

# Extended Data Figure 1

Neural  
Progenitor

Rampage

RNA-seq

Thyroid  
Gland

Rampage

RNA-seq

Lower  
Leg Skin

Rampage

RNA-seq

Fetal  
Liver

Rampage

RNA-seq

Frontal  
Cortex

Rampage

RNA-seq

Temporal  
Lobe

Rampage

RNA-seq

Genes

GENCODE

UCSC

1 kb hg19

41,488,000

41,488,500

41,489,000

41,489,500

0.46

3.53

1.59

2.27

1.88

5.08

1.99

3.76

0.85

1.15

0.60

1.13

*EP300*

*MIR1281*

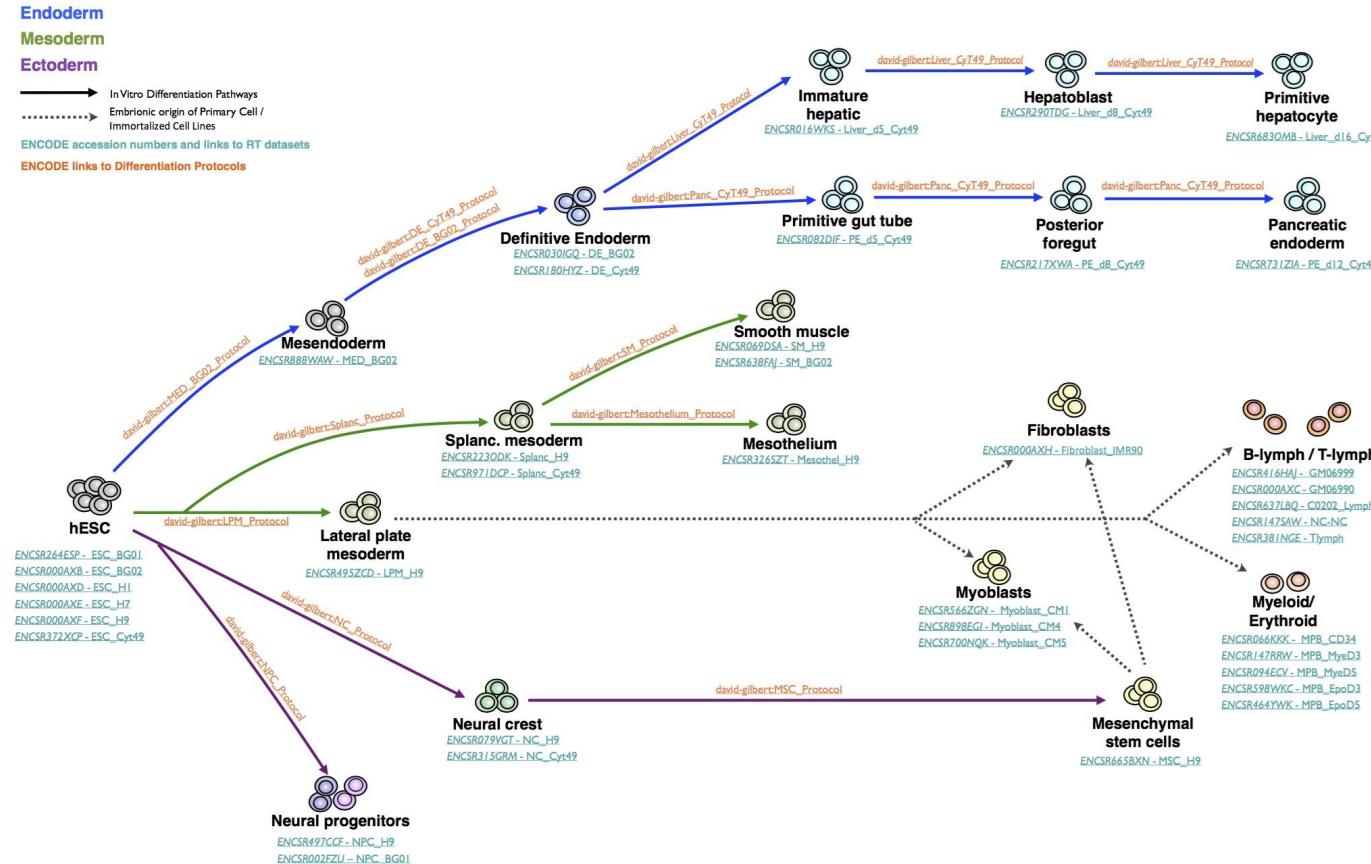
*EP300*

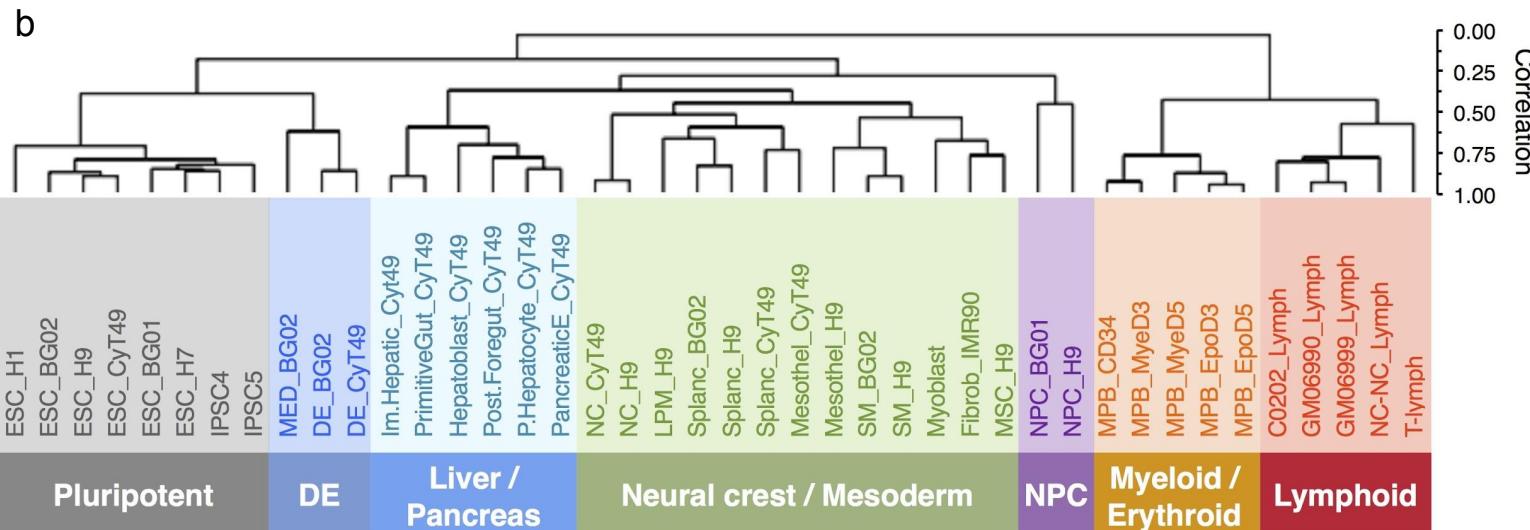
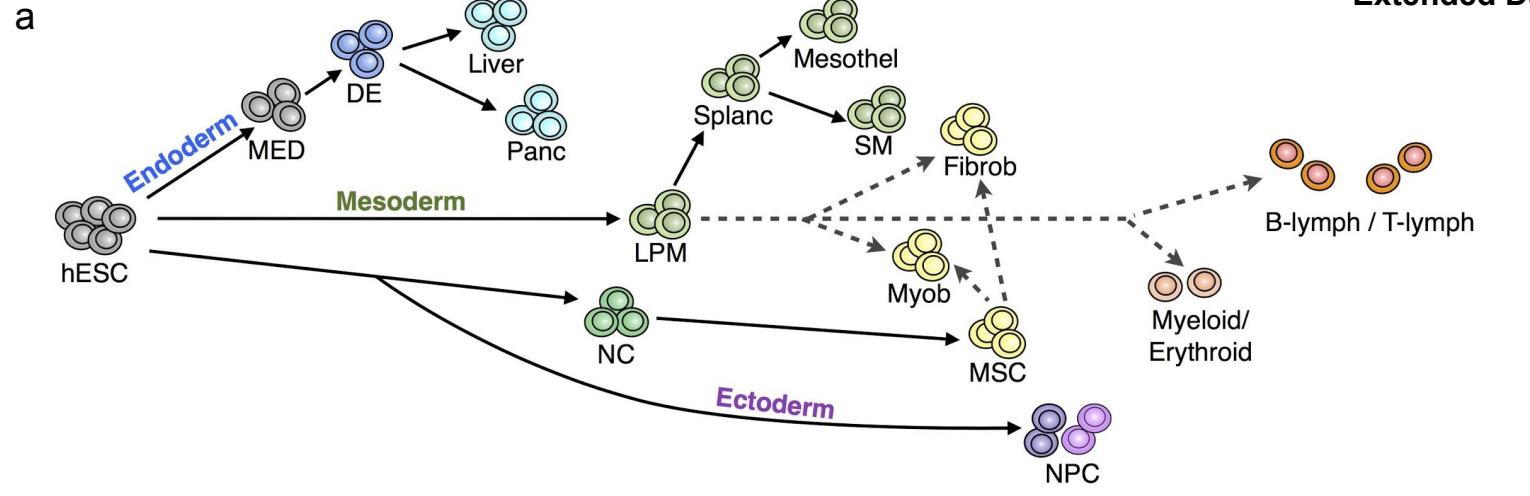
*MIR1281*

hg19

# Replication Timing (RT) datasets of distinct human cell types

Extended Data Figure 2





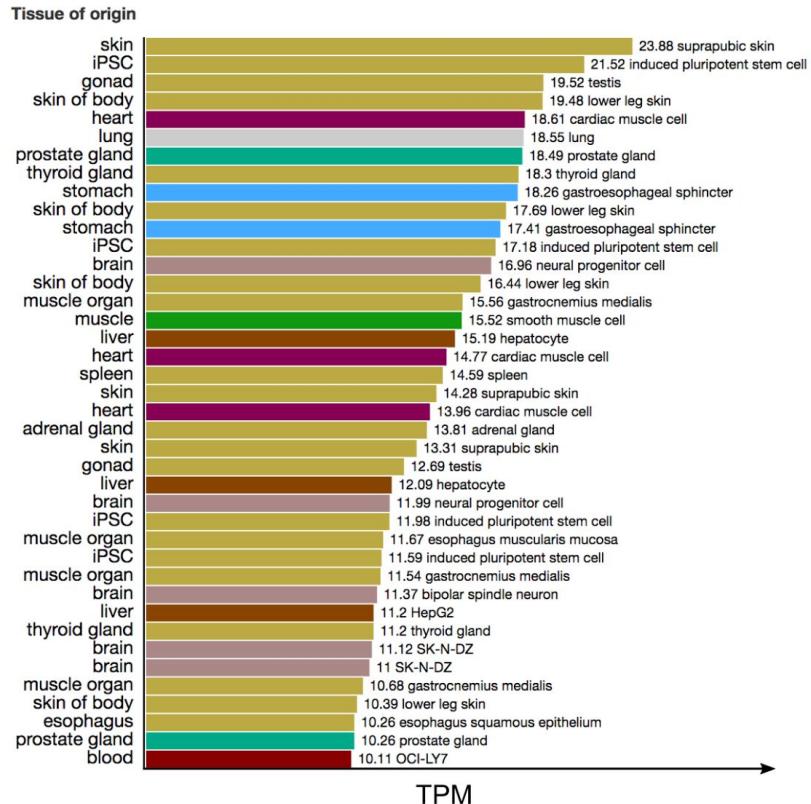
a

## Gene Expression - RNA-seq

*EP300*

ENSG00000100393.9 - chr22:41,487,790-41,576,081

Top 40 Experiments



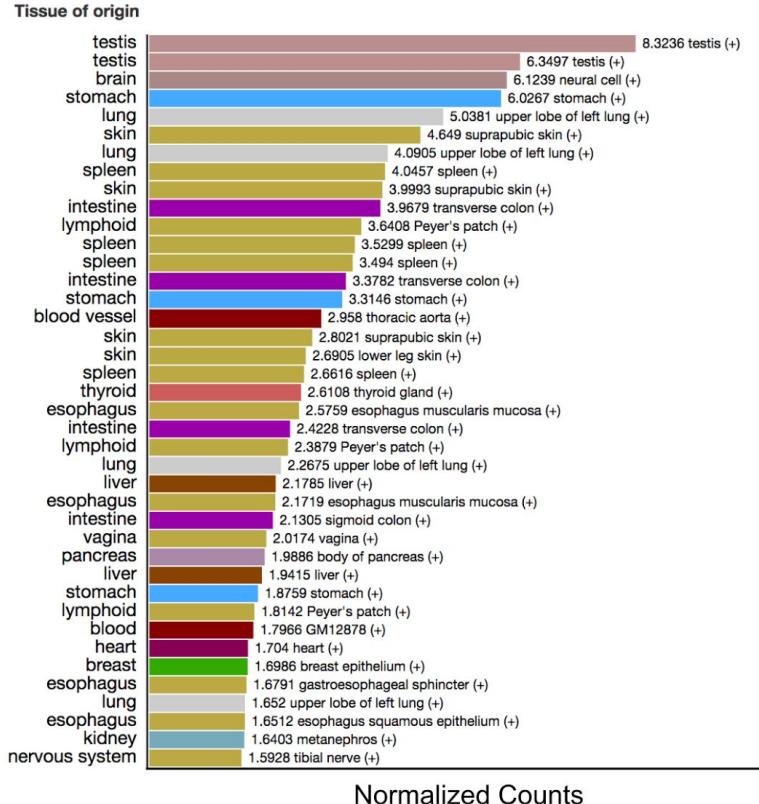
b

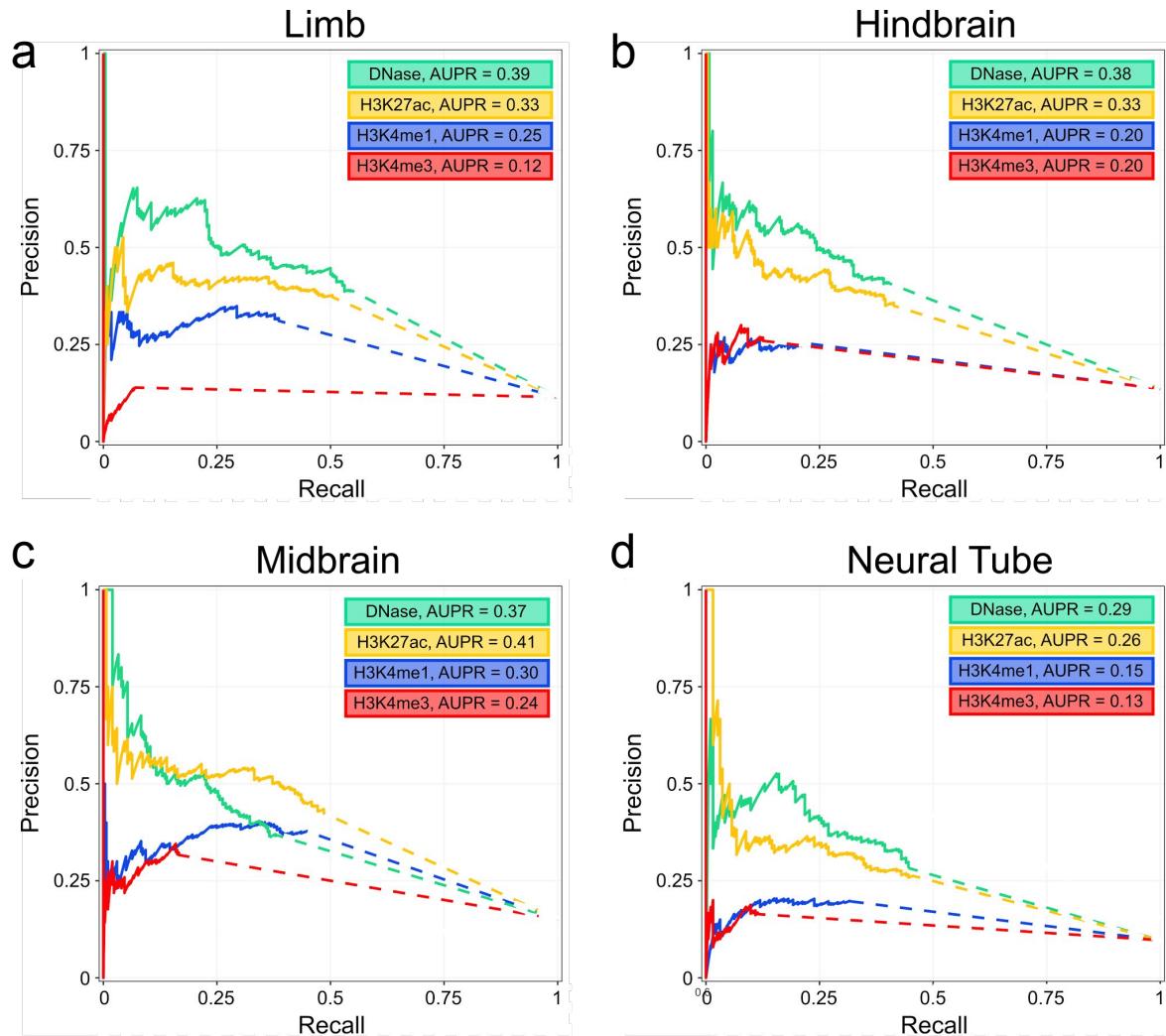
## Transcription Quantification - RAMPAGE

