

## Supporting Information

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# Synthesis of Highly Sensitive and Selective Fluorescent Sensor for Imaging Mercury (II) in Living Cells

Chen Zhou<sup>a</sup>, Yan Song<sup>b</sup> and Yapeng Li<sup>a\*</sup>

<sup>a</sup> Department of Chemistry, Jilin University, Changchun, 130021, People's Republic of  
China.

<sup>b</sup> Department of Chemical Engineering, Jilin Institute of Chemical Technology, Jilin,  
132022, People's Republic of China.

Corresponding author: Yapeng Li

E-mail address: [liyapeng@jlu.edu.cn](mailto:liyapeng@jlu.edu.cn)

Tel: +86431 85168238.

Fax: +86431 85168238.

### Contents:

1. NMR spectrum and LC-MS spectra of Intermediate 4, Intermediate 2 and sensor 1
2. Fluorescence intensities of sensor 1 in the presence of various metal ions and competition experiment

# Supporting Information

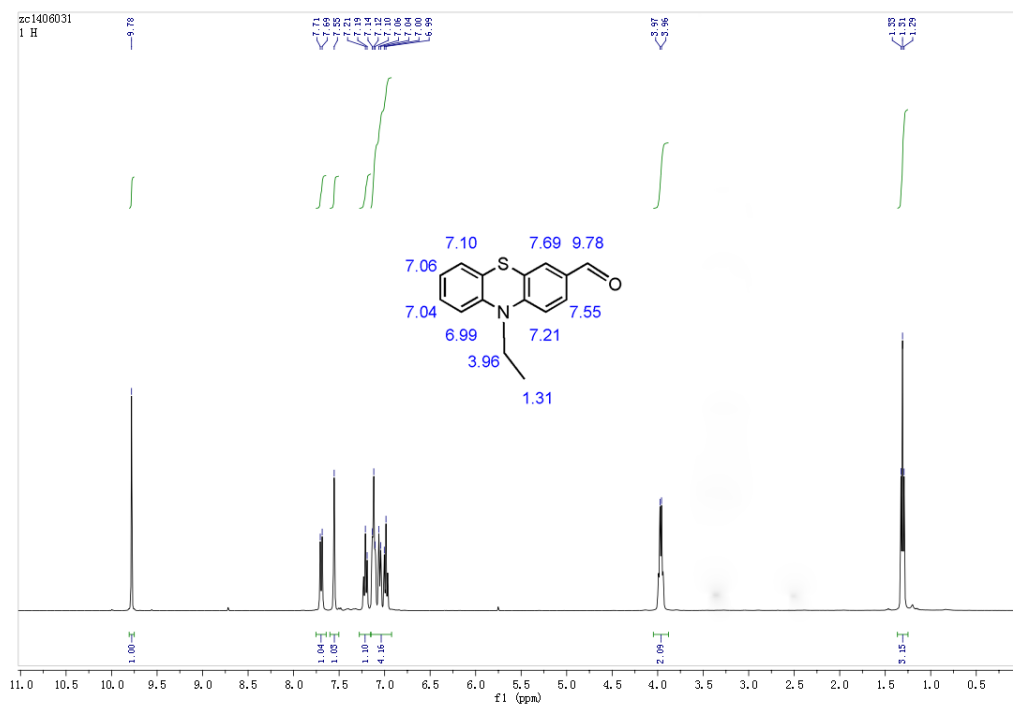


Fig.S1 <sup>1</sup>H NMR spectrum of Intermediate 4 in DMSO

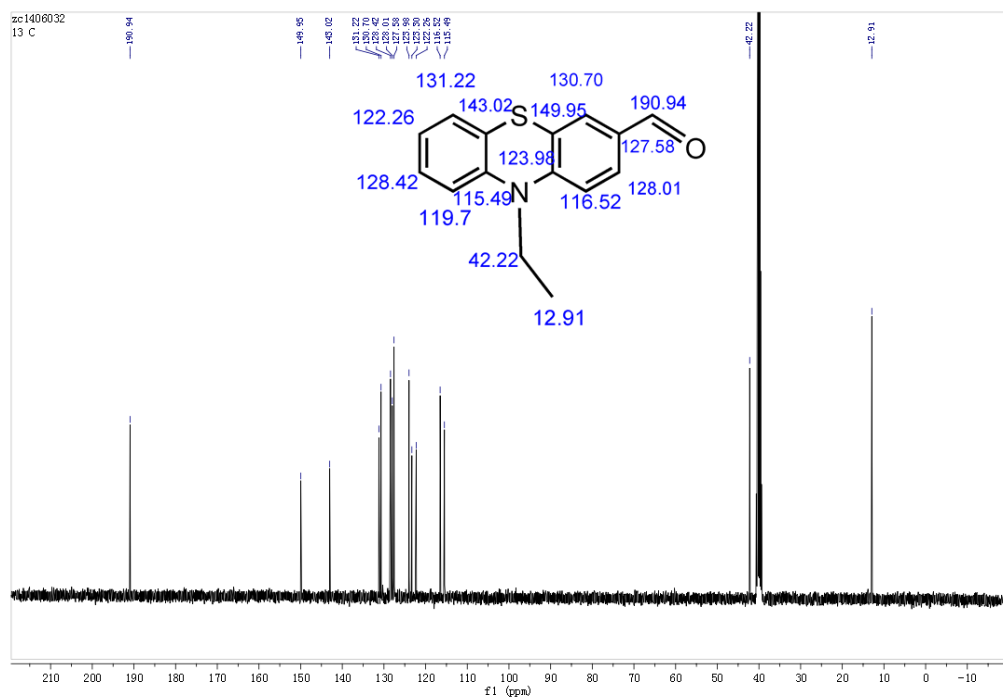


Fig.S2 <sup>13</sup>C NMR spectrum of Intermediate 4 in DMSO

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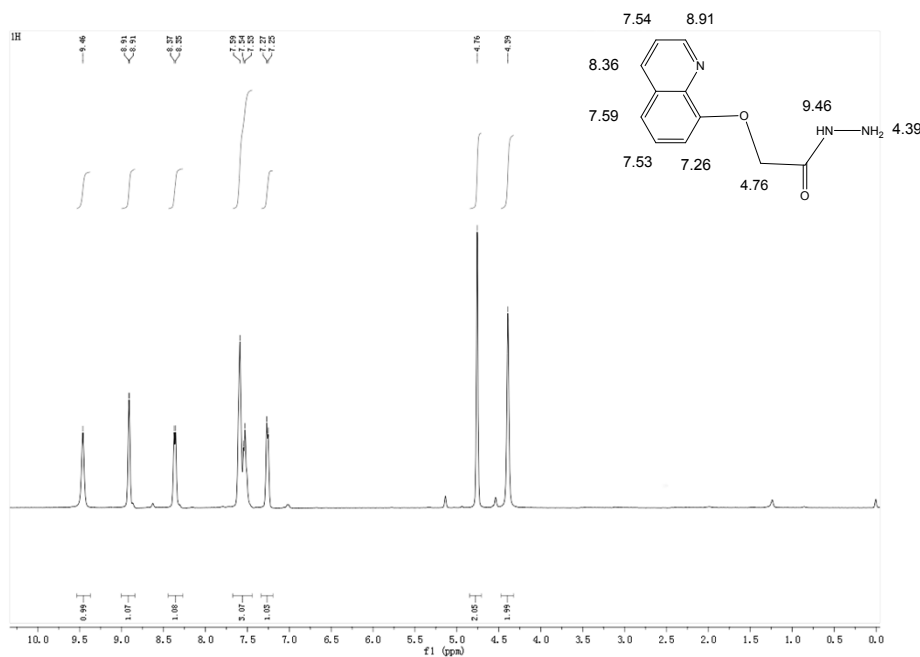


