Electronic Supplementary Material (ESI) for Analytical Methods.

Highly sensitive and selective of two coumarin-based fluorometric probes for detection of ClO^- and cell imaging

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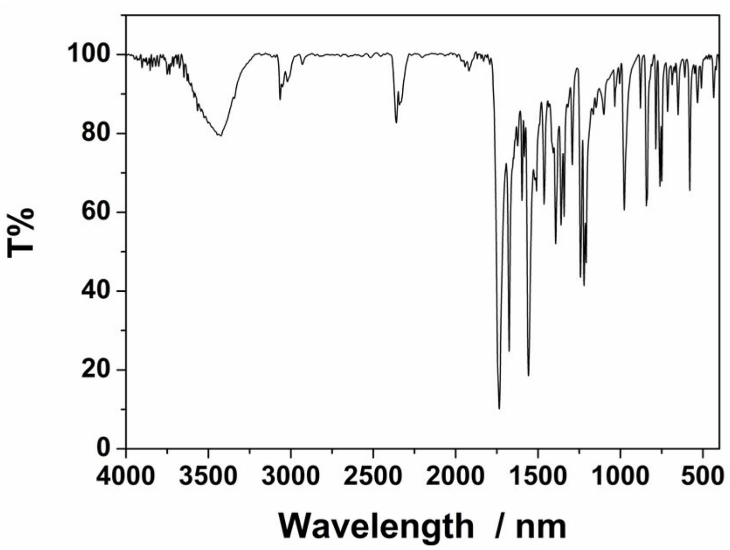

