

Supporting information for

A turn-on fluorescent probe for hypochlorous acid based on the oxidation of diphenyl telluride

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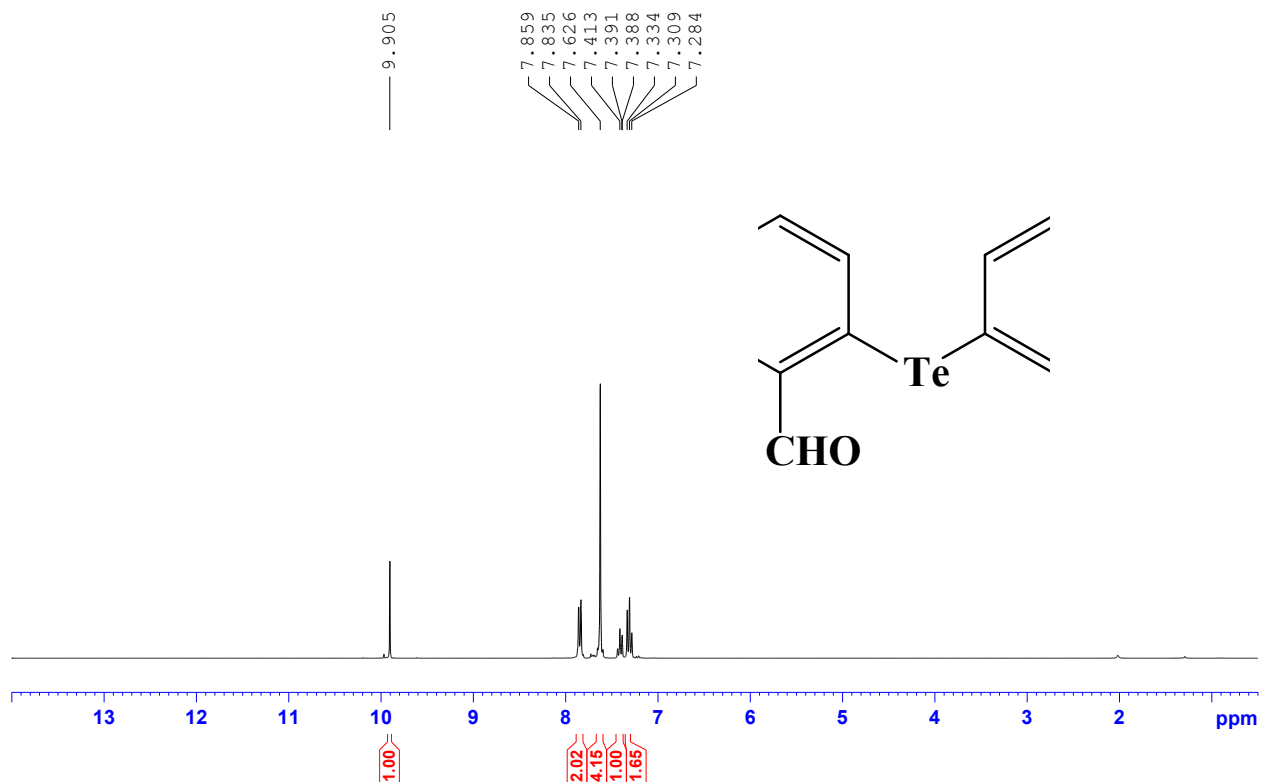


Figure S1. ¹H NMR (300 MHz, CDCl₃) spectrum of 2-(phenyltellanyl) benzaldehyde

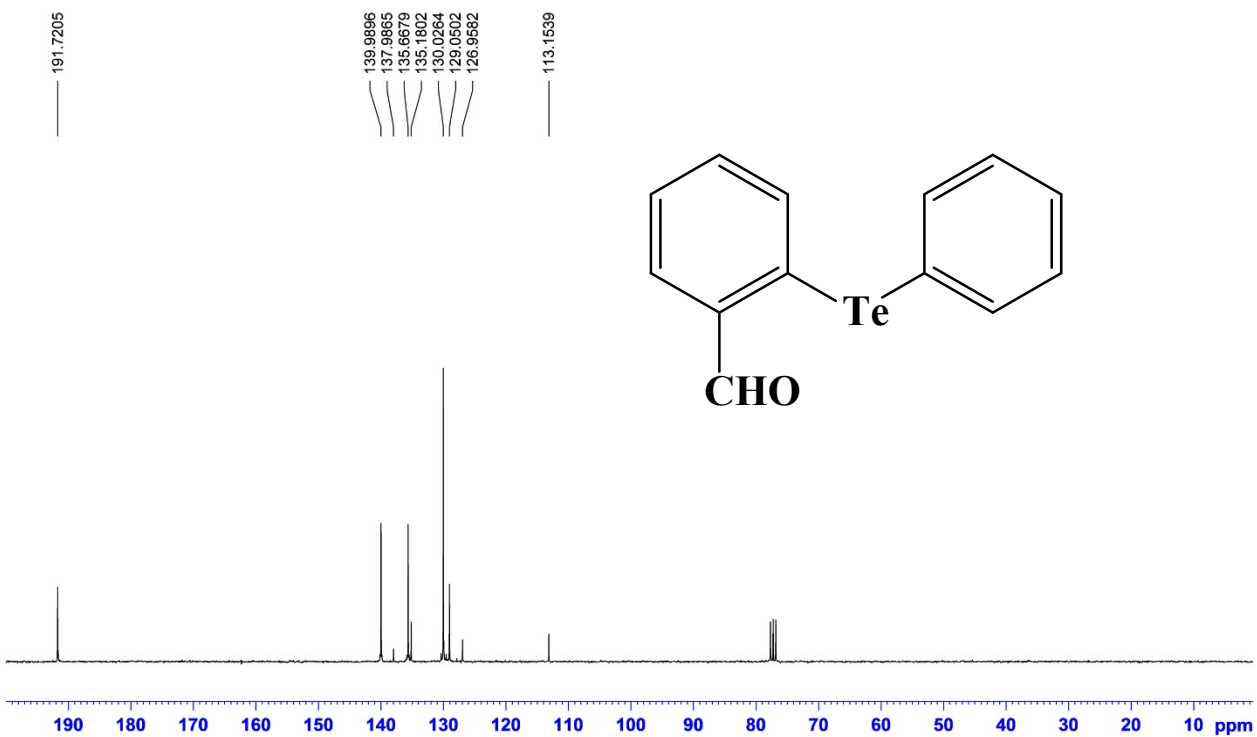
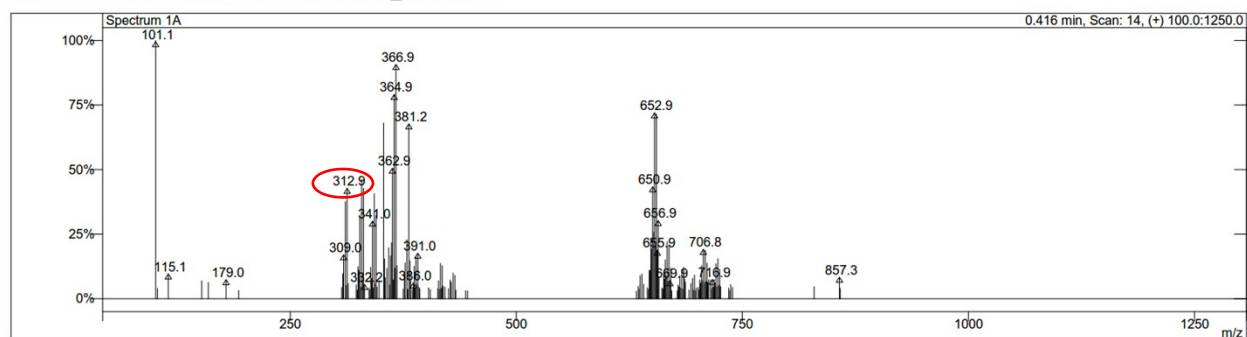


