

# Chipseq QC - aggregation plots and correlation between replicates

10/03/2016

# Outline

First sample sequenced of these marks

H3K9ac

H3K36me3

Second replicate of these marks

H3K27me3

Aggregation plots

Correlation between replicates

H3K4me2

Aggregation plots

Correlation between replicates

One timepoint of these marks is sequenced. 4 timepoints more

H3K4me1

H3K9me3

Pol2Ser5

# Outline

First sample sequenced of these marks

H3K9ac

H3K36me3

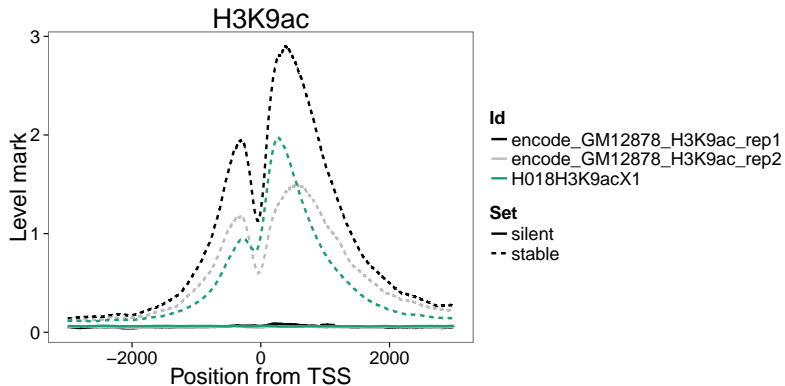
Second replicate of these marks

One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

# H3K9ac - First sample sequenced of this mark

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

H3K9ac

H3K36me3

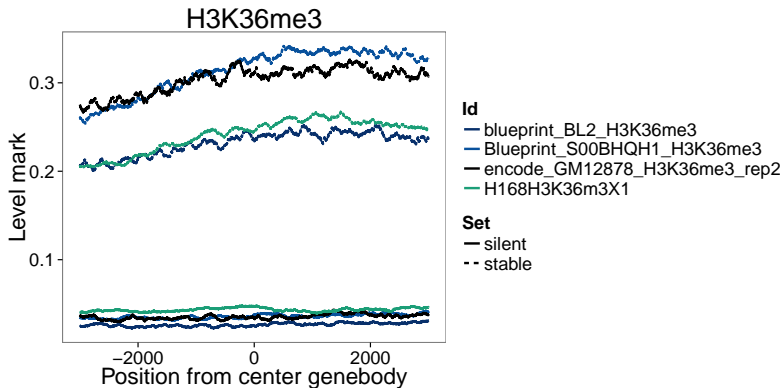
Second replicate of these marks

One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

# H3K36me3 - First sample sequenced of this mark

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

Second replicate of these marks

H3K27me3

Aggregation plots

Correlation between replicates

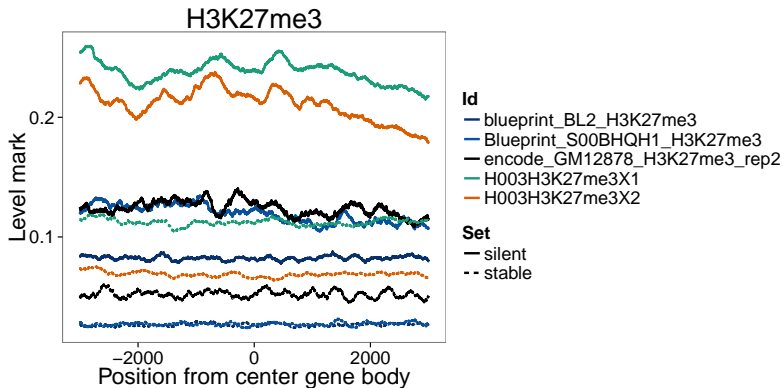
H3K4me2

One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

# H3K27me3 - gene body - Second replicate

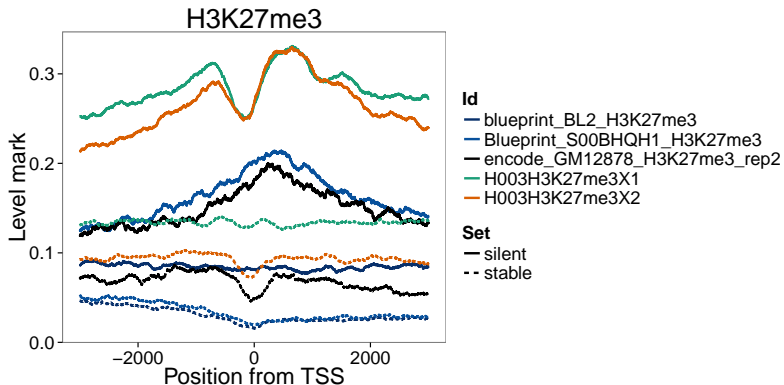
- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24





