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## **Supplementary Material**

#### 1. SRF standard curve

A stock solution (1000  $\mu$ M) was obtained by dissolving 4.6 mg of SRF in MeOH. By dilution of the stock solution with MeOH, different concentrations of working solutions (20, 40, 60, 80, and 100  $\mu$ M) can be obtained. All the solutions were stored at 4 °C. HPLC/UV (254 nm) was used for the content determination of SRF. Calibration curve was performed by plotting the peak area of the target analyte SRF as the concentration. The calibration curve of SRF was achieved with the correlation coefficient (R<sup>2</sup>) of 0.99908.



#### 2.NAPP standard curve

A stock solution (1000  $\mu$ M) was obtained by dissolving 6.0 mg of NAPP in MeOH. By dilution of the stock solution with MeOH, different concentrations of working solutions (50, 100, 200, 400, and 500  $\mu$ M) can be obtained. All the solutions were stored at 4 °C. HPLC/UV (400 nm) was used for the content determination of NAPP. Calibration curve was performed by plotting the peak area of the target analyte NAPP as the concentration. The calibration curve of NAPP was achieved with the correlation coefficient (R<sup>2</sup>) of 0.99904.



# 3. Determination of drug loading and encapsulation efficiency of SRF@FeIIITA-NAPP by HPLC

(1) HPLC analysis was performed on a reverse phase C18 column at 254 nm and 400 nm respectively. Mobile phase (A: MeOH, B: 0.6% glacial acetic acid-H<sub>2</sub>O; A:B=85:15) was used for elution in flow rate 1 mL/min. Column temperature was  $30^{\circ}$ C and injection volume was 10 mL.

### (2) Test methods

A stock solution was obtained by ultrasonic-dissolving 2.1 mg of SRF@FeIIITA-NAPP in 30 mL MeOH. Then the solution was centrifuge at 8000 rpm for 10 min after complete reaction. HPLC/UV (254 nm and 400 nm) was used for the content determination of SRF and NAPP. Calibration curves were performed by plotting the peak area of the target analyte SRF and NAPP as the concentration. Furthermore, the encapsulation efficiency and drug loading of SRF@FeIIITA-NAPP were calculated as follows:

Encapsulation efficiency % 
$$= \frac{Drug \ content \ in \ preparation}{Total \ drug \ content} \times 100\%$$

$$= \frac{Drug \ content \ in \ preparation}{Total \ mass \ of \ nanodrugs} \times 100\%$$

Drug loading efficiency %

#### (3) Typical chromatogram of SRF at 254 nm



## Typical chromatogram of NAPP at 400 nm



## 4. In Vitro Cumulative Release of SRF from SRF@Fe<sup>III</sup>TA-NAPP

Release medium: pH=5.0, 7.4 10 mM PBS (2% Tween 80)

$$=\frac{C_i V N}{W} \times 100\%$$

Cumulative release of drug at point i

- C<sub>i</sub>: Concentration of drug at point i
- V: Volume of release medium
- N: Dilution factor
- W: Total drug content

SRF concentration was determined by HPLC. SRF release curve was performed by plotting SRF concentration at different time (1, 2, 4, 6, 8, 12, 24, 48, 72 h).

5. TEM images of SRF@Fe<sup>III</sup>TA



# 6. STEM images of SRF@Fe<sup>III</sup>TA-NAPP

