

## Supplementary Materials

### Sarcoehrenbergilides D-F: Cytotoxic Cembrene Diterpenoids from the Soft Coral *Sarcophyton ehrenbergi*

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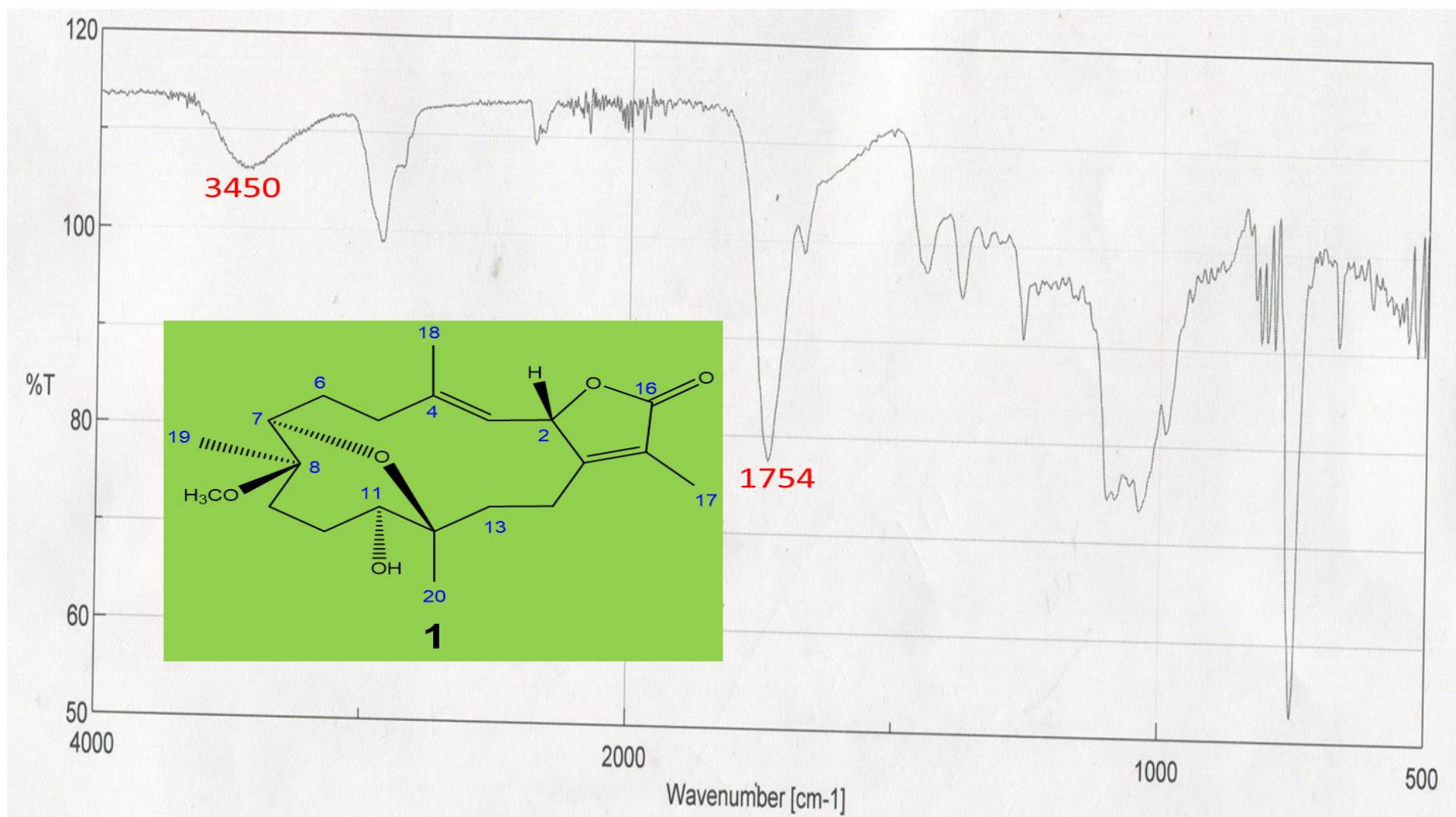
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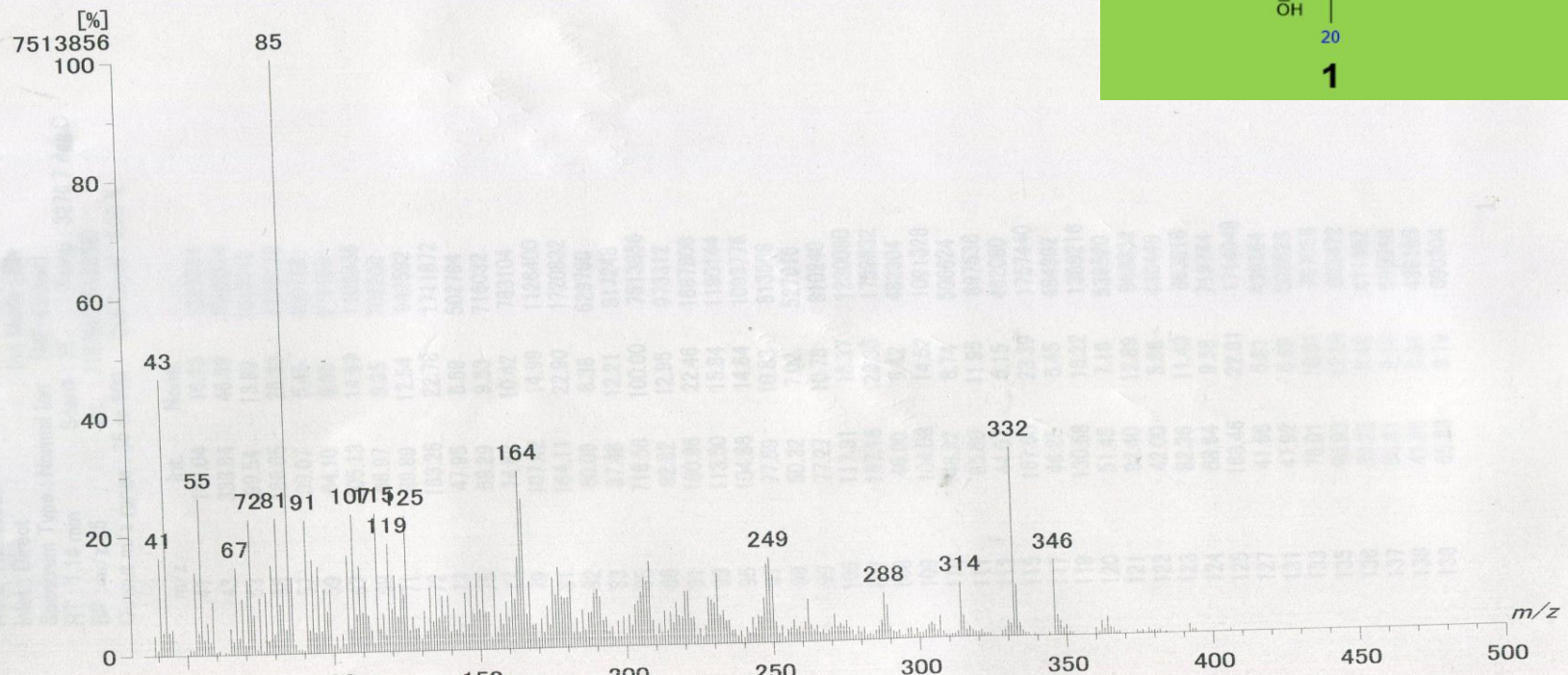
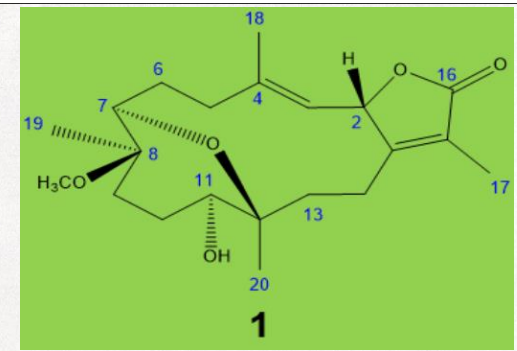
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S1: FT-IR of 1

[ Mass Spectrum ]  
 Data : Umeyama-EI.07-Sep-2016.009      Date : 07-Sep-2016 11:06  
 Sample : SE-70  
 Note : MStation  
 Inlet : Direct      Ion Mode : EI+  
 Spectrum Type : Normal Ion [MF-Linear]  
 RT : 1.14 min      Scan# : 35  
 BP : m/z 85      Int. : 716.58 (7513856)  
 Output m/z range : 35 to 500      Cut Level : 0.00 %



