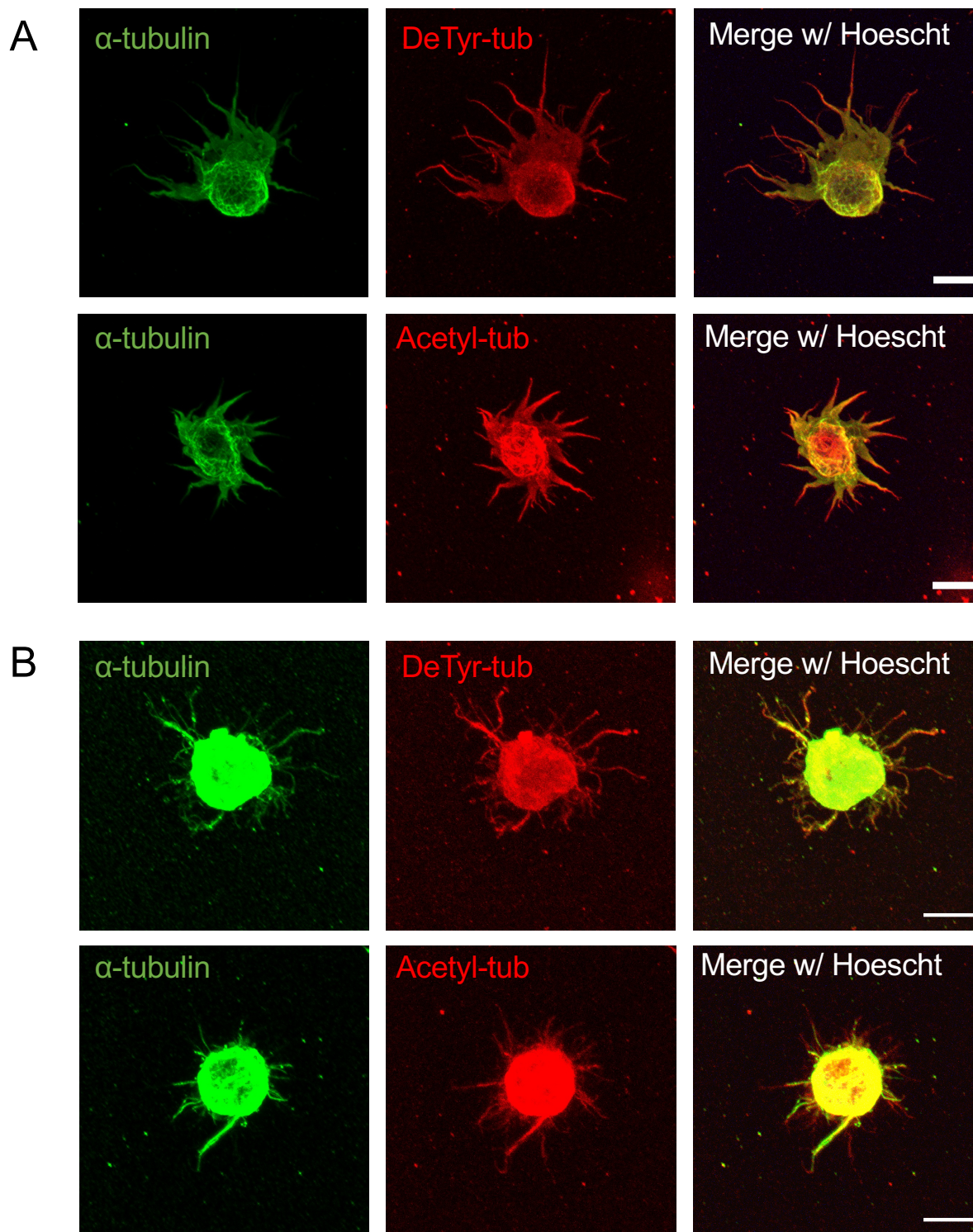


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