Supporting Information

Tumor Size-Dependent Anticancer Efficacy of Chlorin Derivatives for Photodynamic Therapy

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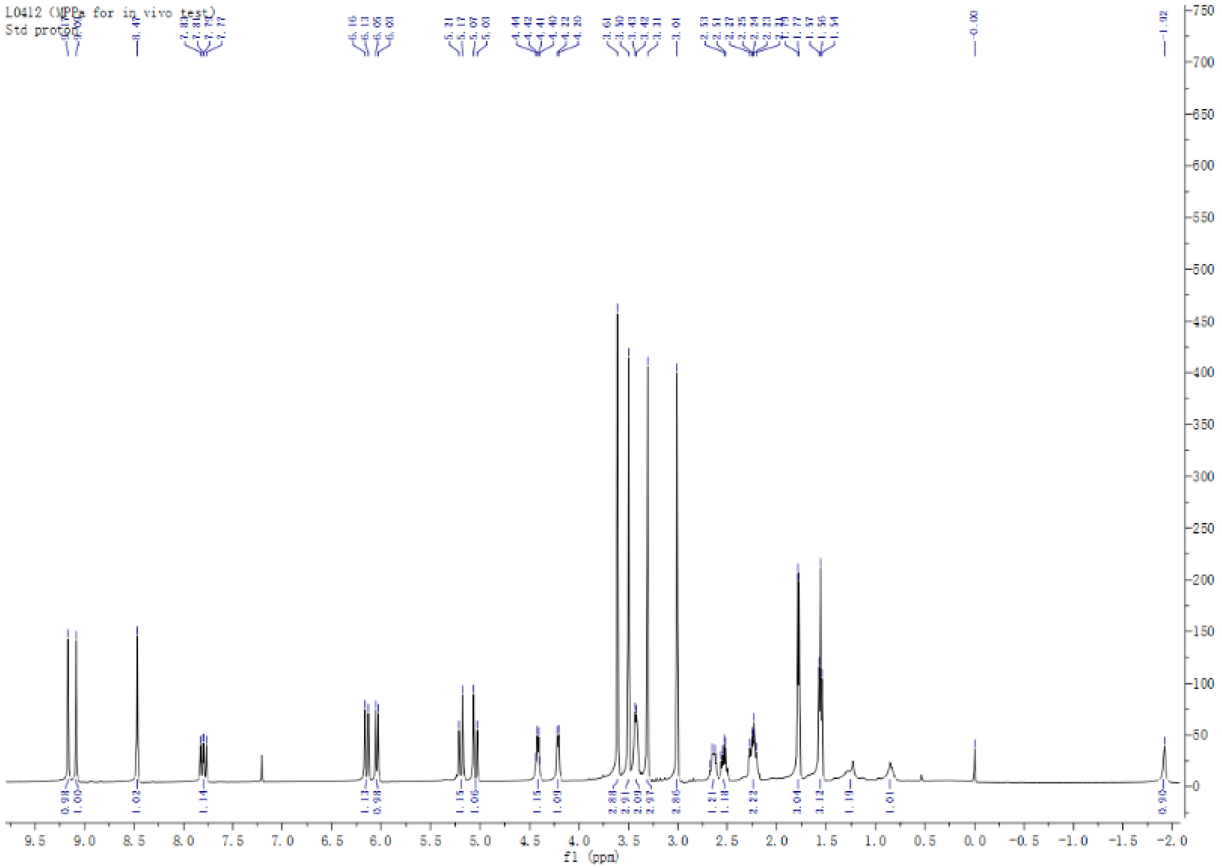

Figure S1. ^{1}H NMR spectrum of MPPa (298 K, $CDCl_3$).

