggttttgc...4542...	-acaatcaaatcctccttaacc	<b>CTTTTGATG</b>	<b>CTCA</b> tagctcaagatgatgattaaa--...369...tctttgtttcag	gttatttg
	*****	*****	*****	*****	** *****	*** * * ** *

id=781913 gene=ENSG00000143013 name=LMO4 segment=chr1.87797935.87805218.1 type=IN

Figure 420: CS=10.14



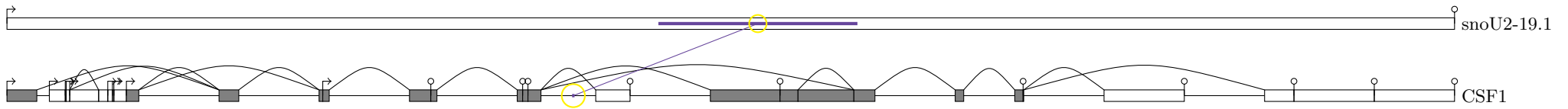
H. Sap	ctgaagtg	gatc	gatgat	gaaa	aaag	caa	GTTTGAGCA	T	CAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac					
P. Tro	ctgaagtg	gatcaatgat	gaaa	aaag	caa	GTTTGAGCA	T	CAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac						
P. Abe	ttgaagtg	gatcaaggat	gaaa	aaac	caa	ATTTGAGCA	T	CAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	aacaaaac						
C. Jac	ctgaagta	gatcaatgatt	aaag	taac	caa	ATTTGAGCA	T	CAGAAGAC	cttccagtc-tacttgatgcatgagctgtacagttttgaga	agcaaaac						
C. Por	tcaaagtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tccctgattcatgatctctatagttctggga	agcagatt						
O. Cun	ccaaggtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttctagctctacctgatgcatgatctccattgttctgaga	agcaaaac						
C. Fam	ctgtagtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tacctgatgcatgatctctctagtctgaga	agcaaaaag						
F. Cat	ctgaagtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tatctgatgcatgatctctgtagttctgaga	agcaaaaag						
B. Tau	ctgaagtg	gatcagtgat	gaaag	tag	caa	ctGAGCA	T	CAGAAGAC	caccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaaag						
E. Cab	ctgaagtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaaag						
S. Sus	cagaagtg	gatcaatgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaaag						
L. Afr	atgaagtg	gatcagtgat	gaaa	aaag	caa	ctGAGCA	T	CAGAAGAC	cttccagtc-tacctgatgcatgatctctatagttctggga	agcaaatcg						
	**	****	***	***	**	****	*	*****	**	*	**	*****	**	***	*	**

id=181127 gene=ENSG00000199231 name=snoU2\_19.1 segment=chr7.62636318.62636397.-1 type=EN

H. Sap	gtttattt	at	ttcg	ttag	at...	211...	ag	gtag	attg	aatg	ag	acat	GTTTCTGTGCTT	ct	AAGT	gtt	ct	gt	ccct
P. Tro	gtttattt	at	ttcg	ttag	at...	211...	ag	gtag	attg	aatg	ag	acat	GTTTCTGTGCTT	ct	AAGT	gtt	ct	gt	ccct
P. Abe	gtttattt	at	ttcg	ttag	at...	211...	ag	gtag	attg	aatg	ag	acat	GTTTCTGTGCTT	ct	AAGT	gtt	ct	gt	ccct
C. Jac	gttcatta	ct	ttg	gt	ta	aat...	210...	ag	gtag	attg	ag	acgt	GTTTCTGTGCTT	ct	AAGT	gtt	ct	gt	ccct
C. Por	attcattt	ct	ttg	gt	ta	aat...	210...	aa	gtag	ctg	aatg	ag	acat	GTTTCTGTGCTT	ct	aa	at	g	tt
O. Cun	gttcattt	ct	ttg	gt	ta	ca...	207...	ag	gtag	atg	gg	atg	ag	at	GTTTCTGTGCTT	ct	g	ag	tt
C. Fam	gttcattt	ct	ttg	at	ta	aat...	215...	ag	gtag	atg	g	atg	at	ct	GTTTCTGTGCTT	ct	aa	at	g
F. Cat	gttcattt	ct	ttg	at	ta	aat...	214...	ag	gtag	act	g	aatg	at	ct	GTTTCTGTGCTT	ct	aa	at	g
B. Tau	gttcactg	ct	ttg	g	ata	aac...	216...	ag	at	ag	act	g	aatg	at	GTTTCTGTGCTT	-	ta	ag	tt
E. Cab	gttcattt	ct	ctg	gt	tt	aat...	215...	ag	gtag	attg	aatg	ag	at	ct	GTTTCTGTGCTT	ct	aa	at	g
S. Sus	gttcactt	ct	ttg	gt	ta	aat...	213...	ag	gtag	attg	aatg	ag	at	ct	GTTTCTGTGCTT	ct	aa	at	g
L. Afr	gttcattt	ct	ttg	gt	ta	aac...	213...	ag	gtag	atg	aatg	ag	at	at	GTTTCTGTGCTT	ct	aa	at	g
	** * *	*	*	*	*	*	*	*	*	*	*	*	*****	*****	*	*	*****	*	*

id=533267 gene=ENSG00000143420 name=ENSA segment=chr1.150597676.150597940.-1 type=AN

Figure 421: CS=11.52



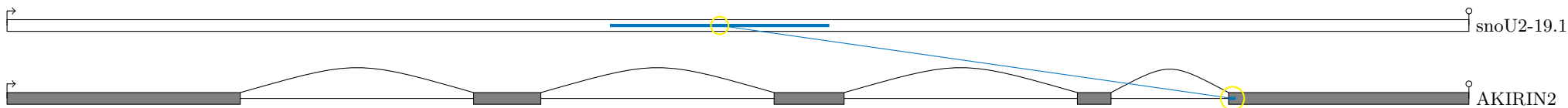
H. Sap	ctgaagtg	gatc	gatgat	gaaaaa	taagca	agtttga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	agctct	acagttt	taaga	agcaaaac
P. Tro	ctgaagtg	gatcaat	gatgaaa	aaataag	caagtttga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	agctct	acagttt	taaga	agcaaaac	
P. Abe	ttgaagtg	gatcaagg	atgaaa	aaataacca	aatttga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	agctct	acagttt	taaga	aacaaaac	
C. Jac	ctgaagta	gatcaat	gatgaaa	aaataag	taacca	aatttga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	ggtgcatg	agctgt	acagttt	gaga	agcaaaac
C. Por	tcaaagtg	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tccct	gattcatg	atctct	atagtt	ctggga	agcagatt
O. Cun	ccaaggtg	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
C. Fam	ctgtagt	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
F. Cat	ctgaagt	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
B. Tau	ctgaagt	gatcagt	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	caccagtg	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
E. Sus	ctgaagt	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
S. Sus	cagaagt	gatcaat	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaaac
L. Afr	atgaagt	gatcagt	gatgaaa	aaataag	ccaaat	ctga	<b>GCATCAGAAGAC</b>	cttccagtc	-tactt	gatgcatg	atctct	atagtt	ctggga	agcaaatc
		**	****	***	***	**	*****	**	*	**	*****	**	***	**

id=181127 gene=ENSG00000199231 name=snoU2\_19.1 segment=chr7.62636318.62636397.-1 type=EN

H. Sap	cagccaag	gtaag	catggca	...154...	acctct	ggtcct	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...107...	ctggct	ctgcag	<b>gctggctg</b>
P. Tro	cagccaag	gtaag	catggca	...154...	tctctg	ggtcct	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...107...	ctggct	ctgcag	<b>gctggctg</b>
P. Abe	cagccaag	gtaag	catggca	...155...	acctct	ggtcct	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...107...	ctggct	ctgcag	<b>gctggctg</b>
C. Jac	cagcaaa	gtaag	catggaa	...154...	acctct	ggttct	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgtac	acctataa	...108...	ctggtt	ctgcag	<b>gctggctg</b>
C. Por	cagcccag	gtaag	caccaat	...126...	atgtgt	gtatg	catgcctat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...108...	ctggtt	ctgcag	<b>gctggctg</b>
O. Cun	cagccaag	gtaag	cagagga	...184...	tctcgg	agtcct	gagcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	accttcat	...85...	ttag	catggaag	<b>actggctg</b>
C. Fam	cagccaag	gtaag	caccaga	...165...	gtggg	cagtcct	gagcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	accgaata	...107...	cggg	cactgcag	<b>gctggctg</b>
F. Cat	cagccaag	gtaag	cacaaaa	...162...	tctgg	gtgtc	cgggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgtt	gagacatc	...86...	cogg	ctctgcag	<b>gctggctg</b>
B. Tau	cagccatg	gtaag	cacggaa	...177...	ctgagt	ggtcct	taggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacgt	...107...	ctgg	ctctgcag	<b>gctggctg</b>
E. Cab	cagcccag	gtaag	cacaaaa	...227...	tctggt	ggtcct	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgtac	accttacgt	...109...	cogg	ctctgcag	<b>gctggctg</b>
S. Sus	cagccagg	gtgag	caccaa	...160...	ctgggt	gatcct	taggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...107...	cogg	ctctgcag	<b>gctggctg</b>
L. Afr	cagccacg	gtaagt	ccagg	...155...	ctgggc	gttctc	gggcacat	<b>GTCTT</b>	<b>TCTG</b>	<b>acATGT</b>	gtgtg	catgcac	acctacat	...106...	cggg	cgctgcag	<b>gctggctg</b>
		****	**	**				**	*****	*****	*	*		*	*	**	****

id=670373 gene=ENSG00000184371 name=CSF1 segment=chr1.110464617.110464957.1 type=IN

Figure 422: CS=12.96



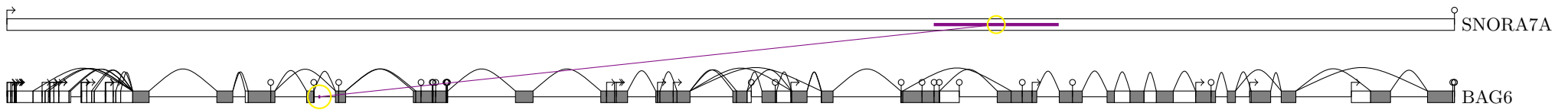
H. Sap	ctgaagtg	gatc	gatgatg	aaaataag	caagtt	TGAGCATC	GAAG	accttccagtc-	tacttgatgcatgagctctacagttttaaga	agcaaaac					
R. Mac	ctgaagtg	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAGG	cctttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaac						
P. Tro	ctgaagtg	gatcaatgat	gaaaataag	caagtt	TGAGCATC	GAAG	accttccagtc-	tacttgatgcatgagctctacagttttaaga	agcaaaac						
P. Abe	ttgaagtg	gatcaaggat	gaaaataac	caaat	TGAGCATC	GAAG	accttccagtc-	tacttgatgcatgagctctacagttttaaga	aacaaaac						
C. Jac	ctgaagta	gatcaatgat	taaagtaac	caaat	TGAGCATC	GAAG	accttccagtc-	tacttgatgcatgagctgtacagttttaaga	agcaaaac						
C. Por	tcaaagtg	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAGA	cctttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcagatt						
O. Cun	caaagtg	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAG	accttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaac						
C. Fam	ctgtagt	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAG	accttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaaag						
F. Cat	ctgaagtg	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAG	accttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaaag						
B. Tau	ctgaagtg	gatcagtgat	gaaagtag	ccaaatc	TGAGCATC	GAAG	accaccagtg-	tacctgatgcatgacgtctctacagttctgaga	agcaaaaag						
E. Cab	ctgaagtg	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAGA	cctttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaaag						
C. Sus	cagaagt	gatcaatgat	gaaaatag	ccaaatc	TGAGCATC	GAAG	accttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaaaag						
L. Afr	atgaagt	gatcagtgat	gaaaatag	ccaaatc	TGAGCATC	GAAGA	cctttccagtc-	tacctgatgcatgacgtctctacagttctgaga	agcaaatcg						
	**	****	***	***	**	*****	*	**	*	***	*****	**	***	*	**

id=181127 gene=ENSG00000199231 name=snoU2\_19.1 segment=chr7.62636318.62636397\_-1 type=EN

H. Sap	tgctagct	gtaagtatttca...	214...	--ctaattttc	ttttctcacc-	CTTT	aG	ATG	TTC	a
R. Mac	tgctagtt	gtaagtatttca...	204...	-actaattttc	ttttctcac-	CCTT	aG	ATG	TTC	a
P. Tro	tgctagtt	gtaagtatttca...	214...	--ctaattttc	ttttctcacc-	CTTT	aG	ATG	TTC	a
P. Abe	tgctagtt	gtaagtatttca...	214...	--ctaattttc	ttttctcacc-	CTTT	aG	ATG	TTC	a
C. Jac	tgctagtt	gtaagtatttca...	205...	--ctaattttc	ttttctcacc-	CTTT	aG	ATG	TTC	a
C. Por	tgctagct	gtaagtatttga...	178...	--ctaaattttc	ttttctgtc	TCTT	aG	ATG	TTC	a
O. Cun	tgctagtt	gtaagtatttca...	61...	-ctacttttc	ctttctccc-	CTTT	aG	ATG	TTC	a
C. Fam	tgctagtt	gtaagtatttca...	193...	---taattttc	ctttctccc	CCTT	aG	ATG	TTC	a
F. Cat	tgctagtt	gtaagtatttca...	211...	--ctaattttc	ttttctccc	CCTT	aG	ATG	TTC	a
B. Tau	tgctagtt	gtaagtatttca...	221...	-ctcattttc	ctttctccc-	CCTT	aG	ATG	TTC	a
E. Cab	tgctagtt	gtaagtatttca...	215...	-actaattttc	ctttctccc-	TCTT	aG	ATG	TTC	a
S. Sus	tgctagtt	gtaagtatttca...	217...	--ctaattttc	gtttttctcc-	CCTT	aG	ATG	TTC	a
L. Afr	tgctagtt	gtaagtatttca...	218...	cactaattgt	ctttttccc-	TCTT	aG	ATG	TTC	a
	*****	*	*****	*	*	*	*	*****	*****	

id=267211 gene=ENSG00000135334 name=AKIRIN2 segment=chr6.88385326.88385577\_-1 type=IN

Figure 423: CS=19.24



H. Sap	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	gctccgtagctggc	gattggaagacactctg	cgacagtg-	ttcagtc				
R. Mac	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	gctccgtagctggc	gattggaagacactctg	cgacagtg-	ttcaatcc				
P. Tro	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	gctccgtagctggc	gattggaagacactctg	cgacagtg-	ttcagtc				
P. Abe	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	gctccgtagctggc	gattggaagacactctg	cgacagtg-	ttcagtc				
C. Jac	tgactcct	gacctcctggga...49...	--aaacaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	gctccgtagctggc	gattggaagatactctg	caacagtg-	ttcagtc				
M. Mus	gaaccact	gacctcctggga...50...	--gagcaagcctagcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacatta-	ctcactga				
R. Nor	gaccact	gacctcctggga...50...	--gaacaagcctagcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacatca-	cttaaggc				
C. Por	gaccctt	gacctcctggga...48...	gagagcaagcc-agcag-ggca	CCCATTCCa	TTCCCa	GCTTg	CTTg	tagctggtgactggaagacactctg	ccacagcc-	ctcagccc				
C. Fam	tgaccctt	gacctcccagga...50...	--cagcaagcctggcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacagca-	ttcaagcc				
F. Cat	tgaatgct	gacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacaatg-	ttcaagcc				
B. Tau	gaccctt	aacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacaagag	ttcaagcc				
E. Cab	tgatcctt	aacctcccagga...50...	--aagcaagcctggcagaggca	CCCATTCCa	TTCCCa	GCTTg	CTCAGg	tagctggtgattggaagacactctg	caacaatg-	ttgaagcc				
O. Avi	gaccctt	aacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCCa	TTCCCa	GTTTg	CTCAGg	tagctggtgattggaagacactctg	caacaagag	ttcaagct				
L. Afr	gtccctt	gacctcccagga...48...	aaaagcaagcctgtcagaga--	CCCATTCCa	GTTTg	CTCAGg	tagctggtgattggaagatactctg	caacagta-		ctcaagct				
	*	*****	**	*	****	***	*	*****	***	*****	*****	***	*	*

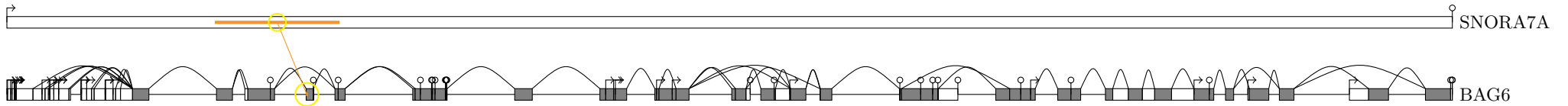
id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

H. Sap	cgattca	g	gtattgagggcctccga	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...	87...	ctctcattgtag	agtgagcc	
R. Mac	cgattca	g	gtattgagggcctccga	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...	87...	ctctcattgtag	agtgagcc	
P. Tro	cgattca	g	gtattgagggcctccga	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...	87...	ctctcattgtag	agtgagcc	
P. Abe	cgattca	g	gtattgagggcctccga	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...	87...	ctctcattgtag	agtgagcc	
C. Jac	cgattca	g	gtattgagggcct	TGGAGGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...	87...	ctctcattgtag	agtgagcc	
M. Mus	caattca	g	gtattgagggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...	86...	cttgcattatag	agtgagcc
R. Nor	caattca	g	gtattgagggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...	89...	cttgcattatag	agtgagcc
C. Por	cgattca	g	gtattgagggc	TGGG	AGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagggcgg...	88...	ctctaccgtag	agtgagcc
C. Fam	cgattca	g	gtatcacggcctgggaggtca-	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...	87...	ctttaccgtag	agtgagcc		
F. Cat	cgattca	g	gtatcacggc-	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgaggtgg...	90...	ctctatcgtag	agtgagcc
B. Tau	cgattca	g	gtatcacggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...	92...	ctttaccgtag	agtgagcc
E. Cab	cgattca	g	gtatcacggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgaggtgg...	87...	ctcatattgtag	agtgagcc
U. Avi	caattca	g	gtatcacggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggccataaagatgg...	90...	ctctcattgtag	agtgagcc
L. Afr	cgattca	g	gtatcacggc	CTGGG	GGGTca	GGGAAg	GGGAtc	TGGG	agaaggaggcctttaggtgg...	77...	ctctgcatag	agtgagcc
	*	*****	*	*****	*	*****	*	*****	*	*****	*****	

id=497982 gene=ENSG00000204463 name=BAG6 segment=chr6.31616529.31616687.-1 type=IN

Figure 424: CS=10.92





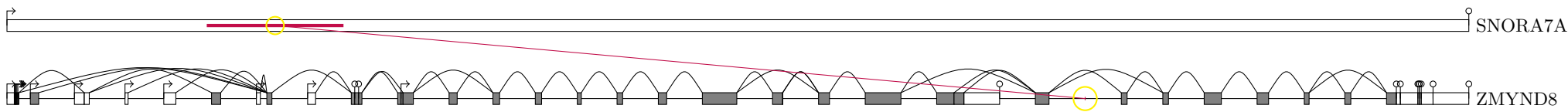
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R. Mac	tgaccctt	gacctcctggga	TCGCa	TCTGGAGAG	tgccctagtattctgccagct	---.81..	tctgacacagt-g	ttcaatcc
P. Tro	tgaccctt	gacctcctggga	TCGCa	TCTGGAGAG	tgccctagtattctgccagct	---.81..	tctgacacagt-g	ttcagttcc
P. Abe	tgaccctt	gacctcctggga	TCGCa	TCTGGAGAG	tgccctagtattctgccagct	---.81..	tctgacacagt-g	ttcagttcc
C. Jac	tgactcct	gacctcctggga	TCGCa	TCTGGAGA	atgcctagtattctgccagc	---.82..	tctgcaacagt-g	ttcagttcc
M. Mus	gaaccact	gacctcctggga	TCGCa	TCTGGAGAGTAG	ctagtattcttccagcttcg	..79..	tctgcaacatt-a	ctcaactga
R. Nor	gaccact	gacctcctggga	TCGCa	TCTGGAGAGTGG	ctagtattctgccagcttcg	..79..	tctgcaacatt-a	cttaaggc
C. Por	gaccctt	gacctcctggga	TCGCa	TCTGGAGAG	cagctagtgttctgccagct	---.80..	tctgacacagc-c	ctcagccc
O. Cun	gggccct	gacctcccggga	TCGCa	TCTGGAGAG	tgccctagcctctgccagct	---.80..	tctgctacagg-g	cccgcggc
C. Fam	tgaccctt	gacctcccagga	TCGCa	TCTGGAGAG	tggttggtattctgccagct	---.82..	tctgcaacagc-a	ttcaagcc
F. Cat	tgaatgct	gacctcccagga	TCGCa	TCTGGAGAG	tggttcgtattctgccagct	---.82..	tctgcaacaat-g	ttcaagcc
B. Tau	gaccctt	aacctcccagga	TCGCa	TCTGGAGA	atggcttattctgccagc	---.84..	-ctgcaacaagag	ttcaagcc
E. Cab	tgatcctt	aacctcccagga	TCGCa	TCTGGAGAGTGG	ctagtattctgccagcttcg	..79..	tctgcaacaat-g	ttgaagcc
O. Avi	gaccctt	aacctcccagga	TCGCa	TCTGGAGA	atggcttattctgccagc	---.84..	-ctgcaacaagag	ttcaagct
L. Afr	gtccctt	gacctcccagga	TCGCa	TCTGGAGA	ataaactagtattctgccagc	---.81..	tctgcaacagt-a	ctcaagct
	*	*****	*****	*****	** *** *****		**** **	

id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

H. Sap	atcttctt	gtaagcttatgt	...192..	-----ccagaacaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
R. Mac	atcttctt	gtaagcttatgt	...188..	-----ccagaacaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
P. Tro	atcttctt	gtaagcttatgt	...192..	-----ccagaacaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
P. Abe	atcttctt	gtaagcttatgt	...192..	-----ccagaacaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
C. Jac	atcttctt	gtaagcttatgt	...193..	-----cagaacaacttcccttacc	TTTC	ccCAG	AGTGA	cgg
M. Mus	atcttctt	gtgagccttgt	...193..	ttctcccagagcaacttccc	TTGC	ccTTTC	ccCAG	AGTGA
R. Nor	atcttctt	gtgagccttgt	...192..	ttctcccagagcaacttccc	TTAC	ccTTTC	ccCAG	AGTGA
C. Por	atcttctt	gtaagcttgtgt	...185..	-----ccagagcaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
O. Cun	atcttctt	gtaagcttgtgt	...205..	-----ccagagcaacttcccttacc	CTTTC	CCAG	AGTGA	cgg
C. Fam	accttctt	gtaagcttgtgt	...193..	-----ccagagcaacttcccttacc	TTTT	TCCAG	AGTGA	cgg
F. Cat	atcttctt	gtaagcttgtgt	...186..	-----cccagagcaacttccatacc	TTTT	TCTCAG	AGTGA	cgg
B. Tau	atcttccc	gtaagcttgtgt	...194..	-----cagaacaacttcccttacc	TTTC	ccCAG	AGTGA	cgg
E. Cab	atcttctt	gtaagcttgc	...190..	ttctcccagagcaacttccc	TTAC	ccTTTC	ccCAG	AGTGA
O. Avi	atcttccc	gtaagcttgtgt	...196..	-----cagagcaacttcccttacc	TTTC	ctCAG	AGTGA	cgg
L. Afr	atcttctt	gtaagcttgtgt	...199..	-----cagagcaacttcccttacc	TTTC	ccCAG	AGTGA	cgg
	*	*****	** *** *		**** *****	* * **** * **	*****	

id=497979 gene=ENSG00000204463 name=BAG6 segment=chr6.31616742.31616975.-1 type=IN

Figure 425: CS=13.5



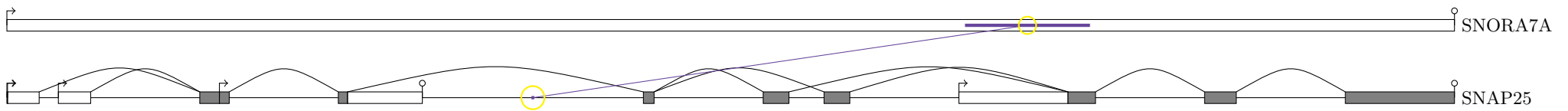
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R. Mac	tgaccctt	gacctcctggg	ATCGcg	TCTGGAGAG	tgacctagattctgccagct	-----	...81...	tctgcgac-agtg	ttcaatcc	
P. Tro	tgaccctt	gacctcctggg	ATCGca	TCTGGAGAG	tgacctagattctgccagct	-----	...81...	tctgcgac-agtg	ttcagtcc	
P. Abe	tgaccctt	gacctcctggg	ATCGcg	TCTGGAGAG	tgacctagattctgccagct	-----	...81...	tctgcgac-agtg	ttcagtcc	
C. Jac	tgactcct	gacctcctggg	ATCGcg	TCTGGAGAG	atgcctagattctgcagc	-----	...82...	tctgcaac-agtg	ttcagtcc	
M. Mus	gaaccact	gacctcctggg	ATCGcg	TCTGGAGAGTAG	ctAGTA	ttCTTC	cagcttcggaagcaagagg	...67...	tctgcaac-atta	ctcactga
C. Por	gaccctt	gacctcctcgg	ATCGca	TCTGGAGAG	cagctagtgcttctgccagct	-----	...80...	tctgccac-agcc	ctcagccc	
O. Cun	gggccctt	gacctcccggg	ATCGcg	TCTGGAGAG	tgcccagtcctctgccagct	-----	...80...	tctgctac-aggg	cccgcggc	
C. Fam	tgaccctt	gacctcccagg	ATCGcg	TCTGGAGAGTGG	ttGGTA	ttctgccagcttcggaggcg	-----	...73...	tctgcaac-agca	ttcaagcc
F. Cat	tgaatgct	gacctcccagg	ATCGcg	TCTGGAGAG	tggtctgtattctgccagct	-----	...82...	tctgcaac-aatg	ttcaagcc	
B. Tau	gaccctt	aacctcccagg	ATCGca	TCTGGAGAATGG	cttgattctgccagcttcg	-----	...80...	-ctgcaacaag	ttcaagcc	
E. Cab	tgatccct	aacctcccagg	ATCGcg	TCTGGAGAGTGG	ctAGTA	ttctgccagcttcggagacg	-----	...73...	tctgcaac-aatg	ttgaagcc
L. Afr	gtccccct	gacctcccagg	ATCGca	TCTGGAGAATAA	ctAGTA	ttctgccagcttcggagacg	-----	...71...	tctgcaac-agta	ctcaagct
	*	*****	*****	*****	**	***	*****	****	** *	

id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

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R. Mac	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattgtttctgttttta	-----	TCTTTCAG	ATGAT	gga	
P. Tro	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattgtttctgttttta	-----	TCTTTCAG	ATGAT	gga	
P. Abe	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattgtttctgttttta	-----	TCTTTCAG	ATGAT	gga	
C. Jac	ctagcaaa	gtgagtggatgg	...4949...	-----	agctgaattggt-tgttttta	-----	TCTTTCAG	ATGAT	gga	
M. Mus	ccagcaaa	gtaagtgggttg	...4936...	-----	catcgttgtatcacctact	GAAGTGTt	TTATCTTCCAG	ATGAT	gga	
C. Por	ctagcaaa	gtgagtggcca	...4949...	-----	gcaattgtttctgttttta	-----	TCTTTCAG	ATGAT	gga	
O. Cun	ccagcaaa	gtgagtggccgg	...4328...	---tgaccacctgcgttgcttt	-----	-----	CTTTCAG	ATGAT	gga	
C. Fam	ctagtaaa	gtgagtgcctgtg	...4941...	---atgatcacctgaattgttc	-----	TGTTt	TTATCTTTCAG	ATGAT	gga	
F. Cat	ctagcaaa	gtgagtgcccat	...4749...	-----	ctgaattgtttctgttttta	-----	-----	TCTTTCAG	ATGAT	gga
B. Tau	ctagcaag	gtgagtgcctgc	...4945...	-----	caccagattgtttctcttt	-----	-----	TTATCTTTCAG	ATGAT	gga
E. Cab	ctagcaaa	gtgagtgccagc	...4743...	---gtcatcaccttaattgttc	-----	TGTTt	TTATCTTTCAG	ATGAT	gga	
L. Afr	ctagcaaa	gtgagtggaaag	...3014...	---aagtgatcacctgaat-tctc	-----	TGTTt	TTATCTTTCAG	ATGAT	gga	
	*	** ** *	** ** **		*	*	** ** *	*****		

id=778511 gene=ENSG00000101040 name=ZMYND8 segment=chr20.45858553.45865069.-1 type=IN

Figure 426: CS=22.75



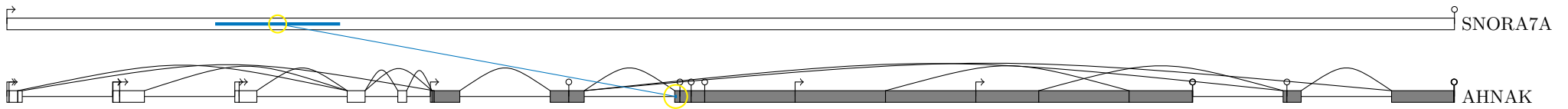
H.Sap	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggcgattggaagacactctgcgac-agt	ttcagtcc
R.Mac	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggcgattggaagacactctgcgac-agt	ttcaatcc
P.Tro	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggcgattggaagacactctgcgac-agt	ttcagtcc
P.Abe	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggcgattggaagacactctgcgac-agt	ttcagtcc
C.Jac	tgactcct	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggcgattggaagatactctgcaac-agt	ttcagtcc
M.Mus	gaaccact	gacctcctggga...53...--caagcctagcagaggcacc	ATTCCATTCCAGT	-----ttgctcggtagctgggtattggaagacactctgcaac-atta	ctcaactga
C.Por	gaccctt	gacctcctcgga...51...agcaagcc-agcag-ggcacc	ATTCCATTcCCAGcTTGC	ctt-----gtagctggtgactggaagacactctgccac-agcc	ctcagccc
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C.Fam	tgaccctt	gacctcccagga...53...--caagcctggcagaggcacc	ATTCCATTCCAGT	-----tggtcagtagctgggtattggaagacactctgcaac-agca	ttcaagcc
F.Cat	tgaatgct	gacctcccagga...53...--caagcctggcagaggcacc	ATTCCATTCCAGT	-----ttgctcagtagctgggtattggaagacactctgcaac-aatg	ttcaagcc
B.Tau	gaccctt	aacctcccagga...53...--caagcctggcagaggcacc	ATTCCATTCCAGT	-----ttgctcagtagctgggtattggaagacactctgcaacaagag	ttcaagcc
O.Avi	gaccctt	aacctcccagga...53...--caagcctggcagaggcacc	ATTCCATTCCAGT	-----ttgctcagtagctgggtattggaagacactctgcaacaagag	ttcaagcc
L.Afr	gtccccct	gacctcccaga...51...agcaagcctgtagcag--acc	ATTCCATTCCAGT	-----ttgctcagtagctgggtattggaagatactctgcaac-agta	ctcaagct
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id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

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R.Mac	acataaaa	tatt-atttataa...4946...----tttcaactttgctaccatta	TTGGAATGtaG	AGTaaaga
P.Tro	acataaaa	cttt-atttataa...4946...----tttcaactttgctaccatta	TTGGAATGtaG	AGTaaaga
P.Abe	acataaaa	cttt-atttataa...4946...----tttcaactttgctaccatta	TTGGAATGtaG	AGTaaaga
C.Jac	acataaaa	cttt-atttataa...4946...----tttcaactttgctaccatta	TTGGAATGtaG	AGTaaaga
M.Mus	acataaaa	tgttcatttataa...4849...----tttcaactttgctaccatt	TTGGAATGtaG	AGTaaaga
C.Por	-ctgaaaa	acttcaattataa...4942...tcttttcaactttgctacc	GTAATTGGAATGtaG	AGTaaaga
O.Cun	-tacataa	attggctacataa...4946...----tttcaactttgctaccatta	TTGGAATGtaG	AGTaaaga
C.Fam	-cataaaa	acttcaacttataa...4945...----tttcaactttgctaccatt	TTGGAATGtaG	AGTaaaga
F.Cat	-cataaaa	acttcccttataa...4942...tgcttttcaactttgctacc	ATTGTTGGAATGtaG	AGTaaaga
B.Tau	ata-aaaa	tcctcatttataa...4945...----tttccactttgctaccatt	TTGGAATGtaG	AGTaaaga
O.Avi	ata-aaaa	tcctcatttataa...4945...----tttccactttgctaccatt	TTGGAATGtaG	AGTaaaga
L.Afr	acatgaaa	cat-atttataa...4945...----tttcaactttgctaccatt	TTGGAATGtaG	AGTaaaga
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id=303155 gene=ENSG00000132639 name=SNAP25 segment=chr20.10258718.10265371.1 type=IN

Figure 427: CS=11.7



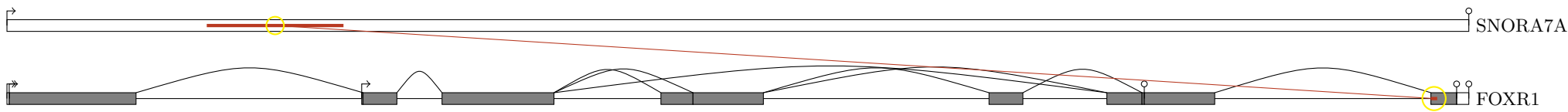
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R. Mac	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ctagtattctgccagcttcg...78...tctgcgacagt-g	ttcaatcc
P. Tro	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ctagtattctgccagcttcg...78...tctgcgacagt-g	ttcagtc
P. Abe	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ccagtattctgccagcttcg...78...tctgcgacagt-g	ttcagtc
C. Jac	tgactcct	gacctcctggga	TCGC	TCTGGAGAATGC	ctagtattctgccagcttcg...78...tctgcaacagt-g	ttcagtc
M. Mus	gaaccact	gacctcttggga	TCGC	TCTGGAGAG	tagctagtattcttccagct---.82...tctgcaacatt-a	ctcactga
R. Nor	gaccact	gacctcttggga	TCGC	TCTGGAGAG	tggtctagtattctgccagct---.82...tctgcaacatc-a	cttaaggc
O. Cun	gggccct	gacctcccggga	TCGC	TCTGGAGAG	tgccagtcctctgccagct---.80...tctgctacagg-g	cccgcggc
C. Fam	tgaccctt	gacctcccagga	TCGC	TCTGGAGAG	tggttggtattctgccagct---.82...tctgcaacagc-a	ttcaaggc
F. Cat	tgaatgct	gacctcccagga	TCGC	TCTGGAGAG	tggttcgtattctgccagct---.82...tctgcaacaat-g	ttcaaggc
B. Tau	gaccctt	aacctcccagga	TCGC	TCTGGAGAA	tggtctgtattctgccagct---.83...-ctgcaacaagag	ttcaaggc
E. Cab	tgatcctt	aacctcccagga	TCGC	TCTGGAGAG	tggtctagtattctgccagct---.82...tctgcaacaat-g	ttgaaggc
O. Avi	gaccctt	aacctcccagga	TCGC	TCTGGAGAA	tggtctgtattctgccagct---.83...-ctgcaacaagag	ttcaagct
L. Afr	gtcccct	gacctcccagga	TCGC	TCTGGAGAA	ataactagtattctgccagc---.81...tctgcaacagt-a	ctcaagct
	*	*****	*****	*****	** **	**** **

id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

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R. Mac	tggttctg	gtgagtacctcg...881...tgctgcaacctctgcccg-gc	GTGT	TTTC	tgCAG	AGCGG	gga
P. Tro	tggttctg	gtgagtacctcg...882...tgctgcaacctctgcccg-gc	GTGT	TTTC	tgCAG	AGCGG	gga
P. Abe	tggttctg	gtgagtacctcg...882...tgctgcaacctctgcccg-gc	GTGT	TTTC	tgCAG	AGCGG	gga
C. Jac	tggttctg	gtgagtacctg...875...tgctgcaacctctgcccg-gc	GTGT	TTTC	tgCAG	AGCGG	gga
M. Mus	tggttctg	gtgagtacctg...793...----gcaacctctgcccg-gcatgt	CTTC	tgCAG	AGCGG	gga	
R. Nor	tggttctg	gtgagtacctg...810...----gcaacctctgcccg-gcatgt	CTTC	tgCAG	AGCGG	gga	
O. Cun	tggttctg	gtgagtacctg...844...----gcaacctctgcccg-gcctgt	CTTC	tgCAG	AGCGG	gga	
C. Fam	tggttctg	gtgagtgcctg...852...----gcaacctctgcccg-cgctgt	CTTC	tgCAG	AGCGG	gga	
F. Cat	tggttctg	gtgagtgcctg...885...----tcaacctctgcccg-gcgtgt	CTTC	tgCAG	AGCGG	gga	
B. Tau	tggttctg	gtgagtgcctg...869...----caacctgtacggg-gcgtgt	TTTC	tgCAG	AGCGG	gga	
E. Cab	tggttctg	gtgagtgcctca...916...----gcaacctctgcccg-gcgtgt	CTTC	tgCAG	AGCGG	gga	
O. Avi	tggttctg	gtgagtgcctg...846...----caacctgtacggg-gcgtgt	TTTC	tgCAG	AGCGG	gga	
L. Afr	tggttctg	gtgagtgcctg...927...----aacctctgctggtgcctgtc	TTTC	cgCAG	AGCGG	gga	
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id=560893 gene=ENSG00000124942 name=AHNAK segment=chr11.62301547.62302474.-1 type=IN

Figure 428: CS=15.12



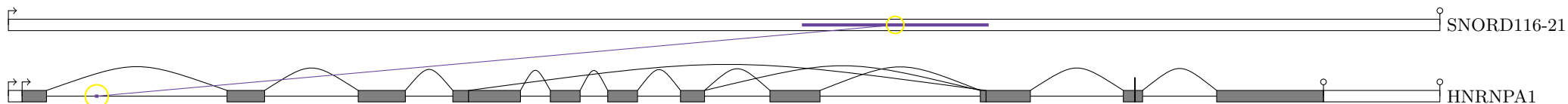
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P. Tro	tgaccctt	gacctcctggg	ATCGCATCTGGAGAG	tgccctagtagtattctgccagct...	81...	tctgcgacagt	ttcagtcc
P. Abe	tgaccctt	gacctcctggg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	81...	tctgcgacagt	ttcagtcc
C. Jac	tgactcct	gacctcctggg	ATCGCGTCTGGAGAA	tgccctagtagtattctgccagct...	81...	tctgcaacagt	ttcagtcc
M. Mus	gaaccact	gacctcctggg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	82...	tctgcaacatta	ctcactga
R. Nor	gaccact	gacctcctggg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	82...	tctgcaacatca	cttaaggc
C. Por	gaccctt	gacctcctggg	ATCGCATCTGGAGAG	tgccctagtagtattctgccagct...	80...	tctgcaacagcc	ctcagccc
O. Cun	gggcccct	gacctcccggg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	80...	tctgctacagg	cccggggc
C. Fam	tgaccctt	gacctcccagg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	82...	tctgcaacagca	ttcaagcc
F. Cat	tgaatgct	gacctcccagg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	82...	tctgcaacaatg	ttcaaggc
E. Cab	tgatccct	aacctcccagg	ATCGCGTCTGGAGAG	tgccctagtagtattctgccagct...	82...	tctgcaacaatg	ttgaagcc
L. Afr	gtccccct	gacctcccagg	ATCGCATCTGGAGAA	tgccctagtagtattctgccagct...	80...	tctgcaacagta	ctcaagct
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id=267161 gene=ENSG00000207496 name=SNORA7A segment=chr3.12881811.12881949.-1 type=EN

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R. Mac	ccagccag	gtgtgaagactt...	437...	-----aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
P. Tro	ccagccag	gtgtgaagactt...	438...	-----aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
P. Abe	ccagccag	gtgtgaagactt...	432...	-----aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
C. Jac	ccagccag	gtgtgaagcctt...	734...	-----aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
M. Mus	ccagccag	gtgtgaagcctt...	360...	attgcaagctcctctgaact-----	CTCTT	aCAG	ATGTGATg
R. Nor	ccagccag	gtgtgaagcctt...	333...	attgcaagctcctctgaact-----	CTCTT	aCAG	ATGTGATg
C. Por	ccagccag	gtgtgctgcctt...	315...	-----gatcccttgaactttttatt	TTCTT	aCAG	ATGTGATg
O. Cun	ccagccag	gtgagggccgt...	343...	-----gattcctctgaactctcctt	CTCTT	aCAG	ATaTGATg
C. Fam	ccaaccgg	gtgagggccctt...	421...	-----gctgacttttttttttttt	TTCTT	aCAG	ATGTGATg
F. Cat	ccagccag	gtgtgagggcctt...	408...	-----attctgttactctctcctt	TTCTT	aCAG	ATGTGATg
E. Cab	ccagccag	gtgtgagggcctt...	411...	-----attccttgaactctctcctt	CTCTT	aCAG	ATGTGATg
L. Afr	ccaaccag	gtatgagggcctt...	430...	-----cttccttgaactctctcctt	TTCTT	aCAG	ATaTGATa
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id=569340 gene=ENSG00000176302 name=FOXR1 segment=chr11.118851439.118851917.1 type=IN

Figure 429: CS=19.89



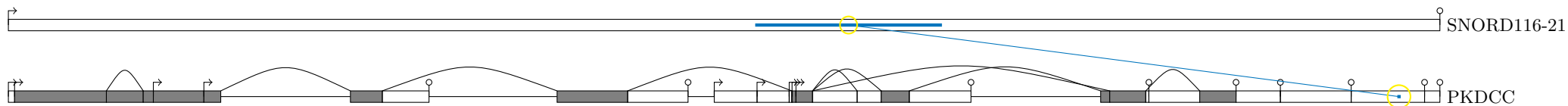
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R. Mac	ctgtgctt	ggatcgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
P. Tro	ctgtgcgt	ggatcgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgacttccatat-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
R. Nor	cggtgctt	ggatcgatgatgattccaata-aaacattccttgg-aaagctga	ACAAAATG	aGTGA	aaactcaataaccgcaactatcatcgtgactgaggtcc	agcacatt
C. Por	atgtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
O. Cun	aagtgcct	ggatcgatgatgactcctgcaa-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
C. Fam	aagtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
F. Cat	atgtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
B. Tau	acgtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
E. Cab	aggtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
S. Sus	ccgtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
L. Afr	atgtgcct	ggatcgatgatgactcctcaata-atacattccttgg-aaagctga	ACAAAATG	aGTGA	aaacactataccgtcatttctcatcg-aactgaggtcc	agcacatt
	****	** * * ****	*****	* * *****	* * * * *	** *****

id=443864 gene=ENSG00000207236 name=SNORD116-21 segment=chr15\_25333951\_25334042\_1 type=EN

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R. Mac	agtcagag	gtgagttaggcg...113...-----taccctcccaagtccaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...377...ccccactccag	tctcctaa
P. Tro	agtcagag	gtgagttaggcg...111...-----taccctcccaagtccaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...375...ccccactctag	tctcctaa
C. Jac	agtcagag	gtgagttaggcg...106...-----ctaccctcccaagtccaag	TCGCCATTTTGT	cctcttgatcgccatgaggc---...371...ccccactgtag	tctcctaa
R. Nor	agtcagag	gtgagttaggcg...105...-----cctactttaaaaatgagg	TCGCCATTTTGT	cctcatagtcaccatgaggc---...361...actttatttag	tccccaa
C. Por	agtcagag	gtaagcgtattt...103...-----gcctgctcccaagtccaag	TCGCCATTTTGT	cc---tcgtcgccatgaggccgc...327...cttccactctag	tctcctaa
O. Cun	agtcagag	gtgaggagctcc...102...aaggcctaccctcccaag	TCGCCATTTTGT	cctcgtcgccatgaggc---...378...tctcccggcag	tccccaa
C. Fam	agtcagag	gtgagtaacacg...112...-----ttcccctcccgaagtgg	TCGCCATTTTGT	cctcgtcgccatgaggc---...363...ccccgctcctag	tctccaa
F. Cat	agtcagag	gtgagtaacacg...113...-----taccctcccaagtccaag	TCGCCATTTTGT	cctcgtcgccatgaggc---...378...cccactcctag	tctccaa
B. Tau	aatcagag	gtgggtaagacg...111...-----tcccctcccaagtgg	TCGCCATTTTGT	cc---tcgtcgccatgaggctgc...362...ctcctctcctag	tctccaa
E. Cab	agtcagag	gtgagtaggacg...111...-----taccctcccaagtccaag	TCGCCATTTTGT	cctcgtcgccatgaggc---...359...tctactcctag	tctccaa
S. Sus	agtcagag	gtgagtaggacg...111...-----taccctcccaagtccaag	TCGCCATTTTGT	cc---tcgtcgccatgaggctgt...358...ccctactcctag	tctccaa
L. Afr	agtcagag	gtaagcctacct...108...-----taccctcccaagtgg	TCGCCATTTTGT	cctcgtcgccatgaggc---...389...tccaccattag	tctcctaa
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id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12\_54674607\_54675169\_1 type=IN

Figure 430: CS=16.25



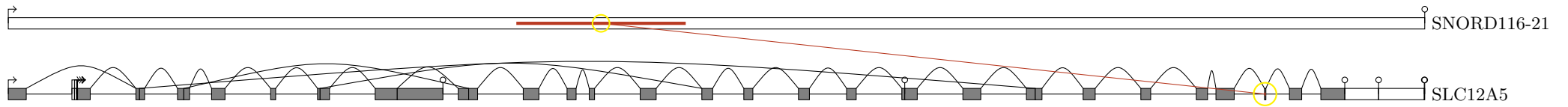
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P. Tro	ctgtgctg	ggatc	cgatgatgacttcc	cat-atacattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactctatacc	gtcatcctcgtcg	-aactgaggtcc	agcacatt	
P. Abe	gtgtgcat	ggatc	cgatgatgacttcc	cat-atacattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactctatacc	gtcatcctcgtcg	-aactgaggtcc	agcacatt	
C. Jac	atgtgcat	ggatc	cgatgatgacttcc	cat-atacattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactctatacc	gtcatcctcgtcg	-aactgaggtcc	agcacatt	
M. Mus	acgagctt	ggatc	atgatgatgattccc	agtc-aaacattcctt	ggaagc-GCTGAACAAA	TGAGTGGAA	aactctgtaccg	cactctcatcgga	aactgaggtcc	agcatctt	
R. Nor	gcgtgctt	ggatc	cgatgatgatttcca	ata-aaacattcctt	ggaagc-GCTGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	tactgaggtcc	agcacctg	
C. Por	atgtgcct	ggatc	cgatgatgactcaca	ata-atgcattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	-aactgaggtcc	agcacact	
C. Fam	aagtgcct	ggatc	cgatgatgactcaca	ata-atgcattcctt	ggaagc-GCTGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	aactgaggtcc	agcacctg	
F. Cat	atgtgctc	ggatc	cgatgatgactcaca	ata-cagcattcctt	ggaagc-GCTGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	aactgaggtcc	agcacctg	
B. Tau	acgtgctt	ggatc	cgatgatgactcaca	ata-atgcattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	-aactgaggtcc	agcacctg	
E. Cab	aggtgctc	ggatc	cgatgatgactcaca	ata-atgcattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	-aactgaggtcc	agcacctg	
S. Sus	ccgtgctc	ggatc	cgatgatgactcaca	ata-aagcattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	-aactgaggtcc	ggcacctg	
L. Afr	atgtgctt	ggatc	cgatgatgactcaca	ata-cagcattcctt	ggaagc-TGAACAAA	TGAG	tgaaaactcaatacc	gccactatcatcg	-aactgaggtcc	agcacctg	
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id=443864 gene=ENSG00000207236 name=SNORD116-21 segment=chr15\_25333951\_25334042\_1 type=EN

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P. Tro	tgtgggtg	attctgtacctg...	138...	-----tggggc	ggggcctttctgc-----	CTCATTG	ctTTCA	-tgaagccgcaa	agcagcca-...	66...	ttgtttat	tttt	gtaaaaa		
P. Abe	tgtgggtg	attctgtacctg...	138...	-----tggggc	ggggcctttctgc-----	CTCATTG	ctTTCA	atgaaagccgcaa	agcagcc--...	67...	ttgtttat	tttt	gtaaaaa		
C. Jac	tgtgggtg	attctgtacctg...	137...	-----tggggc	ggggcctttctgc-----	CTCATTG	ctTTCA	atgaaagccgcaa	agcagcc--...	67...	ttgtttat	tttt	gtaaaaa		
M. Mus	tgtgagtg	aaccagcactgg...	132...	--ggggg	tagggtcggggcctc-----	TTCTG	CTCATTG	ctTTCAGT	gaaagccagg	gagcagccgc...	113...	ttgtttat	tttt	gtaaaaa	
R. Nor	tgtgagtg	agccagcctgg...	134...	-----taggg	tggggcctttctgc-----	CTCATTG	ctTTCAGT	gaaagccacca	agcagccga...	64...	ttgtttat	tttt	gtaaaaa		
C. Por	tgtgagtg	agccagcctgg...	142...	-----taggg	tggggcctttctgc-----	CTCATTG	ctTTCA	atgaaagccac	agcagcc--...	66...	ttgtttat	tttt	gtaaaaa		
C. Fam	tgtggggg	attctgtaccca...	135...	--ggggg	tggggcggggcctt----	TTCTG	CTCATTG	ctTTCAGT	gaaagccgcaa	agcagccaa...	64...	atgtttat	tttt	gtaaaaa	
F. Cat	tgtgggaa	actccgtacctg...	134...	-tgggg	tggggcggggcctt----	TTCTG	CTCATTG	ctTTCAGT	gaaagccgcaa	agcagccaa...	65...	atgtttat	tttt	gtaaaaa	
B. Tau	tgtgggcg	attctgtacccc...	136...	-----tgggg	cggggcctttctgc-----	CTCATTG	ctTTCAGT	gaaagccgcaa	agcagcca-...	66...	atgtttat	tttt	gtaaaaa		
E. Cab	tgtgggcg	atccatacctg...	131...	-tgggg	tggggcggggcctt----	TTCTG	CTCATTG	ctTTCAGT	gaaagccgcaa	agcagcca-...	66...	atgtttat	tttt	gtaaaaa	
S. Sus	tgtgggcg	aatctgtacctg...	128...	-tgggg	tggggcggggcctt----	TTCTG	CTCATTG	ctTTCAGT	gaaagccgcaa	agcagcca-...	66...	atgtttat	tttt	gtaaaaa	
L. Afr	cgtgggtg	actctggcctcc...	106...	cctgg	cggggtggggcctt	AGGG	ctTTCTG	CTCATTG	ctTTCAGT	gaaagcagc	ctggcagctg-	65...	ttgtttat	tttt	gtaaaaa
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id=707208 gene=ENSG00000162878 name=PKDCC segment=chr2\_42285327\_42285609\_1 type=EN

Figure 431: CS=10.14



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P. Tro	ctgtgcgt	ggatcgatgatgacttccatat-ata	CATTCCCTTGAAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
P. Abe	gtgtgcat	ggatcgatgatgacttccatat-ata	CATTCCCTTGAAAAGC	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgacttccatat-ata	CATTCCCTTGAAAAGC	-tgaacaaaatgagtgaactctataccgtcatcctcgttg-aactgaggtcc	tgacagtt
M. Mus	acgagctt	ggatcctatgatgattcccagtc-aaa	CATTCCCTTGAAAAGCTGAA	caaaaatgagtgaaaactctgtaccgccactctcatcggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatcgatgatgatttccaata-aaa	CATTCCCTTGAAAAGC	-tgaacaaaatgagtgaaaactcaataccgccactatcatcgtgactgaggtcc	agcacctg
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C. Fam	aagtgcct	ggatcgatgatgactcctcaatctg	CATTCCCTTGAAAAGC	tgaacaaaatgagtgagaactcctgccgtcgttctcatcgaaactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgactcctcaaa-cag	CATTCCCTTGAAAAGC	tgaacaaaatgagtgagaactcctcccgctcgttctcatcgaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactcccacaa-atg	CATTCCCTTGAAAAT	-ctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E. Cab	agtgctc	ggatcgatgatgactcctcaaa-atg	CATTCCCTTGAAAAT	-ctgaacaaaatgagtgagaactcactaccgtcgttctcgccgagactgaggtcc	agcacctg
S. Sus	ccgtgctc	ggatcgatgatgactcctcta-aag	CATTCCCTTGAAAAT	-ctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	atgtgctt	ggatcgtttatgacttccacac-ata	CATTCCCTTGAAAAT	-ctgaacaaaatgagtgagaacccctactgtctctttagca-acctgaggtcc	agcatacc
	* **	***** * **** *	*****	* ***** * * * * *	***** ***

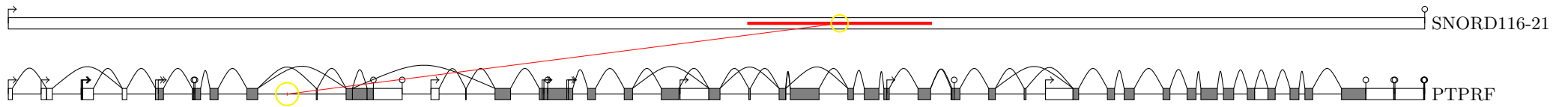
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R. Mac	atgaagcc	gtacgggcctgg...290...-----tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
P. Tro	atgaagcc	gtacgggcctgg...289...-----tctctctttgcatctcttgt	GTTTCCTGAAG	GGAGTGgg
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C. Jac	atgaagcc	gtatgggcctgg...278...-----tttcttttgcactcttgt	GTTTCCTGAAG	GGAGTGgg
M. Mus	atgaagcc	gtacgggcctgg...297...--tctttctctcttgccttctc	TTTGTGTTTCCTGAAG	GGAGTGgg
R. Nor	atgaagcc	gtacgggcctgg...273...-----ttctctcttgccttctctc	GTTTCCTGAAG	GGAGTGgg
C. Por	atgaagcc	gtatgggcctgg...271...tttctttctcccttgcctc	TGTTGTTTCCTGAAG	GGAGTGgg
C. Fam	atgaagcc	gtatgggcctgg...278...-----cctctcgttgccttcttgt	GTTTCCTGAAG	GGAGTGgg
F. Cat	atgaagcc	gtatgggcctgg...298...-----cctctcttgccttcttgt	GTTTCCTGAAG	GGAGTGgg
B. Tau	atgaagcc	gtacgggcctgg...296...-----cctctccttgccttcttct	GTTTCCTgAAG	GgAGTGgg
E. Cab	atgaagcc	gtatgggcctgg...299...-----cctcacttgccttcttgt	GTTTCcgAAG	GgAGTGgg
S. Sus	atgaagcc	gtacgggcctgg...305...-----cctctcttgccttcttgt	GTTTCcgAAG	GgAGTGgg
L. Afr	atgaagcc	gtatgggcctgg...288...-----ctttcttgccttcttgt	GTTTCtgAAG	GgAGTGgg
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id=543329 gene=ENSG00000124140 name=SLC12A5 segment=chr20.44685204.44685535.1 type=IN

Figure 432: CS=16.1





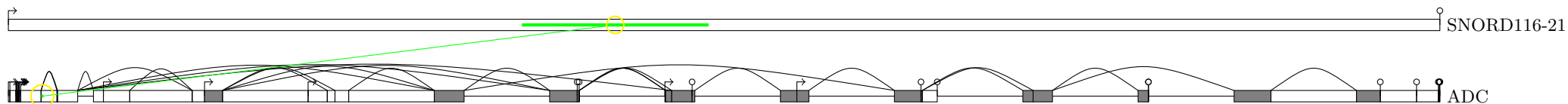
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P. Tro	ctgtgctg	ggatc	cgatgatgacttcc	acat-atacattc	ccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctata	accgtcatcctc	gtcg-aactgaggtcc	agcacatt	
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M. Mus	acgagctt	ggatc	atgatgatgattccc	agtc-aaacattc	ccttgg-aaagc	TGAACAAA	TGAGTGGAA	aactctgtacc	gccactctcatc	ggaaactgaggtcc	agcatctt	
R. Nor	gcgtgctt	ggatc	cgatgatgatttcca	ata-aaacattc	ccttgg-aaagc	TGAACAAA	TGAG	tgaaaactcaata	accgccactatc	atcgtgactgaggtcc	agcacctg	
C. Por	atgtgcct	ggatc	cgatgatgactc	ataa-atgcattc	ccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctata	accgtcattctc	atcg-aactgaggtcc	agcacact	
C. Fam	aagtgcct	ggatc	cgatgatgactc	cctcaatctg	cattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactcctc	ccgtcgttctc	atcgaaactgaggtcc	agcacctg	
F. Cat	atgtgctc	ggatc	cgatgatgactc	cctca-cagcattc	ccttgg-aaagc	TGAACAAA	TGAG	tgaaaactcctc	ccctcgttctc	atcgaaactgaggtcc	agcacctg	
B. Tau	acgtgctt	ggatc	cgatgatgactccc	acaa-atgcattc	ccttgg-aaatc	TGAACAAA	TGAG	tgagcatcact	accgtctc-ctc	atcgaaactgaggtcc	agcacctg	
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S. Sus	ccgtgctc	ggatc	cgatgatgactc	cctcta-aagcattc	ccttgg-aaatc	TGAACAAA	TGAG	tgaaaactcact	accgtctc-ctc	atcgaaactgaggtcc	agcacctg	
L. Afr	atgtgctt	ggatc	cgatgatgacttcc	acac-atacattc	ccttgg-aaatc	TGAACAAA	TGAG	tgaaaaccctc	actgtctcctt	tagca-acctgaggtcc	agcatacc	
	* **	*****	* **	*	*****	***	*****	*	* * * *	*	*****	***

id=443864 gene=ENSG00000207236 name=SNORD116-21 segment=chr15.25333951.25334042.1 type=EN

H. Sap	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	ccttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
R. Mac	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	ccttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
P. Tro	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	ccttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
P. Abe	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	ccttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
C. Jac	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	ccttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
M. Mus	gcgatcag	gtgagctgagtt	..4923..	ctttgtactaat	gtttctc	TCTG	atCTTATTG	caTTCA	aattacctcgccag	gtggttca
R. Nor	gcgttcag	gtgagctgaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
C. Por	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcaccag	gtggttca	
C. Fam	acgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
F. Cat	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
B. Tau	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
E. Cab	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
S. Sus	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
L. Afr	gcgttcag	gtgagcagaggg	..4929..	-----tactaatg	cttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca	
	** **	****	****	**	*****	**	*****	****	*****	

id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 433: CS=12.6



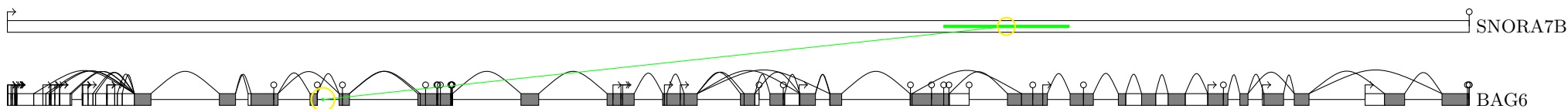
H. Sap	ctgtgcgt	ggatcgatgatgacttccatatata--	<b>CATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
R. Mac	ctgtgcct	ggatcgatgatgacttccatatata--	<b>CATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
P. Abe	gtgtgcat	ggatcgatgatgacttccatatata--	<b>CATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcatcctcgtcg-aactgaggtcc	agcacatt
C. Jac	atgtgcat	ggatcgatgatgacttccatatata--	<b>CATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaacactctataccgtcatcctcgttg-aactgaggtcc	tgcacgtt
M. Mus	acgagcct	ggatctatgatgattcccagtcaaa--	<b>CATTCCTTGGAAAGC</b>	agctgaacaaaatgagtggaaactctgtaccgcaactctcatcggaactgaggtcc	agcatcct
R. Nor	gcgtgcct	ggatcgatgatgattccaataaaa--	<b>CATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaaaactcaataaccgcaactatcatcgtgactgaggtcc	agcacctg
C. Por	atgtgcct	ggatcgatgatgactcataaaa--	<b>TGCATTCCTTGGAAAGC</b>	-tgaacaaaatgagtgaaaactctataccgtcattctcatcg-aactgaggtcc	agcacact
C. Fam	aagtgcct	ggatcgatgatgactccctca- <b>aTCTGCATTCCTTGGAAAGC</b>	agctgaacaaaatgagtgagaactcctgcctcgttctcatcgcaactgaggtcc	agcacgtt	
F. Cat	atgtgcct	ggatcgatgatgactccctca- <b>acaGCATTCCTTGGAAAGC</b>	agctgaacaaaatgagtgagaactcctcccgtcgttctcatcgaaactgaggtcc	agcacgtt	
B. Tau	acgtgcct	ggatcgatgatgactcccaca- <b>aaTGCATTCCTTGGAAAGC</b>	-ctgaacaaaatgagtgagccatcactaccgtc-tcctcatcggaactgaggtcc	agcacgtg	
E. Cab	agggtgctc	ggatcgatgatgactccctca- <b>aTGCATTCCTTGGAAAGC</b>	-ctgaacaaaatgagtgagaactcactaccgtcgttctcgcgagactgaggtcc	agcacctg	
S. Sus	cogtgctc	ggatcgatgatgactccctct- <b>aaaGCATTCCTTGGAAAGC</b>	-ctgaacaaaatgagtgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg	
L. Afr	atgtgcct	ggatcgtttatgacttccacacata--	<b>CATTCCTTGGAAAGC</b>	-ctgaacaaaatgagtgagaacccctactgtctctcttagca-acctgaggtcc	agcatacc
	** *	***** * **** * * *****	*****	* * * * *	***** **

id=443864 gene=ENSG00000207236 name=SNORD116-21 segment=chr15\_25333951\_25334042\_1 type=EN

H. Sap	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----ggaagtggcctggggagc----. . .54. .-gcctcctgtcag	cagaggcc
R. Mac	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----ggaagtggcctggggagc----. . .54. .-gcctcctgtcag	caggggcc
P. Abe	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----ggaagtggcctggggagc----. . .54. .-gcctcctgtcag	caggggcc
C. Jac	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----ggggagtggcctggggagc----. . .54. .-gcctcctcag	caggggcc
M. Mus	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----aggagatggctgggggga----. . .57. .-gcctcctcag	caggggcc
R. Nor	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--c----agcagatggctgggggag----. . .58. .-gcctcctcag	caggggcc
C. Por	g <b>TTTTAAG</b>	Gcg <b>AGTGCA</b>	g----ggggatagtctcggggagc----. . .55. .-gcctccttcag	caggagcc
C. Fam	g <b>TTTTAAG</b>	Gcg <b>AGTGCGG</b>	g----gagtggctcggggagcctcc. . .48. .-gcctcctccag	caggggcc
F. Cat	g <b>TTTTAAG</b>	Gcg <b>AGTGC</b>	g----ggggagtggctcggggagcc----. . .51. .-gcctccttcag	caggggcc
B. Tau	g <b>TTTTAAG</b>	Gcg <b>AGTGCG</b>	g----gggagaccctcggggagcct--. . .51. .-gcctcctcag	caggggcc
E. Cab	g <b>TTTTAAG</b>	Gcg <b>AGTGCG</b>	g----gggagtggctcggggagcct--. . .51. .-gcctcctcag	caggggcc
S. Sus	g <b>TTTTAAG</b>	Gcg <b>AGTGC</b>	g----ggggagtggctcggggagcc----. . .52. .-gcctcctcag	caggggcc
L. Afr	g <b>TTTTAAG</b>	Gcg <b>AGTG</b>	--cgggggaggaggtggctttg----. . .69. .tgcctc-ctcag	caggggcc
	*****	*****	* *	**** * ** *** **

id=513845 gene=ENSG00000142920 name=ADC segment=chr1\_33546896\_33546988\_1 type=AN

Figure 434: CS=10.14



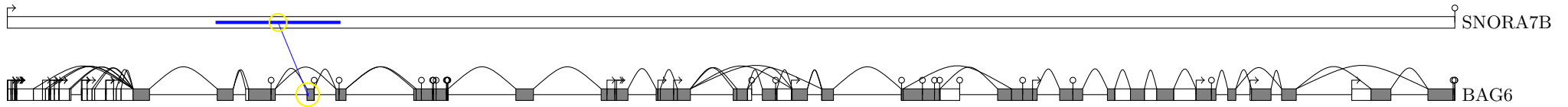
H. Sap	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCa	TTCCCa	GCTT	gctccgtagctggtgattggaagacactctgcgacagtg-	ttcagtc
R. Mac	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCa	TTCCCa	GCTT	gctccgtagctggtgattggaagacactctgcgacagtg-	ttcaatcc
P. Tro	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCa	TTCCCa	GCTT	gctccgtagctggtgattggaagacactctgcgacagtg-	ttcagtc
P. Abe	tgaccctt	gacctcctggga...49...	--aagcaagcctggcagaggca	CCCATTCa	TTCCCa	GCTT	gctccgtagctggtgattggaagacactctgcgacagtg-	ttcagtc
C. Jac	tgactcct	gacctcctggga...49...	--aaacaagcctggcagaggca	CCCATTCa	TTCCCa	GCTT	gctccgtagctggtgattggaagacactctgcaacagtg-	ttcagtc
M. Mus	gaaccact	gacctcctggga...50...	--gagcaagcctagcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCGTtagctggtgattggaagacactctgcaacatta-	ctcactga
R. Nor	gaccact	gacctcctggga...50...	--gaacaagtctagcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacatca-	cttaaggc
C. Por	gaccctt	gacctcctggga...48...	gagagcaagcc-agcag-ggca	CCCATTCa	TTCCCa	GCTT	gCTTtagctggtgactggaagacactctgccacagcc-	ctcagccc
C. Fam	tgaccctt	gacctcccagga...50...	--cagcaagcctggcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacagca-	ttcaagcc
F. Cat	tgaatgct	gacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacaatg-	ttcaagcc
B. Tau	gaccctt	aacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacaagag-	ttgaagcc
E. Cab	tgatcctt	aacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacaatg-	ttcaagcc
O. Avi	gaccctt	aacctcccagga...50...	--aagcaagcctggcagaggta	CCCATTCa	TTCCCa	GTTT	gCTCAGtagctggtgattggaagacactctgcaacaagag-	ttcaagcc
L. Afr	gtcccct	gacctcccagga...48...	aaaagcaagcctgtcagaga--	CCCATTCa	GTTT	GCTCAG	tagctggtgattggaagatactctgcaacagta-	ctcaagct
	*	***** **	* ****	*** *	***** ** *	*** **	*** **	***** **

id=546198 gene=ENSG00000207088 name=SNORA7B segment=chr3\_129116053\_129116191\_-1 type=EN

H. Sap	cgattca	g	gtattgagggcctccga	GGGT	caGGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...87...ctctcattgtag	agtgagcc
R. Mac	cgattca	g	gtattgagggcctccga	GGGT	caGGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...87...ctctcattgtag	agtgagcc
P. Tro	cgattca	g	gtattgagggcctccga	GGGT	caGGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...87...ctctcattgtag	agtgagcc
P. Abe	cgattca	g	gtattgagggcctccga	GGGT	caGGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...87...ctctcattgtag	agtgagcc
C. Jac	cgattca	g	gtattgagggcct	TGGAGGGT	caGGGAAg	GGGAtc	TGGG	agaaggaggctgggaggtgg...87...ctctcattgtag	agtgagcc
M. Mus	caattca	g	gtattgagggc	CTGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...86...cttgcattatag	agtgagcc
R. Nor	caattca	g	gtattgagggc	CTGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...89...cttgcattatag	agtgagcc
C. Por	cgattca	g	gtattgagggc	TGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...88...ctcttaccgtag	agtgagcc
C. Fam	cgattca	g	gtatcacggcctgggaggtca-	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...87...ctttaccgtag	agtgagcc	
F. Cat	cgattca	g	gtatcacggc-	CTGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...90...ctcttaccgtag	agtgagcc
B. Tau	cgattca	g	gtatcacggcctgggaggtca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...92...ctttaccgtag	agtgagcc	
E. Cab	cgattca	g	gtatcacggc	CTGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...87...ctcatattgtag	agtgagcc
O. Avi	caattca	g	gtatcacggcctgggaggtca	GGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...90...ctctcattgtag	agtgagcc	
L. Afr	cgattca	g	gtatcacggc	CTGGG	caGGGAAg	GGGAtc	TGGG	agaaggaggccatgagatgg...77...ctcttaccgtag	agtgagcc
	*	*****	* ****	**	*	*****	* **	**	*****

id=497982 gene=ENSG00000204463 name=BAG6 segment=chr6\_31616529\_31616687\_-1 type=IN

Figure 435: CS=10.92



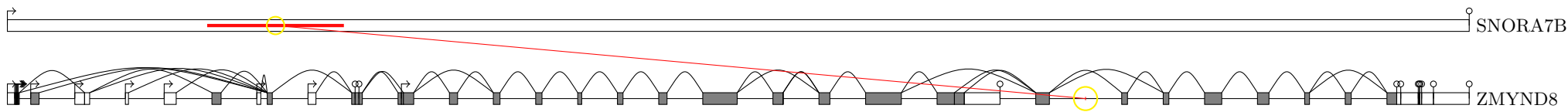
H. Sap	tgaccctt	gacctcctggga	TCGGa	TCTGGAGA	ctgcctagtattctgccagc	----.82...	tctgacacagt-g	ttcagttcc
R. Mac	tgaccctt	gacctcctggga	TCGGg	TCTGGAGAG	tgccctagtattctgccagct	----.81...	tctgacacagt-g	ttcaatcc
P. Tro	tgaccctt	gacctcctggga	TCGGa	TCTGGAGAG	tgccctagtattctgccagct	----.81...	tctgacacagt-g	ttcagttcc
P. Abe	tgaccctt	gacctcctggga	TCGGg	TCTGGAGAG	tgccctagtattctgccagct	----.81...	tctgacacagt-g	ttcagttcc
C. Jac	tgactcct	gacctcctggga	TCGGg	TCTGGAGA	atgcctagtattctgccagc	----.82...	tctgcaacagt-g	ttcagttcc
M. Mus	gaaccact	gacctcctggga	TCGGg	TCTGGAGAGTAG	ctagtattctccagcttcg	..79...	tctgcaacatt-a	ctcactga
R. Nor	gaccact	gacctcctggga	TCGGg	TCTGGAGAGTGG	ctagtattctgccagcttcg	..79...	tctgcaacatt-a	cttaaggc
C. Por	gaccctt	gacctcctggga	TCGGa	TCTGGAGAG	cagctagtgttctgccagct	----.80...	tctgccacagc-c	ctcagccc
O. Cun	ggccctt	gacctcctggga	TCGGg	TCTGGAGAG	tgccctagcctctgccagct	----.80...	tctgctacagg-g	cccgcggc
C. Fam	tgaccctt	gacctcctggga	TCGGg	TCTGGAGAG	tggttggtattctgccagct	----.82...	tctgcaacagc-a	ttcaagcc
F. Cat	tgaatgct	gacctcctggga	TCGGg	TCTGGAGAG	tggttcgtattctgccagct	----.82...	tctgcaacaat-g	ttcaagcc
B. Tau	gaccctt	aacctcccagga	TCGGa	TCTGGAGA	atggcttattctgccagc	----.84...	-ctgcaacaagag	ttcaagcc
E. Cab	tgatcctt	aacctcccagga	TCGGg	TCTGGAGAGTGG	ctagtattctgccagcttcg	..79...	tctgcaacaat-g	ttgaagcc
O. Avi	gaccctt	aacctcccagga	TCGGa	TCTGGAGA	atggcttattctgccagc	----.84...	-ctgcaacaagag	ttcaagct
L. Afr	gtccctt	gacctcccagga	TCGGa	TCTGGAGA	ataaactagtattctgccagc	----.81...	tctgcaacagt-a	ctcaagct
		*	*****	*****	*****	**	***	*****

id=546198 gene=ENSG00000207088 name=SNORA7B segment=chr3\_129116053\_129116191\_-1 type=EN

H. Sap	atcttctt	gtaagcttatgt	...193...	-----cagaacaacttccttacc	TTTCccCAG	AGTGA	cgg
R. Mac	atcttctt	gtaagcttatgt	...188...	-----ccagaacaacttccttacc	CTTTCcCCAG	AGTGA	cgg
P. Tro	atcttctt	gtaagcttatgt	...192...	-----ccagaacaacttccttacc	CTTTCcCCAG	AGTGA	cgg
P. Abe	atcttctt	gtaagcttatgt	...192...	-----ccagaacaacttccttacc	CTTTCcCCAG	AGTGA	cgg
C. Jac	atcttctt	gtaagcttatgt	...193...	-----cagaacaacttccttacc	TTTCccCAG	AGTGA	cgg
M. Mus	atcttctt	gtgagccttgt	...193...	ttctcccagagcaacttccc	TTGCccTTTCccCAG	AGTGA	cgg
R. Nor	atcttctt	gtgagccttgt	...192...	ttctcccagagcaacttccc	TTACccTTTCcgCAG	AGTGA	cgg
C. Por	atcttctt	gtaagcttgtgt	...185...	-----ccagagcaacttccttacc	CTTTCcCCAG	AGTGA	cgg
O. Cun	atcttctt	gtaagcttgtgt	...205...	-----ccagagcaacttccttacc	CTTTCcCCAG	AGTGA	cgg
C. Fam	accttctt	gtaagcttgtgt	...193...	-----ccagagcaacttccttacc	CTTTTCCAG	AGTGA	cgg
F. Cat	atcttctt	gtaagcttgtgt	...186...	-----cccagagcaacttcatacc	-CTTTTCTCAG	AGTGA	cgg
B. Tau	atcttccc	gtaagcttgtgt	...194...	-----cagaacaacttccttacc	TTTCccCAG	AGTGA	cgg
E. Cab	atcttctt	gtaagcttgc	...190...	ttctcccagagcaacttccc	TTACccTTTCccCAG	AGTGA	cgg
O. Avi	atcttccc	gtaagcttgtgt	...196...	-----cagagcaacttccttacc	TTTCctCAG	AGTGA	cgg
L. Afr	atcttctt	gtaagcttgtgt	...199...	-----cagagcaacttcacttacc	TTTCccCAG	AGTGA	cgg
		*	*****	**	***	*	*****

id=497979 gene=ENSG00000204463 name=BAG6 segment=chr6\_31616742\_31616975\_-1 type=IN

Figure 436: CS=13.5



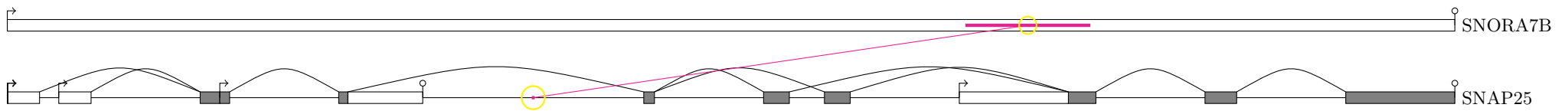
H. Sap	tgaccctt	gacctcctggg	ATCG	ca	TCTGGAGA	ctgcctagtattctgccagc	-----	..82..	tctgcgac-agtg	ttcagtcc	
R. Mac	tgaccctt	gacctcctggg	ATCG	cg	TCTGGAGAG	tgccctagtattctgccagc	-----	..81..	tctgcgac-agtg	ttcaatcc	
P. Tro	tgaccctt	gacctcctggg	ATCG	ca	TCTGGAGAG	tgccctagtattctgccagc	-----	..81..	tctgcgac-agtg	ttcagtcc	
P. Abe	tgaccctt	gacctcctggg	ATCG	cg	TCTGGAGAG	tgccctagtattctgccagc	-----	..81..	tctgcgac-agtg	ttcagtcc	
C. Jac	tgactcct	gacctcctggg	ATCG	cg	TCTGGAGA	atgcctagtattctgccagc	-----	..82..	tctgcaac-agtg	ttcagtcc	
M. Mus	gaaccact	gacctcctggg	ATCG	cg	TCTGGAGAGTAG	ctAGTA	ttCTTC	cagcttcggaagcaagagg	..67..	tctgcaac-atta	ctcactga
C. Por	gaccctt	gacctcctggg	ATCG	ca	TCTGGAGAG	cagctagtgttctgccagc	-----	..80..	tctgcaac-agcc	ctcagccc	
O. Cun	gggccctt	gacctcccggg	ATCG	cg	TCTGGAGAG	tgcccagtcctctgccagc	-----	..80..	tctgctac-aggg	cccggggc	
C. Fam	tgaccctt	gacctcccagg	ATCG	cg	TCTGGAGAGTGG	ttGGTA	ttctgccagcttcggaggcg	-----	..73..	tctgcaac-agca	ttcaagcc
F. Cat	tgaatgct	gacctcccagg	ATCG	cg	TCTGGAGAG	tggtctgtattctgccagc	-----	..82..	tctgcaac-aatg	ttcaagcc	
B. Tau	gaccctt	aacctcccagg	ATCG	ca	TCTGGAGAATGG	cttgattctgccagcttcg	-----	..80..	-ctgcaacaag	ttcaagcc	
E. Cab	tgatccct	aacctcccagg	ATCG	cg	TCTGGAGAGTGG	ctAGTA	ttctgccagcttcggagacg	-----	..73..	tctgcaac-aatg	ttgaagcc
L. Afr	gtccccct	gacctcccagg	ATCG	ca	TCTGGAGAATAA	ctAGTA	ttctgccagcttcggagacg	-----	..71..	tctgcaac-agta	ctcaagct
	*	*****	*****	*****	*****	**	***	*****	****	** *	

id=546198 gene=ENSG00000207088 name=SNORA7B segment=chr3\_129116053\_129116191\_-1 type=EN

H. Sap	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
R. Mac	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
P. Tro	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
P. Abe	ctagcaaa	gtgagtggatgg	...4949...	-----	ctgaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
C. Jac	ctagcaaa	gtgagtggatgg	...4949...	-----	agctgaattg	tt-tgttttta	-----	TCTTtCAG	ATGAT	gga
M. Mus	ccagcaaa	gtaagtgggttg	...4936...	-----	catcg	ttgtatcacctact	GAAGT	TTATCTTCCAG	ATGAT	gga
C. Por	ctagcaaa	gtgagtggcca	...4949...	-----	gcaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
O. Cun	ccagcaaa	gtgagtggccg	...4328...	---tgacc	acctgcgtt	gtcttt	-----	CTCTTCCAG	ATGAT	gga
C. Fam	ctagtaaa	gtgagtgcctg	...4941...	---atgat	cacctgaatt	gtttc	-----	TGTTt	TTATCTTCCAG	ATGAT
F. Cat	ctagcaaa	gtgagtgccat	...4749...	-----	ctgaattg	tttctgttttta	-----	TCTTtCAG	ATGAT	gga
B. Tau	ctagcaag	gtgagtgcctg	...4945...	-----	caccagatt	gtttctcttt	-----	TTATCTTCCAG	ATGAT	gga
E. Cab	ctagcaaa	gtgagtgccag	...4743...	---gtcat	caccttaatt	gtttc	-----	TGTTt	TTATCTTCCAG	ATGAT
L. Afr	ctagcaaa	gtgagtggaaag	...3014...	---aagt	gatcacct	gaat-tctc	-----	TGTTt	TTATCTTCCAG	ATGAT
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id=778511 gene=ENSG00000101040 name=ZMYND8 segment=chr20\_45858553\_45865069\_-1 type=IN

Figure 437: CS=22.75



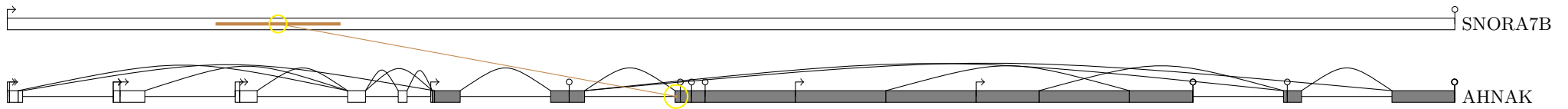
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R.Mac	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggtgattggaagacactctgcgac-agt	ttcaatcc
P.Tro	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggtgattggaagacactctgcgac-agt	ttcagtcc
P.Abe	tgaccctt	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggtgattggaagacactctgcgac-agt	ttcagtcc
C.Jac	tgactcct	gacctcctggga...52...--caagcctggcagaggcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggtgattggaagatactctgcaac-agt	ttcagtcc
M.Mus	gaaccact	gacctcctggga...53...--caagcctagcagaggtagcc	ATTCCATTCCAGT	-----ttgctcgtagctggtgattggaagacactctgcaac-atta	ctcactga
C.Por	gaccctt	gacctcctcgga...51...agcaagcc-agcag-ggcacc	ATTCCATTcCCAGcTTGC	ctt-----gtagctggtgactggaagacactctgccac-agcc	ctcagccc
O.Cun	gggccctt	gacctcccggga...51...agcaagccgc--ggagcacc	ATTCCATTcCCAG	-----ctgtctccgtagctggtgactggaagacactctgctac-aggg	cccgcggc
C.Fam	tgaccctt	gacctcccagga...53...--caagcctggcagaggtagcc	ATTCCATTCCAGT	-----ttgctcagtagctggtgattggaagacactctgcaac-agca	ttcaagcc
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O.Avi	gaccctt	aacctcccagga...53...--caagcctggcagaggtagcc	ATTCCATTCCAGT	-----ttgctcagtagctggtgattggaagacactctgcaacaagag	ttcaagcc
L.Afr	gtccccct	gacctcccaga...51...agcaagcctgtagcag--acc	ATTCCATTCCAGT	-----ttgctcagtagctggtgattggaagatactctgcaac-agta	ctcaagct
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id=546198 gene=ENSG00000207088 name=SNORA7B segment=chr3\_129116053.129116191.-1 type=EN

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R.Mac	acataaaa	tatt-atttgtaa-...4946...----	tttcaactttgctaccattaTTGGAATGtaG	AGTaaaga
P.Tro	acataaaa	cttt-atttgtaa-...4946...----	tttcaactttgctaccattaTTGGAATGtaG	AGTaaaga
P.Abe	acataaaa	cttt-atttgtaa-...4946...----	tttcaactttgctaccattaTTGGAATGtaG	AGTaaaga
C.Jac	acataaaa	cttt-atttgtaa-...4946...----	tttcaactttgctaccattaTTGGAATGtaG	AGTaaaga
M.Mus	acataaaa	tgttcatttga-...4849...---	tttcaactttgctaccattATTGGAATGtaG	AGTaaaga
C.Por	-ctgaaaa	acttcaattata-...4942...tcttttcaac	ttgctaccGTAATTGGAATGtaG	AGTaaaga
O.Cun	-tacataa	attggctacata-...4946...----	tttcaactttgctaccattaTTGGAATGtaG	AGTaaaga
C.Fam	-cataaaa	acttcaacttga-...4945...---	tttcaactttgctaccattATTGGAATGtaG	AGTaaaga
F.Cat	-cataaaa	acttcccttga-...4942...tgcttttcaac	tttcaactttgctaccATTGTTGGAATGtaG	AGTaaaga
B.Tau	ata-aaaa	tcctcatttga-...4945...---	tttccactttgctaccattATTGGAATGtaG	AGTaaaga
O.Avi	ata-aaaa	tcctcatttga-...4945...---	tttccactttgctaccattATTGGAATGtaG	AGTaaaga
L.Afr	acatgaaa	cat-atttgaat-...4945...---	tttcaactttgctaccattATTGGAATGtaG	AGTaaaga
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id=303155 gene=ENSG00000132639 name=SNAP25 segment=chr20\_10258718.10265371.1 type=IN

Figure 438: CS=11.7



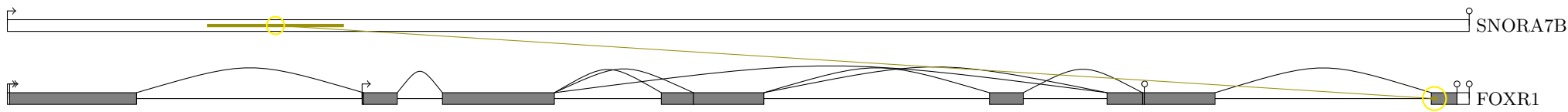
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R. Mac	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ctagttattctgccagcttcg	...78...	tctgacagct-g	ttcaatcc
P. Tro	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ctagttattctgccagcttcg	...78...	tctgacagct-g	ttcagtc
P. Abe	tgaccctt	gacctcctggga	TCGC	TCTGGAGAGTGC	ccagttattctgccagcttcg	...78...	tctgacagct-g	ttcagtc
C. Jac	tgactcct	gacctcctggga	TCGC	TCTGGAGAATGC	ctagttattctgccagcttcg	...78...	tctgcaacagct-g	ttcagtc
M. Mus	gaaccact	gacctcttggga	TCGC	TCTGGAGAG	tagctagttattctccagct	---.82...	tctgcaacatt-a	ctcactga
R. Nor	gaccact	gacctcttggga	TCGC	TCTGGAGAG	tggtctagttattctgccagct	---.82...	tctgcaacatc-a	cttaaggc
O. Cun	gggccct	gacctcccggga	TCGC	TCTGGAGAG	tgccagtcctctgccagct	---.80...	tctgctacagg-g	cccgcggc
C. Fam	tgaccctt	gacctcccagga	TCGC	TCTGGAGAG	tggttggtattctgccagct	---.82...	tctgcaacagc-a	ttcaaggc
F. Cat	tgaatgct	gacctcccagga	TCGC	TCTGGAGAG	tggttcgtattctgccagct	---.82...	tctgcaacaat-g	ttcaaggc
B. Tau	gaccctt	aacctcccagga	TCGC	TCTGGAGAA	tggttggtattctgccagct	---.83...	ctgcaacaagag	ttcaaggc
E. Cab	tgatccct	aacctcccagga	TCGC	TCTGGAGAG	tggtctagttattctgccagct	---.82...	tctgcaacaat-g	ttgaaggc
O. Avi	gaccctt	aacctcccagga	TCGC	TCTGGAGAA	tggttggtattctgccagct	---.83...	ctgcaacaagag	ttcaagct
L. Afr	gtcccct	gacctcccagga	TCGC	TCTGGAGAA	taactagttattctgccagc	---.81...	tctgcaacagct-a	ctcaagct
	*	*****	*****	*****	* ** ** *		**** *	

id=546198 gene=ENSG00000207088 name=SNORA7B segment=chr3\_129116053\_129116191.-1 type=EN

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R. Mac	tggttctg	gtgagtacctcg	...881...	tgctgcaacctctgcccg-gcGTGTg	TTTCtgCAG	AGCGGgga
P. Tro	tggttctg	gtgagtacctcg	...882...	tgctgcaacctctgcccg-gcGTGTc	TTTCtgCAG	AGCGGgga
P. Abe	tggttctg	gtgagtacctcg	...882...	tgctgcaacctctgcccg-gcGTGTc	TTTCtgCAG	AGCGGgga
C. Jac	tggttctg	gtgagtacctg	...875...	tgttgcaacctctgcccg-gcGTGTc	TTTCtgCAG	AGCGGgga
M. Mus	tggttctg	gtgagtacctgg	...793...	-----gcaacctctgcccg-gcatgt	CTTTCtgCAG	AGCGGgga
R. Nor	tggttctg	gtgagtacctgc	...810...	-----gcaacctctgcccg-gcatgt	CTTTCtgCAG	AGCGGgga
O. Cun	tggttctg	gtgagtacctgg	...844...	-----gcaacctctgcccg-gcctgt	CTTTCtgCAG	AGCGGgga
C. Fam	tggttctg	gtgagtgcctgg	...852...	-----gcaacctctgcccg-cctgt	CTTTCtgCAG	AGCGGgga
F. Cat	tggttctg	gtgagtgcctcg	...885...	-----tcaacctctgcccg-gcgtgt	CTTTCtgCAG	AGCGGgga
B. Tau	tggttctg	gtgagtccctgg	...869...	-----caacctgtacggg-gcgtgt	TTTCTgCAG	AGCGGgga
E. Cab	tggttctg	gtgagtgcctca	...916...	-----gcaacctctgcccg-gcgtgt	CTTTCtgCAG	AGCGGgga
O. Avi	tggttctg	gtgagtccctgg	...846...	-----caacctgtacggg-gcgtgt	TTTCTgCAG	AGCGGgga
L. Afr	tggttctg	gtgagtctctgc	...927...	-----aacctctgctggtgcctgtc	TTTCcgCAG	AGCGGgga
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id=560893 gene=ENSG00000124942 name=AHNAK segment=chr11\_62301547\_62302474.-1 type=IN

Figure 439: CS=15.12



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R. Mac	tgaccttt	gacctcctggg	ATCGCGTCTGGAGAG	tgccctagtattctgccagct...	81...	tctgcgacagt	ttcaatcc
P. Tro	tgaccctt	gacctcctggg	ATCGCATCTGGAGAG	tgccctagtattctgccagct...	81...	tctgcgacagt	ttcagtcc
P. Abe	tgaccctt	gacctcctggg	ATCGCGTCTGGAGAG	tgcccagtagtattctgccagct...	81...	tctgcgacagt	ttcagtcc
C. Jac	tgactcct	gacctcctggg	ATCGCGTCTGGAGAA	tgccctagtattctgccagct...	81...	tctgcaacagt	ttcagtcc
M. Mus	gaaccact	gacctcctggg	ATCGCGTCTGGAGAG	tagcttagtattcttccagct...	82...	tctgcaacatta	ctcactga
R. Nor	gaccact	gacctcctggg	ATCGCGTCTGGAGAG	tgccctagtattctgccagct...	82...	tctgcaacatta	cttaaggc
C. Por	gaccctt	gacctcctggg	ATCGCATCTGGAGAG	cagctagtattctgccagct...	80...	tctgcaacagcc	ctcagccc
O. Cun	gggcccct	gacctcccggg	ATCGCGTCTGGAGAG	tgcccagtagtattctgccagct...	80...	tctgcaacagcc	cccgcggc
C. Fam	tgaccctt	gacctcccagg	ATCGCGTCTGGAGAG	tggttggtattctgccagct...	82...	tctgcaacagca	ttcaagcc
F. Cat	tgaatgct	gacctcccagg	ATCGCGTCTGGAGAG	tggttcgtattctgccagct...	82...	tctgcaacaatg	ttcaagcc
E. Cab	tgatccct	aacctcccagg	ATCGCGTCTGGAGAG	tgccctagtattctgccagct...	82...	tctgcaacaatg	ttgaagcc
L. Afr	gtccccct	gacctcccagg	ATCGCATCTGGAGAA	taactagtagtattctgccagct...	80...	tctgcaacagta	ctcaagct
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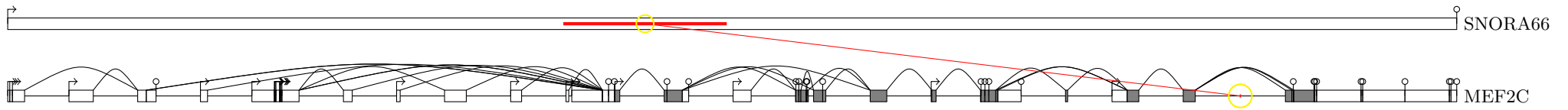
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R. Mac	ccagccag	gtgtgaagactt...	437...	-----	aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
P. Tro	ccagccag	gtgtgaagactt...	438...	-----	aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
P. Abe	ccagccag	gtgtgaagactt...	432...	-----	aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
C. Jac	ccagccag	gtgtgaagcctt...	734...	-----	aactcctgaactctctcctt	TTCTT	aCAG	ATGTGATg
M. Mus	ccagccag	gtgtgaagcctt...	360...	attgcaagctcctctgaact	-----	CTCTT	aCAG	ATGTGATg
R. Nor	ccagccag	gtgtgaagcctt...	333...	attgcaagctcctctgaact	-----	CTCTT	aCAG	ATGTGATg
C. Por	ccagccag	gtgtgctgcctt...	315...	-----	gatcccttgaactttttatt	TTCTT	aCAG	ATGTGATg
O. Cun	ccagccag	gtgagggccgt...	343...	-----	gattcctctgaactctcctt	CTCTT	aCAG	ATaTGATg
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F. Cat	ccagccag	gtgtgagggcct...	408...	-----	attctgtgactctctcctt	TTCTT	aCAG	ATGTGATg
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L. Afr	ccaaccag	gtatgagggcct...	430...	-----	ctccttgaactctctcctt	TTCTT	aCAG	ATaTGATa
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id=569340 gene=ENSG00000176302 name=FOXR1 segment=chr11\_118851439\_118851917\_1 type=IN

Figure 440: CS=19.89





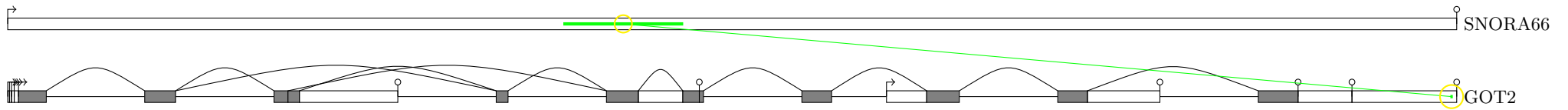
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R. Mac	gtgtaatt	gtgcaaactcgatcactagctctgcatgatgtggcagaagc	GAAGGGAACCAGgt	TTGCA	aaagtaactgtggtgataga...	39...	cctagtacagtc	taagtact
P. Tro	gtgtaatt	gtgcaaactcgatcactagctctgctgatgtggcagaagc	GAAGGGAACCAGgt	TTGCA	aaagtaactgtggtgatgga...	41...	cctagtacagtc	taagtact
P. Abe	gtgtaatt	gtgcaaactcgatcactagctctgcatgatgtggcagaagc	GAAGGGAACCAGgt	TTGCA	aaagtaactgtggtgatgga...	41...	cctagtacagtc	tgagtact
C. Jac	gcgtagct	gtgcaaactcgatcactagctctgcatgatgtggcagaagc	GAAGGGAACCAGgt	TTGCA	aaagtaactgtggtgataga...	41...	cctagtacagtc	tcagtact
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O. Cun	tttatact	atgcaaactcgatcactggctctgtgtgatgaggcagaagca	AAGGGAACCAGgt	TTGC	taaataaattgtggtgatag...	42...	cccagtacagtg	caagtacc
C. Fam	ttgaagtt	gtgcaaactcgatcactagctctgcatgatgttgcagaagc	GAGGGAACCAGgt	TTGC	taaagtaattgtggtgatag...	46...	cccattacagtg	taactacc
B. Tau	ctgaatt	gtgcaaactcgatcactagctctgcatgatgttgcagaagc	GAGGGAACCAGgt	TTGC	taaagtaattgtggtgatag...	42...	cccagtacattg	taactact
E. Cab	gtgaagtt	gtgcaaactcgatcactaactctgcatgatgttgcagaagc	GAAGGGAACCAGgt	TTGC	taaagtaattgtggtgatag...	42...	cccagtacagcg	tgactgcc
S. Sus	gtgaagtt	gtgcaaactcgatcactagctctgcatgatgttgcagaagc	GAGGGAACCAGgt	TTGC	taaagtaactgtggtgatg...	41...	cccactacattg	taactaac
L. Afr	gtgaagat	ctgcaaactcgatcactagctctgcatgatgttgcagaagc	GAGGGAACCAGgt	TTGC	taaagtaattgtggtgatag...	41...	cataatacagta	taagtacc
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R. Mac	caattggg	gtaagcaatatt...	4929...	gcctccaggcctccttcatc	TGTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
P. Tro	cagttggg	gtaagcaatatt...	4929...	gcctccaggcctccttcatc	TGTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
P. Abe	caattggg	gtaagcaatatt...	4929...	gcctccaggcctccttcatc	TGTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
C. Jac	caattggg	gtaagcaatatt...	4929...	gcctccaggcctccttcatc	TGTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
M. Mus	cagttggg	gtaagcaatagt...	4930...	cctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
C. Por	cagttggg	gtaagtaaaatt...	4930...	cctcctggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
O. Cun	cagttggg	gtaagcaacatt...	4930...	cctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
C. Fam	caactggg	gtaagcaatatt...	4930...	gctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
B. Tau	cagctggg	gtaagcagtggt...	4930...	gctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
E. Cab	cagctggg	gtaagcaatact...	4930...	gctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
S. Sus	caactggg	gtaagcaatatt...	4930...	gctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
L. Afr	caactggg	gtaagcaatatt...	4930...	gctccaggcctccttcatc	GTAAGTGGgt	TTCCTTT	cctctacag	agcttgca
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Figure 441: CS=15.34



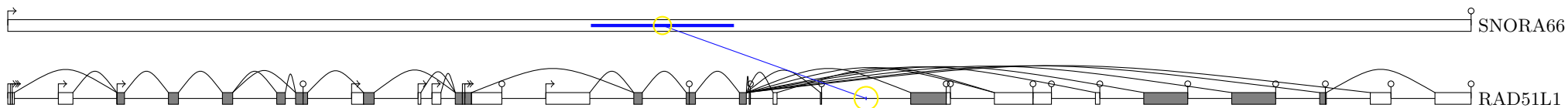
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C. Por	gtgaggtt	gtgcaaaactcgatcactagctctg	cgatggtggcagaagcga	AGGGAACCAGGTTTGCAAAAGT	aaTTGTG	GTGATAGAaatggttagcctcagaca	ctactgaggtggcccttctatcctagtagacgtc	caagaatc
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Figure 442: CS=18.59



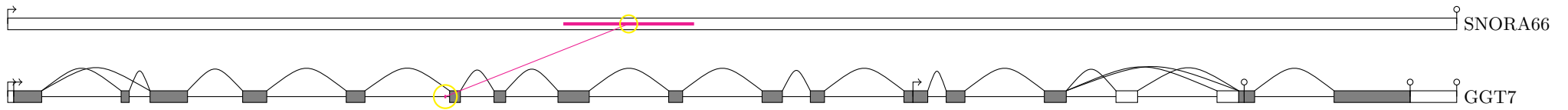
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Figure 443: CS=15.34



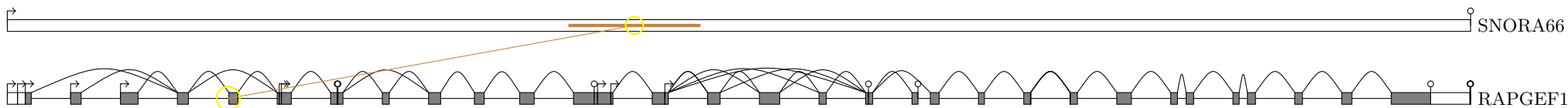
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Figure 444: CS=12.48



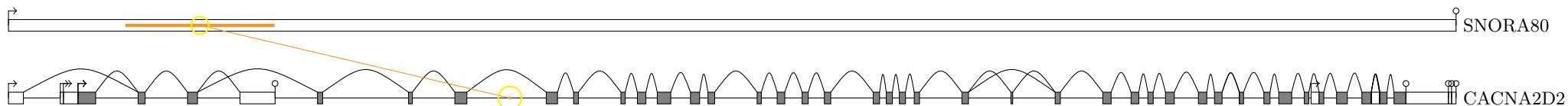
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Figure 445: CS=14.04



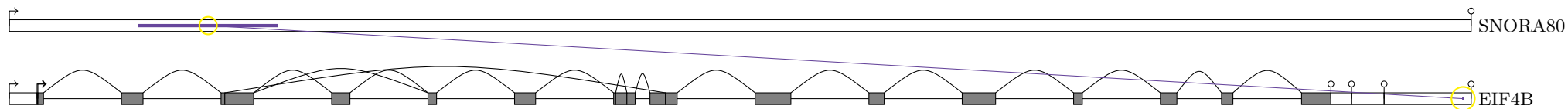
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F. Cat	---cctac	GATGcATGGGtTTGGA	TTAT	ggcaggcccgtccccctgga...85...-ggtcgacacagt----	g	aaaacaaa
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P. Tro	caaaggct	gtgagtgtgcag...2594...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...395...gcttccccccag	ccactgtc
C. Jac	caaaggct	gtgagtgtgcag...2559...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...399...acttccccccag	ccactgtc
M. Mus	caaaggct	gtaagtgtgag...2218...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...366...cctgccccccag	ctaccgtc
R. Nor	caaaggct	gtaagtgtgag...2349...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...367...cctgccccccag	ctaccgtc
C. Por	caaaggct	gtgagtgtgtca...2393...tcaagtacctaataagctga	ATAAATCCAGcCCCAT	caGTGGGcccccttaattgcttcttctgtg...371...cccccaaccag	ccaccgtc	
O. Cun	caaaggct	gtgagtgtgcag...1887...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...386...ccccctccccag	ccactgtc
C. Fam	caaaggct	gtgagtgtgcag...2833...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	cagcgggcccttaattgctt-----	...380...tctccccccag	ctactgtc
F. Cat	caaaggct	gtgagtgtgcag...2848...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	caTCCGggcccccttaattgcttcttctgtg...372...tttccccccag	ccactgtc	
B. Tau	caaaggct	gtgagtgtgcag...3565...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	catcgggcccttaattgctt-----	...378...cttccccctcag	ccaccgtc
E. Cab	caaaggct	gtgagtgtgcag...2853...tcaagtacctaataagctga	ATAAATCCAGcCCCAT	aatcgggcccttaattgctt-----	...401...cttcccccttag	ccaccgtc
L. Afr	caaaggct	gtgagtgtgcag...2811...tcaggtacctaataagctga	ATAAATCCAGcCCCAT	catcgggcccttaattgctt-----	...359...gcttccccatag	ccactgtc
	*****	** ** **	*** **	*****	*	** * * * *

id=297995 gene=ENSG00000007402 name=CACNA2D2 segment=chr3\_50418558\_50421626\_-1 type=IN

Figure 446: CS=12.48



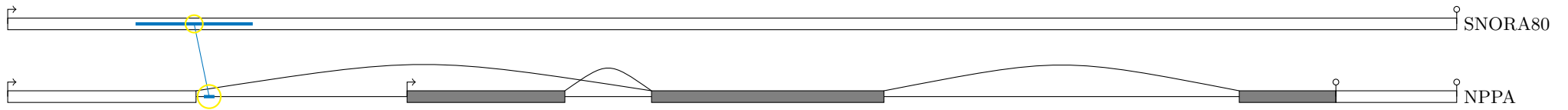
H. Sap	gtgcttat	gcatGGGTTGGATTTATGATGGGccCGTCccCCTGG	acctctcatagtaccccatg---.67...-ggttgcacaata	gataaaga
P. Tro	gtgcttat	gcatGGGTTGGATTTATGATGGGccCGTCccCCTGG	acctctcatagtaccccatg---.67...-ggttgcacaata	gataaaga
P. Abe	gtgcttat	gcatGGGTTGGATTTATGATGGGccCGTCccCGCGG	acctctcatagtaccccatg---.67...-ggttgcacaata	gatgaaga
C. Jac	atgctcat	gcatGGGTTGGATTTATG	-----atgggcctgt-----ccccctgggc..84...gggttgcaaca-tg	gataagga
M. Mus	gtgctggt	gcatGGGTTGGATTTATG	-----gcaggccctgt-----tcccctgggt..83...-ggtcgcacagaa	gagcctcg
R. Nor	aaacaagt	gcatGGGTTGGATTTATG	-----gcaggccctgt-----tcctctgggc..90...-cacagtaacaag	gataaaaa
C. Por	gtctttct	gcgtGGGTTGGATTTATG	-----gcagacctat-----ccctgtgggc..83...-ggttacacagca	gaaatggt
O. Cun	tttttaat	gcatGGGTTGGATTTATG	-----gcaggccctgt-----tcccctgggc..82...-ggttgcacagta	gaaaaaga
C. Fam	tattctat	gcatGGGTTGGATTTATG	-----gcaggcttgt-----ccccctgggc..84...-ggtcgcacagt	gaaaaaga
F. Cat	cctacgat	gcatGGGTTGGATTTATG	-----gcaggcttgt-----ccccctgggc..84...-ggtcgcacagt	aaaacaaa
B. Tau	tctcccat	gcatGGGTTGGATTTATG	-----gcaggcttgt-----ccccctgggc..81...-ggttgcacagt	gaaaagat
E. Cab	tccaacgt	gcatGGGTTGGATTTATG	-----gcaggcttgt-----ccccctgggc..82...gggttgacacagt	agaaaaga
L. Afr	agcctggt	gcatGGGTTGGATTTATG	-----gcaggccctat-----tcctatgggc..87...-ggttgtaacaatg	gataaaaa
		*** *****	* * * * * ** **	*

id=191071 gene=ENSG00000200792 name=SNORA80 segment=chr21\_33749496\_33749631\_-1 type=EN

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P. Tro	atctgaat	aaatthttccact...1429...-----gtaactctgtagacttattacCTGGGgATGtCTTGaTGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----	ttttctccaataaatctgatctttaagttc
P. Abe	atctgaat	aaatthttccact...1426...-----gtaactctgtagacttattacCTGGGgATGtCTTGaTGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----	ttttctccaataaatctgatctttaagttc
C. Jac	atctgaat	aaatthttccact...1440...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
M. Mus	acctgaat	aaatthttccact...1307...-----acttgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
R. Nor	acctgaac	aaacttccatc...1298...-----acttgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
C. Por	atctgaat	aaatthttccact...1593...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
O. Cun	accggagt	agattgttcacc...1361...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-gtt-----tttg-----
C. Fam	ccctgaat	acatthttccatcc...1316...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
F. Cat	acctgaat	aaatthttccatc...1533...-----acctggaagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
B. Tau	acctgaat	aaatthttccatc...1469...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
E. Cab	atctgaat	aaatthttccatc...1461...-----acctgggagatgtccttgaga	-----TGTAaAAT-CCcATCC	tttgggttggtggg-ttt-----tttg-----
L. Afr	atctcaat	aaatthttccatc...1424...tagacttaaacctgggaga	-----TGTAaAATCCcATCC	tttgggttggtggg-ttt-----tttg-----
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id=155109 gene=ENSG0000063046 name=EIF4B segment=chr12\_53434456\_53435992.1 type=E3

Figure 447: CS=12.48



H. Sap	gtgcttat	gcatGGGTTTGGATTTATgatgggcccgtccccctgga---.86...-ggttgacacaat----a	gataaaga
R. Mac	atgcttat	gcatGGGTTTGGATTTATgatgggcccgtccccctggg---.86...-ggttgacacaat----g	gataaaga
P. Tro	gtgcttat	gcatGGGTTTGGATTTATgatgggcccgtccccctgga---.86...-ggttgacacaat----a	gataaaga
C. Jac	atgctcat	gcatGGGTTTGGATTTATgatgggcccgtccccctggg---.85...gggttgacac-at----g	gataaaga
M. Mus	gtgctggt	gcatGGGTTTGGATTTATggcaggcccgttccccctggg---.84...-ggtcgacacaga----a	gagcctcg
R. Nor	aaacaagt	gcatGGGTTTGGATTTATggcaggcccgttccccctggg---.91...-----cacagtaacaag	gataaaaa
C. Por	gtctttct	gcatGGGTTTGGATTTATggcaggcccgttccccctggg---.84...-ggttacacagc----a	gaaatgtt
O. Cun	tttttaat	gcatGGGTTTGGATTTATggcaggcccgttccccctggg---.83...-ggttgacacagt----a	gaaaagaa
C. Fam	tattctat	gcatGGGTTTGGATTTATGGCaggcttgcctccccctgggct...82...-ggtcgacacagt----g	gaaaagaa
F. Cat	cctacgat	gcatGGGTTTGGATTTATGGCaggcttgcctccccctgggct...83...-ggtcgacacagt----g	aaaacaaa
B. Tau	tctcccat	gcatGGGTTTGGATTTATGGCaggcttgcctccccctgggct...79...-ggttgacacagt----g	gaaaagat
E. Cab	tccaactg	gcatGGGTTTGGATTTATGGCaggcttgcctccccctgggct...80...gggttgacacagt----g	agaaaaga
L. Afr	agcctgtt	gcatGGGTTTGGATTTATGGCaggccttattcctatgggct...86...-ggttgacacaat----g	gataaaaa
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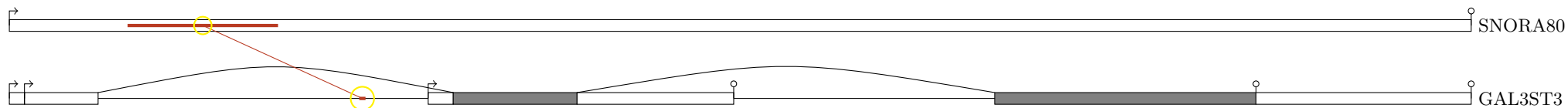
id=191071 gene=ENSG00000200792 name=SNORA80 segment=chr21\_33749496\_33749631\_-1 type=EN

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R. Mac	-gcatggtg	gtg---AGATAACCAAggACTCttttttactcttctcacacc---.244...ctgggcagctgg	gagacagg
P. Tro	-gcacggcg	gtg---AGATAACCAAggACTCttttttactcttctcacacc---.246...ctgggcagctgg	gagacagg
C. Jac	-gcatggcg	gtg---AGATAACCAAggACTCttttttgctcttccacacc---.245...ctgggcagctgg	gagacagg
M. Mus	agcggccag	ga----AGATAACCAAggACTCttttctgctcctctcacacc---.250...gctggcagctag	gagacagt
R. Nor	agcggccag	ga----AGATAACCAAggACTCttttctgctcctctcacacc---.232...cgggcagctgg	gagacagt
C. Por	-gcacggcg	gcgctc-AGATAACCAAggACTC-ttttctgctcctctcacacc---.241...ctgggcagctgg	gggacagt
O. Cun	-gcatggca	ggg---AGATAACCAAggACTCttttttgctcctctcacacc---.244...ctgggcagctgg	aagacagt
C. Fam	-gcatc---	GCTGTaAGATAaaCCAAggACTCttttttgctcctctcacacc---.241...cagggcagctgg	gagacaga
F. Cat	-gcatc---	aCTGTgAGATAaaCCAAggACTCttttttgctcctctcacacc---.244...cagggcagctgg	gagacagg
B. Tau	-gcatc---	GTTGTgAGATAaaCCAAggACTCttttttgctcctctcacacc---.250...cagggcagctgg	gagacaga
E. Cab	-gcatc---	GCTGTgAGATAaaCCAAggACTCttttttgctcctctcacacc---.245...cagggcagctgg	gagacaga
L. Afr	-gcatc---	aCTGTgAGATAaaCCAAggACTCttttttgctcctctcacacc---.246...cagggcagctgg	taggcaga
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id=666604 gene=ENSG00000175206 name=NPPA segment=chr1\_11907841\_11908137\_-1 type=I5

Figure 448: CS=10.14





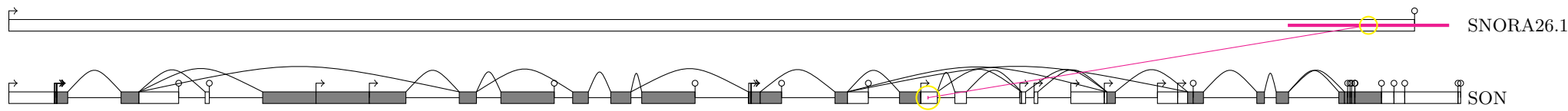
H. Sap	gtgcttat	gcaTGGGttTGGAtTTATG	atgggcccgtccccctggac	---.85...	-ggttgcaaca	gataaaga
R. Mac	atgcttat	gcaTGGGttTGGAtTTATG	ATGGccccgtccccctggcctct	...81...	-ggttgcaaatg	gataaaga
P. Tro	gtgcttat	gcaTGGGttTGGAtTTATG	atgggcccgtccccctggac	---.85...	-ggttgcaaca	gataaaga
P. Abe	gtgcttat	gcaTGGGttTGGAtTTATG	atgggcccgtccccctggac	---.85...	-ggttgcaaca	gatgaaga
M. Mus	gtgctggt	gcaTGGGttTGGAtTTATG	caggcccgttccccctgggtc	---.82...	-ggtcgcacagaa	gagcctcg
C. Por	gtctttct	gcaTGGGttTGGAtTTATG	cagacctatccctgtgggccc	---.82...	-ggttacacagca	gaaatggt
O. Cun	ttttta	gcaTGGGttTGGAtTTATG	caggcccgttccccctgggccc	---.81...	-ggttgcacagta	gaaaagaa
C. Fam	tattctat	gcaTGGGttTGGAtTTATG	caggcttgtccccctgggccc	---.83...	-ggtcgcacagtg	gaaaaaga
F. Cat	cttacgat	gcaTGGGttTGGAtTTATG	caggctcgtccccctgggccc	---.83...	-ggtcgcacagtg	aaaaaaa
B. Tau	tctccat	gcaTGGGttTGGAtTTATG	caggctcgtccccctgggccc	---.80...	-ggttgcacagtg	gaaaagat
E. Cab	tccaacgt	gcaTGGGttTGGAtTTATG	caggctcgtccccctgggccc	---.81...	-gggttgcacagtg	agaaaaga
O. Avi	agtgcaat	gcaTGGGttTGGAtTTATG	caggcccgtccccctgggccc	---.80...	-ggttgcacagtg	ggaaaaaa
L. Afr	agcctggt	gcaTGGGttTGGAtTTATG	caggcctattcctatgggccc	---.86...	-ggttgtaaatg	gataaaaa
		** *****	* * * ** *		*** **	

id=191071 gene=ENSG00000200792 name=SNORA80 segment=chr21\_33749496\_33749631\_-1 type=EN

H. Sap	cgtgcggt	gtgagtactgca...3262...	---gctggctacacccagacc	TGTAAT	TCCACCCA	agactaagttatctggagca...	95...	gctggggccag	atcccatc
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P. Tro	cgtgcggt	gtgagtactgca...3262...	---gctggctacacccagacc	TGTAAT	TCCACCCA	agactaagttatctggagca...	95...	gctggggccag	atcccatc
P. Abe	cgcgcgga	gtgagtactgca...3265...	---gctggctacacccagacc	TGTAAT	TCCACCCA	agactaagttatctggagca...	95...	gctggggccag	atcccatc
M. Mus	ctgcctgc	gtgagtactgca...3710...	-gtgctggcacacatccagac-	CTGTAAT	TCCACCCA	agactaagttatctggagca...	95...	gctggggccag	agcctttt
C. Por	cgtgcggc	gtgagtactgca...3203...	-ggctggccacgcccagggc	CTGTAAT	TCCACCCA	agactaagttatctggagca...	98...	gctggggccag	agcccatc
O. Cun	ggcgcgcc	gtgagtactgca...2942...	-gcgctggccacacccagc-	CTGTAAT	TCCACCCA	agactaagttatctggagca...	96...	gctggggccag	agcccatc
C. Fam	aacttggc	gtgagtactgca...3438...	-agctggccacacccagagc	CTGTAAT	TCCACCCA	agactaagttatctggagca...	98...	gctggggccag	agcccatc
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O. Avi	cggtcagc	gtgagtactgca...3272...	-ggctggccacacccagagc	CTGTAAT	TCCACCCA	agactaagttatctggagca...	98...	gctggggccag	agcctttt
L. Afr	cgcgcgcc	gtgagtactgca...4780...	-ggctggccacacccagagc	CTGTAAT	TCCACCCA	agactaagttatctggagca...	130...	gctggggccag	agcctttt
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id=48940 gene=ENSG00000175229 name=GAL3ST3 segment=chr11\_65813047\_65816481\_-1 type=IN

Figure 449: CS=17.94



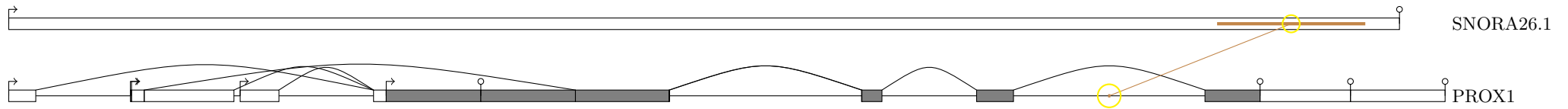
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R. Mac	cctttcct	atgcccttttaa...69...-attggaaca---ctcctctggat---CCTGccTGGAGTCACagct	gaaccagg
P. Tro	cctttcct	atgcccttttaa...71...-tggaaaact---cctctctggat---CCTGccTGGAGTCACagct	gtaccagg
P. Abe	cctttcct	gtgcccttttac...71...-tggaaaact---cctctctggat---CCTGccTGGAGTCACagct	gaaccagg
M. Mus	cctttcct	gtgcccttttaa...71...-tccacacct---cctctctggat---CCTGtcTGGAGTCACagct	gaaaaaaa
R. Nor	cctttcat	gtgcccttttaa...65...-ggaaaaatg---cacctcctctTGGATCCTGtcTGGAGTCACagat	gaaccaga
C. Por	actttcct	gtgctcttttaa...63...-gaagagactgacactcctct---TTGGA TCCTGtcTGGAGTCACagct	gaaaaaaa
O. Cun	cctttcct	gtgccctttcag...64...-aagagatggctgt-ttcttct---TTGGA TCCTGtcTGGAGTCACaaat	gcaaaaaa
C. Fam	cctttcct	gtgctctccaa...65...-cgagcccgcagagctcctct---TTGGA TCCTGtcTGGAGTCACagcc	caaccgga
F. Cat	cctttcct	gtgcccttttaa...69...-actaaaact---cctctctggat---CCTGtcTGGAGTCACagCG GA	accaga
B. Tau	cctttcca	gtgcccttttaa...65...-agagattttagaactcctct---CTGGATCCTGtcTGGAGTCACaaact	gaaccaga
E. Cab	cctttcct	gtgcccttttaa...64...-aggagatgtcagactcctc---TTGGATCCTGtcTGGAGTCACagct	gaaccaca
O. Avi	cctttcca	gtgccctattaa...65...-agagattttagaactcctct---CTGGATCCTGtcTGGAGTCACaaact	gaaccaga
	****	*** ** * ** **** ***** *	*

id=484076 gene=ENSG00000212187 name=SNORA26.1 segment=chr1\_212198903\_212199024\_1 type=EN

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M. Mus	ttgtgaaaggggtggttaa	caggggtgggatgg-gctggagataac-tatctgtggaccaccatttaggtcctggtggcctctgGTGATCCACAGGtCCAattgagaaccactgacttca...58...tgctgcaagat	gta-gtgcg
R. Nor	-----aa	cagggagggatgg-gctggagataac-tatctgtggaccaccatttaggtcctggtggcctctgGTGATCCACAGGtCCAattgagaaccactgacttca...53...tgctgcaagat	gtaggtgc-
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O. Cun	tgctgacgggtggttaag	gagg-gtgaggggggatggaaagtac-tatctgtggaccaccatttaggcctggtggcctctgGTGATCCACAGGTTCAAattgagaaccactgatttca...53...tgctacgaagat	gtaggtgc-
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id=73029 gene=ENSG00000159140 name=SON segment=chr21\_34942082\_34942236\_1 type=AN

