

Electronic Supplementary Information

**A cell-selective glutathione-responsive tris(phthalocyanine) as a smart photosensitiser
for targeted photodynamic therapy**

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Fig. S2 Fluorescence spectra of **BioPC3** and **7** in DMF at the same concentration of the phthalocyanine unit (excited at 610 nm).

Fig. S3 Changes in the (a and c) electronic absorption and (b and d) fluorescence ($\lambda_{\text{ex}} = 610$ nm) spectra of **BioPC3** in PBS (with 1% Cremophor EL) upon exposure to 5 μM or 5 mM of GSH at 37 °C over a period of 20 h.

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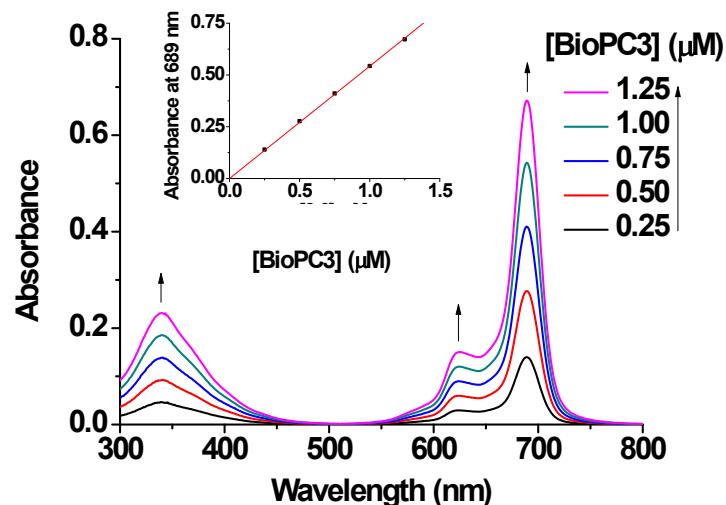
Fig. S7 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **4** in CDCl_3 .

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Fig. S9 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **6** in CDCl_3 .

Fig. S10 ^1H NMR spectrum of **BioPC3** in $\text{DMSO}-d_6$ with a trace amount of pyridine- d_5 at 333 K; asterisks indicate signals of residual solvents or water.

(a)



(b)

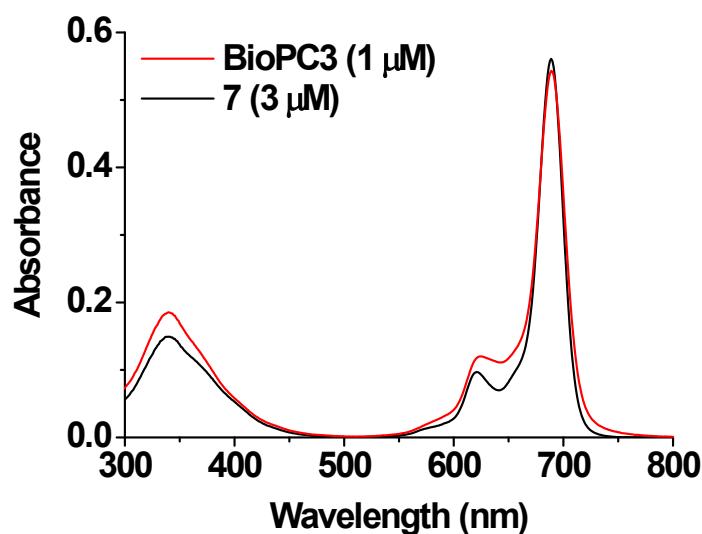


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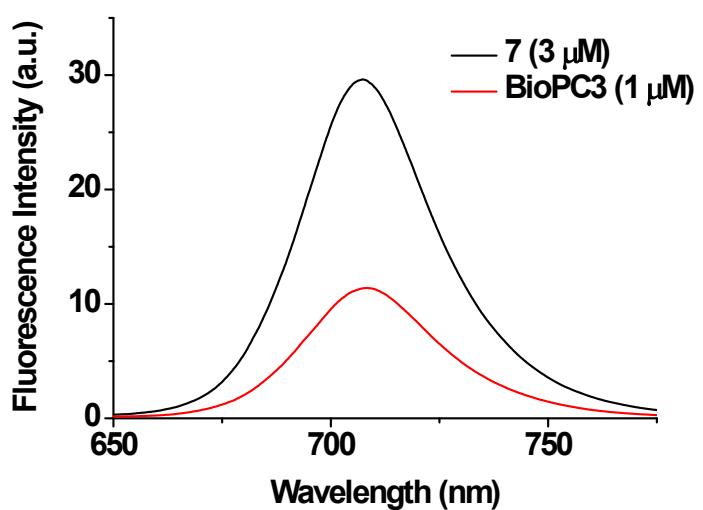


Fig. S2 Fluorescence spectra of **BioPC3** and **7** in DMF at the same concentration of the phthalocyanine unit (excited at 610 nm).

