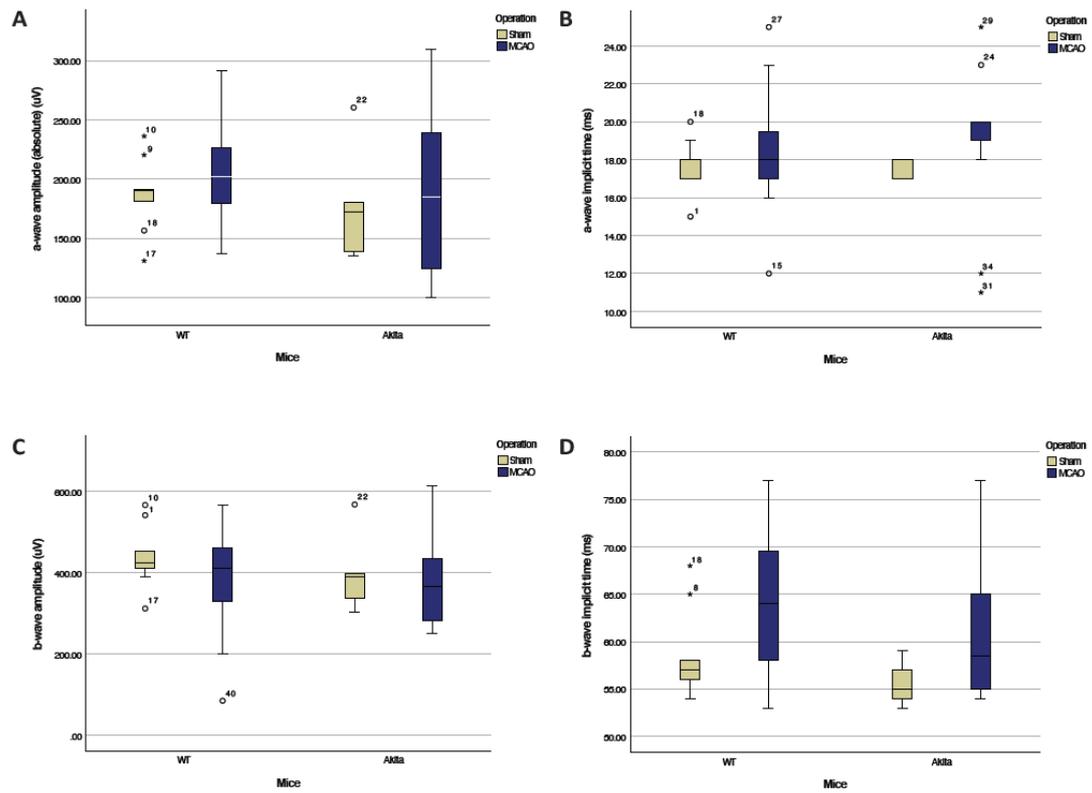
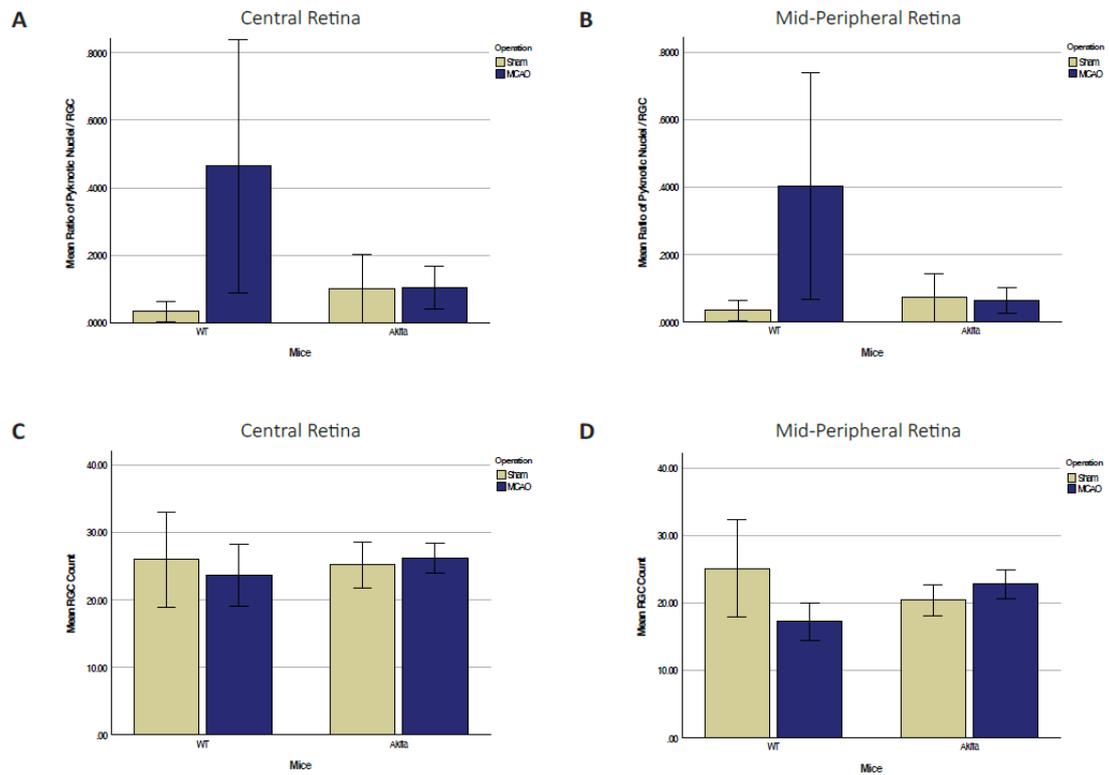


