



**Supplementary Figure 1: Analysis of CASC3 protein levels and Magoh phenotypes (A-C)**

Western analysis of CASC3 expression level in brain lysates of *Casc3*<sup>RRU345</sup> mutant and control embryos at indicated ages. Independent biological samples are loaded in each lane. Note CASC3 levels are consistently reduced in *Casc3*<sup>RRU345/RRU345</sup> brains comparing to the controls. (D) Representative image of E18.5 *Magoh*<sup>Mos2/+</sup> embryo and brain. Note a reduced forebrain size comparing to control (compare to Fig1. Q and S).