Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

Synthesis and Characterization of Photodynamic activity of Iodinated Chlorin p_6 Copper complex

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Table S1: Percent cytotoxicity of ICp_6-Cu in dark at 10 - 15 μM concentration.

Concentration of ICp_6-Cu (μM)	% Cytotoxicity in dark	
	NT8e	4451
10	1.2 ± 0.8	2.1 ± 1
12	3.5 ± 2.1	2.8 ±1.2
15	5.1 ± 3.7	6.0 ± 4.5

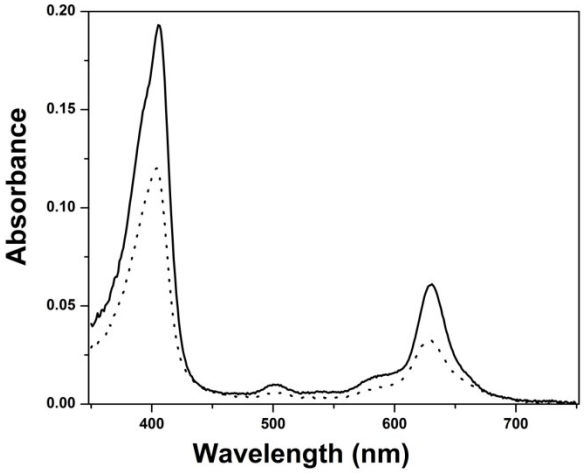

Figure S1. Absorption spectra of 2.5 μM ICp_6-Cu in methanol (solid line) and 25 mM sodium phosphate buffer (pH 7.4) (dotted line).

Table S2. Absorption characteristics of ICp_6-Cu in methanol and buffer.

Solvent	Soret Band (λ_{max})	FWHM	Q band (λ_{max})	FWHM
Methanol	411 nm	36 nm	634 nm	32 nm
Sodium –phosphate buffer (pH 7.4)	404 nm	42 nm	630 nm	40 nm

Octanol/ water partition coefficient:

Partition coefficients of Cp_6 and ICp_6-Cu were determined in 1-octanol– sodium phosphate buffer (pH 7.4) system. A saturated solution of octanol and buffer was prepared by vigorous shaking of buffer and octanol mixture for 4 h at room temperature. 10 μM of Cp_6 and ICp_6-Cu was dissolved in pre-saturated buffer phase, to which an equal volume of pre-saturated octanol phase was added. The mixture was mixed for 1 h by intermittent vortexing, centrifuged at 5000 rpm for 5 mins and left at room temperature for ~1 h to allow the two phases to separate. Concentration of Cp_6 and ICp_6-Cu in both the phases was determined by absorption spectroscopy. The partition coefficients (P) were calculated as:

$\text{Log } P_{(\text{Oct/buffer})} = \text{Log } (C_{oct} / C_{buffer})$

Where, C_{oct} and C_{buffer} are concentration of photosensitizer in the organic and the buffer phase, respectively.

Table S3. Octanol/ water partition coefficient of Cp_6 and ICp_6-Cu

Photosensitizer	Log P
Cp_6	0.46 ± 0.065
ICp_6-Cu	0.94 ± 0.045