S2: LREIMS of 1



Data : Umeyama-EIHR.07-Sep-2016.005

Date : 07-Sep-2016 15:18

Instrument : MS700D

Sample : SE--70

Note : MStation

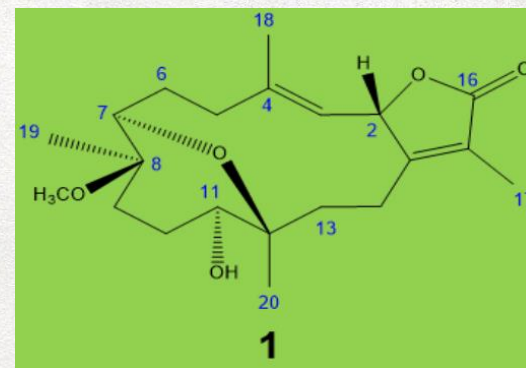
Inlet : Direct Ion Mode : EI+

RT : 1.24 min Scan# : 32

Elements : C 150/0, H 250/0, O 50/0

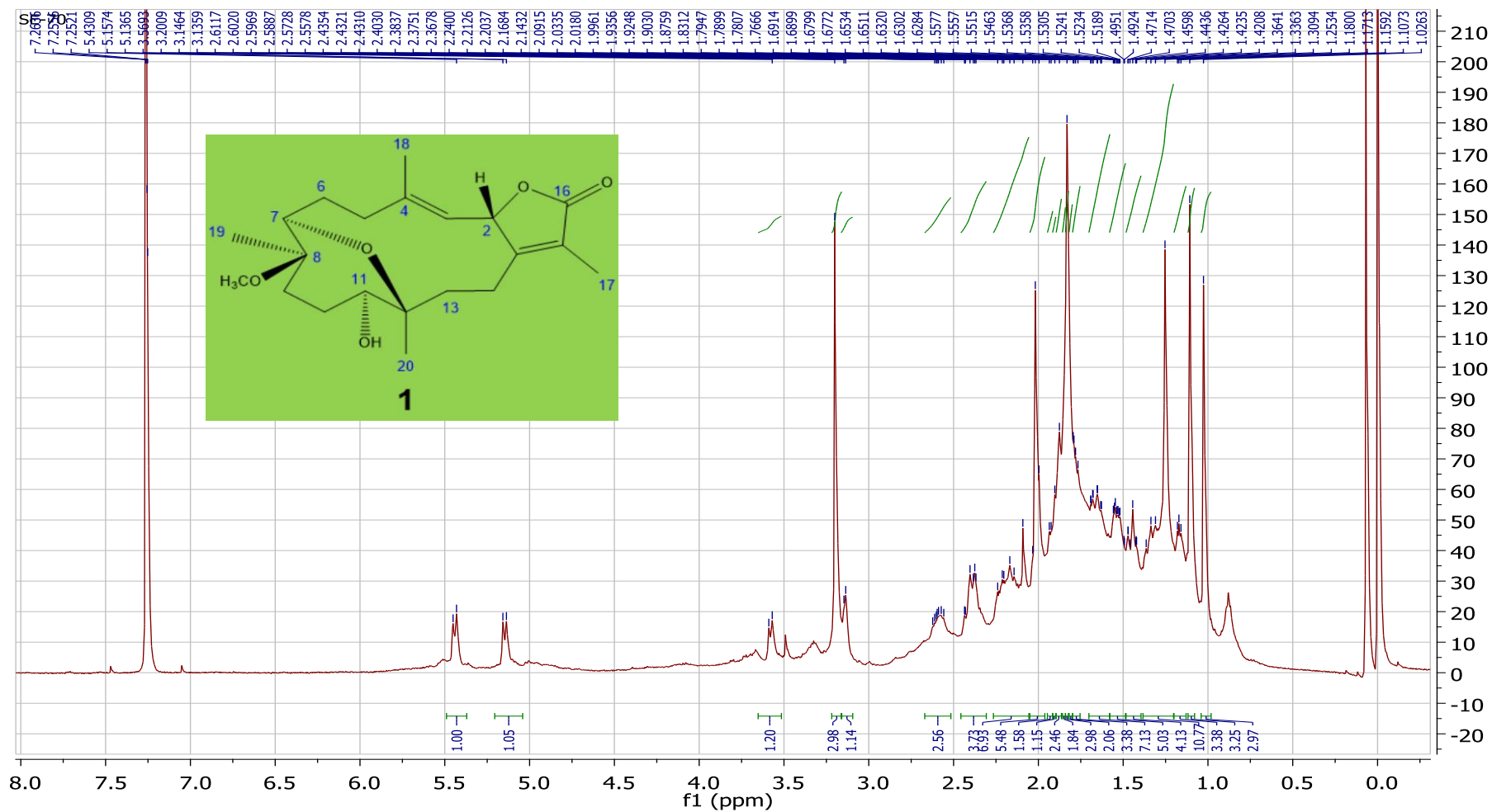
Mass Tolerance : 5mmu

Unsaturation (U.S.) : 0.0 - 15.0

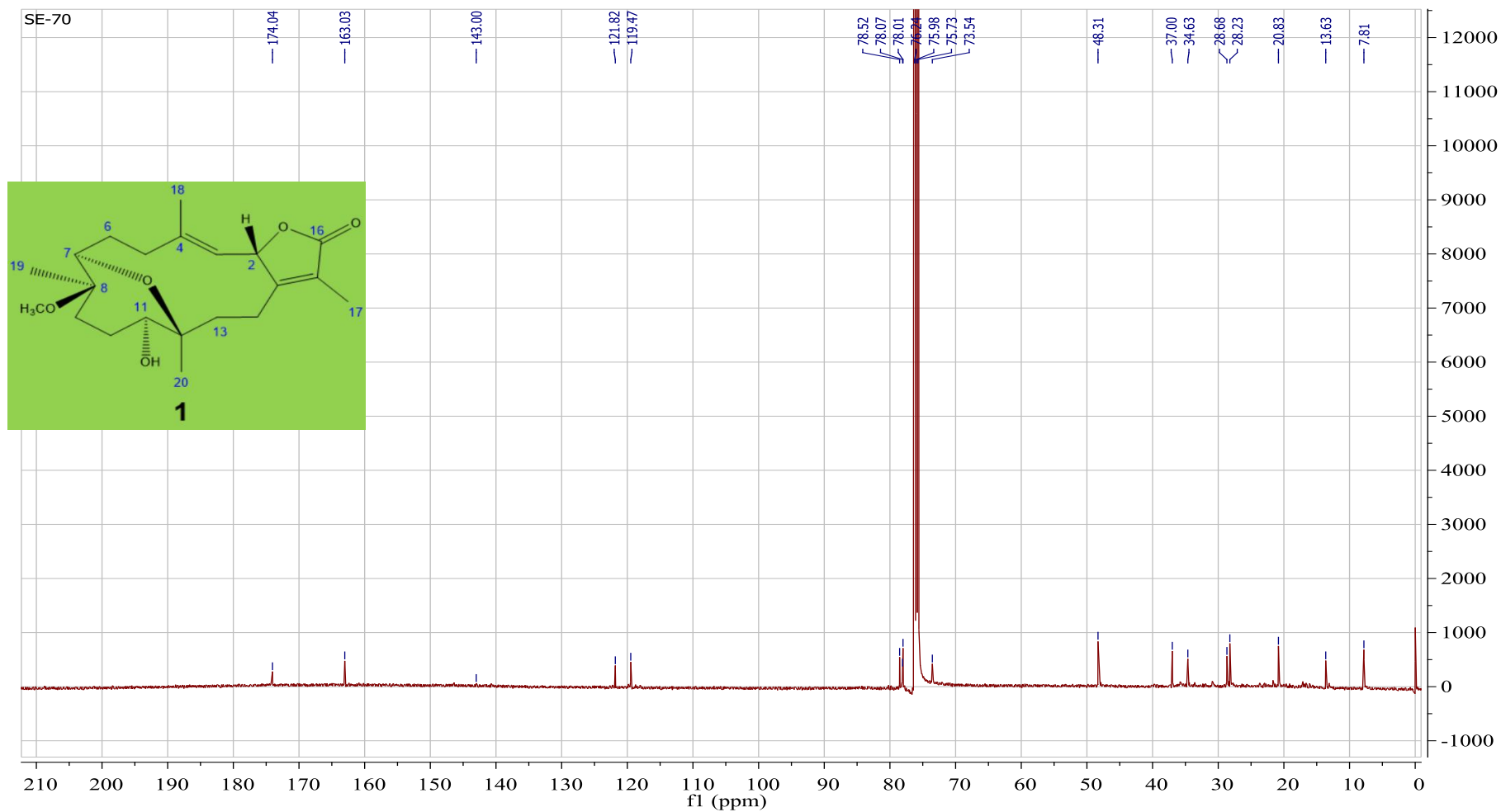


	Observed m/z	Int%	Err [ppm / mmu]	U.S. Composition
1	332.2002	17.70	+4.3 / +1.4	7.0 C20 H28 O4
2	346.2127	8.01	-4.9 / -1.7	7.0 C21 H30 O4

