-Supporting Information-

Iron-oxide Colloidal Nanocluster as Theranostic Vehicles and their Interactions at the Cellular Level

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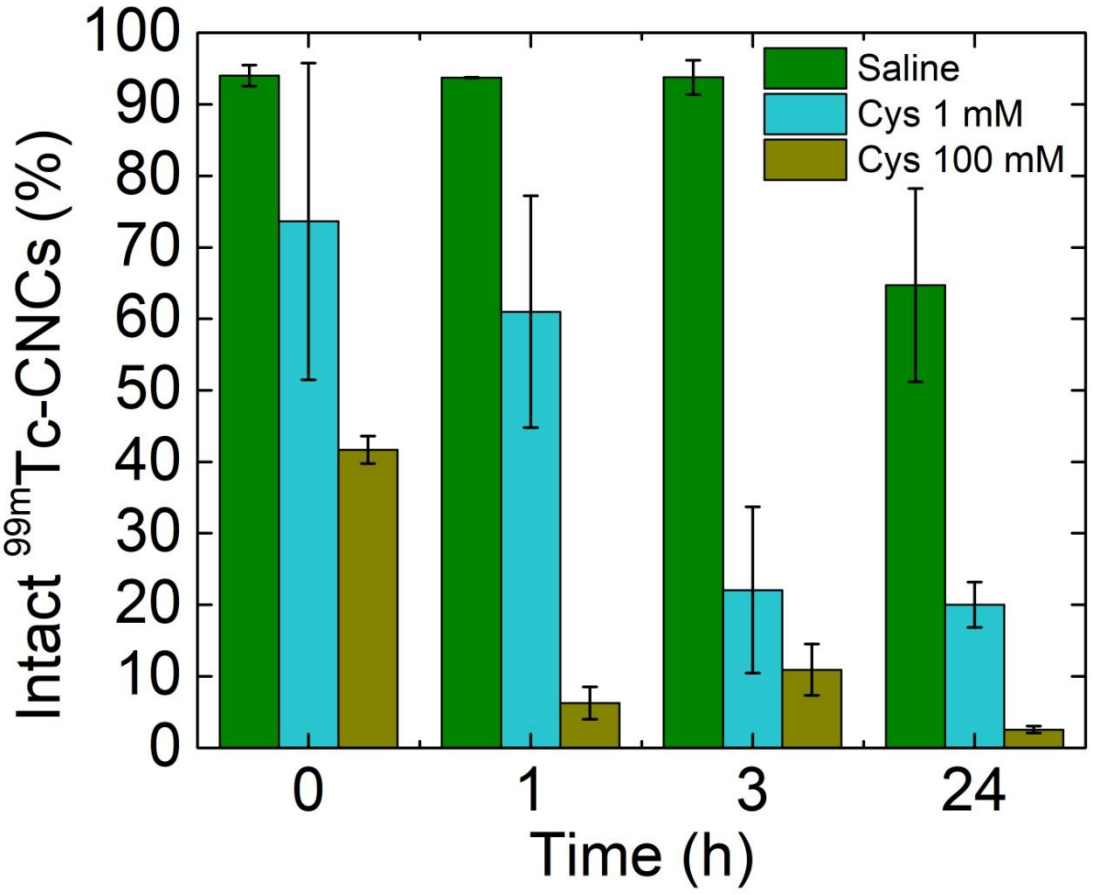
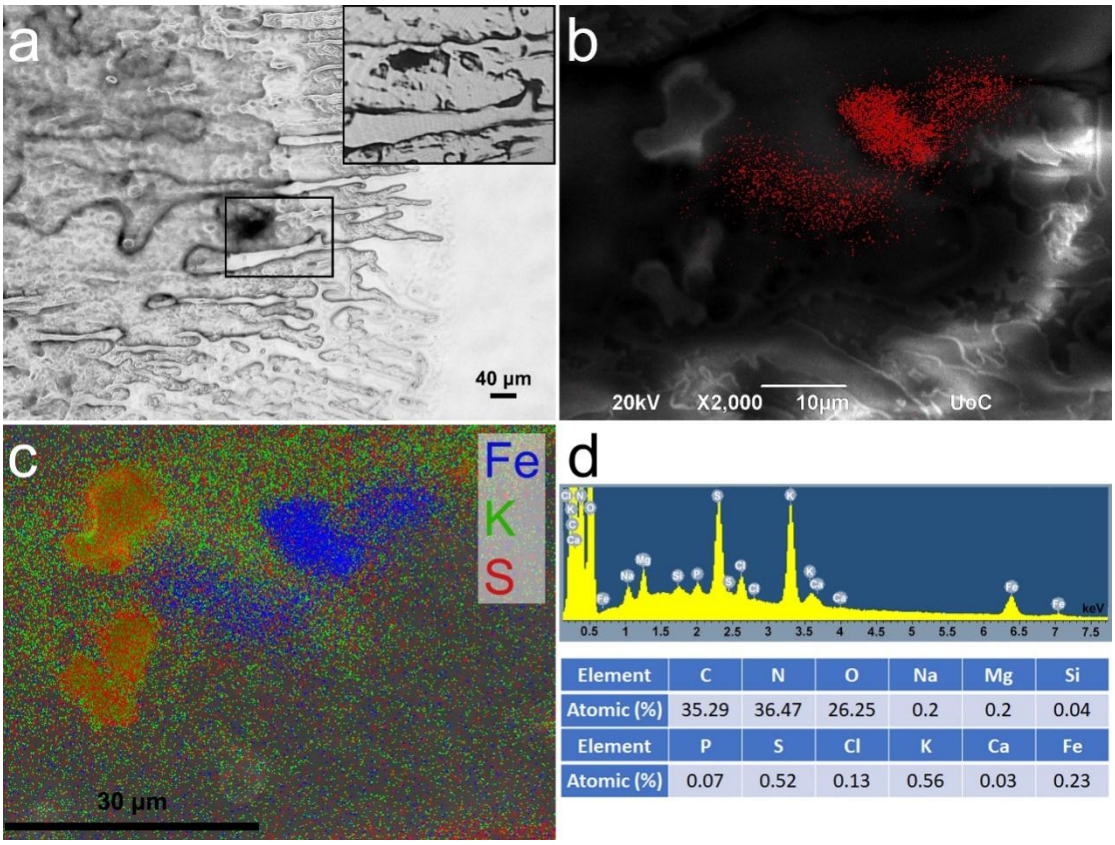


