

Supplementary Materials

A redox-switchable colorimetric probe for “naked-eye” detection of hypochlorous acid and glutathione

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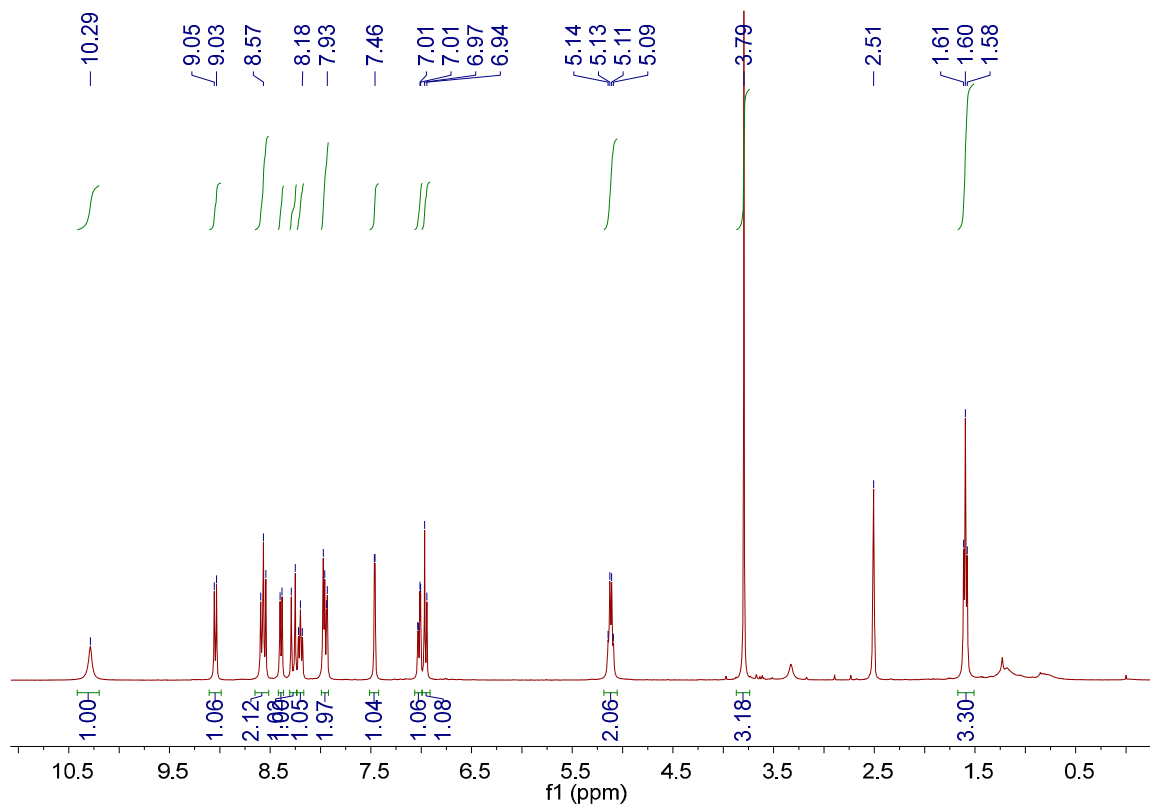


Figure S1. ^1H NMR of L-ol (DMSO- d_6).

