Supplementary materials for

Self-assembled Dual Fluorescence Nanoparticles for CD44-targeted Delivery of anti-miR-27a in Liver Cancer Theranostics

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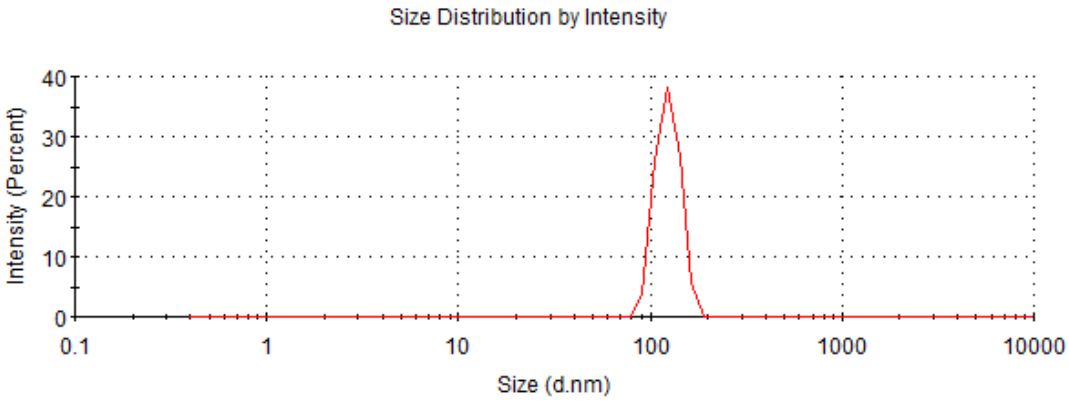

Figure S1. Size distribution of anti-miR-27a/QD-HA-PEI in water.

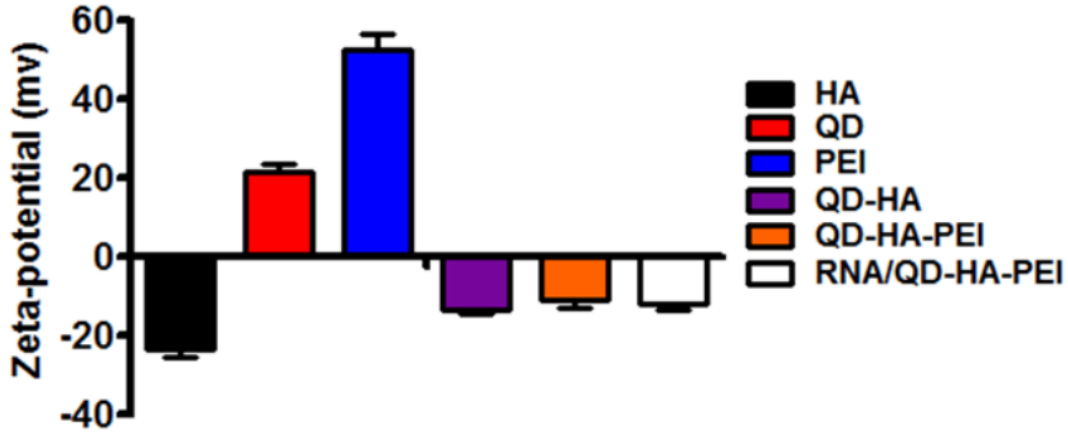

Figure S2. Zeta potentials of HA, PEI, QD, QD-HA, QD-HA-PEI and anti-miR-27a/QD-HA-PEI.

