

## Supporting Information for

### **Novel fluorescent probe with dual-site for monitoring Cys and sulfite in living cells**

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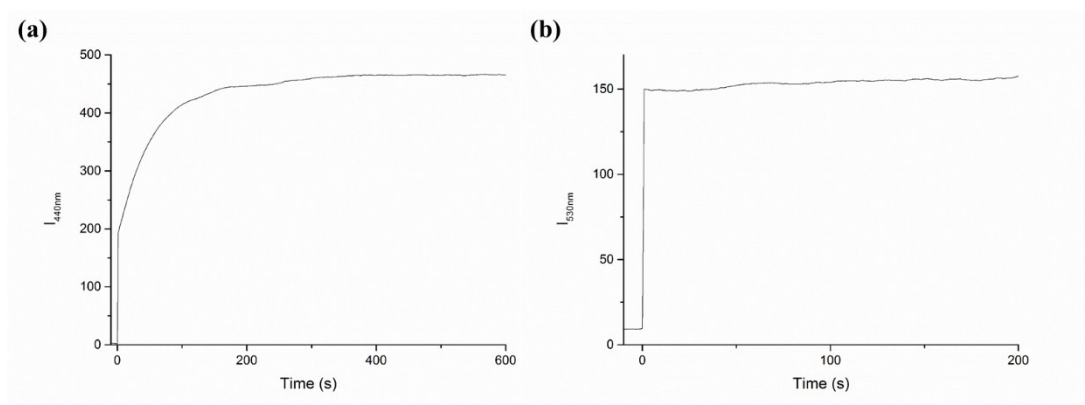
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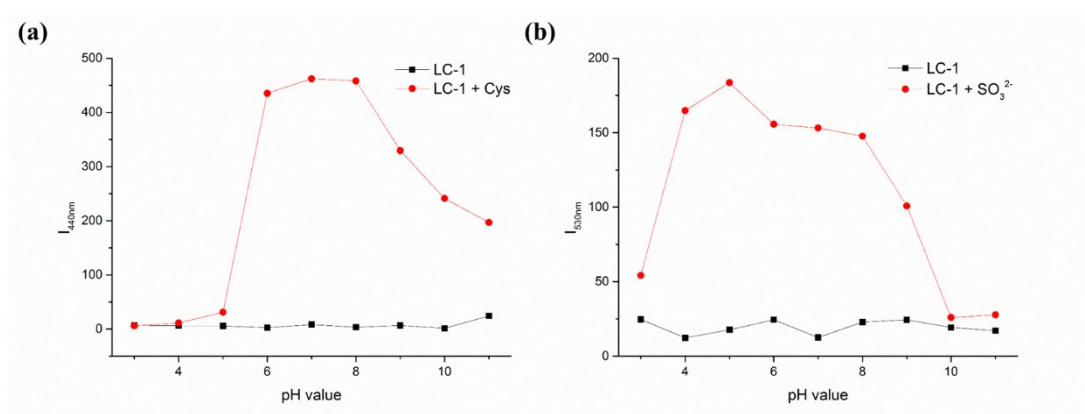
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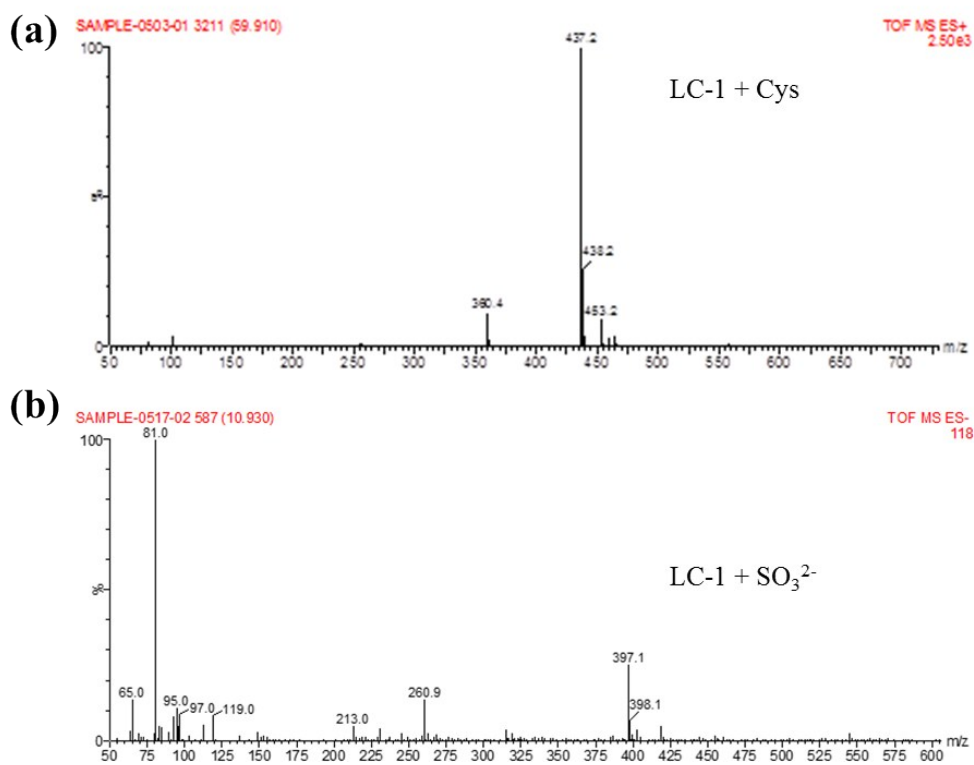
Corresponding email: [wangpeng159seu@hotmail.com](mailto:wangpeng159seu@hotmail.com)



