

Supplementary Data

C19-Norditerpenoid Alkaloids from *Aconitum szechenyianum*

Bei Song^{1,2,†}, Bingliang Jin^{3,†}, Yuze Li^{1,†}, Fei Wang⁴, Yifu Yang³, Yuwen Cui⁵, Xiaomei Song², Zhenggang Yue^{2,*} and Jianli Liu^{1,*}

¹ The College of Life Sciences, Northwest University, Xi'an 710069, China; songbei168@126.com (B.S.); lyz1990yeah@163.com (Y.L.)

² Shaanxi Collaborative Innovation Center of Chinese Medicinal Resource Industrialization, School of Pharmacy, Shaanxi University of Chinese Medicine, Xianyang 712046, China; songxiaom@126.com (X.S.)

³ Experiment Center for Science and Technology, Shanghai University of Traditional Chinese Medicine, Shanghai 201203, China; jin872459317@126.com (B.J.); yangyifu@mail.shcnc.ac.cn (Y.Y.)

⁴ Shaanxi Institute for Food and Drug Control, Xi'an 710065, China; wf88-88@163.com (F.W.)

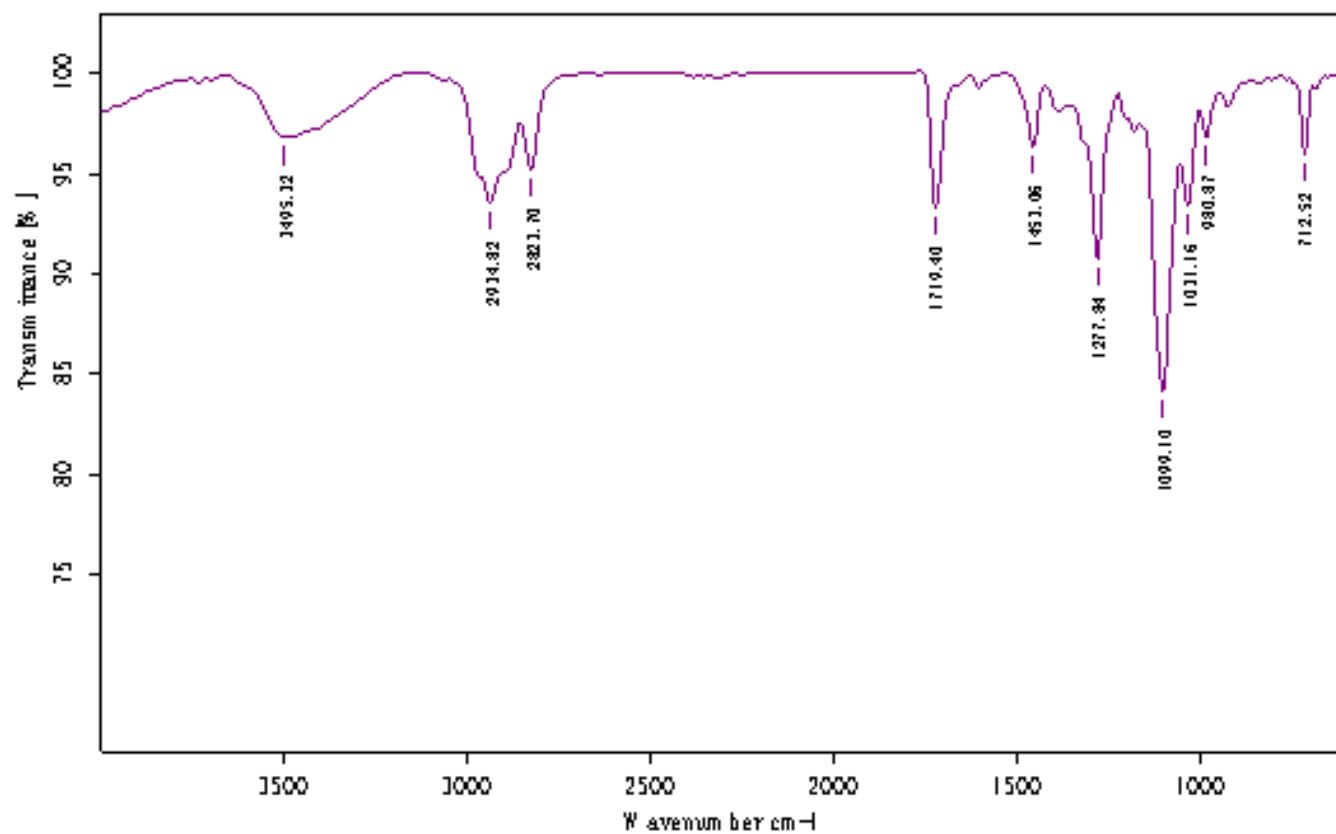
⁵ Department of Pharmacy, Xi'an Medical University, Xi'an 710021, China; polaris_101025@163.com (Y.C.)

* Correspondence: jlliu@nwu.edu.cn (J.L.); liuxingjian1981@163.com (Z.Y.); Tel.: +86-136-0929-8392 (J.L.); +86-029-3818-2209 (Z.Y.)

† These authors contribute equally to this work.

List of Content

No.	Content	Page
1	Figure S1. The IR spectrum of 1 (in KBr)	S3
2	Figure S2. The HR-ESI-MS spectrum of 1 (in MeOH)	S4
3	Figure S3. The ^1H NMR spectrum of 1 (in CDCl_3)	S5
4	Figure S4. The ^{13}C NMR spectrum of 1 (in CDCl_3)	S6
5	Figure S5. The HSQC spectrum of 1 (in CDCl_3)	S7
6	Figure S6. The HMBC spectrum of 1 (in CDCl_3)	S8
7	Figure S7. The ROESY spectrum of 1 (in CDCl_3)	S9
8	Figure S8. The IR spectrum of 2 (in KBr)	S10
9	Figure S9. The HR-ESI-MS spectrum of 2 (in MeOH)	S11
10	Figure S10. The ^1H NMR spectrum of 2 (in CDCl_3)	S12
11	Figure S11. The ^{13}C NMR spectrum of 2 (in CDCl_3)	S13
12	Figure S12. The HSQC spectrum of 2 (in CDCl_3)	S14
13	Figure S13. The HMBC spectrum of 2 (in CDCl_3)	S15
14	Figure S14. The ROESY spectrum of 2 (in CDCl_3)	S16
15	Figure S15. The IR spectrum of 3 (in KBr)	S17
16	Figure S16. The HR-ESI-MS spectrum of 3 (in MeOH)	S18
17	Figure S17. The ^1H NMR spectrum of 3 (in CDCl_3)	S19
18	Figure S18. The ^{13}C NMR spectrum of 3 (in CDCl_3)	S20
19	Figure S19. The HSQC spectrum of 3 (in CDCl_3)	S21
20	Figure S20. The HMBC spectrum of 3 (in CDCl_3)	S22
21	Figure S21. The ROESY spectrum of 3 (in CDCl_3)	S23



E:200

溴代乙酸钾水溶液pH

halogenolipid / bioactive

2018-3-24

Page 1/1

Figure S1. The IR spectrum of 1 (in KBr).

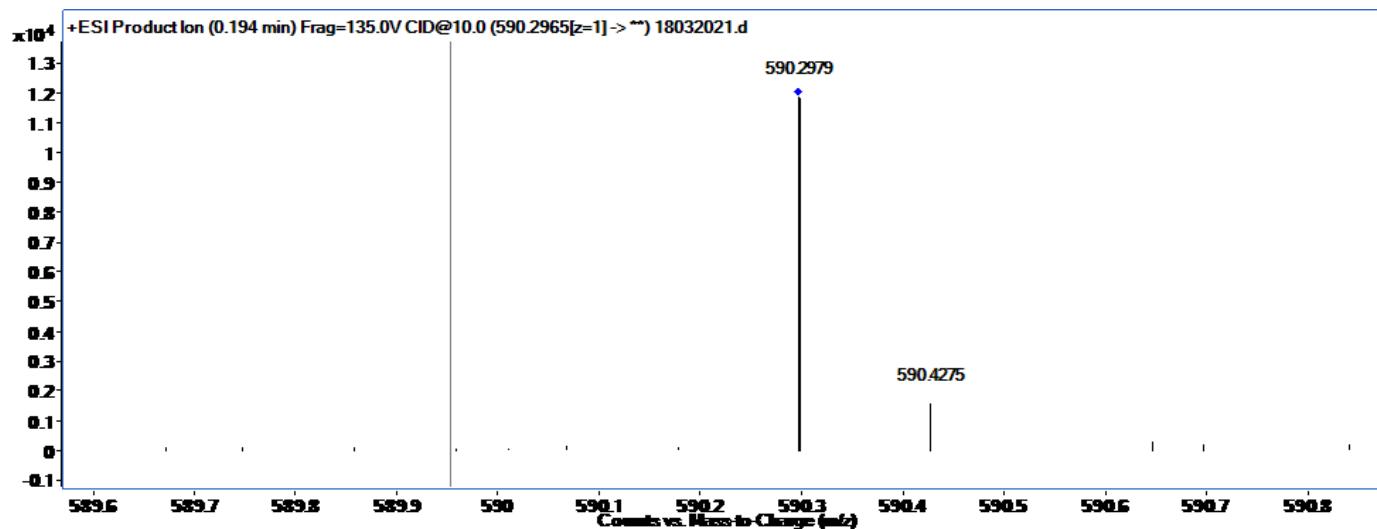


Figure S2. The HR-ESI-MS spectrum of 1(in MeOH).

