

Supporting information for

A Dicyanisophorone-Based Fluorescent Probe for Hypochlorite with a Fast Response and Its Applications in Bioimaging

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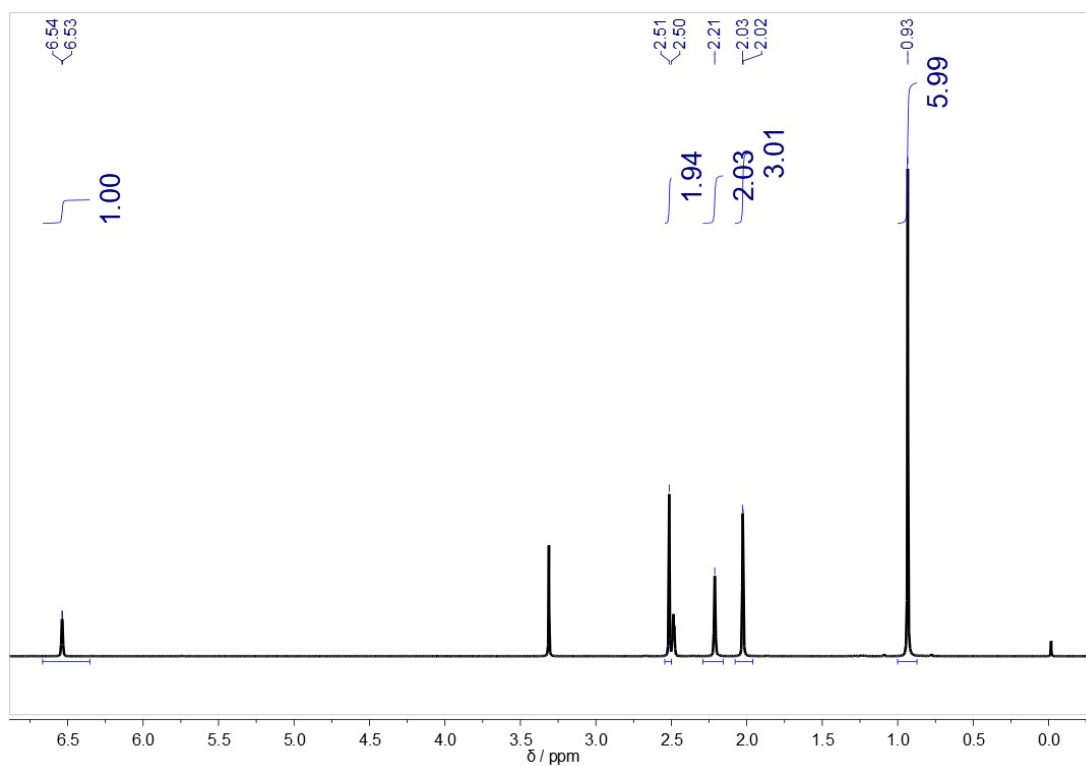