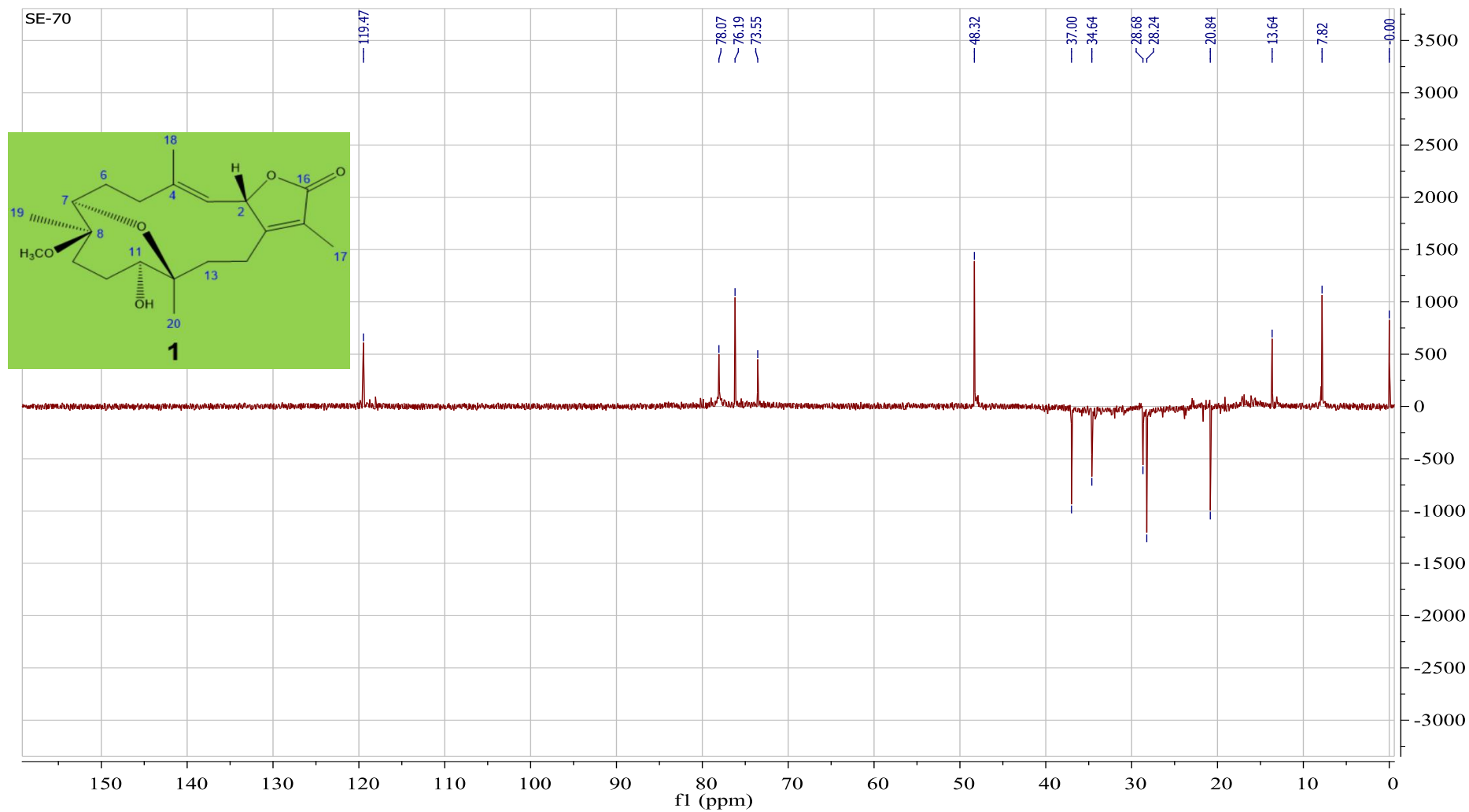
S3: HREIMS of 1



**S4:** <sup>1</sup>H NMR of **1**

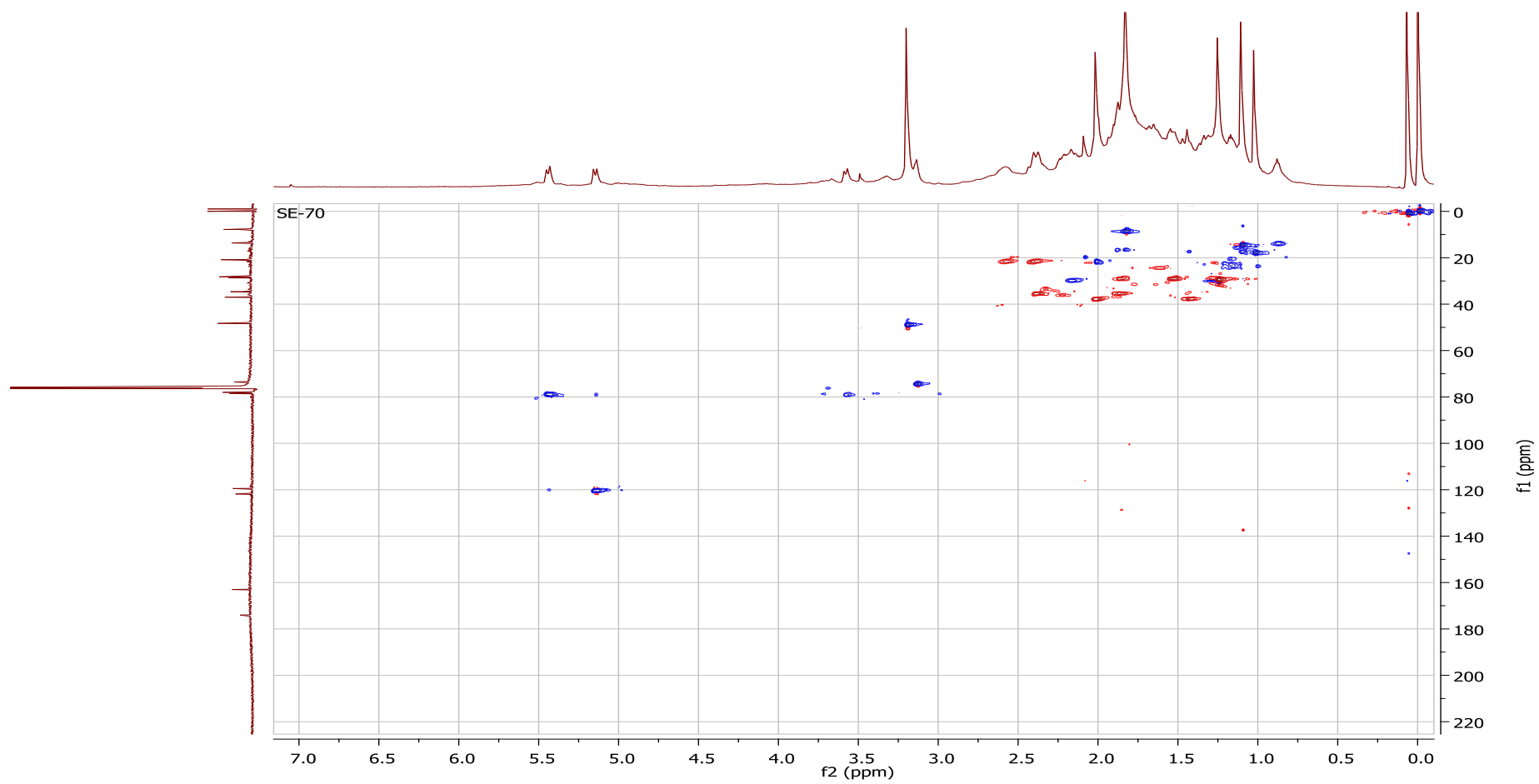


S5:  $^{13}\text{C}$  NMR of **1**

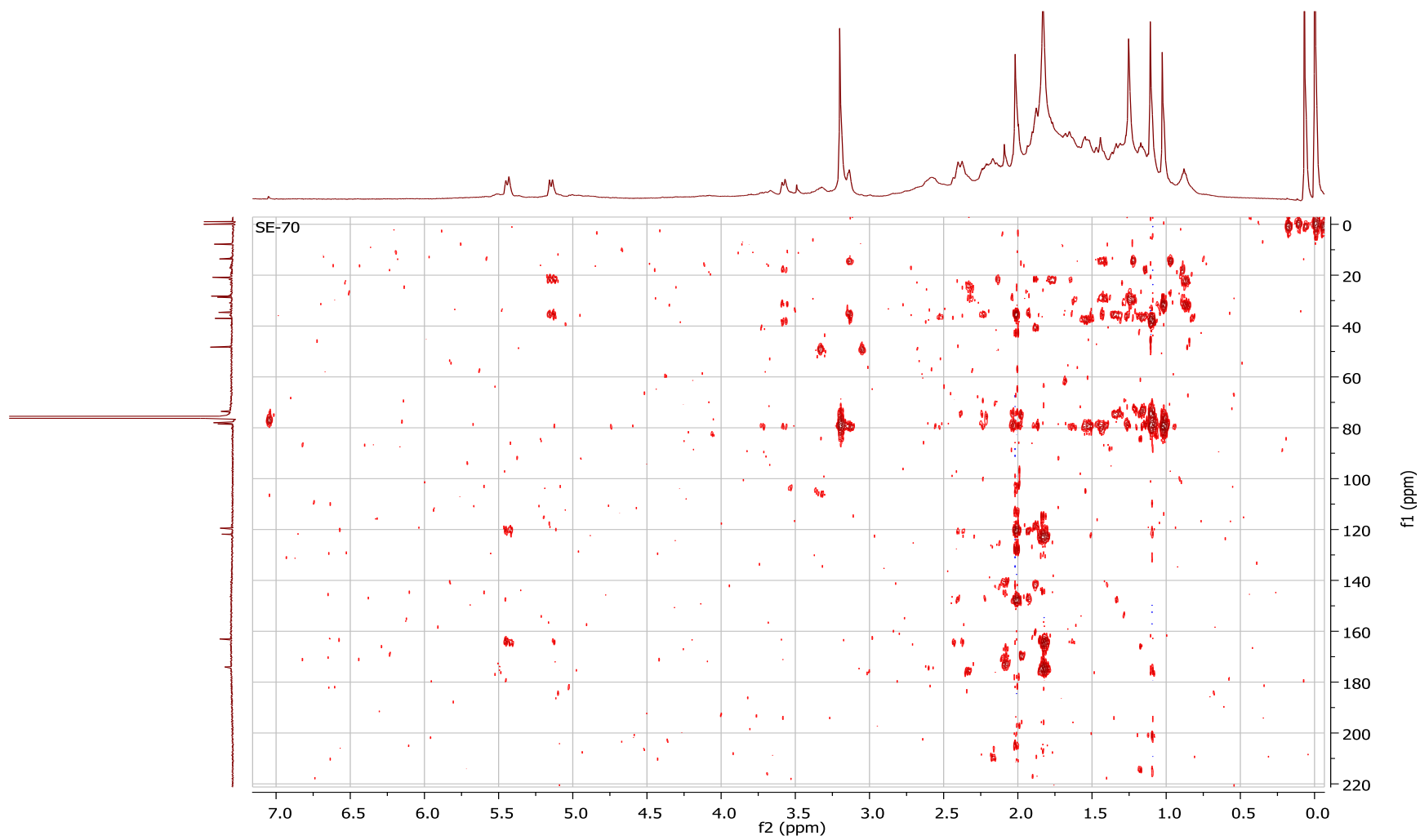


S6: DEPT-135 of **1**

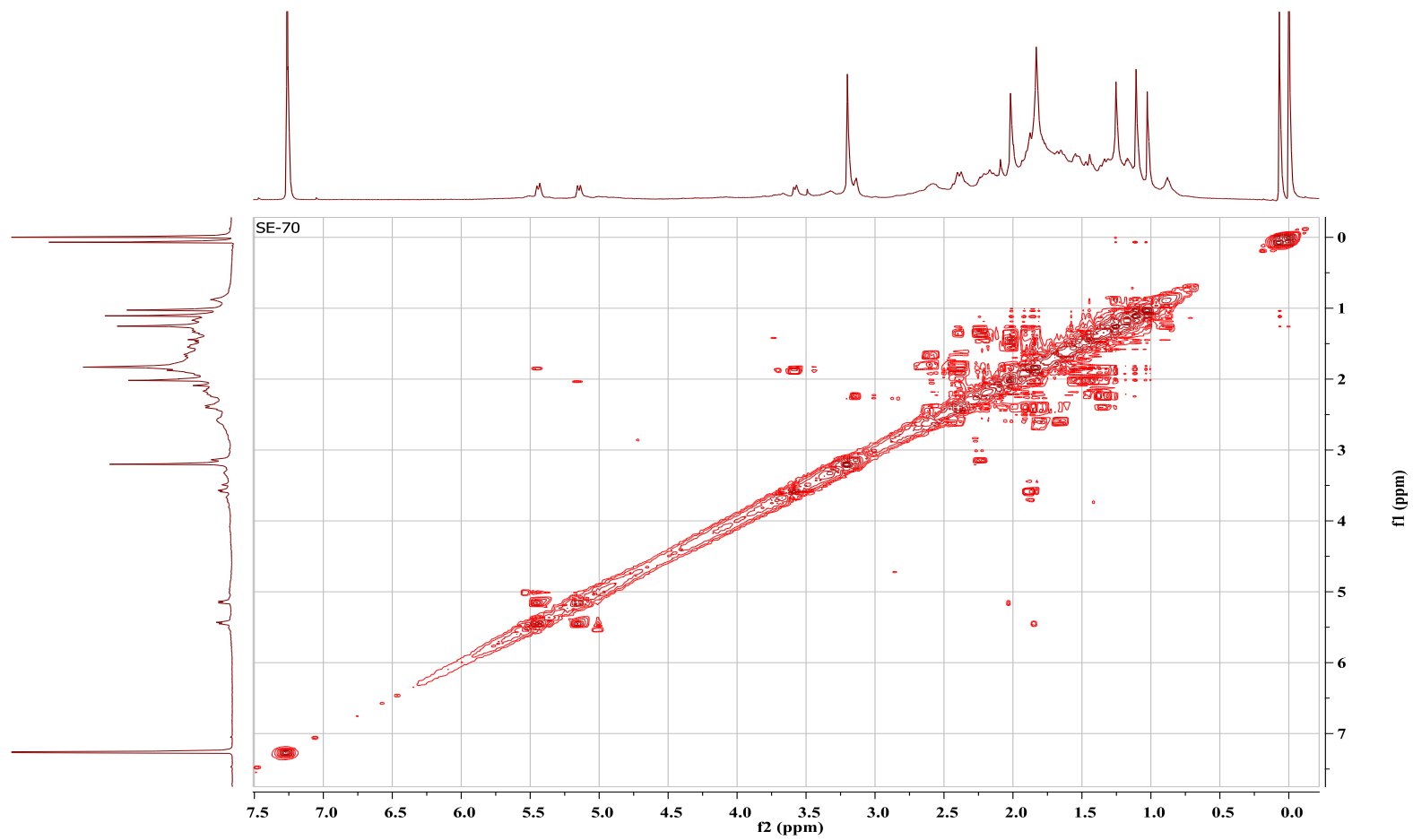




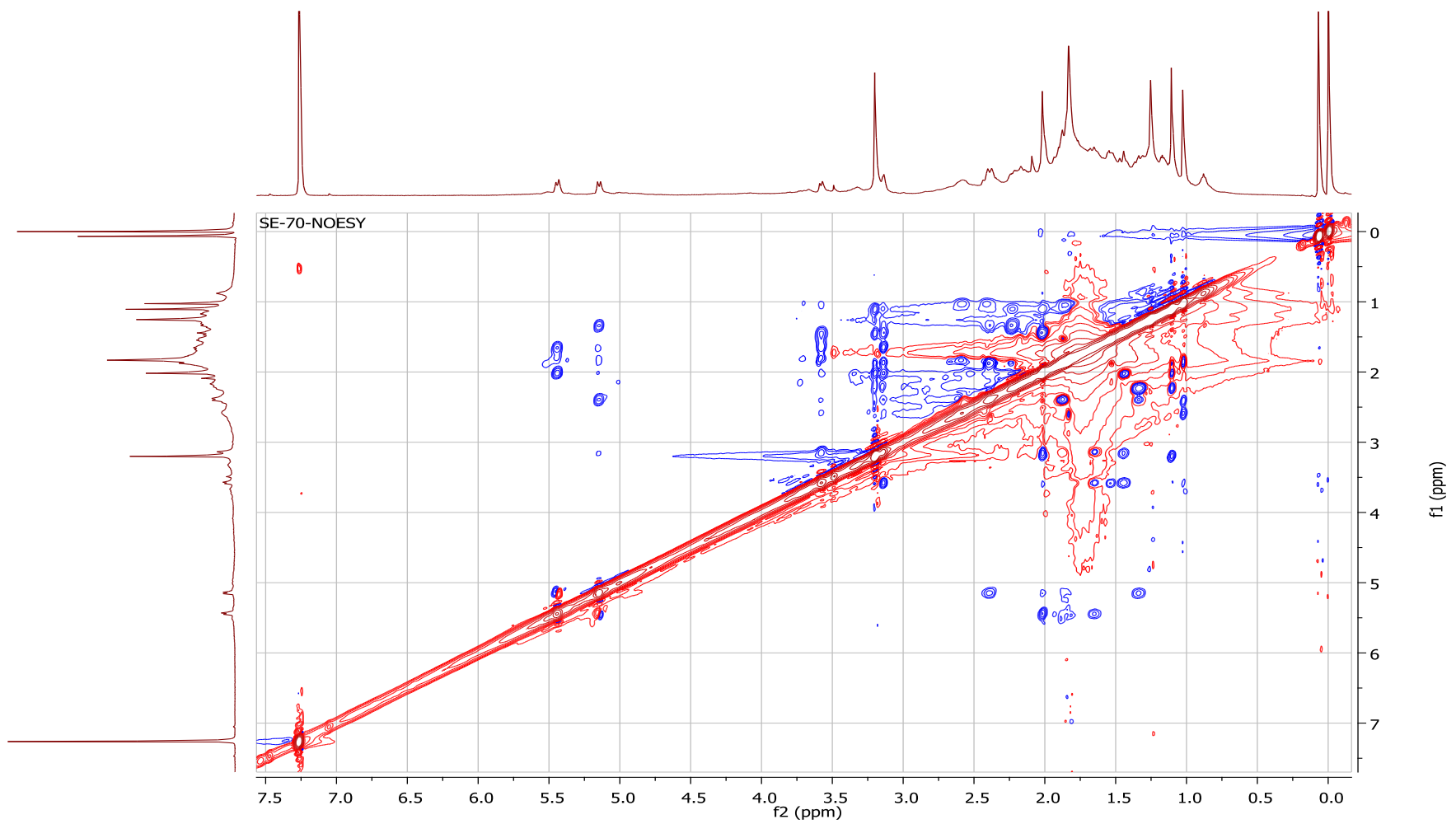
S7: HSQC of 1



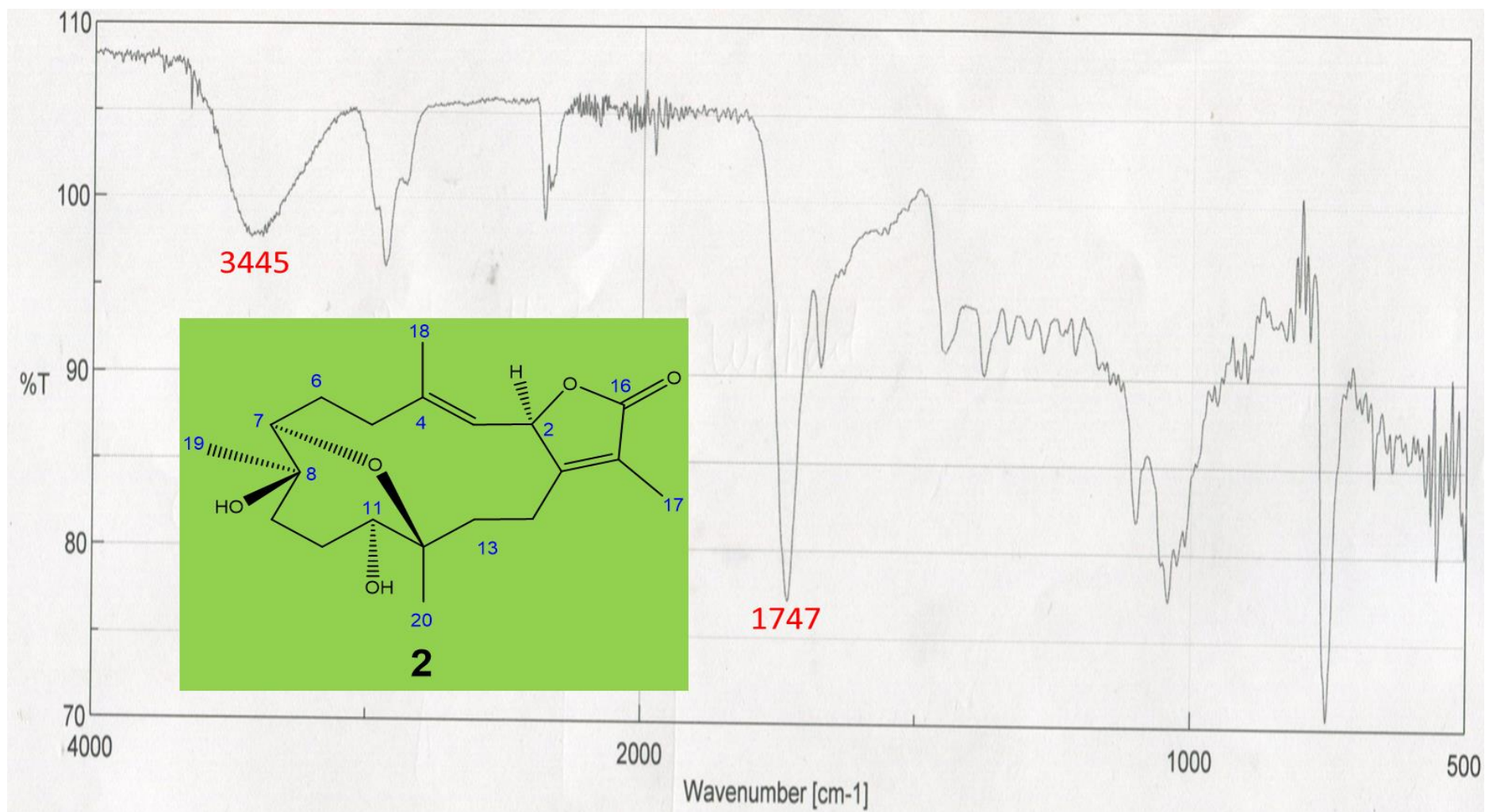
S8: HMBC of 1



S9:  $^1\text{H}$   $^1\text{H}$  COSY of **1**



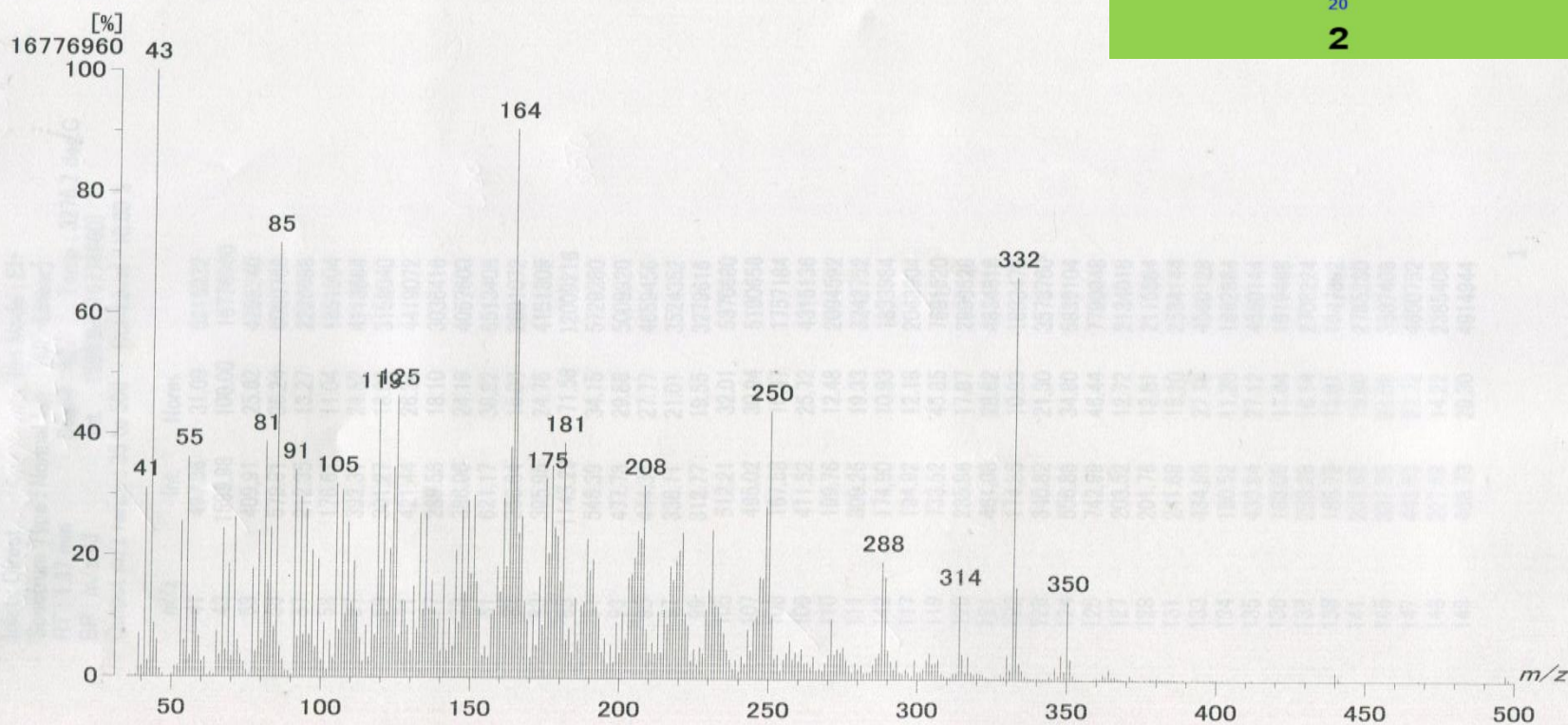
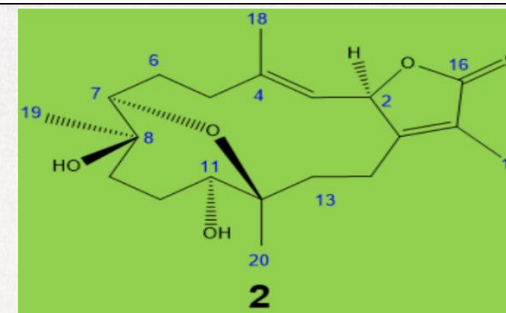
**S10: NOESY of 1**



S11: FT-IR of 2



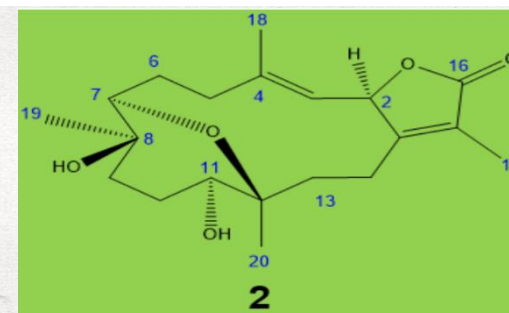
[ Mass Spectrum ]  
 Data : Umeyama-EI.06-Sep-2016.006 Date : 06-Sep-2016 10:14  
 Sample : SE-64  
 Note : MStation  
