

Supporting Information

Photoinitiated Coupling of Unmodified Monosaccharides to Iron Oxide Nanoparticles for Sensing Proteins and Bacteria

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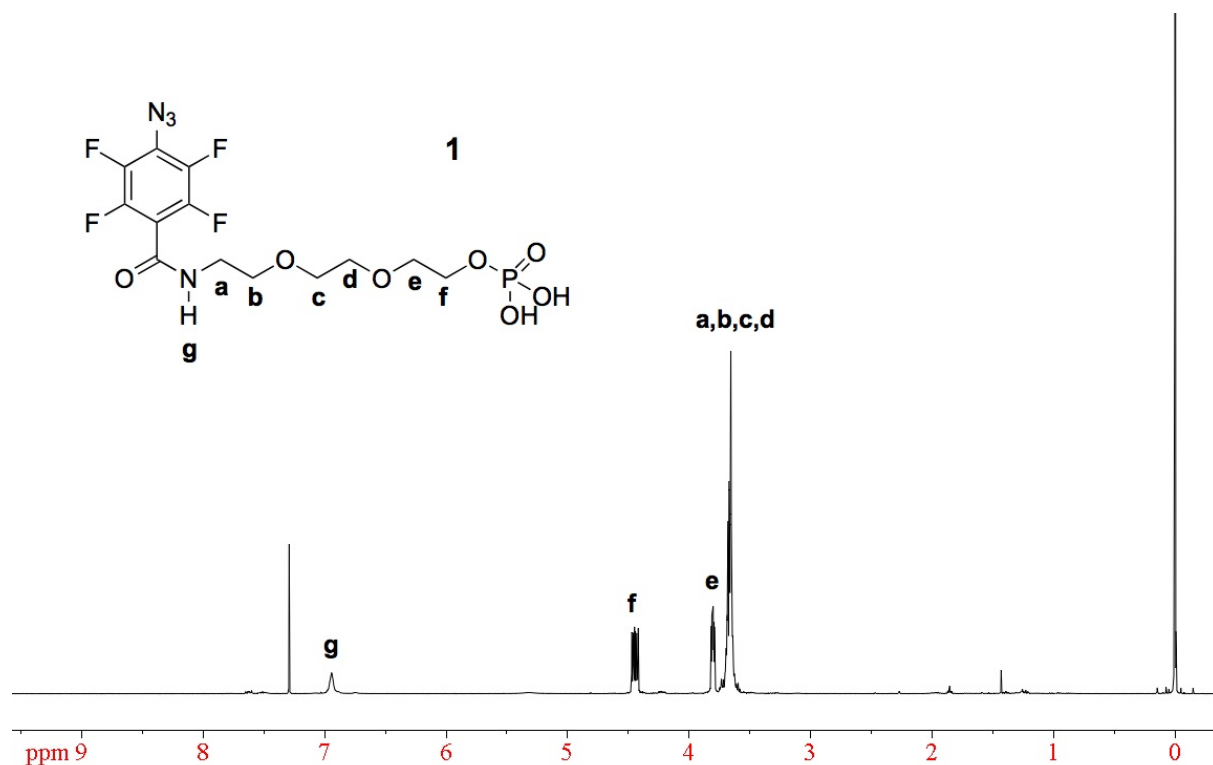


Figure S1. The proton NMR spectrum of **1**. ¹H NMR (400 MHz, CDCl₃, δ): 6.94 (br, 1H, NH), 4.44 (m, 2H, CH₂), 3.80 (m, 2H, CH₂), 3.67 (m, 8H, CH₂).

