

Supporting Information

- Figure S1.** ^1H NMR (600 MHz, DMSO- d_6) spectrum of compound **1**
- Figure S2.** ^{13}C NMR (150 MHz, DMSO- d_6) spectrum of compound **1**
- Figure S3.** HMQC (DMSO- d_6) spectrum of compound **1**
- Figure S4.** ^1H - ^1H COSY (DMSO- d_6) spectrum of compound **1**
- Figure S5.** HMBC spectrum (DMSO- d_6) of compound **1**
- Figure S6.** HRESIMS spectrum of compound **1**
- Figure S7.** ^1H NMR (600 MHz, CDCl_3) spectrum of compound **3**
- Figure S8.** ^{13}C NMR (150 MHz, CDCl_3) spectrum of compound **3**
- Figure S9.** HMQC (CDCl_3) spectrum of compound **3**
- Figure S10.** ^1H - ^1H COSY (CDCl_3) spectrum of compound **3**
- Figure S11.** HMBC (CDCl_3) spectrum of compound **3**
- Figure S12.** NOESY (CDCl_3) spectrum of compound **3**
- Figure S13.** HRESIMS spectrum of compound **3**
- Figure S14.** ^1H NMR (600 MHz, CDCl_3) spectrum of compound **4**
- Figure S15.** ^{13}C NMR (150 MHz, CDCl_3) spectrum of compound **4**
- Figure S16.** HMQC (CDCl_3) spectrum of compound **4**
- Figure S17.** ^1H - ^1H COSY (CDCl_3) spectrum of compound **4**
- Figure S18.** HMBC (CDCl_3) spectrum of compound **4**
- Figure S19.** HRESIMS spectrum of compound **4**
- Figure S20.** ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **13a-1/13b-1**
- Figure S21.** ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-1/13b-1**
- Figure S22.** ESIMS spectrum of compounds **13a-1/13b-1**
- Figure S23.** ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **13a-2/13b-2**
- Figure S24.** ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-2/13b-2**
- Figure S25.** ESIMS spectrum of compounds **13a-2/13b-2**
- Figure S26.** ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **13a-3/13b-3**
- Figure S27.** ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-3/13b-3**
- Figure S28.** ESIMS spectrum of compounds **13a-3/13b-3**
- Figure S29.** ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **14a/14b**
- Figure S30.** ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **14a/14b**
- Figure S31.** ESIMS spectrum of compounds **14a/14b**
- Figure S32.** The determination of the absolute configuration of **1** by Marfey's Method
- S1.** The spectroscopic data of **13a-1/13b-1**, **13a-2/13b-2**, **13a-3/13b-3**, **14a/14b**

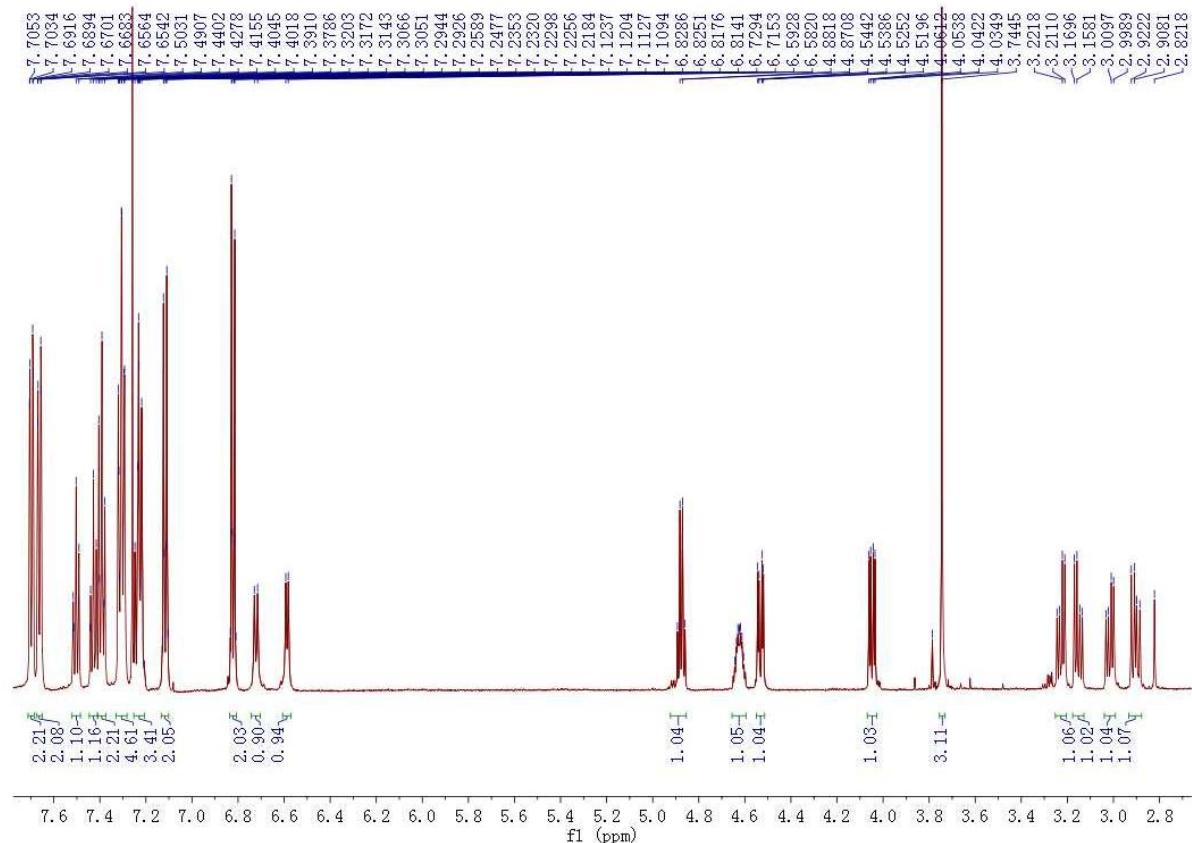
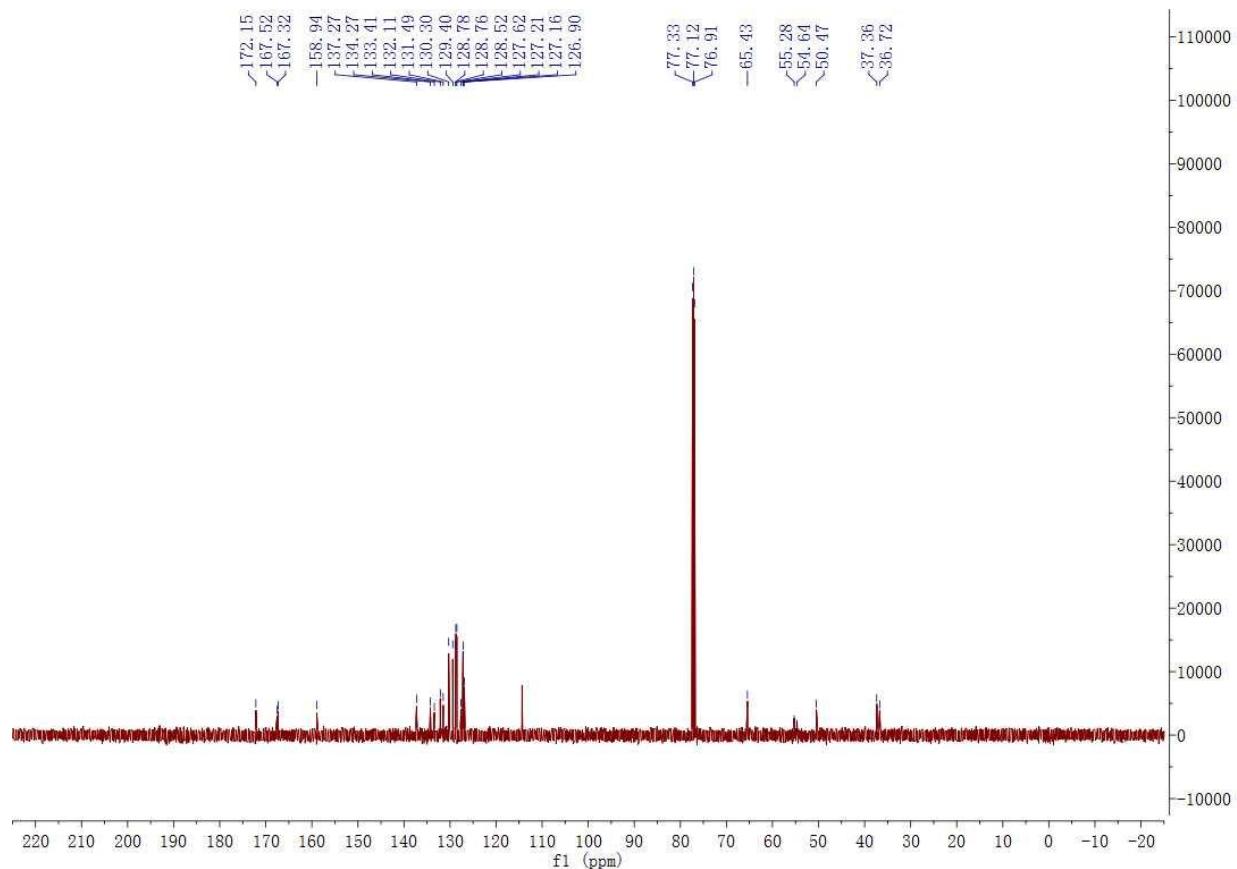
Figure S1. ^1H NMR (600 MHz, DMSO- d_6) spectrum of compound 1.**Figure S2.** ^{13}C NMR (150 MHz, DMSO- d_6) spectrum of compound 1.

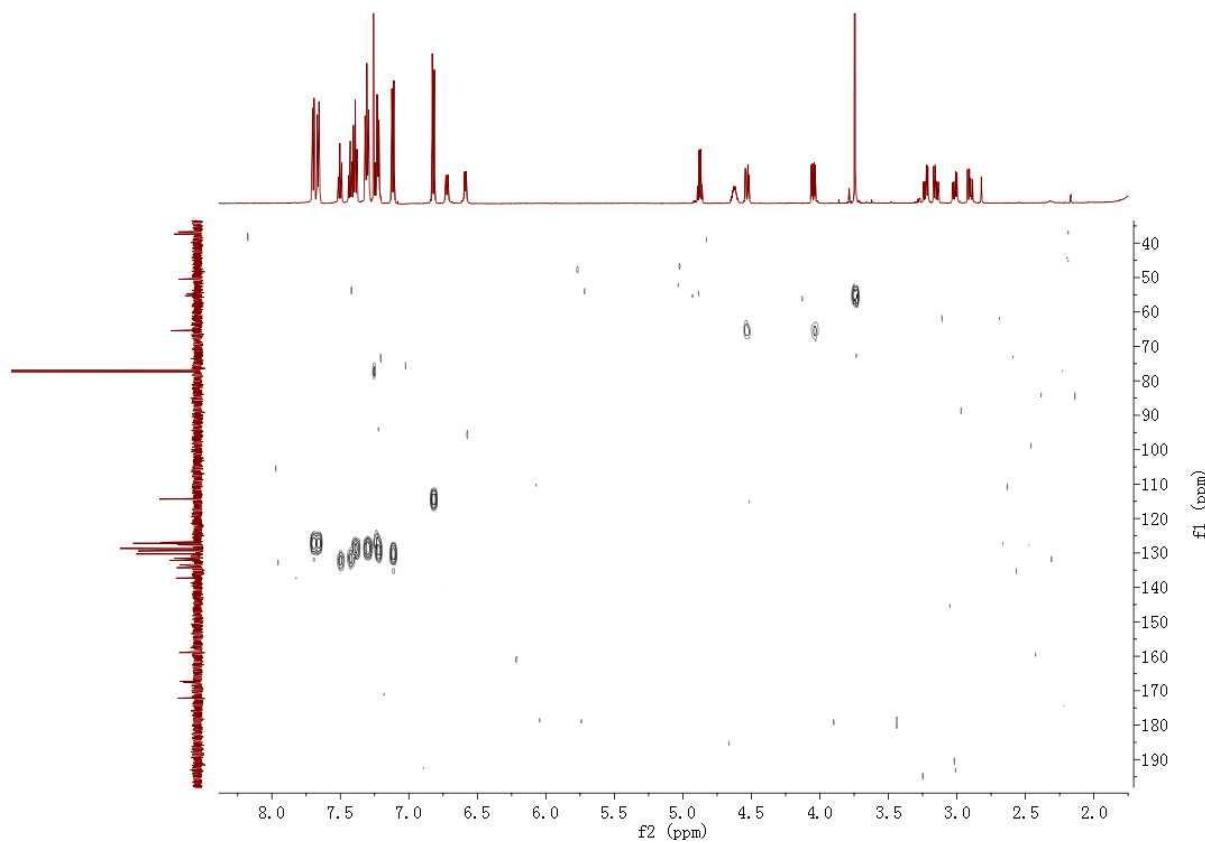
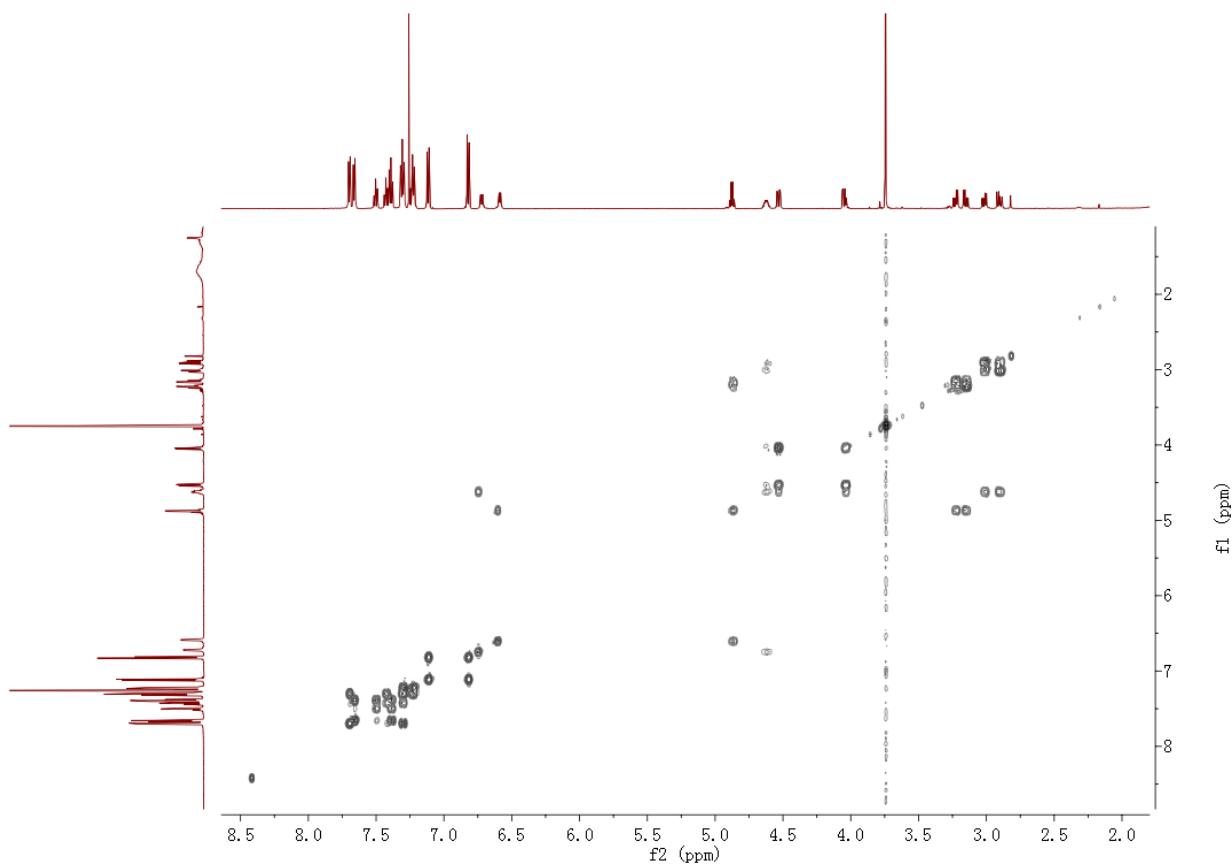
Figure S3. HMQC ($\text{DMSO}-d_6$) spectrum of compound **1**.**Figure S4.** ^1H - ^1H COSY ($\text{DMSO}-d_6$) spectrum of compound **1**.

