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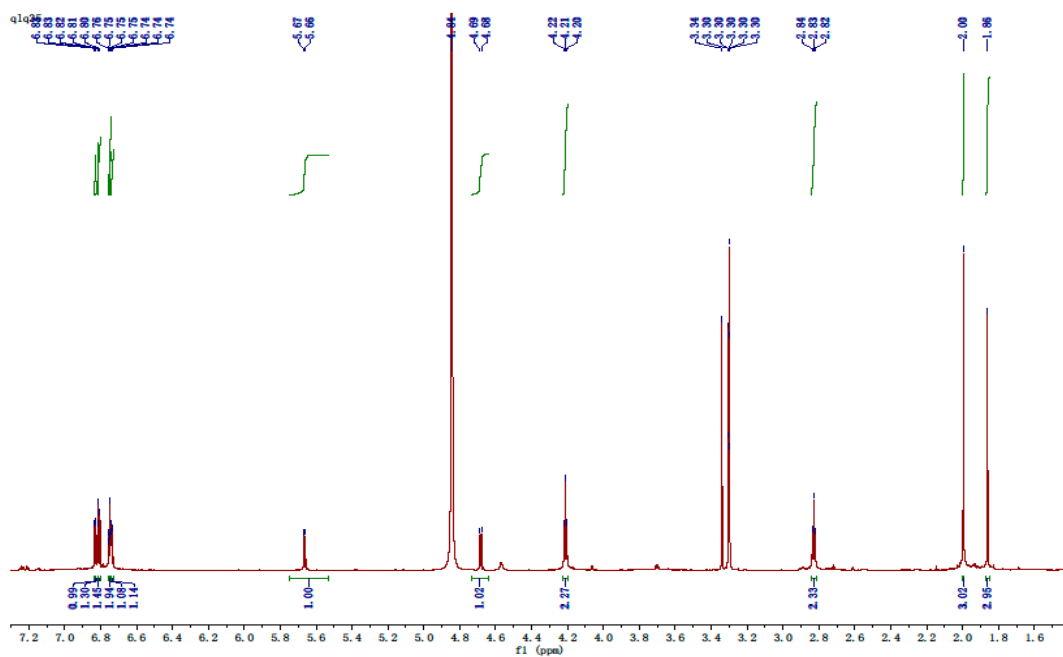


Figure S1.  $^1\text{H}$ -NMR spectrum of **1** in  $\text{CD}_3\text{OD}$ .

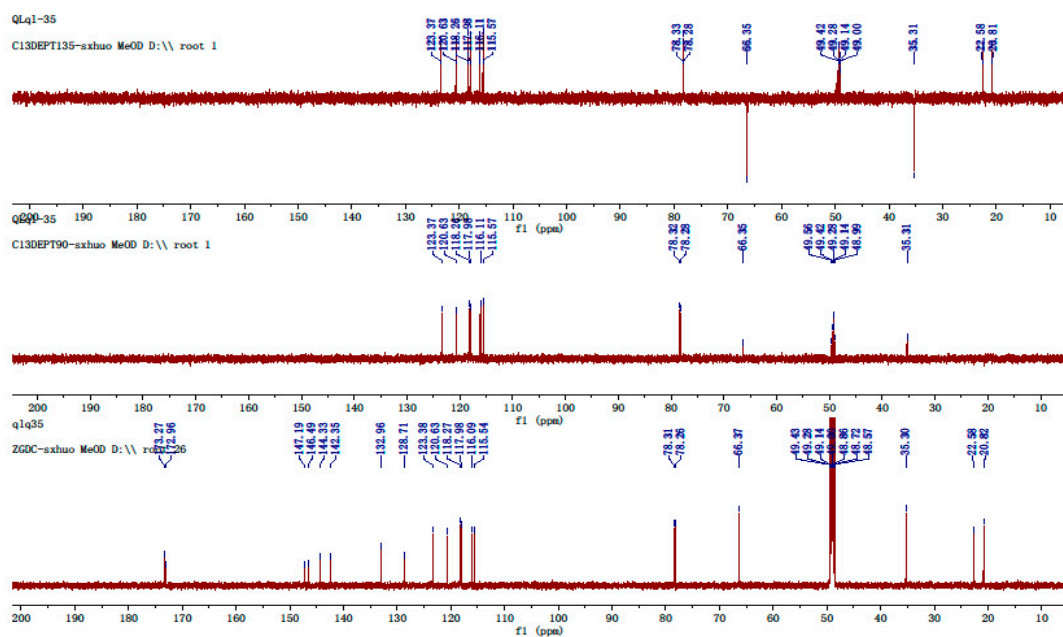
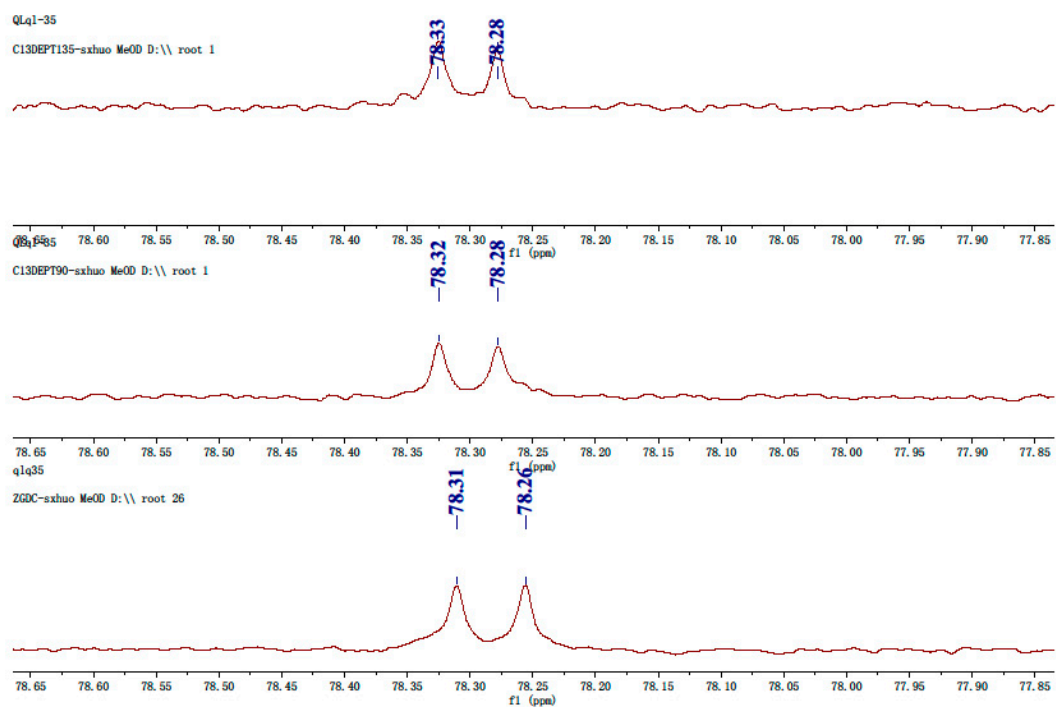


Figure S2.  $^{13}\text{C}$ -NMR and DEPT spectra of **1** in  $\text{CD}_3\text{OD}$ .



Enlarged  $^{13}\text{C}$ -NMR and DEPT spectra of **1** (C-2,C-3) in  $\text{CD}_3\text{OD}$ .

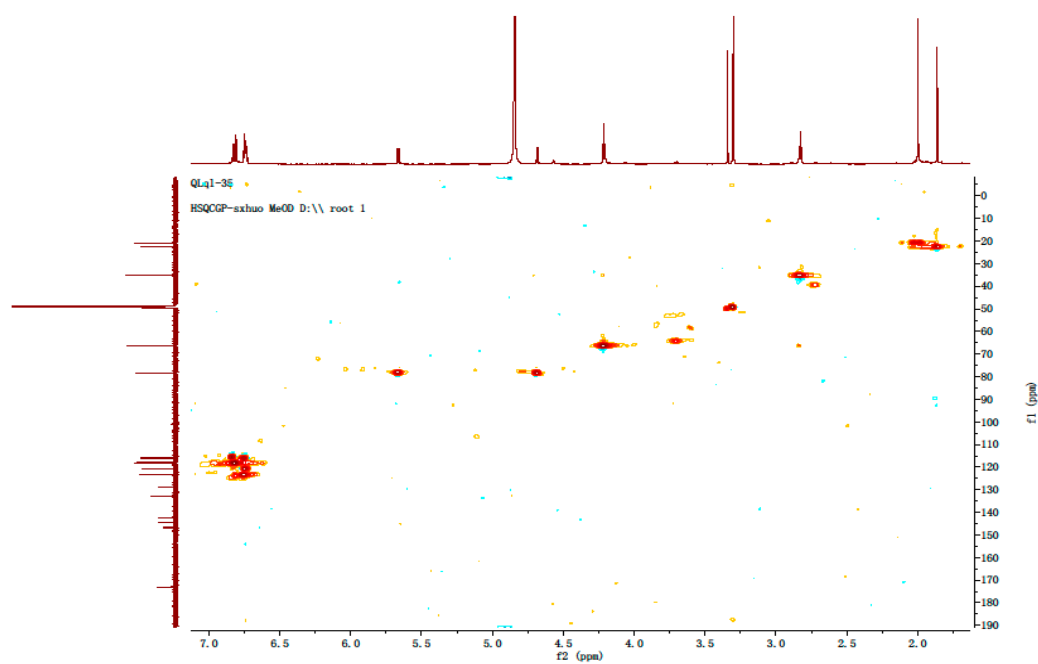


Figure S3. HSQC spectrum of **1** in  $\text{CD}_3\text{OD}$ .

