

Figure S1 Oxidative stress/nitrative stress in the RPE/choroid of BL-exposed Balb-c mice. (A) Gene expression of gp91, p47 and p22 in the RPE-choroid-sclera complexes of each group was detected by real-time PCR (N=7). The results are presented as means ± SEM; N=6, \*P<0.05 for each pair of groups indicated.



**Figure S2** Expression of FPRL1 in the retina and RPE-choroid-sclera complexes post BL illumination. Representative images of immunostaining of FPRL1 in the retina and RPE-choroid-sclera complexes of each group. Scale bar =25 µm. GCL, ganglion cell layer; INL, inner nuclear layer; ONL, outer nuclear layer; RPE, retinal pigment epithelial (/epithelium) layer.



Figure S3 The level of NRF2 in hRMECs after siRNAs transfection. (A,B) Cells were transiently transfected with the expression vector encoding NRF2 siRNAs or the empty vector. Lysates of the cells were immunoblotted using the anti-NRF2 antibody; N=5. (C) Gene expression of NRF2 in each group's RPE cells was detected via real-time PCR; N=5. The results are presented as means  $\pm$  SEM; \*P<0.05 for each pair of groups indicated.

Table S1 Primer sequences and conditions for conventional RT-PCR

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Genes	Forward primer (5'-3')	Reverse primer (5'-3')
Human NRF2	GGTGATGAATTTTACTCTGC	TTTCCGAGTCACTGATGAACC
Human HO1	TCTTGGCTGGCTTCCTTAC	CATAGGCTCCTTCCTCCTTTC
Human GAPDH	ATCACCATCTTCCAGGAGCG	CGCCTGCTTCACCACCTTCTTG
Mouse NRF2	TCACACGAGATGAGCTTAGGGCAA	TACAGTTCTGGGCGGCGACTTTAT
Mouse NQO1	TGGCCGAACACAAGAAGCTG	GCTACGAGCACTCTCTCAAACC
Mouse gp91	AGCTATGAGGTGGTGATGTTAGTGG	CACAATATTTGTACCAGACAGACTTGAG
Mouse p22	CTGCCCTCCACTTCCTGTTG	TTCACCCTCACTCGGCTTCT
Mouse p47	ATGAAGGTCTCCACCACTG	GCATTCAGTTCCAGGTCA
Mouse-HRPT	CCCCAGGAATACAAAGACT	AACAAGAGCATAGCAGGAAC