



**Supplemental Figure S9. HNRNPU peaks are enriched at TAD boundaries.** (A) Distribution of HNRNPU peaks centered by TAD boundaries. (B) Strengths of boundaries associated or not associated with HNRNPU.  $P$  values were obtained by ANOVA. (C) The boxplots (top) and violin plots (down) show strengths and changes of different group of boundaries according to their association with HNRNPU and /or CTCF&RAD21 peaks.  $P$  values were obtained by ANOVA.