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# Supplementary Information

# Highly enhanced leukemia therapy and oral bioavailability from a novel amphiphilic prodrug of cytarabine

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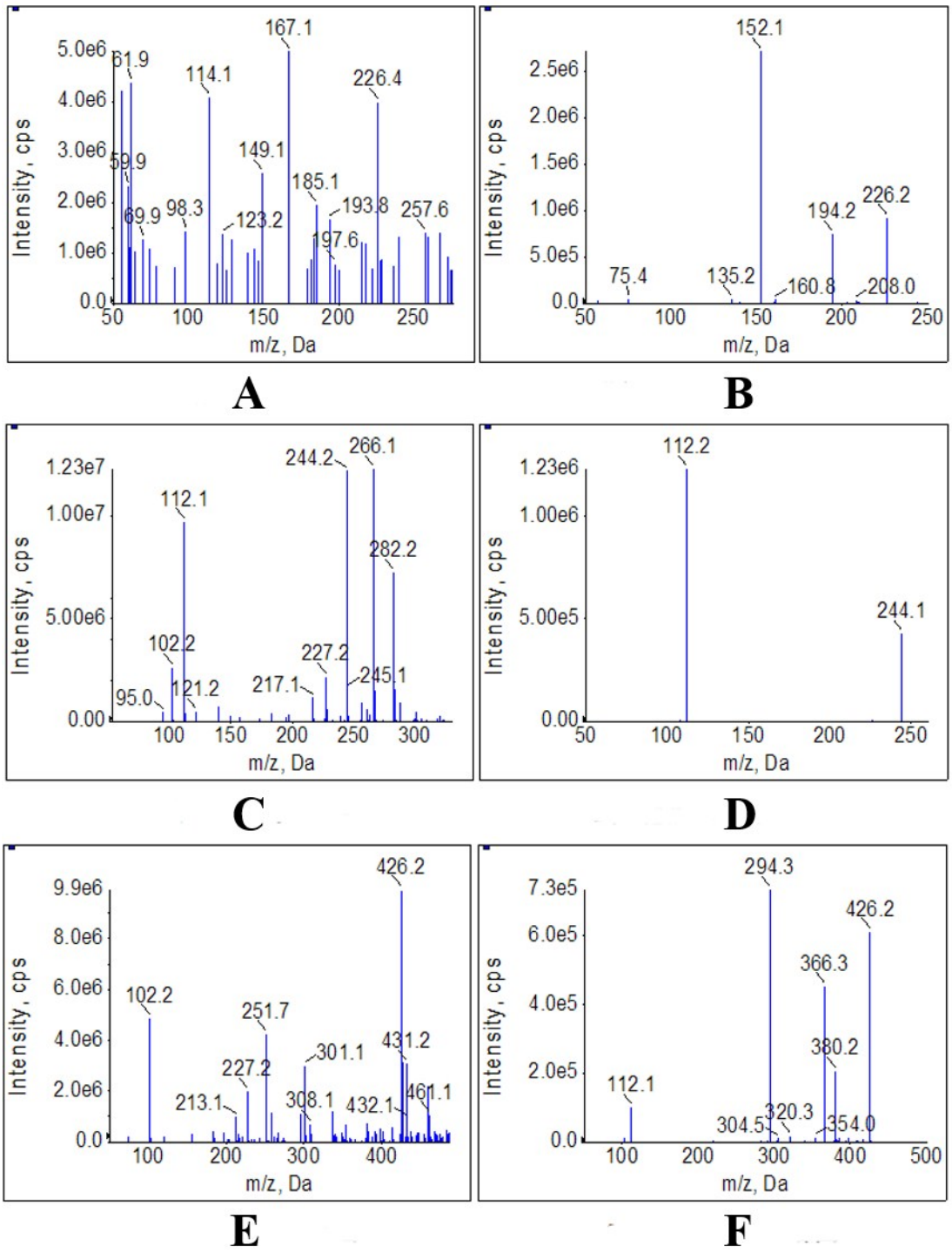


**Fig. S1** The first order mass chromatogram (left) and second stage of mass chromatogram (right) of internal standard preparation acyclovir (A, B), cytarabine (C, D) and LA-Ara (E, F).

