Ring-fused *meso*-Tetraarylchlorins as Auspicious PDT Sensitizers: Synthesis, Structural Characterization, Photophysics and Biological evaluation

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Supporting Information

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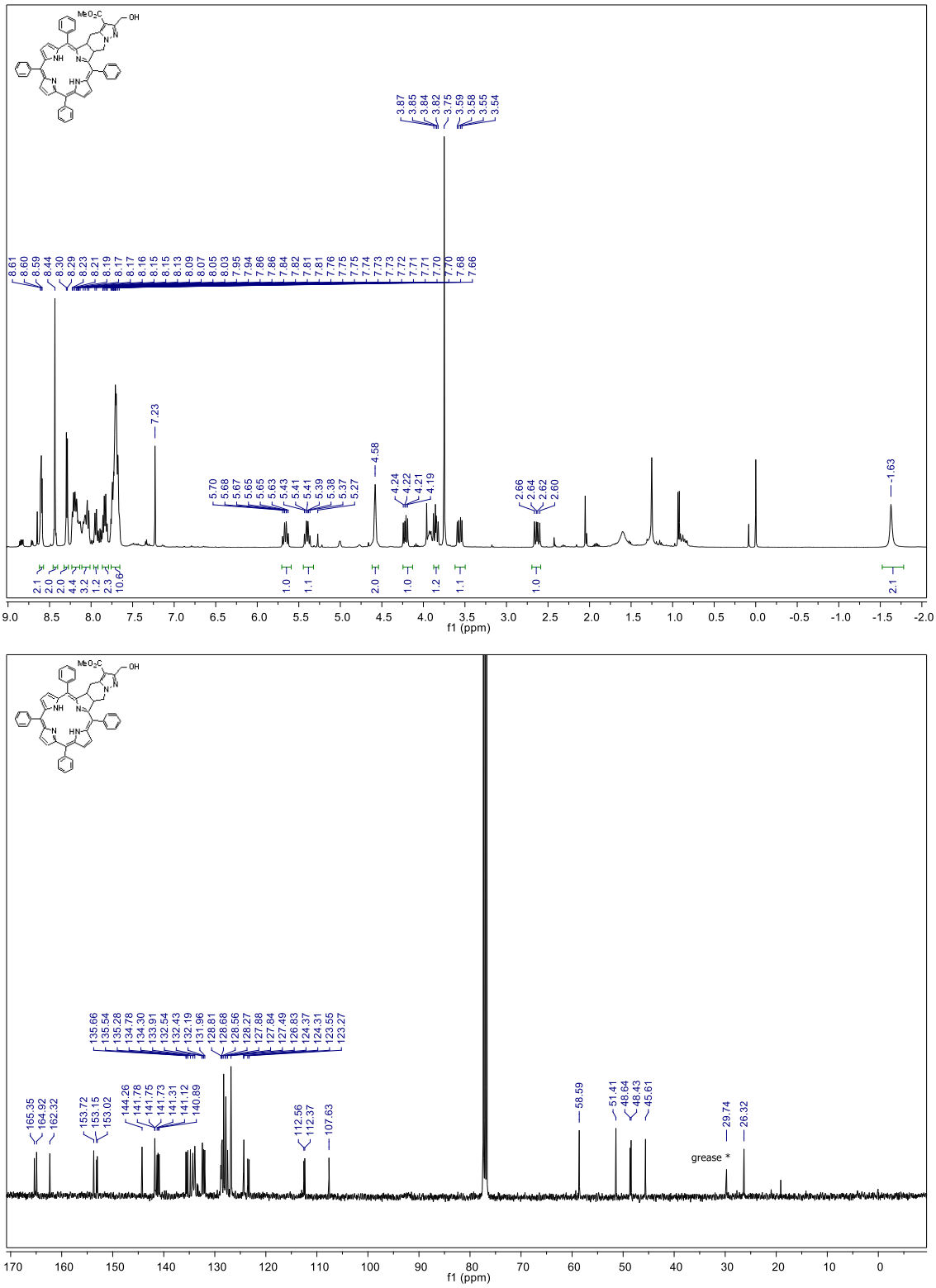

Figure S1. ^{1}H and ^{13}C NMR spectra ($CDCl_3$) of chlorin **7a**. Chemical shifts (δ) are given in ppm relative to internal TMS.

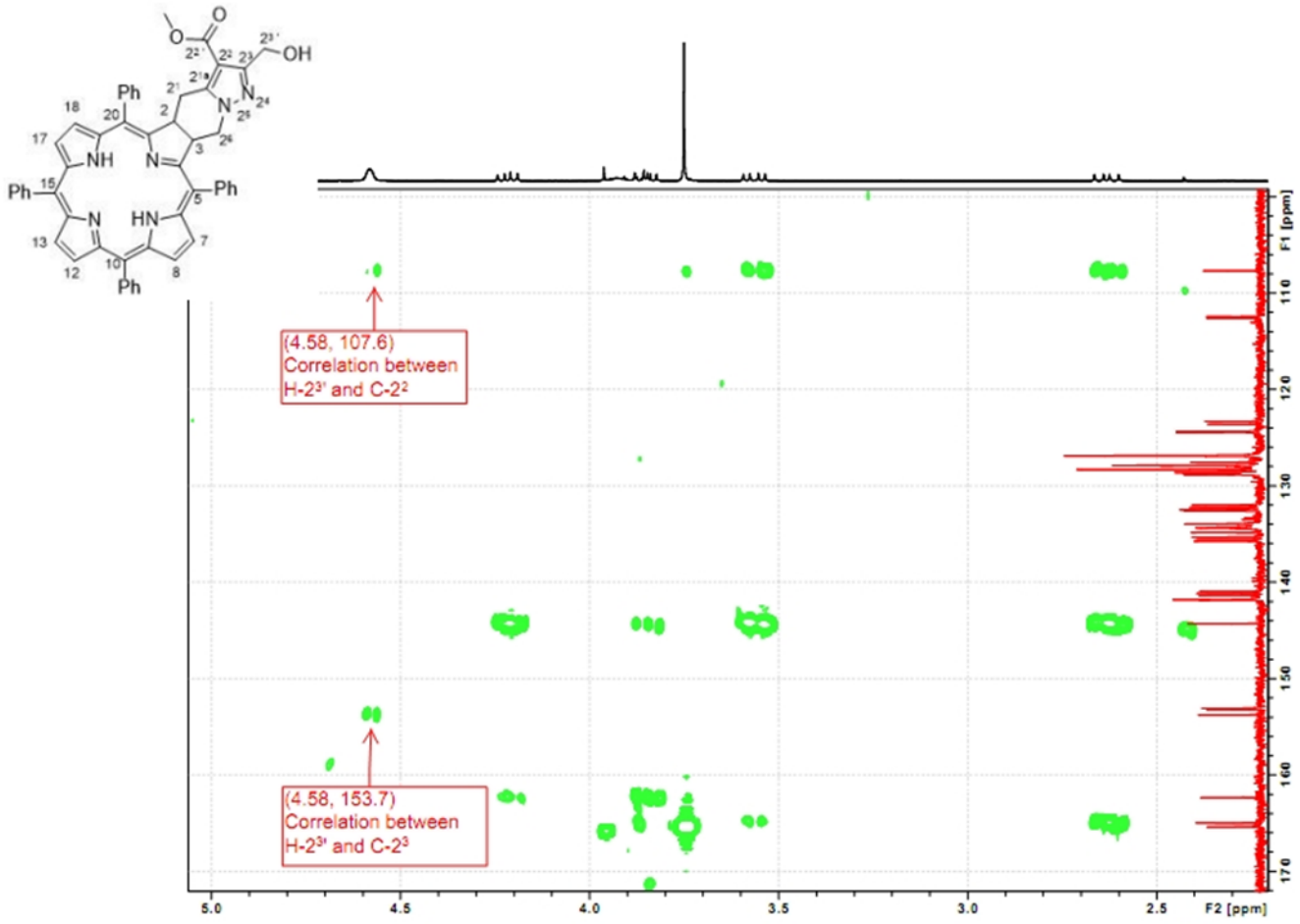

Figure S2. ^{1}H-^{13}C HMBC NMR spectrum ($CDCl_3$) of chlorin **7a**. Chemical shifts (δ) are given in ppm relative to internal TMS.

