## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Differential gene expression and associated Atrx ChIP-seq peaks and ATAC-seq open and closed regions. Fold change between Atrx- and Atrx+ mNPCs is shown along with associated P value. Associations with Atrx ChIP-seq peaks and ATAC-seq open and closed regions (red) are determined by summing enrichment peak area within a  $\pm$  10 kb window surrounding the transcriptional start site in question. Transcriptional start and stop sites are also shown.

File Name: Supplementary Data 2 Description: Atrx ChIP-seq enrichment peaks for Tp53+/+ mNPCs.

File Name: Supplementary Data 3 Description: Atrx ChIP-seq enrichment peaks for Tp53-/- mNPCs.

File Name: Supplementary Data 4 Description: ATAC-seq open regions arising with Atrx deficiency in mNPCs.

File Name: Supplementary Data 5 Description: ATAC-seq closed regions arising with Atrx deficiency in mNPCs.

File Name: Supplementary Data 6 Description: Genomic sites of significant differential H3.3 composition arising with Atrx deficiency in mNPCs.

File Name: Supplementary Data 7 Description: Primers used for genotyping and RT-qPCR in this study.

File Name: Supplementary Data 8 Description: Primers used for ChIP-qPCR in this study