Figure 450: CS=11.7



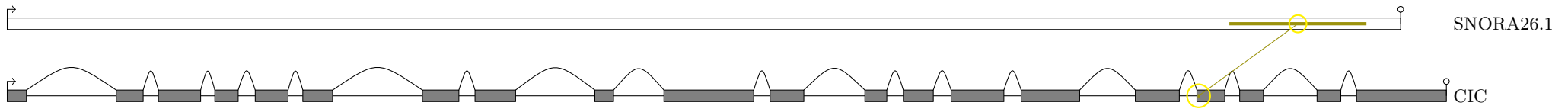
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P.Abe	cctttcct	gtgcccttttac...64...--aagagactggaaaactcctc	TCTGGAtCCTGcCTGG	agtcacagct	gaaccagg
C.Jac	cctttcct	gtgcccttttaa...64...--aagaggctgaaaatcctc	TTTGGAtCCTGtCTGG	agtcacacct	gaaacaga
M.Mus	cctttcct	gtgcccttttaa...64...--aagaggctccacacctcctc	TCTGGAtCCTGtCTGG	agtcacagct	gaaaaaaa
R.Nor	cctttcat	gtgcccttttaa...63...--gaggaaaaatgcacctcctc	TTTGGAtCCTGtCTGG	agtcacagat	gaaccaga
C.Por	actttcct	gtgctcttttaa...62...agaagagactg--acactcctc	TTTGGAtCCTGtCTGG	agtcacagct	gaaaaaaa
O.Cun	cctttcct	gtgccctttcag...63...--gaagagatggctgt-ttcttc	TTTGGAtCCTGtCTGG	agtcacaaat	gcaaaaaa
C.Fam	cctttcct	gtgctcctccaa...64...--acgagcccgcagagctcctc	TTTGGAtCCTGtCTGG	agtcacagcc	caaccgga
F.Cat	cctttcct	gtgcccttttaa...62...ggatgagacta--aaactcctc	TCTGGAtCCTGtCTGG	agtcacagcg	gaaccaga
B.Tau	cctttcca	gtgcccttttaa...64...--aagagattttagaactcctc	TCTGGAtCCTGtCTGG	agtcacaaat	gaaccaga
E.Cab	cctttcct	gtgcccttttaa...64...--aggagattgtcagactcctc	TTTGGAtCCTGtCTGG	agtcacagct	gaaccaca
O.Avi	cctttcca	gtgccctattaa...64...--aagagattttagaactcctc	TCTGGAtCCTGtCTGG	agtcacaaat	gaaccaga
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id=484076 gene=ENSG00000212187 name=SNORA26.1 segment=chr1\_212198903\_212199024.1 type=EN

H.Sap	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
R.Mac	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
P.Tro	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
P.Abe	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
C.Jac	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
M.Mus	actttgag	gtaggagccagt...4950...aataccattgtctccttgta	TCAGCAG	GtTCCAGa
R.Nor	actttgag	gtaggaaccagt...4950...ataccattgtctccttgta	TCAGCAG	GtTCCAGa
C.Por	actttgag	gtaggaactaat...4950...aacgcggtgtctccttgta	TCAGCAG	GtTCCAGa
O.Cun	actttgag	gtaggaactaat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
C.Fam	actttgag	gtaggaactcat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
F.Cat	actttgag	gtaggaactcat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
B.Tau	actttgag	gtaggaactcat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
E.Cab	actttgag	gtaggaactcct...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
O.Avi	actttgag	gtaggaattcat...4950...aatgccattgtctccttgta	TCAGCAG	GtTCCAGa
	*****	***** *	* ** *****	*****

id=672503 gene=ENSG00000117707 name=PROX1 segment=chr1\_214185059\_214208991.1 type=IN VIEW

Figure 451: CS=15.12



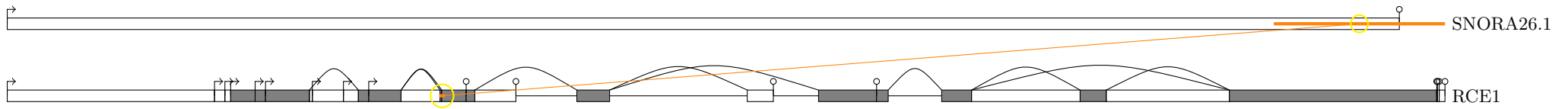
H.Sap	cctttcct	atgcccttttaa...67...--agactggaaaactcctctct	GGATCCTGcCTGGAGt	gtaccagg
R.Mac	cctttcct	atgcccttttaa...65...--agatattggaactcctctct	GGATCCTGcCTGGAGt	gaaccagg
P.Tro	cctttcct	atgcccttttaa...67...--agactggaaaactcctctct	GGATCCTGcCTGGAGt	gtaccagg
P.Abe	cctttcct	gtgcccttttac...67...--agactggaaaactcctctct	GGATCCTGcCTGGAGt	gtaccagg
C.Jac	cctttcct	gtgcccttttaa...67...--aggctgaaaatcctctctt	GGATCCTGtCTGGAGTCA	gaaacaga
M.Mus	cctttcct	gtgcccttttaa...67...--aggctccacactcctctct	GGATCCTGtCTGGagt	gaaaaaaa
R.Nor	cctttcat	gtgcccttttaa...66...--gaaaaatgcacctcctctt	GGATCCTGtCTGGagt	gaaccaga
O.Cun	cctttcct	gtgccctttcag...66...--gagatggtcgtttctctt	GGATCCTGtCTGGAGTC	gcaaaaaa
C.Fam	cctttcct	gtgctcctccaa...67...--agcccagagctcctctt	GGATCCTGtCTGGAGTC	caaccgga
F.Cat	cctttcct	gtgcccttttaa...65...tgagact--aaaactcctctct	GGATCCTGtCTGGAGTC	gaaccaga
B.Tau	cctttcca	gtgcccttttaa...67...--agattttagaactcctctct	GGATCCTGtCTGGAGt	gaaccaga
E.Cab	cctttcct	gtgcccttttaa...67...--agattgtcagactcctctt	GGATCCTGtCTGGAGt	gaaccaca
O.Avi	cctttcca	gtgccctattaa...67...--agattttagaactcctctct	GGATCCTGtCTGGAGt	gaaccaga
L.Afr	cctttcct	gtgcccttttaa...67...--agactggagaactcctctt	GGATCCTGtCTGGAGTCACAG	gaaccaga
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id=484076 gene=ENSG00000212187 name=SNORA26.1 segment=chr1\_212198903\_212199024.1 type=EN

H.Sap	gtggacaa	gtgagcatgggc...60...-----gggaggtgacctgcccggcc	CTCCAG	CAGGGTC
R.Mac	gtggacaa	gtgagcatgggc...59...-----gagaggtgacctgcccagcc	CTCCAG	CAGGGTC
P.Tro	gtggacaa	gtgagcatgggc...60...-----gggaggtgacctgcccggcc	CTCCAG	CAGGGTC
P.Abe	gtggacaa	gtgagcatgggc...59...-----gggaggtgacctgcccggcc	CTCCAG	CAGGGTC
C.Jac	gtggacaa	gtgagcatgggc...54...----ggcaggggaggtgacctgct	TGGCctCCAG	CAGGGTC
M.Mus	gtggacaa	gtgagcaggggc...63...-----gaggtgacctgctggcccc	CCAG	CAGGGTC
R.Nor	gtggacaa	gtgagcaggggc...62...-----gaggtgacctgctggcacc	CCAG	CAGGGTC
O.Cun	gtggacaa	gtgagcaggggc...54...----gcagtggaggtgacctgccc	GACTctCCAG	CAGGGTC
C.Fam	gtggacaa	gtgagcatgggc...57...-----acaggagaggtgacctgccc	GGCTctCCAG	CAGGGTC
F.Cat	gtggacaa	gtgagcatgggc...58...----gcaggggaggtgacctgccc	GGCTctCCAG	CAGGGTC
B.Tau	gtggacaa	gtgagcatgggc...60...-----aggaggtgacctgctgct	CTCCAG	CAGGGTC
E.Cab	gtggacaa	gtgagcatgggc...61...-----gggaggtgacctgcccact	CTCCAG	CAGGGTC
O.Avi	gtggacaa	gtgagcatgggc...60...-----aggaggtgacctgctgct	CTCCAG	CAGGGTC
L.Afr	gtggacaa	gtgagcatgggc...53...ctggggcaggggaggtgacc	CTGTgGGCTctCCAG	CAGGGTC
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id=115675 gene=ENSG00000079432 name=CIC segment=chr19\_42797989\_42798086.1 type=IN

Figure 452: CS=15.12



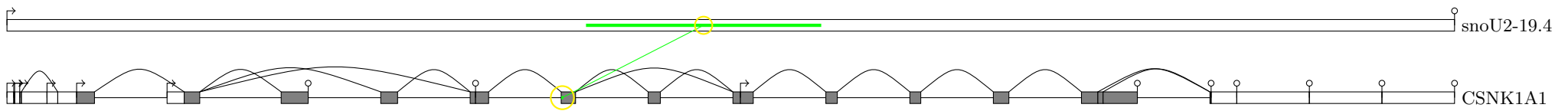
H.Sap	cctttcct	atgcccttttaa...71...tggaaaactcctctctggat	CCTGcCTGgaGTCACAGct	gtaccagg
R.Mac	cctttcct	atgcccttttaa...69...attggaacactcctctctggat	CCTGcCTGgaGTCACAGct	gaaccagg
P.Tro	cctttcct	atgcccttttaa...71...tggaaaactcctctctggat	CCTGcCTGgaGTCACAGct	gtaccagg
P.Abe	cctttcct	gtgcccttttac...71...tggaaaactcctctctggat	CCTGcCTGgaGTCACAGct	gaaccagg
C.Jac	cctttcct	gtgcccttttaa...71...tggaaaactcctctctggat	CCTGtCTGgaGTCACAcct	gaaacaga
M.Mus	cctttcct	gtgcccttttaa...71...tccacacctcctctctggat	CCTGtCTGgaGTCACAGct	GAAAAaaa
R.Nor	cctttcat	gtgcccttttaa...70...aatgacactcctctctggat	CCTGtCTGgaGTCACAGat	gaaccaga
C.Por	actttcct	gtgctcttttaa...69...actgacactcctctctggat	CCTGtCTGgaGTCACAGct	GAAAAaaa
O.Cun	cctttcct	gtgccctttcag...70...tggtcgtttctctctggat	CCTGtCTGgaGTCACAAat	gcaaaaaa
C.Fam	cctttcct	gtgcgctcccaa...71...cgcagagctcctctctggat	CCTGtCTGgaGTCACAGcc	caaccgga
B.Tau	cctttcca	gtgcccttttaa...71...ttagaactcctctctggat	CCTGtCTGgaGTCACAAact	gaaccaga
E.Cab	cctttcct	gtgcccttttaa...71...tgtcagactcctctctggat	CCTGtCTGgaGTCACAGct	gaaccaca
O.Avi	cctttcca	gtgccctattaa...71...ttagaactcctctctggat	CCTGtCTGgaGTCACAAact	gaaccaga
L.Afr	cctttcct	gtgcccttttaa...71...tggagaactcctctctggat	CCTGtCTGgaGTCACAGct	gaaccaga
	*****	*** ** *	* ** ***** *****	*

id=484076 gene=ENSG00000212187 name=SNORA26.1 segment=chr1.212198903.212199024.1 type=EN

H.Sap	gcatccag	gtgccaaggagg...51...-----caaaactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
R.Mac	gcatccag	gtgccaaggagg...44...-----caagactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
P.Tro	gcatccag	gtgccaaggagg...51...-----caaaactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
P.Abe	gcatccag	gtgccaaggagg...51...-----caaaactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
C.Jac	gcatccag	gtgccaaggagg...52...-----aagactgatgccccctttc	TGTGGCTCAG	cCAGGcac
M.Mus	gcatccag	gtgccaaggagg...49...-ggaacatcactaacgcccc	TTTCTGTGGCTCAG	cCAGGcac
R.Nor	gcatccag	gtgccaaggagg...49...-----catcactgataccccctttc	CTGTGGCTCAG	cCAGGcac
C.Por	gcatccag	gtgccaagaag...42...gggagcaagactgatgcccc	TTTCTGTGGCTCAG	cCAGGcac
O.Cun	gcatccag	gtgccaaggggc...31...-----cggactgatgccccctttc	TGTGGCTCAG	cCAGGcac
C.Fam	gcatccag	gtgccaaggagg...50...-----caagactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
B.Tau	gcatccag	gtgccaaggagg...50...-----gagactgatgccccctttc	TGTGGCTCAG	cCAGGcac
E.Cab	gcatccag	gtgccaaggagg...51...-----caagactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
O.Avi	gcatccag	gtgccaaggagg...50...-----gagactgatgccccctttc	TGTGGCTCAG	cCAGGcac
L.Afr	gcatccag	gtgccaaggggc...47...---ataactgatgccccctttc	CTGTGGCTCAG	cCAGGcac
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id=359305 gene=ENSG00000173653 name=RCE1 segment=chr11.66611333.66611426.1 type=AN

Figure 453: CS=12.6



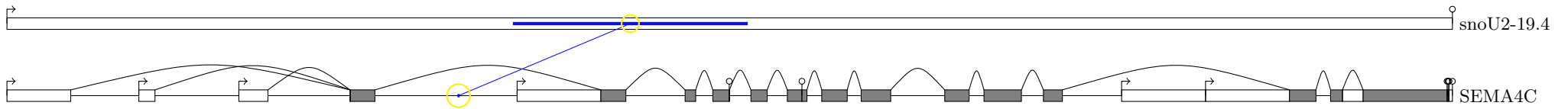
H. Sap	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	c	tttccgg	gtc-tac	ctgatgcatgatctctacagttctgaga	agcagaac
P. Tro	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	c	tttccag	gtc-tac	ctgatgcatgatctctacagttctgaga	agcaaaac
P. Abe	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	c	tttccag	gtc-tac	ctgatgcatgatctctacagttctgaga	agcaaaac
C. Jac	ccgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAGG	c	tttccag	gtc-tat	ctcatgcatgatctctacagttctgaga	agcaaaac
M. Mus	ctgaaata	gatcagtgatgaaatagc	caaatCTGAgCATCAGAAGG	c	ttttgg	gtc---	ctggg-gcatgatctctctagtctgaga	agcaaaac
R. Nor	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGG	c	ttttgg	gtc-gg	ctgggtgcatgatctctatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCAGAAGG	c	tttccg	gtc-tcc	ctgatgcatgatctctatagttctggga	agcagatt
O. Cun	ccaagtg	ggtcaatgacgaaatagc	caaatCTGAgCATCaGAAGA	c	tttctag	tcttac	ctgatgcatgatctcattgttctgaga	agcaaaac
C. Fam	ctgtagt	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGA	c	tttccag	gtc-tac	ctgatgcatgatctctctagtctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAGA	c	ccaccag	gtg-tat	ctgatgcatgatctctgtagtctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGA	c	tttccag	gtc-tac	ctgatgcatgatctctgtagtctgaga	agcaaaag
S. Sus	cagaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAGA	c	tttccg	gtc-tac	ctgatgcatgatctctgtagtctgaga	agcaaaag
L. Afr	atgaagtg	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAGA	c	tttctag	gtc-tac	ctgatgcatgatctctatagttctggga	agcaatcg
	*	* * * * *	* * * * * * * * * * * * * * *	*	* * *	* * * * * * * * * * * * * * *	* * * * * * * * * * * * * * *	* * * * *

id=597383 gene=ENSG00000201592 name=snoU2\_19.4 segment=chrX.20154424\_20154503\_-1 type=EN

H. Sap	ctgaccag	g	tatgtgaaatt...4616...--aattatctctcccttctttt-TTTTCaG	ATGATCAG
P. Tro	ctgaccag	g	tatgtgaaatt...4623...--aattatctctcccttctttt-TTTTCaG	ATGATCAG
P. Abe	ctgaccag	g	tatgtgaaatt...4604...--aattatctctcccttctttt-TTTTCaG	ATGATCAG
C. Jac	ctgaccag	g	tatgtgaaatt...4948...tcaattatctctcccttctct--TTTTTCaG	ATGATCAG
M. Mus	ctgaccag	g	tatgccaact...1032...tcacctcttctaccctttt--CTTTTCaG	ATGATCAG
R. Nor	ctgaccag	g	tatgtgaact...650...--acctgttctacccttttct--CTTTCaG	ATGATCAG
C. Por	ctgatcag	g	tatgtgaaatt...3828...-catttgtctccccctcctt--TTTTTCaG	ATGATCAG
O. Cun	ctgaccag	g	tatgtgaaatg...4262...-tgcctcttcccttctttttt--TTTTTCaG	ATGATCAG
C. Fam	ctgaccag	g	tatgtgaaatt...3356...ttatctttcaccctcctt--TTTTTCaG	ATGATCAG
B. Tau	ctgaccag	g	tatgtgaaact...3168...-tgattttctctcctccctt--TTTTTCaG	ATGATCAG
E. Cab	ctgaccag	g	tatgtgaaatt...3560...-cacttgtctctcctcctt--TTTTTCaG	ATGATCAG
S. Sus	ccgaccag	g	tatgtgaaatt...3177...tcaattatctctccccctt--TTTTTCaG	ATGATCAG
L. Afr	ctgaccag	g	tatgtgagatt...3328...--tccttccccctccccctttt-TTTTCaG	ATGATCAG
	*	* * * * *	* * * * * * * * * * * * * * *	* * * * *

id=54105 gene=ENSG00000113712 name=CSNK1A1 segment=chr5.14889952\_148904607\_-1 type=IN

Figure 454: CS=17.68



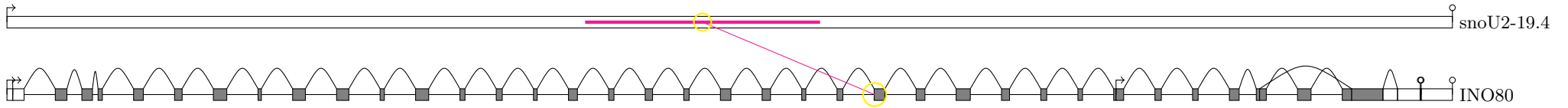
H. Sap	ctgaagtg	gatcaatgatgaaactagc	CAAACTGAGCATCA	gaaggcctttccggtc-tacctgatgcatgatctctacagttctgaga	agcagaac
P. Tro	ctgaagtg	gatcaatgatgaaactagc	CAAACTGAGCATCA	gaaggcctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaac
C. Jac	ccgaagtg	gatcaatgatgaaactagc	CAAACTGAGCATCA	gaaggcctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaac
M. Mus	ctgaaata	gatcagtgatgaaatagc	CAAACTGAGCATCA	gaaggccttttgggt-ctggg-gcatgatctctctagttctgaga	agcaaac
R. Nor	ctgaagtg	gatcaatgatgaaatagc	CAAACTGAGCATCA	gaaggccttttgggt-ggctgggtgcatgatctctatagttctgaga	agcaaac
C. Por	tcaaagtg	gatcaatgatgaaatagc	CAAACTGAGCATCA	gaagactttcggtc-tccctgatgcatgatctctatagttctggga	agcagatt
O. Cun	cgaagtg	ggatcaatgacgaaatagc	CAAACTGAGCATCA	gaagaccttctagttctacctgatgcatgatctcattgttctgaga	agcaaac
F. Cat	ctgaagtg	gatcaatgatgaaatagc	CAAACTGAGCATCA	gaagactttgagtc-tatctgatgcatgatctctgtagttctgaga	agcaaac
B. Tau	ctgaagtg	gatcagtgatgaaatagc	CAAACTGAGCATCA	gaagaccaccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaac
E. Sus	ctgaagtg	gatcaatgatgaaatagc	CAAACTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctgtagttctgaga	agcaaac
S. Sus	cagaagtg	gatcaatgatgaaatagc	CAAACTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctgtagttctgaga	agcaaac
L. Afr	atgaagtg	gatcagtgatgaaatagc	CAAACTGAGCATCA	gaagaccttctagtc-tacctgatgcatgatctctatagttctggga	agcaaac
	*	*	*****	*****	*****

id=597383 gene=ENSG00000201592 name=snoU2\_19.4 segment=chrX.20154424.20154503.-1 type=EN

H. Sap	ttctgggg	gtgagtcctgg...	451...	gcacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	316...	-----cctagtgccctg	ctgtgctc
P. Tro	ttctgggg	gtgagtcctgg...	449...	gcacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	316...	-----cctagtgccctg	ctatgctc
C. Jac	ttctgggg	gtgagtcctgg...	449...	gcacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	316...	-----cctagtgccctg	ctgtgctc
M. Mus	ttctgggg	gtgagtcctga...	577...	-cgacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	297...	-----cctagtgccctg	ctg-----
R. Nor	ttctgggg	gtgagtcctga...	608...	-acacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	285...	-----cactatgccag	ctgtgtgt
C. Por	ttctgggg	gtgagtcctga...	489...	-cacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	286...	-----cactatgccag	ctgtgtgt
O. Cun	ttctgggg	gtgagtcctga...	534...	-catgacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	280...	-----cactatgccag	ctgtgtgt
F. Cat	ttctgggg	gtgagtcctga...	489...	-cacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	314...	-----cactatgccag	ctgtgtgt
B. Tau	ttctgggg	gtgagtcctga...	519...	-cacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	305...	-----tccatggcgg	ctgtgtgt
E. Cab	ttctgggg	gtgagtcctga...	525...	-tatgacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	308...	-----cgagcggcgg	ctgtgtgt
S. Sus	ttctgggg	gtgagtcctga...	446...	-cacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	294...	-----gtccatggcgg	ctgtgtgt
L. Afr	cactgggg	gtgagtcctga...	584...	-cacacaccctgtgtaa-agg---	TGATGTCAGgtGTTTG	tatcagccctgctctggtg...	276...	-----tccagccccag	ctgtgtgt
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id=224398 gene=ENSG00000168758 name=SEMA4C segment=chr2.97532668.97533514.-1 type=IN

Figure 455: CS=10.2



H. Sap	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAG	gctttccggtc-tacctgatgcatgatctctacagttctgaga	agcagaac
P. Tro	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAG	gctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaac
P. Abe	ctgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAG	gctttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaac
C. Jac	cgaagtg	gatcaatgatgaaactagc	caaatCTGAgCATCaGAAG	gctttccagtc-tatctcatgcatgatctctacagttctgaga	agcaaac
C. Por	tcaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAG	actttcggtc-tccctgattcatgatctctatagttctggga	agcagatt
O. Cun	caaagtg	ggtcaatgacgaaatagc	caaatCTGAgCATCaGAAG	acctttcagtc-tacctgatgcatgatctctcattgttctgaga	agcaaac
C. Fam	ctgtagt	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAG	acctttccagtc-tacctgatgcatgatctctcattgttctgaga	agcaaac
F. Cat	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAG	actttcggtc-tatctgatgcatgatctctgtagttctgaga	agcaaac
B. Tau	ctgaagtg	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAG	accaccagtc-tatctgatgcatgatctctgtagttctgaga	agcaaac
E. Cab	ctgaagtg	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAG	acctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaac
S. Sus	cagaagt	gatcaatgatgaaatagc	caaatCTGAgCATCaGAAG	acctttcagtc-tacctgatgcatgatctctgtagttctgaga	agcaaac
L. Afr	atgaagt	gatcagtgatgaaatagc	caaatCTGAgCATCaGAAG	acctttcagtc-tacctgatgcatgatctctatagttctggga	agcaatcg
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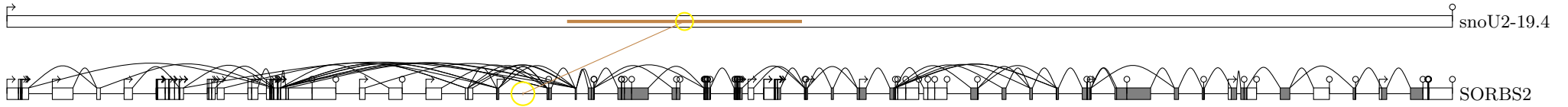
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P. Tro	ttggccag	gtgagaggtttg...	2333... agcgtgtctgctgtggtttg	TTTCaG	ATGgTTAg
P. Abe	ttggccag	gtgagaggtttg...	2303... agcgtgtctgctgtggtttg	TTTCaG	ATGgTTAg
C. Jac	ttggccag	gtgagaggtttg...	2329... agcgtgtctgctgtggttta	TTTCaG	ATGgTTAg
C. Por	ttggccag	gtgaggagtttg...	990... agcatgtctgctgtggtctg	TTTCaG	ATGgTTAg
O. Cun	ttggccag	gtgagaagtttg...	1475... aacgtatctgctgtggtttg	TTTCaG	ATGgTTAg
C. Fam	ttggccag	gtgagaagtttg...	732... agcatgtctgctgtggtctg	TTTCaG	ATGgTTAg
F. Cat	ttggccag	gtgagaagtttg...	733... agcatgtctgctgtggtttg	TTTCaG	ATGgTTAg
B. Tau	ttagccag	gtgagaagtttg...	725... agcatgtctgctgtggtttg	TTTCaG	ATGgTTAg
E. Cab	ttggccag	gtgagaagtttg...	726... agcatgtctgctgtggtttg	TTTCaG	ATGgTTAg
S. Sus	ttggccag	gtgagaagtttg...	1131... agcatgtctgctgtggtttg	TTTCaG	ATGgTTAg
L. Afr	ttggccag	gtgaggagtttg...	754... agcatgtctgctgtggtttg	TTTCaG	ATGgTTAg
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id=400811 gene=ENSG00000128908 name=INO80 segment=chr15.41337274.41339605.-1 type=IN

Figure 456: CS=10.2





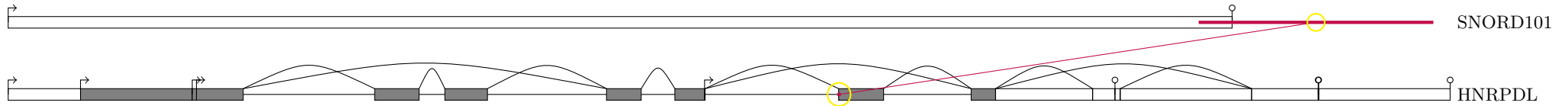
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P. Tro	ctgaagtg	gatcaatgatgaaactagccaa	ATCTGAGCA	AGAAGG	ccttcaggtc-tacctgatgcatgatctctacagttctgaga	agcaaac
P. Abe	ctgaagtg	gatcaatgatgaaactagccaa	ATCTGAGCA	AGAAGG	ccttcaggtc-tacctgatgcatgatctctacagttctgaga	agcaaac
M. Mus	ctgaaata	gatcagtgatgaaatagccaa	ATCTGAGCA	AGAAGG	ccttttggt---ctggg-gcatgatctctagttctgaga	agcaaac
R. Nor	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	gccttttggtc-ggctgggtgcatgatctctatagttctgaga	agcaaac
C. Por	tcaaatg	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tccctgattcatgatctctatagttctggga	agcagatt
O. Cun	caaagtg	ggtcaatgacgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
C. Fam	ctgtagt	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
F. Cat	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
B. Tau	ctgaagtg	gatcagtgatgaaatagccaa	ATCTGAGCA	AGAAGG	accaccaggc-tatctgatgcatgatctctgtagttctgaga	agcaaac
E. Cab	ctgaagtg	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
S. Sus	cagaagt	gatcaatgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
L. Afr	atgaagt	gatcagtgatgaaatagccaa	ATCTGAGCA	AGAAGG	accttcaggtc-tacctgatgcatgatctctcattggtctgaga	agcaaac
	*	*** **	*****	*	**	* ***** ***** **

id=597383 gene=ENSG00000201592 name=snoU2\_19.4 segment=chrX.20154424\_20154503\_-1 type=EN

H. Sap	gaacacag	gtatgctgtctg...4942...	ccttggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
P. Tro	gaacacag	gtatgctgtctg...4942...	ccttggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
P. Abe	gaatacag	gtatgctgtctg...4942...	ccttggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
M. Mus	gaatacag	gtacactgtctc...4944...	-ttggcctctgcatatcatg	TTTTTTGCTtc	CAG	ATagcggt
R. Nor	gaatacag	gtataccatctc...4944...	-ttggcctctgctatatcatg	TTTTTTGCTtc	CAG	ATagcggt
C. Por	gaatacag	gtatgctgtctc...4194...	ccttggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
O. Cun	gaatacag	gtatgctgtctc...4324...	ccttggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
C. Fam	gaatacag	gtacgctgtctc...4534...	ctgtggcctctgctatatca	TTTTTTGCTtt	CAG	ATagcggt
F. Cat	gaatacag	gtatgctgtctc...4334...	ctgtggcctctgctatatca	TTTTTTGCTtt	CAG	ATagcggt
B. Tau	gaacacag	gtatgctgtctc...4942...	ctgtggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
E. Cab	gaatacag	gtatgctgtctc...4567...	ctgtggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
S. Sus	gaatacag	gtatgctgtctc...4942...	ctatggcctctgctatatca	TTTTTTGCTtc	CAG	ATagcggt
L. Afr	gaatacag	gtatgacatctc...4944...	-tcggcctctgctatatcatg	TTTTTTGCTtc	CAG	ATagcggt
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id=721998 gene=ENSG00000154556 name=SORBS2 segment=chr4.186606001\_186611715\_-1 type=IN

Figure 457: CS=10.14



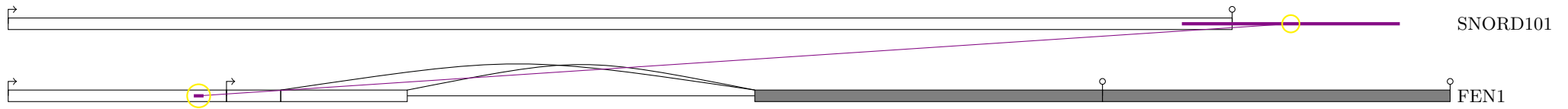
H. Sap	--actacagt	gtttgaatgatg...30...-tttatgagtgaacat-aaga	GTCTGacAAAC	cTGTAggt
R. Mac	--actacagt	gtttgaatgatg...30...-tttatgagtgaatgt-aaga	GTCTGacAAAC	cTGTAggt
P. Tro	--actacagt	gtttgaatgatg...30...-tttatgagtgaacat-aaga	GTCTGacAAAC	cTGTAggt
P. Abe	--actacagt	gtttgaatgatg...30...-tttatgagtgaacat-aaga	GTCTGacAAAC	cTGTAggt
C. Jac	--actacagt	gtttgaatgatg...29...ttttatgagtgaaa-at-caga	GTCTGacAAAC	cTGTAggt
M. Mus	--gctacagt	gtttgcacatgatg...31...-tcatgggtgagaaacagcta	GTCTGacAAAC	cTGTAgct
R. Nor	--gctacagt	gtttgaatgatg...31...-tcatgggtgagattcagcta	GTCTGacAAAC	cTGTAgca
C. Por	--gctacagt	gtttgaatgatg...32...-tcatgagtgaacatgaata	GTCTGacAAAC	cTGTAgat
O. Cun	--actacagt	gtttgaatgatg...29...-ttcctgagtgcacac-tgca	GTCTGacAAAC	cTGTAggt
C. Fam	--actacagc	gtttgaatgatg...31...-cgatgagtgaacatgaaca	GTCTGacAAAC	cTGTAggt
F. Cat	--actacagt	gtttgaatgatg...30...-tctgtgagtgaacct-aaca	GTCTGacAAAC	cTGTAggt
B. Tau	--actacagt	gtttgaatgatg...30...-tctatgagtgaatcg-cata	GTCTGacAAAC	cTGTAgat
E. Cab	--actacagt	gtttgatgatg...30...-tttatgagtgaacct-aata	GTCTGacAAAC	cTGTAggt
S. Sus	--actacagc	gtttgaatgatg...30...-tccatgagtgaatct-aata	GTCTGacAAAC	cTGTAggt
L. Afr	aaactaca--	gtttgaatgatg...30...ttttatgagtgaacat-aca-	GTCTGacAAAC	cTGTAggt
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id=792707 gene=ENSG00000206754 name=SNORD101 segment=chr6.133136446.133136518.1 type=EN

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R. Mac	tggccg	ag	gtgagacttaat...500...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
P. Tro	tggccg	ag	gtgagacttaat...511...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
P. Abe	tggccg	ag	gtgagacttaat...515...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
C. Jac	tggccg	ag	gtgagacttaat...491...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
M. Mus	tggaag	ag	gtgagacctcct...165...--ttgtttcctaaccttcgttg	TGCAttGTTTCAG	GTcagggc
R. Nor	cggaag	ag	gtgagccttgct...186...--gttggttcctaaccatccttg	TGCAttGTTTCAG	GTcagggc
O. Cun	tggccg	ag	gtgagacttaac...412...aggttgtttcctaacaatca-	CTGCAttGTTTCAG	GTcagggc
C. Por	tggccg	ag	gtgagccttaat...478...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
C. Fam	tggacg	ag	gtgagacttaat...462...--tcgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
F. Cat	tggacg	ag	gtgagacttaat...669...--ttgtctcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
B. Tau	aggccg	ag	gtgagacctaata...493...--ttgtttcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
E. Cab	tggccg	ag	gtgagacttaat...493...--ttgtttcctaacgatcattg	TGCAttGTTTCAG	GTcagggc
S. Sus	tggacg	ag	gtgagactttgc...1358...--gtatctcctaacaatcattg	TGCAttGTTTCAG	GTcagggc
L. Afr	tggacg	ag	gtaagacttgat...398...--ttgtttgctaacaatgttg	TGCAttGTTTCAG	GTcagggc
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id=338254 gene=ENSG00000152795 name=HNRPDL segment=chr4.83347787.83348342.-1 type=IN

Figure 458: CS=11.7



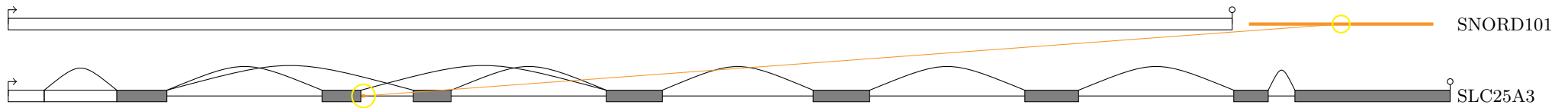
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P. Tro	actacagt	gtttgaatgatgacttttaa-ttgtcggataacccttcactccttttatgagtgaacat-aaga	GTCTga	CAAAC	CTGT	agggt
P. Abe	actacagt	gtttgaatgatgacttttaa-ttgtcggataacccttcactccttttatgagtgaacat-aaga	GTCTga	CAAAC	CTGT	agggt
C. Jac	actacagt	gtttgaatgatgactttaa-ttgtcggataacccttcactccttttatgagtgaacat--caga	GTCTga	CAAAC	CTGT	agggt
M. Mus	gctacagt	gtttgcatgatgacttgaa-ttgtcggataacccttcaccccggttcattgggtgagaaacagcta	GTCTga	CAAAC	CTGT	agct
R. Nor	gctacagt	gtttgagtgatgacttgta-ttgtcggataacccttcaccccggttcattgggtgagattcagcta	GTCTga	CAAAC	CTGT	agca
C. Por	gctacagt	gtttgaatgatgactttaaagtgtcggataacccttcactcctatcatgagtgaacatgaata	GTCTga	CAAAC	CTGT	agat
O. Cun	actacagt	gtttgaatgatgactgaaa-ttgtcggataacccttcactcctcc-tgagtgcaca-	CTGCaGTCTga	CAAAC	CTGT	agggt
C. Fam	actacagc	gtttgaatgatgacttttaa-ttgtcggataacccttcactcctcgatgagtgaacatgaaca	GTCTga	CAAAC	CTGT	agggt
F. Cat	actacagt	gtttgaatgatgactttaa-ttgtcggataacccttcactccttctgtgagtgaacct-aaca	GTCTga	CAAAC	CTGT	agggt
B. Tau	actacagt	gtttgaatgatgactttaa-ttgtcggataacccttcactccttctatgagtgaactcg-cata	GTCTga	CAAAC	CTGT	agat
E. Cab	actacagt	gtttgagtgatgacttttaa-ttgtcggataacccttcactccttttatgagtgaactt-aata	GTCTga	CAAAC	CTGT	agggt
S. Sus	actacagc	gtttgagtgatgacttttaa-ttgtcggataacccttcactccttccatgagtgaactc-aata	GTCTga	CAAAC	CTGT	agggt
	*****	*****	*****	*****	*****	*****

id=792707 gene=ENSG00000206754 name=SNORD101 segment=chr6.133136446.133136518.1 type=EN

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R. Mac	caaccgga	aaaggaagtgcc...226...gcaggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggctgagcgt---cagccgacc-----cg-cgctaagctgaggaggga	gatcaggt
P. Tro	caaccgga	aaaggaagtgcc...226...gcaggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggctgaacgt---cagccgacc-----cg-cgctaagctgagaaggga	gagcgggc
P. Abe	caaccgga	aaaggaagtgcc...226...gcaggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggctgaacgt---cagccgacc-----cg-cgctaagctgagaaggga	gagcgggt
C. Jac	caaccgga	aaaggaagtacc...225...gcaggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggcggagcga---cagcagac-----cggctgctaactgagcaagga	aagcgggc
M. Mus	caacagga	aaaggtgtggt...226...gcagatcacgtgacgagagc	GCGGGc	TTTGga	AGGC	----ggcgaagtgtg---gga---a-----cgat-----actgaaa	gaacgggc
R. Nor	caacagga	aaaggtgtggt...225...gtaggtcacgtgacgagagc	GCGGGc	TTTGga	AGGC	----ggcgaagtgtg---gaa---a-----cgat---cggtc---actgaaa	gaacgggc
C. Por	gcgccgga	agaggaagtgcc...219...atgctcacgtgagcgagc	GCGGGc	TTTGga	AGGC	----gtcggcgagactt---gagtggta-----agactaagcggcgtactcggaa	gaacagcg
O. Cun	cgtccgga	agaggaagtgc...234...gccggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggcggagcga---cagcagac-----cggctgctaactgagcaagga	gagcgggc
C. Fam	cggccgga	agaggaagtgc...224...gcgggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggcggagcgggaccgggtctgccc---cagagtggaagcggggagggc	----ct--
F. Cat	cagccgga	aaaggaagtgc...231...gcgggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggctgagcgg---gagggcgtc---cg-cgcccgcgtgagcaggt	tgccgggc
B. Tau	caaccgga	aggggaaatgca...221...gcaggtcacgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggtgaagcga---aaggtaccagagaccggtgctgaagctcggggtag	agcgggga
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S. Sus	cagccgga	agaggaagcgca...221...gtaggtcatgtgacgggagc	GCGGGc	TTTGga	AGGC	----ggcggagcga---gaggtacc---cg-c-----ggctgaggagcga	gctggctg
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id=196258 gene=ENSG00000168496 name=FEN1 segment=chr11.61560109.61560422.1 type=E5

Figure 459: CS=10.92



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P.Tro	--actacagt	gtttgaatgatg...34...-tgagtgaacat-aagagtct	GACAAAC	CTGTAggt
C.Jac	--actacagt	gtttgaatgatg...33...atgagtgaatc--agagtct	GACAAAC	CTGTAggt
M.Mus	--gctacagt	gtttgcacgatg...34...-tgggtgagaacacagctagt	TGACAAAC	CTGTAgct
R.Nor	--gctacagt	gtttgcacgatg...34...-tgggtgagattcagctagt	TGACAAAC	CTGTAgca
C.Por	--gctacagt	gtttgaatgatg...36...-gagtgaacatgaatagtct	GACAAAC	CTGTAgat
O.Cun	--actacagt	gtttgaatgatg...33...-tgagtgacacac-tgcagtct	GACAAAC	CTGTAggt
C.Fam	--actacagc	gtttgaatgatg...35...-gagtgaacatgaacagtct	GACAAAC	CTGTAggt
F.Cat	--actacagt	gtttgaatgatg...34...-tgagtgaacct-aacagtct	GACAAAC	CTGTAggt
B.Tau	--actacagt	gtttgaatgatg...34...-tgagtgaatcg-catagtct	GACAAAC	CTGTAgat
E.Cab	--actacagt	gtttggatgatg...34...-tgagtgaacct-aatagtct	GACAAAC	CTGTAggt
S.Sus	--actacagc	gtttgcacgatg...34...-tgagtgaatct-aatagtct	GACAAAC	CTGTAggt
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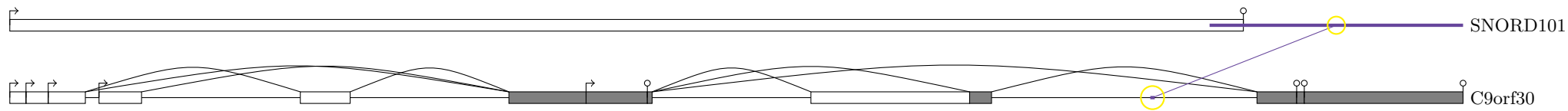
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H.Sap	-----
R.Mac	-----
P.Tro	-----
C.Jac	-----
M.Mus	-----
R.Nor	-----
C.Por	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggccttggaggaattattagctgtggcacaacccatacagcattggttctctagatctgg
O.Cun	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg
C.Fam	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg
F.Cat	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg
B.Tau	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg
E.Cab	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg
S.Sus	-----
L.Afr	aacagagcagtagctgtgactatggatctggcagattcctttatcctttgtggacttggaggaattattagctgtggcacaacacatacagcattggttctctagatctgg

H.Sap	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
R.Mac	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
P.Tro	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
C.Jac	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
M.Mus	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
R.Nor	-----gaaTGCAG	GTTTGT	-ttgcatgctggac	-----tagagcata	-----ttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt
C.Por	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
O.Cun	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
C.Fam	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
F.Cat	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
B.Tau	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
E.Cab	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
S.Sus	-----gaaTGCAG	GTTTGT	tttgcagttggactaaataagcatattgttgaagcatg	:::::taaaatgcatggtgtgtccttcttactacag	agtacagt		
L.Afr	ttaaatgcagaaTGCAG	GTTTGT	-----	-----	-----	:::::-----	-----t
	* *****	*****					*

id=229189 gene=ENSG00000075415 name=SLC25A3 segment=chr12.98989336.98989504.1 type=IN

Figure 460: CS=16.52



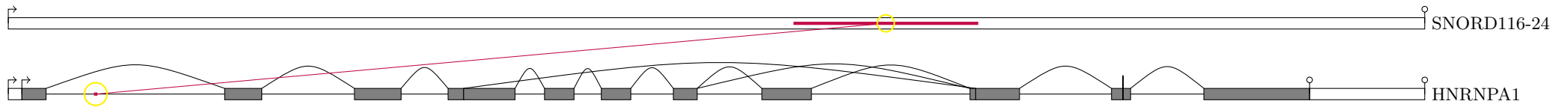
H.Sap	--actacagt	gtttgaatgatg...31...-ttatgagtgaacat-aagag	TCTGAcAAAC	ctGTAGgt
R.Mac	--actacagt	gtttgaatgatg...31...-ttatgagtgaatgt-aagag	TCTGAcAAAC	ctGTAGgt
P.Tro	--actacagt	gtttgaatgatg...31...-ttatgagtgaacat-aagag	TCTGAcAAAC	ctGTAGgt
P.Abe	--actacagt	gtttgaatgatg...31...-ttatgagtgaacat-aagag	TCTGAcAAAC	ctGTAGgt
C.Jac	--actacagt	gtttgaatgatg...30...ttatgagtgaaatc--agag	TCTGAcAAAC	ctGTAGgt
C.Por	--gctacagt	gtttgaatgatg...33...-catgagtgaacatgaatag	TCTGAcAAAC	ctGTAGat
O.Cun	--actacagt	gtttgaatgatg...30...-tcctgagtgcacac-tgcag	TCTGAcAAAC	ctGTAGgt
C.Fam	--actacagc	gtttgaatgatg...32...-gatgagtgaacatgaacag	TCTGAcAAAC	ctGTAGgt
F.Cat	--actacagt	gtttgaatgatg...31...-ctgtgagtgaacct-aacag	TCTGAcAAAC	ctGTAGgt
B.Tau	--actacagt	gtttgaatgatg...31...-ctatgagtgaatcg-catag	TCTGAcAAAC	ctGTAGat
E.Cab	--actacagt	gtttggatgatg...31...-ttatgagtgaacct-aatag	TCTGAcAAAC	ctGTAGgt
S.Sus	--actacagc	gtttgagtgatg...31...-ccatgagtgaatct-aatag	TCTGAcAAAC	ctGTAGgt
L.Afr	aaactaca--	gtttgaatgatg...31...ttatgagtgaacat-ac-ag	TCTGAcAAAC	ctGTAGTt
	****	*****	*****	*****

id=792707 gene=ENSG00000206754 name=SNORD101 segment=chr6.133136446.133136518.1 type=EN

H.Sap	-ggaaaaag	gtggaatctg...4943...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
R.Mac	-ggaaaaag	gtggaatctg...4943...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
P.Tro	-ggaaaaag	gtggaatctg...4943...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
P.Abe	-ggaaaaag	gtggaatctg...4943...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
C.Jac	-ggaaaaag	gtggaatctg...4943...--ctttgaata--tatgttttctg	CTACTGTTTTCAG	Aatcattt
C.Por	ggggaatg	attgcaaatc...4943...--ctttgaacg--tatgttttctg	CTACTGTTTTCAG	Aatcattt
O.Cun	-ggaaaaaga	tggaatctg...4943...atctttgaac---atgttttctg	CTACTGTTTTCAG	Aatcattt
C.Fam	-ggaaaaaa	gttgaaacttg...4708...---ttgaacttatatgttttctg	CTACTGTTTTCAG	Aatcattt
F.Cat	-gggaataa	gttgaaacttg...4943...--ctttgaacg--tatgttttctg	CTACTGTTTTCAG	Aatcattt
B.Tau	-gggaaaaag	gttgagaactg...4943...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
E.Cab	-ggaataag	gttgaaacttg...4679...--ctttgaaca--tatgttttctg	CTACTGTTTTCAG	Aatcattt
S.Sus	-ggaaaaag	gttgaaactta...4943...atctttgaac---atgttttctg	CTACTGTTTTCAG	Aatcattt
L.Afr	-ggaaaaag	gttgaaacttg...4942...-tctttgaacg--tgtgttttctg	GCTACTGTTTTCAG	Aatcattt
	** *	**	*****	*****

id=72315 gene=ENSG0000066697 name=C9orf30 segment=chr9.103207520.103212838.1 type=IN

Figure 461: CS=10.14



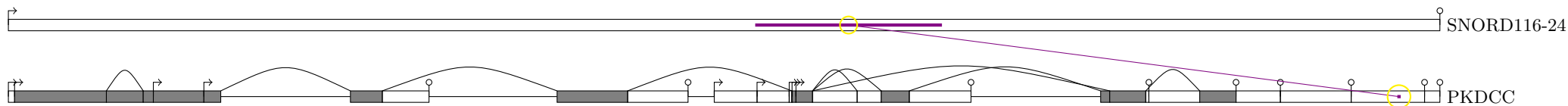
H. Sap	ctgtgcat	ggatc	gatgatgact	tttatac	-atgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaactctata	accgtcat	cctt	cgttg	-aactgaggtcc	agcacatt	
R. Mac	ctgtgcat	ggatcaat	gatgac	ctttatac	-atgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaactctata	accgtcat	cctc	cattg	-aactgaggtct	ggcacatt	
P. Tro	ctgtgcat	ggatc	gatgatgact	tttatac	-atgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaactctata	accgtcat	cctt	cgttg	-aactgaggtcc	agcacatt	
C. Jac	ctgtgcat	ggatcaat	gatgact	tttatac	-ctgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaactctata	accgtcat	cctt	gtcg	-agctgaggtcc	agcacgtt	
M. Mus	acgtgctt	ggatc	atgatgatt	cccagtc	-aaacattc	ccttgg	-aaaagctga	ACAAAATG	GTGA	aaactctg	taccgccact	gtcatt	ggaact	gaggtcc	agcatcct	
R. Nor	gcgtgctt	ggatc	gatgatgatt	tccaata	-aaacattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaactcaata	accgccact	ctcatc	gtgact	gaggtcc	agcacctg	
C. Por	acgtgctt	ggatc	agtgatgac	actcaciaa	-atgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	aaaacctg	taccgtcatt	tctcat	cg	-aactgaggtcc	agcacact	
C. Fam	aagtgctt	ggatc	gatgatgact	ccctcaat	ctgcattc	ccttgg	-aaagctga	ACAAAATG	GTGA	gaactccct	gccctg	tctcat	cgcaact	gaggtcc	agcacgtt	
F. Cat	atgtgctc	ggatc	gatgatgact	ccctcaa	-cagcattc	ccttgg	-aaaagctga	ACAAAATG	GTGA	gaactccct	cccgtc	gttctc	atcg	gaaactgaggtcc	agcacgtt	
B. Tau	acgtgctt	ggatc	gatgatgact	cccaciaa	-atgcattc	ccttgg	-aaatctga	ACAAAATG	GTGA	gccacc	ccctaccgtc	-tcctcat	cggaactgaggtcc	agcacgtt		
E. Cab	aggtgctc	ggatc	gatgatgact	ccctcaa	-atgcattc	ccttgg	-aaatctga	ACAAAATG	GTGA	gaactcact	accgtc	gttctc	gcgagactgaggtcc	agcacctg		
S. Sus	ccgtgctc	ggatc	gatgatgact	ccctcta	-aagcattc	ccttgg	-aaatctga	ACAAAATG	GTGA	gaactcact	accgtc	-tcctcat	cgaaactgaggtcc	ggcacgtt		
O. Avi	acatgctc	ggatc	agtgatgac	aaacttt	catattt	atctt	ccttgg	-aaaatctga	ACAAAATG	GTGA	gaactcact	accatc	-tcctcat	cgatactgagctct	agcacgtt	
L. Afr	acgtgcat	ggatt	gatgatgact	gctatct	-aaacattc	ccttgg	-aaaagctga	ACAAAATG	GTGA	aaactcct	taccgtc	tcaact	cattg	-aactgaggtcc	agcacatt	
	***	****	*****		*****		***	*****		*	*	*	*	*	*****	**

id=490059 gene=ENSG00000207279 name=SNORD116-24 segment=chr15\_25339184\_25339275\_1 type=EN

H. Sap	agtcagag	gtgagtt	taggcg	...111...	-taccctcc	caaagtt	caag	TCGCCATTTTGT	cctcttgat	cgccatg	aggc	---...376...	ccccact	ctag	tctcctaa	
R. Mac	agtcagag	gtgagtt	taggcg	...113...	-taccctcc	caaagtt	caag	TCGCCATTTTGT	cctcttgat	cgccatg	aggc	---...377...	ccccact	ccag	tctcctaa	
P. Tro	agtcagag	gtgagtt	taggcg	...111...	-taccctcc	caaagtt	caag	TCGCCATTTTGT	cctcttgat	cgccatg	aggc	---...375...	ccccact	ctag	tctcctaa	
C. Jac	agtcagag	gtgagtt	taggcg	...106...	-ctaccctcc	caaagtt	caag	TCGCCATTTTGT	cctcttgat	cgccatg	aggc	---...371...	ccccact	ctag	tctcctaa	
M. Mus	agtcagag	gtaagtt	ggatg	...106...	-ctacttta	aaaaaat	gcagg	TCGCCATTTTGT	cctcatagt	caccatg	aggc	---...369...	cctccact	ttag	tctcccaa	
R. Nor	agtcagag	gtgagtt	ggatg	...105...	-ctactttt	aaaaaat	gcagg	TCGCCATTTTGT	cctcatagt	caccatg	aggc	---...361...	actttat	ttag	tctcccaa	
C. Por	agtcagag	gtaagc	gtat	...103...	-gcctgct	cccaagt	tcagg	TCGCCATTTTGT	cc--tc	gtcgccatg	aggc	ccgc...327...	cttccact	ctag	tctcctaa	
C. Fam	agtcagag	gtgagta	aacacg	...112...	-ttccctcc	ccaagtt	gcagg	TCGCCATTTTGT	cctcgtc	gtcgccatg	aggc	---...363...	ccccgct	ctag	tctcccaa	
F. Cat	agtcagag	gtgagta	aacacg	...113...	-taccctcc	caaagtt	tcggg	TCGCCATTTTGT	cctcgtc	gtcgccatg	aggc	---...378...	ccgactc	ctag	tctcccaa	
B. Tau	aatcagag	gtgggta	agacg	...111...	-tccccct	ccctaag	ttgagg	TCGCCATTTTGT	cc--tc	gtcgccatg	aggc	ctgc...362...	ctcctc	ctag	tctcccaa	
E. Cab	agtcagag	gtgagta	ggacg	...111...	-taccctcc	caaagtt	gcagg	TCGCCATTTTGT	cctcgtc	gtcgccatg	aggc	---...359...	tctactc	ctag	tctcccaa	
S. Sus	agtcagag	gtgagta	ggact	...111...	-taccctcc	ctgagtt	gcagg	TCGCCATTTTGT	cc--tc	gtcgccatg	aggc	ctgt...358...	ccctact	ctag	tctcccaa	
O. Avi	aatcagag	gtgggta	agacg	...111...	-tccccct	ccctgag	ttgagg	TCGCCATTTTGT	cc--tc	gtcgccatg	aggc	ctgc...366...	ctccact	ctag	tctcccaa	
L. Afr	agtcagag	gtaagc	taccct	...108...	-taccctcc	caaagtt	ggagg	TCGCCATTTTGT	cctcgtc	gtcgccatg	aggc	---...389...	ttccacc	atag	tctcctaa	
	**	**	**	**	*		*	*	*	*	*	*	*	*	**	**

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12\_54674607\_54675169\_1 type=IN

Figure 462: CS=17.5



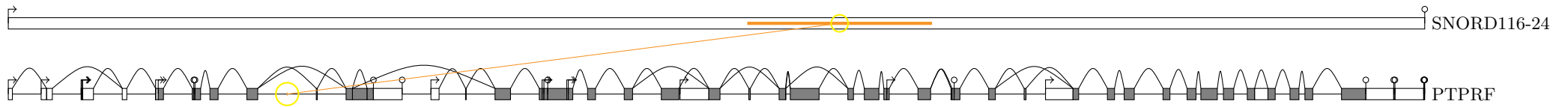
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P. Tro	ctgtgcat	ggatc	cgatgatgacttttatac-atgcattccttggaaagc-TGAACAAAaTGAGtg	gaaaactctataccgtcatcttcggtg-aactgaggtcc	agcacatt
P. Abe	ctgtgcat	ggatc	cgatgatgacttttatac-atgcattccttggaaagc-TGAACAAAaTGAGtg	gaaaactctataccgtcatcttcggtg-aactgaggtcc	agcacgtt
C. Jac	ctgtgcat	ggatc	caatgatgacttttatac-ctgcattccttggaaagc-TGAACAAAaTGAGtg	gaaaactctataccgtcatcttcggtg-agctgaggtcc	agcacgtt
M. Mus	acgtgctt	ggatc	atgatgatgattcccagtc-aaacattccttggaaaaGCTGAACAAAaTGAGtg	gaaaactctgtaccgccactgtcattggaactgaggtcc	agcatctt
R. Nor	cgctgctt	ggatc	cgatgatgatttccaata-aaacattccttggaaaaGCTGAACAAAaTGAGtg	gaaaactcaataccgccactctcattcgtgactgaggtcc	agcacctg
C. Por	acgtgctt	ggatc	cgatgatgactcaca-aaacattccttggaaagc-TGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	agcacact
C. Fam	aagtgctt	ggatc	cgatgatgactcctcaatctgcattccttggaaaaGCTGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatc	cgatgatgactcctca-aaacattccttggaaaaGCTGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	cgatgatgactcccaca-aaacattccttggaaat-CTGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	agcacgtg
E. Cab	agtgctc	ggatc	cgatgatgactcctca-aaacattccttggaaat-CTGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	agcacctg
S. Sus	ccgtgctc	ggatc	cgatgatgactcctcta-aagcattccttggaaat-CTGAACAAAaTGAGtg	gaaaactgtaccgccactgtcattcctcag-aactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggatt	gatgatgactgctatct-aaacattccttggaaaaGCTGAACAAAaTGAGtg	gaaaactccttaccgtctcattcattg-aactgaggtcc	agcacatt
	****	****	***** * **	***** * **	****

id=490059 gene=ENSG00000207279 name=SNORD116-24 segment=chr15\_25339184\_25339275\_1 type=EN

H. Sap	tgtgggtg	attctgtacctg...138...-----tggggcggggcctttctgc-CTCATTGctTTCAat	gaaagcctcaaagcagcc--...67...ttgtttat	gtaaaaaa
P. Tro	tgtgggtg	attctgtacctg...138...-----tggggcggggcctttctgc-CTCATTGctTTCA-t	gaaagcagcc--...66...ttgtttat	gtaaaaaa
P. Abe	tgtgggtg	attctgtacctg...138...-----tggggcggggcctttctgc-CTCATTGctTTCAat	gaaagcagcc--...67...ttgtttat	gtaaaaaa
C. Jac	tgtgggtg	attctgtacctg...137...-----tggggcggggcctttctgc-CTCATTGctTTCAat	gaaagcagcc--...67...ttgtttat	gtaaaaaa
M. Mus	tgtgagt	aaccagcactgg...137...-----tagggtcggggccttctgc-CTCATTGctTTCAGTg	aaagcagggagcagccg...113...ttgtttat	gtaaaaaa
R. Nor	tgtgagg	agccagcctgg...134...-----tagggtcggggccttctgc-CTCATTGctTTCAGTg	aaagcagggagcagccg...64...ttgtttat	gtaaaaaa
C. Por	tgtagg	agccagcctgg...142...-----tagggtcggggccttctgc-CTCATTGctTTCAat	gaaagcagggagcagcc--...66...ttgtttat	gtaaaaaa
C. Fam	tgtgggg	attctgtaccca...135...-gggggtggggcggggcctTTCTgCTCATTGctTTCAGTg	aaagcagggagcagcc--...64...atgtttat	gtaaaaaa
F. Cat	tgtgggaa	actccgtacctg...134...tgggggtggggcggggcctTTCTgCTCATTGctTTCAGTg	aaagcagggagcagcc--...65...atgtttat	gtaaaaaa
B. Tau	tgtgggc	attctgtacccc...136...-----tggggcggggcctttctgc-CTCATTGctTTCAGTg	aaagcagggagcagcc--...66...atgtttat	gtaaaaaa
E. Cab	tgtgggc	atccatacctg...131...tgggggtggggcggggcctTTCTgCTCATTGctTTCAGTg	aaagcagggagcagcc--...66...atgtttat	gtaaaaaa
S. Sus	tgtgggc	aatctgtacctg...128...tgggggtggggcggggcctTTCTgCTCATTGctTTCAGTg	aaagcagggagcagcc--...66...atgtttat	gtaaaaaa
L. Afr	cgtgggtg	actctggcctcc...119...-----tggggcggggcctttctgc-CTCATTGctTTCAGTg	aaagcagggagcagctga...64...ttgtttat	gtaaaaaa
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id=707208 gene=ENSG00000162878 name=PKDCC segment=chr2\_42285327\_42285609\_1 type=EN

Figure 463: CS=10.14



H. Sap	ctgtgcat	ggatc	cgatgatgacttttatac-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcttcgttg-aactgaggtcc	agcacatt
R. Mac	ctgtgcat	ggatcaatgatgac	cttttatac-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcttcgttg-aactgaggtcc	ggcacatt
P. Tro	ctgtgcat	ggatc	cgatgatgacttttatac-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcttcgttg-aactgaggtcc	agcacatt
P. Abe	ctgtgcat	ggatc	cgatgatgacttttatac-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcttcgttg-aactgaggtcc	agcacgtt
C. Jac	ctgtgcat	ggatcaatgatgact	tttatac-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactctataccgtcatcttcgttg-aactgaggtcc	agcacgtt
M. Mus	acgtgctt	ggatc	atgatgattcccagtc-aaacattccttggaaaagc	TGAACAAA	TGAG	tgaaaactctgtaccgccactgtcattggaactgaggtcc	agcatctt
R. Nor	gcgtgctt	ggatc	cgatgatgatttccaata-aaacattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactcaataccgccactctcatcgtgactgaggtcc	agcacctg
C. Por	acgtgctt	ggatc	agtgatgacactcaca-atgcattccttgg-aaagc	TGAACAAA	TGAG	tgaaaactgtaccgccactctcatcgtgactgaggtcc	agcacact
C. Fam	aagtgctt	ggatc	cgatgatgactcctcaatctgcattccttgg-aaagc	TGAACAAA	TGAG	tgagaactcctgccgtcgttctcatcgcaactgaggtcc	agcacgtt
F. Cat	atgtgctt	ggatc	cgatgatgactcctcaatctgcattccttgg-aaagc	TGAACAAA	TGAG	tgagaactcctgccgtcgttctcatcgcaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatc	cgatgatgactcccaca-atgcattccttgg-aaatc	TGAACAAA	TGAG	tgagccaccctaccgtc-tcctcatcggaactgaggtcc	agcacgtg
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S. Sus	ccgtgctt	ggatc	cgatgatgactcctcta-aagcattccttgg-aaatc	TGAACAAA	TGAG	tgagaactcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
L. Afr	acgtgcat	ggatt	gatgatgactgctatct-aaacattccttggaaaagc	TGAACAAA	TGAG	tgaaaactcctaccgtctcactcattg-aactgaggtcc	agcacatt
	****	****	*****	****	*****	* ** * * * * *	****

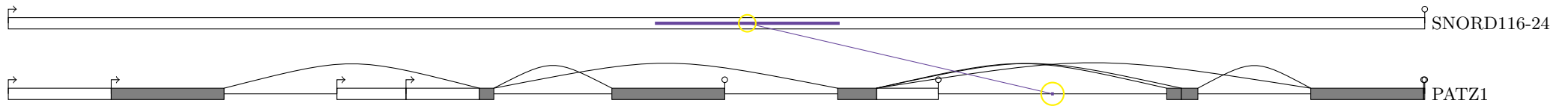
id=490059 gene=ENSG00000207279 name=SNORD116-24 segment=chr15.25339184.25339275.1 type=EN

H. Sap	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
R. Mac	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
P. Tro	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
P. Abe	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
C. Jac	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
M. Mus	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
R. Nor	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
C. Por	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
C. Fam	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
F. Cat	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
B. Tau	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
E. Cab	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
S. Sus	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
L. Afr	gcgttcag	gtgagcagaggg...4929...	tactaatgcttctctctgat	CTTATTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 464: CS=12.6





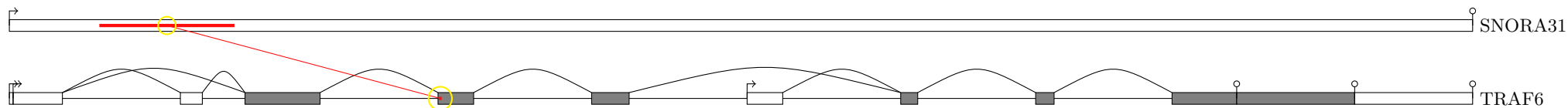
H.Sap	ctgtgcat	ggatc	gatgatgacttttatac-atgcattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-actctataccgtcatcttcgttg-aactgaggtcc	agcacatt
R.Mac	ctgtgcat	ggatcaat	gatgacttttatac-atgcattcctt-GAAA	gCTGAACAAa	ATGAGt	gaaa-actctataccgtcatcctcattg-aactgaggtct	ggcacatt
P.Tro	ctgtgcat	ggatc	gatgatgacttttatac-atgcattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-actctataccgtcatcttcgttg-aactgaggtcc	agcacatt
P.Abe	ctgtgcat	ggatc	gatgatgacttttatac-atgcattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-actctataccgtcatcttcgttg-aactgaggtcc	agcacgtt
C.Jac	ctgtgcat	ggatcaat	gatgacttttatac-ctgcattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-actctataccgtcatccttgcg-agctgaggtcc	agcacgtt
M.Mus	acgtgctt	ggatc	tatgatgattcccagtc-aaacattccttGGAAA	gCTGAACAAa	ATGAGt	gaaa-actctgtaccgccactgtcattggaactgaggtcc	agcatctt
R.Nor	gcgtgctt	ggatc	gatgatgattccaata-aaacattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-actcaataaccgccactctcatcgtgactgaggtcc	agcacctg
C.Por	acgtgctt	ggatc	agtgatgacactcaciaa-atgcattcctt-GGAAA	gCTGAACAAa	ATGAGt	gaaa-aacctgtaccgtcattctcatcg-aactgaggtcc	agcacact
C.Fam	aagtgctt	ggatc	gatgatgactcctcaatctgcattcct-GGAAA	gCTGAACAAa	ATGAGt	GAGA-actccctgccgtcgttctcatcgcaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgactcccaciaa-atgcattcctt-GGAAA	ATCTGAACAAa	ATGAGt	gagccacc-ctaccgtc-tcctcatcggaactgaggtcc	agcacgtg
E.Cab	agggtctc	ggatc	gatgatgactcctcaa-atgcattcctt-GGAAA	ATCTGAACAAa	ATGAGt	GAGA-actcactaccgtcgttctcgcgagactgaggtcc	agcacctg
S.Sus	ccgtgctc	ggatc	gatgatgactcctcta-aagcattcctt-GGAAA	ATCTGAACAAa	ATGAGt	GAGA-actcactaccgtc-tcctcatcgaaactgaggtcc	ggcacgtg
O.Avi	acatgctc	ggatc	agtgatgacaactttcatatttattccttGGAAA	TCTGAACAAa	ATGAGt	GAGA-actcactaccatc-tcctcatcgatactgaggtcc	agcacgtt
L.Afr	acgtgcat	ggatt	gatgatgactgctatct-aaacattccttGGAAA	gCTGAACAAa	ATGAGt	gaaa-actcctaccgtctcactcattg-aactgaggtcc	agcacatt
	***	****	*****	*****	***	*****	*****

id=490059 gene=ENSG00000207279 name=SNORD116-24 segment=chr15\_25339184\_25339275\_-1 type=EN

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R.Mac	aactctca	cctgctactcag...4943...-----gccgcgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
P.Tro	aactctca	cctgctactcag...4943...-----gccgcgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
P.Abe	aactctca	cctgctactcag...4943...-----gccgcgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
C.Jac	aactccca	cctgctactcag...4943...-----gctcgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
M.Mus	cagataca	cctgctcaagt...4943...-----gctgtgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
R.Nor	cagatgca	cctgctcaagt...4943...-----gctgtgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
C.Por	caaacata	cctgctgcttag...4943...-----gctgcgggatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
C.Fam	tcataaca	tgtgctgtgtgg...4937...-gtgctggccgcgggatctcaTCTCctTTTGTcTTGTTTAG	gTTTCTcc
B.Tau	atgacgca	cctgctgcccc...4943...-----ggccgcg-gatctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
E.Cab	gtagcaca	tctgctgctcag...4937...-gtgctggccgcgggatctcaTCTCctTTTGTcTTGTTTAG	gTTTCTcc
S.Sus	gtaataca	gctgctgctgg...4937...-gtgctggccgcgggatctcaTCTCctTTTATcTTGTTTAG	gTTTCTcc
O.Avi	atgacgca	cctgctgcccc...4937...tgtgccggccgcg-gatctcaTCTCctTTTGTcTTGTTTAG	gTTTCTcc
L.Afr	acaaaaca	cctgctgctcag...4943...-----gccgcggggtctcatctcctTTTGTcTTGTTTAG	gTTTCTcc
	*	****	*
		**	* * *****

id=182225 gene=ENSG00000100105 name=PATZ1 segment=chr22\_31724911\_31731403\_-1 type=IN

Figure 465: CS=12.6



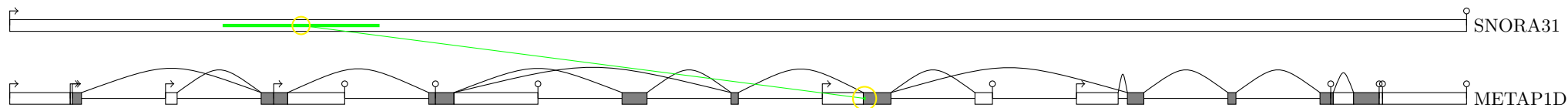
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R. Mac	agggtatt	CTGCATCCaCTGATAGAC	cttgaacaatttactgttgt...78...gggaatacatct	atagccta
P. Tro	agggtggt	CTGCATCCaCTGATAGAC	cttgaacaatttactgttgt...80...gggaatacatct	ttagccta
P. Abe	agggtggt	CTGCATCCaCTGATAGAC	cttgaacaatttactgttgt...80...gggaatacatct	atagccta
C. Jac	aagggtct	CTGCATCCaCTGATAGAC	cttgaacaattggctgttgt...80...gggaatacatct	gtagccta
M. Mus	gtgagggt	CTGCATCCaCTGA	tagacctcgaacagtttgg-----..85...gggagtacatct	acatgcta
R. Nor	ggggtggt	CTGCATCCaCTGA	tagacctcgaacagtttgg-----..85...gggagtacatct	ctacacta
C. Por	aggatgtc	CTGCATCCaCTGA	tagacctgaacaatttgg-----..81...gggagtacacc	gtatggca
O. Cun	aggatggt	CTGCATCCaCTGA	tagacctgaacaatttgg-----..83...gggaatacatct	gtagtcca
C. Fam	ggatagtc	CTGCATCCaCTGA	tagacctgaacaatttgg-----..85...gggagtacatcg	gtggcgtg
F. Cat	ggatggct	CTGCATCCaCTGA	tagacctcgaacagtttggcc-----..85...gggaatacacct	agagccta
B. Tau	ggatgggt	CTGCATCCaCTGA	tagacctgaacaatttgg-----..87...gggagtacatct	gaagccta
L. Afr	aagaagtt	CTGCATCCaCTGA	tagacctgaacaatttgg-----..84...gggaatacatct	gcagccta
		*****	*****	****

id=659355 gene=ENSG00000199477 name=SNORA31 segment=chr13\_45911615\_45911744\_-1 type=EN

H. Sap	tcaataag	gtacgtgagcat...2536...-aatctaattgtgtgtatattt---GTTTctGTTAG	GGATGCAg
R. Mac	tcaataag	gtacgtgagcgt...3333...-aatcaagttgtgtgtatattt---GTTTctGTTAG	GGATGCAg
P. Tro	tcaataag	gtacgtgagcat...2532...-aatctaattgtgtgtatattt---GTTTctGTTAG	GGATGCAg
P. Abe	tcaataag	gtacgtgagcat...2532...-aatctaattgtgtgtatattt---GTTTctGTTAG	GGATGCAg
C. Jac	tcaataag	gtatgtgagcat...3048...----gaattgtatgtgttttatttGTTTctGTTAG	GGATGCAg
M. Mus	tccataag	gtatgtgattt...3631...actctaagtt-cctacttctt-----TTAG	GGATGCAg
R. Nor	tccataag	gtatgtgatag...2425...-ctctaagttccctgcttctt-----TTAG	GGATGCAg
C. Por	tcaataag	gtatgtgggctt...3193...-ttgaatacatcttgttgcct-----TTAG	GGATGCAg
O. Cun	tcaataag	gtatgaatgat...4050...----gcttgtatttattttacctt-----TTAG	GGATGCAg
C. Fam	tcaataag	gtaggtgagcgg...3777...-atgtatgtatcttctttttt-----TTAG	GGATGCAg
F. Cat	tcaataag	gtacgtaagtgt...4064...-tgtatcttacttgttttctt-----TTAG	GGATGCAg
B. Tau	tcaataag	gtgctgtgagcat...4184...-aaataatgtatatttgtttctt-----TTAG	GGATGCAg
L. Afr	tcgataag	gtatgtgagcat...4130...-acctatcttatttctttctt-----TTAG	GGATGCAg
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id=48212 gene=ENSG00000175104 name=TRAF6 segment=chr11\_36520191\_36522769\_-1 type=IN

Figure 466: CS=20.02



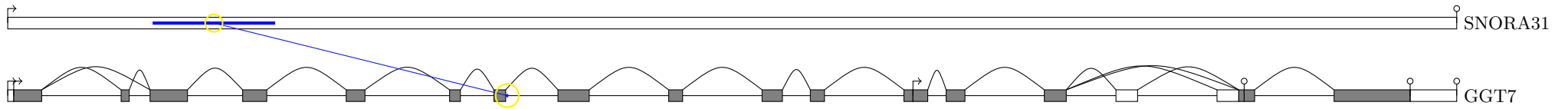
H. Sap	agggtggt	ctgcatccac	TGATAGACCTt	GAACA	atttactgtt	gttcttttgg	---..72..	gggaatacatct	ttagcctg
R. Mac	agggtatt	ctgcatccac	TGATAGACCTt	GAACA	atttactgtt	gttcttttgg	---..70..	gggaatacatct	atagccta
P. Tro	agggtggt	ctgcatccac	TGATAGACCTt	GAACA	atttactgtt	gttcttttgg	---..72..	gggaatacatct	ttagccta
P. Abe	agggtggt	ctgcatccac	TGATAGACCTt	GAACA	atttactgtt	gttcttttgg	---..72..	gggaatacatct	atagccta
C. Jac	aagggtct	ctgcatccac	TGATAGACCTt	GAACA	attggctgtt	gttcttctgg	---..72..	gggaatacatct	gtagccta
M. Mus	gtgagggt	ctgcatccac	TGATAGACCTt	GAACA	atttggctgtt	gttcttctgg	---..72..	gggagtacatct	acatgcta
R. Nor	ggggtggt	ctgcatccac	TGATAGACCTt	GAACA	atttggctgtt	gttcttctgg	---..72..	gggagtacatct	ctacacta
C. Por	aggatgtc	ctgcatccac	TGATAGACCTt	GAACA	attt---gtt	gttcttctgg	---..68..	gggagtacacc	gtatggca
O. Cun	aggatggt	ctgcatccac	TGATAGACCTt	GAACA	atttctgtgtt	gttcttttgg	---..70..	gggaatacatt	gtagtcca
C. Fam	ggatagtc	ctgcatccac	TGATAGACCTt	GAACA	attggctgtt	gttcttttgg	---..72..	gggagtacatcg	gtggcgtg
F. Cat	ggatggct	ctgcatccac	TGATAGACCTt	GAACA	atttggcctgtt	gttcttttgg	---..72..	gggaatacacct	agagccta
E. Cab	gggtggct	ctgcatccac	TGATAGACCTt	GAACA	atttggctgtt	gttcttttgg	---..72..	gggaatacatct	gcagccta
L. Afr	aagaagtt	ctgcatccac	TGATAGACCTt	GAACA	atttggctgtt	gttcttttgg	---..71..	gggaatacatct	gcagccta
***** * ** * ** * ** * ** * ** *									

id=659355 gene=ENSG00000199477 name=SNORA31 segment=chr13.45911615.45911744.-1 type=EN

H. Sap	tcatcata	atgctgaaataa	...205..	tatttttaaattt	ctgctta	TGTTTAG	GTCTATTa
R. Mac	tcgtcata	acgctgaaataa	...206..	tatttttaaattt	ctgctta	TGTTTAG	GTCTATTa
P. Tro	tcatcata	atgctgaaataa	...207..	tatttttaaattt	ctgctta	TGTTTAG	GTCTATTa
P. Abe	tcatcata	atgctgaaataa	...208..	tatttttaaattt	ctccta	TGTTTAG	GTCTATTa
C. Jac	tcatcact	atgctgaaataa	...206..	tatttttaaattt	ctgctta	TGTTTAG	GTCTATTa
M. Mus	taatccca	aagccgagggaa	...174..	taccttaaaat	gtgtgcctg	TGTTTAG	GTCTATTa
R. Nor	taatccca	aagctgaggtgg	...176..	taccttaaaat	gtgtgcctg	TGTTTAG	GTCTATTa
C. Por	taatcaga	atattgaactag	...188..	tattttaaaact	tctgcctg	TGTTTAG	GTCTATTa
O. Cun	caatagta	atactgaagtag	...206..	tattgtaaaat	gtctgcctg	TGTTTAG	GTCTATTa
C. Fam	taatcata	atgctgaaatag	...208..	tatttttaaatt	gtttgcctg	TGTTTAG	GTCTATTa
F. Cat	taatcata	atgctattgaaa	...225..	tattttaaaat	atgtgcctg	TGTTTAG	GTCTATTa
E. Cab	tgatcata	atgccaaaatag	...206..	tattttaaaatt	tctgcctg	TGTTTAG	GTCTATTa
L. Afr	caatcaca	atgctgaagtag	...207..	tatttttaagt	tctccctg	TGTTTAG	GTCTATTa
		*	*	**	**	**	*****

id=731227 gene=ENSG00000172878 name=METAP1D segment=chr2.172935391.172935634.1 type=AN

Figure 467: CS=12.35



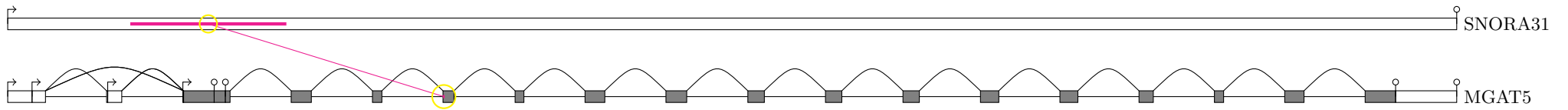
H. Sap	agggtggt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggaatacatct	ttagcctg
R. Mac	agggtatt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...79...gggaatacatct	atagccta
P. Tro	agggtggt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggaatacatct	ttagccta
P. Abe	agggtggt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggaatacatct	atagccta
C. Jac	aagggtct	ctgcaTCCACTGATAGAccttgaacaattggctgttg...81...gggaatacatct	gtagccta
M. Mus	gtgagggt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggagtacatct	acatgcta
R. Nor	ggggtggt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggagtacatct	ctacacta
C. Por	aggatgtc	ctgcaTCCACTGATAGAccttgaacaatttactgttg...77...gggagtacaccc	gtatggca
O. Cun	aggatgTT	CTGcaTCCACTGATAGAccttgaacaatttactgttg...79...gggaatacattt	gtagtcca
C. Fam	ggatagtc	ctgcaTCCACTGATAGAccttgaacaattggctgttg...81...gggagtacatcg	gtggcgtg
F. Cat	ggatggct	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggaatacacct	agagccta
E. Cab	gggtggct	ctgcaTCCACTGATAGAccttgaacaatttactgttg...81...gggaatacatct	gcagccta
L. Afr	aagaagtt	ctgcaTCCACTGATAGAccttgaacaatttactgttg...80...gggaatacatct	gcagccta
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id=659355 gene=ENSG00000199477 name=SNORA31 segment=chr13.45911615.45911744.-1 type=EN

H. Sap	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...288...ccctgcccttag	cccgtgcc	
R. Mac	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...289...ccctgcccttag	cccgtgcc	
P. Tro	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...288...ccctgcccttag	cccgtgcc	
P. Abe	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...288...ccctgcccttag	cccgtgcc	
C. Jac	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...291...ccctgcccttag	cccgtgcc	
M. Mus	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...254...tccccgcgcag	ctcatgcc	
R. Nor	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...256...aacccccacag	ctcatgcc	
C. Por	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...286...tccctgccccag	cccgtgcc	
O. Cun	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...265...ccttgctcctag	cccgtgcc	
C. Fam	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...262...ccctacttgag	cccgtgcc	
F. Cat	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...274...ccctgcttgag	cccgtgcc	
E. Cab	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...302...ctctgcccag	cccgtgcc	
L. Afr	tgaTCTAg	gTCAGT	-----GGG	gcctggggatttgggagaga-----	...268...ccctgccccag	cccgtgcc	
		*****	*****	***	*	*	** * * *

id=183334 gene=ENSG00000131067 name=GGT7 segment=chr20.33447443.33447771.-1 type=IN

Figure 468: CS=10.14



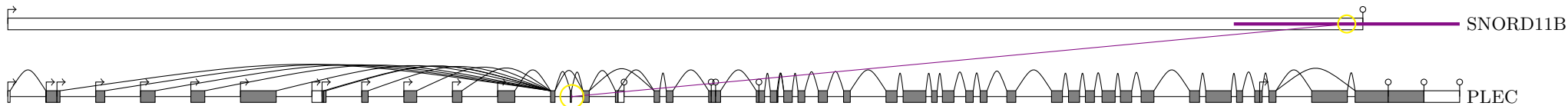
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R. Mac	agggtatt	ctg	CATCCACTG	atAGAC	cttgaacaatttactgttgt...78...gggaatacatct	atagccta	
P. Tro	agggtggt	ctg	CATCCACTG	atAGAC	cttgaacaatttactgttgt...80...gggaatacatct	ttagccta	
P. Abe	agggtggt	ctg	CATCCACTG	atAGAC	cttgaacaatttactgttgt...80...gggaatacatct	atagccta	
C. Jac	aagggtct	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...80...gggaatacatct	gtagccta	
M. Mus	gtgagggt	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...80...gggagtacatct	acatgcta	
R. Nor	ggggtggt	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...80...gggagtacatct	ctacacta	
C. Por	aggatgtc	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttct...76...gggagtacacc	gtatggca	
O. Cun	aggatggt	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...78...gggaatacatct	gtagtcca	
F. Cat	ggatggct	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...80...gggaatacacct	agagccta	
B. Tau	ggatgggt	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...82...gggagtacatct	gaagccta	
E. Cab	gggtggct	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...80...gggaatacatct	gcagccta	
L. Afr	aagaagtt	ctg	CATCCACTG	atAGAC	cttgaacaattgctgttgt...79...gggaatacatct	gcagccta	
			*****	*****	*** *	**** *	*

id=659355 gene=ENSG00000199477 name=SNORA31 segment=chr13.45911615.45911744.-1 type=EN

H. Sap	agatcaag	gtaaggcagagg...1005...tgctcagagatgttc-----ttctt----	GTTTCAG	TGGATGaa
R. Mac	agatcaag	gtaaggcagagg...1022...tgctcagagatgttc-----ttctt----	GTTTCAG	TGGATGaa
P. Tro	agatcaag	gtaaggcagagg...1005...tgctcagagatgttc-----ttctt----	GTTTCAG	TGGATGaa
P. Abe	agatcaag	gtaaggcagagg...1106...tgctcagagatgttc-----ttctt----	GTTTCAG	TGGATGaa
C. Jac	agatcaag	gtaaggcagagg...992...tgcttagagatgttt-----ttctt----	GTTTCAG	TGGATGaa
M. Mus	aatcaag	gtaagtagaag...1139...-----cagccacgtcctctcctctc-	GTTTCAG	TGGATGaa
R. Nor	aatcaag	gtaagcagagc...1105...-----agccatcctcctcctcttc-	GTTTCAG	TGGATGaa
C. Por	aatcaag	gtaaggtggaag...1032...-----gatgttctct---gttcttgttc	GTTTCAG	TGGATGaa
O. Cun	agatcaag	gtgagaacagag...667...-----cgatgctcttgtct-gctctt----	GTTTCAG	TGGATGaa
F. Cat	aatcaag	gtaaggccaag...1018...-----gtccttacctggctcttgtt-	GTTTCAG	TGGATGaa
B. Tau	aatcaag	gtaagtcagag...838...-----gtgctcttctcctctctgtt-	GTTTCAG	TGGATGaa
E. Cab	aatcaag	gtaaggcagaaa...1025...-----tgttcttgctggctcttgt-	GTTTCAG	TGGATGaa
L. Afr	aatcaag	gtaaggcagatg...1181...-----gtccttatctggctcttgtc-	GTTTCAG	TGGATGaa
		* ***** ** *	**	***** *****

id=174712 gene=ENSG00000152127 name=MGAT5 segment=chr2.135075177.135076220.1 type=IN

Figure 469: CS=18.2



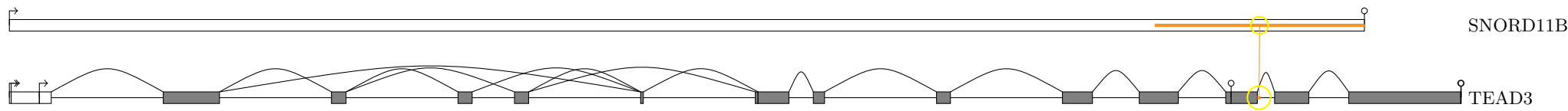
H. Sap	ttttctga	tggcaatgatgatttttacacttattgttggccacctgataacataaatatgagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcatgatt						
R. Mac	ttttctga	tggcaatgatga--tttacacttactgttggccacctgataacataaatatgagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcatgatt						
P. Tro	ttttctga	tggcaatgatgatttttacacttattgttggccacctgataacataaatatgagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcatgatt						
P. Abe	ttttctga	tggcagtgatgatttttacacttattgttggccacctgataacataaatatgaagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcatgatt						
C. Jac	ttttctga	tggcaatgatgatttttacacttat-----ttcacctgataacataaatatgaagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcatgatt						
M. Mus	tttgcagg	tggcaatgatgattttt---cttat--ttgttcacctgacaatat---atgaagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tctttttg						
R. Nor	tttccagg	tggcaatgatgataatt---ttac--tcattcacctgacaatat---ctgaagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tctttttt						
C. Por	attgatga	tggcagtgatgatttttacatgtat---tgttcacctgatgacag---tatgagagtggttcagtcac	TACCTc	ATCTga	TGCCa	tctcagtt						
O. Cun	ttttctga	tggcagtgatgatgcttacacttcg---gttcacctgataacat-aacatgagggtgttcagtcac	TACCTc	ATCTga	TGCCa	ttttgatt						
C. Fam	ttttctga	tggcaatgatgatttttaagcttac-----tcacctg----ataaatatgagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcttgatt						
F. Cat	ttttctga	tggcaatgatgatttttaaaatttac---taatcacctg----acaaatagagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcttgatt						
B. Tau	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctgataa-ataaatatgaagggtgttcagtcac	TACCTc	ATCTga	TGCCg	tcttgact						
E. Cab	cittctga	tggcagtgatgattttcaacttat---tgttcacctgataa-acaaatagagggtgttcagtcac	TACCTc	ATCTga	TGCCa	tcttgatt						
O. Avi	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctg----ataaatatgagggtgttcagtcac	TACCTc	ATCTga	TGCCg	tcttgact						
	**	*	****	*****	**	*	*****	*	***	*****	*****	*

id=424176 gene=ENSG00000238505 name=SNORD11B segment=chr2.203156058.203156141.1 type=EN

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P. Tro	gGGCAgAG	GTAGGTG	cctccgcggg-gcagggtgtg-...121...ctgtccccacag	gcccagag
P. Abe	gGGCAgAG	GTAGGTG	cctccgagg-gcagg-gtgt...122...ctgtccccacag	gcccagag
C. Jac	gGGCAgAG	GTAGGTG	cctccaagg-gcaggg-ccgt...115...ctgtccccacag	gcccagag
M. Mus	gGGCAgAG	GTAGGTG	cctgcatggcgggggtgt-...89...ctattccacag	gctcagag
R. Nor	gGGCAgAG	GTAGGTG	tctgcatggccagggtgt-...71...ctattctgcag	gctcaaag
C. Por	gGGCAgAG	GTAGGTA	cctgtgtaggacaggacat-...105...ttgtccccacag	gcccagag
O. Cun	gGGCAgAG	GTAGGTG	-tctgtggcggggcagtc-...120...ctgtcccttcag	gcccagag
C. Fam	gGGCAgAG	GTAGGTG	ctcctgtggacgtgggatag-...72...ctgtccccacag	gcccagag
F. Cat	gGGCAgAG	GTAGGTG	cctcctgtggggcgggcat-...77...ctgtccccacag	gcccagag
B. Tau	gGGCAgAG	GTAGGTG	cctccttggggcgggcgtc-...45...ctgtccgtgcag	gctcagag
E. Cab	gGGCAgAG	GTAGGTG	-ttcttgggggtggcatgt-...95...ctgtccccacag	gcccagag
O. Avi	gGGCAgAG	GTAGGTG	cctccttaggggtggcgtc-...44...ctgtccgtgcag	gctcagag
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id=140145 gene=ENSG00000178209 name=PLEC segment=chr8.145012409.145012568.-1 type=IN

Figure 470: CS=15.12



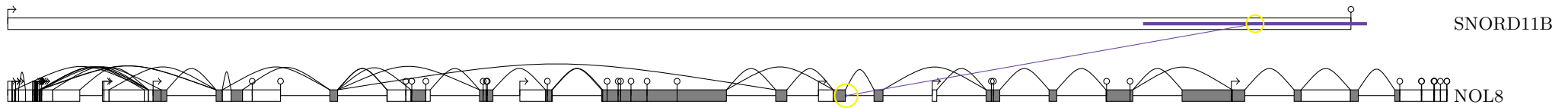
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R.Mac	ttttctga	tggcaatgatga--tttacacttactgttgttcacctgataacataaatatg	AGGGTg	TTCAGt	CACTACCTCATCT	gatgcca
C.Jac	ttttctga	tggcaatgatgatttttacacttat-----ttcacctgataacataaatatgaaggt	GTTcag	TCACTACCTCATCT	gatgcca	tcatgatt
M.Mus	tttgacag	tggcaatgatgattttt---cttat--tgttcacctgacaa---tatatgaaggtgttcag	TCACTACCTCATCT	gatgcca	tctttttg	
C.Por	attgatga	tggcagatgatgatttttacatgtat---tgttcacctgatgac---agtatgaga	GTGTTcag	TCACTACCTCATCT	gatgcca	tctcagtt
O.Cun	ttttctga	tggcagatgatgatgcttacacttcg----gttcacctgataacat-aacatgagggt	GTTcag	TCACTACCTCATCT	gatgcca	ttttgatt
C.Fam	ttttctga	tggcaatgatgatttttaagcttac-----tcacctg----ataaatatgagggt	GTTcag	TCACTACCTCATCT	gatgcca	tcttgatt
F.Cat	ttttctga	tggcaatgatgatttttaaatttac---taatacactg----acaaatgagggt	GTTcag	TCACTACCTCATCT	gatgcca	tcttgatt
B.Tau	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctgataa-ataaatatgaaggt	GTTcag	TCACTACCTCATCT	gatgcca	tcttgatt
E.Cab	ccttctga	tggcagtgatgatttttaacacttat---tgttcacctgataa-acaacatgaaggt	GTTcag	TCACTACCTCATCT	gatgcca	tcttgatt
S.Sus	atttctga	tggcaatgatgattttgaaatttat---tgttcacctgagaa-ataaa	TATGAGGgt	GTTcag	TCACTACCTCATCT	gatgcca
O.Avi	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctg----ataaatatgagggt	GTTcag	TCACTACCTCATCT	gatgcca	tcttgatt
L.Afr	ttttctga	tggcagtgatgattt-----aat---tgttcacctgaaat-acaaatgagggtgtacag	TCACTACCTCATCT	gatgcca	tcttgatt	
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id=424176 gene=ENSG00000238505 name=SNORD11B segment=chr2.203156058.203156141.1 type=EN

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C.Jac	aGGTGgAG	GTGaGT-GGGGGC	-----tcagggtggcttgggtggggc---...33...tgctctatgcag	actgagta
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C.Por	aGGTGgAG	GTGaGT-GGGGGCGC	-----gggcagggggcaggcgggggt---...40...cggccgcccag	accgagta
O.Cun	aGGTGgAG	GTGaGT-GGGGGC	-----cgggatgggggggaggggc---g...42...cgctctgcgcag	accgagta
C.Fam	aGGTaGAG	GTGaGT-GGGGGC	-----ccagggtggcacggcagggc---...34...ggcctcgcgtag	accgagta
F.Cat	aGGTGgAG	GTGaGT-GGGGGC	-----ccagggtggcacgggtggggc---...34...ggcctcgcgtag	accgagta
B.Tau	aGGTaGAG	GTGaGTGGgGGC	-----cacagcaggggagggggcc---g...59...cggctcctgcag	actgagta
E.Cab	aGGTGgAG	GTGaGT-GGGGGC	-----ctggggcggcgggtggggc---...33...ggctctcgcgtag	accgagta
S.Sus	aGGTGgAG	GTGaGT-GGGGGCCCTCGTG	cggtctggggggagcccggga---g...57...ggctccccgcag	accgagta
O.Avi	aGGTGgAG	GTGaGT-GGgGGGC	-----cacagcaggggaggggctg---g...59...cggctccccgcag	actgagta
L.Afr	aGGTGgAG	GTAaGT-GG	-----gggtctgggaggcatggtg---...38...ggctctctgtag	accgagta
	****	***	**	***
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id=489156 gene=ENSG0000007866 name=TEAD3 segment=chr6.35443266.35443342.-1 type=IN

Figure 471: CS=10.14



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P. Tro	ttttctga	tggcaatgatgatttttacacttattgttgttcacctgataacataaatatgagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcatgatt					
P. Abe	ttttctga	tggcagtgatgatttttacacttattgttgttcacctgataacataaatatgaagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcatgatt					
C. Jac	ttttctga	tggcaatgatgatttttacacttat-----ttcacctgataacataaatatgaagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcatgatt					
R. Nor	ttccagg	tggcaatgatgataattttactcat-----tcacctgacaat-----atctgaagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcttttt					
C. Por	attgatga	tggcagtgatgatttttacatgtat---tgttcacctgatgac---agtatgagaggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tctcagtt					
O. Cun	ttttctga	tggcagtgatgatgcttacacttcg---gttcacctgataacat-aacatgagggtgttcag	TTCAGT	CACTACCT	ca	TCTG	atgcca	ttttgatt					
C. Fam	ttttctga	tggcaatgatgatttttaagcttac-----tcacctg-----ataaatatgagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcttgatt					
B. Tau	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctgataa-ataaatatgaagggtgttcag	TC	CACTACCT	ca	TCTG	atgccg	tcttgatt					
E. Cab	ccttctga	tggcagtgatgattttcaacttat---tgttcacctgataa-acaacatgaagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcttgatt					
S. Sus	atttctga	tggcaatgatgattttgaaatttat---tgttcacttgagaa-ataaatatgagggtgttcag	TC	CACTACCT	ca	TCTG	atgcca	tcttgatt					
O. Avi	atttctga	tggcagtgatgatttttaaatgtat---tgttcacctg-----ataaatatgagggtgttcag	TC	CACTACCT	ca	TCTG	atgccg	tcttgatt					
L. Afr	ttttctga	tggcagtgatgattt-----aat---tgttcacctg-aatacaaatatgagggtgtacag	TC	CACTACCT	ca	TCTG	atgcca	tcttgatt					
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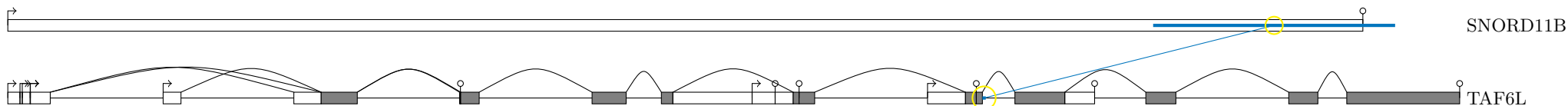
id=424176 gene=ENSG00000238505 name=SNORD11B segment=chr2.203156058.203156141.1 type=EN

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P. Tro	gaCAGAAG	GTtAGTGA	-----agactgaaaataattagact...252...-ctgtctgtgtag	ctcatgga
P. Abe	gaCAGAAG	GTtAGTGA	-----agactgaaaataattaaact...252...-ctgtctgtgtag	ctcatgga
C. Jac	gaCAGAAG	GTtAGTGA	-----agactgaaaagaattaaact...233...-ttgtctgtgtag	ctcatgga
R. Nor	gcCAGAAG	GTtAGTGA	-----agactgaaaatagcagttgc...206...-ttttctgtgtag	cttatgga
C. Por	gaCAGAAG	GTtGGTGA	-----aggctaaaactgaaccct...240...-tcactctgtgtag	ctcatgga
O. Cun	gaCAGAAG	GTtAGTGA	gaCTGAAaatagtaaaacttgcaacat...221...-ttttgtctgtag	ctcatgga
C. Fam	ggCAGAAG	GTtAGTGA	-----agaccagataatcccacctg...139...-gtgtctgtgtag	ctcatgga
B. Tau	gaCAGAAG	GTtAGTGA	-----agactgaaaataaaaaaatt...242...-ttttgtccttag	ctcatgaa
E. Cab	gaCAGAAG	GTtAGTGA	-----agactgaaaataaaaactcg...245...-ttgtctgtgcag	ctcatgca
S. Sus	gaCAGAAG	GTtGGTGA	-----atactgaaaataatgaaact...245...-ttttgtttatag	ctcatgga
O. Avi	gaCAGAAG	GTtAGTGA	-----agactgagaataaaaagaatt...241...gttttgtc-ttag	ctcatgaa
L. Afr	gaCAGAAG	GTtAGTGA	-----agactggaagtgtagaact...207...-ttttatctgtag	ctcatgga
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id=546690 gene=ENSG00000198000 name=NOL8 segment=chr9.95072544.95072834.-1 type=IN

Figure 472: CS=11.9





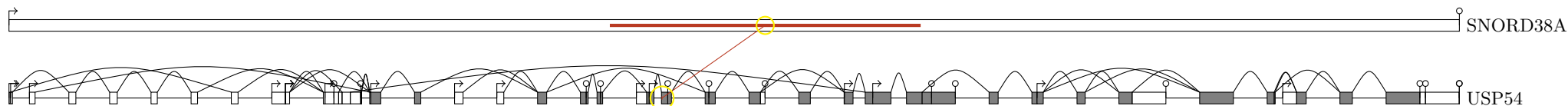
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P.Tro	ttttctga	tggcaatgatgattttt-acacttattgttgttcacctgataacataaaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tcatgatt
P.Abe	ttttctga	tggcagtgatgattttt-acacttattgttgttcacctgataacataaaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tcatgatt
C.Jac	ttttctga	tggcaatgatgattttt-acacttat-----ttcacctgataacataaaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tcatgatt
M.Mus	tttgcagg	tggcaatgatgatttttcttatttg-----ttcacctgacaatat----atgaagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tctttttg
R.Nor	tttccagg	tggcaatgatgataatt-ttactca-----ttcacctgacaatat----ctgaagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tctttttt
C.Por	attgatga	tggcgatgatgattttt-acatgattg---ttcacctgatgaca---gtatgagaggtgttca	TCA	CTACCTCA	t	CTGA	tgcca	tctcagtt
O.Cun	ttttctga	tggcgatgatgatgctt-acactt---cggttcacctgataacat-aacatgagggtgttca	TCA	CTACCTCA	t	CTGA	tgcca	ttttgatt
C.Fam	ttttctga	tggcaatgatgattttt-aagctta-----ctcacctg----ataaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tcttgatt
F.Cat	ttttctga	tggcaatgatgattttt-aaatttacta---atcacctg----acaaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgcca	tcttgatt
B.Tau	atttctga	tggcagtgatgattttt-aaatgattg---ttcacctgataa-ataaatgatgagggtgttca	GTC	ACTACCTCA	t	CTGA	tgccg	tcttgact
E.Cab	ctttctga	tggcagtgatgattttt-caacttattg---ttcacctgataa-acaaacatgaagggtgttca	CA	CTACCTCA	t	CTGA	tgcca	tcttgatt
L.Afr	ttttctga	tggcagtgatgattt-----aattg-----ttcacctga-aatacaaatgatgagggtgtaca	GTC	ACTACCTCA	t	CTGA	tgcca	tcttgatt
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id=424176 gene=ENSG00000238505 name=SNORD11B segment=chr2.203156058.203156141.1 type=EN

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P.Abe	tCAGTGGG	GTAaGTGAC	caggctgggacagggagaat---...107...-ctctccaacag	gtgaaaat
C.Jac	tCAGTGGG	GTAaGTGAC	caggctgagacagggagaat---...87...-ttctccaacag	gtgaaatc
M.Mus	tCAGTGGG	GTAaGTGAT	cagttc---tctagcgaatccta...76...-tcctaccaacag	gtaaaatc
R.Nor	tCAGTGGG	GTAaGTGAT	caattc---tctagcgaacatga...79...ctcctacc-acag	gtaaaatc
C.Por	tCAGTGGG	GTAaGTGA	---gtacctttgggaacaacagc...60...-ttttgccacag	gtgaaatc
O.Cun	tCAGTGGG	GTAaGTGA	---gcagggtccaggaggacgt...95...-ttctaccaacag	gtgaaatc
C.Fam	tCAGTGGG	GTGaGTGAC	caggctgggacagggagaat---...104...-ttctaccaacag	gtaaaatc
F.Cat	tCAGTGGG	GTGaGTGAC	gcggctgcggcagggtgggg---...104...-ttctaccaacag	gtgaaatc
B.Tau	tCAGcGGG	GTAaGTGAC	caggctgcggcaggggcggga---...99...-ttctccaacag	gtgaaatc
E.Cab	tCAGTGGG	GTAaGTGc	cccaggctgggacagggagaat---...107...-ttctccaacag	gtgaaatc
L.Afr	tCAGTGGG	GTAaGTGAC	caggctgggacagggagac---...100...-ttttaccaacag	gtgaaatc
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id=764081 gene=ENSG00000162227 name=TAF6L segment=chr11.62549441.62549584.1 type=IN

Figure 473: CS=11.7



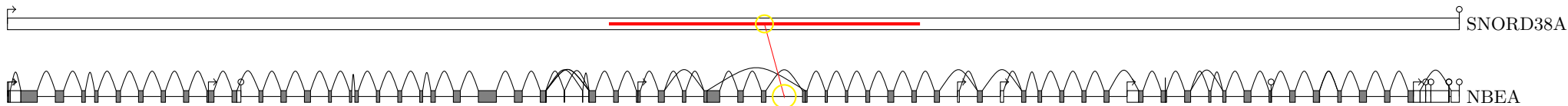
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P. Abe	tccagcct	tctcgtgatgaaaactctgtc	CAGTtc	TGCTa	CTGAAG	ggagagagacgagagccttttaggctgaggaa	ggccagca
M. Mus	tgctgcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTa	CTGAAG	-gaatgagatgaacac-tttagtgtgaagaa	ggcaagca
R. Nor	gagcgcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTa	CTGAAG	-gaatgagatgaatac-tttagtgtgaagaa	ggcaagca
C. Por	ctgagcct	tctcgtgatgaaaga--ctgtt	CAGTtc	TGCTg	CTGAAG	ggggagtgtgaaaccttttagtgtgaggaa	ggcaggca
O. Cun	ggtcgcct	ccttgtgatg--agactctgtc	CAGTtc	TGCTa	CTGAAG	ggagagagatgaaagccttgagtgtgaggaa	ggcgggat
C. Fam	tccagcct	tcttatgatgaaaa--ctgtc	CAGTtc	TGCTa	CTGAAG	ggaaagagatgaaagccttttagtgtgaggaa	ggcagcag
B. Tau	ttcagcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTa	CTGAAG	ggagagagatgaaagccttttagtgtgaggaa	ggtggcag
E. Cab	cccagcct	ccttgtgatgaaa--actgtc	CAGTtc	TGCTg	CTGAAG	ggggagagatgaaagccttttagtgtgaggaa	ggcggcca
S. Sus	tgagcct	tctcatgatgaaaactctgtc	CAGTtc	TGCTg	CTGAAG	ggagagcagatgaaagccttttagcactgaggaa	ggtggcgt
O. Avi	tgagcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTa	CTGAAG	ggagagagatgaaagccttttagtgtgaggaa	ggtggcag
L. Afr	tccagcct	tcttgtgatg--aaactctgtc	CAGTtc	TGCTa	CTGAAG	ggagagagatgaaagtcttttagtactgaggaa	ggctgagg
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id=490083 gene=ENSG00000202031 name=SNORD38A segment=chr1.45243515.45243584.1 type=EN

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P. Abe	actgtcca	gtgagttaaatc...	73...	gaactagccttatatatgta	TTTCAG	AGCAACTg
M. Mus	actgtccg	gtgagttaatgc...	73...	gacctagtgtgtgtgtgta	TTTCAG	AGCAACTg
R. Nor	actgtccg	gtgagttagctc...	67...	gaactagtgtgtgtgtgta	TTTCAG	AGCAACTg
C. Por	actgtccg	gtaagttaactt...	66...	tgactgtcattacatacata	TTTCAG	AGCAACTg
O. Cun	actgtcct	gtgagttcaagtc...	78...	aagccttttatgtaaatatg	TTTCAG	AGCAACTg
C. Fam	actgtccg	gtgagttaaagtc...	292...	aaactagttttatatatgta	TTTCAG	AGCAACTg
B. Tau	actgcccg	gtgagttgtcag...	72...	aaactgaccttatatgtgta	TTTCAG	AGCAACTg
E. Cab	actgtccg	gtgagttcaagtc...	74...	aaactacccttatatatgta	TTTCAG	AGCAACTg
S. Sus	actgtccg	gtgagttaaagtc...	57...	aaactagcctcatgtatgta	TTTCAG	AGCAACTg
O. Avi	actgcccg	gtgagttgtggg...	65...	aaactgacctgatatgtgta	TTTCAG	AGCAACTg
L. Afr	actgtcct	gtgagttatgtc...	74...	gaactagccttatatactg	TTTCAG	AGCAACTg
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id=568559 gene=ENSG00000166348 name=USP54 segment=chr10.75301280.75301390.-1 type=IN

Figure 474: CS=14.04



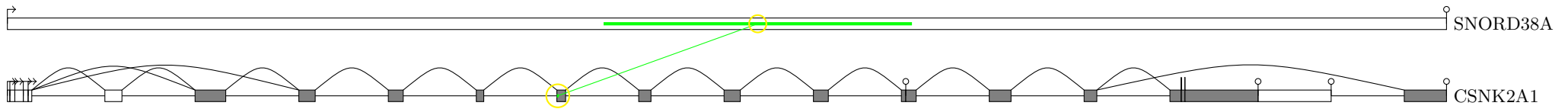
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P.Tro	tccagcct	tctcgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGg	GAGAgagatgagagccttttaggctgaggaa	ggccagca
M.Mus	tgctgcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGg	-gaatgagatgaacac-tttagtgtgaa	ggcaagca
R.Nor	gagcgct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGg	-gaatgagatgaatac-tttagtgtgaa	ggcaagca
C.Por	ctgagcct	tctcgtgatgaaaga-ctgtt	CAGTtc	TGCTGc	TGAAGg	GGGAGTGA	gaaaccttttagtgtgaggaa
O.Cun	ggtcgtcg	ccttgtgatg-actctgtc	CAGTtc	TGCTac	TGAAGg	GAGAgagatgaaagccttgagtgtgaggaa	ggcgggat
C.Fam	tccagcct	tctttagatgaaaact-gtc	CAGTtc	TGCTac	TGAAGg	gaaagagatgaaagccttttagtgtgaggaa	ggcagcag
F.Cat	tgagcct	tctttagatgaaaactgcgtc	CAGTtc	TGCTGc	TGAAGg	gaaagagatgaaagccttttagtgtgaggaa	ggcagcag
B.Tau	ttcagcct	tctttagatgaaaactctgtc	CAGTtc	TGCTac	TGAAGg	GAGAgagatgaaagccttttagtgtgaggaa	ggtggcag
E.Cab	cccagctg	cctttagatgaaa-actgtc	CAGTtc	TGCTGc	TGAAGg	GGGAgagatgaaagccttttagtgtgaggaa	ggcggcca
O.Avi	tgagcct	tctttagatgaaaactctgtc	CAGTtc	TGCTac	TGAAGg	GAGAgagatgaaagccttttagtgtgaggaa	ggtggcag
L.Afr	tccagcct	tctttagatg-aaactctgtc	CAGTtc	TGCTac	TGAAGg	GAGAgagatgaaagccttttagtactgaggaa	ggctgagg
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R.Mac	aatatgag	gtatgcatgact...4942...	-----	tatattattagttttatg	TCTTaa	TTTCAacAG	CAtcACTg
P.Tro	aatatgag	gtatgcatgact...4942...	-----	tatattattagttttatg	TCTTaa	TTTCAacAG	CAtcACTg
M.Mus	aacatgag	gtatgcatagtg...4948...	-----	tactagtctttatgtcttaa	TTTCAacAG	CAtcACTg	
R.Nor	aacatgag	gtatgaaatagtg...4948...	-----	tactagtctttgtcttaa	TTTCAacAG	CAtcACTg	
C.Por	aacatgag	gtatgcagaact...4937...	...tgaattatattattag	tctTTGTg	TCTTaa	TTTCAaCAG	CAtcACTg
O.Cun	aacatgag	gtgtgtataact...4942...	-----	tatattattagctctttgtg	TCTTaa	TTTCAacAG	CAtcACTg
C.Fam	aacatgag	gtatacataact...4948...	-----	tactagtctttatgtcttaa	TTTCAacAG	CAtcACTg	
F.Cat	aacatgag	gtacacataacg...4948...	-----	tactagtctttatgtcttaa	TTTCAaCAG	CAtcACTg	
B.Tau	aacatgag	gtatacataact...4942...	-----	catattactagtctttatg	TCTTaa	TTTCAacAG	CAtcACTg
E.Cab	aacatgag	gtatatataacc...4942...	-----	tatattactagtctttatg	TCTTaa	TTTCAaCAG	CAtcACTg
O.Avi	aacatgag	gtatacataact...4942...	-----	catattactagtctttatg	TCTTaa	TTTCAacAG	CAtcACTg
L.Afr	aatatgag	gtacacagagct...4942...	-----	tatattatcagctctttatg	TCTTaa	TTTCAacAG	CAtcACTg
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Figure 475: CS=19.5



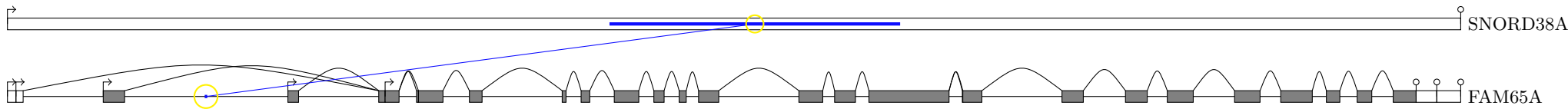
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R. Mac	tccagcct	tctcgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgagagcc-ttttaggctgaggaa	ggccagca
P. Tro	tccagcct	tctcgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgagagccttttaggctgaggaa	ggccagca
P. Abe	tccagcct	tctcgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagacgagagccttttaggctgaggaa	ggccagca
M. Mus	tgctgcct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGGAATGa	GATG--aacactttagtgtgaa	ggcaagca
R. Nor	gagcgct	tcttgtgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGGAATGAGATG	--aatactttagtgtgaa	ggcaagca
C. Por	ctgagcct	tctcgtgatgaaaga--ctgtt	CAGTtc	TGCTac	TGAAGGgg	GAGTGATGaacctttagtgtgaa	ggcaggca
O. Cun	ggtcgtctg	ccttgtgatgaga--ctgtt	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagccttgagtgtgaa	ggcgggat
C. Fam	tccagcct	tcttctgatgaaaact--gtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
F. Cat	tgagcct	tcttctgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
B. Tau	ttcagcct	tcttctgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
E. Cab	cccagctg	ccttctgatgaaa--actgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
S. Sus	tgagcct	tcttctgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
O. Avi	tgagcct	tcttctgatgaaaactctgtc	CAGTtc	TGCTac	TGAAGG	gagagagatgaaagcctttagtgtgaa	ggcaggca
	**	** *****	** *****	***** *	*	*	**** **

id=490083 gene=ENSG00000202031 name=SNORD38A segment=chr1.45243515.45243584.1 type=EN

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R. Mac	acttcaag	gtataatctata...1739...	-----tttcatggctcaaa-----cat--ttg-----	TCTTTAcAG	CAATTGta
P. Tro	acttcaag	gtataatatata...1435...	-----tttcatggctcaaa-----cat--ttg-----	TCTTTAcAG	CAATTGta
P. Abe	acttcaag	gtataatatata...1437...	-----tttcatggctcaaa-----cat--ttg-----	TCTTTAcAG	CAATTGta
M. Mus	acttcaag	gtatcatccata...631...	gcgttgttttatagctcaac-----	TATTgCATTtg	TCTTTAcAG
R. Nor	acttcaag	gtattgttcata...718...	-----tcatctcagctt---tggtgaac-----	TATTTTATtt	TCTTTAcAG
C. Por	acttcaag	gtatagtatgag...1500...	-----agcctt---tattacatgactgaa	TTGTtgCATTtg	TCTTTAcAG
O. Cun	acttcaag	gtatatctaacc...1490...	-----tgacttaaatgtttcat--ttg-----	TCTTTAcAG	CAATTGta
C. Fam	acttcaag	gtataatatata...1307...	-----gctcaaatgttgcac--ttgtc-----	TTTAcAG	CAATTGta
F. Cat	acttcaag	gtataatatata...1310...	-----cggcttatatgttgcac--ttg-----	TCTTTAcAG	CAATTGta
B. Tau	acttcaag	gtataatgtata...1142...	-----tggtcctcaatgttgcac--ttg-----	TCTTTAcAG	CAATTGta
E. Cab	acttcaag	gtataatgtata...1285...	-----tgactcaaatgttgcac--ttg-----	TCTTTAcAG	CAATTGta
S. Sus	acttcaag	gtataatgtata...1612...	-----tggtcctcaatattatat--ttg-----	TCTTTAcAG	CAATTGta
O. Avi	acttcaag	gtataatgtata...1140...	-----tggtcctcaatgttgcac--ttg-----	TCTTTAcAG	CAATTGta
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id=199898 gene=ENSG00000101266 name=CSNK2A1 segment=chr20.478425.479898.-1 type=IN

Figure 476: CS=18.76



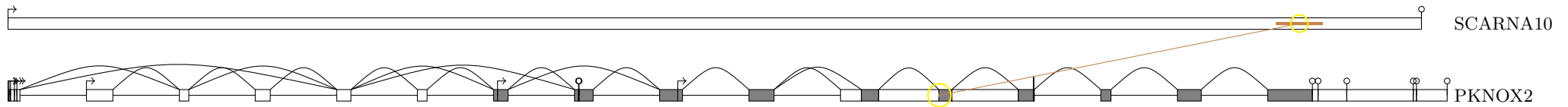
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P. Tro	tccagcct	tctcgtgatgaaaa	CTCTGTCCAGTTCTGCT	CTGA	agggagagagatgagagccttttaggctgaggaa	ggccagca
P. Abe	tccagcct	tctcgtgatgaaaa	CTCTGTCCAGTTCTGCT	CTGA	agggagagacgagagccttttaggctgaggaa	ggccagca
M. Mus	tgctgcct	tcttgtgatgaaaa	CTGTCCAGTTCTGCT	CTGA	-aggaatgagatgaacac-tttagtgtgaa	ggcaagca
C. Por	ctgagcct	tctcgtgatgaaga	--CTGTTTCAGTTCTGCT	CTGA	agggggagtgatgaaaccttttagtgctgaggaa	ggcaggca
O. Cun	ggtcgctg	ccttgtgatgaga	-CTCTGTCCAGTTCTGCT	CTGA	agggagagagatgaaagccttgagtgtgaggaa	ggcgggat
C. Fam	tccagcct	tcttatgatgaaaa	--CTGTCCAGTTCTGCT	CTGA	aaggaaagagatgaaagccttttagtgctgaggaa	ggcagcag
F. Cat	tcagcct	tcttatgatgaaaa	CTGCgtCCAGTTCTGCT	CTGA	agggaaagagatgaaagccttttagtgctgaggaa	ggcagcag
B. Tau	ttcagcct	tcttgtgatgaaaa	CTCTGTCCAGTTCTGCT	CTGA	agggagagagatgaaagccttttagtgctgaggaa	ggtggcag
E. Cab	cccagctg	ccttgtgatgaaaa	--CTGTCCAGTTCTGCT	CTGA	agggggagagatgaaagccttttagtgctgaggaa	ggcggcca
S. Sus	tcagcct	tctcatgatgaaaa	CTCTGTCCAGTTCTGCT	CTGA	agggagagcagatgaaagccttttagcactgaggaa	ggtggcgt
O. Avi	tcagcct	tcttgtgatgaaaa	CTCTGTCCAGTTCTGCT	CTGA	agggagagagatgaaagccttttagtgctgaggaa	ggtggcag
L. Afr	tccagcct	tcttgtgatgaaa	-CTCTGTCCAGTTCTGCT	CTGA	agggagagagatgaaagccttttagtactgaggaa	ggctgagg
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id=490083 gene=ENSG00000202031 name=SNORD38A segment=chr1.45243515.45243584.1 type=EN

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R. Mac	ccagagag	ggtt-agtagtatt...	4845...	ccccatccaggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-gaggcgcgggaggagccga...	55...	ggccaggcctgc	agagtccg---
P. Tro	ccagagag	ggtt-agtagtatt...	4845...	ccccatccaggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggcggcgcgggaggagccg-	56...	ggccaggccgg	aaggtccg---
P. Abe	ccagagag	ggtt-agtagtatt...	4845...	ccccatccaggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggcggcgcgggaggagccg-	56...	ggctaggccgg	agggtccg---
M. Mus	ccagagag	ggtt-agcagcatt...	4841...	ccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-gaggaggcggagagcag---	62...	acccggccag	cgggacac---
C. Por	tcagagag	att-tgtaacatt...	4843...	gccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggggaggcggcggagcag---	60...	gcccgggccc	caggggcg---
O. Cun	ccagagac	ggtt-attcacagc...	4864...	ccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggaggcggcggagtagccg-	37...	catctggccc	cgggctcg---
C. Fam	ccagagat	gtgaagtaacat...	4842...	ccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggggcggcgggaggagc---	61...	gcccgggccc	cagggaca---
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E. Cab	ccagagag	gttaagtaatat...	4839...	ccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggggcggcgggaggagc---	64...	ctggactgg	cggagacactg
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O. Avi	ccagagag	gttaagtaatat...	4842...	ccccatcccggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggcggcgcgggaggagcctg-	59...	gcccgggccc	cgtggact---
L. Afr	ccagaaag	cttaagtaatat...	4843...	ccccatcccaggcgggctgag	TCAGg	GGCAGg	AACTGGGCGGGG	-ggcggcgcgggaggagcca-	58...	accctggccc	cagggctg---
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id=591778 gene=ENSG0000039523 name=FAM65A segment=chr16.67563763.67571433.1 type=IN

