Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supplementary Information for:

Selective Detection of Inorganic Phosphates in Live Cells Based on a Responsive Fluorescence Probe

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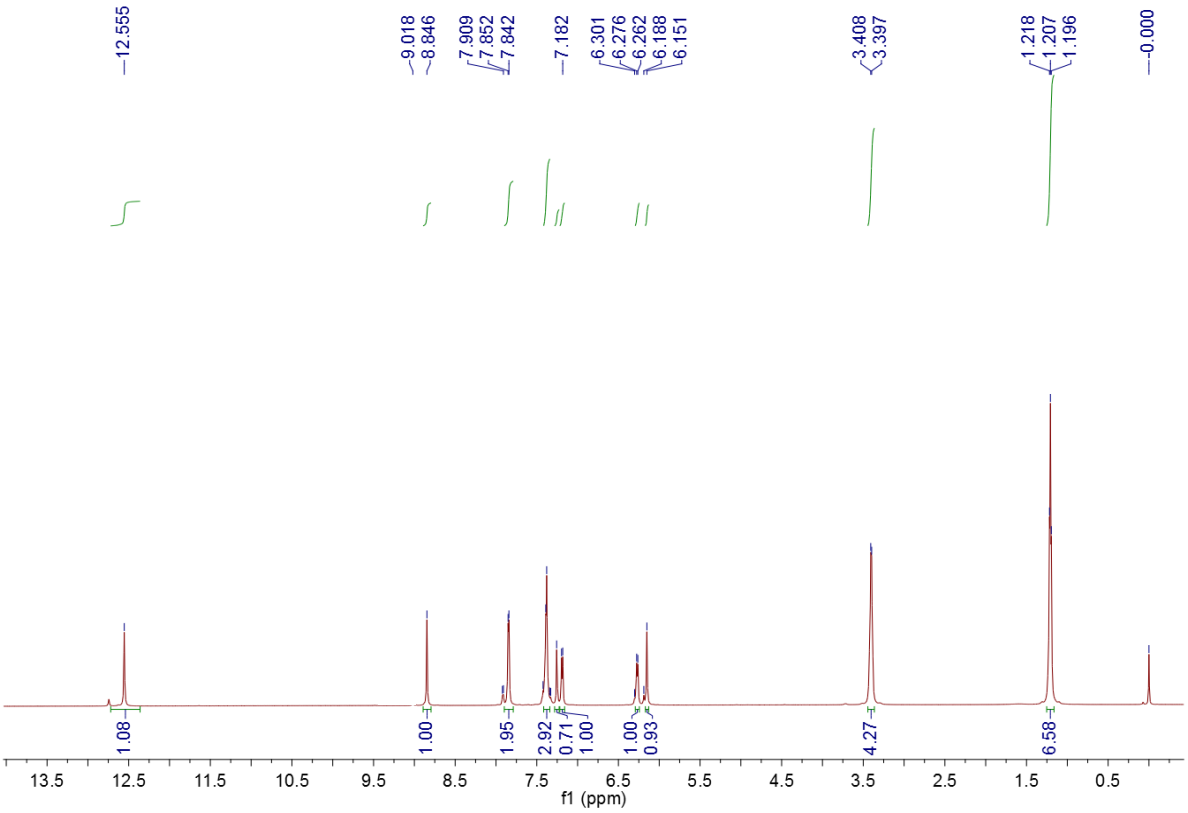

Fig. S1 ^{1}H NMR of **L** ($CDCl_3$)