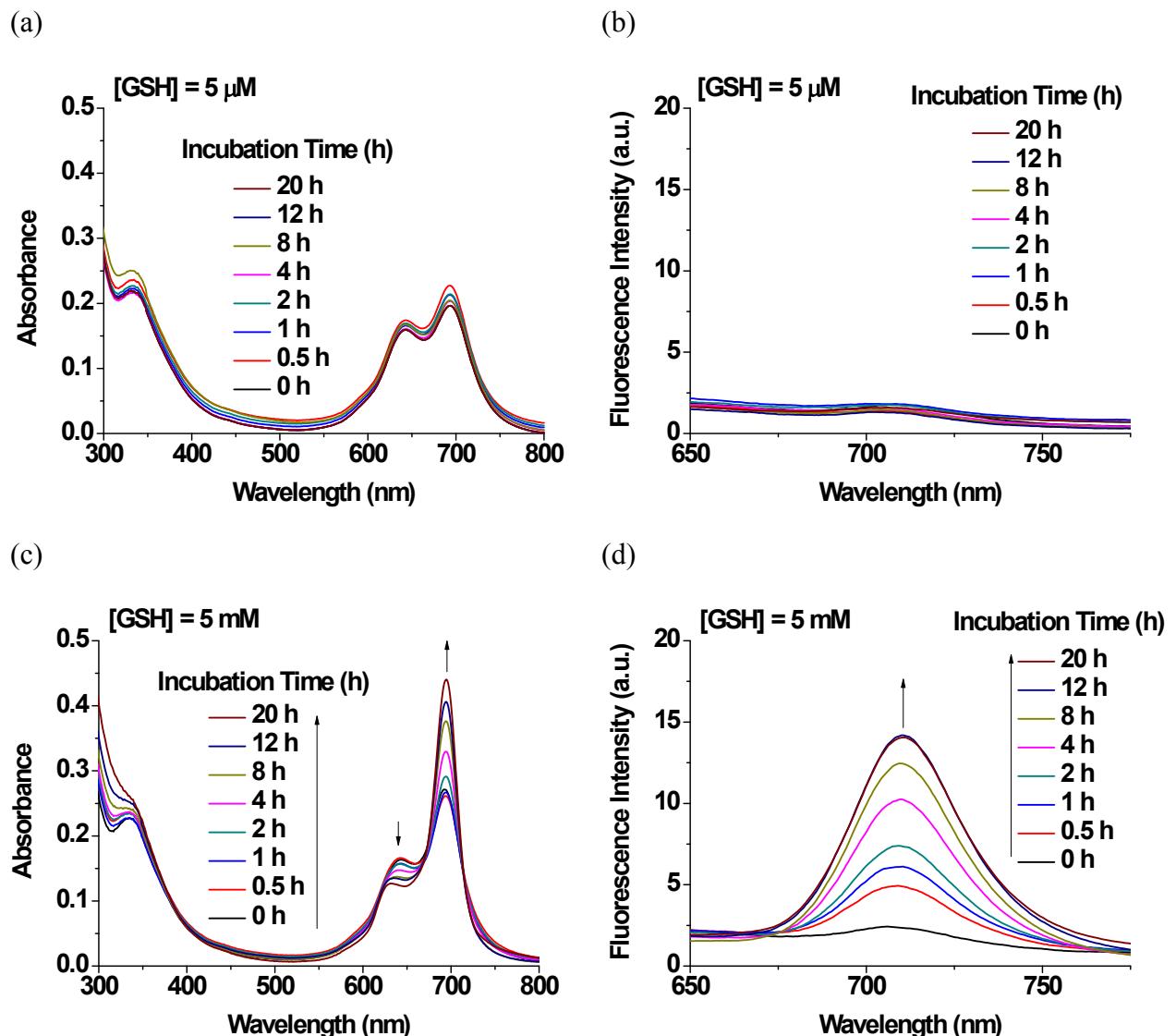


Fig. S3 Changes in the (a and c) electronic absorption and (b and d) fluorescence ($\lambda_{\text{ex}} = 610$ nm) spectra of **BioPC3** in PBS (with 1% Cremophor EL) upon exposure to 5 μM or 5 mM of GSH at 37 °C over a period of 20 h.