Figure 477: CS=14



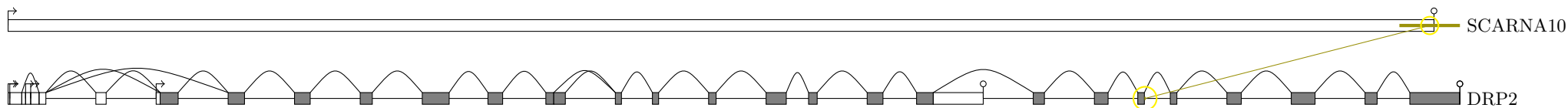
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R.Mac	ttgtgtca	gccacatgatga...256...-ggacttagcttgtgttatgg	<b>CCACTGAGAGATGA</b>	aacacagatc	tttggaatctgatggct	gtaagtgc
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P.Abe	ttttatca	gccacatgatga...256...-ggacttagcttgtgttatgg	<b>CCACTGAGAGATGA</b>	aacacagatc	tttggaatctgatggct	gcaagtgc
C.Jac	ttttatca	gccacatgatga...255...-ggacttagctcgtattatga	<b>CCACTGAGAGATGA</b>	aacatagatc	tttggaatctgatggct	gcaagtgc
M.Mus	ttttctca	gccatgtgatga...251...aggacttagct-gtgtcatgg	<b>CCACTGAGAGATGA</b>	acacagatc	tttggaatctgatggct	ataagcgc
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C.Por	ttttatca	gccatgtgatga...255...aggacttagct-ctcttatgg	<b>CCACTGAGAGATGA</b>	aacatagatc	tttggaatctgatggct	gcaagtgc
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R.Mac	cgtgtcag	gtcgggtgcaaag...418...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
P.Tro	tgtgtcag	gtcgggtgcaaag...410...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
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C.Jac	cgtgtcag	gtcgggtgcaaag...414...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
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C.Por	cgtgtcag	gtcaggtgcagag...423...-acaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
O.Cun	cgtgtcag	gtcgggtgcagag...394...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
C.Fam	ggtgtcag	gtcgggtgcaggg...407...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
B.Tau	ggtgtcag	gtcgtgtgcaggg...405...-gcaggggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
E.Cab	ggtgtcag	gtcgggtgcaggg...419...ggca-gggaccccaaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agct
L.Afr	tgtgtcag	gtcgggtgcaggg...521...ggcaggggaccc-aaaactgg	<b>TGTGCTcCTCAG</b>	<b>GTGG</b> agcc
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Figure 478: CS=11.7



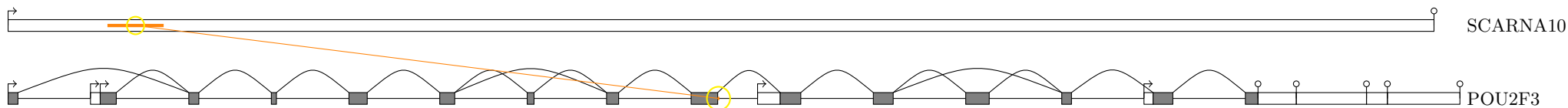
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R.Mac	ttgtgtca	gccacatgatga...274...ggccactgagagatgaaaca	CAGATCTT	TGGTA	TCTG	TGGCT	gtaagtgc
P.Tro	ttttgtca	gccacatgatga...274...ggccactgagagatgaaaca	CAGATCTT	TGGTA	TCTG	TGGCT	gcaagtgc
P.Abe	ttttatca	gccacatgatga...274...ggccactgagagatgaaaca	CAGATCTT	TGGTA	TCTG	TGGCT	gcaagtgc
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R.Nor	ttttctca	gccatgtgatga...280...-----	agagatgacacacagatcctt	TGGTA	TCTG	TGGCT	acaagggc
C.Por	ttttatca	gccatgtgatga...273...ggccactgagagatgaaaca	TAGATCTT	TGGTA	TCTG	TGGCT	gcaagtgc
O.Cun	ttttgtca	gccacatgatga...275...ggccactgagagatgaaaca	CAGATCTT	TGGTA	TCTG	TGGCT	gcaagtgc
C.Fam	ttttgtca	gccatgtgatga...280...-----	agagatgaaacacagatcctt	TGGTA	TCTG	TGGCT	gcaaatgc
B.Tau	ttttatca	gccatgtgatga...274...-----	agagatgaaacacagatcctt	TGGTA	TCTG	TGGCT	gcaaatgc
E.Cab	tttaatca	gccacatgatga...271...ggccactgagagatgaaaca	CAGATCTT	TGGTA	TCTG	TGGCT	gcaagtac
L.Afr	ttttatta	gccacatgatga...274...-----	agagatgaaacacagatcctt	TGGTA	TCTG	TGGCT	gcaaatgc
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P.Tro	gCCA	CAG	GTACCA	ccAGGTTT	G	cg-ggaggtgggtaggagctg...212...ctttattcctag	gcttgctg
P.Abe	gCCA	CAG	GTACCA	ccAGGTTT	G	cg-ggaggtgggtaggagctg...212...ctttattcctag	gcttgctg
C.Jac	gCCA	CAG	GTACCA	ccAGGTTT	G	cg-ggaggtgggtaggagctg...211...gtttctttctag	gcttgctg
M.Mus	gCCA	CAG	GTACCA	ctgcctttcagtgaggagtg	g	-----...230...ctgtcctttctag	gcttgctg
R.Nor	gCCA	CAG	GTACCA	ctgcctttcagtgaggagtg	g	-----...231...ctgtcctttctag	gcttgctg
C.Por	gCCA	CAG	GTACCA	gAAGGTTT	G	gg-gaaggaggtatagaaagt...157...ctttcttcccag	gcttgctg
O.Cun	gCCA	CAG	GTACCA	ccGGGTTT	G	ct-gcggaggggttaggag...191...ctttcttcccag	gctggcgc
C.Fam	gCCA	CAG	GTACCA	ccaggcttggg-ggagggaga	g	-----...202...ctttcttctcag	gcttgcag
B.Tau	gCCA	CAG	GTACCA	ccacatttggg-ggaggagaa	g	-----...224...ctttcttcccag	gcttgctg
E.Cab	gCCA	CAG	GTACCA	ccAGGTTT	G	gg-ggaggagatttaagga...204...ctttcttcccag	gcttgctg
L.Afr	gCCA	CAG	GTACCA	ccacgttttg-gggagtg	g	-----...207...ctttcttcccag	gcttgctg
*****	*****	**	*			* * * *	*** ** *

id=259610 gene=ENSG00000102385 name=DRP2 segment=chrX.100509914.100510172.1 type=IN

Figure 479: CS=17.94



H. Sap	ttttgtca	gccacatgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...269...aatctgatggct	gcaagtgc
R. Mac	ttgtgtca	gccacatgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...269...aatctgatggct	gtaagtgc
P. Tro	ttttgtca	gccacatgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...269...aatctgatggct	gcaagtgc
P. Abe	ttttatca	gccacatgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...269...aatctgatggct	gcaagtgc
C. Jac	ttttatca	gccacatgatgata	TCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...268...aatctgatggct	gcaagtac
M. Mus	ttttctca	gccatgtgatgat	CAAGg	CTGTt	GTGA	ttcagttggtttagctaagt...264...aatctgatggct	ataagcgc
R. Nor	ttttctca	gccatgtgatgat	CAAGg	CTGTt	GTGA	ttcagttggtttgctaagt...267...aatctgatggct	acaagggc
C. Por	ttttatca	gccatgtgatgat	ACCAAGg	CTGTt	GTGA	ttcagtcggctgagtaagc...268...aatctgatggct	gcaagtgc
O. Cun	ttttgtca	gccacatgatgata	TCAAGg	CTGTt	GTGA	ttcagttggcttgctaagc...270...aatctgatggct	gcaagtgc
C. Fam	ttttgtca	gccatgtgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...267...aatctgatggct	gcaaatgc
B. Tau	ttttatca	gccatgtgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...261...aatctgatggct	gcaaatgc
E. Cab	tttaatca	gccacatgatgat	CAAGg	CTGTt	GTGA	ttcagttggtttgctaagc...266...aatctgatggct	gcaagtac
L. Afr	ttttatta	gccacatgatgat	ATCAAGg	CTGTt	GTGA	ttcagttggtttgctaagt...261...aatctgatggct	gcaaatgc
	** * *	****	*****	*****	****	*****	*****

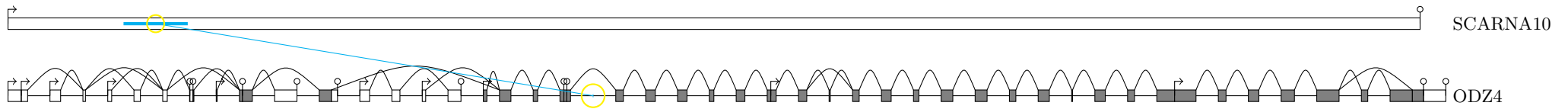
id=290803 gene=ENSG00000239002 name=SCARNA10 segment=chr12.6619388.6619717.1 type=EN

H. Sap	tCACACAG	gTTTGGT	ttt---aggggaaaagatagaag...236...aaccgattcttc	accttaga
R. Mac	tCACACAG	gTTTGGT	ttt---aggggaaaagatagaag...236...aaccgattcttc	accttaga
P. Tro	tCACACAG	gTTTGGT	ttt---aggggaaaagatagaag...236...aaccgattcttc	accttaga
P. Abe	tCACACAG	gTTTGGT	ttt---aggggaaaagatagaag...236...aactgattcttc	accttaga
C. Jac	tCACACAG	gTTTGG	cttt---aggggaaaagatagaa...234...aaccaattcttc	aacttaga
M. Mus	tCACACAG	gTTTG	---ctctgggatcc-ggagttgga--...178...agctggttttgt	gtcctaga
R. Nor	tCACACAG	gTTTG	---ctttgggagcg-ggagttgga--...206...agctggttttat	atcctaga
C. Por	tCACACAG	gTTTGGT	-tt---aggggaggataaatggaag...170...aaccagttctcc	atcctaga
O. Cun	tCACACAG	gTTTGG	-cttttggggggaaggagatg----...213...aaccagcactcc	acccacaa
C. Fam	tCACACAG	gTTTGGT	ttgcagggatct---agtaggaa-...230...accaaattctcc	ctcttaga
B. Tau	tCACACAG	gTTTGGT	---ttgggactgaggaggtgaag...218...aaccaggtttcc	atcctaga
E. Cab	tCACACAG	gTTTG	---ttt---aggggaggagatgaa-...231...gaccaattctcc	atcctaga
L. Afr	tCACACAG	gTTTGGT	ttt---ggggaagcagctgaaag...231...aaccagttctcc	atctgaga
	*****	*****		* * * *

id=684595 gene=ENSG00000137709 name=POU2F3 segment=chr11.120175922.120176196.1 type=IN

Figure 480: CS=19.5





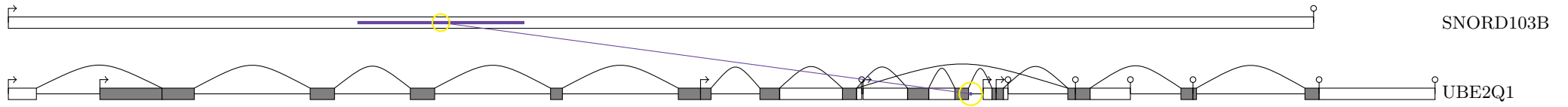
H.Sap	ttttgtca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...263...	aatctgatggct	gcaagtgc
R.Mac	ttgtgtca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...263...	aatctgatggct	gtaagtgc
P.Tro	ttttgtca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...263...	aatctgatggct	gcaagtgc
P.Abe	ttttatca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...263...	aatctgatggct	gcaagtgc
C.Jac	ttttatca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...262...	aatctgatggct	gcaagtac
M.Mus	ttttctca	gccatgtgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttagctaagccaggg...258...	aatctgatggct	ataagcgc
R.Nor	ttttctca	gccatgtgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagccaggg...261...	aatctgatggct	acaagggc
C.Por	ttttatca	gccatgtgatgatataca	GGCTGT	GTGA	ttCAGT	cggtctgagtaagccggga...262...	aatctgatggct	gcaagtgc
O.Cun	ttttgtca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...264...	aatctgatggct	gcaagtgc
C.Fam	ttttgtca	gccatgtgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...261...	aatctgatggct	gcaagtgc
B.Tau	ttttatca	gccatgtgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...255...	aatctgatggct	gcaagtgc
E.Cab	tttaatca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...260...	aatctgatggct	gcaagtgc
L.Afr	ttttatca	gccacatgatgatataca	GGCTGT	GTGA	ttCAGT	tggtttggctaagcccaggg...255...	aatctgatggct	gcaagtgc
** * *	****	*****	*****	****	*****	*** *	**** *	*****

id=290803 gene=ENSG00000239002 name=SCARNA10 segment=chr12.6619388.6619717.1 type=EN

H.Sap	c t t t g t g g	g t a a g c a c c t c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
R.Mac	c t t t g t g g	g t a a g c a c c t c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
P.Tro	c t t t g t g g	g t a a g c a c c t c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
P.Abe	c t t t g t g g	g t a a g c a c c t c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
C.Jac	c t t t g t g g	g t a a g c a c c t c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
M.Mus	c t t t g t g g	g t a a g c a t t t c c . . . 4943 . . .	a g a a a c a g a t g a c t t t t t c c	A T T G c	T C A C t	A C A G	C C a t g c a c
R.Nor	c t t t g t g g	g t a a g c a t t t c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c c	A T T G c	T C A C t	A C A G	C C a t g c a c
C.Por	c t t c g t g g	g t a a g c a c a c c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
O.Cun	c t t c g t g g	g t a a g c a t c c c t . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
C.Fam	c t t t g t g g	g t a a g c a c c t c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C C A C A G		C C a t g c a c
B.Tau	c t t t g t g g	g t a a g t a c c c c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C C A C A G		C C a t g c a c
E.Cab	c t t t g t g g	g t a a g c a c c t c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C C A C A G		C C a t g c a c
L.Afr	c t t t g t g g	g t a a g c a c c t c c . . . 4943 . . .	a g a a a a a g a t g a c t t t t t c t c	A T T G c	T C A C c	A C A G	C C a t g c a c
*** **	****	***** * *	*****	*****	*****	*****	*****

id=304415 gene=ENSG00000149256 name=ODZ4 segment=chr11.78574178.78600829.-1 type=IN

Figure 481: CS=14.04



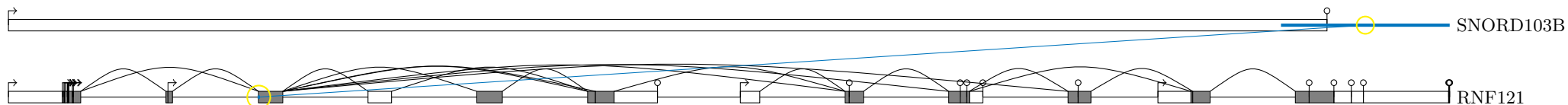
H. Sap	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
R. Mac	gccttttg	tctggtaaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
P. Tro	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
M. Mus	tgctattg	tctggcggtgatgac	<b>CCACTTGCCCTC</b>	actgaggacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggtgatgac	<b>CCACTTGCCCTC</b>	actgaggacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgac	<b>CCACTTGCCCTC</b>	actgaggacagagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagatgg
O. Cun	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggacgc
F. Cat	ggcctcgg	tctggcagtgatg	<b>AGCCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggacgc
B. Tau	gaccgtgg	tctggcaatgatg	<b>TGAGCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggacgc
E. Cab	ggcctcgg	tctggcaatgatg	<b>GAGCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggacgc
S. Sus	ggcctcgg	tctggcaatgatg	<b>GCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caggacgc
L. Afr	ggccattg	tctggcagtgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttggtaatggact	caagttctgagccaga	caagacac
	*	*	*****	*****	*****	*****	*****	* *

id=735318 gene=ENSG00000202107 name=SNORD103B segment=chr1.31421964.31422049.-1 type=EN

H. Sap	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	atthttgtc
R. Mac	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	ctthttgtc
P. Tro	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	atthttgtc
P. Abe	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	ctthttgtc
C. Jac	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcagacgagggg	catctcctctggc	ctgagggggaaggg	acttggag	cttgtgtc
M. Mus	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggcag-	agggcaatagggc	g--ttctgtg	tcagcaggtgtggaagg	gat-tggac	ctctggcc
R. Nor	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctgggcaa-	agggcaata-gcca-	ttgtggtgc	agcaggtgcggaagg	ggc-tgggc	ccgtggcc
C. Por	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctgggcca-	ggggcaacaggg	tagttcttg	agcagaggtgaagaaga	aaactcagg	ctcctacc
O. Cun	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	tggctgggcga-	gggggagcggc	ggcggggcggag	-----agggc	cttttaa	ctthttaa
F. Cat	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	gctcggcaggg	-----	-----g	cggggggtggggaagg	gctcggag	ctcttgac
B. Tau	tct	<b>GGAGG</b>	<b>GTGAGTGG</b>	CTCA	---gcaa-g	-----	ggtagaggtgaagaagg	gctcggag	cttctgcc
E. Cab	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	CTC	-----caaaagg	gcagagggcggc	ctctgtgcagaggggaagg	caggggtgtggag	ctthttgc
S. Sus	tc	<b>CGGAGG</b>	<b>GTGAGTGG</b>	---	ccagccagg	-----	gcagaggtgaggaagg	-gccccgac	ctctcgcc
L. Afr	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ttgggaa	gggggagagaggg	cagctctctgt	tcagaggggaggaagg	aacttggag	ctthttgtc
	**	*****	*****			*	*	**	*

id=175951 gene=ENSG00000160714 name=UBE2Q1 segment=chr1.154524334.154524396.-1 type=IN VIEW

Figure 482: CS=12.6



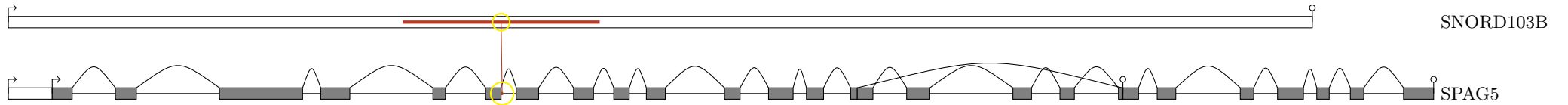
H.Sap	ggccattg	tctggcaatgat...41...-----atctttgttaatggactcaa	GTTCTGAGCCAGA	CA	---agacac
R.Mac	gccttttg	tctggtaatgat...40...-----aatctttgtt-gtggactcaa	GTTCTGAGCCAGA	CA	---agacac
P.Tro	ggccattg	tctggcaatgat...41...-----atctttgttaatggactcaa	GTTCTGAGCCAGA	CA	---agacac
P.Abe	ggccattg	tctggcaatgat...41...-----atctttgttaatggactcaa	GTTCTGAGCCAGA	CA	---agacac
C.Jac	ggccattg	tctggcaatgat...35...atgagaatctttgtt-atgga	CTCAa	GTTCTGAGCCAGA	CA---agacac
M.Mus	tgctattg	tctggcggatgat...38...---agaatctttgtt-atggactc	---	GTTCTGAGCCAGA	CaGGAT---cc
R.Nor	aactgttg	tctggcggatgat...38...---agaacctttgat-atggactc	---	GTTCTGAGCCAGA	CaGGAT---cc
C.Por	caccattg	tctggcagtgat...35...atgagaacctttg-t-atggac	TCAAg	TTCTGAGCCAGA	CAAGAtgg---
O.Cun	ggccattg	tctggcaatgat...36...-tgagaatctttgtt-atggac	TCAAg	TTCTGAGCCAGA	CAGG---acgc
B.Tau	gaccgtgg	tctggcagtgat...38...---agactctact-ctggactcaa	GTTCTGAGCCAGA	CG	---aggcac
E.Cab	ggccgtgg	tctggcaatgat...40...-----aatctgtgtt-atggactcaa	GTTCTGAGCCAGA	CG	---agacac
O.Avi	tgtaaagt	tctggcagtgat...40...-----aatctttact-ctggactcaa	GTTCTGAGCCAGA	CGaGGCA	---c
L.Afr	ggccattg	tctggcagtgat...35...atgagaatcttagtt-atgga	CTCAg	GTTCTGAGCCAGA	CA---aggcac
		* **** * ** * * * * * * * * * * *			

id=735318 gene=ENSG00000202107 name=SNORD103B segment=chr1\_31421964\_31422049\_-1 type=EN

H.Sap	caatggag	gtaagtgtgta...3439...-----ctgac-ttgattcaccatg	TGTTTGCT	ttCAG	GGTcgagc	
R.Mac	caatggag	gtaagtgtggc...3421...-----ctgac-ttgattcaccatg	TGTTTGCT	ttCAG	GGTcgagc	
P.Tro	caatggag	gtaagtgtgca...3435...-----ctgac-ttgattcaccatg	TGTTTGCT	ttCAG	GGTcgagc	
P.Abe	caatggag	gtaagtgtgca...3405...-----ctgac-ttgattcaccatg	TGTTTGCT	ttCAG	GGTcgagc	
C.Jac	caatggag	gtaagtgtggca...3705...-----cctgac-ttaactcaccatg	TGTTTGCT	ttCAG	GGTTGAGc	
M.Mus	cagtggag	gtaagtgtgaca...2886...----tctgtcattgactcaccct	ATCTGTTTGCT	ttCAG	GGTcgaac	
R.Nor	cagtggag	gtaagtgtgca...2729...----tctgtcattgactcaccct	ATCTGTTTGCT	ttCAG	GGTcgaac	
C.Por	cagtggag	gtaagtgtgca...3522...-catcctgac-ctggcttacc	TCTT	ctGTTTGCT	ttCAG	GGTTGAac
O.Cun	caatggag	gtaagtgtgca...4593...-----ccctgac-ttgcttacccca	TCTGTTTGCT	ttCAG	GGTTGAac	
B.Tau	caatggaa	gtaagtgtgaca...3651...-----ctgac-ctagctcactgatc	TGTTTGCT	ttCAG	GATcgagc	
E.Cab	caatggag	gtaagtgtgaca...3239...-----ctgac-ctggctcactccatc	TGTTTGCT	ttCAG	GGTcgagc	
O.Avi	caatggaa	gtaagtgtgaca...3627...ccatctgac-ctagctcac-	TGCTc	TGTTTGCT	ttCAG	GATcgagc
L.Afr	caatggag	gtaagtgtgca...3074...-----ctgac-ctgcctcaccatc	TGTTTGCT	ttCAG	GGTTGAGc	
	** ****	***** **	*** * * * *	*****	* * * *	

id=518836 gene=ENSG00000137522 name=RNF121 segment=chr11\_71668311\_71671795\_1 type=IN

Figure 483: CS=13.52



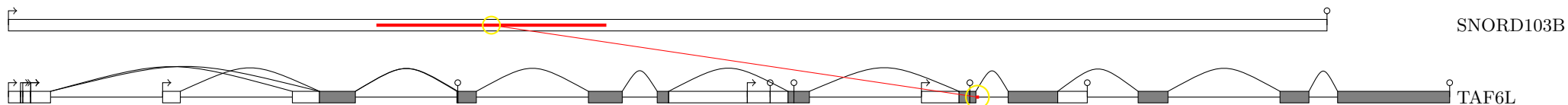
H. Sap	ggccattg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	aatggactcaagtt	ctgagccaga	caagacac
R. Mac	gccttttg	tctggtaaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-gtggactcaagtt	ctgagccaga	caagacac
P. Tro	ggccattg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	aatggactcaagtt	ctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	aatggactcaagtt	ctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-atggactcaagtt	ctgagccaga	caagacac
M. Mus	tgctattg	tctggcggatgatgacca	CTTGcCCTCa	CTGA	ggacaaagt	tcgataatgagaat	ccttggt	-atggactc--gtt	ctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggatgatgacca	CTTGcCCTCa	CTGA	ggacaaagt	tcggtgtagaac	ccttggt	-atggactc--gtt	ctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgacca	CTTGcCCTCa	CTGA	ggacagagt	tcgataatgagaat	ccttggt	--atggactcaagtt	ctgagccaga	caagatgg
O. Cun	ggccattg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-atggactcaagtt	ctgagccaga	caggacgc
F. Cat	ggcctcgg	tctggcagtgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-aaggactcaagtt	ctgagccagg	cgaggcgc
B. Tau	gaccgtgg	tctggcagtgatgacca	CTTGcCCTCa	CTGA	gaacagagt	tcggtaatgagaat	ccttggt	--ctctact-ctggactcaagtt	ctgagccaga	cgaggcac
E. Cab	ggcctggt	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-atggactcaagtt	ctgagccaga	cgagacac
S. Sus	ggcgggtg	tctggcaatgatgacca	CTTGcCCTCa	CTGA	gaacagagt	tcggtaatgagaat	ccttggt	-ctggactcaagtt	ctgagccaga	caaggcac
O. Avi	tgtaaatg	tctggcagtgatgacca	CTTGcCCTCa	CTGA	gaacagagt	tcggtaatgagaat	ccttggt	-ctggactcaagtt	ctgagccaga	cgaggcac
L. Afr	ggccattg	tctggcagtgatgacca	CTTGcCCTCa	CTGA	gaacaaagt	tcggtaatgagaat	ccttggt	-atggactcaggt	ctgagccaga	caaggcac
			*	*****	*****	*****	*****	*****	*****	* *

id=735318 gene=ENSG00000202107 name=SNORD103B segment=chr1\_31421964\_31422049\_-1 type=EN

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R. Mac	gTCAGGAG	GTAAGcagcatgaagatggaggtag--...54...cttattgtatag	tctcggca
P. Tro	gTCAGGAG	GTAAGcagcctgaagatggaggtg--...54...cttatcatatag	tctcagcg
P. Abe	gTCAGGAG	GTAAGcagcatgaagatggaggtg--...54...cttatcatatag	tctcggcg
C. Jac	gTCAGGAG	GTAAGcagcatgaagatagaggtag--...54...cttatcgtgtag	tctcagcg
M. Mus	gTCAGGAG	GTAAGcatcatgaagtgtgactgtg--...35...cttctctgtag	tctcagcg
R. Nor	gTCAGGAG	GTAAGcatcgaagatgtgattggg--...32...cttctctgtag	tctcagcg
C. Por	gTCAGGAG	GTAAGcag-atg-aggtggagcagag...54...cttatcttatag	tcttggtc
O. Cun	gTCAGGAG	GTAAGcagcatggagtagaggcgt--...47...cttactttgtag	tctcgaca
F. Cat	gTCAGGAG	GTAAGcagcatggatgtgaacgcag--...54...cttgtctgtag	tctcggcg
B. Tau	gTCAGGAG	GTAAGcagcatgaagatggagcag--...58...cttatcttatag	actcggcg
E. Cab	gTCAGGAG	GTAAGcagtataaaggtgaaggcag--...51...cttgtctgtag	tctcggcg
S. Sus	gTCAGGAG	GTAAGcagcaggaagataaagcag--...57...cttatctgtag	tctcggcg
O. Avi	gTCAGGAG	GTAAGcagcataaagatggagcag--...58...cttatcttatag	actcggcg
L. Afr	gTCAGGAG	GTAAGcagtgatgaagatggaggtag--...58...gttatctgtag	tctcagcg
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id=268659 gene=ENSG00000076382 name=SPAG5 segment=chr17\_26913017\_26913107\_-1 type=IN

Figure 484: CS=13.5



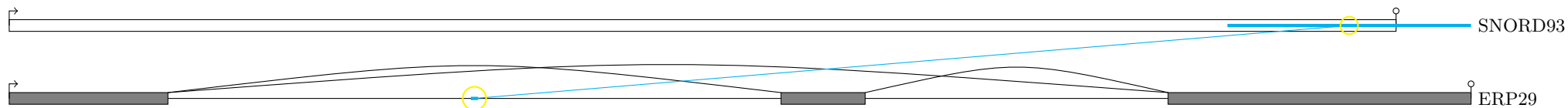
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P. Tro	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	caagacac
M. Mus	tgctattg	tctggcggatgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacaaagt	tcgtaatgagaat	ccttgtaatggactc	----gttctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggatgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacaaagt	tcgtaatgagaat	ccttgtaatggactc	----gttctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacagagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	caagatgg
D. Cun	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	caggacgc
C. Fam	ggccaccg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	taaggtac
F. Cat	ggcctcgg	tctggcagtgatgacc	<b>CACTTGCCCTCGCTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccagg	cgaggcgc
B. Tau	gaccgtgg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacagagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	cgaggcac
E. Cab	ggccgtgg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aagttctgagccaga	cgagacac
L. Afr	ggccattg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttgtaatggactc	---aggttctgagccaga	caaggcac
	*	*	*****	*****	*****	*****	*****	*

id=735318 gene=ENSG00000202107 name=SNORD103B segment=chr1.31421964.31422049.-1 type=EN

H. Sap	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...105...-ttctccaacag	gtgaaatc
P. Tro	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...105...-ttctccaacag	gtgaaatc
P. Abe	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...109...-ctctccaacag	gtgaaatc
C. Jac	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...89...-ttctccaacag	gtgaaatc
M. Mus	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	atcagttctctagcagatc...78...-tcctaccaacag	gtgaaatc
R. Nor	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	atcaattctctagcagatc...81...-tcctaccaacag	gtgaaatc
C. Por	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	agtagctttgggaacaacag...61...-tttggccacag	gtgaaatc
D. Cun	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	agtagctttgggaacaacag...96...-ttctaccaacag	gtgaaatc
C. Fam	t <b>CAGTGGG</b>	<b>GTGAGTG</b>	accaggctgggacagggaga...106...-ttctaccaacag	gtgaaatc
F. Cat	t <b>CAGTGGG</b>	<b>GTGAGTG</b>	acgcggctgaggcagggagg...106...-ttctaccaacag	gtgaaatc
B. Tau	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...101...-ttctccaacag	gtgaaatc
E. Cab	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...107...-ttctccaacag	gtgaaatc
L. Afr	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...102...-tttccaacag	gtgaaatc
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id=764081 gene=ENSG00000162227 name=TAF6L segment=chr11.62549441.62549584.1 type=IN

Figure 485: CS=11.7



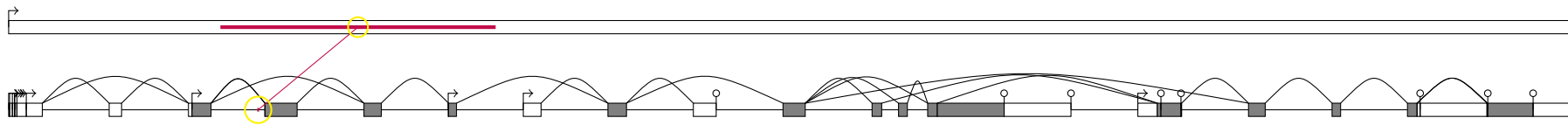
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P.Tro	tgaaattc	tggccaaggatgagaactc-taatctgattttatgtcttctgctgtgatgg-attaaa	GGATtt	ACCTGAGG	cca	aattggta
P.Abe	tgaaatcc	tggccaaggatgagaactc-taatctgatttcatgtcttctgctgtgatgg-a-taaa	GGA-Tt	ACCTGAGG	cc-	acttggta
C.Jac	tgaaatcc	tggccaaggatgagaactc-taatctgatttcatatgcttctgctgtgatgg-attaaa	GGATtt	ACCTGAGG	cca	acttgata
C.Por	agaattcc	tggccaagatgagaactc-taacctgaatggctgt-gttctgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	gcttgata
O.Cun	cgaactct	tggccaaggatgagaactc-taacctgattgaata--cttctgcgctgatgg-gttaa	GGATtt	ACCTGAGG	cca	aggtcacg
C.Fam	ggaattct	tggccgaggatgagaaatc-taatctgattggatgctt---ctctgatggcgttga	GGATtt	ACCTGAGG	cca	atgtgata
F.Cat	cgaattct	tggccaaggatgagaactc-taatctgattggatgctt---ctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	acttcata
B.Tau	agaattct	tggccaaggatgagaacc-taatctgattggatgctt---ctctgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	atttgatg
E.Cab	gaaagtct	tggccaaggatgagaactc-taatctgattggatgcttctgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	acttgata
S.Sus	tgaattgt	tggccaagatgagaactc-gaatctgaatggatgcttctgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	tcctaag
O.Avi	agaattct	tggccaaggatgagaacc-taatctgattggatgcttctgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	atttgatg
L.Afr	ataattct	tggccaaggatgagaactc-taatctgattggcctgtgctctgatgg-gttaa	GGATtt	ACCTGAGG	cca	atgtgatt
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id=821081 gene=ENSG00000221740 name=SNORD93 segment=chr7\_22896232\_22896305.1 type=EN

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P.Tro	tctacaag	gtaaccggggcg...4951...	acttgctcagctctatacgc	CCTCAG	GTcATTGc
P.Abe	tctacaag	gtaacggggcg...4951...	acttgctcagctctatacgc	CCTCAG	GTcATTGc
C.Jac	tctacaag	gtaaaaggggca...4951...	acttgctcagctctatacgc	CCTCAG	GTcATTGc
C.Por	tctataag	gtaacgagggca...4656...	acttgctccgctctatgcac	CCTCAG	GTcATTGc
O.Cun	tctacaag	gtaacggggcg...4951...	tcttgctcagctctgtacac	CCTCAG	GTcATTGc
C.Fam	tctacaag	gtaacgggggtg...4718...	acttgctcagctctctgtac	CCTCAG	GTcATTGc
F.Cat	tctacaag	gtaacggggcg...4483...	acttgctcagctctctatgc	CCTCAG	GTcATTGc
B.Tau	tctacaag	gtaaaggggccc...4835...	acttgctcagctctatgtgc	CCTCAG	GTcATTGc
E.Cab	tctacaag	gtaacgggggag...4465...	acttgctcagccttatacac	CCTCAG	GTtATTGc
S.Sus	tctacaag	gtaacggggcg...4951...	actgctcagctctgtctgc	CCTCAG	GTcATTGc
O.Avi	tctacaag	gtaaaggggccc...4818...	acttgctcagctctatagc	CCTCAG	GTcATTGc
L.Afr	tctacaag	gtaaatggggcg...4721...	acttgctcagctctatgtac	CCTCAG	GTcATTGc
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id=197710 gene=ENSG00000089248 name=ERP29 segment=chr12\_112451414\_112457559.1 type=IN

Figure 486: CS=15.6



SNORD93

MAPK9

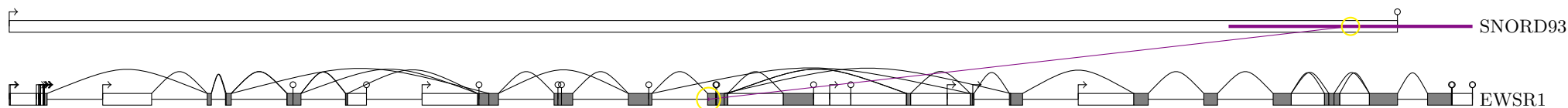
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R. Mac	tgaaatcc-----	TGGCCAagGATGAGAA	ctc-taatctgattttatgtgcttctgctgtgatggattaaggattacctgaggcca	acttggtg
P. Tro	tgaaatcc-----	TGGCCAagGATGAGAA	ctc-taatctgattttatgtgcttctgctgtgatggattaaggattacctgaggcca	aattggta
P. Abe	tgaaatcc-----	TGGCCAagGATGAGAA	ctc-taatctgattttatgtgcttctgctgtgatggattaaggattacctgaggcca	acttggtg
C. Jac	tgaaatcc-----	TGGCCAagGATGAGAA	ctc-taatctgattttatgtgcttctgctgtgatggattaaggattacctgaggcca	acttggtg
R. Nor	acagttct-----	TGGCCAagGATGAGAA	ctc-taacctgactggatg---ctgctgtgatgggtaaggattacctgaggcca	acttgata
C. Por	agaattcc-----	TGGCCAaaGATGAGAA	ctc-taacctgaatggctgtg--ttctgctgtgatgggtaaggattacctgaggcca	acagaaca
O. Cun	cgaactct-----	TGGCCAagGATGAGAA	ctc-taacctgattgaata--cttctgcctgatgggtaaggattacctgaggcca	gcttgata
B. Tau	agaattct-----	TGGCCAaGGATGAGAA	ccc-taatctgattggatgac-cctctgctgtgatgggtaaggattacctgaggcca	aggtcag
E. Cab	gaaagtct-----	TGGCCAaGGATGAGAA	ctc-taatctgattggatgac-cctctgctgtgatgggtaaggattacctgaggcca	atttgatg
S. Sus	tgaattgt-----	TGGCCAaaGATGAGAA	ctc-gaatctgaatggatgac-cctctgctgtgatgggtaaggattacctgaggcca	acttgata
O. Avi	agaattct-----	TGGCCAaGGATGAGAA	ccc-taatctgattggatgac-cctctgctgtgatgggtaaggattacctgaggcca	tcctaatg
L. Afr	ataattct-----	TGGCCAagGATGAGAA	ctc-taatctgattggatgac-cctctgctgtgatgggtaaggattacctgaggcca	atgtgatg
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id=821081 gene=ENSG00000221740 name=SNORD93 segment=chr7\_22896232\_22896305.1 type=EN

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R. Mac	attgtttg	gtaagtatggtc...311..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattccaatcactcctattcatttctag	gcgccatc
P. Tro	attgtttg	gtaagtatggtc...306..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattcccgatcactcctgttcattccag	gcgccatc
P. Abe	attgtttg	gtaagtctggtc...309..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattccaatcactcctattcatttctag	gcgccatc
C. Jac	attgtttg	gtaagtatggtc...307..	gaaattggagttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattccaatcactcctgttcatttctag	gcgccatc
R. Nor	attgtttg	gtaagcctagcc...245..	gaatttggcgtttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattccaatcactcctgttcattccag	gcgccatc
C. Por	attgtttg	gtaagtatgatt...246..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	cctttccccctcccccttttattccaatcactcctgttcatttctag	gcgccatc
O. Cun	atcgtttg	gtaagtatggcc...296..	gaatttggggtttttattcct	TTCTtCATCaTGGCCA	cctttt---cccctcccccttttattccaatcactcctattcatttctag	gcgccacc
B. Tau	attgtttg	gtaagtatggtc...303..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	cctttt---cccctcccccttttattccaatcactcctattcatttctag	gcgccatg
E. Cab	attgtgtg	gtaagtatggtc...301..	aaatctggagttttattcat	TTCTtCATCCTGGCCA	cctttt---cccctcccccttttattccaatcactcctattcatttctag	gcgccgtc
S. Sus	attgtttg	gtaagtatggtc...314..	aaatttggagttttattcat	TTCTtCATCaTGGCCA	ccttttccccctcccccttttattccaatcactcctattcatttctag	gcgccgtc
O. Avi	attgtttg	gtaagtatagtc...307..	aaatttggagttttattcat	TTCTtCATCCTGGCCA	cccttc--ctccctcccccttttattccaatcactcctattcatttctag	gcgccatg
L. Afr	attgtttg	gtaagtatagtc...308..	aagtttggagttttattcat	TTCTtCATCaTGGCCA	ccttttccccctcccccttttattccaatcactcctattcatttccag	gcaccatc
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id=779117 gene=ENSG00000050748 name=MAPK9 segment=chr5\_179707037\_179707439.-1 type=IN

Figure 487: CS=10.14



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R.Mac	tgaaatcc	tggccaaggatgagaactc-taatctgatttcataatgcttctgctgtgatgg-attaaa	GGATttACCTGAGGcca	acttggta
P.Tro	tgaaatcc	tggccaaggatgagaactc-taatctgattttatgtgcttctgctgtgatgg-attaaa	GGATttACCTGAGGcca	aattggta
P.Abe	tgaaatcc	tggccaaggatgagaactc-taatctgatttcataatgcttctgctgtgatgg-a-taaa	GGA-TtACCTGAGGcc-	acttggta
C.Jac	tgaaatcc	tggccaaggatgagaactc-taatctgatttcataatgcttctgctgtgatgg-attaaa	GGATttACCTGAGGcca	acttgata
C.Por	agaattcc	tggccaaggatgagaactc-taacctgaatggctgt-gttctgctctgatgg-gttaa	GGATttACCTGAGGcca	gcttgata
O.Cun	cgaactct	tggccaaggatgagaactc-taacctgattgaata--ctctgcgctgatgg-gttaa	GGATttACCTGAGGcca	AGGTCAG
C.Fam	ggaattct	tggccaaggatgagaactc-taatctgattggatgctt---ctctgatggcgttgaa	GGATttACCTGAGGcca	atgtgata
F.Cat	cgaattct	tggccaaggatgagaactc-taatctgattggatgctt---ctctgatgg-gttaa	GGATttACCTGAGGcca	acttcata
B.Tau	agaattct	tggccaaggatgagaactc-taatctgattggatgctt---ctctgatgg-gttaa	GGATttACCTGAGGcca	atttgatg
E.Cab	gaaagtct	tggccaaggatgagaactc-taatctgattggatgcttctgctctgatgg-gttaa	GGATttACCTGAGGcca	acttgata
S.Sus	tgaattgt	tggccaaggatgagaactc-gaatctgaatggatgcttctgctctgatgg-gttaa	GGATttACCTGAGGcca	tcctaatg
O.Avi	agaattct	tggccaaggatgagaactc-taatctgattggatgcttctgctctgatgg-gttaa	GGATttACCTGAGGcca	atttgatg
L.Afr	ataattct	tggccaaggatgagaactc-taatctgattggatgcttctgctctgatgg-gttaa	GGATttACCTGAGGcca	atgtgatt
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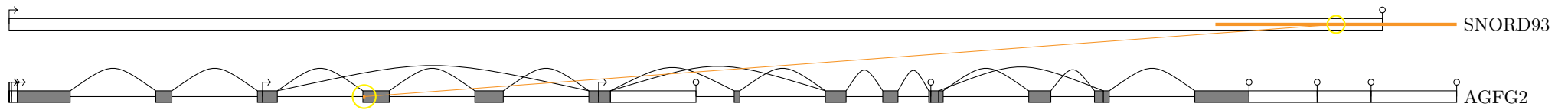
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P.Tro	gcagcaga	gtgagttgctaa...1430...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
P.Abe	gcagcaga	gtgagttgctaa...1447...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
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C.Por	gcagcaga	gtgagttgctaa...1004...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
O.Cun	gcagcaga	gtgagtcgctga...827...gctgatccatggccttacaga	TGTGA	ctCTTCCTCAG
C.Fam	gcagcaga	gtgagttgctaa...798...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
F.Cat	gcagcaga	gtgagttgctaa...972...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
B.Tau	gcagcaga	gtgagttgctaa...851...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
E.Cab	gcagcaga	gtgagttgctaa...919...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
S.Sus	gcagcaga	gtgagttgctaa...880...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
O.Avi	gcagcaga	gtnnnnnnnnnn...851...-----gcttacagatgtgactcttt	CCTCAG	GTtcATTc
L.Afr	gcagcaga	gtgagttgctaa...933...-----gcttacaggtgtgactcttt	CCTCAG	GTtcATTc
	*****	** ***** *****		*****

id=632641 gene=ENSG00000182944 name=EWSR1 segment=chr22\_29683124\_29684594.1 type=IN

Figure 488: CS=14





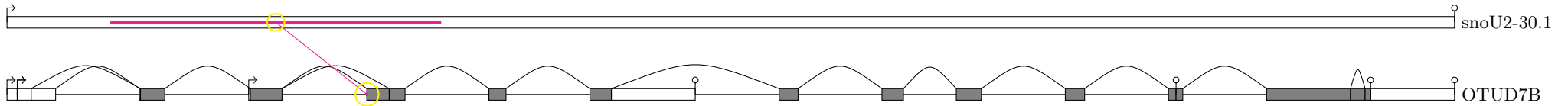
H.Sap	tgaaattg	tggccaaggatgagaactc-taatctgattttatgtgcttctgctgtgatgg-attaaaGGAT	TACCTGAGG	cca	aattggta
P.Tro	tgaaatc	tggccaaggatgagaactc-taatctgattttatgtgcttctgctgtgatgg-attaaaGGAT	TACCTGAGG	cca	aattggta
P.Abe	tgaaatcc	tggccaaggatgagaactc-taatctgatttcatgtgcttctgctgtgatgg-a-taaaGGAT	TACCTGAGG	cc-	acttgta
C.Jac	tgaaatcc	tggccaaggatgagaactc-taatctgatttcatatgcttctgctgtgatgg-attaaaGGAT	TACCTGAGG	cca	acttgata
C.Por	agaattcc	tggccaagatgagaactc-taacctgaatggctgt-gttctgctctgatgg-gttaaGGAT	TACCTGAGG	cca	gcttgata
O.Cun	cgaactct	tggccaaggatgagaactc-taacctgattgaata--cttctgctctgatgg-gttaaGGAT	TACCTGAGG	cca	aggtcacg
C.Fam	ggaattct	tggccgaggatgagaatc-taatctgattggatgctt---ctctgatggcgttgaGGAT	TACCTGAGG	cca	atgtgata
F.Cat	cgaattct	tggccaaggatgagaactc-taatctgattggatgctt---ctctgatgg-gttaaGGAT	TACCTGAGG	cca	acttcata
B.Tau	agaattct	tggccaaggatgagaacc-taatctgattggatgac-cctctgctctgatgg-gttaaGGAT	TACCTGAGG	cca	atgtgatg
E.Cab	gaaagtct	tggccaaggatgagaactc-taatctgattggatgcttctgctctgatgg-gttaaGGAT	TACCTGAGG	cca	acttgata
S.Sus	tgaattgt	tggccaagatgagaactc-gaatctgaatggatgcttctgctctgatgg-gttaaGGAT	TACCTGAGG	cca	tcctaag
L.Afr	ataattct	tggccaaggatgagaactc-taatctgattggcctgtgtgctctgatgg-gttaaGGAT	TACCTGAGG	cca	atgtgatt
	** *	***** * ***** * ** ***** *	* * ***** * ***** *****		*

id=821081 gene=ENSG00000221740 name=SNORD93 segment=chr7\_22896232\_22896305.1 type=EN

H.Sap	aagagatg	gtaaggagtagg...2795...tttacagcctaactattcttTCTCA	aaG	GTAtGTC	c
P.Tro	aagagatg	gtaaggagtagg...2769...tttacagcctaactattcttTCTCA	aaG	GTAtGTC	c
P.Abe	aagagatg	gtaaggagtagg...3228...tttacagcctaactattcttTCTCA	aaG	GTAtGTC	c
C.Jac	aagagatg	gtaaggagtagg...773...tttacagcctaactattcttTCTCA	aaG	GTAtGTC	c
C.Por	aaaagatg	gtaaggagaag...1698...tttatagcttgtctgtcctTCTCA	aaG	GTAcGTC	c
O.Cun	aagagatg	gtaaggcaagg...1321...cttacggcctgactgttctcTCTCA	aaG	GTAcGTC	c
C.Fam	aagagatg	gtaaggaggagg...1058...cttcagcctggctattcttTCTCA	aaG	GTAtGTC	c
F.Cat	aagagatg	gtaaggaggagg...1025...gatgtcacctgactattcttTCTCA	aaG	GTAtGTC	c
B.Tau	aaaagatg	gtaaggaggagg...1063...ctctctgcctaactattcttTCTC	caAG	GTAtGTC	c
E.Cab	aagagatg	gtaaggaggagg...1352...cttcagcctaactgttcttTCTCA	aaG	GTAtGTC	c
S.Sus	aagagatg	gtaaggggcg...1027...ctctcagcgcaactcttctTCTCA	aaG	GTAtGTC	c
L.Afr	aagagatg	gtaaggaggagg...1057...ctctcagcctaactattcttTCTCA	aaG	GTAtGTC	c
	** *****	***** *	* ** * ** ***** **	*** *****	

id=647824 gene=ENSG00000106351 name=AGFG2 segment=chr7\_100148135\_100150969.1 type=IN VIEW

Figure 489: CS=20.52



```

H.Sap -tcaTTTCT GggCAATGAtGAAA--aggttttactactgatctt--tgtaactatgatggtttctacacttgacctgagctca gaagtgac
R.Mac -tcaTTTCT GggCAATGAtGAAA--aggttttactactgatctt--tgtaactatgaaggtttctacacttgacctgagctca gaaatgac
P.Tro -tcaTTTCT GggCAATGAtGAAA--aggttttactactgatctt--tgtaactatgatggtttctacacttgacctgagctca gaagtgac
P.Abe -tcaTTTCT GggCAATGAtGAAA--aggttttactactgatctt--tgtaactatgatggtttctacacttgacctgagctca gaaatgac
C.Jac -tcaTTTCT GggCAATGAtGAAA--aggttttactactgatctt--tgtaactatgaaggtttctacacttgacctgagctcg gaaatgac
M.Mus -tcatcTCT GagCAATGAtGAAA--aggttttagtactgaattt--tgtcactgtgaaggctcctacacttgacctgagctca gaattgac
R.Nor -tcaTTTCT GagCAATGAtGAAA--aggttttagtactgaattt--tgtcactatgaaggtttctacacttgatctgagctca gaattgac
C.Por -acaTTTCT GagCAATGAtGAAA--agtttttactactgacctt--tataactatgaaggtttctacacttgacctgagctca gaattgac
O.Cun -tcTTTCT GagCAATGAtGAAA--aggttttacaactgacctt--tataactatgaggtttctacacttgacctgagctca gaattgat
C.Fam -agaTTTCT GagCAATGAtGAAA--aggttttactactgatctt--tacaactatgaaggtttctacacttgatctgagctca gatttcat
F.Cat -tcagTTCT GagCAATGAtGAAA--aggttttagtactgacctt--tacagctatgaaggtttctacacttgatctgagctca gaattgat
B.Tau -tcaaTTCT GagCAATGAtGAAA--agattttactgcagaactttatataactatgaaggtttctacacttgatctgagctca gaattaat
E.Cab -tcagTTCT GagCAATGAtGAAAaaaggttttaccactgacctt--tataactatgaaggtttctacacttgatctgagctca gaattgat
O.Avi -tgagTTCT GagCAATGAtGAAA--agattttactgcggaactttatataactatgaaggtttctacacttgatctgagctca gaattaat
L.Afr atcag-TCT GagCAATGAtGAAA--aag-ttggctactgacctt--tgggaactatgaagggtgctacacttgacctgagctca gaattgat
*** * ***** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=552340 gene=ENSG00000199675 name=snoU2-30.1 segment=chr11.93454963.93455032.1 type=EN

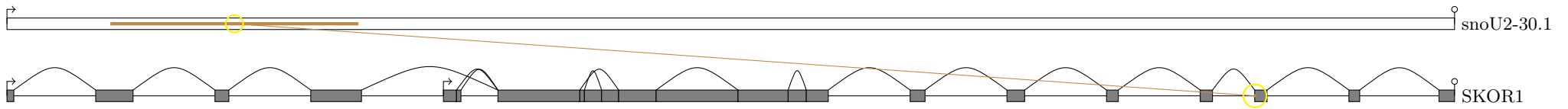
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H.Sap cgttcaag gtactggggtga...3499...-tatgttctaaggtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
R.Mac cgttcaag gtactggggtga...3509...-tgtgttctaaggtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
P.Tro tgttcaag gtactggggtga...3493...-tatgttctaaggtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
P.Abe cgttcaag gtactgggatga...3465...-tatgttctaaggtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
C.Jac cgttcaag gtactggggtgg...1881...-tatgttctaaggtgactccaTTTCTCATTGCAGAAAaagggctgtgaaattcagcagtcagttagtttct:::acattctaaggtgactccatttctcattgcagaaaacgc
M.Mus cattcaag gtattgctctga...837...-tatgttctaaggtgactccgTTTCTCATTGCAGAA-----:-----:-----:-----aaaacgc
R.Nor cattcaag gtattgctctga...869...-tatgttctaaggtgactcaaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
C.Por catccaag gtacagggctag...2695...gtatgttctaa-gtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
O.Cun cattcaag gtactggggtga...1735...-tgtattctaaggtgactccaTTTCTCATTGCAGAGAA-----:-----:-----:-----acgc
C.Fam cattcaag gtactggggtaa...2340...-tatgttctaaggtgactccgTTTCTCATTGCAGAAA-----:-----:-----:-----aacgc
F.Cat cgttcaag gtactggggtaa...1676...-tatgttctaaggtgactccaTTTCTCATTGCAGAA-----:-----:-----:-----aaacgc
B.Tau cattcaag gtactggggtgc...1850...-tatgttctaaggtgactccaTTTCTCATTGCAGAAA-----:-----:-----:-----aaacgc
E.Cab cgttcaag gtattggggtaa...1943...-tatgttctaaggtgactccaTTTCTCATTGCAGAA-----:-----:-----:-----aaacgc
O.Avi cgttcaag gtattggggtac...1836...-tctgttctaaggtgactccaTTTCTCATTGCAGAA-----:-----:-----:-----aaacgc
L.Afr cgttcaag gtactagggtat...2041...-tatgttctaaggtgactcTTTCTCATTGCAGAA-----:-----:-----:-----aaaacgc
* **** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=786538 gene=ENSG00000163113 name=OTUD7B segment=chr1.149939447.149942990.-1 type=IN

Figure 490: CS=16.2



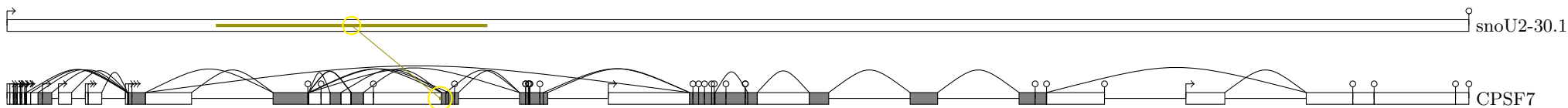
H. Sap	-tcattTCT	GgGCAATGAT	gaaaa--ggttttactactgat-...28..gacctgagctca	gaagtgac
R. Mac	-tcattTCT	GgGCAATGAT	gaaaa--ggttttactactgat-...28..gacctgagctca	gaaatgac
P. Tro	-tcattTCT	GgGCAATGAT	gaaaa--ggttttactactgat-...28..gacctgagctca	gaagtgac
P. Abe	-tcattTCT	GgGCAATGAT	gaaaa--ggttttactactgat-...28..gacctgagctca	gaaatgac
C. Jac	-tcattTCT	GgGCAATGAT	gaaaa--ggttttactactgac-...28..gacctgagctcg	gaaatgac
M. Mus	-tcattTCT	GaGCAATGAT	gaaaa--ggttttagtactgaa-...28..gacctgagctca	gaattgac
R. Nor	-tcattTCT	GaGCAATGAT	gaaaa--ggttttagtactgaa-...28..gatctgagctca	gaattgac
C. Por	-acattTCT	GaGCAATGAT	gaaaa--gtttttactactgac-...28..gacctgagctca	gaattgac
O. Cun	-tctttTCT	GaGCAATGAT	gaaaa--ggttttacaactgac-...28..gacctgagctca	gaattgat
F. Cat	-tcagtTCT	GaGCAATGAT	gaaaa--ggttttagtactgac-...28..gatctgagctca	gaattgat
B. Tau	-tcaatTCT	GaGCAATGAT	gaaaa--gattttactgcagaa-...30..gatctgagctca	gaattaat
E. Cab	-tcagtTCT	GaGCAATGAT	gaaaaaaggtttttaccact-...31..gatctgagctca	gaattgat
O. Avi	-tgagtTCT	GaGCAATGAT	gaaaa--gattttactgcggaa-...30..gatctgagctca	gaattaat
L. Afr	atca-GTCT	GaGCAATGAT	gaaaa--agtttgctactgacc-...27..gacctgagctca	gaattgat
		***	* *****	*** * *

id=552340 gene=ENSG00000199675 name=snoU2-30.1 segment=chr11.93454963.93455032.1 type=EN

H. Sap	tctcaaag	gtaccactgcc...212...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
R. Mac	tctcaaag	gtaccactgcc...219...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
P. Tro	tctcaaag	gtaccactgcc...212...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
P. Abe	tctcaaag	gtaccactgcc...513...	-tgtgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
C. Jac	tctcaaag	gtaccactccc...208...	gtgcgtaacagctctca-ttaATCAatTTGCaCAG	Ataatttt
M. Mus	tctcaaag	gtacttccttc...182...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
R. Nor	tctcaaag	gtacttccttc...166...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
C. Por	tctcaaag	gtacttccttc...181...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
O. Cun	tctcaaag	gtatccccgtcc...215...	-tgcgtaacagctcccgttaATCAatTTGCaCAG	Ataatttt
F. Cat	tctcaaag	gtacccttcc...193...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
B. Tau	tctcaaag	gtaccctcattc...208...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
E. Cab	tctcaaag	gtaccctatcc...187...	-tgcataacagctctcacttaATCAatTTGCaCAG	Ataatttt
O. Avi	tctcaaag	gtaccctcattc...211...	-tgcgtaacagctctcacttaATCAatTTGCaCAG	Ataatttt
L. Afr	tctcaaag	gtaccctcggac...141...	-tgcataacagctcccacttaATCAatTTGCaCAG	ATaatttt
	*****	***	* *****	*****

id=161935 gene=ENSG00000188779 name=SKOR1 segment=chr15.68124687.68124944.1 type=IN

Figure 491: CS=15.12



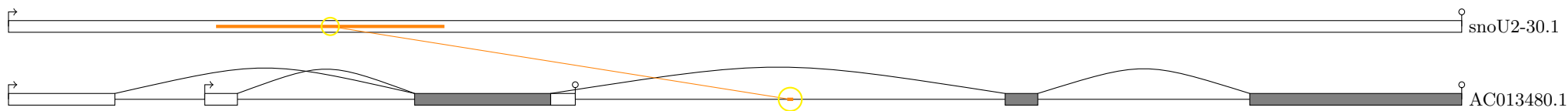
H. Sap	tcatttct	gGGCAAtGATGAAAAGG	---ttttactactgatcctt--tgtaactatgatggtttctacacttgacctgagctca	gaagtgac
P. Tro	tcatttct	gGGCAAtGATGAAAAGG	---ttttactactgatcctt--tgtaactatgatggtttctacacttgacctgagctca	gaagtgac
P. Abe	tcatttct	gGGCAAtGATGAAAAGG	---ttttactactgatcctt--tgtaactatgatggtttctacacttgacctgagctca	gaaatgac
C. Jac	tcatttct	gGGCAAtGATGAAAAGG	---ttttactactgacctt--tgtaactatgaagggttctacacttgacctgagctcg	gaaatgac
M. Mus	tcatttct	gaGCAAtGATGAAAAGG	---ttttagtagtgaattt--tgtcactgtgaaggctcctacacttgacctgagctca	gaattgac
R. Nor	tcatttct	gaGCAAtGATGAAAAGG	---ttttagtagtgaattt--tgtcactgtgaagggttctacacttgacctgagctca	gaattgac
C. Por	acatttct	gaGCAAtGATGAAAAGG	---ttttactactgacctt--tataactatgaagggttctacacttgacctgagctca	gaattgac
O. Cun	tcttttct	gaGCAAtGATGAAAAGG	---ttttacaactgacctt--tataactatgaggttttctacacttgacctgagctca	gaattgat
C. Fam	agatttct	gaGCAAtGATGAAAAGG	---ttttactactgatcctt--tacaactatgaagggttctacacttgacctgagctca	gagttcat
F. Cat	tcagttct	gaGCAAtGATGAAAAGG	---ttttagtagtacctt--tacagctatgaagggttctacacttgacctgagctca	gaattgat
B. Tau	tcaattct	gaGCAAtGATGAAAAGG	---attttactgcagaacttataataactatgaagggttctacacttgacctgagctca	gaattaat
E. Cab	tcagttct	gaGCAAtGATGAAAAGG	---ttttaccactgacctt--tataactatgaagggttctacacttgacctgagctca	gaattgat
L. Afr	atcagtct	gaGCAAtGATGAAAAGG	---tttgctactgacctt--tgaactatgaagggttctacacttgacctgagctca	gaattgat
	***	* * * * * * * * * * * *	*** * * * * * * * * * * *	*** * * *

id=552340 gene=ENSG00000199675 name=snoU2-30.1 segment=chr11.93454963.93455032.1 type=EN

H. Sap	gtgactgt	tgttctgcaagt-----..363...-----tgtagctcttgacatctctt	CCTTTTcCATCTTGCC	ggccccag	tggaccac
P. Tro	gtgactgt	tgttctgcaagt-----..363...-----tgtagctcttgacatctctt	CCTTTTcCATCTTGCC	ggccccag	tggaccac
P. Abe	gtgactgt	tgttctgcaagt-----..364...-----tgtagctcttgacatctctt	CCTTTTcCATCTTGCC	ggccccag	tggaccac
C. Jac	gtgactgt	tgttctgcaagt-----..386...-----gtagctcttgacatctctt	CCTTTTcCATCTTGCC	ggccccag	tggaccac
M. Mus	ctgac---	aattctgtaaaaagtt---..368...-----tgtagctcttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggaccac
R. Nor	ctgac---	cattctgtaaaaagtt---..362...-----tgtagctcttgacatttctc	CCTTTTcCATCTTGCC	cgacctcag	tggaccac
C. Por	gtgac---	--tcctgcagaagttac...358...-----atgtagctcttgacatttctc	CCTTTTcCATCTTGCC	cgccccag	tggaccac
O. Cun	gtgactgt	cattctgaaaaa-----..384...-----tgtagctcttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggaccac
C. Fam	gtgattct	ta---tgcaaaaatt---..379...-----tgtagctcttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggaccac
F. Cat	ctgattgt	tgttctgcaaaa-----..371...-----tgtagctgttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggactac
B. Tau	gtgattgt	tgtttctgcaaaa-----..378...-----atacctcttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggaccac
E. Cab	gtggtgat	tgttctgcaaaa-----..384...ggtgtgtagctcttgacatt	TCTTccTTTTcCATCTTGCC	ggccccag	tggaccac
L. Afr	gtgactgt	tgttctgcaaaa-----..386...-----gtagctcttgacatttctc	CCTTTTcCATCTTGCC	ggccccag	tggactac
	**	** *	** * * * * * * * * * * *	* * * * * * * * * * * *	***** **

id=245772 gene=ENSG00000149532 name=CPSF7 segment=chr11.61188046.61188464.-1 type=AN VIEW

Figure 492: CS=11.7



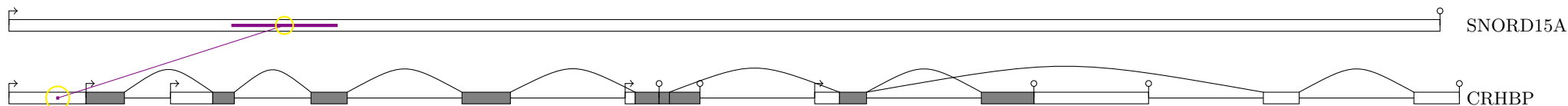
H. Sap	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgatggtttctacacttgacctgagctca	gaagtgac
R. Mac	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
P. Tro	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgatggtttctacacttgacctgagctca	gaagtgac
P. Abe	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgatggtttctacacttgacctgagctca	gaaatgac
C. Jac	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgacct--	tgtaactatgaaggtttctacacttgacctgagctcg	gaaatgac
M. Mus	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
R. Nor	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
C. Por	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
O. Cun	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
C. Fam	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
F. Cat	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
B. Tau	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
E. Cab	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
O. Avi	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
L. Afr	tcatttct	g <b>GGCAATGATGAAA</b>	--aggttttactactgatcct--	tgtaactatgaaggtttctacacttgacctgagctca	gaatgac
		***	*****	*** * ** * * * * ** * * *	***** ***** ** * *

id=552340 gene=ENSG00000199675 name=snoU2-30.1 segment=chr11.93454963.93455032.1 type=EN

H. Sap	ggggaatg	aatgattaatgc...4584...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGTC</b>	agccagccttgctcctcagcc...	325...	tccttttacag	ttaccctg
R. Mac	ggggaatg	aatgattaatgc...4585...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGTC</b>	agccagccttgctcctcagcc...	324...	tccttttacag	ttaccctg
P. Tro	ggggaatg	aatgattaatgc...4584...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGTC</b>	agccagccttgctcctcagcc...	325...	tccttttacag	ttaccctg
P. Abe	ggggaatg	aatgattaatgc...4582...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGTC</b>	agccagccttgctcctcagcc...	327...	tccttttacag	ttaccctg
C. Jac	ggggaatg	aatgattaatgc...4600...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGTC</b>	agccagccttgctcctcagcc...	309...	tccttttacag	ttaccctg
M. Mus	ggggaatg	aatgattaatga...4554...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	356...	tccttttacag	ttaccctg
R. Nor	ggggaatg	aatgattaatga...4479...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	431...	tccttttacag	ttaccctg
C. Por	ggggaatg	aatgattaatga...4641...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	269...	tccttttacag	ttaccctg
O. Cun	gggggatg	aatgattaatga...4303...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	345...	tccttttacag	ttaccctg
C. Fam	gggggatg	aatgattaatga...4581...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	329...	tccttttacag	ttaccctg
F. Cat	gggggatg	aatgattaatga...4567...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	343...	tccttttacag	ttaccctg
B. Tau	gggggatg	aatgattaatga...4551...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	359...	tccttttacag	ttaccctg
E. Cab	gggggatg	aatgattaatga...4570...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	340...	tccttttacag	ttaccctg
O. Avi	gggggatg	aatgattaatga...4549...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	361...	tccttttacag	ttaccctg
L. Afr	gatgaatg	aatgattaatga...4567...	aaagggtttgggaactcctg <b>TTCcaATCAcTTGT</b>	agccagccttgctcctcagcc...	343...	tccttttacag	ttaccctg
		* * **	***** **	* * ** * * ** * * * * * * * *	**	*****	**

id=485975 gene=ENSG00000205086 name=AC013480.1 segment=chr2.42174712.42180069.-1 type=IN

Figure 493: CS=11.7



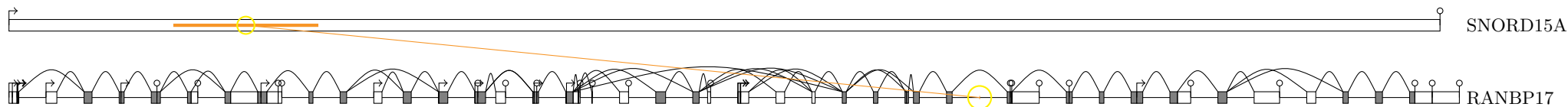
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R. Mac	tttaaacc	cttcgatgaagaga	TGATGACGAGTCTG	acttgggggt-gttgccttcg-...88...	tgctgagaagg	gttgctgc						
P. Tro	tttaaacc	cttcgatgaagaga	TGATGACGAGTCTG	acttggggat-gttctctttg-...88...	tgctgagaagg	gttgctgc						
C. Jac	tttaaacc	cttcgatgaagaga	TGATGACGAGTCTG	acttgggggt-gttccctttg-...88...	tgctgagaagg	gttgctgc						
R. Nor	gtaaagcc	cttcgatgaaga	GGTGATGACGAGTCTG	actaggaggtatttgcctt-...88...	tgctgagaagg	gttgctgc						
C. Por	atgaaacc	cttcgatgaagaga	TGATGACGAGTCTG	acttgggaagt-cttgccttgg-...86...	tgctgagaagg	gtttcttc						
O. Cun	ctgagcc	cttcgatgaaga	GGTGATGACGAGTCTG	accgggggt-gctggctctcc...87...	tgctgagaagg	gttgcagc						
C. Fam	ttaaaacc	cttcaatgaagaga	GATGACGAGTCT	gactggaggt-gttatctttg-...89...	tgctgagaagg	gttgttaa						
B. Tau	ttaaaacc	cttcaatgaagaga	GATGACGAGTCTG	actggaagt-gttctctttgt...90...	tgctgagaagg	gtttgcta						
E. Cab	taaaaacc	cttcagtgaagaga	TGATGACGAGTCT	gactggaggt-gtcatctttg-...91...	tgctgagaagg	gttgctac						
S. Sus	tttaaacc	cttcaatgacgaga	GATGACGAGTCTG	actggaggt-gttctcttga...90...	tgctgagaagg	gttattac						
O. Avi	taaaaacc	cttcaatgaagaga	GATGACGAGTCTG	actggaggt-gttctctttgt...90...	tgctgagaagg	gttgctac						
L. Afr	caaaaacc	cttcagtgaagaga	TGATGACGAGTCTG	attggaggt-gttatctttgt...88...	tgctgagaagg	gttgttac						
	*	**	****	***	***	*****	**	*	**	**	*****	***

id=770932 gene=ENSG00000206941 name=SNORD15A segment=chr11.75111435.75111582.1 type=EN

H. Sap	actttgtc	actttgatttgc--...165...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCG	ccacgtactctgtcaatgag--...91...	acctaccagct	tctagctc
R. Mac	actttgtc	actttgatttgc--...165...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCG	ccacgtacttctgtcaatgag--...91...	acctaccagct	tctagctc
P. Tro	actttgtc	actttgatttgc--...165...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCG	ccacgtactctgtcaatgag--...91...	acctaccagct	tctagctc
C. Jac	actttgtt	actttgatttgc--...165...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCA	ccacgtacttctgtcaatgag--...90...	acctaccagct	tccagctc
R. Nor	tgtctgac	atttgcttttac--...162...	--aaatatttggctgagagc	TGGACcc	TCGTCATCGCC	accgcatttctgaccaggagc...89...	acctaccagct	tccagctc
C. Por	taactgtc	actgtgctttgc--...177...	ctgaaaatttggctgagagc	TGGACcc	TCGTCATCA	ccacgcacttctgtcaatgag--...90...	acctaccagct	tccagctc
O. Cun	tgctcagc	actgtgctttgc--...131...	--gacaacctgtggctgagagc	TGGACcc	TCGTCATCACC	accgcacttctgtcaatgag--...60...	acctaccagct	tccagctc
C. Fam	actttgtc	actttgctttgc--...180...	--aagatattggctgagagc	TGGACcc	TCGTCATC	accgcacttctgtcaatgag--...90...	acctaccagct	tccagctc
B. Tau	accttgtc	actttgctttgc--...144...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCGCC	accgcacttctgtcaatgag--...91...	acctaccagct	tccagctc
E. Cab	actttgtc	act--gctttgcaa...170...	--gaaatttggctgagagc	TGGACcc	TCGTCATCA	ccacgcacttctgtcaatgag--...89...	acctaccagct	tccagctc
S. Sus	acattgtc	actttgctttgc--...170...	--gaaaatttggctgagagc	TGGACcc	TCGTCATC	accgcacttctgtcaatgag--...92...	acctaccagct	tccagctc
O. Avi	acattgtc	cctttgctttgc--...144...	--gaaaatttggctgagagc	TGGACcc	TCGTCATC	accgcacttctgtcaatgag--...91...	acctaccagct	tccagctc
L. Afr	actttgtc	actttgctttgc--...186...	--gaaaatttggctgagagc	TGGACcc	TCGTCATCA	ccacgcacttctgtcaatgag--...90...	acctaccagct	tccagctc
	*	*	*	*	*	*	*	*

id=636231 gene=ENSG00000145708 name=CRHBP segment=chr5.76248538.76248873.1 type=E5

Figure 494: CS=12.48



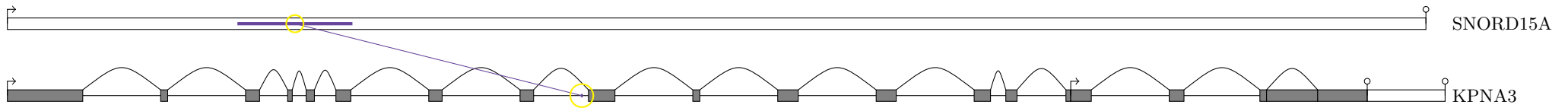
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R. Mac	ttaaacc	cttcgatgaAGAGatGATGacGAGT	-----	ctgacttgggggtgttcct-...91...tgtctgagaagg	gttgctgc
P. Tro	ttaaacc	cttcgatgaAGAGatGATGacGAGT	-----	ctgacttggggatgttctct-...91...tgtctgagaagg	gttgctgc
C. Jac	ttaaacc	cttcgatgaAGAGatGATGacGAGT	-----	ctgacttgggggtgttcct-...91...tgccgagaagg	gttgctgc
M. Mus	gtagagcc	cttcgatgaAGAGgtGATGacGAGT	-----	ctgagtaggaagtgttct-...91...tgtctgagaagg	gttgctgc
R. Nor	gtaaaacc	cttcgatgaAGAGgtGATGacGAGT	-----	ctgactaggaggtatttct-...91...tgtctgagaagg	gttgctgc
C. Por	atgaaacc	cttcgatgaAGAGatGATGacGAGT	-----	ctgacttggaaagtctgtct-...89...tgtctgagaagg	gttcttc
O. Cun	ctgaggcc	cttcGGTgaAGAGgtGATGacGAGT	-----	ctgacc-gggggtgctggctc-...90...tgtctgagaagg	gttgacgc
C. Fam	ttaaacc	cttcaatgaAGAGaAGATGacGAGT	-----	ctgact-ggaggtgttatctt-...91...tgtctgagaagg	gttgtaa
F. Cat	taaaaacc	cttcaatgaAGAGaAGATGacGAGT	-----	ctgact-ggaggttttctct-...94...tgtctgagaagg	gttgccc
B. Tau	ttaaacc	cttcaatgaAGAGaAGATGacGAGT	-----	ctgact-ggaagtgttctct-...93...tgtctgagaagg	gttgcta
E. Cab	taaaaacc	cttcAGTgaAGAGatGATGacGAGT	-----	ctgact-ggaggtgtcatct-...93...tgtctgagaagg	gttgctac
L. Afr	caaaaacc	cttcAGTgaAGAGatGATGacGAGTcTGATTggAGGTG	-----	tatatcttcttcaggtgct-...78...tgtctgagaagg	gttgttac
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id=770932 gene=ENSG00000206941 name=SNORD15A segment=chr11.75111435.75111582.1 type=EN

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R. Mac	acgtaaag	gtagggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	cgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
P. Tro	atgtaaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	cgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
C. Jac	acgtaaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	cgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
M. Mus	aagtaaag	gtgagttttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	gcactaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
R. Nor	aagtaaag	gtgagttttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	gcactaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
C. Por	atgtgaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTg	cgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
O. Cun	aagtgaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTgCGCT	aacgtgaaaatcaattactgtatctctttccactgacag	cgatggt
C. Fam	atgtaaag	gtgggtttgttc...4898...gtcattattgcctgattatt	-----	ACTCCATCTgCTCTg	tgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
F. Cat	atgtaaag	gtgggtttgttc...4898...gtcattattgcctgattatt	-----	ACTCCATCTgCTCTg	tgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
B. Tau	atgtaaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCTgCTCTg	tgctaacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
E. Cab	acgtaaag	gtgggtttgttt...4898...gtcattattgcctgattatt	-----	ACTCCATCtgCTCTgTGCT	aacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
L. Afr	atgtaaag	gtgggtttgttt...4886...atca--gatatgtgctcattatTGCCTGATTA	-----	ACTCCATCtgCTCTgCGCT	aacgtgaaaatcaattactgtgtctctttccactgacag	cgatggt
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id=5136 gene=ENSG00000204764 name=RANBP17 segment=chr5.170626778.170632527.1 type=IN

Figure 495: CS=10.14



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R.Mac	tttaaacc	cttcgatgaagagat	GATGACGAGTCTGA	cttggggatg-ttctctttgc...	87...	tgtctgagaagg	gttgctgc
P.Tro	tttaaacc	cttcgatgaagagat	GATGACGAGTCTGA	cttggggatg-ttctctttgc...	87...	tgtctgagaagg	gttgctgc
C.Jac	tttaaacc	cttcgatgaagagat	GATGACGAGTCTGA	cttggggatg-ttctctttgc...	87...	tgtctgagaagg	gttgctgc
M.Mus	gtagagcc	cttcgatgaagaggt	GATGACGAGTCTGAG	taggaagtg-ttctctttgc...	86...	tgtctgagaagg	gttgctgc
R.Nor	gtaaagcc	cttcgatgaagaggt	GATGACGAGTCTGA	ctaggaggtatttctctttg...	87...	tgtctgagaagg	gttgctgc
C.Por	atgaaacc	cttcgatgaagagat	GATGACGAGTCTGA	cttgggaagtc-ttctctttgc...	85...	tgtctgagaagg	gtttcttc
O.Cun	ctgaggcc	cttcggtgaagaggt	GATGACGAGTCTGA	ccgggggtg-ctggctctccc...	86...	tgtctgagaagg	gttgcagc
C.Fam	ttaaaacc	cttcaatgaagagaa	GATGACGAGTCTGA	ctggaggtg-ttatctttgccc...	87...	tgtctgagaagg	gttgttaa
B.Tau	ttaaaacc	cttcaatgaagagaa	GATGACGAGTCTGA	ctgggaagtg-ttctctttgtc...	89...	tgtctgagaagg	gtttgcta
E.Cab	taaaaacc	cttcagtgaagagat	GATGACGAGTCTGA	ctggaggtg-tcatctttgtc...	89...	tgtctgagaagg	gttgctac
S.Sus	tttaaacc	cttcaatgacgagaa	GATGACGAGTCTGA	ctggaggtg-ttctctttgac...	89...	tgtctgagaagg	gttattac
O.Avi	ttaaaacc	cttcaatgaagagaa	GATGACGAGTCTGA	ctggaggtg-ttctctttgtc...	89...	tgtctgagaagg	gttgctat
L.Afr	caaaaacc	cttcagtgaagagat	GATGACGAGTCTGA	ctggaggtg-ttatctttgtc...	87...	tgtctgagaagg	gttgttac
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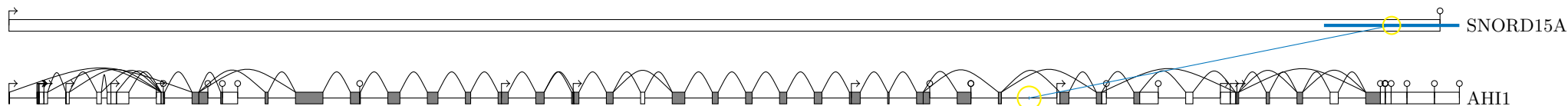
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R.Mac	cattatag	gtaagtggttg...	263...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
P.Tro	cattatag	gtaagtggttg...	263...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
C.Jac	cattatag	gtaagtggaat...	271...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
M.Mus	cattatag	gtaagttgaatt...	255...	acatgagccattgcacacatt	TCAGACTTtc	TCATC	ctgactgtga-ttttttttaataacaat	tttcatttctgtag	gtgatggt
R.Nor	cattatag	gtaagttgaatt...	259...	-catgagccattgcacacatt	TCAGACTTtc	TCATC	ctgactgtga-ttttttttaataacaat	tttcatttctgtag	gtgatggt
C.Por	cattatag	gtaagttgctgt...	269...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataaaaat	tttcatttctgtag	gtgatggt
O.Cun	catcatag	gtaagtccattc...	264...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
C.Fam	cattatag	gtaagttggatt...	298...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
B.Tau	cattatag	gtaagttgaaat...	270...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
E.Cab	cattatag	gtaagttgcatt...	275...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
S.Sus	tattatag	gtaagttgcatt...	275...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
O.Avi	cattatag	gtaagttgaaat...	270...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtaa-gtttttttaataacaat	tttcatttctgtag	gtgatggt
L.Afr	cattatag	gtaagttttatt...	277...	-catgagccattgcatacatt	TCAGACTTtc	TCATC	ctgaatgtac-gtttttttaataacaat	tttcatttctgtag	gtgatggt
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id=325369 gene=ENSG00000102753 name=KPNA3 segment=chr13.50296261.50296612.-1 type=IN

Figure 496: CS=10.92





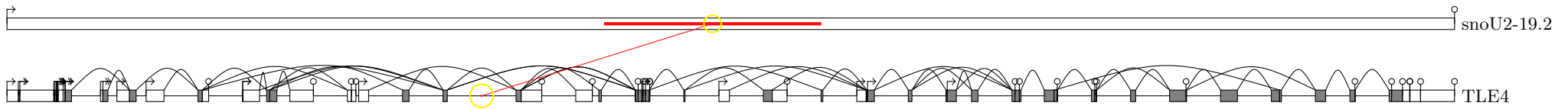
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R. Mac	tttaaacc	cttcgatgaaga...96...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gttgctgc
P. Tro	tttaaacc	cttcgatgaaga...96...aatttcctaaagatgactta	GAGGca	TTTGt	CTGA	gaagg	gttgctgc
P. Abe	tttaaacc	cttcgatgaaga...96...aatttcctaaagatgactta	GAGGca	TTTGt	CTGA	gaagg	gttgctgc
C. Jac	tttaaacc	cttcgatgaaga...96...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gttgctgc
C. Por	atgaaacc	cttcgatgaaga...94...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gtttcttc
O. Cun	ctgaggcc	cttcggtgaaga...95...aacagcccgaagatgaccaa	GAGGca	TTTGt	CTGA	gaagg	gttgcagc
C. Fam	ttaaaacc	cttcaatgaaga...96...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gttgttaa
F. Cat	tataaacc	cttcaatgaaga...99...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gttgcccc
B. Tau	ttaaaacc	cttcaatgaaga...98...aacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gtttgcta
S. Sus	tttaaacc	cttcaatgacga...98...gacttcctaaagatgaccta	GAGGca	TTTGt	CTGA	gaagg	gttattac
O. Avi	ttaaaacc	cttcaatgaaga...98...aacttcctaaagatgactta	GAGGca	TTTGt	CTGA	gaagg	gttgctat
L. Afr	caaaaacc	cttcagtgaaga...96...gacttcctaaagatgaccaa	GAGGca	TTTGt	CTGA	gaagg	gttgttac
	*	*	****	***	**	*	*****

id=770932 gene=ENSG00000206941 name=SNORD15A segment=chr11.75111435-75111582.1 type=EN

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R. Mac	caccaacg	gtaagacagtct...4871...tcccaccaccctcatcca	TTAGCAAACCTT	gagacagcctcacacttacc...42...tgaatggtgggg	gttttctc
P. Tro	caccaacg	gtaagacagtct...4871...tcccaccaccctcatcca	TTAGCAAACCTT	gagacagcctcacacttacc...42...tgaatggtgggg	gttttctc
P. Abe	caccaatg	gtaagacagtct...4871...tcccaccaccctcatcca	TTAGCAAACCTT	gagacagcctcacacttacc...42...tgaatggtgggg	gttttctc
C. Jac	caccaacg	gtaagacagtct...4871...tcccaccaccctcatcca	TTAGCAAACCTT	gagacagcctcacacttacc...42...tgaatggtgggg	gttttctc
C. Por	caccattg	gtaagccaatct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgagtgtgggg	gtttctct
O. Cun	caccaacg	gtaaggccattt...4870...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...43...tgagtgtgggg	gttttctc
C. Fam	caccaacg	gtaaggcagtct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
F. Cat	caccaacg	gtaagacagtct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
B. Tau	caccaacg	gtaaggcagtct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
S. Sus	caccaacg	gtaaggcagtct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
O. Avi	caccaacg	gtaaggcagtct...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
L. Afr	cgccaaca	gtaaggccattt...4871...tcccaccaccctgatcca	TTAGCAAACCTT	gagacagcctcagacttacc...42...tgaatggtgggg	gttttctc
	* **	**** * * *	***** ** *	***** ** *	*** *****

id=172 gene=ENSG00000135541 name=AH11 segment=chr6\_135644518-135679269.-1 type=IN

Figure 497: CS=10.14



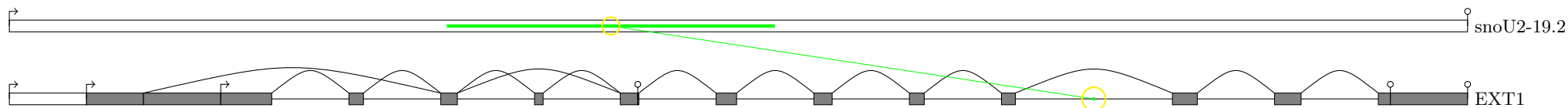
H. Sap	ttgaagtg	gatcaaggatgaaaatacc	caaat	TGAGt	ATCAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac	
R. Mac	ctgaagtg	gatcaatgatgaaactag	cctcaatc	TGAGc	ATCAGAAGGC	tttccagtc-tacctgatgcatgatctctacagttctgaga	agcaaaac	
P. Tro	ctgaagtg	gatcaaggatgaaaatacc	caaat	TGAGt	ATCAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac	
C. Jac	ctgaagta	gatcaatgattaaagta	acc	caaat	TGAGc	ATCAGAAGAC	cttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac
M. Mus	ctgaaata	gatcagtgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGGC	cttttgggt----ctggggcatgatctctctagttctgaga	agcaaaac	
R. Nor	ctgaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGGC	cttttgggt-ggctgggtgcatgatctccatagttctgaga	agcaaaac	
C. Por	tcaaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	ctttgagtc-tccctgattcatgatctctatagttctgaga	agcagatt	
O. Cun	cgaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	cttctagtc-tacctgatgcatgatctccatggtctgaga	agcaaaac	
C. Fam	ctgtagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	cttccagtc-tacctgatgcatgatctctctagttctgaga	agcaaaag	
F. Cat	ctgaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	ctttgagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag	
B. Tau	ctgaagtg	gatcagtgatgaaagtag	cctcaatc	TGAGc	ATCAGAAGAC	caccagtg-tatctgatgcatgatctctgtagttctgaga	agcaaaag	
E. Cab	ctgaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	cttccagtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag	
S. Sus	cagaagtg	gatcaatgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	cttctgtc-tacctgatgcatgatctctgtagttctgaga	agcaaaag	
L. Afr	atgaagtg	gatcagtgatgaaaatag	cctcaatc	TGAGc	ATCAGAAGAC	cttctagtc-tacctgatgcatgatctctatagttctgaga	agcaaatc	
	*	*****	*** ** *	**	*****	**	* ***** ** *** * **	

id=675724 gene=ENSG00000199894 name=snoU2.19.2 segment=chr4.111354265.111354344.-1 type=EN

H. Sap	cccaagag	gtaaggtagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
R. Mac	cccaagag	gtaaggcagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
P. Tro	cccaagag	gtaaggtagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
C. Jac	cccaagag	gtaaggtagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
M. Mus	cccaagag	gtaagattgttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
R. Nor	cccaagag	gtaagattgttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
C. Por	cccaagag	gtaaggcagttc...4936...	gaagacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
O. Cun	cccaagag	gtaaggtagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
C. Fam	cccaagag	gtaaggcagttg...4936...	aaagcaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
F. Cat	cccaagag	gtaaggcagttg...4936...	aaagcaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
B. Tau	cccaagag	gtaaggcagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
E. Cab	cccaagag	gtaaggcagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
S. Sus	ctcaagag	gtaagacagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
L. Afr	cccaagag	gtaaggcagttg...4936...	aaacaataattgattct	GTTTCTGATc	TTCA	tttatag	caccagca
	*	*****	*****	*	*****	*****	*****

id=172631 gene=ENSG00000106829 name=TLE4 segment=chr9.82227634.82242288.1 type=IN

Figure 498: CS=18.2



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R. Mac ctgaagtggatcaatgatgaaactAGCCAAAtcTGAGCATCAGaaggctttccagtc-tacctgatgcatgatctctacagttctgagaagcaaaac
M. Mus ctgaaatagatcagtgatgaaatAGCCAAAtcTGAGCATCAGaAGGCctTTTGGtcTGGG----gcatgatctctctagttctgagaagcaaaac
R. Nor ctgaagtggatcaATGATGAAaATAGCCAAAtcTGAGCATCAGaAGGCctTTTGGtc--ggctgggtgcatgatctccatagttctgagaagcaaaac
C. Por tcaaagtggatcaatgatgaaaATAGCCAAAtcTGAGCATCAGaagacctttcggtc-tcctgatccatgatctctatagttctggaagcagatt
O. Cun ccaagtggtgatcaatgatgaaatAGCCAAAtcTGAGCATCAGaagacctctagtccttacctgatgcatgatctccattgttctgagaagcaaaac
C. Fam ctgtagtggatcaatgatgaaatAGCCAAAtcTGAGCATCAGaagacctccagtc-tacctgatgcatgatctctctagttctgagaagcaaaag
F. Cat ctgaagtggatcaatgatgaaatAGCCAAAtcTGAGCATCAGaagacctttcagtc-tatctgatgcatgatctctgtagttctgagaagcaaaag
B. Tau ctgaagtggatcagtgatgaaatAGCCAAAtcTGAGCATCAGaagaccaccagtg-tatctgatgcatgatctctgtagttctgagaagcaaaag
E. Cab ctgaagtggatcaatgatgaaatAGCCAAAtcTGAGCATCAGaagacctttcagtc-tacctgatgcatgatctctgtagttctgagaagcaaaag
S. Sus cagaagtggatcaatgatgaaatAGCCAAAtcTGAGCATCAGaagaccttctctc-tacctgatgcatgatctctgtagttctgagaagcaaaag
O. Avi ctgaaactgggtcattgatgaaacAGCCAAAtcTGAGCATCAGaagacctttcagtc-tacctaaagcatgatctctgtagtgctgataagcaaaag
L. Afr atgaagtggatcagtgatgaaatAGCCAAAtcTGAGCATCAGaagaccttctagtc-tacctgatgcatgatctctatagttctggaagcaatcg
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=675724 gene=ENSG00000199894 name=snoU2.19.2 segment=chr4.111354265.111354344.-1 type=EN

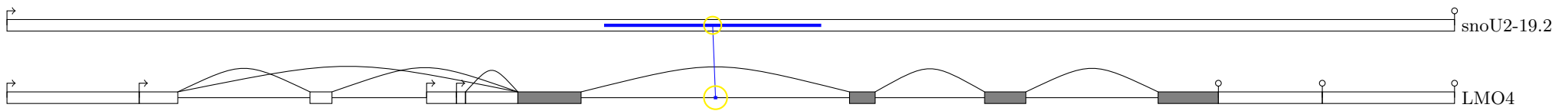
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R. Mac caacagaggtgaagaaccat...4923...-gttgacatt-tgttaacgctg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
M. Mus ctacggaagtaagaatggtg...4909...gagtgatgTTTTgtgacaTTTgtTCAAAGTCTTGATtGCTTGTtTTGGCT-----tgtactttgcctttaggtggattt
R. Nor ccacggaagtaagaatggtg...4914...-gatgttttttgacatttatTCAAAGTCTTGATtGCTTGTtTTGGCTTTGtTGTgcTTTGccTTGT-----aggtggattt
C. Por caaccgaggtgaagaaccatc...4924...-gttgacatt-tgttaacagcc-----TTGATtGCTTGTtTTGGCT-----GTgttctgcc-tacaggtggattt
O. Cun caacagaggtgaagaacccc...4923...-gttgacatt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgtttgcc-tgcaggtggattt
C. Fam ccacagaggtgaagcgcctc...4923...-gttgacatt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttcgcc-tgcaggtggattt
F. Cat ccacgaggtgaaggagcggg...4923...-gttgacatt-tgttgacgatg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
B. Tau ccacgaggtgaagcagcctc...4923...-gttgacatt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
E. Cab ccacgaggtgaagcaccaca...4923...-gttcgacgtt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggttagattt
S. Sus ccacagaggtgaagcatcaca...4923...-gttgacatt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
O. Avi ccacgaggtgaagcagcctc...4923...-gttgacatt-tgttaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
L. Afr ctacgaggtgaagagccctt...4923...-gttgacatt-cactaacactg-----TTGATtGCTTGTtTTGGCT-----tgtgttctgcc-tgcaggtggattt
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id=90954 gene=ENSG00000182197 name=EXT1 segment=chr8.118819617.118825110.-1 type=IN

Figure 499: CS=10.8



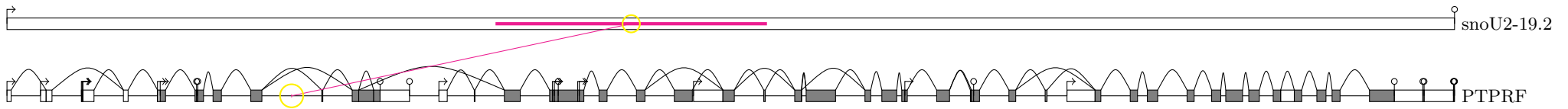
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R. Mac	ctgaagtg	gatcaatgatgaaactagc	ccaatc	TGAGCATCAGAAGG	cctttccagtc-tacctgatgcatgctctacagttctgaga	agcaaaac
P. Tro	ctgaagtg	gatcaaggatgaaaat	acccaatt	TGAGTATCAGAAG	accttccagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac
P. Abe	ttgaagtg	gatcaaggatgaaaat	aacccaatt	TGAGCATCAGAAG	accttccagtc-tacttgatgcatgagctctacagttttaaga	aacaaaac
C. Jac	ctgaagta	gatcaatgattaaagta	aacccaatt	TGAGCATCAGAAG	accttccagtc-tacttggtgcatgagctgtacagttttgaga	agcaaaac
R. Nor	ctgaagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAGG	ccttttggtc-ggctgggtgcatgctccatagttctgaga	agcaaaac
C. Por	tcaaagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAG	acctttcggtc-tccctgatctcatgctctatagttctggga	agcagatt
O. Cun	cgaagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAG	accttctagtttacctgatgcatgctccattggttctgaga	agcaaaac
C. Fam	ctgtagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAG	accttccagtc-tacctgatgcatgctctctagttctgaga	agcaaaag
B. Tau	ctgaagtg	gatcagtgatgaaagtag	cccaatc	TGAGCATCAGAAG	accaccagtg-tatctgatgcatgctctgtagttctgaga	agcaaaag
E. Cab	ctgaagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAG	accttccagtc-tacctgatgcatgctctgtagttctgaga	agcaaaag
S. Sus	cagaagtg	gatcaatgatgaaaatag	cccaatc	TGAGCATCAGAAG	accttctgctc-tacctgatgcatgctctgtagttctgaga	agcaaaag
L. Afr	atgaagtg	gatcagtgatgaaaatag	cccaatc	TGAGCATCAGAAG	accttctagtc-tacctgatgcatgctctatagttctggga	agcaatcg
	**	*****	*** ** *	*****	**** ***** *	** * * ***** ** *** * ** * **

id=675724 gene=ENSG00000199894 name=snoU2.19.2 segment=chr4.111354265.111354344.-1 type=EN

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R. Mac	tacattag	gtaagactttgc...4544...	tacaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...366...	tctttgtttcag	gttatttg
P. Tro	tacattag	gtaagactttgc...4550...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctgaagat	atgattaaa--...361...	tctttgtttcag	gttatttg
P. Abe	tacattag	gtaagactttgc...4553...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	--tctgaagat	atgattaaagt...358...	tctttgtttcag	gttatttg
C. Jac	tacattag	gtaaggctttgc...4542...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...369...	tctttgtttcag	gttatttg
R. Nor	tacattag	gtaagttggctg...4501...	tacaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tctctcaagat	atgattaaa--...409...	tctctgctgcag	gttatttg
C. Por	tacattag	gtaagtttgctt...4553...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...358...	tctttgtttcag	gttatttg
O. Cun	tacattag	gtaagactgctg...4515...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcgagat	atgattaaa--...396...	tcttcgtttcag	gttatttg
C. Fam	tacattag	gtaagacttggc...4523...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...388...	tctttgtttcag	gttatttg
B. Tau	tacattag	gtaagacttggc...4536...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...375...	tctttgtttcag	gttatttg
E. Cab	tacattag	gtaagacttggc...4542...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...369...	tctgtgtttcag	gttatttg
S. Sus	tacattag	gtaaggcttggc...4522...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tatctcaagat	atgattaaa--...389...	tctctgttcag	gttatttg
L. Afr	tacattag	gtaaggttttgc...4542...	-acaatcaaatcctc	ttaacc	CTTTTGATG	aCTCA	tagctcaagat	atgattaaa--...369...	tctttgtttcag	gttatttg
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id=781913 gene=ENSG00000143013 name=LMO4 segment=chr1.87797935.87805218.1 type=IN

Figure 500: CS=11.7



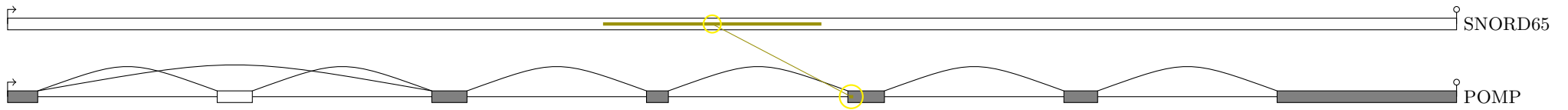
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R. Mac	ctgaagtg	gatcaatgatgaaactagc	CAAA	tcTGAGc	ATCAGA	aggctttc	cagtc-tacctgatgcatgacgtctacagttctgaga	agcaaaac							
P. Tro	ctgaagtg	gatcaaggatgaaaatacc	CAAA	ttTGAGt	ATCAGA	agaccttc	cagtc-tacttgatgcatgagctctacagttttaaga	agcaaaac							
P. Abe	ttgaagtg	gatcaaggatgaaaatacc	CAAA	ttTGAGc	ATCAGA	agaccttc	cagtc-tacttgatgcatgagctctacagttttaaga	aacaaaac							
C. Jac	ctgaagtg	gatcaatgatgaaaatacc	CAAA	ttTGAGc	ATCAGA	agaccttc	cagtc-tacttgatgcatgagctgtacagttttgaga	agcaaaac							
M. Mus	ctgaaata	gatcagtgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	aggccttt	tggt---ctggg-gcatgatctctctagttctgaga	agcaaaac							
R. Nor	ctgaagtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	aggccttt	tggtc-ggctgggtgcatgacgtctcctagttctgaga	agcaaaac							
O. Cun	ccaagtgtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	agaccttc	tagtcttacctgatgcatgacgtctcctagttctgaga	agcaaaac							
C. Fam	ctgtagtgtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	agaccttc	cagtc-tacctgatgcatgacgtctcttagttctgaga	agcaaaag							
F. Cat	ctgaagtgtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	agaccttc	cagtc-tacttgatgcatgacgtctcttagttctgaga	agcaaaag							
B. Tau	ctgaagtgtg	gatcagtgatgaaagttagc	CAAA	tcTGAGc	ATCAGA	agaccacc	cagtg-tatctgatgcatgacgtctctgtagttctgaga	agcaaaag							
E. Cab	ctgaagtgtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	agaccttc	cagtc-tacctgatgcatgacgtctcttagttctgaga	agcaaaag							
S. Sus	cagaagtgtg	gatcaatgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	agaccttc	ctctgac-tacctgatgcatgacgtctctgtagttctgaga	agcaaaag							
L. Afr	atgaagtgtg	gatcagtgatgaaaatagc	CAAA	tcTGAGc	ATCAGA	AGAA	ctttctagtc-tacctgatgcatgacgtctcttagttctggga	agcaaatcg							
	*	*****	***	**	*	*****	**	*	*****	**	***	*	**	*	***

id=675724 gene=ENSG00000199894 name=snoU2.19.2 segment=chr4.111354265.111354344.-1 type=EN

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R. Mac	gcgttcag	gtgagcagaggg...4923..	-----	ctattgtactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
P. Tro	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
P. Abe	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
C. Jac	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
M. Mus	gcgatcag	gtgagctgagtt...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
R. Nor	gcgttcag	gtgagctgaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
O. Cun	gcgttcag	gtgagctgaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cgttcaaattacctcgccag	gtggttca				
C. Fam	acgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
F. Cat	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
B. Tau	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
E. Cab	gcgttcag	gtgagcagagag...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
S. Sus	gcgttcag	gtgagcagaggg...4923..	-----	cttttatactaatgcttctc	TCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
L. Afr	gcgttcag	gtgaggagaggg...4918..	ccttcctttt	gtactaatgcttctc	TTTTctTCTGATCTTATTTG	cattcaaattacctcgccag	gtggttca				
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 501: CS=16.8



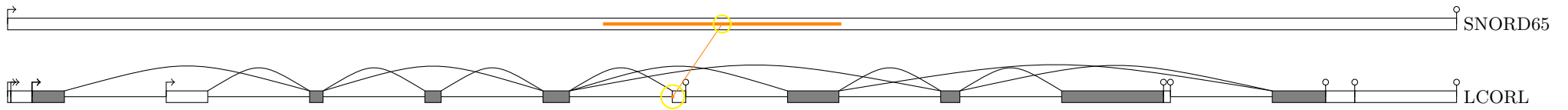
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R. Mac	aagat	aatgatgaaatcacc	aaaaat-AGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-acggttttctgaag	atatctgt
P. Tro	aagat	aatgatgaaatcacc	aaaaat-AGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-acggttttctgaag	atatctct
P. Abe	aagat	aatgatgaaatcacc	aaaaat-AGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-acggttttctgaag	atatctct
C. Jac	aagat	aatgatgaaatcacc	aaaaat-AGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-acggttttctgagg	atatctct
M. Mus	gagat	aatgatgatcacct	aaaaat-AGCTGGAATTAC	cggcagattg-gtagt	tggtgagcct-atggttttctgaag	atatacatt
C. Por	aggat	aatgatgaaataac	caaaaact-AGCTGGAATTAC	cggcagattg-gcagt	tggtgacct--agggttttctgaag	atgtcttt
O. Cun	aggat	-aatgatgaaatcacc	aaaaatAGCTGGAATTAC	cggcagattgtgtg	tggtgagccc-aaggtcttctgaag	atatacttc
C. Fam	aggat	aatgatgagatcacc	aaaaat-AGCTGGAATTAC	cggcagattgatag	tggtgaatgtaatggttttctgaag	ataacctt
F. Cat	aggat	aatgatgaaatcg	cctaaaaatAGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-gtggttttctgaag	atatactgt
B. Tau	aggat	-aatgatgaaatcacc	aaaaagaAGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-acggttttctgagg	atatacttt
E. Cab	aggat	aatgatgaaatcacc	aaaaat-AGCTGGAATTAC	cggcagattgtgtg	tggtgaacct-acggttttctgaag	atatacttt
O. Avi	aggat	-aatgatgaaatcacc	aaaaagaAGCTGGAATTAC	cggcagattgtgtag	tggtgaacct-atggttttctgagg	atatacttt
L. Afr	aggat	acatgatgagata	acccaaaaat-AGCTGGAATTAC	cggcagagtgtgtag	tggtgaacct-gtggttttctgaag	atacctta
	*****		***** ** ** *	***** ** ** *	***** ** ** *	***** ** *

id=62415 gene=ENSG00000212381 name=SNORD65 segment=chr17\_16344540\_16344612.1 type=EN

H.Sap	aaaaaaat	gtaagtatatta...	3867...-ttaa	aattac---attgtctttt	GTAGTTCAGC	-----t
R. Mac	aaaaaaat	gtaagtatatta...	3816...-ttaa	aattac---attgtctttt	GTAGTTCAGC	-----t
P. Tro	aaaaaaat	gtaagtatatta...	3865...-ttaa	aattac---attgtctttt	GTAGTTCAGC	-----t
P. Abe	aaaaaaat	gtaagtatatta...	3873...-ttaa	aactac---attgtctttt	GTAGTTCAGCT	caaccaagataaaaatgaagtttttccaccactgaagaaa::: gagtgtaatgtaaactacattgtctttgtagttccagct
C. Jac	aaaaaaat	gtaagtatgcta...	4033...-ttaa	aattac---attgtctttt	GTAGTTCAGC	-----t
M. Mus	aaaaaac	gtgagtgtgta...	592...-ttag	agtcactctgtcttct	GTAGTTCAGC	-----t
C. Por	aaaaaaat	gtaagtcttctgt...	3074...tg	tatatata---tgtatcaatt	GTAGTTCAGC	-----t
O. Cun	aaaaaaat	gtaagtatggtg...	3446...-ata	aagttac---attgtcatt	GTAGTTCAGC	-----t
C. Fam	aaaaaaat	gtaagtacatta...	3285...---	aatatattgtttgccttt	GTAGTTCAGC	-----t
F. Cat	aaaaaaat	gtaagtatgta...	3214...ttt	caactcctgtttgtc	CTGTGTAGTTCAGC	-----t
B. Tau	aaaaaaat	gtaagtatgta...	673...-taa	aattacg-tgttgccttt	GTAGTTCAGC	-----t
E. Cab	aaaaaaat	gtaagtatatta...	3738...---	aatgacattgttgccttt	GTAGTTCAGC	-----t
O. Avi	aaaaaaat	gtaagtatgta...	664...-taa	aattatg-tgttgccttt	GTAGTTCAGC	-----t
L. Afr	aaaaaaat	gtaagtatatta...	4005...-ttt	---ttccattgtcctctttt	GTAGTTCAGC	-----t
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id=572367 gene=ENSG00000132963 name=POMP segment=chr13\_29238707\_29242609.1 type=IN

Figure 502: CS=21.14



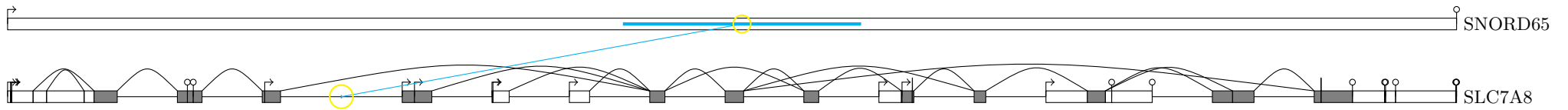
H. Sap	aagat	aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-atggttttctgaag	atatctct
R. Mac	aagat	aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-acggttttctgaag	atatctgt
P. Tro	aagat	aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-acggttttctgaag	atatctct
C. Jac	aagat	aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-acggttttctgagg	atatctct
M. Mus	gagat	aatgatgatatcacctaaaa	TAGCTGGAATTACCGG	cagattg-gtagtggtgagcct-atggttttctgaag	atatcatt
R. Nor	aagat	aatgatgatatcacctaaaa	TAGCTGGAATTACCGG	cagattg-ctagtggtagcct-atggttttctgaag	atatctct
C. Por	aggat	aatgatgaaataa-ccaaaac	TAGCTGGAATTACCGG	cagattg-gcagtggtagcc--agggttttctgaag	atgtcttt
O. Cun	aggat	-aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgagccc-aaggtcttctgaag	atatcttc
C. Fam	aggat	aatgatgagatcacccaaaa	TAGCTGGAATTACCGG	cagattgatagtggtgaatgtaatggttttctgaag	ataaactt
F. Cat	aggat	aatgatgaaatcgctaaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-gtggttttctgaag	atatctgt
B. Tau	aggat	-aatgatgaaatcacccaaaa	AGCTGGAATTACCGG	cagattgtgtagtggtgaacct-acggttttctgagg	atatcttt
E. Cab	aggat	aatgatgaaatcacccaaaa	TAGCTGGAATTACCGG	cagattgtgtagtggtgaacct-acggttttctgaag	atatcttt
S. Sus	aagat	aatgatgaaataacccaaaaa	AGCTGGAATTACCGG	cagattgtgtagtggtgaacct-atggttttctgaag	atatcttt
O. Avi	aggat	-aatgatgaaatcacccaaaa	AGCTGGAATTACCGG	cagattgtgtagtggtgaacct-atggttttctgagg	atatcttt
	*****	***** ** * ** *	*****	***** ** * ** *	***** ** *

id=62415 gene=ENSG00000212381 name=SNORD65 segment=chr17\_16344540\_16344612.1 type=EN

H. Sap	aaagaaag	gtaatatggta...1544...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
R. Mac	aaagaaag	gtaatatggta...1532...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
P. Tro	aaagaaag	gtaatatggta...1544...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
C. Jac	aaagaaag	gtaatatggta...1577...gaagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
M. Mus	aaagaaag	gtaatactggca...1280...-aagagtactcagtaaaaaac	TTGGTActATTTCAG	CTG	attca
R. Nor	aaagaaag	gtaatactggca...1253...-aagagtactcagtaaaaaac	TTGGTActATTTCAG	CTG	attca
C. Por	aaagaaag	gtaatacagtg...1358...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
O. Cun	aaagaaag	gtaatactggta...1186...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
C. Fam	aaagaaag	gtaatatggta...2515...taagagtaatcagaaacac-	TTGGTActATTTCAG	CTG	attca
F. Cat	aaagaaag	gtaatatggta...1423...taagagtaatcagtaaacac-	TTGGTActATTTCAG	CTG	attca
B. Tau	aaagaaag	gtaatatgata...1400...taagagtaatcagtaaaaaa-	TTGGTActATTTCAG	CTG	attca
E. Cab	aaagaaag	gtaatatgata...1412...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
S. Sus	aaagaaag	gtaacattgata...2004...taagagtaatcagtaaaaaac-	TTGGTActATTTCAG	CTG	attca
O. Avi	aaagaaag	gtaatatgata...1405...taagagtaatcagtaaaaaa-	TTGGTActATTTCAG	CTG	attca
	*****	**** * *	*****	*****	*****

id=729988 gene=ENSG00000178177 name=LCORL segment=chr4\_17961935\_17963525\_-1 type=IN

Figure 503: CS=10.92



H. Sap	aagat	aatgatgaaatcacc	aaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-atggtttt	ctgaag	atatctct
R. Mac	aagat	aatgatgaaatcacc	aaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-acggtttt	ctgaag	atatctgt
P. Tro	aagat	aatgatgaaatcacc	aaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-acggtttt	ctgaag	atatctct
P. Abe	aagat	aatgatgaaatcacc	aaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-acggtttt	ctgaag	atatctct
C. Jac	aagat	aatgatgaaatcacc	aaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-acggtttt	ctgagg	atatctct
M. Mus	gagat	aatgatgatcacct	aaaata	GCTGGAATTACCGG	gcagattg-gtagt	ggtagcct-atggtttt	ctgaag	atatcatt
R. Nor	aagat	aatgatgatcacct	aaaata	GCTGGAATTACCGG	gcagattg-gtagt	ggtagcct-atggtttt	ctgaag	atatctct
C. Por	aggat	aatgatgaaataacc	aaaacta	GCTGGAATTACCGG	gcagattg-gtagt	ggtagcct-atggtttt	ctgaag	atgtcttt
O. Cun	aggat	-aatgatgaaatcacc	gaaaaata	GCTGGAATTACCGG	cagattgtgtagtgg	gagccc-aaggtctt	ctgaag	atatcttc
C. Fam	aggat	aatgatgagatcacc	aaaata	GCTGGAATTACCGG	gcagattgtatag	tggtgaatgtaatg	gttttctgaag	ataacctt
F. Cat	aggat	aatgatgaaatcgct	aaaaata	GCTGGAATTACCGG	gcagattgtgtagt	gtagcct-gtggttt	ctgaag	atatctgt
B. Tau	aggat	-aatgatgaaatcacc	aaaagaa	GCTGGAATTACCGG	gcagattgtgtagt	ggtagcct-acggtttt	ctgagg	atatcttt
S. Sus	aagat	aatgatgaaataacc	aaaaaaa	GCTGGAATTACCGG	cagattgtgtagtgg	gaacct-atggtttt	ctgaag	atatcttt
O. Avi	aggat	-aatgatgaaatcacc	aaaagaa	GCTGGAATTACCGG	gcagattgtgtagt	ggtagcct-atggtttt	ctgagg	atatcttt
	*****	***** ** ** *	*****	*****	*****	*** **	*** *****	** *

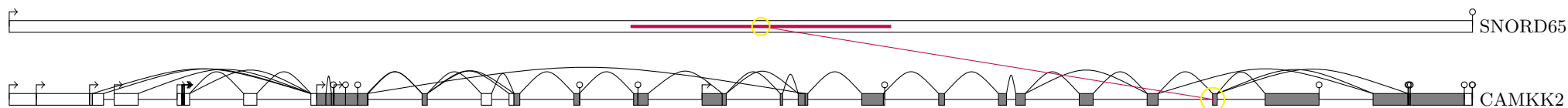
id=62415 gene=ENSG00000212381 name=SNORD65 segment=chr17\_16344540\_16344612.1 type=EN

H. Sap	ctgcttat	gtaagtgtcatc...	4906...	-----cctcttg	ctgagcta	aaata	CTGGgTGGTGATT	CAGC	aga	aaacccagctcc	cagcagctgg	cgccaggagct	aacaggat	
R. Mac	ctgcttat	gtaagtgtcatc...	4906...	-----cctcttg	ctgagcta	agta	CTGGgTGGTGATT	CAGC	aga	aaacaccagctcc	cagcagctgg	ccaggagct	aatagggt	
P. Tro	ctgcttat	gtaagtgtcatc...	4906...	-----cctcttg	ctgagcta	aaata	CTGGgTGGTGATT	CAGC	aga	aaacccagctcc	cagcagctgg	cgccaggagct	aacaggat	
P. Abe	ctgcttat	gtaagtgtcatc...	4906...	-----cctcttg	ctgagcta	agtaa	CTGGgTGGTGATT	CAGC	aga	aaactccagctcc	cagcagctgg	cgccaggagct	aacaggat	
C. Jac	ctgcttat	gtaagtgtcatc...	4906...	-----cctcttg	ctgagcta	agta	CTGGgTGGTGATT	CAGC	aga	aaactccagctcc	cagcagctgg	cgccaggagct	aacaggat	
M. Mus	ctgtttgt	gtaagtgtcatc...	4911...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	ag	gaactgcaggtcc	cagcagctct	ggctctggagag	aaaaggat	
R. Nor	ctgcctgt	gtaagtgtcatc...	4911...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	ag	gaactgcaggtcc	cagcagctct	ggctctggagag	aaaaggat	
C. Por	ctgcttat	gtaagtgtcatc...	4901...	ttcagggtt	cttggtg	aac	TCAGTGTGG	TGGTGATT	CAGC	ag	aactccaggtct	agcagctgg	cactagaggg	aacaggag
O. Cun	ctgcctgt	gtaagtattcca...	4906...	-----cctcttg	ctgagcta	cgac	CTGGgTGGTGATT	CAGC	aga	aaaagccaggtcc	ggcagctgg	ccaggaggg	gacaggat	
C. Fam	ctgcttat	gtaagtgtcatc...	4912...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	aga	aaactccaggtct	agcagctgg	ccaggaggg	gtcagggg	
F. Cat	ctgcttat	gtaagtgtcatc...	4912...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	aga	aaactccaggtct	agcagctgg	ccaggaggg	gtcaggat	
B. Tau	ctgcttat	gtaagtaccatc...	4912...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	aga	aaactccaggtcc	aaactgg	ccaggaggg	gtcaggat	
S. Sus	ctgcttat	gtaagtaccatc...	4907...	-----cctcttg	ctgagcta	agtag	CTGGgTGGTGATT	CAGC	aga	aaactccaggtcc	aaactgg	ccaggaggg	gtcaggat	
O. Avi	ctgcttat	gtaagtaccatc...	4912...	-----tggtct	aaacta	agtag	TGGTGATT	CAGC	aga	aaactccaggtcc	aaactgg	ccaggaggg	ataagaat	
	*** **	*****	*****	**** *	*****	*****	*****	*****	** **	*** **	** *****	***	**	

id=111707 gene=ENSG00000092068 name=SLC7A8 segment=chr14\_23624621\_23634493\_-1 type=IN

Figure 504: CS=12.6





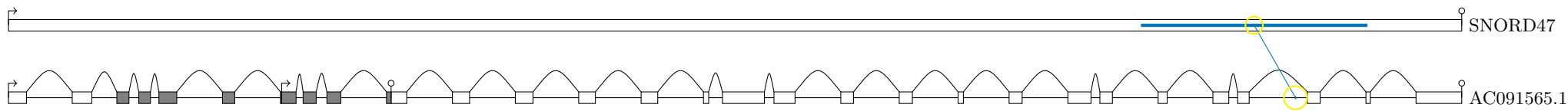
H. Sap	aagat	aatgatg	aaatc	acccaaa	ata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-atg	ttttct	gaag	at	atctct	
R. Mac	aagat	aatgatg	aaatc	acccaaa	ata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gaag	at	atctgt	
P. Tro	aagat	aatgatg	aaatc	acccaaa	ata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gaag	at	atctct	
P. Abe	aagat	aatgatg	aaatc	acccaaa	ata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gaag	at	atctct	
C. Jac	aagat	aatgatg	aaatc	acccaaa	ata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gagg	at	atctct	
M. Mus	gagat	aatgatg	at	accta	aaaata	GCTGGAATTACCGG	cagattg	-gtagt	ggg	gagcct	-atg	ttttct	gaag	at	atcatt	
R. Nor	aagat	aatgatg	at	accta	taaata	GCTGGAATTACCGG	cagattg	-ctagt	ggg	gagcct	-atg	ttttct	gaag	at	atctct	
C. Por	aggat	aatgatg	aaata	acccaaa	acta	GCTGGAATTACCGG	cagattg	-gcagt	ggg	gacct	--agg	ttttct	gaag	at	gtcttt	
O. Cun	aggat	-aatgatg	aaatc	acccaaa	aaata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gagccc	-aag	gtctct	gaag	at	atcttc	
C. Fam	aggat	aatgatg	gagat	acccaaa	aaata	GCTGGAATTACCGG	cagattg	at	agt	ggg	aat	gtaat	gtttct	gaag	ata	acctt
F. Cat	aggat	aatgatg	aaatc	gccta	aaaata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-gtg	ttttct	gaag	at	atctgt	
B. Tau	aggat	-aatgatg	aaatc	acccaaa	aaata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gagg	at	atcttt	
E. Cab	aggat	aatgatg	aaatc	acccaaa	aaata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-acg	ttttct	gaag	at	atcttt	
S. Sus	aagat	aatgatg	aaata	acccaaa	aaaaa	GCTGGAATTACCGG	cagattg	gt	acagt	ggg	gaacct	-atg	ttttct	gaag	at	atcttt
O. Avi	aggat	-aatgatg	aaatc	acccaaa	aaata	GCTGGAATTACCGG	cagattg	tgtagt	ggg	gaacct	-atg	ttttct	gagg	at	atcttt	
	*****		*****	** ** *		*****	*		***	***		***	*****	*	** *	

id=62415 gene=ENSG00000212381 name=SNORD65 segment=chr17\_16344540\_16344612.1 type=EN

H. Sap	ttgctcac	gtgagtggccgc	...479...	cacttccttttcctccct	-CTGGTGATTCCAG	Caaaaaac
R. Mac	ctgctcac	gtgagtggccgc	...478...	cacttccttttcctccct	-CTGGTGATTCCAG	Caaaaaac
P. Tro	ttgctcac	gtgagtggccgc	...480...	cacttccttttcctccct	-CTGGTGATTCCAG	Caaaaaac
P. Abe	ctgctcac	gtgagtggctgc	...479...	cacttccttttcctccct	-CTGGTGATTCCAG	Caaaaaac
C. Jac	ctgctcac	gtgagtggccac	...631...	catgtcccttttcctccct	-CTGGTGATTCCAG	Caaaaaac
M. Mus	ctgctcac	gtgagtgaaccc	...357...	catgtcccttttcctccct	-CTGGcAATTCCAG	Caaaaaac
R. Nor	ctgctcac	gtgagtgtccgc	...329...	cacttccttttcctccct	-CTGGcAATTCCAG	Caaaaaac
C. Por	ctgctcac	gtgagtttcctc	...255...	cacttccttttcctccct	-CTGGcAATTCCAG	Caaaaaac
O. Cun	ctgctcac	gtgagtgtccac	...436...	cacttccttttcctccct	-CTGGcAATTCCAG	Caaaaaac
C. Fam	ttgctcac	gtgagtgtccac	...482...	-acttccttttcctccct	CTGGccATTCCAG	Caaaaaac
F. Cat	ctgcttac	gtgagtatccac	...958...	-nnnnnnnnntccctccct	CTGGccATTCCAG	Caaaaaac
B. Tau	ctgctcgg	gtgagtatccct	...454...	-acttccttttcctccct	CTGGcGATTCCAG	Caaaaaac
E. Cab	ctgctcac	gtgagtgtccac	...490...	-acttccttttcctccct	CTGGccATTCCAG	Caaaaaac
S. Sus	ctgctcac	gtaagtgtccac	...433...	-acttccttttcctccct	CTGGcAATTCCAG	Caaaaaac
O. Avi	ctgctcag	gtgagtttccc	...465...	-acttccttttcctccct	CTGGcGATTCCAG	Caaaaaac
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id=612707 gene=ENSG00000110931 name=CAMKK2 segment=chr12\_121682419\_121682942\_-1 type=IN

Figure 505: CS=15.6



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R. Mac --ttcaatgt aaccaatgatgtaatgattctgccaatgaaatataatgatatacactat-aaaACCGTTCCATTTTGATtctgaggtt actctact
P. Tro --ttcagtgt aaccaatgatgtagtgattctgccaatgaaatataatgatatacactgt-aaaACCGTTCCATTTTGATtctgaggtt actctact
P. Abe --ttcaacgt aaccaatgatgtaatgattctgccaatgaaatataatgatatacactat-aaaACCGTTCCATTTTGATtctgaggtt actctact
C. Jac --ttcgatgt aaccaatgatgtaatgattctgccaatgaaatataatgatatacactgt-aaaACCGTTCCATTTTGATtctgaggtt actgtagt
M. Mus --tagccttgt aaccagtgtgtgatgattctgccaatgatacaaaagtgatatacacttca-aaACCGTTCCATTTTGATtctgaggtt actatact
R. Nor --tggccttgt aaccagtgtgtgatgattctgccaatgatacaaaagtgatatacactttacaACCGTTCCATTTTGATtctgaggtt actctggt
C. Por --tgttacat aaccaatgatgtagtgattctgccaatgaagcaaatgatatacacttataaaACCGTTCCATTTTGATtctgaggtt acagtact
O. Cun --tgaaatgt aaccaatgatgtaatgattctgccaatgaaatataatgatatacacttg-aaaACCGTTCCATTTTGATtctgaggtt actgtata
C. Fam --tagaatgt aaccagtgtgtgatgattctgccaatgaaatagaatgatatacactcataaaACCGTTCCATTTTGATtctgaggtt acttcatt
B. Tau --tataaggt aaccagtgtgtgatgattctgccaatga-atagaatgatatacaacaaaaaACCGTTCCATTTTGATtctgaggtt actttagc
O. Avi --tataaggt aaccagtgtgtgatgattctgccaatga-atagaatgatatacaacaaaaaACCGTTCCATTTTGATtctgaggtt actttagc
L. Afr attaga--gt aaccagtgtgtaatgattctgccaatgaaatagaatgatatacactca-aaaACCGTTCCATTTTGATtctgaggtt actttatt
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id=206373 gene=ENSG00000202394 name=SNORD47 segment=chr1\_173833507\_173833583\_-1 type=EN

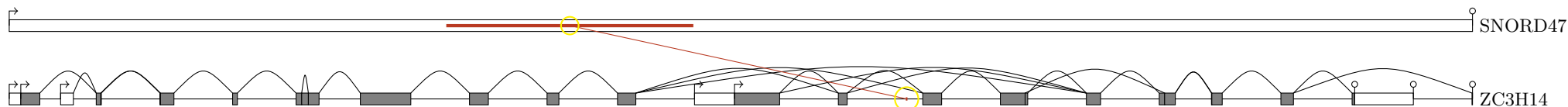
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R. Mac tgtgaaag gtaatattatct...1847...-----tctcactggactgggttgctGTCAGAAATGGAGtTGGTccccagtagtattcatcctgagg...98...ttttacaaatag gtgtgatg
P. Tro tgtgaaag gtaatatcatct...1851...-----tctcactggactgggttgctATCAGAAATGGAGtTGGTgccagtagtattcatcctgagg...98...ttttacaaatag gtgtgatg
P. Abe tgtgaaag gtaatattatct...2528...-----tctcactggactgggttgctATCAGAAATGGAGtTGGTgccagtagtattcatcctgagg...98...ttttacaaatag gtgtgatg
C. Jac cgtgaaag gtaatgttatct...2555...cagcagtcaccactggacgggCTTGcGTCAGAAATGGAGcTGGTgccagtagtattcatcctgagg...97...ttttacaaatag gtgtgatg
M. Mus tgtgaaag gtaatatccagg...818...-----cactggactgggttgctgAGAAATGGAGtTGGTgcctagtagtattcatcaggagg...106...ttttaaaaacag gtgtgacg
R. Nor cgtgaaag gtaatagttaag...846...-----cactggactgggttgctgAGAAATGGAGcTGGTgcctagtagtattcatcaggagg...101...ttttaaaaacag atgtgatg
C. Por tgtgaaag gtaatattatct...1498...-----cactggacgggttgctgAGAAATGGAGtTGGTgcctagtagtattcatcctgagg...103...ttttaaaaatag gtgtgatg
O. Cun tgtgaaag gtaatattatct...1772...-----cactggactgggttgctcCGAAATGGAAcTGGTgcctagtagtattcatcctgagg...110...ttttaaaaacag gtgtgatg
C. Fam tgtgaaag gtaatattatct...1686...-----tctcactggactgggttgctGTCAGAAATGGAGtTGGTgcctagtagtattcatcctgagg...126...ttttaaaaatag gtgtgatg
B. Tau tgtgaaag gtagtattatct...1504...-----tctcactggactgggttgctATCAGAAATGGAAcTGGTgcctagtagtattcatcctgagg...108...ttttaaaaatag gtgtgatg
O. Avi tgtgaaag gtagtattatct...1514...-----cactggactgggttgctcAGAAATGGAGtTGGTgcctagtagtattcatcctgagg...109...ttttaaaaatag atgtgatg
L. Afr tgtgaaag gtaatattatct...1606...-----cactggacagggttgctcAGAAATGGAGtTGGTgcctagtagtattcatcctgagg...105...ttttaaaaatag gtgtgacg
***** ** * * * ***** ** * * * * * ** * * * * * ** * * * * *

