

A multifunctional Schiff base fluorescent sensor for Hg^{2+} , Cu^{2+} and Co^{2+} ions

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Supplementary Data

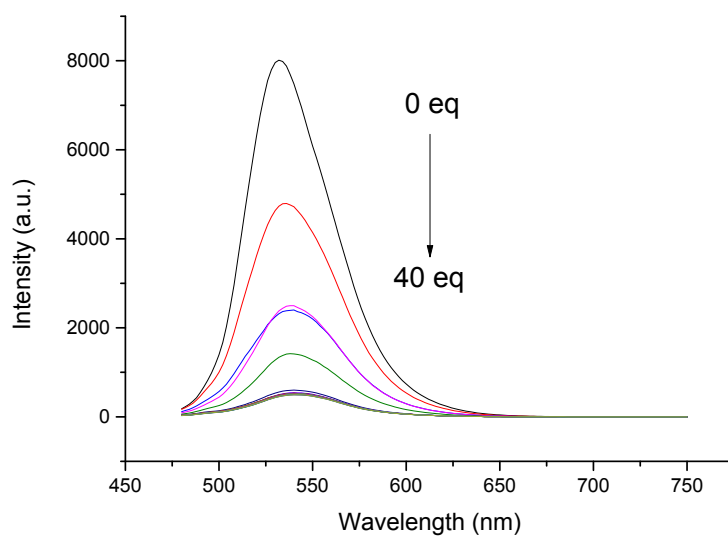


Fig. S1. Fluorescence spectra of receptor (20 μM) in H₂O/DMSO=1/9 (v/v) upon addition of increasing concentrations Cu^{2+}

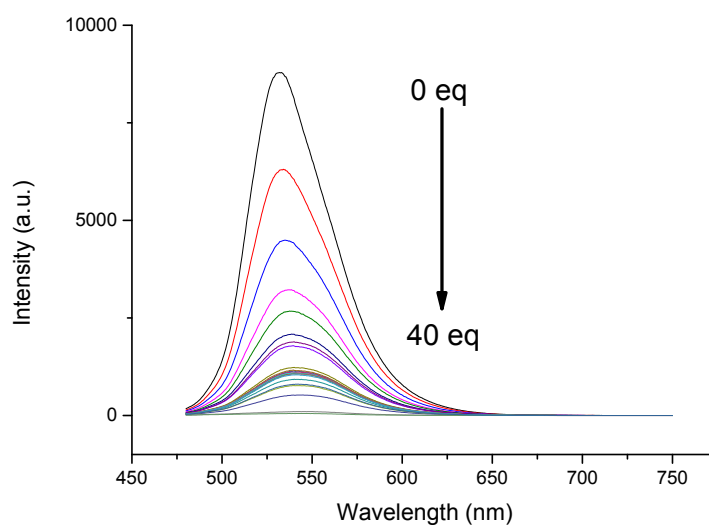


Fig. S2. Fluorescence spectra of receptor (20 μM) in H₂O/DMSO=1/9 (v/v) upon addition of increasing concentrations Co^{2+}

