

## Supplementary Material

### **Construction of a novel isopinocampone-based fluorescent probe for rapid and specific detection of ClO<sup>-</sup> and its application in environmental analysis and biological imaging**

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**Fig. S1** Absorption spectra of probe **DMTI** (10  $\mu\text{M}$ ) before and after addition of  $\text{ClO}^-$ .

**Fig. S2** HRMS of **DMTI**.

**Fig. S3** Cytotoxicity assays of **DMTI** in living RAW264.7 cells.

**Fig. S4**  $^1\text{H}$  NMR spectra of **DMTI** in  $\text{DMSO-}d_6$ .

**Fig. S5**  $^{13}\text{C}$  NMR spectra of **DMTI** in  $\text{DMSO-}d_6$ .

**Fig. S6** Linear relationship between fluorescence intensity of **DMTI** at 460 nm against  $\text{ClO}^-$  concentration (0–140  $\mu\text{M}$ ) in distilled water (a), tap water (b), and lake water (c).

## **Experimental**

### **Materials and Instruments**

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra were conducted on AVANCE III HD 600 (Beijing, China). The high resolution mass spectra (HRMS) were recorded on Thermo Q-Exactive mass spectrometer (Beijing, China). The ultraviolet-visible spectra were measured with an UV-2450 spectrophotometer of Shimadzu Corporation (Japan), and fluorescence spectra were recorded by PerkinElmer LS-55 fluorescence spectrophotometer (Massachusetts, USA). The pH was measured by PHS-3C pH meter of Shanghai Leici (Shanghai, China).

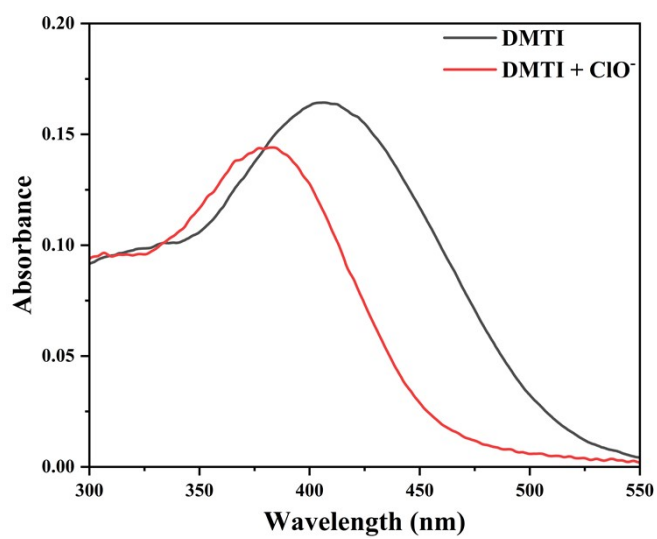


Fig. S1 Absorption spectra of probe DMTI (10  $\mu$ M) before and after addition of ClO<sup>-</sup>.

