

Electronic Supplementary Information

A naphthalimide-based azo colorimetric and ratiometric probe: synthesis and its application for rapid detection of cyanide anion

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Analytical methods

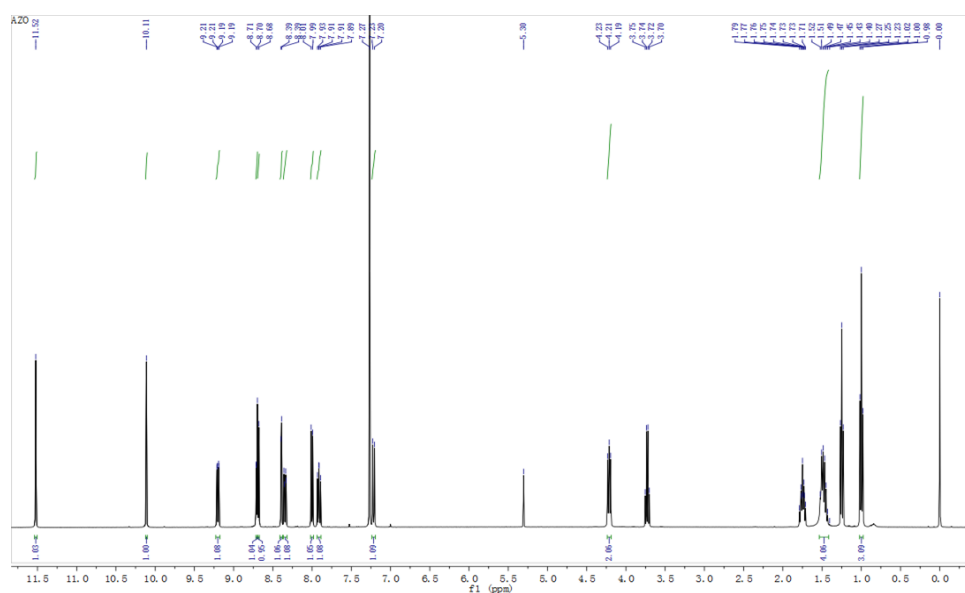


Fig. S1. ¹H NMR chemical shifts of probe 1.

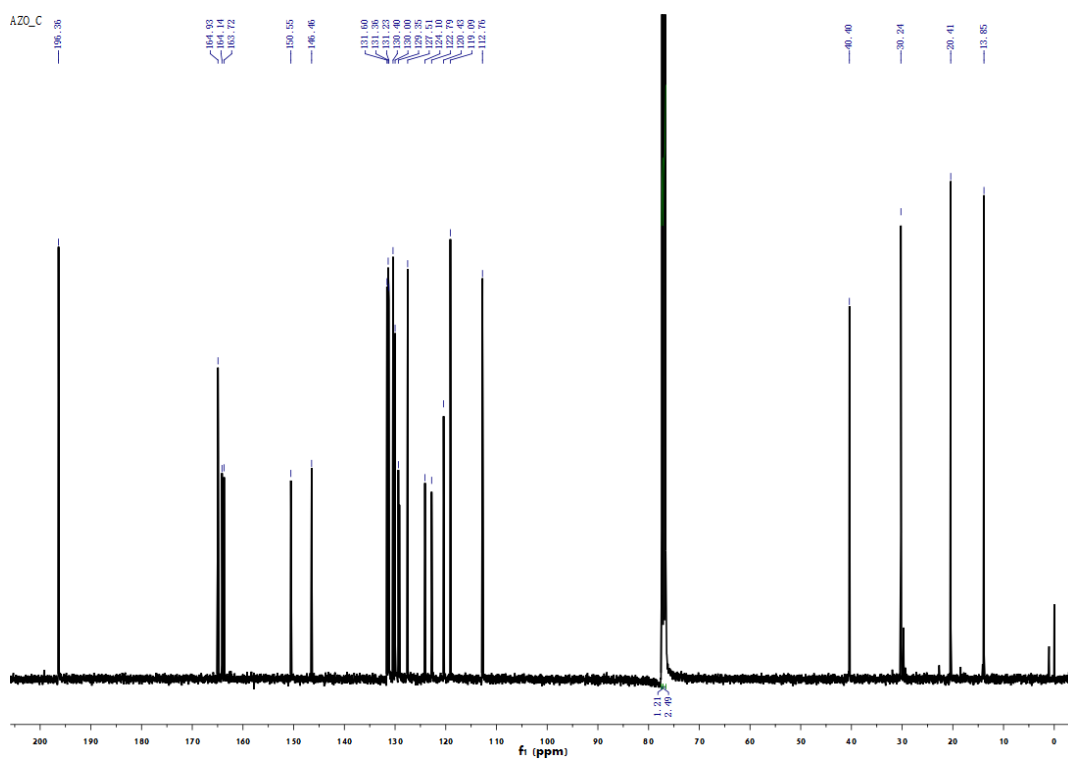


Fig. S2. ¹³C NMR chemical shifts of probe 1.

