Supporting Information

***Rec. Nat. Prod*. 9:3 (2015) 336-341**

Four New Cycloheximide Derivatives from *Streptomyces* sp. h-119

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Shanghai Mass Spectrometry Center

Shanghai Institute of Organic Chemistry

Chinese Academy of Sciences

High Resolution MS Data Report

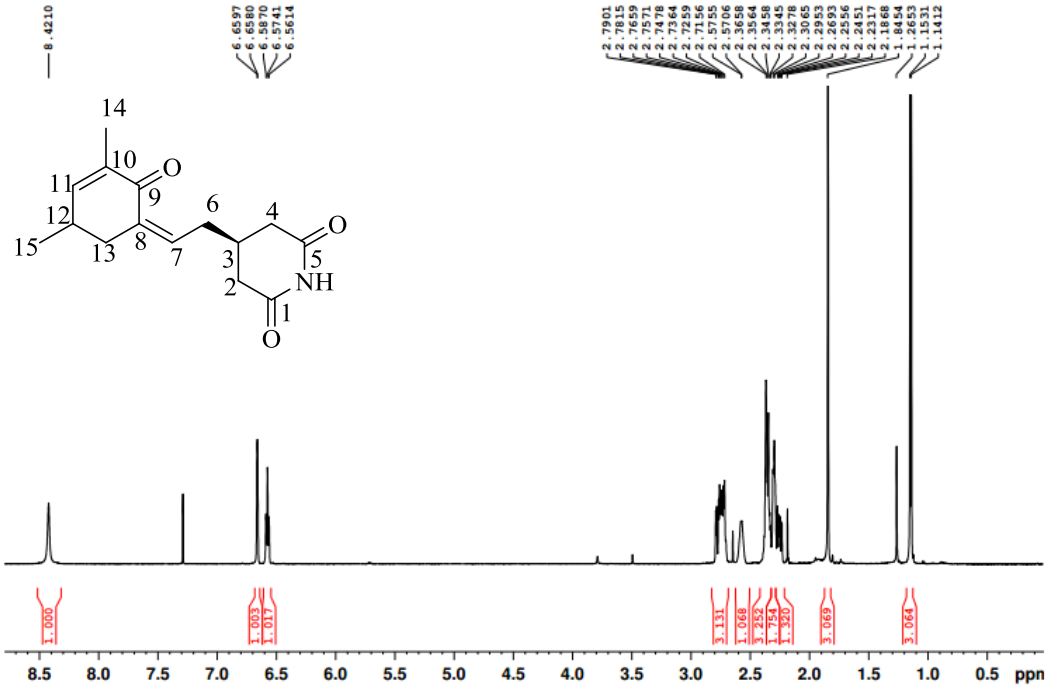
Instrument

Bruker Daltonics, Inc. APEXIII 7.0 TESLA FTMS

Card Serial Number	F140258
Analysis Name	D:\Data\zfj2014\20140225_000002.d
Sample Name	P-42 → Compound **1**
Acquisition Date	2/26/2014 10:26:30 AM
Operator:	zfj
Ionization Mode	ESI-Positive
Ion Mass (Measured)	284.1257

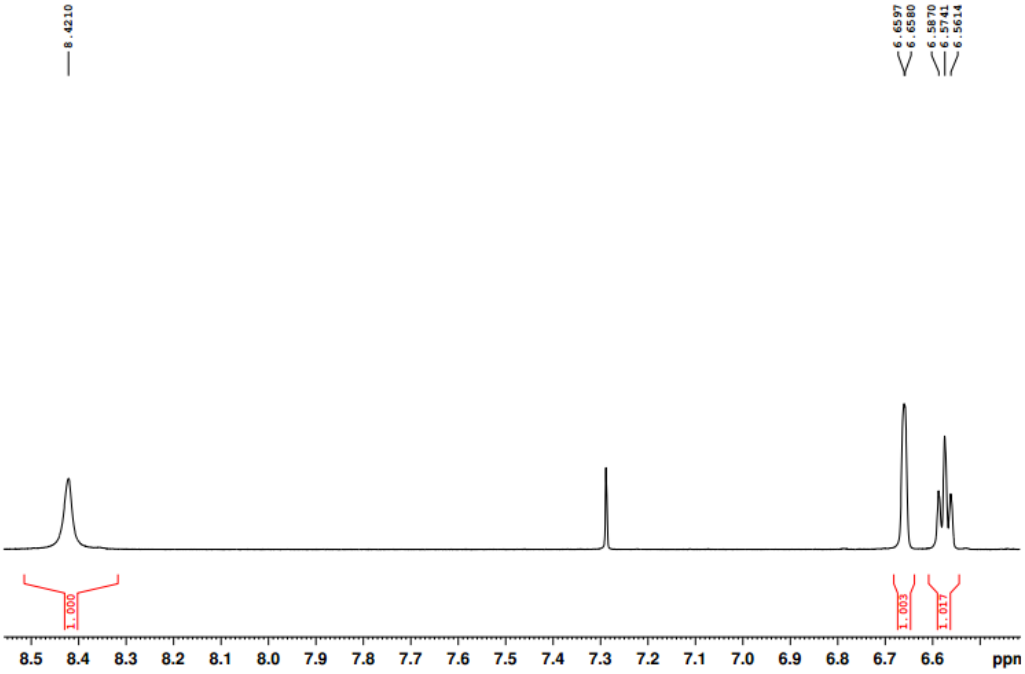
Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e^-
C 15 H 19 N 1 Na 1 O 3	0.039	284.1257	0.17	0.26	0.05	6.50	ok	even

S1: HRESIMS Spectrum of Compound **1**

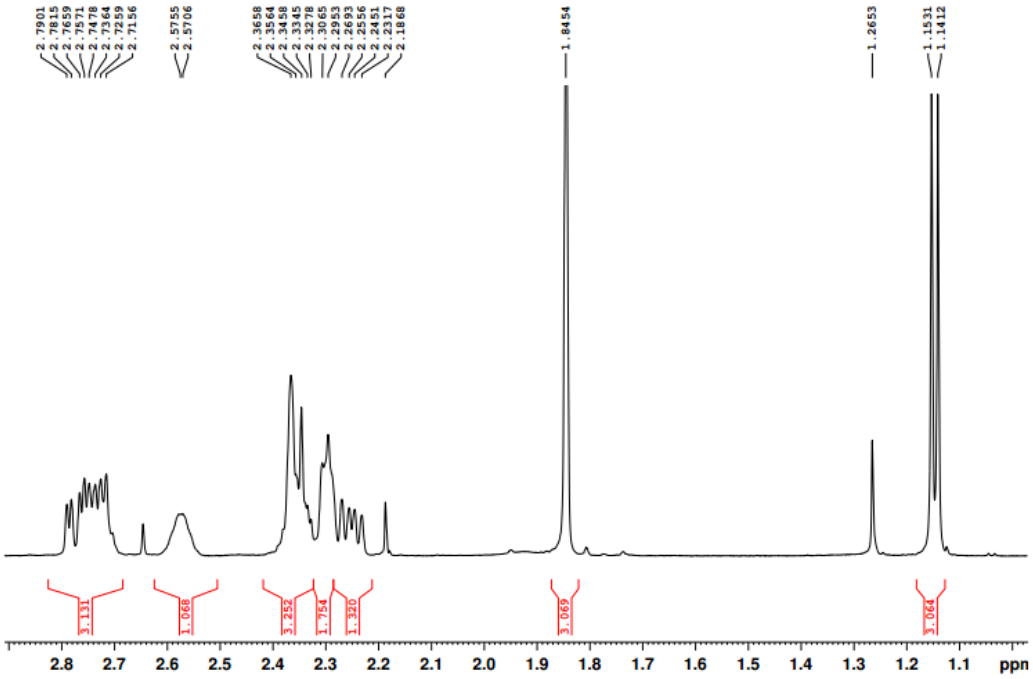


S2: ^{1}H-NMR Spectrum (600MHz, $CDCl_3$) of Compound **1**

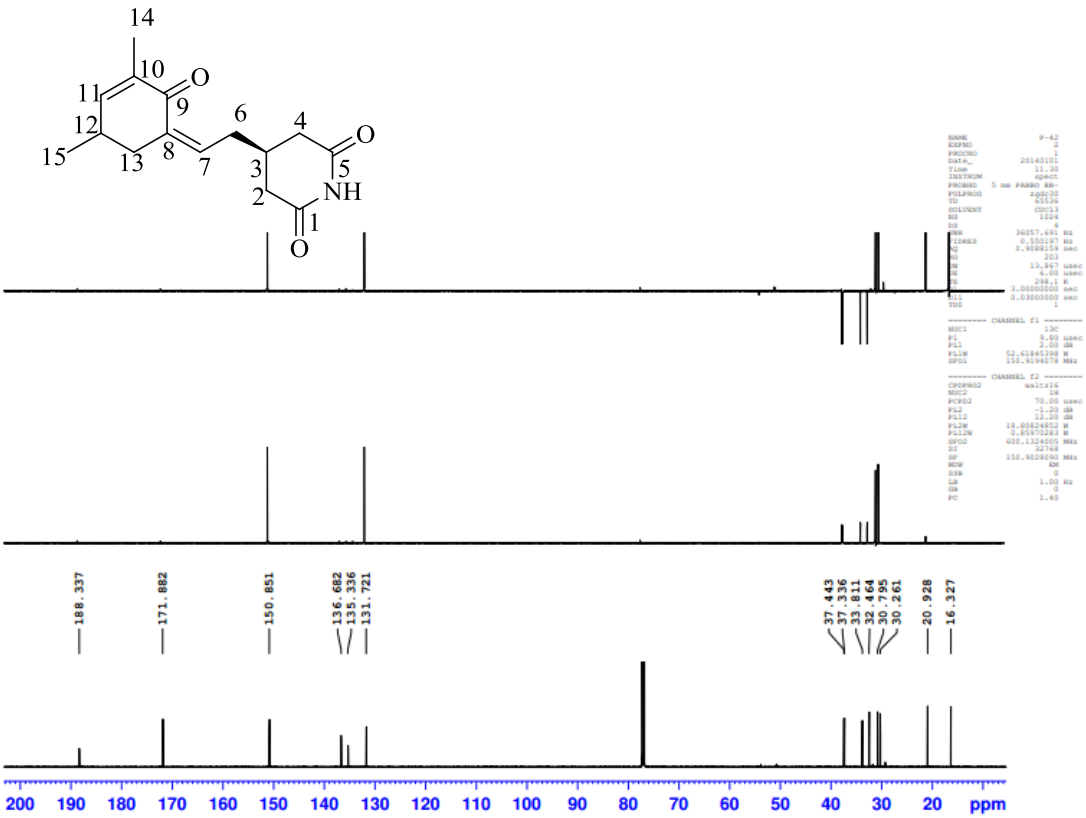
Compound **1** : ^{1}H-NMR ($CDCl_3$,600 MHz), δ: 1.20(3H, d, H-15), 1.77(3H, brs, H-14), 2.25(1H, dd, H-13β), 2.29(2H, m, H-6), 2.35(2H, m, H-2), 2.36(1H, m, H-3), 2.57(1H, br s, H-12), 2.73(2H, m, H-4), 2.77(1H, m, H-13α), 6.58(1H, t, H-7), 6.66(1H, br s, H-11). ^{13}C-NMR ($CDCl_3$,600 MHz), δ: 16.4 (C-14), 20.9 (C-15), 30.3 (C-3), 30.8 (C-12), 32.5 (C-6), 33.9 (C-13), 37.3 (C-4), 37.4 (C-2),131.8 (C-7), 135.5 (C-10), 136.9 (C-8), 151.0 (C-11), 172.0 (C-1/5), 188.5 (C-9). EIMS: *m/z* = 261[M] $^{+}$ for formula $C_{15}H_{19}NO_3$.



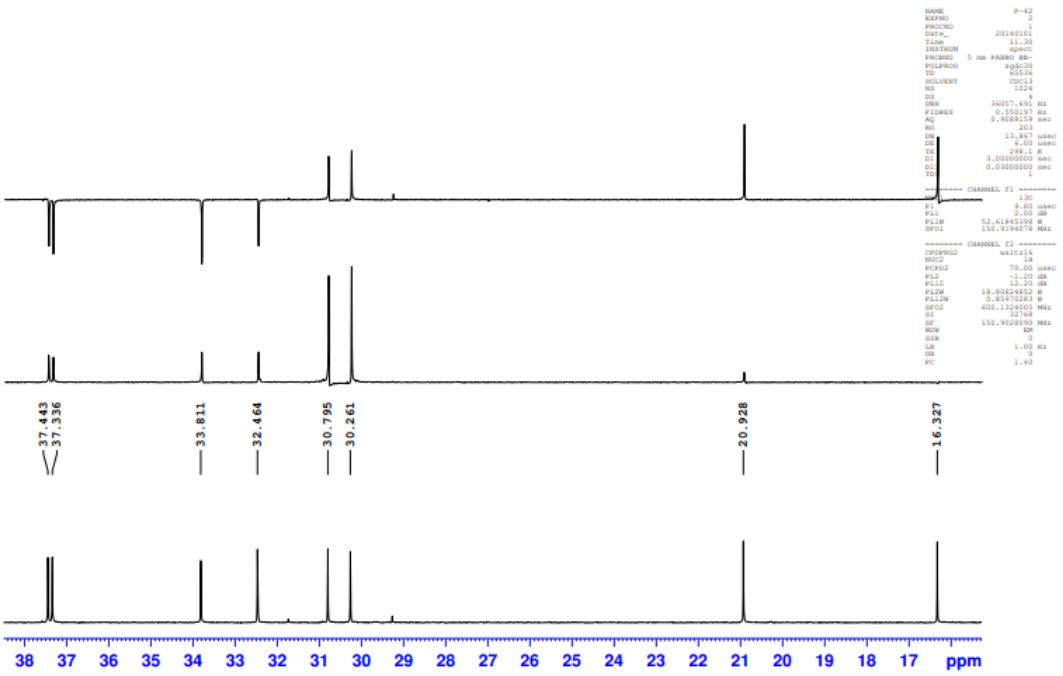
S3: Expansion of the ^{1}H-NMR Spectrum of Compound **1**



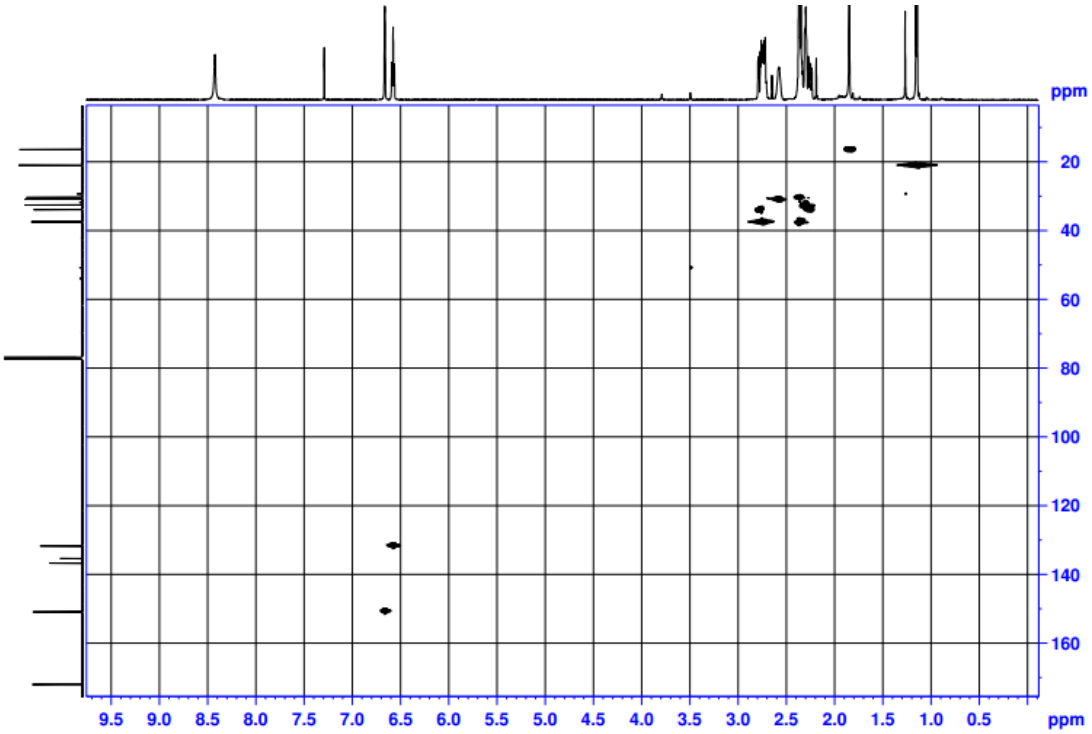
S4: Expansion of the ^{1}H-NMR Spectrum of Compound **1**



