

Supporting information

**A rhodamine-based sensor for Hg²⁺ and resultant complex as a
fluorescence sensor for I⁻**

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Fig. S1. ^1H NMR (in CDCl_3) and ^{13}C NMR (in CDCl_3) spectrums of **1**.

Fig. S2. ESI-MS spectrum of **1**.

Fig. S3. The relationship between the absorbance and Hg^{2+} concentration, taken from the inset of Fig. 4A.

Fig. S4. The LOD for Hg^{2+} by absorbance.

Fig. S5. The relationship between the emission intensity and Hg^{2+} concentration, taken from the inset of Fig. 4B.

Fig. S6. The LOD for Hg^{2+} by fluorescence.

Fig. S7. The relationship between the emission intensity and I^- concentration, taken from the inset of Fig. 7.

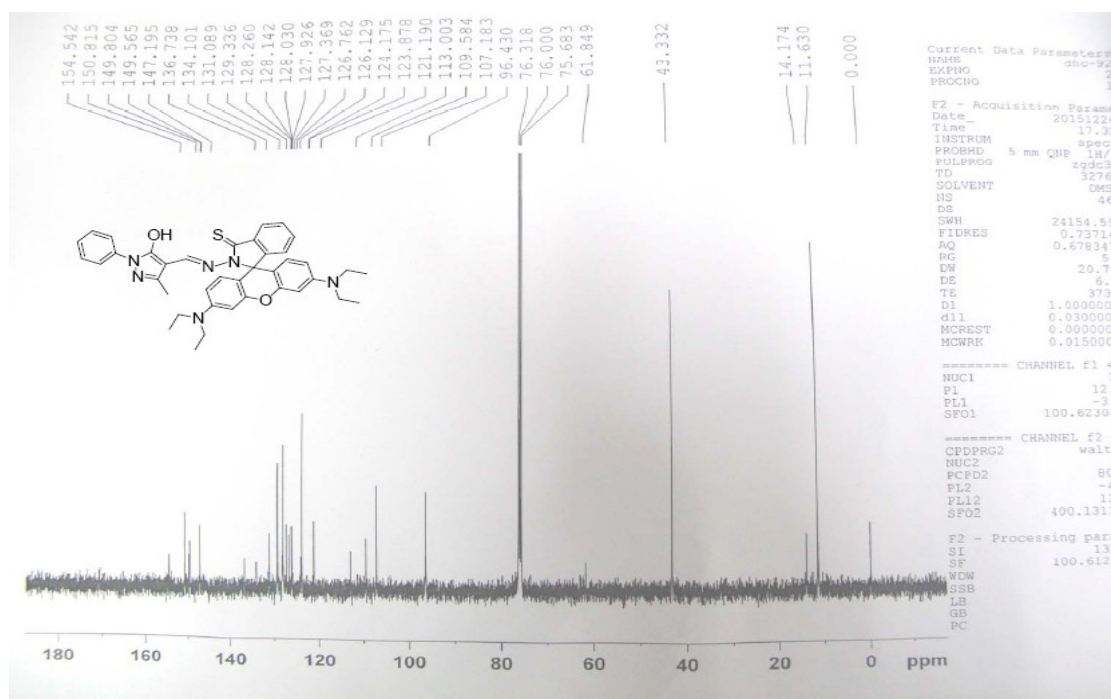
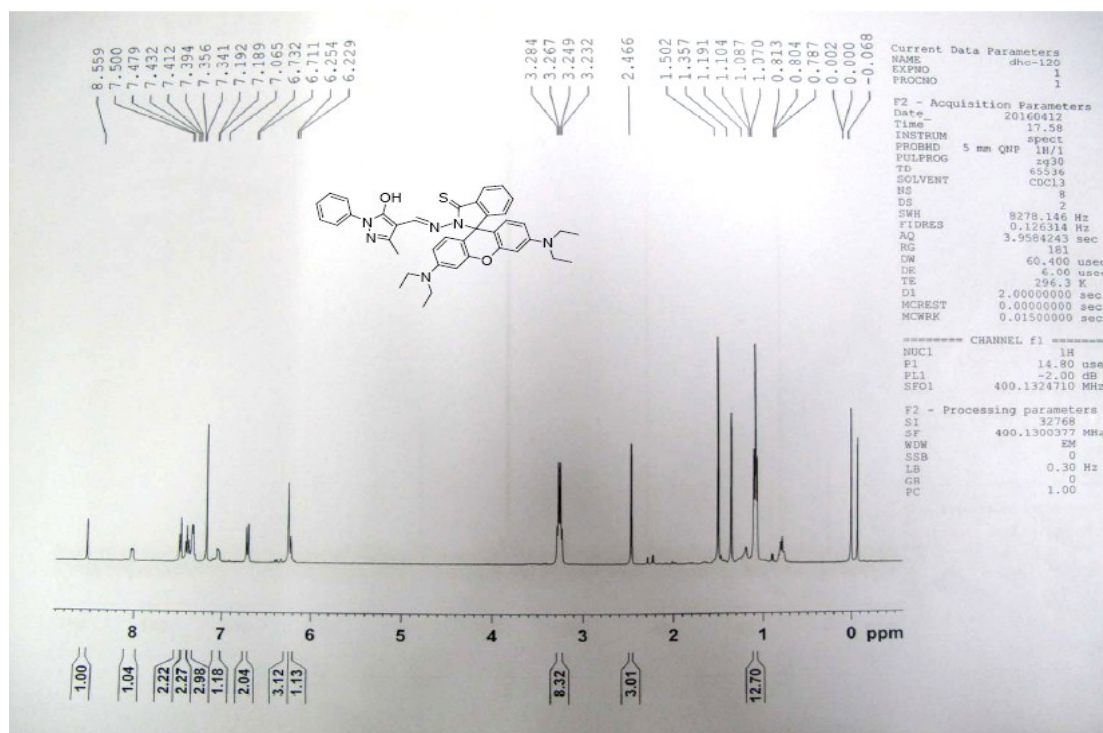


