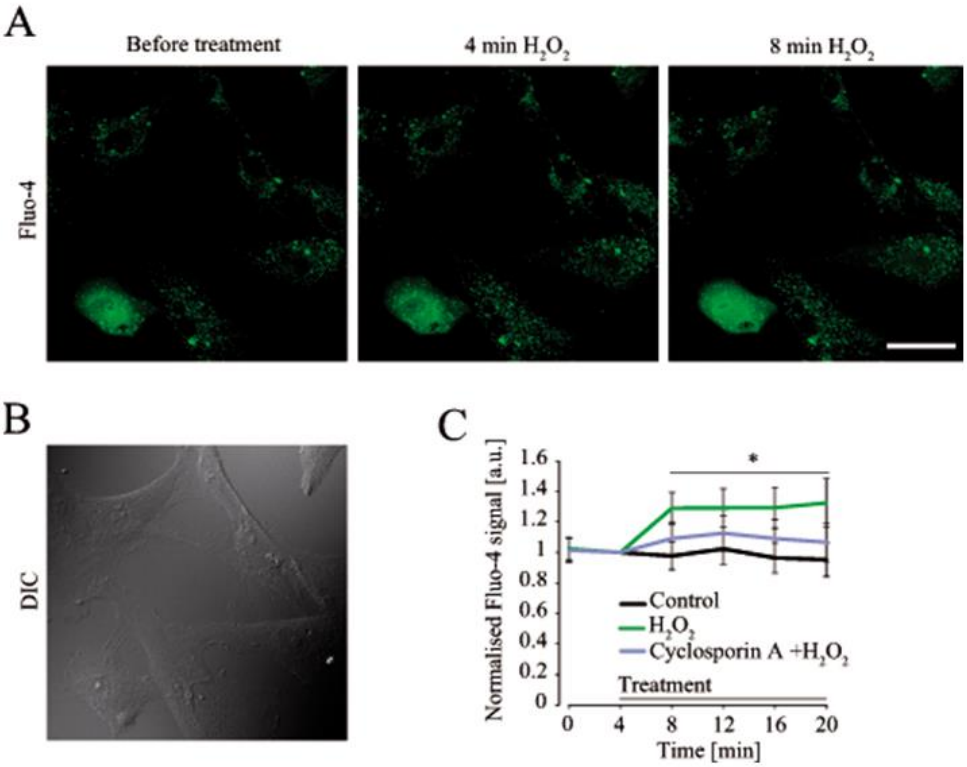
CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Activation of the NFAT–calcium signaling pathway in human lamina cribrosa cells in glaucoma
Authors	Irnaten, Mustapha;Zhdanov, Alexander V.;Brennan, Deirdre;Crotty, Thomas;Clark, Abbot;Papkovsky, Dmitri B.;O'Brien, Colm
Publication date	2018
Original Citation	Irnaten, M., Zhdanov, A., Brennan, D., Crotty, T., Clark, A., Papkovsky, D. and O'Brien, C. (2018) 'Activation of the NFAT–calcium signaling pathway in human lamina cribrosa cells in glaucoma', Investigative Ophthalmology and Visual Science, 59(2), pp. 831-842. doi: 10.1167/iovs.17-22531
Type of publication	Article (peer-reviewed)
Link to publisher's version	http://iovs.arvojournals.org/article.aspx?articleid=2672464 - 10.1167/iovs.17-22531
Rights	© 2018, the Authors. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. https://creativecommons.org/licenses/by-nc-nd/4.0/ - https://creativecommons.org/licenses/by-nc-nd/4.0/
Download date	2026-11-02 14:20:57
Item downloaded from	https://hdl.handle.net/10468/5615

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Supplementary Figure S1



Supplementary Figure S1: Effect of cyclosporin A on H_2O_2-induced elevation of intracellular Ca^{2+} in normal LC cells. Fluo-4/AM loaded LC cells were pre-incubated overnight with CsA (10 μM) at 37ºC, and H_2O_2 (100 μM) was applied in the continued presence of CsA. Change of $[Ca^{2+}]_i$ was determined by confocal microscopy. (A). Fluo-4 fluorescence images before and after addition of H_2O_2 (100 μM) for 4 min and 8 min. Images represent the stacks of 12 focal planes collected with 0.25 μm steps. (B). DIC image of LC cells grown on tissue culture. (C). Analysis of calcium dynamics upon stimulation of cells with H_2O_2. Signals are normalised to that collected immediately prior to H_2O_2 addition and changes in cytosolic Ca^{2+} levels in cells upon treatment with H_2O_2 (100 μM) were compared to that in cells pre-treated overnight with CsA (10 μM). Bars show means ± standard deviations. Scale bar is 50 μm. Note H_2O_2 induced significant elevation of intracellular Ca^{2+} (*p<0.05, two-tailed unpaired student's t-test), and this elevation was significantly inhibited by CsA pre-treatment (10 μM) (*p<0.05, Mann-Whitney test).

Downloaded From: http://iovs.arvojournals.org/pdfaccess.ashx?url=/data/journals/iovs/936739/ on 04/04/2018