

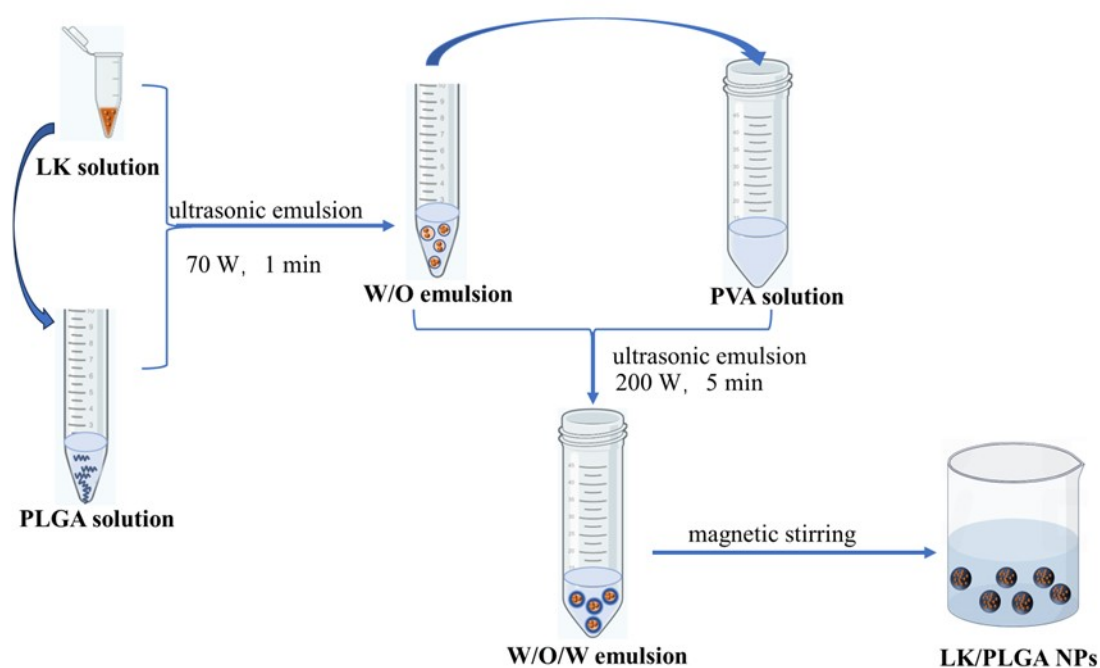
Supplementary material

Construction of fibrin-targeted Nanoparticles for Imaging Diagnosis and Treatment of Arterial Thrombosis

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Scheme S1. Schematic diagram of the preparation of LK/PLGA NPs