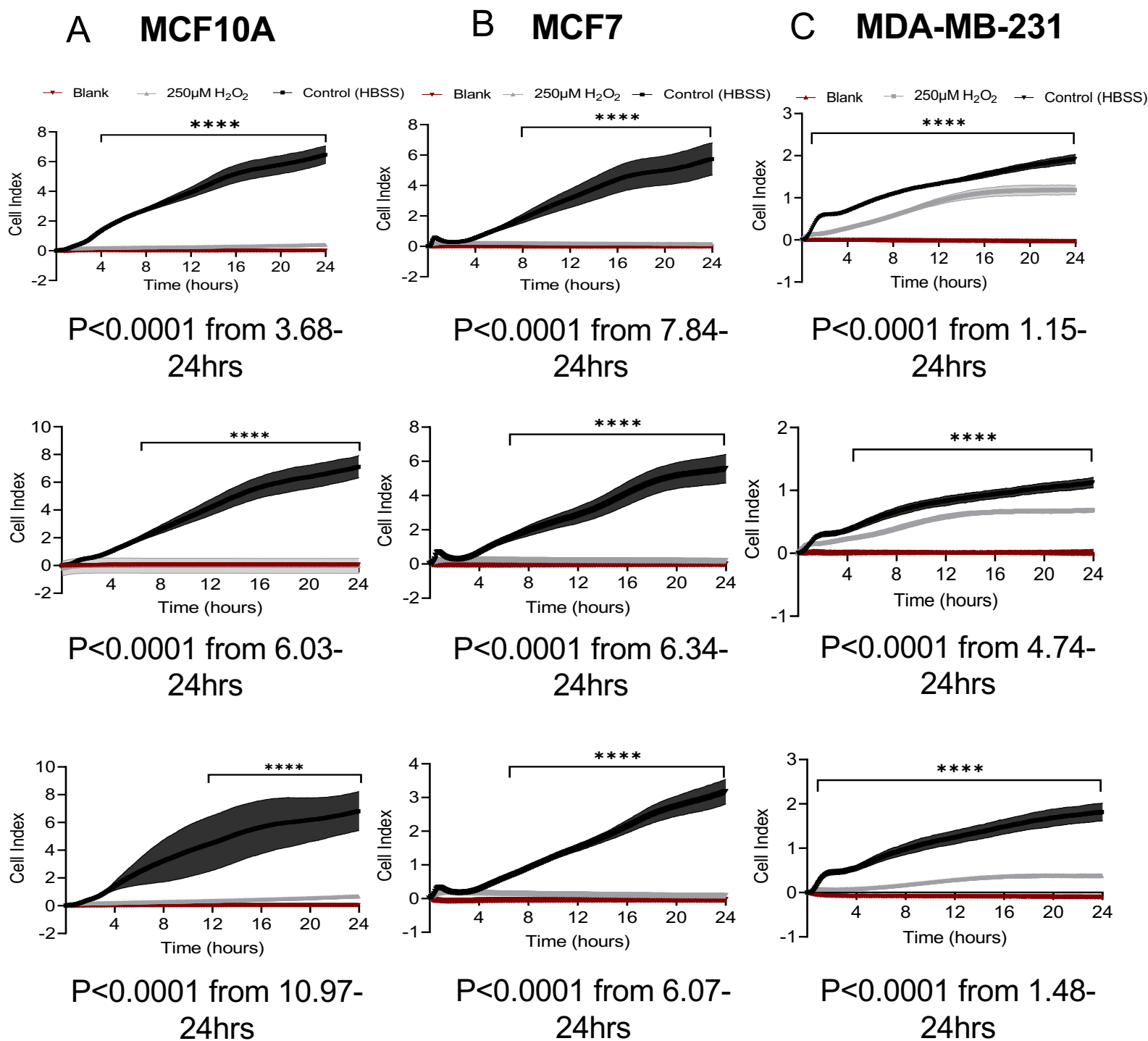
## Supplemental Figure S1



