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Supplementary Text T8

For comparison of Hi-C data sets, we have downloaded publicly available mapped positions of IMR90 [1] and embryonic human stem cells (ESC) [1] from the Gene Expression Omnibus (GEO) [2] and transformed them into 1Mb contact maps (a contact map for each replicate, with 2 replicates for IMR90 and 2 replicates of ESC). Following appropriate correction (as described in the paper) we have next performed a comparison, within and between cell lines (comparison procedure as described in the paper). For within-comparison we have compared replicates' contact maps (2 comparisons in total: one for comparing the 2 replicates of IMR90 and another for comparing the 2 replicates of ESC). For between-comparison we have compared replicates' contact maps from different cell lines (4 comparisons in total, see Table 2). Pairs achieving a BF value larger than the permissive threshold (6.10) were reported as differentially interacting regions (Supplementary Table ST2).

References

- 1. Dixon JR, Selvaraj S, Yue F, Kim A, Li Y, Shen Y, Hu M, Liu JS and Ren B: **Topological domains in mammalian genomes identified by analysis of chromatin interactions**. *Nature* 2012, **485**:376–80.
- 2. Edgar R, Domrachev M and Lash AE: Gene Expression Omnibus: NCBI gene expression and hybridization array data repository. *Nucl. Acids Res.* 2002, **30**:207-10.