

Unusual bicyclo [3.2.1] octanoid neolignans from leaves of *Piper crocatum* and their effect on pyruvate dehydrogenase activity.

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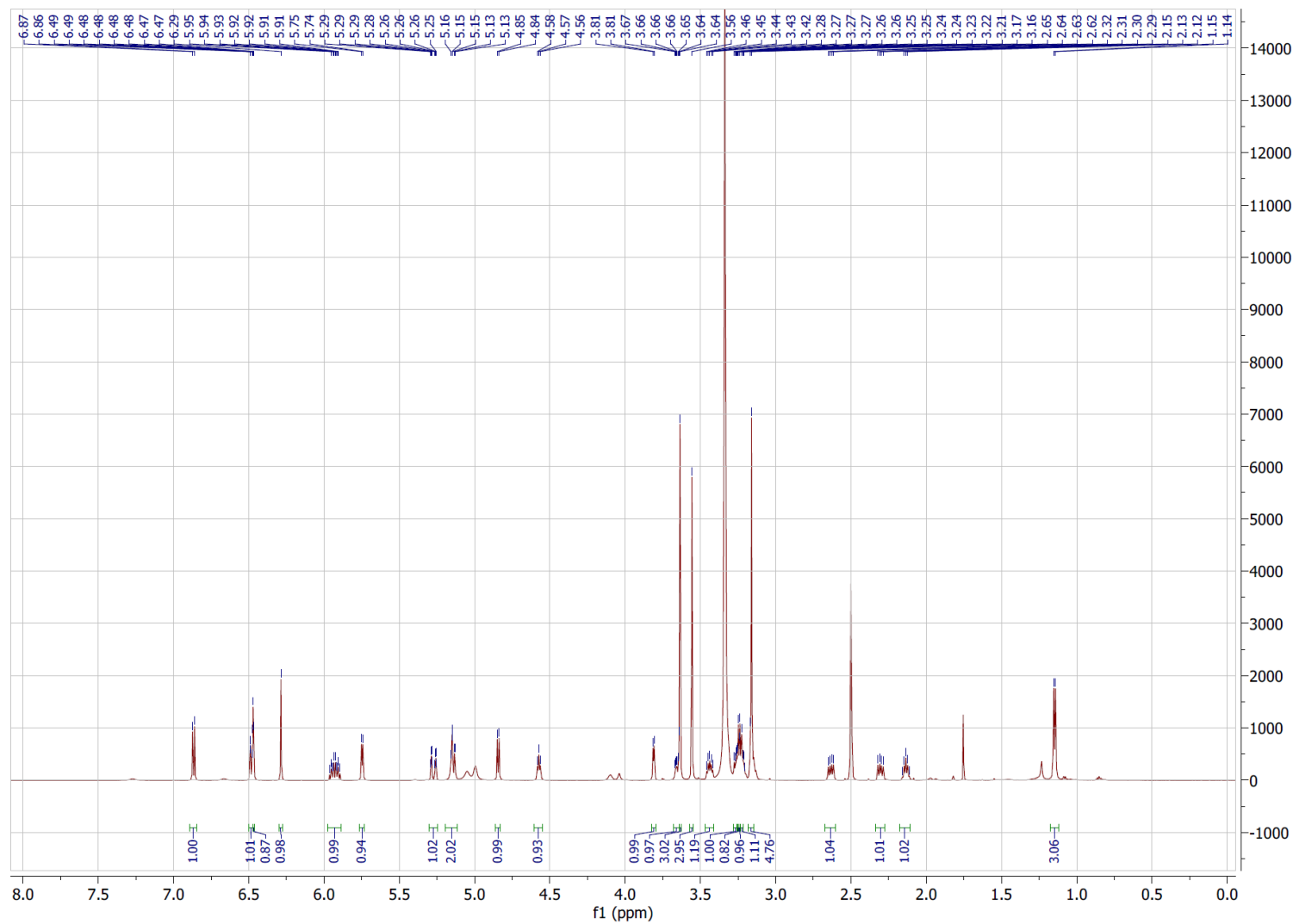


Figure S1. ^1H -NMR (600 MHz, $\text{dimethyl sulfoxide-}d_6$) spectrum of compound **1**

