Electronic Supplementary Information (ESI) for:

Stable water-dispersed organic nanoparticle: its preparation, optical properties, and cell imaging application

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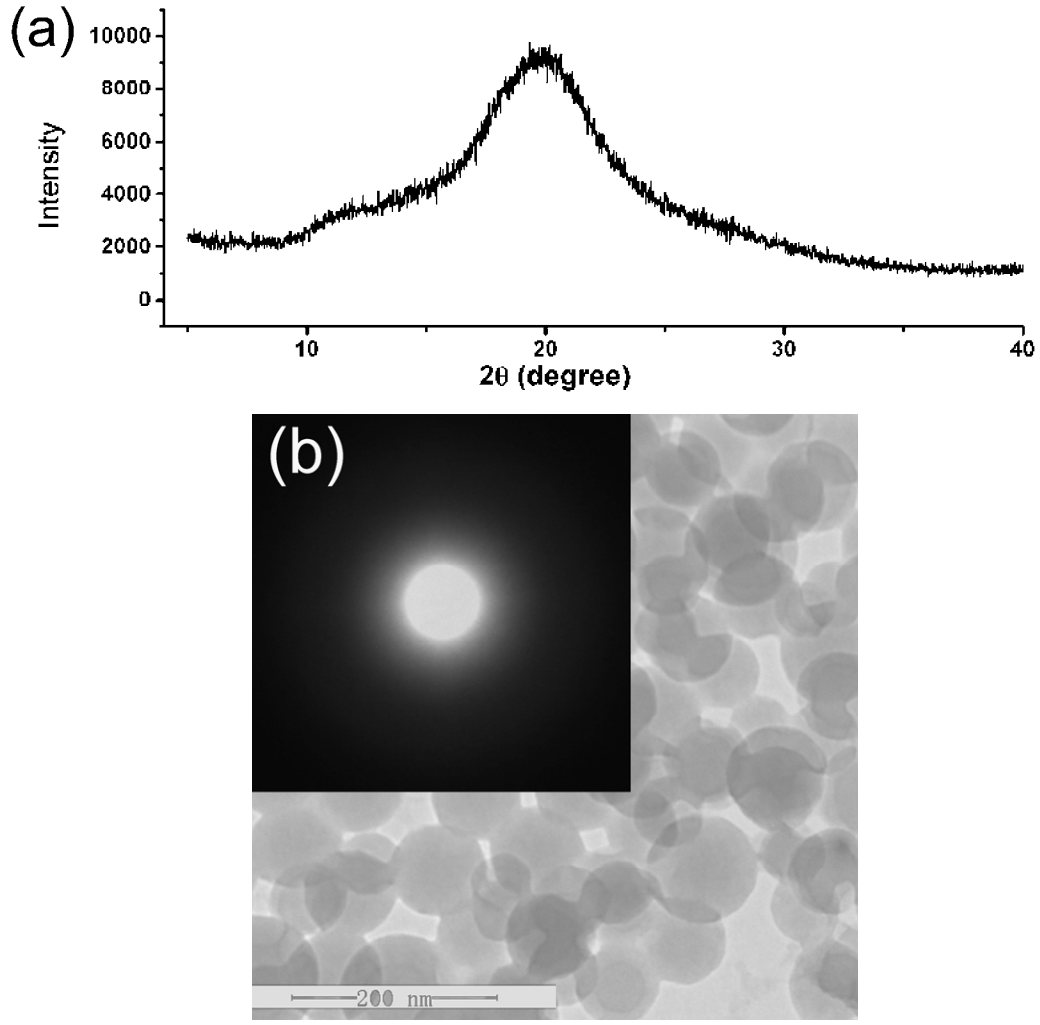

Figure S1. (a) X-ray powder diffraction patterns for DPA-TSB; (b) TEM images of DPA-TSB nanoparticles (after dialysis) with average diameter of 85 nm. Inset is electron diffraction patterns of particles.

The powder X-ray diffraction analysis (Figure 1 a) showed a broad band in the wide angle around 20° for DPA-TSB, demonstrating the amorphous glass nature of DPA-TSB.

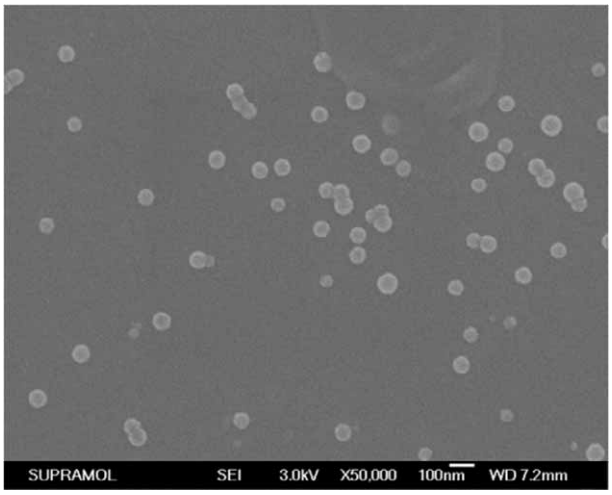

Figure S2. The plate morphology of DPA-TSB NPs in stored sample kept for 8 month.