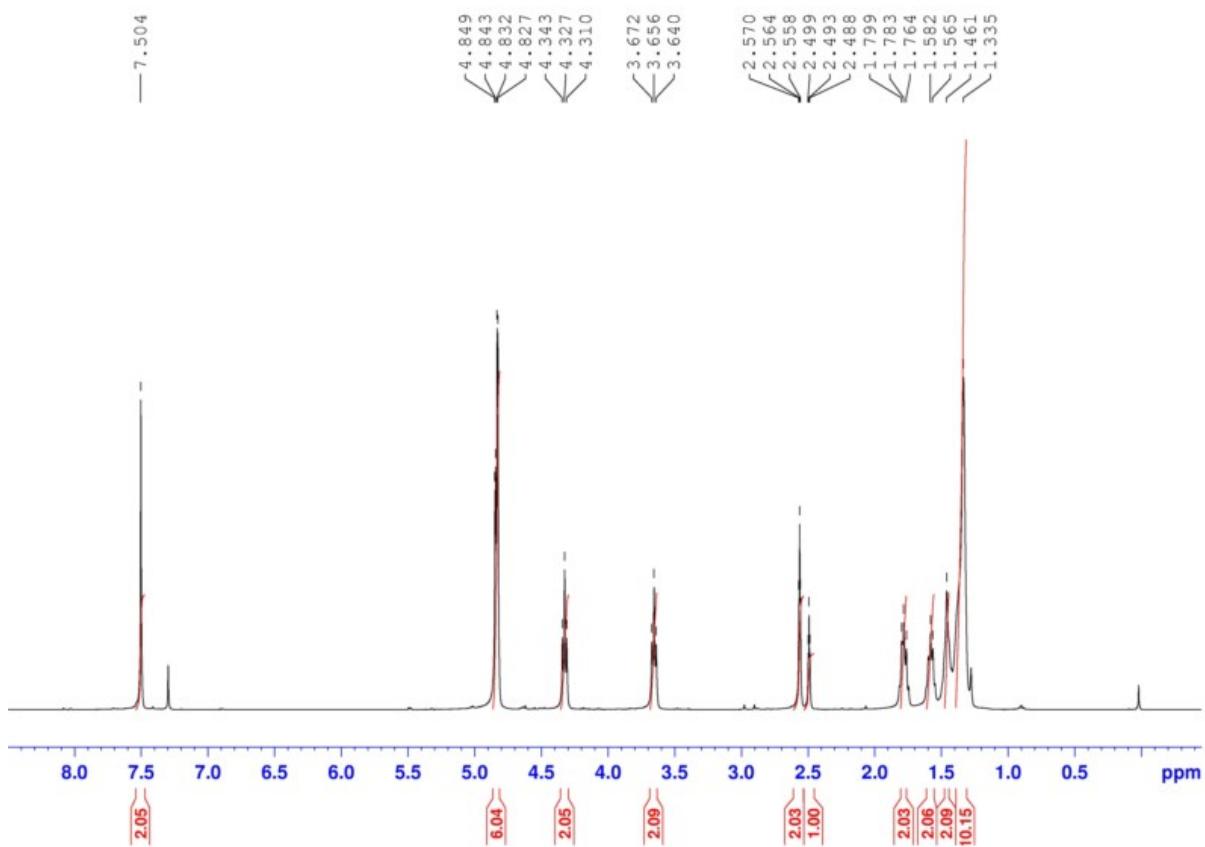
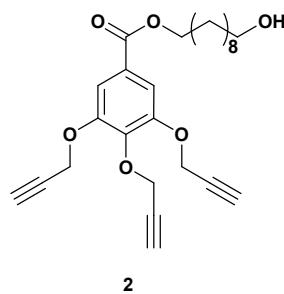


Fig. S4 ^1H NMR spectrum of **2** in CDCl_3 .

