

Electronic Supplementary Information

Highly Selective Luminescent Nanostructures for Mitochondria Imaging and Targeting

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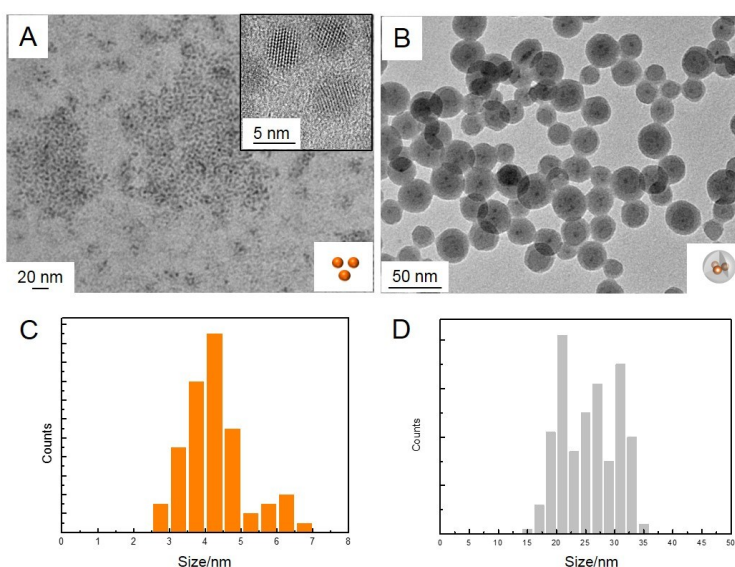


Figure S 1. TEM micrographs (A, B) and related size distribution (C, D) of CdSe@ZnS QDs (A, C) and QD@SiO₂ nanoparticles (B, D), respectively.

