

## Aggregation-Induced Emission Based PET probe for Liver

### Function Imaging

Song Liu,<sup>a</sup> Yong Huang,<sup>a</sup> Yajing Liu,<sup>b</sup> Renbo, Wu,<sup>a</sup> Yuli, Sun,<sup>a</sup> Zequn, Yang,<sup>a</sup> Hao, Xiao,<sup>a</sup>  
Xuebo Cheng,<sup>a</sup> and Zehui, Wu<sup>a\*</sup>

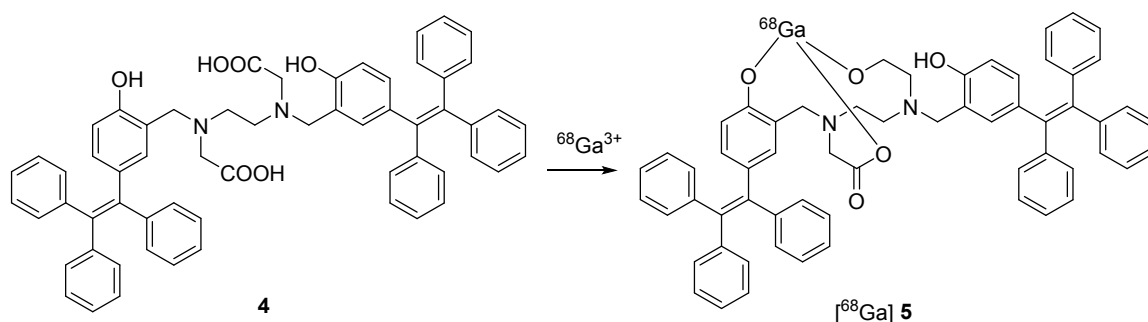
<sup>a</sup> Brain Institute of Brain Disorders, Capital Medical University, Beijing 100069, China

<sup>b</sup> School of Pharmaceutical Science, Capital Medical University, Beijing 100069, China

E-mail: wzhhuey2012@ccmu.edu.cn

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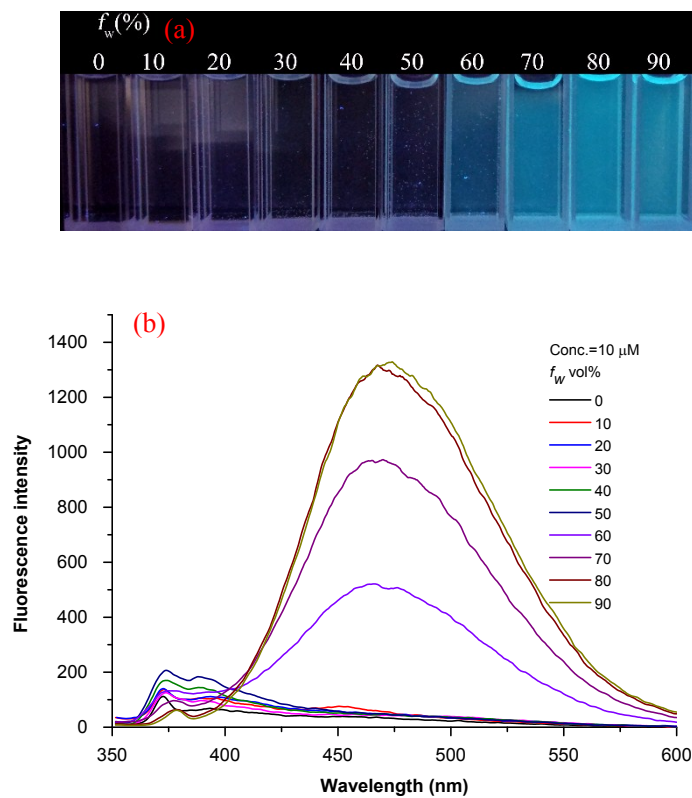
#### I . Radiosynthesis of [<sup>68</sup>Ga] **5**



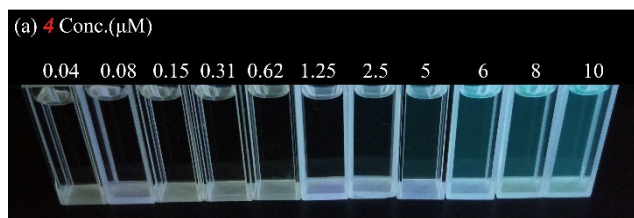
**Scheme S1.** Synthesis of the [<sup>68</sup>Ga<sup>3+</sup>] **5** 0.2 mL eluent in 0.05 M HCl of <sup>68</sup>Ge/<sup>68</sup>Ga