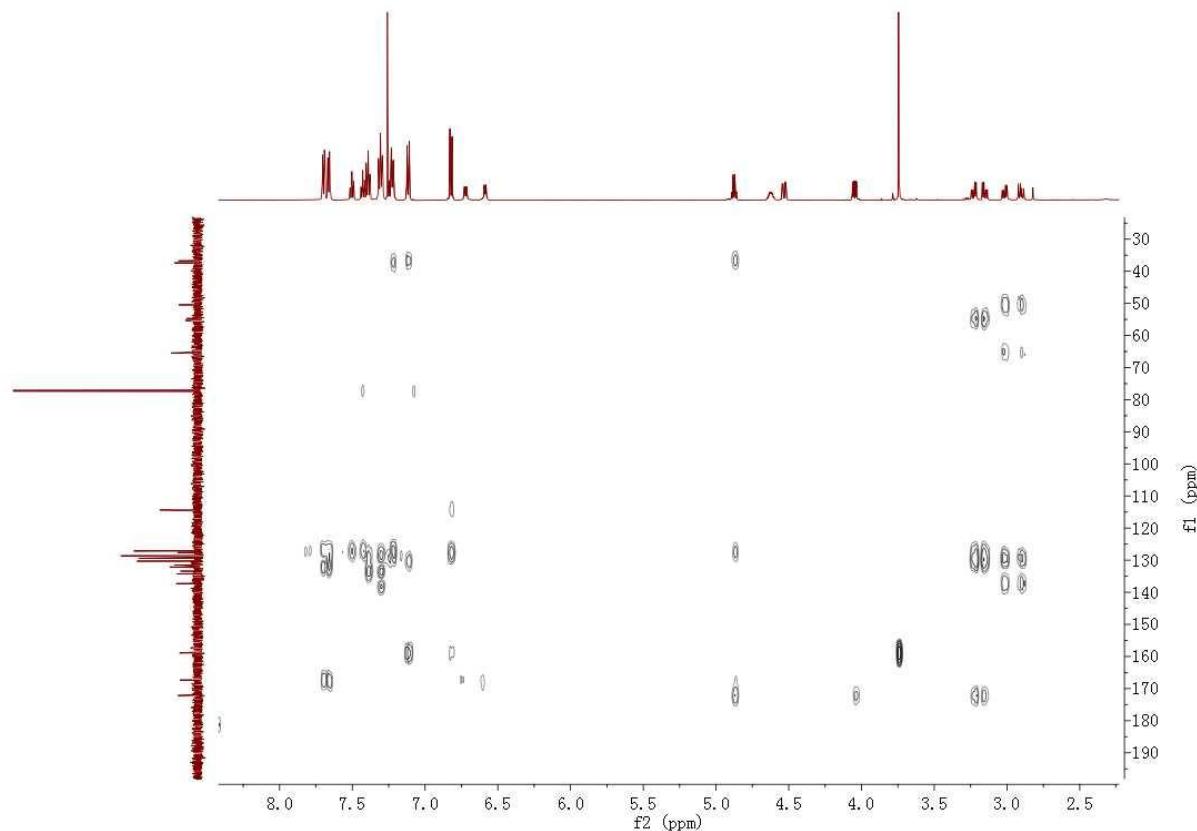
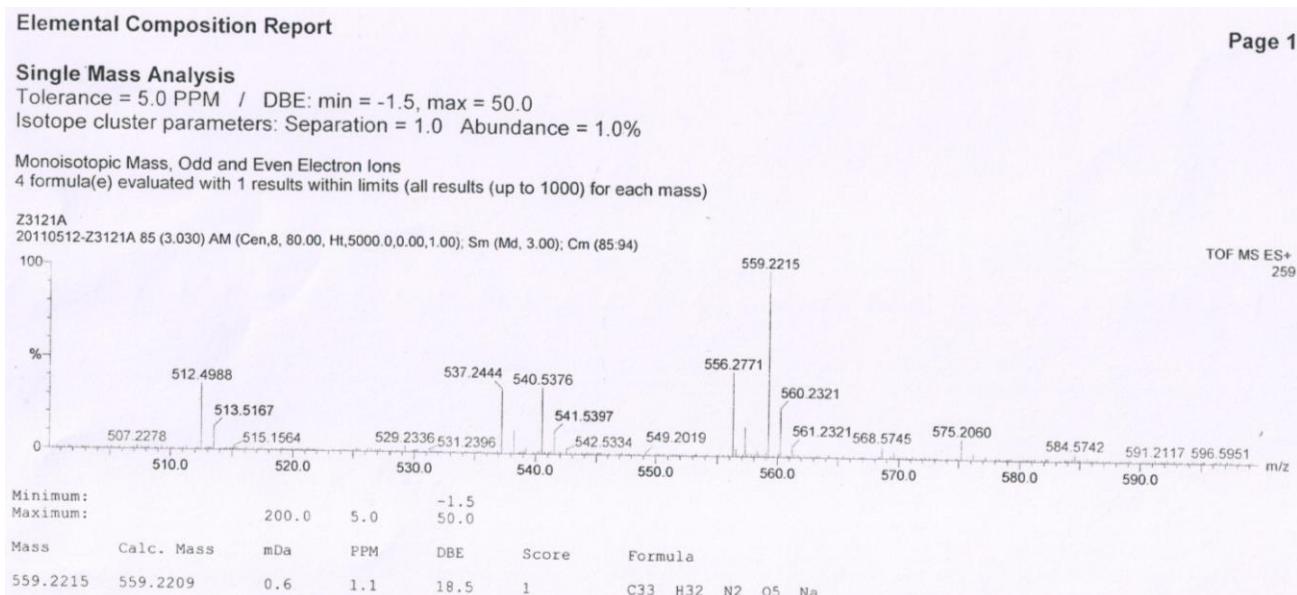
Figure S5. HMBC spectrum (DMSO-*d*₆) of compound 1.**Figure S6.** HRESIMS spectrum of compound 1.

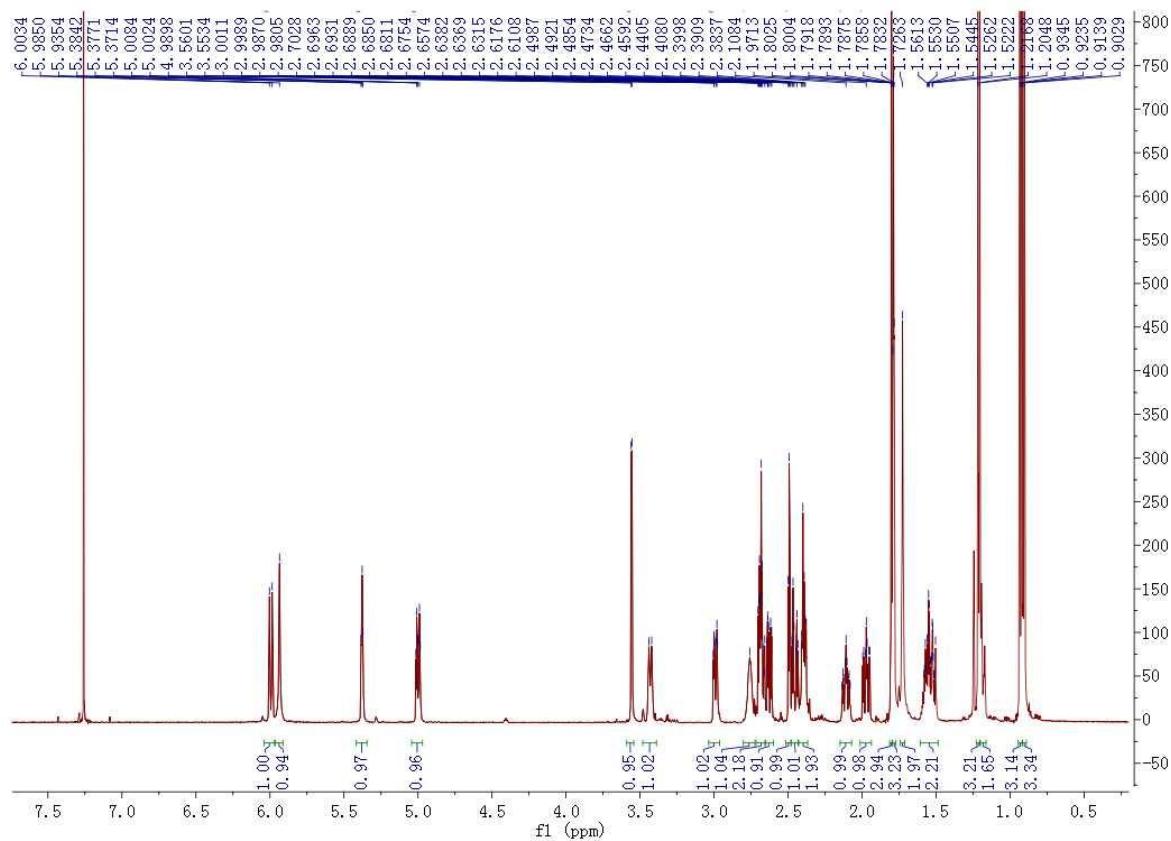
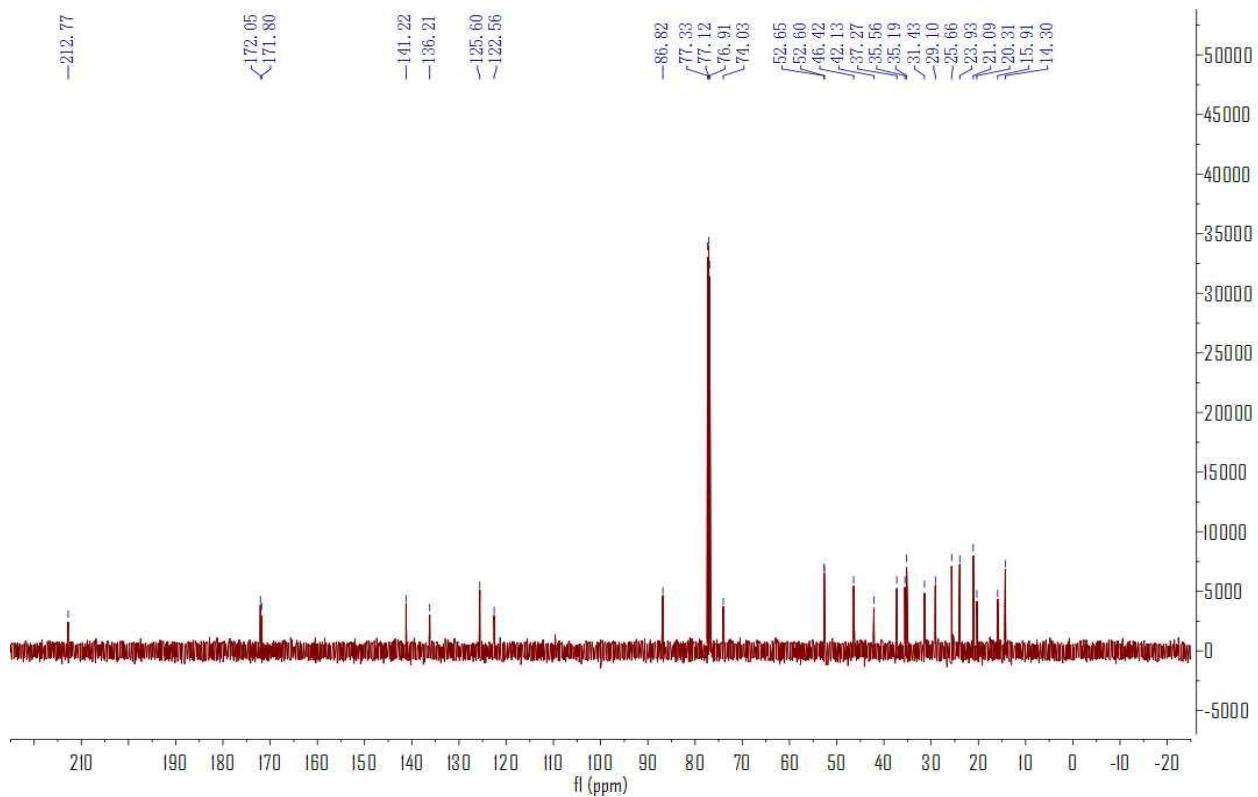
Figure S7. ^1H NMR (600 MHz, CDCl_3) spectrum of compound **3**.**Figure S8.** ^{13}C NMR (150 MHz, CDCl_3) spectrum of compound **3**.

