The influence of Pluronics® on dark cytotoxicity, photocytotoxicity, localization and uptake of curcumin in cancer cells

Studies of curcumin and curcuminoids XLIX

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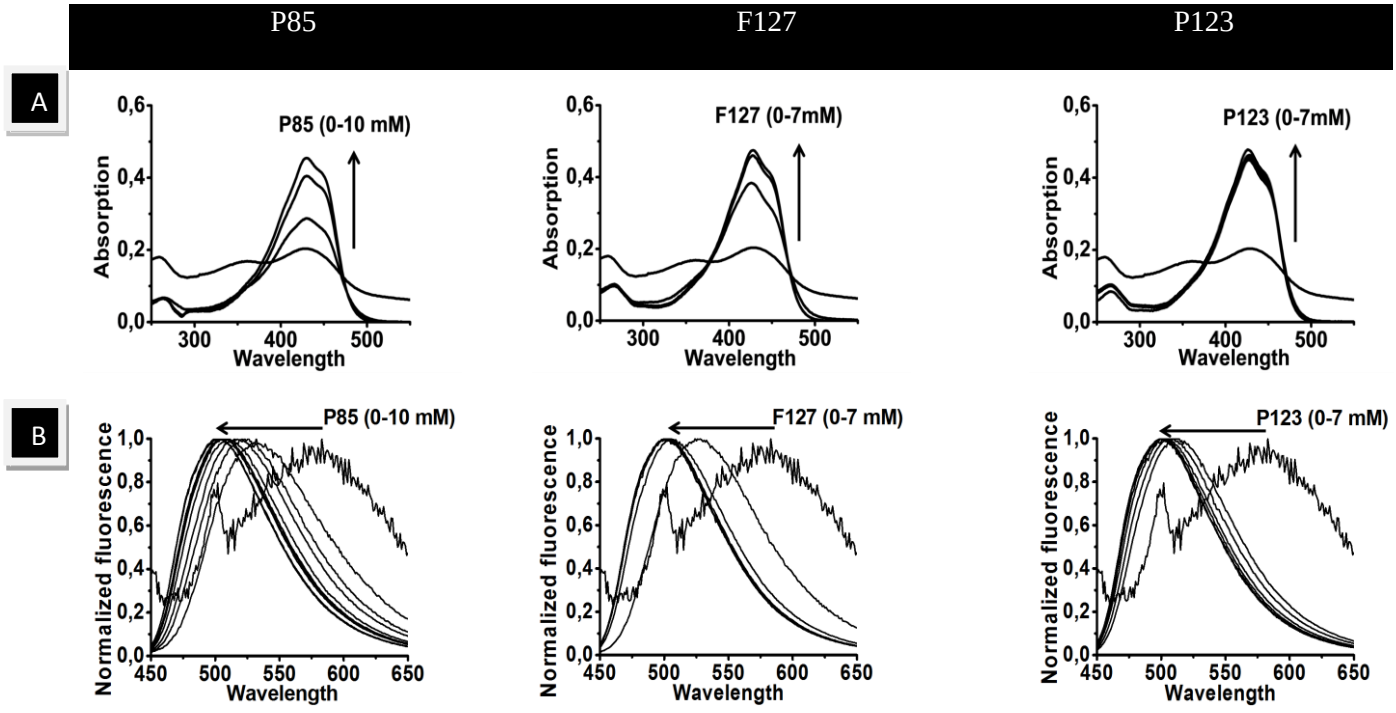
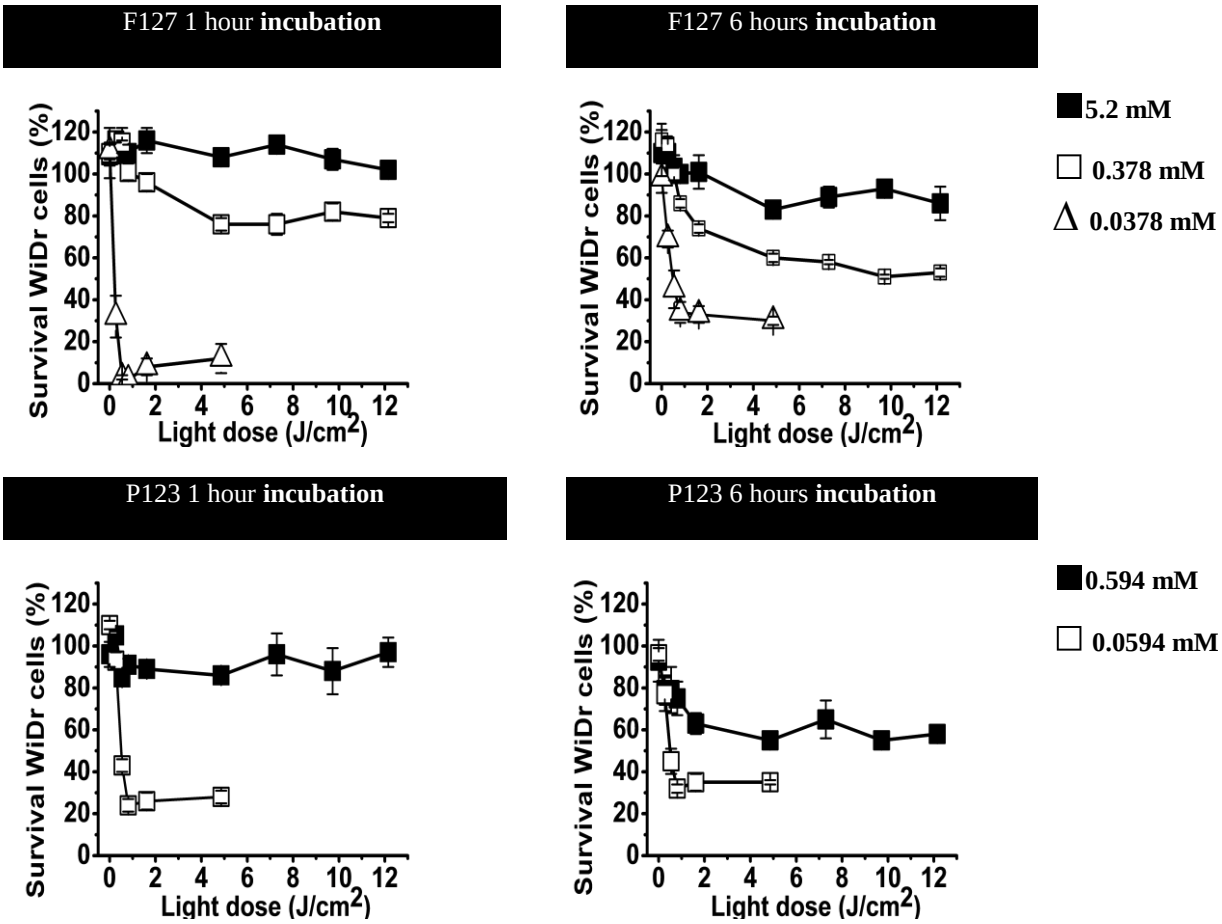
Supplementary Figures