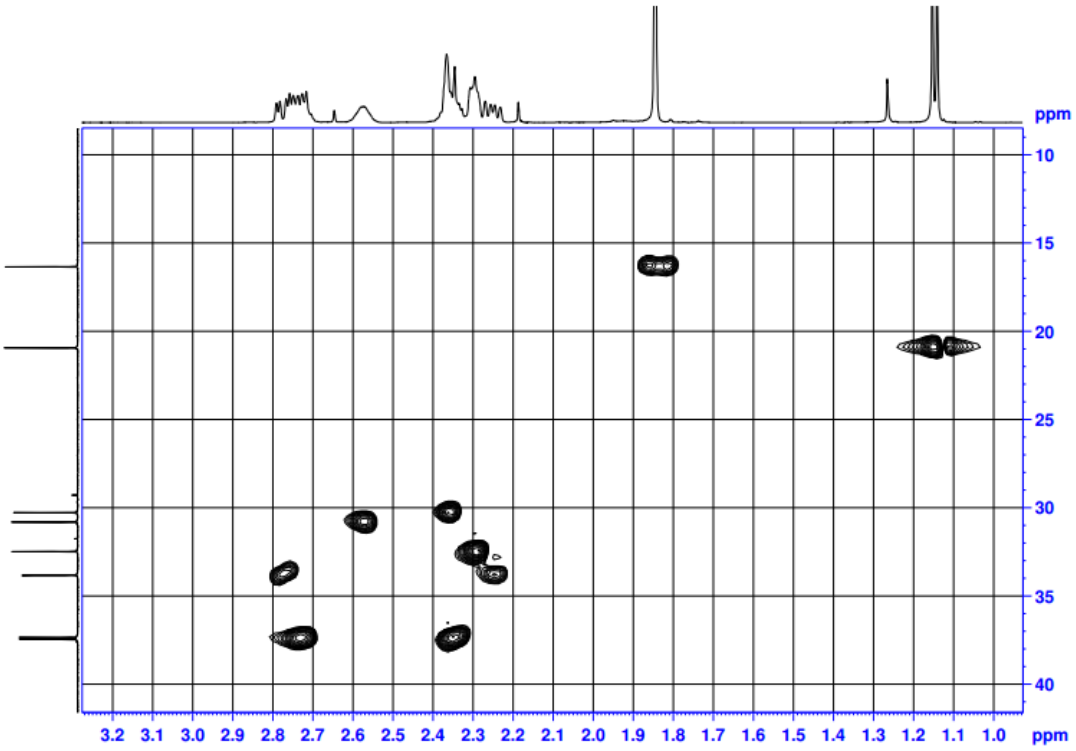
S5: ^{13}C-NMR and DEPT Spectrum (600MHz, $CDCl_3$) of Compound **1**



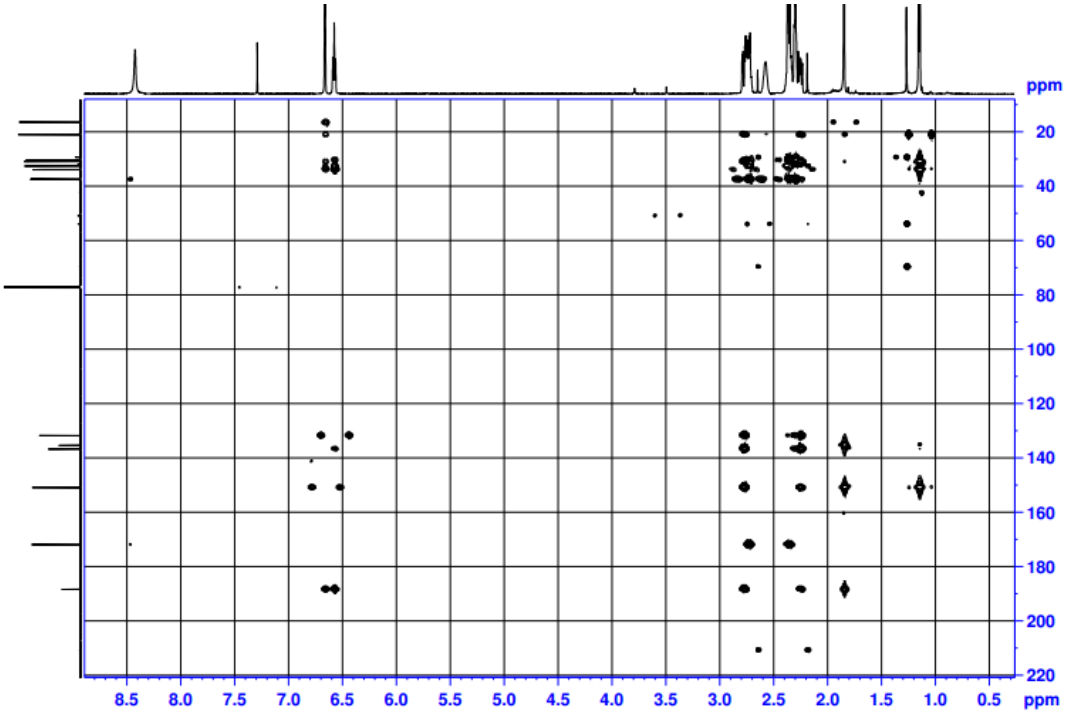
S6: Expansion of the ^{13}C-NMR and DEPT Spectrum of Compound **1**



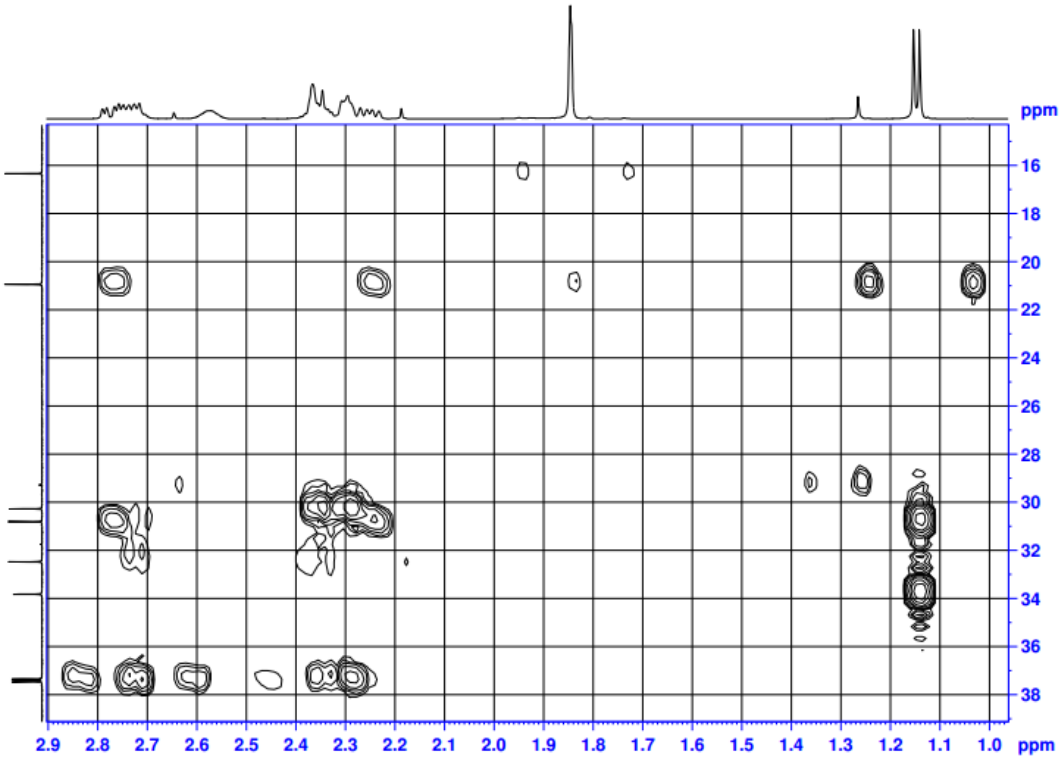
S7: HSQC Spectrum (600MHz, $CDCl_3$) of Compound **1**



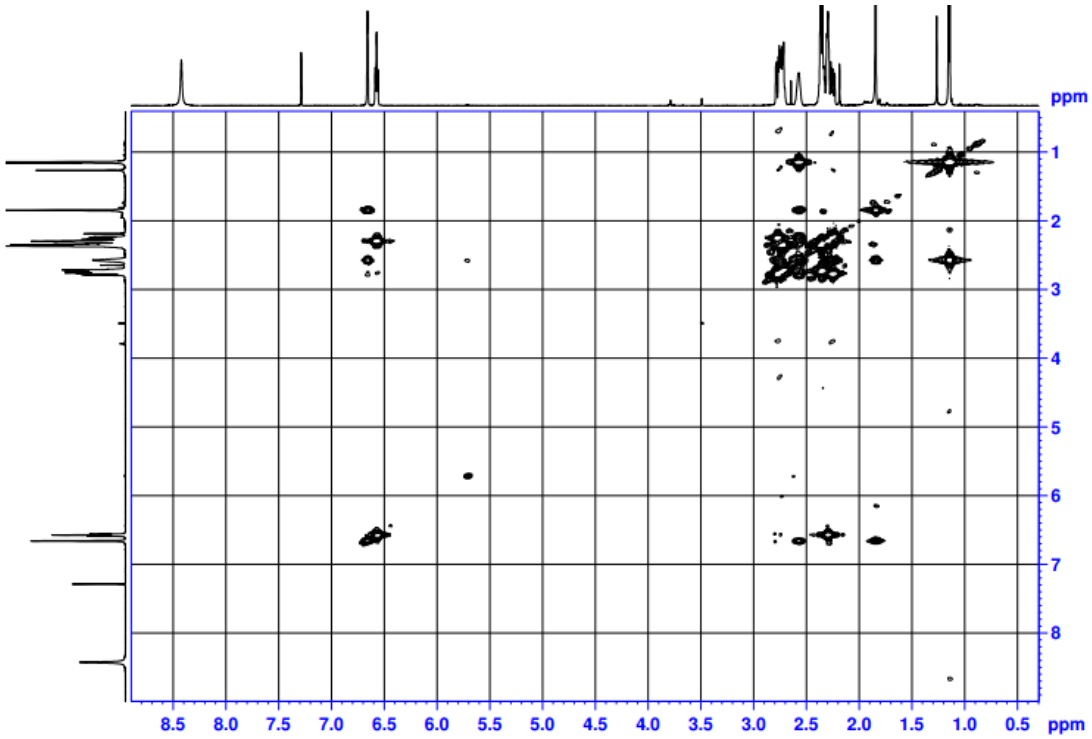
S8: Expansion of the COSY Spectrum of Compound **1**



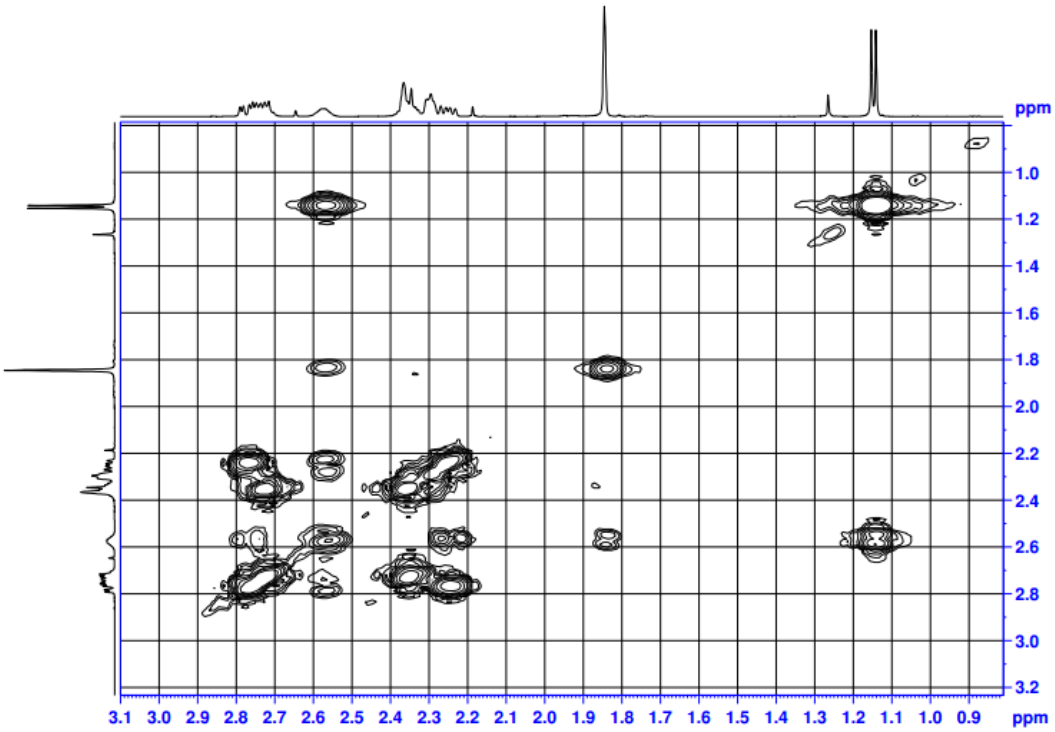
S9: HMBC Spectrum (600MHz, $CDCl_3$) of Compound **1**



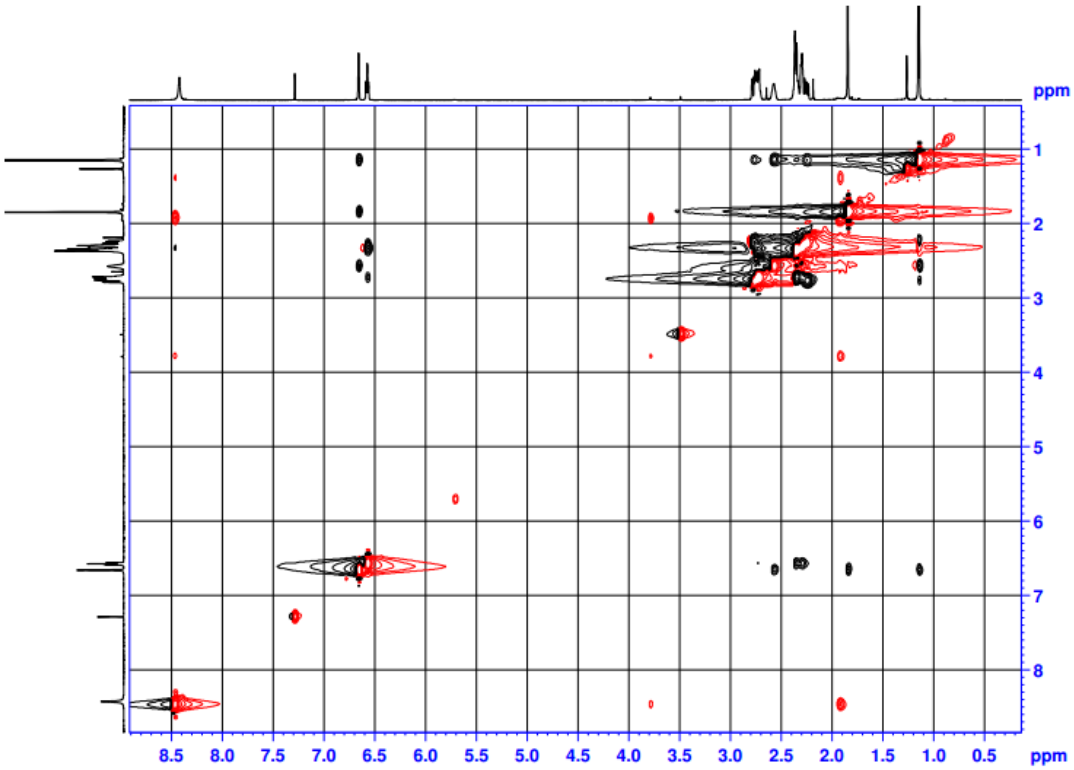
S10: Expansion of the HMBC Spectrum of Compound **1**



