

α B-crystallin peptide fused with elastin-like polypeptide: intracellular activity in retinal pigment epithelial cells challenged with oxidative stress

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This work is dedicated to the memory of our beloved collaborator David R Hinton, MD, FARVO.

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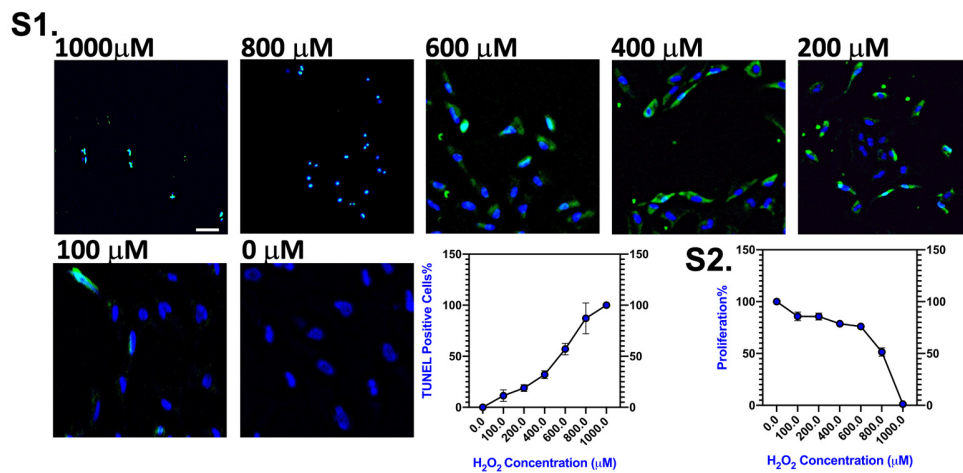


Figure S1,2. ARPE-19 cells exhibit H_2O_2 dose-dependent induction of apoptosis and inhibition of viability. S1) Cells were starved in 1% FBS during treatment by the following concentrations: 1000, 800, 600, 400, 200, and 100 μ M of H_2O_2 . The TUNEL assay was used to detect the apoptotic (nucleus positive) cells (green) as a percentage of total nuclei stained with DAPI (blue). Images were obtained using a Keyence epifluorescence microscope. S2) ARPE-19 cells were treated by the same concentrations of H_2O_2 but were instead investigated for cellular viability using the formazan-based WST-1 assay. 200 μ M H_2O_2 challenge was selected for further experimental studies in the manuscript because that concentration induces $18.9 \pm 2.7\%$ of the cells to enter apoptosis, while retaining $85.6 \pm 2.7\%$ of cell viability ($n = 3$, mean \pm SD) using the TUNEL, WST-1 results, respectively. (Scale bar = 200 μ m)