



Figure S6. Impact of DNMTs and TETs on KAP1-regulated TE and genes. **a)** Expression heatmap of the 5,000 TE with highest standard deviation. DNMT: DNMT TKO; TET: TET TKO. Color key is indicated on top right, blue downregulation, red upregulation. Data are from 3 (WT and DNMT TKO) or 2 (TET TKO) independent RNA-seq experiments. **b)** Principal component analysis of genes expression on data from wild type, DNMT TKO and TET TKO mESCs control or *Kap1* knockdown, obtained by RNA-seq. Data are from 3 (for WT and DNMT TKO samples) and 2 (for TET TKO samples) independent RNA-seq experiments. **c,e)** Graphic representation of logged normalized counts across samples for TE grouped in patterns P5 (**c**) and P6 (**e**). Families enriched for each pattern are depicted on the right with the p value from the hypergeometric test defining how significant over-representation is for each (blue heatmap), the percentage of KAP1-bound elements in the family (green heatmap) and the fold change of 5hmC upon *Kap1* knockdown (red heatmap). **d)** Heatmaps showing KAP1 enrichment signal (ChIP-seq) over IAPEz, MERVK10C and L1MdA (1kb upstream and 10kb downstream the beginning of the element). Integrants were separated by pattern of transcriptional behaviour. Data are representative of 2 independent ChIP-seq experiments.