S11: ^{1}H-^{1}H COSY Spectrum (600MHz, $CDCl_3$) of Compound **1**



S12: Expansion of the ^{1}H-^{1}H COSY Spectrum of Compound **1**



S13: NOESY spectrum (600MHz, $CDCl_3$) of compound **1**

Shanghai Mass Spectrometry Center

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High Resolution MS Data Report

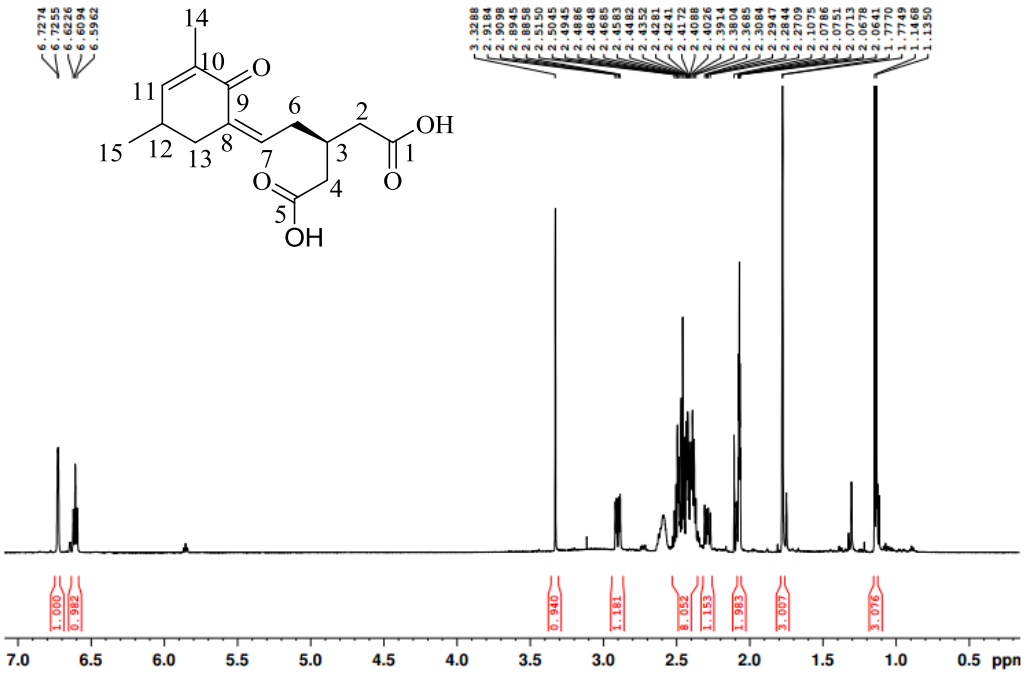
Instrument

Bruker Daltonics, Inc. APEXIII 7.0 TESLA FTMS

Card Serial Number	F140115
Analysis Name	D:\Data\zfj2014\20140108_000002.d
Sample Name	h-119-24 → Compound **2**
Acquisition Date	5/8/2013 4:00:34 PM
Operator:	zfj
Ionization Mode	ESI-Positive
Ion Mass (Measured)	303.1206

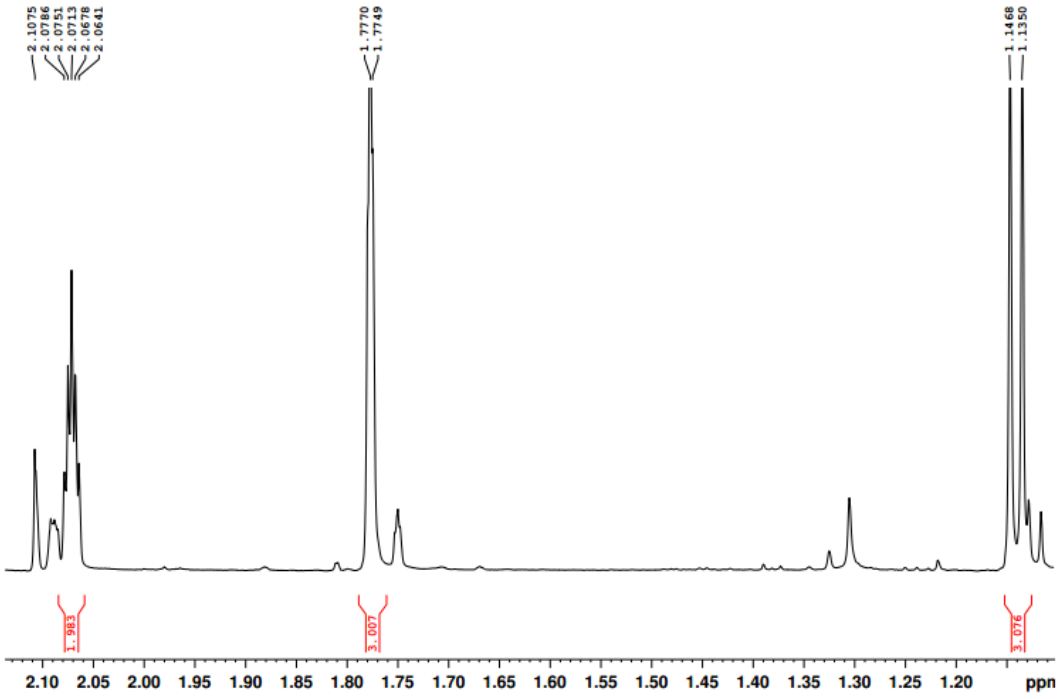
Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e^-
C 15 H 17 N 3 O 4	0.209	303.1214	2.62	-5.86	0.80	9.00	ok	odd
C 15 H 20 Na 1 O 5	0.208	303.1203	-0.88	-8.96	-0.27	5.50	ok	even

S14: HRESIMS Spectrum of Compound **2**

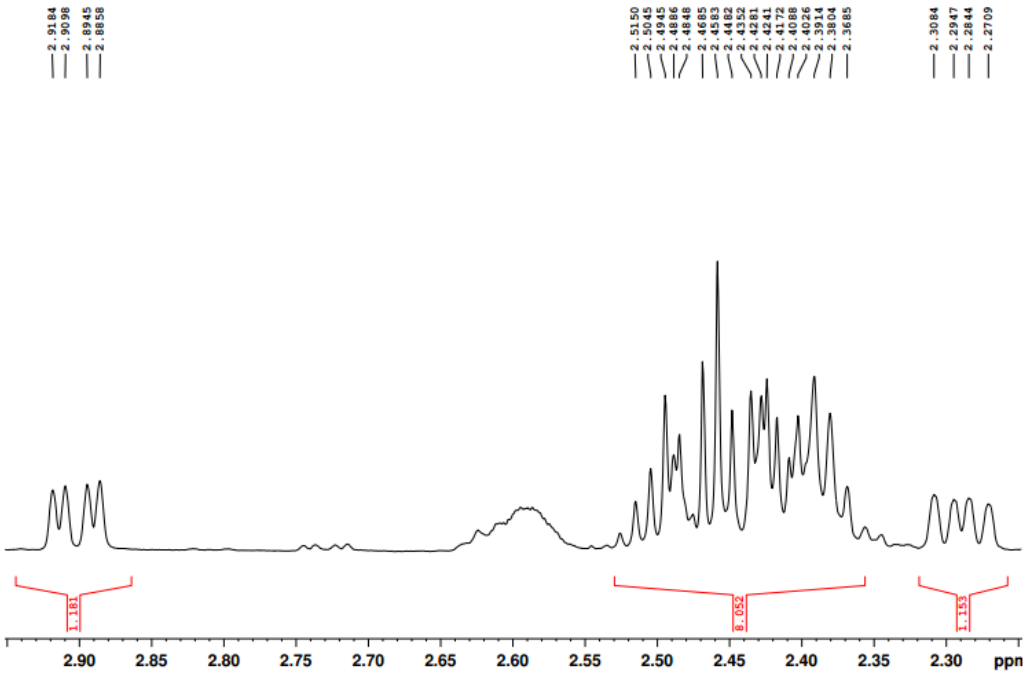


S15: ^{1}H-NMR Spectrum (600MHz, Acetone) of Compound **2**

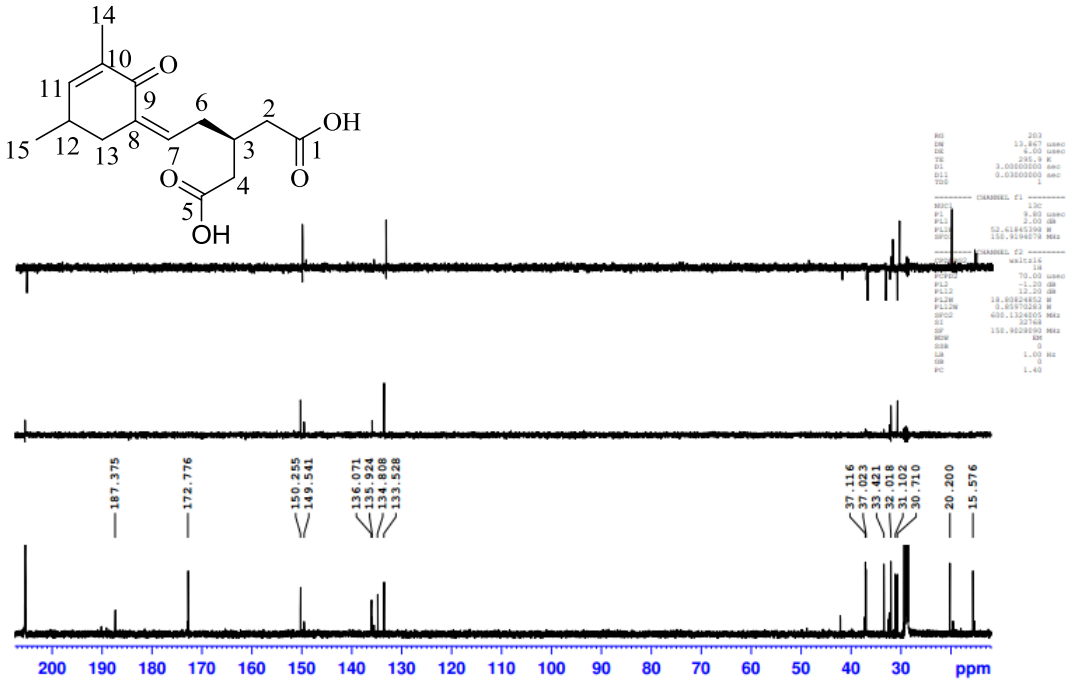
Compound **2** : ^{1}H-NMR ($CDCl_3$,600 MHz), δ: 1.14(3H, d, H-15), 1.78(3H, brs, H-14), 2.29(1H, dd, H-13β), 2.39(2H, m, H-6), 2.43(2H, m, H-4), 2.46(2H, m, H-2), 2.50(1H, m, H-3), 2.59(1H, br s, H-12), 2.90(1H, m, H-13α), 6.61(1H, t, H-7), 6.73(1H, br s, H-11). ^{13}C-NMR ($CDCl_3$,600 MHz), δ: 15.7 (C-14), 20.3 (C-15), 30.7 (C-12), 31.1 (C-6), 32.0 (C-3), 33.5 (C-13), 37.0 (C-4), 37.1 (C-2), 133.6 (C-7), 134.8 (C-10), 136.1 (C-8), 150.4 (C-11), 172.9 (C-1/5), 187.4 (C-9). EIMS: *m/z* = 280[M] $^{+}$ for formula $C_{15}H_{20}O_5$.



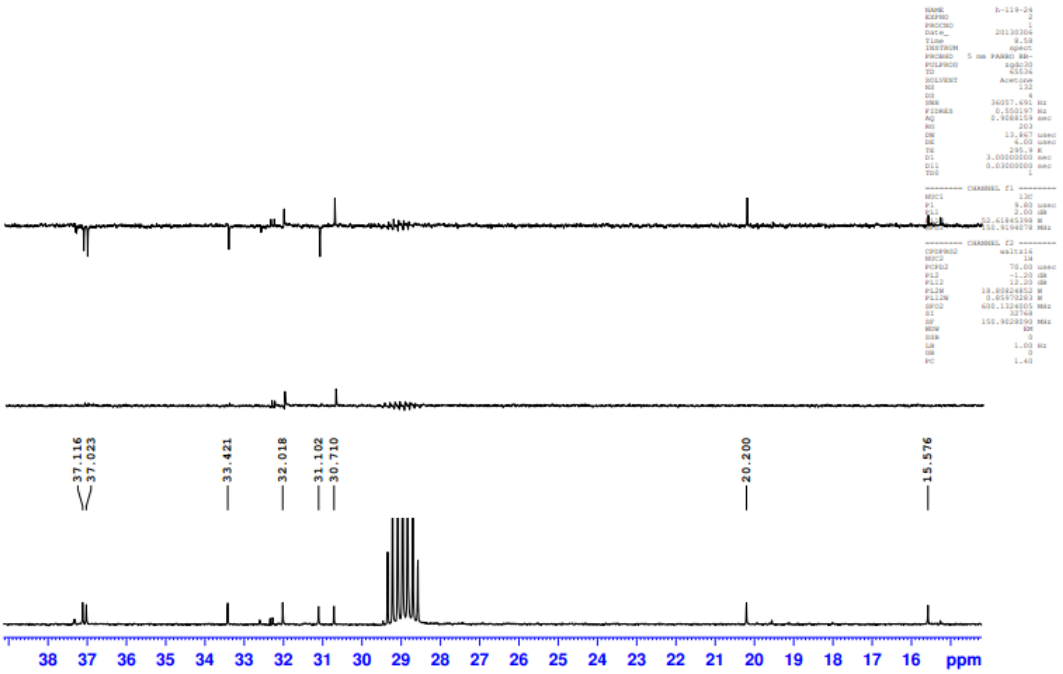
S16: Expansion of the ^{1}H-NMR Spectrum of Compound **2**