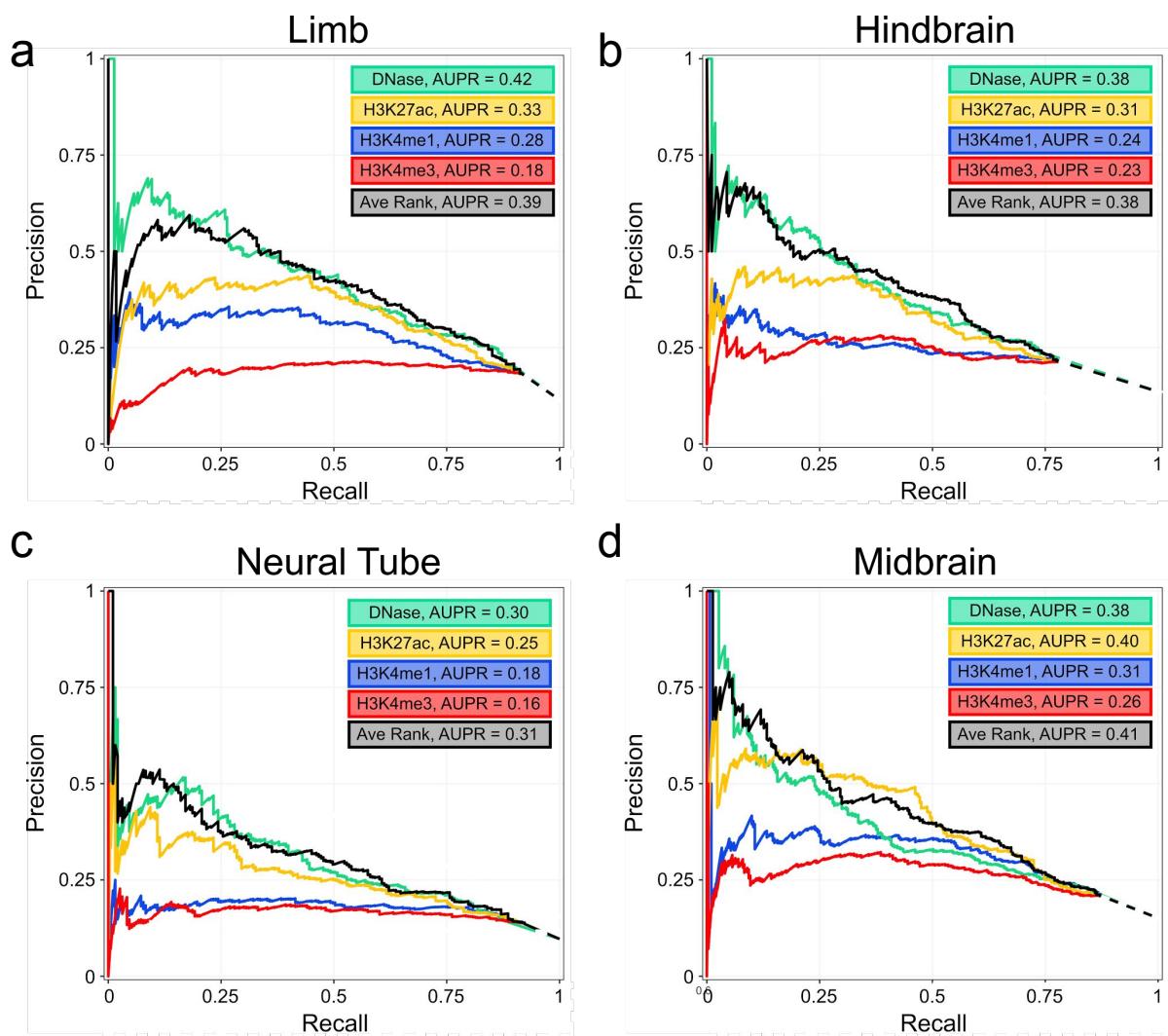
*EP300*

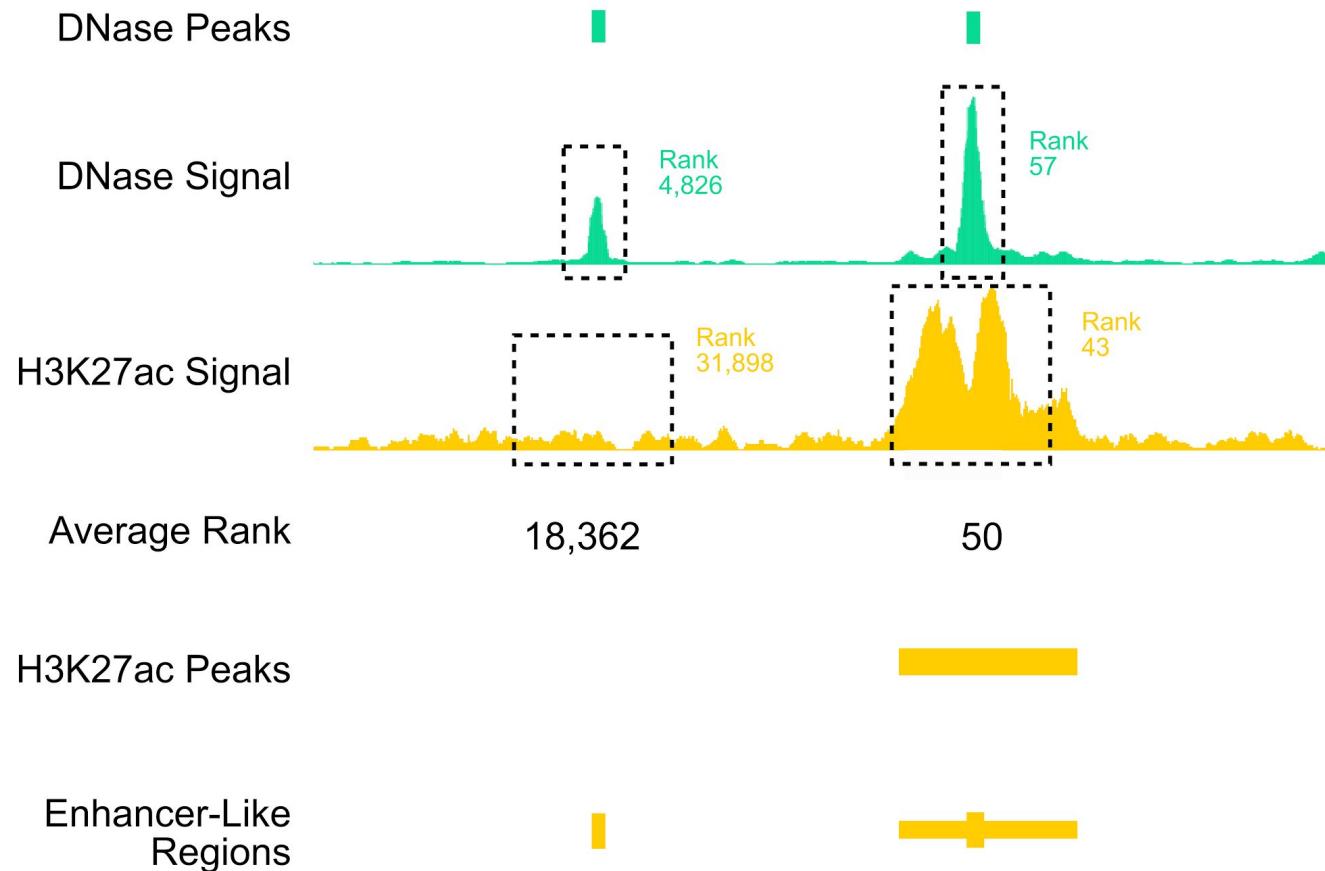
ENST00000263253.7 - chr22:41,487,790

Top 40 Experiments

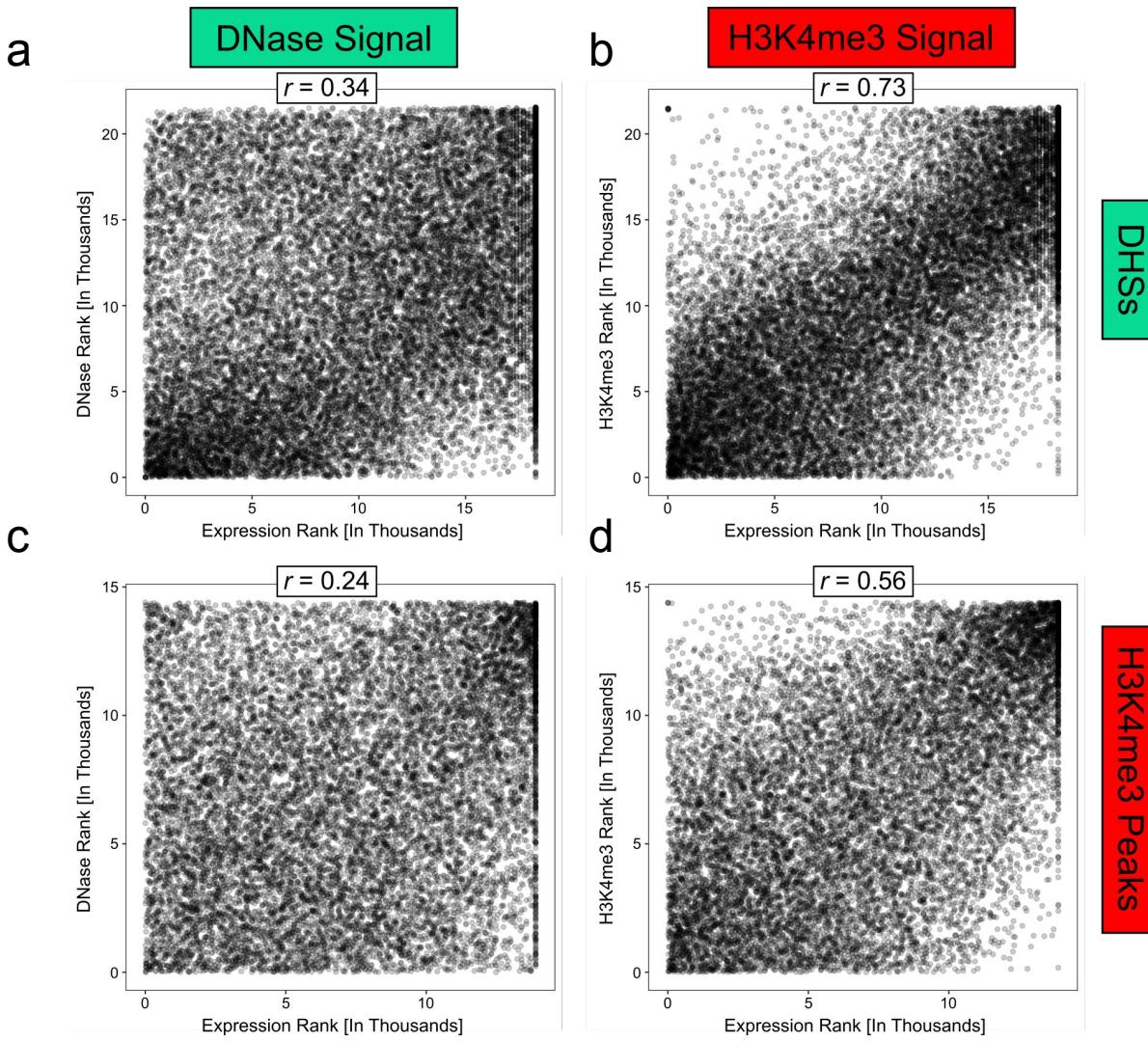


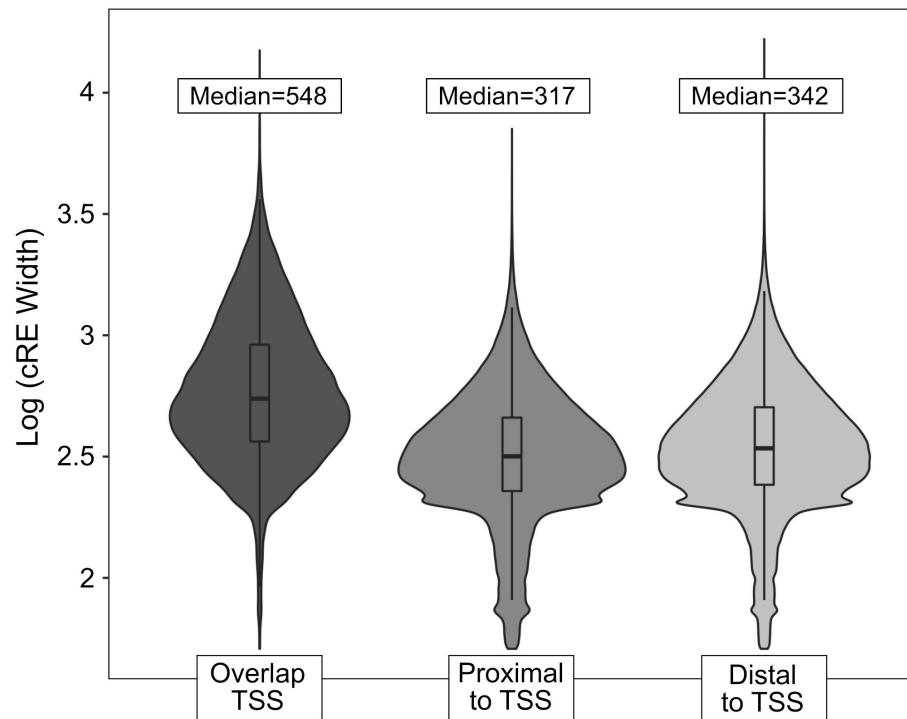
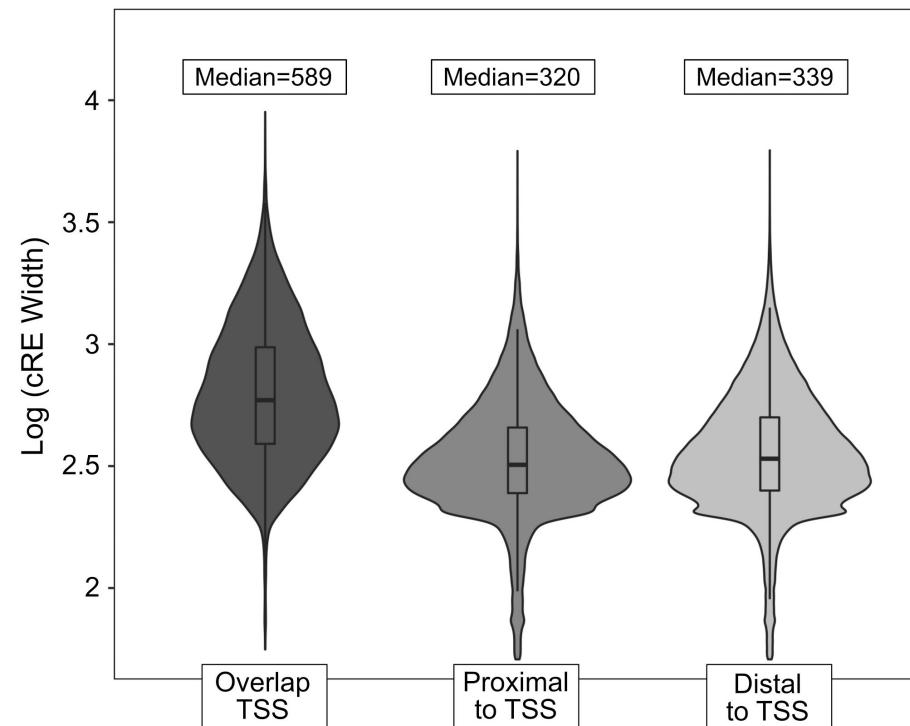


