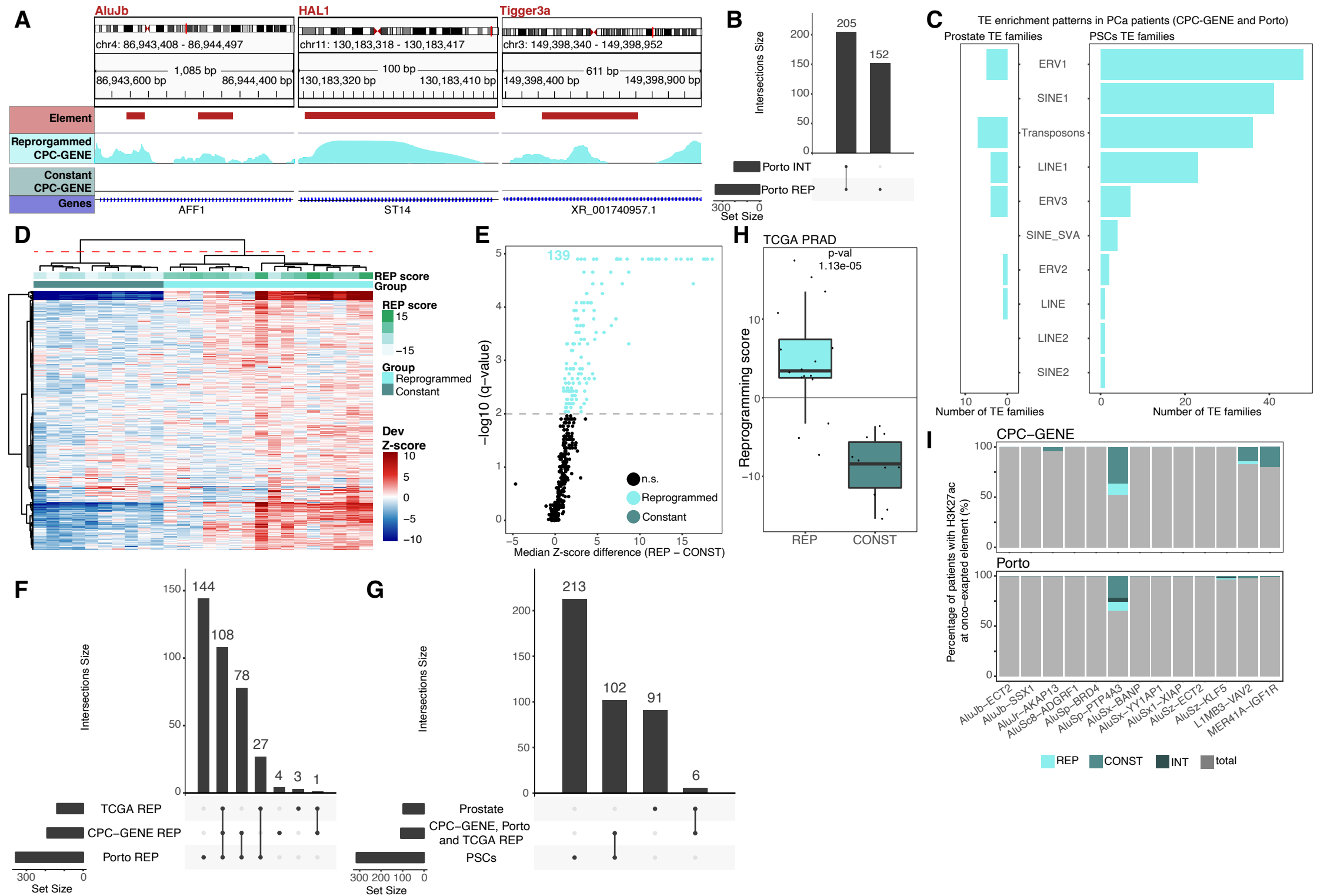


# Supplementary Figure S2



## Supplementary Figure S2

A. Genome browser view of H3K27ac signal from CPC-GENE patients for one element of three reprogrammed transposable element families, namely AluJb, HAL1, and Tigger3a.

B. UpSet plot showing the intersection of transposable element families enriched in reprogrammed (REP) and intermediate (INT) Porto patients. Note that the vast majority of transposable element families are commonly enriched.

C. Number of transposable element families differentially enriched in H3K27ac-positive regions of benign prostate or PSCs also enriched in H3K27ac-positive chromatin in reprogrammed PCa patients (CPC-GENE and Porto) vs constant patients, divided by transposable element superfamily. Transposable element superfamilies ordered from most highly enriched in both H3K27ac-positive chromatin in pluripotent stem cells vs benign prostate and in H3K27ac-positive chromatin in reprogrammed vs constant PCa patients.

D. Heatmap displaying the deviation Z-scores of transposable element families differentially enriched in H3K27ac-positive chromatin between pluripotent stem cells and benign prostate tissue state across chromatin accessibility profiles of TCGA PRAD patients (n=26).

E. Volcano plot showing median difference in deviation Z-scores for each transposable element family enriched in accessible chromatin between reprogrammed and constant TCGA PRAD patients versus the  $-\log_{10}$  q-value for that difference. The gray dashed line corresponds to  $-\log_{10}(q\text{-value})=2$  (q-value=0.01). The number of transposable element families enriched in reprogrammed or constant patients are reported at the top.

F. UpSet plot showing the intersection of transposable element families enriched in reprogrammed (REP) CPC-GENE, Porto and TCGA PRAD patients.

G. UpSet plot showing the intersection of transposable element families enriched in pluripotent stem cells (PSCs), benign prostate, and reprogrammed (REP) prostate cancer patients (CPC-GENE, Porto and TCGA).

H. Boxplot displaying the reprogramming score in reprogrammed (REP) and constant (CONST) TCGA PRAD patients. p-values results of wilcoxon test are showcased on the box plot.

I. Percentage of reprogrammed prostate cancer patients showing H3K27ac signal over onco-exapted transposable elements, previously reported to drive oncogene expression in prostate tumour.