

**Electronic supplementary information (ESI)**

**A highly sulfite-selective ratiometric fluorescent probe based on  
ESIPT**

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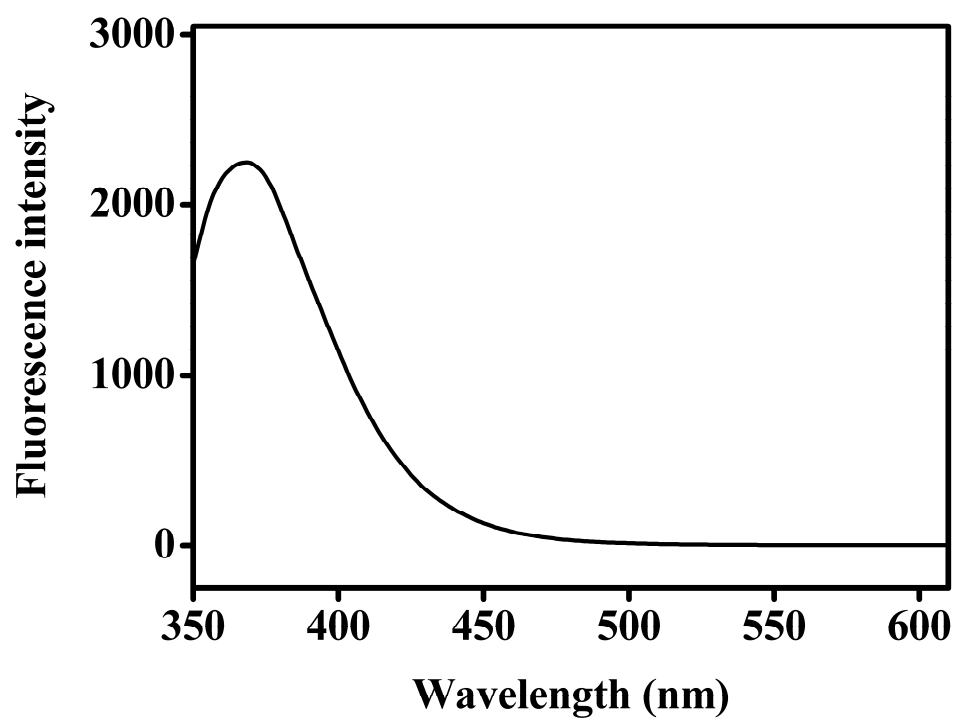
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**Fig. S1.** Fluorescence spectrum of probe 1 ( $\lambda_{ex} = 310$  nm,  $10\mu\text{M}$ ) in  $\text{CH}_3\text{CN}$  solution .

