Electronic Supplementary Information

Bioactive norditerpenoids from *Flickingeria fimbriata*

Jin-Long Chen,[a] Zhi-Min Zhao,[a,b] Xue Xue,[a,b] Gui-Hua Tang,[a] Long-Ping Zhu,[b] De-Po Yang,[*a,b] and Lin Jiang[*a]

[a] School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou 510006, Guangdong, P. R. of China.

E-mail: Linderson_jiang@163.com; Fax: +86-20-39943041

[b] Guangdong Technology Research Center for Advanced Chinese Medicine，Guangzhou 510006, Guangdong, P. R. of China.

E-mail: lssydp@mail.sysu.edu.cn; Fax: +86-20-39943043.

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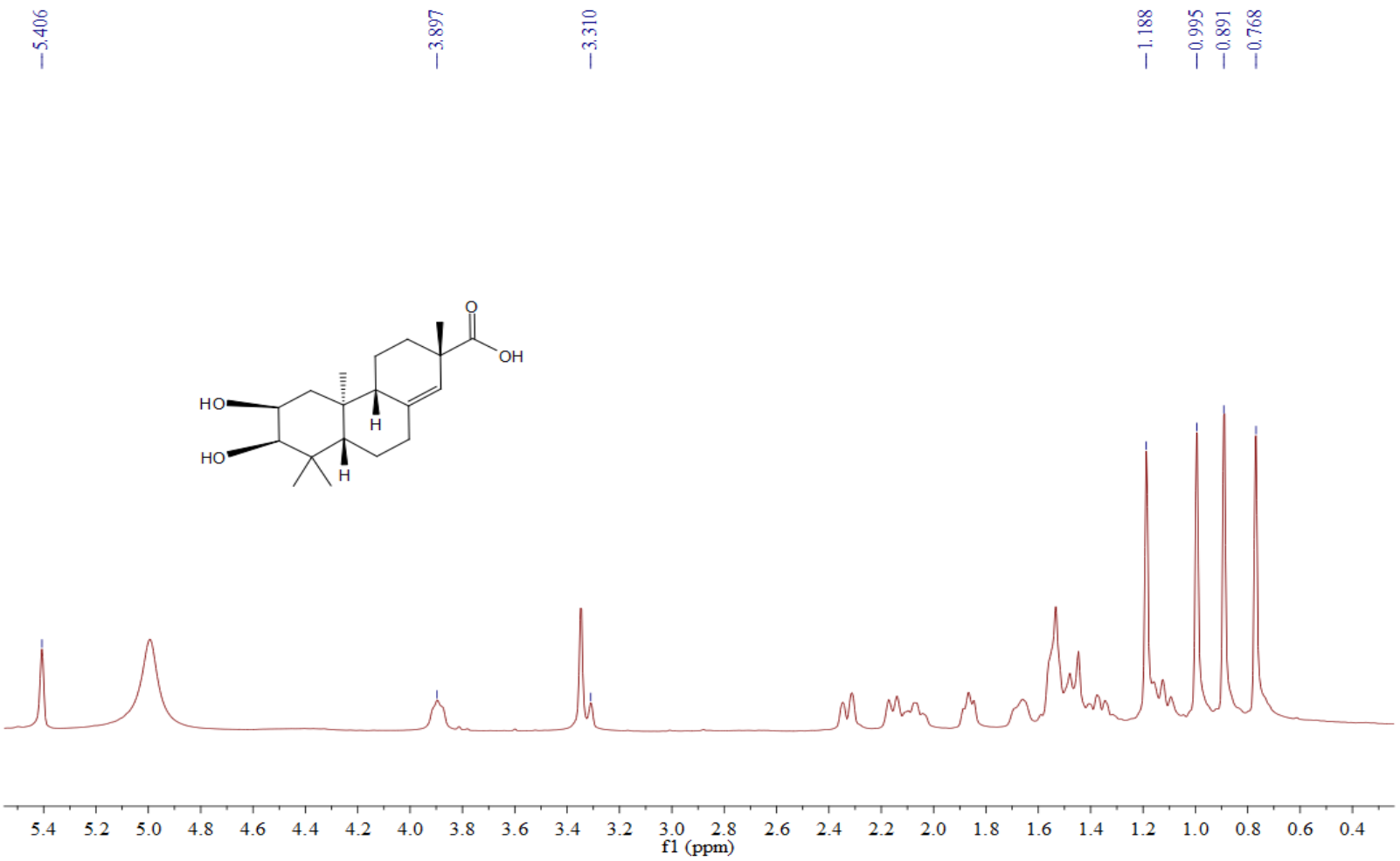
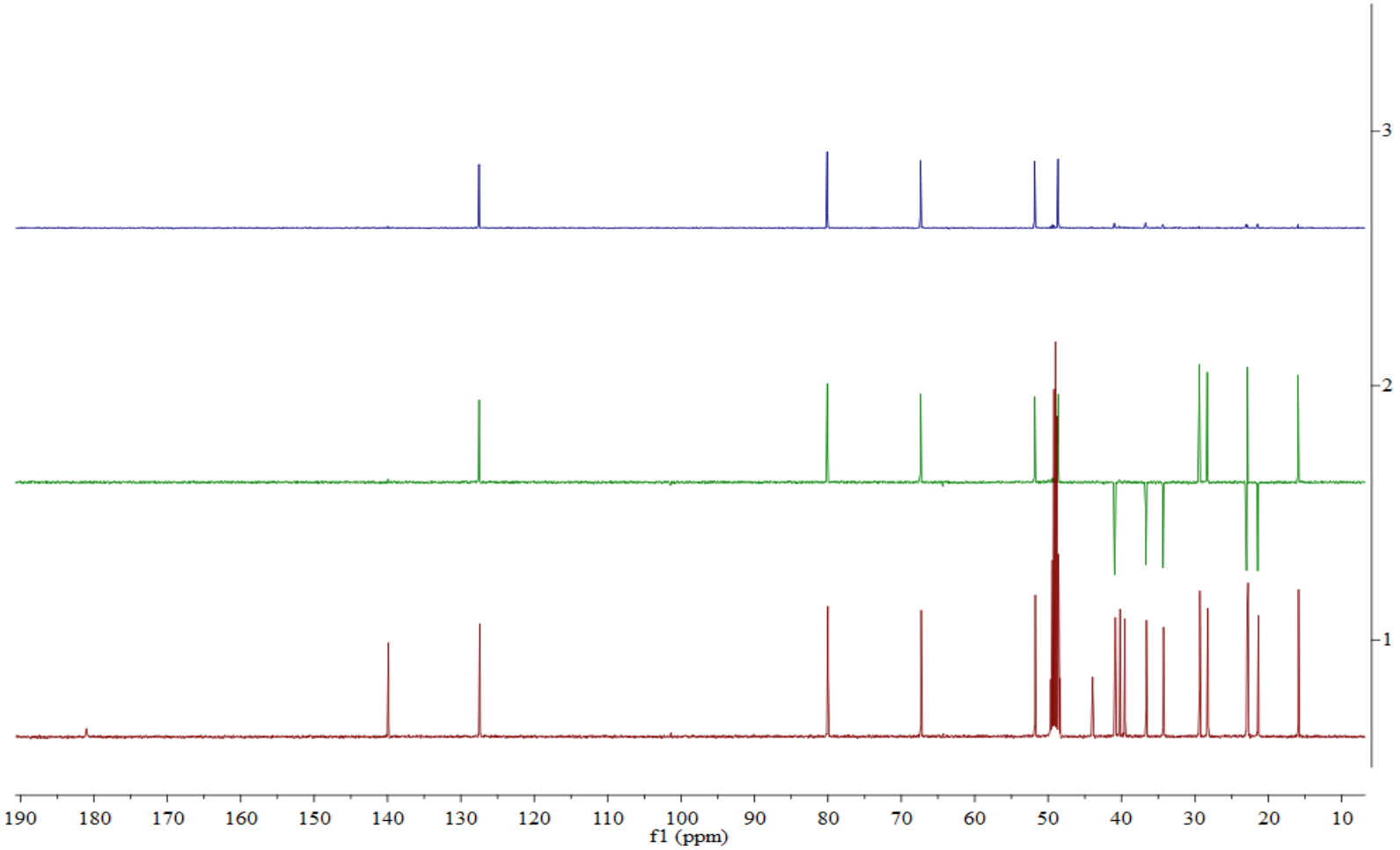
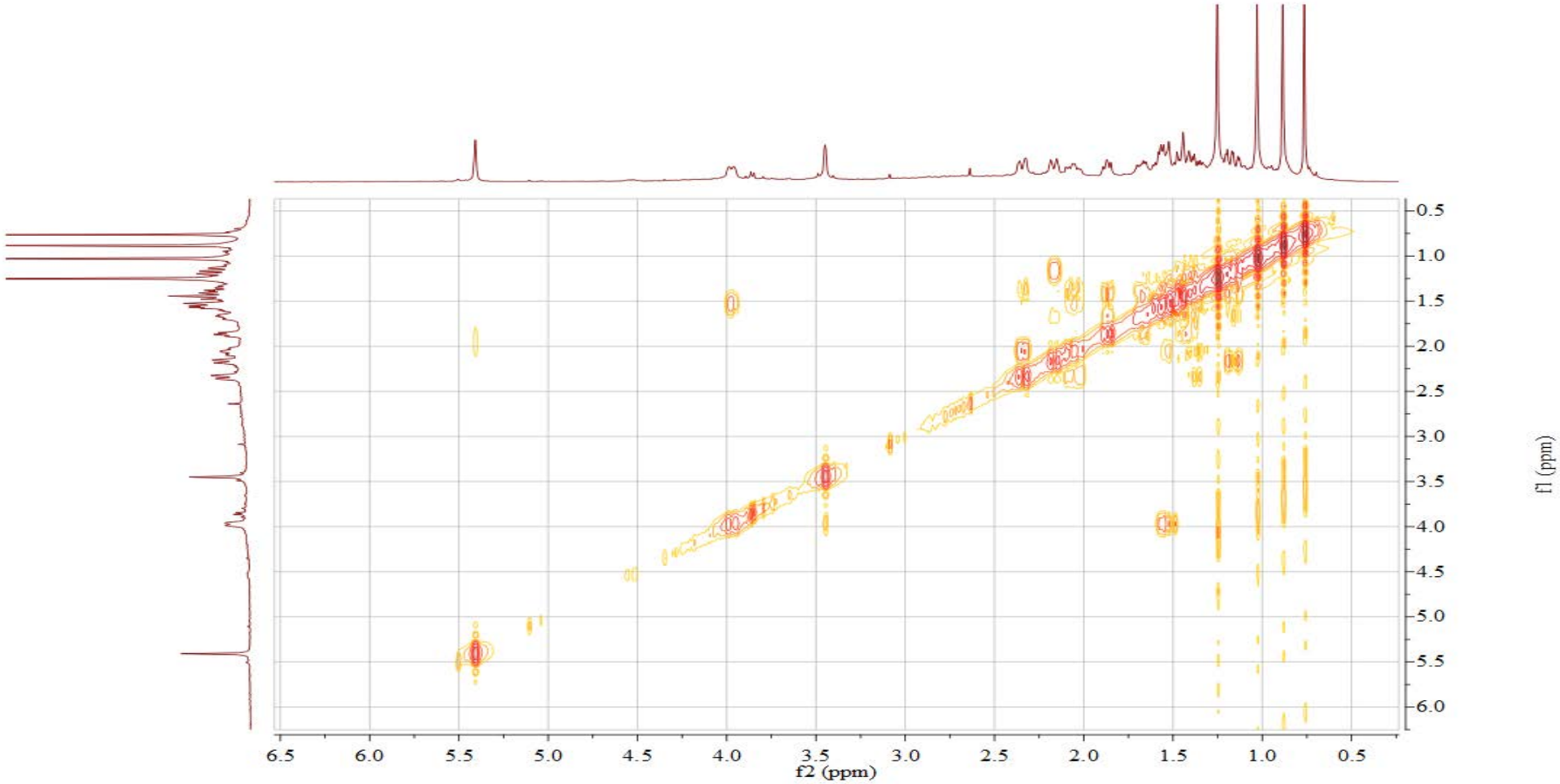
S1 ^{1}H NMR Spectrum of **1** in CD_3OD



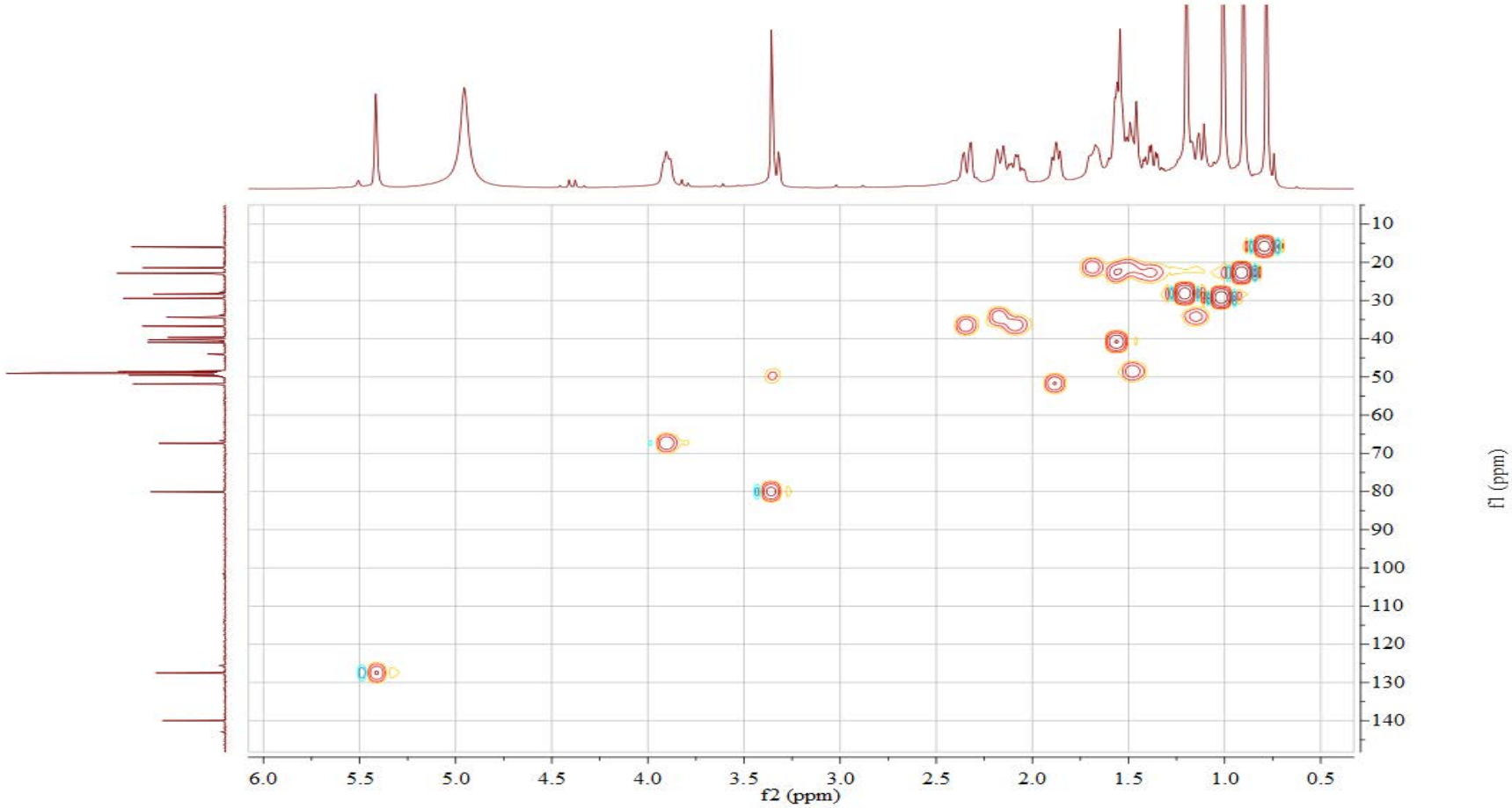
S2 ^{13}C NMR Spectrum of **1** in CD_3OD



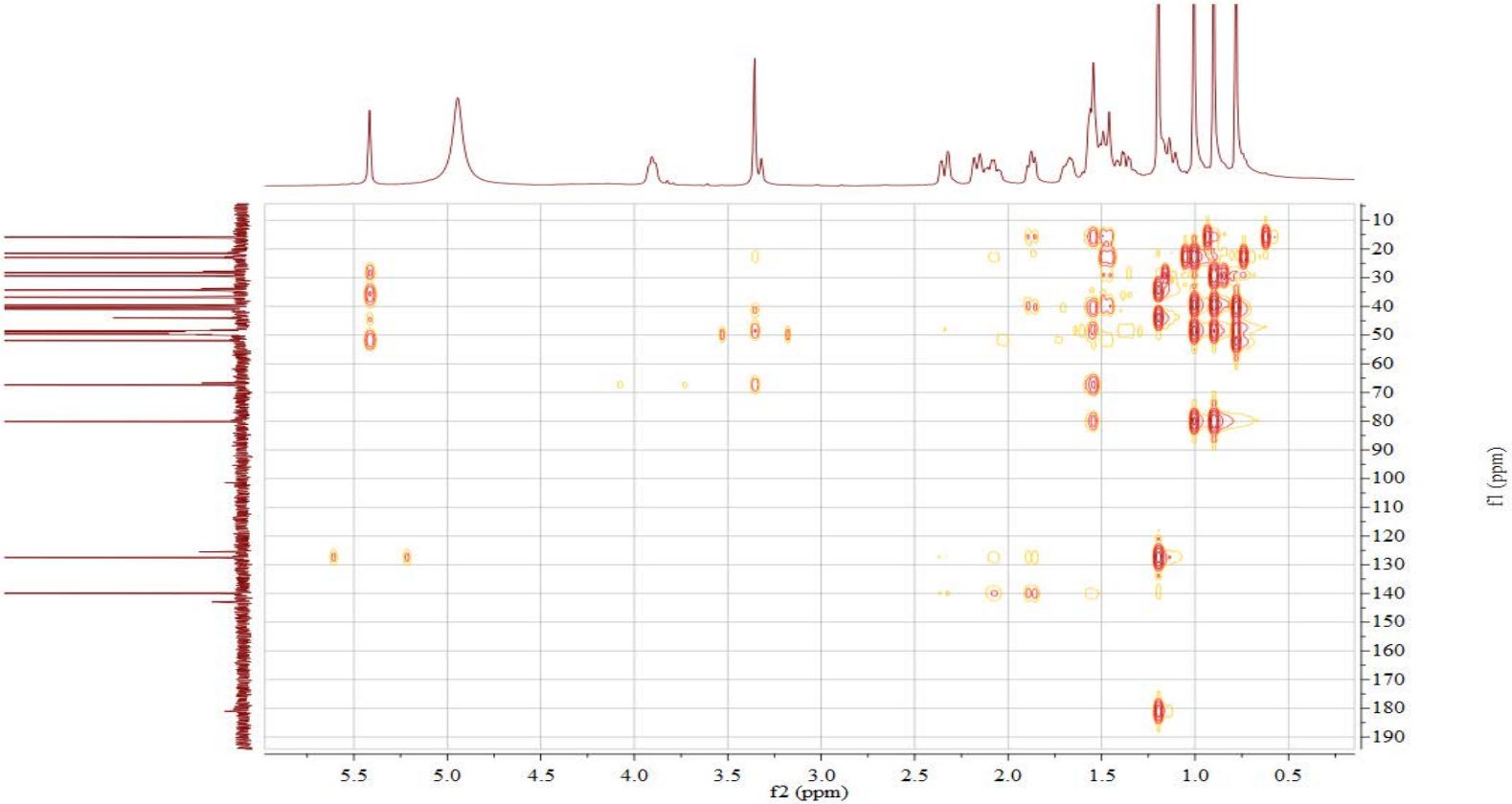
S3 ^{1}H-^{1}H COSY Spectrum of **1** in CD_3OD



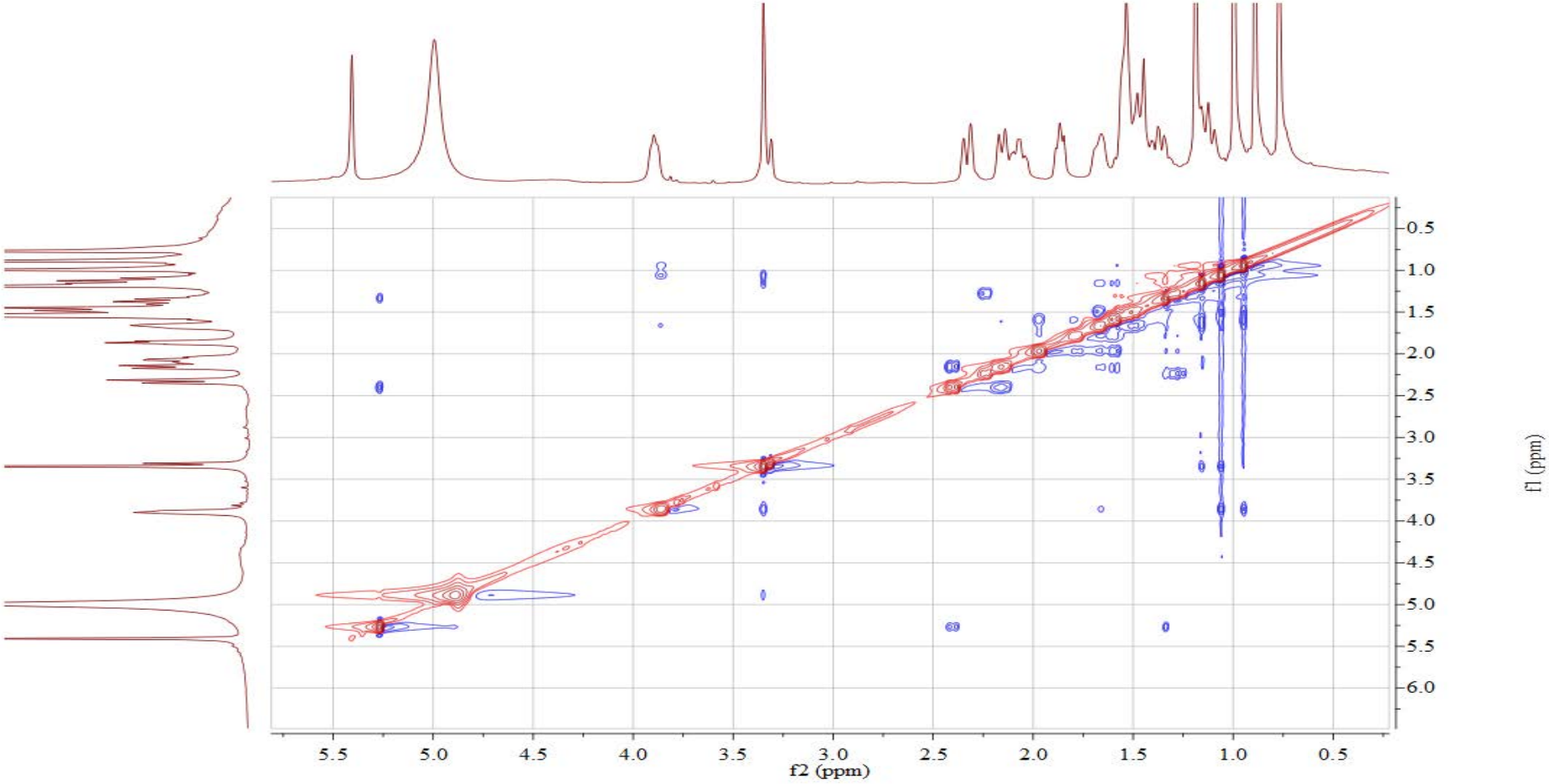
S4 HSQC Spectrum of **1** in CD_3OD



S5 HMBC Spectrum of **1** in CD_3OD



S6 NOESY Spectrum of **1** in CD_3OD



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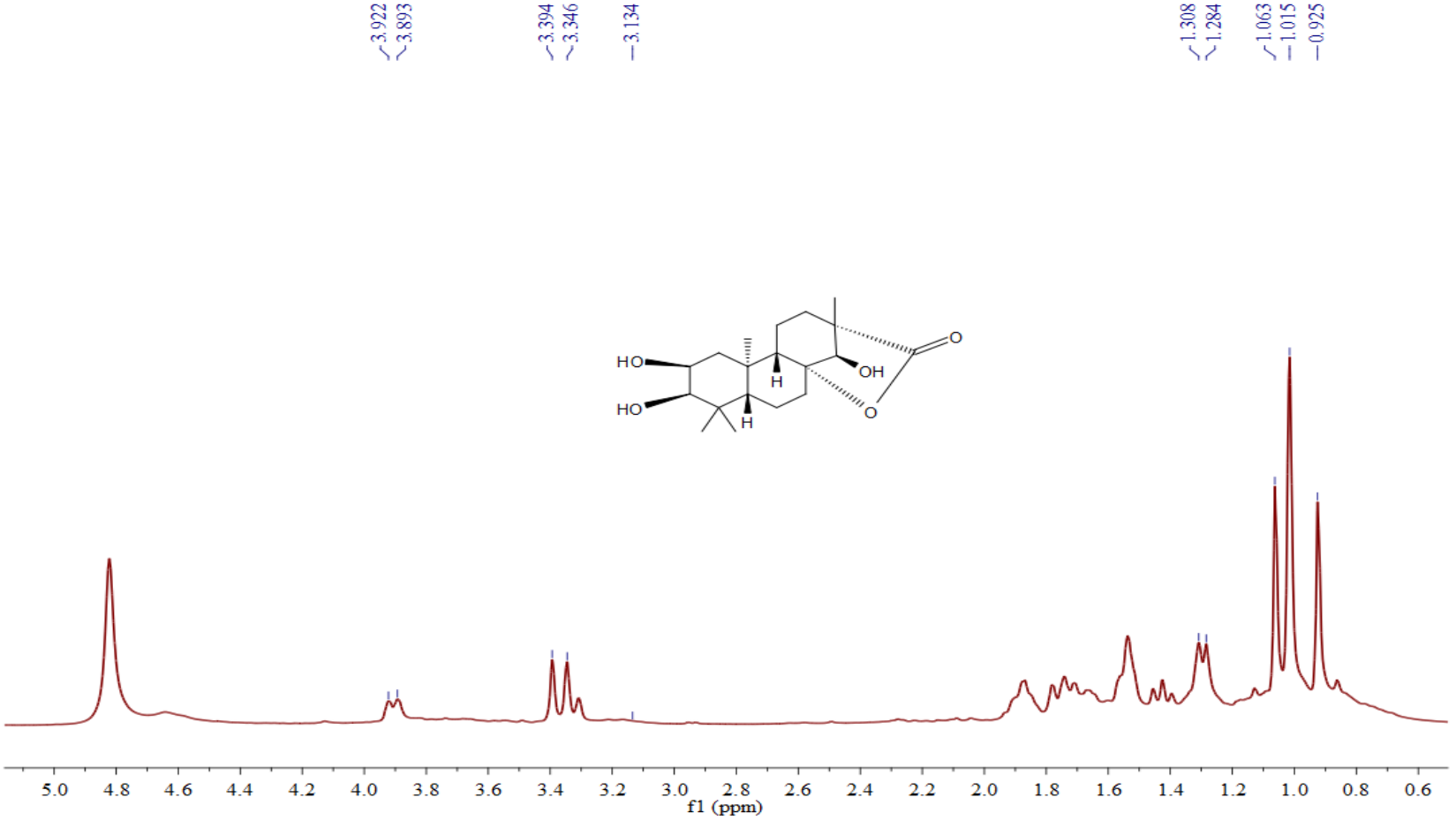
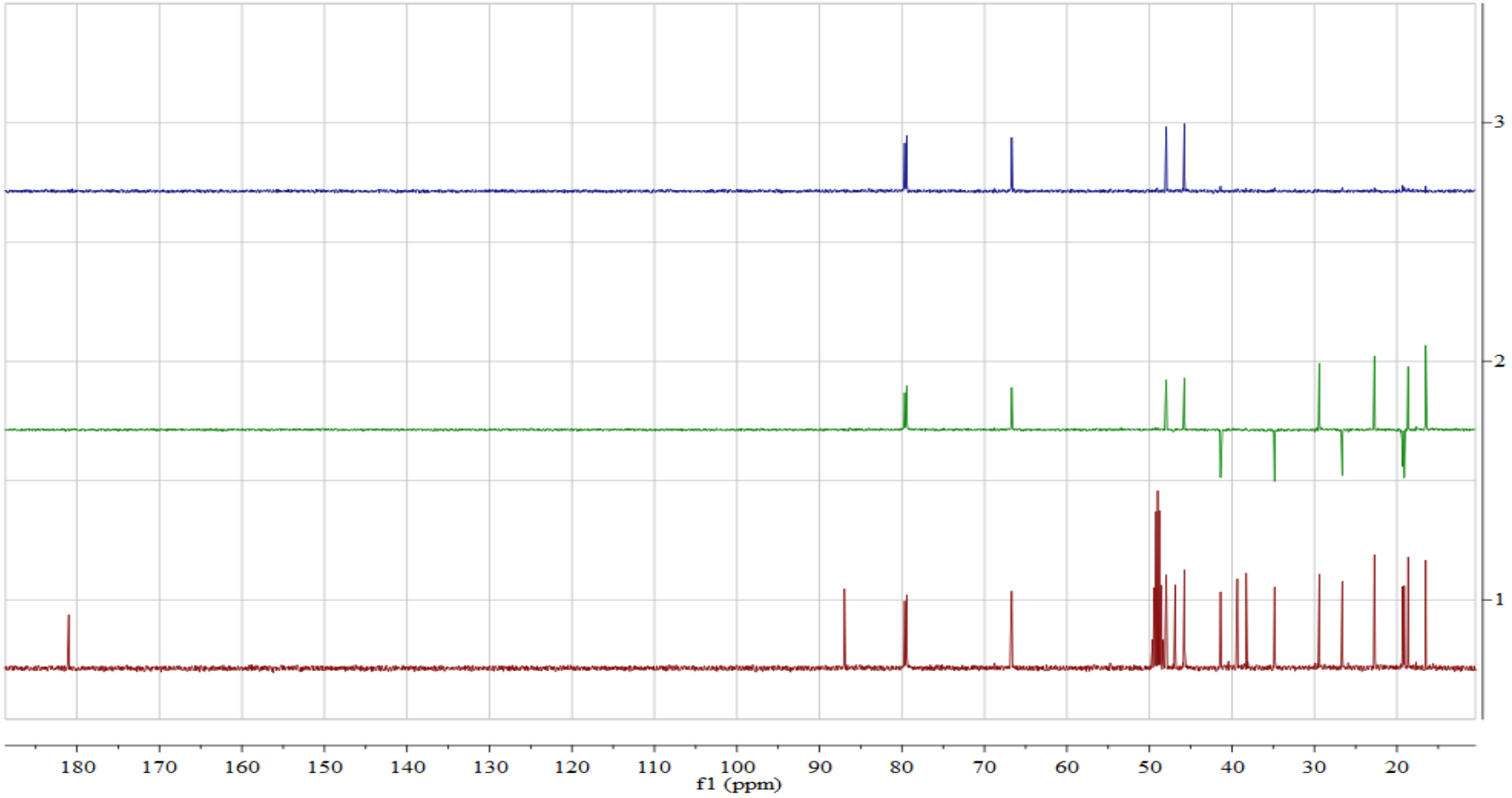


S8 ^{13}C NMR Spectrum of **2** in CD_3OD



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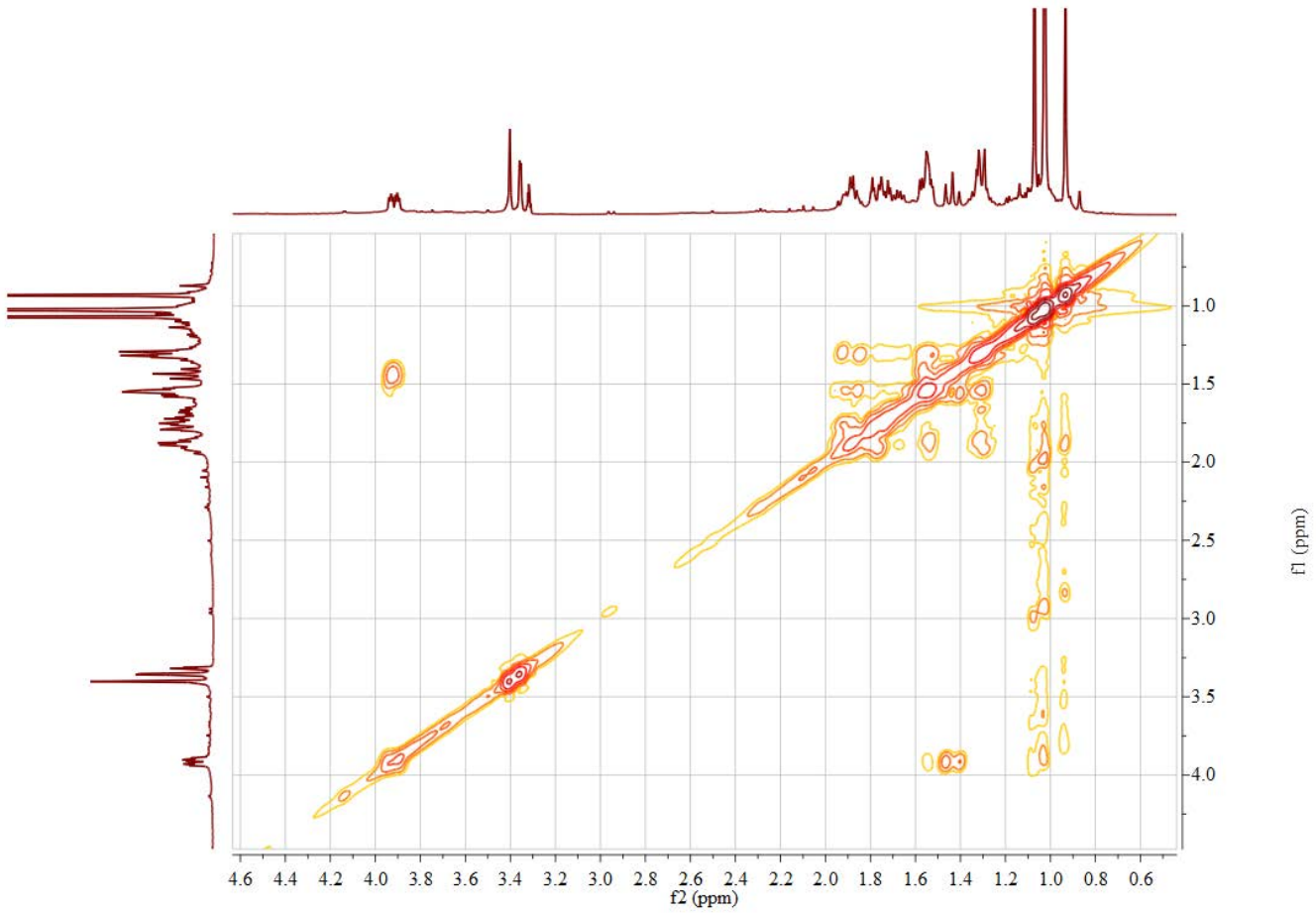

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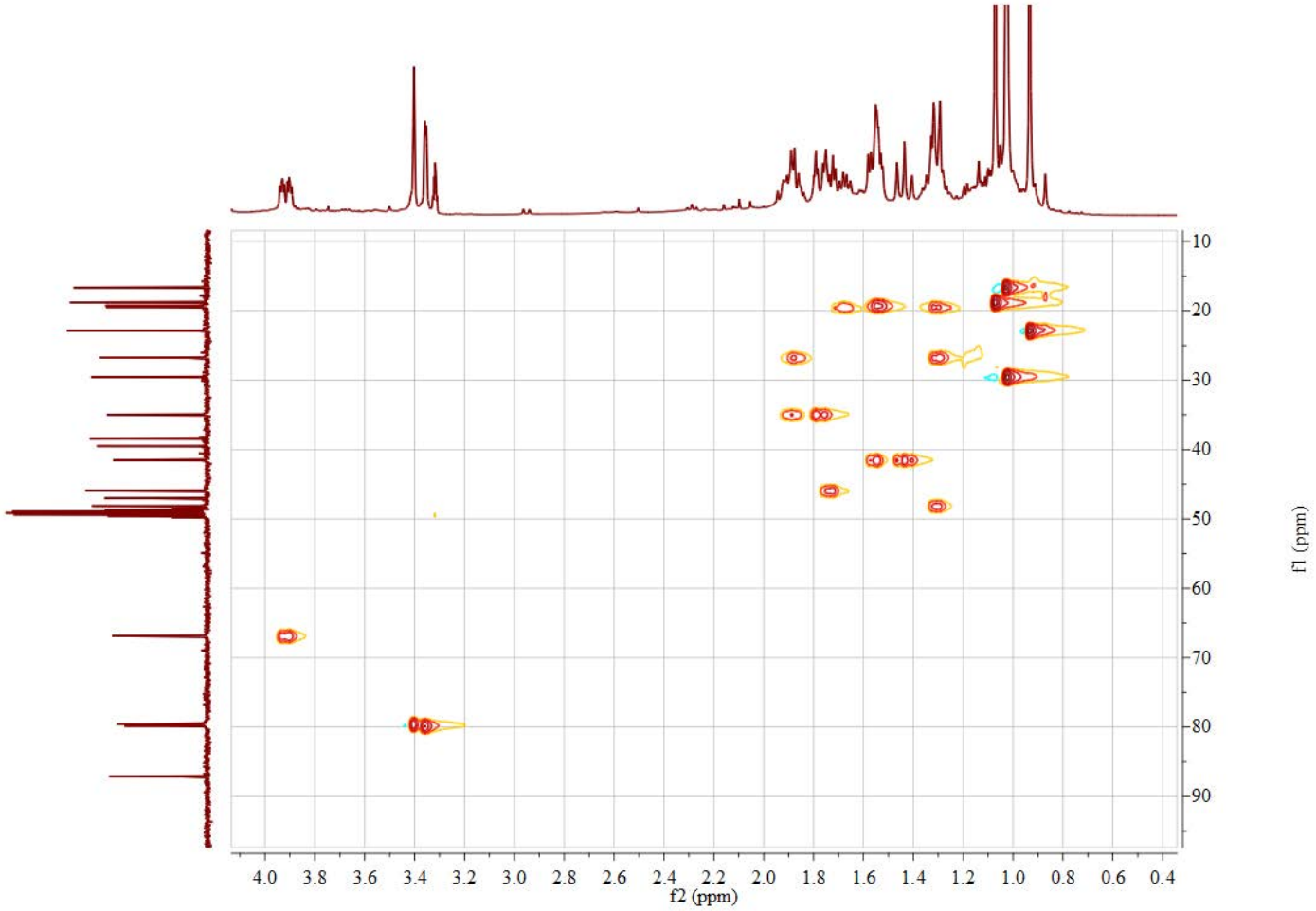