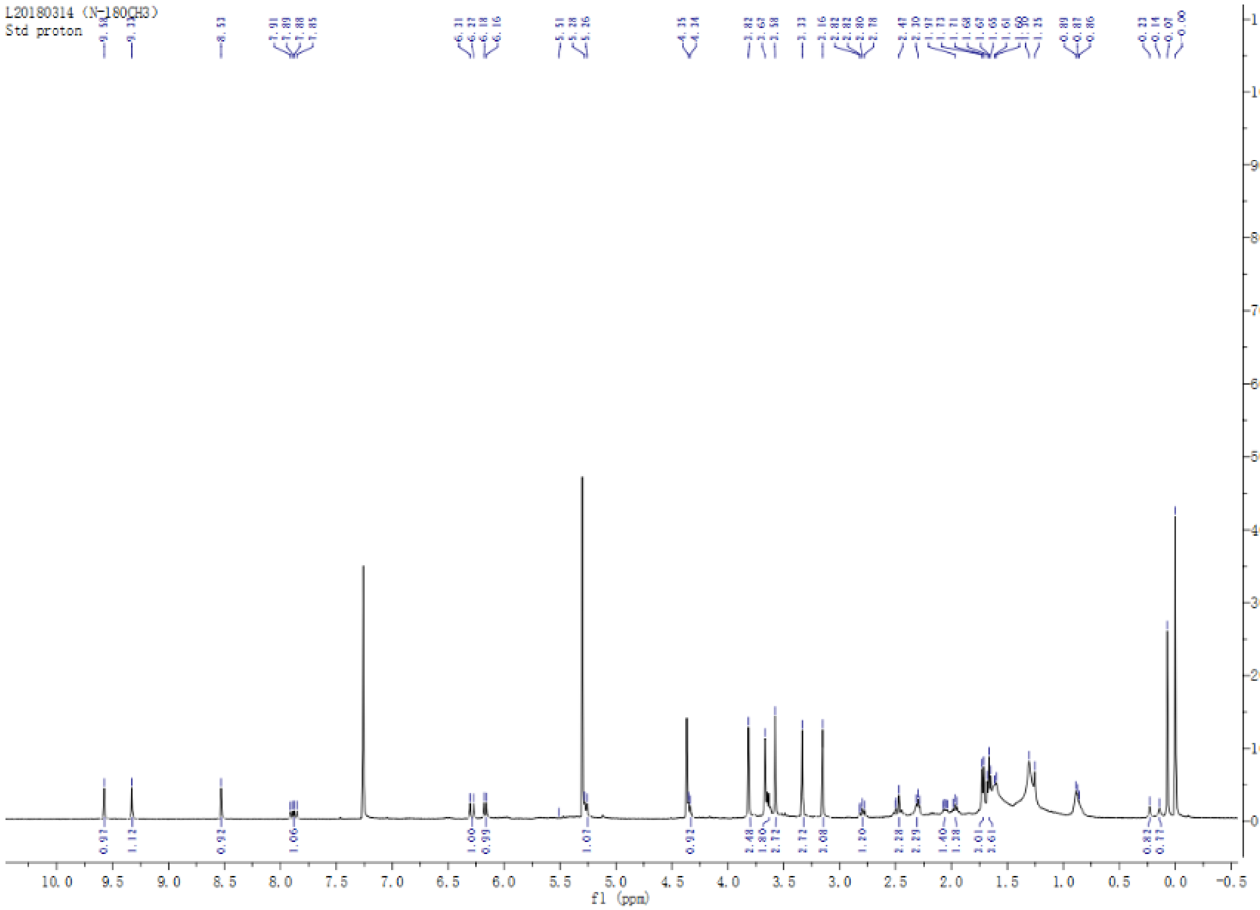

Figure S2. ^{1}H NMR spectrum of NMPi (298 K, $CDCl_3$).

