## **Electronic Supplementary data**

## Pyridoxal-thiosemicarbazide: its anion sensing ability and application in living cells imaging

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Fig. S1. Changes in the absorbance spectrum of L ( $5.0 \times 10^{-5}$ M) upon addition of incremental amounts of TBAAcO ( $1.0 \times 10^{-3}$  M) in DMSO.



Fig. S2. B-H plot of AcO<sup>-</sup> with L.



Fig. S3. Job's plot of L with fluoride and acetate.



Fig S4. The absorption spectra of L with ten equivalents of TBAOH and TBAF in DMSO.



Fig. S5. Interference study of L with various anions (2 equiv.) in the presence of  $F^-$  (1 equiv.).



Fig. S6. Interference study of L with various anions (2 equiv.) in the presence of  $AcO^{-}$  (1 equiv.).



Fig. S7. Changes in the fluorescence spectra of L (1 × 10<sup>-5</sup> M) after the successive addition of AcO<sup>-</sup> (0-200  $\mu$ L, 1 × 10<sup>-4</sup> M).



Fig. S8. The linear curve fitting of fluorescent intensity at 506 nm as a function of [AcO<sup>-</sup>].

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