Supplementary data

Anion selective chromogenic and fluorogenic chemosensor and its application in breast cancer live cell imaging

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FIGURES

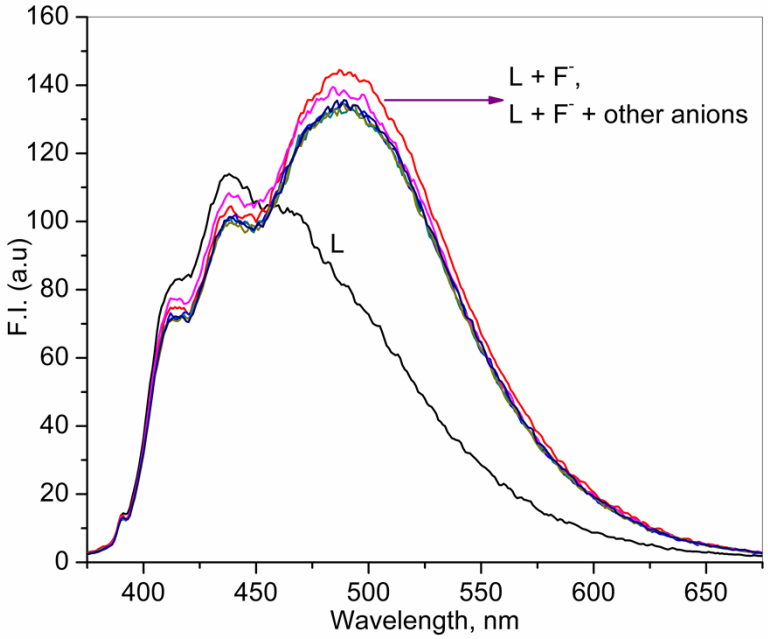

Fig. S1. Interference study of **L** for the detection of F^- in DMSO (2 mL solution of **L** of 5 x 10^{-5} M was mixed with 100 µL of F^- and 100 µL of other anions of 1 x 10^{-3} M, except AcO^-).

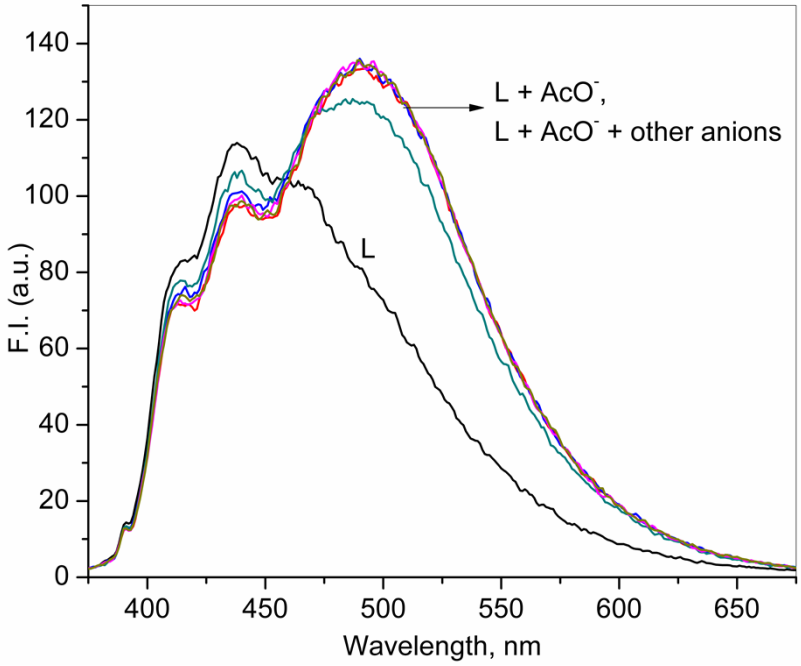

Fig. S2. Interference study of **L** for the detection of AcO^- in DMSO (2 mL solution of **L** of 5 x10^{-5} M was mixed with 100 µL of AcO^- and 100 µL of other anions of 1x10^{-3} M, except F^-).

