

Supplementary Figure S1

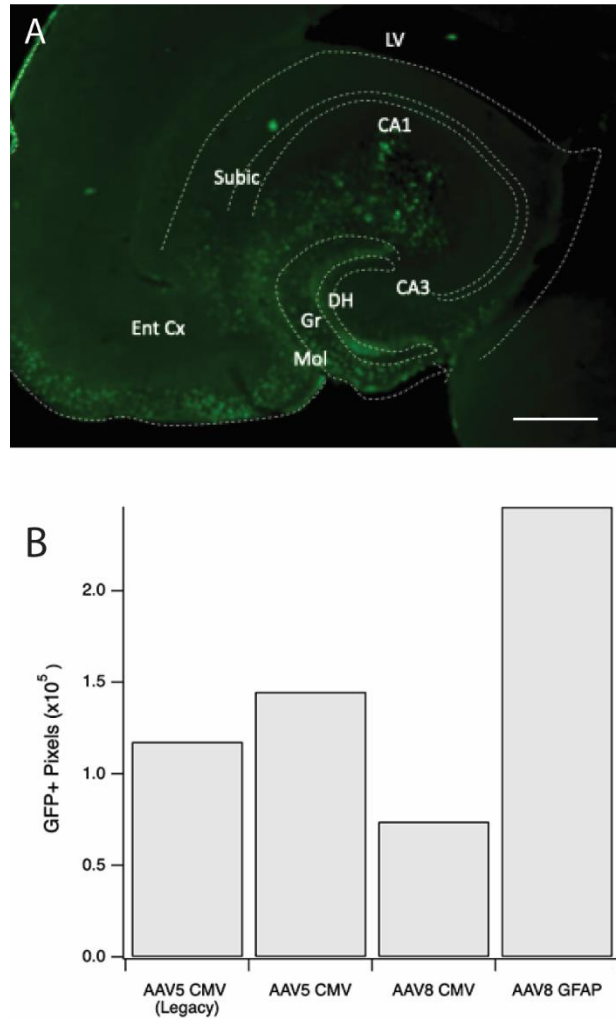


Figure S1. A. Horizontal section of the entorhinal-hippocampal territory of an AAV8-GFAP-GFP-Cre injected $GS^{flx/flx}$ mouse. The section is immunostained for green fluorescent protein (GFP), which is expressed numerous transfected cells in the entorhinal cortex (EC) and hippocampal formation. **B.** The bar graphs depict the extent of viral transfection after a single injection, measured as GFP-positive pixels in the entorhinal-hippocampal territory. Abbreviations: DH, dentate hilus; Gr, granule cell layer of the dentate gyrus; Mol, molecular layer of the dentate gyrus; SUB, subiculum; LV, lateral ventricle. Scale bar in A = 0.5mm.

Supplementary Figure S2

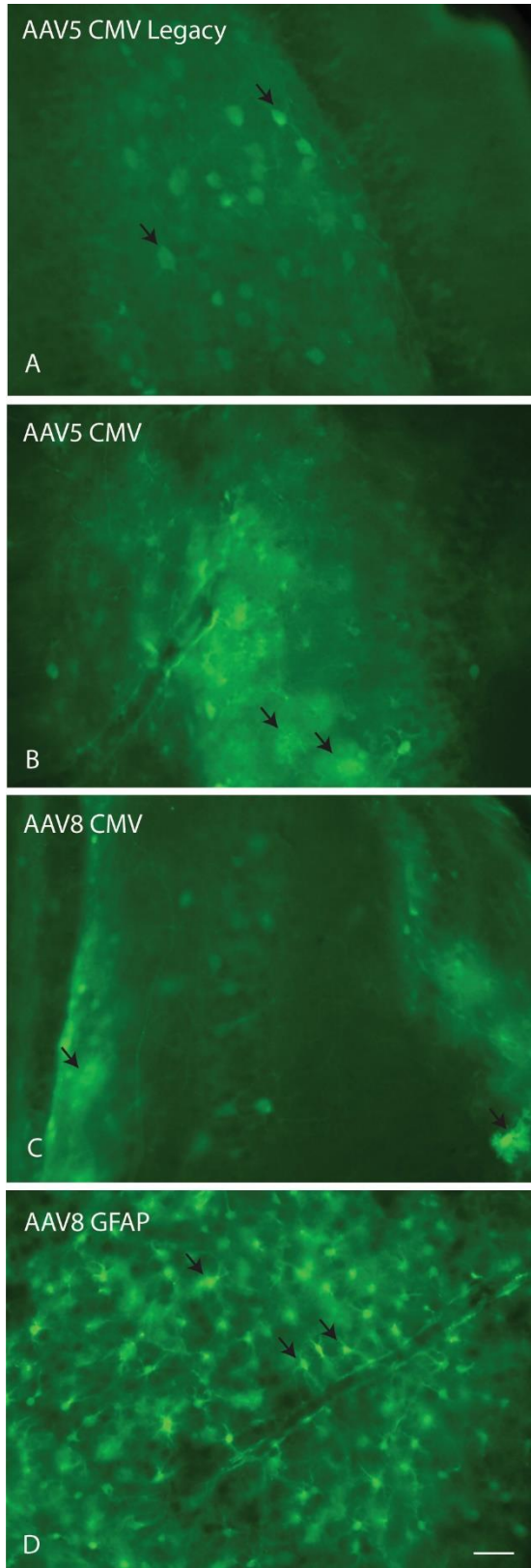


Figure S2. Neuronal and glial selectivity of the different viral vectors tested in the study.

Horizontal sections through the virus injected hippocampi were stained for green fluorescent protein 4 to 6 weeks after the injection. **A.** AAV5 CMV Legacy preferentially infects neurons (arrows). **B.** AAV5 CMV infects both neurons and astrocytes (arrows). **C.** AAV8 CMV infects both neurons and astrocytes (arrows). **D.** AAV8 GFAP preferentially infects astrocytes (arrows). Scale bar in D = 50 μm (same magnification for all pictures).