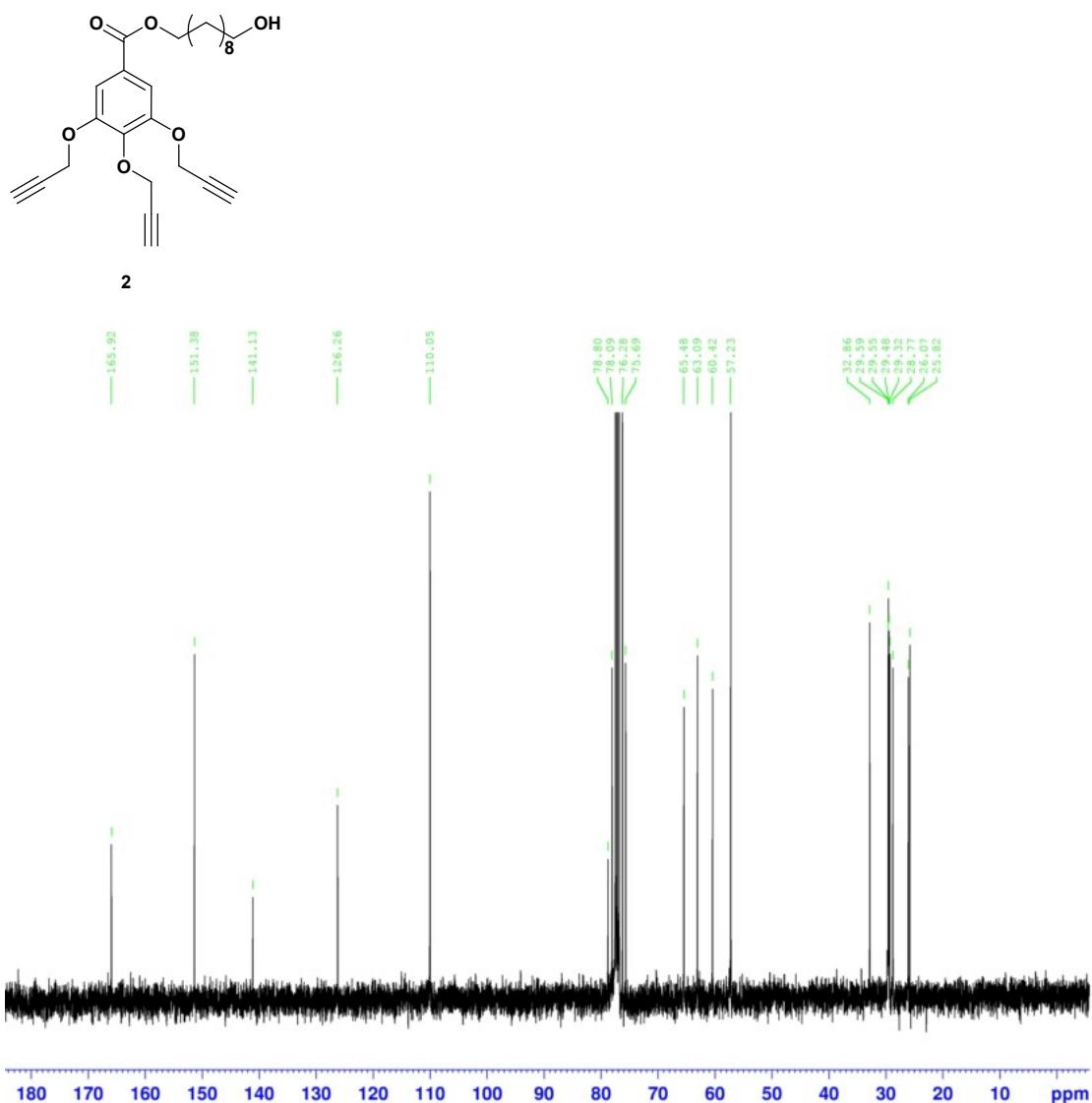


Fig. S5 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **2** in CDCl_3 .

