

Electronic Supplementary Information

Facile preparation of hyaluronic acid-modified Fe₃O₄@Mn₃O₄ nanocomposites for targeted T₁/T₂ dual-mode MR imaging of cancer cells

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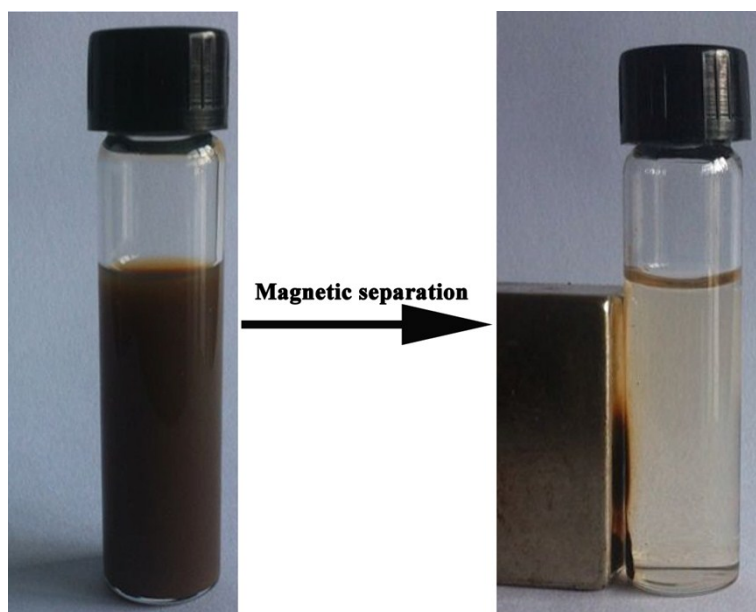


Fig. S1 The photos of the $\text{Fe}_3\text{O}_4@\text{Mn}_3\text{O}_4\text{-PEI-HA}$ NCs before and after magnetic separation.

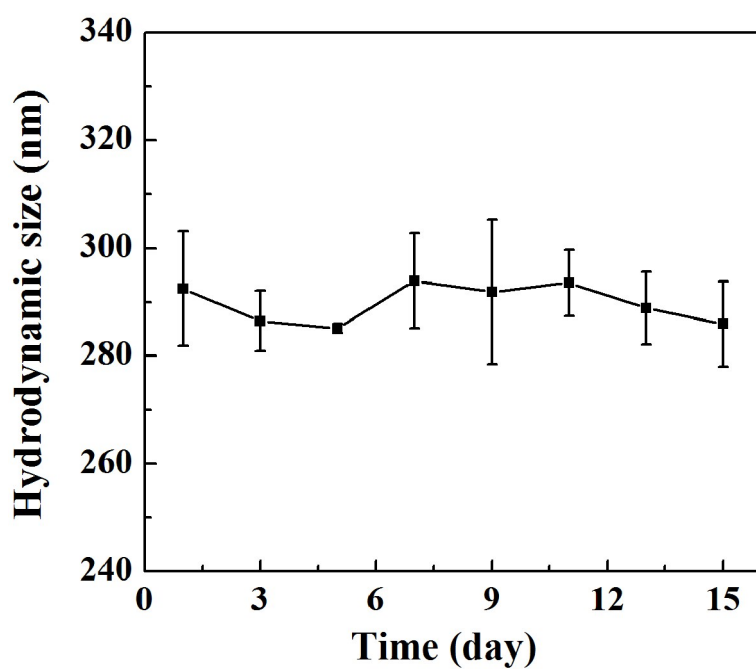


Fig. S2 The hydrodynamic size of the $\text{Fe}_3\text{O}_4@\text{Mn}_3\text{O}_4\text{-PEI-HA}$ NCs dispersed in water at different storage time periods.