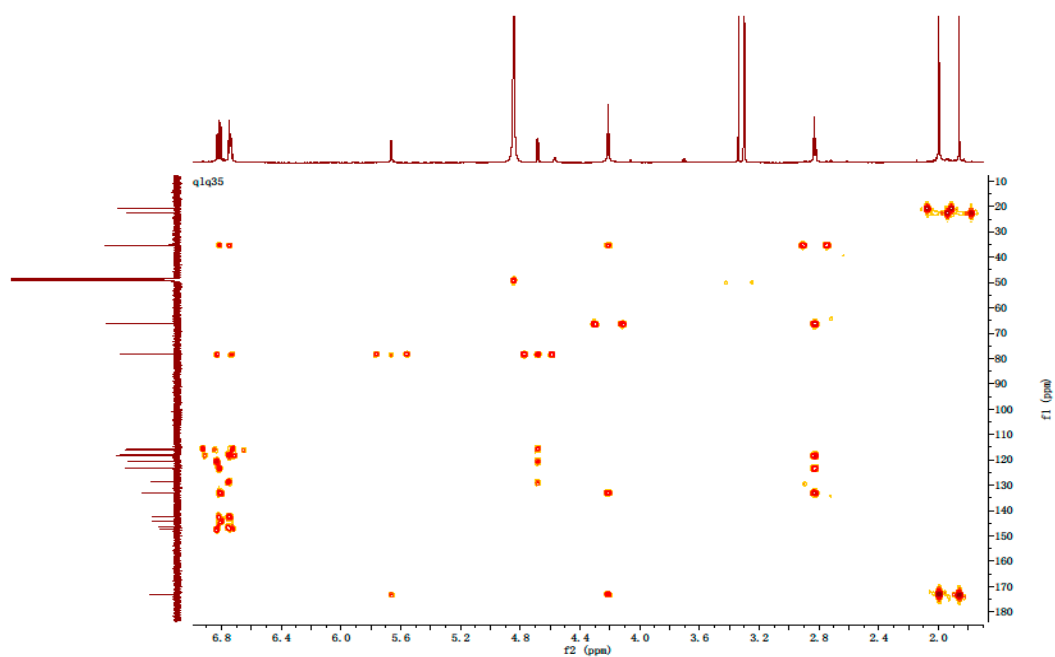
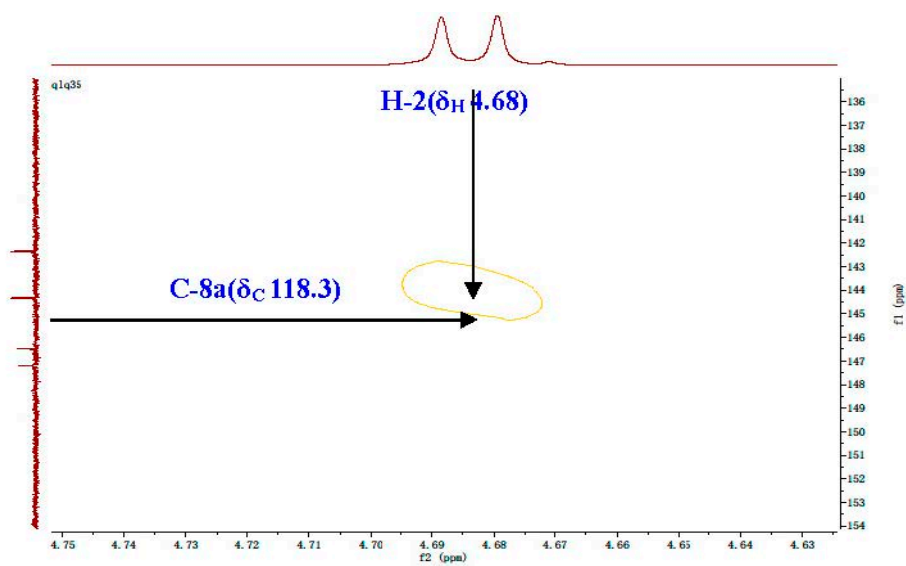
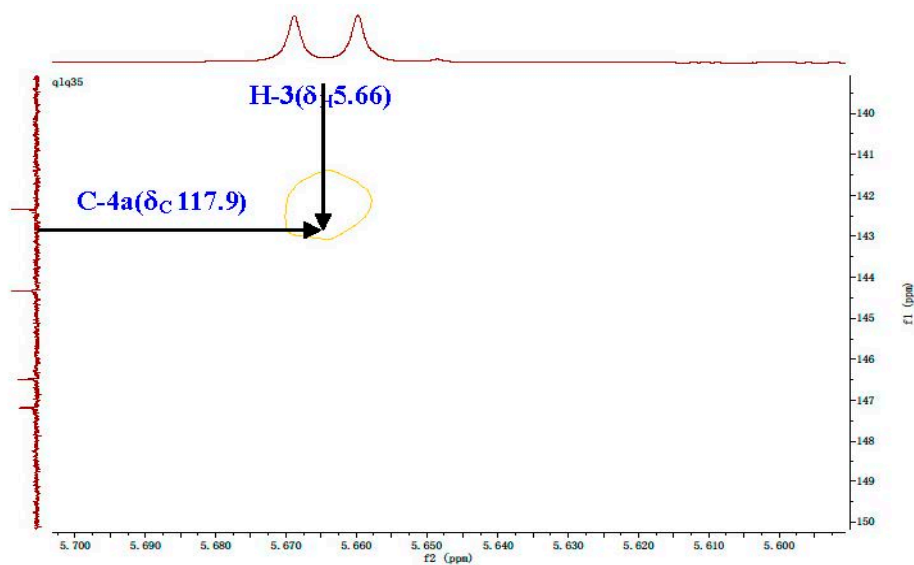


Figure S4. HMBC spectrum of **1** in CD<sub>3</sub>OD.



Enlarged HMBC spectrum of **1** (key correlations of H-2/C-8a) in CD<sub>3</sub>OD.



Enlarged HMBC spectrum of **1** (key correlations of H-3/C-4a) in CD<sub>3</sub>OD.

