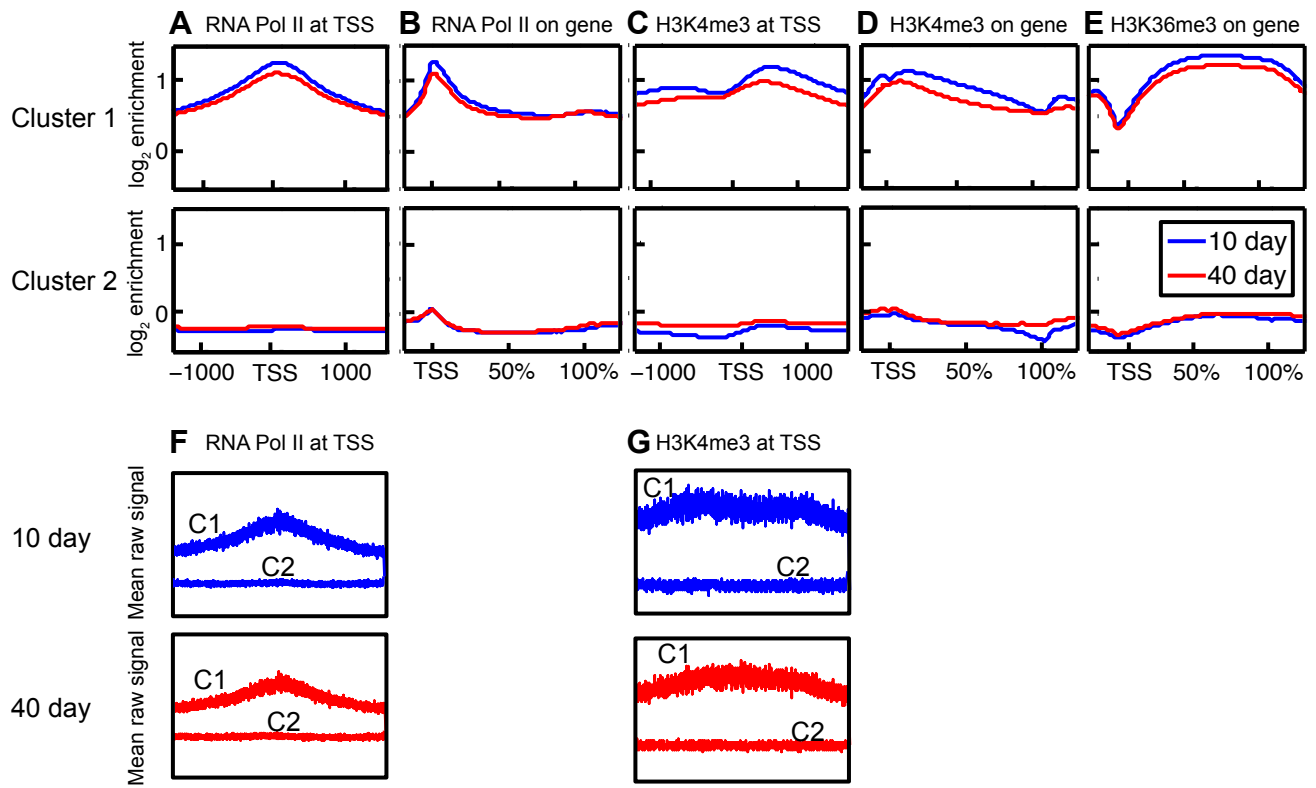


Figure S1



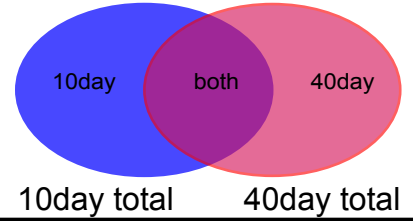
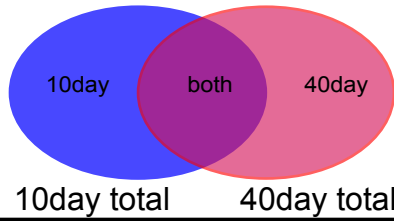
**Figure S2**

