Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Development of a highly selective H_2S fluorescent probe and its application to evaluate CSE inhibitors

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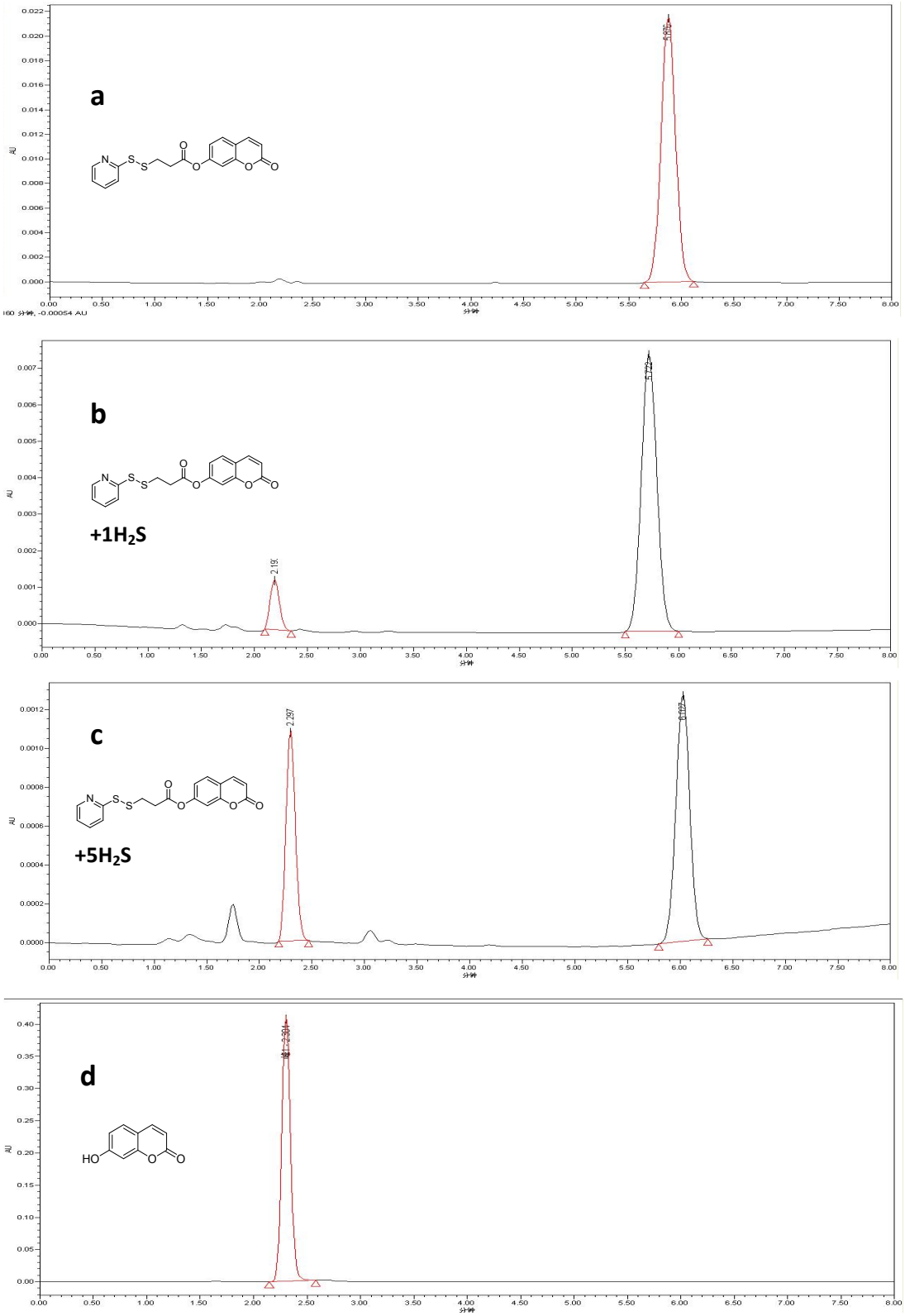

Fig. S1 The HPLC profile of a) **C359**; b) **C359**+1equiv H_2S; c) **C359**+5equiv H_2S; d) **C169**; Conditions: Column: Waters SunFire^{TM} C18 5μm, 4.6×150mm column; Solvents: CH_3OH/H_2O; Gradient: 35% to 45% of CH_3OH (0-8 min); Detection wavelength: 310 nm.