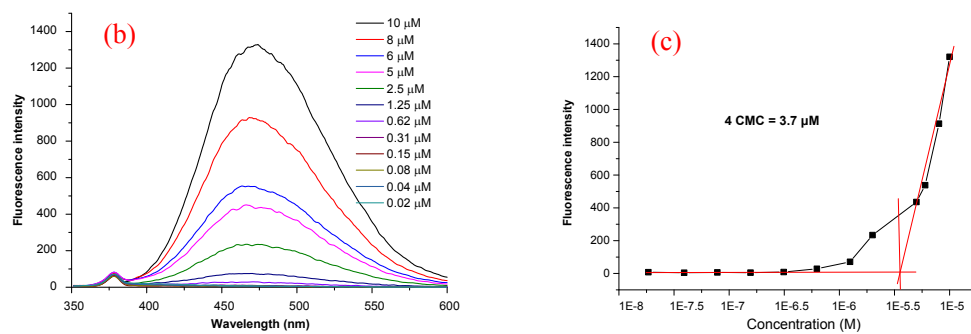
generator (ITG, Germany) and 0.2 mL 2 N HEPES (pH = 7) were added and mixed with 10  $\mu\text{L}$  of  $4 \times 10^{-3} \text{ molL}^{-1}$  and reacted at room temperature for 10 min

## II. AIE Properties of precursor 4



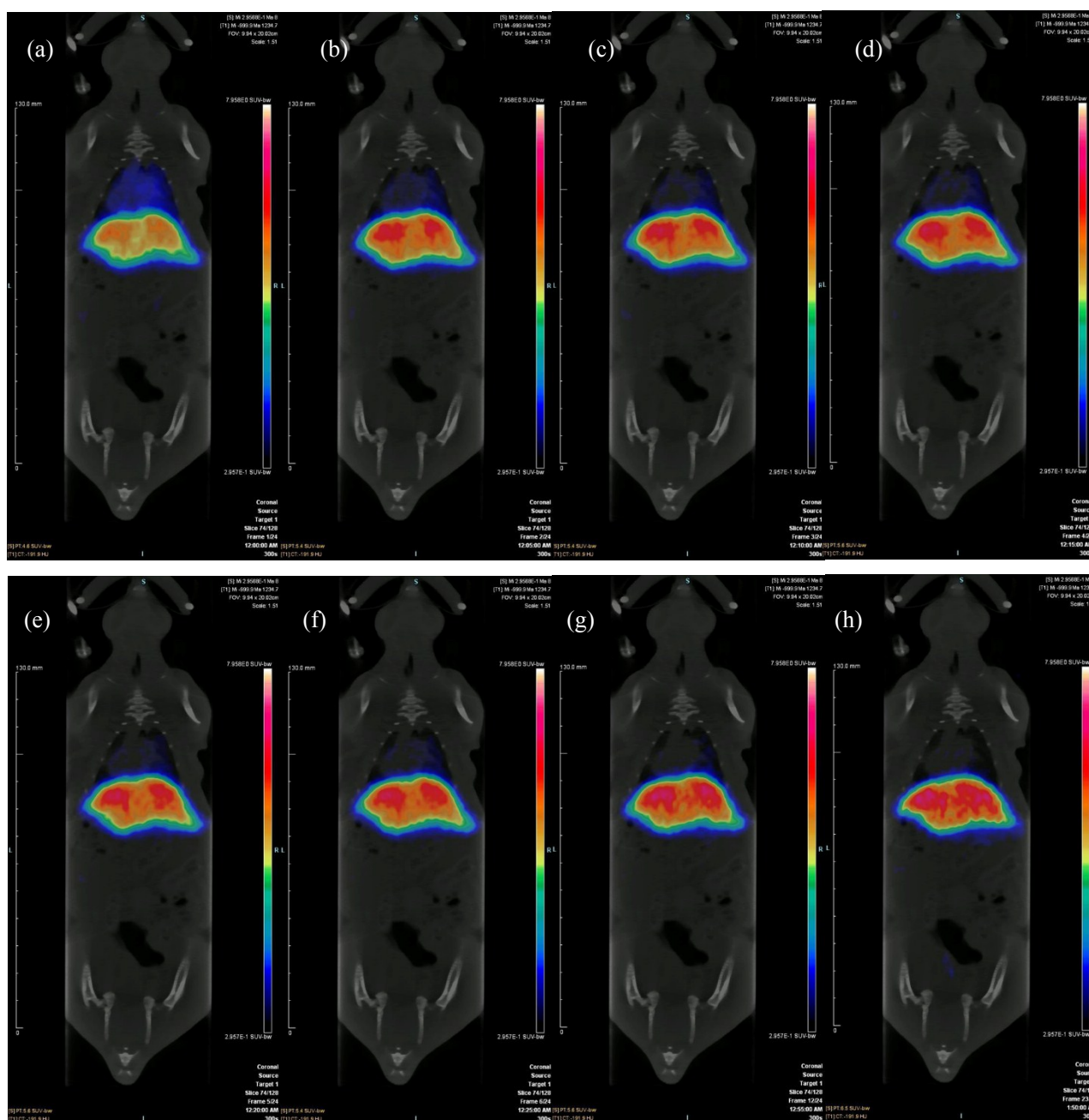
**Figure S1.** (a) Photographs taken under UV irradiation and (b) emission spectra of 4 in aqueous solution at different concentrations. Concentration: 10  $\mu\text{M}$ . slit width = 5 nm, Excitation wavelength: 330 nm.