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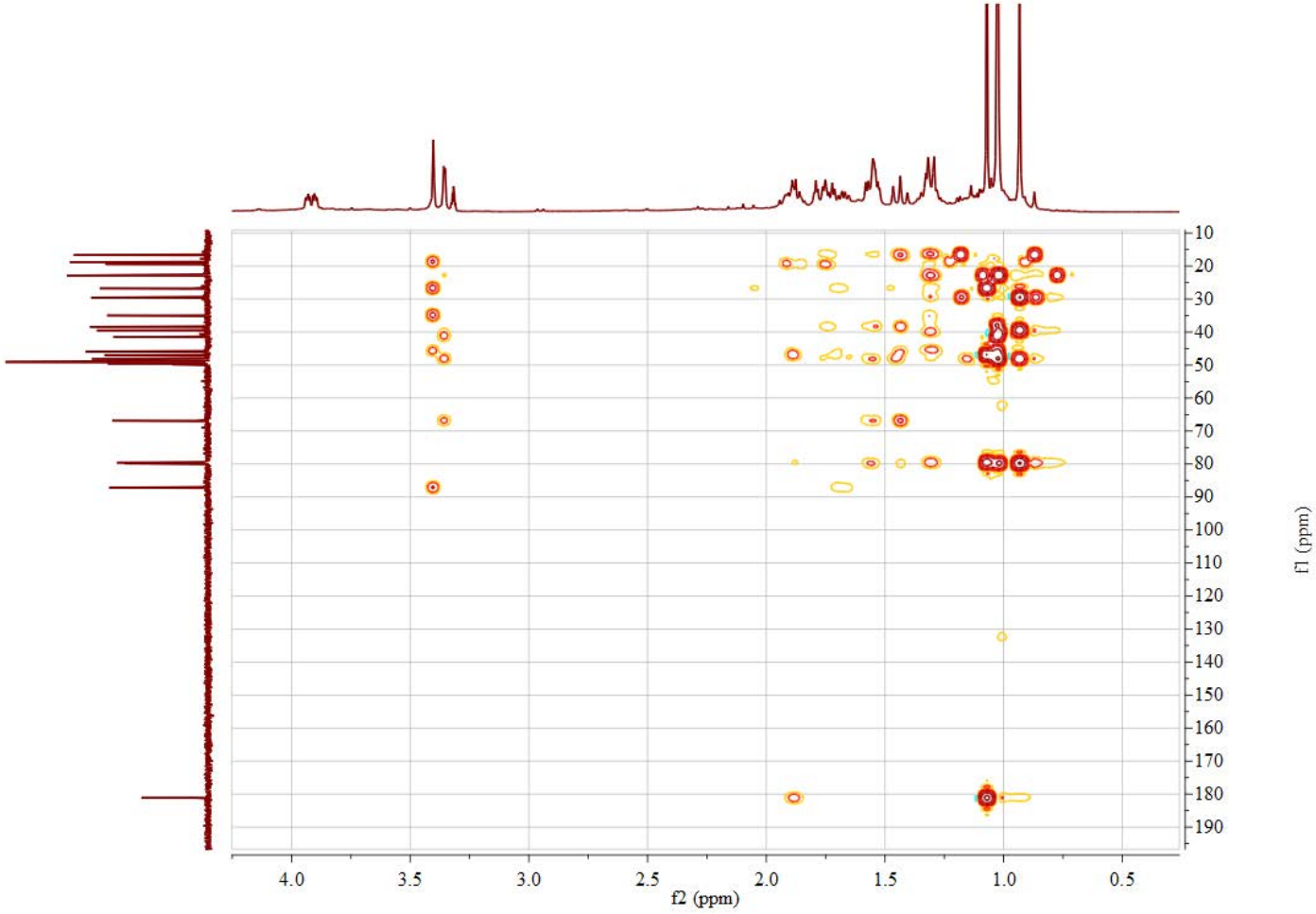

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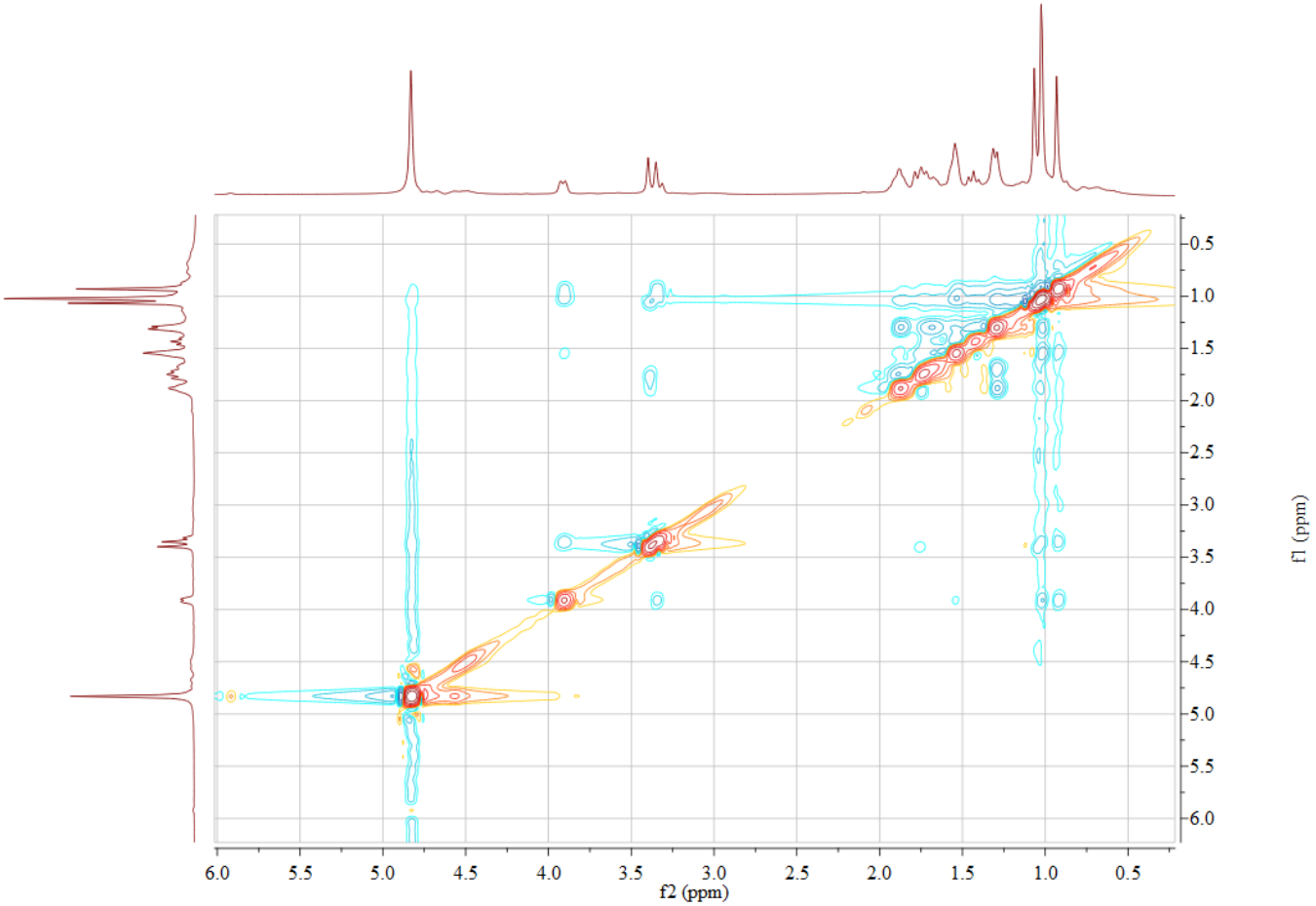

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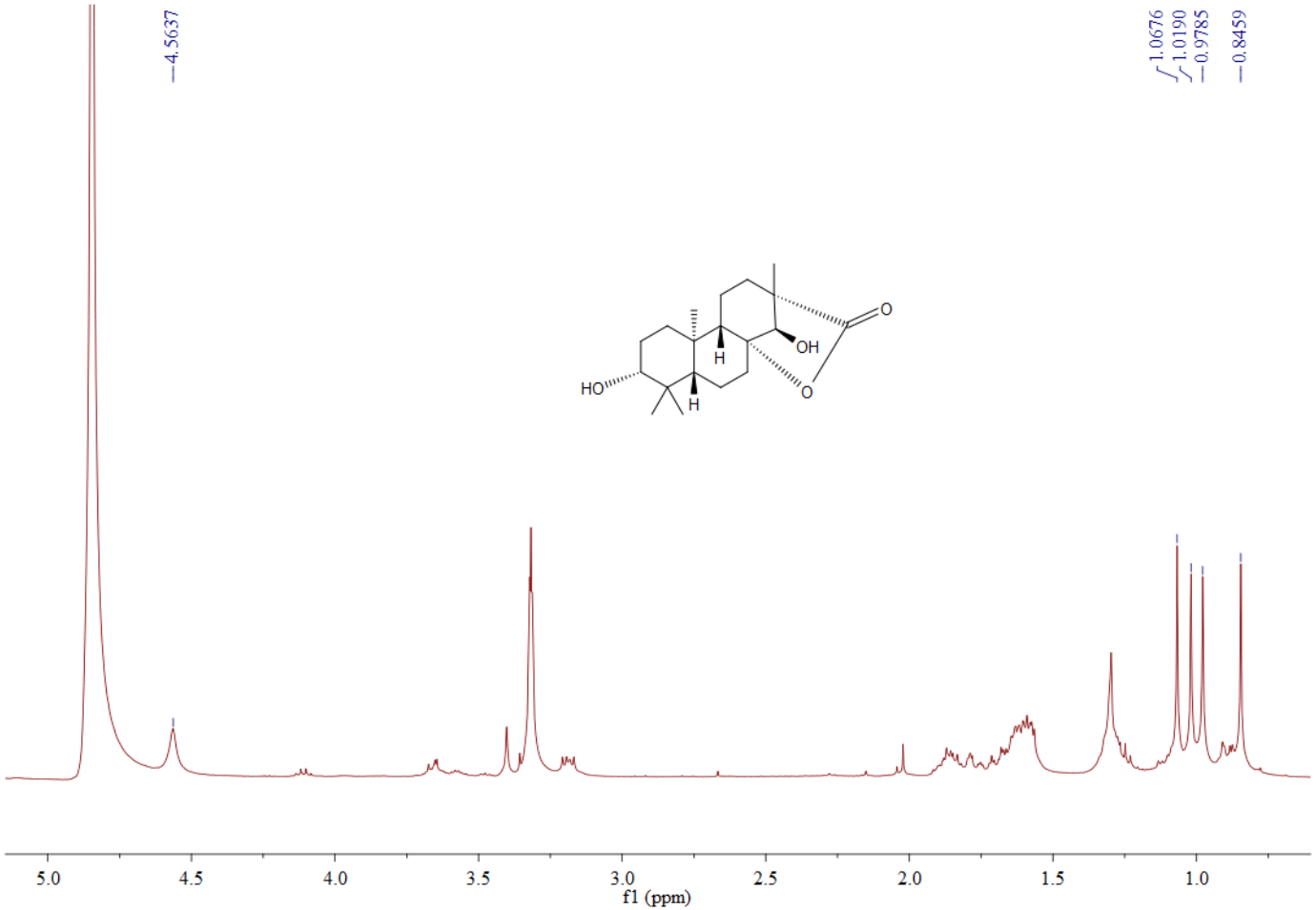

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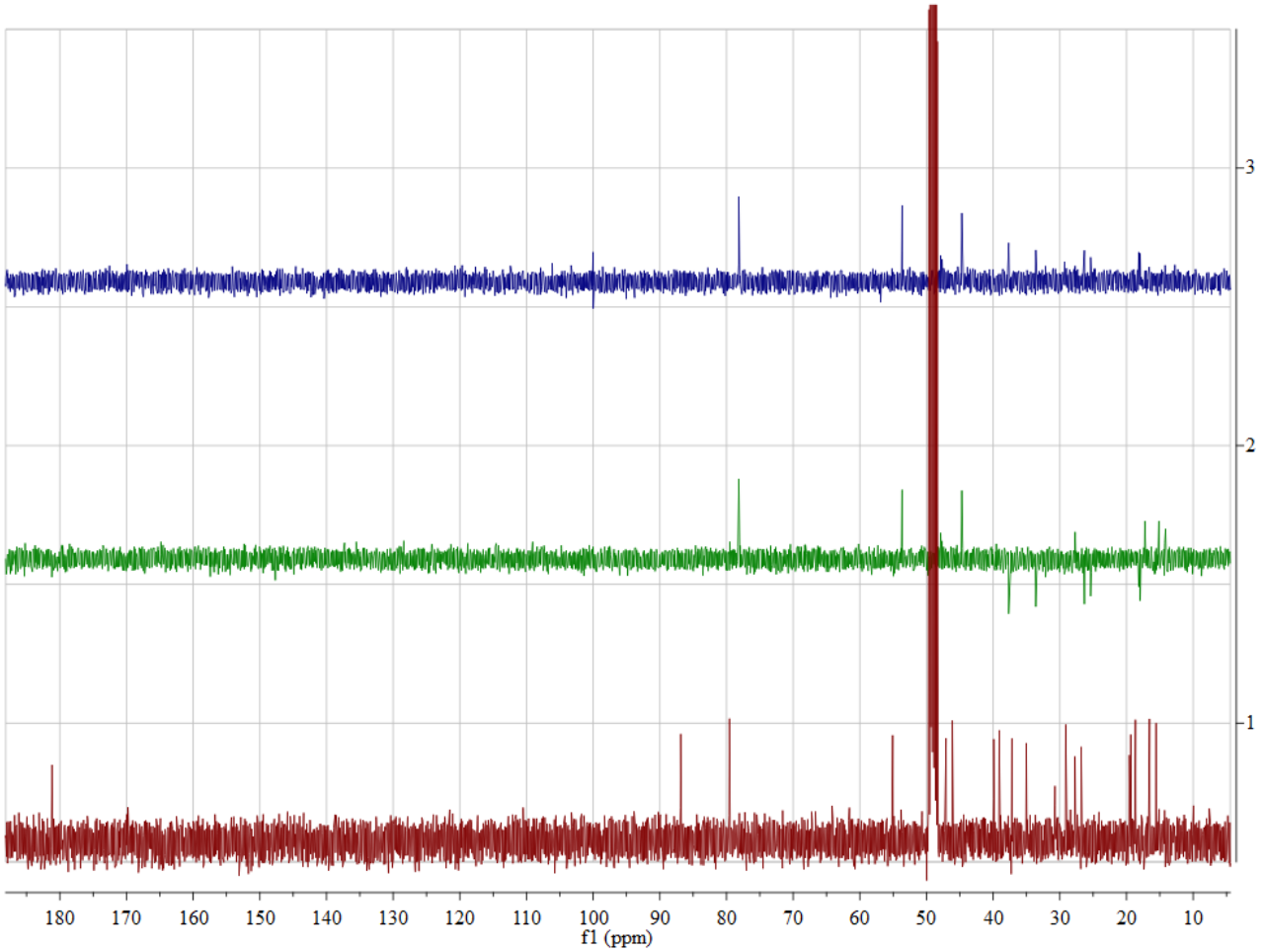

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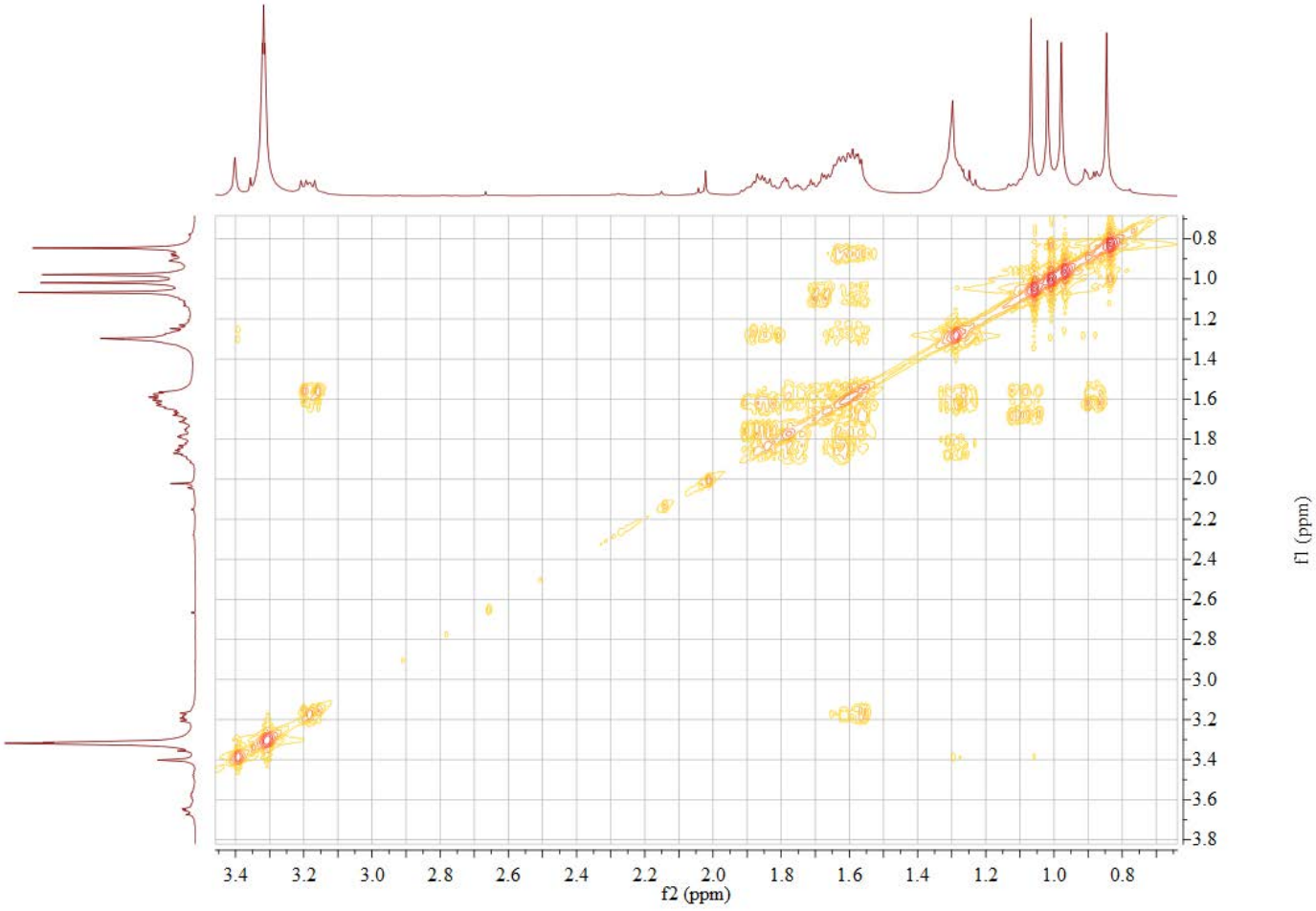

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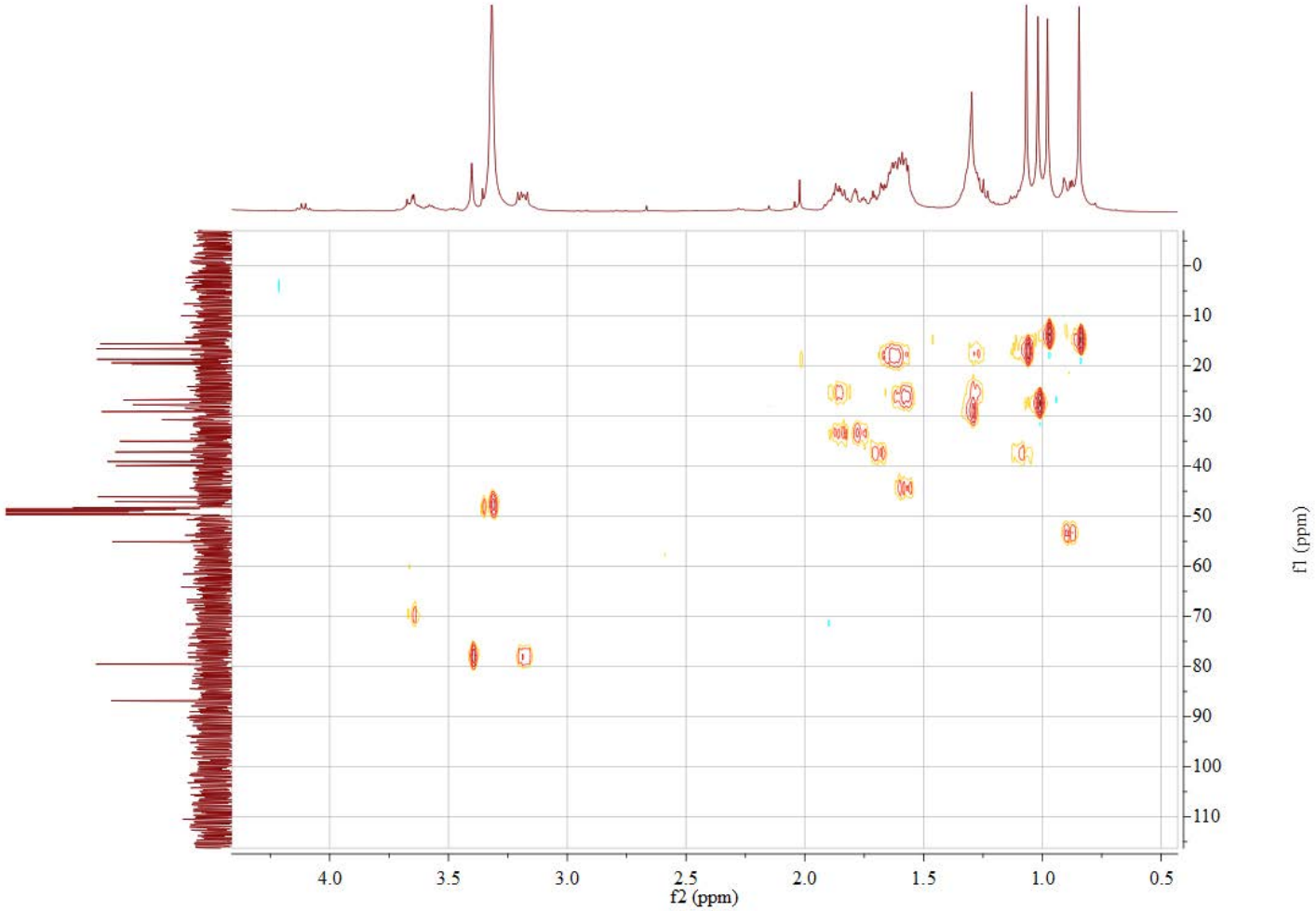

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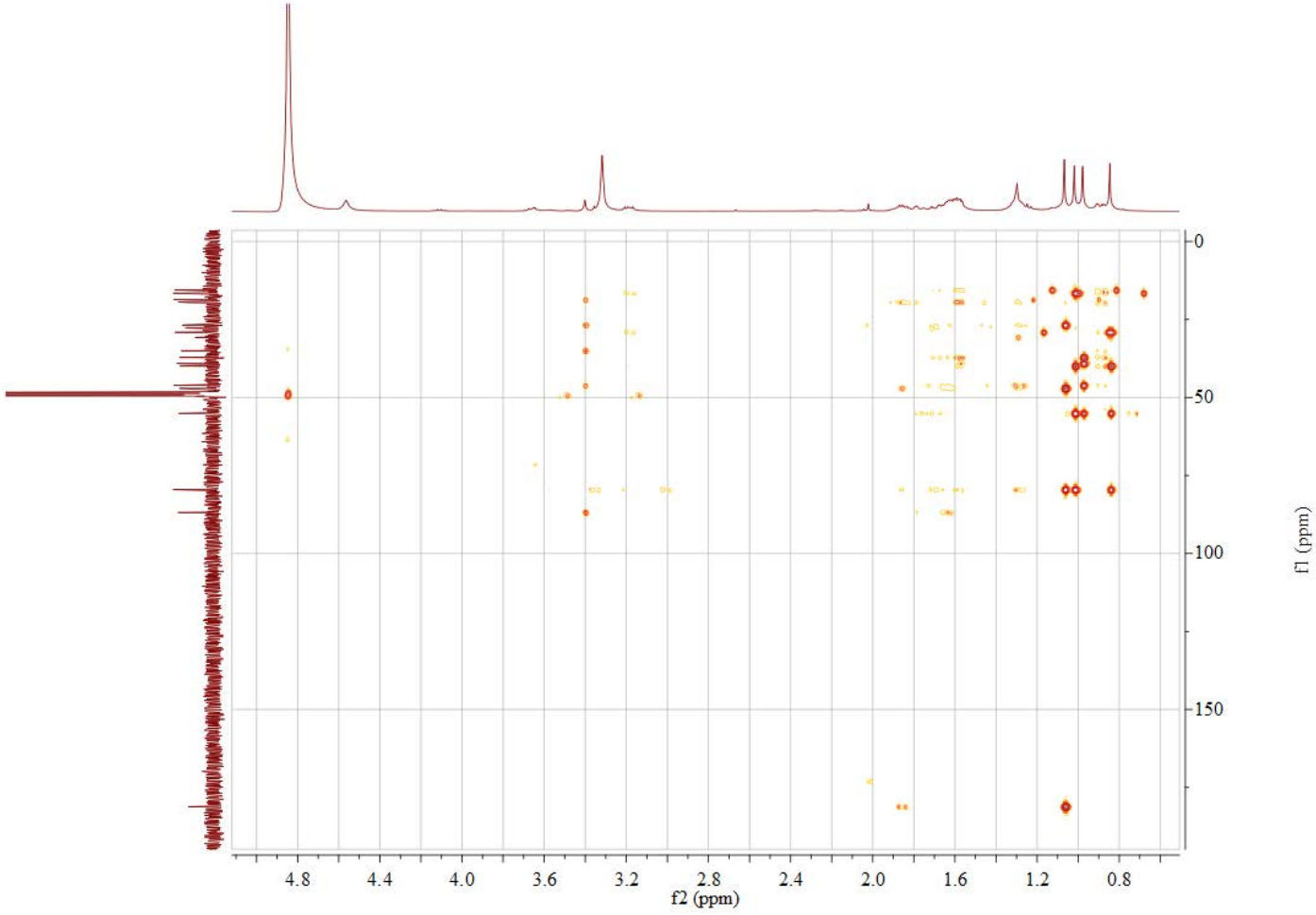

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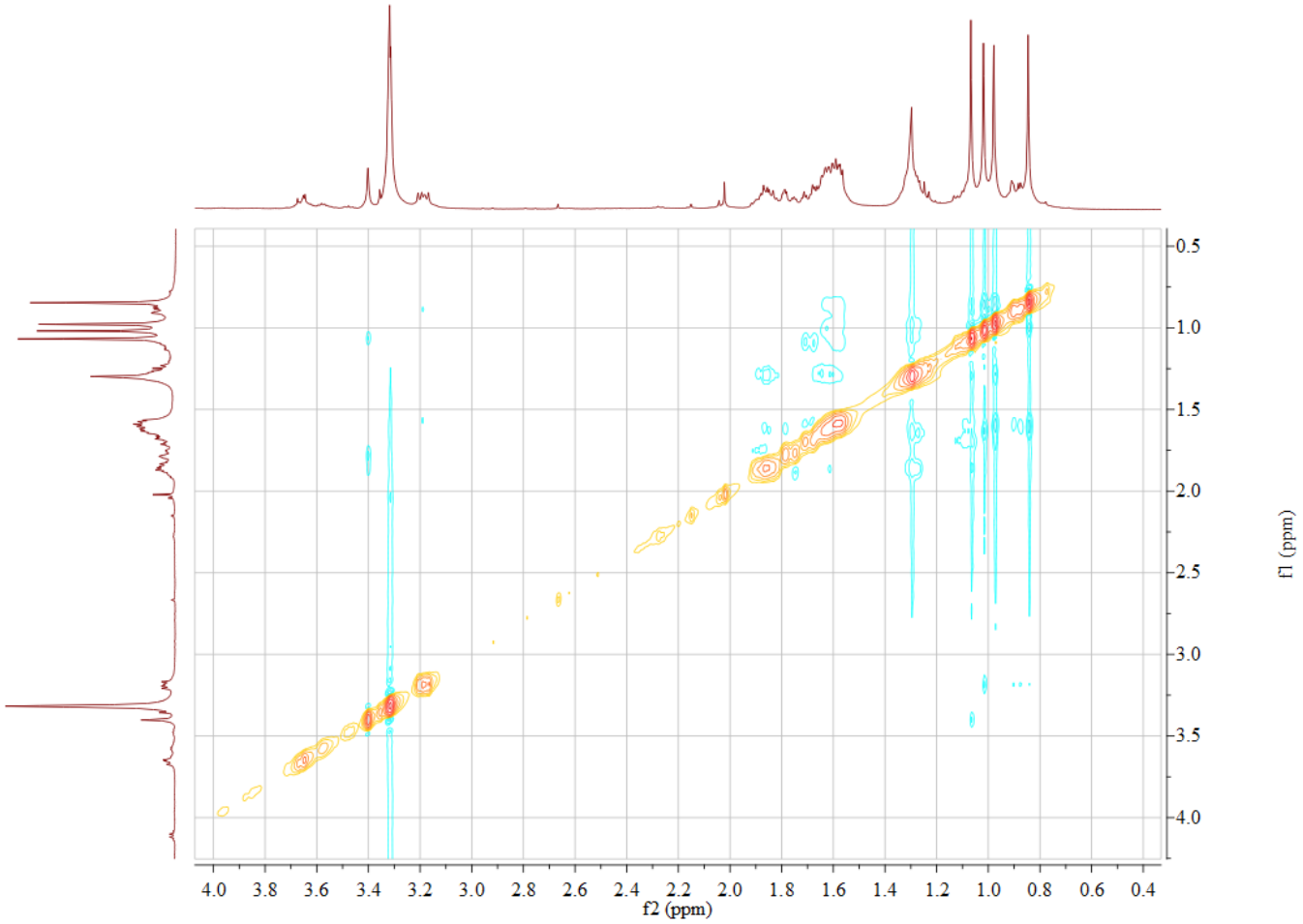
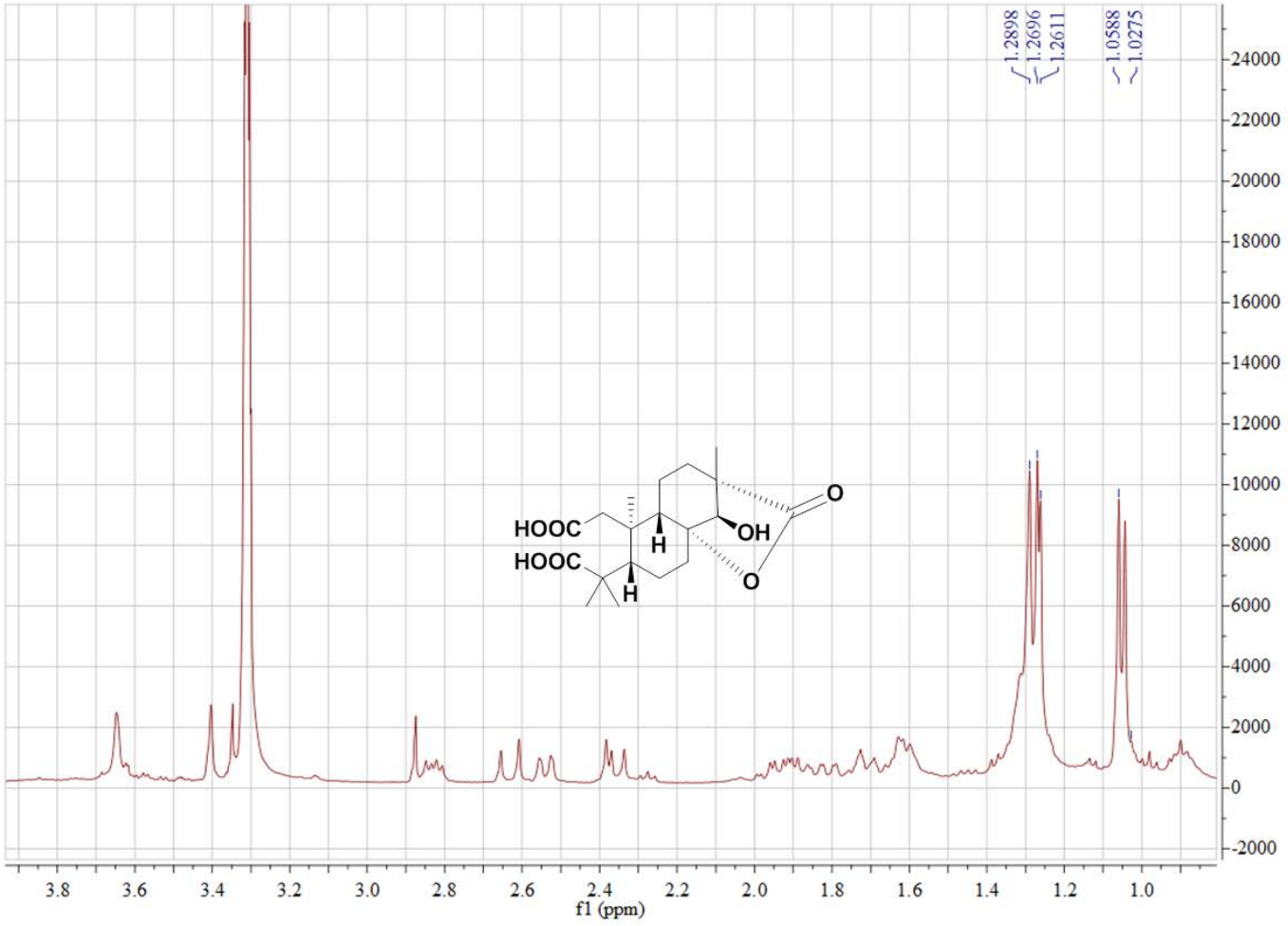


S19 ^{1}H NMR Spectrum of **4** in CD_3OD



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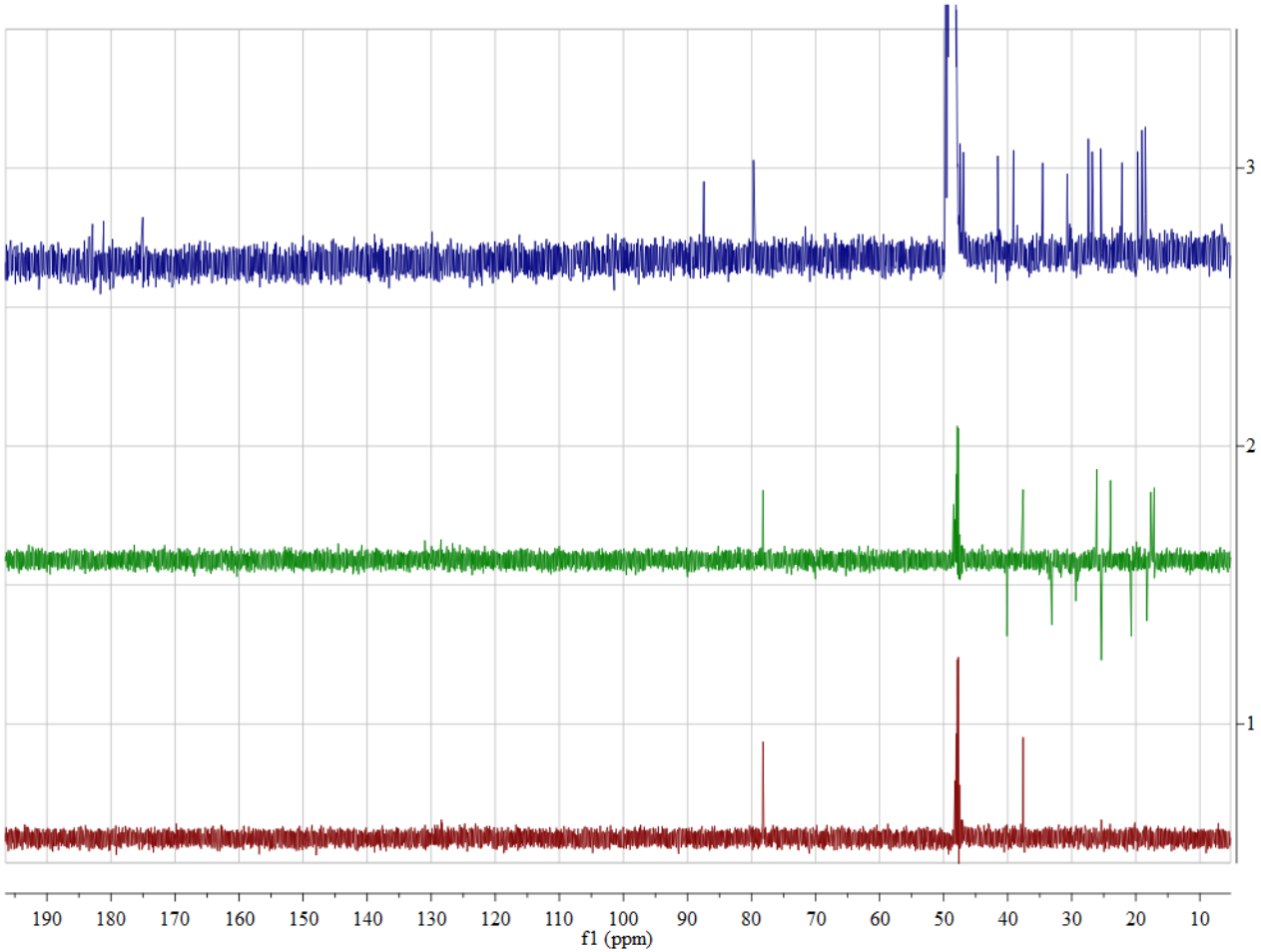

