

Supplementary Materials

Photodynamic effect of 5,10,15,20-tetrakis[4-(3-*N,N*-dimethylaminopropoxy)phenyl]chlorin towards the human pathogen *Candida albicans* under different culture conditions

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1. Strains and cultures of *C. albicans*

The strain of *C. albicans* PC31 was previously identified and characterized [1]. Yeast cells were aerobically grown overnight in 4 mL Sabouraud broth at 37 °C to stationary phase. Cells were harvested by centrifugation of broth cultures (3000 rpm for 15 min). After that, they were resuspended in 4 mL of 10 mM phosphate-buffered saline (PBS, pH = 7.0) to obtain a cell suspension of $\sim 10^7$ colony forming units (CFU)/mL. Then, the cell suspension was diluted 1/10 in PBS to obtain $\sim 10^6$ CFU/mL [2].

1. Supporting figures

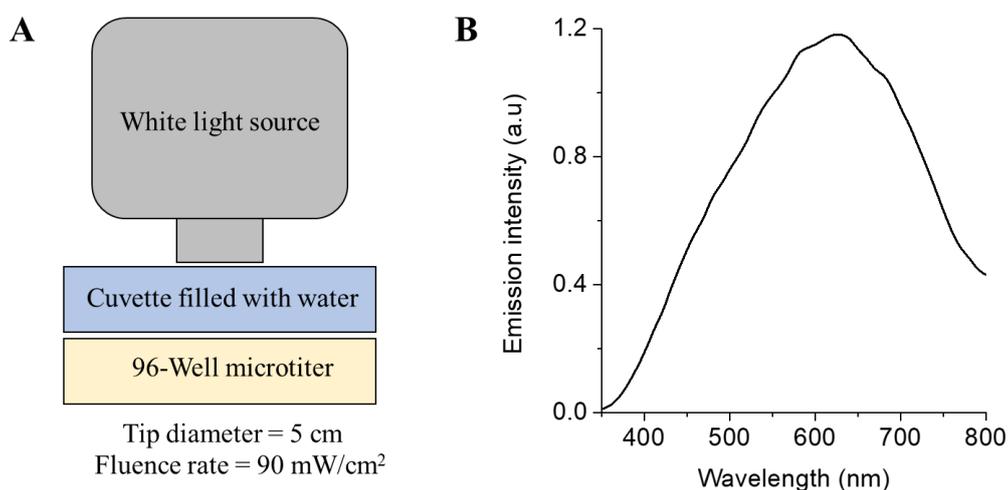


Figure S1. (A) Model of irradiation systems for PDI and (B) emission spectrum of the light source.



Figure S2. Microscopic observation of *C. albicans* pseudohyphae incubated in HS for 4 h at 37 °C in the dark (100 × microscope objective).

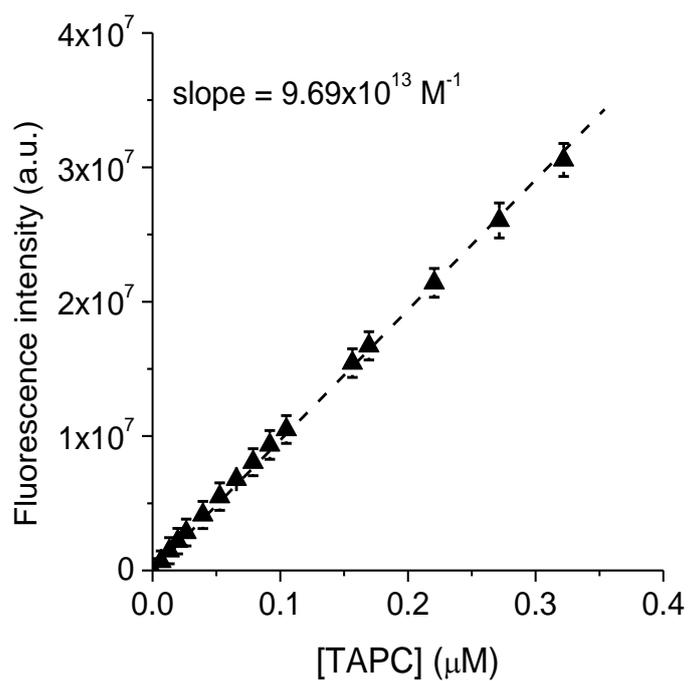


Figure S3. Calibration curve for TAPC in 2% w/v SDS aqueous solution ($\lambda_{\text{exc}} = 420 \text{ nm}$, $\lambda_{\text{em}} = 650 \text{ nm}$).

