

## **Description of Additional Supplementary Files**

Supplementary Data 1: List of oligos and antibodies

Supplementary Data 2: DEGs and GOs shL1-a at E14 and overlap with mESCs

Supplementary Data 3: DEGs and GOs shL1-a/b in 21 div cells with H3K27me3 mark ENCODE

Supplementary Data 4: Off-targets of shL1-a/b among down-regulated genes

Supplementary Data 5: DEGs AZT treatment in 21 div cells

Supplementary Data 6: GOs overlaps shL1-a/b at E14 and 21 div cells

Supplementary Data 7: ChIP-Seq Diffbind and GOs for H3K27me3 and Ezh2

Supplementary Data 8: L1 sequences for catRAPID omicsV2 0210225 annotation

Supplementary Data 9: Ranking catRAPID omicsV2 interaction propensity 1946 RBPs to L1 RNA sequences