

Red lines for ICV catheter (Supplemental Figure 8 – panels A-D); Blue lines for mid brain samples (Supplemental Figure 8 – panels E-F)

Supplementary Figure S8. Pathologic safety assessment of a control NHP CNS. The NHP used for comparisons was administered PBS. The animals were euthanized 8 weeks post-vector administration. Left hemispheres were sectioned into 3 mm coronal sections following formalin fixation. Histologic staining was performed on brain slices using H&E, with blue indicating nuclei (hematoxylin counterstained). Brown deposits indicate hemosiderin-laden macrophages. Multiple images are shown around the site of the catheter placement in the frontal lobe of the PBS control (NHP-13). Representative images are displayed. (A and B) Areas around the catheter insertion in the frontal lobe—lateral outer cortex. (C and D) Areas around the catheter insertion in the frontal lobe—medial white matter. (E) Area distal to catheter in the frontal lobe—lateral ventricle. (F) Area distal to catheter in the frontal lobe—lateral white matter. (A and C) Overall brain parenchyma of the needle tract regions (scale bars=1mm). (B, D, E, and F) Enlarged areas within the *red boxes* (scale bars=100 µm). Approximate locations of the sections of the primate CNS that were sampled for pathology are shown in the schematic, with *color-coded lines* for each section. No corresponding samples were tested for the cerebellum in the PBS control (NHP-13).