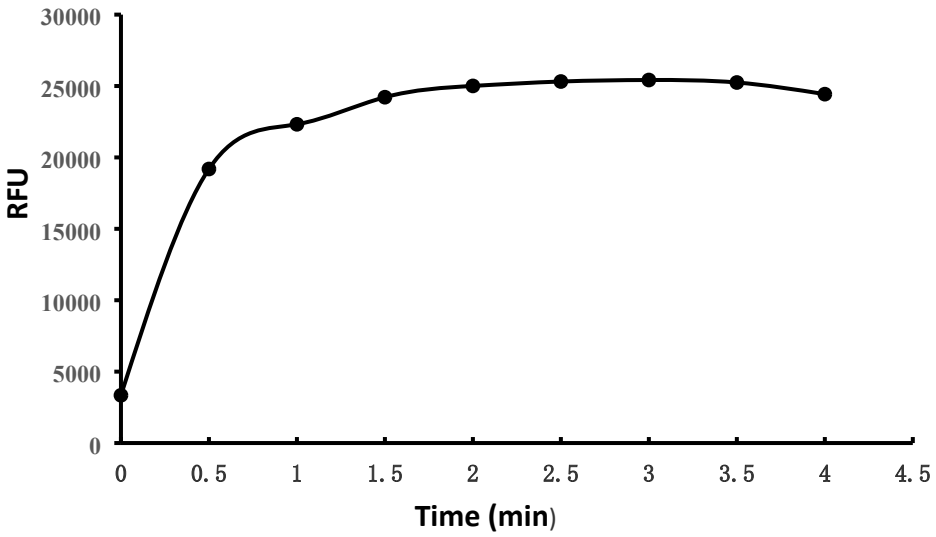

Fig. S2 Time-dependent fluorescent intensity (450 nm) in the presence of **C359** (5×10^{-6}M) and NaHS (1equiv) in Tris HCl buffer (200mM, pH 7.4).

