

Supporting Information

A rhodamine B-based “turn-on” fluorescent sensor for detecting Cu²⁺ and sulfur anion in aqueous media

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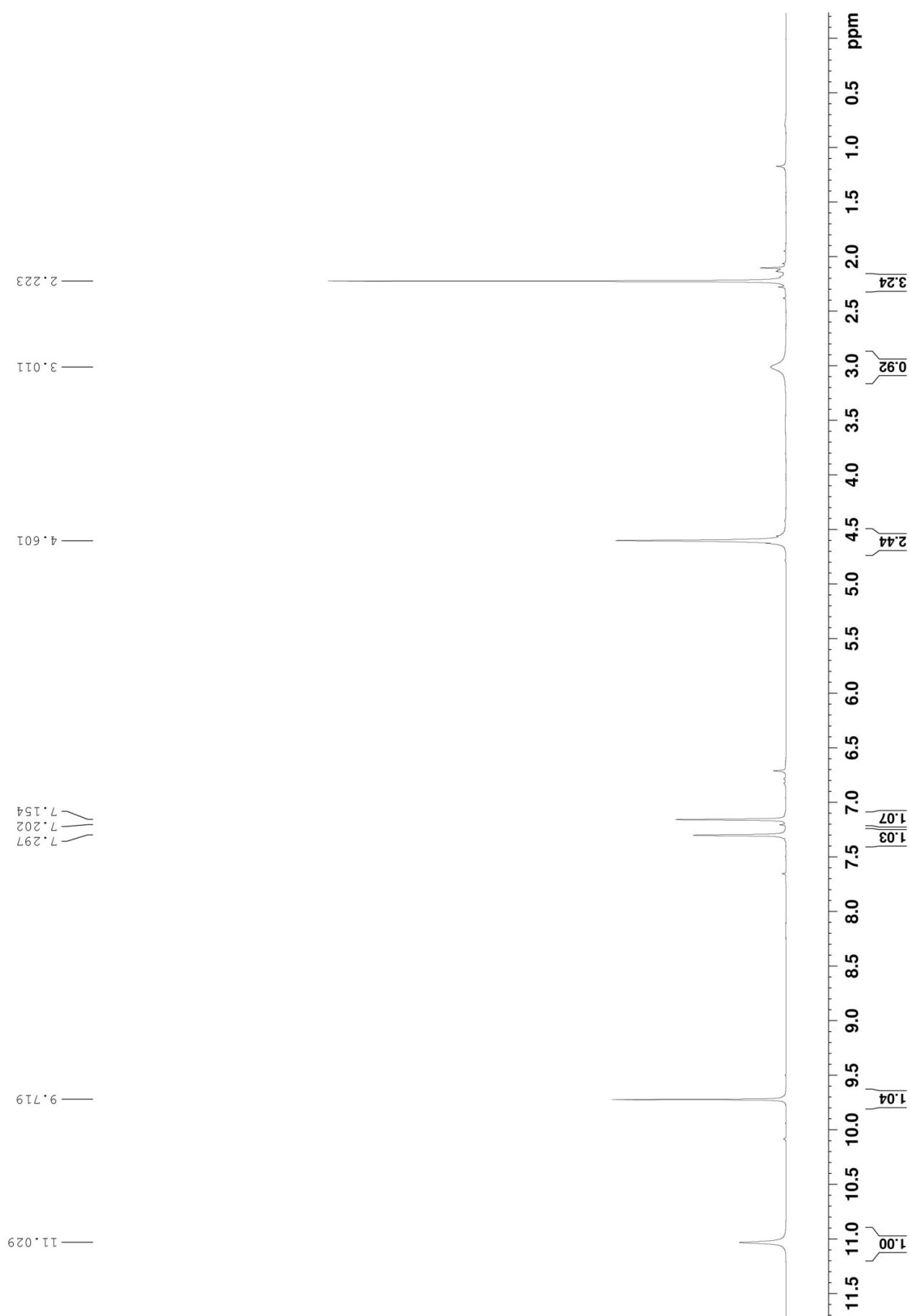


Figure S1 ^1H NMR (CDCl_3 , 400 MHz) spectrum of Compound 2.

