

Supporting information for

**Construction of a novel ratiometric near infrared
fluorescent probe for SO₂ derivatives and its application for
biological imaging**

Huiming Shang, Keyin Liu, Weiying Lin

Institute of Fluorescent Probes for Biological Imaging, School of Chemistry and Chemical
Engineering, School of Materials Science and Engineering, University of Jinan, Jinan, Shandong
250022, PR China.

E-mail: weiyinglin2013@163.com

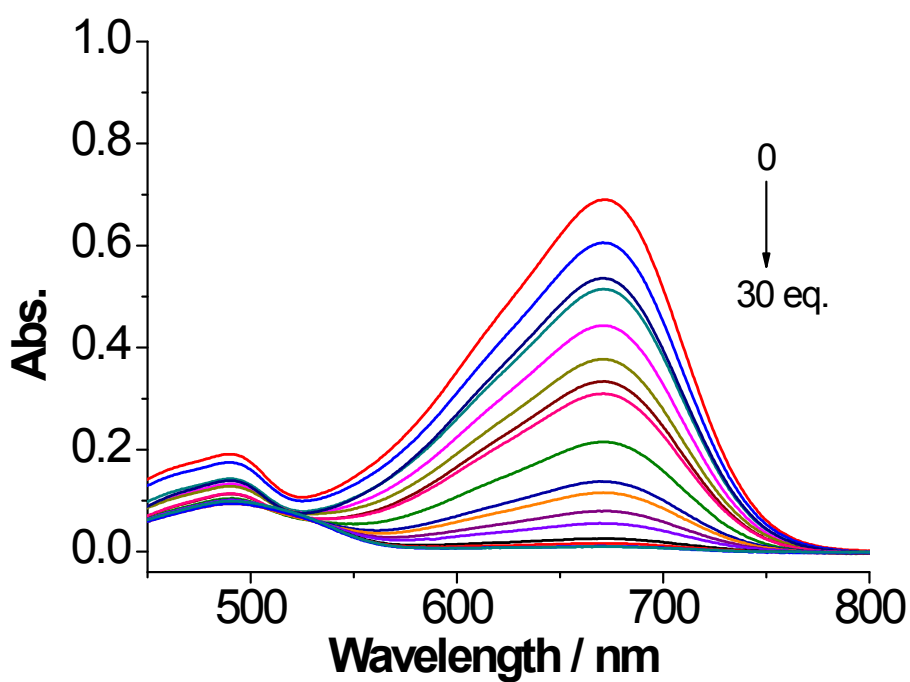


Fig. S1. The absorption spectra change of **1-SO₂** titrated with SO₃²⁻. 10 μM of **1-SO₂** interacted with 0 to 30 eq. of SO₃²⁻ in (PBS : DMSO = 8 : 2) buffer in 1 cm cell.

