Electronic Supplementary Material (ESI) for New Journal of Chemistry.

A High-Sensitive Ratiometric Fluorescent Probe for Imaging Endogenous Hydrogen Sulfide in Cells

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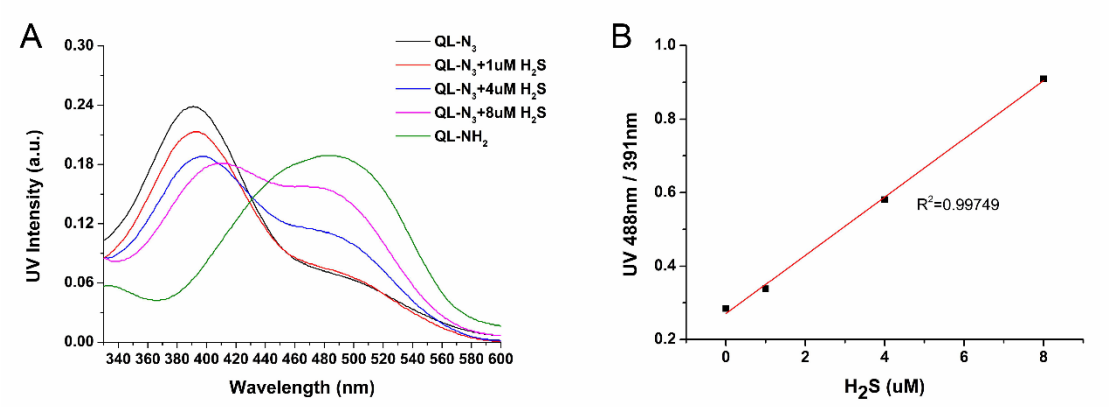


Fig .S1 (A) UV absorption spectra of QL-NH_2 (10 μM), QL-N_3 (10 μM) reacting with hydrogen sulfide (0 μM, 1 μM, 4 μM, 8 