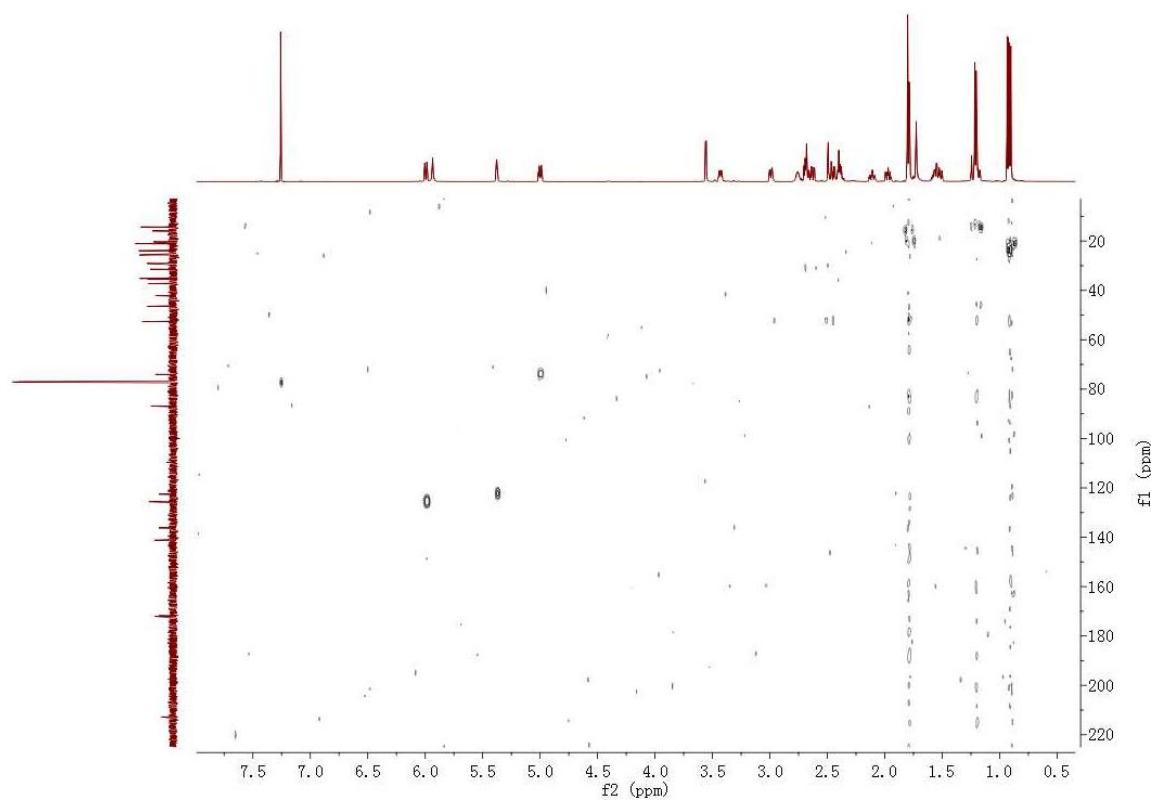
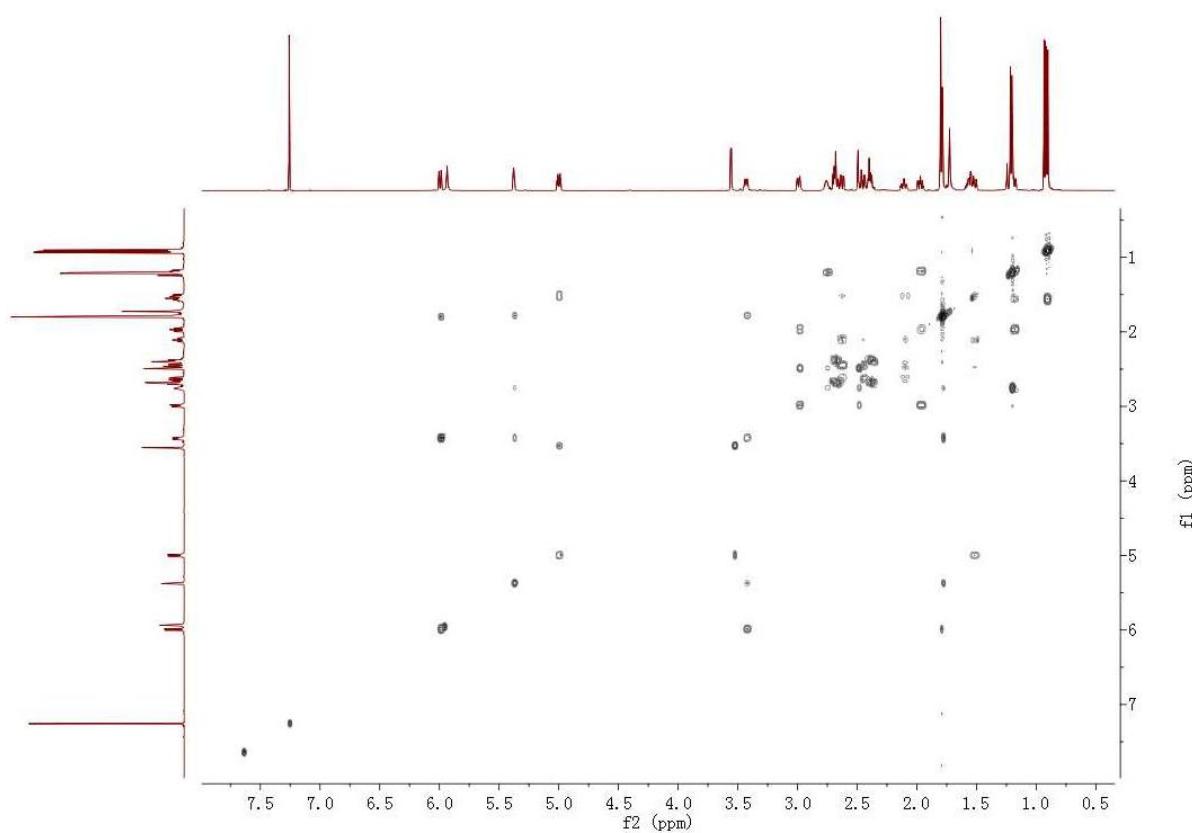
Figure S9. HMQC (CDCl_3) spectrum of compound 3.**Figure S10.** ^1H - ^1H COSY (CDCl_3) spectrum of compound 3.

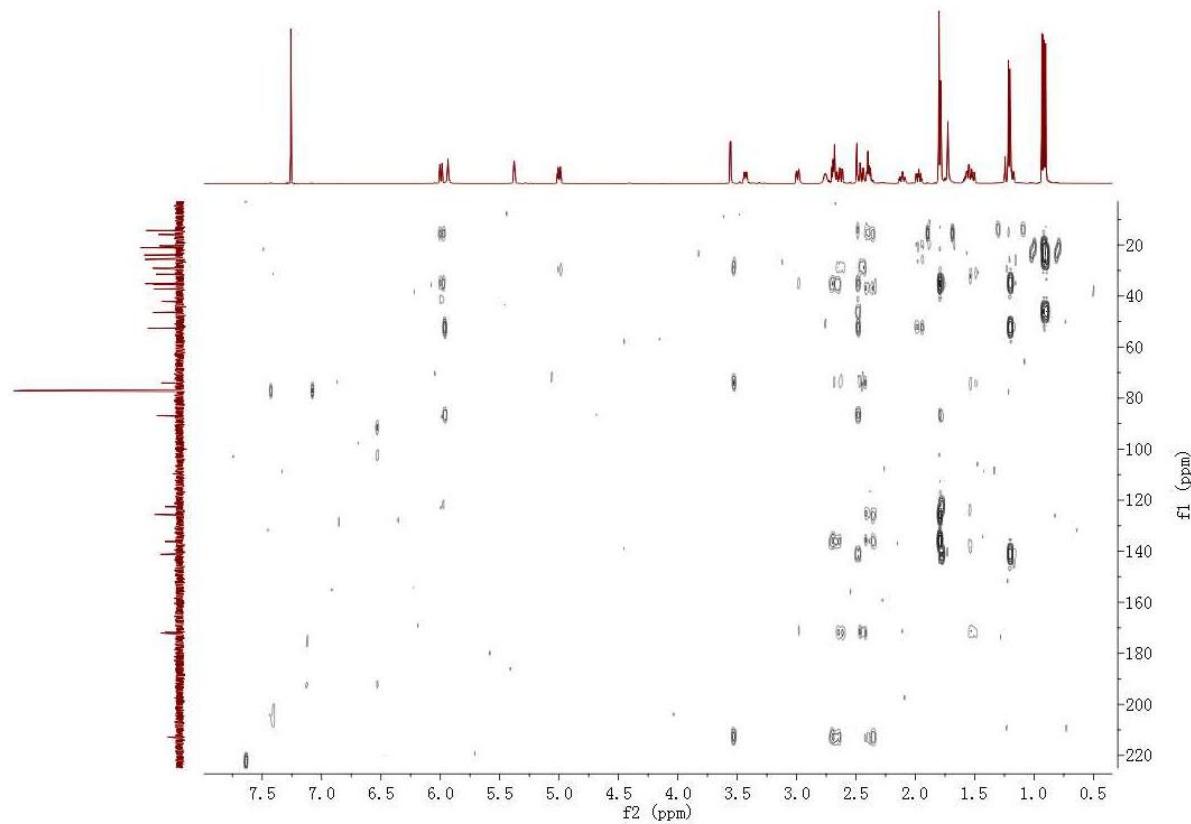
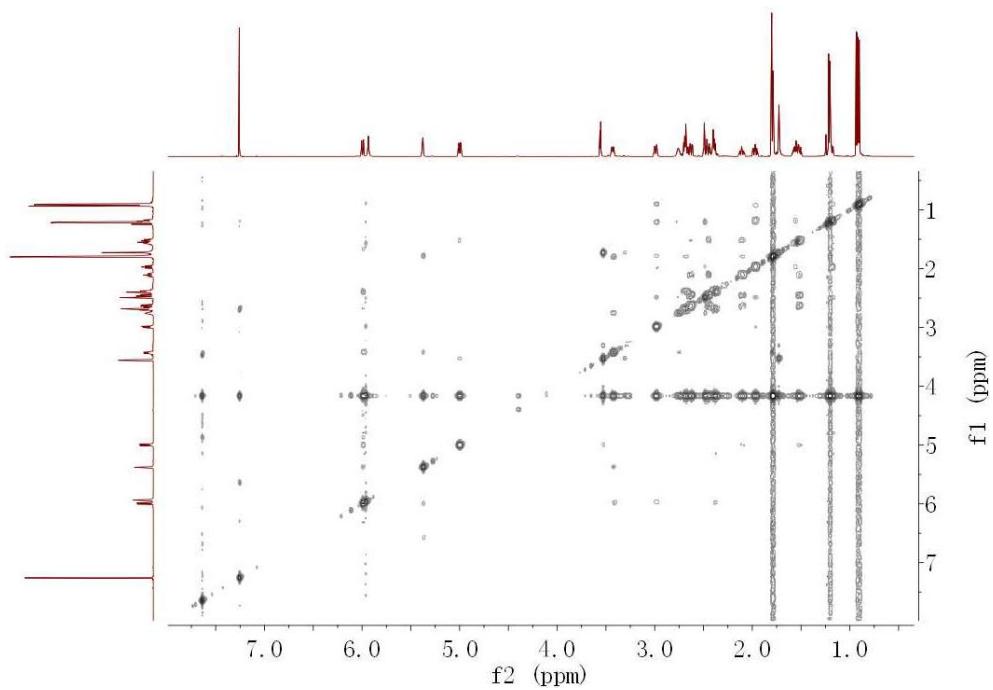
Figure S11. HMBC (CDCl_3) spectrum of compound 3.**Figure S12.** NOESY (CDCl_3) spectrum of compound 3.

Figure S13. HRESIMS spectrum of compound 3.

Elemental Composition Report

Page 1

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0
 Isotope cluster parameters: Separation = 1.0 Abundance = 1.0%

Monoisotopic Mass, Odd and Even Electron Ions
 32 formula(e) evaluated with 1 results within limits (all results (up to 1000) for each mass)