Figure S2. ¹³C NMR (300 MHz, CDCl₃) spectrum of 2-(phenyltellanyl) benzaldehyde

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Spectrum from c:\service\20140408\2014-04-08_te cho.xms
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 No averaging. Background corrected.
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 CAS No: None Acquired Range: 100.0 - 1250.0 m/z

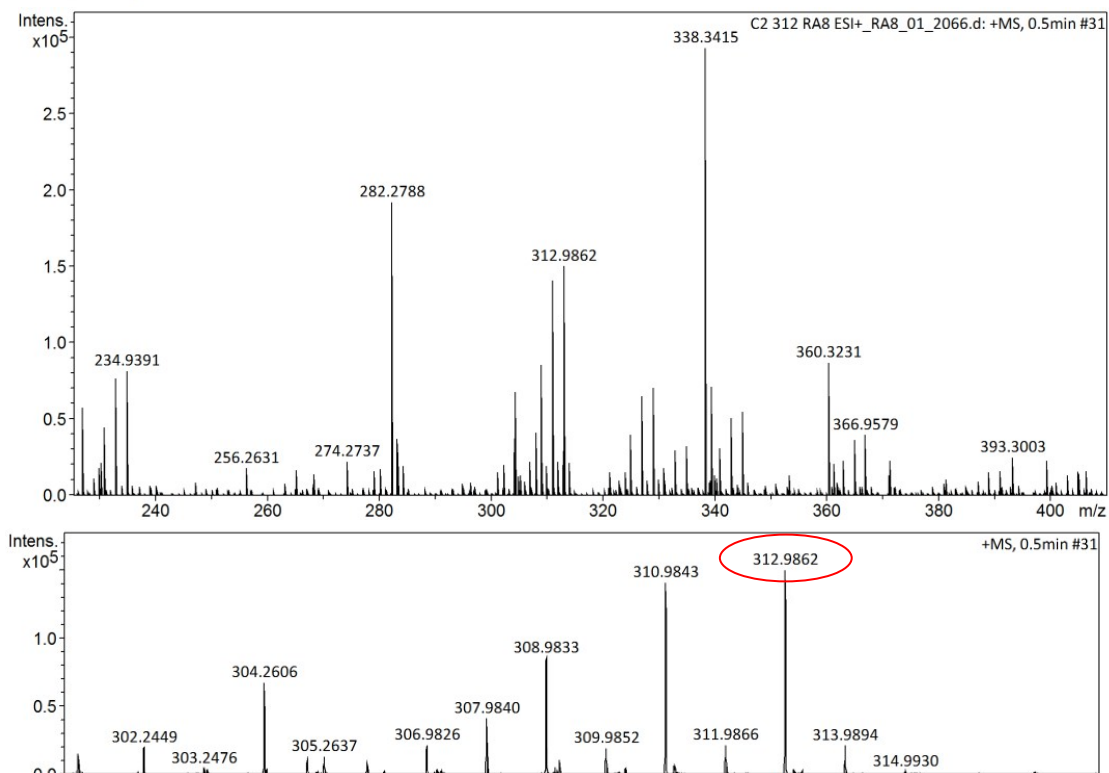


Figure S3. Mass spectrum of 2-(phenyltellanyl)benzaldehyde

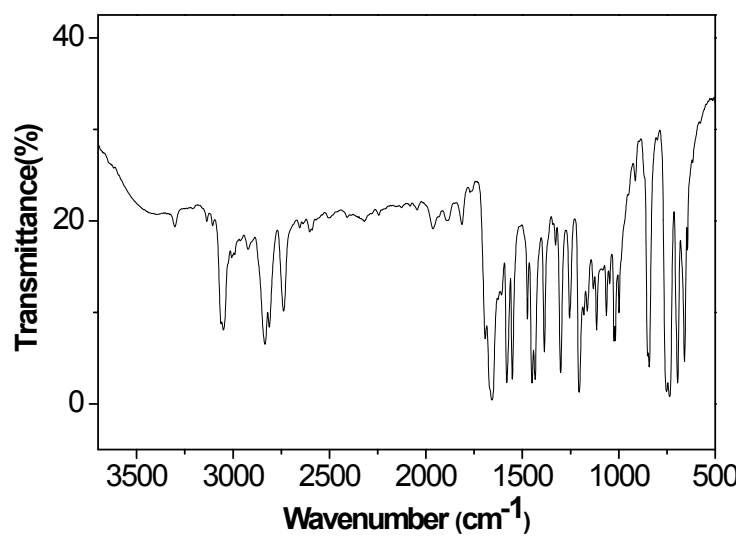


Figure S4. IR spectrum of 2-(phenyltellanyl) benzaldehyde

te-bodipy

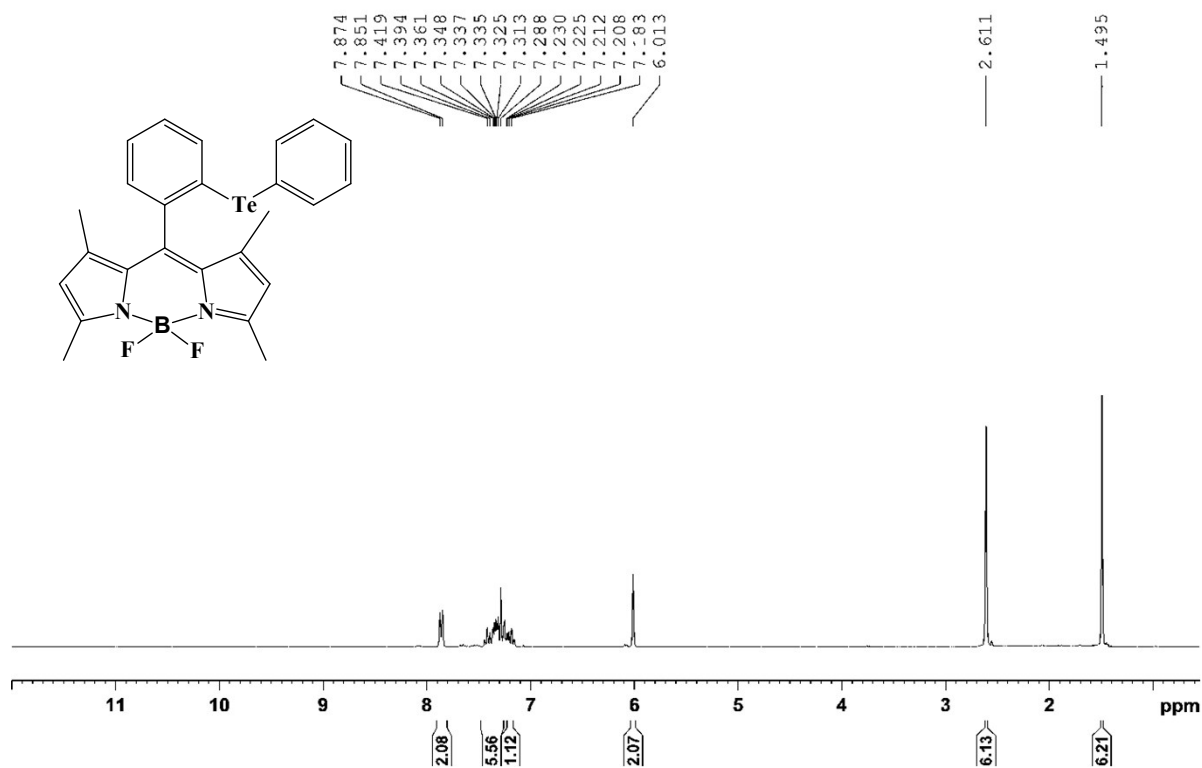


