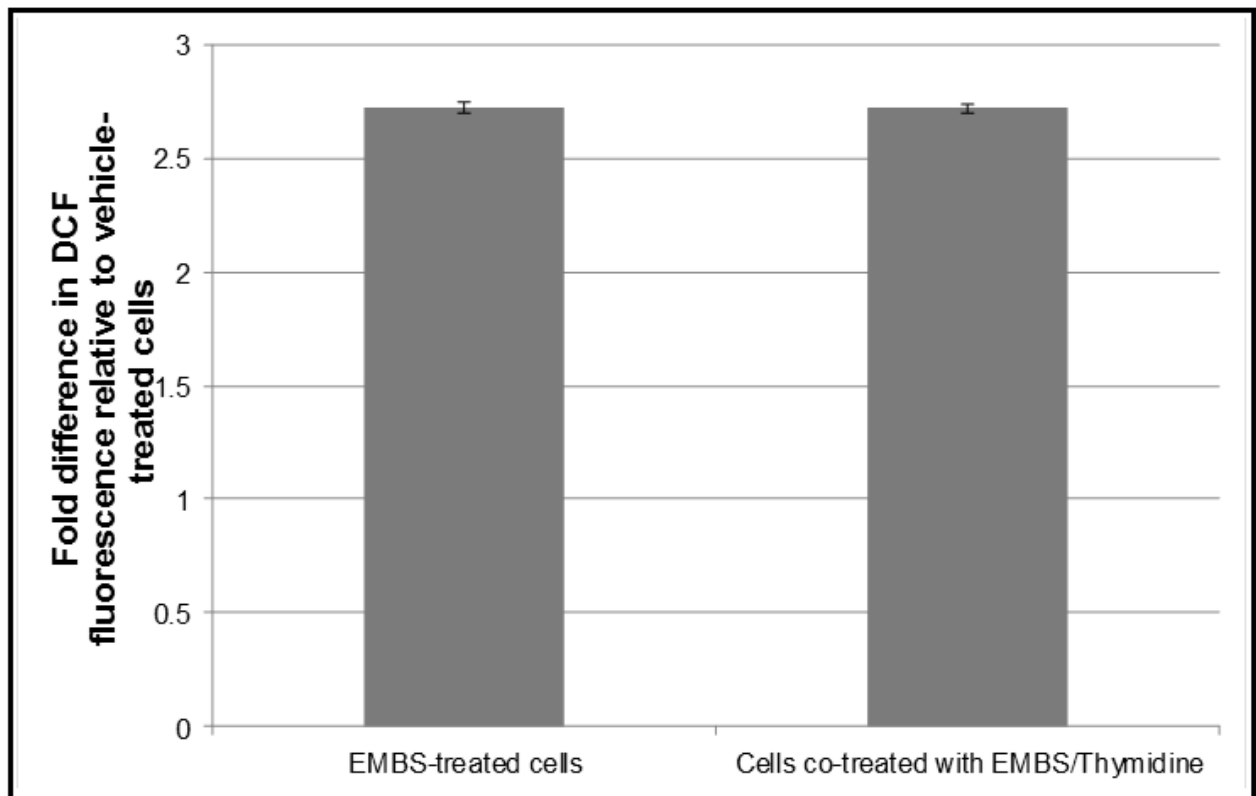


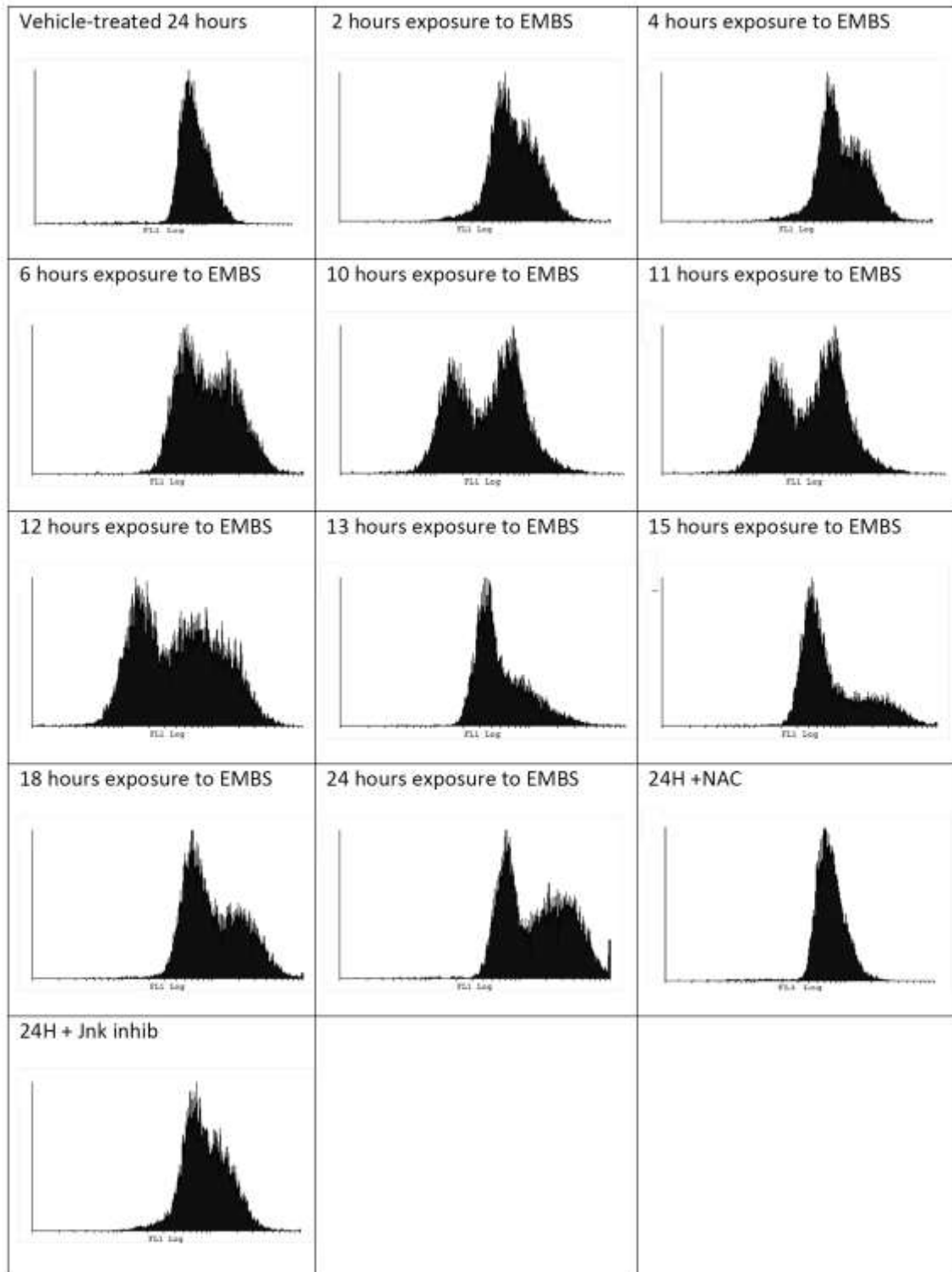
Supplementary Figures



S1 Fig. Thymidine does not influence hydrogen peroxide generation.

Hydrogen peroxide was quantified of EMBS-treated cells in the presence or absence of 2 mM thymidine. The graph represents the average fold change between EMBS-treated- and vehicle-treated cells (3 independent experiments with error bars representing s.e.m).