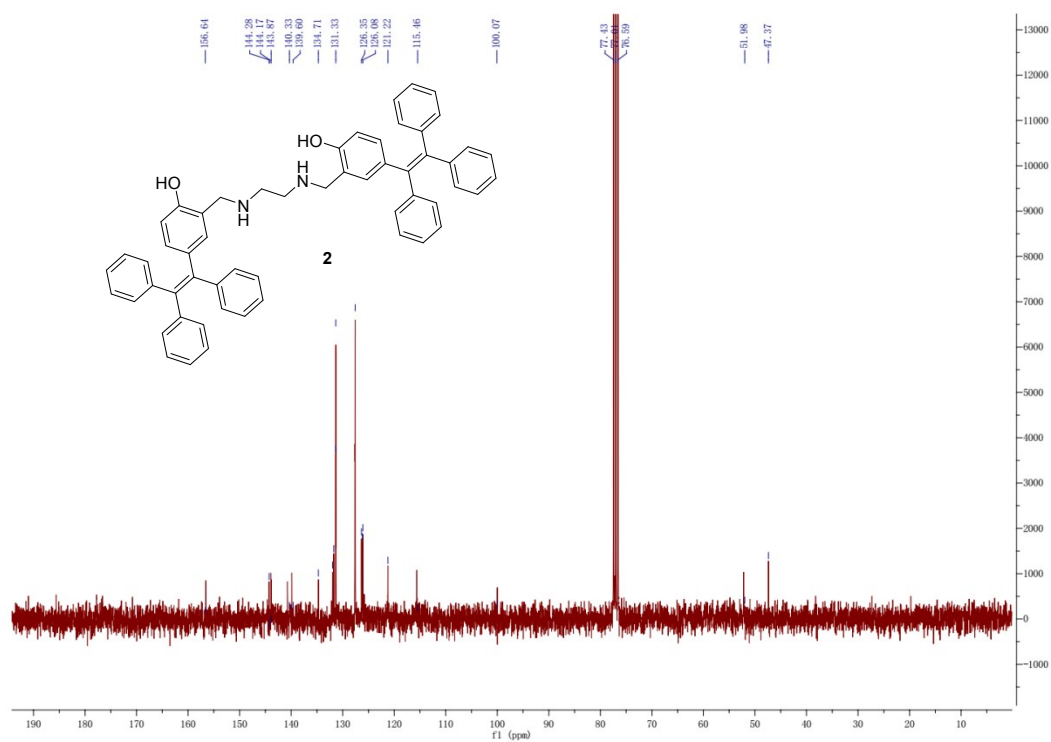
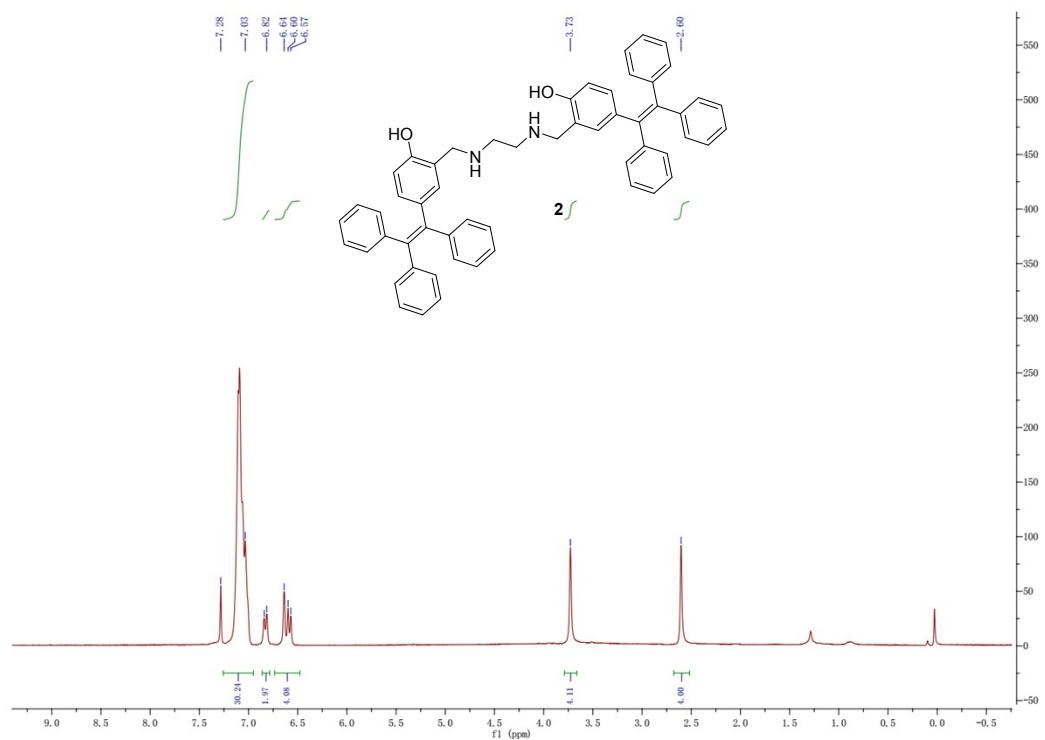
**Figure S2.** (a) Photographs taken under UV irradiation and (b) emission spectra of **4** in aqueous solution at different concentrations. (c) Plots of PL intensities versus concentrations of **4** in DMSO/H<sub>2</sub>O=1/99. The CMC of **4** is 3.7 μM, slit width = 5 nm, Excitation wavelength:330 nm.

