Supporting Information for

The chemical constituents from fruits of *Catalpa bignonioides* Walt. and their α-glucosidase inhibitory activity and insulin secretion effect

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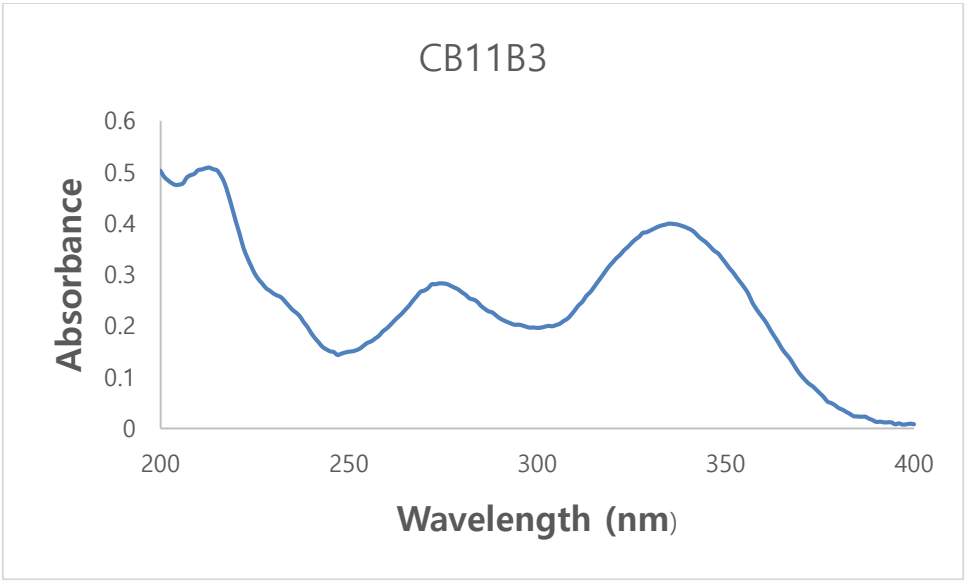


Figure S1. UV spectrum of compound **1**

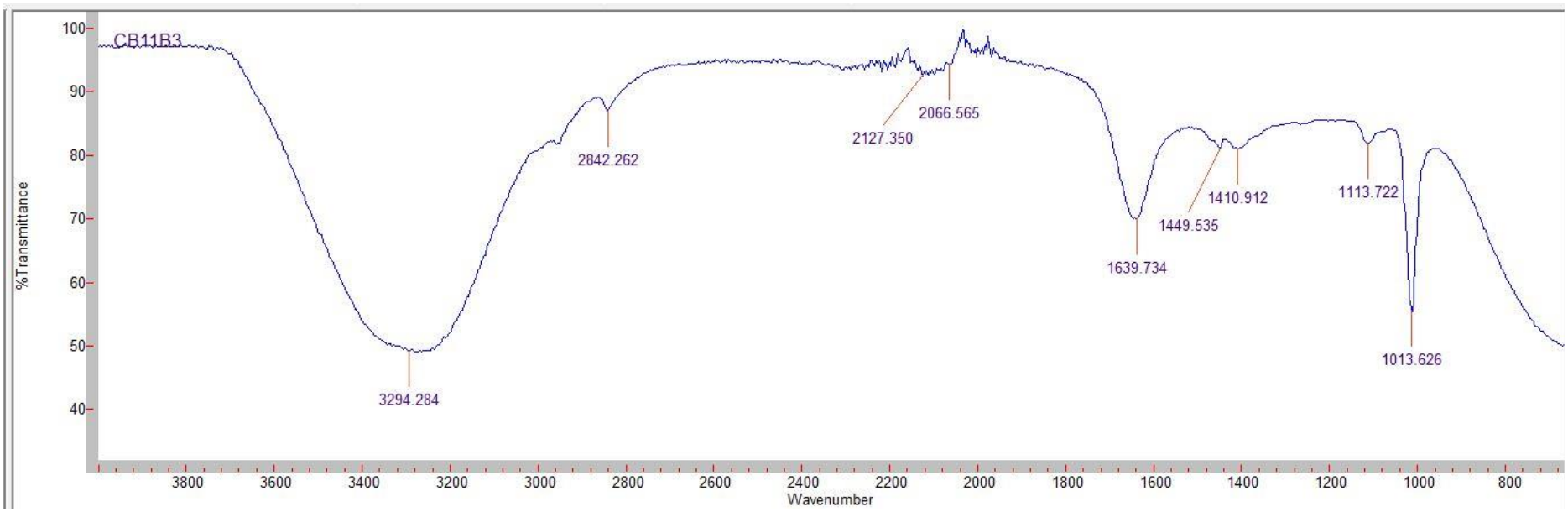


Figure S2. IR spectrum of compound **1**

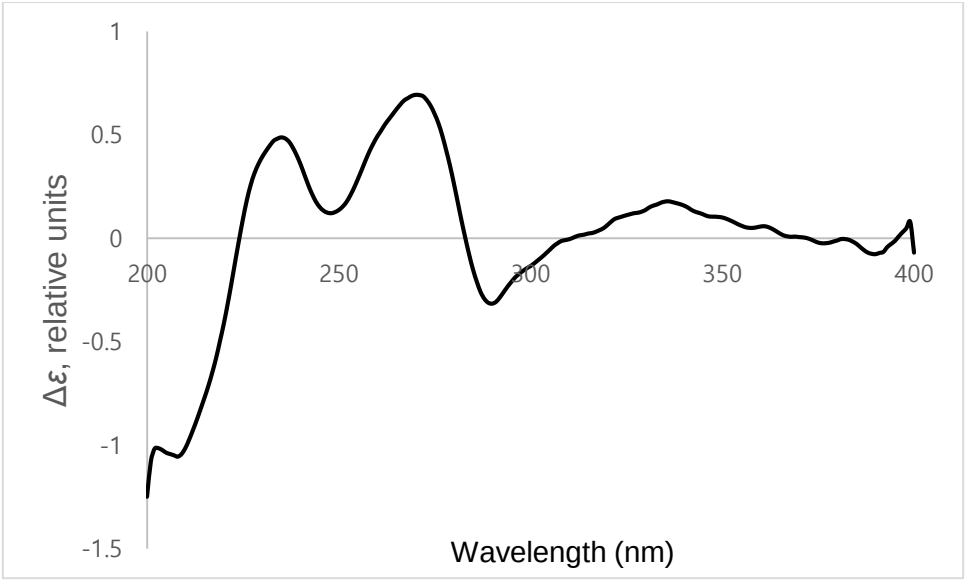


Figure S3. CD spectrum of compound **1**

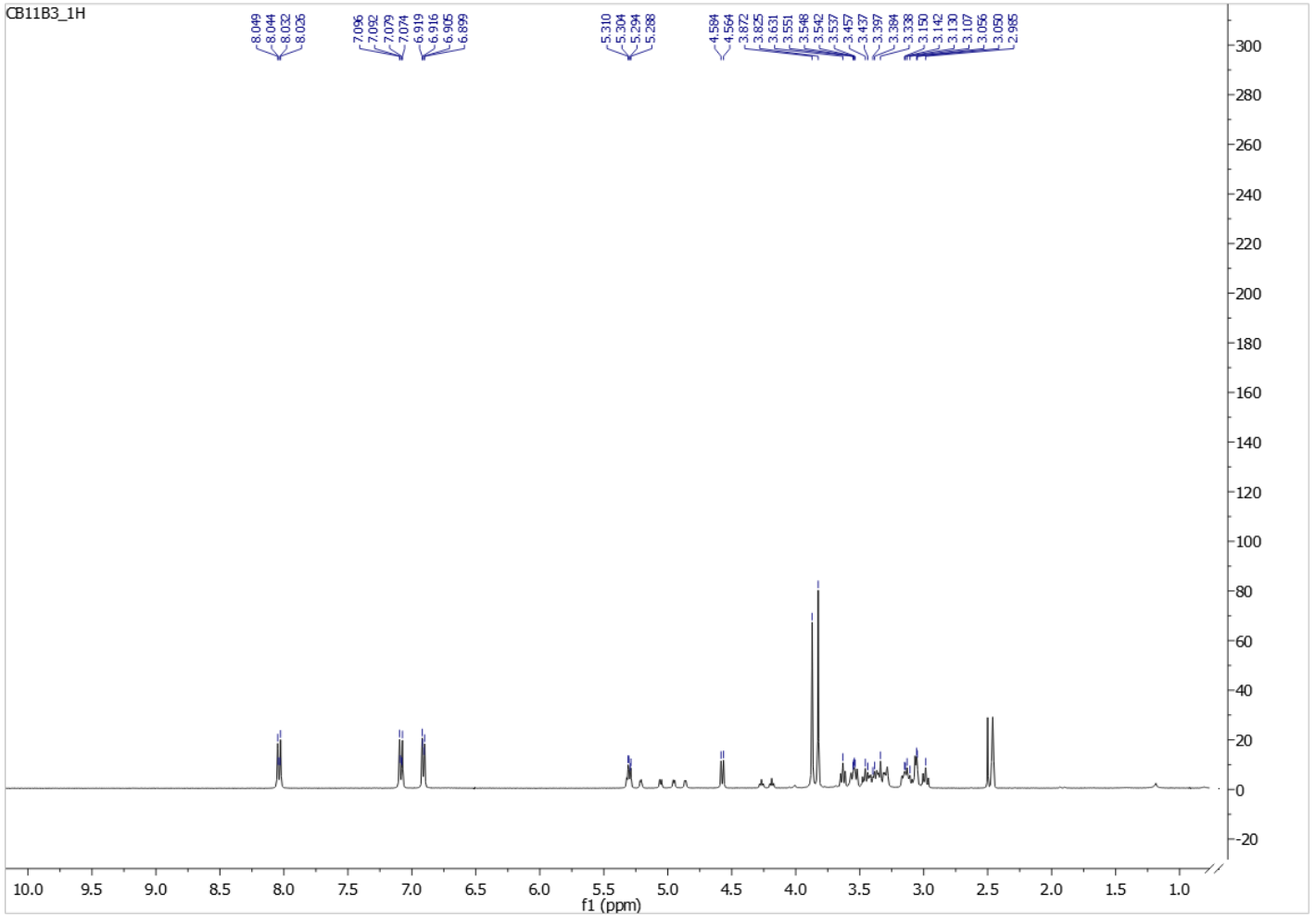


Figure S4. ^{1}H-NMR spectrum of compound **1** (400 MHz, Dimethyl sulfoxide-d_6)