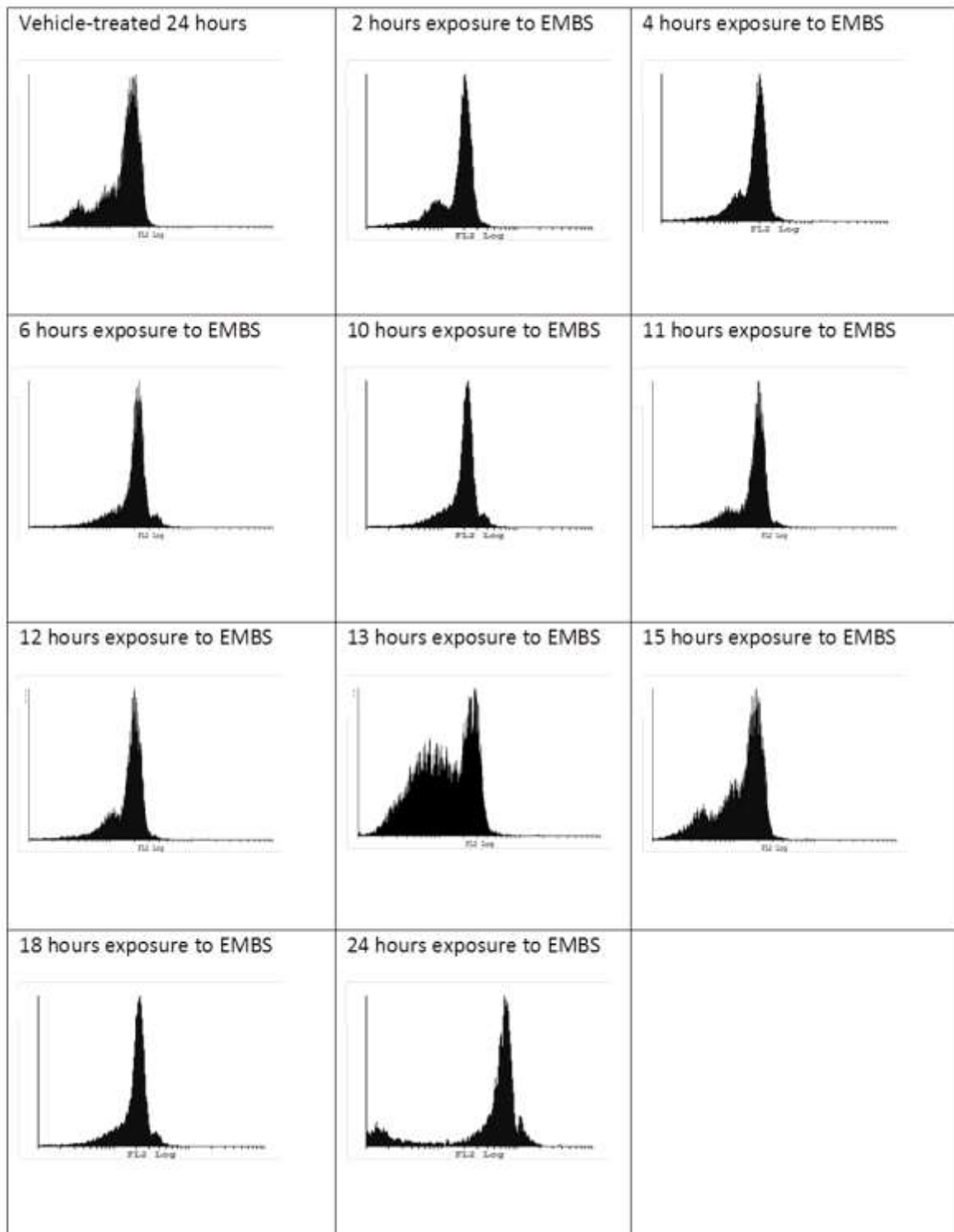
Hydrogen peroxide generation



S2 Fig. EMBS induces a biphasic hydrogen peroxide response.