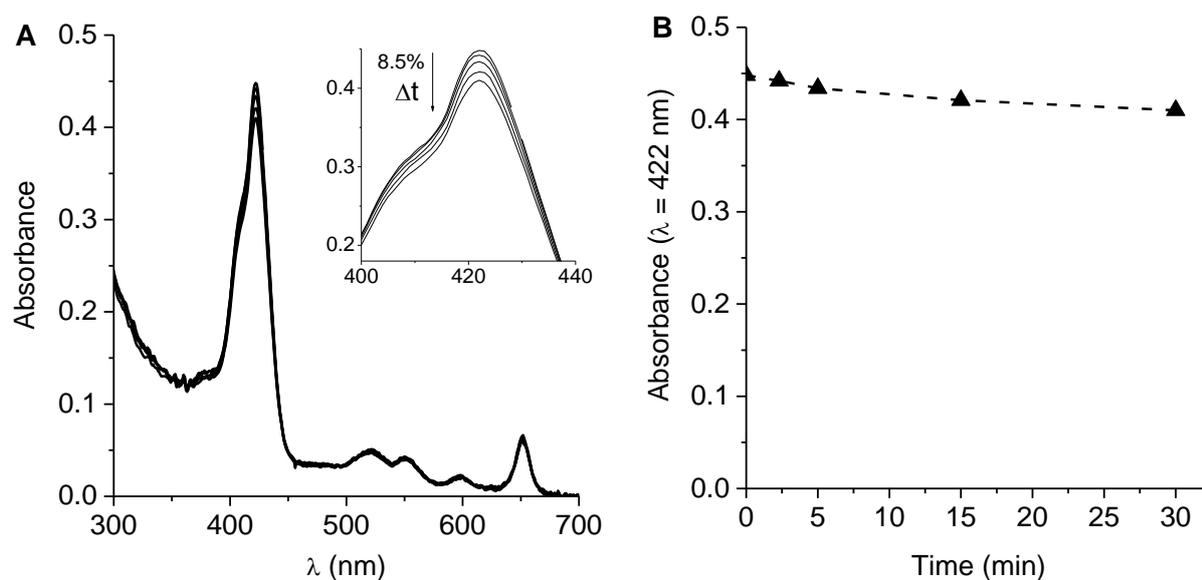


Figure S4. (A) Absorption spectra and (B) changes in the maximum of the Soret band for the photobleaching of TAPC after different irradiation in DMF.

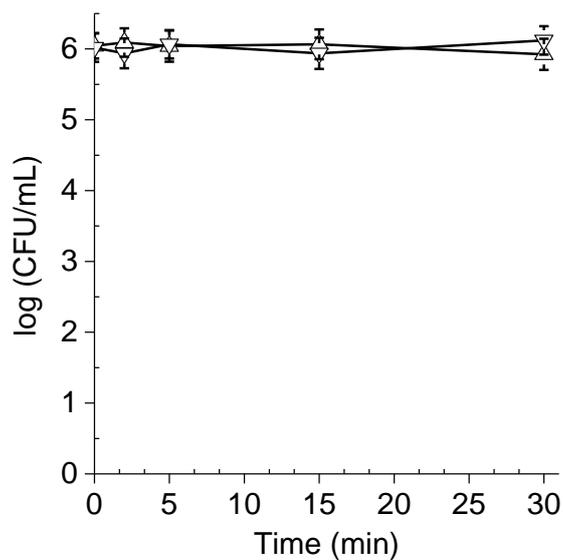


Figure S5. Survival curves of *C. albicans* pseudohyphae ($\sim 10^6$ CFU/mL) incubated with 5 μ M TAPC in PBS (Δ) and in HS (∇) for 30 min at 37 $^{\circ}$ C in dark and kept in the dark for different times.

