Supporting information for:

Specific uptake and imaging of bombesin functionalized iron oxide nanoparticles in prostate cancer cells

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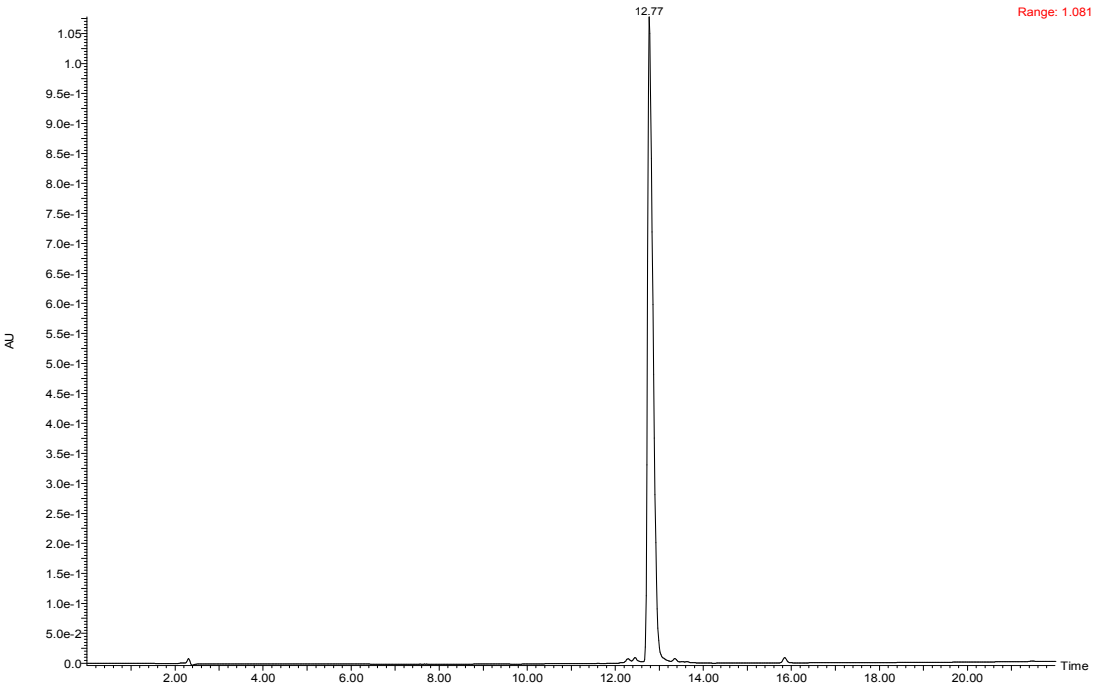

Figure S1. HPLC of peptide **1**. Linear gradient of 20-80% solvent A in B. Purity of peptide determined to be 98.7%.