MDA-MB-231 cells were exposed to 0.4 μ M EMBS at the indicated timepoints. Hydrogen peroxide was measured in the presence or absence of NAC. Histograms are representatives of 3 repeats.

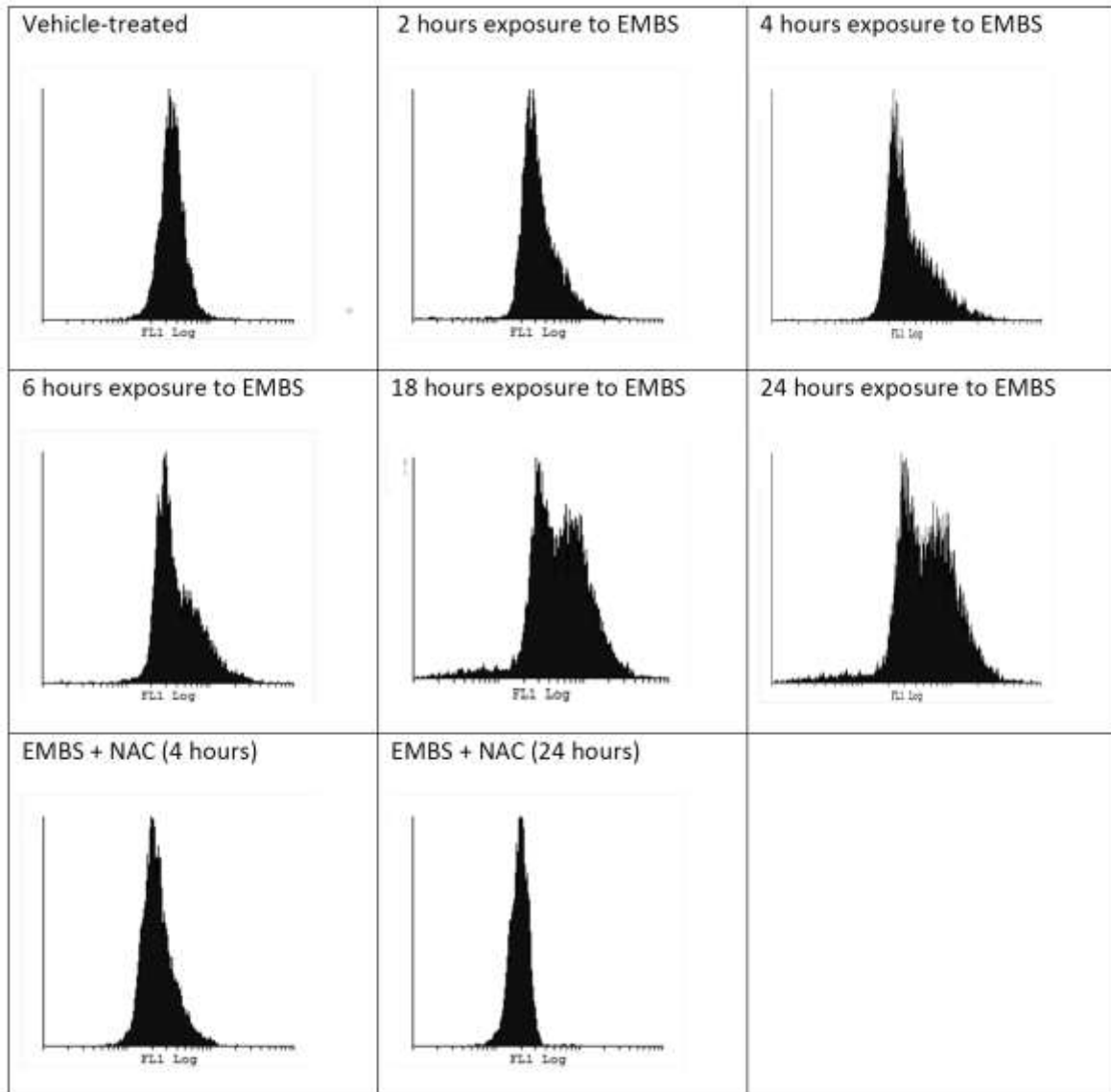
Superoxide generation



S3 Fig. EMBS induces a biphasic hydrogen peroxide response.