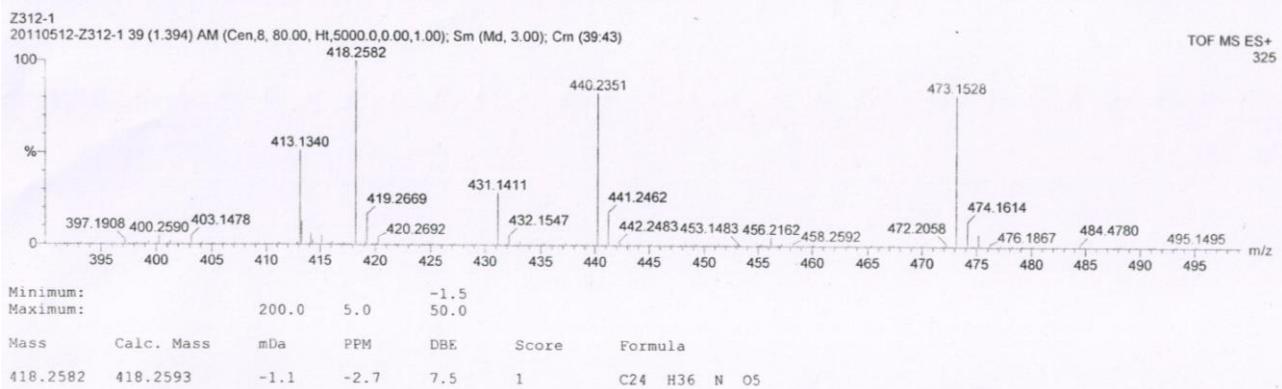
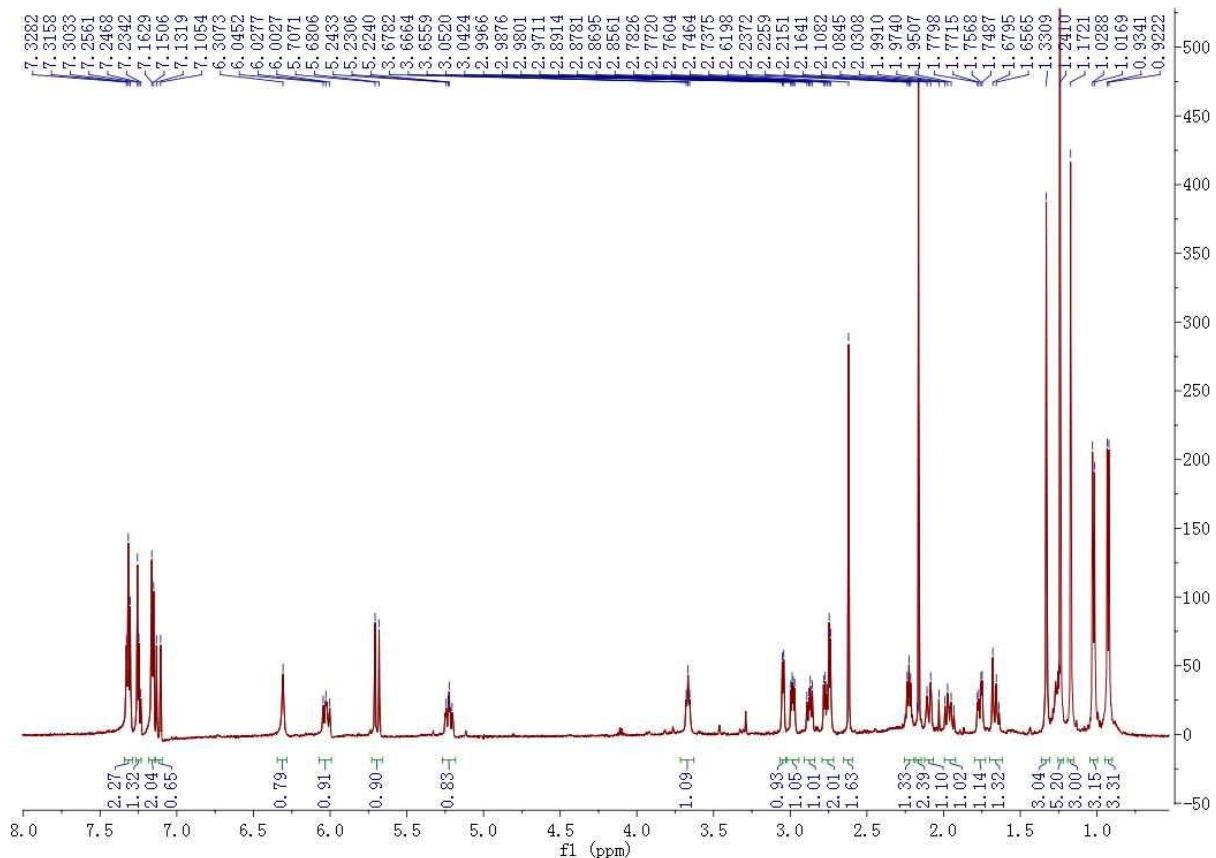
**Figure S14.** ¹H NMR (600 MHz, CDCl₃) spectrum of compound 4.

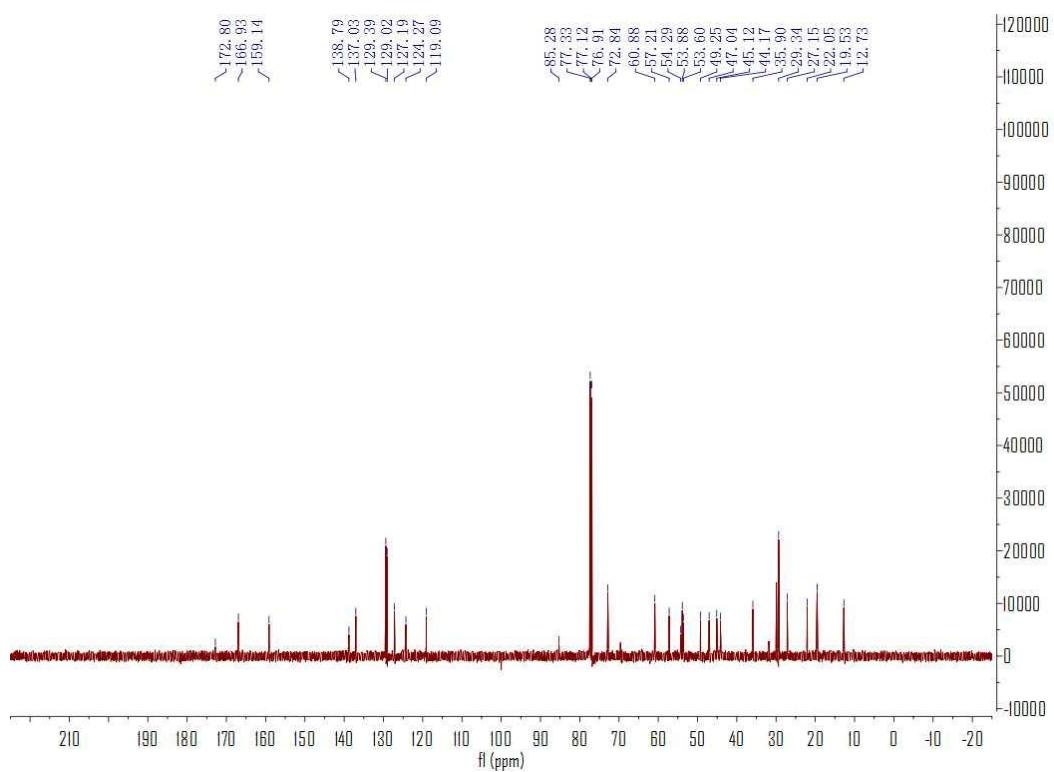
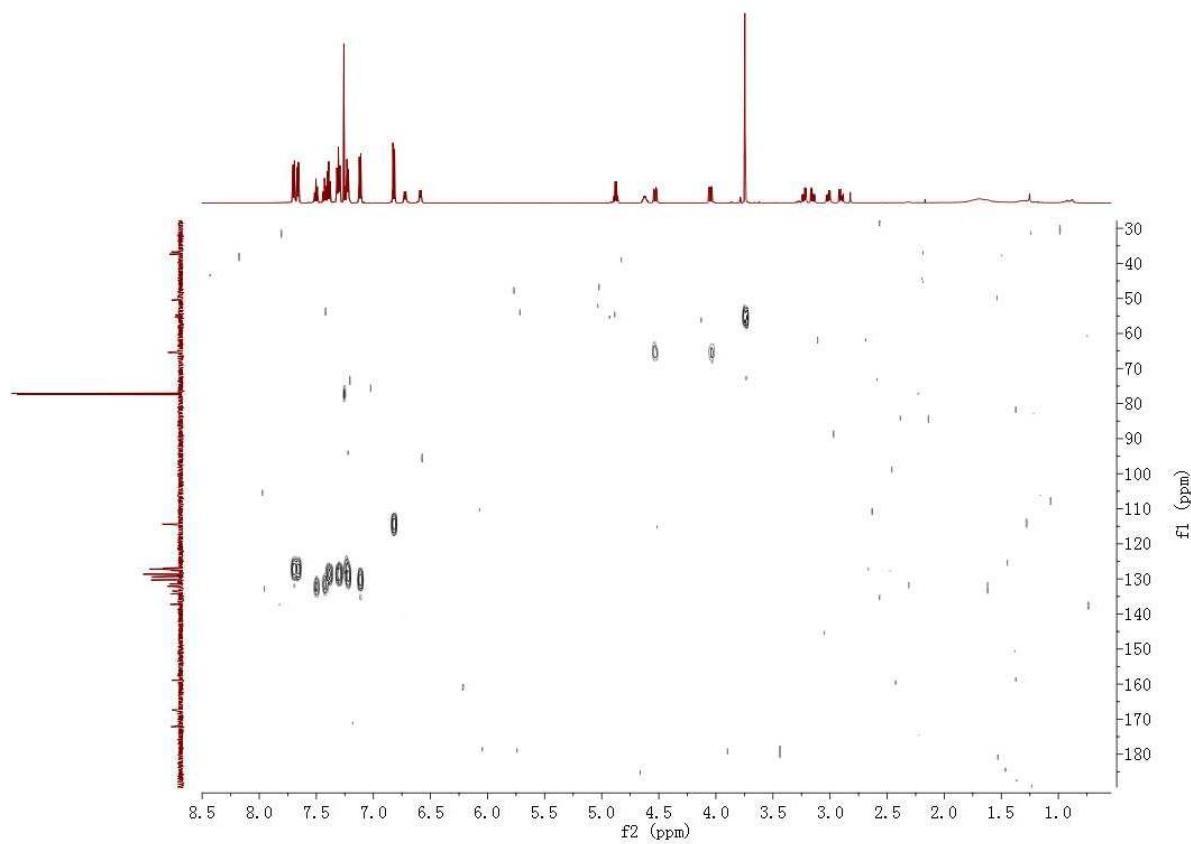
Figure S15. ^{13}C NMR (150 MHz, CDCl_3) spectrum of compound 4.**Figure S16.** HMQC (CDCl_3) spectrum of compound 4.

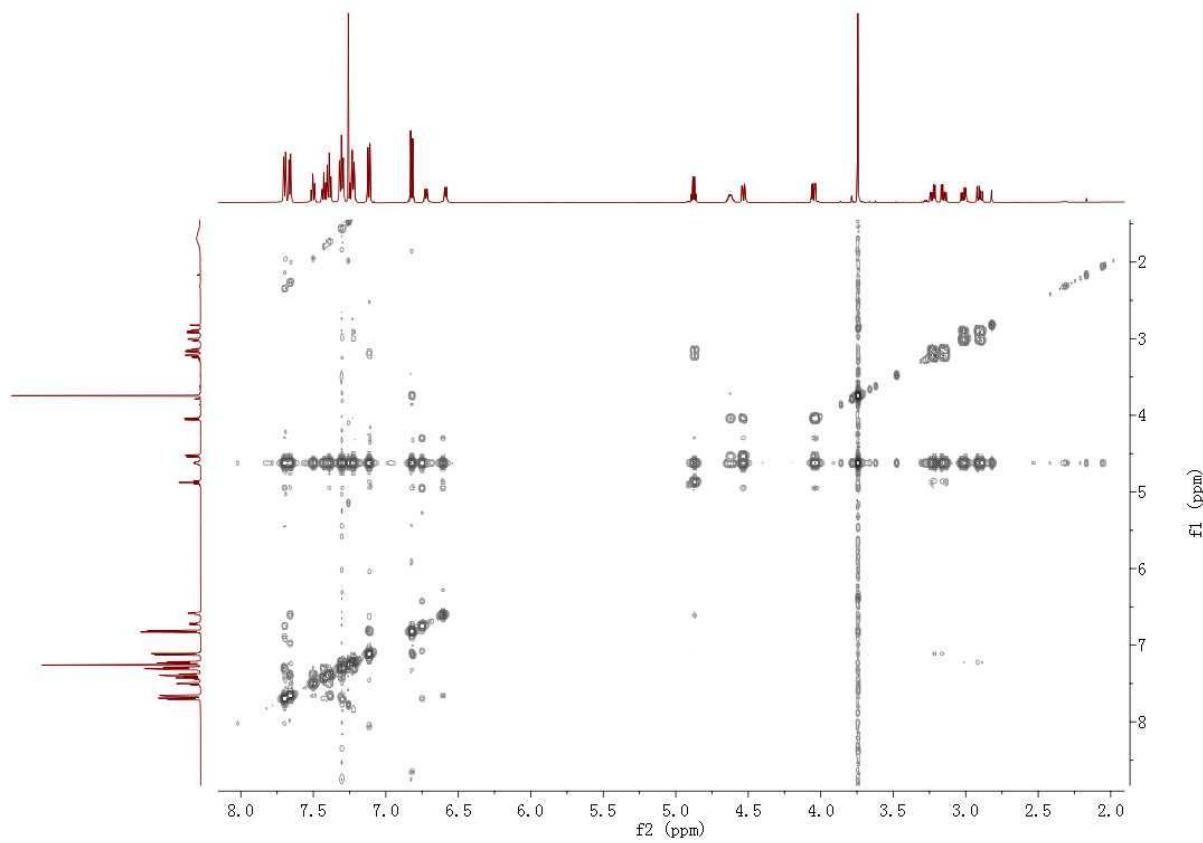
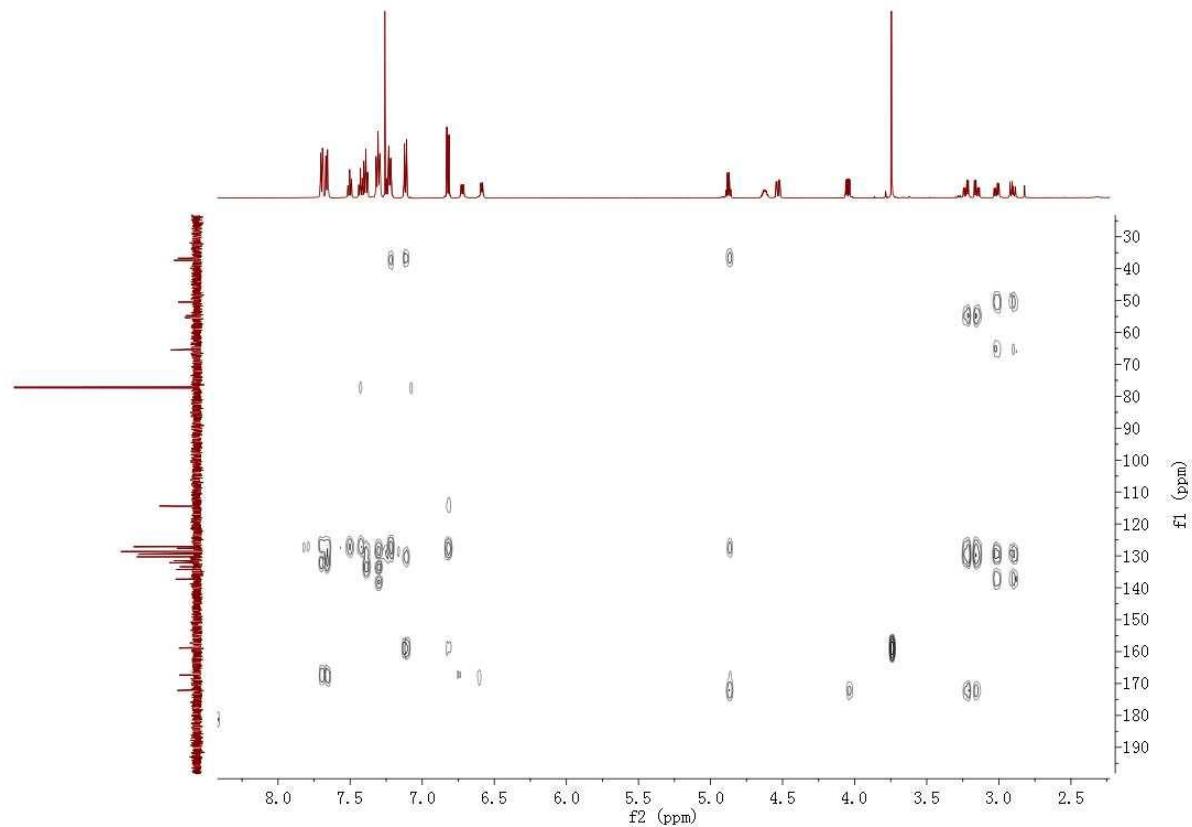
Figure S17. ^1H - ^1H COSY (CDCl_3) spectrum of compound 4.**Figure S18.** HMBC (CDCl_3) spectrum of compound 4.