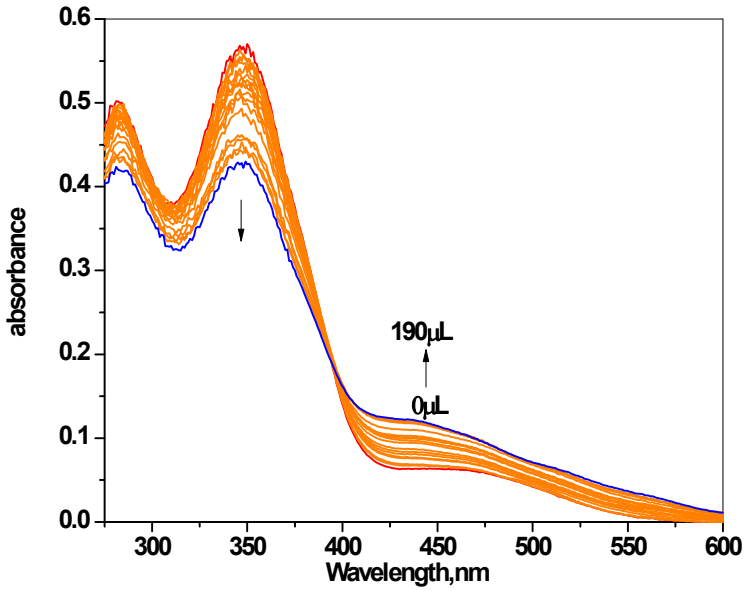

Fig. S3. Absorption titration of **L** (5x 10^{-5} M) upon incremental addition of TBAAcO (1 X 10^{-3} M).

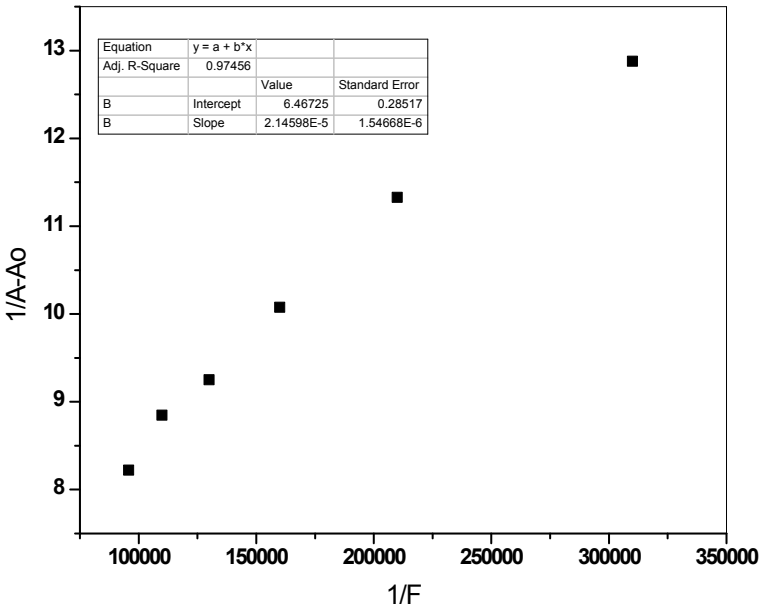

Fig. S4. BH plot for **L** with Fluoride, K = 3.01 x 10^5 M^{-1}.