MDA-MB-231 cells were exposed to 0.4 μ M EMBS at the indicated timepoints. Superoxide was measured in the presence or absence of NAC. Histograms are representatives of 3 repeats.

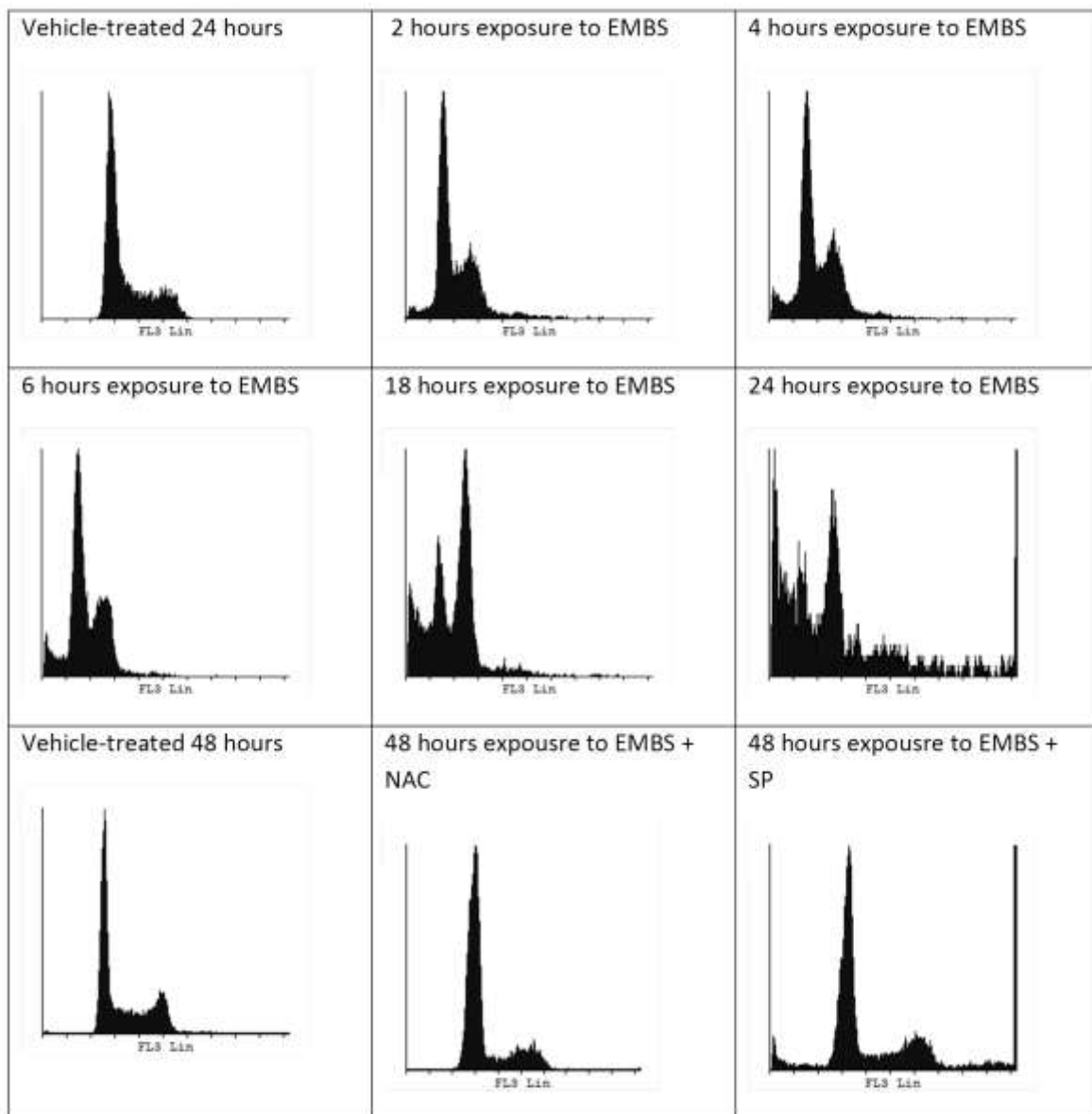
Mitotracker



S4 Fig. EMBS induces mitochondrial membrane depolarisation.