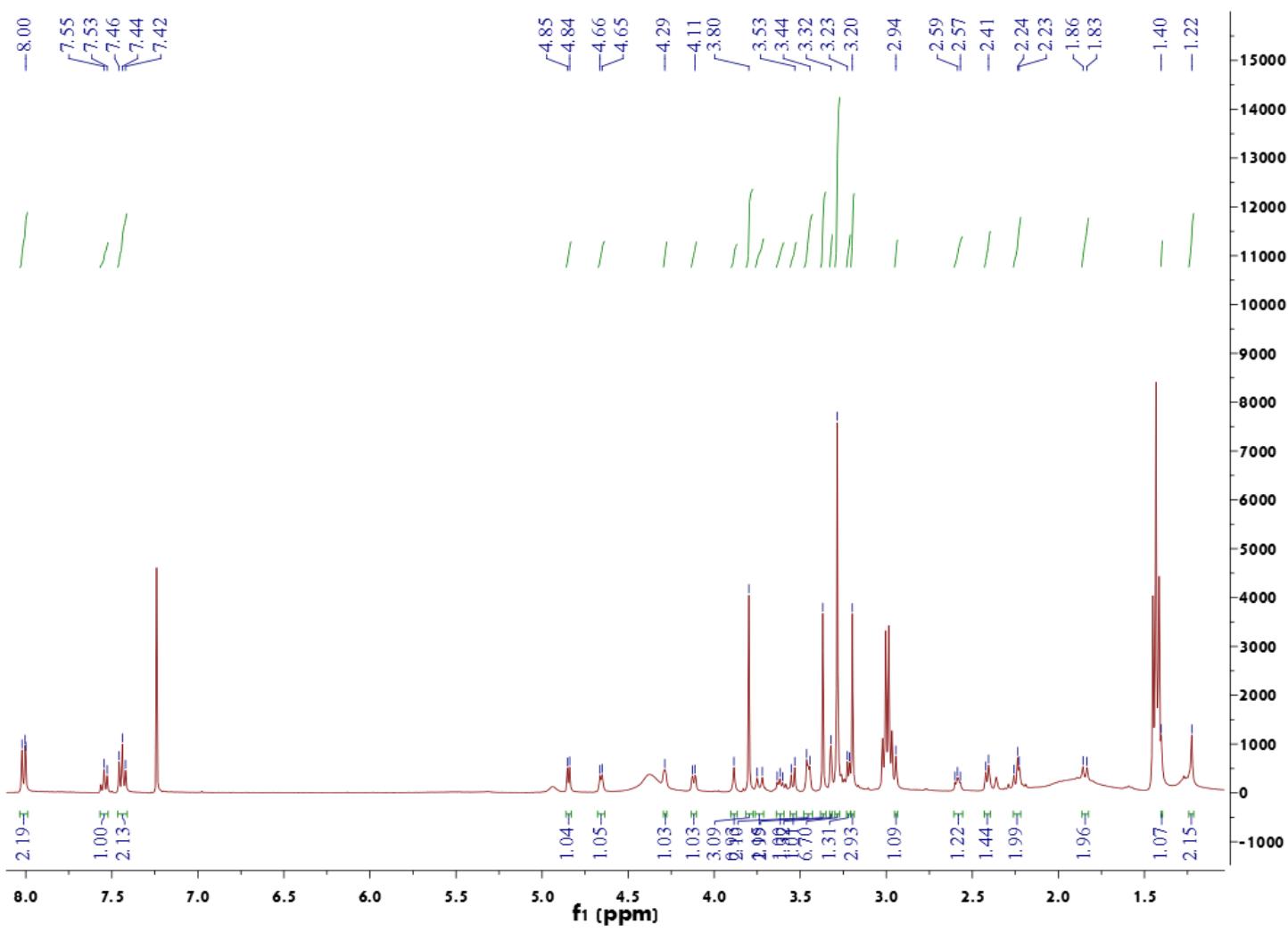


Figure S3. The ^1H -NMR spectrum at 400 MHz of 1 (in CDCl_3).

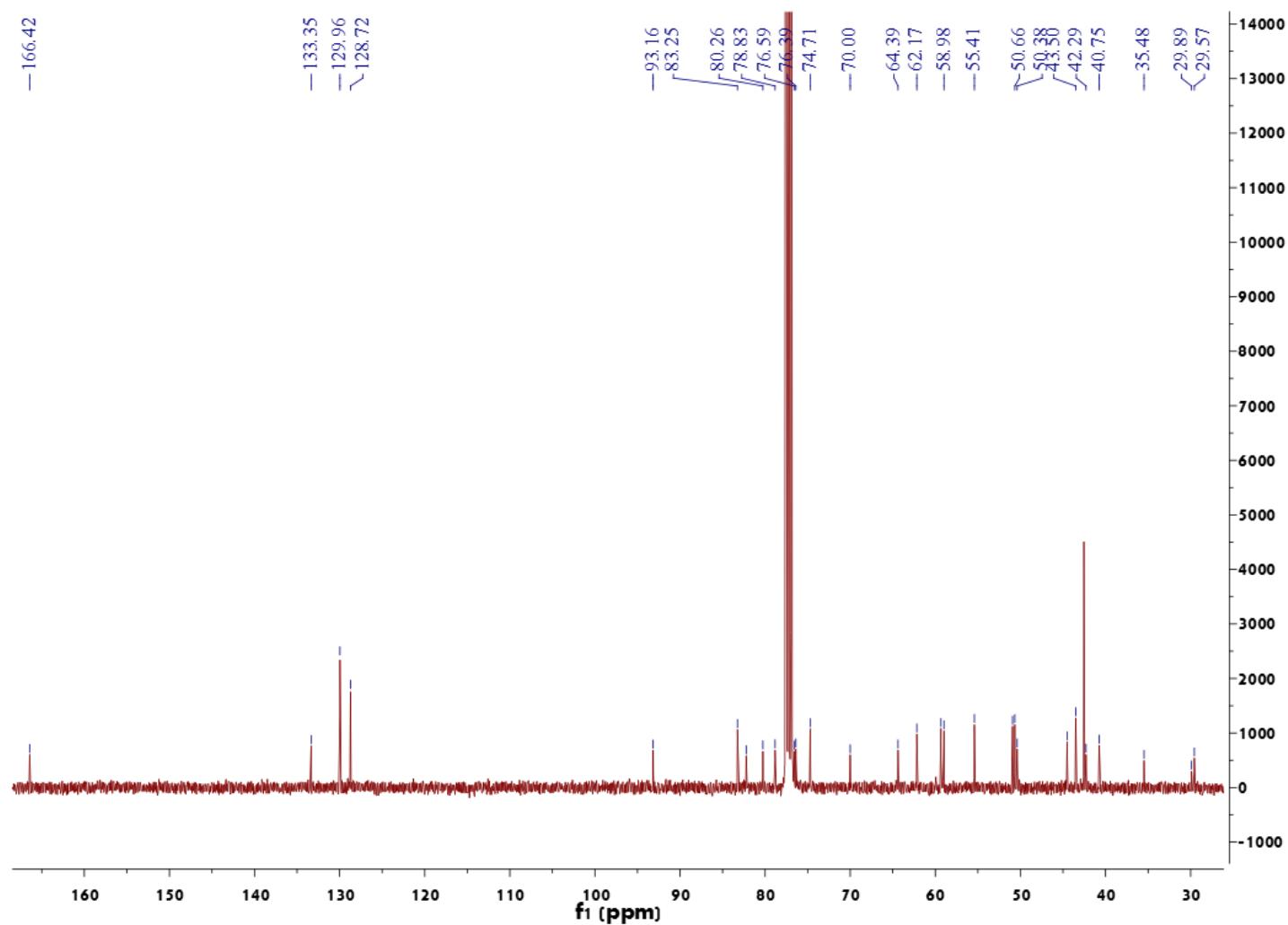


Figure S4. The ^{13}C -NMR spectrum at 100 MHz of 1 (in CDCl_3).

