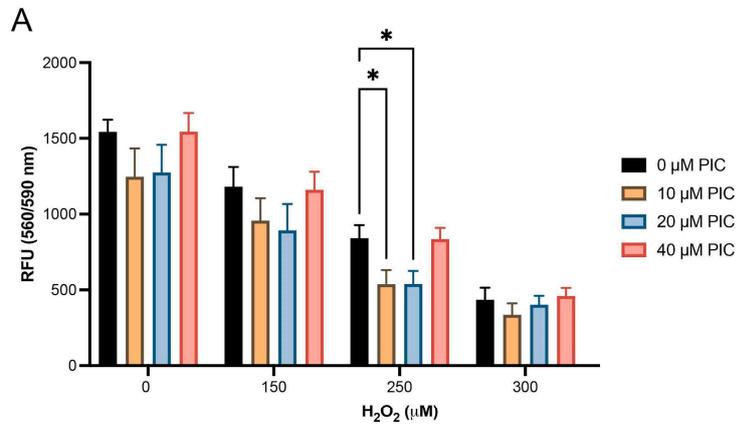
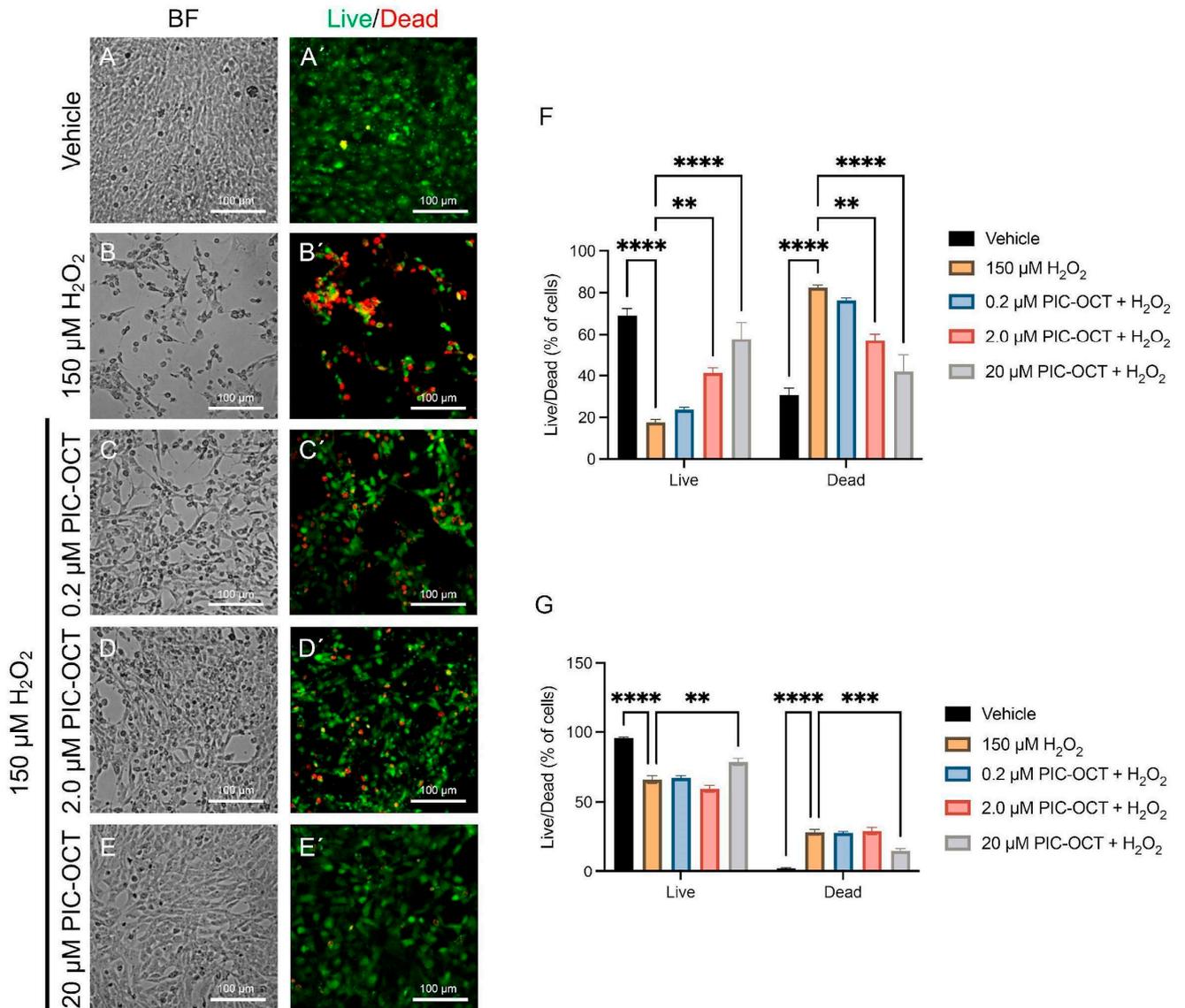