Figure S1. ^1H NMR (400 MHz, DMSO-d_6) spectrum of compound **1**

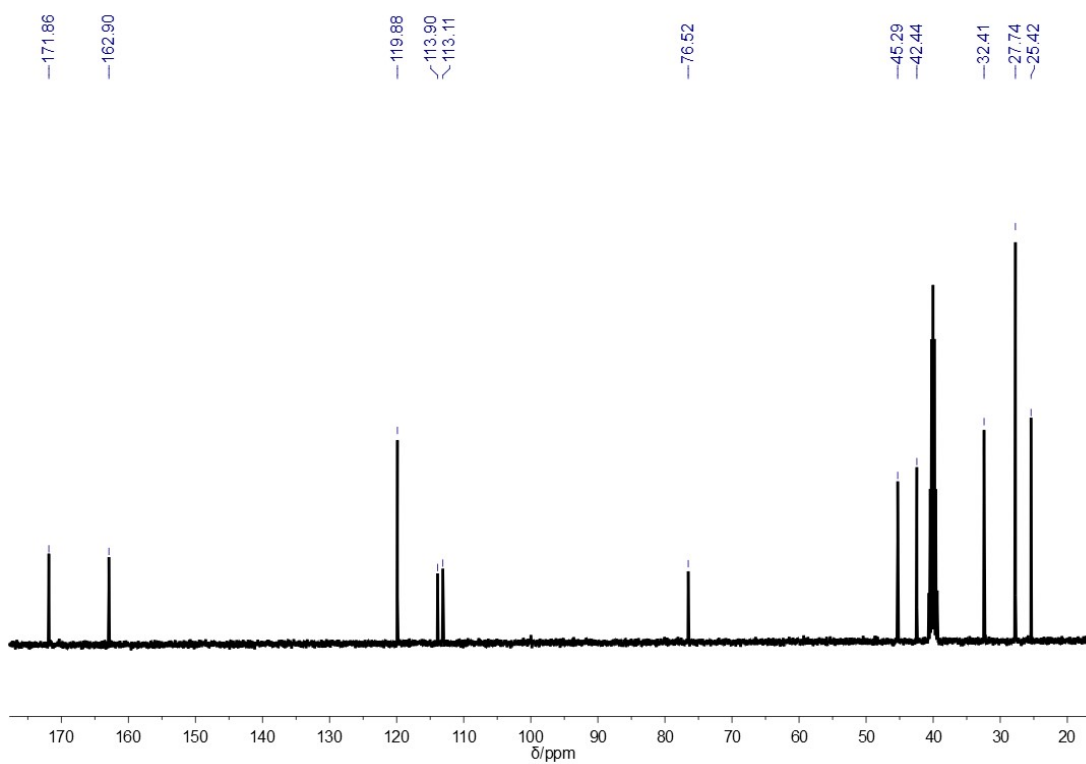


Figure S2. ^{13}C NMR (400 MHz, DMSO-d_6) spectrum of compound **1**