 Inlet : Direct Ion Mode : EI+  
 Spectrum Type : Normal Ion [MF-Linear]  
 RT : 1.37 min Scan# : 42  
 BP : m/z 43 Int. : 1599.98 (16776960)  
 Output m/z range : 35 to 500 Cut Level : 0.00 %



S12: LREIMS of 2

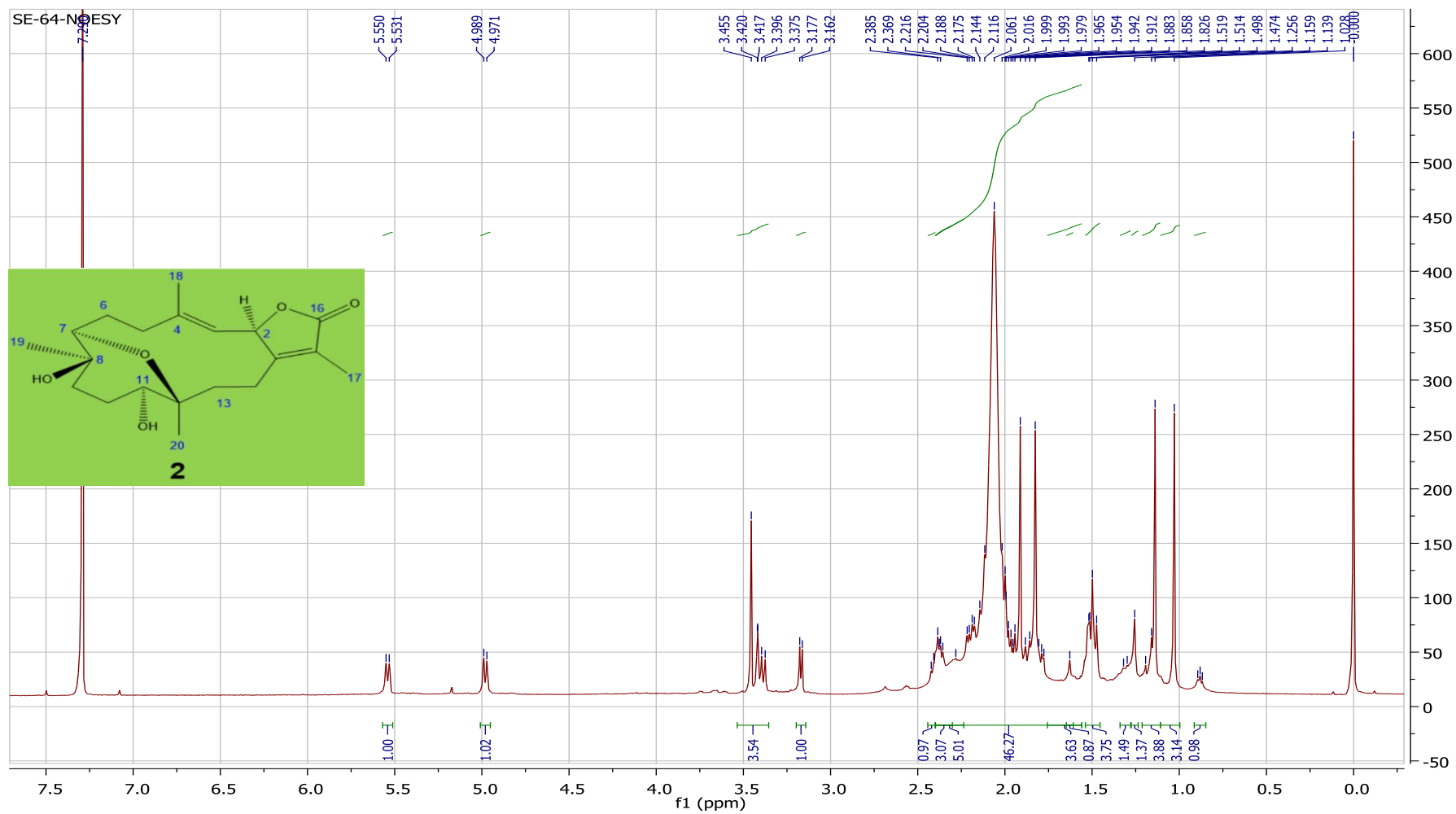
Data : Umeiyama-EIHR.07-Sep-2016.003  
 Instrument : MS700D  
 Sample : SE--64  
 Note : MStation  
 Inlet : Direct      Ion Mode : EI+  
 RT : 1.88 min      Scan# : 48  
 Elements : C 150/0, H 250/0, O 50/0  
 Mass Tolerance : 5mmu  
 Unsaturation (U.S.) : 0.0 - 15.0

Date : 07-Sep-2016 09:09

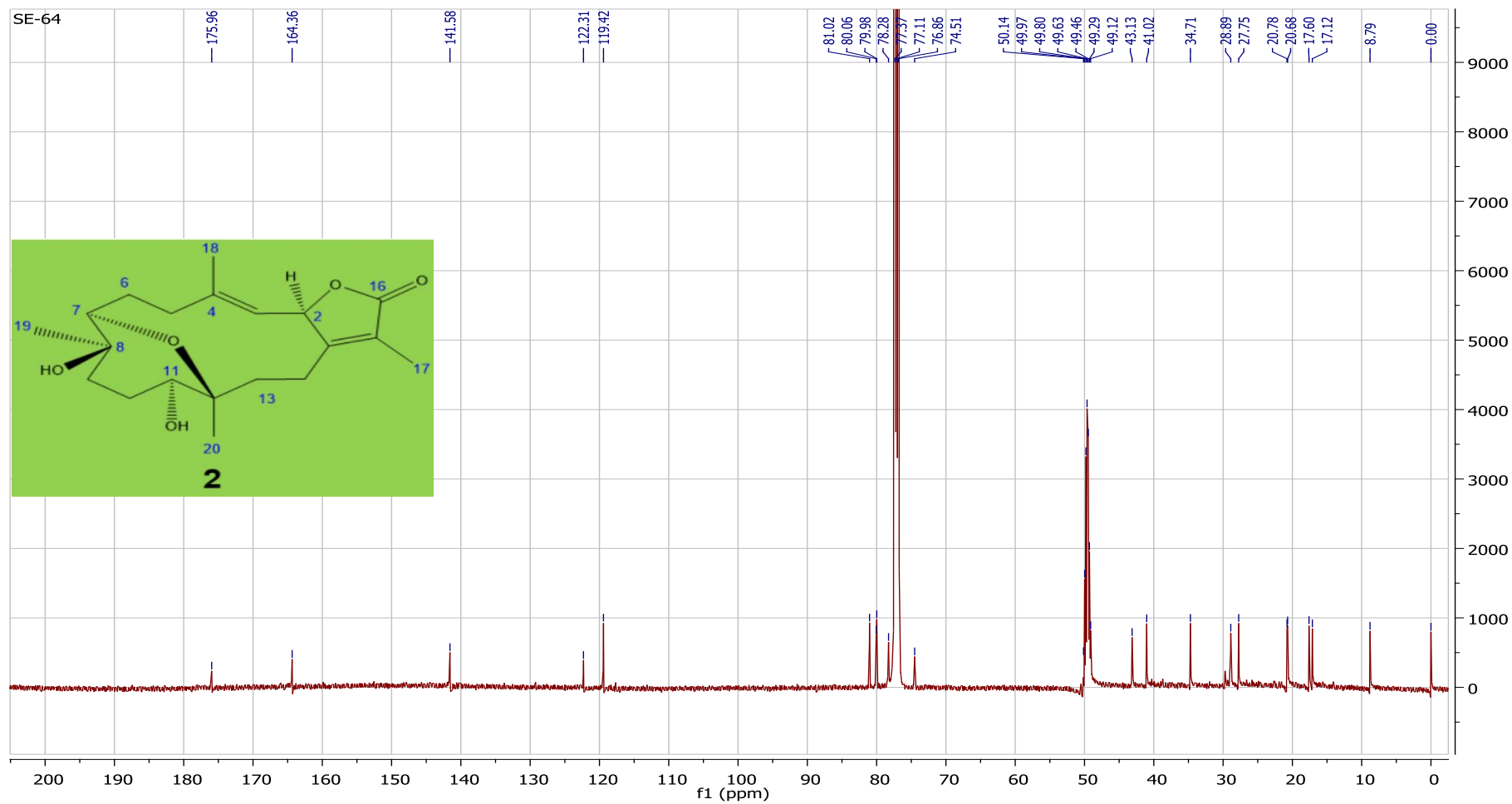


	Observed m/z	Int%	Err [ppm / mmu]	U.S. Composition
1	332.2008	100.00	+6.1 / +2.0	7.0 C20 H28 O4
2	350.2094	22.70	+0.2 / +0.1	6.0 C20 H30 O5

