

Description of Additional Supplementary Files

Supplementary Data 1. List of enriched hMeRIP-Seq peaks in WT ESC.

Supplementary Data 2. List of ratio of spliced to unspliced transcripts bearing intronic 5hmC in WT ESC and TKO ESC.

Supplementary Data 3. List of differential hMeRIP-Seq peaks between WT ESC and EB.

Supplementary Data 4. List of differential hMeRIP-Seq peaks between WT ESC and TKO ESC.

Supplementary Data 5. List of enriched RIP-Seq transcripts in tagged-Tet1, -Tet2 and -Tet2 Δ ARBD ESCs.

Supplementary Data 6. List of differential hMeRIP-Seq peaks between tagged-Tet2 WT and -Tet2 Δ ARBD ESCs.

Supplementary Data 7. List of differentially expressed mRNAs between WT ESC and TKO ESC identified by RNA-Seq after transcription inhibition.

Supplementary Data 8. List of primers and oligos used for RT-qPCR, genotyping, Crispr-gRNA and plasmid cloning.