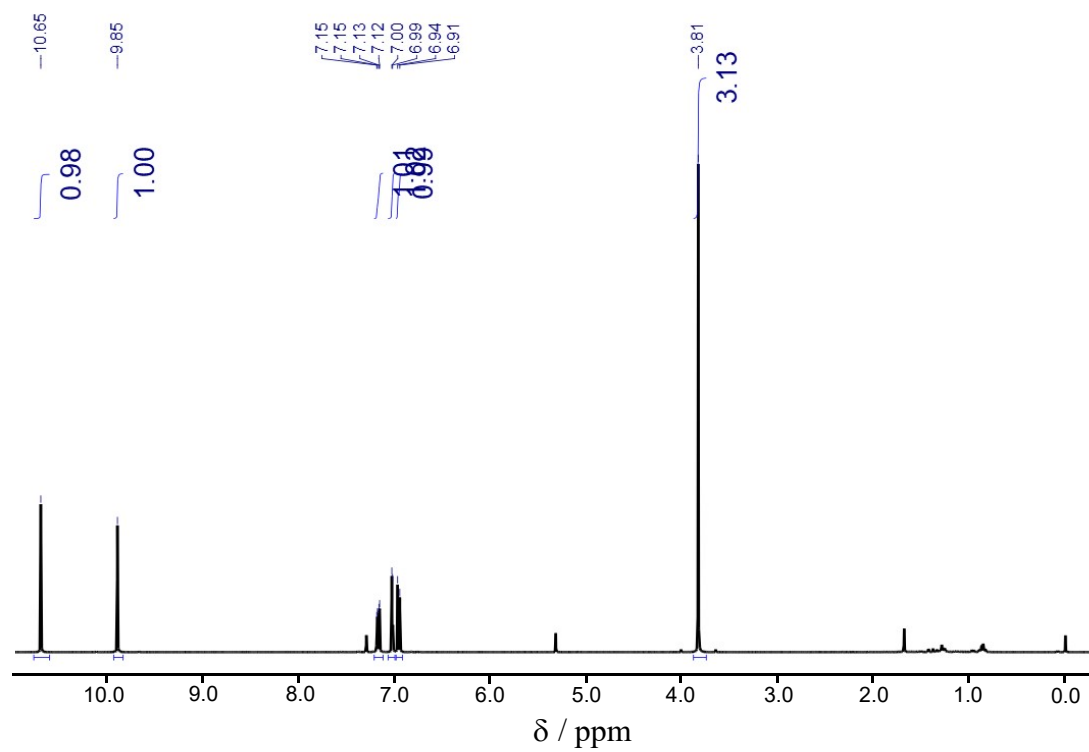


Figure S3. ¹H NMR (400 MHz, CDCl₃) spectrum of compound **2**.

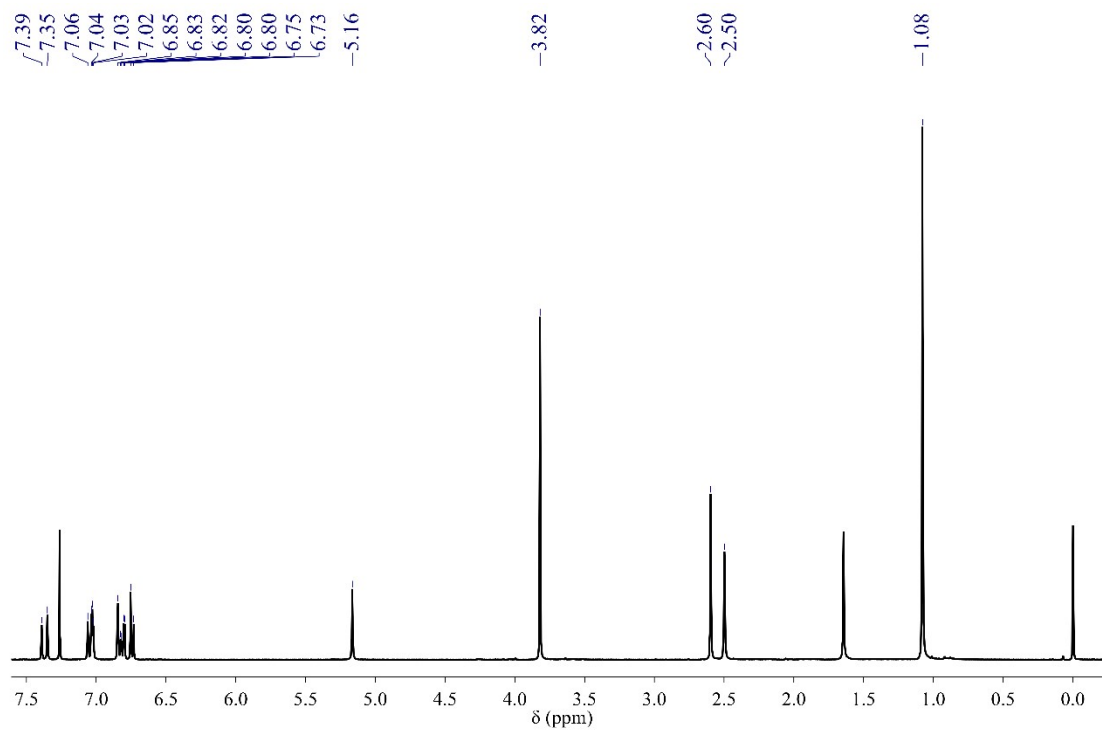


Figure S4. ^1H NMR (400 MHz, CDCl_3) spectrum of compound **Is-OL**.