# Figure S3

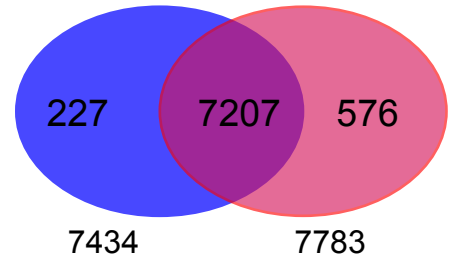
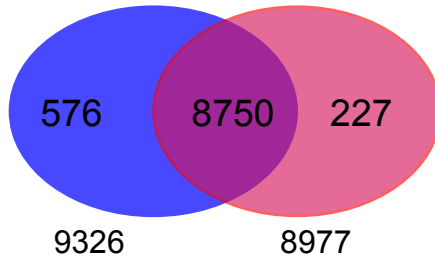
## GENES IN HIGH CLUSTER

## GENES IN LOW CLUSTER

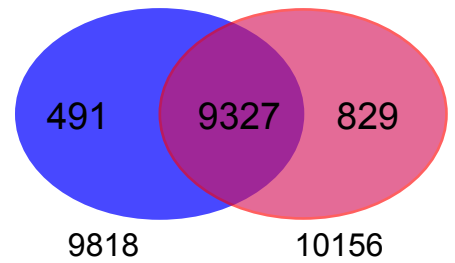
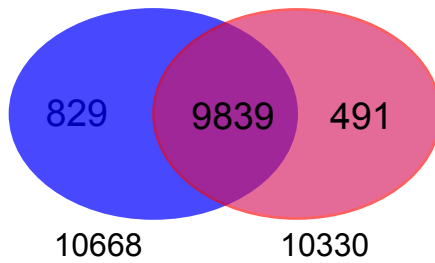
### EXPERIMENT



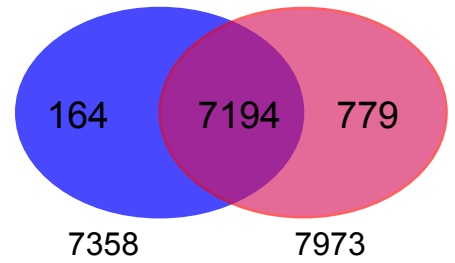
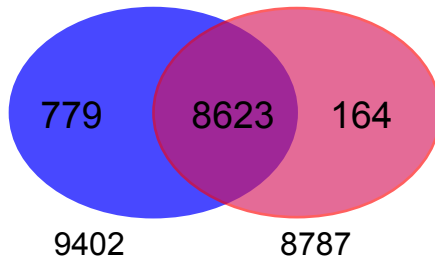
### RNA Pol at TSS



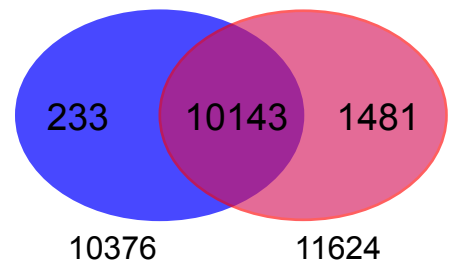
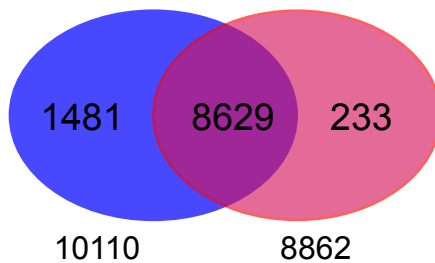
### RNA Pol on Whole Gene



