

Supplementary

Surface-Fabrication of Fluorescent Hydroxyapatite for Cancer Cell Imaging and Bio-Printing Applications

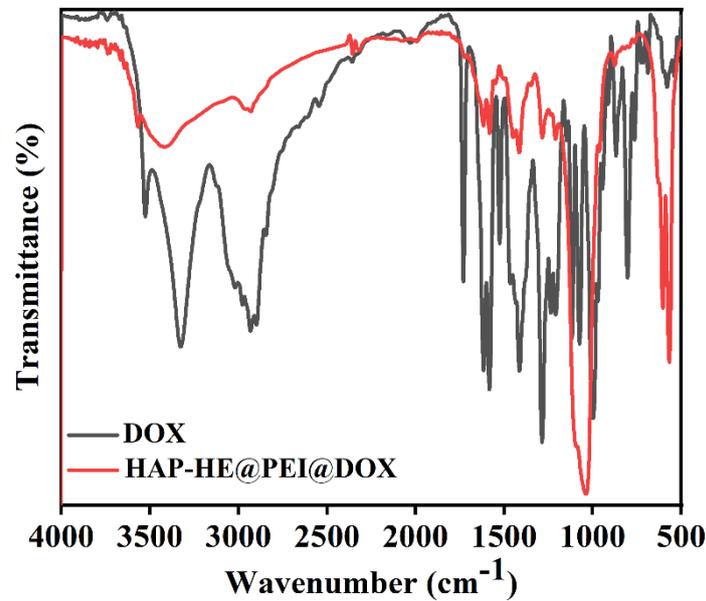


Figure S1. Normalized FT-IR spectra of DOX and HAP-HE@PEI@DOX samples.

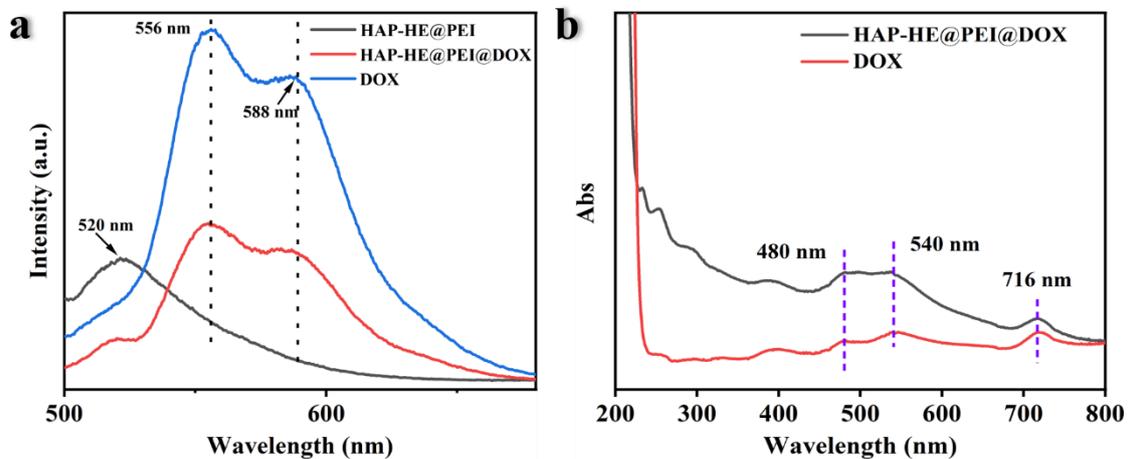


Figure S2. Fluorescence and UV-vis spectra of HAP-HE@PEI@DOX and DOX. (a) FL Spectrum (Excitation wavelength: 480 nm); (b) UV-Vis Spectrum.