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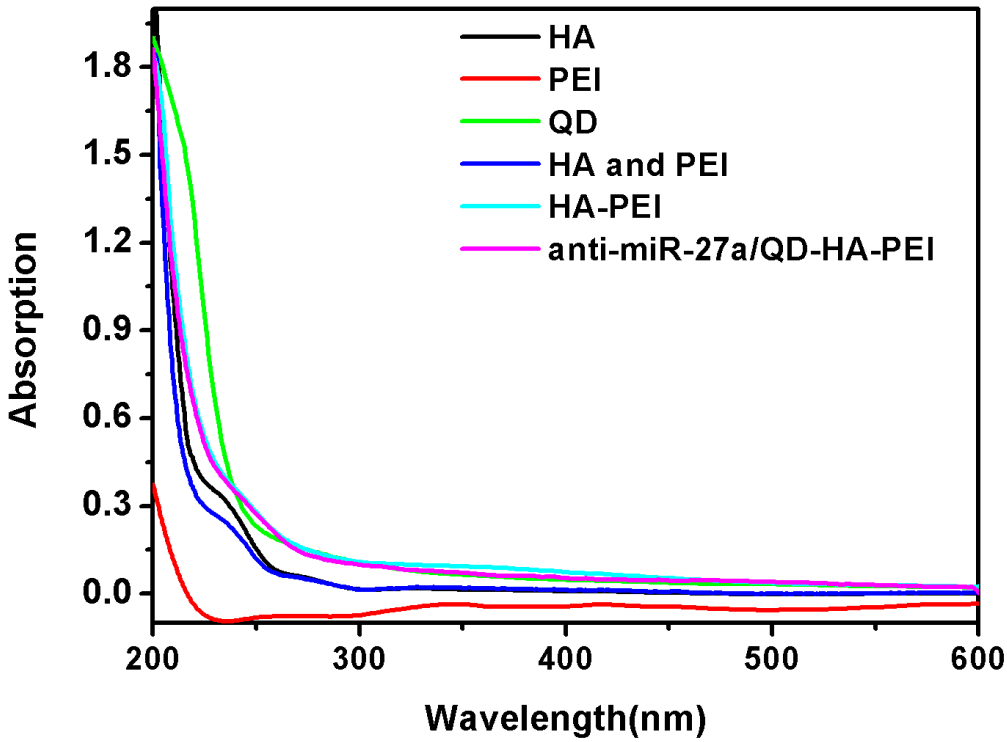

Figure S3. UV-vis spectra of HA, PEI, QD, HA and PEI, HA-PEI and anti-miR-27a/QD-HA-PEI.

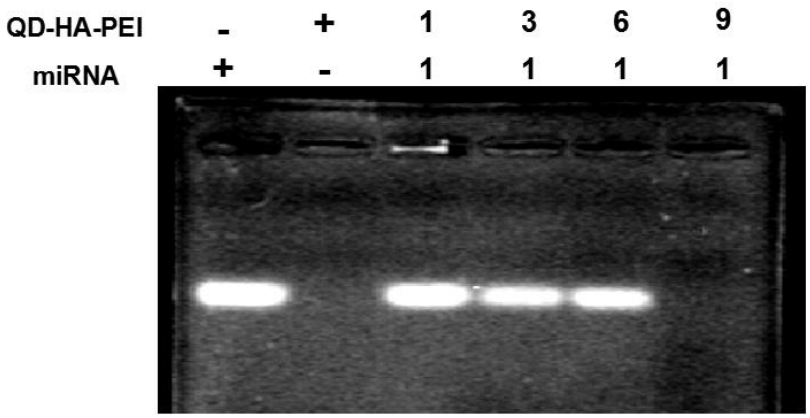

Figure S4. Agarose gel retardation assay of anti-miR-27a/QD-HA-PEI at various weight ratios.

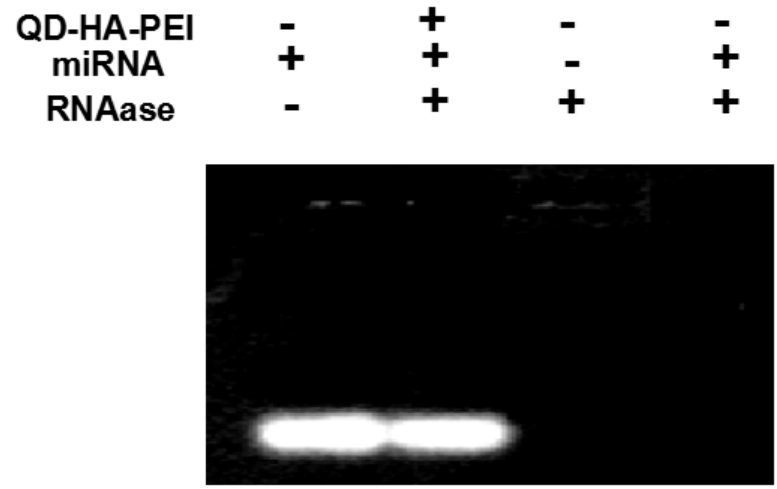

Figure S5. RNA protection ability of anti-miR-27a/QD-HA-PEI at w/w ratio of 9:1.