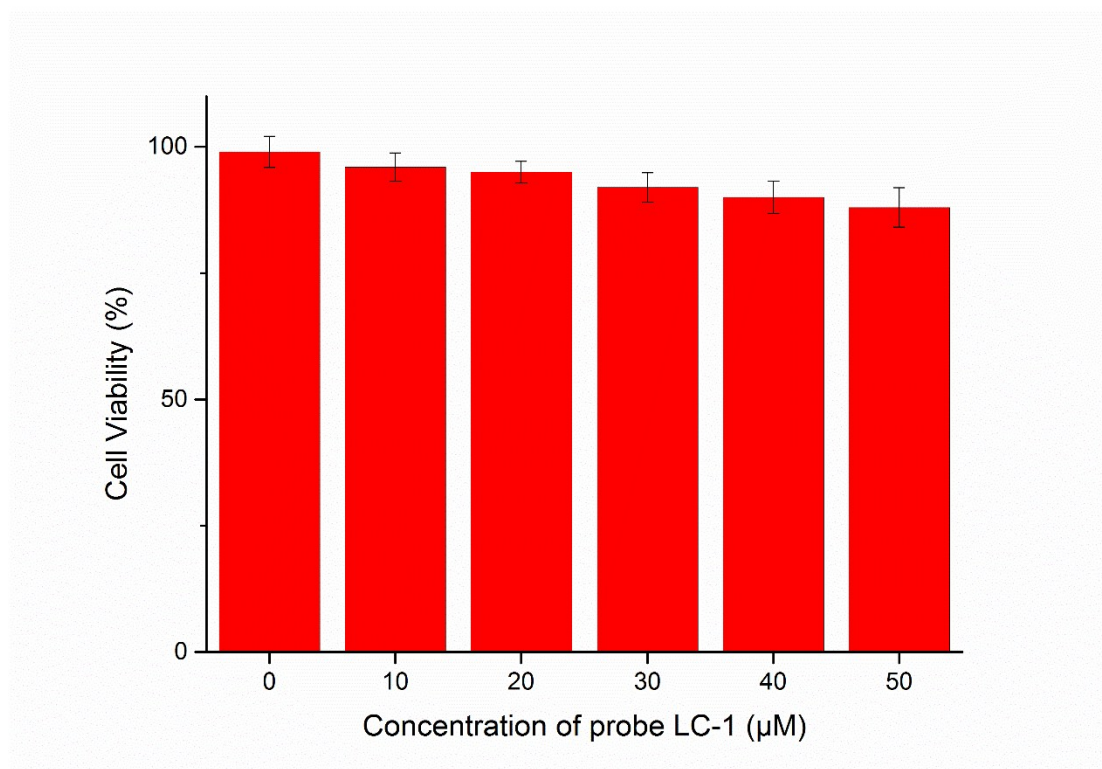
**Figure S1.** Reaction time profile of probe LC-1 (20  $\mu$ M) in the presence of (a) Cys (400  $\mu$ M) or (b)  $\text{SO}_3^{2-}$  (400  $\mu$ M) in aqueous solution (pH 7.4, 20 mM PBS buffer solution containing 50% DMSO).