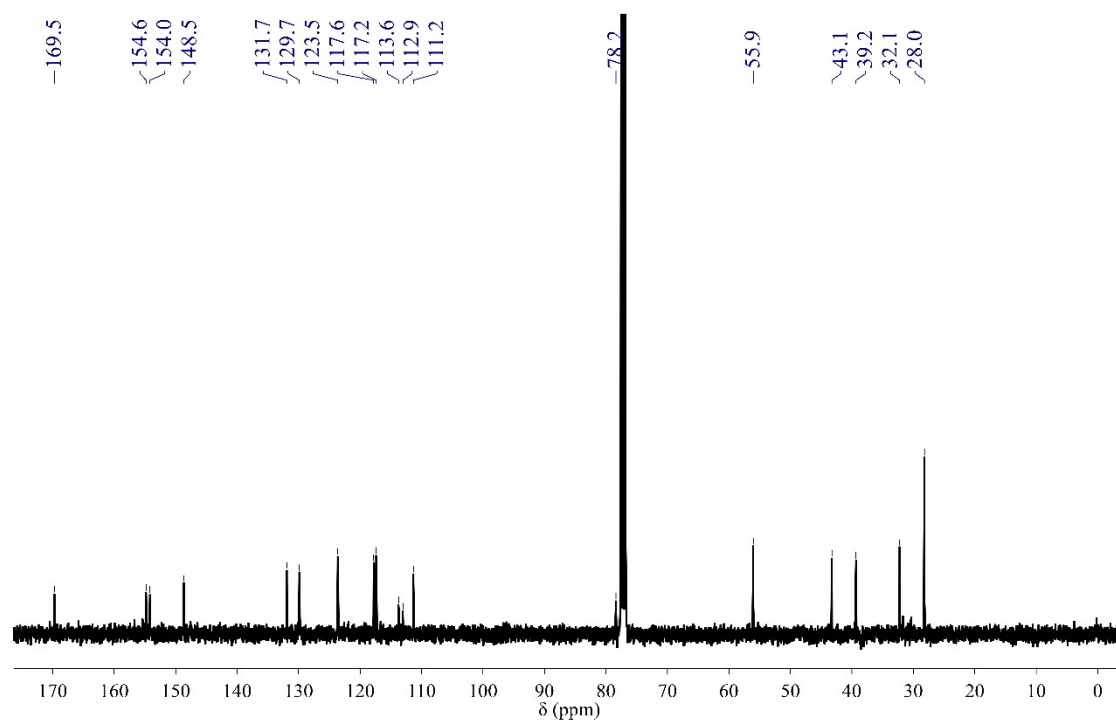


Figure S5. ^{13}C NMR (100 MHz, CDCl_3) spectrum of compound **Is-OL**

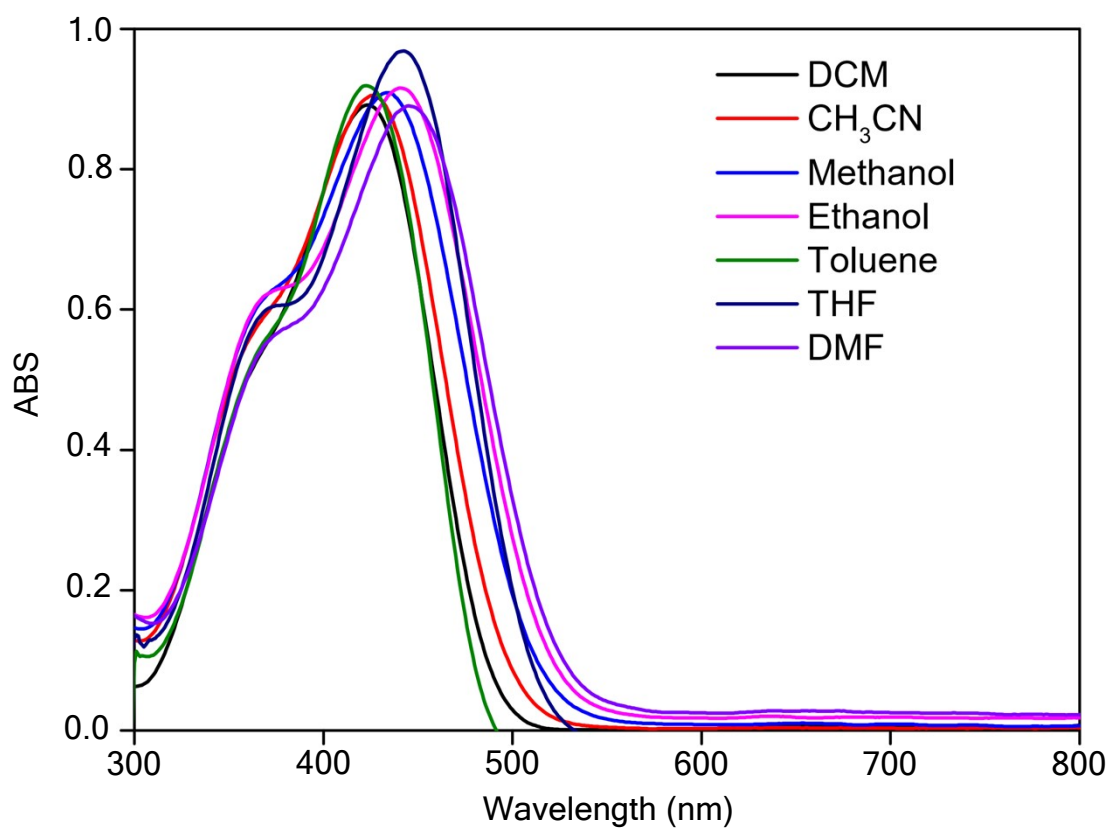


Figure S6. The absorption spectra of chemosensor **Is-OL** in different solvents.

