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Electronic Supplementary Information

Mitochondria-targeted fluorescent probe based on coumarin-pyridine derivatives for hypochlorite imaging in living cells and zebrafish

Xiuli Zhong, Qin Yang, Yingshuang Chen, Yuliang Jiang*, Bingxiang Wang*, Jian Shen*

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1. Characteristic of the CPD

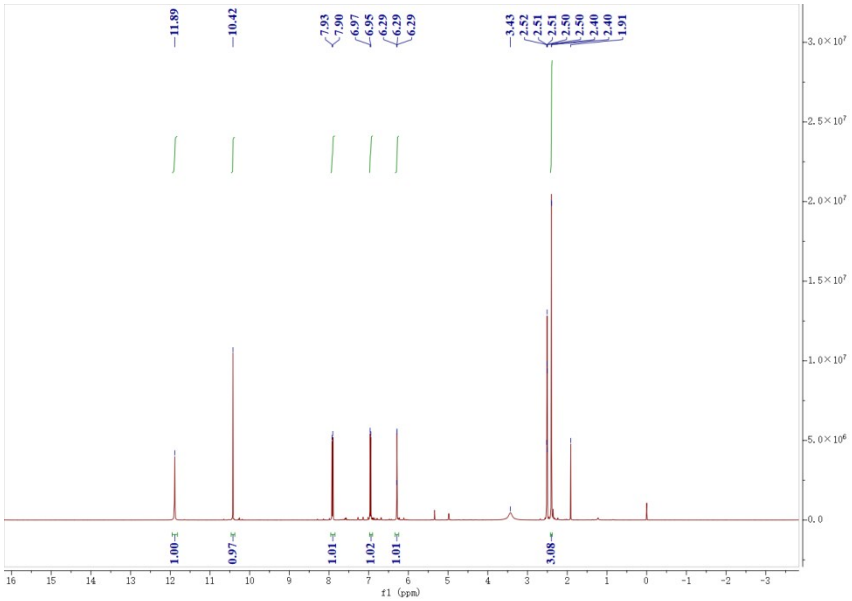

Fig. S1 ^{1}H NMR spectroscopy of compound 2

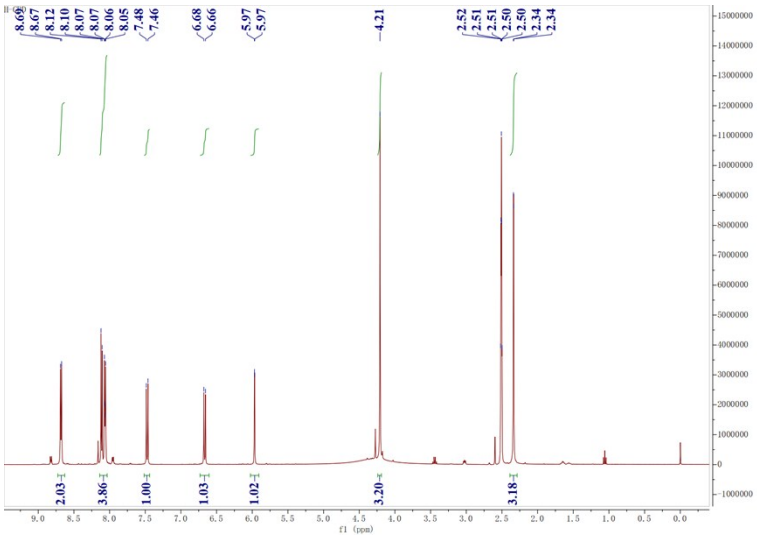