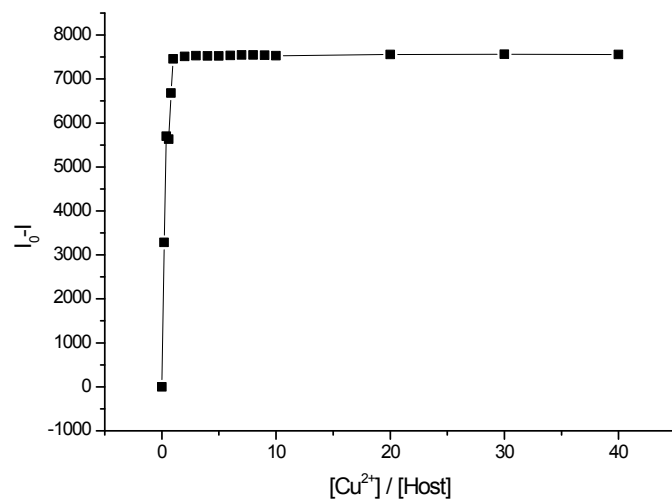


Fig. S3. Stern-Volmer plot

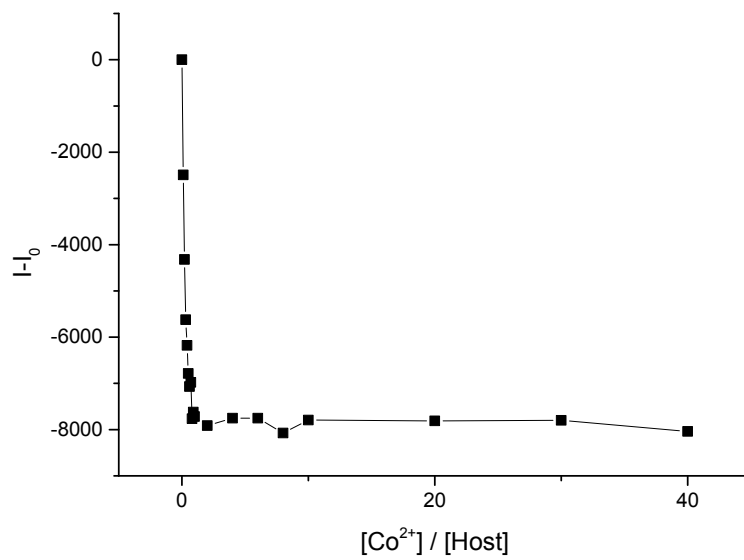


Fig. S4. Stern-Volmer plot

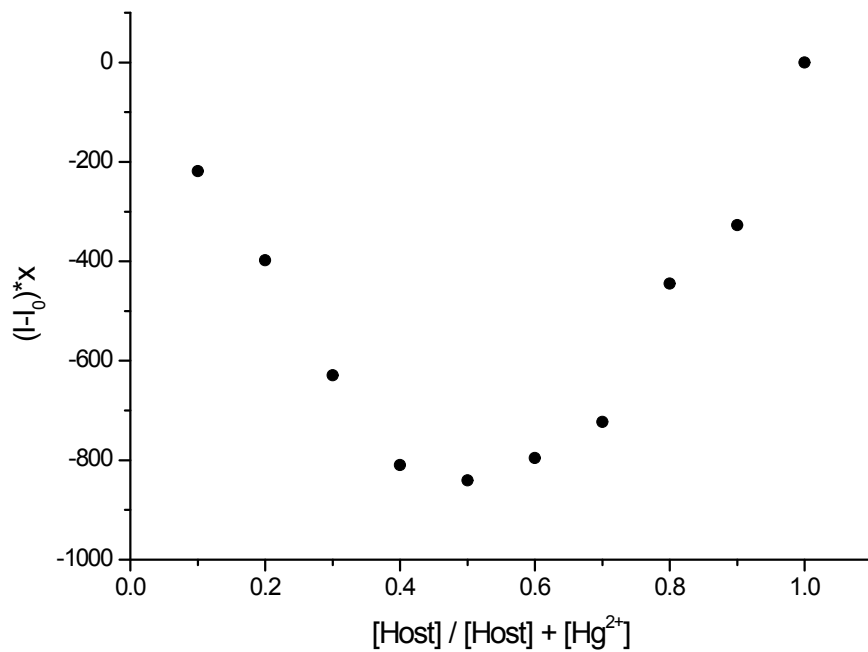


Fig. S5. The Job's plot examined between receptor **L** and Hg²⁺ by fluorescence.

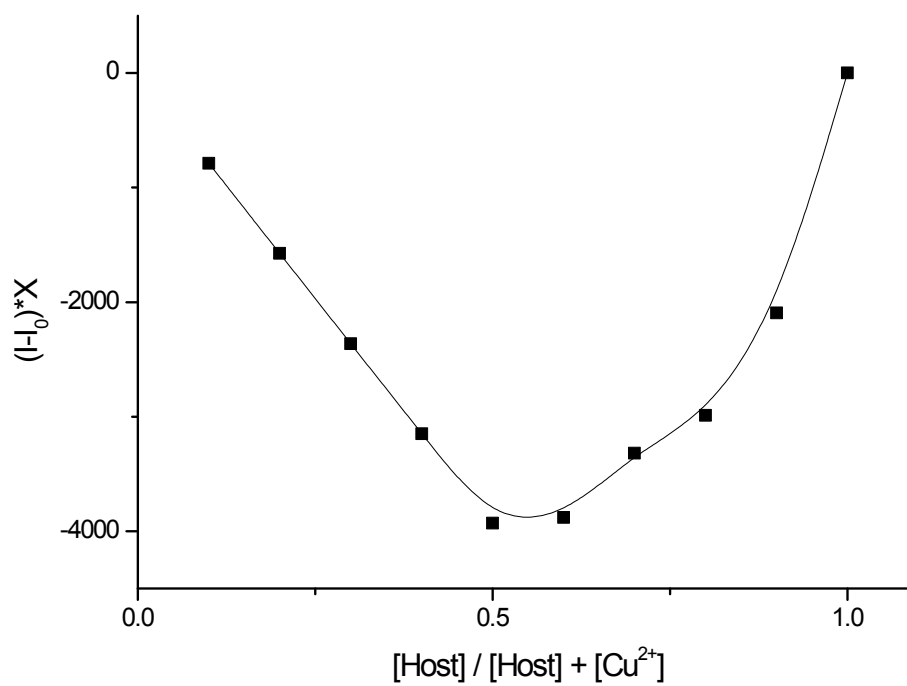


Fig. S6. The Job's plot examined between receptor **L** and Cu²⁺ by fluorescence.

