

Supplementary Data

A novel colorimetric and fluorogenic chemosensor for selective detection of Cu²⁺ ions in aqueous media

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FIGURES

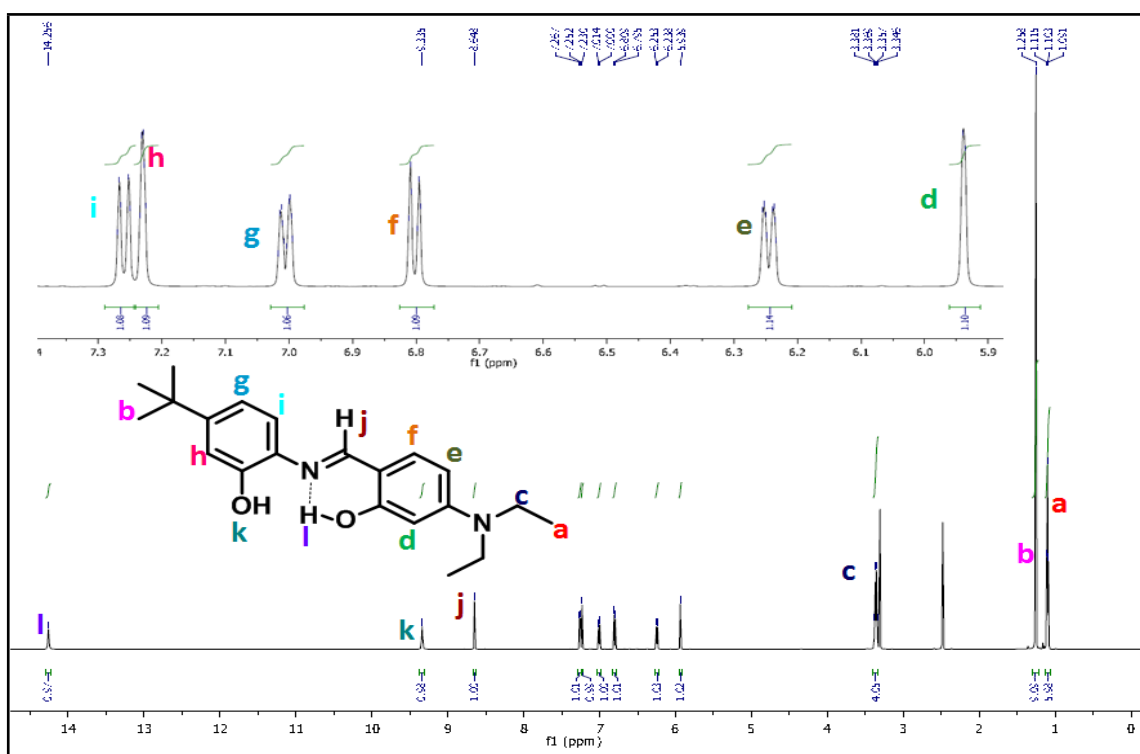


Fig. S1. $^1\text{H-NMR}$ of **L** in $\text{DMSO-}d_6$.

