Electronic Supplementary Information

A Selective Colorimetric and Fluorescent Probe for Detection of ClO^- and its application in bioimaging

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Figure S1: The emission spectra of probe when all kinds of analytes added

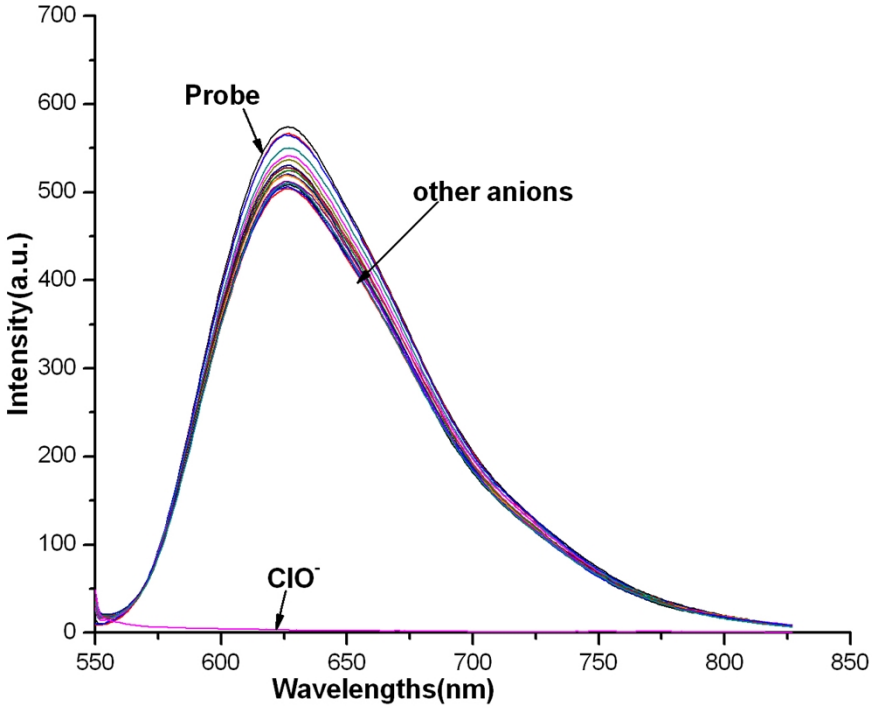
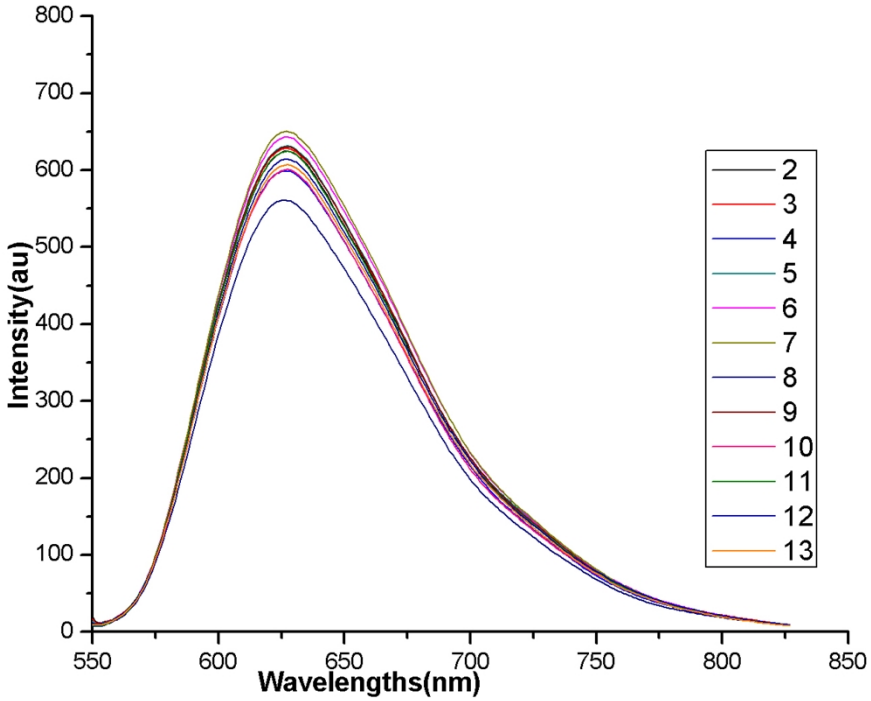


Figure S1: The selectivity of DV26 for ClO^-, H_2O_2, ClO_2^-, $ONOO^-$, F^-, ClO_3^-, CN^-, NO_2^-, S^{2-}, SCN^-, MnO_4^-, ClO_4^-, CO_3^{2-} and $P_2O_7^{4-}$.