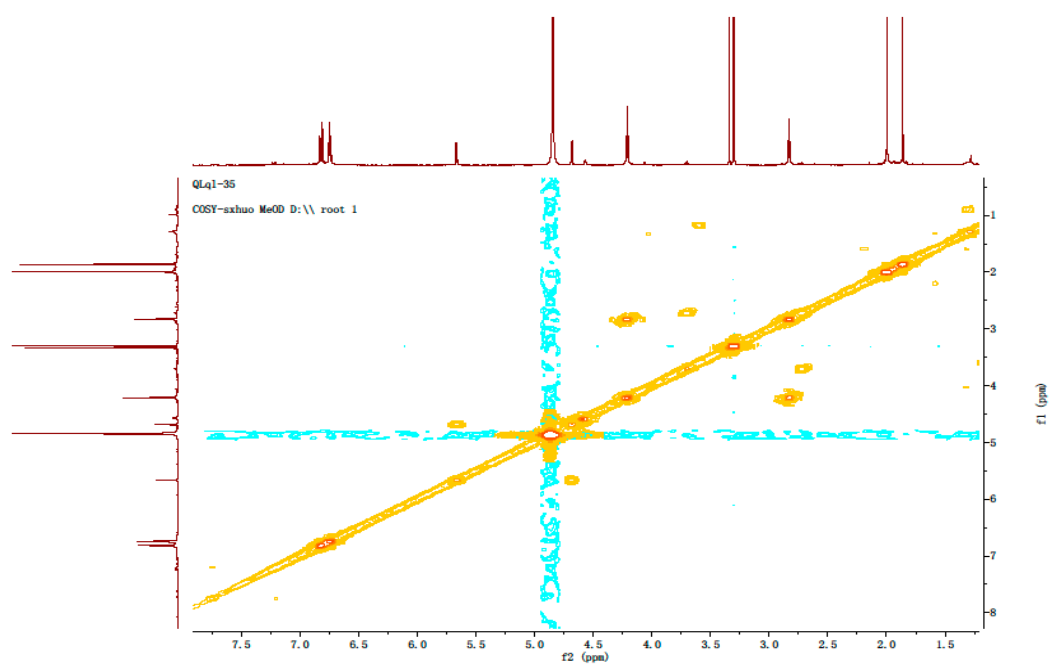


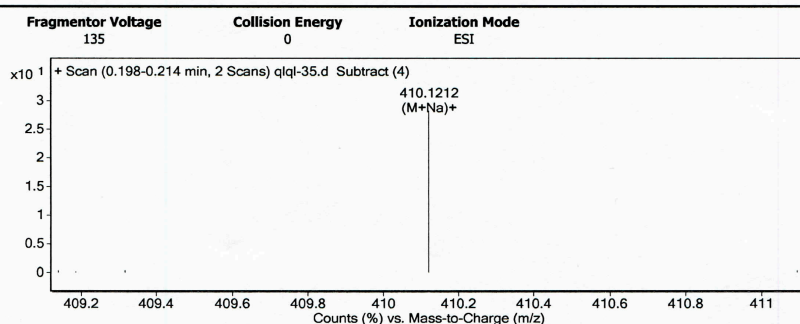
Figure S5. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of **1** in CD<sub>3</sub>OD.

## Qualitative Analysis Report

<b>Data Filename</b>	qlql-35.d	<b>Sample Name</b>	qlql-35
<b>Sample Type</b>	Sample	<b>Position</b>	P1-A1
<b>Instrument Name</b>	Instrument 1	<b>User Name</b>	
<b>Acq Method</b>	SIBU.m	<b>Acquired Time</b>	4/13/2015 2:06:28 PM
<b>IRM Calibration Status</b>	Success	<b>DA Method</b>	Default.m
<b>Comment</b>			

<b>Sample Group</b>		<b>Info.</b>
<b>Acquisition SW</b>	6200 series TOF/6500 series	
<b>Version</b>	Q-TOF B.05.01 (B5125.2)	

### User Spectra



### Peak List

m/z	z	Abund	Formula	Ion
274.2745	1	24310.29		
302.3055	1	10523.09		
318.3002	1	12763.09		
381.2981	1	9396.49		
388.1392	1	8674.9		
410.1212	1	15832.46	C <sub>20</sub> H <sub>21</sub> N O <sub>7</sub>	(M+Na) <sup>+</sup>

### Formula Calculator Element Limits

Element	Min	Max
C	3	60
H	0	120
N	0	10
O	0	30

### Formula Calculator Results

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C <sub>20</sub> H <sub>21</sub> N O <sub>7</sub>	387.1318	410.1210	410.1212	-0.3	-0.9	11.0000

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Figure S6. HRESIMS spectrum of 1.

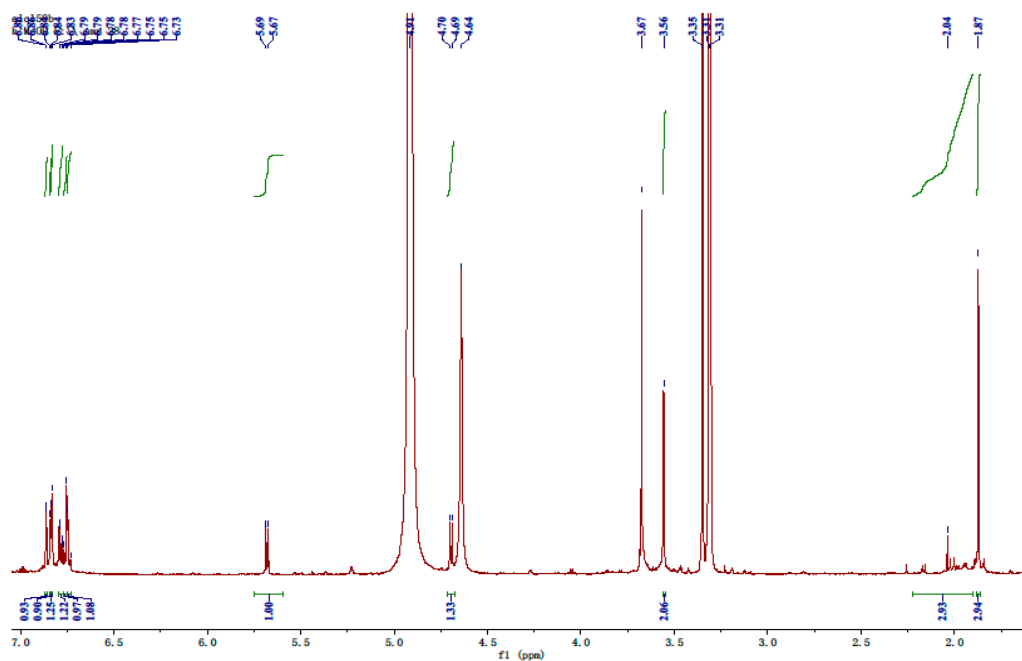


Figure S7.  $^1\text{H-NMR}$  spectrum of **2** in  $\text{CD}_3\text{OD}$ .

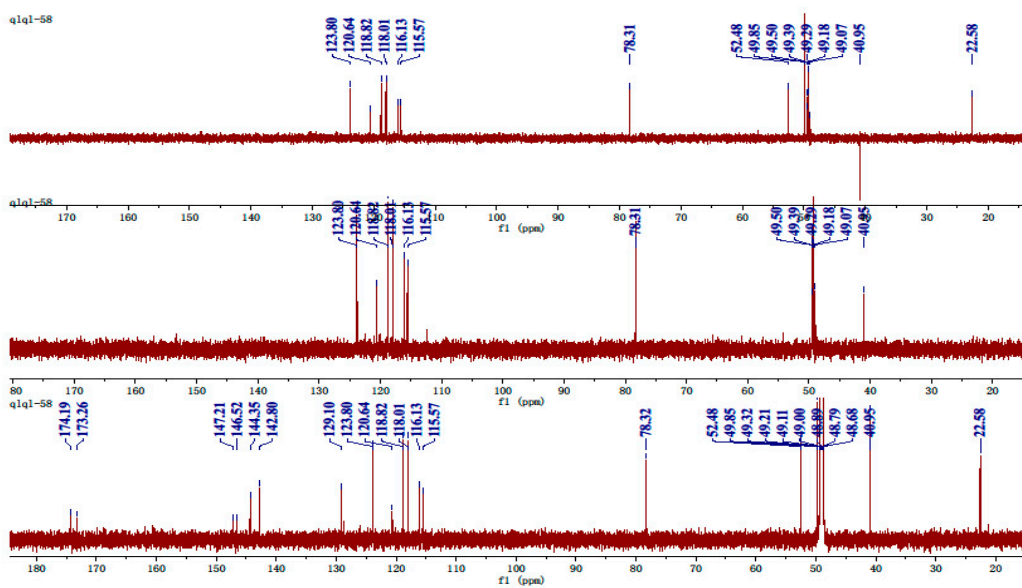
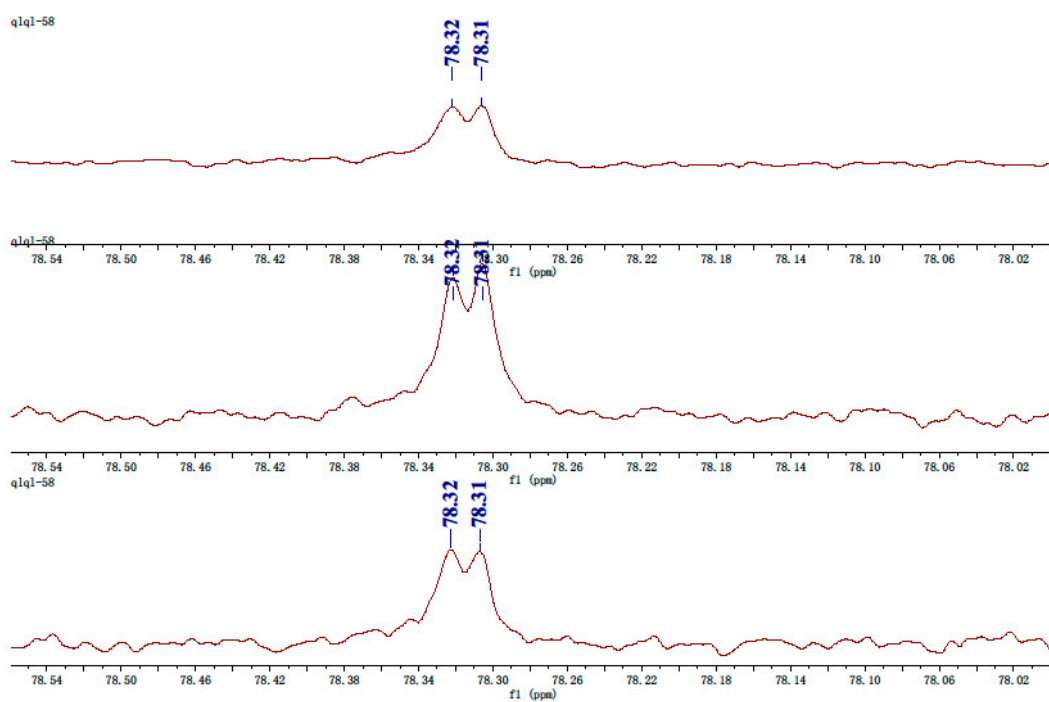


