SUPPLEMENTARY DATA

Polymersomal Delivery Enhances Third-Generation Photodynamic Therapy with the First White-Light-Activated Peptide Photosensitiser for Melanoma

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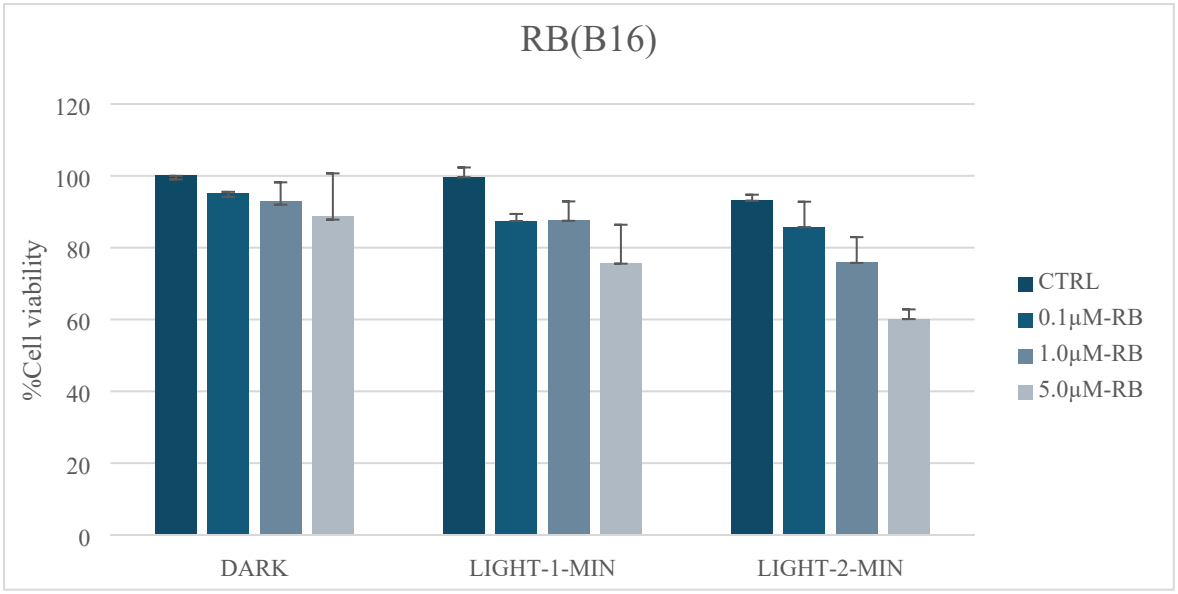
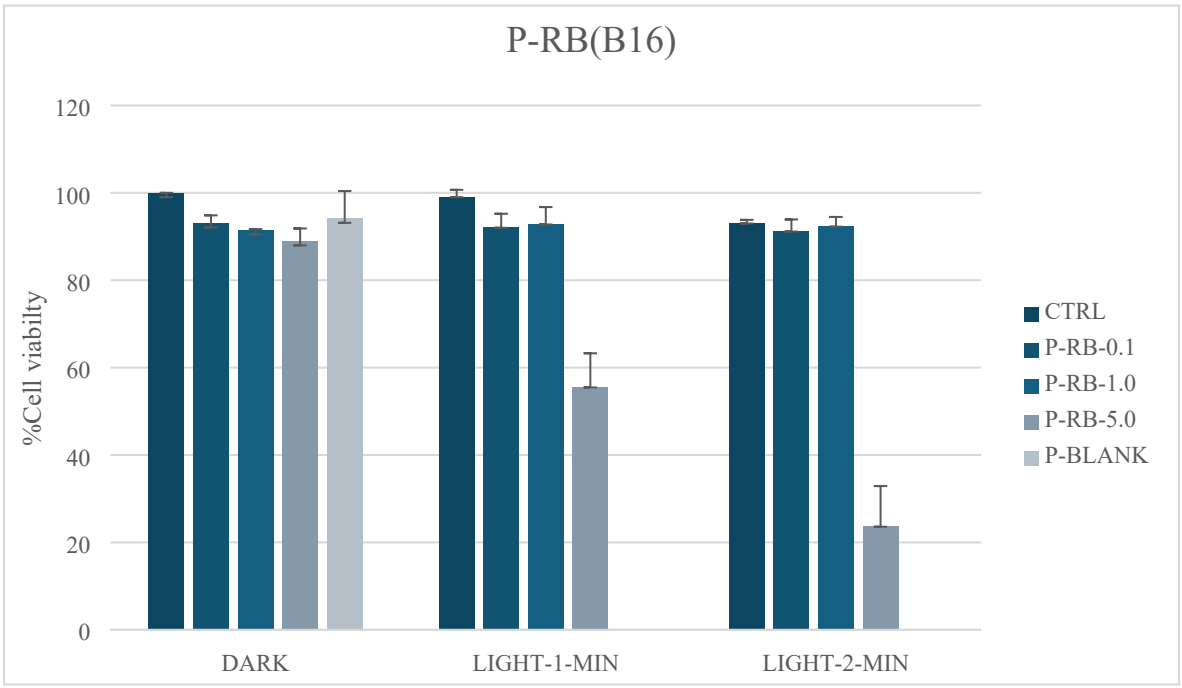
Contents:

