



Supplemental Figure 1: Pitx2 expression pattern in adult eyes.

Paraffin sections of 2-week-old wild type were immunostained (red) to detect PITX2 and sections were counterstained with DAPI to detect nuclei (A). PITX2 was detected in the corneal endothelium (B, arrow heads), anterior iris (arrows) and iridocorneal angle (star). (C) Merge of A and B.

Supplemental Tables:

Supplemental Table 1: IOP distribution analysis in controls and mutants at three time points

	WT			Mutant		
	3 weeks	2 months	4 months	3 weeks	2 months	4 months
IOP<20	18/20 (90%)	24/25(96%)	25/25 (100%)	5/13 (28%)	17/32 (53%)	13/23 (57%)
IOP≥20	2/20 (10%)	1/25 (4%)	0/25 (0%)	13 (72%)	15/32 (47%)	10/23 (43%)

Supplemental Table 2: Grade distribution of optic nerve degeneration in WT and mutants at three weeks and two months.

	3 Weeks				2 Months			
	Grade 0	Grade 1	Grade 2	Grade 3	Grade 0	Grade 1	Grade 2	Grade 3
WT	8/12 (67%)	4/12 (33%)	0/12 (0%)	0/12 (0%)	8/8 (100%)	0/8 (0%)	0/8 (0%)	0/8 (0%)
Mut	3/13 (23%)	4/13 (31%)	1/13 (8%)	5/13 (38%)	0/14 (0%)	6/14 (43%)	2/14 (14%)	6/14 (43%)