

Supporting Information

Photobiological characteristics of chlorophyll a derivatives as microbial PDT agents

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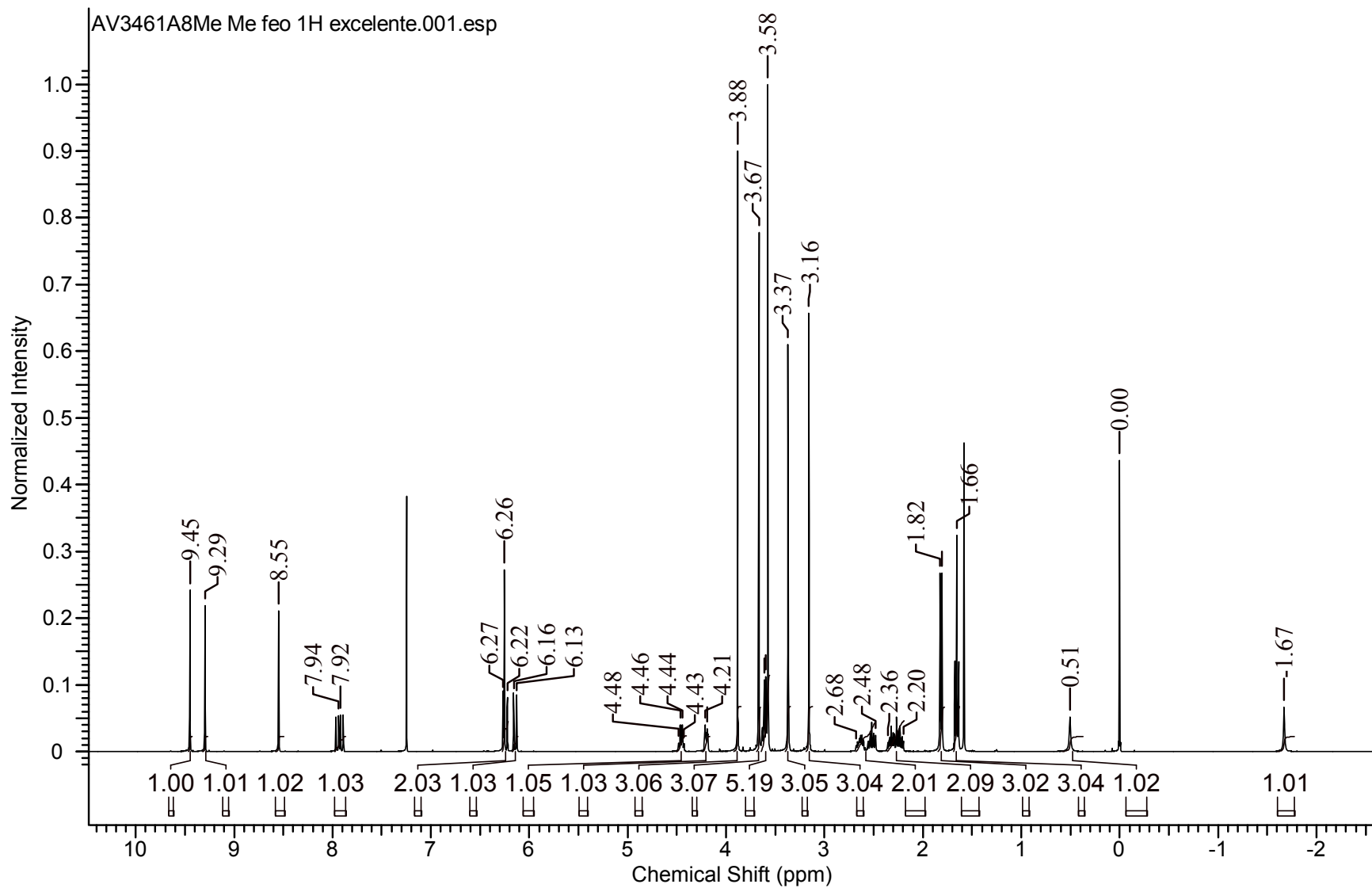


Figure S1. $^1\text{H-NMR}$ (400 MHz) in CDCl_3 of methyl pheophorbide-*a*.

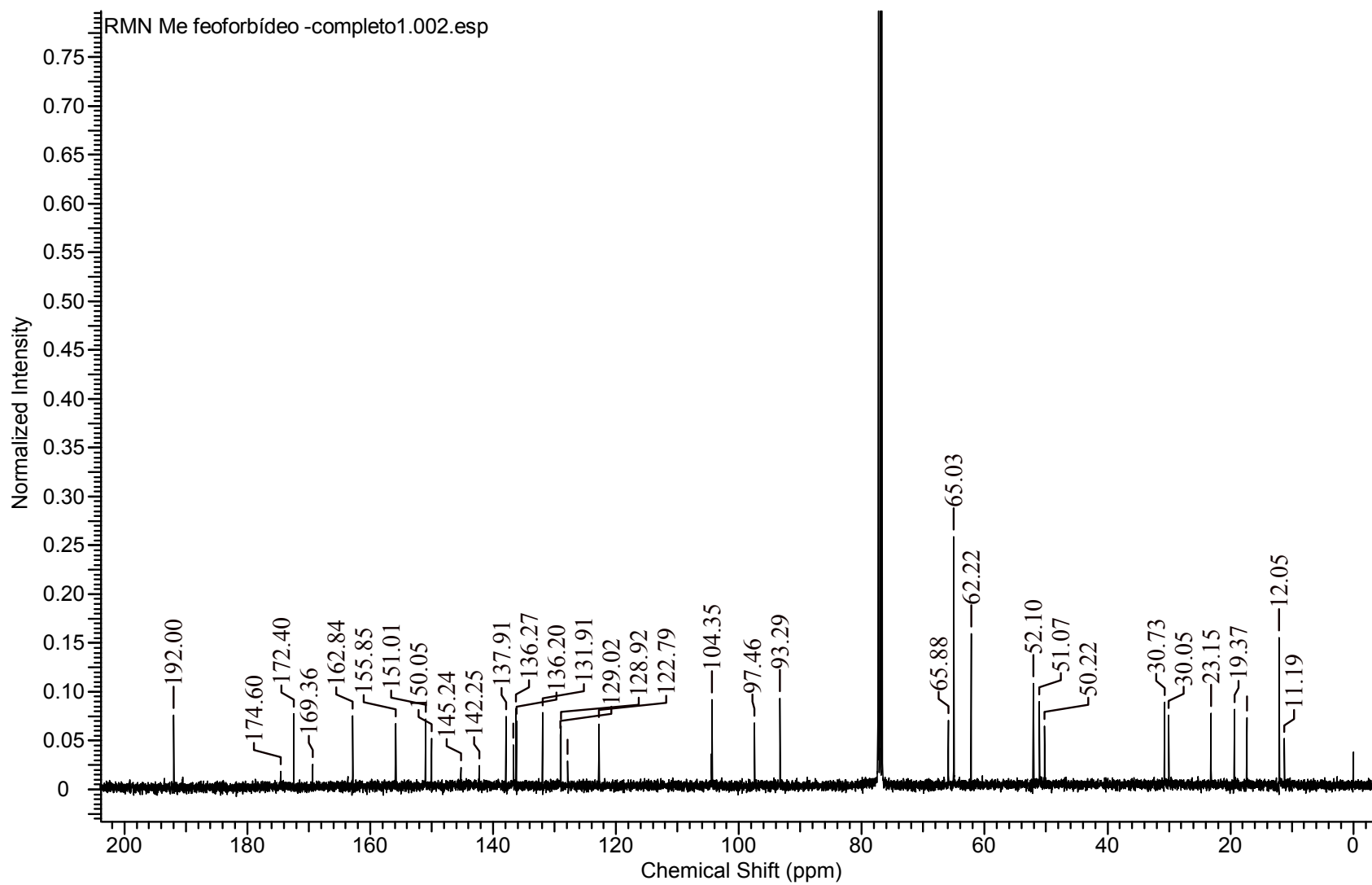


Figure S2. ^{13}C -NMR (100 MHz) in CDCl_3 of methyl pheophorbide-*a*.

