Supporting information

Trackable and Targeted Phage as Positron Emission Tomography (PET) Agent for Cancer Imaging

Zibo Li[1]*, Qiaoling Jin[2#], Chiunwei Huang[1#], Siva Dasa[2], Liaohai Chen[2]*, Li-peng Yap[1], Shuanglong Liu[1], Hancheng Cai[1], Ryan Park[1], Peter S Conti[1]

1. Molecular Imaging Center, Department of Radiology, University of Southern California, Los Angeles, CA 90033, USA

2. Biosciences Division, 9700 S. Cass Avenue, Argonne National Laboratory, Argonne, IL 60439, USA.

*Correspondence should be addressed to: Zibo Li (ziboli@usc.edu) and Liaohai Chen (lhchen@anl.gov).

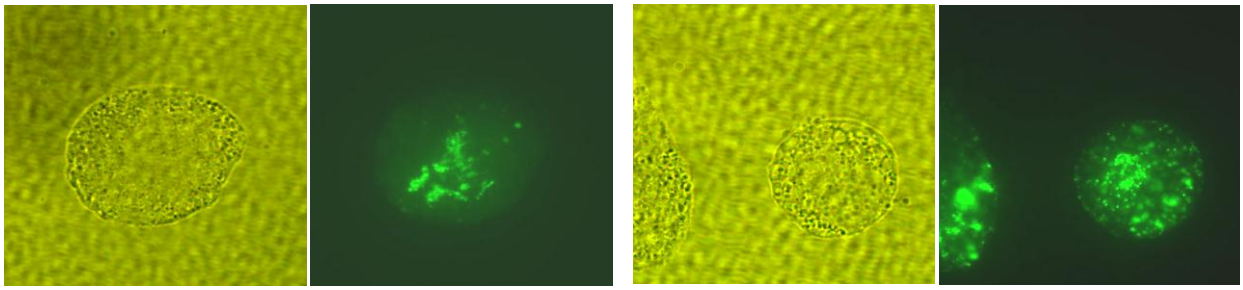

Figure S1. SKOV3 cells were incubated with 488 conjugated wild type T7 (left) or T7 -RGD phage (right) for 1 h. Cells were then washed, dissociated, fixed and observed under IX70 Olympus microscope. It was noticed that most cells were intensively labeled by T7-RGD phage, both on cell surface and intracellular space, whereas they were less intensively labeled by wild type T7 phage, and the labeling were found to be intracellular only.

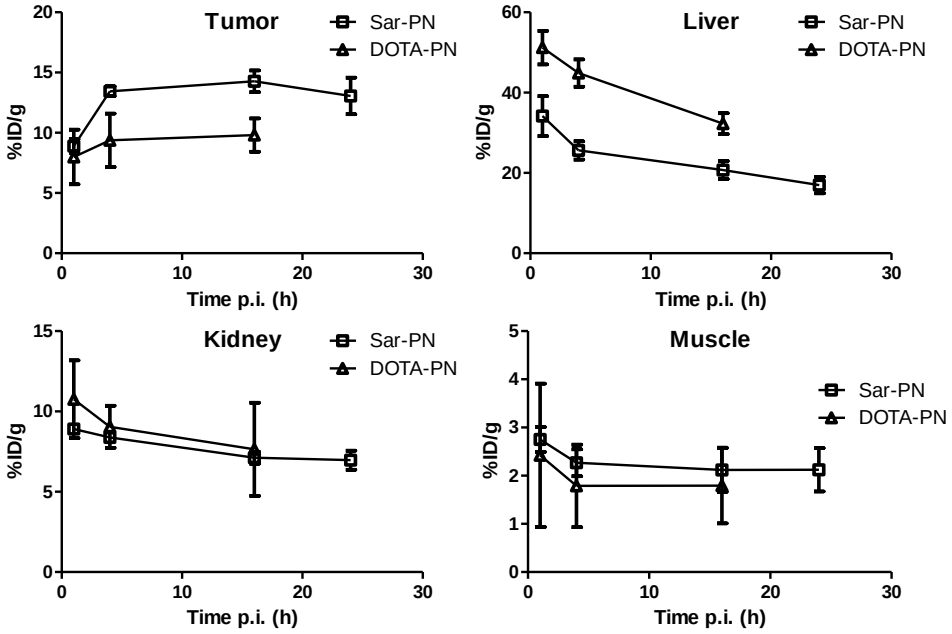

Figure S2. The uptake of ^{64}Cu-DOTA-Phage-RGD and ^{64}Cu-Sar-Phage-RGD in U87MG tumor and major organs.