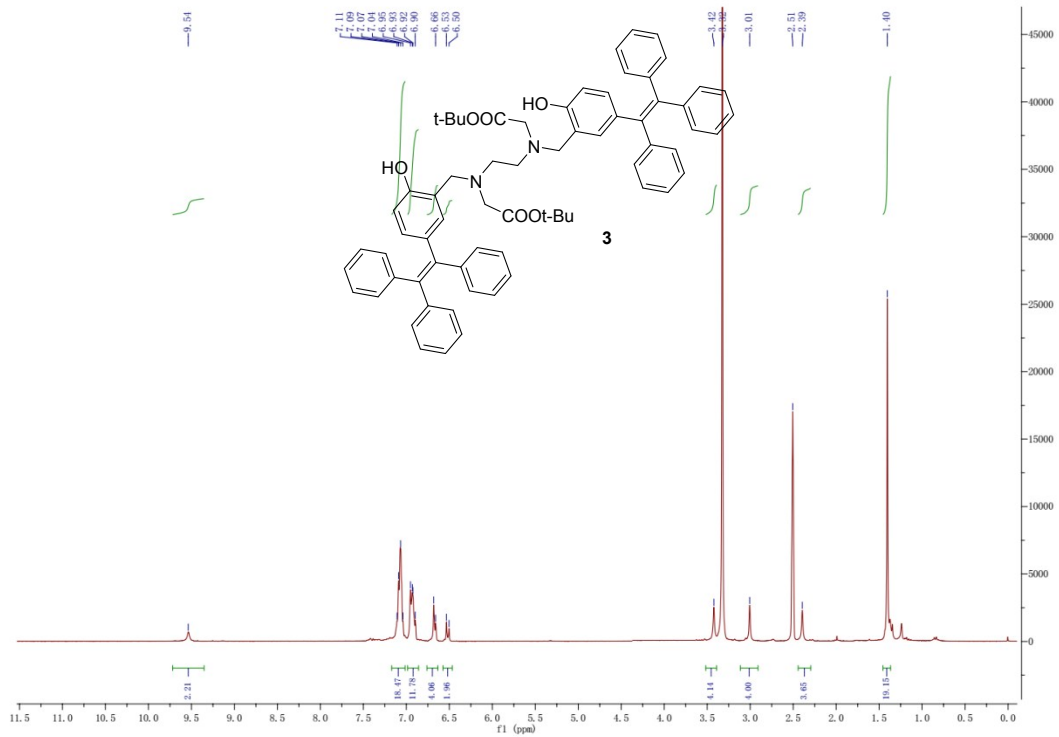
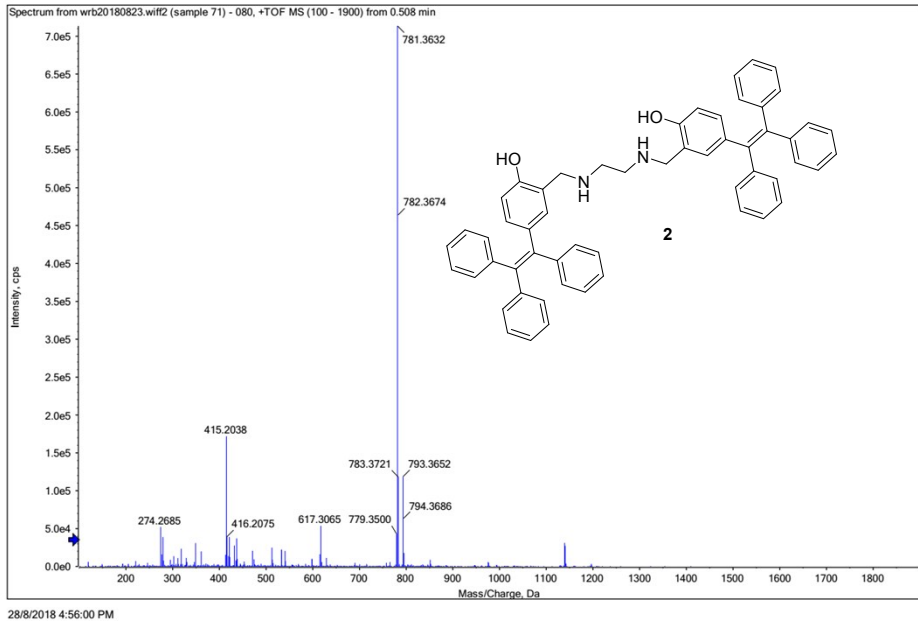
### III . PET imaging of Rat