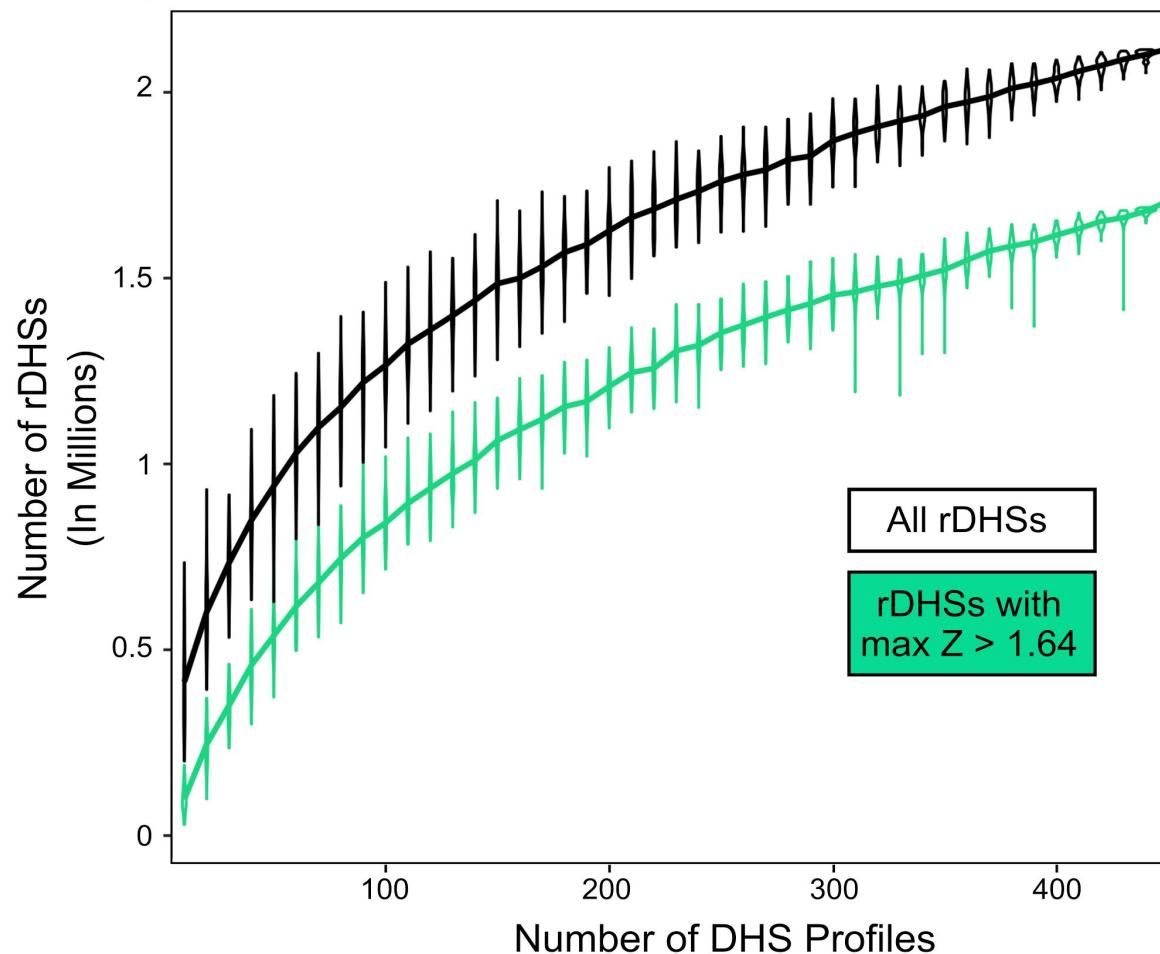




## Extended Data Figure 8



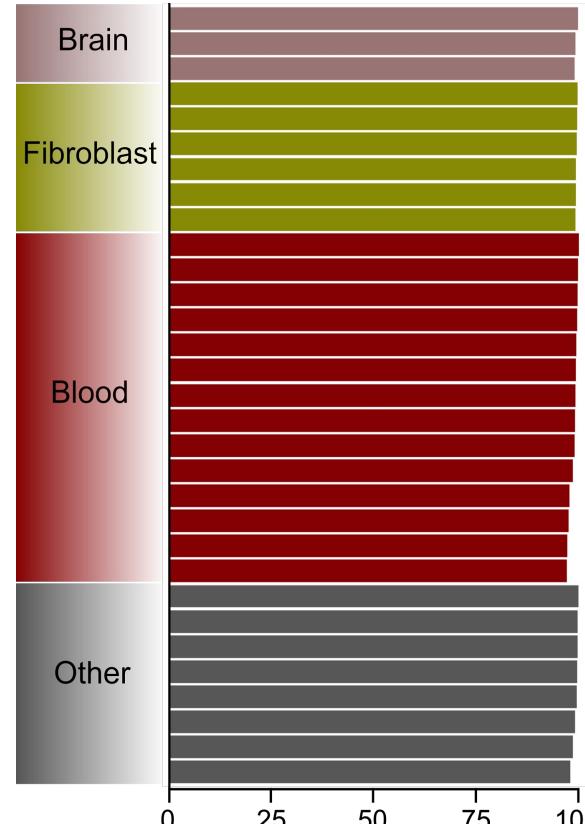
**a****Human (hg19)****b****Mouse (mm10)**