μM). (B) The relationship between $I_{605\ nm}$ / $I_{525\ nm}$ and the concentration of H_2S.

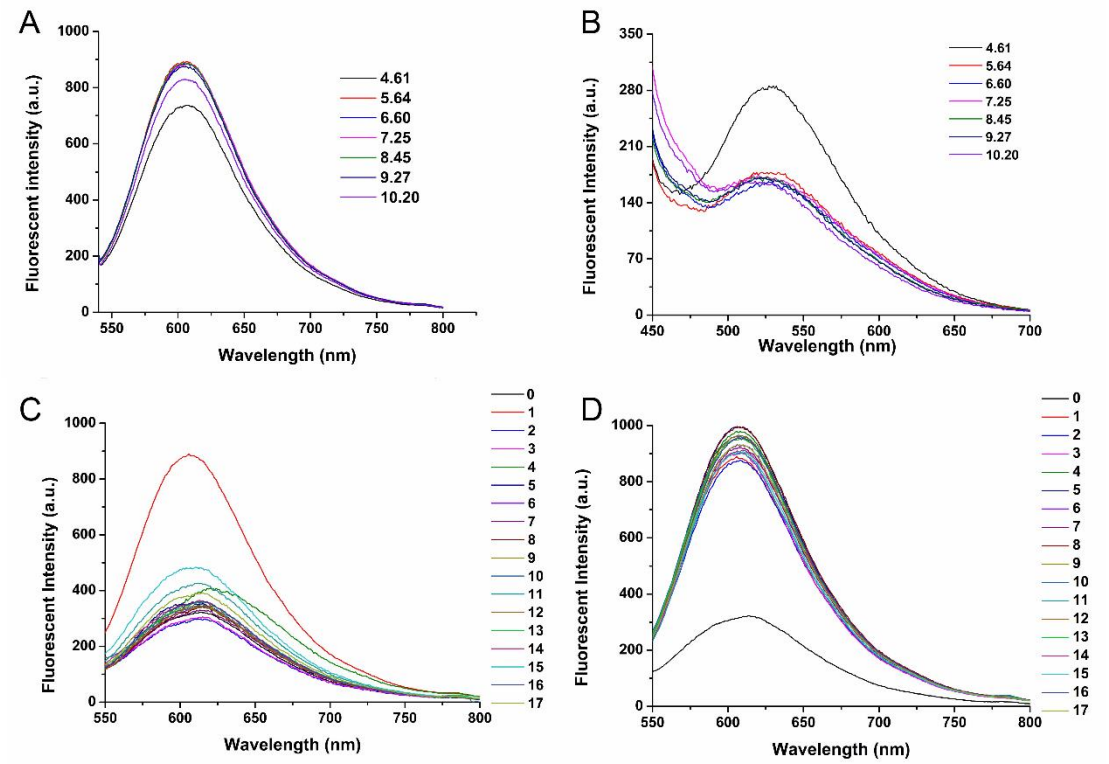
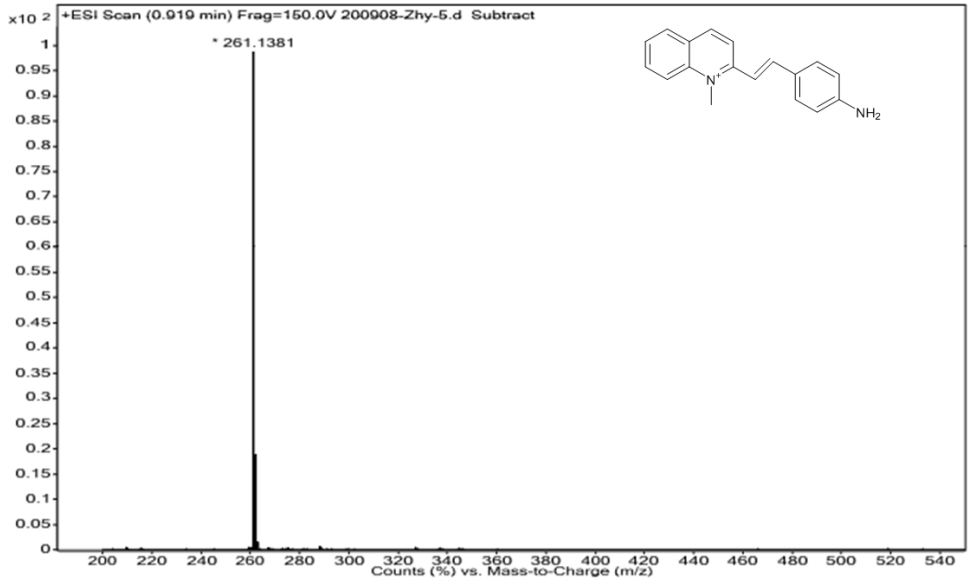
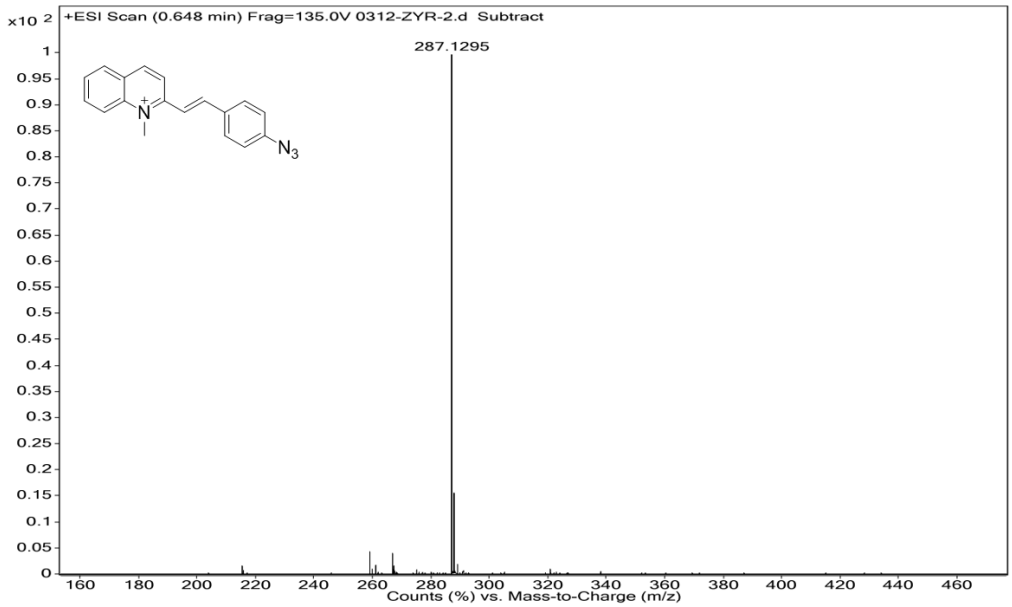
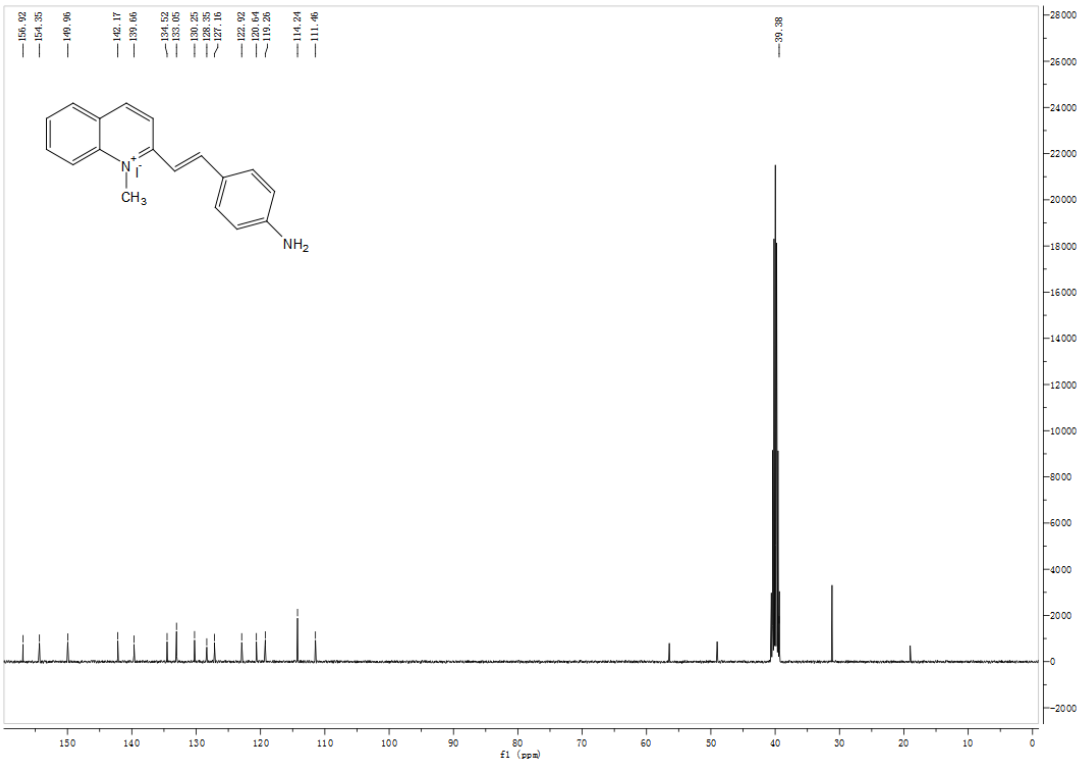


Fig .S2 (A) After excitation at 385 nm, the pH stability of fluorescence emission intensity of QL-N_3 (10 μM) and hydrogen sulfide (10 μM) at 525 nm. (B) After excitation at 385 nm, the pH stability of fluorescence emission intensity of free QL-N_3 (10 μM) at 525 nm. (C) Fluorescence emission spectrum of QL-N_3 selective test for potential interference factors (Ex: 521 nm). (D) Fluorescence emission spectrum of interference test of QL-N_3 and hydrogen sulfide on potential interference factors (Ex: 385 nm).



