Supplementary materials

Radioprotective effects of ultra-small citrate-stabilized cerium oxide nanoparticles *in vitro* and *in vivo*

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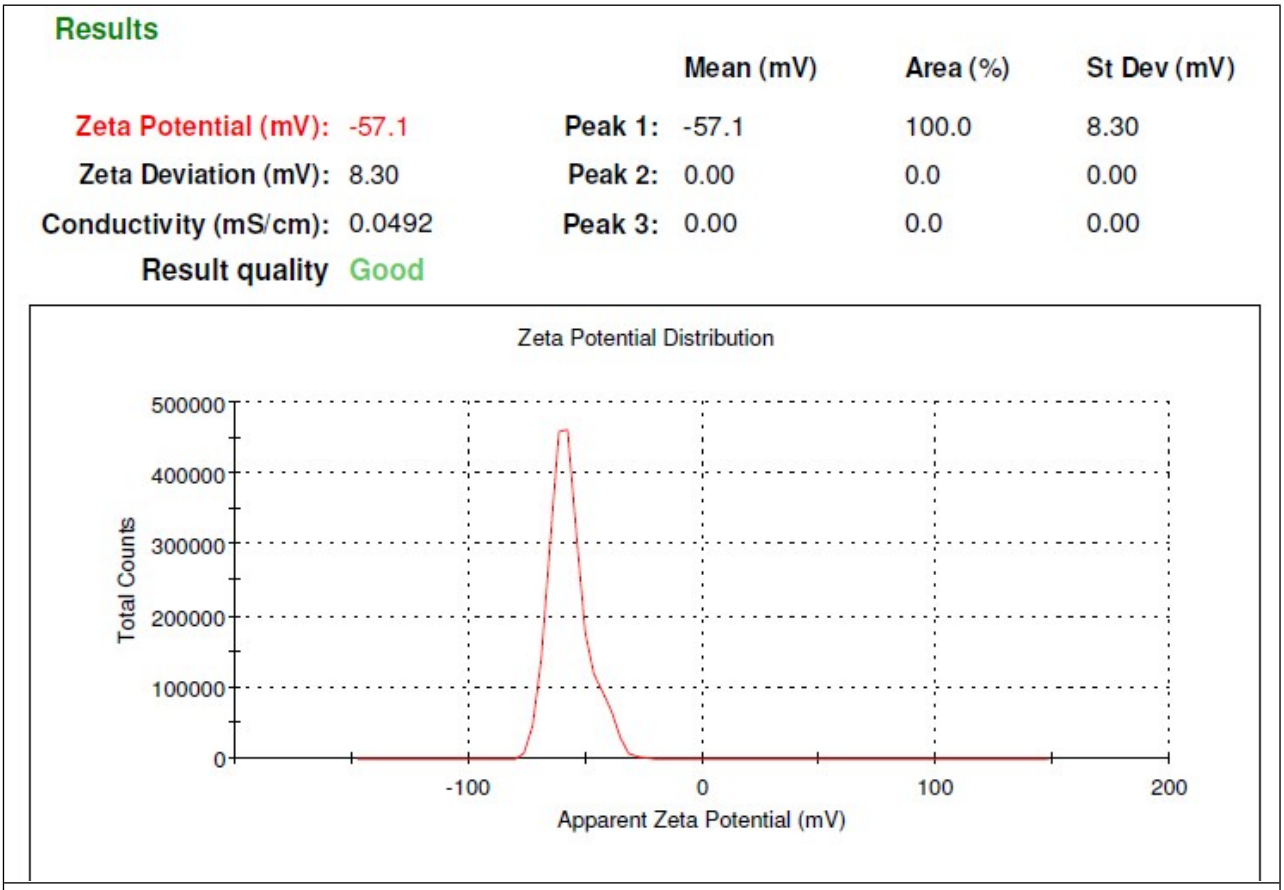