**Figure S1:**  $\text{H}_2\text{O}_2$ -induced McTNs in MCF10A and MDA-MB-231 are composed of DeTyr-tub and Acetyl-tub.

Representative immunofluorescence images of MCF10A (**A**) and MDA-MB-231 (**B**) cells treated with  $250\mu\text{M}$   $\text{H}_2\text{O}_2$  for 60 minutes. For both A and B, top row: Left panel (green =  $\alpha$ -tubulin), Middle panel (Red = DeTyr-tub), Right panel (merged with blue nuclear Hoescht stain). Bottom row: Left panel (green =  $\alpha$ -tubulin), Middle panel (Red = Acetyl-tub), Right panel (merged with blue nuclear Hoescht stain). Images were captured on an Olympus IX81 microscope with a Fluoview FV1000 confocal laser scanning system at 60X magnification. Scale bar =  $10\mu\text{m}$ .

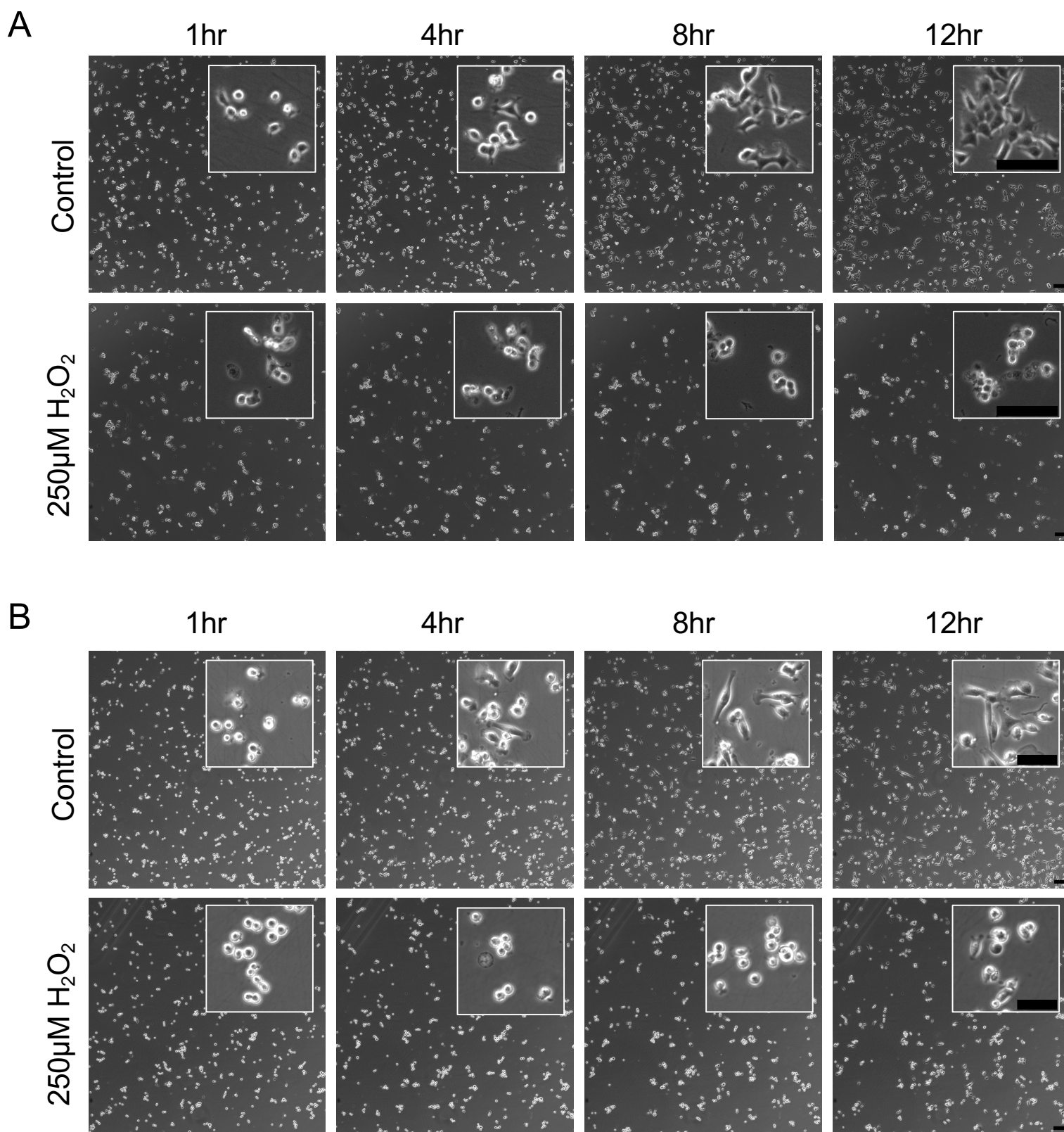
# Supplemental Figure S2



**Figure S2: Independent xCelligence Reattachment Replicates.**

Three independent xCelligence assay experiments from MCF10A (A), MCF7 (B), and MDA-MB-231 (C) cell lines. Real-time, impedance measurements were taken every 5 minutes over 24 hours, data are shown as mean  $\pm$  SD, n = 3. Red = Blank, Black = Control (HBSS), Grey = 250µM H<sub>2</sub>O<sub>2</sub>. Control and 250µM H<sub>2</sub>O<sub>2</sub> were compared using a two-way ANOVA with Bonferroni's multiple comparisons test, \*\*\*\*,  $p \leq 0.0001$ .