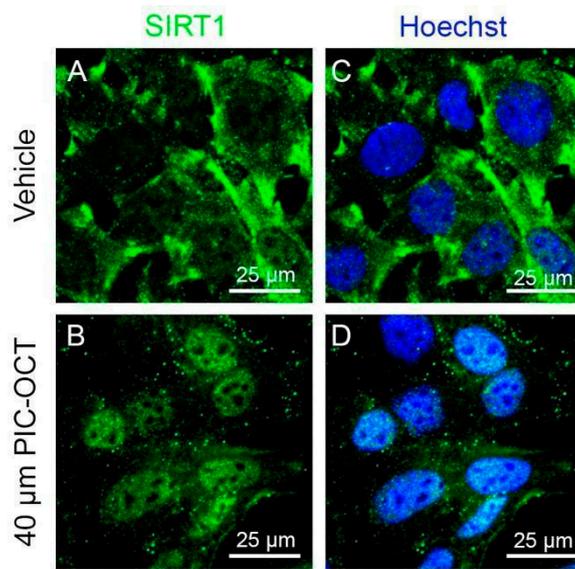
## Supplementary Figures.



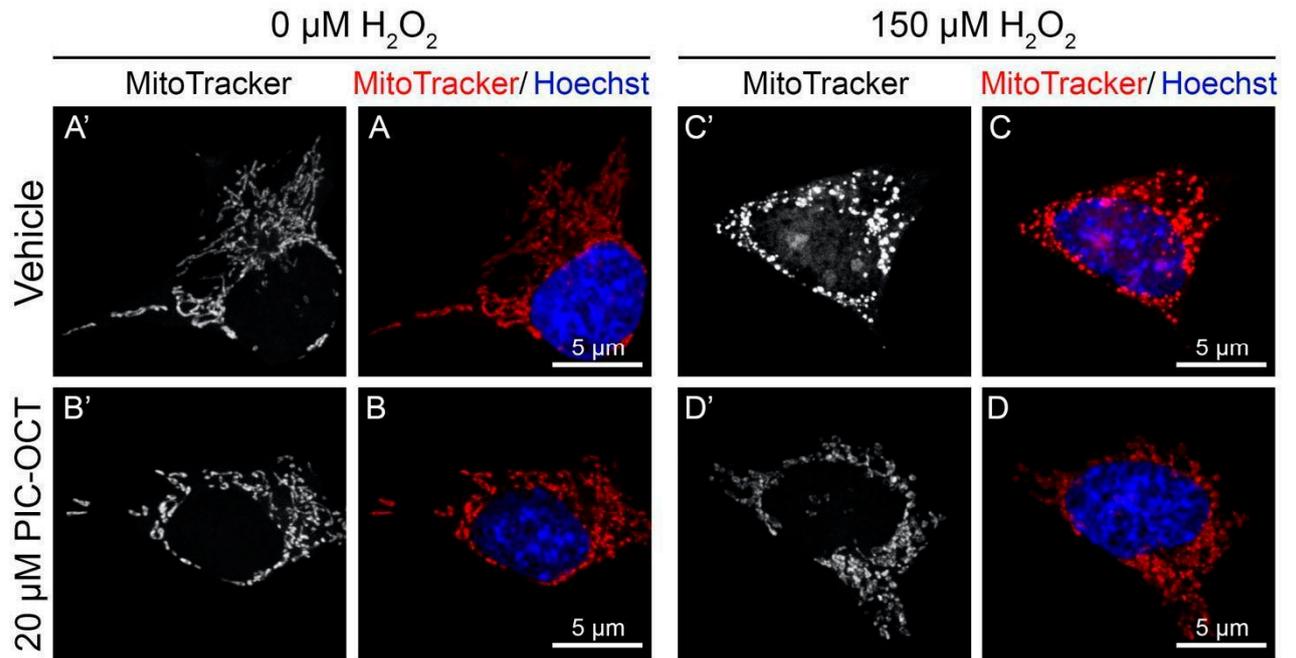
**Supplementary Figure S1.** Cell viability of 661W pretreated with PIC and exposed to H<sub>2</sub>O<sub>2</sub>. PIC treatment did not protect 661W cells against oxidative stress. Cells were grown in 96-well plates and pretreated with PIC (10-40 μM) for 24 h. Then, 661W cells were exposed to H<sub>2</sub>O<sub>2</sub> (150-300 μM) for 6h. 0.02% DMSO was used as the vehicle. Finally, cell viability was measured with the CellTiter-Blue assay. Graph (A) shows the cell viability of 661W cells treated with different doses of PIC and exposed to increasing doses of H<sub>2</sub>O<sub>2</sub>. PIC did not show a cytoprotective effect against H<sub>2</sub>O<sub>2</sub> exposure; even cell viability was significantly lower in 10-20 μM PIC-treated cells and exposed to 250 μM H<sub>2</sub>O<sub>2</sub>. The graphs' bars represent the mean ± SEM of relative fluorescence units (RFU) (560/590 nm) (n= 3). Statistics: Two-way ANOVA followed by Dunnett's test to compare different groups with the control (0 μM PIC). \*  $p < 0.05$



**Supplementary Figure S2.** Cell viability of 661W cells pretreated with PIC-OCT and chronically exposed to  $\text{H}_2\text{O}_2$ . PIC-OCT protects 661W cells against chronic  $\text{H}_2\text{O}_2$  exposure. 