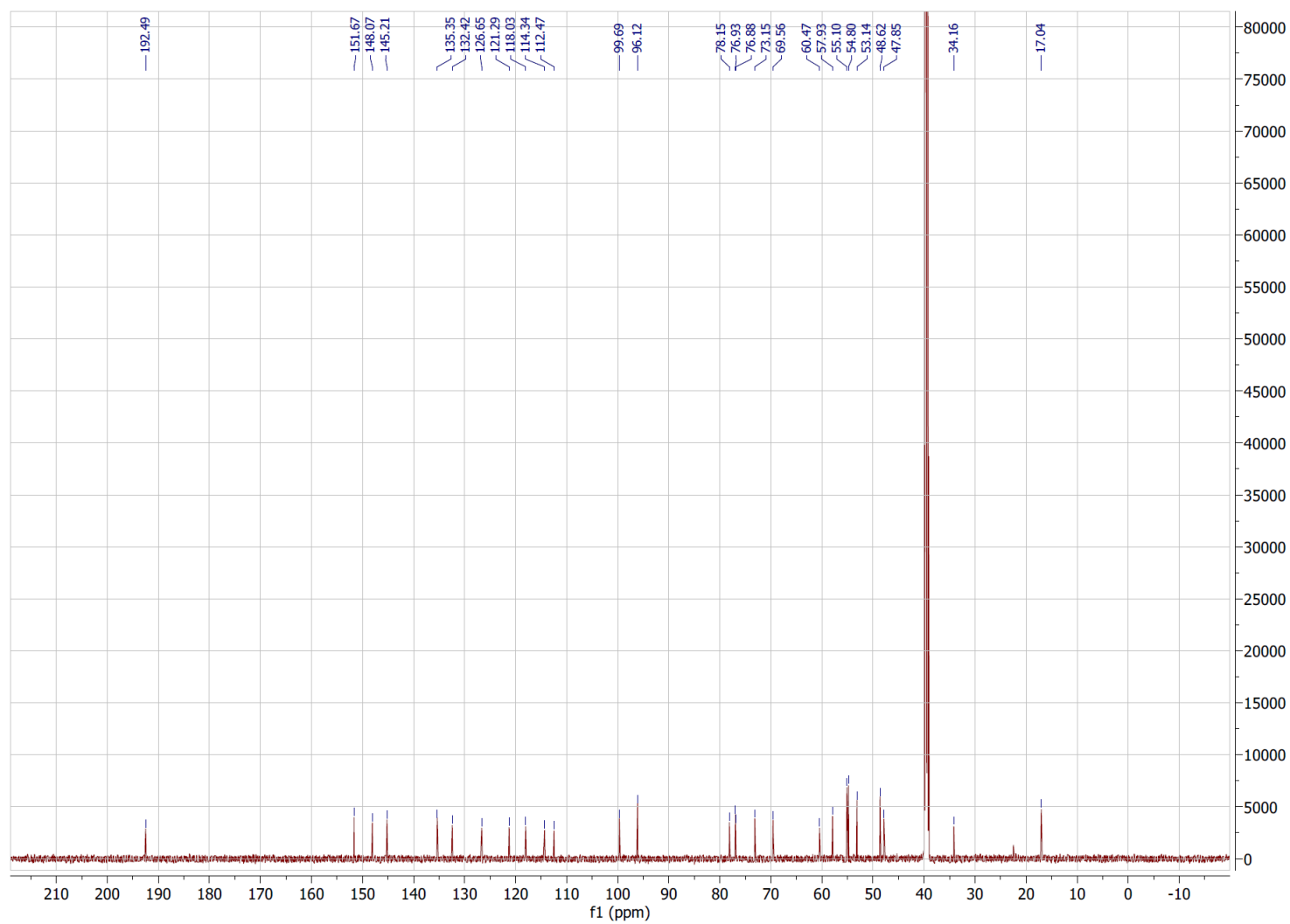


Figure S2. ¹³C-NMR (150 MHz, dimethyl sulfoxide-*d*₆) spectrum of compound **1**

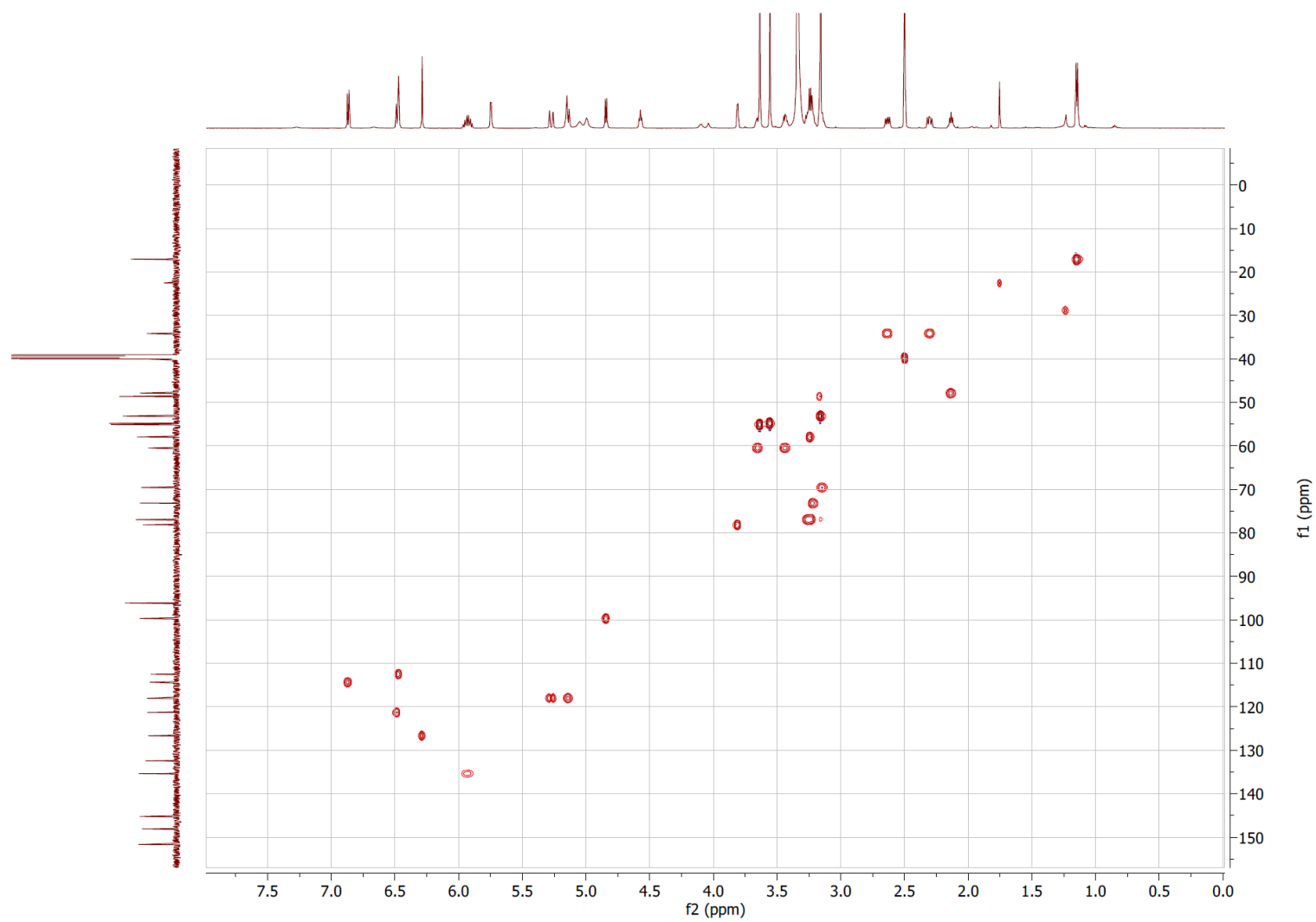


Figure S3. HSQC spectrum of compound **1**

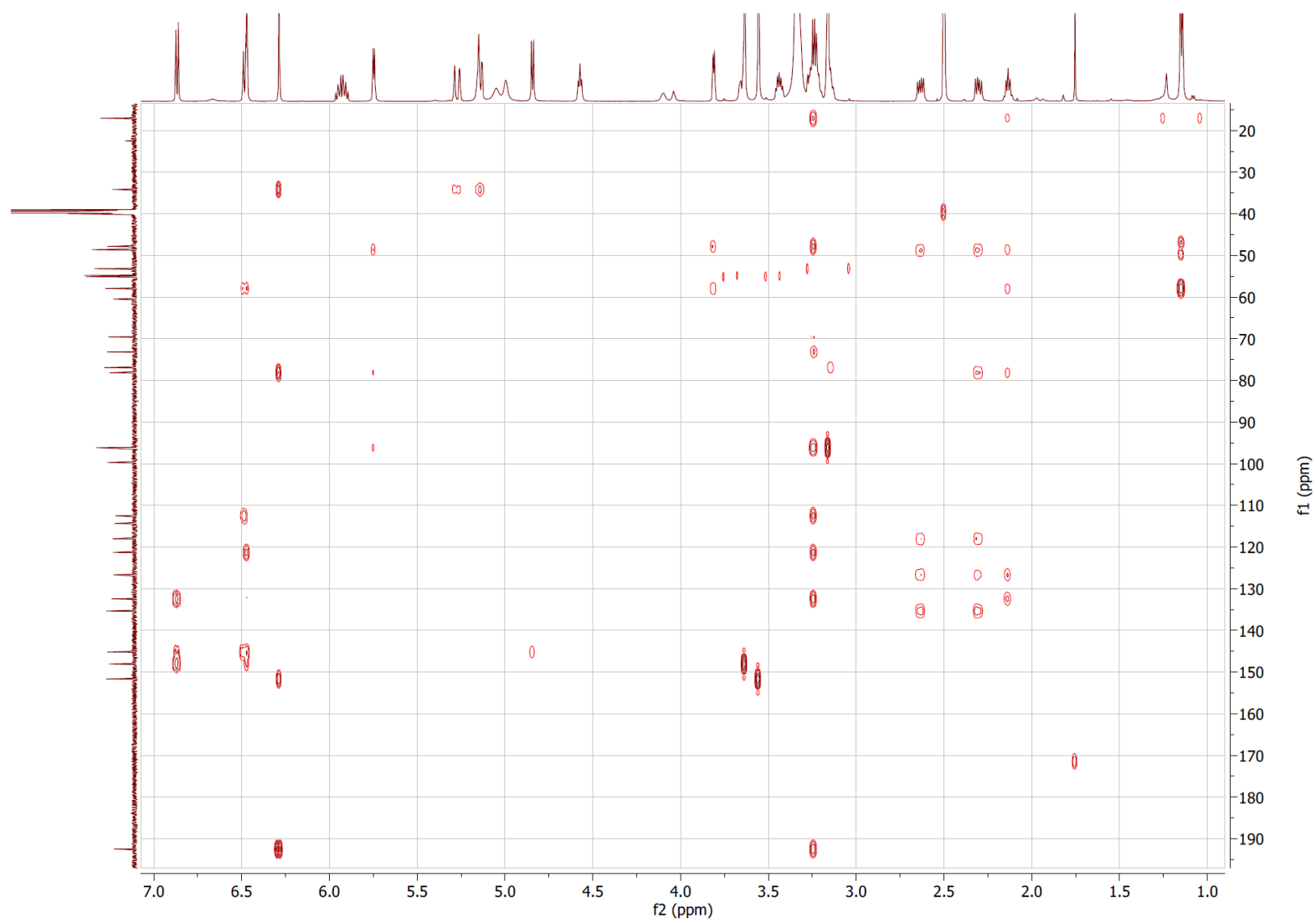


Figure S4. HMBC spectrum of compound

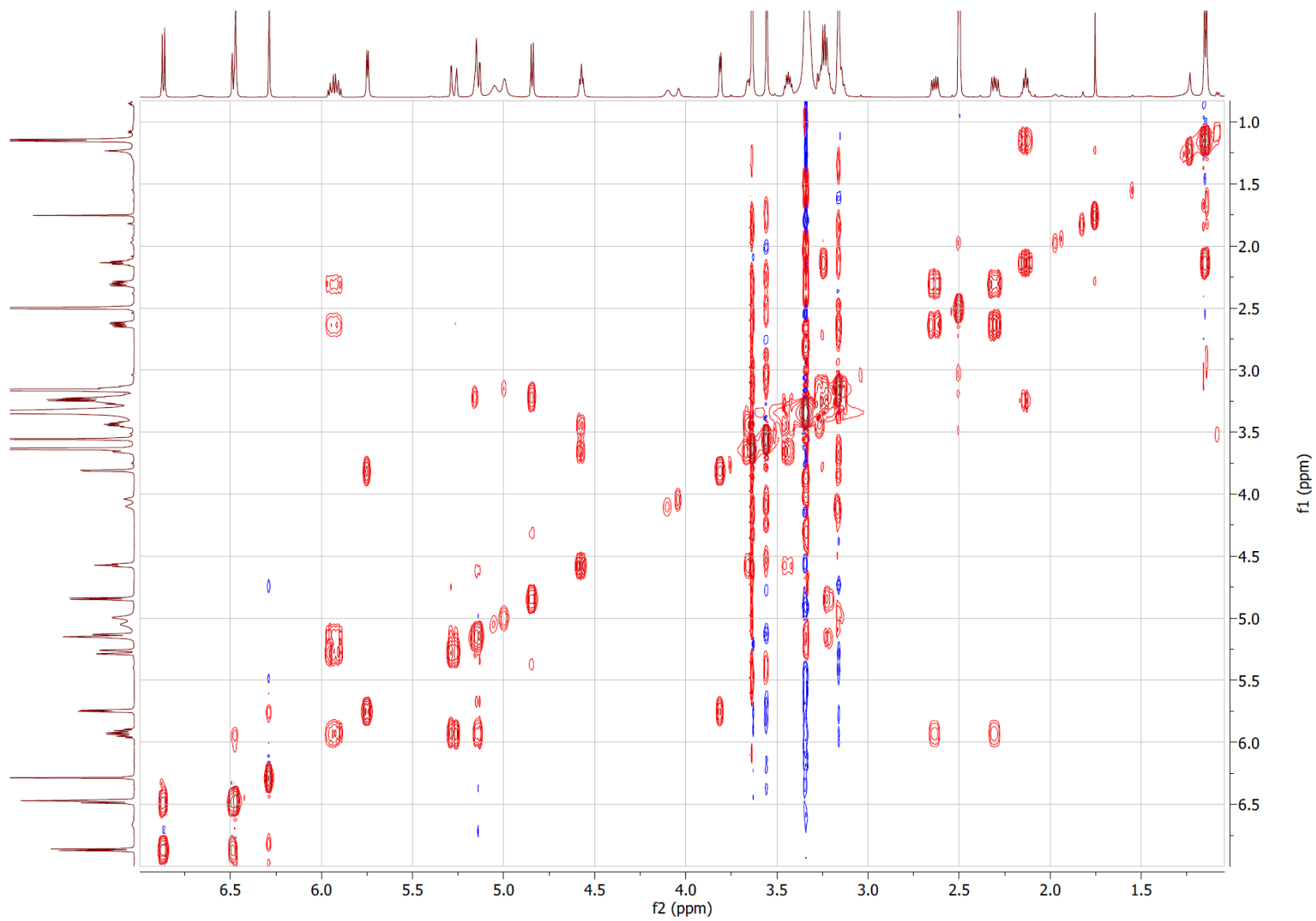