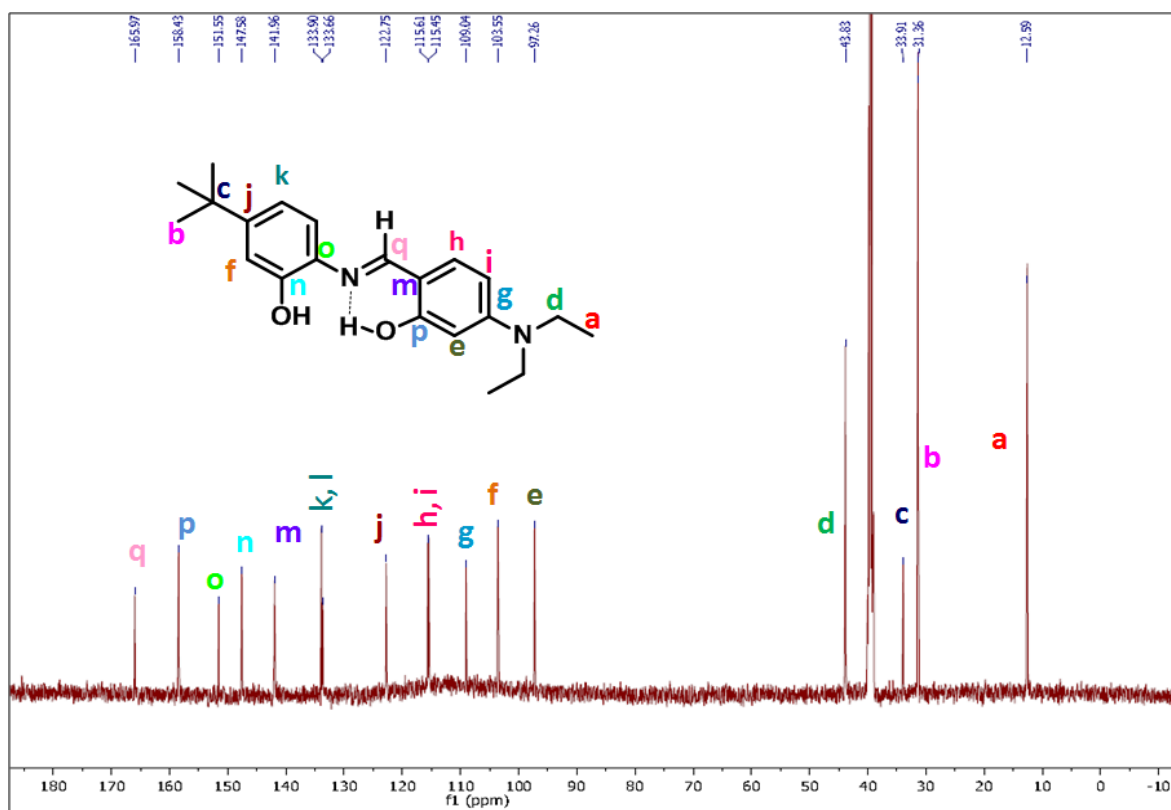


Fig. S2. $^{13}\text{C-NMR}$ of **L** in $\text{DMSO-}d_6$.