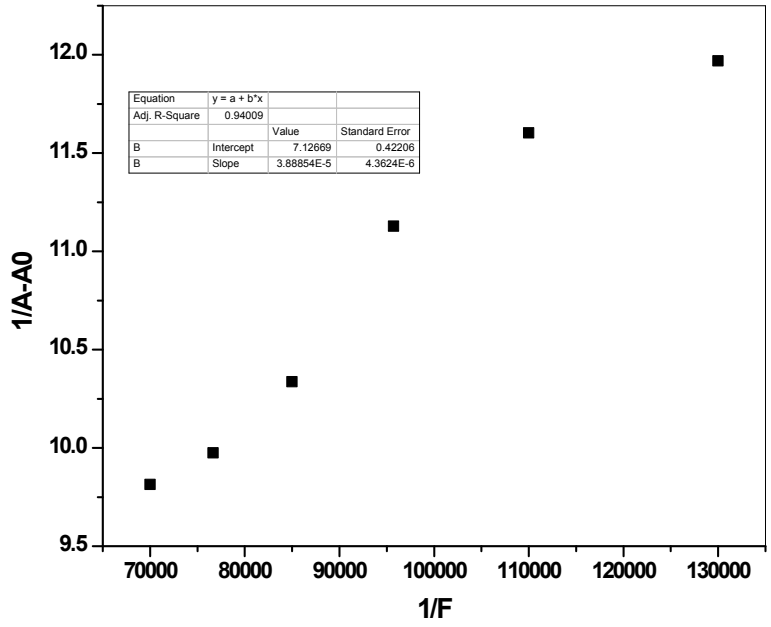

Fig. S5. BH plot for **L** with acetate, K= 1.83 x 10^5 M^{-1}.

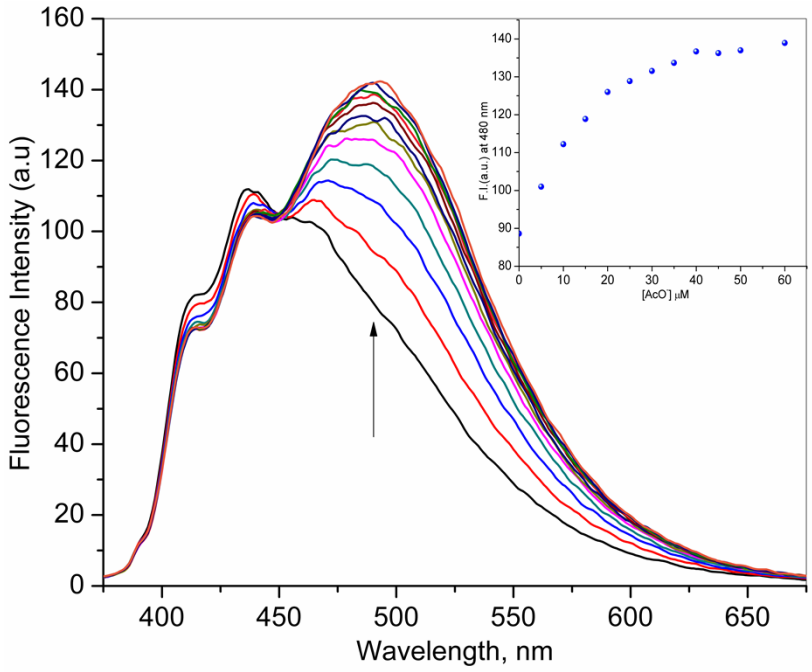

Fig. S6. Fluorescence spectral changes of **L** (1.0x 10^{-5}M, λ_{exc} = 350 nm) upon incremental addition of TBAAcO in DMSO. Inset showing the [AcO^-] vs. F.I. at 480 nm.

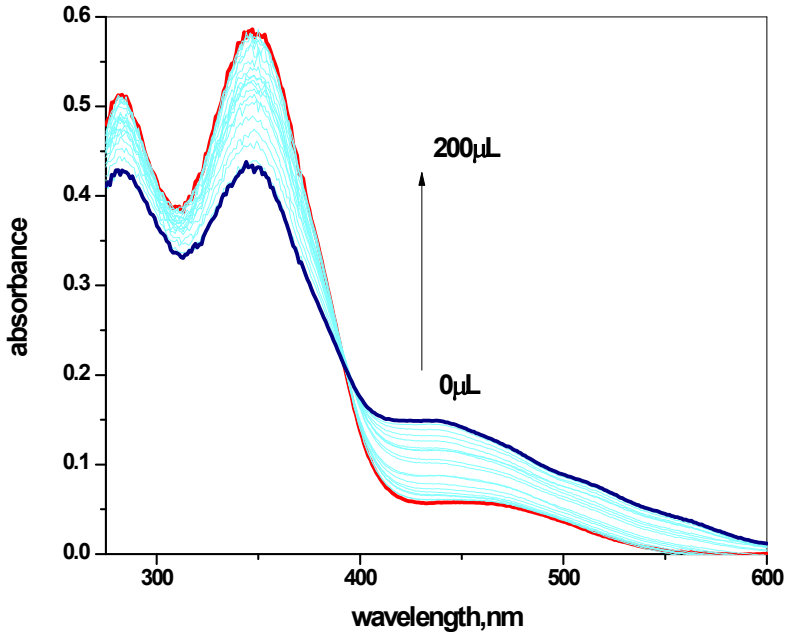

Fig. S7. Absorption titration of **L** (5x 10^{-5} M) upon incremental addition of TBAOH (1 X 10^{-3} M).