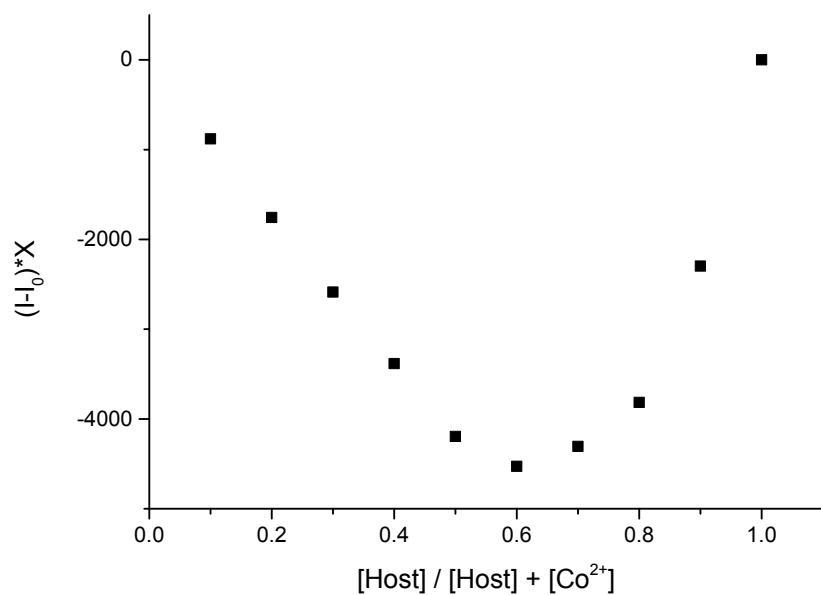


Fig. S7. The Job's plot examined between receptor L and Co²⁺ by fluorescence.

