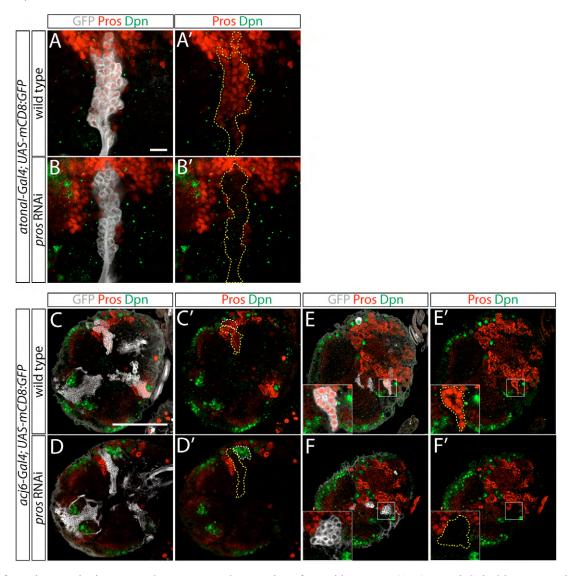


**Fig. S1.** *mdlc* RNAi reduces Mdlc protein levels. Central brain neuroblasts stained for Mdlc; marked by *wor-Gal4 mCD8:GFP*. (A,C) Mdlc is expressed robustly in wt neuroblast lineages. (B,D) *mdlc* RNAi reduces Mdlc protein at 48 hours ALH (B) and 84 hours ALH (D). Scale bar: 10 μm.



**Fig. S2.** Loss of Pros in postmitotic neurons does not cause derepression of neuroblast genes. (A-B) *atonal-Gal4* drives expression in a cluster of neurons which is Pros<sup>+</sup> Dpn<sup>-</sup> in wt (A, A'); Pros staining is strongly reduced in *pros* RNAi with no derepression of Dpn (B, B'). (C-F) *acj6-Gal4* expression is depicted in multiple lineages: deep in the central brain (C,D) and superficial, near the dorsoposterior surface (E,F). Pros is expressed in these lineages in wt (C,C',E,E') while *pros* RNAi ablates this expression (D,D',F,F'). *acj6-Gal4* does not express in the neuroblasts of the lineages outlined in yellow, but it expresses strongly in the neuroblast of the lineage outlined in white. *pros* RNAi in this lineage causes a neuroblast overproliferation phenotype (note cluster of Dpn<sup>+</sup> cells in D'), further illustrating the efficacy of *pros* knockdown. Insets in E,F are high magnification views of white boxed regions. Scale bars: A, 10 μm; C-F, 100 μm.



**Movie 1.** Wt MARCM clone., Shows z-stack images of a wt MARCM clone. The neuroblast is Dpn<sup>+</sup> Ase<sup>+</sup>; neurons are Pros<sup>+</sup> with the exception of some of the oldest neurons at the distal tip of the clone.



**Movie 2.** *mdlc* mutant MARCM clone. Shows z-stack images of a *mdlc* mutant MARCM clone. The large Dpn<sup>+</sup> Ase<sup>+</sup> parent neuroblast persists. Pros expression is lost in some "middle-aged" neuronal progeny. Ase is derepressed in a subset of the Pros<sup>-</sup> neurons, and Dpn is derepressed in several of the Ase<sup>+</sup> neurons.

**Download Table S1**