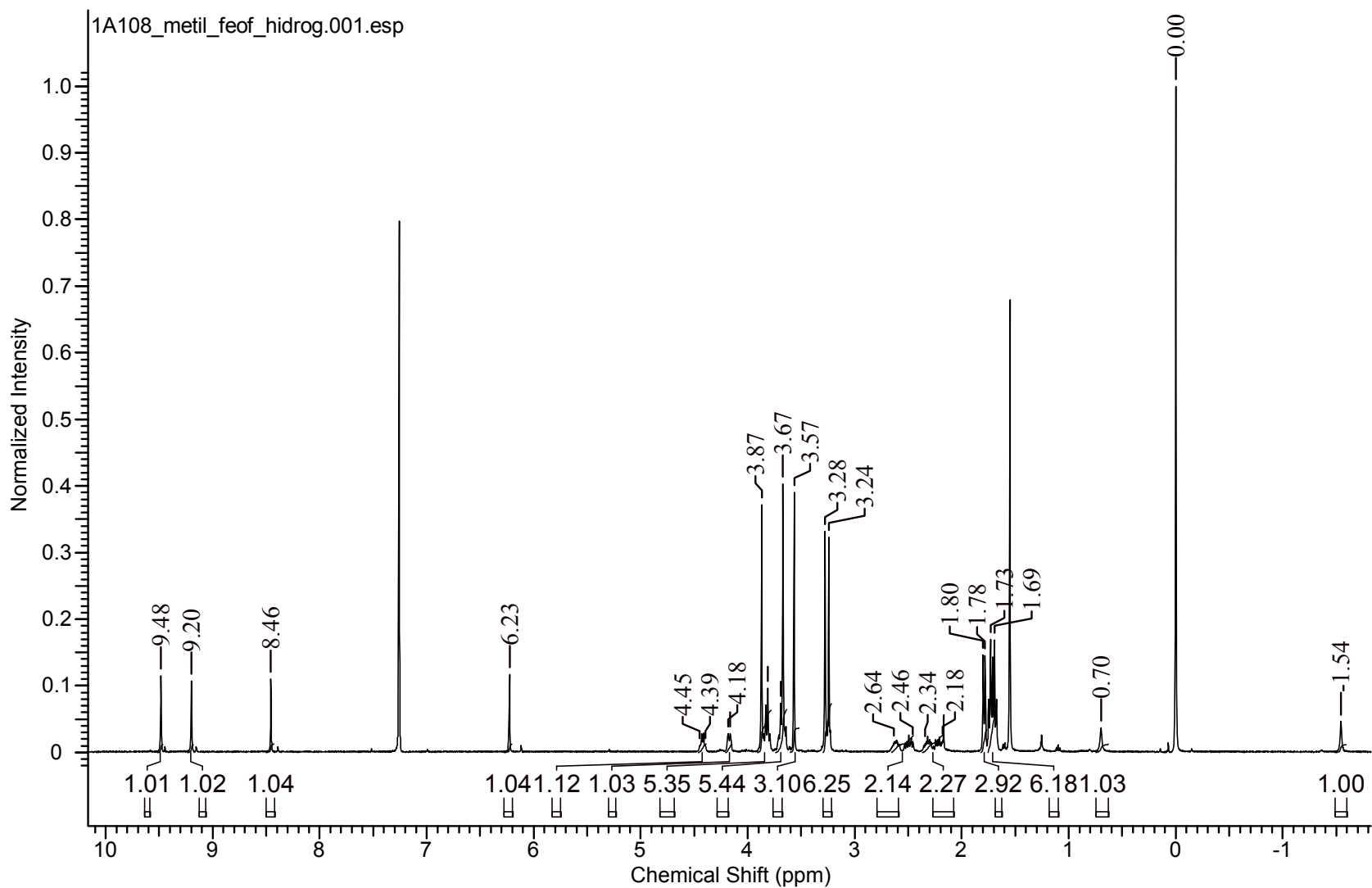


Figure S3. $^1\text{H-NMR}$ (400 MHz) in CDCl_3 of hydrogenated methyl pheophorbide-*a*.

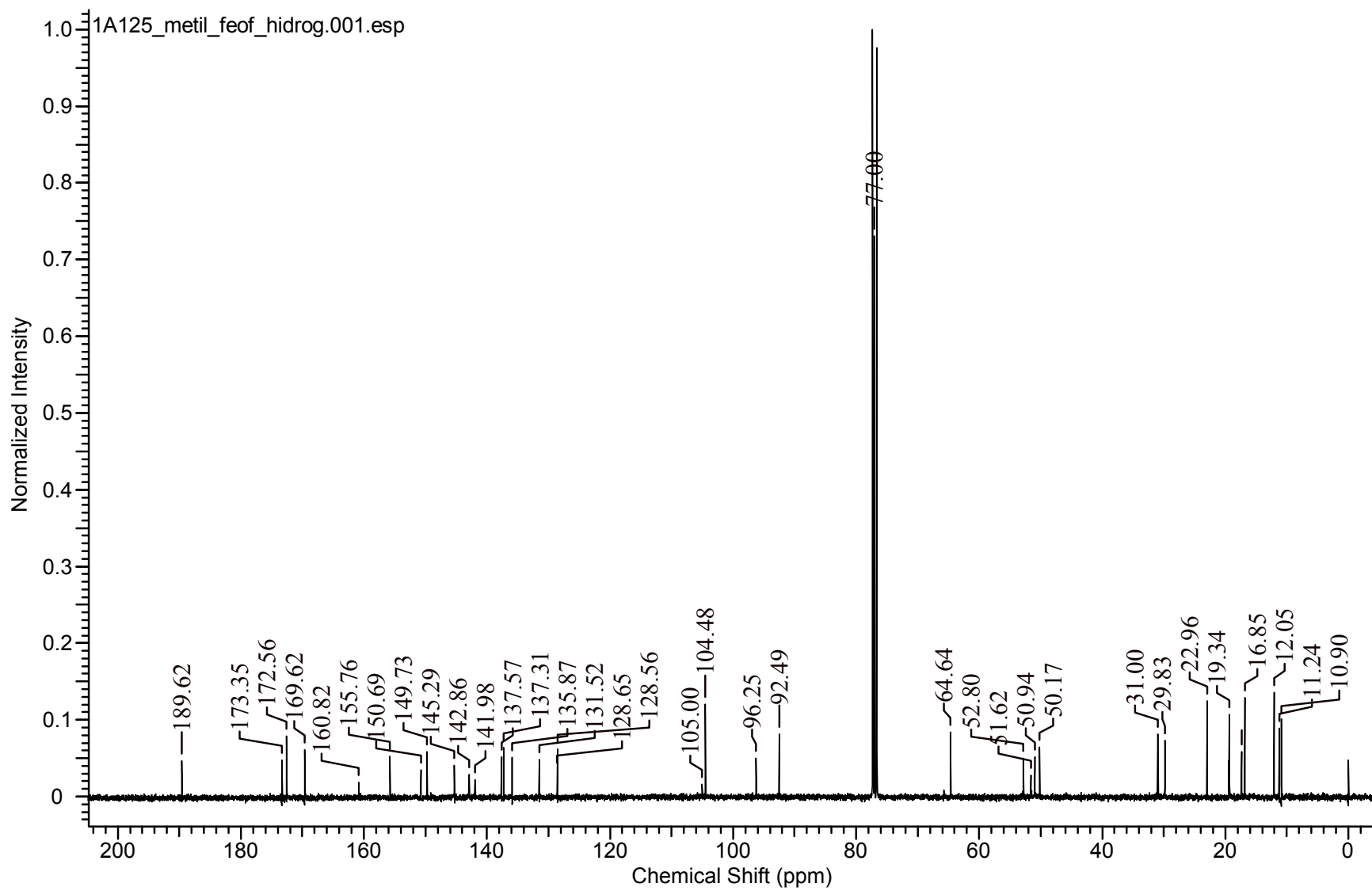


Figure S4. ^{13}C -NMR (100 MHz) in CDCl_3 of hydrogenated methyl pheophorbide-*a*.