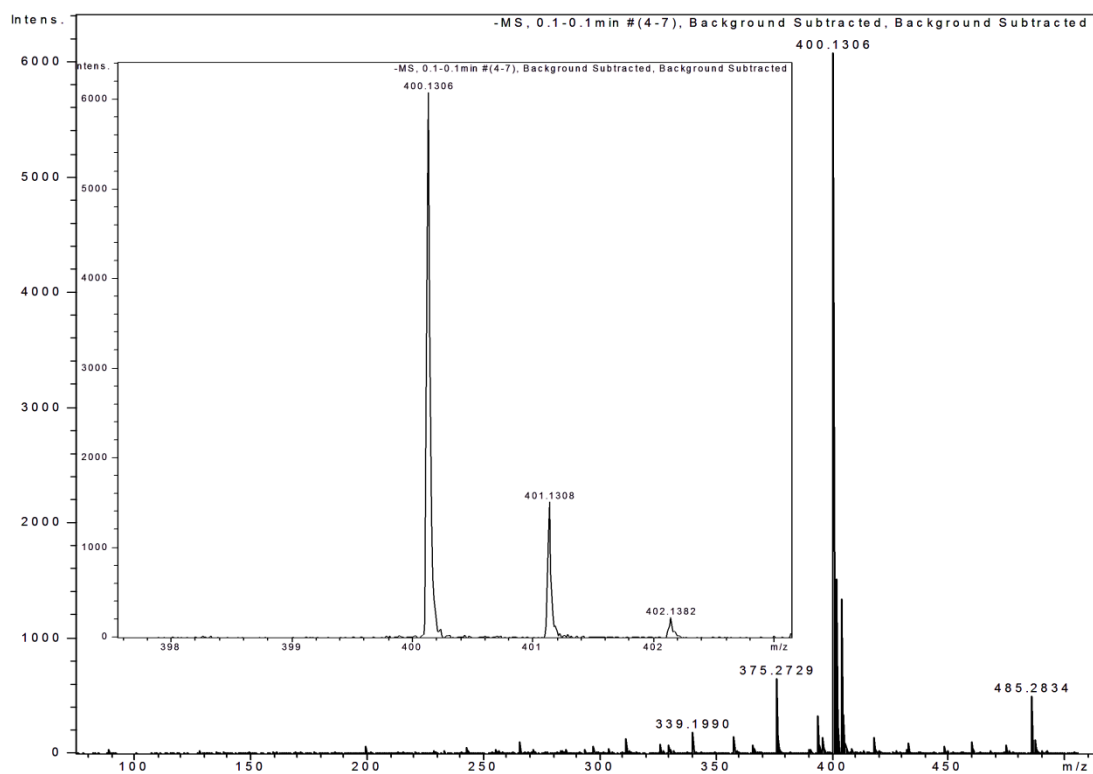


Fig. S3 High resolution mass spectrum (HRMS) of the probe 1.