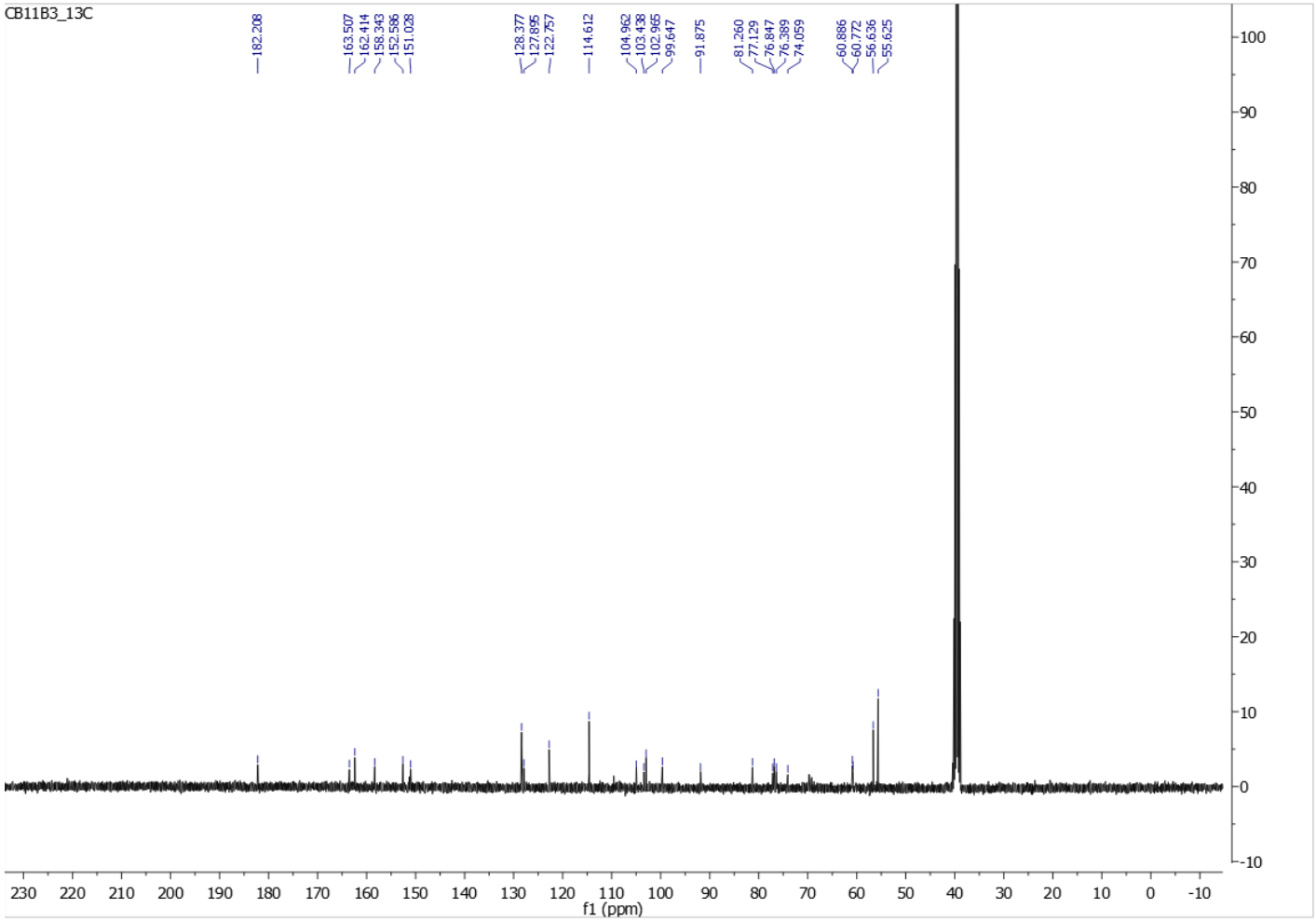


Figure S5. ^{13}C-NMR spectrum of compound **1** (100 MHz, Dimethyl sulfoxide-d_6)

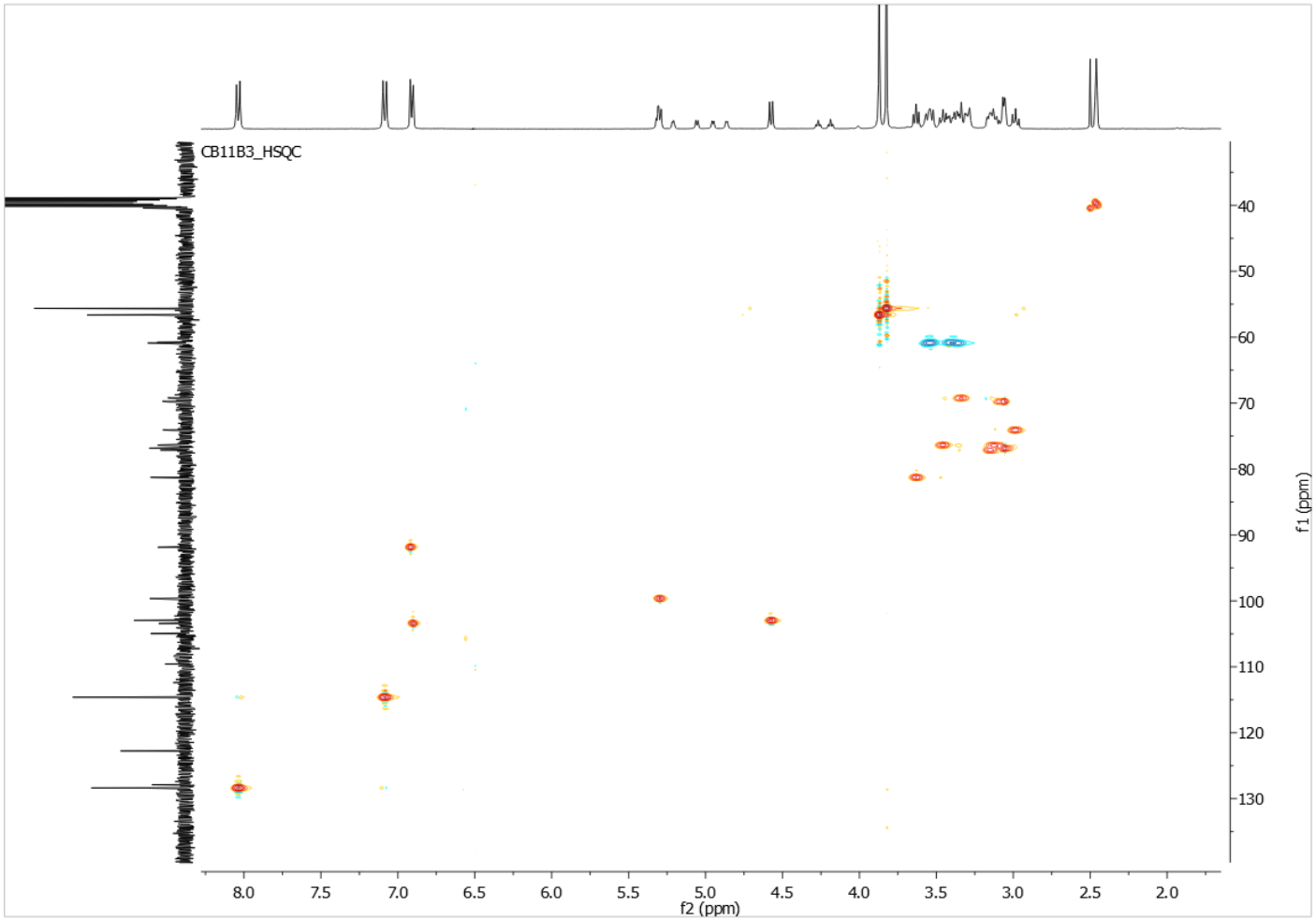


Figure S6. HSQC spectrum of compound **1** (Dimethyl sulfoxide-d_6)

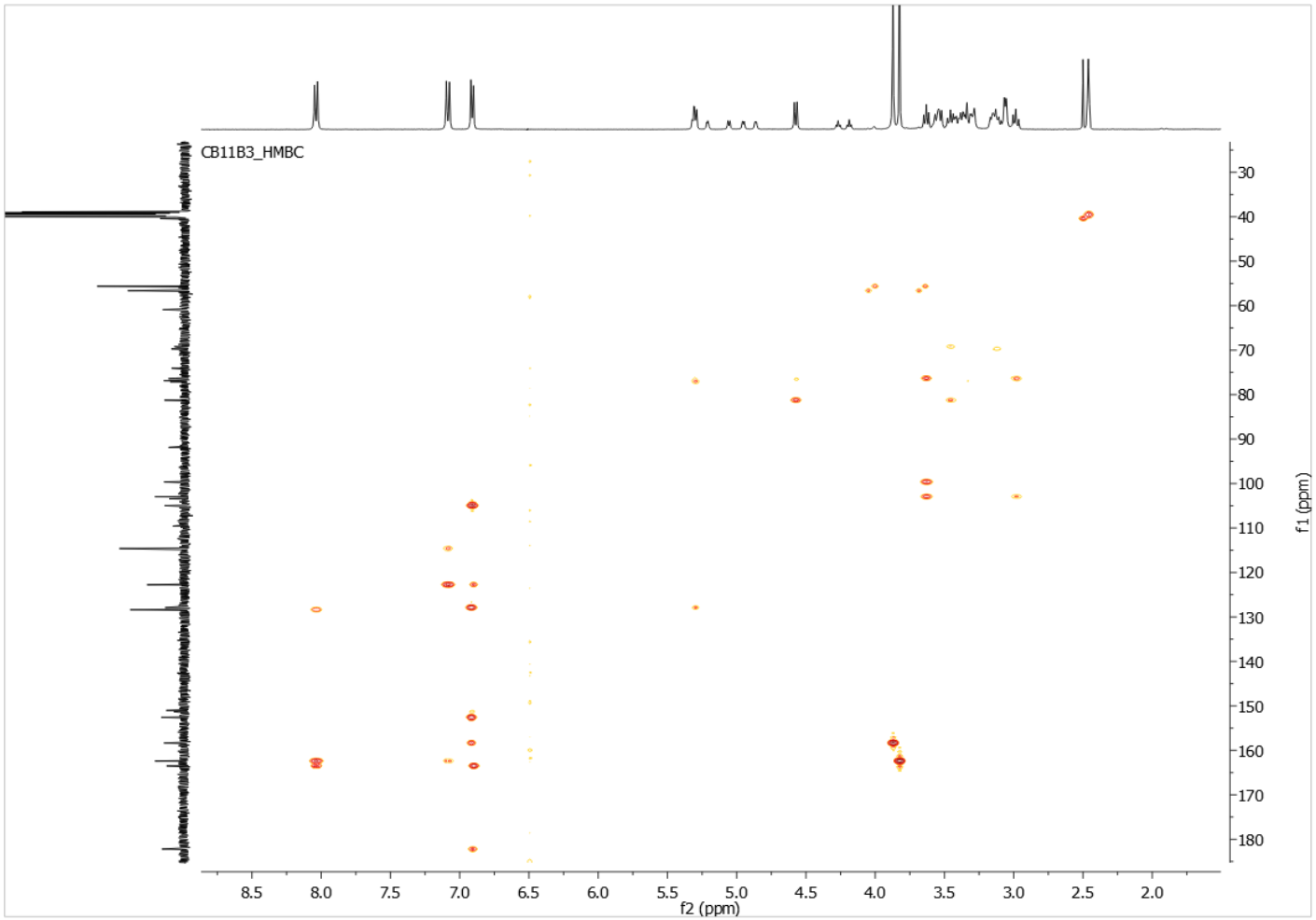


Figure S7. HMBC spectrum of compound **1** (Dimethyl sulfoxide-d_6)