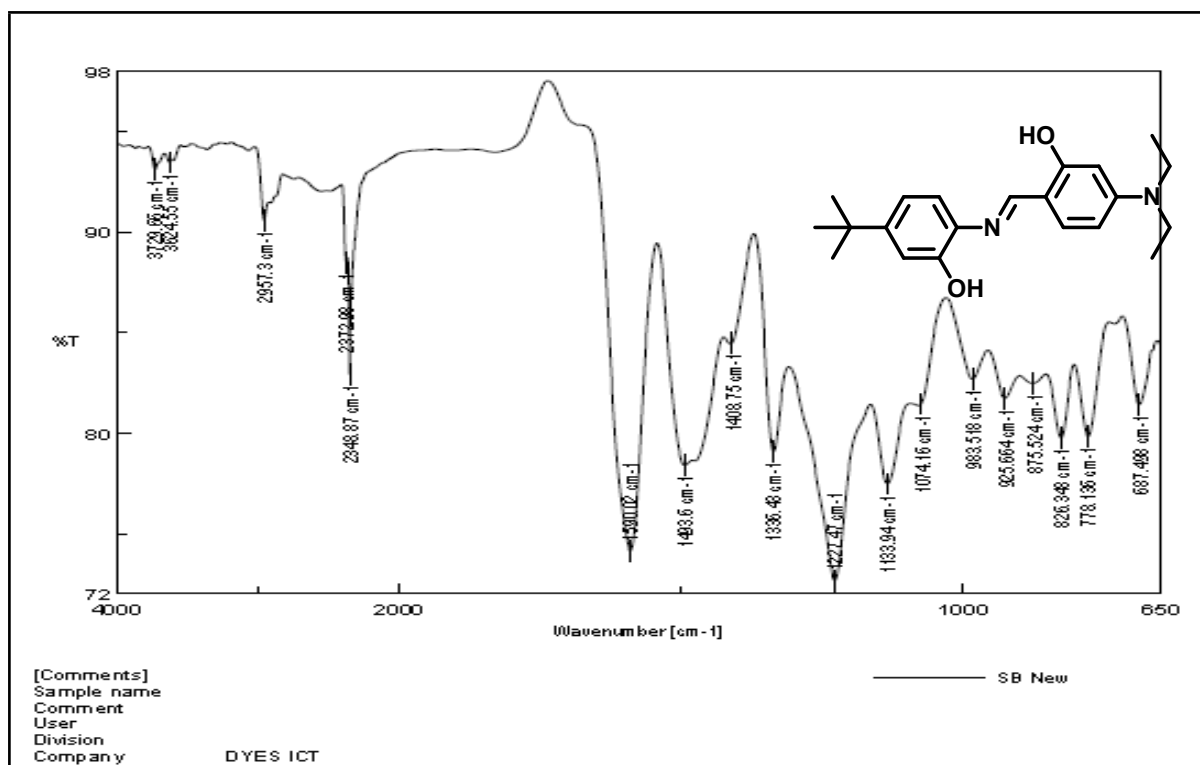


Fig. S3. FT-IR of L.