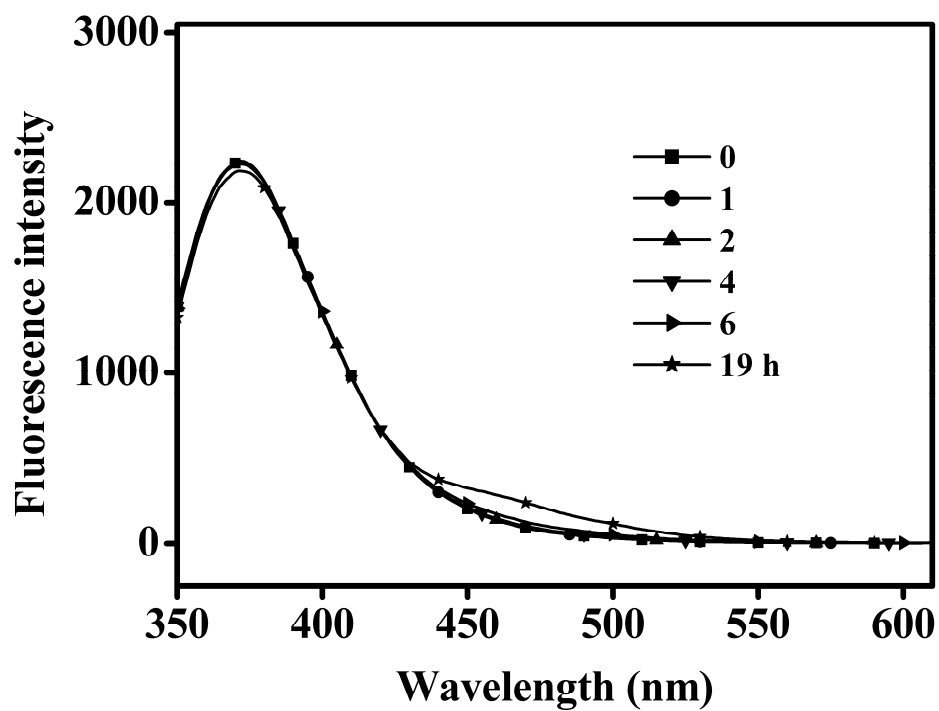
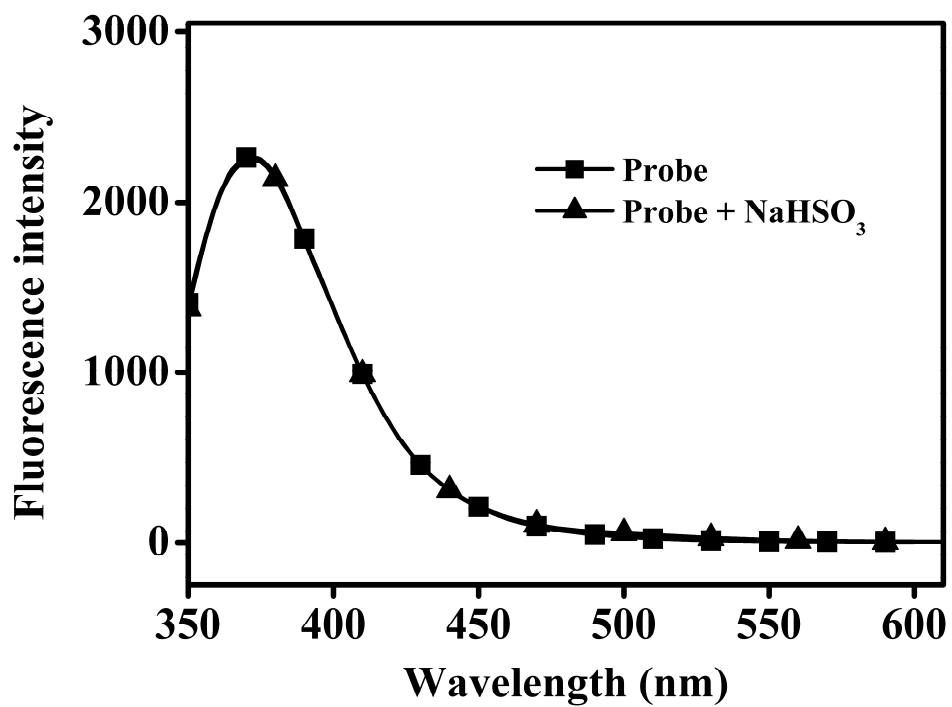


Fig. S2 The time-dependent fluorescence of probe 1 in  
HEPES buffered (pH 7.4, 10 mM) H<sub>2</sub>O-CH<sub>3</sub>CN (50%, V/V).



**Fig. S3** Fluorescence spectra of probe 1 (10  $\mu$ M) in response to bisulfate ion in PBS buffered (pH 4.8, 50 mM) H<sub>2</sub>O-CH<sub>3</sub>CN (50%, V/V).