Figure S5. COSY spectrum of compound

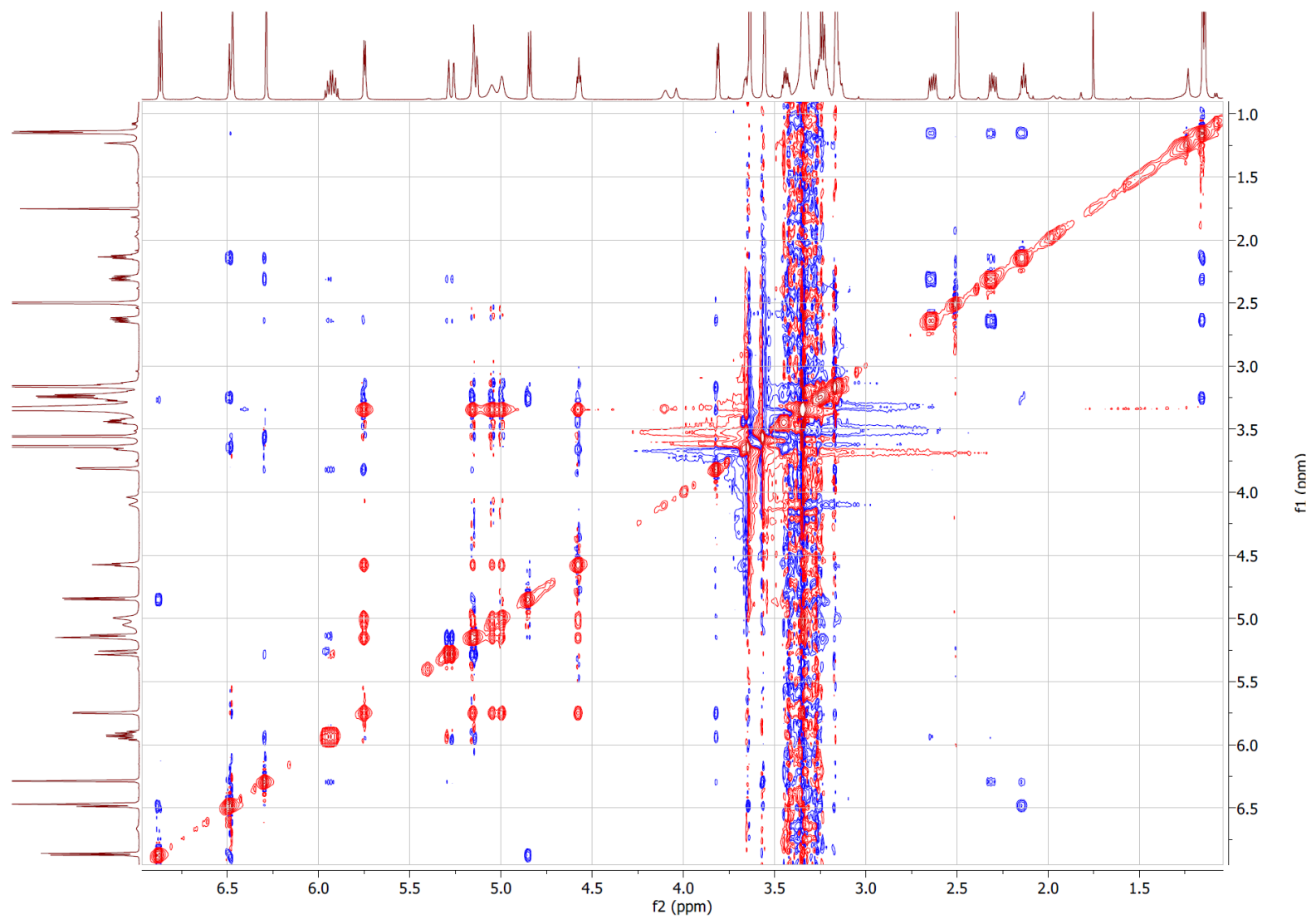


Figure S6. ROESY spectrum of compound

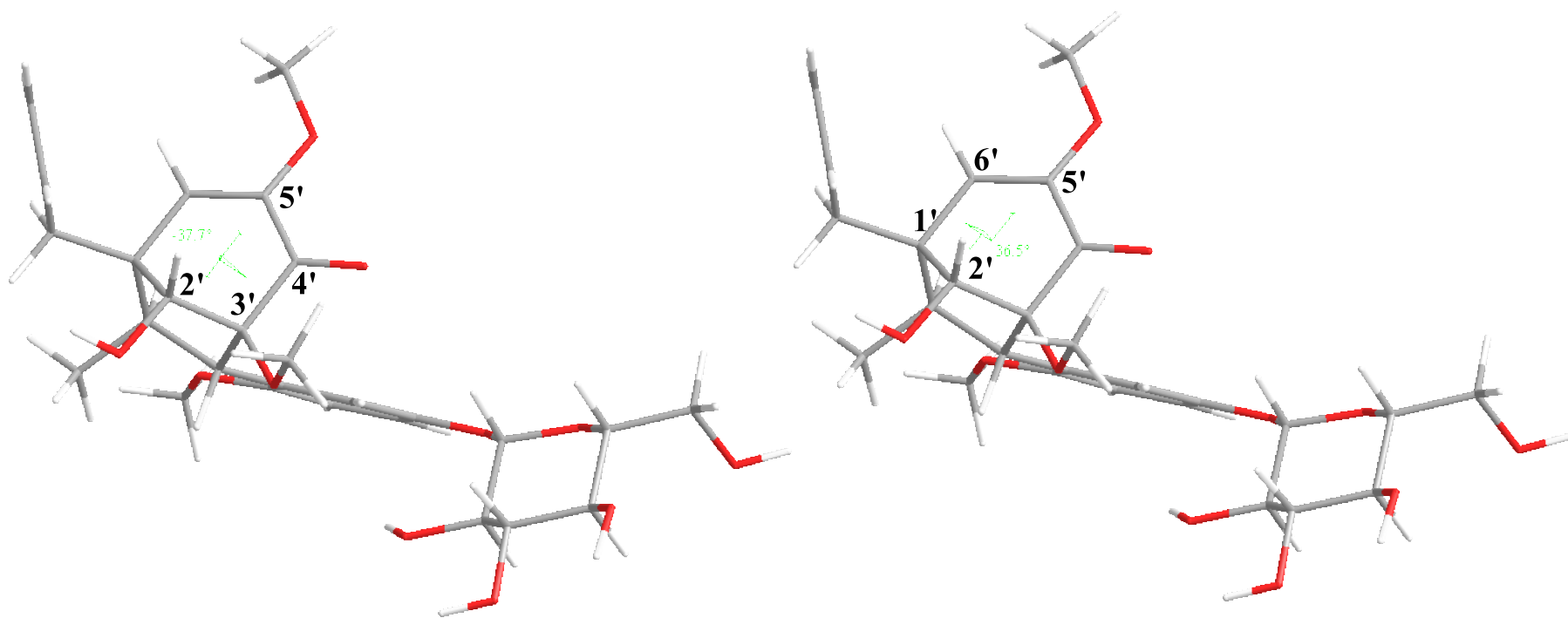


Figure S7. Adjacent torsion angles of compound 1

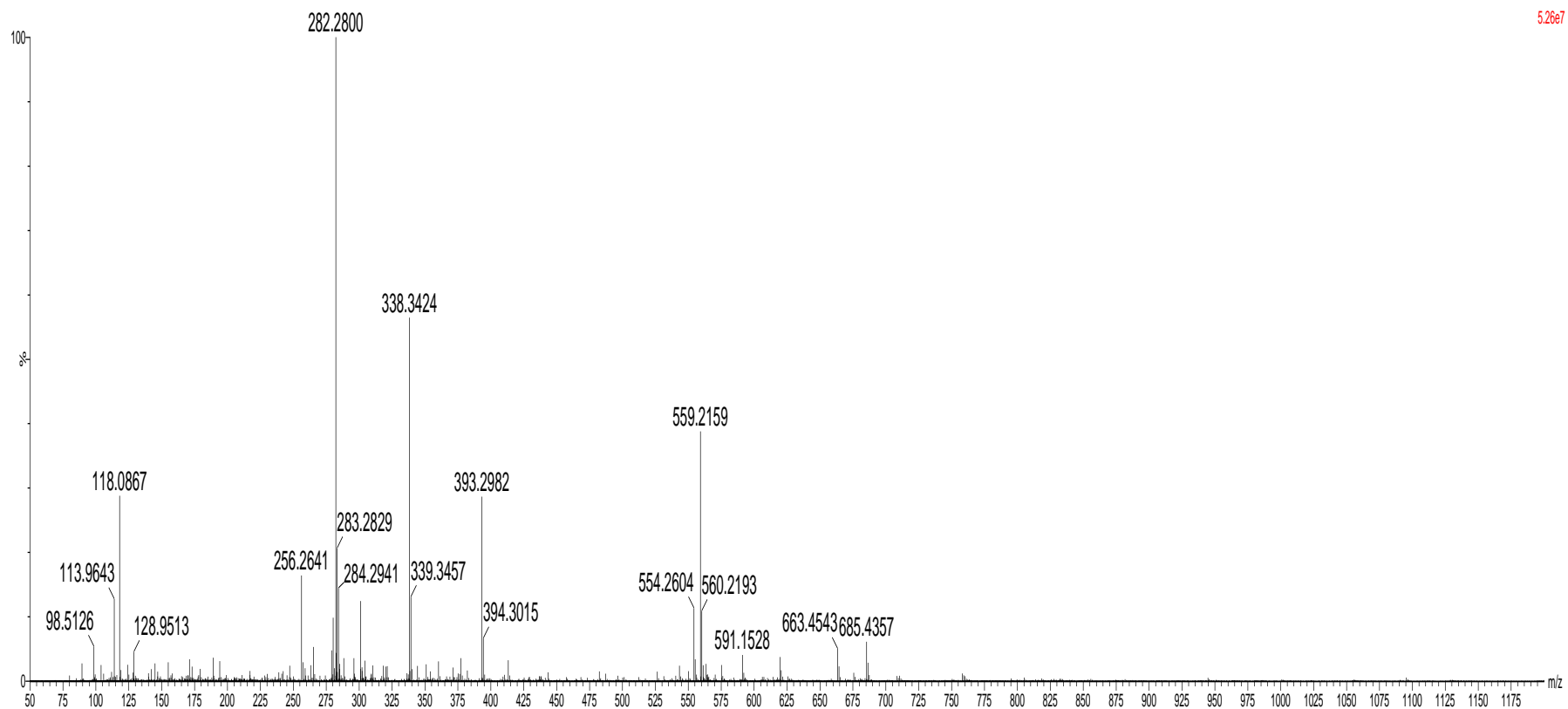


Figure S8. HR-ESI-MS spectrum of compound **1**

