



Supporting Information

for

Two new lanostanoid glycosides isolated from a Kenyan polypore *Fomitopsis carnea*

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HRESIMS profiles and NMR spectroscopic data of 1, 2 and 4 in CD₃OD, and of 3 in (CD₃)₂S=O; half inhibitory concentrations (IC₅₀) for various mammalian cell lines as well as minimum inhibitory concentrations (MIC) of 1–4 for bacteria, yeasts and filamentous fungi

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Table S1. Cytotoxicity (IC₅₀) and antimicrobial activity (MIC) of **1–4**.

	IC ₅₀ (μM)				Positive Control
Test Cell Line	1	2	3	4	Epothilone B (nM)
Mouse fibroblast (L929)	n.a.	n.a.	15.2	n.a.	0.65
Human endocervical adenocarcinoma (KB3.1)	n.a.	n.a.	7.0	n.a.	0.17
Human prostate carcinoma (PC-3)	n.d.	n.d.	18.9	n.d.	0.09
Human breast adenocarcinoma (MCF-7)	n.d.	n.d.	17.6	n.d.	0.07
Human ovarian cancer (SKOV-3)	n.d.	n.d.	47.3	n.d.	0.09
Human epidermoid carcinoma (A431)	n.d.	n.d.	5.7	n.d.	0.06
Human lung carcinoma (A549)	n.d.	n.d.	47.3	n.d.	0.05
Test Microorganism	MIC (μg/mL)				Positive Control (μg/mL)
<i>Staphylococcus aureus</i>	16.6	n.i.	n.i.	n.i.	0.21 ^G
<i>Escherichia coli</i>	n.i.	n.i.	n.i.	n.i.	0.42 ^G
<i>Bacillus subtilis</i>	8.3	n.i.	n.i.	n.i.	16.6 ^O
<i>Pseudomonas aeruginosa</i>	n.i.	n.i.	n.i.	n.i.	0.21 ^G
<i>Pichia anomala</i>	n.i.	n.i.	n.i.	n.i.	16.6 ^N
<i>Candida albicans</i>	n.i.	n.i.	n.i.	n.i.	8.3 ^N
<i>Acinetobacter baumannii</i>	n.i.	n.i.	n.i.	n.i.	0.52 ^C
<i>Chromobacterium violaceum</i>	n.i.	n.i.	n.i.	n.i.	1.70 ^G
<i>Schizosaccharomyces pombe</i>	n.i.	n.i.	n.i.	n.i.	8.30 ^N
<i>Mucor hiemalis</i>	n.i.	n.i.	n.i.	n.i.	8.30 ^N
<i>Rhodotorula glutinis</i>	n.i.	n.i.	n.i.	n.i.	4.20 ^N
<i>Mycobacterium smegmatis</i>	n.i.	n.i.	n.i.	n.i.	1.70 ^K

n.a.: No activity. n.i.: No inhibition up to 67 μg/mL. n.d.: Not determined.

G: Gentamycin; O: Oxytetracycline; N: Nystatin; C: Ciprofloxacin; K: Kanamycin.

Generic Display Report

Analysis Info

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Instrument amaZon speed

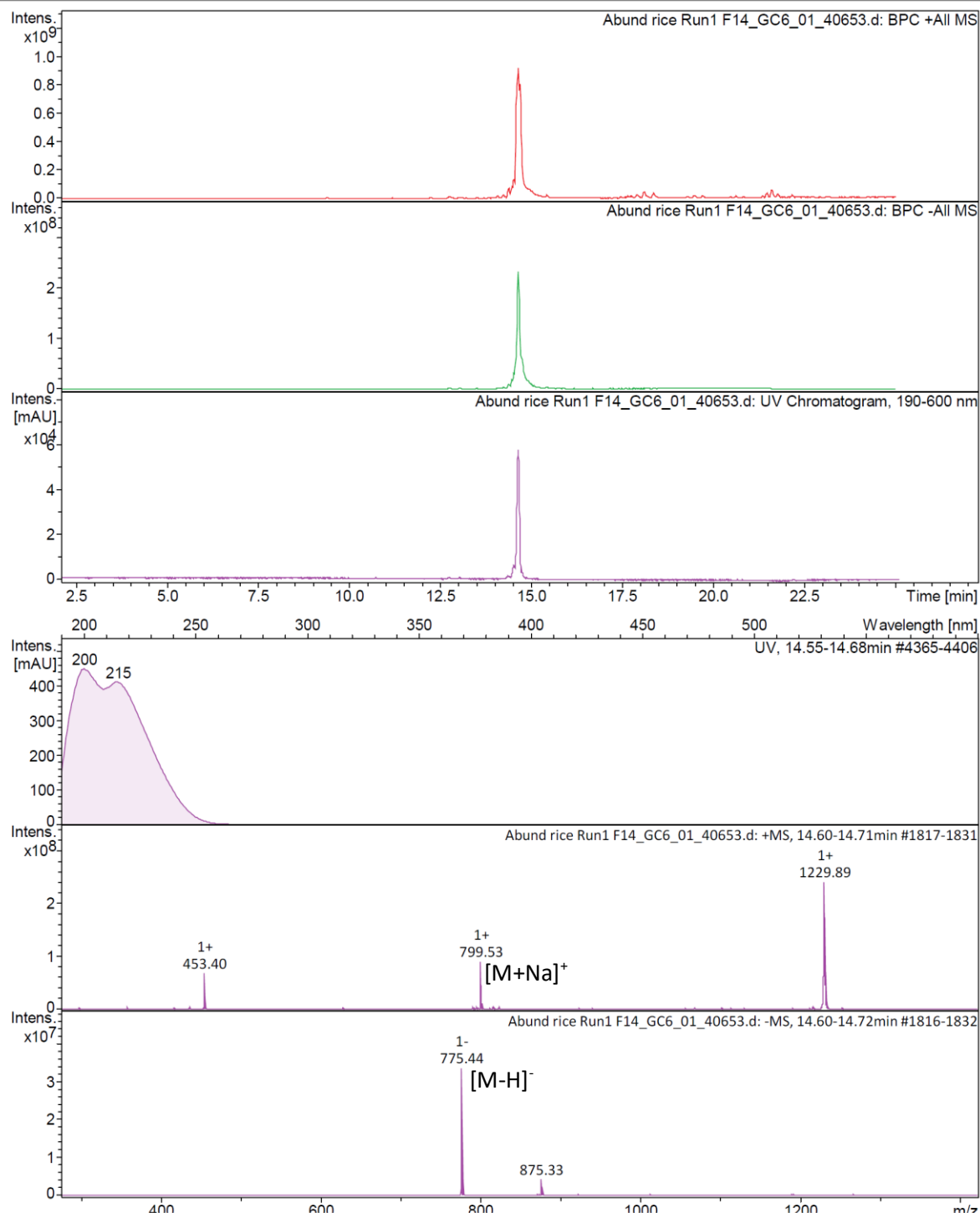


Figure S1. LRESIMS of 1.

Generic Display Report

Analysis Info

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Acquisition Date 15.11.2022 13:22:30

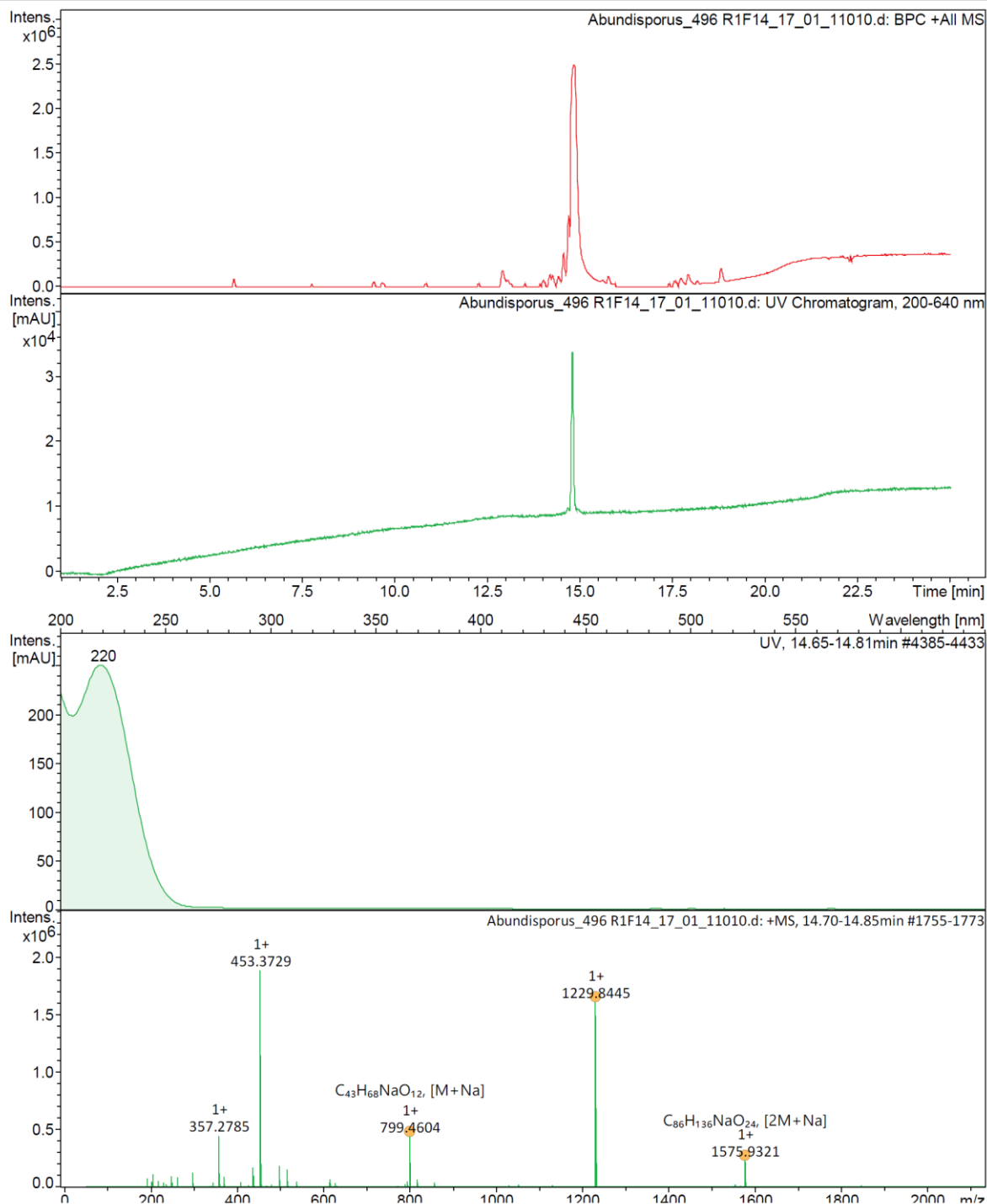


Figure S2. HRESIMS of 1.

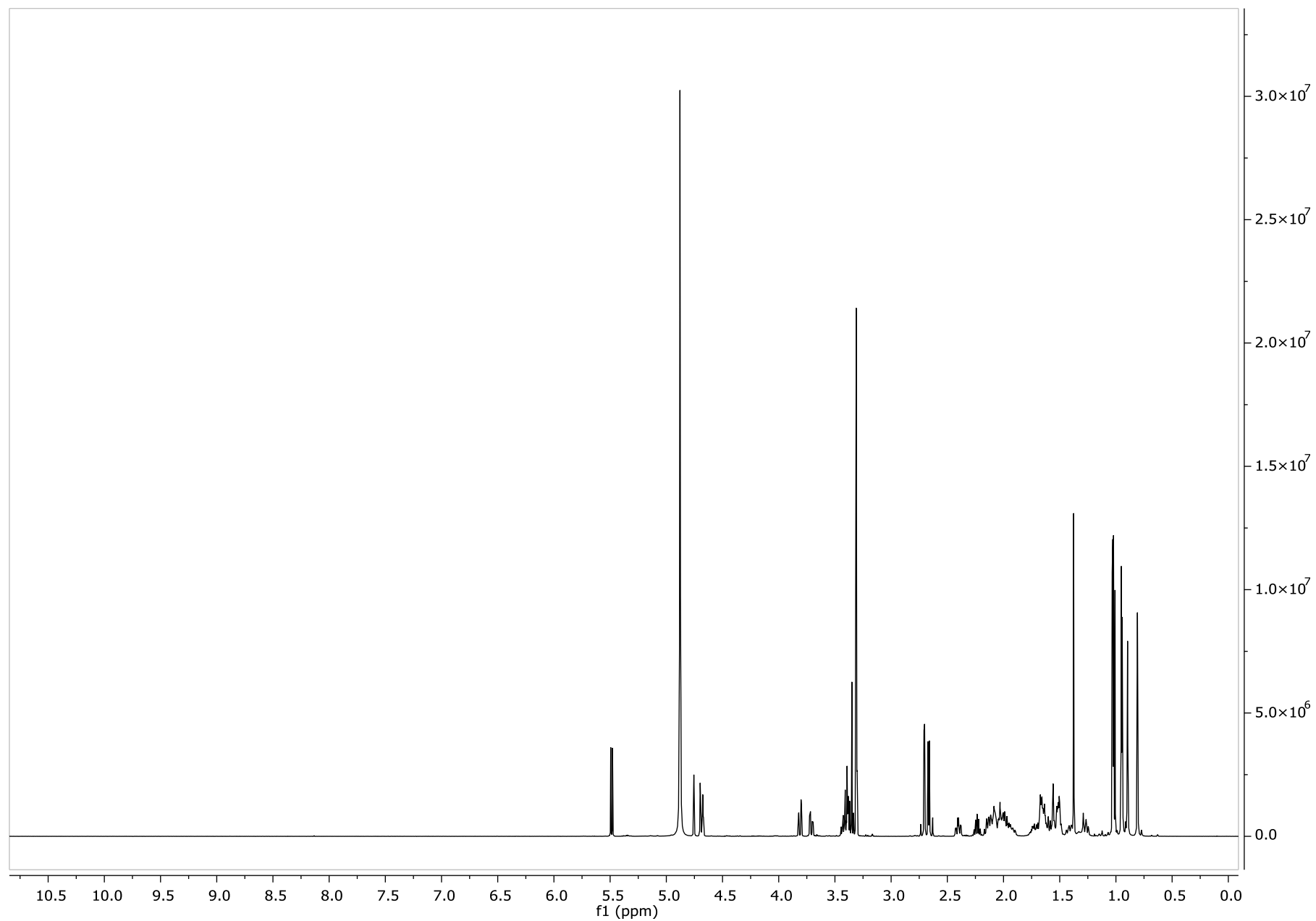


Figure S3. ^1H NMR spectrum of **1** in $\text{methanol-}d_4$ at 500 MHz.