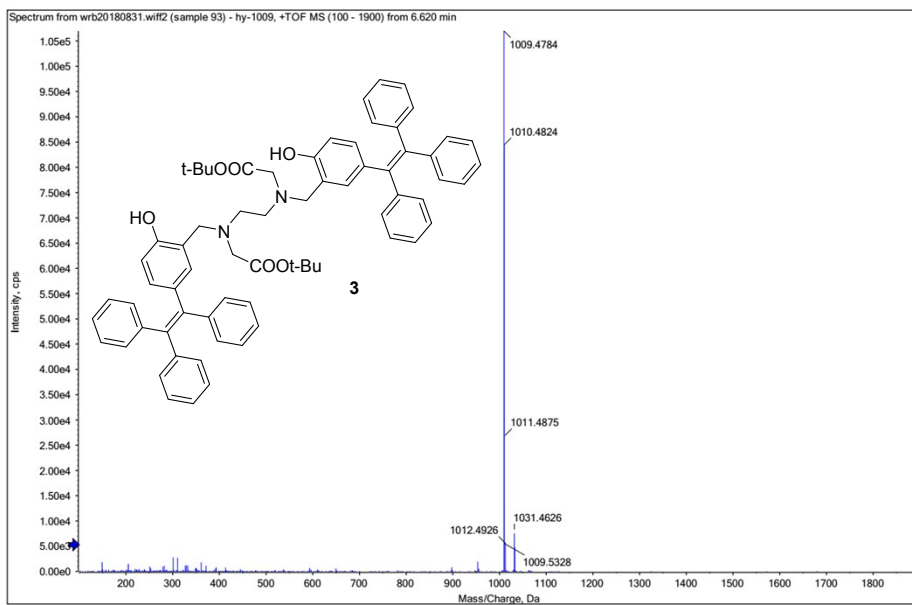
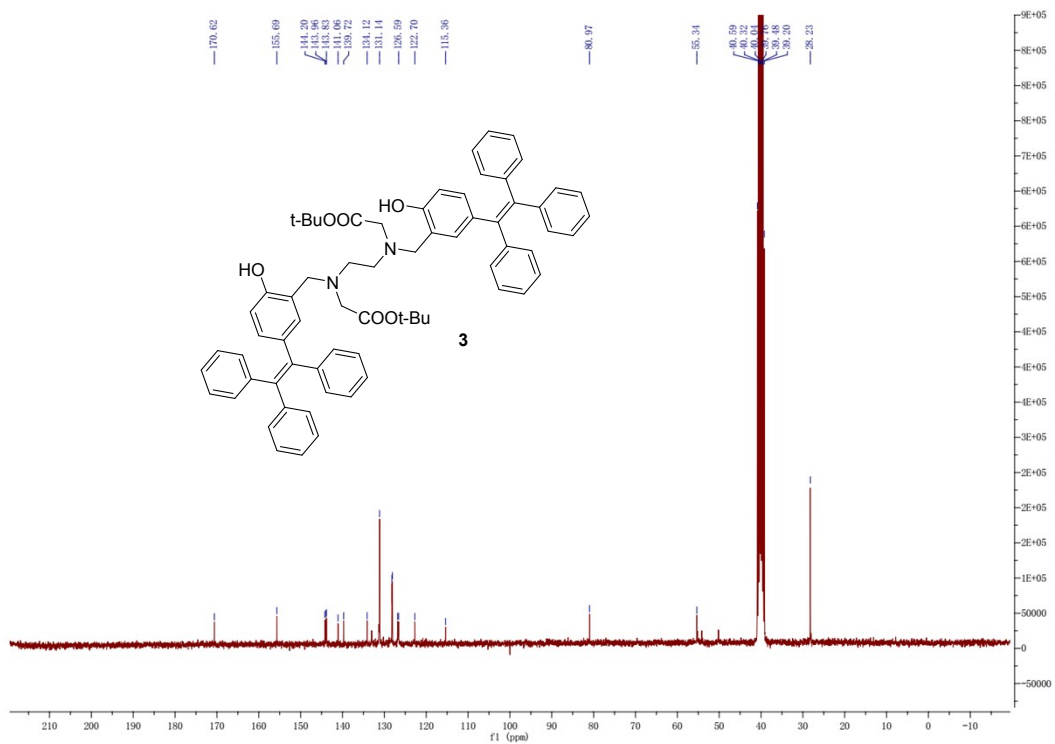


**Figure S3.** Dynamic image of rat obtained over 2 h min immediately following the intravenous injection of  $[^{68}\text{Ga}] \mathbf{5}$ , (a) 5 min, (b) 10 min, (c) 15 min, (d) 20 min, (e) 25 min, (f) 30 min, (g) 60 min, (h) 115 min.