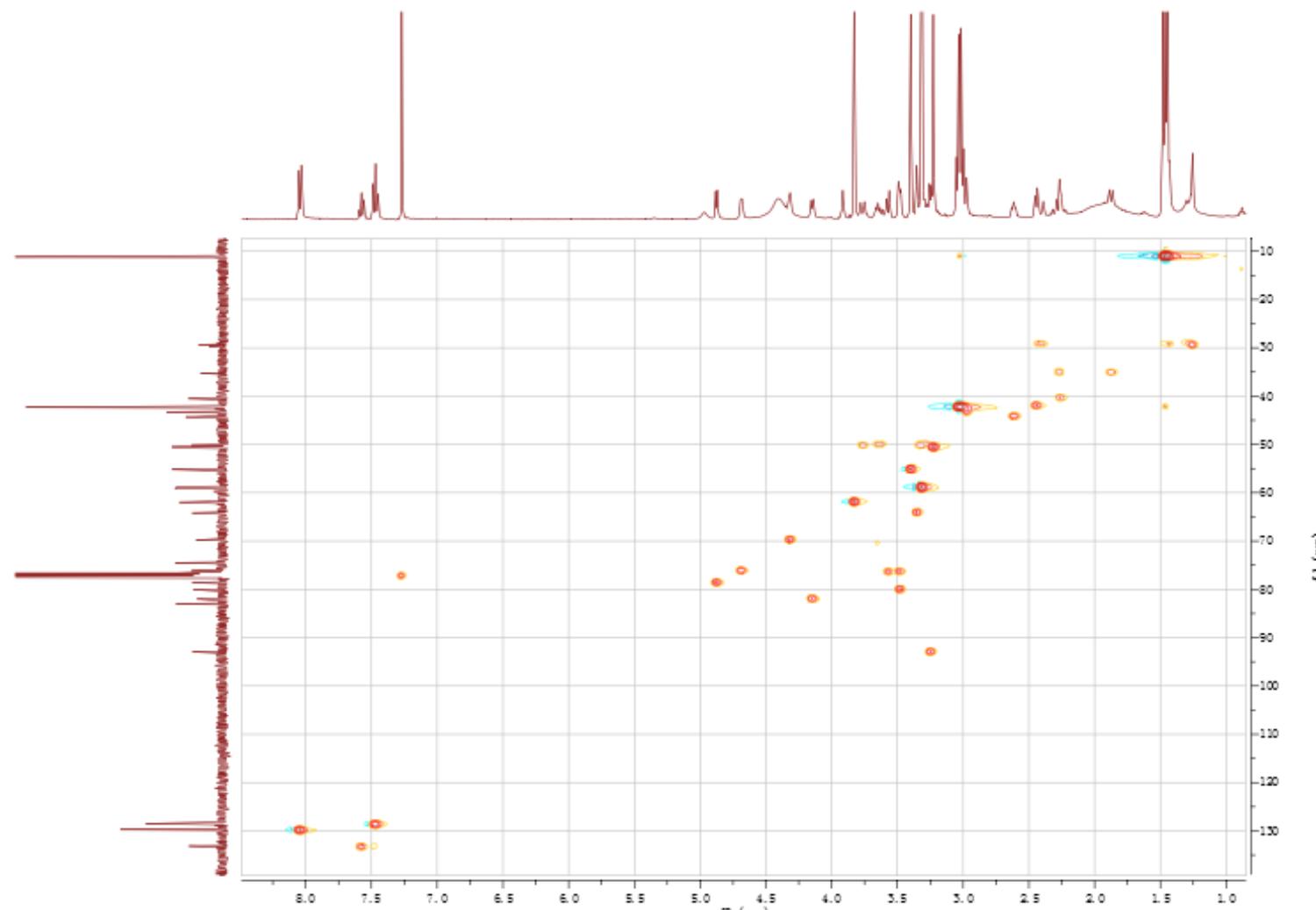


Figure S5. The HSQC spectrum of 1 (in CDCl_3).

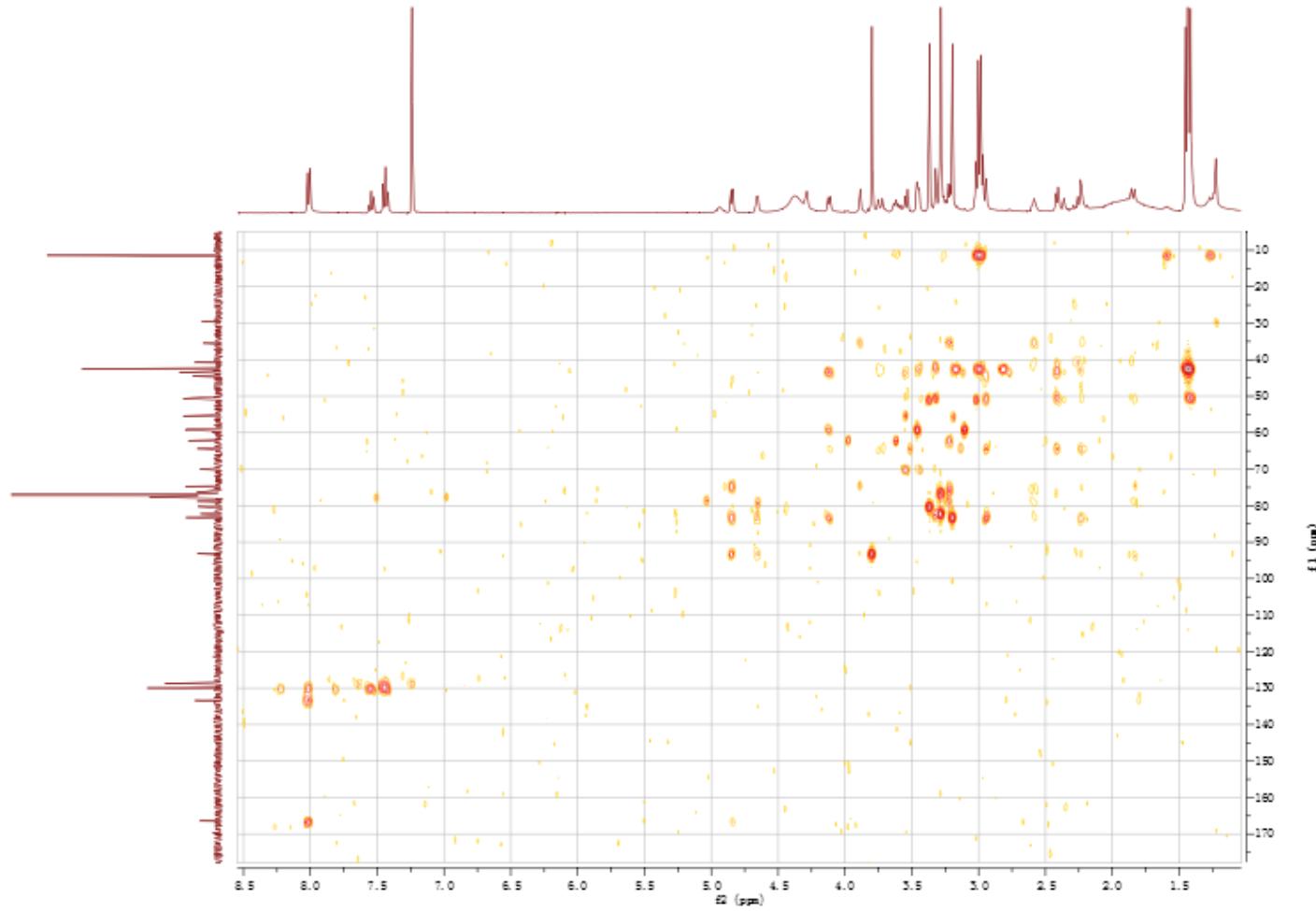


Figure S6. The HMBC spectrum of 1 (in CDCl_3).

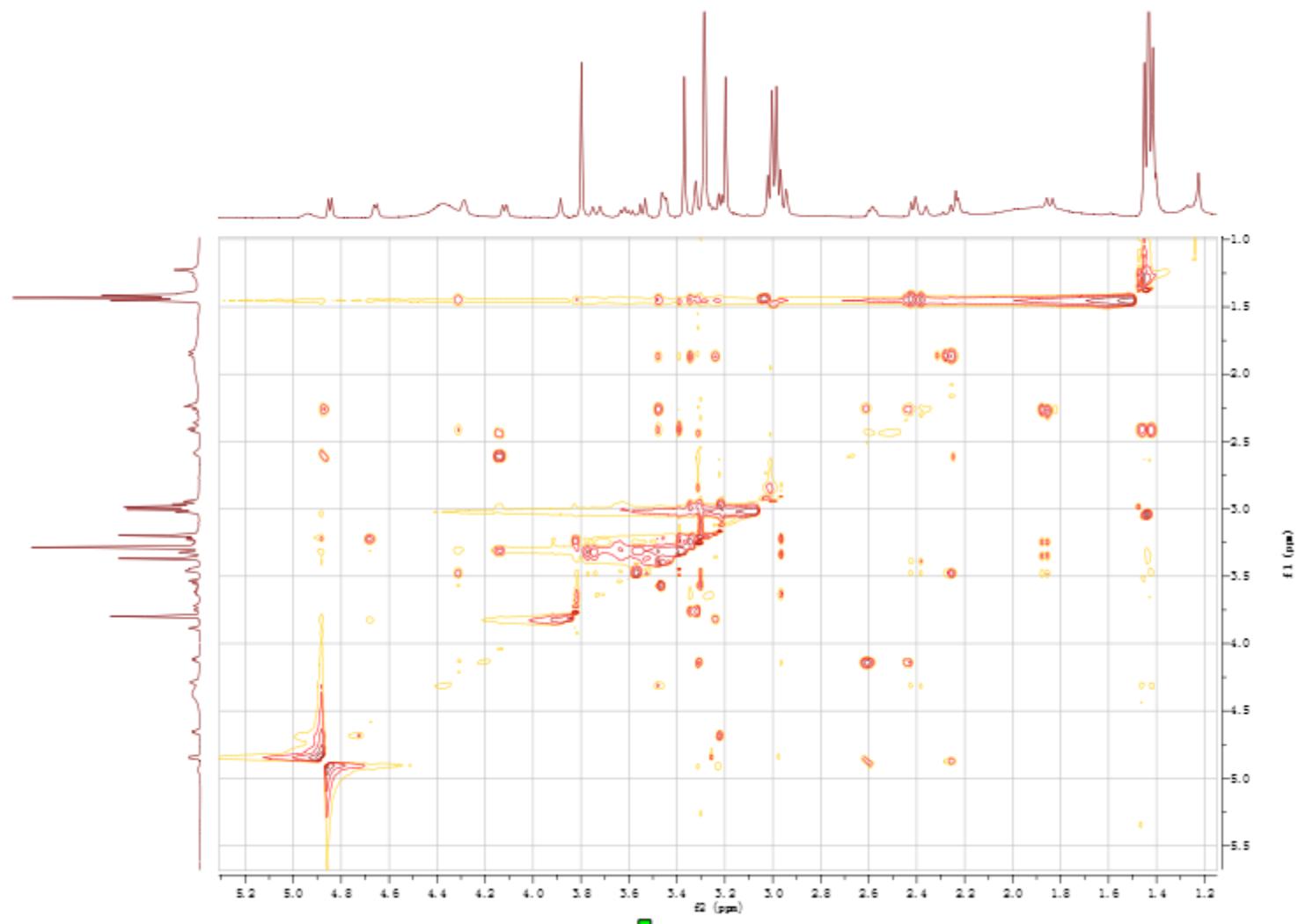
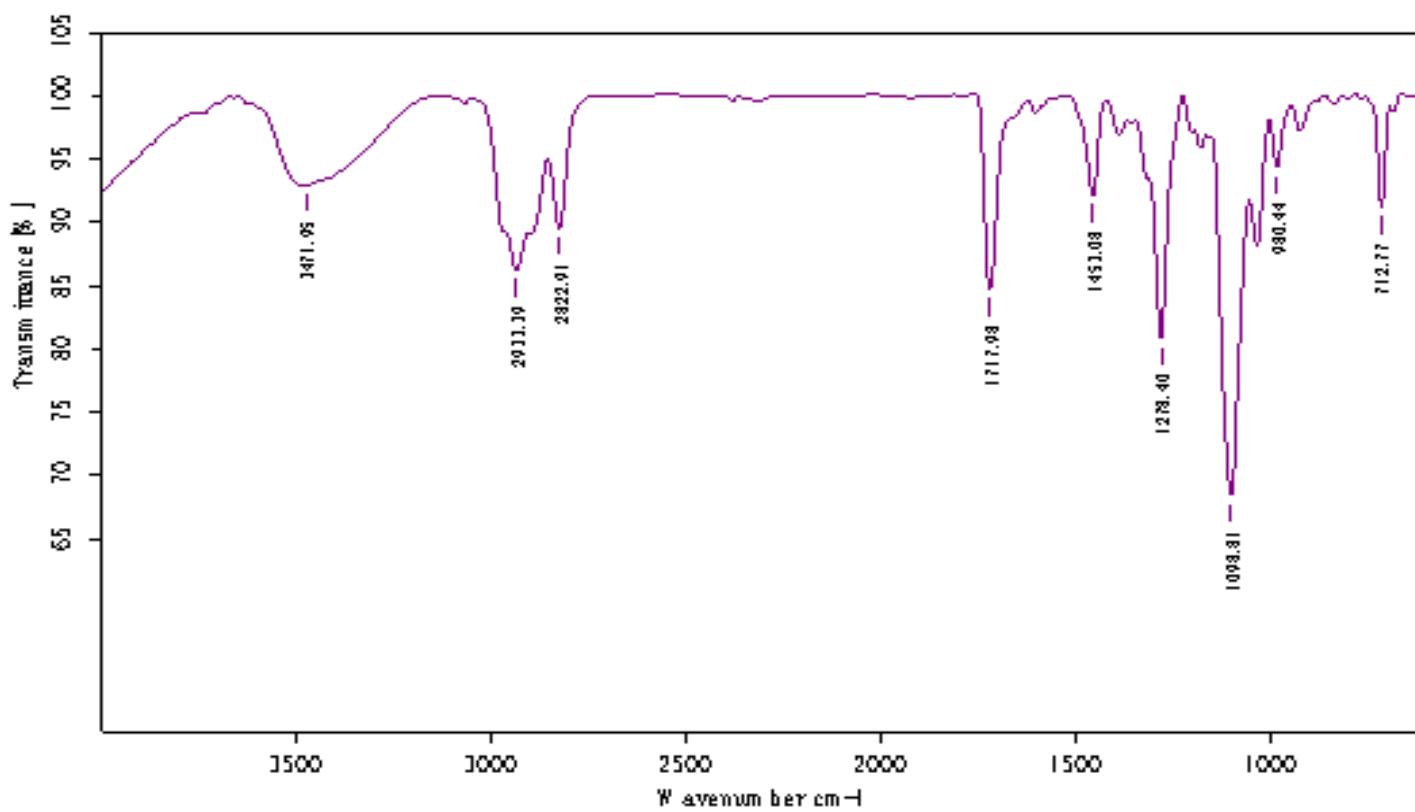


