

Supplementary Information

T1-weighted MR imaging of liver tumor by gadolinium-encapsulated glycol chitosan nanoparticles without non-specific toxicity in normal tissues

Jin Hee Na,^{‡a,b,c} Sangmin Lee,^{‡a,b,c} Heebeom Koo,^a Hyounkoo Han,^{a,d} Kyung Eun Lee,^e Seung Jin Han,^a Seung Hong Choi,^f Hyuncheol Kim,^d Seulki Lee,^{b,c} Ick Chan Kwon,^{a,g} Kuiwon Choi^{*h} and Kwangmeyung Kim^{*a}

^a Center for Theragnosis, Biomedical Research Institute, Korea Institute of Science and Technology (KIST), Hwarangno 14-gil 5, Seongbuk-gu, Seoul 136-791, Republic of Korea. E-mail: kim@kist.re.kr

^b The Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins University School of Medicine, 601 N. Caroline Street, Baltimore, MD 21287, USA.

^c The Center for Nanomedicine, The Wilmer Eye Institute, Johns Hopkins University School of Medicine, 400 N. Broadway, Baltimore, MD 21231, USA.

^d Department of Chemical and Biomolecular Engineering, Sogang University, 35 Baekbeom-ro, Mapo-gu, Seoul 121-742, Republic of Korea.

^e Advanced Analysis Center, Korea Institute of Science and Technology (KIST), Hwarangno 14-gil 5, Seongbuk-gu, Seoul 136-791, Republic of Korea.

^f Department of Radiology, Seoul National University Hospital, 101 Daehak-ro, Jongno-gu, Seoul 110-744, Republic of Korea.

^g KU-KIST School, Korea University, 1 Anam-dong, Seongbuk-gu, Seoul 136-701, Republic of Korea.

^h Korea Institute of Science and Technology Europe (KIST-Europe), Forschungsgesellschaft mbH, Campus E7.1, 66123 Saarbrücken, Germany.

* Address correspondence to K.Kim (kim@kist.re.kr) or K.Choi (choi@kist.re.kr)

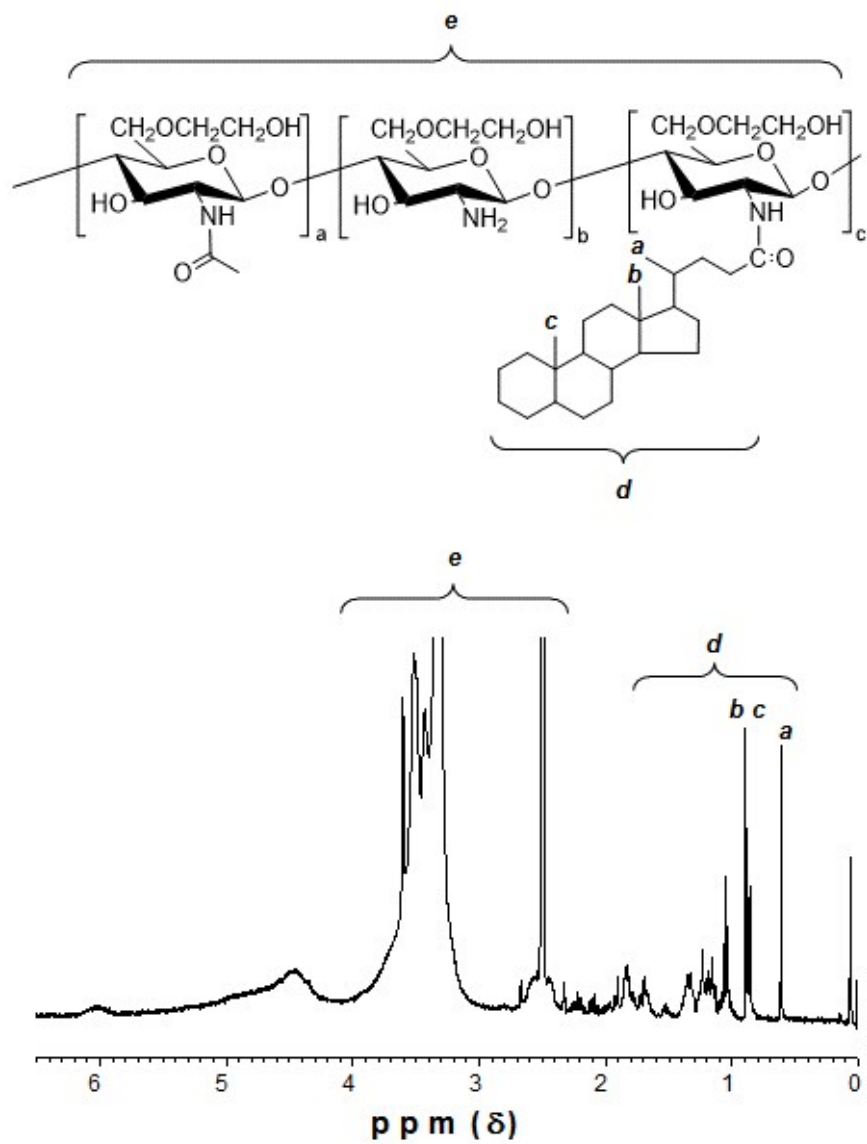


Fig. S1 $^1\text{H-NMR}$ spectrum of CNP