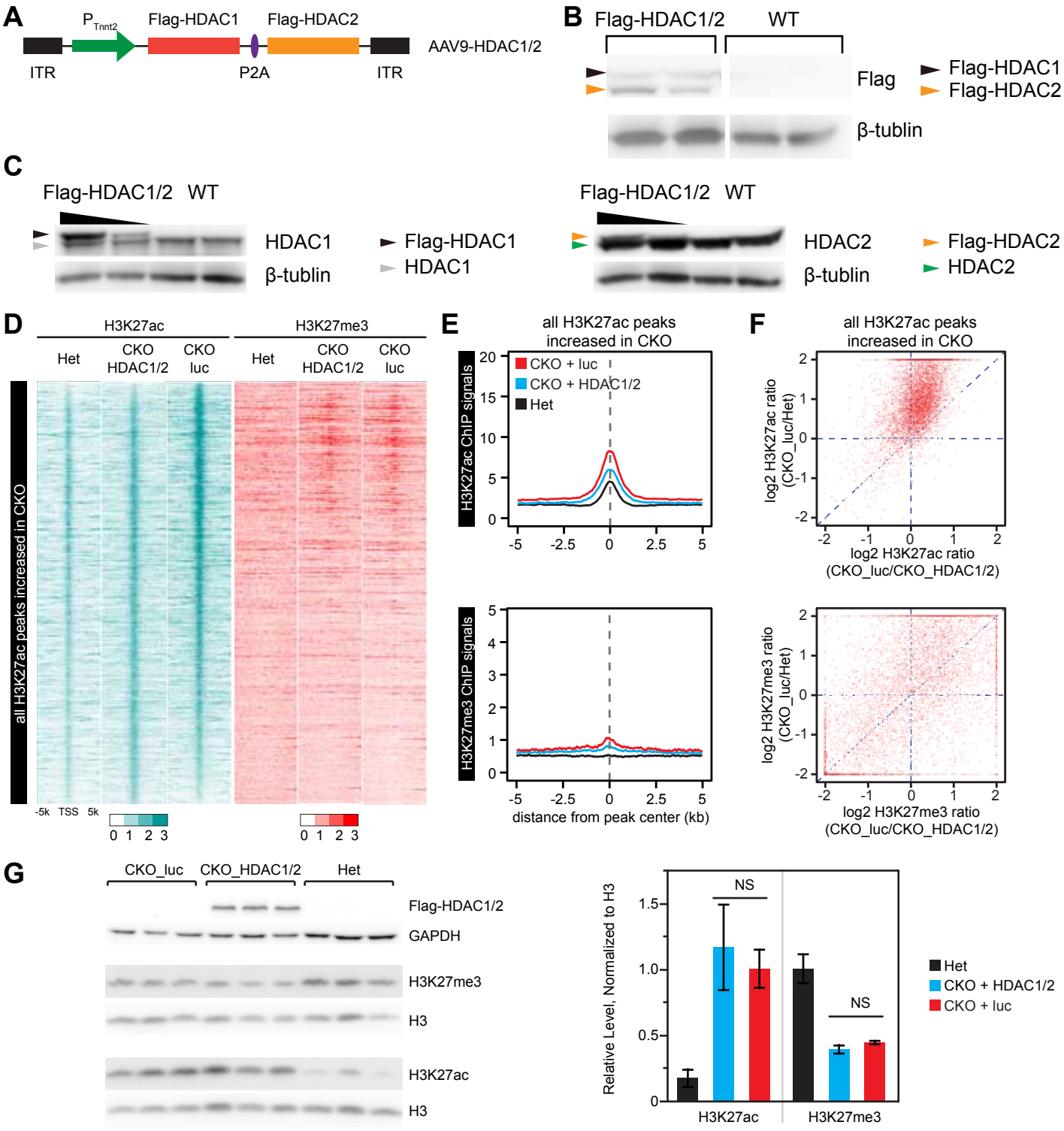

Figure 5 -- figure supplement 1. Effect of over-expression of HDAC1/2 on genome-wide H3K27ac and H3K27me3 accumulation at H3K27ac peaks with increased signal in Eed^{CKO}.

A. Schematic of AAV9 construct expressing Flag-tagged HDAC1/2 (Flag-HDAC1/2). ITR, Inverted Terminal Repeart.

B. Validation of Flag tagged HDAC1 and HDAC2 protein expression in AAV-treated hearts. Mice were treated with AAV9-Flag-HDAC1/Flag-HDAC2 or AAV9-Flag-EED at P3. Hearts were analyzed at 2 months of age.

C. Validation of ectopic and endogenous expression of HDAC1 and HDAC2 proteins in AAV-treated hearts of mice at 2 months of age.

D-F. Analysis of H3K27ac and H3K27me3 ChIP signals around all H3K27ac peaks gained in CKO, in het CKO_luc, and CKO_HDAC1/2. Heatmap (D) was sorted by descending value of the ratio of H3K27ac signal in CKO_luc to het. E, aggregate plots of H3K27ac and H3K27me3 ChIP signals. F, scatterplot of signal ratios comparing change in EED loss of function to change in HDAC1/2 rescue. Signals are from the peak center ± 0.5 kb.

G. Immunoblotting and quantification of H3K27ac and H3K27me3 levels in adult cardiomyocytes isolated from hearts of three groups. H3K27ac or H3K27me3 immunoblot signals were normalized to total H3. NS, not significantly different.