Fig. S1. ¹H NMR (in CDCl₃) and ¹³C NMR (in CDCl₃) spectra of 1.

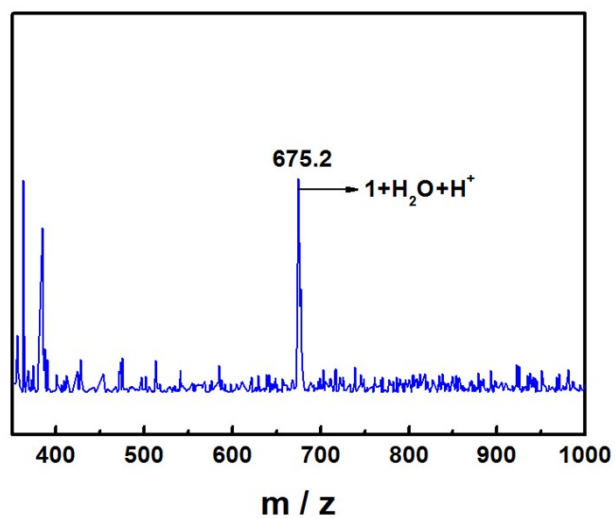


Fig. S2. ESI-MS spectrum of **1**.

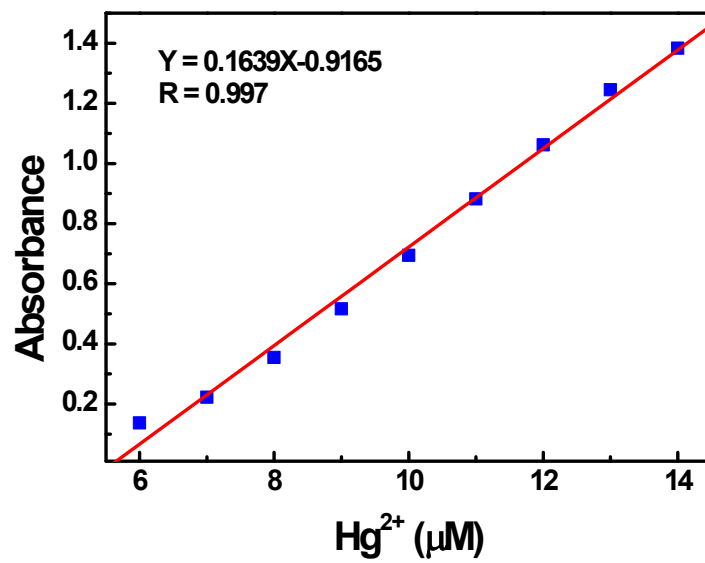


Fig. S3. The relationship between the absorbance and Hg^{2+} concentration, taken from the inset of Fig. 4A.

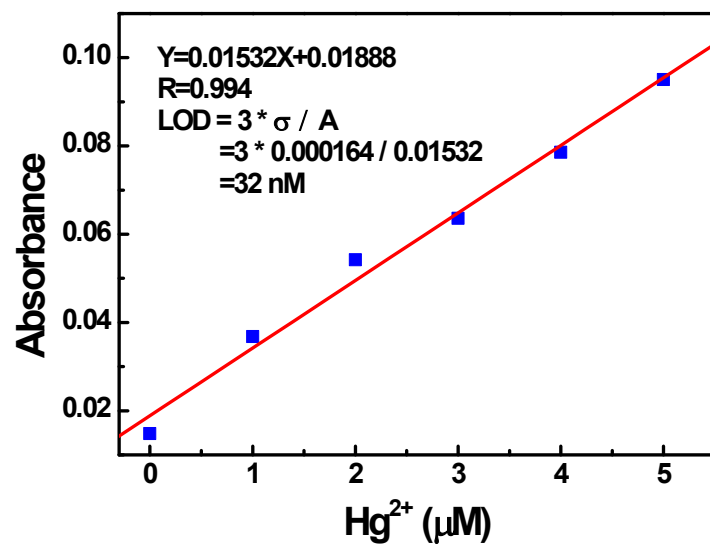


Fig. S4. The LOD for Hg²⁺ by absorbance.

