

## Synthesis and Cellular Up-take of Porphyrin Decorated Iron Oxide Nanoparticles—A Potential Candidate for Bimodal Anticancer Therapy

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### Supporting Information

*Synthesis of 4:* In a round bottom flask filled 433 mg of **1** with 30 mL of dimethoxy ethane, 115 mg of NHS, 10 mg of DMAP and 230 mg of DCC were stirred at room temperature for 10 hours. After the reaction, the solvent was evaporated and the crude product **2** was used for the next reaction without purification. A 593 mg of **3** and the crude compound of **2** were dissolved in 40 ml of the mixed solvent of MeOH /CHCl<sub>3</sub> (1:1) in a round bottom flask. The mixture was stirred at room temperature for overnight. After the solvent was removed, methanol was used to wash the crude product (3x10 ml). The crude product was then purified on a silica gel column using MeOH/CHCl<sub>3</sub> (1:9) as the eluent. Then, 200 mg of the product was dissolved in 10 ml of MeOH/CHCl<sub>3</sub> (1:1), and the deprotection was carried out under H<sub>2</sub> atmosphere for 5 hours using 30 mg of Pd/C as the catalyst. After the solid content was filtered off, **4** was obtained by removing the organic solvent and dried in vacuo (yield = 65 %).

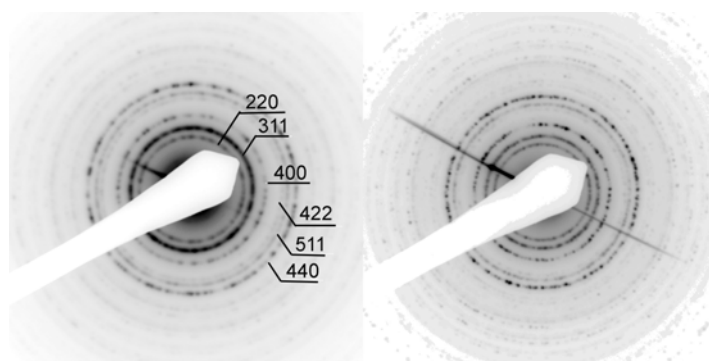


Figure S1. Electron Diffraction Pattern of as-synthesized Fe<sub>3</sub>O<sub>4</sub> and Fe<sub>3</sub>O<sub>4</sub>-Porphyrin (5).

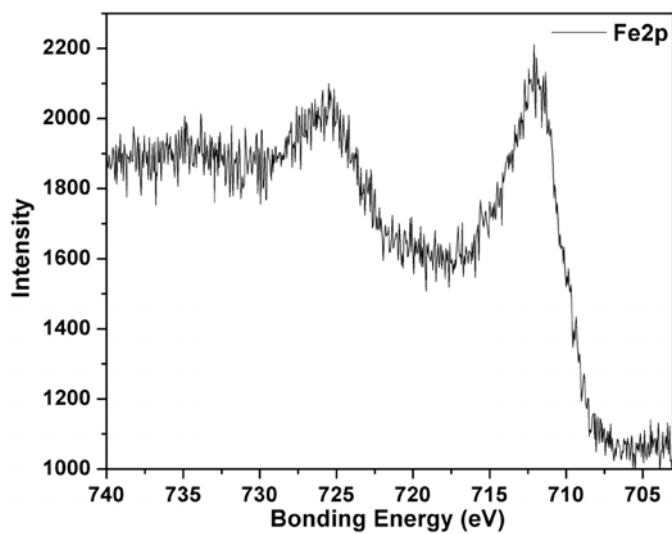


Figure S2. XPS spectra of Fe<sub>3</sub>O<sub>4</sub>-Porphyrin (5).

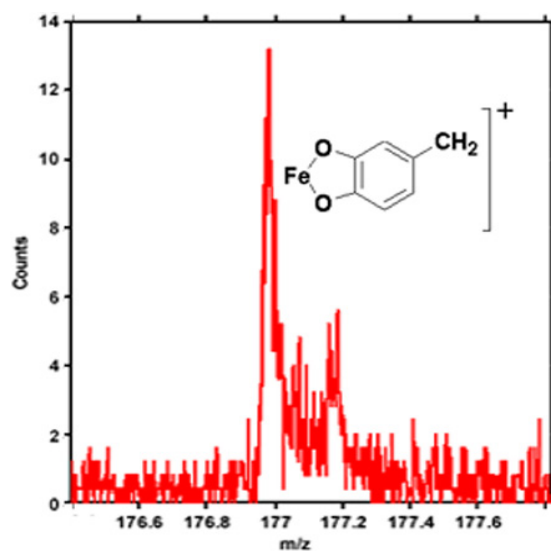


Figure S3. TOF-SIMS spectrum of Fe<sub>3</sub>O<sub>4</sub>-Porphyrin (5).

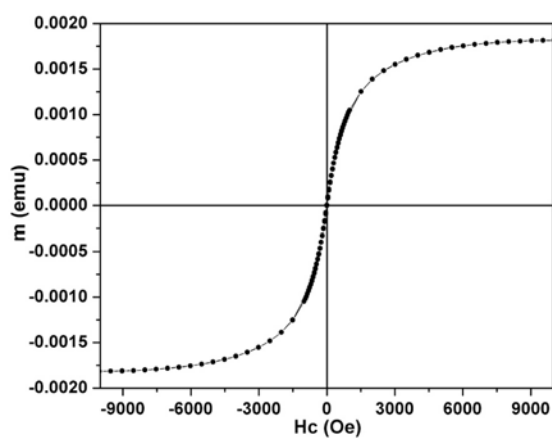


Figure S4. Field-dependent magnetization of  $\text{Fe}_3\text{O}_4$ -Porphyrin (**5**) at 300 K