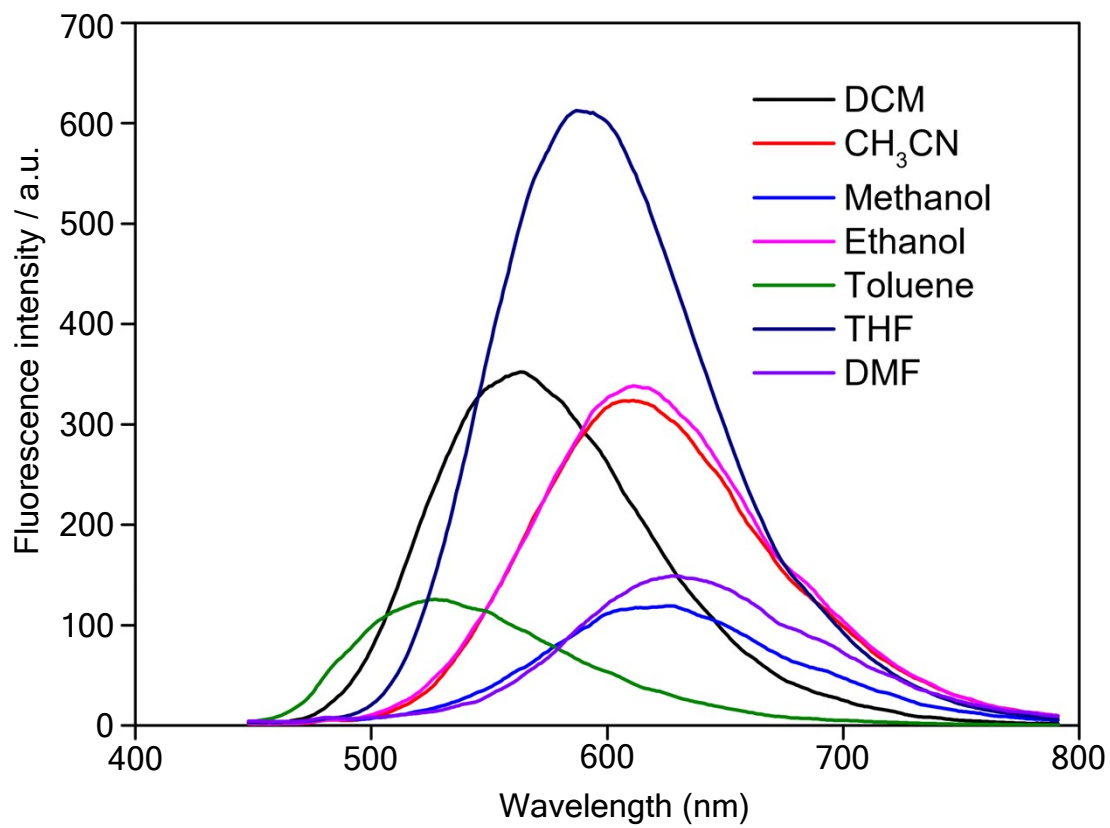


Figure S7. Fluorescence intensity spectra of chemosensor **Is-OL** in different solvents.

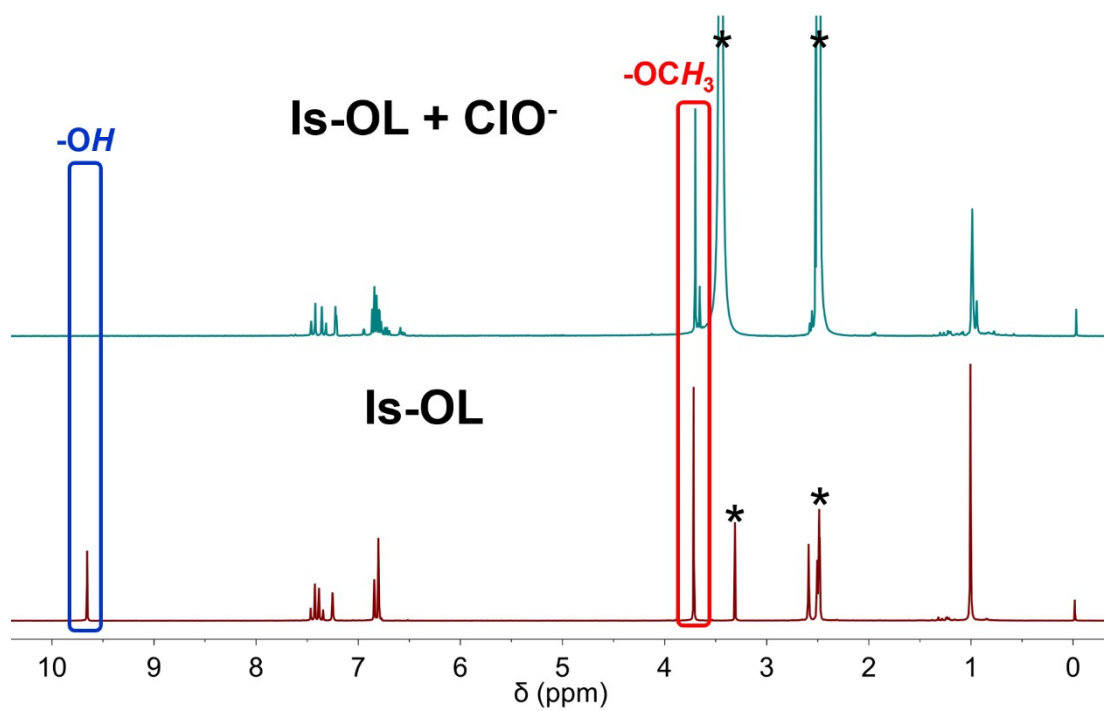


Figure S8. ¹H NMR titration spectra of chemosensor **Is-OL** in *d*₆-DMSO before (bottom) and after the addition 1.0 *equiv.* of ClO⁻ (top). * indicates the solvent peaks.