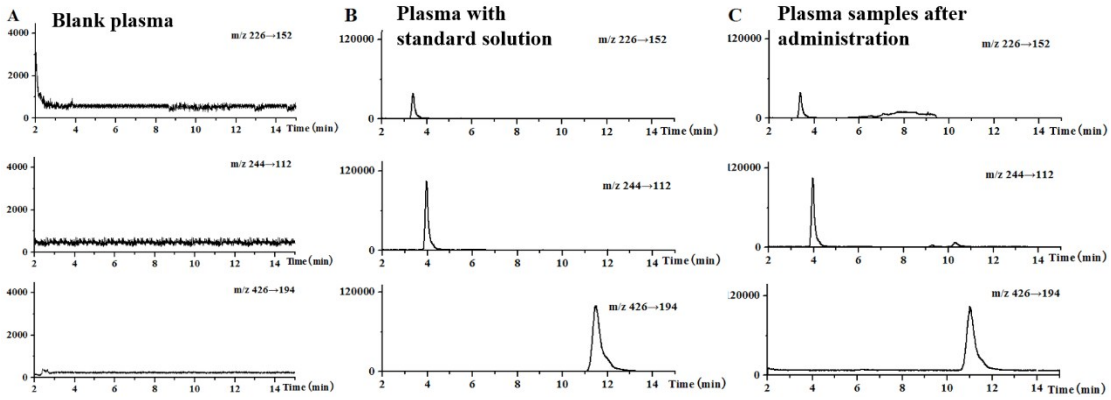


**Fig. S2** Representative MRM chromatograms of acyclovir (m/z 226→152), cytarabine (m/z 244→112) and LA-Ara(m/z 426→294) in rat plasma samples.