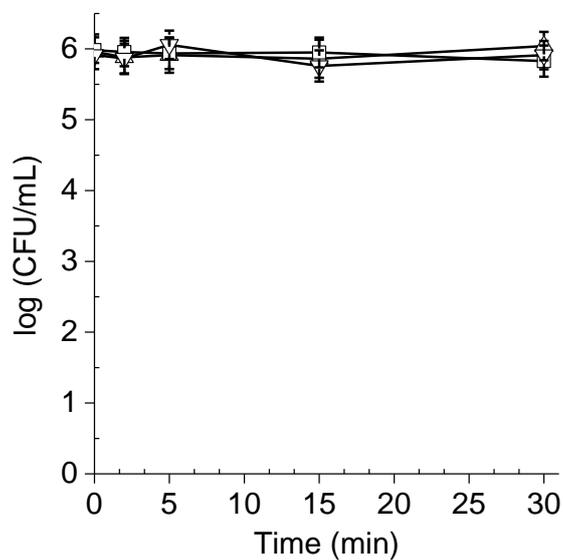


Figure S6. Survival curves of *C. albicans* ($\sim 10^6$ CFU/mL) incubated with 5 μ M TAPC in PBS (Δ) and containing 1% (\square) and 4.5% BSA (∇) for 30 min at 37 $^{\circ}$ C in the dark and kept in the dark for different times.

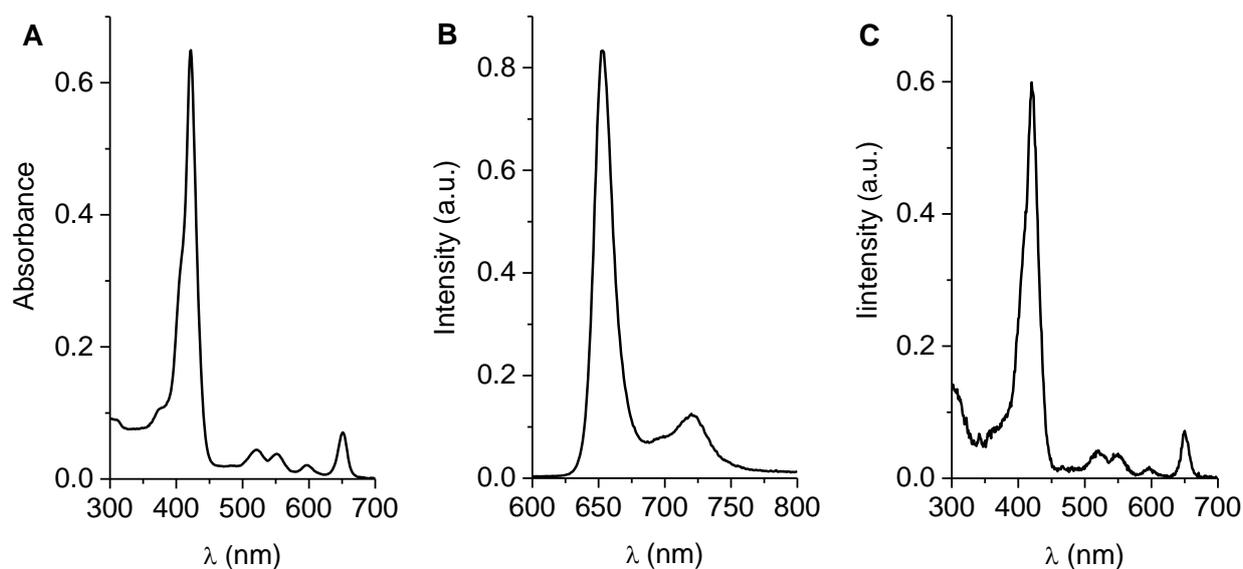


Figure S7. (A) Absorption, (B) fluorescence emission ($\lambda_{\text{exc}}=520$ nm) and (C) excitation ($\lambda_{\text{em}}=721$ nm) spectra of TAPC in DMF.

2. References

1. Cormick, M. P.; Alvarez, M. G.; Rovera, M.; Durantini, E. N. Photodynamic inactivation of *Candida albicans* sensitized by tri- and tetra-cationic porphyrin derivatives. *Eur. J. Med. Chem.* **2009**, *44*, 1592-1599. DOI: 10.1016/j.ejmech.2008.07.026
2. Quiroga, E. D.; Cordero, P.; Mora, S. J.; Alvarez, M. G.; Durantini, E. N. Mechanistic aspects in the photodynamic inactivation of *Candida albicans* sensitized by a dimethylaminopropoxy porphyrin and its equivalent with cationic intrinsic charges. *Photodiagn. Photodyn. Ther.* **2020**, *31*, 101877. DOI: 10.1016/j.pdpdt.2020.101877