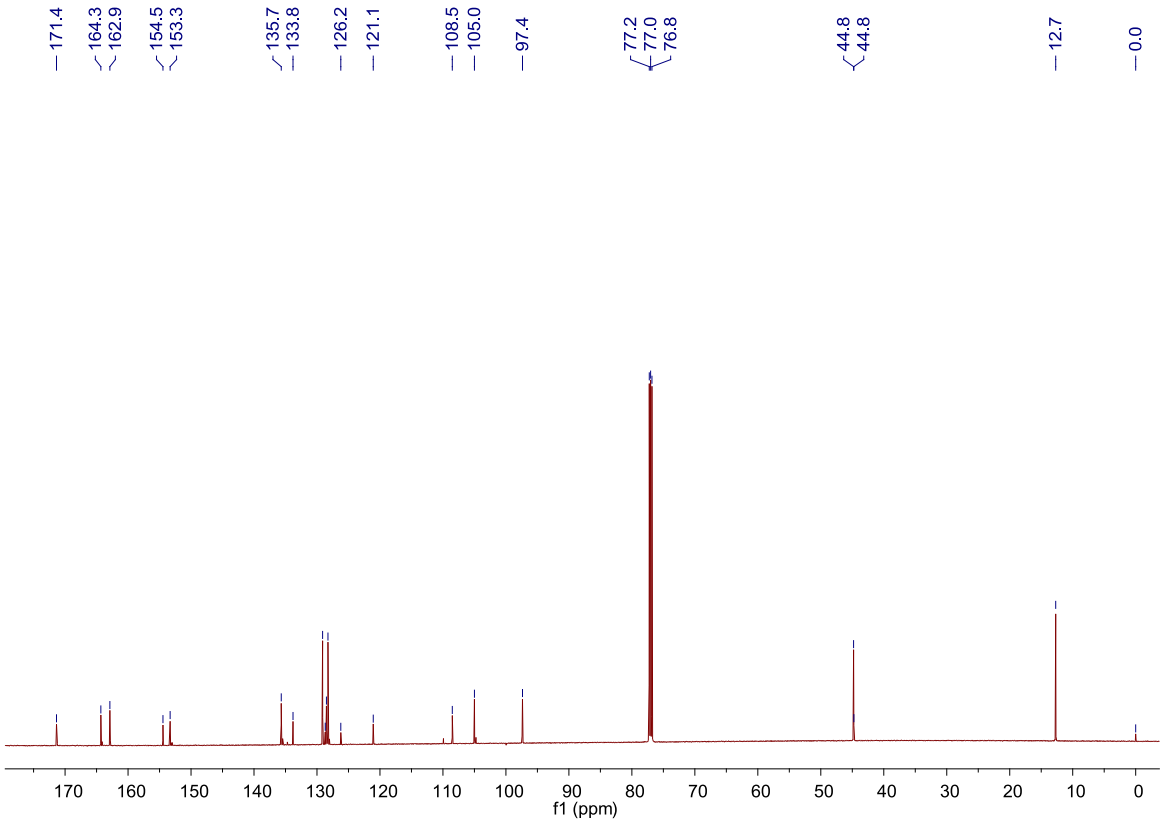

Fig. S2 ^{13}C NMR of **L** ($CDCl_3$)