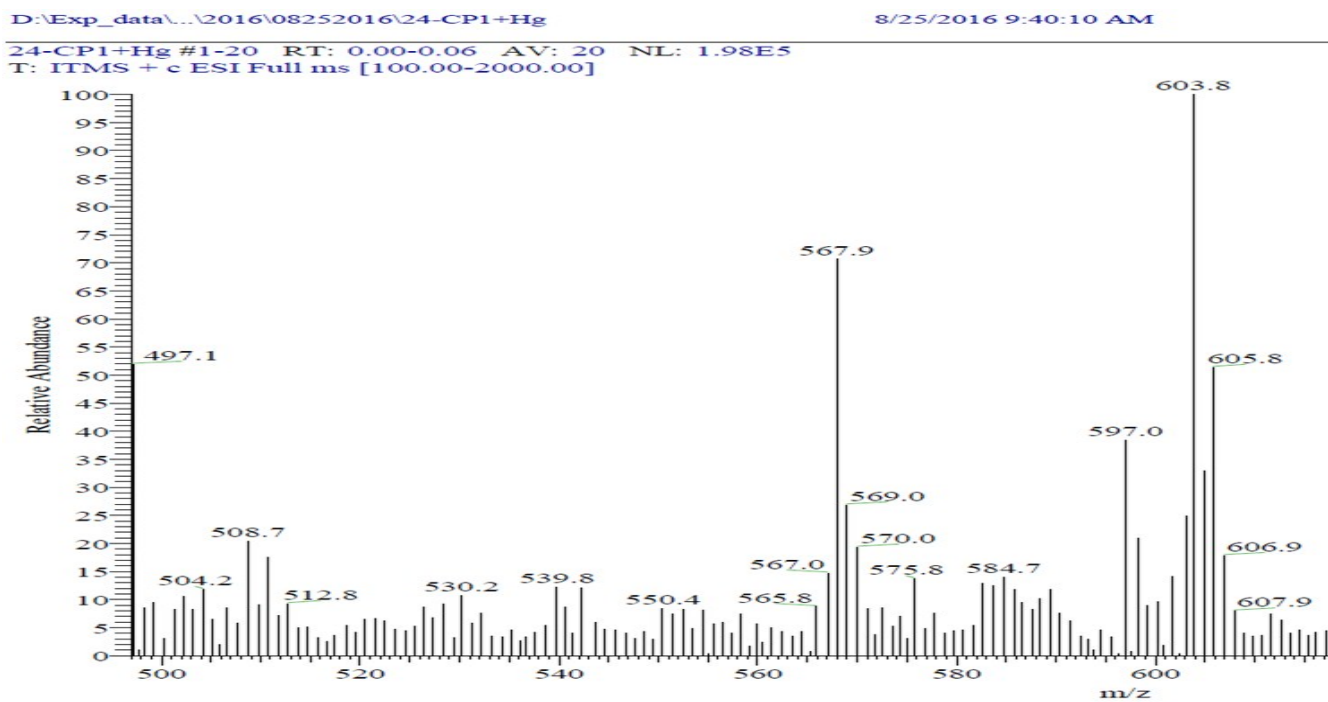


Fig. S8 ESI Mass [receptor L + Hg²⁺]

15-Cp1+Cu #1-20 RT: 0.00-0.06 AV: 20 NL: 2.26E5
T: ITMS + c ESI Full ms [150.00-2000.00]

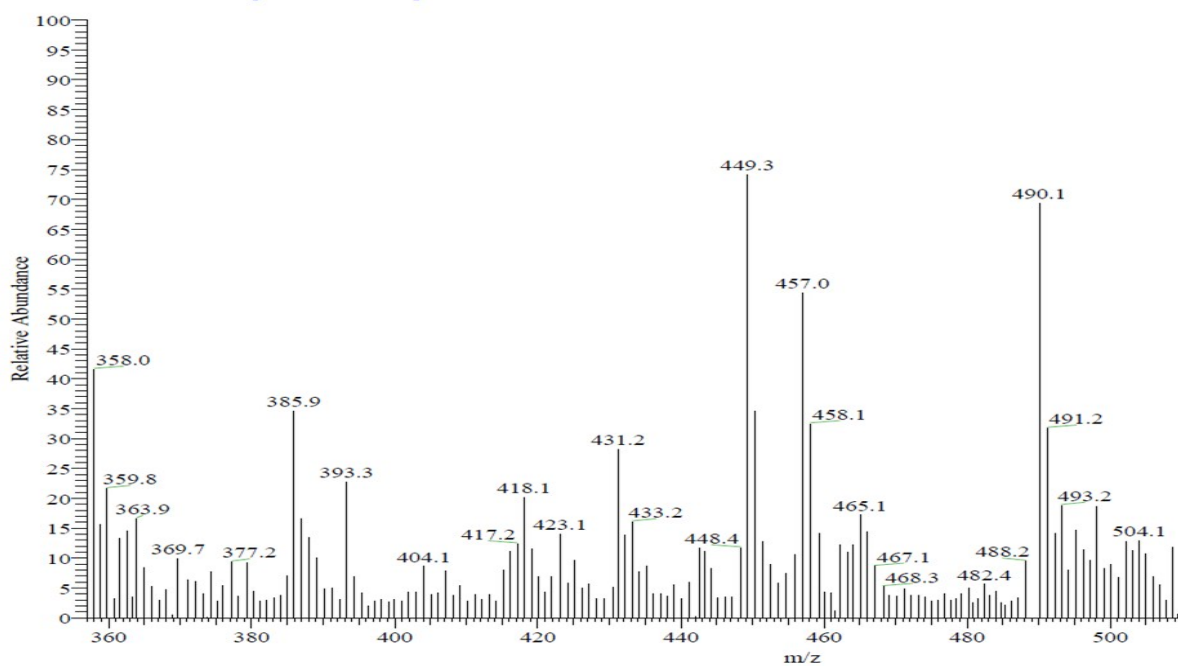


Fig. S9 ESI Mass [receptor L + Cu²⁺]

43-CP1+Co #1-20 RT: 0.00-0.07 AV: 20 NL: 7.52E4
T: ITMS - c ESI Full ms [100.00-2000.00]