Figure S5. ¹H NMR (300 MHz, CDCl₃) spectrum of HCTe

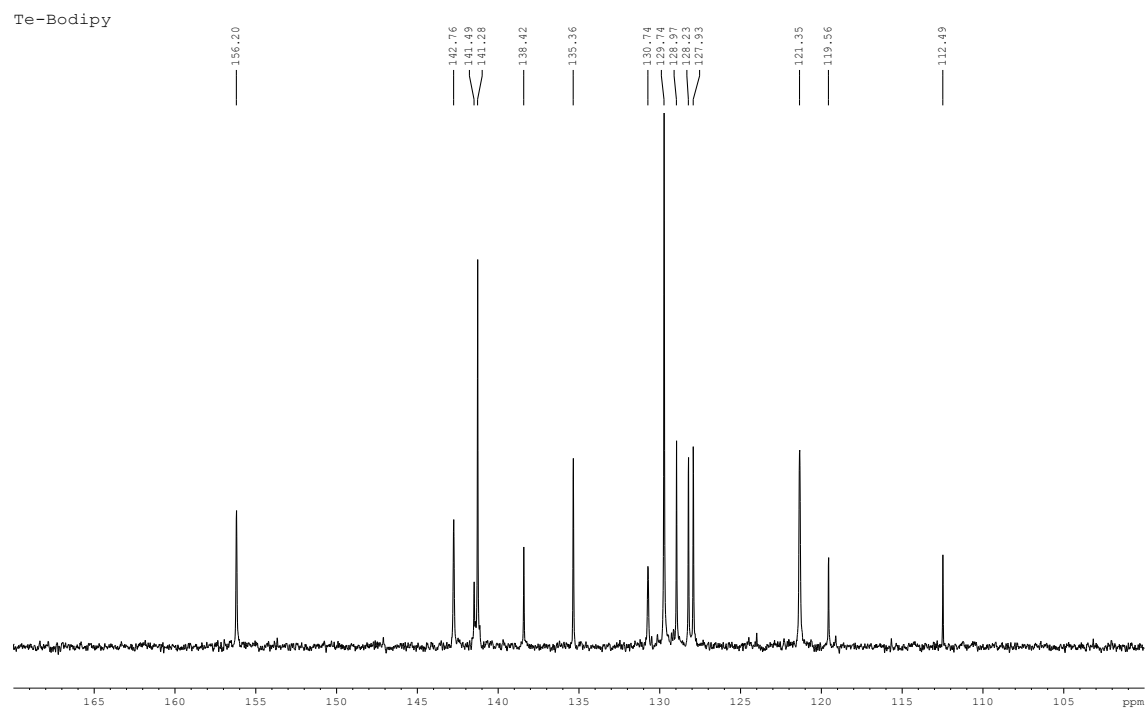


Figure S6. ¹³C NMR (300 MHz, CDCl₃) spectrum of HCTe

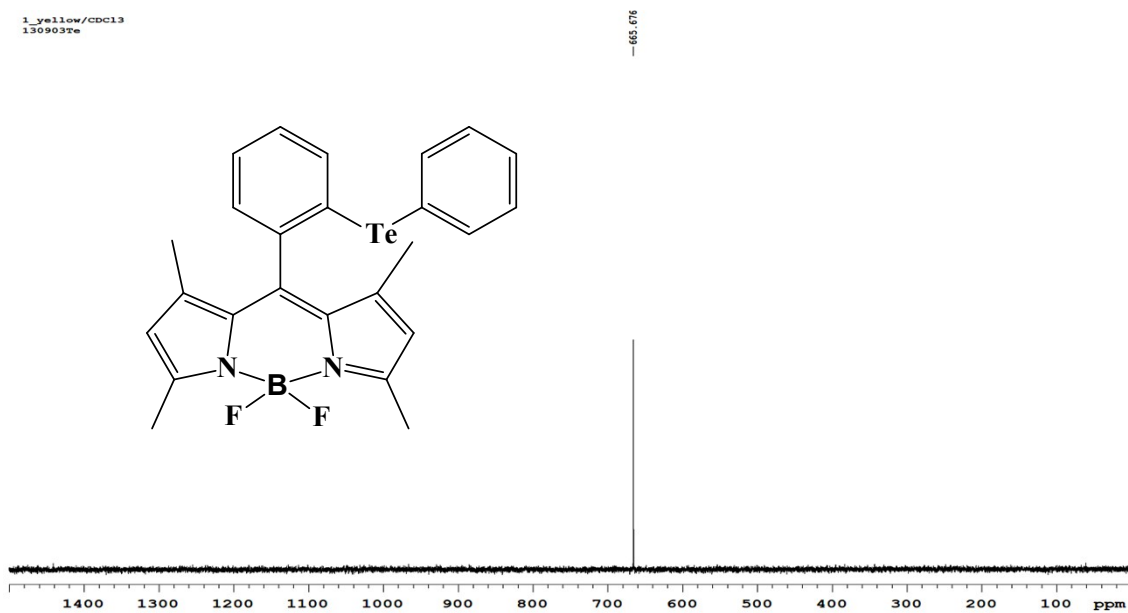


Figure S7. ^{125}Te NMR (500 MHz, CDCl_3) spectrum of **HCTe**

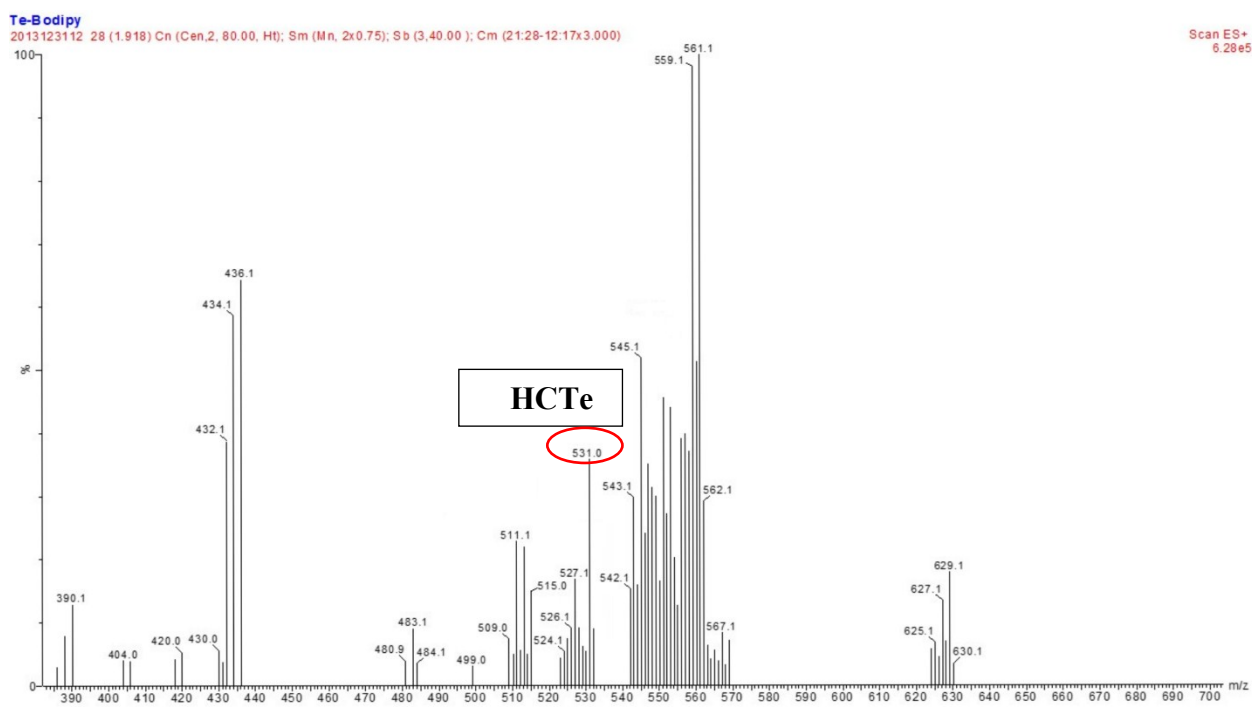