Fig. S1:



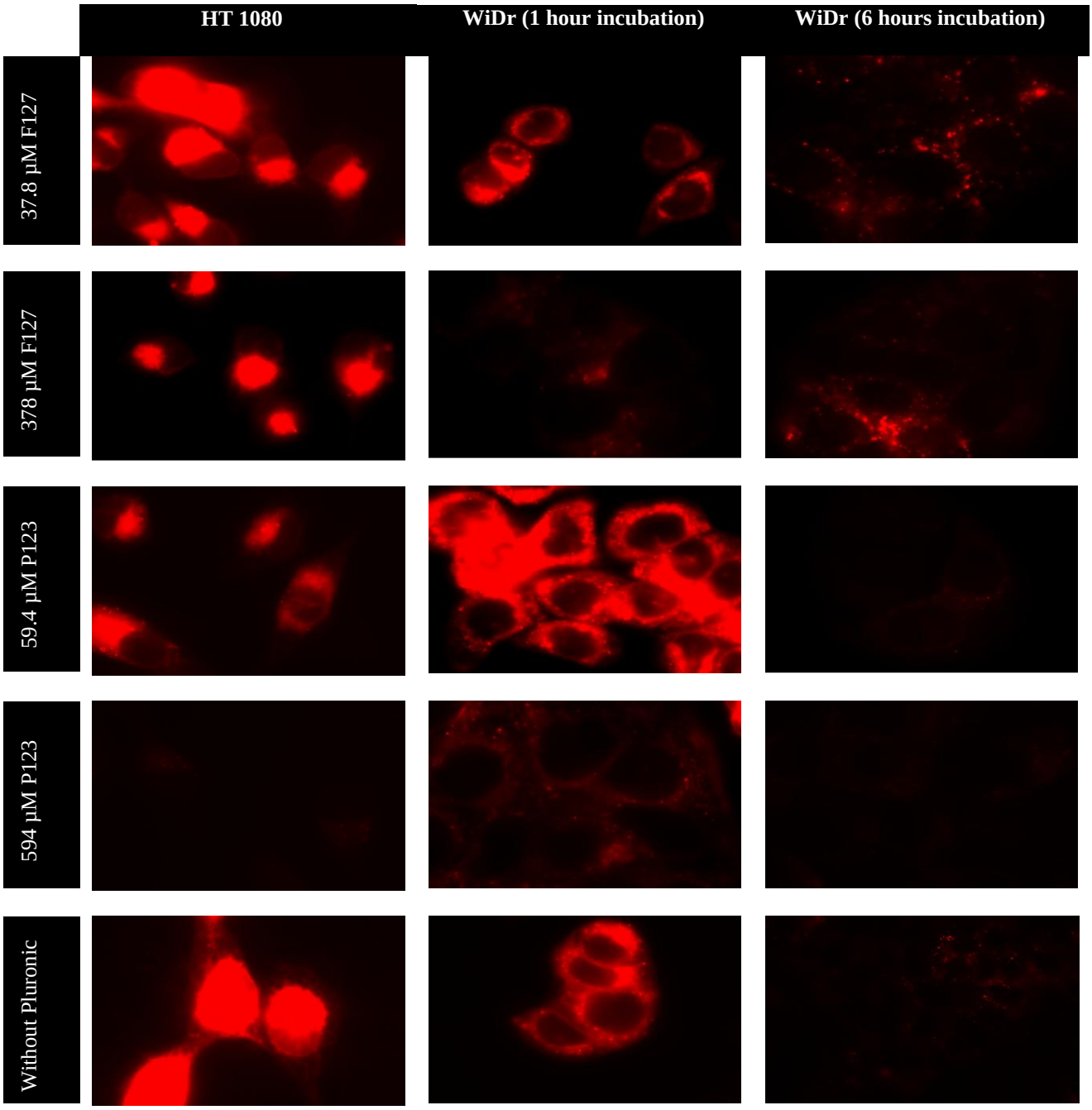
A; Absorption spectra of curcumin (7 µM) in PBS with P85 (0-10 mM), F127 (0-7 mM) and P123 (0-7 mM). B; Normalized fluorescence spectra (uncorrected) of curcumin (7 µM) in PBS with P85 (0-10 mM), F127 (0-7 mM) and P123 (0-7 mM). The arrows indicate the general changes in the absorption (A) and fluorescence spectra (B) of curcumin by an increase in Pluronic concentration. Only one absorption and fluorescence spectrum of each formulation, which was representative for 3 replicate experiments, is presented.

