

Electronic Supplementary Information (ESI)

Dual Purpose Prussian Blue Nanoparticles for Cellular Imaging and Drug Delivery: A New Generation of T_1 -Weighted MRI Contrast and Small Molecule Delivery Agents

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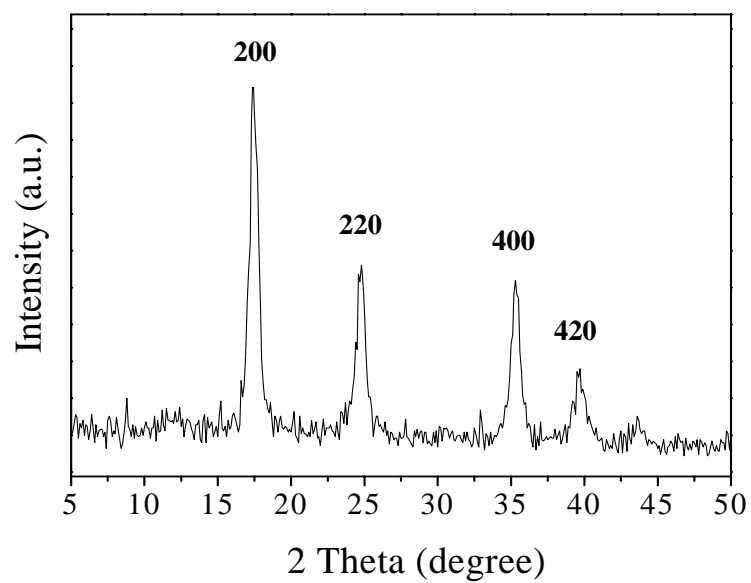


Fig. S1 XRD pattern of the PBNPs.

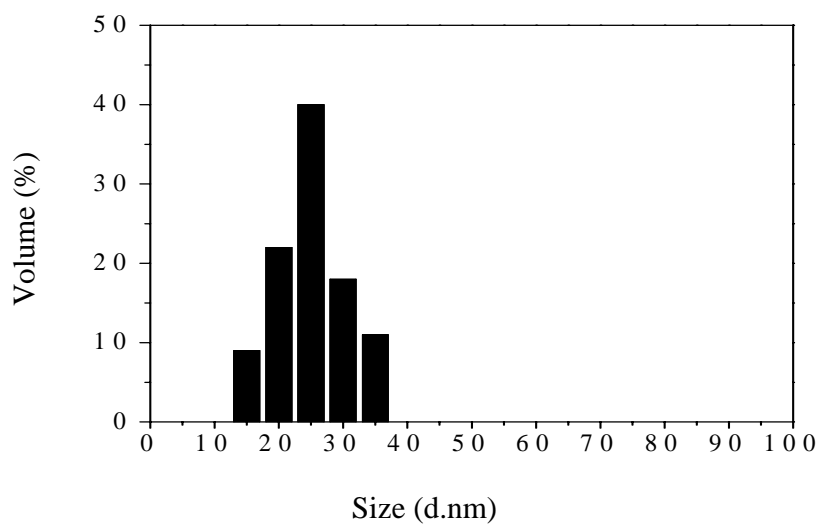


Fig. S2 Size distributions of PBNPs as determined by the dynamic light scattering (DLS) method