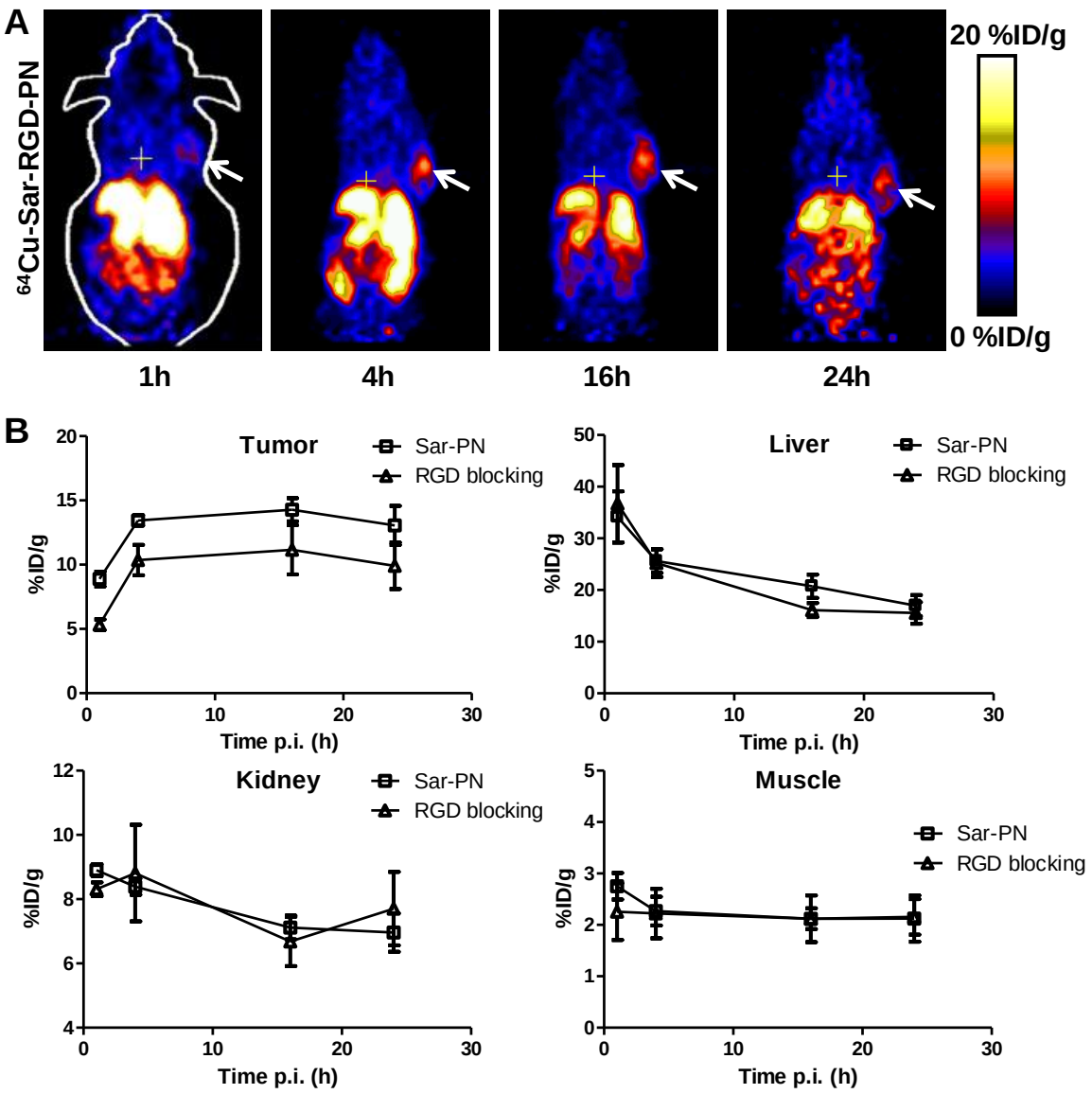

Figure S3. (A) Coronal microPET images of U87MG tumor bearing nude mice after injection of ^{64}Cu-Sar-Phage-RGD with a blocking dose c(RGDyK). (B) The unblocked/ blocked tumor and major organ uptake derived from microPET study.