Fig.S1. The FI-IR spectrum of **BCO**

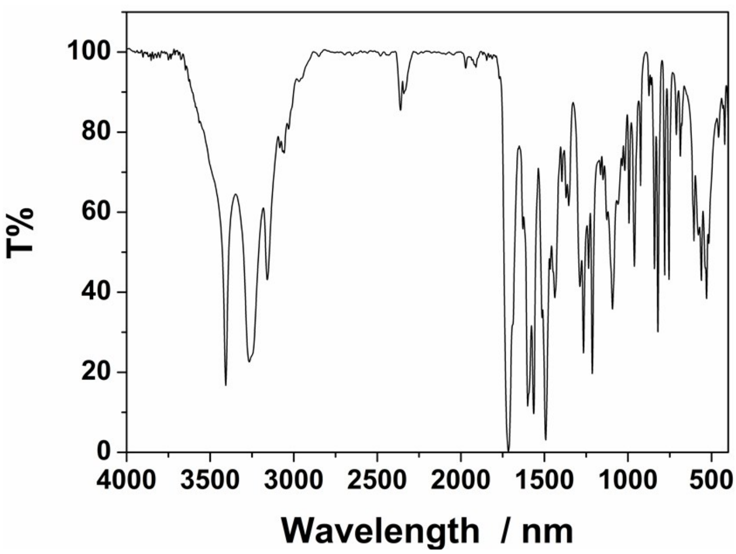

Fig.S2. The FI-IR spectrum of **BETC**

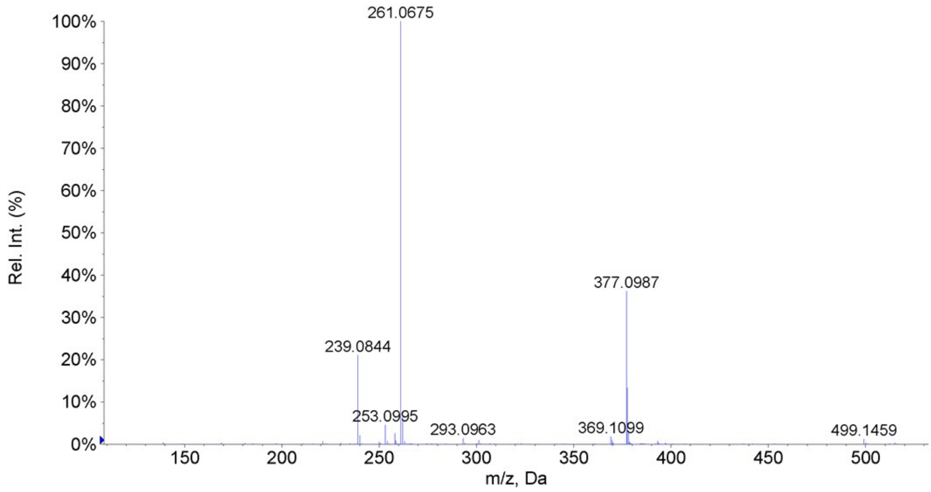

Fig.S3. ESI-MS spectrum of **BCO**

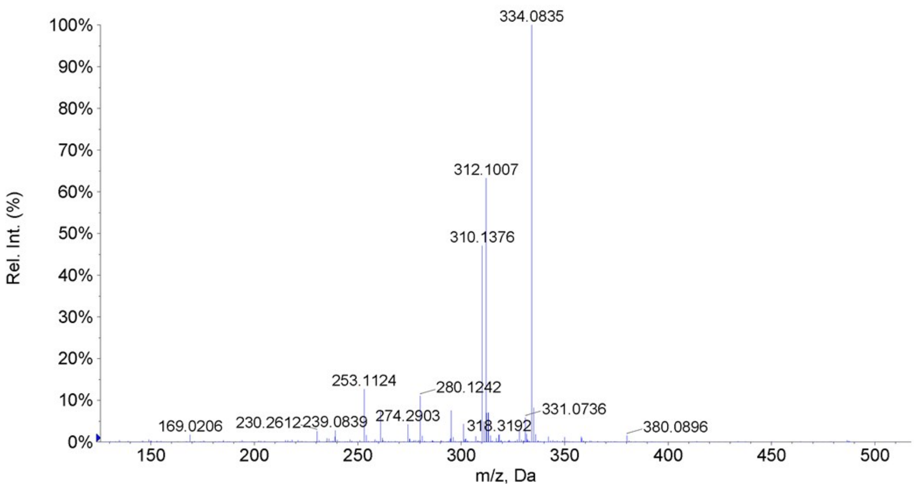

Fig.S4. ESI-MS spectrum of **BETC**

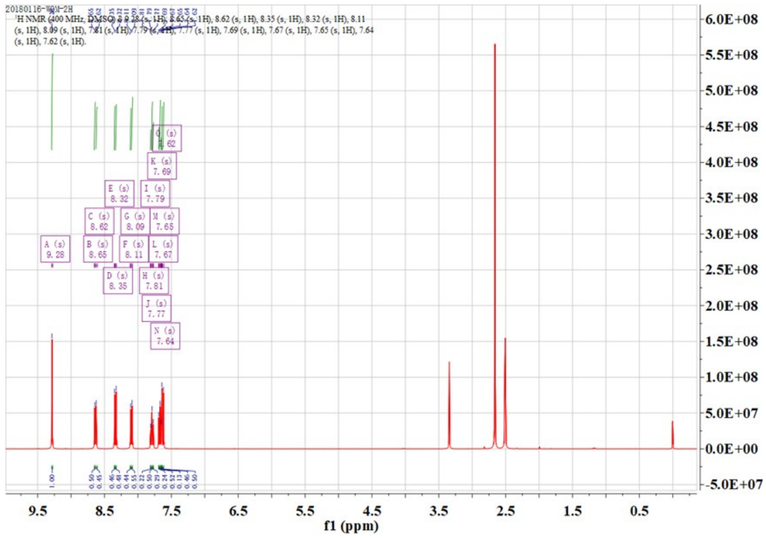

Fig.S5. ^{1}H-NMR spectrum of **BCO**

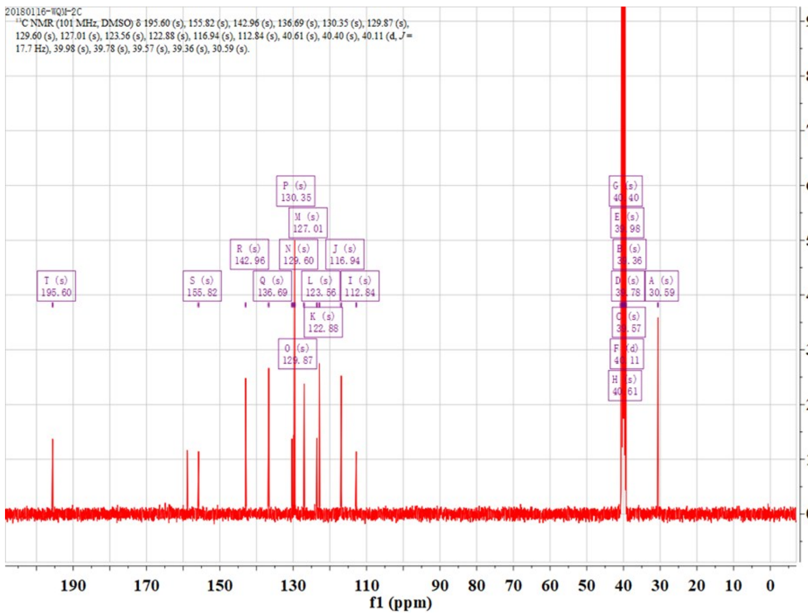