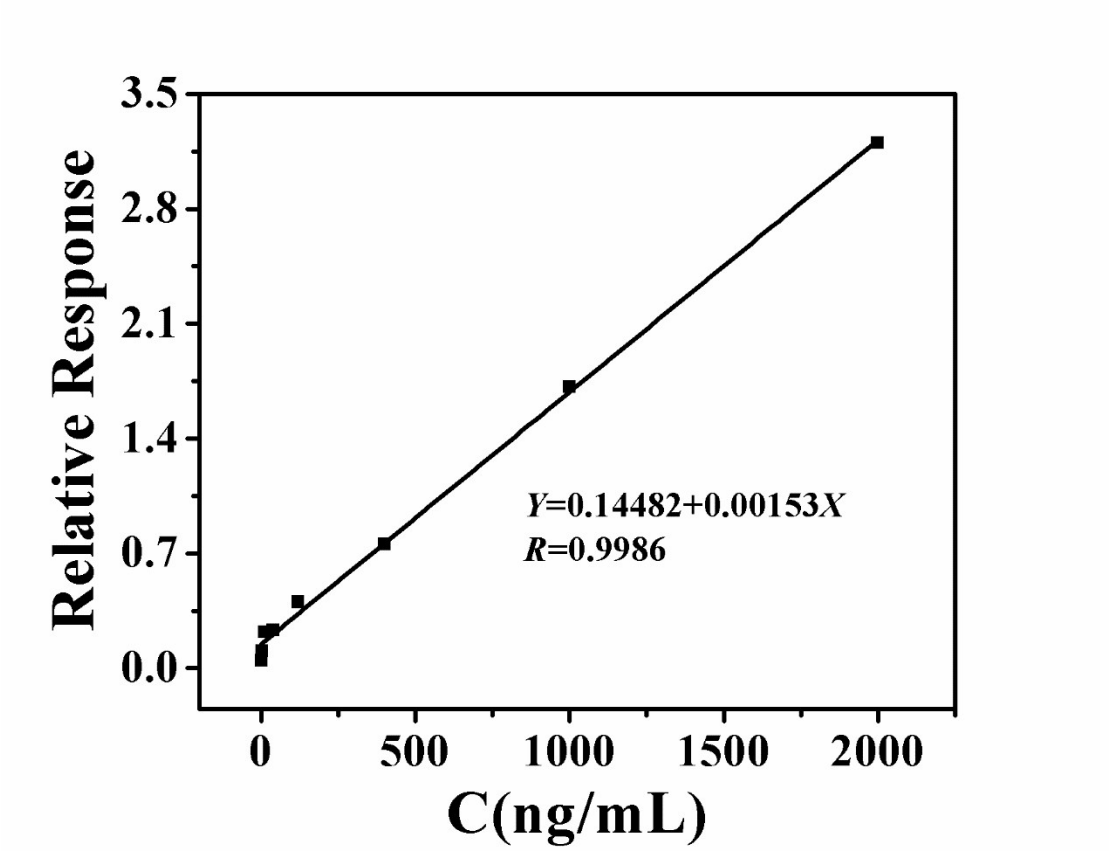


**Fig. S3** Standard curve of Ara-C in the plasma of rats. Linear relationship is well within concentration of Ara-C range from1.2 to 2000 ng·mL$^{-1}$.

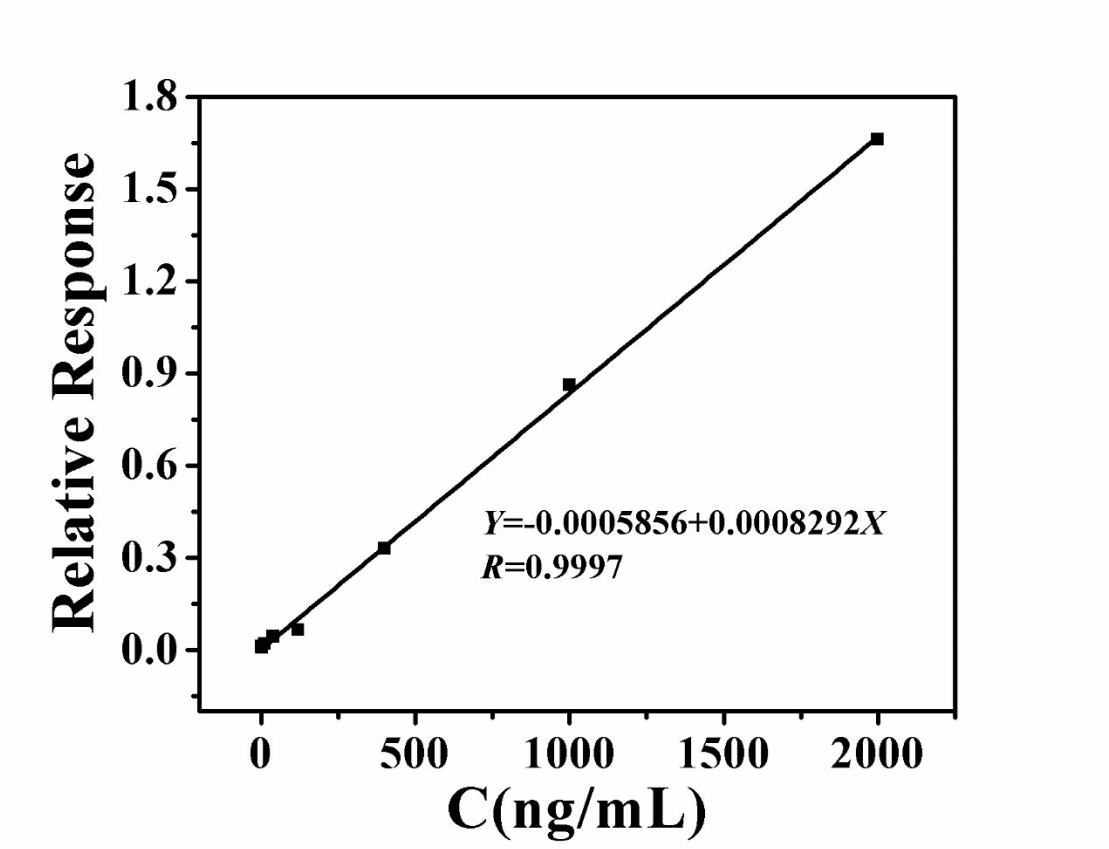


**Fig. S4** Standard curve of LA-Ara in the plasma of rats. Linear relationship is well within concentration of LA-Ara range from1.2 to 2000 ng·mL$^{-1}$.

