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 CH3CN.
Figure S2 Titration of a $1.0 \times 10^{-5}$ M solution of I in presence of $1.0 \times 10^{-5}$ M of P-Tolune sulfonic acid in acetonitrile with a standard solution of $\text{H}_2\text{PO}_4^-$ . Inset: absorbance at 580nm versus number of equivalents of $\text{H}_2\text{PO}_4^-$ ion (n) added.
Figure S3 Titration of a $1.0 \times 10^{-5}$ M solution of 1 in presence of $1.0 \times 10^{-5}$ 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 $\text{F}^-$, 1 equivalent molar of $\text{H}_2\text{PO}_4^-$, and 20 equivalent molar of $\text{Cl}^-$, $\text{Br}^-$, $\text{I}^-$, $\text{HSO}_4^-$, $\text{NO}_3^-$. 
Figure S5 Titration of a $1.0 \times 10^{-5}$ M solution of 1 in presence of $1.0 \times 10^{-5}$ M of TS in DMSO with a standard solution of H$_2$PO$_4^-$ . Inset: absorbance at 580nm versus number of equivalents of H$_2$PO$_4^-$ ions (n) added.