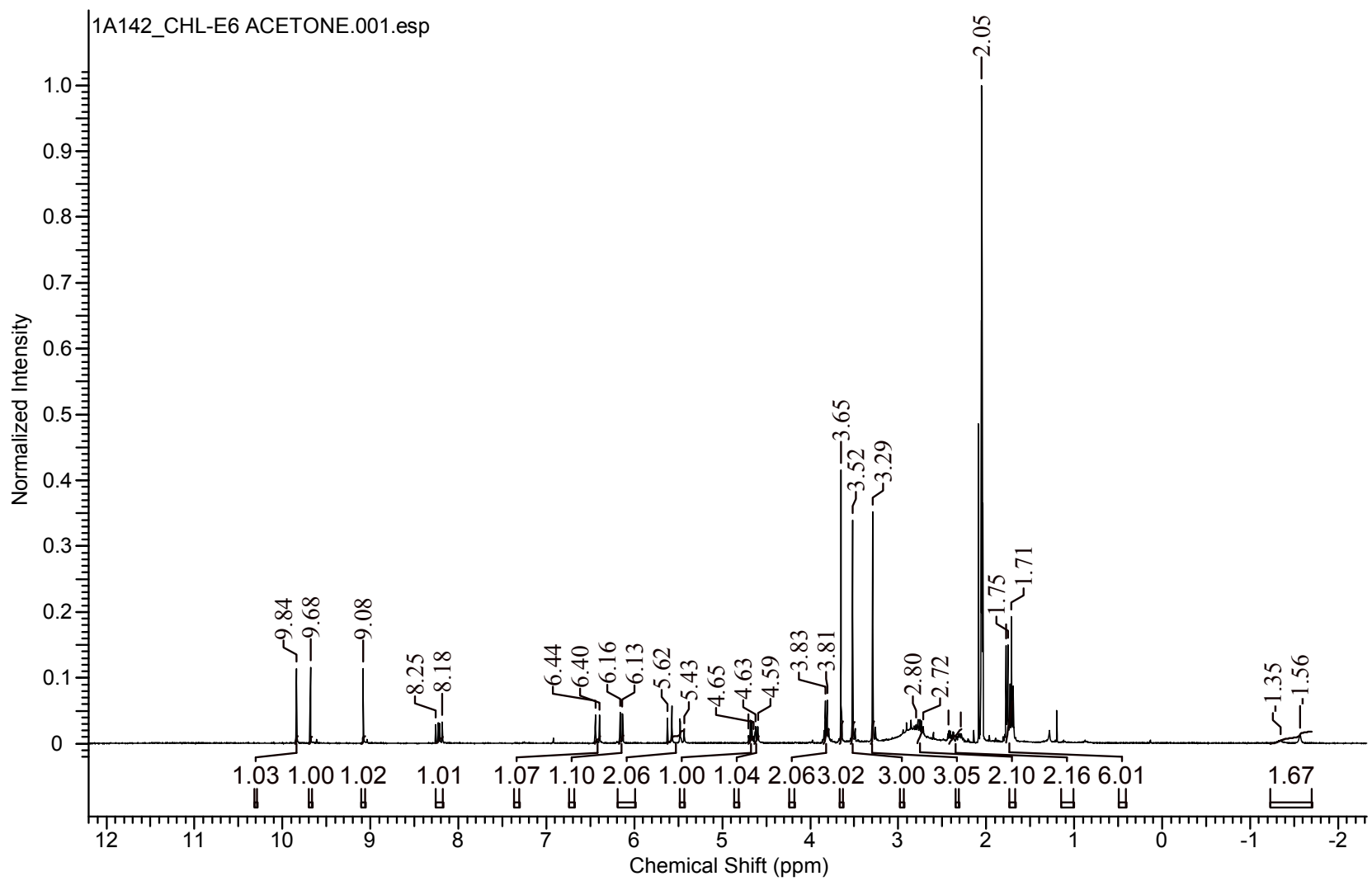


Figure S5. $^1\text{H-NMR}$ (400 MHz) in $(\text{CD}_3)_2\text{CO}$ of chl-e6.

