

Electronic Supplementary Information

Cationic Porphyrin-Based Nanoparticles for Photodynamic Inactivation and Identification of Bacteria Strains

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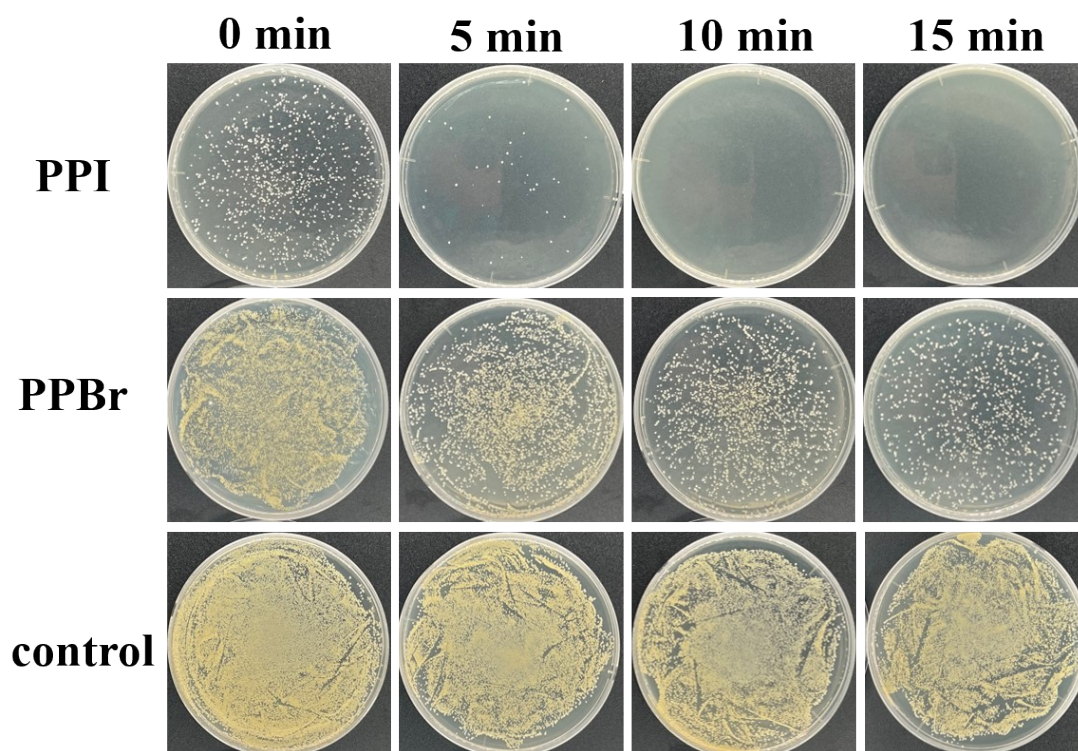


Figure S1. The effect of 635 nm laser (100 mW/cm²) irradiation time on the viabilities of PPI- and PPBr-treated *S. aureus* (CMCC 26003). The concentrations of PPI and PPBr aqueous media are 0.01 and 0.04 mg/mL. The aqueous solution of PPI (or PPBr) NPs and bacterial suspension (10⁶ cells/mL) were mixed at volume ratio of 2:1, irradiated with 635 nm laser for different time, cultured at 37 °C for 2 h, and spread on the TSB-agar plate.

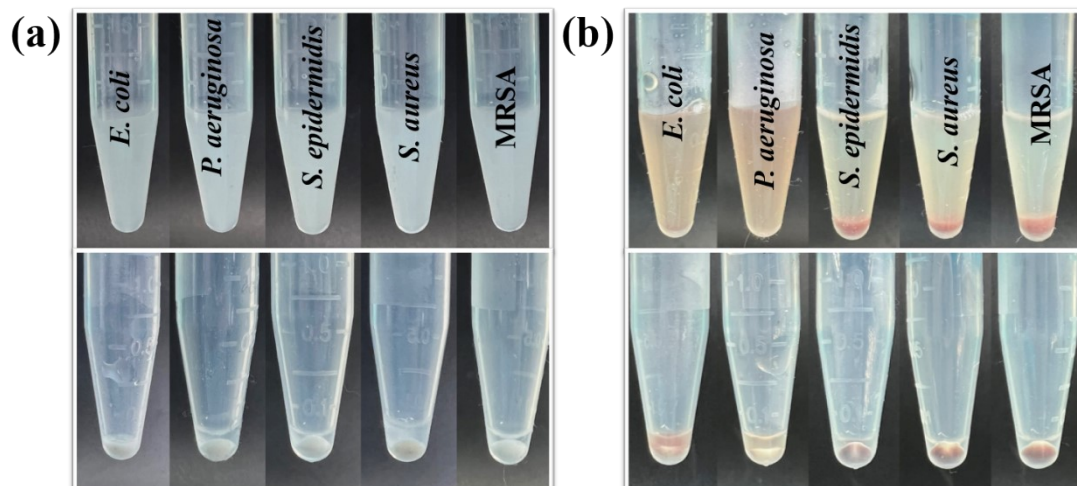


Figure S2. Photographic images of the bacteria suspensions (*S. aureus*, CMCC 26003) and the centrifugal bacterial cakes after treatment with (a) PBS and (b) TPP-PEG suspension at 37 °C for 1 h.