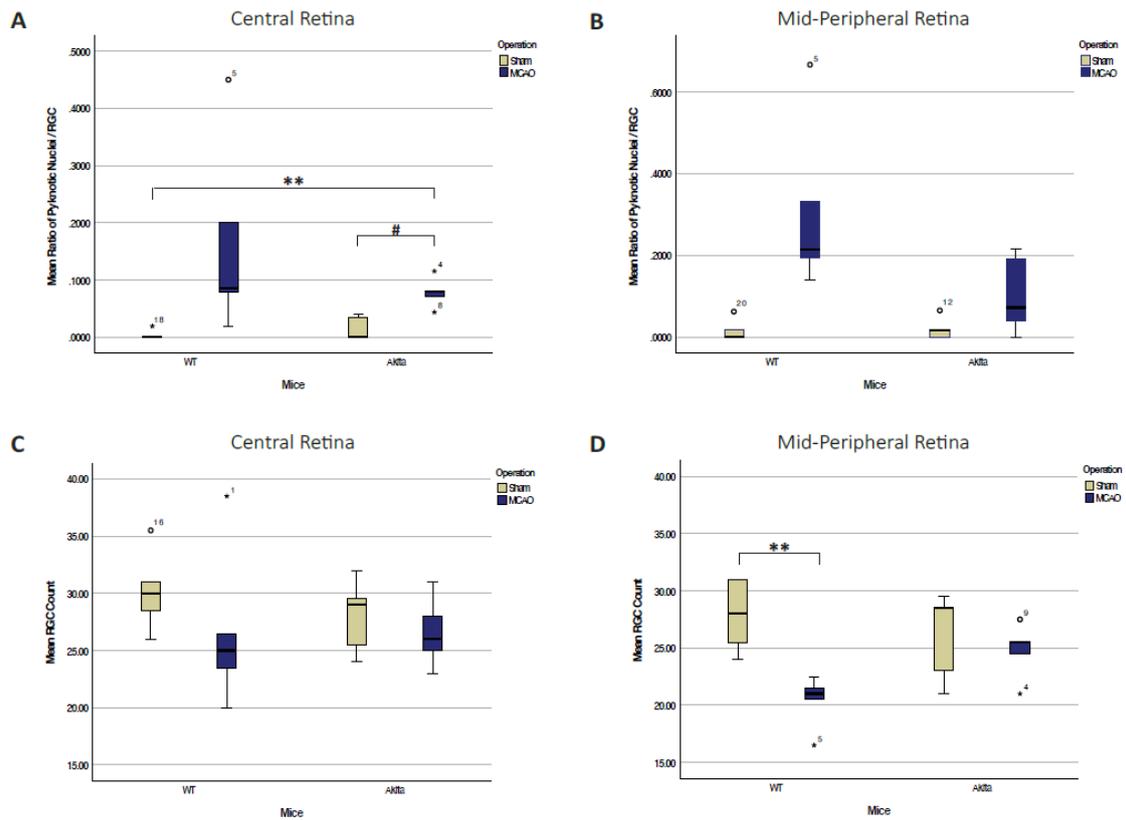
Supplementary Figure S1. Scotopic flash ERG responses of a- and b-waves in WT and Akita mice after sham or MCAO treatment (2I2R group) at 3 cd.s/m² intensity (A) a-wave amplitude (B) a-wave implicit time (C) b-wave amplitude (D) bwave implicit time. $n = 7$ for WT sham group, $n = 8$ for WT MCAO group and Akita MCAO group, $n = 9$ for Akita sham group. # $p < 0.05$, ### $p < 0.001$ as compared with Akita sham. ** $p < 0.01$, *** $p < 0.001$ as compared with WT sham. Values represent mean with error bars +/- SD. (Figure and caption has been adapted from a dissertation[9]. Please refer to acknowledgements section.)