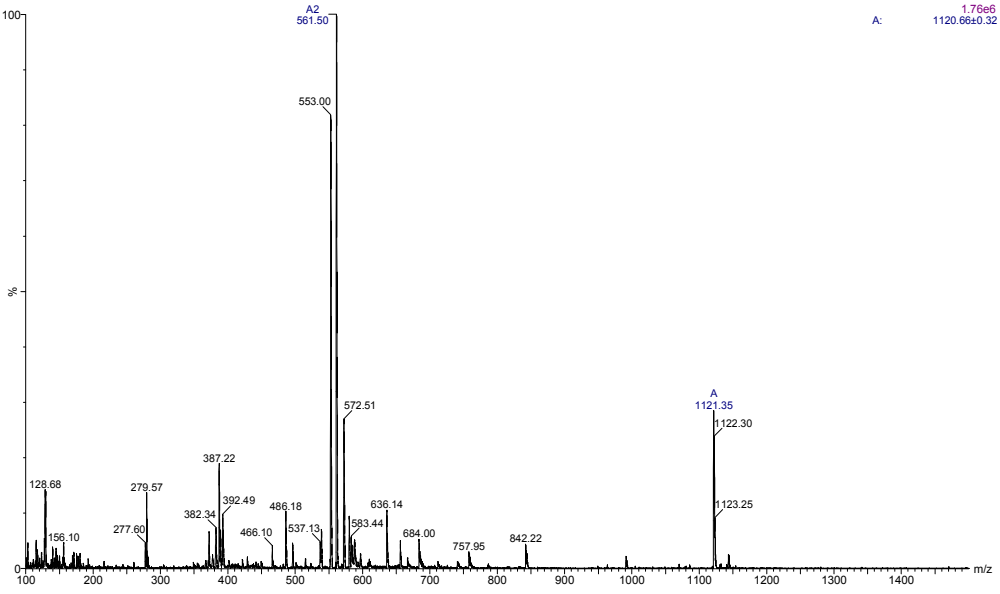

Figure S2. ESI-MS of peptide **1**. m/z calculated 1121.59, found 1121.35 $[M+H]^+$ and m/z calculated 561.30, found 561.50 $[M+2H]^{2+}$.

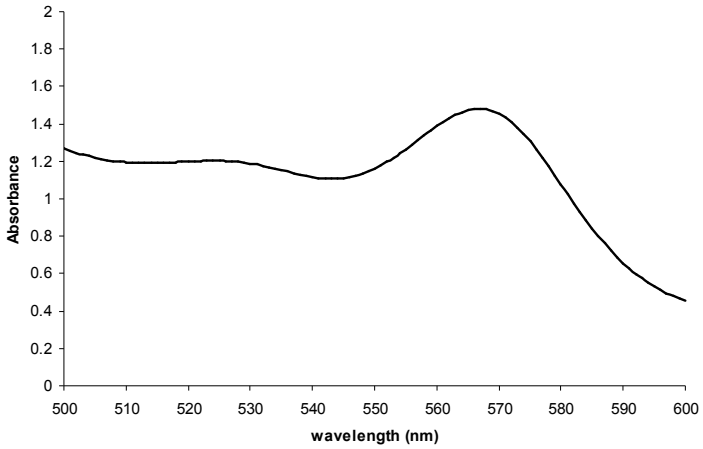

Figure S3. UV-visible spectrum of nanoparticle **4** (c = 0.14 mg/mL of iron, path length (b) = 1 cm, ε for rhodamine dye = 96000 $cm^{-1}M^{-1}$ at 560 nm). The loading of dye can be determined by subtracting the absorbance of the iron oxide nanoparticles at 560 nm (determined from a calibration curve), then solving the expression A = εbc for the concentration of dye.

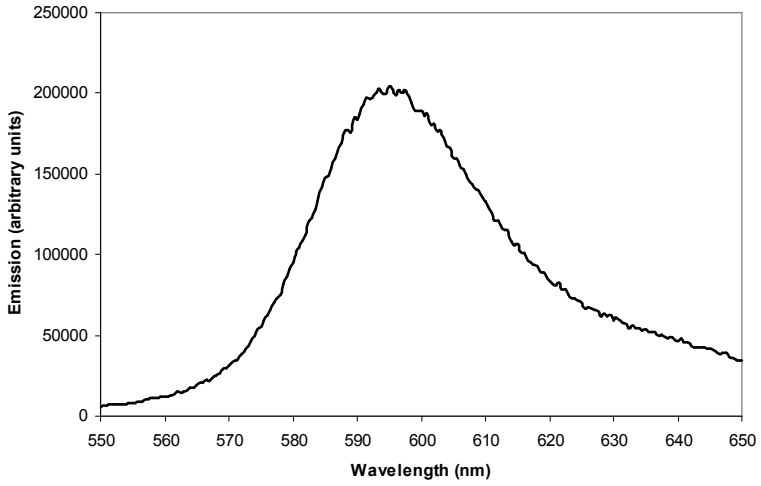

Figure S4. Fluorescence emission spectrum of nanoparticle **4** showing maximum emission at 595 nm. Lack of quenching by the iron oxide core was verified by comparison with a sample of the unconjugated dye having a normalized absorbance.