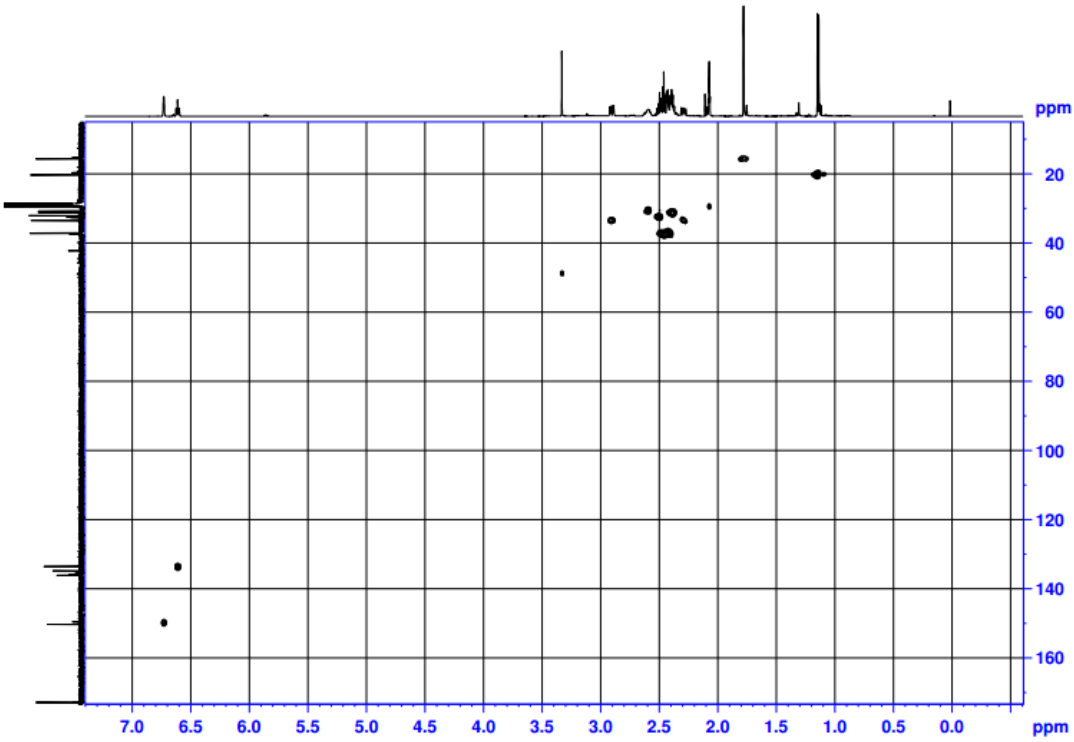
S17: Expansion of the ^{1}H-NMR Spectrum of Compound **2**



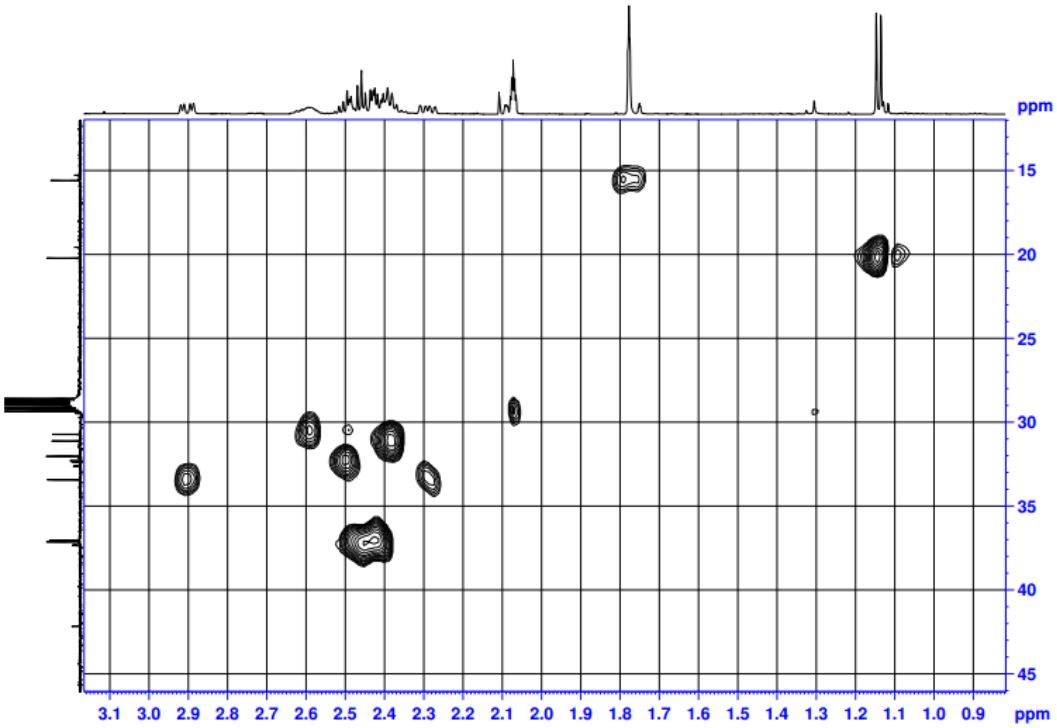
S18: ^{13}C-NMR and DEPT Spectrum (600MHz, Acetone) of Compound **2**



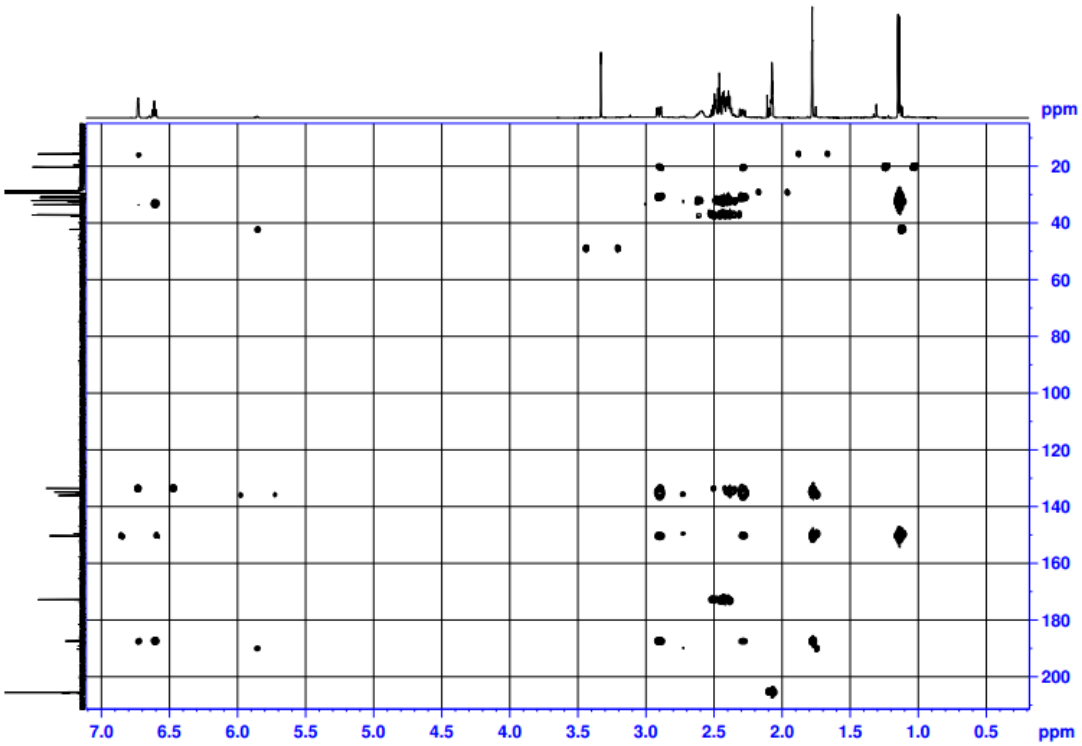
S19: Expansion of the ^{13}C-NMR and DEPT Spectrum of Compound **2**



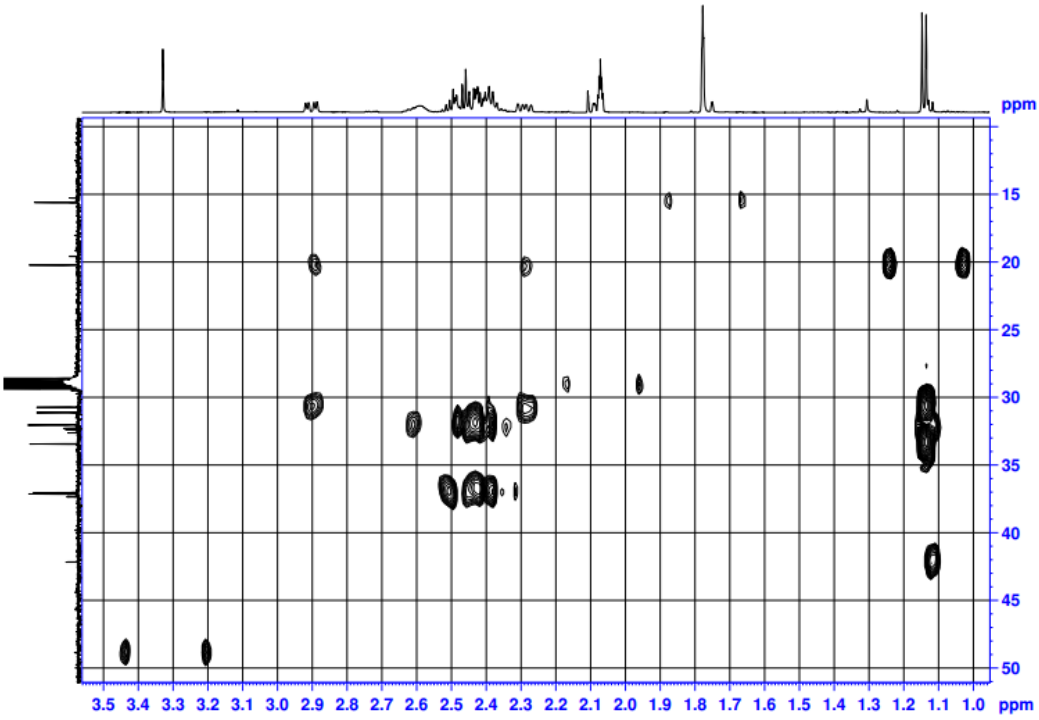
S20: HSQC Spectrum (600MHz, $CDCl_3$) of Compound **2**



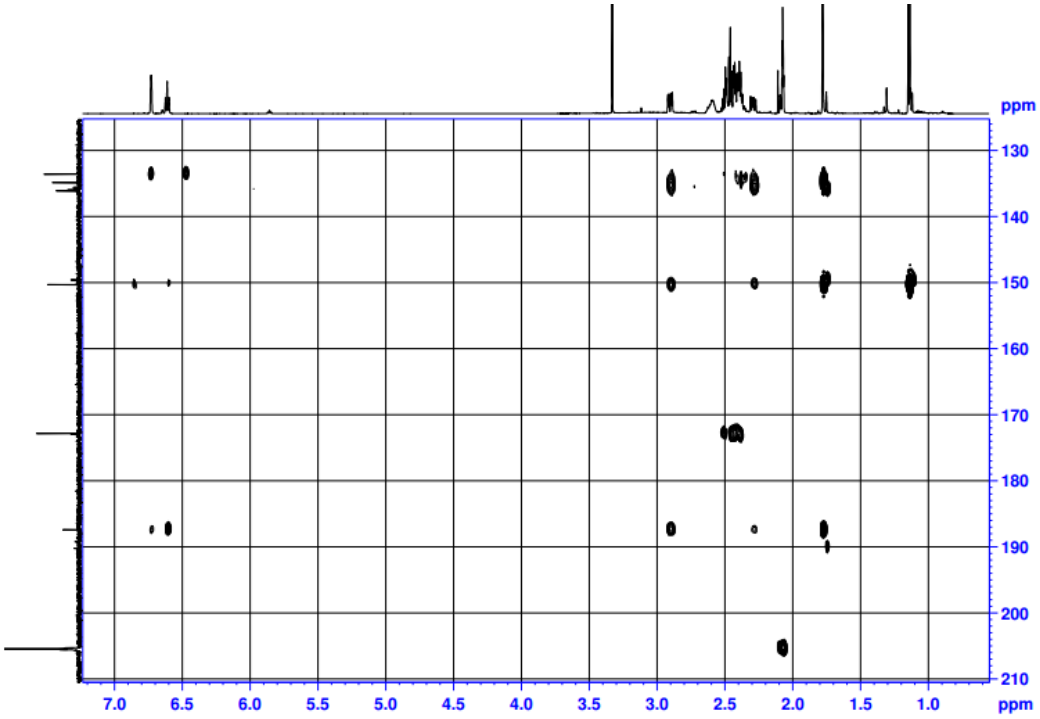
S21: Expansion of the HSQC Spectrum of Compound **2**



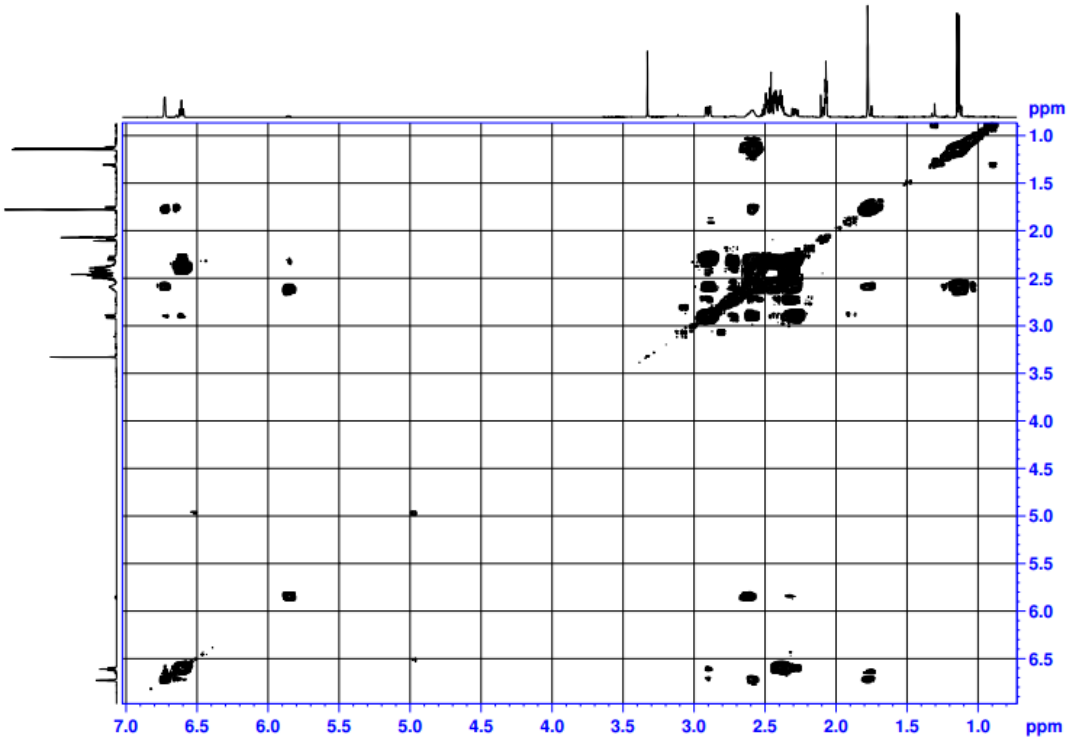
S22: HMBC Spectrum (600MHz, Acetone) of Compound **2**



