Electronic Supplementary Information

An ESIPT-based colorimetric and fluorescent probe with large Stokes shift for sensitive detection of hypochlorous acid and its bioimaging in cells

Haixian Ren, [a,b] Fangjun Huo, [c] Caixia Yin [a,b]*

[a] *Department of Chemistry, Xinzhou Teachers University, Xinzhou 034000, China.Key*

[b] *Laboratory of Chemical Biology and Molecular Engineering of Ministry of Education, Institute of Molecular Science, Shanxi University, Taiyuan 030006, China*

[c] *Research Institute of Applied Chemistry, Shanxi University, Taiyuan 030006, China*

**Corresponding author: C.X. Yin, E-mail: yincx@sxu.edu.cn, Tel/Fax: +86-351-7011022.*

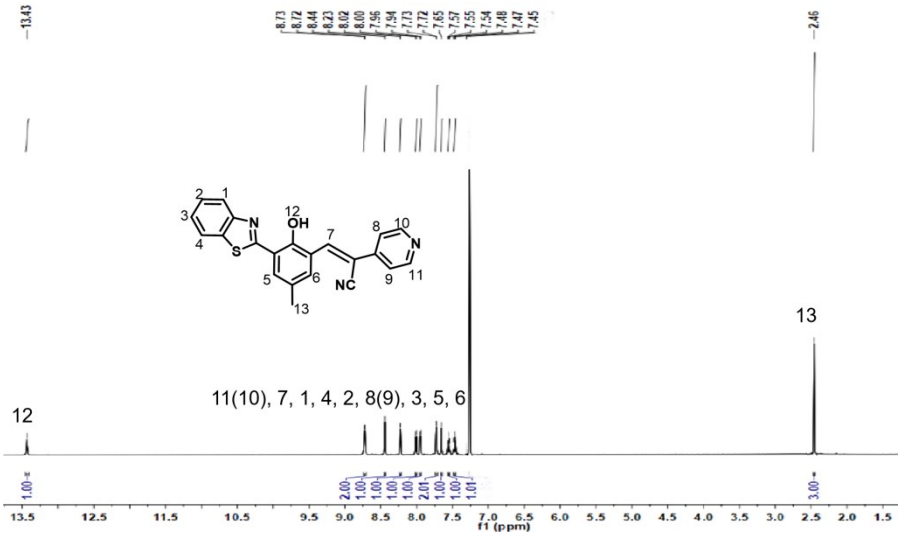
Contents:

I: Material and Methods

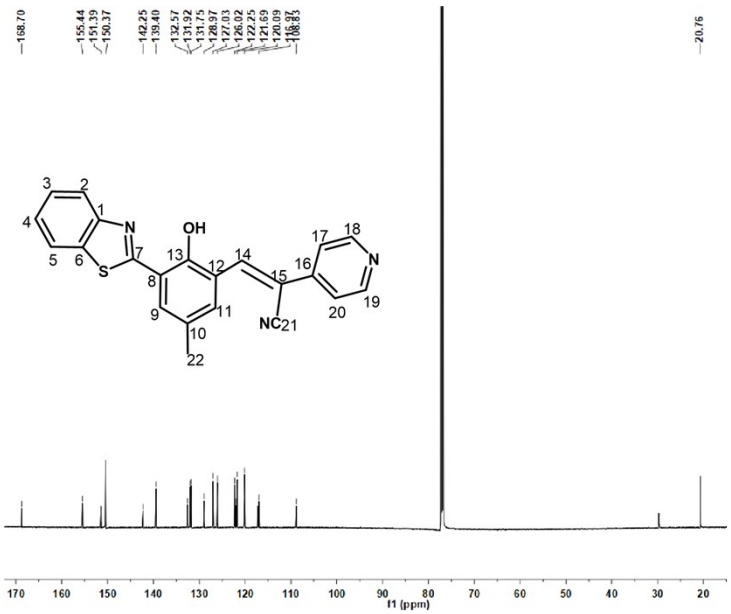
Materials and Physical measurements

All the regents and solvents were commercially available. Naphthalene-1,6-diol and ethyl acetoacetate were got from Aladdin Industrial Corporation (Shanghai, China). Amino acids were got from Shanghai Experiment Reagent Co., Ltd (Shanghai, China). Fluorescence spectra were recorded by HITACHI F-7000 fluorescence spectrophotometer. Ultraviolet-visible spectra were detected by Hitachi U-3900 UV spectrophotometer. ^{1}H NMR and ^{13}C NMR data were obtained by Bruker AVANCE-600 MHz NMR spectrometers (Bruker, Billerica, MA). HR-MS determinations were implemented on an AB SCIEX Tripple TOF5600 Instruments. Nikon Ti-S microsystem was used to evaluate the response of probe **JBD** to HClO in Hela cells.