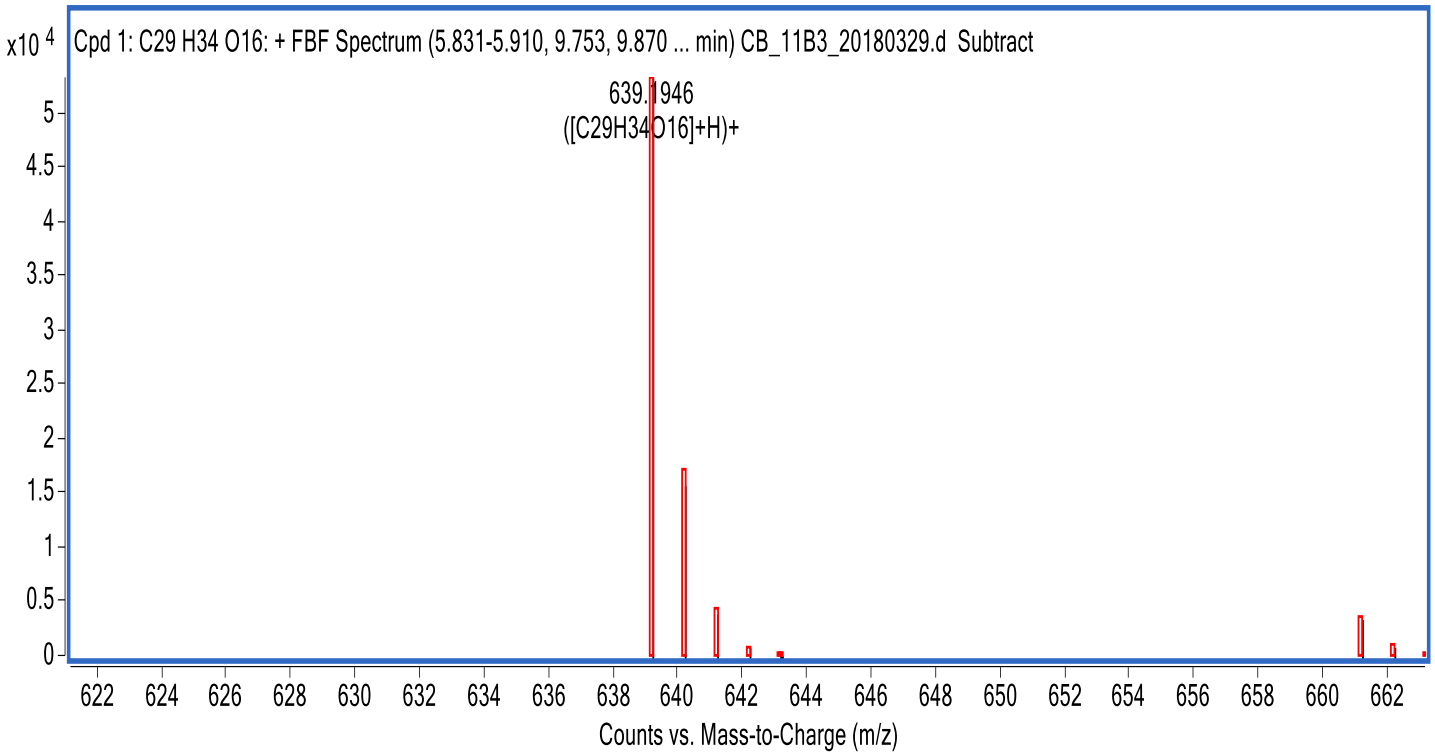


Figure S8. HR-ESI-MS of compound **1**

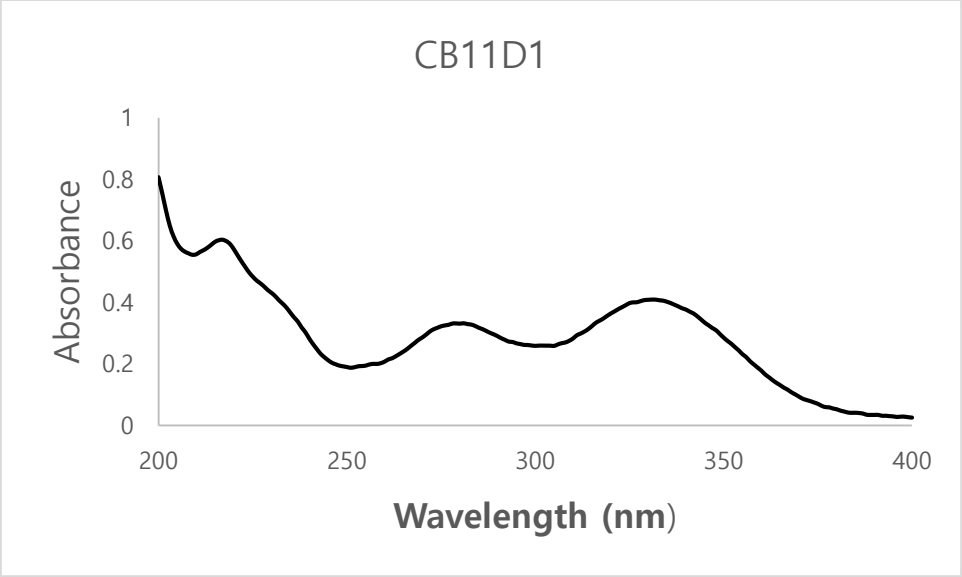


Figure S9. UV spectrum of compound **2**

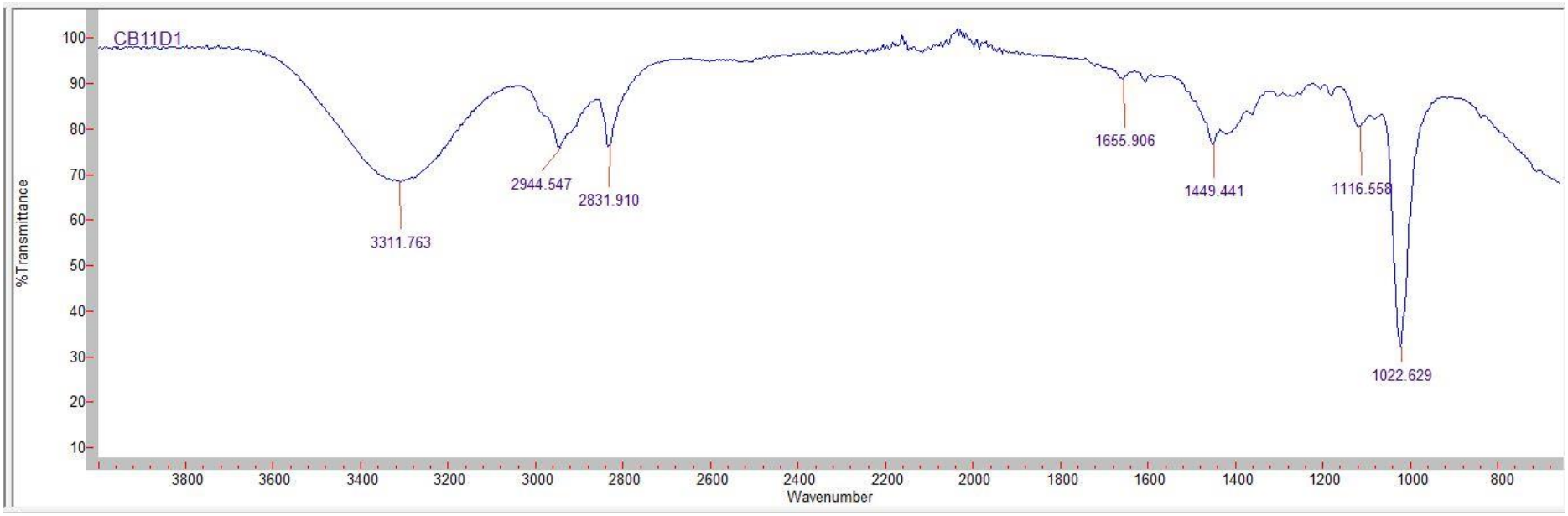


Figure S10. IR spectrum of compound **2**

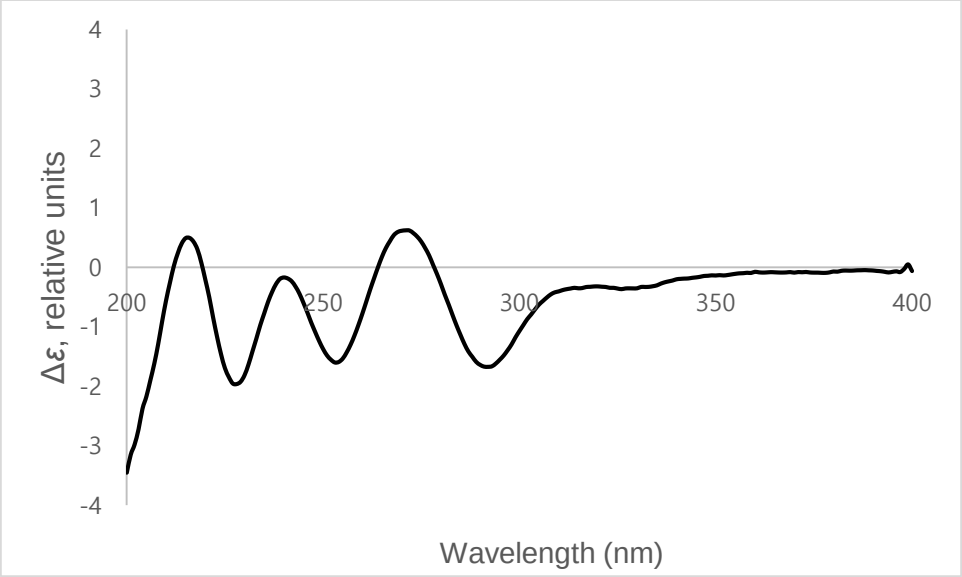


Figure S11. CD spectrum of compound **2**

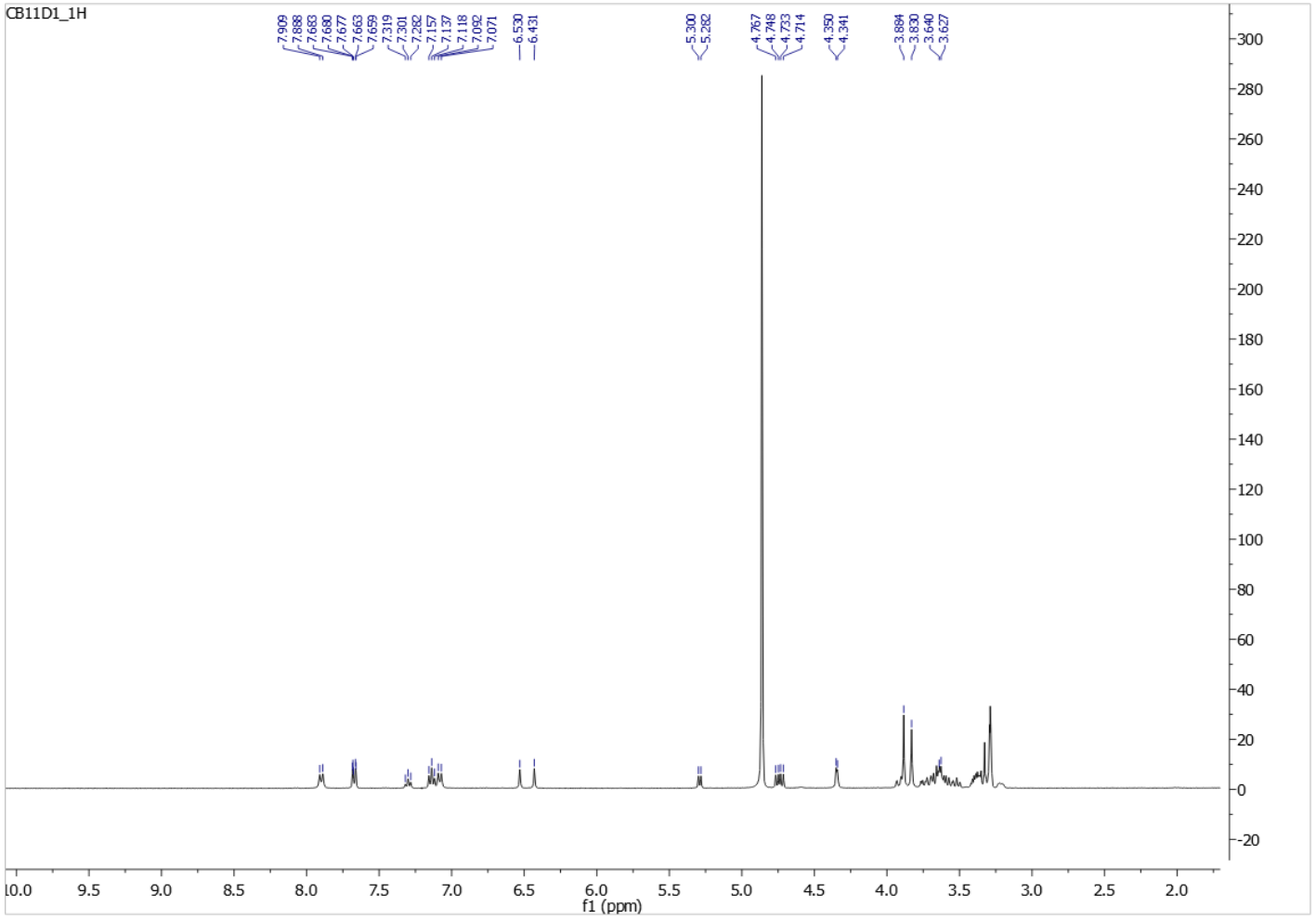


Figure S12. ^{1}H-NMR spectrum of compound **2** (400 MHz, methanol-d_4)