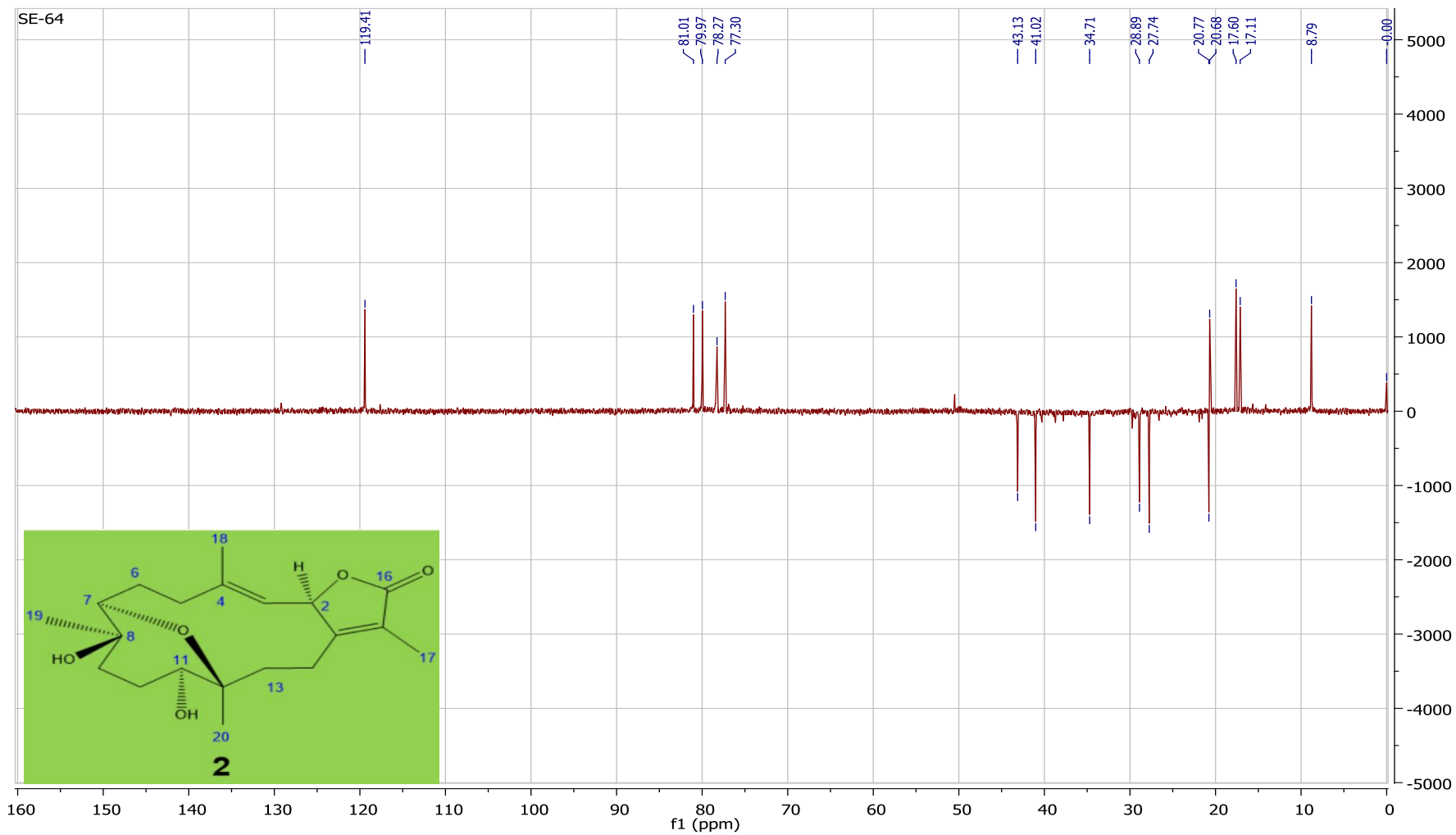
S13: HREIMS of 2



S14:  $^1\text{H}$  NMR of **2**

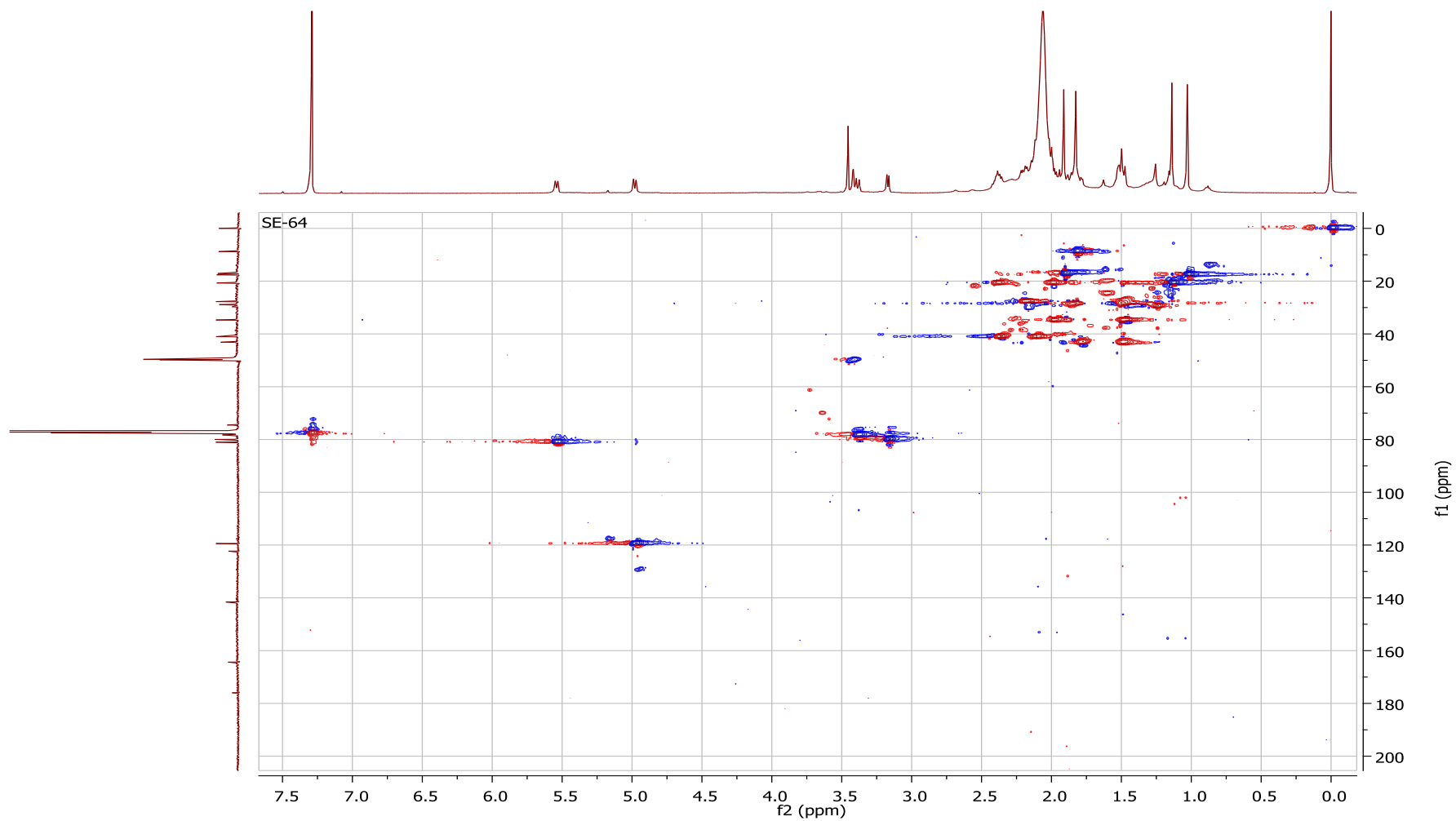


S15:  $^{13}\text{C}$  NMR of **2**

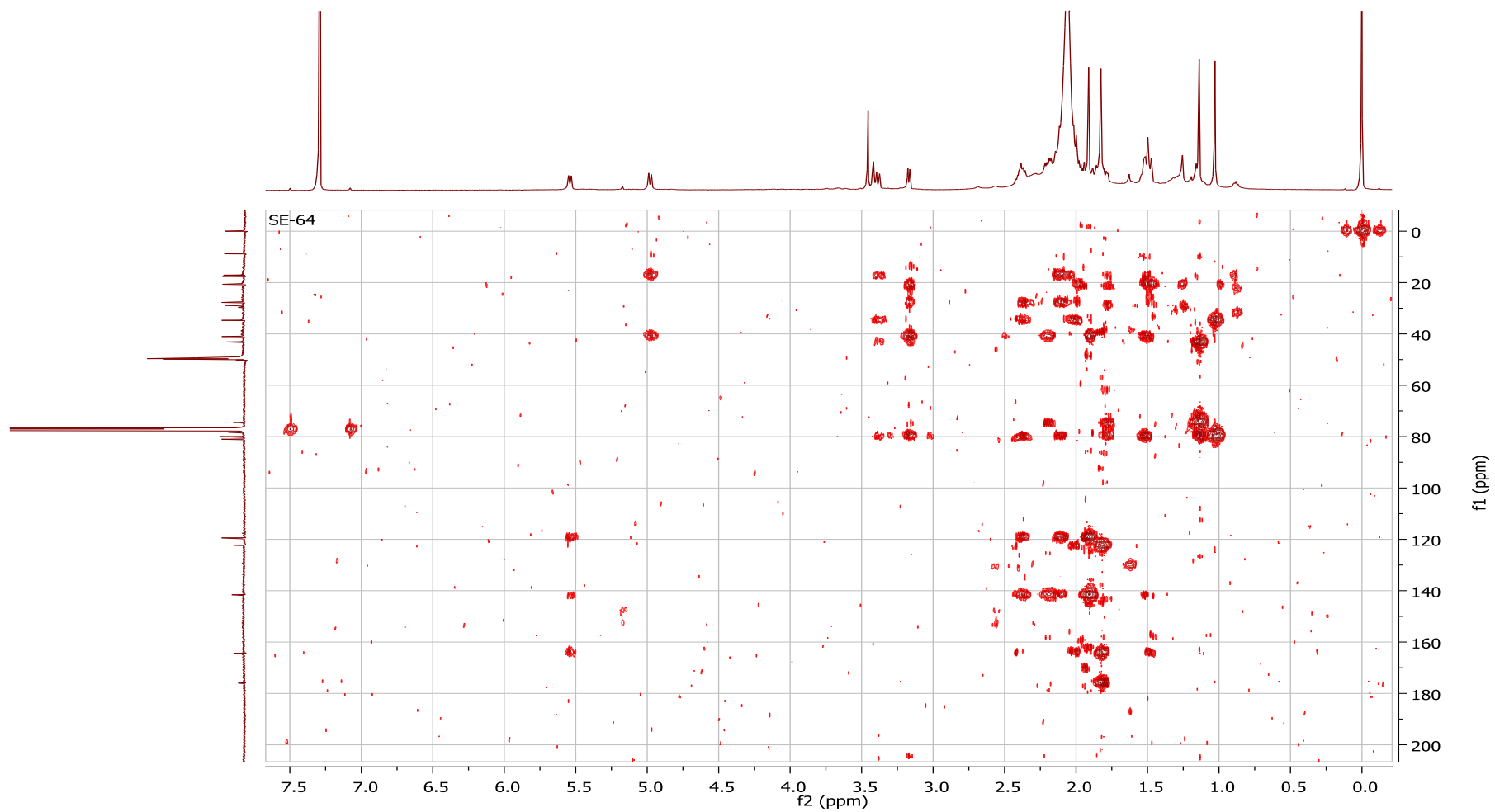


S16: DEPT-135 of 2

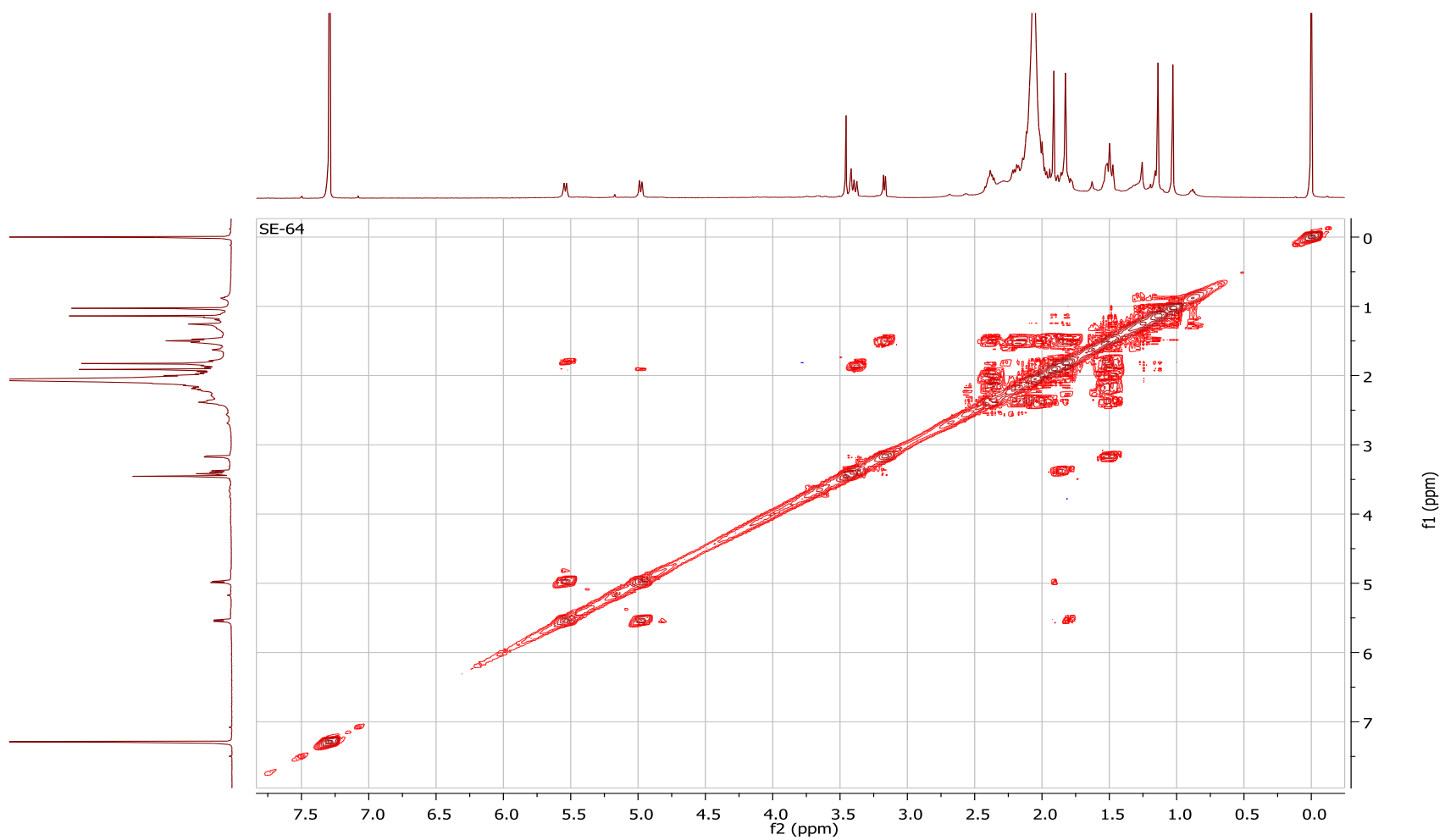




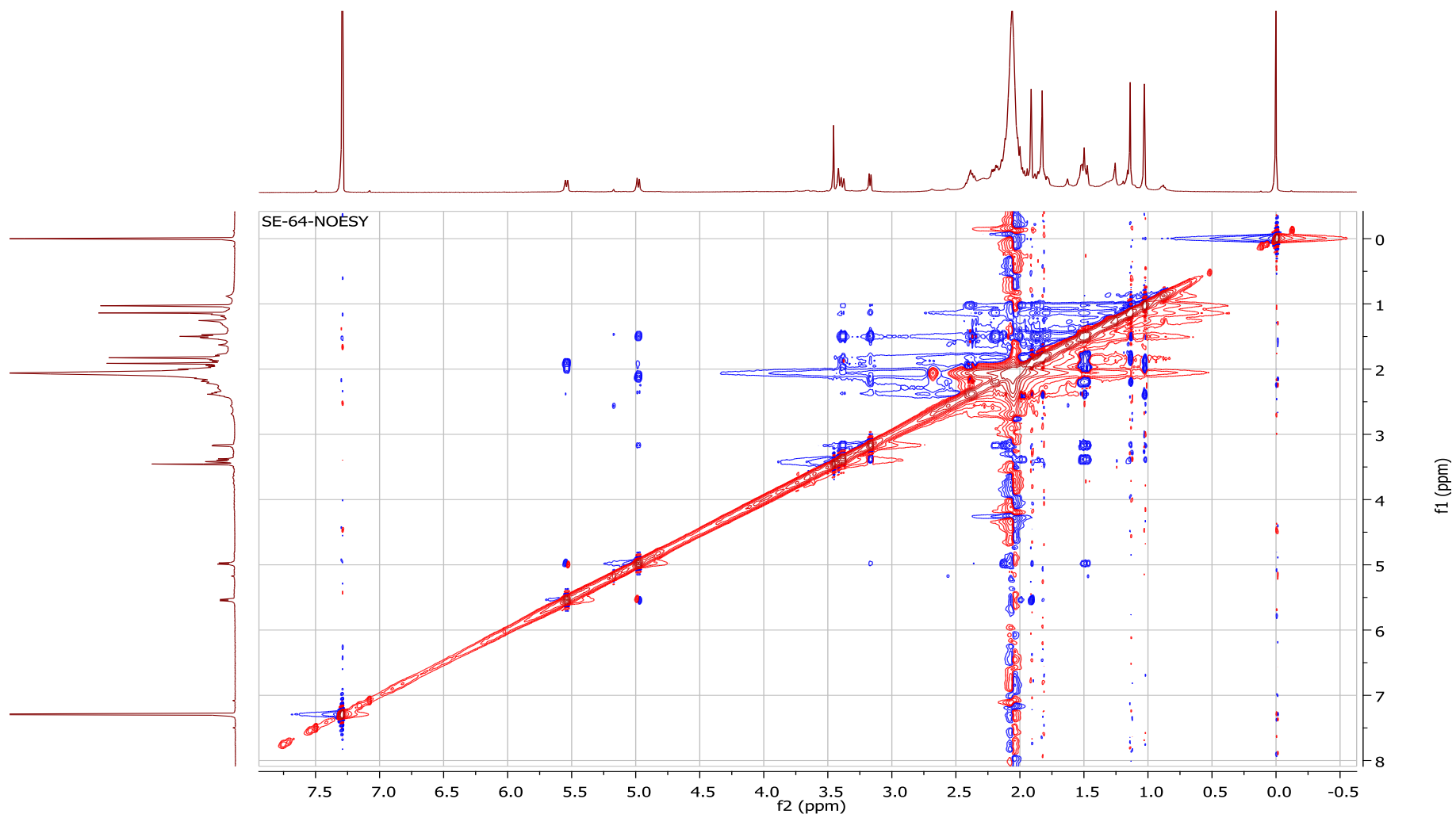
S17: HSQC of 2



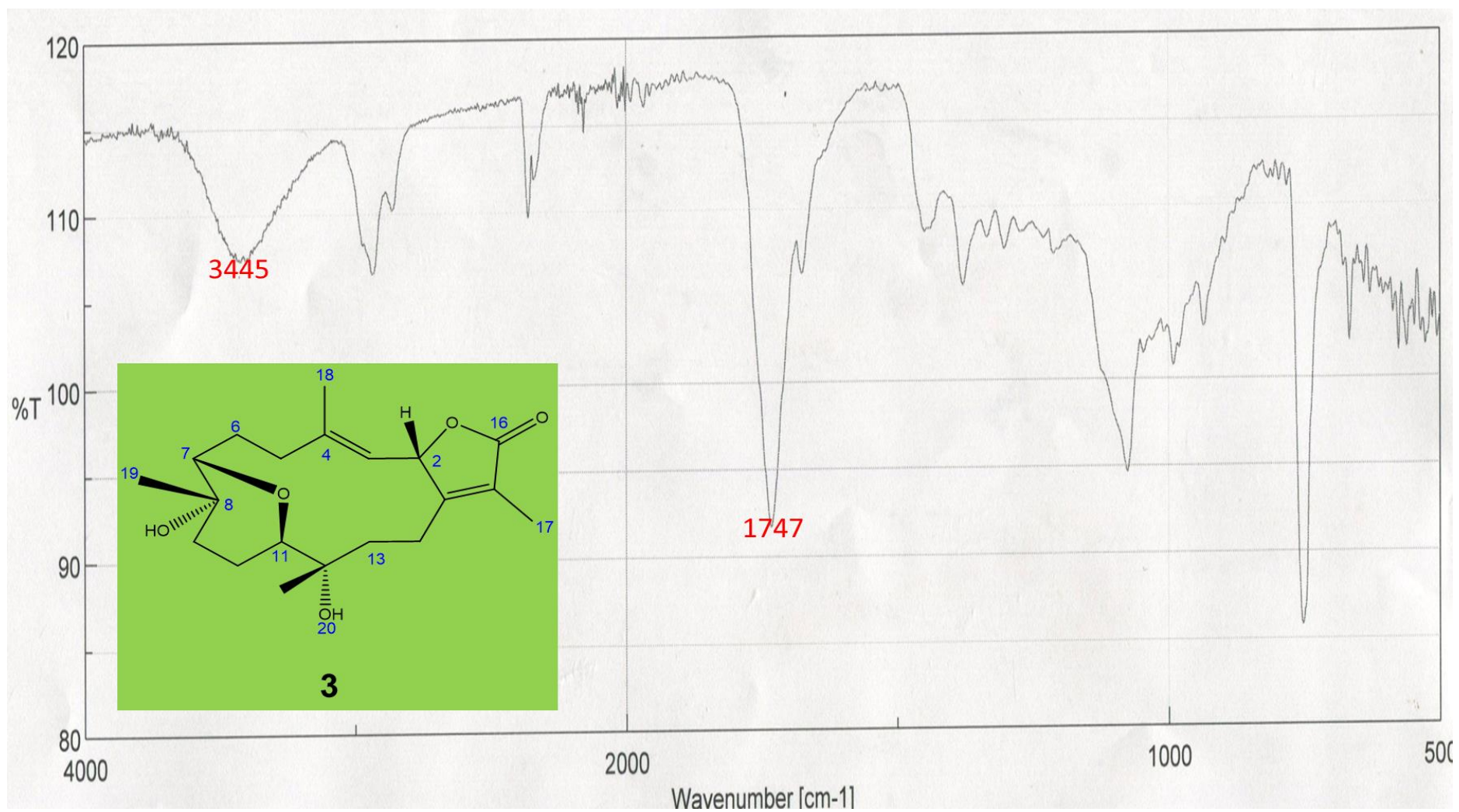
**S18:** HMBC of **2**



S19:  $^1\text{H}^1\text{H}$  COSY of 2