# Extended Data Figure 11

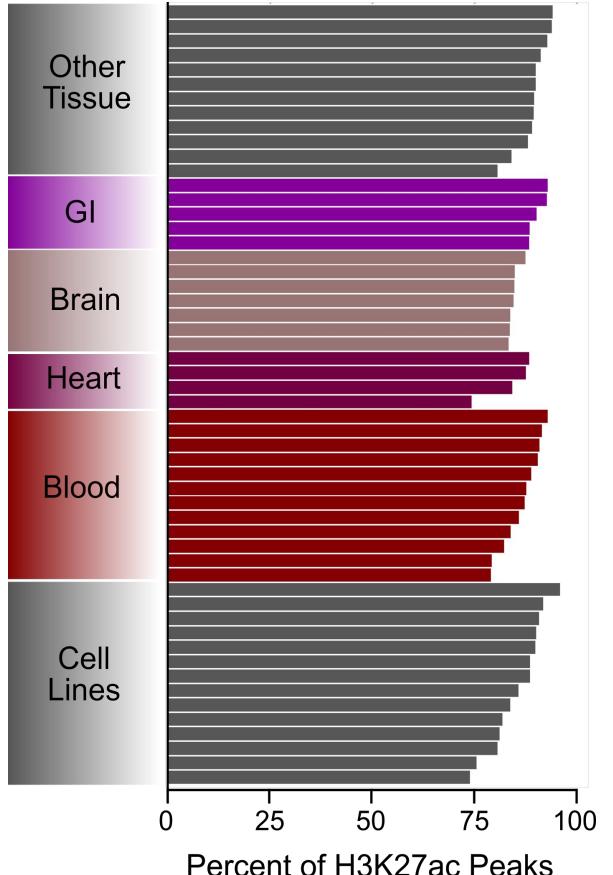
## hg19 CTCF

C



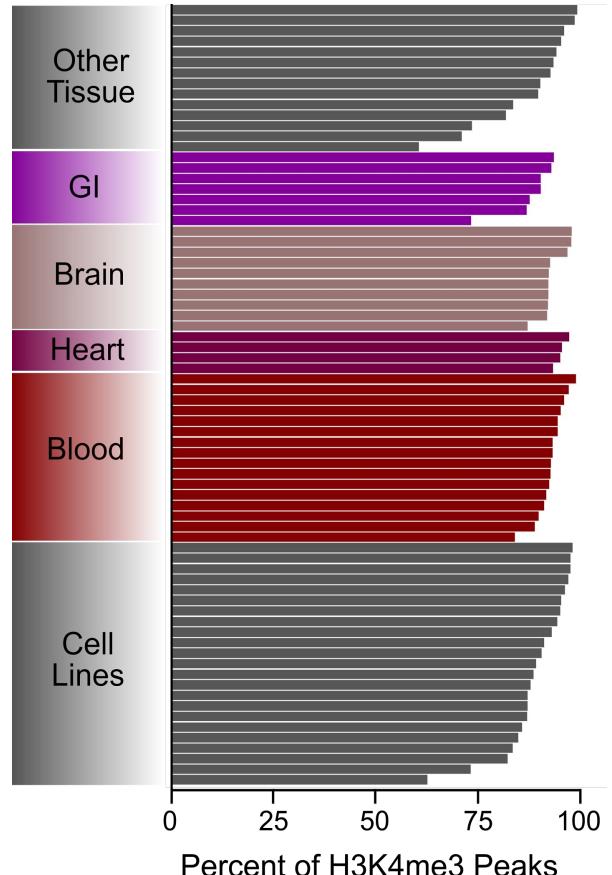
## hg19 H3K27ac

b



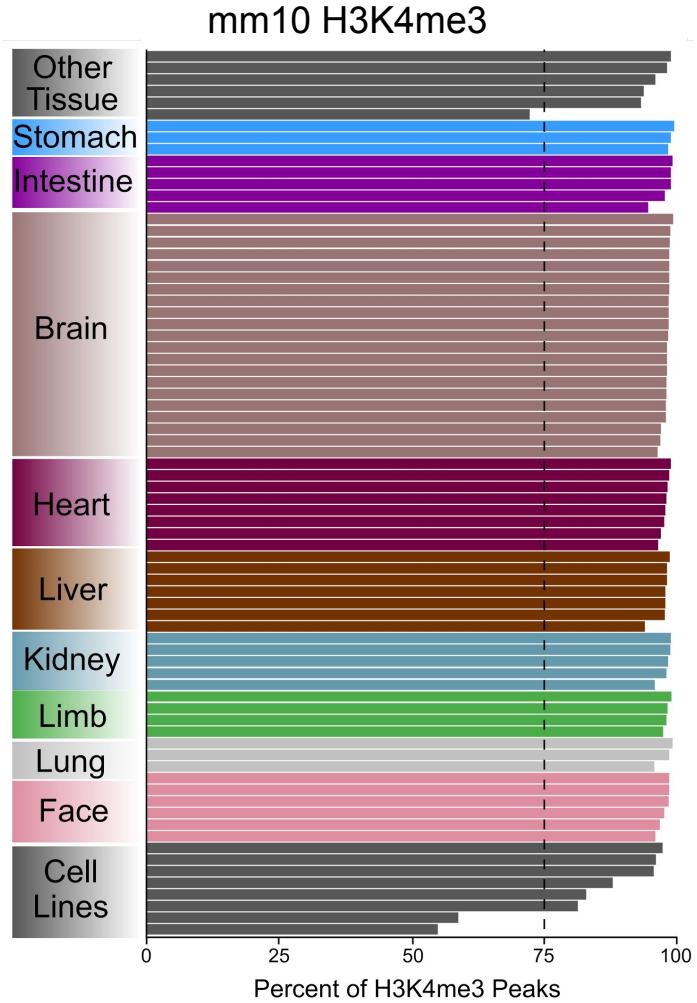
## hg19 H3K4me3

a

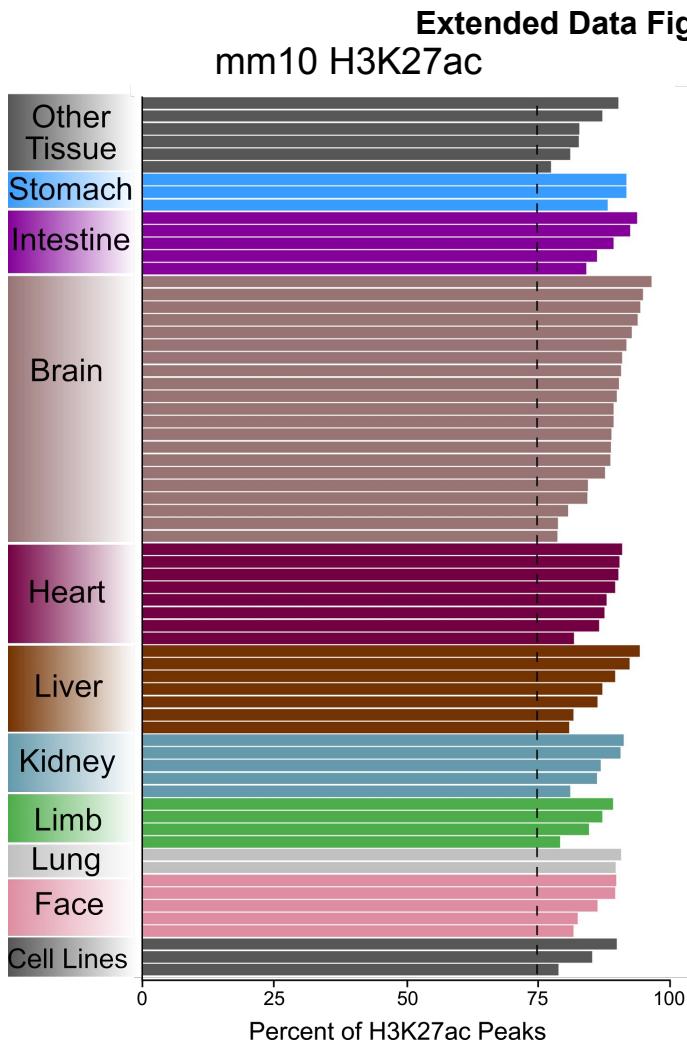


# Extended Data Figure 12

a

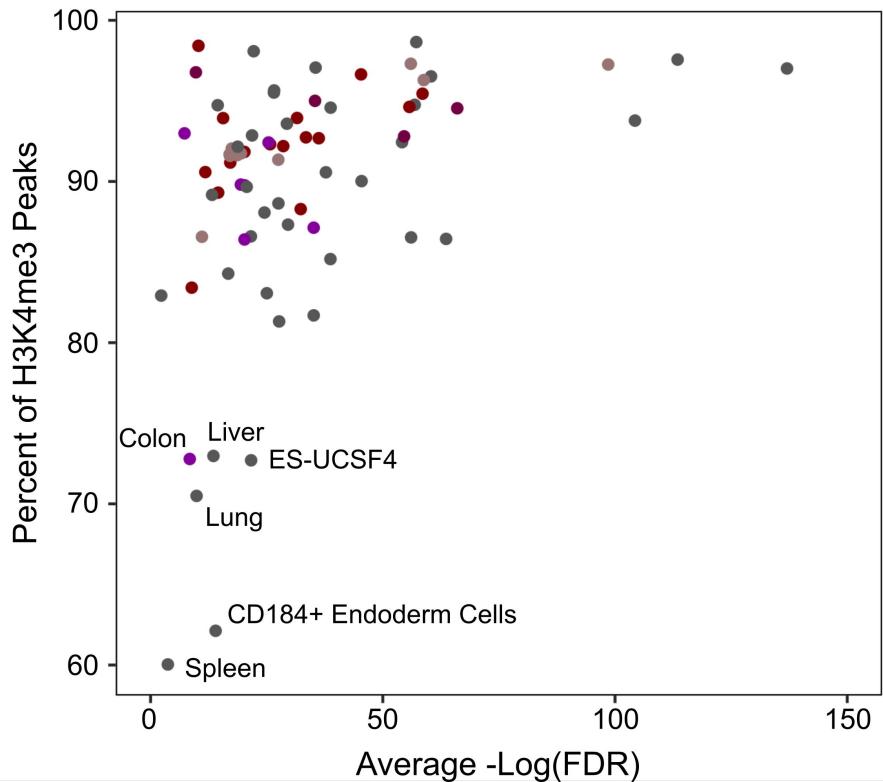


b

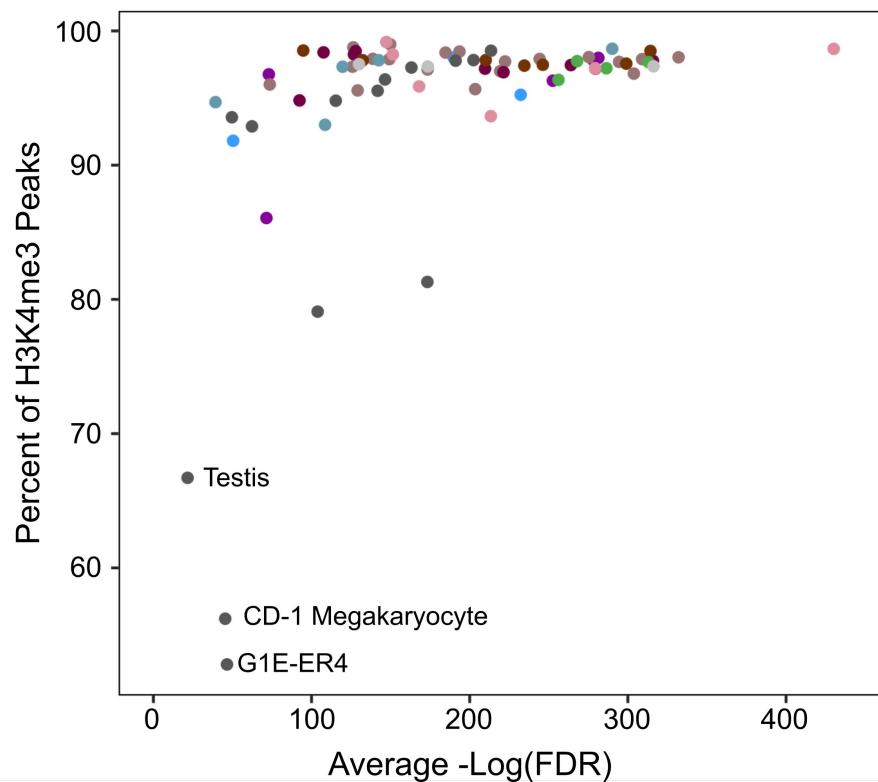


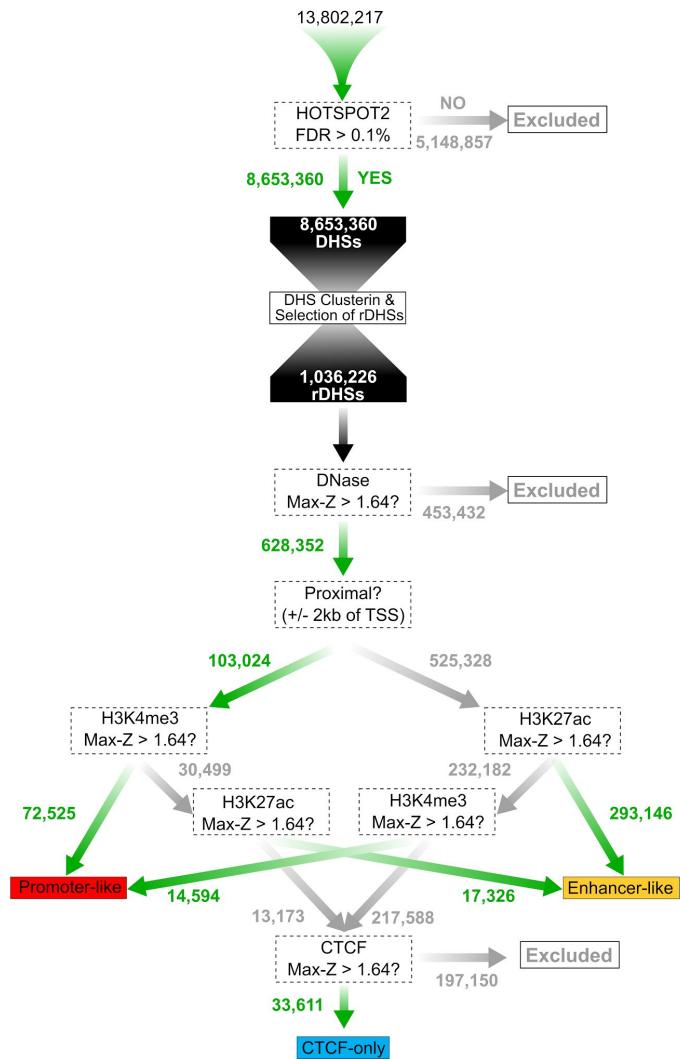
**a**

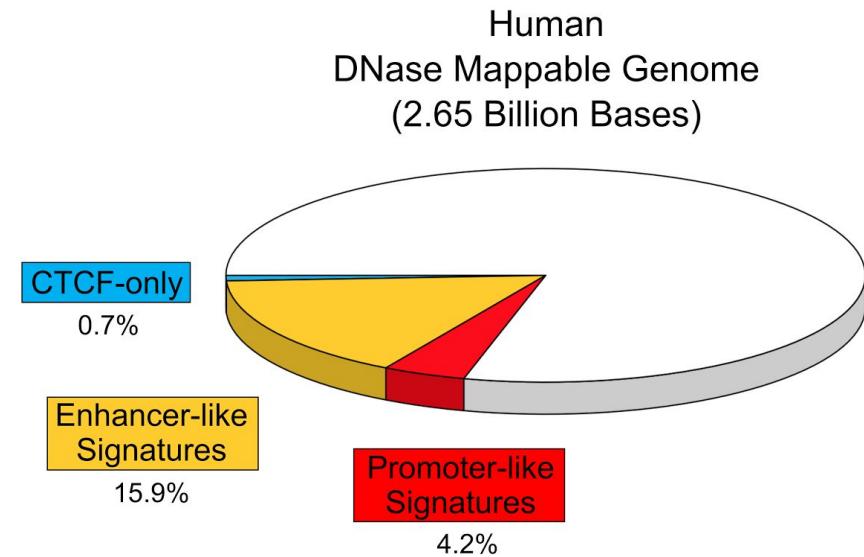
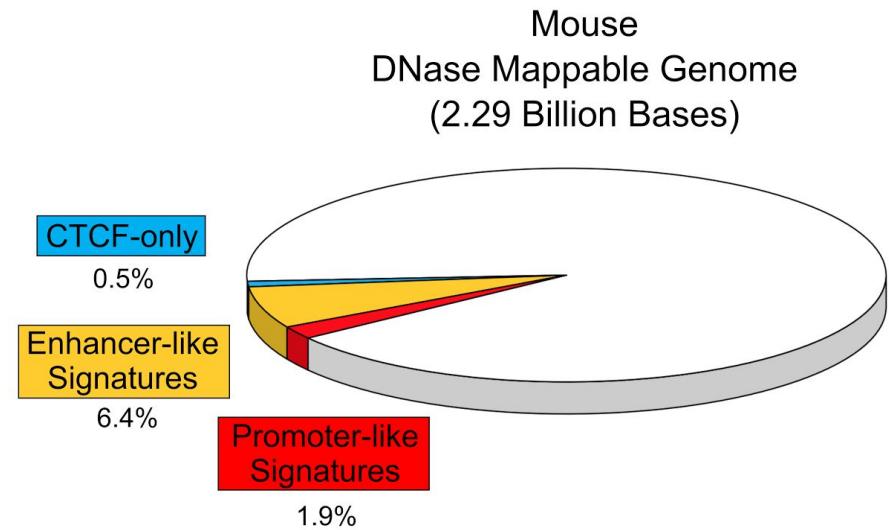
hg19

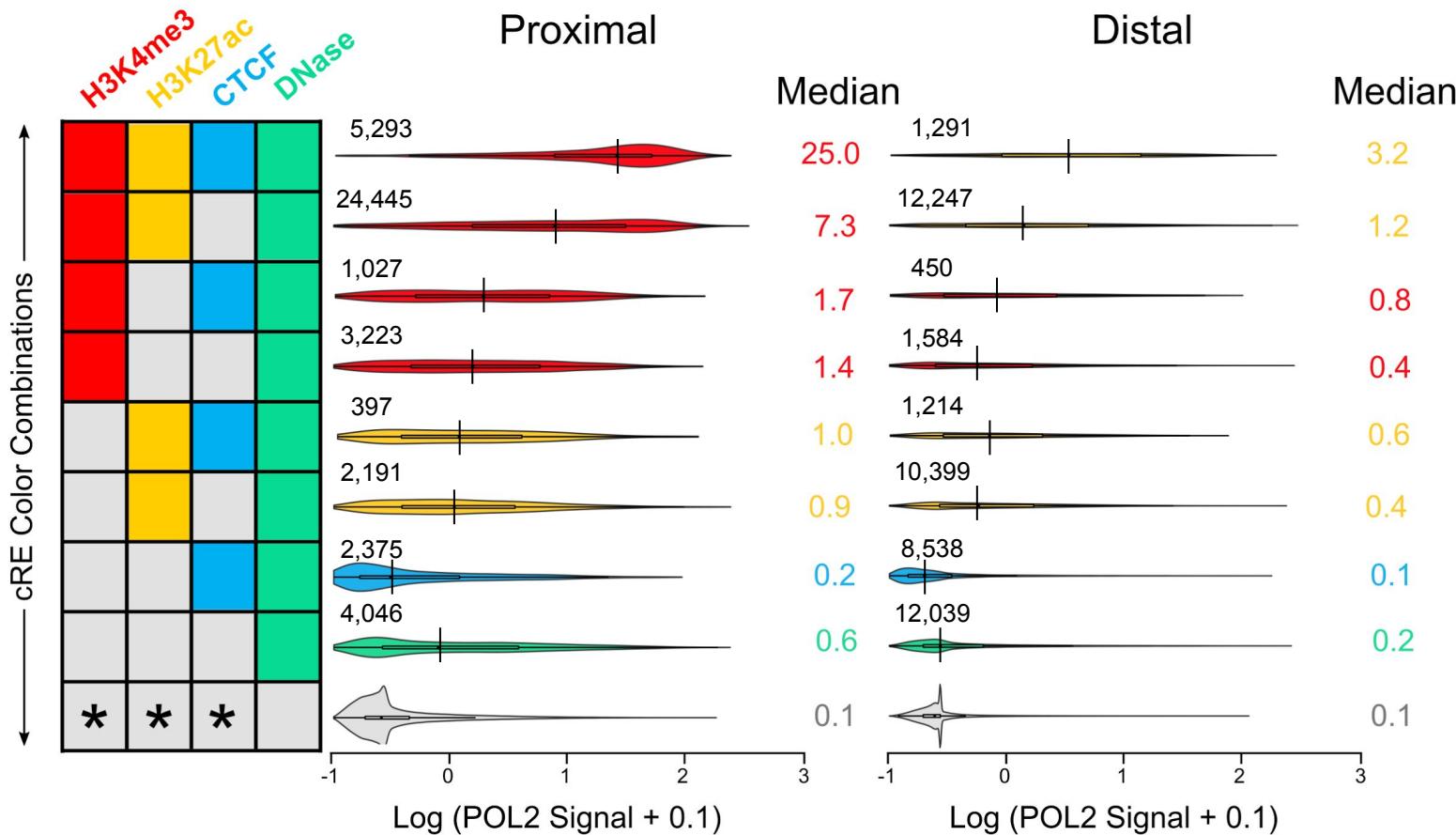
**b**

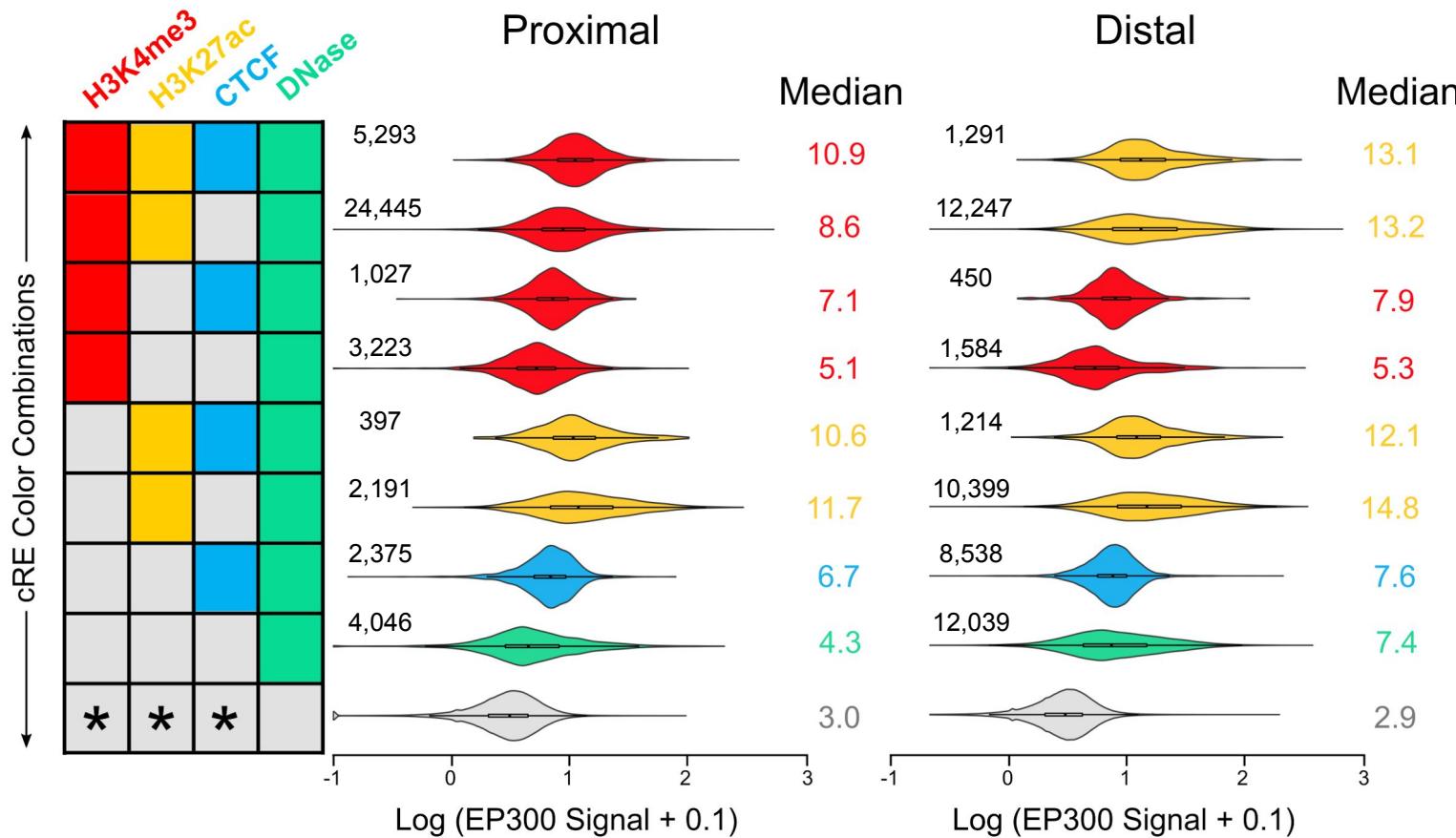
mm10

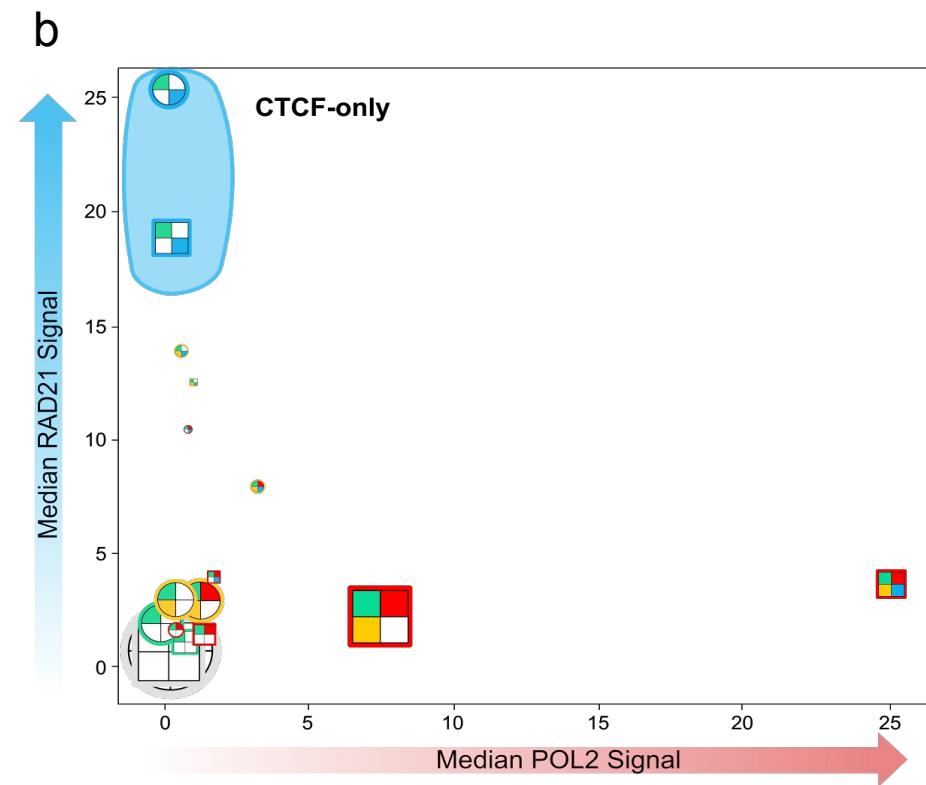
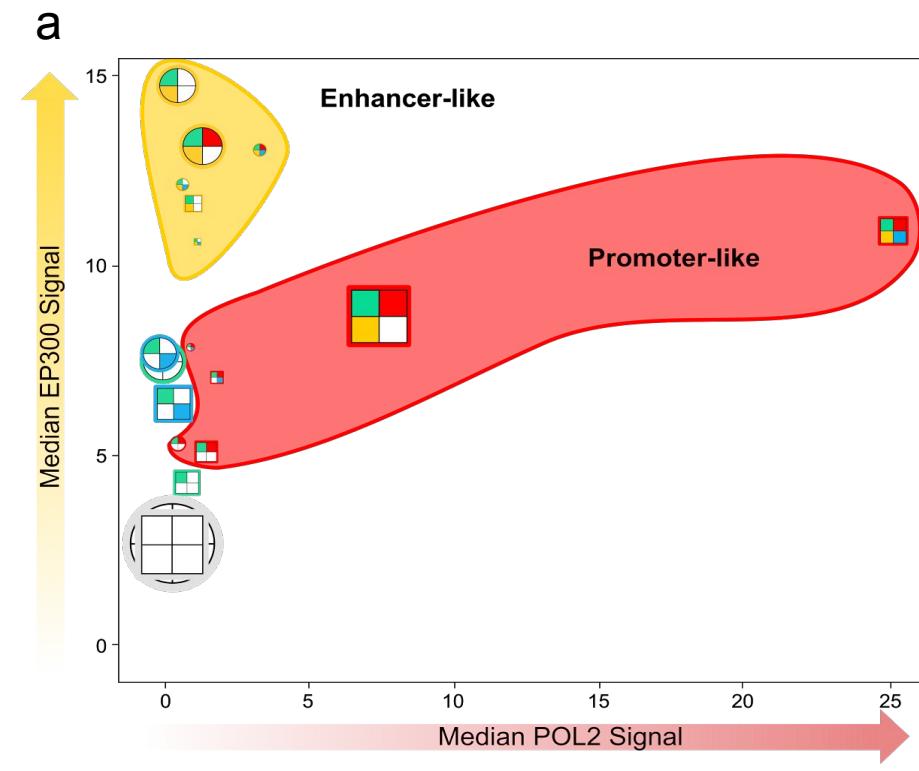


