

Fig. S2 Distribution of the length (a) and width (b) of AuNRs as-prepared.

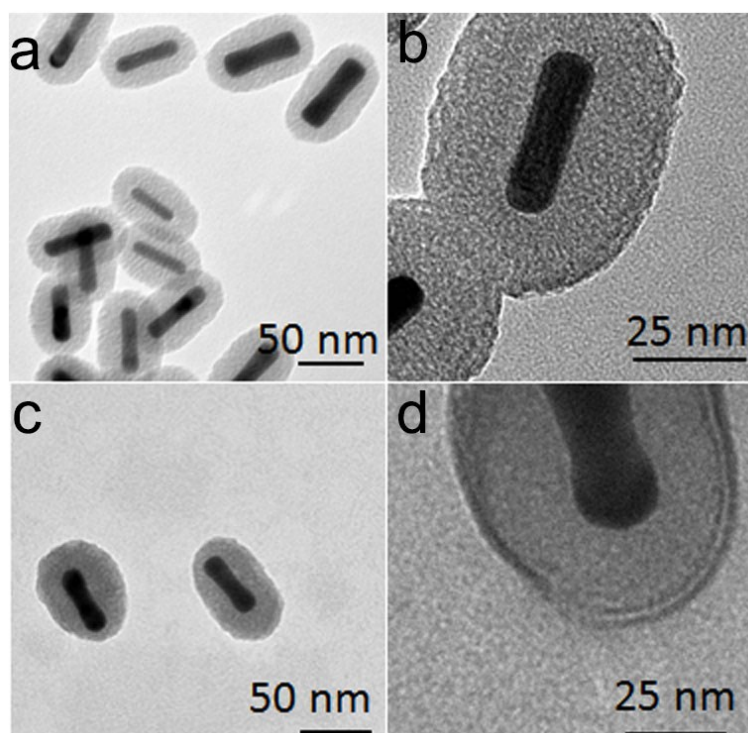


Fig. S3 TEM images with different magnifications of (a, b) AuNR@MSN, (c, d) AuNR@MSN-HB@LF.