**Figure S2.** pH effect in fluorescence response of LC-1 to Cys and  $\text{SO}_3^{2-}$ .



**Figure S3.** MS spectra of Cys-LC-1 system (a) and SO<sub>3</sub><sup>2-</sup>-LC-1 system (b)



**Figure S4.** Cell viability of MCF-7 treated with probe LC-1.

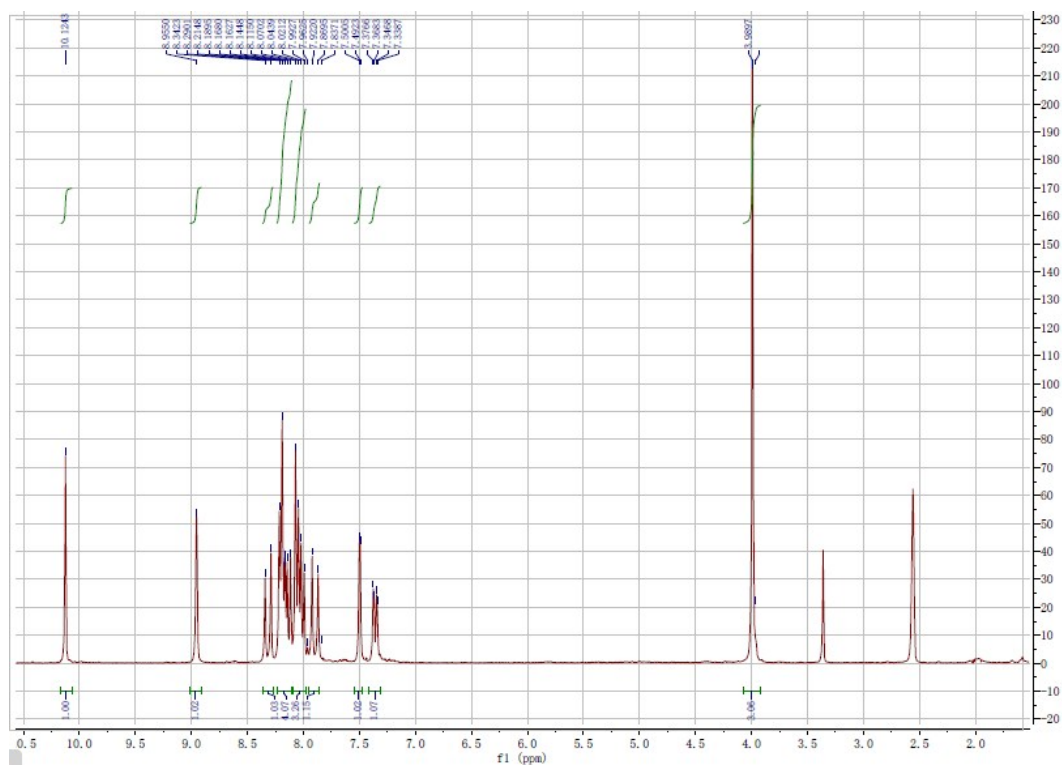


Figure S5.  $^1\text{H}$  NMR spectrum of probe LC-1.