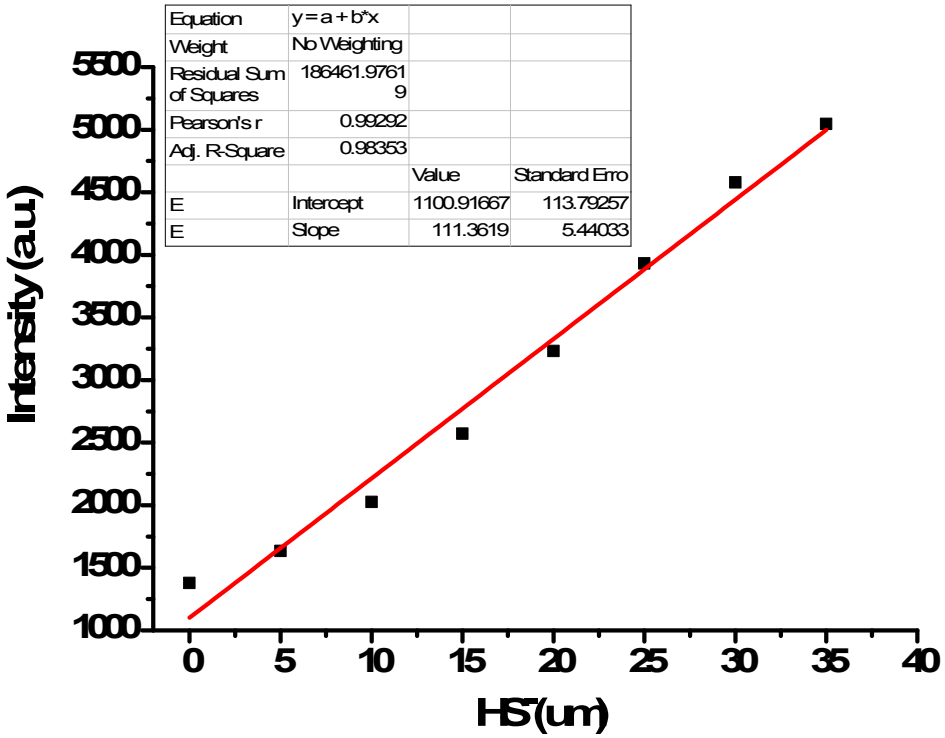

Fig. S3 The slope k of the linear regression curve was determined to be 111.3619×10^{6} M^{-1}. The Standard Deviation was obtained by the fluorescence responses to be $\sigma = 1.84477668$, therefore, the detection limit was calculated by the formula ($3\sigma/k$) and gave a result as 5.0×10^{-8} M.

