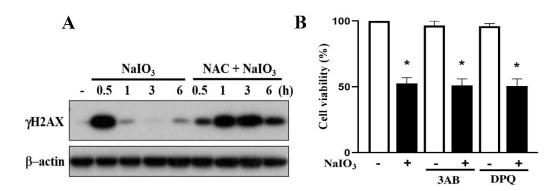
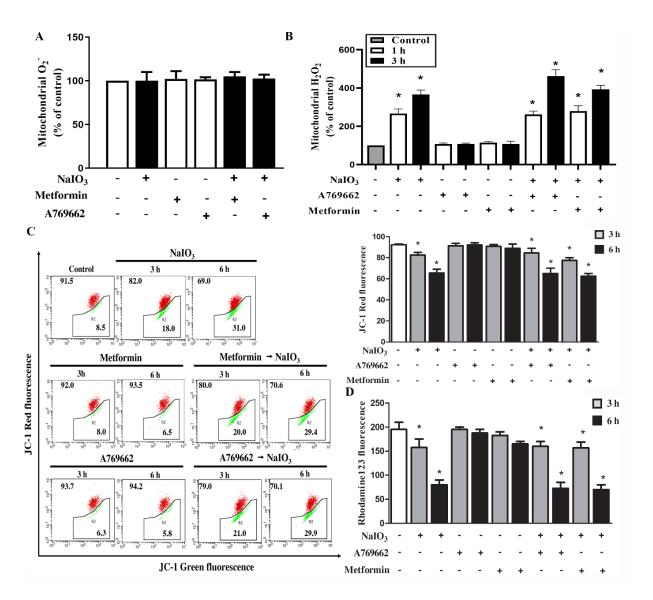
## **Supplementary figures:**



Supplementary Figure S1. NAC enhances DNA damage in NaIO3 treated RPE cells. (A) Cells were pretreated with NAC (10 mM) followed by NaIO3 stimulation at indicated time points.  $\gamma$ H2AX protein was determined by immunoblotting. (B) Cells were pretreated with 3AB (50  $\mu$ M) or DPQ (25  $\mu$ M) for 20 min followed by NaIO3 (30 mM) for 18 h. Cell viability was determined by Annexin V/PI staining using flow cytometry. Data were mean  $\pm$  SEM from three independent experiments \*p < 0.05, indicating the cytotoxic effects of NaIO3.



Supplementary Figure S2. A769662 and metformin do not affect NaIO<sub>3</sub>-induced mitochondrial H<sub>2</sub>O<sub>2</sub> production nor decreased mitochondrial membrane potential. Cells were pretreated with metformin (6 mM) or A769662 (30  $\mu$ M) 20 min prior to NaIO<sub>3</sub> (30 mM) stimulation for the indicated times. Mitochondrial O<sub>2</sub>· (A) and mitochondrial H<sub>2</sub>O<sub>2</sub> (B) were determined by mitoSOX and mitoPY1, respectively. Mitochondrial membrane potential was determined by JC-1 (C) and rhodamine123 (D), respectively. Data were mean  $\pm$  SEM from three independent experiments \* p <0.05, indicating the significant effects of NaIO<sub>3</sub> to induce mitochondrial H<sub>2</sub>O<sub>2</sub> production and mitochondrial membrane potential loss.