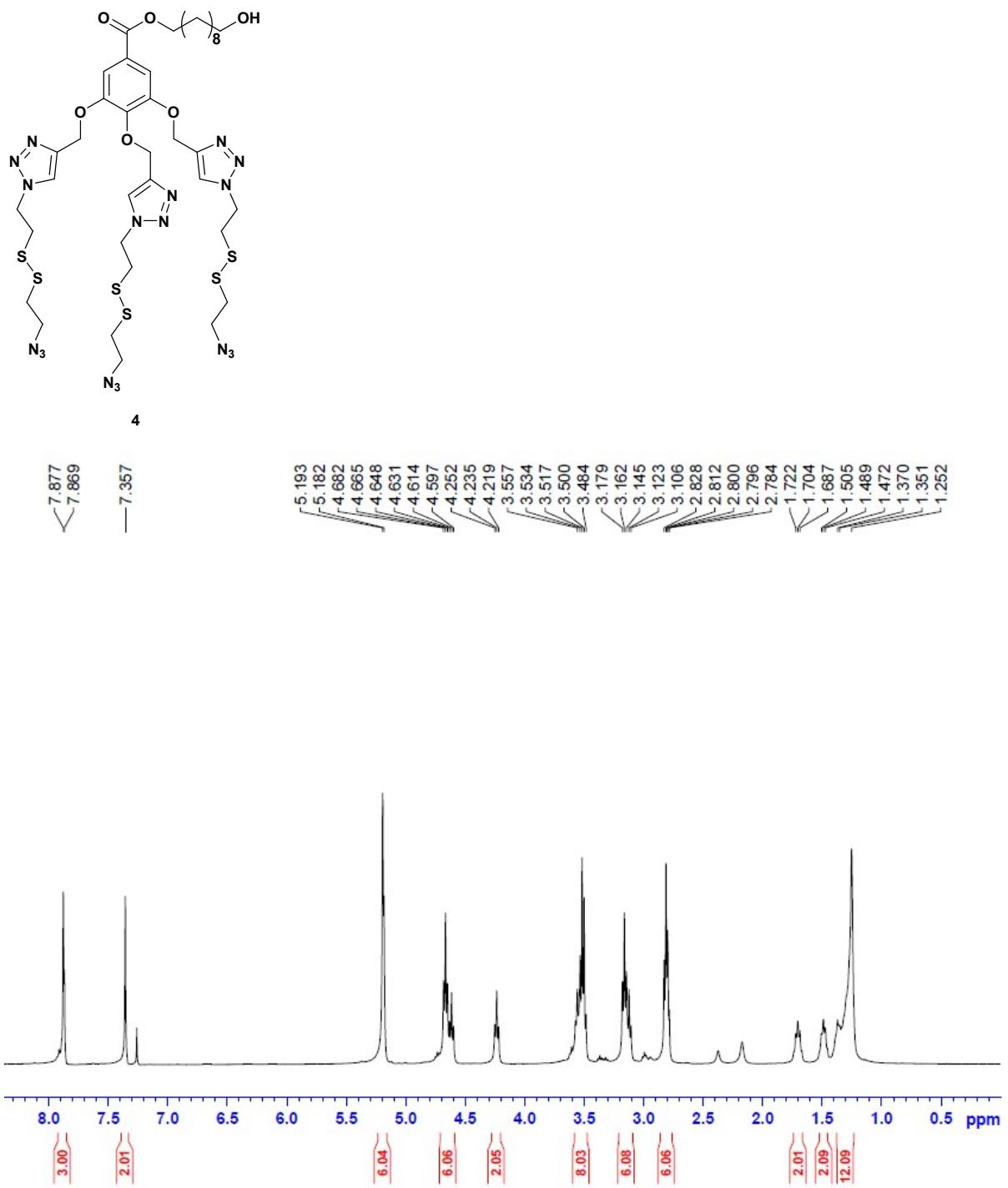


Fig. S6 ^1H NMR spectrum of **4** in CDCl_3 .

