Polymorphic L1 vs Control Integration site Threshold H2AFZ 10 100 H3K27ac 100 H4K20me1 H3K36me3 100 H3K4me1 100 100 H3K4me2 100 H3K4me3 100 H3K79me2 100 H3K9ac 100 H3K9me3 H3K27me3 CTCF 100 100 DNase hypersensitive sites RNA Pol2 100 G Quadruplexes 100 100 A-phased repeats Direct repeats 12 Inverted repeats Mirror repeats Z DNA motifs 100 Most conserved element Features 100 Exons 100 Introns GC content 100 100 AT content 100 Mononucleotides Microsatellites di- tri- tetra-nucleotide DNA transposons 100 100 Alu 100 MIR 100 LTR elements L1 target motifs L2 and L3 CpG islands 5-hydroxymethylcytosine 100 Sperm hypomethylation 2 100 Replication origin Sex-averaged recombination hotspots hESC exon expression 100 hESC gene expression hESC transcript expression 100 100 Testis expression CHH Methylation CHG Methylation 100 CPG Methylation 100 

-log10(p-value)

2

kb