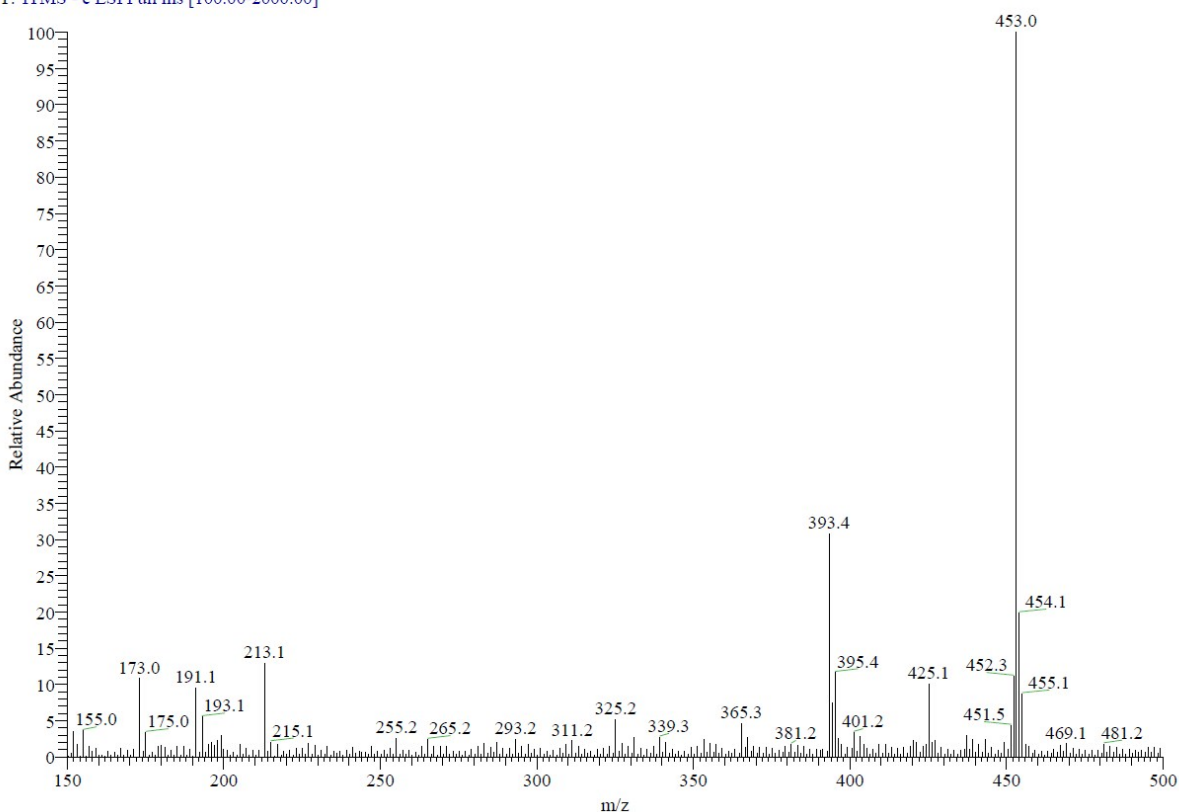


Fig. S10 ESI Mass [receptor L + Co²⁺]

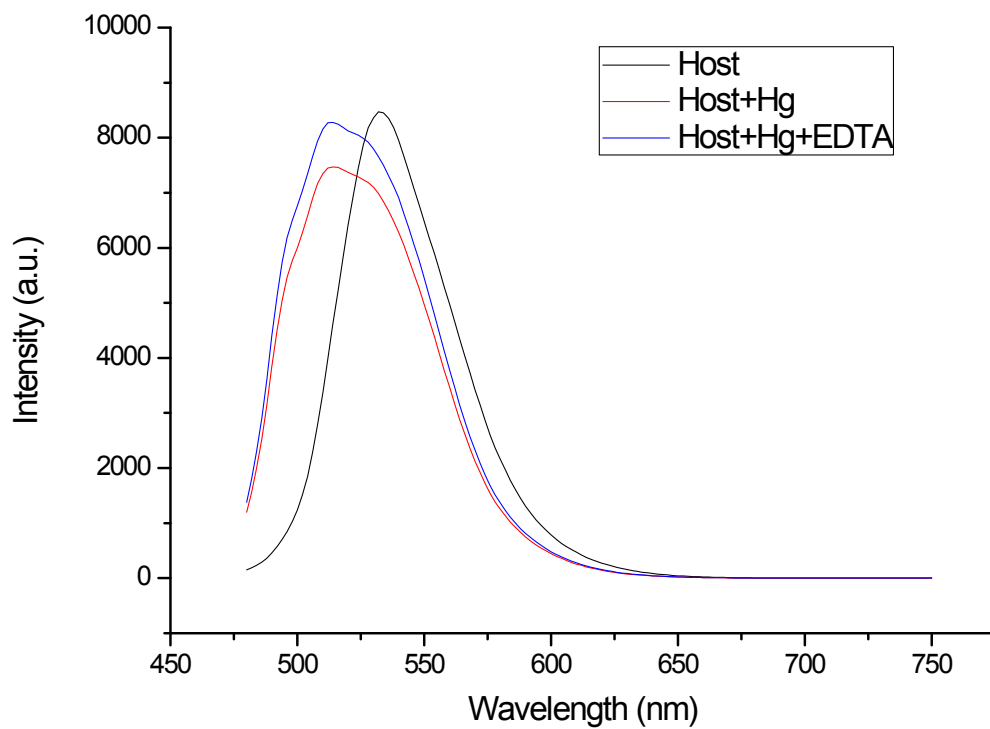


Fig. S11. Receptor L reversible reaction in the presence of Hg^{2+} (5 equiv.) and EDTA (5 equiv.) tested.