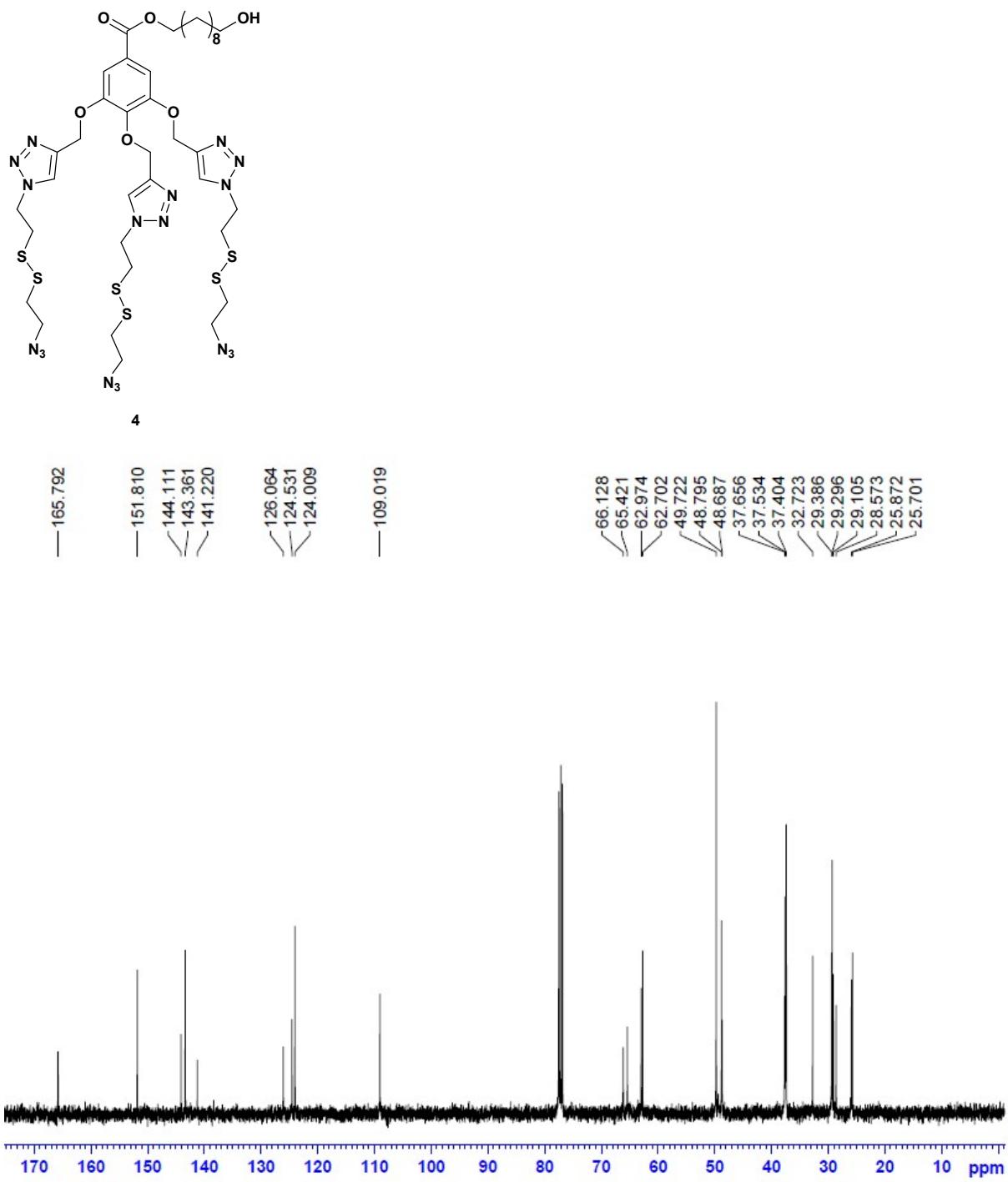


Fig. S7 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **4** in CDCl_3 .

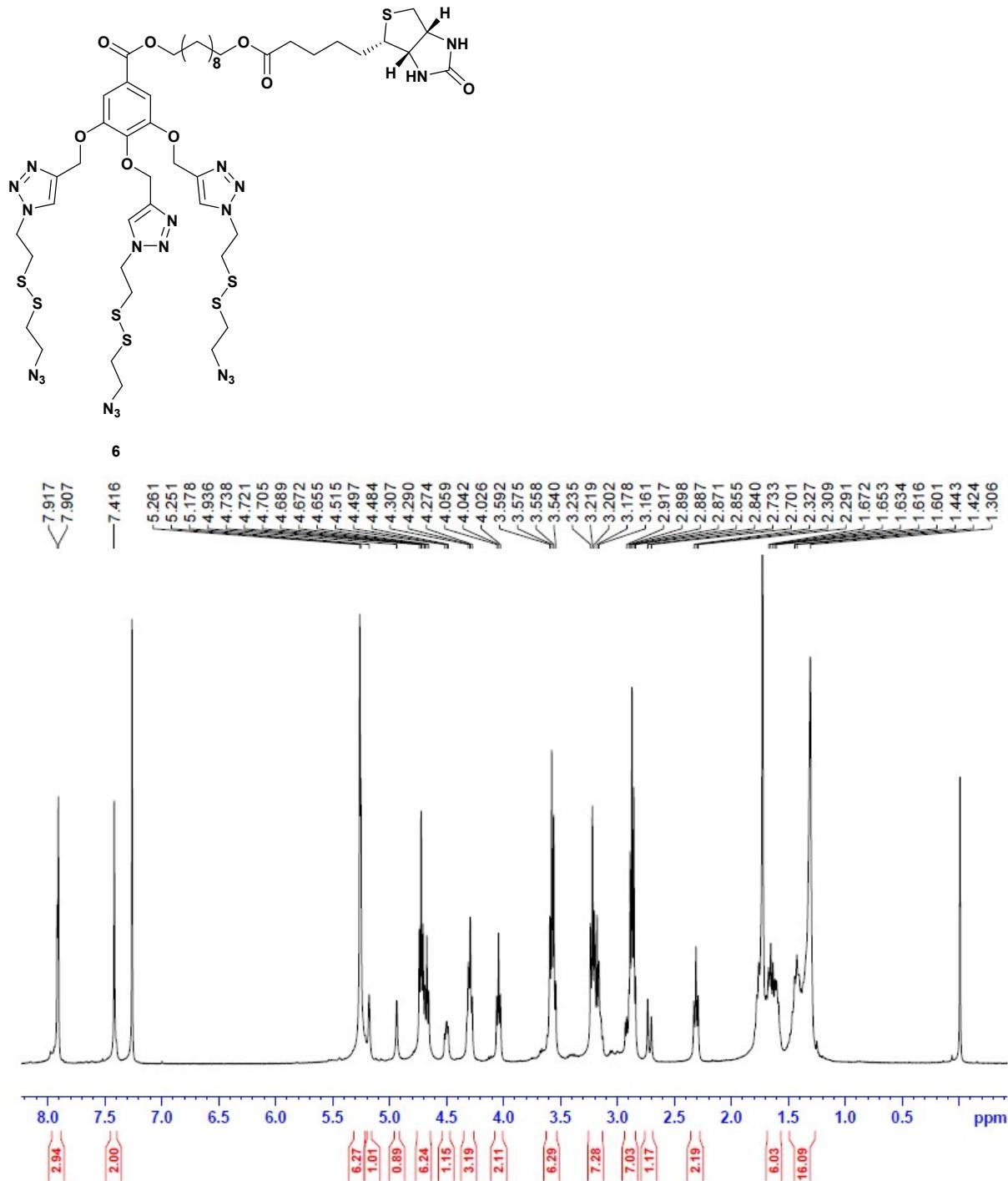


Fig. S8 ^1H NMR spectrum of **6** in CDCl_3 .

