

# **Supporting information for the article**

## **Development of HER2 targeting ligand-modified albumin nanoparticles based on Spy Tag/SpyCatcher system for photothermal therapy**

Changkyu Lee<sup>\*†</sup>, Sebyung Kang<sup>‡</sup>

<sup>†</sup> Department of Biopharmaceutical Engineering, Division of Chemistry and  
Biotechnology, Dongguk University, Gyeongju 38066, Korea

<sup>‡</sup> Department of Biological Sciences, Ulsan National Institute of Science and  
Technology (UNIST), Ulsan, 44919, Korea

### **KEYWORDS**

SpyTag, SpyCatcher , active targeting, HER2 affibody, albumin nanoparticle, photothermal therapy

Constructs	Amino acid sequence
SpyTag- Cysteine (ST-Cys)	AHIVMVDAYKPTKGGSCGG
SpyCatcher- HER2Afb (SC- HER2Afb)	MGSSHHHHHHSQDPMVDTLSGLSEQGQSGDMTIEEDSATHIKFSKRDEDGKELAGA TMELRDSSGKTISTWISDGQVKDFYLYPGKYTFVETAAPDGYEVATAITFTVNEQG QVTVNGKATKGDAHIKNSTSTGGSGGGASVDNKFNEMRNAYWEIALLPNLNNQ QKRAFIRSLYDDPSQSANLLAEAKKLNDDAQAPKVD

Table S1.

Amino acid sequence information of ST-Cys and SC-HER2Afb

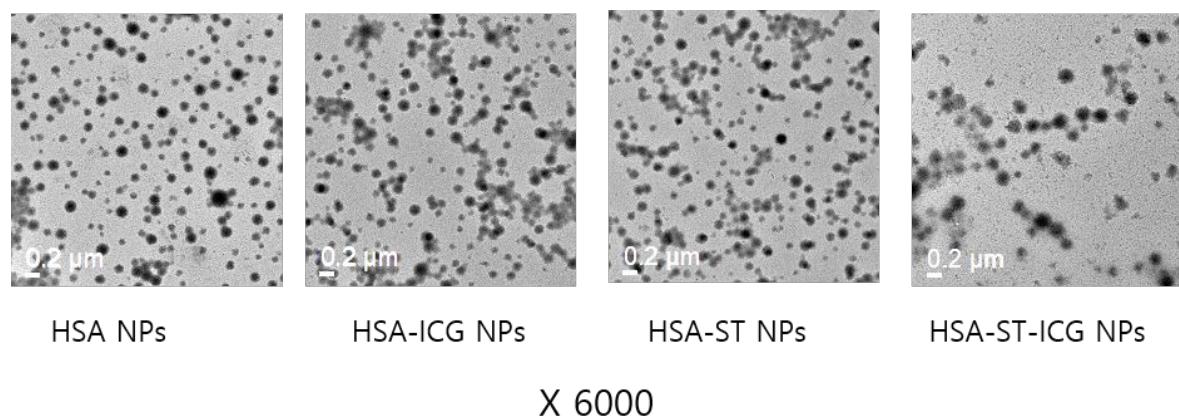


Figure S1. TEM images of all types of nanoparticles

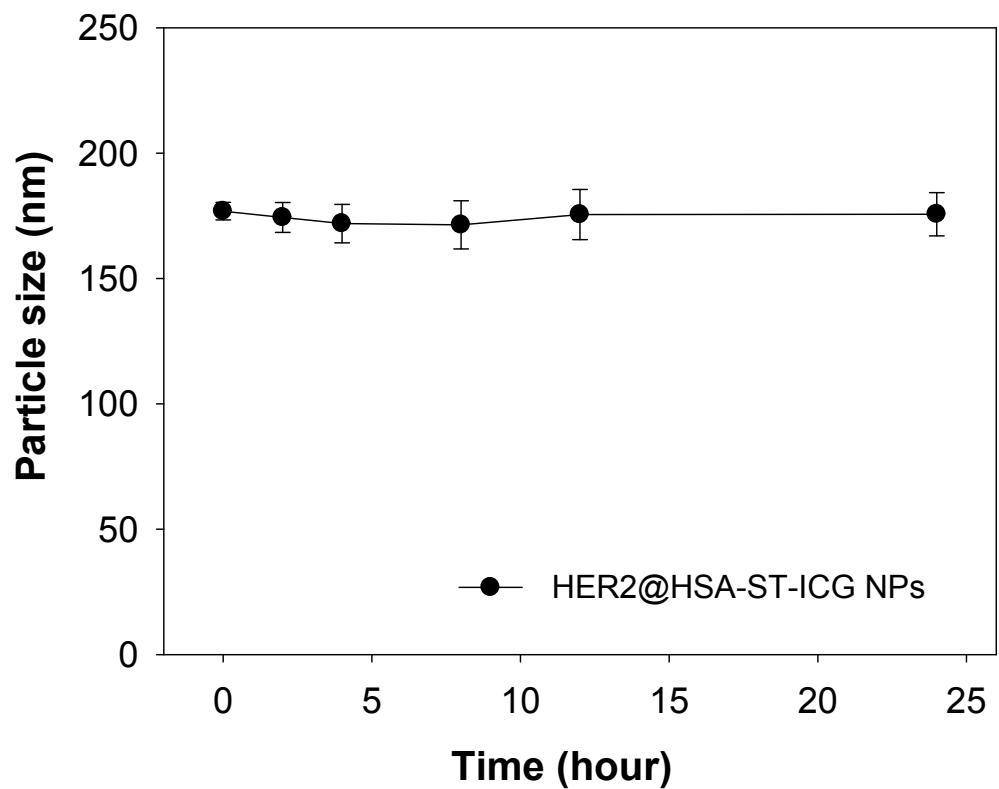


Figure S2. Stability of HER2@HSA-ST-ICG NPs during the day in 10 mM PBS buffer at 37 °C.