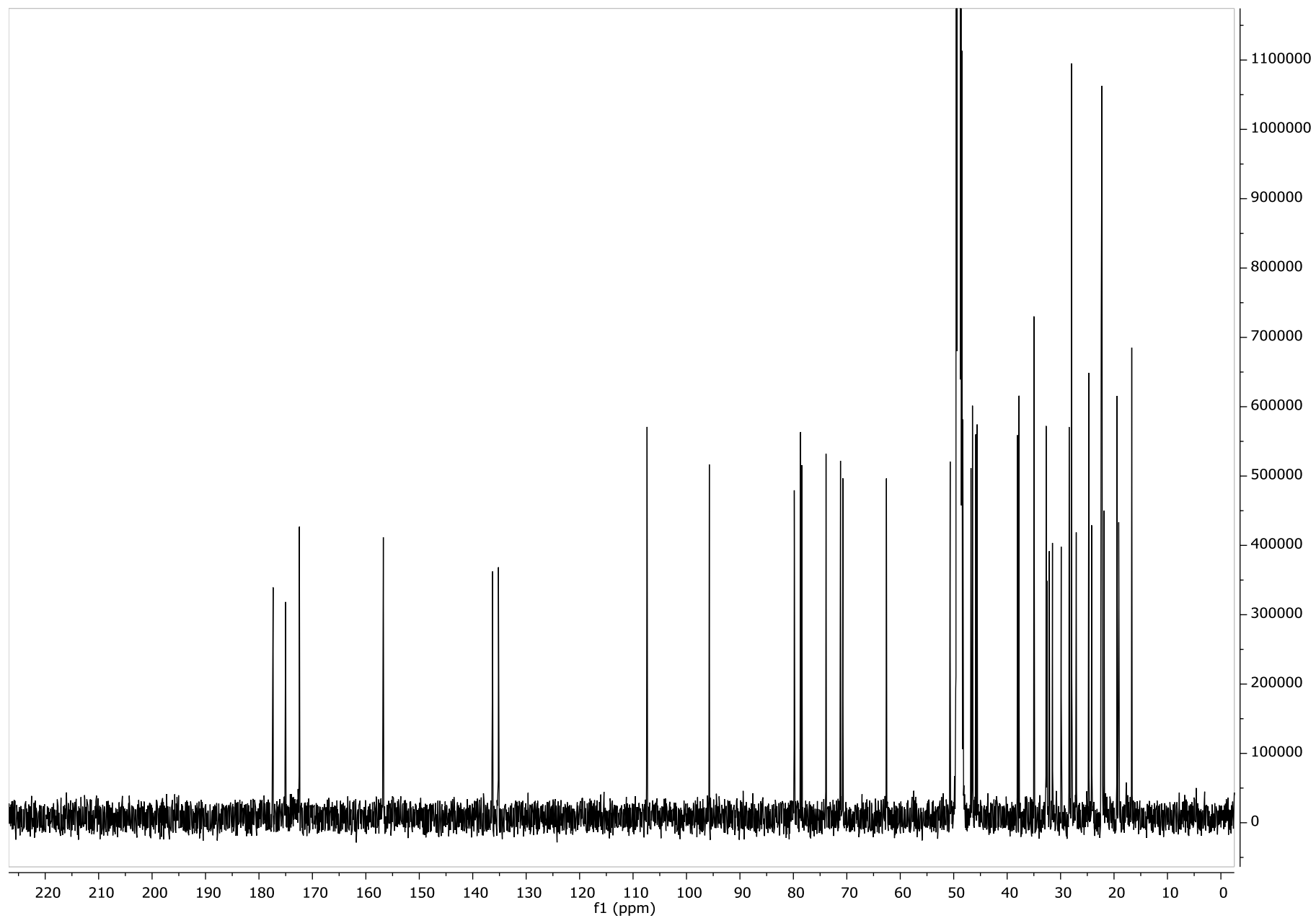


Figure S4. ^{13}C NMR spectrum of **1** in methanol- d_4 at 125 MHz.

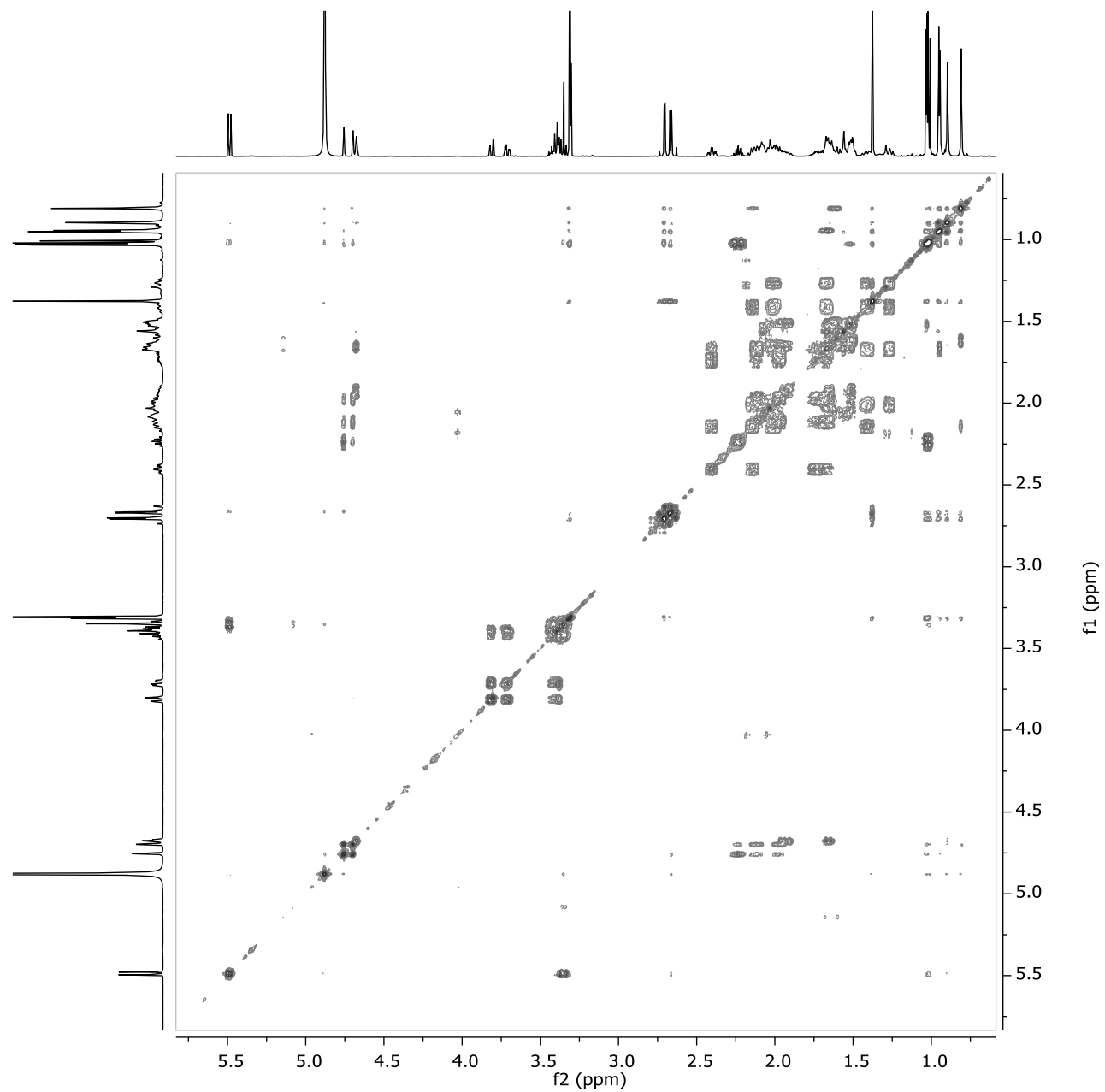


Figure S5. ^1H , ^1H COSY spectrum of **1** in methanol- d_4 at 500 MHz.

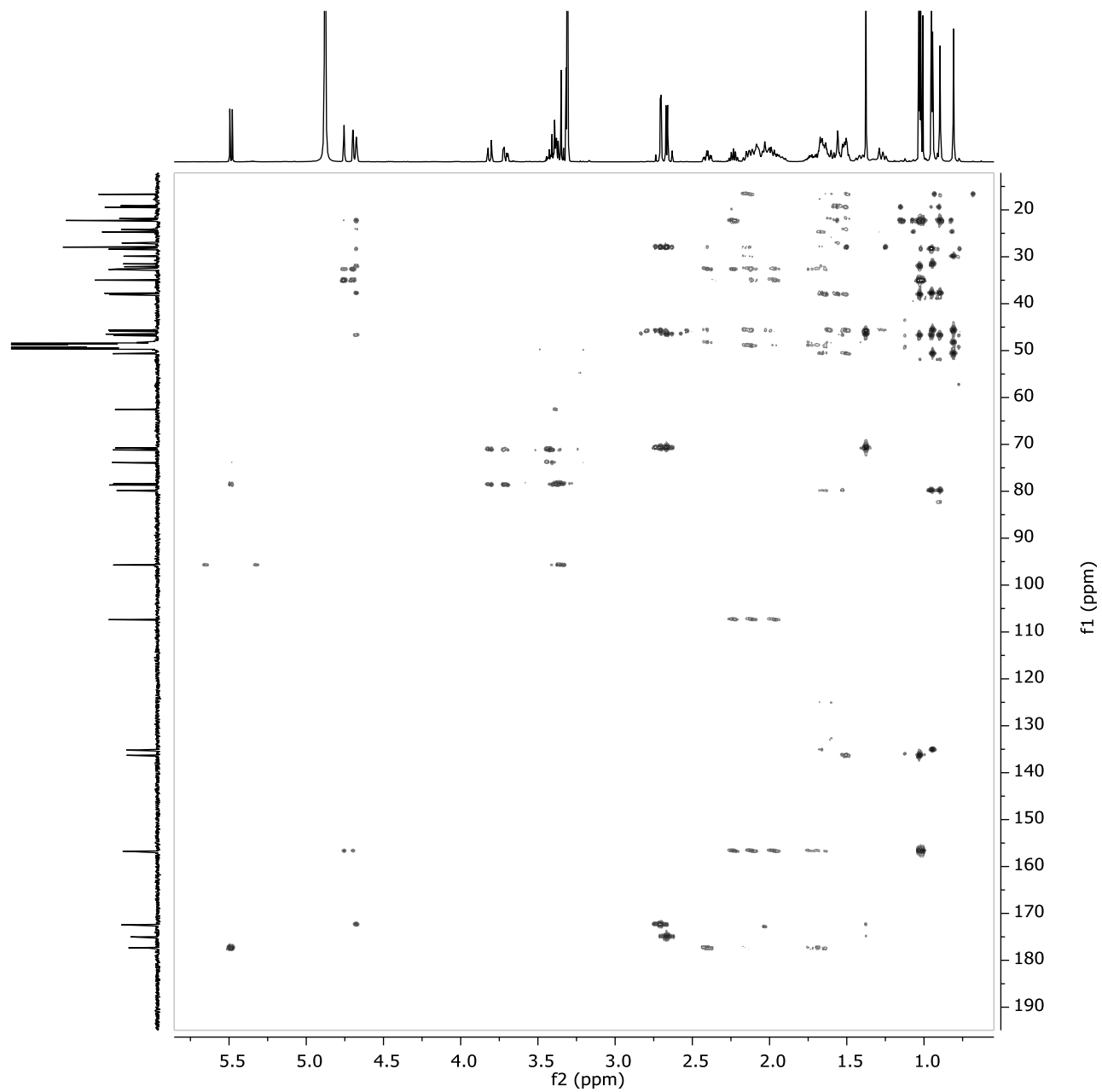


Figure S6. HMBC spectrum of **1** in methanol- d_4 at 500 MHz.

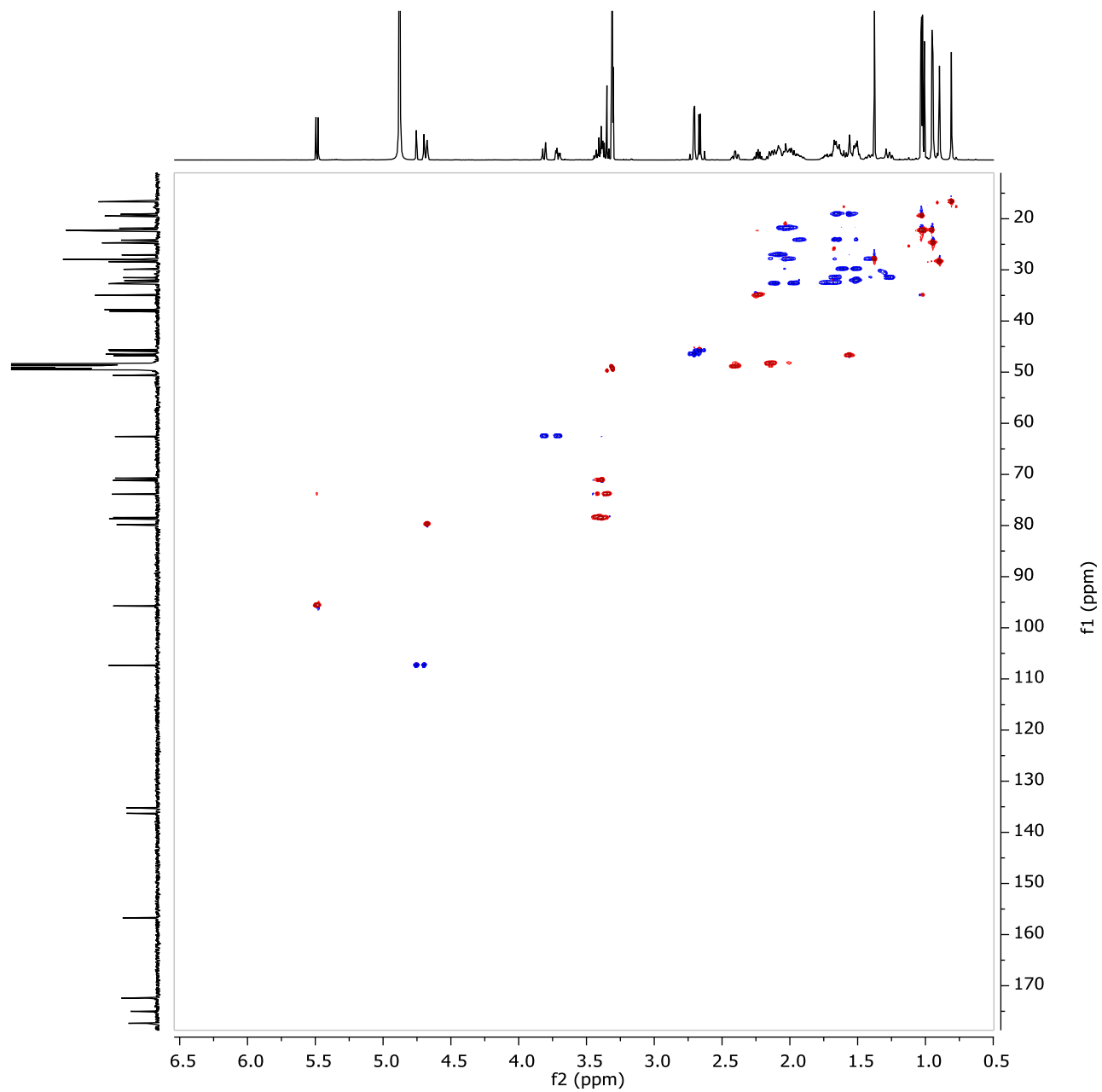


Figure S7. HSQC spectrum of **1** in methanol- d_4 at 500 MHz.