Figure S1 Zeta potential of citrate stabilized cerium oxide nanoparticles

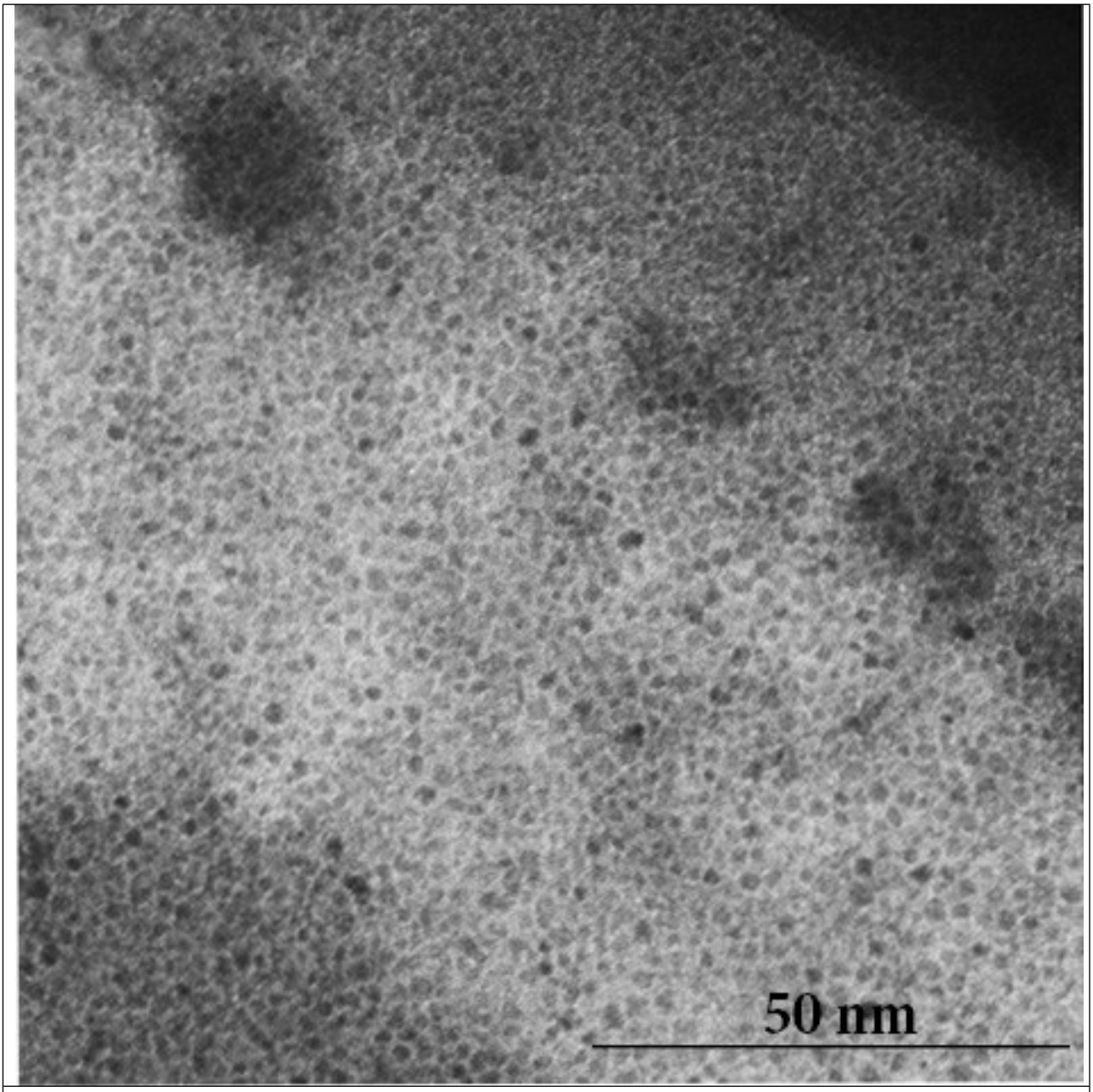


Figure S2 TEM of citrate stabilized cerium oxide nanoparticles

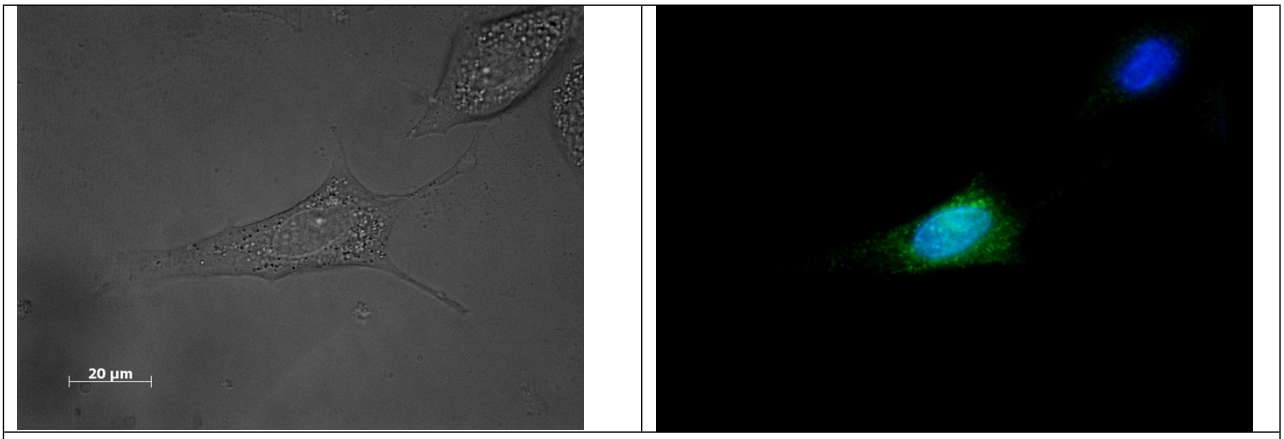


Figure S3 Intercellular localization of citrate-stabilized oxide nanoparticles in primary embryonic fibroblasts. Nuclei staining by Hoechst 33342.

