

**Supporting Information
for
New Trichothecenes Isolated from the Marine Alga
Endophytic Fungus *Trichoderma brevicompactum***

Safwan Safwan, Shih-Wei Wang, George Hsiao, Sui-Wen Hsiao, Su-Jung Hsu, Tzong-Huei Lee and Ching-Kuo Lee

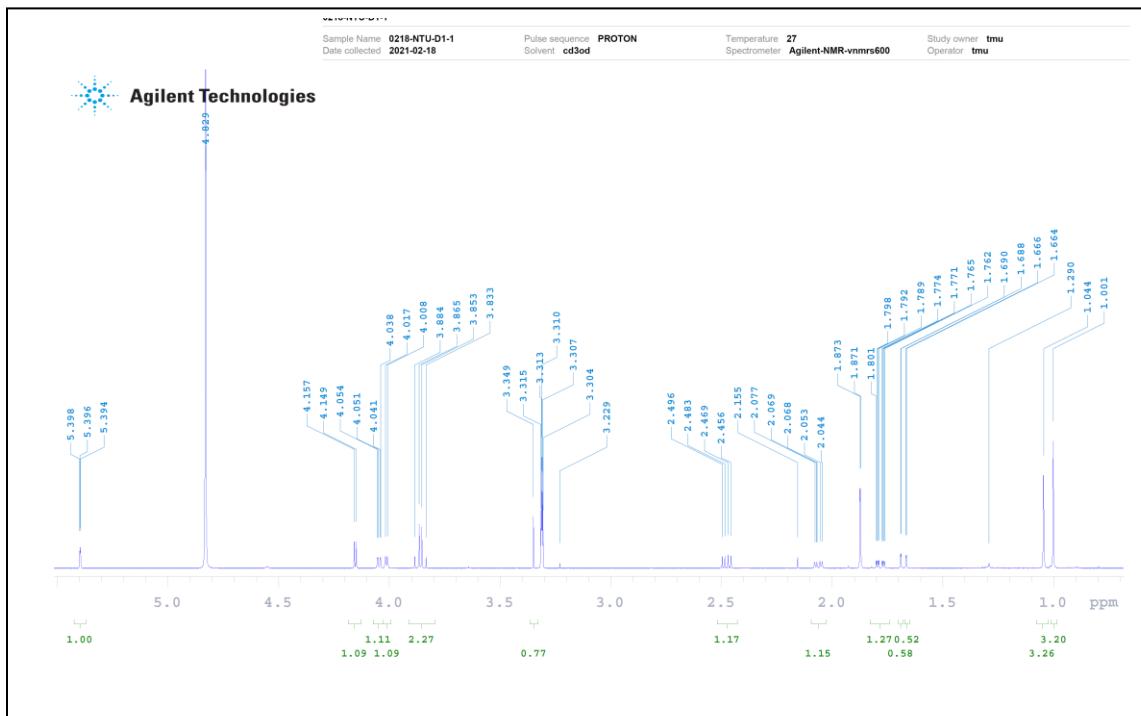


