

1 Supplement - Erosion of somatic tissue identity with loss of the  
2 X-linked intellectual disability factor KDM5C

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**Supplementary Figure 1: KDM5C binds to a subset of germline RNA-seq differentially expressed genes.** **A.** Bar graph of the number of germline-enriched DEGs with promoter KDM5C ChIP-seq peaks in wild-type EpiLCs (Top) and PNCs (Bottom). RNA-seq DEGs were classified as shared between EpiLCs and the brain (Common), unique to EpiLCs (EpiLC Only), or unique to one or multiple brain regions (Brain Only). **B.** Average bigwigs of two example RNA-seq DEGs dysregulated in EpiLCs but not the brain, *Dazl* and *Stra8*. Top is the RNA-seq tracks for wild-type (WT) and *Kdm5c*-KO (5CKO) EpiLCs, bottom is the KDM5C ChIP-seq tracks, with the annotated transcription start site (TSS) for each gene. **C.** Same as B but for two example DEGs only dysregulated in the brain and not expressed in EpiLCs, *Ccnb1ip1* and *Spata18*. **D.** HOMER motif analysis of all KDM5C-unbound germline DEGs shows significant enrichment of multiple RFX members and their X-box motif. **E.** KDM5C ChIP-seq shows no KDM5C accumulation at the *Rfx2* promoter in EpiLCs or PNCs.