Supplemental Figure 1. Effects of H$_2$O$_2$ on Grx1 expression in ARPE-19 cells. (A) Time-dependent effect of H$_2$O$_2$ on Grx1 mRNA level in ARPE-19 cell. ARPE-19 cells were incubated in medium containing 200 μM H$_2$O$_2$ for 0, 2, 6, 12, and 24 h. Grx1 mRNA levels was examined by real-time PCR. (B) Time-dependent effect of H$_2$O$_2$ on Grx1 protein level in ARPE-19 cells. 40 μg cell lysates of each time point was subjected to immunoblot analysis with antibody specific to Grx1.

Supplemental Figure 2.
Supplemental Figure 2. Effects of Grx1 overexpression on ROS production in ARPE-19 cells. (A) Vector-transfected (vector) and Grx1 overexpressed (Grx1 OE) ARPE-19 cells were treated with or without 200 μM H₂O₂ for 30 mins. The cells were then incubated in 5μmol/L CellROX Orange Reagent at 37°C for 30 minutes followed by washing with pre-warmed PBS twice. Afterwards, the cells were subjected to confocal analysis. (scale bar: 20μm). (B) Fluorescence intensity was quantified and represented as mean ± SD via a bar graph. ***P < 0.001 comparing with H₂O₂-treated vector group.