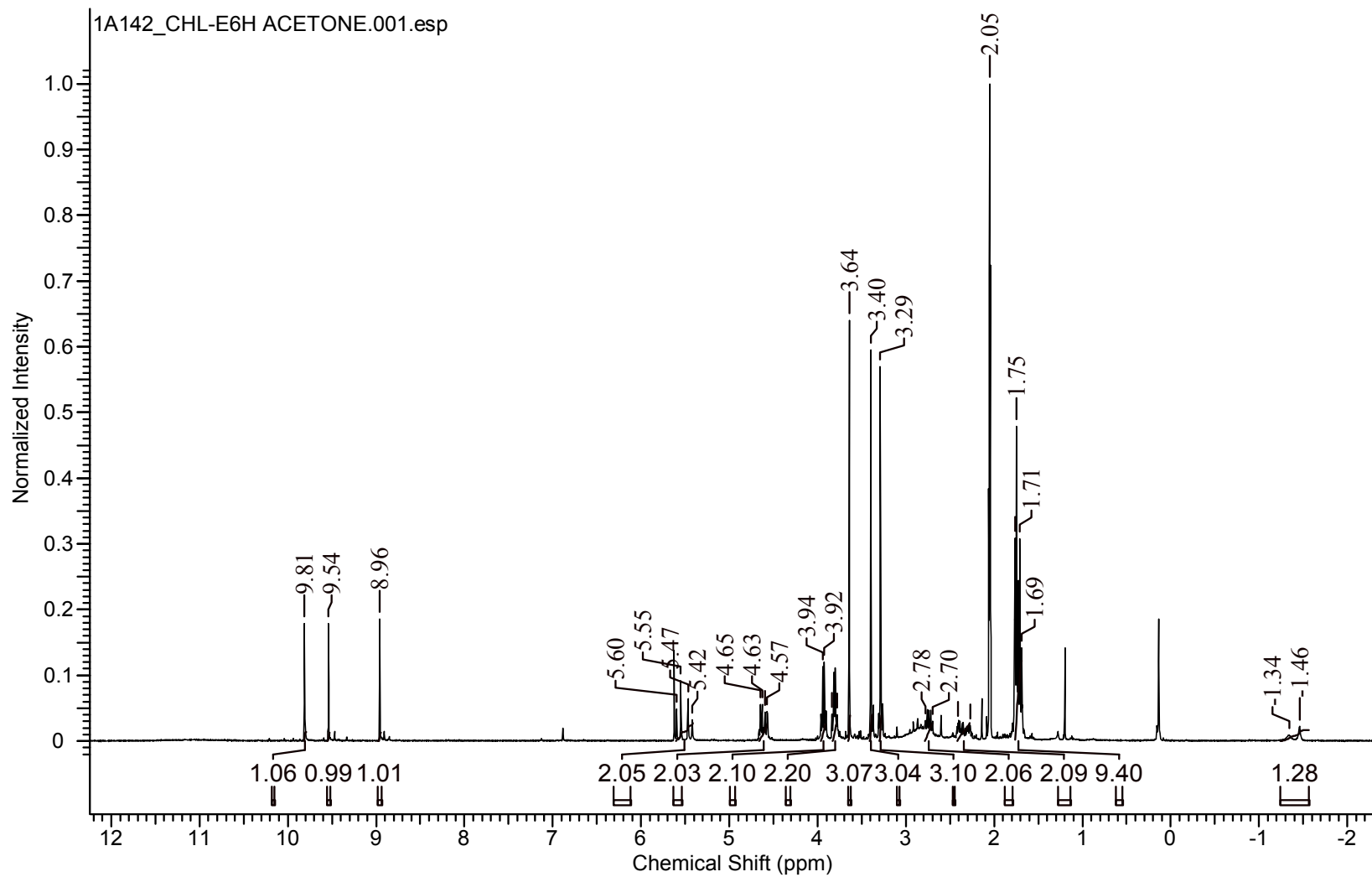


Figure S6. $^1\text{H-NMR}$ (400 MHz) in $(\text{CD}_3)_2\text{CO}$ of chl-e6H.

Mass spectrum of chlorin-e6 (3)

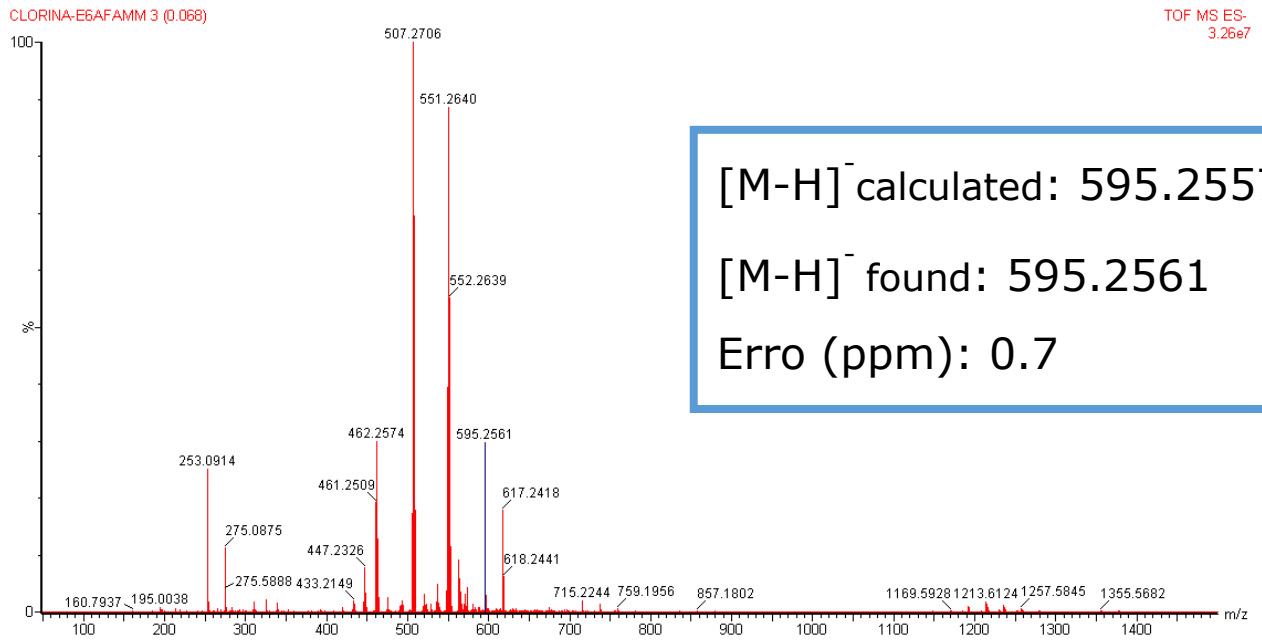


Figure S7: Mass spectrum of chlorin-e6 (3).

Mass spectrum of chlorin-e6H (4)

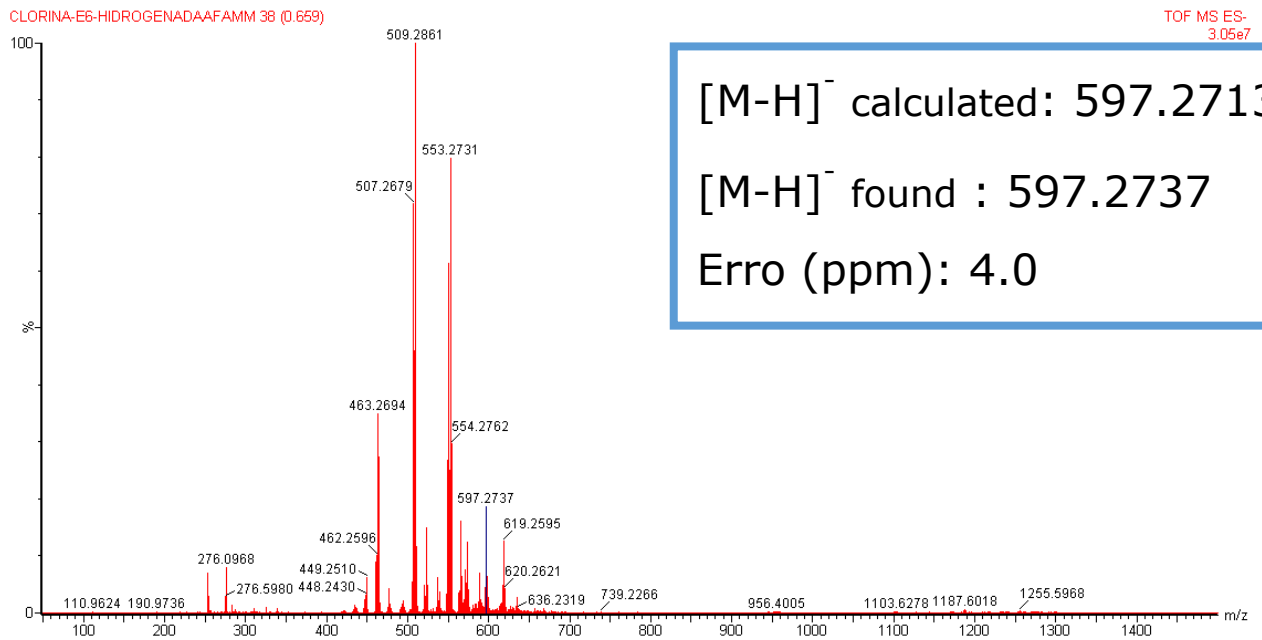


Figure S8: Mass spectrum of chl-e6H.