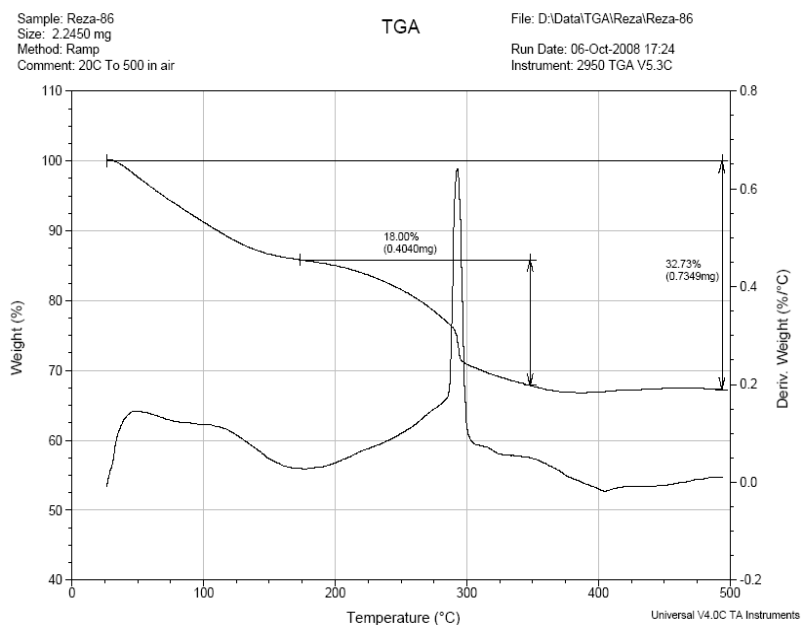


Fig. S3a The TGA curve of uncoated PBNPs.

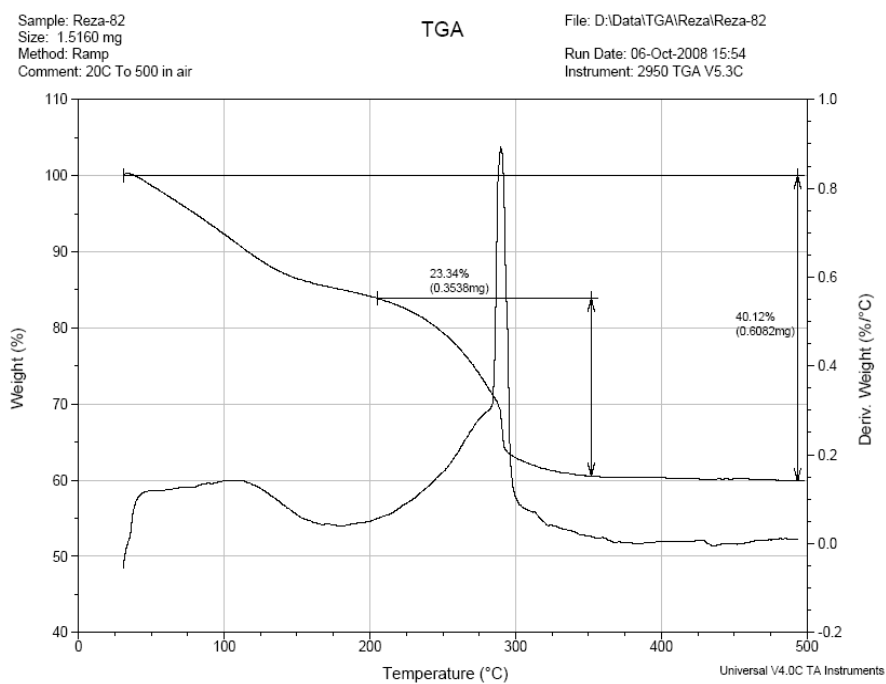


Fig. S3b The TGA curve of citrate coated PB nanoparticles.

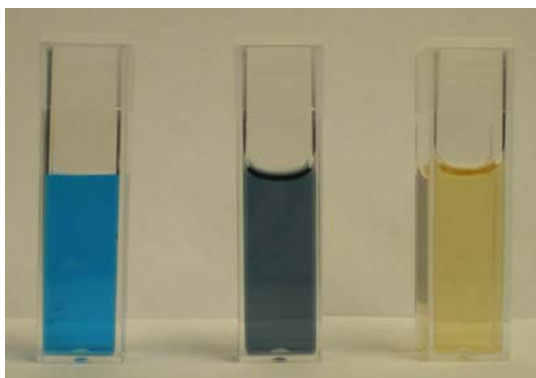


Fig. S4a Digital camera images of the PBNPs incubated in water at 37 °C for 24 h (left), incubated in serum at 37 °C for 24 h (middle), and untreated serum (right).