Figure S2: Choice of pH-range for the Measurement



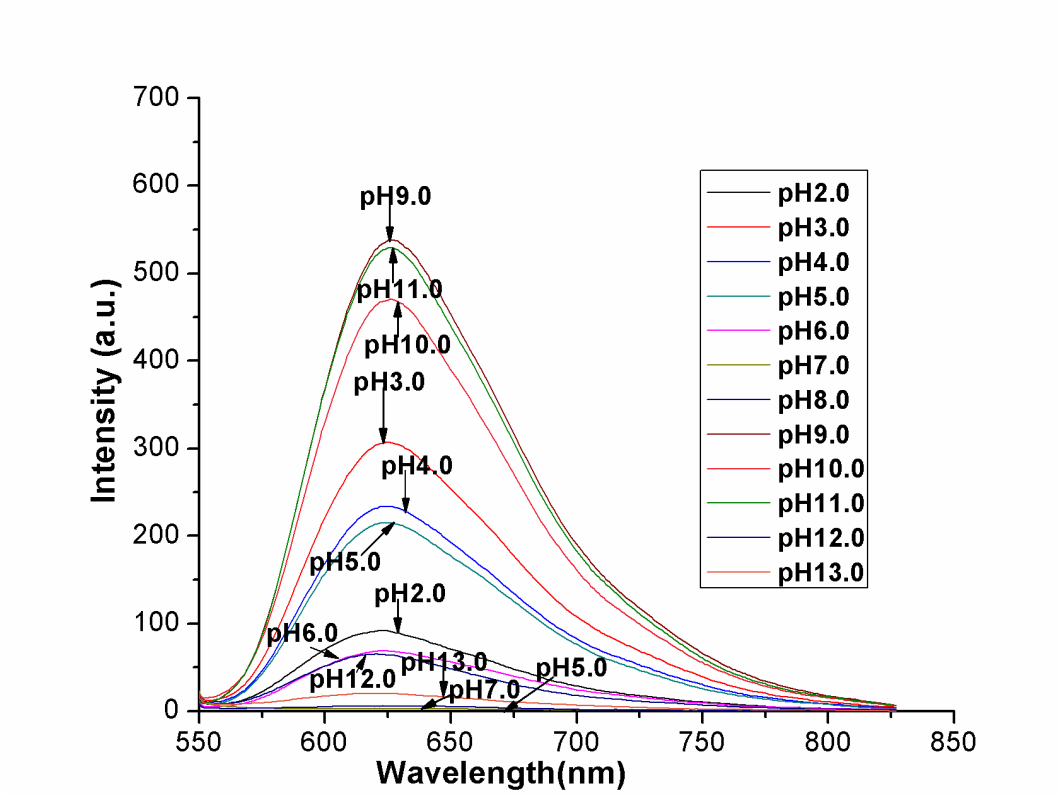


Figure S3: Detection limit for ClO^-

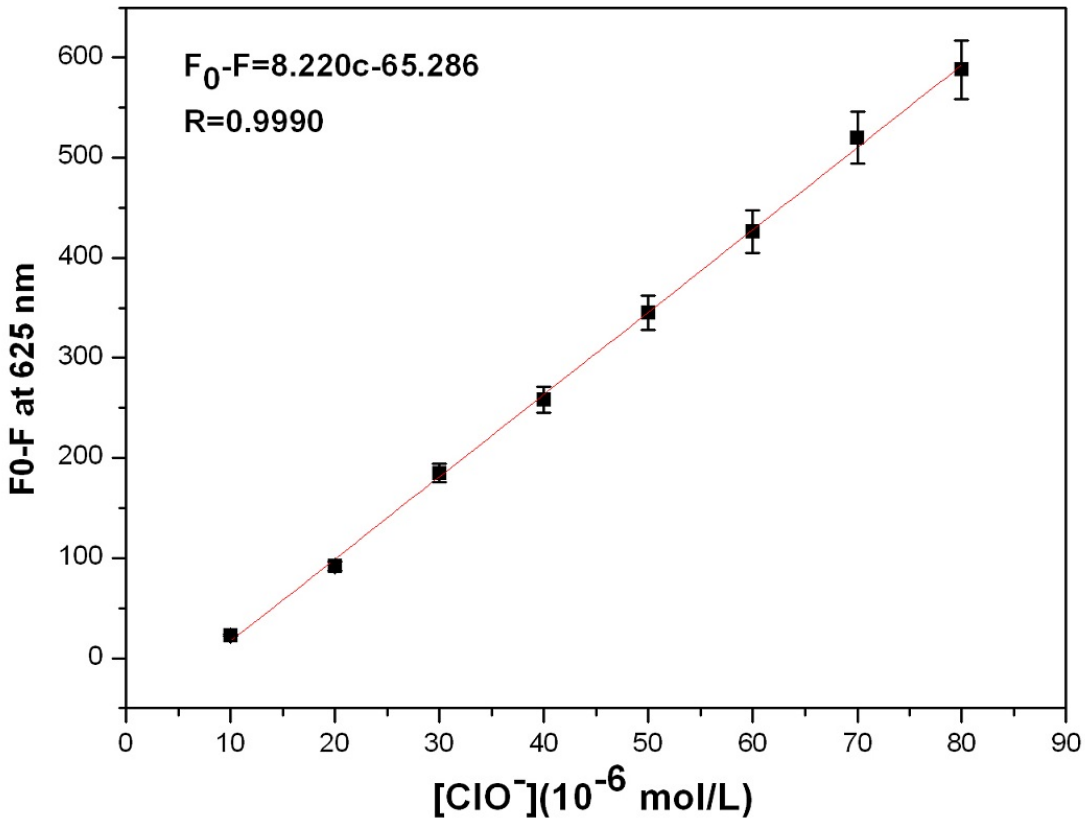


Figure S4: Comparison with other reported hypochlorite probes.

method	analyte	signal output	wavelength	solvent	detection limit
ref(31)	hypochlorite	fluorescence	λ_{ab}=496nm λ_{em}=523nm	Tris-HCl buffer/DMSO	0.040μM
ref(33)	hypochlorite	absorbance	λ_{ab}=572nm	PBS buffer	1.74μM
