

## Supporting Information

### *Renal Clearance and Degradation of Glutathione-coated Copper Nanoparticles*

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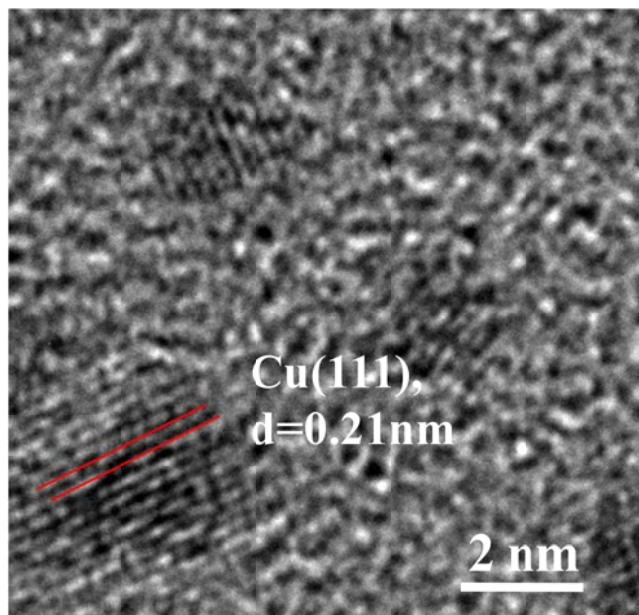
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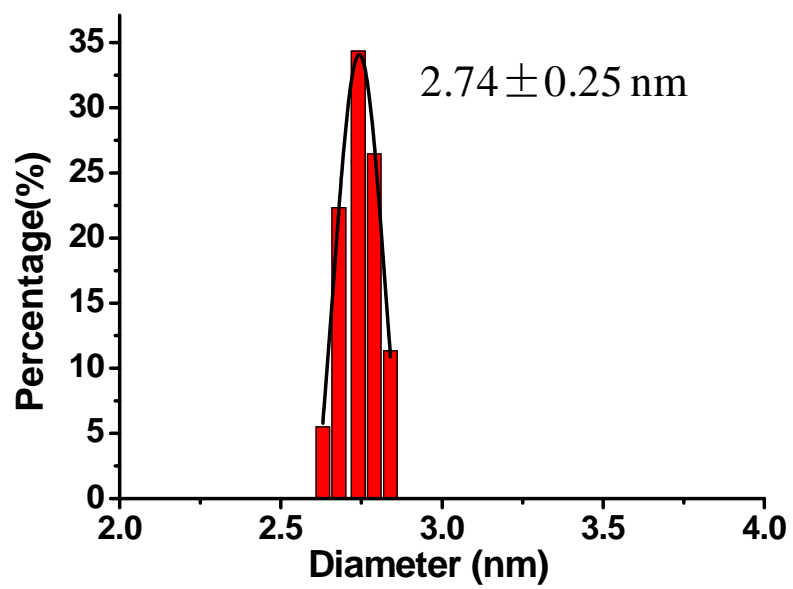
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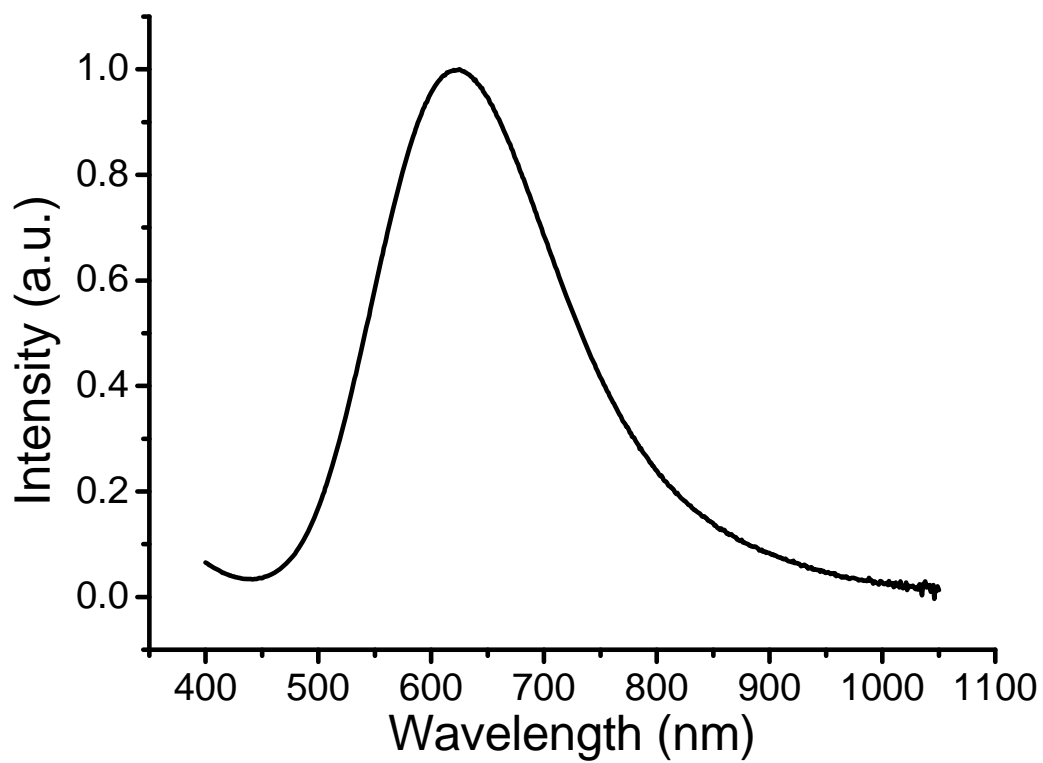
**Figure S1.** The high resolution TEM image of luminescent CuNPs, showing the lattice spacing of Cu(111) plane is  $\sim 0.21$  nm.



