and in the same cells following store depletion with thapsigargin (Tg). Data are reported as mean  $\pm$  SEM; p-values are based on t-test. Scalebars = 10  $\mu$ m.

Figure 9. Colchicine potentiates but does not activate SOCE in cells overexpressing Stim1. A) EYFP-Stim1-expressing HEK293 cells were treated with 1.0  $\mu$ M CPA alone (Control; black trace) or with CPA and 100  $\mu$ M colchicine (red trace) for 20 min in nominally Ca<sup>2+</sup>-free extracellular solution, followed by addition of 1.8 mM extracellular Ca<sup>2+</sup> to reveal SOCE. Also shown are cells treated with colchicine alone (blue trace). Each trace represents the average response of all cells on a single coverslip (20-30 cells). B) The average difference between the peak 340/380 value following Ca<sup>2+</sup> addition and the 340/380 value just prior to Ca<sup>2+</sup> addition was calculated for CPA-treated control (n = 64 cells, 3 coverslips) and colchicine-treated (n = 97 cells, 3 coverslips) cells for experiments performed as described in (A). Data are reported as mean ± SEM; p-value is based on t-test.

## Supplementary Figure 1. Effects of microtubule depolymerizing agents on

**microtubule morphology.** Wildtype HEK293 cells were treated for 20 minutes with 10  $\mu$ M nocodazole (NZL), 100  $\mu$ M colchicine, or left untreated (control), and were then fixed and immunostained for  $\alpha$ -tubulin. Images were then acquired by confocal microscopy. Shown are four representative cells for each condition. Scalebars = 10  $\mu$ M.

Reference List



## Supplemental Figure 1