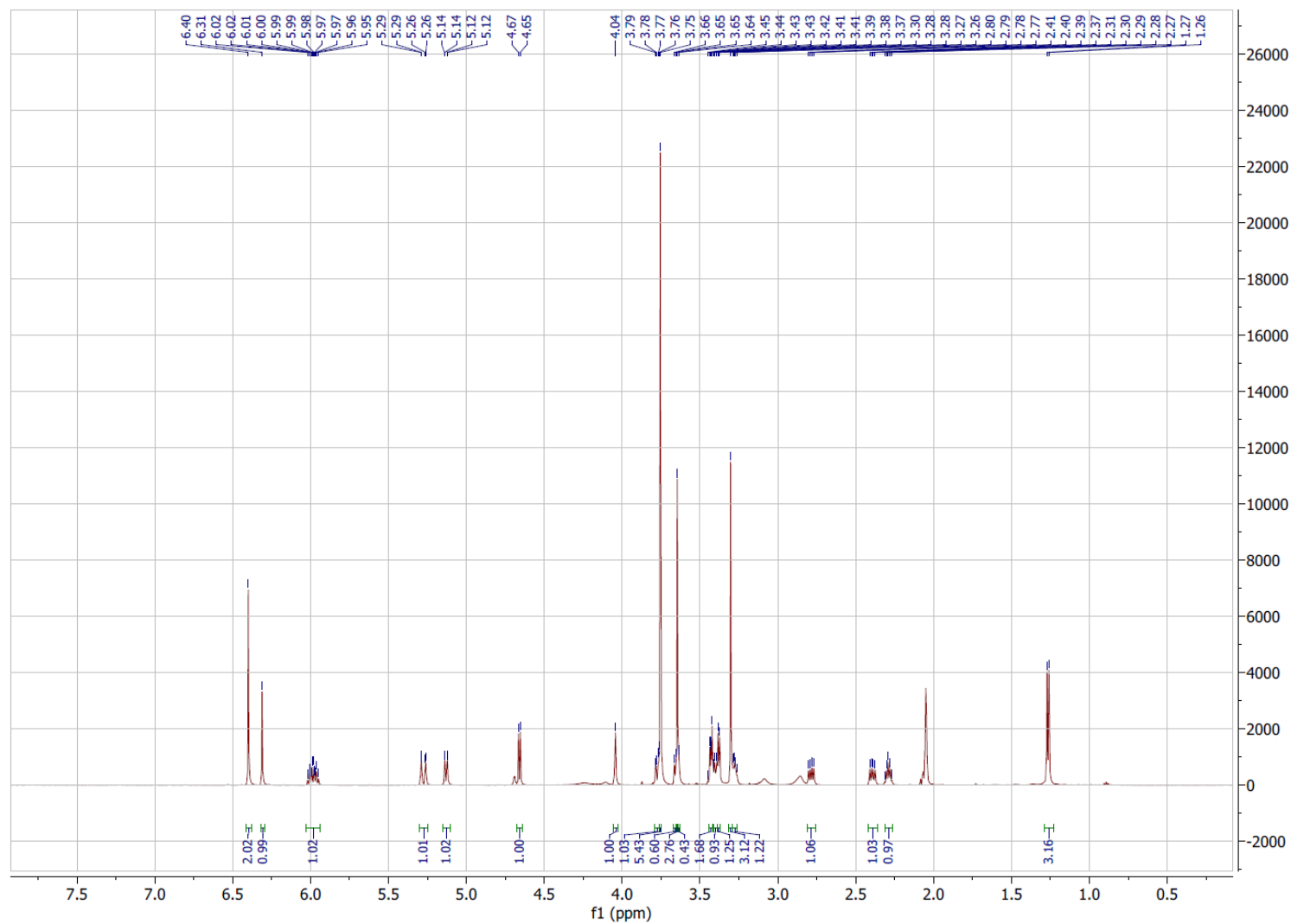


Figure S9. ¹H-NMR (600 MHz, acetone-*d*₆) spectrum of compound **2**

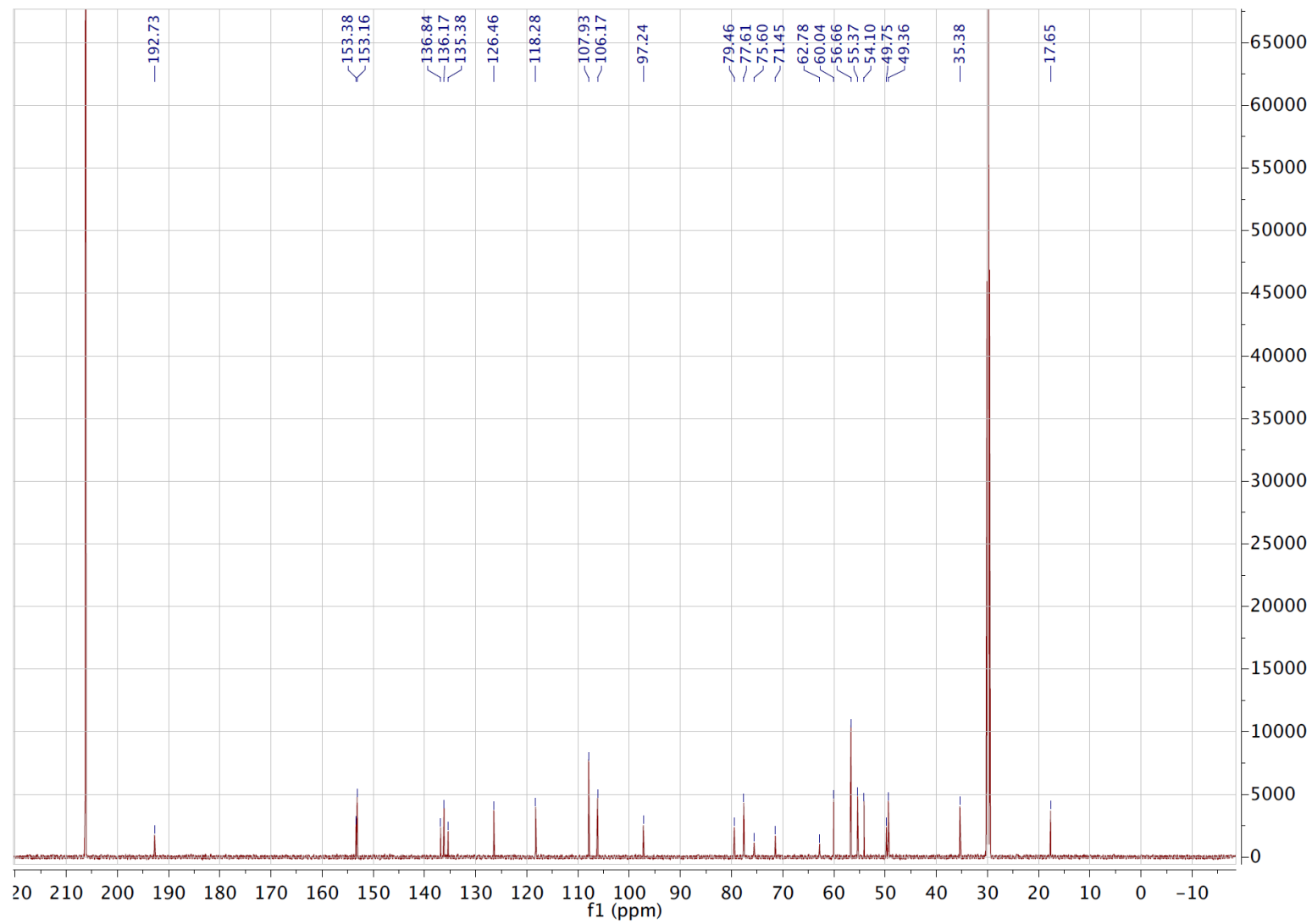


Figure S10. ^{13}C -NMR (150 MHz, acetone- d_6) spectrum of compound **2**

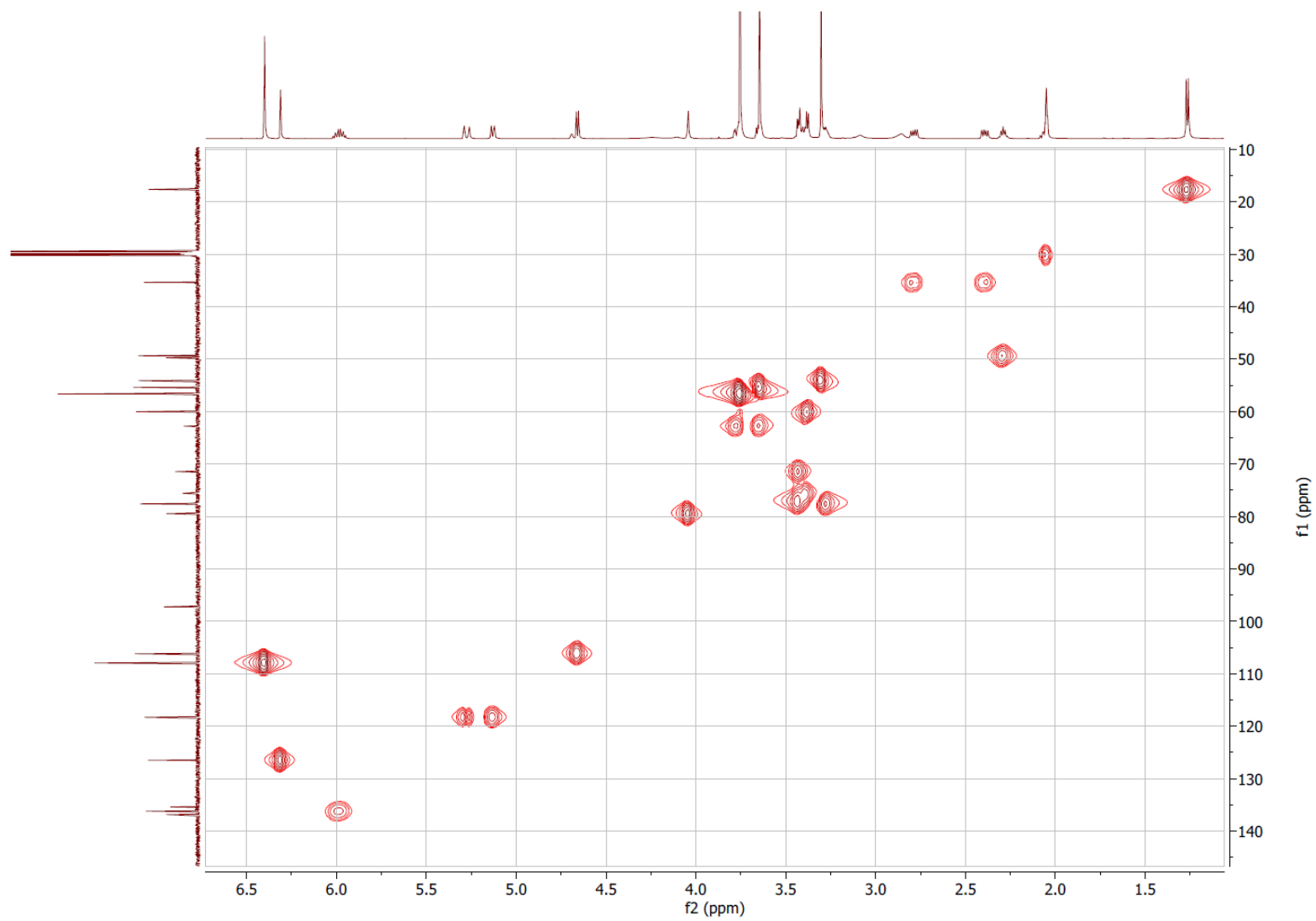


Figure S11. HSQC spectrum of compound