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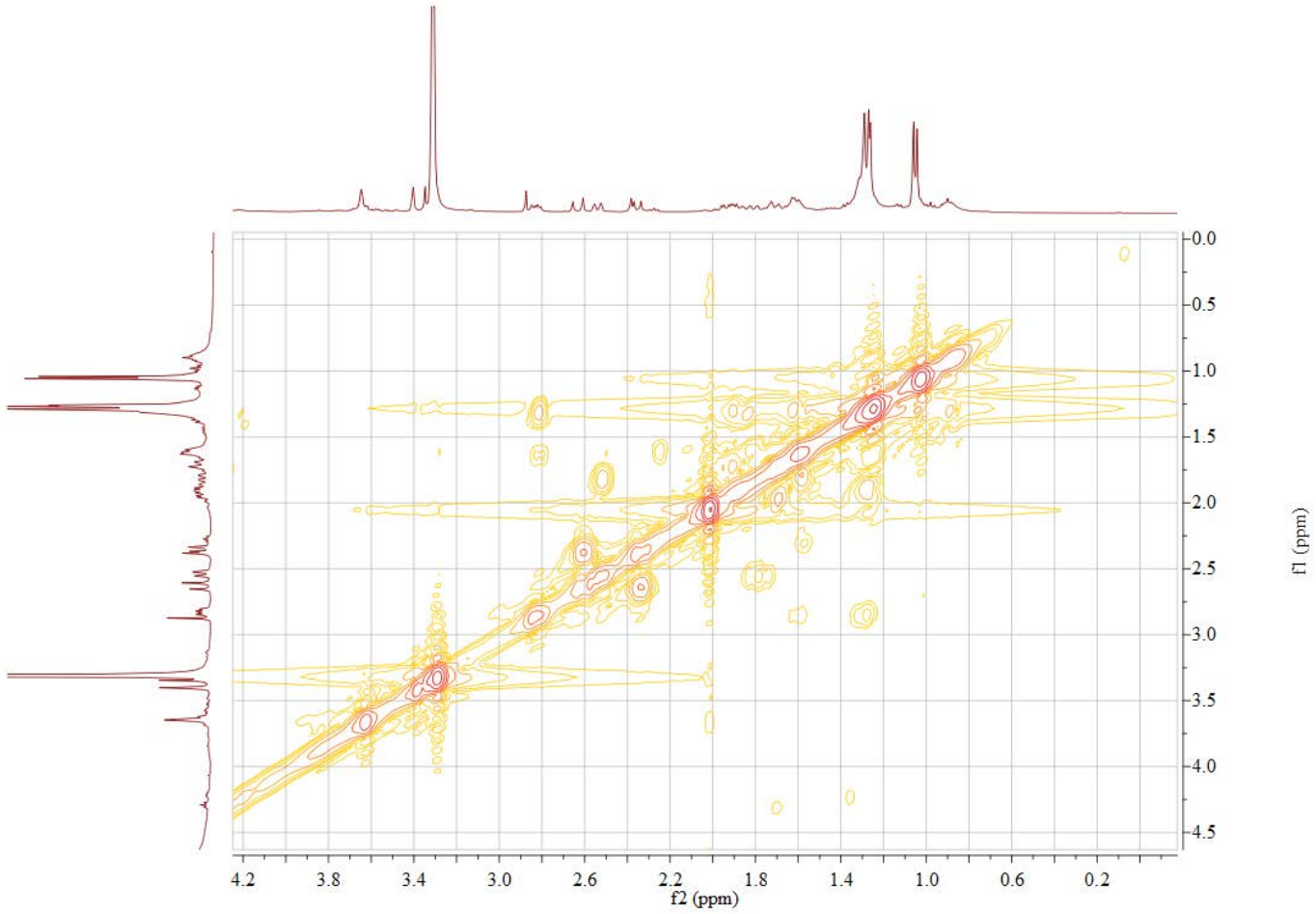

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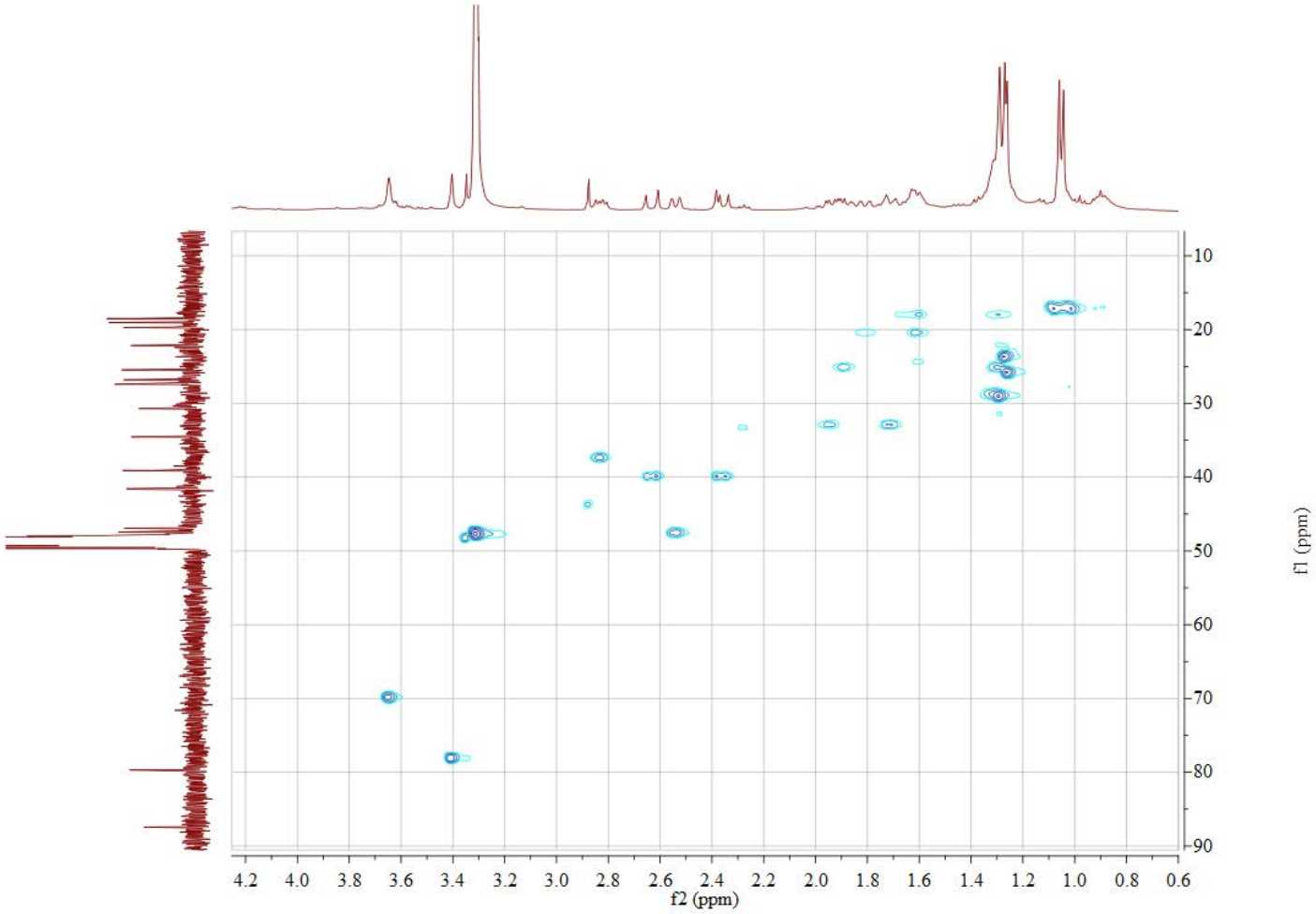

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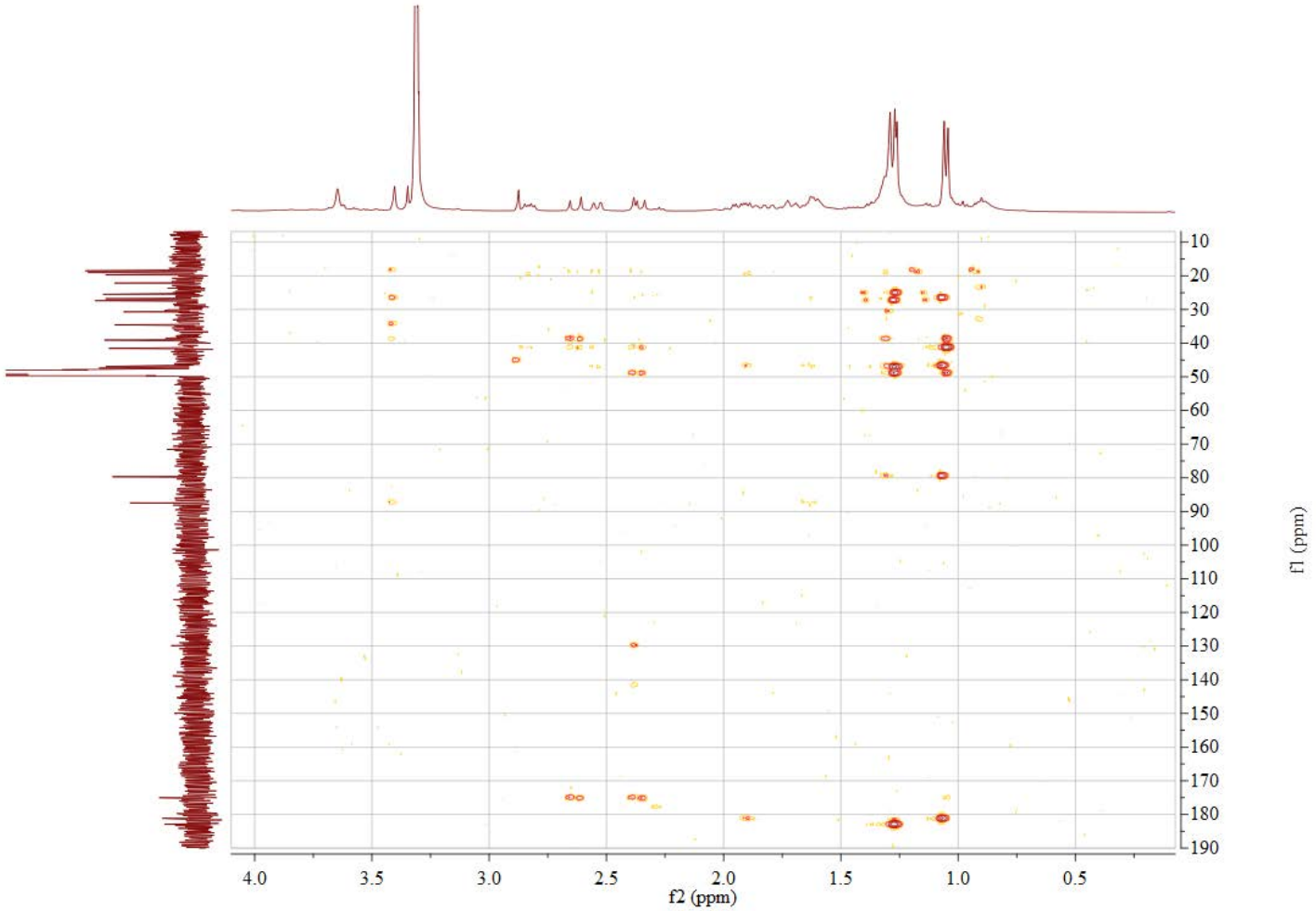

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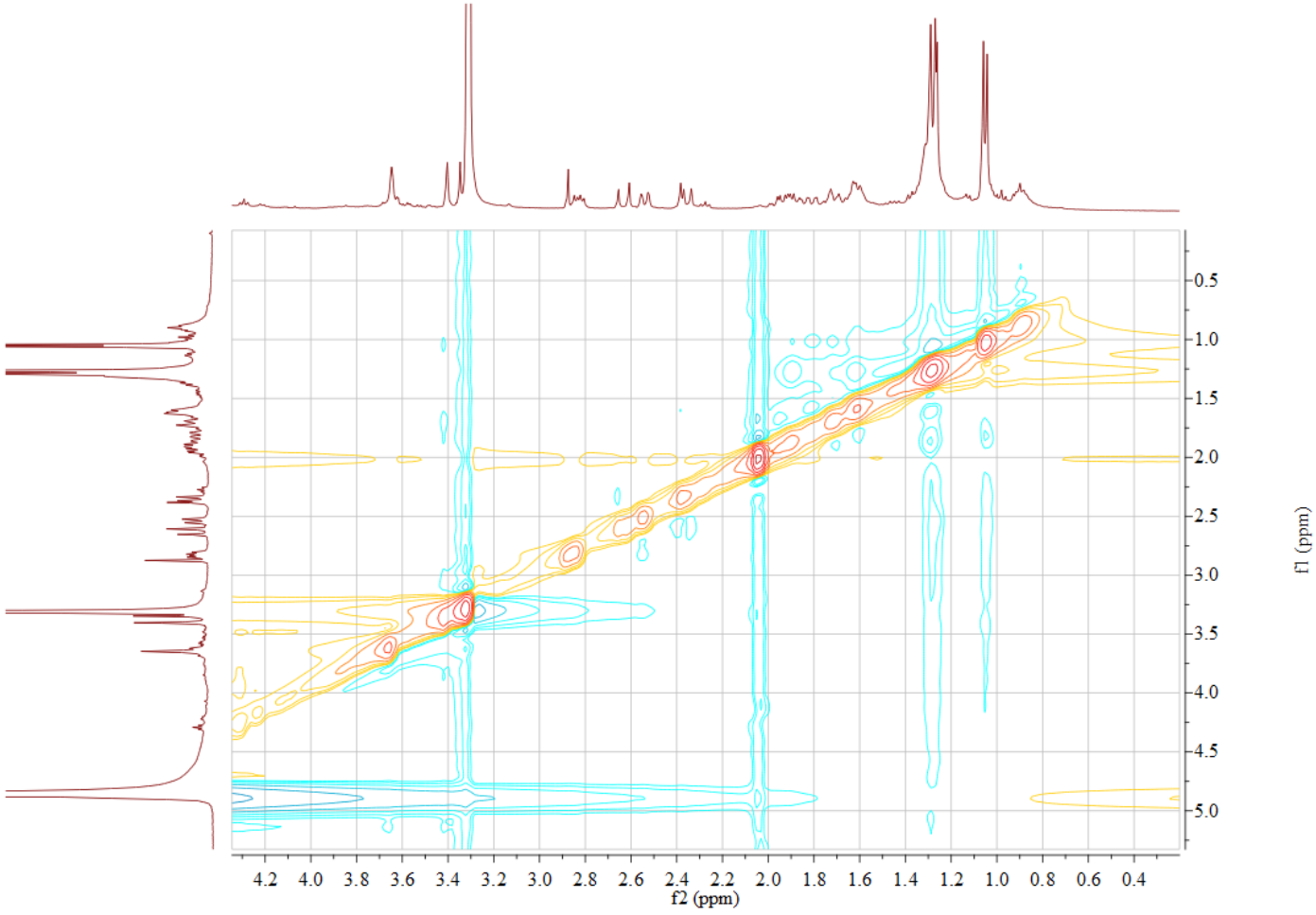
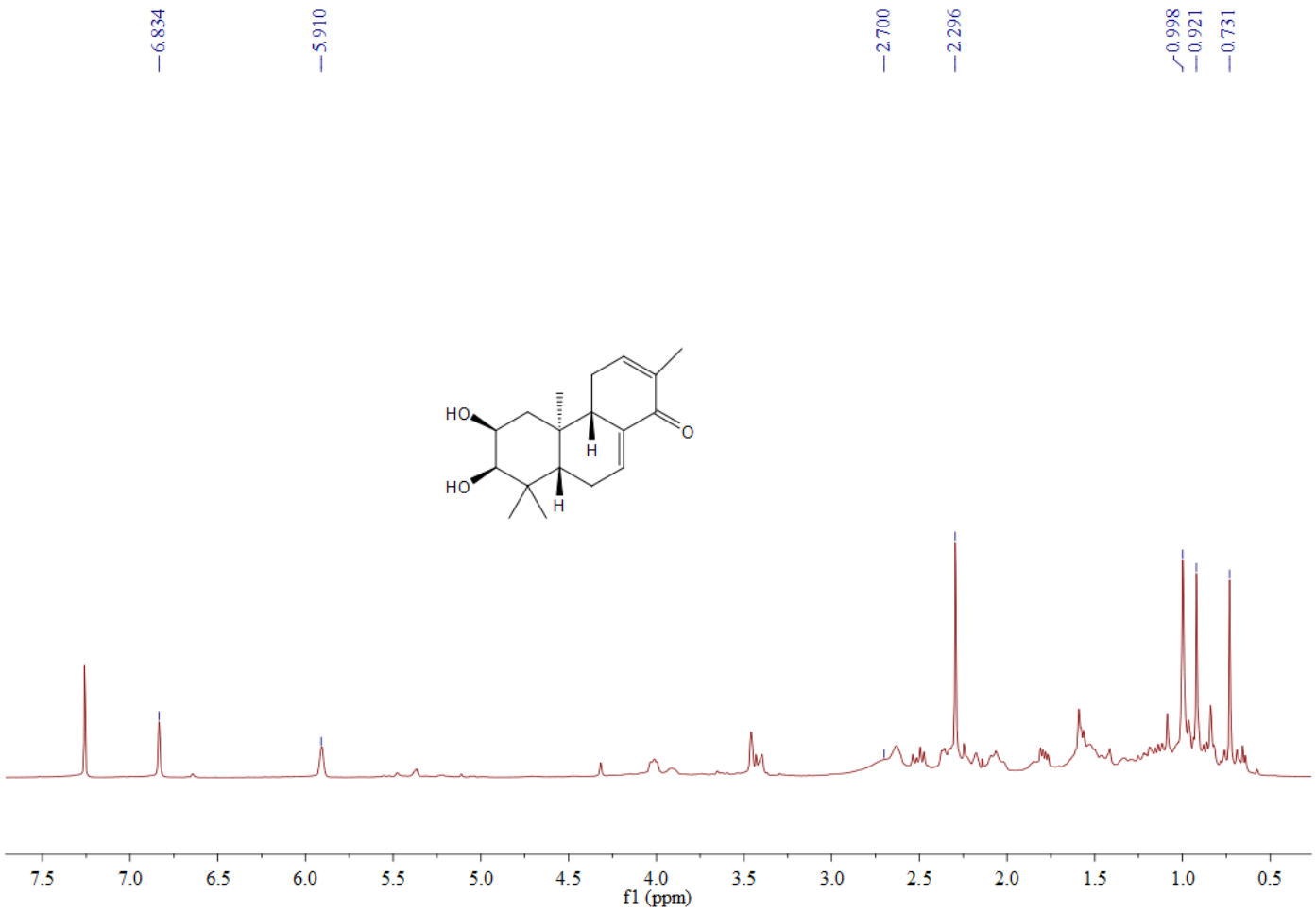


S25 ^{1}H NMR Spectrum of **5** in $CDCl_3$



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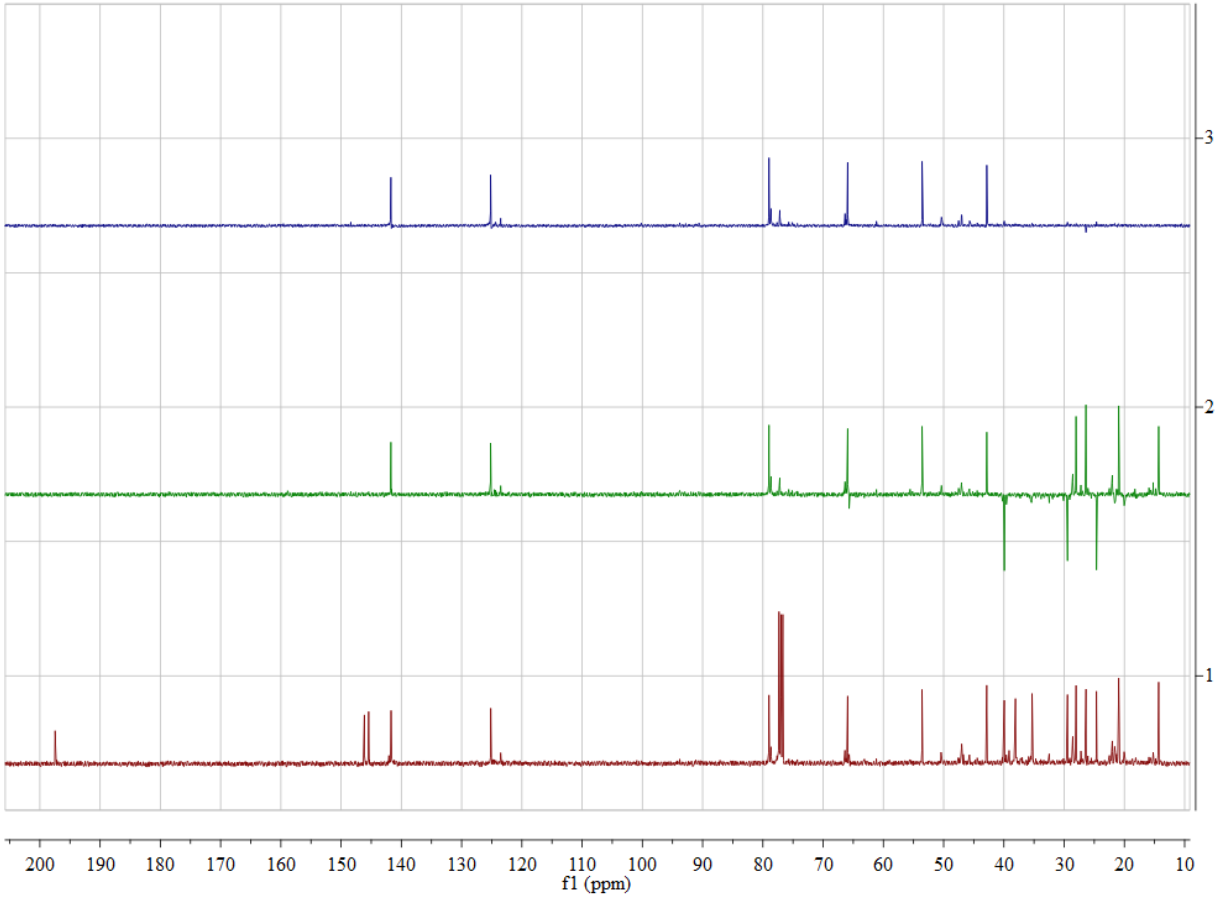

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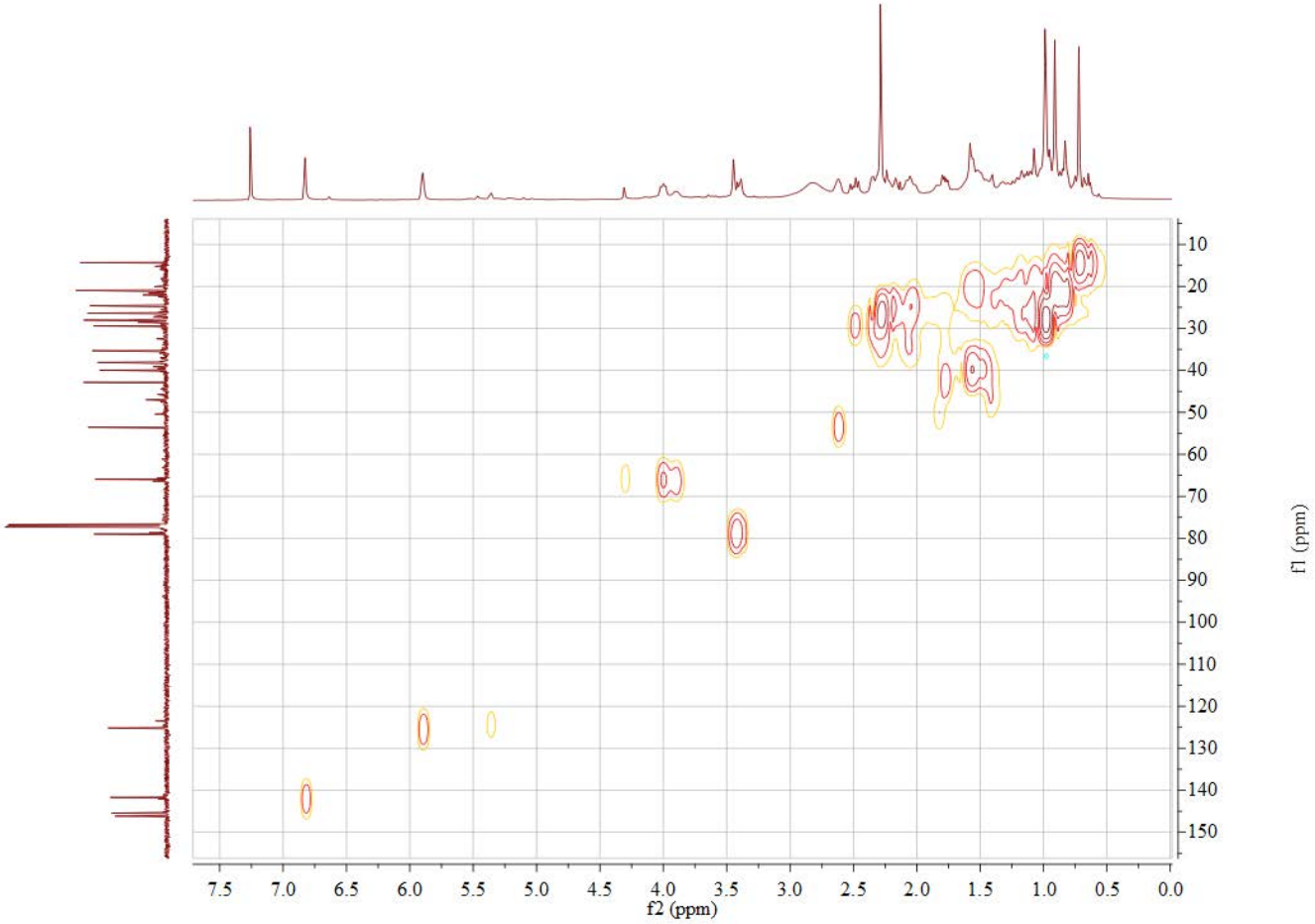

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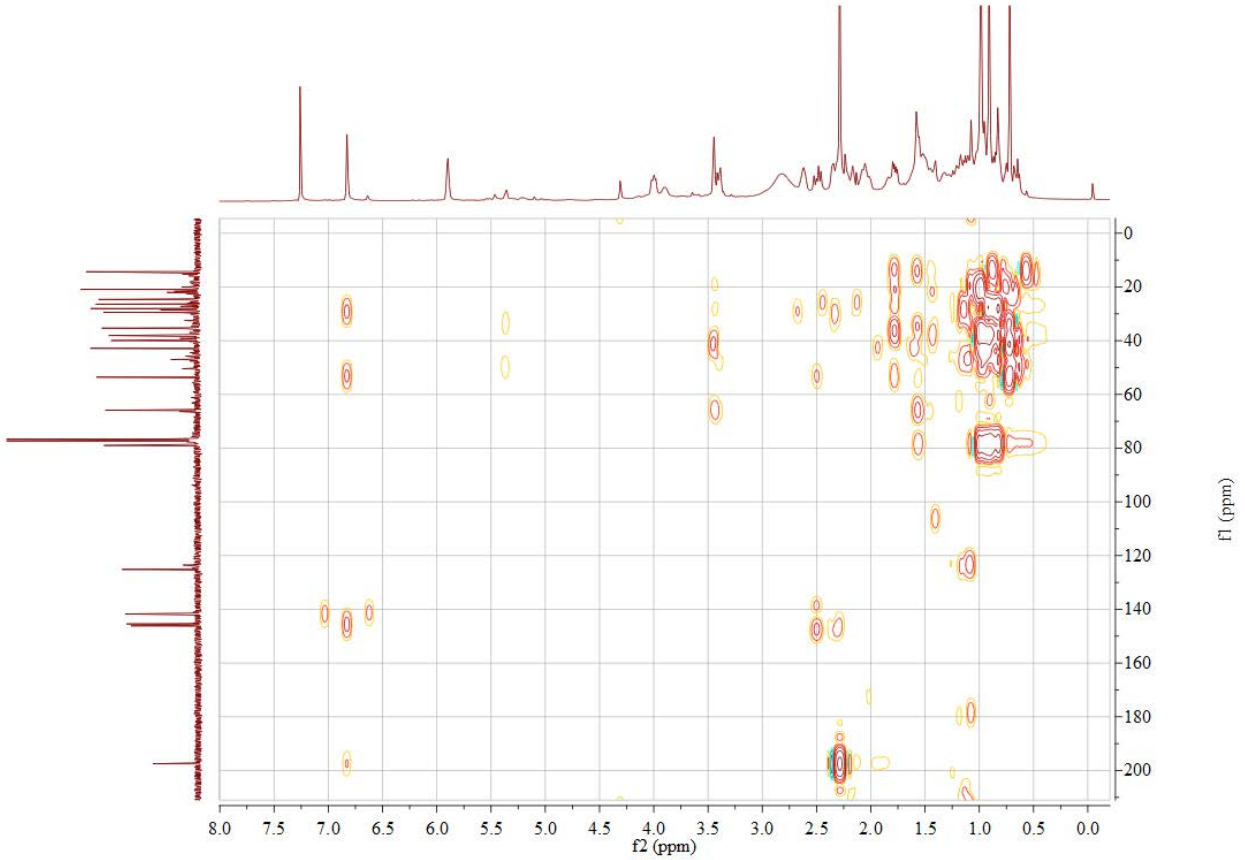

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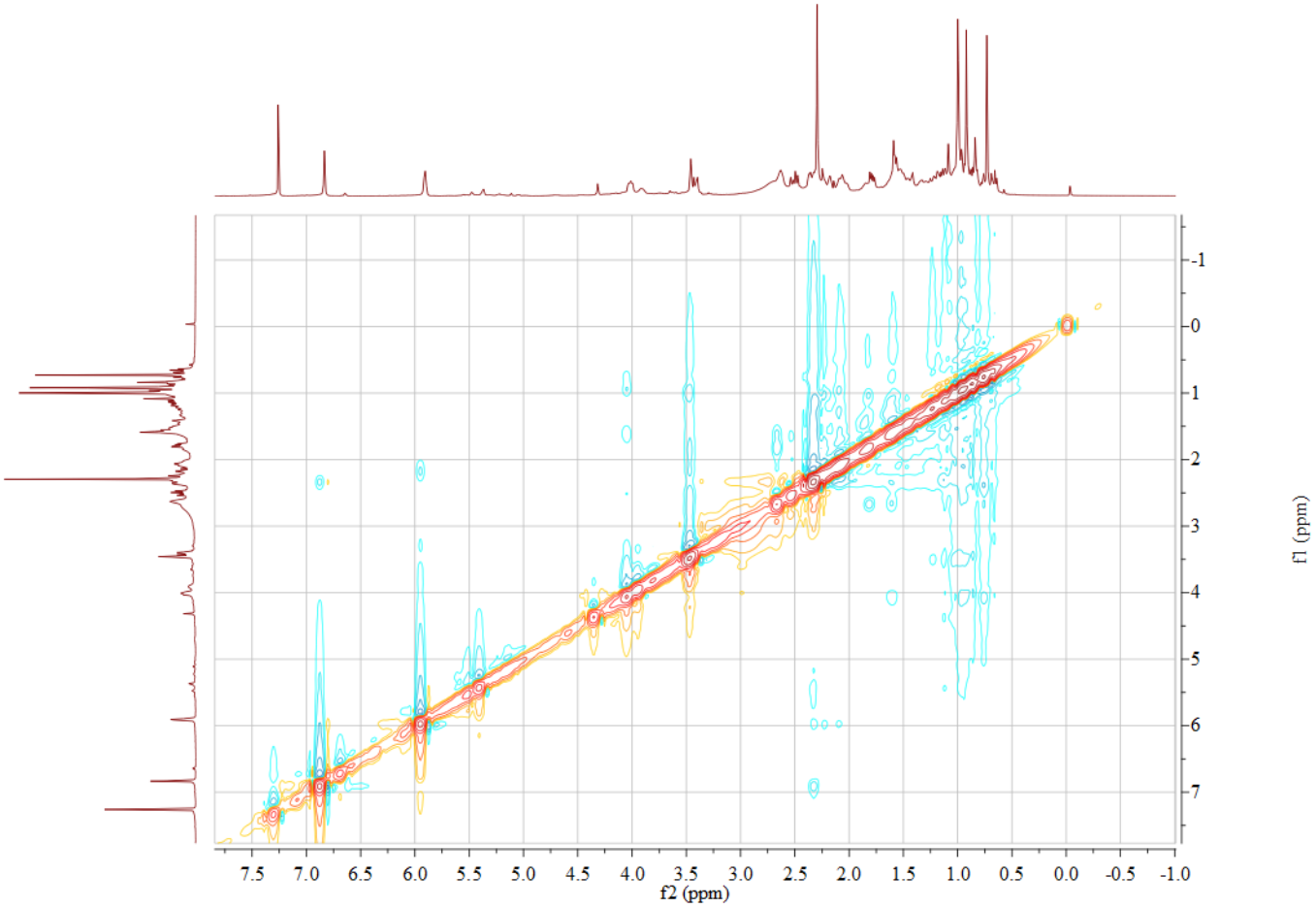
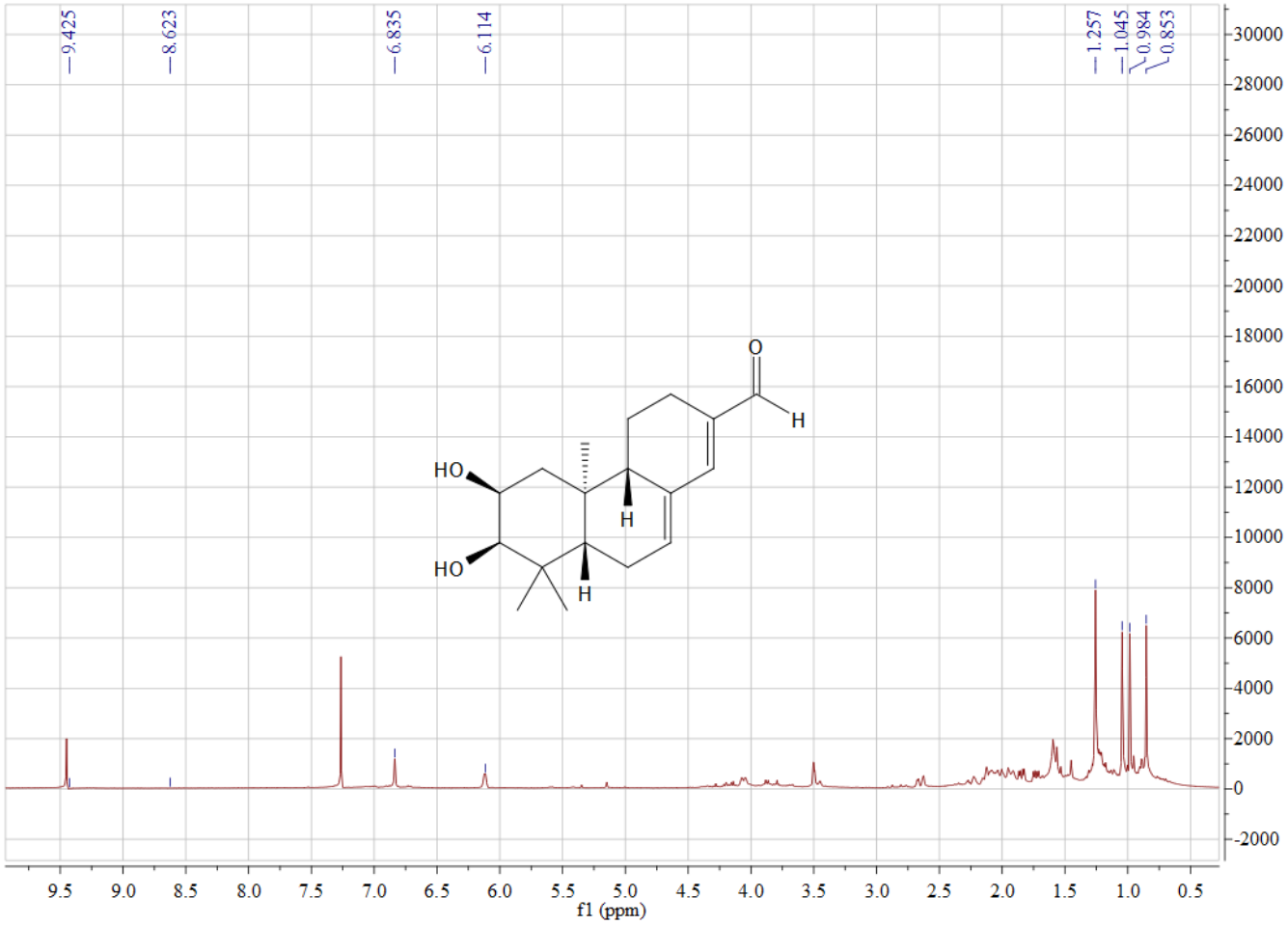