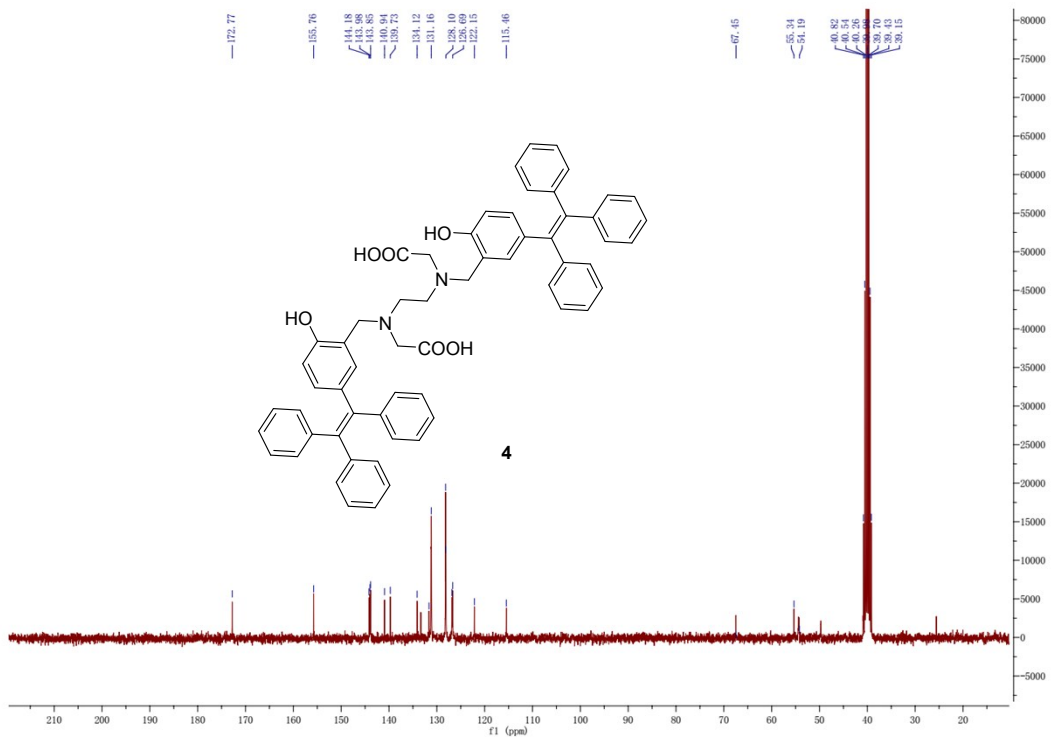
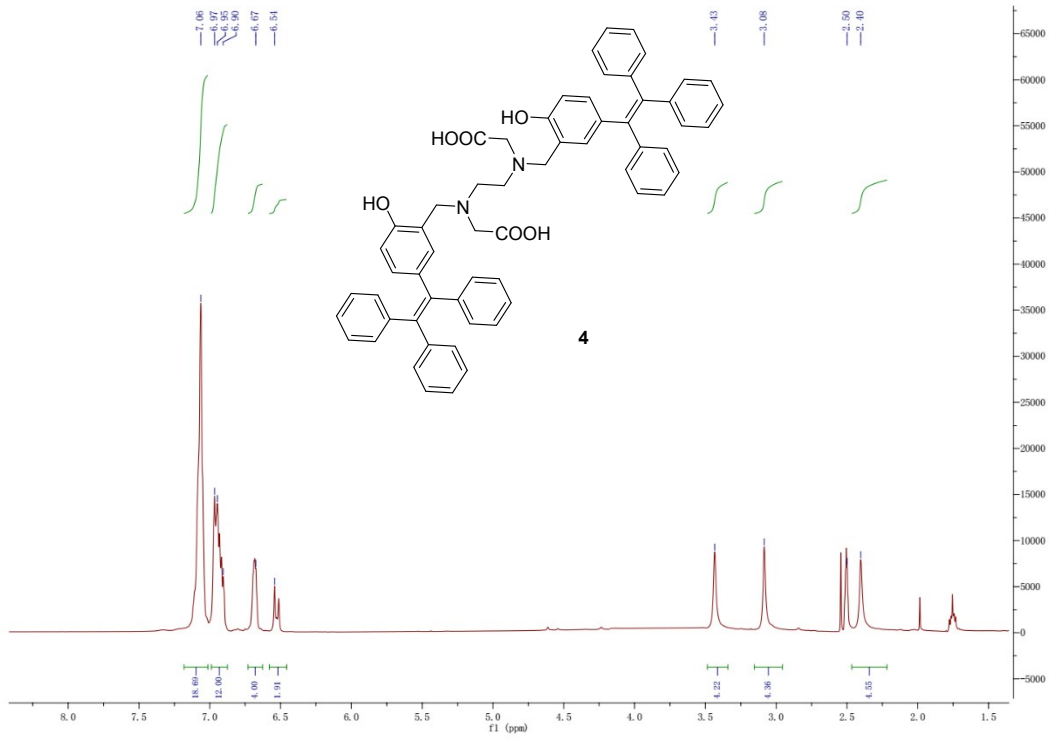
#### IV. <sup>1</sup>H NMR, <sup>13</sup>C NMR and HRMS Spectra of compounds