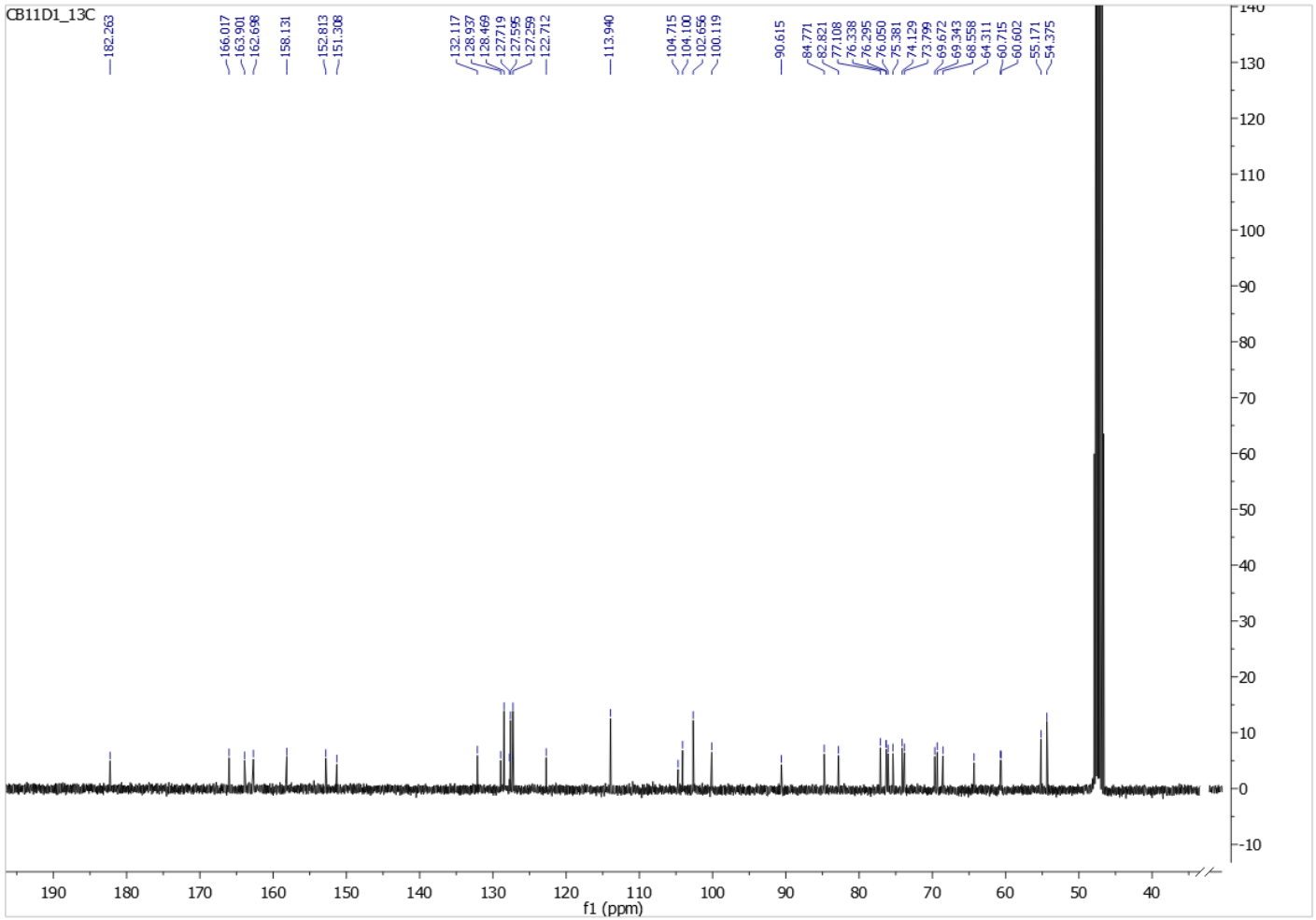


Figure S13. ^{13}C-NMR spectrum of compound **2** (100 MHz, methanol-d_4)

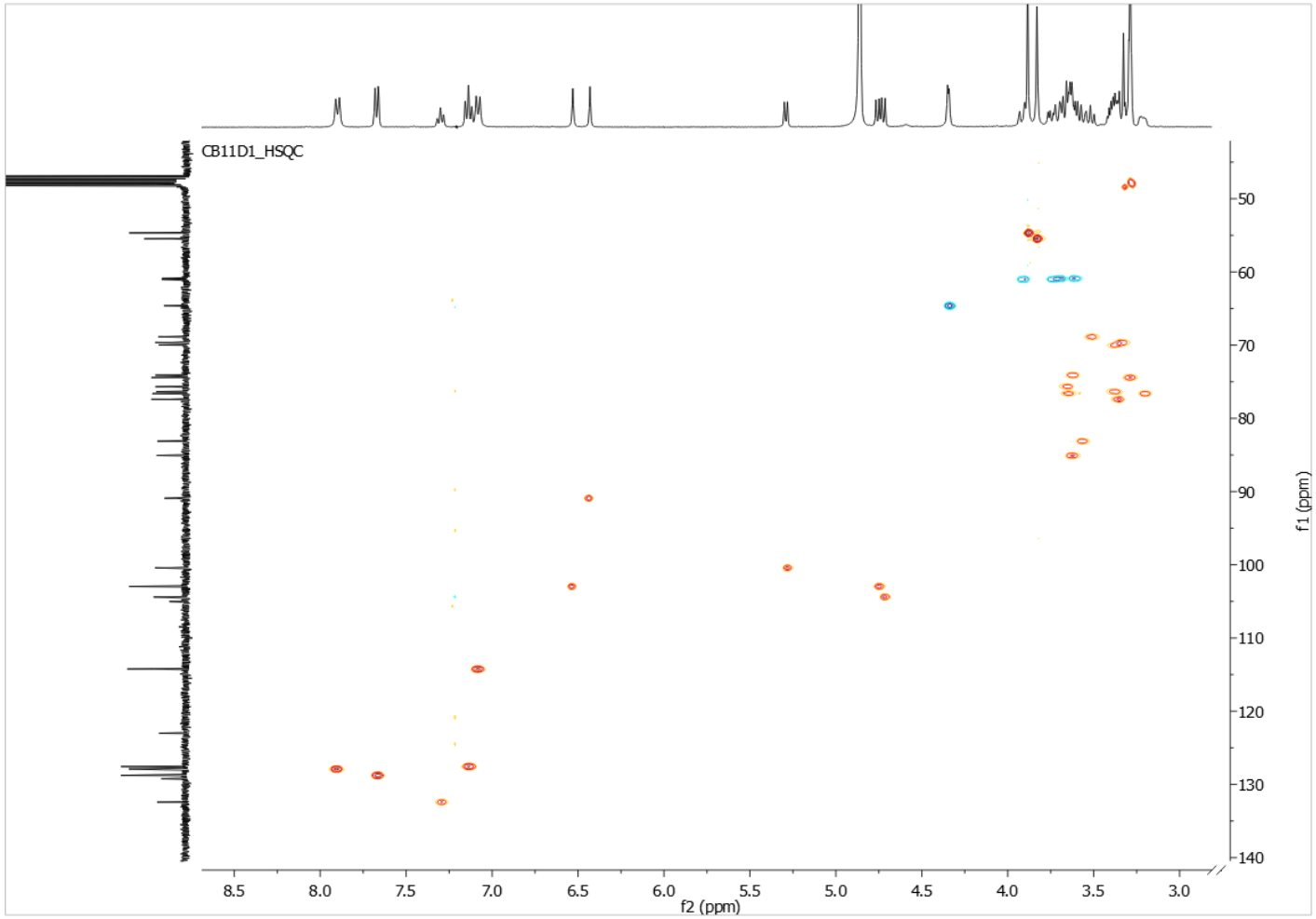


Figure S14. HSQC spectrum of compound **2** (methanol-d_4)

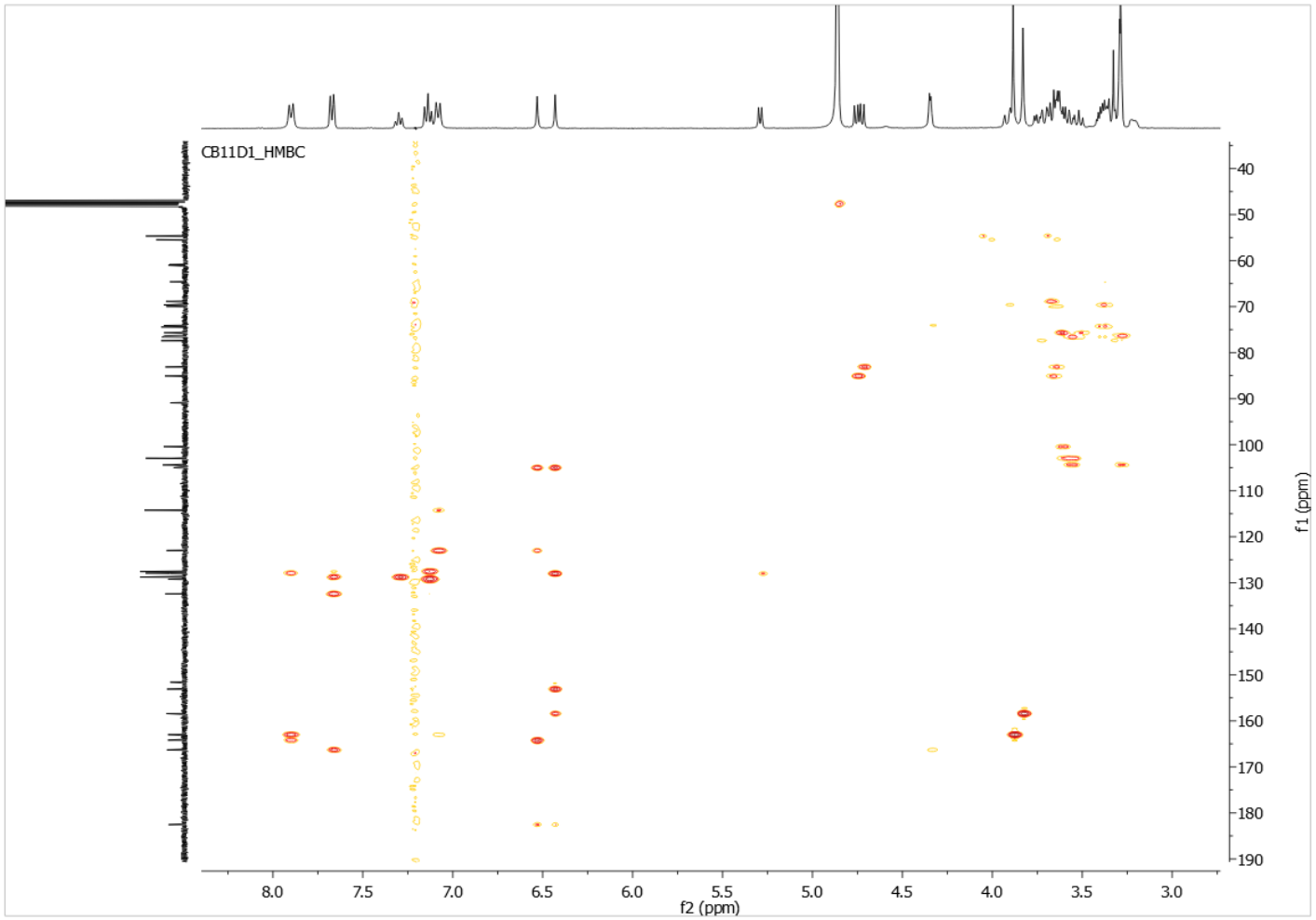


Figure S15. HMBC spectrum of compound **2** (methanol-d_4)