Figure S8. Mass spectrum (ESI+) of **HCTe**

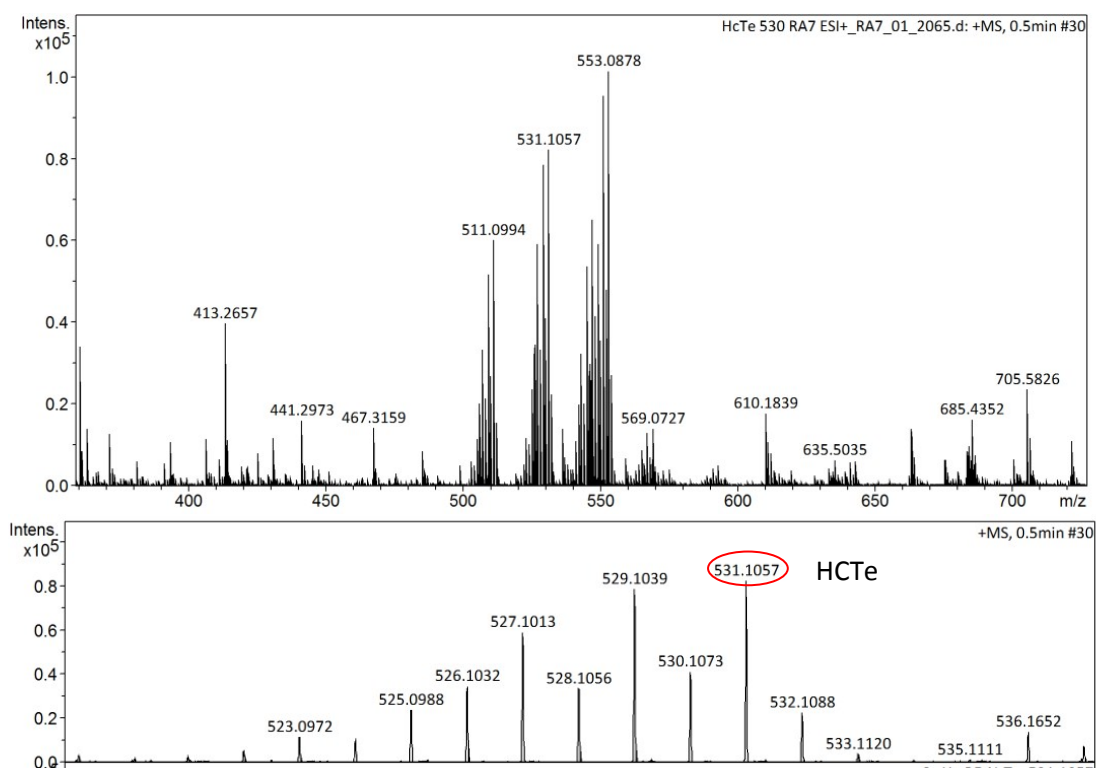


Figure S9. High resolution mass spectrum of **HcTe**

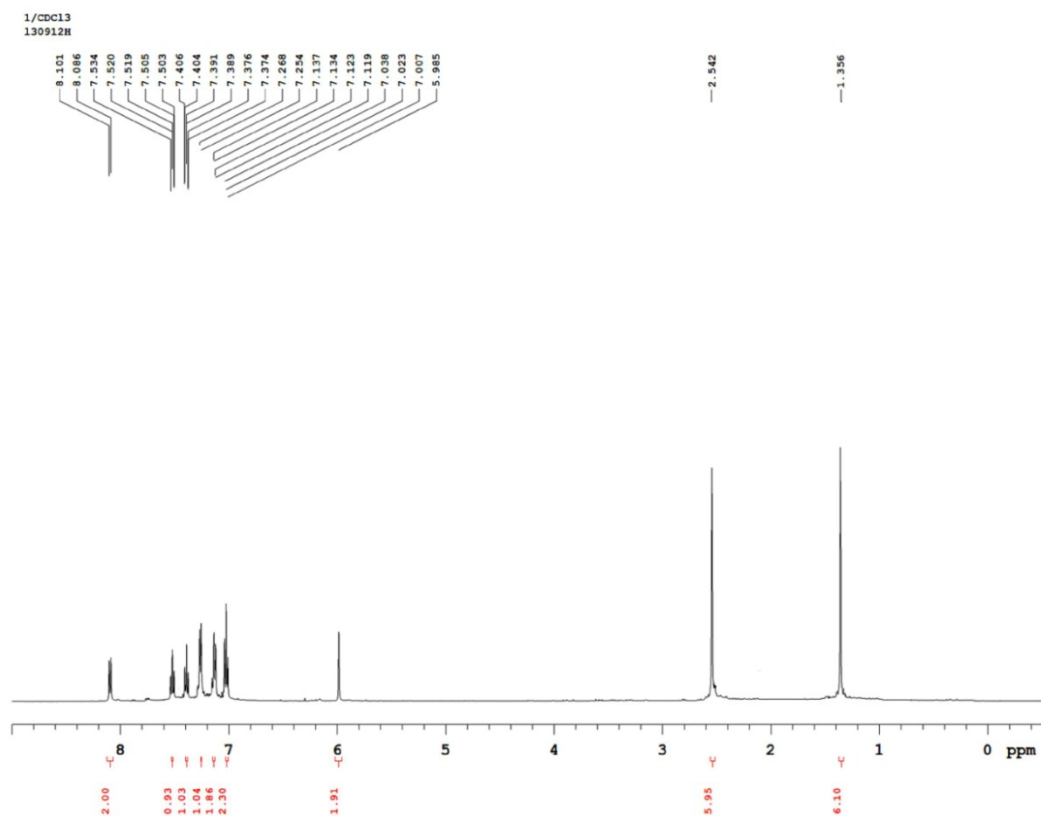


Figure S10. ^1H NMR (500 MHz, CDCl_3) spectrum of **HCTeO**

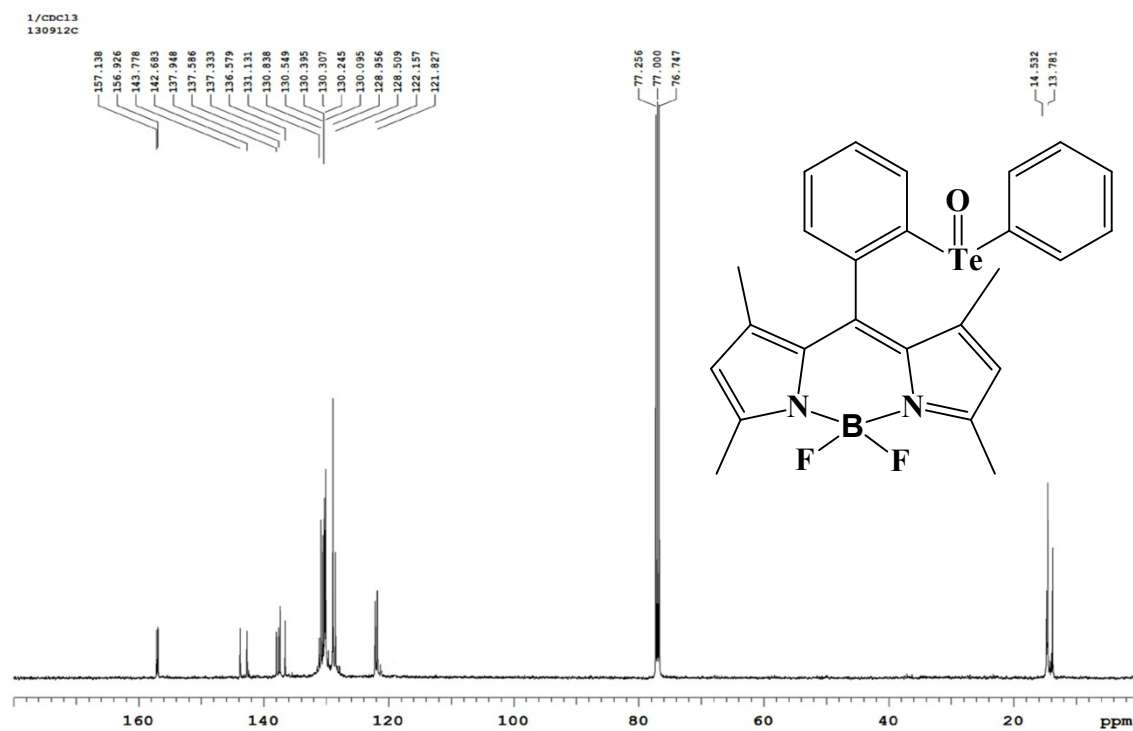


Figure S11. ^{13}C NMR (500 MHz, CDCl_3) spectrum of **HCTeO**