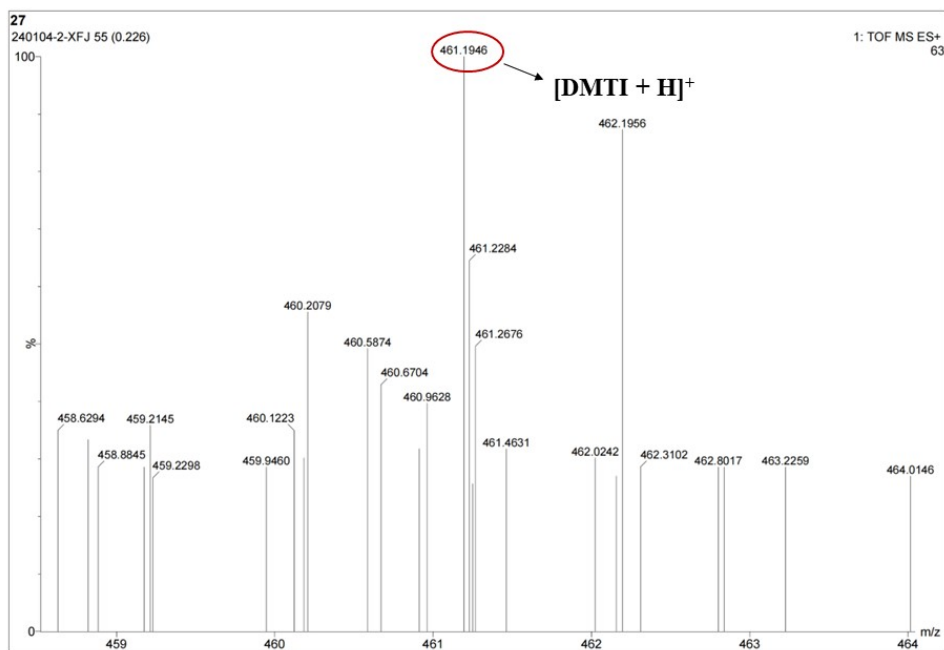


Fig. S2 HRMS of DMTI.

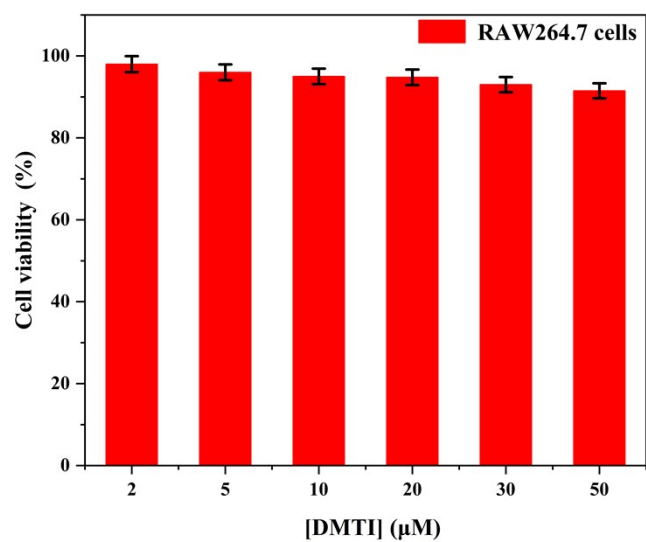


Fig. S3 Cytotoxicity assays of DMTI in living RAW264.7 cells.