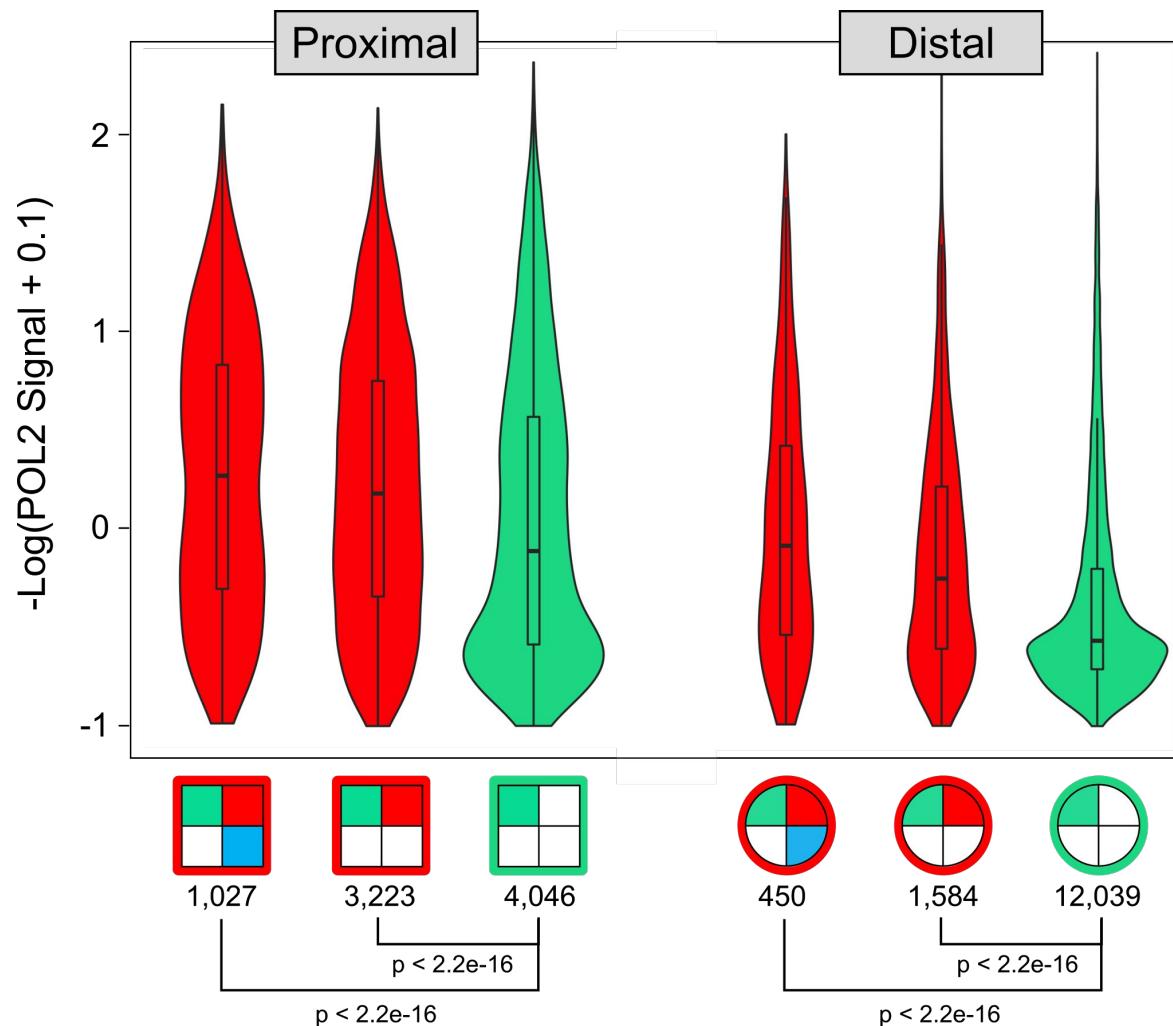


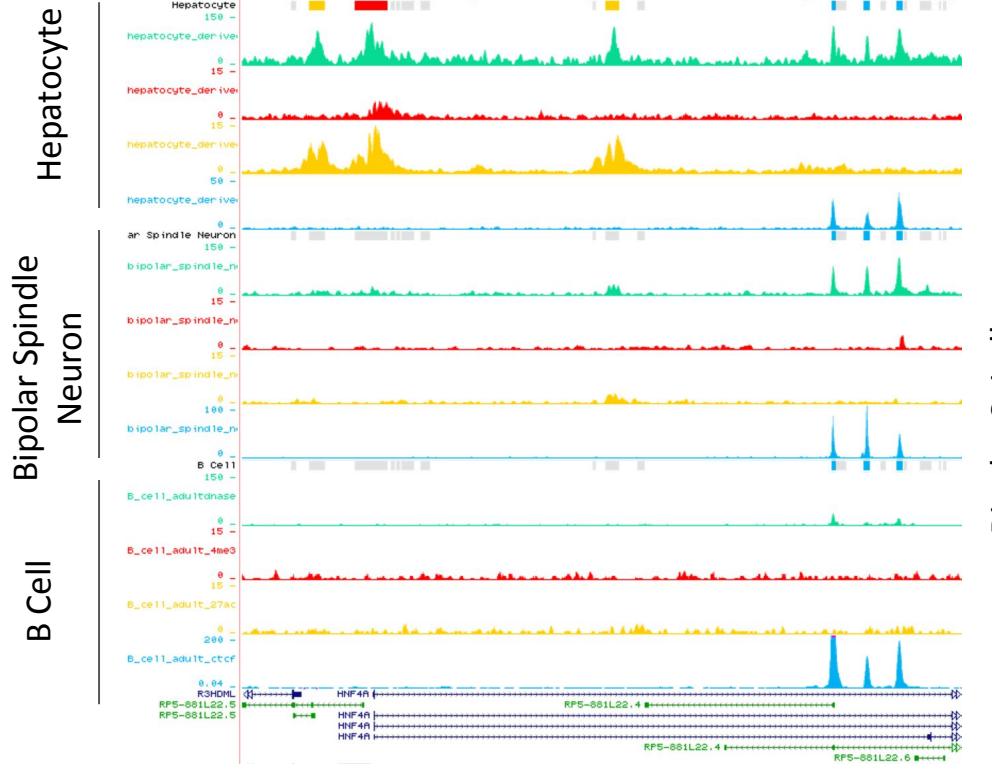
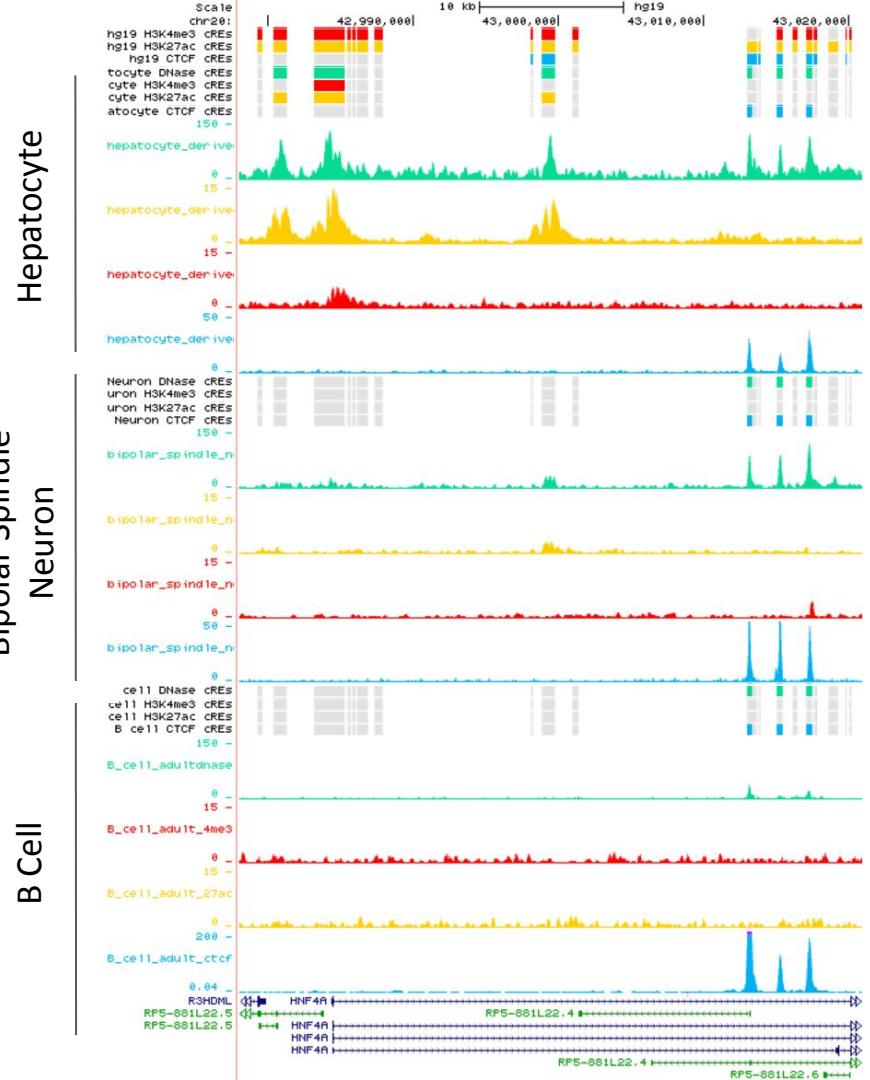
**a****b**