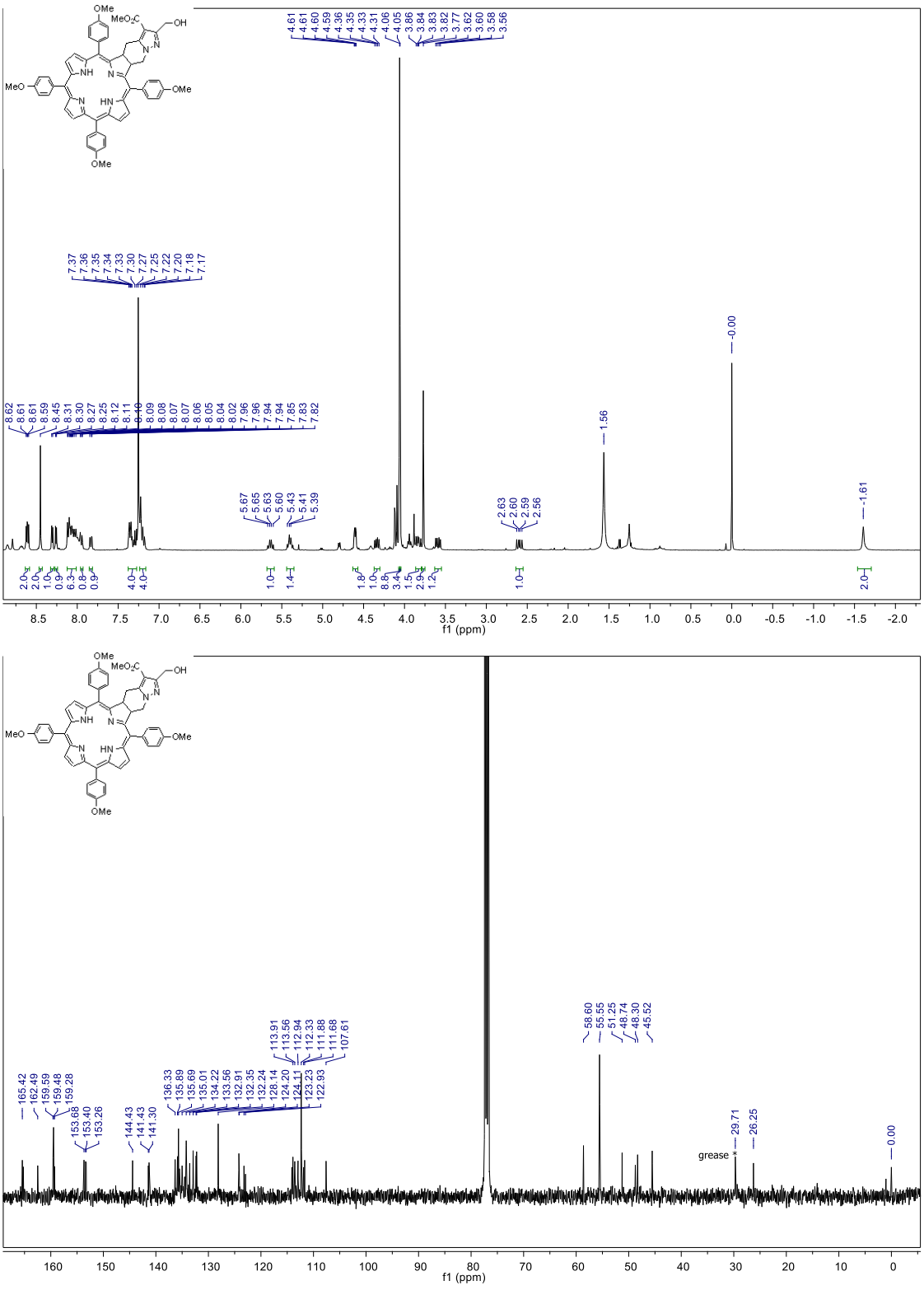

Figure S3. ^{1}H and ^{13}C NMR spectra ($CDCl_3$) of chlorin **7b**. Chemical shifts (δ) are given in ppm relative to internal TMS.

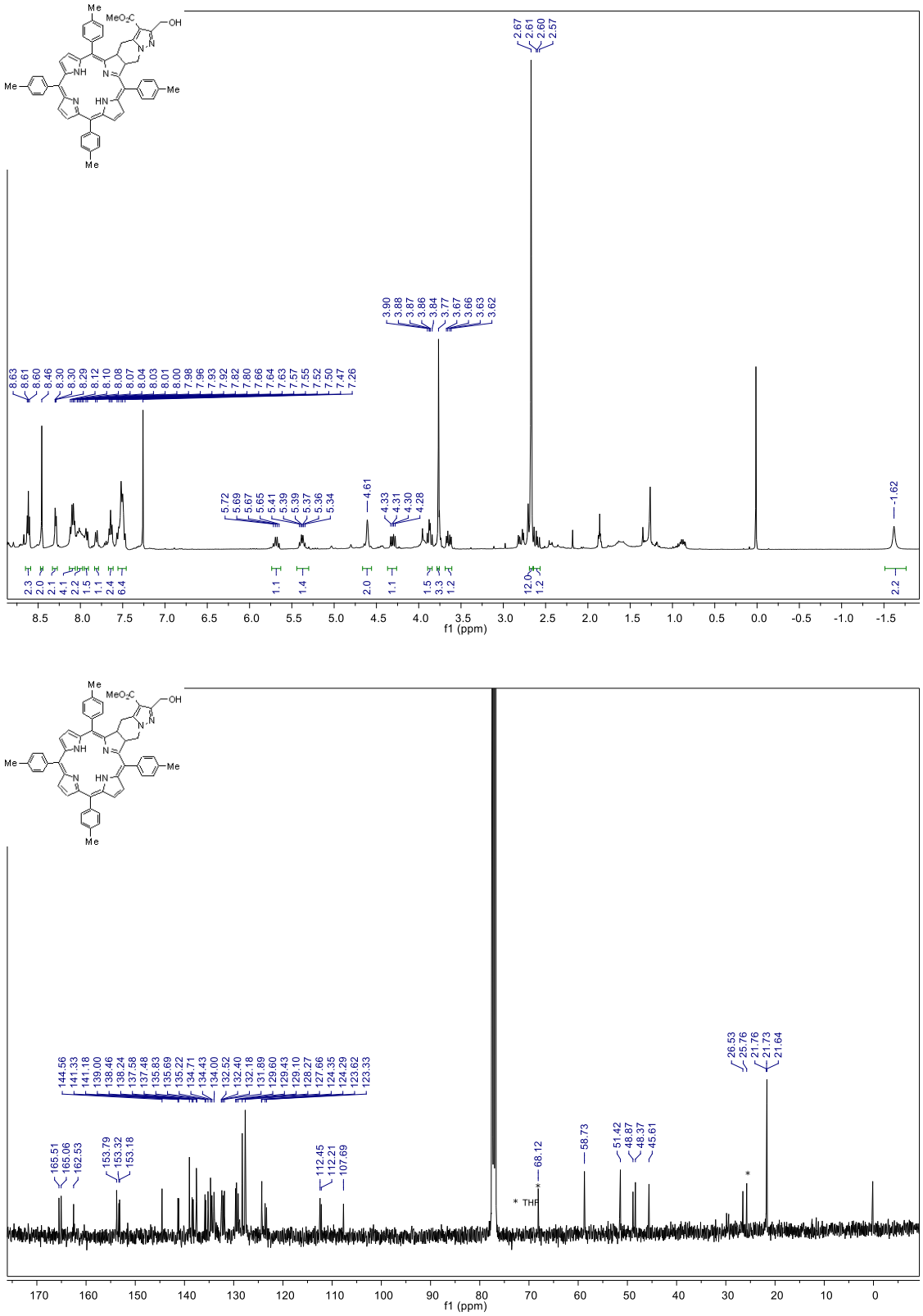

Figure S4. ^{1}H and ^{13}C NMR spectra ($CDCl_3$) of chlorin **7c**. Chemical shifts (δ) are given in ppm relative to internal TMS.