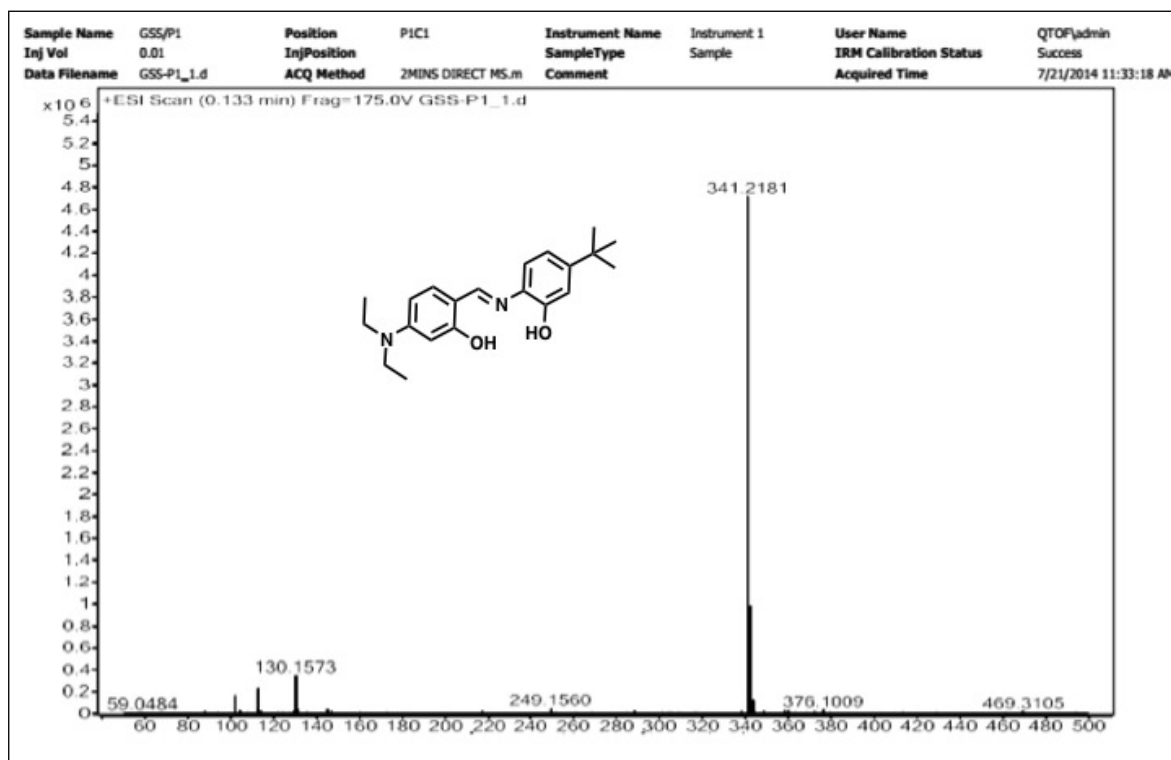


Fig. S4. ESI-Mass of L CH₃OH as solvent.

SBreptMS_MS #8 RT: 0.16 AV: 1 NL: 2.05E4
F: + c ESI Full ms2 475.00@45.00 [150.00-550.00]

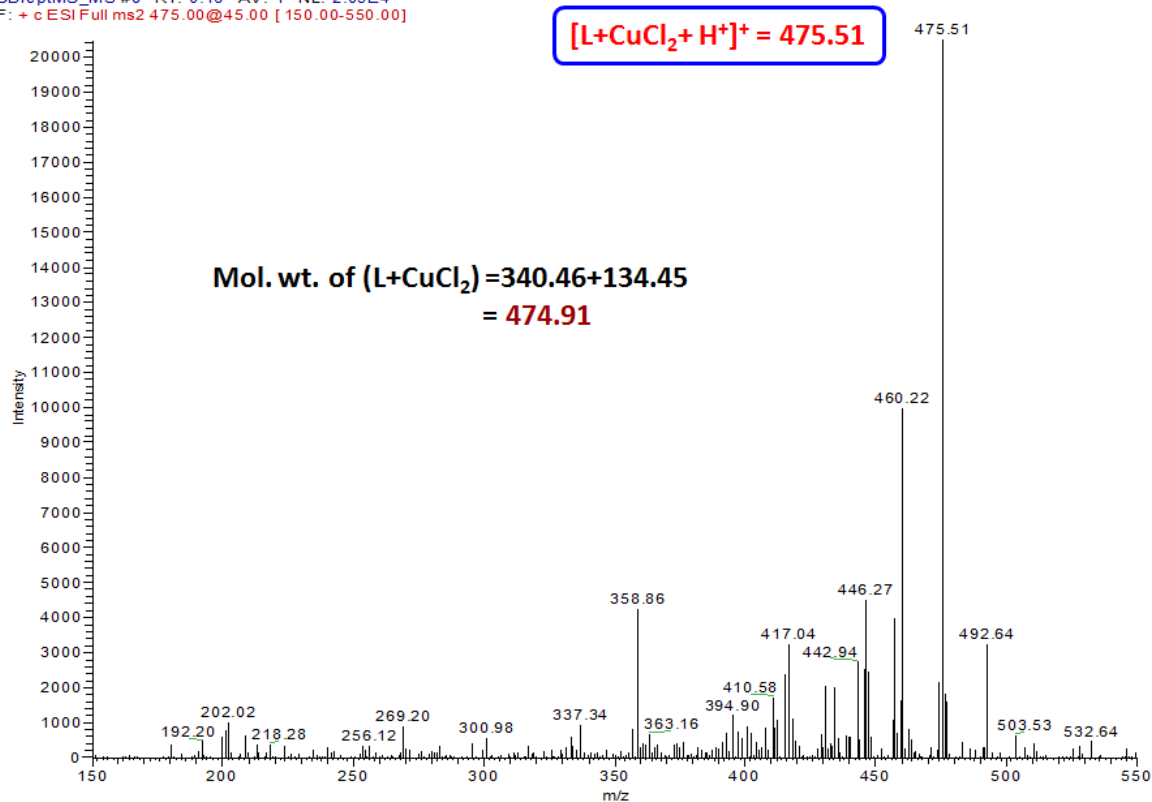


Fig. S5. ESI-Mass of L-Cu²⁺ complex in CH₃OH as solvent.