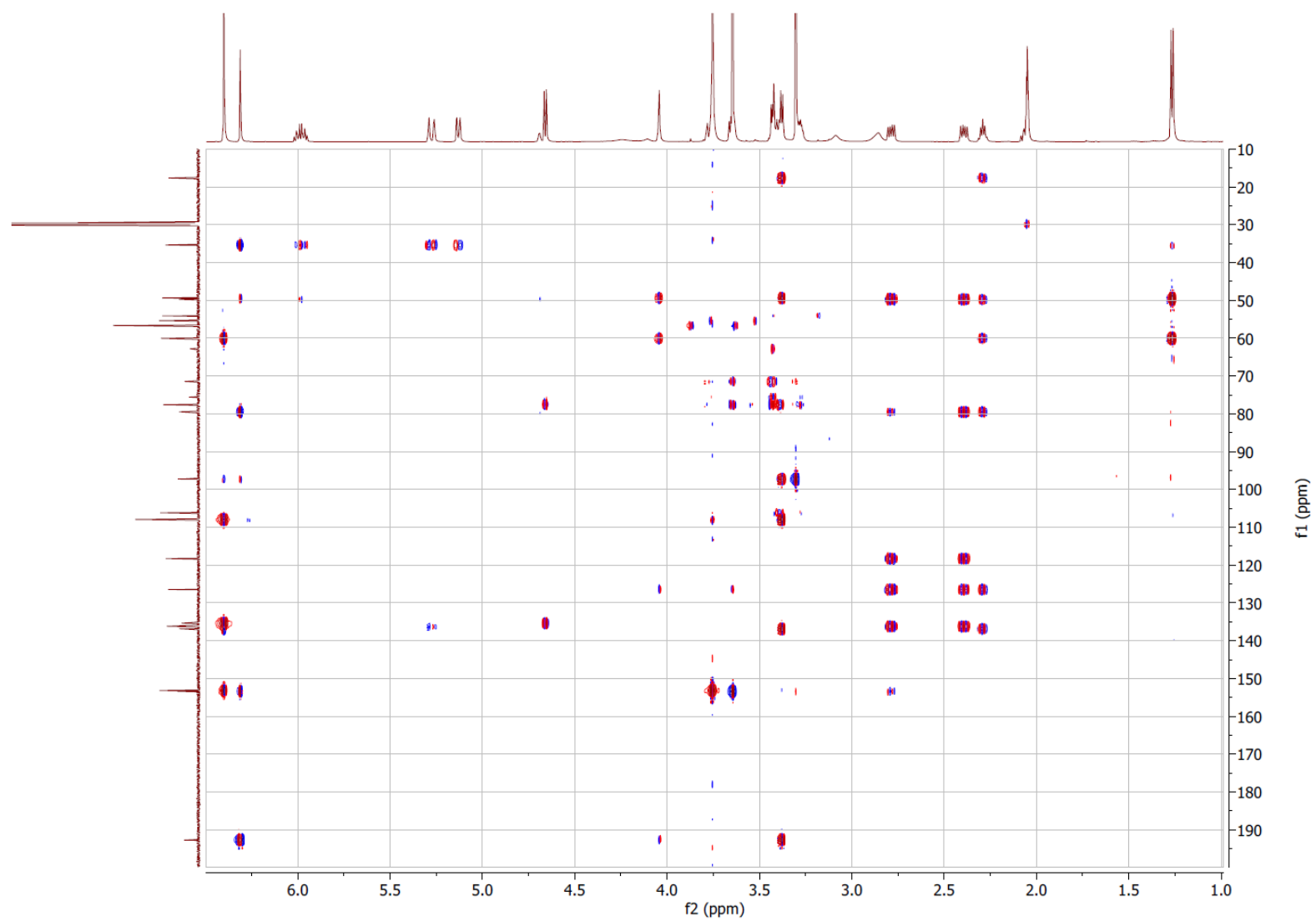


Figure S12. HMBC spectrum of compound

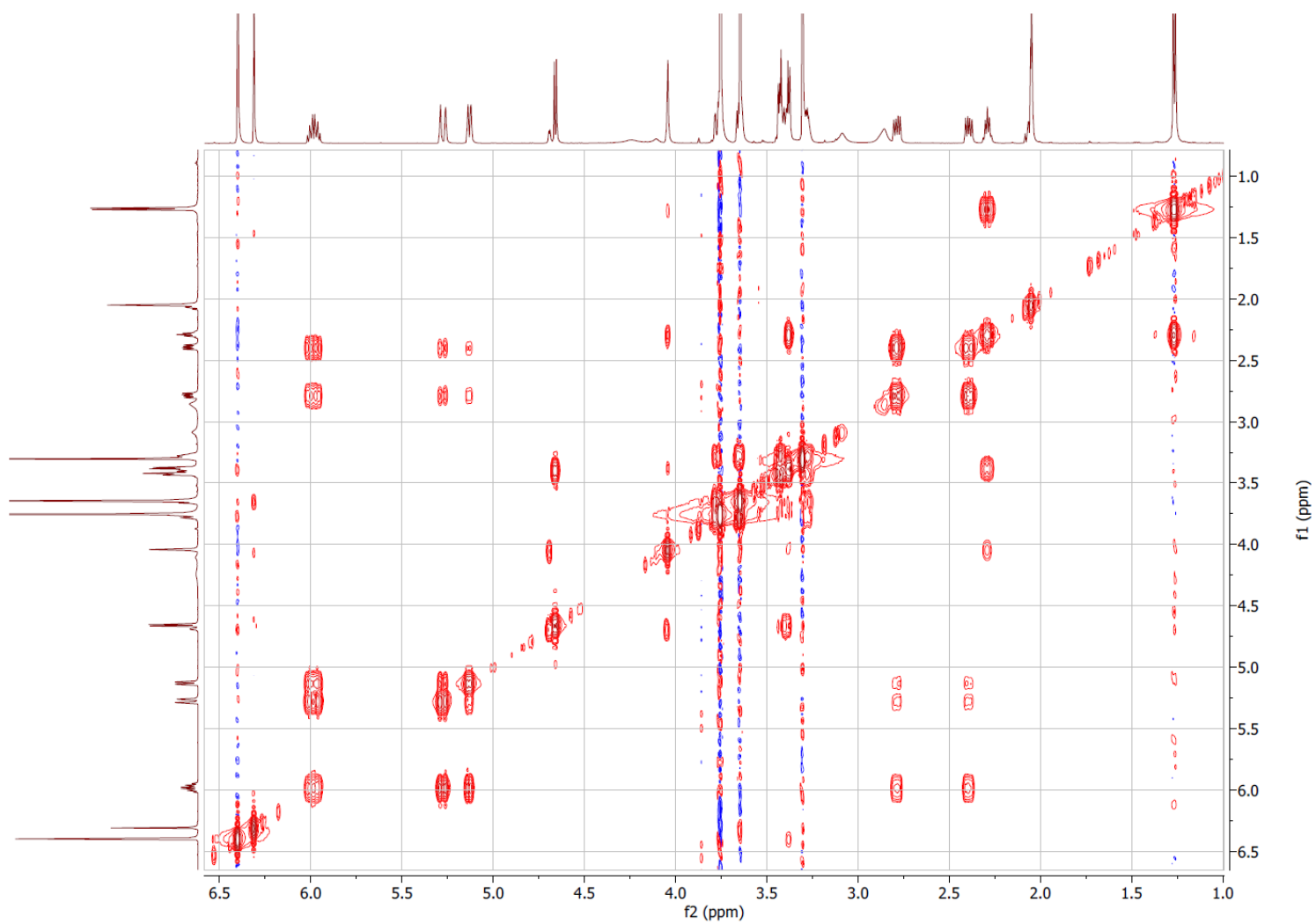


Figure S13. COSY spectrum of compound

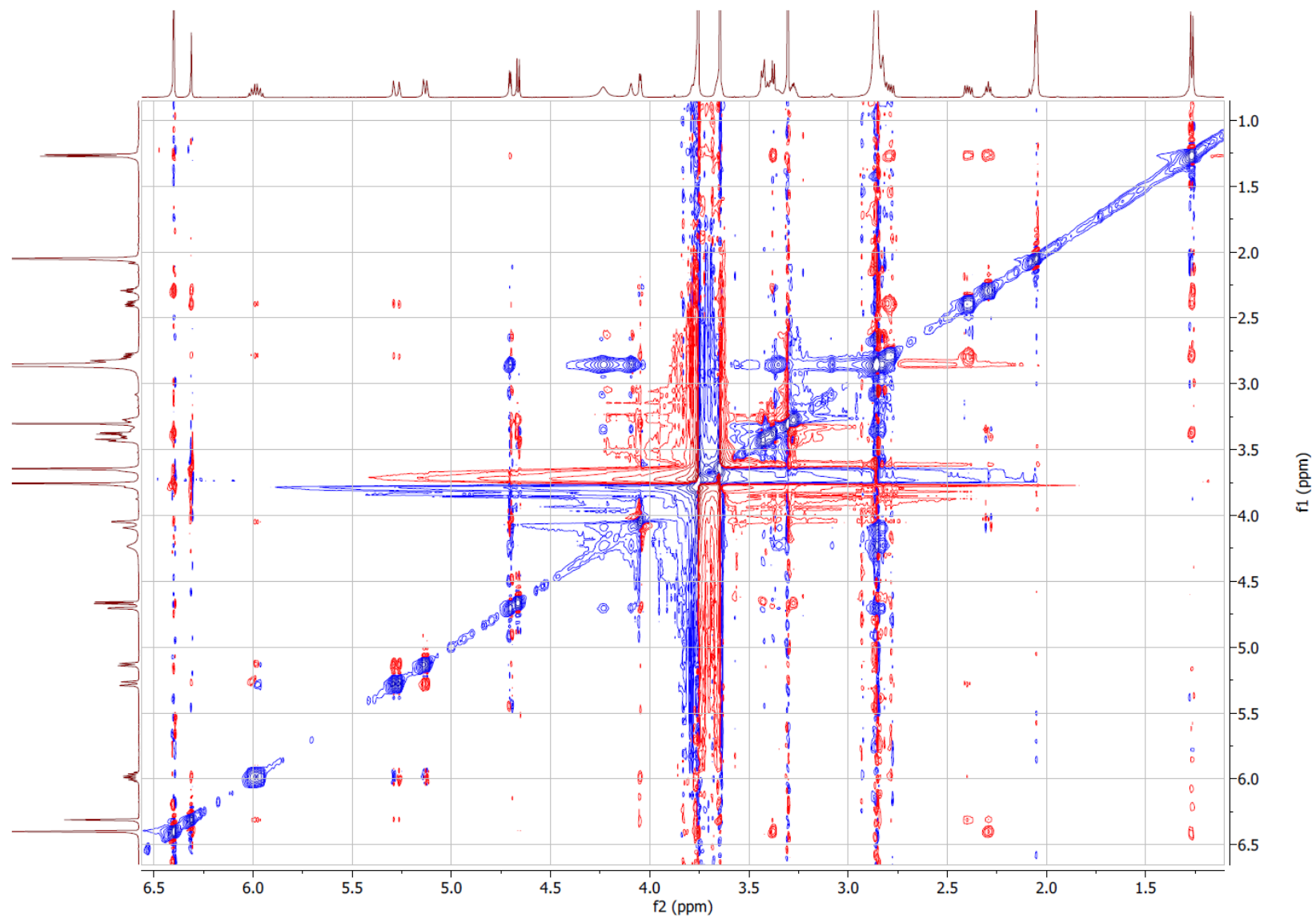


Figure S14. ROESY spectrum of compound

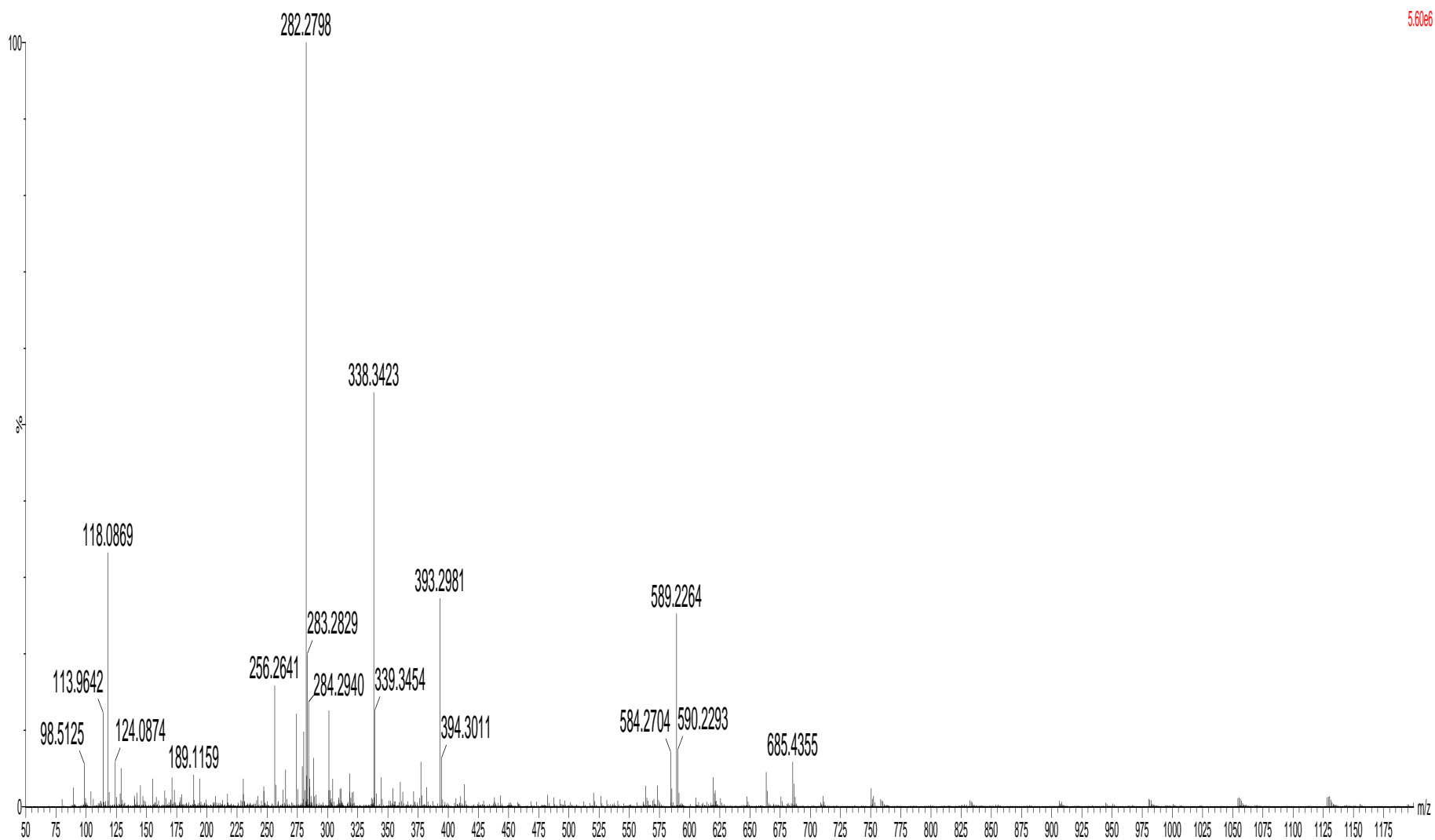


Figure S15. HR-ESI-MS spectrum of compound 2