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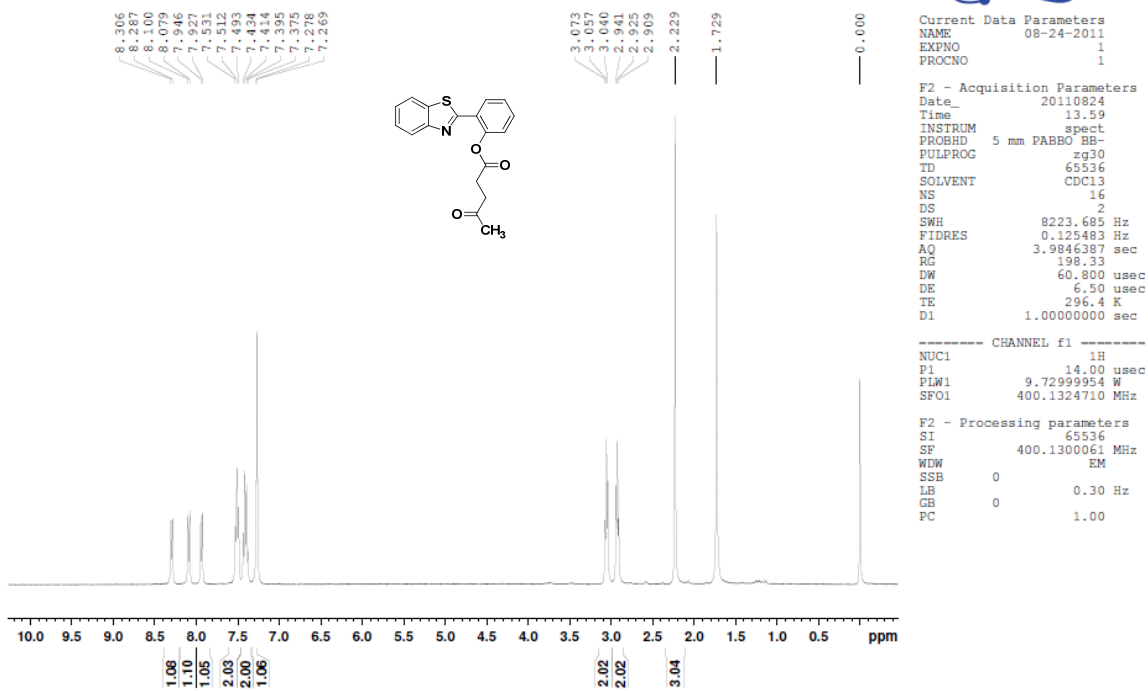


Fig. S4.  $^1\text{H}$  NMR spectrum of 1 in  $\text{CDCl}_3$

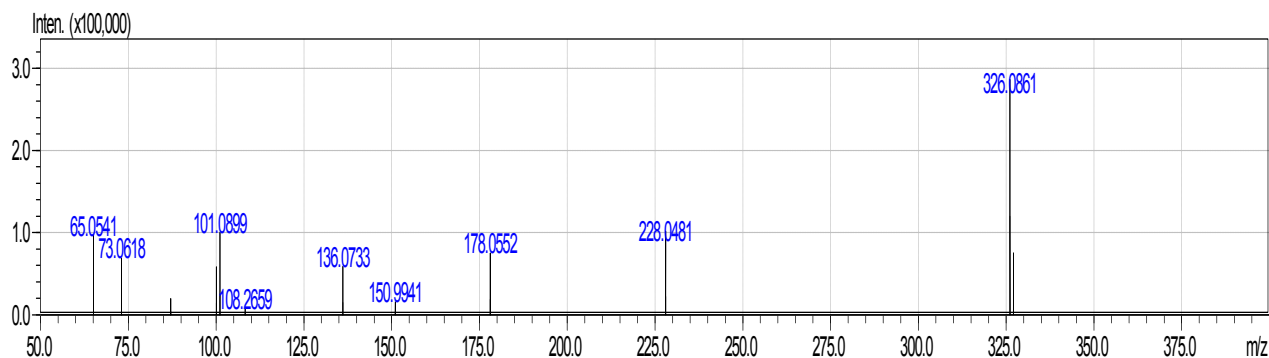


Fig. S5. LC-MS spectrum of 1 in positive ion mode