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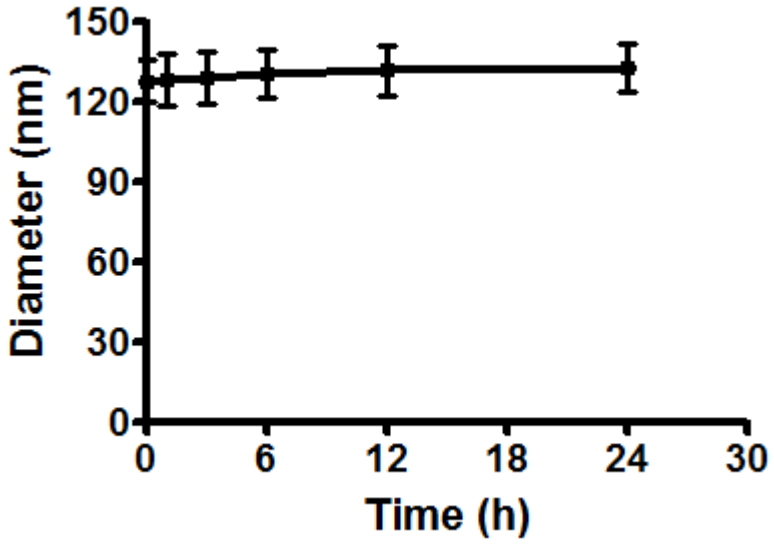

Figure S6. Hydrodynamic size of anti-miR-27a/QD-HA-PEI in cell culture medium during 24 h.

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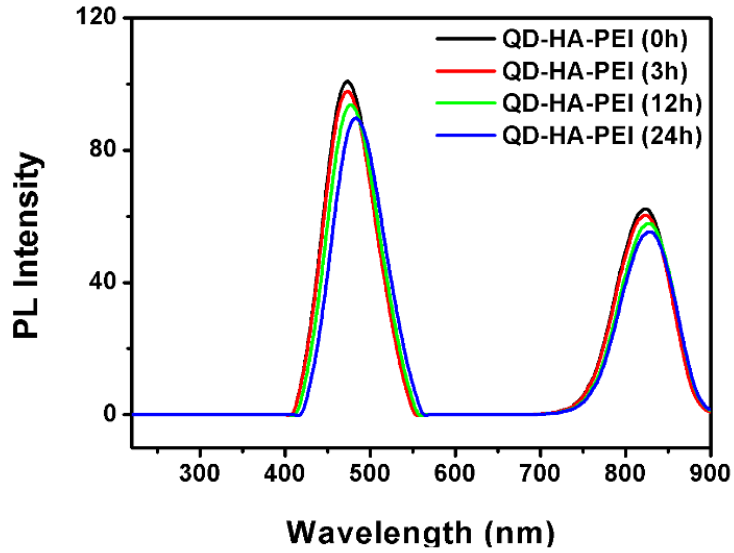

Figure S7. Fluorescence stability of anti-miR-27a/QD-HA-PEI in cell culture medium during 24 h.

