

Electronic Supplementary Information

Preparation of Biofunctionalized Quantum Dots Using Microfluidic Chips for Bioimaging

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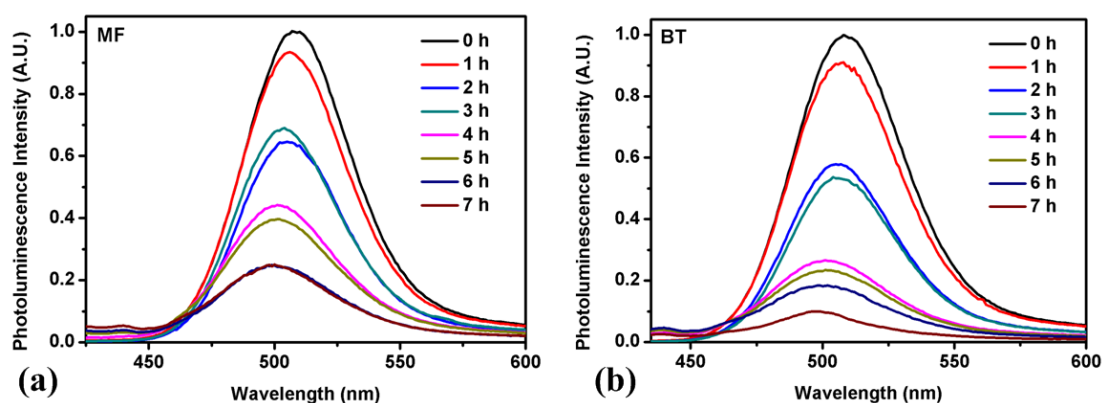


Figure S1. Comparison of photostability between MF-BSA-QDs synthesized in 5 mins and BT-BSA-QDs synthesized in 4 hours. PL spectra of (a) MF-BSA-QDs and (b) BT-BSA-QDs upon different time of UV irradiation.

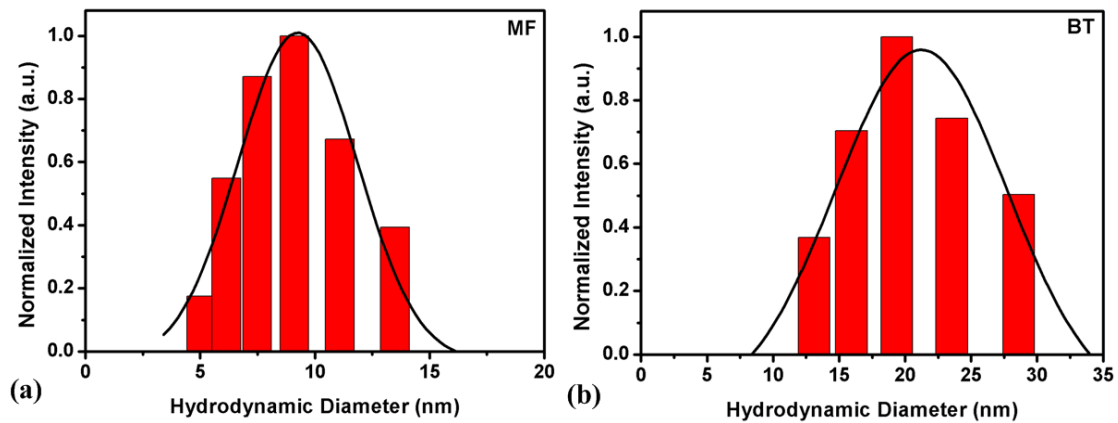


Figure S2. Hydrodynamic size distribution of (a) MF BSA-QDs and (b) BT BSA-QDs in aqueous suspension measured by dynamic light scattering (DLS).

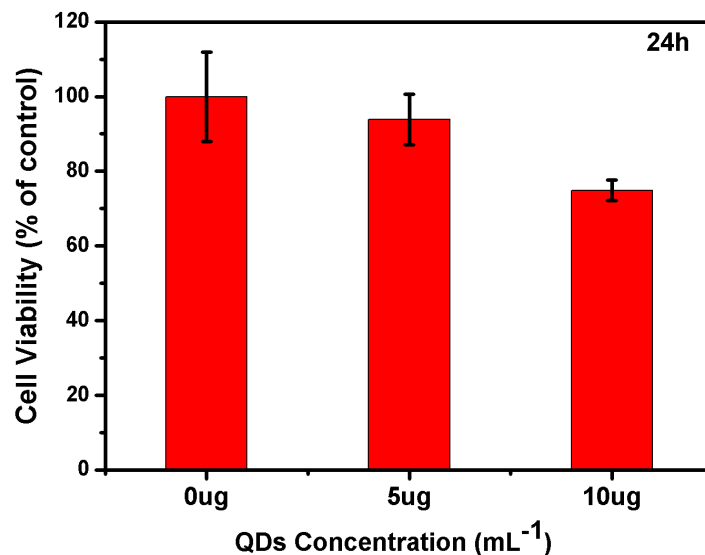


Figure S3. Relative cell viability of RAW264.7 macrophages treated with different concentrations (0-10 μ g/mL) of MF BSA-QDs for 24h.

Cell viability studies were performed by using the MTT assay (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide, Sigma). Briefly, cells were seeded into a 96-well plate and incubated with different concentrations of MF BSA-QD formulations or same amount of PBS solutions (control) for 24h. After that, 18 μ L of MTT (5 mg ml⁻¹) solution was added to each well and the cells were incubated for another 4 h at 37 $^{\circ}$ C with 5% CO₂. Then the solution in the wells was decanted and the purple precipitate was solubilized by adding 150 μ L of dimethyl sulfoxide (DMSO, Sigma) to the sample wells. The absorbance of the mixtures at 490 nm was measured using microplate reader (Bio-Rad). The cell viability was obtained by normalizing the absorbance of the sample wells against that of the control wells.