UV-Vis spectrum of methyl pheophorbide-a (1)

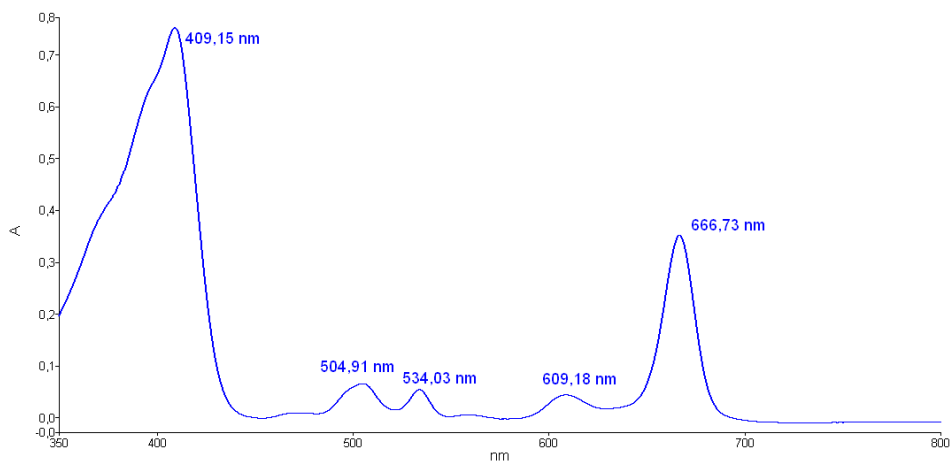


Figure S9: UV-Vis spectrum of methyl pheophorbide-*a* in ethyl acetate

UV-Vis spectrum of hydrogenated methyl pheophorbide-a

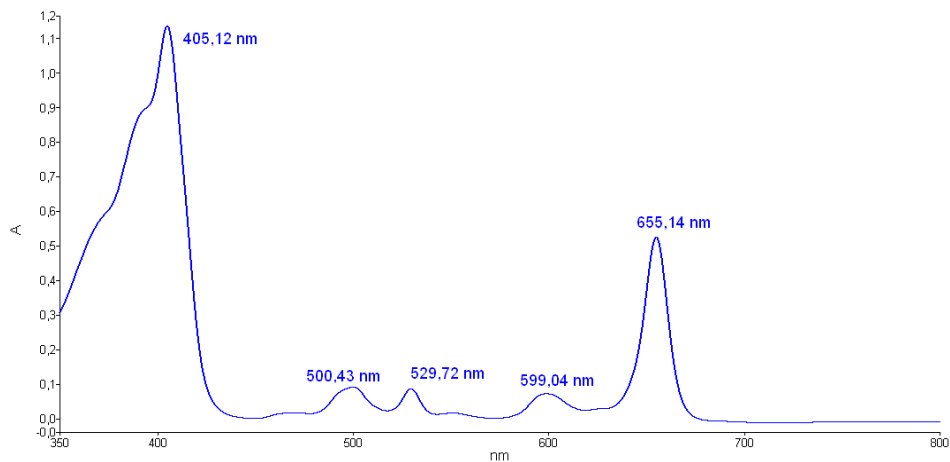


Figure S10: UV-Vis spectrum of hydrogenated methyl pheophorbide-*a* in ethyl acetate

