

## **Description of Additional Supplementary Files**

**File Name: Supplementary Data 1**

**Description:** List of Up-regulated genes in Setdb1 KO iMEFs.

**File Name: Supplementary Data 2**

**Description:** H3K9me3 ChIP-seq reads on ERVs and LINEs in Setdb1 cKO iMEFs.

**File Name: Supplementary Data 3**

**Description:** Genomic distribution of each element of VL30 U3 class I. RPKM values of each element in Setdb1 cKO iMEFs (WT and KO (4OHT 5d) along with each sequences (1-300, red: mutated, blue: Elk site, light blue: AP-1 site and green: Ets site) were shown.

**File Name: Supplementary Data 4**

**Description:** Genomic positions of ERVs used for the analysis.