```

id=343233 gene=ENSG00000140181 name=AC091565.1 segment=chr15\_23293513\_23295540\_-1 type=I3

Figure 506: CS=13



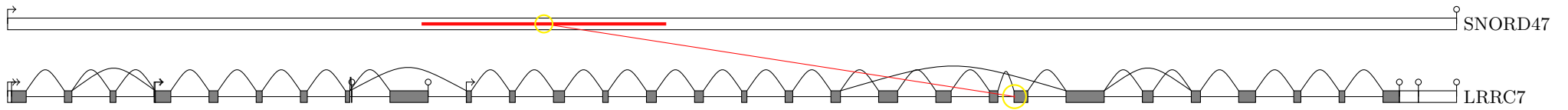
H. Sap	--ttcagtg	aaccaatgatgtaat	GATTCTGC	AAATG	aaatataatgatatc-actgtaaaccggttcattttgattctgaggtt	actctact
R. Mac	--ttcaatgt	aaccaatgatgtaat	GATTCTGC	AAATG	aaatataatgatatc-actataaaaccggttcattttgattctgaggtt	actctact
P. Tro	--ttcagtg	aaccaatgatgtagt	GATTCTGC	AAATG	aaatataatgatatc-actgtaaaccggttcattttgattctgaggtt	actctact
P. Abe	--ttcaacgt	aaccaatgatgtaat	GATTCTGC	AAATG	aaatataatgatatc-actataaaaccggttcattttgattctgaggtt	actctact
C. Jac	--ttcgatgt	aaccaatgatgtaat	GATTCTGC	AAATG	aaatataatgatatc-actgtaaaccggttcattttgattctgaggtt	actgtagt
M. Mus	--tagcttgt	aaccagtgatgtgat	GATTctGCCAAATG		gatacaaaagtgatcaccttta-aaccggttcattttattctgaggtt	actatact
R. Nor	--tggcttgt	aaccagtgatgtgat	GATTctGCCAAATG		gatacaaaagtgatcacctttacaaccggttcattttattctgaggtt	actctggt
C. Por	--tgttacat	aaccaatgatgtgat	GATTctGCCAAATG		aagcaaatgatataccttataaaaccggttcatttttaattctgaggtt	acagtact
O. Cun	--tgaaatgt	aaccaatgatgtaat	GATTCTGC	AAATG	aagaagaatgatatac-actgaaaaccggttcattttgattctgaggtt	actgtata
C. Fam	--tagaatgt	aaccagtgatgtagt	GATTctGCCAAATG		aaatagaatgatatacctataaaaccggttcattttgattctgaggtt	acttcatt
B. Tau	--tataaggt	aaccagtgatgtgat	GATTCTGC	AAATG	-aatagaatgatatacaacaaaaaccggttcattttgattctgaggtt	actttagc
O. Avi	--tataaggt	aaccagtgatgtgat	GATTCTGC	AAATG	-aatagaatgatatacaacaaaaaccggttcatttttaattctgaggtt	actttagc
L. Afr	attaga--gt	aaccagtgatgtaat	GATTCTGC	AAATG	aaatagaatgatatac-actcaaaaaccggttcatttttaattctgaggtt	actttatt
	*	*	*****	*****	* * *****	* ***** ***** **

id=206373 gene=ENSG00000202394 name=SNORD47 segment=chr1\_173833507\_173833583\_-1 type=EN

H. Sap	gagtcaag	gttggtaatggt...	4930...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
R. Mac	gagtcaag	gttggtaatggt...	4930...	aaggatattcagaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
P. Tro	gagtcaag	gttggtaatggt...	4930...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
P. Abe	gagtcaag	gttggtagtggt...	4930...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
C. Jac	cagttggg	gttggtaatggt...	4930...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
M. Mus	gagtcaag	gtggtagtggt...	4729...	aaggatattcagaagtaaa	CATT	taTGGC	caAATT	tttttggtcag
R. Nor	gagtcaag	gtggtagtggt...	4930...	aaggatattcagaagtaaa	CATT	taTGGC	caAATT	tttttggtcag
C. Por	gagtcaag	gtggtagtgact...	4930...	aagattattcaaaagcaaa	CATT	taTGGC	caAATT	tttttggtcag
O. Cun	tagtcaag	gtagtaattta...	4930...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
C. Fam	cagtcaag	gttggtaataat...	4486...	aaggatattcaaaagtaaa	CATT	taTGGC	caAATT	tttttggtcag
B. Tau	cagtcaag	gttggtagtact...	4930...	aagataaattcagaagtaaa	CATTGTGG	ccAATT	ccttttggtcag	attactat
O. Avi	cagtcaag	gttggtagtact...	4930...	aagttatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
L. Afr	cagtcaag	gttggtaataat...	4568...	aaggatattcaaaagtaaa	CATTGTGG	ccAATT	tttttggtcag	attactat
	***	**	**	***	*	*****	*****	*****

id=243495 gene=ENSG00000100722 name=ZC3H14 segment=chr14\_89063153\_89068267\_1 type=IN

Figure 507: CS=13



```

H. Sap  --ttcagtgt aaccaatgatgtaaTGATTCTGccAAATgaatataatgatatact-gtaaaaccgttccattttgattctgaggtt actctact
R. Mac  --ttcaatgt aaccaatgatgtaaTGATTCTGccAAATgaatataatgatatact-ataaaaccgttccattttgattctgaggtt actctact
P. Tro  --ttcagtgt aaccaatgatgtagTGATTCTGccAAATgaatataatgatatact-gtaaaaccgttccattttgattctgaggtt actctact
P. Abe  --ttcaacgt  aaccaatgatgtaaTGATTCTGccAAATgaatataatgatatact-ataaaaccgttccattttgattctgaggtt actctact
C. Jac  --ttcgatgt  aaccaatgatgtaaTGATTCTGccAAATgaatataatgatatact-gtaaaaccgttccattttgattctgaggtt actgtagt
M. Mus  --tagcttgt  aaccagtgatgtgaTGATTCTGccAAATgatacaaaagtgatatacacttca-aaccgttccattttatttctgaggtt actatact
R. Nor  --tggtctgt  aaccagtgatgtgaTGATTCTGccAAATgatacaaaagtgatatacacttcaaacgttccattttatttctgaggtt actctggt
C. Por  --tgttacat  aaccaatgatgtgaTGATTCTGccAAATGAAGcaaatgatatacttataaaaccgttccatttttaattctgaggtt acagtact
O. Cun  --tgaaatgt  aaccaatgatgtaaTGATTCTGccAAATgaAGAAGaatgatatact-tgaaaaccgttccattttgattctgaggtt actgtata
C. Fam  --tagaatgt  aaccagtgatgtagTGATTCTGccAAATGaaatagaatgatatactcataaaaccgttccattttgattctgaggtt acttcatt
B. Tau  --tataaggt  aaccagtgatgtgaTGATTCTGccAAATGaaTAGA-atgatatacaacaaaaaacgttccattttgattctgaggtt actttagc
O. Avi  --tataaggt  aaccagtgatgtgaTGATTCTGccAAATGaaTAGA-atgatatacaacaaaaaacgttccatttttaattctgaggtt actttagc
L. Afr  attaga--gt  aaccagtgatgtaaTGATTCTGccAAATgaatagaatgatatac-actcaaaaaccgttccatttttaattctgaggtt actttatt
*      *      *****      *****      *****      *      *****      *****      **

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id=206373 gene=ENSG00000202394 name=SNORD47 segment=chr1\_173833507\_173833583\_-1 type=EN

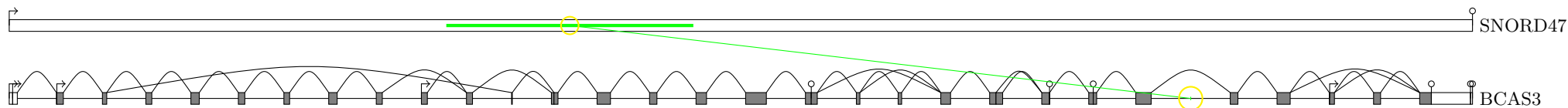
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H. Sap  caaaaaag gtaacactgtga...172...-----tataacat-tttcccctttaa--ATTTCAG AATCAact
R. Mac  caaaaaag gtaacattgtga...172...-----tataacat-tttcccctttaa--ATTTCAG AATCAact
P. Tro  caaaaaag gtaacactgtga...172...-----tataacat-tttcccctttaa--ATTTCAG AATCAact
P. Abe  caaaaaag gtaacactgtga...172...-----tataacat-tttcccctttaa--ATTTCAG AATCAact
C. Jac  caaaaaag gtaacattgtga...172...-----tataacat-tttcccctttaa--ATTTCAG AATCAact
M. Mus  caaaaaag gtaacatcgtga...163...-----gtaacatgttcccctttaa--ATTTCAG AATCAact
R. Nor  caaaaaag gtaacatcgtga...163...-----gtaacatgttcccctttaa--ATTTCAG AATCAact
C. Por  caaaaaag gtaacatcgtga...174...-agcattataacg--tgtttcccCTTTaaATTTCAG AATCAact
O. Cun  caaaaaag gtaacactgtgc...170...tcgtagcataaacatgtttcc--CTTTaaATTTCAG AATCAact
C. Fam  caaaaaag gtaacactgtga...172...-----ttgtaacat-tttcccctttaa--CATTTTCAG AATCAact
B. Tau  caaaaaag gtaacatcgtga...166...-agcattataata--tttttcccTTTACATTTCAG AATCAact
O. Avi  caaaaaag gtaacattgtga...167...---cactataatattttttccc--TTTACATTTCAG AATCAact
L. Afr  caaaaaag gtaacattgtga...157...-----gtaatattgtcctttaa--ATTTCAG AATCAaca
***** ***** *** ** * ***** *****

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id=269762 gene=ENSG0000033122 name=LRRC7 segment=chr1\_70501916\_70502126\_1 type=IN VIEW

Figure 508: CS=10.14



```

H. Sap  --ttcagtgt aaccaatgatgtaatGATTCTGCaAATGaaatataatgatatc-actgtaaaccggttcattttgattctgaggtt actctact
R. Mac  --ttcaatgt aaccaatgatgtaatGATTCTGCaAATGaaatataatgatatc-actataaaaccggttcattttgattctgaggtt actctact
P. Tro  --ttcagtgt aaccaatgatgtagtGATTCTGCaAATGaaatataatgatatc-actgtaaaccggttcattttgattctgaggtt actctact
P. Abe  --ttcaacgt aaccaatgatgtaatGATTCTGCaAATGaaatataatgatatc-actataaaaccggttcattttgattctgaggtt actctact
C. Jac  --ttcgatgt aaccaatgatgtaatGATTCTGCaAATGaaatataatgatatc-actgtaaaccggttcattttgattctgaggtt actgtagt
M. Mus  --tagcttgt aaccagtgatgtgatGATTCTGCaAATGatacaaaagtgatcaccttta-aaccggttcattttatttctgaggtt actatact
R. Nor  --tggcttgt aaccagtgatgtgatGATTCTGCaAATGatacaaaagtgatcacctttacaaccggttcattttatttctgaggtt actctggt
C. Por  --tgttacat aaccaatgatgtgatGATTCTGCaAATGaaagcaaatgatcacttataaaaccggttcatttttaattctgaggtt acagtact
O. Cun  --tgaaatgt aaccaatgatgtaatGATTCTGCaAATGaaagaagaatgatc-acttgaaaaccggttcattttgattctgaggtt actgtata
C. Fam  --tagaatgt aaccagtgatgtagtGATTCTGCaAATGaaatagaatgatcactcataaaaccggttcattttgattctgaggtt acttcatt
B. Tau  --tataaggt aaccagtgatgtgatGATTCTGCaAATG-aatagaatgatcaaccaaaaaaccggttcattttgattctgaggtt actttagc
O. Avi  --tataaggt aaccagtgatgtgatGATTCTGCaAATG-aatagaatgatcaaccaaaaaaccggttcatttttaattctgaggtt actttagc
L. Afr  attaga--gt aaccagtgatgtaatGATTCTGCaAATGaaatagaatgatc-actcaaaaaccggttcatttttaattctgaggtt actttatt
*      * ***** ***** ***** * * ***** * ***** ***** **

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id=206373 gene=ENSG00000202394 name=SNORD47 segment=chr1\_173833507\_173833583.-1 type=EN

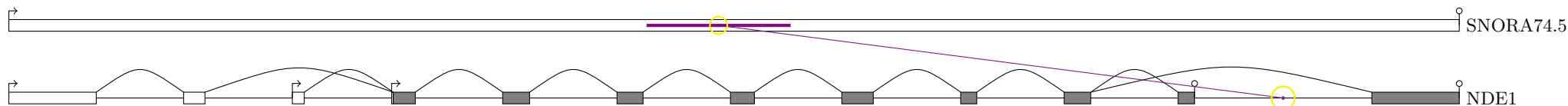
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H. Sap  agtctcag gtaggaatgag...4949...atgtgaattaaattaattgCATTGCAG GATCcagc
R. Mac  agtctcag gtaggaatgag...4949...atgtgaattaaattaattgCATTGCAG GATCcagc
P. Tro  agtctcag gtaggaatgag...4949...atgtgaattaaattaattgCATTGCAG GATCcagc
P. Abe  agtctcag gtaggaatgag...4949...atgtgaattaaattaattgCATTGCAG GATCcagc
C. Jac  agtctcag gtaggaatggg...4705...atatgaattaaattaattgCATTGCAG GATCcagc
M. Mus  agcctcag gtaggagaggg...2618...atgtgaactaaattaattgCATTGCAG GATCcagc
R. Nor  agcctcag gtaggagaggg...1122...atgtgaactaaattaattgCATTGCAG GATCcagc
C. Por  agtctcag gtaagaacaca...4949...atgtgaattaaattaattgCATTGCAG GATCcagc
O. Cun  agtctgag gtaaggaataaa...2990...atgtgaattaaattaattgCATTGCAG GATCcaac
C. Fam  agtctcag gtaagaataag...4930...atgtgaattaaattaattgCATTGCAG GATCcagc
B. Tau  agtctcag gtaagaataag...4949...atgtgaattaaattcaattgCATTGCAG GATCcagc
O. Avi  agtctcag gtaagaataag...4949...atgtgaattaaactcaattgCATTGCAG GATCcagc
L. Afr  agtctcag gtaggaacaag...3213...aattaaattaattaattgCATTGCAG GATCcaac
** ** ** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=238903 gene=ENSG00000141376 name=BCAS3 segment=chr17\_59155891\_59161827\_1 type=IN

Figure 509: CS=14.95



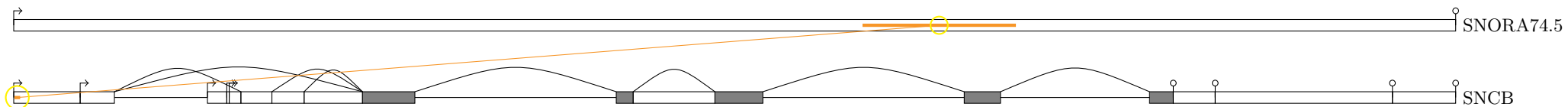
H. Sap	ctctttggc	tccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	gttgctta	
R. Mac	ctctttggc	tccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.39...	gatgccagcata	gttgctta	
P. Tro	ctctttggc	tccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	gttgctta	
P. Abe	tctctggc	tccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	gttgctta	
C. Jac	ctctttggc	tccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.39...	gatgccagcata	gttgctta	
M. Mus	cggtttgc	cccagctgtaggcagctac	taggtttcctgtgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgtagcata	gttgctta
C. Por	atctttgc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.39...	gatgtagcata	gttgctta	
O. Cun	cctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.39...	tgtagcata	attgctta	
C. Fam	cctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	attgctta	
F. Cat	cctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.42...	gatgccagcata	attgctta	
B. Tau	cctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	gttgctta	
O. Avi	tctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.40...	gatgccagcata	gttgctta	
L. Afr	cctttggc	cccagctgtaggcagctgcctaggttgcctgtac	ctggcaagtggttacactg	CTGGGAGAA	caGCAG	cc--aa--tagctggttggcattc...	.44...	gatgccagcata	gttgctta	
	**	**** * ****	**** * ****	***** * ****	***** * ****	* **** *		** **** *	**	

id=588059 gene=ENSG00000252213 name=SNORA74.5 segment=chr5\_138611869\_138612009.1 type=EN

H. Sap	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
R. Mac	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
P. Tro	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
P. Abe	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
C. Jac	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
M. Mus	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	attggata
C. Por	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
O. Cun	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
C. Fam	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
F. Cat	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
B. Tau	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
O. Avi	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
L. Afr	tgcttttag	gaaaaccacgga...	4942...	tctac	ctgatcaaat	tct	CTGCTTCTT	ttCCAG	gttggaca
	***** **	*		***** * * * *	***** * * * *	***** * * * *	***** * * * *	***** *	

id=757812 gene=ENSG00000072864 name=NDE1 segment=chr16\_15793680\_15818047.1 type=IN

Figure 510: CS=16.9



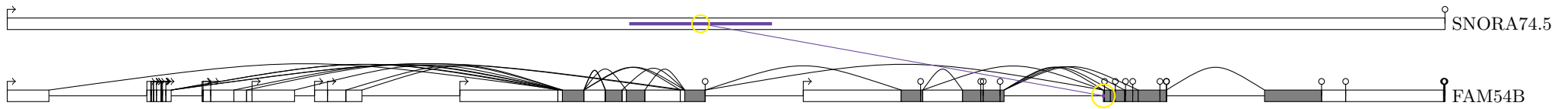
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C. Fam	cctttggc	cccagctgtagg...43...tgggagaacagcagcg--gata---	GCTG	gtTGGCATTCTGGG	cctggttcatgccacctctgttgaactataaccaggatgccagcata	attgttta
F. Cat	cctttggc	cccagctgtagg...45...-ggagaatagcagccgtgata---	GCTG	gtTGGCATTCTGGG	cctggttcatccaaactctgttgaactataaccaggatgccagcata	attgttca
B. Tau	cctttggc	cccagctgtagg...43...tgggagaacagcagct--gata---	GCTG	gtTGGCATTCTGGG	cctggttcatgcctactctgttataactataaccaggatgccagcata	gttgtttt
S. Sus	cctttggc	cccagctgtagg...43...tgggagaacagcagcc--cata---	GCTG	gtTGGCATTCTGGG	cctggttatgccaaactctgttgaactgtaccaggatgccagcata	attactca
L. Afr	cccagctatagg...47...--agaacagcagcc--catattta	GCTG	gtTGGCATTCTGGG	cctgtttcattccaactctgttgaactgtaccaggatgccagcata	gttcccta	
	**	**** * ****		**** * ****	**** * ****	**

id=588059 gene=ENSG00000252213 name=SNORA74.5 segment=chr5\_138611869\_138612009\_1 type=EN

H. Sap	cTCAGAGc	TGCCGCAGC	gccggagccggag---ccggagc...124...-cctccggcccct	ggtccacc
R. Mac	cTCAGAGc	TGCCGCAGC	gccagagccggag---ccggagc...118...-actccggcccct	agttcacc
P. Tro	cTCAGAGc	TGCCGCAGC	gccggagccggag---ccggagc...118...-cctccggcccct	agtcacc
P. Abe	cTCAGAGc	TGCCGCAGC	gccggagccggag---ccggagc...130...-cctccggcccct	agtcacc
C. Jac	cTCAGAGc	TGCCGCAGC	gccggagccggaggaaccgg---...121...-caccgaccocg	agtcacc
M. Mus	cTCAGAGc	TGCCGCAGC	gccggagcaggag---ccggagc...109...-ccactggcccgc	agtcacc
C. Por	cTCAGAGc	TGCCGCAGC	gccggagcaggag---ccggagc...120...-ccgctggcccgc	agtcacc
U. Cun	cTCAGAGc	TGCCGCAGC	gccggagcaggag---cccagaga...131...-cccaacgactctg	agcccacc
C. Fam	cTCAGAGc	TGCCGCAGC	gccggagcaggag---ccggagc...149...-catcccagccgc	agcccacc
F. Cat	cTCAGAGc	TGCCGCAGC	gccggagcaggag---ccggagc...141...-ccatccgcccgc	agcccacc
B. Tau	cTCAGAGc	TGCCGCAGC	gccggagcaggag---caggagc...135...-ctcatcggcccgc	agcccacc
S. Sus	cTCAGAGc	TGCCGCAGC	gtccgagccagag---cccagc...135...-ctcaacggcccgc	agtcacc
L. Afr	cTCAGAGc	TGCCGCAGC	gccggagccggaa---cccagc...146...-ccctccgctcca	agcccacc
	*****	*****	*** ** *	* *

id=658821 gene=ENSG00000074317 name=SNCB segment=chr5\_176057366\_176057530\_-1 type=E5 VIEW

Figure 511: CS=11.05



H. Sap	ctcttggc	tccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...40..gatgccagcata	gttgctta
R. Mac	ctcttggc	tccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...39..gatgccagcata	gttgctta
P. Tro	ctcttggc	tccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...40..gatgccagcata	gttgctta
P. Abe	tctctggc	tccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...40..gatgccagcata	gttgctta
C. Jac	ctcttggc	tccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...39..gatgccagcata	gttgctta
M. Mus	cggtttgc	cccagctgtaggcagctacctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	c--aat--agctggttggcattc-...39..gatgtagcata	gttgctta
R. Nor	tcttttgc	cccagctgtaggcagctacctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--aat--agctggttggcattc-...40..gatgtagcata	gttgctta
C. Por	atltgtgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	ca--aat--agctggttggcattc-...39..gatgtagcata	gttgctta
O. Cun	ccttttgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	ca--aa--agctggttggcattc-...38..tgtgccagcata	attgctta
C. Fam	ccttttgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cg--gat--agctggttggcattc-...40..gatgccagcata	attgctta
F. Cat	ccttttgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	ccgtgat--agctggttggcattc-...42..gatgccagcata	attgctta
B. Tau	ccttttgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	ct--gat--agctggttggcattc-...40..gatgccagcata	attgctta
S. Sus	ccttttgc	cccagctgtaggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cc--cat--agctggttggcattc-...40..gatgccagcata	attgctta
L. Afr	ccttttgc	cccagctataggcagctgcctaggttgccttgtacctaggcaagtgttacact	GCTGGGAGAAcAGCAG	cccatatttagctggttggc-...44..gatgccagcata	attgctta
	**	**** * *****	*** ** * ** *	* ***** ** *	** ***** *

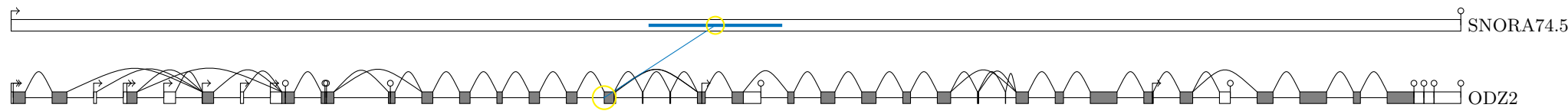
id=588059 gene=ENSG00000252213 name=SNORA74.5 segment=chr5\_138611869\_138612009\_1 type=EN

H. Sap	tgatgcag	gtaggagcccct...2634...--ccaatgtccaccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
R. Mac	tgatgcag	gtaggagcccct...2988...--ccaatgtccatccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
P. Tro	tgatgcag	gtaggagcccct...2658...--ccaatgtccaccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
P. Abe	tgatgcag	gtaggagcccct...2638...--ccaatgtccaccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
C. Jac	tgatacag	gtaggaacctct...2892...--ccaatgtccatccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
M. Mus	agacgcag	gtaggagcccct...812...gc--cagtgccat--gatgcct	GCTGTTGTTTTCTCTttCAG	Cttcggt
R. Nor	agatgcag	gtaggagcccct...857...--cccgtgtccat--tatgccta--	TTGTTTTCTCTttCAG	Cttcggt
C. Por	tgatgcag	gtaggaagctgt...1184...gtatacagtcctccatgccta--	CTGTTGTTTTCTCTttCAG	Cttcggt
O. Cun	tgattcag	gtaggagcccct...1123...--ttcagtggtccatccatgccta--	GTTGTTTTCTCTttCAG	Cttcggt
C. Fam	tgatgcag	gtaggagcccct...1179...--ccaatgtccaccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
F. Cat	cgatgcag	gtaggagcccct...1158...--ccaatgtccatccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
B. Tau	tgatgcag	gtaggagcccct...1207...--ccaatgtccatccatgccta--	TTGTTTTCTCTttCAG	Cttcggt
S. Sus	tgatgcag	gtaggagcccct...1246...gccccagtgccatccatgccta--	CTGTTGTTTTCTCTttCAG	Cttcggt
L. Afr	tgattcag	gtaggagcccct...1149...gccccagtgccatccatgccta--	CTGTTGTTTTCTCTttCAG	Cttcggt
	** ** *	*** ** *	*****	***** *

id=611071 gene=ENSG00000117640 name=FAM54B segment=chr1\_26153318\_26155999\_1 type=IN

Figure 512: CS=12.6





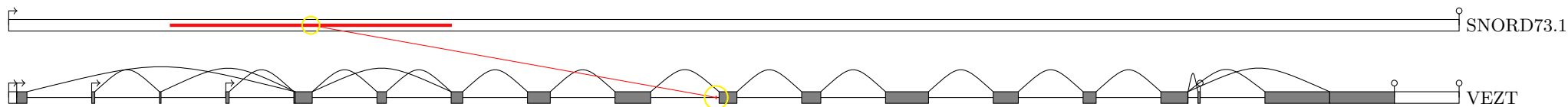
H. Sap	ctctttggc	tccagctgtaggcagctgcctaggttgcttctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 40..gatgccagcata	gttgctta
R. Mac	ctctttggc	tccagctgtaggcagctgcctaggttgcttctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 39..gatgccagcata	gttgctta
P. Tro	ctctttggc	tccagctgtaggcagctgcctaggttgcttctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 40..gatgccagcata	gttgctta
P. Abe	tctcttggc	tccagctgtaggcagctgcctaggttgcttctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 40..gatgccagcata	gttgctta
C. Jac	ctctttggc	tccagctgtaggcagctgcctaggttgcttctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 39..gatgccagcata	gttgctta
M. Mus	cggtttgc	cccagctgtaggcagctacctaaggtttcctgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cc--aat--agctggttggcattc-----.. 40..gatgtcagcata	gttgctta
R. Nor	tcttttgc	cccagctgtaggcagctacctaaggtttcctgtacctaggcaagtgT	TACACgg	CTGGGAGAAAAGCAGc	cc--aat--agctggttggcattc-----.. 40..gatgtcagcata	gttgctta	
C. Por	atttttgc	cccagttgtaggcagctgcctaaggttgctgtgtacctaggcagctgtT	TACACTg	CTGGGAGAAc	AGCAGc	ca--aat--agctggttggcattc-----.. 39..gatgtcagcata	gttcttta
O. Cun	cttttggc	cccagctgtaggcagctgcctaaggttgacttgacctaggcaagtgT	TACACTg	CTGGGAGAAAAGCAGc	ccaaa---agctggctggcattc-----.. 39..tgtccagcata	attgctta	
C. Fam	cttttggc	cccagctgtaggcagctgcctaaggttgctgtgtacctaggcagctgtT	TACACTg	CTGGGAGAAc	AGCAGc	cg--gat--agctggttggcattc-----.. 40..gatgccagcata	attgttta
F. Cat	cttttggc	cccagctgtaggcagctgcctaaggttgctgtgtacctaggcaagtgT	TACACTg	CTGGGAGAAc	AGCAGc	cgctgat--agctggttggcattc-----.. 42..gatgccagcata	attgttca
B. Tau	cttttggc	cccagctgtaggcagctgcctaaggtttccgtgtacctaggcaagtgT	TACACTg	CTGGgAGAAc	AGCAGc	TGAT---agctggttggcattctgtggc... 35..gatgccagcata	gttgtttt
L. Afr	cttttggc	cccagctataggcagctgcctaaggttgcttagtacctaggcaagtgT	TATACcg	CTGGGAGAAc	AGCAGc	ccatatttagctgttggc-----.. 44..gatgccagcata	gttcccta
	**	**** * ***** *****	*****	****	*****	*****	****
	**	*****	*****	*****	*****	*****	*****

id=588059 gene=ENSG00000252213 name=SNORA74.5 segment=chr5\_138611869\_138612009.1 type=EN

H. Sap	ctctgttg	gtaagccacaag...1656...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
R. Mac	ctctgttg	gtaagccacaag...1666...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
P. Tro	ctctgttg	gtaagccacaag...1662...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
P. Abe	ctctgttg	gtaagccacaag...1656...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
C. Jac	ctctgttg	gtaagccacaag...1656...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
M. Mus	ctctgttg	gtaagccacaag...1674...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
R. Nor	ctctgttg	gtaagccacaag...1753...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
C. Por	ctccgttg	gtaagccacaag...1697...-----gccgtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
O. Cun	ctccgttg	gtaagccacaag...1630...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
C. Fam	ctctgttg	gtaagccacaag...1678...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
F. Cat	ctctgttg	gtaagccacaag...1675...-----gtggtgttgagctgtaatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
B. Tau	ctccgttg	gtaagccacaag...1663...cggaggtggtg-tgagctgta	ATCATTTGTTT	CTCCAG	aaAGTGTGc	
L. Afr	ctccgttg	gtaagccacaag...1664...-----gcagtgttgagctataatca	TTGTTt	TTCTTCCAG	aaAGTGTGc	
		*** ** *	*****	*	*** ***** *****	*****

id=316449 gene=ENSG00000145934 name=ODZ2 segment=chr5\_167552056\_167553758.1 type=IN VIEW

Figure 513: CS=11.05



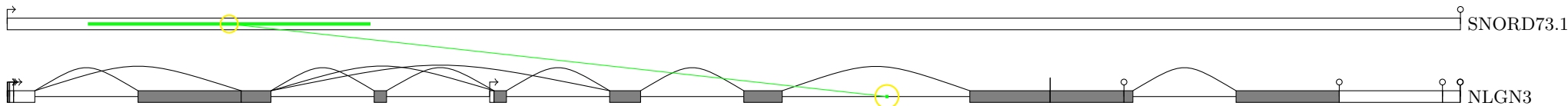
H. Sap	tatGTGGg	AATGaaTGATgACAA	aatgtttcagtc	cccaaatgatac	-----	atactgatt	-----	ataccattatatta	-tcttgacatt	cctctaag
P. Tro	tatGTGGg	AATGaaTGATgACAA	aatgtttcagtc	cccaaatgatac	-----	atactgatt	ataccgtaata	accgttatatta	-tcttgacatt	cctctaag
P. Abe	tatGTGGg	AATGaaTGATgACAA	aatgttttggt	cccaaatgatac	-----	atactgatt	-----	ataccattacatta	-tcttgacatt	cctctaag
C. Jac	tgtGTGGg	AATGaaTGATgACAA	aatgtttcagtc	cccaaatgatac	-----	atactgatt	-----	atactgtagatta	-tcttgatatt	cccctaag
M. Mus	tatatgGG	AATGagTGATgACAA	gatgtttcggt	cccaaatgaagc	-----	ctactgatt	-----	accgtaacatt	tattgctgacatt	ccctata
C. Por	tatatgGG	AATGaaTGATgACAA	aatgtttcggt	cccaaatgatac	-----	aaactgatt	-----	ataccgttacatt	tatttctgacatt	cctctaag
O. Cun	catatgGG	AATGaaTGATgACAA	aatgtttcggt	cccaaatgatatt	gatatacactgatt	-----	ataccgttaca	-ttatttctgacatt	cccataag	
C. Fam	tatatgGG	AATGagTGATgACAA	aatgtttcggt	cccaaatgatac	-----	atattgatt	-----	ataccgctacatt	tacttctgacatt	ccctaaga
F. Cat	tttatgGG	AATGaaTGATgACAA	aatgttttggt	cccaaatgatac	--tgatatactgatt	-----	atactgtaggt	tatttctgacatt	cccgaag	
B. Tau	tatGTGGg	AATGaaTGATgACAA	aatgtttcggt	cccaaatgacat	-----	aatgatt	-----	ataccggtac	----atttctgacatt	cccctaag
S. Sus	tatGTGGg	AATGaaTGATgACAA	aatgtttcggt	cccaaatgatac	-----	atattgatt	-----	ctaccgttacatt	tatttctgacatt	ccctaag
O. Avi	nnnntgGG	AATGaaTGATgACAA	aatgtttcggt	cccaaatgacat	-----	aatgatt	-----	ataccggtac	----atttctgacatt	cccctgag
L. Afr	tatatgGG	AATGagTGATgACAA	aatgtttcggt	cccaaatgataa	-----	atactgatt	-----	agaccgttacatt	tatttctgacatt	cccctgag
	****	*****	*****	*****	****	****	**	*	* * ****	**

id=517617 gene=ENSG00000201264 name=SNORD73.1 segment=chr4\_152023209\_152023280\_1 type=EN

H. Sap	tttacact	gtgagttcattt...3350...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
P. Tro	tttacact	gtgagttcattt...3350...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
P. Abe	tttacact	gtgagttcattt...3356...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
C. Jac	tttacact	gtgagttcattt...2987...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
M. Mus	tttactct	gtgagttaattt...3115...	actttaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
C. Por	tttacact	gtgagttcaatt...2830...	actgcaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
O. Cun	tttacact	gtgagttcattt...2970...	gctttaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
C. Fam	tttacact	gtgagttcattt...2612...	acattaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
F. Cat	tttacact	gtgagttcatat...2680...	actttaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
B. Tau	tttacact	gtgagttcattt...2593...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
S. Sus	tttacact	gtgagttcattt...2648...	actttaggacacctgtacag	TTGTATCACATTTTAC	ttttcaagtttgcttgacag	ggtcagtg
O. Avi	tttacact	gtgagttcattt...2615...	actttaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
L. Afr	tttacact	gtgagttcattt...2901...	actttaggacacctgtacag	TTGTATCACATTTTAC	acttttcaagtttgcttgacag	ggtcagtg
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id=88137 gene=ENSG0000028203 name=VEZT segment=chr12\_95660409\_95663826\_1 type=IN

Figure 514: CS=10.14



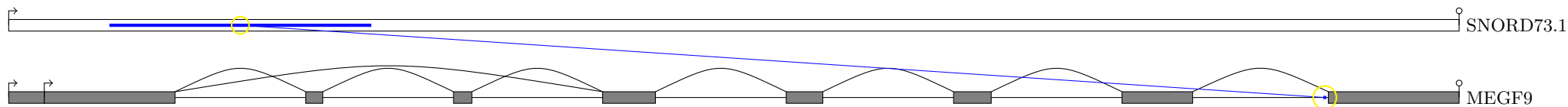
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P. Tro	taTGTGGG	AATGAatGATG	acaaaatgtttcagtc	cccaaatgatac	-----	atactgatt	ataccgtaataaccg-ttatattta-tcctgacatt	cctctaag		
P. Abe	taTGTGGG	AATGAatGATG	acaaaatgttttgg	tcccaaatgatac	-----	atactgatt	-----	atacca-ttacattta-tcctgacatt	cctctaag	
C. Jac	tgTGTGGG	AATGAatGATG	acaaaatgtttcagtc	cccaaatgatac	-----	atactgatt	-----	atactg-ttagattta-tcctgatatt	cccctaag	
M. Mus	taTATGGG	AATGAGtGATG	acaagatgtttcgg	tcccaaatgaagc	-----	ctactgatt	-----	accg-taacatttattgctgacatt	cccttata	
R. Nor	taTATGGG	AATGAGtGATG	aCAGGA	tgtttcgg	tcccaaatgaac	-----	ctactgatt	-----	tcaccgataacatttcttgctgacatt	cccttata
C. Por	tatATGGG	AATGAatGATG	acaaaatgtttcgg	tcccaaatgatac	-----	aaactgatt	-----	ataccg-ttacatttatttctgacatt	cctctaag	
O. Cun	caTATGGG	aATGAatGATG	acaaaatgtttcgg	tcccaaatgatatt	tgatatacactgatt	-----	ataccg-ttaca-ttatttctgacatt	cccataag		
C. Fam	taTATGGG	AATGAGtGATG	acaaaatgtttcgg	tcccaaatgatac	-----	atattgatt	-----	ataccg-ctacatttacttctgacatt	ccctaaga	
F. Cat	tTATGGG	AATGAatGATG	acaaaatgttttgg	tcccaaatgatac	-----	tgatatactgatt	-----	atactg-ttaggtttatttctgacatt	cccgaagg	
B. Tau	taTGTGGG	aATGAatGATG	acaaaatgtttcgg	tcccaaatgacat	-----	aatgatt	-----	ataccg-ttac---atttctgacatt	cccctaag	
S. Sus	taTGTGGG	AATGAatGATG	acaaaatgtttcgg	tcccaaatgatac	-----	atattgatt	-----	ctaccg-ttacatttatttctgacatt	cccttaag	
O. Avi	nmmnTGGG	aATGAatGATG	acaaaatgtttcgg	tcccaaatgacat	-----	aatgatt	-----	ataccg-ttac---atttctgacatt	cccctgag	
L. Afr	taTATGGG	AATGAGtGATG	acaaaatgtttcgg	tcccaaatgataa	-----	atactgatt	-----	agaccg-ttacatttatttctgacatt	cccctgag	
	****	*****	*****	*****	****	*****	**	*	* **** **	

id=517617 gene=ENSG00000201264 name=SNORD73.1 segment=chr4\_152023209\_152023280\_1 type=EN

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P. Tro	ctcagagg	gtgagtaactcg...2673...	-----gtggggctctt-gcctgcctg	CATTtTCATcTCTCATG	-aaaaagactcctttgtggtg--...367...	-tgtcttctgtag	gccttttc	
P. Abe	ctcagagg	gtgagtaactcg...2253...	-----gtggggctctt-gcctgcctg	CATTtTCATcTCTCATG	-aaaaagactcctttgtggtg--...381...	-tgtcttctgtag	gacttttc	
C. Jac	ctctgagg	gtgagtaactca...2255...	-----gtggggctctt-gtctgcctg	CATTtTCATcTCTCATG	-aaaaagactcctttgtggtg--...367...	-tgtcttctgtag	gacttttc	
M. Mus	ttctgagg	gtgagtaactct...2114...	-----gtggggctctc-tcctccctg	CATTtTCATcTCTCATG	-aaaaagaccctttgtggtg--...415...	-tatattctgtag	ggcctttc	
R. Nor	ctctgagg	gtgagtagctct...2258...	cagaatgtgggctctt-tcc	TCCTGgCATTtTCATcTCTCATG	-aaaaagaccctttgtggtg--...421...	-tatattctgtag	ggcctttc	
C. Por	ctctgaag	gtgagtagctct...1490...	-----gtgggactctc-tcctgcctg	CATTtTCATcTCTCATG	-aaaaagaccctttgtggtg--...370...	-tatttctgtag	ggcctttc	
O. Cun	ctctgagg	gtgagtagctta...2785...	-----tggggctcttctcctgcctg	CATTtTCATccCTCATG	-aaaaagaccctttgtggtg--...406...	-tgtctccatag	ggcctttc	
C. Fam	ctcagagg	gtgagtagcatt...1561...	-----gtgaggctctc-tcctgcctg	CATTtTCATcTCTCATG	-aaaaagaccctttgtggtg--...413...	-tatctctgtag	ggcctttc	
F. Cat	ctctgagg	gtgagtaaacact...1575...	-----gtgaggctctc-tcctgcctg	CATTtTCATcTCTCATGAA	-aaagaccctttgtggcggga...410...	-tgtcttctgcag	ggcctttc	
B. Tau	ttctgaag	gtgagtagctct...2182...	-----gtgaaactctc-tcctgcctg	CATTtTCATccCTCATG	-aaaaagaccctttgtggtg--...398...	-ctatttcta-ag	ggcctttc	
S. Sus	ctctgagg	gtagtagctct...2200...	-----gtgaggctctc-tcctgcctg	CATTtTCATcTCTCATG	-aaaaagaccctttgtggtg--...392...	-tatttctgtag	ggcctttc	
O. Avi	ttctgagg	gtgagtagctct...2185...	-----nmmnncctctc-tcctgcctg	CATTtTCATccCTCA	-tgaagaccctttgtggtg--...400...	-ctatttcta-ag	ggcctttc	
L. Afr	ctctgagg	gtgagtagcttg...1617...	-----gtgaagctctc-tcctgactg	CATTtTCATcTCTCATG	-aaaaagcctcctttgtggtg--...422...	-tgtcttctgtag	ggcctttc	
	** ** *	** ** *	****	**	*****	****	* ** ** *	* ** ** *

id=804177 gene=ENSG00000196338 name=NLGN3 segment=chrX\_70384179\_70386860\_1 type=IN

Figure 515: CS=10.92



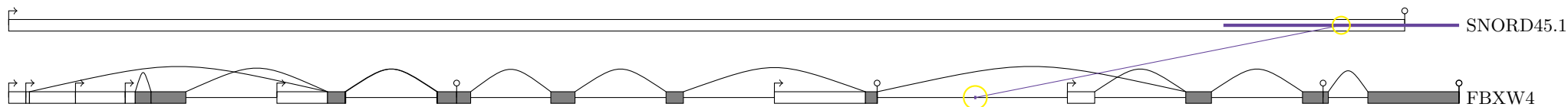
H. Sap	tatgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttcag	ccccaaatgatac	-----	atactgatt	-----	ataccattatattta	-tcctgacatt	cctctaag		
P. Tro	tatgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttcag	ccccaaatgatac	-----	atactgatt	ataccg	tataaccg	tatatattta	-tcctgacatt	cctctaag	
P. Abe	tatgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgttttg	gcccaaatgatac	-----	atactgatt	-----	ataccattacattta	-tcctgacatt	cctctaag		
C. Jac	tgtgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttcag	ccccaaatgatac	-----	atactgatt	-----	atactg	tagattta	-tcctgatatt	cccctaag	
M. Mus	tatat	GGG	AATGA	gt	GATG	ac	AAGA	tgtttc	ggccccaaatgaagc	-----	ctaactgatt	-----	accg	taacatttattg	tgtgacatt	ccctata	
C. Por	tatat	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttc	ggccccaaatgatac	-----	aaactgatt	-----	ataccg	ttacatttattt	ctgacatt	cctctaag	
O. Cun	catat	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttc	ggccccaaatgatattgatatac	actgatt	-----	ataccg	ttaca	-ttattt	ctgacatt	cccataag	
C. Fam	tatat	GGG	AATGA	gt	GATG	ac	AAAA	tgtttc	ggccccaaatgatac	-----	atattgatt	-----	ataccg	ctacatttactt	ctgacatt	ccctaaga	
F. Cat	tttat	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttt	ggccccaaatgatac	--	tgata	tactgatt	-----	atactg	ttagtttattt	ctgacatt	cccraag
B. Tau	tatgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttc	ggccccaaatgacat	-----	aatgatt	-----	ataccg	ttac	---attt	ctgacatt	cccctaag
E. Cab	tatac	GGG	AATGA	Aat	GATG	ac	AAGA	tgtttc	ggccccaaatgatac	-----	atactgatt	-----	ataccg	ttacatttattt	ctgacatt	cccctaag	
S. Sus	tatgt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttc	ggccccaaatgatac	-----	atattgatt	-----	ctaccg	ttacatttattt	ctgacatt	cccctaag	
O. Avi	mnnnt	GGG	AATGA	Aat	GATG	ac	AAAA	tgtttc	ggccccaaatgacat	-----	aatgatt	-----	ataccg	ttac	---attt	ctgacatt	cccctgag
		***	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	**	*	* * **** *	**	

id=517617 gene=ENSG00000201264 name=SNORD73.1 segment=chr4\_152023209\_152023280\_1 type=EN

H. Sap	caagaaag	gtaaaacttcac...2035...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
P. Tro	caagaaag	gtaaaacttcac...2037...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
P. Abe	caagaaag	gtaaaacttcac...2029...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
C. Jac	caagaaag	gtaaaacttcac...2066...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
M. Mus	caagcaag	gtaaaactccaa...1621...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
C. Por	caagaaag	gtaaaacttcac...1708...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
O. Cun	caagaaag	gtaaaccttcac...2307...	-caaaactggataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
C. Fam	caagaaag	gtaaaacttcac...1722...	-taaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
F. Cat	caagaaag	gtaaaacttcac...1741...	-caaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
B. Tau	cacgaaag	gtaaaacttcgc...1719...	.ttaaaccagat-aattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
E. Cab	caagaaag	gtaaaacttcac...1725...	-taaaactagataaattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
S. Sus	caagaaag	gtaaaacttcac...2136...	.ttaaactagat-aattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
O. Avi	caagaaag	gtaaaacttcac...1707...	-aaaaacaagattattttgtc	TTTTa	CATTTCATTCTC	tgtttttattttcag	aagttatt
	** * **	***** * *	*****	***	*****	*****	*****

id=100405 gene=ENSG00000106780 name=MEGF9 segment=chr9\_123367920\_123370018\_-1 type=IN

Figure 516: CS=14.04



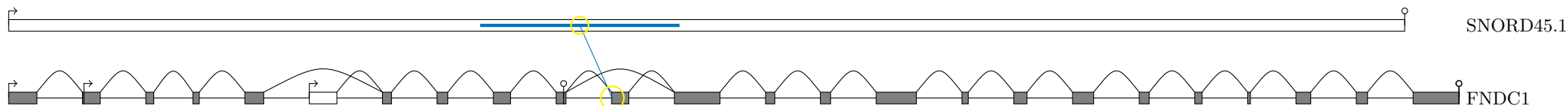
H. Sap	aagcctca	ggtcaatgatga...27...gattatt-agtacttttagttc	TAGAA	TTA	--CTGAGA	cATG	A	gaaaagaa
R. Mac	aagcctca	ggtcaatgatga...27...gattatt-agtacttttagttc	TAGAA	TTA	--CTGAGA	catg	a	gaaaagaa
P. Tro	aagcctca	ggtcaatgatga...27...gattatt-agtacttttagttc	TAGAA	TTA	--CTGAGA	catg	a	gaaaagaa
P. Abe	aagcctca	ggtcaatgatga...27...gattatt-agtacttttagttc	TAGAA	TTA	--CTGAGA	catg	a	gaaaagaa
M. Mus	aagattcg	ggtcaatgatga...28...-attataaaccactttagctc	TAGAA	TTAC	tcTGAGA	cct-	g	gaaaagaa
R. Nor	agaattcg	ggtcaatgatga...28...-attaataaaccactttagctc	TAGAA	TTAC	tcTGAGA	ccc	a	aaaaaaa
C. Por	aatTTTTg	ggtcagtgatga...27...gattatt-actgcttttagctc	TAGAA	TTAC	tcTGAGA	cctg	a	aaaaatac
O. Cun	TTTTTca	ggtcaatgatga...27...gattatt-actacttttagctc	TAGAA	TTAC	tcTGAGA	cctg	a	aaaaatac
C. Fam	tggtcTg	ggtcagtgatga...27...ggtgatt-actccttcagctc	TAGAA	TTAC	tcTGAGA	cctg	a	gaaaatac
B. Tau	gTTTTTg	ggtcagtgatga...27...gattatt-actacttttagctc	TAGAA	TTAC	tcTGAGA	cctg	a	agaacac
E. Cab	atTTTTg	ggtcagtgatga...27...gattatt-actacttcagctc	TAGAA	TTAC	tcTGAGA	cctg	a	aaaaatac
S. Sus	tatTTTTg	ggtcagtgatga...27...gattagt-actacttttagctc	TAGAA	TTAC	tcTGAGA	cctg	a	aaaaatac
L. Afr	atTTTTg	ggtcagtgatga...27...gattatt-gctaaattagctc	TAGAA	TTAC	tcTGAGA	cctg	g	aaaagtaa
	*	**** *****	*	*	*****	*****	*	*

id=470424 gene=ENSG00000200051 name=SNORD45.1 segment=chr5.139906937.139907013.-1 type=EN

H. Sap	ctcaac	ag	gtaagagattca...4919...attacacagtcacaaagaaa---	TTGTTCTCAGTAATCTG	ctctcggccccgggtggggg	gagggtgg
R. Mac	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggtggggg	gagggtgg
P. Tro	ctcaac	ag	gtaagagattca...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggtggggg	gagggtgg
P. Abe	ctcaac	ag	gtaagagattca...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggtggggg	gagggtgg
M. Mus	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ttctcggccaccgggcggggg	ggcggggt
R. Nor	ctcacc	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ttctcggccaccgggtggggg	acgggtgg
C. Por	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggtggggg	gagggtgg
O. Cun	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagcaattgttct	TCTCAGTAATCTG	ctctcggccaccgggtggagt	gagggcgg
C. Fam	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggaggggc	gcgggtgg
B. Tau	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctcttggccaccgggaggggc	ggcggggc
E. Cab	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccaggaggggc	gaggatgg
S. Sus	ctcaac	ag	gtaagagattcc...4923...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggccaccgggaggggc	gagggtgg
L. Afr	cttaac	ag	gtaagagattcc...4924...-----agtcacaaagaaattgttct	TCTCAGTAATCTG	ctctcggcc-cgggaggggg	gagggtag
	** * *	**	*****	*****	** * *	** * *

id=351491 gene=ENSG00000107829 name=FBXW4 segment=chr10.103372911.103384501.-1 type=IN

Figure 517: CS=10.14



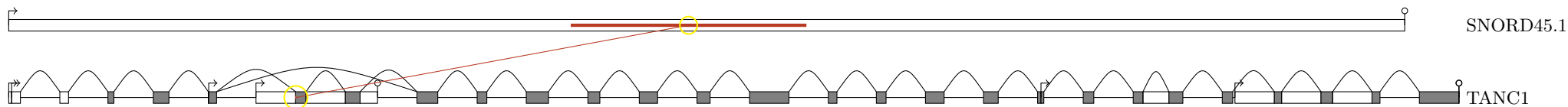
H. Sap	aagcctca	ggtcaatgatgagctgac	ATGTATTCTGAA	tctaaagttgattat	-tagtactttagttctagaatta	--ctgagacatg	agaaagaa		
R. Mac	aagcctca	ggtcaatgatgagctgac	ATGTATTCTGAA	tctaaagttgattat	-tagtactttagttctagaatta	--ctgagacatg	agaaagaa		
P. Tro	aagcctca	ggtcaatgatgagctgac	ATGTATTCTGAA	tctaaagttgattat	-tagtactttagttctagaatta	--ctgagacatg	agaaagaa		
P. Abe	aagcctca	ggtcaatgatgagctgac	ATGTATTCTGAA	tctaaagttgattat	-tagtactttagttctagaatta	--ctgagacatg	agaaagaa		
M. Mus	aagattcg	ggtcaatgatgagctggc	ATGTATTCTGAA	tctaaagttgattataaaccactttagctctagaattactctgagacctg			aaagaa--		
R. Nor	agaattcg	ggtcaatgatgagctggc	ATGTATTCTGAA	tctaaagttgattataaaccactttagctctagaattactctgagacctg			aaaaaaaa		
C. Por	aatTTTTg	ggtcagtgatgagatggc	ATGTATTCTGAA	tctaaagttgattat	-tactgctttagctctagaattactctgagacctg		aaaaatac		
O. Cun	ttttttca	ggtcaatgatgagctggc	ATGTATTCTGAA	tttaaagttgattat	-tactactttagctctagaattactctgagacctg		aaaaatac		
C. Fam	tggctctg	ggtcagtgatgagctggc	ATGTATTCTGAA	tctgcagttggtgat	-tactccttcagctctagaattactctgagacctg		agaaatac		
F. Cat	atTTTTg	ggtcaatgatgagctggc	ATGTATTCTGAA	tccgaagttgattat	-tactacgtagctctagaattactctgagacctg		aaaaatac		
E. Cab	atTTTTg	ggtcagtgatgagcggc	ATGTATTCTGAA	tctaaagttgattat	-tactacttcagctctagaattactctgagacctg		aaaaatac		
S. Sus	tatTTTTg	ggtcagtgatgagctggc	ATGTATTCTGAA	tctaaagttgattat	-tactactttagctctagaattactctgagacctg		aaaaatac		
L. Afr	atTTTTg	ggtcagtgatgagttggc	ATGTATTCTGAA	tctaaagttgattat	-tgctaaattagctctagaattactctgagacctg		gaaagtaa		
	*	****	*****	* *****	*****	* *	* ** *****	*****	*

id=470424 gene=ENSG00000200051 name=SNORD45.1 segment=chr5.139906937.139907013.-1 type=EN

H. Sap	agtgaaag	gtaggaatctca...	3197...	ccaaccatctgccaatcat	TTCAG	AATACATt
R. Mac	agtgaaag	gtaggaatctta...	3573...	ccaaccatctgccaatcat	TTCAG	AATACATt
P. Tro	agtgaaag	gtaggaatctca...	3228...	ccaaccatctgccaatcat	TTCAG	AATACATt
P. Abe	agtgaaag	gtgggaatctca...	3238...	ccaaccatctgccaatcat	TTCAG	AATACATt
M. Mus	agtgaaag	gtgggtgtctca...	3043...	ccaaccatctgccaatcat	TTCAG	AATACATt
R. Nor	agtgaaag	gtgggtgtctcc...	2809...	ccaaccgtctgccaatcat	TTCAG	AATACATt
C. Por	agtgaaag	gtaagaatgtca...	3390...	ccaaccatctgccaatgt	TTCAG	AATACATt
O. Cun	agtgaaag	gtaggaacctca...	3316...	ccaaccgctgccaatcct	TTCAG	AATACATt
C. Fam	agtgaaag	gtaggaacttca...	2739...	ccaaccgtctgccaatcat	TTCAG	AATACATt
F. Cat	agtgaaag	gtaggcacctca...	4952...	ccaaccgtctgccaatcat	TTCAG	AATACATt
E. Cab	agtgaaag	gtaagaacctca...	2775...	ccaaccgtctgccaatcat	TTCAG	AATACATt
S. Sus	agtgaaag	gtaggaaccttg...	2883...	ccaacaatctgccaatcat	TTCAG	AATACATt
L. Afr	agtgaaag	gtaggaatctca...	2945...	ccaaccgtctgccaatcat	TTCAG	AATACATt
	*****	**	*	*	*****	*****

id=140239 gene=ENSG00000164694 name=FND C1 segment=chr6.159647613.159650846.1 type=IN

Figure 518: CS=11.7



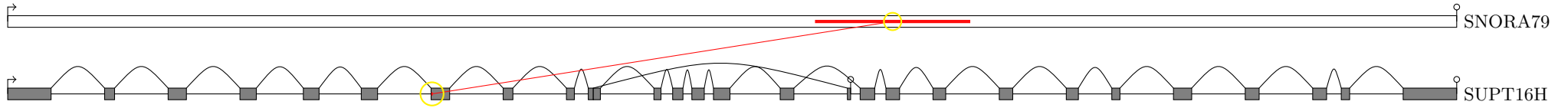
H. Sap	aagcctca	ggtcaatgatgagctgacatgta	TTCTGAAT	ctAAAG	ttgattat	-tagtactttagttctagaatta--ctgagacatg	agaaagaa
P. Tro	aagcctca	ggtcaatgatgagctgacatgta	TTCTGAAT	ctAAAG	ttgattat	-tagtactttagttctagaatta--ctgagacatg	agaaagaa
P. Abe	aagcctca	ggtcaatgatgagctgacatgta	TTCTGAAT	ctAAAG	ttgattat	-tagtactttagttctagaatta--ctgagacatg	agaaagaa
C. Jac	aagcctcg	ggtcaatgatgagctgac	TTGT	TTCTGAAT	ctAAAG	ttgattat-taataactttagttttagaatta--ttgagacata	aaaaagaa
M. Mus	aagattcg	ggtcaatgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattataaaccactttagctctagaattactctgagacctg	aaagaa--	aaaaagaa
R. Nor	agaattcg	ggtcaatgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattataaaccactttagctctagaattactctgagacctg	aaaaagaa	aaaaagaa
C. Por	aatTTTTg	ggtcagtgatgagatggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactgctttagctctagaattactctgagacctg	aaaaatac	aaaaatac
O. Cun	ttttttca	ggtcaatgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactactttagctctagaattactctgagacctg	aaaaatac	aaaaatac
B. Tau	gttttttg	ggtcagtgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactactttagctctagaattactctgagacctg	aagaacac	aagaacac
E. Cab	atTTTTg	ggtcagtgatgagcggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactacttcagctctagaattactctgagacctg	aaaaatac	aaaaatac
S. Sus	tatTTTTg	ggtcagtgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactactttagctctagaattactctgagacctg	aaaaatac	aaaaatac
O. Avi	gtTTTTg	ggtcagtgatgagctggcatgta	TTCTGAAT	ctAAAG	ttgattat-tactactttagctctagaattactctgagacctg	aagaatac	aagaatac
L. Afr	atTTTTg	ggtcagtgatgagttggcatgta	TTCTGAAT	ctAAAG	ttgattat-tgctaaattagctctagaattactctgagacctg	gaaagtaa	gaaagtaa
	*	****	*****	*	*****	*****	*****

id=470424 gene=ENSG00000200051 name=SNORD45.1 segment=chr5.139906937.139907013.-1 type=EN

H. Sap	ttgagaat	caaaatgtgctt----	1559...	gcatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
P. Tro	ttgagaat	caaaatgtgctt----	1559...	gcatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
P. Abe	ttgagaat	caaaatgtgctt----	1562...	gcatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
C. Jac	ttgagaat	caaaatgtgctt----	1619...	ccatcttcattgttttcttt	CTTTGTTcAG	AAgCAAag
M. Mus	ttaagaat	t---tgtggttgaa...	1429...	gaatcttactgttgcctt	CTTTGTTcAG	AAgcaag
R. Nor	ttaagtct	tggctctatgagt----	1349...	ccagatctcatgttttcttt	CTTTGTTcAG	AAgcaaag
C. Por	ttgagaat	ctaactgtgtttt----	1545...	gcatctttattgttttcttt	CTTTGTTcAG	AAgcaaag
O. Cun	ttgagaat	caaaatgtgtct----	1655...	aatgcttcattgttgcctt	CTTTGTTcAG	AAgcaaag
B. Tau	ttaagagt	caaaatgtggtt----	1759...	gtgtcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
E. Cab	ttgagagt	caaaatgtggtt----	1610...	gcatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
S. Sus	ttaagagt	caaaatgtggtt----	2104...	gcatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
O. Avi	ttaagagt	caaaatgtggtt----	1758...	gtgtcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
L. Afr	ttgataat	caaaatgtggtt----	1736...	ccatcttcattgttttcttt	CTTTGTTcAG	AAgcaaag
	** * *	*	*	*	**** *****	**** **

id=24029 gene=ENSG00000115183 name=TANC1 segment=chr2.160004051.160005652.1 type=AN

Figure 519: CS=13



H. Sap	ttcttttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggagtta---tctgttctctgaaatttgcggaatcaaacatgt	aattcctt	
R. Mac	ttattttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggagttatccgtctgttctctgaaatttgcggaatcaaacattt	aattcctt	
P. Tro	ttcttttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggagtta---tctgttctctgaaatttgcggaatcaaacatgt	aattcctt	
P. Abe	ttcttttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggagttatctgtctgttctctgaaatttgcggaatcaaacattt	aatttctt	
C. Jac	gtattttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGACTAT	TAGGataatgggattatccatctgttctctgaaatttgcagaatcaaacattt	catccgt	
C. Por	tacatctt	tgatgactgttc...38...catcataaattgaaatttga	TTTTCTTCACT	AGAGA	atattaggataatgggattatctgtctgttctctgaaatttgcggtatcagaca---	-attcctt	
O. Cun	atcttttc	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGATTA	tgtggataatgggattgtctgtctgttctctgaaatttgcggaatcaaacattt	aatgcctt	
F. Cat	atcttttt	ttgtttttt	gtt...71...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatgggattatc-atttattctctgaaatttgcggaatcaaacattt	aattcctt
B. Tau	attttttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGG	atattaggataatggaattatctgtttattctctgaaattcgcggaatcaaacacct	aattcctt	
E. Cab	gtctattt	tgatgactgttc...38...catcgtaaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggaattatctgtttattctctgaaatttgcgggatcaaacattt	agttcctt	
S. Sus	gtctgttt	tgatgactgttc...38...tatcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatgggattatctatttactctctgaaatttgcggaatcaaacattt	tggtcctt	
O. Avi	attttttt	tgatgactgttc...38...catcataaattaaaatttga	TTTTCTTCACT	AGAGA	atattaggataatggaattatctgtttattctctgaaatttgcggaatcaaacacct	agttcctt	
L. Afr	gtttattt	tgatgactgttc...38...catcatagatcaaatgtga	TTTTCTTCACT	AGAGA	atattaggataatgggattatctgtctattctctgaaatttgtggaatcaaca---	-gtcctt	
			*	*	*	*** ** ** ** **	

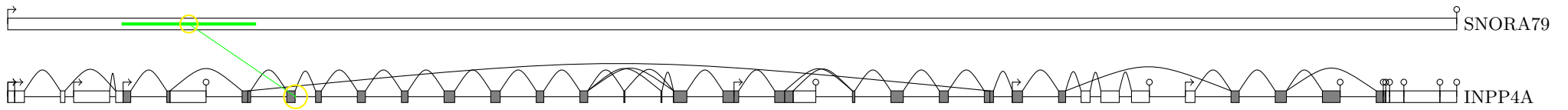
id=7728 gene=ENSG00000221303 name=SNORA79 segment=chr14.81669039.81669178.-1 type=EN

H. Sap	gtggtgag	gtaagtatatga----	...723...-----	atgttttcttctcttctgttg	TCTCTAG	TGAcAAGa
R. Mac	gtggtgag	gtaagtatatga----	...630...-----	atgttttcttctcttcttgg	TCTCTAG	TGAcAAGa
P. Tro	gtggtgag	gtaagtatatga----	...725...-----	atgttttcttctcttctgttg	TCTCTAG	TGAcAAGa
P. Abe	gtggtgag	gtaagtatatga----	...728...-----	atgttttcttctcttctgttg	TCTCTAG	TGAcAAGa
C. Jac	gtggtgag	gtaagtgtgaag----	...957...-----	gtaatgaaatgttttcttct	TITGtTGGTCTCTAG	TGAcAAGa
C. Por	gtggtgag	gtaagtgtgaga----	...1391...-----	tgcaatgctttcttcttgg	TCTCTAG	TGAcAAGa
O. Cun	gtggtgag	gtaagaatgaga----	...1137...-----	taagaataacttttcttctt	TGGTCTCTAG	TGAcAAGa
F. Cat	gtggtgag	gtaagtatgaga----	...1148...-----	gaaatgctttcttcttgg	TCTCTAG	TGAcAAGa
B. Tau	gtggtgag	gtgagtatgaga----	...571...-----	gagatgctttcttcttgg	TCTCTAG	TGAcAAGa
E. Cab	gtggtgag	gtaagtatgaga----	...658...-----	gaaatgctttcttcttgg	TCTCTAG	TGAcAAGa
S. Sus	gtggtgag	gta----tgagaat	...705...-----	tgaaatgctttcttcttgg	CTCTGtAG	TGAcAAGa
O. Avi	gtggtgag	gtgagtatgaga----	...563...-----	gagatgctttcttcttgg	TCTCTAG	TGAcAAGa
L. Afr	gtggtgag	gtaagcatgaga----	...698...-----	gatatgttttcttcttgg	TCTCTAG	TGAcAAGa
	*****	**	*	** ** *	** ** *	*****

id=62998 gene=ENSG00000092201 name=SUPT16H segment=chr14.21836601.21837362.-1 type=IN VIEW

Figure 520: CS=14.95





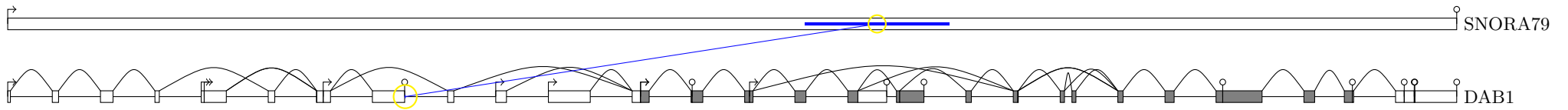
H. Sap	-----ttcttttt	tga	TGACTGTtc	TTCCT	gttgccttcagacc-tggcat...91...---	aatcaaacatgt	aattcctt			
R. Mac	-----ttattttt	tga	TGACTGTtc	TTCCT	gttgccttcagacc-tggcat...95...---	aatcaaacattt	aattcctt			
P. Tro	-----ttcttttt	tga	TGACTGTtc	TTCCT	gttgccttcagacc-tggcat...91...---	aatcaaacatgt	aattcctt			
P. Abe	-----ttcttttt	tga	TGACTGTtc	TTCCT	gttgccttcagacc-tggcat...95...---	aatcaaacattt	aatttctt			
C. Jac	-----gtattttt	tga	TGACTGTT	TCCTCCT	gttgccttcagacc-tggcat...95...---	aatcaaacattt	cattccgt			
R. Nor	-----ttcatctt	tga	TGACTGTT	TCCTCCT	attgcctataggca-tggcac...94...---	gtcaacaactt	acttcgc			
C. Por	-----tacaatctt	tga	TGACTGTT	TCCTCCT	attgccttgagtc-tggcac...91...g	cggtatcagaca---	attcctt			
O. Cun	-----atcttttt	tga	TGACTGTT	TCCTCCT	aatgccttcaagcc-tggcat...95...---	aatcaaacattt	aatgcctt			
C. Fam	-----atctgttt	tga	TGACTGTT	TCCTCCT	attgccttcaggccttggca...96...---	aatcaaacatct	aattcctt			
F. Cat	atctttttttgtttttgtttttattcctttta	atctgttt	tga	TGACTGTT	TCCTCCT	attgccttcaggtc-tggcac...94...---	aatcaaacactt	aattcctt		
B. Tau	-----atthtttt	tga	TGACTGTT	TCCTCCT	attgccttcagatc-tggcac...95...---	aatcaaacactt	aattcctt			
E. Cab	-----gtctattt	tga	TGACTGTT	TCCTCCT	attgccttcaggcc-tggcac...95...---	gatcaaacattt	agttcctt			
O. Avi	-----atthtttt	tga	TGACTGTT	TCCTCCT	attgccttcaggtc-tggcac...95...---	aatcaaacactt	agttcctt			
L. Afr	-----gtttattt	tga	TGACTGTT	TCCTCCT	attgccttcagacc-tggcac...91...gt	ggaatcaaca---	gctcctt			
		*	*****	***	***	*	*****	***	***	*

id=7728 gene=ENSG00000221303 name=SNORA79 segment=chr14.81669039.81669178.-1 type=EN

H. Sap	aGGGAACA	GTTA	agtaatgtgttg-tagttcgt--...247...tctcttcctcag	atgtattt
R. Mac	aGGGAACA	GTTA	agtaatgtgttg-tagttcgt--...247...tctcttcctcag	atgtattt
P. Tro	aGGGAACA	GTTA	agtaatgtgttg-tagttcgt--...247...tctcttcctcag	atgtattt
P. Abe	aGGGAACA	GTTA	agtaatgtgttg-tagttcgt--...247...tctcttccttag	atgtattt
C. Jac	aGGGAACA	GTTA	agtaa--tgtaa-tagttcgtgg...249...tttcttcctcag	atgtattt
R. Nor	aGGGAACA	GTTA	agtgatgtgcat-tgcctac--...223...gtctccccag	atgtactt
C. Por	aGGGAACA	GTTA	agtaacaggata-tggttctt--...210...ccttcgctcag	atgtattt
O. Cun	aGGGAACA	GTTA	agtaacacgctg-cagttggt--...256...tttcttcctcag	atgtattt
C. Fam	aGGGAACA	GTTA	agtaacacgctg-tggttcat--...249...acttttcctcag	atgtattt
F. Cat	aGGGAACA	GTTA	agtaacacattg-tggttcat--...253...ccttcctcag	atgtattt
B. Tau	aGGGAACA	GTTA	agtaccatggtt-tgtttcgt--...252...cctctcccag	atgtactt
E. Cab	aGGGAACA	GTTA	agtaacgtggtt-tgtgggat--...246...ctccttcctcag	atgtattt
O. Avi	aGGGAACA	GTTA	agtaccatggtt-tggttctt--...248...cctctcccag	atgtactt
L. Afr	aGGGAACA	GTTA	agtagcatgttattagttca--...250...gtctctccag	atgtattt
	*****	*****		* **

id=6793 gene=ENSG0000040933 name=INPP4A segment=chr2.99152309.99152591.1 type=IN

Figure 521: CS=14



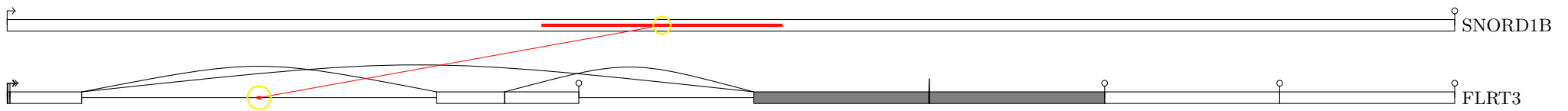
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R.Mac	ttattttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
P.Tro	ttcttttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
P.Abe	ttcttttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
C.Jac	gtattttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
C.Por	tacatcct	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
O.Cun	atcctttc	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgtctgttctctgaaatttgcggaatcaaacatgt	aattcctt
C.Fam	atcctgtt	tgatgactgttc...37..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
F.Cat	atcctttt	ttgtttttgtt...69..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
B.Tau	atcttttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
E.Cab	gtctat	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
S.Sus	gtctgttt	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
L.Afr	gtttat	tgatgactgttc...36..gtcatcataaattaaaattt	GATTTCCTTC	TCAG	agaatattaggataatggagttatcctgttctctgaaatttgcggaatcaaacatgt	aattcctt
	*	* * * *	*****	*****	*****	*****

id=7728 gene=ENSG00000221303 name=SNORA79 segment=chr14.81669039.81669178.-1 type=EN

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R.Mac	tcctgcaa	gattcaggtcag...346..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
P.Tro	tcctgcag	gattcaggtcag...346..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
P.Abe	tcctgcaa	gattcaggtcag...346..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
C.Jac	gcctgcaa	gattcaggtcag...341..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
C.Por	tcctgaag	gattcaggtcag...309..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
O.Cun	ttctgcaa	gattcaggtcag...314..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
C.Fam	cccttcaa	gtctcagttcct...255..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
F.Cat	cccttcaa	tactgaagtcct...232..tatgaataaaagtagatgga	CTGAGAA	GcAAGTTt
B.Tau	cccttcaa	ctttcaggttag...257..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
E.Cab	cccttcaa	ggttcagatcag...252..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
S.Sus	cctctcaa	cattcaaatgag...256..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
L.Afr	tccttcaa	gagtcaggtcag...560..tgtgaataaaagtagatgga	CTGAGAA	GcAAGTTt
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id=494104 gene=ENSG00000173406 name=DAB1 segment=chr1.58291743.58292127.-1 type=AN

Figure 522: CS=10.14



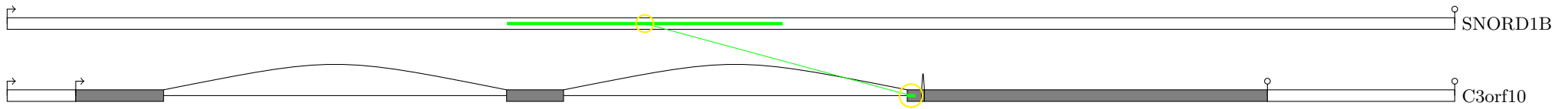
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R. Mac	gaggggag	ctgagtc	catgatgatgtcaagt	TATCCCTGT	TGAAGG	-cAAAG	-aaaggc	ctttcagtgaggacttgaatatctgaaactcag	tttcccaa		
P. Tro	ggtgggag	ctgagtc	catgatgatttcaagt	TATCCCTGT	TGAAGG	-cAAAG	-aaaggc	ctttctgtgtggaattgaatatctgaaactcag	tttcccaa		
P. Abe	ggcgggag	ctgagtc	cctgatgatgtcaagt	TATCCCTGT	TGAAGG	-cAAAG	-aaaggc	ctttctgtgtggaattgaatatctgaaactcag	tttcccaa		
C. Por	agtgggaa	ctgagtc	ctgtgatgat-taaagt	TATCCCTGT	TGAAGG	-----	-aaaggc	ctttctgtgtggaattgtggaactctgaaactcag	cttcccat		
O. Cun	gtgggggg	ccgagtc	cctgatgatggaaagt	TATCCCTGT	TGAAGG	-----	-cgcagc	gagcctggc--tgtggagcgtggaggtctgagactcgg	cccccctgt		
C. Fam	ggtgggag	ctgagtc	catgatgatgtaaagt	TATCCCTGT	TGAAGG	CAAAGG	-----	-ccttcc--tgtggattatggatgtctgaaactcag	tttcccaa		
F. Cat	ggtgggag	ctgagtc	cctgatgatgtaaagt	TATCCCTGT	TGAAGG	-CAAAG	-aaaggc	ctttctgtgtggaattgtggaactctgaaactcag	tttcccaa		
B. Tau	gtggggag	ctgagtc	catgatgatgtgaagt	TATCCCTGT	TGAAGG	ccGAAA	-aaaggc	ctttgagtggaactctggaatctgagactcag	tttccctag		
E. Cab	ggtgggag	ctgagtc	catgatgatgtcgaagt	TATCCCTGT	TGAAGG	-cAAAG	-aaaggc	ctttctgtgtggaattgtggaactctgagactcag	tttcccaa		
S. Sus	tgggggag	ctgagtc	ctgtgatgat-tgaagt	TATCCCTGT	TGAAGG	cgctcaga	aaaggc	ctttc--tgtggagcgtggatgtctgagactcgg	tttcccaa		
O. Avi	gtggggag	ctgagtc	catgatgatgtgaagt	TATCCCTGT	TGAAGG	ccAAAAT	-aaggc	ctttgagtggaactctggaatctgagactcag	tttcccaa		
L. Afr	ggtgggag	ctgagtc	ctgatgatgatacgaagt	TATCCCTGT	TGAAGG	ccAGAGGTGTTG	-----	-tgtgtggagccttggccttctgaaactcag	ttgcacac		
	***	*	****	*****	*****	*****	*****	*	****	***	*

id=289766 gene=ENSG00000199961 name=SNORD1B segment=chr17\_74557191\_74557274.1 type=EN

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R. Mac	tcttcctg	gtaagtgttttc...4942...	-----tattaatagttcattaaaac	CTTTta	CTTTCACAG	GaGATGct	
P. Tro	tcttcctg	gtaagtgttttc...4942...	-----tattaatagttcattaaaac	CTTTta	CTTTCACAG	GaGATGct	
P. Abe	tcttcctg	gtaagtgttttc...4942...	-----tattaatagttcattaaaac	CTTTta	CTTTCACAG	GaGATGct	
C. Por	tcttactg	gtaagtgttttc...4948...	-----taatagctcattaaaac	--tta	CTTTCACAG	GcGATGct	
O. Cun	tcttcctg	gtaagtgttttc...4948...	-----tagctcattaaaac	ctttta	CTTTCACAG	GaGATGct	
C. Fam	tcttcctg	gtaagtgtttcc...4941...	-----ttattaatagttcattaaaac	CCTTTt	GCTTTCACAG	GaGATGct	
F. Cat	tcttcctg	gtaagtgtttcc...4942...	-----tattaatagtttattaaaac	CTTTt	GCTTTCACAG	GaGATGct	
B. Tau	tcttcctg	gtaagtgtttcc...4943...	-----gttaatagctgattaaaaca	TTTTta	CTTTCACAG	GaGATGct	
E. Cab	tcacactg	gtaagtgttttc...4943...	-----attaatagttcattaaaaca	TTTTCTTT	cACAG	GaGATGct	
S. Sus	tcttcctg	gtaagtgtttcc...4948...	-----tagttcattaaaac	ctttta	CTTTCACAG	GaGATGct	
O. Avi	tcttcctg	gtaagtgtttcc...4942...	-----tgttaatagctgattaaaac	ATTTTta	CTTTCACAG	GaGATGct	
L. Afr	tcttcctg	gtaagtgttttc...4936...	gtttattattaatagttcat	TAAAa	ACTTTTGCTTT	cACAG	GaGATGct
	** * **	*****	*** * *****	** ****	****	* *****	

id=270100 gene=ENSG00000125848 name=FLRT3 segment=chr20\_14309974\_14318049.-1 type=IN

Figure 523: CS=11.7



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H.Sap  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
P.Tro  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
P.Abe  ggcgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
C.Por  agtgggaa  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
O.Cun  gtgggggg  ccgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcgcagcga--g c c t g g c --t g t g g a g c g t g g a g g t c t g a g a c t c g g   c c c c c t g t
C.Fam  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
F.Cat  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
B.Tau  gtggggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
E.Cab  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
S.Sus  tgggggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcgcctcagaaaggcctttc--t g t g g a g c t g g g a t g t c t g a g a c t c g g   t t t c c c a a
O.Avi  gtggggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
L.Afr  ggtgggag  ctgagtcctatgatgatttcaaGTTATcCCTGTctGAAGGcAAAGaAAGGC--c t t t c t g t g t g g a a t t t g a a t a t c t g a a a c t c a g   t t t c c c a a
*** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** *

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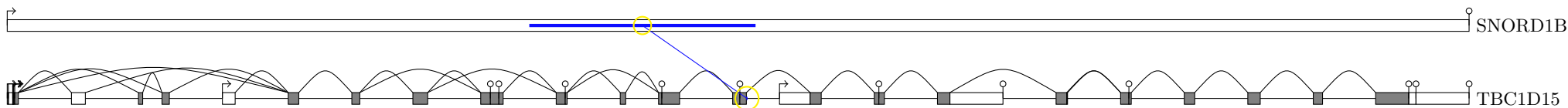
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H.Sap  aagctcgg  gtgagtttgatg...508...t t t a a t t t a t c t a a a t g t - c a G T T T T c C T T T C T T T c A C A G   G T G A C a a a
P.Tro  aagctcgg  gtgagtttgatg...508...t t t a a t t t a t c t a a a t g t - c a G T T T T c C T T T C T T T c A C A G   G T G A C a a a
P.Abe  aagcacgg  gtgagtttgatg...508...t t t a a t t t a t c t a a a t g t - c a G T T T T c C T T T C T T T c A C A G   G T G A C a a a
C.Por  aagctcgg  gtaagcccctgc...114...----a t t t g t c t g a a t g t - g a c t g t ----T C T T T G A C A G   G T G A C g a a
O.Cun  aagcccgg  gtgagtgggggc...183...----t t t c t c t g a a t g t - c a g t t t t ----C C T T T G A C A G   G T G A C a a a
C.Fam  aagcacgg  gtgagtatgtcg...200...----a t t t a t c t a a t t g t - c a a t t t ----C C T T T G A C A G   G T G A C a a a
F.Cat  aagcacgg  gtgagtatgtca...218...----a t t t a t c t a a t t g t - c a a t t t ----C C T T T G A C A G   G T G A C a a a
B.Tau  aagccagg  gtgagtatgcc...224...-t g a g t t t a t c t a a t t g t - c a g ----T T T T C T T T G A C A G   G T G A C a a a
E.Cab  aagcccgg  gtgagtatgatg...468...-t g a a t t t a t c t a a t t g t - c a a ----T T T T C T T T G A C A G   G T G A C a a a
S.Sus  aagcaagg  gtgagtatgatg...224...----t t t g t c t a a t t g t - c a g t t t t ----C C T T T G A C A G   G T G A C a a a
O.Avi  aagccagg  gtgagtatgcc...224...t t g a a t t t g t c t a a t t g t - c a ----G T T T T C T T T G A C A G   G T G A C a a a
L.Afr  aagcccgg  gtgagtatggtg...410...-t g a a t t t a t c t a a a t g t c c a ----T T T T c C T T T G A C A G   G T G A C a a a
**** ** ** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** * **** *

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id=13845 gene=ENSG00000254999 name=C3orf10 segment=chr3\_10167393\_10167952.1 type=IN

Figure 524: CS=20.76



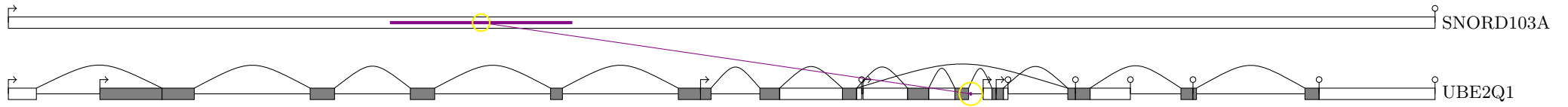
H. Sap	ggtgggag	ctgagtc	catgatgatttc	AAGTTATCCCTg	FCTGA	aggca--aagaaaggc	tttctgtgtggaattt	gaatatctgaaactcag	tttcccaa	
R. Mac	gaggggag	ctgagtc	catgatgatgtc	AAGTTATCCCTg	TCTGA	aggca--aagaaaggc	tttcagtgtggacttt	gaatatctgaaactcag	tttcccaa	
P. Tro	ggtgggag	ctgagtc	catgatgatttc	AAGTTATCCCTg	FCTGA	aggca--aagaaaggc	tttctgtgtggaattt	gaatatctgaaactcag	tttcccaa	
P. Abe	ggcgggag	ctgagtc	cctgatgatgtc	AAGTTATCCCTg	TCTGA	aggca--aagaaaggc	tttctgtgtggaattt	gaatatctgaaactcag	tttcccaa	
C. Por	agtgggaa	ctgagtc	ctgtgatga	TTAAaGTTATCCCTg	FCTGA	aggc-----	aaaggc	tttctgtgtggaattt	gaatatctgaaactcag	
O. Cun	gtgggggg	ccgagtc	cctgatgatggaa	AAGTTATCCCTg	TCTGA	aggcgcagcga--	gcctggc--	tgtggagcgtggaggt	ctgagactcgg	
C. Fam	ggtgggag	ctgagtc	catgatgatgtaaag	TTATCCCTg	TCTGA	aggc-----	aaaggc	tttctgtgtggaattt	gaatatctgaaactcag	
F. Cat	ggtgggag	ctgagtc	cctgatgatgtaaag	TTATCCCTg	FCTGA	aggca--aagaaaggc	tttctgtgtggaattt	gaatatctgaaactcag	tttcccaa	
B. Tau	gtggggag	ctgagtc	catgatgatGTGAag	TTATCCCTg	TCTGA	aggc-cgaaaaaaggc	tttgagtgtggaattt	gaatatctgagactcag	tttcccaa	
E. Cab	ggtgggag	ctgagtc	catgatgatgtcag	TTATCCCTg	FCTGA	aggca--aagaaaggc	tttctgtgtggaattt	gaatatctgagactcag	tttcccaa	
S. Sus	tgggggag	ctgagtc	ctgtgatattga	AGTTATCCCTg	TCTGA	aggcgcctcagaaggc	tttctgtgtggaattt	gaatatctgagactcag	tttcccaa	
O. Avi	gtggggag	ctgagtc	catgatgatGTGAag	TTATCCCTg	FCTGA	aggc-caaataaggc	tttgagtgtggaattt	gaatatctgagactcag	tttcccaa	
L. Afr	ggtgggag	ctgagtc	ctgatgatgatac	AAGTTATCCCTg	TCTGA	agac-----	agaggtgtttgtgtg	ggagcttggc	tttctgaaactcag	
	***		* ****	*****	*****	*	*	*****	* ****	*

id=289766 gene=ENSG00000199961 name=SNORD1B segment=chr17\_74557191\_74557274.1 type=EN

H. Sap	tTAGAGGG	GTAATTT	aaacactctaata---	tggcttg-----	..273...	ccagtggcattt	gccttatt
R. Mac	tTAGAGGG	GTAATTT	aaacactctaata---	tggcttg-----	..285...	ccagtggcattt	gccttatt
P. Tro	tTAGAGGG	GTAATTT	aaacactctaata---	tggcttg-----	..277...	ccagtggcattt	gccttatt
P. Abe	tTAGAGGG	GTAATTT	aaacactctaata---	tggcttg-----	..274...	ccagtggcattt	gccttatt
C. Por	tTAGAGGG	GTAACCTAA	ataacttcacca---	ttgattgtc---	..219...	tcagtgcattt	gctagatc
O. Cun	tTAGAGGG	GTAATT	caaaactctaata---	tggatt-----	..191...	aaggagacattt	gccttatt
C. Fam	tTAGAGGG	GTAA	----ataccttaata---	tggatgata---	..244...	ccactgtagtc	gccttatt
F. Cat	tTAGAGGG	GTAA	----ataccttaata---	gggatgata---	..226...	ccagtgtagtt	tccttatt
B. Tau	tTAGAGGG	GTAATTAC	----ttagtattttaaattgtt	g---	..208...	tctgtgtagct	gccttttc
E. Cab	tTAGAGGG	GTAA	----atacgttaata---	tggactgta---	..222...	ccagtgtcatt	gtcttagc
S. Sus	tTAGAGGG	GTAATT	----actttagtattttaaactgt	g---	..227...	ctagttagtatt	gccttatt
O. Avi	tTAGAGGG	GTAATTAC	----ttagtattttaaattgtt	g---	..204...	tctgtgtagct	gccttttc
L. Afr	tTAGAGGG	GTAATTT	---aaa---	tgata---	..191...	gcagtggagatt	gtcttatt
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id=32643 gene=ENSG00000121749 name=TBC1D15 segment=chr12\_72289856\_72290167.1 type=IN

Figure 525: CS=17.94



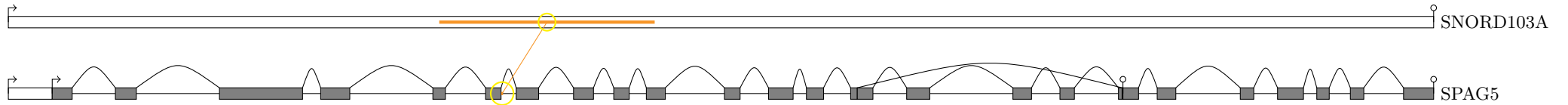
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R. Mac	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caagacac
P. Tro	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caagacac
M. Mus	tgctattg	tctggcggatgatgac	<b>CCACTTGCCCTC</b>	actgaggacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggatgatgac	<b>CCACTTGCCCTC</b>	actgaggacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgac	<b>CCACTTGCCCTC</b>	actgaggacagagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caagatgg
O. Cun	ggccattg	tctggcaatgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggacgc
F. Cat	ggcctcgg	tctggcagtgatgac	<b>AGCCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggacgc
B. Tau	gaccgtgg	tctggcaatgatgac	<b>TGAGCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggacgc
E. Cab	ggctgtgg	tctggcaatgatgac	<b>GAGCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caggacgc
S. Sus	ggcggatg	tctggcaatgatgac	<b>GCCACTTGCCCTC</b>	actgagaacagagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caaggcac
L. Afr	ggccattg	tctggcagtgatgac	<b>CCACTTGCCCTC</b>	actgagaacaaagt	tccgtaatgagaat	ccttgtaatggact	caagttctgagccaga	caaggcac
	*	*	*****	*****	*****	*****	*****	* *

id=555354 gene=ENSG00000200154 name=SNORD103A segment=chr1.31408535.31408620.-1 type=EN

H. Sap	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	attttgtc
R. Mac	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	cttttgtc
P. Tro	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	attttgtc
P. Abe	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcggaagagggg	catctcctctggc	cagagggcggggaagag	acttggag	cttttgtc
C. Jac	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggc--	atgcagacgagggg	catctcctctggc	ctgagggggaaggg	acttggag	cttgtgtc
M. Mus	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctggcag-	agggcaatagggc	g--ttctggtg	cagcaggtgtggaagg	gat-tggac	ctctggcc
R. Nor	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctgggcaa-	agggcaata-gcca-	ttgtggtg	cagcaggtg	cgggaaggggc-tgggc	ccgtggcc
C. Por	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ctgggcca-	ggggcaacagggg	tagttcttg	gagcagagggg	gaagaagaaactcaggg	ctcctacc
O. Cun	tccg	<b>GAGG</b>	<b>GTGAGTGG</b>	tggctgggcga-	gggggagcgggc	ggcggggcggag-	-----	agggccttggag	ctttttaa
F. Cat	tccg	<b>GAGG</b>	<b>GTGAGTGGCT</b>	gctcggcaggg-	-----	-----	gcggggggtggggaagg	ggtcggag	ctcttgac
B. Tau	tct	<b>GGAGG</b>	<b>GTGAGTGGCTCA</b>	---gcaa-g	-----	-----	ggtagagggg	gaagaagggtgggag	cttctgcc
E. Cab	tccg	<b>GAGG</b>	<b>GTGAGTGGCTC</b>	-----	caaaagggcagaggg	cggtcctgt	gcagagggg	gaaggcaggggtgtggag	cttttggc
S. Sus	tc	<b>CGGAGG</b>	<b>GTGAGTGGC</b>	---ccagccagg-	-----	-----	gcagagggg	gaggaagg-gcggggac	ctctcgcc
L. Afr	tctg	<b>GAGG</b>	<b>GTGAGTGG</b>	---ttgggaaagggg	gagagagggcag	cttctgttgc	cagagggg	gaggaaggacttggag	cttttgtc
	**	*****	*****			*	*	**	*

id=175951 gene=ENSG00000160714 name=UBE2Q1 segment=chr1.154524334.154524396.-1 type=IN VIEW

Figure 526: CS=12.6



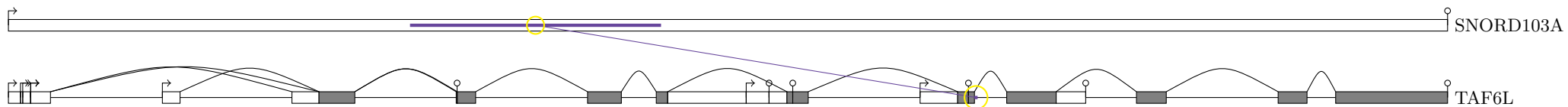
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R. Mac	ggccattg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttgtaatggactcaagttctgagccaga	caagacac
P. Tro	ggccattg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttgtaatggactcaagttctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttgtaatggactcaagttctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttggt-atggactcaagttctgagccaga	caagacac
M. Mus	tgctattg	tctggcggtgatgaccca	CTTGcCCTCa	CTGA	ggacaaagttcgataatgagaatc	tttggt-atggactc--gttctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggtgatgaccca	CTTGcCCTCa	CTGA	ggacaaagttcggttggtgagAACctttgat	-atggactc--gttctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgaccca	CTTGcCCTCa	CTGA	ggacagagttcgataatgagaac	ctttgt--atggactcaagttctgagccaga	caagatgg
O. Cun	ggccattg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttggt-atggactcaagttctgagccaga	caggacgc
F. Cat	ggcctcgg	tctggcagtgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttggt-aaggactcaagttctgagccagg	cgaggcgc
B. Tau	gaccgtgg	tctggcagtgatgaccca	CTTGcCCTCa	CTGA	gaacagagttcggtaatgagact	ctttact-ctggactcaagttctgagccaga	cgaggcac
E. Cab	ggctgtgg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttggt-atggactcaagttctgagccaga	cgaggcac
S. Sus	ggcgggtg	tctggcaatgatgaccca	CTTGcCCTCa	CTGA	gaacagagttcggtaatgagaatc	tttggt-ctggactcaagttctgagccaga	caaggcac
O. Avi	tgtaaatg	tctggcagtgatgaccca	CTTGcCCTCa	CTGA	gaacagagttcggtaatgagaatc	tttact-ctggactcaagttctgagccaga	cgaggcac
L. Afr	ggccattg	tctggcagtgatgaccca	CTTGcCCTCa	CTGA	gaacaaagttcggtaatgagaatc	tttagtt-atggactcaggttctgagccaga	caaggcac
			*	*****	*****	*****	* *

id=555354 gene=ENSG00000200154 name=SNORD103A segment=chr1\_31408535\_31408620\_-1 type=EN

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R. Mac	gTCAGGAG	GTAAGcagcatgaagatggaggtag--...54...cttattgtatag	tctcggca
P. Tro	gTCAGGAG	GTAAGcagcctgaagatggaggtg--...54...cttatcatatag	tctcagcg
P. Abe	gTCAGGAG	GTAAGcagcatgaagatggaggtg--...54...cttatcatatag	tctcggcg
C. Jac	gTCAGGAG	GTAAGcagcatgaagatagaggtag--...54...cttatcgtgtag	tctcagcg
M. Mus	gTCAGGAG	GTAAGcatcatgaagtgtgactgtg--...35...cttctctgtag	tctcagcg
R. Nor	gTCAGGAG	GTAAGcatcgaagatgtgattggg--...32...cttctctgtag	tctcagcg
C. Por	gTCAGGAG	GTAAGcag-atg-aggtggagcagag...54...cttatcttatag	tcttggtct
O. Cun	gTCAGGAG	GTAAGcagcatggagtagaggcgt--...47...cttactttgtag	tctcgaca
F. Cat	gTCAGGAG	GTAAGcagcatggatgtgaacgcag--...54...cttgtctgtag	tctcggcg
B. Tau	gTCAGGAG	GTAAGcagcatgaagatggagcag--...58...cttatcttatag	actcggcg
E. Cab	gTCAGGAG	GTAAGcagtataaaggtgaaggcag--...51...cttgtctgtag	tctcggcg
S. Sus	gTCAGGAG	GTAAGcagcagaaagataaaagcag--...57...cttatctgtag	tctcggcg
O. Avi	gTCAGGAG	GTAAGcagcataaagatggagcag--...58...cttatcttacag	actcggcg
L. Afr	gTCAGGAG	GTAAGcagtgatgaagatggaggtag--...58...gttatctgtag	tctcagcg
	*****	*****	* ** * ** * *

id=268659 gene=ENSG00000076382 name=SPAG5 segment=chr17\_26913017\_26913107\_-1 type=IN

Figure 527: CS=13.5



H. Sap	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caagacac
P. Tro	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caagacac
P. Abe	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caagacac
C. Jac	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caagacac
M. Mus	tgctattg	tctggcggatgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacaaagt	tcgataatgagaat	ccttg	ttaatggactc	---	gttctgagccaga	caggatcc
R. Nor	aactgttg	tctggcggatgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	gttctgagccaga	caggatcc
C. Por	caccattg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	ggacagagt	tcgataatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caagatgg
D. Cun	ggccattg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	caggacgc
C. Fam	ggccaccg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	gttctgagccaga	caaggtac
F. Cat	ggcctcgg	tctggcagtgatgacc	<b>CACTTGCCCTCGCTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccagg	cgaggcgc
B. Tau	gaccgtgg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacagagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	cgaggcac
E. Cab	ggctgtgg	tctggcaatgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aagttctgagccaga	cgaggcac
L. Afr	ggccattg	tctggcagtgatgacc	<b>CACTTGCCCTCACTGA</b>	gaacaaagt	tcgtaatgagaat	ccttg	ttaatggactc	---	aggttctgagccaga	caaggcac
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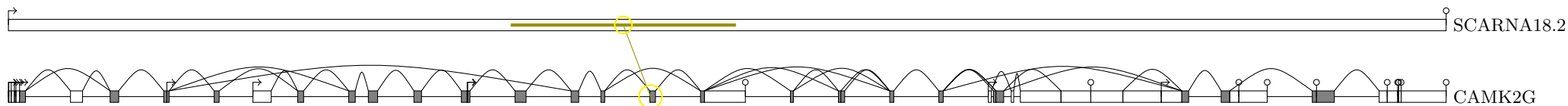
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H. Sap	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...105...-ttctccaacag	gtgaaatc
P. Tro	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...105...-ttctccaacag	gtgaaatc
P. Abe	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacagggaga...109...-ctctccaacag	gtgaaaat
C. Jac	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgagacagggaga...89...-ttctccaacag	gtgaaatc
M. Mus	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	atcagttctctagcagatctc...78...-tcctaccaacag	gtaaaatc
R. Nor	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	atcaattctctagcgaacat...81...ctcctacc-acag	gtaaaatc
C. Por	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	agtagcctttgggaacaacag...61...-ttttgccacag	gtgaaatc
D. Cun	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	agcagggtccaggaggagc...96...-ttctaccaacag	gtgaaatc
C. Fam	t <b>CAGTGGG</b>	<b>GTGAGTG</b>	accaggctggggcagaggag...106...-ttctaccaacag	gtaaaatc
F. Cat	t <b>CAGTGGG</b>	<b>GTGAGTG</b>	acgcggctgcggcagggtgg...106...-ttctaccaacag	gtgaaatc
B. Tau	t <b>CAGCGGG</b>	<b>GTAAGTG</b>	accaggctcggcaggggcg...101...-ttctccaacag	gtgaaatc
E. Cab	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctggggcagggaag...107...-ttctccaacag	gtgaaatc
L. Afr	t <b>CAGTGGG</b>	<b>GTAAGTG</b>	accaggctgggacaggggag...102...-ttttaccaacag	gtgaaatc
	***	***	**	****

id=764081 gene=ENSG00000162227 name=TAF6L segment=chr11\_62549441\_62549584\_1 type=IN

Figure 528: CS=11.7





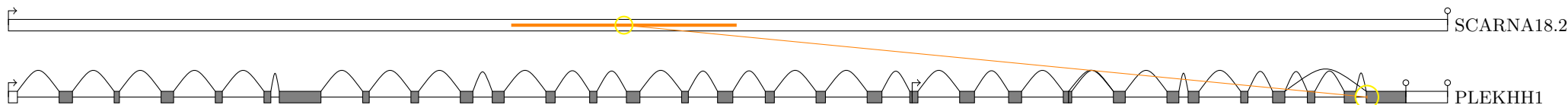
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R. Mac	gtgagccc	tggccgatgatgacgagacca	CTGCgCAATcTGAG	ttatgggaacca-cgtgatggagtgttctgagaacagactgagg---ccg	ggcgagca
P. Tro	gtgagtcc	tggccgatgatgacgagacca	CTGCgCAATcTGAG	ttctgggaacca-ggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
P. Abe	gtgagtcc	tggccgatgatgacgagacca	CTGCgCAATcTGAG	ttctgggaacca-ggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
C. Jac	gtgagctc	tggccgatgatgacgagacca	CTGCgCAATcTGAG	ttctgggaacca-ggtgatggagtgttctgaaaacagactgagg---ccg	ggcgagca
C. Por	gtgagccc	tggccaatgatgactagacca	CTGCgCAATcTGAG	ttctgggaacca-ggtgatggagtgtgtgtaacagcagactgagg---cc-	ggcaagcc
O. Cun	gtgagccc	tggccaatgatgaccagacca	CTGCgCAATcTGAG	tctctgggaccca-ggtgatggagtgttctgagaacagactgagg---ccg	ggcgagtg
C. Fam	gcgagccc	gggtcgatgatgacgtgacca	CTGCgCAATcTGAG	ttctaggaaccaggtgatggagtggatgctgagagcggactgagacctccg	ggcgagcg
F. Cat	gtgagacc	tggccaatgatgacgtgacca	CTGCgCAATcTGAG	ttctaggaacct-ggtgatggagtgttctgagaacagactgagg---ccg	ggcaaaaa
B. Tau	gcaagccc	tggtcgatgatgacgtgacca	CTGCgCAATcTGAG	ttctgggaacta-ggtgatggagcgtgttctgagaacggactgaga---ccg	ggcgagca
E. Cab	gtgagccc	tggtcgatgatgacgtgacca	CTGCgCAATcTGAG	ttctgggaacca---tgatggagggtgt-----actgaga---ccg	ggcgagca
S. Sus	gtgagccc	tggtcgatgatgacgtgacca	CTGCgCAATcTGAG	atctgggaacca-ggtgatggagtgtgtgctgagaacgatctgaga---cca	gggtagca
L. Afr	gtgagccc	tggtcggtgatgacgtgacca	CTGCgCAATcTGAG	ttctgggaacca-gatgatggagcctgtgctgagcagcggactgaga---cag	ggcgagca
	* ** *	** * *****	*****	* ** * *****	***** * ** *

id=79259 gene=ENSG00000252139 name=SCARNA18.2 segment=chr18\_47340731\_47340813.1 type=EN

H. Sap	cttctcag	gtatgttttccc...2530...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
R. Mac	cttctcag	gtatgttttccc...2536...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
P. Tro	cttctcag	gtatgttttccc...2528...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
P. Abe	cttctcag	gtatgttttccc...2531...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
C. Jac	cttctcag	gtatgttttccc...2493...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
C. Por	cttttcag	gtatgttttccc...2319...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
O. Cun	cttctcag	gtatgttttccc...2843...	gcactgagagattgtatccc	CTCAG	TTGGCAGg
C. Fam	cttttcag	gtatgttttccc...2521...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
F. Cat	cttctcag	gtatgttttccc...2496...	gcactgagagattgtatccc	CTCAG	TTGGCAGg
B. Tau	cttttcag	gtatgttttccc...2468...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
E. Cab	cttttcag	gtatgttttccc...2540...	gcactgagagattgtatccc	CTCAG	TTGGCAGg
S. Sus	cttttcag	gtatgttttccc...2421...	gcactgagagactgtatccc	CTCAG	TTGGCAGg
L. Afr	tttttcag	gtatgttttccc...2762...	gcactgagagattgtatccc	CTCAG	TTGGCAGg
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id=168667 gene=ENSG00000148660 name=CAMK2G segment=chr10\_75599360\_75601926.-1 type=IN

Figure 529: CS=10.14



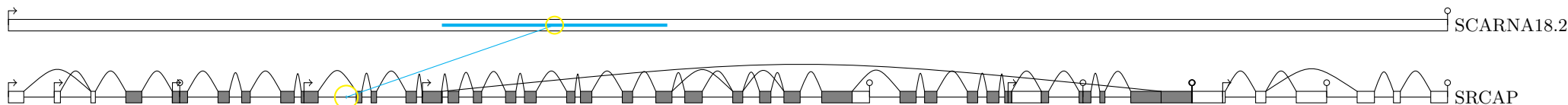
H. Sap	gtgagtcc	tggccgatgatgacgagacca	CTGCgc	AACTCTGAG	ttctgggaacca-ggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
R. Mac	gtgagccc	tggccgatgatgacgagacca	CTGCgc	AACTCTGAG	ttatgggaacca-cgtgatggagtgtgttctgagaacagactgagg---ccg	ggcagca
P. Tro	gtgagtcc	tggccgatgatgacgagacca	CTGCgc	AACTCTGAG	ttctgggaacca-ggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
P. Abe	gtgagtcc	tggccgatgatgacgagacca	CTGCgc	AACTCTGAG	ttctgggaacca-ggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
C. Por	gtgagccc	tggccaatgatgactagacca	CTGCgc	AACTCTGAG	ttctgggaacca-ggtgatggagtgtgtctgaaacagcagactgagg---cc-	ggcaagcc
O. Cun	gtgagccc	tggccaatgatgaccagacca	CTGCgc	AACTCTGAG	ttctgggaccca-ggtgatggagtgtgttctgagaacagactgagg---ccg	ggcagtg
C. Fam	gcgagccc	gggtcgatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctaggaacccaggtgatggagtggatgctgagagcggactgagacctccg	ggcagcg
F. Cat	gtgagacc	tggtcaatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctaggaacct-ggtgatggaatg--tgctcagagcggactgaga---ccg	ggcaaaa
B. Tau	gcaagccc	tggtcgatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctgggaacta-ggtgatggagcgtgttctgagaacggactgaga---ccg	ggcagca
E. Cab	gtgagccc	tggtcgatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctgggaacca--tgatggagggtgt-----actgaga---ccg	ggcagca
S. Sus	gtgagccc	tggtcgatgatgacgtgacca	CTGCgc	AACTCTGAG	atctgggaacca-ggtgatggagtgtgtgctgagaacgatctgaga---cca	ggtagca
O. Avi	gcgagccc	tggtcgatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctgggaacta-ggtgatggagcgtgttctgagaacggactgaga---ccg	ggcagca
L. Afr	gtgagccc	tggtcggatgatgacgtgacca	CTGCgc	AACTCTGAG	ttctgggaacca-gatgatggagcctgtgctgagcacggactgaga---cag	ggcagca
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id=79259 gene=ENSG00000252139 name=SCARNA18.2 segment=chr18\_47340731\_47340813.1 type=EN

H. Sap	-tctcccag	gtgggtatttta----.87...--cttcacatctctgacctcct	CTT-AG	ATTGCAGa
R. Mac	-tctcccag	gtgggtatttta----.87...--cttcacatctctgacctcct	CTT-AG	ATTGCAGa
P. Tro	-tctcccag	gtgggtatttta----.87...--cttcacatctctgacctcct	CTT-AG	ATTGCAGa
P. Abe	-tctcccag	gtgggtatttta----.87...--cttcacatctctgacctcct	CTT-AG	ATTGCAGa
C. Por	-tctcccag	gagggtagtttc----.74...ttccttat-tctctgacctc-	CTT-AG	ATTGCAGa
O. Cun	-gttcttgg	ttggctatttta----.59...--ctccttctgttctgtctctc	CTT-AG	ATTGCAGa
C. Fam	-tctccca-	---gatactttaagaa...78...agttcctttgtttctgtgtg--	CTT-AG	ATTGCAGa
F. Cat	-cctccca-	---gatattttaagaa...84...--tcctttgtttctgtgtctc	CTT-AG	ATTGCAGa
B. Tau	-caccccgg	gtgggtattaag----.89...--cttcgtttctctgtgtctc	CTT-AG	ATTGCAGa
E. Cab	-tctcctgg	gtgggtatttta----.91...--cttggtttctctgtgtctc	CTT-AG	ATTGCAGa
S. Sus	-tctcctga	gtgggtatttta----.84...--agtccttctgtgtctctc	CTT-AG	ATTGCAGa
O. Avi	ccaccccgg	gtgggtatttta----.80...--cttcatttctctgtgtctc	CTT-AG	ATTGCAGa
L. Afr	-tctcccag	gtgggtatttaa----.86...--tcctttgtttctgtctctc	CTT-AG	ATTGCAGa
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id=570815 gene=ENSG00000054690 name=PLEKHH1 segment=chr14\_68053667\_68053790.1 type=IN

Figure 530: CS=14.04



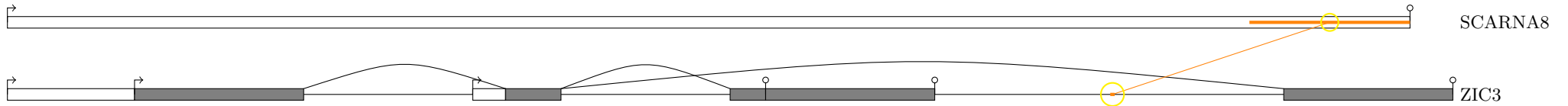
H. Sap	gtgagtcc	tggccgatgatgacgag	ACCACTGCgc	AATCTga	GTTCTG	-ggaaccaggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
R. Mac	gtgagccc	tggccgatgatgacgag	ACCACTGCgc	AATCT	-gagttat	gggaaccacgtgagtggttctgagaacagactgagg---ccg	ggcagca
P. Tro	gtgagtcc	tggccgatgatgacgag	ACCACTGCgc	AATCTga	GTTCTG	-ggaaccaggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
P. Abe	gtgagtcc	tggccgatgatgacgag	ACCACTGCgc	AATCTga	GTTCTGG	-gaaccaggtgatggagtatgttctgagaacagactgagg---ccg	ggcaagca
C. Jac	gtgagctc	tggccgatgatgacgag	ACCACTGCgc	AATCTga	GTTCTG	-ggaaccaggtgatggagtgtgttctgaaaacagactgagg---ccg	ggcagca
C. Por	gtgagccc	tggccaatgatgactag	ACCACTGCgc	AATCTga	GTTCTG	-ggaaccaggtgatggagtgtgctgtaacagcagactgagg---cc-	ggcaagcc
O. Cun	gtgagccc	tggccaatgatgaccag	ACCACTGCgc	AATCT	-gagtcct	gggcaccaggtgatggagtgtgttctgagaacagactgagg---ccg	ggcagtg
C. Fam	gcgagccc	gggtcgatgatgacgtg	ACCACTGCgc	AATCTga	GTTCTA	ggaaccaggtgatggagtggatgctgagagcggactgagacctccg	ggcagcg
F. Cat	gtgagacc	tggccaatgatgacgtg	ACCACTGCgc	AATCTga	GTTCTA	-ggaacctggtgatggaatgtgctc--agagcggactgaga---ccg	ggcaaaaa
B. Tau	gcaagccc	tggtcgatgatgacgtg	ACCACTGCgc	AATCTga	GTTCTG	-ggaactaggtgatggagcgtgttctgagaacggactgaga---ccg	ggcagca
E. Cab	gtgagccc	tggtcgatgatgacgtg	ACCACTGCgc	AATCTga	GTTCT	-tgggaacca--tgatggagggtgt-----actgaga---ccg	ggcagca
S. Sus	gtgagccc	tggtcgatgatgacgtg	ACCACTGCgc	AATCT	-gagatct	gggaaccaggtgatggagtgtgtgctgagaacgatctgaga---cca	gggtagca
L. Afr	gtgagccc	tggtcggtgatgacgtg	ACCACTGCgc	AATCTga	GTTCTG	-ggaaccaggtgatggagcctgtgctgagcagcggactgaga---cag	ggcagca
	* ** *	** * *****	*****		*	*****	***** * ** *

id=79259 gene=ENSG00000252139 name=SCARNA18.2 segment=chr18\_47340731\_47340813.1 type=EN

H. Sap	tgttggag	gtataggcagaa...407...	-acagttccttccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...130...tttgccatacag	ataaagcc
R. Mac	tgttggag	gtataggcagaa...407...	-----tccccaggcgtggggcca	GGATTtg	GTAGtTGGT	gctgaga--gaaaacccttgat...130...tttgccatacag	gtaaagcc	
P. Tro	tgttggag	gtataggcagaa...407...	-acaggtccttccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...130...tttgccatacag	ataaagcc
P. Abe	tgttggag	gtataggcagaa...402...	...cacaggtccttccccaggcag	CTGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...130...tttgccatacag	ataaagcc
C. Jac	tgttggag	gtataggcaaaa...418...	-acaggtccttccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...130...tttgccatacag	gtaaagcc
C. Por	ttttggag	gtataggcagga...616...	-acaggtccaccctgggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...293...tttgtcatacag	gtgaagcc
O. Cun	agtggag	gtataggcaggg...2635...	-----tctcctaggcagtgaggcca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...124...tctgccattcag	gtgaagcc	
C. Fam	tgatacag	gtatggggagaa...417...	-acagatcctccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaaa--gaaaacccttgat...130...tttgccatacag	gtgaagcc
F. Cat	tgtaaaag	gtataggagaa...406...	-acaggtcctccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaaa--gaaaacccttgat...132...tttgccatacag	gtgaagcc
B. Tau	tgttgaag	gtat-ggcagaag...410...	-acaggtcctccccagatcg	TGGGGCca	GGATTtg	GTAGcTGGT	gctaaaattgaaaacccttg--...130...tctgccattcag	gtaaagcc
E. Cab	tgttgaag	gtataggcagaa...426...	---aggtcctccccagacagtt	GGGCca	GGATTtg	GTAGcTGGT	gctgaaa--gaaaacccttgat...132...tttgccatacag	gtaaagcc
S. Sus	cgatgaag	gtatgggcagaa...390...	-----ttccccaggcagtgaggata	GGATTtg	GTAGcTGGT	gctgaaaattgaaaacccttg--...132...tccaccacag	gtaaagcc	
L. Afr	ttttgaag	gtataggcagaa...387...	-acaggtcctccccaggcag	TGGGGCca	GGATTtg	GTAGcTGGT	gctgaga--gaaaacccttgat...127...tttgccatag	gggaagcc
	* **	**** ** *	** * * * *	*****	*****	* * * *****	* ** **	** *

id=397154 gene=ENSG0000080603 name=SRCAP segment=chr16\_30721450\_30722074.1 type=IN

Figure 531: CS=14.95



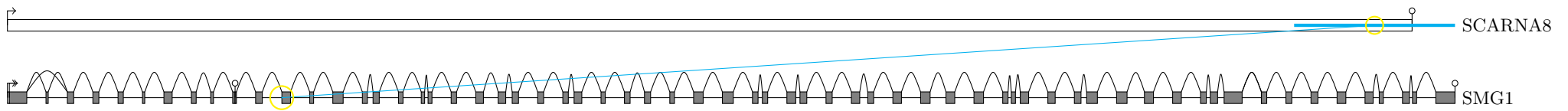
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R.Mac	ttcataa-t	tgggaggctgat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttagagt
P.Tro	ttcataa-t	tgggaggctgat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttagaat
P.Abe	ttcataa-t	tgggaggctgat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttagaat
C.Jac	tttgtaa-t	tgggaggctgat...80...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	ttttaa--
M.Mus	-gagttctt	cgggagagtgat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	ttattc--
R.Nor	-gagttatt	cgggagagtgat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	ttactg--
C.Por	tttataa-t	tgggaggcagat...76...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttaga--
O.Cun	ttcataa-t	tgggaggctgat...76...gaattgagagaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttaga--
C.Fam	tttactgtt	cgggaggctga...77...gaattgagggaaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttt---
F.Cat	ttcaccatt	tgggaggctga...77...gaattgagggaaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tgtaga--
B.Tau	ttca-aata	tgggaggctgat...79...gaattgagagaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttaca--
E.Cab	tgcttaatt	tgggaggctga...77...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttaga--
S.Sus	ttcttaatt	tgggaggctga...77...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttaga--
L.Afr	ttcataa-t	tgggaggctga...77...gaattgagtgaatcgtaac	GGACA	ATACgg	GGCAGAc	AGAT	----	tttagaat
		***** **	*****	*****	*****	*****	*****	*

id=485019 gene=ENSG00000251733 name=SCARNA8 segment=chr9.19063654\_19063784\_-1 type=EN

