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Supporting information for

A turn-on fluorescent probe for hypochlorous acid based on HOCl-promoted removal of the C=N bond in BODIPY-hydrazone

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Figure S1. ¹H NMR (300 MHz, CDCl₃) spectrum of **BODH**



Figure S2. ¹³ C NMR (125 MHz, CDCl ₃) spectrum of **BODH.**



Figure S3. HR-EI MS spectrum of BODH



Figure S4. HR-EI MS spectrum of BODIPY-Al



Figure S5. The relationship with time of fluorescence enhancement of BODH in a H_2O -MeOH (v/v = 70/30, 70 mM PBS, pH7.4) solution upon adding NaOCl (25 μ M, 5 eq). The excitation wavelength was 470 nm



Figure S6. Fluorescence spectra of BODIPY-Al (5 μ M) in a H₂O-MeOH (v/v = 70/30, 70 mM PBS, pH7.4) solution.



Figure S7. Calibration curve of BODH–NaOCl in a H₂O-MeOH (v/v = 30/70, 70 mM PBS, pH = 7.4) solution. The excitation wavelength was 470 nm and the monitored emission wavelength was 508 nm. The detection limit (DL) of NaOCl using BODH was determined from the following equation: $DL = K \times SD / S$, where K = 3; SD is the standard deviation of the blank solution; S is the slope of the calibration curve. DL = $K \times SD/S = 3 \times 5.399 / (7.88729 \times 10^7) = 2.05 \times 10^{-7}$ (M).



Figure S8. Reversed-phase HPLC chromatograms of **BODH** (100 μ M) with NaOCl (5000 μ M, 5eq) in a H₂O-MeOH.