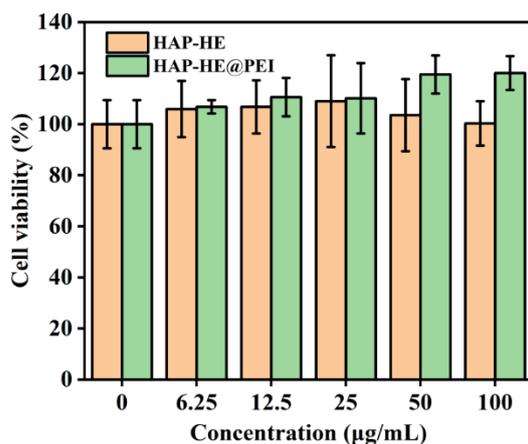


Figure S3. Determination of cell viability of HAP-HE, HAP-HE@PEI with equal concentration gradient. The cell survival viability of A549 cells co-incubated with gradient mass concentration of HAP-HE and HAP-HE@PEI for 24 h.

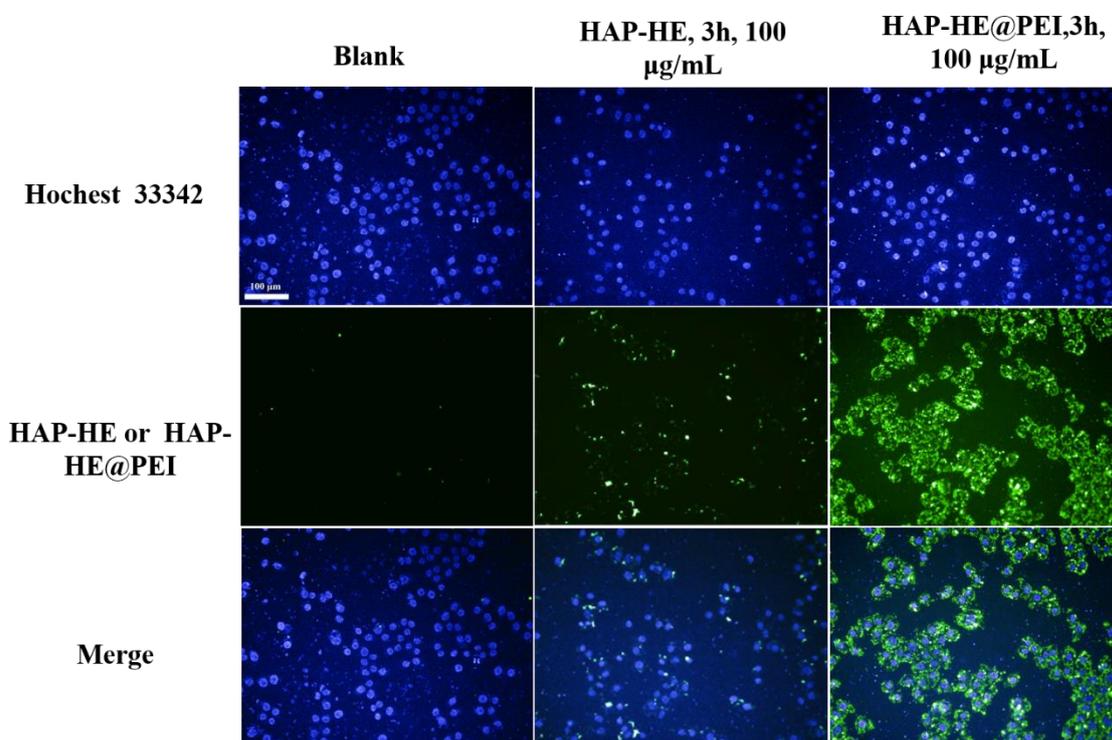


Figure S4. High-content imaging images of A549 cells co-incubated with 100 µg/mL of HAP-HE for 3h (HAP-HE@PEI: Ex= 440 nm, Em= 520 nm; Hochest 33342 for nucleus: Ex= 346 nm, Em= 460 nm).

Table S1. The percentage of each element of HAP, HAP-HE and HAP-HE@PEI.

| | C (%) | N (%) | O (%) | P (%) | Ca (%) |
|------------|-------|-------|-------|-------|--------|
| HAP | 15.78 | 4.45 | 50.67 | 12.84 | 16.26 |
| HAP-HE | 18.18 | 6.10 | 48.29 | 12.13 | 15.30 |
| HAP-HE@PEI | 51.67 | 18.18 | 19.35 | 5.21 | 5.28 |