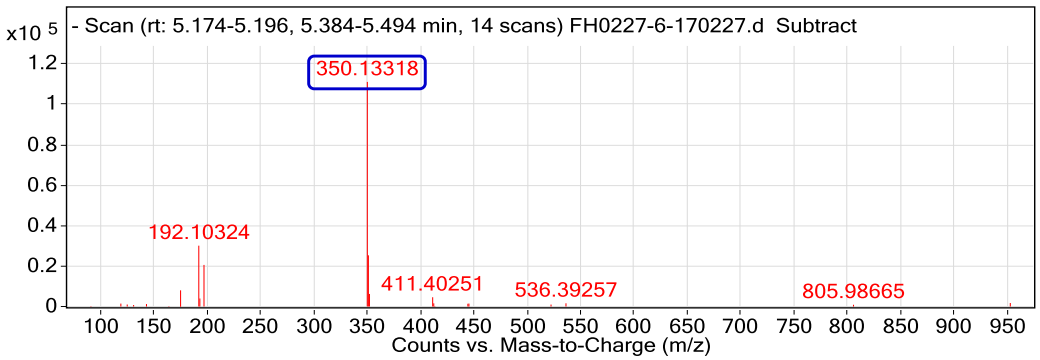

Fig. S3 HR MS of **L**

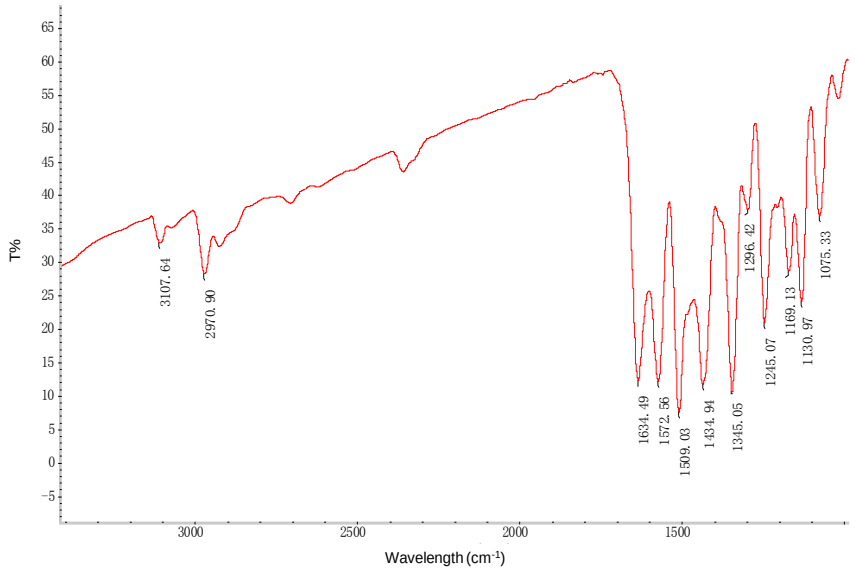

Fig. S4 IR spectra of **L**

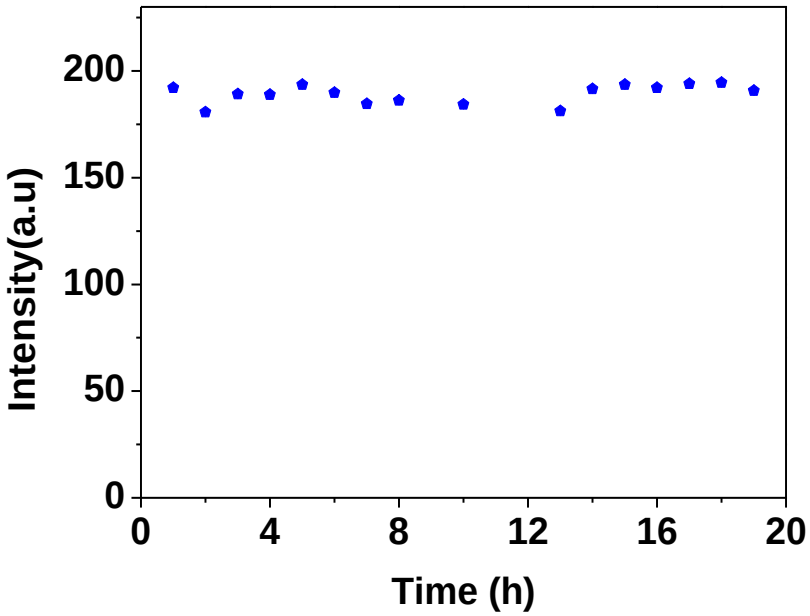

Fig. S5 Fluorescence spectra of **L** (10 μM) at different times in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4). The intensities were recorded at 490 nm, excitation at 430 nm.