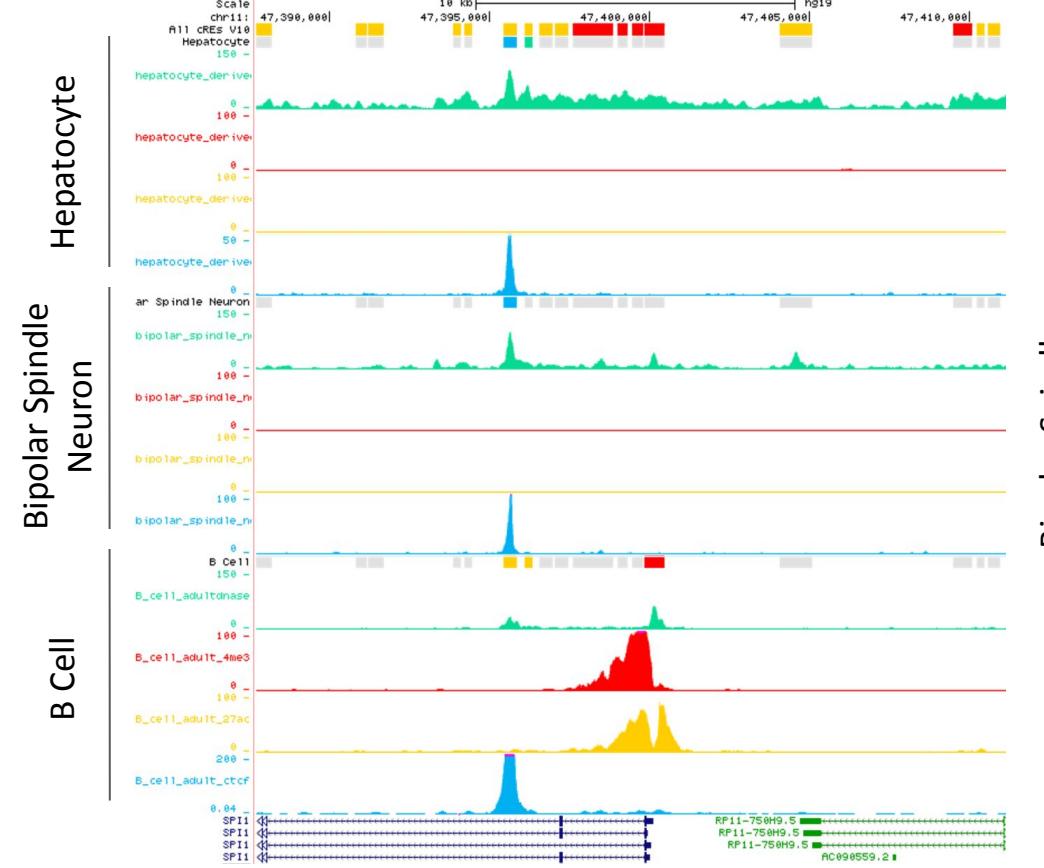




**a****b****Extended Data Figure 20**

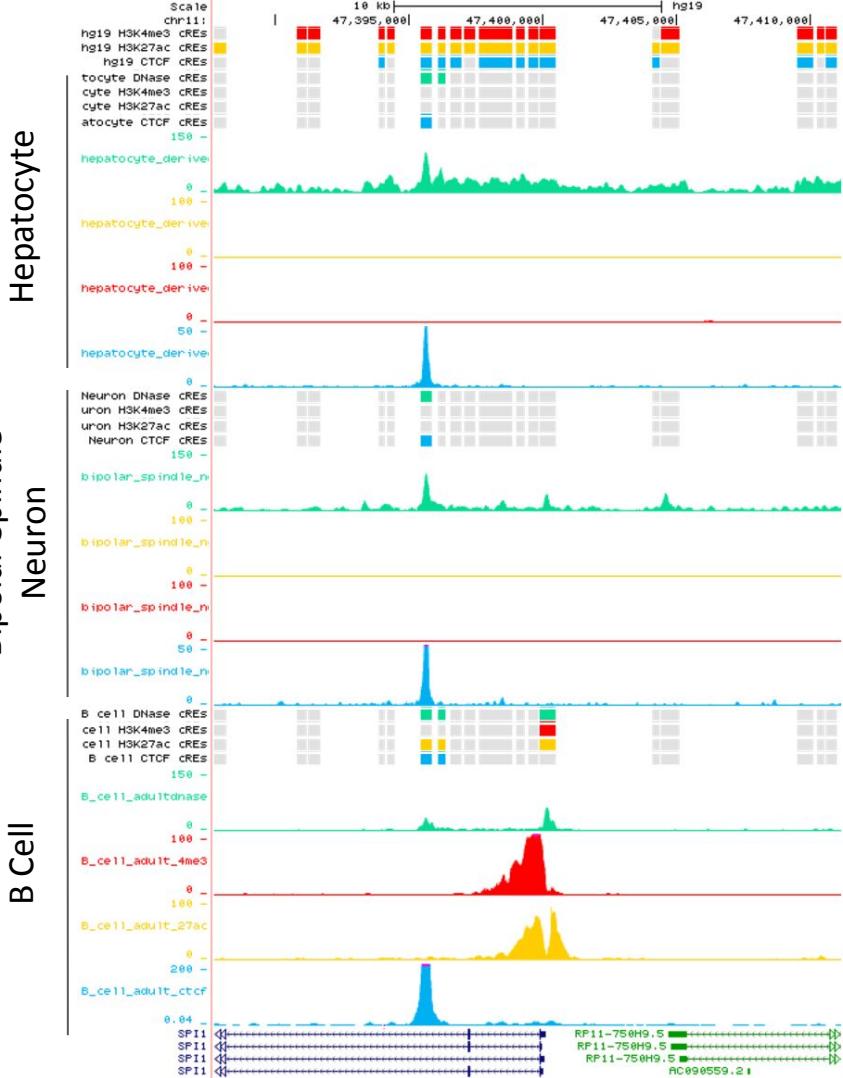
a

Bipolar Spindle  
Neuron



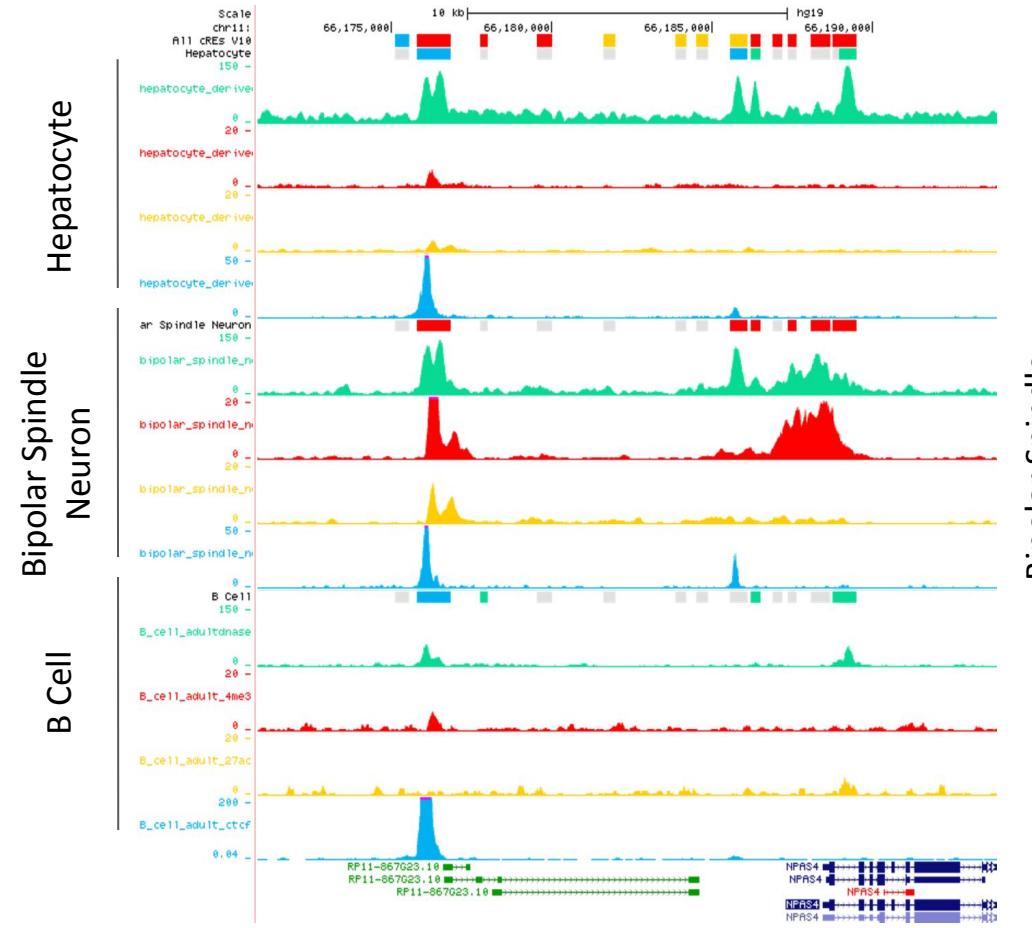
b

Hepatocyte

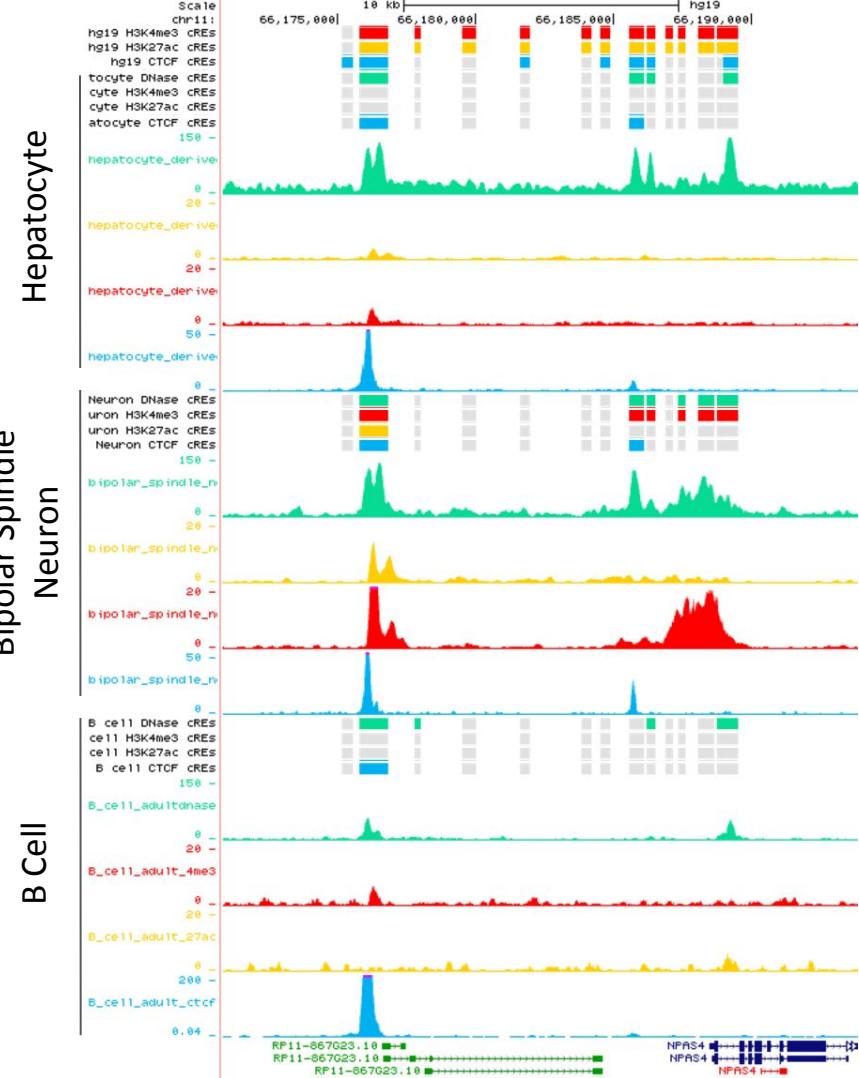


Extended Data Figure 21

a



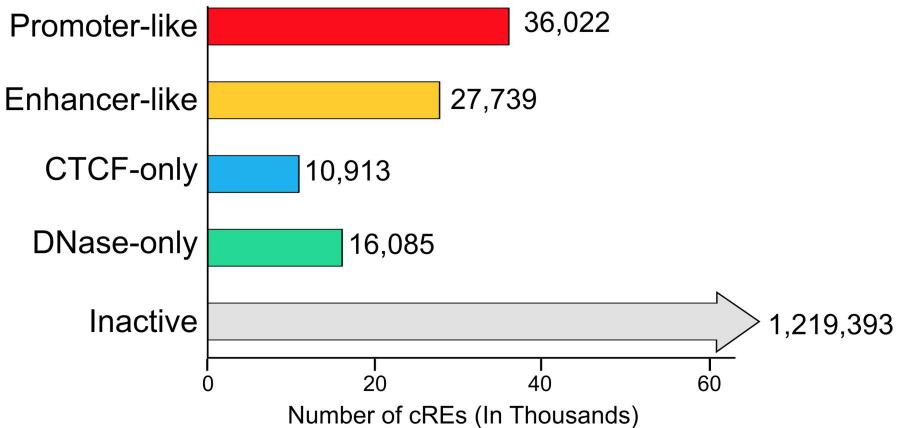
b



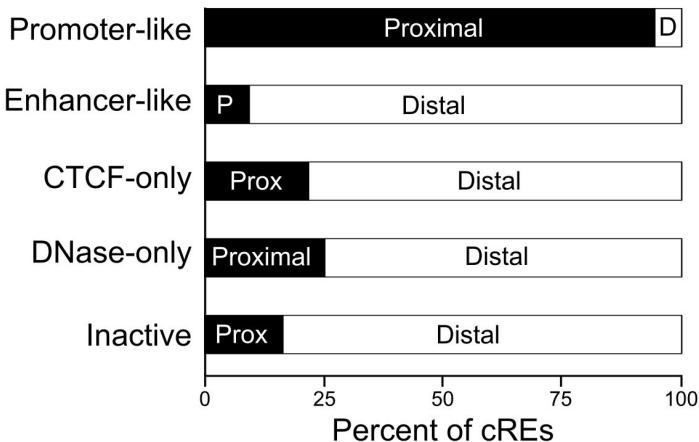
Extended Data Figure 22

## Extended Data Figure 23

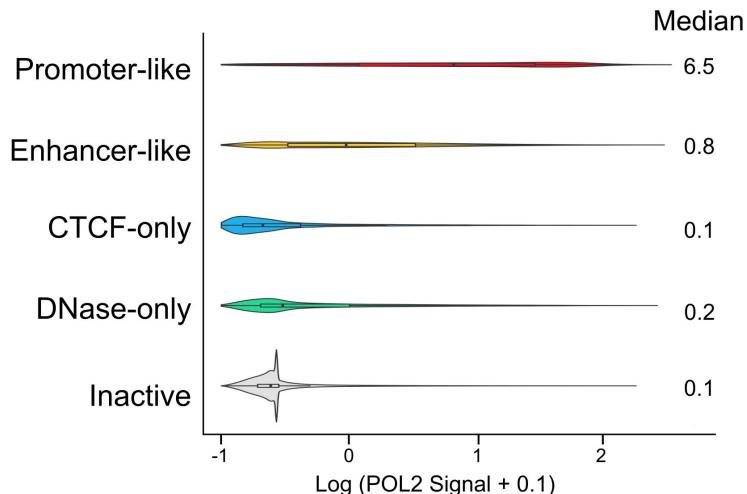
a



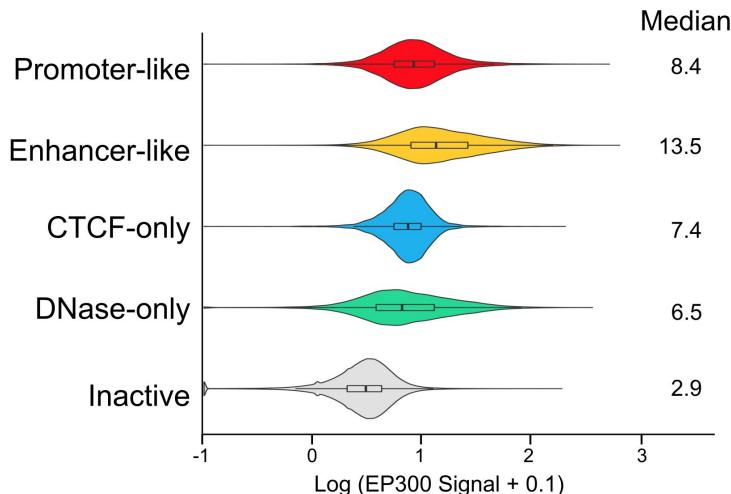
b

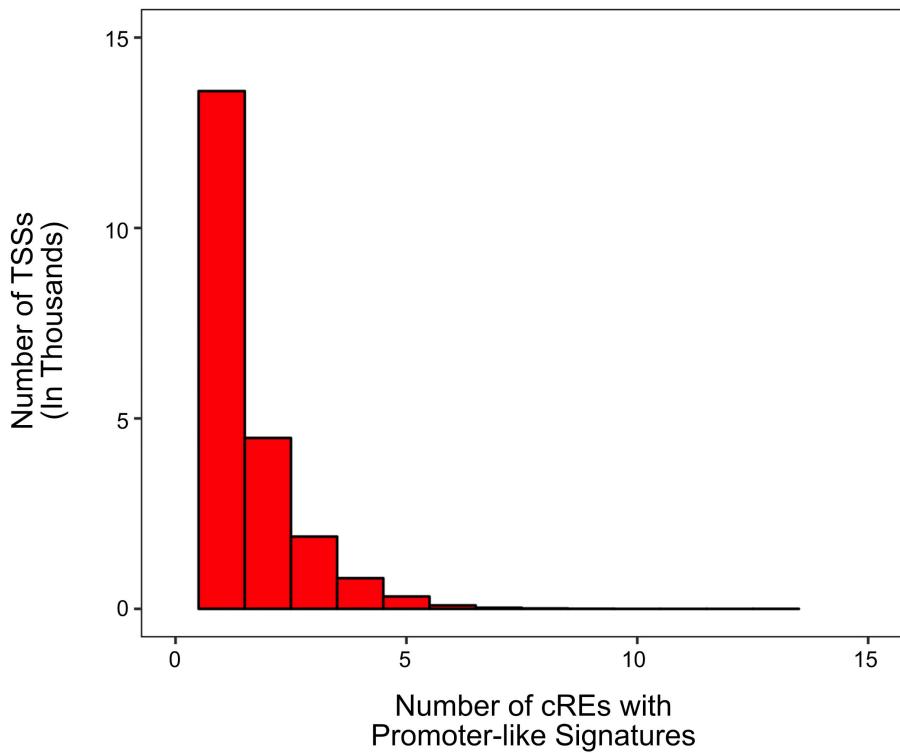
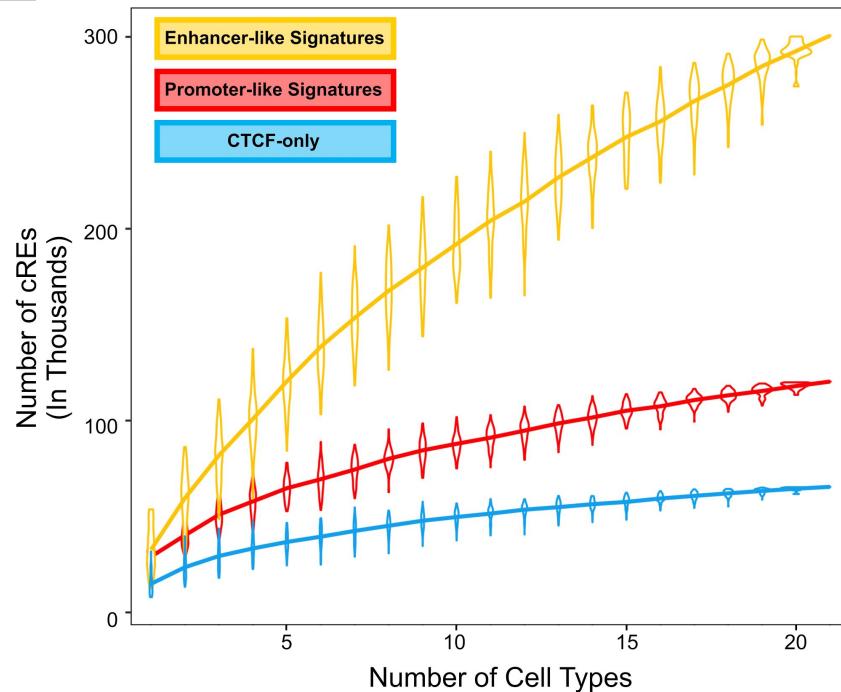


c



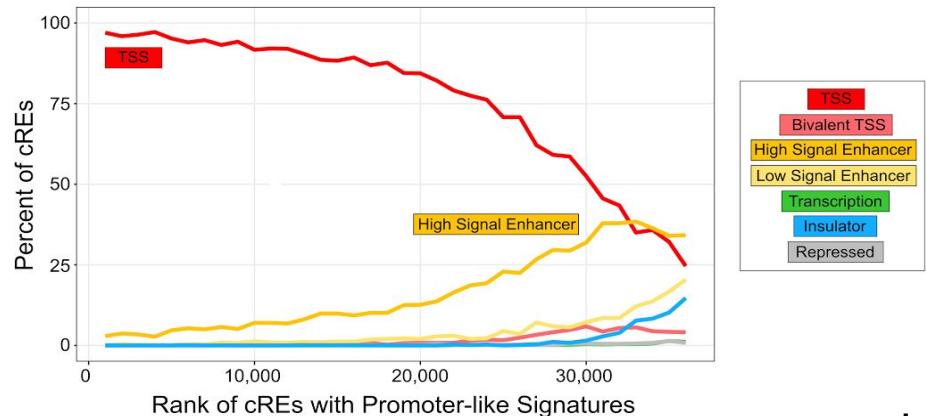
d



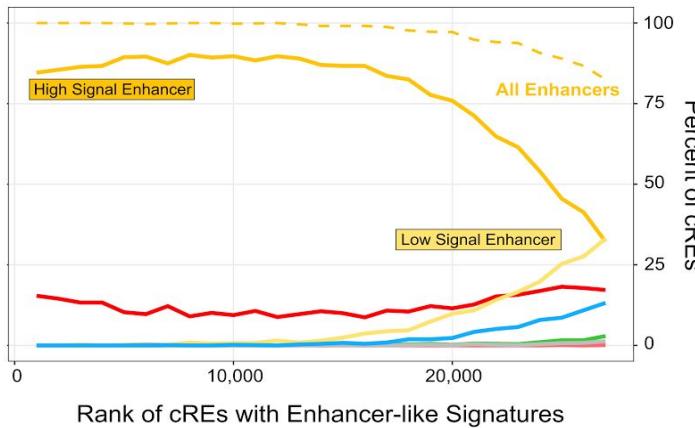
**a****b**

## Extended Data Figure 26

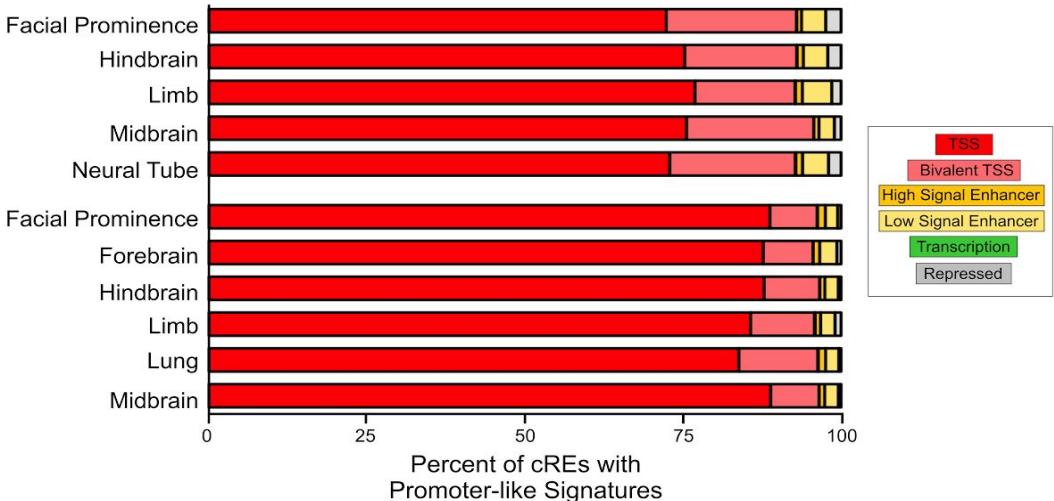
a



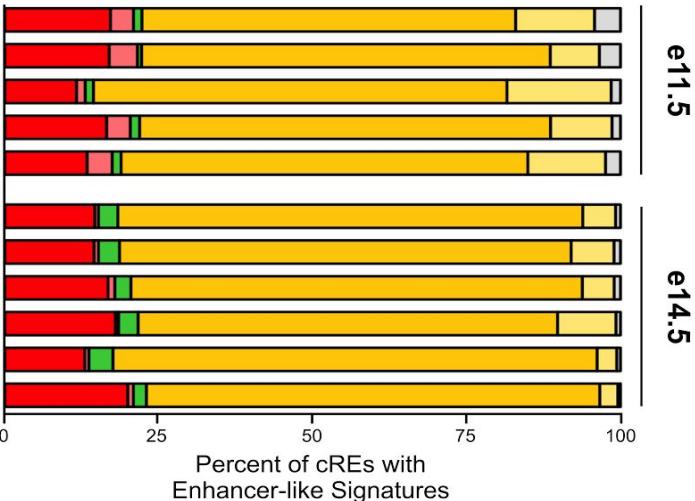
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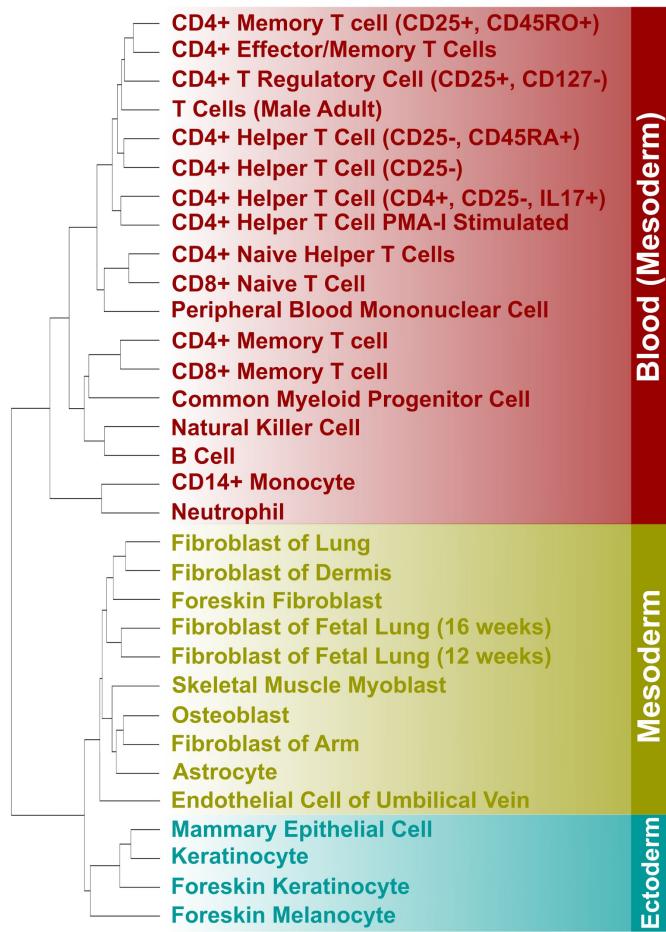
c