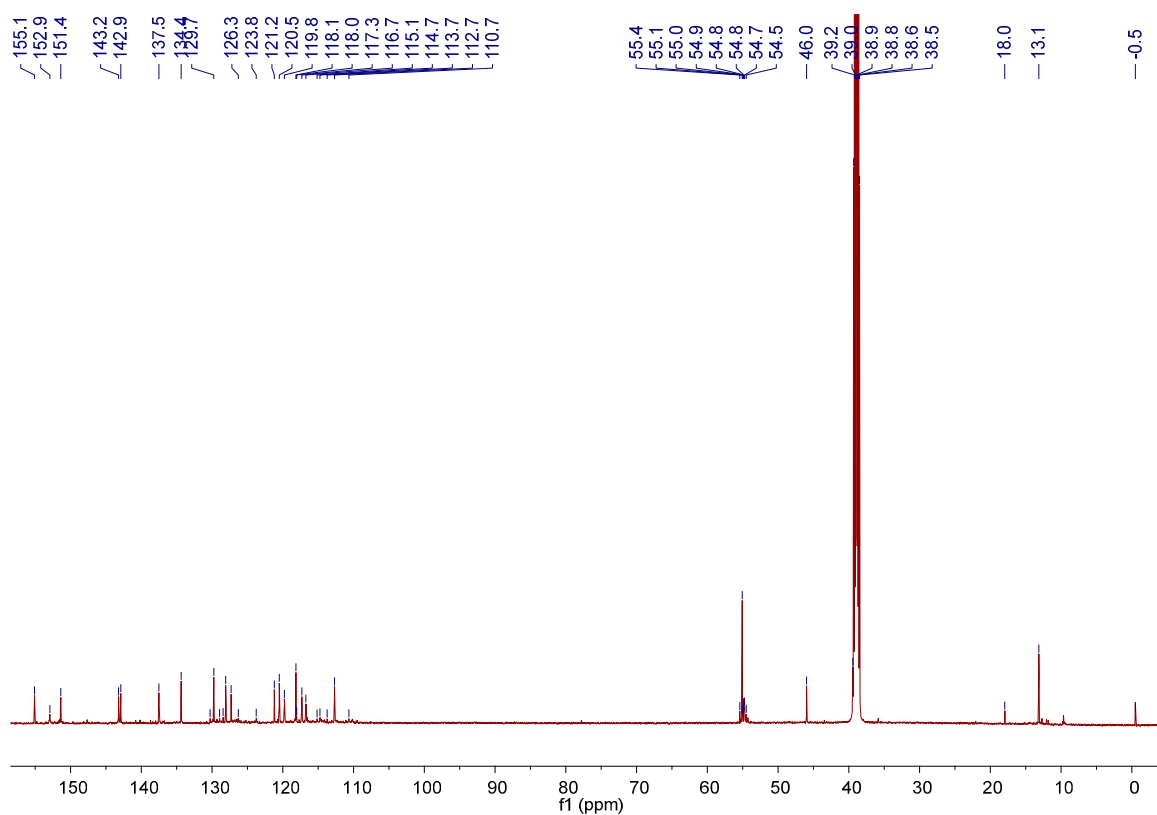


Figure S2. ^{13}C NMR of L-ol (DMSO- d_6).