Figure S7. The ROESY spectrum of 1 (in CDCl_3)



E.200 3.0.0

新規2位-冠叶酸類未測pH

haluo en LiPo and Jolococeasip

2013-3-24

Page 1/1

Figure S8. The IR spectrum of 2 (in KBr).

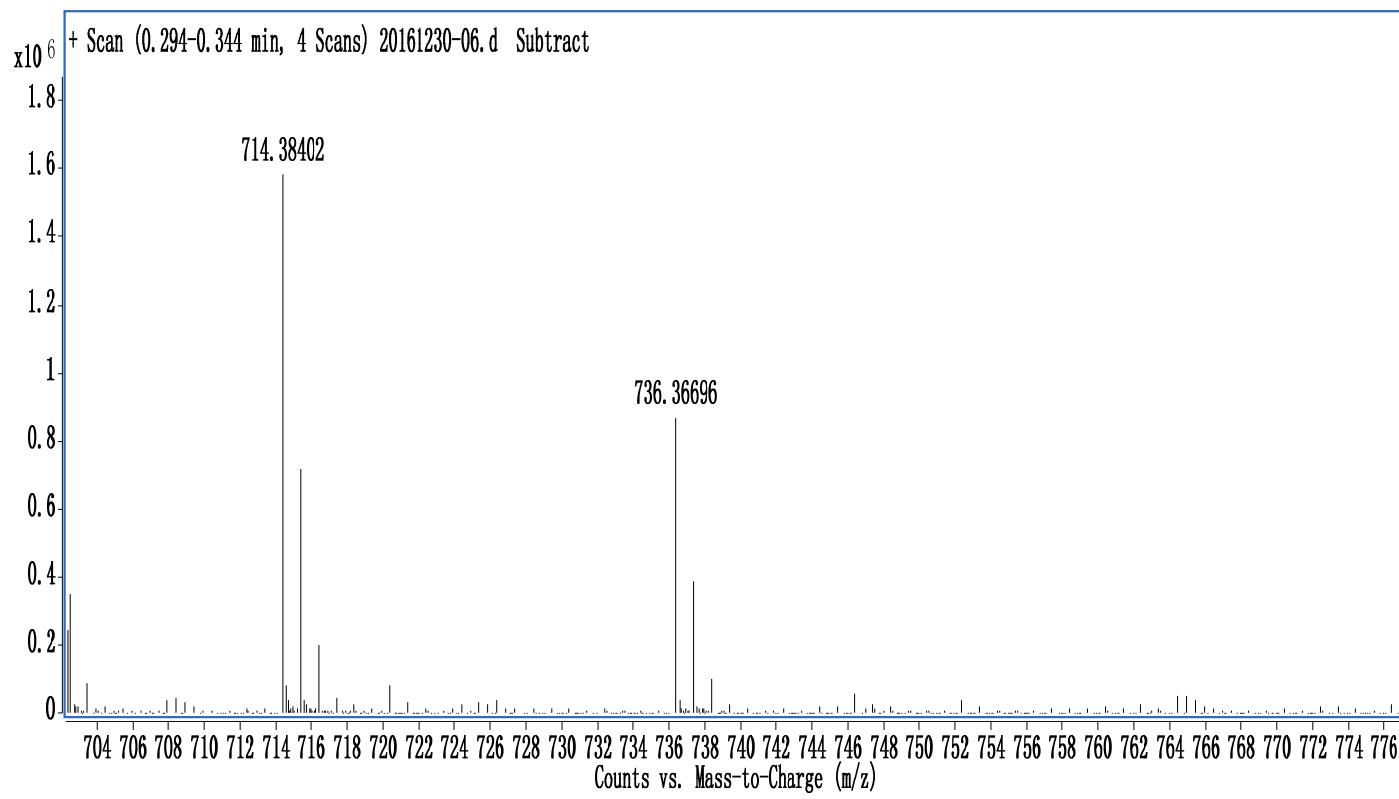


Figure S9. The HR-ESI-MS spectrum of 2(in MeOH).