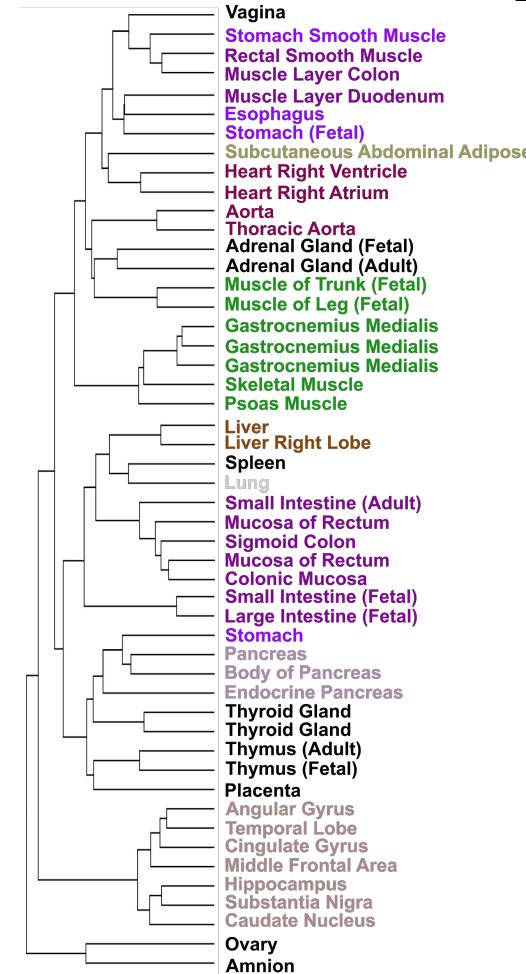
d



a

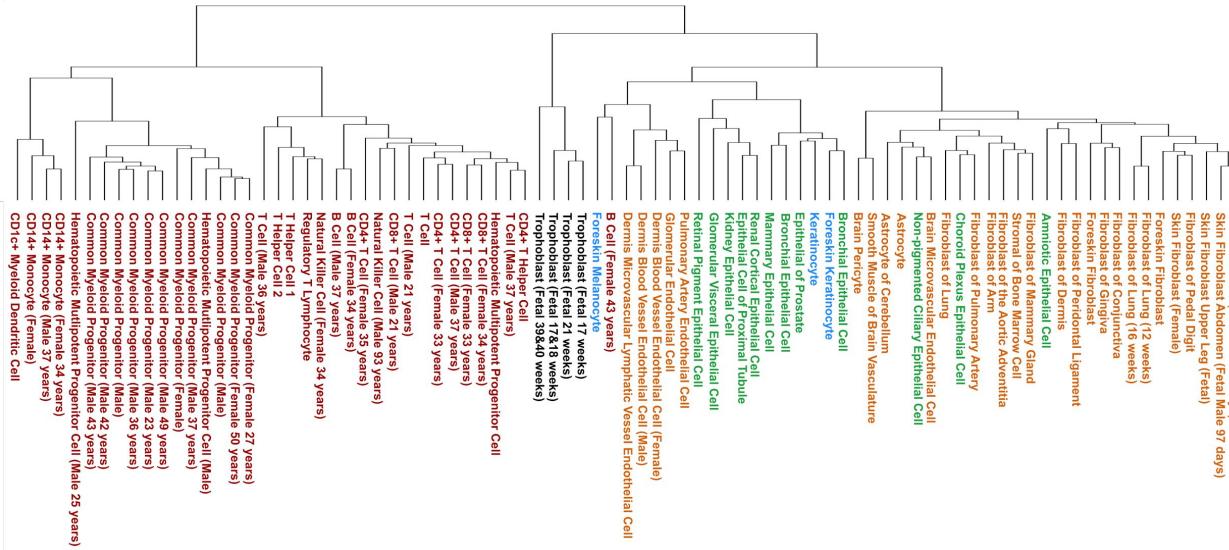


b

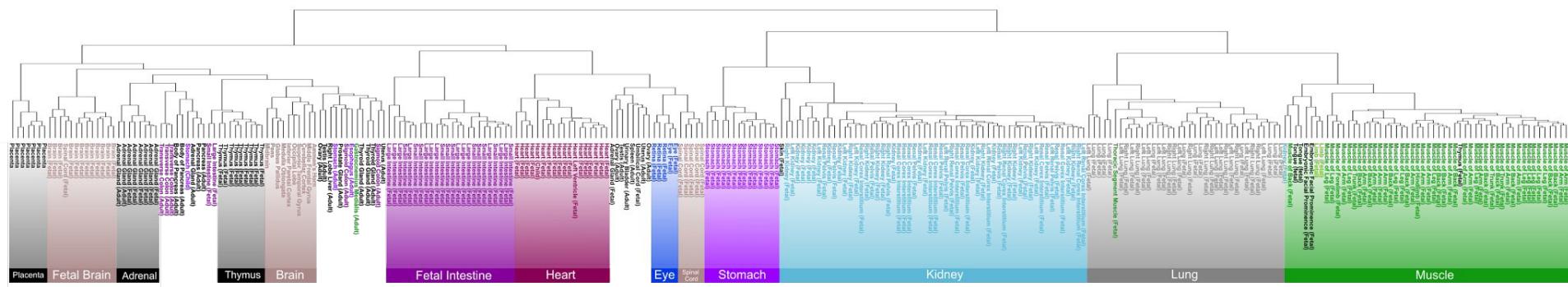


**a**

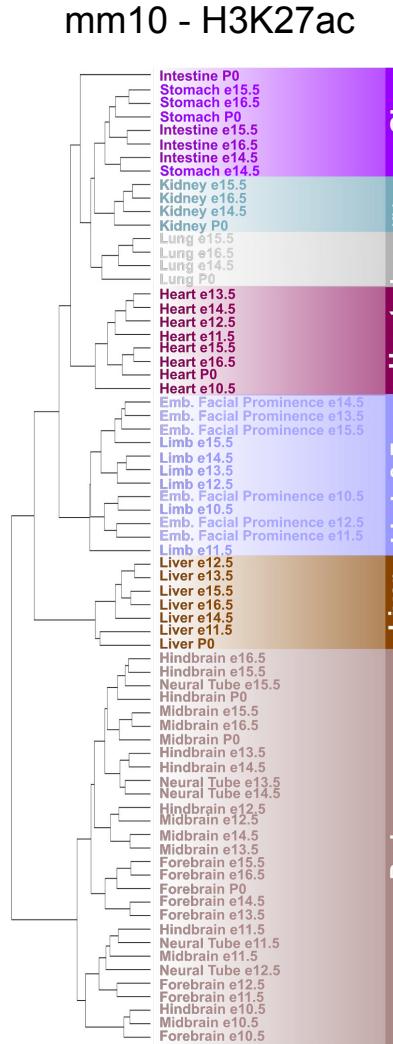
## hg19 - Primary Cell - DNase

**b**

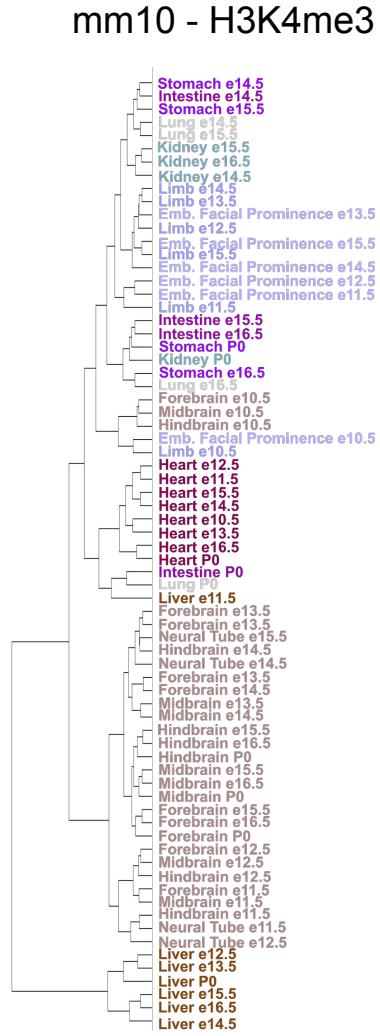
## hg19 - Tissues - DNase



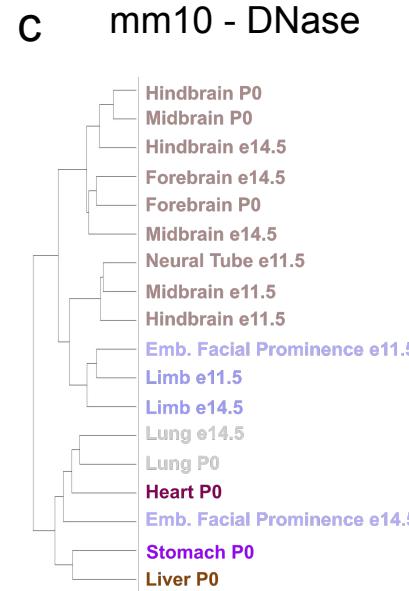
a



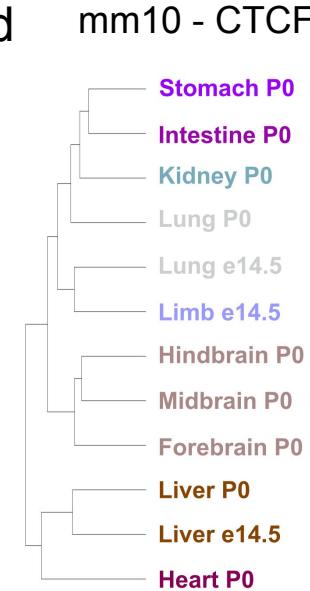
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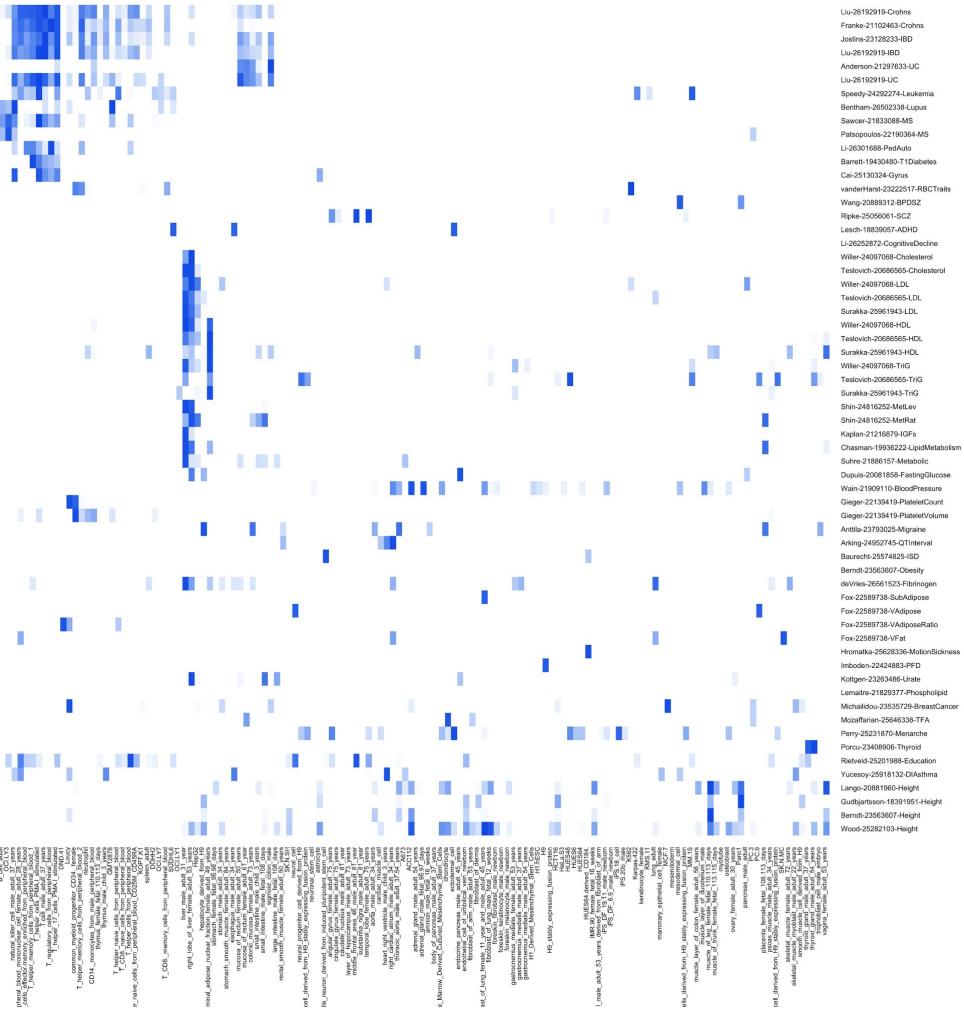
c