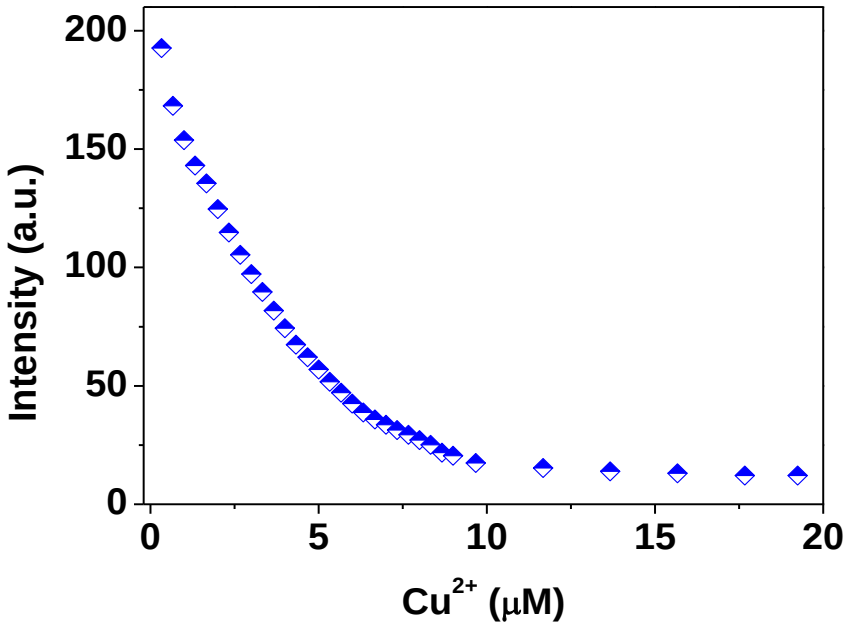

Fig. S6 Fluorescence intensities of **L** (10 μM) at 490 nm as a function of Cu^{2+} concentration (0–20 μM) in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4). Excitation was performed at 430 nm.

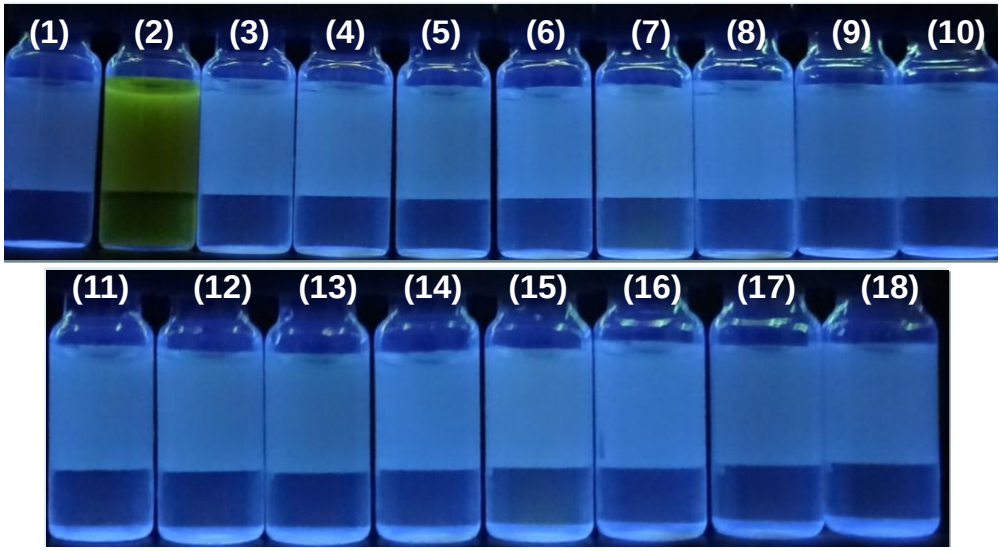

Fig. S7 Fluorescence color images of **L**-Cu^{2+} (10 μM) in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4) in the presence of various anionic analytes (40 μM) under UV light: (1) Blank, (2) Pi. (3) Br^{-}, (4) Cl^{-}, (5) F^{-}, (6) HCO_3^{-}, (7) AcO^{-}, (8) S^{2-}, (9) SCN^{-}, (10) OH^{-}, (11) NO_2^{-}, (12) HSO_4^{-}, (13) CO_3^{2-}, (14) SO_4^{2-}, (15) AMP, (16) ADP, (17) ATP, (18) PPi.