Figure S1. Percentage of intact radiolabeled nanoclusters (D_{TEM}~ 73 nm) at 1, 3 and 24 h post-preparation (p.p.) under aqueous solution (NaCl 0.9% v/v)) and against trans-chelation (1 mM and 100 mM Cysteine solution); (means ±standard deviation, (n=2)).



Element	C	N	O	Na	Mg	Si
Atomic (%)	35.29	36.47	26.25	0.2	0.2	0.04
Element	P	S	Cl	K	Ca	Fe
Atomic (%)	0.07	0.52	0.13	0.56	0.03	0.23

Figure S2. Images from an optical microscope (a), a scanning electron microscope with the superimposed EDS mapping (only for the Fe content – regions colored in red) (b) of the dried urine collected after 1 h from the intravenous injection of the CNCs in a mouse model. Elemental mapping and EDS analysis obtained from the same area (c, d).

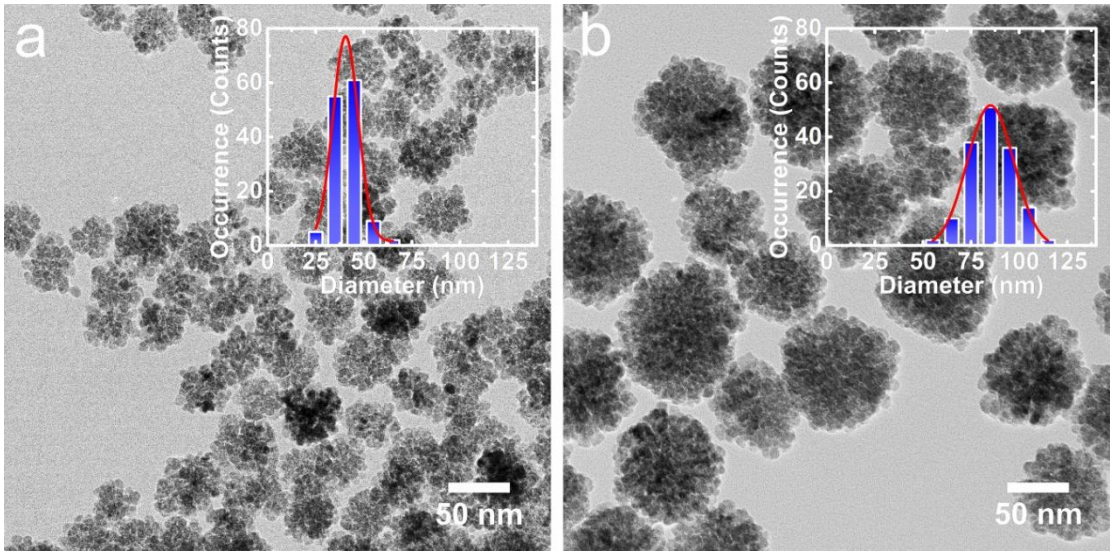


Figure S3. Low magnification TEM images and size distribution of specimens entailing 40 (a) and 85 (b) nm diameter nanoclusters.