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R.Mac	ataactgc	agcagttctgaa...4944...ctatctgcagttcacttttt	GTTTt	TTTGCCaG	TGTTGTC
P.Tro	ataactgc	agcagttctgaa...4944...ctatctgcagttcacttttt	GTTTt	TTTGCCaG	TGTTGTC
P.Abe	ataactgc	agcagttctgaa...4944...ctatctgcagttcacttttt	GTTTt	TTTGCCaG	TGTTGTC
C.Jac	ataactgc	agcagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
M.Mus	ataactgc	agcagttcctaa...4950...-----gcagttcactttttgttttc	TTTGCCaG	TGTTGTC	
R.Nor	ataactgc	agcagttcctaa...4950...-----gcagttcactttttgttttc	TTTGCCaG	TGTTGTC	
C.Por	ataactac	agcagttctgaa...4950...-----gcagttcacttttttttttc	TTTGCCaG	TGTTGTC	
O.Cun	ataactgc	aacagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
C.Fam	ataactgc	agcagttctgaa...4944...ctatctgcagttcacttttt	GTTTt	TTTGCCaG	TGTTGTC
F.Cat	ataactgc	agcagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
B.Tau	ataactgc	agcagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
E.Cab	ataactgc	agcagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
S.Sus	ataactgc	agcagttctgaa...4949...-----tgcagttcactttttgtttt	TTTGCCaG	TGTTGTC	
L.Afr	ataactgc	agcagttctgaa...4950...-----gcagttcactttttgttttc	TTTGCCaG	TGTTGTC	
		***** * * **** **	*****	*****	*****

id=151698 gene=ENSG00000156925 name=ZIC3 segment=chrX.136653745\_136659280\_1 type=IN

Figure 532: CS=10.5



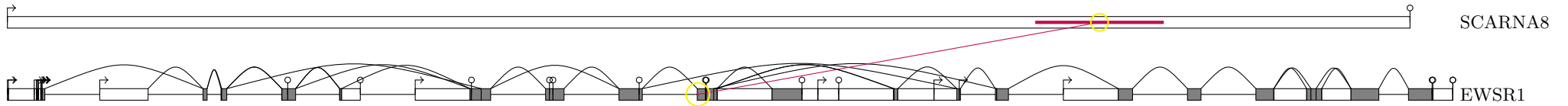
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R. Mac	ttcataa-t	tgggaggctgat..80...-tgagtgaatcgtaacggac	AGATacGGGGcAGACAG	-----at	tttagagt
P. Tro	ttcataa-t	tgggaggctgat...80...-tgagtgaatcgtaacggac	AGATacGGGGcAGACAG	-----at	tttagaat
P. Abe	ttcataa-t	tgggaggctgat...80...-tgagtgaatcgtaacggac	AGATacGGGGcAGACAG	-----at	tttagaat
C. Jac	tttghtaa-t	tgggaggctgat...84...-tgagtgaatcgtaacggac	AGATacGGGGcAGACAG	-----tttt	ttttaa--
M. Mus	-gagttctt	cgggagagtgat...79...ttgagtgaatcgtcatgga	CAGATacGGGGcAGACAA	-----tttc	ttattc--
R. Nor	-gagttatt	cgggagagtgat...79...ttgagtgaatcgtcatgga	CAGATacGGGGcAGACAG	-----tttc	tcactg--
C. Por	tttataa-t	tgggaggcagat...79...ttgagtgaatcgtcacgga	CAGATacGGGGcAGACAG	-----tttc	tttaga--
O. Cun	ttcataa-t	tgggaggctgat...79...ttgagagaatcgtaacgga	CAGATacGGGGcAGACAG	-----tttg	tttaga--
C. Fam	tttactgtt	cgggaggctga...80...ttgagggaaatcgtaacgga	CAGATacGGGGcAGACAGTTTTTTT	tt--	-----
B. Tau	ttca-aata	tgggaggctgat...82...ttgagagaatcgtaacgga	CAGATacGGGGcAGACAG	-----tttc	tttaca--
E. Cab	tgcttaatt	tgggaggctga...80...ttgagtgaatcgtaacgga	CAGATacGGGGcAGACAG	-----tttc	tttaga--
L. Afr	ttcataa-t	tgggaggctga...80...ttgagtgaatcgtaacgga	CAGATacGGGGcAGACAG	-----ttac	tttagaat
		***** **	**** * * *	*****	

id=485019 gene=ENSG00000251733 name=SCARNA8 segment=chr9.19063654.19063784.-1 type=EN

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R. Mac	taacagat	gtaagtgctttt...2693...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTT	acag	gttctgta
P. Tro	taacagat	gtaagtgctttt...2389...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTT	acag	gttctgta
P. Abe	taacagat	gtaagtgctttt...2503...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTT	acag	gttctgta
C. Jac	taacagat	gtaagtgctttt...2077...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTT	acag	gttctgta
M. Mus	taacagat	gtaagtgctttt...2104...-----	gtgagtgtttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctata
R. Nor	taacagat	gtaagtgctttt...1977...-----	gtgagtgtttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctata
C. Por	taactgat	gtaagtgctttt...1438...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctata
O. Cun	taacagat	gtaagtgctttt...2290...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctgta
C. Fam	taacagat	gtaagtgctttt...1787...ggaagcatgtaattttttt	AAAAAGctGCTTGT	ctCCCCATTG	cag	gttctgta
B. Tau	taacagat	gtaagtgctttt...1710...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctgta
E. Cab	taacagat	gtaagtgctttt...1686...-----	gaatttttttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctgta
L. Afr	tcacagat	gtaagtgctttt...1673...-----	tgaatttttttaaaaagctgc	TTGTTTtCCCCATTG	cag	gttctgta
		* * * *	*****	*		* * * *
			* * *	*****	*****	*****

id=365603 gene=ENSG00000157106 name=SMG1 segment=chr16.18891042.18893486.-1 type=IN

Figure 533: CS=13



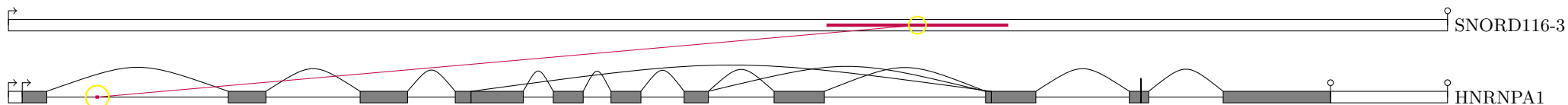
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R. Mac	ttcataa-t	ttggaggctgat...56...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacggggcagacagat--	tttagagt
P. Tro	ttcataa-t	ttggaggctgat...56...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacggggcagacagat--	tttagaat
P. Abe	ttcataa-t	ttggaggctgat...56...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacggggcagacagat--	tttagaat
C. Jac	tttghaa-t	ttggaggctgat...60...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacggggcagacagtttt	tttaa--
M. Mus	-gagttcct	cgggagagtgat...56...----	tccttttgatgaccagggc	GAATTGAGtGAAA	tGTCATGgacagatacggggcagacaatttc	ttattc--
R. Nor	-gagttatt	cgggagagtgat...56...----	tccttttgatgaccagggc	GAATTGAGtGAAA	tGTCATGgacagatacggggcagacagtttc	tcactg--
C. Por	tttataa-t	ttggaggcagat...56...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tGTCACGgacagatacggggcagacagtttc	tttaga--
O. Cun	ttcataa-t	ttggaggctgat...56...----	tccttttgatgaccggaac	GAATTGAGaGAAA	tcgtaacggacagatacggggcagacagtttg	tttaga--
C. Fam	tttactgtt	cgggaggctga-...57...----	tccttttgatgaccgggac	GAATTGAGGGGAAA	tcgtaacggacagatacggggcagacaggttt	ttttt--
F. Cat	ttcaccatt	ttggaggctga-...57...----	tccttttgatgaccgggac	GAATTGAGGGGAAA	tcgtaacggacagatacggggcagacagtttc	tgtaga--
B. Tau	ttca-aata	ttggaggctgat...59...----	tccttttgatgaccgggac	GAATTGAGaGAAA	tcgtaacggacagatacggggcagacagtttc	tttaca--
E. Cab	tgcttaatt	ttggaggctga-...57...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacggggcagacagtttc	tttaga--
S. Sus	ttcttaatt	ttggaggctga-...57...----	tccttttgatgaccgggac	GAATTGAGtGAAA	tcgtaacggacagatacaggcagacagtttc	tttaga--
L. Afr	ttcataa-tt	ttggaggctga-...53...aaactgccttttgatgactg	GGATGAATTGAGtGAAA	tcataacggacagatacggggcagacagttac		tttagaat
		***** **	***** * ***** * * ***** ***** * *			

id=485019 gene=ENSG00000251733 name=SCARNA8 segment=chr9.19063654.19063784.-1 type=EN

H. Sap	gcagcaga	gtgagttgctaa...1430...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
R. Mac	gcagcaga	gtgagttgctaa...1453...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
P. Tro	gcagcaga	gtgagttgctaa...1427...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
P. Abe	gcagcaga	gtgagttgctaa...1444...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
C. Jac	gcagcaga	gtgagttgctaa...1339...-----	ctggcttacagatgtgactc	TTCCTCAG	GTTcAttc
M. Mus	gcagcaga	gtgagttgctaa...877...-gctggtcctgcttacaga	TGTGACtc	TTCCTCAG	GTTcAttc
R. Nor	gcagcaga	gtgagttgctaa...1053...tgctggt-tgtggcttacaga	TGTGACtc	TTCCTCAG	GTTcAttc
C. Por	gcagcaga	gtgagttgctaa...993...-gctggtccatggcttacaga	TGTGACtc	TTCCTCAG	GTTcAttc
O. Cun	gcagcaga	gtgagtcgctga...835...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
C. Fam	gcagcaga	gtgagttgctaa...795...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
F. Cat	gcagcaga	gtgagttgctaa...969...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
B. Tau	gcagcaga	gtgagttgctaa...848...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
E. Cab	gcagcaga	gtgagttgctaa...916...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
S. Sus	gcagcaga	gtgagttgctaa...877...-----	atggcttacagatgtgactc	TTCCTCAG	GTTcAttc
L. Afr	gcagcaga	gtgagttgctaa...930...-----	atggcttacaggtgtgactc	TTCCTCAG	GTTcATTc
		***** ***** ** *	***** ***** ***** ***** ***** ***** ***** *****		

id=632641 gene=ENSG00000182944 name=EWSR1 segment=chr22.29683124.29684594.1 type=IN

Figure 534: CS=10.5



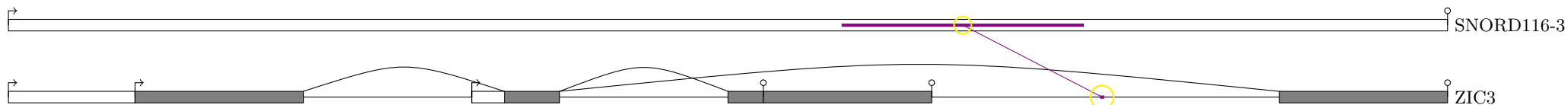
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R.Mac	acgtgctt	ggatc	gatgatgag	ccccataaa	aacattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcat	-accgtcgtt	ctcatc	ggatctgaggtcc	agcacgtt
P.Tro	atgtgctt	ggatc	gatgatgag	ccccataaa	aacattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcat	-accgtcgtt	ctcatc	ggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	ctatgatgatt	ccc--agt	caaacattcctt	ggaaaagctga	ACAAAATG	GTGA	aaactctgt	accgccact	ctcatc	ggaactgaggtcc	agcatcct
R.Nor	gtctgact	ggatc	-atgatgatt	ctc--agt	caaacattcctt	ggaaaagctga	ACAAAATG	GTGA	aaactcagc	accgctatt	gtcatc	gaaactgatgtcc	ggcacctt
O.Cun	atgtgctt	ggatc	caatgatgact	ccccat--	aaacattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcaca	accgtcgtt	ctcatc	gtgactgaggtcc	agcacatt
C.Fam	aagtgctt	ggatc	gatgggact	cctcaat-ct	gattcctt	ggaaaagctga	ACAAAATG	GTGA	gactccct	accatcgtt	ctcatc	gaaactgaggtcc	agcacgtt
F.Cat	atgtgctt	ggatc	gatgatgact	cctcaa--	cagcattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactccct	accgtctt	ctcatc	gaaactgaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgact	ccccaaa--	atgcattcctt	ggaaaagctga	ACAAAATG	GTGA	gccatcact	accgtc--	tcctcatc	ggaactgaggtcc	agcacgtg
E.Cab	aggtgctt	ggatc	gatgatgact	ccccaaa--	atgcattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcact	accgtcgtt	ctcgcg	gagactgaggtcc	agcacctg
S.Sus	ccgtgctt	ggatc	gatgatgact	cctcta--	aagcattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcact	accgtc--	tcctcatc	gaaactgaggtcc	ggcacgtg
O.Avi	acatgctt	ggatc	cagtgatgaca	actttcat-	atttattcctt	ggaaaagctga	ACAAAATG	GTGA	gaactcact	accatc-	tcctcatc	gatactgaggtcc	agcacgtt
L.Afr	atgtgcat	ggatc	caatgataact	cccacct--	aaacattcatt	ggaaaagctga	ACAAAATG	GTGA	aaactcact	actgtctc	actcattg-	aactgaggtcc	agcacatt
	**	****	** * *		****	****	****	*****	**	**	**	****	**

id=680114 gene=ENSG0000207014 name=SNORD116-3 segment=chr15.25302007.25302101.1 type=EN

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R.Mac	agtcagag	gtgagttaggcg	...113...-----	taccctc-ccaa	agttcaag	TCGCCATTTTGT	cctcttgatc	gcatgaggc	---...377...ccccactccag	tctcctaa	
P.Tro	agtcagag	gtgagttaggcg	...111...-----	taccctc-ccaa	agttcaag	TCGCCATTTTGT	cctcttgatc	gcatgaggc	---...375...ccccactctag	tctcctaa	
M.Mus	agtcagag	gtgagttaggcg	...106...-----	tactttaa	aaaaatgcagg	TCGCCATTTTGT	cctcatagt	caccatgaggc	---...369...ctccactttag	tctcccaa	
R.Nor	agtcagag	gtgagttaggcg	...105...-----	ctacttt-aaaa	aatgcagg	TCGCCATTTTGT	cctcatagt	caccatgaggc	---...361...actttatttag	tccccaa	
O.Cun	agtcagag	gtgagttaggcg	...102...-----	aaggcct	accctc-ccaa	ag-----	TCGCCATTTTGT	cctcgtcgt	cgccatgaggc	---...378...tctccgccag	tccccaa
C.Fam	agtcagag	gtgagttaggcg	...112...-----	ttcccctc-	ccgaagttgagg	TCGCCATTTTGT	cctcgtcgt	cgccatgaggc	---...363...ccccactcctag	tctcccaa	
F.Cat	agtcagag	gtgagttaggcg	...113...-----	taccctc-ccaa	agttcgagg	TCGCCATTTTGT	cctcgtcgt	cgccatgaggc	---...378...cccgactcctag	tctcccaa	
B.Tau	aatcagag	gtgggtaagacg	...111...-----	tcccctc-	cctaagttgagg	TCGCCATTTTGT	cc---tcgt	cgccatgaggc	---...362...ctcctcctag	tctcccaa	
E.Cab	agtcagag	gtgagttaggcg	...111...-----	taccctc-ccaa	agttcagg	TCGCCATTTTGT	cctcgtcgt	cgccatgaggc	---...359...tcctactcctag	tctcccaa	
S.Sus	agtcagag	gtgagttaggcg	...111...-----	taccctc-	cctgagttcagg	TCGCCATTTTGT	cc---tcgt	cgccatgaggc	---...358...cctactcctag	tctcccaa	
O.Avi	aatcagag	gtgggtaagacg	...111...-----	tcccctc-	cctgagttgagg	TCGCCATTTTGT	cc---tcgt	cgccatgaggc	---...366...ctcactcctag	tctcccaa	
L.Afr	agtcagag	gtgagttaggcg	...108...-----	taccctc-ccaa	agttgagg	TCGCCATTTTGT	cctcgtcgt	cgccatgaggc	---...389...tccaccattag	tctcctaa	
	** * *	** *		**	*	*****	*	**	*****	** * * *	

id=165449 gene=ENSG0000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 535: CS=16.25



H.Sap	atgtgctt	ggatc	gatgatgag	ccccataaaaacattcc	TTGGA	AAAGct	GAACAAAAt	AGTGag	AACT	cat-accg	tcggttctcatc	ggaactgaggtcc	agcacatt
R.Mac	acgtgctt	ggatc	gatgatgag	ccccataaaaacattcc	TTGGA	AAAGct	GAACAAAAt	AGTGag	AACT	cat-accg	tcggttctcatc	ggaactgaggtcc	agcacgtt
P.Tro	atgtgctt	ggatc	gatgatgag	ccccataaaaacattcc	TTGGA	AAAGct	GAACAAAAt	AGTGag	AACT	cat-accg	tcggttctcatc	ggaactgaggtcc	agcacatt
P.Abe	atgtgctt	ggatc	gatgatgag	ccccataaaaacattcc	TTGGA	AAAGct	GAACAAAAt	AGTGag	AACT	cat-accg	tcggttctcatc	ggaactgaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	atgatgattccc	--agtcaaacattccttggaaaagct	GAACAAAAt	AGTGaa	AACT	ctgtaccg	ccactctcatc	ggaactgaggtcc		agcatctt	
R.Nor	gtctgact	ggatc	-atgatgattctc	--agtcaaacattccttggaaaagct	GAACAAAAt	AGTGaa	AACT	cagcaccg	ctattgtcatc	cagaactgatgtcc		ggcacctt	
C.Por	atgttctt	gggtt	ggtgatgacacc	---ataataatattccttagaaaagctcaac	AAAA	tg	AGTGca	AACT	----ctgt	cattctcattgtgactgaggtct		tgcacatg	
O.Cun	atgtgctt	ggatc	aatgatgactccccat	--aacattcc	TTGGA	AAAGct	GAACAAAAt	AGTGag	AACT	cacaaccg	tcggttctcatc	gtgactgaggtcc	agcacatt
F.Cat	atgtgctc	ggatc	gatgatgactccc	--tcaacagcattcc	TTGGA	-AGct	GAACAAAAt	AGTGag	AACT	ccctaccg	tccttctcatc	gaaactgaggtcc	agcacgtt
E.Cab	agggtgctc	ggatc	gatgatgactccc	--cfaatgcatccttggaaatct	GAACAAAAt	AGTGag	AACT	cactaccg	tcggttctcgcg	gagactgaggtcc		agcacctg	
S.Sus	ccgtgctc	ggatc	gatgatgactccc	--tctaaagcattccttggaaatct	GAACAAAAt	AGTGag	AACT	cactaccg	tcctcatc	gaaactgaggtcc		ggcacgtg	
O.Avi	acatgctc	ggatc	agtgatgacaact	-ttcatatattccttggaaaatct	GAACAAAAt	AGTGag	AACT	cactaccatc	-tcctcatc	gataactgaggtcc		agcacgtt	
L.Afr	atgtgcat	ggatc	aatgataaactccc	--acctaaacattcattggaaaagct	GAACAAAAt	AGTGaa	AACT	cactactgtc	tctcattg	-aactgaggtcc		agcacatt	
	*	**	*	****	*	****	**	*****	*****	*	**	****	**

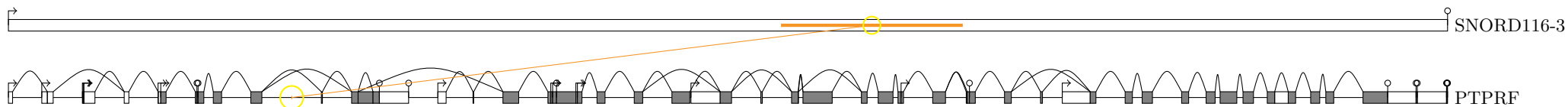
id=680114 gene=ENSG0000207014 name=SNORD116-3 segment=chr15.25302007.25302101.1 type=EN

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R.Mac	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTTTT	gCCAG	tgttg	tcc
P.Tro	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTTTT	gCCAG	tgttg	tcc
P.Abe	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTTTT	gCCAG	tgttg	tcc
M.Mus	ataactgc	agcagttcctaa	..4932..	agaaaatttgacctatctgc	AGTTCAC	TTTTGTTTT	tcttgccag	tgttg	tcc
R.Nor	ataactgc	agcagttcctaa	..4932..	aaaaatttgacctatctgc	AGTTCAC	TTTTGTTTT	tcttgccag	tgttg	tcc
C.Por	ataactac	agcagttctgaa	..4932..	acctgttttgacctatctgc	AGTTCAC	TTTTT	tcttgccag	tgttg	tcc
O.Cun	ataactgc	aacagttctgaa	..4932..	gctattttgacctatctgc	AGTTCAC	TTTTGTTTTT	gCCAG	tgttg	tcc
F.Cat	ataactgc	agcagttctgaa	..4932..	gctgttttgacctgtctgc	AGTTCAC	TTTTGTTTTT	gCCAG	tgttg	tcc
E.Cab	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTTT	tcttgccag	tgttg	tcc
S.Sus	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTT	tcttgccag	tgttg	tcc
O.Avi	ataactgc	agcagttctgaa	..4932..	gctgttttgacctatctgc	AGTTCAC	TTTTGTTTT	tcttgccag	tgttg	tcc
L.Afr	ataactgc	agcagttctgaa	..4932..	gctattttaacctatctgc	AGTTCAC	TTTTGTTTT	tcttgccag	tgttg	tcc
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id=151698 gene=ENSG0000156925 name=ZIC3 segment=chrX.136653745.136659280.1 type=IN

Figure 536: CS=13





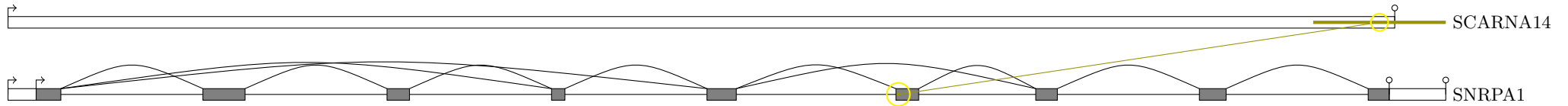
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R.Mac	acgtgctt	ggatc	gatgatgag	tgccccata	aaaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	cat-accgt	cgttctcat	cggaact	gaggtcc	agcacgtt
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P.Abe	atgtgctt	ggatc	gatgatgag	tgccccata	aaaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	cat-accgt	cgttctcat	cggaact	gaggtcc	agcacatt
M.Mus	acgtgctt	ggatc	tatgatgatt	ccc--agt	caaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgaaaact	ctgtacc	gccactctcat	cggaact	gaggtcc	agcatctt
R.Nor	gtctgact	ggatc	-atgatgatt	ctc--agt	caaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgaaaact	cagcacc	gctattgtcat	cagaact	gatgtcc	ggcacctt
O.Cun	atgtgctt	ggatc	aatgatgact	ccccat--	aaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	cacaacc	gcttctcat	cgtgact	gaggtcc	agcacatt
C.Fam	aagtgctt	ggatc	gatggtgact	ccctcaat-	ctgattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagcaact	ccctacc	atcgttctcat	cgaaact	gaggtcc	agcacgtt
F.Cat	atgtgctt	ggatc	gatgatgact	ccctcaa--	cagcattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	ccctacc	gcttctcat	cgaaact	gaggtcc	agcacgtt
B.Tau	acgtgctt	ggatc	gatgatgact	cccacaa--	atgattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagccat	cactacc	gctc-tcctcat	cggaact	gaggtcc	agcacgtg
E.Cab	agggtctc	ggatc	gatgatgact	cccccaa--	atgattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	cactacc	gcttctc	gccgagact	gaggtcc	agcacctg
S.Sus	cogtgctc	ggatc	gatgatgact	ccctcta--	aagcattc	ccttggaaa	agc	TGAACAAA	TGAG	tgagaact	cactacc	gctc-tcctcat	cgaaact	gaggtcc	ggcacgtg
L.Afr	atgtgcat	ggatc	aatgataact	cccacct--	aaacattc	ccttggaaa	agc	TGAACAAA	TGAG	tgaaaact	cactact	gctcact	cattg-aact	gaggtcc	agcacatt
	**							*****	*						**

id=680114 gene=ENSG0000207014 name=SNORD116-3 segment=chr15.25302007.25302101.1 type=EN

H.Sap	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R.Mac	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Tro	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
P.Abe	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
M.Mus	gcgattcag	gtgagctgagtt	...4929...	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
R.Nor	gcgttcag	gtgagctgaggg	...4929...	tactaatgtttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
O.Cun	gcgttcag	gtgagctgaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	cgTTCA	aattacctcgccag	gtggttca
C.Fam	acgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
F.Cat	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
B.Tau	gcgttcag	gtgagcagaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
E.Cab	gcgttcag	gtgagcagagag	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
S.Sus	gcgttcag	gtgagcacaggg	...4929...	tactaatgcttctctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
L.Afr	gcgttcag	gtgaggagaggg	...4929...	tactaatgcttttctctgat	CTTATTTG	caTTCA	aattacctcgccag	gtggttca
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id=517225 gene=ENSG00000142949 name=PTPRF segment=chr1.44035450.44041580.1 type=IN

Figure 537: CS=11.7



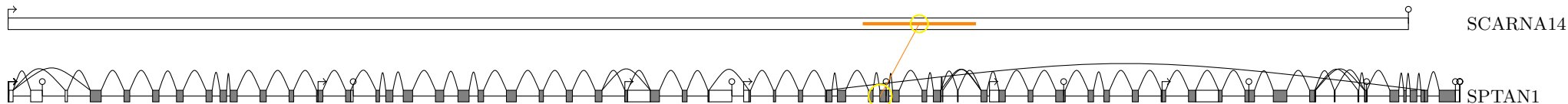
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R.Mac	agacctat	gtgactgttcct...87...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgttt
P.Tro	agaccttt	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgttt
P.Abe	agacctct	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgttt
M.Mus	agaccttc	gtgactgtactt...87...agttgtcagat	ttctgtgc	GATGgCTCCaTACA	aaagatttataaaa	cttttaaacatgtatgtttatta
R.Nor	agaactgc	gtgactgtacct...87...agttgtcagat	ttctgtgc	GATGgCTCCaTACA	-----aaag	ctttttaa
C.Por	agatctct	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	ctttttt
O.Cun	agacctct	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	aatgtttg
C.Fam	tctctttt	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgttta
F.Cat	agacctat	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgttta
B.Tau	agacctgt	gtgactgttcct...86...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgcttt
E.Cab	ggagctcc	gtgactggtcct...86...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgtctg
S.Sus	agacttac	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttggttg
O.Avi	agacctgt	gtgactgttcct...88...agttatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgcttt
L.Afr	ggacccaa	gtgactgctcct...86...agtgatcagat	ttctgtgc	GATGgCTCCaTACA	-----g	tttgcgtg
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id=817053 gene=ENSG00000252712 name=SCARNA14 segment=chr15.66639545.66639680.-1 type=EN

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P.Tro	aactaaaa	gtaagtagtaat...577...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
P.Abe	aactaaaa	gtaagtagtaat...577...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
M.Mus	aactcaaa	gtgagtattgcg...555...aactctgtgtg	tggtgttgc	TGTAG	GAGCGTCa
R.Nor	aactaaaa	gtgagtattgct...535...aactctgtgtg	tggtgttgc	TGTAG	GAGCGTCa
C.Por	aactaaaa	gtaagtgttctt...522...aactctgtgtg	tggtgttgc	TGTAG	GAGCGTCa
O.Cun	agctaaaa	gtaagtggttgt...506...tactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
C.Fam	aactaaaa	gtaagtattggt...596...aactctgtgtg	tggtgttgc	TGTAG	GAGCGTCa
F.Cat	aactgaaa	gtaagtattttc...613...aactctgtgtg	tggtgttgc	TGTAG	GAGCGTCa
B.Tau	aactaaaa	gtaagtgttact...551...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
E.Cab	aactaaaa	gtaagtattatt...802...aactctgtgtg	tggtgtcac	TGTAG	GAGCGTCa
S.Sus	aactaaaa	gtaagtattagt...582...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
O.Avi	aactaaaa	gtaagtgttact...538...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
L.Afr	aactgaaa	gtaagtatttagc...556...aactctgtgtg	tggtgtcgc	TGTAG	GAGCGTCa
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id=143334 gene=ENSG00000131876 name=SNRPA1 segment=chr15.101826499.101827112.-1 type=IN VIEW

Figure 538: CS=10.5



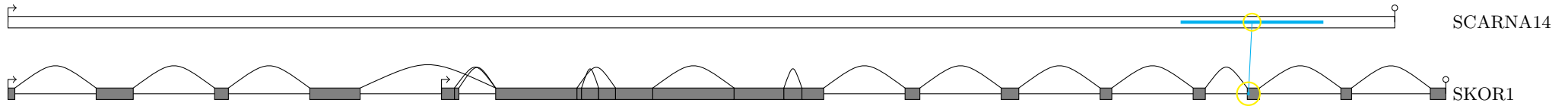
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R.Mac	agacctat	gtgactgttctt...42...gtcacacacattaaaacaga	<b>TGGTTCCTGCCGA</b>	<b>AGGG</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	tttgtttt
P.Tro	agaccttt	gtgactgttctt...43...gtcacacacattaaaacaga	<b>TGGTTCCTGCCGA</b>	<b>AGGG</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	tttgtttt
P.Abe	agacctct	gtgactgttctt...43...gtcacatacagtaaaaacaga	<b>TGGTTCCTGCCGA</b>	<b>AGGG</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	tttgtttt
C.Jac	agatctat	gtaactgttctt...43...gtcacacacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGAG</b>	tctgtatagttatcagattttctgtgcatggatccatacat	-----g	tttgtttt
M.Mus	agaccttc	gtgactgtactt...42...gtcacatacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGAG</b>	tctgtatagttgtcagattttctgtgcatggctccatacataagattttaaaacttttaaacatgtatg	-----g	tttattta
R.Nor	agaactgc	gtgactgtactt...42...gtcacatacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGGG</b>	tctgtatagttgtcagattttctgtgcatggctccatacat	-----aaagctttttaa	-----
C.Por	agatctct	gtgactgttctt...43...gtcacacacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGAG</b>	tctgtatagttatcagattttctgtgcatggctccatacac	-----	-ttttttt
O.Cun	agacctct	gtgactgttctt...43...gtcacatacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGAG</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	aatgtttg
C.Fam	tctctttt	gtgactgttctt...43...gtcacacacatcaaaaacaga	<b>TGGTTCCTGCCG</b>	<b>AGGG</b>	tctgtatagttatcagatttctgtgcatggctccatacat	-----g	tttgttta
S.Sus	agacttac	gtgactgttctt...43...gtcacacacagcaaaaacata	<b>TGGTTCCTGCCG</b>	<b>AGGG</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	tttgttgg
O.Avi	agacctgt	gtgactgttctt...43...gtcacatacatcaaaaacata	<b>TGGTTCCTGCCG</b>	<b>AGGG</b>	tctgtatagttatcagatttctgtgcatggctccatacat	-----g	tttgcctt
L.Afr	ggacccaa	gtgactgttctt...42...gtcacacacatcaaaaacaga	<b>TGGTTCCTGCCGA</b>	<b>cagg</b>	tctgtatagttatcagattttctgtgcatggctccatacat	-----g	tttgcgtg
		** **** * *	***** ** *****	***** ** *****	***** ** *****	***** ** *****	*****

id=817053 gene=ENSG00000252712 name=SCARNA14 segment=chr15.66639545.66639680.-1 type=EN

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R.Mac	gacaccag	gtgggtggacct...105...----agttacctaatacccttcct	<b>CCTTTTGGCAG</b>	<b>GAacACCg</b>
P.Tro	gacaccag	gtgggtggacct...106...----gtttacctaatacccttcct	<b>CCTTTTGGCAG</b>	<b>GAacACCg</b>
P.Abe	gacaccag	gtgggtggacct...105...----agttacctaatacccttcct	<b>CCTTTTGGCAG</b>	<b>GAacACCg</b>
C.Jac	gacaccag	gtgggtggacct...109...----gttacctaatacccttcctc	<b>CTTTTGGCAG</b>	<b>GAacACCg</b>
M.Mus	gacaccag	gtaggtcctgct...69...----gttatctaataccctttactc	<b>CTCTTGGCAG</b>	<b>GAacACCg</b>
R.Nor	gacaccag	gtaggtcccgt...64...agcaagttacttaataccctt---	<b>CTCTcTTGGCAG</b>	<b>GAacACCg</b>
C.Por	ggcaccag	gtgggtagacct...74...----gatacctaataccttcctc	<b>CTCTTGGCAG</b>	<b>GAacACCg</b>
O.Cun	ggcaccag	gtgggcccacct...89...----agttatctcat-cctgccctc	<b>CTCTTGGCAG</b>	<b>GAgcACCg</b>
C.Fam	ggcaccag	gtgggtagacct...132...----gttacctaacccttcctc	<b>CTCTTGGCAG</b>	<b>GAgcACCg</b>
S.Sus	gacaccag	gtggggggcctg...76...----gttacctaatacccttcctc	<b>CTCTTGGCAG</b>	<b>GAgcACCg</b>
O.Avi	gacaccag	gtgggtcggcct...82...----gttacctaatacccttcctc	<b>CTCTTGGCAG</b>	<b>GAacACCg</b>
L.Afr	gacatcag	gtgggttagacct...112...----atttaactcttctcctc	<b>TTGGCAG</b>	<b>GAacACCg</b>
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id=562351 gene=ENSG00000197694 name=SPTAN1 segment=chr9.131369983.131370130.1 type=IN

Figure 539: CS=10.14



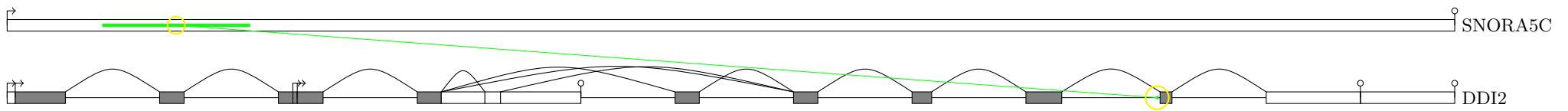
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R. Mac	agacctat	gtgactgttcct...74...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgtttt
P. Tro	agaccttt	gtgactgttcct...75...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgtttt
P. Abe	agacctct	gtgactgttcct...75...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgtttt
C. Jac	agatctat	gtaactgttcct...75...acagagtctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgtttt
M. Mus	agaccttc	gtgactgtactt...74...acagagtctgtatagttgtc	AGATT	TCTGTGCCGA	tggtccatacataaagattttaaaaactttttaaacatgtatg	-----g	tttattta
R. Nor	agaactgc	gtgactgtacct...74...acagggctctgtatagttgtc	AGATT	TCTGTGCCGA	tggtccatacat	-----aaagctttttaa	-----
C. Por	agactctc	gtgactgttcct...75...acagagtctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacac	-----	-----ttttttt
O. Cun	agacctct	gtgactgttcct...75...acagagtctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	aatgtttg
F. Cat	agacctat	gtgactgttcct...75...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgttta
B. Tau	agacctgt	gtgactgttcct...73...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgcttt
E. Cab	ggagctcc	gtgactggctcct...73...acagggctctgcagagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgctg
S. Sus	agacttac	gtgactgttcct...75...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgttgg
O. Avi	agacctgt	gtgactgttcct...75...acagggctctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgcttt
L. Afr	ggacccaa	gtgactgttcct...73...gacaggtctgtatagttatc	AGATT	TCTGTGCCGA	tggtccatacat	-----g	tttgctg
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id=817053 gene=ENSG00000252712 name=SCARNA14 segment=chr15.66639545.66639680.-1 type=EN

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P. Tro	tctcaaag	gtaccactgcc...218...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
P. Abe	tctcaaag	gtaccactgcc...519...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
C. Jac	tctcaaag	gtaccactccc...214...aacagctctca-ttaataatcaat	TTGCACAG	AtAAATTTt
M. Mus	tctcaaag	gtacttccctcc...188...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
R. Nor	tctcaaag	gtacttccctcc...172...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
C. Por	tctcaaag	gtacttccatcc...187...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
O. Cun	tctcaaag	gtatccccgtcc...221...-acagctcccgttaataatcaat	TTGCACAG	AtAAATTTt
F. Cat	tctcaaag	gtacccttcc...199...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
B. Tau	tctcaaag	gtaccctcattc...214...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
E. Cab	tctcaaag	gtaccctatcc...193...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
S. Sus	cctcaaag	gtacaccatcc...188...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
O. Avi	tctcaaag	gtaccctcattc...217...-acagctctcacttaataatcaat	TTGCACAG	AtAAATTTt
L. Afr	tctcaaag	gtacccttggac...147...-acagctcccacttaataatcaat	TTGCACAG	AtAAATTTt
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id=161935 gene=ENSG00000188779 name=SKOR1 segment=chr15.68124687.68124944.1 type=IN VIEW

Figure 540: CS=11.7



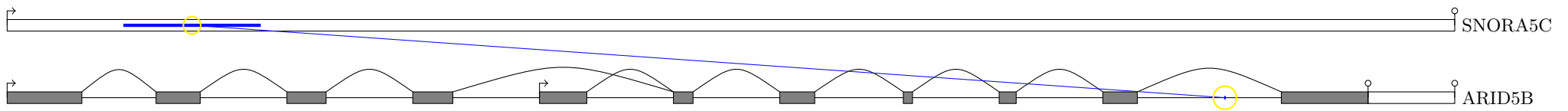
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R. Mac	tgtagccc	t--GCAGtCAAGtCAAATT	cagtgcccgttcctgtcata--...87...ctgtggac--acta	ctccaggt
P. Tro	tgtagcct	t--GCAGtCAAGtCAAATT	cagtgcccgtttctgtcata--...88...ctgtggac--agtg	ctccaggt
P. Abe	tgtagccc	t--GCAGtCAAGtCAAATT	cagtgcccgttcctgtcata--...92...ctgtggac--agtg	ctccaggt
M. Mus	gctatccc	t--GCAGtCAAGtCAAATT	tcagttccta-tcctctcatg--...90...--gcagacattgca	ctctgggt
R. Nor	tactccgc	t--GCAGtCAAGtCAAATT	tcagttccta-tcctctcatg--...91...--gcagacattgca	ctccaggc
O. Cun	taaatacac	t--GCAGtCAAGtCAAATT	cagctctgg--cctgtggtggt...85...ctgcagacaggggt	tctggg--
C. Fam	ccgcacct	t--GCAGtCAAGtCAAATT	cagctcccattcccgtcata--...90...--gcagacagggca	ccccagaa
F. Cat	--acgcc	cGGGCAGtCAAGtCAAATT	cggccccgcctctgttcta--...89...--gcagacagtcca	cttcaggc
B. Tau	ctcagtc	t--GCAGtCAAGtCAAATT	cagc-cctgttcccgtgtag--...89...--tcggacatggta	tgcccgg
E. Cab	ctcagccc	t--GCAGtCAAGtCAAATT	cagccccggttccctgtcgta--...88...ctgtggacagagca	ccccag--
S. Sus	cttgggccc	t--GCAGtCAAGtCAAATT	cagtcctctgtctgtctgtg--...88...--gcgaacatggtg	cccctggg
L. Afr	tcagctcc	t--GCAGtCAAGtCAAATT	cagcacctgtcctatcata--...92...--acagacactgtg	ctctggca
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id=24590 gene=ENSG00000201772 name=SNORA5C segment=chr7\_45144505.45144641.-1 type=EN

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R. Mac	ggatgcag	gtatttgggatg...4163...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
P. Tro	ggatgcag	gtatttgggatg...4648...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
P. Abe	ggatgcag	gtatttgggatg...4634...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
M. Mus	ggatgcag	gtattggactga...2861...-gttttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
R. Nor	ggatgcag	gtattaggattg...2909...-gttttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
O. Cun	ggatgcag	gtatttgggtcg...2054...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
C. Fam	ggatgcag	gtatttgcactg...2422...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
F. Cat	ggatgcag	gtatttgcactg...2267...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
B. Tau	ggatgcag	gtatttgggatg...2094...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
E. Cab	ggatgcag	gtatttgggatg...2211...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
S. Sus	agatgcag	gtatttgggatg...3739...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
L. Afr	ggatgcag	gtatttgggatg...2139...tggtttgcattgtaacc	AGTTTGCTTGTCTGT	ttcctaattcacacag	agcgtcag
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Figure 541: CS=14.04



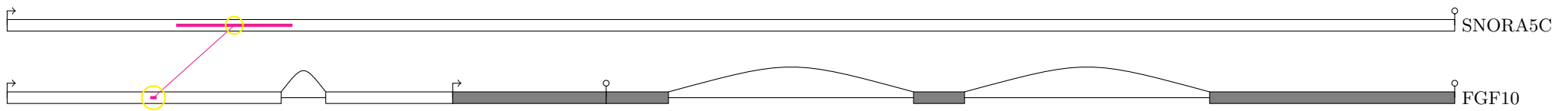
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R. Mac	---tgtagccc	tgcAGTCaAGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...82...ctgtggacacta	ctccaggt--
P. Tro	---tgtagcct	tgcAGTCaAGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...83...ctgtggacagtg	ctccaggt--
P. Abe	---tgtagccc	tgcAGTCaAGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...87...ctgtggacagtg	ctccaggt--
M. Mus	---gctatccc	tgcAGTCaAGTCAAATTCAGT	ttccta-tc--ctctcatgatgg...86...--gcagacattg	cactctgggt
R. Nor	tactccg--c	tgcAGTCaAGTCAAATTCAGT	ttccta-tc--ctctcatgatgg...87...--gcagacattg	cactccaggc
C. Por	--ctgta-ctc	tgcAGTCgAGTCAAATTCAG	cctctcgtctcactgtggcag---...82...ctgcggacagag	catcgcgg--
O. Cun	---taaatcac	tgcAGTCaAGTCAAATTCAG	ctctggc---ctgtgggtgggtg...82...ctgcagacaggg	gttctggg--
C. Fam	---ccgcacct	tgcAGTCaAGTCAAATTCAG	ctcccattc--ccgtcatagtg---...87...--gcagacaggg	caccccagaa
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B. Tau	--ctcag-tcc	tgcAGTCaAGTCAAATTCAG	-ccctgttc--ccgtggtagcag...86...--tcggacatgg	tatgcccggt
E. Cab	---ctcagccc	tgcAGTCaAGTCAAATTCAG	cccccgttc--ctgtcgtagcag---...85...ctgtggacagag	caccccag--
L. Afr	---tcagctcc	tgcAGTCaAGTCAAATTCAG	cactctgctc--ctatcatagcg---...89...--acagacactg	tgctctggca
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R. Mac	ccgcagag	gtgagttgcttt...4594...acaacatgtaatttaaacc	CATTtGGATAATTGACTGATT	tgacaagaag-acaaccttag...293...atatgttaccag	gtttcatc
P. Tro	cagcagag	gtgagttgcttt...4588...acaacatgtaatttaaacc	CATTtGGATAATTGACTGATT	tgacaagaag-acaaccttag...295...atatgttaccag	gtttcatc
P. Abe	cagcagag	gtgagttgcttt...4609...acaacatgtaatttaaacc	CATTtGGATAATTGACTGATT	tgacaagaag-acaaccttag...295...atatgttaccag	gtttcatc
M. Mus	catctgag	gtgagttgctgc...2859...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...284...atgtttttccag	gtttcatc
R. Nor	cgtctgag	gtgagtttctgt...3410...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...282...atgtttttccag	gtttcatc
C. Por	cgtcagag	gtgagttgctgg...3230...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaggaag-acaaccttag...287...atgtttttccag	gtttcatc
O. Cun	catcagag	gtgagttgctgc...2949...--acgtgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...302...atattttatcag	gtttctgc
C. Fam	caccagag	gtgagttgctgt...3256...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaaa-acaaccttag...294...atattttatcag	gtttcatc
F. Cat	catcagag	gtgagttgctgt...3057...--gcatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaaaaaacacactca...290...atattttatcag	gtttcatc
B. Tau	catcagag	gtgagttgctgt...2877...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...297...atattttatcag	gtttctgc
E. Cab	catcagag	gtgagttgctgt...2956...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...294...atattttatcag	gtttcatc
L. Afr	cagccgag	gtgagttgctgt...3273...--acatgtaatttaaaccctat	TGGATAATTGACTGATT	tgacaagaag-acaaccttag...295...aatattttatcag	gtttcatc
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id=320538 gene=ENSG00000150347 name=ARID5B segment=chr10\_63845660.63850620.1 type=IN

Figure 542: CS=10.14



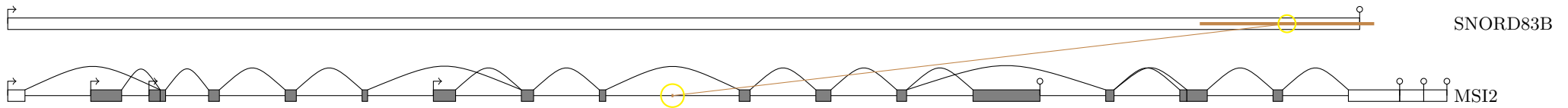
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R.Mac	tgtag-ccc	tgcagtca	AGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...	82...	ctgtggacacta--	ctccaggt
P.Tro	tgtag-cct	tgcagtca	AGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...	83...	ctgtggacagtg--	ctccaggt
P.Abe	tgtag-ccc	tgcagtca	AGTCAAATTCAGTG	cccgttt--ctgtcatagcggg...	87...	ctgtggacagtg--	ctccaggt
M.Mus	gctat-ccc	tgcagtca	AGTCAAATTCAGT	tcctatc--ctctcatgatggg...	85...	--gcagacattgca	ctctgggt
R.Nor	tactc-cgc	tgcagtca	AGTCAAATTCAGT	tcctatc--ctctcatgatggg...	86...	--gcagacattgca	ctccaggc
C.Por	ctgta-ctc	tgc	AGTCTGAGTCAAATTCAG	ccttctctcactgtggcag---	82...	ctgcggacagag--	catcgcgg
O.Cun	taaat-cac	tgcagtca	AGTCAAATTCAGT	ctctggc---	82...	ctgcagacaggg-g	ttctggg-
B.Tau	ctcag-tcc	tgcagtca	AGTCAAATTCAG	ccctgttc--ccgtggtagcag--	86...	--tcggacatggta	tgcccggg
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S.Sus	cttgg-ccc	tgcagtca	AGTCAAATTCAGT	ccctgct--ctgtcgtggcggg...	84...	--gcgaacatggtg	cccctggg
O.Avi	ctcag-ccc	cg	AGTCTAGTCAAATTCAG	ccctgttc--ccgtggtagcag--	86...	--acggacacagta	tacccggg
L.Afr	-tcagctcc	tgcagtca	AGTCAAATTCAG	cacctgctc--ctatcatagc--	89...	--acagacactgtg	ctctggga
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id=24590 gene=ENSG00000201772 name=SNORA5C segment=chr7\_45144505.45144641.-1 type=EN

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R.Mac	-tagcaacg	a-attgcccagag...	250...	gcccacctctggc---	ttagaat--	CACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	229...	agagccagaag	gtgccaac
P.Tro	-tagcagcg	a-attagccagag...	250...	gcccacctctggc---	ttagaat--	CACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	229...	agagaccagaag	gtgccaac
P.Abe	-tagcagcg	a-attagccagag...	250...	gcccacctctggc---	ttagaat--	CACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	229...	agagaccagaag	gtgccaac
M.Mus	ggagccgc-	a-attagcaggag...	244...	cccacctctggc---	tgaaaagc--	ACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	224...	aaggaccagaag	gtgccaac
R.Nor	ggagccgc-	a-attagcaggag...	247...	cccacctctggc---	tgaaaagc--	ACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	229...	aaggaccagaag	gtgccaac
C.Por	ttagcagc-	a-attagctcggc...	239...	ccacctctggc---	ttagaatca--	CTGAcATTTaGACT	caGGCTtcaacctgtttacaagcgcg...	237...	agggaccagaag	gtgccaac
O.Cun	-gggcagcg	agaggaccgga...	223...	---cctctggc---	tcggaaccacca	CTGAcATTTaGACT	ctgagcttcaacctgtttac-----	245...	ggggaccaggag	gtgccaac
B.Tau	ttcgctgc-	a-attagcccag...	283...	ccacctctggc---	ttagaatca--	CTGAcATTTaGACT	ccaggcttcaacctgtttac-----	269...	agggactagacg	ctgccaac
E.Cab	tgcgcagc-	a-attagccggag...	250...	ccacctctggc---	ttagaatca--	CTGAcATTTaGACT	ccaggcttcaacctgtttac-----	232...	agcgaccagaag	gtgccaac
S.Sus	ttcgccgc-	a-attagccggag...	254...	cccacctctggc---	ttagaatc--	ACTGAcATTTaGACT	ccaggcttcaacctgtttac-----	247...	agggaccagaag	gtgccaac
O.Avi	ttcgctgc-	a-actagcccag...	283...	ccacctctggc---	ttagaatca--	CTGAcATTTaGACT	ccAGGCTtcaacctgtttacaagcggg...	262...	agggactggaca	ctgcccagc
L.Afr	ttaggagc-	a-gttaaccggac...	238...	---cctctggc---	ttggaatca--	CTGAcATTTaGACT	ccaggcttcaacctgtttac-----	236...	cgggaccagaag	gtgcccagc
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id=382176 gene=ENSG0000070193 name=FGF10 segment=chr5\_44389250.44389808.-1 type=E5

Figure 543: CS=10.14



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R.Mac	cgggctca	gctgctcagtga...36...-acagactg	cggaaccgttcc	TTGTtg	CCTT	CCTTCTGAG	aacagc	cctgtggt
P.Tro	caggctca	gctgttcagtga...36...-acagactg	cggaaccgttcc	TTGTtg	CCTT	CCTTCTGAG	aacagc	cctgtggt
P.Abe	caggctca	gctgttcagtga...36...-acagactg	cggaaccgttcc	TTGTtg	CCTT	CCTTCTGAG	aacagc	cctgtggt
C.Jac	cgggctca	gctgctcagtga...35...gacagactg	cggaaccattc	TTGTtg	CCTT	CCTTCTGAG	aacagc	cctgtggt
M.Mus	cagaatca	gctgttctgtga...38...-gagactg	gaggaattattccc	TGTTGCCTT	CCTTCTGAG	aacagc	cctgttga	
R.Nor	caggctta	gctgttctgtga...38...-gagactg	gaggaaccattccc	TGTTGCCTT	CCTTCTGAG	aacagc	actattgg	
C.Por	ctcaggca	gctgttccgtga...43...-----	tgaggaaccattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	cctgttgt
O.Cun	cgggcgg	gctgttcaggga...41...-----	tgtggaaccattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	ggggcgg
C.Fam	ctgacca	gctgttcaggga...43...-----	tgcggaacattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	cccatggt
F.Cat	cagacca	gctgttcaggga...43...-----	tgcggaacattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	cctgtggt
B.Tau	tggggcca	gctgttcaggga...43...-----	tgcggaacattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	tctggtca
E.Cab	tcgggcca	gctgttcaggga...43...-----	tgcggaacattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	ctgtgtgt
L.Afr	caggcca	gctgttcaggga...44...-----	tgcggaacattccc	cctgttg	CCTT	CCTTCTGAG	aacagc	catgtggt
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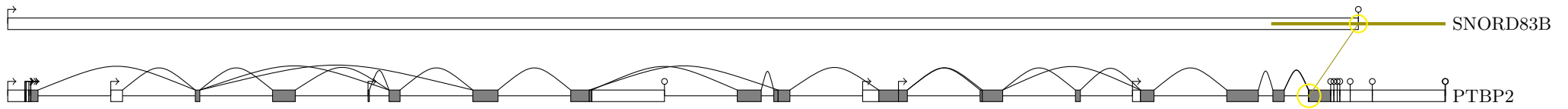
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R.Mac	gcacagag	gtaagattacc...4508...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...398...cttttccttag	ggtttggc
P.Tro	gcacagag	gtaagattacc...4508...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...398...cttttccttag	ggtttggc
P.Abe	gcacagag	gtaagattacc...4508...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...398...cttttccttag	ggtttggc
C.Jac	gcacagag	gtaagattacc...4513...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...393...cttttccttag	ggtttggc
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R.Nor	gcacagag	gtaagattacc...4496...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...407...tccttccttag	ggtttggc
C.Por	gcacagag	gtaagattacc...4510...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...401...ctcttccttag	ggtttggc
O.Cun	gcacagag	gtaagattacc...4563...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...347...tgtttccttag	ggttcggc
C.Fam	gcacagag	gtaagattacc...4506...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...404...tttttcttag	ggtttggc
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B.Tau	gcacagag	gtaagattacc...4531...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...379...tttctcttag	ggtttggc
E.Cab	gcacagag	gtaagattacc...4539...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...371...cttttccttag	ggtttggc
L.Afr	gcacagag	gtaagattacc...4508...tgaggtattagaggaagtaa	TTCAGGAAGGAAAGGACAA	ataaccacctccgctctggag	---...402...cttttccttag	ggtttggc
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id=29985 gene=ENSG00000153944 name=MSI2 segment=chr17\_55607086\_55674228\_1 type=IN

Figure 544: CS=10.92





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P.Tro	caggctca	gctgttcagtga...47...aacgcttccttggtgccttc	CTTCTGaGAACAGc	cctgtggt
P.Abe	caggctca	gctgttcagtga...47...aacgcttccttggtgccttc	CTTCTGaGAACAGc	cctgtggt
C.Jac	cgggctca	gctgctcagtga...46...gaccattccttggtgccttg	CTTCTGaGAACAGc	cctgtggt
M.Mus	cagaatca	gctgttctgtga...48...aattattccttggtgccttc	CTTCTGaGAACAGc	cctgttga
R.Nor	caggctta	gctgttctgtga...48...aacattccttggtgccttc	CTTCTGaGAACAGc	actattgg
C.Por	ctcaggca	gctgttccgtga...48...aacattccttggtgccttc	CTTCTGaGAACAGc	cctgttgt
O.Cun	cggcgccg	gctgttcaggga...46...aacattccttggtgccttc	CTTCTGaGAACAGt	ggggcggc
C.Fam	ctgaccca	gctgttcaggga...48...aacattccttgctgccttc	CTTCTGaGAACAGc	cccatggt
B.Tau	tggggcca	gctgtgcagtga...48...aagtattccttgctgccttc	CTTCTGaGAACAGc	tctggtca
E.Cab	tcgggcca	gctgttcagtga...48...aagattcctagctgccttc	CTTCTGaGAACAGc	ctgtgtgt
O.Avi	tggggcca	gctgttcagtga...48...aagtattcctgcctgccttc	CTTCTGaGAACAGc	tctggggc
L.Afr	caggccca	gctgttcagtga...49...aacgcttccttgctgccttc	CTTCTGaGAACAGc	catgtggg
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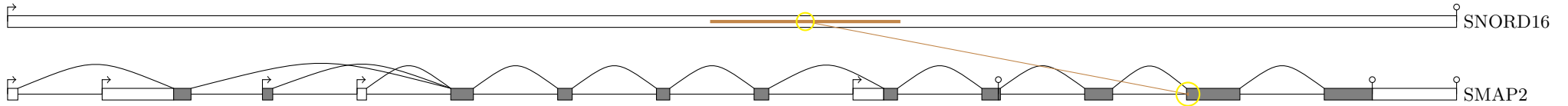
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P.Tro	tttttca	gtaagcaagctt...129...aagtatctaattttataatt	TTGTTTCAG	AAGagatc
P.Abe	tttttca	gtaagcaagctt...129...aagtatctaattttataatt	TTGTTTCAG	AAGagatc
C.Jac	tttttca	gtaagcaagctt...129...aagtatctaattttataatt	TTGTTTCAG	AAGagatc
M.Mus	tttttca	gtaagcaagctt...105...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
R.Nor	tttttca	gtaagcaagctt...106...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
C.Por	tttttca	gtaagcaagctt...133...aagtgtctaatttcataatt	TTGTTTCAG	AAGagatc
O.Cun	tttttca	gtaagcaagctt...124...aagtatctaattgataatt	TTGTTTCAG	AAGagatc
C.Fam	tttttca	gtaagcaagctt...124...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
B.Tau	tttttca	gtaagcaagctt...121...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
E.Cab	tttttca	gtaagcaagctt...151...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
O.Avi	tttttca	gtaagcaagctt...121...nnnatctaatttcataatt	TTGTTTCAG	AAGagatc
L.Afr	tttttca	gtaagcaagctt...131...aagtatctaatttcataatt	TTGTTTCAG	AAGagatc
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id=174350 gene=ENSG00000117569 name=PTBP2 segment=chr1\_97278663\_97278828.1 type=IN

Figure 545: CS=10.92





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P.Tro  attttgct  tgcaatgatgtcgtaatttgcgtccttactctgttctcagcGACAgTTGcTGCTGtcagtaagctggtacagaaggttgacgaaaattcttactgagca  agaataaa
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C.Jac  attttgct  tgccatgatgtcgtaatttgcgtccttactctgttctcggcGACAgTTGcTGCTGtcagtaagctggtacagaggttgacgaaaattcttactgagca  agaataaa
M.Mus  tgggaact  tgcaatgatgtcgtaatttgcgtccttactctgttccagcGACAgTTGcTGCTGtcagtaagctggttcagaaggttgacgaaacattgttactgagca  agtagtaa
R.Nor  ggtggact  tgcaatgatgtcgtaatttgcgtccttactctgttccagcGACAgTTGcTGCTGtcagtaagctggttcagaaggttgacgaaatgttctgagca  agtaatga
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F.Cat  attttgct  tgcaatgatgtcgtaatttgcgtccttactctgttctcggcGACAgTTGcTGCTGtcagtaagctggttcagaaggttgacgaaaattcttactgagca  agacatga
B.Tau  ggcttcct  tgccatgatgtcgtaatttgcgtccgactctgttccagcGACAgTTGcTGCTGtcagtagctggttcagaaggttgacgaaaatttactgagca  aggcaaca
E.Cab  aatttact  tgcaatgatgtcgtaatttgcgtccttactctgttctcagcGACAgTTGcTGCTGtcagtaagctggttcagaaggttgacgaaaattcttactgagca  aggcagtc
L.Afr  gttttgct  tgcaatgatgtcgtaatttgcgtccttactctgttctcagcGACAgTTGcTGCTGtcattaagctggtacagaaggttgacgaaaattcttactgagca  aggcataa
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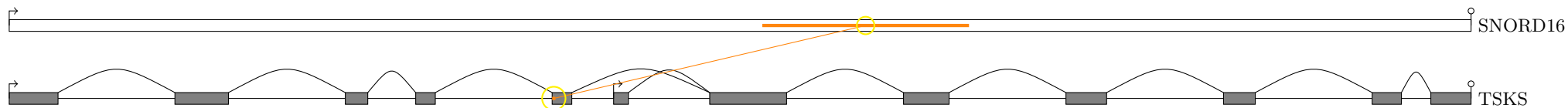
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P.Abe  tactcaag  gtagatttcatg...395...--gacctgatgtgtgttttctTGGCAG  CAATGTTc
C.Jac  tactcaag  gtagatttcatg...392...--gacctgatgtgtgttttctTGGCAG  CAATGTTc
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C.Por  tgcccaag  gtagagtccctg...398...--gactgatagtgtgttttctTGGCAG  CAATGTTc
O.Cun  tgcccaag  gtcggtttcatg...402...--gaccttgatgtatgttttctTGGCAG  CAATGTTc
C.Fam  tgcccaag  gtagatttcatg...412...--gtactcatttatgttttctTGGCAG  CAATGTTc
F.Cat  tgcccaag  gtagatttcatg...420...--gatctgtgtgtgtgttttctTGGCAG  CAATGTTc
B.Tau  cacccaag  gtagagttcaca...794...caaatctgatgtctgtctc--TGGCAG  CAATGTTc
E.Cab  tgcccaag  gtagagttcatg...380...--gaactgatgtgtgtgttttctCGGCAG  CAATGTTc
L.Afr  tgcccaag  gtagatttcatg...401...--aatctgatgtatgcttttctTGGCAG  CAATGTTc
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Figure 547: CS=12.35





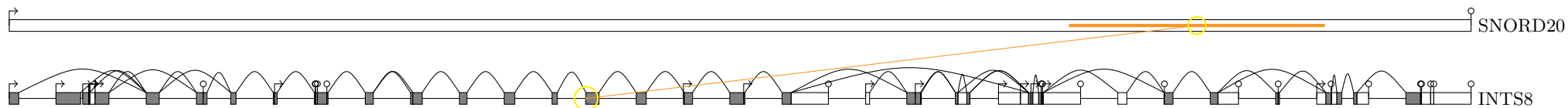
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R. Mac	at	ttttgct	tg	caatgatg	tcg	taattg	cg	tctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggtac	aga	aggttg	acg	aaaatt	tttact	gagca	ag-aaataa
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P. Abe	at	ttttgct	tg	caatgatg	tcg	taattg	cg	tctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggtac	aga	aggttg	acg	aaaatt	cttact	gagca	ag-aaataa
C. Jac	at	ttttgct	tg	ccatgatg	tcg	taattg	cg	tctact	ctg	ttctc	ggcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggtac	aga	cggttg	acg	aaaatt	cttact	gagca	ag-aaataa
M. Mus	tgg	gaact	tg	cagtgatg	tcg	taattg	cg	tctact	ctg	ttcac	agcga	CAGTT	CCTG	ct	GTCAG	TA	gctg	gttc	aga	aggttg	acg	aacatt	gttact	gagca	ag-tagtaa
R. Nor	ggt	ggact	tg	cagtgatg	tcg	taattg	cg	tctact	ctg	ttcac	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggttc	aga	aggttg	acg	aatgtt	gttctg	gagca	ag-taatga
C. Por	gtg	ctgct	tg	caatgatg	ttg	taattg	cg	tctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggttc	aga	agattg	acg	aaaatt	gttact	gagca	agataata-
O. Cun	tgt	gcgct	tg	ccgtgatg	tcg	taattg	cg	tctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	TGCTGG	ttc	aga	aggttg	acg	aaaatg	ctaact	gagca	ag-acagcc	
C. Fam	ctt	ctgct	tg	caatgatg	tcg	taattg	cg	tctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggttc	aga	aggttg	acg	aaaatt	cttact	gagca	ag-acctaa
F. Cat	at	ttttgct	tg	caatgatg	tcg	taattg	cg	tctact	ctg	ttctc	ggcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggttc	aga	aggttg	acg	aaaatt	cttact	gagca	ag-acatga
S. Sus	g	ttttgct	tg	caatgatg	tcg	taattg	cg	cctact	ctg	ttctc	agcga	CAGTT	CCTG	ct	GTCAG	ta	agctg	ggttc	aga	aggttg	acg	aaaact	cctact	gagca	ag-gcataa
L. Afr	g	ttttgct	tg	caatgatg	tcg	taattg	cg	tctact	ctg	ttcta	agcga	CAGTT	CCTG	ct	GTCAG	TA	taagct	ggttc	aga	aggttg	acg	aaaatt	cttact	gagca	ag-gcataa
	**		**		**		**		**		**		**		**		**		**		**		**	**	**

id=692784 gene=ENSG00000199673 name=SNORD16 segment=chr15\_66795150\_66795248\_-1 type=EN

H. Sap	aactcaag	gtgagccag	tgg...571...	-----	cagg	ccctc	gcctg	gtgt	-CTGAC	cCAG	GagAACTg
R. Mac	aactcaag	gtgagccag	tgg...871...	-----	cagg	ccctc	gcctg	gtgt	-CTGAC	cCAG	GagAACTg
P. Tro	aactcaag	gtgagccag	tgg...576...	-----	cagg	ccctc	gcctg	gtgt	-CTGAC	cCAG	GagAACTg
P. Abe	aactcaag	gtgagccag	tgg...582...	-----	cagg	ccctc	gcctg	gtgt	-CTGAC	cCAG	GagAACTg
C. Jac	gactcaag	gtgagccag	tgg...519...	-----	cagg	ccctc	gcctg	gtgt	-CTGAC	cCAG	GagAACTg
M. Mus	agttgaag	gtgagccg	tgt...694...	---	aagg	cagg	cccc	gcctg	ATGTcc	TGACcCAG	GagAACTg
R. Nor	aattgaag	gtgagccg	tgt...917...	-----	agg	cccc	gcctg	atgtt	CTGAC	cCAG	GagAACTg
C. Por	agctcaag	gtgagccag	tgg...93...	-----	agg	cccc	gcctg	gtgtc	CTGAC	cCAG	GagAACTg
O. Cun	agctcaag	gtgagacc	ggg...153...	...	ggg	aagg	cagg	ccgg	cgct	CTGGTGTc	CTGACcCAG
C. Fam	aactcaag	gtgagtag	tgg...302...	-----	ggg	cccc	gcctg	gtgtc	CTGAC	cCAG	GagAACTg
F. Cat	aactcaag	gtgagccac	agc...252...	-----	agg	cccc	gcctg	gtgtt	CTGAC	cCAG	GagAACTg
S. Sus	aactcaag	gtgagccag	cagc...428...	-----	agg	cccc	gcctg	gtgtc	CTGAC	cCAG	GagAACTg
L. Afr	aactcaag	gtggccag	tga...285...	-----	ggg	cccc	gcctg	gtt	TGACt	CAG	GagAACTg
	*	*	*		*	*	*	*	*	*	*

id=225939 gene=ENSG00000126467 name=TSKS segment=chr19\_50250730\_50251341\_-1 type=IN

Figure 549: CS=14.43



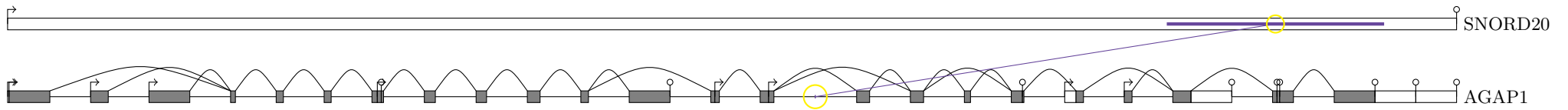
H. Sap	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctgtgtca
P. Tro	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctgtgtca
P. Abe	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctgtgtca
C. Jac	-agaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctgtcaac
M. Mus	-atgacaac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGTCAAG	ttctgatccag	ctatgtca
R. Nor	-atgacaac	tggatatgatgac--tga-ttacctgag--aaataa--ctgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctatgtca
C. Por	-gtgacaac	tggatatgatgac--tga-ttacctgag--aaaagactgatgaataaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	tcatgtca
O. Cun	-atggcagc	tggatatgatgac--aga-cggcctgag--aaggaa---tgatg---aaatctcgagaga	ATTCctCTAGATAGT	caagttctgatctgg	ctgtcagc
C. Fam	aaggata-c	tggatatgatgac--tga-ttatctgagaaaataa--ttgatg---aaa--tcaagaaa	ATTCctCTAGATAGTCAAG	Ttctgatccag	ctatgtct
B. Tau	aatgata-c	tggatatgatgac--tga-ttatctgag--aagtaa---ctgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctaagtca
E. Cab	aatgata-c	tggacatgatgactatga-ttatctgag--aaatta--ttgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctgtgtcg
S. Sus	aacgatg-c	tggatatgatgac--tga-ttatctgag--aaataa--ctgatg---aaatctcaagaaa	ATTCctCTAGATAGT	caagttctgatccag	ctaagttg
L. Afr	aacagta-c	tggacatgatgac--tgatttatctgag--aaataa--ttgatg---aacctcaagaaa	ATTCctCTAGATAGT	caagttctgaccag	atgtgttg
	*	**** ***** ** ***** ** ***** ** ** ** * ***** * * *			

id=370800 gene=ENSG00000207280 name=SNORD20 segment=chr2\_232321155\_232321234.-1 type=EN

H. Sap	tttctaaa	gtaagtaccttt...341...-----	tttgtttacaatatttctt	ACTG	TCTAG	GAATgtgt
P. Tro	tttctaaa	gtaagtaccttt...347...-----	tttgtttacaatatttctt	ACTG	TCTAG	GAATgtgt
P. Abe	tttctaaa	gtaagtaccttt...352...-----	cttgtttacaatatttctt	ACTG	TCTAG	GAATgtgt
C. Jac	tttctgaa	gtaagtaccttt...335...-----	tttgtttacaatatttctt	ACTG	TCTAG	GAATgtgt
M. Mus	tttctaaa	gtgagtaccttt...1097...--atactctgttttataatgt	TTTG	ACTG	TCTAG	GAATgtgt
R. Nor	tttctaaa	gtaagtacctct...577...-----	tttgtttcataatgtttctt	ACTG	TCTAG	GAATgtgt
C. Por	tttctaaa	gtaagtaccttt...1067...-----	tttgtttacaatgtttctt	ACTG	TCTAG	GAATgtgt
O. Cun	tttctaaa	gtaagtcctctt...330...-----	tttgtttacaatatttctt	ACTG	TCTAG	GAATgtgt
C. Fam	tttctaaa	gtaagtgatttt...315...aactttttgttttacaat-	ATT	TACTG	TCTAG	GAATgtgt
B. Tau	tttttgaa	gtaagtaccttt...343...-----	tttgtttataatatttctt	ACTG	TCTAG	GAATgtgt
E. Cab	tttctaaa	gtaagtgccctt...337...-----	tttgtttcacaatatttctt	ACTG	TCTAG	GAATgtgt
S. Sus	tttctaaa	gtaagtgccctt...348...-----	tttgtttataatatttctt	ACTG	TCTAG	GAATgtgt
L. Afr	tttctgaa	gtaagtgccctt...338...-----	tttgtttacaatatttctt	ACTG	TCTAG	GAATgttt
	*** * **	** *** *	***** * ** * ** * ** *			***** *

id=469350 gene=ENSG00000164941 name=INTS8 segment=chr8\_95861761\_95862143.1 type=IN

Figure 550: CS=10.14



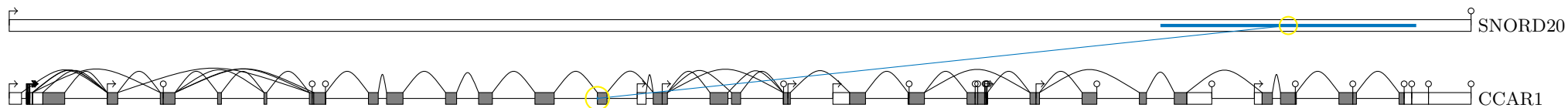
H. Sap	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctgtgtca
P. Tro	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctgtgtca
P. Abe	-acaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctgtgtca
C. Jac	-agaataac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctgtcaac
M. Mus	-atgacaac	tggatatgatgac--tga-ttacctgag--aaataa--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctatgtca
R. Nor	-atgacaac	tggatatgatgac--tga-ttacctgag--aaataa--ctgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctatgtca
C. Por	-gtgacaac	tggatatgatgac--tga-ttacctgag--aaaaagacttgatgaaataaactcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	tcatgtca
O. Cun	-atggcagc	tggatatgatgac--aga-cggcctgag--aaggaa---tgatg---aaatctcgagaga	ATTCCtCTAGATAGt	CAAGTT	ctgatctgg	ctgtcagc
C. Fam	aaggat-ac	tggatatgatgac--tga-ttatctgagaaaataa--ttgatg---aaa--tcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctatgtct
F. Cat	aaggat-ac	tggatatgatgat--tga-ttatctgagaaacataa--ctgatg---aaatccaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	tgaggtct
B. Tau	aatgat-ac	tggatatgatgac--tga-ttatctgag--aagtaa--ctgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctaagtca
E. Cab	aatgat-ac	tggacatgatgactatga-ttatctgag--aaatta--ttgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctgtgtcg
S. Sus	aacgat-gc	tggatatgatgac--tga-ttatctgag--aaataa--ctgatg---aaatctcaagaaa	ATTCCtCTAGATAGt	CAAGTT	ctgatccag	ctaagttg
L. Afr	aacagt-ac	tggacatgatgac--tgatttatctgag--aaataa--ttgatg---aacctcaagaaaattc	CTCTAGATAGt	CAAGTT	ctgacccag	atgtgttg
	*	**** * * * * *				

id=370800 gene=ENSG00000207280 name=SNORD20 segment=chr2\_232321155\_232321234.-1 type=EN

H. Sap	caattcag	gtaagcttacag...4940...gtccgcggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
P. Tro	caattcag	gtaagcttacag...4940...gtccgcggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
P. Abe	caattcag	gtaagcttatag...4940...gtccgcggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
C. Jac	caattcag	gtaagcttcag...4940...gtcccaggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
M. Mus	aaattcag	gtaagctcgct...4940...gtccggcgtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
R. Nor	aaattcag	gtaagctcacag...4940...gtccggcgtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
C. Por	gaactcag	gtaagccgag...4940...gatcggcgtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
O. Cun	caattcag	gtaagctcacgg...4940...gtccgctggtgttcacct	AACTTGtTTATtcCTAG	GGAATgtc
C. Fam	aaattcag	gtaagctcacgg...4940...gtccgaggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
F. Cat	aaattcag	gtaagctcgag...4940...gtccgaggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
B. Tau	gaattcag	gtaagctcacag...4940...gtcgcgctggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
E. Cab	aaattcag	gtaagcttacag...4940...gtccgcggtggtgttcacct	GACTTGtTTATtcCTAG	GGAATgtc
S. Sus	aaattcag	gtaagcgtatgg...4940...gtcgcgctggtattcatcc	GACTTGtTTATtcCTAG	GGAATgtc
L. Afr	taattcag	gtaagcgtacaa...4940...gtccgcggtggtgttcacct	GACTTGtTTATtcCTAG	GGcatgtc
	** ** ** *	*****	* * * * * * *	***** ** ** *

id=455735 gene=ENSG00000157985 name=AGAP1 segment=chr2\_236817551\_236839408.1 type=IN VIEW

Figure 551: CS=14.56



H. Sap	acaataac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctgtgtca
P. Tro	acaataac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctgtgtca
P. Abe	acaataac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctgtgtca
C. Jac	agaataac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctgtcaac
M. Mus	atgacaac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctatgtca
R. Nor	atgacaac	tggatatgatgac--tga-ttacctgag-aaataa--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctatgtca
C. Por	gtgacaac	tggatatgatgac--tga-ttacctgag-aaaaagacttgatgaataaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	tcatgtca
O. Cun	atggcagc	tggatatgatgac--aga-cggcctgag-aaggaa--ttgatg----aaatctcgagagaattcc	TCTAg	ATAGTCAAGT	tctgatctgg	ctgtcagc
C. Fam	aaggatc	tggatatgatgac--tga-ttatctgagaaaataa--ttgatg----aaa--tcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctatgtct
F. Cat	aaggatc	tggatatgatgat--tga-ttatctgagaaacataa--ctgatg----aaatccaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	tgaggtct
E. Cab	aatgatc	tggacatgatgactatga-ttatctgag-aaatta--ttgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctgtgtcg
S. Sus	aacgatgc	tggatatgatgac--tga-ttatctgag-aaataa--ctgatg----aaatctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgatccag	ctaagttg
L. Afr	aacgatc	tggacatgatgac--tgatttatctgag-aaataa--ttgatg----aacctcaagaaaattcc	TCTAg	ATAGTCAAGT	tctgaccag	atgtgttg
	*	**** * * * * *				*

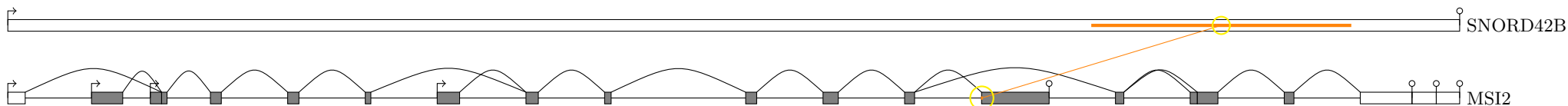
id=370800 gene=ENSG00000207280 name=SNORD20 segment=chr2.232321155\_232321234.-1 type=EN

H. Sap	gtgcaaag	gtttgattcag...589...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
P. Tro	gtgcaaag	gtttgattcaa...589...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
P. Abe	gtgcaaag	gtttgattcaa...591...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
C. Jac	gtgcaaag	gtttgattcca...580...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
M. Mus	gtgcaaag	gtttgattctg...454...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
R. Nor	gtgcaaag	gtttgatccca...653...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
C. Por	gtgcaaag	gtttgattcca...479...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
O. Cun	gtgcaaag	gtttgattcca...458...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gttatgct
C. Fam	gtgcaaag	gtttgattctg...410...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
F. Cat	gtgcaaag	gtttgattatg...533...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
E. Cab	gtgcaaag	gtttgattctc...901...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
S. Sus	gtgcaaag	gtttgattatg...786...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
L. Afr	gtgcaaag	gtttgattcta...552...acttttgacaggattgaatt	ATTGACTATaa	TAG	Gtaatgct
	*****	*****	*****	*****	** *****

id=750100 gene=ENSG0000060339 name=CCAR1 segment=chr10.70513835\_70514470.1 type=IN

Figure 552: CS=10.14





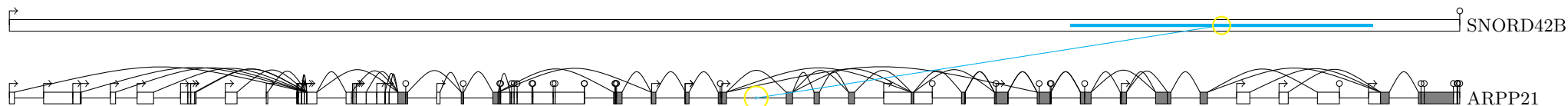
H.Sap	ctggtatc	gtgcatatgatgg-aaaagttttaatctcctgacacttgtgat	GTCTtCAAAGGAA	ccactgatgcac	ctgtggcc
R.Mac	ctggtatc	gtgcatgtgatgg-aaaagttttaatctcctgacatttgtgat	GTCTtCAAAGGAA	ccactgatgcac	gtgtggcc
P.Tro	ctggtatc	gtgcatatgatgg-aaaagttttaatctcctgacacttgtgat	GTCTtCAAAGGAA	ccactgatgcac	ctgtggcc
P.Abe	ctggtatc	gtgcatatgatgg-aaaagttttaatctcctgacacttgtgat	GTCTtCAAAGGAA	ccactgatgcac	gtgtggcc
C.Jac	ctggtatc	gtgcatatgatgg-aaaaattttaatctcctgacacttgtgat	GTCTGCAAAGGAA	ccgctgatgcac	atgtggcc
C.Por	tccatc	gtgcatatgatgg-aaaaaagtttaatctcctgagatttgtgat	GTCTtCAAAGGAA	ccactgatgcac	gtgtaggc
O.Cun	ccagcgtc	gtgcatatgatgg-aaaaatcttaattctcctgagactttagat	GTCTtCAAAGGAA	ccactgatgcac	atgtggac
C.Fam	ccagtatc	gtgcatatgatgg-aaaaatcttaattctcctgagactttagat	GTCTtCAAAGGAA	ccactgatgcac	gtgtggtc
F.Cat	ccagtacc	gtgcatatgatgg-aaaaattgtaacctcctgagactttagat	GTCTtCAAAGGAA	ccgctgatgcac	gtgtgctc
E.Cab	ccagtatc	gtgcacatgatgg-aaaaattaaccacctgaaattttagat	GTCTtCAAAGGAA	ccgctgatgcac	gtgtggcc
S.Sus	ctagtgtc	gtgcatatgatgg-aaaaactggaacttctcctgagcctttagat	GTCTtCAAAGGAA	ccactgatgcac	gtgtagcc
O.Avi	ctagagtc	gtgcatatgatgg-aaaaaattttaatctcctgagactttagat	GTGATGTCTtCAAAGGAA	ccactgatgcac	gtgtggcc
L.Afr	tcagtgtc	gtgcatgtgatgg-aaaaattttaatctcctgagactttagat	GTCTtCAAAGGAA	ccactgatgcac	gtgtggtc
		* ***** ** * ***** ** ***** ***** ***** *			***

id=151570 gene=ENSG00000238423 name=SNORD42B segment=chr17\_27047568\_27047634\_1 type=EN

H.Sap	gttcccag	gtgagtggttg...4442...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
R.Mac	gttcccag	gtgagtggttg...4722...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
P.Tro	gttcccag	gtgagtggttg...4664...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
P.Abe	gttcccag	gtgagtggttg...4775...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
C.Jac	gttcccag	gtaagtggctca...4441...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
C.Por	gttcccag	gtgagtggttg...2564...cacttgtaa-ttctgttctt	GTTTCaCTTTGcAG	AC----	tatttg
O.Cun	gttcccag	gtgagtggttg...3122...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
C.Fam	gttcccag	gtgagtttgtct...3788...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tacttg
F.Cat	gttcccag	gtgagtgctctt...3869...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
E.Cab	gttcccag	gtgagtgctctt...3969...-tgtgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
S.Sus	gttcccag	gtgagtagcttt...3219...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
O.Avi	gttcccag	gtgagtggttg...2264...--tctgttaatttctgttctt	TTTCacTTTGcAG	AC	ATTGc----
L.Afr	gttcccag	gtaagtgtctt...3991...--tctgttaatttctgttctta	TTTCacTTTGcAG	AC----	tatttg
		***** ** * * ***** ***** ***** ***** **			

id=29991 gene=ENSG00000153944 name=MSI2 segment=chr17\_55704665\_55709151\_1 type=IN VIEW

Figure 553: CS=14.04



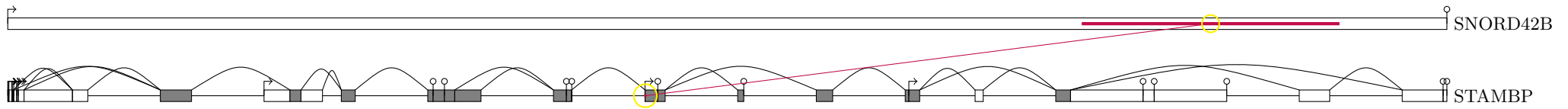
H. Sap	ctggtatc	gtgcatatgatgg-aaaagttaa-tctcctgacacttgta	TGTCtt	CAAAGGAAC	cactgatgcac	ctgtggcc
P. Tro	ctggtatc	gtgcatatgatgg-aaaagttaa-tctcctgacacttgta	TGTCtt	CAAAGGAAC	cactgatgcac	ctgtggcc
P. Abe	ctggtatc	gtgcatatgatgg-aaaagttaa-tctcctgacacttgta	TGTCtt	CAAAGGAAC	cactgatgcac	gtgtggcc
C. Jac	ctggtatc	gtgcatatgatgg-aaaaatkaa-tttcctgacacttgta	TGTCt	GCAAAGGAAC	cgctgatgcac	atgtggcc
M. Mus	gtggtatc	gtgcatatgatggaaaaaatctgaagtctcctgagacctgtga	TGTCtt	CAAAGGAAC	cactgatgcac	atgctggc
R. Nor	gtggtatc	gtgcatatgatggaaaaaatctgaagtctcctgagacctgtga	TGTCtt	CAAAGGAAC	cactgatgcac	gtttgaca
C. Por	tccatc	gtgcatatgatggaaaaaatctgaagtctcctgagacctgtga	TGTCt	CAAAGGAAC	cactgatgcac	gtgtaggc
O. Cun	ccagcgtc	gtgcatatgatgg-aaaaatcttaa-tttcctgagacttatga	TGTCtt	CAAAGGAAC	cactgatgcac	atgtggac
C. Fam	ccagcgtc	gtgcatatgatgg-aaaaatcttaa-tttcctgagacttatga	TGTCtt	CAAAGGAAC	cactgatgcac	gtgtggtc
E. Cab	ccagcgtc	gtgcacatgatgg-aaaaatkaa-ccacctgaaattgtga	TGTCtt	CAAAGGAAC	cgctgatgcac	gtgtggcc
S. Sus	ctagtgtc	gtgcatatgatgg-aaaaactgaa-cttctgaggcttgtga	TGTCtt	CAAAGGAAC	cactgatgcac	gtgtagcc
O. Avi	ctagagtc	gtgcatatgatggaaaaaatkaa-tctcctgagacttgta	TGTCtt	CAAAGGAAC	cactgatgcac	gtgtggcc
L. Afr	tcagtgtc	gtgcatatgatgg-aaaaatkaa-tttcctgagacttgta	TGTCtt	CAAAGGAAC	cactgatgcac	gtgtggtc
	**	*****	*****	*****	*****	*

id=151570 gene=ENSG00000238423 name=SNORD42B segment=chr17\_27047568\_27047634\_1 type=EN

H. Sap	accagaat	gtaagccccatc...4939...aaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
P. Tro	accagaat	gtaagccccatc...4939...aaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
P. Abe	accagaat	gtaagccccatc...4939...aaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
C. Jac	accagaat	gtaagccccatc...4939...aaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
M. Mus	accagat	gtaagtccaac...4939...atacttcctttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
R. Nor	accagaat	gtaagtcccagc...4939...acactttctttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
C. Por	actagaat	gtaagctctagt...4939...aaaaatttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
O. Cun	accagaat	gtaagccctatg...4939...gaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
C. Fam	acaagaat	gtaagcccattg...4939...gaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
E. Cab	acaagaat	gtaagcttcatc...4939...aaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
S. Sus	acaagaat	gtaagccccatc...4939...aaaaactttttattgatat	GTTTta	CTTTGct	GGCAg	cccagagc
O. Avi	acaagaat	gtaagccccttc...4939...aaaactttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
L. Afr	accagaat	gtaagccccgtt...4939...aaagctttttattgatat	GTTTta	CTTTGct	GGCAg	accagagc
	** ** *	*****	*	*****	*****	*****

id=414704 gene=ENSG00000172995 name=ARPP21 segment=chr3\_35732498\_35748465\_1 type=IN

Figure 554: CS=11.7



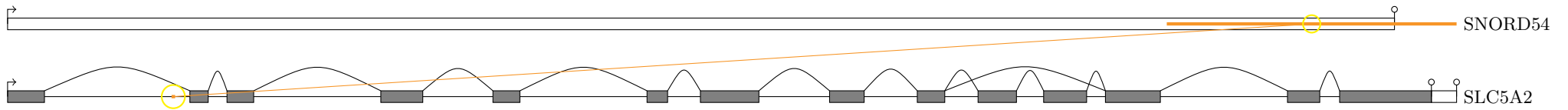
H. Sap	ctggtatc	gtgcatatgatgg-aaaagtttta-tctcctgacacttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	ctgtggcc
R. Mac	ctggtatc	gtgcatgtgatgg-aaaagtttta-tctcctgacatttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	gtgtggcc
P. Tro	ctggtatc	gtgcatatgatgg-aaaagtttta-tctcctgacacttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	ctgtggcc
P. Abe	ctggtatc	gtgcatatgatgg-aaaagtttta-tctcctgacacttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	gtgtggcc
C. Jac	ctggtatc	gtgcatatgatgg-aaaattttaa-tttcctgacacttgtga	<b>TGTCTGCAAAGGAA</b>	ccgctgatgcac	atgtggcc
M. Mus	gtggtatc	gtgcatatgatggaaaaaatctgaagtctcctgagacctgtga	<b>TGTCTCAAAGGAA</b>	ccactgatgcac	atgctggc
R. Nor	gtggtatc	gtgcatatgatggaaaaaatctgaagtctcctgagacctgtga	<b>TGTCTCAAAGGAA</b>	ccactgatgcac	gtttgaca
C. Por	tccatatc	gtgcatatgatggaaaaaagttaa-tctcctgagatttgtga	<b>TGTCTCAAAGGAA</b>	ccactgatgcac	gtgtaggc
O. Cun	ccagcgtc	gtgcatatgatgg-aaaaatcttaa-tttcctgagacttatga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	atgtggac
E. Cab	ccagtatc	gtgcacatgatgg-aaaaatataa-ccacctgaaatttgtga	<b>TGTCTTCAAAGGAA</b>	ccgctgatgcac	gtgtggcc
S. Sus	ctagtgtc	gtgcatatgatgg-aaaaactgaa-cttcctgaggcttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	gtgtaggc
D. Avi	ctagagtc	gtgcatatgatggaaaaaattttaa-tctcctgagacttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	gtgtggcc
L. Afr	tcagtgtc	gtgcatgtgatgg-aaaaattttaa-tttcctgagacttgtga	<b>TGTCTTCAAAGGAA</b>	ccactgatgcac	gtgtggc
	**	*****	*****	*****	*

id=151570 gene=ENSG00000238423 name=SNORD42B segment=chr17\_27047568\_27047634\_1 type=EN

H. Sap	aaaactg	g	t-aaaaaagaaaa...841...-gggaattgtgaccagctgtt	<b>TTCTCCTTTGGcA</b>	GATG	agga
R. Mac	aaaactg	g	t-aaaaaaaacca...842...-gagaattgtgaccagctgtt	<b>TTCTCCTTTGGcA</b>	GATG	agaa
P. Tro	aaaactg	g	t-aaaaaagaaaa...847...-gggaattgtgaccagctgtt	<b>TTCTCCTTTGGcA</b>	GATG	agga
P. Abe	aaaactg	g	t-aaaaaagaaaa...845...-gggaattgtgaccagctgtt	<b>TTCTCCTTTGGcA</b>	GATG	agga
C. Jac	aaaactg	g	t-aaaaacgaaca...881...-gggaattgtgaccagctgtt	<b>TTCTCCTTTGGCA</b>	GATG	agga
M. Mus	aaaactg	g	t-aagcgggtgta...978...-cagaacttaacctgctgtc	<b>TTCTCCTTT-GcA</b>	GATG	agaa
R. Nor	aaaactg	g	t-aaggatggctt...1263...-gggaattcttacctgttgtc	<b>TTCTCCTTT-GcA</b>	GATG	agaa
C. Por	aaaactg	g	t-aaaaacaaacg...1008...agggcgtcatggtgc-ttgtt	<b>TTCTTCTTTGGcA</b>	GATG	agga
O. Cun	aaaactg	g	t-aaagaaaccaa...857...-agaaattgtgacaagtgtt	<b>TTCTCCTTTGAcA</b>	GATG	agga
E. Cab	aaaactg	g	t-aaagaaaaaaa...818...-gggaattgtgacgagctgtt	<b>TTCTCCTTTGAcA</b>	GATG	agga
S. Sus	aaaactg	g	t-aaaacagcaag...811...-ggccattgtgatgagctgtt	<b>TTCTcaTTTGAcA</b>	GATG	agga
D. Avi	aaaactg	g	t-nnnnnnnnaaa...839...-gggaattgtgacgagctgtt	<b>TTCTaaTTTGAcA</b>	GATG	agga
L. Afr	aaaactg	g	t-aaaaaacaaac...1764...-tgggaattatgatgacgctt	<b>TTCTCCTTTGGcA</b>	GATG	agga
	*****	*		*	**	****

id=414590 gene=ENSG00000124356 name=STAMPB segment=chr2\_74076616\_74077501\_1 type=IN

Figure 555: CS=14.43



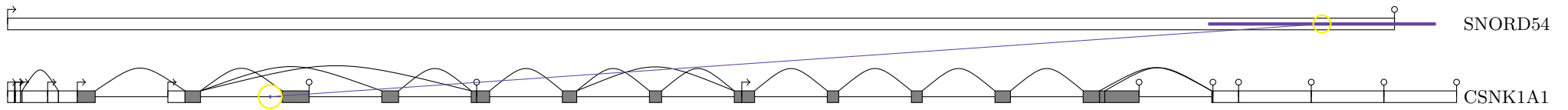
H. Sap	catcacagc	tggc	gatgaggaggtac	ctattgtgtt	gagtaac	gggtgata-ATTTT	atACGC	ATTCT	gAGCC	agca	gaagt	gaa
R. Mac	catcacagc	tggc	gatgaggaggtac	ctactgtgtt	gaataac	gggtgata-TTTT	atACGC	ATTCT	gAGCC	agta	gaagt	gaa
P. Tro	catcacagc	tggc	gatgaggaggtac	ctattgtgtt	gagtaac	gggtgata-ATTTT	atACGC	ATTCT	gAGCC	agca	gaagt	gaa
P. Abe	catcacagc	tggc	gatgaggaggtac	ctattgtgtt	gagtaac	gggtgata-ATTTT	atACGC	ATTCT	gAGCC	agca	gaagt	gaa
M. Mus	ggcgcggt	cggc	gatgaggagata	ccaacc	gtattgag	ttatagtgata-TTCTT	atACGC	ATTCT	gAGCC	gata	ggcga	act
C. Por	caaacggt	tggc	gatgaggagact	cctattgtgtt	gaataca	aatgataggttat-ACGC	atATTCT	gAGCC	agca	gctgag	gt	
O. Cun	ccggaagc	tggc	gatgaggagata	-caactgtgtt	gaattat	ggtgataa-CTTA	atACGC	ATTCT	gAGCC	agct	gaaac	ggg
C. Fam	atccttgt	tggc	gatgaggagacc	tactgtgtt	gaataat	gatgatag-TTCT	atACGC	ATTCT	gAGCC	agca	ggagt	taa
F. Cat	atccttgt	tggc	gatgaggagaca	aagaagtgtgtt	gaactac	gatgatag-TTTT	atACGC	ATTCT	gAGCC	agca	tcagt	tca
B. Tau	tgccgtgt	tggc	ggtgaggagaga	aattgctgtgtt	gaactac	gggtgatcg-TCTT	atACGC	ATTCT	gAGCC	cgcg	gcggt	tcg
E. Cab	gtcgtggt	tggc	gatgaggagaga	aattactgtgtt	gaactac	gggtgatag-TTTT	atACGC	ATTCT	gAGCC	agca	gtagt	tca
O. Avi	tgccgtgt	tggc	ggtgaggagaga	aattgctgtgtt	gaactac	gggtgatcg-TCTT	atACGC	ATTCT	gAGCC	cgcg	gcggt	tcg
L. Afr	ggtggagc	tggc	gatgaggaaa	atctag--gtgtt	gaattat	ggtgatag-TCTT	atACGC	ATTCT	gAGCC	agca	ccagt	tga
		***	*****		**	***	*	***		*****		

id=401134 gene=ENSG00000238650 name=SNORD54 segment=chr8.56986394.56986460.-1 type=EN

H. Sap	gctt	gtgaga	gtgaga	gttgg...1298	..taat	cttcagcc	gaga	aaacaaGGCT	gaGGAAT	GTGTTGAGG	ggct	gatgag	gtcca	aggct-...27	...tct	gtctccc	ag	tccat	gtg	
R. Mac	gctt	gtgaga	gtgaga	gttgg...1626	..taat	cttcagcc	gaga	aaacaaGGCT	gaGGAAT	GTGTTGAGG	acgcta	aatga	agcca	aggc--...28	...tct	gtctccc	ag	tccat	gtg	
P. Tro	gctt	gtgaga	gtgaga	gttgg...1283	..taat	cttcagcc	gaga	aaacaaGGCT	gaGGAAT	GTGTTGAGG	ggct	gatgag	gtcca	aggct-...27	...tct	gtctccc	ag	tccat	gtg	
P. Abe	gctt	gtgaga	gtgaga	gttgg...1303	..taat	cttcagcc	gaga	aaacaaGGCT	gaGGAAT	GTGTTGAGG	ggct	gatgag	gtcca	aggct-...27	...tct	gtctccc	ag	tccat	gtg	
M. Mus	gctt	gtgaga	gtgaga	cattga...416	..taat	cttcagc	ctgaa	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agc	taag	gaagcca	aatgatg...26	...tct	gttccc	ag	tctat	gtt	
C. Por	gctt	gtgaga	gtgaga	gttgc...422	..taat	cttcagc	ctgga	aaagaaGGCT	gaGGAAT	GTGTTGAGG	cgagg	aggctag	tgaag	tcc-----...35	...tct	gttccc	ag	tctat	gtg	
O. Cun	gctt	gtgaga	gtgaga	gttga...393	..taat	cttcagc	ctgag	aaacaaGGCT	gaGGAAT	GTGTTGAGG	gagg	cta	atgatg--cta	atgatg...45	...ct	accccc	ag	tccat	gtg	
C. Fam	gctt	gtgaga	gtgaga	gttgg...435	..taat	cttcagc	ctaaa	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agc	ta	atgatgcca	aatgatg...28	...c	ctgtctc	ag	tccat	gtg	
F. Cat	gctt	gtgaga	gtgaga	aattag...430	..taat	cttcagc	ctgaa	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agg	cta	atgatgcca	aatgatg...29	...c	ctgtccc	ag	tccat	gtg	
B. Tau	gctt	gtgaga	gtgaga	actgg...435	..taat	attcagc	ctgga	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agg	cta	atgatgcca	aatgatg...29	...c	ccaacccc	ag	tccat	gtg	
E. Cab	gctt	gtgaga	gtgaga	actga...457	..taat	cttcagc	ctgaa	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agg	cta	atgatgcca	aatgatg...29	...c	ctgtccc	ag	tccat	gtg	
O. Avi	gctt	gtgaga	gtgaga	cgtgg...436	..taat	attcagc	ctgga	aaagaaGGCT	gaGGAAT	GTGTTGAGG	agg	cta	atgatgcca	aatgatg...29	...c	ccaacccc	ag	tccat	gtg	
L. Afr	gctt	gtgaga	gtgaga	gtttaa...381	..taat	cttcagc	ctgaa	aaacaaGGCT	gaGGAAT	GTGTTGAGG	agg	cta	atgatgcca	aatgatg...28	...c	ctgtccc	ag	tccat	gtg	
	****	***	**	**		****	****	*	*	*****	*****	***	***	**	*			*	**	****

id=415710 gene=ENSG00000140675 name=SLC5A2 segment=chr16.31494584.31495993.1 type=IN

Figure 556: CS=19.24



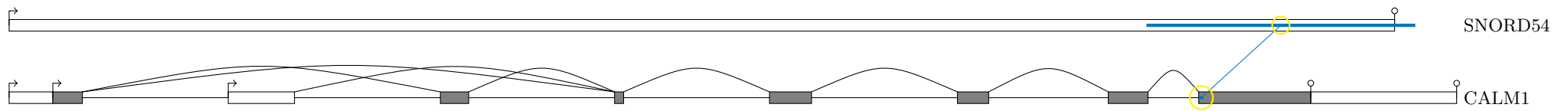
H. Sap	catacagc	tggc	gatgaggaggtac	tattgtgtt	gagtaac	gggtgata	aattttata	CGCTATTCTGAGC	-----	cagca	gaagt	gaa	
R. Mac	catacagc	tggc	gatgaggaggtac	tactgtgtt	gaataac	gggtgat	agttttata	CGCTATTCTGAGC	-----	cagta	gaagt	gaa	
P. Tro	catacagc	tggc	gatgaggaggtac	tattgtgtt	gagtaac	gggtgata	aattttata	CGCTATTCTGAGC	-----	cagca	gaagt	gaa	
P. Abe	catacagc	tggc	gatgaggaggtac	tattgtgtt	gagtaac	gggtgata	aattttata	CGCTATTCTGAGC	-----	cagca	gaagt	gaa	
C. Jac	cacagagc	cggc	gatgaggagac	cctactgtgtt	gagcgac	gggtgaa	actttcata	CGCTATTCTGAGC	-----	cagca	gaagt	gga	
C. Por	caaacggt	tggc	gatgaggagact	cctattgtgtt	gaattaca	atgatag	gtttata	CGCTATTCTGAGC	-----	cagca	gct	gaggt	
O. Cun	ccggaagc	tggc	gatgaggagata	-caactgtgtt	gaattac	gataac	taata	CGCTATTCTGAGC	-----	cagct	gaa	cggg	
C. Fam	atctttgt	tggc	gatgaggagacc	tactgtgtt	gaataat	gatgat	agtctata	CGCTATTCTGAGC	-----	cagca	ggag	tta	
F. Cat	atccttgt	tggc	gatgaggagaca	agaagtgtgtt	gagttat	gatgat	cgtttata	CGCTATTCTGAGC	-----	cagca	tcag	tca	
B. Tau	tgccgtgt	tggc	ggtgaggagaga	aattgtgtt	gacttac	ggtgat	cgtctata	CGCTATTCTGAGC	-----	ccg	gcg	ttcg	
E. Cab	gtcgtggt	tggc	gatgaggagaga	aattactgtgtt	gaattac	gggtgat	agttttata	CGCTATTCTGAGC	-----	cagca	gtag	tca	
S. Sus	accgtagc	tggc	gctgaggagaga	aattgc--	tgtgaac	tacagt	gatagttttata	CGCTATTCTGAGC	AGCAG	cgtta	ag	-----	
O. Avi	tgccgtgt	tggc	ggtgaggagaga	aattgctgtgtt	gactta	aggtgat	cgtctata	CGCTATTCTGAGC	-----	ccg	gcg	gttcg	
L. Afr	ggtggagc	tggc	gctgaggaaaa	atctag--	gtgttga	aattat	ggtgatag	ctttata	CGCTATTCTGAGC	-----	cagca	ccag	tga
		***	*****		*****	*	***	*****		*			

id=401134 gene=ENSG00000238650 name=SNORD54 segment=chr8.56986394.56986460.-1 type=EN

H. Sap	cacatacg	gtaaga	acc	cg...433...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcctc	ctttag	cagccccg
R. Mac	cacatacg	gtaaga	acc	cg...422...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcctc	ctttag	cagccccg
P. Tro	cacatacg	gtaaga	acc	cg...433...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcctc	ctttag	cagccccg
P. Abe	cacatacg	gtaaga	acc	cg...433...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcctc	ctttag	cagccccg
C. Jac	cacatacg	gtaaga	acc	ctg...444...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	tacctc	cttcag	cagccccg
C. Por	cacatacg	gtaag	cact	ctg...432...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gagc	gacgtgact	caacccc...42...	gacttc	ctttag	cagccccg
O. Cun	cacatacg	gtaaga	acc	ctt...439...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacatgact	caacccc...48...	attccc	ctttag	cagccccg
C. Fam	cacatacg	gtaaga	acc	cg...425...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcccc	gtttag	cagccccg
F. Cat	cacatacg	gtaaga	acc	cat...443...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcccc	ctttag	cagccccg
B. Tau	cacatacg	gtaaga	at	cctt...425...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcccc	cttttag	cagccccg
E. Cab	cacatacg	gtaaga	acc	cg...440...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcccc	cttttag	cagccccg
S. Sus	cacatacg	gtaag	ag	tccg...394...	ttttgtt	ccaacat	gtctt	cctcctcc	CTGTCC	TGGCG	gagc	gacgtgact	caacccc...47...	accccc	ggcgg	cagccccg
O. Avi	cacatacg	gtaaga	at	cctt...427...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttccg	cttttag	cagccccg
L. Afr	cacatacg	gtaaga	acc	ctc...439...	-----	ccaacat	gtctt	cctcctcc	GCTTAGAAA	TGGCG	gaac	gacgtgact	caacccc...49...	ttcccc	cttttag	ctgccccg
	*****	*****	*			*****	*****	*****	*****	*****	*	*****	*	*	*	*

id=54098 gene=ENSG00000113712 name=CSNK1A1 segment=chr5.148929077.148929637.-1 type=IN

Figure 557: CS=13.44



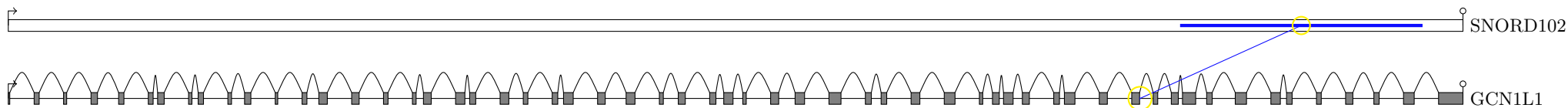
H. Sap	-catacagc	tggcgatgaggaggtac	tattgtgttgagtaac	gggtgataatt-tta	TACGct	ATTCTGAG	-----	ccagca	gaagtga--
R. Mac	-catacagc	tggcgatgaggaggtac	tactgtgttgaa	taacgggtgatagtt-tta	TACGct	ATTCTGAG	-----	ccagta	gaagtga--
P. Tro	-catacagc	tggcgatgaggaggtac	tattgtgttgagtaac	gggtgataatt-tta	TACGct	ATTCTGAG	-----	ccagca	gaagtga--
P. Abe	-catacagc	tggcgatgaggaggtac	tattgtgttgagtaac	agtgataatt-tta	TACGct	ATTCTGAG	-----	ccagca	gaagtga--
C. Jac	-cacagagc	cggcgatgaggagacac	ctactgtgttgagc	gagtgaaact-tca	TACGct	ATTCTGAG	-----	ccagca	gaagtga--
M. Mus	-ggcgcgt	cggcgatgaggagata	ccaaccgtattgag	ttatagtgatatttcta	TACGct	ATTCTGAG	ccGATAGG	-----	cgaact
R. Nor	-ggcgcgt	cggcgatgaggagata	ctactgtgttgaa	ttagtgatatttcta	TACGct	ATTCTGAG	ccGATAGG	TAACT	-----
C. Por	-caaacgtt	tggcgatgaggagact	cctattgtgttgaa	tacaatgataggt-tta	TACGct	ATTCTGAG	-----	ccagca	gc--tgaggt
O. Cun	-ccggaagc	tggcgatgaggagata	ca-actgtgttgaa	ttagtgataact-taa	TACGct	ATTCTGAG	-----	ccagct	gaaacggg-
C. Fam	-atccttgt	tggcgatgaggagacc	attactgtgttgaa	taataatgatgatagtt-cta	TACGct	ATTCTGAG	-----	ccagca	ggagttaa--
B. Tau	tgccgt-gt	tggcgtgaggagaga	aattgctgtgttgac	ttacgggtgacgctc-tta	TACGct	ATTCTGAG	-----	cccgcg	gcggttcg--
S. Sus	-accgtagc	tggcgtgaggagaga	aattgc--tgttgaa	ctacagtgatagtt-tta	TACGct	ATTCTGAG	-----	ccagca	gcgttaag--
L. Afr	-ggtggagc	tggcagtgaggaaa	atctag--gtgttgaa	ttagtgatagct-tta	TACGct	ATTCTGAG	-----	ccagca	ccagttga--
		***	*****	* ****	*	***	*****		

id=401134 gene=ENSG00000238650 name=SNORD54 segment=chr8.56986394.56986460.-1 type=EN

H. Sap	ctatgaag	gtaaaactaaat...137...	-----	gttactattatattgtc	ttTTCAG	AATtCGTa
R. Mac	ctatgaag	gtaaaatgaaat...138...	-----	gttactattatattgtc	ttTTCAG	AATtCGTa
P. Tro	ctatgaag	gtaaaactaaat...137...	-----	gttacgattatatttct	ttTTCAG	AATtCGTa
P. Abe	ctatgaag	gtaaaactaaat...138...	-----	gttacgattatattatct	ttTTCAG	AATtCGTa
C. Jac	ctatgaag	gtaaaactaagt...137...	-----	gttaccattatattgtc	ttTTCAG	AATtCGTa
M. Mus	ctatgaag	gtaaaggctaag...121...	----	atactgaaatggtatgat--ta	TTTGTCTTTCAG	AATtCGTa
R. Nor	ctatgaag	gtaaaggcctgg...94...	tgcaaaactgaaacgttat--	GGTTGTTTGTCTTTCAG	AATtCGTa	
C. Por	ctatgaag	gtgaaacattaa...119...	-----	ccaaaagtttcaat-----	tgtcTTTCAG	AATtCGTa
O. Cun	ctacgaag	gtaaggcgtccg...131...	-----	aagttatgat--tattgtc	ttTTCAG	AATtCGTa
C. Fam	ctatgaag	gtaaaaagcact...145...	-----	aagttatgat--tgtttgtc	ttTTCAG	AATtCGTa
B. Tau	ctacgaag	gtgagccaccac...124...	-----	aagttatgat--tattgtc	ttTTCAG	AATtCGTa
S. Sus	ctacgaag	gtaatagactac...143...	-----	agttatgat--tattgtc	ttTTCAG	AATtCGTa
L. Afr	ctatgaag	gtaaaactac...132...	-----	acgttacgat--tgtttgtc	ttTTCAG	AATtCGTa
		*** ****	** *		**	* *****

id=217016 gene=ENSG00000198668 name=CALM1 segment=chr14.90870859.90871032.1 type=IN

Figure 558: CS=17.94



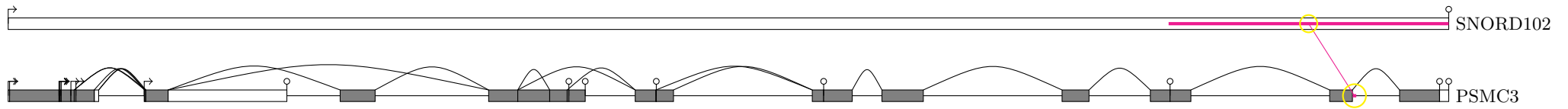
H.Sap	ggcactcg	agcttaatgatgact-gtttttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
R.Mac	cactctag	agcttaatgatgattggtttttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
P.Tro	ggcactcg	agcttaatgatgactggtttttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
P.Abe	cactctag	agcttaatgatgactggtttttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
M.Mus	cgctctgg	aacttaatgatgattg--tctgtttgattgc-ttgaagcaatgtgaaaacca	CATTtCACCGGCT	ctgagagtt	cttgagct--
R.Nor	tgctctgg	aacttaatgatgattg--tctatttgattgc-ttgaagcaatgtgaaaacca	CATTtCACCGGCT	ctgagagtt	cttgagtt--
C.Por	tactctag	agcttaatgatgattg--tctttgcaattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
O.Cun	tactccag	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtc--
C.Fam	tactctgg	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
B.Tau	cactccag	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgagagct	cttgagtt--
E.Cab	cactctag	agcttaatgatgattg--cctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	c--gagttgc
S.Sus	cgctctgg	agcttgatgatgatgc--tctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
L.Afr	cactctag	agcttgatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	CATTtCACCGGCT	ctgaaagct	cttgagtt--
		* * *	*** *****	* * ***** * * ***** ***** *****	* * **

id=426766 gene=ENSG00000207500 name=SNORD102 segment=chr13\_27829201\_27829272\_1 type=EN

H.Sap	agcAGCTG	GTGAGTG	gatctaccacacacctacct...240...caccctctgcag	gatgacga
R.Mac	agcAGCTG	GTGAGTG	gatctaccacacacctacct...240...caccctctgcag	gatgatga
P.Tro	agcAGCTG	GTGAGTG	gatctaccacacacctacct...240...caccctctgcag	gatgacga
P.Abe	agcAGCTG	GTGAGTG	gatctaccacacacctacct...240...caccctctgcag	gatgacga
M.Mus	agcAGCTG	GTGAGTG	ggtctcccacacacctacca...167...gctcctctgcag	gacgacga
R.Nor	agcAGCTG	GTGAGTG	ggtctcccacacacctacca...210...tgctcctctgcag	gatgacga
C.Por	agcAGCTG	GTGAGTG	gatctgctgcatacctacca...236...atcctctgcag	gatgatga
O.Cun	agcAGCTG	GTGAGTG	gatctgccacacacctacca...230...gccacctgcag	gaagacga
C.Fam	agcAGCTG	GTGAGTG	gatctgccacacacctacca...244...gccctctgcag	gatgatga
B.Tau	agcAGCTG	GTGAGTG	gctccgctcaccctgcc...193...gccctctgcag	gatgacga
E.Cab	agcAGCTG	GTGAGTG	gatctgccacacacctacca...242...gccctctgcag	gatgatga
S.Sus	agcAGCTG	GTGAGTG	gctctgcctcacacctacca...240...gccctccgcag	gatgatga
L.Afr	agcAGCTG	GTGAGTG	ggtctgccacacacctgcc...240...cccctgtgcag	gaagacga
	*****	*****	** * ** ** *	*** ** ** **

id=21916 gene=ENSG00000089154 name=GCN1L1 segment=chr12\_120576220\_120576498\_-1 type=IN

Figure 559: CS=11.7



H. Sap	ggcactcg	agcttaatgatgact-gtttttttgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
R. Mac	cactctag	agcttaatgatgattggTTTTTTTgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
P. Tro	ggcactcg	agcttaatgatgactggTTTTTTTgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
P. Abe	cactctag	agcttaatgatgactggTTTTTTTgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
M. Mus	cgctctgg	aacttaatgatgattg--tctgtttgattgcttgaatgtgaaaacca-CATTtCACCGgCTCTG	agagtt	cttgagct--			
R. Nor	tgctctgg	aacttaatgatgattg--tctatttgattgcttgaatgtgaaaacca-CATTtCACCGgCTCTG	agagtt	cttgagtt--			
C. Por	tactctag	agcttaatgatgattg--tctttgcaattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
O. Cun	tactccag	agcttaatgatgattg--tctttttgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtc--			
C. Fam	tactctgg	agcttaatgatgattg--tctttttgattgcttgaagcaatgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
B. Tau	cactccag	agcttaatgatgattg--tctttttgattgctttaaagcaacgtgaaaatga-CATTtCACCGgCTCTG	agagct	cttgagtt--			
E. Cab	cactctag	agcttaatgatgattg--cctttttgattgcttgaagcaacgtgaaaaaca-CATTtCACCGgCTCTG	aaagct	c--gagttgc			
S. Sus	cgctctgg	agcttgatgatgatgc--tctttttgattgctttaaagcaaatgtgaaaatga-CATTtCACCGgCTCTG	aaagct	cttgagtt--			
L. Afr	cactctag	agcttgatgatgattg--tctttttgattgctttGAAGcaATGTGaaAAACaCATTtCACCGgCTCTG	aaagct	cttgagtt--			
		* * *	*** *****	* * *****	* **	*****	***

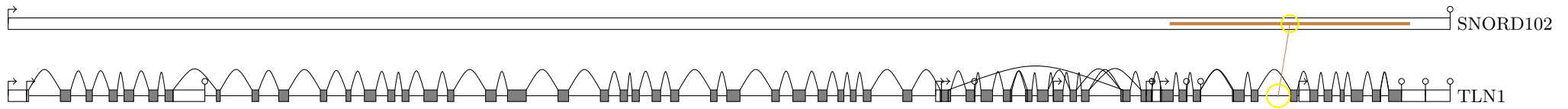
id=426766 gene=ENSG00000207500 name=SNORD102 segment=chr13.27829201.27829272.1 type=EN

H. Sap	tGGAGgCG	GTGAGTG	-----gtcagctgggg--tgggtgctg-----	...131...	tcccggctgtag	ggcatgat
R. Mac	tGGAGgCG	GTGAGTG	-----gtcaggcgggg--tgggtgctg-----	...131...	tcccggctgtag	ggcatgat
P. Tro	tGGAGgCG	GTGAGTG	-----gtcagctgggg--tgggtgctg-----	...125...	tcccggctgtag	ggcatgat
P. Abe	tGGAGgCG	GTGAGTG	-----gtcagctgggg--tgggtgctg-----	...131...	tcccggctgcag	ggcatgat
M. Mus	tGGAGgCG	GTGAGTG	-----gtcagcgtggg--tgggtgggt-----	...87...	gtcccggctgcag	ggatgat
R. Nor	tGGAGgCG	GTGAGTG	-----ctcagggtggg--tgggtgggc-----	...66...	tcttggctgcag	ggatgat
C. Por	tGGAGgCG	GTGAGTG	-----gcaggccagggctggatgc-----	...78...	gtctggctgcag	ggcatgat
O. Cun	tGGAGgCG	GTGAGTG	-----gtcaggcgggg--tgggcggtg-----	...68...	tcttggctgcag	ggcatgat
C. Fam	tGGAGgCG	GTGAGTG	-----ggagcacgtgg--agaggggat-----	...141...	tcttgggtgcag	ggcatgat
B. Tau	tGGAGgCG	GTGAGTG	-----cgggctgcagagg--tgggctg-----	...404...	gtctgggctgcag	ggcatgat
E. Cab	tGGAGgCG	GTGAGTG	-----gtggggtgagg--tgggtggct-----	...137...	tcccgggtgcag	ggcatgat
S. Sus	tGGAGgCG	GTGAGTG	-----gtggg--tgggtggacagggtg...	...116...	cctcgggctgcag	ggcatgat
L. Afr	tGGAGgCG	GTGAGTGGTTTCATGTCTTC	ttgccctttccctggctcc-----	...103...	tcccggctgtag	ggcatgat
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id=298302 gene=ENSG00000165916 name=PSMC3 segment=chr11.47440497.47440666.-1 type=IN

Figure 560: CS=13.52





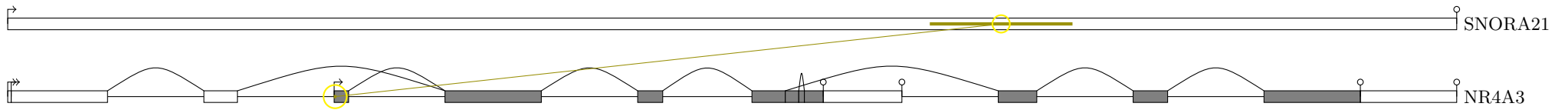
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R.Mac	cactctag	agcttaatgatgattggtttttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTctgaaagct</b>		cttgagtt--
P.Tro	ggcactcg	agcttaatgatgactggtttttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTCTGA</b>	aagct	cttgagtt--
P.Abe	cactctag	agcttaatgatgactggtttttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTCTGA</b>	aagct	cttgagtt--
M.Mus	cgctctgg	aacttaatgatgattg--tctgtttgattgc-ttgaagcaatgtgaaaacca	<b>CATTtCACCGGCTCTGAGAGTt</b>		cttgagct--
R.Nor	tgctctgg	aacttaatgatgattg--tctatttgattgc-ttgaagcaatgtgaaaacca	<b>CATTtCACCGGCTCTGAGAGTt</b>		cttgagtt--
C.Por	tactctag	agcttaatgatgattg--tctttgcaattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTCTGA</b>	aagct	cttgagtt--
O.Cun	tactccag	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	<b>ACATTtCACCGGCTCTGAAAGCt</b>		cttgagtc--
C.Fam	tactctgg	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTctgaaagct</b>		cttgagtt--
B.Tau	cactccag	agcttaatgatgattg--tctttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTcTGAGAGCTt</b>		cttgagtt--
E.Cab	cactctag	agcttaatgatgattg--cctttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTCTGA</b>	aagct	c--gagttgc
S.Sus	cgctctgg	agcttgatgatgatgc--tctttttgattgc-ttgaagcaatgtgaaaaaca	<b>CATTtCACCGGCTCTGA</b>	aagct	cttgagtt--
L.Afr	cactctag	agcttgatgatgattg--tctttttgattgctttgaagcaatgtgaaaaa	<b>CACATTtCACCGGCTCTGA</b>	aagct	cttgagtt--
		* * *	*** *****		* * ***** * * ***** ***** ***** ***** * * *

id=426766 gene=ENSG00000207500 name=SNORD102 segment=chr13\_27829201\_27829272\_1 type=EN