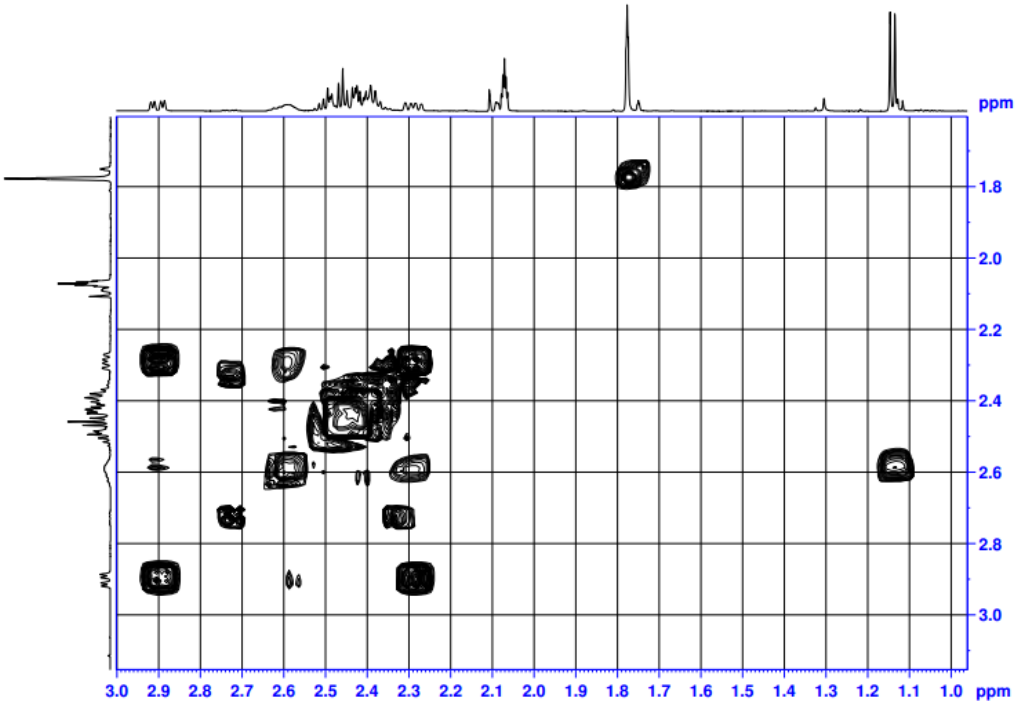
S23: Expansion of the HMBC Spectrum of Compound **2**



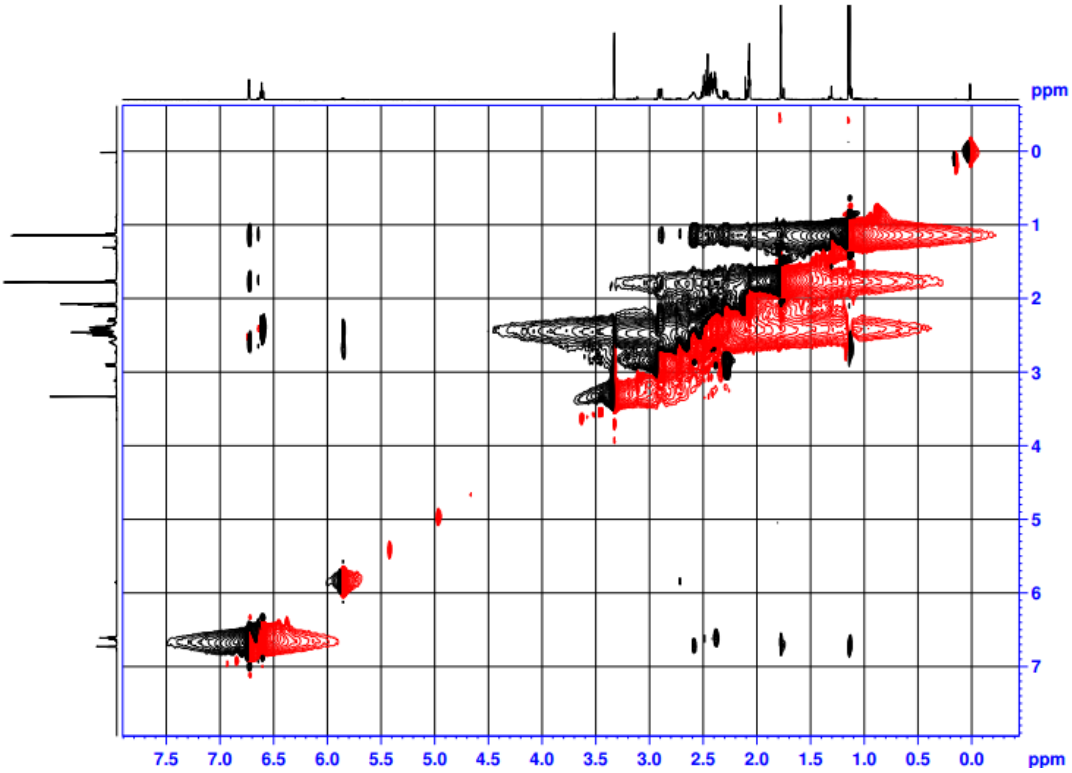
S24: Expansion of the HMBC Spectrum of Compound **2**



S25: ^{1}H-^{1}H COSY Spectrum (600MHz, Acetone) of Compound **2**



S26: Expansion of the ^{1}H-^{1}H COSY Spectrum of Compound **2**



S27: NOESY Spectrum (600MHz, Acetone) of Compound **2**

Shanghai Mass Spectrometry Center

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Chinese Academy of Sciences

High Resolution MS Data Report

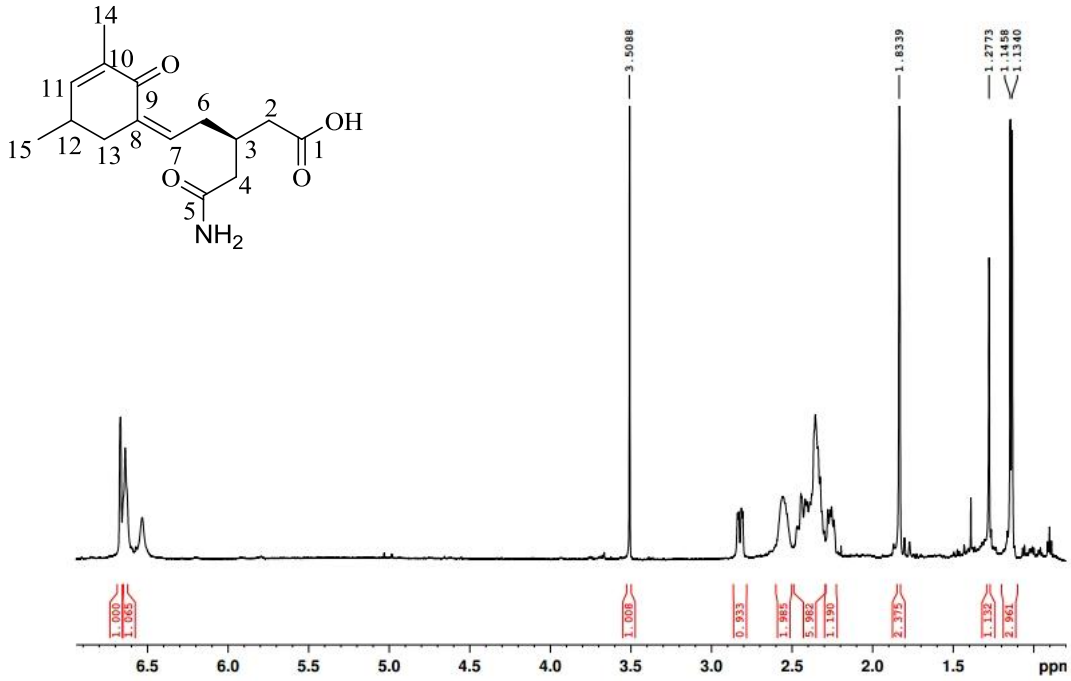
Instrument

Bruker Daltonics, Inc. APEXIII 7.0 TESLA FTMS

Card Serial Number	F140112
Analysis Name	D:\Data\zfj2014\20140106_000032.d
Sample Name	h-119-14 → Compound **3**
Acquisition Date	5/8/2013 3:13:36 PM
Operator:	zfj
Ionization Mode	ESI-Positive
Ion Mass (Measured)	302.1354

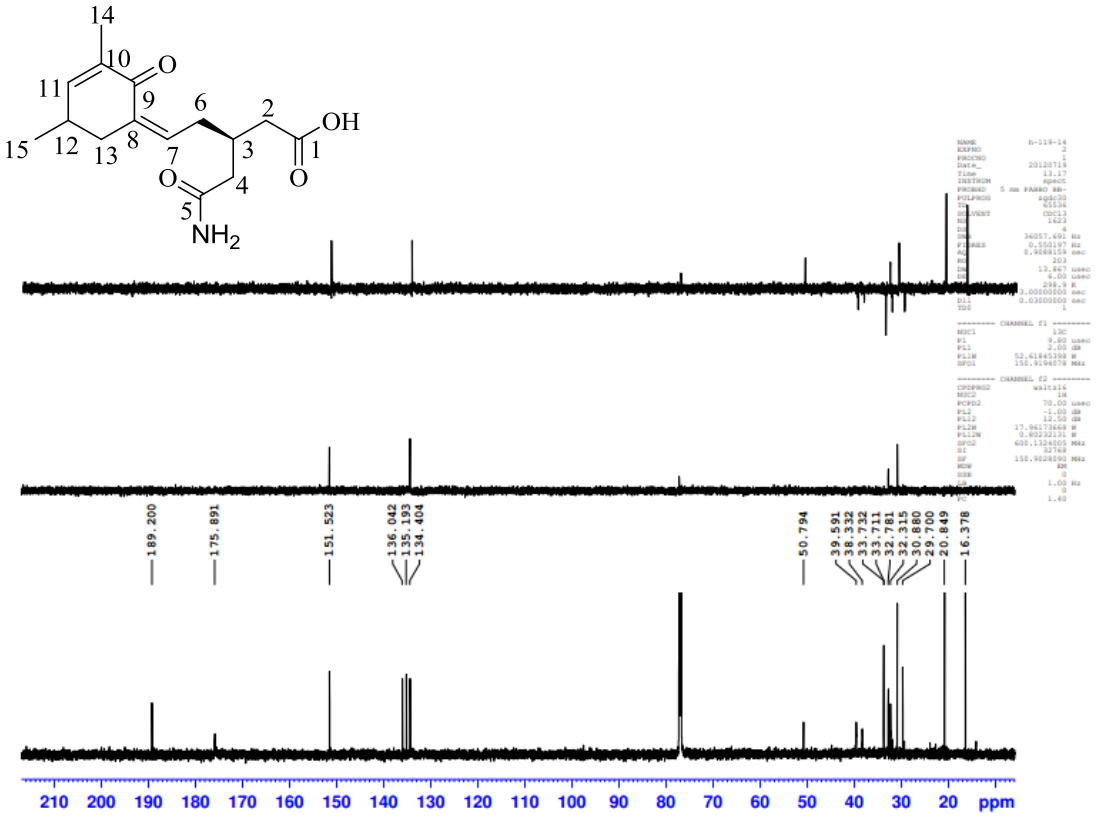
Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e⁻
C 12 H 20 N 3 O 6	0.021	302.1347	-2.37	-3.57	-0.72	4.50	ok	even
C 14 H 22 O 7	0.016	302.1360	2.08	0.86	0.63	4.00	ok	odd
C 15 H 21 N 1 Na 1 O 4	0.019	302.1363	2.99	1.61	0.90	5.50	ok	even

S28: HRESIMS Spectrum of Compound **3**

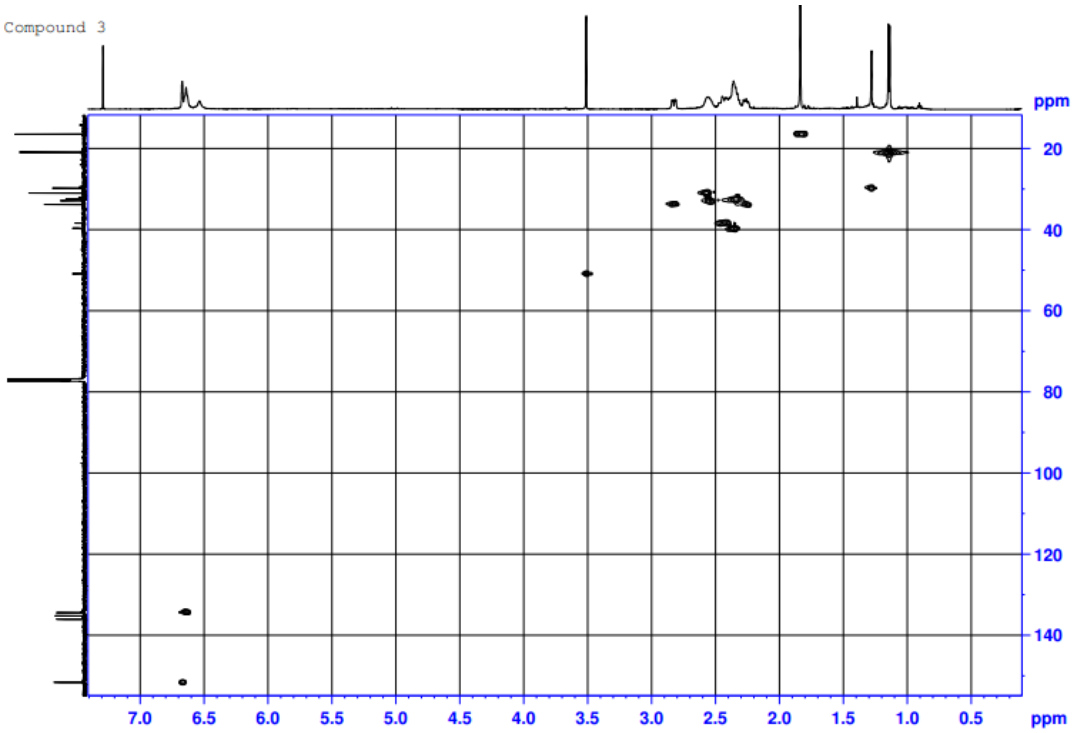


S29: ^{1}H-NMR Spectrum (600MHz, $CDCl_3$) of Compound **3**

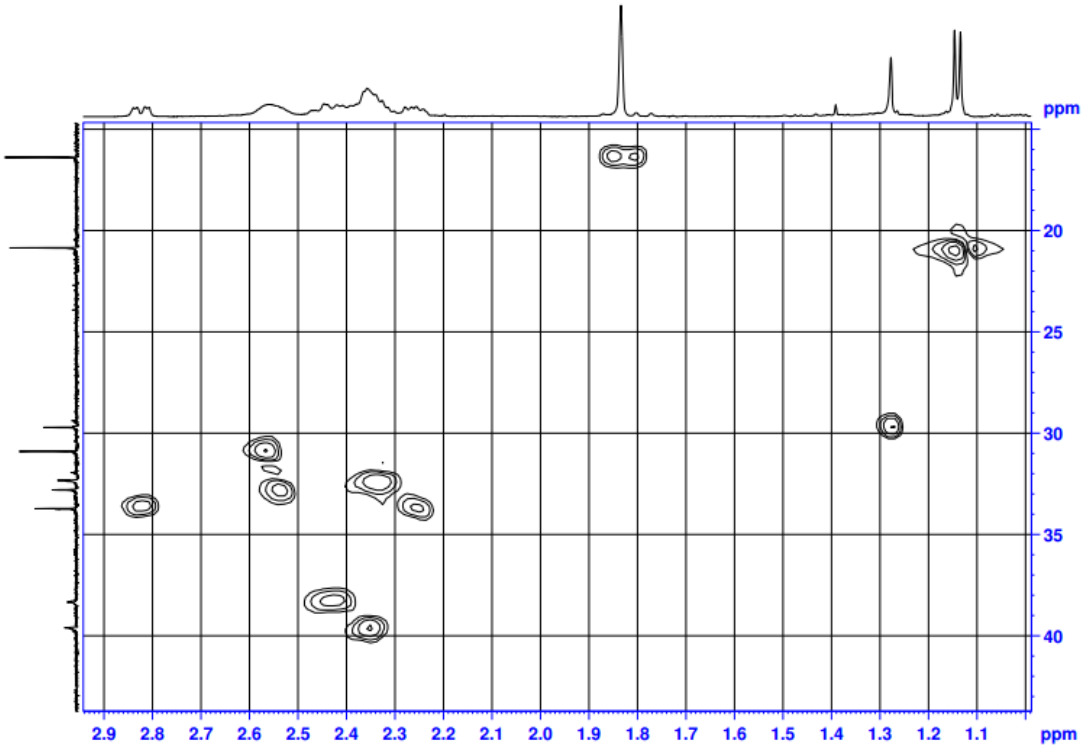
Compound **3** : ^{1}H-NMR ($CDCl_3$,600 MHz), δ: 1.15(3H, d, H-15), 1.83(3H, brs, H-14), 2.25(1H, dd, H-13β), 2.33(2H, m, H-6), 2.35(2H, m, H-4), 2.43(2H, m, H-2), 2.54(1H, m, H-3), 2.57(1H, m, H-12), 2.83(1H, dd, H-13α), 6.64(1H, br s, H-7), 6.67(1H, br s, H-11). ^{13}C-NMR ($CDCl_3$,600 MHz), δ: 16.4 (C-14), 20.9 (C-15), 30.8 (C-12), 33.3 (C-6), 32.8 (C-3), 33.8 (C-13), 38.4 (C-2), 39.7 (C-4), 134.3 (C-7), 135.2 (C-10), 136.1 (C-8), 151.6 (C-11), 176.1 (C-1/5), 189.3(C-9). EIMS: *m/z* = 279[M] $^{+}$ for formula $C_{15}H_{21}NO_4$.