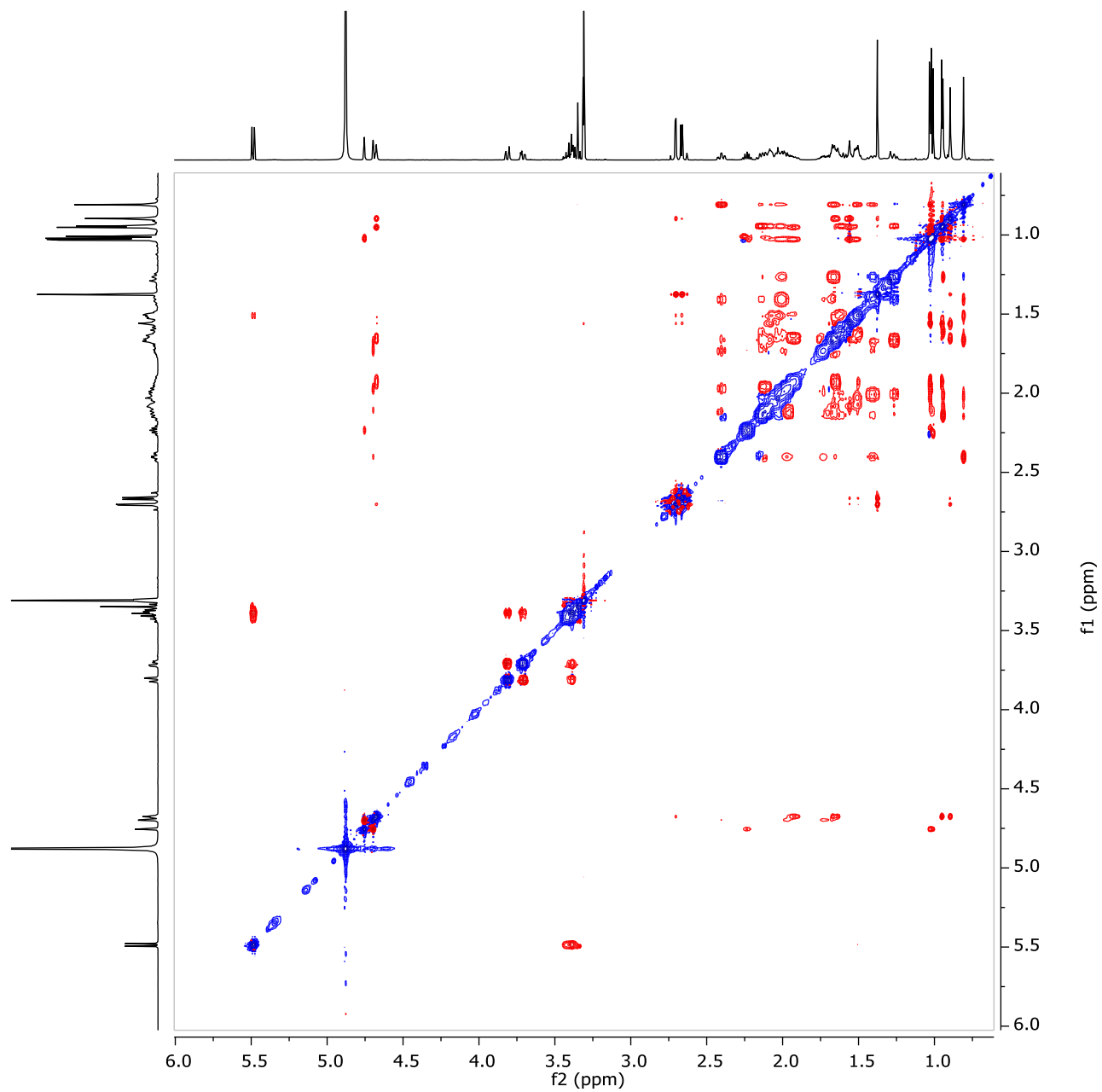


Figure S8. ROESY spectrum of **1** in methanol- d_4 at 500 MHz.

Generic Display Report

Analysis Info

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Comment
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Operator esu
Instrument amaZon speed

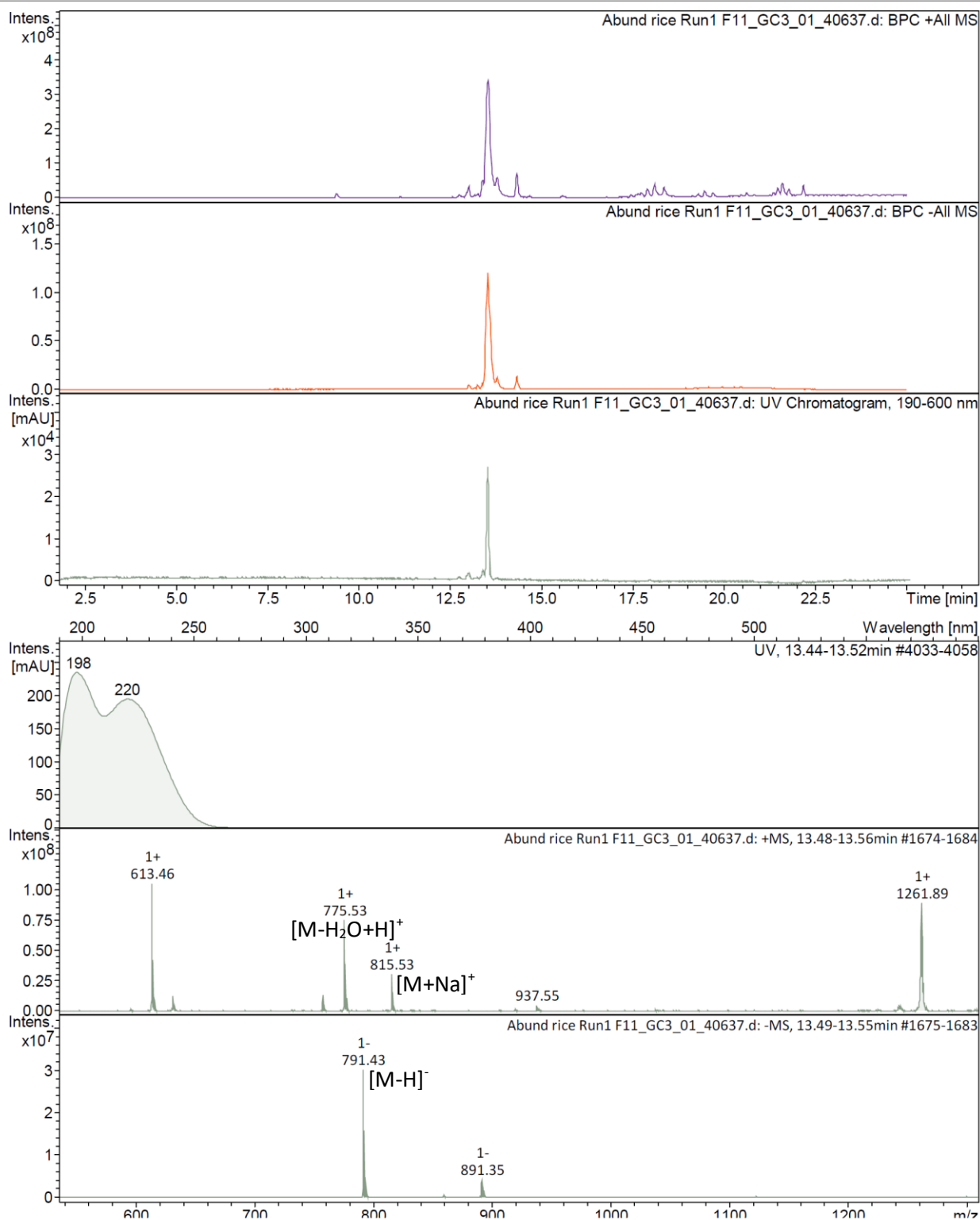


Figure S9. LRESIMS of 2.

Generic Display Report

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Acquisition Date 15.11.2022 12:20:30

Operator maXis
Instrument maXis

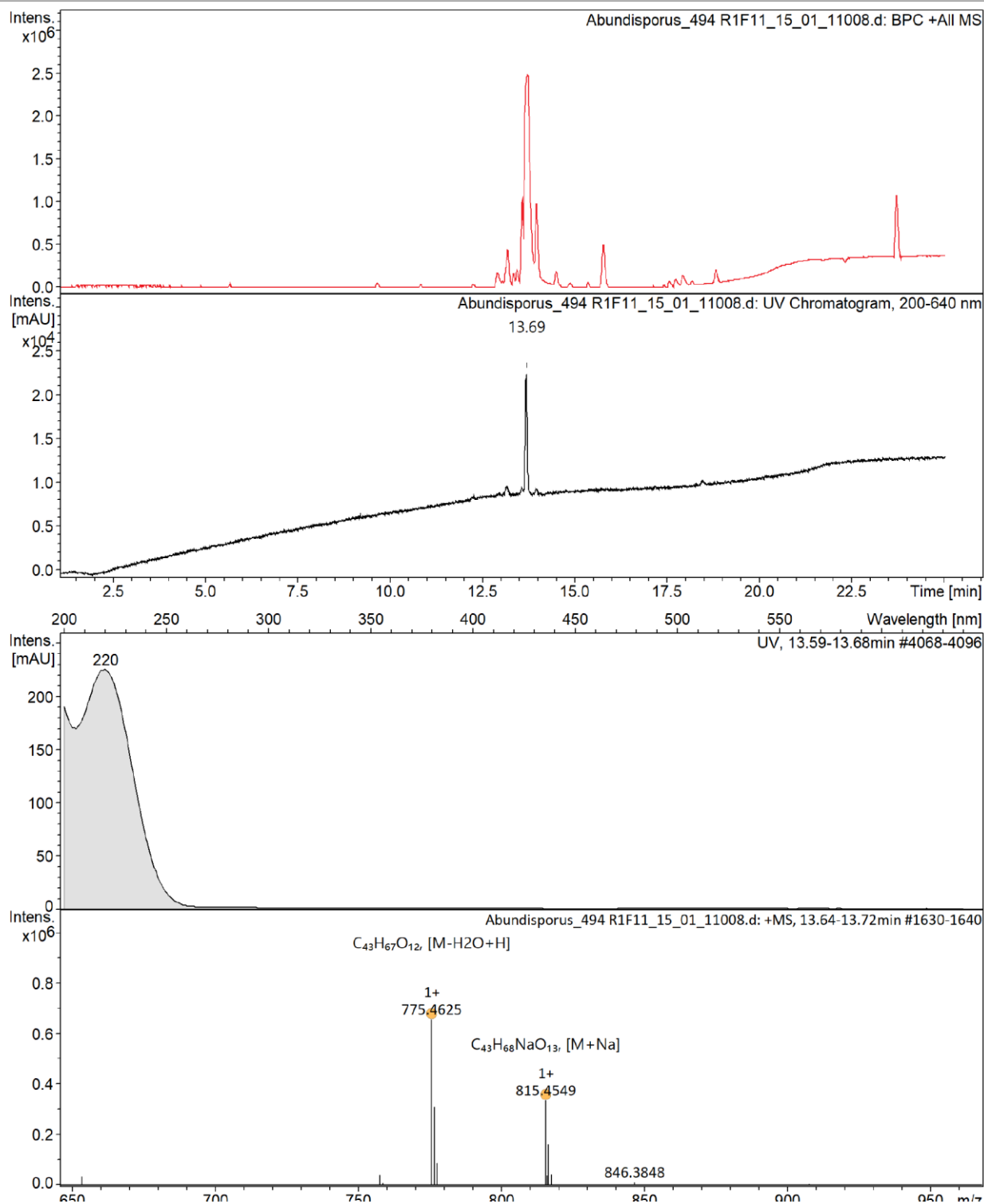


Figure S10. HRESIMS of 2.

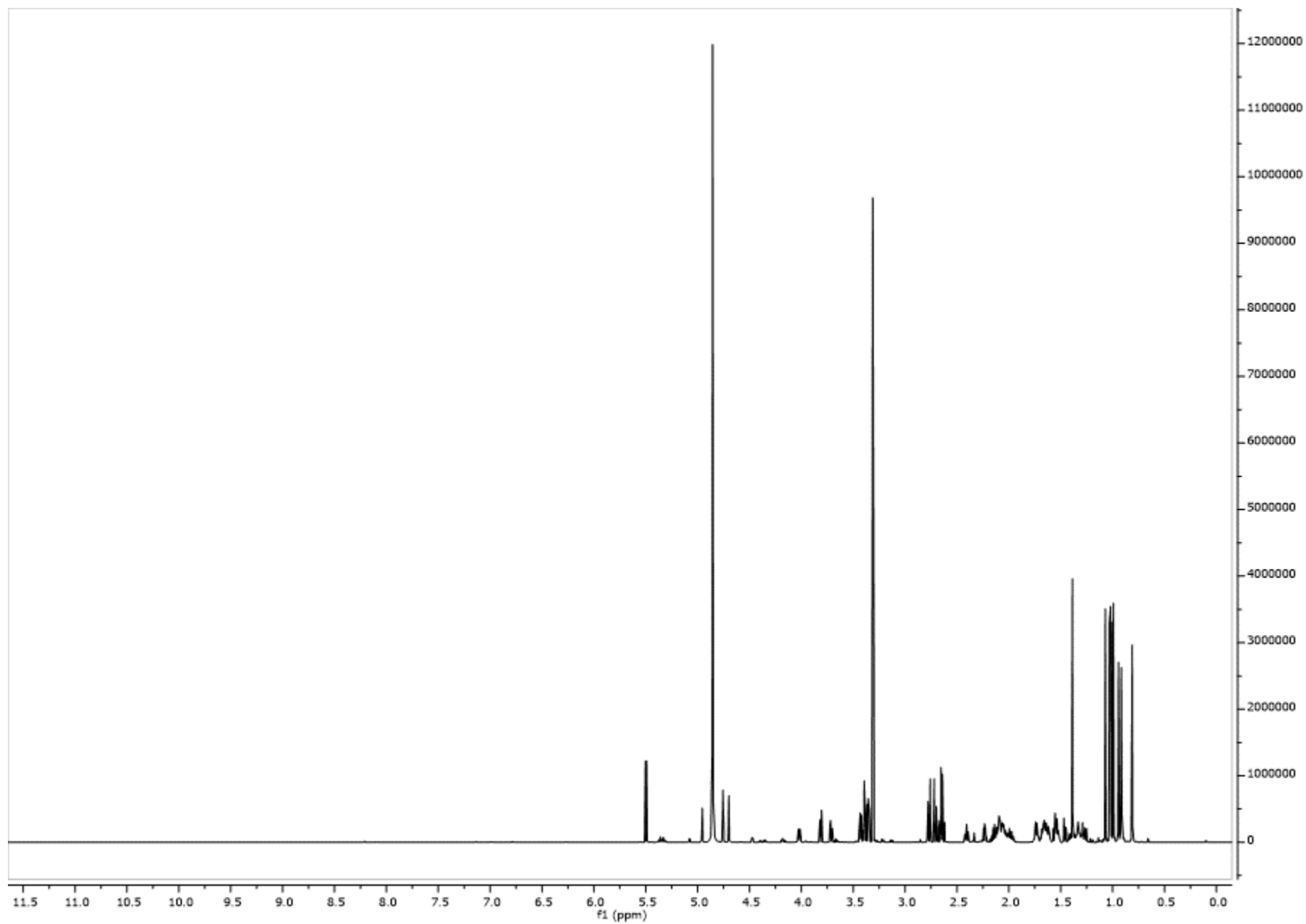


Figure S11. ^1H NMR spectrum of **2** in methanol- d_4 at 700 MHz.

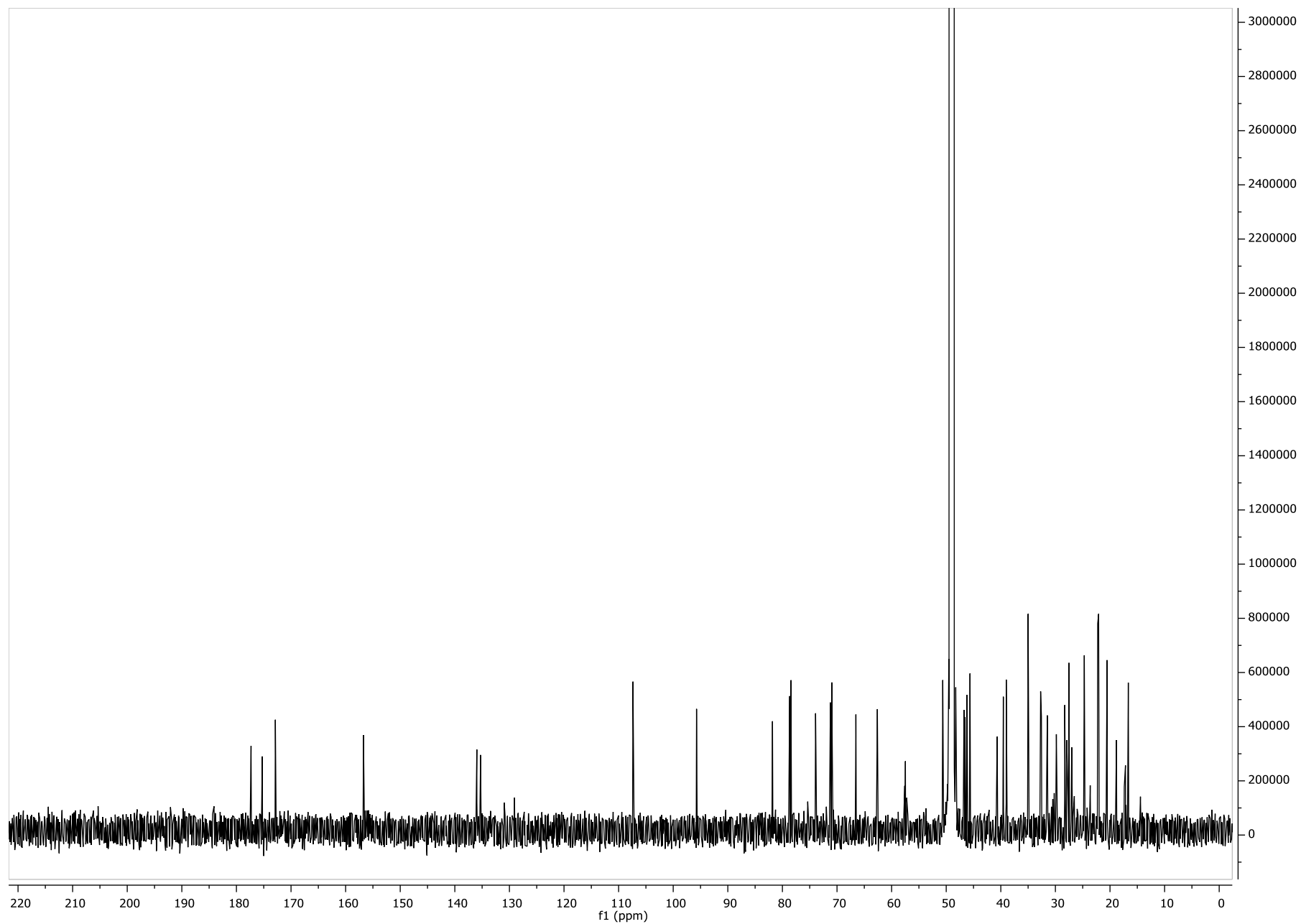


Figure S12. ^{13}C NMR spectrum of **2** in methanol- d_4 at 175 MHz.