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R.Mac	tgctgctg	gtaagggagggc-...267...	-----tcattctccttgctccttg	<b>AGCCGGTGAGTG</b>	-----acacagcccactgtctcca--...163...	cttcttgcccag	accctgca
P.Tro	tactgctg	gtaagggagggc-...268...	-----atcattctccttgctccttg	<b>TCAGCCGGTGAGTG</b>	-----acacagcccactgtctcta--...163...	cttcttgcccag	accctgca
P.Abe	tactgctg	gtaagggagggc-...271...	-----atcattctccttgctccttg	<b>TCAGCCGGTGAGTG</b>	-----acacagcccactgtctcta--...163...	cttcttgcccag	accctgca
M.Mus	tgctgctg	gtaagggagggag-...185...	ctctcatctcatcactcctt--	<b>GCTTgTCAGCCGGTGAGTG</b>	-----gcaccccacactcttcctg--...153...	gtcccacacag	accctca
R.Nor	tgctgctg	gtaagg-aggcgc-...137...	acct--tctcatcactgctttt--	<b>GCTTgTCAGCCGGTGAGTG</b>	-----gcacaccacccttactgtg--...149...	gtcccacacag	accctca
C.Por	tgctgttg	gtaagtggtaag-...434...	ctcaccgtccctgctccctg	<b>TCAGCCGGTGAGTG</b>	-----acagcctgctctgtgctgt...148...	ttgttgcccag	actctgca
O.Cun	tactactg	gtaaggggggt-...250...	acttcatcattctccttgct	<b>GCTTgTCAGCCGGTGAGTG</b>	-----cacagccc-ctgtcttacc...108...	cgcttcccag	acgtgca
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B.Tau	tgctgctg	gtaagggggag-...239...	-tctgcttcatccttctctc	<b>GGCTtCTTGcAGCCGGTGAGTG</b>	-----acacacagcccactgtctt--...167...	catcttcccag	accctgca
E.Cab	tgctactg	gtgaggcgggag-...270...	-----atcattctccttgctccttg	<b>TCAGCCGGTGAGTG</b>	-----acgtacagcccactgtctt--...159...	ccttcccag	accctgca
S.Sus	tgctgctg	gtaagggggag-...255...	-----atcattctccttgctccttg	<b>TCAGCCGGTGAGTG</b>	-----acacagcccactgtctt--...175...	catctcccag	accctgca
L.Afr	tgctactg	gtaagggcgaga-...261...	-----atcattctccttgctcctg	<b>TCAGCCGGTGAGTG</b>	-----gtgcagcccactgtcttca--...139...	cgctctacag	accctgca
		* * * *		*		* * *	*** ** * **

id=659996 gene=ENSG00000137076 name=TLN1 segment=chr9\_35699459\_35699970\_-1 type=IN

Figure 561: CS=10.14



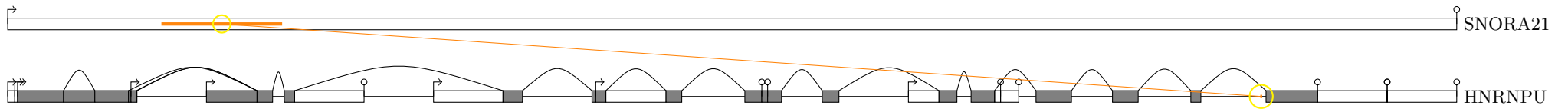
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R. Mac	ctatactc	ccccttttaaaa...44...aaggggagag-tgaaaacatc	GCTTTTGGGt	GAAGTGG	caacatggtgtgtg-tttgcttcaatcggtggtgtgacaagg	cgttcttg	
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R. Nor	tcacggtc	ccccttttaaaa...43...aaggggagag-tgaaaacacc	GCTTTTGGGt	GAAGTGG	caacatgctgtgtgttttaacttcaatcggtgtgtgacaaga	tgctcttg	
C. Por	ctcgttac	ccccttttaaaa...42...aagggcagag-tacaaaccc	GCTTTTGGGt	GAAGCGG	cagcgtgctgtgtgttatgcttcaatcggtggtgtgacaaga	tatcccc	
O. Cun	ctacatcc	ccccttttaaaa...44...-ggggcagagccaaaacacc	GCTTTTGGGt	GAAGCGG	cagcatgtgtgtgtgttttgcctcaatcggtggtgtgacaaga	cgttccac	
C. Fam	caaaactc	ccccttttaaaa...43...aagggtagag-taaaaaactc	GCTTTTGGGt	GAAGCAG	cagcatattgtgtgttttgcctcaatcggtggtgtgacaagg	tgtaccac	
F. Cat	cccccccc	ccccttttaaaa...43...aagggcagag-gaaaaaactc	GCTTTTGGGt	GAAGCAG	cagcatgctgtgtgtgttttgcctcaatcggtggtgtgacaagg	tattgcac	
B. Tau	ccatactc	acccttttaaaa...44...aagggcagag-tgaaaacacc	GCTTTTGGGt	GAAGCGG	cagcctgtgtgtgtgttttgcctcaatcggtggtgtgacaggg	tgttccac	
O. Avi	tcatactc	acccttttaaaa...44...aagggcagag-tgaaaacacc	GCTTTTGGGt	GAAGCGG	cagcatgtgtgtgtgttttgcctcaatcggtggtgtgacaagg	cgttccac	
L. Afr	ttgcactc	ccccttttaaaa...44...aagggcagaa-taaaaaactc	GCTTTTGGGt	GAAGCGG	caatatcctgtgtgttttgcctcaatcggtggtgtgacaagg	tgttccac	
	*	** ** *	*** **	** *	***** **	*** **	***** ** ***** *

id=663878 gene=ENSG00000199293 name=SNORA21 segment=chr17\_37009116\_37009247\_-1 type=EN

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R. Mac	ccctccag	gtaggtacgaag...845...gaactggcctctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
P. Tro	ccctccag	gtaggtccgaag...849...gaactggcctctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
P. Abe	ccctccag	gtaggttccgaag...849...gaactggcctctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
C. Jac	tcctccag	gtaggtccgaag...843...-aactggcctctcctcatcac	TGCTTCt	TCCAA	cAGGCcct
R. Nor	ccctccag	gtaggtccgaag...721...gaaccggcactcctcaaca	CTGCTTCt	TCCAA	cAGGCcct
C. Por	ccctccag	gtatgtctgcaa...826...gagctggccttctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
O. Cun	ccctccag	gtaggtctgaaa...890...ggaactgcttctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
C. Fam	tcctccag	gtaggtctaaag...857...gaactggcctctccttatca	CTGCTTCt	TCCAA	cAGGCcct
F. Cat	tcctccag	gtaggtctgcaa...851...gaactggactctccttatca	CTGCTTCt	TCCAA	cAGGCcct
B. Tau	ccctccag	gtaggtctcaag...1020...gaactggcctctccttatca	CTGCTTCt	TCCAA	cAGGCcct
O. Avi	tcctccag	gtaggtctgaag...1019...gaactggcctctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
L. Afr	ccctccag	gtaggtcttatg...808...gaatcggccttctcctcatca	CTGCTTCt	TCCAA	cAGGCcct
		***** ** *	*	**** *	***** *****

id=76177 gene=ENSG00000119508 name=NR4A3 segment=chr9\_102588115\_102589008.1 type=I5

Figure 562: CS=10.14



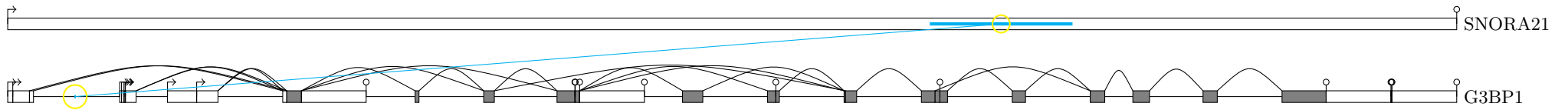
H. Sap	ctatactc	cccctt-	TTAAAAGCACTCAA	tgggcctgtggctaata	gacc---	80..	ggtgtgacaagg	cgttcttg
R. Mac	ctatactc	cccctt-	TTAAAAGCACTCAA	tgggcctgtgcctaata	gacc---	83..	ggtgtgacaagg	cgttcttg
P. Tro	ctatactc	cccctt-	TTAAAAGCACTCAA	tgggcctgtggctaata	gacc---	80..	ggtgtgacaagg	cgttcttg
P. Abe	ccatactc	cccctt-	TTAAAAGCACTCAG	tgggcctgtggctaata	gacc---	79..	ggtgtgacaagg	cgttcttg
C. Jac	ctatactc	cccctt-	TTAAAAGCACTCAG	tgggcctgtggctaata	gacc---	84..	ggtgtgacaagg	cgctcttg
M. Mus	gccaccgt	cccctt-	TTAAAAGCACTCAG	tgagccttttgcctagt	gacc---	85..	gttgtgacaaga	cacttctg
C. Por	ctccgtac	cccctt-	TTAAAAGCACTCG	ctgggccctgctcgtgac	cc---	83..	ggtgtgacaaga	tatcccc
O. Cun	ctacatcc	cccctt-	TTAAAAGCACTCAG	tgggcctttg-ctaata	gacc--	84..	ggtgtgacaaga	cgttccac
C. Fam	ccaaactc	cccctt-	TTAAAAGCACTCGG	tgggcc-ttgactgatgac	cc---	83..	ggtgtgacaagg	tgtaccac
F. Cat	cccccccc	cccctt-	TTAAAAGCACTCGTTG	ggcc-ttgactaatgacc	ccac..	81..	ggtgtgacaagg	tattgcac
B. Tau	ccatactc	accctt-	TTAAAAGCACTCAG	tgggccttttgcctgat	gacc---	84..	ggtgtgacaggg	tgttccac
E. Cab	gccgacc	cccctt-	TTAAAAGCACTCGG	tgggcc-ttggctgatgac	cc---	82..	gttgtgacagcg	tgttccac
O. Avi	tcatactc	accctt-	TTAAAAGCACTCAG	tgggccttttgcctgat	gacc---	84..	ggtgtgacaagg	cgttccac
L. Afr	ttgcactc	cccctt-	TTAAAAGCACTCATTG	ggccttttgcctgacc	cca-	82..	ggtgtgacaagg	tgttccac
		*** *	*****	* *	* ****		* *****	

id=663878 gene=ENSG00000199293 name=SNORA21 segment=chr17\_37009116\_37009247\_-1 type=EN

H. Sap	agcagggt	gtaagtaatttc...	386..	----	tgtcatttcctaaaacagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
R. Mac	agcagggt	gtaagtaatttc...	384..	----	tgtcatttcctaaaacagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
P. Tro	agcagggt	gtaagtaatttc...	386..	----	tgtcatttcctaaaacagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
P. Abe	agcagggt	gtaagtaatttc...	366..	----	tgtcatttcctaaaacagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
C. Jac	agcagggt	gtaagtaatttc...	382..	----	ttgtcatttcct-aaaacagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
M. Mus	agcagggt	gtaagtagtttc...	376..	----	tgtcatttcctaaaacaat	TTGAGTgGCTT	TTGATg	ttttttcttataaaaca--	aaat	tttctcttacag	caattctg
C. Por	agcagggt	gtaagtaatttc...	351..	----	gtcatttcctaaaacaatt	CGAGTgGCTT	TTGATg	ttttttcttataaaaaa--	aaat	tttctcttacag	caattctg
O. Cun	agcagggt	gtaagtaatttc...	355..	----	tgtcatttcctaaaagcagt	TTGAGTgGCTT	TTGATg	ttttttcttataaaaaa--	aaat	tttctcttacag	caattctg
C. Fam	agcagggt	gtaagtaatttc...	333..	----	tatcatttcctaaaagcagt	TTGAGTgGCTT	TTGATg	ttttcttataaaaaa--	aaat	tttctcttacag	caattctg
F. Cat	agcagggt	gtaagtaatttc...	338..	agatt	gtcatttcctaaaagCAGT	ttGAGTgGCTT	TTGATg	tttcttataaaaaa--	aaat	tttctcttacag	caattctg
B. Tau	agcagggt	gtaagtaatttc...	389..	----	tgtcatttcctaaaagcaat	TTGAGTgGCTT	TTGATg	tttcttataaaaaa--	aaat	tttctcttacag	caattctg
E. Cab	agcagggt	gtaagtaatttc...	382..	----	ttgtcaatttcctaaaagcaat	TTGAGTgGCTT	TTGATg	tttcttataaaaaa--	aaat	tttctcttacag	caattctg
O. Avi	agcagggt	gtaagtaatttc...	385..	----	tgtcatttcctaaaagcaat	TTGAGTgGCTT	TTGATg	tttcttataaaaaa--	aaat	tttctcttacag	caattctg
L. Afr	agcagggt	gtaagtaatttc...	351..	tcatt	gtcatttcctaaaagCAGT	ttGAGTgGCTT	TTGATg	ttttttcttataaaaaa	caat	tttctcttacag	caattctg
	*****	*****			*** *****	*** *****		*****		*****	*****

id=548260 gene=ENSG00000153187 name=HNRNPU segment=chr1\_245017806\_245018274\_-1 type=IN

Figure 563: CS=10.92



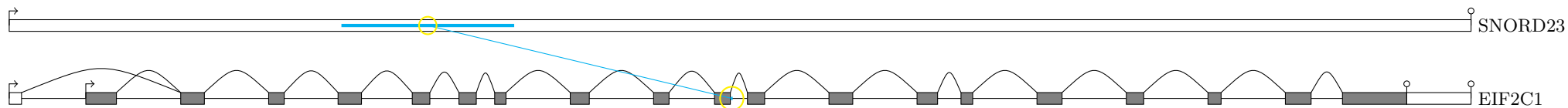
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R.Mac	ctatactc	ccccttttaaaa...44...-aaggggagag-tgaaaacatc	GCTT	TGGG	GAAGTGG	caacatgttgtgtg-tttgcttcaatcggtggtgacaagg	cgttcttg
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P.Abe	ccatactc	ccccttttaaaa...43...-aaggggagag-tgaaaacatc	GCTT	TGGG	GAAGTGG	caaca--tgtgttg-tttgcttcaatcggtggtgacaagg	cgttcttg
C.Jac	ctatactc	cccctttttaa...45...-aaggggagaa-tgaaaacacc	GCTT	TGGG	GAAGTGA	cagcatgatgtgtgtttgcttcaatcagtggtgacaagg	cgctcttg
R.Nor	tcacggtc	ccccttttaaaag...43...-aagggcagag-tgaaaacacc	GCTT	TGGG	GAAGTGG	caacatgctgtgtgtttaaacttcaatcggtggtgacaaga	tgctcttg
C.Por	ctcgttac	ccccttttaaaa...42...-aagggcagag-tacaaacccc	GCTT	TGGG	GAAG	cggcagcgtgtcgtgtgttatgcttcaatcggtggtgacaaga	tatcccc
O.Cun	ctacatcc	ccccttttaaaa...44...-ggggcagagccaaaagacc	GCTT	TGGG	GAAG	cggcagcatgtgtgtgtttgcttcaatcggtggtgacaaga	cgttccac
C.Fam	ccaaactc	ccccttttaaaa...42...aaaggtagag-taaaaacac	TGCTT	TGGG	GAAG	cagcagcatatgtgtgtttgcttcaatcggtggtgacaagg	tgtaccac
F.Cat	cccccccc	ccccttttaaaa...42...aaagggcagag-gaaaaacac	TGCTT	TGGG	GAAG	cagcagcatgctgtgtgtttgcttcaatcggtggtgacaagg	tattgcac
B.Tau	ccatactc	acccttttaaaa...44...-aagggcagag-tgaaaacacc	GCTT	TGGG	GAAG	cggcagcgtgtgtgtgtttgcttcaatcggtggtgacaggg	tgtccac
O.Avi	tcatactc	acccttttaaaa...44...-aagggcagag-tgaaaacacc	GCTT	TGGG	GAAG	cggcagcagatgtgtgtgtttgcttcaatcggtggtgacaagg	cgttccac
L.Afr	ttgcactc	ccccttttaaaa...43...aaagggcagaa-taaaaacac	TGCTT	TGGG	GAAG	cggcaatatctgtgtgtttgcttcaatcggtggtgacaagg	tgttccac
		* * * * *				* * * * *	

id=663878 gene=ENSG00000199293 name=SNORA21 segment=chr17\_37009116\_37009247\_-1 type=EN

H.Sap	--cgccgcac	gtaagaaaaaag...273...gcctcctagttgctaggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...314...ccgcaacaagtt	agggtgag
R.Mac	--cgtcgtat	gtaaaaaaaa...283...gcctcctagttgctaggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...313...ccgcaacaagtt	agggtgag
P.Tro	--ggccgcac	gtaagaaaaaag...272...gcctcctagttgctaggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...314...ccgcaacaagtt	agggtgag
P.Abe	--cgccgccc	gtaagaaaaaag...273...gcctcctagttgctaggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...314...ccgcaacaagtt	agggtgag
C.Jac	--cgccgcac	ggaataaaaaaa...283...gcctcctagttgcttaggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...312...ccgcaacaagtt	agggtgag
R.Nor	--tgaatgt	atgcagaaaaag...294...acctcccagttgcatgggggt	TTACTTCCCAAAAGT	acacgggccccaccttgtgg-...295...gagcagcatgtt	cggtctgag
C.Por	ggcagcgcgt	gggtttaaac-...277...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgg-...312...ccacatcatgtt	aggctgag
O.Cun	--cagcgcgc	ggacatgaaaga...281...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgg-...313...ctgcaacaagtt	aggctgag
C.Fam	--cgccacat	ggaattagaaa...310...-tcttagctgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgga...312...ccgcaacaagtt	aggctgag
F.Cat	--ggccgtat	ggaataaaaaaa...298...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgga...311...ccgcaacaagtt	aggctgag
B.Tau	gcgccacat	ggaat--aaag...295...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgg-...313...ccgcaacaagtt	aggctgag
O.Avi	gcgccacat	ggaat--aaag...294...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgg-...313...ccgcaacaagtt	aggctgag
L.Afr	--agccgat	agaaataaaaa...289...-tcttagttgcttaggggtt	CTTCCCAAAAGT	acacgggccccaccttgtgga...312...ccgcaacaagtt	aggctgag
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id=73831 gene=ENSG00000145907 name=G3BP1 segment=chr5\_151150805\_151151470\_1 type=I5

Figure 564: CS=10.14



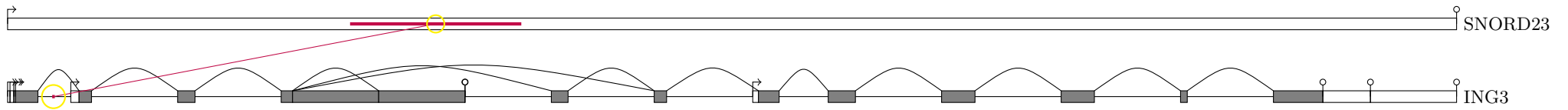
H. Sap	gagccccg	tgcccagtgatgacacc-ATCCTtGCTCCCCG	tgcccc-ccaggggctatggg--...47...gggctgagggca	cgggatgc
R. Mac	gagccctg	tgcccaatgatgacacc-ATCCTtGCTCCCCG	tgcccc-ccaggggctatggg--...47...gggctgagggca	cagggtgc
P. Tro	gagccccg	tgcccagtgatgacacc-ATCCTtGCTCCCCG	tgcccc-ccaggggctatggg--...47...ggactgagggca	cgggatgc
P. Abe	gagccccg	tgcccagtgatgacacc-ATCCTtGCTCCCCG	tgcccc-ccaggggctatggg--...47...gggctgagggca	cgggatgc
C. Jac	ggccccg	tgcccagtgatgacacc-ATCCTtGCTCCCCG	tgccccactaggggctgtgg--...49...gggctgagggca	cggggtac
M. Mus	ggaccctg	tgcccagtgatgataacc-ATCCTtGCTCCCCG	tg-cctactc-gggctgtgggc-...45...ggactgagggca	cagggtca
R. Nor	ggaccctg	tgcccagtgatgataacc-ATCCTtGCTCCCCG	tg-ccc-tcttgggctgtgggc-...45...ggactgagggca	cagggtcg
C. Por	caggactg	tgcccagtgatgac-tcc-ATCCTtGCTCCCCG	tg-ccc-ccaggggctgtgggc-...43...gggctgagggca	caggatcc
O. Cun	ggaccctg	tgcccagtgatgac-ccc-ATCCTtGCTCCCCG	tg-ccc-cccgggctgtgggc-...46...gggctgagggca	cagggtgc
C. Fam	agaccctg	tgcccagtgatgataacc-ATCCTtGCTCCCCG	tg-ccc-ccc-gggctgtgggc-...45...gggctgagggca	cggggtcc
B. Tau	ggcggccg	tgcccagtgatgacacc-ATCCTtGCTCCCCG	tg-tcc-gcagggactgtgggc-...46...gggctgagggca	cgtgttcc
E. Cab	gacccccg	tgctcaggatgacactc-ATCCTtGCTCCCCG	tg-ccc-ccaggggctgtgggc-...45...ggactgagggca	cgggggtc
L. Afr	ggacactg	tgcccagtgatgataacc-ATCCTtGCTCCCCG	tg-ccc-cccaggggctgtgggc-...44...gggctgagggca	caggctcc
	* *	*** * *****	***** * ** * **	** ***** * *

id=279510 gene=ENSG00000221803 name=SNORD23 segment=chr19.48259110.48259219.1 type=EN

H. Sap	gcggcCGG	GtGAGCAGG	caggccagacaacatctcg...90...acctatcccag	aaccgggc
R. Mac	gcggcCGG	GtGAGCAGG	caggccagacaacatctca...90...gcctatcccag	aaccgggc
P. Tro	gcggcCGG	GtGAGCAGG	caggccagacaacatctcg...90...acctatcccag	aaccgggc
P. Abe	gcggcCGG	GtGAGCAGG	caggccagacaacatctcg...90...acctatcccag	aaccgggc
C. Jac	gcggcCGG	GtGAGCAGG	caggccagacaacatcttg...91...gcctatccctag	aaccgggc
M. Mus	gcggcCGG	GtGAGCAGG	caggccagacaaagtctct...91...gcctatccctag	aaccgggc
R. Nor	gcggcCGG	GtGAGCAGG	caggccagacaaagtctct...90...gcctatccctag	aaccgggc
C. Por	gcggcCGG	GtGAGCAGG	caggccagacaacatctct...95...gcctatccctag	aaccgggc
O. Cun	gcggcCGG	GtGAGCAGG	caggccagacaacatctct...91...gcctatctctag	aaccgggc
C. Fam	gcggcCGG	GtGAGCAGG	caggccagacaacatctct...94...tcctatcccag	aatcgggc
B. Tau	gcggcCGG	GtGAGCAGG	caggccagacaacgtctct...93...gcctatcccag	aaccgggc
E. Cab	gcggcCGG	GtGAGCAGG	caggccagacaacatctct...93...gcctatcccag	aaccgggc
L. Afr	gtggcCGG	GtGAGCAGG	caggccagacaacatctct...89...gcctatccctag	aaccgggc
	* *****	*****	*** ***** **	** *****

id=777607 gene=ENSG00000092847 name=EIF2C1 segment=chr1.36367672.36367804.1 type=IN

Figure 565: CS=10.14



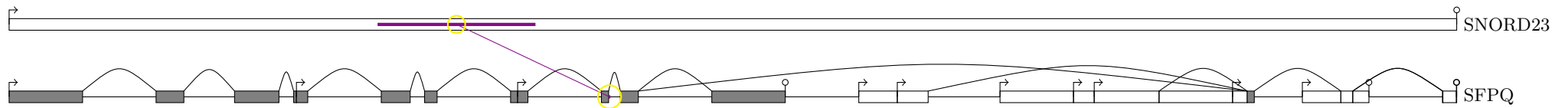
H. Sap	gagccccg	tgcccagtgatgaca-cca	<b>TCCTTgCTCCCCGT</b>	gcccc-ccaggggctatgggc-----	..46..	gggctgagggca	cgggatgc
R. Mac	gagccctg	tgcccaatgatgaca-cca	<b>TCCTTgCTCCCCGT</b>	gcccc-ccaggggctatgggc-----	..46..	gggctgagggca	cagggtgc
P. Tro	gagccccg	tgcccagtgatgaca-cca	<b>TCCTTgCTCCCCGT</b>	gcccc-ccaggggctatgggc-----	..46..	ggactgagggca	cgggatgc
P. Abe	gagccccg	tgcccagtgatgaca-cca	<b>TCCTTgCTCCCCGT</b>	gcccc-ccaggggctatgggc-----	..46..	gggctgagggca	cgggatgc
C. Jac	ggccccg	tgcccagtgatgaca-cca	<b>TCCTTgCTCCCCGT</b>	gccccactaggggctgtggg-----	..48..	gggctgagggca	cggggtac
M. Mus	ggaccctg	tgcccagtgatgataacca	<b>TCCTTgCTCCCCGT</b>	gccta-ct-cgggctgtgggcg-----	..44..	ggactgagggca	cagggtca
R. Nor	ggaccctg	tgcccagtgatgataacca	<b>TCCTTgCTCCCCGT</b>	gcctt-ct-tgggctgtgggcg-----	..44..	ggactgagggca	cagggtcg
C. Por	caggactg	tgcccagtgatgata- <b>CTCCa</b>	<b>TCCTTgCTCCCCGT</b>	gcccc-ca-ggggctgtgggcg-----	..42..	gggctgagggca	caggatcc
O. Cun	ggaccctg	tgcccagtgatgatacca	<b>TCCTTgCTCCCCGT</b>	gcccc-cg-ggggctgtgggcg-----	..45..	gggctgagggca	cagggtgc
C. Fam	agaccctg	tgcccagtgatgataacca	<b>TCCTTgCTCCCCGT</b>	gcccc-cc--gggctgtgggcga-----	..44..	gggctgagggca	cggggtcc
B. Tau	ggcgcccg	tgcccagtgatgacaccca	<b>TCCTTgCTCCCCGT</b>	<b>TCCGC</b> --agggactgtgggcgacatca..	..39..	gggctgagggca	cgtggtcc
E. Cab	gacccccg	tgctcagtgatgacactca	<b>TCCTTgCTCCCCGT</b>	gcccc-ca-ggggctgtgggcg-----	..44..	ggactgagggca	cgggggtc
L. Afr	ggacactg	tgcccagtgatgataacca	<b>TCCTTgCTCCCCGT</b>	gcccc-cg-agggctgtgggcg-----	..43..	gggctgagggca	caggctcc
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id=279510 gene=ENSG00000221803 name=SNORD23 segment=chr19.48259110.48259219.1 type=EN

H. Sap	tctgaaaa	gtgagtgcgcgg...43...	----gcgagtgagcgggca-gcgag	<b>ATGGcgGGAGgGAGGG</b>	---ggcggcgggggatgtttcctt---	..68..	tgacgtaagcgc	gtatttcg
R. Mac	tctgaaaa	gtgagtgcgcgg...43...	----gcgagtgagcgggca-gcgag	<b>ATGGcgGGAGgGAGGG</b>	---ggcggcgggggatgtttcctt---	..68..	tgacgtaagcgc	gtatttcg
P. Tro	tctgaaaa	gtgagtgcgcgg...43...	----gcgagtgagcgggca-gcgag	<b>ATGGcgGGAGgGAGGG</b>	---ggcggcgggggatgtttcctt---	..68..	tgacgtaagcgc	gtatttcg
P. Abe	tctgaaaa	gtgagtgcgcgg...43...	----gcgagtgagcgggta-gcgag	<b>ATGGcgGGAGgGAGGG</b>	---ggcggcgggggatgtttcctt---	..68..	tgacgtaagcgc	gtatttcg
C. Jac	tctgaaaa	gtgagtgcgcgg...43...	----gcgagtgagcgggca-gcgag	<b>ATGGcg--GAGAGGG</b>	aggggggcggcgggggatgtt-----	..72..	tgacgtaagcgc	gtatttcg
M. Mus	tttgaaaa	gtgagtgcgcgg...42...	----cgagtggccgggcgggcggg	<b>ATGGcgGGAGgGAGGG</b>	---ggagcgggggatgtttcctt---	..74..	tgacccagcgc	gtcccttc
R. Nor	tttgaaaa	gtgagtgcgcgg...42...	----cgagtggccgggcgggcggg	<b>ATGGcgGGAGgGAGGG</b>	---ggagcgggggatgtttcctt---	..67..	tgacccagcgc	gtaccttc
C. Por	tttgaaaa	gtgagtgcgtgg...44...	----agagtggacgggcaagcagg	<b>ATGGcgGGAGgGAGGGGAG</b>	---gcgggggatagttccttctc...	..67..	tgacgtaagcgc	gtattttg
O. Cun	tctgaaaa	gtgagtgcgcgg...44...	----cgagtggacgggcaggcggg	<b>ATGGcgGGAGgGAGGG</b>	---ggagcgggggatgtttcctt---	..78..	tgacgtaggcgc	gtacgctc
C. Fam	tctgaaaa	gtgagtgggcgg...44...	----cgagcggccgggcgggcggg	<b>ATGGcgGGAGgAAGGG</b>	---ggagcgggggatgtttcctt---	..75..	tgacgtcagcgc	gaccttcg
B. Tau	tctgaaaa	gtgagtgggcgg...38...	....gggaggagtagaccgctg	<b>CGGGATGGcgGGAGgGAGGG</b>	---ggagcgggggatgtttcctt---	..73..	tgacgtaaacgc	gtactttc
E. Cab	ctagaaaa	gtgagtgggcgg...40...	----cgagtggacggacaggcggg	<b>ATGGcgGGAGgGAGGG</b>	---ggagcgggggatgtttcctt---	..72..	cgacgtaggcgc	gtccgttc
L. Afr	tctgagaa	gtgagtgcgcgg...44...	----cgagtggccgggcgggcggg	<b>ATGGcgGGAGgGAGGG</b>	---ggcggcgggggatgtttcctt---	..71..	tgacgtaggcgc	gtattttc
	* * * * *	***** * * *		* * * * *		***** * * *		*** * * *

id=284484 gene=ENSG00000071243 name=ING3 segment=chr7.120590979.120591169.1 type=IN

Figure 566: CS=10.14



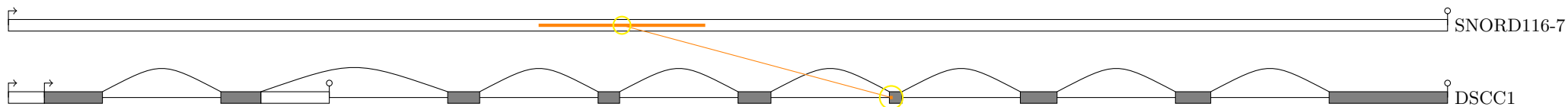
H.Sap	gagccccg	tgcccagtgatgaca-ccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctatgggcg--...45...gggctgagggca	cgggatgc
R.Mac	gagccctg	tgcccaatgatgaca-ccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctatgggcg--...45...gggctgagggca	cagggtgc
P.Tro	gagccccg	tgcccagtgatgaca-ccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctatgggcg--...45...ggactgagggca	cgggatgc
P.Abe	gagccccg	tgcccagtgatgaca-ccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctatgggcg--...45...gggctgagggca	cgggatgc
C.Jac	ggccccg	tgcccagtgatgaca-ccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	cccactaggggctgtgggc---...47...gggctgagggca	cggggtac
M.Mus	ggaccctg	tgcccagtgatgataaccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	cctact-cgggctgtgggcca...43...ggactgagggca	cagggtca
R.Nor	ggaccctg	tgcccggtgatgataaccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccctct-tgggctgtgggcca...43...ggactgagggca	cagggtcg
C.Por	caggactg	tgcccggtgatgac-tccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctgtgggcca...41...gggctgagggca	caggatcc
O.Cun	ggaccctg	tgcccggtgatg-----acc <b>CCAT</b>	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctgtgggcca...44...gggctgagggca	cagggtgc
C.Fam	agaccctg	tgcccagtgatgataccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctgtgggcca...43...gggctgagggca	cggggtcc
B.Tau	ggcgcccc	tgcccagtgatgacaccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	tccgca-gggactgtgggcca...44...gggctgagggca	cgtggtcc
E.Cab	gacccccg	tgctcgaggatgacac---- <b>TCAT</b>	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctgtgggcca...43...ggactgagggca	cggggtcc
L.Afr	ggacactg	tgcccgctgatgataccatc----	<b>CTTGCTCC</b>	<b>CGTG</b>	ccccca-ggggctgtgggcca...42...gggctgagggca	caggctcc
	*	*** * ***	*****	* * ** * *	*****	** ***** * *

id=279510 gene=ENSG00000221803 name=SNORD23 segment=chr19.48259110.48259219.1 type=EN

H.Sap	c <b>ATGGGAG</b>	g <b>TAAG</b> gtgaaatttaaatga-----...43...ttgttttctag	atccctat
R.Mac	c <b>ATGGGAG</b>	g <b>TAAG</b> tatgaaatttaaatga-----...44...ttgttttctag	atccctat
P.Tro	c <b>ATGGGAG</b>	g <b>TAAG</b> gtgaaatttaaatga-----...43...ttgttttctag	atccctat
P.Abe	c <b>ATGGGAG</b>	g <b>TAAG</b> tgtgaaatttaaatga-----...43...ttgttttctag	atccctat
C.Jac	c <b>ATGGGAG</b>	g <b>TAAG</b> tatgaaatttaagttaacag-----...40...ttgttcttag	atccctat
M.Mus	c <b>ATGGGAG</b>	g <b>TAAG</b> tcagagacttttagtacagc-----...43...ttgtttcctag	atccctat
R.Nor	c <b>ATGGGAG</b>	g <b>TAAG</b> tgagagact--gttacagaca---...46...ttgtttcctag	atccctat
C.Por	c <b>ATGGGAG</b>	g <b>TAAG</b> ttacggatataaattaacaa-----...49...ttgtttcctag	atccatata
O.Cun	c <b>ATGGGAG</b>	g <b>TAAG</b> c <b>GTGG</b> aaattcaattaacagtagct...38...ttgtttccag	atccctat
C.Fam	c <b>ATGGGAG</b>	g <b>TAAG</b> catgaaatcgaattagcga-----...42...ttgtttcatag	atccctat
B.Tau	c <b>ATGGGAG</b>	g <b>TAAG</b> aatgaaatataattagtaa-----...43...ttgtttcctag	atccctat
E.Cab	c <b>ATGGGAG</b>	g <b>TAAG</b> c <b>ATGA</b> aaatcaattatcagtacca...38...ttgtttcctag	atccctat
L.Afr	c <b>ATGGGAG</b>	g <b>TAAG</b> catgaacattaaattagtag-----...43...ttatttcctag	atccctat
	*****	*****	**
			*** * *
			*****

id=181371 gene=ENSG00000116560 name=SFPQ segment=chr1.35652724.35652803.-1 type=IN

Figure 567: CS=15.34



H. Sap	acgtgctt	ggatcgatgatgagtc	ccccataaaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaact	-cataccg	tcgttctcatc	gaaactgaggtcc	agcacgtt
R. Mac	atgtgctt	ggatcgatgatgagtc	ccccataaaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaact	-cataccg	tcgttctcatc	gaaactgaggtcc	agcacgtt
P. Abe	atgtgctt	ggatcgatgatgagtc	ccccataaaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaact	-cataccg	tcgttctcatc	gaaactgaggtcc	agcacatt
C. Jac	atgtgctt	ggatcgatgatgagtc	cctcccaaaaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaact	-cataccg	tcgttctcatc	gaaactgaggtcc	agcacatt
M. Mus	acgtgctt	ggatcctatgatgatt	cccagtc	caaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gaaaactctgt	accgcaactctcatc	gaaactgaggtcc	agcatctt
R. Nor	gtatgcct	ggatcgatgatgatt	cccagtc	caaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gaaaactcagc	accgcaactgtcatc	gaaactgaggtcc	ggcacctt
O. Cun	atgtgctt	ggatcgatgatgact	ccccataaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactcaca	accgctcattctcatc	gtgactgaggtcc	agcacgtt	agcacgtt
C. Fam	aagtgcct	ggatcgatgatgact	ccctca-atctg	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactccctg	ccgctcgttctcatc	gaaactgaggtcc	agcacgtt	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgact	ccctcaacag	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactccctc	ccgctcgttctcatc	gaaactgaggtcc	agcacgtt	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgact	cccaca-a-atg	CATTCCTGGAAAAG	TGAA	caaatgagt	gagccatcact	accgctc-tcctcatc	gaaactgaggtcc	agcacgtt	agcacgtt
E. Cab	acgtgctc	ggatcgatgatgact	ccctcatatg	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactcact	accgctcgttctcatc	gaaactgaggtcc	ggcacgtt	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgact	ccctctaaag	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactcact	accgctc-tcctcatc	gaaactgaggtcc	ggcacgtt	ggcacgtt
L. Afr	acgtgcat	ggattgatgatgact	gctatctaaa	CATTCCTGGAAAAG	TGAA	caaatgagt	gagaactcctt	accgctcactcattg	-aactgaggtcc	agcacatt	agcacatt
	***	****	***** * *	*****	*****	*	***	****	*****	*** *	

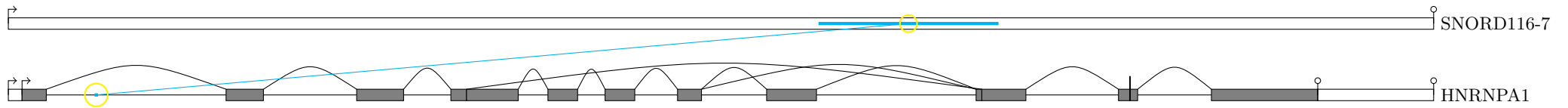
id=586677 gene=ENSG00000207133 name=SNORD116-7 segment=chr15.25312935.25313029.1 type=EN

H. Sap	gagccaga	gtaagtatttta...	734...	---ataactttt	caagtgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
R. Mac	gagccaga	gtaagtatttta...	729...	---ataactttt	caagtgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
P. Abe	gagccaga	gtaagtatttta...	751...	---ataactttt	caagtgggtg	-----TTTAaa	TTTTTCAG	GGaAATGa
C. Jac	gagccaga	gtaagtatttta...	608...	---agaactttt	caagtgtgtg	-----TTTAaa	TTTTTCAG	GGaAATGa
M. Mus	gagccaga	gtgagtatttgc...	905...	-tcataagtt	ctcttgtgtgc	-----TTTAaa	TTTTTCAG	GGaAATGa
R. Nor	gagccaga	gtgagtatttgc...	1060...	-tcataagtt	ctcttgtgtgc	-----TTTAaa	TTTTTCAG	GGaAATGa
O. Cun	gagccaga	gtaagtatttta...	403...	-gaatagctt	ctca--tgagtgt	-----TTTAaa	TTTTTCAG	GGaAATGa
C. Fam	gagccaga	gtaagtatttta...	640...	-----ttcaaat	gagtgtttaaaa	-----TTTTCAG	GGaAATGa	GGaAATGa
F. Cat	gagccaga	gtaagtatttta...	426...	---taactttt	caaatgagtatt	-----TTTAaa	TTTTTCAG	GGaAATGa
B. Tau	gagccaga	gtaagtatttat...	450...	.gtgaaaact	tttcaataag	-----TGTTTAaa	ATTTTTCAG	GGaAATGa
E. Cab	gaaccaga	gtaagtatttta...	728...	---gtaactttt	caaatgaggt	-----TTTAaa	TTTTTCAG	GGaAATGa
S. Sus	gagccaga	gtaagtatttta...	323...	-----tcataaaa	atgtgaagaag	TGTTTAaa	ATTTTTCAG	GGaAATGa
L. Afr	gaaccaga	gtaagtatttta...	399...	-----ttcaaat	tggttttaaaa	-----TTTTCAG	GGaAATGa	GGaAATGa
	** *****	** *** * *		*		*****	*****	*****

id=5227 gene=ENSG00000136982 name=DSCC1 segment=chr8.120855069.120855848.-1 type=IN

Figure 568: CS=19.24





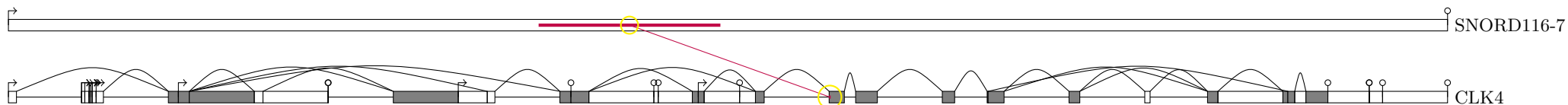
H. Sap	acgtgctt	ggatcgatgatgagtc	ccccat-aaaa	cattccttgg	aaaagctga	ACAAAATG	GTGA	gaact-cata	ccgctg	tctcatc	cagaact	gaggtcc	agcacgtt
R. Mac	atgtgctt	ggatcgatgatgagtc	ccctat-aaaa	cattccttgg	aaaagctga	ACAAAATG	GTGA	gaact-cata	ccgctg	tctcatc	cggaact	gaggtcc	agcacgtt
P. Tro	acgtgctt	ggatcgatgatgagtc	ccccat-aaaa	cattccttgg	aaaagctga	ACAAAATG	GTGA	gaact-cata	ccgctg	tctcatc	cggaact	gaggtcc	agcacgtt
C. Jac	atgtgctt	ggatcgatgatgagtc	cctccaaaa	cattccttgg	aaaagctga	ACAAAATG	GTGA	gaact-cata	ccgctg	tctcatc	cggaact	gaggtcc	agcacatt
M. Mus	acgtgctt	ggatc	tatgatgattccc	ag---tca	aacattccttgg	aaaagctga	ACAAAATG	GTGA	aaactctg	taccg	ccactctc	atcggaact	gaggtcc
R. Nor	gtatgcct	ggatcgatgatgattccc	ag---tca	aacattccttgg	aaaagctga	ACAAAATG	GTGA	aaactcag	caccg	caactgtc	atcggaat	gaggtcc	ggcacctt
O. Cun	atgtgctt	ggatcgatgatgactccc	ccat---aa	cattccttgg	aaaagctga	ACAAAATG	GTGA	gaactcaca	accgtc	attctc	atcg	tgactgaggtcc	agcacgtt
C. Fam	aagtgctt	ggatcgatgatgactccc	tca---at	ctgattccttgg	aaaagctga	ACAAAATG	GTGA	gaactccct	gccg	ctg	tctcatc	gaaactgaggtcc	agcacgtt
F. Cat	atgtgctc	ggatcgatgatgactccc	ctc---aa	cagcattccttgg	aaaagctga	ACAAAATG	GTGA	gaactccct	ccc	gctg	tctcatc	gaaactgaggtcc	agcacgtt
B. Tau	acgtgctt	ggatcgatgatgactccc	ccac---aa	tgcattccttgg	aaaagctga	ACAAAATG	GTGA	gccaact	cactacc	gtc-tc	ctcatc	ggaactgaggtcc	agcacgtg
E. Cab	acgtgctc	ggatcgatgatgactccc	ctc---at	atgattccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accg	ctg	tctcatc	gaaactgaggtcc	ggcacgtt
S. Sus	ccgtgctc	ggatcgatgatgactccc	ctc---ta	agcattccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accg	gtc-tc	ctcatc	gaaactgaggtcc	ggcacgtg
O. Avi	acatgctc	ggatcagtgatgacaact	ttc---at	attattccttgg	aaaagctga	ACAAAATG	GTGA	gaactcact	accatc	-tc	ctcatc	gatactgaggtcc	agcacgtt
L. Afr	acgtgcat	ggattgatgatgactg	ctat---ct	aaacattccttgg	aaaagctga	ACAAAATG	GTGA	aaactcct	taccg	ctcact	cattg-	aactgaggtcc	agcacatt
	***	****	*****	*	*****	***	*****	*	**	****	****	**	*** *

id=586677 gene=ENSG0000207133 name=SNORD116-7 segment=chr15.25312935.25313029.1 type=EN

H. Sap	agtcagag	gtgagttaggcg...111...	-----tacc	cctccca	aagttcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	...376...	ccccact	ctag	tctcctaa
R. Mac	agtcagag	gtgagttaggcg...113...	-----tacc	cctccca	aagttcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	...377...	ccccact	ccag	tctcctaa
P. Tro	agtcagag	gtgagttaggcg...111...	-----tacc	cctccca	aagttcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	...375...	ccccact	ctag	tctcctaa
C. Jac	agtcagag	gtgagttaggcg...106...	-----ctac	cctccca	aagttcaag	TCGCCATTTGT	cctcttgat	cgccatg	aggc---	...371...	ccccact	gtag	tctcctaa
M. Mus	agtcagag	gtaagttggatg...106...	-----ctac	ttaaaaa	aagttcagg	TCGCCATTTGT	cctcatagt	caccatg	aggc---	...369...	cctccact	ttag	tctcccaa
R. Nor	agtcagag	gtgagttgagcg...105...	-----ccta	cttt-aaaa	aagttcagg	TCGCCATTTGT	cctcatagt	caccatg	aggc---	...361...	actttat	tttag	tccccaa
O. Cun	agtcagag	gtgaggagctcc...102...	-----aag	gcctacc	cctccca	aag-----TCGCCATTTGT	cctcgtc	gctcg	ccatgagg	---...378...	tctccc	cccag	tcgccc
C. Fam	agtcagag	gtgagtaacacg...112...	-----ttcc	cctccc	aagttgagg	TCGCCATTTGT	cctcgtc	gctcg	ccatgagg	---...363...	ccccg	ctctag	tctcccaa
F. Cat	agtcagag	gtgagtaacacg...113...	-----tacc	cctccca	aagttcagg	TCGCCATTTGT	cctcgtc	gctcg	ccatgagg	---...378...	cccga	ctctag	tctcccaa
B. Tau	aatcagag	gtgggtaagacg...111...	-----tccc	cctcc	taagttgagg	TCGCCATTTGT	cc---tc	gtcg	ccatgagg	ctgc...362...	ctc	ctctctag	tctcccaa
E. Cab	agtcagag	gtgagtaggacg...111...	-----tacc	cctccca	aagttcagg	TCGCCATTTGT	cctcgtc	gctcg	ccatgagg	---...359...	tc	ctactctag	tctcccaa
S. Sus	agtcagag	gtgagtgagact...111...	-----tacc	cctcc	ctgagttcagg	TCGCCATTTGT	cc---tc	gtcg	ccatgagg	ctgt...358...	cc	tactctag	tctcccaa
O. Avi	aatcagag	gtgggtaagacg...111...	-----tacc	cctcc	ctgagttgagg	TCGCCATTTGT	cc---tc	gtcg	ccatgagg	ctgc...366...	ct	ccactctag	tctcccaa
L. Afr	agtcagag	gtaagctaccct...108...	-----tacc	cctccca	aagttgagg	TCGCCATTTGT	cctcgtc	gctcg	ccatgagg	---...389...	tt	caccattag	tctcctaa
	** ** **	** *		*	*	*****	*	**	*****		**	** ** *	**

id=165449 gene=ENSG0000135486 name=HNRNPA1 segment=chr12.54674607.54675169.1 type=IN

Figure 569: CS=13.3



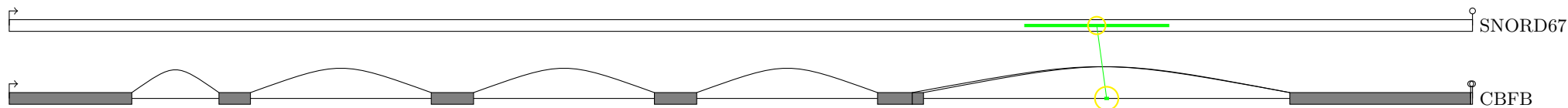
H. Sap	acgtgctt	ggatcgatgatgagtc	ccccataaaaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaact-	cataccgctgttctcatcagaactgaggtcc	agcacgtt			
P. Tro	acgtgctt	ggatcgatgatgagtc	ccccataaaaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaact-	cataccgctgttctcatcagaactgaggtcc	agcacgtt			
P. Abe	atgtgctt	ggatcgatgatgagtc	ccccataaaaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaact-	cataccgctgttctcatcagaactgaggtcc	agcacatt			
C. Jac	atgtgctt	ggatcgatgatgagtc	cctccacaaaaa	CATTCCTTGGAAA	agctgaacaaatgagtgagaact-	cataccgctgttctcatcagaactgaggtcc	agcacatt			
M. Mus	acgtgctt	ggatcctatgatgatt	cccagtc	caaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgaaaactctgtaccgcaactctcatcagaactgaggtcc	agcatctt			
R. Nor	gtatgcct	ggatcgatgatgatt	cccagtc	caaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgaaaactcagcaccgcaactgtcatcagaactgaggtcc	ggcacctt			
O. Cun	atgtgctt	ggatcgatgatgact	ccccataaaa-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaactcacaaccgctcattctcatcgtgactgaggtcc	agcacgtt	agcacgtt			
C. Fam	aagtgctt	ggatcgatgatgact	ccctca-atctg-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaactccctgccgtgttctcatcagaactgaggtcc	agcacgtt	agcacgtt			
F. Cat	atgtgctc	ggatcgatgatgact	ccctcaacag-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaactccctccgctgttctcatcagaactgaggtcc	agcacgtt	agcacgtt			
B. Tau	acgtgctt	ggatcgatgatgact	cccaca-a-atg-	CATTCCTTGGAAA	-tcTGAA	caaatgagtgagccatcactaccgctc-tcctcatcagaactgaggtcc	agcacgtg			
E. Cab	acgtgctc	ggatcgatgatgact	ccctcatatg-	CATTCCTTgGAAAAGcTGAA	caaatgagtgagaactcactaccgctgttctcatcagaactgaggtcc	ggcacgtt	ggcacgtt			
S. Sus	ccgtgctc	ggatcgatgatgact	ccctctaaag-	CATTCCTTGGAAA	-tcTGAA	caaatgagtgagaactcactaccgctc-tcctcatcagaactgaggtcc	ggcacgtg			
L. Afr	acgtgcat	ggattgatgatgact	gctatctaaa-	CATTCCTTGGAAAAGcTGAA	caaatgagtgaaaactccttaccgtctcactcattg-aactgaggtcc	agcacatt	agcacatt			
	***	****	***** * *	*****	*****	* **	***	****	* *****	*** *

id=586677 gene=ENSG00000207133 name=SNORD116-7 segment=chr15.25312935.25313029.1 type=EN

H. Sap	catggcat	gtaagtttg	ttt...2994...	----t	tta	---c	at	ttttatctta	TTTATTTTAAG	GGATG	gca
P. Tro	catggcat	gtaagtttg	ttt...2993...	----t	tta	---c	at	ttttatctta	TTTATTTTAAG	GGATG	gca
P. Abe	catggcat	gtaagtttg	ttt...2998...	----t	tta	---c	at	ttttatctta	TTTATTTTAAG	GGATG	gca
C. Jac	catggcat	gtaagtttg	ttt...3178...	----a	tt	---c	at	ttttatctta	TTTATTTTAAG	GGATG	gca
M. Mus	cacggcat	gtaagtttg	ctt...1540...	..t	---	tt	ag	catcatcatct	TTTGTTTCAAG	GGATG	gct
R. Nor	catggcat	gtaagtttg	ctt...1496...	..t	---	tt	ag	catcatcatct	TTTGTTTCAAG	GGATG	gct
O. Cun	catggcat	gtaagtttg	ctt...2567...	..t	---	tt	ag	catcatctta	TTTGTTTTAAG	GGATG	gca
C. Fam	catggcat	gtaagtttg	ctt...3759...	..t	---	tt	ag	catctta	TTTGTTTTAAG	GGATG	gca
F. Cat	catggcat	gtaagtttg	ctt...2893...	..t	---	tt	ag	catctta	TTTGTTTTAAG	GGATG	gca
B. Tau	catgacat	gtaagtttg	ctt...3284...	..t	---	tt	ag	catctta	TTTGTTTTAAG	GGATG	gca
E. Cab	catggcat	gtaagtttg	ctt...2877...	..t	---	tt	ag	catctt	TTTGTTTTAAG	GGATG	gca
S. Sus	catggcat	gtaagtttg	ctt...4259...	..t	---	tt	ag	catctt	TTTGTTTTAAG	GGATG	gca
L. Afr	catggcat	gtaagtttg	ctt...1359...	..t	---	tt	ag	catctt	TTTGTTTTAAG	GGATG	gca
	** * **	*****							*** **	*****	

id=746901 gene=ENSG00000113240 name=CLK4 segment=chr5.178040845.178043882.-1 type=IN

Figure 570: CS=18.85



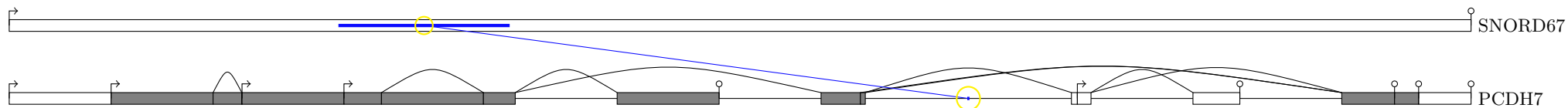
H. Sap	atthagac	tgtgagagtgat...37...caggcaccactcag-tatcac	CCTGGTGACAAAATCA	agtgcacaggggccatctgactcaca	ggcatctc		
R. Mac	atthagac	tgtgagagtgat...37...caggcaccactcag-tatcac	CCTGGTGACAAAATCA	agtgcacaggggccatctgattcaca	ggcatctc		
P. Tro	atthagac	tgtgagagtgat...37...caggcaccactcag-tatcac	CCTGGTGACAAAATCA	agtgcacaggggccatctgactcaca	ggcatctc		
P. Abe	atthagac	tgtgagagtgat...37...caggcaccactcag-tatcac	CCTGGTGACAAAAT	caagtgcacaggggccatctgactcaca	ggcatctc		
C. Jac	atthagac	tgtgagagtgat...37...caggcaccactcag-tatcac	CCTGGTGACAAAAT	caagtgcacaggggccatctgactcaca	ggcatctc		
M. Mus	cttcaaac	tgtgagagtgat...37...caggcaccactcag-tactac	CCTGGTGACAAAATCAAGTG	cacaggggccatctgactcaca	ggcatacc		
C. Por	tcttagac	tgtgagtatgat...37...caggcaccactcag-taccac	CCTGGTGACAAAAT	caAGTGcacaggggccatctgactcaca	ggcgtgcc		
O. Cun	atthagac	tgtgagagtgat...37...caggcaccactcag-taccac	CCTGGTGACAAAATC	aagtgcacaggggccatctgactcaca	ggcattcc		
C. Fam	atthagac	tgtgagagtgat...37...caggcaccactcag-taccac	CCTGGTGACAAAAT	atcaagtgcacaggggccatctgactcaca	ggcatccc		
F. Cat	atthagac	tgtgagagtgat...38...-gggcaccagtcagttaccac	CCTGGTGACAAAAT	caagtgcacaggggccatctgactcaca	ggcatccc		
B. Tau	atthagac	tgtgagagtgat...37...caggcaccaccag-tacctc	CCTGGTGACAAAAT	caagtgcacaggggccatctgactcaca	ggcatccc		
E. Cab	atthagac	tgtgagagtgat...37...cgggcatcactcag-taccac	CCTGGTGACAAAATCA	agtgcacaggggccatctgactcaca	ggcatccc		
L. Afr	atthagac	tgtgagagtgat...37...caggcaccactcag-tacctc	CCTGGTGACAAAAT	catgtgcacaggggccatctgactcaca	tgcacatc		
	*	*	*****	****	***	**	*

id=274988 gene=ENSG00000212135 name=SNORD67 segment=chr11.46783939\_46784049\_-1 type=EN

H. Sap	agtaactg	gtagtagtactttc...4940...--cactttttgaccccaatta-----	TG	ATTTTGCAT	tgCAG	Gcaagaag	
R. Mac	agtaactg	gtagtagtactttc...4940...--cactttttgaccccaatta-----	TG	ATTTTGCAT	tgCAG	Gcaagaag	
P. Tro	agtaactg	gtagtagtactttc...4940...--cactttttgaccccaatta-----	TG	ATTTTGCAT	tgCAG	Gcaagaag	
P. Abe	agtaactg	gtagtagtactttc...4942...--ctttttgaccccaattata-----		ATTTTGCAT	tgCAG	Gcaagaag	
C. Jac	agtaactg	gtagtagtactttc...4942...--ctttttgaccccaattata-----		ATTTTGCAT	tgCAG	Gcaagaag	
M. Mus	agtaactg	gtagtagtactttc...4934...-----tcaaacacattcatgactt	TATTT	GATTTTGCAT	tgCAG	Gcaagaag	
C. Por	agtaactg	gtagtagtactttc...4938...actgctttcctaactcgaat-----	TACT	GTTTGCAT	tgCAG	Gcaagaag	
O. Cun	agtaactg	gtagtagtactttc...4941...--actttctgatcccaattac-----	G	ATTTTGCAT	tgCAG	Gcaagaag	
C. Fam	agtaactg	gtagtagtactttc...4944...-----ttttgactcccaattatgac-----		TTTGCAT	tgCAG	Gcaagaag	
F. Cat	agtaactg	gtagtagtactttc...4942...--tgttttgaccccaattata-----		ATTTTGCAT	tgCAG	Gcaagaag	
B. Tau	agtaactg	gtagtagtactttc...4942...--cattttcaccctaaattata-----		ATTTTGCAT	tgCAG	Gcaagaag	
E. Cab	agtaactg	gtagtagtactttc...4940...--catgttttgatcccaatt-c-----	TG	ATTTTGCAT	tgCAG	Gcaagaag	
L. Afr	agtaactg	gtagtagtactttc...4942...--catattgatcccaattatt-----		ATTTTGCAT	tgCAG	Gcaagaag	
	*****	*****	*	*	*	*****	*****

id=641361 gene=ENSG00000067955 name=CBFB segment=chr16.67116243\_67132612\_1 type=IN

Figure 571: CS=15.34



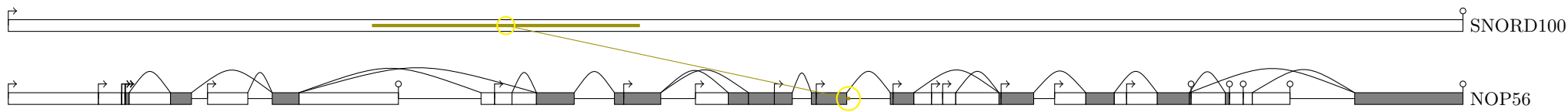
H. Sap	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcatctc
R. Mac	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgattcaca	ggcatctc
P. Tro	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcatctc
P. Abe	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcatctc
C. Jac	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcatctc
M. Mus	cttcaaac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcatacc
R. Nor	gttcaggc	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...47...atctgactcaca	gtataccc
C. Por	tcttagac	tgtgagagtgatgagttGCACaCTGGtGGAGccacagtgtcaggtgataca...48...atctgactcaca	ggcgtgcc
O. Cun	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccatggtatcaggtgataca...48...atctgactcaca	ggcattcc
C. Fam	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccagagtatcaggtgataca...48...atctgactcaca	ggcatccc
B. Tau	atntagac	tgtgagagtgatgagttGCACaCTGGtGGAGccacagtatcaggtgataca...48...atctgactcaca	ggcatccc
S. Sus	gattggac	tgtgagagtgatgagttGCACaCTGGtGGAGccacagtatcaggtgataca...48...atctgactcaca	ggcatccg
L. Afr	atntagac	tgtgagagtgatgagttGCACgCTGGtGGAGccacagtatcaagtgataca...48...atctgactcaca	tgcatatc
	*	*****	*****

id=274988 gene=ENSG00000212135 name=SNORD67 segment=chr11\_46783939\_46784049\_-1 type=EN

H. Sap	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
R. Mac	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
P. Tro	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
P. Abe	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
C. Jac	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
M. Mus	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
R. Nor	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
C. Por	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
O. Cun	ggaaaatg	gtaggggcaaac...4948...ttacctatttccccatctccCTTCCCCAG	GTGTtgct
C. Fam	ggaaaatg	gtaggggcaaac...4948...tcacatcttccccgtctccCTTCCCCAG	GTGTtgct
B. Tau	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
S. Sus	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
L. Afr	ggaaaatg	gtaggggcaaac...4948...ttacatatttccccatctccCTTCCCCAG	GTGTtgct
	*****	***** * **	*****

id=422196 gene=ENSG00000169851 name=PCDH7 segment=chr4\_30921992\_30951741\_1 type=IN

Figure 572: CS=10.14



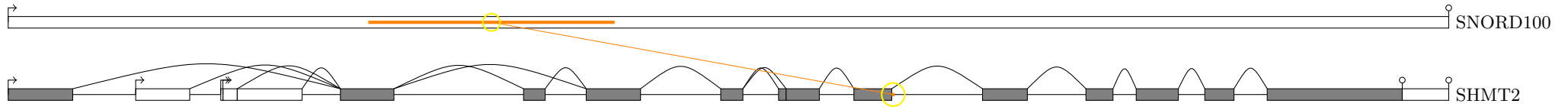
H. Sap	atcttag----	gctgtacatga	TGACA	ACTG	gc	TCCC	tctactgaac	---	tgccatgaggaaactg	ccatgtcaccct	-tctgattacagc	cacctttt
R. Mac	atctttg----	gctgtacatg	ATGACA	ACTG	gc	TCCC	tctactgaac	---	tgccatgaggaaactg	ccatgtcaccct	-tctgactacagc	cacctttt
P. Tro	atctttg----	gctgtacatga	TGACA	ACTG	gc	TCCC	tctactgaac	---	tgctatgaggaaactg	ccatgtcaccct	-tctgactacagc	cacctttt
P. Abe	atctttg----	gctgtacatga	TGACA	ACTG	gc	TCCC	tctactgaac	cccatg	aggaaactg	ccatgtcaccct	-tctgactacagc	cacctttt
C. Jac	atthttgtgctt	gctgtacatga	TGACA	ACTG	gc	TCCC	tctactgaac	---	tgtggtgaggagactg	ccatgtcaccct	-tctgactacagc	cacctttt
R. Nor	aatccgg----	gctgcacatg	ATGACA	ACTG	gc	TCCC	tctactgagt	---	cgcagtgaggaaactg	ccatgtcaccct	-tctgac-gctgc	caccttgg
C. Por	gttttgg----	gctgtcatg	ATGACA	ACTG	gc	TCCC	tctaccgaac	---	tgtcttggaggaaactg	ccatgtcaccct	-tctgatgacagc	tacctttc
O. Cun	ctaattg----	gctgtgaatg	ATGACA	ACTG	gc	TCCC	tctactgagc	---	tgccatgaggaaactg	ccatgtcaccct	-actgactacagc	cacctctc
F. Cat	gttttgg----	gctgtacatg	ATGACA	ACTG	gc	TCCC	tctactgaac	---	tgctatgaggaaactg	ccatgtcaccct	atctgactacagc	taccgtct
B. Tau	ttctttg----	gctgtacatg	ATGACA	ACTG	gc	TCCC	tctactgaac	---	cgtggtgaggaaactg	ccatgtcaccct	atctgactacagc	cacctttc
E. Cab	gtcttgg----	gctgtcatg	ATGACA	ACTG	gc	TCCC	tctactgaat	---	tgccatgaggaaactg	ccatgtcaccct	atctgactacagc	tacctttt
S. Sus	ttggtgc----	gctgtacatga	TGACA	ACTG	gc	TCCC	tctactgaac	---	ttctatgaggaaactg	ccatgtcaccct	atctgactacagc	tgcccttc
L. Afr	----tgggtgtgt	gctgtacatg	ATGACA	ACTG	gc	TCCC	tctactgaa	---	tctggtgaggaaactg	ccatgtcaccct	atctgactacagc	cactttgg
		****	*****	*****	**	*****	*****	*	*****	*****	****	* ** *

id=220397 gene=ENSG00000221500 name=SNORD100 segment=chr6.133137941.133138016.1 type=EN

H. Sap	gGGAagCG	GTgcGTCa	caggggactcaaaaatggga	---	...147...	ctctctccag	gtaggtgc
R. Mac	gGGAagCG	GTgcGTCAT	--gggacacaaaaatgggagaa	...	141...	gactcttccag	gtaggtgc
P. Tro	gGGAagCG	GTgcGTCa	caggggactcaaaaatggga	---	...149...	ctctctccag	gtaggtgc
P. Abe	gGGAagCG	GTgcGTCa	caggggatacaaaaatggga	---	...135...	ctctctccag	gtaggtgc
C. Jac	gGGAagCG	GTgcGTCa	caggggacacaaaaaatgg	---	...151...	gactcttccag	gtaggtgc
R. Nor	gGGAagCG	GTgcGTCAT	ggggaacacaaaagtggggg	---	...129...	gtctcttccag	gtaggtgc
C. Por	gGGAagCG	GTgcGTCAT	ggggaacacacatggtgggg	---	...124...	atthtttccag	gtaggcgc
O. Cun	gGGAagCG	GTaTGTCa	cagggaacagggggtggg	---	...97...	accttttccag	gtaggtgc
F. Cat	gGGAagCG	GTgcGTCAT	ggggaacacacatggggtt	---	...136...	atcttttctag	gtaggtgc
B. Tau	gGGAagCG	GTgcGTCAT	ggggaacacaaaatggggg	---	...146...	ctcttctctag	gtaggtgc
E. Cab	gGGAagCG	GTgcGTCAT	ggggagcacagaaatgggga	---	...139...	atcttctccag	gtaggtgc
S. Sus	gGGAagCG	GTgcGTCa	cggggaagaaaaatggggg	---	...136...	atcttctccag	gtaggtgc
L. Afr	gGGAagCG	GTaTGTCAT	gggggctcgggaatgttac	---	...125...	gtcttctccag	gtaggtgc
	*****	**	****	*		* ** *	*****

id=521959 gene=ENSG00000101361 name=NOP56 segment=chr20.2636393.2636579.1 type=IN

Figure 573: CS=13



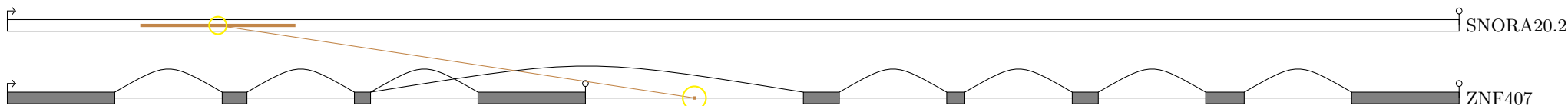
H.Sap	atcttag----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgattacagc	cacctttt
R.Mac	atctttg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	cacctttt
P.Tro	atctttg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	cacctttt
P.Abe	atctttg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	cacctttt
C.Jac	atctttg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	cacctttt
R.Nor	aatccgg----	gctgcacatga	TGACaa	CTGGCTCC	ctctactgagt---	cgcagtgaggaaactg	ccatgtcaccct-tctgac-gctgc	caacttgg
C.Por	gttttgg----	gctgtgcatga	TGACaa	CTGGCTCC	ctctaccgaac---	tgtctgaggaaactg	ccatgtcaccct-tctgatgacagc	taccttcc
O.Cun	ctaatgg----	gctgtgaatga	TGACaa	CTGGCTCC	ctctactgagc---	tgccatgaggaaactg	ccatgtcaccct-actgactacagc	caactctc
C.Fam	atattgg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgattacagc	tacctttt
F.Cat	gttttgg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	taccttcc
B.Tau	ttctttg----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	cgctgaggaaactg	ccatgtcaccct-tctgactacagc	caacttcc
E.Cab	gtccttg----	gctgtgcatga	TGACaa	CTGGCTCC	ctctactgaat---	tgccatgaggaaactg	ccatgtcaccct-tctgactacagc	tacctttt
S.Sus	ttggtgc----	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaac---	ttctatgaggaaactg	ccatgtcaccct-tctgactacagc	tgaccttt
L.Afr	----tggtgtgt	gctgtacatga	TGACaa	CTGGCTCC	ctctactgaa---	tctggtgaggaaactg	ccatgtcaccct-tctgactacagc	caacttgg
		****	*****	*****	**	*****	* *****	**** * ** *

id=220397 gene=ENSG00000221500 name=SNORD100 segment=chr6.133137941.133138016.1 type=EN

H.Sap	gGGGCCAG	GTC	aggct-ccctgaggtcgggcct--...300...cctctcacacag	gtcagggc
R.Mac	gGGGCCAG	GTC	aggct-ccctgaggtcgggcct--...300...cctctcacacag	gtcagggc
P.Tro	gGGGCCAG	GTC	aggct-ccctgaggtcgggcct--...300...cctctcacacag	gtcagggc
P.Abe	gGGGCCAG	GTC	aggct-cgctgaggtcgggcct--...275...cctctcacacag	gtcagggc
C.Jac	gGGGCCAG	GTC	-ggctccctggggtcaggcat--...301...tctctcacacag	atcaggac
R.Nor	gGGGCCAG	GTC	gaattccctggggtcagatc---...163...tctccacacag	gtcaggac
C.Por	gGGGCCAG	GTC	aggttcccctggggtgagcc---...283...cctccacacag	gtcaggac
O.Cun	gGGGCCAG	GTC	aggttctctgcccggcaggcc---...166...ccctgcaccag	gtcgggcc
C.Fam	gGGGCCAG	GTC	aggttcccctgaggtcaggcc---...305...cttccccatag	gtcaggac
F.Cat	gGGGCCAG	GTC	aggttcccctgaggtcaggcc---...309...cctcccacacag	gtcaggac
B.Tau	gGGGCCAG	GTC	aggttcccctgaggtcaggcc---...292...cctcccacacag	gtcaggac
E.Cab	gGGGCCAG	GTC	aggttcccctgaggtcaggcc---...310...ccttttgacag	gtcaggac
S.Sus	gGGGCCAG	GTC	aggttcccct--gtcaggccttg...273...tgtcctgcacag	gtcaggac
L.Afr	gGGGCCAG	GTC	aggttcccctgagatcaagcc---...324...cctcccacacag	gtcaggac
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id=574607 gene=ENSG00000182199 name=SHMT2 segment=chr12.57626627.57626962.1 type=IN

Figure 574: CS=15.54



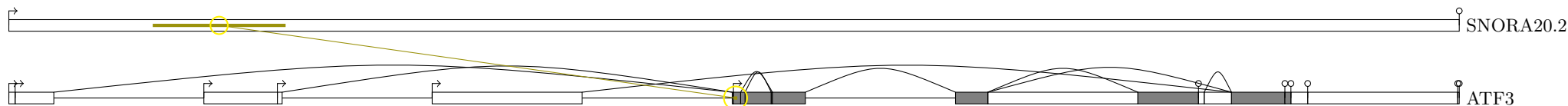
H. Sap	ttgagc	CTTCCCATTATTTg	CTGCT	atagtc	tataatgataca...	79...	gacaagacattg	tttttggt
R. Mac	tcaagc	CTTCCCATTATTTg	CTGCT	catagc	tataatgataca...	80...	gacaagacactg	tttttggt
P. Tro	ttgagc	CTTCCCATTATTTg	CTGCT	atagtc	tataatgataca...	79...	gacaagacattg	tttttggt
P. Abe	ttgagc	CTTCCCATTATTTg	CTGCT	atagtc	tataatgataca...	79...	gacaagacattg	tttttggt
M. Mus	aataatt	TTTCCATTaATTTg	CTGCT	ctagtc	gtcagtgatagga...	76...	gtctagacattg	ttcctggt
R. Nor	aagaatt	TTTCCATTaATTTg	CTGCT	ctagtc	gtcagtgatagga...	78...	gtctagacattg	ttcctggt
O. Cun	cattacc	CTTCCCATTATTTg	CTGCT	ctggtc	gctcaatgccatga...	75...	gtctagacattg	tgattgtg
C. Fam	tagatcac	CTTCCCATTgATTTg	CTGCT	ctagtc	ctttcagtgatagga...	78...	gccagacactg	ctgctctg
F. Cat	ttttgtcc	catcCCATTgATTTg	CTGCT	ctggtt	ttttcagttatatca...	78...	gtccagacattg	tttccatg
B. Tau	cagatcac	CTTCCCATTATTTg	CTGCT	atagtc	cctcagtgatagga...	78...	gtctagacattg	cttccctg
E. Cab	cagatcac	CTTCCCATTgATTTg	CTGCT	atagtc	ctcagtgatagga...	78...	gccagacatgg	cttctatg
S. Sus	attctttt	CTTCCCATTATTTg	CTGCT	atggtc	ctttcagtgatagga...	78...	gtctagacattg	cttctgtc
L. Afr	gaggtcat	CTTCCCATTATTTg	CTGCT	atcgtc	ctcagtgatagga...	79...	gtctagacatgc	tttttggt
		* * * * *		* * * * *			* * * * *	

id=332252 gene=ENSG00000206649 name=SNORA20.2 segment=chr8.81229174.81229304.-1 type=EN

H. Sap	tgattact	atagccagtc	ctc...4756...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	147...	tccttcagtcag	gaaattta
R. Mac	tgattact	atagtcagtc	ctc...4757...	-ccgttggg	cccaaccgcaa	GCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	147...	tccttcagtcag	gaaattta
P. Tro	tgattact	atagccagtg	gtt...4756...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	147...	tccttcagtcag	gaaattta
P. Abe	tgattact	atagtcagtc	ctc...4756...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	147...	tccttcagtcag	gaaattta
M. Mus	tgattact	gtagtaaat	ctc...4757...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	146...	tccttcagtcag	gaaattta
R. Nor	tgattact	gcagtaaat	ctc...4759...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	144...	tccttcagtcag	gaaattta
O. Cun	tgattact	acagtaaat	ctc...4761...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	142...	tccttcagtcag	gaaattta
C. Fam	tgattact	atagtaaat	ctc...4755...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	148...	tccttcagtcag	gaaattta
F. Cat	tgattact	atagtaaat	ctc...4755...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	154...	tccttcagtcag	gaaattta
B. Tau	tgattact	ctagtaaat	ctc...4763...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	140...	ctccccagtcag	gaagtcca
E. Cab	tgattact	atagtaaat	ctc...4756...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	147...	tccttcagtcag	gaaattta
S. Sus	tgattact	atagtaaat	ctc...4757...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	146...	tccttcagtcag	gaaattta
L. Afr	tgattact	atactaaat	ctc...4755...	cccgttggg	cccaaccgcaa	AGCAGa	GAATAAATGGct	GAAGt	gccaggc	ctcgacagaaaa...	148...	ccttcagtcag	gaaattta
	*****		* * * *			*****						***	*** * * *

id=442895 gene=ENSG00000215421 name=ZNF407 segment=chr18.72516581.72589152.1 type=IN

Figure 575: CS=11.05



H. Sap	ttgagctt	cttcc	CATTt	ATTTGCTG	ctatagtctcataatgatac...81...gacaagacattg	tttttggt
R. Mac	tcaagctt	cttcc	CATTt	ATTTGCTG	ccatagcctcataatgatac...81...gacaagacactg	tttttggt
P. Tro	ttgagctt	cttcc	CATTt	ATTTGCTG	ctatagtctcataatgatac...81...gacaagacattg	tttttggt
P. Abe	ttgagctt	cttcc	CATTt	ATTTGCTG	ctatagtctcataatgatac...81...gacaagacattg	tttttggt
M. Mus	aataattc	tttcc	CATTa	ATTTGCTG	ctctagtctgtcagtgatag...78...gtctagacattg	ttcctggt
R. Nor	aagaattc	tttcc	CATTa	ATTTGCTG	ctctagtctgtcagtgatag...80...gtctagacattg	ttcctggt
O. Cun	catttacc	ctttc	CATTt	ATTTGCTG	ctctggtcgtcctcaatgccat...77...gtctagacattg	tgattgtg
C. Fam	tagatcac	cttcc	CATTg	ATTTGCTG	ctctagtctttcagtgatag...80...gccagacactg	ctgctctg
F. Cat	ttttgtcc	catcc	CATTg	ATTTGCTG	ctctggtttttcagttatat...80...gtccagacattg	tttccatg
B. Tau	cagatcac	cttcc	CATTt	ATTTGCTG	ctatagtccttcagtgatag...80...gtctagacattg	cttcctg
E. Cab	cagatcac	cttcc	CATTg	ATTTGCTG	ctatagtctctcagtgatag...80...gccaagacatgg	cttctatg
S. Sus	attccttt	ctttc	CATTt	ATTTGCTG	ctatggtctttcagtgacat...80...gtctagacattg	cttctgtc
L. Afr	gaggtcat	cttcc	CATTt	ATTTGCTG	ctatcgtctctcagtgatag...81...gtctagacatgc	tttttggt
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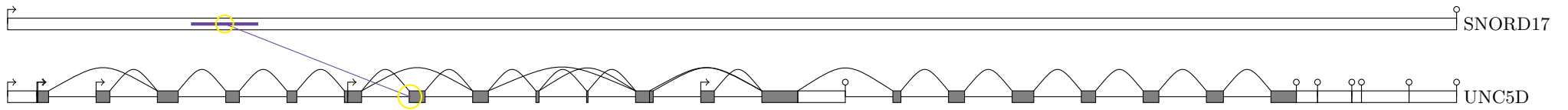
id=332252 gene=ENSG00000206649 name=SNORA20.2 segment=chr8.81229174.81229304.-1 type=EN

H. Sap	tcttt	CAG	Ca	AAATGATG	ct
R. Mac	tcttt	CAG	Ca	AAATGATG	ct
P. Tro	tcttt	CAG	Ca	AAATGATG	ct
P. Abe	tcttt	CAG	Ca	AAATGATG	ct
M. Mus	tcttt	CAG	CAAAa	TGATG	ct
R. Nor	tcttt	CAG	CAAAa	TGATG	ct
O. Cun	tcttt	CAG	Ca	AAATGATG	ct
C. Fam	tcttt	CAG	Ca	AAATGATG	ct
F. Cat	tcttt	CAG	Ca	AAATGATG	ct
B. Tau	ctttt	CAG	Ca	AAATGATG	ct
E. Cab	tcttt	CAG	Ca	AAATGATG	ct
S. Sus	tcttt	CAG	Ca	AAATGATG	ct
L. Afr	tcttt	CAG	Ca	AAATGATG	ct
			*****	*****	

id=485305 gene=ENSG00000162772 name=ATF3 segment=chr1.212788360.212788363.1 type=AN

Figure 576: CS=11.05





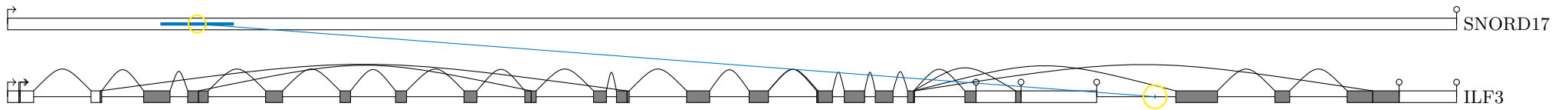
H.Sap	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
R.Mac	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
P.Tro	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
P.Abe	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	173...	aaatctgatcac	ttgctgca
C.Jac	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
M.Mus	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	172...	aaatctgatcac	ttcctgca
R.Nor	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	173...	aaatctgatcac	ttcctgca
C.Por	acagcttt	gtgaagtgatgattcagttta	TCCATTCGCTGAG	tgacccact-accttctt...	133...	gaatctgatcac	ttgctgtg
C.Fam	gcagcttt	gtgaagtgatgattcagttta	TCCATTCGCTGAG	tgacactgactgaccttctt...	172...	aaatctgatcac	ttgctgca
F.Cat	gcagctct	gtgaagtgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
B.Tau	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	170...	aaatctgatcac	ttgctgca
E.Cab	gcagcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
S.Sus	gcagcctt	gtgaagtgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
L.Afr	gtggcctt	gtgaaatgatgattcagttta	TCCATTCGCTGAG	tgcgctgcactgaccttctt...	171...	aaatctgatcac	ttgctgca
	** *	*****	*****	*	** * ** *	*****	** **

id=708712 gene=ENSG00000212232 name=SNORD17 segment=chr20\_17943353\_17943589\_-1 type=EN

H.Sap	ggtctacg	gtaagaccattc...	817...	tcccctccccatttttctct	CTCAG	TGAATGGa
R.Mac	ggtttatg	gtaagaccagcc...	817...	tcccctccccatttttctct	CTCAG	TGAATGGa
P.Tro	ggtctacg	gtaagaccattc...	817...	tcccctccccatttttctct	CTCAG	TGAATGGa
P.Abe	ggtctatg	gtaagaccattc...	818...	tcccctccccatttttctct	CTCAG	TGAATGGa
C.Jac	ggtctacg	gtaagaccagcc...	820...	tcccctccccatttttctct	CTCAG	TGAATGGa
M.Mus	ggtctacg	gtaagaccagcc...	769...	tcccctccccatttttctct	CTCAG	TGAATGGa
R.Nor	ggtctacg	gtaagaccagcc...	783...	tcccctccccatttttctct	CTCAG	TGAATGGa
C.Por	ggtctacg	gtaagaccaacc...	818...	ctcccctccccatttttctct	CTCAG	TGAATGGa
C.Fam	ggtttatg	gtaagaccagcc...	819...	tcccctccccatttttctct	CTCAG	TGAATGGa
F.Cat	ggtttatg	gtaagaccagcc...	801...	ccccctccccatttttctct	CTCAG	TGAATGGa
B.Tau	ggtttatg	gtaagaccagcc...	832...	tcccctccccatttttctct	CTCAG	TGAATGGt
E.Cab	ggtttatg	gtaagaccagcc...	818...	tcccctccccatttttctct	CTCAG	TGAATGGa
S.Sus	ggtttatg	gtaagaccagcc...	837...	tcccctccccatttttctct	CTCAG	TGAATGGa
L.Afr	ggtttatg	gtaagaccagcc...	839...	tcccctccccatttttctct	CTCAG	TGAATGGa
	*** ** *	*****	*	***	*****	*****

id=649968 gene=ENSG00000156687 name=UNC5D segment=chr8\_35541246\_35542099\_1 type=IN

Figure 577: CS=10.92



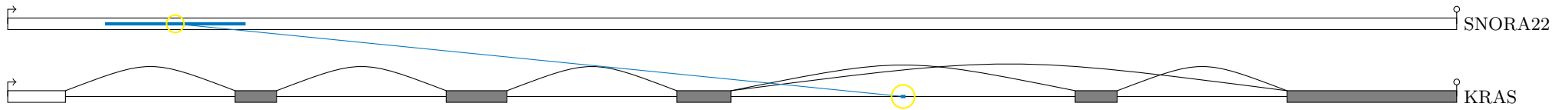
H.Sap	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>AGTGcGCTG</b>	cactgaccttctccaagcc...	164...	aaatctgatcac	ttgctgca
R.Mac	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>AGTGcGCTG</b>	cactgaccttctccaagcc...	164...	aaatctgatcac	ttgctgca
P.Tro	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>AGTGcGCTG</b>	cactgaccttctccaagcc...	164...	aaatctgatcac	ttgctgca
P.Abe	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>AGTGcGCTG</b>	cactgaccttctccaagct...	166...	aaatctgatcac	ttgctgca
C.Jac	gcagcctt	gtgaaatgatgaa	<b>TTCAGTTTATCCATTCGCT</b>	<b>AGTGcGCTG</b>	cactgaccttctccaagcc...	164...	aaatctgatcac	ttgctgtg
M.Mus	gcagccgt	gtgaaatgatgattctg	<b>TTTATCCATTCGCT</b>	<b>gagtagcgtgctgac</b>	ctt-----	175...	aaatctgatcac	ttcctgca
R.Nor	gcagcctt	gtgaaatgatgattctg	<b>TTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	176...	aaatctgatcac	ttcctgca
C.Por	acagcttt	gtgaagtgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	136...	aaatctgatcac	ttgctgtg
C.Fam	gcagcttt	gtgaagtgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	175...	aaatctgatcac	ttgctgca
F.Cat	gcagctct	gtgaagtgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	174...	aaatctgatcac	ttgctgca
B.Tau	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	173...	aaatctgatcac	ttgctgca
E.Cab	gcagcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	174...	aaatctgatcac	ttgctgca
S.Sus	gcagcctt	gtgaagtgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	ctt-----	174...	aaatctgatcac	ttgctgca
L.Afr	gtggcctt	gtgaaatgatga	<b>TTCAGTTTATCCATTCGCT</b>	<b>gagtagcgtgac</b>	cttcttcc----	169...	aaatctgatcac	ttgctgca
	** *	*****	*****	*****	*****	*****	*****	** **

id=708712 gene=ENSG00000212232 name=SNORD17 segment=chr20\_17943353\_17943589\_-1 type=EN

H.Sap	taacaagc	cctcggccttg...	1339...	caaagccccattgtgtcat-	<b>CAGCTGCTgGGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagcccaaacggctgtgct-	143...	ctccctgtttag	gtcagttc
R.Mac	taacaagc	cctcggccttg...	1343...	caaagccccattgtgtcat-	<b>CAGCTGCTgGGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagcctgaatggctgtgct-	143...	ctccctgtttag	gtcagttc
P.Tro	taacaagc	cctcggccttg...	1341...	caaagccccattgtgtcat-	<b>CAGCTGCTgGGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagcccaaacggctgtgct-	143...	ctccctgtttag	gtcagttc
P.Abe	taacaagc	cctcggccttg...	1343...	caaagccccattgtgtcat-	<b>CAGCTGCTgGGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagcccaaacggctgtgct-	143...	ctccctgtttag	gtcagttc
C.Jac	taacaagc	cctcggccttg...	1682...	caaagccccattgtgtcat-	<b>CAGCTGCTgGGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-gctggcccgaac--agctgcac-	144...	ctccctgtttag	gtcagttc
M.Mus	taatgagc	cctccgtacttg...	1112...	-----ccccctgtcatcagctga-g-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-gctggccttaagcca-----	144...	ctccctgtctag	gtcagttc
R.Nor	taatgagc	cctccgcactcg...	1109...	-----accctgtcatcagctga-g-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ggctggccttaagcca-----	145...	ctccctgtctag	gtcagttc
C.Por	taacaagt	ccgccgtacttg...	929...	-----ctgtgtgtcaccagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccggcccagccaggcggcc-	135...	ctccctgtctag	gtcagttc
C.Fam	taacaagt	cctcagtacttg...	1312...	-----attgtgtcatcagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagtccaaccaggctgct-	153...	ctccctgtttag	gtcagttc
F.Cat	taacaagt	cctcagtacttg...	1295...	-----attgtgtcatcagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagtccaaccaggctgct-	156...	ctccctgtttag	gtcagttc
B.Tau	taacaagc	cctcagtccttg...	1222...	-----attgtgtcgtcagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-gccagcccagccaggctgc-	153...	ctccctgtttag	gtcagttc
E.Cab	taagaagc	cccaggacttg...	1138...	-----tcattgtcgtcagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-cc-gcccgaaccaggctgct-	144...	ctccctgtctag	gtcagttc
S.Sus	tagtaagc	cctcattccaa...	1246...	-----attgtgtcatcagctgatg-	<b>GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagcccaaccaggctgct-	150...	ctccctgtttag	gtcagttc
L.Afr	caacaagc	cctcaatacttg...	1402...	-acagatccagtggtctcgtc	<b>CGCTgAT--GGTGAGTGGAgc</b>	<b>TGAAggCTGGG</b>	-ccagccc--aaccaggctgctg-	199...	ctccctgtttag	gtcaattc
	* **	** *	*	** **	*****	*****	*****	*****	** **	** **

id=811095 gene=ENSG00000129351 name=ILF3 segment=chr19\_10796444\_10798021\_1 type=IN

Figure 578: CS=10.92



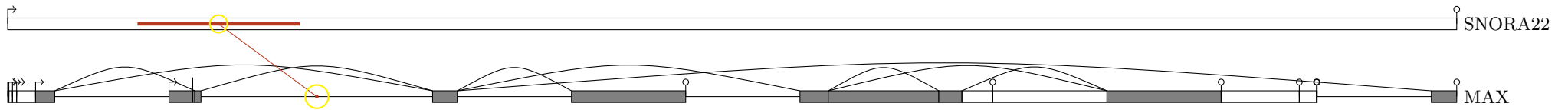
H.Sap	ggagtggT	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...87...gccagcacat-ta	tattacct---
P.Tro	ggagtggT	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...87...gccagcacat-ta	tattacct---
P.Abe	agagtggT	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...87...gccagcacat-ta	tattacct---
M.Mus	ttcgtgga	TTGCAcaGTGAACAC	ccaagtgtgctctgtagttc...88...gtcagcacac-ca	--ttaattaa
R.Nor	ttcgtgga	TTGCAcaGTGAACAC	ccaagtgtgctctgtagttc...88...atcagcacac-ca	tcttaatt---
C.Por	ctggcgac	TTGCAcaGTGAACAC	ccaagtgtgctttgtagttc...89...ggcagcacat---	-actacataaa
O.Cun	ctggtggc	TTGCAcaGTGAACAC	ccaagtgtgctttgatagttc...87...gtcagcacat-ta	ttttatct---
C.Fam	cCTGTggT	TTGCAcaGTGAACAC	ccaagtgtactttatagttc...87...gtcagcacat-ta	tattcaag---
B.Tau	cttgtggT	TTGCAcaGTGAACAC	ccaagtgtgctttgtagttc...87...gtcagcacat-ta	tattaatt---
E.Cab	cttgtagT	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...88...-tcagcacatata	tattaact---
S.Sus	cttgtggc	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...88...gtcagcacat-tg	tattaatt---
L.Afr	ctggtggt	TTGCAcaGTGAACAC	ccaagtgtgctttatagttc...87...gtcagcacat-tt	taattgta---
	*	*****	** ** *	***** *

id=686112 gene=ENSG00000206634 name=SNORA22 segment=chr7\_65220513\_65220646.1 type=EN

H.Sap	caagacag	gtaagtaaact...4941...caacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
P.Tro	caagacag	gtaagtaaact...4941...caacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
P.Abe	caagacag	gtaagtaaact...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
M.Mus	caagacag	gtgagtcaact...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	agagtgga
R.Nor	caagacag	gtgagtgccacc...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	agagtgga
C.Por	caagacag	gtaagtaaatca...4941...aacagactttaaagaagtt	GTGTtTTACaaTGCAG	agagtgga
O.Cun	caagacag	gtaagtaaaact...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	agagtgga
C.Fam	caagacag	gtaagtaaaatt...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	AgaGTGGa
B.Tau	caagacag	gtaagtaaaatt...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
E.Cab	caagacag	gtaagtaaaact...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
S.Sus	caagacag	gtaagtaaaatt...4941...aacagac-tttaaagaagtt	GTGTtTTACaaTGCAG	agagtgga
L.Afr	caagacag	gtaagtaaaact...4941...aacaaaac-tttaaagaagtt	GTGTtTTACaaTGCAG	Agagtgga
	*****	** ** *	*** * *****	*****

id=555149 gene=ENSG00000133703 name=KRAS segment=chr12\_25368495\_25378547\_-1 type=IN

Figure 579: CS=12



H. Sap	-----gGAGTGGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..82..gccagcacat-ta	tattacct---
P. Tro	-----gGAGTGGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..82..gccagcacat-ta	tattacct---
P. Abe	-----a---GAGTGGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..82..gccagcacat-ta	tattacct---
C. Jac	-----gGAGTGGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..82..gccagcacat-ga	tataacct---
M. Mus	ttcgtgga-----	TTGCACAGtGAACA	CCAAG	tgtgctc--tgtagttcccttg..83..gtcagcacac-ca	--ttaattaa-
R. Nor	ttcgtgga-----	TTGCACAGtGAACA	CCAAG	tgtgctc--tgtagttcccttg..83..atcagcacac-ca	tcttaatt---
C. Por	ct-----GGCGAC	TTGCACAGtGAACA	CCAAG	tgtgctt--tgtagttcccttg..84..ggcagcacat---	actacctaaa
O. Cun	ct-----GGTGGC	TTGcACAGtGAACA	CCAAG	tgtgctt--gatagttcccttg..82..gtcagcacat-ta	ttttatct---
C. Fam	cctgtggtctgc---	---ACAGtGAACA	CCAAG	tgtactt--tatagttcccttg..82..gtcagcacat-ta	tattcaag---
B. Tau	cttgt-----GGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tgtagttcccttg..82..gtcagcacat-ta	tattaatt---
E. Cab	ctt-----GTAGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..83..-tcagcacatata	tattaact---
S. Sus	cttgt-----GGC	TTGCACAGtGAACA	CCAAG	tgtgctttatagttccctt--..83..gtcagcacat-tg	tattaatt---
L. Afr	ct-----GGTGGT	TTGCACAGtGAACA	CCAAG	tgtgctt--tatagttcccttg..82..gtcagcacat-tt	taattgta---

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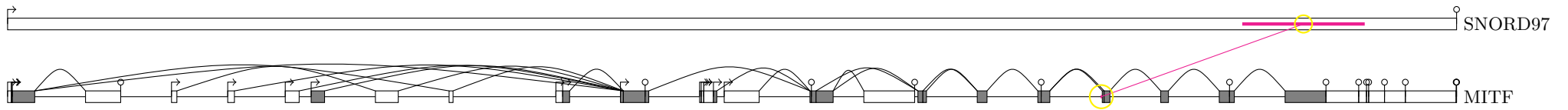
id=686112 gene=ENSG00000206634 name=SNORA22 segment=chr7\_65220513\_65220646.1 type=EN

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P. Tro	aatctgcg	gtacgtctccta...4742...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAGC	gtTGCTC	acccttttctcccccttag...154...ccattcttctag	gctgacaa
P. Abe	aatctgcg	gtacgtctccta...4742...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAGC	gtTGCTC	acccttttctcccccttag...154...ccattcttctag	gctgacaa
C. Jac	aatctgcg	gtacgtctccta...4742...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAGC	gtTGCTC	acccttttctcccccttag...154...ccattcttctag	gctgacaa
M. Mus	aatctgcg	gtacgtctccta...4750...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	tGCAAG	gccttgctcaccctttctc-----	..155...tcactctcctag	gctgacaa
R. Nor	aatctgcg	gtacgtctccta...4750...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	tGCAAG	gccttgctcaccctttctc-----	..155...tcactctcctag	gctgacaa
C. Por	aatctgcg	gtacgtctccta...4745...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAG	ccTTGCT	cacccttttctcccccttag...152...ccattcttctag	gctgacaa
O. Cun	aatctgcg	gtacgtctccta...4743...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	caCAAG	ccTTGCT	cacccttttctcccccttag...154...ccattcttccag	gctgacaa
C. Fam	aatctgcg	gtacgtctccta...4743...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cgcaag	cccttgctcaccctt-----	..167...ccattcttctag	gctgacaa
B. Tau	aatctgcg	gtacgtctccta...4747...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	tGCAAG	CCcttgctcacccttttctcccc-----	..155...cccttcttccag	gctgacaa
E. Cab	aatctgcg	gtacgtctccta...4743...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAG	ccTTGCT	cacccttttctccccctt--..155...ccattccctag	gctgacaa
S. Sus	aatctgcg	gtacgtctccta...4745...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAG	CCcttgctcacccttttctcccc-----	..157...ccattcttccag	gctgacaa
L. Afr	aatctgcg	gtacgtctccta...4743...agctggatgcatcgagctac	TTTGGa	TGTTCCCTGT	cGCAAG	ccTTGCT	cactccttttcccccttag...154...acattcttctag	gctgacaa

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

id=338812 gene=ENSG00000125952 name=MAX segment=chr14\_65560534\_65568263.-1 type=IN

Figure 580: CS=10.14



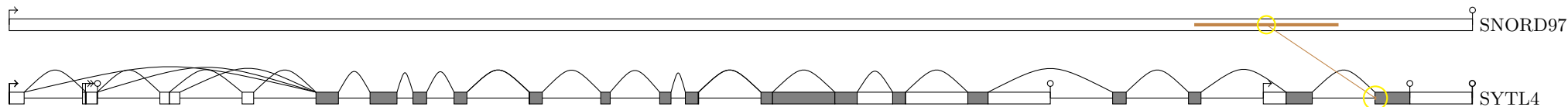
H. Sap	gaaattta	ttgcccgatgat...79...	-----tctttgaat-gtccagcgtcc	TGTGAGcGAAGATTAT	gagatatgagggcaa	g-tctccta
R. Mac	gaaattta	ttgcccgatgat...80...	-----tctttgaat-gtccagcatcc	TGTGAGTGAAGATTAT	gagatatgagggcaa	g-tctgcta
P. Tro	gaaattta	ttgcccgatgat...79...	-----tctttgaat-gtccagcgtcc	TGTGAGcGAAGATTAT	gagatatgagggcaa	g-tctgta
P. Abe	gaaattta	ttgcccgatgat...72...	tttctttctttgaat-gtcca	GTGTccTGTGAGcGAAGATTAT	gagatatgagggcaa	g-tctcctg
C. Jac	gaaattta	ttgcccaatgat...82...	-----ttaaatagtccagcgtccta	TGAGcGAAGATTAT	gagatatgagggcaa	g-tctccta
M. Mus	gaagtctc	ttgcccgatgat...107...	-----tctggat-gtccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	g-tttctaa
R. Nor	gaagtctc	ttgcccgatgat...127...	-----tctggat-gtccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	g-tttctaa
C. Por	gaaatcta	ctgcccgatgat...82...	-----tttggat-gtccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	g-tataaaa
O. Cun	gaaatcta	ttgcccgatgat...78...	-----tctttggat-gtccagcgtcc	TGTGAGcGAAGATTATGAGAT	atgagggcaa	agtcgattg
C. Fam	gaaatcta	ttgcccgatgat...82...	-----tttggat-gtccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	a-tctttaa
B. Tau	gaaatctc	ttgcccgatgat...89...	-----tctttgaat-gtccagcgtcc	TATGAGcGAAGATTATGAGAT	atgagggcaa	g-tcttcag
E. Cab	ggaatcta	ttgcccgatgat...81...	-----tttggat-atccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	g-cctctta
O. Avi	gaaatctc	ttgcccgatgat...87...	-----tctttgaat-gtccagcgtcc	TATGAGcGAAGATTATGAGAT	atgagggcaa	g-tcttcag
L. Afr	gaaaccta	ttgcccgatgat...81...	-----tttggat-gtccagcgtccta	TGAGcGAAGATTATGAGAT	atgagggcaa	g-tctccta
	* * *	***** *****	* ** *****	*** ** *	***** *****	*****

id=173780 gene=ENSG00000238622 name=SNORD97 segment=chr11\_10823014\_10823155\_-1 type=EN

H. Sap	gctcacag	gtaaacacctag...2587...	-----cttcaaacagttccaacttc	TAATGACTTCaTTCACG	tgccacag	cgtgtatt
R. Mac	gctcacag	gtaaacacctaa...2665...	-----cttcaaacagttccaacttc	TAATGACTTCaTTCACG	tgccacag	cgtgtatt
P. Tro	gctcacag	gtaaacacctag...2529...	-----cttcaaacagttccaacttc	TAATGACTTCaTTCACG	tgccacag	cgtgtatt
P. Abe	gctcacag	gtaaacacctag...2553...	-----cttcaaacagttccaacttc	TAATGACTTCaTTCACG	GCACag	catgtatt
C. Jac	gctcacag	gtaaacacttag...2585...	-----ccttgaacagttccaacttc	TAATGACTTCaTTCa	cgtgcacag	cgtgtatt
M. Mus	gctcacag	gtacgtacctag...2057...	ttatgtccctcaaagttcca	GTTTCTAATgaCTTCaTTCa	cgtgcacag	cgtgtatt
R. Nor	gctcacag	gtacgtacctag...1934...	ttatgtccctcaaagttcca	GTTTCTAATgaCTTCaTTCa	cgtgcacag	cgtgtatt
C. Por	gctcacag	gtaaatgcctag...2353...	ggatgcattttacagttcta	ATTTCTAATtaCTTCaTTCa	cgtgcacag	cgtgtatt
O. Cun	gctcacag	gtaaatacataa...1988...	gtgtcccttgaacagttcca	ATTTCTAATtaCTTCaTTCACG	tgccacag	cgtgtatt
C. Fam	gctcacag	gtaaatactggc...3128...	gtgtgccttgaacagttccc	GTTTCTAATtaCTTCaTTCa	cgtgcacag	cgtgtatt
B. Tau	gctcacag	gtaaattctcag...1891...	gtgttccttgaacagttctg	GTTTCTAATgaCTTCaTTCa	TGtgccacag	cgtgtatt
E. Cab	gctcacag	gtaaatacctgg...2098...	gtgtgccttgaacaaattcca	ATTTCTAATgaCTTCaTTCa	cgtgcacag	cgtgtatt
O. Avi	gctcacag	gtaaatactcag...1889...	ctgttccttgaacagttctg	GTTTCTAATgaCTTCaTTCa	TGtgccacag	catgtatt
L. Afr	gctcacag	gtgagtaccaat...2132...	gtgtgccttgaacagttcca	ATTTCTAATtaCTTCaTTCa	cgtgcacag	cgtgtatt
	*****	** *	* ** *	***** *****	*****	* *****

id=649289 gene=ENSG00000187098 name=MITF segment=chr3\_69998320\_70000962\_1 type=IN

Figure 581: CS=14.56



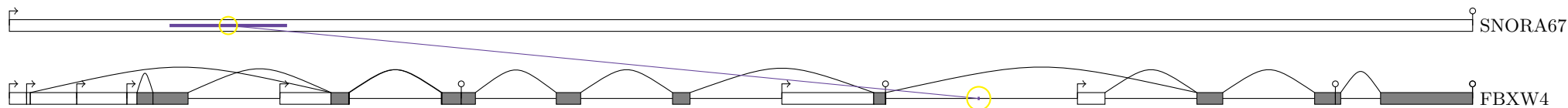
H. Sap	gaaattta	ttgcccgatgat...75...tctttctttgaat-gtccagc	GTCCTg	TGAGc	GAAGATTA	GAGA	tatgagggcaa	g-tctccta
P. Abe	gaaattta	ttgcccgatgat...74...tctttctttgaat-gtccagc	GTCCTg	TGAGc	GAAGATTA		tgagatatgagggcaa	g-tctcctg
C. Jac	gaaattta	ttgcccaatgat...76...-ctttctttaaatagtccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	g-tctccta
M. Mus	gaagtctc	ttgcccgatgat...101...tttctctctggat-gtccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	g-tttctaa
R. Nor	gaagtctc	ttgcccgatgat...121...cctctctctggat-gtccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	g-tttctaa
C. Por	gaaatcta	ctgcccgatgat...76...tctttctttggat-gtccagc	GTCCTa	TGAGc	GAAGATTA	GAGA	tatgagggcaa	g-tataaaa
O. Cun	gaaatcta	ttgcccgatgat...74...tctgtctttggat-gtccagc	GTCCTg	TGAGc	GAAGATTA		tgagatatgagggcaa	agtcgattg
C. Fam	gaaatcta	ttgcccgatgat...76...tctttctttggat-gtccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	a-tctttaa
B. Tau	gaaatctc	ttgcccgatgat...85...tctttctttgaat-gtccagc	GTCCTa	TGAGc	GAAGA	ttatgagatatgagggcaa		g-tcttcag
E. Cab	ggaatcta	ttgcccgatgat...75...tctttctttggat-atccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	g-cctctta
O. Avi	gaaatctc	ttgcccgatgat...83...tctttctttgaat-gtccagc	GTCCTa	TGAGc	GAAGA	ttatgagatatgagggcaa		g-tcttcag
L. Afr	gaaaccta	ttgcccgatgat...75...tctttctttggat-gtccagc	GTCCTa	TGAGc	GAAGATTA		tgagatatgagggcaa	g-tctccta
	* * *	***** *****	* * * * *	***** *****	***** *****	***** *****	***** *****	***** *****

id=173780 gene=ENSG00000238622 name=SNORD97 segment=chr11\_10823014\_10823155\_-1 type=EN

H. Sap	tggcactg	gtgagatcccct...2161...agtggggcccctctttagcc	TCTTc	TGGTg	TTTc	CTCAG	GGATcagt
P. Abe	tggcactg	gtgagatcccct...2444...----ggcccctctttagcctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
C. Jac	tggcactg	gtgagatcccct...2178...----ggcccctctttagcgtcctc	TGGTg	TTTc	CTCAG	GGATcagt	
M. Mus	tggcactg	gtgagactctcc...2224...----ggactctgttcagctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
R. Nor	tggcactg	gtgagactctct...2104...----ggactctgttcagctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
C. Por	tggcactg	gtgagtctccag...1761...aattgggtcctcttccagcc-	TCTCTGGTg	TTTTCTCAG		GGATcagt	
O. Cun	tggcactg	gtgagagctctc...1916...----agcccctgttcagcctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
C. Fam	tggcactg	gtgagaacctct...1757...----gttcctgttcaacctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
B. Tau	cggcacag	gtgagagcttct...2212...-----tgttcagcctcctctgggtg	TTTTCTCAG			GGATcagt	
E. Cab	tggcactg	gtgagagctct...1884...----agtccctgttcagcctcctc	TGGTg	TTTc	CTCAG	GGATcagt	
O. Avi	cggcacag	gtgagagcttct...2205...-----tgttcagcctcctctgggtg	TTTTCTCAG			GGATcagt	
L. Afr	tggcactg	gtgagagctct...1633...----ggctctgttccagcgtcctc	TGGTg	TTTc	CTCAG	GGATcagt	
	***** *	*****	* * *	*****	*****	*****	*****

id=530699 gene=ENSG00000102362 name=SYTL4 segment=chrX\_99931174\_99933387\_-1 type=IN

Figure 582: CS=14.76



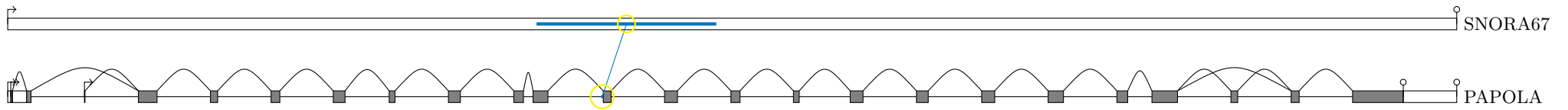
H. Sap	aaggag-----g	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggacat-ca-gtgcctct...84...ctgcccacatg-g	atgcctaa
R. Mac	aaggag-----g	a-----tccaaggtgattcctgatccaag	<b>GTGATTC CCTCTCC</b>	aaggggacatcca-gtgccc-...87...ctgcctacatg-g	atgcctaa
P. Tro	aaggag-----g	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggacat-ca-gtgcctct...84...ctgcccacatg-g	atgcctaa
P. Abe	aaggag-----g	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggacat-ca-gtgcctct...84...ctgcccacatg-g	atgcctaa
C. Jac	aaggag-----g	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggacttcca-gtgccc-...88...ctgcctacatg-g	atatccat
M. Mus	aaaggaagacaagtta	agtttagtccaag-----	<b>GTGATTC CCTCTCC</b>	aaagggtgactgtgtgcc-...90...ctgcctacatg-t	atgcctac
R. Nor	aaggag-----a	aaatagccaag-----	<b>GTGATTC CCTCTCC</b>	aaagggtgactatgtgcc-...90...cagcctacata-t	atgcctac
C. Por	gaaggag-----a	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aagaggccagtca-gtgccc-...86...ctgcctacagg-t	atagaagt
O. Cun	gcagaag-----a	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	caggggccgacta-gtgcc-...90...ctgcctacatg-c	actcactg
F. Cat	aaggaa-----a	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggcctgtc-gtgccc-...115...-tgaccgatact	gtgcttct
E. Cab	aaaggag-----a	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	tccaagggcctacta-atgc-...93...ctgcctacata-t	atacatgt
S. Sus	aaggag-----g	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggcctgtt-gtgccc-...89...ctgcccacaca-c	acgcctct
L. Afr	aagagag-----a	a-----tccaag-----	<b>GTGATTC CCTCTCC</b>	aaggggccagcta-gtgccc-...89...ctgcctacata-g	ataccaaa
		* ****	***** * * *	***	** *

id=673668 gene=ENSG00000207152 name=SNORA67 segment=chr17\_7481273\_7481409\_1 type=EN

H. Sap	ctcaac	ag gtaagagattca...4892...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattg---ttctcagtaatctgctctcggcccccgggtggggt	gagggtgg
R. Mac	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccgggtggggt	gagggtgg
P. Tro	ctcaac	ag gtaagagattca...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccgggtggggt	gagggtgg
P. Abe	ctcaac	ag gtaagagattca...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccgggtggggt	gagcaggc
C. Jac	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcagccaccgtgtggggt	gagggtga
M. Mus	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgttctcggccaccgggtggggt	ggcgggtg
R. Nor	ctcacc	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgttctcggccaccgggtggggt	acgggtgg
C. Por	ctcaac	ag gtaagagattcc...4891...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	--agtcacaaagaattgttcttctcagtaatctgctctcggccaccgggtggggt	gagggtgg
O. Cun	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccgggtggggt	gagggtgg
F. Cat	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcggtaatctgctctcggccaccgggaggggc	gagggtgg
E. Cab	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccaggaggggc	gaggatgg
S. Sus	ctcaac	ag gtaagagattcc...4889...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	acagtcacaaagaattgttcttctcagtaatctgctctcggccaccgggaggggc	gagggtgg
L. Afr	cttaac	ag gtaagagattcc...4892...ctgccactgcccgggtcac	<b>GGAGGGAATTAC</b>	--agtcacaaagaattgttcttctcagtaatctgctctcggcc-cgggaggggt	gagggtgag
	** * *	*****	*****	*****	** * * *

id=351491 gene=ENSG00000107829 name=FBXW4 segment=chr10\_103372911\_103384501\_-1 type=IN

Figure 583: CS=14.04



H. Sap	-aaggag-----g	atccaagtgattccctc-tccaaggggacat-ca-gtgcctctc--AGGAaaGTAGCAgCTTGGaATAGaatctggcatgcctaaggcc...40...ctgccacatg-g	atgcctaa
R. Mac	-aaggaggatccaaggtgattcctg	atccaagtgattccctc-tccaaggggacatcca-gtgcctctc--AGGAaaGTAGCAgCTTGGaATAGaatctggcatgcctaaggcc...40...ctgcctacatg-g	atgcctaa
P. Tro	-aaggag-----g	atccaagtgattccctc-tccaaggggacat-ca-gtgcctctc--AGGAaaGTAGCAgCTTGGaATAGaatctggcatgcctaaggcc...40...ctgccacatg-g	atgcctaa
P. Abe	-aaggag-----g	atccaagtgattccctc-tccaaggggacat-ca-gtgcctctc--AGGAaaGTAGCAgCTTGGaatagaatctggcatgcct-----46...ctgccacatg-g	atgcctaa
C. Jac	-aaggag-----g	atccaagtgattccctc-tccaaggggacat-ca-gtgcctctc--AGGAaaGTAGCAaCTTGGaATAGaatctggcatgcctaaggcc...41...ctgcctacatg-g	atgcctaa
M. Mus	aaaggaag-----acaagttaagtta	gtccaagtgattccctc-tccaaagggctgactgtgtgccttttc-AGGAacGTAGCAaCTTGGAAAGAAaaccaggcgtgcctgaggt...43...ctgcctacatg-t	atgcctac
R. Nor	-aaggag-----aaaa-----ta	gtccaagtgattccctc-tccaaagggctgactgtgtgccttttc-AGGAacGTAGCAaCTTGGAAAGAAaaccaggcgtgcctgaggt...43...cagcctacata-t	atgcctac
C. Por	-gaaggag-----a	atccaagtgattccctc-tccaagggcagctca-gtgcctctc--AGGAaaGTAGCAaCTTGGAAAGAAaatctggcatgcctgaggt...40...ctgcctacagg-t	atagaagt
O. Cun	-gcagaag-----a	atccaagtgattccctc-tccaaggggcccagctca-gtgcctctc--AGGAaaGTAGCAaCTTGGAAAGAAaatctggcatgcctaaggcc...43...ctgcctacatg-c	actcactg
C. Fam	-aaggag-----g	atccaagtgattccctc-tccaaggggcttgcctt-gtgcctctc--AGGAaaGTAGCAaCTTGGaATAAaatctggcatgcctaaggcc...41...ctgcctacac-a	acagcggg
F. Cat	-aaggaa-----a	atccaagtgattccctc-tccaagggcctgctc-gtgcctctc--AGGAaaGTAGCAgCTTGGaacagaacctggcaagcctc-----72...-tgcaccgatact	gtgcttct
B. Tau	-aggagag-----a	atccaagtgattccctc-tccaaggggcccagctca-gtgcctctc--AGGAaaGTAGCAaCTTGGaATAAaatctggcagcctcaggt...42...ctgcctacatg-t	atggttaa
E. Cab	-aaaggag-----a	atccaagtgattccctc-tccaaggggcccagctca-gtgcctctc--AGGAaaGTAGCAaCTTGGaATAAaatctggcatgcctaaggcc...42...ctgcctacata-t	atgcctaa
L. Afr	-aagagag-----a	atccaagtgattccctc-tccaaggggcccagctca-gtgcctctc--AGGAaaGTAGCAaCTTGGaATAAaatctggcatgcctaaggcc...42...ctgcctacata-g	atgcctaa

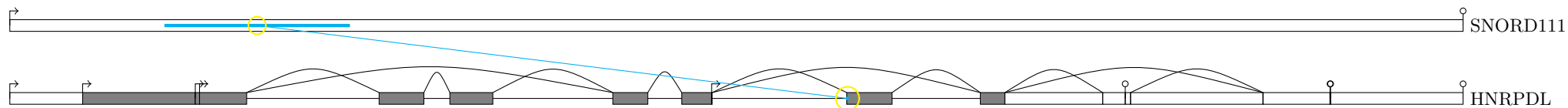
id=673668 gene=ENSG00000207152 name=SNORA67 segment=chr17\_7481273\_7481409\_1 type=EN

H. Sap	tctaaatg	gtatgtgttag...1780...--gatgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
R. Mac	tctaaatg	gtatgtgttag...1498...--gatgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
P. Tro	tctaaatg	gtatgtgttag...1779...--gatgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
P. Abe	tctaaatg	gtatgtgttag...1775...-----gtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
C. Jac	tctaaatg	gtatgtgttag...1472...--gatgataatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
M. Mus	tctaaatg	gtatgtgttag...1311...tagatgtaatatccaatagTCTTaTCAAGTGCTACaaTCTTtttgaacag	ggaatggc
R. Nor	tctaaatg	gtatgtgttag...1402...tagatgtaatatccaatagTCTTaTCAAGTGCTACaaTCTTtttgaacag	ggaatggc
C. Por	tctaaatg	gtatgtgttag...1517...tagatgtaatatccaatagTCTTaTCAAGTGCTACaaTCTTtttgaacag	ggaatggc
O. Cun	tctaaatg	gtatgtgttag...1453...tagatgataatgtccagtagTCTTaTCAAGTGCTACaaTCTTtttaaacag	ggaatggc
C. Fam	tctaaatg	gtatgtgttag...1517...--gttgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
F. Cat	tctaaatg	gtatgtgttag...1490...-----gtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
B. Tau	tctaaatg	gtatgtgttag...1786...--gatgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
E. Cab	tctaaatg	gtatgtgttag...1485...--gatgtaatatccaatagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc
L. Afr	tctaaatg	gtatgtgttag...1492...-cgatg-tgataccagtagtcTTATCAAGTGCTACaaTCTTtttaaacag	ggaatggc

id=445583 gene=ENSG0000090060 name=PAPOLA segment=chr14\_96998987\_97000827\_1 type=IN

Figure 584: CS=16.8





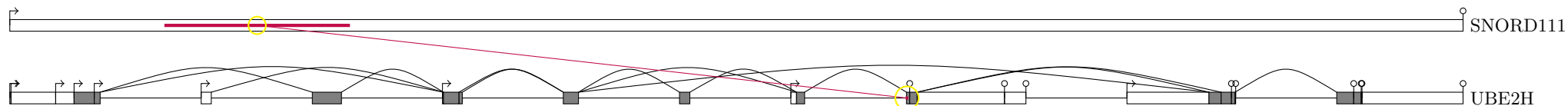
H. Sap	gtgtttca	caGCCTGAAATGATG	actccttaaaaaatttc	catg-----	..47..	ctgatcaggctg	tagagtgg
R. Mac	ttcattca	caGCCTGAAATGATG	actcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tagtgaaa
P. Tro	gtgtttca	caGCCTGAAATGATG	actccttaaaaaatttc	catg-----	..47..	ctgatcaggctg	tagagtgg
P. Abe	gcgtttca	caGCCTGAAATGATG	actcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tagagtgg
C. Jac	ttcgggtca	caGCCTGAAATGATG	actcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tagagtga
M. Mus	tttaagaa	caGCCTGAAATGATG	accattt---aattc	atgtctct---	..42..	ctgatcaggctg	cagagtgg
R. Nor	attatGTC	caGCCTGAAATGATG	actattt---aattc	gtgtctct---	..42..	ctgatcaggctg	cagagtgg
C. Por	tttgttca	taGCCTGAAATGATG	ct---ct---aaatttc	atgtctctctt	..39..	ctgatcaggctg	tagaatgg
O. Cun	tttattca	taGCCTGAAATGATG	ACAATtt---aaatttc	atgtctctctt	..39..	ctgatcaggctg	tagaatag
B. Tau	cttattca	caGCCTGAAATGATG	attcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tagagtgg
E. Cab	tttattca	caGCCTGAAATGATG	attcctt---acttttc	catgtct----	..43..	ctgatcaggctg	tagagtgg
O. Avi	cttattca	caGCCTGAAATGATG	attcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tagagtgg
L. Afr	tttattca	caGCCTGAAATGATG	attcctt---aaatttc	catgtct----	..44..	ctgatcaggctg	tatgtaga
		*****	****	*	***	**	*****
							*

id=336304 gene=ENSG00000221066 name=SNORD111 segment=chr16.70571908.70572001.1 type=EN

