

## 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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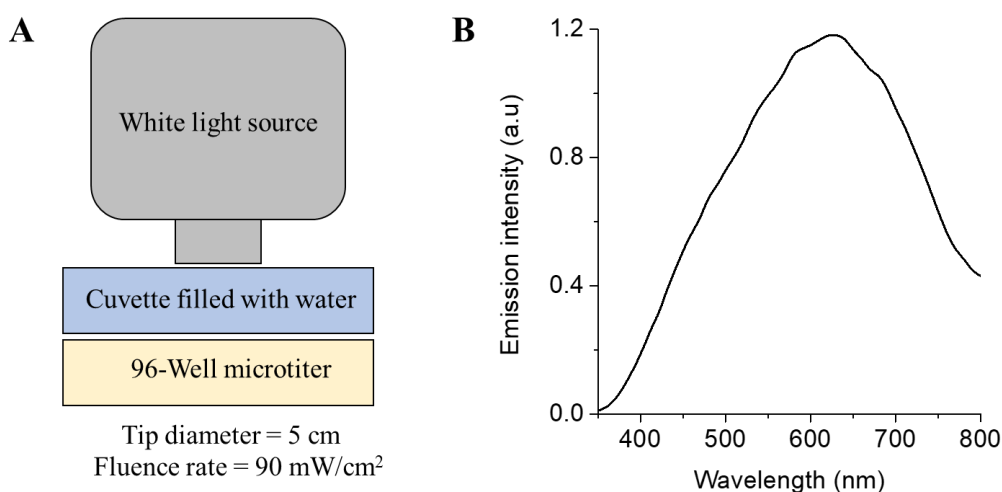
#### **Table of Contents**

<b>1. Strains and cultures of <i>C. albicans</i></b>	Page S1
<b>2. Supporting figures</b>	Page S2
<b>3. References</b>	Page S4

## 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].

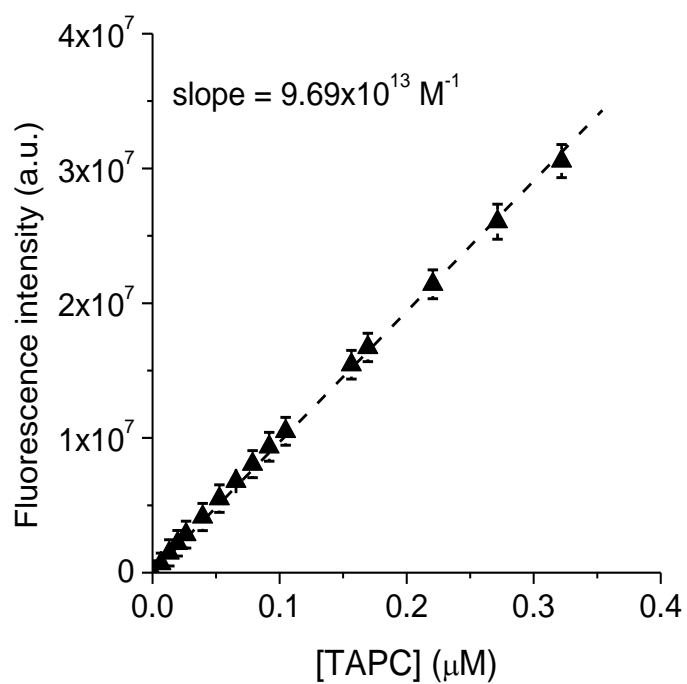
## 1. Supporting figures



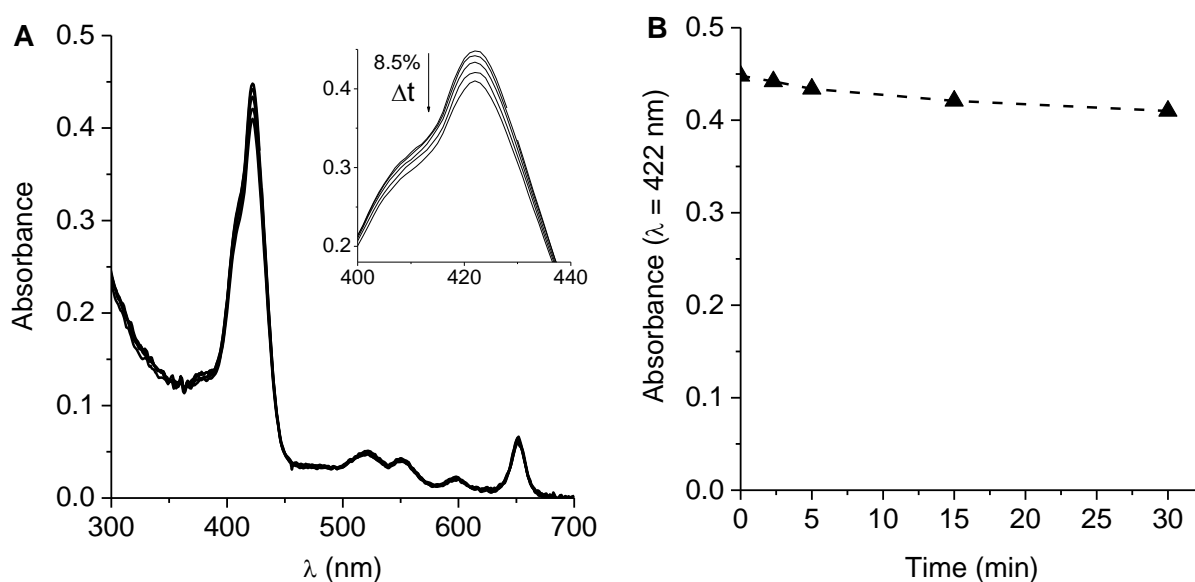
**Figure S1.** (A) Model of irradiation systems for PDI and (B) emission spectrum of the light source.



