Zhang et al., Supplemental Figure S10



Sharpr-MPRA activity score at the promoter region (TSS ± 50 bp)

Supplemental Figure S10. Cell type-specific expressed *Alu* elements exhibit cell type-specific regulatory activity.

A. *Alu* elements expressed in ESCs showed significantly stronger enhancer activity (top) and enrichment in active enhancers (bottom) than *Alu* elements expressed in other biosamples and unexpressed *Alu* elements, as measured by RPP (reads per plasmid) of STARR-seq in primed (top-left, *p*-values \leq 2.42×10⁻³, Wilcoxon rank-sum test; bottom-left, *p*-values \leq 3.00×10⁻⁷, Chi-squared test) and naive (topright, *p*-values \leq 1.19×10⁻⁴, Wilcoxon rank-sum test; bottom-right, *p*-values \leq 1.11×10⁻⁷, Chi-squared test) ESCs (Barakat et al. 2018).

B. Two examples of K562 expressed *Alu* elements with strong activation activity (Sharpr-MPRA activity score \geq 1) at their promoter regions (top). *Alu* elements expressed in K562 exhibit significantly stronger Sharpr-MPRA activity score (Ernst et al. 2016) than *Alu* elements expressed in other biosamples and unexpressed *Alu* elements (bottom). Wilcoxon rank-sum test *p*-values are shown.