S30 ^{1}H NMR Spectrum of **6** in $CDCl_3$



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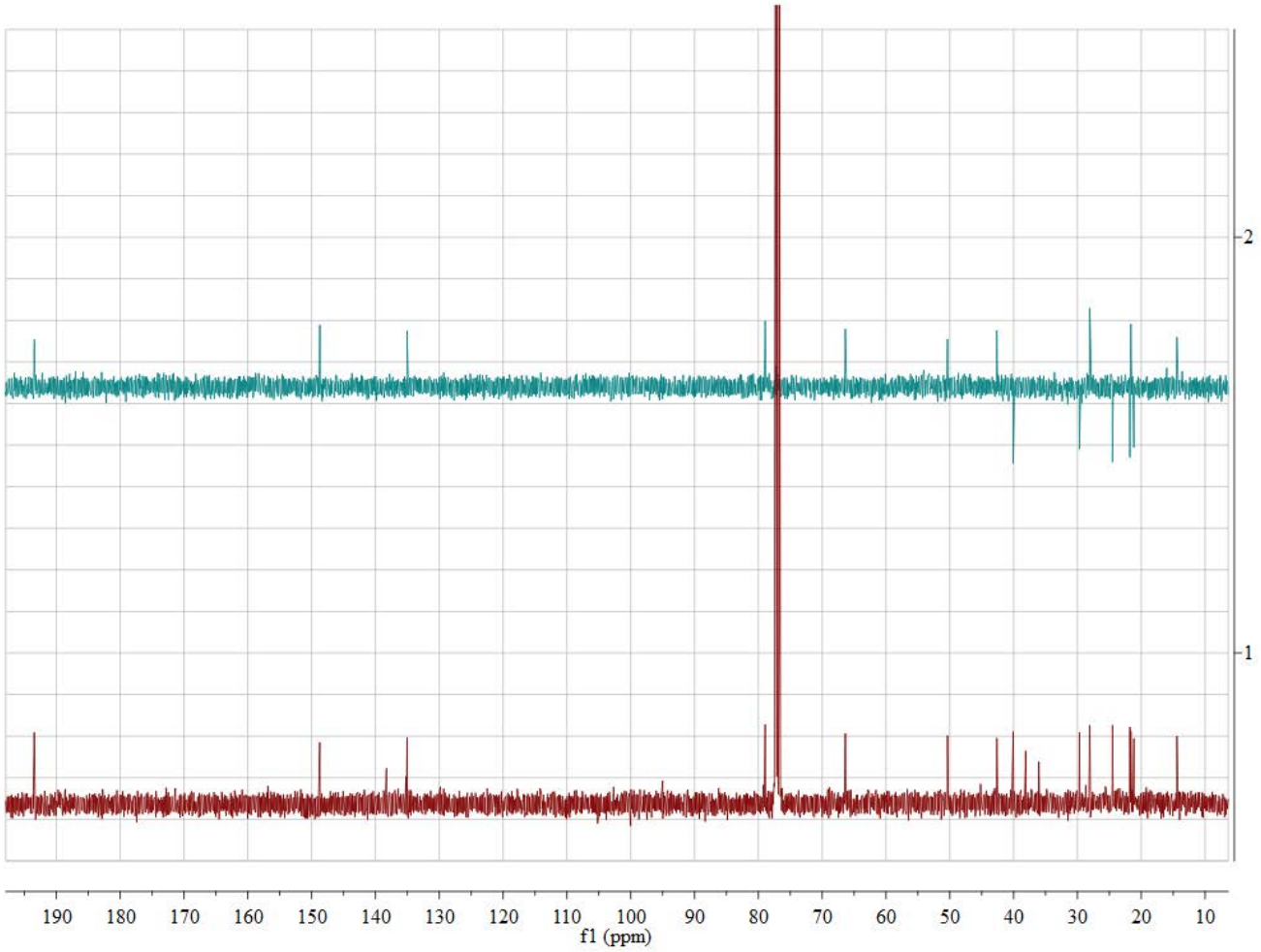
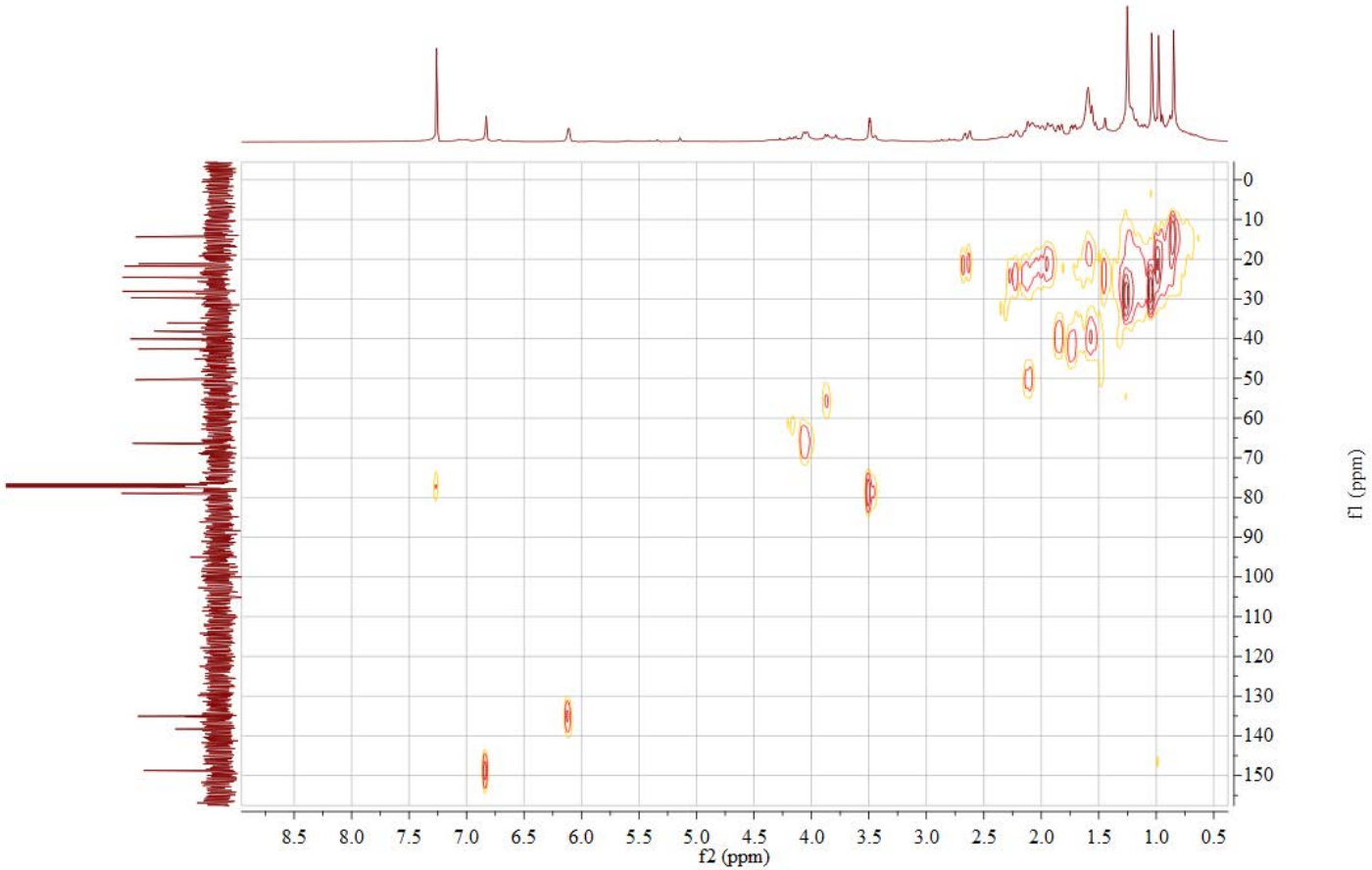


S32 HSQC Spectrum of **6** in $CDCl_3$



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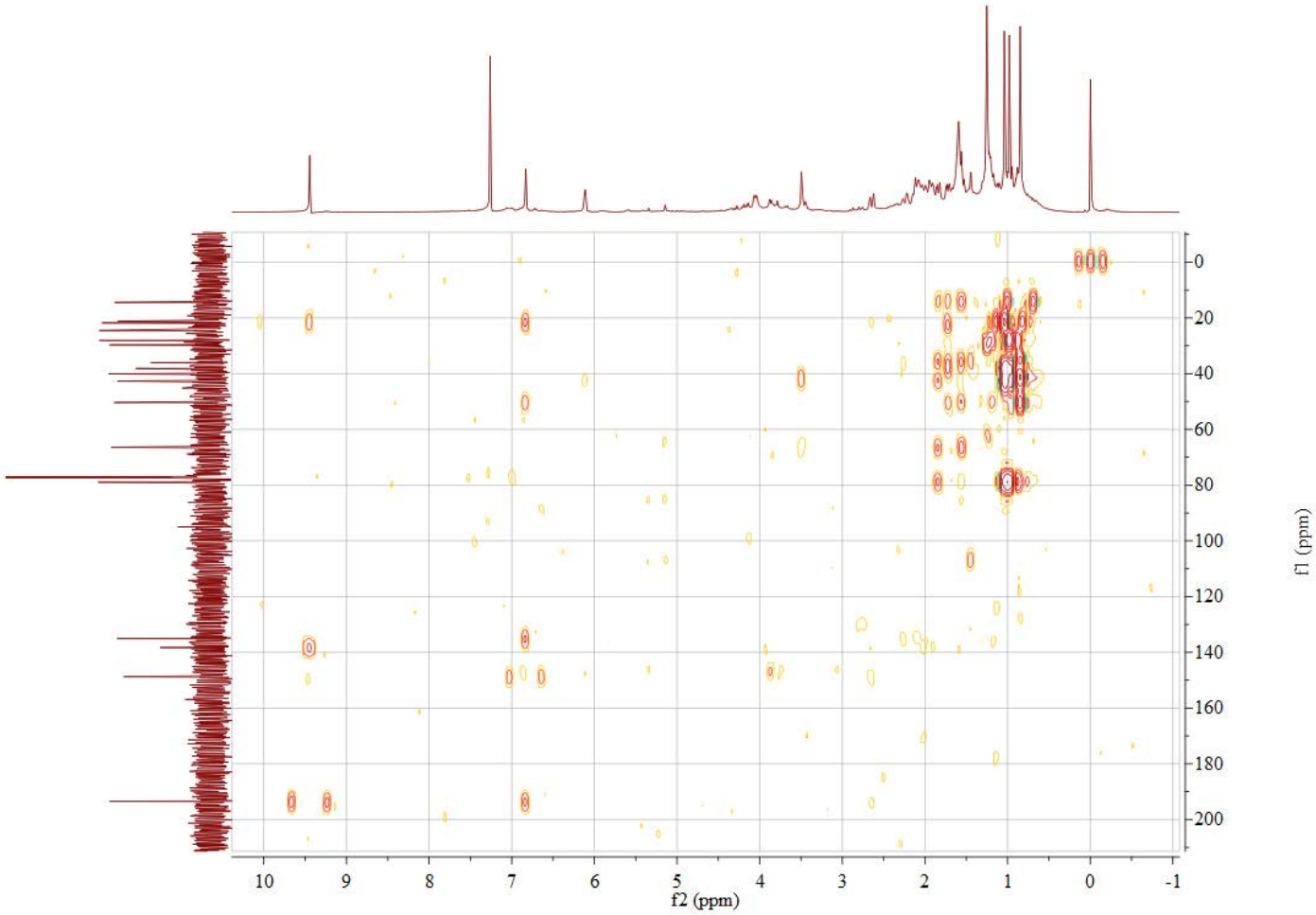

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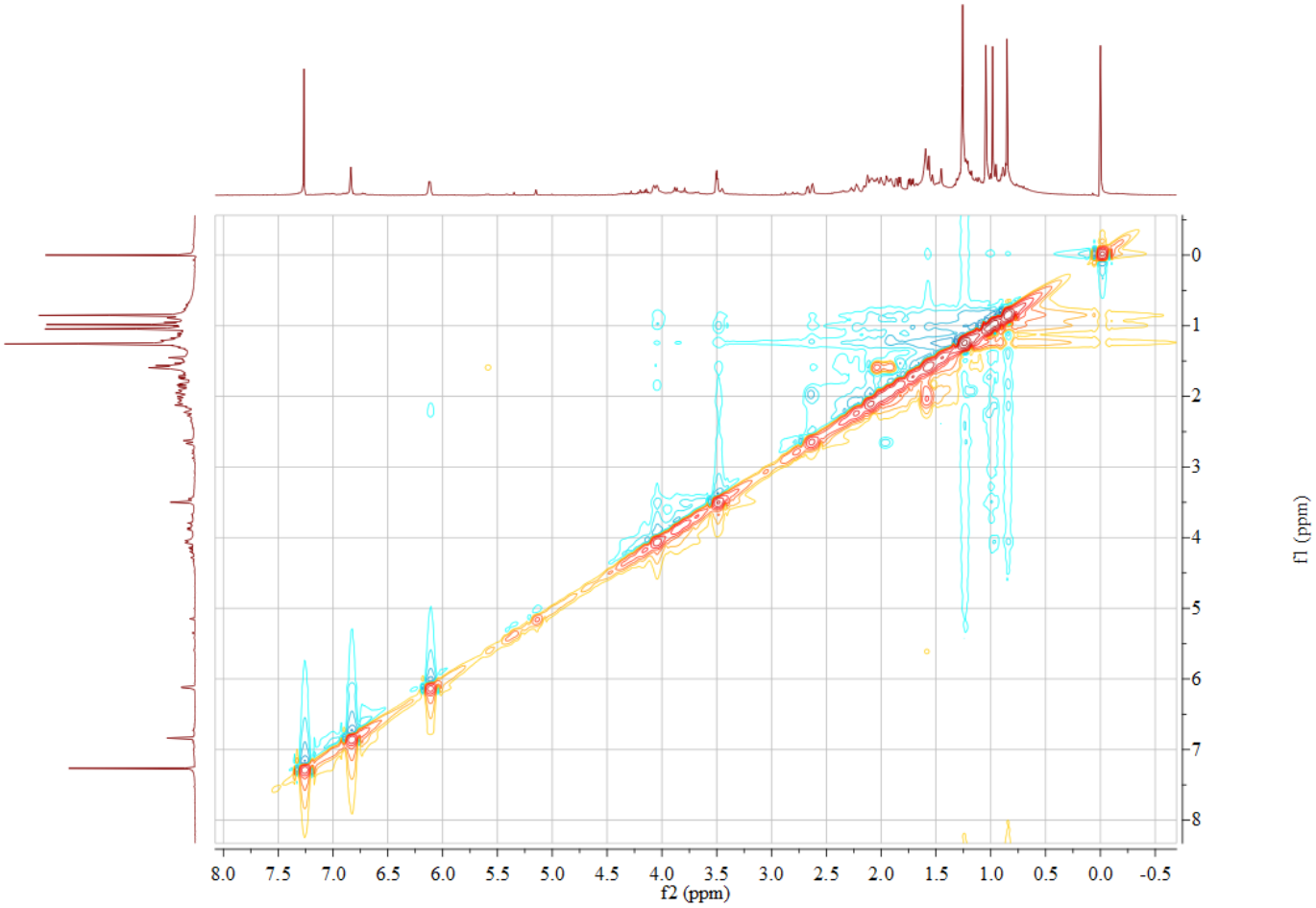
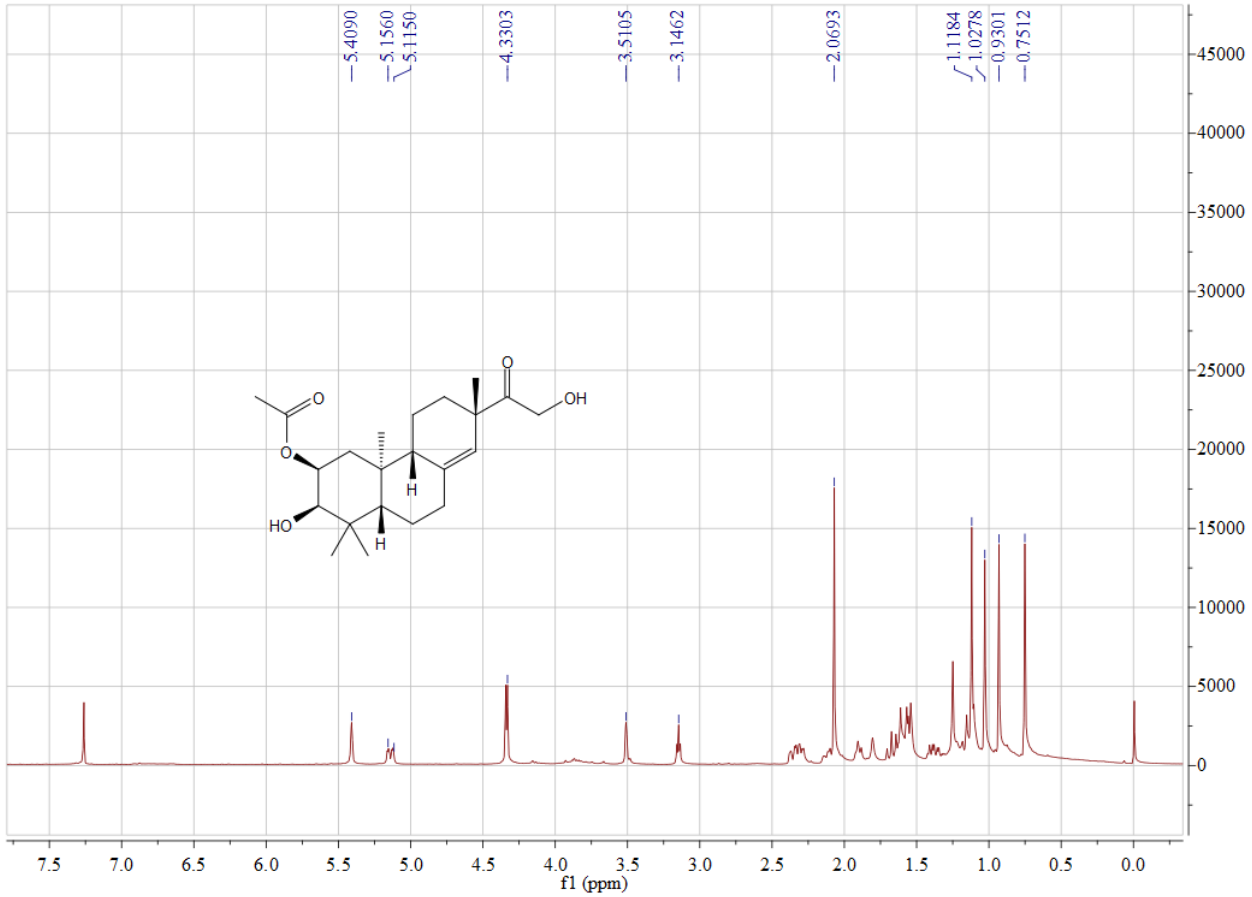


S35 ^{1}H NMR Spectrum of **7** in $CDCl_3$



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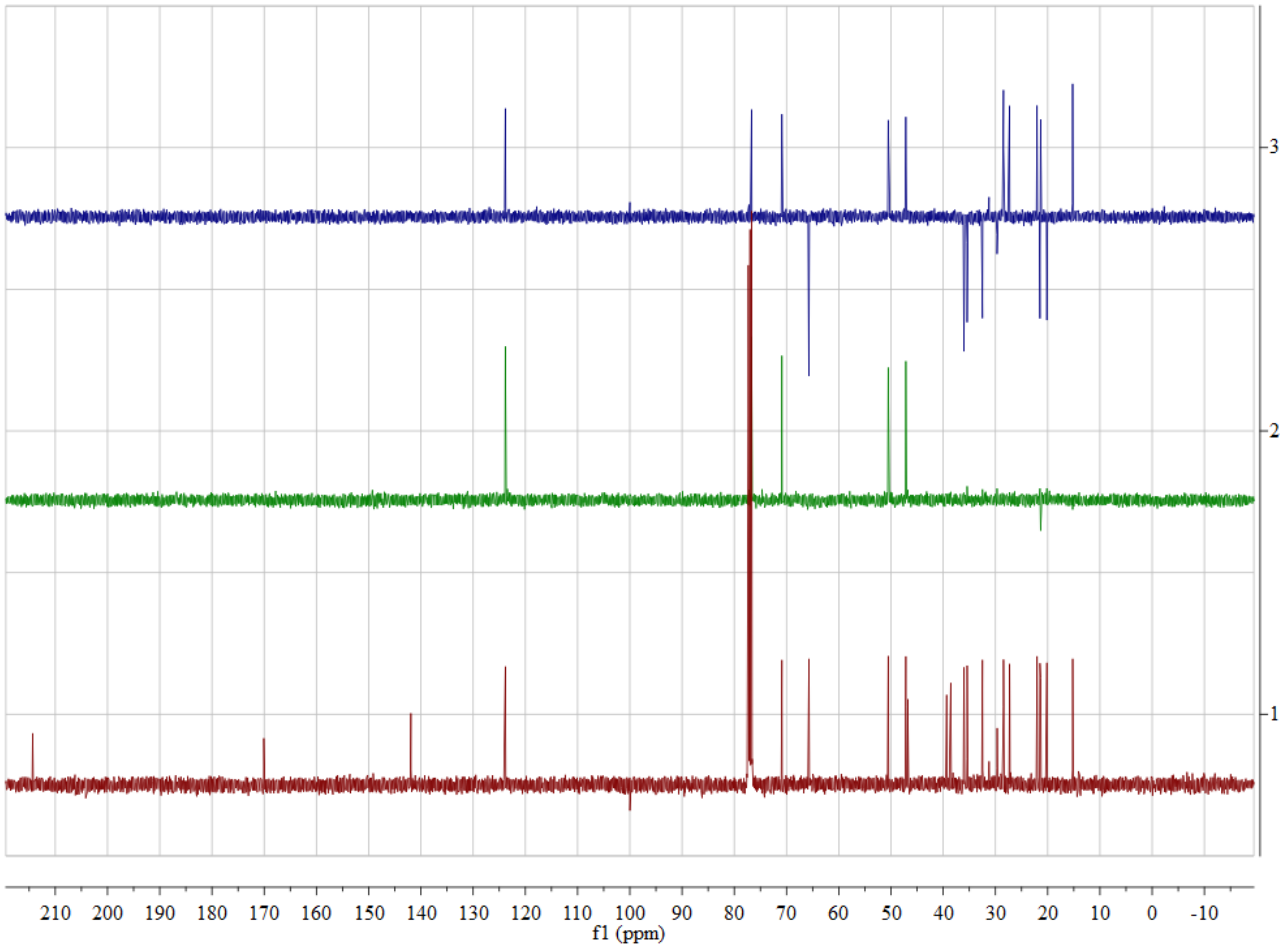

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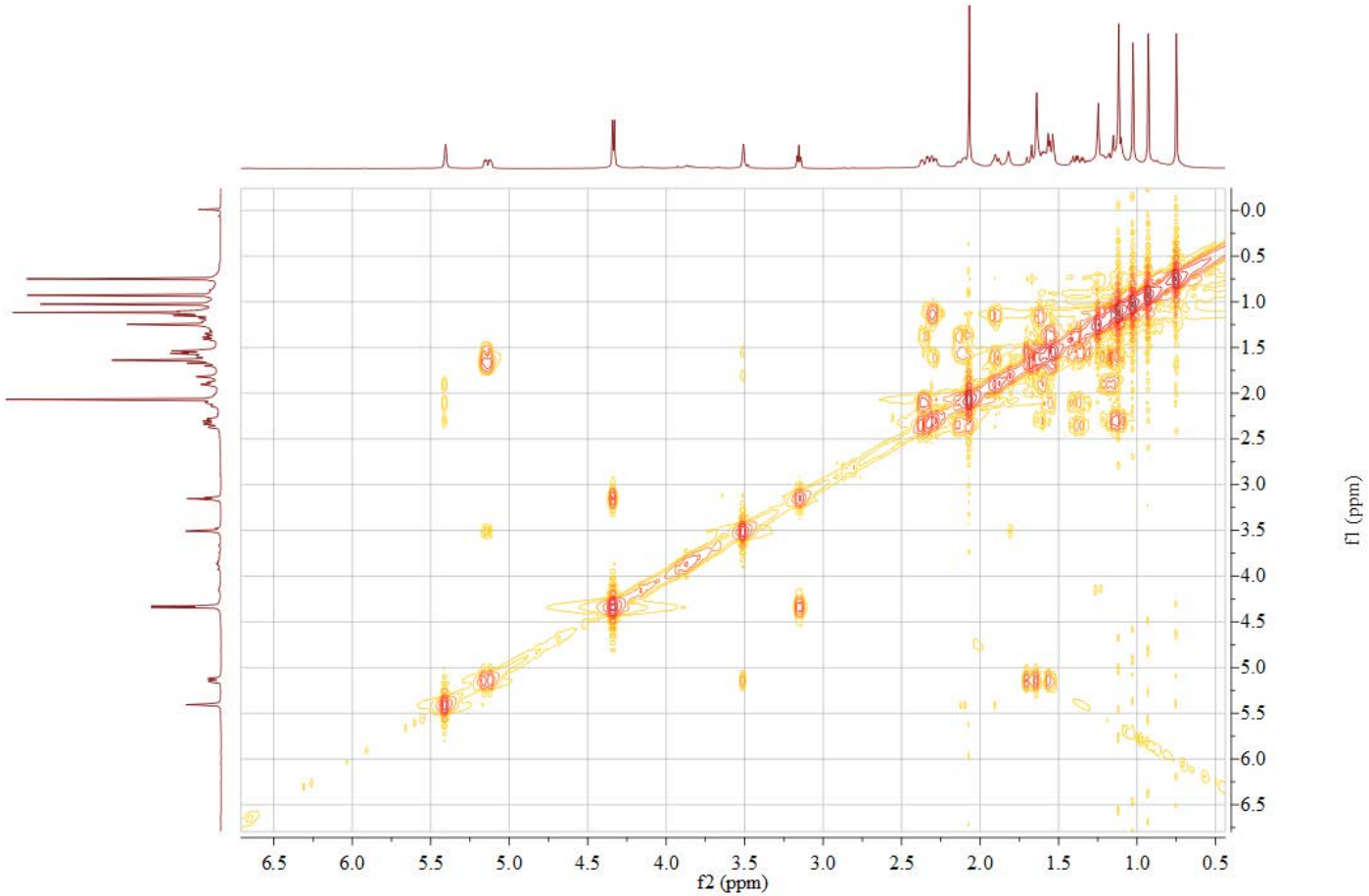

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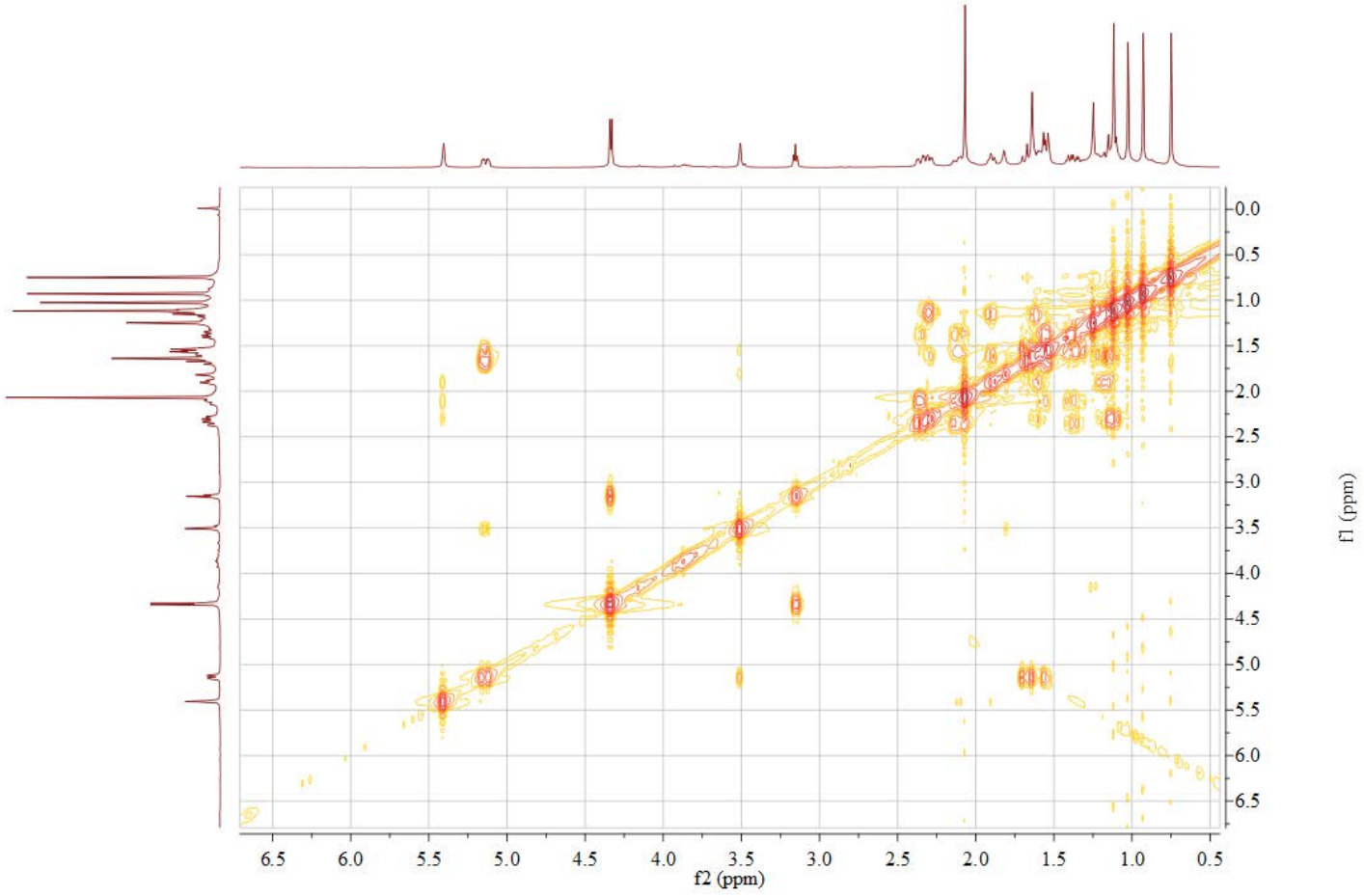

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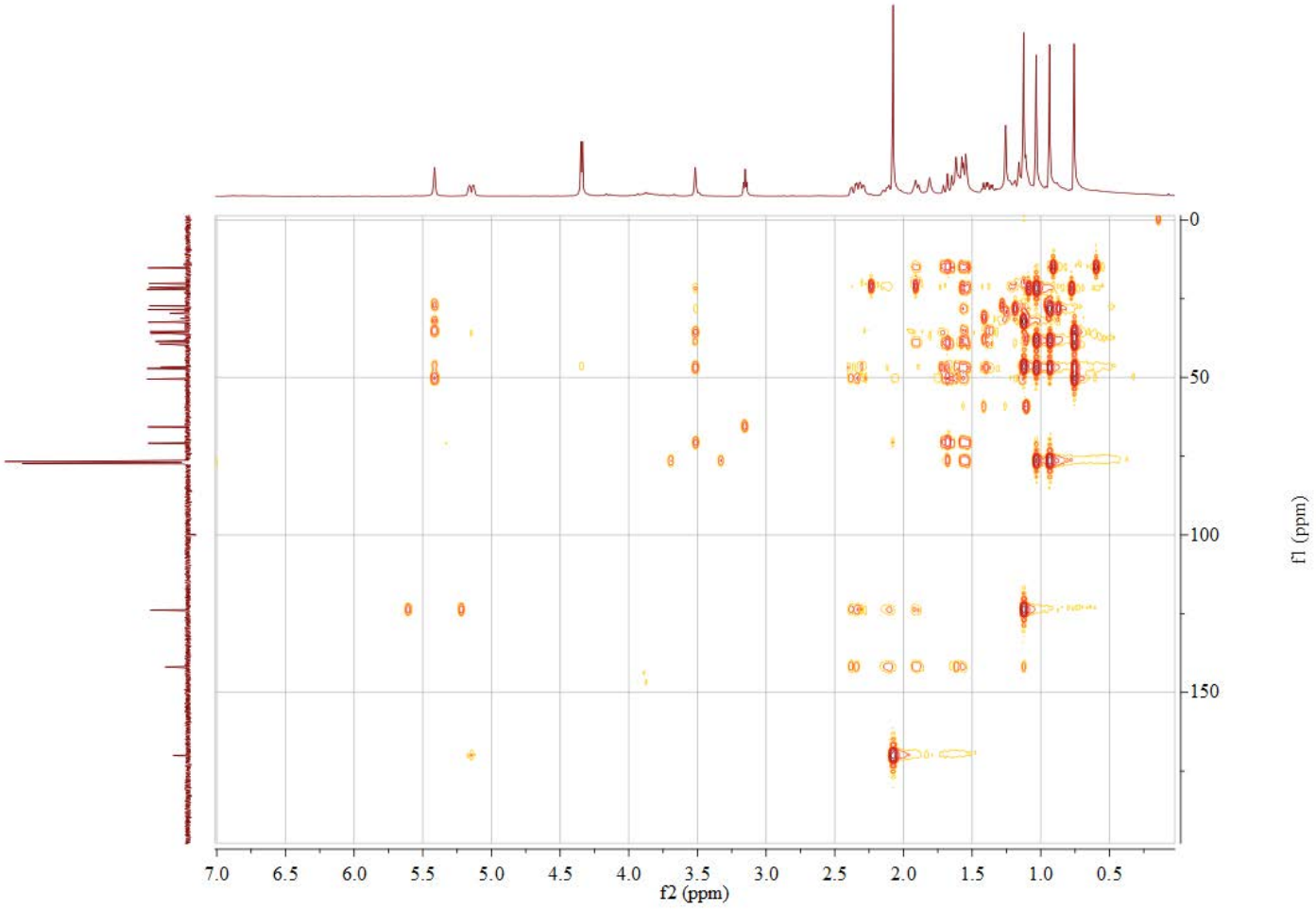

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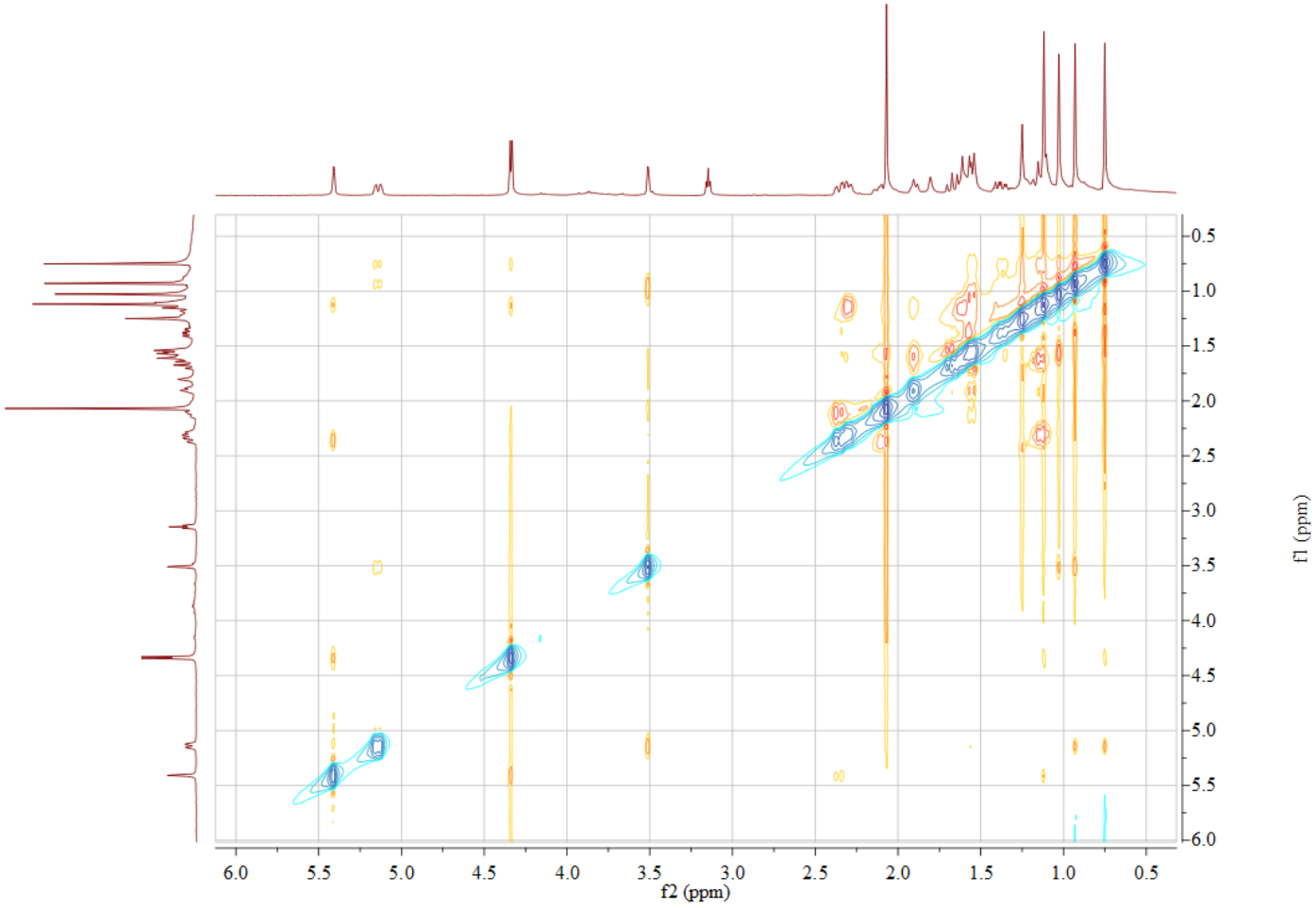
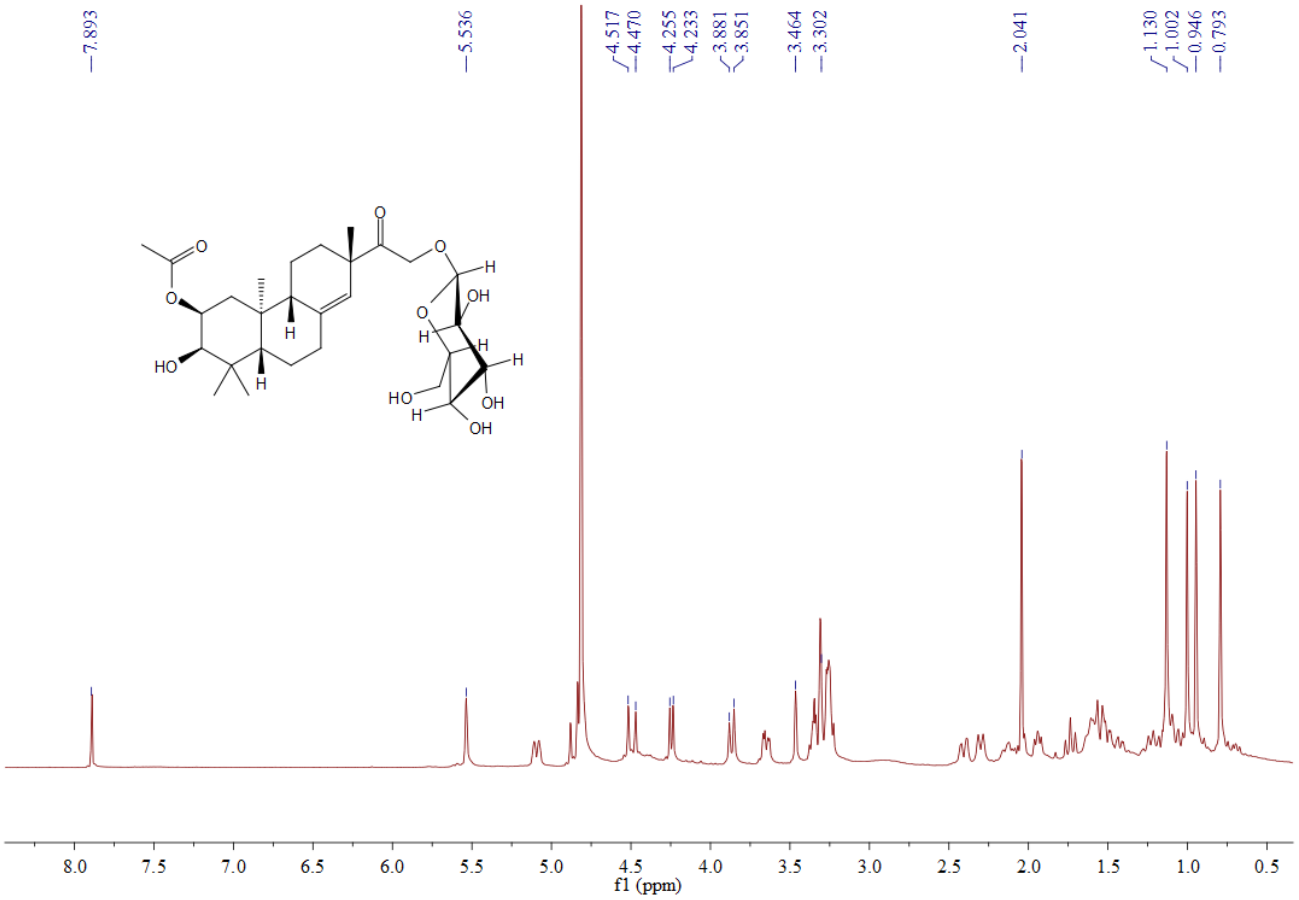
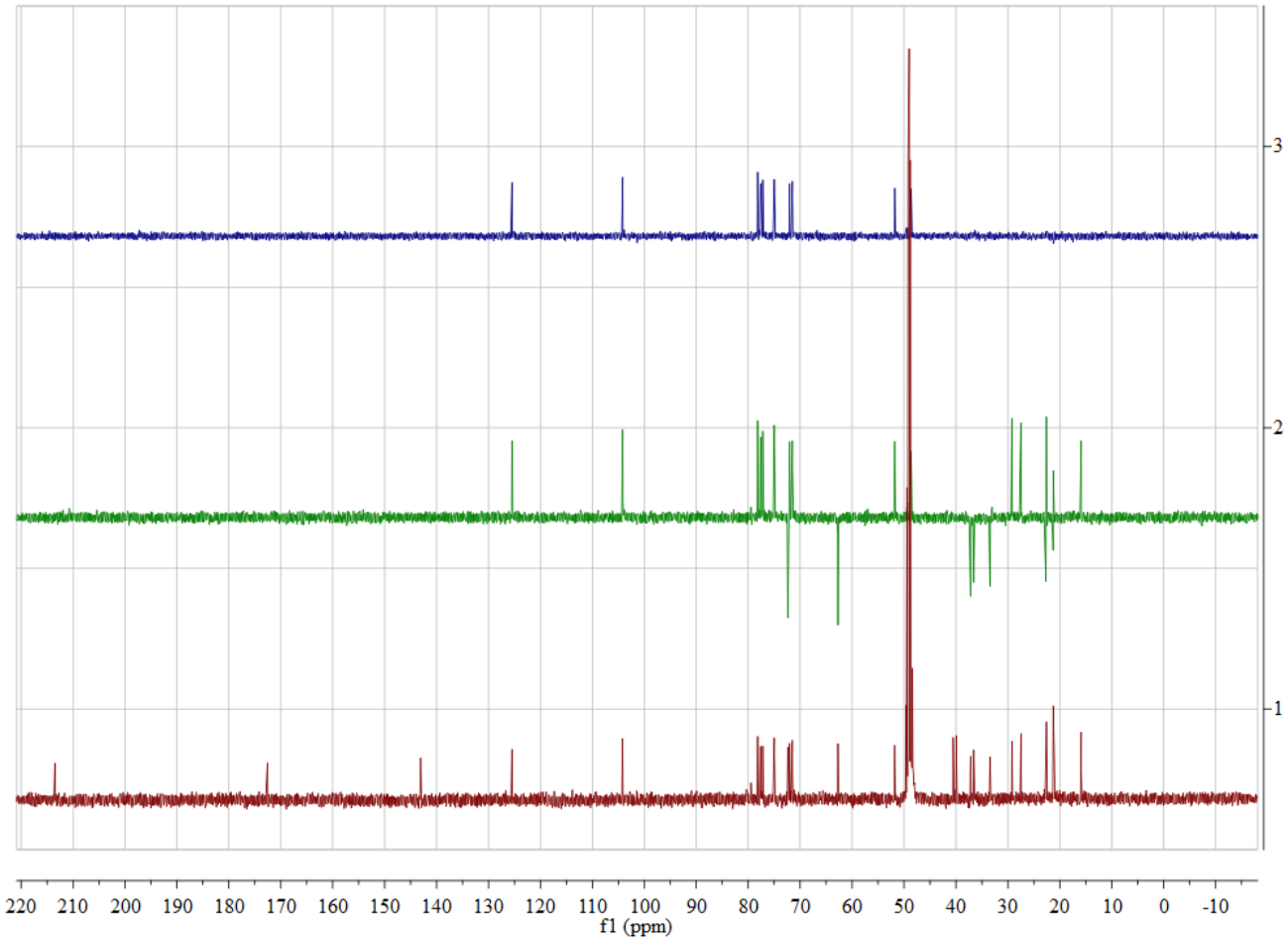