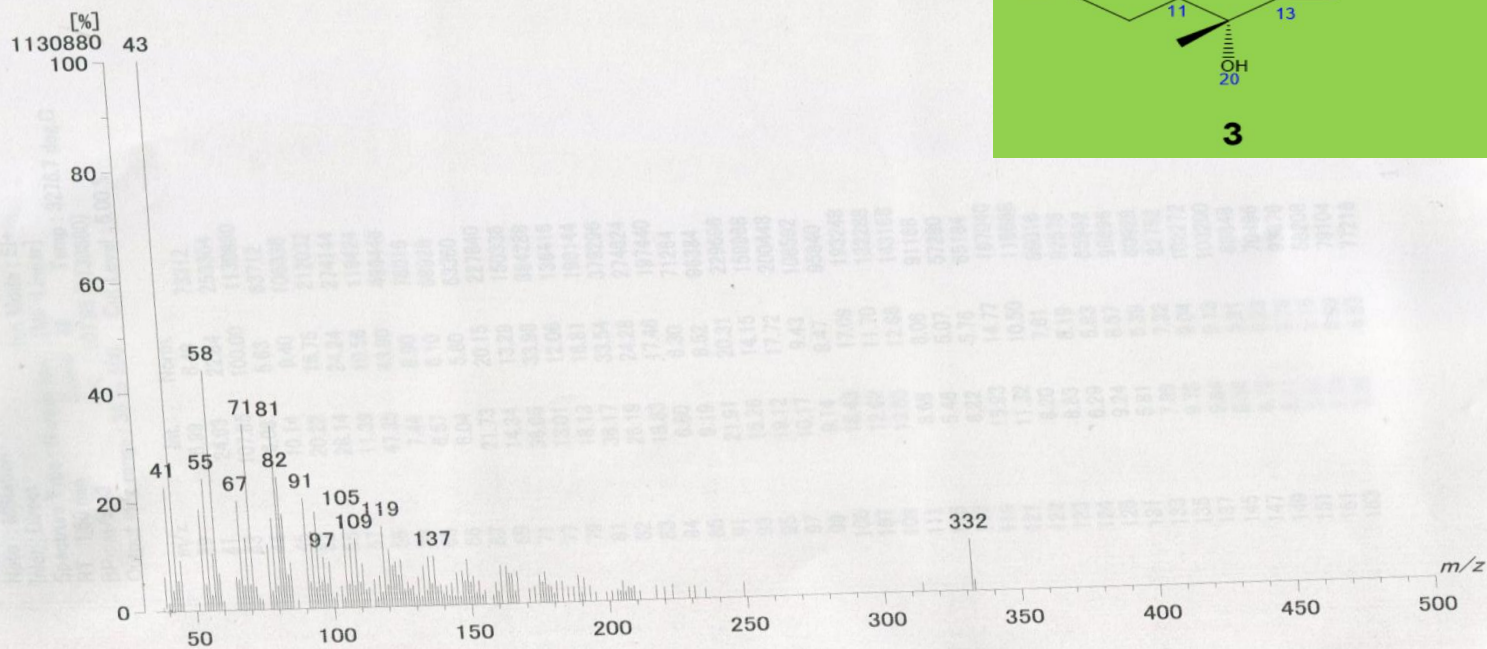
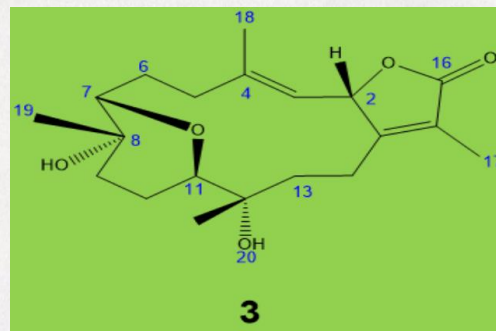
S20: NOESY of 2



S21: FT-IR of 3



[ Mass Spectrum ]  
 Data : Umeyama-EI.29-Aug-2016.004      Date : 29-Aug-2016 10:45  
 Sample : SE-65  
 Note : MStation  
 Inlet : Direct      Ion Mode : EI+  
 Spectrum Type : Normal Ion [MF-Linear]  
 RT : 1.60 min      Scan# : 49  
 BP : m/z 43      Int. : 107.85 (1130880)  
 Output m/z range : 35 to 500      Cut Level : 0.00 %



