Polymorphic L1 vs Human specific L1 Integration site Threshold H2AFZ 24 8 H3K27ac 30 H4K20me1 H3K36me3 100 H3K4me1 H3K4me2 H3K4me3 8 10 H3K79me2 H3K9ac 8 H3K9me3 2 H3K27me3 10 CTCF 2 10 DNase hypersensitive sites RNA Pol2 2 100 G Quadruplexes 100 A-phased repeats Direct repeats 2 Inverted repeats 6 Mirror repeats 100 Z DNA motifs Most conserved element 2 Features 2 Exons 100 Introns GC content 100 100 AT content 100 Mononucleotides 100 Microsatellites di- tri- tetra-nucleotide 100 DNA transposons Alu MIR 100 LTR elements 100 L1 target motifs 100 L2 and L3 CpG islands 6 5-hydroxymethylcytosine Sperm hypomethylation 20 Replication origin Sex-averaged recombination hotspots hESC exon expression 10 16 hESC gene expression 100 hESC transcript expression 100 Testis expression CHH Methylation 100 CHG Methylation 100 CPG Methylation 100 

-log10(p-value)

2