Figure S1. ^1H NMR (600 MHz, MeOH- d_4) of **1**

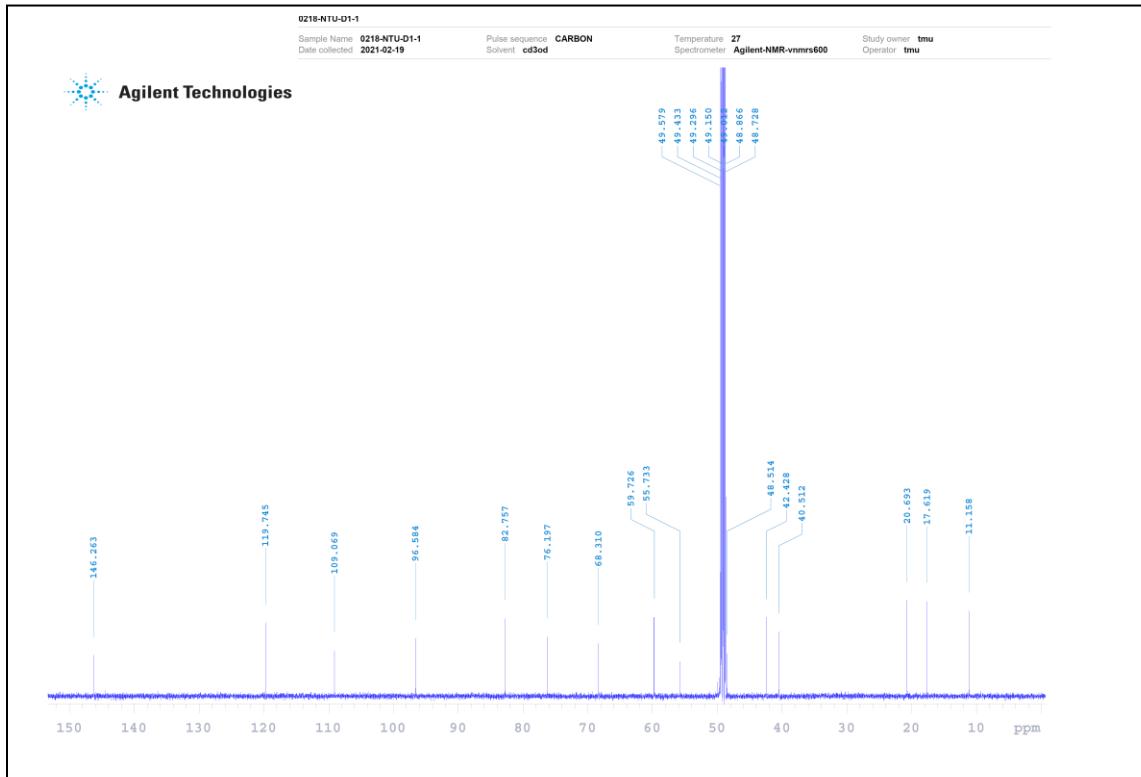


Figure S2. ^{13}C NMR (150 MHz, MeOH- d_4) of **1**

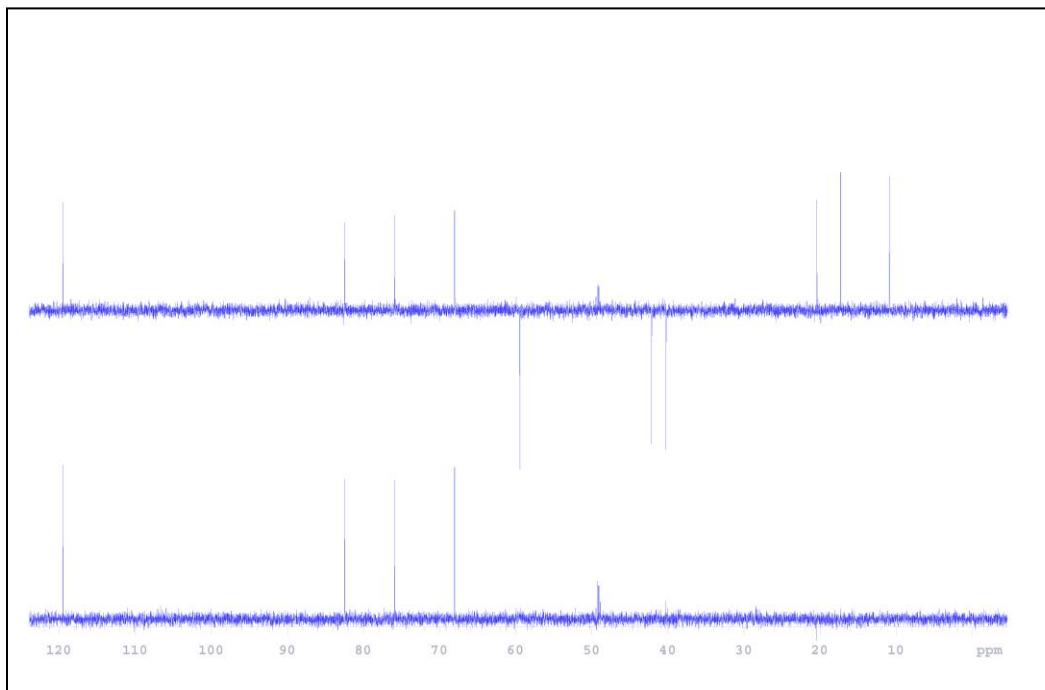


Figure S3. DEPT -90 (down) and -135(up) of **1**.

