

Table S1: Additional datasets used in this study

Dataset	Figure	Reference	Source
<i>In vitro</i> reconstituted nucleosomes	2a, 5c, 5d	Locke et al., BMC Genomics 2013	SRA050182
Sequence-dependent nucleosome model	2a	Kaplan et al., Nature 2009	http://genie.weizmann.ac.il/software/nucleo_genomes.html
Transcription factor binding sites	2, SF6	Boyle et al., Nature 2014 Araya et al., Nature 2014	https://www.encodeproject.org/comparative/regulation/
HTZ-1	4d, SF6	Ho et al., Nature 2014	https://www.encodeproject.org/comparative/chromatin/
GC content	4, SF6	UCSC table browser	https://genome.ucsc.edu/
PhastCons 7 way Conservation Score		UCSC table browser	https://genome.ucsc.edu/
Developmental RNA-seq	6	Spencer and Zeller et al., Genome Res 2011 Gerstein et al., Nature 2014	https://www.encodeproject.org/comparative/transcriptome/
Histone PTMs	SF7	Ho et al., Nature 2014	https://www.encodeproject.org/comparative/chromatin/
DNA physical properties	SF7	Zhou et al., NAR 2013	http://rohslab.cmb.usc.edu/DNAshape/
80 mM nucleosomes	SF7	Ooi et al., Genome Res 2010	GSE18898
H3.3 ChIP-chip	SF7	Ooi et al., Genome Res 2010	GSE18898
hiHMM Chromatin states	SF7	Ho et al., Nature 2014	https://www.encodeproject.org/comparative/chromatin/