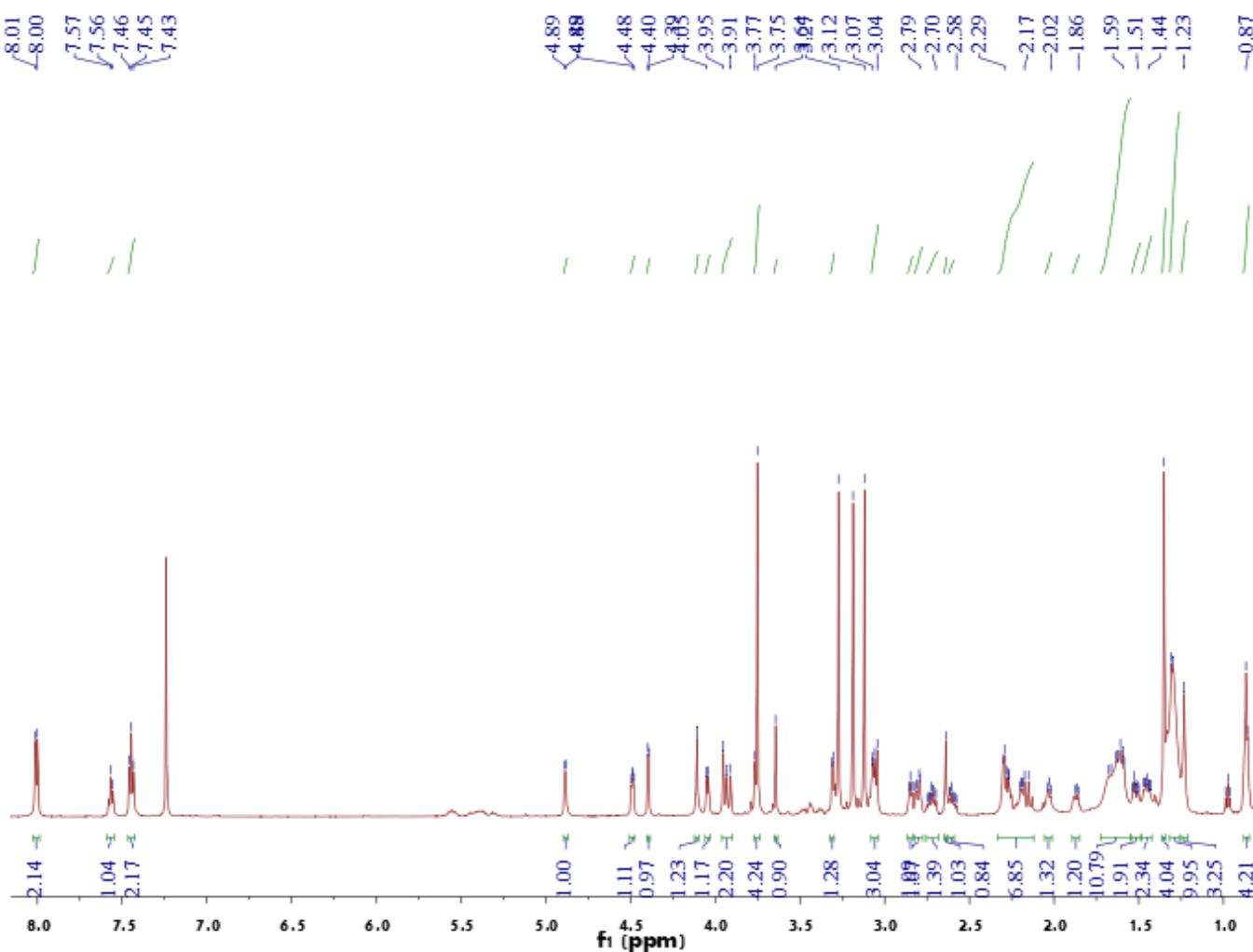


Figure S10. The ^1H -NMR spectrum at 600 MHz of **2** (in CDCl_3).

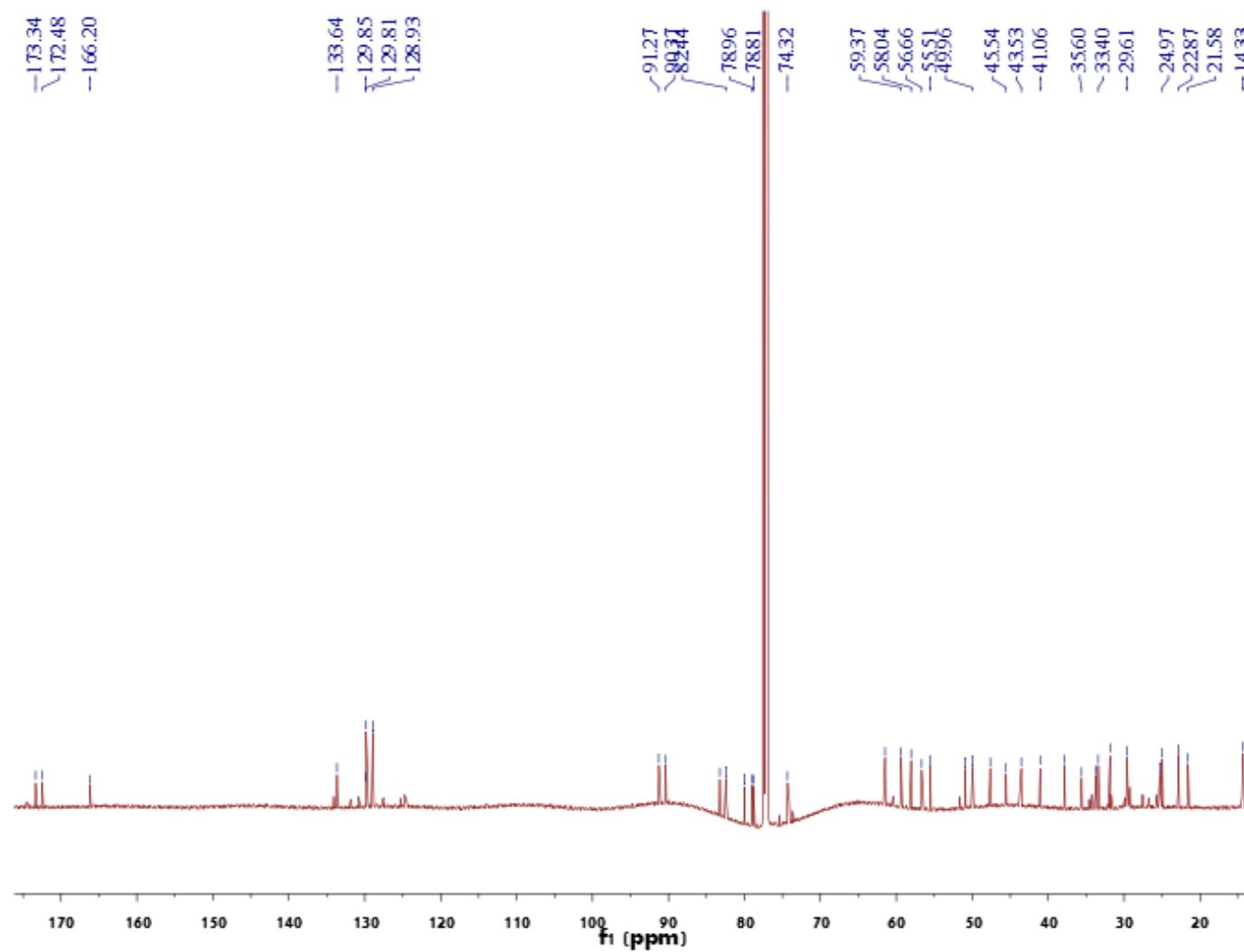


Figure S11. The ^{13}C -NMR spectrum at 150 MHz of 2 (in CDCl_3)

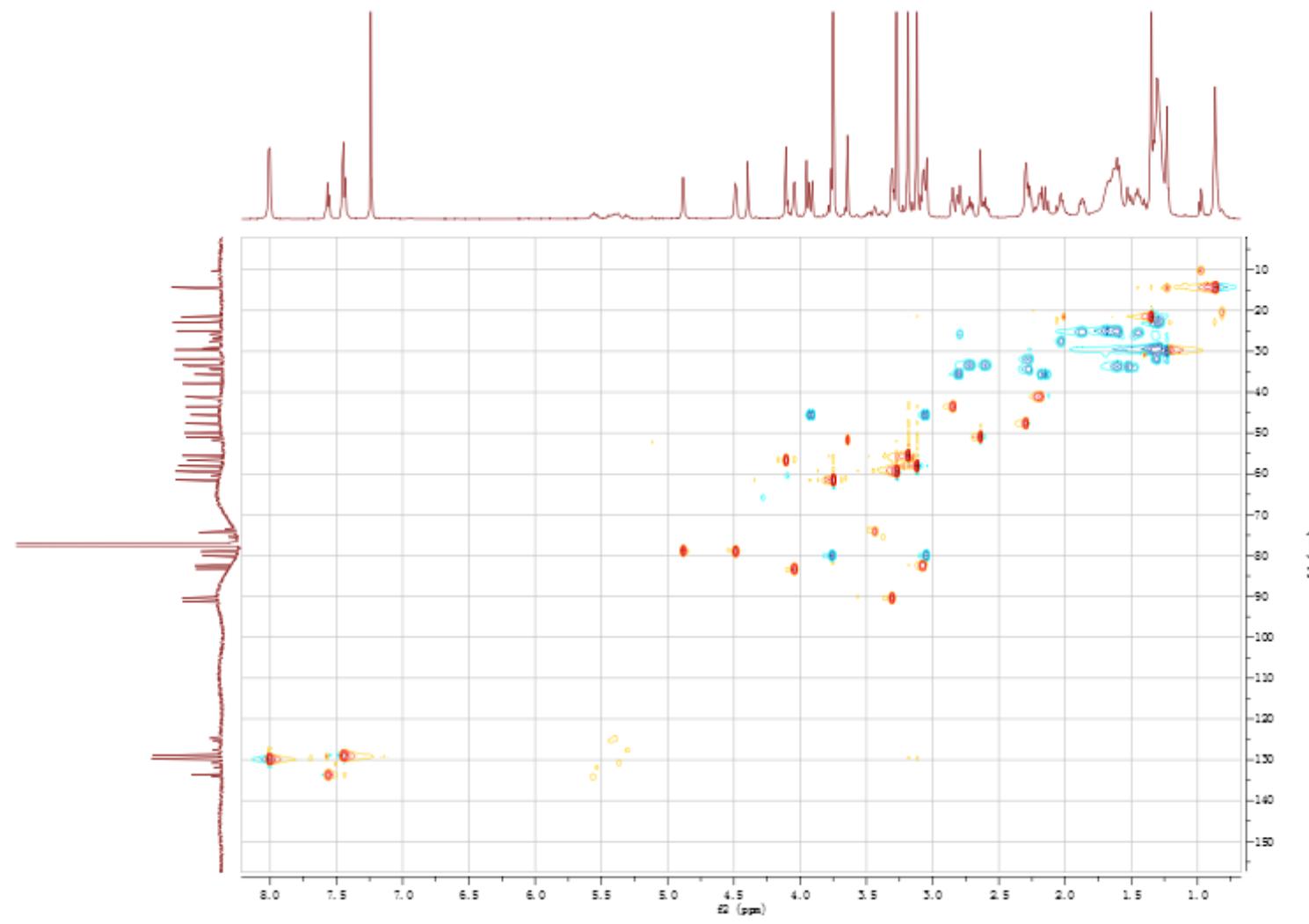


Figure S12. The HSQC spectrum of **2** (in CDCl_3).



Figure S13. The HMBC spectrum of 2 (in CDCl_3).