MDA-MB-231 cells were exposed to 0.4 μ M EMBS at the indicated timepoints. Mitochondrial membrane potential of EMBS-treated cells were analysed using Mitotracker in the presence or absence of 20 mM NAC. Histograms are representatives of 3 repeats.

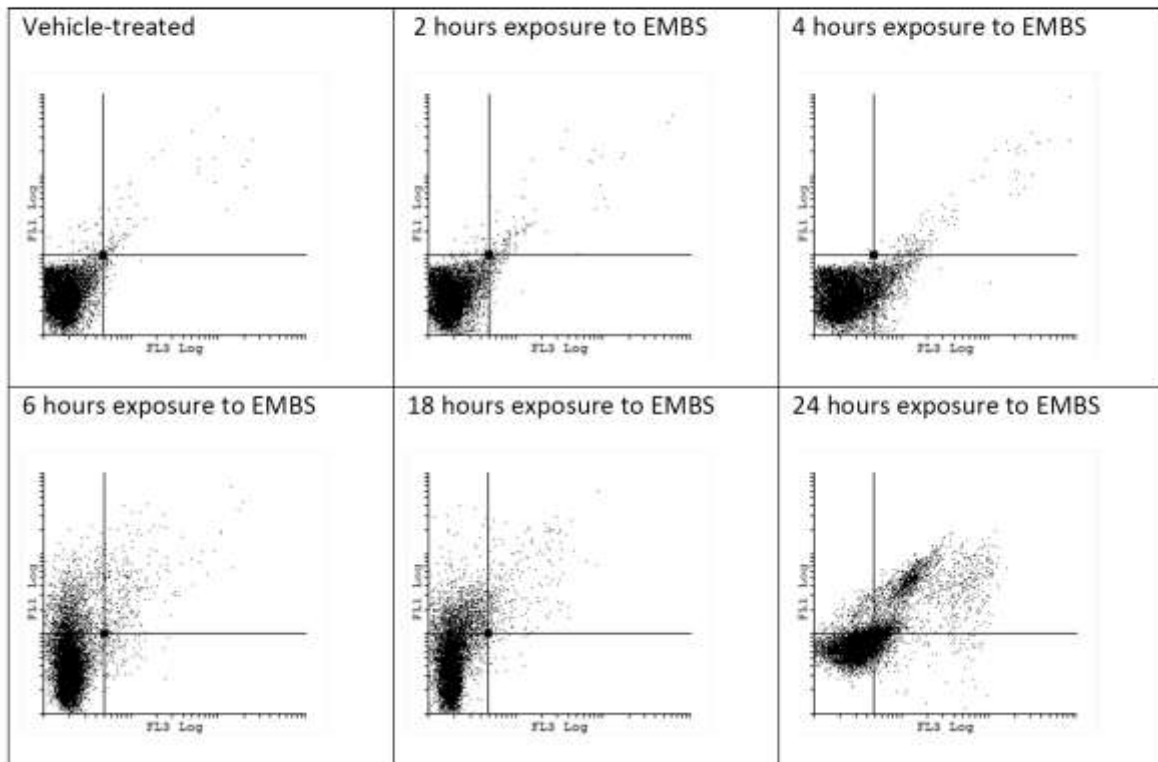
Cell cycle histograms



S5 Fig. EMBS induces cell cycle abnormalities, endoreduplication and apoptosis.