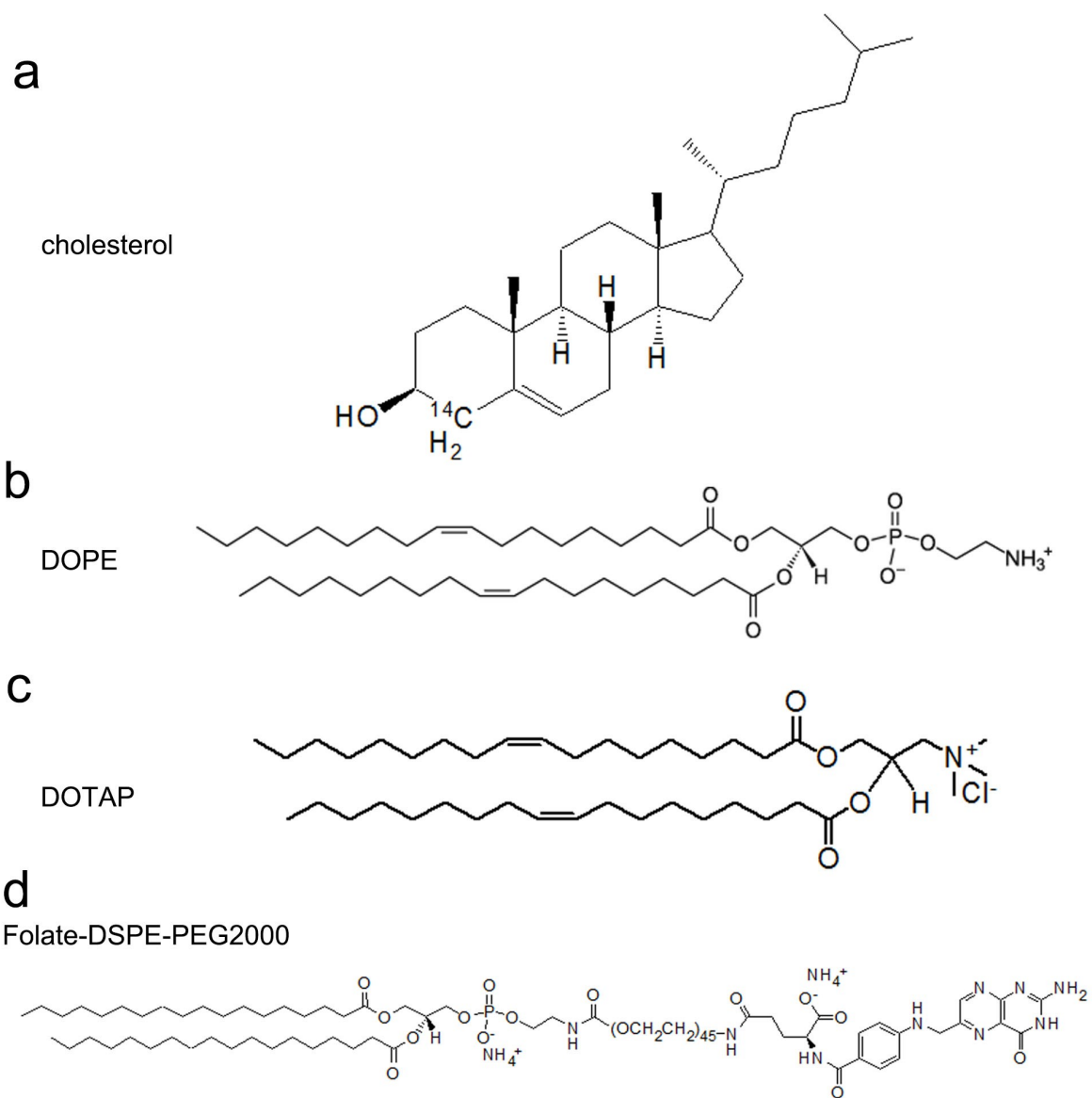


Fig. S4 Chemical structures of (a) cholesterol, (b) DOPE, (c) DOTAP, (d) DSPE-PEG2000-Folate.

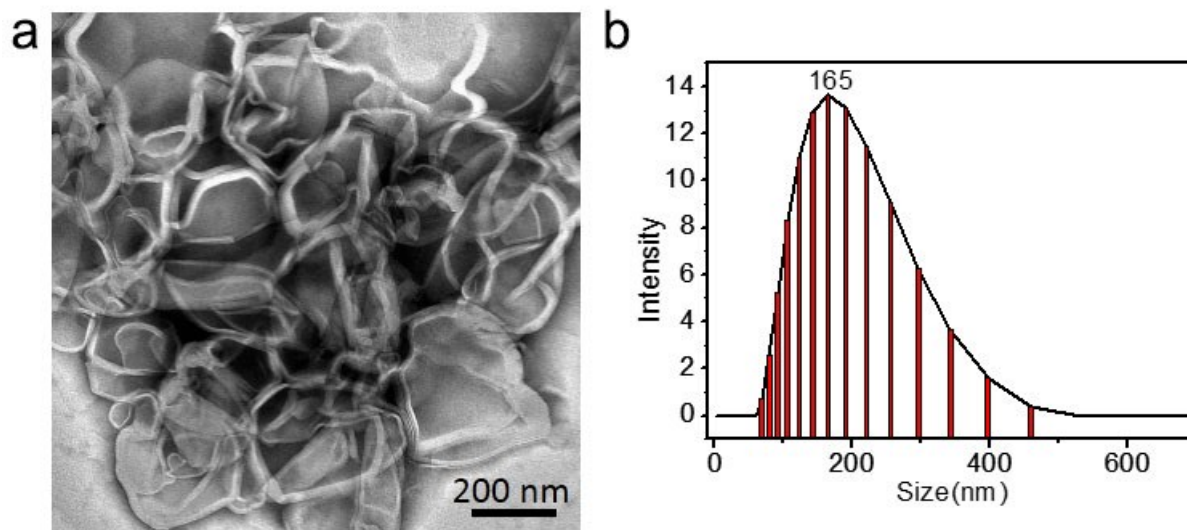


Fig. S5 (a) TEM image of the mixed liposome; (b) relevant DLS measurement.

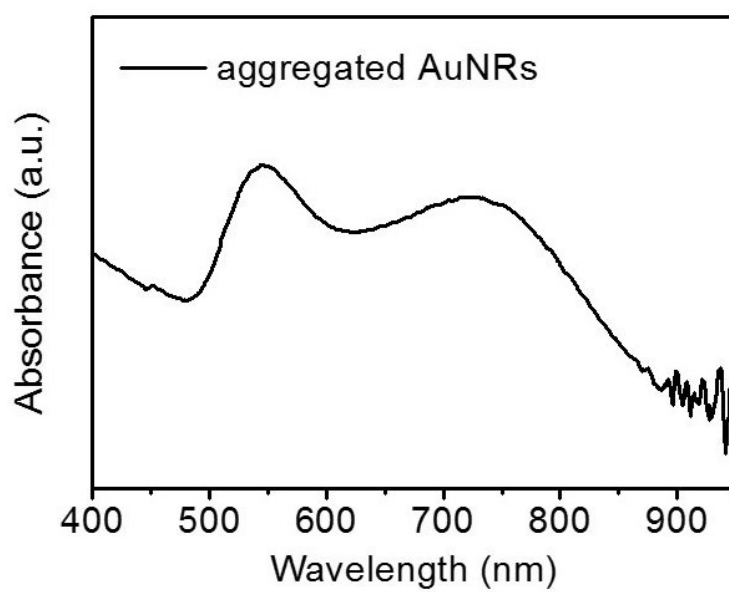


Fig. S6 UV-vis spectrum of aggregated AuNRs without surface modification.