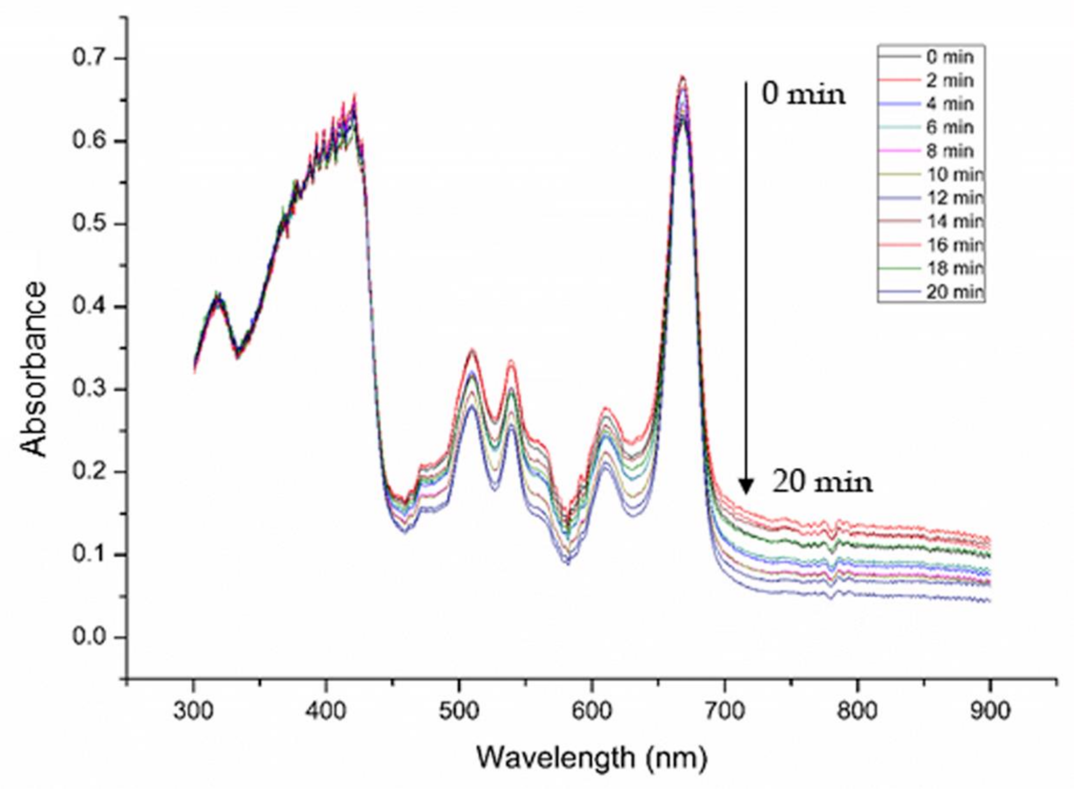

Figure S3. UV-Vis spectra for photobleaching of MPPa in CH_2Cl_2.

