

Supplementary information

Transmission electron microscopy (TEM)

TEM images of the pegylated iron oxide nanoparticles showed that the iron oxide core appeared very similar before and after peptide modification (Figure S1).

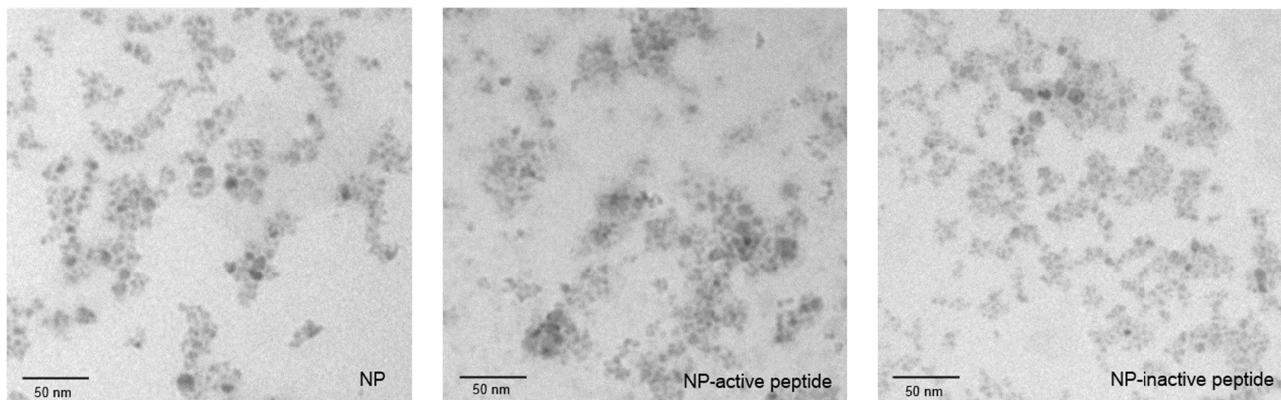


Figure S1. Representative TEM images of pegylated iron oxide nanoparticles (NP) before and after conjugation to the uPAR peptide.

Crystalline iron oxide nanoparticles were analysed using high resolution TEM (HRTEM) (Figure S2 a). The iron map from energy spectroscopy imaging (ESI), calculated for peak at 710 eV, and the electron energy-loss spectrum (EELS) showing O K and Fe L_{2,3}-edges confirm the presence of iron oxide in the nanoparticles (Figure S2 b-c).

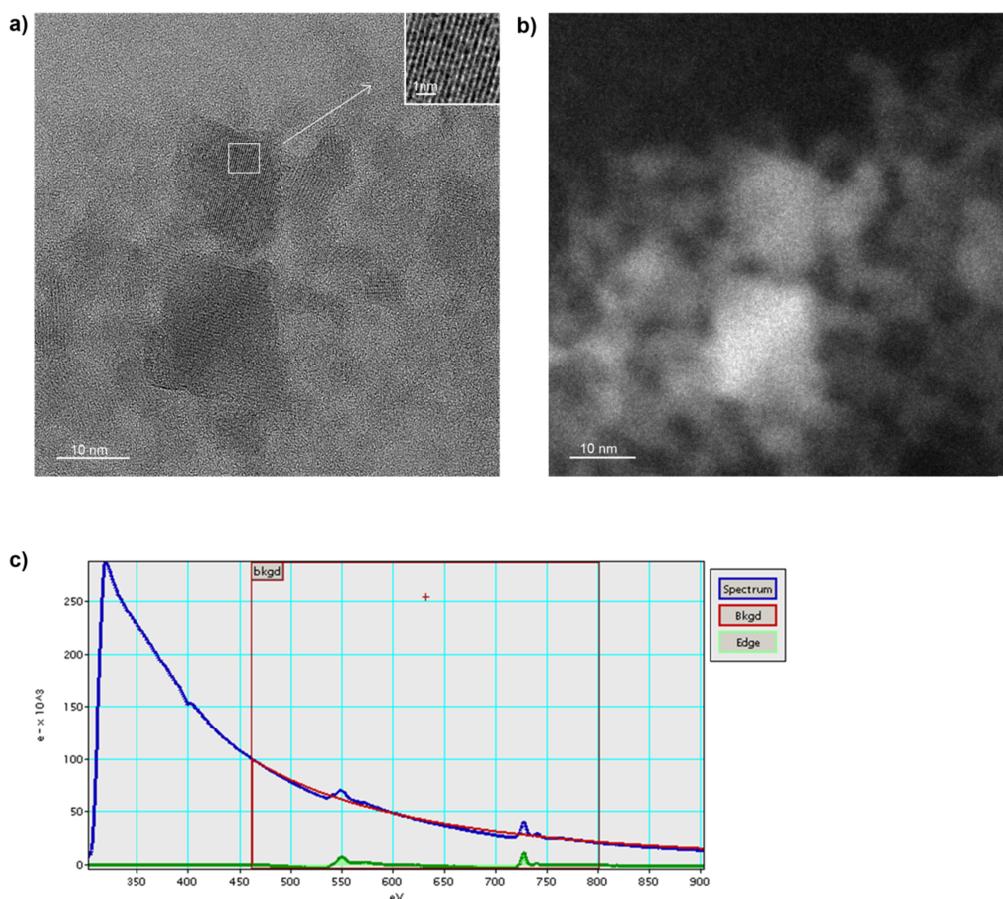


Figure S2. (a) HRTEM, (b) ESI image at 710 eV, and (c) EELS spectrum showing the O K-edge and Fe L_{2,3}-edges from the iron oxide nanoparticles.

Dynamic light scattering measurements (DLS)

DLS measurements of pegylated iron oxide nanoparticles revealed a mean diameter of 24.9 nm before and 29.6 nm after peptide modification (Figure S3). The polydispersity index (PDI) was < 0.3 for all measurements. Zeta potential values were -6.6 mV and -7.3 mV before and after peptide modification, respectively.

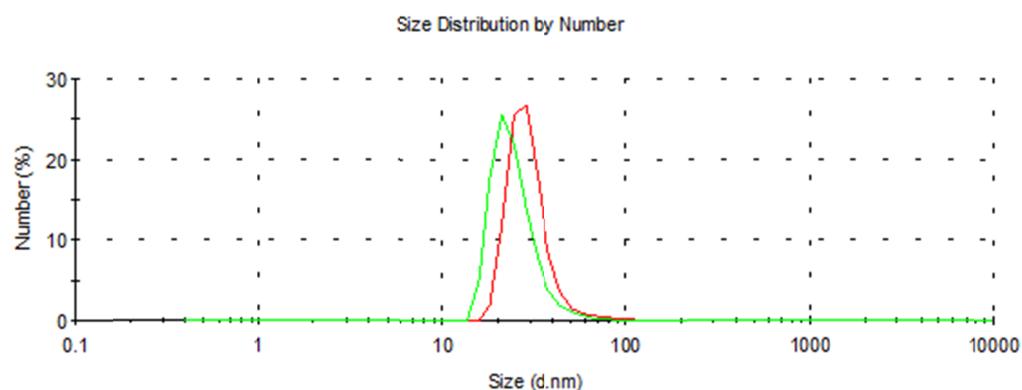


Figure S3. Hydrodynamic size measured by DLS of pegylated iron oxide nanoparticles before (green) and after peptide modification (red).