Electronic Supplementary Information

Multifunctional Nanoprobes for both Fluorescence and ^{19}F Magnetic Resonance Imaging

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Instrumentation

TEM images were acquired by using a JEOL JEM-1200EX (200 kV). DLS particle size analysis was carried out using a Zetasizer Nano-ZS90 zeta and size analyzer from Malvern. All ^{1}H，^{13}C and ^{19}F NMR spectra were recorded on a Bruker Avance-III 400 MHz spectrometer. The fluorescence measurements were conducted on a model F-4600 spectrophotometer (Hitachi, Japan). UV absorption spectra were acquired on a UV-3600 spectrophotometer (Shimadzu). The in vitro cell viability was tested by a Tecan Infinite F50 (Switzerland) plate reader. Cell imaging was recorded with an EVOS fl microscopes system (Life Technologies) with excitation wavelength range at 400-435 nm.

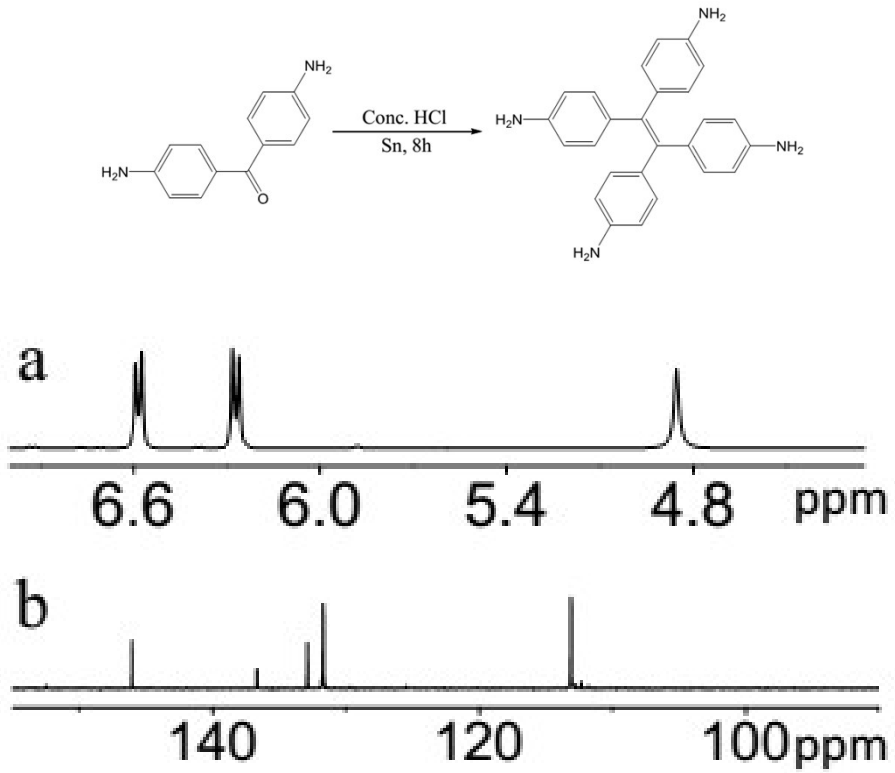

Figure S1: Synthetic procedures, ^{1}H NMR and ^{13}C-NMR spectrum of compound ETTA. ^{1}H NMR (400 MHz, d_6-DMSO) δ(TMS, ppm): 6.59 (d, *J* = 8.72 Hz, 8H), 6.27 (d, *J* = 8.36 Hz, 8H), 4.85 (s, 8H); ^{13}C NMR (400 MHz, d_6-DMSO) δ (TMS, ppm): 146.0 (C), 136.7(C), 132.9 (C), 131.6 (CH), 113.1 (CH).