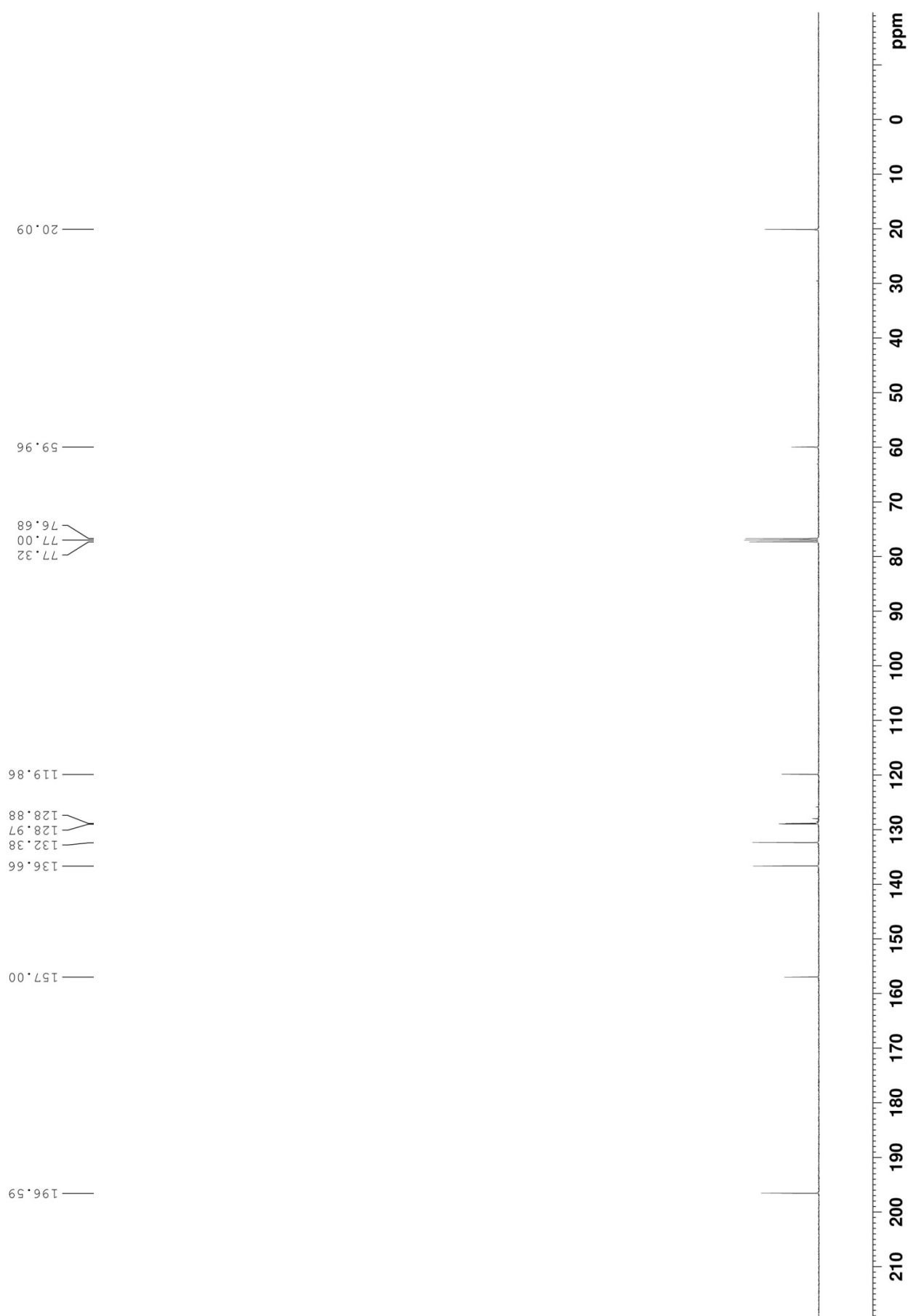


Figure S2 ^{13}C NMR (CDCl_3 , 400 MHz) spectrum of Compound 2.