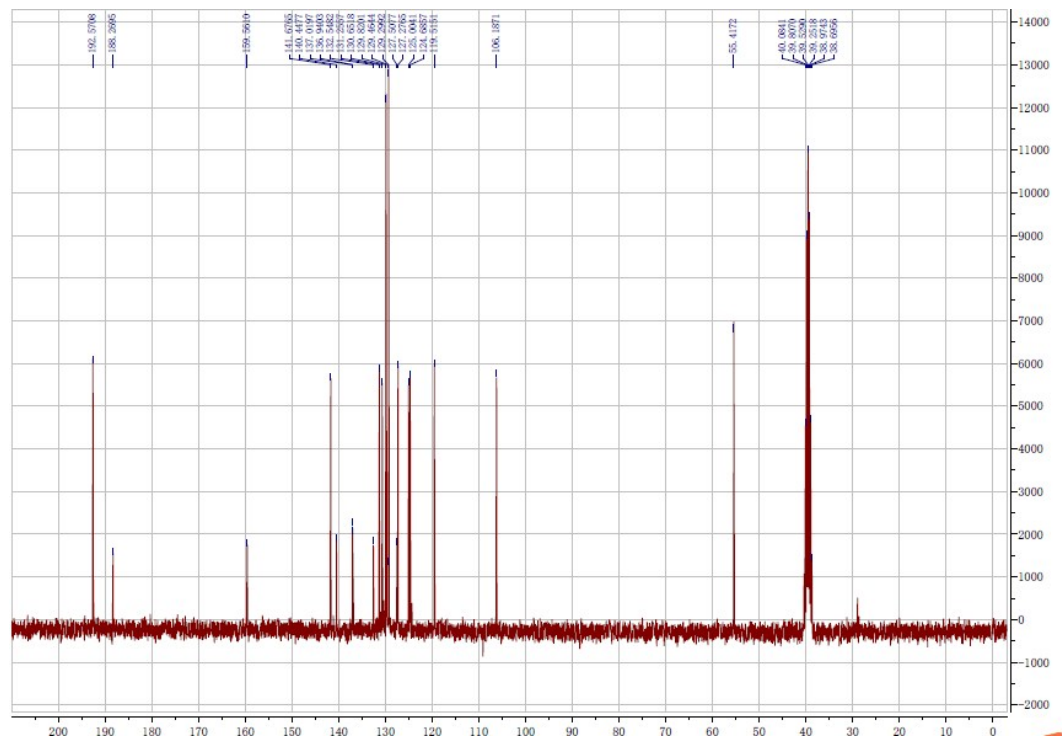
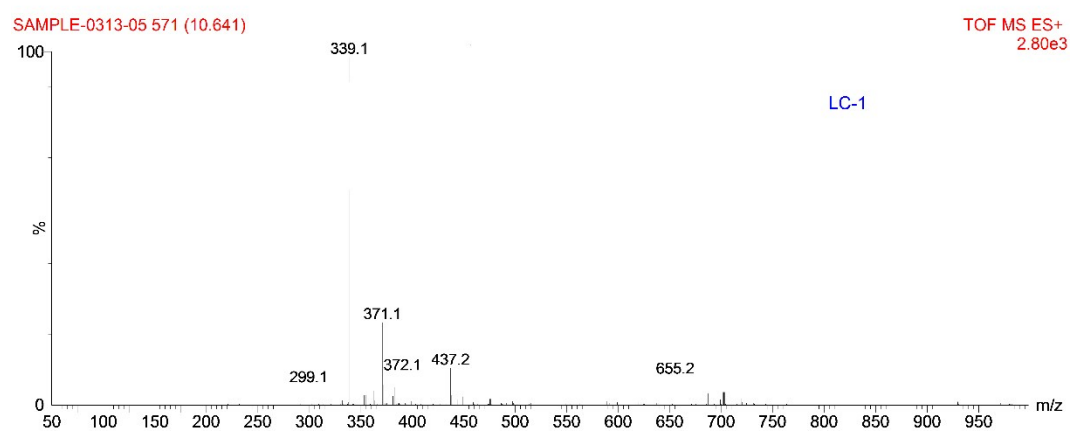


Figure S6.  $^{13}\text{C}$  NMR spectrum of probe LC-1.



**Figure S7.** MS spectrum of probe LC-1