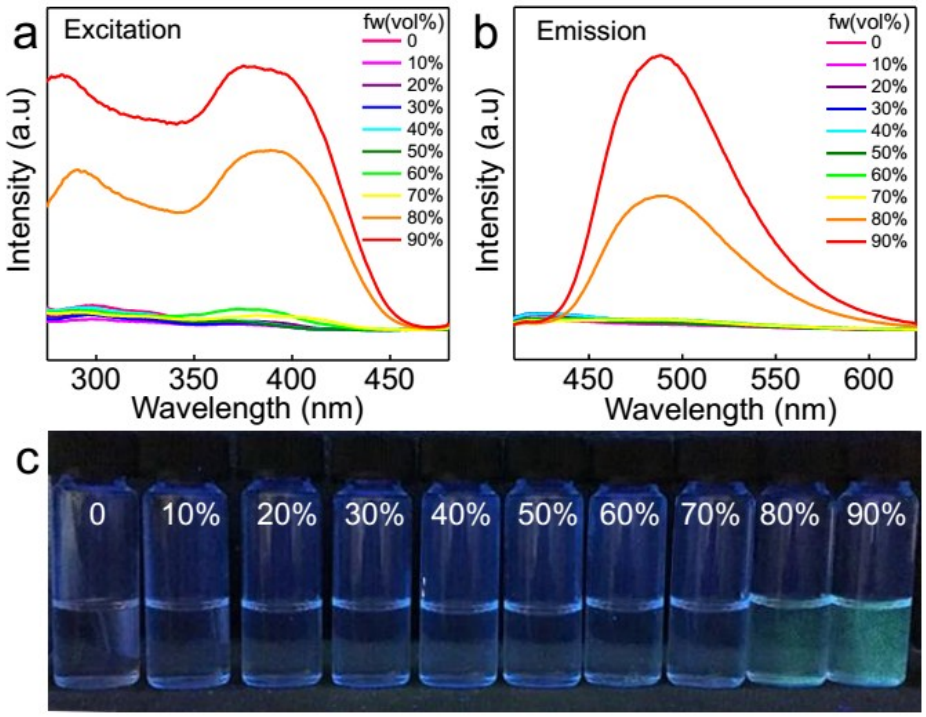

Figure S2: Excitation (a) and emission (b) spectra changes of compound ETTA under different water fraction (fw); (c) Optical photos of TPE-AM solution with different water fraction under UV light. [ETTA] = 127 mM; λ_{ex} = 365 nm