d



# Extended Data Figure 30



## Blood

T Helper Cells

Multiple Sclerosis

Leukemia

Ulcerative Colitis

Type 1 Diabetes

Heschl's Gyrus Morphology

Educational Attainment

Inflammatory Skin Disease

T Regulatory Cells

Crohn's Disease

Pediatric Autoimmune Diseases

T Cells

Inflammatory Bowel Disease

Crohn's Disease

B Cell Lymphoma Cell Lines

Platelet Count

Multiple Sclerosis

Obesity

Cognitive Decline

Lymphoblast Cell Line

Lupus Erythematosus

Erythroid Leukemia Cell Line

Red Blood Cell Traits

Myeloid Progenitor Cell

Platelet Volume

## Thyroid

Thyroid Gland

Thyroid Hormone Levels

## Heart

Heart Tissue

QT Interval

## Fibroblasts

Fibroblast Cells

Height

Phospholipid Levels

Subcutaneous adipose tissue

## Gastrointestinal

Colon Tissue

Ulcerative Colitis

## Muscle

Leg Muscle Tissue

Height

## Brain

Brain Tissue

Schizophrenia

ADHD

## Breast

Breast Cancer Cell Line

Breast Cancer

## Pancreas

Pancreas Cells

Height

Insulin Levels

## Liver

Liver Tissue

Total Cholesterol

LDL Cholesterol

HDL Cholesterol

Lipid Metabolism

Metabolite Levels

Urate Levels

Fibrinogen Levels

Metabolite Ratios

Metabolic Traits

Insulin-like Growth Factors

Hepatocyte

Migraine

## Adipose

Abdominal Tissue

HDL Cholesterol

Triglyceride Levels

## Adrenal Gland

Fetal Adrenal Gland

Blood Pressure

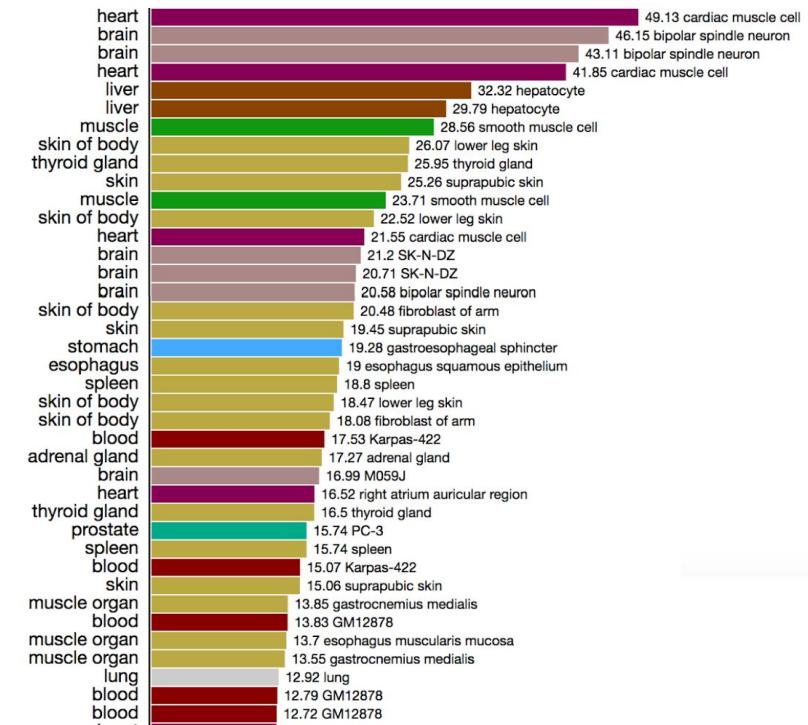
a

# Gene Expression - RNA-seq

## ZMIZ1

ENSG00000108175.12 - chr10:80,828,792-81,076,276

### Tissue of origin



Top 40 Experiments

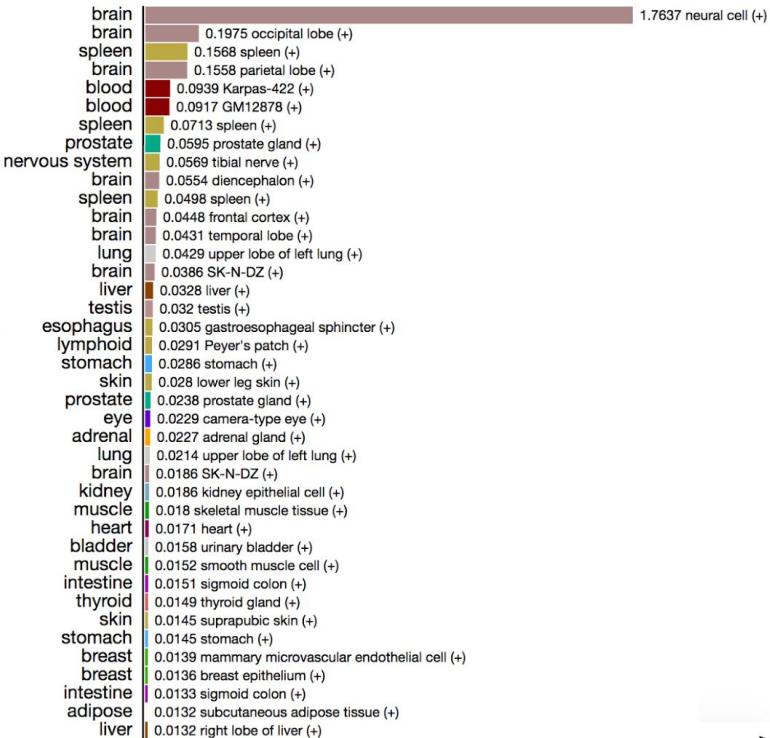
b

# Transcription Quantification - RAMPAGE

## ZMIZ1

ENST00000472035.1 - chr10:81,003,426

### Tissue of origin



Top 40 Experiments

Normalized Counts

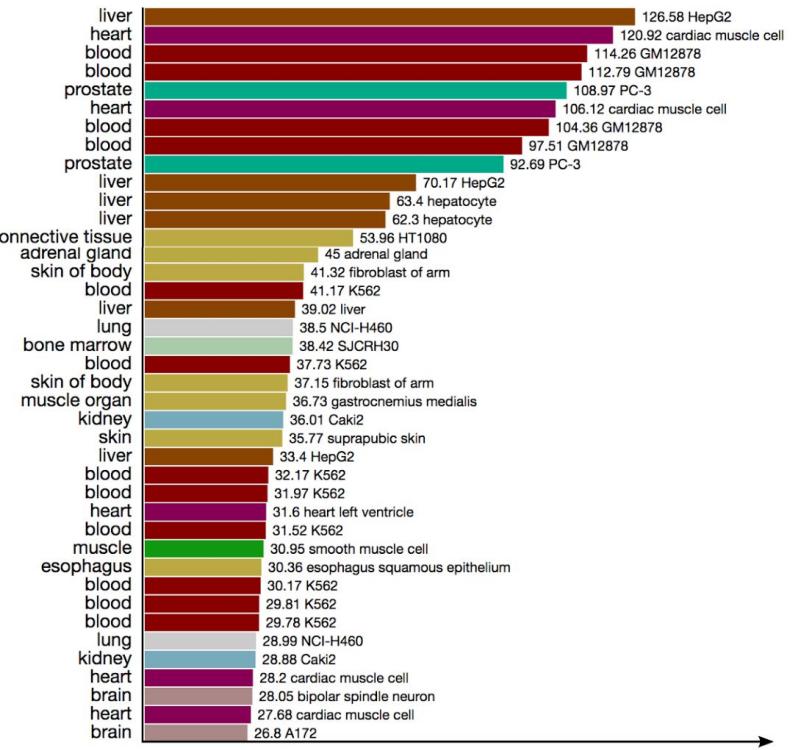
a

## Gene Expression - RNA-seq

### *PPIF*

ENSG00000108179.9 - chr10:81,106,947-81,107,457

#### Tissue of origin



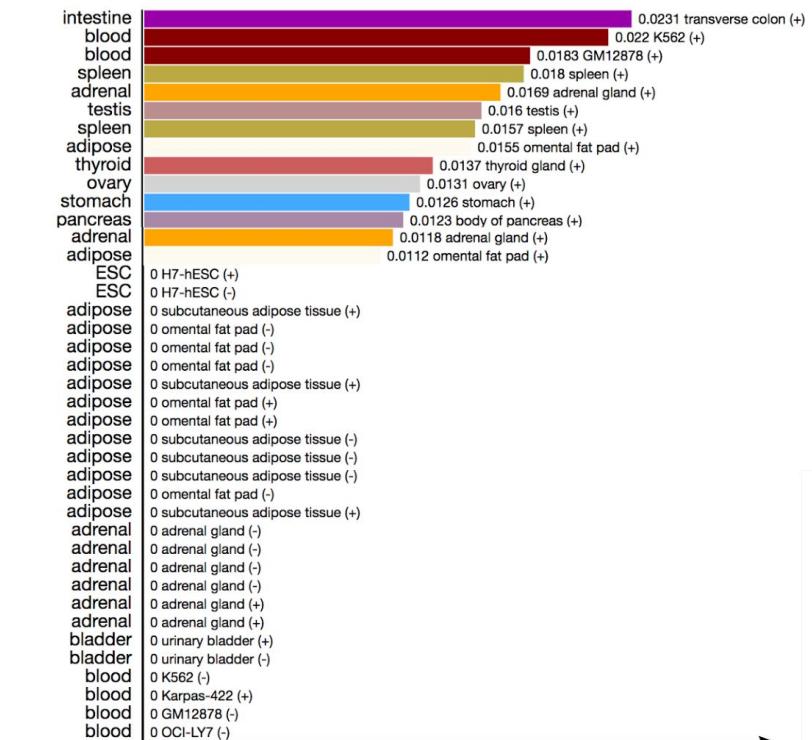
b

## Transcription Quantification - RAMPAGE

### *PPIF*

ENST00000225174.3 - chr10:81107234

#### Tissue of origin



Top 40 Experiments

Normalized Counts

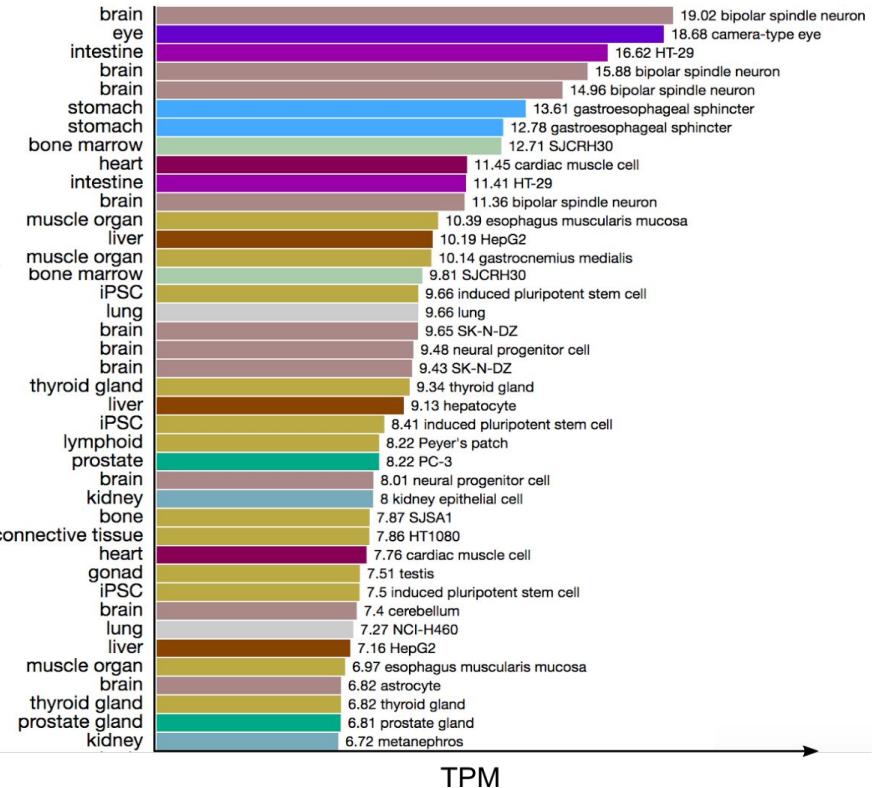
a

## Human (hg19) - RNA-seq

*AGAP1*

ENSG00000157985.13 - chr2:236,409,993-236,410,636

## Tissue of origin



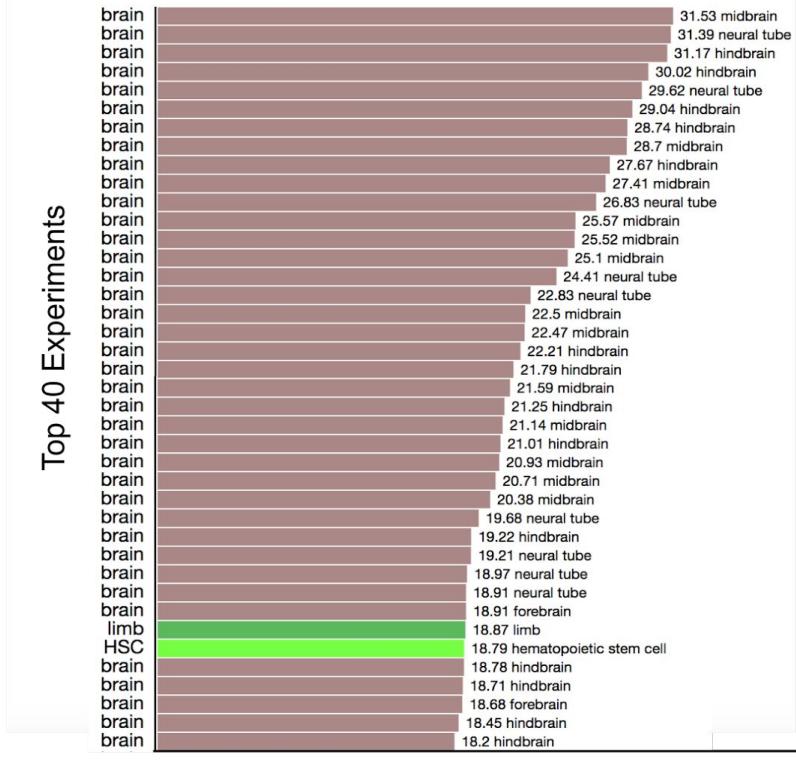
b

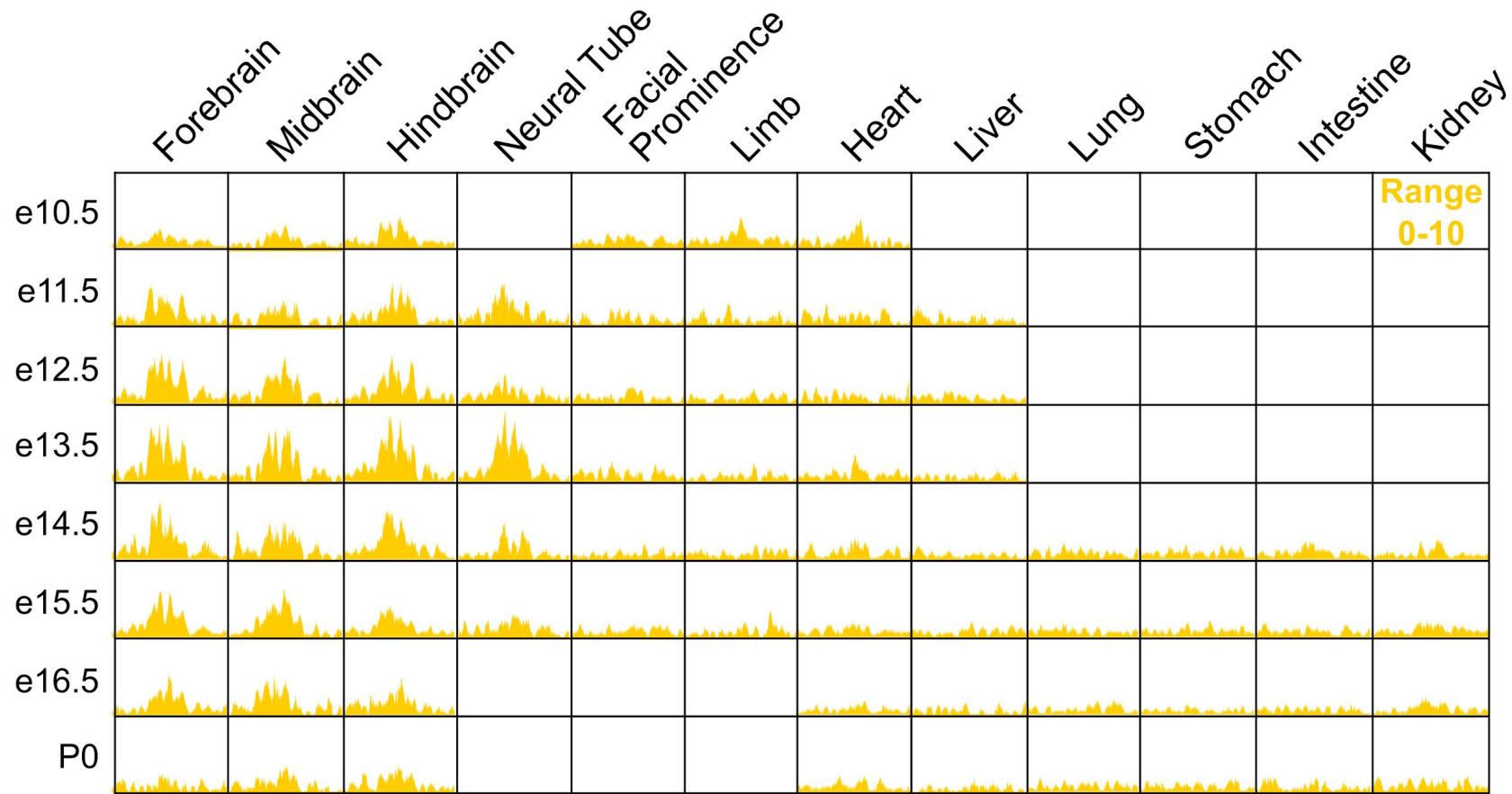
## Mouse (mm10) - RNA-seq

*Agap1*

ENSMUSG00000055013.10 - chr1:89,455,333-89,456,120

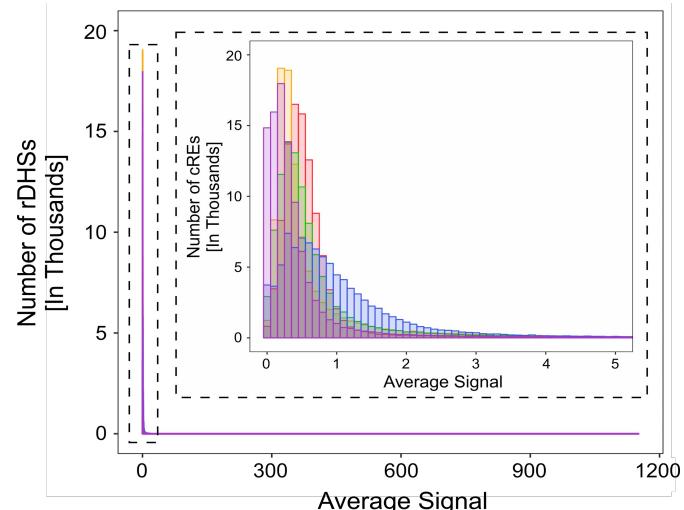
## Tissue of origin



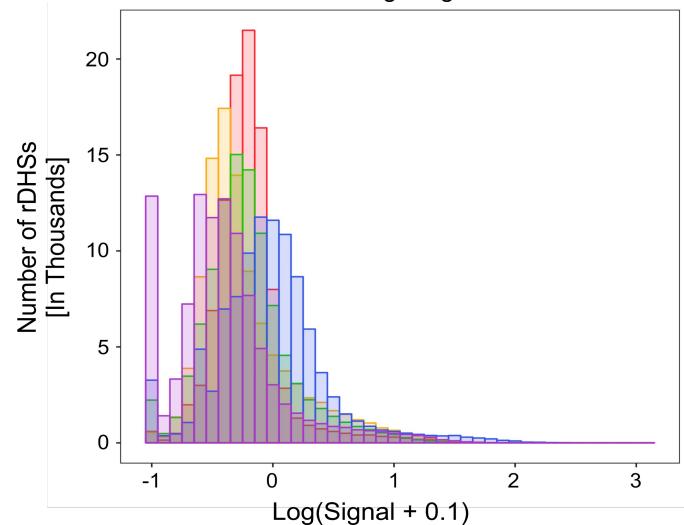


# Extended Data Figure 35

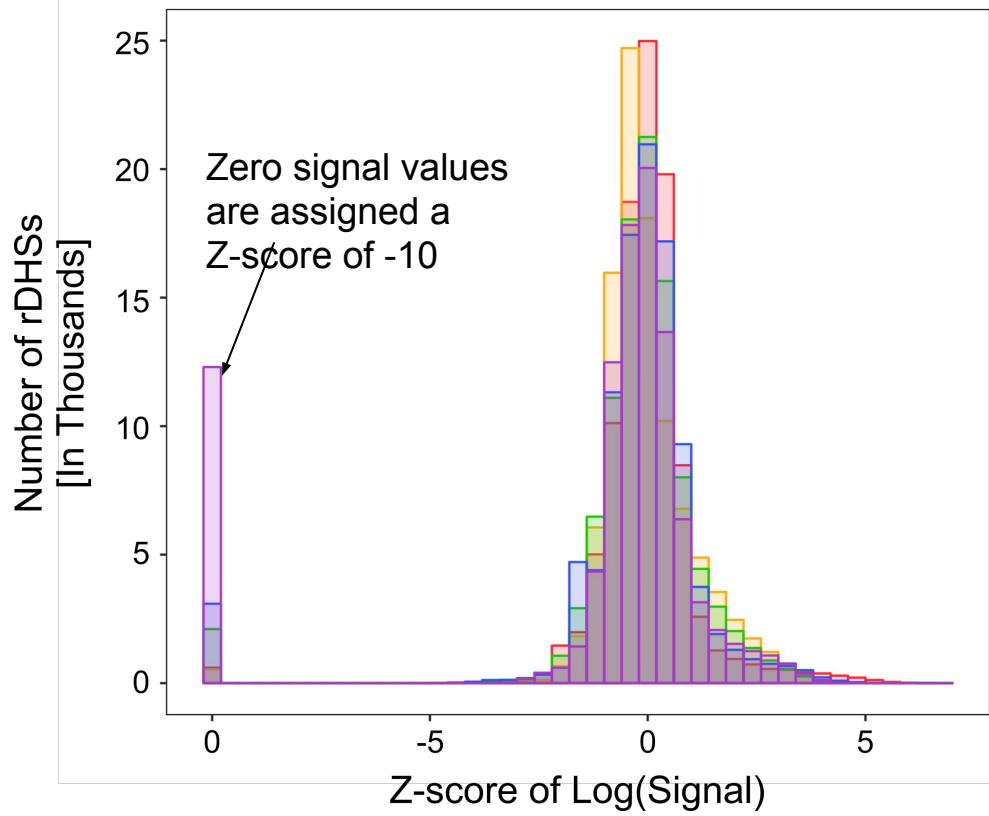
**a**



**b**



**c**



B cell

Liver

K562

T cell

GM12878