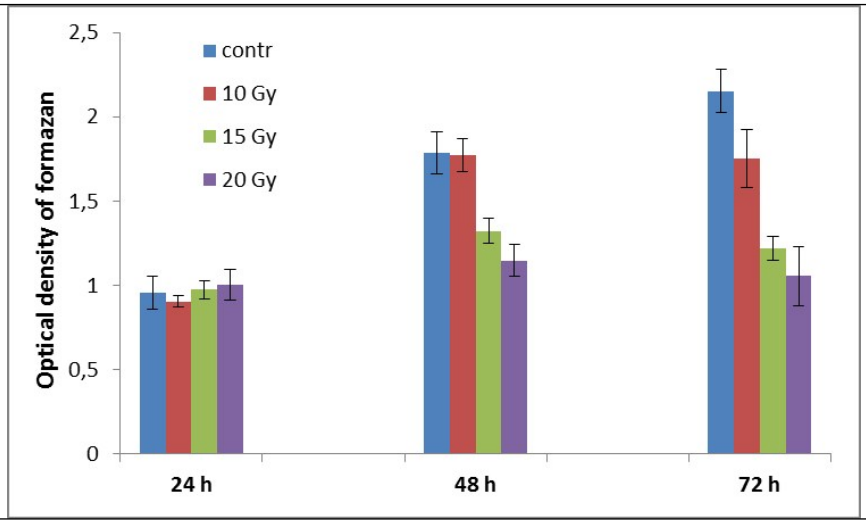
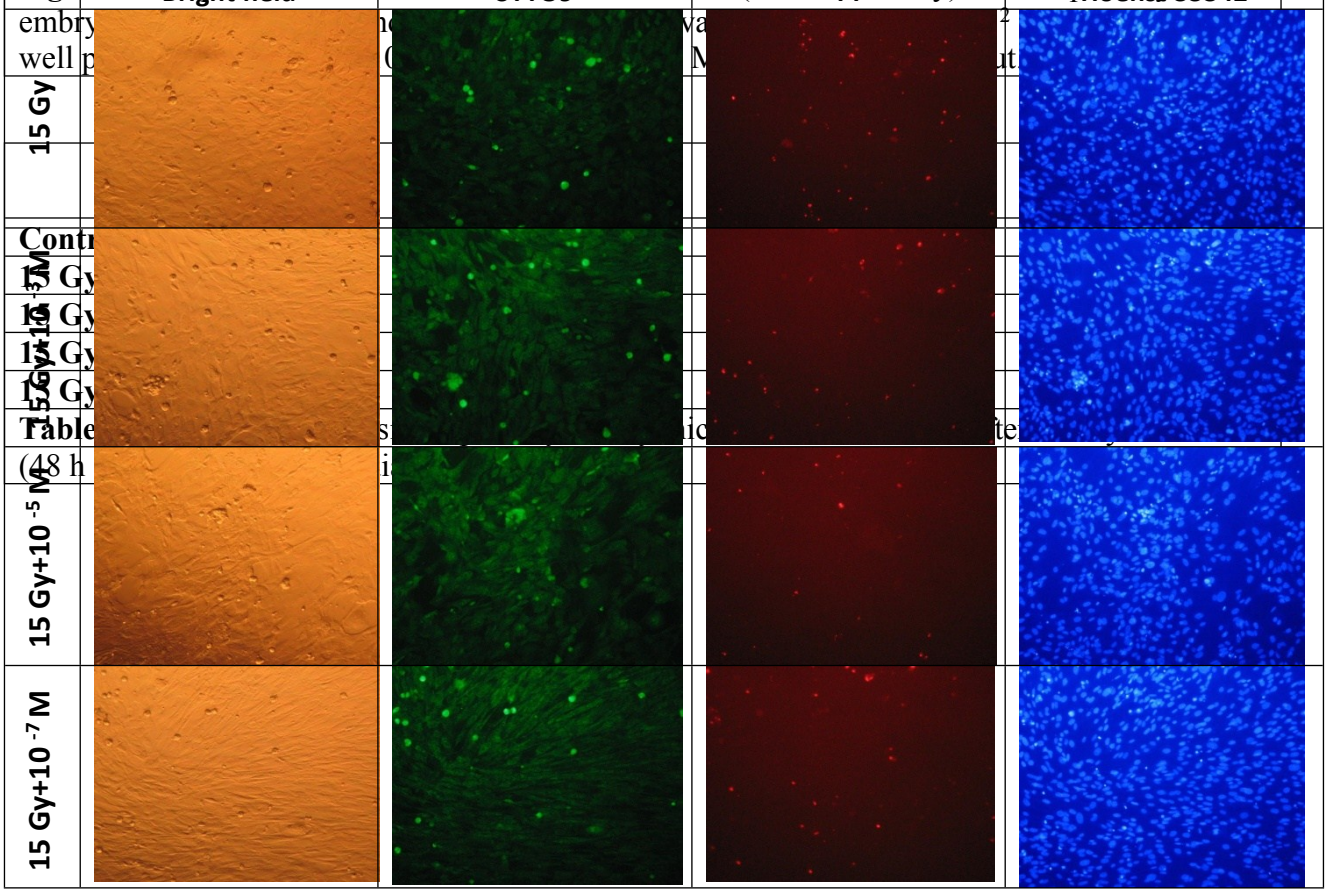


