## Zhang et al., Supplemental Figure S9



## Supplemental Figure S9. Enrichment of transcription factor binding at expressed Alu elements.

A. Expressed *Alu* elements are bound by transcription factors in GM12878 cells. The left heatmap shows the fold changes of TFs in the  $\pm$  500 bp window centered on the TSSs of *Alu* elements specifically expressed in GM12878 cells compared with *Alu* elements expressed in other biosamples. Each row is a TF and all 141 TFs with ChIP-seq data in GM12878 are included in the heatmap and sorted by their fold changes. The top-right heatmaps indicate the TFs with enriched signals and motifs, with the motif logos shown at bottom-right.

B. The binding of FOS and EP300 exhibited specific profiles for *Alu* elements expressed uniquely in K562 (blue) and GM12878 (red). Note that cell type-specific expressed *Alu* elements showed higher binding signals than unexpressed *Alu* elements in the respective cell line.

C. EP300 binding profile at different FOS-bound *Alu* element groups. FOS-bound, expressed *Alu* elements were classified into high, medium and low groups on the basis of their FOS levels, and EP300 binding profile for each group was plotted in K562 and GM12878 cells, respectively.