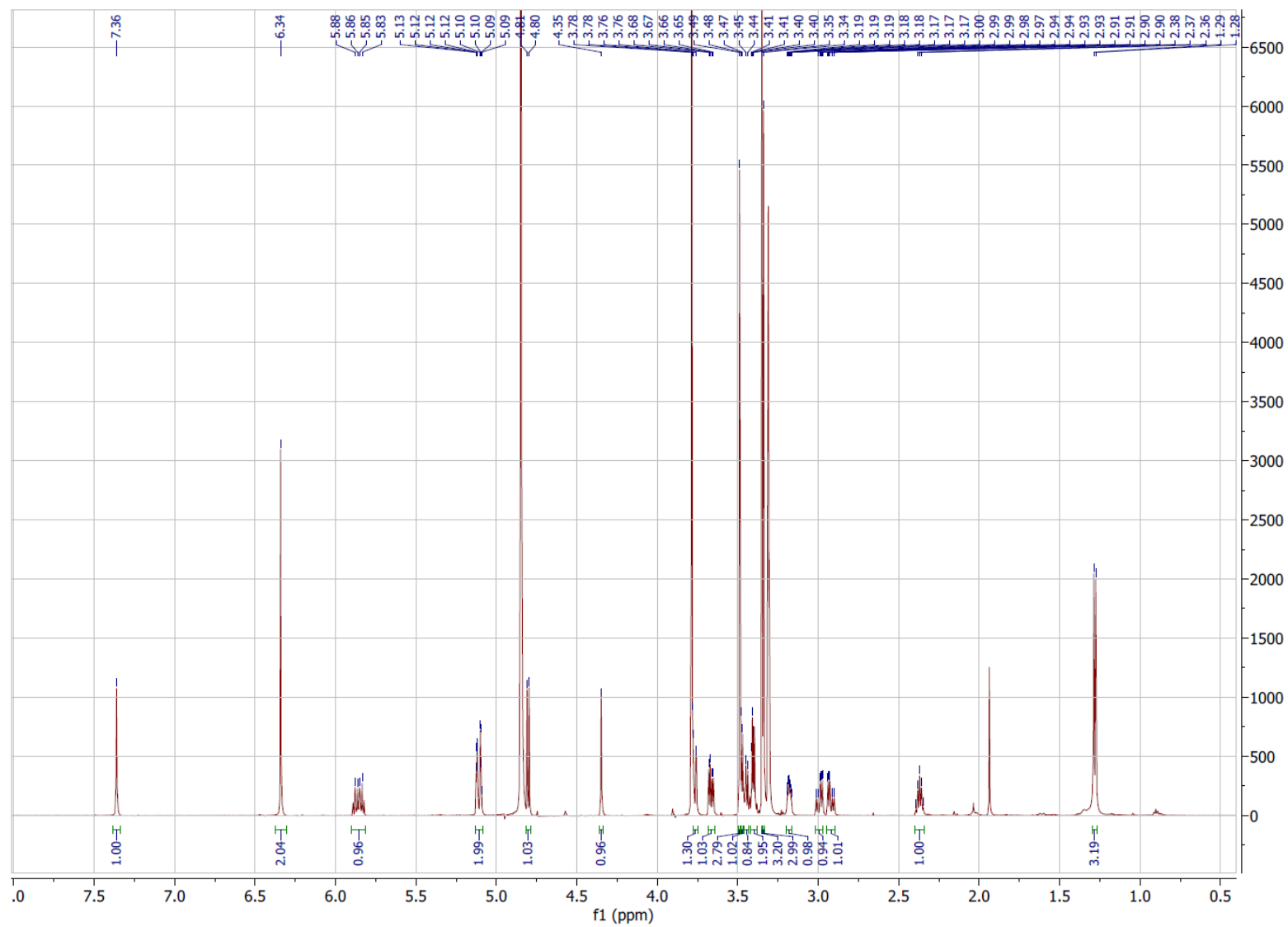


Figure S16. ^1H -NMR (600 MHz, methanol- d_4) spectrum of compound

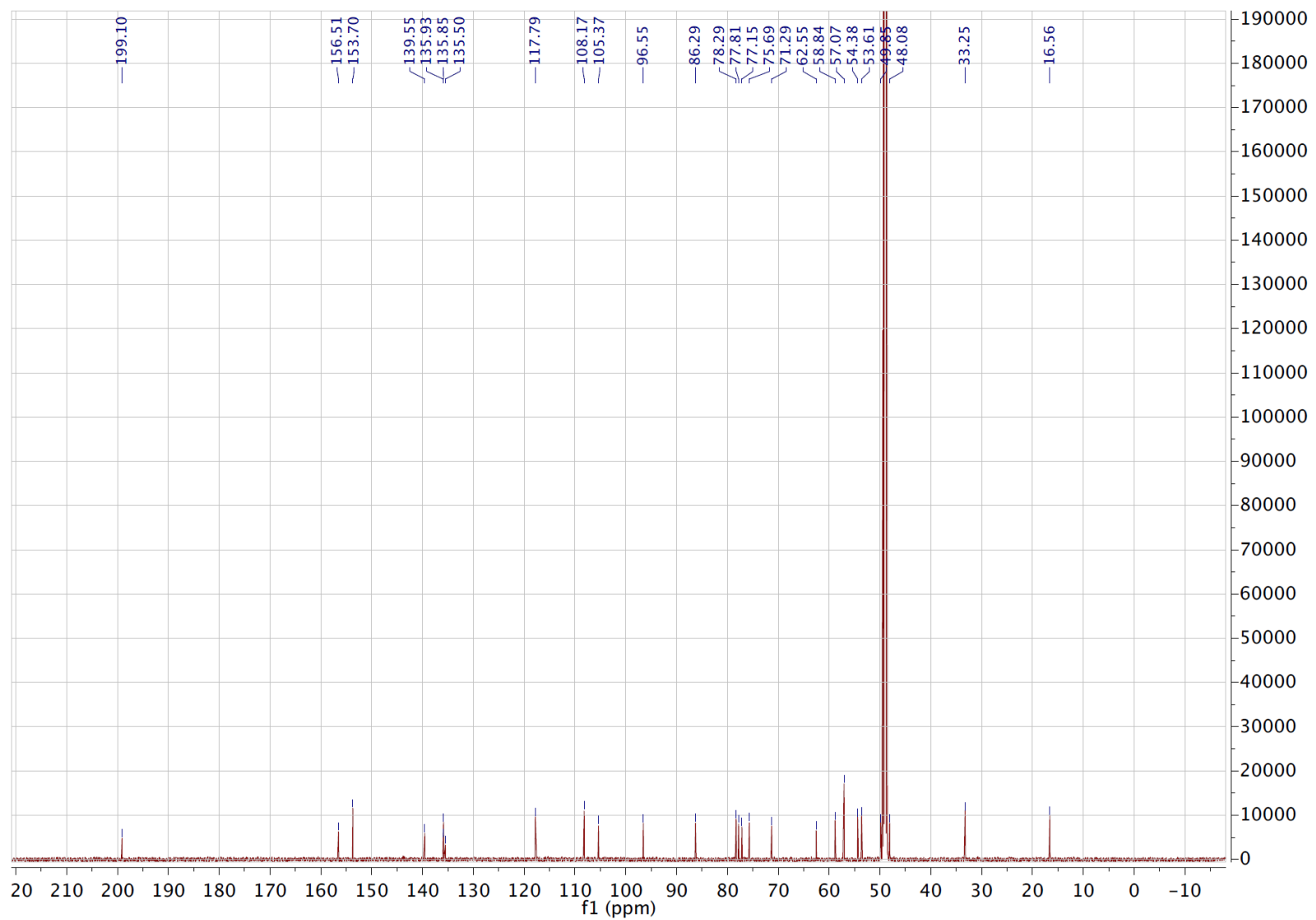


Figure S17. ¹³C-NMR (150 MHz, methanol-*d*₄) spectrum of compound **3**

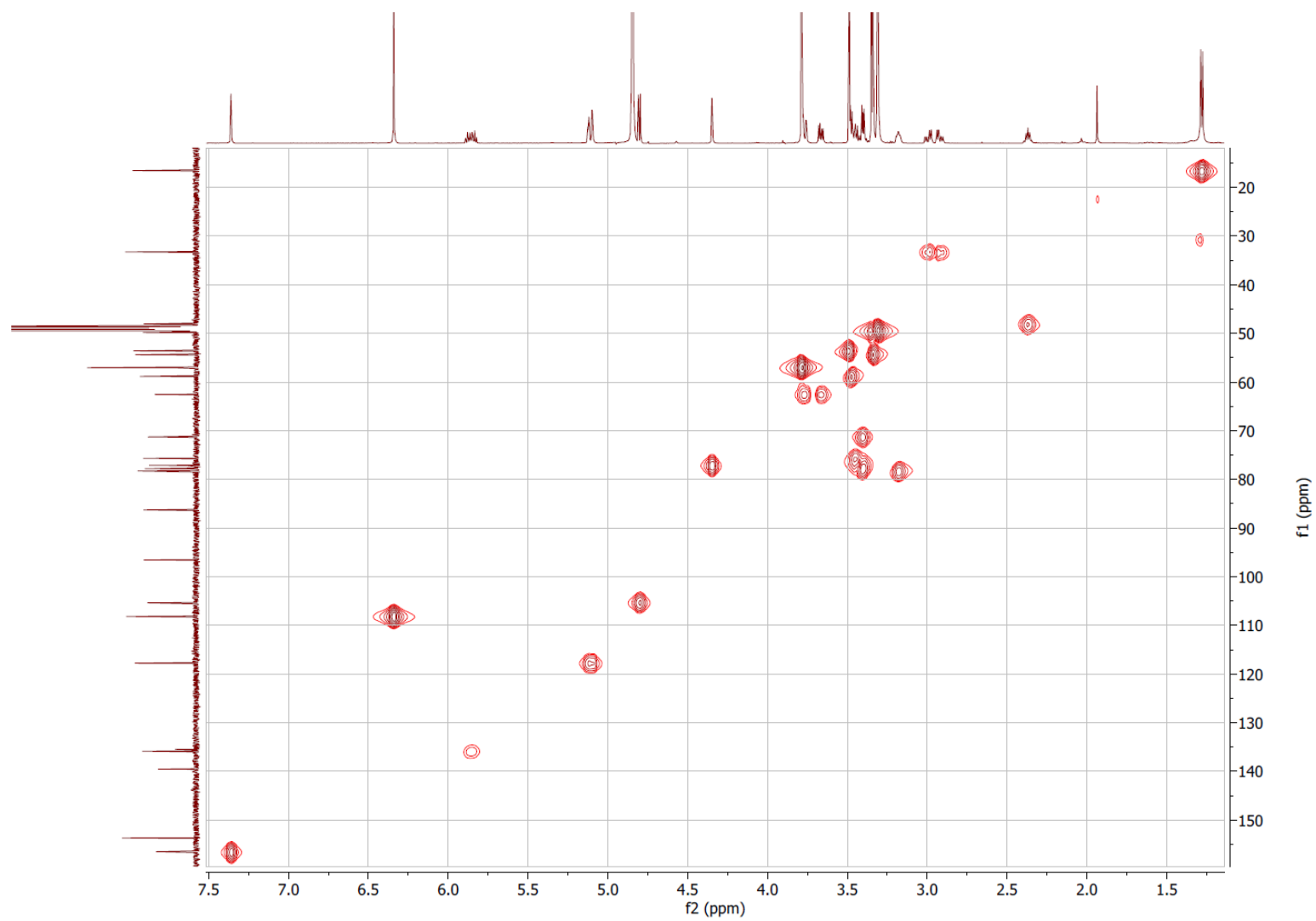


Figure S18. HSQC spectrum of compound