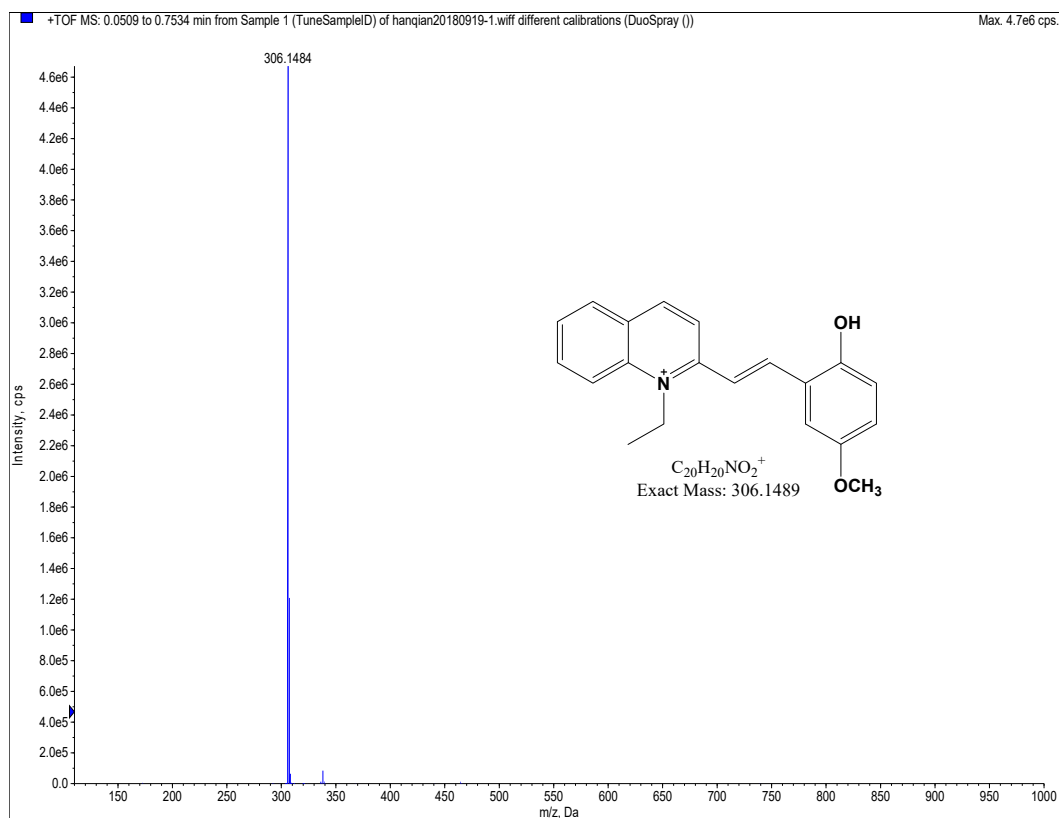


Figure S3. HRMS of L-ol.

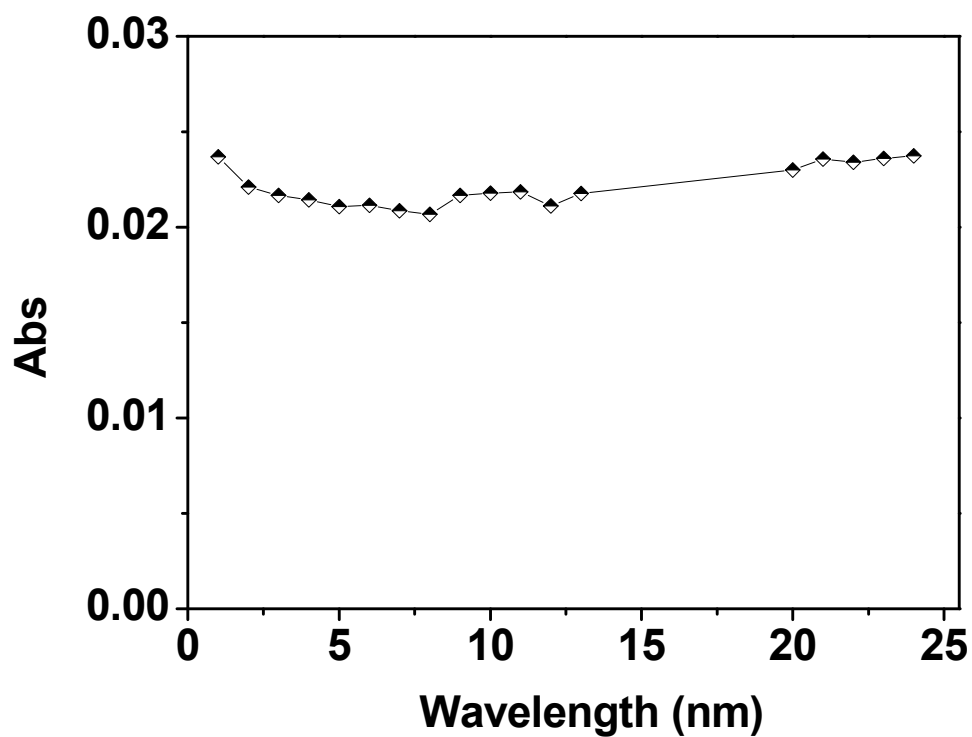


Figure S4. Absorbance at 619 nm of L-ol (10 μ M) at different time in PBS aqueous buffer (DMF: PBS=7:3, 20 mM, pH=7.4).

