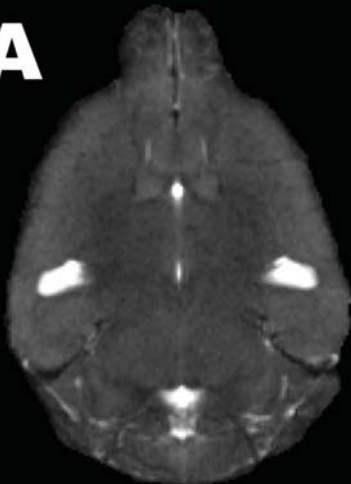
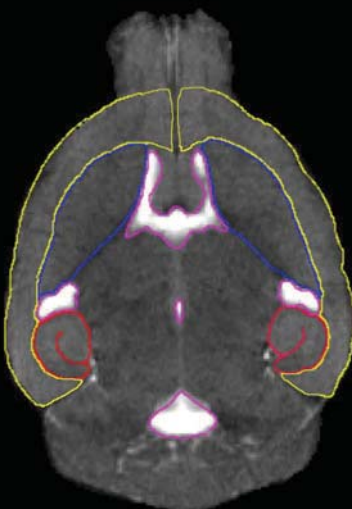
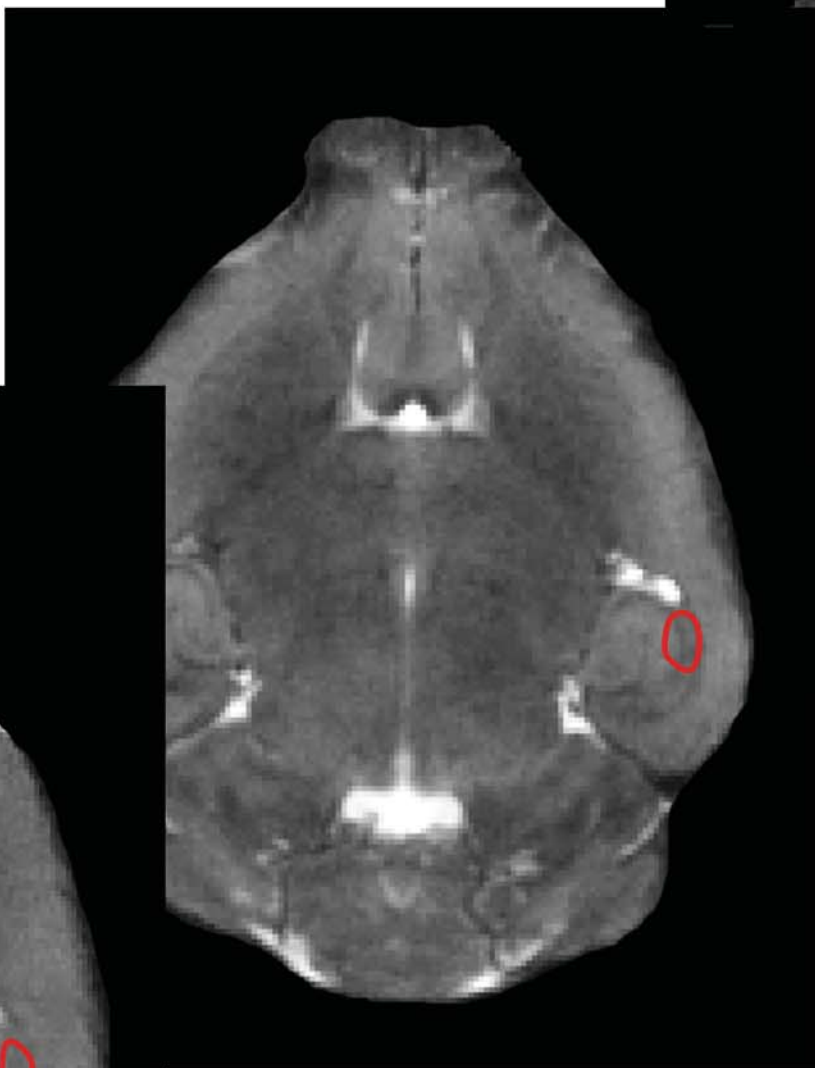


Supporting Information Figure 1. Typical horizontal brain T2-weighted images. Images from a 9-month-old wild-type C57BL/6J mouse are shown. A) 0.7 mm ventral from the mid-body of the hippocampal formation. B) Mid-body of the hippocampus. C) 0.7mm dorsal from the mid-body of the hippocampus. Shown in the right columns are the delineated structural regions measured, as follows: neocortex [yellow], striatum [blue], hippocampus [red], and ventricles [purple].

Supporting Information Figure 2. Dorsal and ventral CA1 rCBV maps in horizontal Slices. A) The most ventral level analyzed. B) The mid-body of the hippocampal formation. C) The most dorsal level analyzed. In each slice, a CA1 ROI was selected as illustrated (red). Note that the EC is not seen at the most dorsal level.

Supporting Information Figure 3. Immunocytochemical staining of hippocampal sections from CBKO, PVKO, and WT mice. Top row: Coronal sections from a WT and CBKO mouse stained for calbindin D-28k. The section from the WT mouse shows strong staining of DG granule cells and CA1 pyramidal cells. In contrast, the section from the CBKO mouse is devoid of any specific immunostaining. Bottom row: Coronal sections from a WT and PVKO mouse stained for parvalbumin. In the section from the WT mouse, there is strong staining in various layers of DG and CA1. Diffuse neuropil is strongest in the DG granule cell layer and CA1 pyramidal cell layer. In the section from the PVKO mouse, no specific immunostaining is detectable.

A**B****C**

A**B****C**