Fig.S3 <sup>1</sup>H NMR spectrum of Intermediate 2 in DMSO

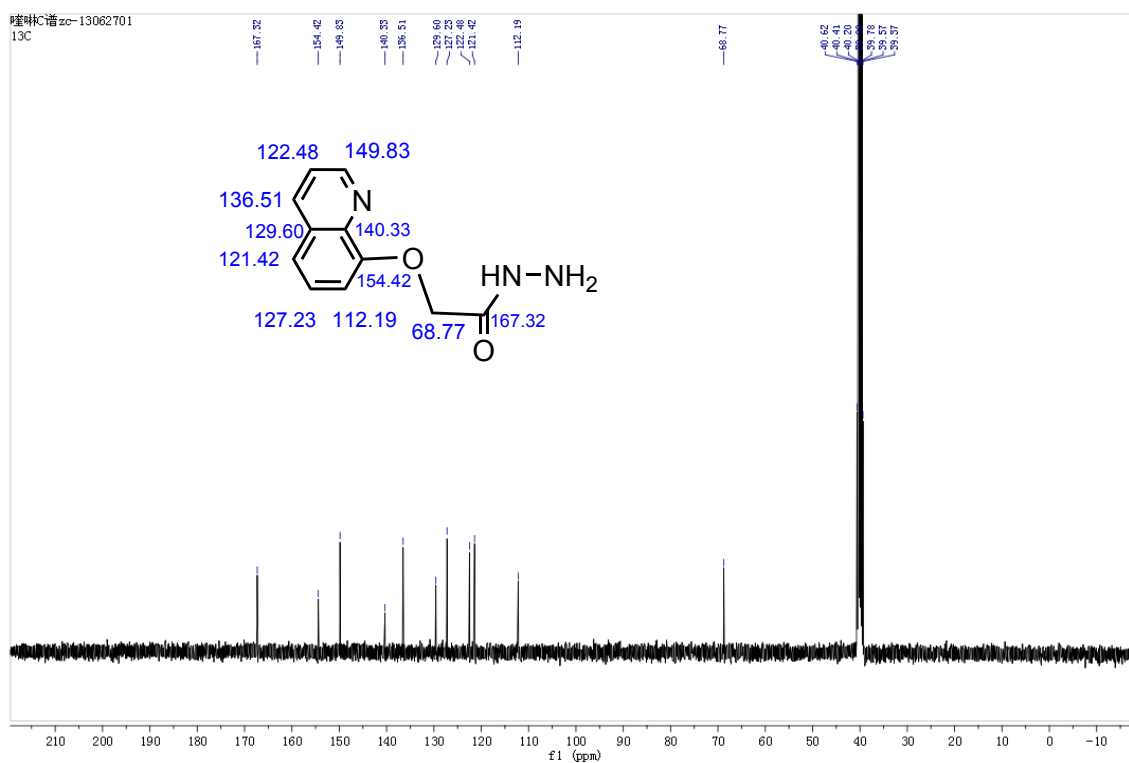


Fig.S4 <sup>13</sup>C NMR spectrum of Intermediate 2 in DMSO

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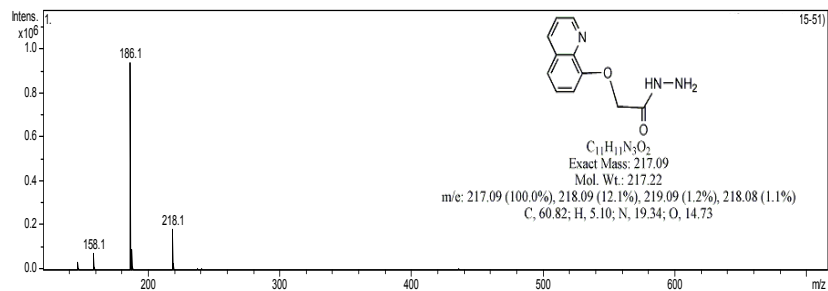