Figure S8.  $^{13}\text{C-NMR}$  and DEPT spectra of **2** in  $\text{CD}_3\text{OD}$ .



Enlarged  $^{13}\text{C}$ -NMR and DEPT spectra of **2** (C-2, C-3) in  $\text{CD}_3\text{OD}$ .

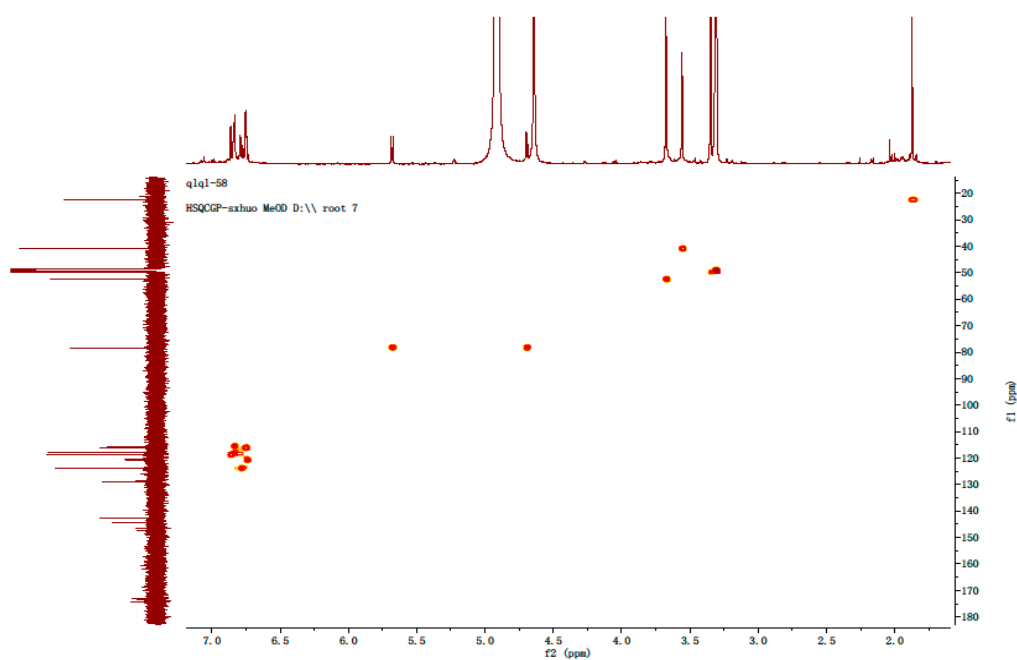


Figure S9. HSQC spectrum of **2** in  $\text{CD}_3\text{OD}$ .



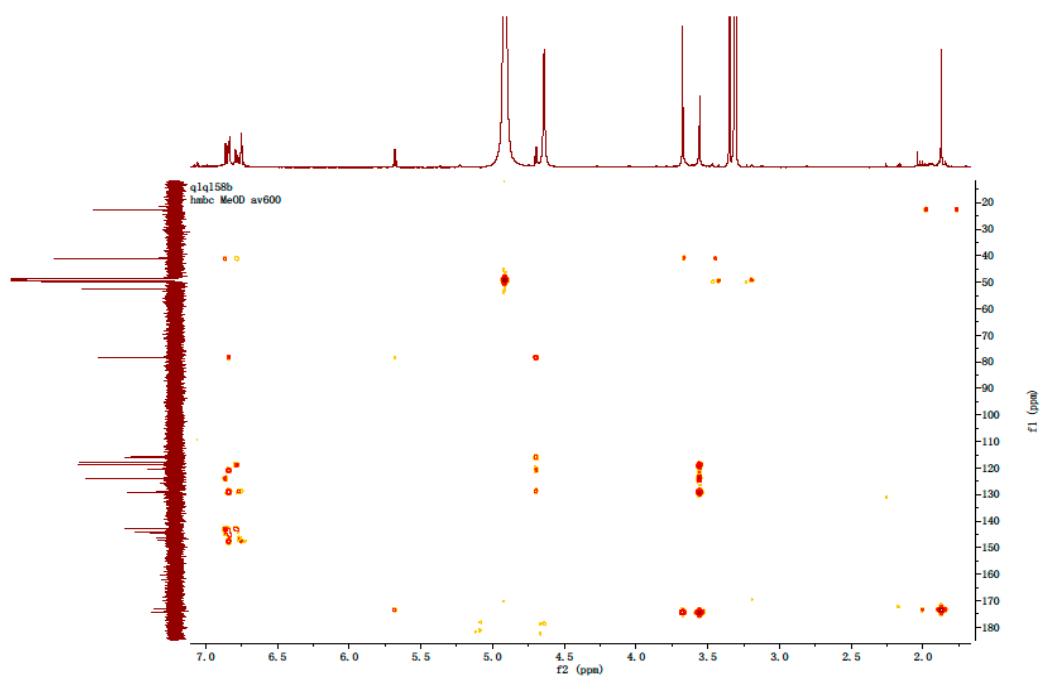
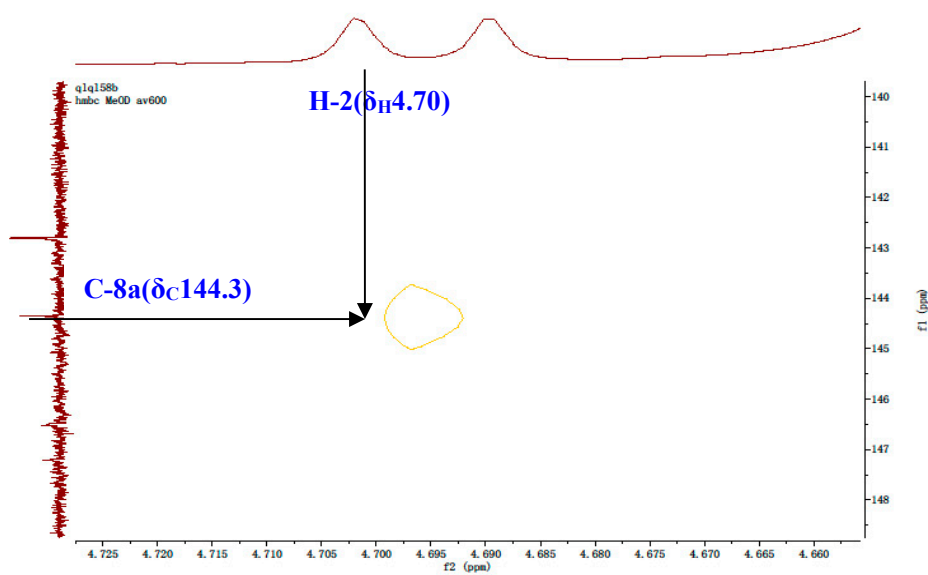
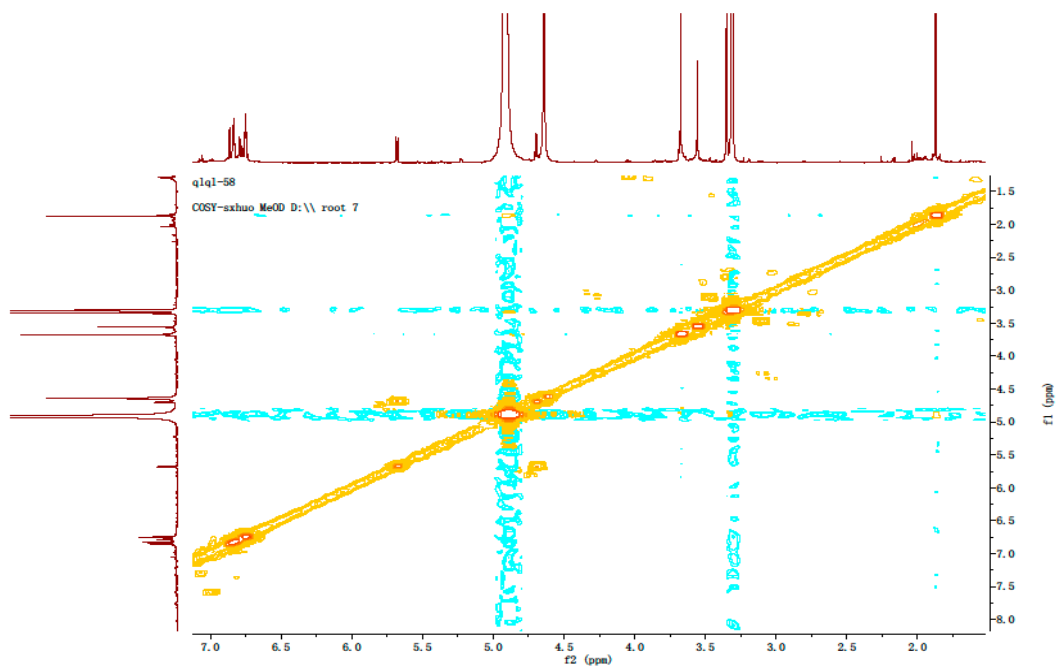