UV-Vis spectrum of chlorin-e6

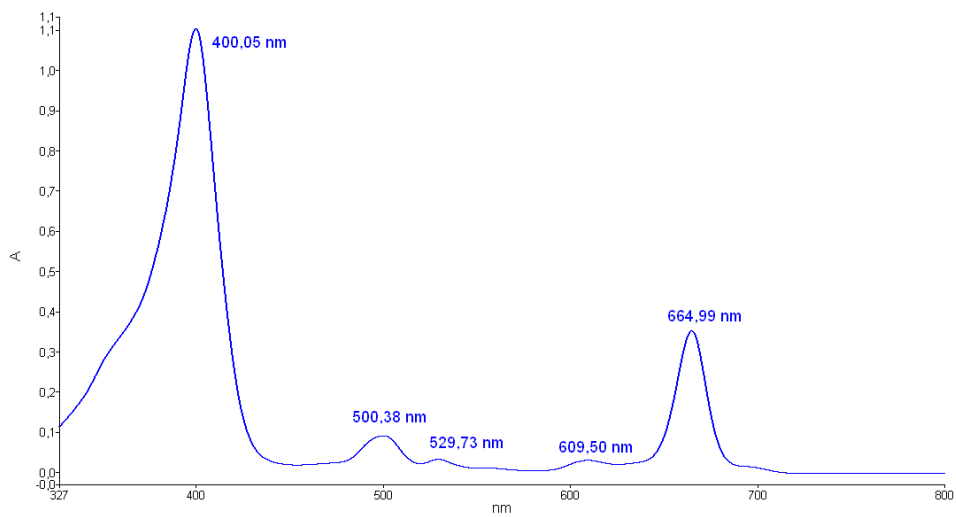


Figure S11: UV-Vis spectrum chl-e6 in ethyl acetate

UV-Vis spectrum of chlorin-e6H

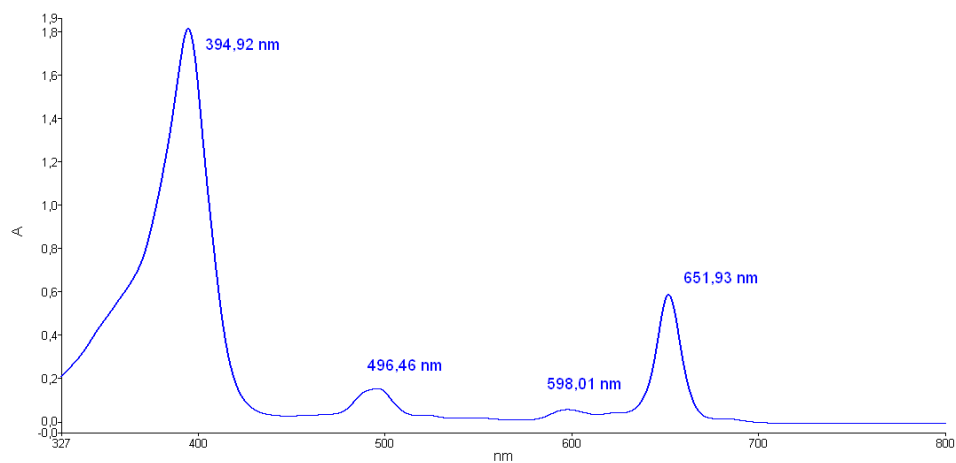


Figure S12: UV-Vis spectrum chl-e6H in ethyl acetate

Singlet oxygen quantum yields

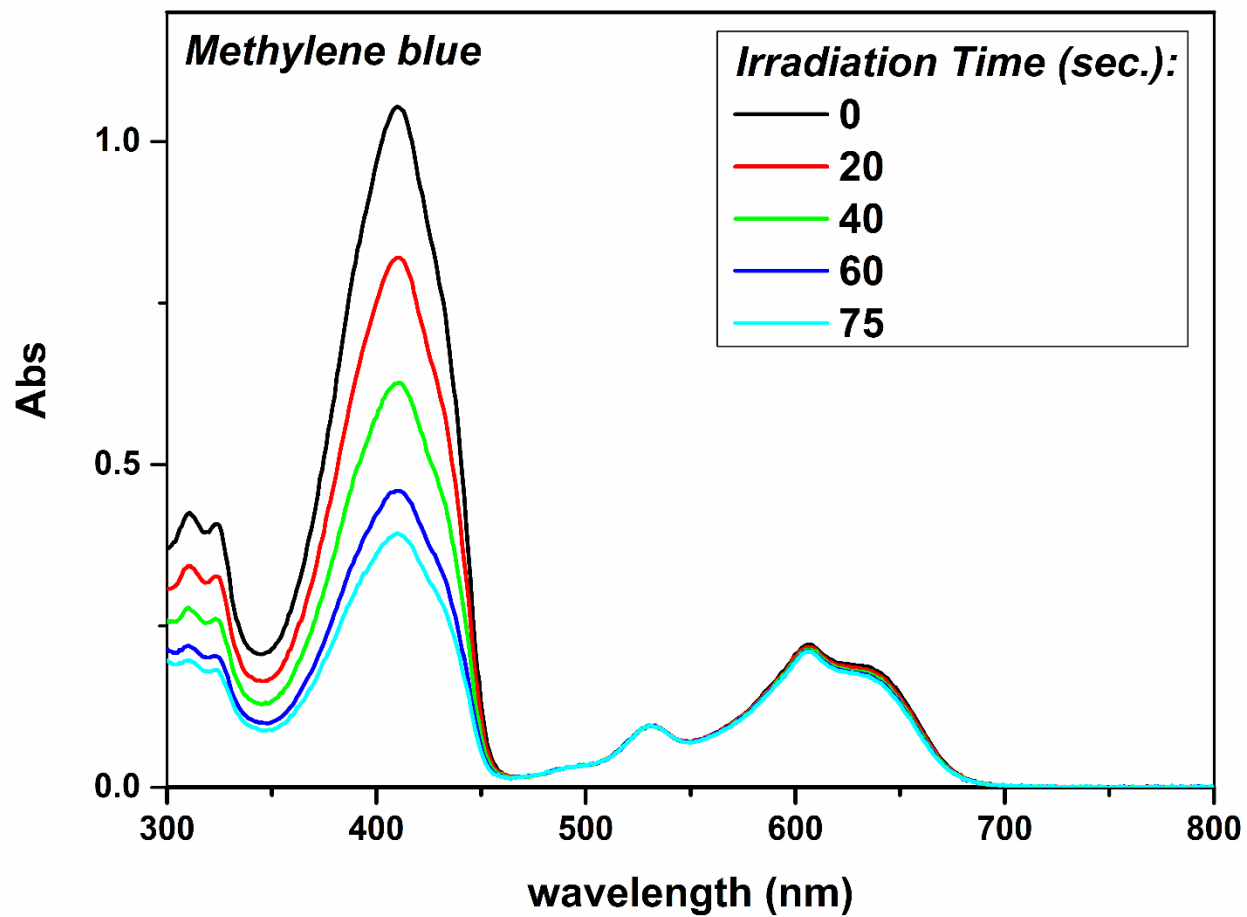


Figure S13: Absorption spectra of 50 μM DPBF upon irradiation time in air saturated ethanol containing **MB** with irradiation at 660 nm.

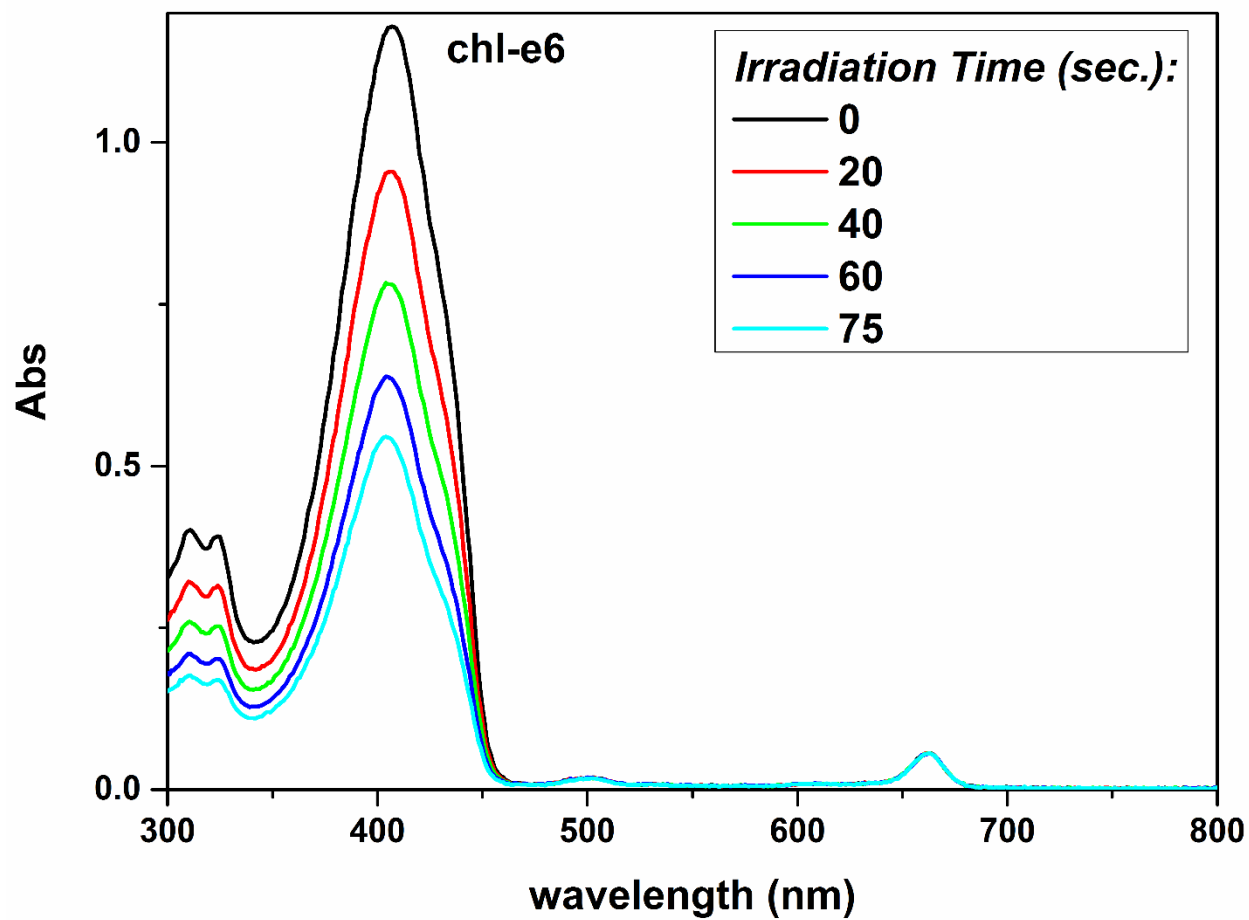


Figure S14: Absorption spectra of 50 μM DPBF upon irradiation time in air saturated ethanol containing **chl-e6** with irradiation at 660 nm.