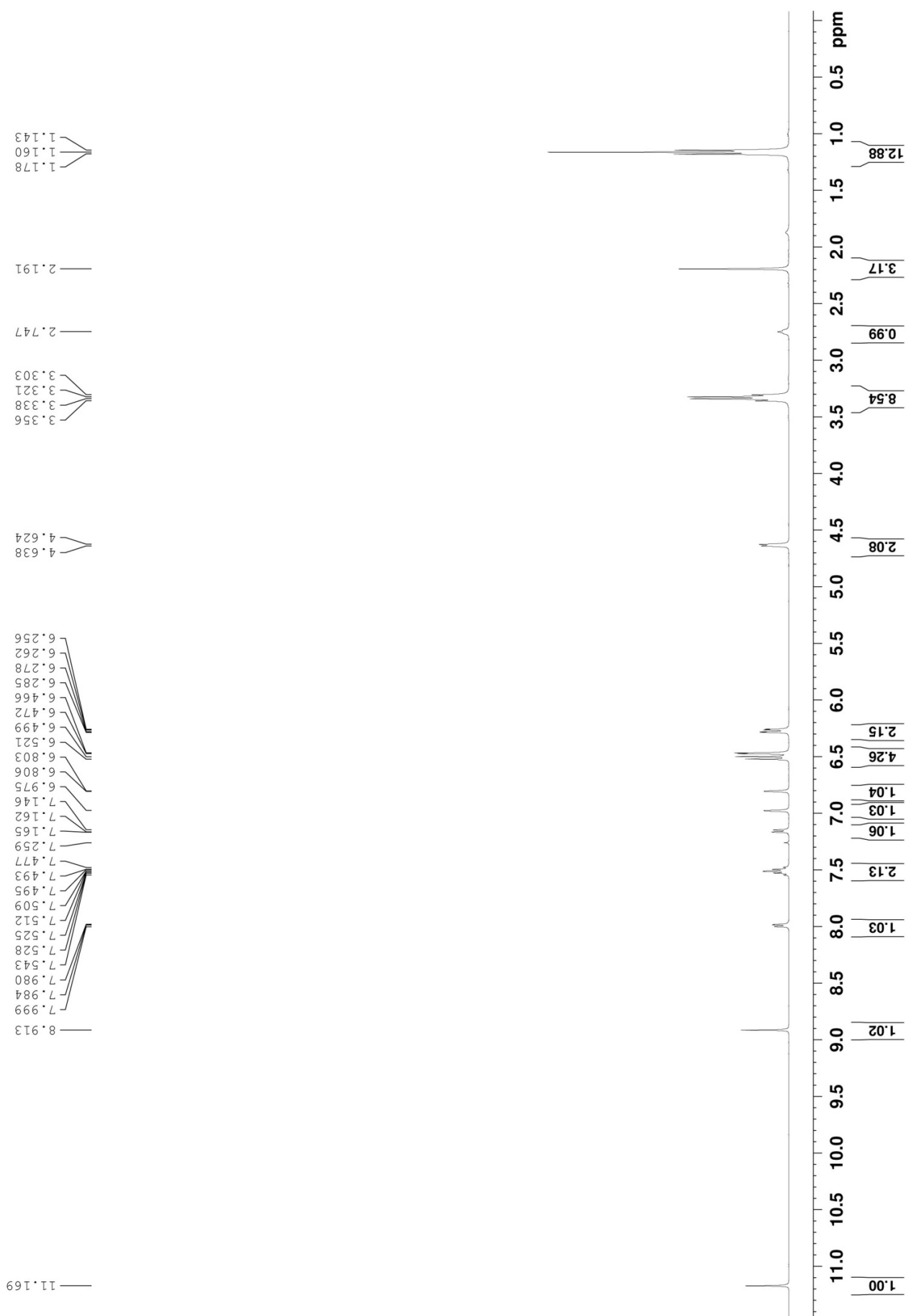


Figure S3 ^1H NMR (CDCl_3 , 400 MHz) spectrum of **L**



Figure S4 ^{13}C NMR (CDCl_3 , 400 MHz) spectrum of **L**.