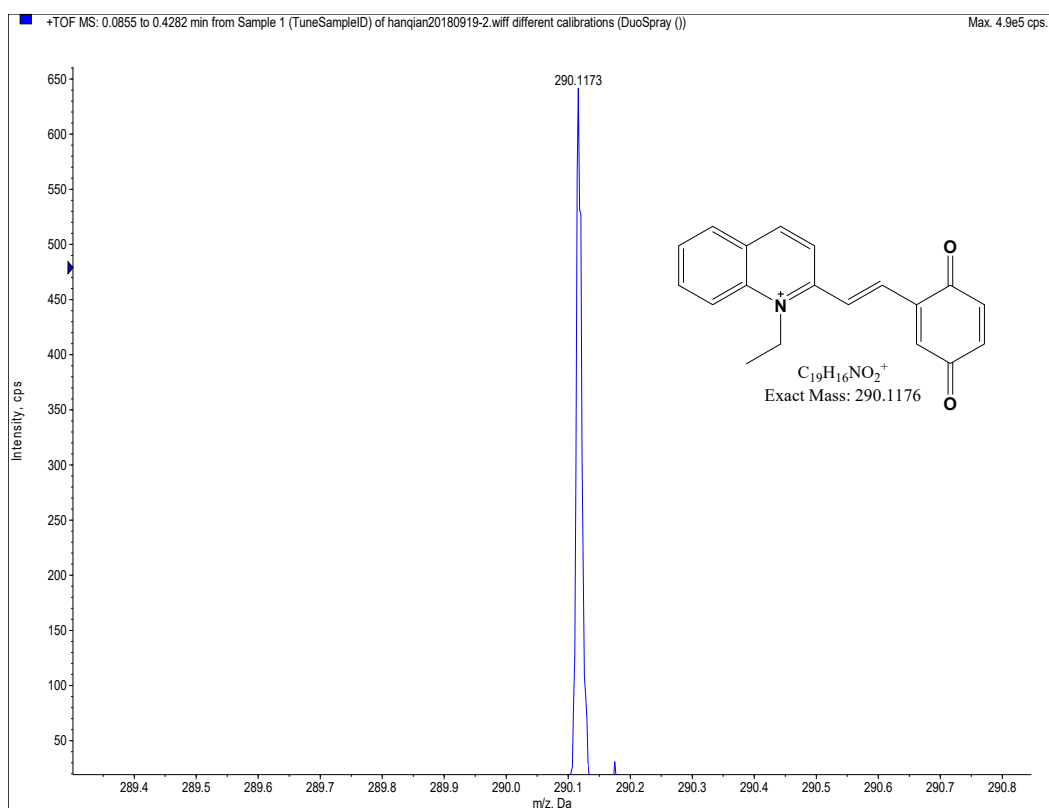


Figure S5. HRMS of **L-ol** in the presence of HOCl.