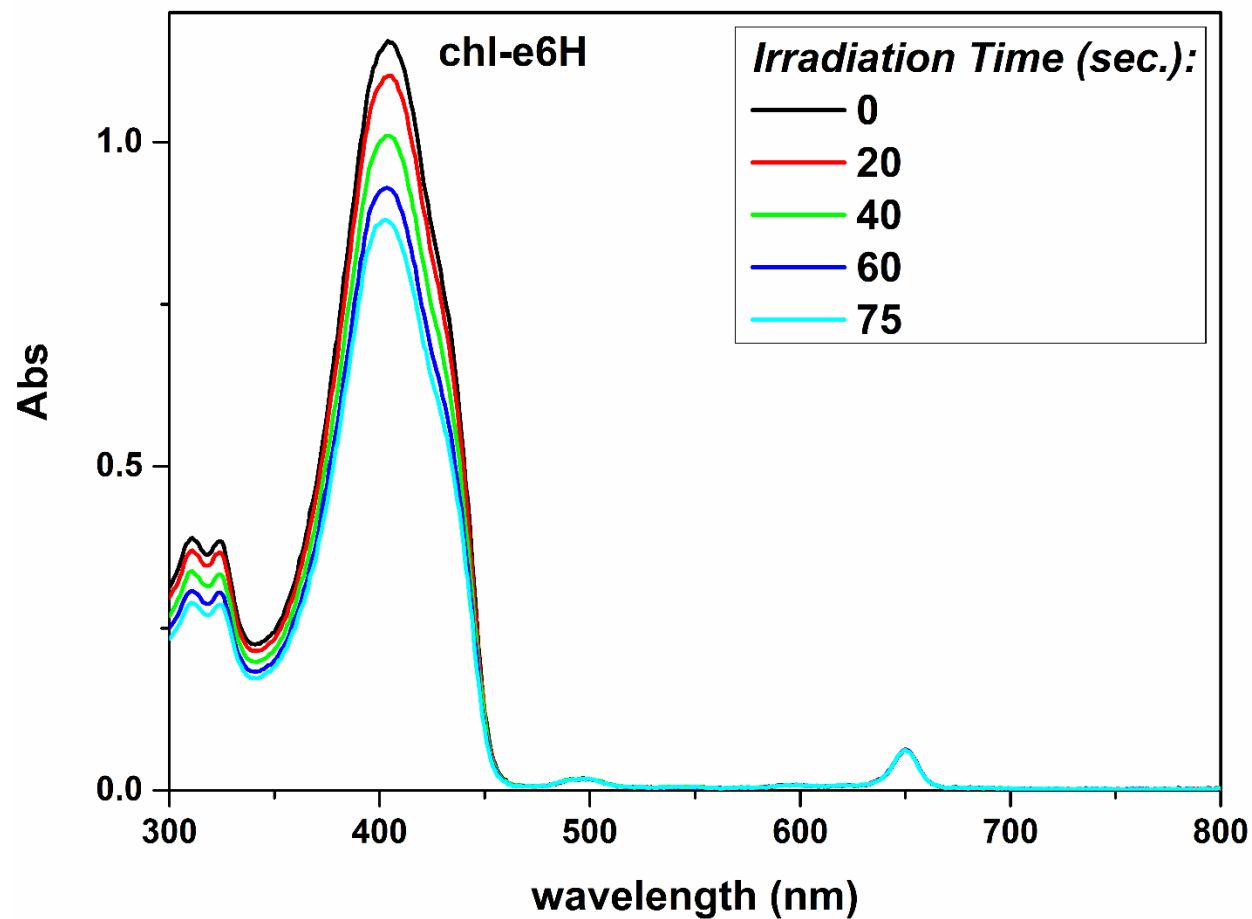


Figure S15: Absorption spectra of 50 μM DPBF upon irradiation time in air saturated ethanol containing **chl-e6H** with irradiation at 660 nm.

Photobleaching studies

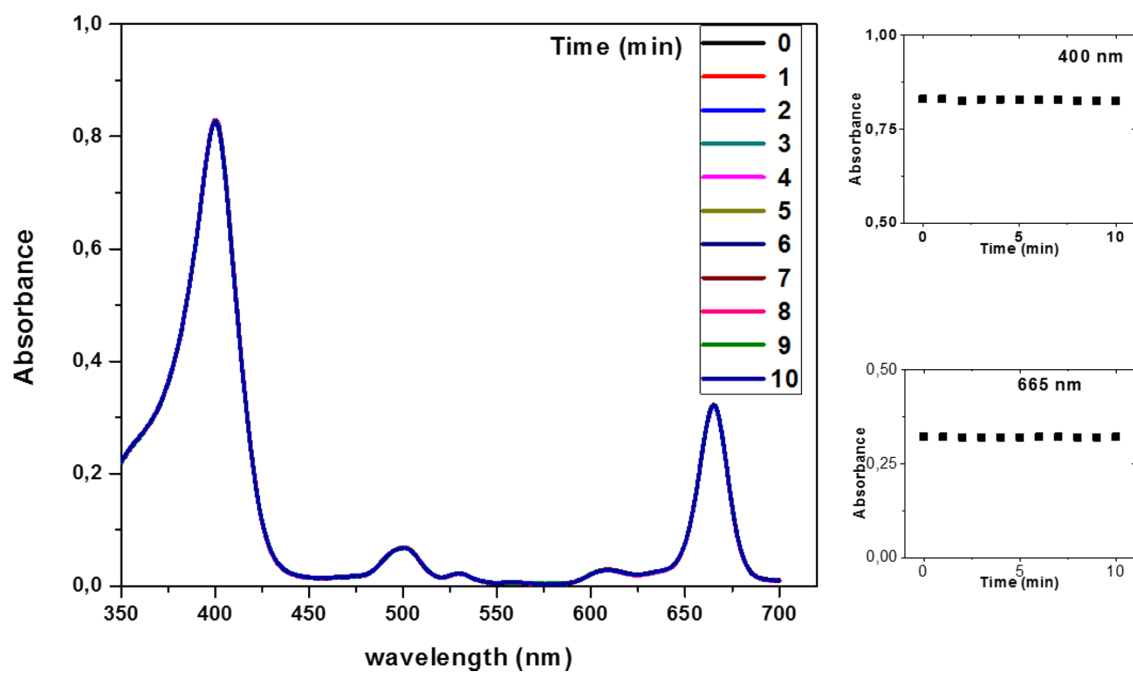


Figure S16: Photodegradation of **chl-c6** with irradiation periods of 1 min. *Insert:* Absorption at 400 nm and 665 nm in function of time

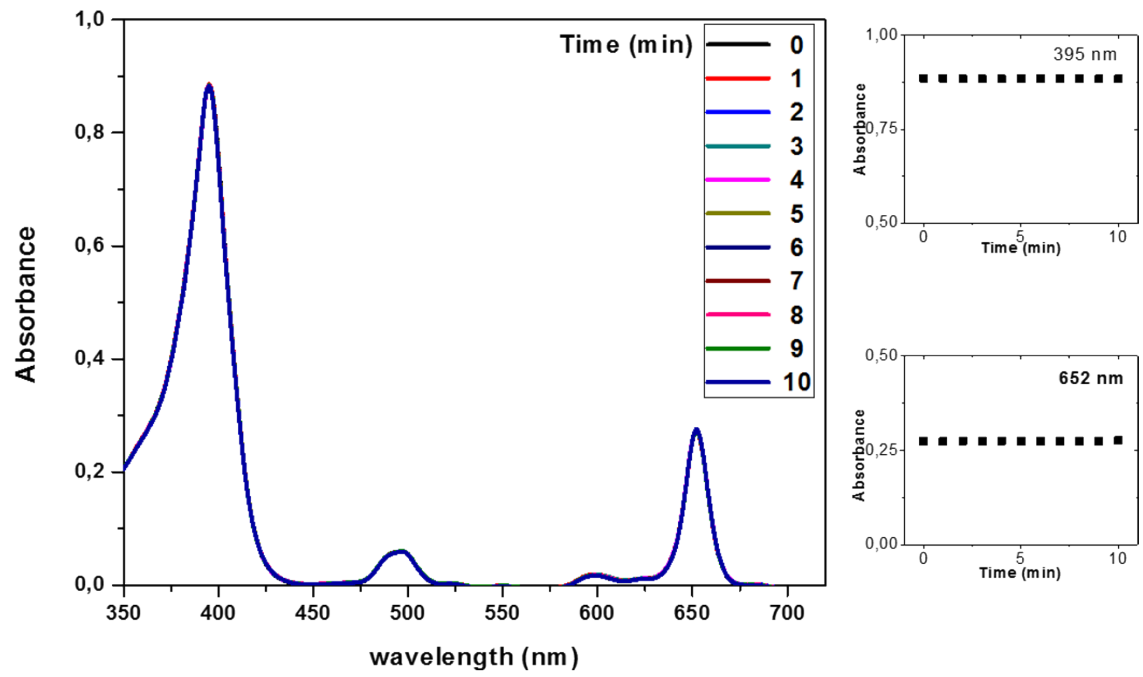


Figure S17: Photodegradation of **chl-e6H** with irradiation periods of 1 min. *Insert:* Absorption at 395 nm and 652 nm in function of time