S22: LREIMS of 3

Data : Umeyama-EIHR.29-Aug-2016.007

Date : 29-Aug-2016 14:59

Instrument : MS700D

Sample : SE-65

Note : MStation

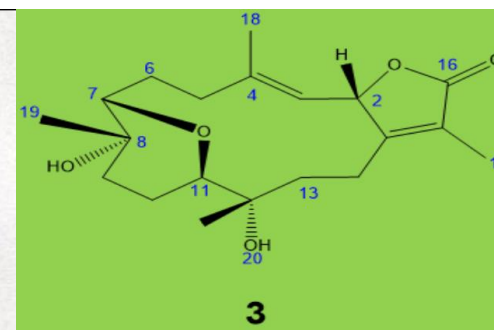
Inlet : Direct Ion Mode : EI+

RT : 1.36 min Scan# : 35

Elements : C 150/0, H 250/0, O 50/0

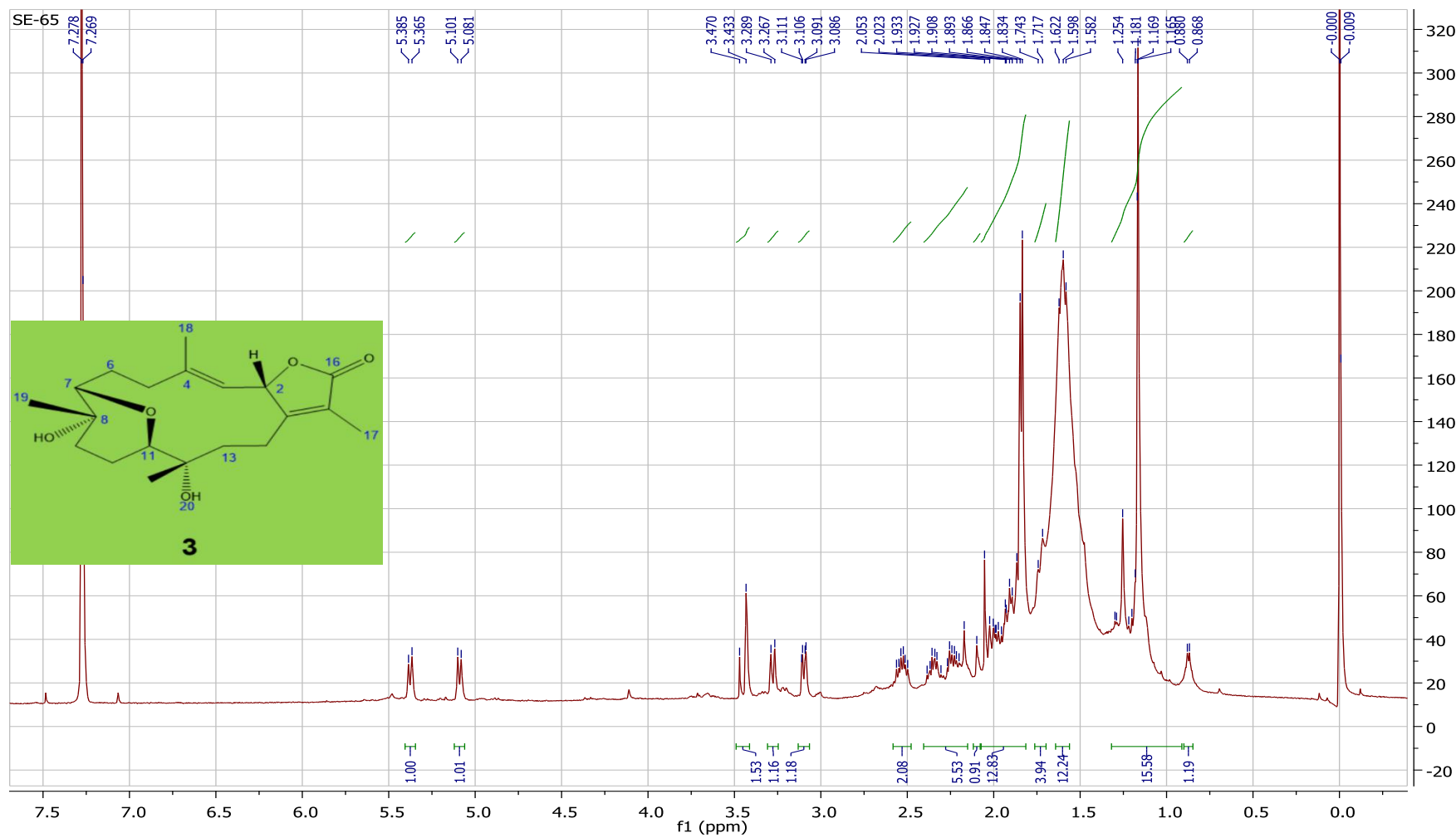
Mass Tolerance : 5mmu

Unsaturation (U.S.) : 0.0 - 15.0

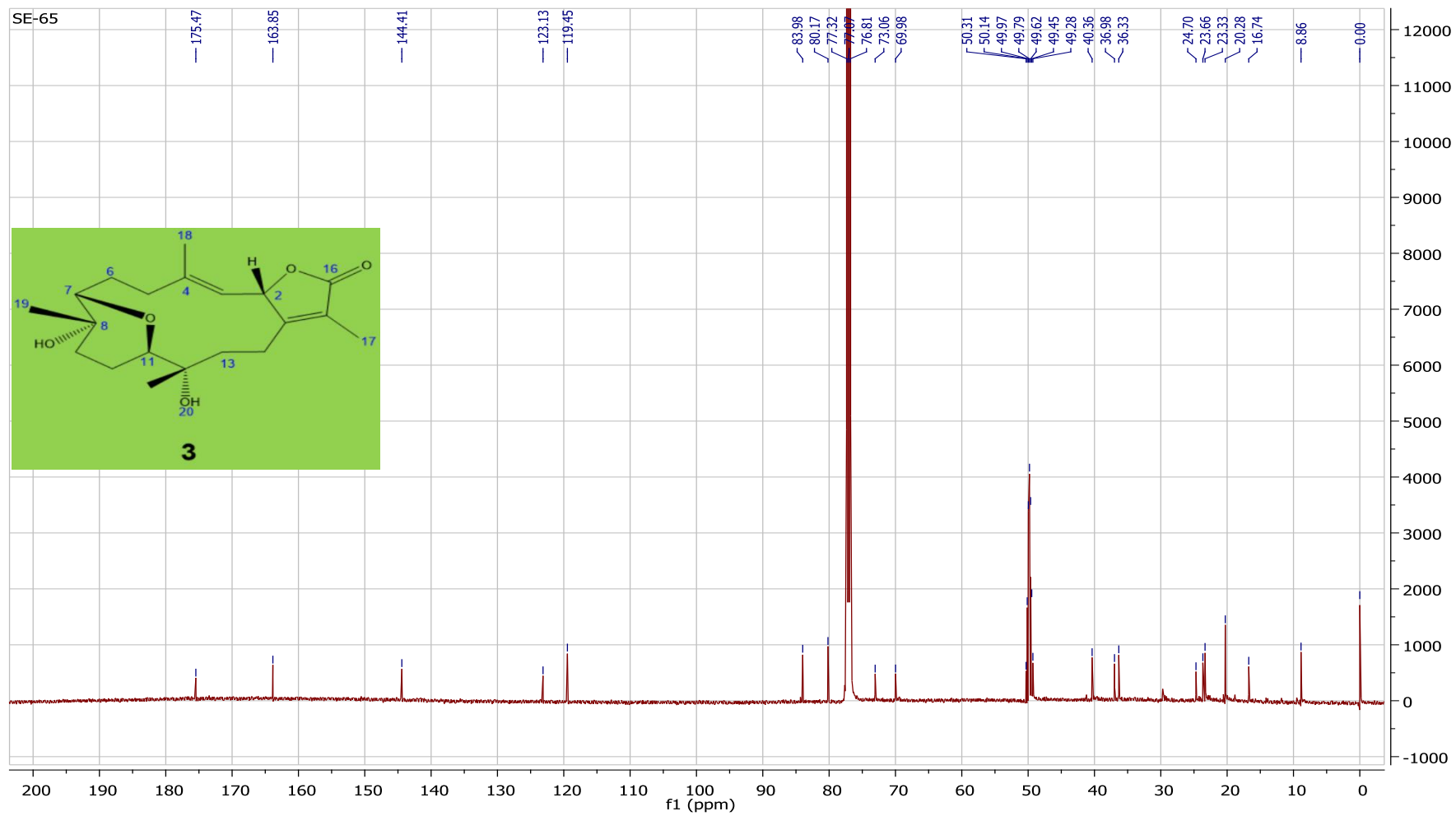


	Observed m/z	Int%	Err [ppm / mmu]	U.S. Composition
1	332.1993	16.32	+1.6 / +0.5	7.0 C20 H28 O4