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142.17
139.66
134.52
133.65
130.25
128.35
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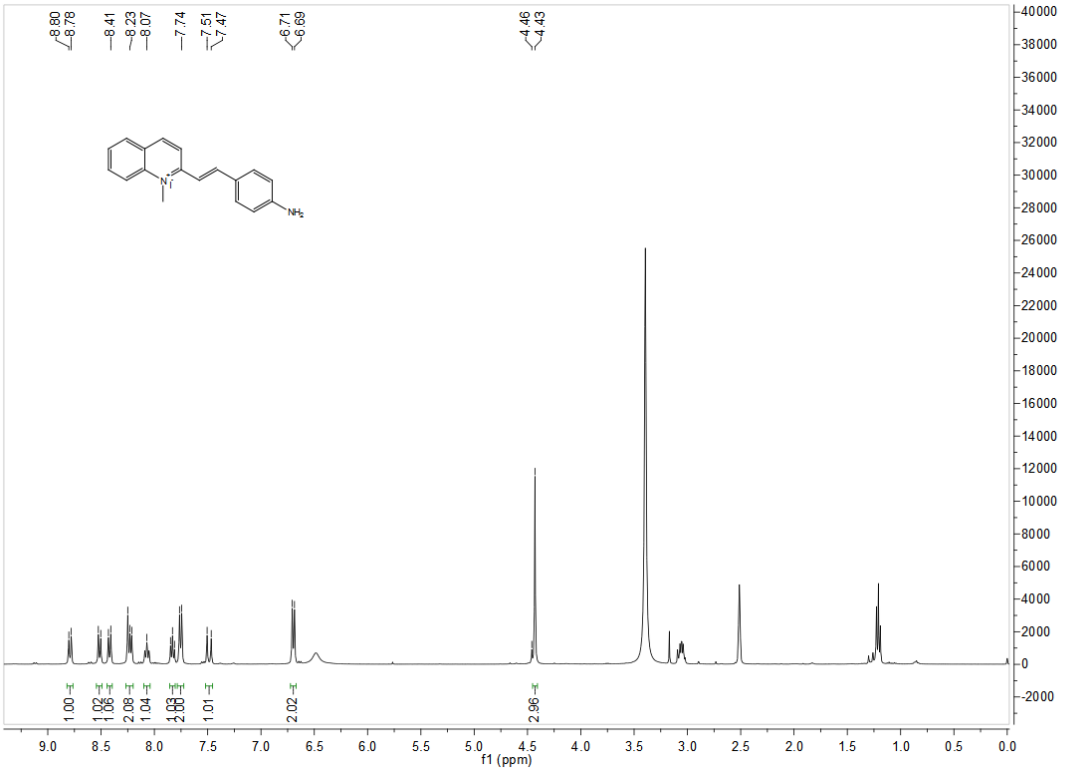
39.38
N+
I-
CH3
NH2
f1 (ppm)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8.23
8.07
7.74
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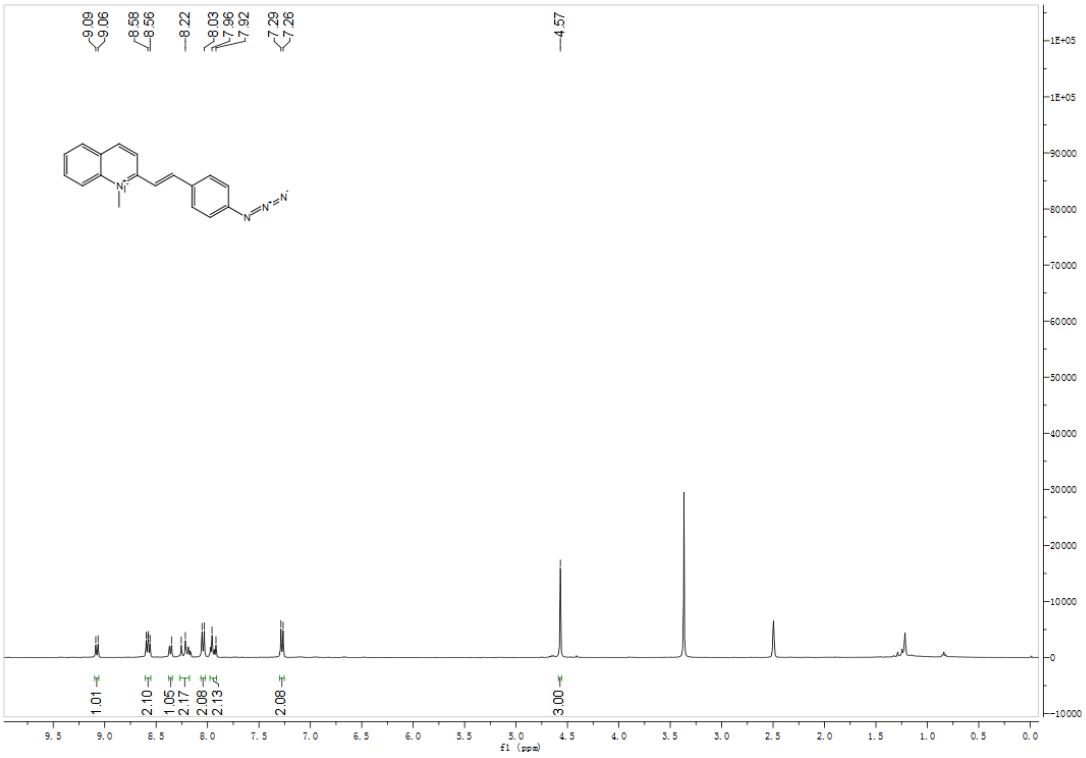
7.47
6.71
6.69
4.46
4.43
1.00
1.02
1.06
2.08
1.04
1.03
2.00