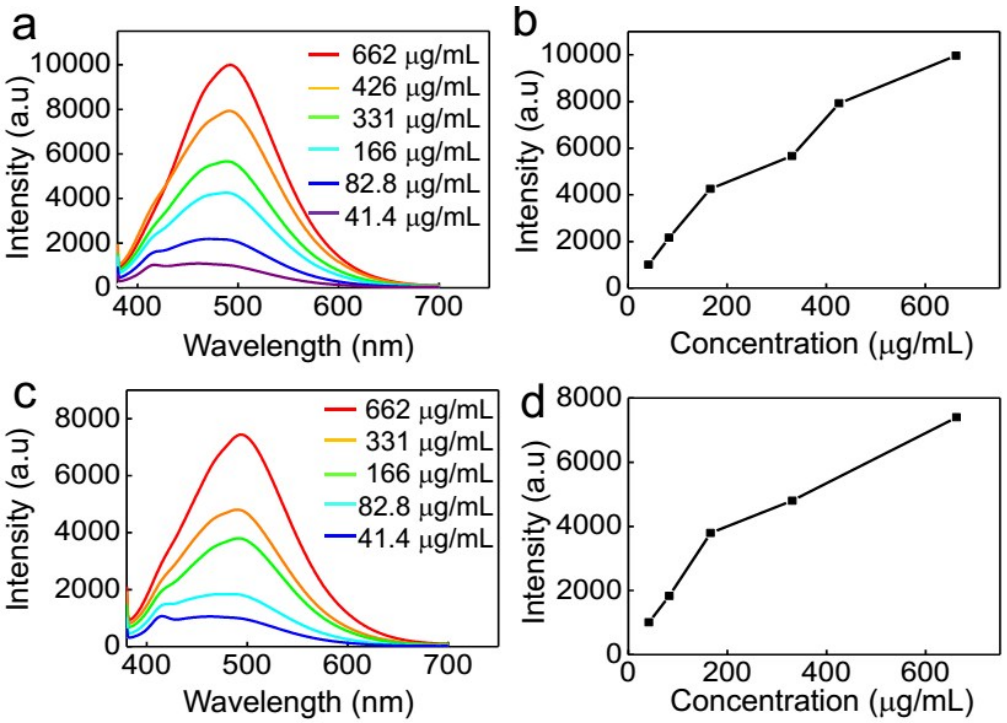

Figure S3: The fluorescence spectra of NCs (a, b) and NCs-RGD (c, d) at different concentrations.

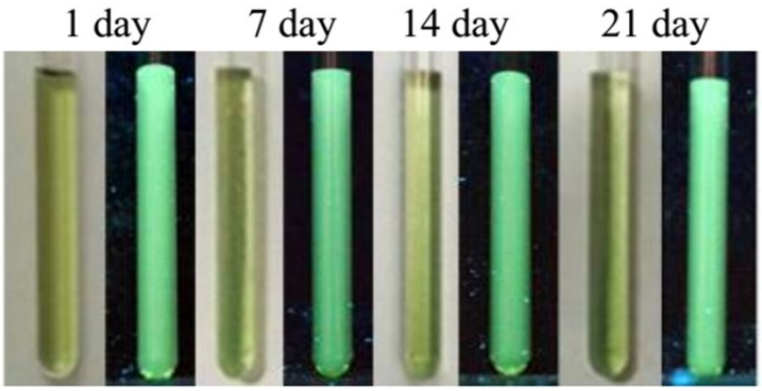

Figure S4: The stability of fluorescence intensity of nanoprobes.

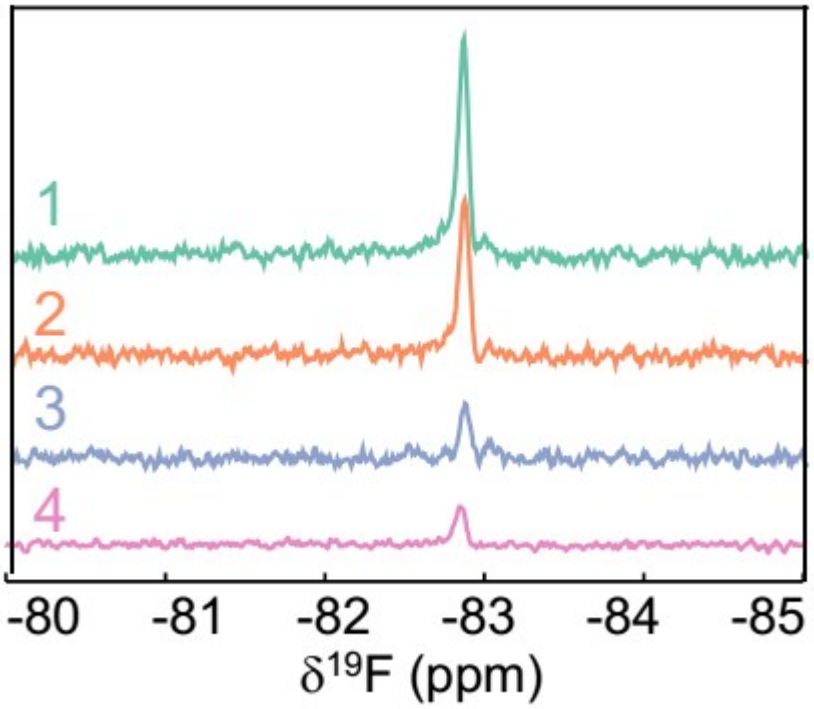

Figure S5: ^{19}F NMR signal intensities (peak at −82.8 ppm) of the cell lysates after incubation with 2 mL NCs with (1 and 3) and without (2 and 4) RGD (330 μg/mL and 170 μg/mL) at 37 °C for 12 h, respectively.