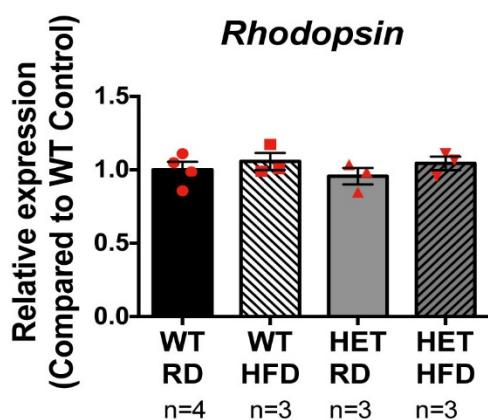
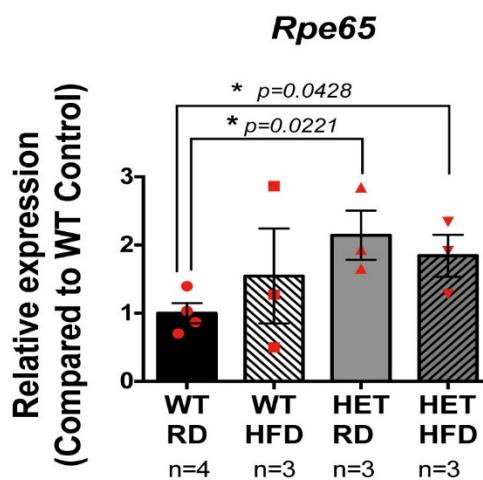
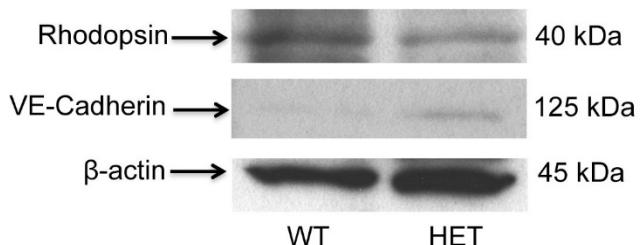
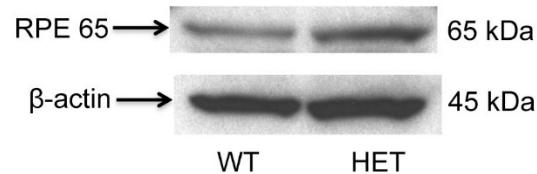


Supplementary Figure 1.

A**B****C****D**

Supplementary Figure 1.

(A) Rhodopsin gene expression in RPE/retina of WT and *PGC-1α^{+/-}* (HET) under RD and HFD.

(B) Rpe65 gene expression in RPE/retina of WT and *PGC-1α^{+/-}* (HET) under RD and HFD showing increased *Rpe65* expression in the RPE/retina of *PGC-1α^{+/-}* mice fed RD or HFD as compared to WT mice fed RD, suggesting that *Pgc-1α* might regulate *Rpe65* expression, or that increased levels of *Rpe65* expression might be a compensatory response to oxidative stress and photoreceptor degeneration. (*n* represents the number of mice in each group).

(C) Representative western blot image of rhodopsin, RPE65 and VE-cadherin showing rhodopsin and RPE65 protein expression and absence or minimal VE-cadherin expression in RPE/retina extract of WT and *PGC-1α^{+/-}* (HET) mice.

Table S1. Antibodies used in this study.

Name of Antibody	Concentration	Reference#
LC3B Rabbit Ab	1:1,000	Cell signaling, 2775
SQSTM1/P62 Rabbit Ab	1:1,000	Cell signaling, 5114
β -Actin (D6A8) Rabbit mAb	1:10,000	Cell signaling, 8457
Rabbit IgG HRP-Linked Ab	1:3,000	Cell signaling, 7074
Goat IgG HRP-conjugated Ab	1:1,000	R&D System, HAF017
Mouse IgG, HRP-linked Ab	1:3,000	Cell signaling, 7076S
Bestrophin Rabbit Ab	1:500	Biorbyt, orb323221
Mouse VE-Cadherin Ab	0.2 μ g/ul	R&D System, AF1002
Rhodopsin mouse mAb	1:1,000	Thermo Fisher, MA1-722
RPE65 Rabbit	1:500	A gift from Dr. M. Redmond laboratory, NEI/NIH
AGE, Carboxy-Methyl Lysine mouse mAb	1:100	Millipore, MABN1837
Goat anti-Mouse IgG (H+L) Cross-Adsorbed Secondary Ab	1:1000	Thermo Fisher, A-11001

Table S2. Primers used in this study.

Gene	Primer sequence	
<i>Gapdh</i>	Forward	AGACAGCCGCATCTTCTTGT
	Reverse	AATCTCCACTTGCCACTGC
<i>Tnfa</i>	Forward	GTAGCCCACGTCGATGCAAA
	Reverse	ACAAGGTACAACCCATCGGC
<i>Infy</i>	Forward	GGCAAAAGGATGGTGACATGA
	Reverse	TTTCGCCTGCTGTTGCTGA
<i>Pgc-1a</i>	Forward	AGCCGTGACCACTGACAACGAG
	Reverse	GCTGCATGGTTCTGAGTGCTAAA
<i>ApoE</i>	Forward	GGTCGAGCCAATAGTGGAA
	Reverse	ATGGATGTTGTTGCAGGACA
<i>ApoJ</i>	Forward	CAGCTGGCTAACCTCACACA
	Reverse	TGTGATGGGGTCAGAGTCAA
<i>ApoB</i>	Forward	GCCCATTGTGGACAAGTTGATC
	Reverse	CCAGGACTGGAGGTCTTGGAA
<i>App</i>	Forward	TGCAGCAGAACGGATATGAG
	Reverse	ACACCGATGGGTAGTGAAGC
<i>Vegfa</i>	Forward	AGCACACGAGATGTGATTGC
	Reverse	TTTCTTGCCTTCGTTTTT
<i>Rpe65</i>	Forward	TGATGGTGTGGTTCTGAGTGTGGT
	Reverse	AAGAGGGCATTGGATTCCGTCTCA
<i>Rhodopsin</i>	Forward	TTCGTGGTCCACTTCACCATTCC
	Reverse	TGATAACCATGCGGGTGACTTCCT
<i>VE-Cadherin</i>	Forward	CCGGCGCCAAAAGAGAGA
	Reverse	CTGGTTTCCTTCAGCTGGAAGTGGT
<i>Sod2</i>	Forward	TCATGCATGCAAATCCTTGT
	Reverse	CCAGACCCAAACAAGCTCTTC
<i>Nd1</i>	Forward	CTCTTATCCACGCTTCCGTTACG
	Reverse	GATGGTGGTACTCCCGCTGTA
<i>H19</i>	Forward	GTACCCACCTGTCGTCC
	Reverse	GTCCACGAGACCAATGACTG