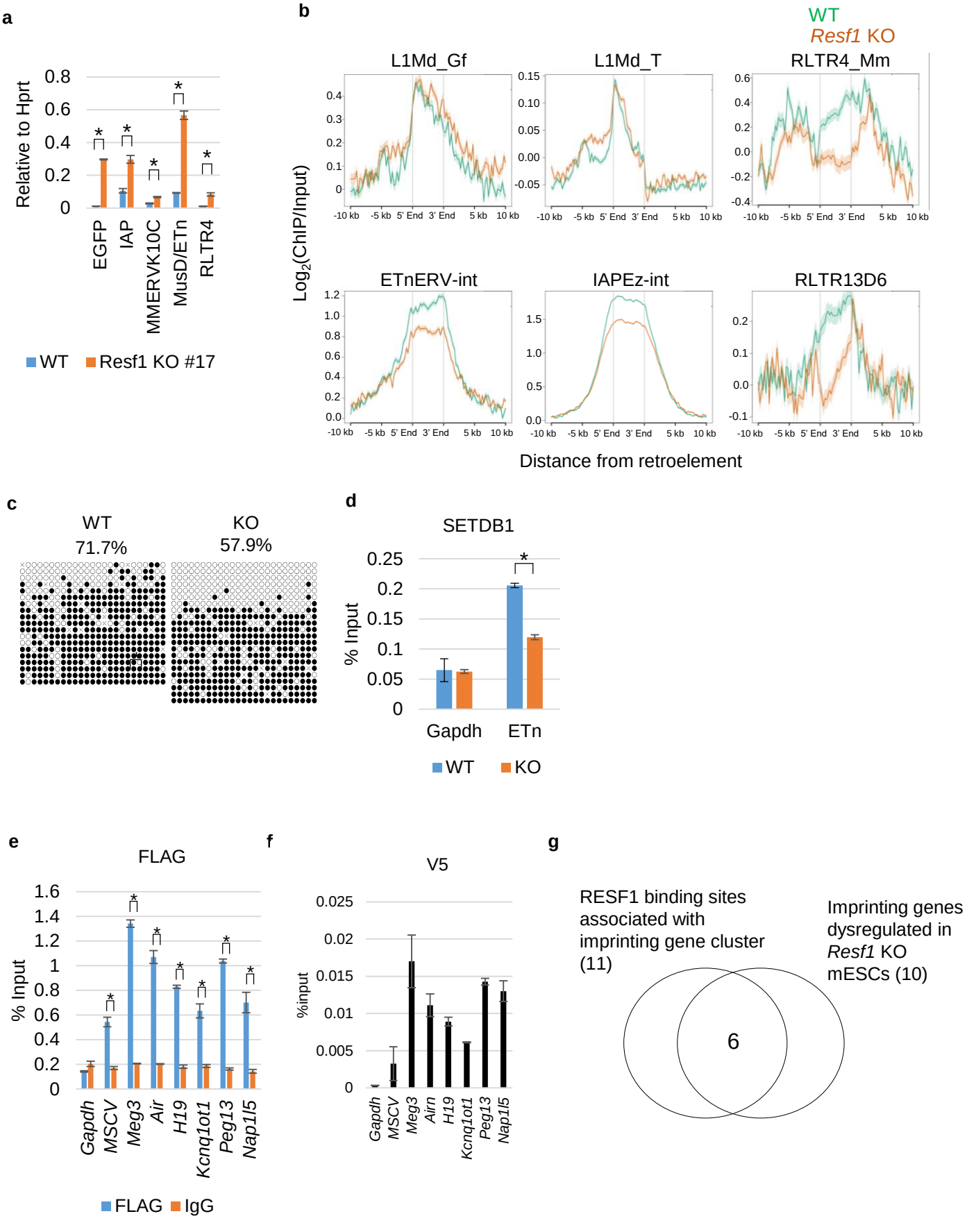
Fukuda_Fig_S6



Supplemental Figure 6. RESF1 regulates imprinted genes and ERVs. (a) RT-qPCR analysis of expression of ERV retrotransposons in another *Resf1* KO cell line. (b) Enrichment of H3K9me3 ChIP-seq reads on derepressed (RLTR4_Mm (MULV-LTR), ETnERV-int, IAPEz-int (IAPLTR1a_I_MM), RLTR13D6) and unaffected (L1Md_Gf, L1Md_T) retroelements in *Resf1* KO ESCs. (c) DNA methylation level of ETn in WT and *Resf1* KO ESCs analyzed by bisulfite sequencing. (d) Enrichment of SETDB1 on ERV ETn promoter analyzed by ChIP-qPCR. In *Resf1* KO ESCs, enrichment of SETDB1 on ETn promoter was reduced. (e,f) ChIP-qPCR confirmation of RESF1 binding around imprinted genes. ChIPs were performed with *Resf1* KO cell line stably expressing FLAG- (e) or V5- (f) tagged RESF1. Anti-FLAG or V5 Ab were used. (g) Overlap between imprinted gene cluster with RESF1 binding sites and imprinted genes dysregulated in *Resf1* KO ESCs. 6 of those genes were located in imprinted gene clusters with RESF1 binding sites.
Data represent mean ± SE (n = 3). *P-value < 0.01 (*t*-test).