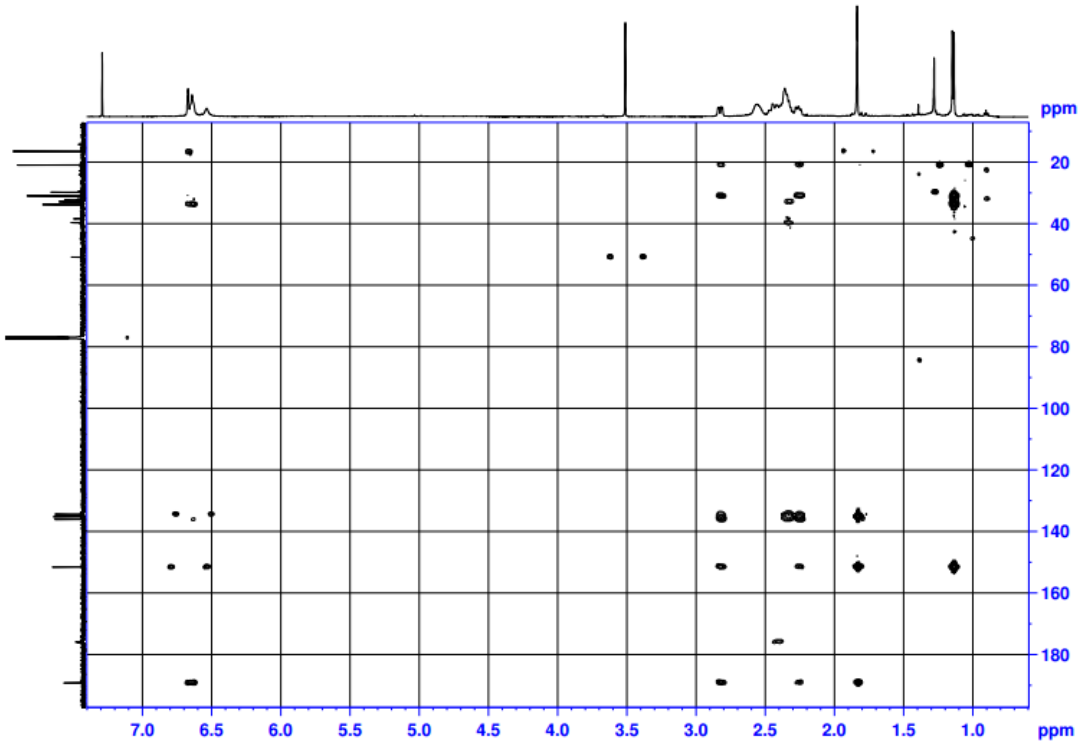
S30: ^{13}C-NMR and DEPT Spectrum (600MHz, $CDCl_3$) of Compound **3**



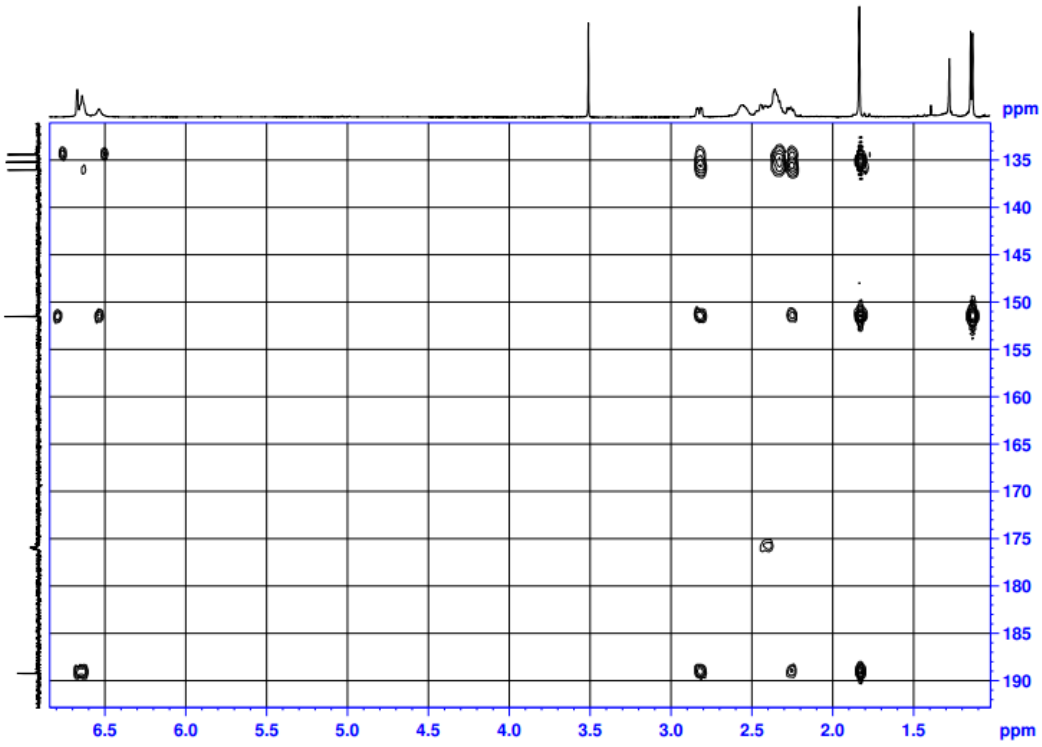
S31: HSQC Spectrum (600MHz, $CDCl_3$) of Compound **3**



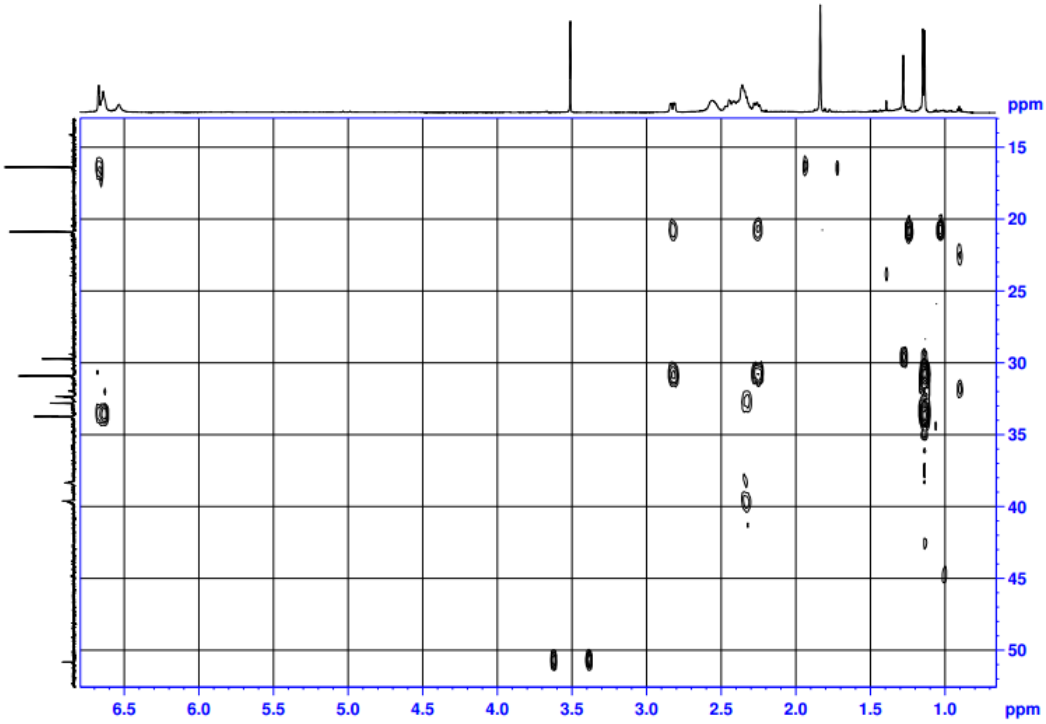
S32: Expansion of the HSQC Spectrum of Compound **3**



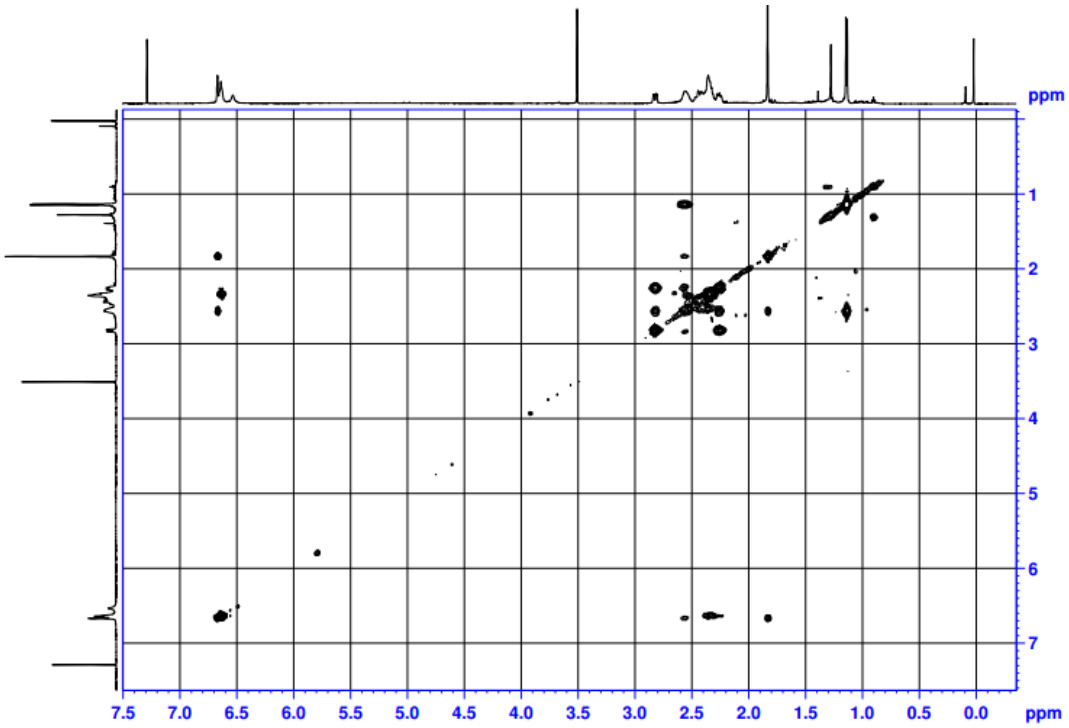
S33: HMBC Spectrum (600MHz, $CDCl_3$) of Compound **3**



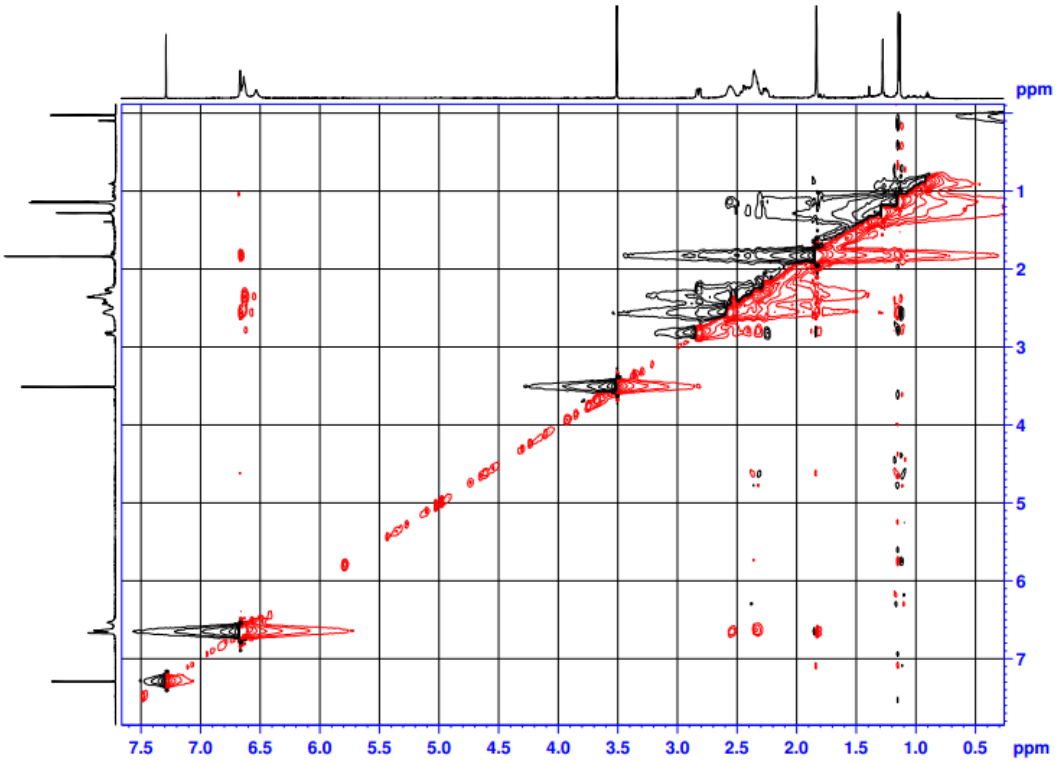
S34: Expansion of the HMBC Spectrum of Compound **3**