Fig.S6. ^{13}C-NMR spectrum of **BCO**

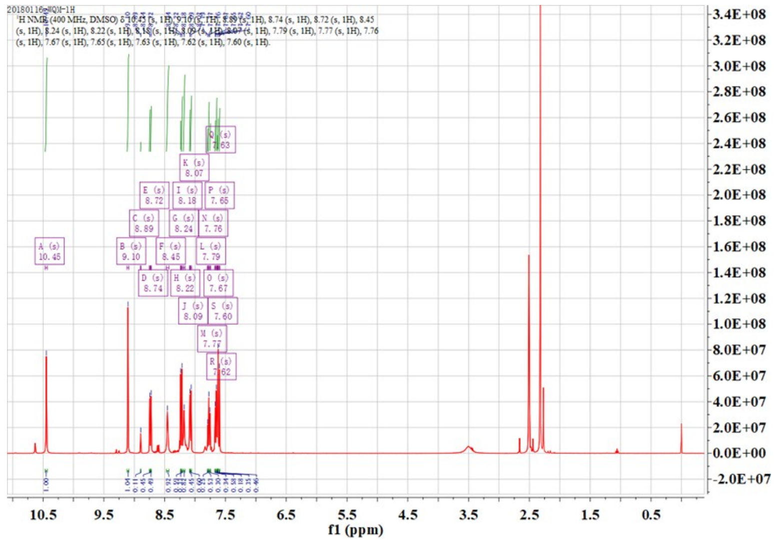

Fig.S7. ^{1}H-NMR spectrum of **BETC**

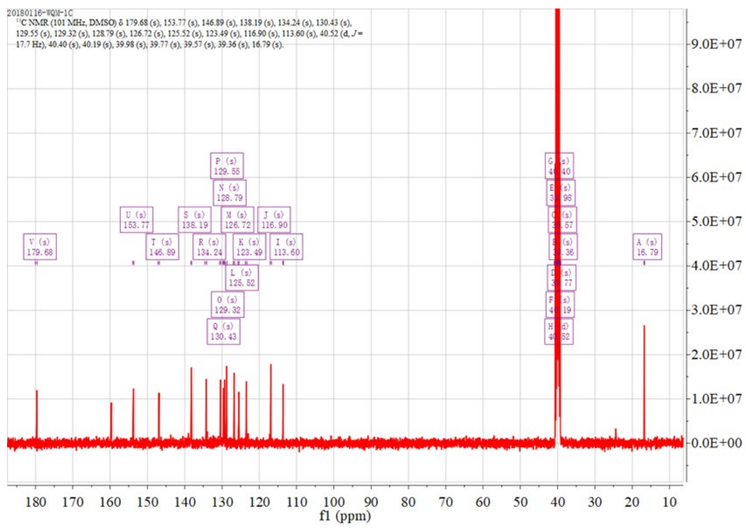

Fig.S8. ^{13}C-NMR spectrum of **BETC**

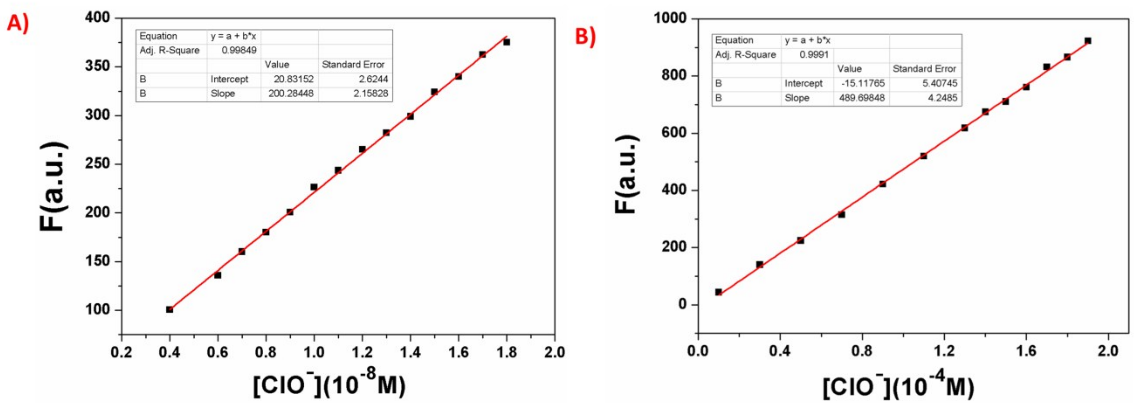

Fig S9. Fluorescent emissions pectra of **BCO** & **BETC** (1.0 μM) in the presence of ClO^{-} .(A) for **BCO**; (B) for **BETC**.