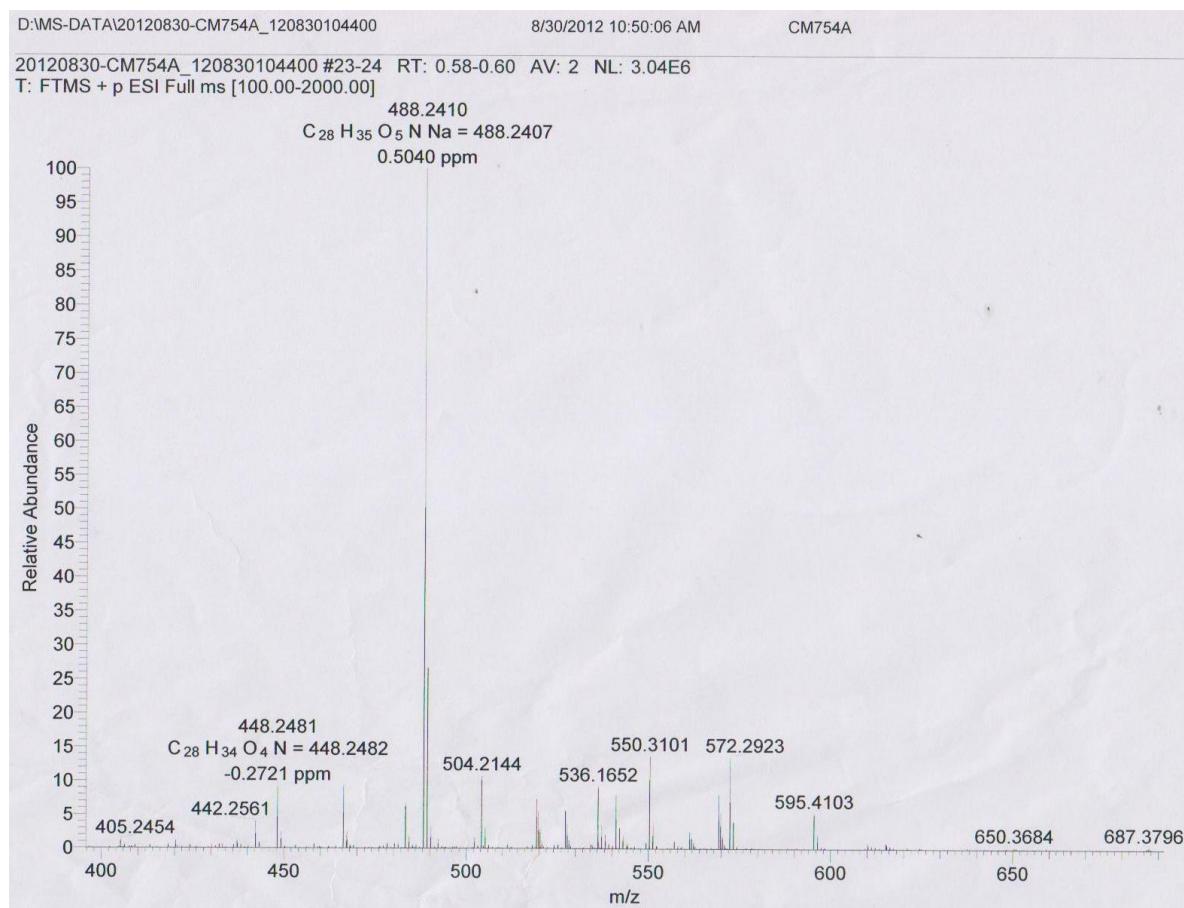
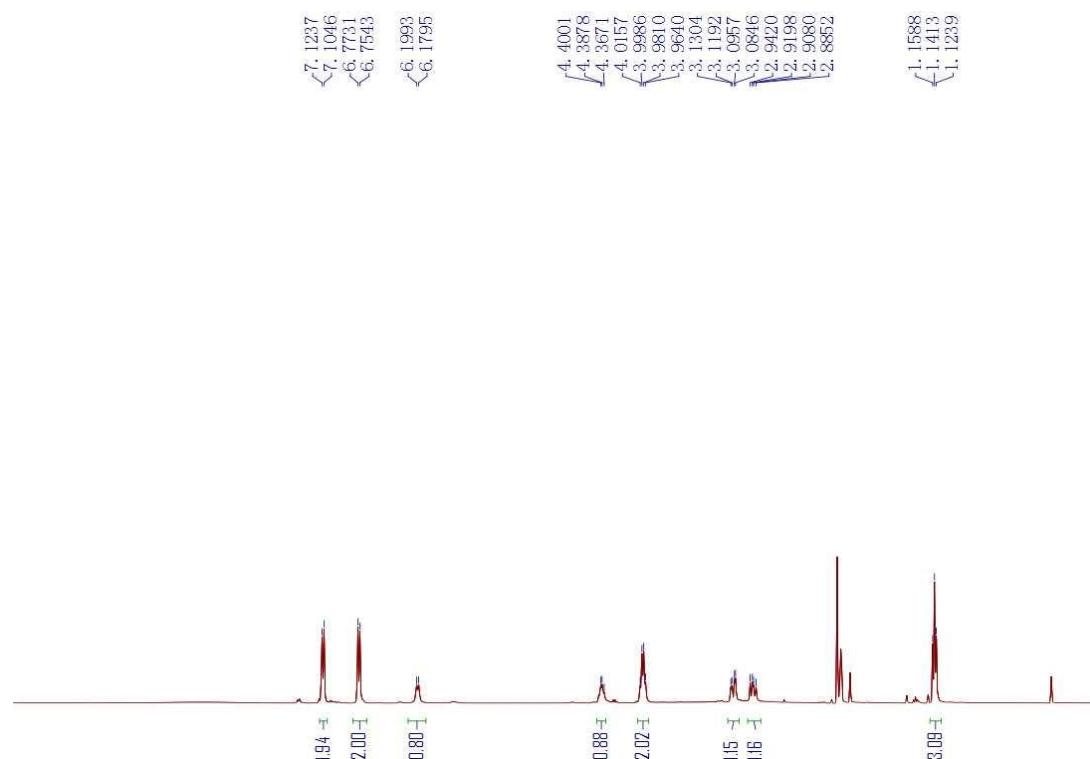
Figure S19. HRESIMS spectrum of compound 4.**Figure S20.** 1H NMR (400 MHz, Acetone- d_6) spectrum of compounds 13a-1/13b-1.

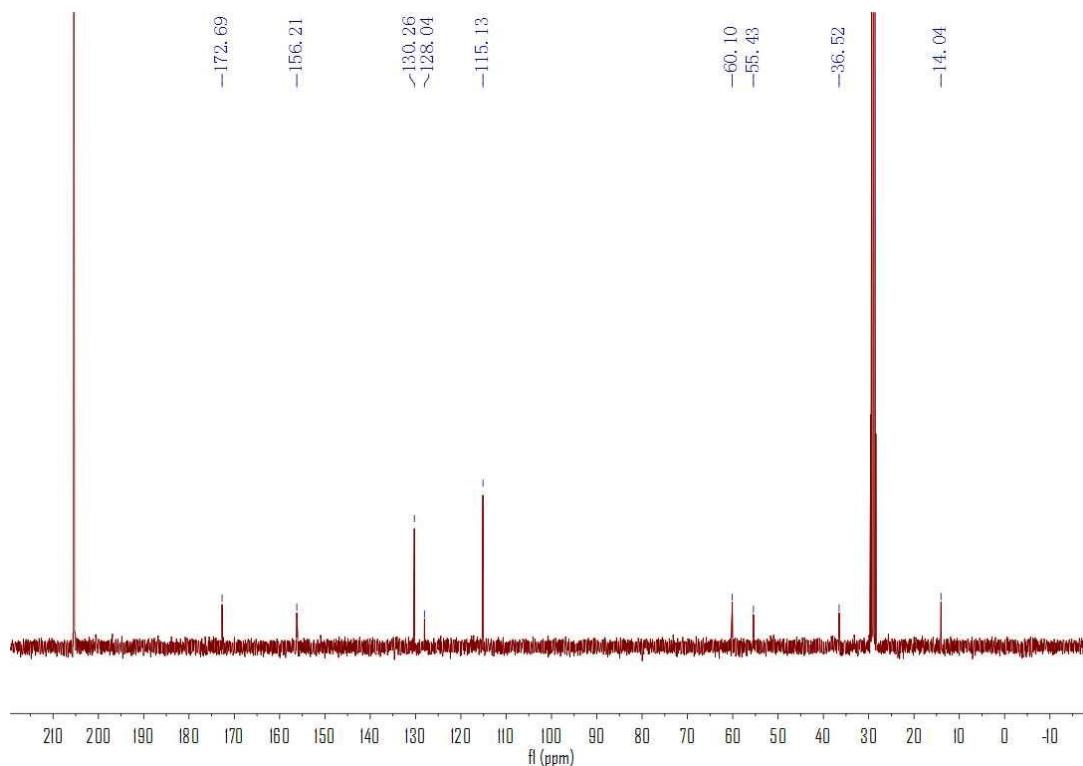
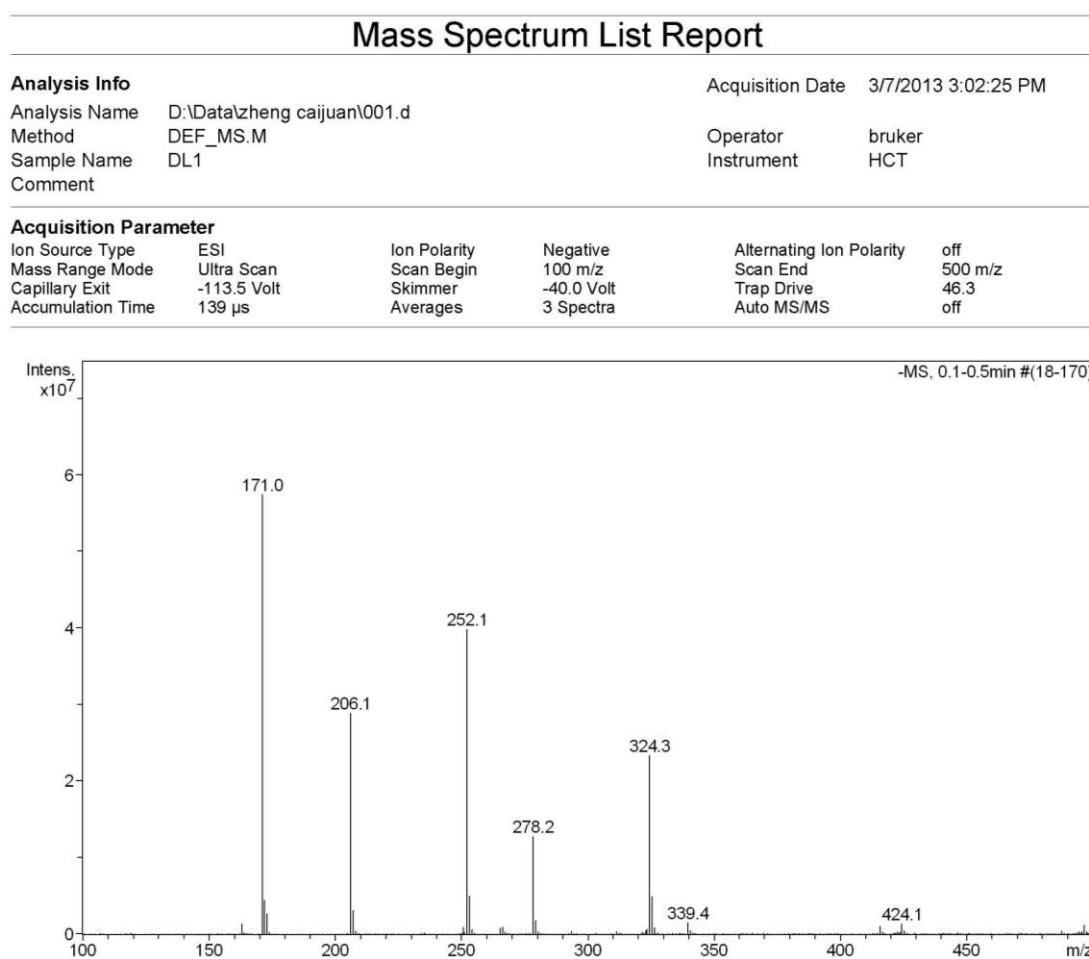
Figure S21. ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-1/13b-1**.**Figure S22.** ESIMS spectrum of compounds **13a-1/13b-1**.