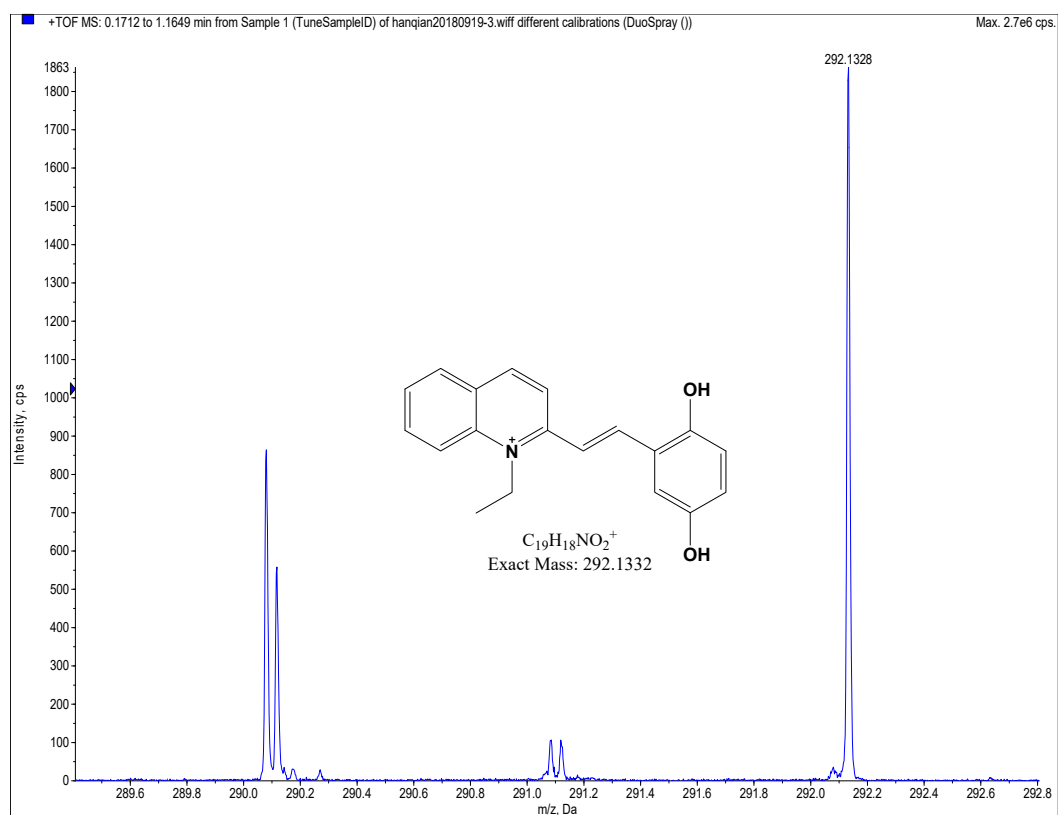


Figure S6. HRMS of HOCl pre-treated **L-ol** in the presence of GSH.

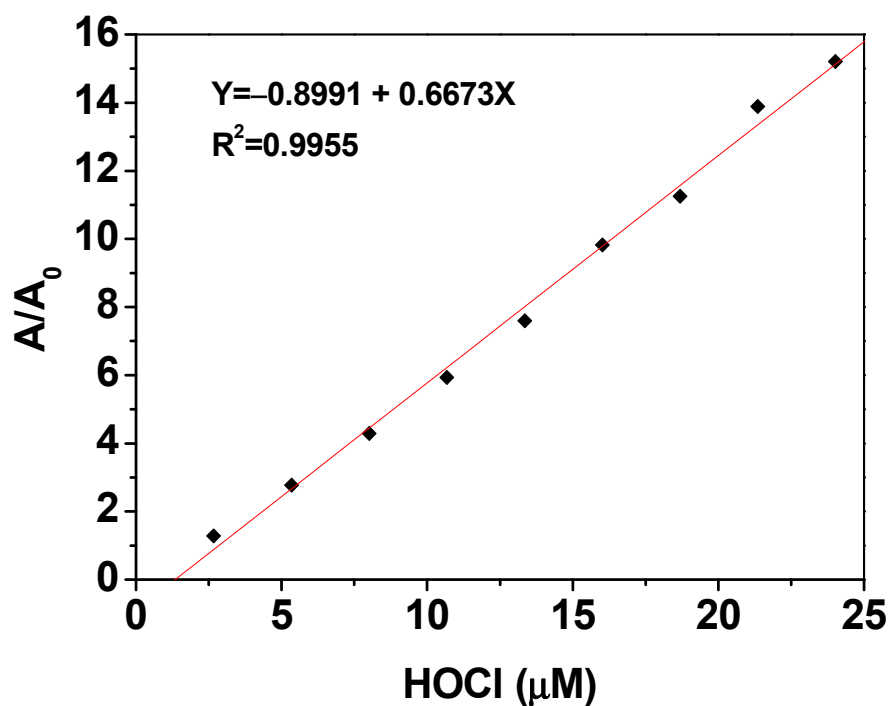


Figure S7. UV-vis absorption spectra changes at 619 nm of L-ol (2 μM) as a function of HOCl concentration (2.5–25.0 μM).