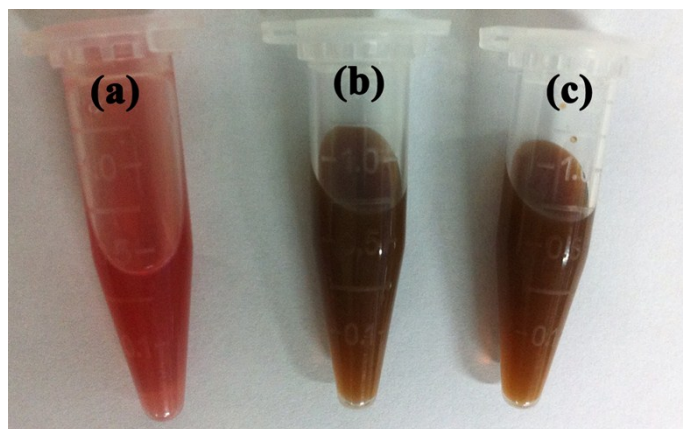


Fig. S3 The photos of the $\text{Fe}_3\text{O}_4@\text{Mn}_3\text{O}_4\text{-PEI-HA}$ NCs dispersed in cell culture medium (a), PBS (b), and water (c) over a period of 15 days.

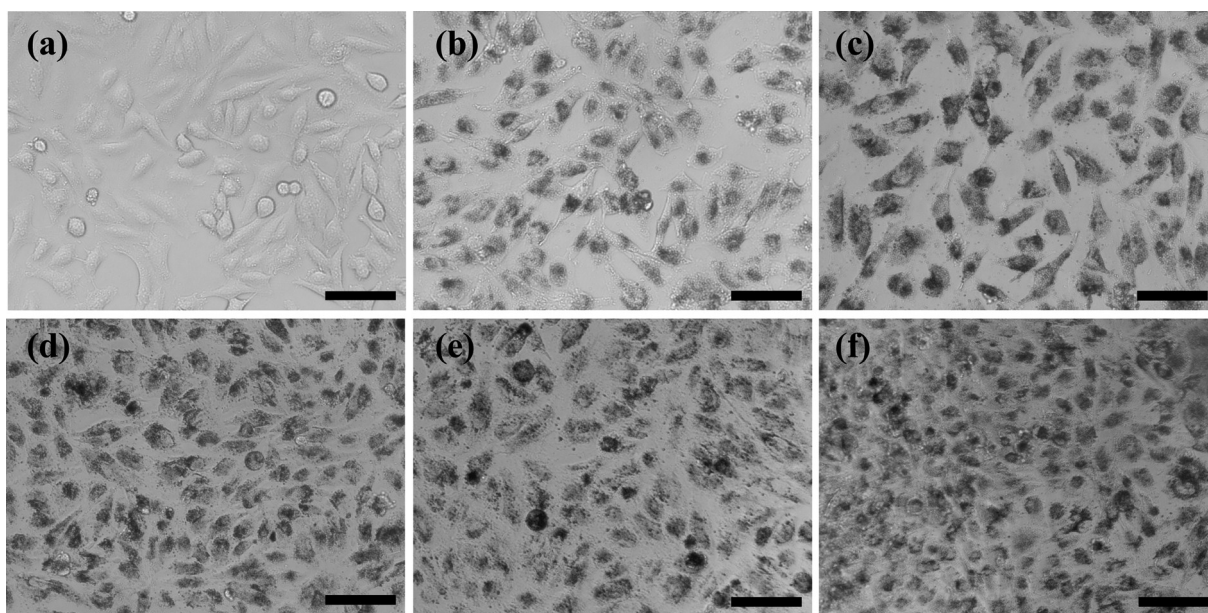


Fig. S4 Phase contrast microscopic images of HeLa cells treated with PBS (a) and the $\text{Fe}_3\text{O}_4@\text{Mn}_3\text{O}_4\text{-PEI-HA}$ NCs at the Mn concentrations of 0.2 mM (b), 0.4 mM (c), 0.8 mM (d), 1.5 mM (e), and 2.0 mM (f) for 24 h. The scale bar in each panel represents 50 μm .