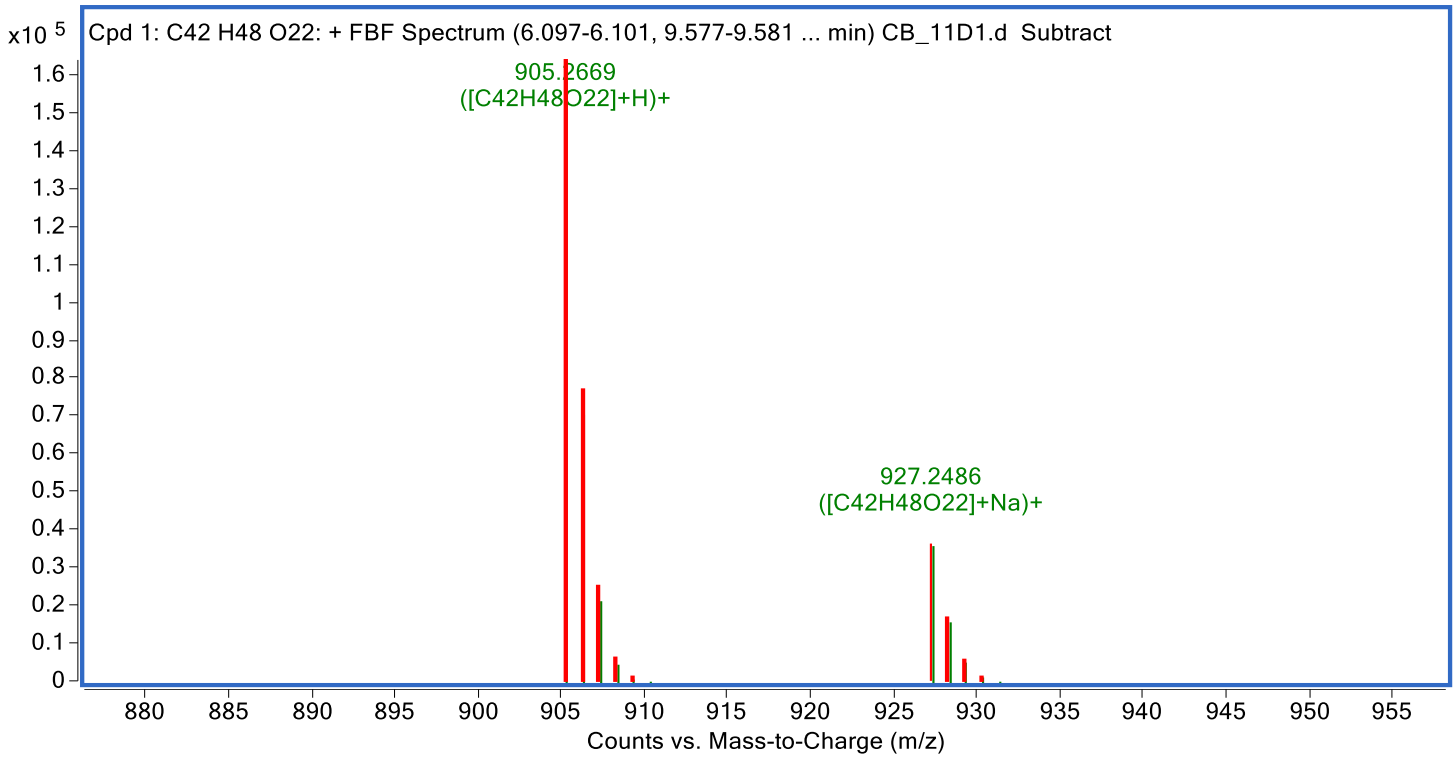
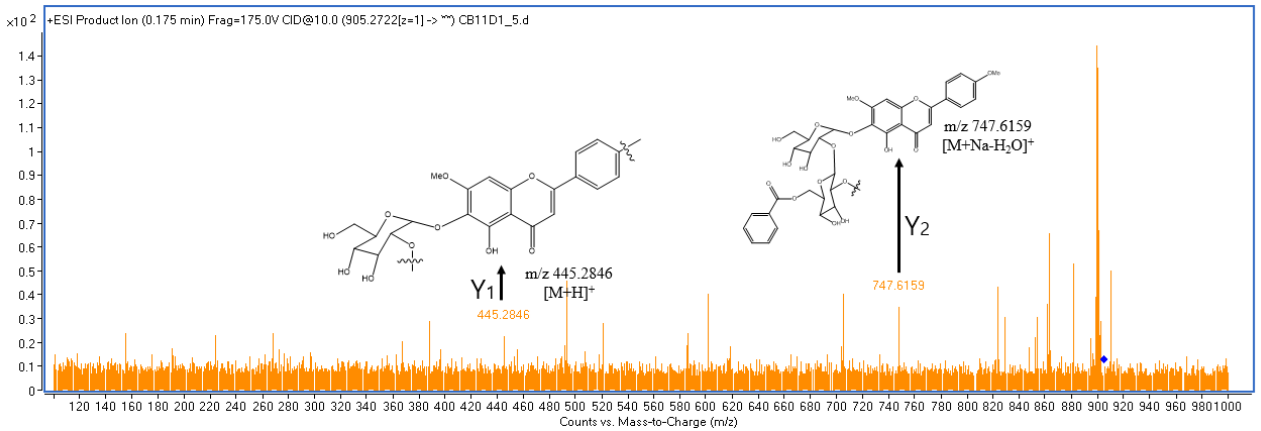


Figure S16. HR-ESI-MS of compound **2**



The ms/ms spectrum of compound 2 (*m/z* 905.2772)

Y1 : $[M+H]^+$ = 445.2846

Y2 : $[M+Na-H_2O]^+$ = 747.6159

Figure S17. MS/MS spectrum of compound **2**

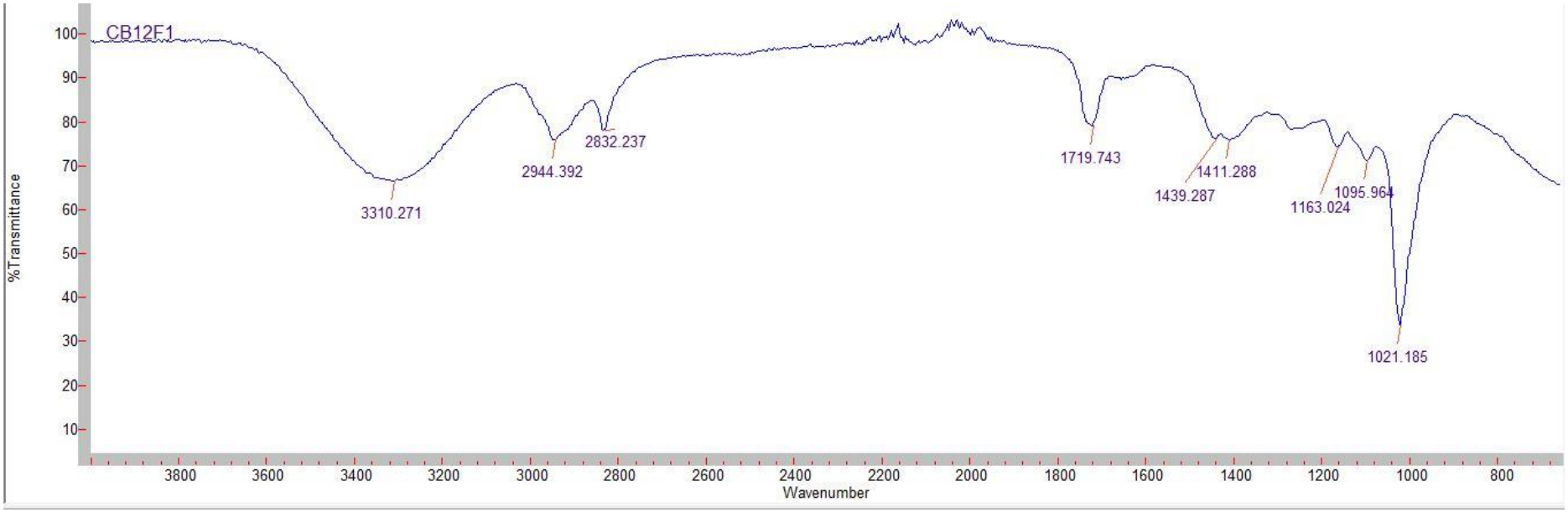


Figure S18. IR spectrum of compound **3**

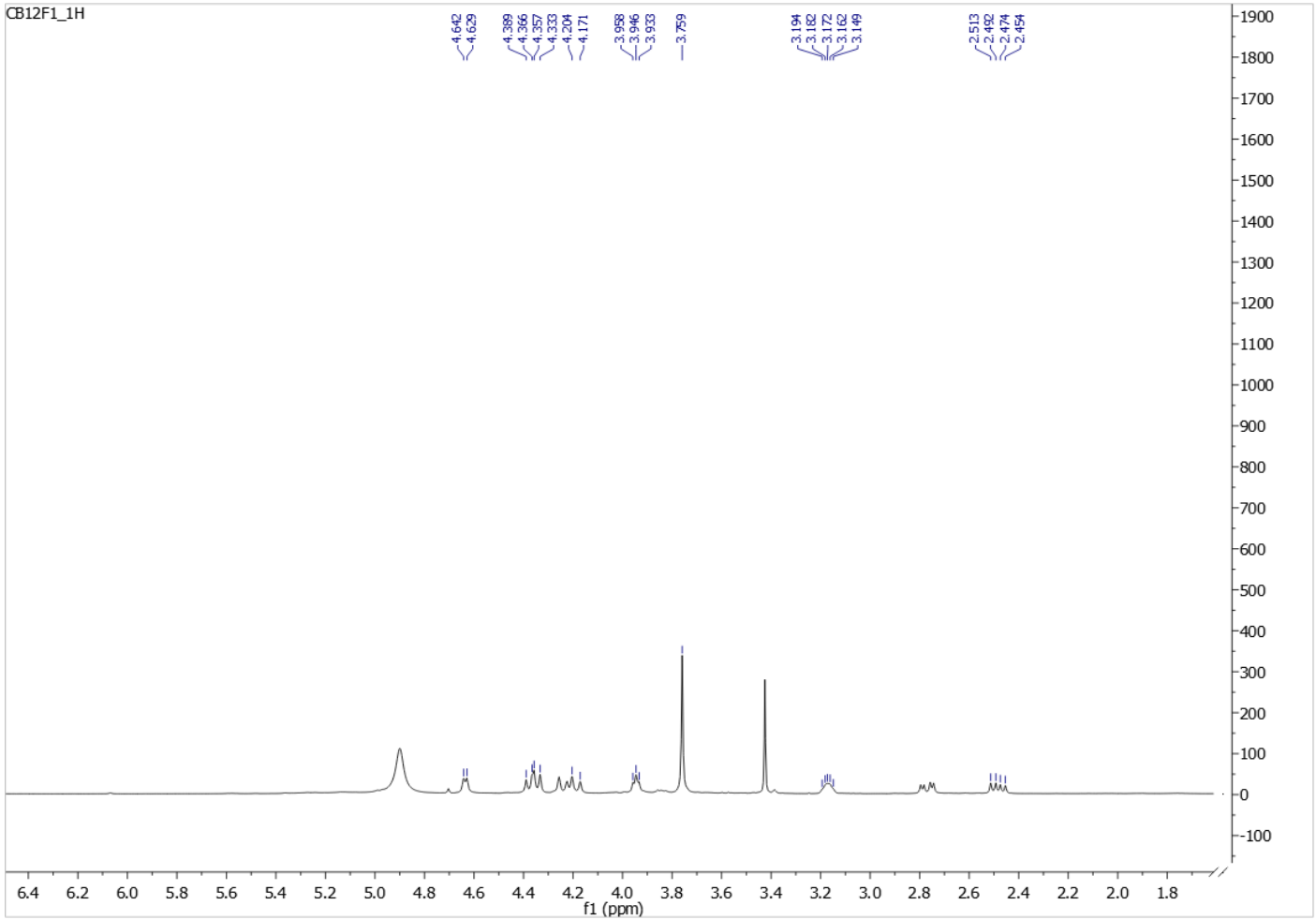


Figure S19. ^{1}H-NMR spectrum of compound **3** (400 MHz, methanol-d_4)