# H3K27me3 - TSS - Second replicate

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

Second replicate of these marks

H3K27me3

Aggregation plots

Correlation between replicates

H3K4me2

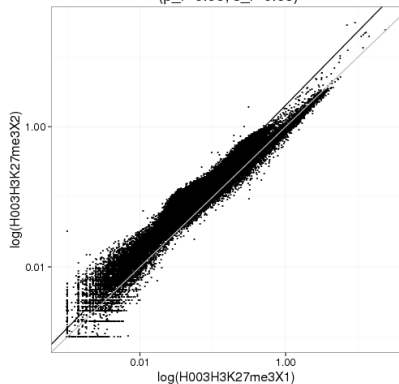
One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

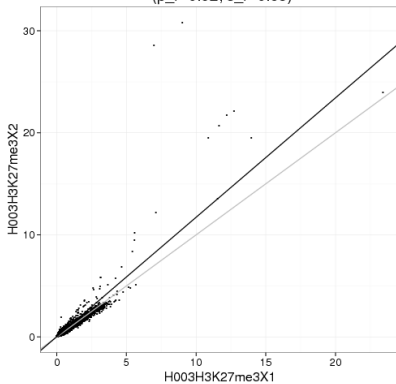
# H3K27me3 - Second replicate

Correlation between replicates: mean of 10kb windows

(p\_r=0.98; s\_r=0.65)



(p\_r=0.92; s\_r=0.65)



# Outline

First sample sequenced of these marks

**Sencond replicate of these marks**

H3K27me3

**H3K4me2**

Aggregation plots

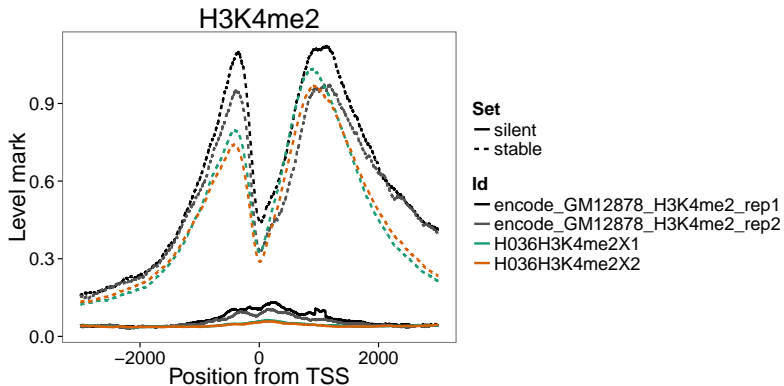
Correlation between replicates

One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

# H3K4me2 - Second replicate

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

**Sencond replicate of these marks**

H3K27me3

**H3K4me2**

Aggregation plots

Correlation between replicates

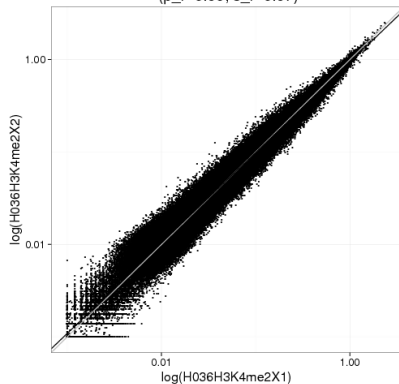
One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

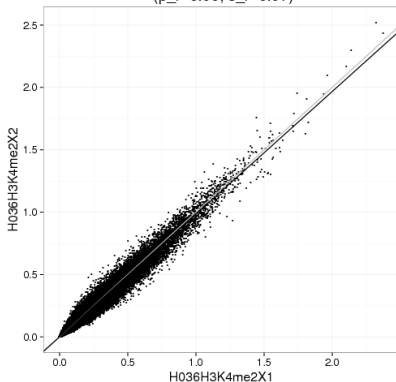
# H3K4me2 - Second replicate

Correlation between replicates: mean of 10kb windows

(p\_r=0.99; s\_r=0.97)



(p\_r=0.99; s\_r=0.97)