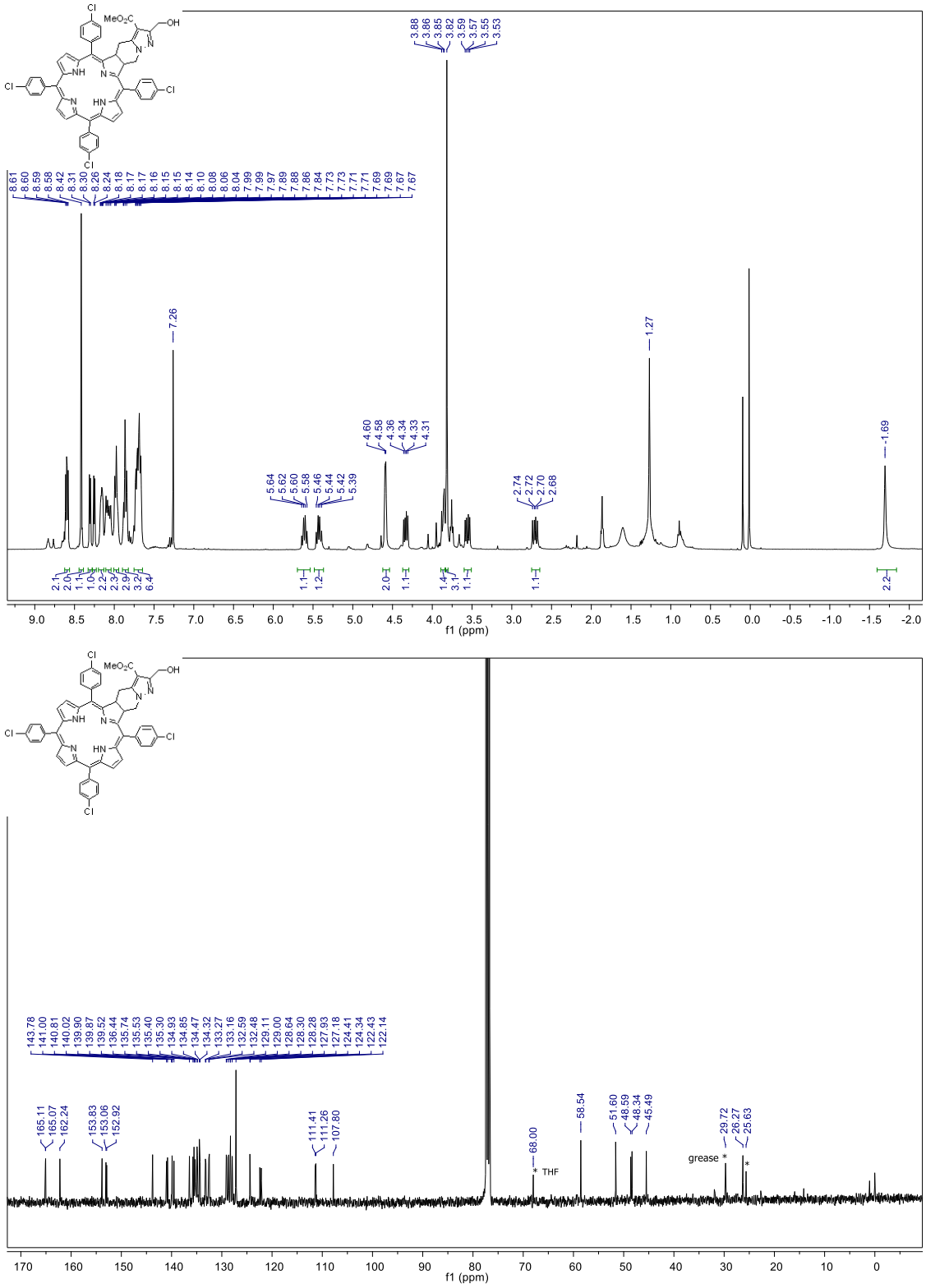

Figure S5. ^{1}H and ^{13}C NMR spectra ($CDCl_3$) of chlorin **7d**. Chemical shifts (δ) are given in ppm relative to internal TMS.

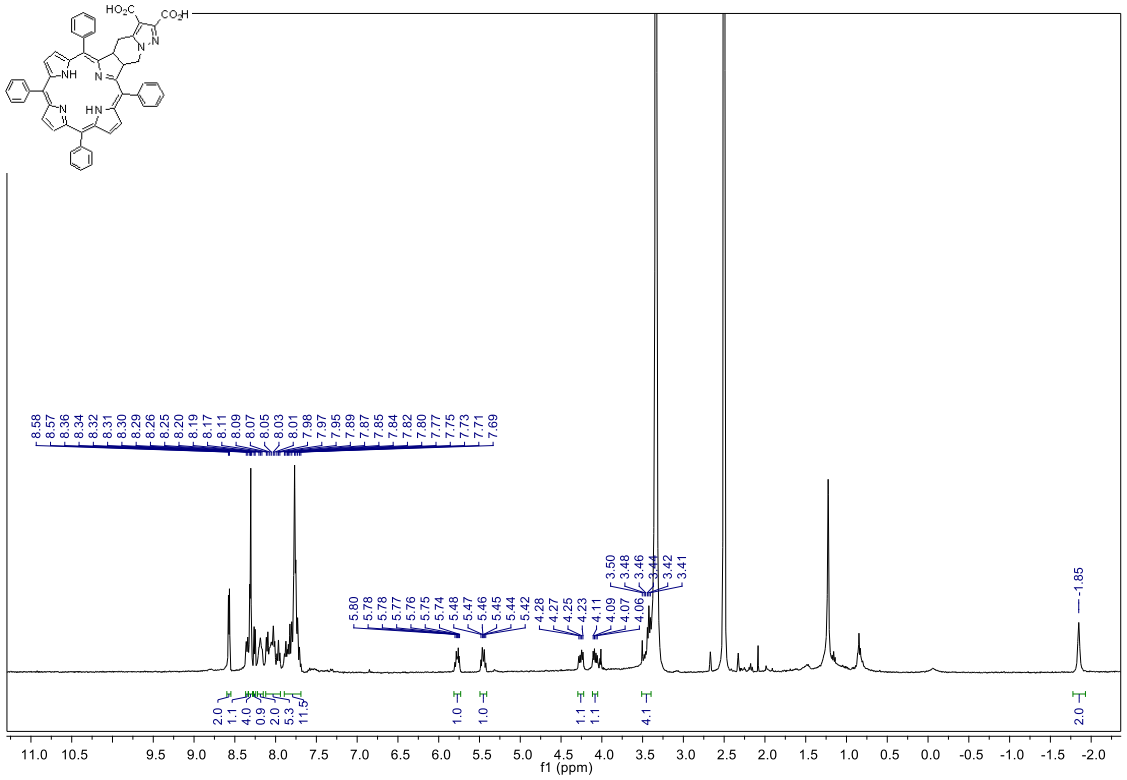

Figure S6. ^{1}H NMR spectrum (DMSO-d_6) of chlorin **6a**. Chemical shifts (δ) are given in ppm relative to solvent peak (2.50 ppm).

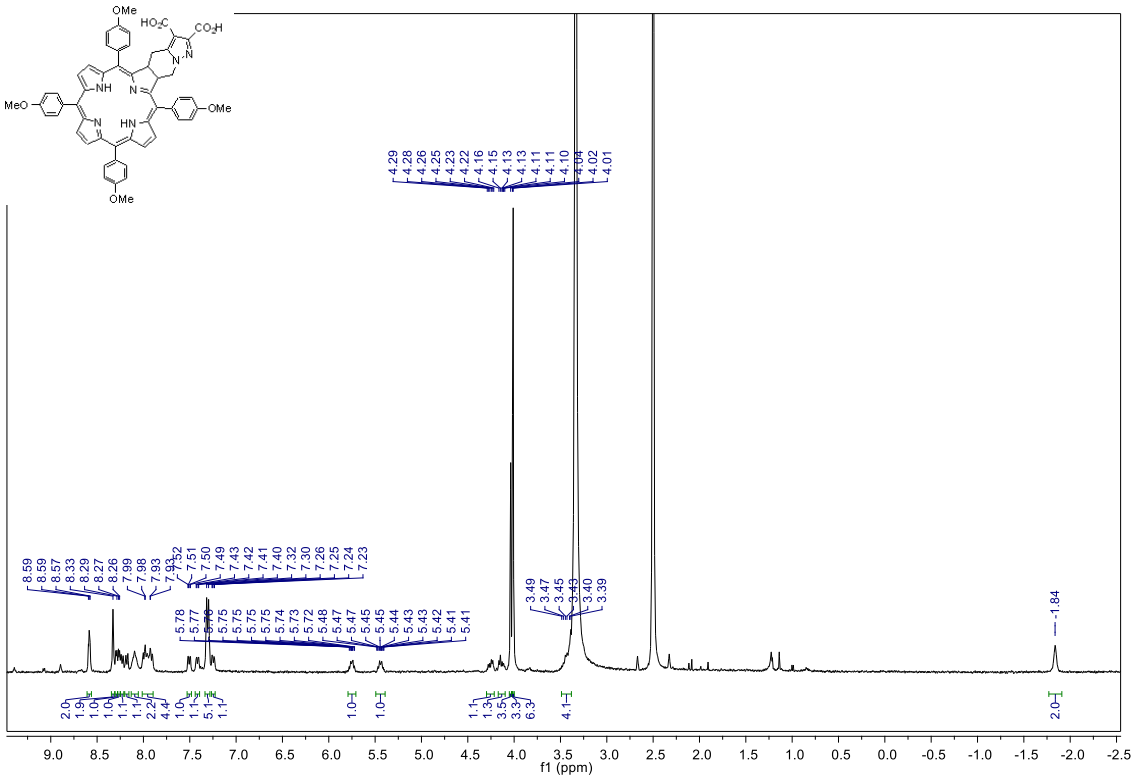

Figure S7. ^{1}H NMR spectrum (DMSO-d_6) of chlorin **6b**. Chemical shifts (δ) are given in ppm relative to solvent peak (2.50 ppm).

