

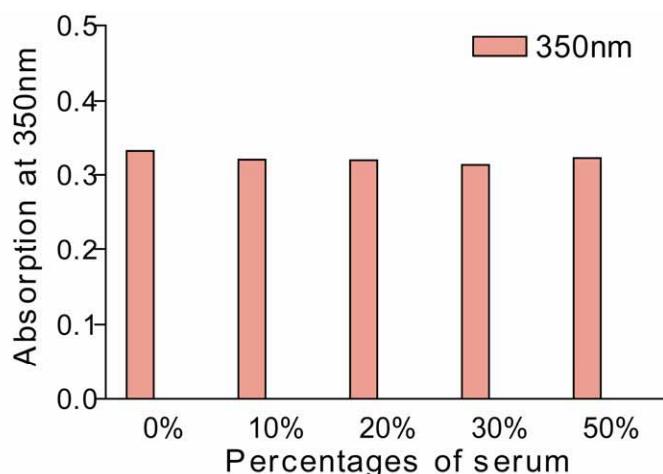
## Supporting Information

### Stability, Toxicity and Differential Cellular Uptake of Protein Passivated- $\text{Fe}_3\text{O}_4$ Nanoparticles

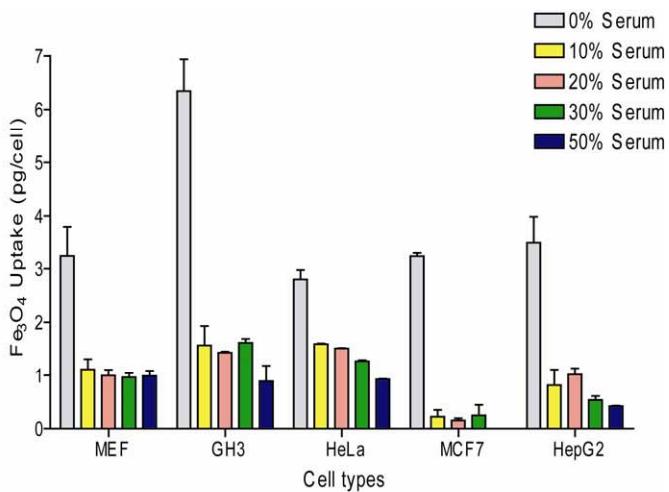
Avinash Bajaj,<sup>a</sup> Bappaditya Samanta,<sup>a</sup> Haoheng Yan,<sup>b</sup> D. Joseph Jerry,<sup>b</sup> Vincent M. Rotello<sup>a</sup>

<sup>a</sup>Department of Chemistry and <sup>b</sup>Veterinary and Animal Science, University of Massachusetts, Amherst, Massachusetts 01003, USA.

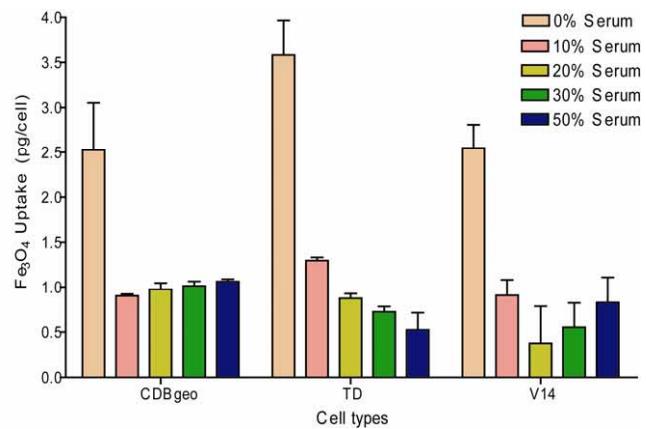
Corresponding author: Prof. Vincent M Rotello, Email: rotello@chem.umass.edu



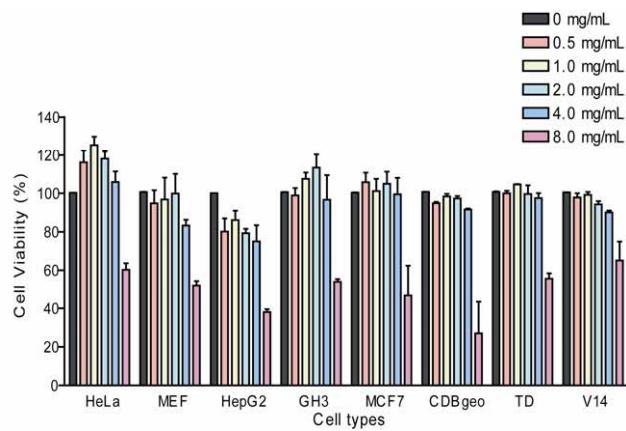
**Figure S-1.** Stability of the BSA coated  $\text{Fe}_3\text{O}_4$  nanoparticles at 6 h in the presence of different percentages of serum as evidenced from absorption graph at 350 nm. The BSA coated  $\text{Fe}_3\text{O}_4$  nanoparticles (4mg/mL) were dispersed in DMEM media supplemented with 0-50% of fetal bovine serum (FBS).



**Figure S2.** Uptake of the BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles in different cell types in absence and presence of different percentages of serum. Cells ( $1 \times 10^6$ ) were incubated with BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles (2mg/mL per well) for 6h. The particle uptake was quantified by Prussian blue assay.



**Figure S3.** Uptake of the BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles in different cell types in absence and presence of different percentages of serum. Cells ( $1 \times 10^6$ ) were incubated with BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles (2mg/mL per well) for 6h. The particle uptake was quantified by Prussian blue assay.



**Figure S-4.** Cell viabilities of BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles in different cell types at various concentrations of nanoparticles. Cells (10, 000) were incubated with BSA-coated  $\text{Fe}_3\text{O}_4$  nanoparticles for 6h and cell viability was calculated by Alamar blue assay.