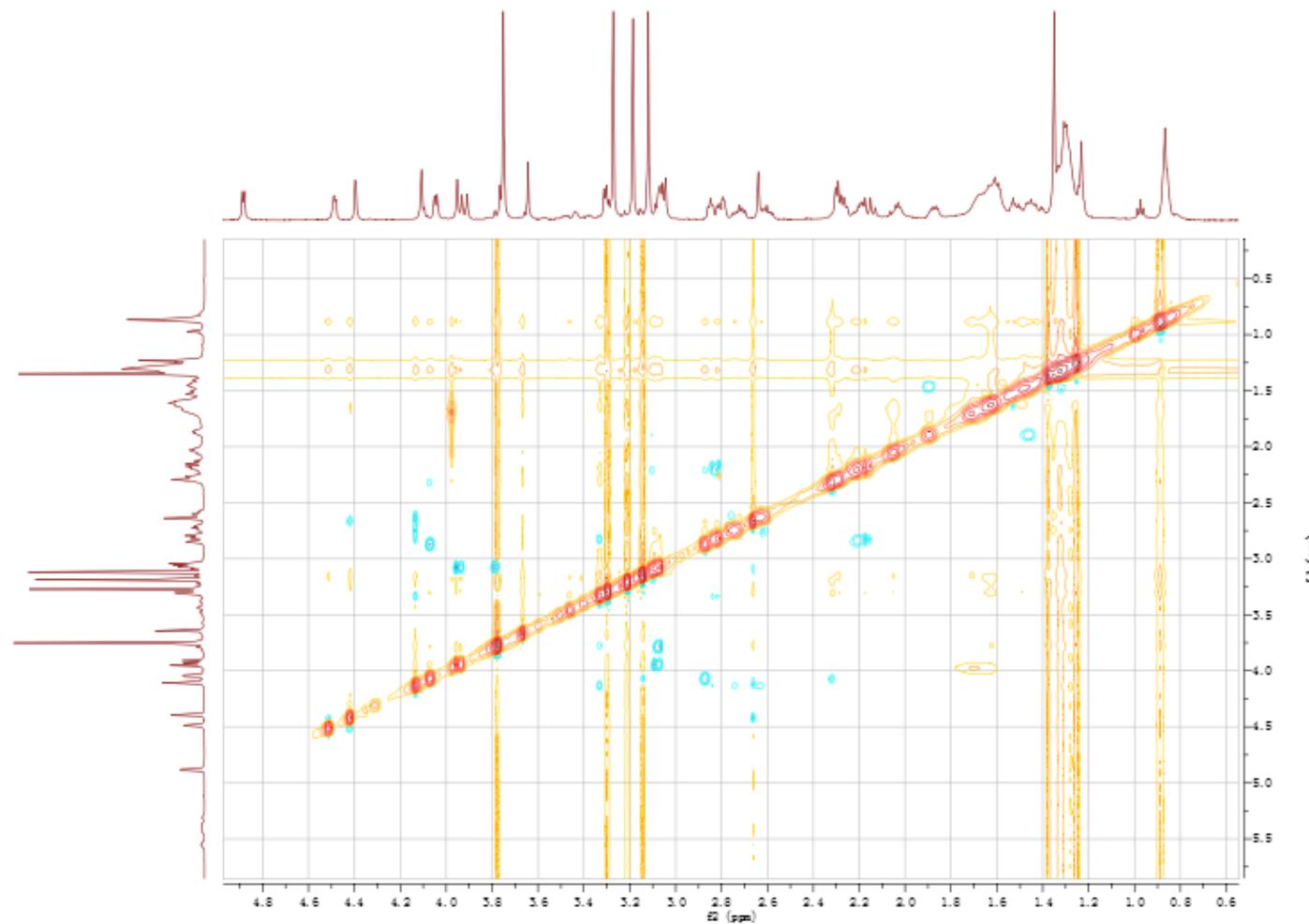
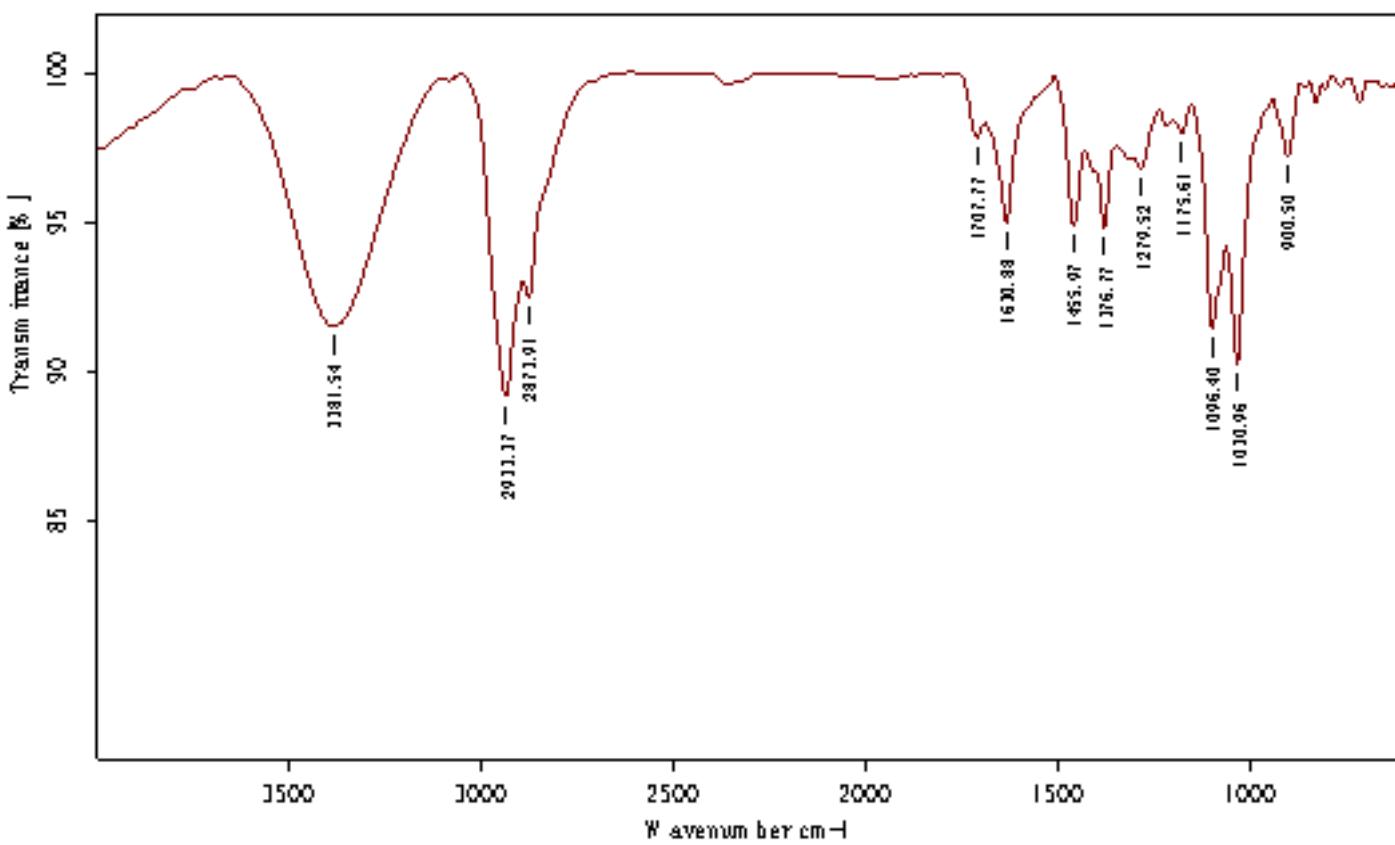


Figure S14. The ROESY spectrum of 2 (in CDCl_3).



E.200 版2.1

新物种-双叶区热木属

halus elliptica and variegata

2018-3-24

Figure S15. The IR spectrum of 3 (in KBr).

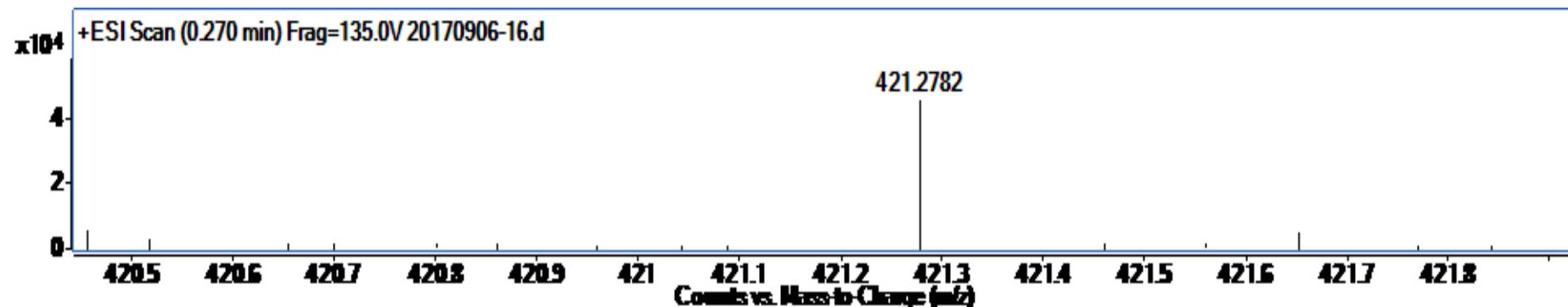


Figure S16. The HR-ESI-MS spectrum of 3(in MeOH).