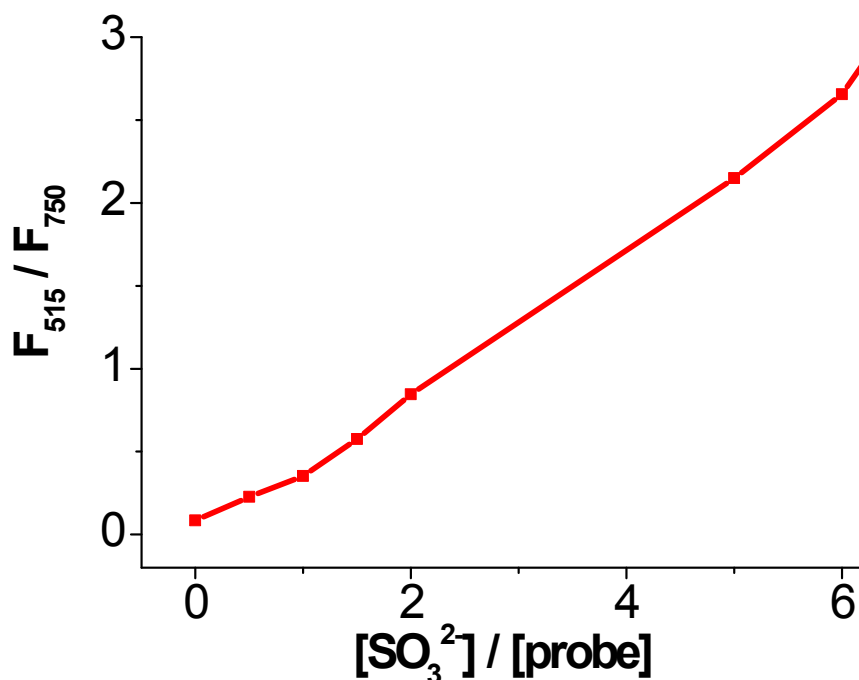


Fig. S2. The ratiometric fluorescence change when the SO₃²⁻ to **1-SO₂** ratio is 0 to 6, 10 μM of **1-SO₂** was used. Excitation by 430 nm and 680 nm; emission monitored at 515 nm and 750 nm respectively.

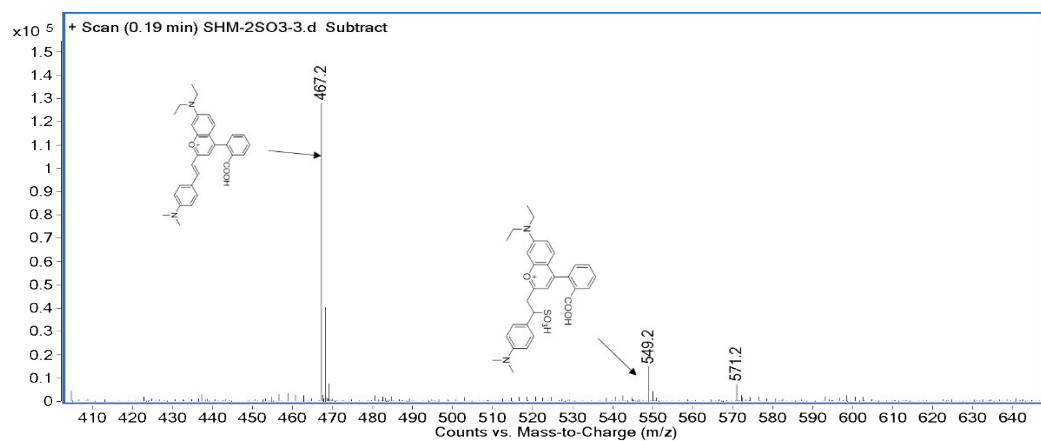


Fig. S3. High resolution mass spectrum (ESI) of the reaction mixture of the probe **1-SO₂** reacted with SO_3^{2-} .