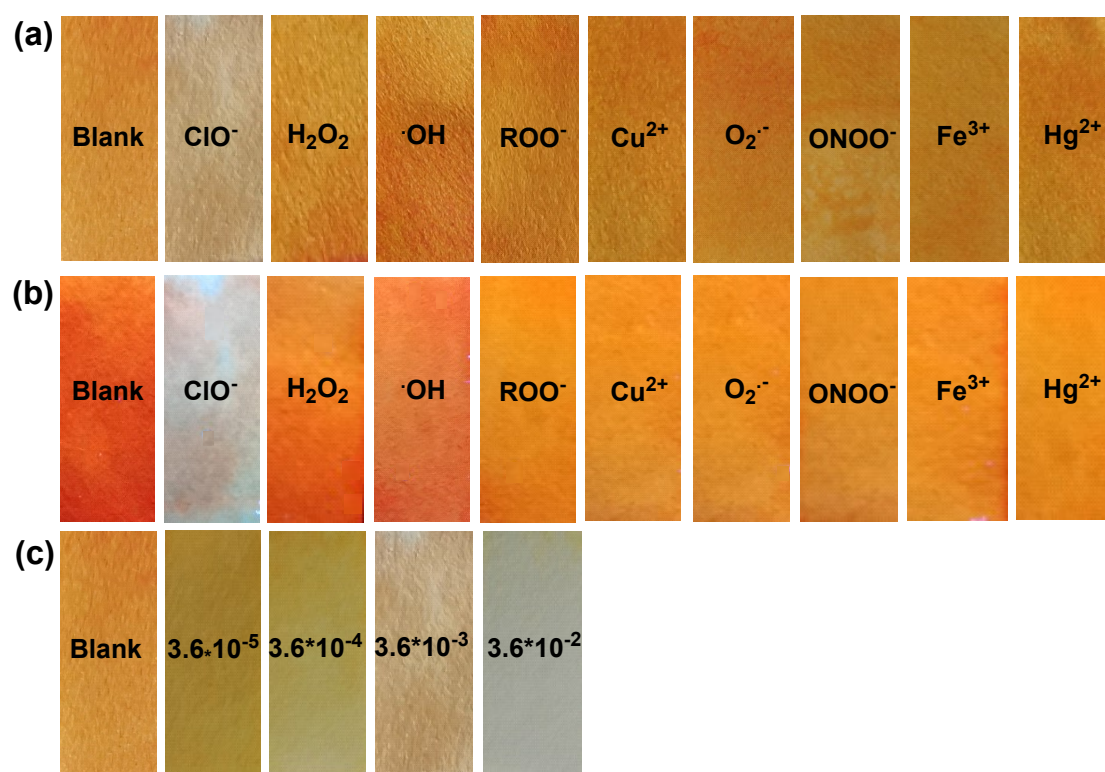


Figure S9. Photographs of the **Is-OL** based test strips colorimetric detect different ROS and metal ions: (a) Under sunlight, (b) with UV-lamp at 365 nm and (c) under different ClO^- concentration (from 3.6×10^{-5} M to 3.6×10^{-2} M) under sunlight.