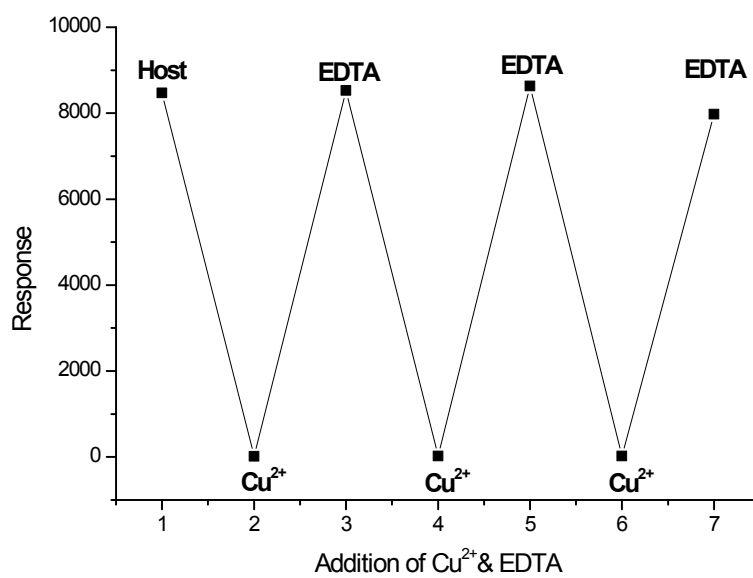


Fig. S12. Reversibility experiment of receptor L (20 μM) in the presence of Cu^{2+} (5 equiv.) and EDTA (5 equiv.) tested.

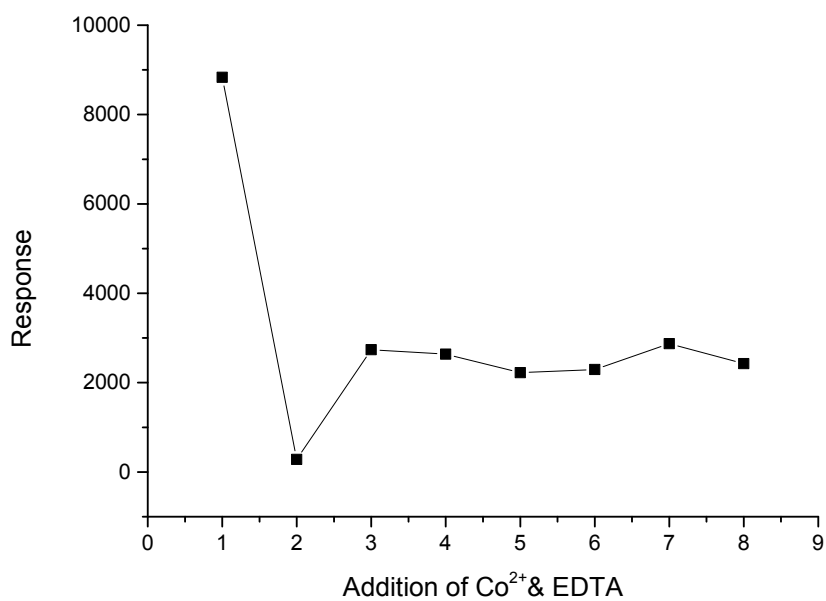


Fig. S13. Reversibility experiment of receptor **L** (20 μ M) in the presence of Co^{2+} (5 equiv.) and EDTA (5 equiv.) tested.

