

A preliminary study of a ^{68}Ga -labeled PET probe for HER2 imaging

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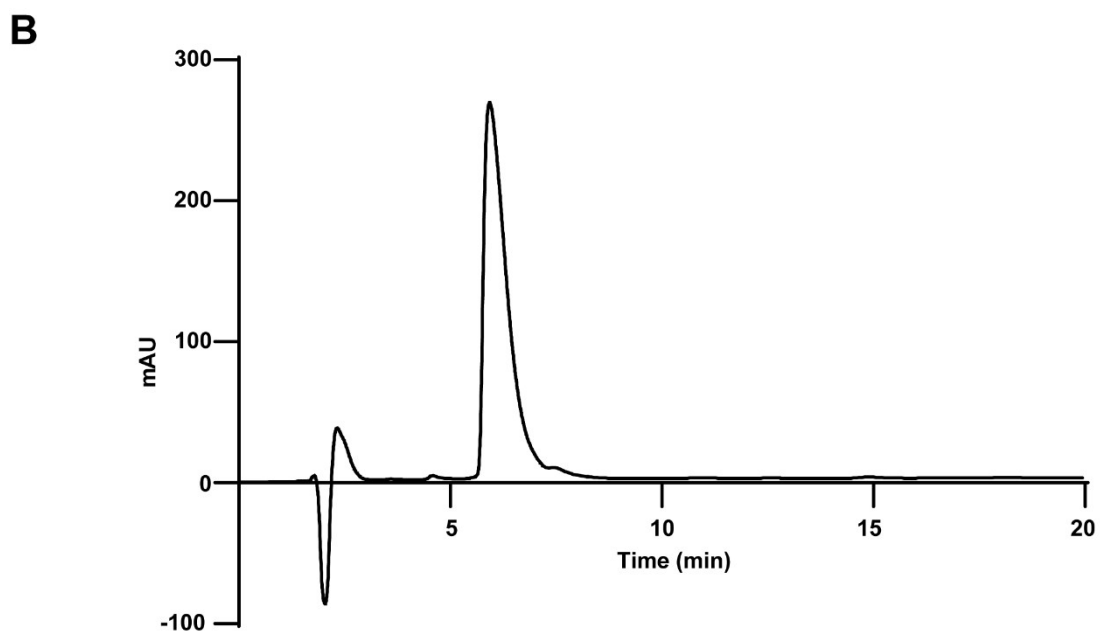
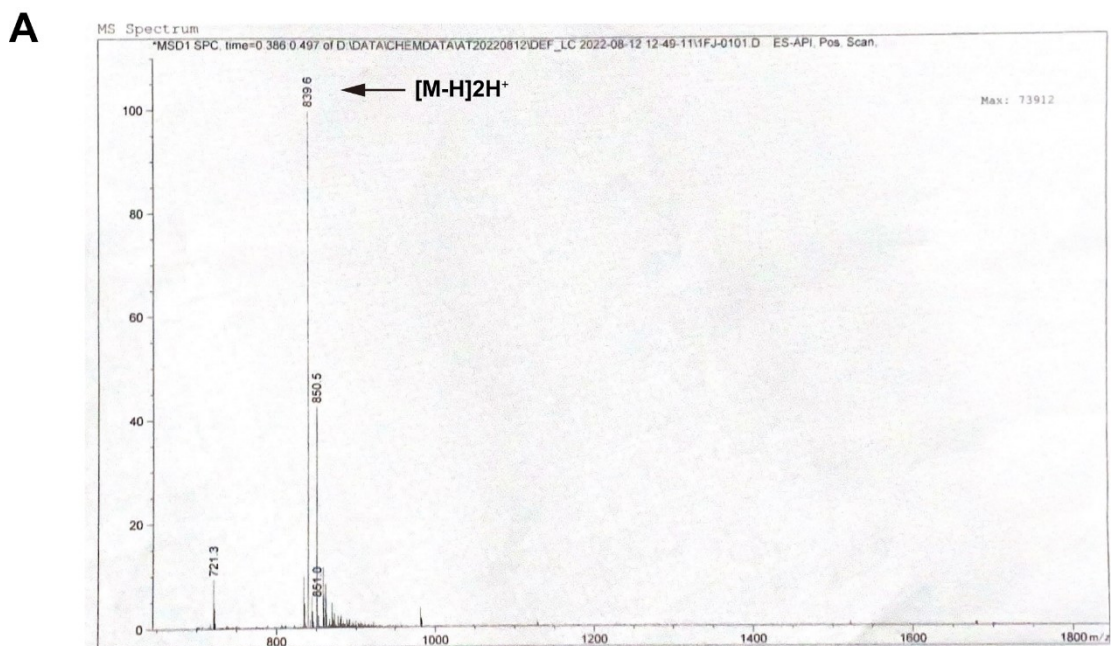


Fig. S1. (A) ESI analysis of DOTA-GGG-H6F, MS-ESI(+) calcd for $C_{80}H_{112}N_{18}O_{22}$: 1676.8199, $[M-H]2H^+$ found: 839.6. (B) Analytical HPLC chromatogram of DOTA-GGG-H6F (retention time: 5.9 min).

