

Figure S7. Chromatin architecture around the Sox2 locus is ESC-specific and CTCF-independent. A) Hi-C maps around the Sox2 locus for ESCs (top) and neuronal precursor cells (NPC, bottom), generated from data from Bonev et al. (2017). Positions and orientations of the Sox2 gene and major CTCF-bound motifs in ESCs are denoted under the maps. Dotted lines indicate ESC TADs. These two TADs fuse into one larger TAD in NPCs. B) Hi-C maps around the Sox2 locus (left) and a control region around the Prdm14 locus (right) in control ESCs (top) and ESCs after acute depletion of CTCF using an engineered auxin-inducible degron (middle); generated from data from Nora et al. (2017). Whereas clear loss of TADs on CTCF depletion is observed in the control region, Sox2 architecture appears largely unchanged. Bottom: Quantitative comparison of the two experimental conditions at these regions is shown as a heatmap of log2(ctrl/degron) interaction scores. In the control region, CTCF depletion causes a ~4-fold relative increase in inter-TAD contacts and a similar decrease in intra-TAD contacts. At Sox2, contact changes are negligible (<1.04-fold).