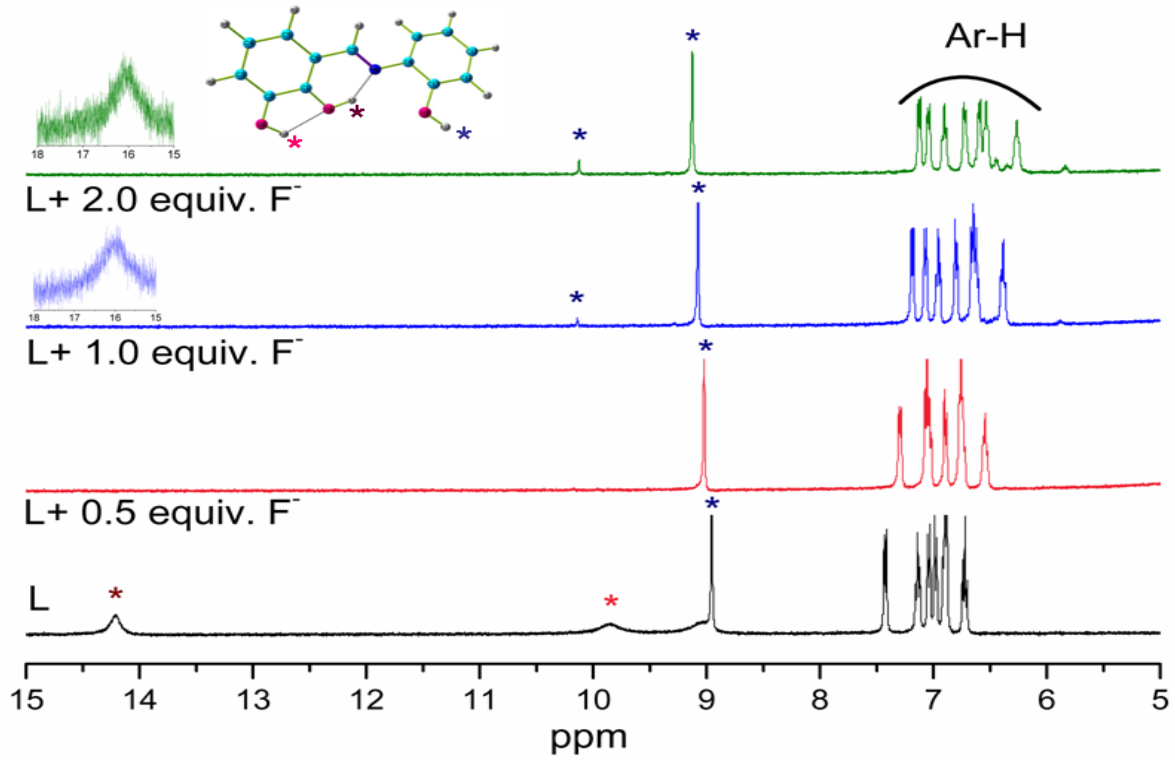

Fig. S8. ^{1}H NMR titration of **L** upon addition of different equivalents of TBAF in DMSO-d_6.