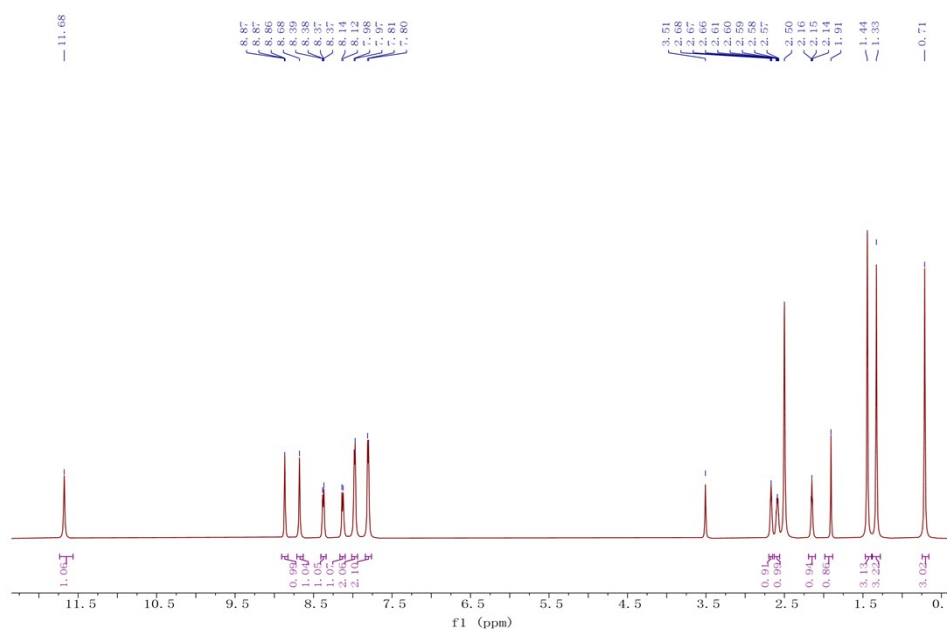
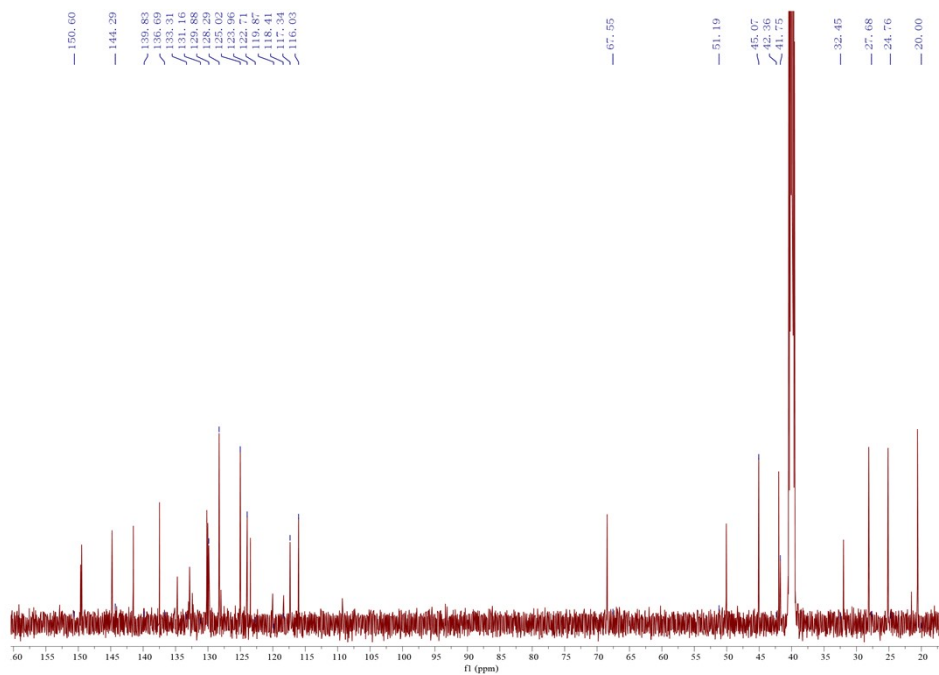
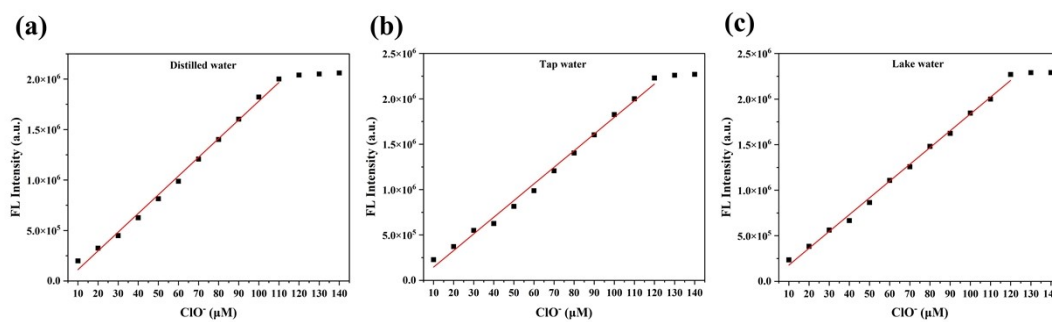


Fig. S4  $^1\text{H}$  NMR spectrum of DMTI in  $\text{DMSO-}d_6$ .



**Fig. S5**  $^{13}\text{C}$  NMR spectrum of **DMTI** in  $\text{DMSO-}d_6$ .



**Fig. S6** Linear relationship between fluorescence intensity of **DMTI** at 460 nm against  $\text{ClO}^-$  concentration (0–140  $\mu\text{M}$ ) in distilled water (a), tap water (b), and lake water (c).