

Supplementary Figure S2. HBZ protein alters epigenetic regulation of TAp73 by EZH2.

- (A) A snapshot of the UCSC genome browser around the TAp73 promoter (registered as TP73_1 in the EPDnew [Eukaryotic Promoter Database]) in hg19. Enriched transcription factors from the ENCODE are shown as barplots.
- (B) Immunoprecipitation (IP) of endogenous HBZ protein and EZH2 in HTLV-1-infected cells. IP was performed with anti-HBZ antibody and analyzed by SDS-PAGE and immunoblotting (IB).

Supplementary Figure S2. HBZ protein alters epigenetic regulation of TAp73 by EZH2. (Continued)

- (C) IP of endogenous HBZ and EZH2 with or without DNase I.
- (D and E) IP to examine binding sites of HBZ protein to EZH2. A schematic diagram showing the EZH2 mutants and the domains of the EZH2 protein (D). IP of wild-type (WT) or mutant EZH2 with HBZ protein (anti-Flag antibody) in HEK293T cells (E).
- (F) IP of SUZ12 or EED with HBZ protein (anti-Flag antibody) in HEK293T cells
- (G) IP of SUZ12 or EED with endogenous HBZ protein (anti-HBZ antibody) in ATL55T+ cells.
- (H) EZH2, H3K27me3 and H3K27ac enrichments (ChIP-seq) and transcripts (RNA-seq) around TP73 in human CD4+ T cells from healthy donors (hCD4) and TL-Om1 cells (left), and around Trp73 in WT or HBZ-Tg mouse CD4+ T cells (right).
- (I) Results of KEGG pathway analysis using the mouse cluster 2 genes (Fig. 2H). Shared pathways between human and mouse cells are highlighted in red. Statistical values and gene counts calculated by the clusterProfiler are shown.