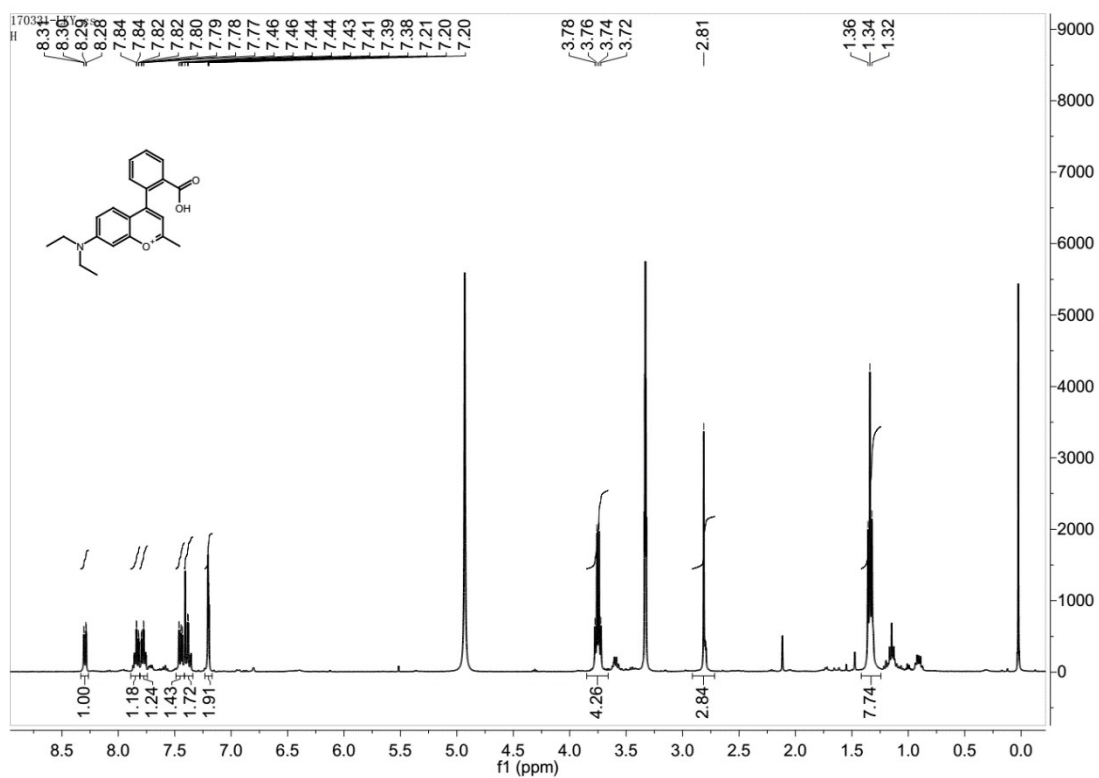


Fig. S4. ^1H NMR of compound **2** in MeOH-d_4 .

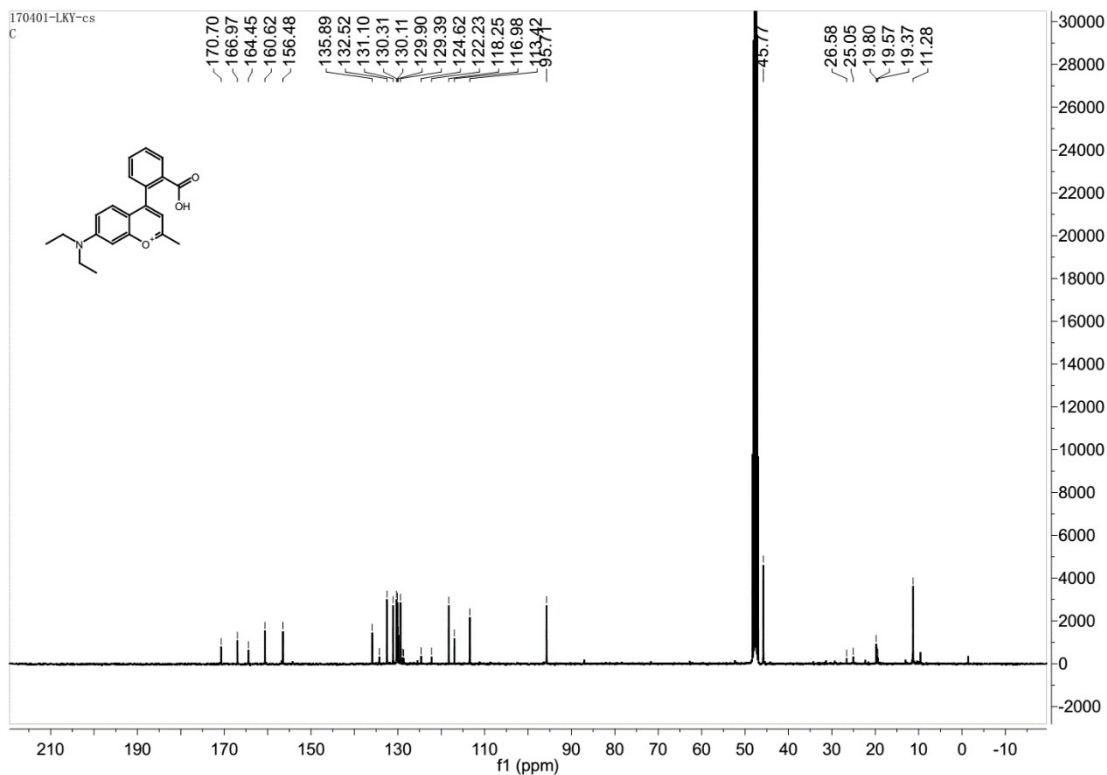


Fig. S5. ^{13}C NMR of compound **2** in MeOH-d_4 .