Supplementary Figure S2. Scotopic flash ERG responses of a- and b-waves in WT and Akita mice after sham or MCAO treatment (2I22 group) at 3 cd.s/m² intensity. (A) a-wave amplitude (B) a-wave implicit time (C) b-wave amplitude (D) bwave implicit time. *n* = 9 for WT sham group. *n* = 15 for WT MCAO group. *n* = 5 for Akita sham group. *n* = 14 for Akita MCAO. (Figure and caption has been adapted from a dissertation[9]. Please refer to acknowledgements section.)



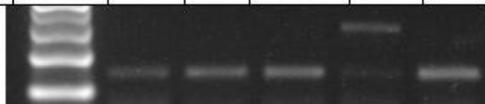
Supplementary Figure S3. RGC and pyknotic cell count in the GCL (2I2R group). (A, B) Ratio of cells with pyknotic nuclei to RGCs in the central (A) and mid-peripheral retina (B). (C, D) Number of RGCs in the GCL in the central (C) and midperipheral retina (D). No statistical significance detected. $n = 5$ in each group. Values represent mean with error bars \pm SD. (Figure and caption has been adapted from a dissertation[9]. Please refer to acknowledgements section.)



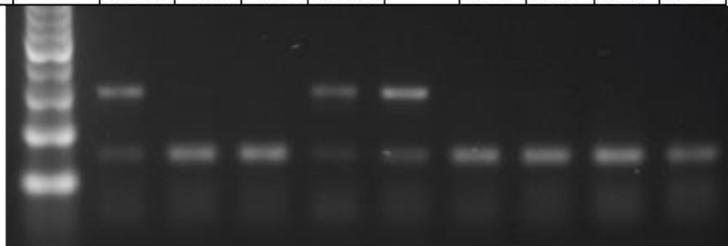
Supplementary Figure S4. RGC and pyknotic cell count in the GCL (2I22R group) (A, B) Ratio of cells with pyknotic nuclei to RGCs in the central (A) and mid-peripheral retina (B). (C, D) Number of RGCs in the GCL in the central (C) and midperipheral retina (D). The RGC cell count was slightly lower in WT MCAO-injured retinae as compared with WT sham-treated retinae in the mid-peripheral retinae, with statistical significance detected in the mid-peripheral retinae. $n = 5$ in each group. $** p < 0.01$ as compared with WT sham group. $\# p < 0.05$ as compared with Akita sham group. (Figure and caption has been adapted from a dissertation[9]. Please refer to acknowledgements section.)

