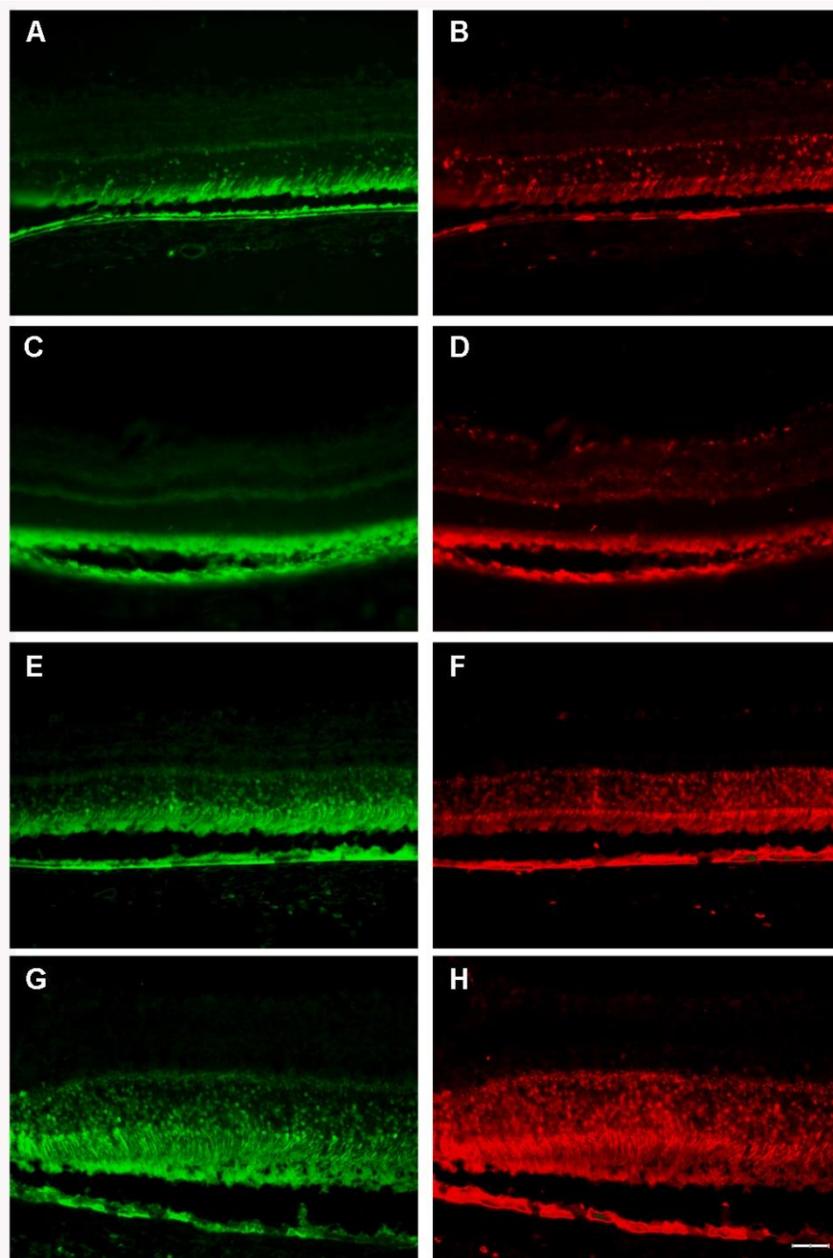


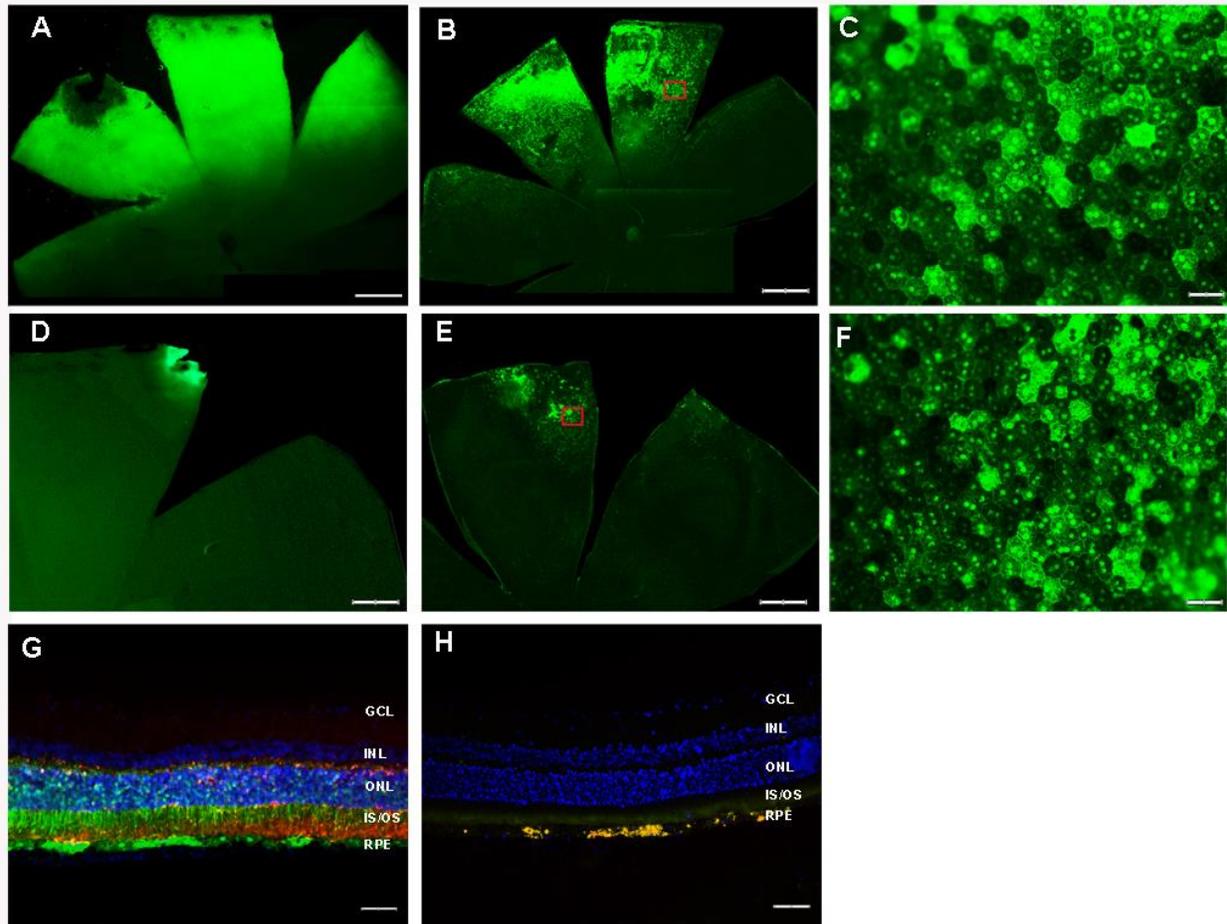
Supplemental Figure 1



Supplemental Figure 1. High Expression of GFP in all Four Quadrants of the Retina Two Weeks after Suprachoroidal Injection of AAV8.GFP.

Corresponding fluorescent and anti-GFP images from locations A-D shown in Figure 2 two weeks after suprachoroidal injection of 2.85×10^{10} GC of AAV8.GFP in rats. There is moderate expression of GFP in retinal pigmented epithelial (RPE) cells and photoreceptors in the 2 quadrants on the opposite side of the eye from the site of injection (A-D) and strong expression of GFP in RPE, photoreceptor inner and outer segments and cell bodies in the 2 quadrants adjacent to the injection site (E-H, bar = 100 μ m).

Supplemental Figure 2



Supplemental Figure 2. Widespread expression of GFP in the retina and retinal pigmented epithelium (RPE) after suprachoroidal injection of AAV9.GFP, but not AAV2.GFP.

Two weeks after suprachoroidal injection of 2.85×10^{10} GC of AAV9.GFP in Brown Norway rats, retinal flat mounts showed fluorescence in the quadrant where the injection was done (A, scale bar = 500µm). RPE/choroid flat mounts also showed strong fluorescence in the quadrant that the injection was done (B, scale bar = 500µm). High magnification of the boxed region in B shows some strongly fluorescent RPE cells and other cells with mild fluorescence (C, scale bar = 50µm). Two weeks after suprachoroidal injection of 2.0×10^{10} GC of AAV2.GFP in Brown Norway rats, retinal flat mounts showed a few focal areas of fluorescence around the injection site but nothing elsewhere in the retina (D, scale bar = 250µm). RPE/choroid flat mounts showed fluorescence around the injection site encompassing a larger area than the fluorescent area on the retinal flat mount (E, scale bar = 250µm). High magnification of the boxed region in E shows some strongly fluorescent RPE cells and other cells with mild fluorescence (F, scale bar = 50µm). A merge image of an ocular section showing GFP fluorescence, anti-GFP staining and Hoechst staining of nuclei 2 weeks after injection of AAV9.GFP, demonstrates GFP expression in the RPE and photoreceptor inner and outer segments (G, scale bar = 100µm). A merge image of an ocular section showing GFP fluorescence, anti-GFP staining and Hoechst staining of nuclei 2 weeks after injection of AAV2.GFP, demonstrates focal GFP expression in RPE cells (H, scale bar = 100µm).