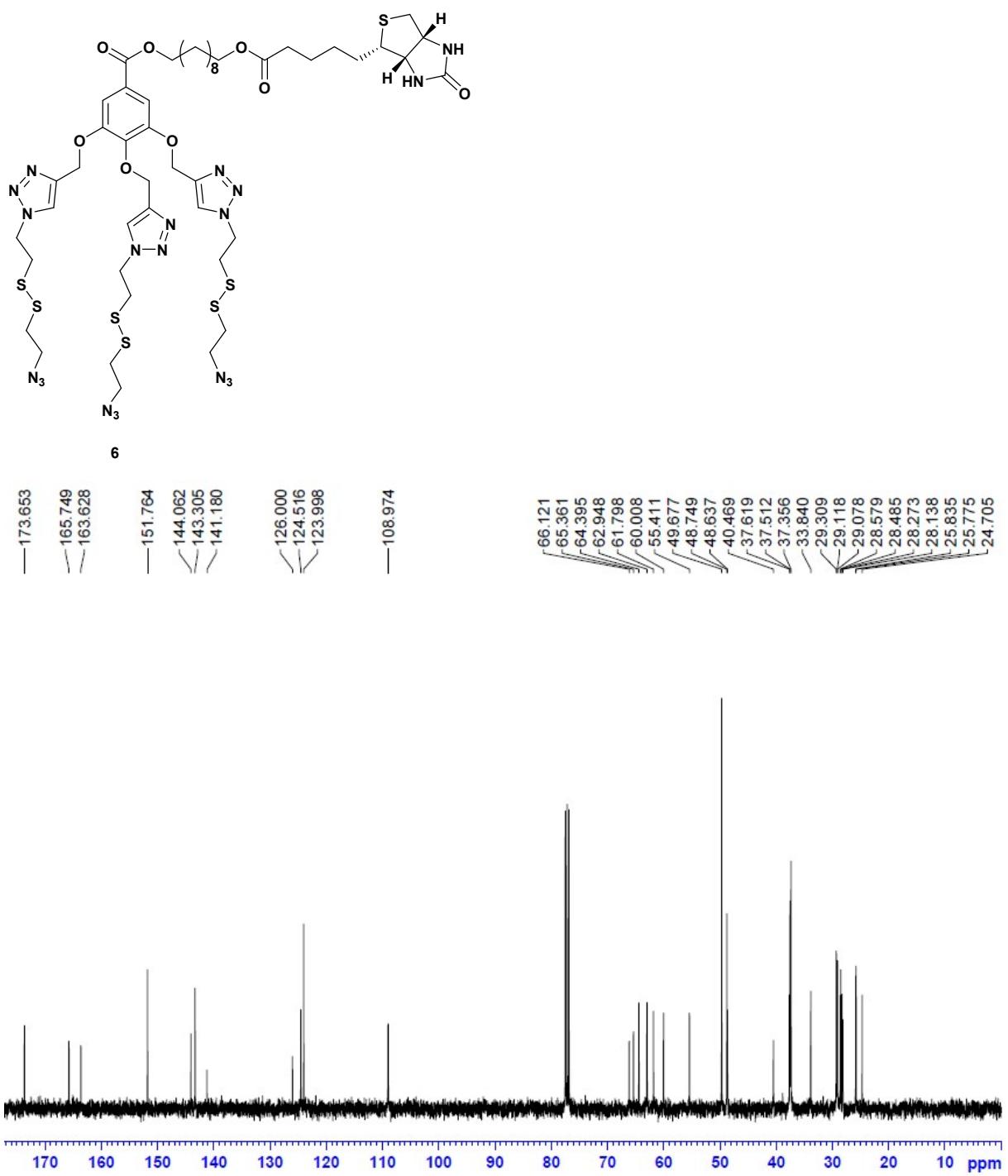


Fig. S9 $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of **6** in CDCl_3 .

