



*Supporting Figure 9. Normal retinal histology in *Abca4*<sup>-/-</sup> and *sh1*<sup>-/-</sup> mice following subretinal delivery of dual AAV trans-splicing and hybrid AK vectors.*

(A) Representative paraffin-embedded sections of *Abca4*<sup>-/-</sup> retinas either uninjected (n=2) or treated at one month of age with dual AAV2/8-RHO-ABCA4 trans-splicing (TS-ABCA4, n=3), dual AAV hybrid AK (AK-ABCA4, n=4) or single 5'-half (neg) of either dual AAV TS (n=1) or hybrid AK (n=2; neg total n=3). Eyes were harvested 8 months after treatment and retinal sections were stained with hematoxylin and eosin. (B) Representative semi-thin sections of *sh1*<sup>-/-</sup> retinas either uninjected (n=2) or treated at one month of age with dual AAV2/8-CBA-MYO7A trans-splicing (TS-MYO7A, n=6), dual AAV hybrid AK (AK-MYO7A, n=6) or single 5'-half (neg) of either dual AAV TS (n=1) or hybrid AK (n=2; neg total n=3). Eyes were harvested 2-3 months after treatment and retinal sections were stained with toluidine blue. (A-B) the scale bar (50  $\mu$ m) is depicted. RPE: retinal pigmented epithelium; PR: photoreceptors; INL: inner nuclear layer; GCL: ganglion cell layer.