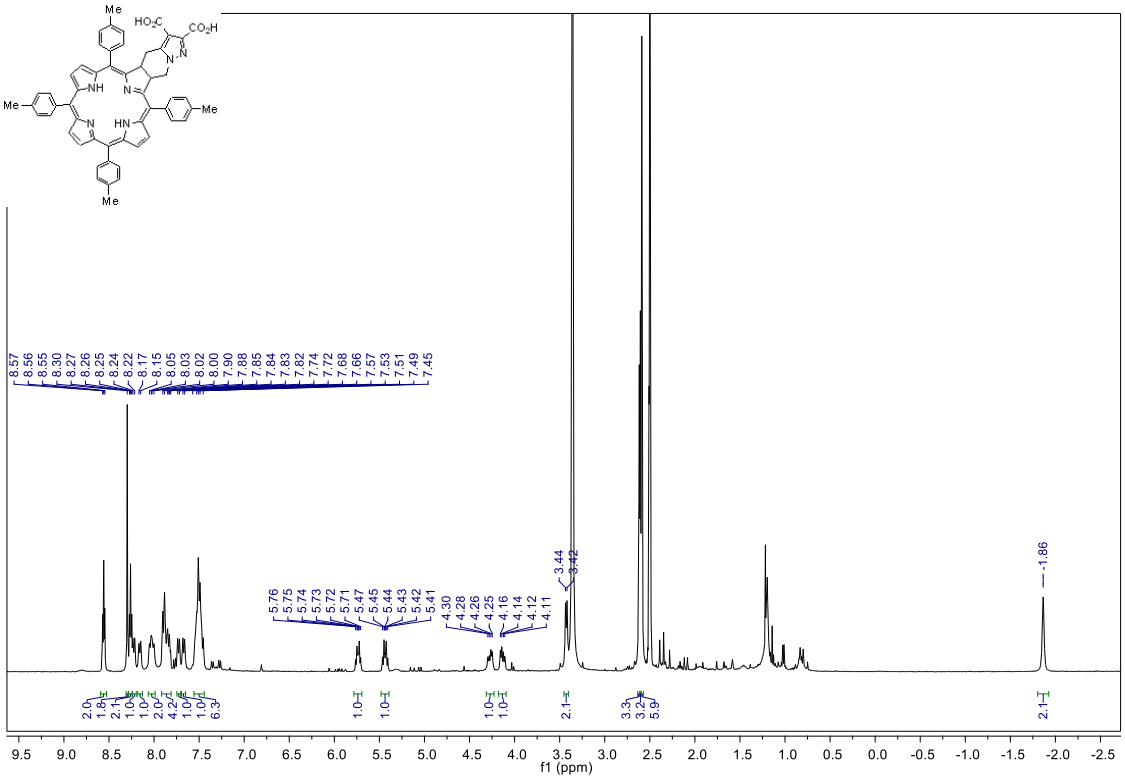

Figure S8. ^{1}H NMR spectrum (DMSO-d_6) of chlorin **6c**. Chemical shifts (δ) are given in ppm relative to solvent peak (2.50 ppm).

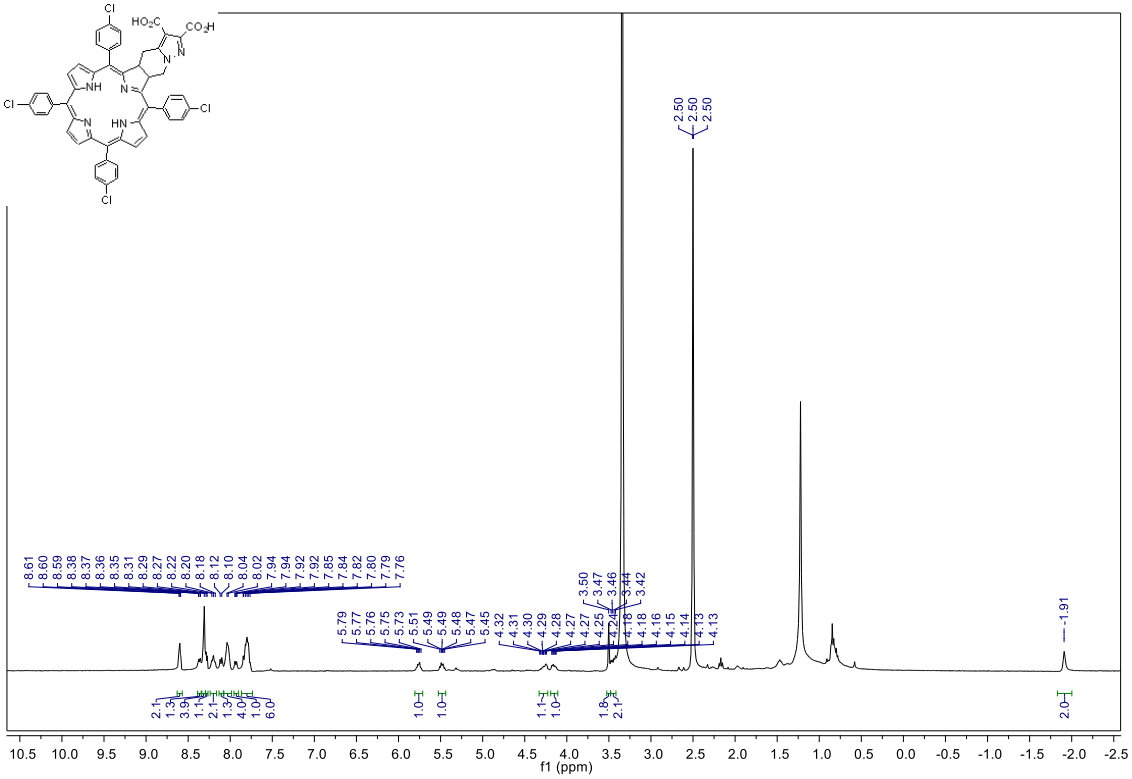

Figure S9. ^{1}H NMR spectrum (DMSO-d_6) of chlorin **6d**. Chemical shifts (δ) are given in ppm relative to solvent peak (2.50 ppm).