Figure S10. HMBC spectrum of **2** in CD<sub>3</sub>OD.



Enlarged HMBC spectrum of **2** (key correlations of H-2/C-8a) in CD<sub>3</sub>OD.

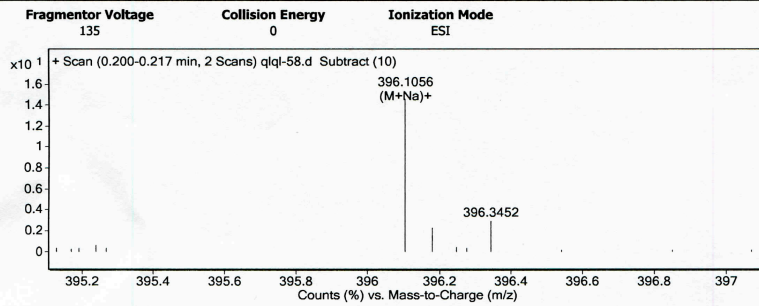


**Figure S11.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of **2** in  $\text{CD}_3\text{OD}$ .

### Qualitative Analysis Report

<b>Data Filename</b>	qlql-58.d	<b>Sample Name</b>	qlql-58
<b>Sample Type</b>	Sample	<b>Position</b>	P1-A3
<b>Instrument Name</b>	Instrument 1	<b>User Name</b>	
<b>Acq Method</b>	SIBU.m	<b>Acquired Time</b>	4/13/2015 2:10:14 PM
<b>IRM Calibration Status</b>	Success	<b>DA Method</b>	Default.m
<b>Comment</b>			
<b>Sample Group</b>		<b>Info.</b>	
<b>Acquisition SW Version</b>	6200 series TOF/6500 series Q-TOF B.05.01 (B5125.2)		

**User Spectra**



**Peak List**

m/z	z	Abund	Formula	Ion
274.2744	1	27249.32		
302.3056	1	11985.32		
318.2997	1	14544.99		
330.3365	1	7923.88		
396.1056	1	10285.74	C19 H19 N O7	(M+Na)+
453.1669	1	8345.76		

**Formula Calculator Element Limits**

Element	Min	Max
C	3	60
H	0	120
N	0	10
O	0	30

**Formula Calculator Results**

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C19 H19 N O7	373.1162	396.1054	396.1056	-0.6	-1.6	11.0000

--- End Of Report ---

**Figure S12. HRESIMS spectrum of 2.**

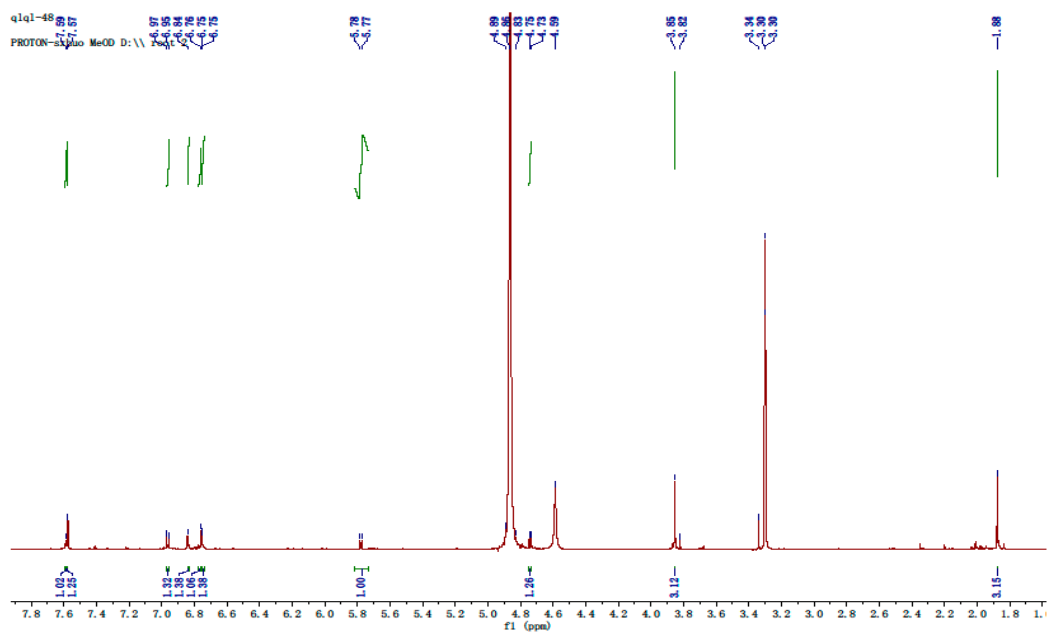


Figure S13.  $^1\text{H}$ -NMR spectrum of **3** in  $\text{CD}_3\text{OD}$ .

