

Figure S1 Uv-vis spectra of **1** (in present of 1 eq. TS) (blue, solid) and **1'** (red, solid) and upon addition of 2 folds of F^- (dash) in CH_3CN .

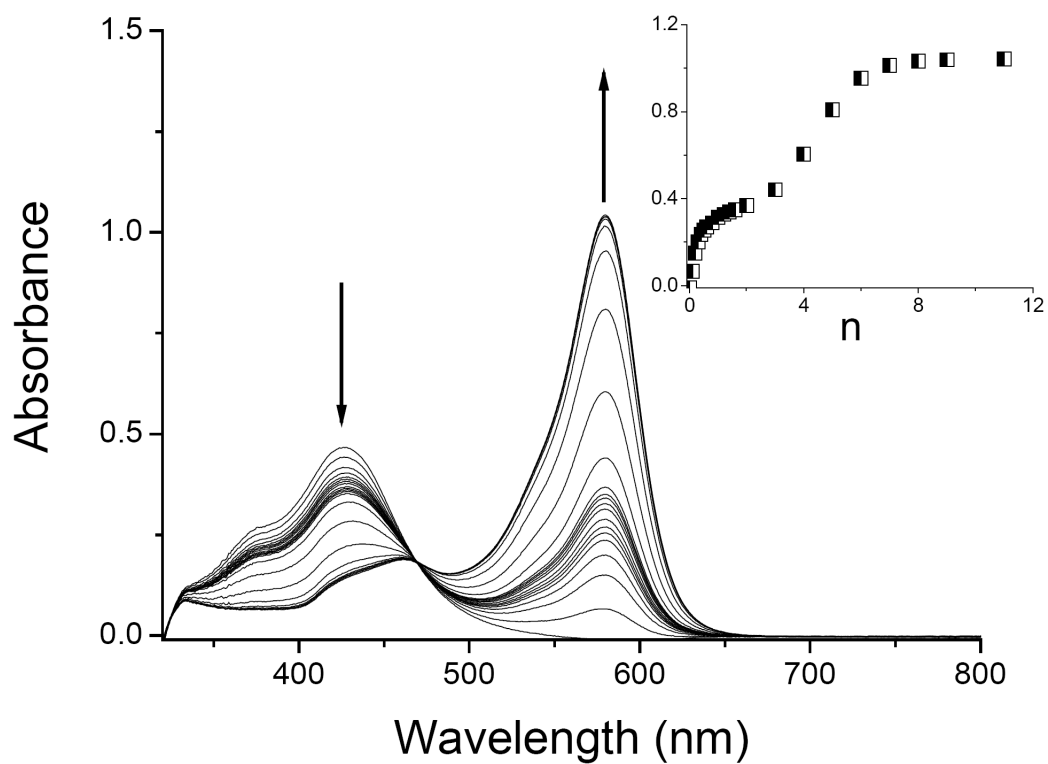


Figure S2 Titration of a 1.0×10^{-5} M solution of **1** in presence of 1.0×10^{-5} M of P-Toluene sulfonic acid in acetonitrile with a standard solution of H_2PO_4^- . Inset: absorbance at 580nm versus number of equivalents of H_2PO_4^- ion (n) added.

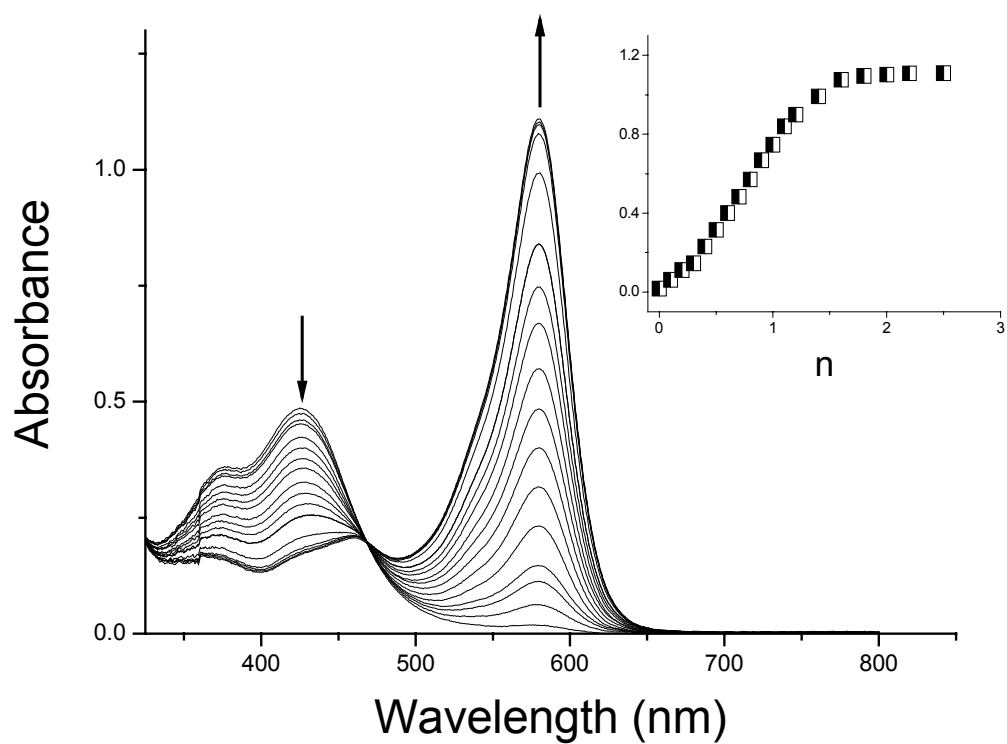


Figure S3 Titration of a 1.0×10^{-5} M solution of **1** in presence of 1.0×10^{-5} M of TS in acetonitrile with a standard solution of OH⁻. Inset: absorbance at 580nm versus number of equivalents of OH⁻ ion (n) added.