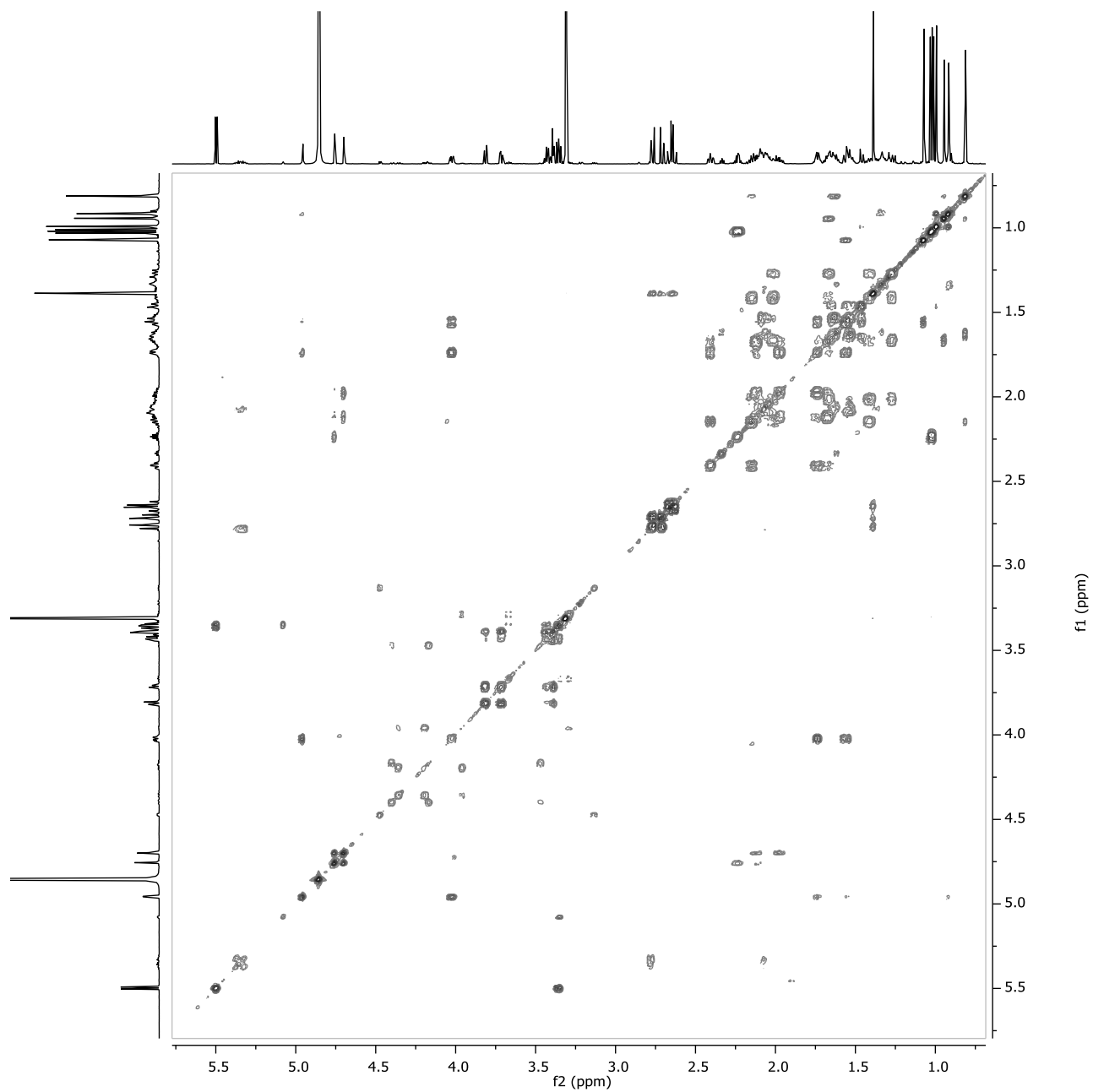


Figure S13. $^1\text{H},^1\text{H}$ COSY spectrum of **2** in methanol- d_4 at 700 MHz.

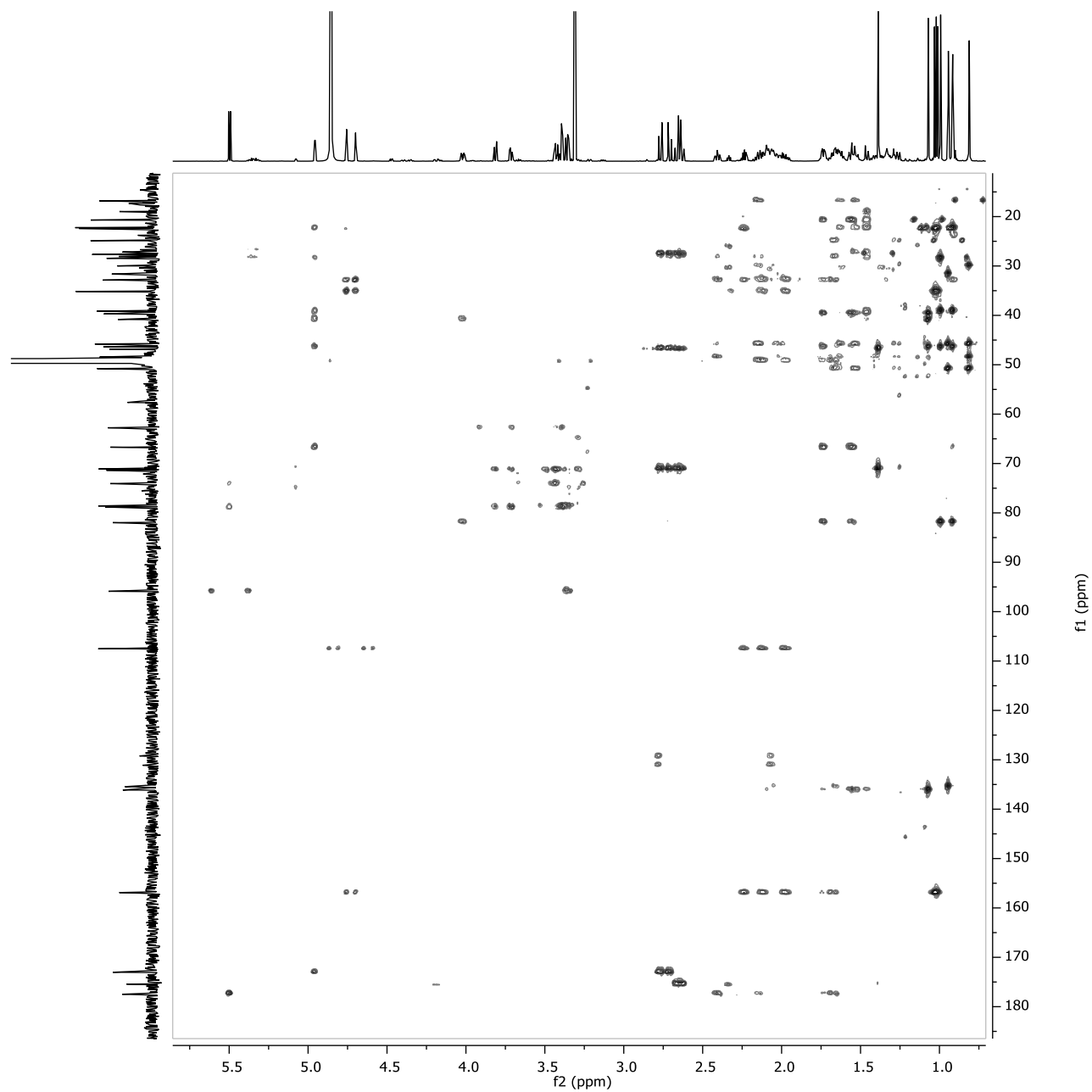


Figure S14. HMBC spectrum of **2** in methanol- d_4 at 700 MHz.

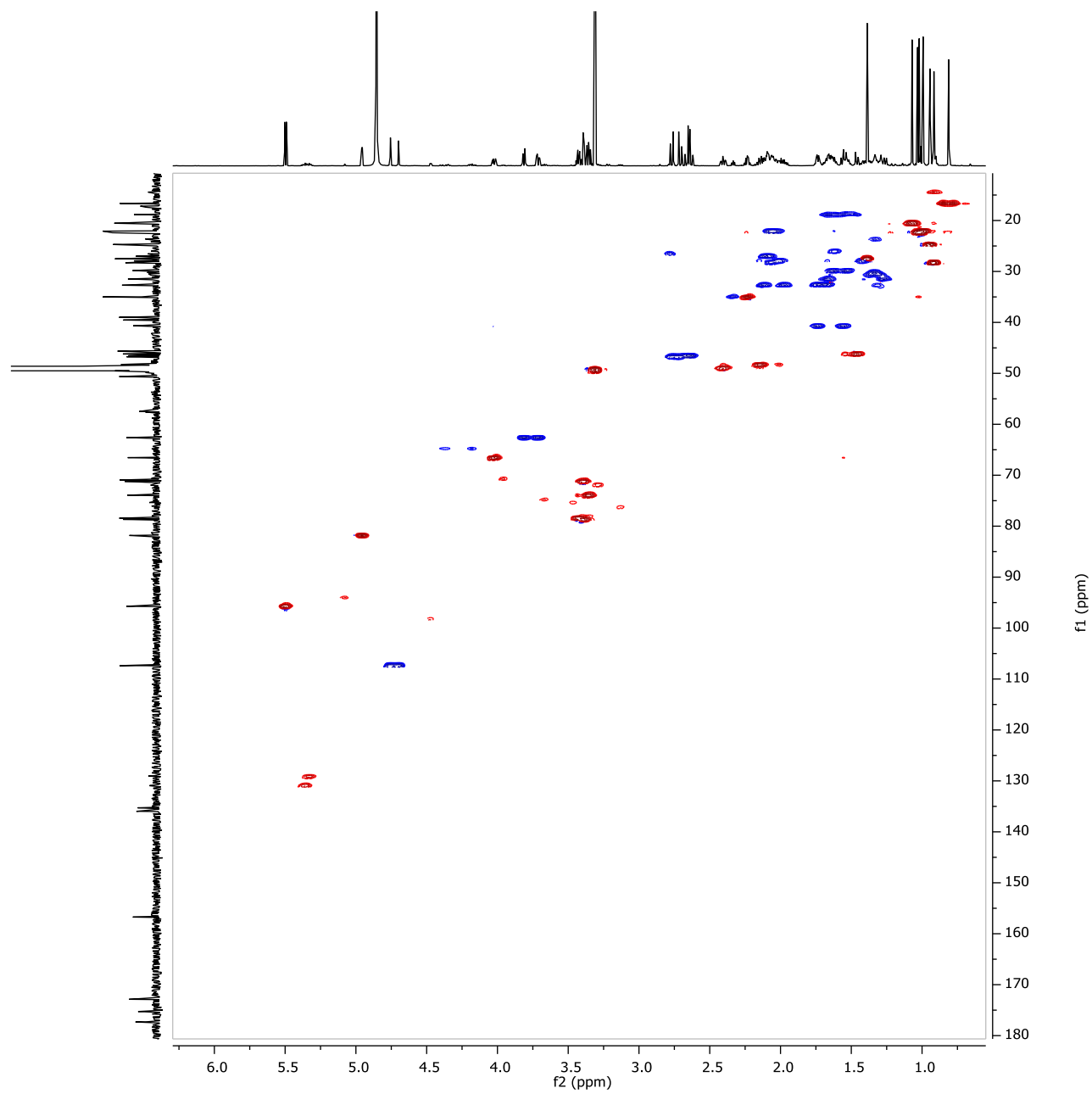


Figure S15. HSQC spectrum of **2** in methanol- d_4 at 700 MHz.

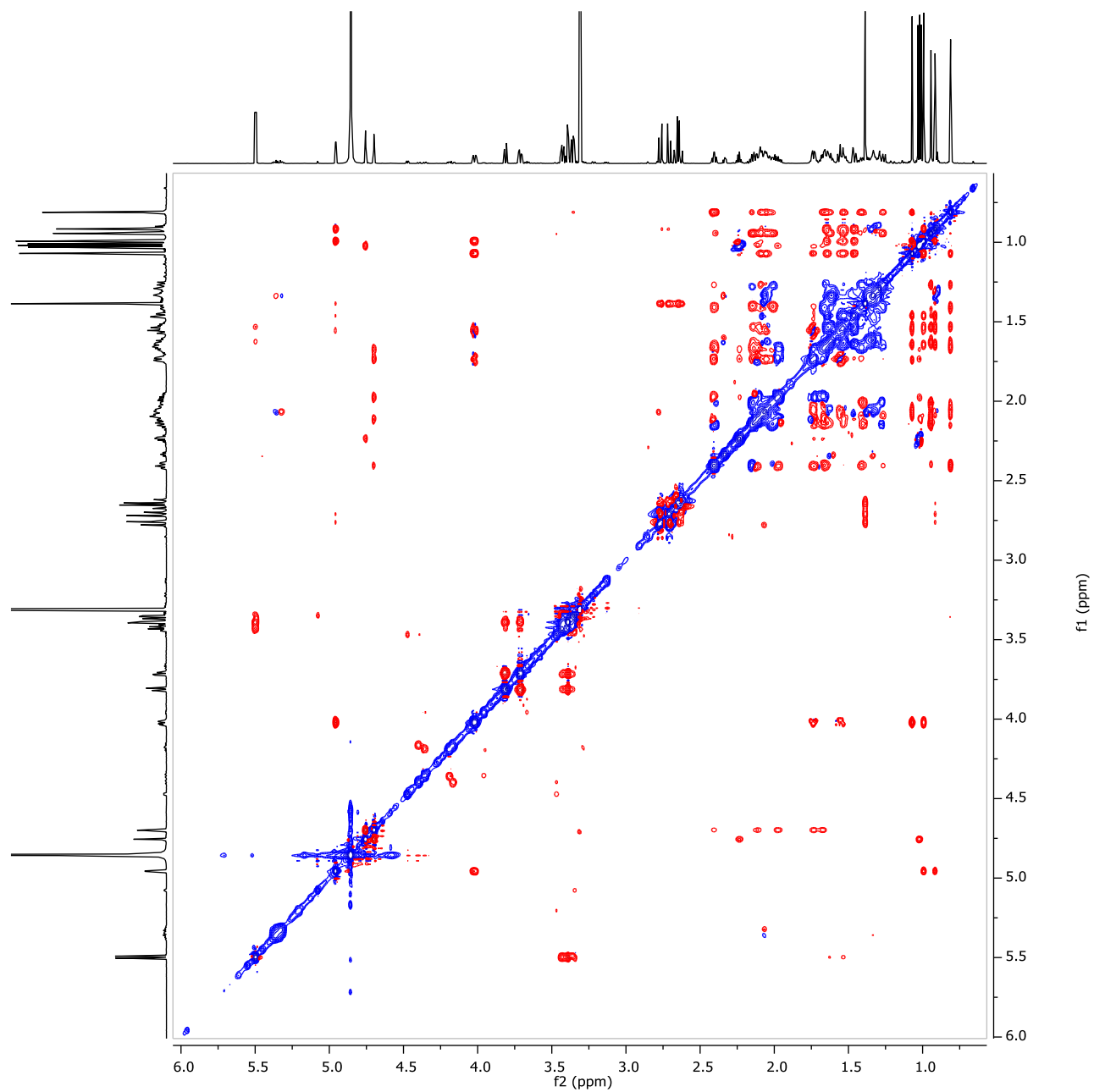


Figure S16. ROESY spectrum of **2** in methanol-*d*₄ at 700 MHz.

