

Description of Additional Supplementary Files

Supplementary Data 1. List of sgRNAs for CRISPR/Cas9 editing, and siRNA/shRNAs for KD

Supplementary Data 2. PCR primers

Supplementary Data 3: X-linked genes dysregulated in Δ FirreXa compared to WT

Supplementary Data 4. Predicted novel miRNAs in Δ FirreXa cells

Supplementary Data 5. Summary of proteins associated with PRC that interact with mouse Firre RNA

Supplementary Data 6. List of genes located within ChrX: 36Mb-62Mb

Supplementary Data 7. Categories of genes with expression changes in Δ FirreXa, and rescue efficiency using a mouse transgene in Δ FirreXa

Supplementary Data 8. Autosomal genes dysregulated in Δ FirreXa compared to WT

Supplementary Data 9. Autosomal genes on chromosomes without aneuploidy dysregulated in Δ FirreXa cells compared to WT

Supplementary Data 10. GO terms for dysregulated genes in Δ FirreXa as compared to WT, and rescued in Δ FirreXa+mtransgene

Supplementary Data 11. Summary of read counts for in situ DNase Hi-C, RNA-seq, ATAC-seq, H3K27me3 ChIP-seq, CTCF CUT&RUN and SUZ12 CUT&RUN read counts