S35: Expansion of the HMBC Spectrum of Compound **3**



S36: ^{1}H-^{1}H COSY Spectrum (600MHz, $CDCl_3$) of Compound **3**



S37: NOESY Spectrum (600MHz, $CDCl_3$) of Compound **3**

Shanghai Mass Spectrometry Center

Shanghai Institute of Organic Chemistry

Chinese Academy of Sciences

High Resolution MS Data Report

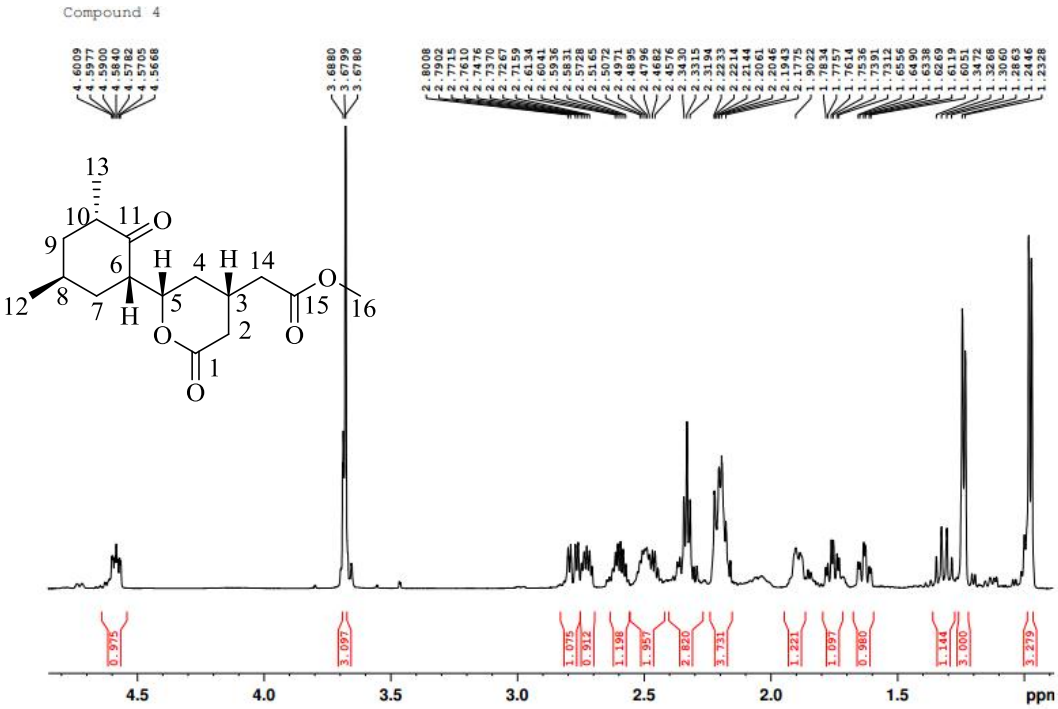
Instrument

Bruker Daltonics, Inc. APEXIII 7.0 TESLA FTMS

Card Serial Number	F140114
Analysis Name	D:\Data\zfj2014\20140108_000002.d
Sample Name	h-119-22 → Compound **4**
Acquisition Date	5/8/2013 4:00:34 PM
Operator:	zfj
Ionization Mode	ESI-Positive
Ion Mass (Measured)	319.1512

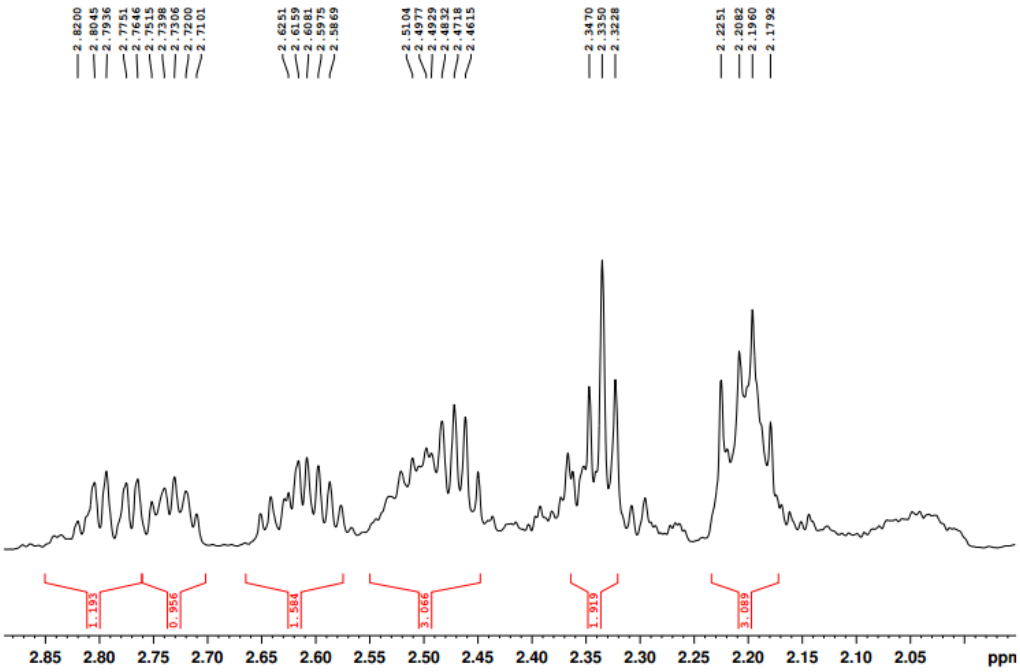
Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e⁻
C 13 H 23 N 2 O 7	0.015	319.1500	-3.70	-3.94	-1.18	3.50	ok	even
C 14 H 22 N 3 Na 1 O 4	0.007	319.1503	-2.83	-3.14	-0.90	5.00	ok	odd
C 16 H 21 N 3 O 4	0.005	319.1527	4.70	4.40	1.50	8.00	ok	odd
C 16 H 24 Na 1 O 5	0.002	319.1516	1.37	1.28	0.44	4.50	ok	even

S38: HRESIMS Spectrum of Compound **4**

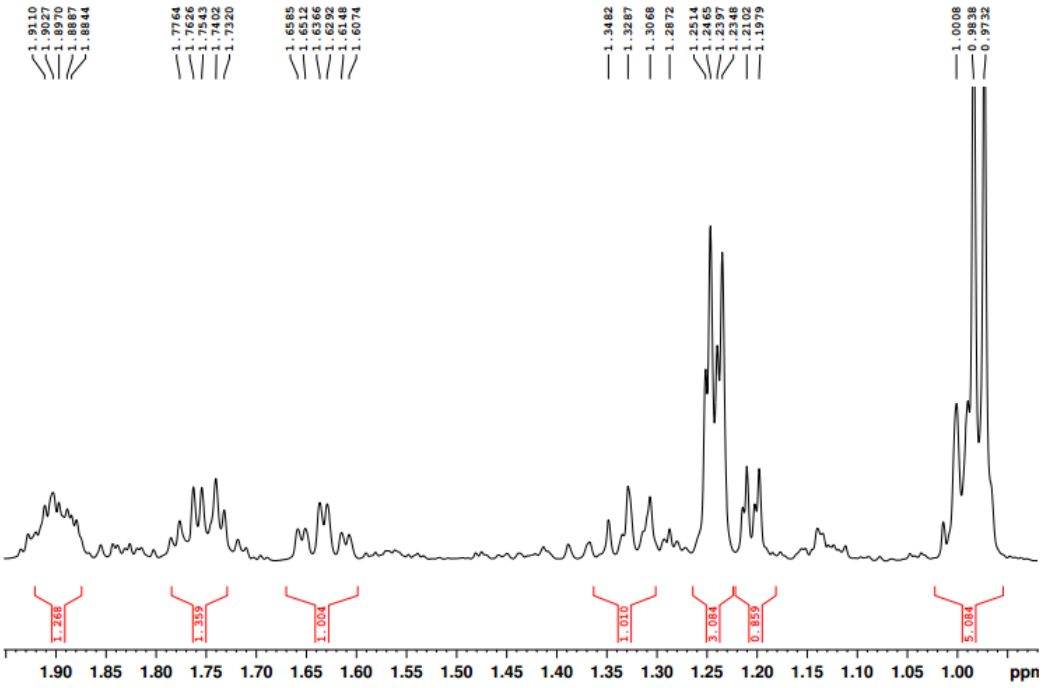


S39: ^{1}H-NMR Spectrum (600MHz, $CDCl_3$) of Compound **4**

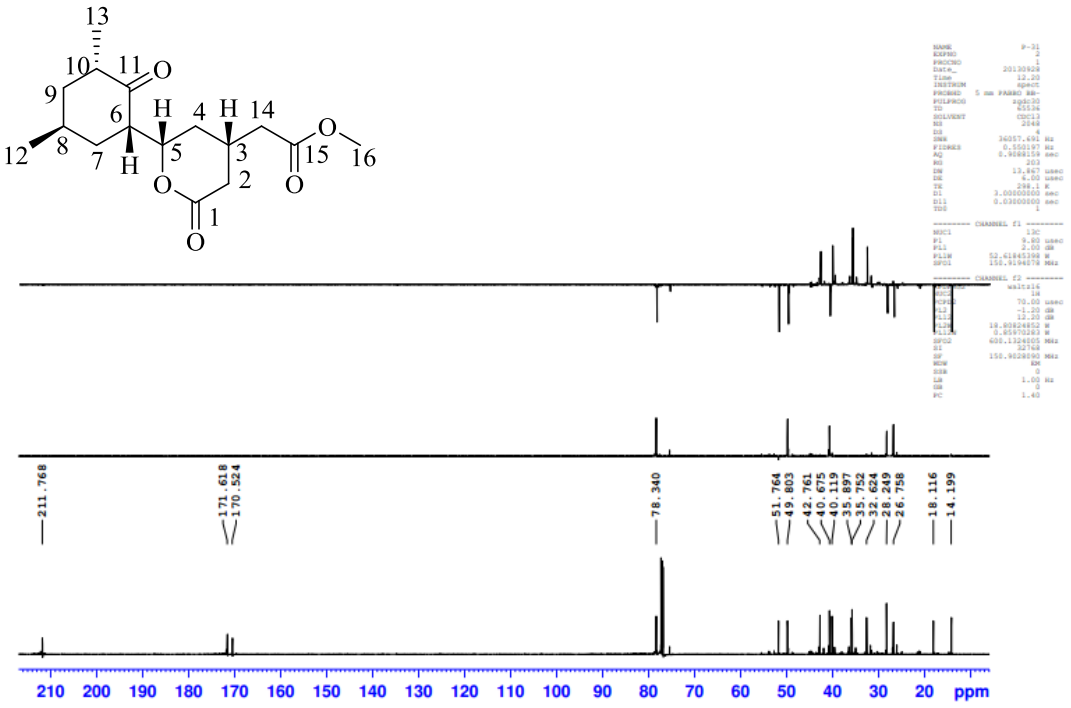
Compound **4**: ^{1}H-NMR ($CDCl_3$,600 MHz), δ: 0.98(3H, d, H-13), 1.24(3H, d, H-12), 1.32(1H, dd, H-4β), 1.63(1H, td, H-9β), 1.78(1H, td, H-7β), 1.89(1H, m, H-9α), 2.19(1H, m, H-7α), 2.19(1H, m, H-8), 2.22(1H, m, H-2β), 2.22(1H, m, H-4α), 2.34(2H, t, H-14), 2.49(1H, m, H-3), 2.60(1H, m, H-10), 2.73(1H, m, H-6), 2.78(1H, m, H-2α), 3.68(3H, d, O-Me), 4.58(1H, ddd, H-5). ^{13}C-NMR ($CDCl_3$,600 MHz), δ: 16.4 (C-14), 20.9 (C-15), 30.8 (C-12), 33.3 (C-6), 32.8 (C-3), 33.8 (C-13), 38.4 (C-2), 39.7 (C-4), 134.3 (C-7), 135.2 (C-10), 136.1 (C-8), 151.6 (C-11), 176.1 (C-1/5), 189.3(C-9). EIMS: *m/z* = 296[M] $^{+}$ for formula $C_{16}H_{24}O_5$.



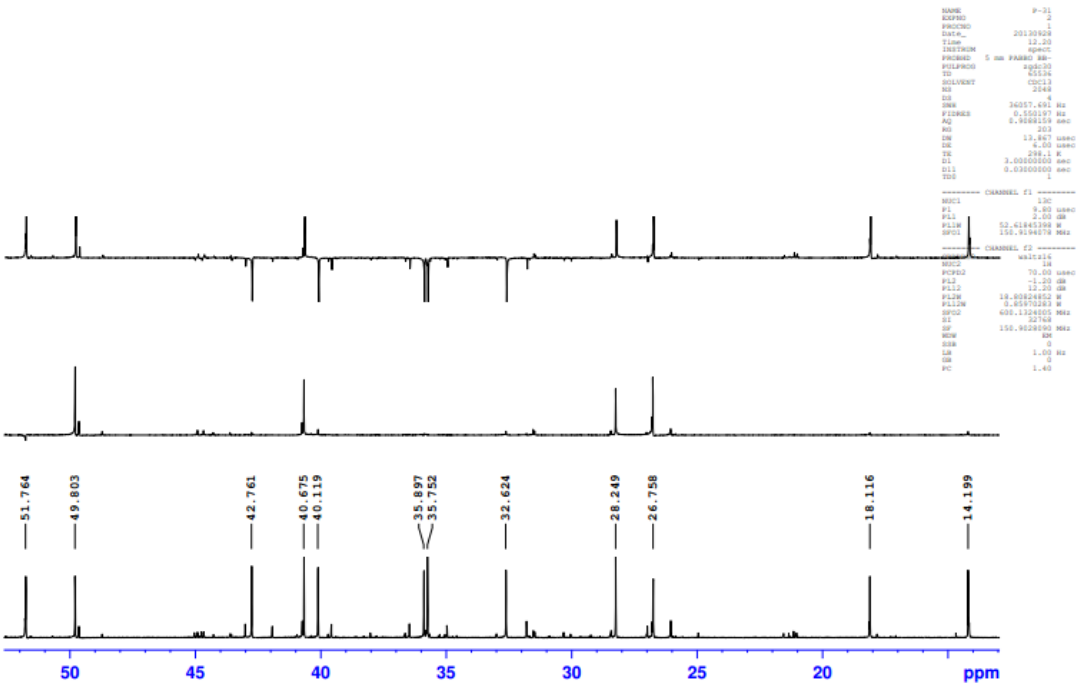
S40: Expansion of the ^{1}H-NMR Spectrum of Compound **4**



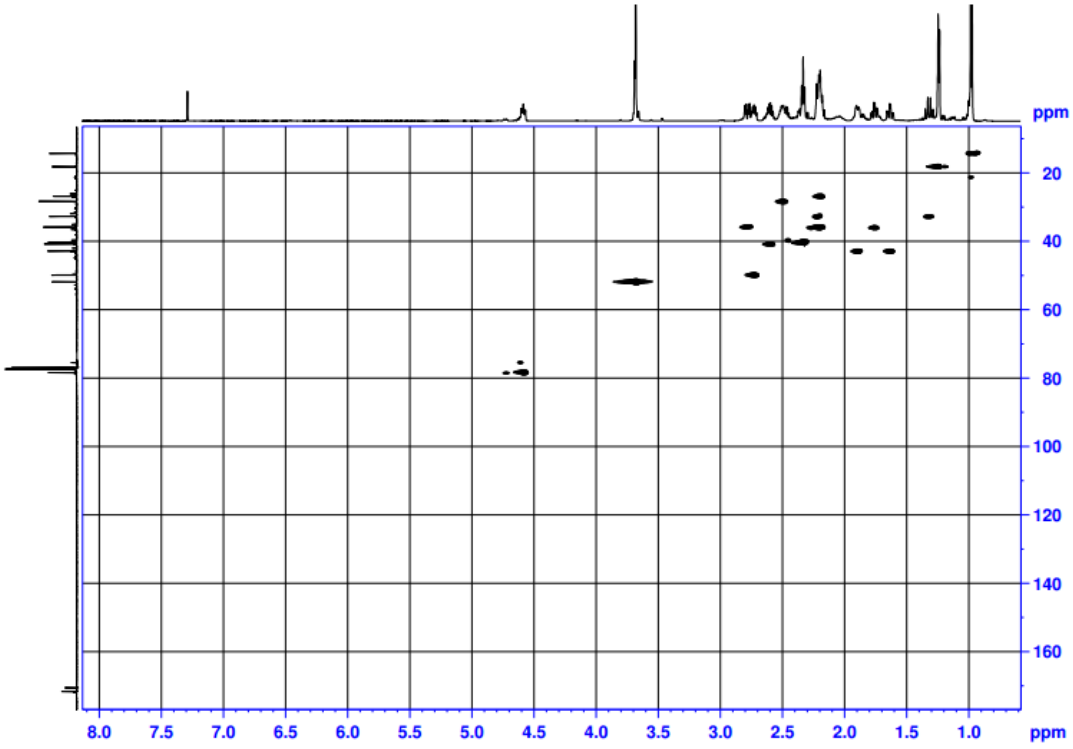
S41: Expansion of the ^{1}H-NMR Spectrum of Compound **4**



