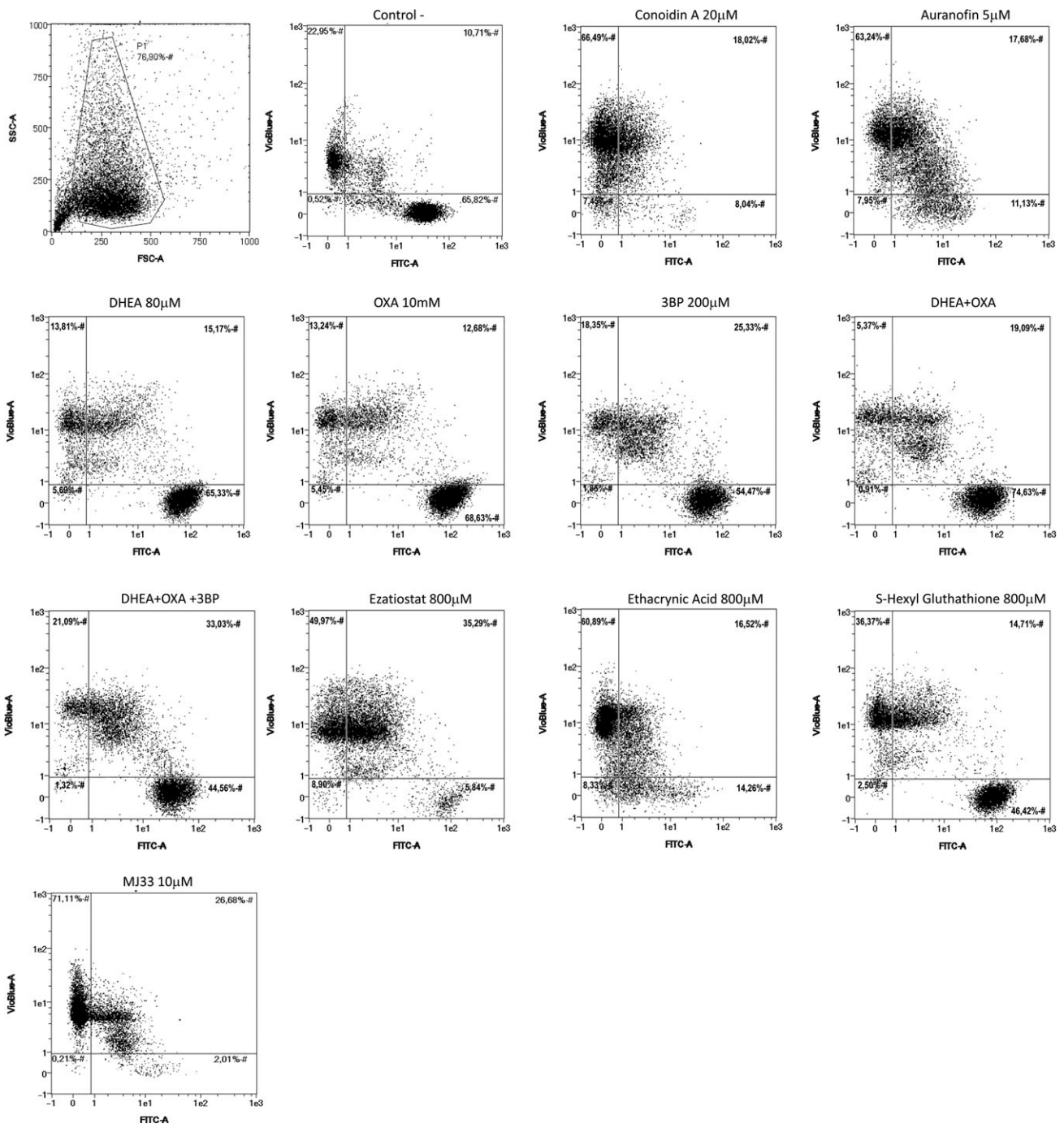

Supplementary Figure S1 Representative dot plots from the LIVE/DEAD assay performed with the different PRDXs inhibitors. Spermatozoa were incubated in BWW medium at 37°C for 2 h with different concentrations of 2-Cys PRDXs inhibitor (conoidin A), TRD inhibitor (auranofin), inhibitor of glucose 6-phosphate dehydrogenase (DHEA), NADP-isocitrate dehydrogenase (oxalomalic acid, OXA), malic enzyme (3 bromopyruvate, 3BP), (NADP-ICDH) and (ME), NADPH-suppliers enzymes), inhibitors of the reactivation system of the PRDX6 peroxidase activity (ezatiostat, ethacryinic acid and S-hexylglutathione) or inhibitor for the Ca^{2+}-$iPLA_2$ activity of PRDX6 (MJ33). Spermatozoa were stained with 2 µM of Calcein AM and 0.2 µM Sytox Blue to determine by MACSQuant Analyzer flow cytometry the percentages of LIVE/DEAD cells. A representative side and forward scatter dot plot shows the gating of the sperm population and each inhibitor used in this study at a concentration where significance is evident. Three different populations were established on the quadrants representing the live (right bottom, FITC+ cells), dead (left top, VioBlue+ cells) and dying sperm (right top, FITC+ and VioBlue+).