Generic Display Report

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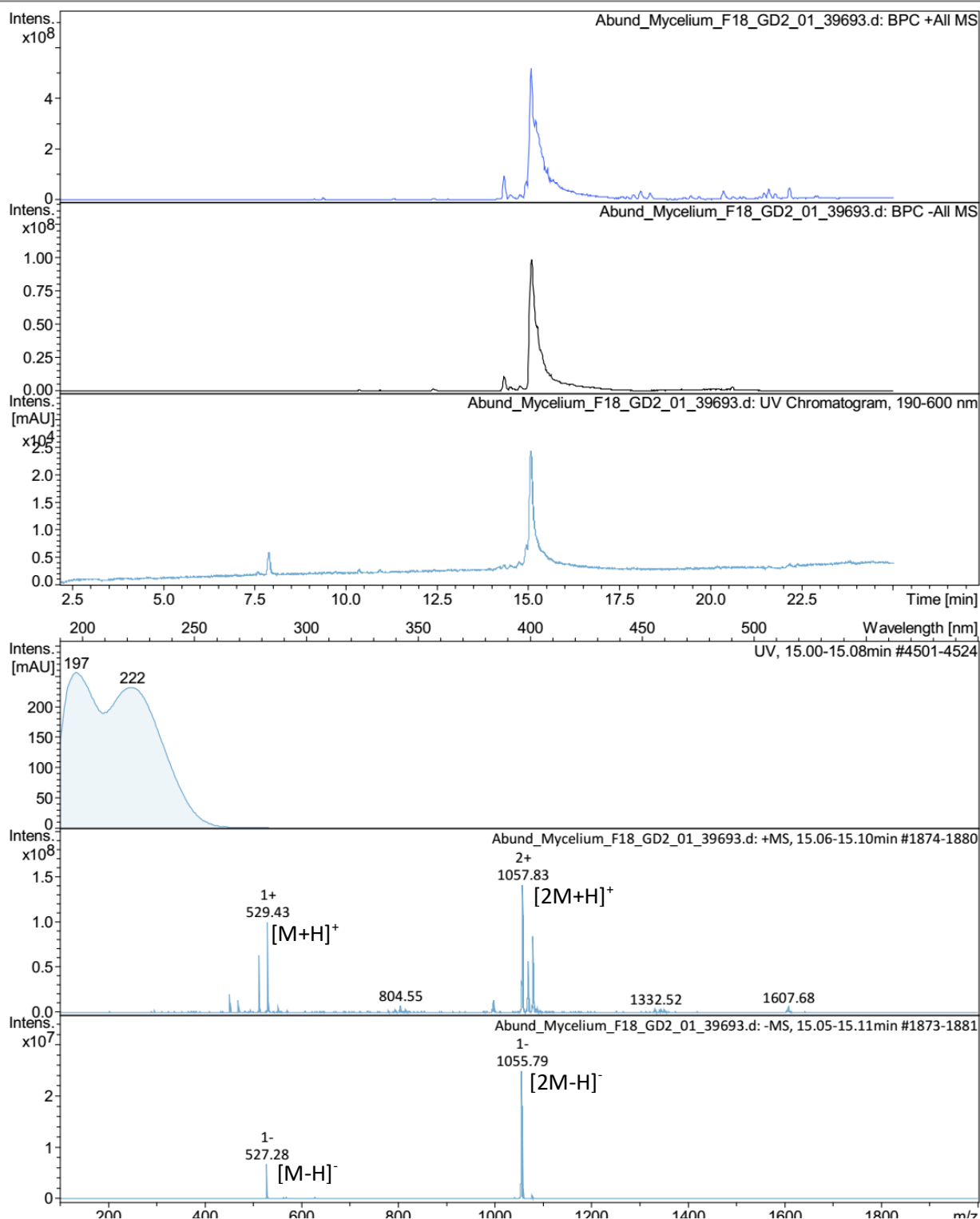


Figure S17. LRESIMS of 3.

Generic Display Report

Analysis Info

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 Instrument maXis

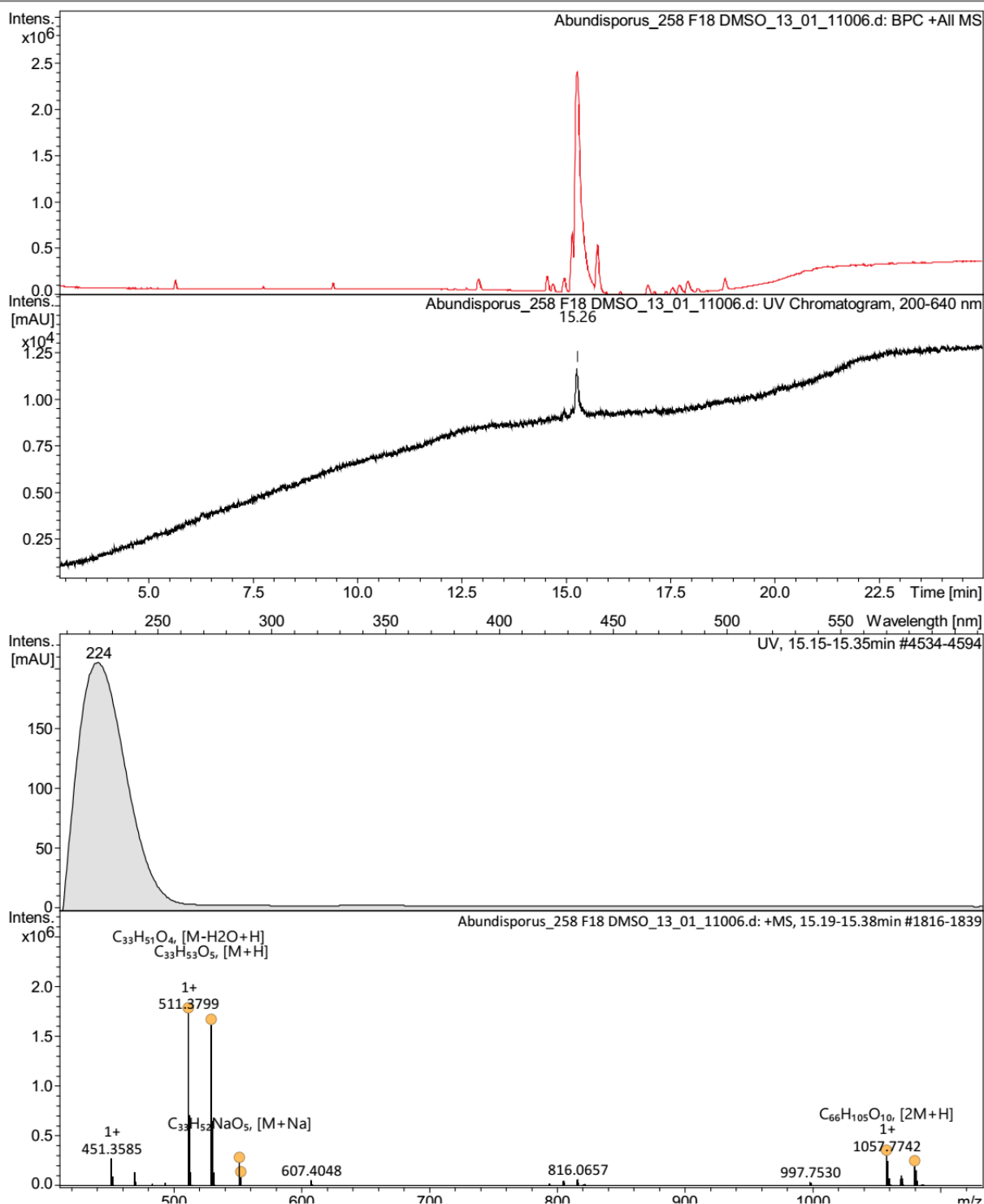


Figure S18. HRESIMS of 3.

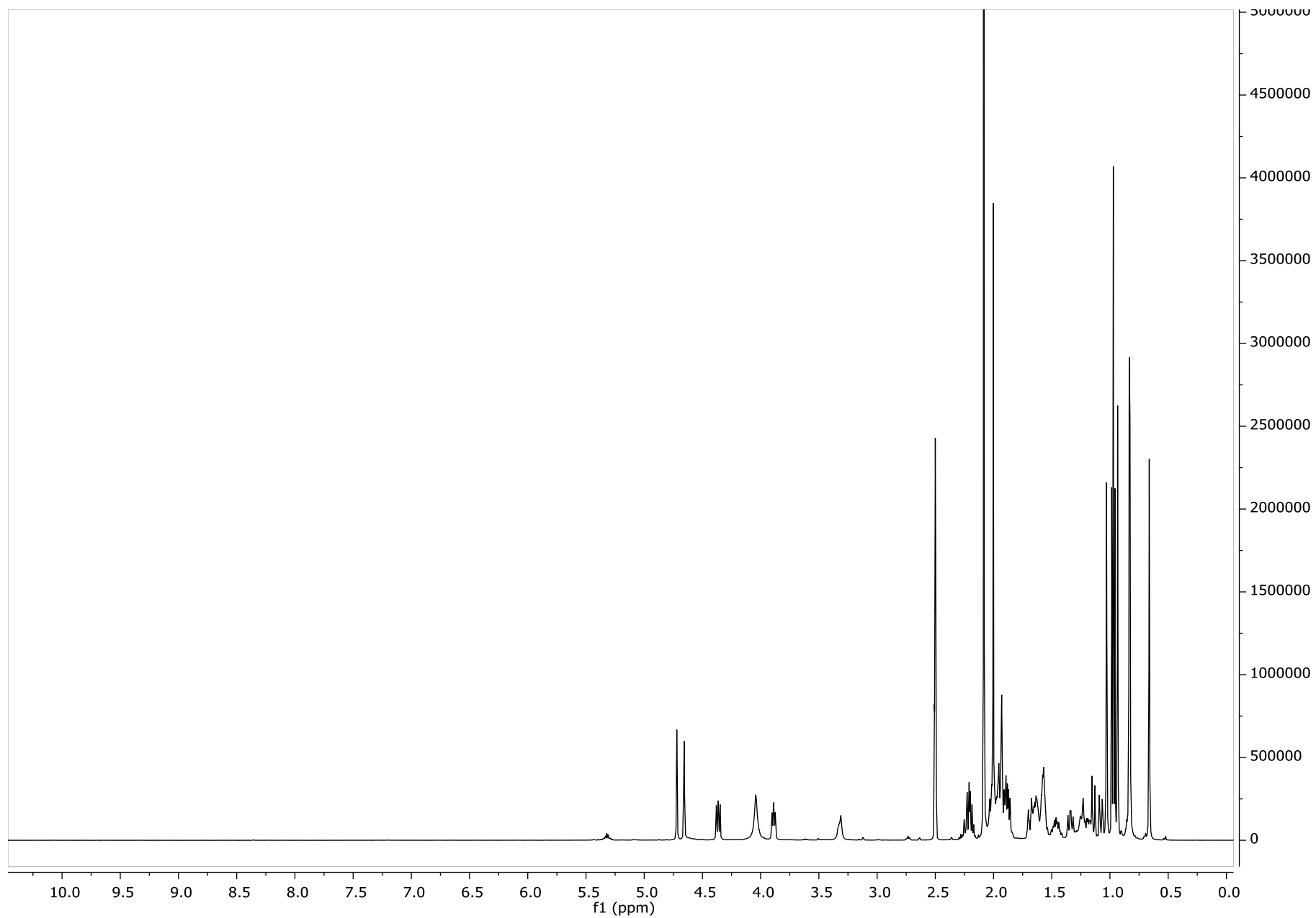


Figure S19. ^1H NMR spectrum of **3** in $\text{DMSO}-d_6$ at 500 MHz.

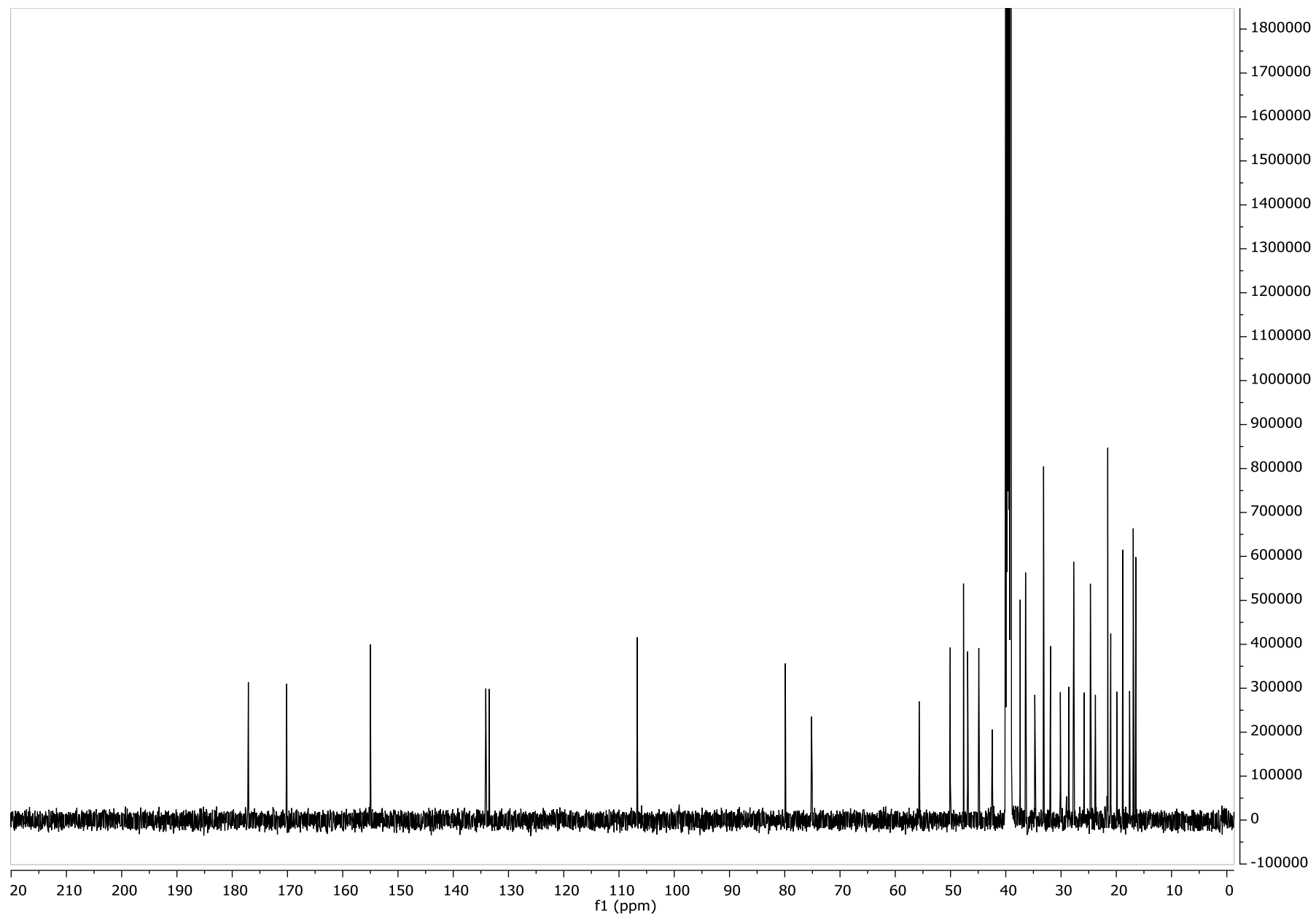


Figure S20. ^{13}C NMR spectrum of **3** in $\text{DMSO}-d_6$ at 125 MHz.

