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Research article

Radioprotective effect of nanoceria and magnetic flower-like iron oxide

microparticles on gamma radiation-induced damage in BSA protein

Running Title: Radioprotective Effect of Nanostructures on BSA

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Appendix



Figure 1S. Far-UV CD spectra of (A) native BSA (0.4 mg/mL) and (B) IR-BSA in different concentration of CNPs in PBS 10 mM, pH = 7 at room temperature and dose of 3 Gy.



Figure 2S. Far-UV CD spectra of (A) native BSA (0.4 mg/mL) and (B) IR-BSA in different concentration of FIOMPs in PBS 10 mM, pH=7 at room temperature and dose of 3 Gy.



Figure 3S. Fluorescence emission spectra of native BSA (solid line) and IR-BSA (dashed line) in different concentrations of CNPs, The 0.4 mg/mL BSA in 10 mM PBS (pH 7.0) solutions were excited at 280 nm and the emission spectra were recorded from 300 to 440 nm.



Figure 4S. Fluorescence emission spectra of native BSA (solid line) and IR-BSA (dashed line) in different concentrations of FIOMPs, The 0.4 mg/mL BSA in 10 mM PBS (pH 7.0) solutions were excited at 280 nm and the emission spectra were recorded from 300 to 440 nm.



Figure 5S. Stern–Volmer plot for the binding of CNPs (\bullet) and FIOMPs (\blacksquare) with BSA at room temperature respectively.



Figure 6S. Modified Stern-Volmer plots of binding parameters CNPs (\bullet) and FIOMPs (\blacksquare) with BSA at room temperature respectively.



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