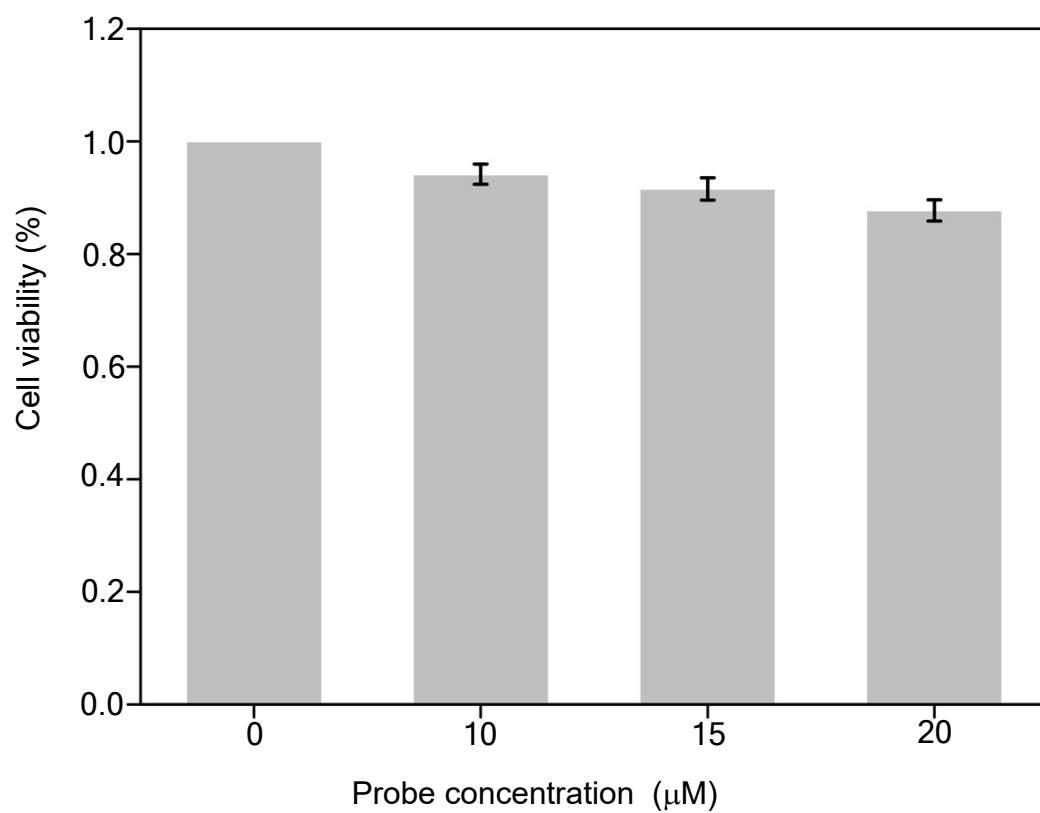


Figure. S10. Cell viability of HeLa cells incubated with different concentrations of chemosensor **Is-OL**.

Reference

[S1] C. Lee, W. Yang, R.G. Parr, *Phys. Rev. B* 37 (1988) 785.

[S2] M.J. Frisch, G.W. Trucks, H.B. Schlegel, G.E. Scuseria, M.A. Robb, J.R. Cheeseman, G. Scalmani, V. Barone, B. Mennucci, G.A. Petersson, H. Nakatsuji, M. Caricato, X. Li, H.P. Hratchian, A.F. Izmaylov, J. Bloino, G. Zheng, J.L. Sonnenberg, M. Hada, M. Ehara, K. Toyota, R. Fukuda, J. Hasegawa, M. Ishida, T. Nakajima, Y. Honda, O. Kitao, H. Nakai, T. Vreven, J.A. Montgomery, Jr., J.E. Peralta, F. Ogliaro, M. Bearpark, J.J. Heyd, E. Brothers, K.N. Kudin, V.N. Staroverov, R. Kobayashi, J. Normand, K. Raghavachari, A. Rendell, J.C. Burant, S.S. Iyengar, J. Tomasi, M. Cossi, N. Rega, J.M. Millam, M. Klene, J.E. Knox, J.B. Cross, V. Bakken, C. Adamo, J. Jaramillo, R. Gomperts, R.E. Stratmann, O. Yazyev, A.J. Austin, R. Cammi, C. Pomelli, J.W. Ochterski, R.L. Martin, K. Morokuma, V.G. Zakrzewski, G.A. Voth, P. Salvador, J.J. Dannenberg, S. Dapprich, A.D. Daniels, O. Farkas, J.B. Foresman, J.V. Ortiz, J. Cioslowski, D.J. Fox, *Gaussian 09, Revision A.02*, Gaussian Inc, Wallingford CT (2009)