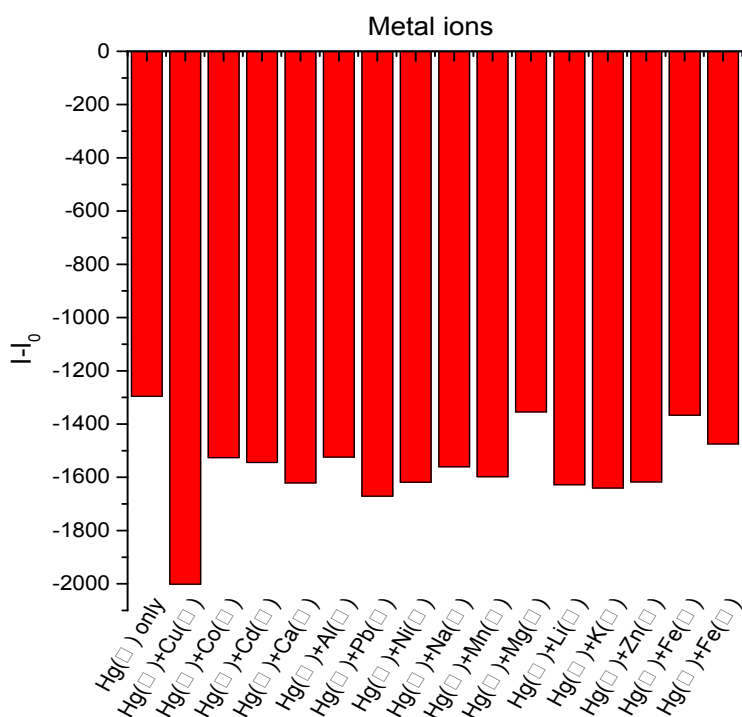


Fig. S14. Competition experiment of receptor **L** towards Hg^{2+} in the presence of 5.0 equiv. of other metal ions.

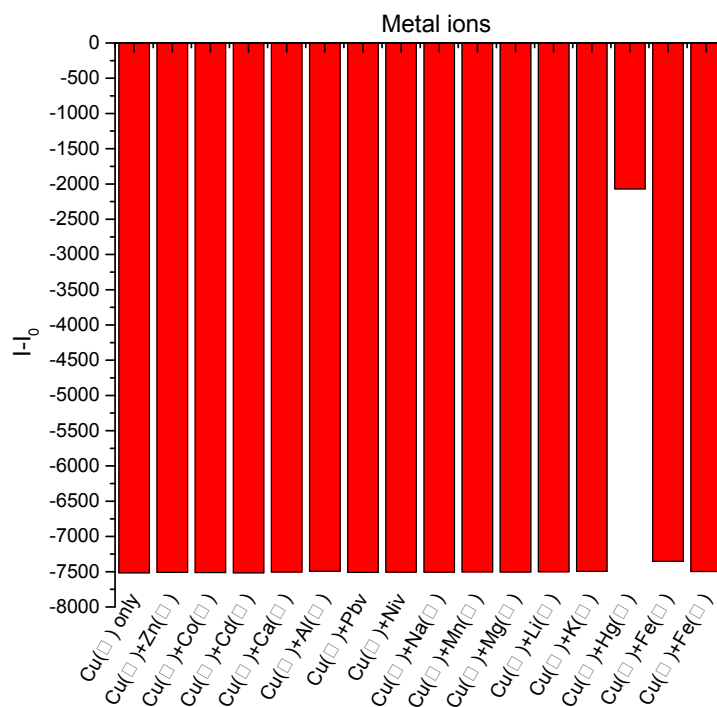


Fig. S15. Competition experiment of receptor L towards Cu^{2+} in the presence of 5.0 equiv. of other metal ions.

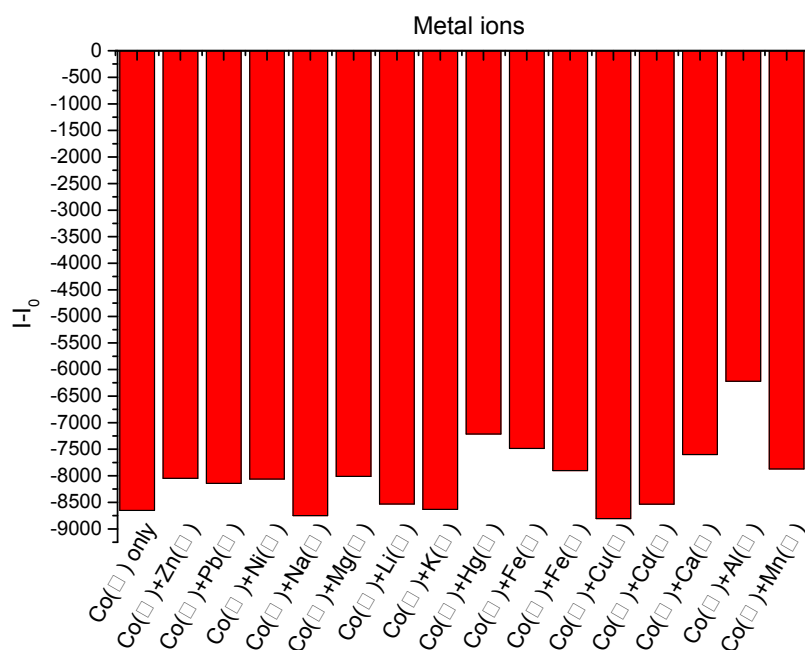


Fig. S16. Competition experiment of receptor L towards Co^{2+} in the presence of 5.0 equiv. of other metal ions.

