



**Supplementary Figure S1.** Quantitative comparison of mitochondrial morphology in 2D. Cells were treated with 16  $\mu$ M of Roy-Bodipy for 48 h and further observed by confocal microscopy. After, mitochondrial size and shape was analyzed through the measurement of the mean area and perimeter and the form factor (FF) and aspect ratio (AR), respectively. Data are presented as mean  $\pm$  SD and it is representative of three independent experiments. At least 10 images per condition were considered in each experiment. Asterisks (\* $p < 0.05$ , \*\* $p < 0.01$ , and \*\*\*\* $p < 0.0001$ ) represent the values that significantly differ from the control condition (CTL) (untreated cells).