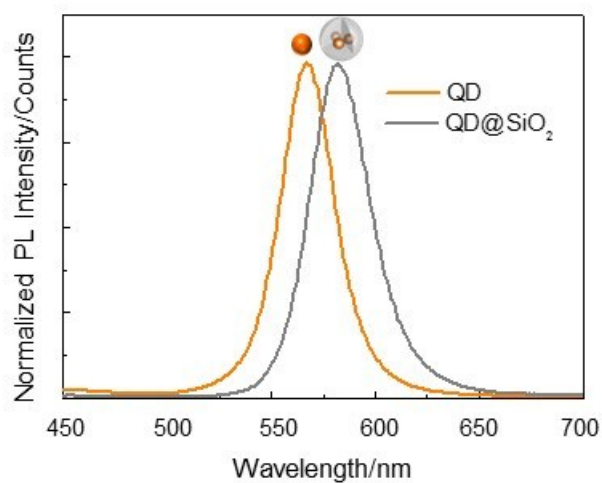


Figure S 2. PL intensity of QD (orange line) and QD@SiO₂ (blue line) samples

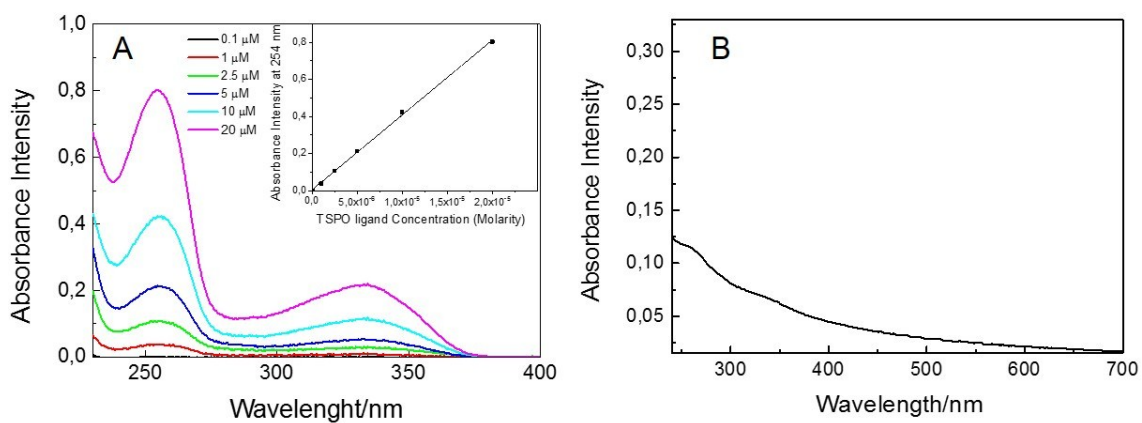


Figure S 3. (A) UV-Vis absorbance spectra of TSPO ligand varying its concentration in the range of 0.1- 20 μM , calibration curve (inset) of TSPO ligand as a first order linear fit of the absorbance at 254 nm vs TSPO ligand concentration ($\epsilon_{254 \text{ nm}} = 35945 \pm 710 \text{ L cm}^{-1}/\text{mol}$); (B) UV-Vis Absorbance spectra of NPs after physical adsorption of the TSPO ligand onto amine functionalized QD@SiO₂

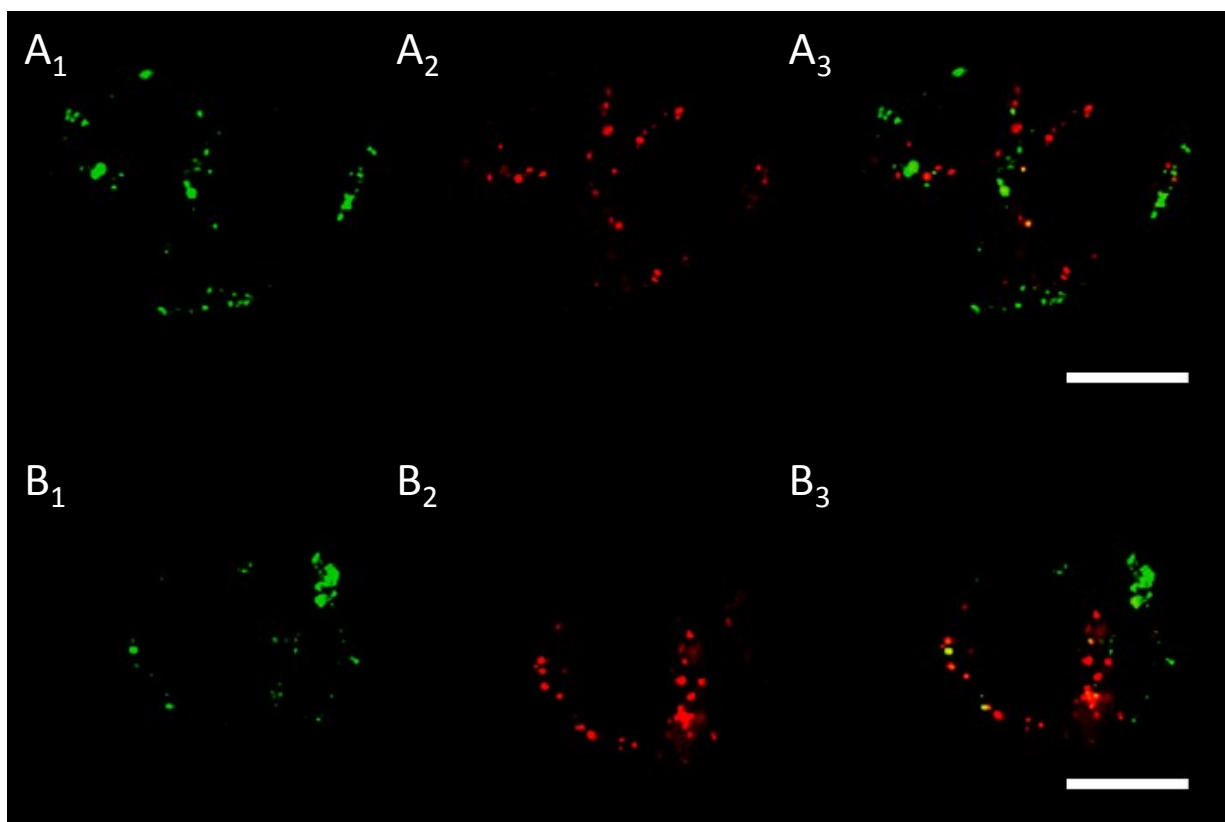


Figure S 4. Representative single confocal slices of live C6 cells imaged with LysoTracker Green (A₁, B₁) amino functionalized QD@SiO₂ NPs (A₂) and TSPO ligand-conjugated QD@SiO₂ NPs (B₂). Overlay (A₃, B₃) when the red and green fluorescence converge to yellow, indicates co-localization. Scale bar = 10 μ m.