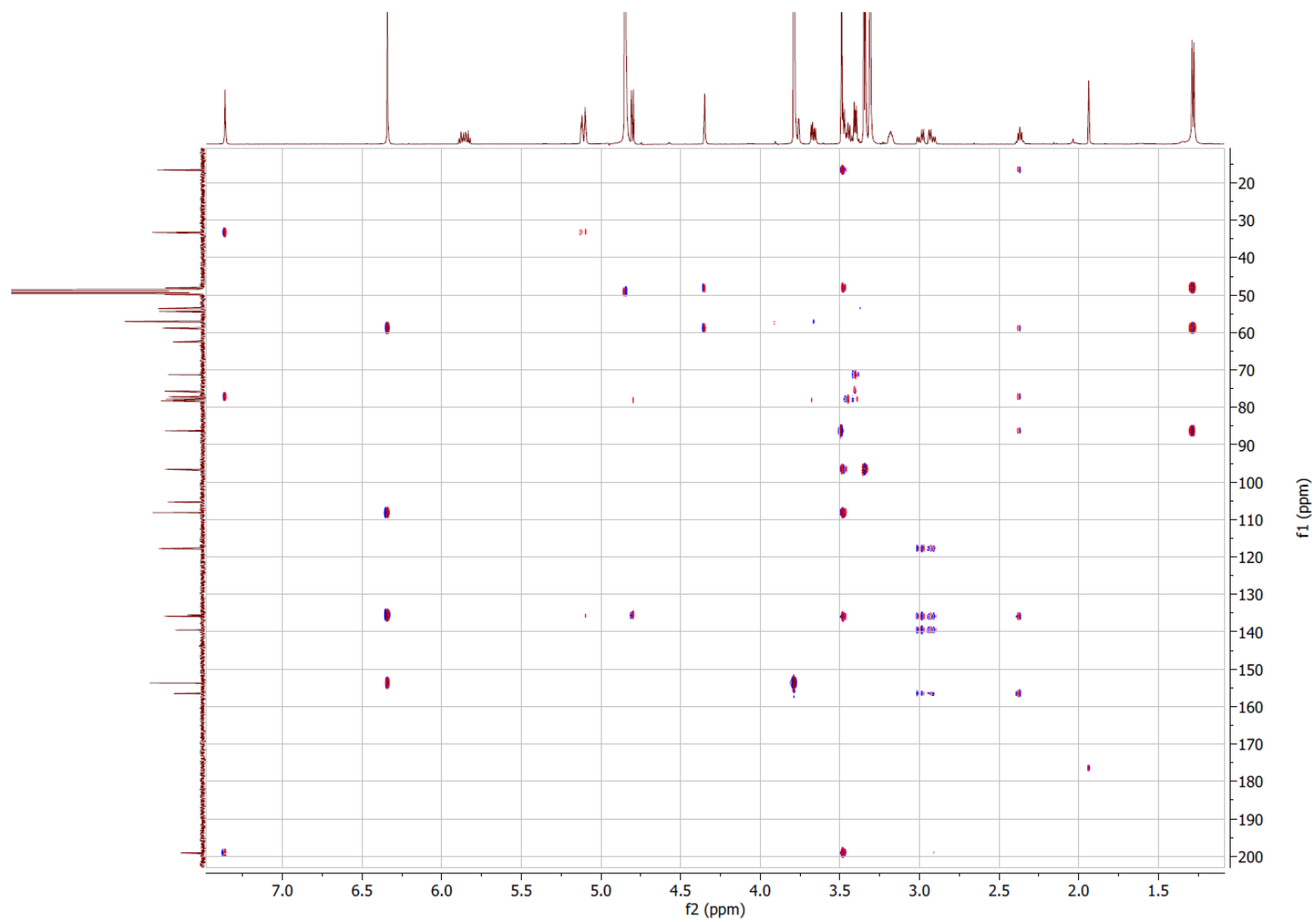


Figure S19. HMBC spectrum of compound

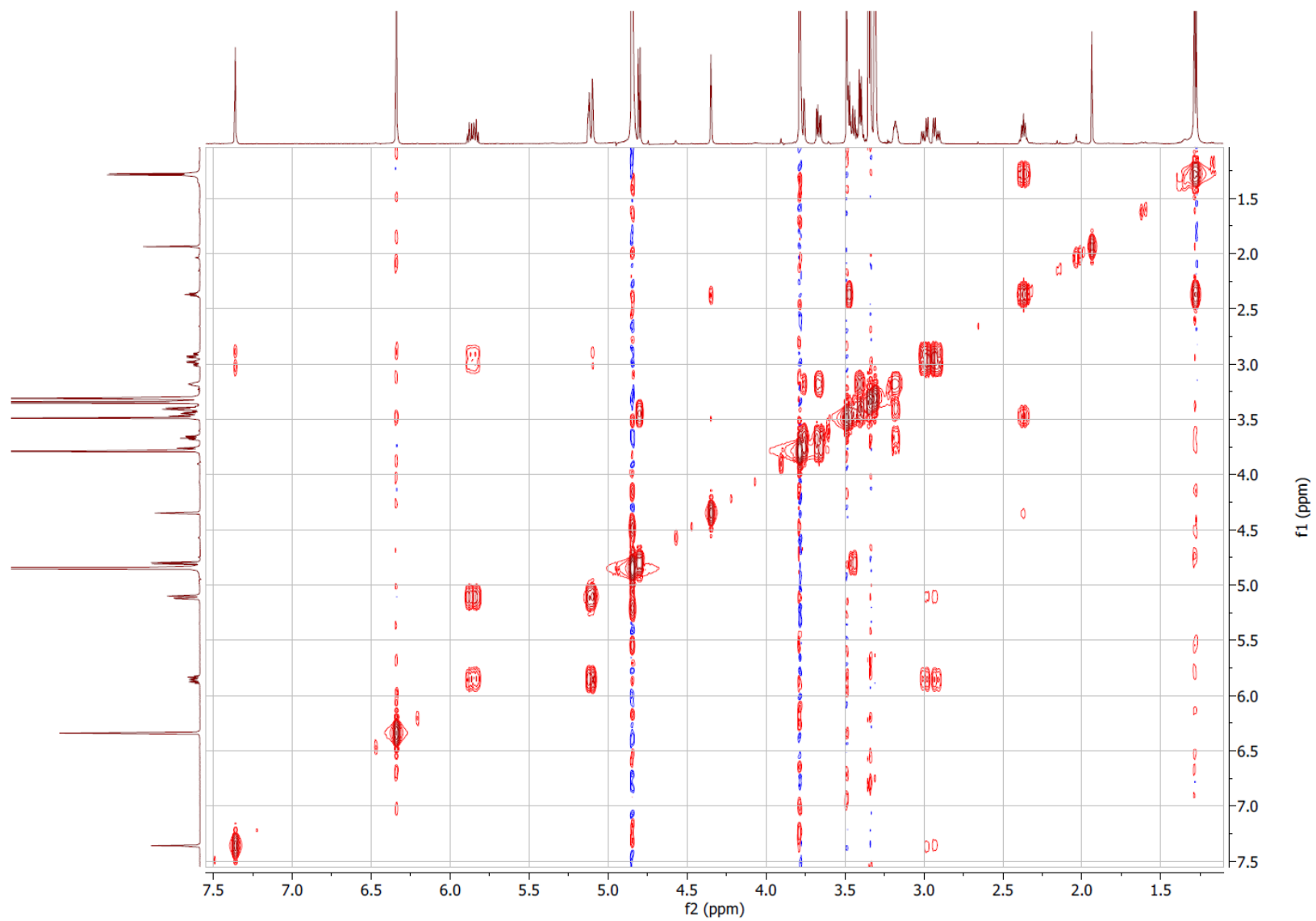


Figure S20. COSY spectrum of compound

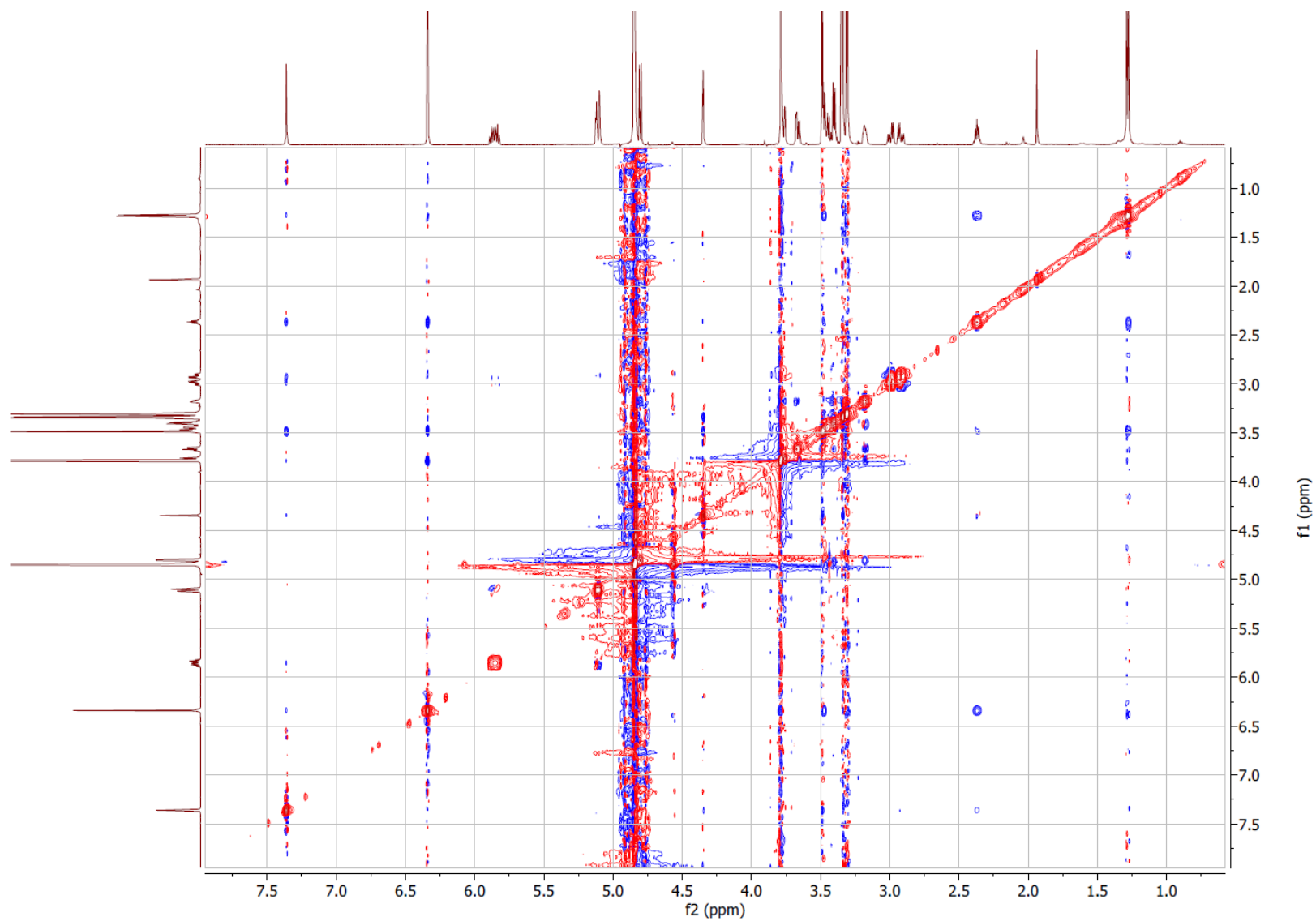


Figure S21. ROESY spectrum of compound

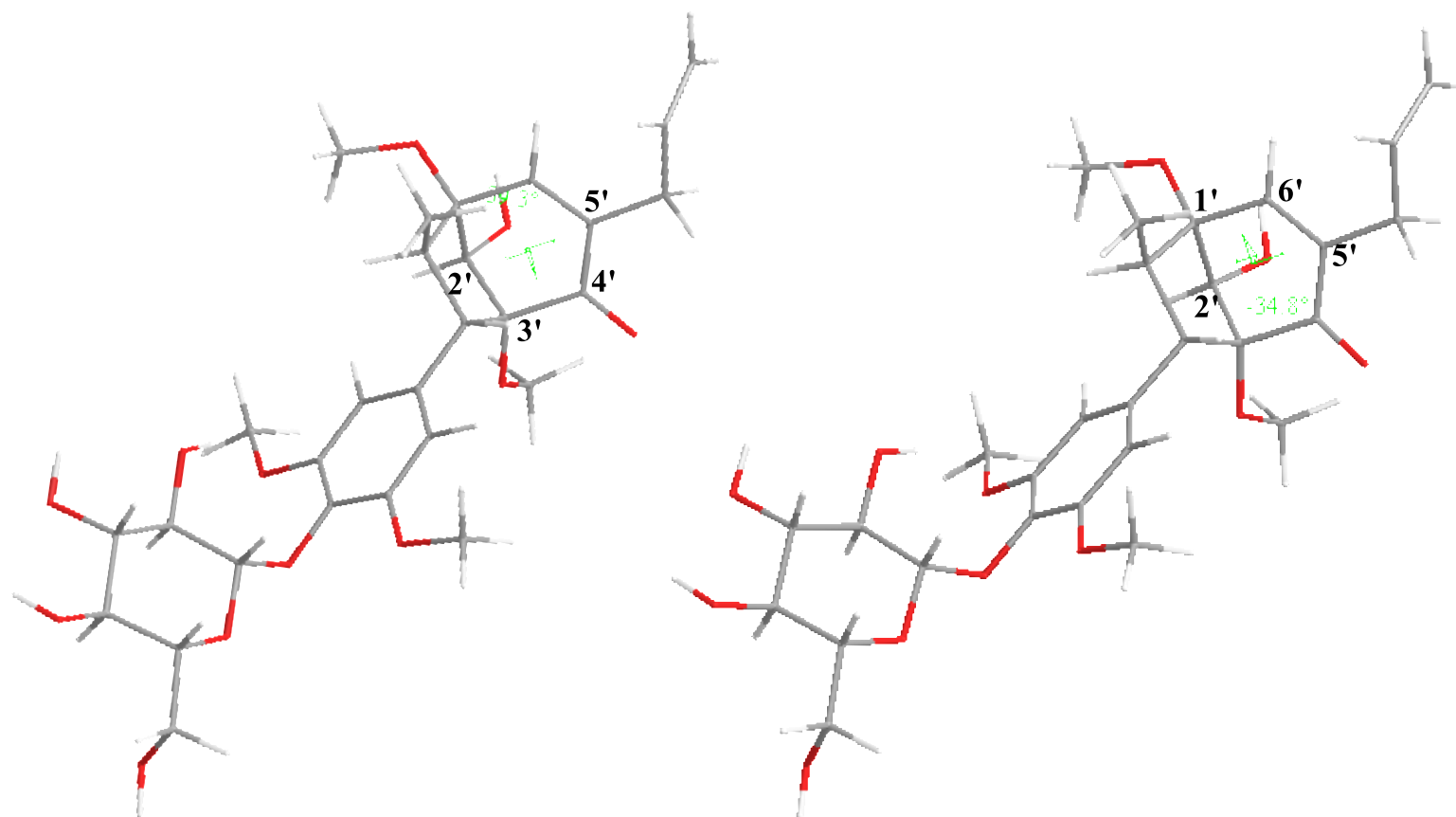


Figure S22. Adjacent torsion angles of compound