Fig.S5 LC-MS of Intermediate 2

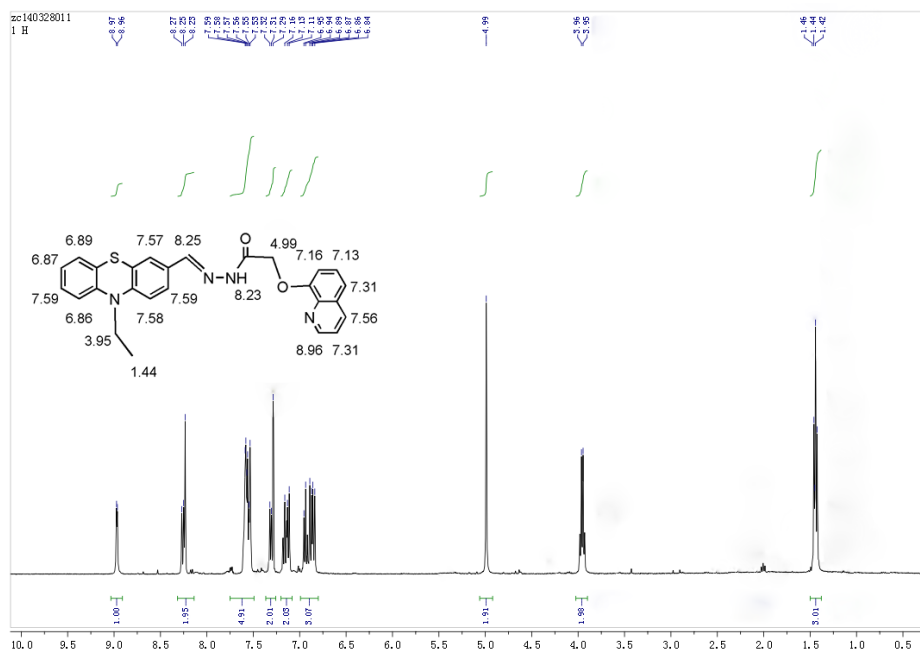


Fig.S6  $^1H$  NMR spectrum of Sensor 1 in DMSO

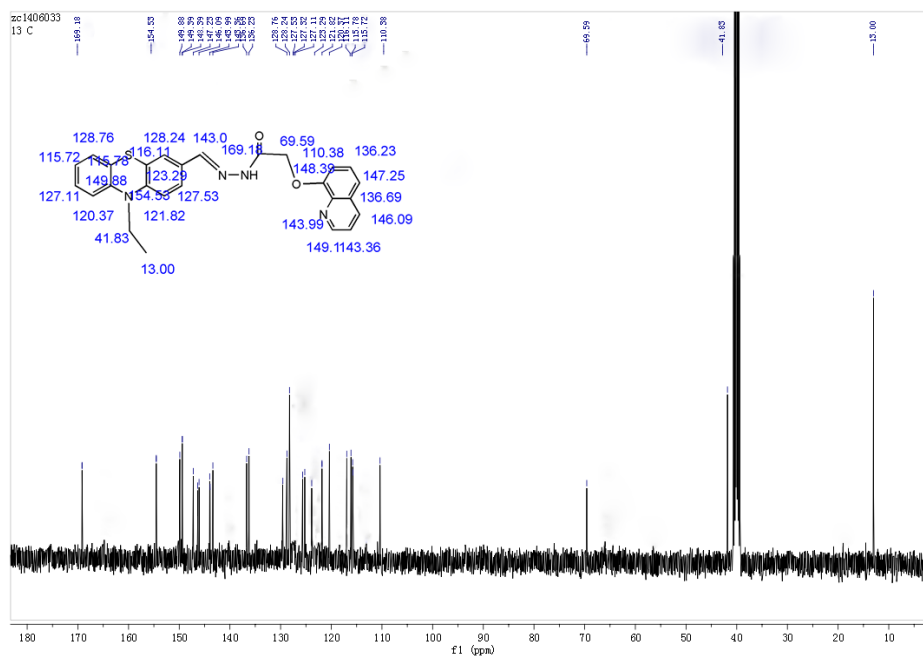
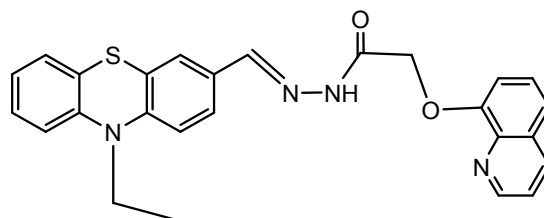