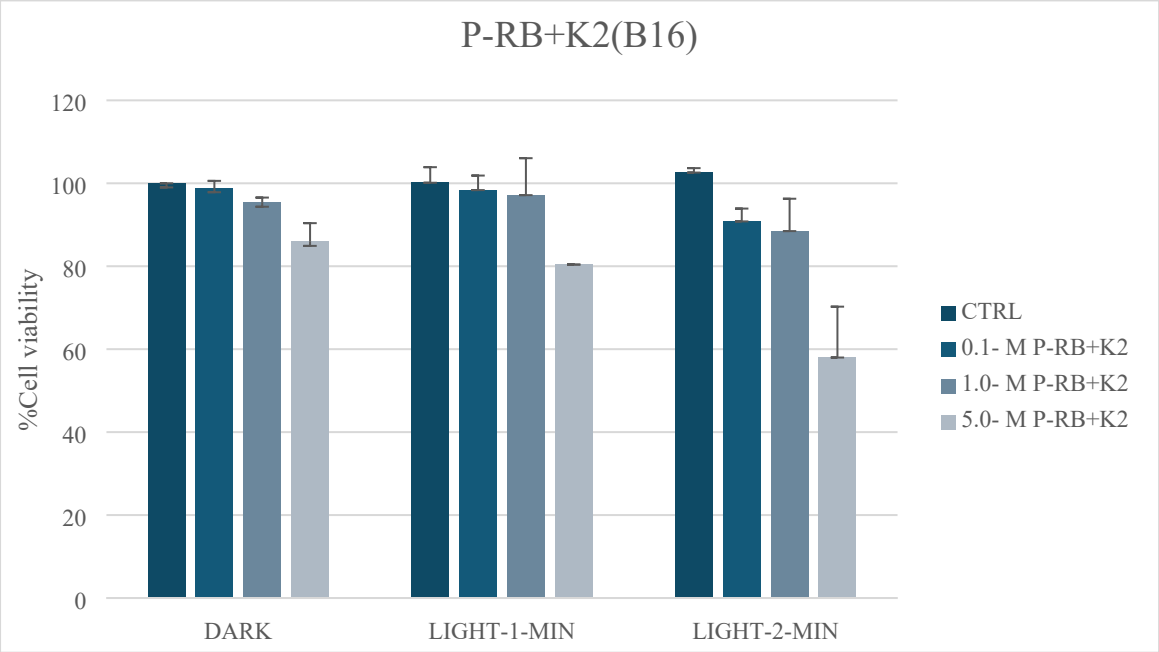


S1: MTT viability assay of B16 cells incubated with 0.1, 1.0 and 5.0µM Rose Bengal for 3 hrs, following which time the media containing RB was removed and the cells washed twice with PBS with fresh media added followed by either no light, 1min light or 2 min light exposure (Fenix LD01 LED, 50 mW output). Following light treatment cells were maintained at 37°C, 5/20/75 CO2/O2/air overnight before an MTT assay was carried out.