Figure S4. Optimization of the LD 50 radiation dose (via MTT assay) for the primary mouse embry… h… va… 2… well p… (… M… ut…



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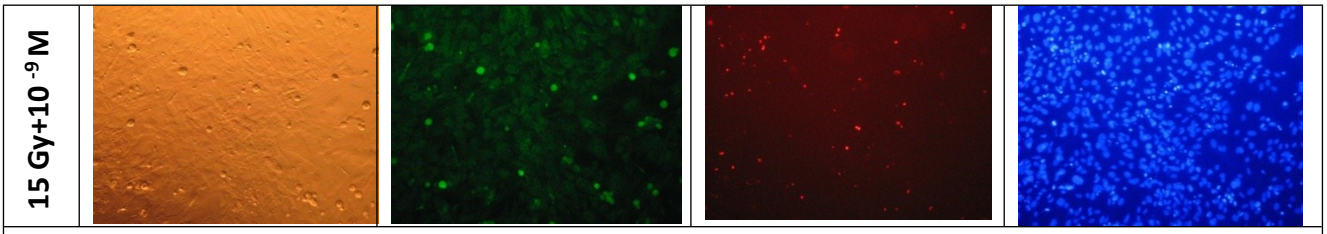

Figure S5 LIVE/DEAD (Syto 9 and propidium iodide dyes) and morphological analysis of primary embryonic murine fibroblasts after 15 Gy X-ray irradiation (48 h cultivation after irradiation).

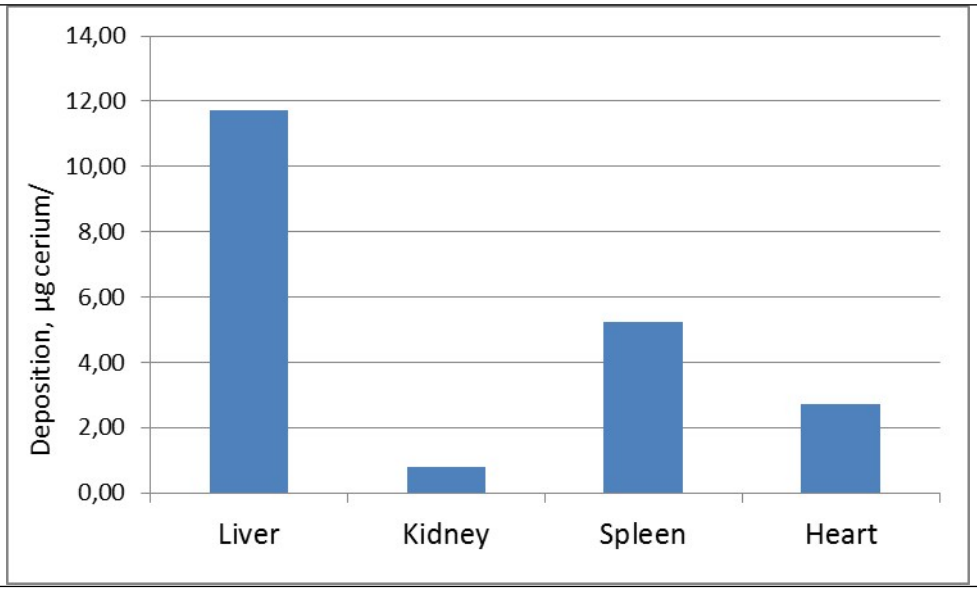

Figure S6 Biodistribution of cerium oxide nanoparticles administered SHK mice. Mice were administered nanoceria at 8,3 µM/g via intraperitoneal routes. Control mice were administered PBS. Spleen, heart, kidney and liver were collected a week after cerium oxide nanoparticles administration and were evaluated for cerium deposition concentrations using inductively coupled plasma mass spectrometry (ICP-MS). The liver showed the greatest deposition followed closely by the spleen.