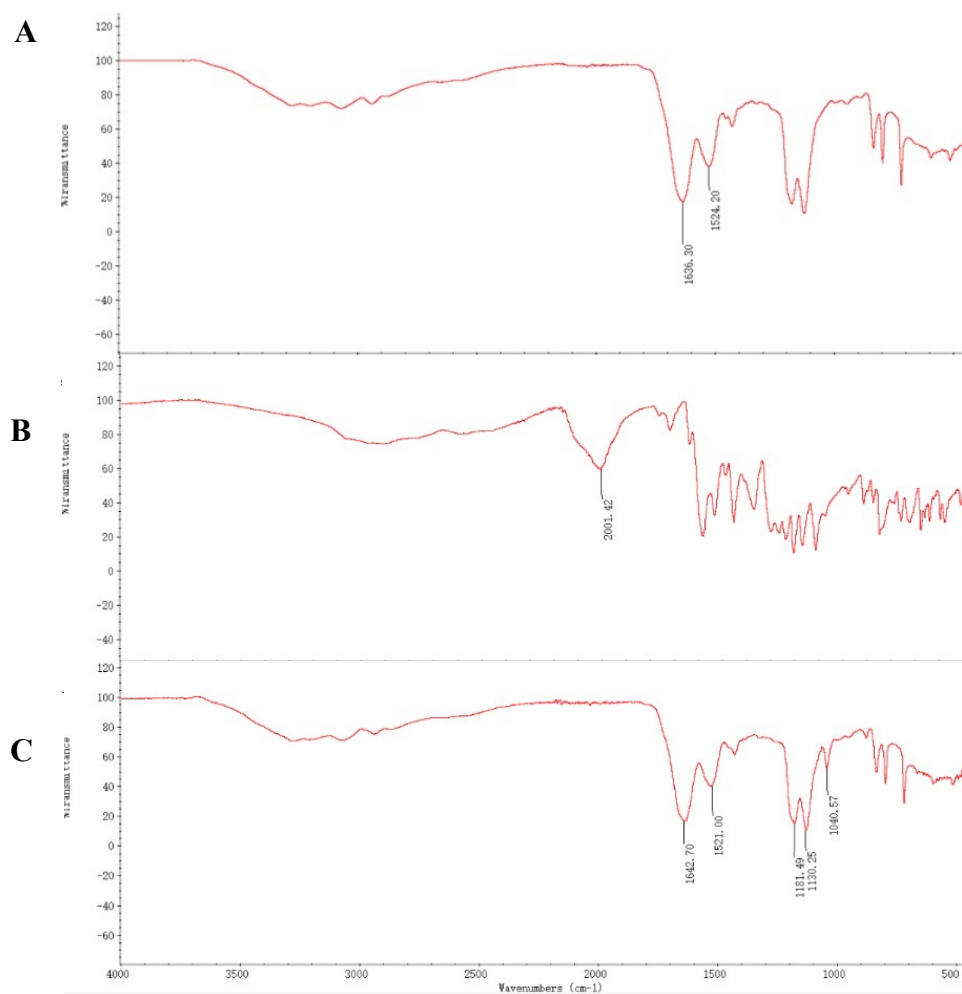


Figure S1. (A) The IR spectra of CREKA. (B) The IR spectra of FITC. (C) The IR spectra of FITC-CREKA

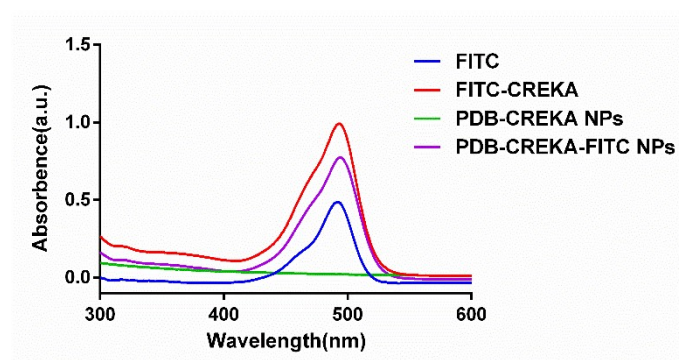


Figure S2. Ultraviolet absorption spectrum of FITC, FITC-CREKA, PDB-CREKA NPs and PDB-CREKA-FITC NPs (300-600nm).

Table S1. Characterization of PLGA NPs, PLGA@PDA NPs, PDB NPs and PDB-CREKA NPs.
(n=3, mean $\pm$ SD)

Nanoparticles	Size(nm)	PDI	Zeta(mV)
PLGA NPs	172.5 $\pm$ 1.7	0.02 $\pm$ 0.006	-21.3 $\pm$ 0.4
PLGA@PDA NPs	185.3 $\pm$ 1.5	0.03 $\pm$ 0.013	-8.7 $\pm$ 4.9
PDB NPs	196.3 $\pm$ 3.8	0.05 $\pm$ 0.038	-19.5 $\pm$ 6.9
PDB-CREKA NPs	206.6 $\pm$ 6.5	0.07 $\pm$ 0.023	-12.8 $\pm$ 8.2

Table S2. Physicochemical properties of LK/PDB/IR820 NPs prepared by different mass ratios of IR820 and LK/PDB NPs (n = 3, mean $\pm$ SD).

IR820: NPs(m/m)	Size (nm)	PDI	Zeta (mV)	EE% of IR820
1:50	194.5 $\pm$ 1.7	0.03 $\pm$ 0.02	-24.9 $\pm$ 0.8	94.6 $\pm$ 1.6
1:80	181.6 $\pm$ 0.8	0.02 $\pm$ 0.01	-17.4 $\pm$ 0.7	96.8 $\pm$ 2.1
1:100	189.2 $\pm$ 3.4	0.06 $\pm$ 0.03	-22.6 $\pm$ 1.2	91.9 $\pm$ 0.5
1:200	189.5 $\pm$ 1.8	0.08 $\pm$ 0.04	-19.5 $\pm$ 2.4	83.2 $\pm$ 4.3

Table S3. Physicochemical properties related to LK/PDB/IR820-CREKA NPs prepared with different mass ratios of IR820 and LK/PDB-CREKA NPs (n = 3, mean $\pm$ SD).