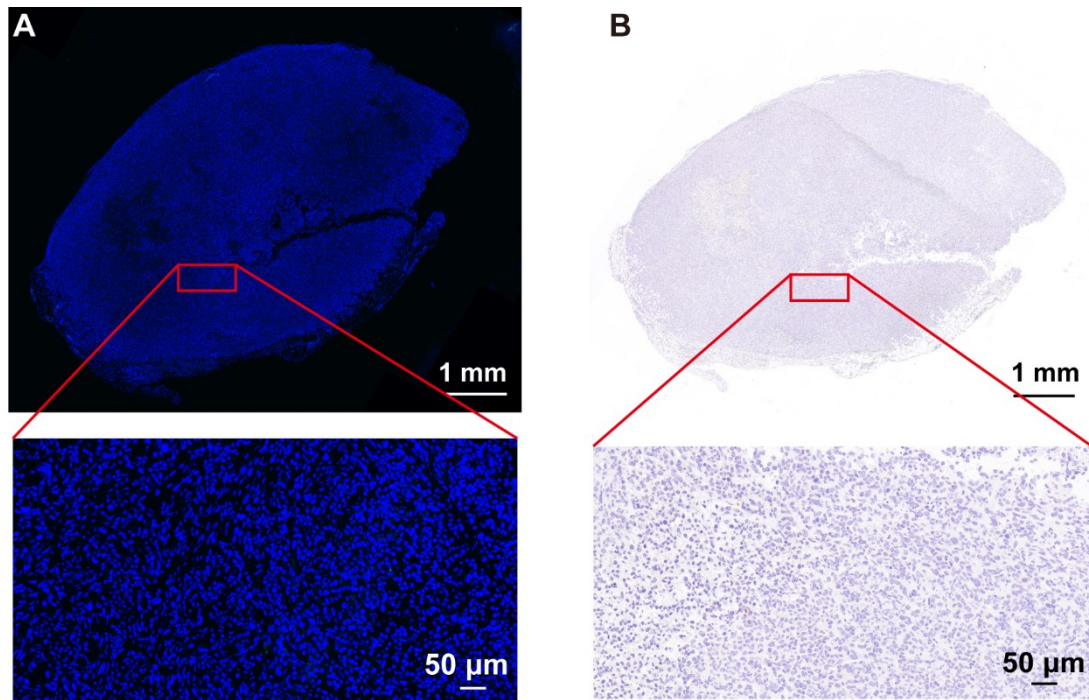


Fig. S2. Histological studies. (A) IF (green = HER2, blue = nuclei), and (B) IHC analysis of MDA-MB-231 tumor tissue specimens harvested at 60 min post-injection.

Table. S1. Biodistribution of ⁶⁸Ga-DOTA-GGG-H6F tumor xenograft models.

Tissue	SKOV-3			MDA-MB-231	
	30 min	60 min	120 min	60 min Block	60 min
Blood	1.20 ± 0.45	0.31 ± 0.08	0.11 ± 0.01	0.40 ± 0.07	0.41 ± 0.11
Heart	0.33 ± 0.11	0.10 ± 0.02	0.06 ± 0.02	0.09 ± 0.02	0.12 ± 0.04
Liver	0.85 ± 0.26	0.68 ± 0.21	0.77 ± 0.11	0.76 ± 0.26	0.63 ± 0.11
Spleen	0.41 ± 0.16	0.28 ± 0.08	0.35 ± 0.22	0.30 ± 0.14	0.52 ± 0.20
Lung	1.68 ± 0.88	0.80 ± 0.33	1.04 ± 0.51	0.55 ± 0.17	1.74 ± 0.62
Kidney	5.53 ± 1.82	2.42 ± 0.86	1.62 ± 0.25	2.04 ± 0.45	2.96 ± 0.64
Bladder	1.91 ± 0.77	0.69 ± 0.30	0.24 ± 0.10	0.99 ± 0.45	2.80 ± 1.06
Brain	0.07 ± 0.02	0.04 ± 0.01	0.02 ± 0.01	0.03 ± 0.01	0.02 ± 0.01
Intestine	0.32 ± 0.06	0.18 ± 0.06	0.07 ± 0.04	0.19 ± 0.08	0.40 ± 0.31
Stomach	0.52 ± 0.06	0.14 ± 0.02	0.04 ± 0.03	0.16 ± 0.02	0.18 ± 0.13
Bone	0.37 ± 0.19	0.20 ± 0.10	0.13 ± 0.06	0.20 ± 0.16	0.38 ± 0.04
Muscle	0.31 ± 0.03	0.06 ± 0.02	0.04 ± 0.005	0.07 ± 0.005	0.09 ± 0.01
Tumor	1.07 ± 0.14	0.52 ± 0.10	0.23 ± 0.01	0.23 ± 0.03	0.36 ± 0.04
T/M	3.44 ± 0.17	9.29 ± 1.90	6.40 ± 1.16	3.25 ± 0.32	4.01 ± 0.53

* Values are expressed as mean ± SD (% ID/g); T/M = tumor to muscle ratio.