## Supplemental Figure S3

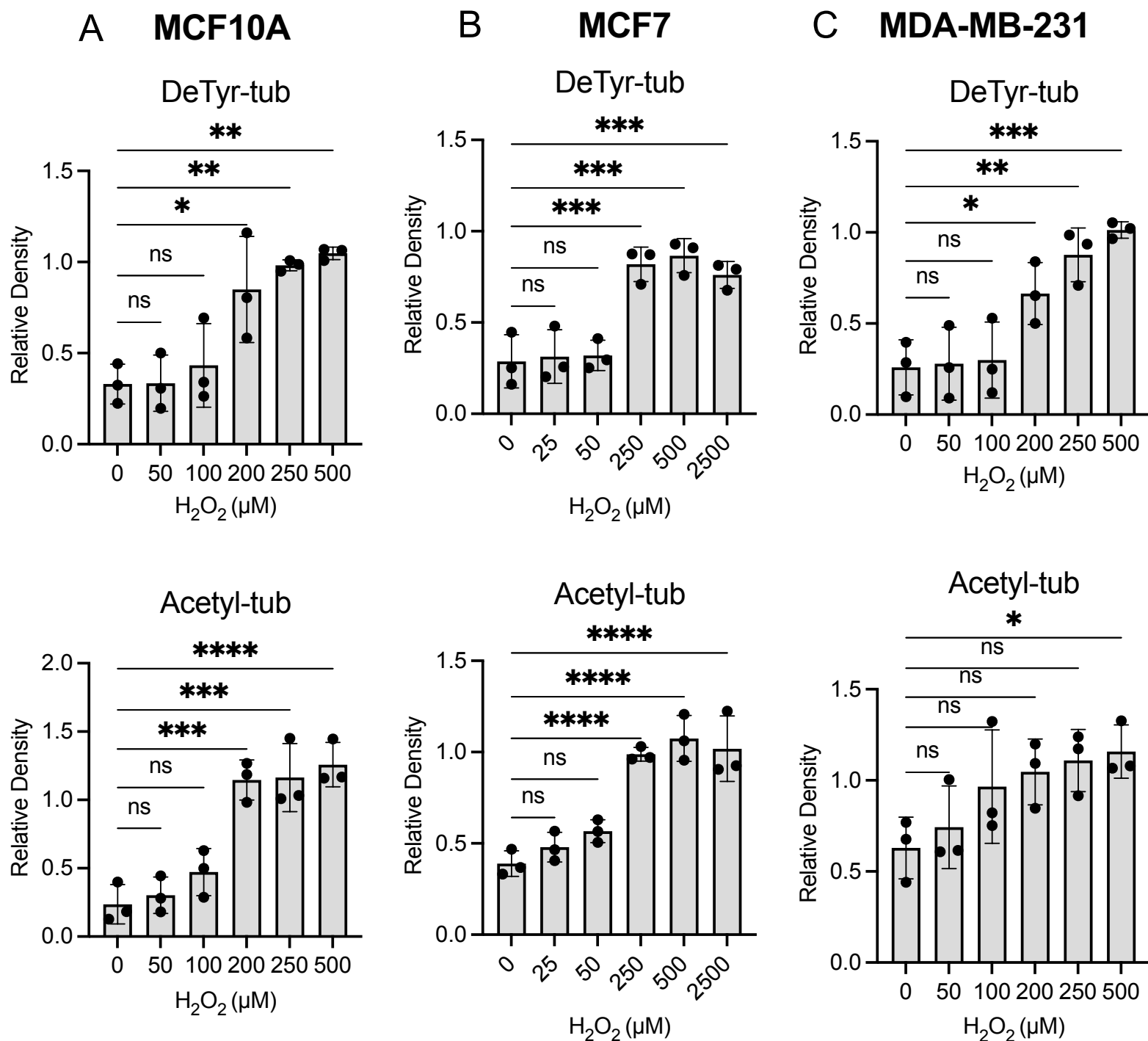


**Figure S3: Time-lapse microscopy videos demonstrate H<sub>2</sub>O<sub>2</sub> inhibits reattachment in MCF7 and MDA-MB-231 cells.**

**A)** Phase contrast time-lapse images were taken of MCF7 cells at indicated time points following treatment on a Nikon Ti2E microscope at 10X magnification. Scale bar = 100μm.

**B)** Phase contrast time-lapse images were taken of MDA-MB-231 cells at indicated time points following treatment on a Nikon Ti2E microscope at 10X magnification. Scale bar = 100μm.