### H3K4 at TSS



### H3K4 Whole Gene



### H3K36 Whole Gene

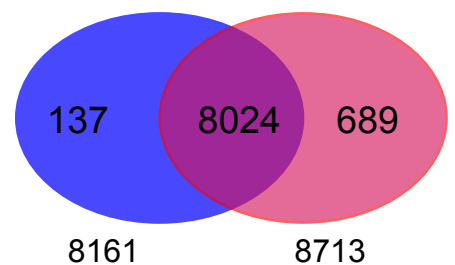
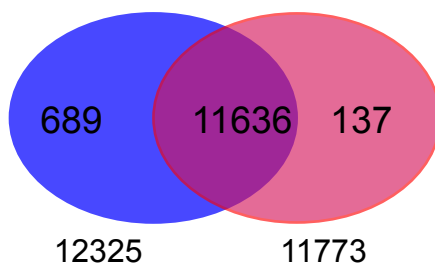
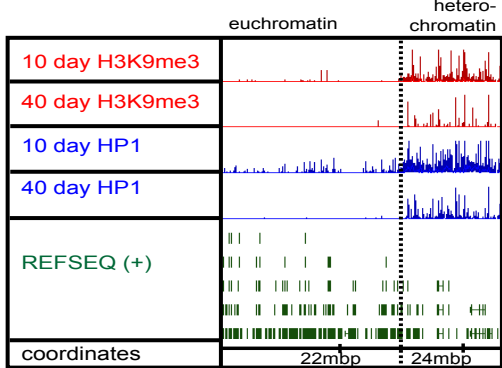
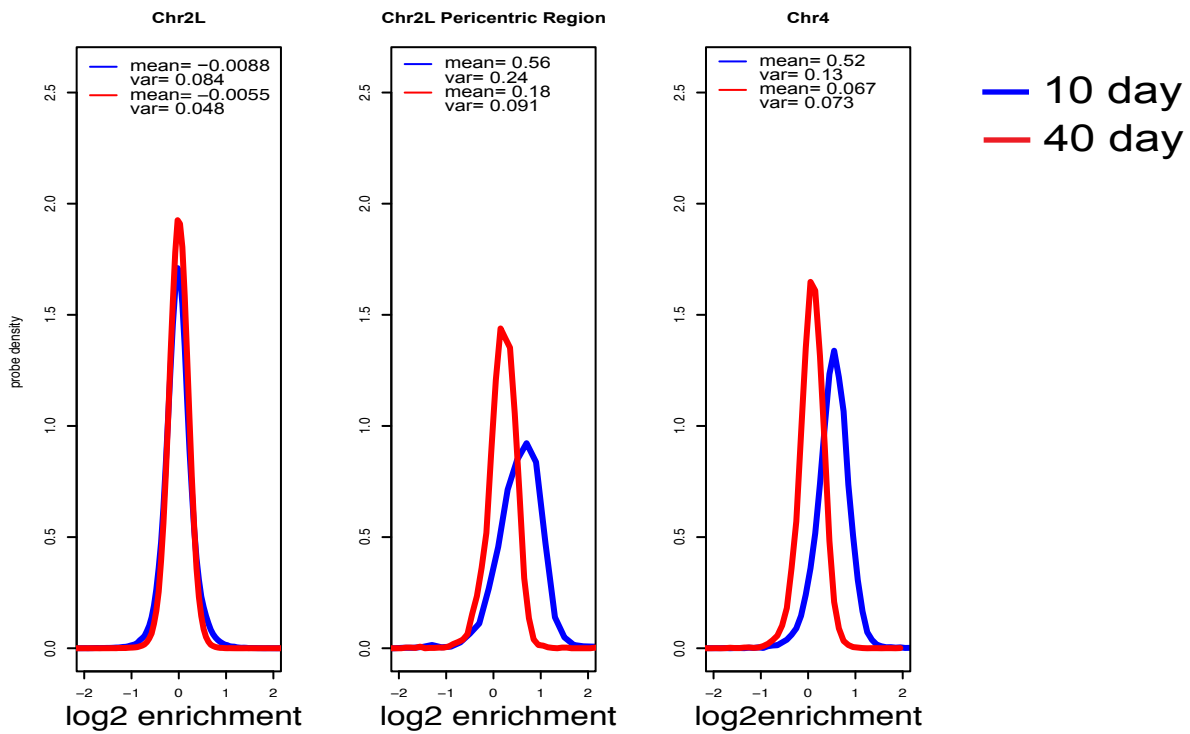


Figure S4



A

## H3K9me3 Signal:



B

H3k9me3 enrichment in pericentric regions + chr4 from each individual replicate  
 pvalue (10day v. 40day term in 2 way anova) = 0.