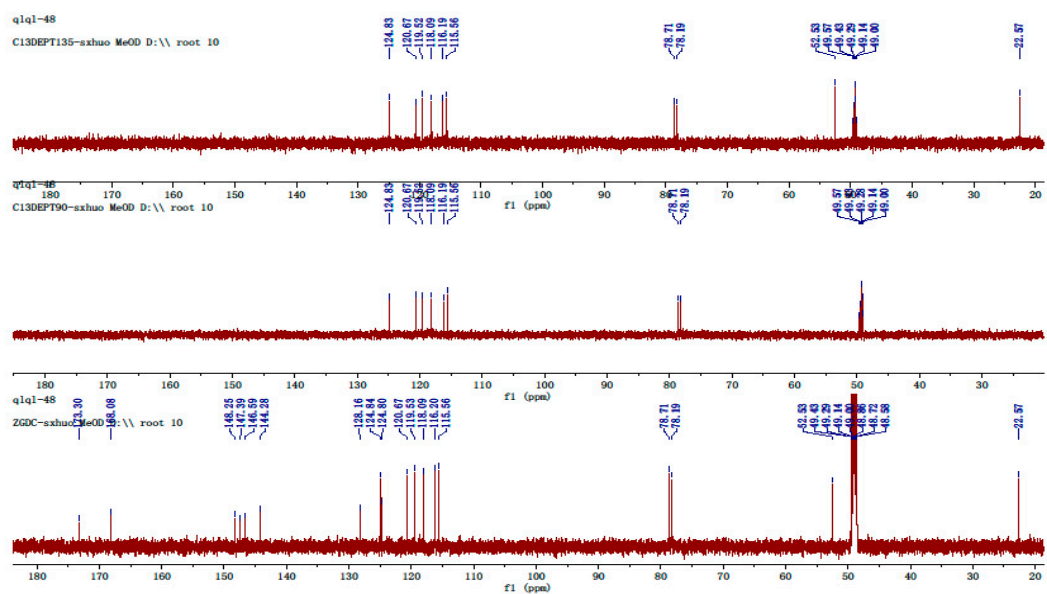
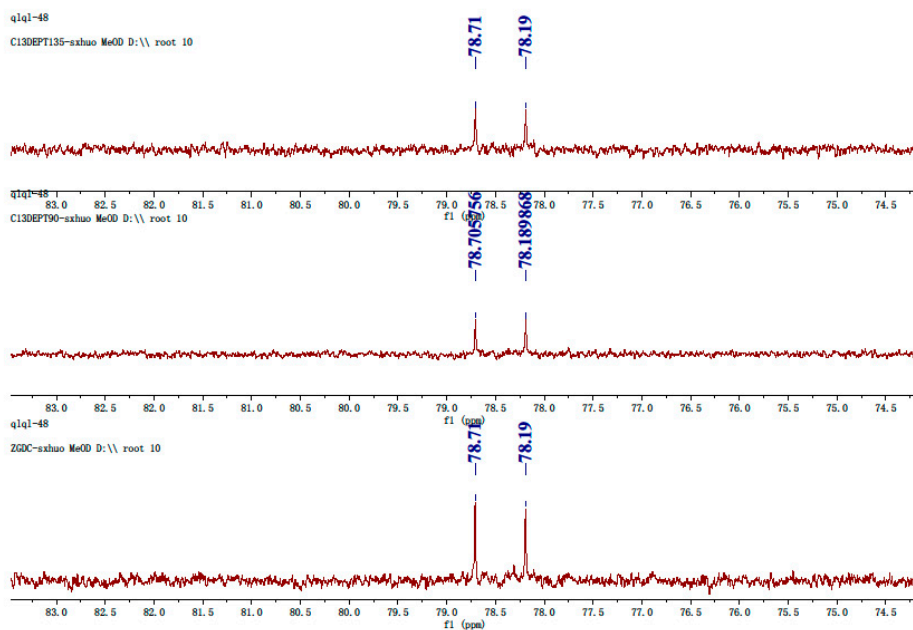


Figure S14.  $^{13}\text{C}$ -NMR and DEPT spectra of **3** in  $\text{CD}_3\text{OD}$ .



Enlarged  $^{13}\text{C}$ -NMR and DEPT spectra of **3** (C-2, C-3) in  $\text{CD}_3\text{OD}$ .

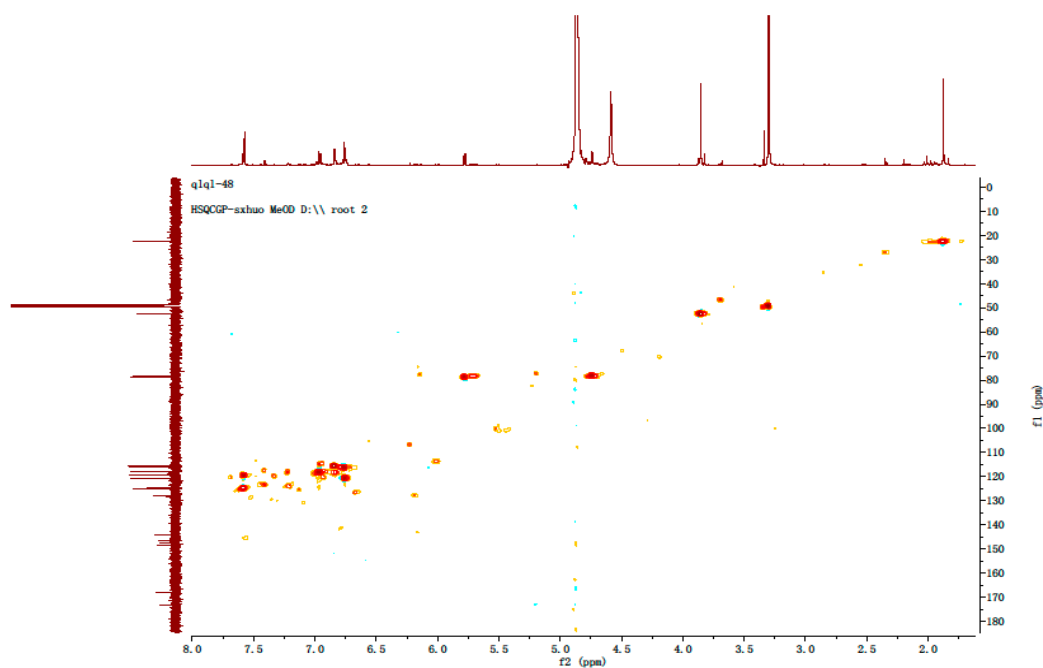


Figure S15. HSQC spectrum of **3** in  $\text{CD}_3\text{OD}$ .

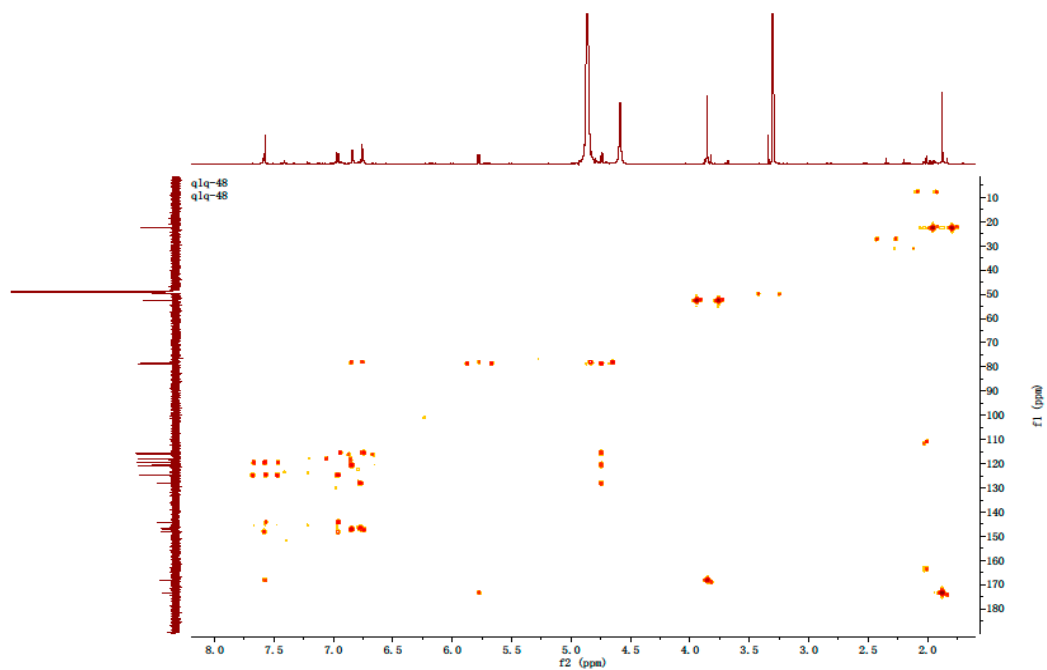
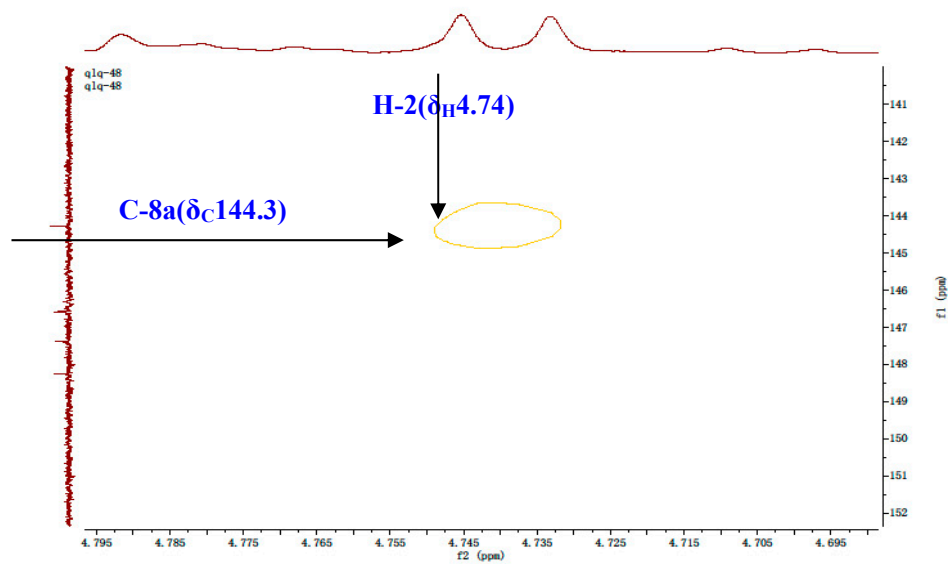
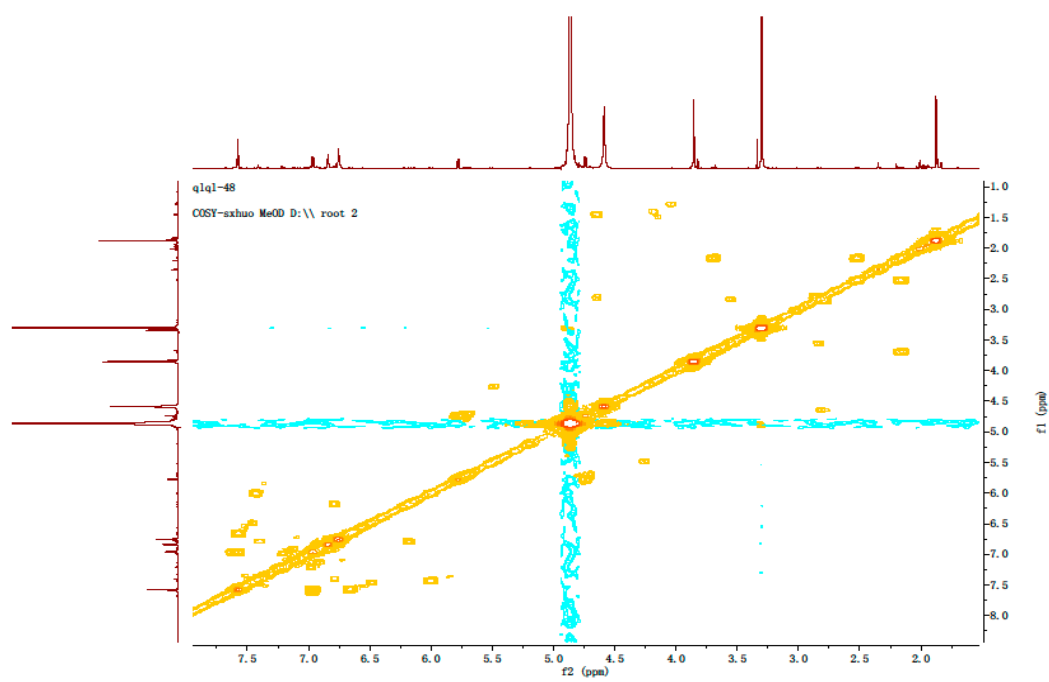