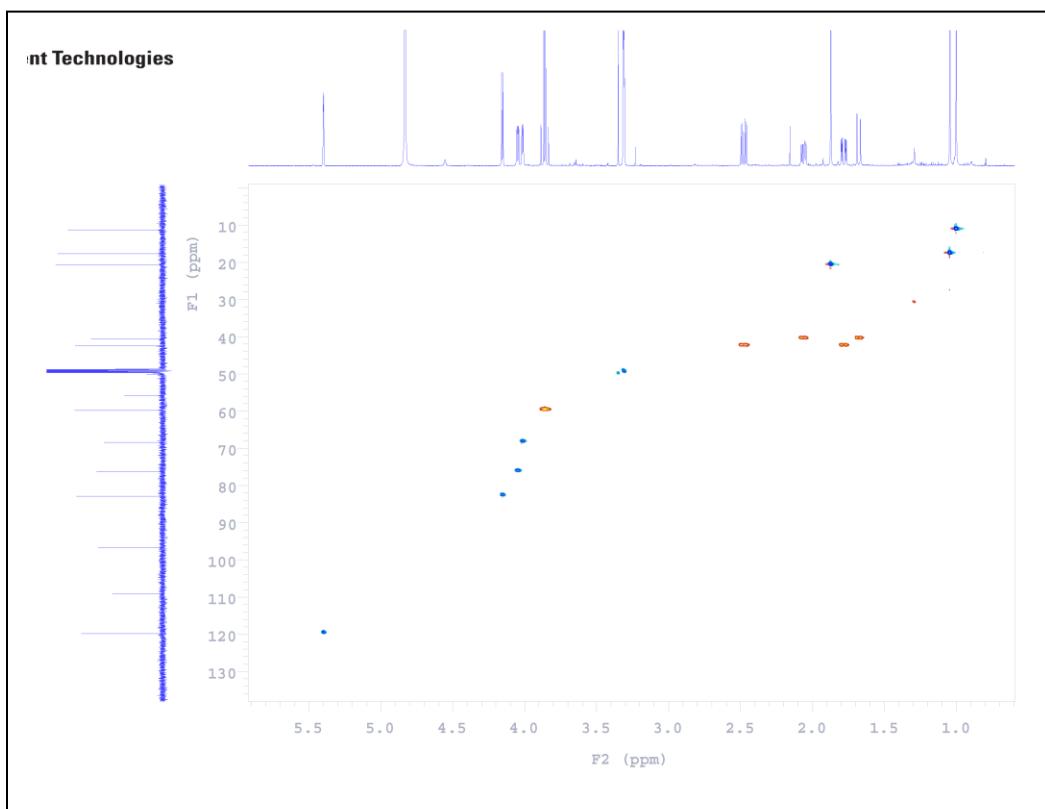


Figure S4. HSQC of **1**.