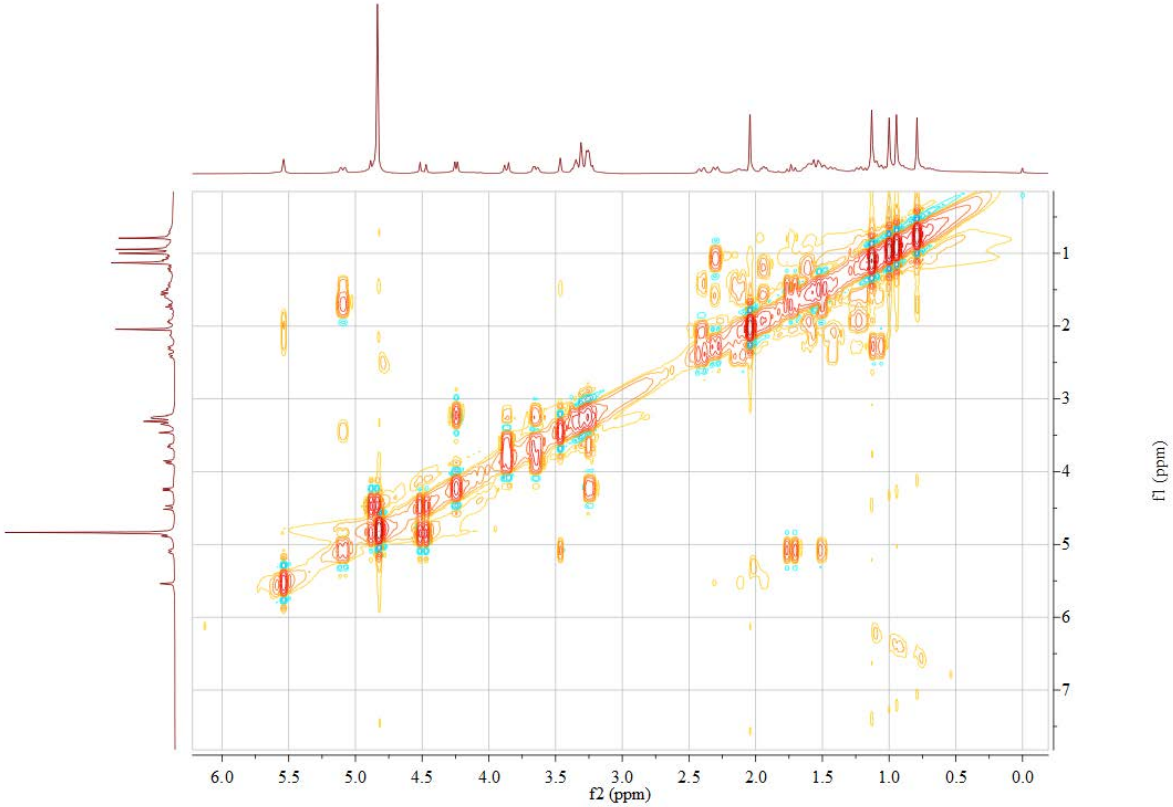
S41 ^{1}H NMR Spectrum of **8** in CD_3OD



S42 ^{13}C NMR Spectrum of **8** in CD_3OD



S43 ^{1}H-^{1}H COSY Spectrum of **8** in CD_3OD



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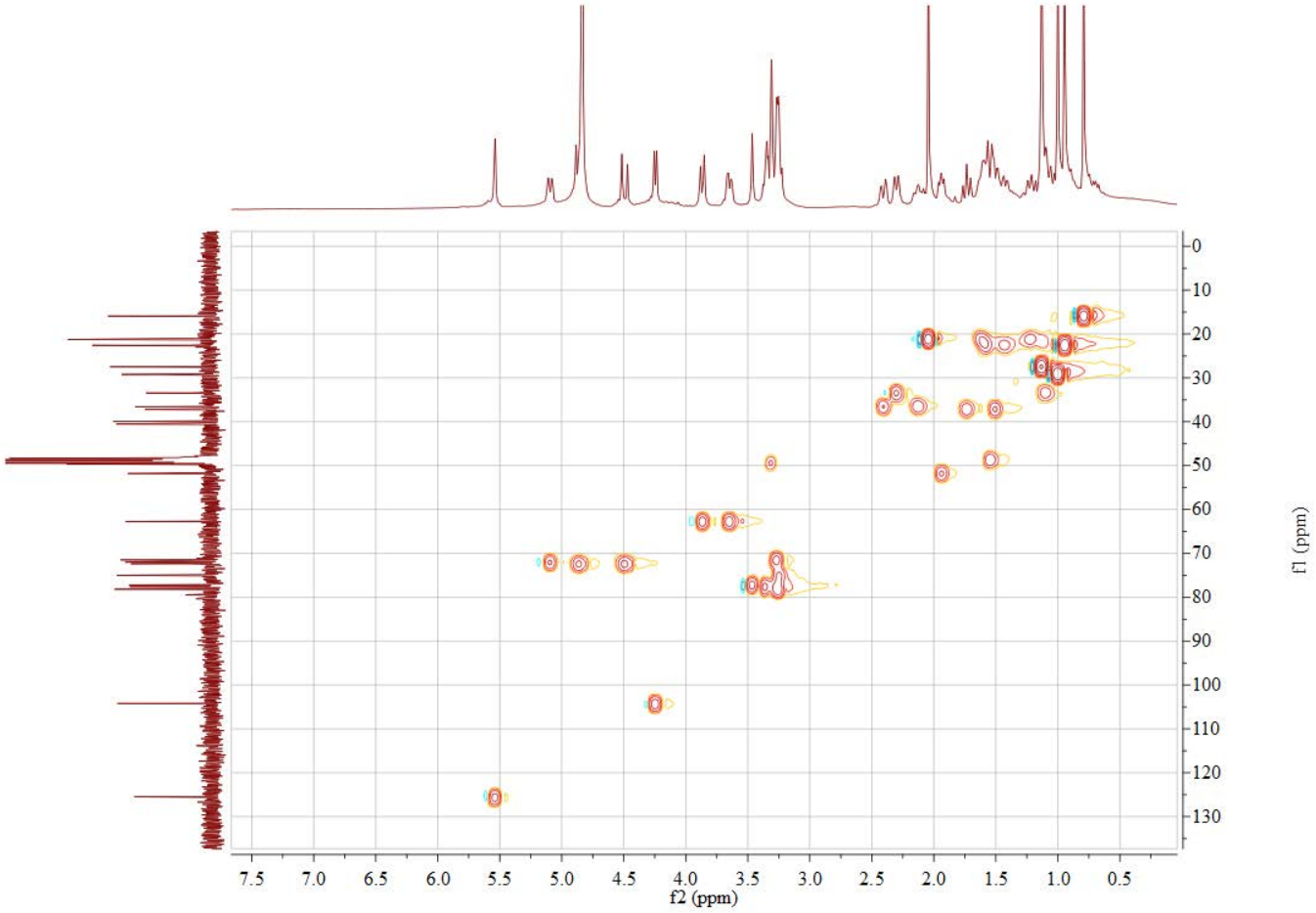

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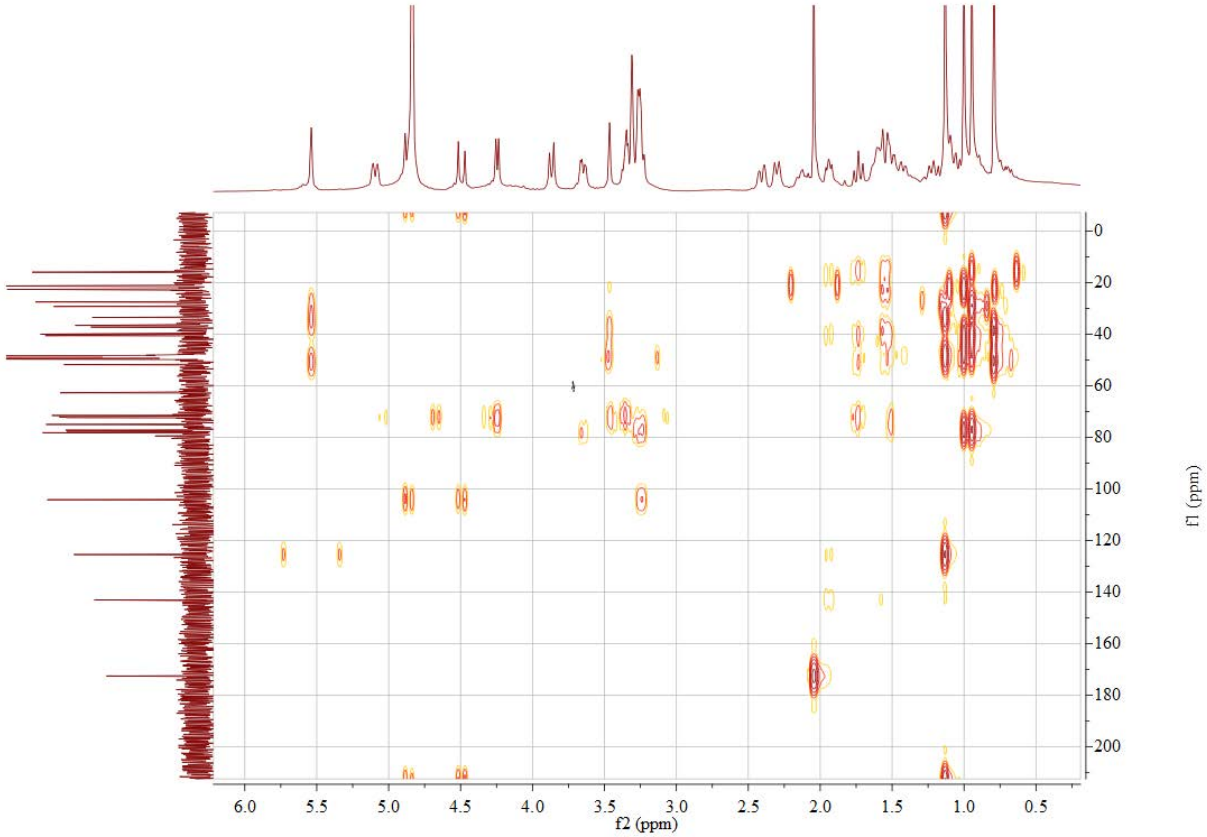

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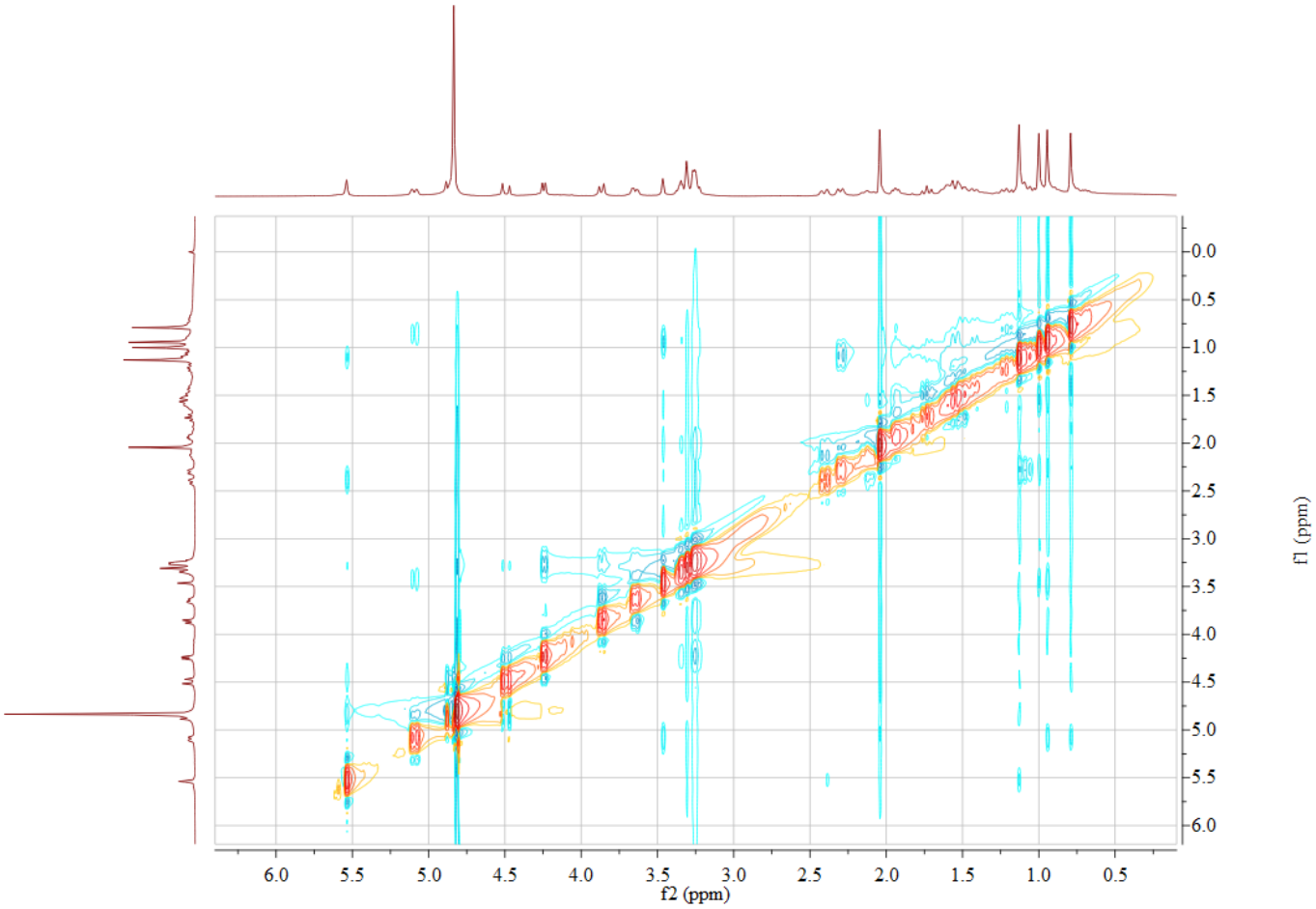
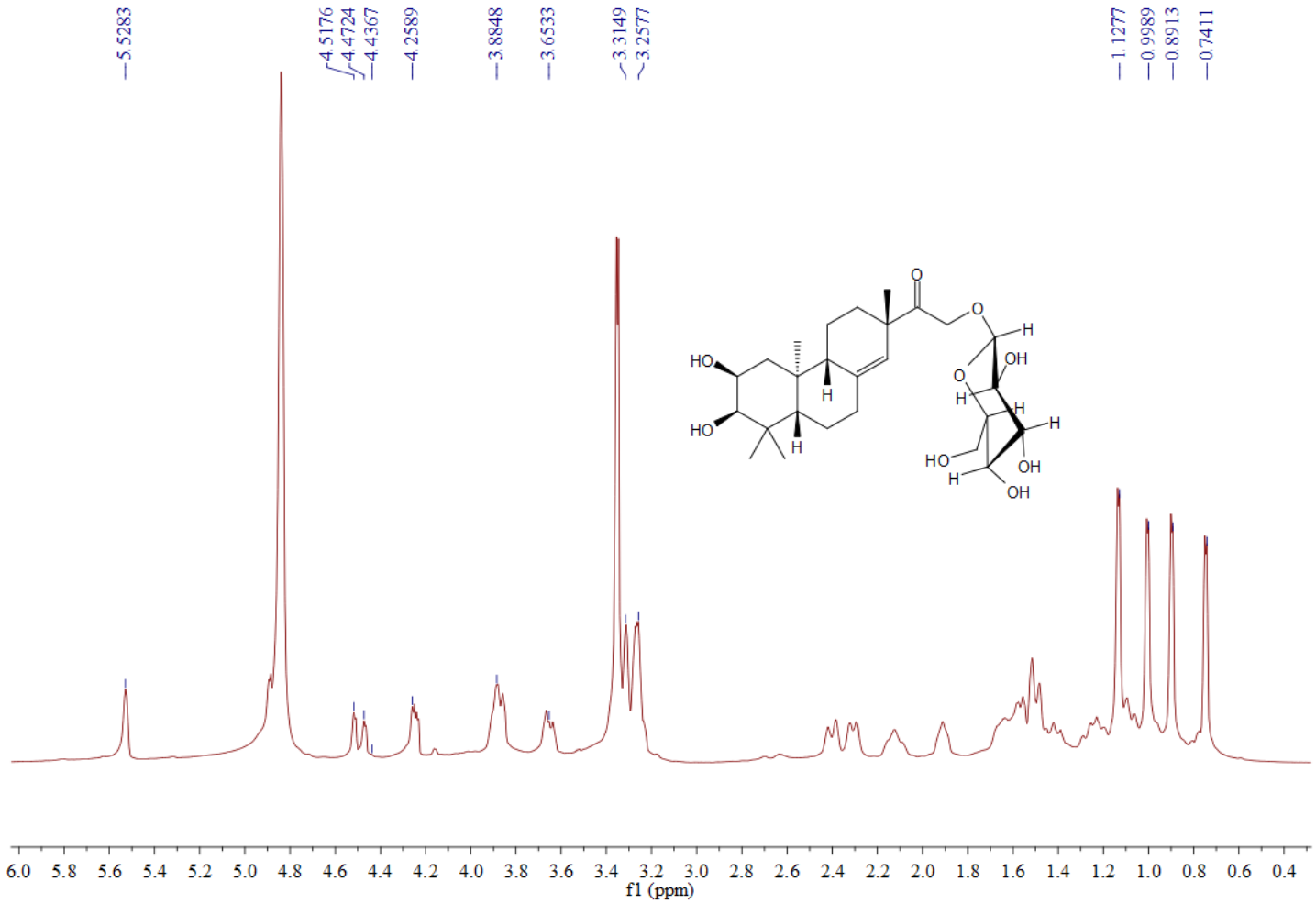
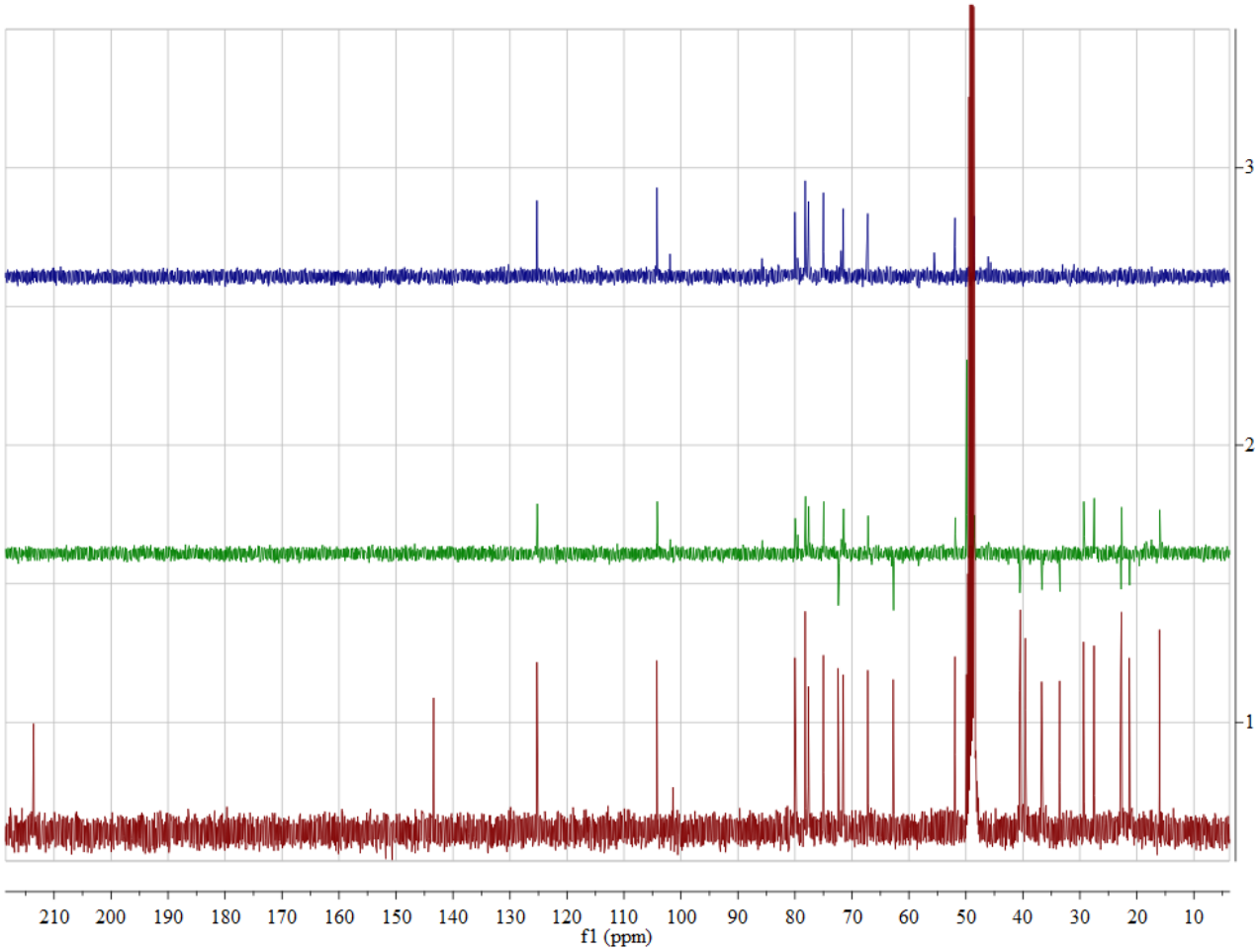


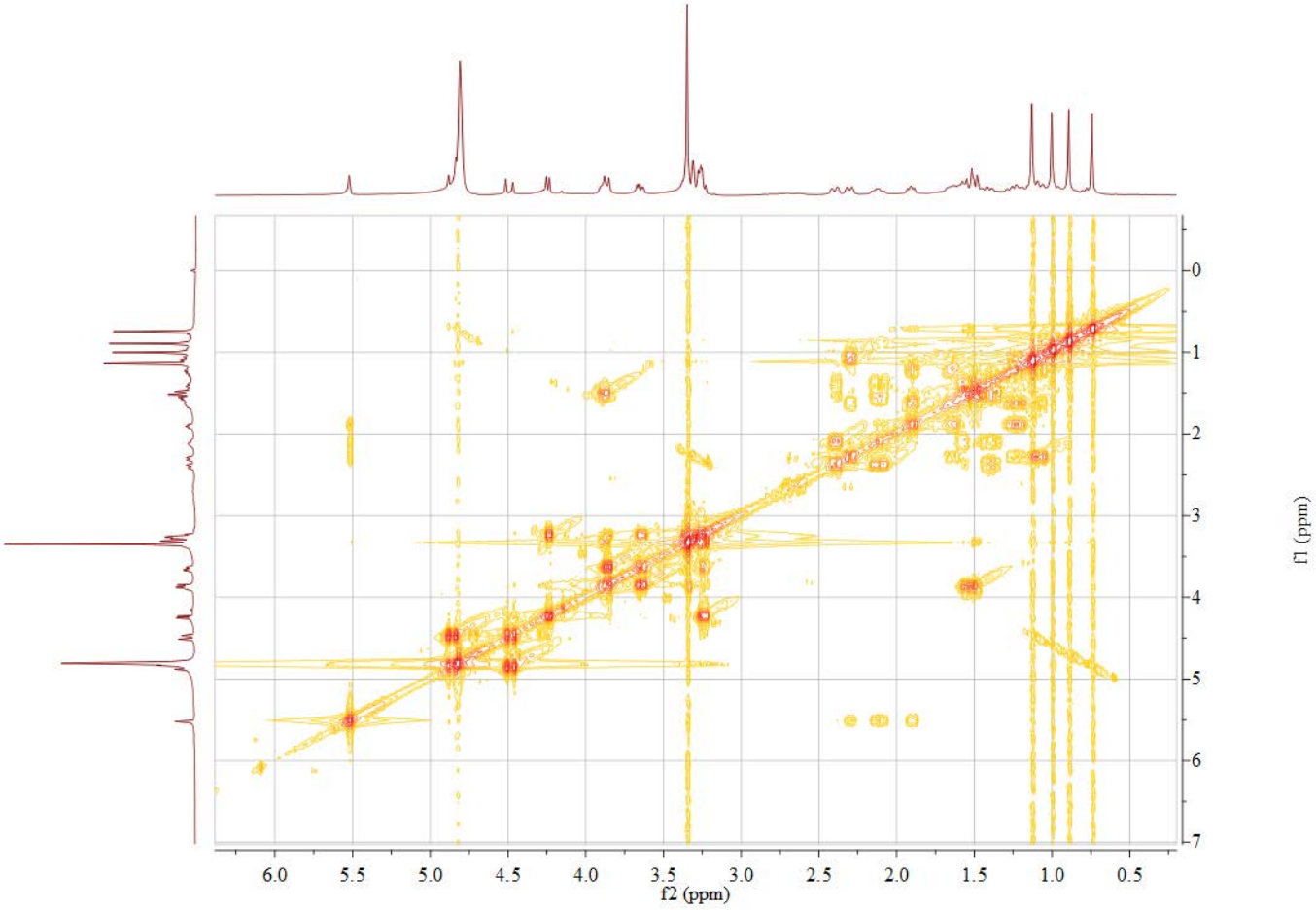
S47 ^{1}H NMR Spectrum of **9** in CD_3OD



S48 ^{13}C NMR Spectrum of **9** in CD_3OD



S49 ^{1}H-^{1}H COSY Spectrum of **9** in CD_3OD



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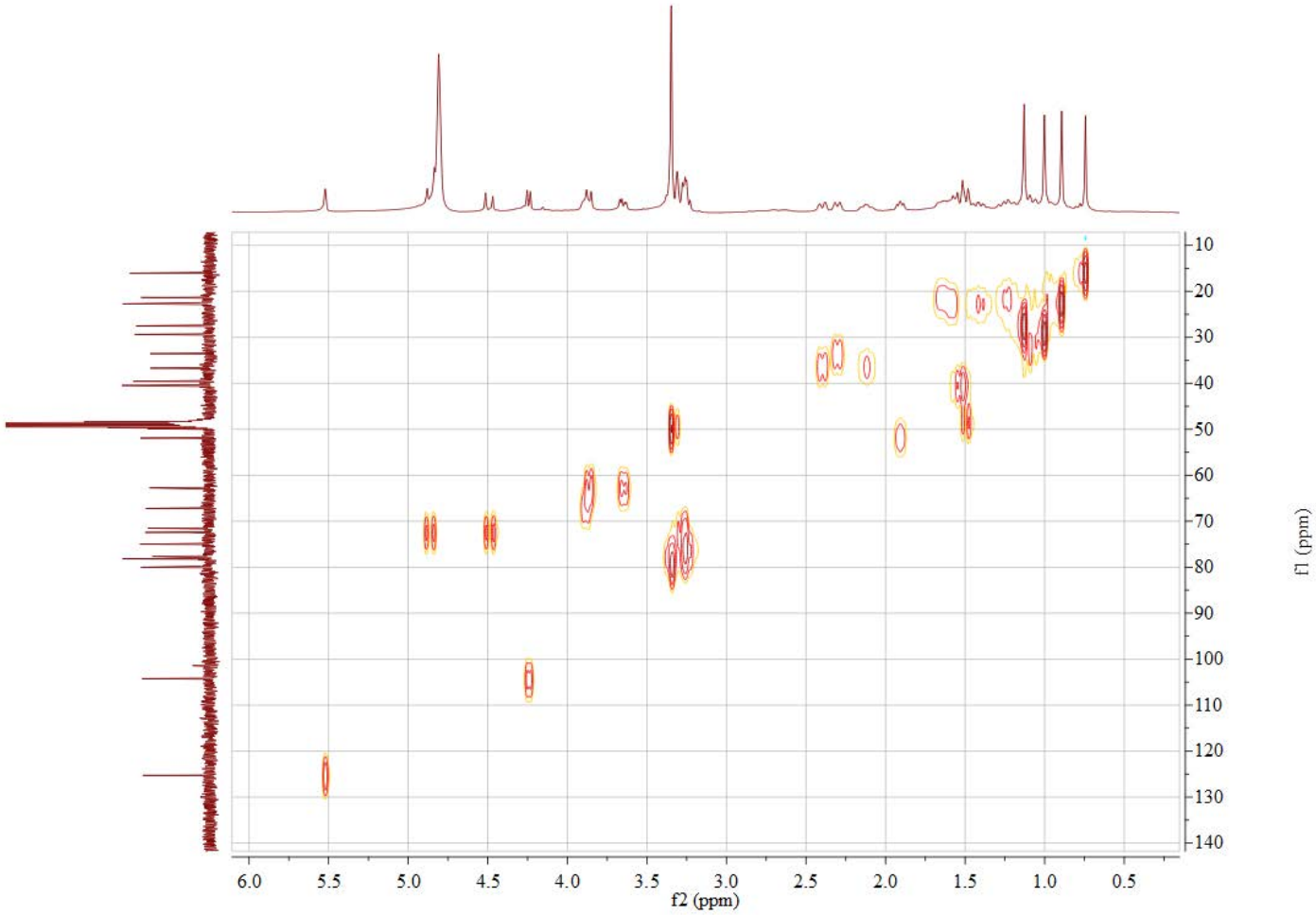

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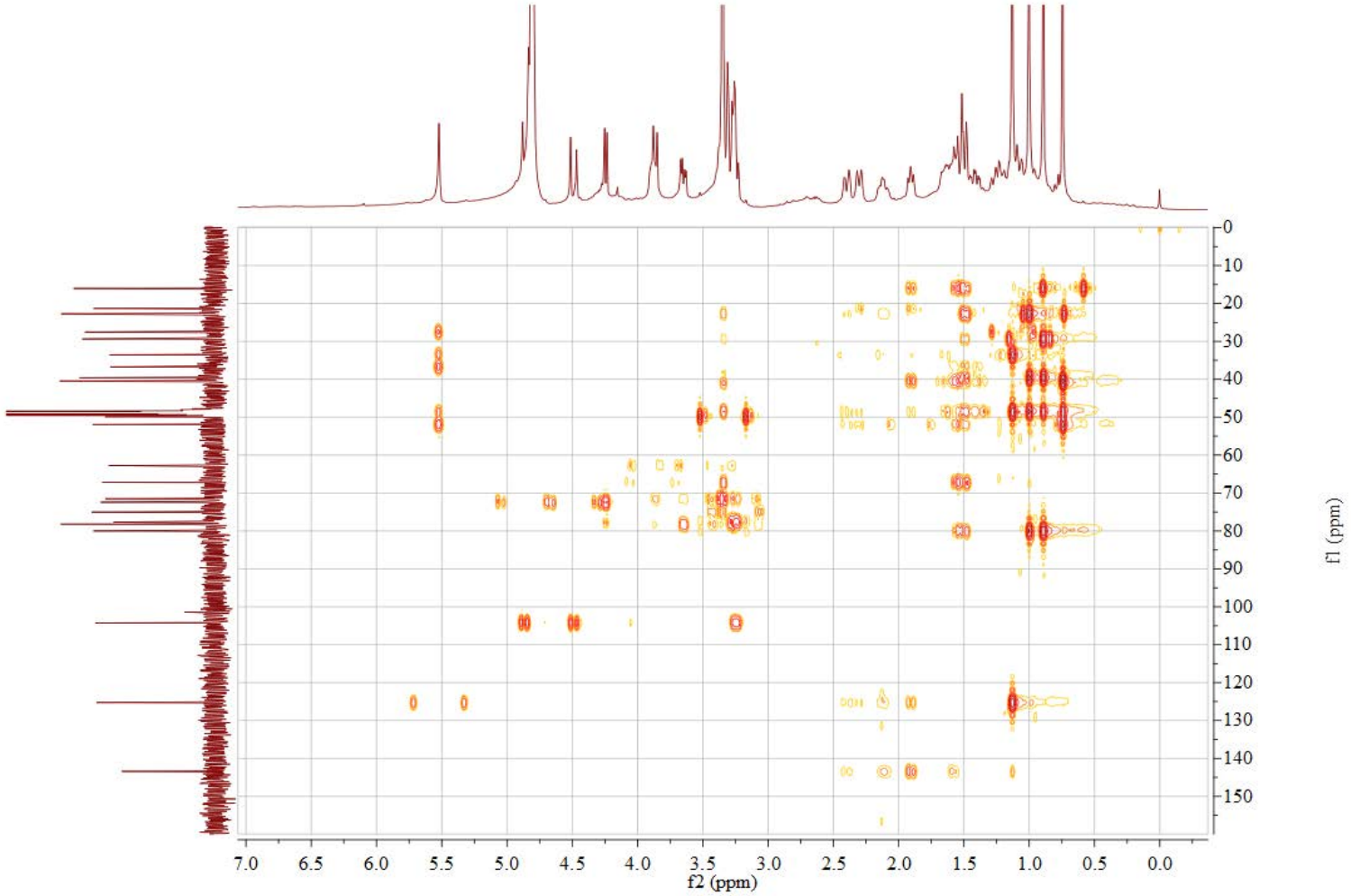