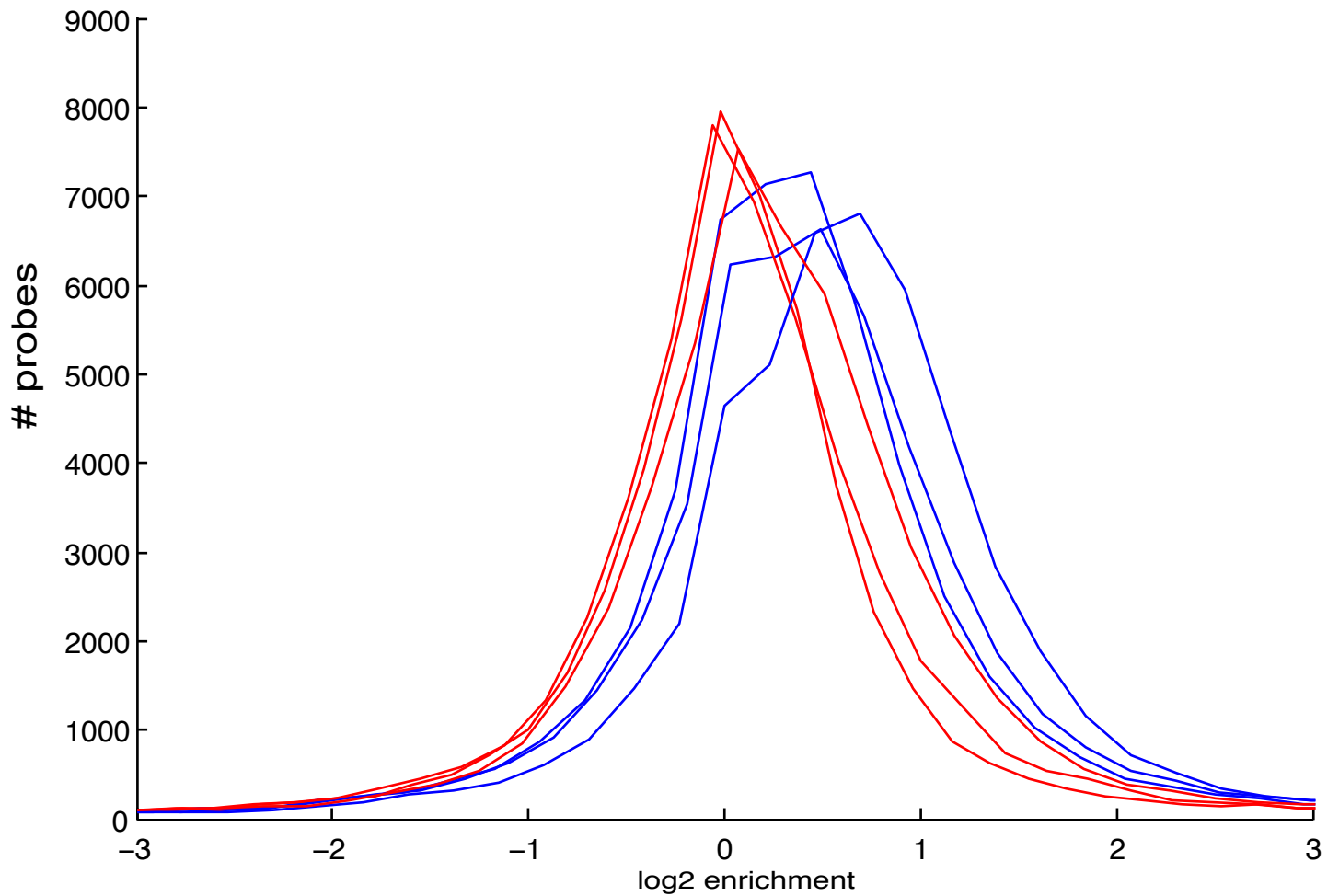


Figure S6

A

HP1 Signal:

Chr2L

- mean = -0.0085
- var = 0.11
- mean = 0.0025
- var = 0.05

Chr2L Pericentric Region

- mean = 0.94
- var = 0.22
- mean = 0.52
- var = 0.16

Chr4

- mean = 1
- var = 0.25
- mean = 0.42
- var = 0.13

10 day (blue line)

40 day (red line)

B

HP1 enrichment in pericentric regions + chr4 from each individual replicate  
pvalue (10day v. 40day term in 2 way anova) = 0.

