

## **$\alpha$ B-crystallin peptide fused with elastin-like polypeptide: intracellular activity in retinal pigment epithelial cells challenged with oxidative stress**

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**Citation:** To be added by editorial staff during production.

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

Academic Editor: Firstname  
Lastname

Received: date  
Revised: date  
Accepted: date  
Published: date



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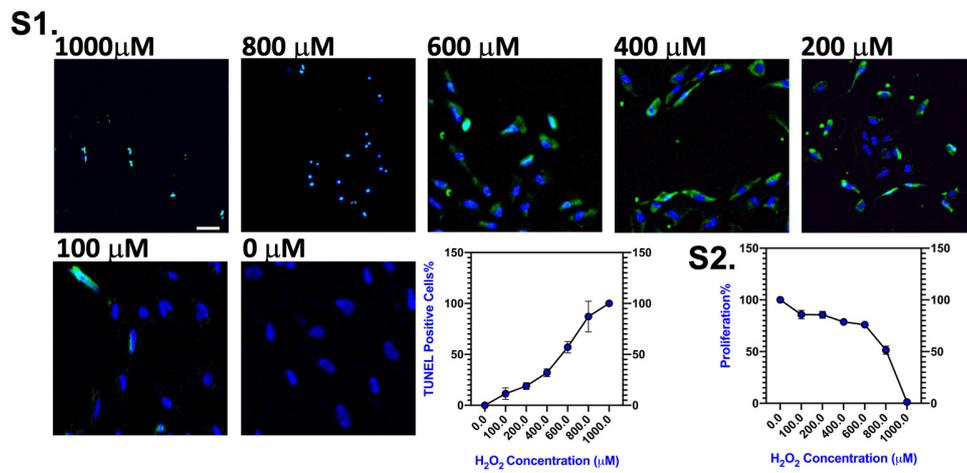


Figure S1,2. ARPE-19 cells exhibit H<sub>2</sub>O<sub>2</sub> dose-dependent induction of apoptosis and inhibition of viability. S1) Cells were starved in 1% FBS during treatment by the following concentrations: 1000, 800, 600, 400, 200, and 100 μM of H<sub>2</sub>O<sub>2</sub>. The TUNEL assay was used 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<sub>2</sub>O<sub>2</sub> but were instead investigated for cellular viability using the formazan-based WST-1 assay. 200 μM H<sub>2</sub>O<sub>2</sub> 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 μm)