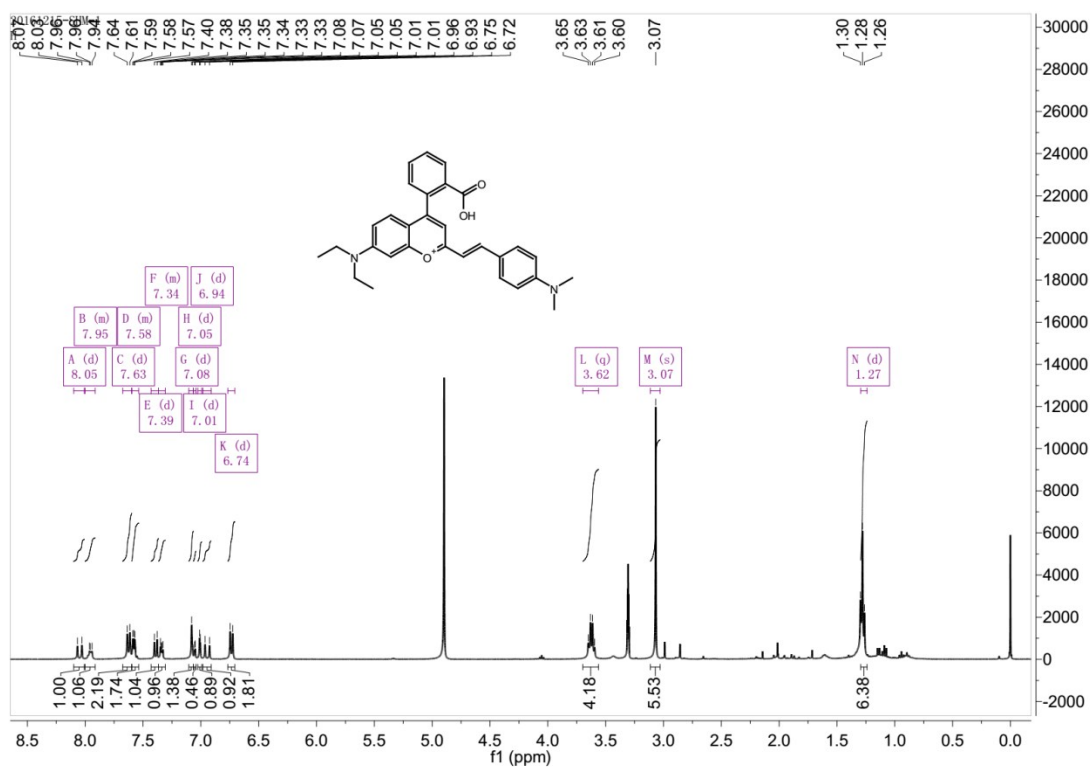


Fig. S6. ^1H NMR of **1-SO₂** in MeOH-d_4 .