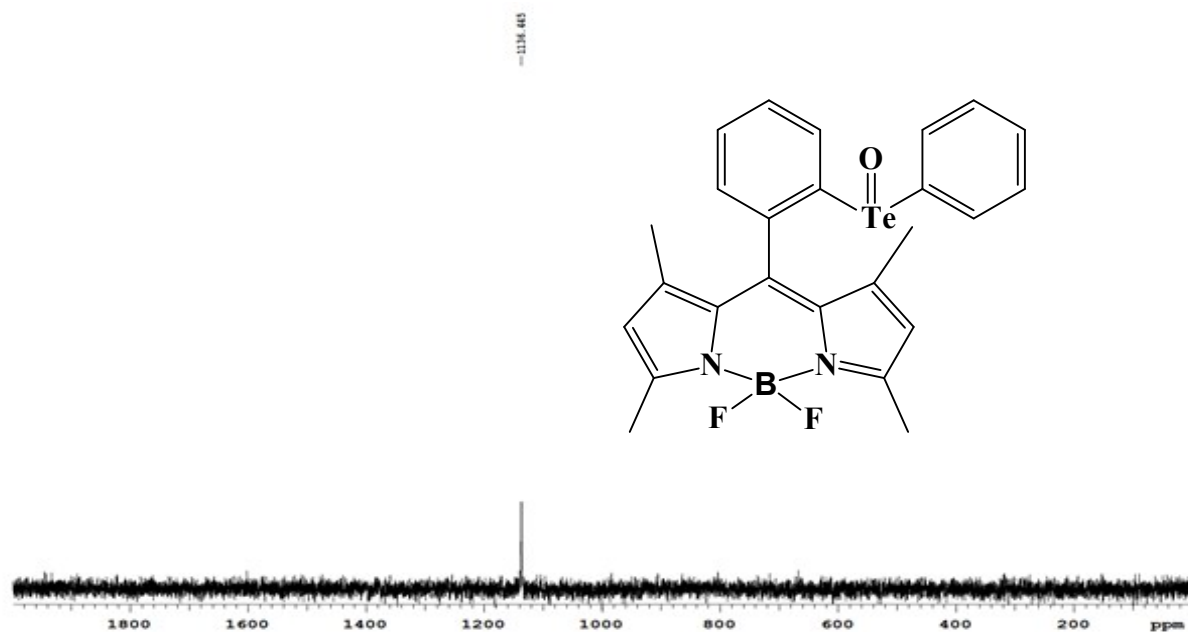


Figure S12. ^{125}Te NMR (500 MHz, CDCl_3) spectrum of HCTeO

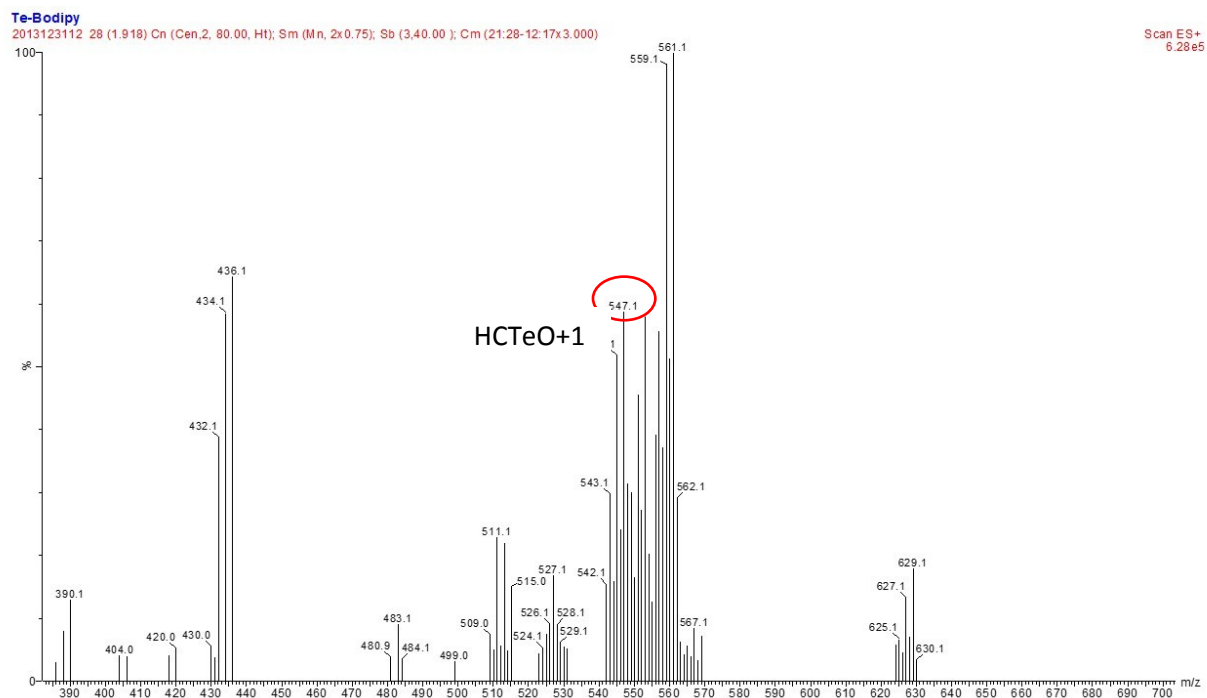


Figure S13. Mass spectrum (ESI+) of HCTeO

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Pos ESI-MS