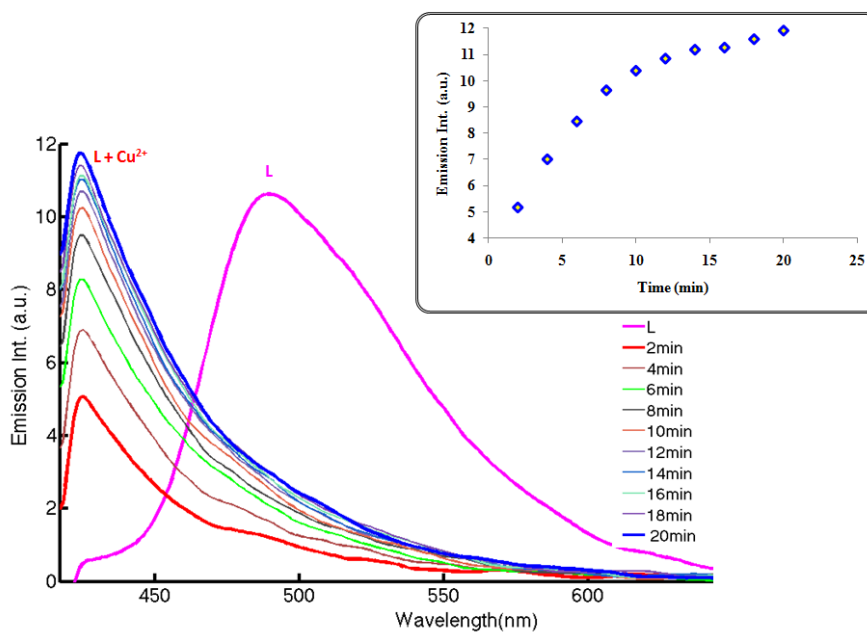


Fig. S6. Time course plot representing changes in emission graph of L on interaction with Cu²⁺ ions (Insert showing plot of emission intensity of L-Cu²⁺ complex with respect to time).

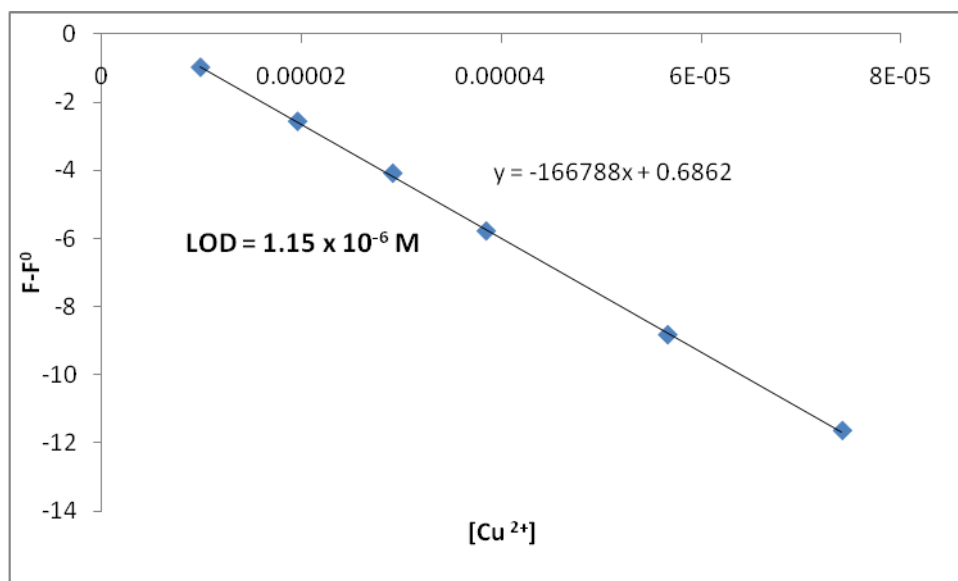


Fig. S7. Limit of detection calculation for L-Cu²⁺ complex from linear curve fit of emission values.