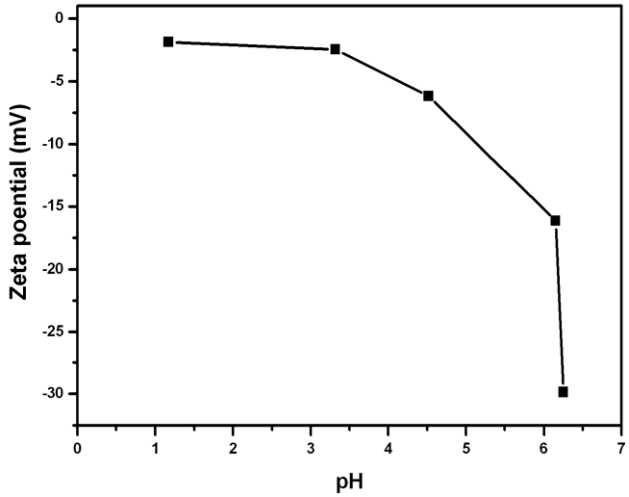

Figure S3. The dependency of surface-potential on DPA-TSB NPs as a function of pH in the NP dispersions.

Hydrochloric acid was hired to adjust the pH value of NP water dispersions. It is found that as the pH value decrease (from 6.25 to 1.17), the surface potential of NP changes from ca. -30 mV to ca. -2 mV. Meanwhile, the average diameter increase greatly (from 70 to 600 nm).These data suggest surface potential on the particles derive from hydroxide adsorption. Meanwhile high stability was result from the high zeta potential.

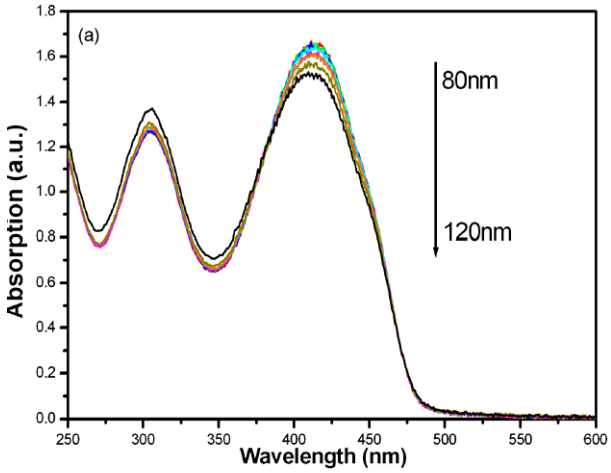

Figure S4. UV-vis absorption spectra of DPA-TSB NPs in water/THF mixed solution with V/V=8/2 with different size.

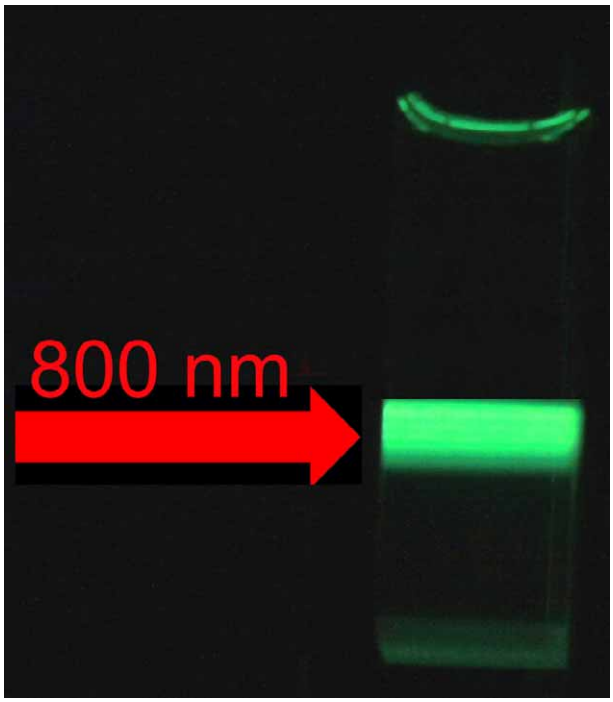

Figure S5. Two-photon fluorescence photograph of aqueous DPA-TSB NPs under excitation at 800 nm.