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Intensity

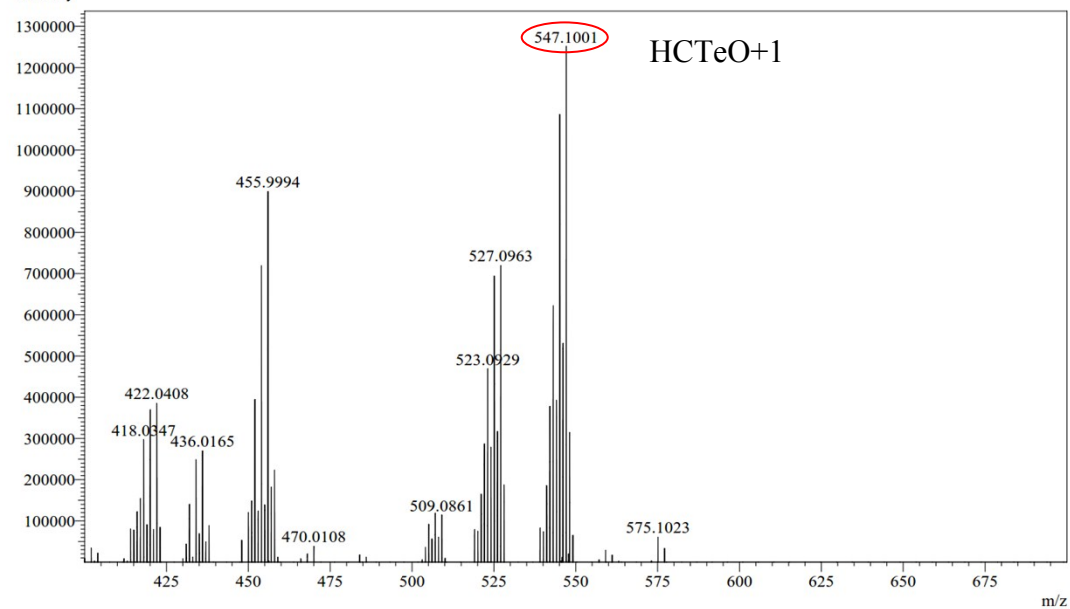


Figure S14. Mass spectrum of HR (ESI+) of HCTeO

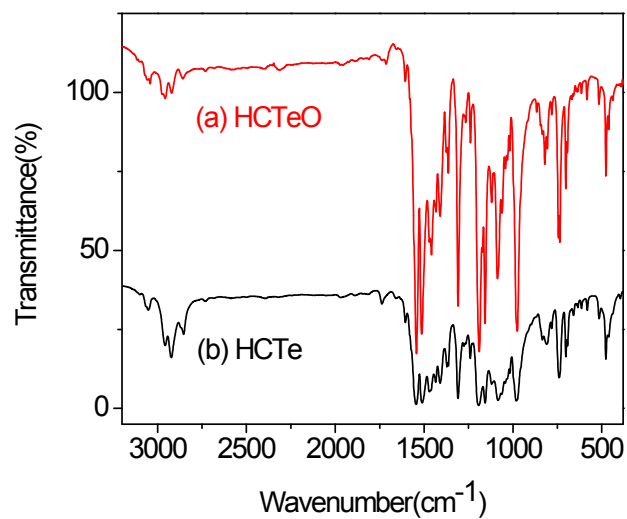


Figure S15. IR spectrum of HCTe and HCTeO.

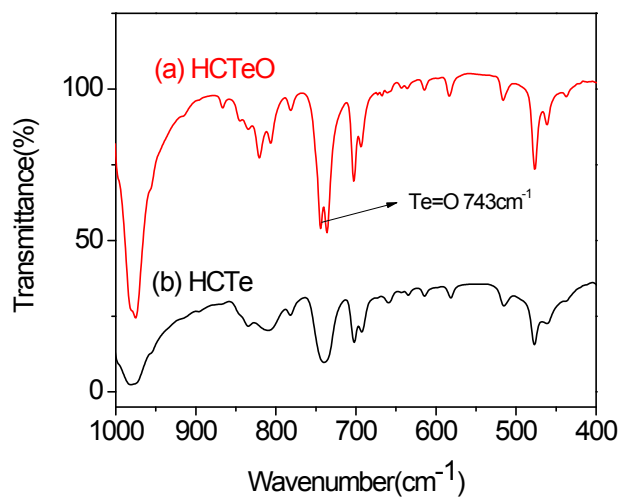


Figure S16. Expanded IR spectrum of **HCTe** and **HCTeO**.