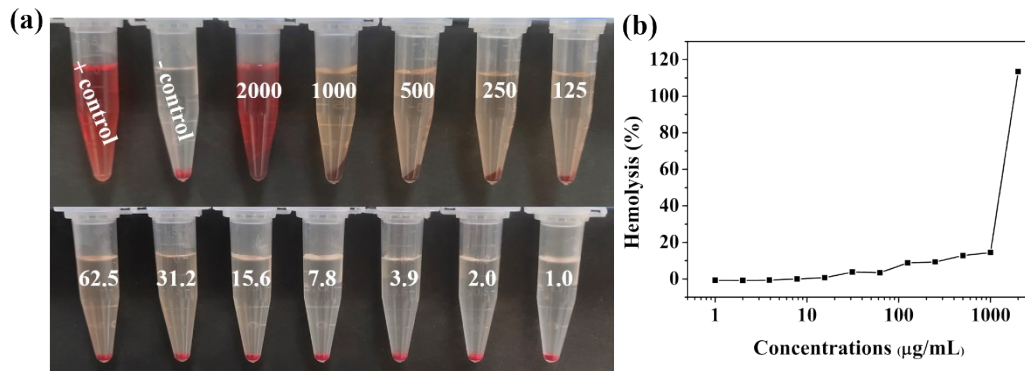


Figure S3. (a) Photograph image of the fresh rabbit blood treated with different concentrations of PPBr, PBS (negative control) and Triton X-100 (positive control); (b) Hemolysis rates of different concentrations of PPBr toward RBCs of the fresh rabbit blood.

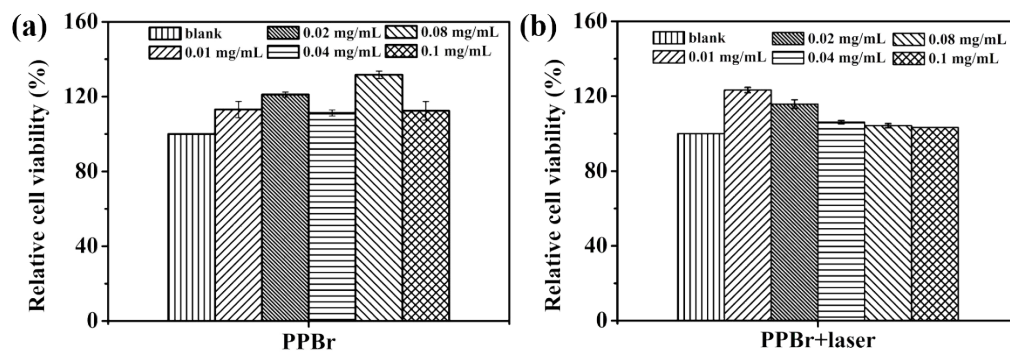


Figure S4. Cell survival rates of L929 mouse fibroblasts cultured with PPBr at different concentrations in the (a) absence and (b) presence of 635 nm laser irradiation for 10 min, and incubated at 37 °C for 48 h.

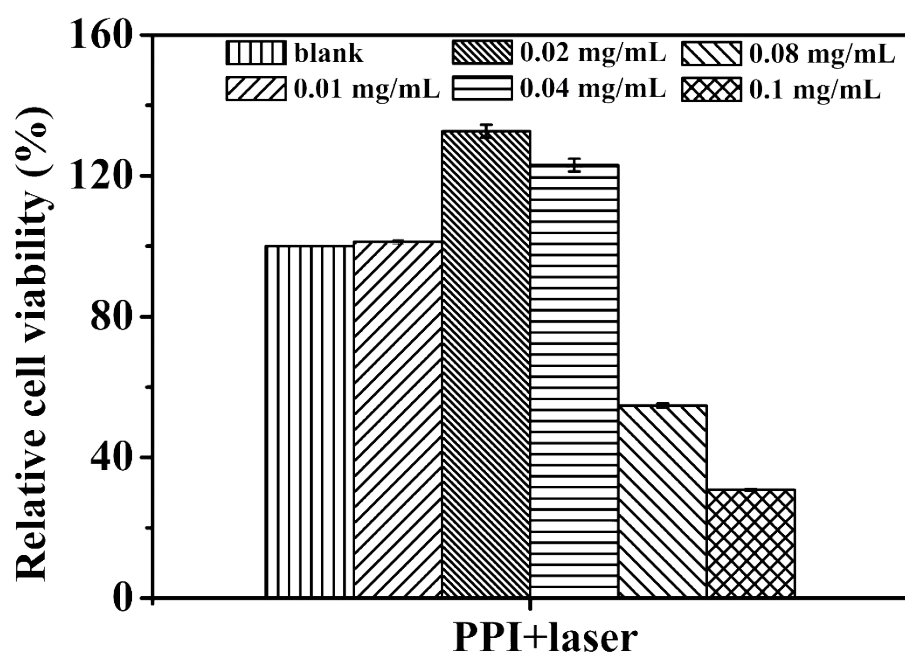


Figure S5. Cell survival rates of L929 mouse fibroblasts cultured with PPI at different concentrations in the presence of 635 nm laser irradiation for 10 min, and incubated at 37 °C for 48 h.