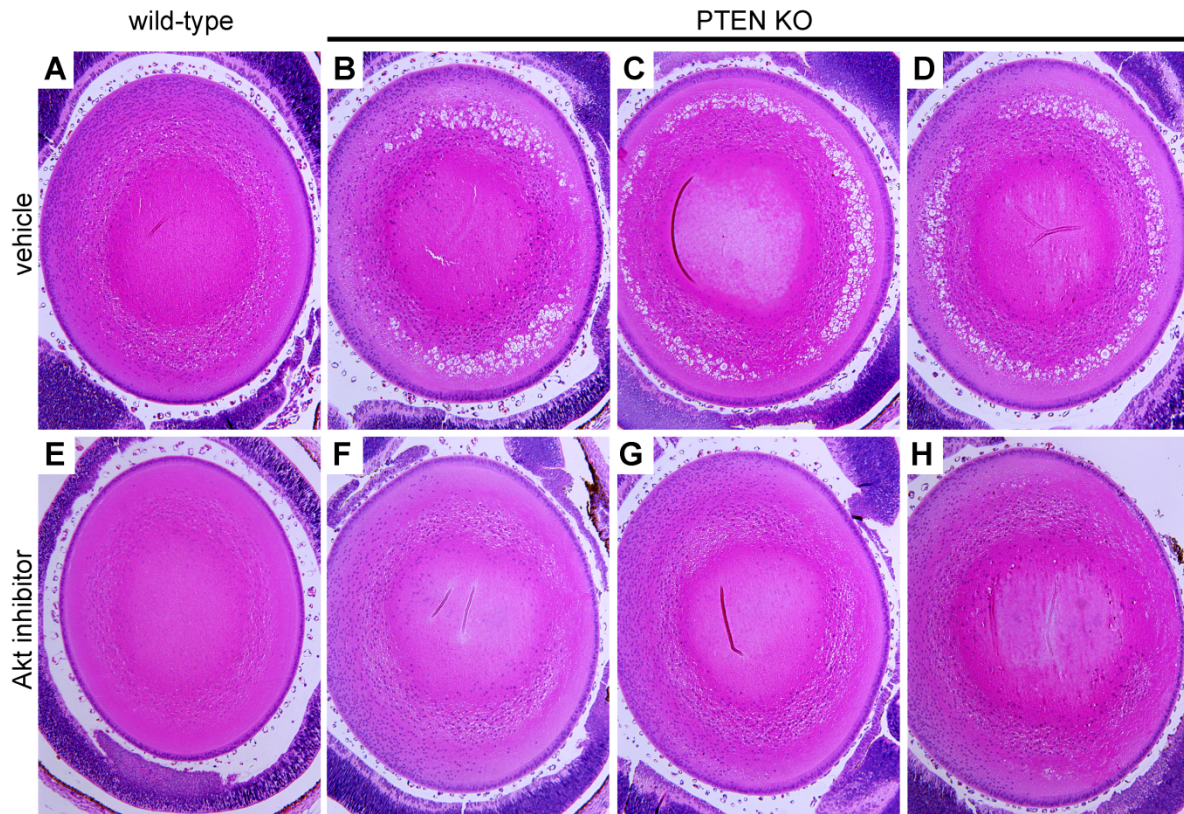


## Supplemental material



**Supplemental Figure S1.** Histological abnormalities in PTEN KO lenses can be partially alleviated by Akt inhibitor treatment. Pregnant females were injected with vehicle, or an Akt inhibitor dissolved in 2% DMSO at 1 mg/kg/d on E16.5, E17.5, and E18.5. P0 lenses were dissected, fixed, sectioned and stained with hematoxylin and eosin. Coronal sections of wild-type lenses from vehicle treated mothers appeared normal (A). PTEN KO lenses from vehicle injected mothers developed extensive equatorial vacuoles (B-D, 100%, n = 8). Wild-type lenses from P0 animals treated with the Akt inhibitor also appeared normal (E). Lenses of PTEN KO neonates from Akt inhibitor treated mothers either displayed a substantial reduction in vacuole formation (F-H, 56%, n = 9), or, developed vacuoles to a similar extent as vehicle treated controls (not shown, 44%, n = 7). Scale bar = 50  $\mu$ m.