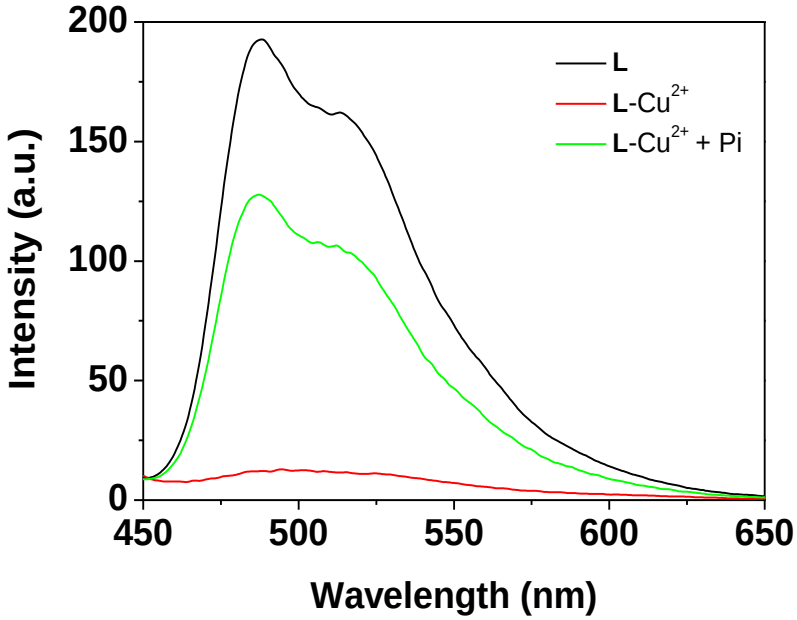

Fig. S8 Fluorescence spectra of (a) **L** (10 μM), sequential upon addition of(b) Cu^{2+} (20 μM) and (c) Pi (40 μM) in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4). Excitation was performed at 430 nm.

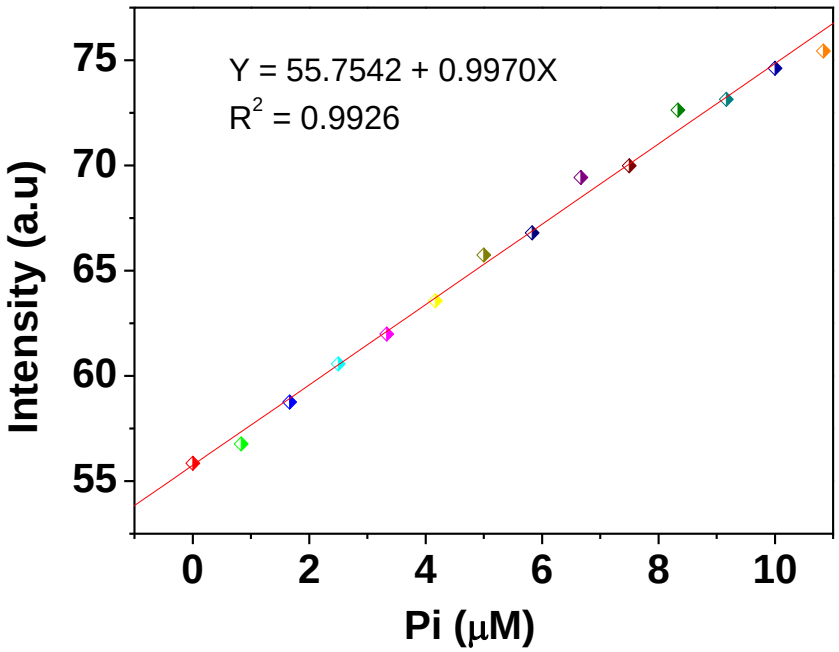

Fig. S9 Linear relationship between fluorescence intensity of **L**-Cu^{2+} (3 μM) at 490 nm versus the concentration of Pi (0–11 μM) in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4). Excitation was performed at 430 nm.