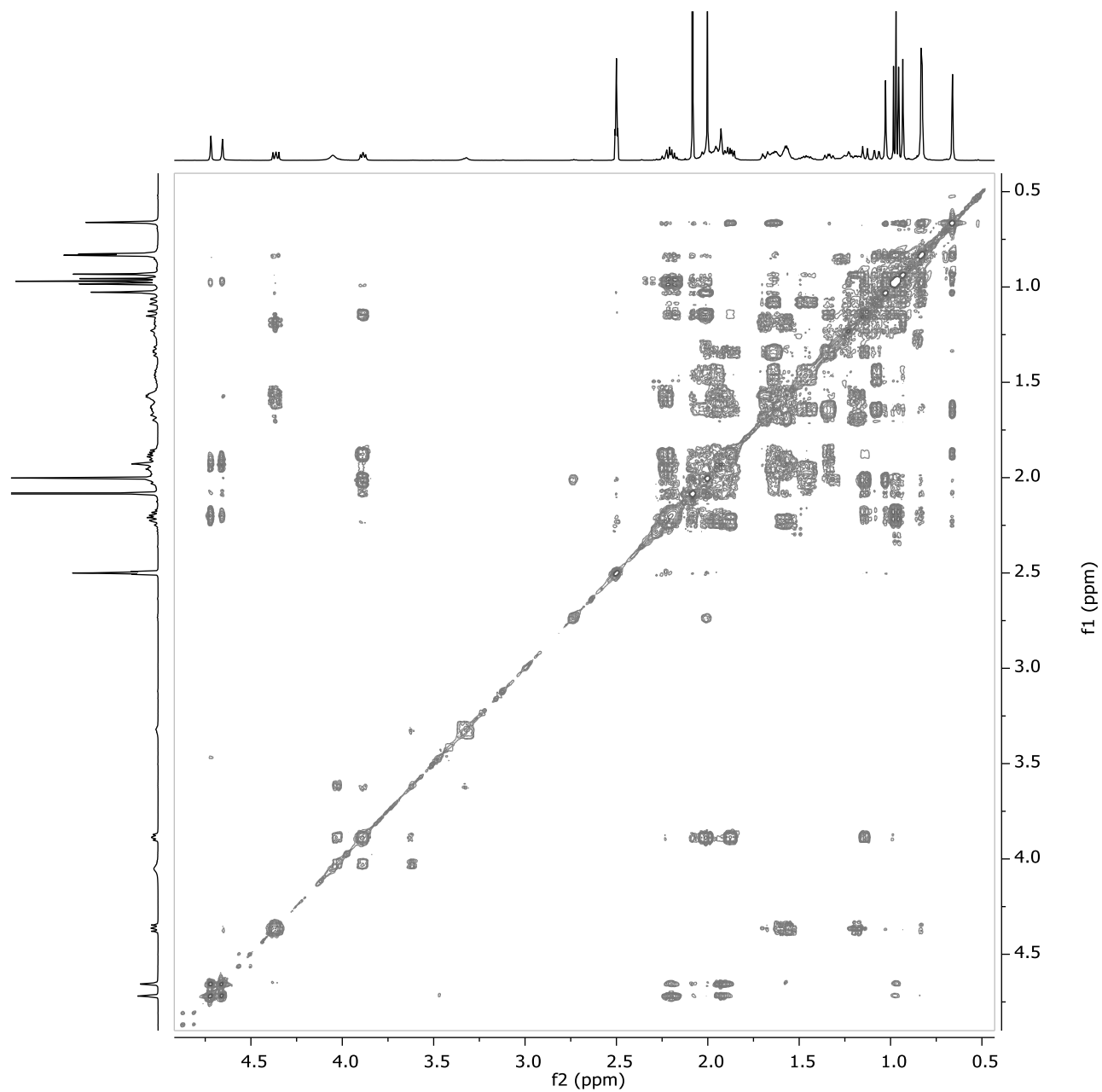


Figure S21. ^1H , ^1H COSY spectrum of **3** in $\text{DMSO-}d_6$ at 500 MHz.

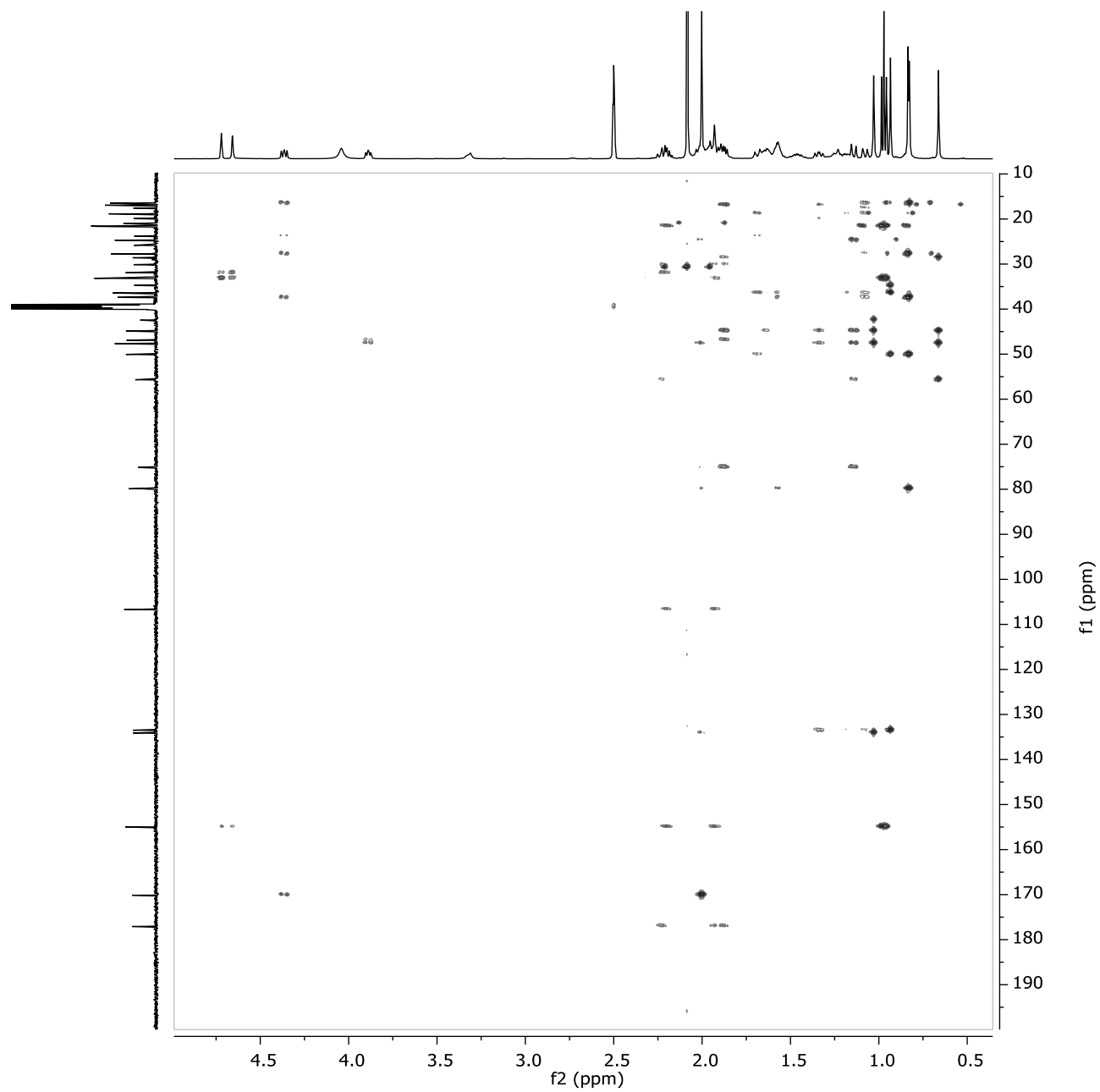


Figure S22. HMBC spectrum of **3** in $\text{DMSO}-d_6$ at 500 MHz.

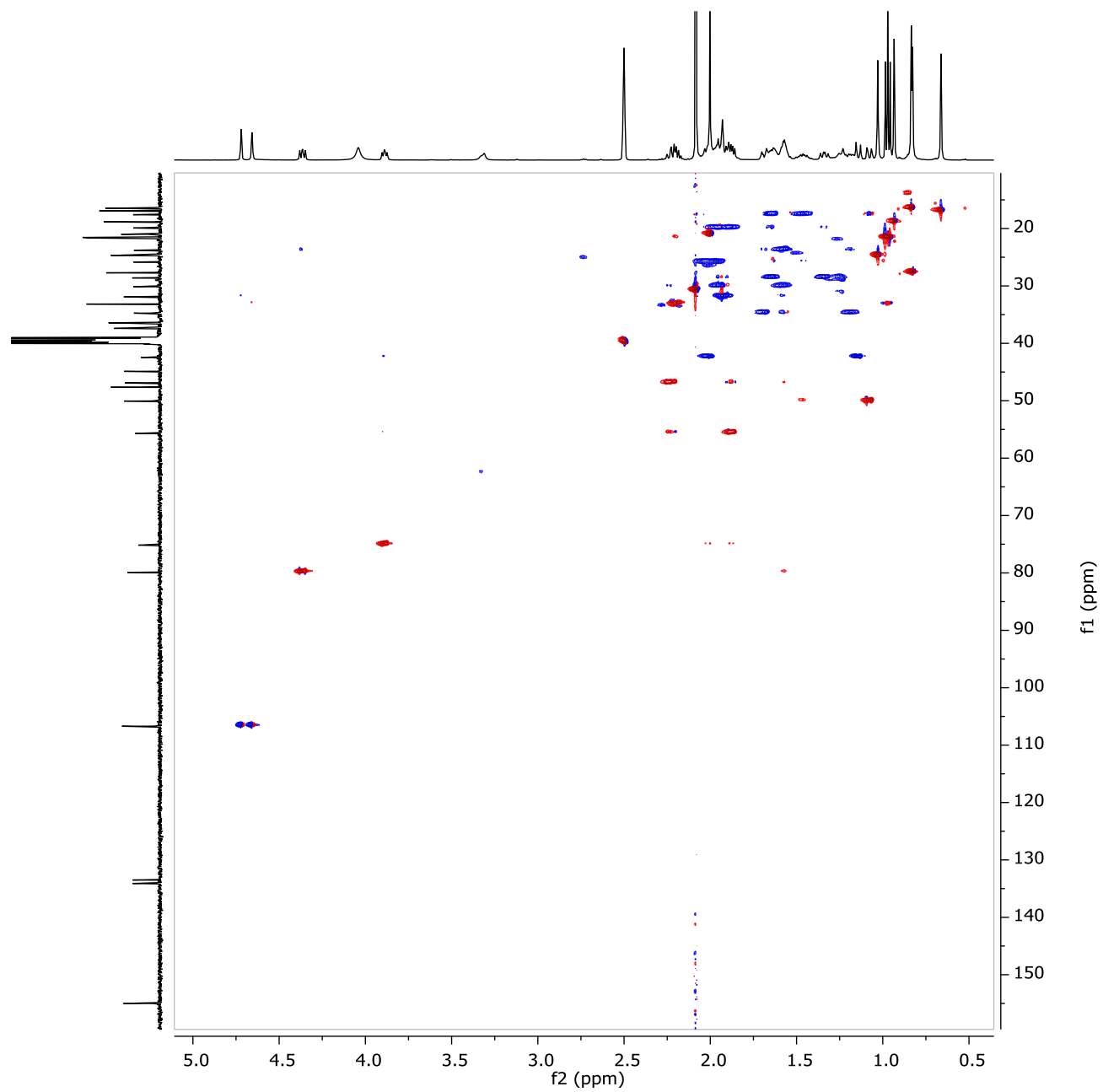


Figure S23. HSQC spectrum of **3** in DMSO-*d*₆ at 500 MHz.

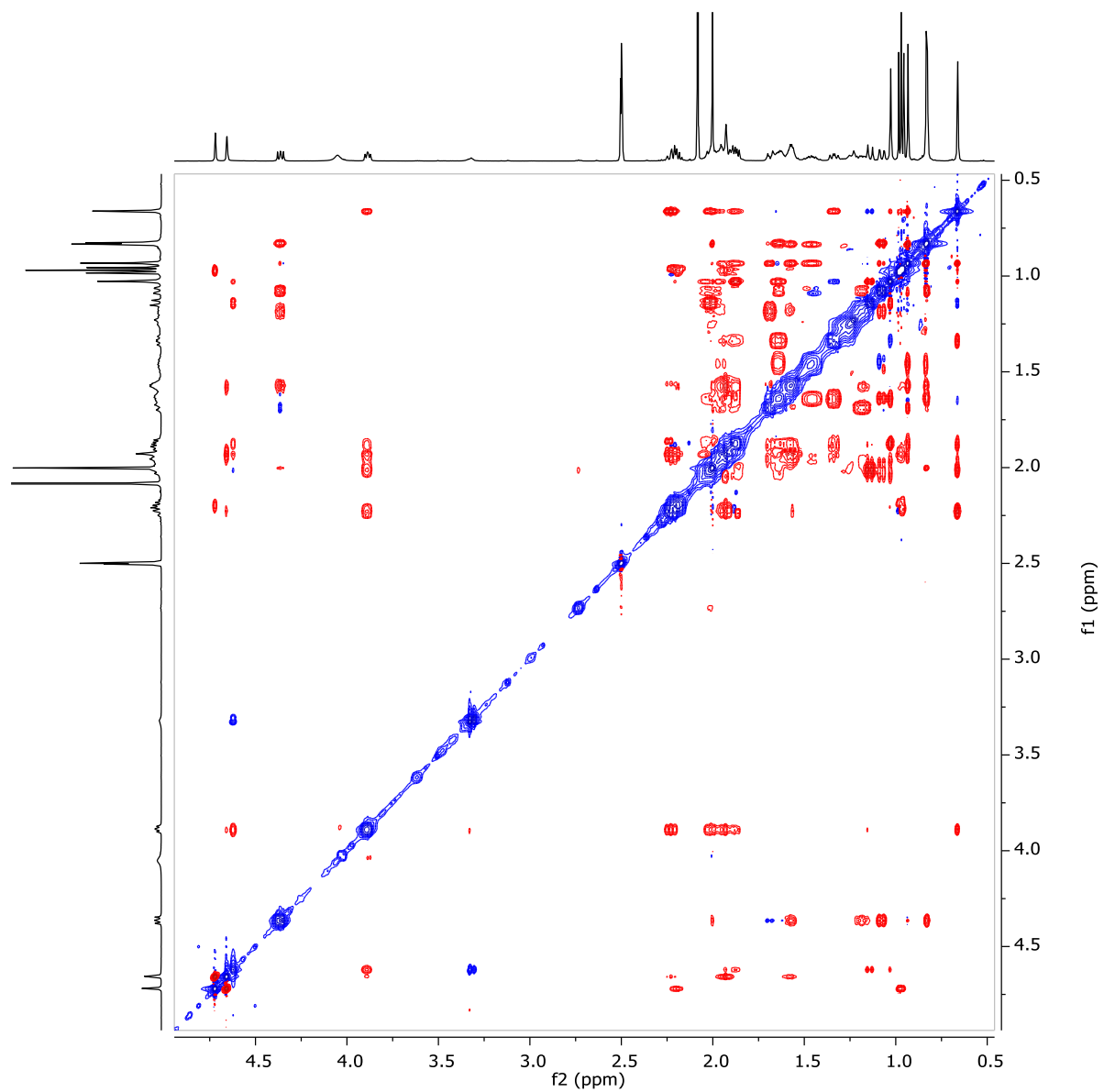


Figure S24. ROESY spectrum of **3** in DMSO- d_6 at 500 MHz.