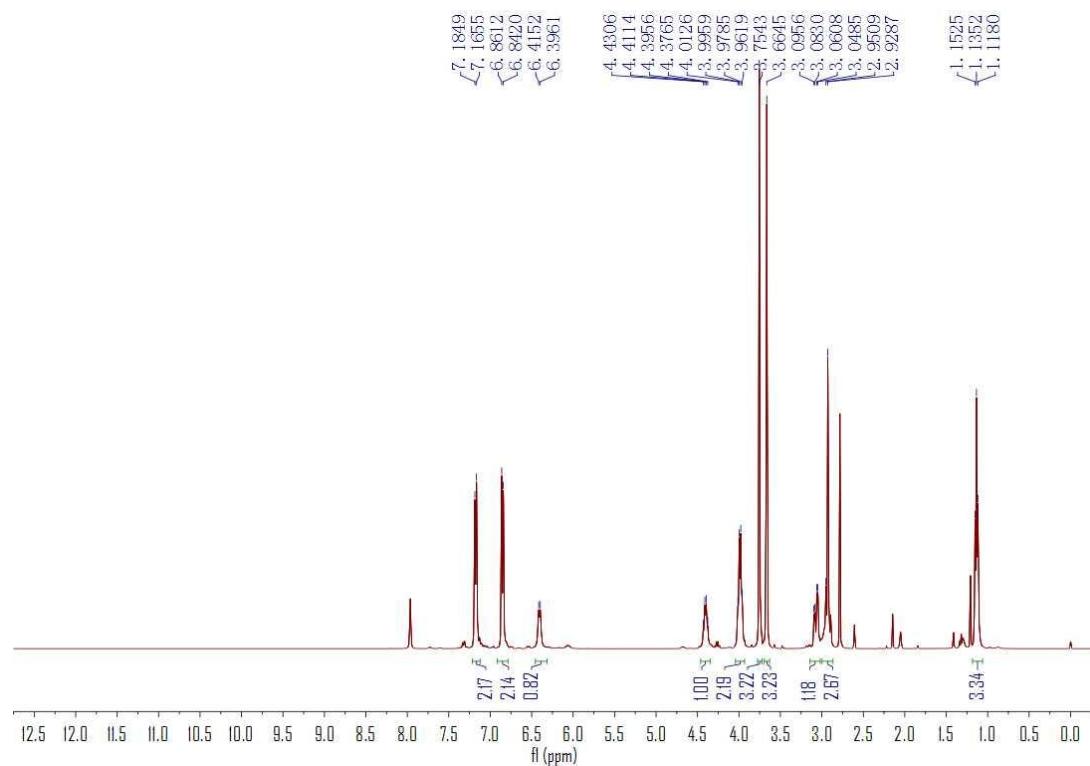
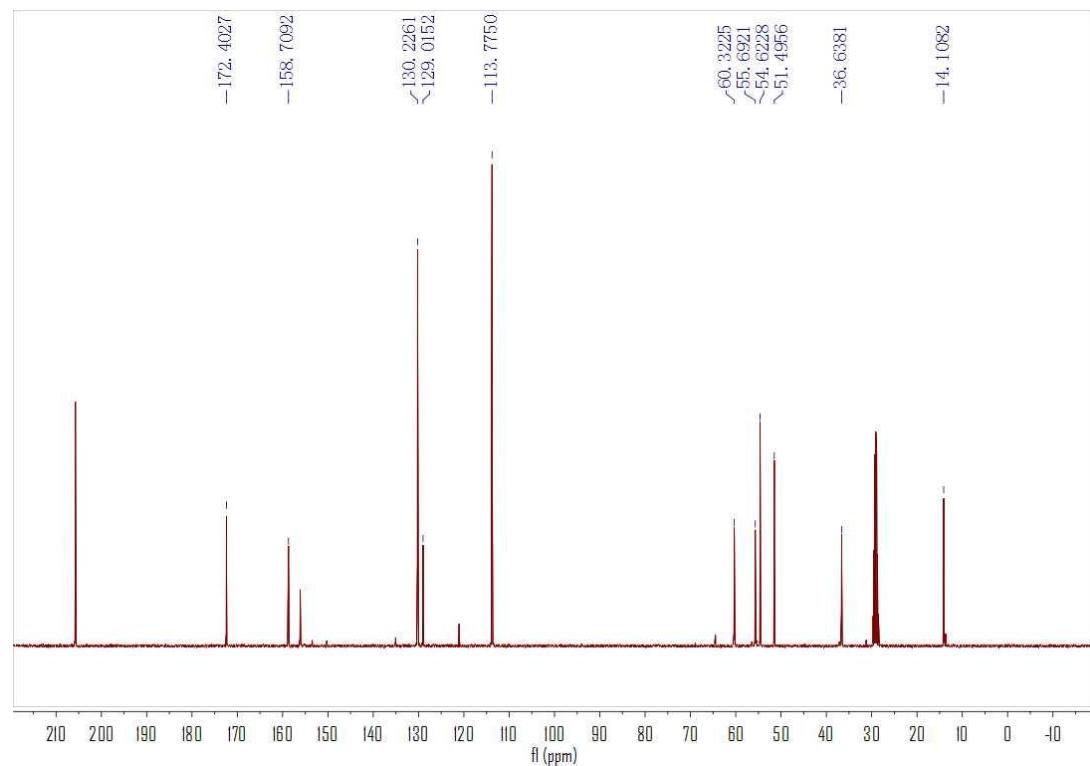
Figure S23. ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **13a-2/13b-2**.**Figure S24.** ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-2/13b-2**.

Figure S25. ESIMS spectrum of compounds **13a-2/13b-2**.

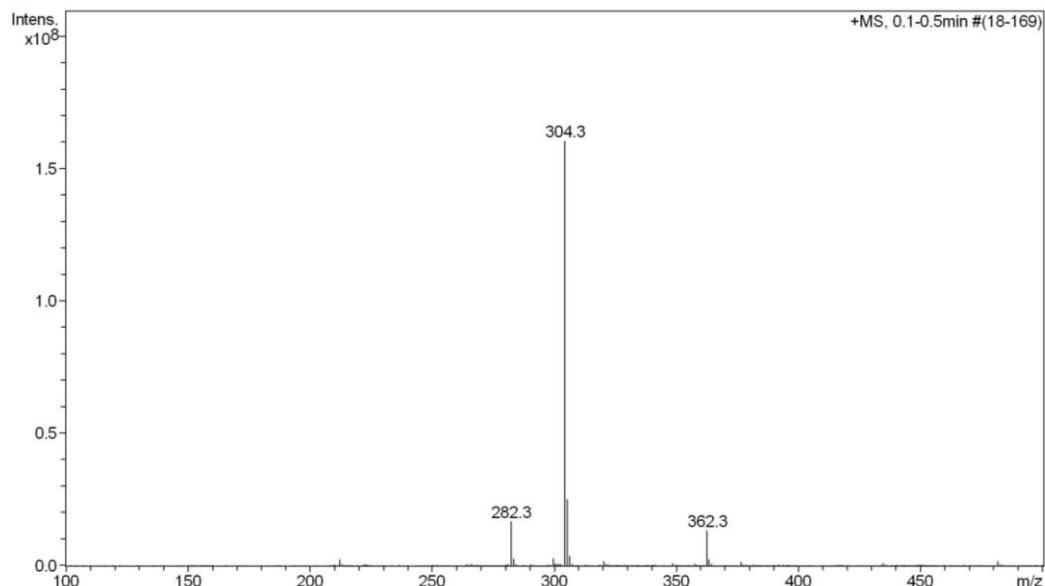
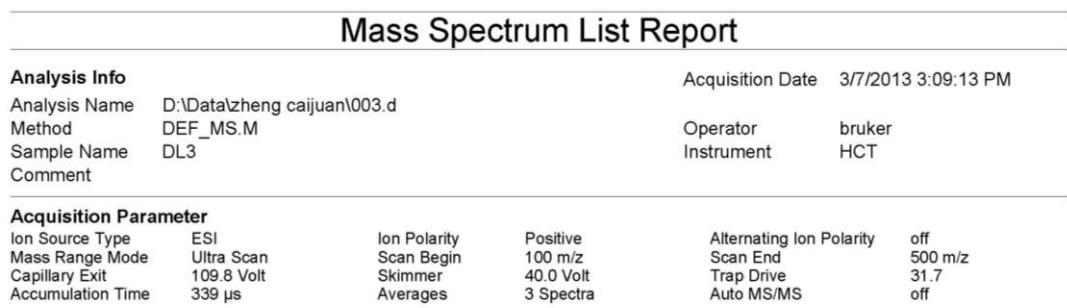


Figure S26. ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **13a-3/13b-3**.

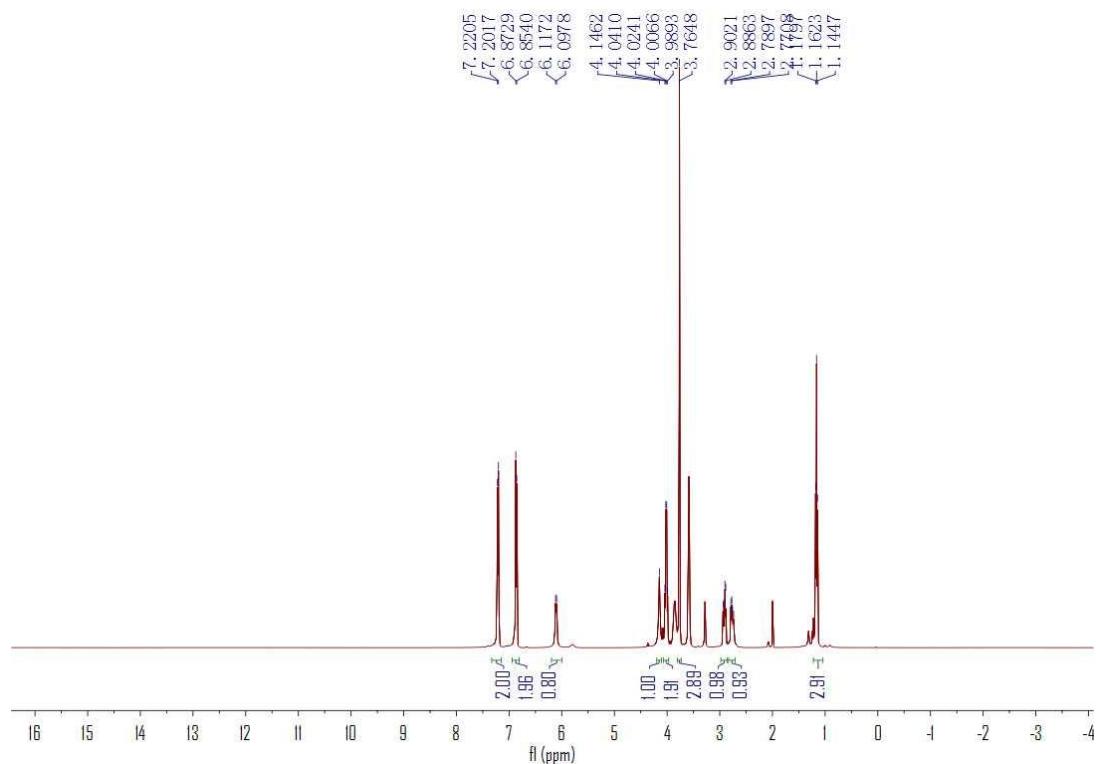


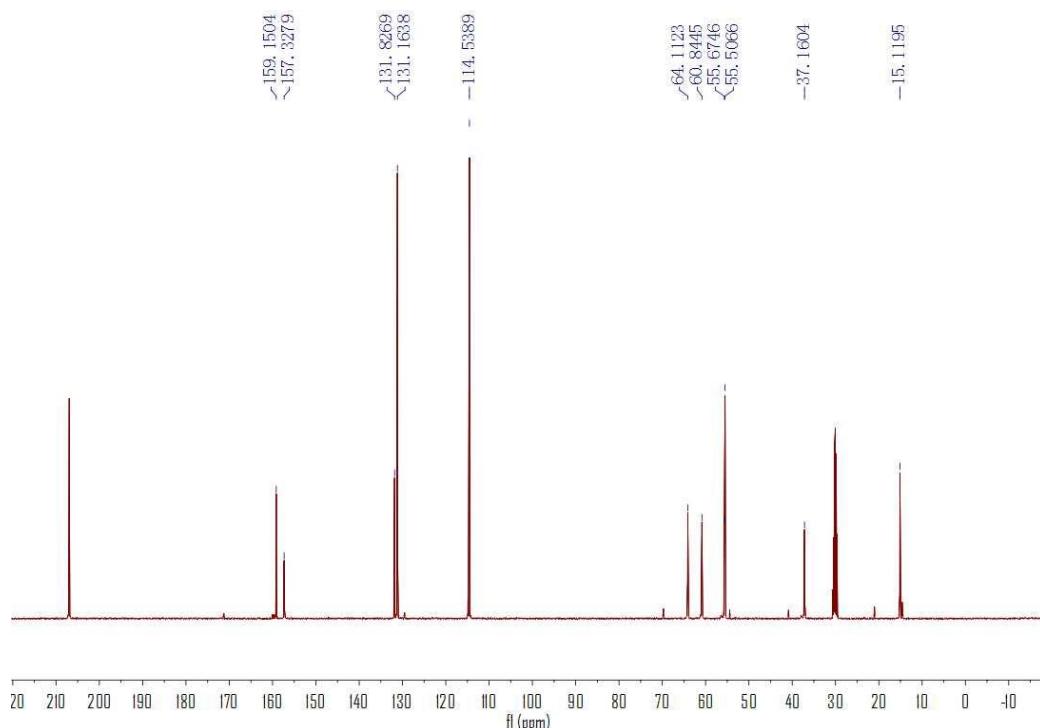
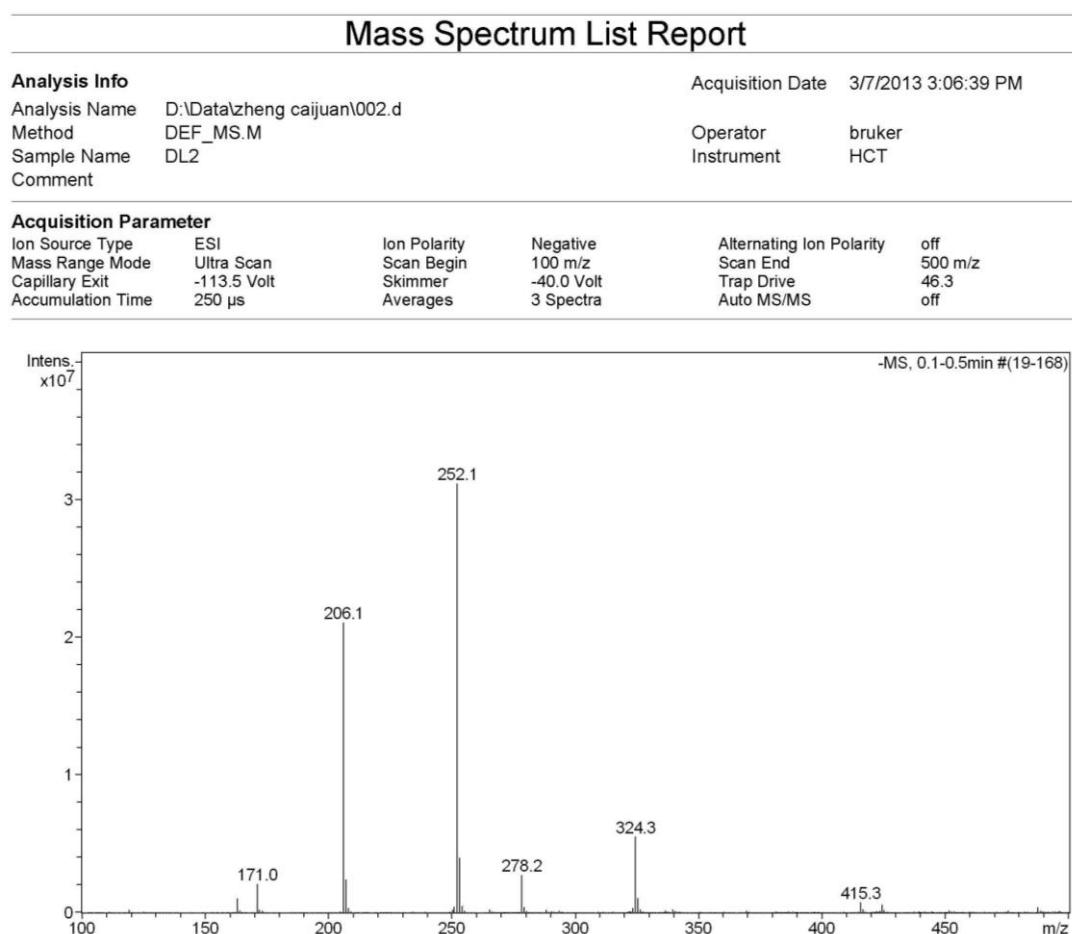
Figure S27. ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **13a-3/13b-3**.**Figure S28.** ESIMS spectrum of compounds **13a-3/13b-3**.

