



Figure S4. The smCBA Promoter Delivered by Subretinal Injection in Adult Nonhuman Primate Showed Ubiquitous Expression

smCBA driving EmGFP-WPRE in rAAV9, was injected directly into adult rhesus macaque eye at a dose of 1.88×10^{12} GC/eye, and harvested four weeks later. At harvest, A) *in vivo* color fundus photo showed intense expression throughout the posterior retina compared to baseline. Dotted line indicates location of subretinal blebs. B) *In vivo* fundus autofluorescence (FAF) demonstrated intense expression (white) in the posterior pole, optic nerve, and nerve fibers. The 4-week time-point image was taken using a 1.0 Neutral Density Filter (NDF) to reduce EmGFP fluorescence to a level where retinal features were visible. C) *In vivo* spectral domain optical coherence tomography imaging showed minimal disruption of retinal structure or changes in retinal thickness. D) *In vivo* ultra-widefield FAF showed intense expression (white) centered in the posterior pole. E) Histological confocal images demonstrated expression in all retinal layers in the periphery, posterior, fovea, and optic nerve. EmGFP, emerald green fluorescent protein; GCL, ganglion cell layer; INL, inner nuclear layer; ONL, outer nuclear layer; rAAV9, recombinant adeno-associated virus packaged in capsid 9; WPRE, woodchuck hepatitis virus posttranscriptional regulatory element. Blue, DAPI; Green, EmGFP epifluorescence.