

Fig. S10

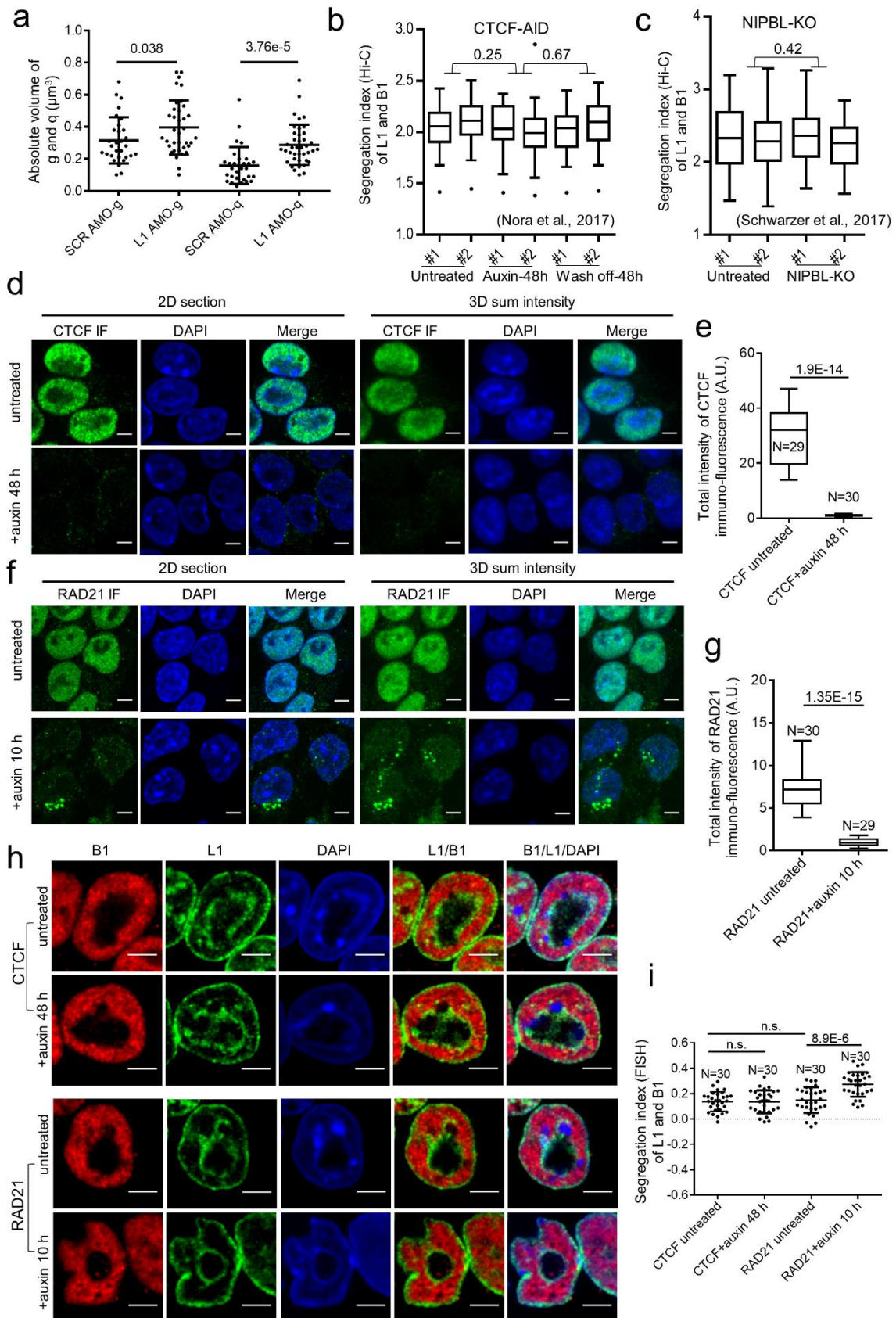


Fig. S10 Segregation of L1 and B1 is preserved upon depletion of CTCF or cohesin.

- (a) Absolute volume of two B compartmental regions (g and q). The p value was calculated by the two-tailed Student's t -test. Related to Fig. 6b (panel ii).
- (b) Boxplots showing the Hi-C segregation index of L1 and B1 in WT ESCs or ESCs depleted of CTCF. The p value was calculated by the two-tailed Student's t -test. The analysis was based on the published Hi-C data by Nora et al., 2017⁴.
- (c) Boxplots showing the Hi-C segregation index of L1 and B1 in WT ESCs or ESCs depleted of NIPBL. The p value was calculated by the two-tailed Student's t -test. The analysis was based on the published Hi-C data by Schwarzer et al., 2017⁵.
- (d) Immunofluorescence of CTCF in the ESCs with or without auxin treatment. The images of WT and ESCs treated with auxin are shown with the same imaging conditions and under the same intensity threshold. All scale bars, 5 μ m.
- (e) Total intensity of CTCF immunofluorescence (A.U.) in the ESCs with or without auxin treatment. The p value was calculated by the two-tailed Student's t -test.
- (f) Immunofluorescence of RAD21 in the ESCs with or without auxin treatment. All scale bars, 5 μ m. The images of WT and ESCs treated with auxin are shown with the same imaging conditions and under the same intensity threshold. All scale bars, 5 μ m.
- (g) Total intensity of RAD21 immunofluorescence (A.U.) in the ESCs with or without auxin treatment. The p value was calculated by the two-tailed Student's t -test.
- (h) Representative images of L1 (green) and B1 (red) repeats revealed by DNA FISH in WT ESCs and ESCs depleted of CTCF or RAD21. DNA is labeled by DAPI (blue). All scale bars, 5 μ m.
- (i) Scatterplot of the segregation index of L1 and B1 DNA in (e). The p value was calculated by the two-tailed Student's t -test.

References:

- 4. Nora, E. P. *et al.* Targeted Degradation of CTCF Decouples Local Insulation of Chromosome Domains from Genomic Compartmentalization. *Cell* **169**, 930-944, doi:10.1016/j.cell.2017.05.004 (2017).
- 5. Schwarzer, W. *et al.* Two independent modes of chromatin organization revealed by cohesin removal. *Nature* **551**, 51-56, doi:10.1038/nature24281 (2017).