

*Supplementary Material*

# Theragnostic Glycol Chitosan-Conjugated Gold Nanoparticles for Photoacoustic Imaging of Regional Lymph Nodes and Delivering Tumor Antigen to Lymph Nodes

In-Cheol Sun <sup>1,†</sup>, SeongHoon Jo <sup>1,2,†</sup>, Diego Dumani <sup>3</sup>, Wan Su Yun <sup>1,4</sup>, Hong Yeol Yoon <sup>1</sup>, Dong-Kwon Lim <sup>4</sup>, Cheol-Hee Ahn <sup>2</sup>, Stanislav Emelianov <sup>5,6,\*</sup> and Kwangmeyung Kim <sup>1,4,\*</sup>

<sup>1</sup> Center for Theragnosis, Biomedical Research Institute, Korea Institute of Science and Technology, 5, Hwarang-ro, Seongbuk-gu, Seoul 02792, Korea; pfesun@kist.re.kr (I.-C.S.); jsh@kist.re.kr (S.J.); ip9801@kist.re.kr (W.S.Y.) seerou@kist.re.kr (H.Y.Y.)

<sup>2</sup> Department of Materials Science and Engineering, Research Institute of Advanced Materials (RIAM), Seoul National University, 1 Gwanak-ro, Gwanak-gu, Seoul 08826, Korea; chahn@snu.ac.kr

<sup>3</sup> School of Electrical Engineering, University of Costa Rica, San Pedro Montes de Oca, San Jose 11501-2060, Costa Rica; diego.dumani@ucr.ac.cr

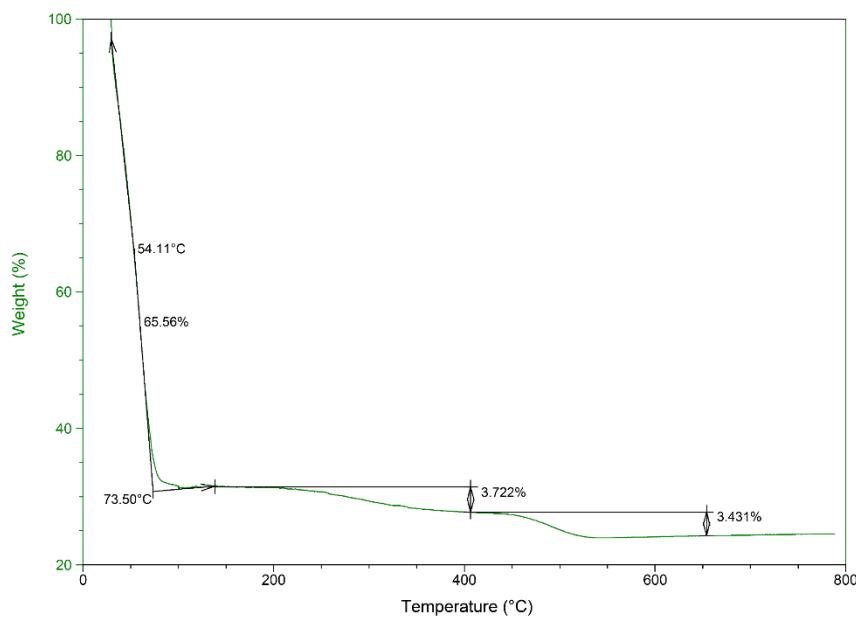
<sup>4</sup> KU-KIST Graduate School of Converging Science and Technology, Korea University, 145 Anam-ro, Seongbuk-gu, Seoul 02841, Korea; dklim@korea.ac.kr

<sup>5</sup> School of Electrical and Computer Engineering, Georgia Institute of Technology, 777 Atlantic Drive, Atlanta, GA 30332, USA

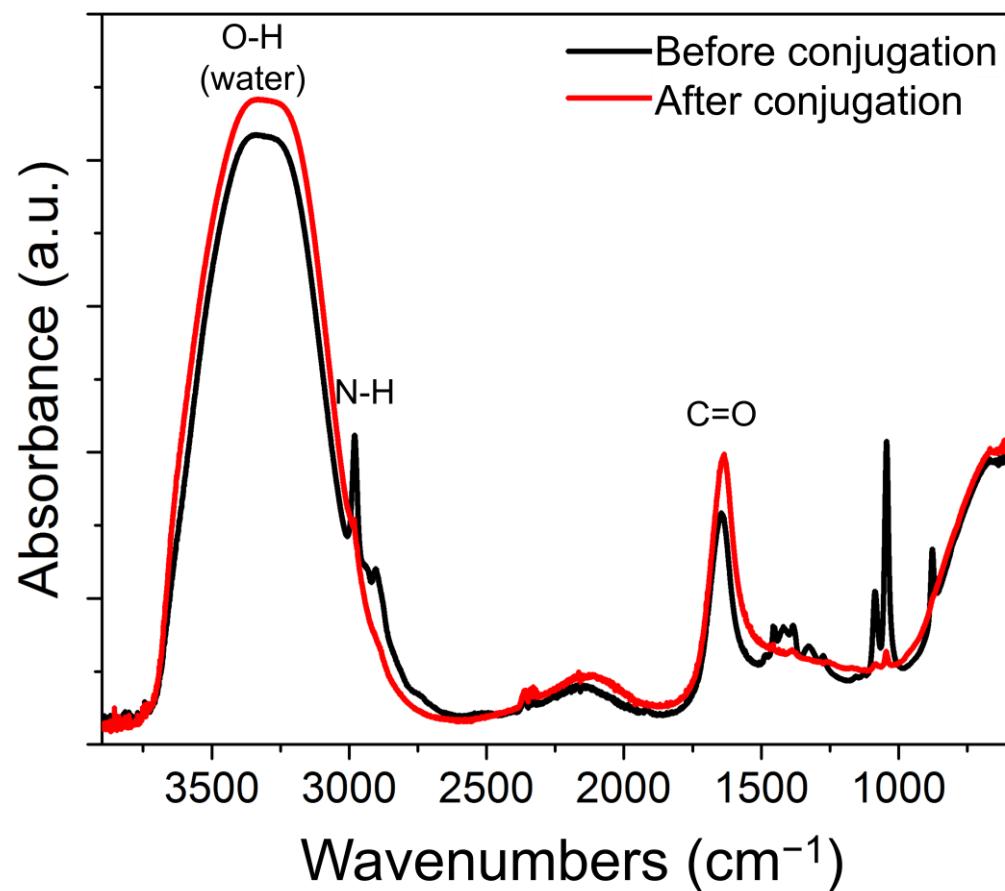
<sup>6</sup> Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory University School of Medicine, 313 First Drive NW, Atlanta, GA 30318, USA

† These authors contributed equally to this work.

\* Correspondence: stas@gatech.edu (S.E.); kim@kist.re.kr (K.K.)



**Figure S1.** Weight loss profile from thermal gravimetric analysis of GC-AuNPs.



**Figure S2.** FT-IR spectra of before (black line) and after (red line) the conjugation of OVA peptides to GC-AuNPs.