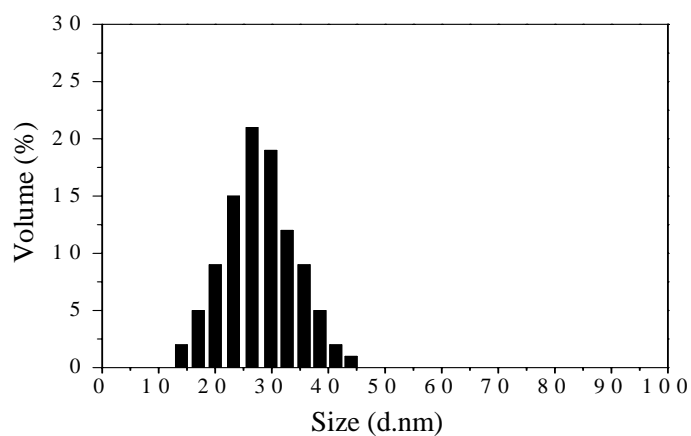


Fig. S4b DLS diagram of the PBNPs incubated in serum at 37 °C for one week.

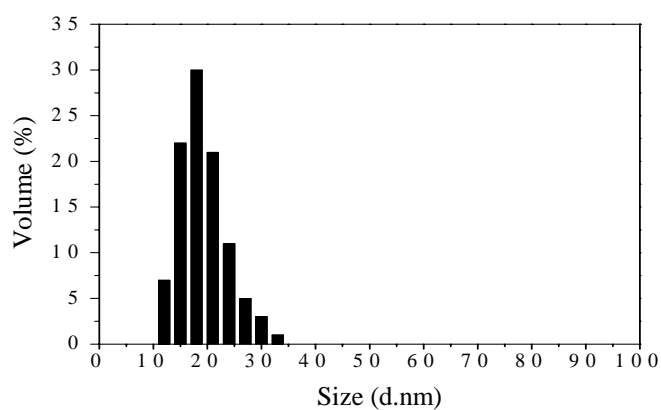


Fig. S4c DLS diagram of the PBNPs incubated in serum at 37 °C for one month.

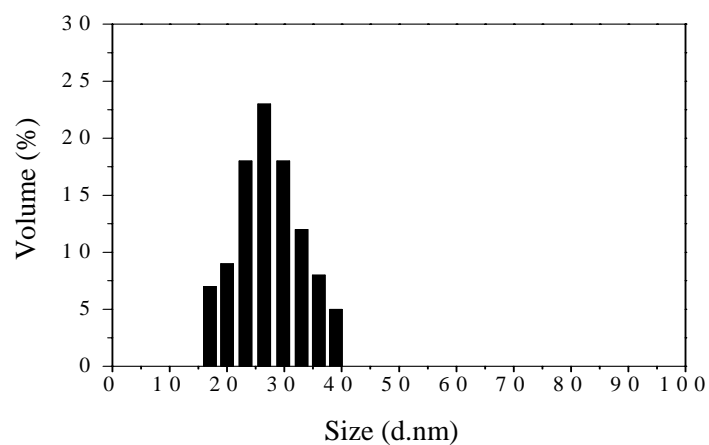


Fig. S4d DLS diagram of PBNPs incubated in water at 37 °C for one week as the control.

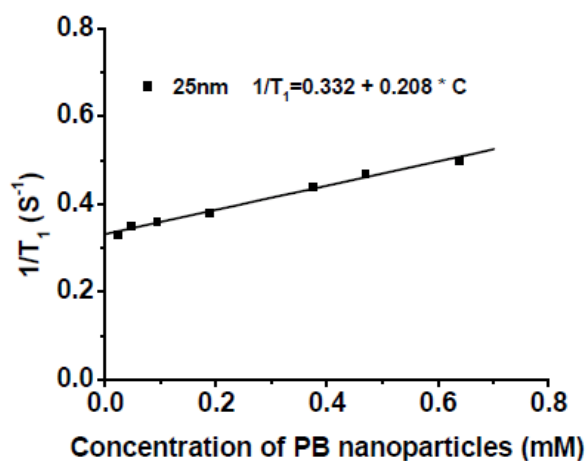


Fig. S5 The proton T₁ relaxation rate versus concentration of PBNPs at 7 T.

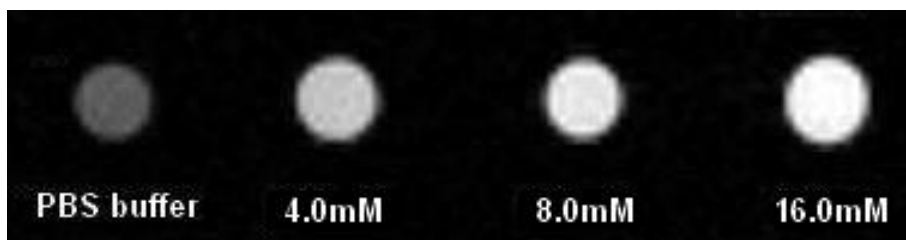


Fig. S6 T₁-weighted MRI phantoms of PB nanoparticles (25 nm) acquired from a 7 T MRI system.