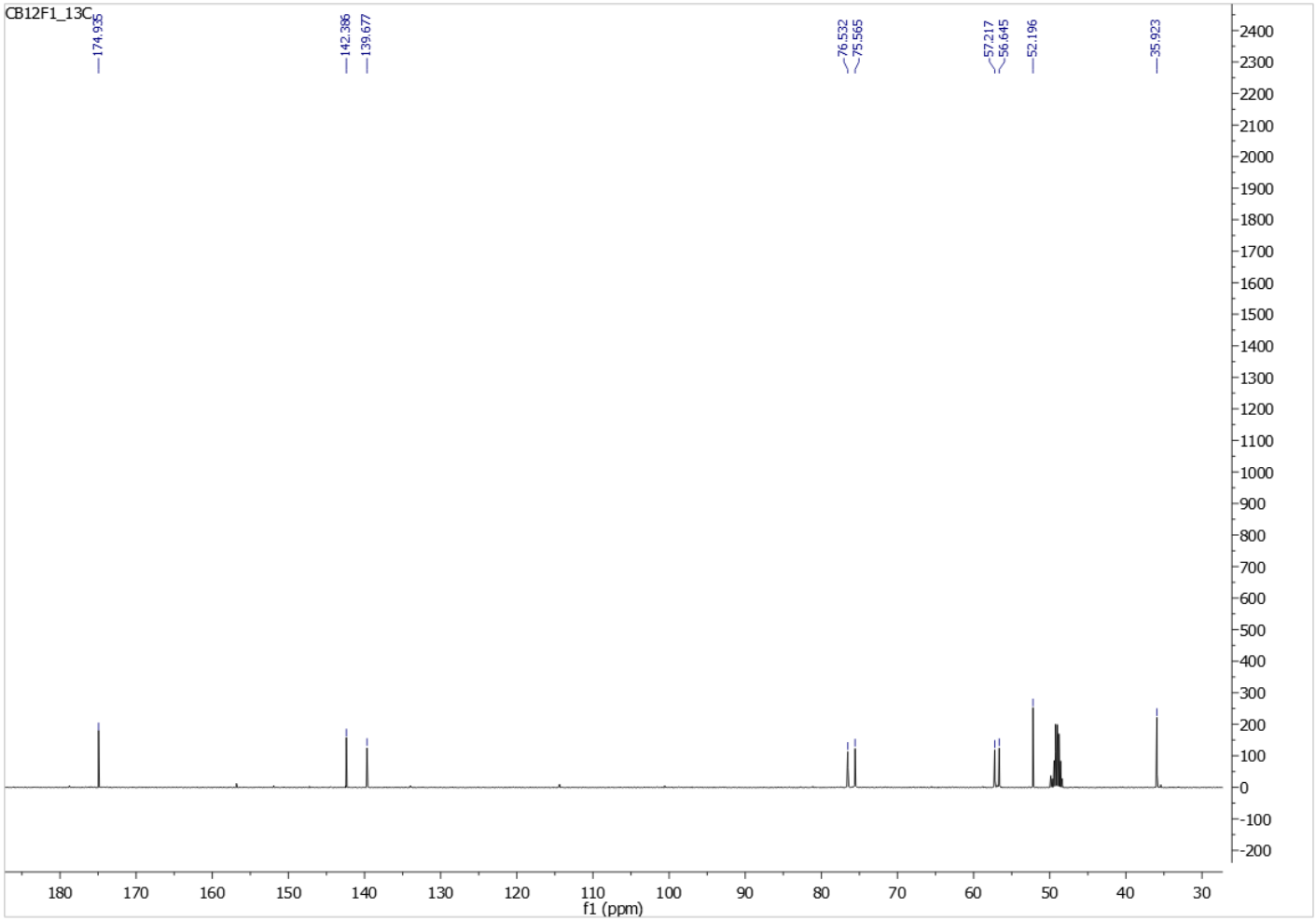


Figure S20. ^{13}C-NMR spectrum of compound **3** (100 MHz, methanol-d_4)

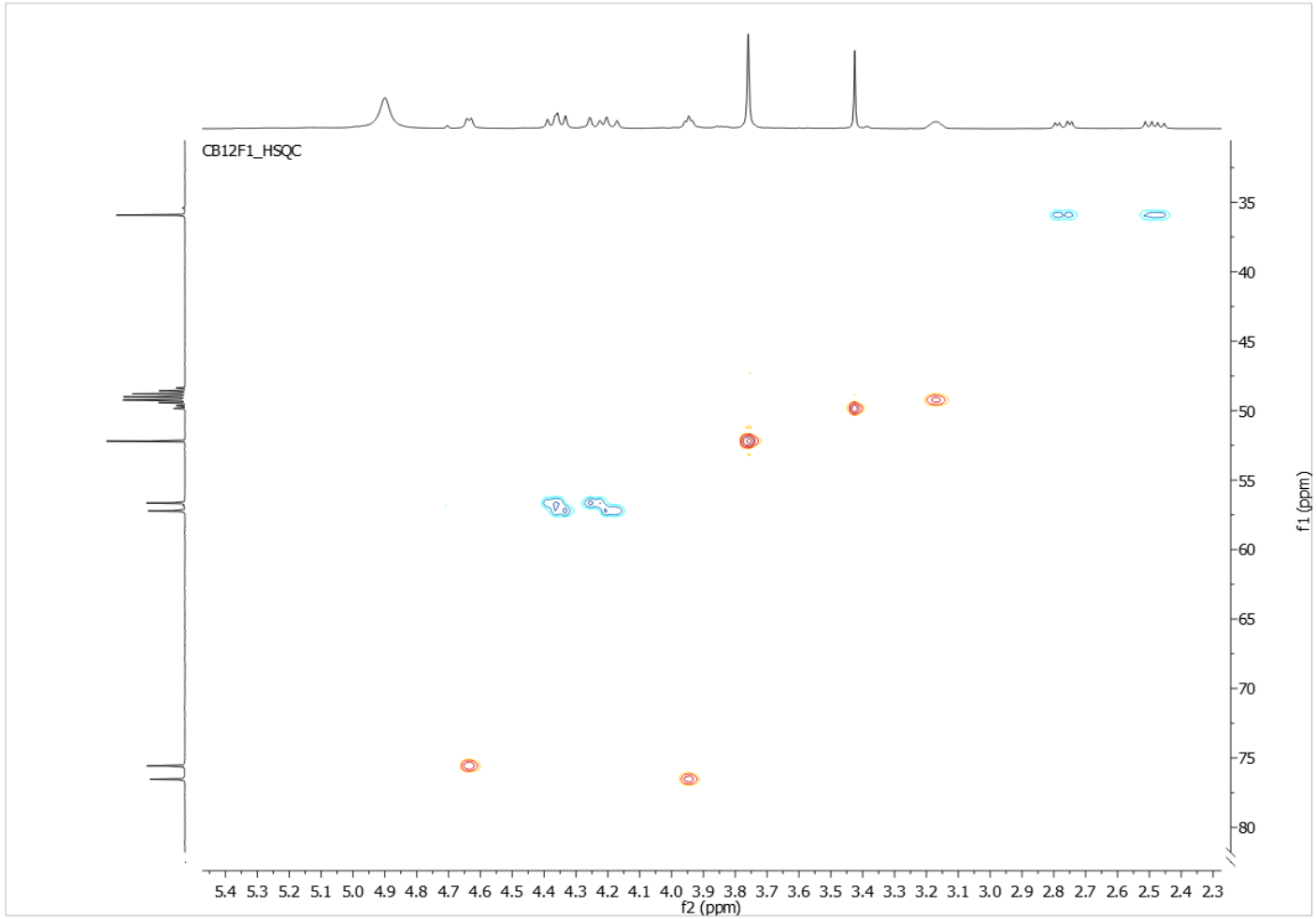


Figure S21. HSQC spectrum of compound **3** (methanol-d_4)

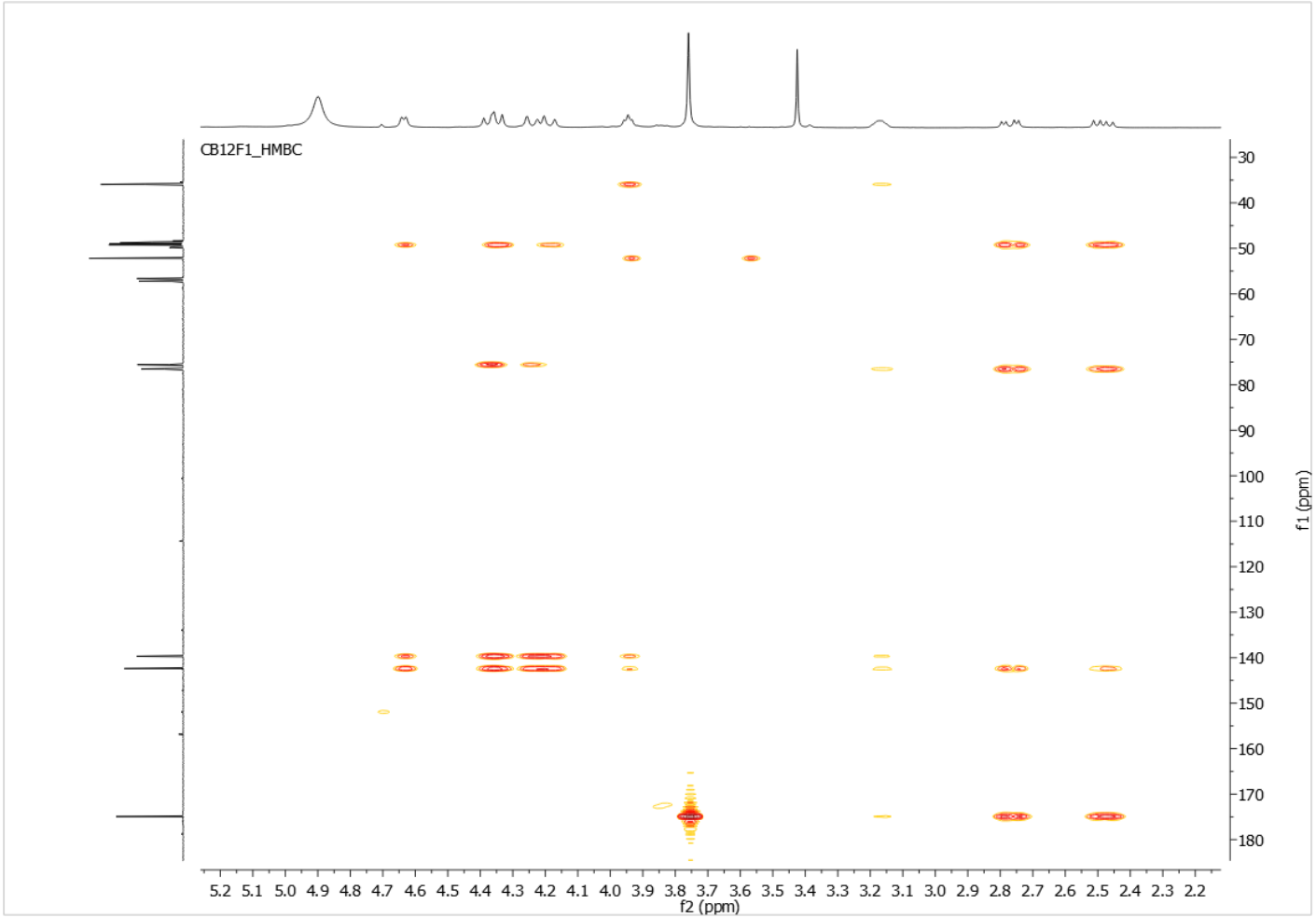


Figure S22. HMBC spectrum of compound **3** (methanol-d_4)