Figure S29. ^1H NMR (400 MHz, Acetone- d_6) spectrum of compounds **14a/14b**.

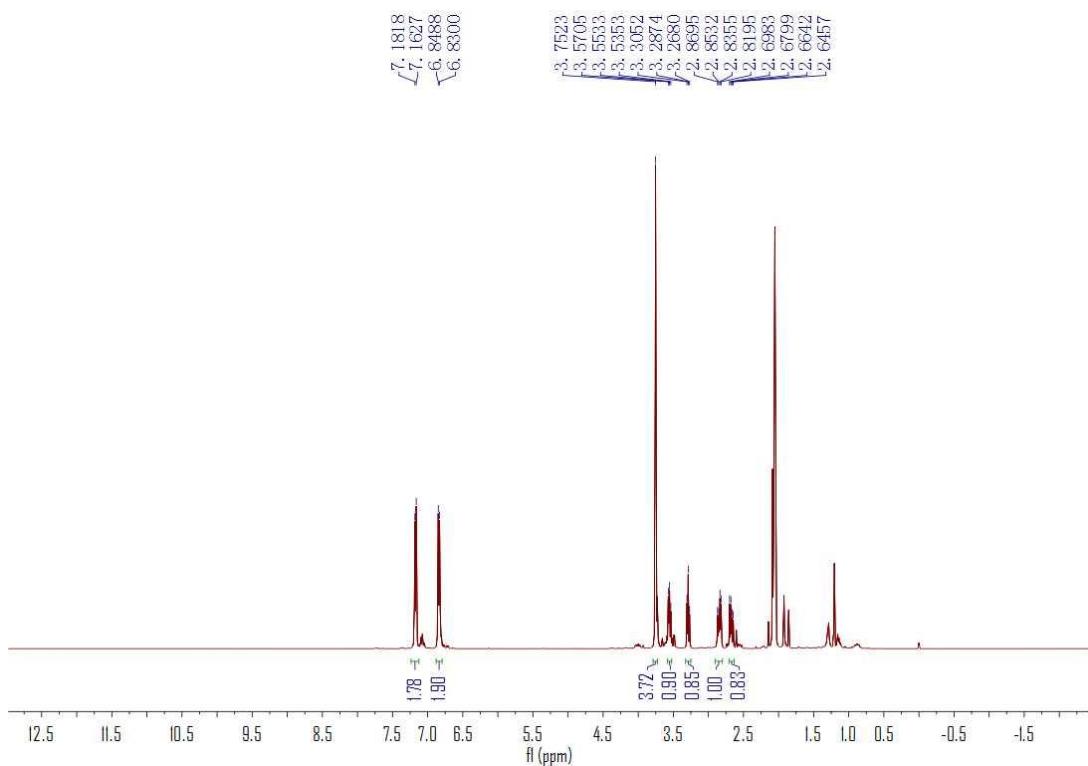


Figure S30. ^{13}C NMR (100 MHz, Acetone- d_6) spectrum of compounds **14a/14b**.

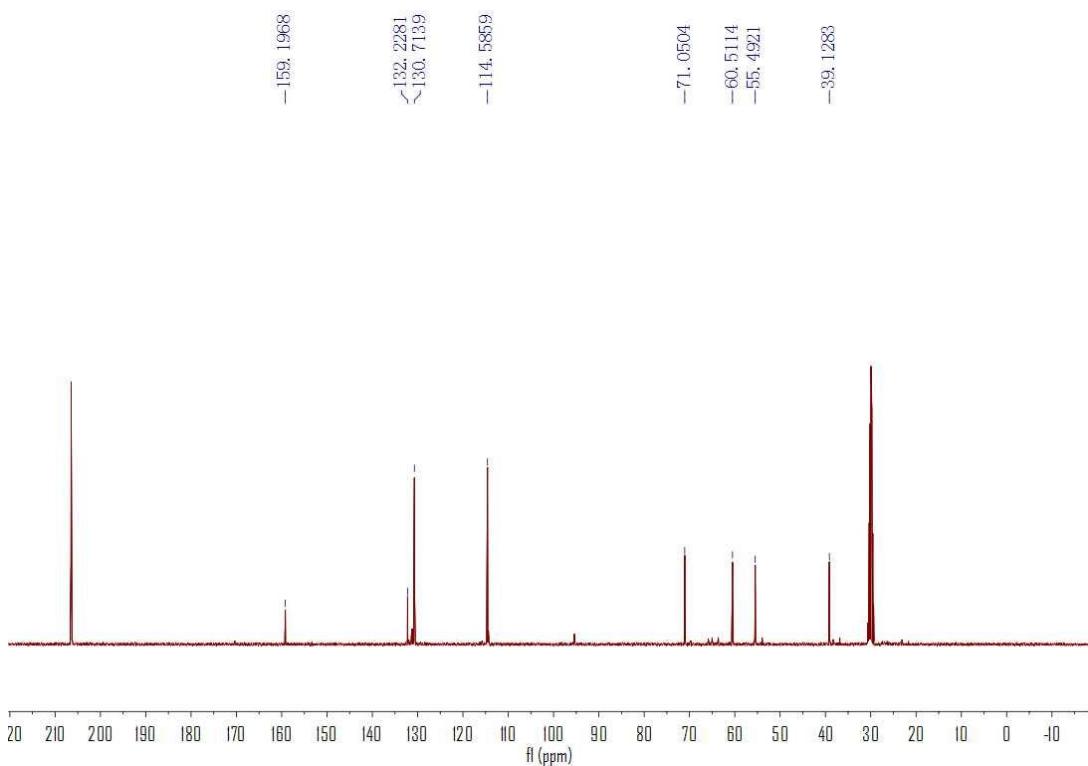


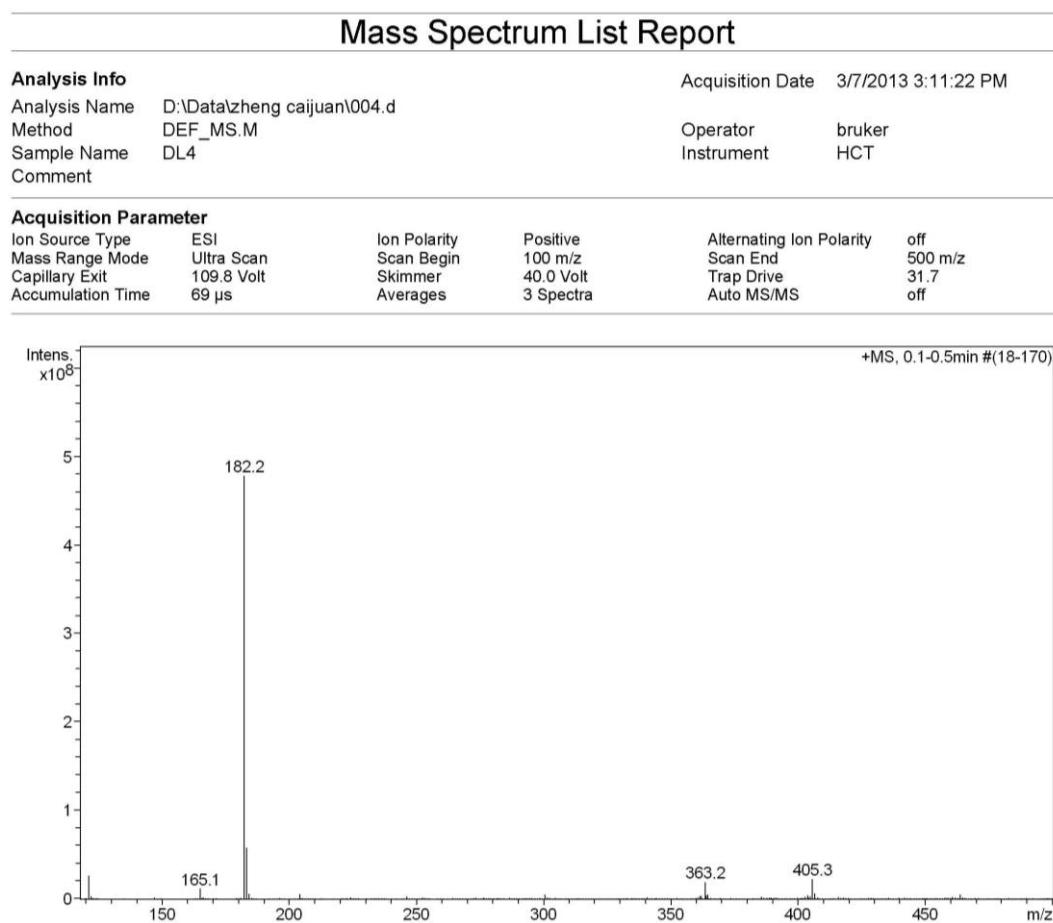
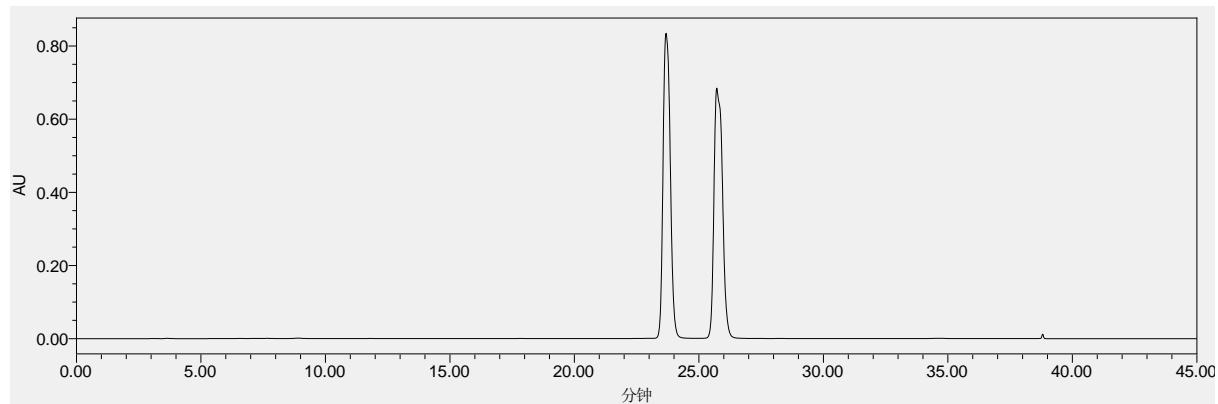
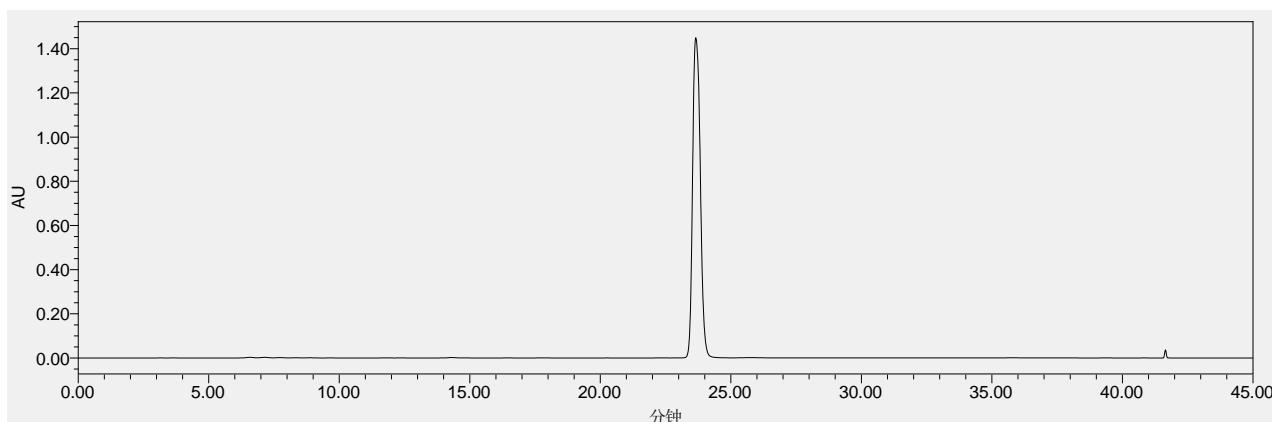
Figure S31. ESIMS spectrum of compounds **14a/14b**.