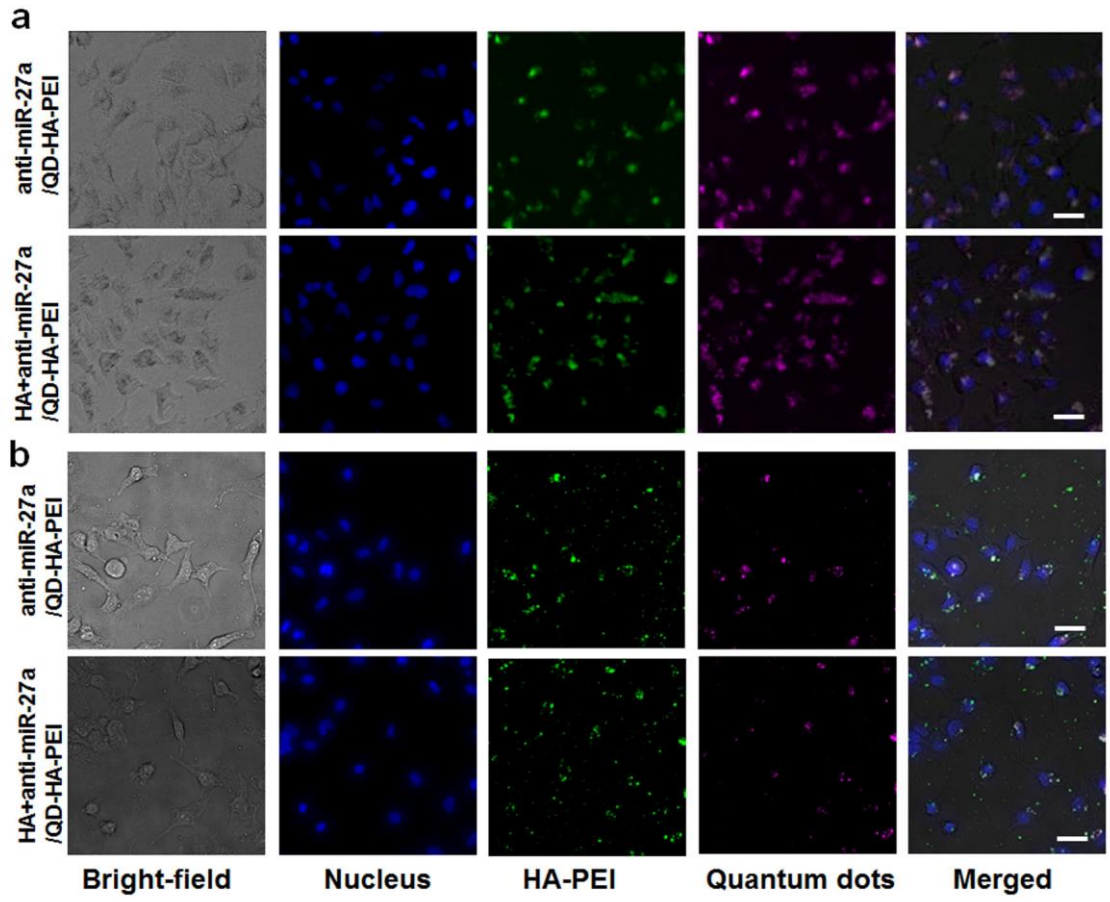

Figure S8. CLSM images of (a) HL-7702 and (b) NIH-3T3 cells after 3 h of incubation, the scale bars represent 10 μm.

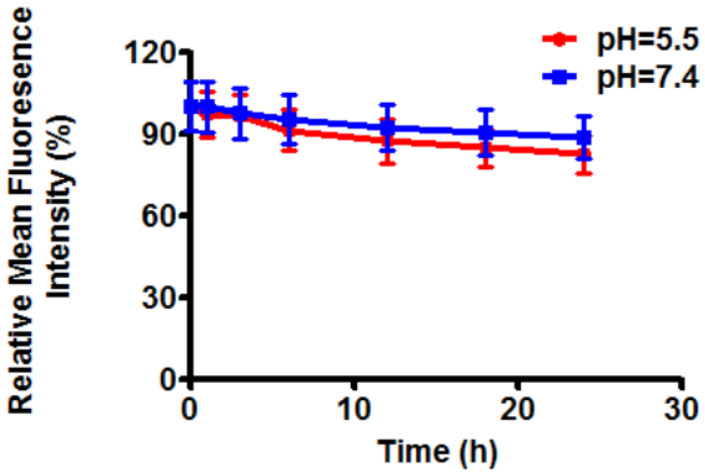

Figure S9. Quantification of the fluorescence intensity changes of QDs under different pH conditions over 24 h. These data represent three separate experiments and are presented as the mean values ± SD.

