Supplementary Figure 5. Proposed model of DNER-Notch signaling during Bergmann glial development.

(a) During early postnatal development, putative precursors with radial morphology located in the deep cerebellar cortex are thought to generate Bergmann glia (red) and possibly stellate astrocytes in the granule layer (green). Bergmann glia, but not astrocytes in IGL, are responsive to Notch signaling. At P7, cell bodies of Bergmann glia are located around Purkinje cells expressing DNER (blue), and their radial processes project to the pial surface. By P20, varicose appendages appear in the radial fibers simultaneously with growth of Purkinje cell dendrites. (b) DNER expressed in Purkinje cells binds to Bergmann glia and induces morphological differentiation via Deltex-dependent Notch signaling. Determination of Bergmann glial fate from the precursor might also be regulated by Notch signaling.