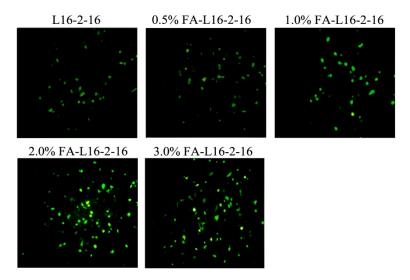
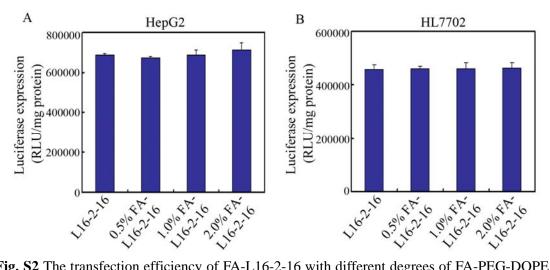
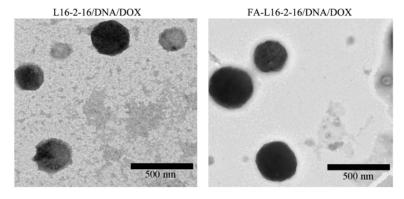
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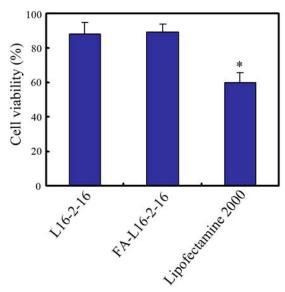
**Fig. S1** The GFP expression when Bel7402 cells were transfected with pEGFP-N1 using FA-L16-2-16 with different degrees of FA-PEG-DOPE incorporation.



**Fig. S2** The transfection efficiency of FA-L16-2-16 with different degrees of FA-PEG-DOPE incorporation in HepG2 cells and HL7702 cells using a luciferase reporter gene.



**Fig. S3** TEM images of L16-2-16/DNA/DOX and 2 % FA-L16-2-16/DNA/DOX complexes at DNA/DOX mass ratio of 9 and N/P ratio of 2. The scale bar is 500 nm.



**Fig. S4** Cell cytotoxicity of L16-2-16-, 2 % FA-L16-2-16- and Lipofectamine 2000-mediated transfection in Bel7402 cells using a luciferase reporter gene. Data as mean values  $\pm$  S.D. (n = 3). \* P<0.01 compared with 2 % FA-L16-2-16/pCMV-Luc-treated group.