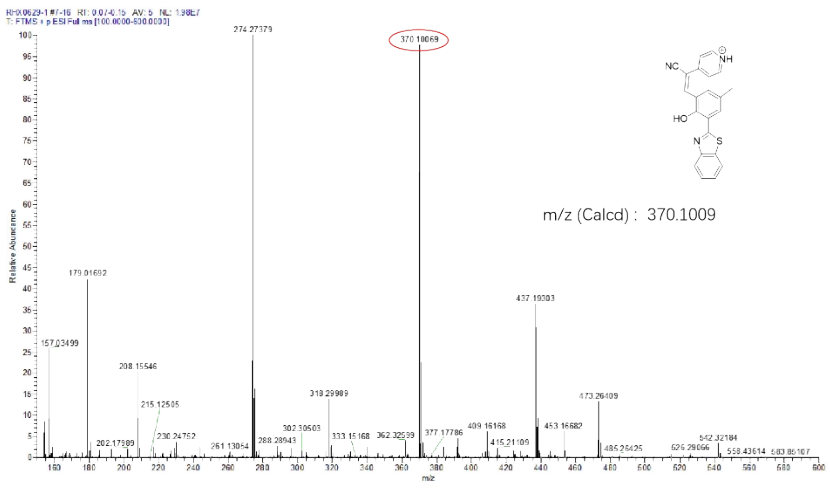
Figure S1



^{1}H-NMR of the probe **JBD**



^{13}C-NMR of the probe **JBD**



HR-MS of the probe **JBD**

Figure S2

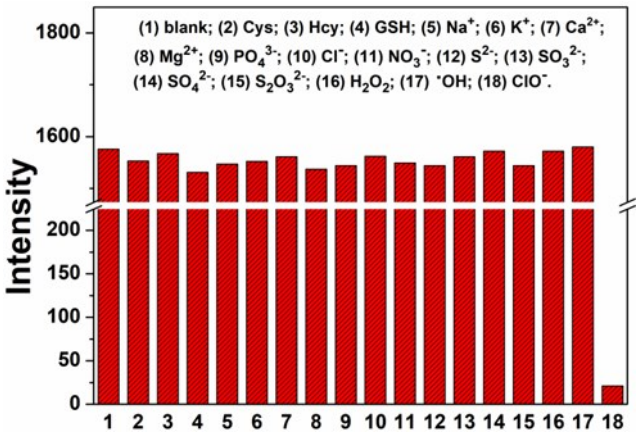
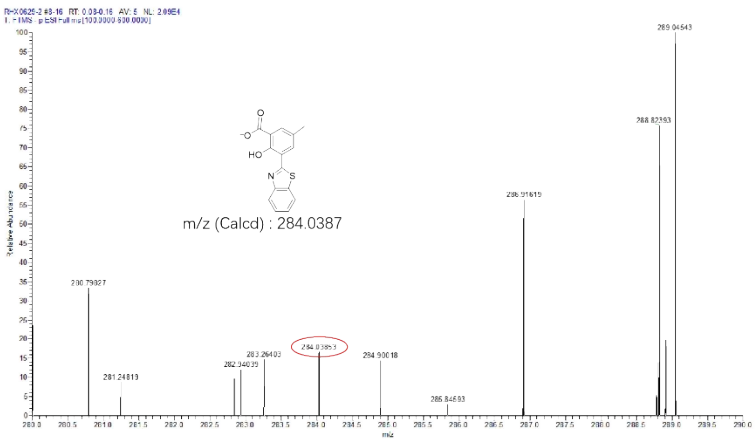


Figure S3



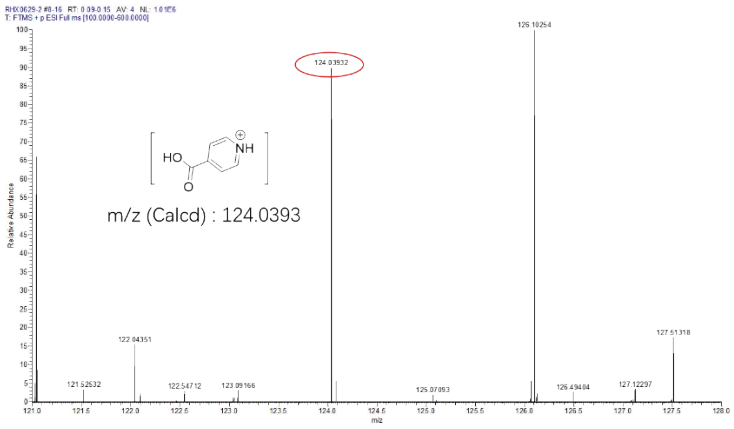
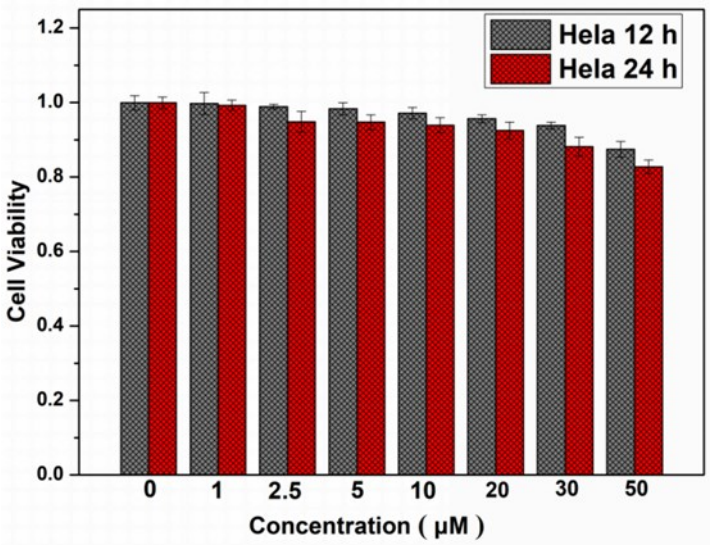

125.10254
124.03932
HO
NH
O
m/z (Calcd) : 124.0393
Relative Abundance
122.04351
121.52532
122.54712
123.09166
125.07093
126.49484
127.12297
127.51318
m/z

Figure S4


Hela 12 h
Hela 24 h
Cell Viability
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2.5
5
10
20
30
50
Concentration (μM)