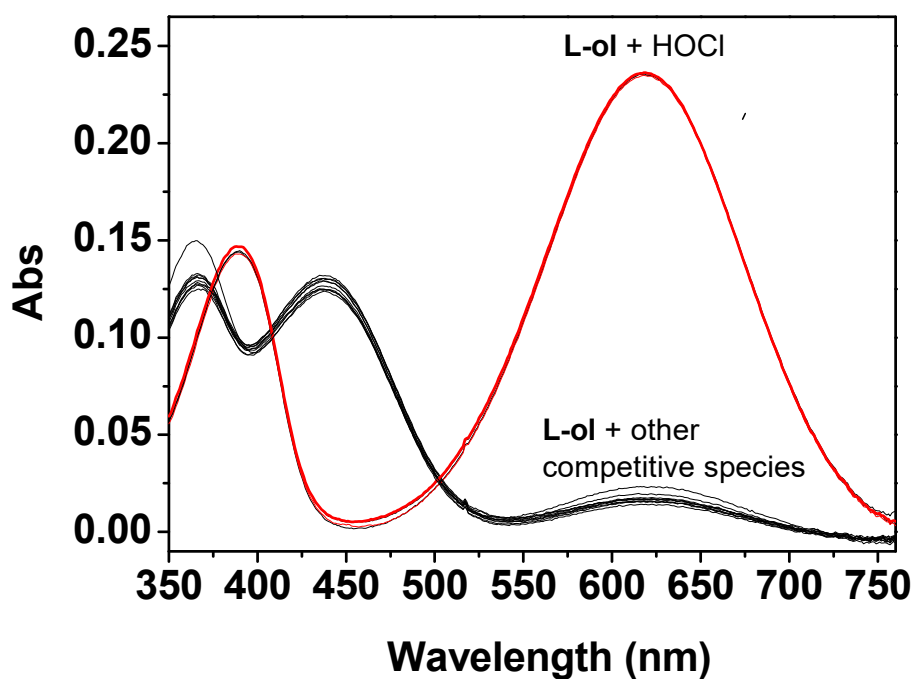


Figure S8. Absorption spectra of L-ol (10 μM) in PBS aqueous buffer (DMF: PBS=7:3, 20 mM, pH=7.4) upon addition of various anions (50 μM): Br⁻, AcO⁻, Cl⁻, F⁻, HSO₃⁻, HSO₄⁻, S²⁻, NO₂⁻, NO₃⁻, OH⁻, PO₄²⁻, SO₃²⁻, SO₄²⁻, HCO₃⁻, Pi, PPi, HOCl, ¹O₂, ONOO⁻, .OH, H₂O₂, Cys, Hcy and GSH.

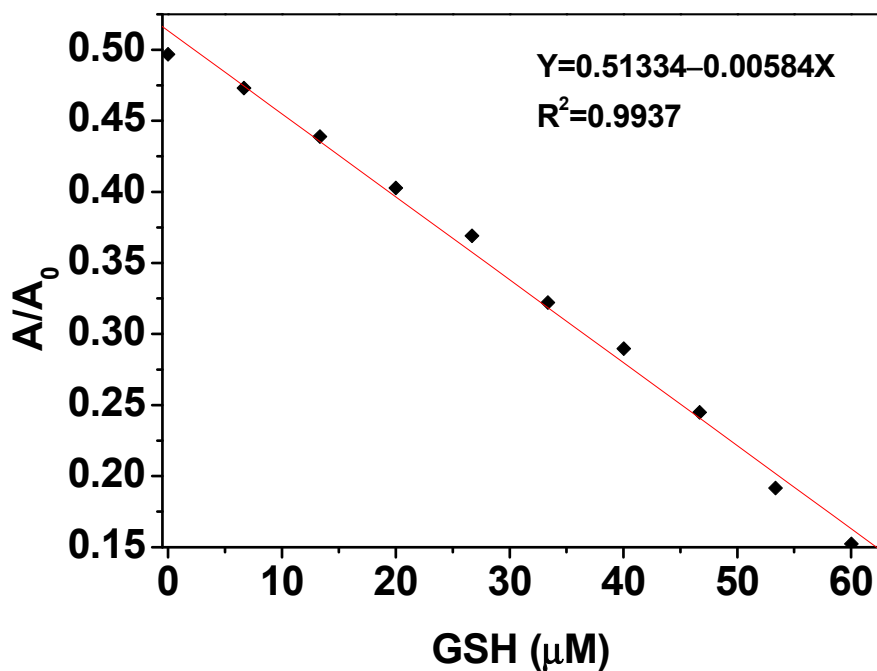


Figure S9. UV-vis absorption spectra changes at 617 nm of L-one (2 μM) as function of GSH concentrations (0–6.0 μM).