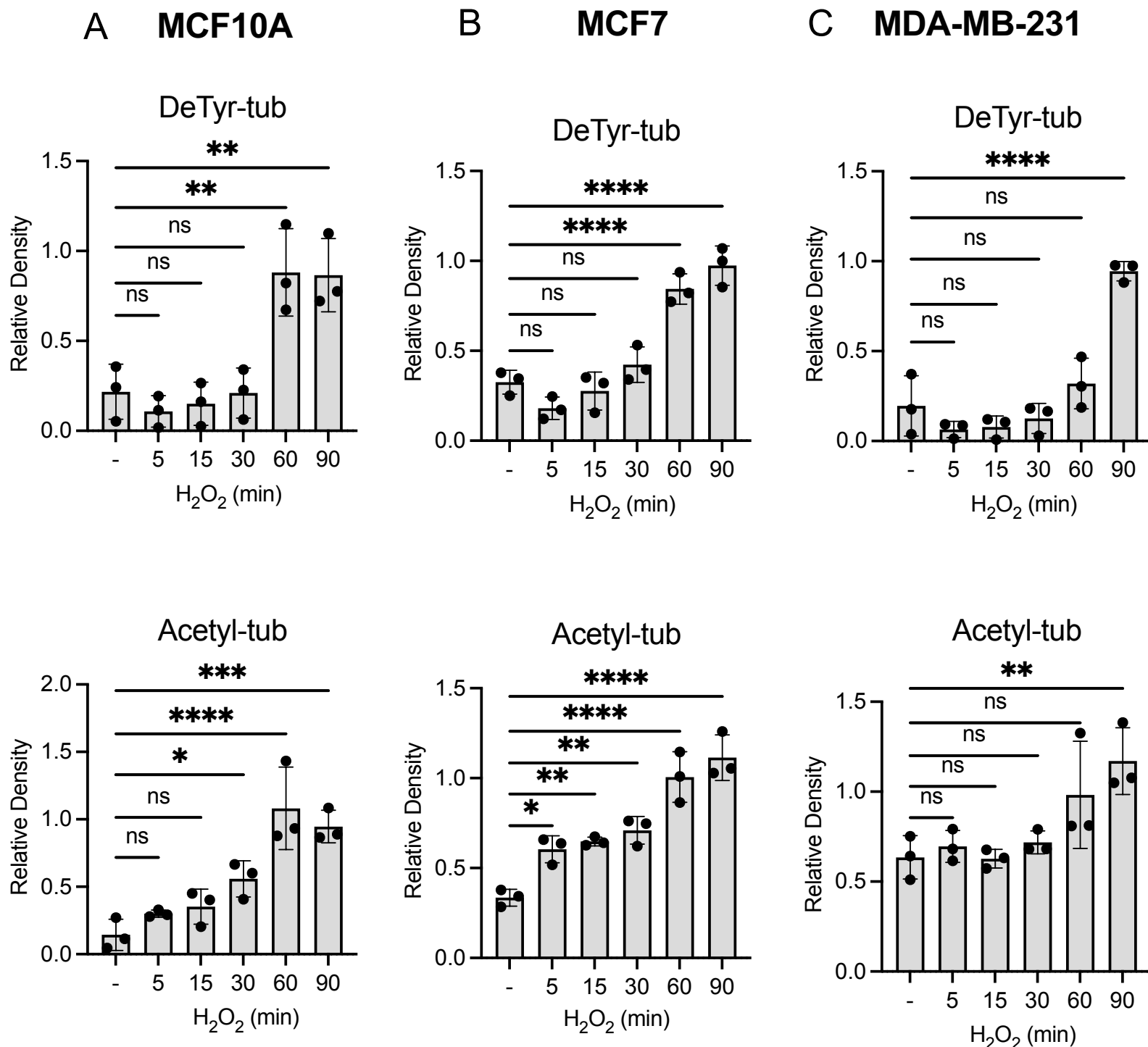
# Supplemental Figure S4



**Figure S4: Densitometry bar graphs used to perform statistics for Fig. 1A-B.**

Bar graphs used to perform statistical analysis on densitometry corresponding to  $H_2O_2$  dose response immunoblots in Figures 1A-B. Top row shows DeTyr-tub relative density following normalization to total  $\alpha$ -tubulin in MCF10A (A), MCF7 (B), and MDA-MB-231 (C) cell lines. Bottom row shows Acetyl-tub relative density, following normalization to total  $\alpha$ -tubulin, in MCF10A (A), MCF7 (B), and MDA-MB-231 (C) cell lines. All means were compared using a one-way ANOVA with Dunnett's multiple comparisons test, ns, non-significant; \*,  $p \leq 0.05$ ; \*\*,  $p \leq 0.01$ ; \*\*\*,  $p \leq 0.001$ ; \*\*\*\*,  $p \leq 0.0001$ .

# Supplemental Figure S5



**Figure S5: Densitometry bar graphs used to perform statistics for Fig. 2A-B.**

Bar graphs used to perform statistical analysis on densitometry corresponding to  $H_2O_2$  time response immunoblots in Figure 2A-B. Top row shows DeTyr-tub relative density, following normalization to total  $\alpha$ -tubulin, in MCF10A (A), MCF7 (B), and MDA-MB-231 (C) cell lines. Bottom row shows Acetyl-tub relative density, following normalization to total  $\alpha$ -tubulin, in MCF10A (A), MCF7 (B), and MDA-MB-231 (C) cell lines. All means were compared using a one-way ANOVA with Dunnett's multiple comparisons test, ns, non-significant; \*,  $p \leq 0.05$ ; \*\*,  $p \leq 0.01$ ; \*\*\*,  $p \leq 0.001$ ; \*\*\*\*,  $p \leq 0.0001$ .