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Supplemental Information

AKT3 Gene Transfer Promotes Anabolic Reprogramming and Photoreceptor Neuroprotection in a Pre-clinical Model of Retinitis Pigmentosa

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Supplemental Information

Figure S1. AAV.caRheb stimulates mTORC1 activity *in vitro* but not in photoreceptors. (A) Western blot evaluating expression of pS6$^{Ser240/244}$, S6, and GAPDH (loading control) from untreated 84-31 cells or treated with AAV.eGFP or AAV.caRheb. Numerical values indicate biological replicates for each treatment condition. **(B)** Representative micrographs of retinal sections injected with AAV.eGFP alone (top panels) or with AAV.caRheb/AAV.eGFP (bottom panels) and stained with antibodies directed against pS6$^{Ser240/244}$.

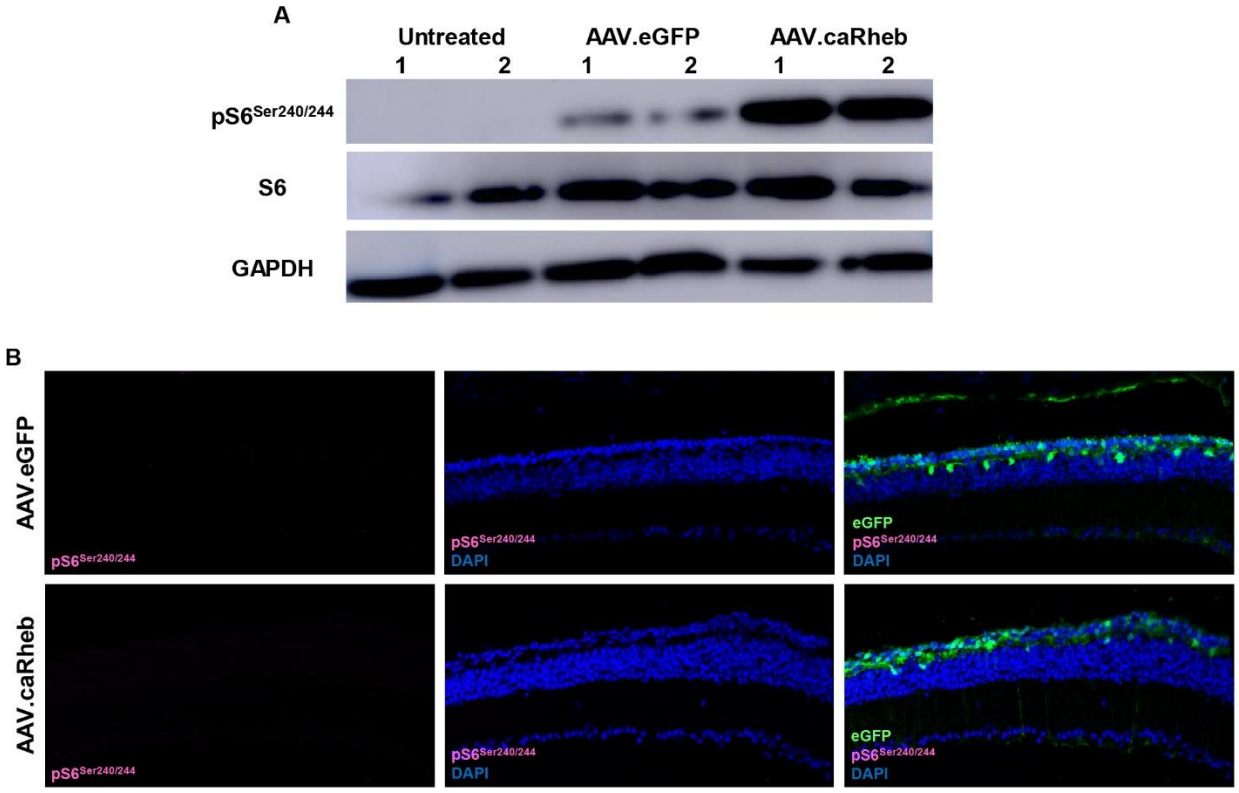

Figure S2. Long-term *AKT3* gene transfer leads to retinal disorganization in wild-type animals. C57Bl/6 (wild-type) mice received subretinal injection at PN13. **(A-B)** Retinal histology at PN125 reveals normal photoreceptor structure in animals treated with AAV.eGFP alone. **(C-D)** Animals treated with AAV.eGFP in combination with AAV.AKT3 display extensive disorganization of retinal layers and loss of photoreceptor numbers and structure.