

Fig. S6

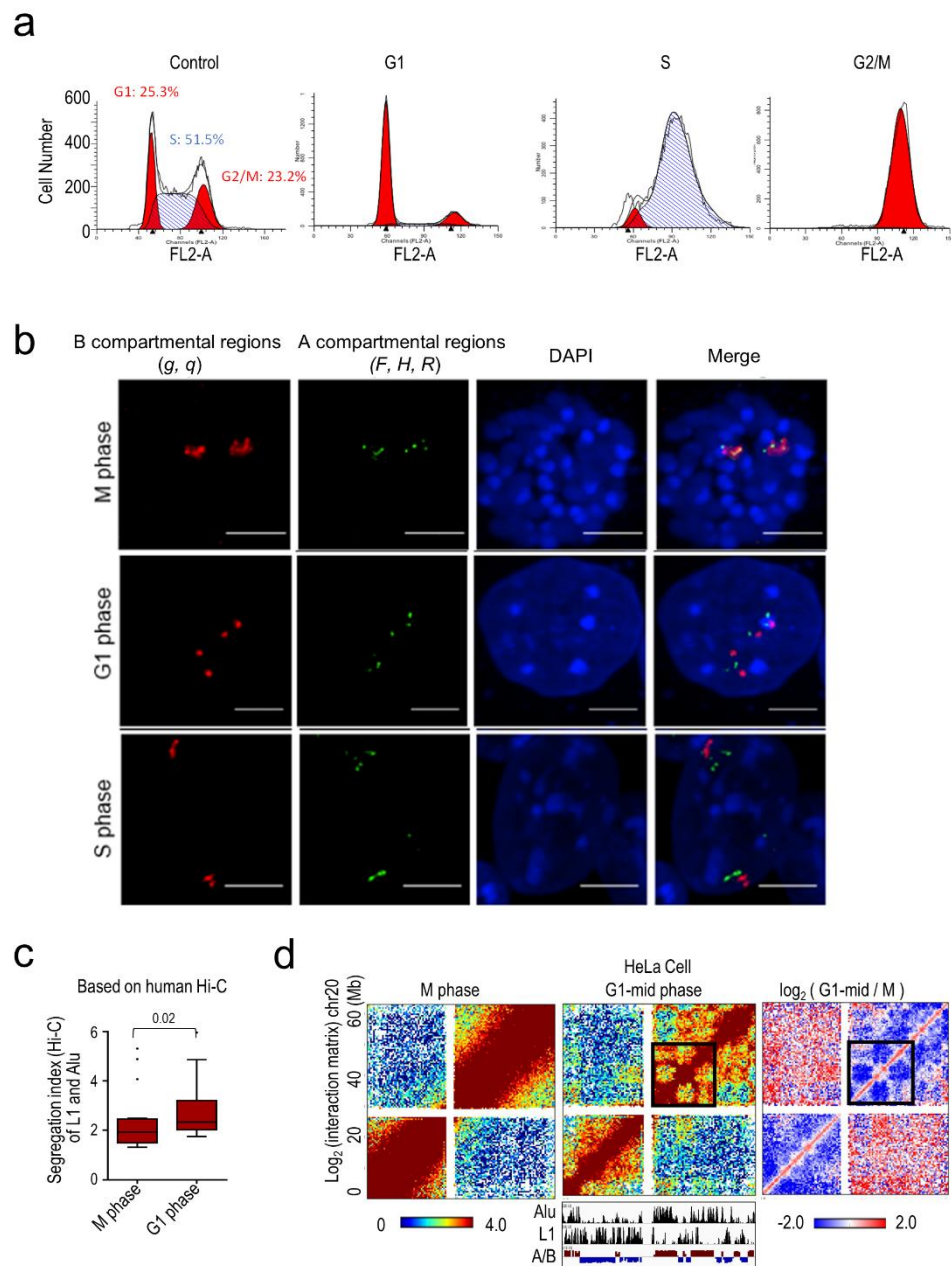


Fig. S6 Dynamic establishment of higher-order chromatin organization during the cell cycle.

- (a) FACS analysis of cell-cycle synchronized mESCs.
- (b) Oligopaint DNA FISH analysis of representative compartmental regions during cell cycle progression from the M phase to the G1 and S phase. A-compartment associated regions: *F*, *H*, *R* (green color); B-compartment associated regions: *g*, *q* (red color), as illustrated in Fig. S5b.
- (c) Boxplot analysis of the ratio of homotypic versus heterotypic contacts for Alu-rich and L1-rich regions based on Hi-C data from cell cycle-synchronous HeLa cells. The y-axis shows the Hi-C segregation index $[(\text{Alu}.\text{Alu} \text{ and } \text{L1}.\text{L1}) / \text{Alu}.\text{L1}]$ (female cell line, X chromosomes excluded). *p* values are calculated with two-tailed Student's *t*-tests.
- (d) Heatmap of normalized interaction frequencies at 500-kb resolution on chromosome 20 in HeLa cell at M (left) and G1-mid (middle) phase. Comparison of contact frequencies between M and G1-mid phase $[\log_2(\text{G1-mid}/\text{M})]$ for the whole chromosome 20 are shown on the right. Genomic densities of Alu and L1 repeats are shown at the bottom.