Supplementary Figure S5. Examples of PCR analysis for genotyping of Akita mice

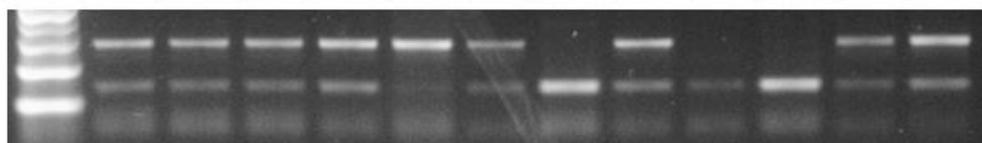
Lane	1	2	3	4	5	6
Marker		A8/E8	A7/C2	A7/C1	A7/13-1	A8/5-3
Result	---	WT	WT	WT	Akita	WT



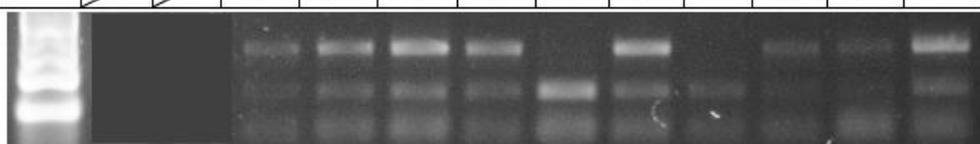
Lane	1	2	3	4	5	6	7	8	9	10
Marker		G1-2	G1-3	A8/B1	A8/B2	A8/B3	A8/B4	A8/B5	A8/B6	A8/B7
Result	---	Akita	WT	WT	Akita	Akita	WT	WT	WT	WT



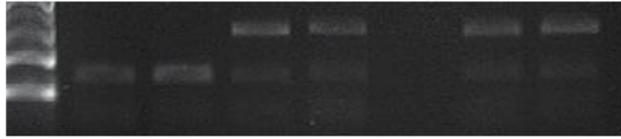
Lane	1	2	3	4	5	6	7	8	9	10	11	12	13
Marker		A8/5-1	A8/5-2	A8/5-4	A7/D1	A7/D2	A7/D3	A2/9-1	A2/9-2	A2/9-3	A2/9-4	A2/9-5	A7/13-2
Result	---	Akita	Akita	Akita	Akita	Akita	Akita	WT	Akita	WT	WT	Akita	Akita



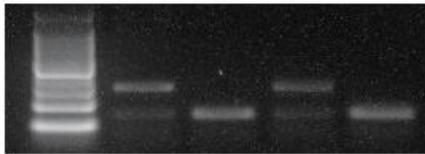
Lane	1	2	3	4	5	6	7	8	9	10	11	12	13
Marker		/	/	A7/12-8	A7/12-9	A8/5-5	A8/5-6	A8/5-7	A7/D4	A7/D5	A7/D6	A7/D7	A7/D8
Result	---	/	/	Akita	Akita	Akita	Akita	WT	Akita	WT	Akita	Akita	Akita



Lane	1	2	3	4	5	6	7	8
	Marker	G1/20-1	G1/20-1	G1/11-1	G1/11-2	/	G1/11-4	G1/11-5
Result	---	WT	WT	Akita	Akita	/	Akita	Akita



Lane	1	2	3	4	5
	Marker	F2-6	G1-1	G1-2	G1-3
Result	---	Akita	WT	Akita	WT



Lane	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	F1-1	F1-2	F1-4	/	F2-7	F3-8	F5-15	F6-19	Marker	/	/	G1-3	G1-4	G2-1	G2-2	G2-3
Result	Akita	Akita	Akita	/	Akita	Akita	Akita	Akita		/	/	WT	Akita	Akita	Akita	Akita