661W cells were treated with 0.2, 2 or 20  $\mu\text{M}$  of PIC-OCT for 12 h and then cells were exposed to 150  $\mu\text{M}$   $\text{H}_2\text{O}_2$  for 24 h. Then, the cell viability/cytotoxicity was evaluated by bright-field (BF) images (A-E) and the Live/Dead staining kit (A'-E'). The graphs represent the mean  $\pm$  SEM of cell viability measured by a cell counter (F) or cytometry (G) (n= 3). Scale bars represent 100  $\mu\text{m}$ . Statistics: Two-way ANOVA followed by Dunnett's test. \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.0001$ .



**Supplementary Figure S3.** Nuclear and cytoplasmic SIRT1 expression in PIC-OCT treated cells. The 661W cells were treated with vehicle (A-C) or 40 μM of PIC-OCT (B-D) and then were fixed and immunostained with anti-SIRT1 antibodies (A, B). The nuclei were visualized by Hoechst dye (C, D). PIC-OCT treatment increases the SIRT1 signal at the nucleus (B-D). Scale bars represent 25 μm.



**Supplementary Figure S4.** *Mitochondrial morphology in PIC-OCT treated cells.* The 661W cells were treated with vehicle (A'-A), 20  $\mu\text{M}$  of PIC-OCT (B'-B), 150  $\mu\text{M}$   $\text{H}_2\text{O}_2$  (C'-C) or PIC-OCT +  $\text{H}_2\text{O}_2$  (D'-D). Then the cells were stained with MitoTracker (red). The nuclei were visualized by Hoechst dye (blue).  $\text{H}_2\text{O}_2$  produced swelling and fragmentation of the mitochondria and PIC-OCT pretreatment prevented these mitochondrial morphological changes. Scale bars represent 5  $\mu\text{m}$ .