

## Supplementary table 1 ENCODE data files used

Data	ENCODE Project File
<b>K562 cells</b>	
Chromatin state	wgEncodeBroadHmmK562HMM.bed
RNA-seq	wgEncodeCaltechRnaSeqK562R1x75dAlignsRep1V2.bam
Short RNA-seq	K562_WholeCell_Short_RNA_CSHL_Contig.CSHL_LID10567-001WC-r1.LID10568-002WC-r2.idrFilt0.1.bb
Input	wgEncodeBroadHistoneK562ControlStdAlnRep1.bam
Input	wgEncodeSydhTfbsK562InputIggmusAln.bam
Input	wgEncodeSydhTfbsK562InputIggrabAln.bam
H3K4me1	wgEncodeBroadHistoneK562H3k4me1StdAlnRep1.bam
H3K4me2	wgEncodeBroadHistoneK562H3k4me2StdAlnRep1.bam
H3K4me3	wgEncodeBroadHistoneK562H3k4me3StdAlnRep1.bam
CHD1	wgEncodeBroadHistoneK562Chd1a301218aStdAlnRep1.bam
CHD2	wgEncodeSydhTfbsK562Chd2ab68301IggrabAlnRep1.bam
Pol II	wgEncodeSydhTfbsK562Pol2IggmusAlnRep1.bam
BRF1	wgEncodeSydhTfbsK562Brf1StdAlnRep1.bam
BRF2	wgEncodeSydhTfbsK562Brf2StdAlnRep1.bam
DNase-seq	wgEncodeOpenChromDnaseK562AlnRep1V2.bam
MNase-seq	wgEncodeSydhNsomeK562AlnRep1.bam
<b>H1 ESCs</b>	
Chromatin state	wgEncodeBroadHmmH1hescHMM.bed
Input	wgEncodeBroadHistoneH1hescControlStdAlnRep1.bam
Input	wgEncodeSydhTfbsH1hescInputIggrabAln.bam
CHD1	wgEncodeBroadHistoneH1hescChd1a301218aStdAlnRep2.bam
CHD2	wgEncodeSydhTfbsH1hescChd2IggrabAlnRep1.bam
<b>GM12878</b>	
Chromatin state	wgEncodeBroadHmmGm12878HMM.bed
Input	wgEncodeBroadHistoneGm12878ControlStdAlnRep1.bam
Input	wgEncodeSydhTfbsGm12878InputIggmusAlnRep1.bam
CHD1	wgEncodeSydhTfbsGm12878Chd1a301218aIggmusAlnRep1.bam
CHD2	wgEncodeSydhTfbsGm12878Chd2ab68301IggmusAlnRep1.bam