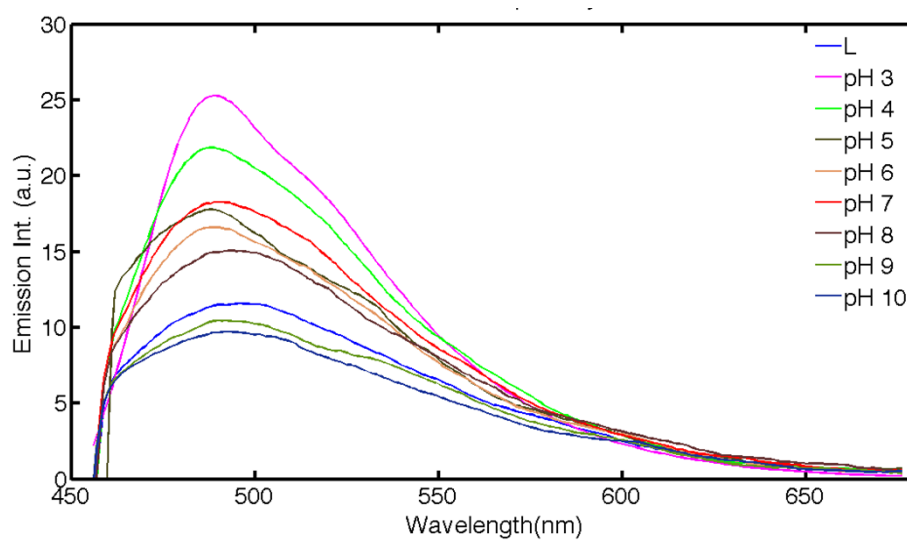


Fig. S8 (a). Emission graph of free L (10 μM) in the pH range of 3-10 ($\lambda_{ex} = 425 \text{ nm}$).

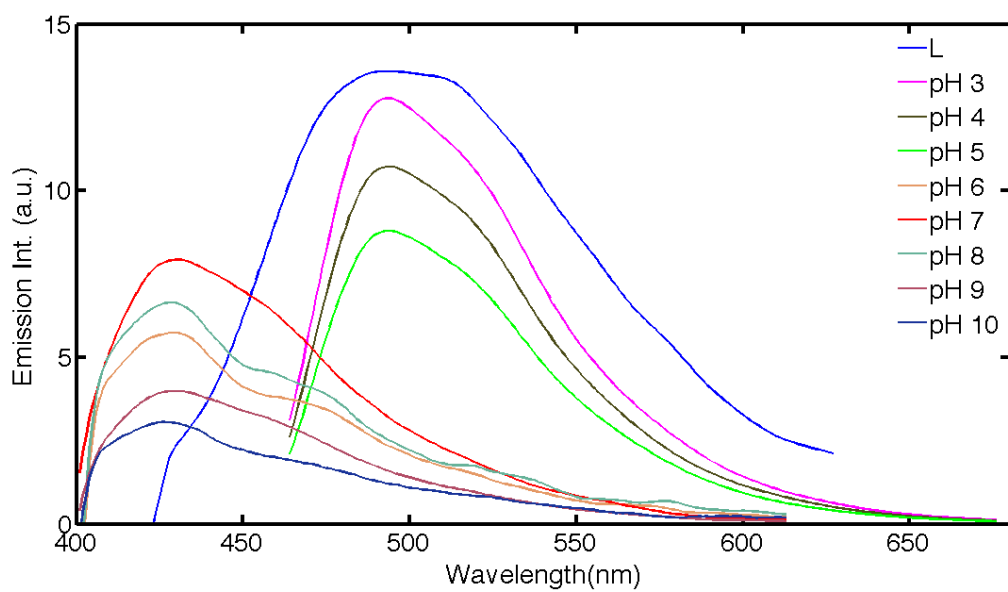


Fig. S8 (b). Emission of L-Cu²⁺ in the pH range of 3-10.

