

Article

Endolysosome Iron Chelation Inhibits HIV-1 Protein-Induced Endolysosome De-Acidification-Induced Increases in Mitochondrial Fragmentation, Mitophagy, and Cell Death

Supplementary Materials

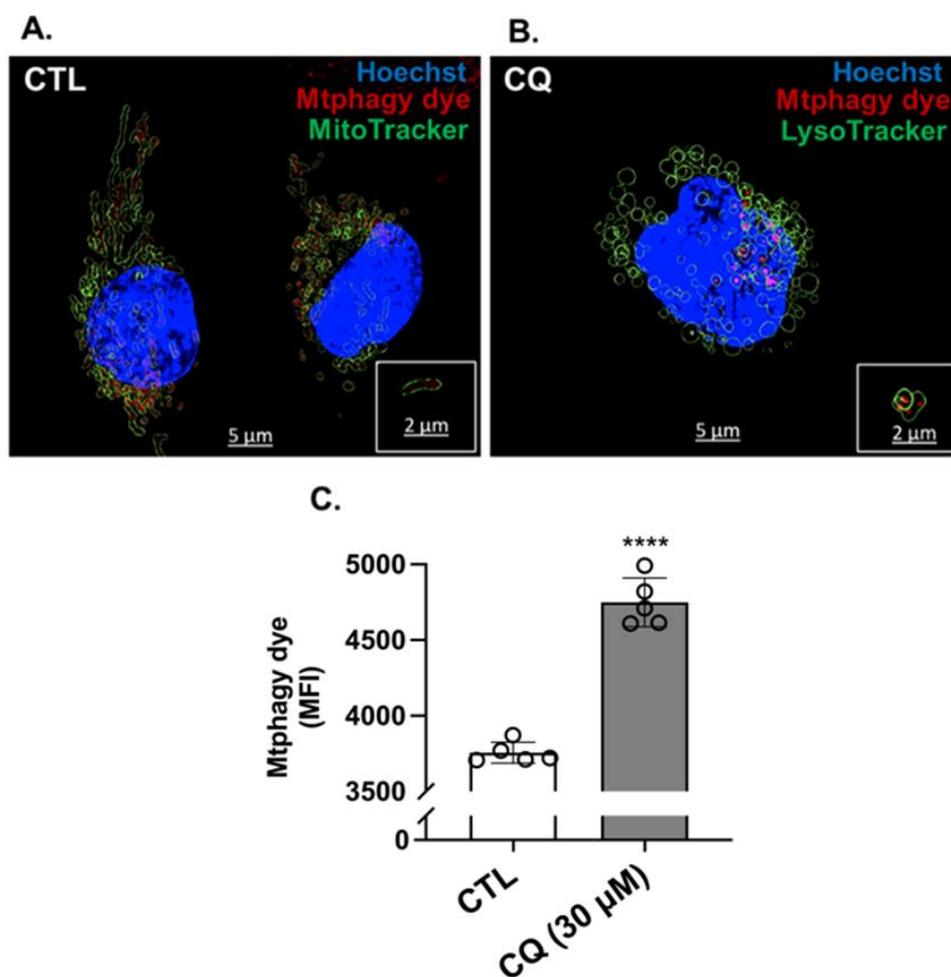


Figure S1. Mtpagy dye binds intact mitochondria and fluorescence intensity increases when damaged mitochondria enter acidic endolysosomes. (A) Representative fluorescence microscopy images were reconstructed using Imaris 3D software and in control cells illustrate mitochondria (green out-lines), intact mitochondrial Mtpagy staining (dim red fluorescence inside green outlined organelles), and the nucleus (blue). (B) Treatment of cells with CQ (30 μM) for 24 h significantly ($p < 0.0001$) increased the Mtpagy dye fluorescence in endolysosomes. (C) Quantification of intact and damaged mitochondrial staining demonstrated that CQ (30 μM) significantly ($p < 0.0001$) increased mean fluorescence intensity (MFI) compared to controls. Error bars represent standard deviation (SD) of five independent experiments ($n = 150$). A Student's t-test was used for analysis to compare treatment with controls. Cells were chosen randomly during image acquisition and no cells were intentionally excluded. Scale bars are 5 μm for the images and 2 μm for the insets.