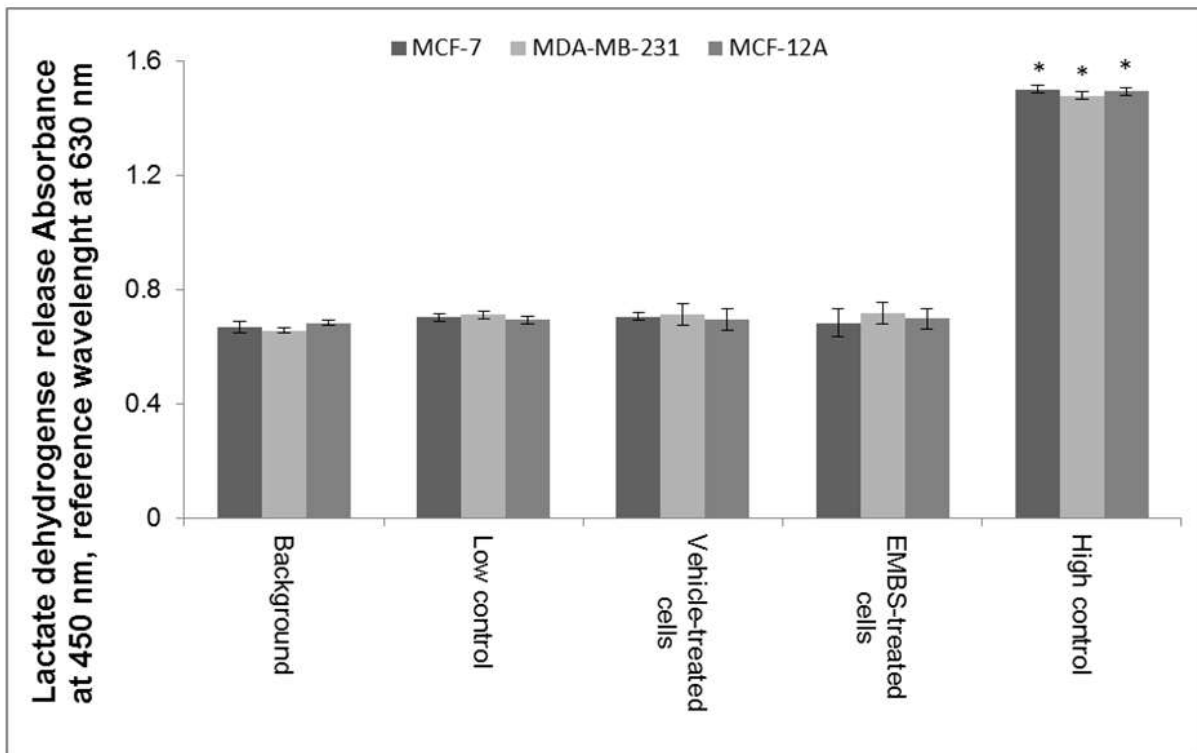
Cell cycle progression was analysed using PI in cells treated with EMBS alone, EMBS together with NAC or EMBS together with the JNK inhibitor, SP600125. Histograms are representatives of 3 repeats.

Annexin Dotplots



S6 Fig. EMBS induces apoptosis.

MDA-MB-231 cells were exposed to 0.4 μ M EMBS at the indicated timepoints. Representative repeat of apoptosis induction demonstrated using Annexin V-FITC and propidium iodide.



S7 Fig. Lactate dehydrogenase release:

Lactate dehydrogenase levels MCF-7-, MDA-MB-231- and MCF-12A cells exposed to 0.4 μ M EMBS-treated for 24 h were compared to vehicle-treated cells. Controls included medium only as background, cells propagated in medium as the low control and cells propagated in medium containing cell lysis solution as the high control. An * demonstrates a statistically significant *P* value <0.05 when compared to vehicle-treated cells.