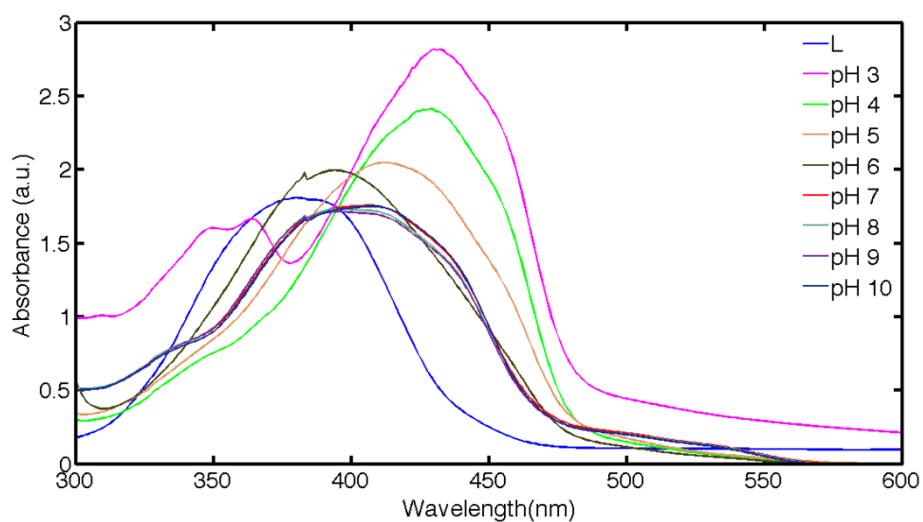


Fig. S9 (a). Absorbance of free L (10 μ M) in the pH range of 3-10.

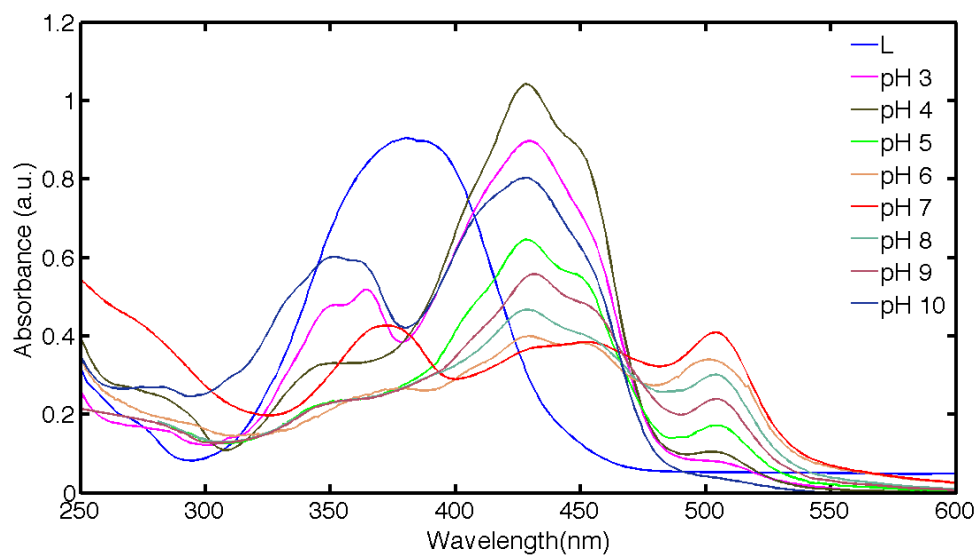


Fig. S9 (b). Absorbance of L-Cu²⁺ in the pH range of 3-10.