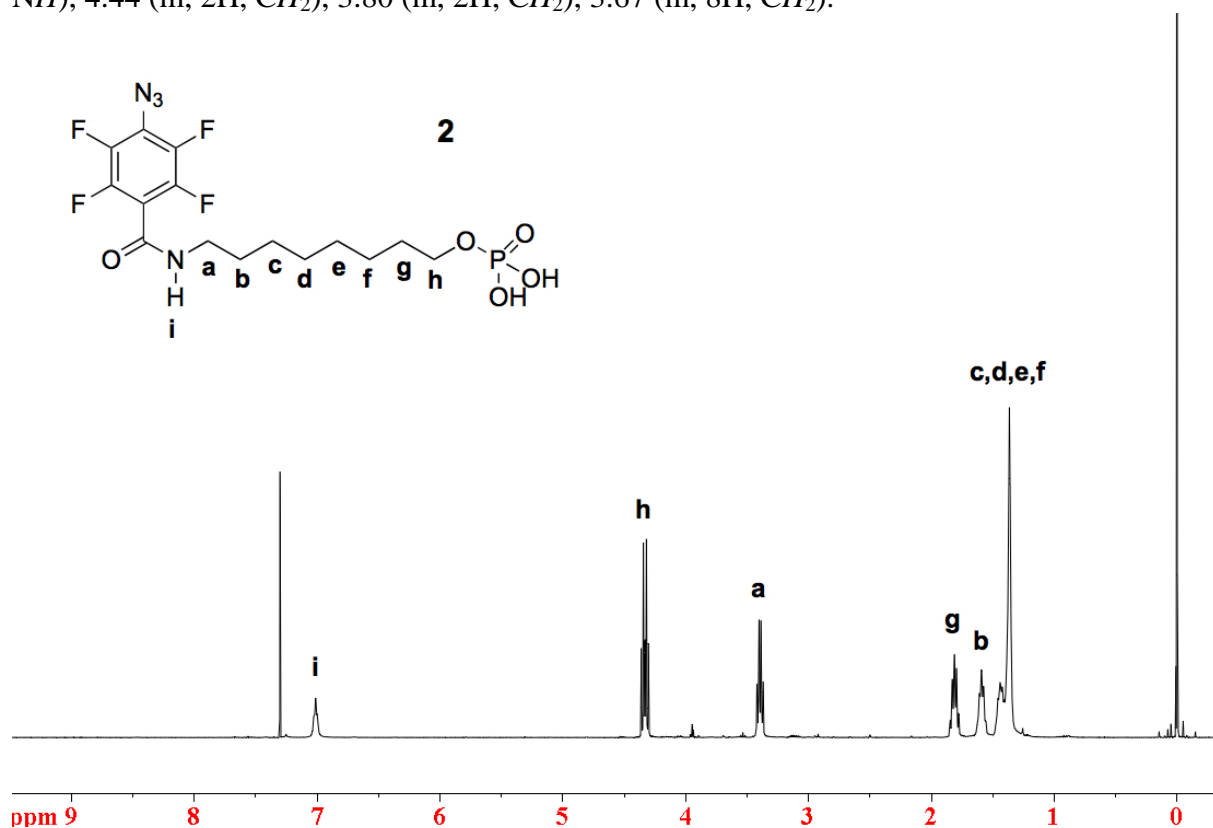


Figure S2. The proton NMR spectrum of **2**. ¹H NMR (400 MHz, CDCl₃, δ): 7.01 (s, 1H, NH), 4.33 (m, 2H, CH₂), 3.39 (q, 2H, *J* = 7.0 Hz, CH₂), 1.81 (m, 2H, CH₂), 1.59 (t, 2H, *J* = 7.0 Hz, CH₂), 1.36 (m, 8H, CH₂).

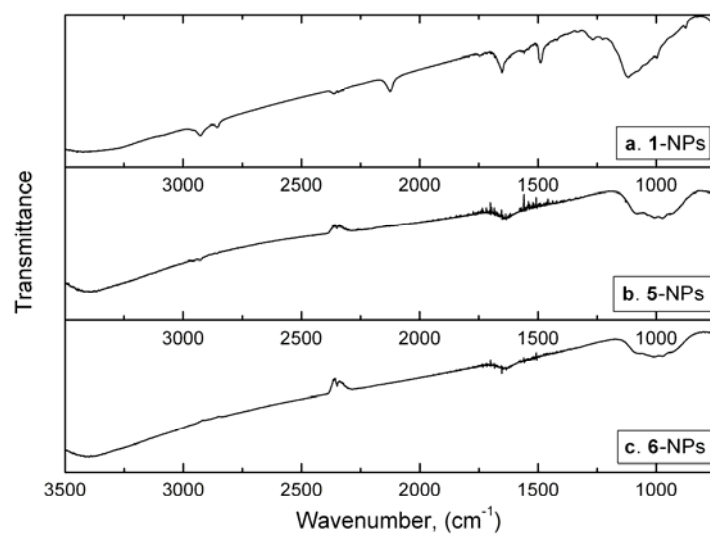


Figure S3. FTIR spectra of PFPA-phosphate ligand **1**-functionalized hematite nanoparticles (a), hematite nanoparticles after treating with compound **5** (b) and **6** (c).