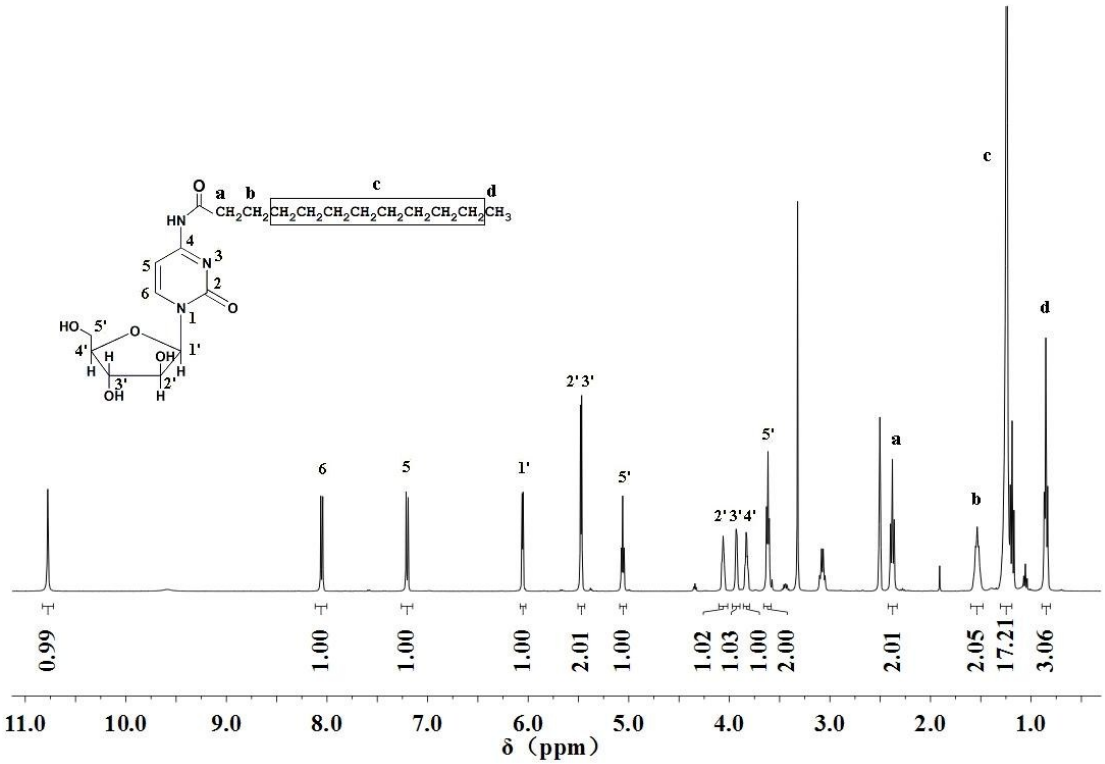


**Fig. S5** $^{1}$H-NMR spectra of LA-Ara prodrug and the integral area values of peaks have been given under peak.

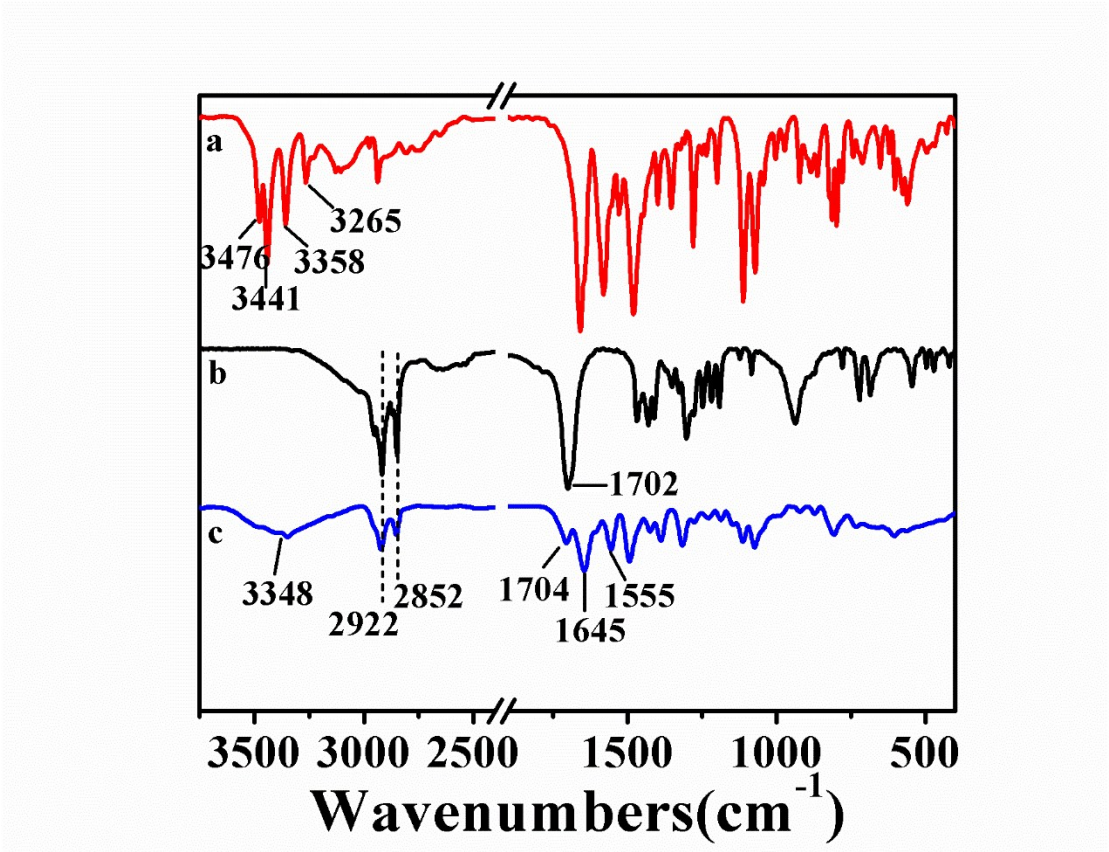