Fig. S2:



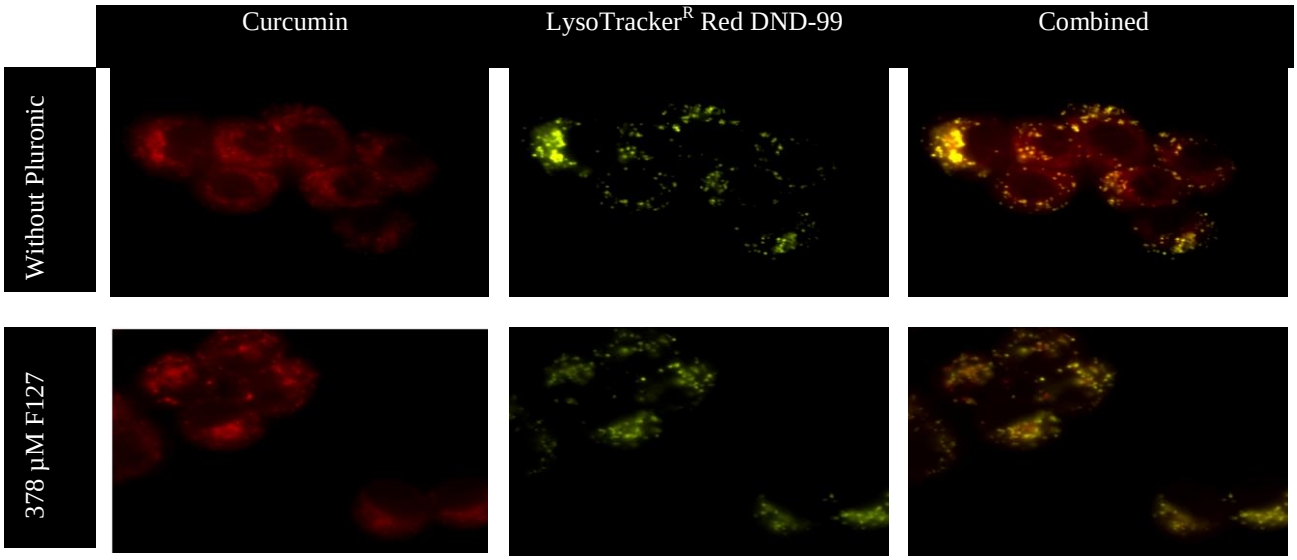
WiDr cell survival after incubation for 1 or 6 hours with preparations containing curcumin (7 µM) and F127 (5.2, 0.378 and 0.0378 mM) or P123 (0.594 and 0.0594 mM), and subsequent exposure to irradiation doses of 0– 12.15 J/cm^2. The data points are presented as mean (n = 3) of one replicate experiment, and are representative for the two replicates. The bars are SD from 3 parallels.