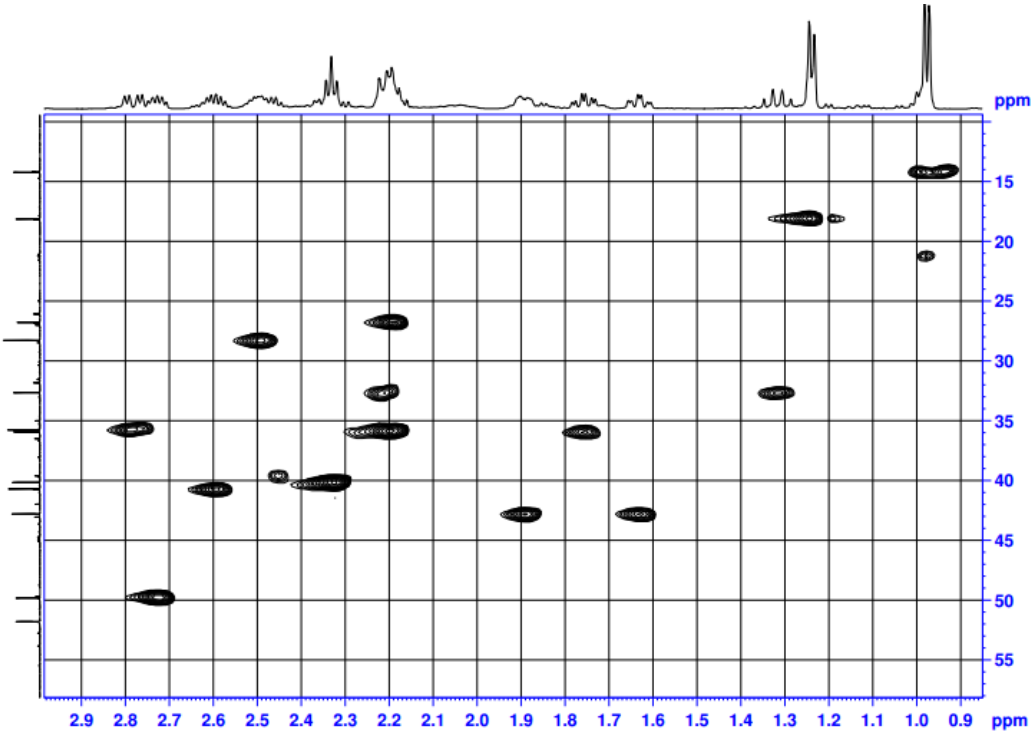
S42: ^{13}C-NMR Spectrum (600MHz, $CDCl_3$) of Compound **4**



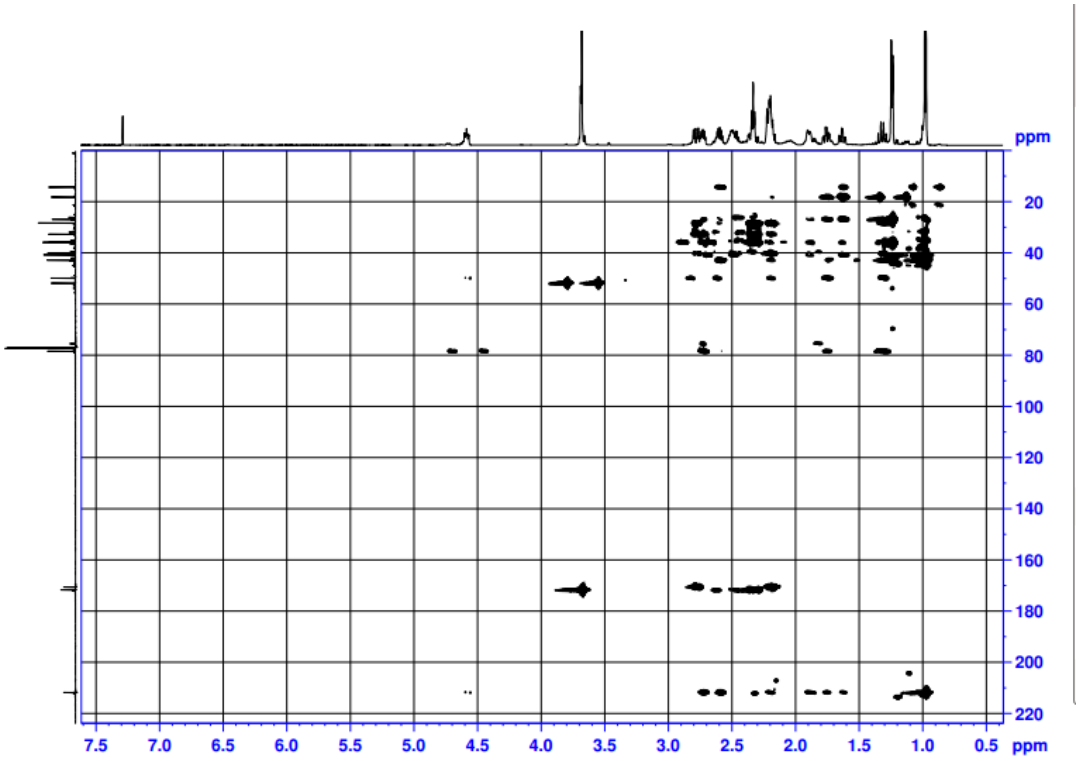
S43: Expansion of the ^{13}C-NMR Spectrum of Compound **4**



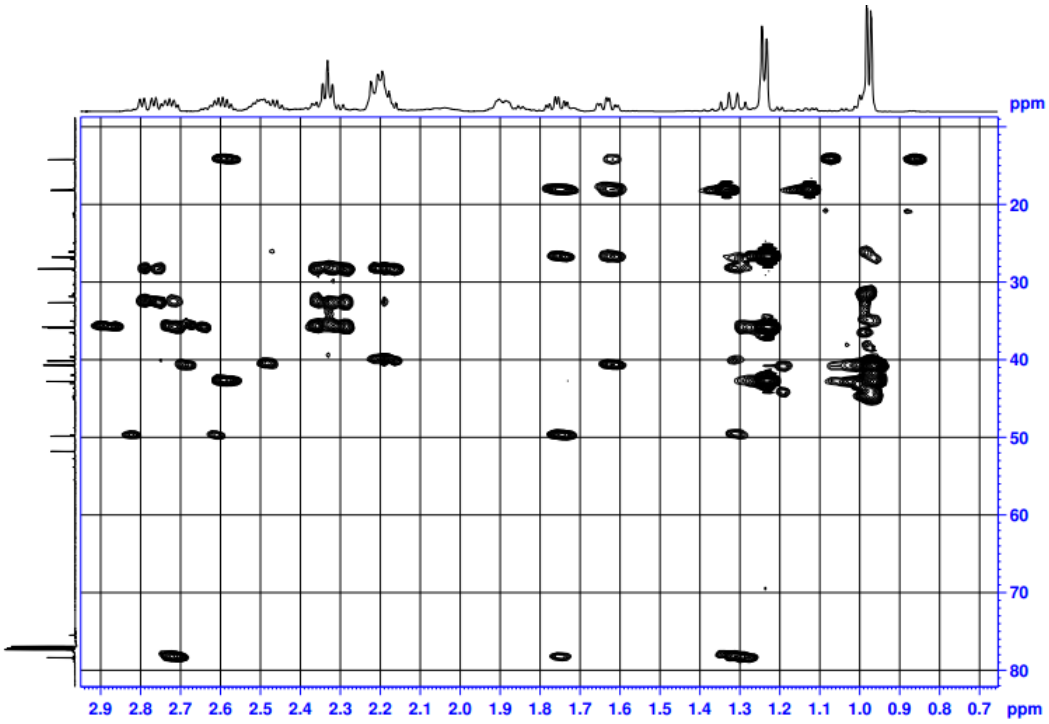
S44: HSQC Spectrum (600MHz, $CDCl_3$) of Compound **4**



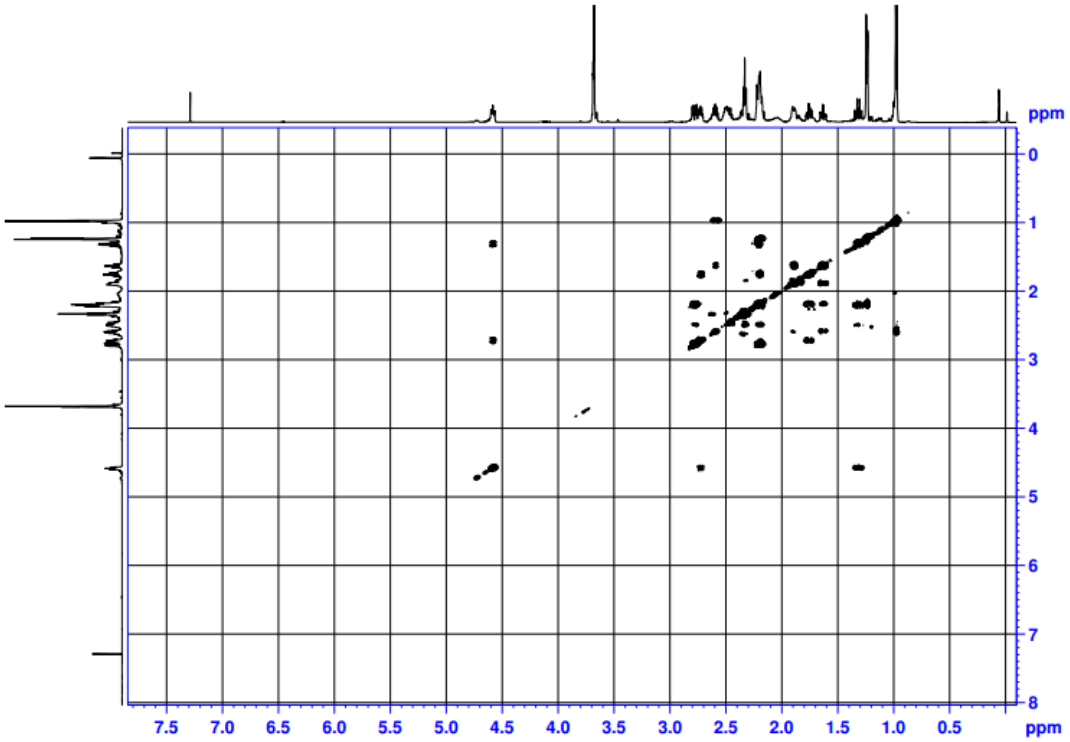
S45: Expansion of the HSQC Spectrum of Compound **4**



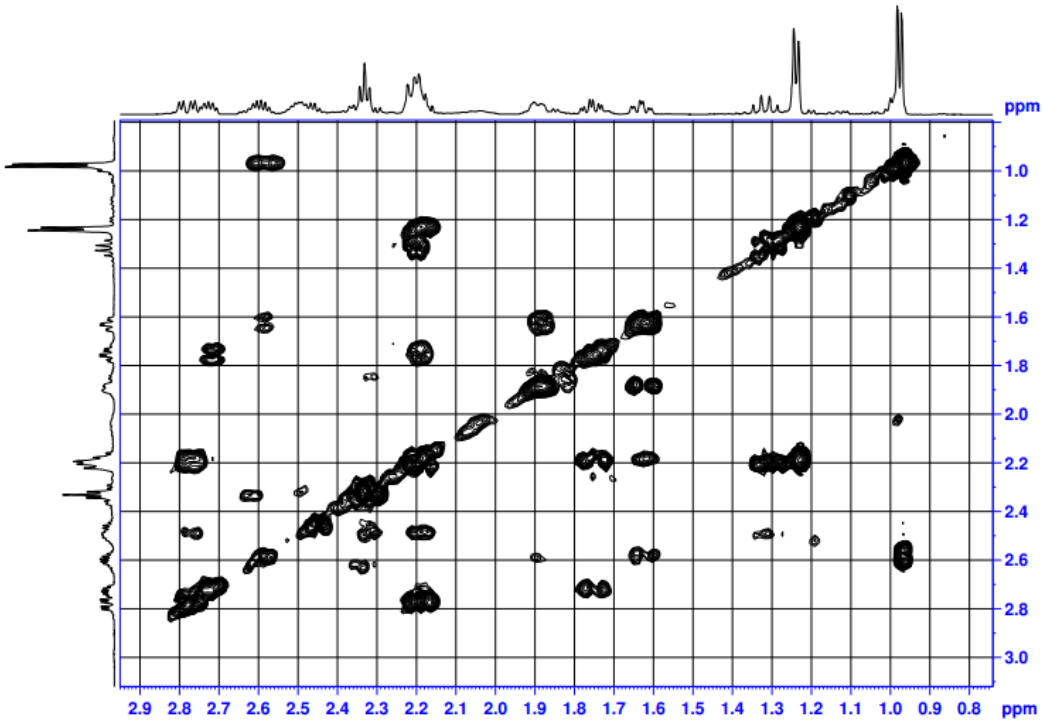
S46: HMBC Spectrum (600MHz, $CDCl_3$) of Compound **4**



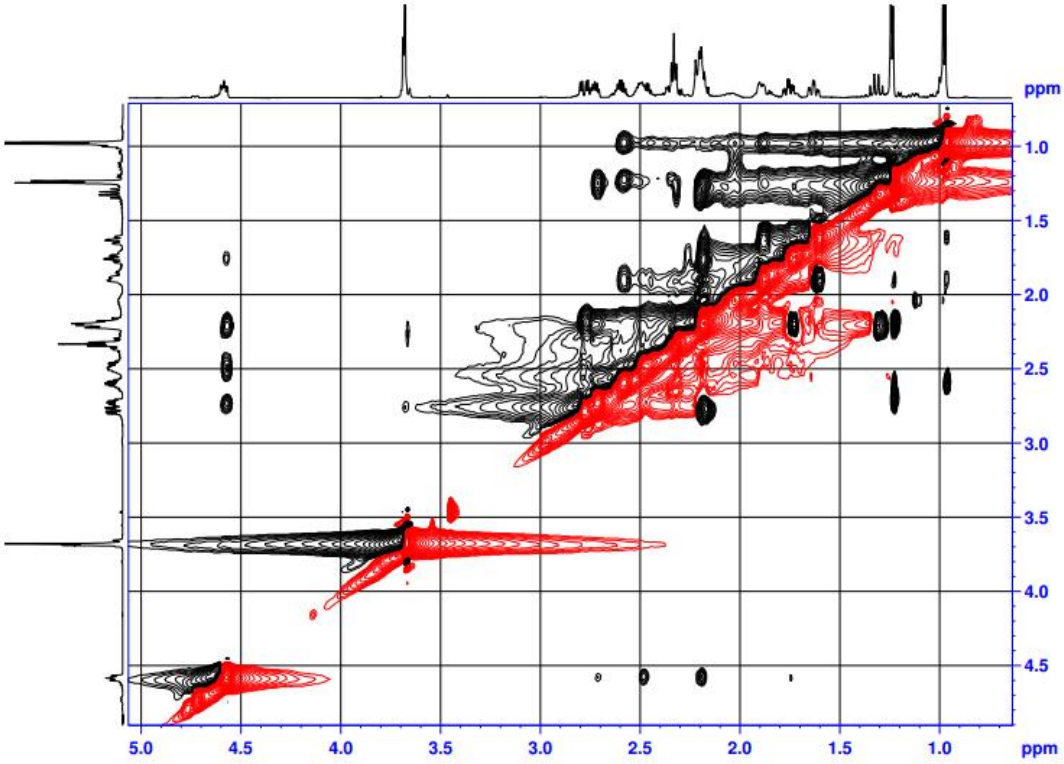
S47: Expansion of the HMBC Spectrum of Compound **4**



S48: ^{1}H-^{1}H COSY Spectrum (600MHz, $CDCl_3$) of Compound **4**



S49: Expansion of the ^{1}H-^{1}H COSY Spectrum of Compound **4**



S50: NOESY Spectrum (600MHz, $CDCl_3$) of Compound **4**