Elemental Supplementary Information

Visualization of platelet recruitment to tumor lesions using highly sensitive and stable radioiodine studded gold nanoprobes

Sang Bong Lee ,‡[a] Hyun Dong Ji ,‡[b] In-Kyu Lee, [c] Kil Soo Kim, [d,f] Jaetae Lee, [b,e] Sang-Woo Lee, [*,b,e] Yong Hyun Jeon[*,d,e]

[a] Korea Institute of Medical Microrobotics (KIMIRo), Gwangju, 61011, South Korea.

[b] Department of Nuclear Medicine, Kyungpook National University Hospital, Daegu, South Korea. E-mail: swleenm@knu.ac.kr

[c] Department of Internal Medicine, School of Medicine, Kyungpook National University, Daegu, South Korea.

[d] Laboratory Animal Center, Daegu-Gyeongbuk Medical Innovation Foundation, Daegu, South Korea. E-mail: jeon9014@gmail.com

[e] Leading-edge Research Center for Drug Discovery and Development for Diabetes and Metabolic Disease, Kyungpook National University Hospital, Daegu, South Korea.

[f] College of Veterinary Medicine, Kyungpook National University, Daegu 41566, South Korea.
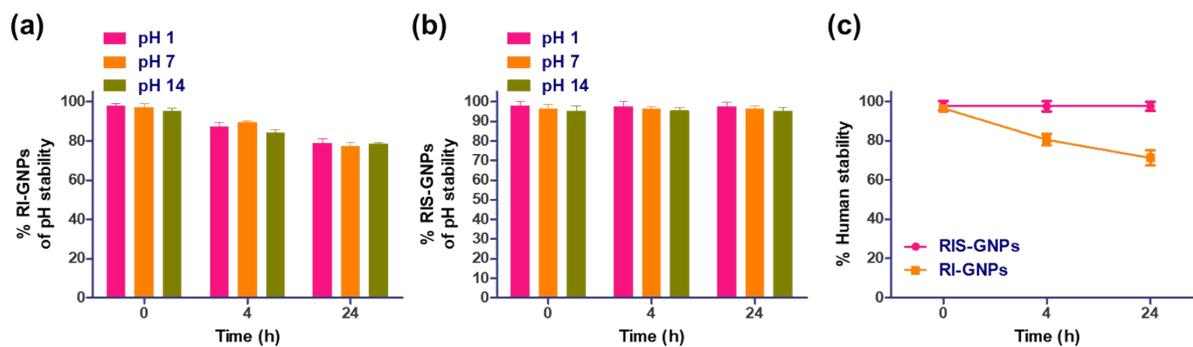
Fig. S1. Time-dependent stability of **(a)** RI-GNPs and **(b)** RIS-GNPs in solutions with varying pH and **(c)** in human serum.
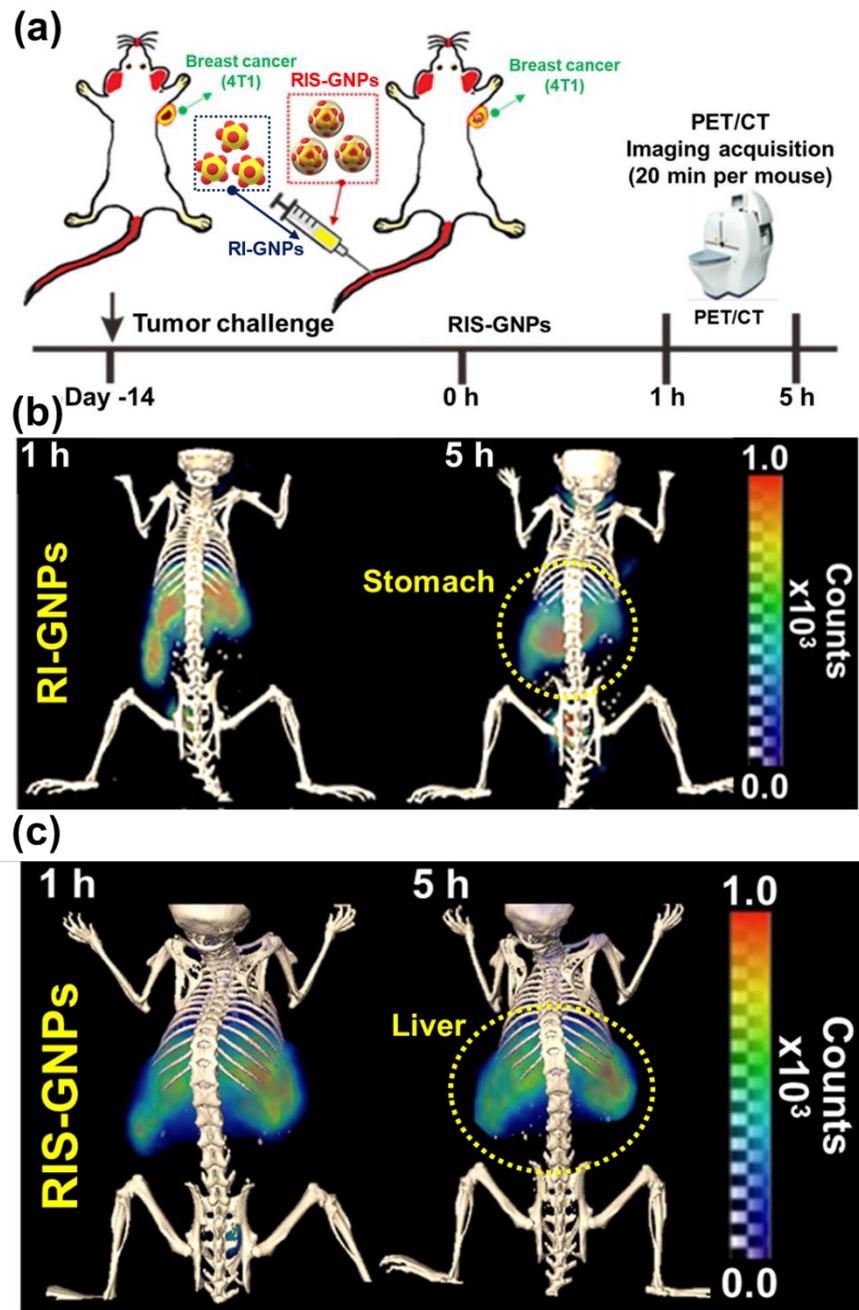
Fig. S2. PET/CT images of breast cancer with RI-GNPs and RIS-GNPs. **(a)** Schematic protocol for in vivo experiments. 3D-reconstructed PET/CT images revealing the distribution of **(b)** RI-GNPs and **(c)** RIS-GNPs in 4T1 tumor-bearing mice over time. Using VIVID, PET signals were analyzed with CT-based segmentation and the radioactive signal in the tumor lesion was overlaid with CT imaging.