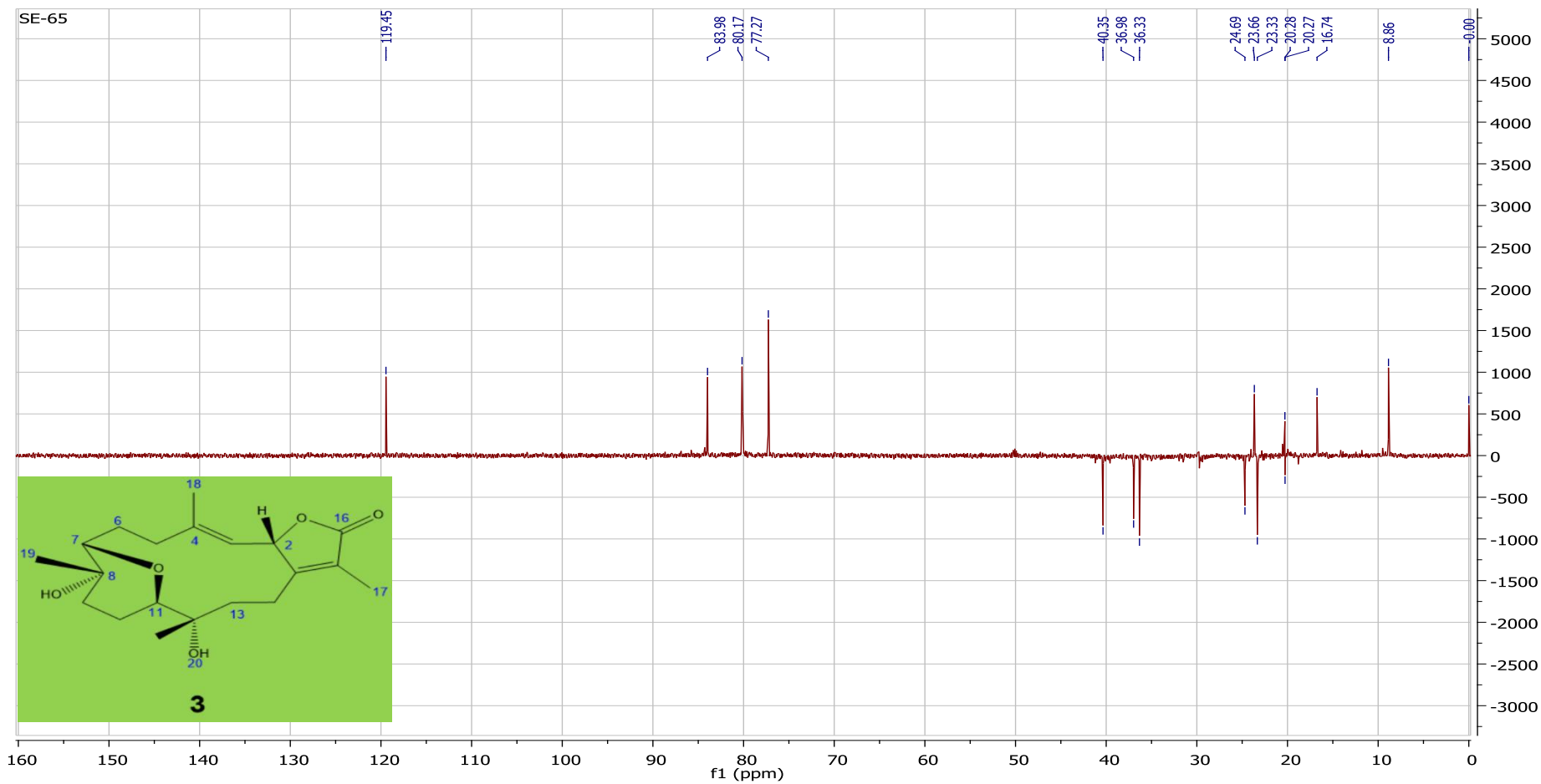
S23: HREIMS of 3



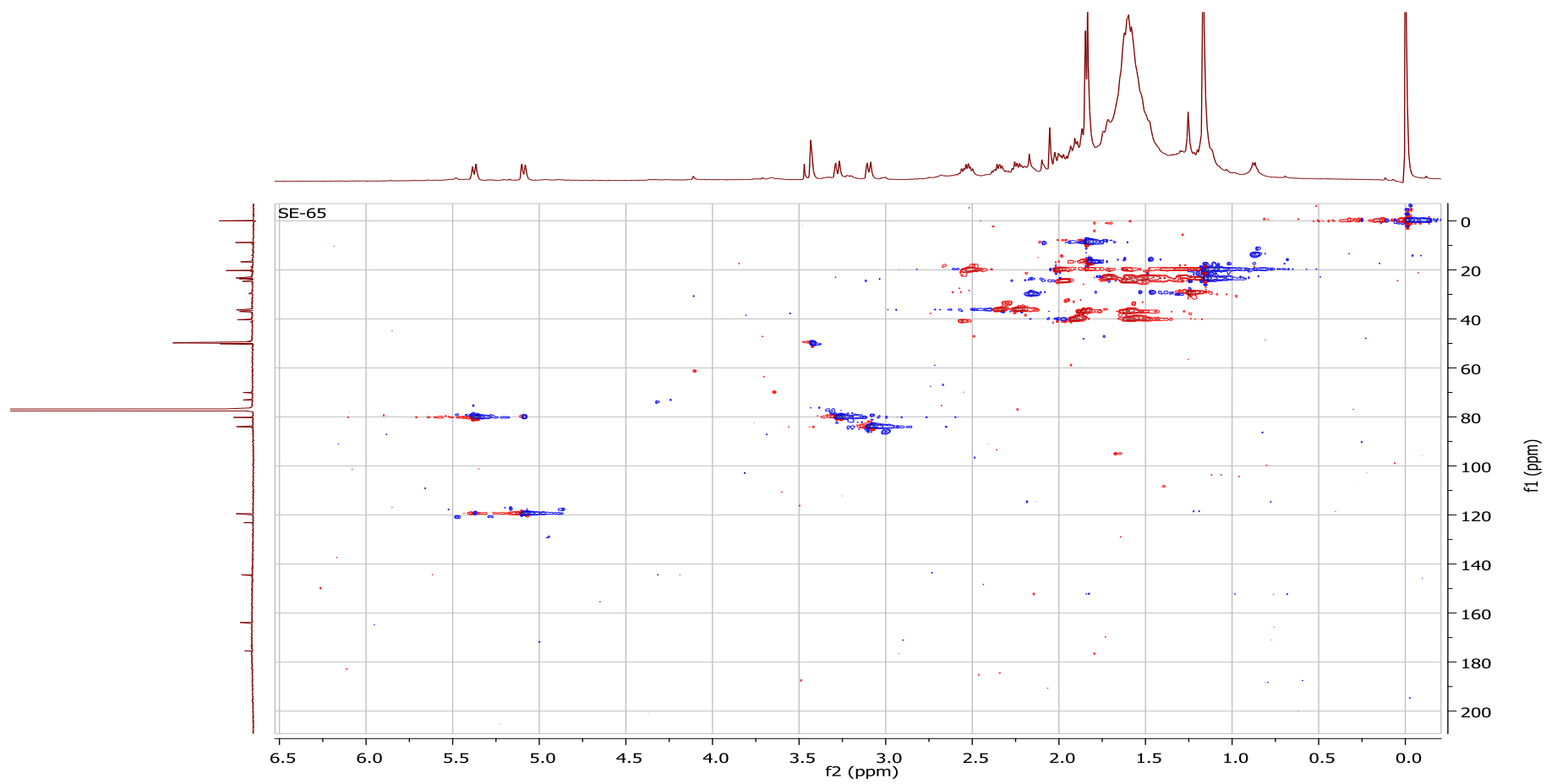
S24:  $^1\text{H}$  NMR of 3



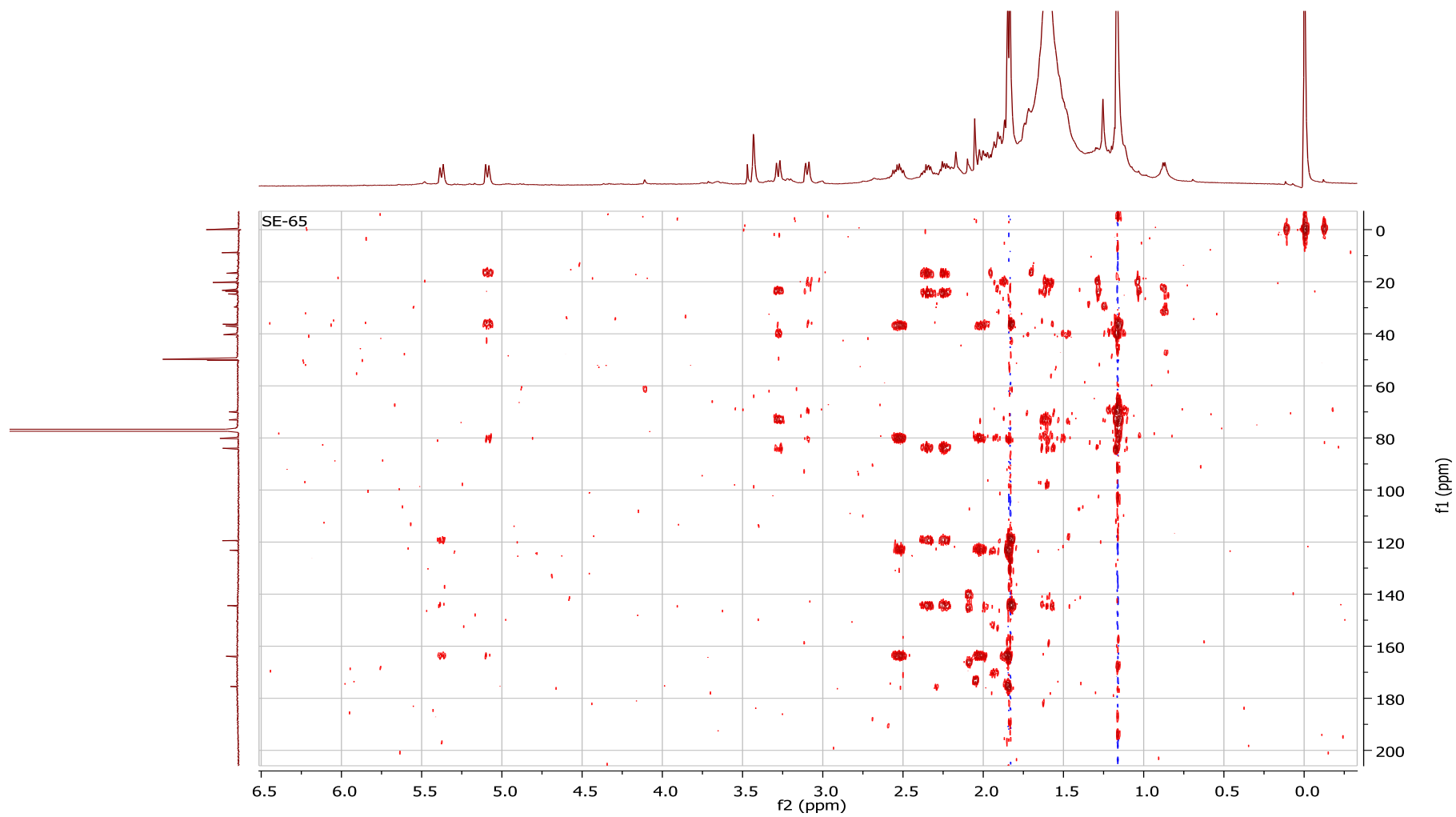
S25:  $^{13}\text{C}$  NMR of **3**



S26:DEPT-135 of 3

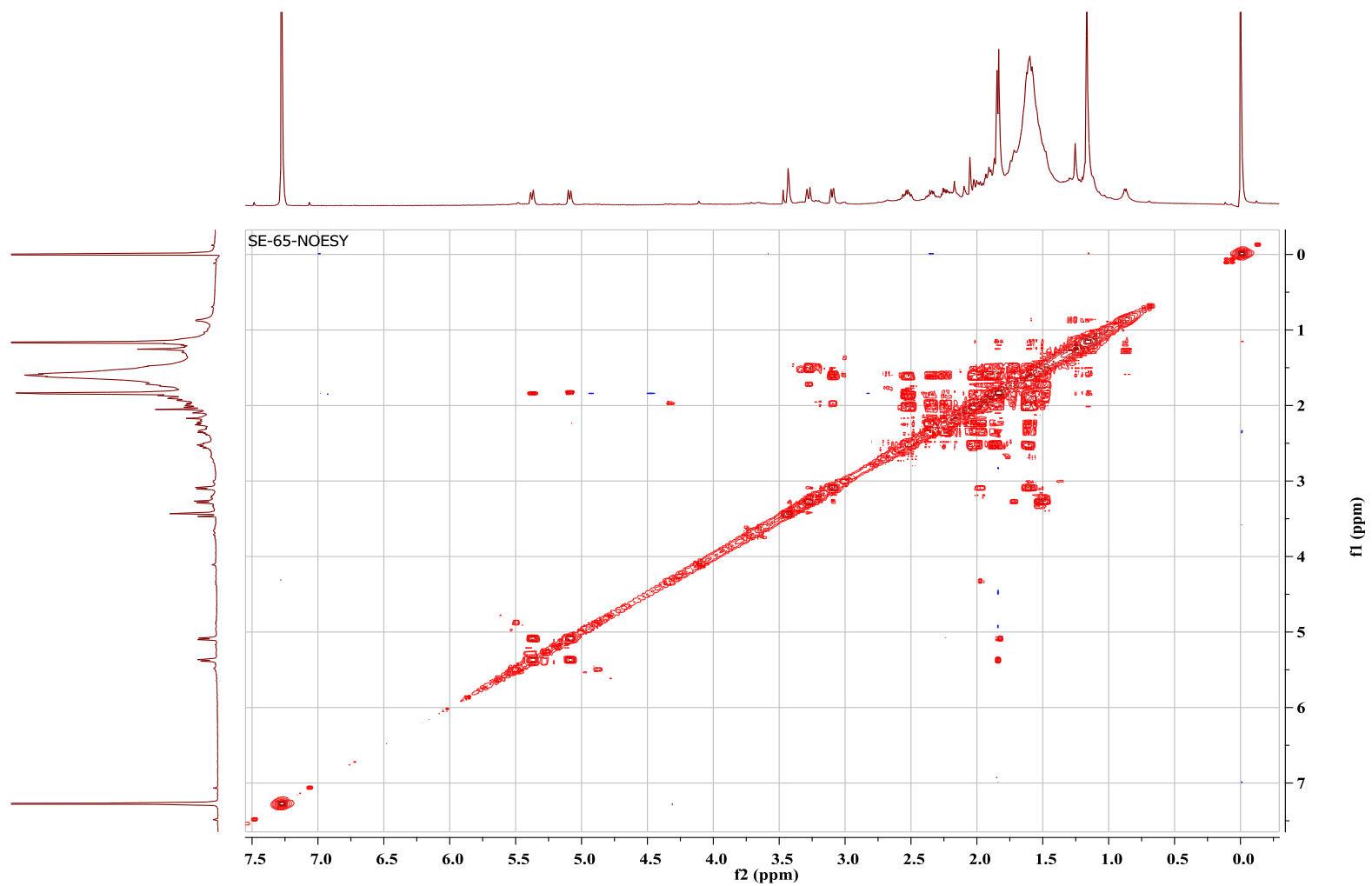


**S27:** HSQC of **3**

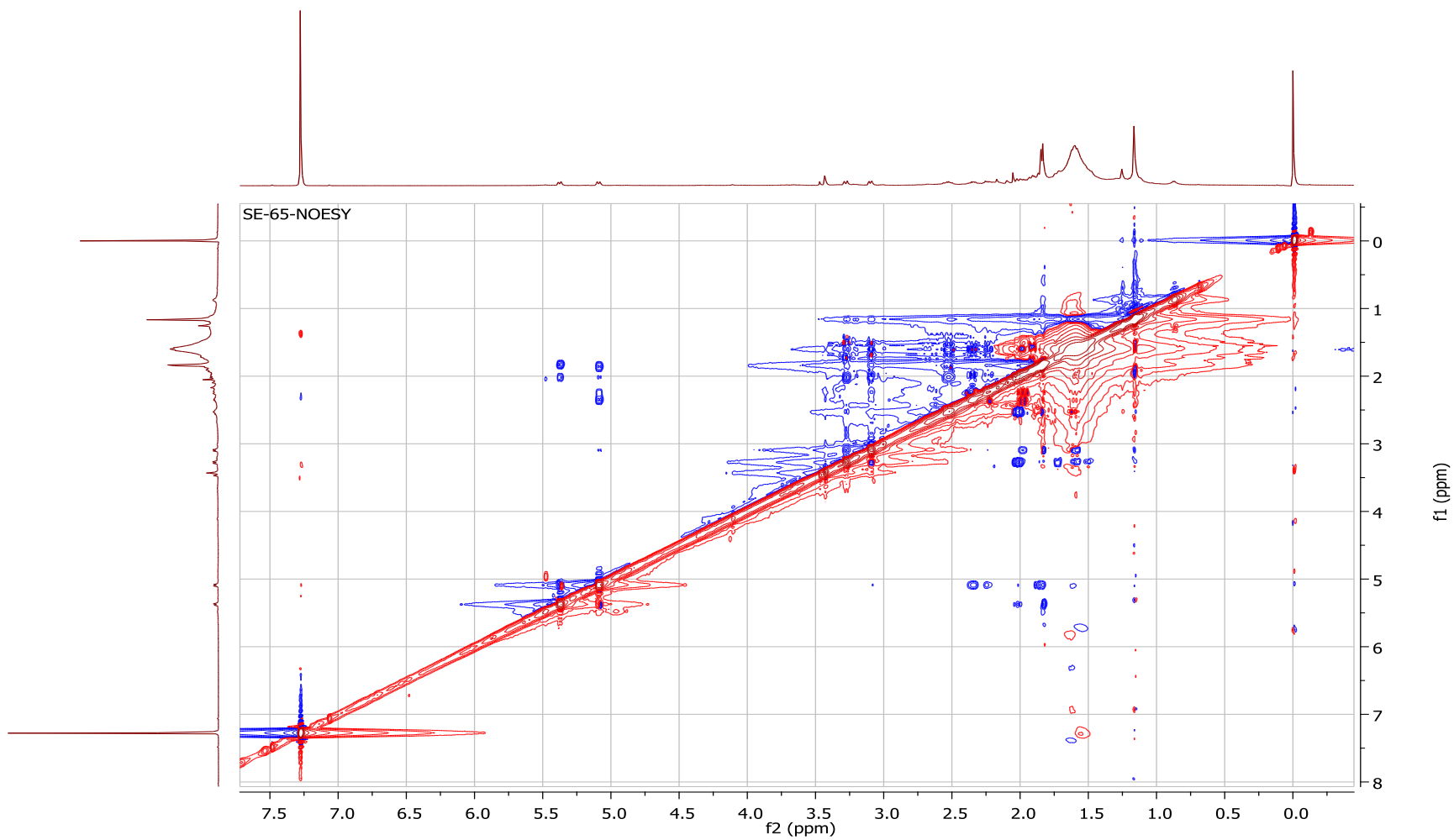


**S28:** HMBC of **3**





S29:  $^1\text{H}$   $^1\text{H}$  COSY of 3



S30: NOESY of 3