Fig. S2 ^{1}H NMR spectroscopy of CPD

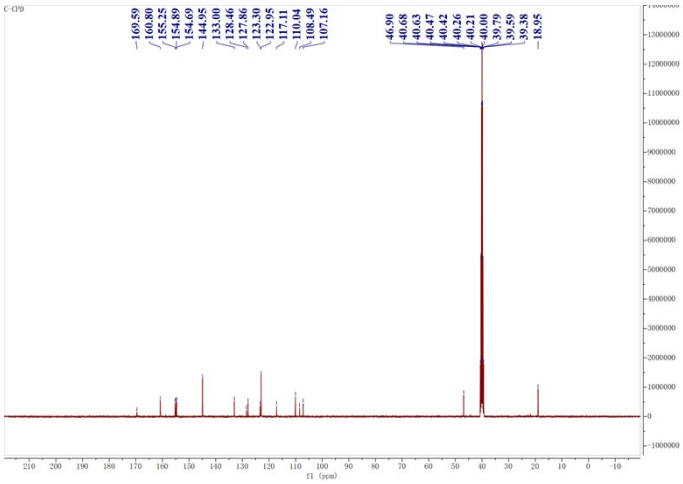

Fig. S3 ^{13}C NMR spectroscopy of CPD

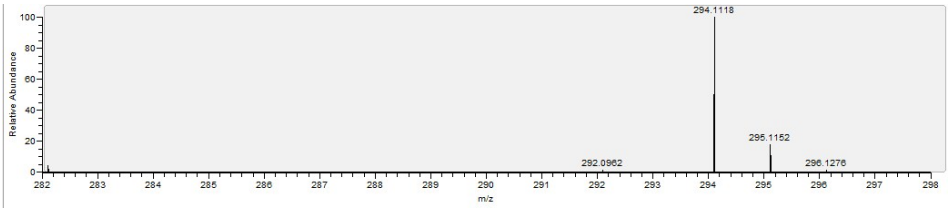

Fig. S4 HRMS spectroscopy of CPD

2. Fluorescence responses of CPD and CPD-OCl$^-$

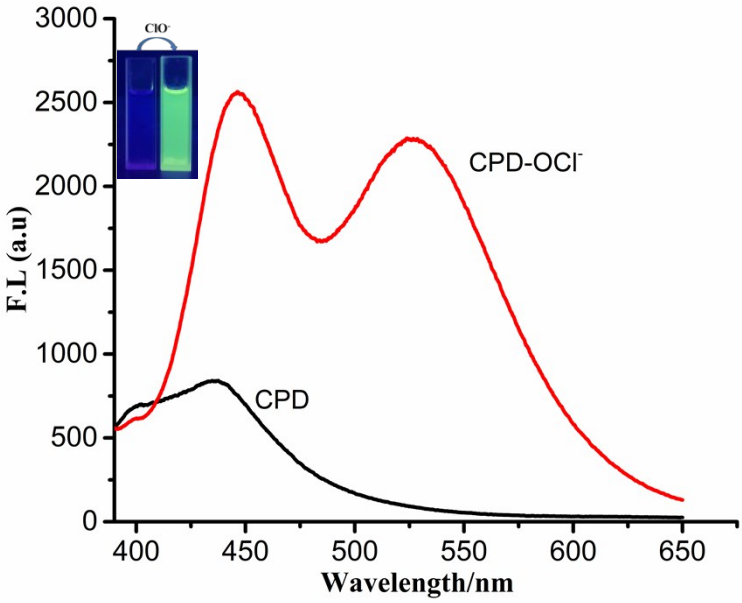

Fig. S5 Fluorescence responses of CPD and CPD-OCl$^-$

3. Interference experiment

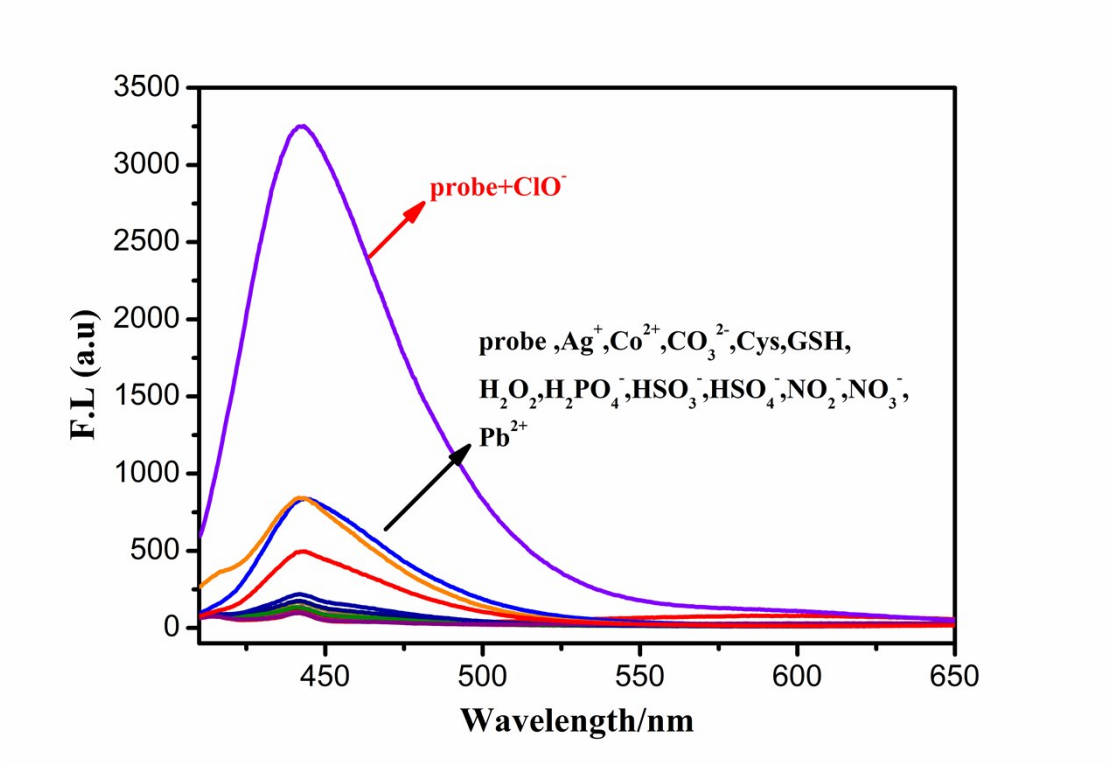

Fig. S6 Emission intensity of CPD in aqueous conditions (DMF/PBS buffer solution (1:4, V/V, 10 mM, pH 7.4) in the presence of various species (40 μM).