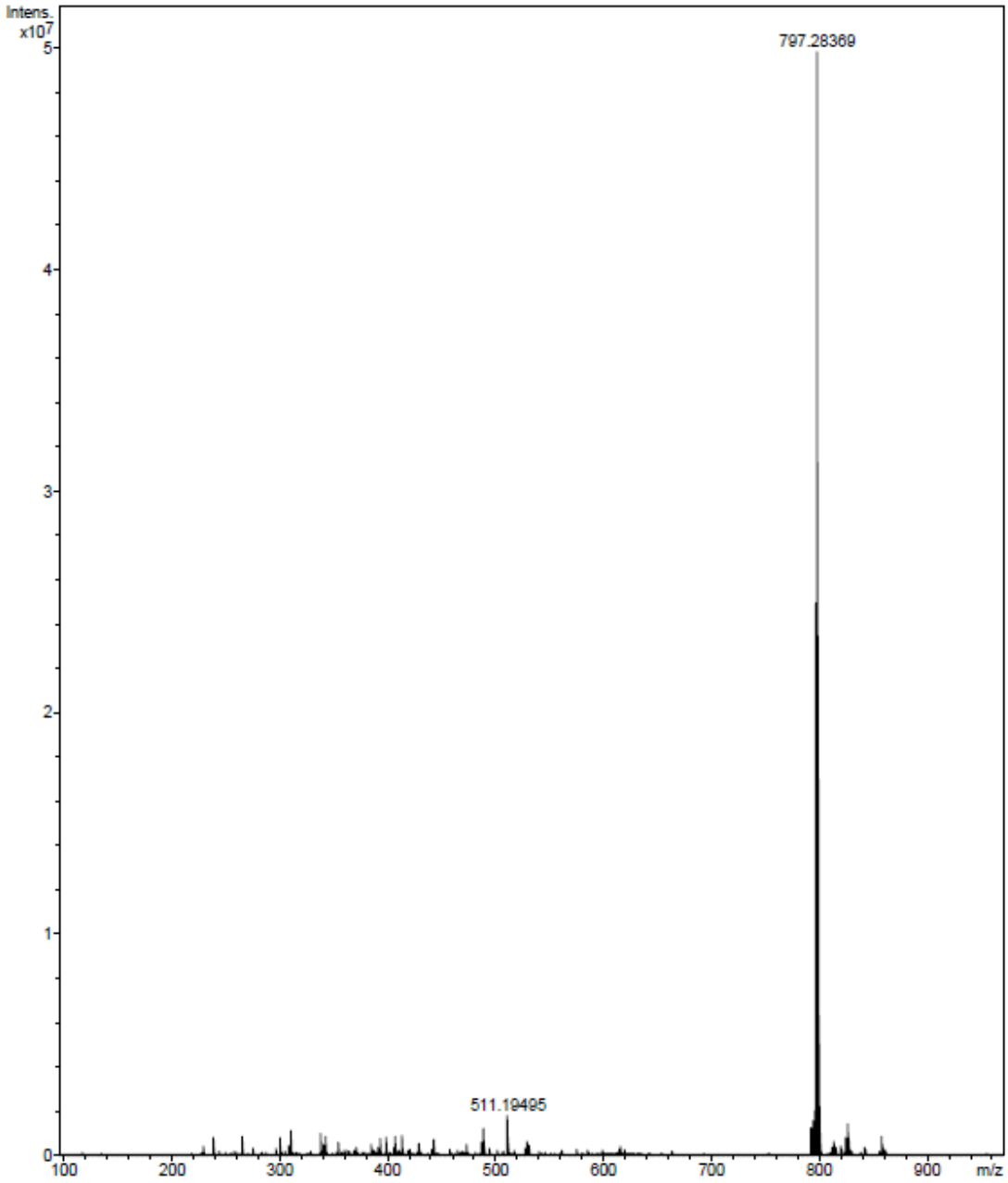

Figure S10. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **6a**.

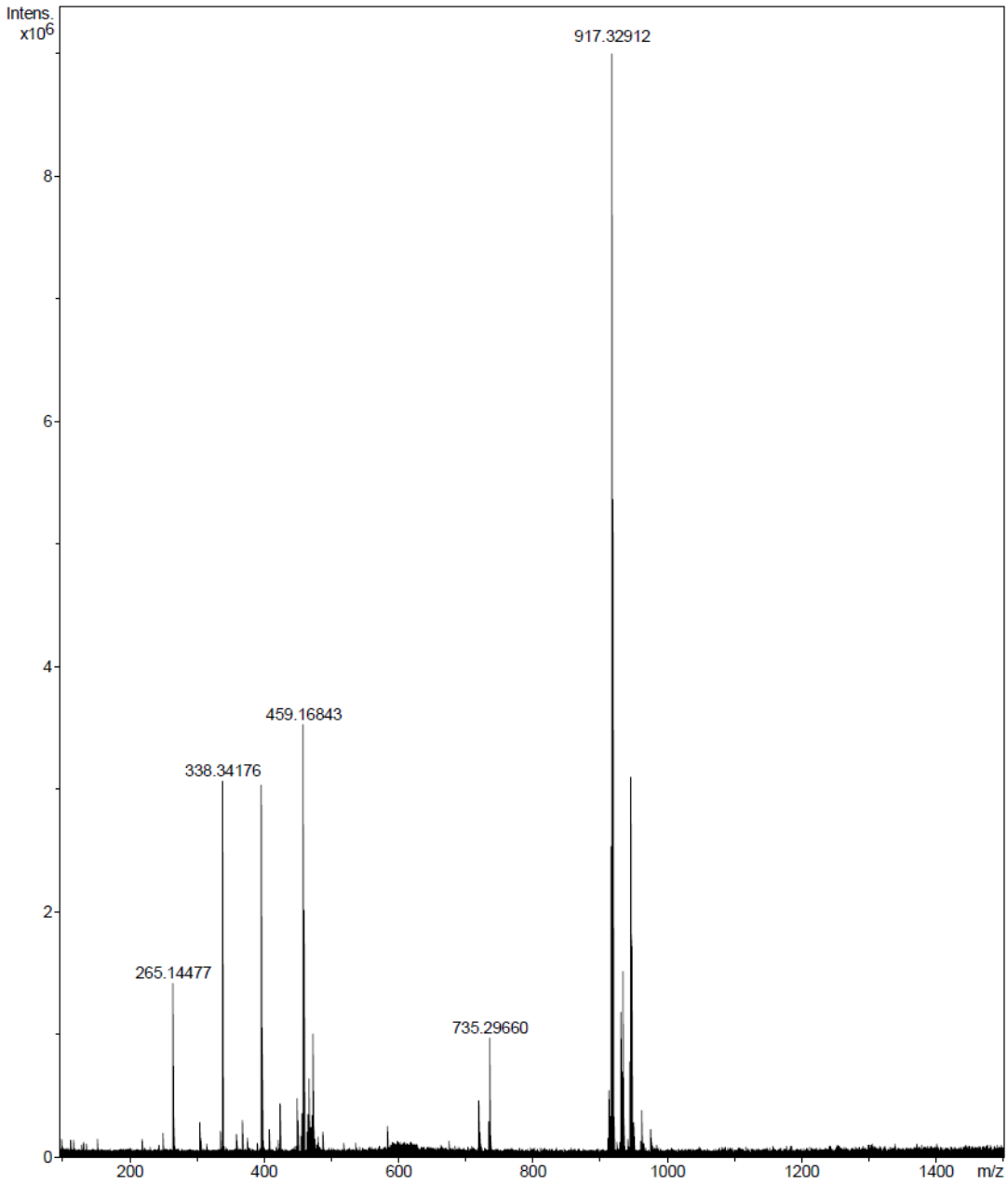

Figure S11. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **6b**.