**Fig. S6** FTIR spectra of Ara-C (a), LA (b) and LA-Ara (c)

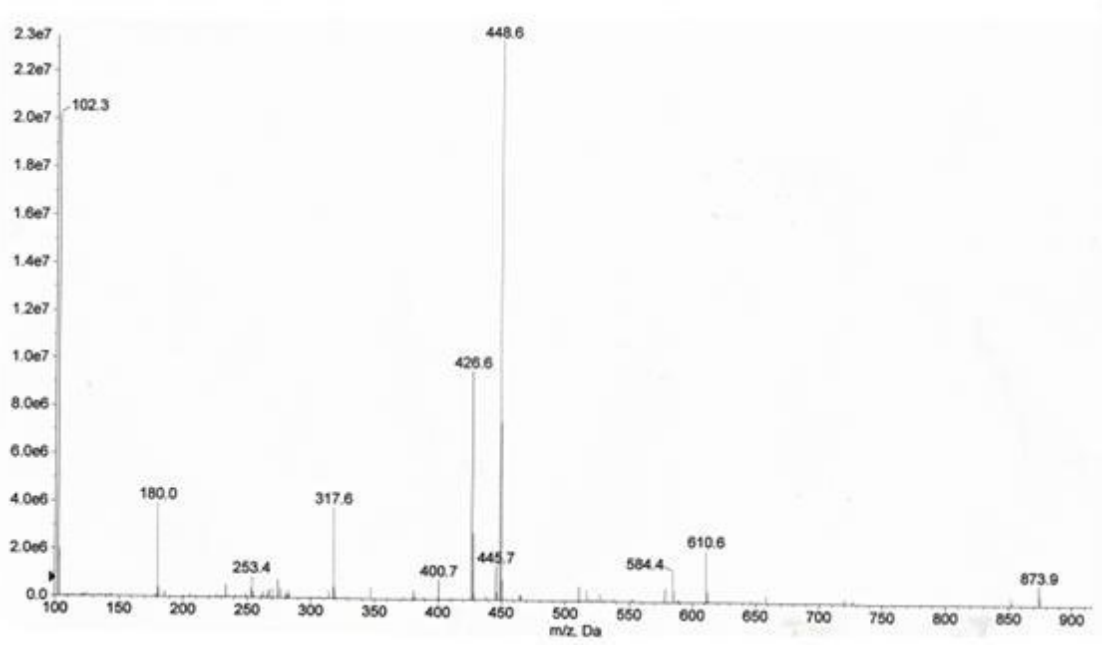


**Fig. S7** Mass spectra of prodrug LA-Ara

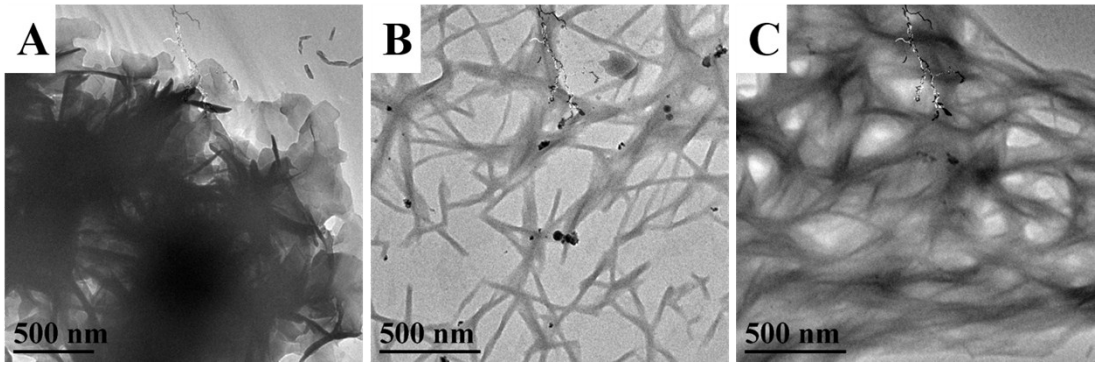


**Fig. S8** TEM images of LA-Ara nanofibers after incubation for 