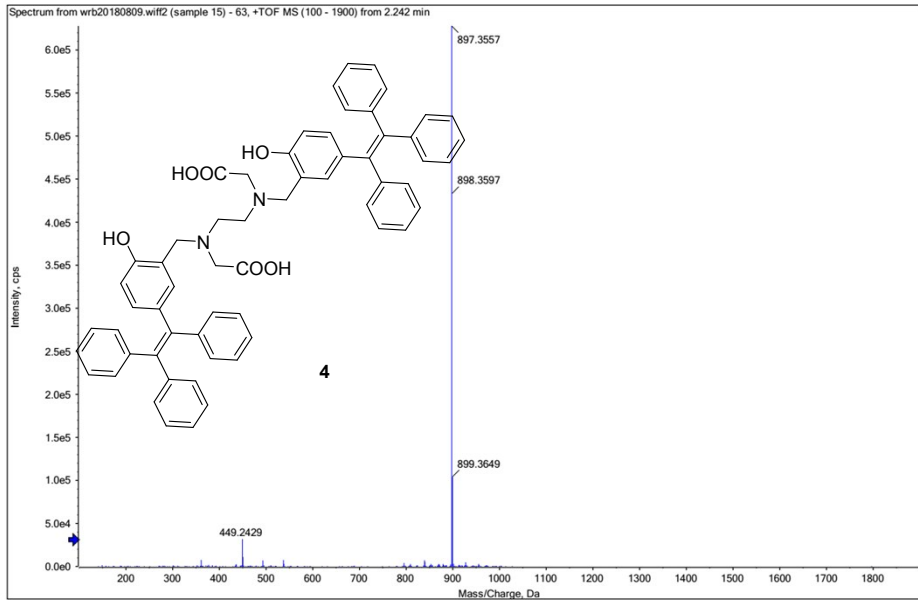




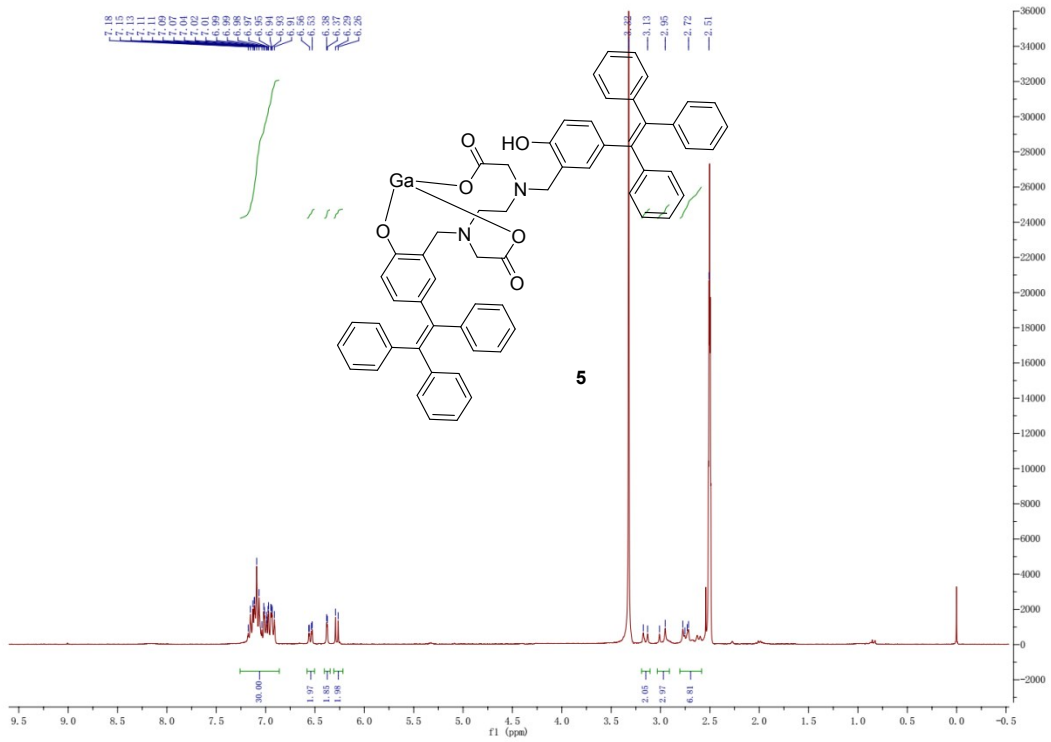
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