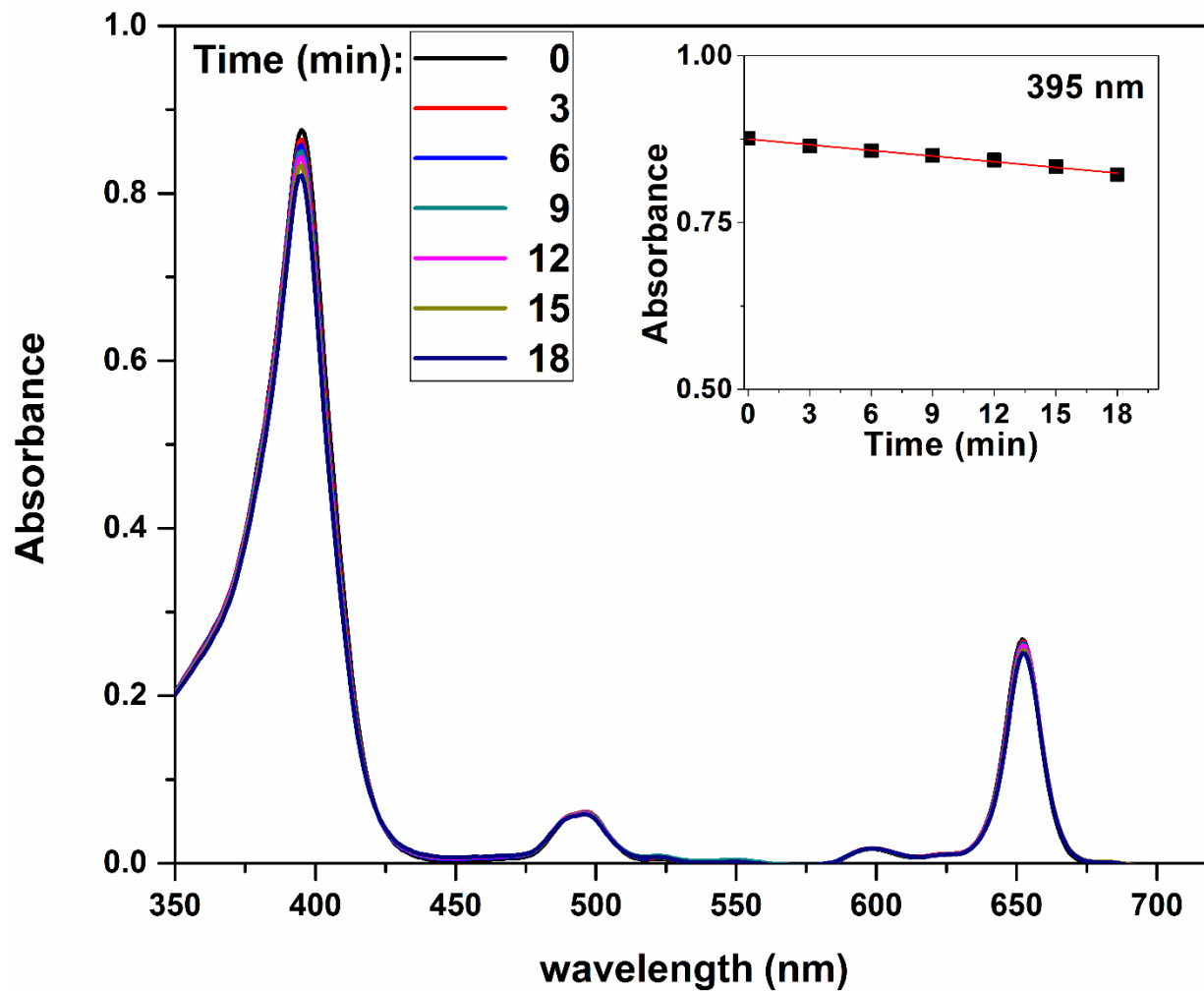


Figure S18: Photodegradation of chl-e6 with irradiation periods of 3 min. *Insert:* Absorption at 395 nm in function of time.

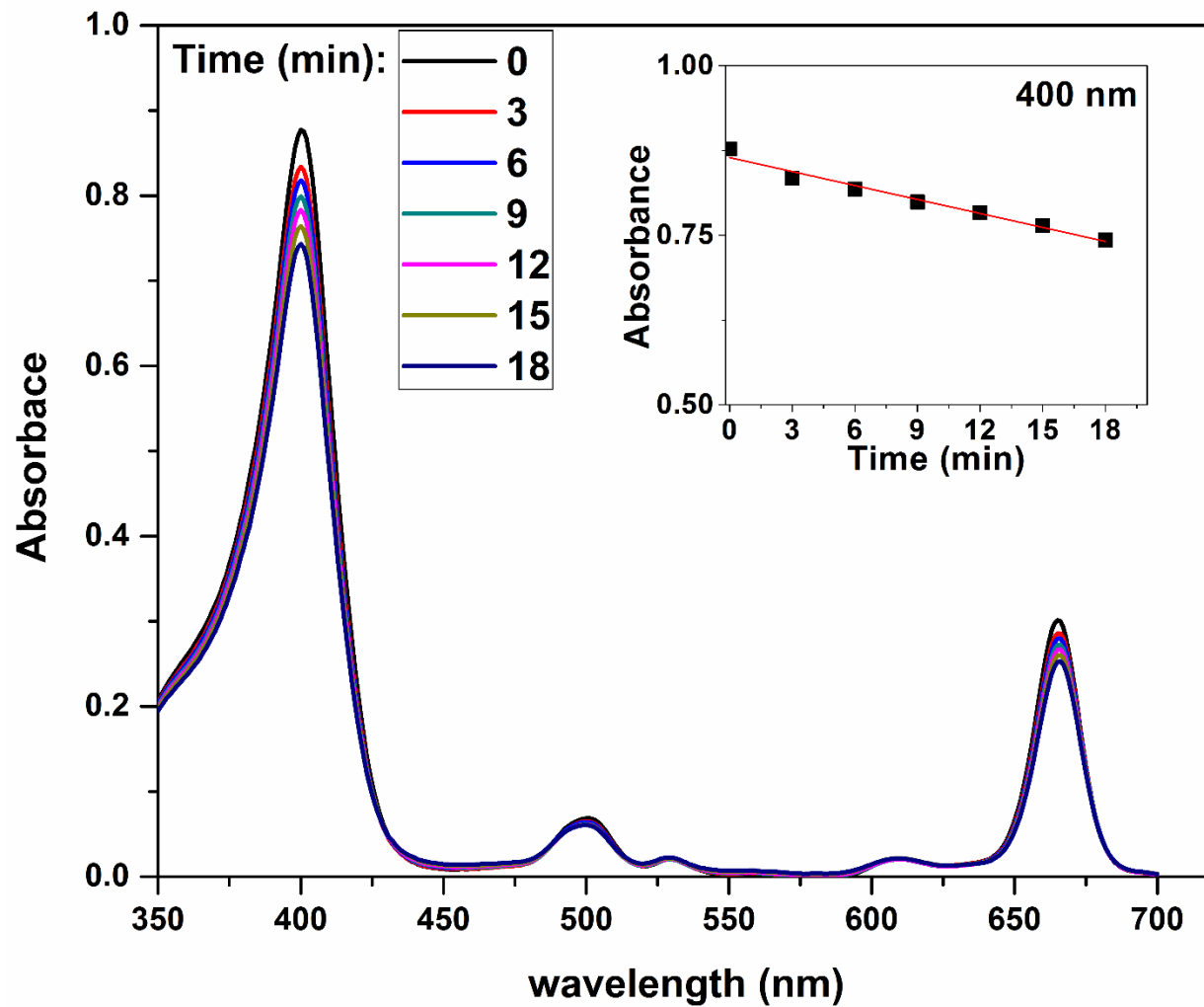


Figure S19: Photodegradation of chl-e6H with irradiation periods of 3 min. *Insert:* Absorption at 400 nm in function of time.