



Supplemental Figure S1. Oxidative stress leads to cell-cycle arrest in G2.

(A) Flow cytometry analyses of cells treated with different oxidants as indicated.

HP- and TBH-treated cells arrest with 2C nuclear content within 60 min of stress treatment. Note the decreasing 4C peaks (septating cells) at 60 min and the left shoulder of 2C peak in HP only (may reflect S-phase due to DNA damage). In contrast, Md shows little effect on cell-cycle progression.

(B) Graph showing percentages of cells with two nuclei (mitotic anaphase) and division septa (cytokinesis) after treatment with different oxidants as indicated. Both HP- and TBH-treatments lead to a marked decrease of binucleate and septated cells within 60 min, while Md-treated cells show little effect and also continue to grow (not shown). Consistent with a cell-cycle arrest in G2-phase, HP-and TBH-treated cells arrest with interphase microtubules (not shown). The cell-cycle arrest is transient, and cells start to proliferate again at 120 min (not shown).