4. Table S1 The comparision of CPD with published probes for OCl^-

Probe	Response time (s)	Detection limit (nM)	Mitochondrial localization	Ref.
S-BODIPY	30	59	No	38
CPBT	30	41.8	Yes	39
AC-ClO	120	25	No	40
DCPO-DMTC	300	164	No	41
Zcp-Me	900	89	Yes	42
TRA	60	100	No	43
CPD	10	12	Yes	This work

5. The MS spectroscopy of CPD /OCl^-

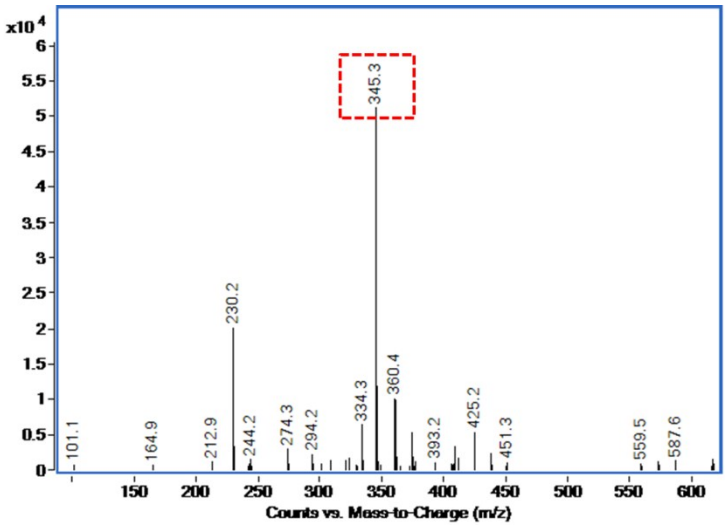

Fig. S7 The MS spectroscopy of CPD /OCl^-

6. Cytotoxicity of CPD

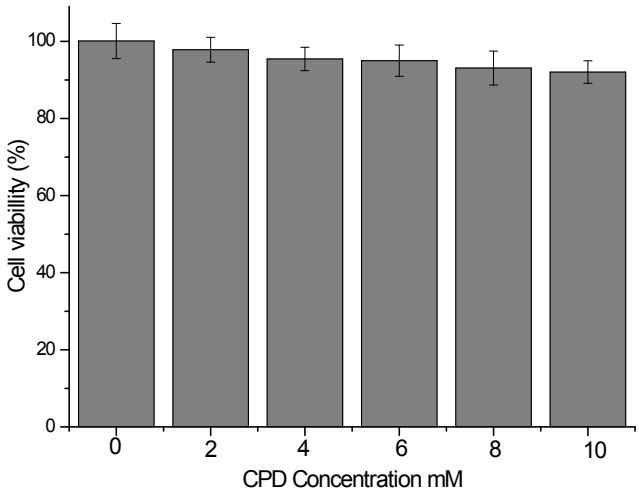

Fig. S8 Cytotoxicity of CPD by a MTT assay (n = 3).