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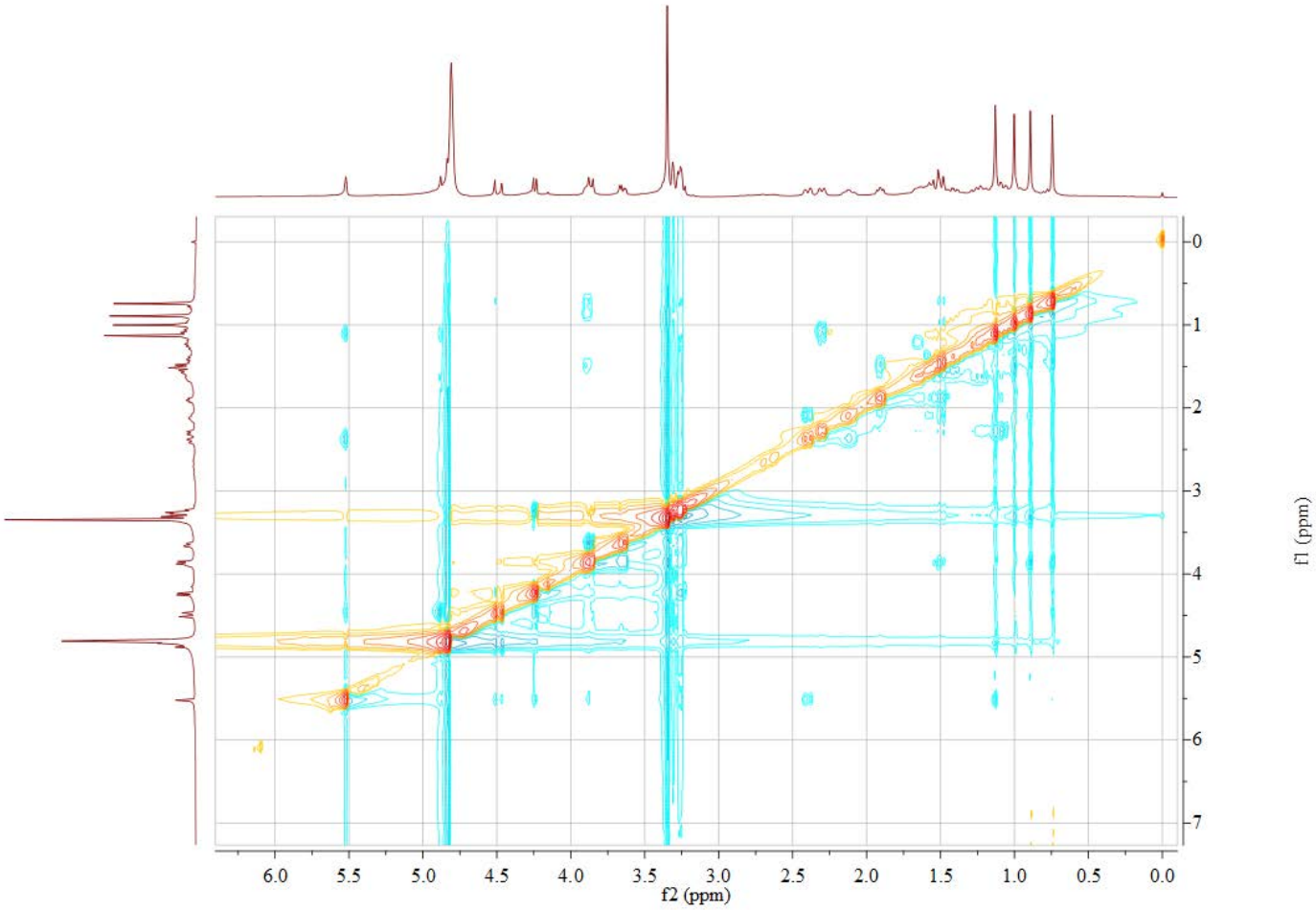
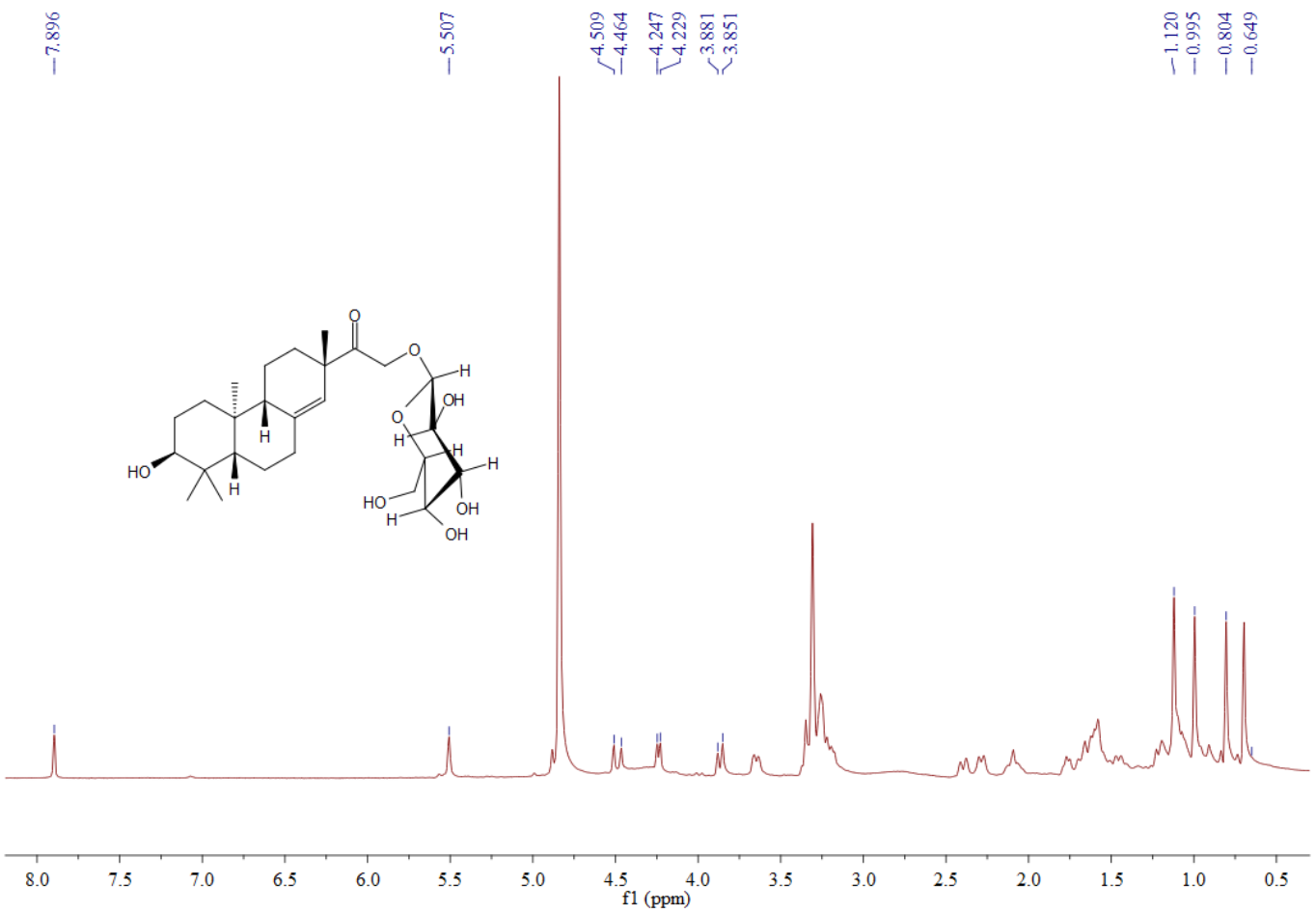
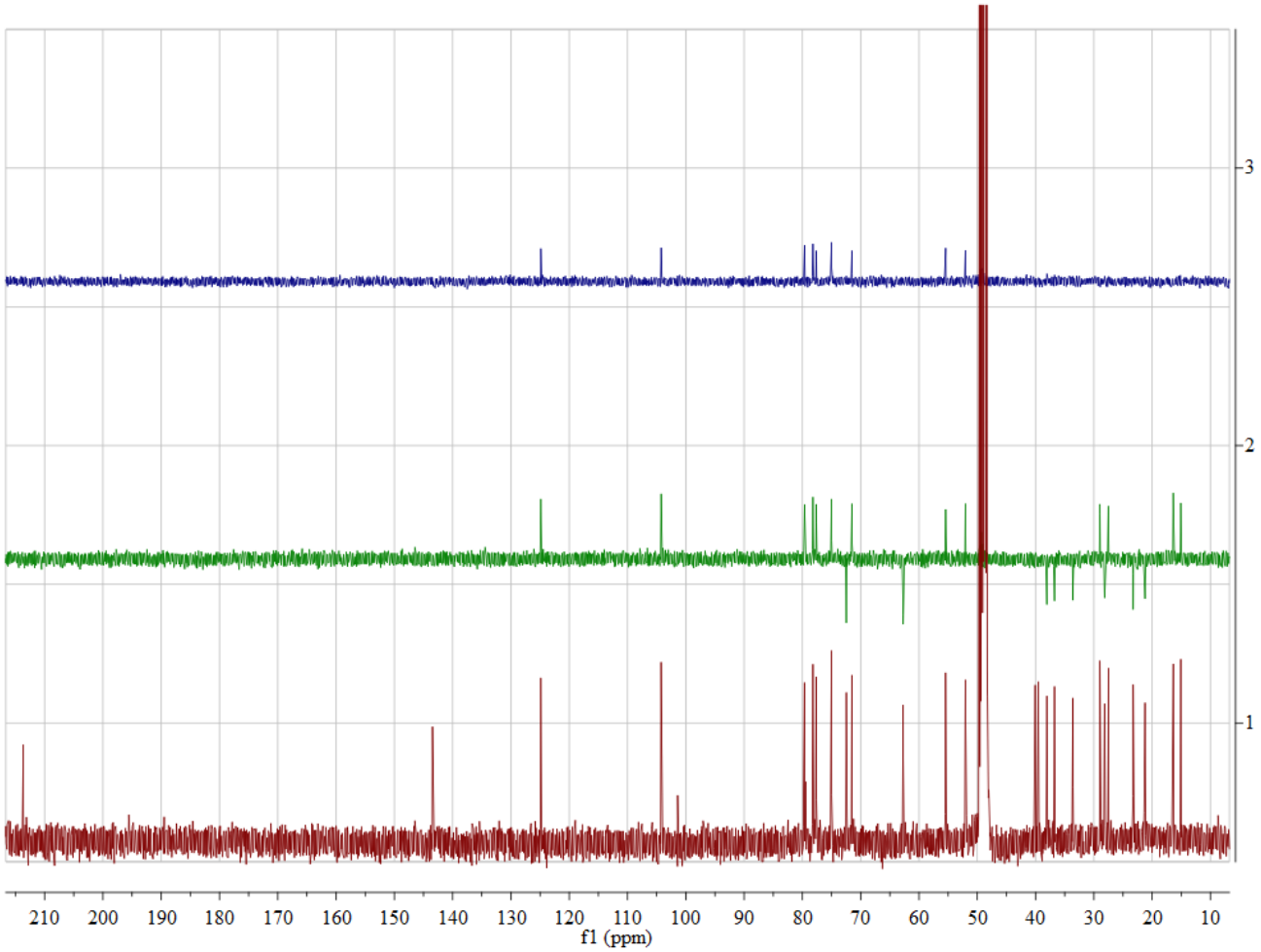


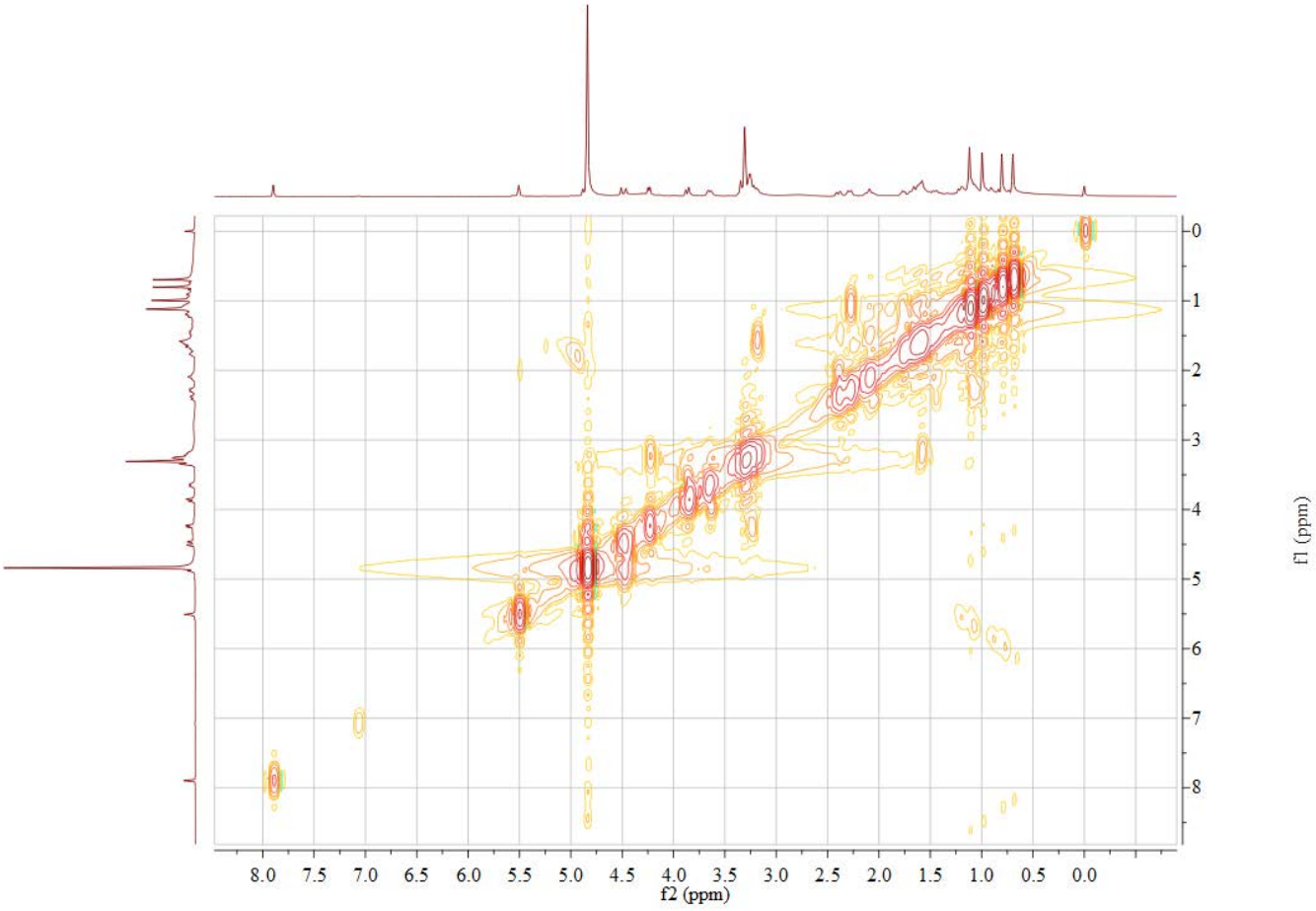
S53 ^{1}H NMR Spectrum of **10** in CD_3OD



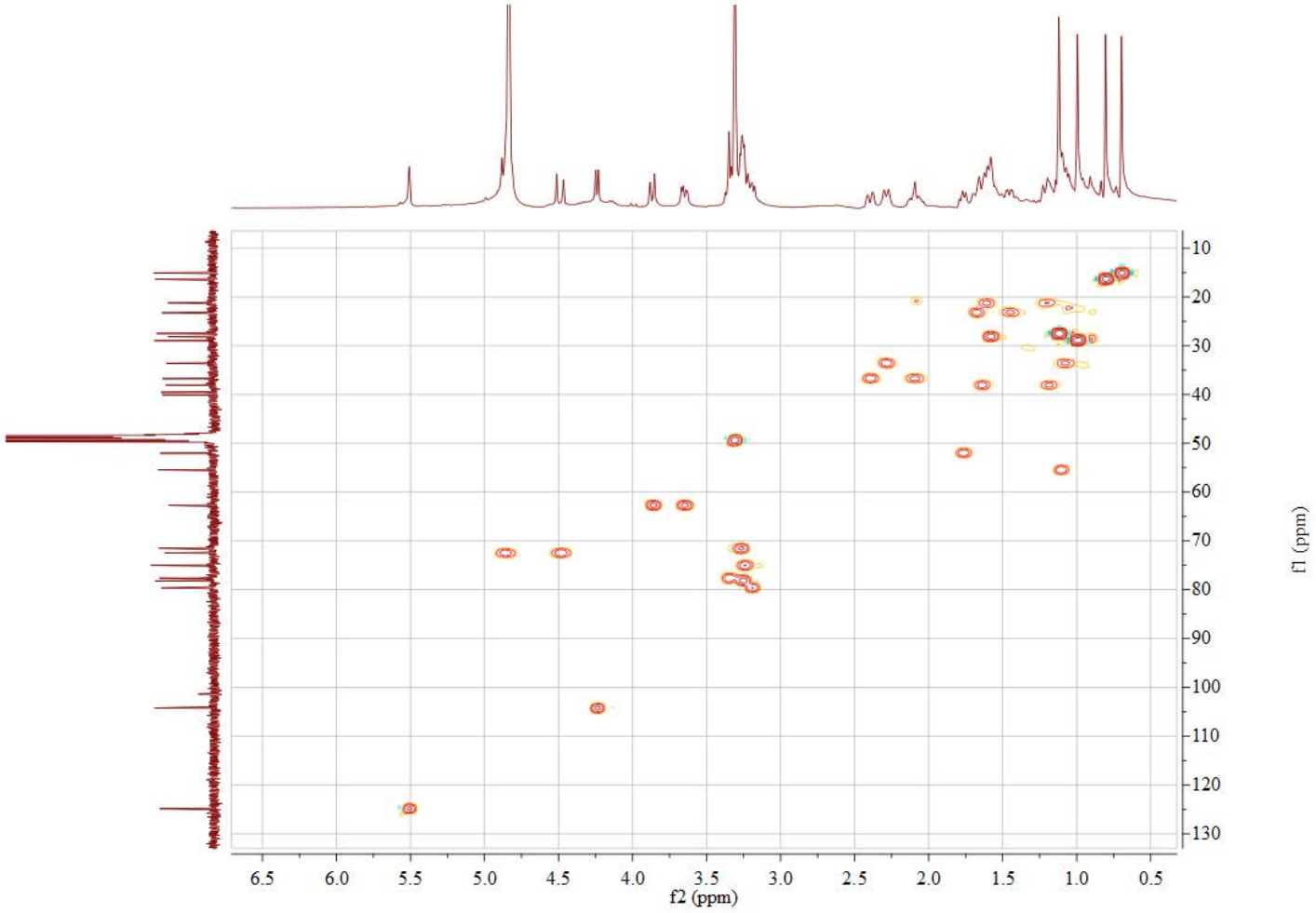
S54 ^{13}C NMR Spectrum of **10** in CD_3OD



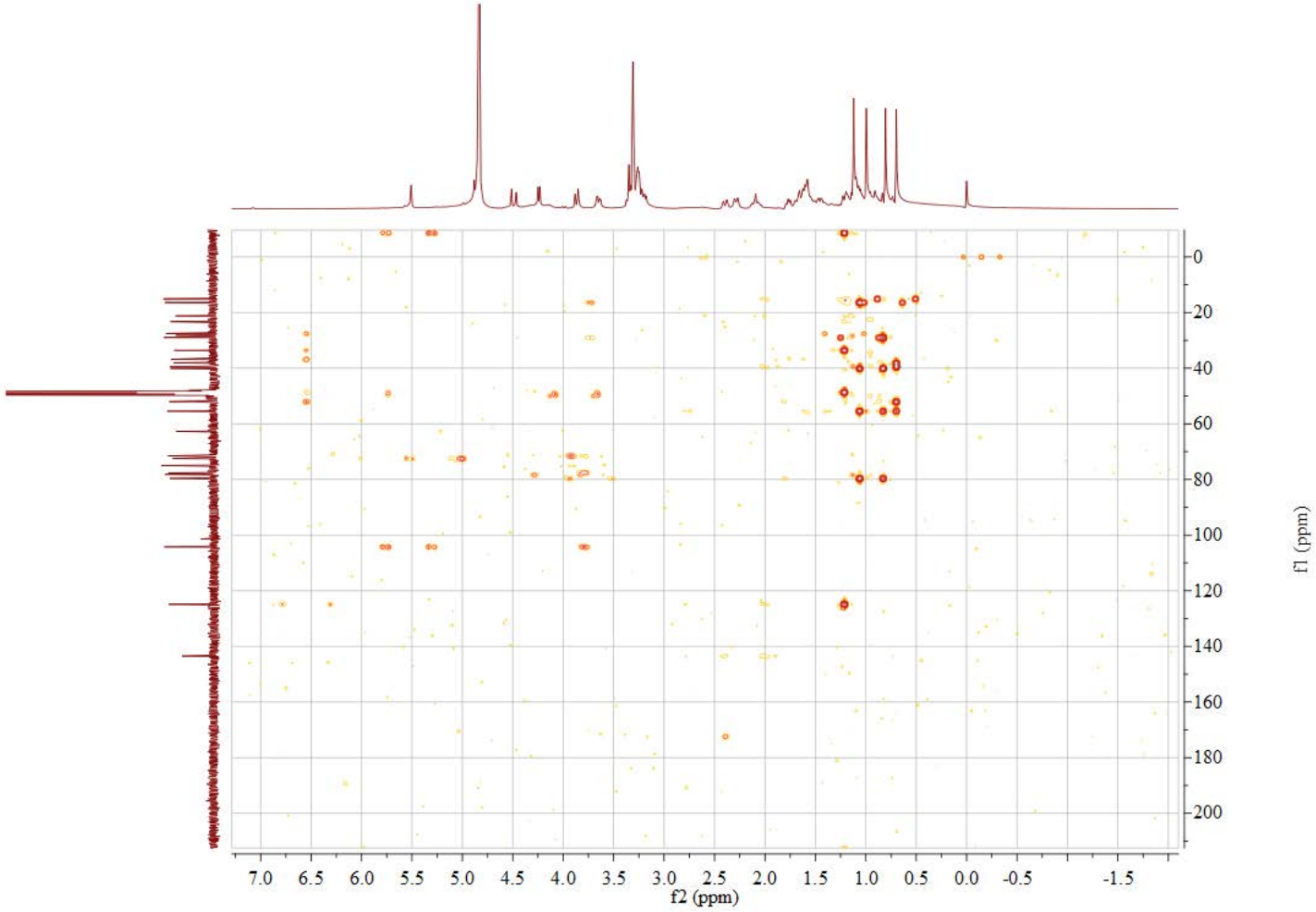
S55 ^{1}H-^{1}H COSY Spectrum of **10** in CD_3OD



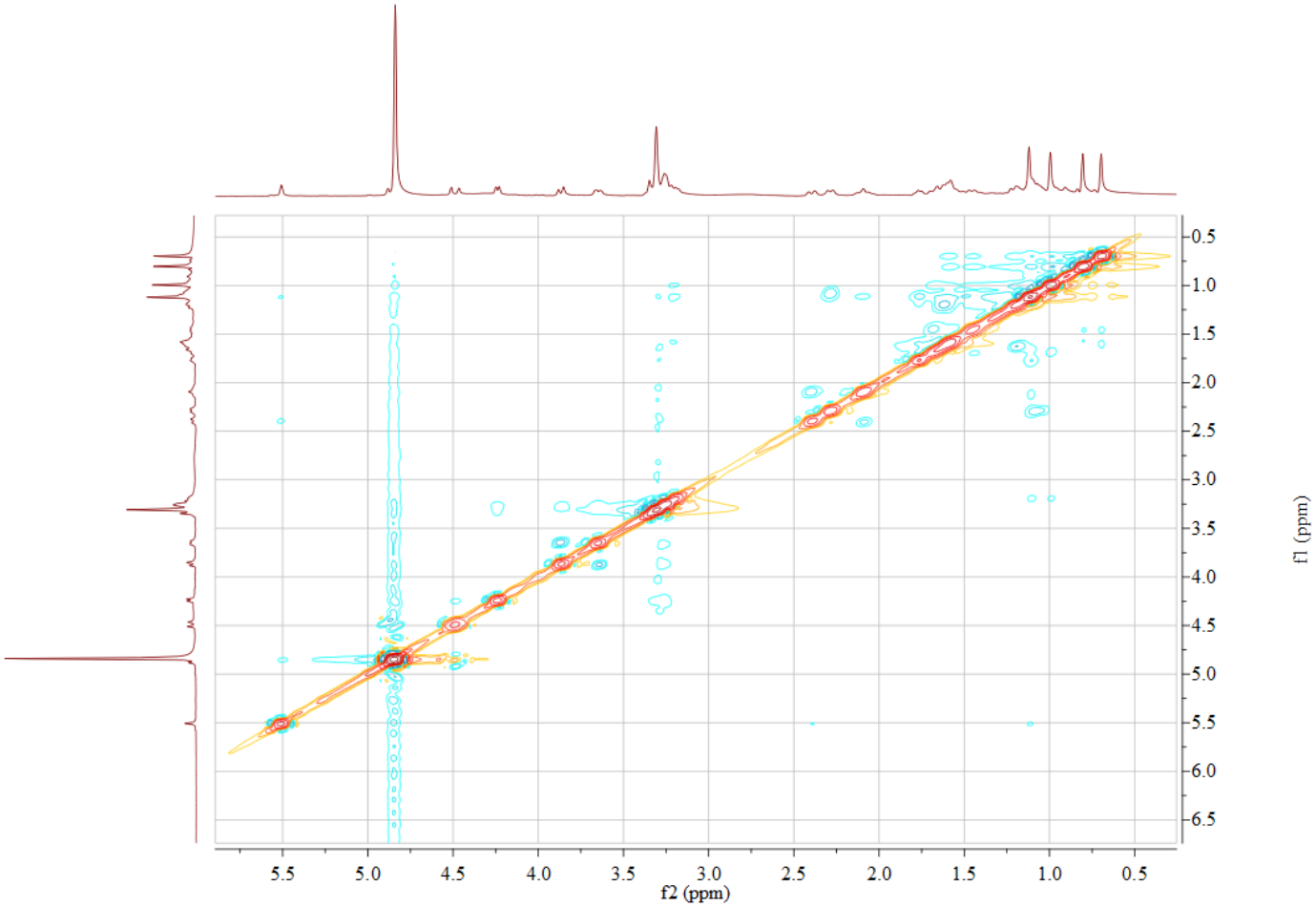
S56 HSQC Spectrum of **10** in CD_3OD



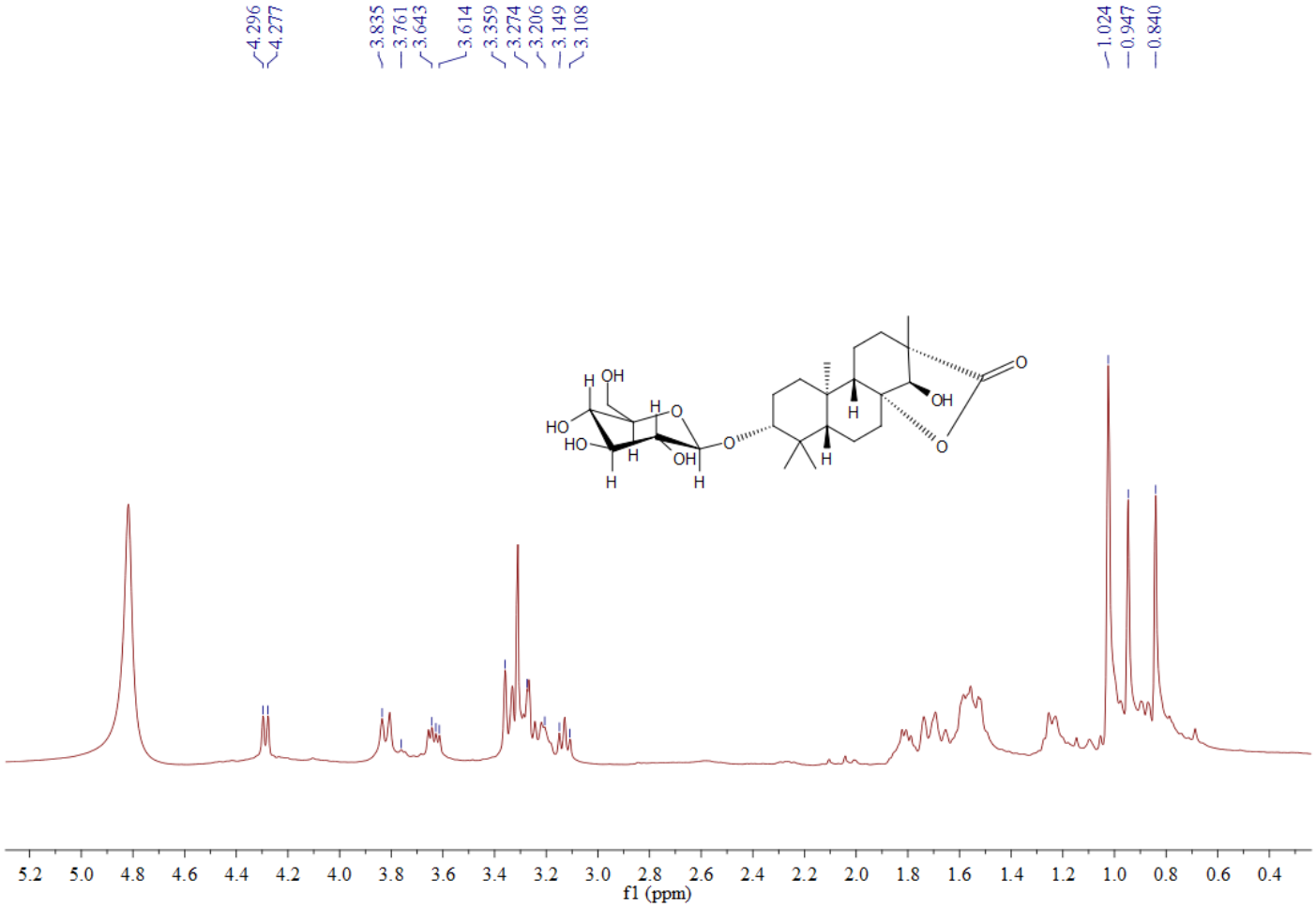
S57 HMBC Spectrum of **10** in CD_3OD



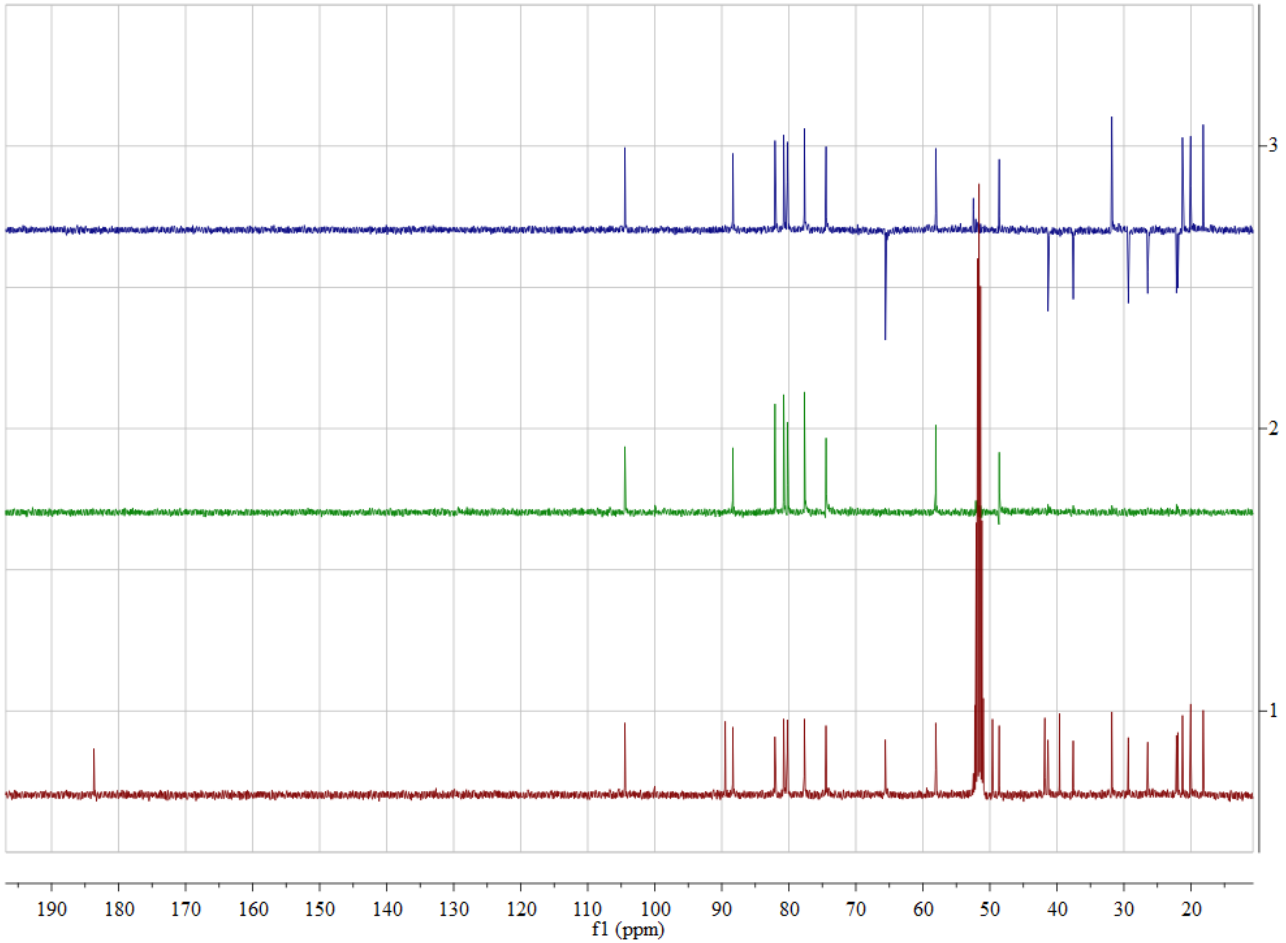
S58 NOESY Spectrum of **10** in CD_3OD



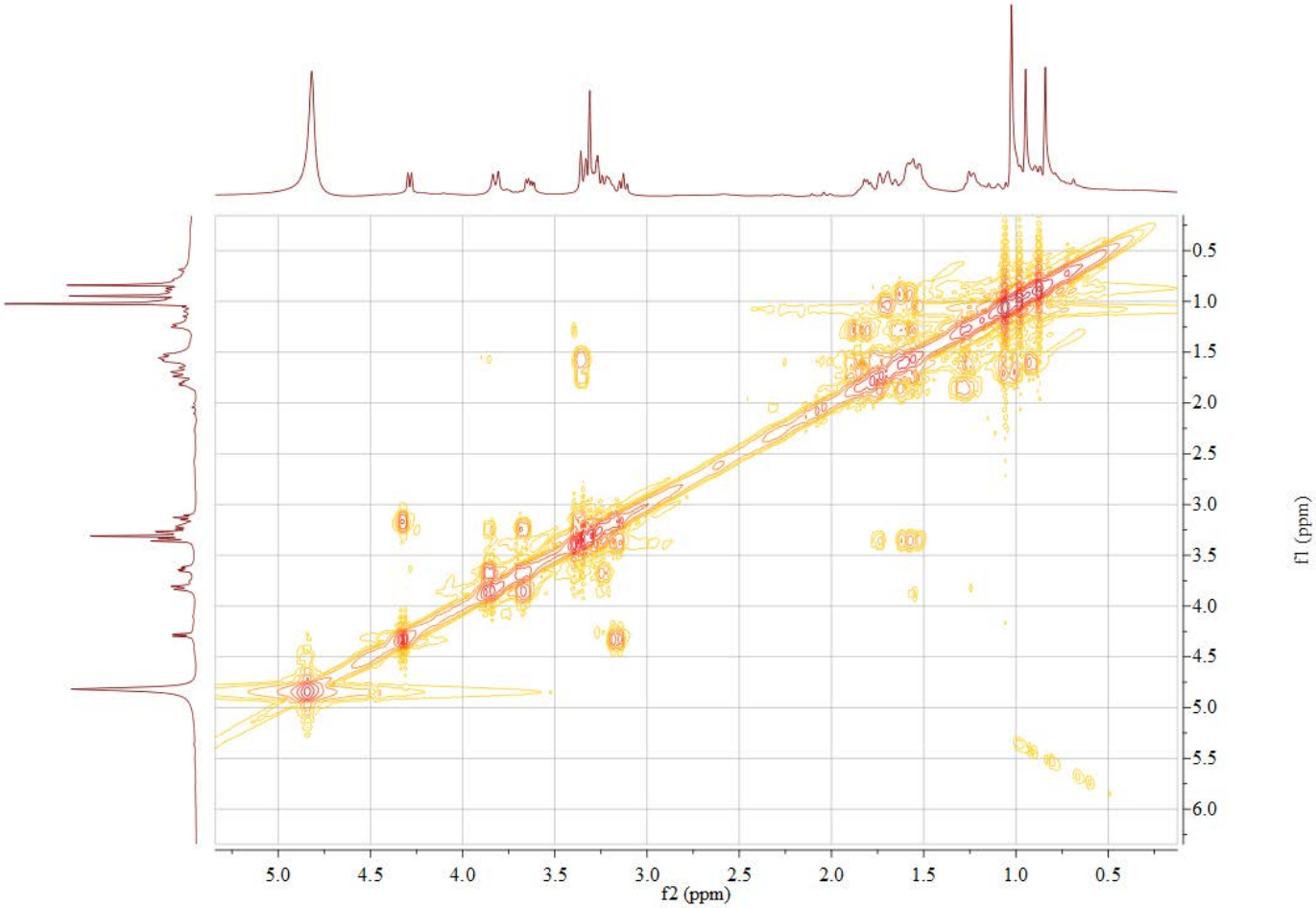
S59 ^{1}H NMR Spectrum of **11** in CD_3OD



