

Table S1. Drug release kinetics of E/AC-Au/MTX

Formulation	Zero order		First order		Higuchi		Korsmeyer-Peppas		
	r^2	k_0	r^2	k_1	r^2	k_2	r^2	k_3	n
E/AC-Au/MTX	0.6120	2.56	0.7276	0.02	0.8196	16.29	0.9787	78.02	0.3571

r^2 : correlation coefficient, $k_0 - k_3$: rate constants, n: diffusional exponent.

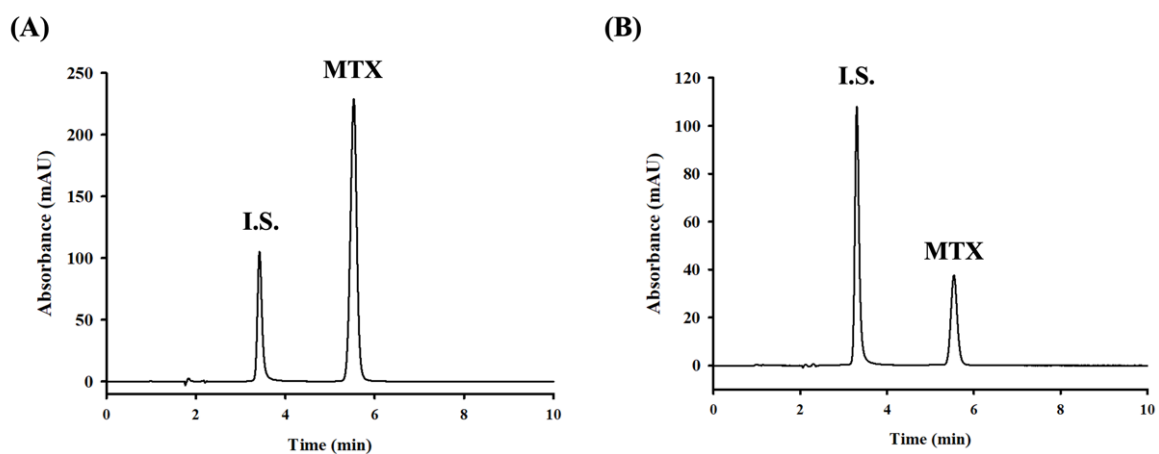


Figure S1. HPLC chromatograms of (A) MTX solution (40 $\mu\text{g/mL}$) and (B) the supernatant to determine the entrapment efficiency of MTX-loaded nanoparticles.

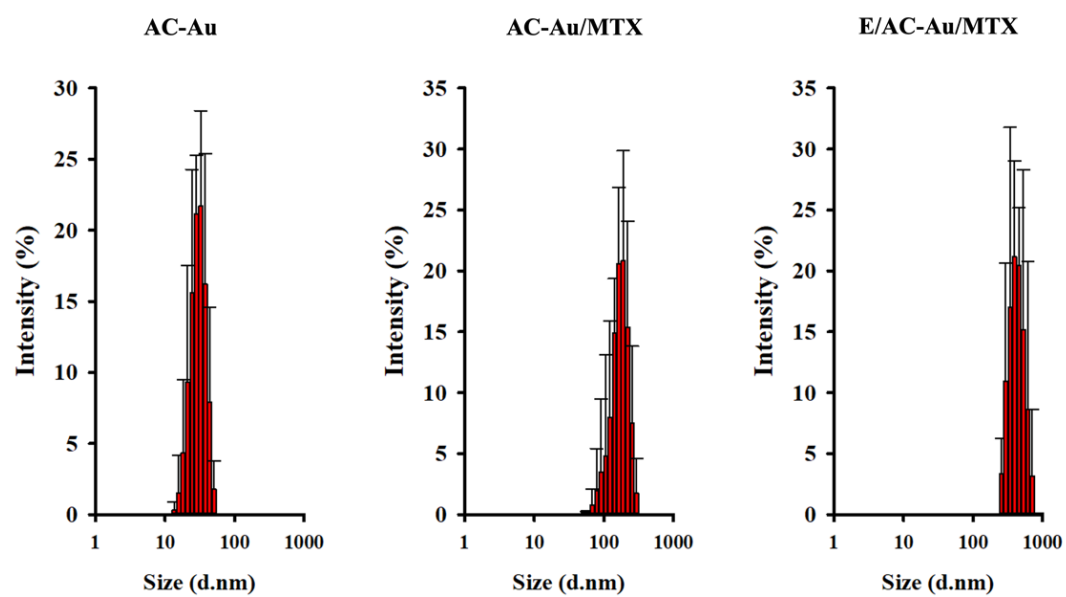
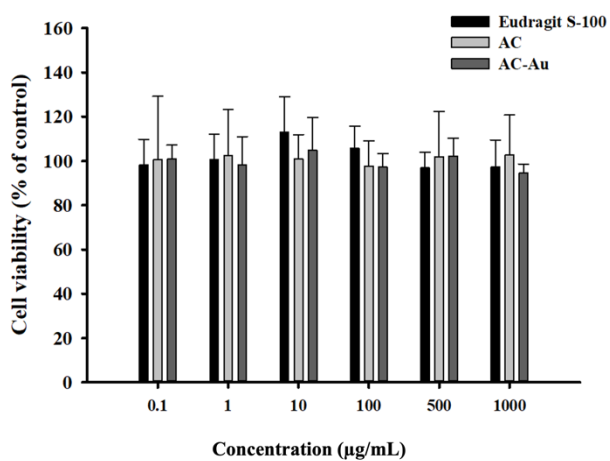


Figure S2. Particle size distribution of AC-Au-based nanoparticles determined by DLS.

(A) CCD-18Co



(B) HEK-293

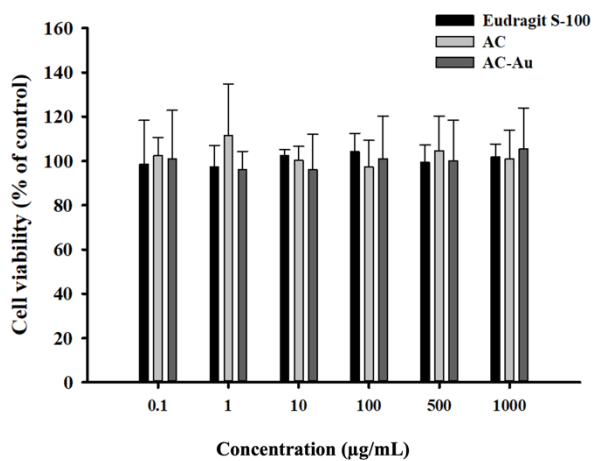


Figure S3. Cytotoxic effect of vehicle components in (A) CCD-18Co cells and (B) HEK-293 cells (mean \pm SD, n = 6). Eudragit®-S 100 (methacrylic acid-methyl methacrylate copolymer (1:2)): a surface coating polymer, AC: aminoclay, and AC-Au: aminoclay-gold nanoparticles.