H. Sap	tggccg	ag	gtgagacttaat...513...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
R. Mac	tggccg	ag	gtgagacttaat...502...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
P. Tro	tggccg	ag	gtgagacttaat...513...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
P. Abe	tggccg	ag	gtgagacttaat...517...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
C. Jac	tggccg	ag	gtgagacttaat...493...	-----gtttcctaacaatcattgtg	CATTgTTTCAG	GT	cagggc
M. Mus	tggaag	ag	gtgagacctct...167...	-----gtttcctaaccttcgttgtg	CATTGTTTCAG	GT	cagggc
R. Nor	cggaag	ag	gtgagccttgct...188...	-----tgttcctaaccatccttgtg	CATTGTTTCAG	GT	caGGGc
C. Por	tggccg	ag	gtgagacttaac...414...	---gttgtttcctaacaatcact--	GCATTGTTTCAG	GT	cagggc
O. Cun	tggccg	ag	gtgagccttaat...474...	gaagttgtttcctaacaatc	ATTGTgCATTGTTTCAG	GT	cagggc
B. Tau	aggccg	ag	gtgagaccttaat...495...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
E. Cab	tggccg	ag	gtgagacttaat...495...	-----gtttcctaacgatcattgtg	CATTGTTTCAG	GT	cagggc
O. Avi	aggccg	ag	gtgagaccttaat...495...	-----gtttcctaacaatcattgtg	CATTGTTTCAG	GT	cagggc
L. Afr	tggacg	ag	gtaagacttgat...400...	-----gtttgctaacaattgttgtg	CATTGTTTCAG	GT	cagggc
	**	*	**	**	*	*	*****
	**	**	**	**	*	*	*****

id=338254 gene=ENSG00000152795 name=HNRPDL segment=chr4.83347787.83348342.-1 type=IN

Figure 585: CS=10.14



```

H.Sap gtgtttca caGCCTGAAATGATGactctttaaataatttcacg-----..47...ctgatcaggctg tagagtgg
R.Mac ttcattca caGCCTGAAATGATGactctt---aaatttcacgtctct----..44...ctgatcaggctg tagtgaaa
P.Tro gtgtttca caGCCTGAAATGATGactctttaaataatttcacg-----..47...ctgatcaggctg tagagtgg
P.Abe gcgtttca caGCCTGAAATGATGactctt---aaatttcacgtctct----..44...ctgatcaggctg tagagtgg
C.Jac ttcggtca caGCCTGAAAGATGactctt---aaatttcacgtctct----..44...ctgatcaggctg tagagtga
M.Mus ttttaaga caGCCTGAAATGATGaccatt---aatttcacgtctctctt---..41...ctgatcaggctg cagagtgg
R.Nor attatgtc caGCCTGAAATGATGactctt---aatttcacgtctctctt---..41...ctgatcaggctg cagagtgg
C.Por tttgttca taGCCTGAAATGATGcct-----aaatttcacgtctctctt---..40...ctgatcaggctg tagaatgg
O.Cun tttattca taGCCTGAAATGATGacaatt---aaatttcacgtctctct---..44...ctgatcaggctg tagaatag
B.Tau cttattca caGCCTGAAATGATGactctt---aaatttcacgtctctct---..44...ctgatcaggctg tagagtgg
E.Cab tttattca caGCCTGAAATGATGactctt---acttttcacgtctctct---..43...ctgatcaggctg tagagtgg
O.Avi cttattca caGCCTGAAATGATGactctt---aaatttcacgtctctct---..44...ctgatcaggctg tagagtgg
L.Afr tttattca caGCCTGAAATGATGactctt---aaatttcacgtctctct---..44...ctgatcaggctg tatgtaga
***** ****                *** **                ***** ***** *

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id=336304 gene=ENSG00000221066 name=SNORD111 segment=chr16.70571908.70572001.1 type=EN

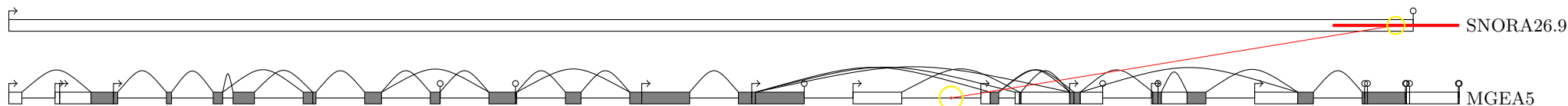
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H.Sap gatgaagc gtaagtaactat...1294...taaaaacatgccattccttc--CATCtGTTTCAG GTcaggaa
R.Mac gatgaagc gtaagtaactat...1686...taaaaacatgccattccttc--CATCtGTTTCAG GTcaggaa
P.Tro gatgaagc gtaagtaactat...1290...taaaaacatgccattccttc--CATCtGTTTCAG GTcaggaa
P.Abe gatgaagc gtaagtaactat...1294...taaaaacatgccattccttc--CATCtGTTTCAG GTcaggaa
C.Jac gatgaagc gtaagtaactat...1211...taaaaacatgccattccttc--CATCTgTTTCAG GTcaggaa
M.Mus gatgaagc gtaagtaactat...1068...ttaaaaagtgccattttttt--TCATCtGTTTCAG GTcaggaa
R.Nor gatgaagc gtaagtaactat...1055...-taaaaagtgccatttttttTCATCtGTTTCAG GTcaggaa
C.Por gacgaagc gtaagtaactat...1669...ttttttaatgctattccttc--CATCtGTTTCAG GTcgggaa
O.Cun gatgaagc gtaagtaactgt...1247...ttaaaaaatgccattccttc--CATCtGTTTCAG GTcaggaa
B.Tau gatgaagc gtaagtaactat...1271...ttttttaatgccattccttc--CATCtGTTTCAG GTcaggaa
E.Cab gatgaagc gtaagtaactat...1269...taaaaaatgccattccttc--CATCtGTTTCAG GTcaggaa
O.Avi gatgaagc gtaagtaattta...1246...ttttttaatgccattccttc--CATCtGTTTCAG GTcaggaa
L.Afr gatgaagc gtaagtaactat...1235...ttaaaaaatgccattccttc--CATCtGTTTCAG GTcaggaa
** ***** ***** *                *** *** **                ***** ***** ** *****

```

id=354614 gene=ENSG00000186591 name=UBE2H segment=chr7.129497404.129498741.-1 type=IN

Figure 586: CS=10.14



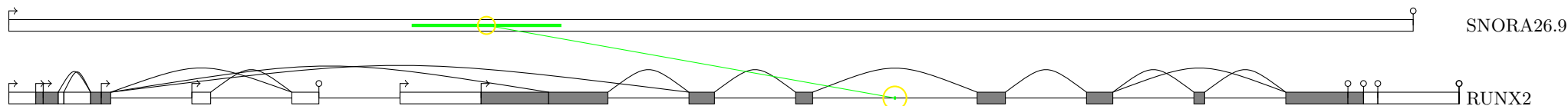
H.Sap	cctttcct	gtgcccttttaa...64...-----aagagattgtaaagctcctc	TTTAgaACCTt	TCTGGAGTCACA	cct	gagaaaaac
R.Mac	cctttcct	gtgcccttttcaa...75...-----aagctcctcttttagatcctt		TCTGGAGTCACA	cct	gagaaaaac
P.Tro	cctttcct	gtgcccttttaa...75...-----aagctcctcttttagatcctt		TCTGGAGTCACA	cct	gagaaaaac
P.Abe	cctttcct	gtgcccttttaa...75...-----aagctcctcttttagatcctt		TCTGGAGTCACA	cct	gagaaaaac
M.Mus	cctttcct	gtgcccttttaa...66...-gaggtccacacctcctctc		TGGAtCCTGTCTGGAGTCACA	gct	gaaaaaaa
R.Nor	cctttcct	gtgcccttttaa...63...gaggaaaactgcactcctc	TTAGAt	CCTGTCTGGAGTCACA	gat	ggaaaaaa
C.Por	tctttcct	gtgcccttttaa...63...gaagagactgacactcctc	TTGGAt	CCTGTCTGGAGTCACA	gct	gaaaaaaa
O.Cun	cctttcct	gtgcccttttac...70...-gtgtgacctcttctttggat		CCTGTCTGGAGTCACA	gct	gaacaaaa
F.Cat	cctttcct	gtgcccttttaa...64...-atgagactaaaactcctc	TGGAt	CCTGTCTGGAGTCACA	gct	gaaccaga
B.Tau	cctttcca	gtgcccttttaa...66...-gagattttagaactcctc	TGGAt	ccTGTCTGGAGTCACA	act	gaaccaga
E.Cab	cctttcct	gtgcccttttaa...75...-----agactcctctttggatcctg		TCTGGAGTCACA	gct	gaaccaca
O.Avi	cctttcca	gtgccctattaa...66...-gagattttagaactcctc	TGGAt	ccTGTCTGGAGTCACA	act	gaaccaga
L.Afr	cctttcct	gtgcccttttaa...65...agagactggagaactcctc	TTGGAt	CCTGTCTGGAGTCACA	gct	gaaccaga
	*****	***** * *		*****		* *

id=722877 gene=ENSG00000212624 name=SNORA26.9 segment=chr1.52190447.52190568.-1 type=EN

H.Sap	gaagtcac	gtttgcgcagcg...882...cccttcctcaaatgtaaaa	TGTGACTTCAGAc	AGGTTGAA	----ttccttcattgggctgtgata--	...266...tattgtagaga	gttatttc
R.Mac	gaagtcac	gtttgcgcagcg...875...cccttcctcaaatgtaaaa	TGTGACTTCAGAc		----caggtttaaattccttcattg--	...276...tattgtagaga	gctatttc
P.Tro	gaagtcac	gtttgcgcagcg...882...cccttcctcaaatgtaaaa	TGTGACTTCAGAc		----caggttgaattccttcattg--	...266...tattgtagaga	gttatttc
P.Abe	gaagtcac	gtttgcgcagcg...878...cccttcctcaaatgtaaaa	TGTGACTTCAGAc		----caggtttaaattccttcattg--	...279...tattgtagaga	gctatttc
M.Mus	gaagtcac	gtttgcgcagcg...1027...acccttcctcaaatgtaaaa	TGTGACTTCAGACAGGTTTA		agtcagttccttcattgggct--	...260...aacttttagaga	gctatttc
R.Nor	gaagtcac	gtttgcgcagcg...1038...cccttcctcaaatgtaaaa	TGTGACTTCAGACAGGTTTA		attcagttccttcattgggctg--	...263...agcttttagaga	gctatttc
C.Por	gaagtcac	gtttgcgcagcg...870...cccttcctgaaatgtaaaa	TGTGACTTCAGACAGGTTTA		----ttccttcattgggctgtgata--	...256...tactgtagaga	gctatttc
O.Cun	gaagtcac	gtttgcgcagcg...875...cccttcctgaaatgtaaaa	TGTGACTTCAGACAGG		----tgtaattccttcattgggctg--	...274...aactgtagaga	gctatatc
F.Cat	gaagtcac	gtttgcgcagcg...906...cccttcctcataatgtaaaa	TGTGACTTCAGACAGGTTTA		----atccttcattgggctgtgat--	...276...tattgtagaga	gttatttc
B.Tau	gaagtcac	gtttgcgcagcg...976...cccttcctcaaatgtaaaa	TGTGACTTCAGACAGTTTA		----attcct---tgggctgtgataat	...280...tattgtagaga	gctgtttc
E.Cab	gaagtcac	gtttgcgcagcg...910...cccttcctcaaatgtaaaa	TGTGACTTCAGAc		----gaggtttaaattccttcattg--	...286...tattgtagaga	gctatttc
O.Avi	gaagtcac	gtttgcgcagcg...978...cccttcctcaaatgtaaaa	TGTGACTTCAGACAGTTTA		----atcct---tgggctgtgataat	...271...tattgtagaga	gctgtttc
L.Afr	gaagtcac	gtttgcgcagcg...897...cccttcctcaaatgtaaaa	TGTGACTTCAGACAGGTTTA		----ctccttcattgggctgtgata--	...263...tattgtagaga	gctagttc
	*****	*****	** **** * *****		**** **	* *****	* * **

id=370598 gene=ENSG00000198408 name=MGEA5 segment=chr10.103553853.103555085.-1 type=IN

Figure 587: CS=10.14



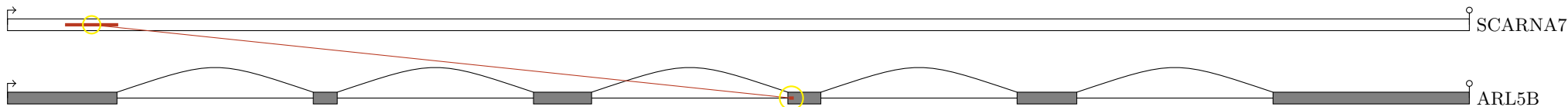
H. Sap	cctttcct	gtgccctttaaggttgacgc	AGTGct	TTAAagg	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacacct	gagaaaaac
R. Mac	cctttcct	gtgccctttcaaggtcgacgc	AGTGct	TTAAagg	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacacct	gagaaaaac
P. Tro	cctttcct	gtgccctttaaggttgacgc	AGTGct	TTAAagg	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacacct	gagaaaaac
P. Abe	cctttcct	gtgccctttaaggttgacgc	AGTGct	TTAAagg	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacacct	gagaaaaac
M. Mus	cctttcct	gtgccctttaaggttgacact	GTACT	TTAAaga	GGCTAACA	cagaagggttaaggaactct...49..	ggagtcacagct	gaaaaaaa
R. Nor	cctttcct	gtgccctttaaggttgctgc	AGTACT	TTAAaga	GGCTAACA	cagaagggttaaggaagtct...47..	ggagtcacagat	ggaaaaaa
C. Por	tctttcct	gtgccctttaaggtt	GATAc	AGTGcc	TTAAaga	GGCTAACA	cagaaggtacaggaaccct...47..	ggagtcacagct
O. Cun	cctttcct	gtgcccttttacagctaacac	AGTGct	TTAAaga	GGCTAACA	cagaagggttaaggaactct...48..	ggagtcacagct	gaacaaaa
F. Cat	cctttcct	gtgccctttaaggttgacgc	AGTGcc	TTAAaga	GGCTAACA	cagaagggttaaggaagtct...47..	ggagtcacagcg	gaaccaga
B. Tau	cctttcca	gtgccctttaaggttgacac	AGTGcc	TTAAaga	GGCTAACA	caggagggttaaggaagtct...49..	ggagtcacaaact	gaaccaga
E. Cab	cctttcct	gtgccctttaaggttgacgc	AGTGcc	TTAAaga	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacagct	gaaccaca
S. Sus	gaattcct	gtgccctttaaggttc	GATGc	AGTGcc	TTAAagg	GGCTAACA	cagaagggttaaggaagtct...48..	atagtcacagtt
L. Afr	cctttcct	gtgccctttaaggttgctgc	AGTGct	TTAAaga	GGCTAACA	cagaagggttaaggaagtct...49..	ggagtcacagct	gaaccaga
	****	***** * *	* * *	*****	*****	* * *	*****	* *

id=722877 gene=ENSG00000212624 name=SNORA26.9 segment=chr1\_52190447\_52190568.-1 type=EN

H. Sap	accagaa	gtaagtactccc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctatttcag	ggcacaga
R. Mac	accagaa	gtaagtactccc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctatttcag	ggcacaga
P. Tro	accagaa	gtaagtactccc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctatttcag	ggcacaga
P. Abe	accagaa	gtaagtactccc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctatttcag	ggcacaga
M. Mus	accagaa	gtaagtgctctac...4910..	atctatagcagcatcaat-	TGTTc	AGCTaa	TTAAat	GTGCTtttattttatgatttgctgctttccag	ggcacaga
R. Nor	accagaa	gtaagtacctgc...4910..	-tctatagcgttatcaat	TGTTc	AGCTaa	TTAAat	GTGCTtttattttatgatttgctgctttccag	ggcacaga
C. Por	accagaa	gtaagtaattgt...4910..	atctatttagcatggtcatt-	TGTTc	AGCTaa	TTAAata	TGCTttTATTttatgatttgctgctttccag	ggcacaga
O. Cun	accagaa	gtgagtacttac...4910..	atctatttagtatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctgctttccag	ggcacaga
F. Cat	accagaa	gtaagtacttgc...4910..	atctatttagtatggtcaat-	TGTTc	AGCTca	TTAAata	TGCTtttattttatgatttgctgctttccag	ggcacaga
B. Tau	accagaa	gtaagtgcttgc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctatttcag	ggcacaga
E. Cab	accagaa	gtaagtacttgc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctgctttccag	ggcacaga
S. Sus	gccagaa	gtaagtgcttgc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTttTATTttatgatttgctgctttccag	ggcacaga
L. Afr	accagaa	gtaagtacttgc...4910..	atctatttagcatggtcaat-	TGTTc	AGCTaa	TTAAata	TGCTtttattttatgatttgctgctttccag	ggcacaga
	** **	** **	***** **	** *	*****	*****	*****	*****

id=535500 gene=ENSG00000124813 name=RUNX2 segment=chr6\_45405789\_45459677.1 type=IN

Figure 588: CS=11.7



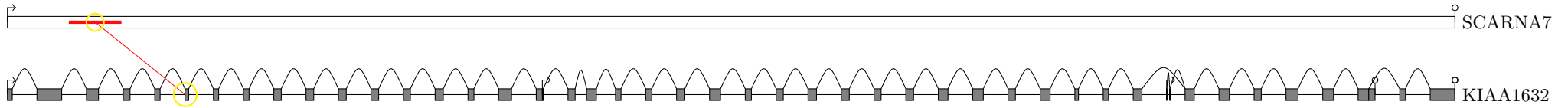
H.Sap	ggctctct	tggaaATGATGAAaTAGAG	-----	ataa	ttgggtgttgaatg-tt...	279	..gatctgatccaa	aagagcct-
P.Tro	ggctctct	tggaaATGATGAAaTAGAG	-----	ataa	ttgggtgttgaatg-tt...	279	..gatctgatccaa	aagagcct-
C.Jac	ggctctct	tggaaATGATGAAaTAGAG	-----	ataa	ttgggtgttgaatg-tt...	275	..gatctgatccga	aagagcct-
M.Mus	gactctct	tggaaATGATGAAaTAGAGA	-----	tatt	ttgggtgttgaatg-ttg...	291	..gatctgatcc-a	aagagtcta
R.Nor	ggctctct	tggaaATGATGAAaTAGAG	-----	ata	ctgggtgtcgaatgtt-...	276	..gatctgatccaa	aagagtct-
C.Por	ggctcttt	tggaaATGATGAAaTAGAGATAAGTTGGG	-----	tgt	tgaatgttgaatgactg...	268	..gatctgatccaa	aagagcct-
O.Cun	ggctctct	tggaaATGATGAAaTAGAGATAAaTGGGTGtTGAa	-----	tgt	tgaatgttgaatgactg...	267	..gatctgatccaa	aagagcct-
C.Fam	ggctctct	tggaaATGATGAAaTAGAG	-----	ata	atgggtgttgaatg-tt...	275	..gatctgatccaa	aagagccc-
F.Cat	ggctctct	tggaaATGATGAAaTAGAGATAAaTGGG	-----	tgt	tgaatgttgaatgactg...	284	..gatctgatccaa	aagagcct-
B.Tau	ggctctcc	tggaaATGATGAAaTAGAGATAAaTGGG	-----	tgt	taatgttgaatgactg...	263	..gatctgatccaa	aagagcct-
E.Cab	ggctctct	tggaaATGATGAAaTAGAGATAAaTGGG	-----	tgt	tgaatgttgaatgactg...	262	..gatctgatccag	aagagcct-
L.Afr	ggctcttt	tggaaATGATGAAaTAGAGATAAaTGGG	-----	tgt	tgaatgttgaatgactg...	268	..gatctgatccaa	aagagcct-
	* ****	*****			*	**	*****	**** *

id=627913 gene=ENSG00000238741 name=SCARNA7 segment=chr3\_160232695\_160233024\_-1 type=EN

H.Sap	atacagag	g	gtatgctaagat...3906...	tgt	---ctttccttttaattttc-----	TTCTAg	TTCATCAT
P.Tro	atacagag	g	gtatgctaagat...3928...	tgt	---ctttccttttaattttc-----	TTCTAg	TTCATCAT
C.Jac	acacagag	g	tacgctaaat...4563...	tgt	---ctttccttttgattttc-----	TTCTAg	TTCATCAT
M.Mus	acacagag	g	tatgccaat...3117...	tcc	---ctgtattttaatattgc-----	TTTCTAg	TTCATCAT
R.Nor	acacagag	g	tatgccaat...3121...	ccc	---ct-tattttaatattgcc-----	TTCTAg	TTCATCAT
C.Por	acacagag	g	tatgctgtgat...2088...	ctta	atgcaattttttct-----	TTTAAaTTATTCTCTAg	TTCATCAT
O.Cun	acacagag	g	tatgctaagaa...3258...	ca	atcctgttctctttttTTIGtt	IGTTTTIGCTTCTAg	TTCATCAT
C.Fam	acactgag	g	tatactaagct...3148...	ttt	---ctttccttttaattttc-----	TTCTAg	TTCATCAT
F.Cat	acacagag	g	tatactgagcc...3465...	tcc	---attcaattttctttctt-----	TTTAATTGCTTCTAg	TTCATCAT
B.Tau	atacagag	g	tatactgaggt...2570...	ctc	---attcaattttctttctt-----	TTTAcTTGTCTTCTAg	TTCATCAT
E.Cab	acacggag	g	tatactaaat...2913...	ctc	---attcgttttctttctt-----	TTTAATTGTCTTCTAg	TTCATCAT
L.Afr	acacagag	g	tatacttcgat...3311...	gt	caatttttttttctt-----	TTTAcTTGTCTTCTAg	TTCATCAT
	* ** **	*** *			** *	*****	*****

id=370938 gene=ENSG00000165997 name=ARL5B segment=chr10\_18957607\_18961550\_1 type=IN

Figure 589: CS=18.96



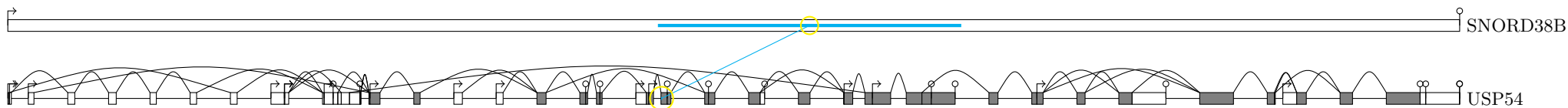
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P. Tro	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.278...	gatctgatccaa	aagagcct
P. Abe	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.278...	gatctgatccaa	aagagcct
C. Jac	ggctctct	tggaaa	TGATGAAATAGAGA	ataattgggtgttgaatgtt-	..275...	gatctgatccga	aagagcct
R. Nor	ggctctct	tggaaa	TGATGAAATAGAGA	tatctgggtgtcgaatgttg...	.275...	gatctgatccaa	aagagtct
C. Por	ggctcttt	tggaaa	TGATGAAATAGAGA	tagttgggtgttgaatgttg...	.276...	gatctgatccaa	aagagcct
O. Cun	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.282...	gatctgatccaa	aagagcct
C. Fam	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.274...	gatctgatccaa	aagagccc
F. Cat	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.292...	gatctgatccaa	aagagcct
B. Tau	ggctctcc	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.271...	gatctgatccaa	aagagcct
E. Cab	ggctctct	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.270...	gatctgatccag	aagagcct
L. Afr	ggctcttt	tggaaa	TGATGAAATAGAGA	taattgggtgttgaatgttg...	.276...	gatctgatccaa	aagagcct
	*****		*****	*****	* ****	*****	***** *

id=627913 gene=ENSG00000238741 name=SCARNA7 segment=chr3\_160232695\_160233024.-1 type=EN

H. Sap	ttatccag	g	tatgatgaatc...	.862...	tctacagtatgc--tttttgct-	TTTCTGa	TTTCag	ATCA	aagt
P. Tro	tcatccag	g	tatgatgaatc...	.862...	tctacagtatgc--tttttgct-	TTTCTGa	TTTCag	ATCA	aagt
P. Abe	tcatccag	g	tatgaggaatc...	.861...	tctacagtatgc--tttttgct-	TTTCTGa	TTTCag	ATCA	aagt
C. Jac	tcatccag	g	tatgatgaatg...	.855...	ctacagtatgc--tttttgct-	TTTCTGa	TTTCag	ATCA	cagt
R. Nor	ttatacag	g	tatgatggtga...	.1009...	ctacagtagtc--tttttcat	TTTCTGa	TTTCag	ATCA	aagt
C. Por	tcatccag	g	tatgacttgtt...	.944...	tatagtattctatttttct-	TTTCTGa	TTTCag	ATCA	aagt
O. Cun	tcatccag	g	tgccggtgtggc...	.691...	acttaggtgact--ggtttcct-	TTTCTGa	TTTCag	ATCA	aagt
C. Fam	tcatacag	g	tatgctgaatg...	.895...	tctacagtatgc--cttttcct-	TTTCTGa	TTTCag	ATCA	aagt
F. Cat	tcatccag	g	tatgatgaatg...	.864...	tctacagtatgc--tttttcct-	TTTCTGa	TTTCag	ATCA	aagt
B. Tau	tcatccag	g	tatgatgaatg...	.868...	tctacagtatgc--cttttcct-	TTTCTGa	TTTCag	ATCA	aagt
E. Cab	tcatccag	g	tatgattaatg...	.1106...	tctacagtatgc--cttttcct-	TTTCTGa	TTTCag	ATCA	aagt
L. Afr	tcatccag	g	tatgaggaatg...	.869...	tctaatgatgtgc--tttttct-	TTTCTGa	TTTCag	ATCA	aagt
			* * * *	** *	* *	***	*****	**** *	***

id=454398 gene=ENSG00000152223 name=KIAA1632 segment=chr18\_43528543\_43529449.-1 type=IN

Figure 590: CS=14.16



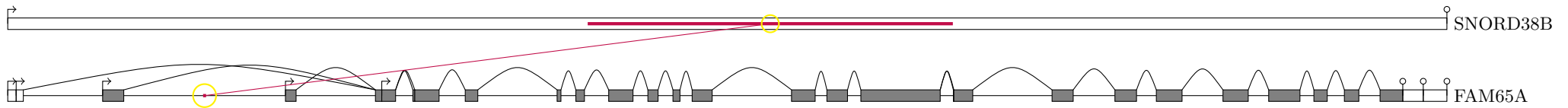
H. Sap	gggggctg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	cAGTA	--agtgaagataaagtg-tgtctgagga	gacagctg
P. Tro	gggggctg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	cAGTA	--agtgaagataaagtg-tgtctgagga	gacagctg
P. Abe	gggggctg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	cAGTA	--agtgaagataaagtg-tgtctgagga	gacagctg
M. Mus	cggcactg	tctcagtgatgagaactttgtc	CAGT	tcTGCT	aCTGA	tctcttaagtgaggatgaagt--tatctgagga	gacagctg	
R. Nor	tgctgctg	tctcagtgatgagaactttgtc	CAGT	tcTGCT	aCTGA	-cttctaagtgaggatgaagtg-tatctgagga	gacagctg	
C. Por	gggggccg	tcttaatgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	--cttcaagtgctgataaaagta-tatctgacaa	gattgtgg	
O. Cun	aggggttg	tctccgtgatgagaactttgtc	CAGT	tcTGCT	aCTGA	-tttgaagtgaggataaaagta-cacctgagga	gactgtgg	
C. Fam	gggggccg	tcttggtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	-ctttaaagtgacgataaaagta-tatctgagga	gacactgg	
B. Tau	ggggattg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	ttttcaaagtgatgataaaagta-tatctgagga	gacattgg	
E. Cab	gggggctg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	--cttgaagtgatgataaaagtc-tatctgagaa	gacagctg	
S. Sus	aggggttg	tctcagtgatgagaactttgtc	CAGT	tcTGCT	aCTGA	--catgaagtgacgataaaagta-tatctgagga	gacagctg	
O. Avi	ggggattg	tctcagtgatgataactttgtc	CAGT	tcTGCT	aCTGA	ttttcaaagtgatgataaaagta-tatctgagga	gactttgg	
L. Afr	gggggccg	tctcagtgatgaaaactttgtc	CAGT	tcTGCT	aCTGA	-ctttacttgatgataaaagtattatctgagga	gacagtgg	
	*	*	***	*****	**	*****	***	**

id=111234 gene=ENSG00000207421 name=SNORD38B segment=chr1.45244062.45244128.1 type=EN

H. Sap	actgtcca	gtgagttaaatc...	71...	ttgaactagccttatatatg	TATTTCAG	AGCAACTg
P. Tro	actgtcca	gtgagttaaatc...	71...	ttgaactagccttatatatg	TATTTCAG	AGCAACTg
P. Abe	actgtcca	gtgagttaaatc...	71...	ttgaactagccttatatatg	TATTTCAG	AGCAACTg
M. Mus	actgtccg	gtgagttaaatc...	75...	----cctagtgtgtgtgtatt	TCAG	AGCAACTg
R. Nor	actgtccg	gtgagtttagctc...	69...	----actagtgtgtgtatt	TCAG	AGCAACTg
C. Por	actgtccg	gtaagttaactt...	68...	----actgtcattacatacact	TCAG	AGCAACTg
O. Cun	actgtcct	gtgagtcaagtc...	80...	----gccttttatgtaaatatg	TCAG	AGCAACTg
C. Fam	actgtccg	gtgagttaagtc...	294...	----actagttttatatatgtatt	TCAG	AGCAACTg
B. Tau	actgcccg	gtgagttgtcag...	74...	----actgaccttatatgtgtatt	TCAG	AGCAACTg
E. Cab	actgtccg	gtgagtcaagtc...	76...	----actacccttatatatgtatt	TCAG	AGCAACTg
S. Sus	actgtccg	gtgagttaagtc...	59...	----actagcctcatgtatgtatt	TCAG	AGCAACTg
O. Avi	actgcccg	gtgagttgtggg...	67...	----actgacctgatatgtgtatt	TCAG	AGCAACTg
L. Afr	actgtcct	gtgagttatgtc...	76...	----actagccttatatacgtgtt	TCAG	AGCAACTg
	****	**	**	***	*	*****

id=568559 gene=ENSG00000166348 name=USP54 segment=chr10.75301280.75301390.-1 type=IN

Figure 591: CS=14.04



H. Sap	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGACAGT	--aagtgaagataaagtg-tgtctgagga	gacagctg						
R. Mac	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGACAGT	--aagtgaagataaagtg-tgtctgagga	gacagctg						
P. Tro	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGACAGT	--aagtgaagataaagtg-tgtctgagga	gacagctg						
P. Abe	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGACAGT	--aagtgaagataaagtg-tgtctgagga	gacagctg						
C. Jac	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGAC	--attaagtgaagataaagtg-tgtctgagga	gacagcag						
M. Mus	cggcactg	tctcagtgatgagaa	CTTTGTCCAGTTCTGCT	aCTGAT	ctcttaagtgaggatgaagt--tatctgagga	gacggttg						
C. Por	gggggccc	tcttaagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGA	TTCA--agtgtgataaaagta-tatctgacaa	gattgtgg						
O. Cun	aggggttg	tctccgtgatgagaa	CTTTGTCCAGTTCTGCT	aCTGATTTGG	--aagtgaggataaaagta-cacctgagga	gactgtgg						
C. Fam	gggggccc	tcttgatgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGACTT	--taagtgaagataaaagta-tatctgagga	gacactgg						
B. Tau	gggggattg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGAT	TTCAaagtgatgataaaagta-tatctgagga	gacattgg						
E. Cab	gggggctg	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	GCTGACTG	--aagtgatgataaaagtc-tatctgagaa	gacagtgg						
S. Sus	aggggttg	tctcagtgatgagaa	CTTTGTCCAGTTCTGCT	aCTGAC	--atgaagtgaagataaaagta-tatctgagga	gacagtgg						
O. Avi	ggggattg	tctcagtgatgataa	CTTTGTCCAGTTCTGCT	aCTGA	TTCAaagtgatgataaaagta-tatctgagga	gactttgg						
L. Afr	gggggccc	tctcagtgatgaaaa	CTTTGTCCAGTTCTGCT	aCTGA	cTTTACTG--atgataaaagtattatctgagga	gacagtgg						
	**	*	***	*****	**	*****	***	***	***	***	***	**

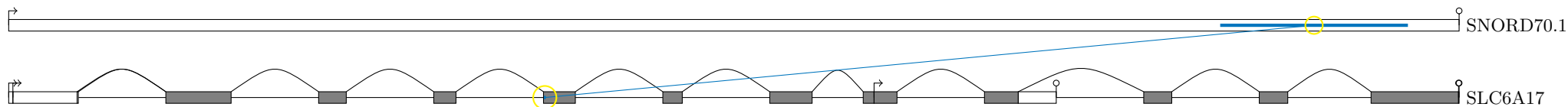
id=111234 gene=ENSG00000207421 name=SNORD38B segment=chr1.45244062.45244128.1 type=EN

H. Sap	ccagagag	gtt-agtagtatt...	4839	...	---gtcccgcccatccaggcgg	---GCTGagTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagccg	..56	..ggccagggcccgg	aaggtccg---		
R. Mac	ccagagag	gtt-agtagtatt...	4839	...	---gtcccgcccatccaggcgg	---GCTGagTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagccg	..56	..ggccagggctgc	agagtccg---		
P. Tro	ccagagag	gtt-agtagtatt...	4839	...	---gtcccgcccatccaggcgg	---GCTGagTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagccg	..56	..ggccagggcccgg	aaggtccg---		
P. Abe	ccagagag	gtt-agtagtatt...	4839	...	---gtcccgcccatccaggcgg	---GCTGagTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagccg	..56	..ggccagggcccgg	aggttccg---		
C. Jac	ccagagag	gtt-agtaatat...	4844	...	-----gccccgtacaggcgggctga	---GTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagcca	..56	..ggccagggtcgg	aggtgctg---		
M. Mus	ccagagag	gtt-agcagcatt...	4840	...	-----gccccatcccggcgggctga	---GTCAGgaGGCAGgAACTGGGCGGGG	---caggagcgccgagagcagc	...61	..accccgggccag	cgggacac---		
C. Por	tcagagag	att-tgtaacatt...	4839	...	-----tcccgcccatcccggcgggc	---TGAGTCAGgaGGCAGgAACTGGGCGGGG	---ggaggcgccaagcggagcca	..58	..gcccctgggcccgg	caggggctg---		
O. Cun	ccagagac	gtt-attcacagc...	4859	...	-----tcccgcccatcccggcgggc	---CTGAGTCAGgcGGCAGgAACTGGGCGGGG	---ggaggcgccgagagtagccg	..37	..catctgggcccgg	cggggtcg---		
C. Fam	ccagagat	gtgaagtaacat...	4839	...	-----ccgccccatcccggctggct	---GAGTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagccg	..59	..gcccctgggcccctg	cagggaca---		
B. Tau	ccagagag	gttaagtaatat...	4838	...	-----cccgcccatcccggcgggc	---TGAGTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagctg	..59	..gcccctgggcccgg	cgtggact---		
E. Cab	ccagagag	gttaagtaatat...	4835	...	-----ccgccccatcccggcgggc	---TGAGTCAGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagctg	..62	..---ctggactgg	cggagacactg		
S. Sus	ccagagag	attaagtaatat...	4841	...	-----gccccatcccggcgggctga	---GTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagctt	..59	..gcccctgggcccgg	cgtggaca---		
O. Avi	ccagagag	gttaagtaatat...	4838	...	-----ccgccccatcccggcgggc	---TGAGTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagctg	..59	..gcccctgggcccgg	cgtggact---		
L. Afr	ccagaaag	cttaagtaatat...	4834	...	ccggtcccgcccatcc	---cagCGGGG	---TGAGTCAGgcGGCAGgAACTGGGCGGGG	---ggcggcgccgggaggagcca	..58	..accctgggccag	cagggctg---	
	****	*	*	*	***	*	*	*****	*****	***	***	**

id=591778 gene=ENSG0000039523 name=FAM65A segment=chr16.67563763.67571433.1 type=IN

Figure 592: CS=14





H.Sap	taacctta	ttcaatgttgtc...31...gtgatctgactc---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
R.Mac	taacctta	ttcaatgttgtc...31...gtgatctgactc---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
P.Tro	taacttta	ttcaatgttgtc...31...gtgatctgactc---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
P.Abe	taacctta	ttcaatgttgtc...31...gtgatctgactc---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
C.Jac	taatttta	ttcaatgttgtc...31...gtgatctgactg---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
C.Por	taacctta	ttcaatgttgtc...33...-gatctaactcaa--attcgtca	CTACCACTGAGA	caacgttgag	ttagctct
O.Cun	taacctta	cttgatgttgtc...33...-gatctgactcaa--attcgtca	CTACCACTGAGACA	acattgag	ttagcttt
F.Cat	taactgta	ttcattgttgtc...35...-tctaactcaaattcgtca	CTACCACTGAGACA	acaatgaa	ttagcttt
B.Tau	taactcta	ttcaatgttgtc...33...-gatctaactcaa--attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
E.Cab	taacctta	ttcaatgttgtc...31...gtgatctaagtc---attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
S.Sus	taacctta	ttcaatgttgtc...33...-gatctaattcaa--attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
O.Avi	tancctna	ttcantgttgtc...35...-tctaactcaaantnctgca	CTACCACTGAGA	caacantgng	ttagcttt
L.Afr	taacctta	ttcaatgttgtc...33...-gatctaactcaa--attcgtca	CTACCACTGAGA	caacattgag	ttagcttt
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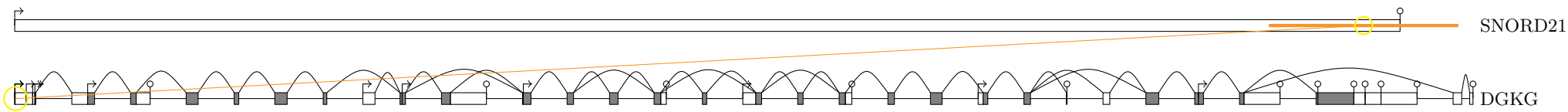
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H.Sap	cgtggcag	gca-agtatgggg...641...-ccctgtgacctttgctgcta---	TTTCAG	TGGTGGag
R.Mac	tgtggcag	gca-agtatgggg...641...-ccctgtgacctttgctgcta---	TTTCAG	TGGTGGaa
P.Tro	cgtggcag	gca-agtatgggg...641...-ccctgtgacctttgctgcta---	TTTCAG	TGGTGGag
P.Abe	cgtggcag	gca-agtatgggg...666...-ccctgtgacctttgctgcta---	TTTCAG	TGGTGGag
C.Jac	catggcag	gca-agtatgggg...639...-acctgtgacctttgctgcta---	TTTCAG	TGGTGGag
C.Por	tatggcag	gca-agtgtgggg...676...-gccctgggaactgttct-ctg--	GTTTCAG	TGGTGGag
O.Cun	catggcag	gca-agtcggggg...643...-gctgaggctccggccgctgg	TGTTTCAG	TGGTGGag
F.Cat	tgtggcag	gca-agtatagga...727...ggcactgtggcctttgctgcta---	TGTTTCAG	TGGTGGag
B.Tau	cgtggcag	gca-agtatggtt...910...-ccctgtggccgctgctgcca---	TTTCAG	TGGTGGag
E.Cab	catggcag	gca-agtgtgacc...712...-tcctgtggcctttgctgcta---	TTTCAG	TGGTGGag
S.Sus	cgtggcag	gca-agtatggct...704...-gctctgtggcctctgctgcca---	GTTTCAG	TGGTGGag
O.Avi	cgtggcag	gca-agtatggtt...909...-ccctgcggcctttgctgcca---	TTTCAG	TGGTGGag
L.Afr	cgtggcag	gca-agtatgaga...714...-gccctgtggtcctttgctgc-a---	TTTCAG	TGGTGGag
	*****	*** **	*** * *	*****

id=278760 gene=ENSG00000197106 name=SLC6A17 segment=chr1\_110716722\_110717400.1 type=IN

Figure 593: CS=13





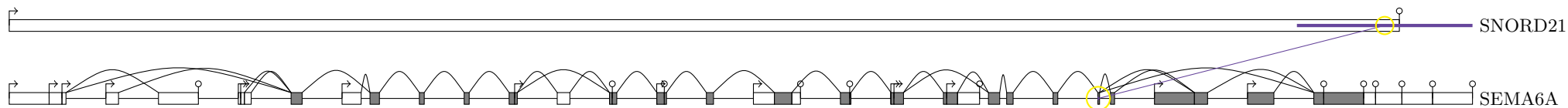
H. Sap	gatgagct	gctgaatgatga...46...gatgcgataaattgtttcaag	ACGGgACTGaTGGCagc	tactaaag
R. Mac	gatgagct	gctgaatgatga...46...gatgcgataaattgtttcaag	ACGGgACTGaTGGCagc	tactgaag
P. Tro	gatgagct	gctgaatgatga...46...gatgcgataaattgtttcaag	ACGGgACTGaTGGCagc	tactaaag
P. Abe	gatgagct	gctgaatgatga...46...gatgcgataaattgtttcaag	ACGGgACTGaTGGCagc	tactaaag
C. Jac	gatgagct	gctgaatgatga...46...gatgcaataaattgtttcaag	ACGGgACTGaTGGCagc	tactgaag
C. Por	ggtaagct	gccaatgatga...46...gatataaataattgtttcaag	ACGGgACTGaTGGCagc	tactaaaa
O. Cun	gatgagct	gctgaatgatga...46...gatgcaacagttgtttcaag	ACGGgACTGaTGGCagc	tgctgata
C. Fam	gatgagct	gctgaatgatga...47...atgcagttaattgtttcaag	ACGGgACTGaTGGCagc	tactgaaa
F. Cat	gatcagct	gctgaatgatga...47...atgcaattaattgtttcaag	ACGGgACTGaTGGCagc	tactgaag
B. Tau	aattagct	gctgaatgatga...48...atgcaattaattgtttcaag	ACGGgACTGaTGGCagc	tactgaaa
E. Cab	gattagct	gctgaatgatga...46...gatcaattaattgtttcaag	ACGGgACTGaTGGCagc	tactgaaa
O. Avi	aattagct	gctgaatgatga...47...atgcaattaattgtttcaag	ACGGgACTGaTGGCagc	tactgaaa
L. Afr	gattagct	gctaaatgatga...48...atgcaattaattgtttcaag	ACGGgACTGaTGGCagc	tactttta
		* ****	** *****	* ***** * **

id=573070 gene=ENSG00000206680 name=SNORD21 segment=chr1\_93302846\_93302940\_1 type=EN

H. Sap	aga	GCC GCAGTgCCGT	agtagcgggccacggagata...115...gagggctgcgca	ggcgggaa
R. Mac	aga	GCC GCAGTgCCGT	actagcgggccacggagata...115...gagggctgcgcg	ggcgggaa
P. Tro	aga	GCC GCAGTgCCGT	agtagcgggccacggagata...115...gagggctgcgca	ggcgggaa
P. Abe	aga	GCC GCAGTgCCGT	agtagcgggccacggagata...115...gagggctgcgcg	ggcgggaa
C. Jac	aga	GCC GCAGTgCCGT	agtagcgggccacggagata...117...gagggcgcgcg	ggcgggaa
C. Por	aga	GCC GCAGTgCCGT	agtagcgggcagccgagctg...126...acggcccgcgcg	ggcgggag
O. Cun	aca	GCC GCAGTgCCGT	agtagcgggcggccgggagc...105...gagggctccgcg	ggcgggaa
C. Fam	ggc	GCC GCAGTgCCGT	agtagcgggcggccgggagc...110...gagggctgccc	ggcgggag
F. Cat	ggc	GCC GCAGTgCCGT	agtagcgggcagctgggacg...110...gagggctgcgct	ggcgggaa
B. Tau	ggc	GCC GCAGTgCCGT	agtagctggccgacacg...113...gaaggctgcgcg	ggcgggca
E. Cab	ggc	GCC GCAGTgCCGT	agtagcgggcagccgacaca...114...gagggctgcgcg	ggcgggaa
O. Avi	ggc	GCC GCAGTgCCGT	agtagcgggcggccggagacg...114...gagggctgcgcg	ggcgggca
L. Afr	aga	GCC GCAGTgCCGT	agtagcgggtagcccaggca...114...ggaggctgcgcg	ggcgggaa
		*** ***** * ** *	* * * *	*****

id=552430 gene=ENSG0000058866 name=DGKG segment=chr3\_186079867\_186080021\_-1 type=E5

Figure 595: CS=11.05



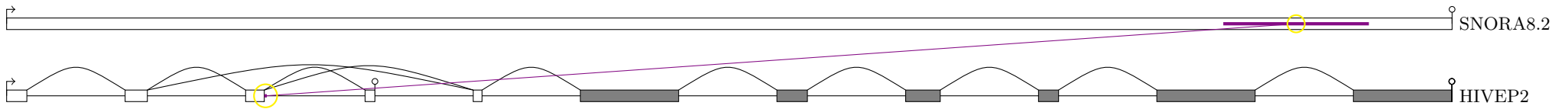
H.Sap	gatgagct	gctgaatgatga...	48...	tgcgataattg	tttcaagac	GGGACTGAt	GGCAGc	tactaaag
R.Mac	gatgagct	gctgaatgatga...	48...	tgcgataattg	tttcaagac	GGGACTGAt	GGCAGc	tactgaag
P.Tro	gatgagct	gctgaatgatga...	48...	tgcgataattg	tttcaagac	GGGACTGAt	GGCAGc	tactaaag
P.Abe	gatgagct	gctgaatgatga...	48...	tgcgataattg	tttcaagac	GGGACTGAt	GGCAGc	tactaaag
C.Jac	gatgagct	gctgaatgatga...	48...	tgcaataattg	tttcaagac	GGGACTGAt	GGCAGc	tactgaag
R.Nor	gaggagct	gct-aatgatgat...	47...	tgtaatcattg	tttcaagac	GGGACTGAt	GGCAGc	tcctgaag
C.Por	ggtaagct	gccaaatgatga...	48...	tataataattg	tttcaagac	GGGACTGAt	GGCAGc	tactaaaa
O.Cun	gatgagct	gctgaatgatga...	48...	tgaacagttg	tttcaagac	GGGACTGAt	GGCAGc	tgctgata
B.Tau	aattagct	gctgaatgatga...	50...	gcaattaattg	tttcaagac	GGGACTGAt	GGCAGc	tactgaaa
E.Cab	gattagct	gctgaatgatga...	48...	tcaattaattg	tttcaagac	GGGACTGAt	GGCAGc	tactgaaa
S.Sus	aatgagct	gctggatgatga...	49...	gcaattccttg	tttcaagac	GGGACTGAt	GGCAGc	tactgaaa
O.Avi	aattagct	gctgaatgatga...	49...	gcaattaattg	tttcaagac	GGGACTGAt	GGCAGc	tactgaaa
L.Afr	gattagct	gctaaatgatga...	50...	gcaattaattg	tttcaagac	GGGACTGAt	GGCAGc	tactttta
	****	**	*****		*****		**	

id=573070 gene=ENSG00000206680 name=SNORD21 segment=chr1\_93302846\_93302940\_1 type=EN

H.Sap	ctgtcaca	gtaagtacagtc...	2408...	--aagtaacctt	ctcctccctt	TTGTCtt	TCAG	atTCCTtt
R.Mac	ctgtcaca	gtaagtacagtc...	2393...	--aagtaacctt	ctcctccctt	CTGTCtt	TCAG	atTCCTtt
P.Tro	ctgtcaca	gtaagtacagtc...	2406...	--aagtaacctt	ctcctccctt	TTGTCtt	TCAG	atTCCTtt
P.Abe	ctgtcaca	gtaagtacagtc...	2391...	--aagtaacctt	ctcctccctt	TTGTCtt	TCAG	atTCCTtt
C.Jac	ctgtcaca	gtaagtacactc...	2677...	--aagtaacctt	ctcctccctt	TTGTCtt	TCAG	atTCCTtt
R.Nor	ctgtcaca	gtaagtatagtt...	2467...	--aagtaaccac	ctccccgctt	TTGTCtt	TCAG	atTCCTtc
C.Por	ctgtcaca	gtaagttagact...	2309...	--aagtaacctt	ctcctccctt	TTGTCtt	TCAG	atTCCTtc
O.Cun	ctgtcaca	gtaagtgccgct...	2057...	ctgagtcac	cttctcccctc--	TTGTCtt	TCAG	atTCCTtc
B.Tau	ttgtcaca	gtaagtggagtt...	2654...	--aagtaactc	actcctccctt	TTGTCtt	TCAG	atTCCTtc
E.Cab	ctgtcaca	gtaagtaaagct...	2873...	--aagtaagct	tcttctccctt	TTGTCtt	TCAG	atTCCTtc
S.Sus	ctgtcaca	gtaagtggagct...	2267...	--cagtaacct	gctcctccctt	TTGTCtt	TCAG	atTCCTtc
O.Avi	ttgtcaca	gtaagtggagtt...	2658...	--aactcactc	actcctccctt	TTGTCtt	TCAG	atTCCTtc
L.Afr	ctgtcaca	gtgagtaaagct...	2576...	--aataacctt	cttctccctt	TTGTCtt	TCAG	atTCCTtc
	****	*	**	***	*	*****		*****

id=7330 gene=ENSG00000092421 name=SEMA6A segment=chr5\_115808790\_115811240\_-1 type=IN

Figure 596: CS=11.05



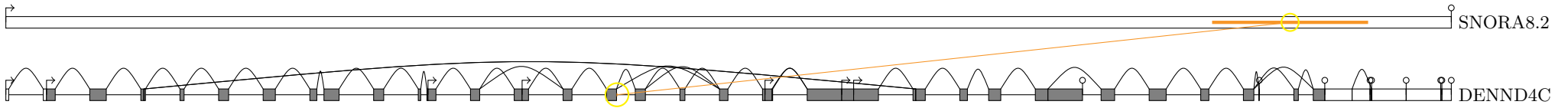
H. Sap	-ttccagga	tgca	ctgc	atgg	...75...	tggt	tctt	ggct	ttgt	gc	-TTGTTAA	CCTG	TATTT	ctatt	gata	cagc	-----	a	ttgt	tata	
R. Mac	-ttccagga	tgca	ctgc	atgg	...75...	tgat	tctt	ggct	ttgt	gc	-TTGTTAA	CCTG	TATTT	ctatt	gata	aaag	-----	a	cttg	tata	
P. Tro	-aaagatct	tgca	ctgc	atgg	...75...	tggt	tctt	ggct	ttgt	gc	-TTGTTAA	ACCT	gTATTT	ctatt	gata	cagt	-----	a	ttgt	tata	
P. Abe	-ttccagaa	tgca	ctgc	atgg	...75...	tgct	tctt	ggct	ttgt	gc	-TTGTTAA	CCTG	TATTT	ctatt	gata	cagg	-----	a	ttgt	tata	
C. Jac	-ttccagga	tgca	ctgc	atgg	...75...	tggt	tact	cctg	gctt	gtac	-TTGTTAA	CCTG	TATTT	ctgt	tggt	acag	-----	a	tctg	tata	
M. Mus	-taggattt	tgca	ctgc	atgg	...74...	tggt	tctt	ggct	ttgt	gc	-TGTAA	CCTG	TATTT	ctaat	gata	cagt	ttttca	-----	ta	tata	
R. Nor	-ttcatctt	tgca	ctgc	atgg	...74...	tggt	tctt	ggct	ttgt	gc	-TGTAA	ACCT	ggTATTT	ctaat	gata	cagt	ttattcca	-----	ta	gtaca	
O. Cun	-gtcatgac	tgca	ctgc	atgg	...76...	gg	tctt	ggct	ttgt	gc	-TGTAA	CCTG	TATTT	ctatt	gata	cagt	-----	a	ttg	ctct	
C. Fam	agtcaggat	tgca	ctgc	atgg	...77...	gg	tctt	ggct	ttgt	gc	-TGTAA	CCTG	TATTT	ttatt	gaa	cagt	-----	a	ttc	ctata	
F. Cat	-gtcatgat	tgca	ctgc	atgg	...75...	gg	tctt	ggct	ttgt	gc	-TGTAA	CCTG	TATTT	ttatt	gaa	cagt	-----	a	ttc	ctata	
B. Tau	-aaaagcat	tgca	ctgc	atgg	...74...	tggt	tctt	ggct	ttgt	gc	-TGT	TAG	CCTG	TATTT	ctact	gata	cagt	-----	a	tc	cttta
E. Cab	-gtcctgat	tgca	ctgc	atgg	...75...	gg	tctt	ggct	ttgt	gc	-TGTAA	CCTG	TATTTT	TATGA	tacagt	-----	a	tt	ctgta		
E. Cab	-gtcataat	tgca	ctgc	atgg	...76...	gt	tctt	ggct	ttgt	gc	-GTTAA	gaCCTG	TATTT	ctact	gata	cagt	-----	a	tt	ctagt	
L. Afr	-tgaatcgc	tgca	ctgc	atgg	...76...	gg	tctt	ggct	ttgt	gc	-TGTAA	ACCT	ggTATTT	ctatt	gta	cagt	ttat	-----	ta	-----	
											*****	**		*	*	*	*	*	*	*	

id=506616 gene=ENSG00000207100 name=SNORA8.2 segment=chrX.132286782.132286920.1 type=EN

H. Sap	tcttttag	attccc	agaagt	...54...	-----	gatg	cagtt	tttt	gatatga	---GGATA	aCAG	GTTAATA	a
R. Mac	tcttttaa	attccc	agaagt	...54...	-----	gatg	cagtt	tttt	gatatgc	---GGATA	aCAG	GTTAATA	a
P. Tro	tcttttag	attccc	agaagt	...54...	-----	gatg	cagtt	tttt	gatatga	---GGATA	acAG	GTTAATA	a
P. Abe	tcttttag	attccc	agaagt	...54...	-----	gatg	cagtt	tttt	gatatga	---GGATA	aCAG	GTTAATA	a
C. Jac	tctttcag	gttccc	agaagt	...54...	-----	gatg	cagtt	tttt	gatatga	---GGATA	aCAG	GTTAATA	a
M. Mus	tccttcag	gttctc	agaatt	...45...	-----	gatg	tagtt	tatt	gatatga	---GGATA	aCAG	GTTAATA	a
R. Nor	tccttcag	gttctc	agaagt	...49...	-----	gatg	cagtt	tact	gatatga	---GGATA	agAG	GTTAATA	a
O. Cun	tccttcag	attccc	agaagt	...51...	-----	gatg	cact	gtt	cta	aatatga	---AGATA	aCAG	GTTAATA
C. Fam	tttttcag	gttccc	gaagt	...54...	-----	gatg	ctgt	tttt	gatatgt	---GGATA	aCAG	GTTAATA	a
F. Cat	tcttttag	gttccc	agaagt	...54...	-----	gata	cagtt	tttt	gatatgt	---GGATA	aCAG	GTTAATA	a
B. Tau	tttttag	attccc	agaagt	...54...	-----	gatg	cact	tttt	gatatga	---GGATA	aCAG	GTTAATA	g
E. Cab	ctttcag	attcct	ggaagt	...37...	aagg	caa	agac	agtt	gtttt	TIGATA	tgAGGATA	aCAG	GTTAATA
S. Sus	tcttttag	attccc	ggaagt	...50...	-----	gatg	cagtt	tttt	gatatga	---GGATA	aCAG	GTTAATA	aa
L. Afr	attttag	attccc	agac	gt...54...	-----	gatg	cagatt	tttt	gatatga	---GGATA	aaAG	GTTAATA	a
		** *	**	** *		*	*	*	*	*****	**	*****	

id=665089 gene=ENSG0000010818 name=HIVEP2 segment=chr6.143104658.143104752.-1 type=AN

Figure 597: CS=10.92



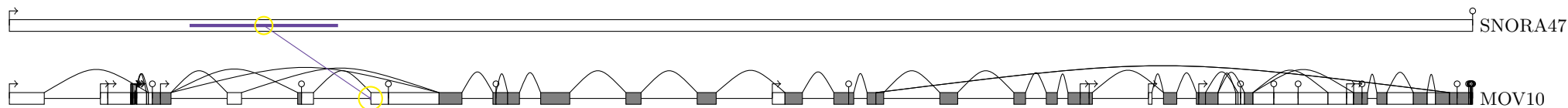
H. Sap	-ttccagga	tgca	ctgc	gtgg...53..	gaa	tcca	----	gtat	ctgg	tttc	ATTGGTTT	tc	TTGG	ct	TTGTG	ct	TGTTA	aa	CCTGGTATT	tctattgatacagc	-----	a	ttgtata
R. Mac	-ttccagga	tgca	ctgc	atgg...57...	tcca	----	gtat	ctgg	cttc	cattg	ATTTT	tc	TTGG	ct	TTGTG	ct	TGTTA	aa	CCTGGTATT	tctattgataaagc	-----	a	cttgata
P. Tro	-aaagatct	tgca	ctgc	atgg...57...	ttca	----	gtat	ctgg	catc	attg	GTTT	tc	TTGA	ct	TTGTG	ct	TGTTA	aa	ACCTaGTATT	tctattgatacagt	-----	a	tttgata
P. Abe	-ttccagaa	tgca	ctgc	gtgg...70...	ttcattg	ctttt	cttgg	ctt	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	a	ttgtata
C. Jac	-ttccagga	tgca	ctgc	atgg...57...	ttcg	----	gtat	ctgg	cttt	attg	GTA	ct	TTGG	ct	TTGTG	ct	TGTTA	aa	CCTGGTATT	tctgttggtacagc	-----	a	tctgata
M. Mus	-taggattt	tgca	ctgc	atgg...56...	ctca	----	gtat	ctgg	catc	gttg	GTTT	tc	TTGG	ct	TTGTG	ct	TGTTA	aa	CCTGGTATT	tctaatgatacagtt	-----	tttca	ta
R. Nor	-ttcatctt	tgca	ctgc	atgg...73...	ttgg	----	ttct	ctgg	cttt	gagc	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	tttca	ta
O. Cun	-gtcatgac	tgca	ctgc	atgg...57...	ttca	----	gtat	ctgg	catc	gttg	GTTTT	tc	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tctattgatacagt	-----	a	ttgctct
C. Fam	agtccaggat	tgca	ctgc	atgg...59...	tca	----	gtat	ctgg	catc	gttg	TTTTT	ct	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tttattgaaacagt	-----	a	ttcctata
F. Cat	-gtcatgat	tgca	ctgc	atgg...56...	ttca	----	gtat	ctgg	catc	gttg	GTTTT	tc	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tttattgaaacagt	-----	a	ttcctata
B. Tau	-aaaagcat	tgca	ctgc	atgg...55...	attca	----	gtat	ctgg	catc	cattg	GTTTT	ct	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tctactgatacagt	-----	a	tcctttaa
E. Cab	-gtcctgat	tgca	ctgc	atgg...56...	ttca	----	gtat	ctgg	catc	gttg	GTTTT	tc	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tttattgatacagt	-----	a	tttctgta
O. Avi	-gtcataat	tgca	ctgc	atgg...52...	taaat	tca	----	gtat	ctgg	catc	GTTG	g	TTTTTT	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tctactgatacagt	-----	a	tcctttaa
L. Afr	-tgaatcgc	tgca	ctgc	atgg...57...	ttca	----	gtat	ctgg	catc	gttg	GTTTT	tc	TTGG	ct	TTGTG	ca	TGTTA	aa	CCTGGTATT	tctattggtacagttat	-----	a	ta

id=506616 gene=ENSG00000207100 name=SNORA8.2 segment=chrX.132286782.132286920.1 type=EN

H. Sap	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aTAAT	--tccttactgaacctgagct	---	..213..	ccttatcctttag	ctcttcaa
R. Mac	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	--atacttccttgctgaacct	-----	..218..	ccttatcctttag	ctcttcaa	
P. Tro	aATATcAG	GTAAT	ca	TATGATTAGAAAT	--atacttccttactgaacct	-----	..218..	ccttatcctttag	ctcttcaa	
P. Abe	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	--tgattagaataacttcct	-----	..231..	ccttatcctttag	ctcttcaa	
C. Jac	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	--actttcttcctgaacctga	-----	..208..	ccttaacctttag	ctcctcag	
M. Mus	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----gtttaaacataggtttat	..189..	ccttatcctttag	ctcctcag	
R. Nor	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	-----atgtgattgaaagatggtt	-----	..206..	ccttaacctttag	ctcctcag	
O. Cun	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----accttttgcagaaaccataa	-----	..204..	gcttatccttag	ctcctcag
C. Fam	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----atactccttgctgaacct	-----	..223..	ccttatcctttag	ctcctcag
F. Cat	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----actccttgctgaacctaa	-----	..210..	ccttatcctttag	ctcctcag
B. Tau	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----ttcttgctgaacctaaagtt	-----	..216..	gcttgctttag	ctccccag
E. Cab	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----actttcttgctgaacctaa	-----	..216..	ccttatcctttag	ctcctcag
O. Avi	aATATCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----ctttcttgctgaacctaaag	-----	..219..	gcttgctttag	ctccccag
L. Afr	aATAgCAG	GTAAT	ca	TGTGATTAGAAAT	aaAGAT	-----gctttgttgtgacctgga	-----	..220..	ccttatcctttag	ctcctcag

id=149782 gene=ENSG00000137145 name=DENND4C segment=chr9.19336413.19336683.1 type=IN

Figure 598: CS=15.12



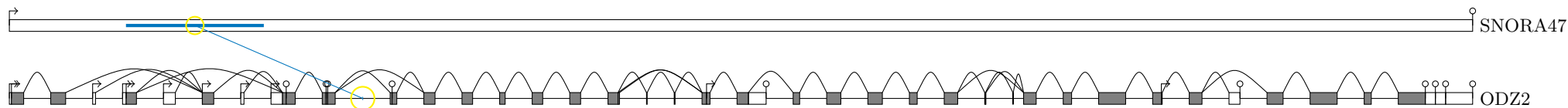
H.Sap	-gcatgatg	tggaggact	GAGAAGGTGAGGCAG	ttttgcccctgctgccttc...	82...	ggccgacatttg	tga-tgcag	
R.Mac	-acatggtg	tggaggact	GAGAAGGTGAGGCAG	ttctgccccatgctgccttc...	82...	ggccgacatttg	tga-ggctt	
P.Tro	-gcatgatg	tggaggact	GAGAAGGTGAGGCAG	ttttgcccctgctgccttc...	82...	ggccgacatttg	tga-tgcag	
P.Abe	-gcatgatg	tggaggact	GAGAAGGTGAGGCAG	ttttgcccctgctgccttc...	82...	ggccaacatttg	tga-tgcag	
C.Jac	-acatggtg	tggaggact	GAGAAGGTGAGGCAG	ttctgcccctgctgccttc...	81...	ggccaacatttg	tga-tgctg	
C.Por	-agccagtg	tgggg	GTCTGAGAAaGTGAGGCAG	ctctgcaccatgctgccttc...	82...	ggccaacatttg	tgg-tgctg	
O.Cun	-agaaagg	tggaggact	GAGAAGGTGA-GCAG	cgcc-tgcatgctgcctccc...	79...	agccacagtct	cgg-tgctg	
C.Fam	-gctgtgtg	cggaggact	GAGAAGGTGAGGCAG	cccagtgtgtgctgtcttc...	82...	ggccaacatttg	cgg-tgccg	
F.Cat	-gccgtatg	cggaggact	GAGAAGGTGAGGCAG	ttcagcaactgtgctgccttc...	82...	ggccgacatttg	tag-tgctg	
B.Tau	agctgttgt	cggaggact	GAGAAGGTGAGGCAG	ttctgaaccatgctgccttc...	82...	ggccgacatttg	tgg-ttttg	
E.Cab	-gctgctgtg	tggaggact	GAGAAGGTGAGGCAG	tcctgtaccgtgctgccttc...	82...	ggccgacatttg	tga-tgctg	
S.Sus	agttgttgt	cggaggact	GAGAAGGTGAGGCAG	ttctgaaccatgctgccttc...	82...	ggccgacatttg	ttc-tgctg	
L.Afr	-tgtgtgtg	tggaggact	GAGAAGGTGAGGCAG	ttctgtaccatgctgccatc...	81...	ggccaacatttg	tggctgct-	
		** * *	*****	****	****	*	*****	* * *

id=570397 gene=ENSG00000238961 name=SNORA47 segment=chr5.76376259.76376396.-1 type=EN

H.Sap	ggctgaaa	gtaagttgttac...	1170...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
R.Mac	ggctgaaa	gtaagttgttac...	1170...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
P.Tro	ggctgaaa	gtaagttgttac...	1170...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
P.Abe	ggctgaaa	gtaagttgttac...	1171...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
C.Jac	ggctgaaa	gtaagttgttac...	1175...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
C.Por	ggttgaaa	gtaagttgtcac...	1136...	ttcctgctgaccagttttcc	CTGTctTCACTCTtAGGC	---aa	acaaag
O.Cun	ggcggaaa	gtaagtcggtat...	979...	gttgcctgacgcgtttttcc	CTGTctTCACTTCT	---Ctag	gcacaaag
C.Fam	ggctgaaa	gtaagttgttac...	1051...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaaa
F.Cat	ggctgaaa	gtaagttgttac...	1103...	gaccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaaa
B.Tau	ggctggaa	gtaagttactac...	1086...	gtccttctgaccactttttcc	CTGTCTtCACCTTCT	---Ctag	gcccaaac
E.Cab	ggctgaaa	gtaagttgttac...	1128...	gtccttctgaccactttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
S.Sus	ggctgaaa	gtaagttgttc...	1123...	gtccttctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcccaaac
L.Afr	ggctggaa	gtaagttgttac...	1181...	gtcctcctgaccagttttcc	CTGTCTtCACCTTCT	---Ctag	gcacaaag
	** * *	*****		* * * * *	* * * * * * * * * * * * * * *	**	****

id=42371 gene=ENSG00000155363 name=MOV10 segment=chr1.113229729.113230949.1 type=IN

Figure 599: CS=17.29



H. Sap	gcatgatg	t-ggAGGA	ctGAGAAGGTGA	aggcagttttgccccgtgctg--...87...-ggccgacatttg	tga-tgcag		
P. Tro	gcatgatg	t-ggAGGA	ctGAGAAGGTGA	aggcagttttgccccgtgctg--...87...-ggccgacatttg	tga-tgcag		
P. Abe	gcatgatg	t-ggAGGA	ctGAGAAGGTGA	aggcagttttgccccgtgctg--...87...-ggccaacatttg	tga-tgcag		
C. Jac	acatggtg	t-ggAGGA	ctGAGAAGGTGA	aggcagttctgccccgtgctg--...86...-ggccaacatttg	tga-tgctg		
M. Mus	gcctgcta	t-ggAGGA	ctGAGAAGGTGG	aggcagttctgtaccgtgctg--...86...-tggcccaca-ttg	tag-tgttg		
R. Nor	gtccgcta	t-ggAGGA	caGAGAAGGTGG	aggcagttc-ataccgtgctgc--...86...-tggcccaca-ttg	tag-tgttt		
O. Cun	agaaaggg	t-ggAGGA	ctGAGAAGGTGA	-gcagcgcc-tgccatgctgcc...83...-agcccacagtct	cgg-tgctg		
C. Fam	gctgtgtg	c-ggAGGA	ctGAGAAGGTGA	aggcagcccagtgtgtgctg--...87...-ggccaacattta	cgg-tgccg		
F. Cat	gccgtatg	c-ggAGGA	ctGAGAAGGTGA	aggcagttcagcactgtgctg--...87...-ggccgacatttg	tag-tgctg		
B. Tau	agctgttg	tcggAGGA	ctGAGAAGGTGA	aggcagttctgaaccatgctg--...87...-ggccgacacttg	tgg-ttttg		
E. Cab	gctgctgt	t-ggAGGA	ctGAGAAGGTGA	aggcagtcctgtaccgtgctg--...87...-ggccgacatttg	tga-tgctg		
S. Sus	agttgttg	tcggAGGA	ctGAGAAGGTGA	aggcagttctgaaccatgctg--...87...-ggccgacacttg	ttc-tgctg		
L. Afr	tgtgtgtg	t-ggAGGA	ctGAGAAGGTGA	aggcagttctgtaccatgctg--...86...-ggccaacatttg	tggctgct-		
		*****	*****	****	* ****	*** ** *	*

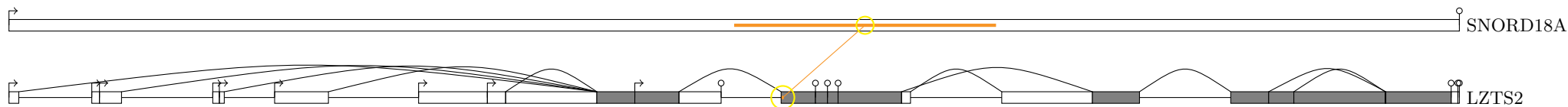
id=570397 gene=ENSG00000238961 name=SNORA47 segment=chr5.76376259.76376396.-1 type=EN

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P. Tro	tttcatag	gtaagtcagggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
P. Abe	tttcatag	gtaagtcagggc...4937...attatctattcttatt	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
C. Jac	tttcatag	gtaagttagggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
M. Mus	tttcatag	gtaagtgaaagc...4937...attatctattcatact	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
R. Nor	tttcatag	gtaagtgaaagc...4937...at	tttctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat
O. Cun	tttcatcg	gtaagtcgggca...4937...attatctgttcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
C. Fam	tttcatcg	gtaagtcagggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
F. Cat	cttcatag	gtaagtcaggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
B. Tau	tttcatag	gtgagtcgggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
E. Cab	tttcatag	gtaagtcgggc...4937...attatctattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat	
S. Sus	cttcatag	gtaagtcgggc...4937...attatctattcatat	tcaTTACTTtgTCTCTCCTgcag	caatgcat	
L. Afr	tttcatag	gtaagtcagcgc...4937...attac	tattcatat	tttcaTTACTTtgTCTCTCCTgcag	caatgcat
		**** * ** **	*** ** ** * * *****	*****	

id=316436 gene=ENSG00000145934 name=ODZ2 segment=chr5.167420188.167474431.1 type=IN VIEW

Figure 600: CS=12.48





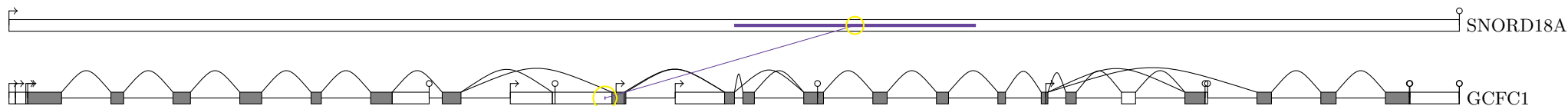
H. Sap	ctgcttta	cagtagtgatgaaattccacttcattgg	TCCGTGT	TCTGAA	ccacatgattttctcggatggttctgatgct	gtttgcta-
R. Mac	ttgcttta	cagtagtgatgaaattccacttcattgg	TCCGTGT	TCTGAA	ccacatgattttctcggatggttctgatgct	gtttgcta-
P. Tro	ctgcttta	cagtagtgatgaaattccacttcattgg	TCCGTGT	TCTGAA	ccacatgattttctcggatggttctgatgct	gtttgcta-
P. Abe	ctgcttta	cagtagtgatgaaattccacttcattgg	TCCGTGT	TCTGAA	ccacatgattttctcggatggttctgatgct	gtttgcta-
C. Jac	ctgcttta	cagtagtgatgaaattccacttcattgg	TCCGTGT	TCTGAA	ccagatgatttgcttggatggttctgatgct	gtttgcta-
C. Por	ccattca	cagtcgtgatgagattccactccattgg	TCCGTGT	TCTGAA	ccacatgattttcttggatgctctgatgct	gtctgta-
O. Cun	ccgcttg	cagccgtgatgagatccagctcattgg	TCCGTGT	TCTGAA	cacgtgatgttctc-gacgctctgatgct	gcttgctg-
C. Fam	ccacttaa	cagcagtgatgaaattccactccattgg	TCCGTGT	TCTGAA	ctacatgattttcttggatggttctgaggct	gttggctg-
F. Cat	ctgcttaa	cagcagtgatgaaataacactccattgg	TCCGTGT	TCTGAAAG	cacatgattttcttggatggttctgatgct	g-ttgctac
B. Tau	gtacttca	cagcagtgatgaaattccactccattgg	TCCGTGT	TCTGAA	caacatgattttccctggatggttctgatgct	gtttgctg-
E. Cab	ctgcttaa	cagcagtgatgaaattccactccattgg	TCCGTGT	TCTGAA	ccgctgatgtttcttggatggttctgatgct	gtttgcta-
O. Avi	atacttca	cagcagtgatganattccactcnnctgg	TCCGTGT	TCTGAA	nnncatgatntnnntggngtctgatgct	gtttgctg-
L. Afr	ttgcttta	cagtagtgatgagattacacttaattgg	TCCGTGT	TCTGAA	ccacatgattttcttggatggttctgatgct	gtttgcta-
	**	***	*****	**	*****	**** * * * ***** **

id=621171 gene=ENSG00000200623 name=SNORD18A segment=chr15.66795581.66795652.-1 type=EN

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R. Mac	agtgcccta	gcatgtggcatg-...297...-actgtcacatggc-acctcat	TTCAG	AACATGGa
P. Tro	agtgcccta	gcacgtagcatg-...292...-agtgccacatggc-acctcat	TTCAG	AACATGGa
P. Abe	agtgcccta	gcatgtagcatg-...292...-agtgccacatggc-acctcat	TTCAG	AACATGGa
C. Jac	agtgccctg	gcatgtagcatg-...290...-agtgccacatggc-acctcat	TTCAG	AACATGGa
C. Por	aatgctag	gtat-tagcaagt...292...-agtgccacatggc-gcctcat	TTCAG	AACATGGa
O. Cun	tggggcca	gcgccctagcagg-...295...cag-gccactcggc-acttctt	TTCAG	AACATGGa
C. Fam	agggcctg	tcgtacaacatg-...298...-agtgccacatggc-acctcat	TTCAG	AACATGGa
F. Cat	agtacctg	tcacctaacgta-...303...cagtgtcccatggc-acctca	TTCAG	AACATGGa
B. Tau	agtacctg	gcacataatagg-...309...-attgtcaaatggc-acctcat	TTCAG	AACATGGa
E. Cab	agtgccctg	gccacataatag-...310...-agtgccacatggc-acctcat	TTCAG	AACATGGa
O. Avi	agtgccctg	gcacataatagg-...309...-attgtcaaatggc-acctcat	TTCAG	AACATGGa
L. Afr	agcgcttc	gcacacagcatg-...461...-gtgttcatggctacctcat	TTCAG	AACATGGa
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id=247052 gene=ENSG00000107816 name=LZTS2 segment=chr10.102762935.102763263.1 type=IN

Figure 601: CS=15.6



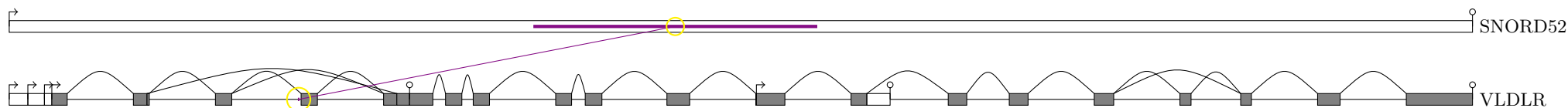
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P. Tro	ctgcttta	cagtagtgatgaaattccacttc	ATTG	TCCG	GTTT	CTGAA	ccacatgattttctcggatgttctgatgct	gtttgcta
P. Abe	ctgcttta	cagtagtgatgaaattccacttc	ATTG	TCCG	GTTT	CTGAA	ccacatgattttctcggatgttctgatgct	gtttgcta
C. Jac	ctgcttta	cagtagtgatgaaattccacttc	ATTG	TCCG	GTTT	CTGAA	ccagatgatttgcttggatgttctgatgct	gtttgcta
C. Por	cccattca	cagtcgtgatgagattccactcc	ATTG	TCCG	GTTT	CTGAA	ccacatgattttctcggatgctctgatgct	gtctgtta
D. Cun	ccgctttg	cagccgtgatgagatccagctc	ATTG	TCCG	GTTT	CTGAA	-cacgtgatgttctc-gacgctctgatgct	gcttgctg
C. Fam	ccacttaa	cagcagtgatgaaattccactcc	ATTG	TCCG	GTTT	CTGAA	actacatgattttctcggatgttctgaggct	gttgctg
B. Tau	gtacttca	cagcagtgatgaaattccactcc	ATTG	TCCG	GTTT	CTGAA	caacatgatttccctggatgttctgatgct	gtttgctg
E. Cab	tgcttaa	cagcagtgatgaaattccactcc	ATTG	TCCG	GTTT	CTGAA	ccgctgattttctcggatgttctgatgct	gtttgcta
S. Sus	ttttaaaa	cagcaatgatgaaattccactccgcttg	TCCG	GTTT	CTGAA	tcacatgattttctcggatgttctgatgct	gtttgcta	
D. Avi	atacttca	cagcagtgatganattccactcnncttg	TCCG	GTTT	CTGAA	annncatgatnntnntggngttctgatgct	gtttgctg	
L. Afr	ttgcttta	cagtagtgatgagattacacttaattgg	TCCG	GTTT	CTGAA	ccacatgattttctcggatgttctgatgct	gtttgcta	
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id=621171 gene=ENSG00000200623 name=SNORD18A segment=chr15.66795581.66795652.-1 type=EN

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R. Mac	tgctataa	cacttggtgcc...	871...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataaagta...	34...	gtatttttacag	gtgccact
P. Tro	tgctataa	cacttggtgcc...	871...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataaata...	34...	gtatttttacag	gtgccact
P. Abe	tgctataa	cacttggtgcc...	873...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataaata...	34...	gtatttttacag	gtgccact
C. Jac	tgctataa	cacttggtgcc...	857...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataaagta...	34...	gtatttttacag	gtgccact
C. Por	tgctataa	cacttggtgcc...	862...	--gtccttagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaatgaata...	34...	gtattttcacag	gtgccact
D. Cun	tgctctaa	cacttggtgcc...	855...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataaagta...	34...	gtattttcacag	gtgccact
C. Fam	tgctataa	cacttggtgcc...	885...	ctgtccat--agagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaactaagta...	34...	gtatttttacag	gtgccact
B. Tau	tgctataa	cacttggtgcc...	869...	--ttctgtccagagggtactcc	TTCAGAAAT	cCGGAA	aaTAAT	atggaaccctcaataaata...	34...	gtatttttacag	gtgccact
E. Cab	tgctataa	cacttggtgcc...	885...	tgatccgt--agagggtacttt	TTCAGAAAT	cCGGAA	aaTAGT	atggaaccctcaataagga...	34...	gtatttttacag	gtgccact
S. Sus	tgctataa	cacttggtgcc...	903...	--ttctgtccagagggtgcttt	TTCAGAAAT	cCGGAA	aatcatatggaaccctcaga	-----	40...	gtatttttacag	gtgccact
D. Avi	tgctataa	cacttggtgcc...	874...	--tctgtccagagggtactcca	TTCAGAAAT	cCGGAA	aataatggaaccctcaga	-----	39...	gtatttttacag	gtgccact
L. Afr	tgctgtaa	cactcggtgcc...	901...	--gtccatagagagggtacttt	TTCAGAAAT	cCGGAA	aataggatggaaccctgaaa	-----	40...	gtattttcacag	gtaccact
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id=355671 gene=ENSG00000159086 name=GCFC1 segment=chr21.34127665.34128652.-1 type=AN

Figure 602: CS=10.14



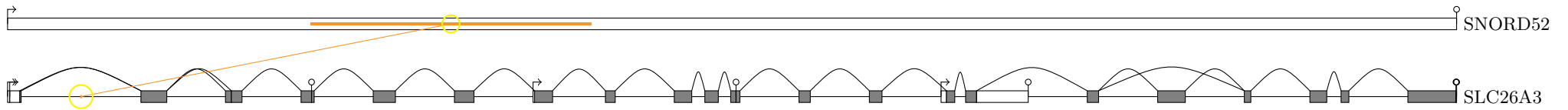
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R. Mac	ccctaatt	gggaatgatgatttca-	CAGAct	AGAGTCTC	tgatgctggtcatgatgtcaaaa-ctaagttctgactc-	atttaggg					
P. Tro	ccctaatt	gggaatgatgatttca-	CAGAct	AGAGTCTC	cgatgctggtcatgatgtcaaaa-ctaagttctgactc-	atttaggg					
P. Abe	ccctaatt	gggaatgatgatttca-	CAGAct	AGAGTCTC	cgatgctggtcatgatgtcaaaa-ctaagttctgactc-	atttaggg					
C. Jac	ccctaatt	gggaatgatgatctca-	CAGAct	AGAGTCTC	tgatgctggtcatgctgtcaaaa-ctaagttctgactc-	atttaggg					
M. Mus	cctcaatt	gagagtgatgatttca-	CAGAct	AGAGTCTCTGA	cGCTGtccttgatgtcagctataaa--tctgactc-	atttgggg					
R. Nor	cctcaatt	gagaatgatgatttca-	CAGAct	AGAGTCTGACT	ctgcccttgatgtcaactataaa--tctgactc-	atttgggg					
C. Por	cctaaatt	gggaatgatgatttca-	CAGAct	AGAGTCTC	tgacactggttctgatgtcaaaaa-taatgtctgactca	atttagag					
O. Cun	cctaaaca	ggggatgatgatttca-	CAGAct	AGAGTCTC	tgaccctggtcctgatgtcaaaaa-tgagttctgactc-	gtttagga					
C. Fam	cttaaaat	gggaatgatgatttca-	TCTCAGAct	AGAGTCTCT	gacactggtccttgatgtcaaaaattacgtttctgactc-	atttggag					
F. Cat	cctaaatt	gggaatgatgatttca-	GTCTCAGAct	AGAGTCTCTGA	tgctggacttgatgtcaaaaattaagttctgactc-	atttggag					
B. Tau	cctaaatt	gggaatgatgatttca-	TCTCAGAct	AGAGTCTCTGA	actggttttgatgtcaaaa-ttgatttctgactc-	atttaggg					
E. Cab	cctaaatt	gggaatgatgatttca-	TCTCAGAct	AGAGTCTCTGA	tgctggttctgatgtcaaaaattacgtttctgactc-	atttgggg					
O. Avi	cctaaatt	aggaatgatgatttca-	TCTCAGAct	AGAGTCTCTGA	actggttctgatgtcaaaa-ttgatttctgactc-	atttaggg					
L. Afr	cctgaatt	gggaatgatgatttca-	TCTCAGAct	AGAGTCTCTG	ATGCtGGTCTtgatgtcaaaaa-taaattctgactc-	atttgggg					
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id=747880 gene=ENSG00000201754 name=SNORD52 segment=chr6\_31804853\_31804919\_1 type=EN

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P. Tro	acagtgcc	gtgagtgtgact--...1331...-----gctttgcattgatcagttct-	GAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
P. Abe	acagtgcc	gtgagtgtgact--...1330...-----gctttgcattgatcagtttt-	GAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
C. Jac	acagtgcc	gtgagtgtgact--...1348...-----gctttgcattgatcagtttt-	GAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
M. Mus	acagtgcc	gtgagtgtgact--...1256...----agcagcaactttgactgac-	CAGTTTGGAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
R. Nor	acagtgcc	gtgagtgtgact--...1249...----gcagcagctttgactgacc-	AGTTTGGAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
C. Por	gcagtgcc	gtgagtgtgact--...1317...-----gcctgacactgatcagttct-	GAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
O. Cun	gcagtgcc	gtgagtgtgact--...1306...-----cacag---ggagtcaccagtttt-	GAGGCTCTTTG	gagactgtatatcatcaacag	atatgaga					
C. Fam	acagtgcc	gtgagtgtgact--...1342...-----agcctttgactgactgattg-	AGAGGCTCTTTGAGAG	ctgtatatcatcaacag	atatgaga					
F. Cat	acagtgcc	gtgagtgtgact--...1304...-----gcagctttgactgactgattg-	TTGGAGGCTCTTTGAGAG	ctgtatatcatcaacag	atatgaga					
B. Tau	acagtgcc	gtgagtgtgact--...1328...-----gcagctttgactgactgattg-	TCGGAGGCTCTTTGAGAG	ctgtatatcatcaacag	atatgaga					
E. Cab	acagtgcc	gtgagtgtgact--...1330...-----gcagctttgactgactgattg-	TTGGAGGCTCTTTGAGAG	ctgtatatcatcaacag	atatgaga					
O. Avi	acagtgcc	gtgagtgtgact--...1314...-----gcagctttgactgactgattg-	TTGGAGGCTCTTTGAGAG	ctgtatatcatcaacag	atatgaga					
L. Afr	acaatgcc	gtgagtgtgact--...1661...aggagcggcagctttgact-	GATC	cGTGGAGGCTCTTTGAGAG	ctgtatatcatcaacag					
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id=553454 gene=ENSG00000147852 name=VLDLR segment=chr9\_2639982.2641376\_1 type=IN

Figure 603: CS=15



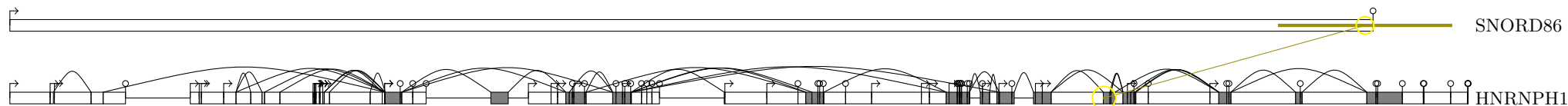
H. Sap	ccctaatt	gggaa	TGATGATTT	ACAGA	ctagagtctccgatgctggatcatgatgtcaaac-taagttctgactc-	atttaggg						
R. Mac	ccctaatt	gggaa	TGATGATTT	CACAGA	ctagagtctctgatgctggatcatgatgtcaaac-taagttctgactc-	atttaggg						
P. Tro	ccctaatt	gggaa	TGATGATTT	ACAGA	ctagagtctccgatgctggatcatgatgtcaaac-taagttctgactc-	atttaggg						
P. Abe	ccctaatt	gggaa	TGATGATTT	CACAGA	ctagagtctccgatgctggatcatgatgtcaaac-taagttctgactc-	atttaggg						
M. Mus	cctcaatt	gaga	TGATGATTT	ACAGA	ctagagtctctgacgctgtccttgatgtcagcta-taaa-tctgactc-	atttgggg						
R. Nor	cctcaatt	gagaa	TGATGATTT	ACAGA	ctagagtctctgactctgcccttgatgtcaacta-taaa-tctgactc-	atttgggg						
C. Por	cctaatt	gggaa	TGATGATTT	ACAGA	ctagagtctctgacactggttctgatgtcaaaaa-taatgtctgactc-	atttagag						
O. Cun	cctaaca	gggaa	TGATGATTT	ACAGA	ctagagtctctgacctggtccttgatgtcaaaaa-tgatttctgactc-	gttttagga						
C. Fam	cttaaat	gggaa	TGATGATTT	ctCAGA	ctagagtctctgacactggttcttgatgtcaaaaaattacgttctgactc-	atttggag						
B. Tau	cctaatt	gggaa	TGATGATTT	ctCAGA	ctagagtctctgatactggttttgatgtcaaaa-tgatttctgactc-	atttaggg						
E. Cab	cctaatt	gggaa	TGATGATTT	ctCAGA	ctagagtctctgatgctggttctgatgtcaaaacttaagttctgactc-	atttgggg						
D. Avi	cctaatt	aggaa	TGATGATTT	ctCAGA	ctagagtctctgatactggttcttgatgtcaaaa-tgatttctgactc-	atttaggg						
L. Afr	cctgaatt	gggaa	TGATGATTT	ctCAGA	ctagagtctctgatgctggttcttgatgtcaaaaa-taattctgactc-	atttgggg						
	*	**	*	*****	*****	**	***	*****	*	*****	***	*

id=747880 gene=ENSG00000201754 name=SNORD52 segment=chr6\_31804853\_31804919\_1 type=EN

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P. Abe	tatgtcag	gtaggaacaaa...4896...	ttcagttcggagctcactca	TCTGTA	AAAT	tgCATCA	cattatctctgagttatttaagaagcaagctctgtttggttcag	gcattttt
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C. Por	tgtttcag	gtaggagctaca...4896...	ttcagttcggagttcactca	TCTGTA	AAAT	tgCATCA	cattatctctgagttatttaagaagcaagctctgtttggttcag	gcatttca
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B. Tau	tgtatcag	gtaggaataaca...4896...	ttcagttcagagctcactca	TCTGT	AAAT	tgCATCA	cattatctctgagttatttaagaagcaagctctgtttggttcag	gcatttta
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O. Avi	tgtatcag	gtaggaataaca...4896...	ttcagttcagagctcactca	TCTGT	AAAT	tgCATCA	cattatctctgagttatttaagaagcaagctgtttggttcag	gcatttta
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Figure 604: CS=10.14



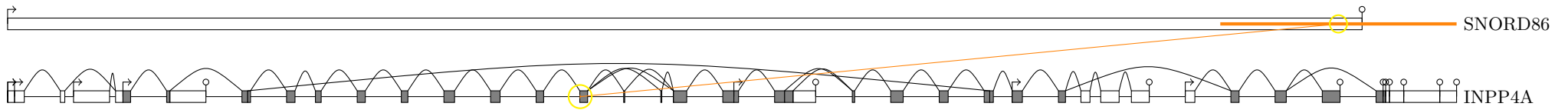
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R.Mac	tg	ttgggg	gatcacggtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
P.Tro	tg	ttgggg	gatcacggtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
C.Jac	tg	ttgggg	gatcacggtgat...40...gggggtgatggccaatcctg	GTGTCTGAGTGA	tt	cccagggc
M.Mus	tg	ttgggg	gattacaatgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
R.Nor	tg	ttgggg	gattacagtgat...40...gggagtgatggccagtccta	GTGTCTGAGTGA	tt	cccagggc
C.Por	ta	tatggg	aatcacagtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
O.Cun	tg	ttgggg	gatcacagtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
C.Fam	tg	ttgggg	gatcacagtgat...40...gggggtgatggccagcctg	GTGTCTGAGTGA	tt	cctagggc
B.Tau	tg	ttgggg	gatcacagtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	ccctgggc
E.Cab	tg	ttgggg	gatcacagtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
S.Sus	tg	ttcggg	gatcacagtgat...40...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	ccttgggc
L.Afr	tg	ttgggg	tatcacagtgat...39...gggggtgatggccagtcctg	GTGTCTGAGTGA	tt	cccagggc
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id=210006 gene=ENSG00000212498 name=SNORD86 segment=chr20\_2636743\_2636828\_1 type=EN

H.Sap	aa	aatatgc	gtaagtgtgatt...362...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
R.Mac	aa	aatatgc	gtaagtgtgatt...365...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
P.Tro	aa	aatatgc	gtaagtgtgatt...362...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
C.Jac	aa	aatatgc	gtaagtgtgatt...349...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
M.Mus	aa	aatatgc	gtaagtgtgatt...324...-a	attcaaacttttttttc----	TCATtTCAG	aACACaga
R.Nor	aa	aatatgc	gtaagtgtgatt...637...-t	ttttaaacttttttttc----	TCATtTCAG	aACACaga
C.Por	aa	aatatgc	gtaagtgtgatg...407...-at	tttcatacttcttttttc----	TCATtTCAG	aACACaga
O.Cun	aa	aatatgc	gtaagtgttca...273...t	gttttcaaactttgttttc----	TCATtTCAG	aACACaga
C.Fam	aa	aatatgc	gtaagtgtggtt...376...-c	tttcaaaattttttttttc----	TCATtTCAG	aACACaga
B.Tau	aa	aatatgc	gtaagtgtgatt...349...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
E.Cab	ca	aatatgc	gtaagtgtgatt...371...-at	tttcaaacttttttttc----	TCATtTCAG	aACACaga
S.Sus	gt	gagtgact	...601...-ttt	caaactttgttttttc----	TCATtTCAG	aACACaga
L.Afr	aa	aatatgc	gtaagtgtgttg...409...-c	aaacttttttttttttc	TCATtTCAG	aACACaga
		*****	**	*****	* * * *	*****

id=427538 gene=ENSG00000169045 name=HNRNPH1 segment=chr5\_179044112\_179044514\_-1 type=AN

Figure 605: CS=11.05



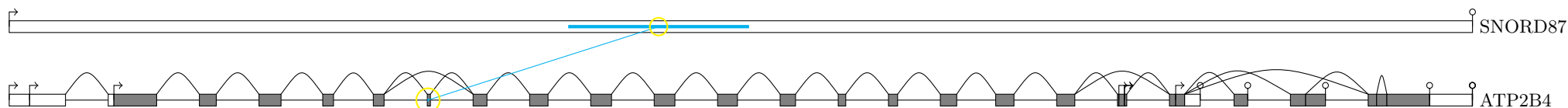
H. Sap	tg	ttgggg	gatcacggtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
R. Mac	tg	ttgggg	gatcacggtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
P. Tro	tg	ttgggg	gatcacggtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
P. Abe	tg	ttgggg	gatcacggtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
C. Jac	tg	ttgggg	gatcacggtgat...37...-tatgggggtgatggccaatc	CTGGtg	TCTGAGTGAT	t	cccagggc
C. Por	ta	tatggg	aatcacagtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
O. Cun	tg	tttggg	gatcacagtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGaGTGAT	t	cccagggc
C. Fam	tg	tttggg	gatcacagtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cctagggc
F. Cat	tg	tttggg	gatcacggtgat...36...ctat-ggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
B. Tau	tg	tttggg	gatcacagtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	ccctgggc
E. Cab	tg	tttggg	gatcacagtgat...37...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
S. Sus	tg	ttcggg	gatcacagtgat...37...-tacgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	ccttgggc
L. Afr	tg	tttggg	tatcacagtgat...36...-tatgggggtgatggccagtc	CTGGtg	TCTGAGTGAT	t	cccagggc
	*	*	***	*****	*****	**	****

id=21006 gene=ENSG00000212498 name=SNORD86 segment=chr20\_2636743\_2636828.1 type=EN

H. Sap	aggatcag	gtac	tattttt...471...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
R. Mac	aggatcag	gtac	tattttt...439...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
P. Tro	aggatcag	gtac	tattttt...471...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
P. Abe	aggatcag	gtac	tattttt...470...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
C. Jac	aggatcag	gtac	tcttttt...459...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
C. Por	cggatcag	gtac	tcttttt...359...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
O. Cun	tggatcag	gtat	ctgtttt...461...agtaacggagg-gagctttct	GTCAT	gCAG	ATCAG	aac
C. Fam	ggggtcag	gta	actattttt...462...-gtaacggagaagagctttct	GTCATT	CAG	ATCAG	aac
F. Cat	ggggtcag	gta	actattttt...487...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
B. Tau	aggagcag	gta	actgccccg...434...-gtaacagaggagagctttct	GTCATT	CAG	ATCAG	aac
E. Cab	aggatcag	gta	actattttt...488...-gtaatggaggagagctttct	GTCATT	CAG	ATCAG	aac
S. Sus	aggatcag	gta	agtgtcttg...458...-gtaacggaggagagctttct	GTCATT	CAG	ATCAG	aac
L. Afr	aggatcag	gta	actcttttt...459...-gtaacggagaggagctttct	GTCATT	CAG	ATCAG	aac
	**	***	***	*	****	***	*****

id=6805 gene=ENSG0000040933 name=INPP4A segment=chr2\_99162537\_99163048.1 type=IN

Figure 606: CS=11.05



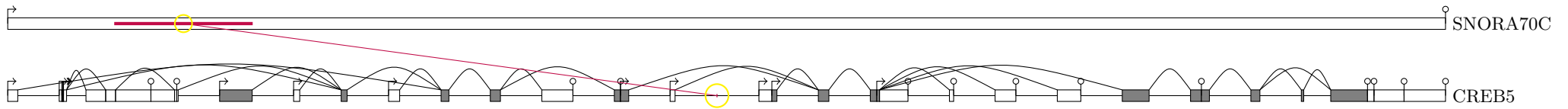
H.Sap	gtttaata	gctggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tt--aagactgagatgccagt	actgtaca
R.Mac	gtttaata	gctggcacagtgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tt--aagactgagatgccagt	aatgtaca
P.Tro	gtttaata	gctggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tt--aagactgagatgccagt	actgtaca
P.Abe	gtttaata	gctggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tt--aagactgagatgccagt	aatgtaca
C.Jac	gattaata	gctggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	tttaatt--aagactgagatgccagt	aatctaca
M.Mus	ccttaata	gctggcacaatgatgacttaag	----TTTTGGCGTTT	accagctgaggtgtccttgaag-agagaatc	----ttaaagactgagatgccagc	agtatata
R.Nor	ccttaata	gctggcacaatgatgacttatg	----TTTTGGCGTTT	accagctgaggtgtccttgaag-agagaatc	----tt--aagactgagatgccagc	aatgtata
C.Por	gtgtaata	gctggcacaatgatgacataaa	----TTTTGGCGTTT	accagctgaggtgtccttgaag-aaatcatt	----tt--aagactgagatgccagt	agtataat
O.Cun	gtgtattt	gctggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaatctt	----tc--aagactgagatgccagt	tatctata
C.Fam	ggttaaaa	actggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tt--aagactgagatgccagt	agcctata
F.Cat	gtttagta	actggcacaatgatgacttaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tg--aagactgagatgccagt	tacgtata
B.Tau	gtttaata	actggcacagtgatgac--aagttac	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataact	----tt--aagactgagatgccagt	aatatata
E.Cab	gtttaata	actggcacaatgatgacttaac	----TTTTGGCGTTT	accagctgaggtgtccttgaag-acataatt	----tt--aagactgagatgccagt	aatctata
S.Sus	gtttaata	actggcacaatgatgactcaaat	TTTTGGCGTTT	accagctgaggtgtccttgaag-aaataatt	----tc--aagactgagatgccagt	aacctatg
L.Afr	gcttaata	actggcacaatgatgatttaaat	TTTTGGCGTTT	accatctgaggtgtccttgaagaaaataatc	----tt--gaaactgaggtgtcagt	aatttata
	**	***** * ***** *	*****	* ** * ***** * *	* * ***** ** ** *	*

id=704326 gene=ENSG00000201719 name=SNORD87 segment=chr8.67834702.67834790.-1 type=EN

H.Sap	gaagaaag	gtaaggggcatc...1082...	cactttttctttctgttcAAACaG	GTAaAAAa
R.Mac	gaagaaag	gtaaggggcatc...1077...	cactttttctttctgttcAAACaG	GTAaaaaaG
P.Tro	gaagaaag	gtaaggggcatc...1082...	cactttttctttctgttcAAACaG	GTAaAAAa
P.Abe	gaagaaag	gtaaggggcatc...1082...	cactttttctttctgttcAAACaG	GTAaAAAa
C.Jac	gaagaaag	gtaaggggcatc...1081...	cactttttctttctgttcAAACaG	GTAaaaaa
M.Mus	gaagaaag	gtaaggggcatc...1300...	cgctttttctttctgttcAAACaG	GTAaAAAa
R.Nor	gaagaaag	gtaagggcctgc...1294...	cgctttttctttctgttcAAACaG	GTAaAAAa
C.Por	gaagaaag	gtaataagtgtc...1078...	cactttttctttctgttcAAACaG	GTAaAAAa
O.Cun	gaagaaag	gtaaggggcatc...782...	cactttgttctttctgttcAAACaG	GTAaAAAa
C.Fam	gaagaaag	gtaaagggtatt...1064...	cactttttctttctgttcAAACaG	GTAaaaaa
F.Cat	gaaaaaag	gtaaggggcatc...1078...	cactttttctttctgttcAAACaG	GTAaAAAa
B.Tau	gaagaaag	gtaaggggcatc...2764...	cattttttctttctgttcAAACaG	GTAaAAAa
E.Cab	gaaaaaag	gtaaggggcatc...1101...	cactttttctttctgttcAAACaG	GTAaAAAa
S.Sus	gaagaaag	gtaaaggggcatc...1082...	cactttttctttctgttcAAACaG	GTAaAAAa
L.Afr	gaagaaag	gtaaggggcatc...1135...	caactttttctttctgttcAAACaG	GTAaAAAa
	** * ** *	*****	* ** ***** *****	*****

id=517880 gene=ENSG00000058668 name=ATP2B4 segment=chr1.203670052.203671171.1 type=IN

Figure 607: CS=11.7



H. Sap	cagatc	AT	CTGCAGccAATTAAGC	caactgggttcctttcctca	-----	.87...	--atggaacaggc	ctttcaga
P. Tro	cagatc	AT	CTGCAGccAATTAAGC	caactgggttcctttcctca	-----	.87...	--atggaacaggc	ctttcaga
P. Abe	cagatc	AT	CTGCAGccAATTAAGC	caactgggttcctttcctca	-----	.87...	--atggaacaggc	ctttcaga
M. Mus	agaagt	AT	TTGCAGccAATTAAGC	AAGCagggttcttttctcatggga	...	.68...	tcttgagacaa--	ctttctgg
R. Nor	taaaacat	gt	GCAGctAATTAAGC	cgactcaagtcctttcccca	-----	.88...	--ttggaacagtt	ttctggca
C. Por	agaaacca	ct	GCAGtcAATTAAGCGGACT	gggccctttgctggtgggt	...	.82...	--ttcaagacactg	cttctgat
O. Cun	tagcatac	ct	GCAGctAATTAAGC	cgaccagtcctttcttca	-----	.87...	--ttggagacagcc	ctgtgcag
C. Fam	caccgt	GT	CTGCAGccAATTAAGC	cgactgtgctctttccct	-----	.86...	--ttggagacagcc	ctttgtgg
B. Tau	tgggtc	AG	TGCAGccAATTAAGC	cgactgtgctctttcccca	-----	.87...	--ttggagacaact	ctttctag
E. Cab	agatat	AT	CTGCAGccAATTAAGC	tgaccgtgctctttcccca	-----	.87...	--ttggagacagcc	ctttccag
S. Sus	aag	AAGTT	TtGCAGccAATTAAGC	caaccgtgctctttcccca	-----	.86...	--ttggagacagcc	ctttccag
L. Afr	tttgtcct	ct	GCAGccAATTAAGC	cgactgtcctcctttcctgt	-----	.85...	--ttggagacagca	tttccttg
			****	*****	*	**	* **	*

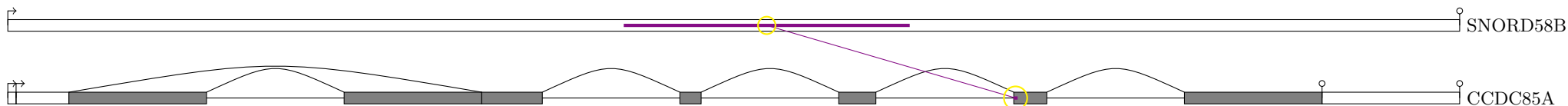
id=449432 gene=ENSG00000207268 name=SNORA70C segment=chr9.119943345.119943479\_-1 type=EN

H. Sap	gacctgag	gtaggtatgtag	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaagtgtgacttcactag--	...34..	agaccaggagaa	agagagca
P. Tro	gacctgag	gtaggtatgtag	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaagtgtgacttcactag--	...34..	agaccaggagaa	agagagca
P. Abe	gacctgag	gtaggtatgtag	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaagtgtgacttcactag--	...34..	agaccaggagaa	agagagca
M. Mus	gcaccaag	acacacatgcta	...4867...	-gctgtttt	ggttacattgaa	GTTTtGCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...34..	agcccaggagaa	agagagtg
R. Nor	gcaccaag	acacacaaccta	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...39..	agcccaggagaa	agagagtg
C. Por	gacctgag	atacctgtgtag	...4866...	ggctgttt	ggttacattgaa	AGTTTtGCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...39..	agcccaggagaa	agagagtg
O. Cun	gacctgag	gtgtgagcatgt	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...39..	agcccaggagaa	agagagcg
C. Fam	gacctgag	gtgattatgcaa	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...34..	agcccaggagaa	agagagcg
B. Tau	tacctgag	atagttacacaa	...4876...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcGATT	ttaaatgtgacttcaccagc-	...30..	aaccaggagaa	agagagcg
E. Cab	gacctgag	atagttatgcaa	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccag--	...34..	agcccaggagaa	agagagcg
S. Sus	gacctgag	ctagttaggcaa	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccagca	...32..	agcccaggagaa	agagagtg
L. Afr	agactgag	atattttagcaa	...4873...	-----	ttggttacattgaagttttt	GCTTcAGTTCTGCcAGAT	ttaaatgtgacttcaccagca	...39..	agcccaggagaa	agagagca
			**		*****	*****	* *****		* ** *****	**** *

id=274772 gene=ENSG00000146592 name=CREB5 segment=chr7.28648738.28725597.1 type=IN

Figure 608: CS=11.52





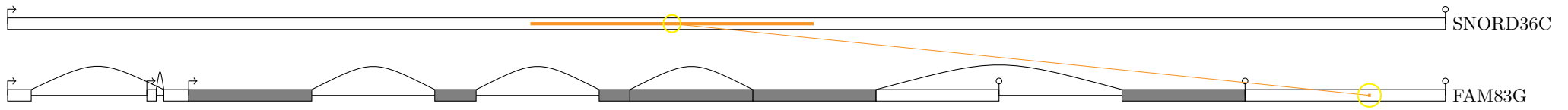
H. Sap	aagtatgg	ctgcgatgatggcatttctt	AGGACACCTTTGGA	ttaataatgaaacaactactctctgagcagc	tggtcgaa
R. Mac	aaggatgg	ctgcgatgatggcatttctt	AGGACaCCTTTGGA	ttAATCATGAaaacaactactctctgagcagc	tggtcgaa
P. Tro	aagtatgg	ctgcgatgatggcatttctt	AGGACACCTTTGGA	ttaataatgaaacaactactctctgagcagc	tggtcgaa
C. Jac	aaggatgg	ctgcgatgatggcatttctt	AGGACACCTTTGGA	ttaataatgaaacaactactctctgagcagc	tggtcgaa
M. Mus	aaagatgg	ctgcgatgatgtcatatctt	AGGACaCCTTTGGA	ttAATCATGAaaataactatcctctgagcagc	tgttgta
R. Nor	aaagatgg	ctgcgatgatgtcatttctt	AGGACaCCTTTGGA	ttAATCATGAaaatagctctctctgagcagc	tgtcgta
C. Por	aaggatgg	ctgcggtgatggcgttctt	AGGACACCTTTGGA	ttaataatgaaataaactactctctgagcagc	ccttacca
O. Cun	agagaacg	ctgcgatgatgccatttctt	AGGACaCCTTTGGA	tAATCATGAaaccaaccattctctgagcagc	ggtggggc
C. Fam	aggcccgg	ccgcgatgatggcatttctt	AGGACACCTTTGGA	ttaaccgtgagaacagctatcagctgagcggc	cgtcgctc
F. Cat	aaggatgg	ctgcgatgatggcatttctt	AGGACACCTTTGGA	ttaaccgtgaaacaactactctctgagcggc	tgtcgta
B. Tau	gaggatgg	ctgcaatgatggcatttctt	AGGACACCTTTGGA	ttaataatgaaacaactactctctgagcagc	tggtgata
E. Cab	cagggcag	ctgcgatgatggcatttctt	AGGACaCCTTTGGA	ttAATCATGAaaacaactactctctgagcagc	tggtgata
L. Afr	cagaatgg	ctgcgatgatgtcatttctt	AGGACaCCTTTGGA	tAATCATGAaaacagttacactctgagcagc	tggtgata
		*	**	*****	*

id=619995 gene=ENSG00000206696 name=SNORD58B segment=chr18.47018034.47018099.-1 type=EN

H. Sap	ctctcccg	gtgagtgaagat...3296...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
R. Mac	ctctcccg	gtgagtgaagat...3283...	ctttgttttaataacaaag	TTGTTGATTt	TCTActAAG
P. Tro	ctctcccg	gtgagtgaagat...3289...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
C. Jac	ctctcccg	gtgagtgaagat...3315...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
M. Mus	ctctcccg	gtgagtgaagat...3159...	ctttgttttaataacaaag	TTGTTGATTt	TCTActAAG
R. Nor	ctctcccg	gtgagtgaagat...3223...	ctttgttttaataacaaag	TTGTTGTTt	TCTActAAG
C. Por	ctctcccg	gtgagtgaagac...2839...	-----agtaacaaagttggtgattt	TCTACTAAG	GGTTCTTt
O. Cun	ctctgccc	gtgagtgaagaa...2949...	ctttgttttaataacaaag	TTGTTGATTTCTAct	AAG
C. Fam	ctctcccg	gtgagtgaagat...2976...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
F. Cat	ctctcccg	gtgagtgaagac...3011...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
B. Tau	ctctcccg	gtgagtgaagat...3026...	-----aataacaaagttggtgattt	TCTACTAAG	GGTTCTTt
E. Cab	ctctcccg	gtgagtgaagat...3114...	ctttgttttaataacaaag	TTGTTGATTt	TCTActAAG
L. Afr	ctctcccg	gtgagtgaagac...3450...	ctttgttttaataacaaag	TTGTTGATTTCTAct	AAG
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id=105312 gene=ENSG00000055813 name=CCDC85A segment=chr2.56599614.56602950.1 type=IN

Figure 609: CS=10.14



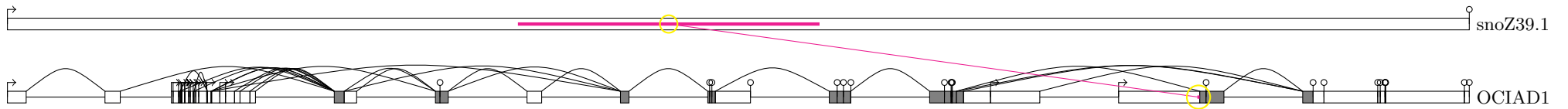
H. Sap	tgaacttt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagactgt
R. Mac	tgaacttt	tgccagtgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagactgt
P. Tro	tgaacttt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagactgt
P. Abe	tgaacttt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagactgt
C. Jac	tgaacttt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagactgt
M. Mus	ggaccatt	tgccagtgat	gctta	GGAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aaaggcag
R. Nor	ggaccggt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aaaaaaaa
C. Por	tgaacatt	tgccatgat	ggttaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aaggcttg
C. Fam	taaatctt	tgccaatgat	GGTTac	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	agggcttg
F. Cat	tgaatctt	tgccgatgat	GGTTac	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aggccttg
B. Tau	tgaatctt	tgccaatgat	GGTTat	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	gagacttg
E. Cab	tgagcctt	tgccgatgat	GGTTGc	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aagtcttg
S. Sus	tagggttt	tgccaatgat	GGTTat	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	ttgcatctgaggcaa	aaagaaaa
L. Afr	tgaccctt	tgccaatgat	GGTTaa	GAATTTCTtc	ACCTga	ataaacatgt	ggtcagca	----	tttattctgaggcaa	aaggtatc
		**	***	****	*****	**	*****	*****	*****	*

id=81914 gene=ENSG00000252542 name=SNORD36C segment=chr9.136217702.136217767.1 type=EN

H. Sap	tggaggga	atggcctggg	cg	cgagcgtgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaca	...273...	----	ccttcccaaaa	gcagtgtt
R. Mac	tggaggga	atggcccggg	ca	cgagcgtgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaca	...288...	----	cccttctgaaa	gcagcgtt
P. Tro	tggaggga	atggcctggg	ca	cgagcgtgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaca	...272...	----	ccttcccaaaa	gcagtgtt
P. Abe	tggaggga	atggcccggg	cg	cgagcgtgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaca	...284...	----	cccttcccaaaa	gcagtgtt
C. Jac	tggaggga	atggcctggg	cg	cgagcgtgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cagcaaca	...284...	----	cccttctgaaa	cagcgttt
M. Mus	tggagggg	atggcctggg	ca	gagcgtgaggatggtgga	CAGGTAGAAGTTC	agcccaggcagatgtg	gaca	...270...	----	gccatcagaga	gcagtgtt
R. Nor	tggacggg	gtggcctggg	ca	gcaacgtgaggatggtgga	CAGGTAGAAGTTC	agcccaggcagatgtg	gaca	...274...	----	gccatcagaga	gcaatgtt
C. Por	tggaggga	atggcccggg	ca	ggagtgtgaggatggtggag	AGGTAGAAGTTC	catcccaggcagatgtg	cac	...263...	----	cattcccaccatgt	gttg---
C. Fam	tggatggg	atggcctggg	cg	tgagcatgaggatggtgga	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaga	...243...	----	ggctaccaagga	gcagagtt
F. Cat	tggatggg	acggcctggg	cg	cgagcatgaggatggtggag	AGGTAGAAGTTC	AGCCcagacagatgtgc	cacaaga	...243...	----	gtccaccaggga	gcagtgtt
B. Tau	tggatggg	acggcctggg	cg	gagcagatgatgacctgga	CAGGTAGAAGTTC	AGCCcaggcagatgtgc	cagcaaca	...219...	----	accaccaggga	gcagcctg
E. Cab	tggttggg	acggcctggg	aa	cgagcatgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cagcaaga	...235...	----	gtgtcccaggga	gcagcgtt
S. Sus	tggagggg	atggcctggg	cg	cgagcatgaggatggtggag	AGGTAGAAGTTC	AGCCcaggcagatgtgc	cagcaaca	...218...	---	ggcccaggga	gagcgt-
L. Afr	tggctggg	atggcccggg	ca	acgagcatgaggatggtgga	CAGGTAGAAGTTC	AGCCcaggcagatgtgc	cacaaga	...238...	---	cctgccaatcaggga	gca---tg
	*** **	**** **		* ** *	*****	*****	*****	** **		*****	*

id=153071 gene=ENSG00000188522 name=FAM83G segment=chr17.18872102.18874380.-1 type=E3

Figure 610: CS=16.1



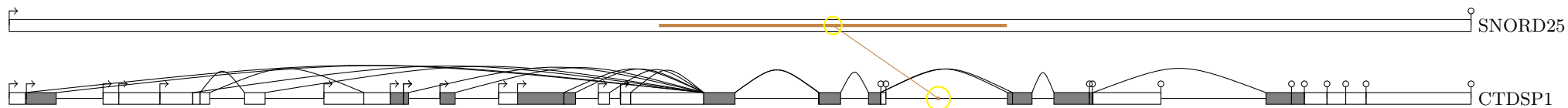
H. Sap	aggttgcg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGAATG	-aattcatgatactgtaaacgctttctgatgta	ctactcaa
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P. Tro	aggttgcg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGAATG	-aattcatgatactgtaaacgctttctgatgta	ctactcaa
P. Abe	agatttcg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGAATG	-aattcatgatactgtaaacgctttctgatgta	ctactcaa
C. Jac	tggtttcg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGAATG	-atgcatgatactgtaaacgctttctgatgta	ccactcaa
M. Mus	aaattttg	gtacatgt	GATGaa	GCAAAAt	CAGTATGA	----ataaaatgatactgtaaacgctttctgatgta	tcatcaa
C. Por	ttttcatg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGAAT	-aaaatcatgatactgtaaacgctttctgatgta	ctaaactg
O. Cun	aggttttg	gtgcatat	GATGaa	GCAAAAt	CAGTATGA	-Ttacaatcatgatactgtaaacgctttctgatgta	ccagttaa
C. Fam	agattttg	gtgcatat	GATGaa	GCAAAAt	CAGTATGAAT	-aaagtcatactgtaaacgctttctgatgta	ccagtcac
B. Tau	attacttg	atgcatat	GATGaa	GCAAAAt	CAGTATGAGT	-aaaatcatgatactgtaaacgctttctgatgca	ccagtcac
E. Cab	agattctg	gtgcatgt	GATGaa	GCAAAAt	CAGTATGA	--ctaagtcatactgtaaacgctttctgatgta	ccagtcac
S. Sus	agattctg	gtgcatgt	gatga	AGCAAAAt	CAGTATGAAT	-aaagtcgatactgtaaacgctttctgatgta	ccagtcct
L. Afr	agattttg	gtgcacat	GATGaa	GCAAAAt	CAGTATGAATG	-aagtcatactgtaaacgctttctgatgta	ccacataa
		*	*	*	*****	*****	*

id=317135 gene=ENSG00000199262 name=snoZ39.1 segment=chr5.85916323.85916385.1 type=EN

H. Sap	atatgccc	aatttgatgtc...	1183...	tatacaaatccttttattac	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
R. Mac	atatgccc	aatttatatgtc...	1177...	tatacaaatccttttattac	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
P. Tro	atatgccc	aatttgatgtc...	1187...	tatacaaatccttttattac	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
P. Abe	atatgccc	aatttgatgtc...	1185...	tatacaaatccttttattac	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
C. Jac	atatgccc	aatttgatgtc...	1101...	tatacaaatccttttattac	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
M. Mus	acatgact	agttggggacc...	747...	tatccatttcttatgaccac---	TTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
C. Por	gtattttg	actctcaggctg...	911...	-atccacatccttttattgccc	ATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
O. Cun	atatgccc	aatttgatgtc...	1323...	---caaattttttatcaccgt	TTATTA	ACTGTTTGTGTT	ttag	gacctgat	
C. Fam	atatgccc	aatttgatgta...	828...	-actcaaatccttttattcacc	ATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
B. Tau	atatacct	gatttctatgtc...	827...	-attaaaatccttttattcacc	ATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
E. Cab	atatgccc	aatttgatgtc...	860...	---tcaaatccttttattcacc	TTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
S. Sus	atagcct	gatttctatgtc...	866...	-ggatttattccttttattcacc	ATTAT	ta	ACTGTTTGTGTT	ccttttag	gacctgat
L. Afr	atatacct	aatttgatgtc...	833...	aagccagattccttttattcacc	CATTAT	ta	ACTGTTTGTGTT	ttag	gacctgat
	**	*		*	*	*	*****	*****	**** **

id=98581 gene=ENSG00000109180 name=OCIAD1 segment=chr4.48857989.48859229.1 type=AN