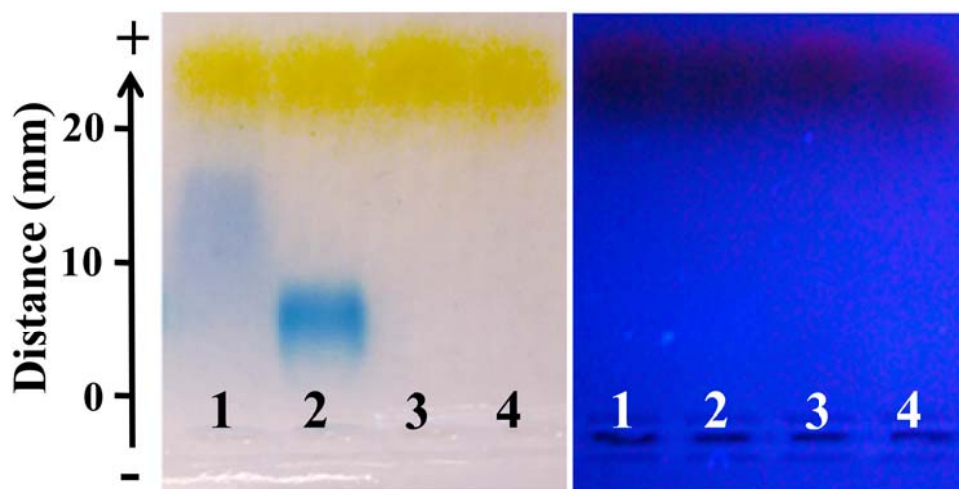
**Figure S2.** Hydrodynamic diameter of the luminescent CuNPs obtained from the dynamic light scattering (DLS) measurement.

**Table S1.** Biodistribution of Cu(II)-GSSG complex and luminescent CuNPs in BALB/c mice 24 h after the tail-vein injection (N=6).