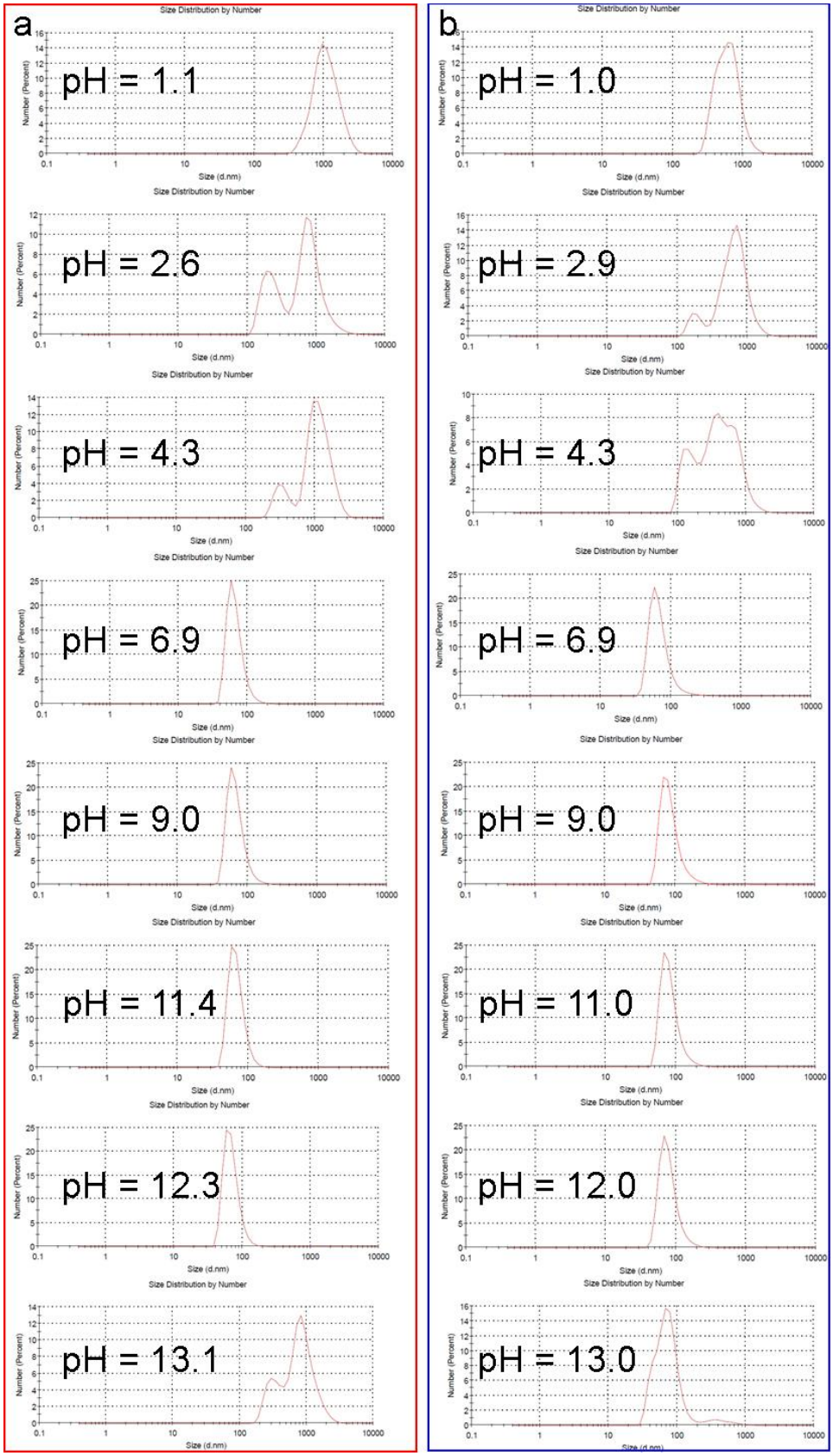


Figure S4. The size distribution of the 40 nm (a) and 85 (b) nm nanoclusters as a function of the colloidal solution pH variation, characterized by Dynamic Light Scattering (DLS) weighted by number.

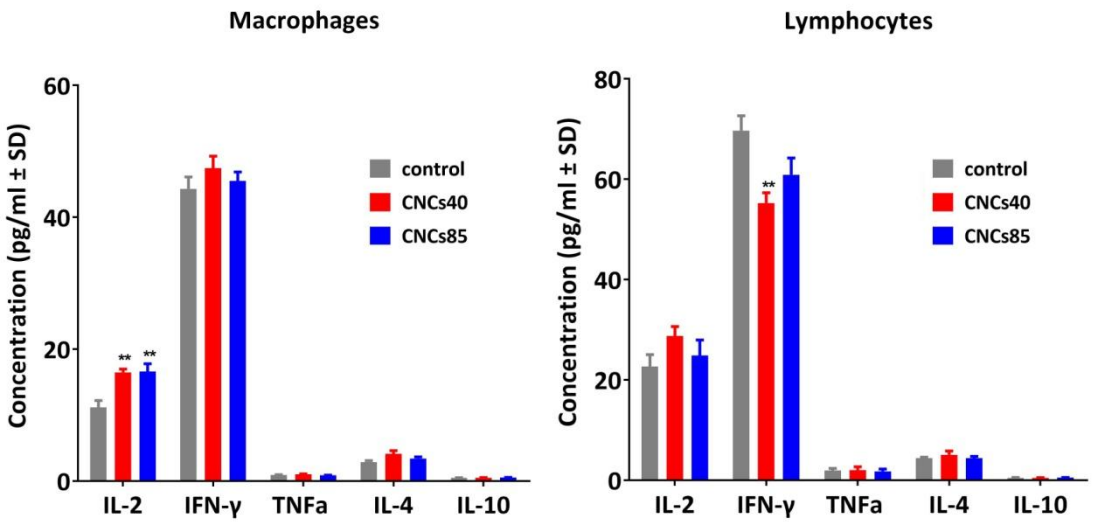


Figure S5. Cytokine content in lymphocytes and macrophages isolated from spleen white cells. The latter were cultures of supernatants incubated for 48 hr in the presence of 40 and 85 nm CNCs (200 Fe μg/ml). The results represent the mean of 3 experiments and are expressed as pg/ml ± SD. **: $p<0.005$.