Generic Display Report

Analysis Info

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Operator esu
Instrument amaZon speed

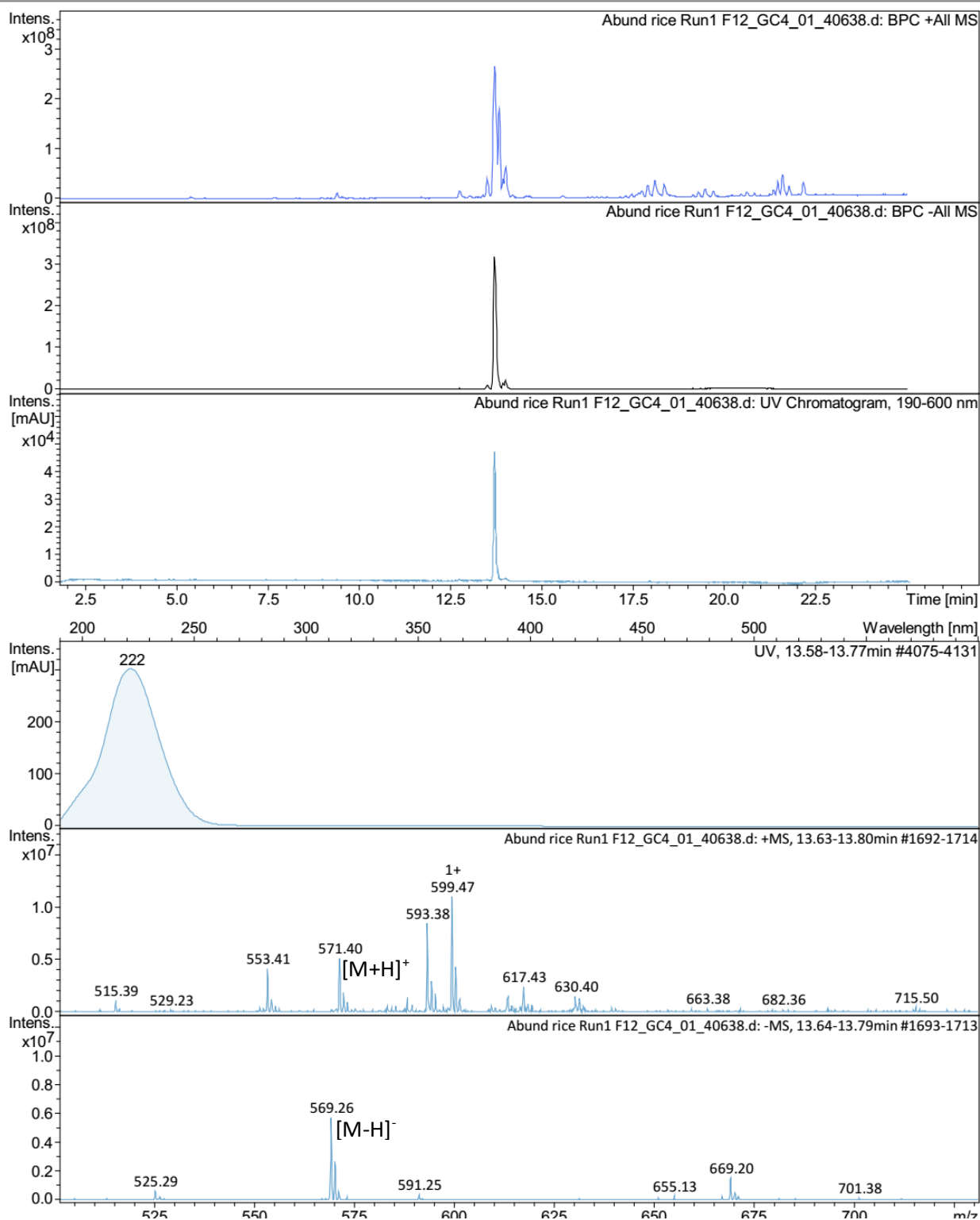


Figure S25. LRESIMS of 4.

Generic Display Report

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Sample Name Abundisporus_495 R1F12
Comment Screening01
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Acquisition Date 15.11.2022 12:51:29

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Instrument mxIs

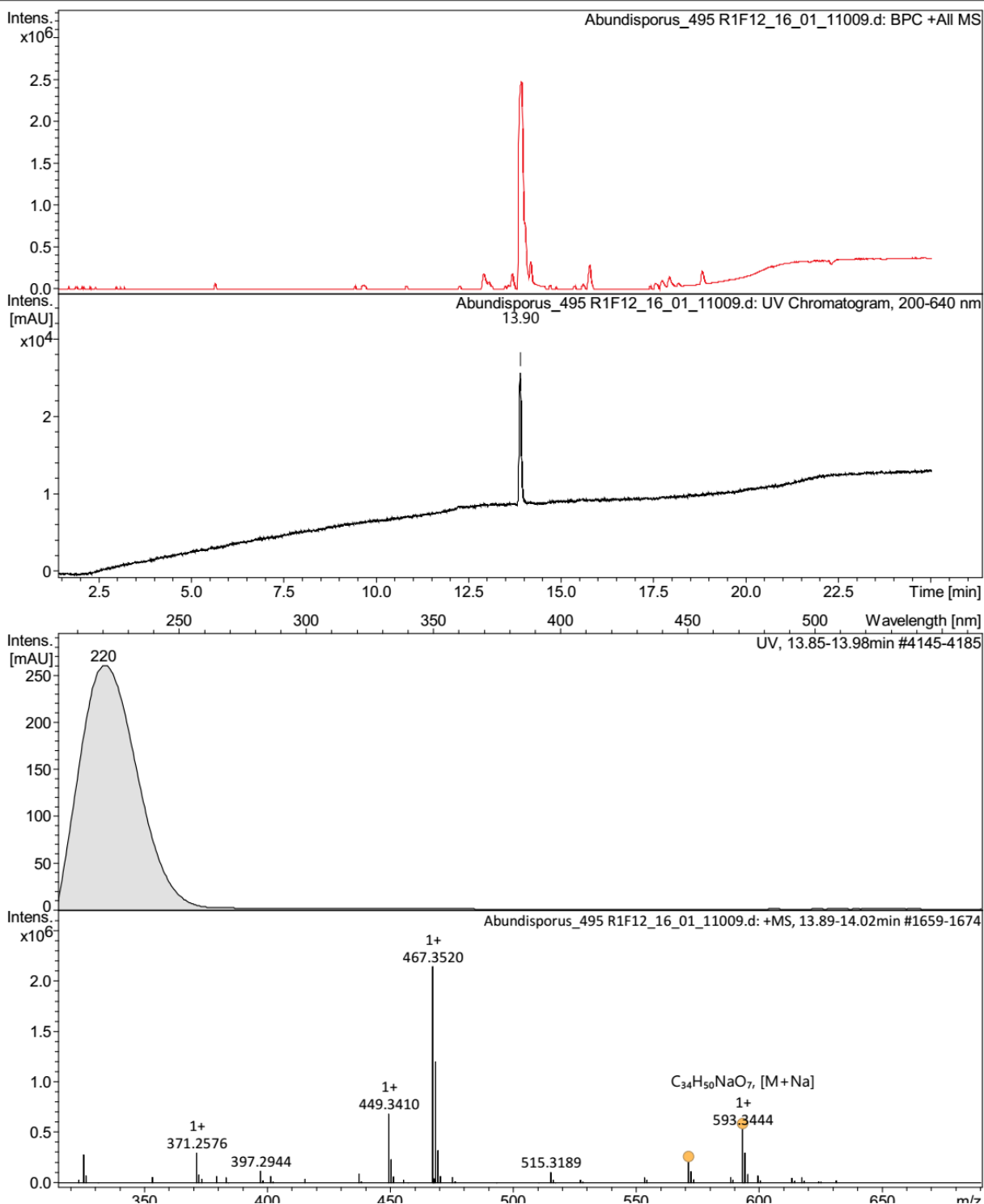


Figure S26. HRESIMS of 4.

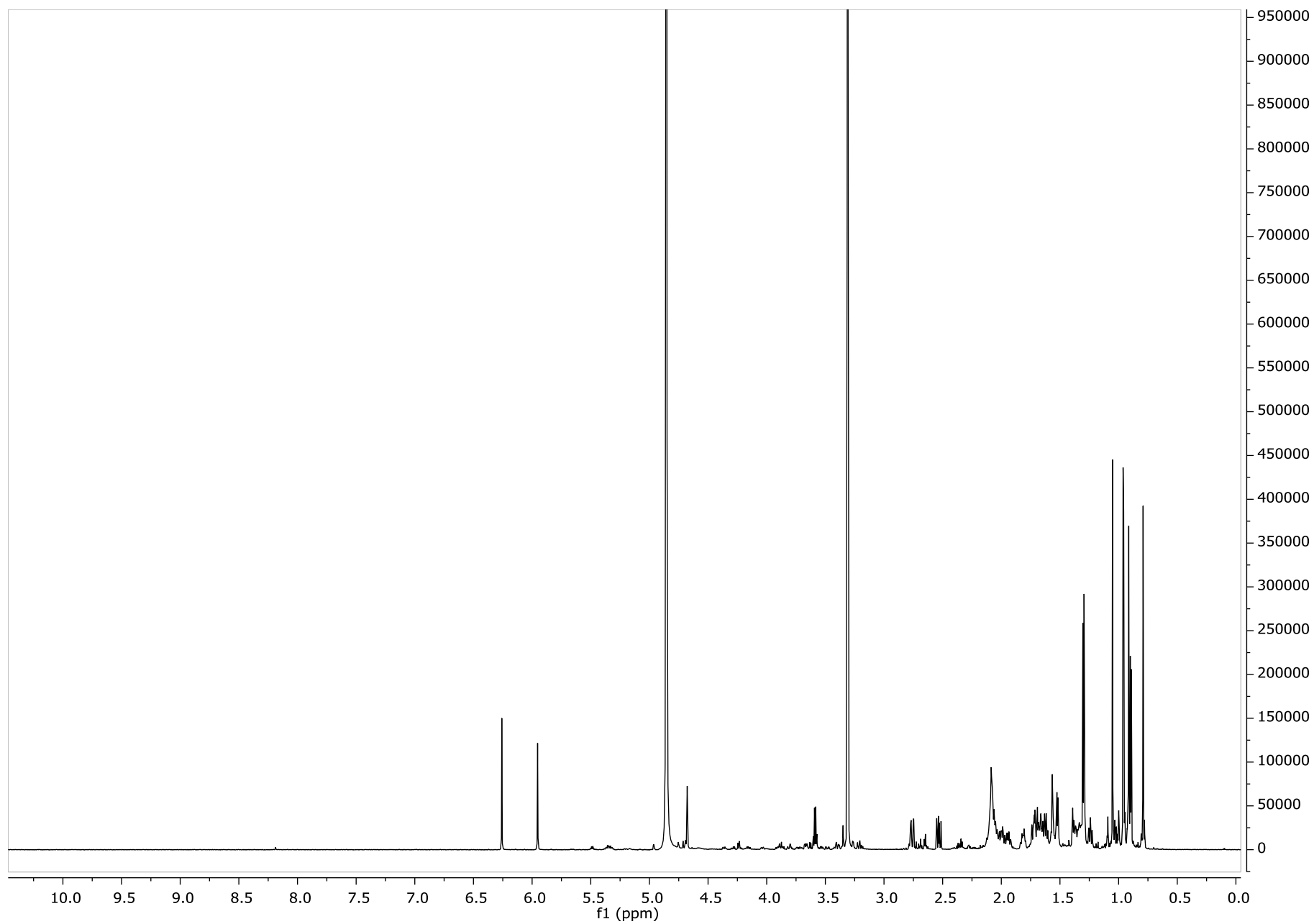


Figure S27. ^1H NMR spectrum of **4** in methanol- d_4 at 700 MHz.

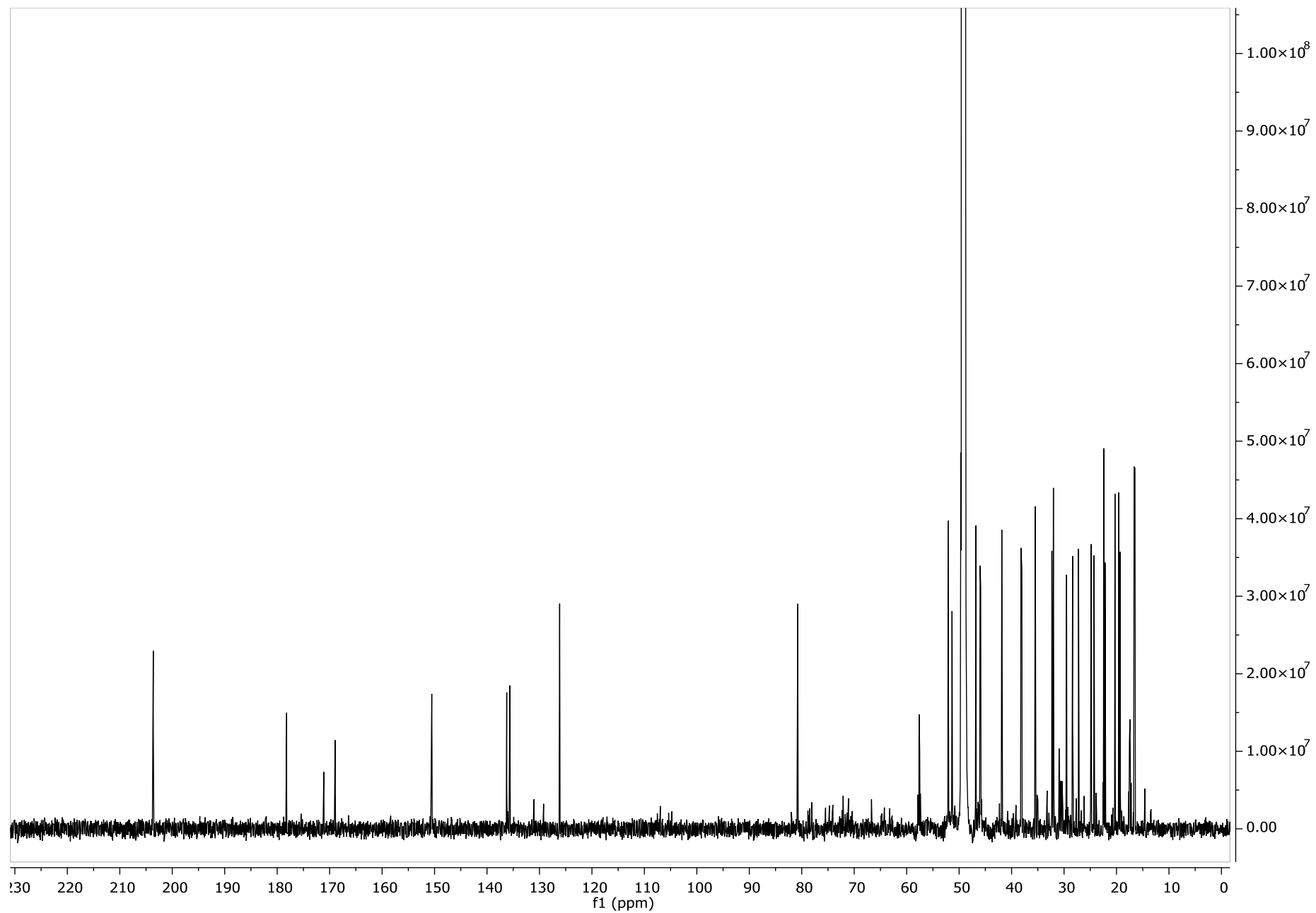


Figure S28. ^{13}C NMR spectrum of **4** in $\text{methanol-}d_4$ at 175 MHz.