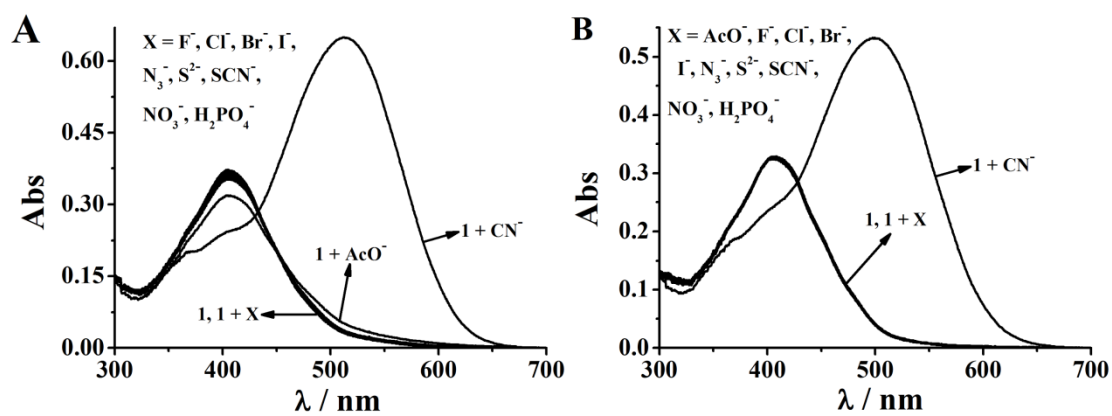


Fig. S4. UV-vis spectra of **1** (25 μM) on addition of various anions (50 μM) in different $\text{H}_2\text{O}/\text{DMSO}$ (v/v) mixed solvents. (A) 1/1 $\text{H}_2\text{O}/\text{DMSO}$; (B) 7/3 $\text{H}_2\text{O}/\text{DMSO}$.

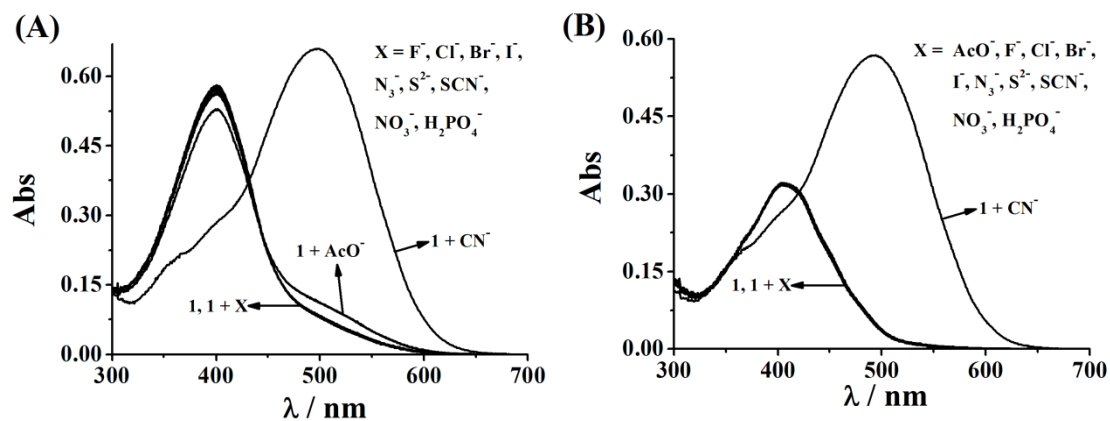


Fig. S5. UV-vis spectra of **1** (25 μM) on addition of various anions (50 μM) in different H₂O/DMSO (v/v) mixed solvents. (A) 1/1 H₂O/MeCN; (B) 7/3 H₂O/ MeCN.

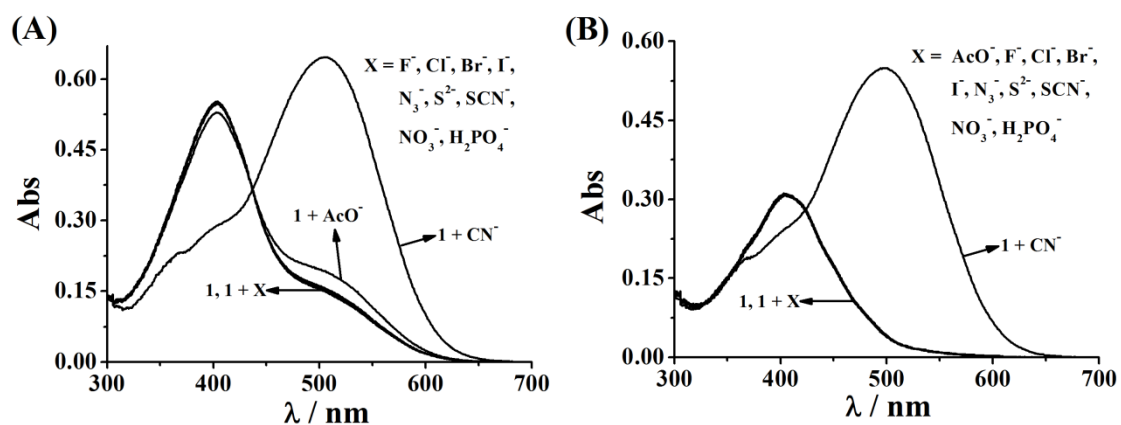


Fig. S6. UV-vis spectra of **1** (25 μM) on addition of various anions (50 μM) in different H₂O/DMSO (v/v) mixed solvents. (A) 1/1 H₂O/EtOH; (B) 7/3 H₂O/ EtOH.