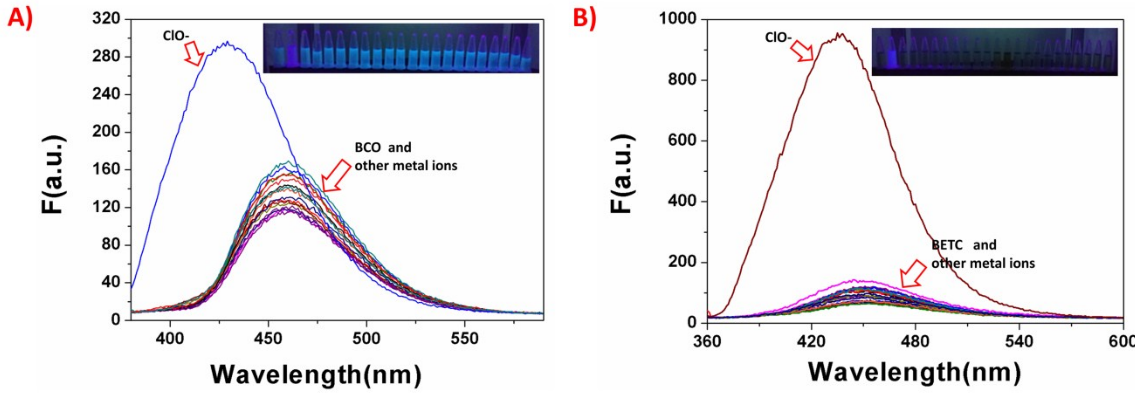

Fig S10**.** (a)Fluorescence emission spectrum for **BCO** (1.0 *u*M) and different metal ions (λ_{ex} = 372 nm).Inset: The visible fluorescence changes upon Uv irradiation. (b) Fluorescence emission spectrum for **BETC** (1.0 *u*M) and different metal ions (λ_{ex} = 350 nm). Inset: The visible fluorescence changes upon Uv irradiation.