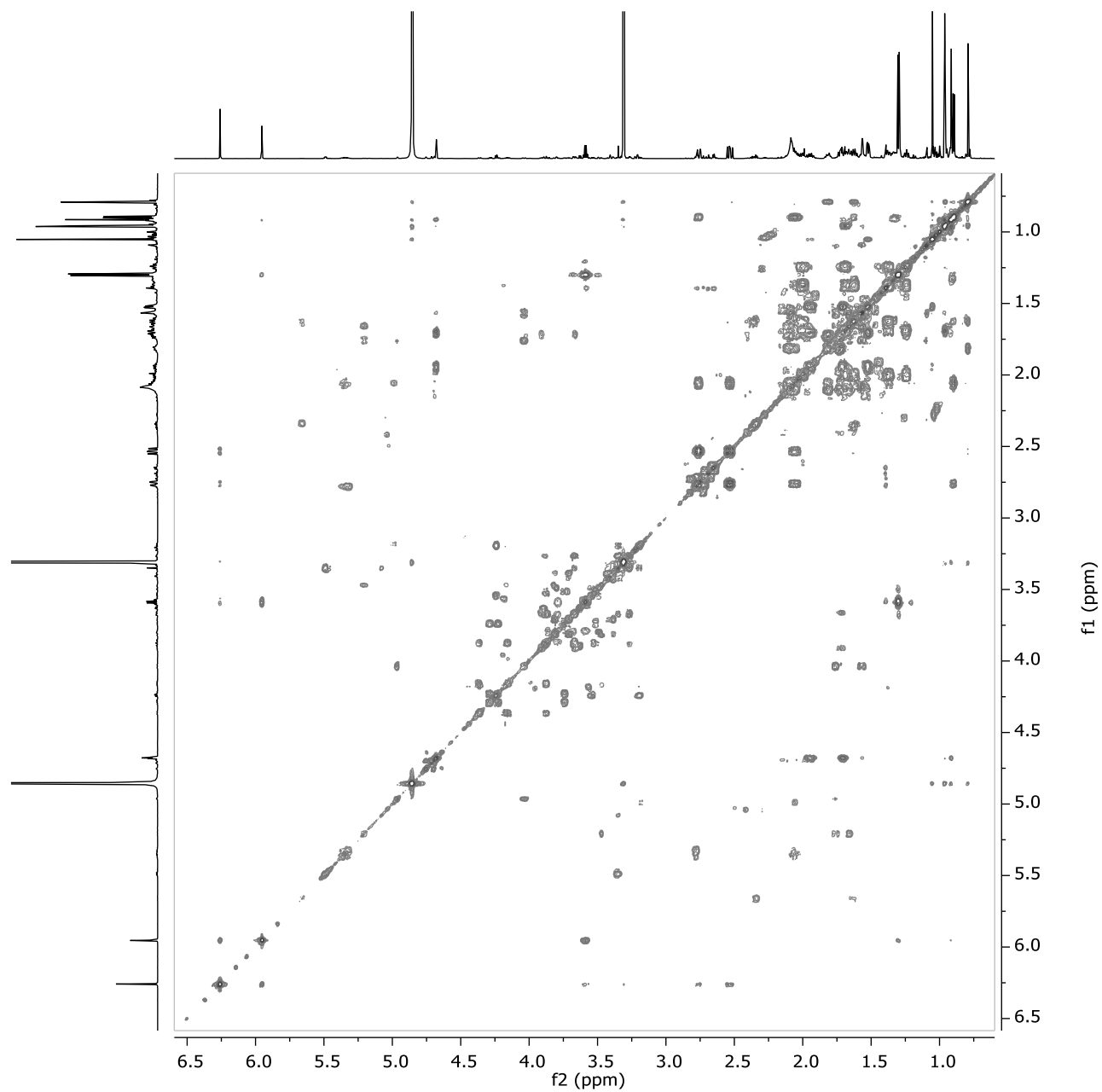


Figure S29. ^1H , ^1H COSY spectrum of **4** in methanol- d_4 at 700 MHz.

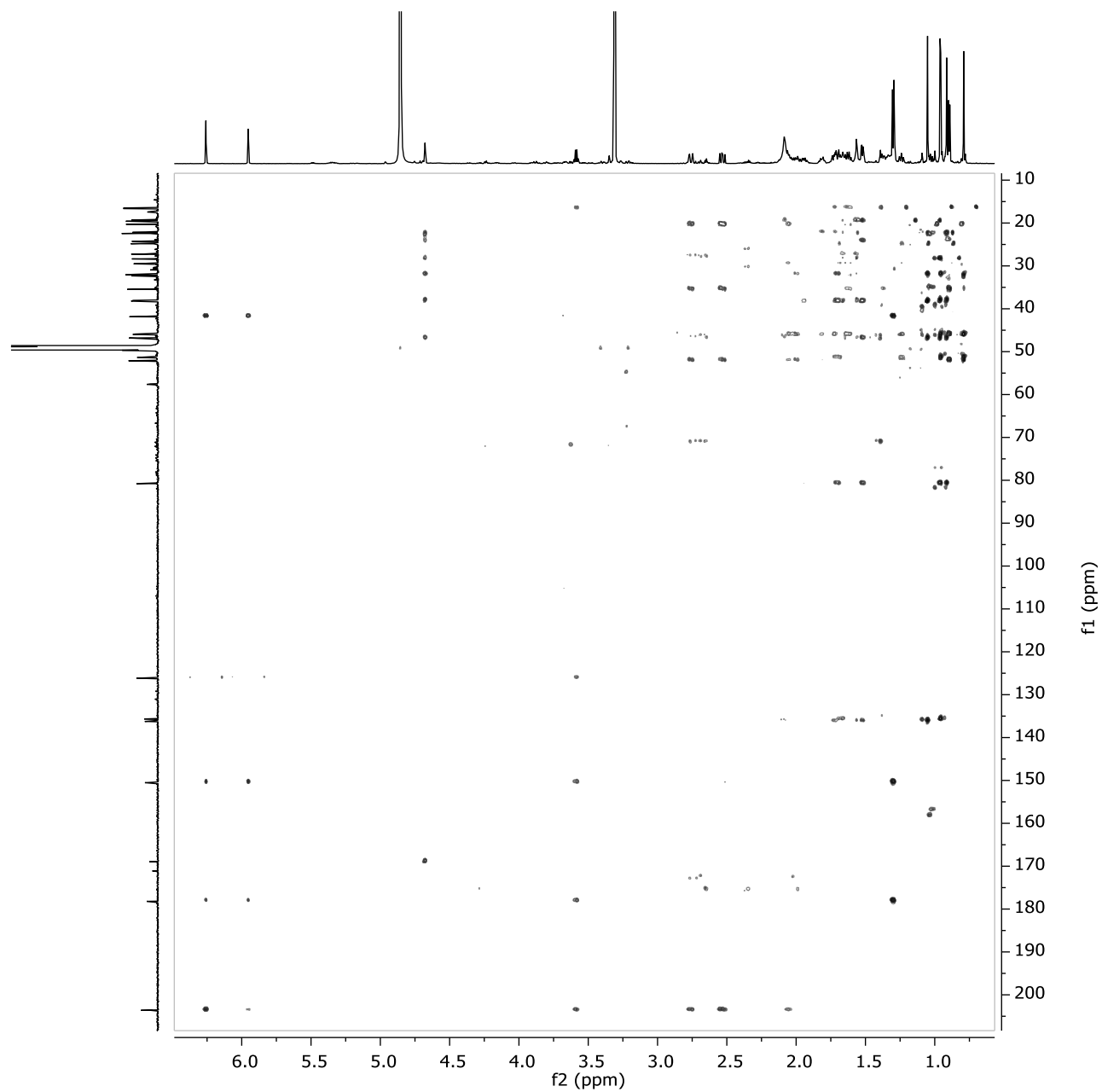


Figure S30. HMBC spectrum of **4** in methanol- d_4 at 700 MHz.

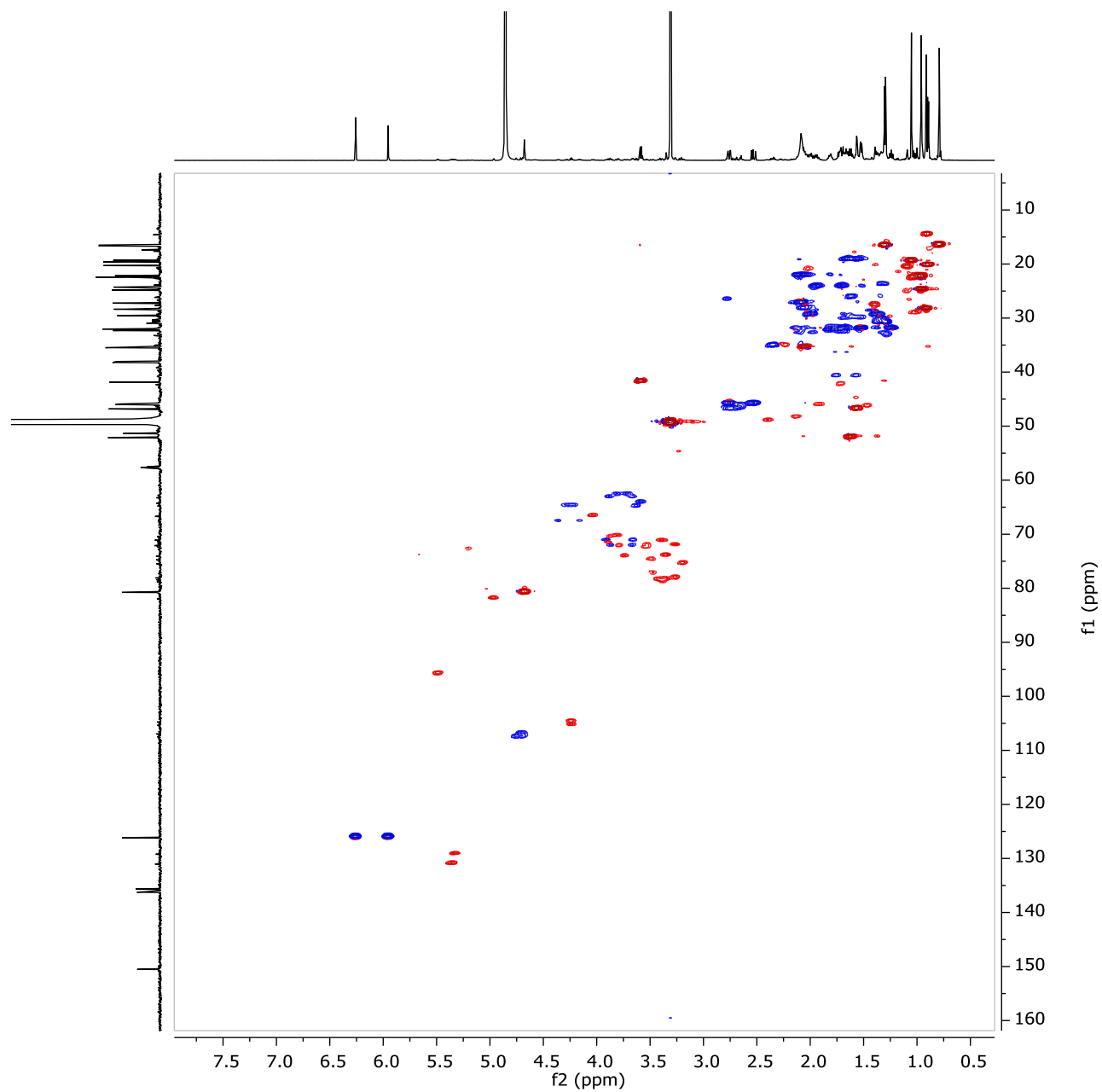


Figure S31. HSQC spectrum of **4** in methanol- d_4 at 700 MHz.

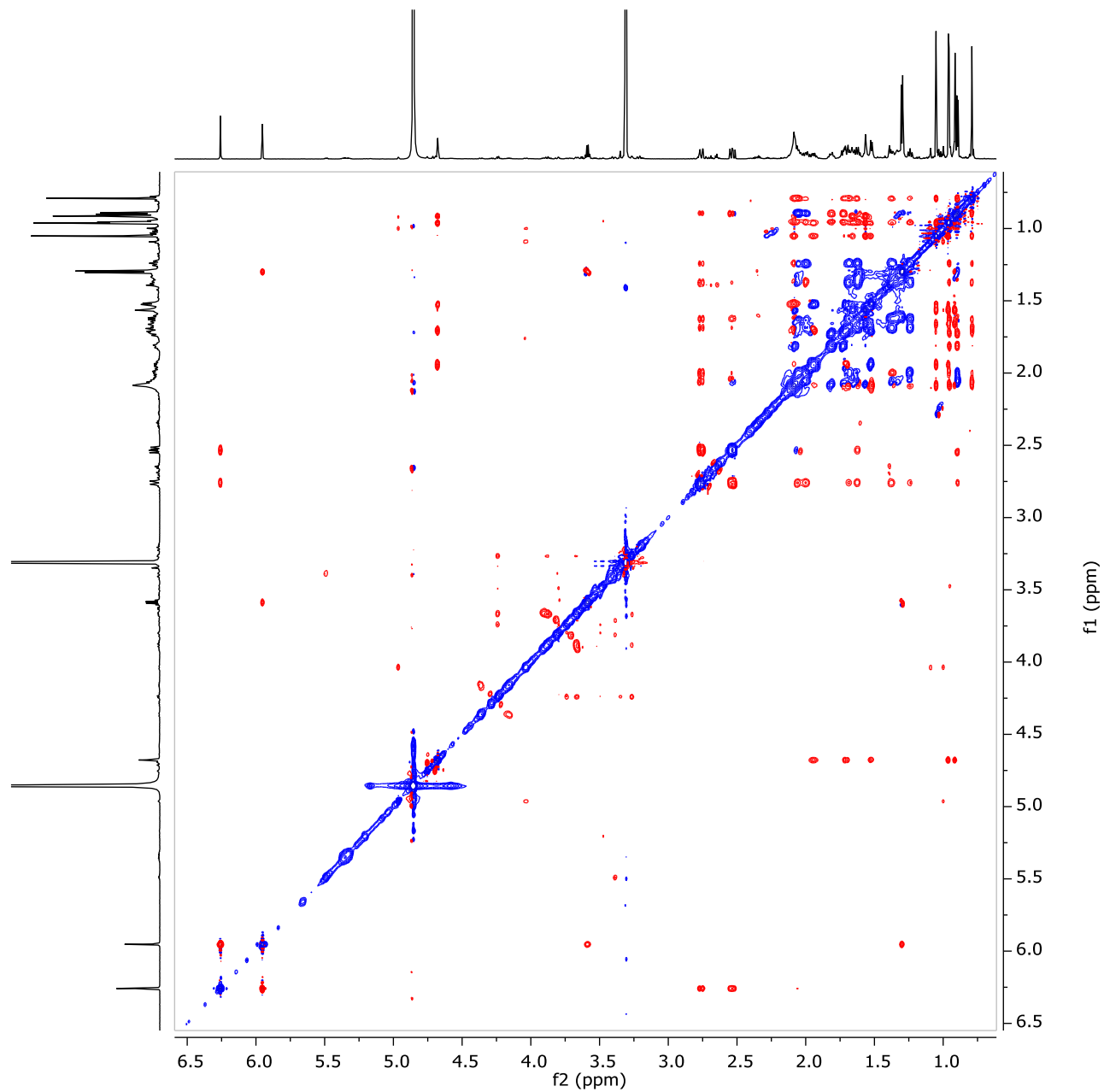


Figure S32. ROESY spectrum of **4** in methanol-*d*₄ at 700 MHz.