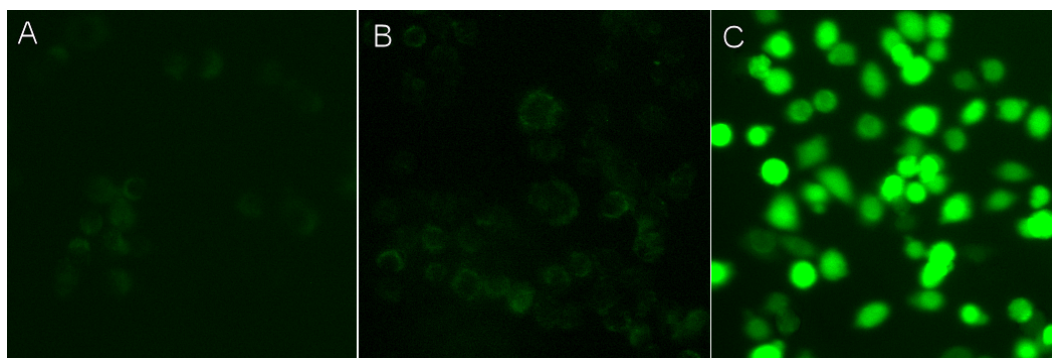


Fig. S7 Intracellular ROS *via* fenton chemistry.

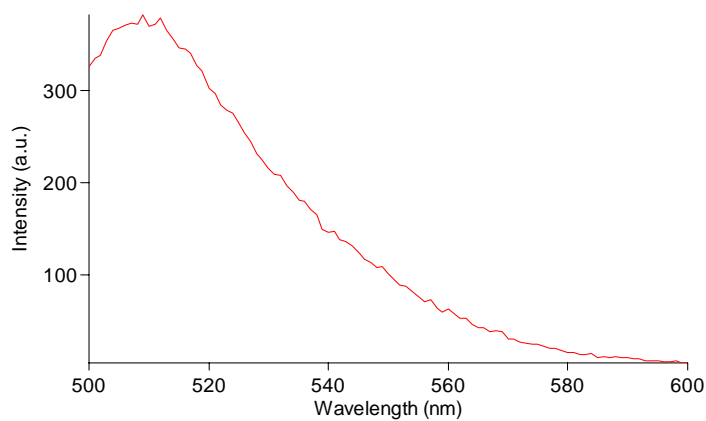


Fig. S8 The emission spectrum of *TRPBNPs* measured by fluorescence spectroscopy (the excitation wavelength is 490 nm).

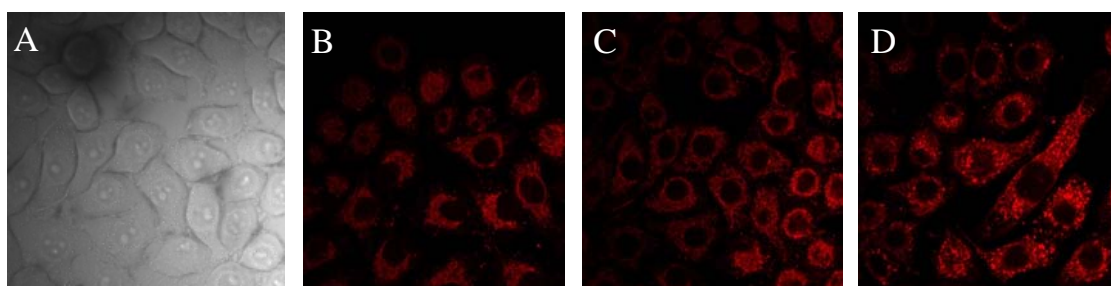


Fig. S9 Confocal microscopy images of HeLa cells (a) and HeLa cells incubated with TRPBNPs for 2hrs (B) 4hrs (C) and 24hrs (D).