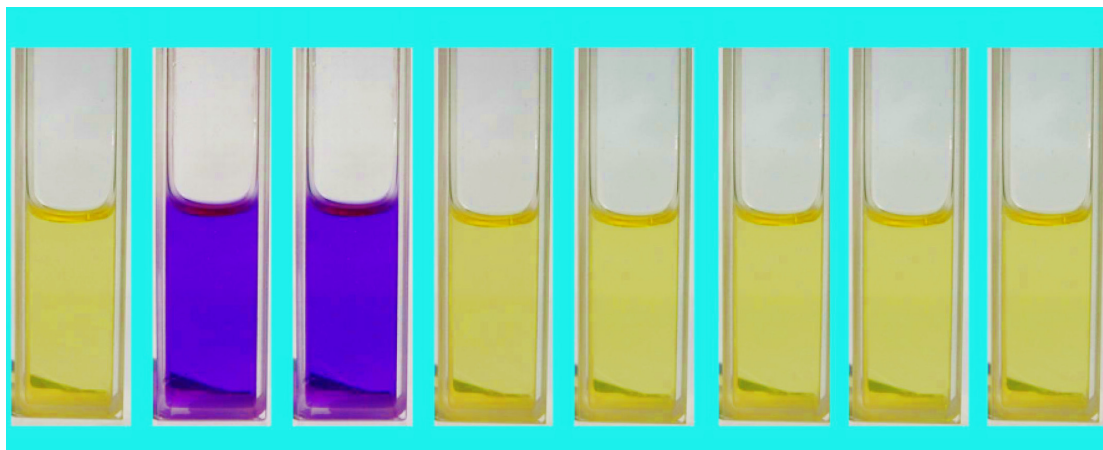


Figure S4 Color changes observed of free ligand HL in DMSO (5×10^{-5} M) in the presence of 1 equivalent molar ratio of TS upon addition anions as TBA salts. From left to right: no anions, 1 equivalent molar of F^- , 1 equivalent molar of $H_2PO_4^-$, and 20 equivalent molar of Cl^- , Br^- , I^- , HSO_4^- , NO_3^- .

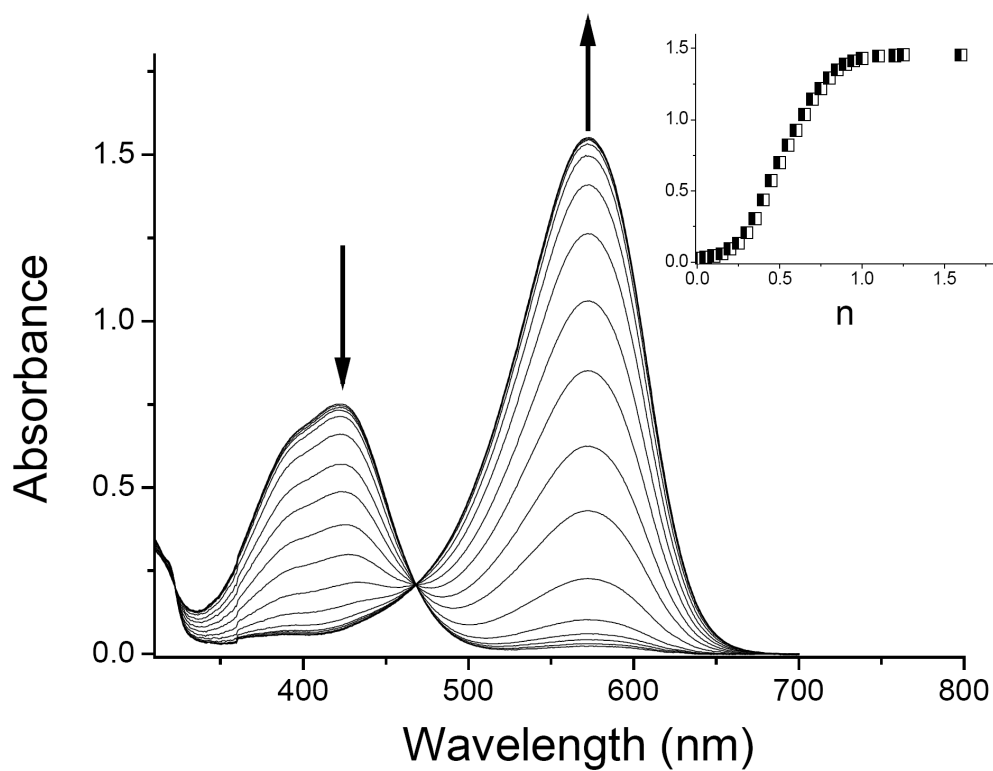


Figure S5 Titration of a 1.0×10^{-5} M solution of 1 in presence of 1.0×10^{-5} M of TS in DMSO with a standard solution of H_2PO_4^- . Inset: absorbance at 580nm versus number of equivalents of H_2PO_4^- ions (n) added.