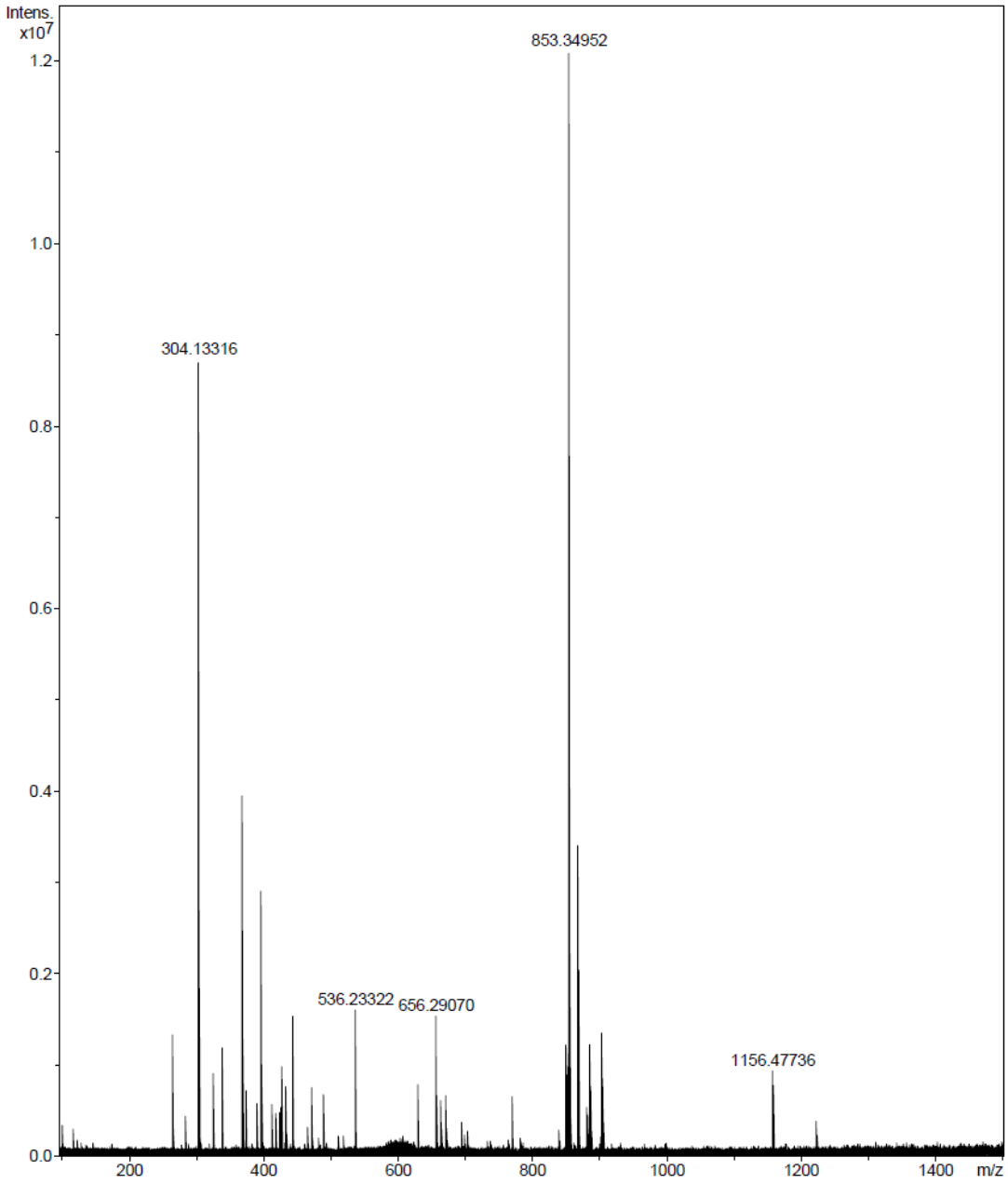

Figure S12. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **6c**.

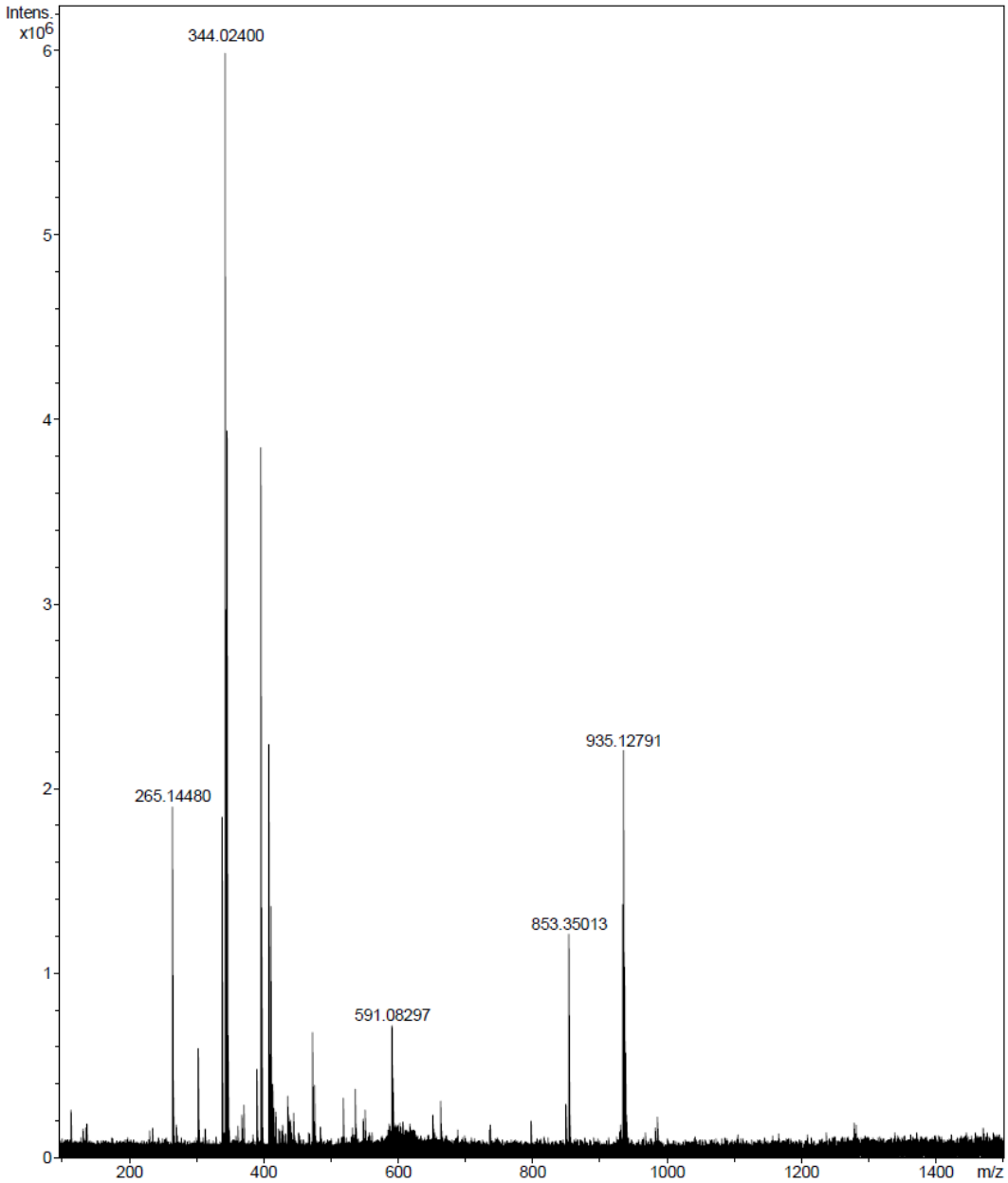

Figure S13. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **6d**.

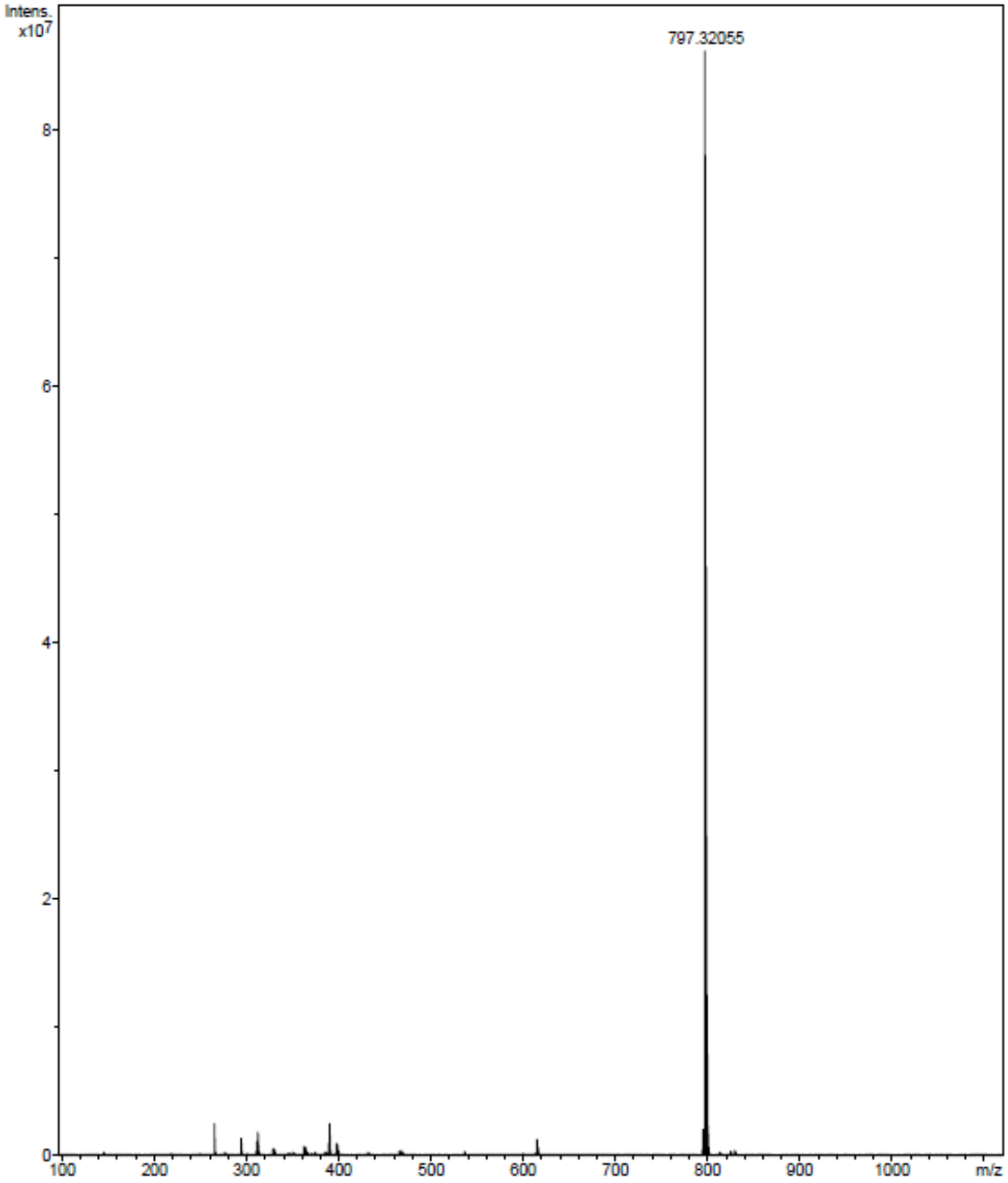

Figure S14. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **7a**.