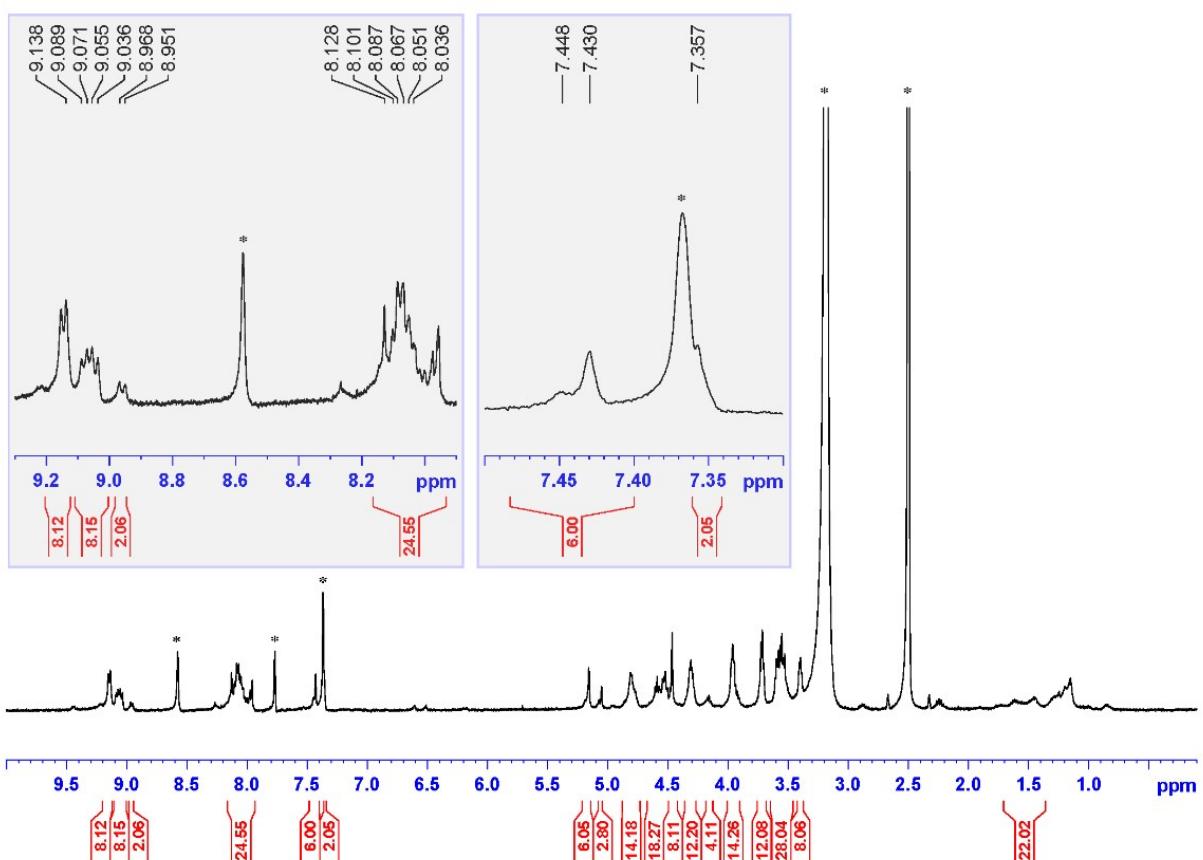
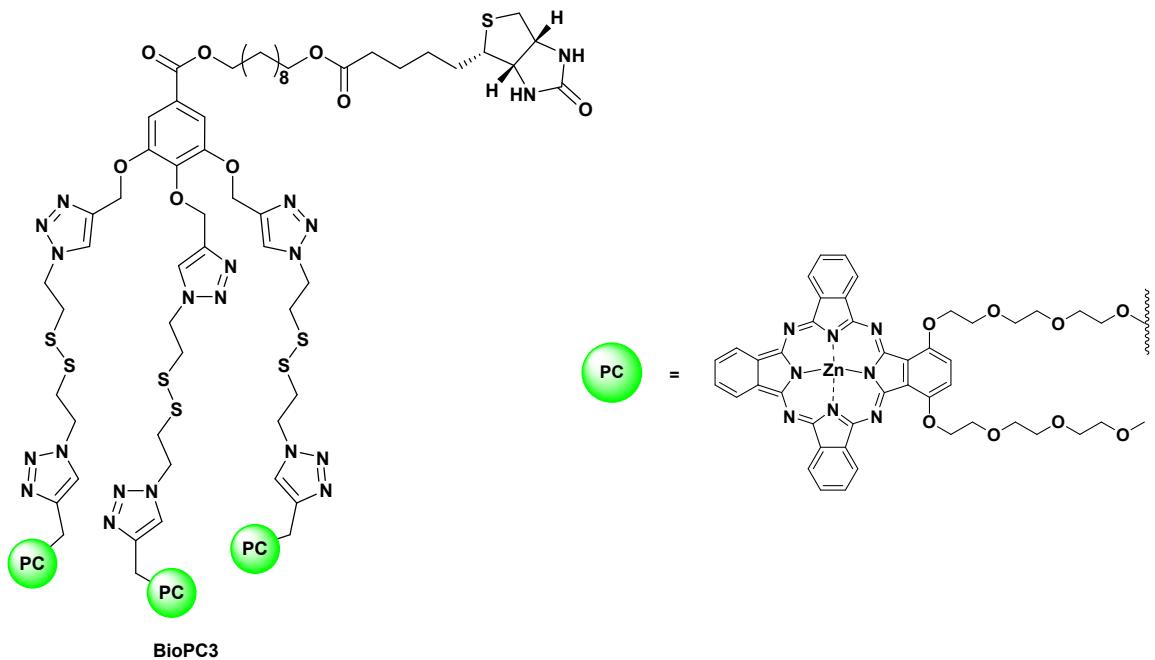


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