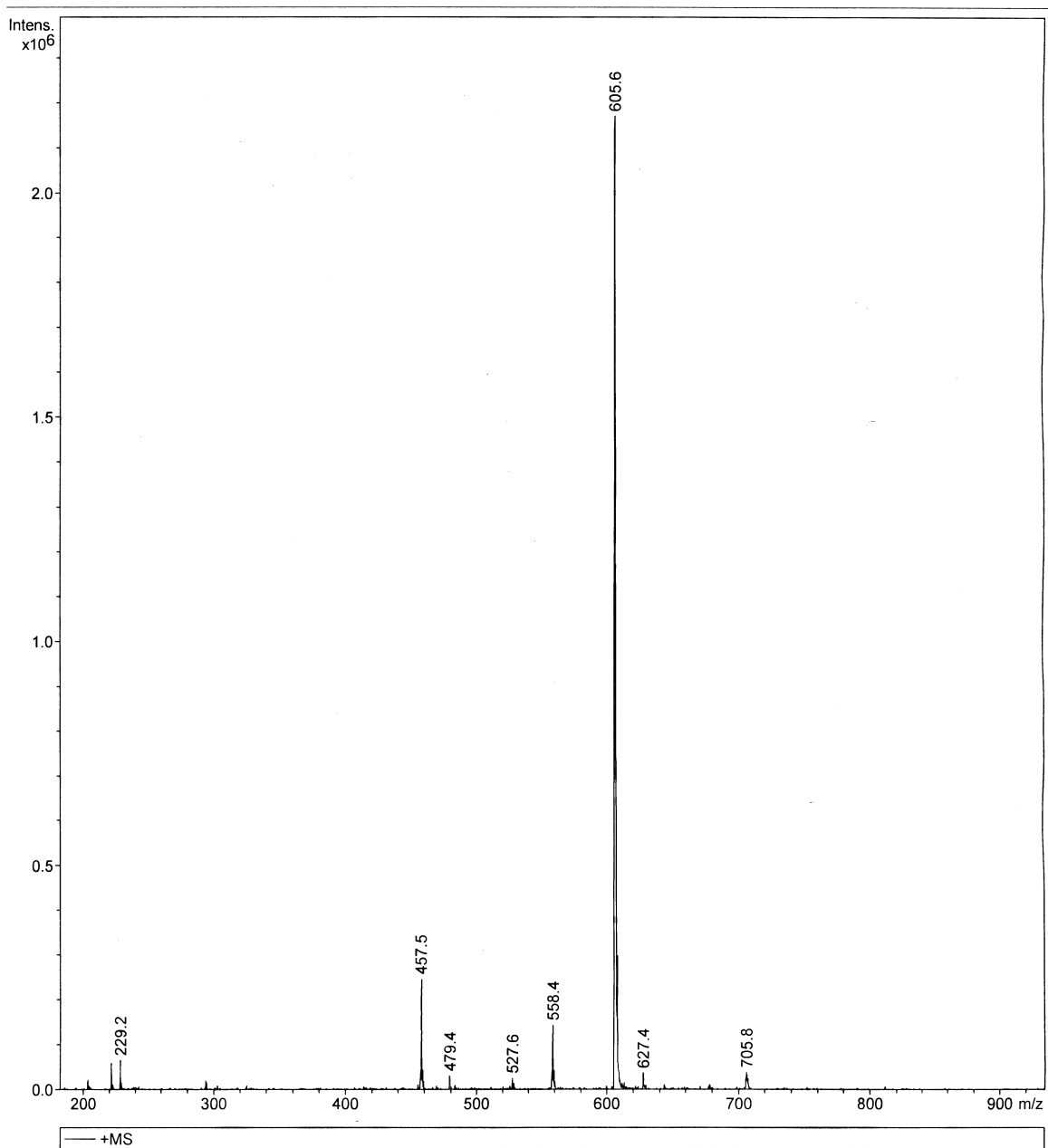
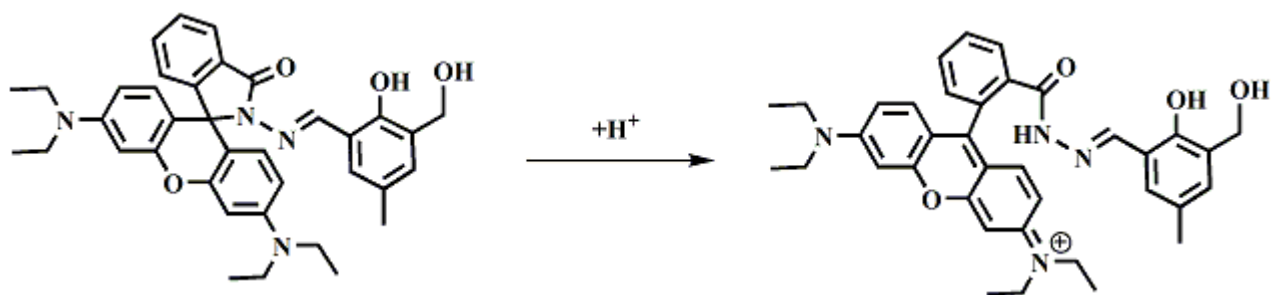