Figure S16. HMBC spectrum of **3** in CD<sub>3</sub>OD.



Enlarged HMBC spectrum of **3** (key correlations of H-2/C-8a) in CD<sub>3</sub>OD.



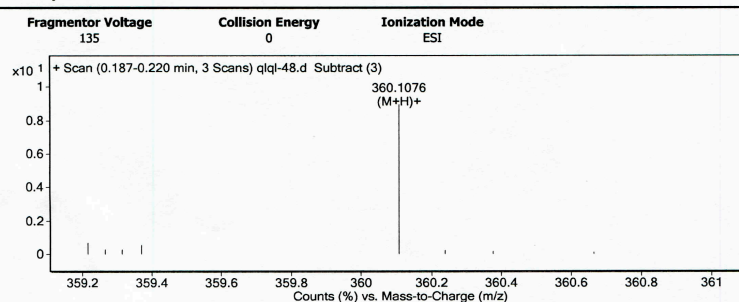
**Figure S17.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of **3** in  $\text{CD}_3\text{OD}$ .

## Qualitative Analysis Report

<b>Data Filename</b>	qlql-48.d	<b>Sample Name</b>	qlql-48
<b>Sample Type</b>	Sample	<b>Position</b>	P1-A2
<b>Instrument Name</b>	Instrument 1	<b>User Name</b>	
<b>Acq Method</b>	SIBU.m	<b>Acquired Time</b>	4/13/2015 2:08:21 PM
<b>IRM Calibration Status</b>	Success	<b>DA Method</b>	Default.m
<b>Comment</b>			

<b>Sample Group</b>		<b>Info.</b>
<b>Acquisition SW</b>	6200 series TOF/6500 series	
<b>Version</b>	Q-TOF B.05.01 (B5125.2)	

### User Spectra



### Peak List

m/z	z	Abund
274.2743	1	26317.84
302.3053	1	11388.74
318.3003	1	14657.39
330.3369	1	9079.19
380.2071	1	24642.24
396.1808	1	13134.54

### Formula Calculator Element Limits

Element	Min	Max
C	3	60
H	0	120
N	0	10
O	0	30

### Formula Calculator Results

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C18 H17 N O7	359.1005	360.1078	360.1076	-0.1	-0.3	11.0000

--- End Of Report ---

Figure S18. HRESIMS spectrum of 3.



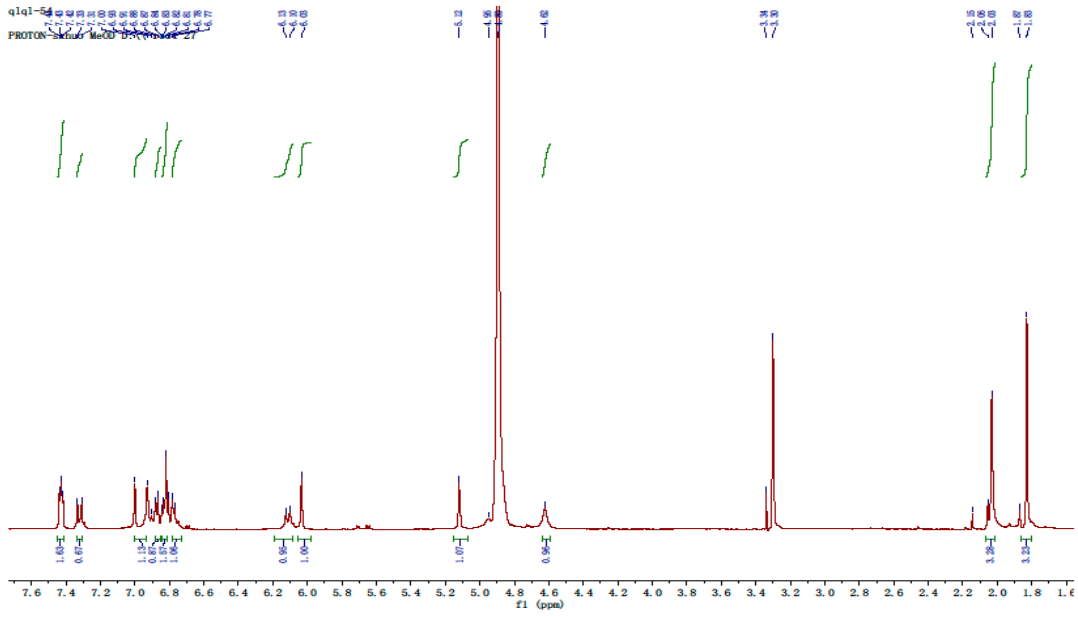


Figure S19.  $^1\text{H}$ -NMR spectrum of **4** in  $\text{CD}_3\text{OD}$ .