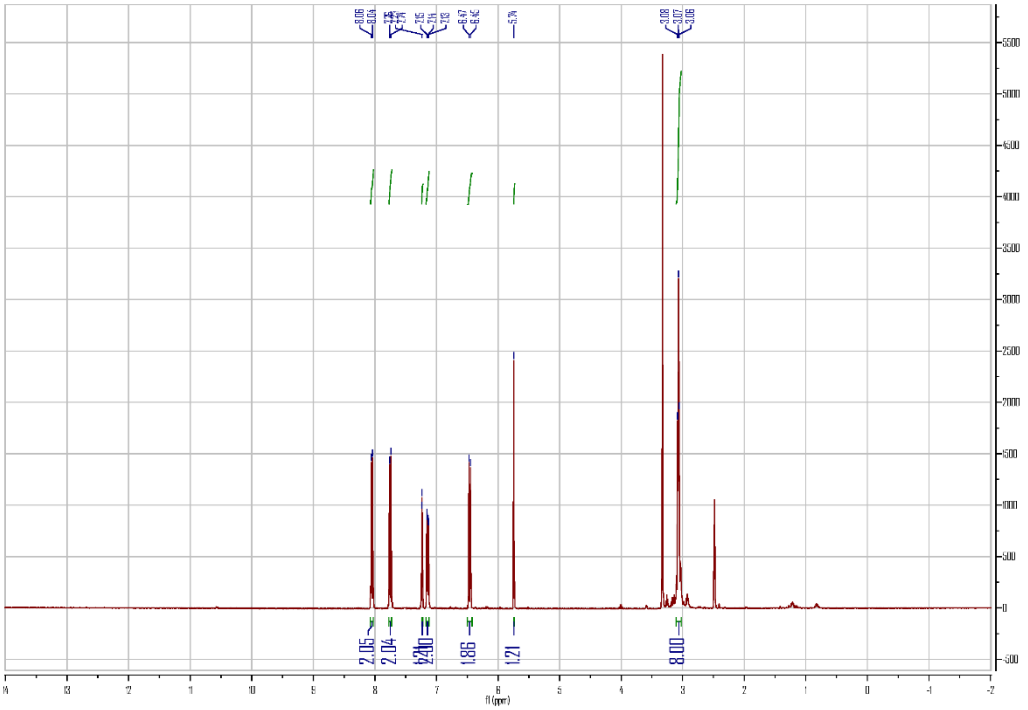

Fig. S4 ^{1}H NMR of **C498.**

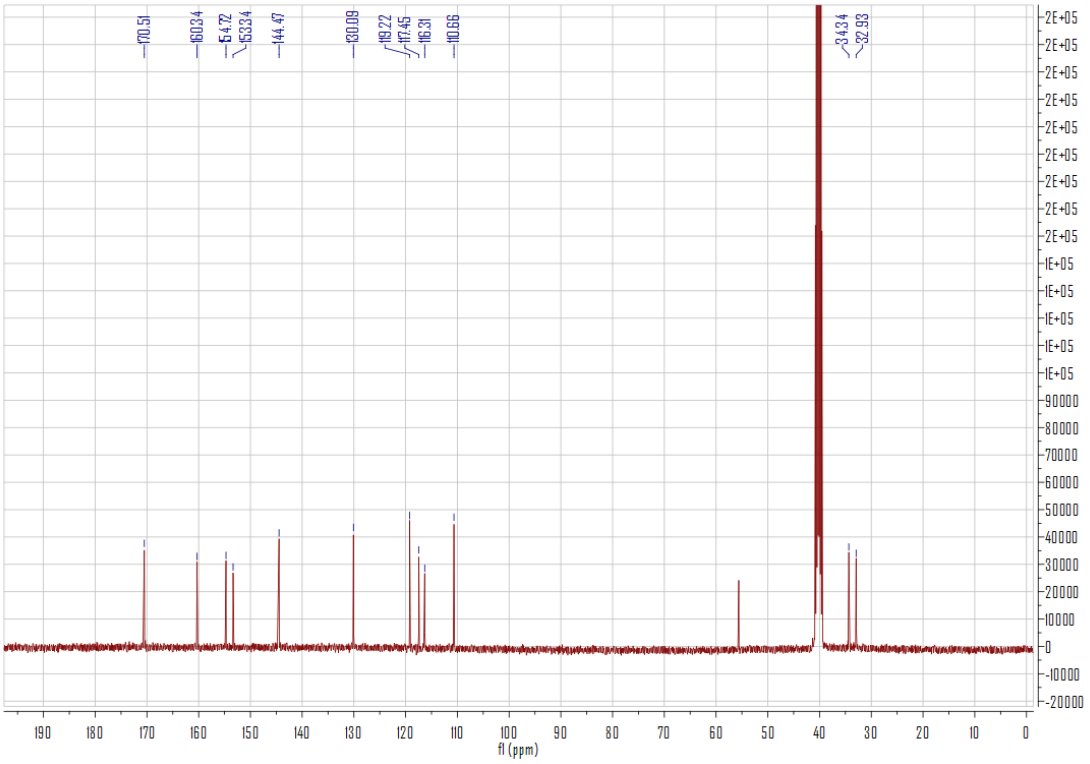

Fig. S5 ^{13}C NMR of **C498.**