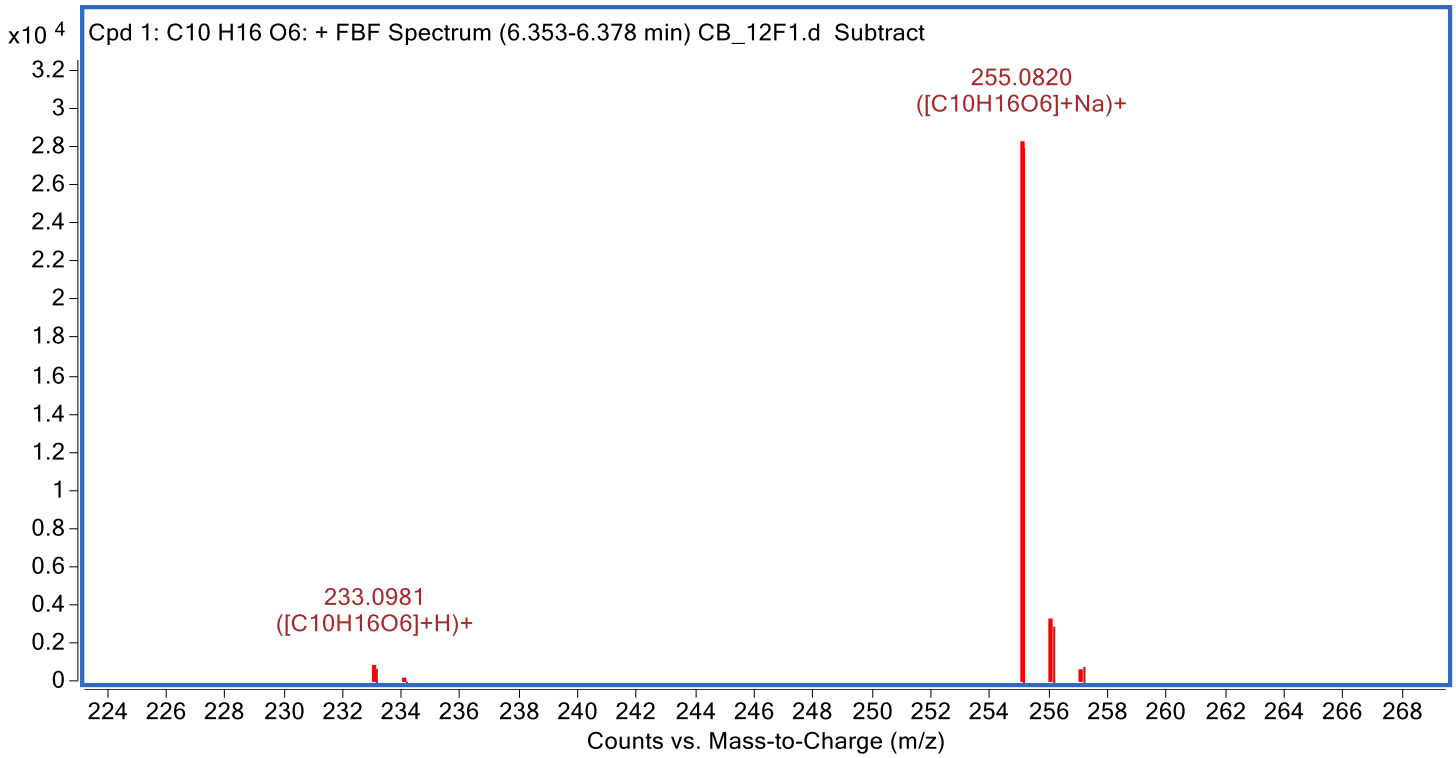


Figure S23. HR-ESI-MS of compound **3**

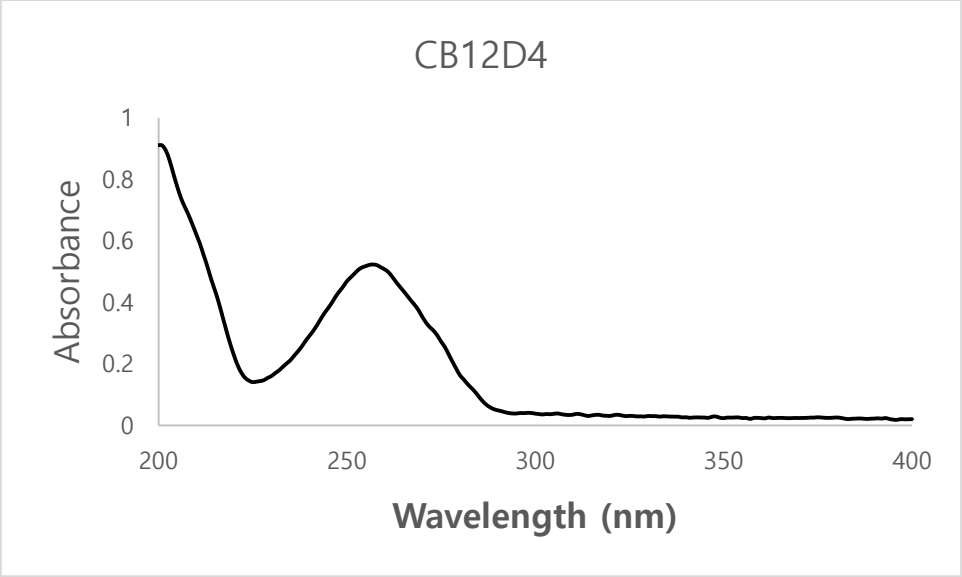


Figure S24. UV spectrum of compound **4**

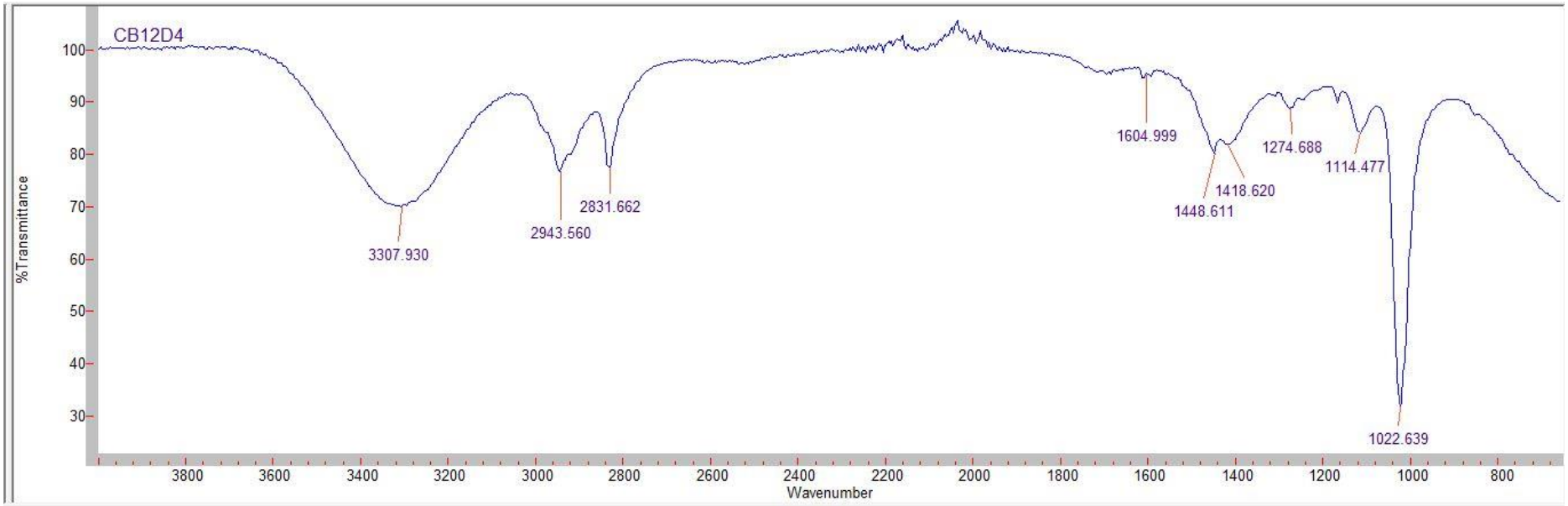


Figure S25. IR spectrum of compound **4**

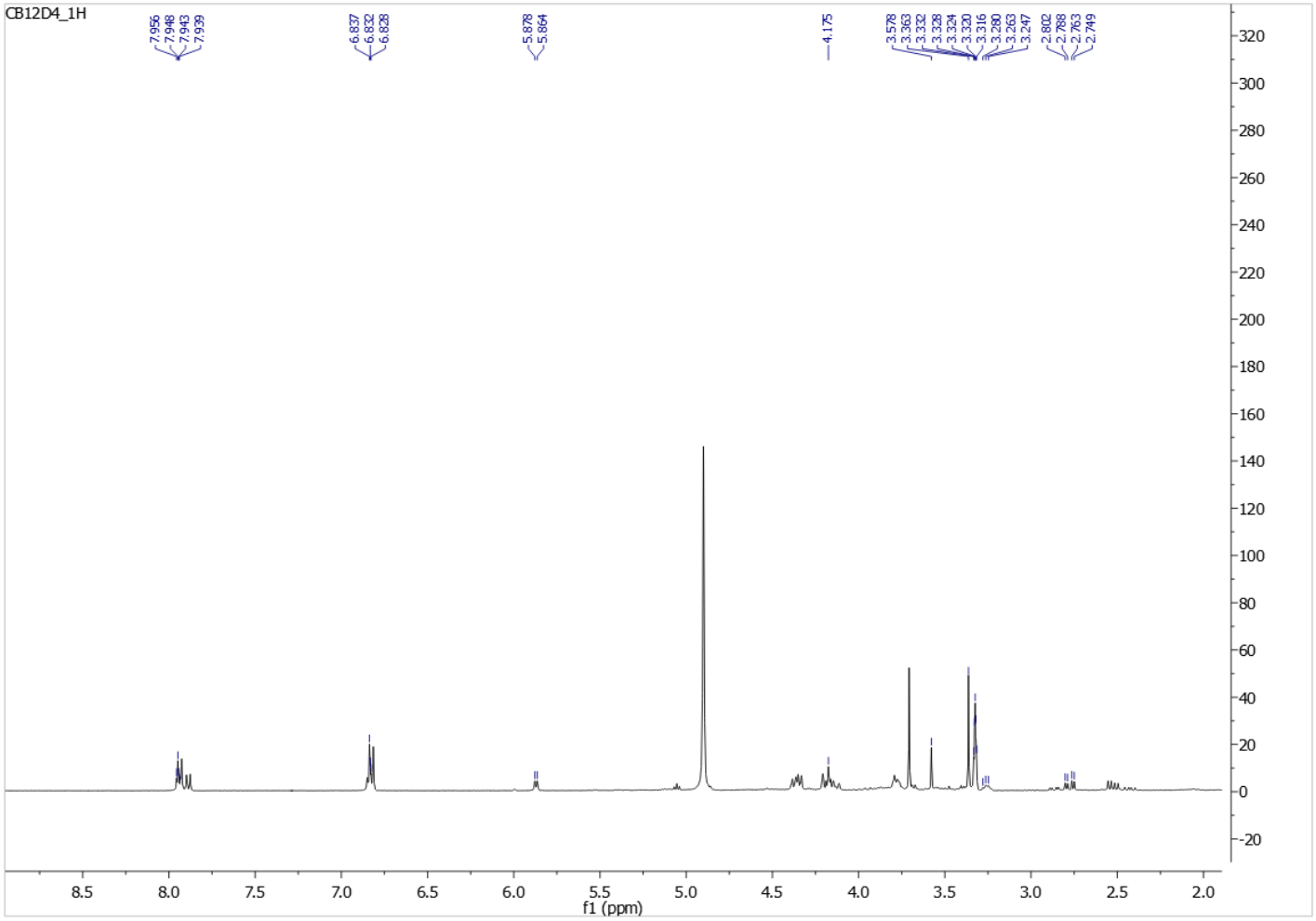


Figure S26. ^{1}H-NMR spectrum of compound **4** (400 MHz, methanol-d_4)

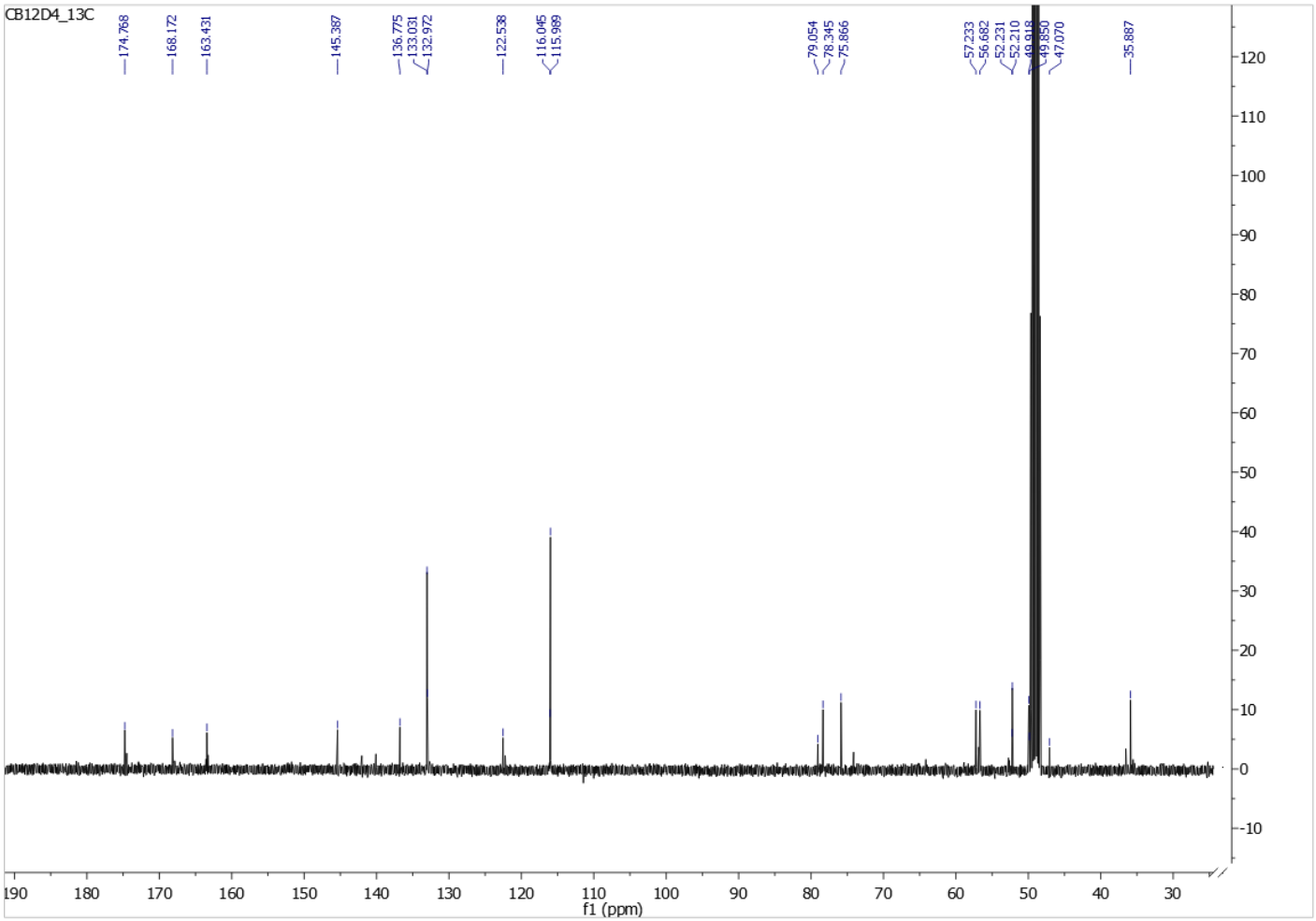


Figure S27. ^{13}C-NMR spectrum of compound **4** (100 MHz, methanol-d_4)