IR820: NPs(m/m)	Size (nm)	PDI	Zeta (mV)	EE% of IR820
1:50	230.4 $\pm$ 4	0.10 $\pm$ 0.02	-34.1 $\pm$ 0.3	82.9 $\pm$ 2.4
1:80	235.9 $\pm$ 7	0.09 $\pm$ 0.01	-29.3 $\pm$ 0.5	81.21 $\pm$ 1.4
1:100	235.3 $\pm$ 3	0.10 $\pm$ 0.02	-26.8 $\pm$ 1.5	93.20 $\pm$ 1.5

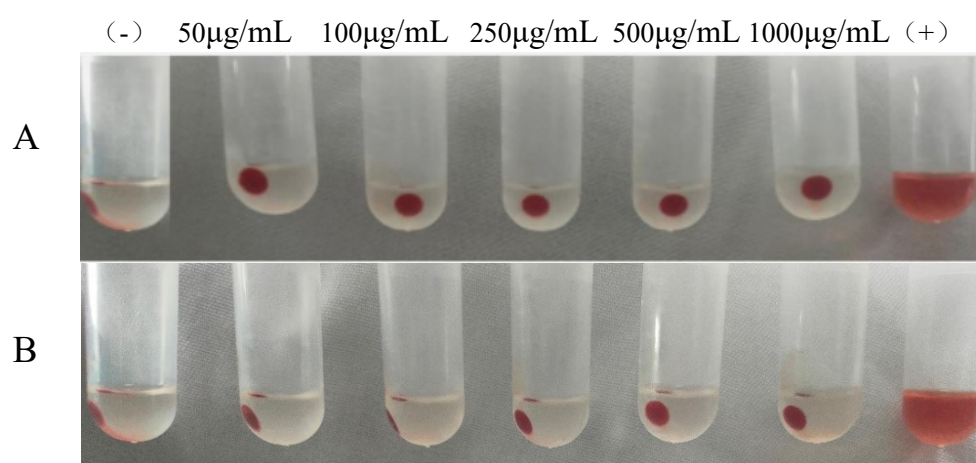


Figure S3. (A) Graph of hemolysis results of LK/PDB NPs. (B) Graph of hemolysis results of LK/PDB-CREKA NPs.

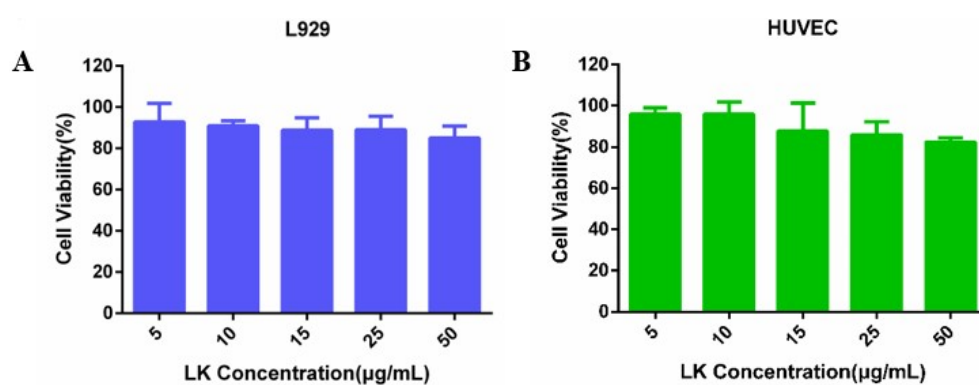


Figure S4. (A) MTT assay of free LK solution on L929 cells (n = 3, mean $\pm$ SD). (B) MTT assay of free LK solution on HUVEC cells (n = 3, mean $\pm$ SD).

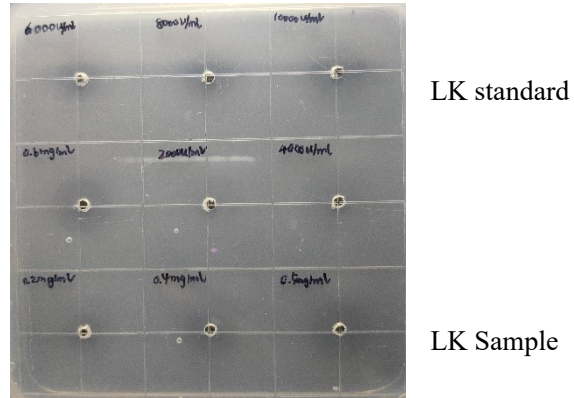


Figure S5. Enzymatic Specific activity of lumbrokinase measured by fibrin agar plate assay.

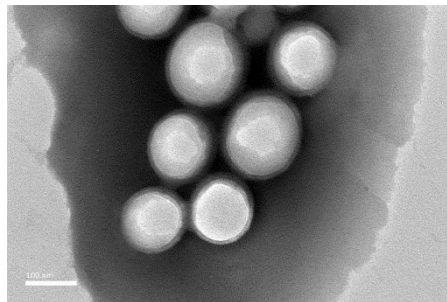


Figure S6. TEM of blank PDB-CREKA NPs. Scale bar, 100 nm.