

Supplementary Figure 1

Supplementary Figure 1. Developmental expression of DLK1 *in vivo*. (a) Immunohistochemistry for DLK1 (green) in coronal sections of brain at different developmental and postnatal stages. (b) Immunohistochemistry for DLK1 (green) in sections of adult brain (left panel). *Dlk1* mutant brain sections were antibody negative (right panel). (c) Quantification by qPCR of *Dlk1* expression in the SVZ at different postnatal stages. (d) *In situ* hybridization of *Dlk1* on sections from murine adult brains (left panel). High magnification images of the SVZ and ventral striatum (Vst) are shown (right panels). Black arrowheads highlight positive cells. sp, septum; st, striatum; V, lateral ventricle. (e) *Dlk1* expression in the ventral tegmental area (VTA). (f) Immunohistochemistry for DLK1 (green) and GFAP (red) in adult brain sections. Lower panels show higher magnification images. White arrowheads highlight double positive cells. (g) Immunohistochemistry for DLK1 (green), GFAP (red) and SOX2 (blue) in adult brain. White arrowheads identify triple positive cells. (h) Immunocytochemistry for DLK1

(green) with cell type-specific markers β III-tubulin (neurons), GFAP (astrocytes), and IB4 (ependymocytes), all in red, in SVZ acutely dissociated cells. No colocalization was found. (i) Immunohistochemistry for DLK1 (green) and DCX (red) on coronal sections of adult brain. No colocalization was found. (j) Immunohistochemistry for DLK1 (green) and for the parenchymal mature astrocyte marker S100 β (red). No colocalization was found. DAPI (blue) was used for counterstaining. Error bars, s.e.m of 5-10 samples. Scale bars: left panel in a, 200 µm; in a, b, f, i, j, 20 µm; in d, 50 µm (right panels, 20 µm); in e, 100 µm; in g, right panels in i, j and lower panel in f, 10µm; in h, 30 µm.