

**SUPPLEMENTARY FIG. S5.** Measurement of mito-roGFP fluorescence and GSH/GSSG ratio. (A) Confocal image showing mito-roGFP fluorescence (488 ex.) of a ventricular myocyte cultured for 24 h. *Inset*, expanded section of cell area indicated by *white box*. (B) Decrease in mito-roGFP fluorescence after 30-min exposure to GGTI-298. (C) Cumulative mito-roGFP fluorescence data at time zero, 1, and 30 min under control conditions (n=6) and in the presence of GGTI-298 (n-6). The drug reached the cell ~1 min after the time zero control measurement was taken. (D) Effect of ESI-05 (n=9), GGTI-298 (n=8), and H<sub>2</sub>O<sub>2</sub> (25  $\mu$ M) relative to the control (n=11) GSH/GSSG ratio in aliquots of cells measured using the GSH/GSSG-Glo assay system. \*\*p < 0.05, \*p < 0.01.