Supporting Information

Microwave-assisted Synthesis of Highly Luminescent AgInS2/ZnS Nanocrystals for Dynamic Intracellular Cu (II) Detection

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Fig. S1 EDS spectrum of the AgInS2/ZnS NCs

The result indicated the presence of Ag, In, Zn and S.
Fig.S2 Photographs of water-soluble AgInS$_2$ NCs (a) and AgInS$_2$/ZnS NCs (b) under a 365 nm UV illumination.
**Fig. S3** Cell viability assay of HeLa cells incubated with different concentrations of AgInS$_2$/ZnS NCs for 24 h, respectively. Blank (A), 200 µg mL$^{-1}$ (B), 100 µg mL$^{-1}$ (C), 50 µg mL$^{-1}$ (D), 25 µg mL$^{-1}$ (E), 10 µg mL$^{-1}$ (F), 5 µg mL$^{-1}$ (G)
In order to assess the effect of reactive oxygen species (ROS) on the PL intensity of AgInS$_2$/ZnS probes, the PL quenching effect of ROS to probes was investigated. The concentrations of H$_2$O$_2$, NaClO, and ascorbic acid (Vc) were all 10.0 µM. O$_2^-$ was generated by the reaction of H$_2$O$_2$ with NaClO as previously reported.\cite{S1} As shown in Fig. S4, only a little change of the PL intensity was observed for the H$_2$O$_2$, 10 µM Vc, and 10 µM O$_2^-$. This result ruled out the possibility of intracellular fluorescence quenching of the probes by ROS.

References