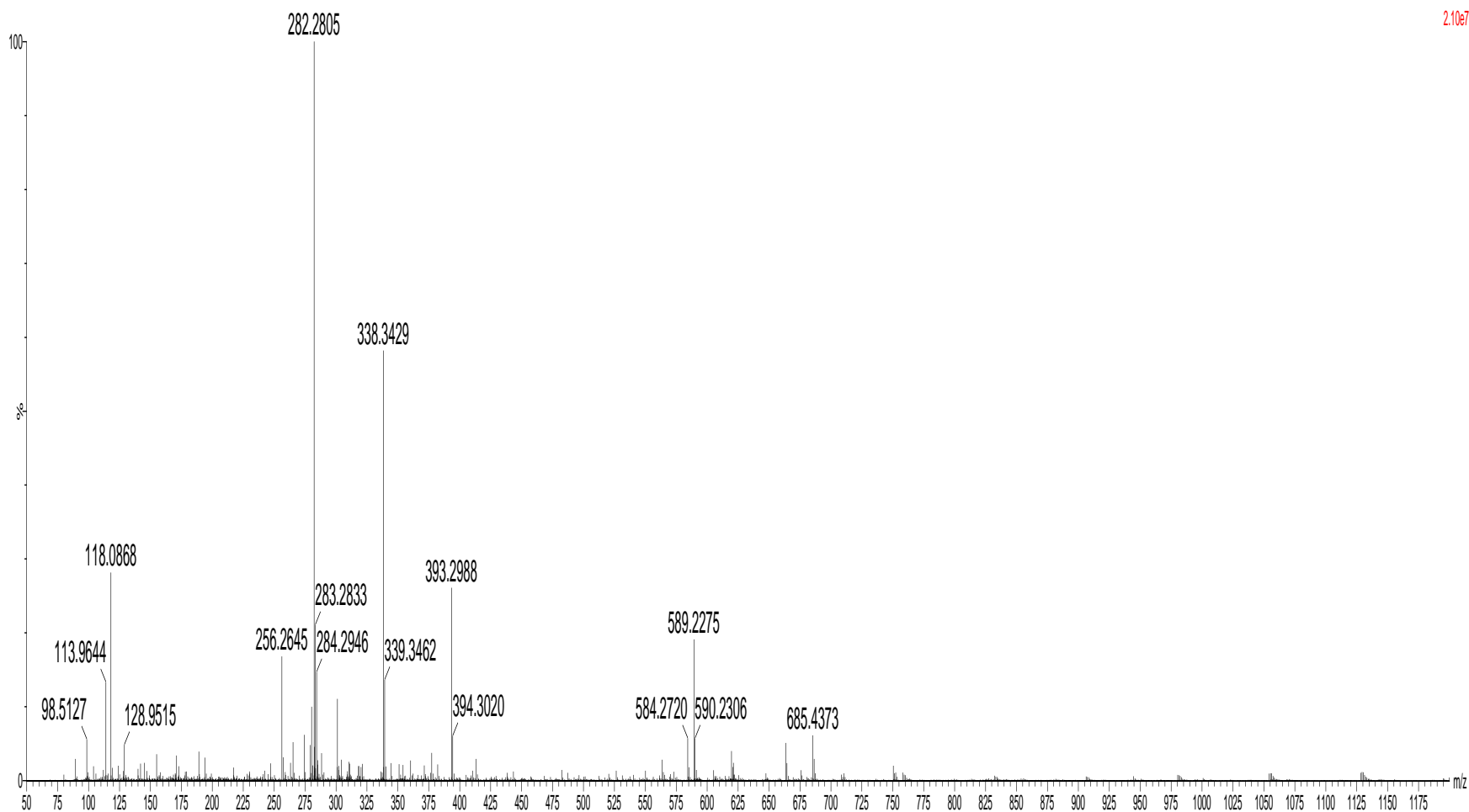


Figure S23. HR-ESI-MS spectrum of compound **3**

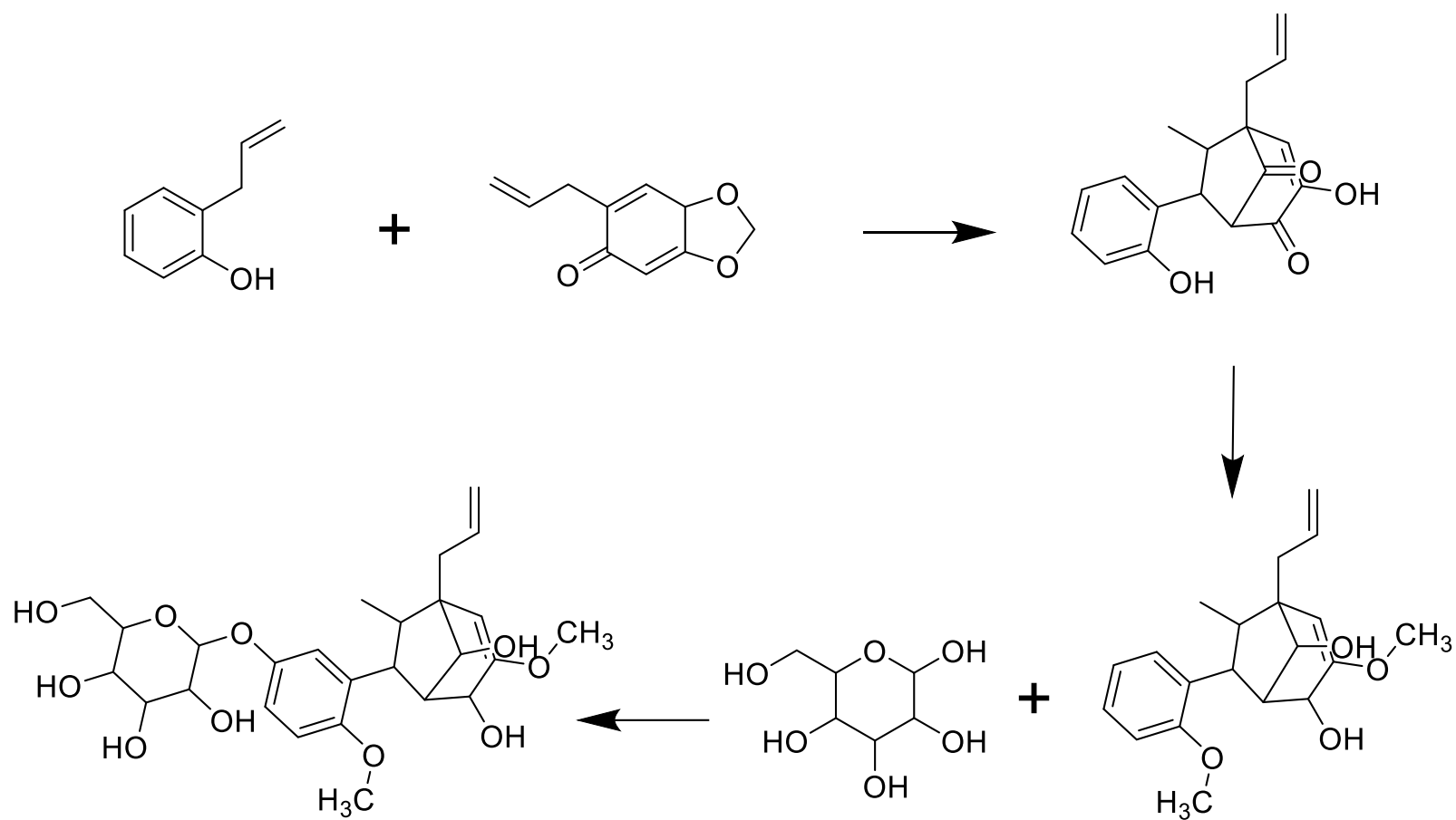


Figure S24. Speculated biosynthetic pathway of compound **1**

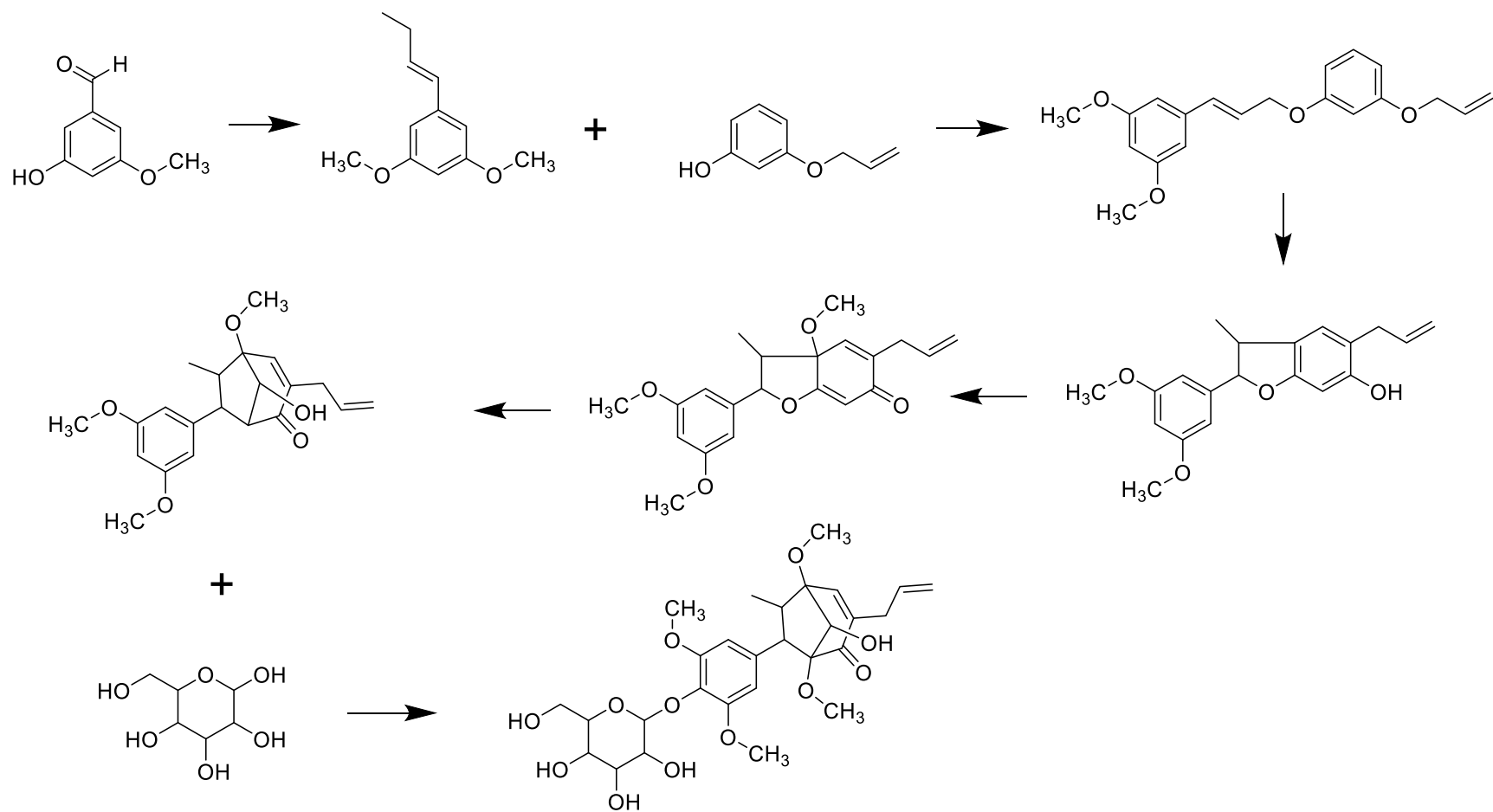


Figure S25. Speculated biosynthetic pathway of compound **3**