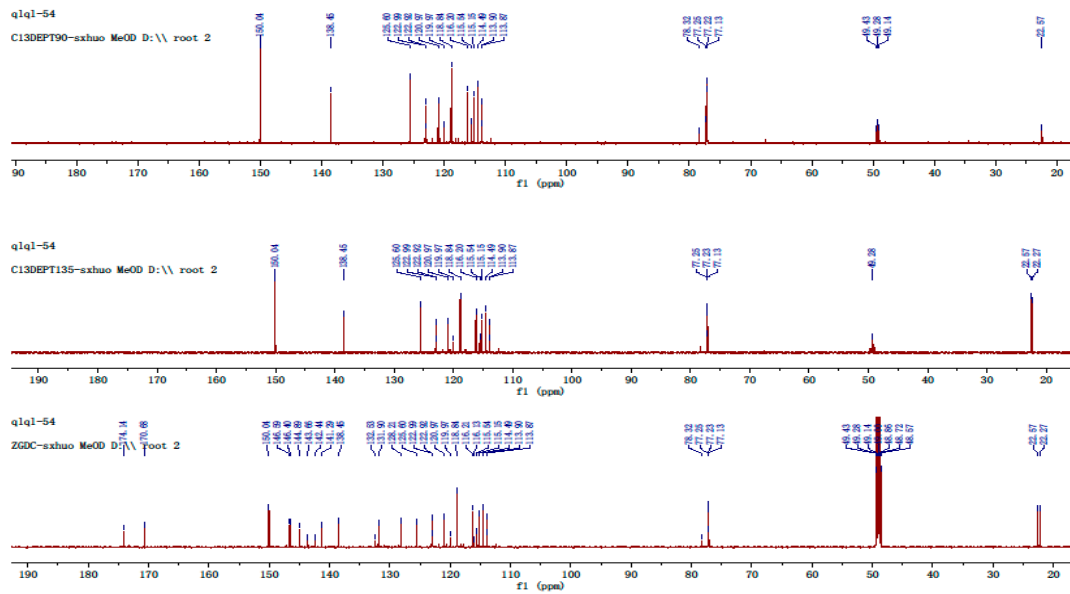


Figure S20.  $^{13}\text{C}$ -NMR and DEPT spectra of **4** in  $\text{CD}_3\text{OD}$ .

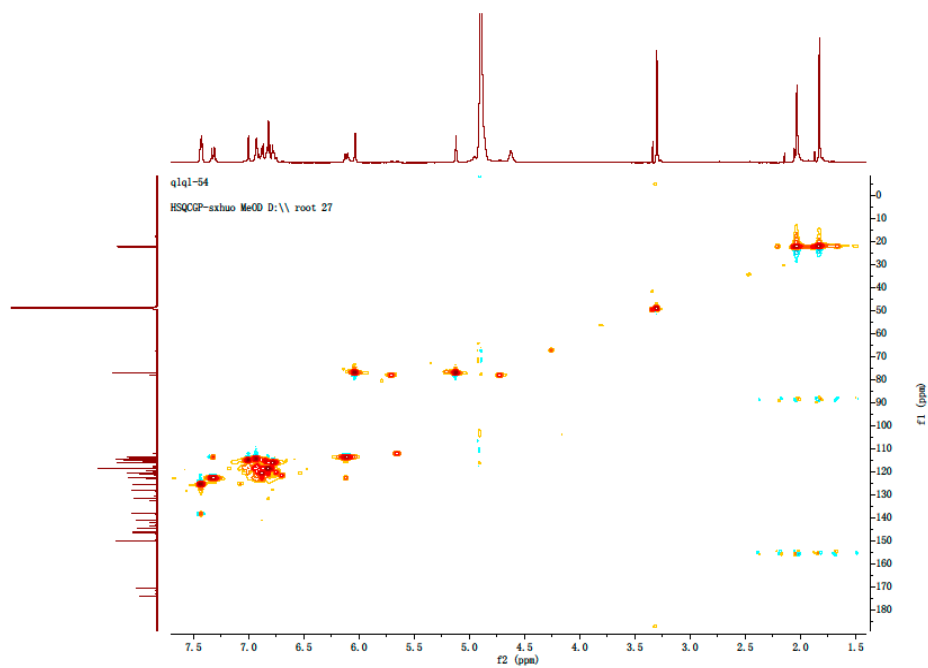


Figure S21. HSQC spectrum of 4 in CD<sub>3</sub>OD.

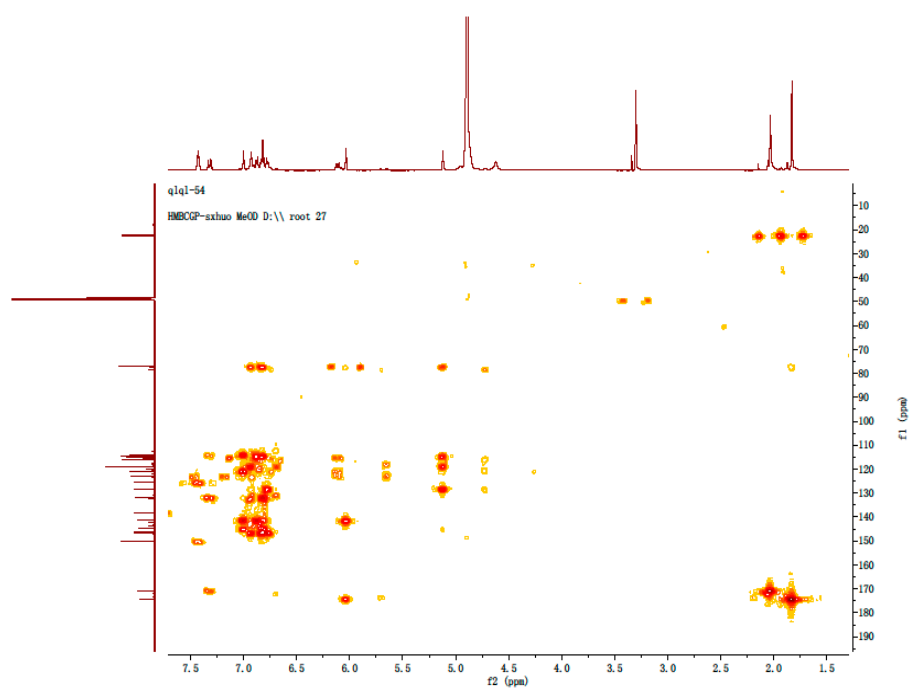


Figure S22. HMBC spectrum of 4 in CD<sub>3</sub>OD.

**Table S1.** The  $^1\text{H}$ - (600 MHz) and  $^{13}\text{C}$ -NMR (150 MHz) spectroscopic data of **4** in  $\text{CD}_3\text{OD}$ .

Position	<b>4</b>	
	$\delta_{\text{H}}$ (J in Hz)	$\delta_{\text{C}}$ , mult
2	6.33, d, 7.2	77.1, CH
3	6.03, d, 7.2	77.2, CH
5	6.92, d, 9.0	113.9, CH
6	6.85, dd, 9.0, 1.8	125.6, CH
7		131.9, qC
8	7.00, d, 1.8	118.8, CH
1'		128.2, qC
2'	6.82, d, 2.0	115.1, CH
3'		146.4, qC
4'		146.6, qC
5'	6.81, d, 8.2	116.2, CH
6'	6.76, dd, 8.2, 2.0	120.9, CH
1''	5.12, d, 7.6	113.9, $\text{CH}_2$
2''	7.32, d, 7.6	122.9, $\text{CH}_2$
3''		170.7, qC
4''	2.04, s	22.3, $\text{CH}_3$
3a		174.1, qC
3b	1.84, s	22.6, $\text{CH}_3$
4a		141.3, qC
8a		144.9, qC

**Table S2.** COX-1 and COX-2 inhibitory activities of the compounds.

Compd.	$\text{IC}_{50}$ ( $\mu\text{M}$ )	
	COX-1	COX-2
<b>1</b>	NA <sup>a</sup>	NA
<b>2</b>	NA	NA
<b>3</b>	NA	NA
<b>4</b>	78.85	6.43
<b>5</b>	NA	NA

<sup>a</sup>NA: no activity.**Table S3.** Cytotoxicity activities of the compounds

Compd.	$\text{IC}_{50}$ ( $\mu\text{M}$ )							
	K562	MCF-7	A549	H1975	Hela	DU145H	Huh-7	A431
<b>1</b>	NA <sup>a</sup>	NA	NA	>30	NA	NA	>30	>30
<b>2</b>	NA	NA	NA	NA	NA	NA	>30	>30
<b>3</b>	NA	NA	NA	NA	NA	NA	>30	NA
<b>4</b>	NA	NA	NA	NA	NA	NA	NA	NA
<b>5</b>	NA	NA	NA	NA	NA	NA	NA	NA

<sup>a</sup>NA: no activity.

**Table S4.** MDCK cell-based anti-influenza activities of the compounds.

<b>Compd.</b>	<b>IC<sub>50</sub> (μM)</b>	
	<b>H1N1</b>	<b>H3N2</b>
<b>1</b>	NA <sup>a</sup>	NA
<b>2</b>	NA	NA
<b>3</b>	NA	NA
<b>4</b>	NA	NA
<b>5</b>	NA	NA

<sup>a</sup>NA: no activity.**Table S5.** EV71 inhibitory activities of the compounds at 30 μM.

<b>Compd.</b>	<b>Inhibition %</b>
<b>1</b>	1.7
<b>2</b>	1.7
<b>3</b>	1.4
<b>4</b>	1.2
<b>5</b>	2.2