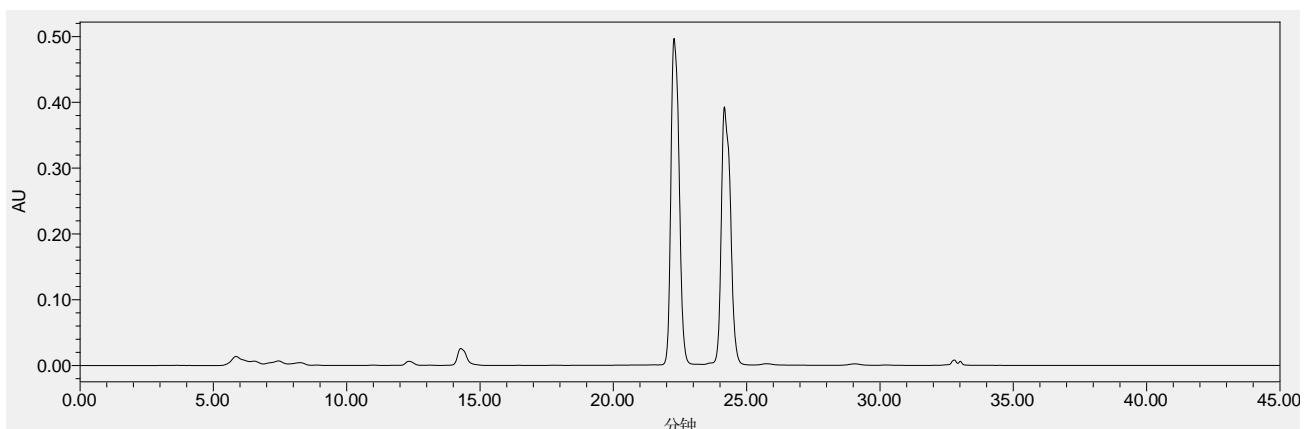
Figure S32. The determination of the absolute configuration of **1** by Marfey's Method (A–G) (HPLC analysis solvents: A, $\text{H}_2\text{O} + 0.1\%$ TFA, B, MeCN; linear gradient: 0 min, 25% B; 40 min, 60% B; 45 min, 100% B; temperature, 30 °C; flow rate, 1 mL/min; UV detection at λ 340 nm; FDAA, 14.2 min).



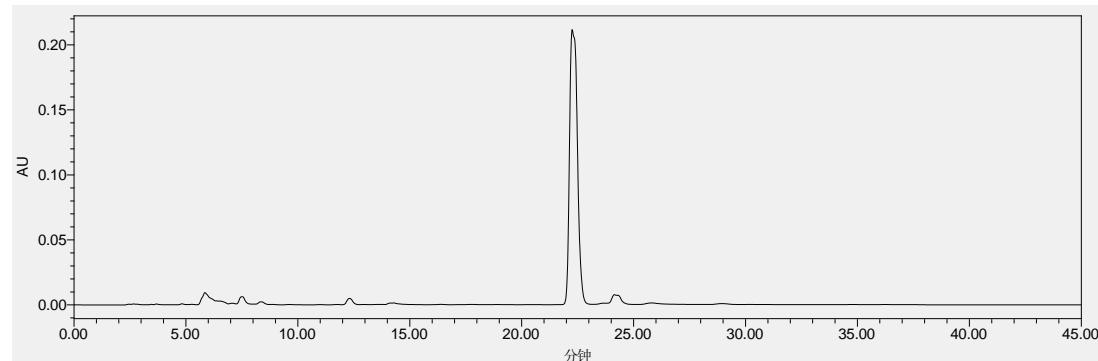
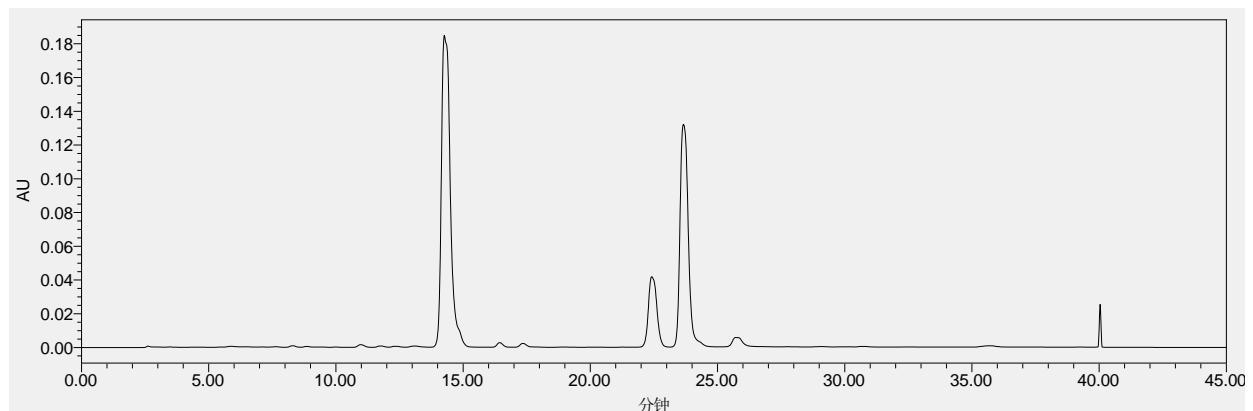
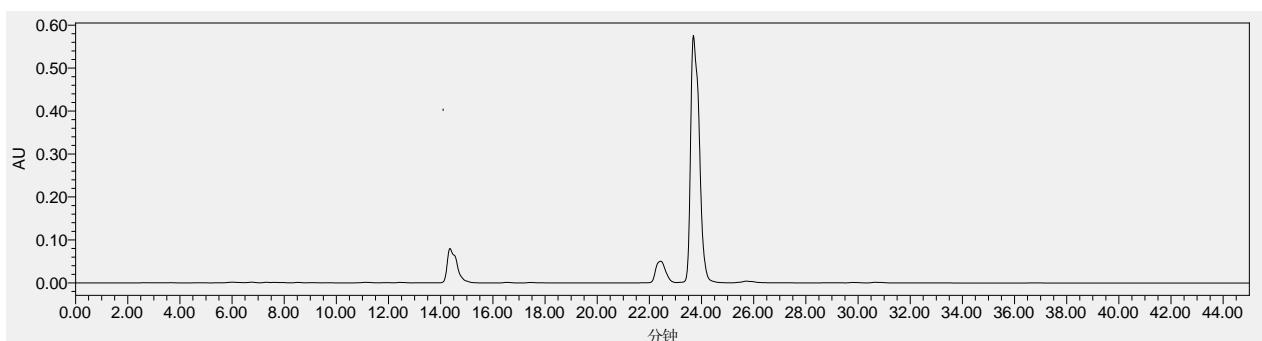
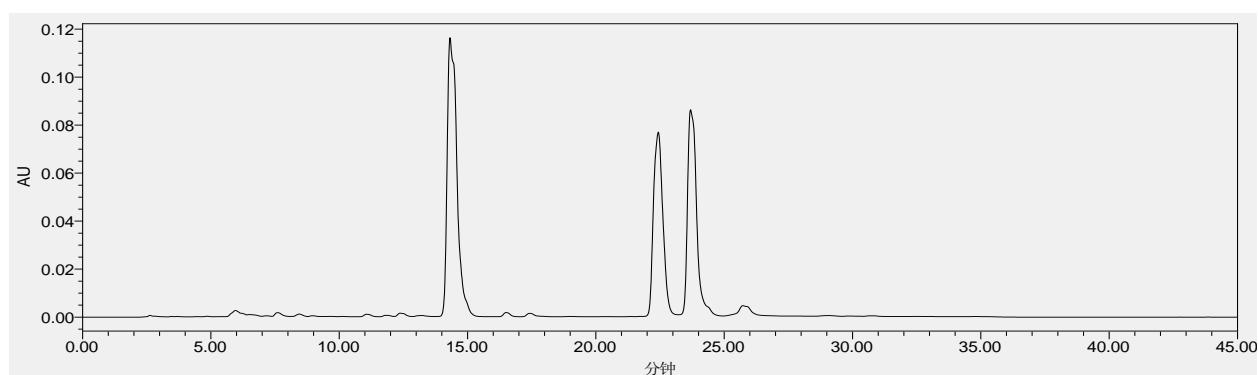
(A) FDAA derivatives of standard L- and D-Phe



(B) FDAA derivative of standard L-Phe



(C) FDAA derivatives of (S)-2-amino-3-(4-methoxyphenyl)-1-propanol and (R)-2-amino-3-(4-methoxyphenyl)-1-propanol (**14a**)

Figure S32. *Cont.*(D) FDAA derivative of (S)-2-amino-3-(4-methoxyphenyl)-1-propanol (**14b**)(E) FDAA derivatives of the hydrolysates from **1**(F) Co-injection of FDAA derivatives of the hydrolysates from **1** with FDAA derivative of standard L-Phe(G) Co-injection of FDAA derivatives of the hydrolysates from **1** with FDAA derivative of (S)-2-amino-3-(4-methoxyphenyl)-1-propanol (**14b**)

S1. The Spectroscopic Data of 13a-1, 13b-1, 13a-2, 13b-2, 13a-3, 13b-3, 14a and 14b

(S/R)-3-(4-Hydroxyphenyl)-2-[(ethoxycarbonyl)amino] propionic acid (13a-1) and (S)-3-(4-hydroxyphenyl)-2-[(ethoxycarbonyl)amino] propionic acid (13b-1): ^1H NMR (400 MHz, acetone- d_6 , δ , ppm, J/Hz): 7.11 (2H, d, $J = 7.6 \text{ Hz}$), 6.76 (2H, d, $J = 7.6 \text{ Hz}$), 6.19 (1H, d, $J = 8.0 \text{ Hz}$), 4.42 (1H, m), 3.99 (2H, q, $J = 7.0 \text{ Hz}$), 3.11 (1H, dd, $J = 13.9, 4.4 \text{ Hz}$), 2.91 (1H, dd, $J = 13.9, 5.2 \text{ Hz}$), 1.14 (3H, t, $J = 7.0 \text{ Hz}$). ^{13}C NMR (100 MHz, acetone- d_6 , δ , ppm): 172.6 (C), 172.6 (C), 156.2 (C), 130.2 (CH), 130.2 (CH), 128.0 (C), 115.1 (CH), 115.1 (CH), 60.1 (CH₂), 55.4 (CH), 36.5 (CH₂), 14.0 (CH₃). ESIMS: 252.1 [M – H][–].

Methyl (S/R)-2-[(ethoxycarbonyl)amino]-3-(4-methoxyphenyl) propanoate (13a-2) and methyl (S)-2-[(ethoxycarbonyl)amino]-3-(4-methoxyphenyl) propanoate (13b-2): ^1H NMR (400 MHz, acetone- d_6 , δ , ppm, J/Hz): 7.18 (2H, d, $J = 7.8 \text{ Hz}$), 6.85 (2H, d, $J = 7.8 \text{ Hz}$), 6.41 (1H, d, $J = 7.6 \text{ Hz}$), 4.40 (1H, dd, $J = 14.0, 7.6 \text{ Hz}$), 3.99 (2H, q, $J = 6.9 \text{ Hz}$), 3.75 (3H, s), 3.66 (3H, s), 3.07 (1H, dd, $J = 13.9, 5.0 \text{ Hz}$), 2.94 (1H, dd, $J = 13.9, 8.9 \text{ Hz}$), 1.14 (3H, t, $J = 6.9 \text{ Hz}$). ^{13}C NMR (100 MHz, acetone- d_6 , δ , ppm): 172.4 (C), 172.4 (C), 158.1 (C), 130.2 (CH), 130.2 (CH), 129.0 (C), 113.7 (CH), 113.7 (CH), 60.3 (CH₂), 55.6 (CH), 54.6 (CH₃), 51.5 (CH₃), 36.6 (CH₂), 14.1 (CH₃). ESIMS: 282.3 [M + H]⁺.

(S/R)-2-[(Ethoxycarbonyl)amino]-3-(4-methoxyphenyl) propan-1-ol (13a-3) and (S)-2-[(ethoxycarbonyl)amino]-3-(4-methoxyphenyl) propan-1-ol (13b-3): ^1H NMR (400 MHz, acetone- d_6 , δ , ppm, J/Hz): 7.21 (2H, d, $J = 7.6 \text{ Hz}$), 6.86 (2H, d, $J = 7.6 \text{ Hz}$), 6.11 (1H, d, $J = 7.8 \text{ Hz}$), 4.15 (1H, m), 4.02 (2H, q, $J = 7.0 \text{ Hz}$), 3.76 (3H, s), 3.38 (2H, m), 2.91 (1H, dd, $J = 13.6, 6.4 \text{ Hz}$), 2.76 (1H, dd, $J = 13.6, 7.8 \text{ Hz}$), 1.16 (3H, t, $J = 7.0 \text{ Hz}$). ^{13}C NMR (100 MHz, acetone- d_6 , δ , ppm): 159.1 (C), 157.3 (C), 131.8 (C), 131.1 (CH), 131.1 (CH), 114.5 (CH), 114.5 (CH), 64.1 (CH₂), 60.8 (CH₂), 55.6 (CH), 55.5 (CH₃), 37.1 (CH₂), 15.1 (CH₃). ESIMS: 252.1 [M – H][–].

(S/R)-2-Amino-3-(4-methoxyphenyl)-1-propanol (14a) and (S)-2-amino-3-(4-methoxyphenyl)-1-propanol (14b): ^1H NMR (400 MHz, acetone- d_6 , δ , ppm, J/Hz): 7.17 (2H, d, $J = 7.5 \text{ Hz}$), 6.84 (2H, d, $J = 7.5 \text{ Hz}$), 3.75 (3H, s), 3.55 (1H, m), 3.74 (1H, t, $J = 7.4 \text{ Hz}$), 3.29 (1H, t, $J = 7.4 \text{ Hz}$), 2.84 (1H, dd, $J = 13.5, 6.5 \text{ Hz}$), 2.67 (1H, dd, $J = 13.5, 7.4 \text{ Hz}$). ^{13}C NMR (100 MHz, acetone- d_6 , δ , ppm): 159.2 (C), 132.2 (C), 130.7 (CH), 130.7 (CH), 114.5 (CH), 114.5 (CH), 71.0 (CH₂), 60.5 (CH), 55.4 (CH₃), 39.1 (CH₂). ESIMS: 182.2 [M + H]⁺.