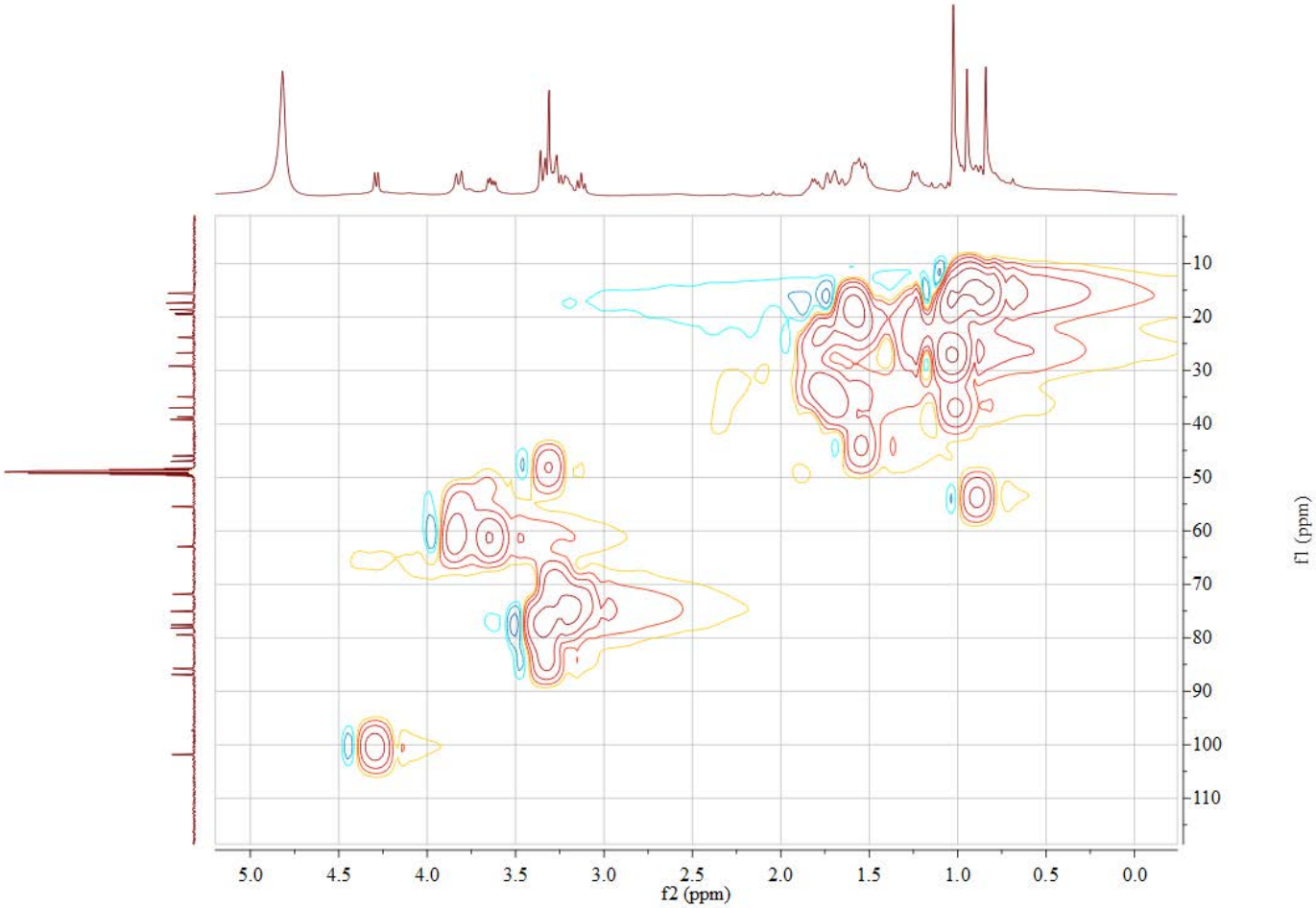
S60 ^{13}C NMR Spectrum of **11** in CD_3OD



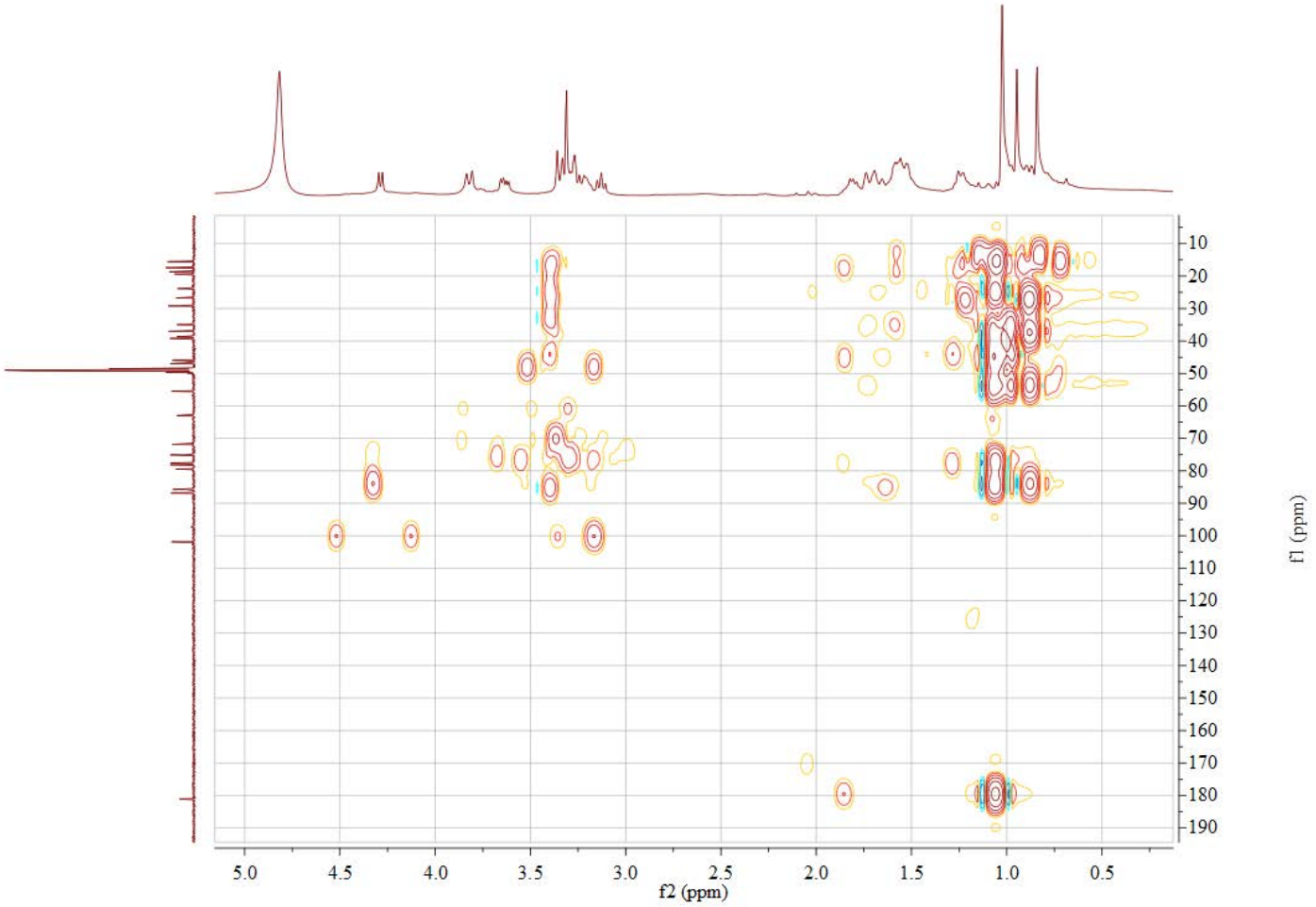
S61 ^{1}H-^{1}H COSY Spectrum of **11** in CD_3OD



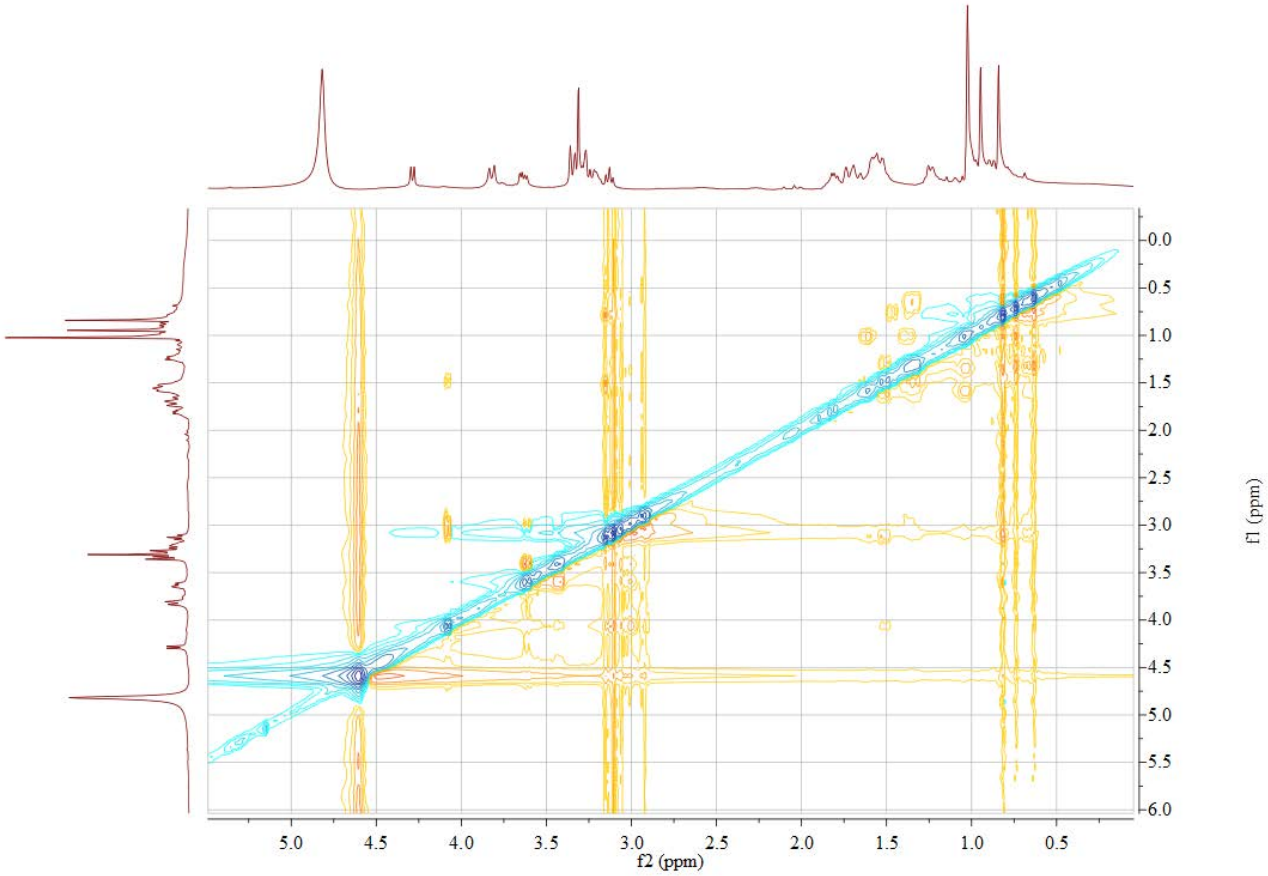
S62 HSQC Spectrum of **11** in CD_3OD



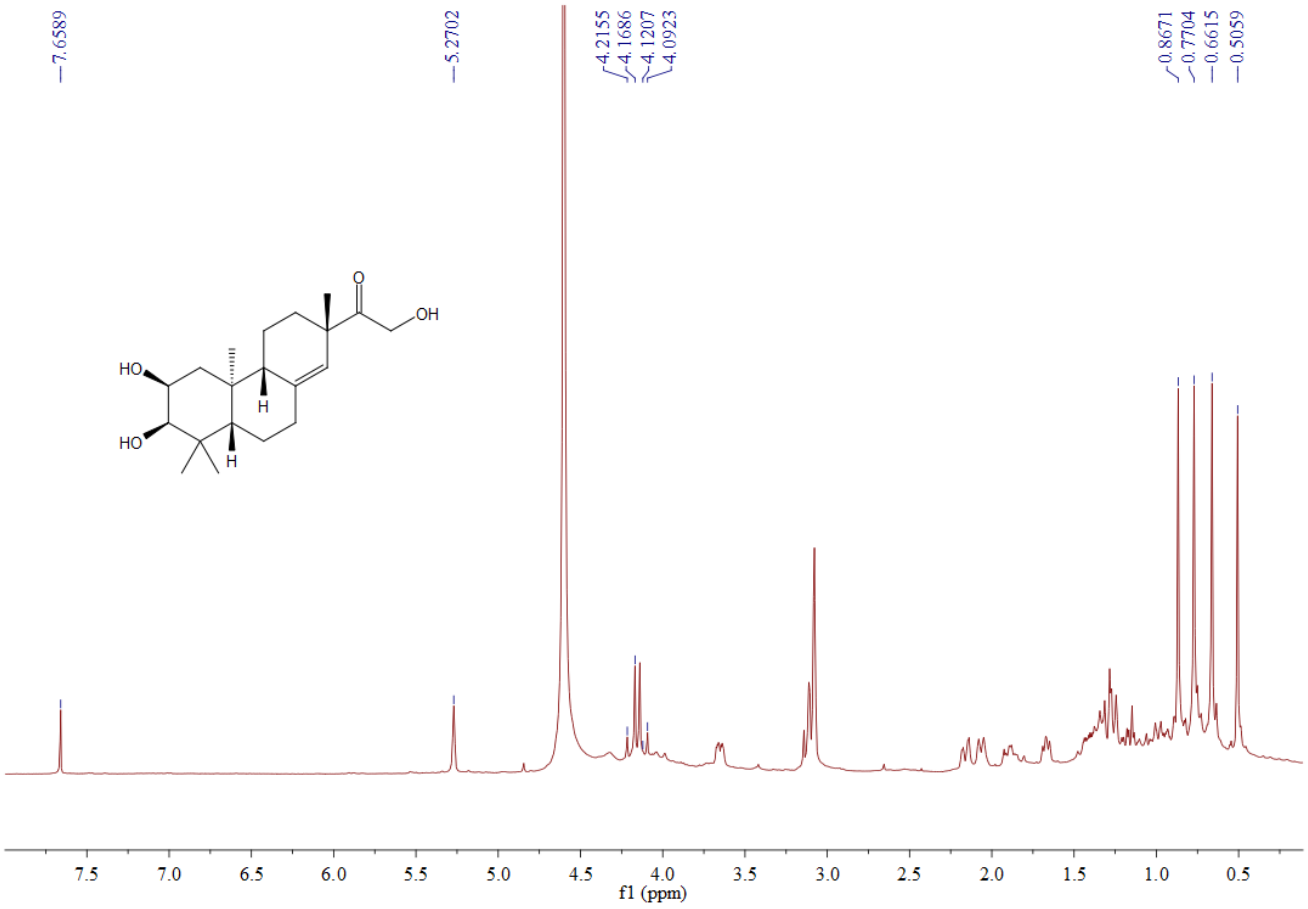
S63 HMBC Spectrum of **11** in CD_3OD



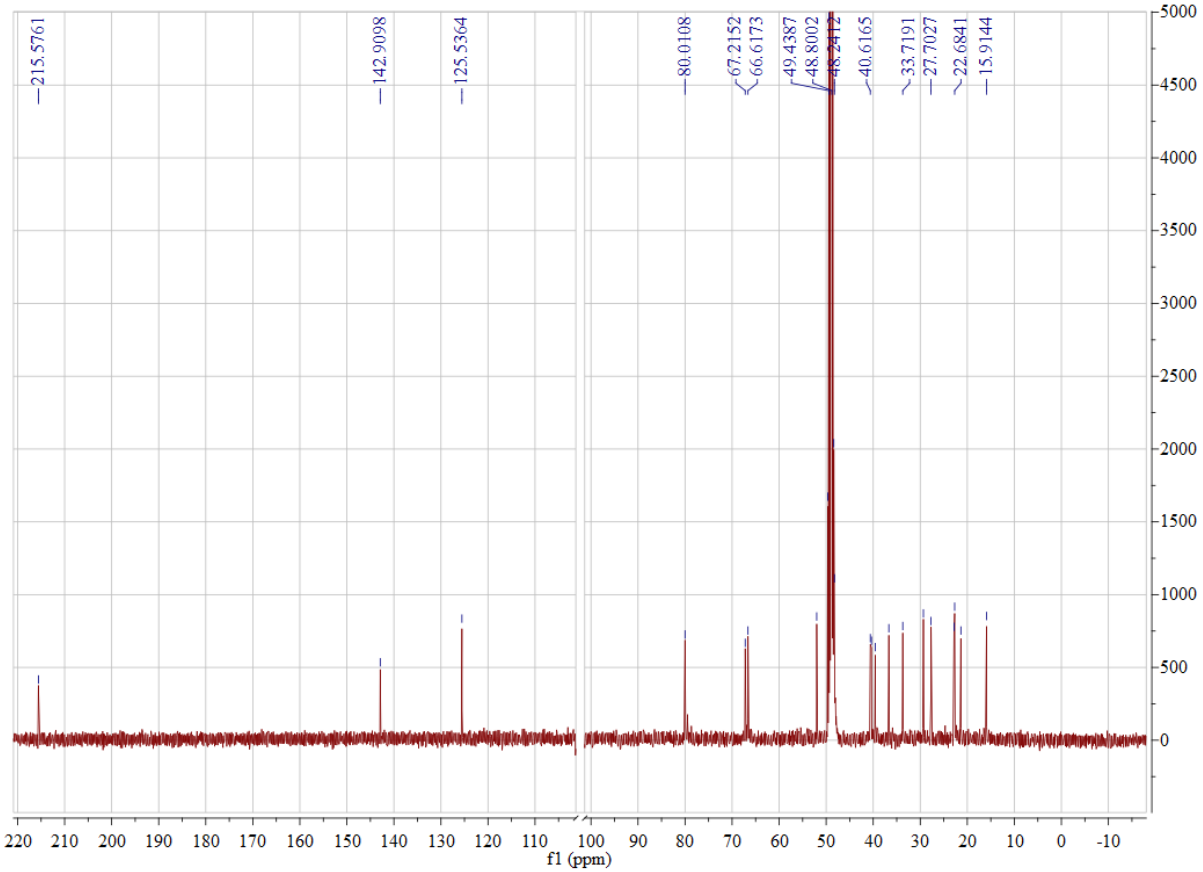
S64 NOESY Spectrum of **11** in CD_3OD



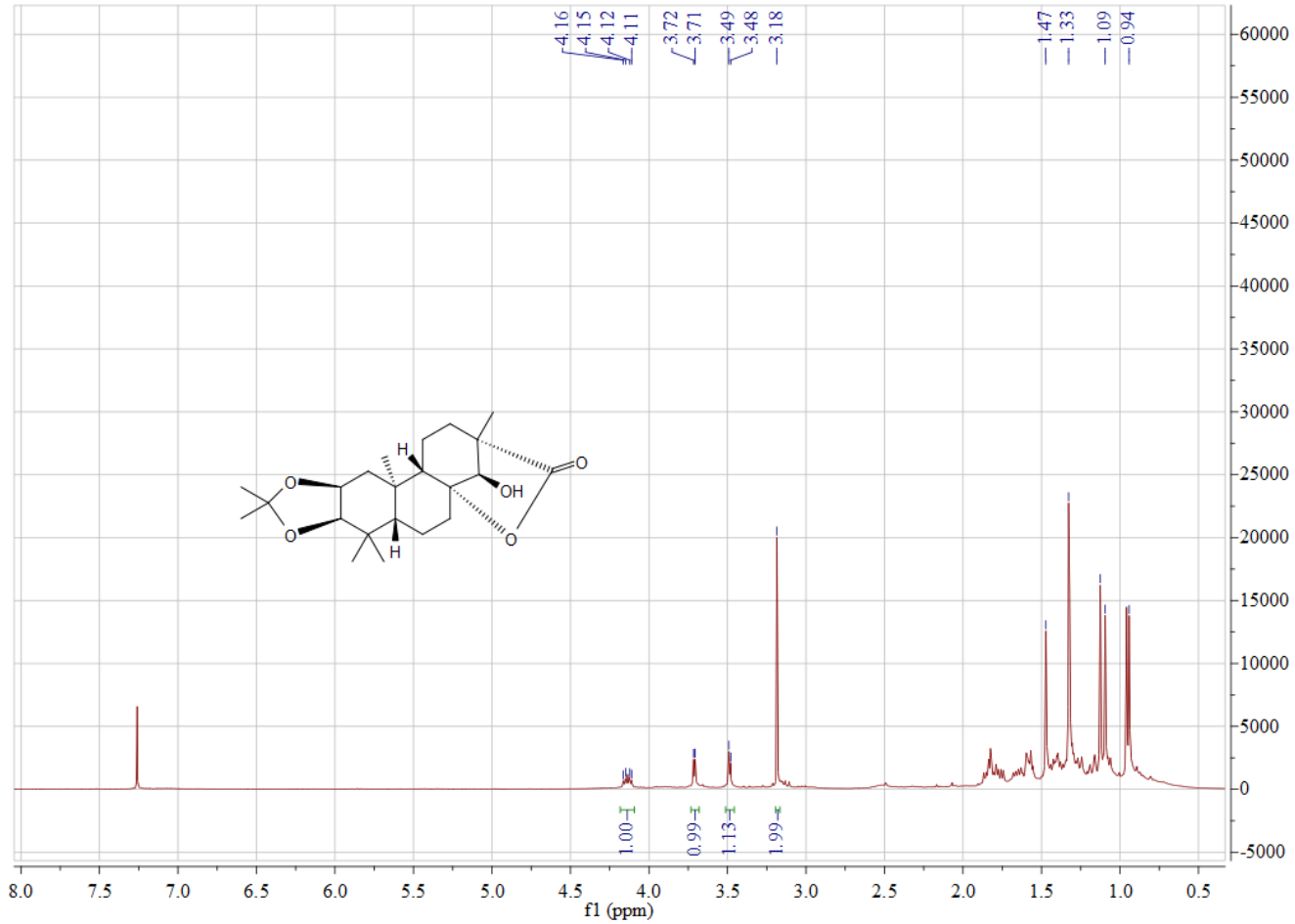
S65 ^{1}H NMR Spectrum of **12** in CD_3OD



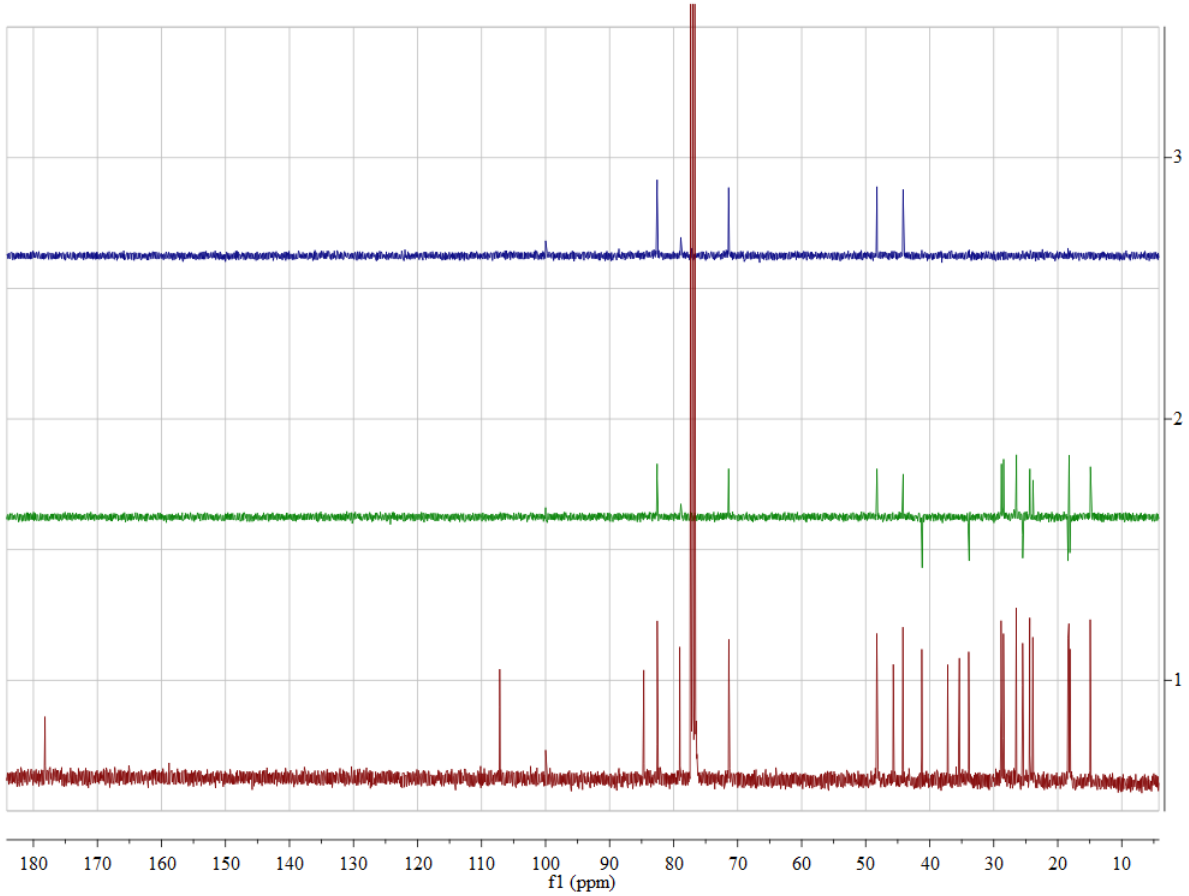
S66 ^{13}C NMR Spectrum of **12** in CD_3OD



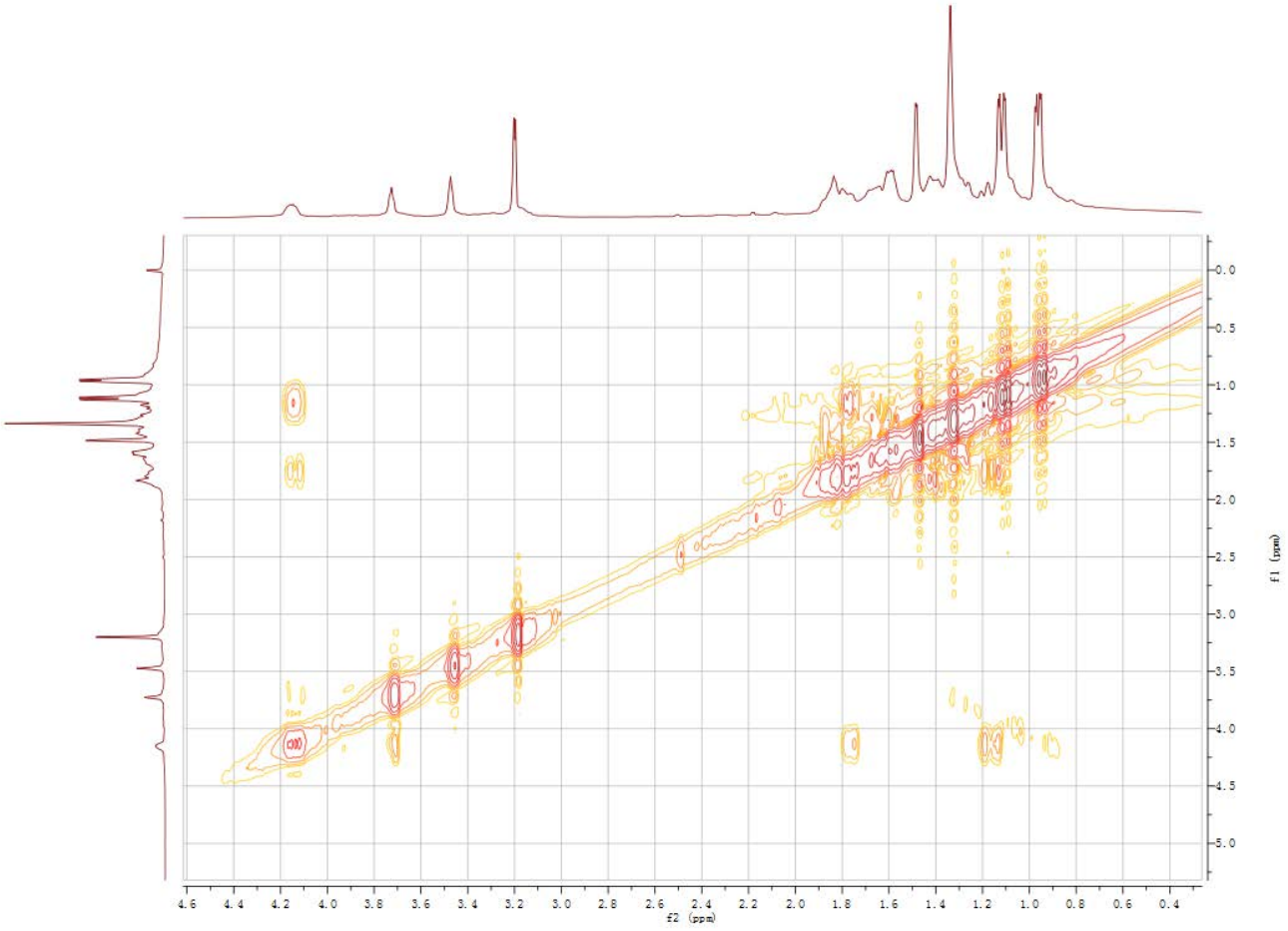
S67 ^{1}H NMR Spectrum of **2a** in $CDCl_3$



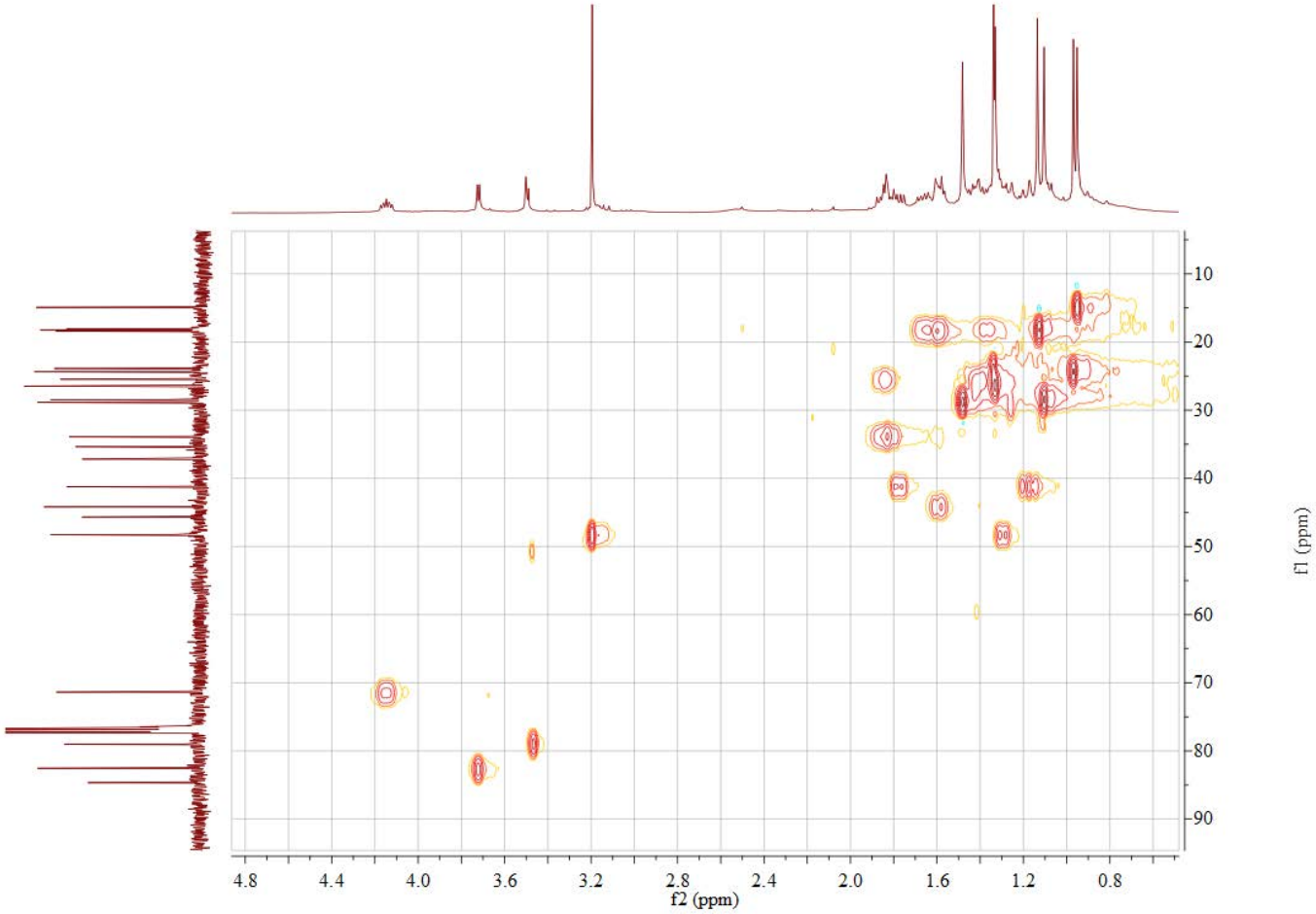
S68 ^{13}C NMR Spectrum of **2a** in $CDCl_3$



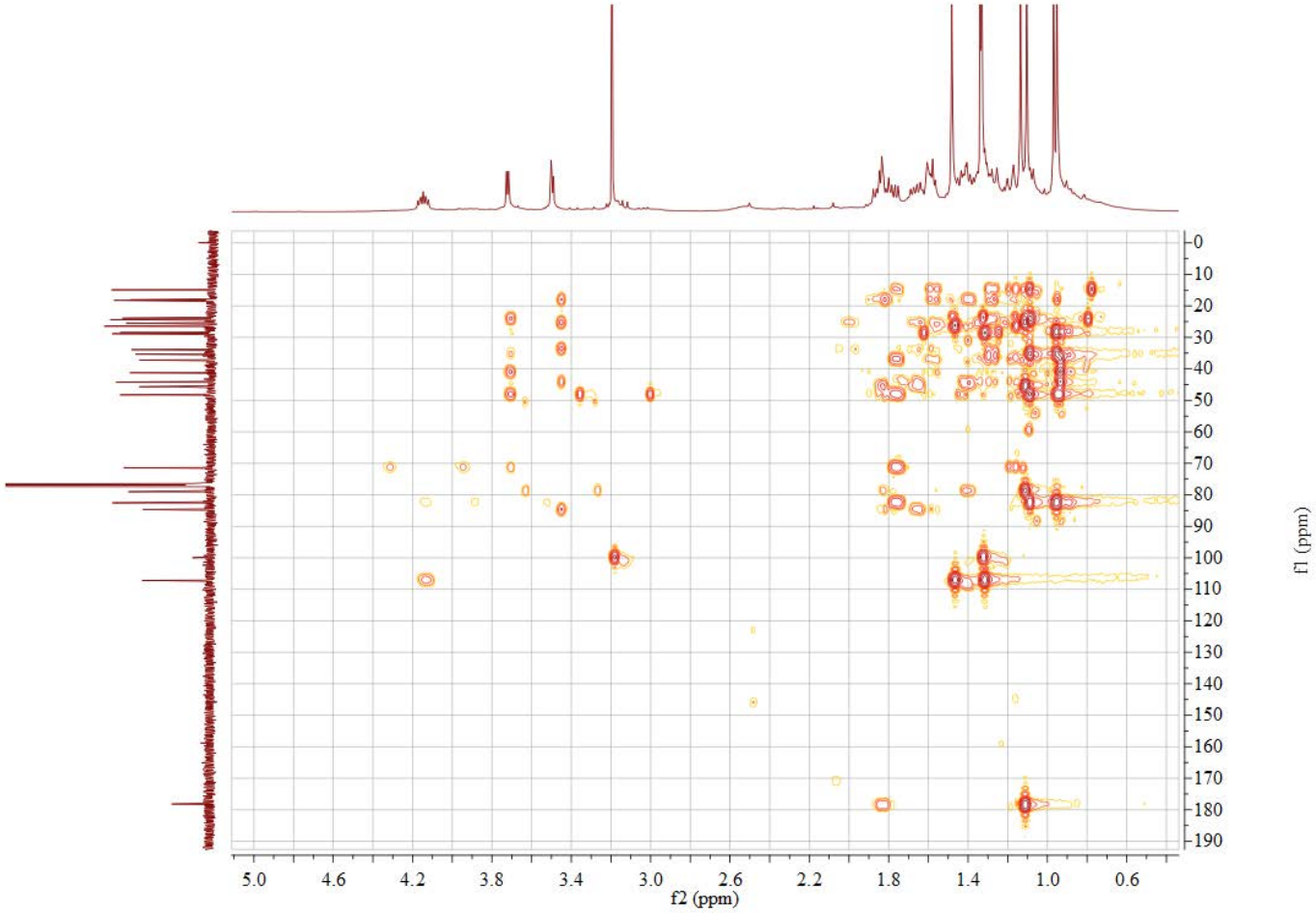
S69 ^{1}H-^{1}H COSY Spectrum of **2a** in $CDCl_3$