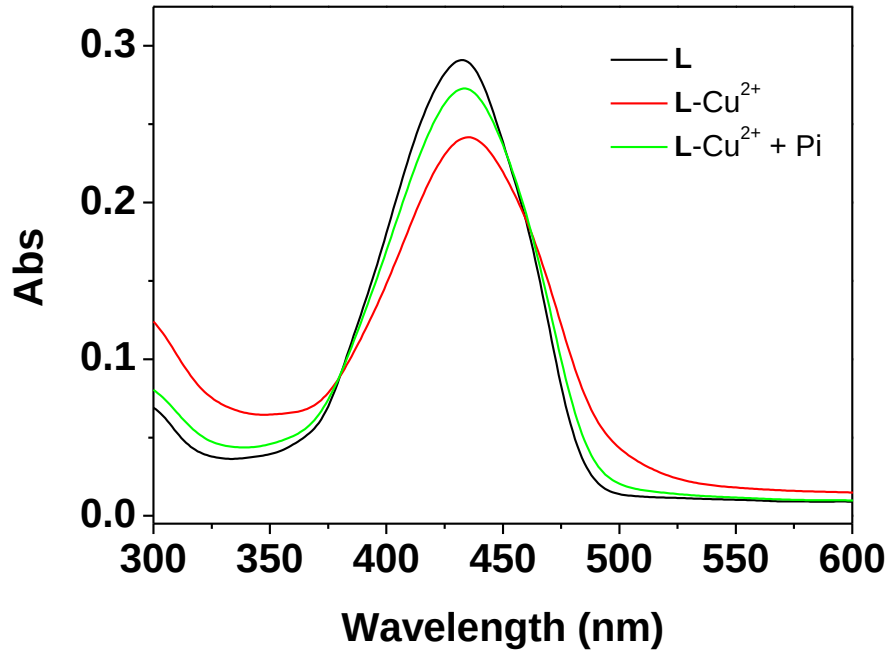

Fig. S10 UV-vis absorption spectra of (a) **L** (10 μM), sequential upon addition of (b) Cu^{2+} (20 μM) and (c) Pi (40 μM) in HEPES aqueous buffer (DMSO: HEPES = 3:7, 20 mM, pH = 7.4).

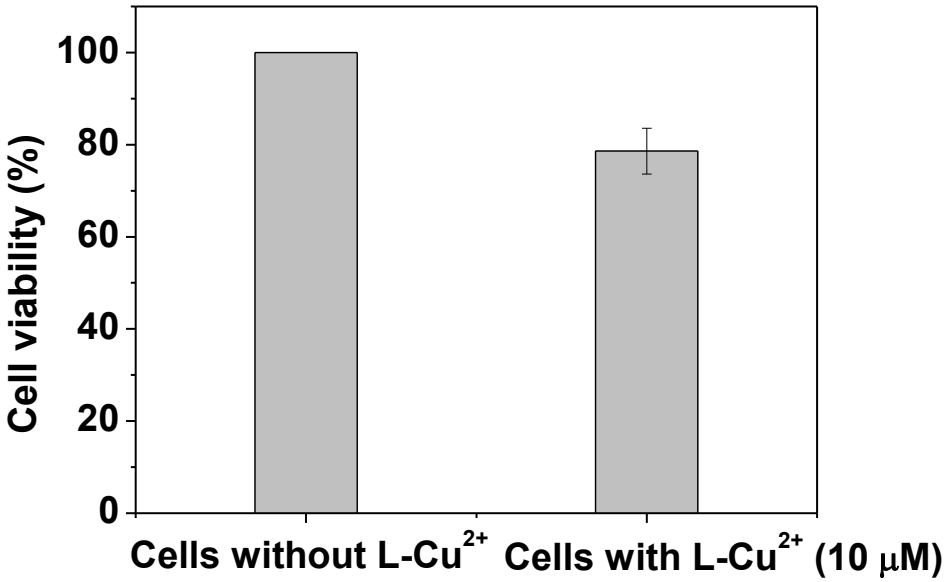

Fig. S 11 MTT assay of MDA-MB-231 cells treated with **L**-Cu^{2+}.