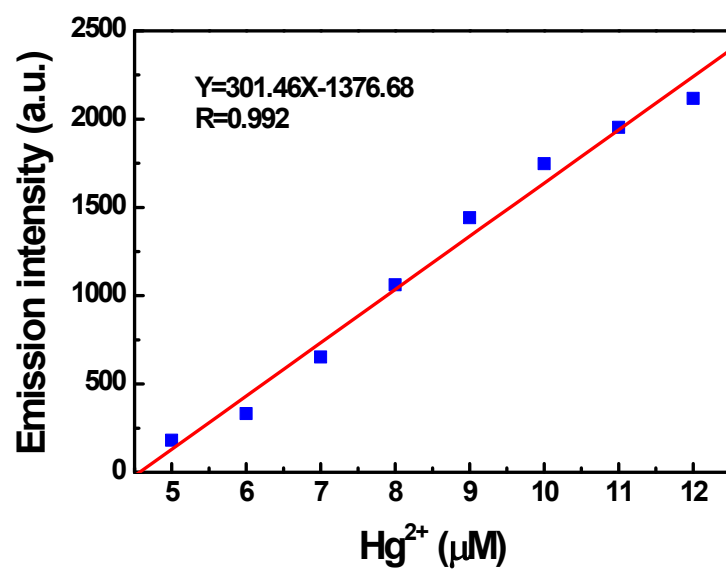


Fig. S5. The relationship between the emission intensity and Hg^{2+} concentration, taken from the inset of Fig. 4B.

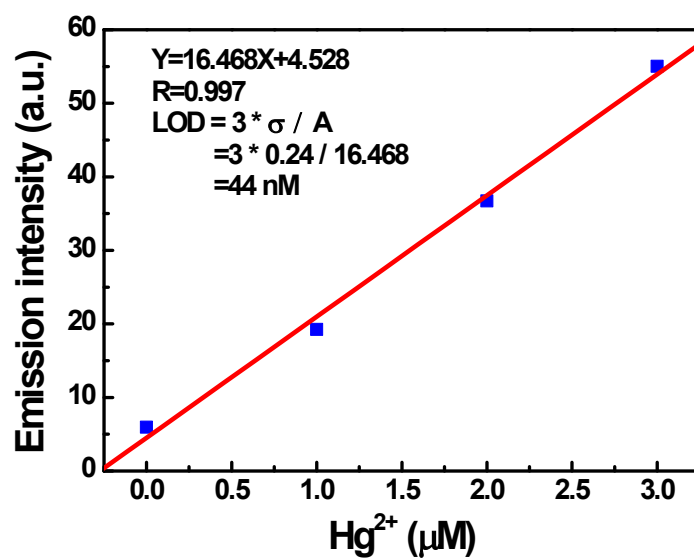


Fig. S6. The LOD for Hg²⁺ by fluorescence.

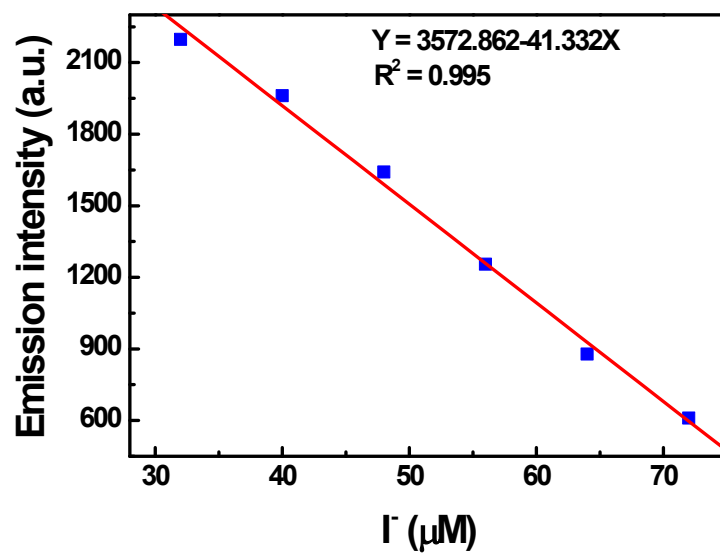


Fig. S7. The relationship between the emission intensity and I^- concentration, taken from the inset of Fig. 7.