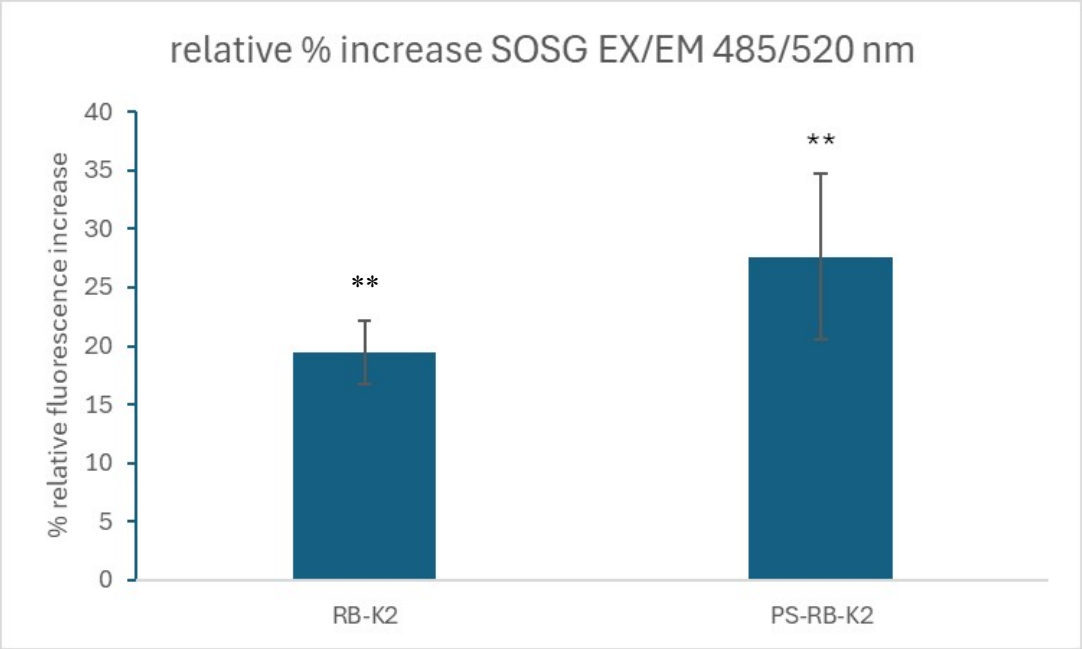


S2: MTT viability assay of B16 cells incubated with 0.1, 1.0 and 5.0µM Rose Bengal contained within polymersomes (0.065mg/ml) for 3 hrs, following which time the media containing P-RB was removed and the cells washed twice with PBS with fresh media added followed by either no light, 1min light or 2 min light exposure (Fenix LD01 LED, 50 mW output). Following light

treatment cells were maintained at 37°C, 5/20/75 CO2/O2/air overnight before an MTT assay was carried out.



S3: MTT viability assay of B16 cells incubated with 0.1, 1.0 and 5.0μM Rose Bengal and 0.1, 1.0 and 5.0μM K2 contained within polymersomes (0.065mg/ml) for 3 hrs, following which time the media containing P-RB+K2 was removed and the cells washed twice with PBS with fresh media added followed by either no light, 1min light or 2 min light exposure (Fenix LD01 LED, 50 mW output). Following light treatment cells were maintained at 37°C, 5/20/75 CO2/O2/air overnight before an MTT assay was carried out.



S4. B-16 melanoma cells were incubated with either no drug, 10 μM of RB-K2 or 10 μM PS-RB-K2 for 3 hrs at 37°C, 5/20/75 CO2/O2/air following which time the cells were washed twice with PBS with fresh media added along with 10μM singlet oxygen sensor green (SOSG) with a further 1 hr incubation at the conditions stated. The cells were again washed twice with PBS and fresh media added before being subjected to 90 secs light (Fenix LD01 LED, 50 mW output). The fluorescent emission was recorded on a Fluostar Omega microplate reader at Ex 480 nm/Em 520 nm with the graph presented as a relative % increase from the cells subjected to light and SOSG only.