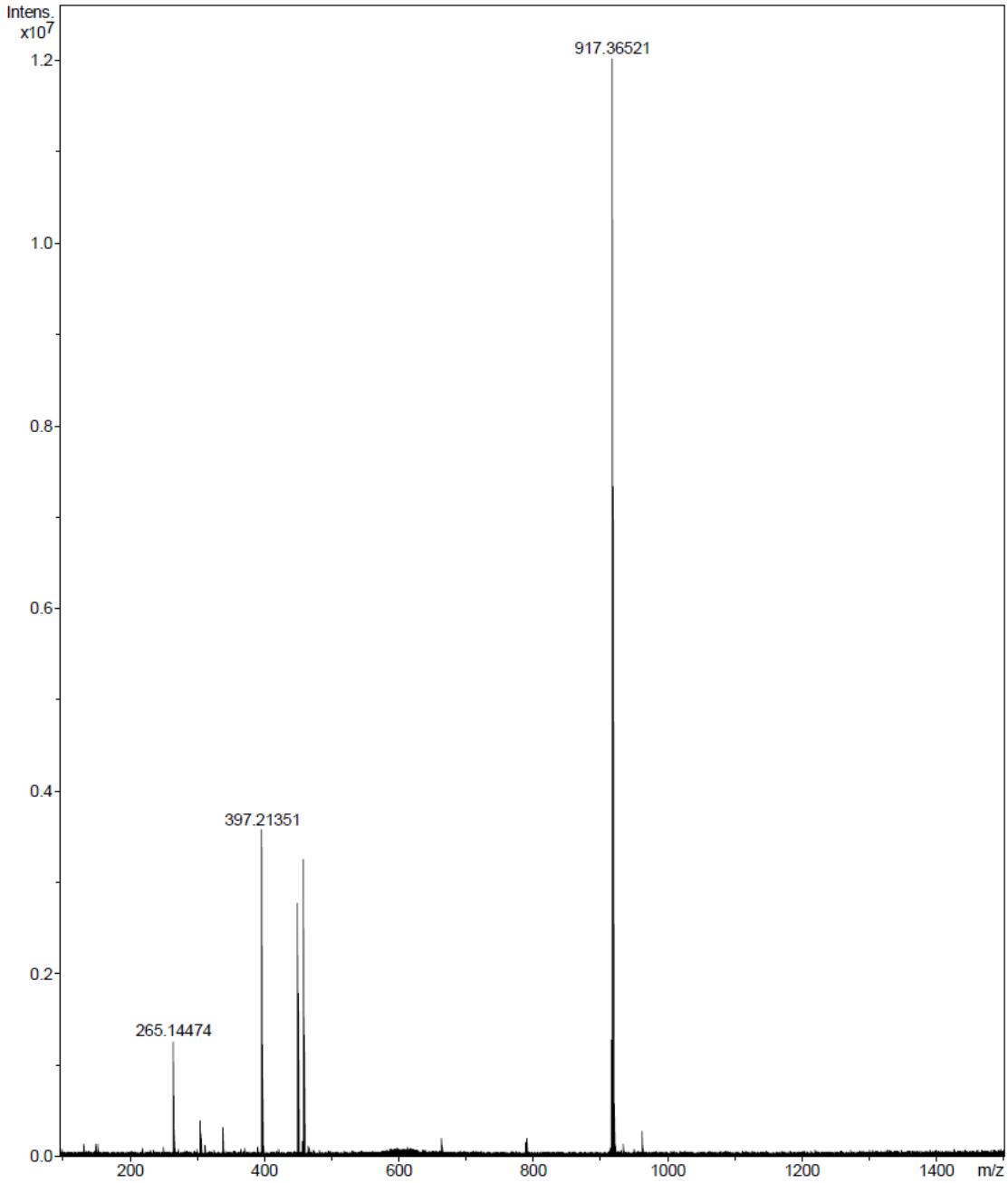

Figure S15. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **7b**.

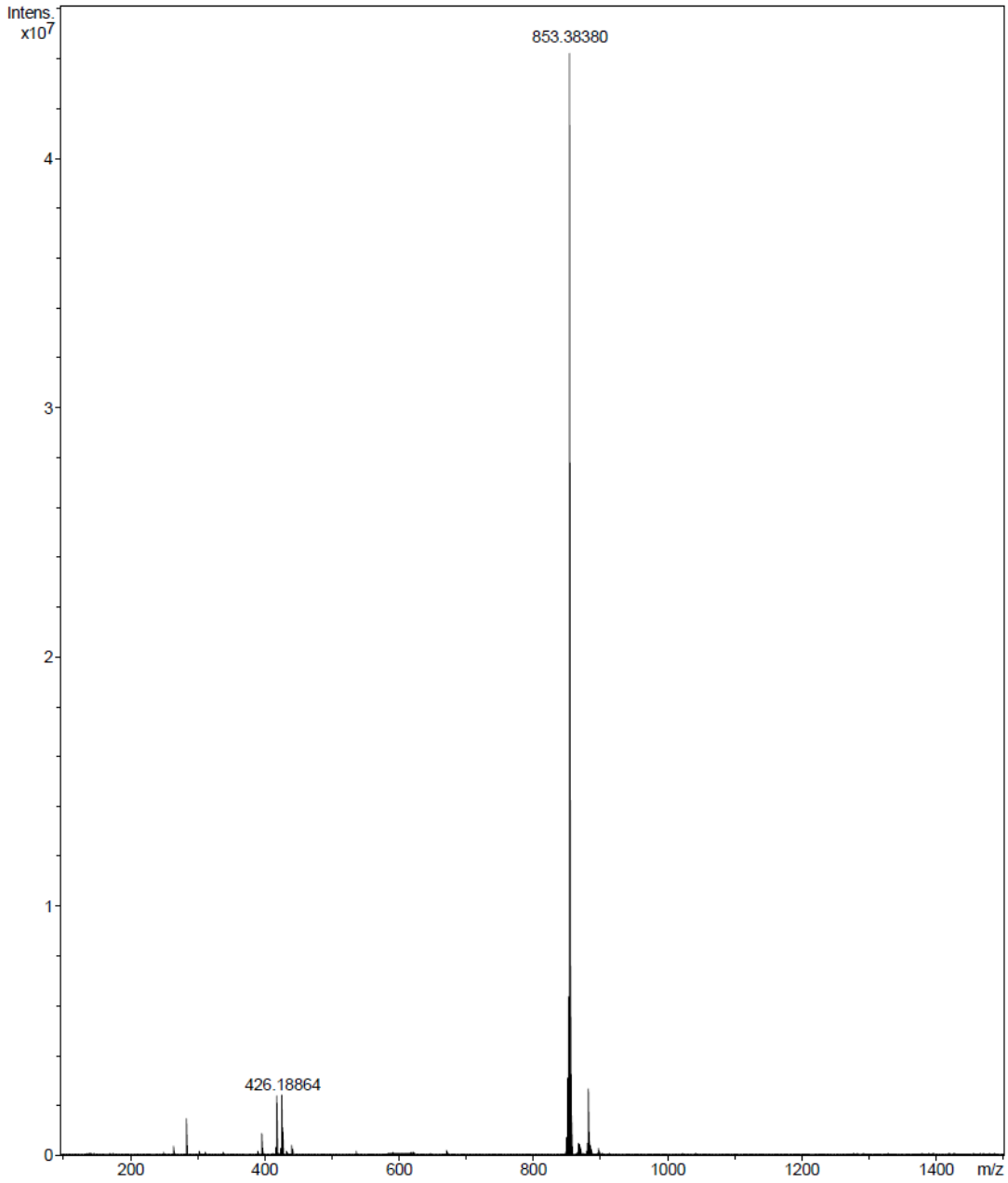

Figure S16. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **7c**.