1.01
2.02
2.96
f1 (ppm)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8.22
8.03
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7.92
7.29
7.26
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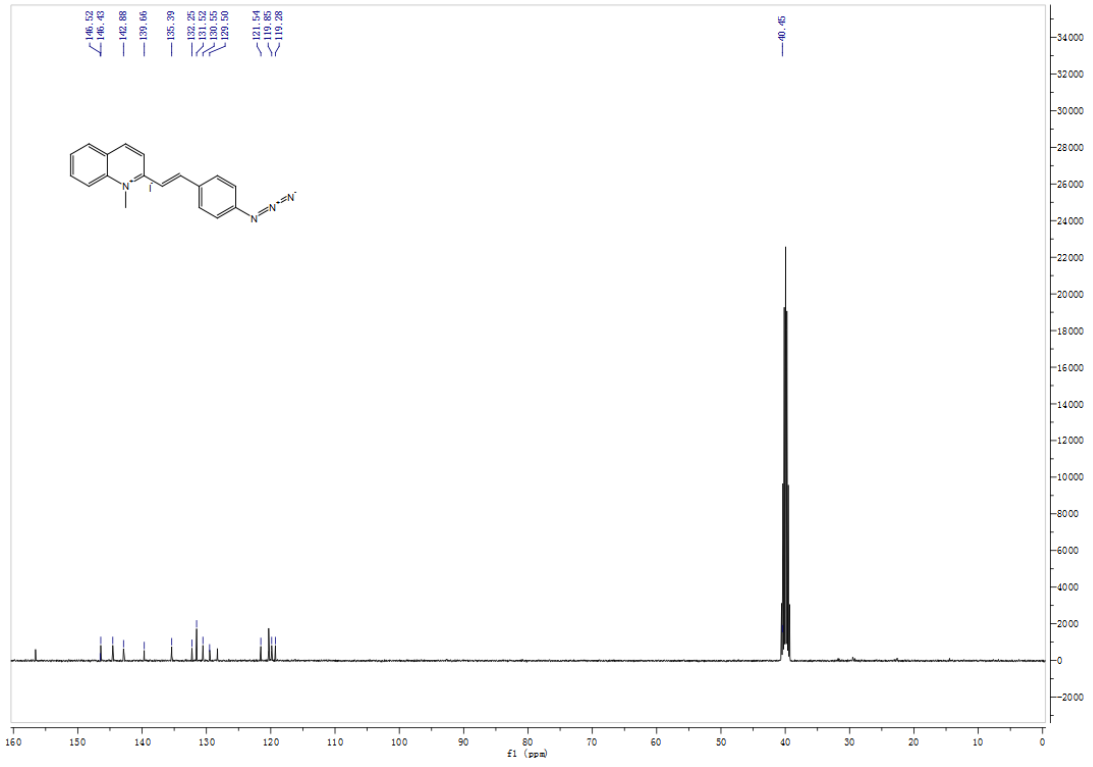
2.08
2.13
2.08
3.00
f1 (ppm)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135.39
132.25
131.52
130.55
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121.54
119.85
119.28
40.45
f1 (ppm)