■ Supplementary Material

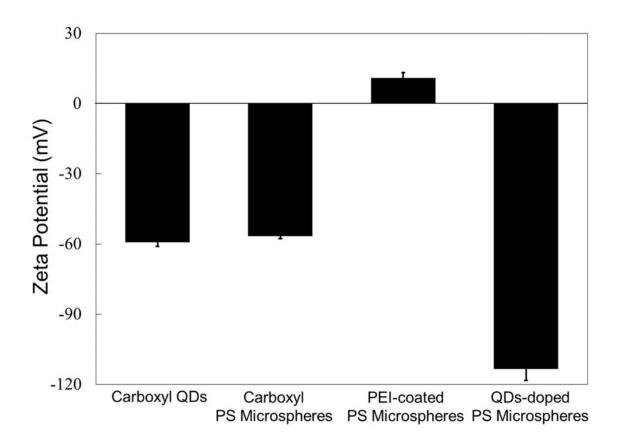


FIG. S1. Results of Zeta (ζ)-potential measurement. CdSe/ZnS QDs and PS microspheres functionalized with carboxyl groups exhibited negative charge (- ζ). PEI-coated PS microspheres exhibited positive charge (+ ζ) due to the presence of amine groups on the surfaces. QDs-doped PS microspheres exhibited negative charge (- ζ) since sufficient carboxyl QDs were adsorbed on the PEI-coated PS matrix. All samples were detected in aqueous media with a specific pH. Error bars are the standard deviation of the ζ values obtained from three independent experiments for each group.

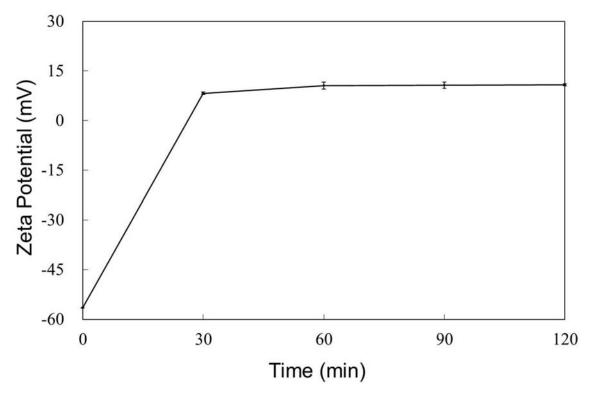


FIG. S2. Variation of Zeta (ζ)-potential of PS microspheres. The ζ value of 3 × 10⁵ PS microspheres during PEI coating was detected every 30 min for up to 2 h. The carboxyl PS microspheres exhibited positive charge (+ ζ) after PEI coating for 30 min, and reached a maximal positive charge one hour after coating began.