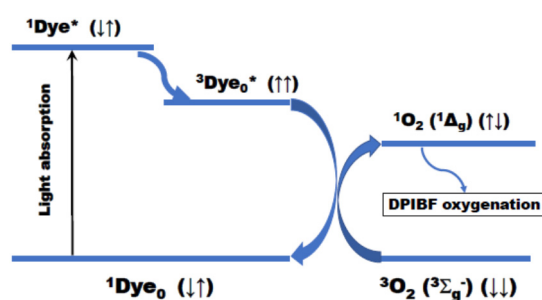


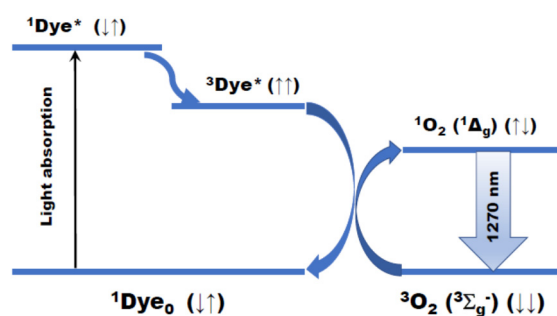
Chlorin endogenous to the North Pacific brittle star *Ophiura sarsii* for photodynamic therapy applications in breast cancer and glioblastoma models

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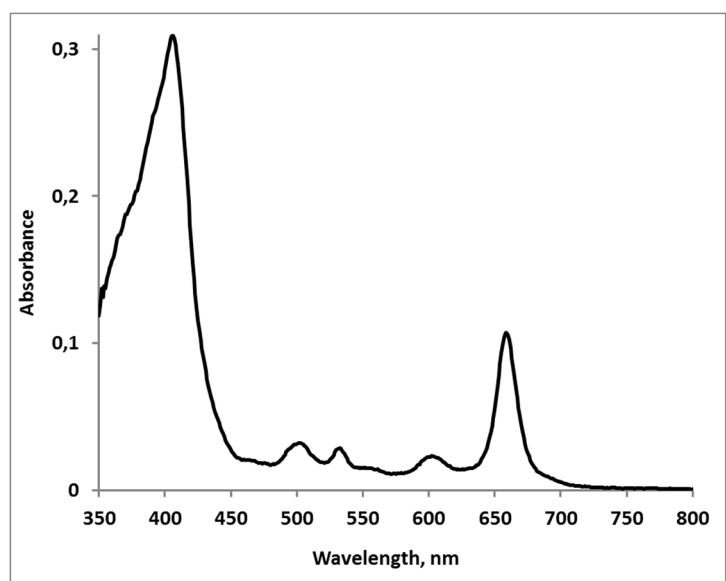
Supplementary Materials



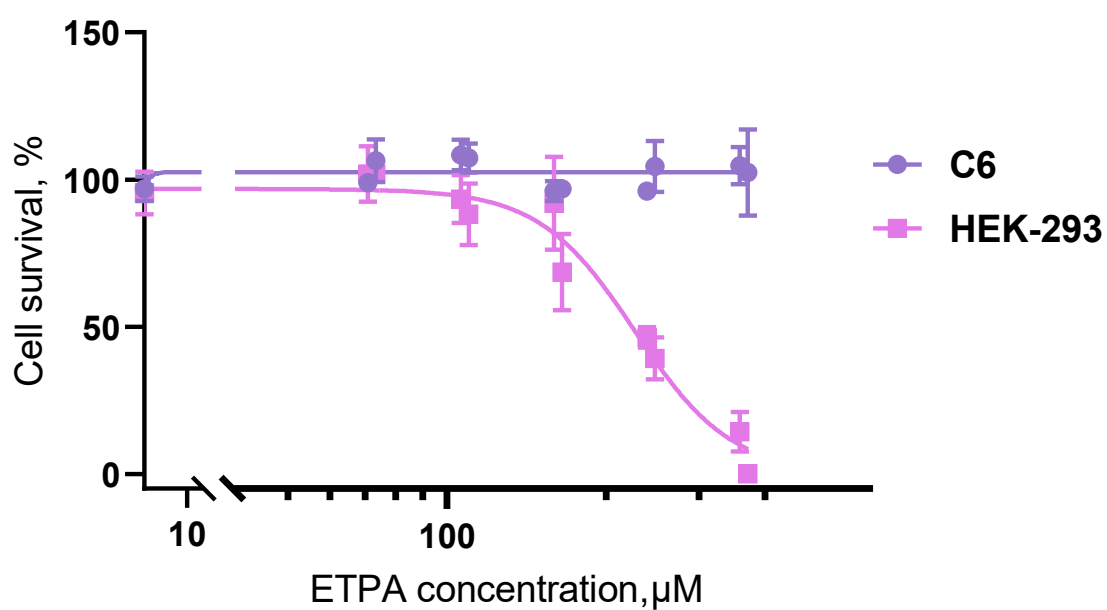
Supplementary Figure S1. Mechanism of photosensitized DPIBF oxygenation. $^1\text{Dye}_0$, $^1\text{Dye}^*$ and $^3\text{Dye}^*$ are molecules of photosensitizers in the ground and excited singlet and triplet states; $^3\text{O}_2$ and $^1\text{O}_2$ are oxygen molecules in the ground and singlet states.



Supplementary Figure S2. Mechanism of photosensitized IR phosphorescence of singlet oxygen. $^1\text{Dye}_0$, $^1\text{Dye}^*$ and $^3\text{Dye}^*$ are molecules of photosensitizer pigments in the ground and excited singlet and triplet states; $^3\text{O}_2$ and $^1\text{O}_2$ are oxygen molecules in the ground and singlet states.



Supplementary Figure S3. Absorption spectrum of ETPA in acetone.



Supplementary Figure S4. Dark cytotoxicity of ETPA against C6 and HEK-293 cells. ETPA was cytotoxic in the dark against HEK-293 cells with the IC_{50} of $226 \pm 17 \mu M$ (mean \pm sd, $n=3$). In contrast, no cytotoxicity in the dark could be reached against the rat glioma C6 cells at the highest tested concentrations of 400 μM ETPA.