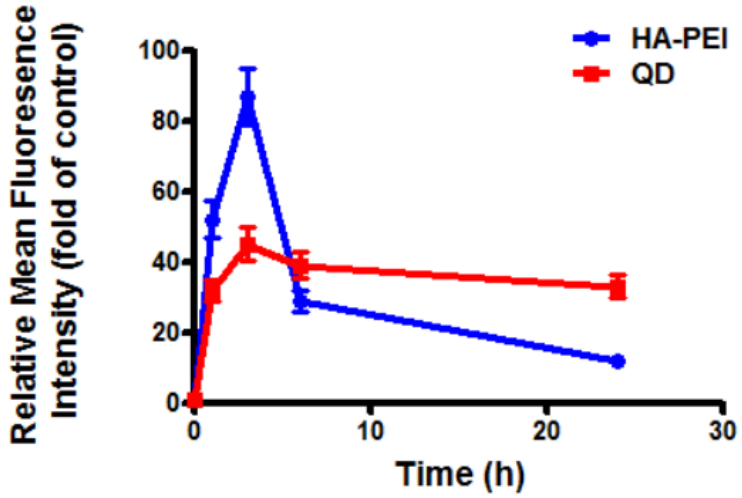

Figure S10. Quantification of the fluorescence intensity changes of HA-PEI and QDs in HepG2 cells over 24 h. These data represent three separate experiments and are presented as the mean values ± SD.

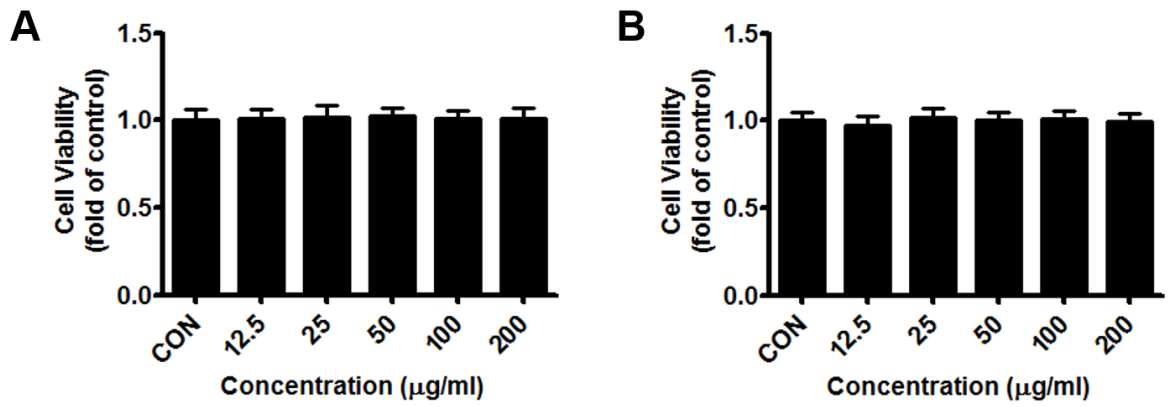

Figure S11. Cell viability of (A) HepG2 cells and (B) HL-7702 cells incubated with various concentrations of QD-HA-PEI for 24 h. These data represent three separate experiments and are presented as the mean values ± SD.

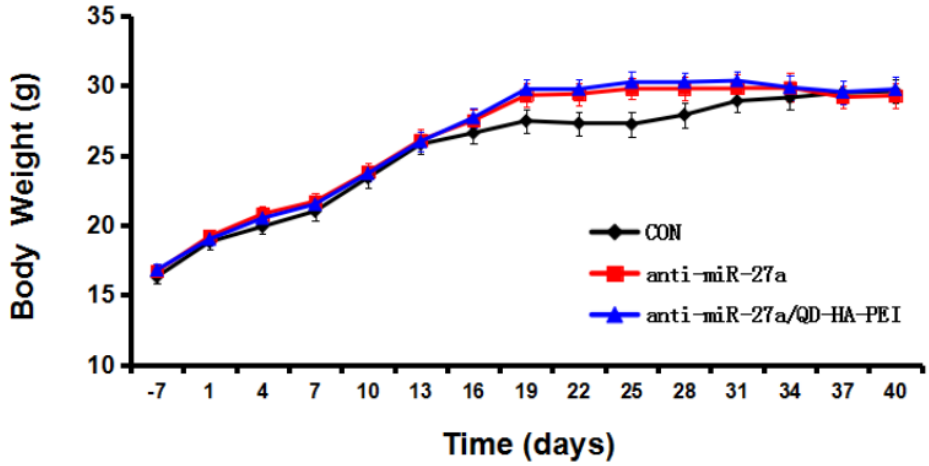

Figure S12. Body weight changes in the whole experimental process of mice in each groups. The values represent mean values ± SD, n=6.