Figure S5 ESI-MS spectrum of **L**



Scheme S1 Proposed mechanism for the fluorescence enhancement of **L** upon the addition of H^+

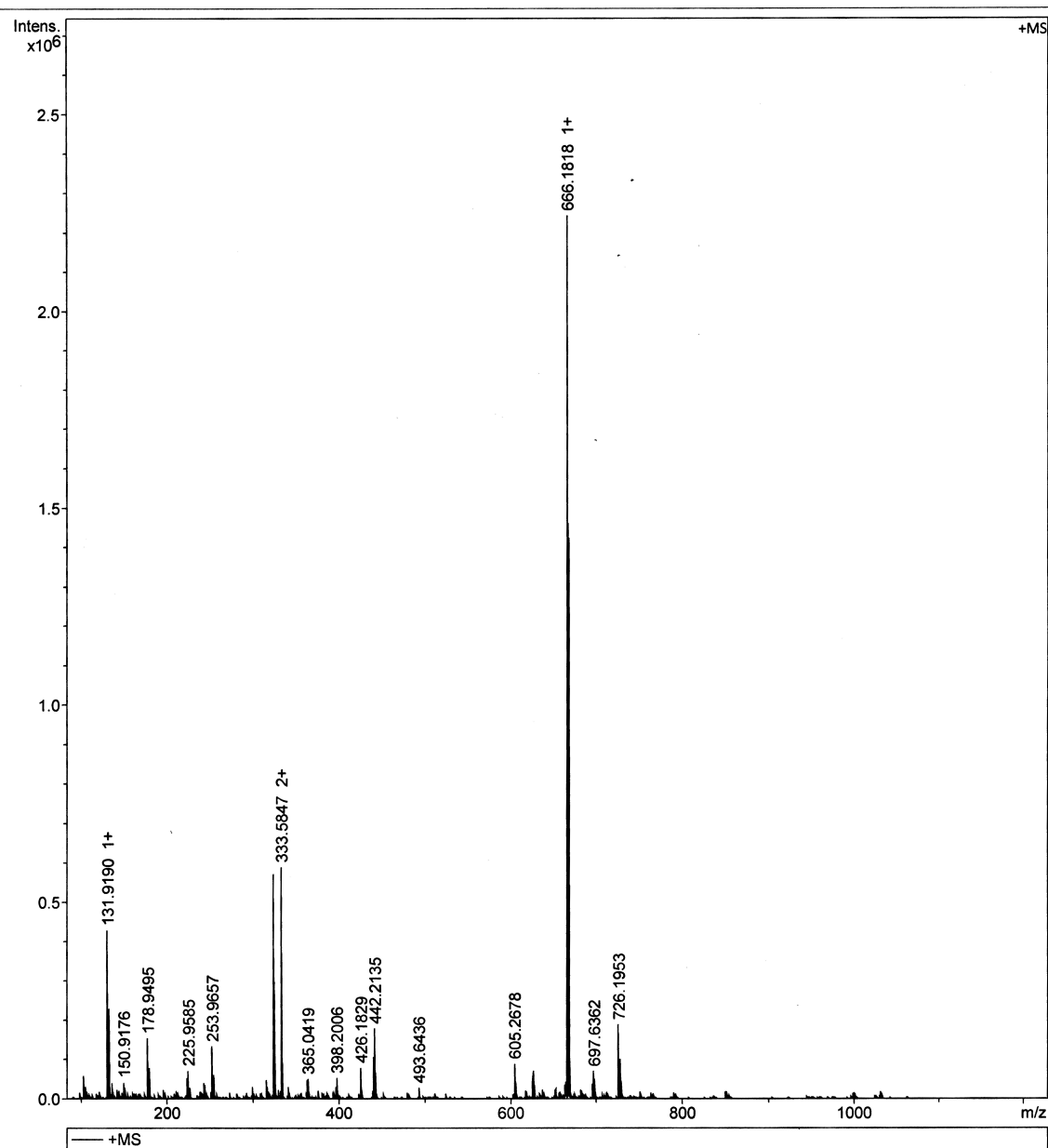


Figure S6. ESI-MS spectrum of L-Cu²⁺