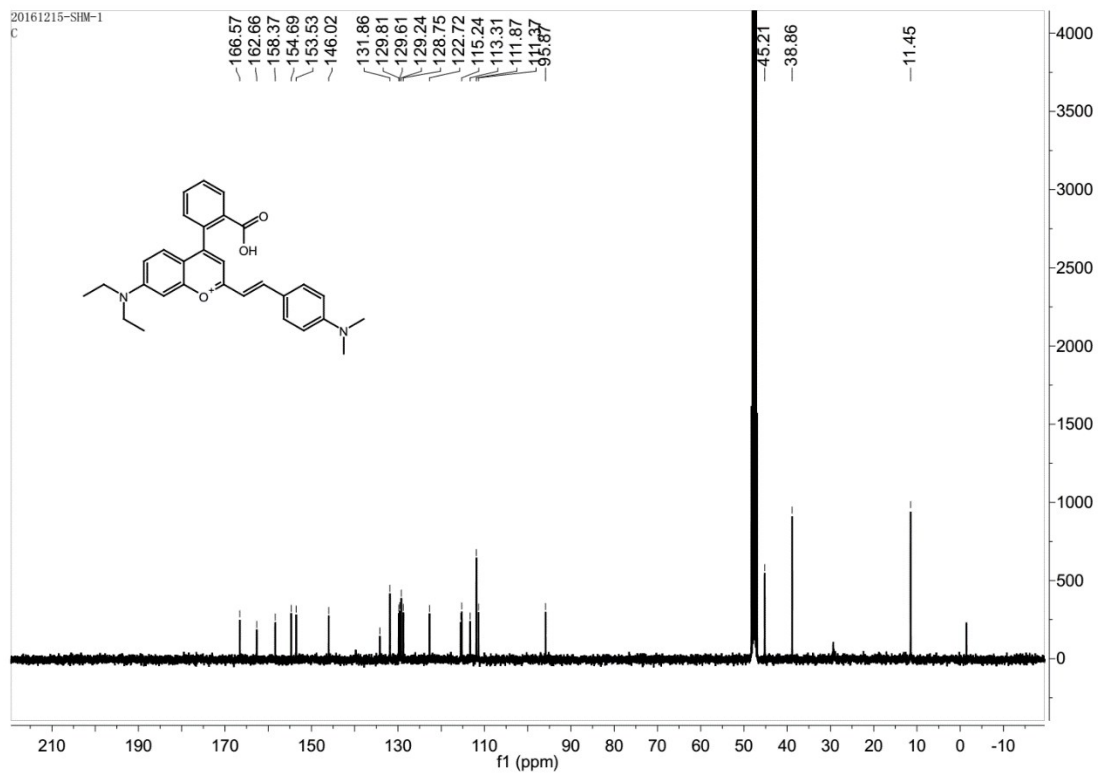


Fig. S7. ¹³C NMR of **1-SO₂** in MeOH-d₄.

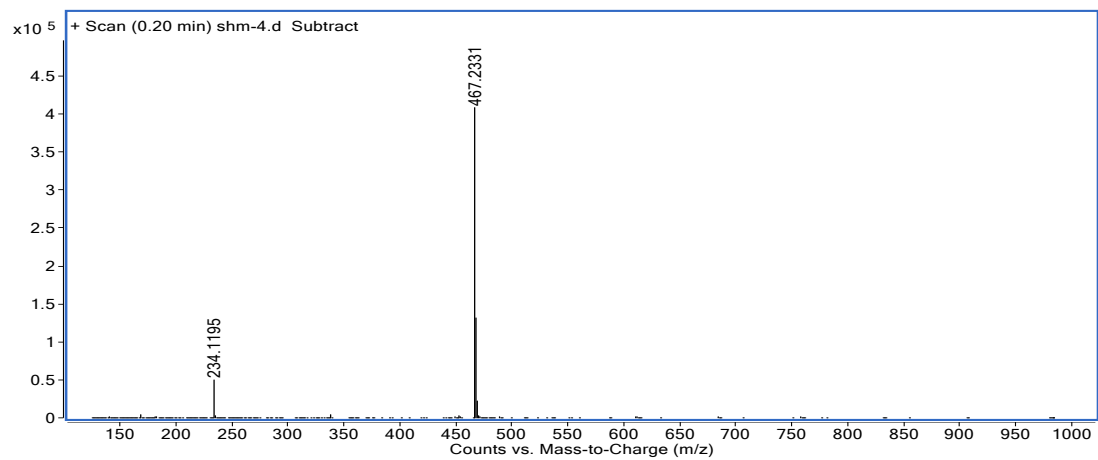


Fig. S8. HR-MS of **1-SO₂**.