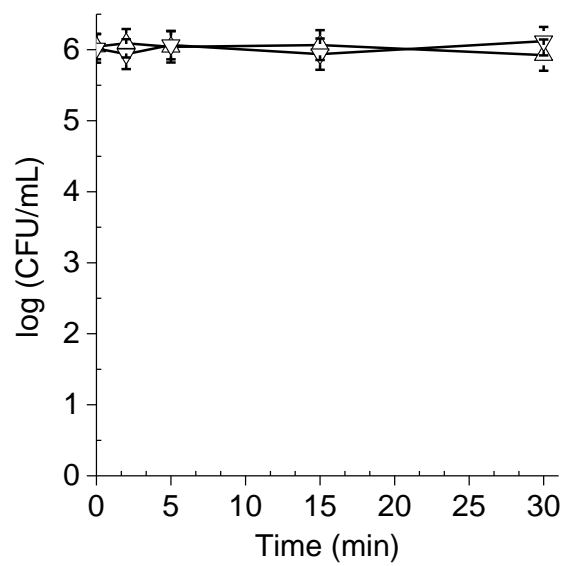
**Figure S2.** Microscopic observation of *C. albicans* pseudohyphae incubated in HS for 4 h at 37 °C in the dark (100 × microscope objective).



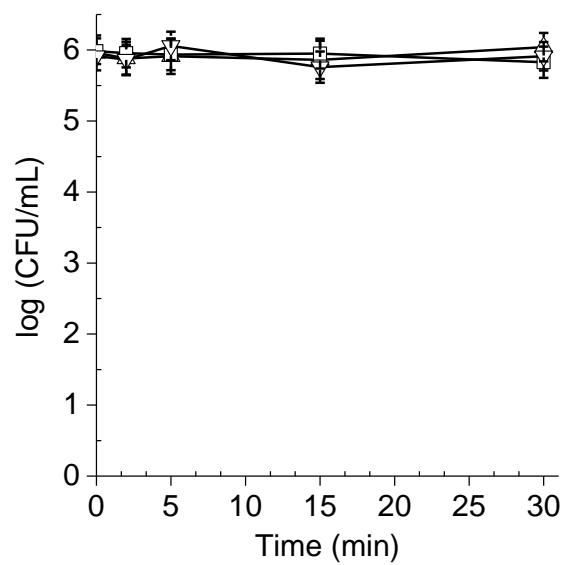
**Figure S3.** Calibration curve for TAPC in 2% w/v SDS aqueous solution ( $\lambda_{\text{exc}} = 420 \text{ nm}$ ,  $\lambda_{\text{em}} = 650 \text{ nm}$ ).



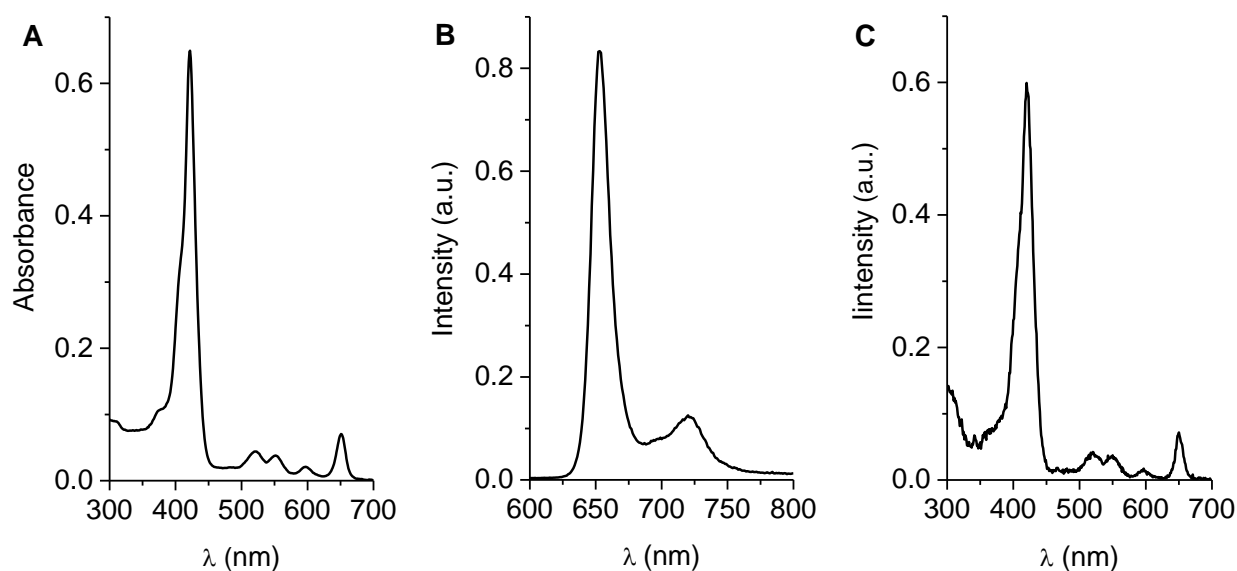
**Figure S4.** (A) Absorption spectra and (B) changes in the maximum of the Soret band for the photobleaching of TAPC after different irradiation in DMF.



**Figure S5.** Survival curves of *C. albicans* pseudohyphae ( $\sim 10^6$  CFU/mL) incubated with 5  $\mu$ M TAPC in PBS ( $\Delta$ ) and in HS ( $\nabla$ ) for 30 min at 37 °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  $\mu$ M TAPC in PBS ( $\Delta$ ) and containing 1% ( $\square$ ) and 4.5% BSA ( $\nabla$ ) for 30 min at 37 °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