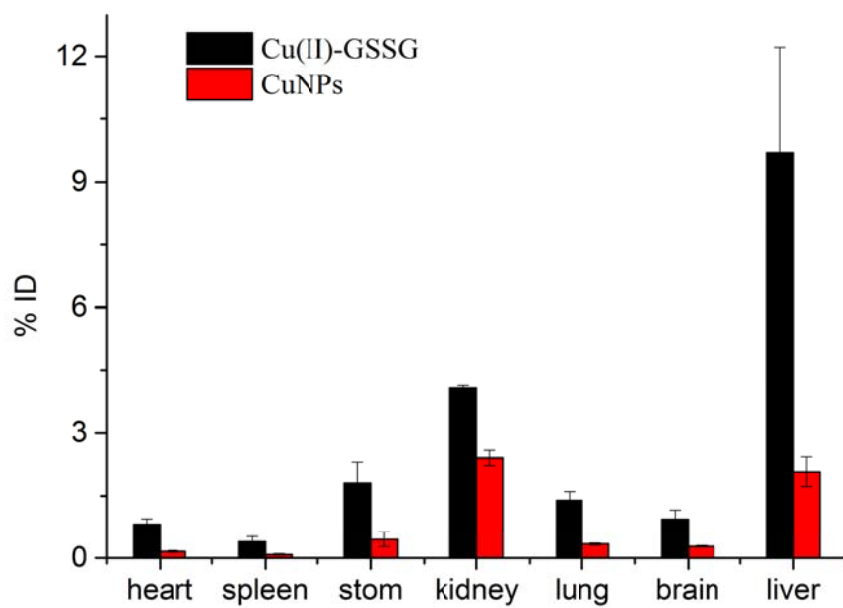
%ID/g	Cu(II)-GSSG	CuNPs
Heart	3.09±0.92	1.35±0.27
Liver	36.24±9.84	17.83±4.77
Spleen	1.56±0.99	0.50±0.14
Stomach	3.03±2.36	0.82±0.39
Kidney	3.44±1.08	1.94±0.77
Lung	2.22±1.96	0.89±0.34
Brain	1.64±0.42	0.84±0.23
Blood	0.46±0.30	0.20±0.12
Muscle	0.97±0.38	0.36±0.08
S-intestine	2.16±1.49	1.06±0.75
L-intestine	3.52±1.35	1.32±0.69
Tail	2.18±0.63	1.37±0.62



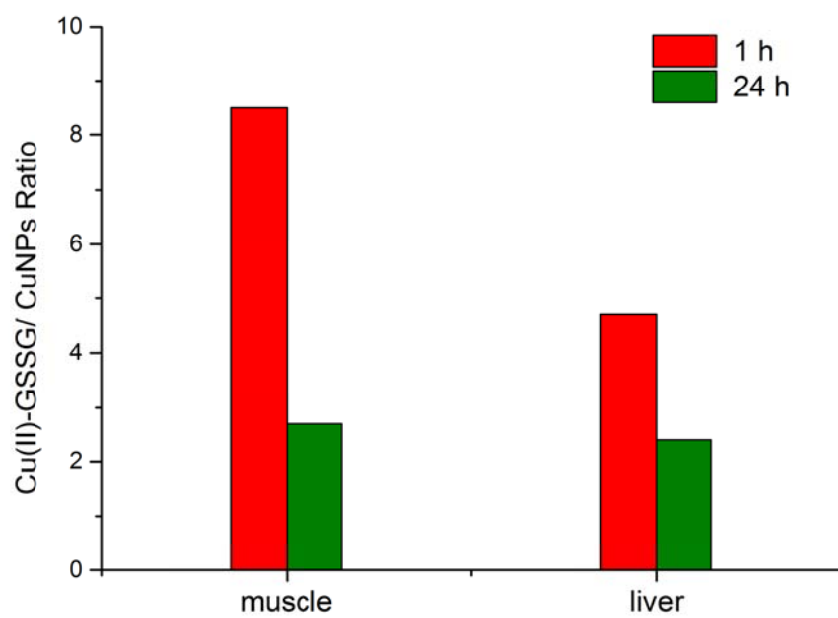
**Figure S3.** The absorption spectrum of blue Cu(II)-GSSG complex.



**Figure S4.** Agarose gel electrophoresis of luminescent GS-CuNPs with (well 2, 4) or without (well 1, 3) incubation with fetal bovine serum (FBS) at pH 7.4. Left and right pictures were taken under daylight and UV light (365 nm), respectively. Serum proteins were stained by Coomassie brilliant blue 250 (CBB250) to confirm their band position. Blue band in wells 1 and 2 were free CBB250 and CBB250-stained proteins, respectively.



**Figure S5.** Biodistribution of CuNPs and Cu(II)-GSSG complexes at 1 hr. p.i.



**Figure S6.** Cu(II)-GSSG/CuNPs ratios in the muscle and liver at 1 hr and 24 hr. p.i., respectively.