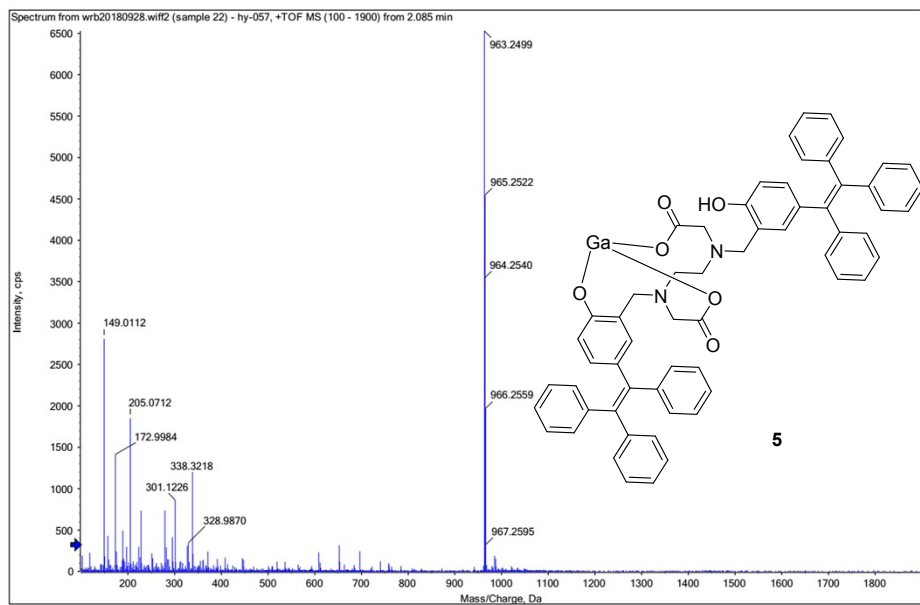
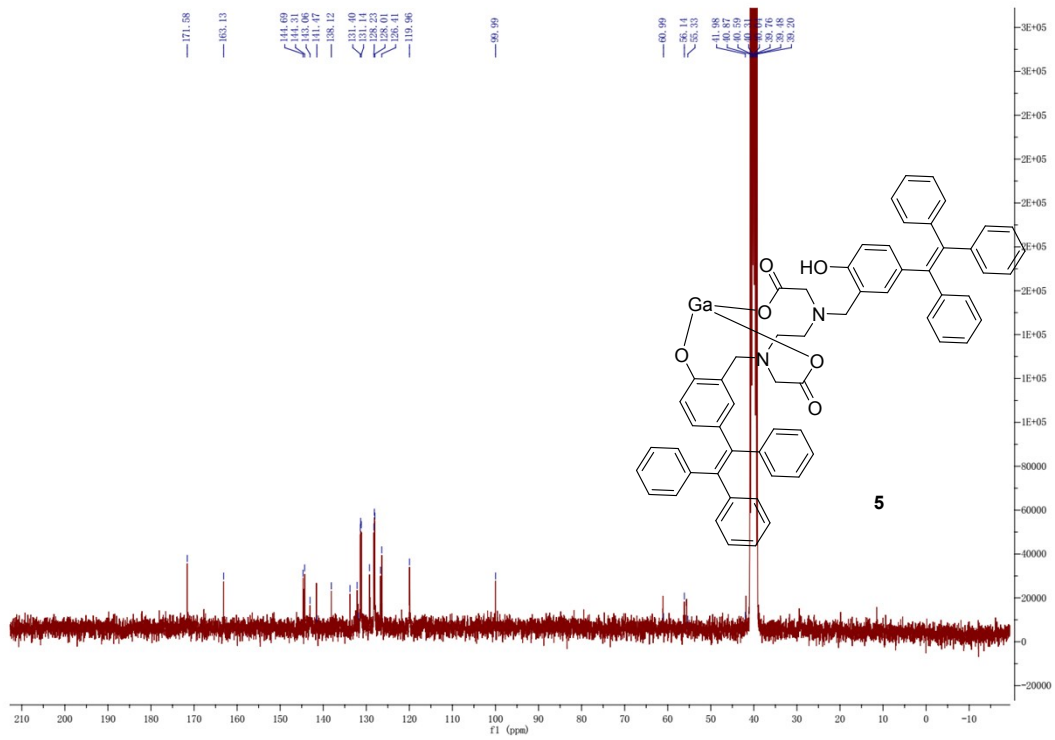






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