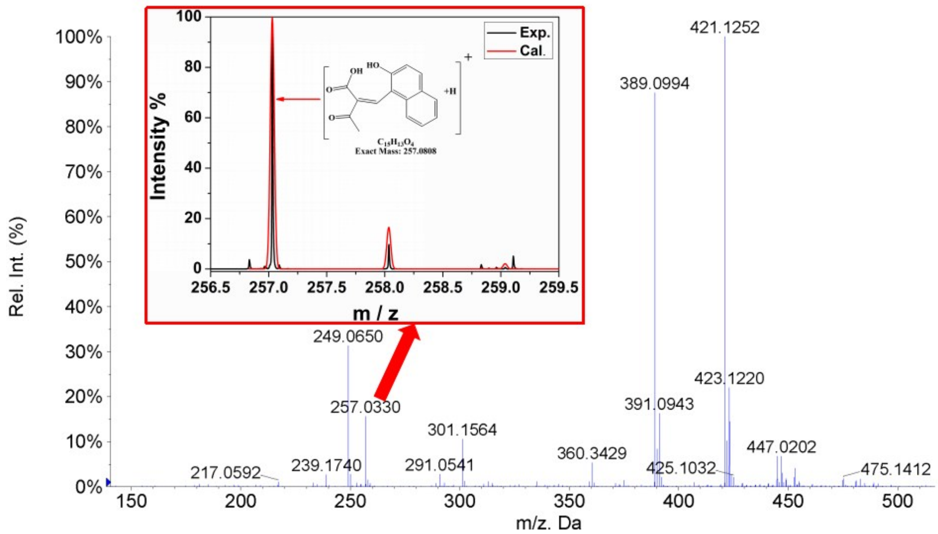

Fig S11. ESI mass spectra of **BETC** upon addition of excess ClO^-.

