Electronic Supplementary Material (ESI) for Nanoscale. This journal is © The Royal Society of Chemistry 2015

Supporting Information

Rational Assembly of Biointerfaced Core@Shell Nanocomplex towards Selective and Highly Efficient Synergistic Photothermal/Photodynamic Therapy

Chenchen Qin,^a Jinbo Fei,^a Anhe Wang,^b Yang Yang,^b and Junbai Li^{a,b*}

^{a.} Beijing National Laboratory for Molecular Sciences, CAS Key Lab of Colloid, Interface and Chemical Thermodynamics, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100190, China, E-mail: jbli@iccas.ac.cn.

b. National Center for Nanoscience and Technology, Beijing, 100190, China.



Fig. S1 Molecule structure of HB.



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 μ m.



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