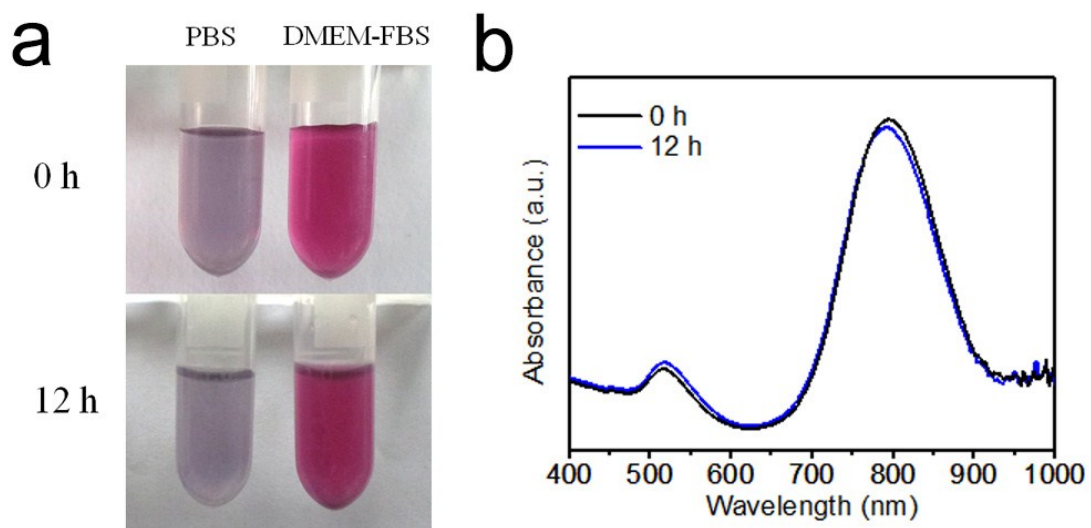


Fig. S7 (a) Photoimages of AuNR@MSN-HB@LF incubated in buffer solution and serum containing medium. (b) Corresponding UV-vis spectra of AuNR@MSN-HB@LF.

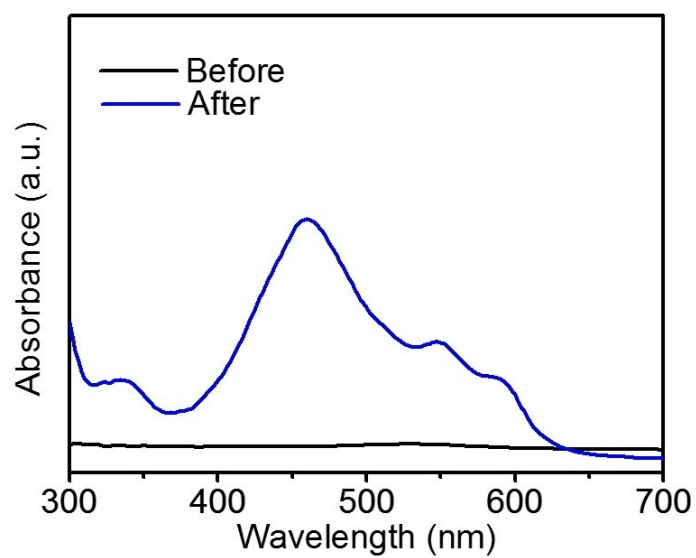


Fig. S8 UV-vis spectra of the supernatant before and after irradiating AuNR@MSN-HB@LF solution.