Fig.S7  $^{13}C$  NMR spectrum of Sensor 1 in DMSO

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$C_{26}H_{22}N_4O_2S$   
Exact Mass: 454.15  
Mol. Wt.: 454.54  
m/e: 454.15 (100.0%), 455.15 (29.3%), 456.15 (4.9%),  
456.14 (4.5%), 457.15 (1.5%), 455.14 (1.5%)  
C, 68.70; H, 4.88; N, 12.33; O, 7.04; S, 7.05

Fig.S8 LC-MS of Sensor 1

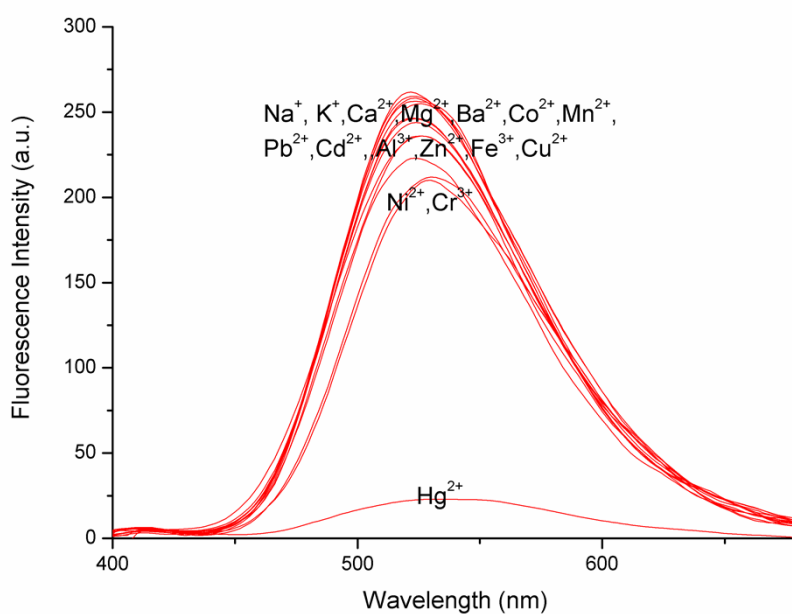
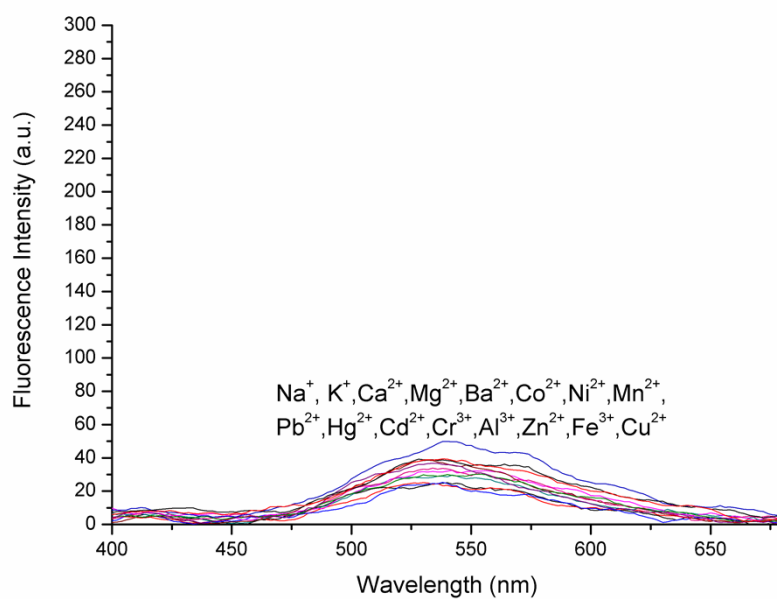


Fig.S9 Fluorescence intensities of sensor 1 (1  $\mu$ M/L) in the presence of various metal ions

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**Fig.S10** Fluorescence intensities of competition experiment