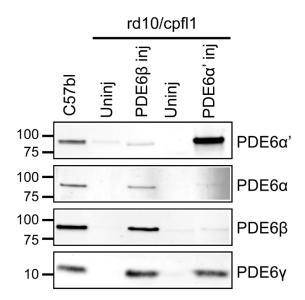


**Figure S1**. Retinal morphology is rescued following delivery of AAV-smCBA-PDE6α'. (A) Retinal morphology shows rescue of rod photoreceptor cells indicated by much thicker outer nuclear layer (ONL) and outer/inner segments (OS/IS) in treated eyes. (B) Immunohistochemistry by anti-rhodopsin antibody confirms the more abundant rhodopsin expression in treated rd10/cpfl1 eyes relative to untreated controls. (C) Immunohistochemistry by anti-M/S-cone opsin antibodies demonstrates cone rescue in treated rd10/cpfl1 eyes. Scale bar: 20 μm.



**Figure S2**. Injected rod PDE6β or cone PDE6α' in rd10/cpfl1 retinas are assembled with endogenous rod PDE6γ subunit. Immunoblot analysis of assembled PDE6 using ROS1-IP from retina of wild type controls, uninjected rd10/cpfl1, and rd10/cpfl1 mice injected with rod PDE6β or cone PDE6α'. The immunoblots were probed with indicated antibodies. A protein molecular weight scale is shown on the left.