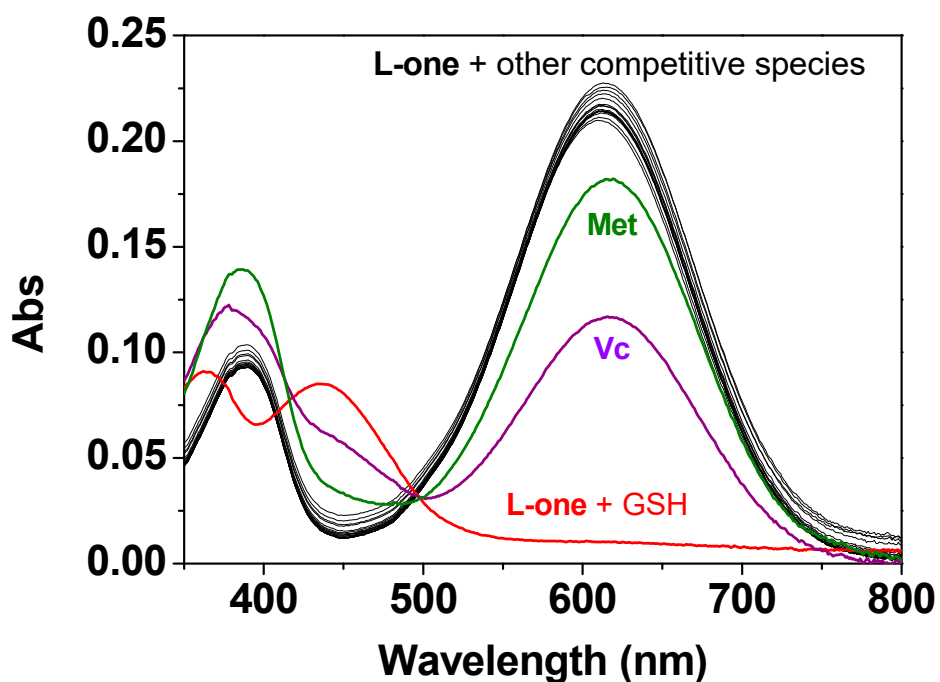


Figure S10. UV-vis absorption spectra of L-one (10 μM) in the presence of various analytes (500 μM) in PBS aqueous buffer (DMF:PBS=7:3, 20 mM, pH=7.4): Leu, His, Val, Tyr, Gerl, Try, Phe, Leu, Thr, Lys, Gly, Pro, Ary, Gln, Asn, Asp, Ala, Met, Hcy, Cys, S²⁻, HSO₄⁻, HSO₃⁻, SO₄²⁻, SO₃²⁻, Vc and GSH.

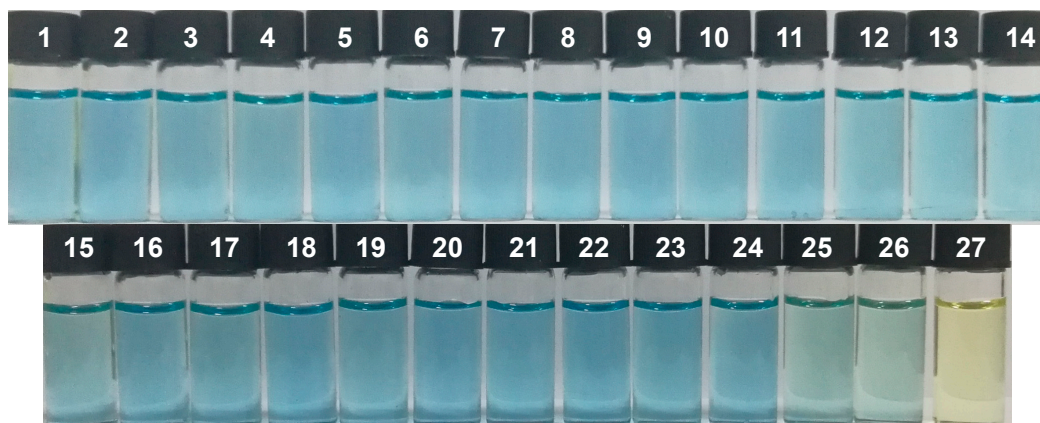


Figure S11. The color changes of **L-one** (10 μM) towards various competitive species (500 μM) in PBS aqueous buffer (DMF:PBS=7:3, 20 mM, pH=7.4). 1. Leu, 2. His, 3. Val, 4. Tyr, 5. Gerl, 6. Try, 7. Phe, 8. Leu, 9. Thr, 10. Lys, 11. Gly, 12. Pro, 13. Ary, 14. Gln, 15. Asn, 16. Asp, 17. Ala, 18. Hcy, 19. Cys, 20. S^{2-} , 21. HSO_4^- , 22. HSO_3^- , 23. SO_4^{2-} , 24. SO_3^{2-} , 25. Met, 26. Cv, 27. GSH.