## **Supplementary Figure S13**



H3K36me2-regulated

distance centered around H3K27ac peaks (kb)

D

## Supplementary Figure S13. EMT-related transcriptional reprogramming occurs by H3K36me2dependent and -independent mechanisms.

(A) Flow chart depicting integrated analysis of ChIP-seq and RNA-seq datasets.

**(B)** GO Biological term enrichment performed on genes determined to be H3K36me2-regulated (n=189 genes, top) and genes that are H3K36me2-stable (n=690 genes, bottom). Enrichment was performed using the Gorilla web tool (http://cbl-gorilla.cs.technion.ac.il).

**(C)** Representative H3K36me2, H3K27ac, and H3K4me1 ChIP-seq and RNA-seq tracks of WT (grey) and sgNsd2 (green) samples. Examples of putative Zeb2 and Snai1 promoters (dotted boxes) and enhancers (solid boxes) whose decrease in activity is associated with a decrease in H3K36me2 signal are framed and magnified.

**(D)** Aggregate plots comparing the average ChIP signal of the indicated histone marks in WT (grey) and sgNsd2 (green) samples centered around promoters, defined here as H3K27ac peaks that are within +/-2.5kb of TSS.