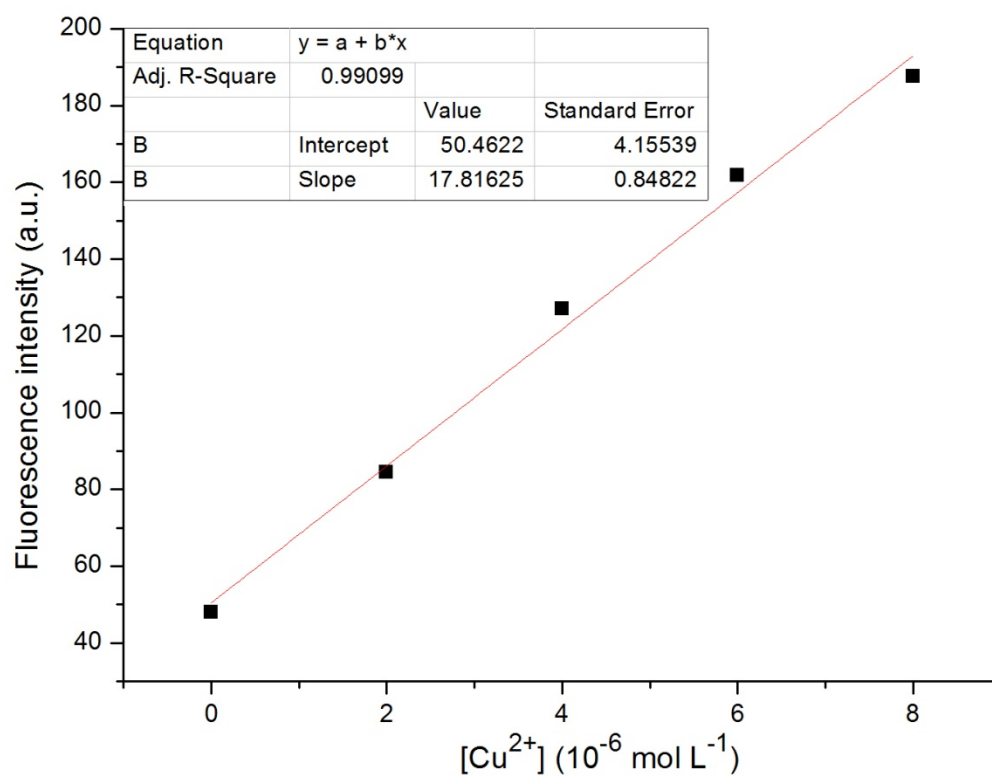


Figure S7 Fluorescence intensity at 581 nm for **L** as a function of the concentration of Cu²⁺ ion. The excitation wavelength is 530 nm.