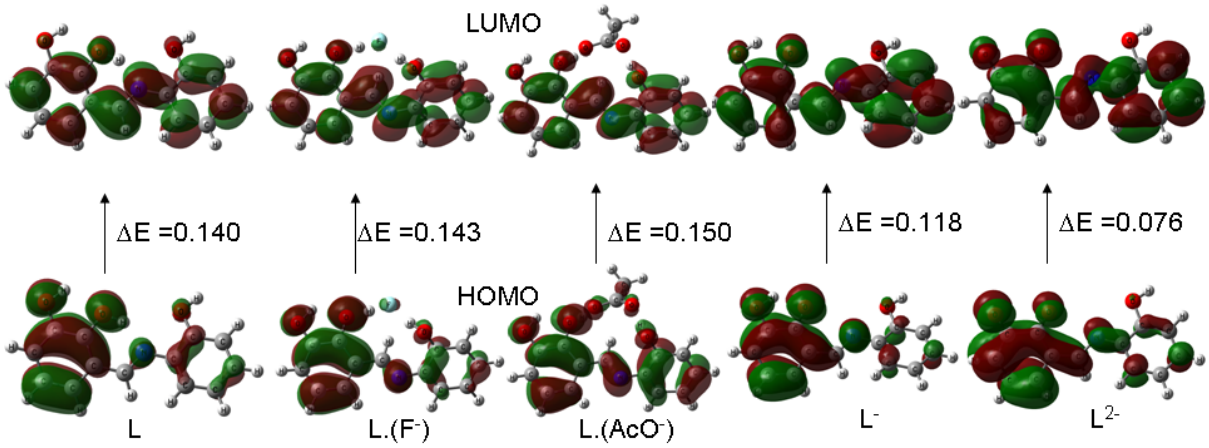

Fig. S9. DFT computed highest occupied molecular orbital (HOMO) and lowest unoccupied molecular orbital (LUMO) of different species of **L.**

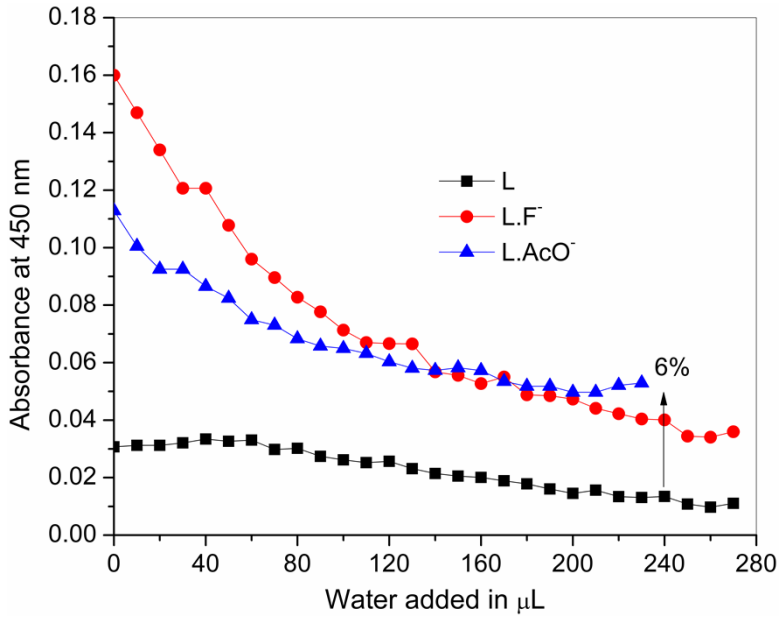

Fig. S10. Changes in the absorbance spectrum of **L** (2 mL, 5.0×10^{-5} M, in DMSO) and in the presence of five equivalents of F^- and AcO^- upon addition of incremental amounts (10 μL) of water.