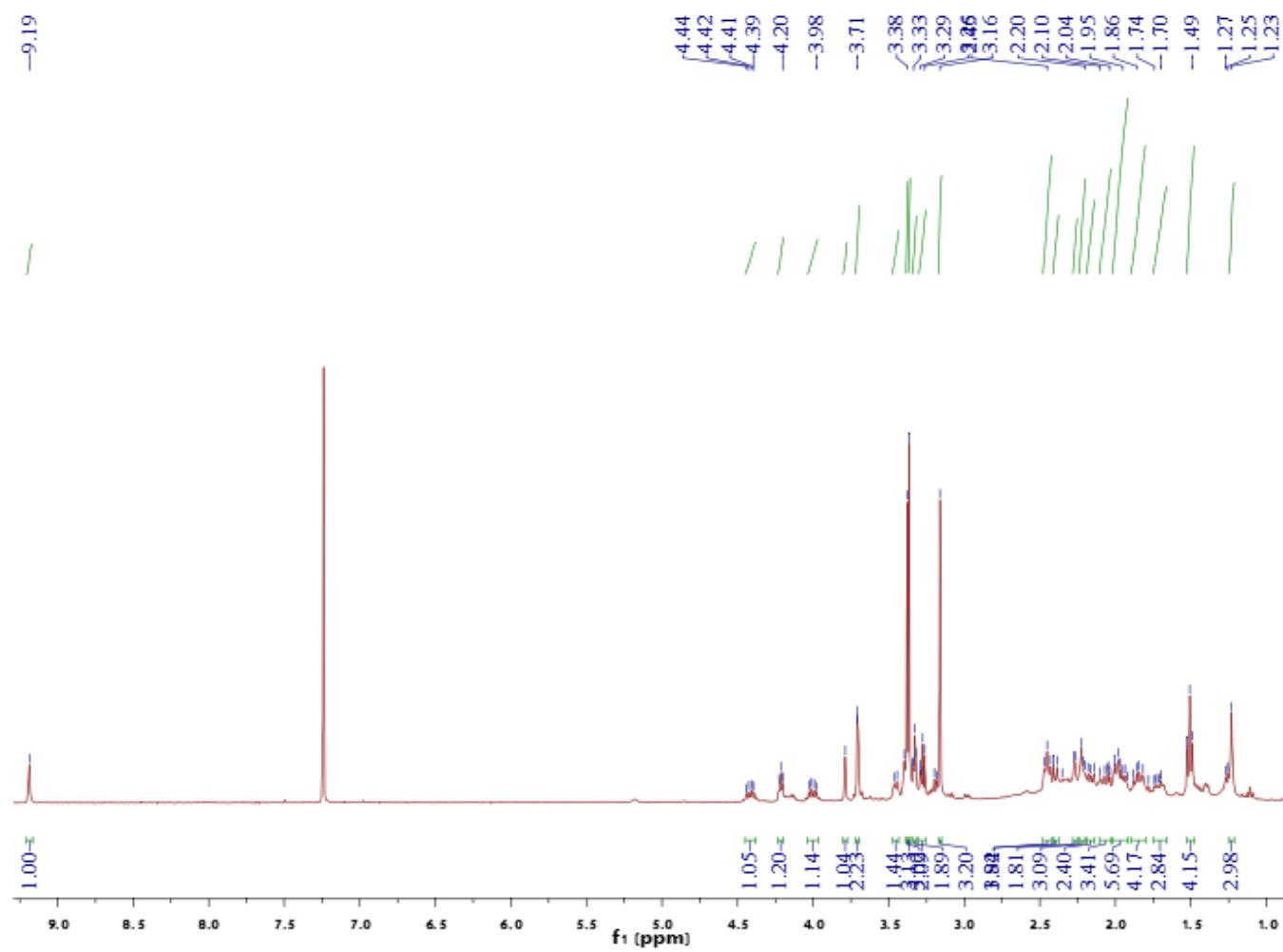


Figure S17. The ^1H -NMR spectrum at 400 MHz of 3 (in CDCl_3).

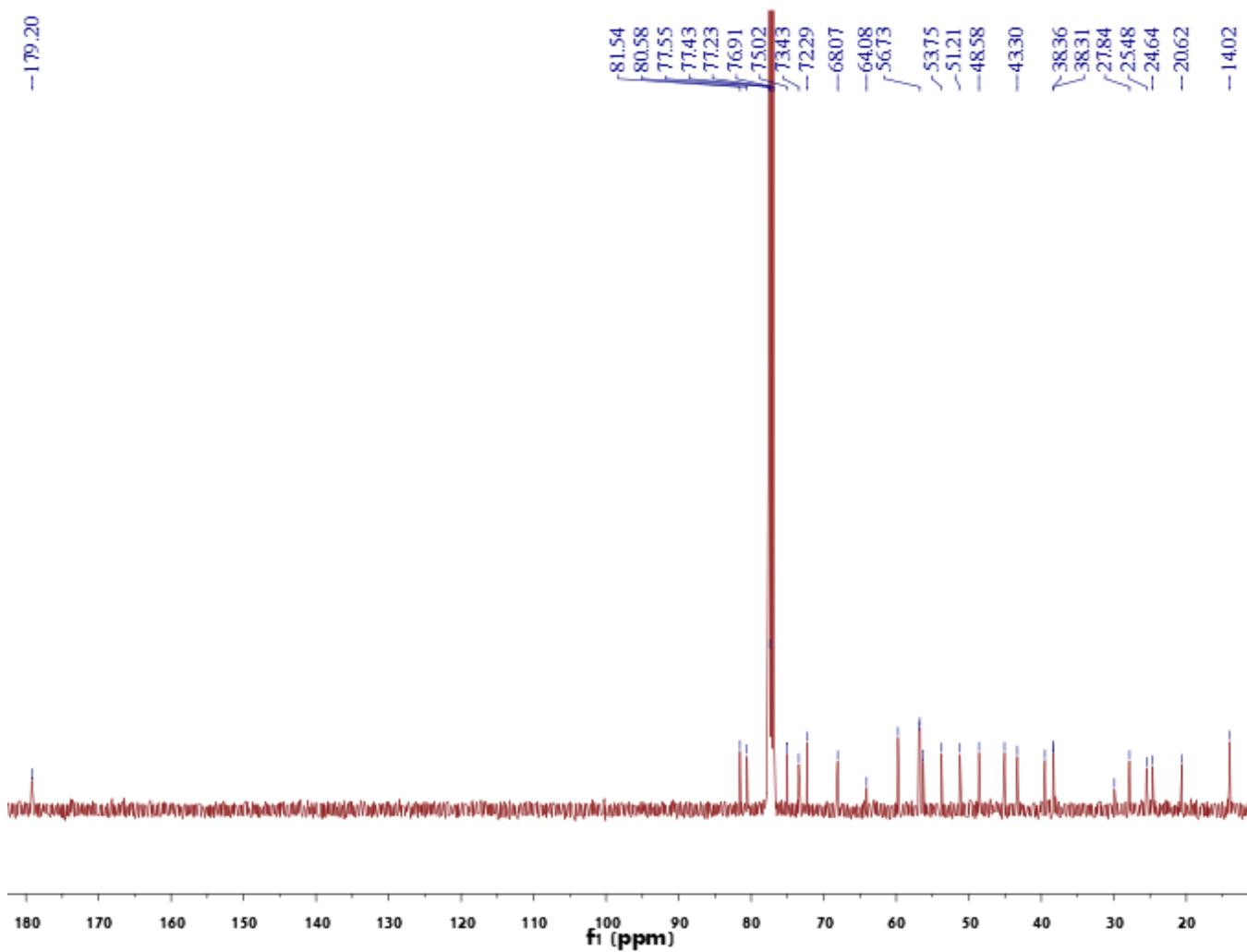


Figure S18. The ^{13}C -NMR spectrum at 100 MHz of 3 (in CDCl_3).