ref(36)	hypochlorite	fluorescence	λ_{em}=530nm	CH3OH/H2O	50μM
ref(37)	hypochlorite	absorbance	λ_{ab}=452nm	PBS buffer	0.2μM
this work	hypochlorite	absorbance fluorescence	λ_{ab}=544nm λ_{ab}=586 nm. λ_{em}= 625 nm	HEPES/CH_3CN	0.037μM

Figure S5: ESI-MS spectra of the probe-ClO^-

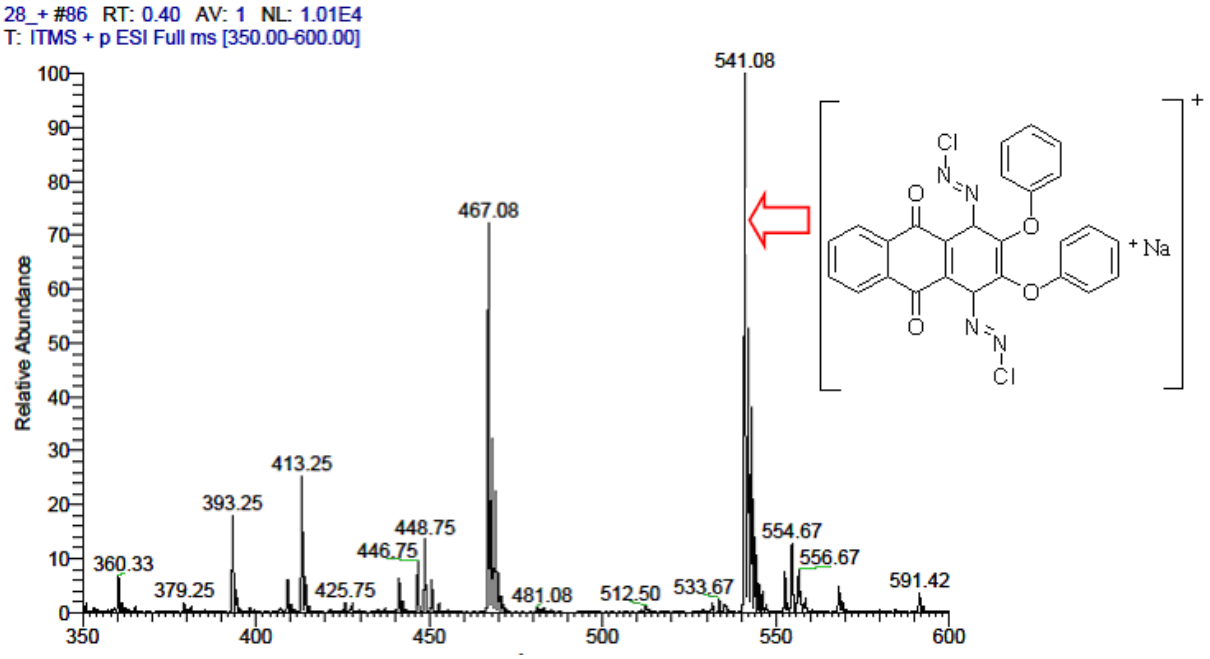


Figure S5: The ESI-MS of product obtained by mixing probe NaOCl, m/z: $[Probe\text{-}ClO^- + Na]^+$ Calcd for $C_{26}H_{18}N_{4Cl2}O_4Na$ 541.04, Found 541.08.