# Outline

First sample sequenced of these marks

Second replicate of these marks

One timepoint of these marks is sequenced. 4 timepoints more

H3K4me1

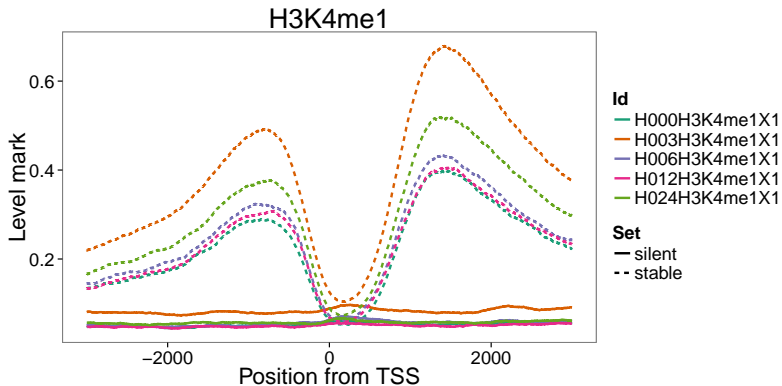
H3K9me3

Pol2Ser5



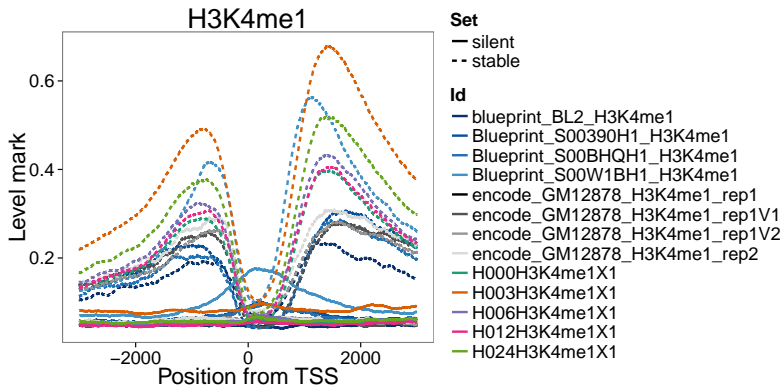
# H3K4me1 - 4 timepoints more

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# H3K4me1 - 4 timepoints more + controls

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

Second replicate of these marks

One timepoint of these marks is sequenced. 4 timepoints more

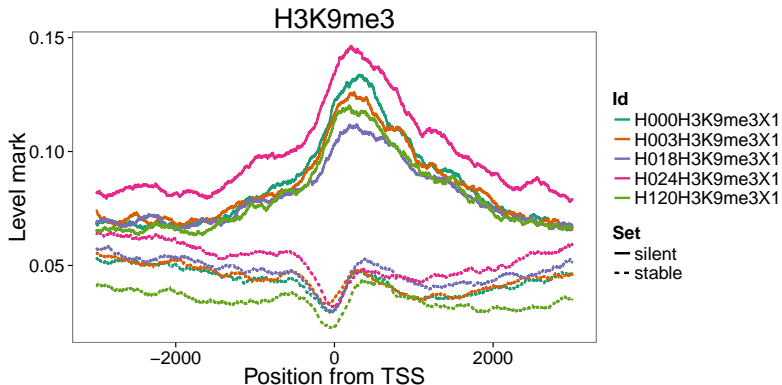
H3K4me1

H3K9me3

Pol2Ser5

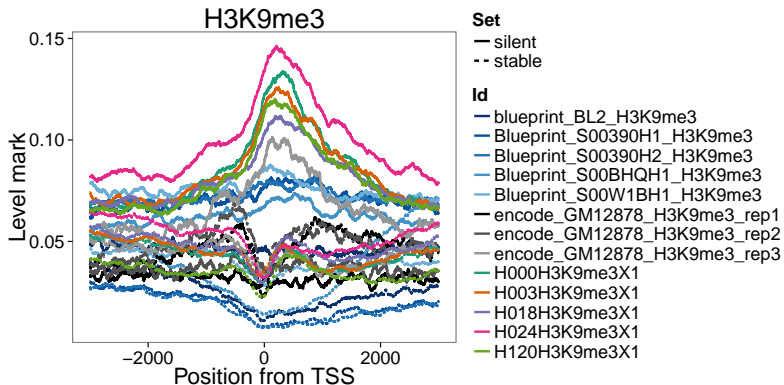
# H3K9me3 - 4 timepoints more

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# H3K9me3 - 4 timepoints more + controls

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Outline

First sample sequenced of these marks

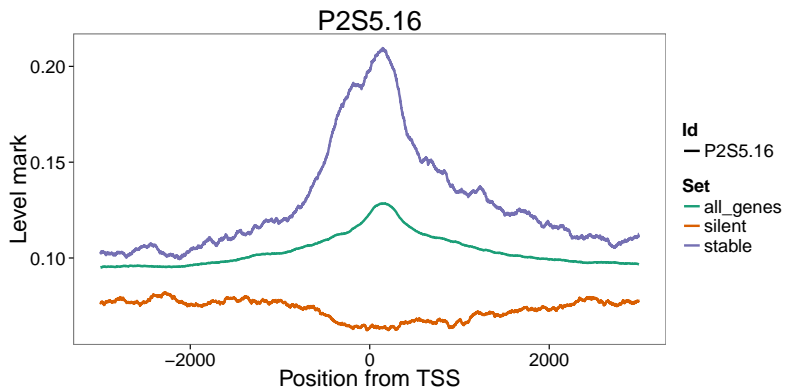
Second replicate of these marks

One timepoint of these marks is sequenced. 4 timepoints more

Pol2Ser5

# Pol2Ser5 - TSS

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24



# Pol2Ser5 - gene body

- 1000 silent genes
- 1000 stable genes (lowest CV)
- gencode v24