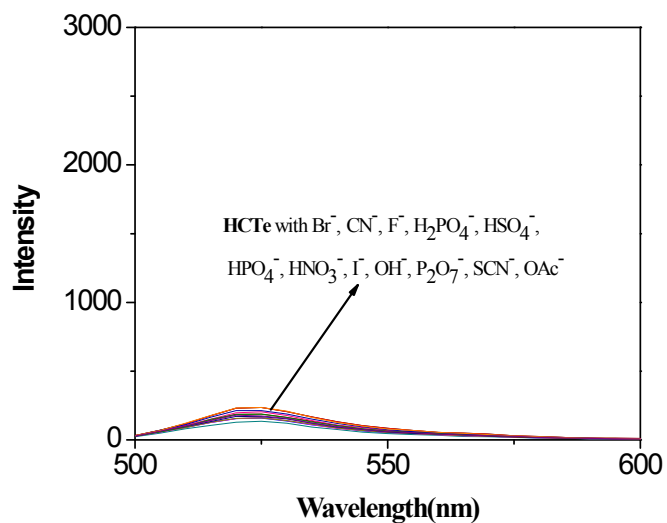


Figure S17. Fluorescence changes in **HCTe** (10 μM) in response to treatment with various anions (100 μM) in a water- CH_3OH (v/v = 99/1, 0.1 M PBS, pH 7.4) solution. The excitation wavelength was 480 nm.

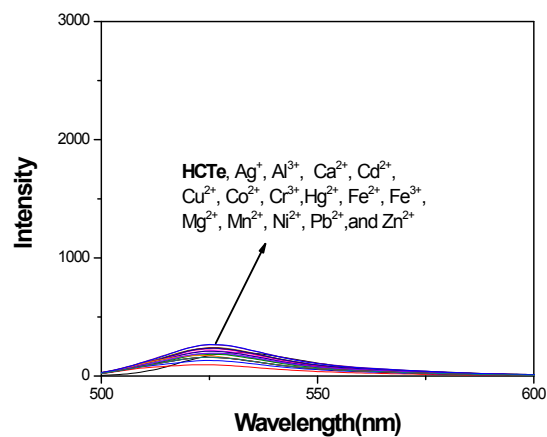


Figure S18. Fluorescence changes in **HCTe** (10 μM) in response to treatment with various metal ions (100 μM) in a water- CH_3OH ($v/v = 99/1$, 0.1 M PBS, pH 7.4) solution. The excitation wavelength was 480 nm.

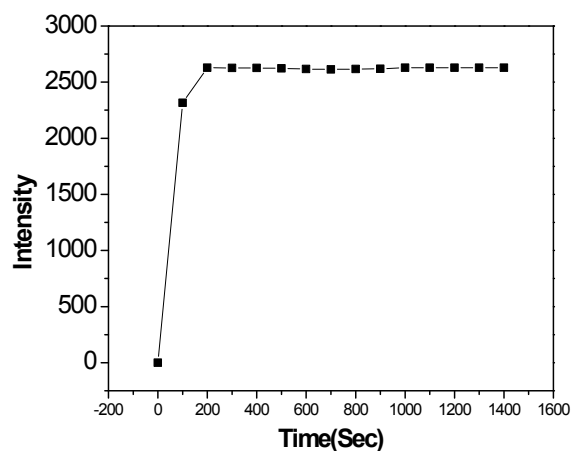


Figure S19. Time courses of the response of **HCTe** to HOCl. The excitation wavelength was 480 nm.

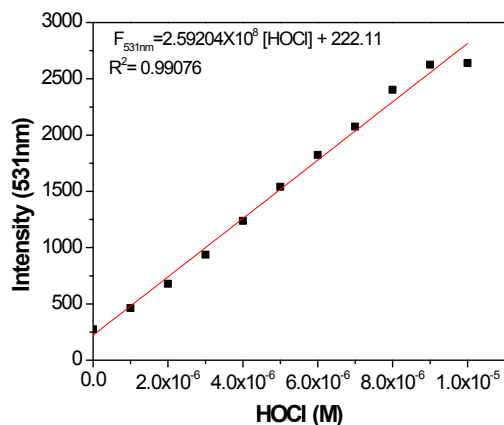


Figure S20. Calibration curve of **HCTe**–NaOCl in a water-CH₃OH(v/v = 99/1, 0.1 M PBS, pH 7.4) solution. The detection limit (DL) of **HCTe** with HOCl was determined from the following equation: $DL = K * S_b / S$, where $K = 3$; S_b is the standard deviation of the blank solution; S is the slope of the calibration curve.

$$DL = 3 * 3.5678 / (2.59 \times 10^8) = 4.13 \times 10^{-8} \text{ M (41.3 nM)}$$

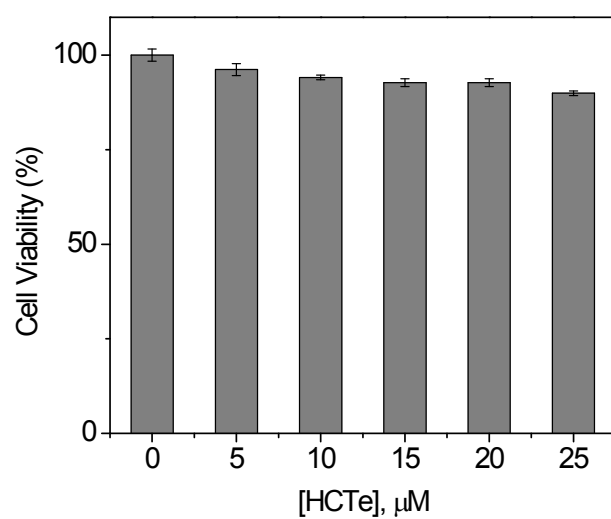


Figure S21. Cell viability values (%) estimated by an MTT assay versus incubation concentrations of HCTe. RAW264.7 cells were cultured in the presence of **HCTe** (0–25 μM) at 37°C for 24 h.