6h at pH 1.2 (A), 4.5 (B) and 6.8 (C)

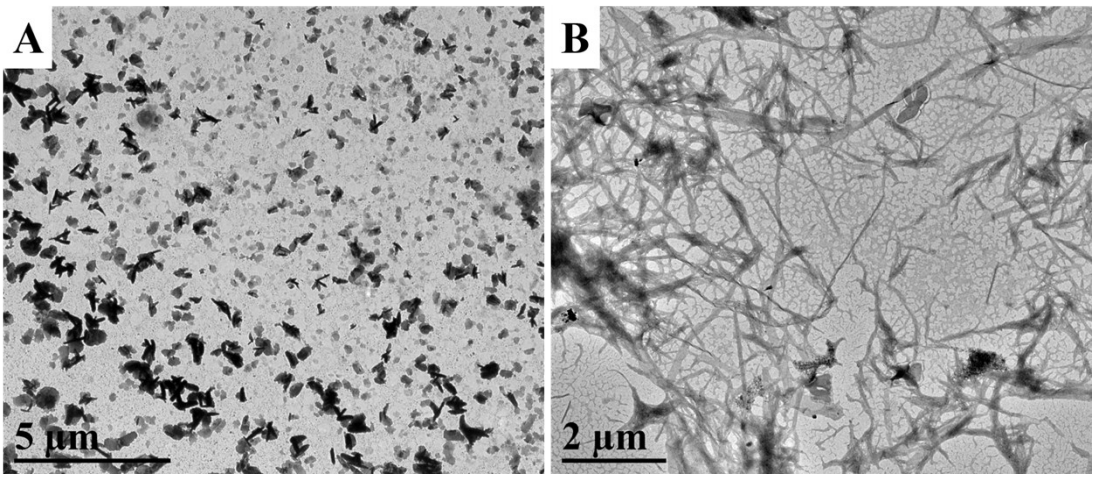


**Fig. S9** TEM images of LA-Ara nanofibers after incubation at artificial gastric juice for 2 h (A) and at artificial intestinal fluid for 4 h (B).