Figure 611: CS=11.05



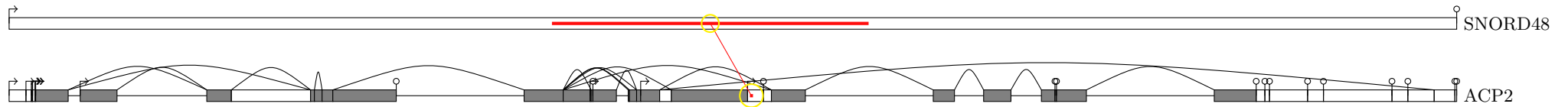
H. Sap	gtccccct	tcctatgatgaggacctttt	CACAgACCTGTaCTGAG	--ctcogtgaggat--	aaataactctga	-----	ggagatgggc
R. Mac	ggtcccct	ccctatgatgaggacctttt	CACAgACCTGTaCTGAG	--ctcogtgaggat--	aagtactctga	-----	ggagatgggc
P. Tro	gtccccct	tcctatgatgaggacctttt	CACAgACCTGTaCTGAG	--ctcogtgaggat--	aagtaactctga	-----	ggagatgggc
P. Abe	gtccccct	tcctatgatgaggacctttt	CACAgACCTGTaCTGAG	--ctcogtgaggat--	aagtactctga	-----	ggagatgggt
C. Jac	gtggccct	ctctatgatgaggaactttt	CACAgACCTGTaCTGAGTT	--tcgtgaggat--	aagtaactctga	-----	ggacacgggc
M. Mus	aggccacc	ccctatgatgaggacctttt	TCACAgACCTGTaCTGAtatata	tctgtgaggat--	aagtaactctga	-----	ggaggctggc
R. Nor	aggccatg	ccctatgatgaggacctttt	TCACAgACCTGTaCTGA	--tctctgtgaggat--	aagtaactctga	-----	ggaggctggc
C. Por	gtggccct	ccctgtgatgaggactt	CACAgACCTGTgCTGA	--cctccaatgaggac--	gactctctctga	-----	ggaaacggcc
O. Cun	gcgggcct	ccctatgatgaggacctatt	CACAgACCTGTaCTGAG	--ccccgtgaggat--	gagtcctctga	-----	ggagacgggg
C. Fam	gaggccct	ctctgtgatgagaaccttt	CACAgACCTGTaCTGA	--tctcogtgaggataaaaaa	actctgaggagggcagcc	catgaatacataaataaaatcttaaaat	cgagacgggc
F. Cat	gcggccct	ctctgtgatgagaacctttt	CACAgACCTGTaCTGAG	--ctcogtgaggat--	aagacactctga	-----	agagacgggc
B. Tau	acggccct	ctctgtgatgagacctttt	CACAgACCTGTaCTGAA	--ctcogtgaggat--	aagaaactctga	-----	ggaggccggc
L. Afr	gcggccct	ccctgtgatgaggaccttct	CACAgACCTGTaCTGAGct	TTGTgaGGAT	-----	aattaactctga	ggatacaggg
		** *****	* *****	****	*	*****	** *

id=458140 gene=ENSG00000202477 name=SNORD25 segment=chr11.62623040.62623102.-1 type=EN

H. Sap	cagtgggtg	gg--cttggcatct...	202...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	297...	actggcccgcag	ccccctca
R. Mac	cagtgggtg	gg--cttggcatct...	203...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	288...	actggcccgcag	ccgcctca
P. Tro	cagtgggtg	gg--cttggcatct...	202...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	299...	actggcccgcag	ccccctca
P. Abe	cagcgggtg	gg--cttggcatct...	202...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	291...	actgcccgcag	ccccctca
C. Jac	cagtgggtg	gg--cttggcctct...	199...	-----	gccccgaccagttcaagt	AATTTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	292...	actggcctgcag	cctcctca
M. Mus	agggtgggg	ag--cttgggtct...	203...	-----	cggggaccagttcaagtaa	TCAGgATAGGTTGTGG	-tgctgtccagcctgttctcc...	234...	gtggccagcag	ctcctca
R. Nor	agggtgggg	gg--tttgggtct...	202...	-----	cggggaccagttcaagtaa	TCAGgATAGGTTGTGG	-tgctgtccagcctgttctcc...	248...	gtggccagcag	cctcctca
C. Por	agatgggtg	gc--cttggcattt...	183...	-----	cggggaccagttcaagtaa	TCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	263...	ccatggccacag	ccccctca
O. Cun	cgggtgggtg	gggtcttggcac...	155...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	239...	ctccccagccg	tccccctca
C. Fam	aggcggcg	gg--cttggcatct...	190...	-----	cggggaccagttcaagtaa	TCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	259...	ctggcctgcag	gccccctca
F. Cat	agggtgggg	gg--cttggcatct...	188...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	302...	gcaggcctgcag	ttccctca
B. Tau	agggtgta	gg--gttggcatct...	198...	-----	cggggaccagttcaagtaa	TTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	320...	atggccagcag	tccccctca
L. Afr	ggagggtg	gg--ttaggcttgg...	196...	cccacacctgccgggacca	GTTCaGTAATTTCAGgATAGGTTGTG	-tgctgtccagcctgttctcc...	289...	cgtggccagcag	tccccctca	
	**	**		*****	*****	*****	** * *	*		

id=41883 gene=ENSG00000144579 name=CTDSP1 segment=chr2.219267155.219267733.1 type=IN

Figure 612: CS=11.7



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M. Mus  gagaggacagtaa-tgatgatttctGGTGatTCTGaGTGT-ctcgctgacgccatcaccgcagcgctgaccgtccccgg-----
R. Nor  aaaaggacggtaa-tgatgacttctGGTGatTCTGaGTGTcttcgctgacgccatcaccgcagcgctgaccgtccccgc-----
C. Por  agcgcaggggtga-tgatgactcccGGTGacTCTGaGTGT-ctcgctgacgccttcaccgcagcgctgactgcccctcg-----
O. Cun  agacgaggttga-tgatgaccccAGGTGacTCTGaGTGT-ctcgctgacgccagcaccgcagcgctgacggcccctc-----
C. Fam  aggacgggagtga-tgatgaaccccGGTGacTCTGaGTGT-ctcgctgacgccatcaccgcagcgctgaccaaccccgg-----
F. Cat  aagacgggggtaa-tgatgaaccccAGGTGatTCTGaGTGT-ctcgctgacgccgtcaccgcagcgctgaccatctccct-----
B. Tau  aggatgggggtga-tgatgactccaGGTGatTCTGaGTGT-ctcgctgacgccatcaccgcagcgctgaccacctccacccctgcccccc
E. Cab  aagacgggacaa-tgatgactccAGGTGacTCTGaGTGTGT-cgtgacgacatcaccgcagcgctgaccaccccctt-----
O. Avi  aggatggggttga-tgatgactccaGGTGatTCTGaGTGT-ctcgctgacgccatcaccgcagcgctgaccacctctac-----
L. Afr  aggatgggatgattgatgaccccAGGTGatTCTGaGTGT-ctcgctgacgccatcaccgcagcgctga-catccctact-----
          *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

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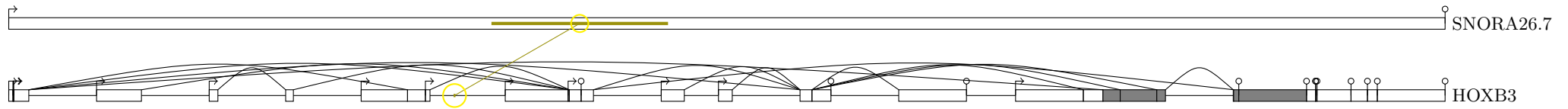
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R. Mac  ctccctc--ACACACaCAGGCACCT-tccc--actggggaagagagctgccccctggagaggct--ggcctaggcctggggcgct
P. Abe  ctccctc--ACACACaCAGGCACC-ttccc--actggggaagagagctgccccctggagaggct--ggcctaggcctggggcgct
M. Mus  ctccctcat--ACACaCAGGCACC-ttccccacctggggaagaaagccaccctt--ggagaggctctggcctaggcctaggggagct
R. Nor  ctccctcat--ACACaCAGGCACC-ttccccacttggggaagaaagccaccctt--ggagaggctctggcctaggcctaggggagct
C. Por  cctcctcac--ACACaCAGGCACC-ttccc--tctggggaggagag--gcccc--aagaggctctggcctaggcccaagaacta
O. Cun  ctgcctcac--ACACaCAGGCACCTcccct--cgggggaagagagctgccccaggagaggctcaggcctaggcctggggagct
C. Fam  ctccctcac--ACACaCAGGCACC-ttccc--gctggggaagagagctgtcccc--ggagaggctctggcctaggcctggggagct
F. Cat  ctccctcacacACACaCAGGCACCT-tccc--gctggggaagagagctgtcccc--ggagaggctctggcctaggcctggggagct
B. Tau  --ccctcacacACACgCAGGCACC-atccc--agcggggaagagagctgtccccgggagaggctctggccggggcc--ggggagct
E. Cab  tccctc--ACACAGgCAGGCACCT-tccc--actggggcagagcgctgtcccc--ggagaggctcct-----cggggagct
O. Avi  --ccctcacacACACgCAGGCACC-atccc--agcggggaagagagctgtccccgggagaggctctggcctggggcc--ggggagct
L. Afr  ttttcctt--ACACaCAGGCACCT-tccc--gctggggaagagaactacccc--gggaggcttagtctgggcctgtgggtgct
          *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

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id=374000 gene=ENSG00000134575 name=ACP2 segment=chr11\_47266450\_47266511.-1 type=AN

Figure 613: CS=10.8



```

R. Mac cctttcctgggccccgtaaggctgatgcaatgctttaaGAGGCTaaCACAGAAGGGtaaagct-ttctttacccttt...48...gaagtcacagctggaaaaa
P. Tro cctttcctgcacccctttaaggctgatgcaatgctttaaGAGGCTaaCACAGAAGGGtgaagccagctccttataaa...41...ggagtcacagctggaaaaa
C. Jac cctttcctgggccccctttaaggctgatgtaatgctttaaGAGGCTaaCACAGAAGGGtaaagccagctccttataaa...41...ggagtcacagctggaaaaa
M. Mus cctttcctgtgcccttttaagggtgacactgtactttaagaGGCTaaCACAGAAGGGTaaaggaactctccatcaaac...40...ggagtcacagctggaaaaa
R. Nor cctttcctgtgcccttttaagggtgactgtacctaagaGGCTaaCACAGAAGGGTaaaggaactctccataaaa...40...ggagtcacagttgaagaaag
C. Por cctttcctgtgcccttttaagggtgatacagtgctttaagaGGCTaaCACAGAAGGGTaaaggaactctccataaaa...39...ggagtcacagctgaatcaga
O. Cun cctttcctgtgcccttttaacagctaacacagtgctttaagaGGCTaaCACAGAAGGGGaaactaagtctccataaaa...39...ggagtcacagctgaacaaaa
F. Cat cctttcctgtgcccttttaagggtgacgcagtgctttaagaGGCTaaCACAGAAGGGTaaagtaagtctccataaaa...39...ggagtcacagcggaaaccaga
B. Tau cctttccagtgcccttttaagggtgacacagtgctttaagaGGCTaaCACAGAAGGGTaaagaaagtctccataaaa...41...ggagtcacaactgaaccaga
E. Cab cctttcctgtgcccttttaagggtgacgcagtgctttaagaGGCTaaCACAGAAGGGCaaagtaagtctccataaaa...40...ggagtcacagctgaaccaca
S. Sus gaatcctgtgcccttttaagggtgatgcagtgctttaaGGGCTaaCACAGAAGGGTaaaggtagtctccataaaa...40...atagtcacagttgaaagaaa
O. Avi cctttccagtgcccttataaggctgatgcagtgctttaagaGGCTaaCACAGAAGGGTaaagaaagtctccataaaa...41...ggagtcacaactgaaccaga
L. Afr cctttcctgtgcccttttaagggtgctgagtgctttaagaGGCTaaCACAGAAGGGTaaagtaagactctataaaa...41...ggagtcacagctgaaccaga
      **** *  ***  ***  *          * * ***** ***** * *          **          ***** * * *

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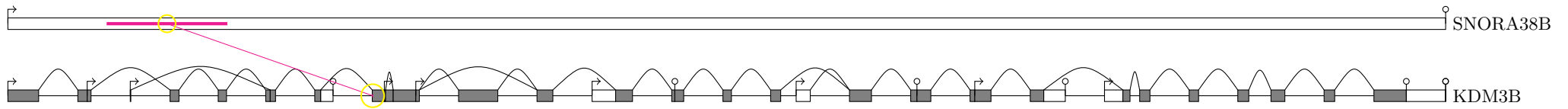
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C. Jac ataagaaggtattgctttcc...134...--taatcaagaagacaatggcCTCTTTTGTGaAGCCTTgctcctgtattaattttcat...344...tggtgttatttttgcgcat
M. Mus atgagaaggtatcactttcc...133...--ataatcaagaagacaatggcGCTCTTTTGTGaAGCCctgctcctgtattaattttcc--...335...gattgtgtttattttacgt
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C. Por ctacgaaggtaccgctttcc...134...--taatcaagaagacaatggcCTCTTTTGTGaAGCCctgctcctgtattaattttcc--...339...tatggttatttttgcgcat
O. Cun gcaagaaggtatcactttcc...134...--ataatcaagaagacaatggcCTCTTTTGTGaAGCCctgctcctgtattaattttcc--...339...tattgtttttattttgcat
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S. Sus gtaagaaggtatcgctttcc...134...--taatcaagaagacaatggcCTCTTTTGTGaAGCCctgctcctgtattaattttcc...350...tactgttatttcttttgcgcat
O. Avi gtaagaaggtatcactttcc...134...--taatcaagaagacaatggcCTCTTTTGTGaAGCCctgctcctgtattaattttcc--...324...tactgttatttcttttgcgcat
L. Afr ataagaaggtaccgctttcc...134...--taatcaagaagacaatggcCTCTTTTGTGaAGCCctgctcctgtattaattttcc--...337...tattttgatttacttttcat
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id=553411 gene=ENSG00000120093 name=HOXB3 segment=chr17\_46651850\_46652404.-1 type=IN

Figure 614: CS=10.14



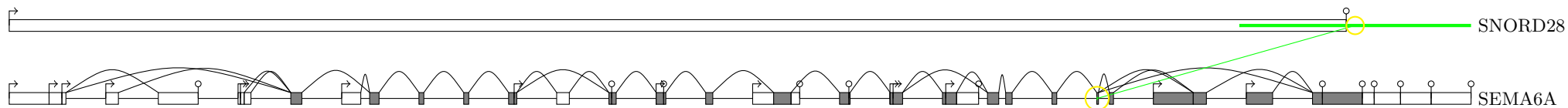
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R. Mac	-tgtatt	TA	CCCTCCTACAAAGGCA	----	tgtctatagttccttgtcctt	-----	..83..	cttcccacagag	aa-gcaata
P. Tro	-tgtatt	TA	CCCTCCTACAAAGGCA	----	tgtctatagttccttgtcctt	-----	..83..	catccacatag	aa-gcagta
C. Jac	tatattc	-A	CCCTCCTACAAAGGCA	----	tgtctatagttccttgtcctt	-----	..83..	catccacatag	aa-gcagta
M. Mus	-ttcata	TA	TCCTCCTACAAAGGCG	GTTT	t----	tggttccctgtccttggac	..81..	catccacagaa	ga-gtcaga
C. Por	gaaaata	-A	CCCTCCTACAAAG	----	gtgtgtcctt	-----	..82..	tgttccacataa	aa-gaaaaa
O. Cun	-accagt	TA	TCCTCCTACAAAGGCG	----	tgtctgtggttcccagtcctc	-----	..84..	catccacattg	aa-gcattg
C. Fam	-accagt	TA	CCCTCCTACAAAGGCA	----	tgtctgtagttccttgtcctt	-----	..83..	catccaacagag	aa-gtatca
B. Tau	caccagc	-A	TCCTCCTACAAAGGCG	----	tgtctgtggtttcctgtcctt	-----	..83..	catccacatag	aa-ttactg
E. Cab	-accagt	TA	TCCTCCTACAAAGGCG	----	tgtctgtggttcccctgtcctt	-----	..83..	cagcccacatag	aa-gcgttg
S. Sus	caccagtac	-	CCTCCTACAAAGGCG	----	tgtctgtggtttcctgtcctt	-----	..83..	catcctacatag	aa-gtattg
O. Avi	cacaagcat	-	CCTCCTACAAAGGCG	----	tgtctgtggttcccctgtcctt	-----	..83..	catcccacaaag	aa-ttactg
L. Afr	-gccagt	TA	TCCTCCTACAAAGGCG	----	tgtctgtggttcccctgtcctt	-----	..83..	catcccacatcg	aatgtaat-
			*****		* * * * *			* * * *	*

id=340122 gene=ENSG00000200394 name=SNORA38B segment=chr17.65736785.65736915.1 type=EN

H. Sap	-taattaag	gggggatattct	..4231..	-----	ttgtaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
R. Mac	-tgtctaag	gggggatgttct	..2773..	-----	ttgtaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
P. Tro	-taattaag	gggggatattct	..4428..	-----	ttgtaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
C. Jac	-taattaag	gggggatattct	..4947..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
M. Mus	-tagttaag	agaggacctagt	..3898..	-----	ccttacaataaacctttt	GAATt	TGTTTTGTAG
C. Por	-taattaag	aggtagtagtc	..4076..	-----	acaatgtcctttgaattt	TTTTTGTAG	GGGGGTAc-
O. Cun	ctagttagg	ggag-atagtct	..2407..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
C. Fam	-tagttaag	ggaatatagtct	..2277..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
B. Tau	-tagttgag	ggagggtaactc	..2465..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
E. Cab	-tagttaag	ggaggctactct	..2723..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
S. Sus	-tagttgag	ggaggataatct	..4268..	-----	ttgtaatccttttgaattt	TGTTTTGTAG	GGGGctac-
O. Avi	-tagttgag	ggagggtaactc	..2472..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGG-tacg
L. Afr	-cagttgaa	ggatgatagttt	..2695..	-----	aataaatccttttgaattt	TGTTTTGTAG	GGGGGTAc-
		*		*	**	*****	**** **

id=167524 gene=ENSG00000120733 name=KDM3B segment=chr5.137717438.137721710.1 type=IN

Figure 615: CS=15.6



H. Sap	acgttact	gtcagatgattt...29...caaaagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttgt
R. Mac	actttact	gtcagatgattt...29...caaaaat---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttga
P. Tro	acgttact	gtcagatgattt...29...caaaagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttgt
P. Abe	acgttact	gtcagatgattt...29...caaaagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttgt
C. Jac	gcattact	gtcagatgattt...29...caaaagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttgc
M. Mus	actcaact	gtcagatgattt...30...tgtgaat---ttatagcatggtta	GAGTtCTGA	GGCA	G	tt	AGTgc-----
R. Nor	aactcact	gtcagatgattt...32...---gaatttattatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgatgg
C. Por	tcaatact	gtcagatgattt...25...agtggcg---ttacagcatggtta	GAGTtCTGA	GGCA	G	-----	ttttggt
O. Cun	acattact	gtcagatgatta...30...tgacagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgttgt
B. Tau	acatcact	gtcagatgattt...30...ccacagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	tttctgt
E. Cab	atgtcact	gtcagatgattt...29...cgacagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	tttctgt
O. Avi	cactcact	gtcagatgattt...30...ccacagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	tttctgt
L. Afr	gtgtcact	gtcaaatgattt...30...tgacagt---taatagcatggtta	GAGTtCTGA	GGCA	G	-----	ttgctgg
		***	****	*****		*	*****

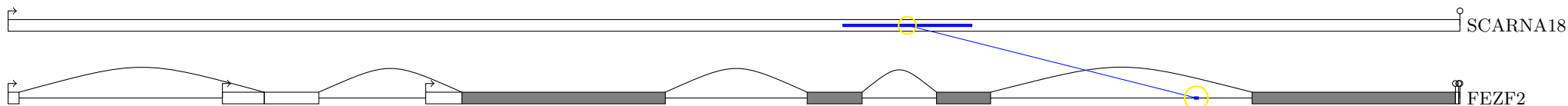
id=128035 gene=ENSG00000207437 name=SNORD28 segment=chr11\_62622093\_62622167\_-1 type=EN

H. Sap	ctgtcaca	gtaagtacagtc...2408...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttt
R. Mac	ctgtcaca	gtaagtacagtc...2393...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttt
P. Tro	ctgtcaca	gtaagtacagtc...2406...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttt
P. Abe	ctgtcaca	gtaagtacagtc...2391...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttt
C. Jac	ctgtcaca	gtaagtacactc...2677...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttt
M. Mus	ctgtcaca	gtaagtatagtt...2461...cagccaagtaaccacatccc	CGCTtTTGTCttTCAG	ATTC	cttc
R. Nor	ctgtcaca	gtaagtatagtt...2467...-----aagtaaccacctcccgcctt	TTGTCttTCAG	ATTC	cttc
C. Por	ctgtcaca	gtaagttagact...2309...-----aagtaaccttctcctccctt	TTGTCttTCAG	ATTC	cttc
O. Cun	ctgtcaca	gtaagtgccgct...2057...---ctgagtcaccttctcccctc-	TTGTCttTCAG	ATTC	cttc
B. Tau	ttgtcaca	gtaagtggagtt...2654...-----aagtaactcactcctccctt	TTGTCttTCAG	ATTC	cttc
E. Cab	ctgtcaca	gtaagtaaacct...2873...-----aagtaagcttcttctccctt	TTGTCttTCAG	ATTC	cttc
O. Avi	ttgtcaca	gtaagtggagtt...2658...-----aactcactcactcctccctt	TTGTCttTCAG	ATTC	cttc
L. Afr	ctgtcata	gtgagtaaacct...2576...-----aataaccttcttctccctt	TTGTCttTCAG	ATTC	cttc
		*****	**	***	*****

id=7330 gene=ENSG00000092421 name=SEMA6A segment=chr5\_115808790\_115811240\_-1 type=IN

Figure 616: CS=11.05





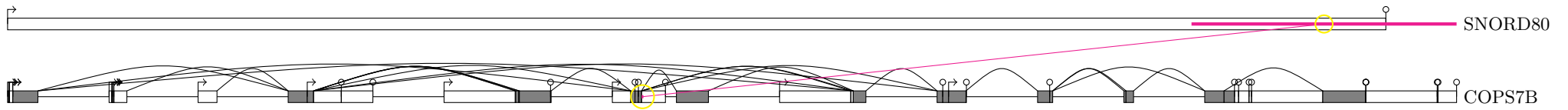
H. Sap	caagtagg	ttgcatgtggaa...37...--cataacatgctacattaaca-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
P. Tro	caagtagg	ttgcatgtggaa...37...--cataacatgctacattaaca-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
P. Abe	caagtagg	tcgcatgtggaa...37...--catgacatgctacattaaca-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
M. Mus	aaggggag	ctgcatgtggac...37...--cataacatgctacagtgtac-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
R. Nor	caaggagg	ctgcatgtggac...38...--cataacatgctacagtgtac-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
C. Por	gaggcaag	ttgcatgttggaa...37...tccgtaacatgctacatgaa-	TAAAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aaaggatg
C. Fam	aaagtaga	ctgcatgtggaa...38...--cattacatgctacattaata-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aaaagcaa
F. Cat	aaagtaga	tggcatgtggaa...38...--cattacatgctacattgaaa-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagaccaa
B. Tau	aaagtagg	ctgcatgtggtg...41...--cacaacatgctacattaata-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aagcacaag
E. Cab	aaaatagg	ttgcatgtggaa...38...--cgtatcatgctacagtaaaa-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	gggaccga
S. Sus	aaagtaga	ttgcatgtggaa...39...--cataacatgctacattaata-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aaacccaa
O. Avi	aaagtagg	ctgcatgtggaa...38...--cacaacatgctacattaata-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	aacccaaag
L. Afr	aaaacaga	ttgcatgtggaa...39...--ataacatgctacattaata-	AAGGAGTT	TCAGG	gctgccaaccttctagtaaggttgagtggtagtagtatatttctccaacataa	gagacaaa
	*	*	*****	*	*****	*****

id=292815 gene=ENSG00000238835 name=SCARNA18 segment=chr5\_82360023\_82360156\_-1 type=EN

H. Sap	cacaaaag	gtaacgtgccag...690...cggccttgacgcttacgaag	TTTGAc	AACTTCTT	cactcgaagaggtcgcgcc--...106...gatctgtttag	ggaactac
P. Tro	cacaaaag	gtaacgtgccag...690...cggccttgacgcttacgaag	TTTGAc	AACTTCTT	cactcgaagaggtcgcgcc--...106...gatctgtttag	ggaactac
P. Abe	cacaaaag	gtaacgtgccag...691...cggccttgacgcttacgaag	TTTGAc	AACTTCTT	cactcgaagaggtcgcgcc--...105...gatctgtttag	ggaactac
M. Mus	cacaaaag	gtaaggtactaa...682...cggccttgatgcagacgaag	TTTGAc	AACTTCTT	agtttggagaggtcaagcct--...120...gctcttccgtag	ggaactac
R. Nor	cacaaaag	gtgaggtgctaa...676...cggccttgatgcagacgaag	TTTGAc	AACTTCTT	agtttggagaggtcaagcct--...113...gctcttccgtag	ggaactac
C. Por	cacaaaag	gtaaggtgccca...668...tggacttgacgcaacaaaag	TTTGAc	AACTTCTT	actcgaagaggtcgcgccgc...118...ggtctcctgtag	ggaactac
C. Fam	cacaaaag	gtaatgtgcggg...735...cggccttgacgagacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...123...ggtctcctgtag	ggaactac
F. Cat	cacaaaag	gtaatgtgcggg...723...cggccttgacgagacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...113...ggtctcctgtag	ggaactac
B. Tau	cacaaaag	gtaacgtgtagg...696...gggcttgacgcttacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...100...ggtctcctgtag	ggaactac
E. Cab	cacaaaag	gtaacgtcggg...704...cggccttgacgagacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...100...ggtctcctgtag	ggaactac
S. Sus	cacaaaag	gtaatgtgcggg...698...cggccttgatgcagacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...102...ggtctcctgtag	ggaactac
O. Avi	cacaaaag	gtaacgtcggg...707...gggcttgacgcttacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...103...ggtctcctgtag	ggaactac
L. Afr	tacaaaag	gtaatgtccgg...701...cggccttgatgcagacgaag	TTTGAc	AACTTCTT	cactcggagaggtcgcgcc--...83...ggtctcctgtag	ggaactac
	*****	** * *	*****	** * *	*****	** * *

id=811935 gene=ENSG00000153266 name=FEZF2 segment=chr3\_62356018\_62356891\_-1 type=IN

Figure 617: CS=14.04



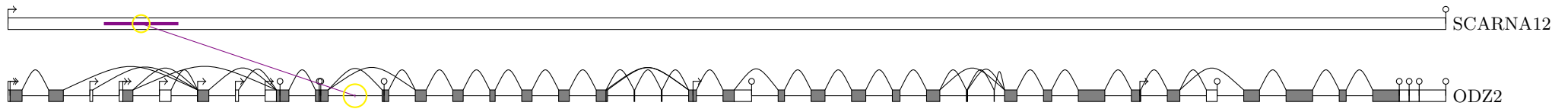
H.Sap	taaagccg	atacaatgatga...27...--tgagcaat-attaagtctttc	GCTCctATCTgATGTA	tct	ggcggtaa
R.Mac	taaagccg	atacaatgatga...27...--tgagcaat-attaagtctttc	GCTCctATCTgATGTA	tct	ggctgtaa
P.Tro	tagagccg	atacaatgatga...27...--tgagcaat-attaagtctttc	GCTCctATCTgATGTA	tct	ggcggtaa
P.Abe	taaagccg	atacaatgatga...27...--tgagcaat-attaagtctttc	GCTCctATCTgATGTA	tct	ggcggtaa
C.Jac	aaaagcca	ataccatgatga...27...--tgagcagt-attaagtctttc	GCTCctATCTgATGTA	tct	ggctgtaa
M.Mus	acaagccg	ataccatgatga...26...gatgaacaat-cat--gtctttc	GCTCctATCTgATGTA	tct	ggctgtaa
R.Nor	gtaagccg	atactgtgatga...26...ggtgaacaat-cat--gtctttc	GCTCctATCTgATGTA	tct	ggctgtaa
C.Por	gaaagcca	atacagtgatga...27...--tgaacaat-cacaagtctttc	GCTCctATCTgATGTA	tct	ggctgcaa
O.Cun	aaaagccg	atacagtgatga...26...-atgagcagt-a-taagtctttc	GCTCctATCTgATGTA	tcc	ggctacca
B.Tau	taaagccg	atacaatgatga...26...-atgagcaaa-t-actgtctttc	GCTCctATCTgATGTA	tct	ggctacaa
E.Cab	taaagccg	atacaatgatga...27...--tgagcaat-attaagtctttc	GCTCctATCTgATGTA	tct	ggctgcaa
S.Sus	ttaagccg	atacaatgatga...28...--tgagcaaa-taactgtctttc	GCTCctATCTgATGTA	tct	ggctgtaa
O.Avi	taaagccg	atacaatgatga...26...-atgagcaaa-t-actgtctttc	GCTCctATCTgATGTA	tct	ggctgcaa
L.Afr	taaagccg	atacaatgatga...29...--gaacaacacttacgtctttc	GCTCctATCTgATGTA	tct	ggctgaaa
	****	**** ***** ** **	*****	*** *	

id=568041 gene=ENSG00000201692 name=SNORD80 segment=chr1\_173833966\_173834043.-1 type=EN

H.Sap	tTACATAG	GTGAGT	-tgggtgaagatccttcaaaag-...130...gaatgttccttc	tcaccttt
R.Mac	tTACATAG	GTGAGT	-tgggtgaagatccttcaaaag-...130...gaatgttccttc	tcaccttt
P.Tro	tTACATAG	GTGAGT	-tgggtgaagatccttcaaaag-...130...gaatgttccttc	tcaccttt
P.Abe	tTACATAG	GTGAGT	-tgggtgaagatccttcaaaag-...130...gaatgttccttc	tcaccttt
C.Jac	tTACATAG	GTGAGT	-tgggtgaagatccttcaaaag-...129...gaatgttccttc	tcaccttt
M.Mus	tTACATAG	GTGAGT	-tggctgagaccctttagaag-...131...ggatttcctga	taactgtt
R.Nor	tTACATAG	GTGAGT	-tgggtgaagatcctttagaaa-...137...ggatttcctga	taactgtt
C.Por	tTACATAG	GTGAGT	-tgggtgggaatcctctgaaa-...111...aagggattttg	tctcccct
O.Cun	tTACATAG	GTGAGT	-tgggttagggtcctcctaaga-...104...gagtgctccttc	tcaccttg
B.Tau	tTACATAG	GTGAGT	-tgg-taacatcctccagtctt...128...tgaccttggttc	cctccttt
E.Cab	tTACATAG	GTGAGT	-tgggttaagatcctcctcaaga-...139...gactttcccttt	tcaccttt
S.Sus	tTACATAG	GTGAGT	-tgggttaagatcctcctcaaga-...126...gactttcccttc	ccaccttt
O.Avi	tTACATAG	GTGAGT	-tgggttaagatcctcctcag--...132...ggactttggttc	cctccttt
L.Afr	tTACATAG	GTGAGT	-tgggttaagatccttcgaaa-...135...gcgttcccttc	tcactttt
	*****	***** **	***	***

id=286311 gene=ENSG00000144524 name=COPS7B segment=chr2\_232656519\_232656686.1 type=AN

Figure 618: CS=16.1



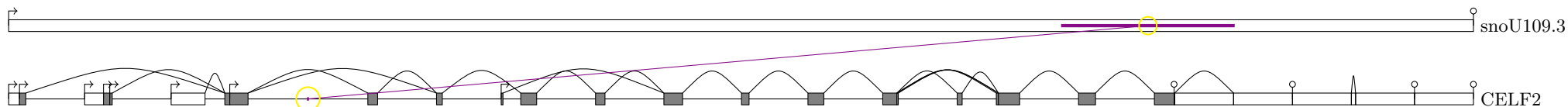
H. Sap	ttcatggg	caggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgctctctggcc	-----	..213..	ttggatctgaca	gcccagag			
R. Mac	ttcacggg	caggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgctctctggcc	-----	..212..	ttggatctgaca	gcccagag			
P. Tro	ttcatggg	caggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgctctctggcc	-----	..213..	ttggatctgaca	gcccagag			
P. Abe	ttcatggg	caggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgctctctggcc	-----	..213..	ttggatctgaca	gcccagag			
C. Jac	ttaatggg	caggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgccctcggcc	-----	..209..	ttggatctgaca	gcccagag			
M. Mus	accatggg	ccggttgat	GAGAC	-cAAGG	cgAATG	-----	cgacttg--gcctactgactct	-----	..214..	ttgaatctgaca	gcccaggg			
R. Nor	accatggg	ccggttgat	GAGAC	-tAAGG	cgAATG	-----	cgacttg--gcctactgactct	-----	..204..	tcgaatctgaca	gcccagag			
C. Por	ccactgga	ccggttgat	GAGAC	-CAAGG	cgAATG	tGATA	cg-----t-gctctctgcccttggc	..204..	ttggatctgacg	gcccaggg				
O. Cun	cctgtggg	ccggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccg-gctctctgcccc	-----	..201..	ttggacctgacg	gccctgag			
F. Cat	ctcatggg	ccggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactctgtctctgtcctt	-----	..205..	ttggatctgaca	gtccagag			
B. Tau	gctgtagg	ctggctgat	GAGAC	ttAAGG	cgAATG	-----	cgac-ccgtgcccttcgaccc	..187..	ttggatctgaca	gcccaggg				
E. Cab	ctcatggg	ctggctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccgtgctctctatcc	-----	..207..	ttggatctgaca	gcccagag			
L. Afr	caggtggg	ccagctgat	GAGAC	-tAAGG	cgAATG	-----	cgactccatgcctgctgacc	-----	..200..	ttgaatctgaca	gcccagag			
		*	*	*	*	*****	*****	**	**	*	*	*	*	*

id=267040 gene=ENSG00000238795 name=SCARNA12 segment=chr12\_7076500\_7076769\_-1 type=EN

H. Sap	tttcatag	gtaagtcagggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
R. Mac	tttcatag	gtaagtcagggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
P. Tro	tttcatag	gtaagtcagggc	..4935..	-----	gaattatctattcctat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
P. Abe	tttcatag	gtaagtcagggc	..4935..	-----	gaattatctattcctat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
C. Jac	tttcatag	gtaagttagggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
M. Mus	tttcatag	gtaagtgaaagc	..4935..	-----	gaattatctattcatact	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
R. Nor	tttcatag	gtaagtgaaagc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
C. Por	tttcatag	gtaagtcgaggc	..4929..	attgctgaattac	tattcaTATT	ttCATTaCTT	TGtCTC	-ccgcag	caatgcat
O. Cun	tttcatcg	gtaagtcgggca	..4935..	-----	gaattatctgttcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
F. Cat	cttcatag	gtaagtcagggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
B. Tau	tttcatag	gtgagtcggggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
E. Cab	tttcatag	gtaagtcggggc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
L. Afr	tttcatag	gtaagtcagcgc	..4935..	-----	gaattatctattcatat	tttCATTaCTT	-TGTCTC	tcctgcag	caatgcat
		*****	*	**	***	*****	*****	*	*****

id=316436 gene=ENSG00000145934 name=ODZ2 segment=chr5\_167420188\_167474431\_1 type=IN

Figure 619: CS=12.48



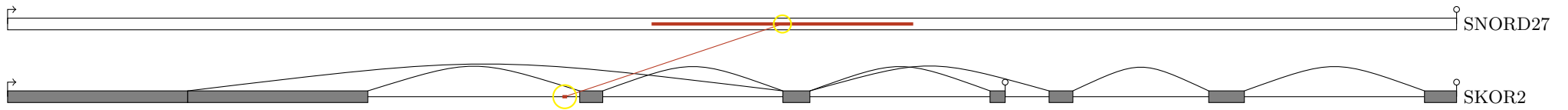
H. Sap	atcaacag	ttgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattactcct	---aca-taa	gagaaaa
R. Mac	atcagcag	ttgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattactcct	---aca-tga	gagaaaa
P. Tro	atcaacag	ttgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattactcct	---aca-taa	gagaaaa
P. Abe	atcaacag	ttgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattactcct	---aca-taa	gagaaaa
C. Jac	agcaacag	ttgcatgtgga...57...aaaggagtatcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattactcct	acacaca-taa	gagaaaag
M. Mus	atctcagg	ttgcatgtgga...57...agaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tagtagtatattctcct	---acagaaa	gagaaaag
R. Nor	caaggagg	ctgcatgtggac...57...gaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tagtagtatattctcct	---aca-ttg	aaggccc
C. Por	atcactag	tggcatgtgca...58...aaaggagtttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattctcct	---aca-tta	aaggaaaa
O. Cun	atcatcag	ttgcatgtgga...56...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tgtagtatattctcct	---aca-caa	gagaaaa
B. Tau	aaagtagg	ctgcatgtggtg...60...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tagtagtatattctcct	---aca-taa	aagcaaag
E. Cab	aaaatagg	ttgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tagtagtatattctcct	---aca-taa	gggaccga
O. Avi	aaagtagg	ctgcatgtgga...57...aaaggagttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	tagtagtatattctcct	---aca-taa	aaccaaag
L. Afr	aaaacaga	ttgcatgtgga...58...aaaggagtttctcagggtgc	CAACCTTACAGt	AGAGGt	TGAGt	cagtagtatattctcct	---aca-taa	gagacaaa
		*****				*****		***

id=356168 gene=ENSG00000238754 name=snoU109.3 segment=chr1.193026411.193026545.-1 type=EN

H. Sap	gagtaaag	gtacagagcgcg...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
R. Mac	gagtaaag	gtacagagcgcg...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
P. Tro	gagtaaag	gtacagagcgcg...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
P. Abe	gagtaaag	gtacagagcgcg...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
C. Jac	gagtaaag	gtacagagcgcg...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
M. Mus	gagtaaag	gtacaaaaagca...4940...aaagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
R. Nor	gagcaaag	gtacaaaaagca...4940...aaagacatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
C. Por	gagtaaag	gtacagagtgtg...4940...acagaaatctctaaatctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
O. Cun	gagtaaag	gtacagaccgca...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
B. Tau	gagtaaag	gtacagacagca...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
E. Cab	gagtaaag	gtacagacagcg...4940...acggaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
O. Avi	gagtaaag	gtacagacagca...4940...accgaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
L. Afr	gagtaaag	gtaccgactgcc...4940...acagaaatctctaaacctt	TTCAtt	TCTCTCTGTAG	GttGTTGt
	*** **	**** * *		* ** *****	*****

id=7772 gene=ENSG00000048740 name=CELF2 segment=chr10.11207646.11259387.1 type=IN

Figure 620: CS=11.7



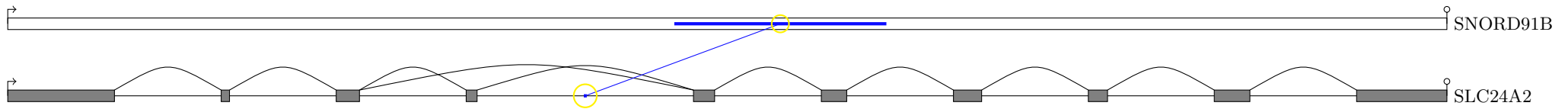
H. Sap	agataacc	ac--tccatgat---gaaca--ca---aatga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gagagaga--
R. Mac	agataacc	ac--tccgtgat---gaaca--ca---aatga--CAAGCATATGgCTGA	actt-ataagtgatgtcatcttactactgagaagt	gacacgga--
P. Tro	agataacc	ac--tccatgat---gaaca--ca---aatga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gagagaga--
P. Abe	agataacc	ac--tccatgat---gaaca--ca---aatga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gagagaga--
C. Jac	agacaacc	ac--tccgtgat---gaaca--ga---aatga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggcccaga--
M. Mus	agatggcc	ac--ttaatgat---gaacaatgt---aatgac--AAGCATATGgCTGAGTTG	---caatgatgtcatcttactactgaaa--t	gggctgaaga
R. Nor	agatgtcc	ac--ttgatgat---gaatg--tattataaatgac--AAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggctgaa--
O. Cun	ggttgcc	ac--tccatgatgaacgaacg--ta---gaatga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggcccgg--
C. Fam	tgctgacc	ac--tctatgat---gaaca--ta---aaaaaagaCAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggccaag--
F. Cat	tgctgacc	ac--tctgtgat---gaaca--ta---aaaaaagaCAAGCATATGgCTGATCTTAA	actt-tcaagtgatgtcatcttactactgagaagt	ggaccag--
B. Tau	cactggcc	ac--tccatgat---gaatg--ta---aatgac--AAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggcccga--
E. Cab	cattggcc	ac--tccatgat---gaacg--ta---aaaaga--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggcccag--
O. Avi	cactggcc	ac--tccatgat---gaatg--ta---aatgac--AAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	gggcccag--
L. Afr	cactggcc	actatccatgat---gaagt--taa---aatgg--CAAGCATATGgCTGA	actt-tcaagtgatgtcatcttactactgagaagt	ggaccaga--
		* ** * **** ** ** ***** ** *	**** * ** * ** * *	*

id=621305 gene=ENSG00000200851 name=SNORD27 segment=chr11.62622484.62622555.-1 type=EN

H. Sap	acaaagat	gtaaataatcccc...921...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	agtcagaa
R. Mac	acaaagat	gtaaataatcccc...948...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	agtcagaa
P. Tro	acaaagat	gtaaataatcccc...929...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	agtcagaa
P. Abe	acaaagat	gtaaataatcccc...1819...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	agtcagaa
C. Jac	acaaagaa	gtaaataatcccc...926...atgcttctcctgctgactgTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	agtcagaa
M. Mus	acaaagat	gtaaataatcccc...826...-tgcttctcctgctgactatTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
R. Nor	acaaagat	gtaaataatctc...844...atgcttctcctgctgactaTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
O. Cun	acaaagat	gtaaataatcccc...818...-----cctcctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
C. Fam	acaaagat	gtaaataatcccc...941...atgcttctcctgctgactgTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
F. Cat	acaaagat	gtaaataatcccc...934...atgcttctcctgctgactgTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
B. Tau	acaaagat	gtaaataatcccc...943...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
E. Cab	acaaagat	gtaaataatcccc...922...atgcttctcctgctgactgTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
O. Avi	acaaagat	gtaaataatcccc...935...atgcttctcctgctgactgTTGAcATTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
L. Afr	acaaagat	gtaaataatcccc...1073...-----cttctgctgactgttgacaTTAGCATATgGTTTG	atccaggcattgatttgtatgtctaattctttccacacag	aatcagaa
	*****	***** * *	* ***** ***** ***** ** * ***** * * ***** ** ***	* *****

id=240010 gene=ENSG00000215474 name=SKOR2 segment=chr18.44771933.44772941.-1 type=IN

Figure 621: CS=10.92



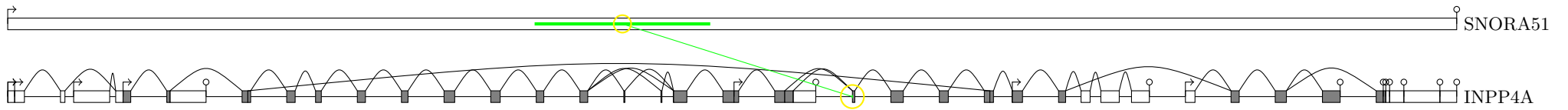
H.Sap	tactctgg	cttaagagccaatgatg	gtttttattcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaacttctgtgtgatactgaggc-ttttttgcca	tgagtatt
R.Mac	tactctgg	cttaagagccaatgatg	gtttttactcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaacctctgtgtgatactgaggc-ttttttgcca	tgagtatt
P.Tro	tactctgg	cttaagagccaatgatg	gtttttattcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaaccttctgtgtgatactgaggc-ttttttgcca	tgagtatt
P.Abe	ttctctgg	cttaagagccaatgatg	gtttttactcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaacctctgtgtgatactgaggc-ttttttgcca	tgagtatt
C.Jac	tactctgg	cttaagagccaatgatg	gtttttactcaaaatgtct	GAACCTg	TCTGAAGCA	tccatgtgatgcaac--ctgtgtcatactgaggc-ttttttgcca	tgaatatt
M.Mus	tactctga	cttaggagccaataatg	gtttttattcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaaaa----atgttgatactgaggc-ttctctgcta	tgagtatt
R.Nor	tactctga	cttaggagccaatgatg	gtctttatcaaaatgtct	GAACCTg	TCTGAAGCA	tctcagtgatgca---cactgttgctgaggc-ttctctgctc	tgagtatt
C.Por	tactctga	cttaggagccagtgatg	gtttttattcataatgtct	GAACCTg	TCTGAAGCA	tgccatgatgcaacatctgt---tactgaggc-ttctttggca	tgagtatt
C.Fam	tactctgg	tctaggagccaatgatg	gtttttattcacaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaacttctctgtgtgctgaggc-ttctctgcca	tgagtatt
F.Cat	tactctgg	tctaggagccaatgatg	gtttttattcacaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaacctctgtgtgtgctgaggc-ttctctgcca	tgagtatt
B.Tau	aactttgg	tttaggagccaatgatg	tttccattcaaaatgtct	GAACCTg	TCTGAAGCA	tcccagtgatgcaactctgtgtgtgctgaggc-tcctgtgcca	tgagtatt
E.Cab	tactctgg	cttaggaaccgatgatg	gtttttattcaaaatgtct	GAACCTg	TCTGAAGCA	tccaatgatgcaa-ctctgtgtgtgctgaggc-ttctttgcca	tgagtatt
O.Avi	gactttgg	tttaggagnnnnnnnnnnnnnnnaaatgtct	GAACCTg	TCTGAAGCA	tccctgtgatgcaaaa--ctgtgtgtgctgaggc-tcctgtgcca	tgagtatt	
L.Afr	tactctgg	attagaaccaatgatg	gtttttattcaaaatgtct	GAACCTg	TCTGAAGCA	tccaatgatgcaacctgtgtgtgctgaggc-ttctctgcca	tgagtatt
	** **	** *		*****	*****	*****	* * ***** * * **

id=416543 gene=ENSG00000212552 name=SNORD91B segment=chr17\_2232413\_2232507\_-1 type=EN

H.Sap	tgaagaag	gtaagaatgatt...4949...	tccttctgccactttcttt	TGCTTCAG	GgAGGTTc
R.Mac	tgaagaag	gtaagaatgatt...4949...	tccttctgccactttcttt	TGCTTCAG	GgAGGTTc
P.Tro	tgaagaag	gtaagaatgatt...4949...	tccttctgccactttcttt	TGCTTCAG	GgAGGTTc
P.Abe	tgaagaag	gtaagaatgatt...4949...	tccttctgccactttcttt	TGCTTCAG	GgAGGTTc
C.Jac	tgaagaag	gtaagaatgatt...4949...	ttctcattgtgtctccttc	TGCTTCAG	GgAGGTTc
M.Mus	tgaagaag	gtaagaatgatt...4949...	tctctcctgccactttctct	TGCTTCAG	GgAGGTTc
R.Nor	tgaagaag	gtaagaatgatt...4949...	tctctcctgccactttctct	TGCTTCAG	GgAGGTTc
C.Por	tgaagaag	gtaagaatgatt...4949...	tcctccctgccactttctct	TGCTTCAG	GgAGGTTc
C.Fam	tgaagaag	gtaagaatgatt...4949...	tcctttccactgctttctct	TGCTTCAG	GgAGGTTc
F.Cat	tgaagaag	gtaagaatgatt...4949...	tcctttccactgctttctct	TGCTTCAG	GgAGGTTc
B.Tau	tgaagaag	gtaagaatgatt...4949...	tcctttccattactttctct	TGCTTCAG	GgAGGTTc
E.Cab	tgaagaag	gtaagaatgatt...4949...	tcctttccaccactttctct	TGCTTCAG	GgAGGTTc
O.Avi	tgaagaag	gtaagaatgatt...4949...	tcctttccattactttctct	TGCTTCAG	GgAGGTTc
L.Afr	tgaagaag	gtaagcatgatt...4949...	tccttccactcctttctct	TGCTTCAG	GGCGTTc
	*****	*****	*	** *	*****

id=412476 gene=ENSG00000155886 name=SLC24A2 segment=chr9\_19577021\_19597226\_-1 type=IN

Figure 622: CS=13.3



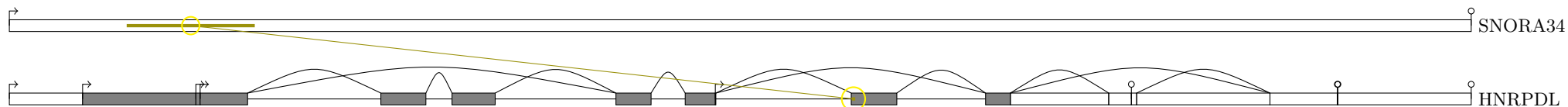
H. Sap	tgggtgta	ggcctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	40...	gggggaacatag	aat-tgagg
R. Mac	tgggtcta	ggcctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	40...	gggggaacatag	aat-gaaga
P. Tro	tgggtgta	ggcctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	40...	gggggaacatag	aat-tgagg
P. Abe	tgggtcta	ggcctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	40...	gggggaacacag	aat-tgagg
C. Jac	gctaggta	agcctcctgatgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctactccatata---	40...	gggggaacatag	aat-tgagg
R. Nor	caaagcca	ggcctccttgtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	39...	gggtagacagt	att-tgagg
C. Por	tacagtag	tgctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGTA	gagtaaacctaccatata---	43...	gggaaacataa	ggcctgagg
O. Cun	tcttttgg	ggcctccttgtgttaccacagtctgtgttcttacctga	CTGTGTAGAAAAGAGGAGGCA	gagtagacctccatata---	40...	gggggtacatgg	agt-tgaga
F. Cat	caatthttg	agcctcctggtgcttaccacaggctgtgttcttacctga	CTGTACAGAAAAGAGGAGGCA	gagtaaattccacc-atatac---	38...	gggggacatgg	agg-tgagg
B. Tau	tagagctg	ggcctcctgatgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGCA	gagtaaaccaccatata---	44...	gggggacatgg	agg-ttttt
E. Cab	ctgggctg	ggcctcctggtgcttaccacaggctgtgttcttacctga	CTGTATAGAAAAGAGGAGGCA	gagcaaaccaccatata---	40...	gggggacaagg	agt-tgagg
S. Sus	tacttcga	ggcttcccagtgcttaccacaagctgttttgcctta	TAATaaCTGTACAGAAAAGAGGAGGCA	aaaggcatcaatctctcca---	44...	agggagacaagg	agt-tgaag
L. Afr	aggggthtt	ggcctccttgtgcttaccacaggctgtgttttgcctga	CTGTATAGAAAAGGGAGGCG	ataaaa-gtaccatatacac...	37...	ggggcaacatgg	cat-tgagg
		** ** *	** * * * * *	* * * *	*	*	** ** *

id=454829 gene=ENSG00000207427 name=SNORA51 segment=chr20\_2635713\_2635844\_1 type=EN

H. Sap	aatctgag	aacctgaaggag...3285...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagt
R. Mac	agtctgag	aacctgaaggag...3216...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagc
P. Tro	aatctgag	aacctgaaggag...3290...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagt
P. Abe	aatctgag	aacctgaaggag...3293...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagt
C. Jac	aatctgag	aacctgaaggag...3553...	actgtg-tgcttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagt
R. Nor	gacctgag	aagctgacgggg...2187...	gtgctgctccttaaatcacc	CTGTGCgc	CCTCCa	TTTCTGTGCAG	attgcagc
C. Por	aacctgag	agcccaaagggtg...3015...	-----tccttaaatcaccctgtcgc	CCTCCa	TTTCTGTGCAG	attgcagt	
O. Cun	aacctgag	gacctgaaggaa...3878...	-tgctgctccttaaatcatccg	TGTTac	CCTCCa	TTTCTGTGCAG	attgcagc
F. Cat	aatctgag	aacctgaaggag...3300...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCa	TTTCTGTGCAG	attgcagc
B. Tau	cacctggg	aacctgaaggag...3118...	gtgc-gtgccttaaatcatcca	TGTCa	CCTCCa	TTTCTGTGCAG	attgcagc
E. Cab	aatctgag	gacctaaagggg...3298...	-tgctgctccttaaatcatcca	TGTCgc	CCTCCg	TTTCTGTGCAG	attgcagc
S. Sus	agtctgag	aacctgaaggag...2988...	-tgctgctccttaaatcatcca	TGTCac	CCTCCa	TTTCTGTGCAG	ATTGcagt
L. Afr	agtccgag	aacctgaaggag...4936...	---ctgctccttaaacctcctg	TTGCCCTCCa	TTTCTGTGCAG	attgcagc	
		* * *	* *	*****	* * * *	*****	** ** *

id=6821 gene=ENSG00000040933 name=INPP4A segment=chr2\_99172586\_99175925\_1 type=IN

Figure 623: CS=14.04



H. Sap	gaattcca	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttgtactgtggc-----	..89..	gaagaaacaacc	tacagctc
R. Mac	gaattcca	gtg---	<b>GCCCTGACTGAAA</b>	-----	accagcagttgtactgtagc-----	..89..	gaagaaacaacc	tacagctc
P. Tro	gaattcca	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttgtactgtggc-----	..89..	gaagaaacaacc	tacagctc
P. Abe	gaattcca	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttgtactgtggc-----	..89..	gaagaaacaacc	tatagttc
C. Jac	gaattcca	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttgtctgtagc-----	..89..	gaagaaacagcc	tcagctc
C. Por	gggtgctt	atg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttatataatagc-----	..89..	gaagaaacaact	aacacttc
O. Cun	gggtacca	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttactctctggc-----	..88..	gaagaaacaac	catagctc
C. Fam	gggtacca	gtg---	<b>GCCCTGACTGAAG</b>	-----	actagcagttgtactatagc-----	..88..	gaagaaacaatg	cacagctc
F. Cat	gggtacca	gtg---	<b>GCCCTGACTGAAG</b>	-----	actagcagttgtactatgct-----	..87..	gaagaaacaacc	cacagttc
B. Tau	ggacactc	atg---	<b>GCCCTGACTGAAGAC</b>	<b>TGCA</b>	-----	gttacactatagctgctggt..84..	gaagaaacaacc	cacagctt
E. Cab	ggataccg	gtg---	<b>GCCCTGACTGAAG</b>	-----	accagcagttatgctatagc-----	..89..	gaagaaacatcc	cacagctc
S. Sus	agatacta	atg---	<b>GCCCTGACTGAAGAC</b>	<b>TGCA</b>	gtta-----	tatactacagctgttg--..84..	gaagaaacaacc	cacagctc
L. Afr	ggatactg	gtggcag	<b>GCCCTGACTGAAG</b>	-----	accagcagttatagtagc-----	..89..	gaagaaacaacc	cacagctc
		*	**	*****	*		*****	* *

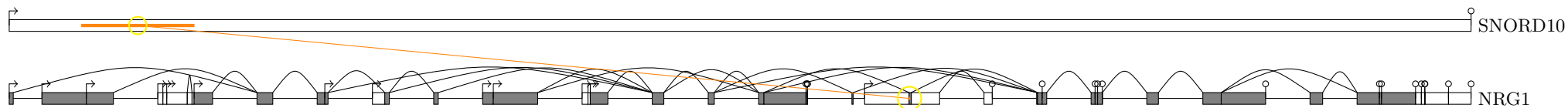
id=775553 gene=ENSG00000221491 name=SNORA34 segment=chr12.49048165.49048301.-1 type=EN

H. Sap	tggccg	ag	gtgagacttaat...518...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
R. Mac	tggccg	ag	gtgagacttaat...507...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
P. Tro	tggccg	ag	gtgagacttaat...518...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
P. Abe	tggccg	ag	gtgagacttaat...522...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
C. Jac	tggccg	ag	gtgagacttaat...498...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
C. Por	tggccg	ag	gtgagacttaac...420...-----	tctaacaatcactg--cattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
O. Cun	tggccg	ag	gtgagacttaat...485...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
C. Fam	tggacg	ag	gtgagacttaat...469...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
F. Cat	tggacg	ag	gtgagacttaat...676...-----	ctaacaatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
B. Tau	aggccg	ag	gtgagacctaata...493...ttgtttc	taacaatcattg	<b>TGCAttGTTTCaG</b>	<b>GTCAGGGc</b>
E. Cab	tggccg	ag	gtgagacttaat...500...-----	ctaagcatcattgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
S. Sus	tggacg	ag	gtgagactttgc...1358...gtatttc	ctaacaatcattg	<b>TGCAttGTTTCaG</b>	<b>GTCAGGGc</b>
L. Afr	tggacg	ag	gtaagacttgat...405...-----	ctaacaattgtgtgcattg	<b>TTTCAG</b>	<b>gTCAGGGc</b>
		** **	** ** * *		*****	*****

id=338254 gene=ENSG00000152795 name=HNRPDL segment=chr4.83347787.83348342.-1 type=IN

Figure 624: CS=14.04





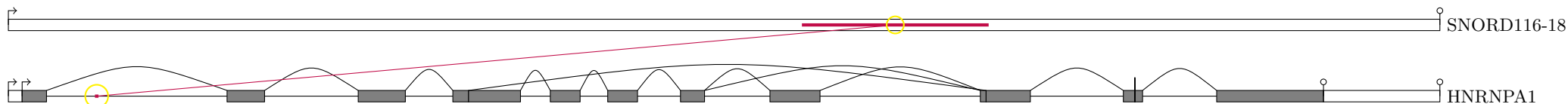
H. Sap	gAAGAgcT	GCTCTGTGATGGAG	cccatgcgtgtcatctgagc...	96...	tactctgagagc	agactact
R. Mac	gAAGAgcT	GCTCTGTGATGGAG	cccatgcgtgtcatctgagc...	97...	tactctgagagc	agactact
P. Tro	gAAGAgcT	GCTCTGTGATGGAG	cccatgcgtgtcatctgagc...	96...	tactctgagagc	agactact
P. Abe	gAAGAgcT	GCTCTGTGATGGAG	cccatgcgtgtcatctgagc...	96...	tactctgagagc	agactact
C. Jac	gAAGAgcT	GCTCTGTGATG	agcccatgcgtgtcatctg---	98...	tattctgagagc	agactact
R. Nor	attgagtT	GCTCTGTGATG	aaccccatgcgtgtcatctg---	99...	cattctgagagc	agactgtc
C. Por	aataggtT	GCTCTGTGATG	aagcccatgcgtgtcatctg---	89...	aattctgagagc	agactgcc
O. Cun	tgaagcT	GCTCTGTGATG	aaccccatgcgtgtcagctg---	104...	tattctgagagc	agactgcc
C. Fam	aAAGAgcT	GCTCTGTGATG	agcccatgcgtgtcatctg---	95...	tacctgagagc	agatctct
B. Tau	aAAGAgcT	GCTCTGTGATG	aactccatgcgtgtcatctg---	98...	tattctgagagc	agaagact
E. Cab	aAAGAgcT	GCTCTGTGATG	aaccccatgcgtgtcatctg---	98...	tattctgagagc	agaccacc
O. Avi	aAAGAgcT	GCTCTGTGATG	aactccatgcgtgtcatctg---	98...	tattctgagagc	agactgcc
L. Afr	aAAGAgcT	GCTCTGTGATG	aaccccatgcgtgtcatctg---	95...	cgttctgagagc	acaccacc
	** *	*****	*****	***	*****	* *

id=261454 gene=ENSG00000238917 name=SNORD10 segment=chr17\_7480129\_7480270\_1 type=EN

H. Sap	tgccatac	agaacttatatg-...	691...	ctttctttttttgtcaact	TTCTgCATTGgCAG	AGCATCTt
R. Mac	aaccacac	agaacttatatg-...	705...	ctttctttttttgtcaact	TTCTgCATTGgCAG	AGCATCTt
P. Tro	tgccatac	agaacttatatg-...	692...	tttctttttttgtcaact	TTCTgCATTGgCAG	AGCATCTt
P. Abe	tgccatac	agaacttctatg-...	695...	ctttctttttttgtcaact	TTCTgCATTGgCAG	AGCATCTt
C. Jac	tgccacac	agaacttatatg-...	666...	-----ttttttttgtcaacttctg	CATTgGCAG	AGCATCTt
R. Nor	tatgacac	aaaacttatatt-...	647...	-----tccccttgtcaacttctg	CATTgGCAG	AGCATctt
C. Por	agttgcac	aaacatta-atat...	576...	-----ttttttgtgtcaacttctg	CATTgGCAG	AGCATctt
O. Cun	taccacac	aaaaga-atatga...	595...	-----ctttttttgtcaacttctg	CATTgGCAG	AGCATctt
C. Fam	tgccacc	aggagtctcttg-...	680...	-----ttttttttgtcaacttctg	CATTgGCAG	AGCATCTt
B. Tau	tcccatgc	agatgatacaga-...	653...	-----ttttgtttgtcaacttctg	CATTgGCAG	AGCATCTt
E. Cab	tgccacac	aggaattatag-...	662...	-----ctttttttgtcaacttctg	CATTgGCAG	AGCATCTt
O. Avi	tgccacac	agagatgataca-...	677...	-----ttttttttgtcaacttctg	CATTgGCAG	AGCATCTt
L. Afr	tgccacac	aggaattatag-...	687...	-----ttgtttttgtcaacttctg	CATTgGCAG	AGCATCTt
	*	*		*****	*****	*****

id=327071 gene=ENSG00000157168 name=NRG1 segment=chr8\_32606342\_32607078\_1 type=AN

Figure 625: CS=12.48



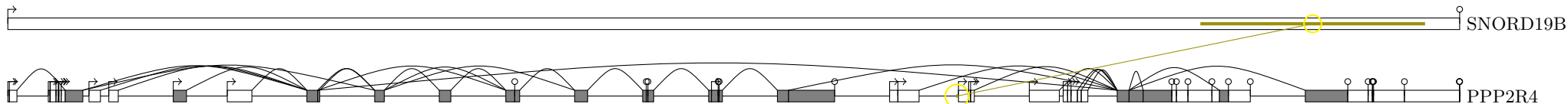
H. Sap	ctgtgcct	ggatc	cgatgatgactt	ccttat-atacattc	ccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatc	cctcgtcg-aactgaggtcc	agcacatt		
R. Mac	ctgtgcat	ggatc	cgatgatgactt	ccatat-atacattc	ccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatc	cctcgtcg-aactgaggtcc	agcacgtt		
P. Tro	ctgtgcct	ggatc	cgatgatgactt	ccatat-atacattc	ccttgg-aaagctga	ACAAAATG	aGTGA	aaactctataccgtcatc	cctcgtcg-aactgaggtcc	agcacatt		
M. Mus	acgtgctt	ggatc	ctatgatgatt	cccagtc-aaacattc	ccttggaaaagctga	ACAAAATG	aGTGA	aaactctgtaccgccactct	catcggaactgaggtcc	agcatcct		
R. Nor	gctgtgctt	ggatc	cgatgatgatt	tccaata-aaacattc	ccttgg-aaagctga	ACAAAATG	aGTGA	aaactcaataccgccactgt	catcgtgactgaggtcc	agctcctg		
O. Cun	atgtgctt	ggatc	cgatgatgact	cctgcaa-atacattc	ccttgg--aaagctga	ACAAAATG	aGTGA	gaacctcataccgtcgtt	tctcattgtgactgaggtcc	agcacgtt		
C. Fam	aagtgctt	ggatc	cgatgatgact	ccctcaatctgcatt	ccttggaaaagctga	ACAAAATG	aGTGA	gaactccctgccgtcgtt	tctcatcgcaactgaggtcc	agcacgtt		
F. Cat	atgtgctc	ggatc	cgatgatgact	ccctcaa-cagcattc	ccttggaaaagctga	ACAAAATG	aGTGA	gaactccctcccgtcgtt	tctcatgaaactgaggtcc	agcacgtt		
B. Tau	acgtgctt	ggatc	cgatgatgact	cccacaa-atgcattc	ccttgg-aaatctga	ACAAAATG	aGTGA	gccatcactaccgtc-tcct	catcggaactgaggtcc	agcacgtg		
E. Cab	acgtgctc	ggatc	cgatgatgact	ccctcat-atgcattc	ccttggaaaatctga	ACAAAATG	aGTGA	gaactcactaccgtcgtt	tctcatgaaactgaggtcc	ggcacgtt		
S. Sus	ccgtgctc	ggatc	cgatgatgact	ccctcta-aagcattc	ccttgg-aaatctga	ACAAAATG	aGTGA	gaactcactaccgtc-tcct	catgaaactgaggtcc	ggcacgtg		
O. Avi	acatgctc	ggatc	cagtgatgaca	actttcatatttattc	ccttggaaaatctga	ACAAAATG	aGTGA	gaactcactaccatc-tcct	catgatactgagctct	agcacgtt		
L. Afr	acgtgcat	ggatt	gatgatgact	gctctatct-aaacattc	ccttggaaaagctga	ACAAAATG	aGTGA	aaactccttaccgtctcact	cattg-aactgaggtcc	agcacatt		
	***	****	*****	*	*****	**	*****	*	**	*	*****	**

id=480190 gene=ENSG00000206688 name=SNORD116-18 segment=chr15\_25330532\_25330623\_1 type=EN

H. Sap	agtca	gag	gtgagttaggcg	..111..-----taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc	---.376..ccccactctag	tctcctaa				
R. Mac	agtca	gag	gtgagttaggcg	..113..-----taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc	---.377..ccccactccag	tctcctaa				
P. Tro	agtca	gag	gtgagttaggcg	..111..-----taccctc-ccaaagttcaag	TCGCCATTTTGT	cctcttgatcgccatgaggc	---.375..ccccactctag	tctcctaa				
M. Mus	agtcc	gag	gtaagttggatg	..106..-----tactttaaataaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc	---.369..ctccactttag	tctcccaa				
R. Nor	agtca	gag	gtgagttgagcg	..105..-----cctacttt-aaaaaatgcagg	TCGCCATTTTGT	cctcatagtcacatgaggc	---.361..actttattttag	tccccaa				
O. Cun	agtca	gag	gtgaggagctcc	..102..aaggcctaccctc-ccaaag	TCGCCATTTTGT	cctcgtcgtcgccatgaggc	---.378..tctcccgcctag	tgcccaa				
C. Fam	agtca	gag	gtgagtaaacacg	..112..-----ttcccctc-cggaagttgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc	---.363..ccccgctcctag	tctcccaa				
F. Cat	agtca	gag	gtgagtaaacacg	..113..-----taccctc-ccaaagttcgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc	---.378..cccgactcctag	tctcccaa				
B. Tau	aatca	gag	gtgggtaagacg	..111..-----tcccctc-cctaagttgagg	TCGCCATTTTGT	cc---tcgtcgccatgaggc	..362..ctcctcctag	tctcccaa				
E. Cab	agtca	gag	gtgagtaggacg	..111..-----taccctc-ccaaagttcagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc	---.359..tcctactcctag	tctcccaa				
S. Sus	agtca	gag	gtgagtgagact	..111..-----taccctc-cctgagttcagg	TCGCCATTTTGT	cc---tcgtcgccatgaggc	..358..cctactcctag	tctcccaa				
O. Avi	aatca	gag	gtgggtaagacg	..111..-----tcccctc-cctgagttgagg	TCGCCATTTTGT	cc---tcgtcgccatgaggc	..366..ctcactcctag	tctcccaa				
L. Afr	agtca	gag	gtgagtaggacg	..108..-----taccctc-ccaaagttgagg	TCGCCATTTTGT	cctcgtcgtcgccatgaggc	---.389..ttccaccattag	tctcctaa				
	**	**	**	*	*	*	*****	*	**	*****	**	**

id=165449 gene=ENSG00000135486 name=HNRNPA1 segment=chr12\_54674607\_54675169\_1 type=IN

Figure 626: CS=16.25



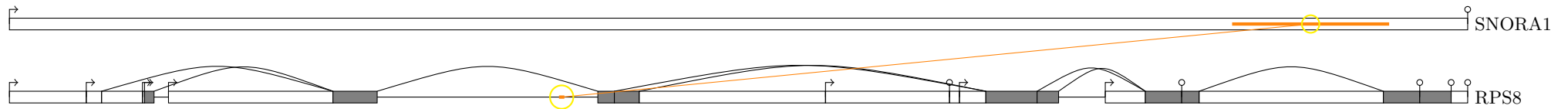
H. Sap	ctttcaga	ttttggt-tgaaa-----	..29...	gtgaatgaaaaattacaaga	TCCA	ACTCTG	ATTTC	cagccagag	atcatctg
R. Mac	ctttcaga	ttttggt-tgaaa-----	..29...	ataaatgaaaaattacaaga	TCCA	ACTCTG	ATTTC	cagccagag	ataatctg
P. Tro	ctttcaga	ttttggt-tgaaa-----	..29...	gtaaatgaaaaattacaaga	TCCA	ACTCTG	ATTTC	cagccagag	atcatctg
P. Abe	ctttccga	ttttggt-tgaaa-----	..29...	gtaaatgaaaaattacaaga	TCCA	ACTCTG	ATTTC	cagccagag	atcatctg
C. Jac	-----c	tttagactgagtggttga..	..31...	ataagtgaaaaattacaaga	TCCA	ACTCTG	ATTTC	cagccagag	atcatctg
R. Nor	tcttcata	tttgtga-tgatt-----	..29...	tacagtgaaaaacagtaaga	TCCA	ACTCTG	ATTTC	catt-aaag	atcatctc
C. Por	ctttctga	ttttgga-tggtt-----	..30...	taaaatgaaaaataaaaaga	TCCA	ACTCTG	ATTTC	catccagag	atcgtctg
O. Cun	cttccaga	ttcctga-cggtt-----	..33...	aaaaatgaaaagtacaaga	TCCA	ACTCTG	ATTTC	catcctaag	attagctg
C. Fam	ctttcaga	ttttgaa-tggct-----	..31...	aaaaatgagaattataaga	TCCA	ACTCTG	ATTTC	catccagag	ataatctg
F. Cat	ctttcaga	ttttgga-tggct-----	..31...	aaaaatgagaactcataaga	TCCA	ACTCTG	ATTTC	catccagag	ataatctg
E. Cab	ctttcaga	ttttgga-tggct-----	..31...	aaaaatgaaaactataaga	TCCA	ACTCTG	ATTTC	catccagag	ataatctg
S. Sus	attttacc	ttttaga-tgggt-----	..34...	aaaactgaaagcttgaaga	TCCA	ACTCTG	ATTTC	catccagca	aaaacctg
L. Afr	ctttcaga	ttttcag-aggtt-----	..30...	aaaaaaagaaattataagg	TCCA	ACTCTG	ATTTC	cgtagcagag	ataactga
		**	*	*	*	*	*	***	*****

id=410021 gene=ENSG00000238862 name=SNORD19B segment=chr3.52724760.52724843.1 type=EN

H. Sap	cctagttg	gtgagtggcctg...	..297...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
R. Mac	cctagttg	gtgagtggcctg...	..297...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
P. Tro	cctagttg	gtgagtggcctg...	..297...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
P. Abe	cctagttg	gtgagtggcctg...	..297...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
C. Jac	tccagttg	gtgagtggcctg...	..316...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
R. Nor	tcagttaa	gtgagtggcctg...	..250...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
C. Por	caccctga	gccagtagcctg...	..271...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	gggtttca
O. Cun	cggggtga	gtgagtggcctg...	..184...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	gggtttca
C. Fam	tggcgttc	gtgaacgagccc...	..292...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
F. Cat	gtccgtga	atgagtggcctg...	..334...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
E. Cab	cctcgtcg	gtgggtgggtga...	..335...	tcagctcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	ggatttca
S. Sus	tctagttg	gtggtgaggag...	..288...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
L. Afr	ggtgatga	gtgagtggcctg...	..330...	tcagtttcaatctggcttct	AAATTt	GGAGTtt	TGGG	aagggagggatc	agatttca
		*		****	***	*****		*****	* ****

id=437167 gene=ENSG00000119383 name=PPP2R4 segment=chr9.131901929.131902286.1 type=IN

Figure 627: CS=12.48



H. Sap	ttttac--aa	tgctcattcta...69...	-----ccatcacagatgcatattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	tgctatgt			
R. Mac	ttctac---aa	tgctcattcta...75...	-----ccatcacagatgcatattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	tgccatgc			
P. Tro	ttttac--aa	tgctcattcta...69...	-----ccatcacagatgcatattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	tgccatgt			
P. Abe	ttttac--aa	tgctcattcta...69...	-----ccatcacagatgcatattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	tgccatgc			
C. Jac	ttttac--aa	agcctcattcta...72...	-----ccaccactgtatgcatattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	tgctatgc			
R. Nor	aagaac---ta	agcctcattgta...67...	-----gcttccatcacagcagatta-	AATGA	CAGTG	TGACa	ATGA	gacctgcaacat--tt			
C. Por	tataag---ac	agcctcatttta...59...	...caggtcgtgcttccatcaca--	GTAA	GTTT	A	CAGTG	TGACa	ATGA	gacctgtaacat--ct	ttctact
O. Cun	attcac---tg	ggcctcattgta...70...	-----gcttccatcacagcaaatga-	ATTG	CAGTG	TGACa	ATGA	gacctgtaacaa--tt	ctgaaatt		
F. Cat	ttttta---aa	agcctcattcat...79...	-----gcatcacagcaagtttattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	ctgcttag			
B. Tau	atttac---aa	agcctcattcta...73...	-----ccatcactgtaattttattg-	CAGTG	TGACa	ATGA	gacctgtaacat--tt	ttttttt			
E. Cab	ttttat---ga	ggcctcatttta...74...	-----ccatcacagtagctgtatta-	CAGTG	TGACa	ATGA	gacctgtaacattatt	tgctaggc			
S. Sus	ttctgt---aa	agcctcattcta...75...	-----ccatcacagtaactcttatta-	CAGTG	TGACa	ATGACAC	ctgtgacat--tt	ttttatt			
L. Afr	ttttattctgt	agcctcatt---...75...	-----ccatcacagtgaactaattg-	CAGTG	TGACa	ATGA	gacctgtcacac--tt	tgtccaag			
		*****		** **		*	*****	****	**	*	

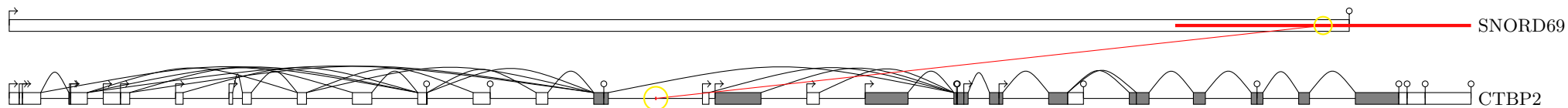
id=471495 gene=ENSG00000206834 name=SNORA1 segment=chr11.93465170.93465299.-1 type=EN

H. Sap	acaccaag	gtgggtgcgagc...400...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	Gac--	tgttgctcctcccggcc-----	..56...	tgtgtttccag	attggccc	
R. Mac	acaccaag	gtgggtgcgagc...397...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	Gac--	tgttgctcctcctcctgcc-----	..56...	tgtgtttccag	attggccc	
P. Tro	acaccaag	gtgggtgcgagc...390...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	Gac--	tgttgctcctcccggcc-----	..56...	tgtgtttccag	attggccc	
P. Abe	acaccaag	gtgggtgcgagc...406...	---tttgccaatgcaaggacttg	TCATa	GTTACTG	Gac--	tgttgctcctcccggcc-----	..56...	tgtgtttccag	attggccc	
C. Jac	acaccaag	gtgggtgcgagc...377...	---cttgccaatgctaggacatg	TCATa	GTTACTG	Gac--	tgttgctcctcacggcc-----	..57...	tctgtttccag	attggccc	
R. Nor	acactaag	gtgctgctgggt...351...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	acTGGT	--acctcctctagttcgggtg--	...47...	tgcgtttccag	attggccc	
C. Por	acaccaag	gtgggtgctgtg...321...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	acTGTC	--ctccgtccagcattattcc...	..36...	tgtgtttccag	attggccc	
O. Cun	acacgaag	gtgggtgctgctg...280...	---cttgccaatgcaaggacttg	TCATa	GTTACTG	acTGGT	--gcctcctgagcctagct--	...42...	tctgtttccag	atcgccc	
F. Cat	acactaag	gtgctgctgggg...340...	---cttgccaatgctaggacttg	TCATa	GTTACTG	actgtgttgcctcctcag--	-----	..58...	tgtgtttccag	atggccc	
B. Tau	acacaaag	gtgctgctgggt...298...	---cttgccaatgctaggacttg	TCATa	GTTACTG	Gac--	tgttacctcctgctggcc-----	..50...	tgtgtttccag	attggccc	
E. Cab	acacgaag	gtgctgctgggg...317...	---cttgccaatgctaggacttg	TCATa	GTTACTG	Gac--	tgtgcctcctcctcag--	-----	..54...	tgtgtttccag	attggccc
S. Sus	acaccaag	gtgctgctgggg...291...	...ccacttgccaatgctaggac	GTGT	TCATa	GTTACTG	actgtgttgcctcctcag--	-----	..59...	tgtgtttccag	attggccc
L. Afr	acactaag	gtgctgctgggt...385...	---cttgccaatgctaggacttg	TCATa	GTTACTG	Gac--	tgttgctcctcctcag--	-----	..54...	tgtgtttccag	atcggtcc
	**** **	*** **	*****	** **	*	*****	*	** **	*** **	** **	

id=667618 gene=ENSG00000142937 name=RPS8 segment=chr1.45241813.45242346.1 type=IN

Figure 628: CS=13





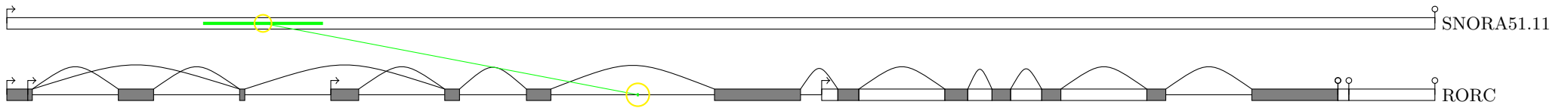
H.Sap	ttagata	aatgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTGT	ctct---
R.Mac	ttagata	aatgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CT	---cttacc
P.Tro	ttagata	aatgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTGT	ctct---
P.Abe	ttagata	aatgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTGT	ctct---
C.Jac	ttacata	aatgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTGT	ctct---
M.Mus	ttcacata	aacatgaagcag...30...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	---	gtcttgtc
C.Por	ttagata	cctatgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTATGT	ct---
O.Cun	ttagata	aacgtgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	caTGTT	CTGT	cttg---
B.Tau	ttagata	aacatgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	cgTGTT	CTGT	ccct---
E.Cab	cttagata	aacatgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	cgTGTT	CT	---cttgtc
S.Sus	ttagata	actacggagcaa...27...atgctgagctgttcaatcc	AACCCTGAGCTT	cgTGTT	CTGTGTG	t---
O.Avi	ttagata	aacatgaagcaa...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	cgTGTT	CT	ccccct---
L.Afr	ttcagaca	gacatgaagcag...27...gtgctgagctgttcaatcc	AACCCTGAGCTT	cgTGTT	CTG	-ccttt---
		* * *	* ****	*** **	* *****	***** **

id=36650 gene=ENSG00000212452 name=SNORD69 segment=chr3.52726752.52726828.1 type=EN

H.Sap	ttgtgaag	gtaagagcgtgt...4848...---tcagctaacgagatgtcac	ATGGAAC	AAAGCTT	tA	GGGTT	ttatttagctcctaataccgc...56...ggctggggacag--	cctcctct
R.Mac	ttgtgaag	gtaagagcgtgt...4849...----agtcctaacgagatgtcacat	GGAAC	AAAGCTT	TTAG	GGTT	ttatttagctcctaataccgc...56...ggctggggacag--	cctcctct
P.Tro	ttgtgaag	gtaagagcgtgt...4847...---tcagctaacgagatgtcac	ATGGAAC	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...56...ggctggggacag--	cctcctct
P.Abe	ttgtgaag	gtaagagcgtgt...4847...---tcagctaacgagatgtcac	ATGGAAC	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...56...ggctggggacag--	cctcctct
C.Jac	ttgtgaag	gtaagagcattt...4847...---tcagctaacgagatgtcac	ATGGAAC	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...56...ggctggggacag--	cctcctct
M.Mus	ttgtgaag	gtaagagccagc...4848...----cagtc---cgagatgtcacatgg	AACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...58...gctggagcacag--	cctcctgc
C.Por	ttgtgaag	gtaagagccagc...4850...-catcagctaacgtgatgtc	ACATGGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...50...tggcaggacag--	ctttcttt
O.Cun	ttgtgaag	gtaagagccagc...4849...---tcactctaacgcgatgtcac	ATGGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...53...ggctgaggccg--	cccagagc
B.Tau	ttgccaag	gtaagagccagc...4840...---tcggtctaacgagatgtcac	ATGGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...62...ggctggctgcag--	cctccttt
E.Cab	ttgtgaag	gtaagagccagc...4852...----agtcctaacgagatgtcacat	GGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...52...ggctcggtgcag--	cctccttt
S.Sus	ttgtgaag	gtaagagccagc...4845...tcatcagctctgatgatgt	CACATGGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...54...ggctggatgcag--	cctccttt
O.Avi	ttgccaag	gtaagagccagc...4843...----agtcctaacgagatgtcacat	GGAACA	AAAGCTT	ta	GGGGTT	ttatttagctcctaataccgc...61...ggctggctgcag--	cctccttt
L.Afr	ttgccaag	gtaagagccagc...4844...----cagcctaagtgtgtgtcaca	TGGAACA	AAAGCTT	TTAG	GGTT	ttatttagctcctaataccgc...59...--ttgctgcagca	cccccttt
		*** **	*****	*	* * *****	*****	*****	*****

id=385168 gene=ENSG00000175029 name=CTBP2 segment=chr10.126716598.126727565.-1 type=IN

Figure 630: CS=10.14



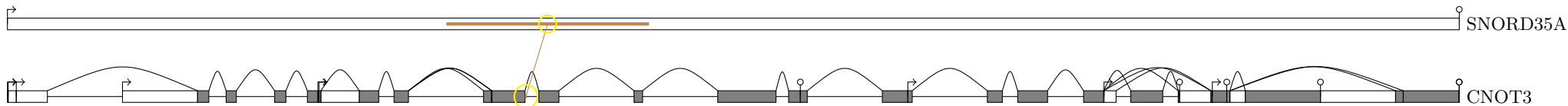
H. Sap	aaagaatg	<b>GGCTTG</b> ctGGTGCTTACCACAGGCTgAATTC	ttacactgactatagaaa...	68...	--gtgggaacatag	a----gttgagg
R. Mac	aaagaatg	ggctt <b>CCTGGT</b> GCTTACCACAGGCTgAATTC	ttaccgactgtatagaaa...	65...	acgtgggaac--ag	a----gttgagg
P. Abe	aaagaatg	<b>GGCTTG</b> ctGGTGCTTACCACAGGCTgAATTC	ttacactgactatagaaa...	68...	--gtgggaacatag	a----gtcgagg
M. Mus	caaagcaa	ggcctc <b>CTTGTG</b> CTTACCACAGGCTgtGTTc	ctacactgactgtatagaaa...	70...	--ggggagacacgg	g----cctgaga
R. Nor	aactgcaa	ggcct <b>GCTTGTG</b> CTTACCACAGGCTgtGTTc	ctacactgactgtatagaaa...	70...	--aggtagacatgg	a----tttgaaa
C. Por	ccaagcca	ggcct <b>CCTGGT</b> GCTTACCACAG---tGTCI	-tacactgactgtagagaaa...	75...	--agaaagatggga	a----aagaaaa
O. Cun	cgtggtcg	ggcct <b>CCTGGT</b> GCTTACCACAGGCTgtgtttt	tacactgactgtatagaaa...	78...	--ggggggacaaa	a----aaaaaaa
C. Fam	tggggctg	agcctcca <b>GTGCTT</b> ACCACAGGCTgtGTTc	ttacactggctgtacagaaa...	68...	--ggggagacacgg	a----gttgagg
F. Cat	tggggctg	agcct <b>CCTGGT</b> GCTTACCACAGGCTgtGTTc	ttacactgactgtacagaaa...	68...	--ggggggacacgg	a----gttgacg
B. Tau	tagagctg	ggcct <b>CCTGAT</b> GCTTACCACAGGCTgtGTTc	ttacactgactgtatagaaa...	73...	--ggggagacatgg	aggttttt---
E. Cab	ctgggctg	ggcct <b>CCTGGT</b> GCTTACCACAGGCTgtGTTc	ttacactgactgtatagaaa...	69...	--ggggggacaa	a----gttgagg
L. Afr	aggggttt	ggcctc <b>CTTGTG</b> CTTACCACAGGCTgtgtttt	tacactgactgtatagaaa...	73...	--ggggcaacatgg	c----attgagg
		** * * * ***** * * * * * * * * *				*

id=610181 gene=ENSG00000207171 name=SNORA51.11 segment=chr4.169392560.169392690.1 type=EN

H. Sap	cagagatg	gtgaggccaagt...	739...	agaacaagccg-cggagccc	<b>GGGTG</b> GGCTGTGGTGAGTATCTAGGTC	accaggggagcctgcaggcct...	407...	gacctctttcag	ctgtcaag
R. Mac	cagagatg	gtgaggccaagt...	736...	agaacaagccg-cggagccc	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	409...	gacctctttcag	ctgtcaag
P. Abe	cagagatg	gtgaggccaagt...	739...	agaacaagccg-cggagccc	<b>GGGTG</b> GGCTGTGGTGAGTATCTAGGTC	accaggggagcctgcaggcct...	407...	gacctctttcag	ctgtcaag
M. Mus	cagagatg	gtgaggccaagt...	671...	-gaagcaagccaccagagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	388...	aacctctttcag	ctgtcaag
R. Nor	cagagatg	gtgaggccaagt...	644...	-agagcaagccaccagagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	388...	accctctttcag	ctgtcaag
C. Por	cagagatg	gtgaggccaagt...	648...	-----caagccg-cggagcct	ggggtt <b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	cacc-gggagcctgcaggc--...	405...	aaactctttcag	ctgtcaag
O. Cun	cagagatg	gtgaggccaagt...	718...	-----aagccg-cggagcct	ggggtt <b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	386...	ggactctttcag	ctgtcaag
C. Fam	cagagatg	gtgaggccaagt...	631...	agaacaagccg-cggagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	439...	cacctctttcag	ctgtcaag
F. Cat	cagagatg	gtgaggccaagt...	722...	agaacaagccg-cggagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	392...	gacctctttcag	ctgtcaag
B. Tau	cagagatg	gtgaggccaagt...	745...	agaacaagccg-cggagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	439...	gacctctttcag	ctgtcaag
E. Cab	cagagatg	gtgaggccaagt...	734...	agaacaagccg-cggagcct	<b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	426...	gaccagttcag	ctgtcaag
L. Afr	cagagatg	gtgaggccaagt...	949...	-----aagccg-cggagcct	ggggtt <b>GGGTG</b> GGCTGTGGTGAGTAtCTAGGTC	caccaggggagcctgcaggc--...	420...	aaccatttcag	ctgtcaag
		* * * * *		***** * * * * ***** * * * * *		***** * * * *		* * * * *	*****

id=209171 gene=ENSG00000143365 name=RORC segment=chr1.151787902.151789139.-1 type=IN

Figure 631: CS=14.16



H. Sap	tggagcct	ggcagatgatgcctta--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgtccctgtggg--	aatggcgacaatgccaatggcttagctgatgccaggag	gcttgggt-----
R. Mac	cggagcct	ggcagatgatgcctta--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgtccctgctggg--	aatggcgacaatgccaatggcttagctgatgccaggag	ggtcgggt-----
P. Tro	cggagcct	ggcagatgatgcctta--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgtccctgctggg--	aatggcgacaatgccaatggcttagctgatgccaggag	gcttgggt-----
P. Abe	cggagcct	ggcagatgatgcctta--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgtccctgctggg--	aatggcgacaatgccaatggcttagctgatgccaggag	ggttgggt-----
C. Jac	ccaagcct	ggcagatgatgcctta--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgtccctgctggg--	agtggcgacaatgccaatggcttagctgatgccaggag	gggtgggt-----
M. Mus	tcaagact	ggcacatgatgttcttat--	<b>TCTCACGA</b> t <b>GTCT</b>	tcggatgccacagttagggcagtgccgataatgccaaggctaaagctgatgccaggag	ggctccc-----	
R. Nor	ggcagatgatggtat--	<b>TCTCACGA</b> t <b>GTCT</b>	tcggatgcca-----	cagtggcgataatgccaaggctgagctgatgccaggag	agcgtccatgttgggat	
O. Cun	ggcagatgatgctgtt--	<b>TCTCACGA</b> t <b>GTCT</b>	gcgaggcc-----	gctggcgacaacgccgatggctcagctgatgccaggag	gggcgctgggc-----	
C. Fam	ctgaaact	ggcagatgatgctctt--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgccacagtggg--	cagtggcgataatgccaatggctcagctgatgccaggag	gagcaggg-----
F. Cat	cggaggct	ggcagatgatgtctctt--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgccgctgctggg--	cagtggcgacaacgccaatggctcagctgatgccaggag	gagggggc-----
B. Tau	ctaggact	ggcagatgatggttttttt	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgccactgctggg--	cagtggcgaaaatgccaatggctcagctgatgccaggag	gaacgggg-----
E. Cab	ccaagact	ggcagatgatgctttt--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgccactgctggg--	cagtggcgataatgccaatggcttagctgatgccaggag	gggcaggg-----
S. Sus	ctaagact	ggcagatgatgctttt--	<b>TCTCACGA</b> t <b>GTCT</b>	gcggatgcca-----	cggtggcgataactgccaatggctcagctgatgccaggag	gagcgggg-----
L. Afr	aagggctt	ggcagatgatgcttc--	<b>TCTCACGA</b> t <b>GTCT</b>	gcgatgctgtgtggg--	cactggcgataacgccagtggtcagctgatgccaggag	gggtagt-----
		*	**** * * * * *		** * * * * ** * * * * *	

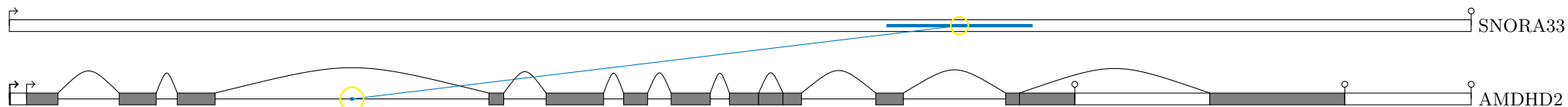
id=724334 gene=ENSG00000200259 name=SNORD35A segment=chr19\_49994432\_49994517\_1 type=EN

H. Sap	gGACatTC	GTGAGG	ccctgggctga--tcgtggca...54...-ctgccccacag	cacaggcg
R. Mac	gGACatTC	GTGAGG	ccctgggctga--tcgtggca...52...-ctgccccacag	cacaggcg
P. Tro	gGACatTC	GTGAGG	ccctgggctga--tcgtggca...54...-ctgccccacag	cacaggcg
P. Abe	gGACatTC	GTGAGG	ccctgggctga--tcgtggca...54...-ctgccccacag	cacaggcg
C. Jac	gGACatTC	GTGAGG	ccctgggtgga--tggtggca...54...-ctgccccacag	cacaggcg
M. Mus	gGACatTC	GTGAGG	ccct-gggctgacctcatgg--...53...-ctacccccacag	cacaggcg
R. Nor	gGACatTC	GTGAGG	ccct-gggctgacctcatgg--...53...-ctacccccacag	cacaggcg
O. Cun	gGACatTC	GTGAGG	cctgggctgccc--ctgcccga...52...-ctgccccacag	cacaggcg
C. Fam	gGACatTC	GTGAGG	cccggggtggc--ctacgggc...57...-tgctccaacag	cacaggcg
F. Cat	gGACatTC	GTGAGG	cccgggcccggc--ccgtgggc...180...-ctgccccacag	cacaggcg
B. Tau	gGACatTC	GTGAGG	ccctgggtggc--ctgcccgg...42...-cccctcccacag	cacaggcg
E. Cab	gGACatTC	GTGAGG	ccctgggtgac--ctgtgagc...56...-ctgccccacag	cacaggcg
S. Sus	gGACatTC	GTGAGG	cccggggtggc--ctgggggt...46...-ccgccccacag	cacaggcg
L. Afr	gGACatTC	GTGAGG	cccagggtggc--ctgtggg...52...gctg-ccccacag	cacaggcg
	*****	*****	* * * * *	* * * * *

id=283408 gene=ENSG0000088038 name=CNOT3 segment=chr19\_54649554\_54649645\_1 type=IN VIEW

Figure 632: CS=15.12





H. Sap	---taatttac	aagccagccaat...37...-ttaaaaactggcaatagtaa	AGCCATGTTA	GAGCCTT	aagga---cattgaagtcgtaaggtccctgagaatggctataaca	aatcttag
R. Mac	---taatttac	aagccagccaat...37...-ttaaaaactggcaatagtaa	AGCCATGTTA	GAGCCTT	aagga---cattgaagtcgtaaggtccctgagaatggctataaca	aatcttag
P. Tro	---taattgc	aagccagccaat...37...-ttaaaaactggcaatagtaa	AGCCATGTTA	GAGCCTTG	aagga---cattgaagtcgtaaggtccctgagaatggctataaca	aatcttag
P. Abe	---taatttac	aagccagccaat...37...-ttaaaaactggcaatagtaa	AGCCATGTTA	GAGCCTT	aagga---cattgaagtcgtaaggtccctgagaatggctataaca	aatcttag
C. Jac	ctgtaat---a	aagccagccaat...37...-ttaaaaactggcaatagtaa	AGCCATGTTA	GAGCCTT	aagga---cattgaagtcgtaaggtccctgagaatggctataaca	aattacag
C. Por	---tgatttca	aagccagctatg...40...-caaaagctggcgaatagtaaat	GCCATGTTA	GAGCCTT	aaagacatcattgaagtcattaaggtccctgaaaatggctacacg-	---ttttaa
O. Cun	---taatttag	aagccagccaat...40...-aaaaagctggcaatagtagt	GCCATGTTA	GAGCCTT	aaaga---cattgaagtccttcaggtccctgaaaatggctacaaca	aacttctg
C. Fam	ctgcaatt---	aagccagccaat...38...-aaattgtggcaatagtaaat	GCCATGTTA	GAGCCTT	aaaga---cattgaagtccttcaggtccctgaaaatggctacaaca	aattttag
F. Cat	ctgtaat---	aagccagccaat...38...-aaagctggcgaatagtaaat	GCCATGTTA	GAGCCTT	aaaga---cattgaagtcattaaggtccctgaaaatggctacaaga	aattttag
B. Tau	ccataatt---	aagccagccaaa...37...-gaaaatgtggcaatagtaa	AGCCATGTTA	GAGCCTT	aaaga---cattgaagtcattaaggtccctgaaaatggctacaagg	cattttaa
E. Cab	ccatagtt---	aagccagccaat...37...-gagcaagctggcaatagtaa	AGCCATGTTA	GAGCCTT	aacga---cgttgaagtcgtaaggtccctgaaaatggccacaaga	agttgtaa
S. Sus	-tgtaatt--a	aagccagccaat...36...-agtaaacgctggcaatagtaa	AGCCATGTTA	GAGCCTT	acaga---cattgaagtccttcaggtccctgaaaatggcaacaaga	catttcaa
L. Afr	---tatattag	aagccaaccggt...37...-gaaaaagttggcaataataaa	AGCCATGTTA	GAGCCTT	agtga---tacttaggtcattaaggtccctgaaaatggctacagtt	gattttga
		*****	**** *	* *****	** * * * * *	***** * * * * *

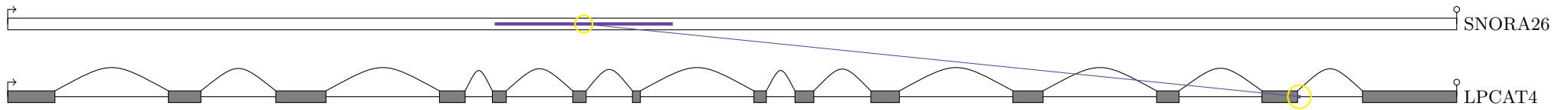
id=544616 gene=ENSG00000200534 name=SNORA33 segment=chr6.133138358.133138487.1 type=EN

H. Sap	atcacaag	gtgaggtgaggc...4930...-gggaatgggctgt-gggggac	AGGGCTTTAACA	gcTGGTT	ccccccag	gttgttcc	
R. Mac	atcacaag	gtgaggtgaggc...4930...-gggaatgggcat-gggggac	AGGGCTTTAACA	gcTGGTT	ccccccag	gttgttcc	
P. Tro	atcacaag	gtgaggtgaggc...4929...-tgggaatgggctgt-gggggac	CAGGGCTTTAACA	gcTGGTT	ccccccag	gttgttcc	
P. Abe	atcacaag	gtgaggtgaggc...4930...-gggaatgggcat-gggggac	AGGGCTTTAACA	gcTGGTT	ccccccag	gttgttcc	
C. Jac	atcacaag	gtgaggtgaggc...4930...-gggcatgggcccgt-gggggac	AGGGCTTTAACA	gcTGGTT	ccccccag	gttgttcc	
C. Por	accataag	gtgagatcaggc...4930...-ggtgccaggcccac-aggggcc	AGGGCTTTAACA	gtTGGT	tcctcccag	gtccttcc	
O. Cun	atcacaag	gtgaggtcaggc...3729...-gggcactgggctgt-gggggc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
C. Fam	atcacaag	gtgaggtcaggc...4930...-ggcgctgggcat-agggggc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
F. Cat	atcacaag	gtgaggtcaggc...4930...-ggcattgggcccgt-agggggc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
B. Tau	atcacaag	gtgaggtcaggc...3321...-gggtgctgggccc--gggggc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
E. Cab	atcacaag	gtgaggtcaggc...4930...-ttcagctgggctgt-gggggc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
S. Sus	atcacaag	gtgaggtcaggc...4930...-gt--gctgggctgtgggggggc	AGGGCTTTAACA	gcTGGTTC	ccccccag	gtccttcc	
L. Afr	atcacaag	gtgaggtcaggc...4930...-gggtgctgggctgt-gtgtgc	AGGGCTTTAACA	gcTGGT	ccccccag	gtccttcc	
		* * * *	*****	**	***	* * * *****	***** * * * * *

id=206892 gene=ENSG00000162066 name=AMDHD2 segment=chr16.2571125.2577561.1 type=IN

Figure 633: CS=16.25





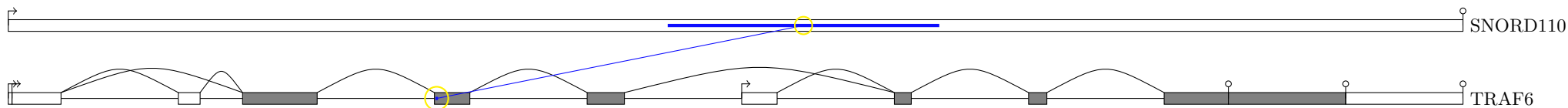
H. Sap	cctttcct	gtgcccttttaagg	ttgacc	cagtgct	ttaaga	GGCTaa	CACAGa	AGGG	taaag	taagtct	ccataaaa	...41..	ggagt	cacaact	gaaccaga		
R. Mac	cctttcct	gtgcccttttaagg	ttgacc	cagtgct	ttaaga	GGCTaa	CACAGa	AGGG	taaag	taagtct	ccataaaa	...41..	ggagt	cacagct	gaaccaga		
P. Tro	cctttcct	gtgcccttttaagg	ttgacc	cagtgct	ttaaga	GGCTaa	CACAGa	AGGG	taaag	taagtct	ccataaaa	...41..	ggagt	cacaact	gaaccaga		
P. Abe	cctttcct	gtgcccttttaagg	ttgacc	cagtgct	TTAAGa	GGCTaa	CACAGa	AGGG	taaag	taaatct	ccataaaa	...41..	ggagt	cacaact	gaaccaga		
C. Jac	cctttcct	gtgcccttttaagg	ttgacc	cagtgct	ttaaga	GGCTaa	CACAGa	AGGG	taaag	taaatct	ccataaaa	...41..	ggagt	cacacct	gaaccaga		
M. Mus	cctttcct	gtgcccttttaagg	ttgtgc	cagta	ctttaaga	GGCTaa	CACAGa	AGGG	taaag	gaactct	ccataaaa	...40..	ggagt	cacaact	gaaccaga		
R. Nor	cctttcat	gtgcccttttaagg	ttgtgc	cagta	ctttaaga	GGCTaa	CACAGa	AGGG	taaag	gaagtct	ccataaaa	...40..	ggagt	cacagat	gaaccaga		
C. Por	cctttcct	gtgcccttttaagg	ttgata	cagtg	ccctaaga	GGCTaa	CACAGa	AGGG	tacag	gaacc	ccataaaa	...39..	ggagt	cacagct	gaaccaga		
O. Cun	cctttcct	gtgcccttttaagg	tttaac	acag	tgccttaaga	GGCTaa	CACAGa	AGGG	aaact	aaagtct	ccacaaaa	...39..	ggagt	cacagct	gaaccaga		
F. Cat	cctttcct	gtgcccttttaagg	ttgac	gcag	tccttaaga	GGCTaa	CACAGa	AGGG	taaag	taagtct	ccataaaa	...39..	ggagt	cacagcg	gaaccaga		
B. Tau	cctttcca	gtgcccttttaagg	ttgac	acag	tgccttaaga	GGCTaa	CACAGa	GAGGG	taaag	aaagtct	ccataaaa	...41..	ggagt	cacaact	gaaccaga		
S. Sus	gaattcct	gtgcccttttaagg	ttgat	gcag	tgccttaaga	GGCTaa	CACAGa	AGGG	taaag	gtagtct	ccataaaa	...40..	atagt	cacagtt	gaaccaga		
O. Avi	cctttcca	gtgcccttttaagg	ttgat	gcag	tgccttaaga	GGCTaa	CACAGa	GAGGG	taaag	aaagtct	ccataaaa	...41..	ggagt	cacaact	gaaccaga		
L. Afr	cctttcct	gtgcccttttaagg	ttgtgc	cagtg	ctttaaga	GGCTaa	CACAGa	AGGG	taaag	taagact	ctataaaa	...41..	ggagt	cacagct	gaaccaga		
	***	*****	***	*	****	*	*****	*****	****	*	*	***	*	*****	***	*	*

id=239133 gene=ENSG00000212588 name=SNORA26 segment=chr4\_53579416\_53579537\_1 type=EN

H. Sap	ct	CCCTCT	GTGAGTC	-actgc	cttctcag	ccc-caca	----	...247...	ttatt	gtccag	gtcagttc
R. Mac	gt	CCCTgT	GTGAGTC	-actgc	cttctcag	ccc-cgca	----	...246...	tgatt	gtccag	gtcagttc
P. Tro	ct	CCCTCT	GTGAGTC	-actgc	cttctcag	ccc-caca	----	...247...	ttatt	gtccag	gtcagttc
P. Abe	ct	CCCTCT	GTGAGTC	aCTTG	ccttctcag	ccc-cacac	ggg...	...243...	ttatt	gtccag	gtcagttc
C. Jac	ct	CCCTCT	GTGAGTC	-actgc	cttctca	acc-taca	----	...240...	tgatt	gtccag	gtcagttc
M. Mus	ct	CCCTCT	GTGAGTC	-actgc	cttctttg	ccc-tgtg	----	...241...	cctct	gtccag	gtcagttc
R. Nor	ct	CCCTCT	GTGAGTC	-accgc	cttctgtg	caggcac	----	...242...	cttcc	gtccag	gtcaattc
C. Por	ct	CCCTCT	GTGAGTC	-accoc	tgtggc	ccctgcac	----	...333...	ttact	gtccag	gtcagttc
O. Cun	c	TCCCTCT	GTGAGTC	-actgc	ctcccc	ggcccc-tgca	----	...252...	tcatt	gtccag	gtcagttc
F. Cat	ct	CCCTCT	GTGAGTC	-actgc	ctcctctg	ccaggac	----	...219...	ttacc	gtccag	gtcagttc
B. Tau	ct	CCCTCT	GTGAGTC	-atccc	ctgcagg	ccccgtgt	----	...170...	ttccc	gtccag	gtgagttc
S. Sus	ct	CCCTCT	GTGAGTC	-actgc	ctctggg	gccaatg	----	...237...	ttacc	atccag	gtcagttc
O. Avi	ct	CCCTCT	GTGAGTC	-atccc	ctgcagg	ccccatgc	----	...168...	ttccc	ctccag	gtgagttc
L. Afr	ct	CCCTCT	GTGAGTC	-actgc	atttctg	gcc-caca	----	...244...	tcatt	gtccag	gtcagttc
		****	*	*****	*				***	**	***

id=737835 gene=ENSG00000176454 name=LPCAT4 segment=chr15\_34651504\_34651789\_-1 type=IN

Figure 635: CS=12.6



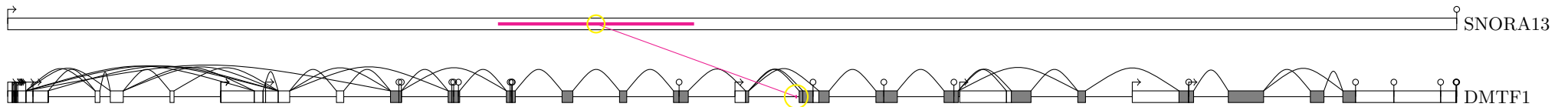
H. Sap	gccaggct	ttgcagtgatgacttgccaatcaaat	CTGTcaATCCcCTGA	----	gtgcaatcactgatgtctccatgtctctgagcaa	tgctgat
P. Tro	gccaggct	ttgcagtgatgacttgccaatcaaat	CTGTcaATCCcCTGA	----	gtgcaatcactgatgtctccatgtctctgagcaa	tgctgat
P. Abe	gccaggct	ttgcagtgatgacttgccaatcaaat	CTGTcaATCCcCTGA	----	gtgcagtcactgatgtctccatgtctctgagcaa	tgctgat
C. Jac	gccaggct	ttgcagtgatgacttggaatcaaat	CTGTcaATCCcCTGA	----	gtgcaatcactgatgtctccatgtctctgagcag	tgctgat
M. Mus	gccaggct	ttgcaatgatgacttata	----tatCTGTcaATCCcCTGAGAGA	----	tcactgacgactccatgtgtctgagcaa	tgctgag
R. Nor	gtcaggct	ttgcaatgatgacttgaa	----a-aatCTGTcaATCCcCTGAG	----	tgatcgatgatgactccatgtttctgagcaa	tgctgaa
C. Por	gccgggct	ttgcagtgatgacttgag	----aaatCTGTcaATCCcCTGAA	GTAAT	----cactgatgtctccatgtctctgagcaa	tgctgaa
O. Cun	gccaggct	ttgcaatgatgactcaaa	----ataatCTGTcaATCCcCTGAG	----	tctgtcactgatgtctccatgtctctgagcaa	tgctgag
C. Fam	gtcaggct	ttgcagtgatgacttgag	----tCTGTcaATCCcCTGAG	----	tgcaatcactgatgtctccatgtctctgagcaa	agcctaaa
F. Cat	tgcgggct	ttgcagtgatgacttgaa	----tCTGTcaATCCcCTGAG	----	tgcaatcactgatgtctccatgtctctgagcaa	agcctgaa
B. Tau	tgctggct	ttgcagtgatgacttgag	----tCTGTcaATCCcCTGAG	GAGT	t-taatcactgatgtctccatgtctctgagcaa	agcctctg
S. Sus	gtcaggct	ttgcagtgatgacttgaa	----tCTGTcaATCCcCTGAG	----	tatgatcattgatgtctccatgtgtctgagcaa	agcctgga
L. Afr	gccaggct	ttgcagtgatgacttgag	----tCTGTcaATCCcCTGAG	----	tgcaatcactgatgtctccatgtctctgagcaa	tgctgaa
	* **	****	*****	*****	****	****

id=493188 gene=ENSG00000221116 name=SNORD110 segment=chr20\_2634858\_2634932.1 type=EN

H. Sap	tcaataag	gtacgtgagcat...2543...	----ttgtgtgattttgtttctg	----	TTAG	GGATGCAg
P. Tro	tcaataag	gtacgtgagcat...2539...	----ttgtgtgattttgtttctg	----	TTAG	GGATGCAg
P. Abe	tcaataag	gtacgtgagcat...2539...	----ttgtgtgattttgtttctg	----	TTAG	GGATGCAg
C. Jac	tcaataag	gtatgtgagcat...3055...	----atgtgttttattttgtttctg	----	TTAG	GGATGCAg
M. Mus	tccataag	gtatttgatttt...3627...	actaactcaagttc---ctact---	TCTTTTAG	GGATGCAg	
R. Nor	tccataag	gtatttgatgat...2424...	actcctaagttcctgcttct	----	TTTAG	GGATGCAg
C. Por	tcaataag	gtatgtgggctt...3186...	caactaattgaatacatctt	GTTGCT	TTTAG	GGATGCAg
O. Cun	tcaataag	gtatgaatgat...4049...	tgcttgatatttttacct	----	TTTAG	GGATGCAg
C. Fam	tcaataag	gtaggtgagcgg...3776...	aatgtatgatcttcttttt	----	TTTAG	GGATGCAg
F. Cat	tcaataag	gtacgtaagtgt...4063...	atgatcttacttgttttct	----	TTTAG	GGATGCAg
B. Tau	tcaataag	gtgcgtgagcat...4177...	atctactaataatgtattt	GTTT	ctTTTAG	GGATGCAg
S. Sus	tcaataag	gtatgtgagcat...4612...	ttgttttaaatctatttct	----	TTTAG	GGATGCAg
L. Afr	tcgataag	gtatgtgagcat...4129...	tacctatct-tatttcttct	----	TTTAG	GGATGCAg
	** *****	**	*	*	****	*****

id=48212 gene=ENSG00000175104 name=TRAF6 segment=chr11\_36520191\_36522769\_-1 type=IN

Figure 636: CS=20.02



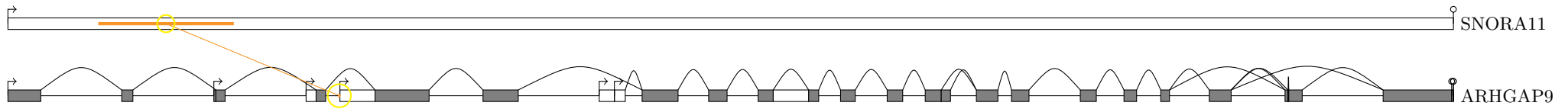
H. Sap	gcagtgtc---	a-gccttgggttggccattcactttgg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	taaat	taacgcttt-gcag-----	..45..	taagtaacag--tt	gctgctt-t
R. Mac	gcagtgtc---	a-gccttgggttggccattcactttgg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	taaat	taacgcttt-gcag-----	..45..	taagtaacag--tt	gctgctt-t
P. Tro	gcagtgtc---	a-gccttgggttggccattcactttgg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	taaat	taacgcttt-gcag-----	..45..	taagtaacag--tt	gctgctt-t
P. Abe	gcagggtc---	a-gccttgggttggccattcactttgg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	taaat	taacgcttt-gcag-----	..45..	taagtaacag--tt	gctgctt-t
C. Jac	gcgatgtcaggt	a-gccttgggttggccattcactttgg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	taaat	taacgcttt-gcag-----	..45..	taagtaacag--tt	aatgctt-t
R. Nor	---actcatgt	a-gccttgggttggccattcactttgggtcactagtga-----	ATGTgGTGTCAAAAAGGCg	TAAATT	-aatgcttt-gcggcctttcct..	..40..	-agtaacagaac	tctactc-t
C. Por	---ttcttgtc	a-gccttgggttggccattcactttggaaagctagtga-----	ATGTgGTGTCAAAAAGGCg	TAAATT	-aaaagcttt-gcagctttttc..	..38..	caagtaacag--tt	tatgcat-t
O. Cun	---ggcctgtg	a-gccttgggttggccattcactttggcaactgtgcga-----	ATGTgGTGTCAAAAAGGCg	gcacagtgaatgcttg-ccag-----	..44..	cgactacag--cc	gaaagct-g	
F. Cat	---tttctcgt	a-gccttgggttggccattcactttggaaactagtga-----	ATGTgGTGTCAAAAAGGCg	TAAATT	ctaaacacttt-gcagcc--ttt..	..40..	caagtaacag--tt	tatgctt-t
B. Tau	---gttcttac	c-gccttgggttggccattcactttg-----gaAACTagTGGATGTg	GTGTCAAAAAGGCg	AACTagTGGATGTg	cacaaacactttcgagct-----	..45..	taagtaacat--ac	actcatt-a
E. Cab	---tttcatgt	a-gccttgggttggccattcactttg-aaactagtga-----	ATGTgGTGTCAAAAAGGCg	CAAA	ctaaacacttg-gcagct--ttt..	..40..	taagtaacag--tt	tatgctc-t
S. Sus	---tttcttgc	a-gccttgggttggccattcactttggcaactagtga-----	ATGTgGTGTCAAAAAGGCg	aaaat	caaacacttttgca-----	..47..	-aagtaacag--tt	agctcatgt
L. Afr	---tccatgc	aagccttgggttggccattcactttcgaaactagtga-----	ATGTgGTGTCAAAAAGGCg	TAAATT	aaacccttt-gcagccatttt--	..38..	taagttacag--tt	cattcct-t
		**** * * * * *	***** * * * *	**	***** * * * *	** * * *	** * * *	

id=42764 gene=ENSG00000238363 name=SNORA13 segment=chr5\_111497182.111497314.1 type=EN

H. Sap	ctcaagga	gtaagttttaa...595...---	agtaacctgaggggaattg---	GTCTTTTTTGaACACATAT	ccaagttacttatttct-tctctgaccag	gaaaaagg
R. Mac	ctcaagga	gtaagttttaa...601...---	agtaacctgaggggaattg---	GTCTTTTTTGaACACATAT	ccaagttacttatttct-tctctgaccag	gaaaaagg
P. Tro	ctcaagga	gtaagttttaa...595...---	agtaacctgaggggaattg---	GTCTTTTTTGaACACATAT	ccaagttacttatttct-tctctgaccag	gaaaaagg
P. Abe	ctcaagga	gtaagttttaa...587...---	agtaacctgaggggaattg---	GTCTTTTTTGaACACATAT	ccaagttacttatttct-tctctgaccag	gaaaaagg
C. Jac	ctcaagga	gtaagttttaa...601...---	agtaacctgaggggaattg---	GTCTTTTTTGaACACATAT	ccaagttacttatttct-tctctgaccag	gaaaaagg
R. Nor	ctcaagga	gtaagttttaa...420...---	gtcaatagcctgaggggaattg---	AATTGGTCT-TTTTTG	acacatatccaattacatttttttctctgaccag	aaaaagg
C. Por	ctgaagga	gtaagttgtaa...542...---	gtgtcagtaactctgagggaaa---	ATTGGTCT-TTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
O. Cun	ctcaagga	gtaagttttaa...568...---	ataacctgaggggaattctg---	GTC-TTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
F. Cat	ctcaagga	gtaagtttaaca...601...---	gtcagtaacctgaggggaattg---	TTTGGTCTTTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
B. Tau	ctcaagga	gtaagttgact...594...---	gtcagtaacctgaggggaattg---	TTTGGTCTTTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
E. Cab	ctcaagga	gtaagttttaa...608...---	atcaataacctgaggggaattg---	TTTGGTCTTTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
S. Sus	ctcaagga	gtaagttttaa...602...---	taacctgaggggaattctgg-	GTCTTTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
L. Afr	ctcaagga	gtaagttttaa...607...---	gtgtcaataacctgaggggaattg---	AATTGGTCTTTTTTG	acacatatccaagttacttatttct-tctctgaccag	gaaaaagg
	** ** ** *	*****	** * * * *	*	***** * * * *	** * * *

id=132456 gene=ENSG00000135164 name=DMTF1 segment=chr7\_86810658.86811332.1 type=IN

Figure 637: CS=11.7



H. Sap	cttgca	GGGGTGTGcTCAGagCAGGG	--ggcccaaga-atggctcctc...76...cgtccccaaca	cctctatg
R. Mac	cttgca	GGGGTGTGcTCAGagCAGGG	--ggcccaaga-acggctcctc...76...tgtcccccaca	cctttgtg
P. Tro	cttgca	GGGGTGTGcTCAGagCAGGG	--ggcccaaga-atggctcctc...76...tgtccccaaca	cctctatg
P. Abe	cttgca	GGGGTGTGcTCAGagCAGGG	--ggcccaaga-atggctcctc...76...tgtccccaaca	cctctatg
C. Jac	cttgca	GGGGTGTGcTCAGagCAGG-g	--ggcccaaga-atggctcct...77...tgtcccctaaca	cctctatg
C. Por	tttGTGA	GGGGTGTGcTCAG--agcaagcaagttttaagagt	-----...67...gtgacatcatgc	cctatatg
O. Cun	cttaggt	GGGGTGTGcTCAG--agcaag--ggcctgaagaatg	-----...96...gtgcctgtgca	ccttcattg
C. Fam	ccactggt	GGGGTGTGcTCAGggCAGAGg	--ggcctgaggaatggctcc--...93...tctcaccttgca	cctccaca
F. Cat	ccaGTGGt	GGGGTGTGcTCAGggCAGGG	--gacctgaagaatggctcct--...91...tctcatcttgca	cctccaca
B. Tau	ccattggt	GGGGTGTGcTCAGagCAGGG	--ggcctaagaactggcttct--...86...aggcccttgta	cctccaca
E. Cab	cctGTGGt	GGGGTGTGcTCAGagCAGGG	--gacctgaagaatggctcct--...90...gttcccctata	cctccatg
O. Avi	ccgttggt	GGGGTGTGcTCAGagCAGGG	--ggcctaagaatggcttct--...86...aggcccttgta	cctccaca
L. Afr	tttcaat	GGGGTGTGcTCAG--aacagg--ggcctgaggaatg	-----...94...gactccttgca	cctccaag
		* **** * * *		***

id=709839 gene=ENSG00000221716 name=SNORA11 segment=chrX\_54840803\_54840930\_1 type=EN

H. Sap	cccacaag	gtacttggagga...33...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	atgttact
R. Mac	cccacaag	gtacttggagga...30...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	acgttact
P. Tro	cccacaag	gtacttggagga...33...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	atgttact
P. Abe	cccacaag	gtacttggagga...33...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	atgttact
C. Jac	cccacaag	gtacttggagga...562...tttctgctgtcggcatgcag	CCTGCTGAcCACAtCCTC	tctc	atgtacat
C. Por	tctacaag	gtacttggagga...38...-----ttgccagccacacagccctg	CTGAcCACAtCCTC	tTC AC	ccttatt
O. Cun	tccacaag	gtacttggagga...38...-----gtgctggccacagccctg	CTGAcCACAtCCTC	ccac	acctcact
C. Fam	cccagaag	gtacttggagga...32...ctgccttgcctggccatgcag	CTCTGCTGAcCACAtCCTC	tccc	accttact
F. Cat	ctcagaag	gtacttggagga...33...ctgccttgcctggccatgcag	CTCTGCTGAcCACAtCCTC	tTC AC	ccttact
B. Tau	cccgaag	gtacttggagga...33...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	accttact
E. Cab	cccagaag	gtacttggagga...33...ctgccttgcctggccatgcag	CCTTGCTGAcCACAtCCTC	tTC AC	ccttact
O. Avi	cccagaaa	gtacttgaagga...33...ctgccttgcctggccatgcag	CCCTGCTGAcCACAtCCTC	tctc	accttact
L. Afr	cccacaag	gtacataaaga...38...-----tggctggccacacagtgctg	CTGAcCACAtCCTC	tctc	accttatt
	**	**** * * **	* * *	***** * *	* * *

id=274473 gene=ENSG00000123329 name=ARHGAP9 segment=chr12\_57873425\_57873512\_-1 type=IN

Figure 638: CS=10.14