Fig. S3:



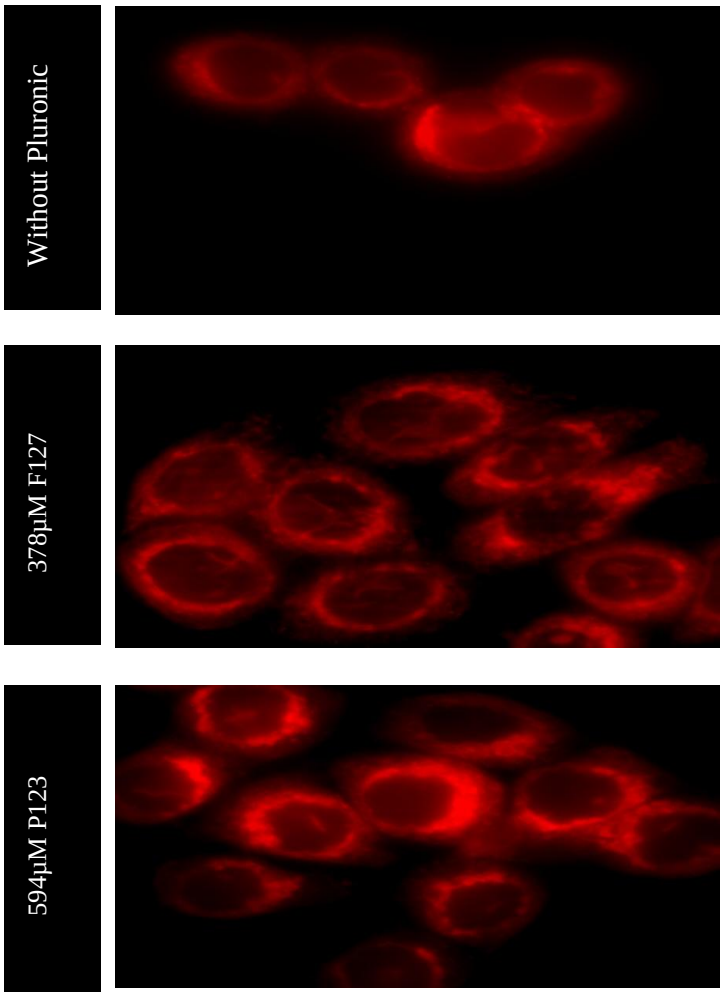
Fluorescence microscope images of HT1080 cells and WiDr cells after incubation for 1 (HT1080 and WiDr) or 6 hours (WiDr) with preparations containing curcumin (7 µM) alone or in combination with F127 (37.8 and 378µM) or P123 (59.4 and 594 µM). The fluorescence in the images is recorded under identical conditions. Some of the pictures appear therefore somewhat overexposed.

Fig S4:



Fluorescence microscope images of WiDr cells incubated for 1 hour with preparations containing curcumin (7 µM) (red fluorescence) alone or in combination with Pluronic (378 µM F127), and 30 minutes with LysoTracker^R Red DND-99 (1 nM) (green fluorescence). Images showing the fluorescence from curcumin and LysoTracker^R Red DND-99 are presented both separately and combined. The red color in the images was adjusted to optimize the visualization of the fluorescence from curcumin.

Fig S5:



Fluorescence microscope images of WiDr cells kept on ice during incubation (1 hour) with preparations containing curcumin (7 µM) alone or in combination with Pluronics (378µM F127 or 594µM P123). The fluorescence in the images is recorded under identical conditions.