Electronic Supplementary Information

Antitumor efficacy of doxorubicin-loaded electrospun nano-hydroxyapatite/poly(lactic-co-glycolic acid) composite nanofibers

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Table S1. Diffraction angle and plane spacing data of n-HA and DOX/n-HA from XRD analysis.

Diffraction plane (*hkl*)	2θ peak position (°)		Plane spacing (d, Å)	
	n-HA	DOX/n-HA	n-HA	DOX/n-HA
(002)	25.86	25.88	3.442	3.440
(210)	29.02	29.02	3.074	3.074
(211)	31.84	31.84	2.808	2.808
(300)	32.98	32.98	2.714	2.714
(202)	34.10	34.06	2.528	2.630
(130)	39.84	39.86	2.261	2.260
(222)	46.74	46.74	1.942	1.942
(213)	49.48	49.48	1.841	1.841
(004)	53.18	53.14	1.721	1.722

Table S2. Mechanical properties of PLGA, n-HA /PLGA, and DOX/n-HA/PLGA nanofibers (data are representative of independent experiments and all data are given as mean ± SD, n = 3).

Sample	Breaking strength (MPa)	Failure strain (%)	Young's modulus (MPa)
PLGA	5.27 ± 0.36	173.67±22.97	81.34 ± 17.34
n-HA/PLGA	7.39 ± 0.34	118.92± 24.07	190.89 ±13.46
DOX/n-HA/PLGA	6.99 ± 0.37	136.25 ± 14.54	254.45± 8.44

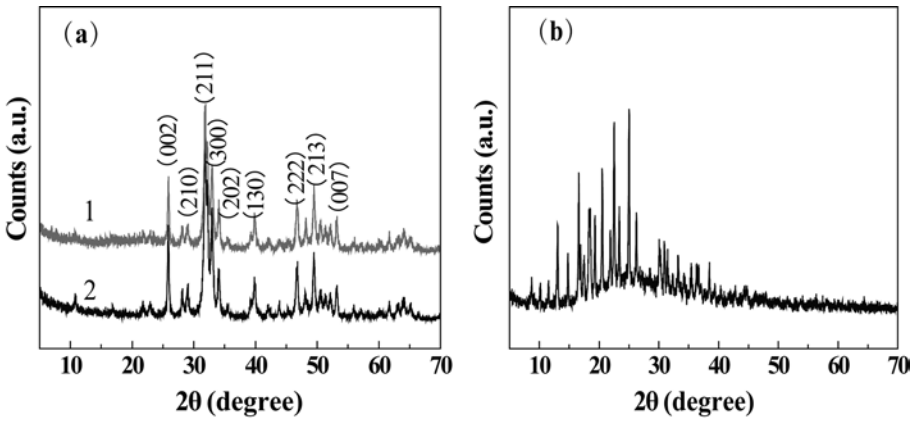

Figure S1. X-ray diffraction patterns of n-HA particles before (Curve 1) and after (Curve 2) loading of DOX (a) and pure DOX powder (b).

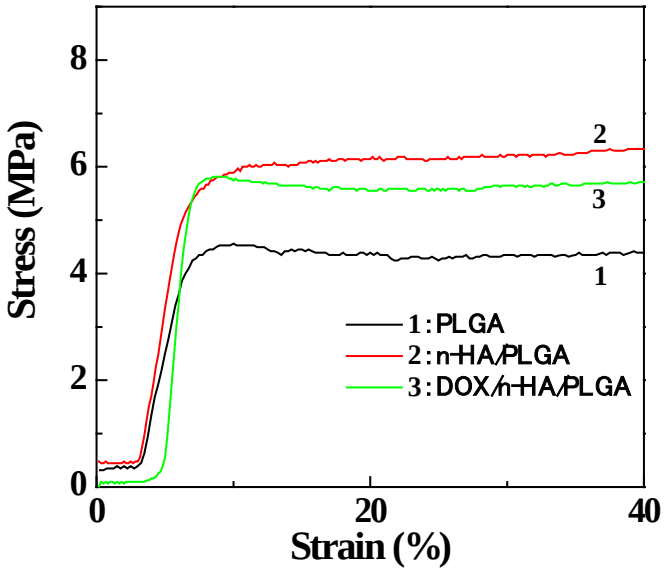

Figure S2. Representative stress-strain curves of electrospun PLGA (Curve 1), n-HA/PLGA composite fibers (the same n-HA weight ratio relative to DOX/n-HA/PLGA nanofibers) (Curve 2), and DOX/n-HA/PLGA (1 wt% DOX relative to PLGA, Curve 3) nanofibrous mats. The enlarged strain range of 0-40% is shown for clear comparison.

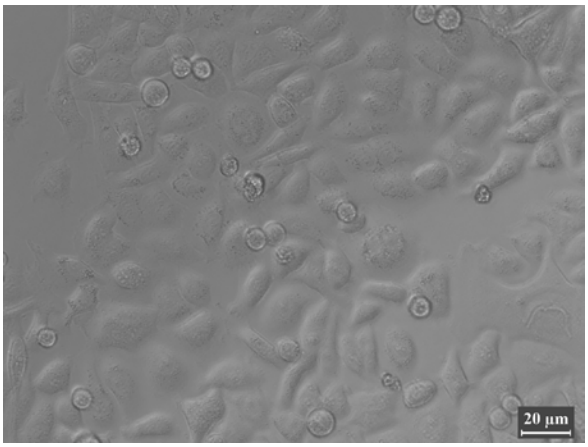

Figure S3. Photomicrographs of the control KB cells treated with PBS buffer.

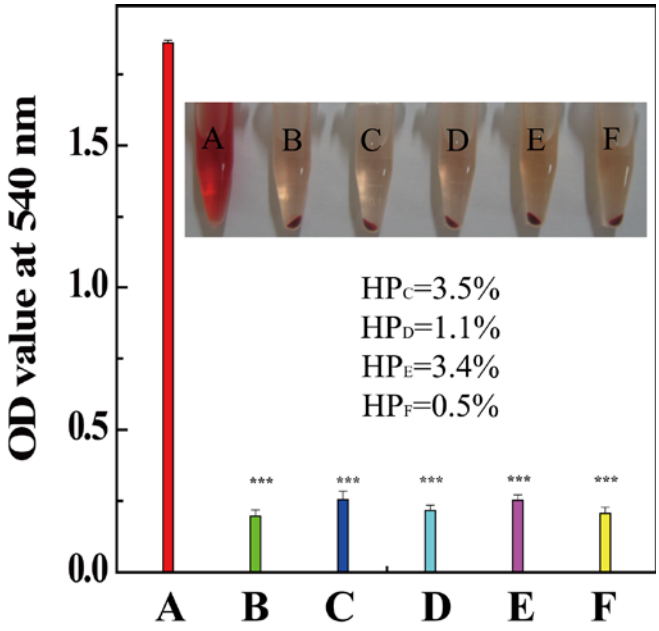

Figure S4. Hemolytic assay of electrospun PLGA nanofibers (C), n-HA/PLGA (D), DOX/PLGA (E) and DOX/n-HA/PLGA (F) composite nanofibers. Water (A) and PBS buffer (B) was used as positive and negative control, respectively.