# probes

log2 enrichment

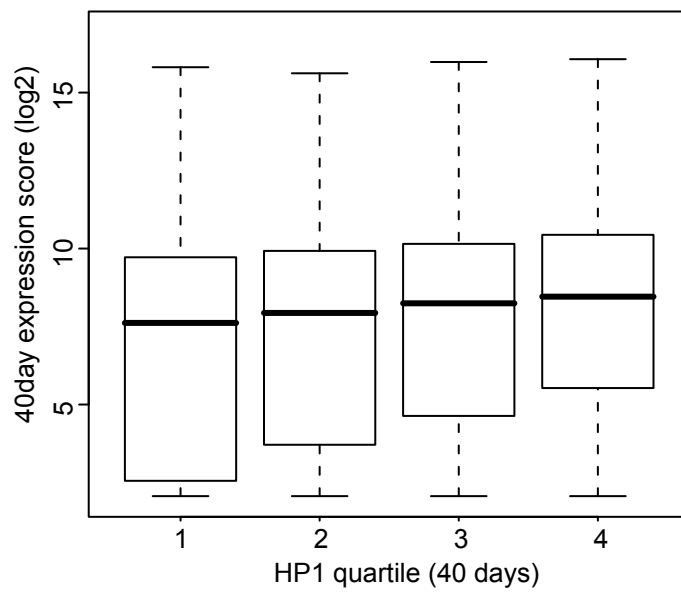
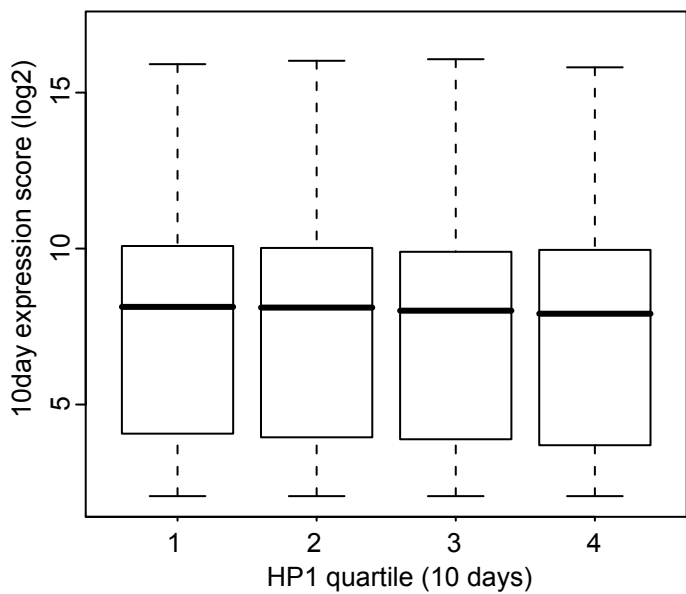
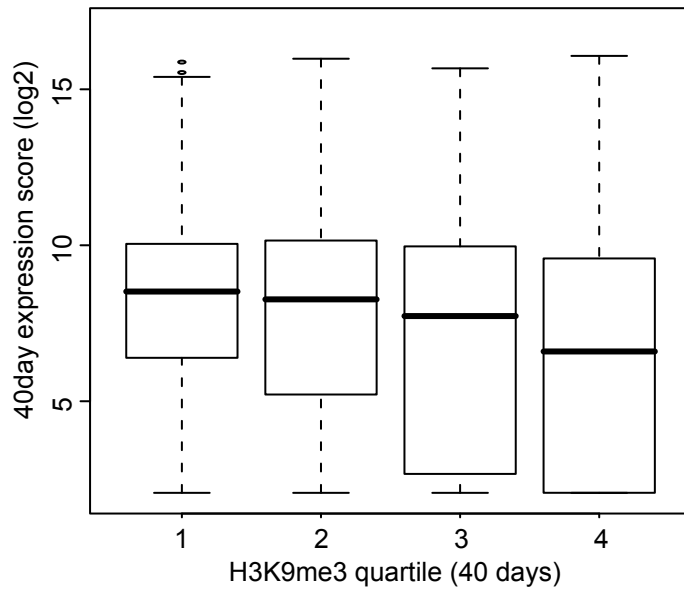
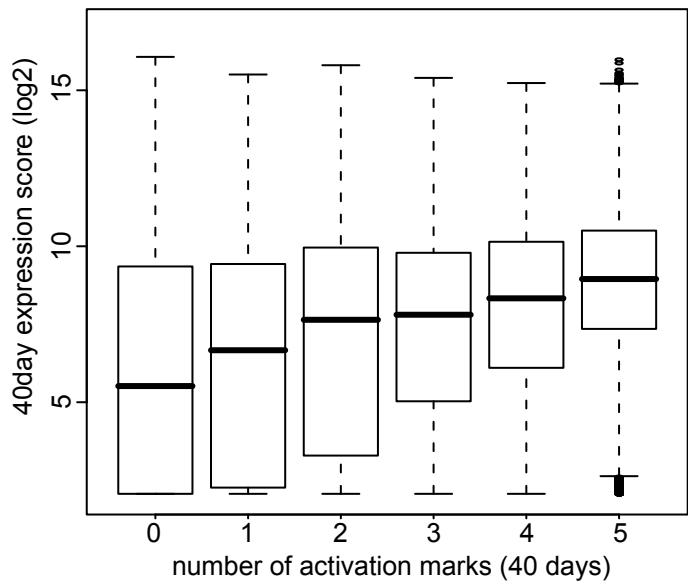
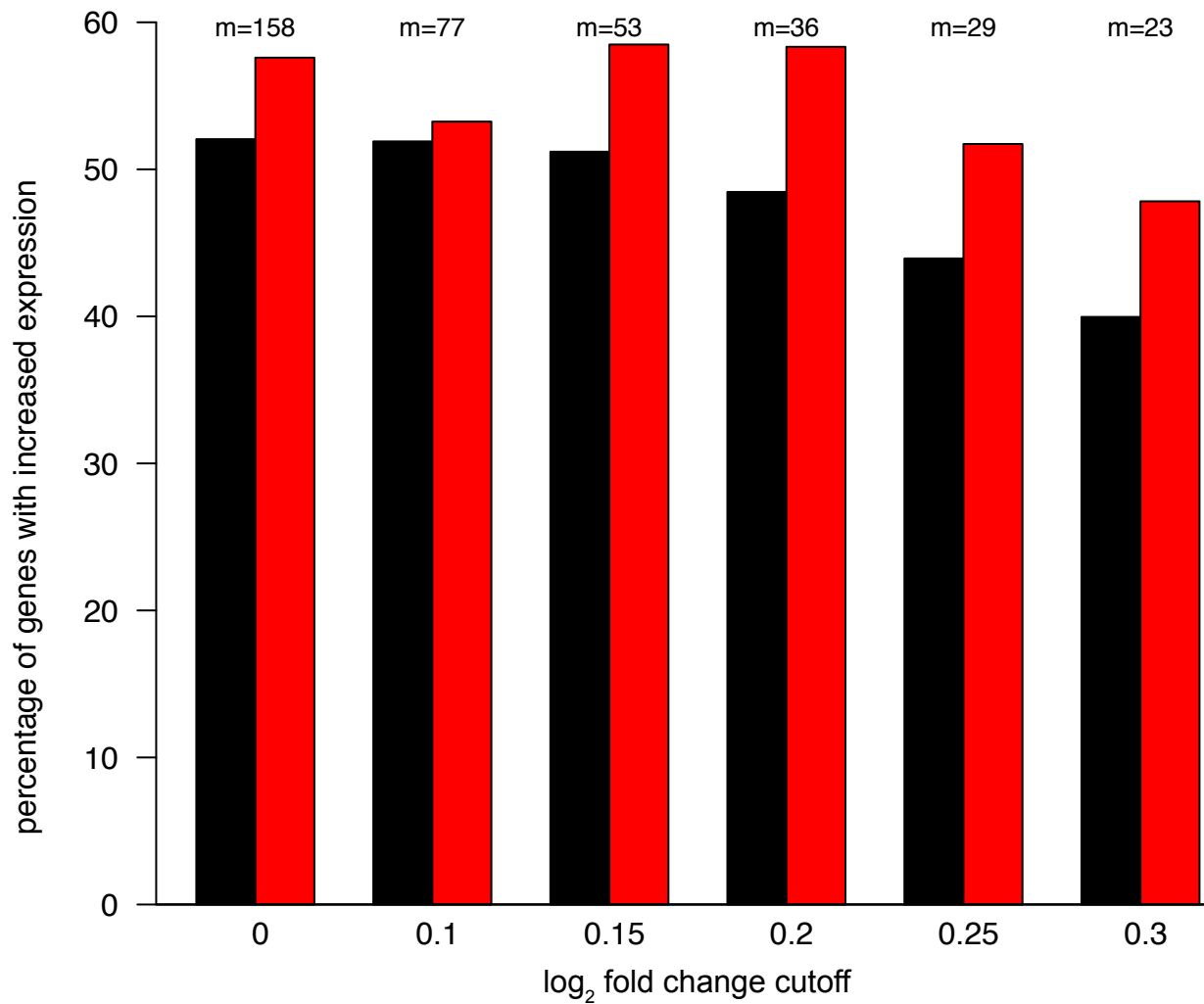


Figure S7

Figure S8



- all genes
- genes losing H3K9me3 marks with age (changing by at least 3 quartiles)

m is the number of genes that meet both the foldchange restriction and lose H3K9me3 by at least 3 quartiles (See supplemental methods)