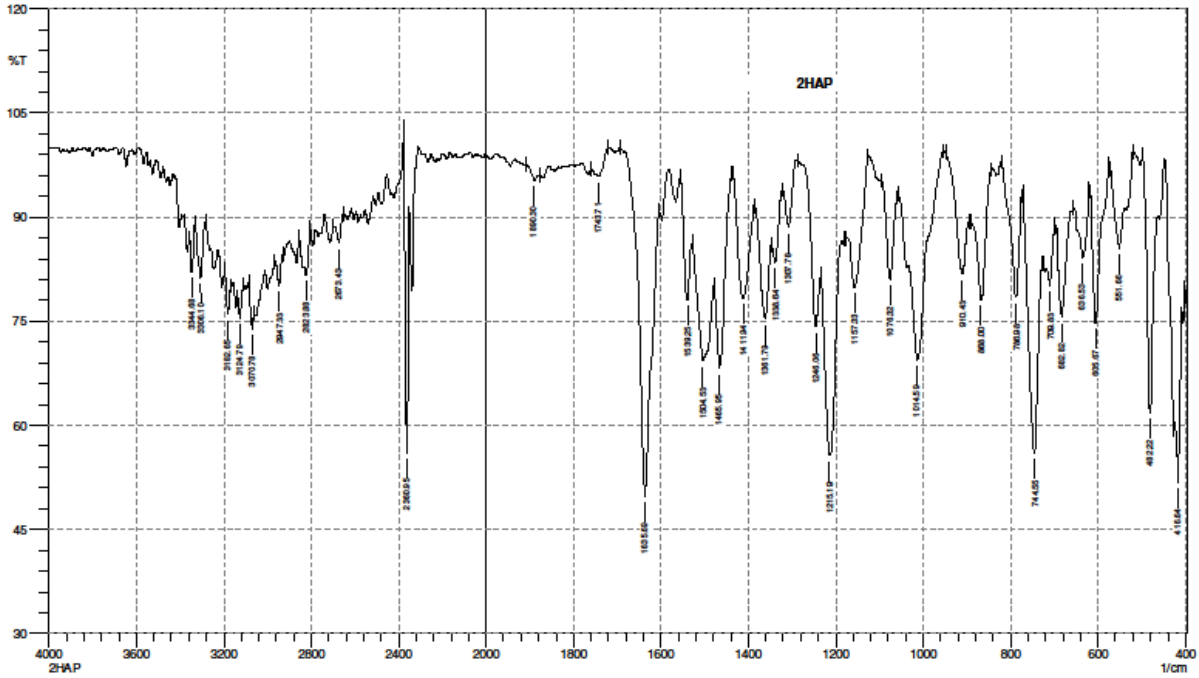

Fig. S11. FTIR spectrum of the receptor **L.**

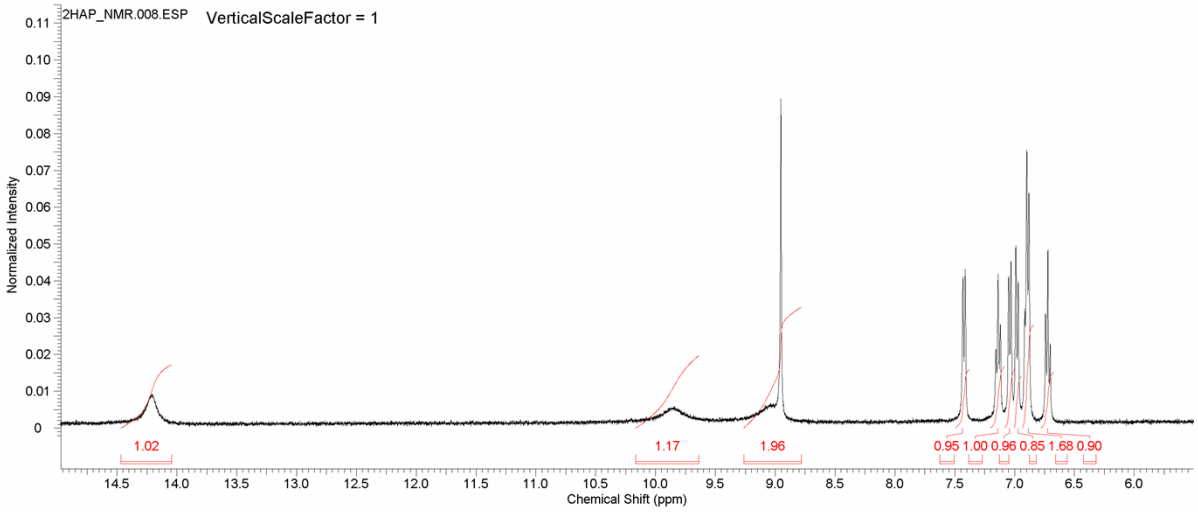

Fig. S12. ^{1}H NMR spectrum of the receptor **L** in DMSO-d_6.