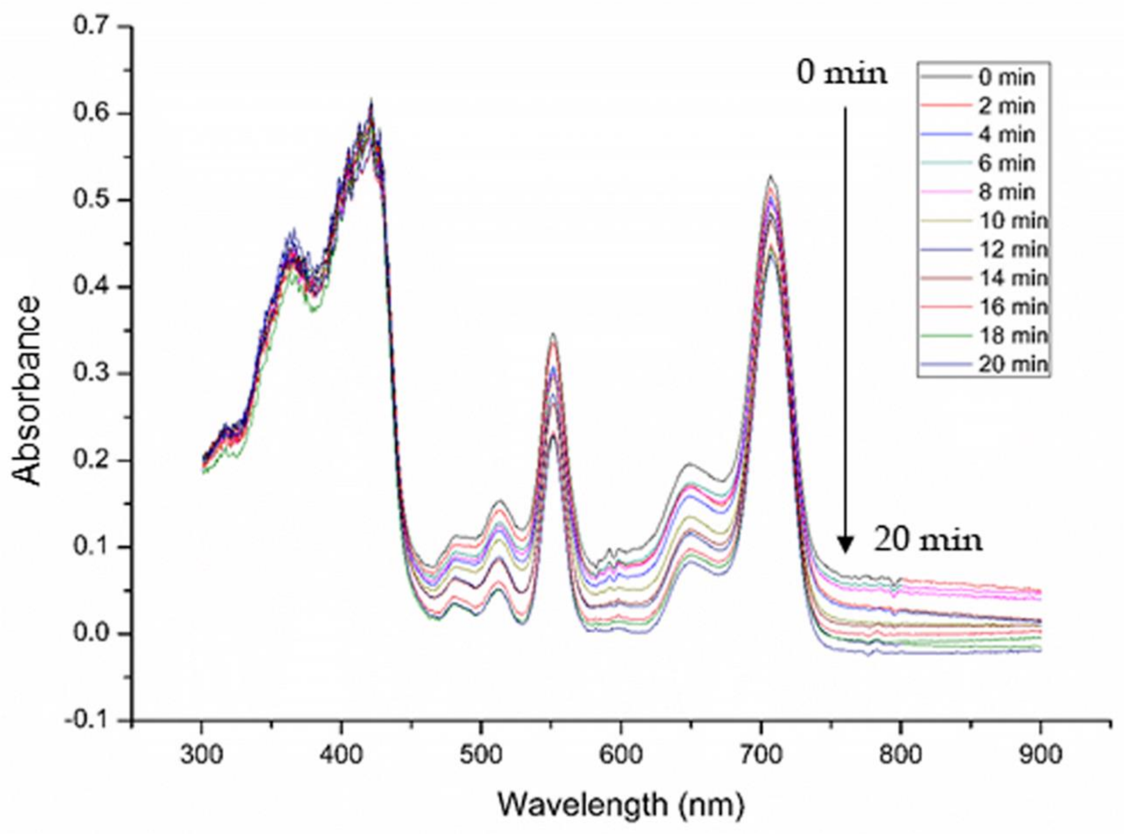

Figure S4. UV-Vis spectra for photobleaching of NMPi in CH_2Cl_2.

Table S1. Cell viability (%) of A549 cell only (control), MPPa and NMPi for photocytotoxicity against A549 cell lines at concentration range of 0.05–20.00 μM. The concentration of all compounds was 50 to 20000 nM. The percentage of cell viability was conducted by MTT assay at 3 h and 24 h incubation times after irradiation. Error values represent the standard deviation of three replicate experiments.

Concentration (μM)	**MPPa**		**NMPi**	
Incubation time	**3 h**	**24 h**	**3 h**	**24 h**
control	100 ± 5.77	100 ± 1.20	100 ± 5.77	100 ± 1.20
0.05	102.50 ± 5.55	107.59 ± 3.37	98.54 ± 4.62	102.83 ± 0.25
0.10	97.77 ± 4.14	103.71 ± 7.93	99.64 ± 2.00	98.21 ± 1.30
0.25	102.48 ± 3.39	91.01 ± 9.46	98.79 ± 3.75	102.89 ± 5.75
0.50	99.71 ± 4.74	31.14 ± 13.13	97.79 ± 3.37	89.02 ± 2.03
1.00	27.11 ± 3.53	4.47 ± 3.29	60.06 ± 6.44	13.89 ± 4.01
2.50	1.34 ± 1.53	1.95 ± 1.02	3.30 ± 0.60	2.07 ± 0.80
5.00	2.34 ± 0.72	2.46 ± 1.33	1.81 ± 1.40	1.66 ± 0.30
10.00	1.32 ± 1.19	1.11 ± 1.05	1.28 ± 0.78	1.40 ± 1.00
20.00	0.05 ± 1.27	0.16 ± 1.40	0.16 ± 0.34	0.93 ± 1.60

Table S2. Cell viability (%) of A549 cell only (control; **con**), MPPa and NMPi for dark toxicity against A549 cell lines at concentration range of 0.05–20.00 μM. The percentage of cell viability was conducted by MTT assay at 3 h and 24 h incubation times after irradiation. Error values represent the standard deviation of three replicate experiments.

Concentration (μM)	**MPPa**		**NMPi**	
Incubation time	**3 h**	**24 h**	**3 h**	**24 h**
control	100 ± 6.45	100 ± 5.05	100 ± 6.45	100 ± 5.05
0.05	107.98 ± 5.49	106.64 ± 3.68	103.19 ± 5.00	102.43 ± 3.16
0.10	109.29 ± 1.70	110.31 ± 7.30	107.01 ± 3.17	110.50 ± 7.85
0.25	110.69 ± 4.08	114.29 ± 10.26	108.73 ± 4.00	111.86 ± 2.25
0.50	108.93 ± 5.35	112.38 ± 7.10	109.21 ± 4.44	105.81 ± 2.40
1.00	108.34 ± 2.68	110.77 ± 5.33	109.53 ± 4.09	109.31 ± 6.68
2.50	103.45 ± 4.30	110.40 ± 3.84	109.01 ± 4.16	105.64 ± 5.92
5.00	100.97 ± 6.58	104.61 ± 4.20	106.04 ± 2.02	106.73 ± 1.77
10.00	98.20 ± 6.72	103.10 ± 5.35	104.34 ± 1.33	104.66 ± 3.91
20.00	86.68 ± 9.71	91.06 ± 2.90	95.31 ± 2.87	90.52 ± 7.95