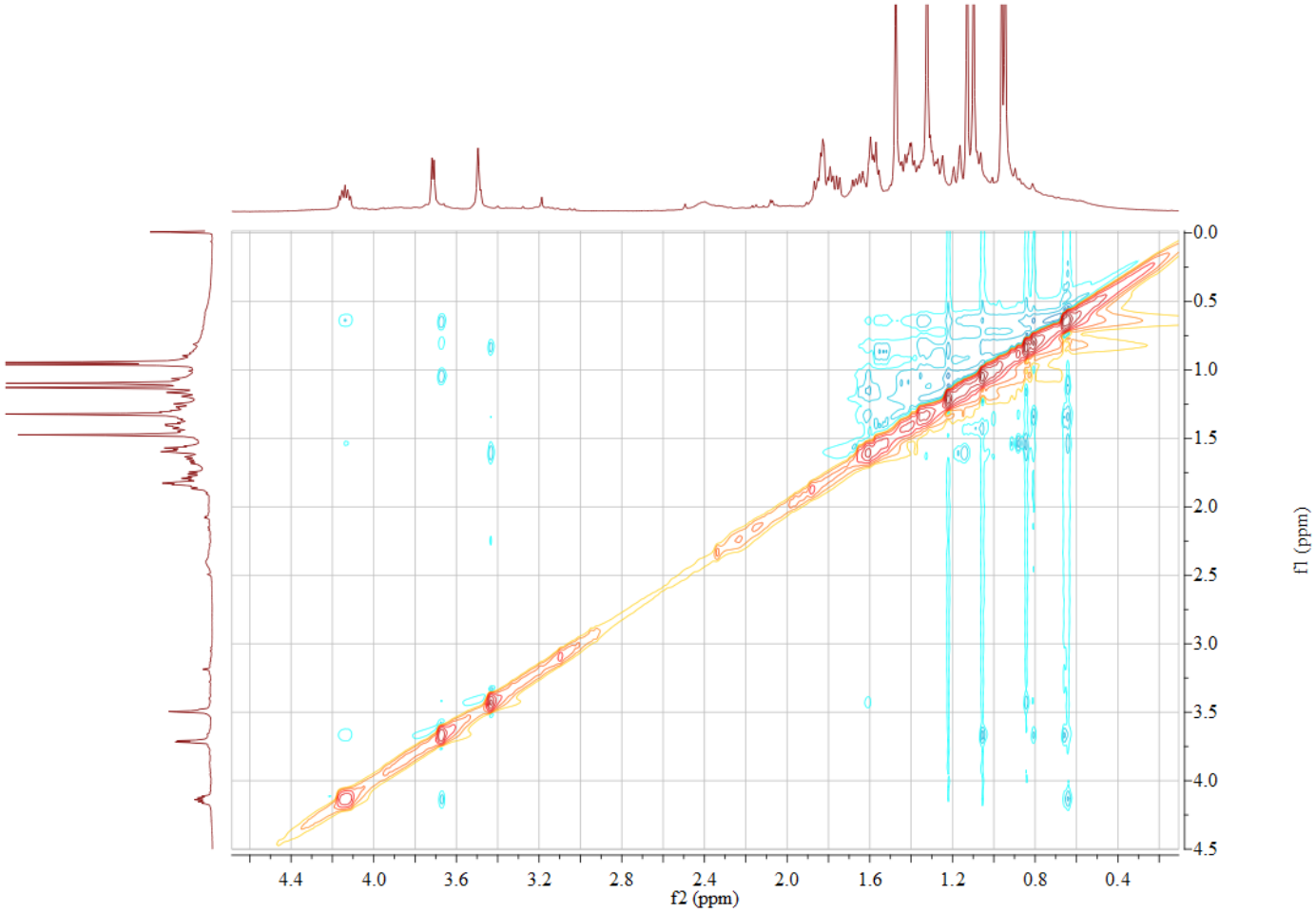
S70 HSQC Spectrum of **2a** in $CDCl_3$



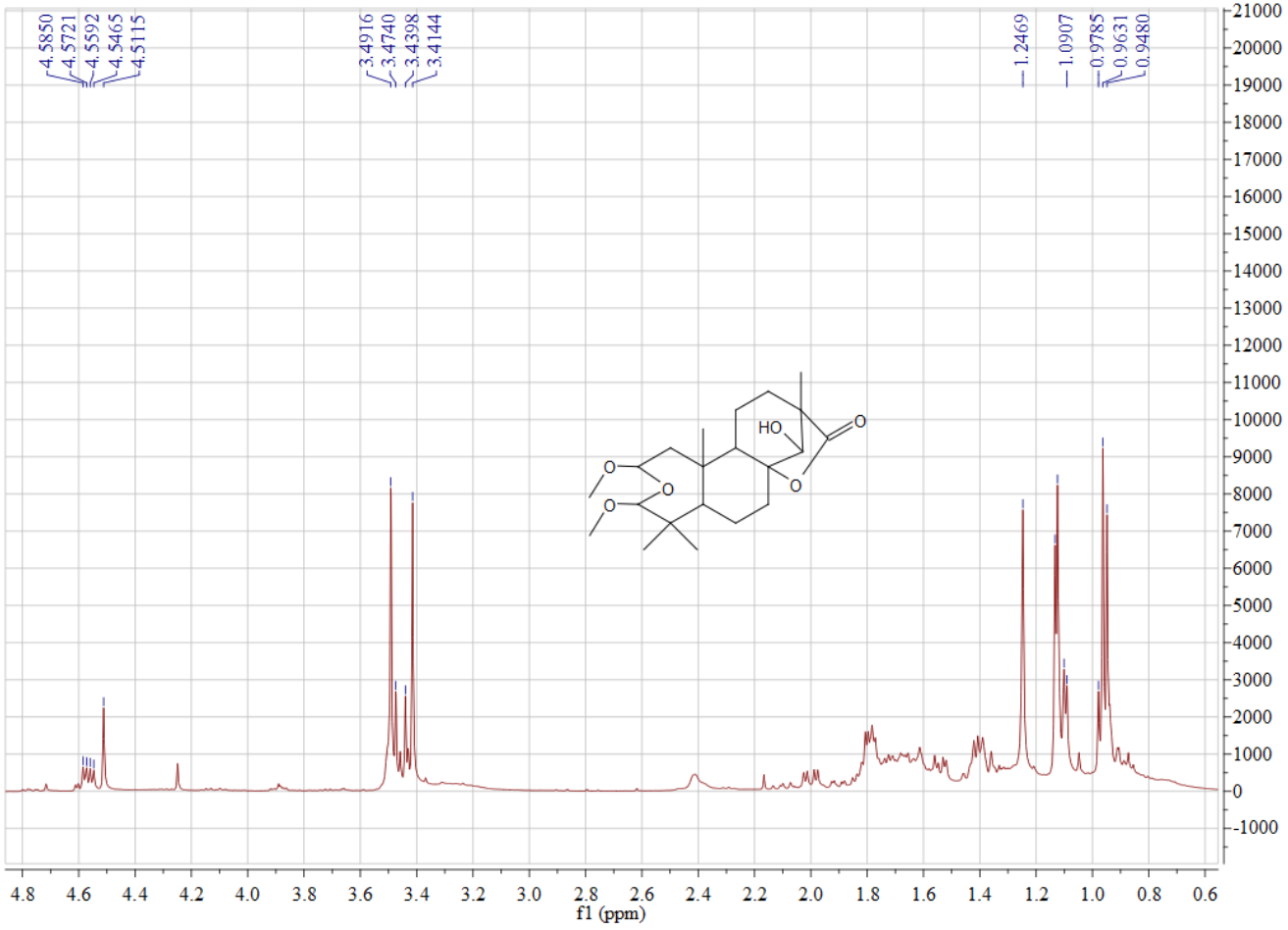
S71 HMBC Spectrum of **2a** in $CDCl_3$



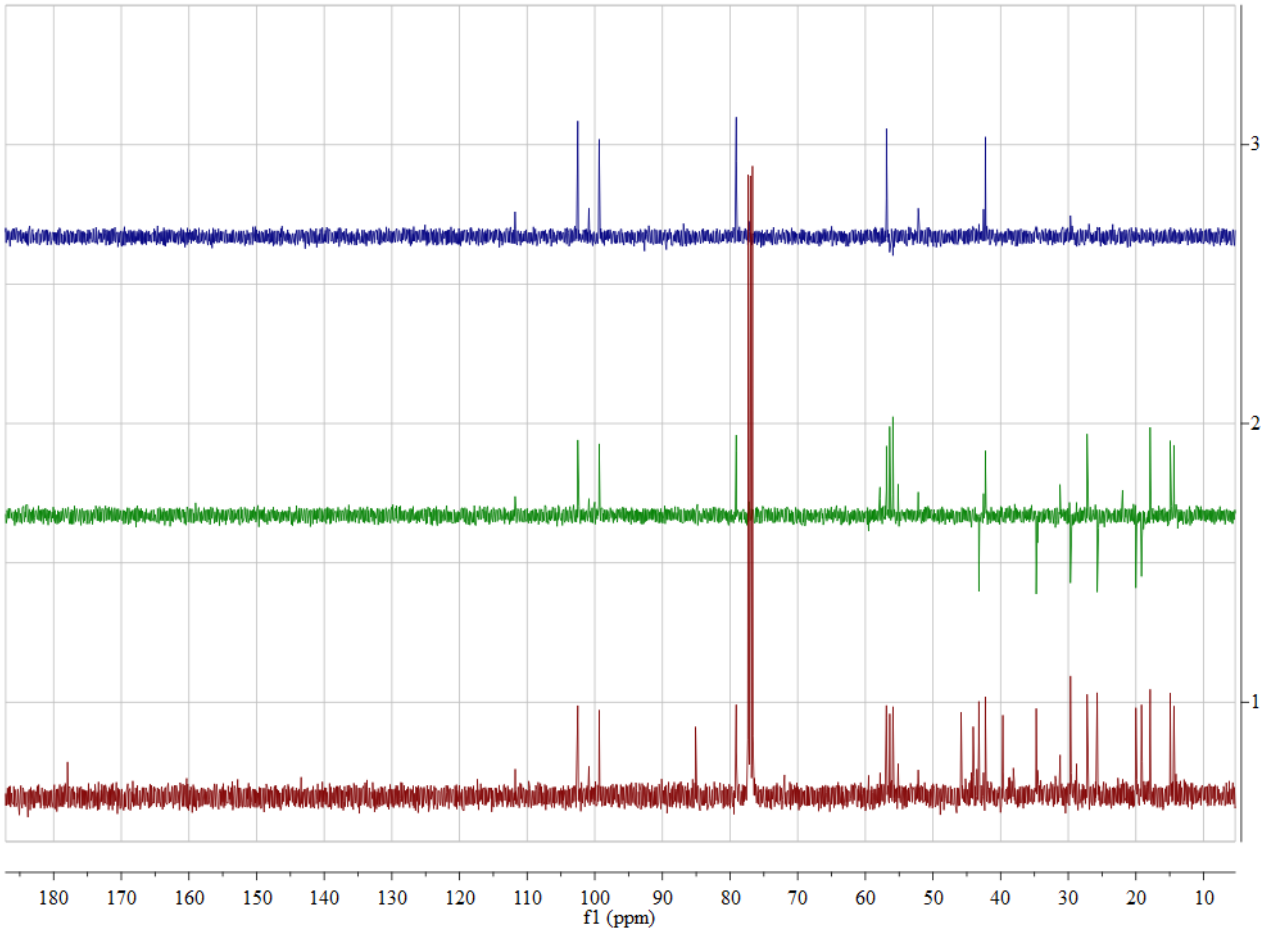
S72 NOESY Spectrum of **2a** in $CDCl_3$



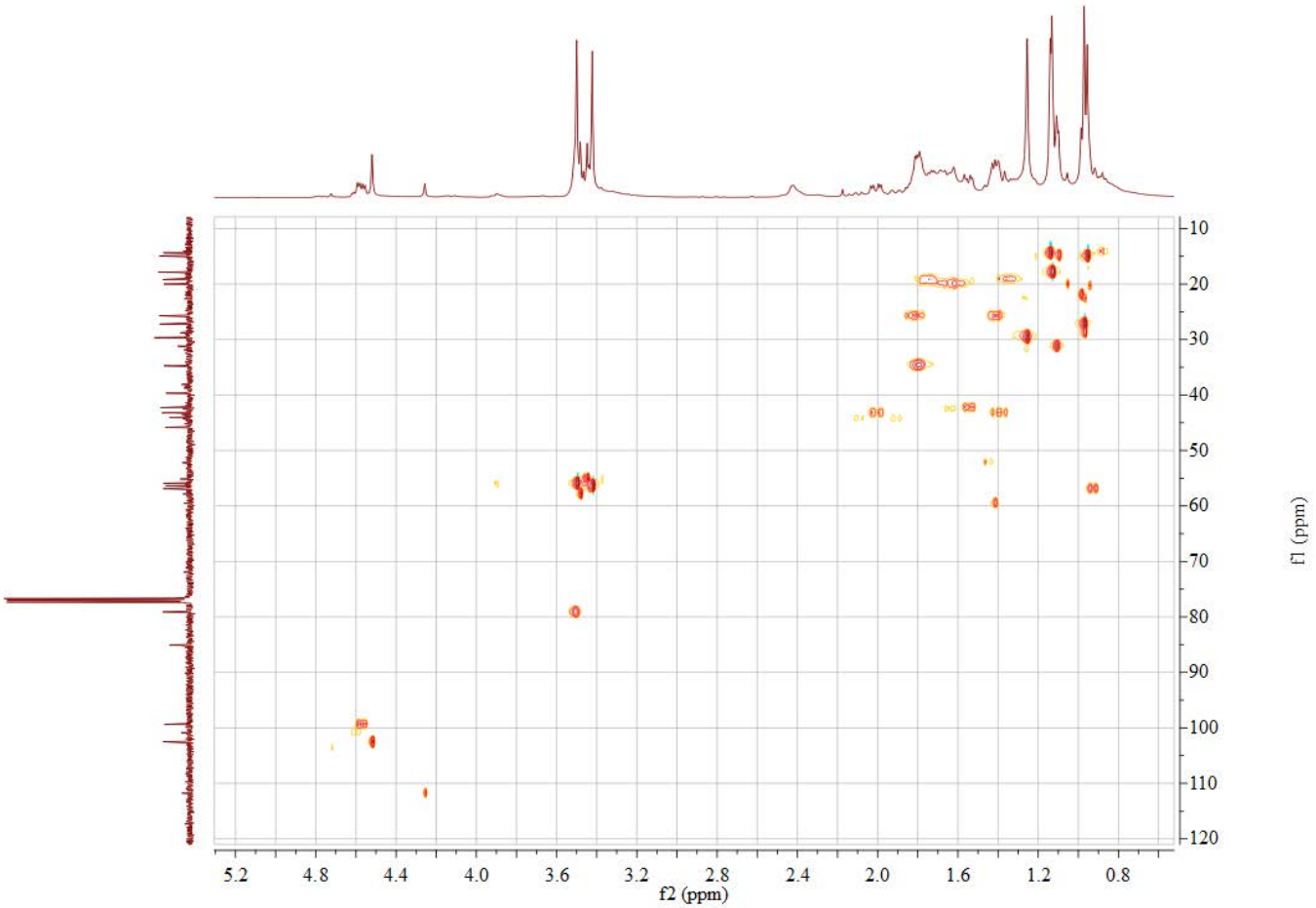
S73 ^{1}H NMR Spectrum of **2b** in $CDCl_3$



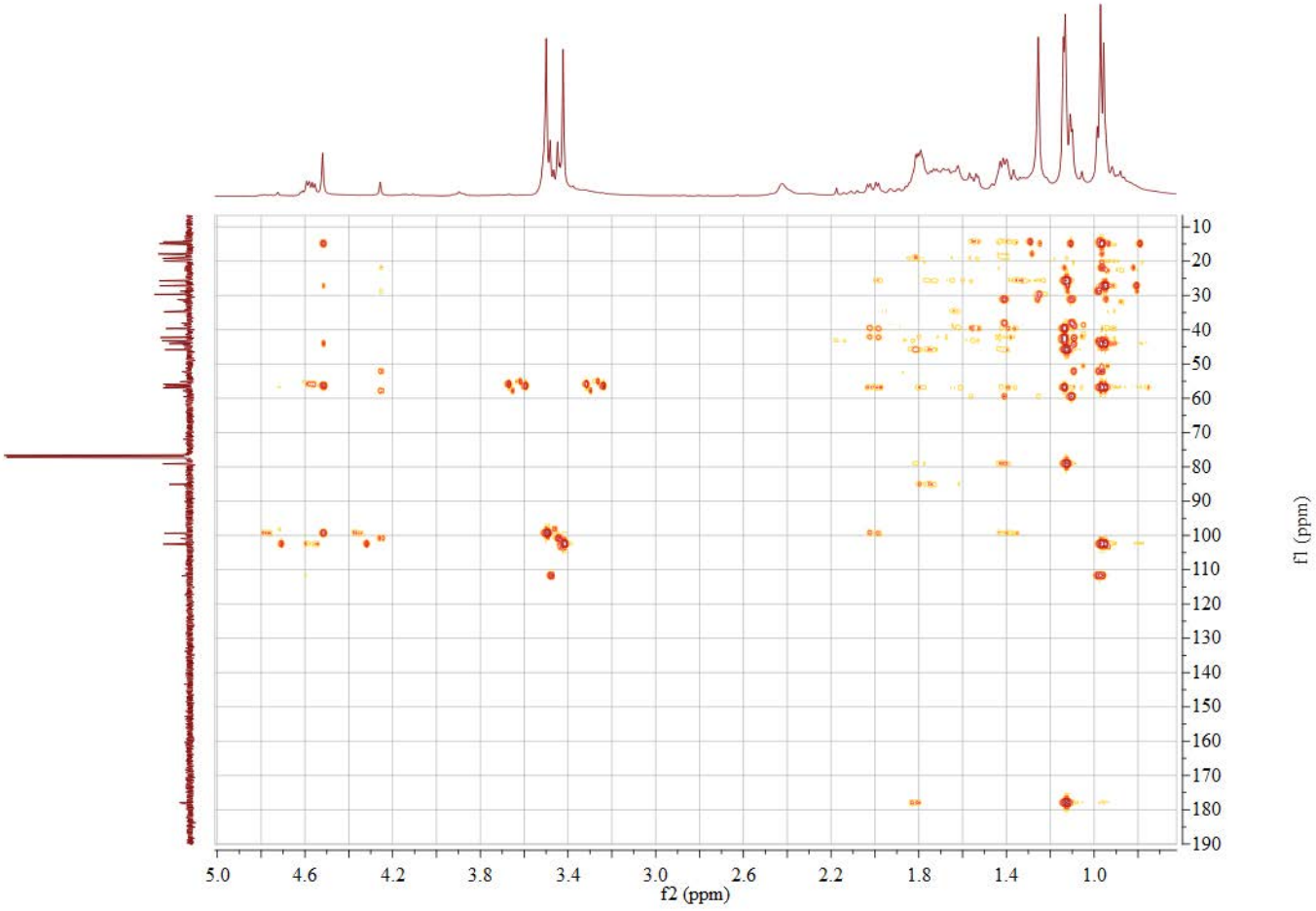
S74 ^{13}C NMR Spectrum of **2b** in $CDCl_3$



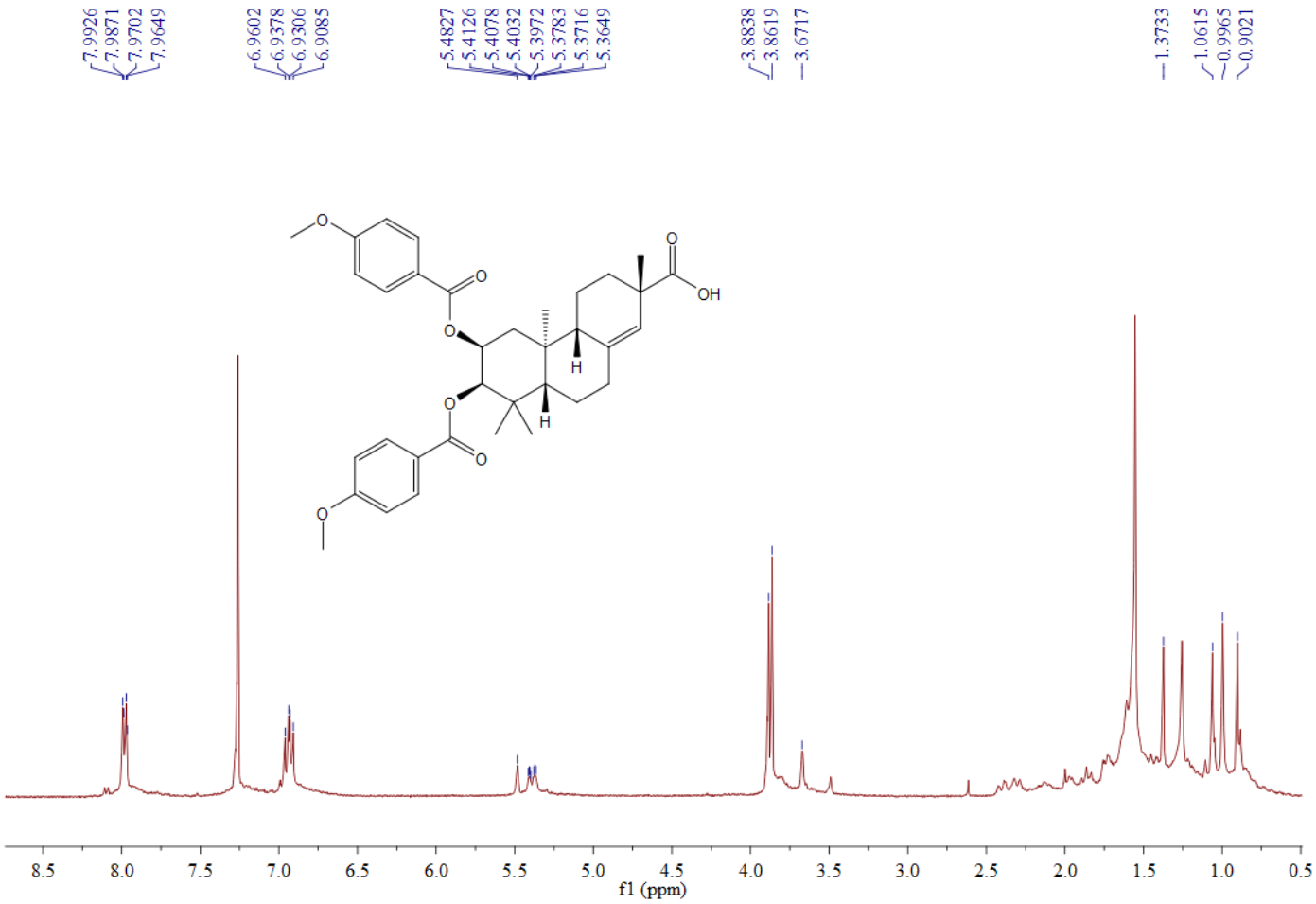
S75 HSQC Spectrum of **2b** in $CDCl_3$



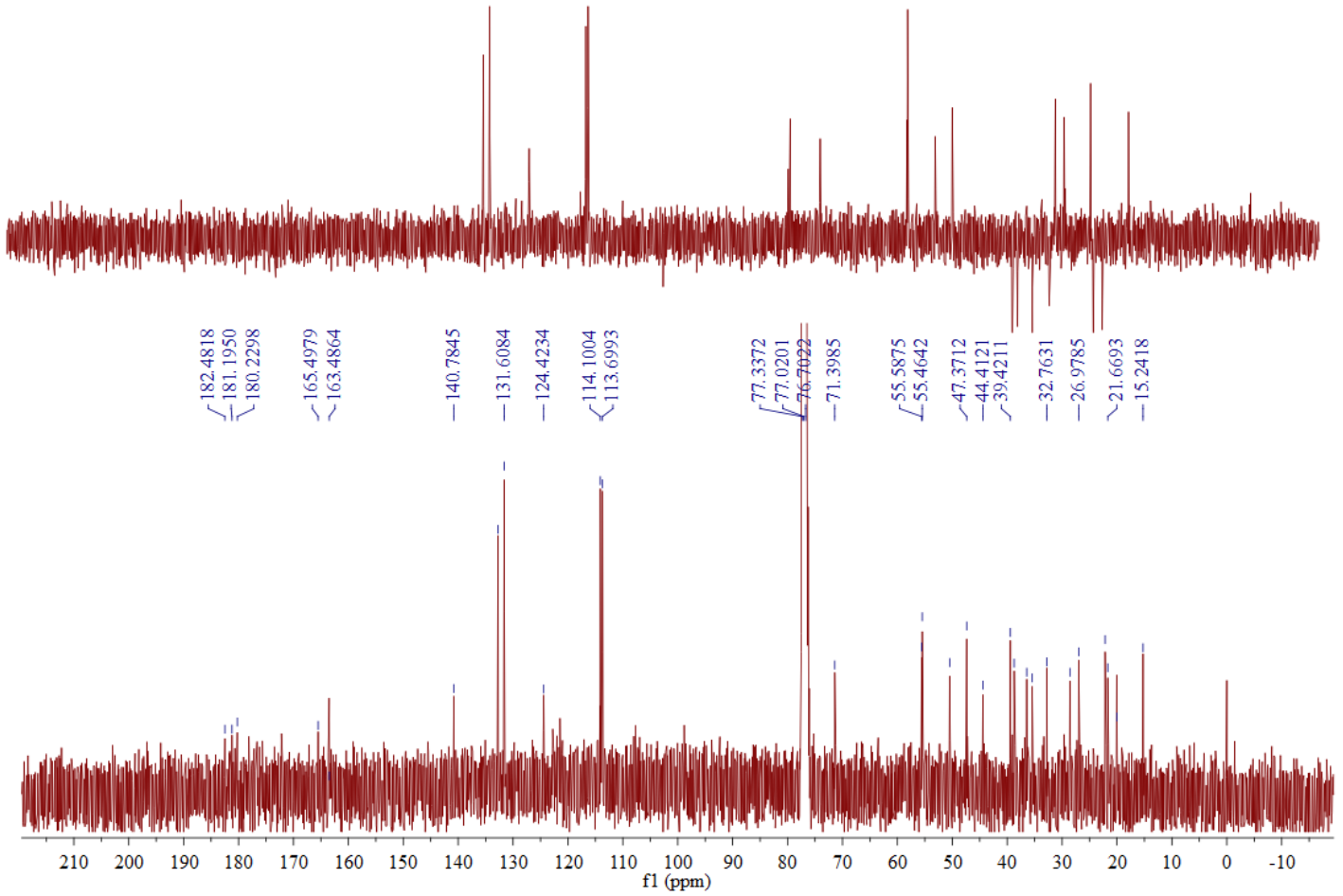
S76 HMBC Spectrum of **2b** in $CDCl_3$



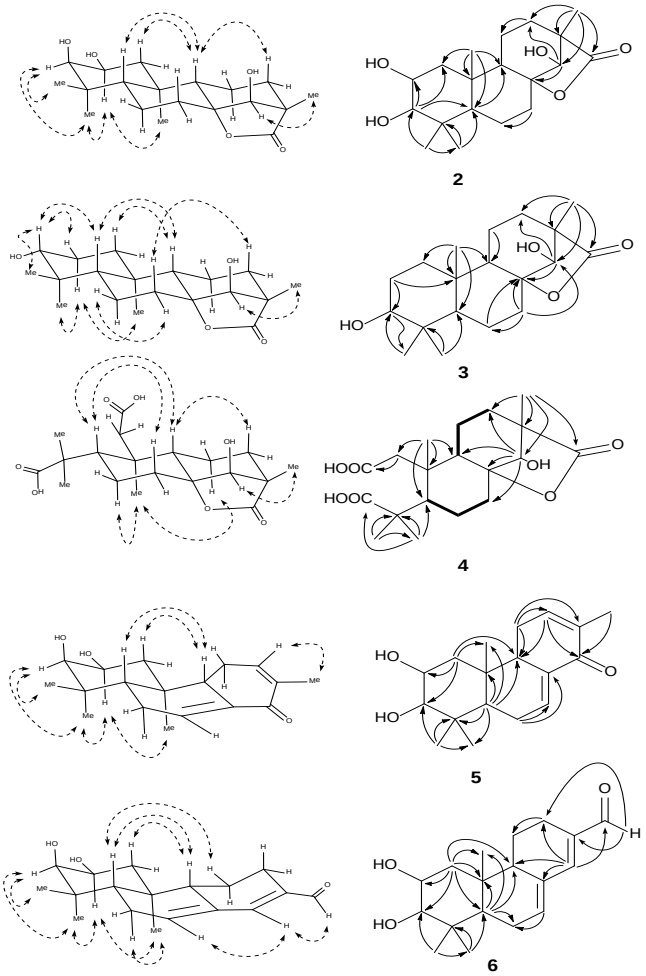
S77 ^{1}H NMR Spectrum of **1a** in $CDCl_3$



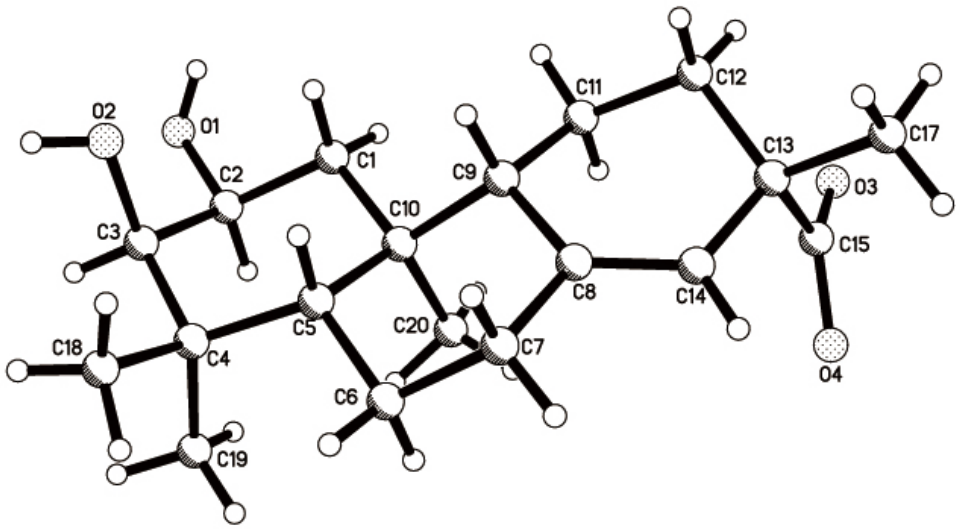
S78 ^{13}C NMR Spectrum of **1a** in $CDCl_3$



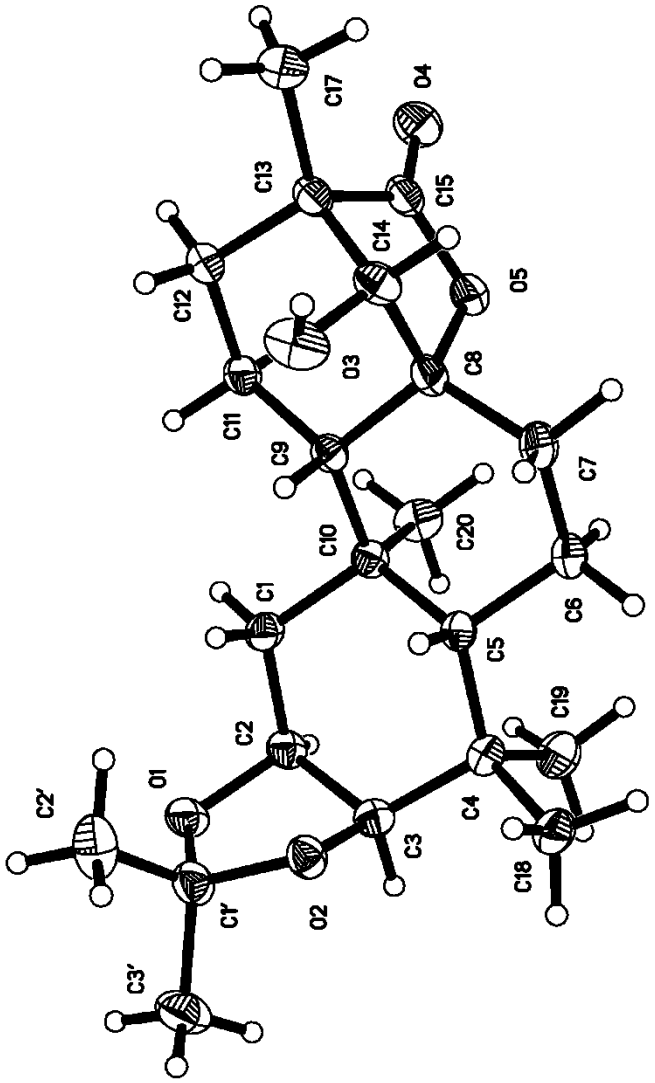
S**79** Selected ^{1}H-^{1}H COSY, HMBC, and NOE correlations of **2**-**6**.(^{1}H - ^{1}H COSY , HMBC , NOESY)



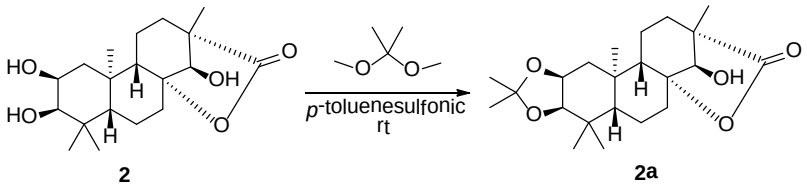
S80 Enlarged X-ray structure of **1**



S81 Enlarged X-ray structure of **2a**

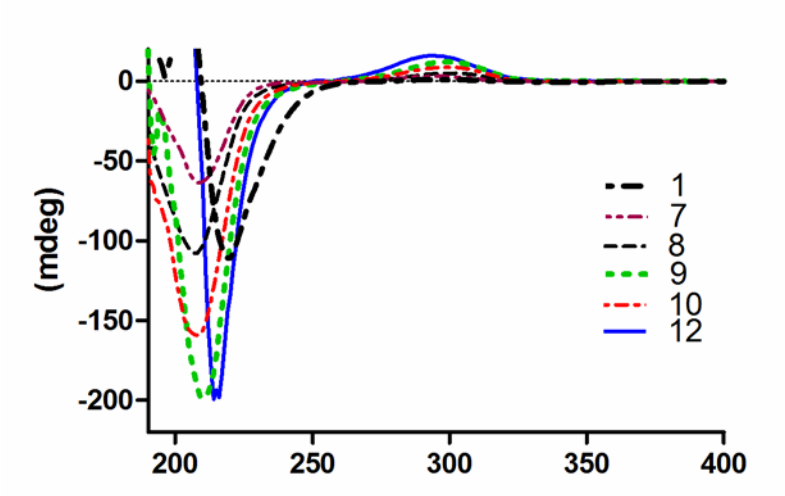


S82 The transformation of **2** to **2a**.

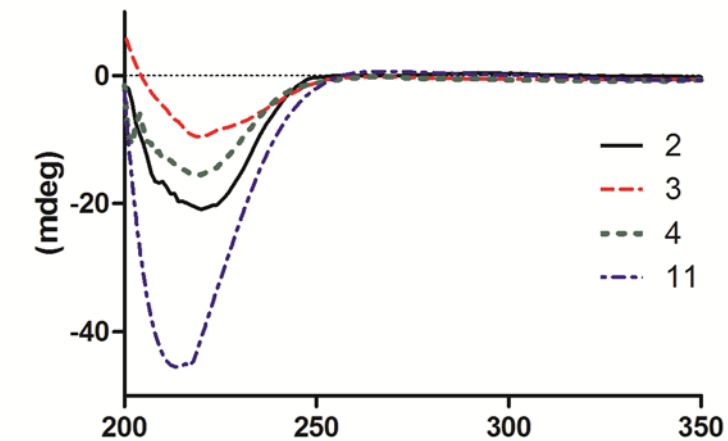


2 **2a**

S83 CD curves of **1**, **7**−**10** and **12**.



S84 CD curves of **2**−**4** and **11**.



S85 X-ray crystallographic data for **1**.

Chemical formula	$C_{38}H_{58}O_9$
Formula Mass	658.84
Crystal system	a = 22.0224 (3) Å alpha = 90 deg. b = 10.2959(1) Å beta = 98.260(1) deg. c = 7.9117(1) Å gamma = 90 deg.
Unit cell volume	1775.29 (4) Å
Temperature	153 (2) K
Space group	C1−2−1
No. of formula units per unit cell, *Z*	2
No. of reflections measured	21727
No. of independent reflections	3449
Final R_1 values	0.0398
Final R_1 values (all data)	0.0425
Final $wR(F^2)$ values (all data)	0.1072
Absorption coefficient	0.697
Radiation type	Cu Kα
Goodness of fit on F^2	1.056
Flack parameter	−0.1(2)
CCDC number	951382

Colorless crystals of 1 were obtained in $CHCl_3$: MeOH (20:1). Crystal data were obtained on a Xcalibur, Onyx, Nova detector employing graphite monochromated Copper-Kα radiation (λ=1.54178 Å) at 150(2) K and operating in the φ/ω scan mode. The crystal structure was solved by direct method using the program OLEX2 (O. V. Dolomanov, L. J. Bourhis, R. J. Gildea, J. A. K. Howard and H. Puschmann, OLEX2: a complete structure solution, refinement and analysis program. J. Appl. Cryst. (2009). 42, 339-341.) and subsequent Fourier difference techniques, and refined anisotropically by full-matrix least-squares on F^2 using OLEX2 (O. V. Dolomanov, L. J. Bourhis, R. J. Gildea, J. A. K. Howard and H. Puschmann, OLEX2: a complete structure solution, refinement and analysis program. J. Appl. Cryst. (2009). 42, 339-341.). All non-hydrogen atoms were refined anisotropically. The hydrogen atom positions were geometrically idealized and

allowed to ride on their parent atoms. Crystallographic data for 1 have been deposited at the Cambridge Crystallographic Data Centre (deposition No. CCDC-951382). Copies of these data can be obtained free of charge via www.ccdc.cam.ac.uk/conts/retrieving.html or from the Cambridge Crystallographic Data Centre, 12, Union Road, Cambridge CB21EZ, UK. [fax: (+44) 1223-336-033; or email: deposit@ccdc.cam.ac.uk].

S86 X-ray crystallographic data for **2a**.

Chemical formula	$C_{22}H_{34}O_5$
Formula Mass	378.49
Crystal system	a = 11.9418(3) Å alpha = 90.00 deg. b = 12.1022(3) Å beta = 90.00 deg. c = 14.2821(3) Å gamma = 90.00 deg.
Unit cell volume	2064.08(8) Å
Temperature	150 (2) K
Space group	*P*21−21−21
No. of formula units per unit cell, *Z*	4
No. of reflections measured	17564
No. of independent reflections	3671
R_{int}	0.0312
Final R_1 values	0.0324
Final R_1 values (all data)	0.0340
Final $wR(F^2)$ values (all data)	0.0808
Absorption coefficient	0.682
Radiation type	Cu Kα
Goodness of fit on F^2	1.105
Flack parameter	−0.11(14)
CCDC number	951383

Colorless crystals of **2a** were obtained in $CHCl_3$: MeOH (20:1). Crystal data were obtained on a Bruker APEX CCD detector employing graphite monochromated Copper-Kα radiation (λ=1.54178 Å) at 150(2) K and operating in the φ/ω scan mode. The crystal structure was solved by direct method using the program SHELXS-97 (G. M. Sheldrick, *SHELXS-97: Program for X-ray Crystal Structure Solution*, University of Gottingen, Germany, 1997) and subsequent Fourier difference techniques, and refined anisotropically by full-matrix least-squares on F^2 using SHELXL-97 (G. M. Sheldrick, *SHELX-97: Program for X-ray Crystal Structure Refinement*, University of Gottingen, Germany, 1997). All

non-hydrogen atoms were refined anisotropically. The hydrogen atom positions were geometrically idealized and allowed to ride on their parent atoms. Crystallographic data for **2a** have been deposited at the Cambridge Crystallographic Data Centre (deposition No. CCDC-951383). Copies of these data can be obtained free of charge *via* www.ccdc.cam.ac.uk/conts/retrieving.html or from the Cambridge Crystallographic Data Centre, 12, Union Road, Cambridge CB21EZ, UK. [fax: (+44) 1223-336-033; or email: deposit@ccdc.cam.ac.uk].