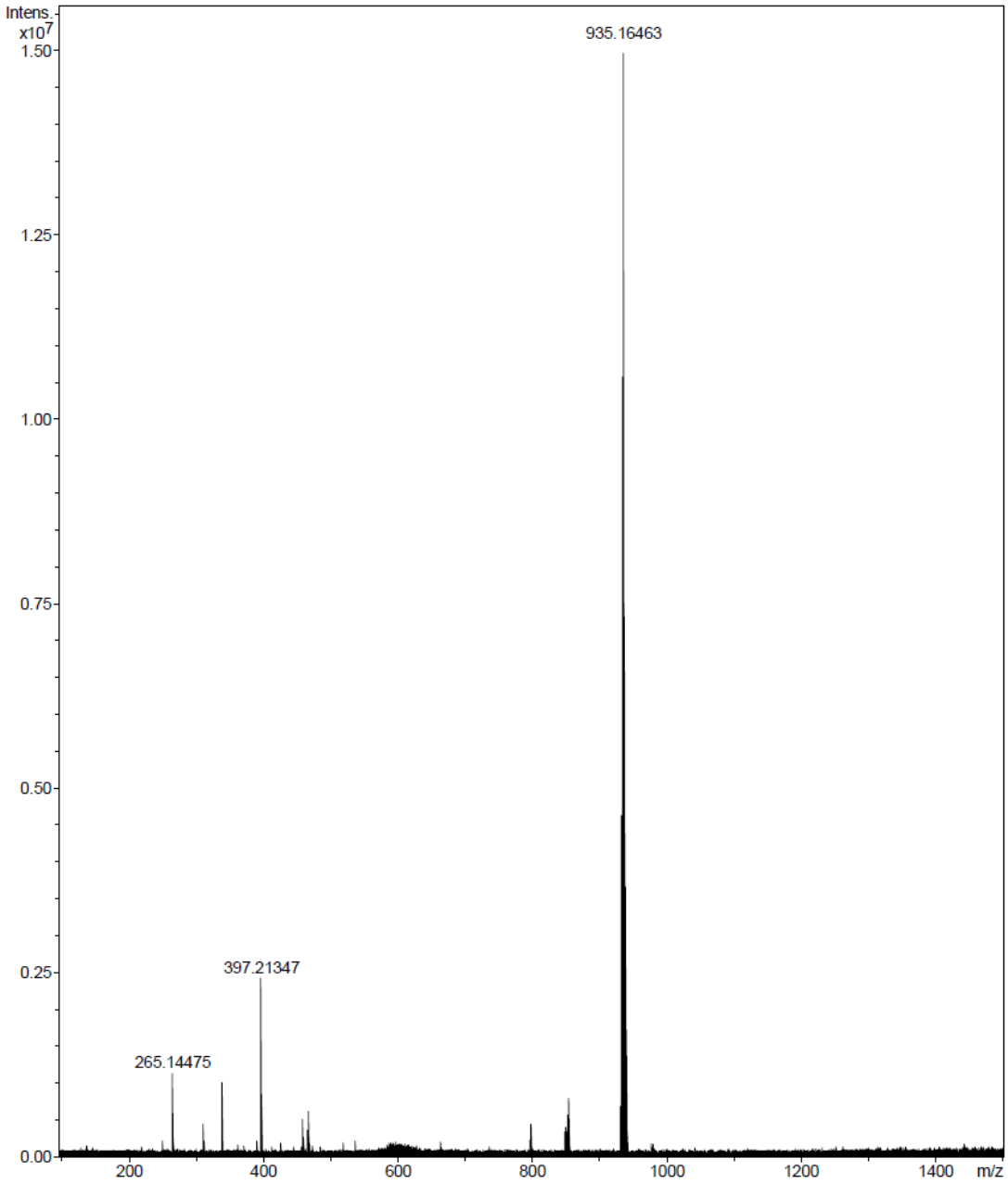

Figure S17. Electrospray ionization mass spectrum in positive-ion mode (HRMS-ESI+) of chlorin **7d**.

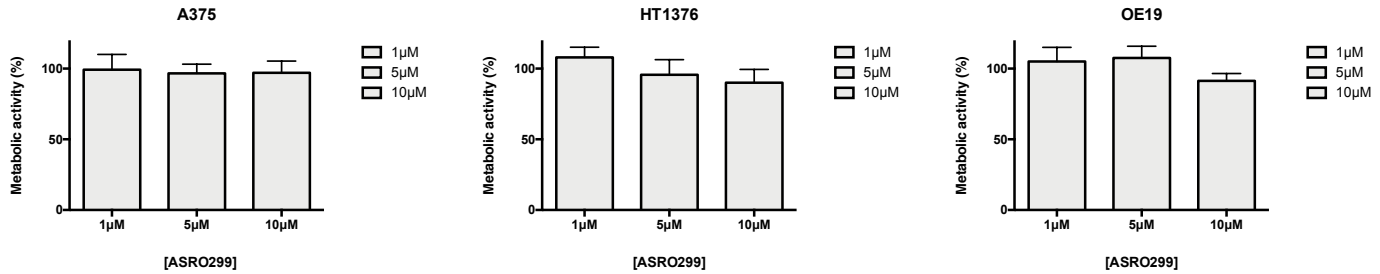

Figure S18. Cytotoxicity of chlorin **6b** in A375 skin malignant melanoma cells (left), HT1376 urinary bladder carcinoma cells (center), and OE19 esophageal adenocarcinoma cells (right). Cells were incubated with the chlorins and kept in the dark until the evaluation of metabolic activity. Results are presented as mean ± SD.

Table S1. Cytotoxicity of non-irradiated chlorin **6b** at different concentrations towards A375, HT1376 and OE19 tumor cells.

[Chlorin 6b] (μM)	A375	sd	HT1376	sd	OE19	sd
0.05	100.6305	4.590397	108.556	4.608098	103.1781	5.9261
0.25	101.6604	9.919532	109.5435	5.72456	105.4278	8.213715
0.50	98.64598	8.640527	107.8084	7.305242	110.2971	6.09976
1	99.27281	10.79248	107.9424	7.187439	105.0067	10.08023
5	96.64089	6.461832	95.60141	10.76057	107.5996	8.289783
10	97.04092	8.310669	90.08365	9.37745	91.37507	5.207386

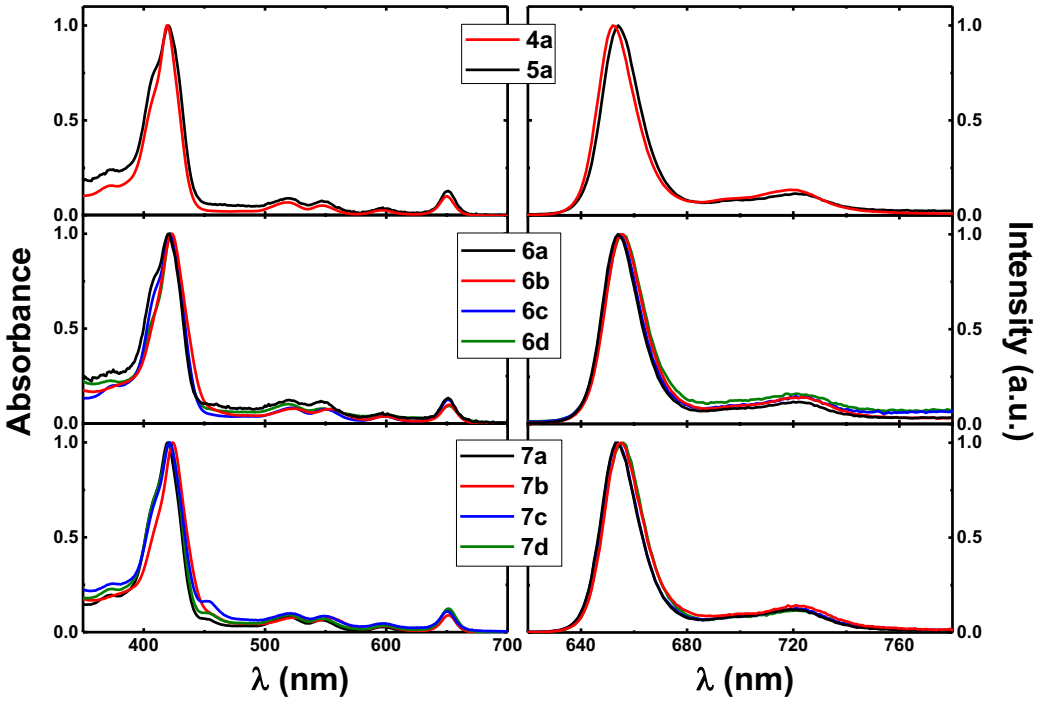

Figure S19. Normalized UV-Vis and fluorescence spectra of PS.