

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: List of identified CTCF peaks in WT mESCs and the CTCF motifs contained within.

File Name: Supplementary Data 2

Description: List of CTCF motif numbers in each category of CBSs in WT mESCs, used for the filtering of SLIM-ChIP data.

File Name: Supplementary Data 3

Description: List of Nano-C runs, including cell types, viewpoints and number of contacts per viewpoint.

File Name: Supplementary Data 4

Description: List of gRNAs used for genome editing and *in-vitro* CRISPR-Cas9 cutting (ELFClamp), primers used for RT-qPCR, genotyping and 4C-seq, and biotinylated probes used for site-specific T7 promoter fusion (ELF-Clamp).

File Name: Supplementary Data 5

Description: BED file with start and end coordinates of TADs in WT mESCs that were identified from reanalyzed Hi-C data.

File Name: Supplementary Data 6

Description: BedGraph file with insulation scores for all 10kb bins in the WT mESC genome, as determined from reanalyzed Hi-C data.