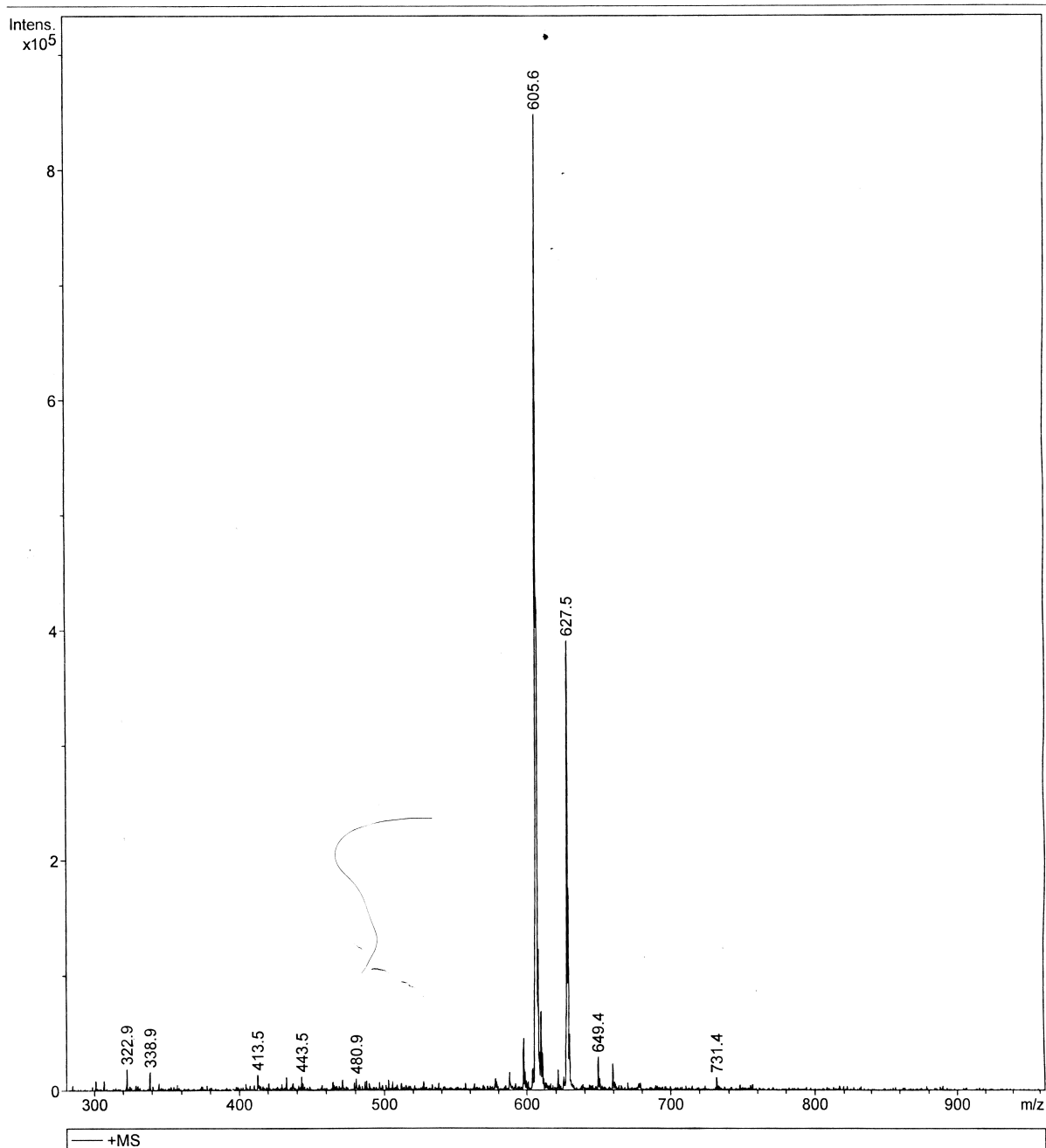


Figure S8 ESI-MS spectrum of $L-Cu^{2+} + S^{2-}$