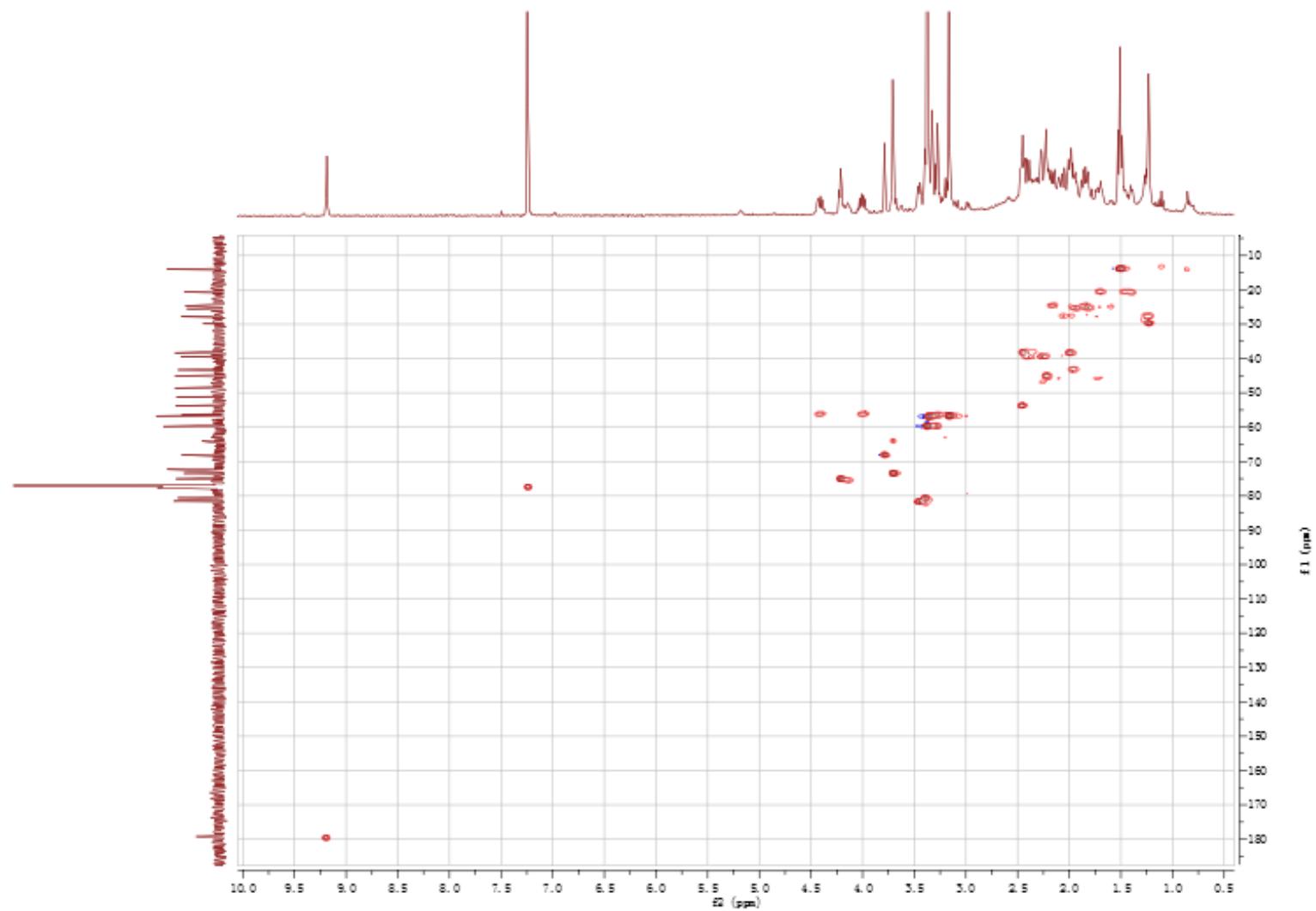


Figure S19. The HSQC spectrum of 3 (in CDCl_3).

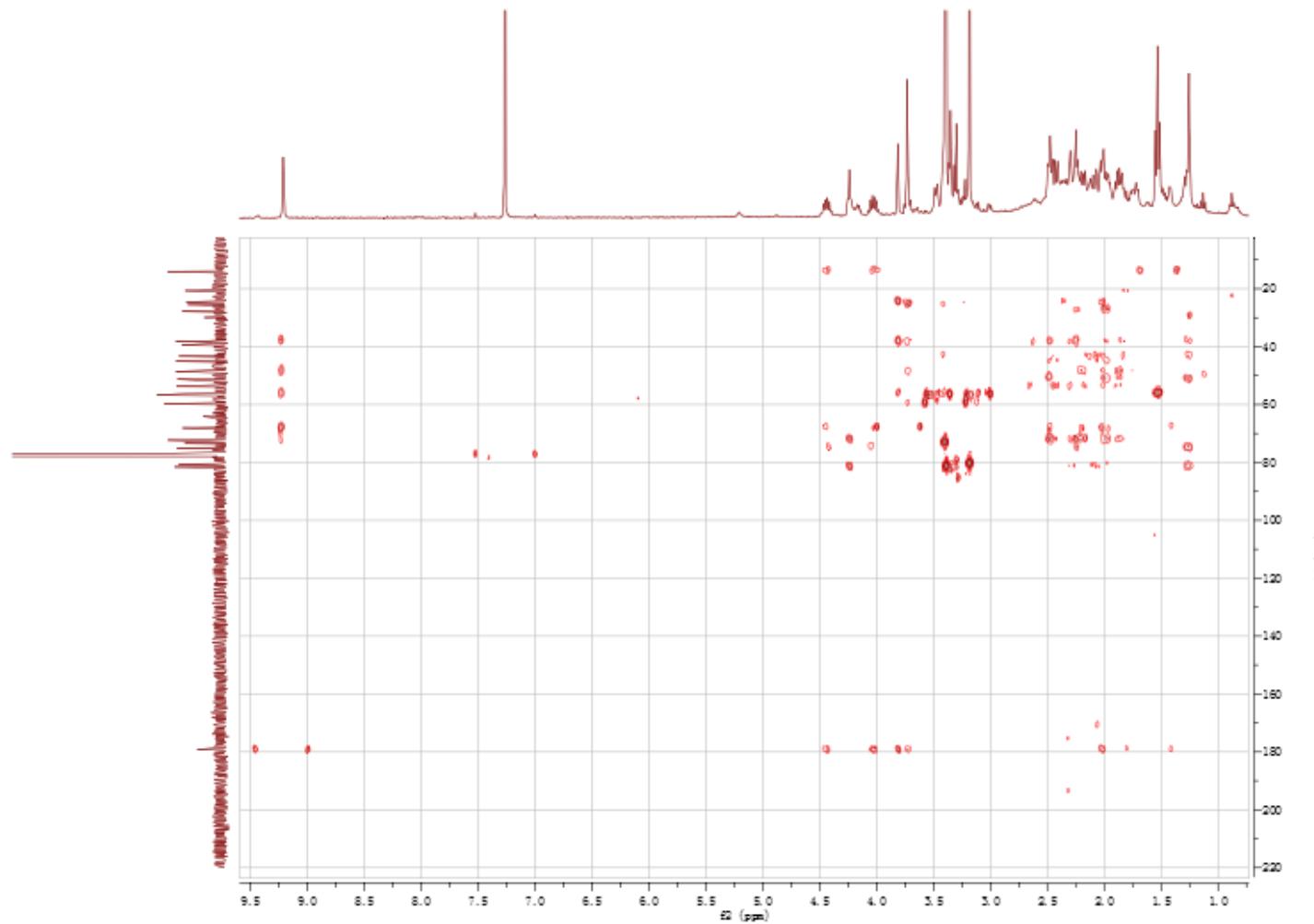


Figure S20. The HMBC spectrum of 3 (in CDCl_3).

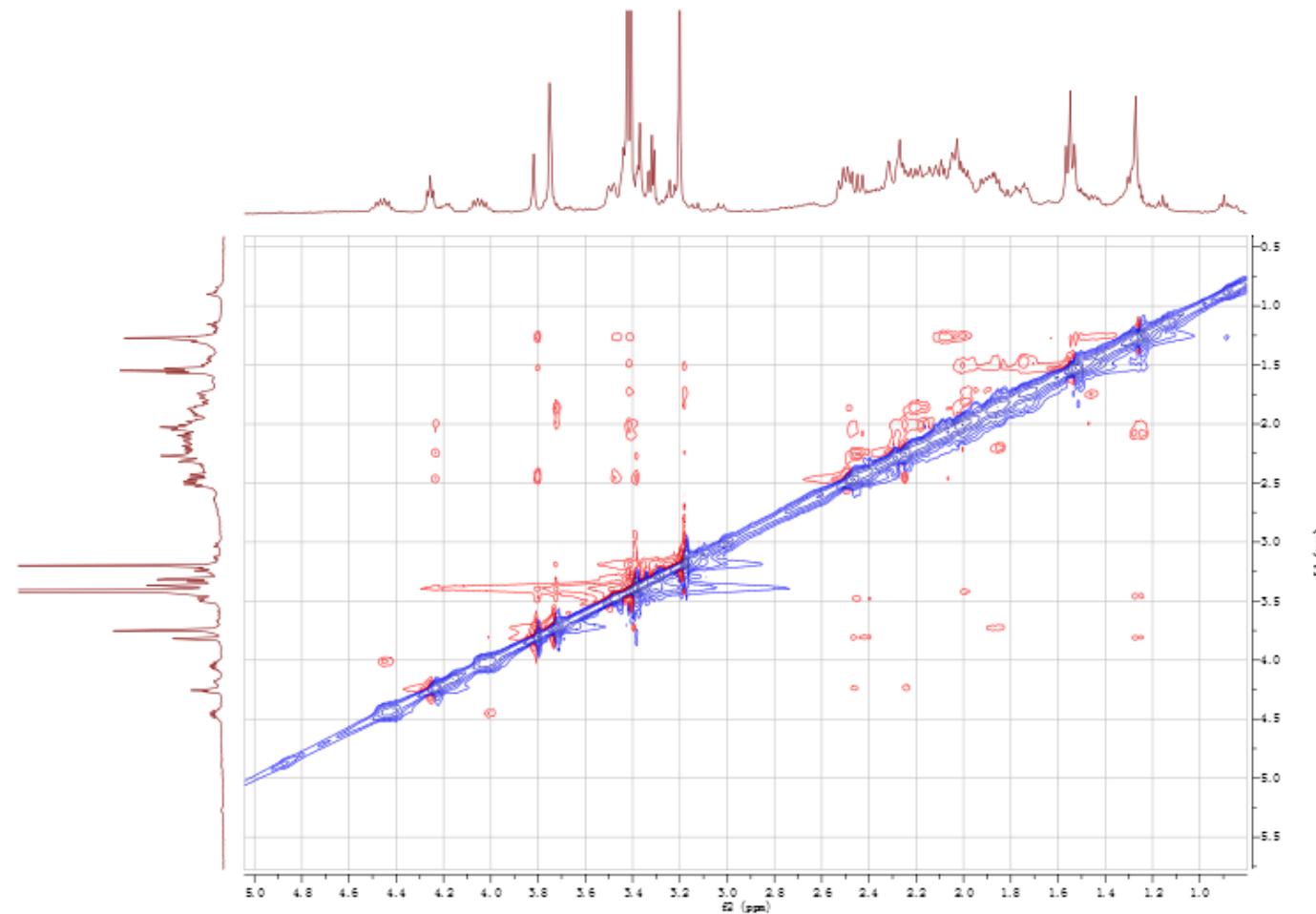


Figure S21. The ROESY spectrum of 3 (in CDCl_3).