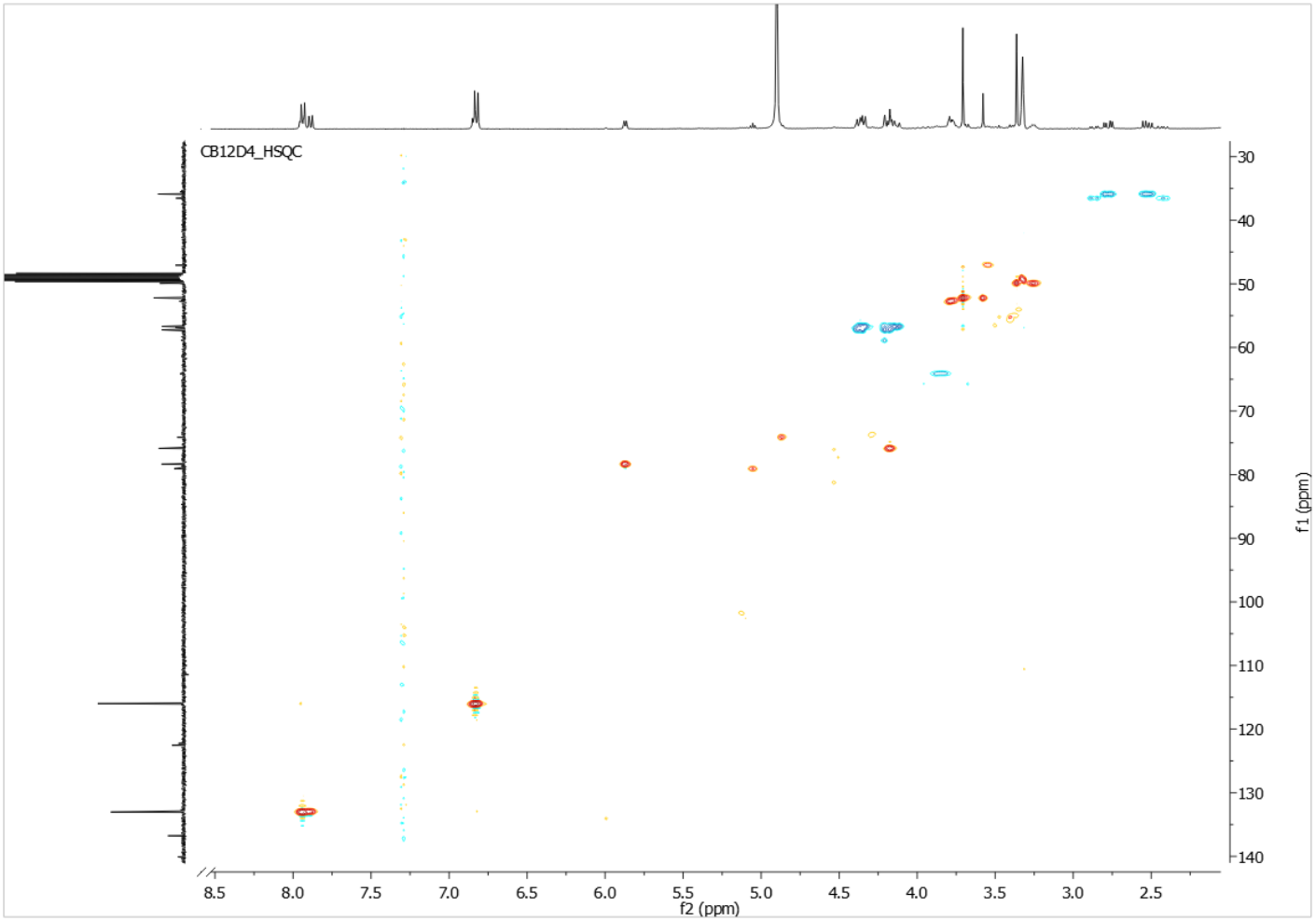


Figure S28. HSQC spectrum of compound **4** (methanol-d_4)

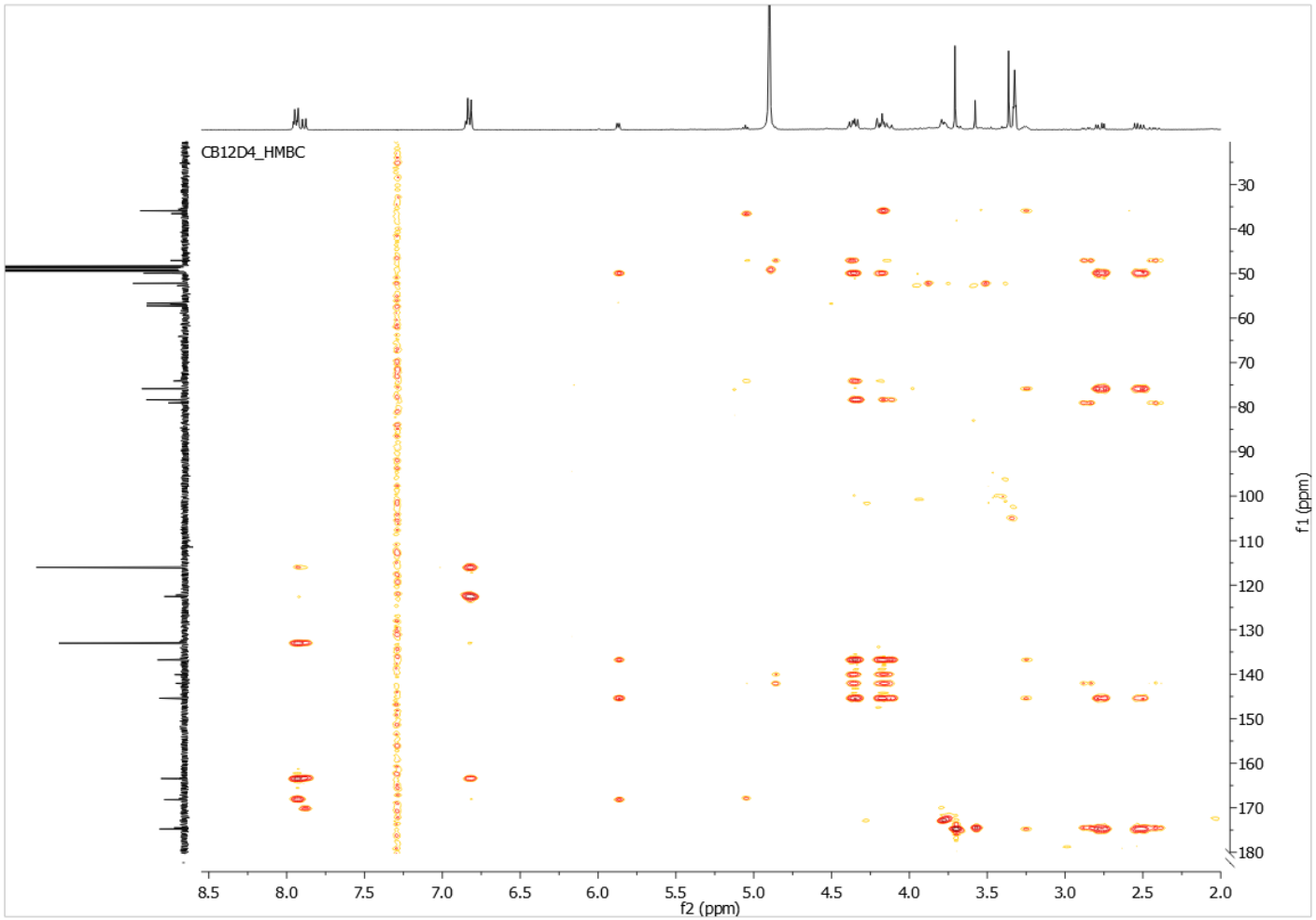


Figure S29. HMBC spectrum of compound **4** (methanol-d_4)

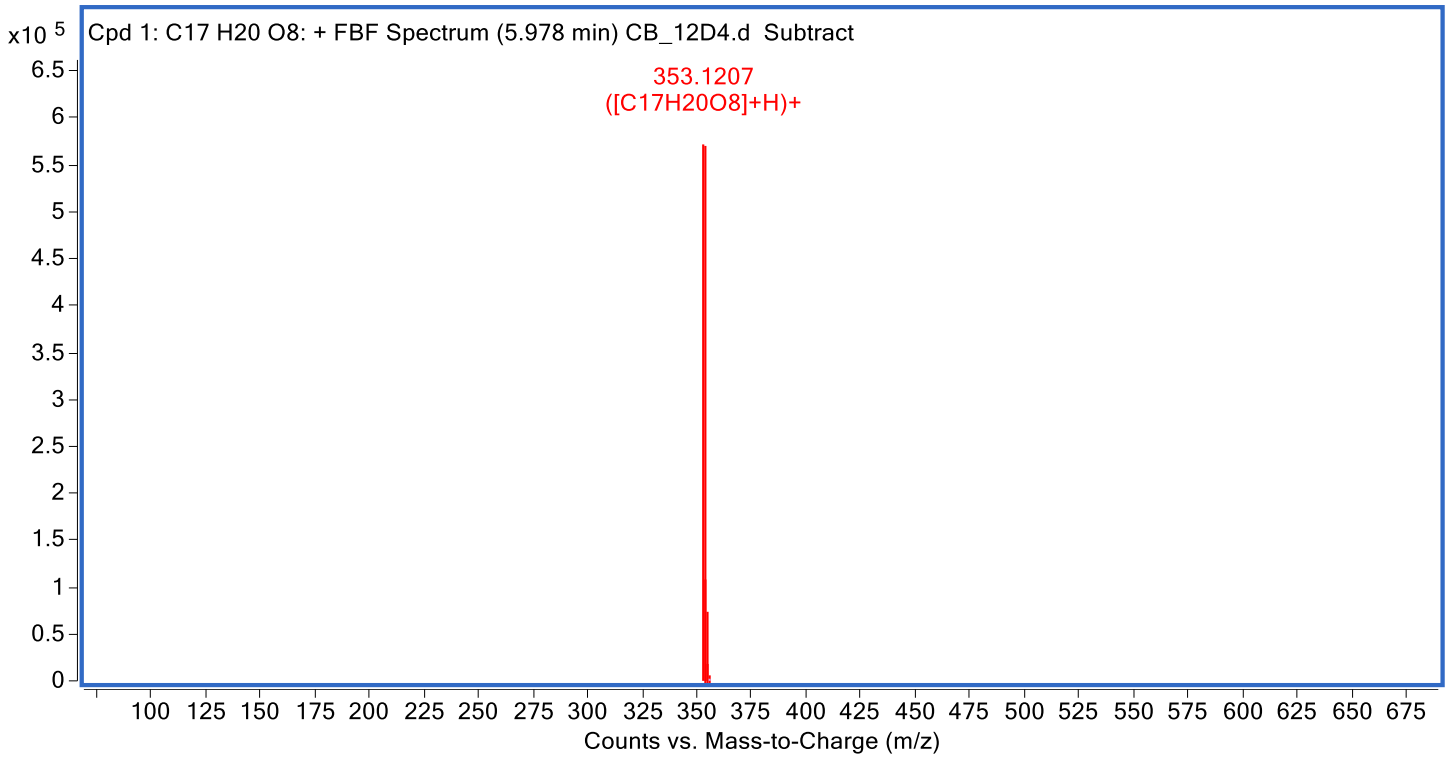


Figure S30. HR-ESI-MS of compound **4**