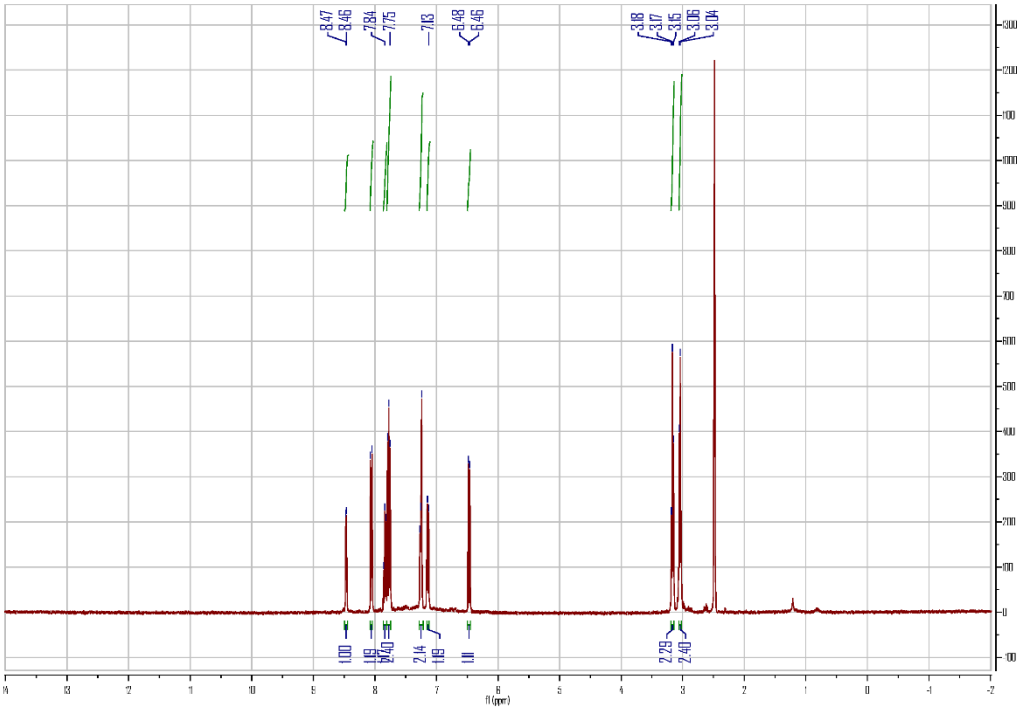

Fig. S6 ^{1}H NMR of **C359.**

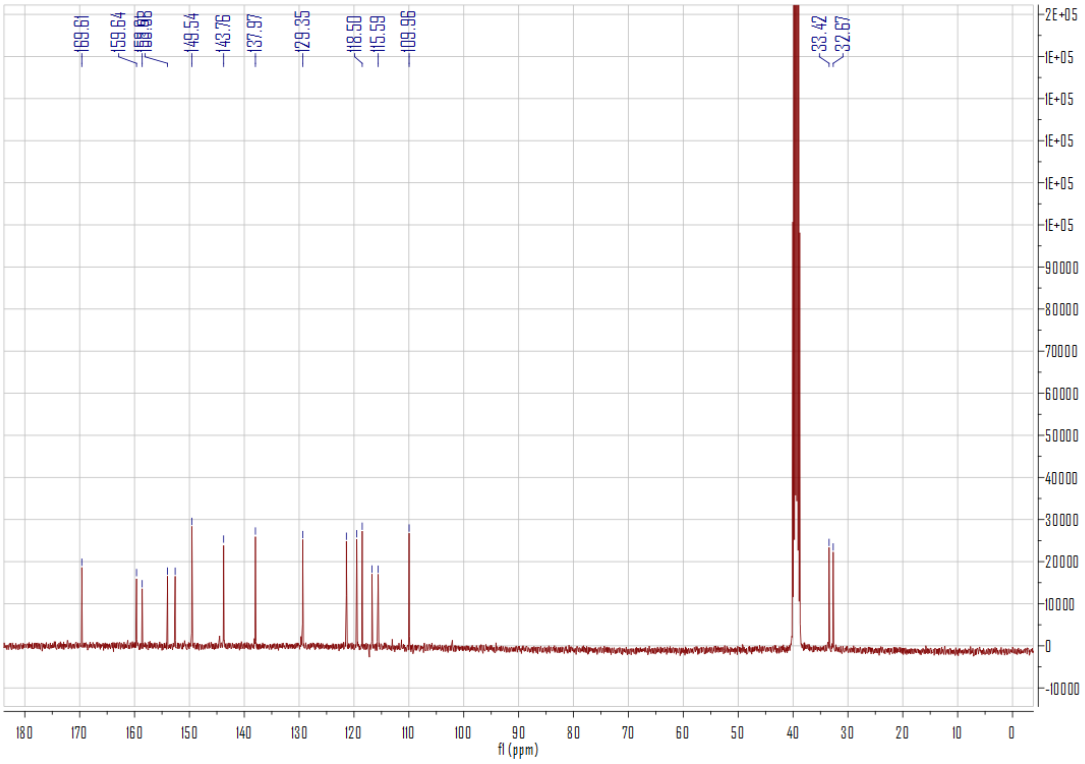

Fig. S7 ^{13}C NMR of **C359.**