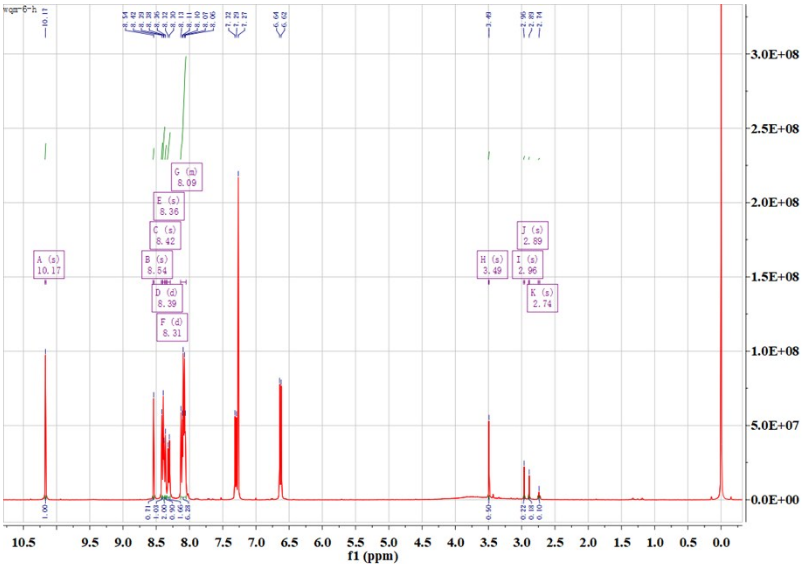

Fig S12. [1]H-NMR spectrum of **NOA**

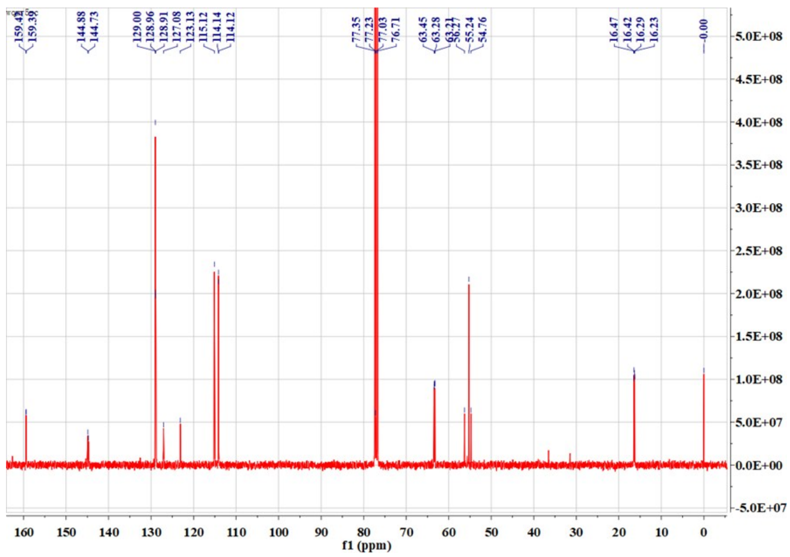

Fig S13. [13]C-NMR spectrum of **NOA**

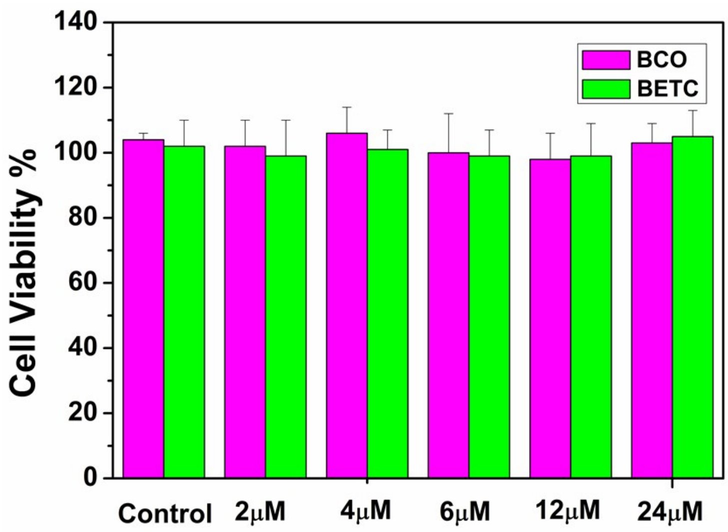

Fig. S14. The cell viability incubated with **BCO** & **BETC** at various contrations (0, 2, 4, 6, 12 and 24 μM). The experiments were repeated three times and the data were shown as mean value(±SD).

Table S1 Compared with other reported methods

LOD / nM	Linear range/μM	Response Time/S	Application	Reaction media	Reference
5.86	0-40	135	Living cells imaging	Water	[22]
8.2	0-100	1200	Living cells imaging	Water	[23]
———	0.5-5	———	Living cells imaging	Methanol:PBS (5:5,*v*/*v*) pH7.4	[25]
0.027	0-0.003	3	Living cells imaging	PBS pH 7.4	[27]
0.43	1-10	30	Living cells imaging	EtOH:PBS (1:9,*v*/*v*) pH 7	[30]
———	1-7	60	Living cells imaging	PBS:DMSO (1:9,*v*/*v*) pH 7.4	[32]
77.82	0-200.96	16	Living cells imaging	PBS pH 7.4	[36]
182	0-25	120	Living cells imaging	EtOH:PBS (3:7,*v*/*v*) pH 7.4	[43]

9.6	0-55	5	Living cells imaging	$H_2O:CH_3CN$ (4:1,*v*/*v*) pH 7.4	[46]
7.0	1-10	60	Living cells imaging	EtOH:PBS (1:9,*v*/*v*) pH 7.3	[47]
210	0-18	120	Living cells imaging	EtOH:PBS (1:9,*v*/*v*) pH 7.4	[45]
154	0-70		Living cells imaging		This work
32	0-20		Living cells imaging		This work