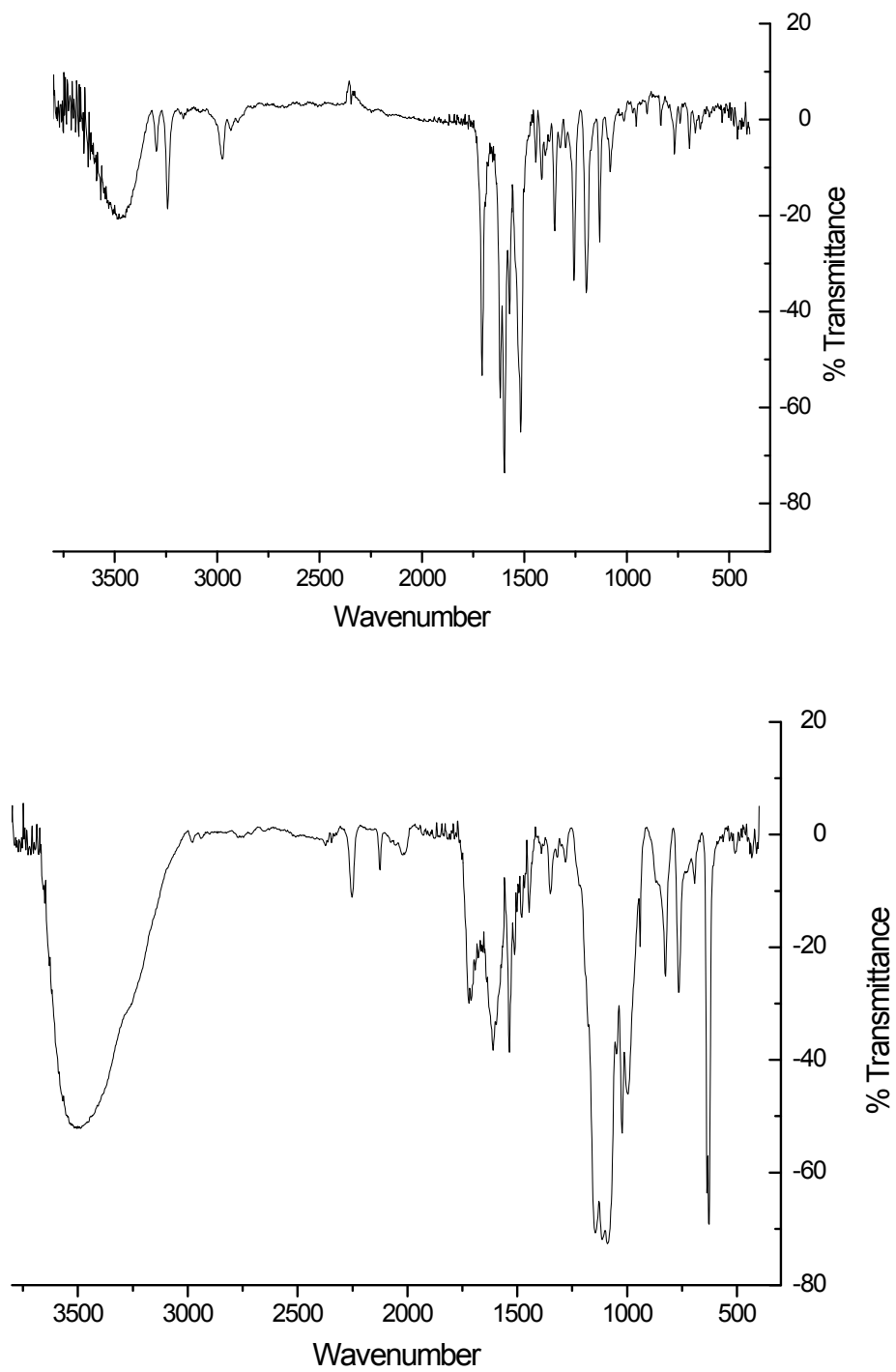


Fig. S17. The IR spectra for (a) receptor **FT** and (b) [receptor **FT** + Hg⁺²] adduct from top to bottom.