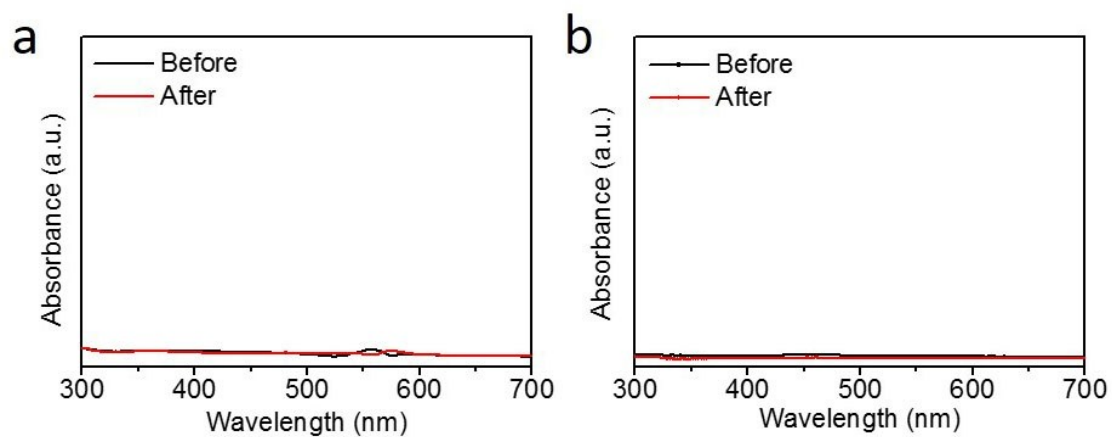


Fig. S9 UV-vis spectra of the supernatant of AuNR@MSN-HB solution before and after lipid coating without irradiation in (a) cell culture medium and (b) PBS (pH 7.2).

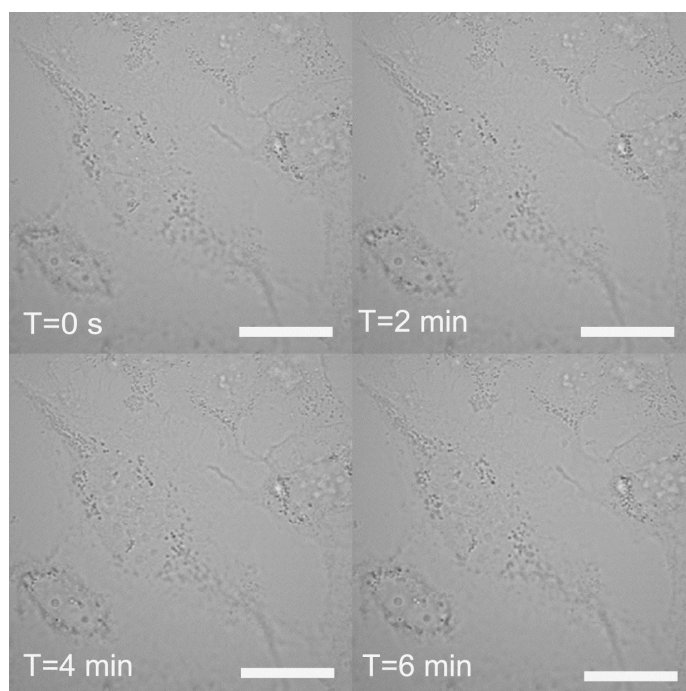


Fig. S10 Time-dependent CLSM images of MCF-7 cells without the bioconjugate under the same irradiation condition. The scale bars are 30 μm .

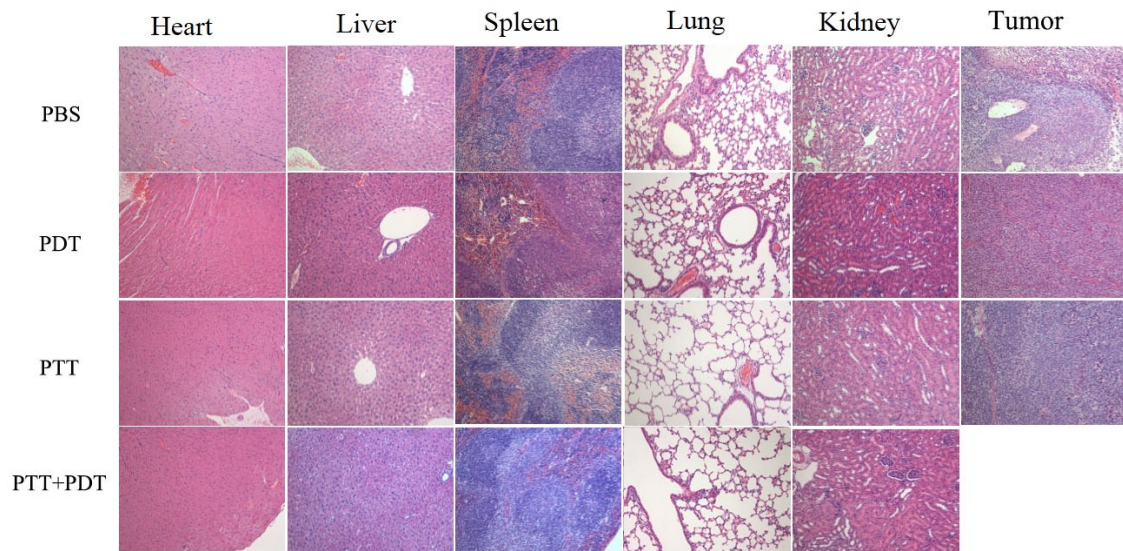


Fig. S11 The 19-day HE section of main organs and tumor after treatment.