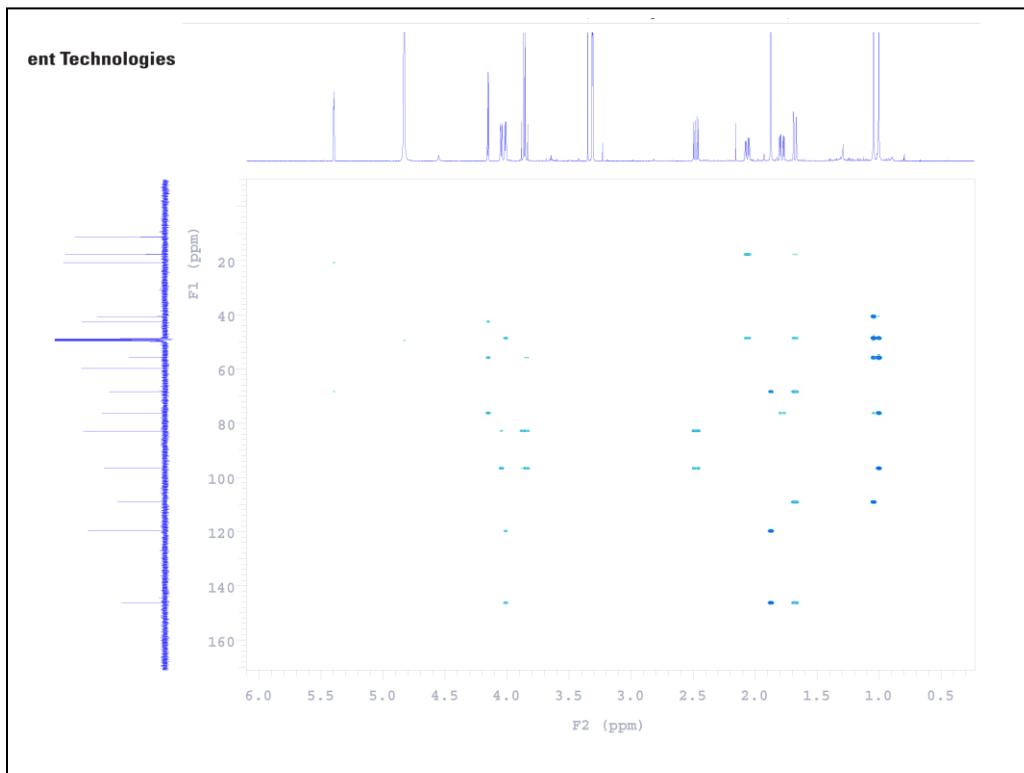


Figure S5. HMBC of **1**.

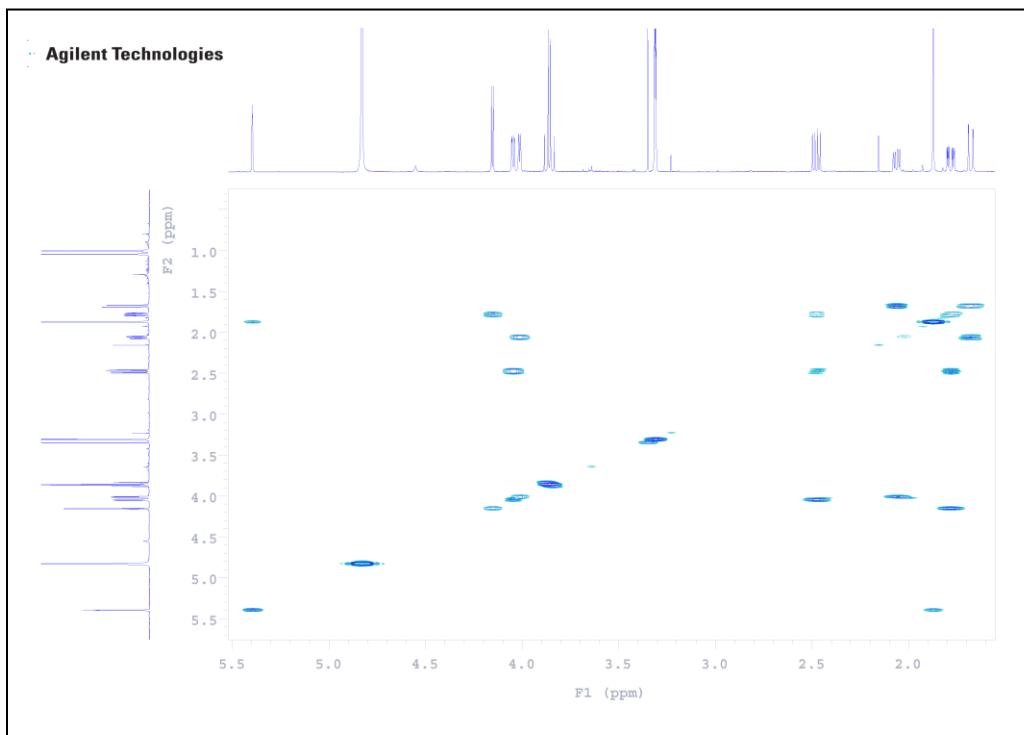


Figure S6. COSY of **1**.

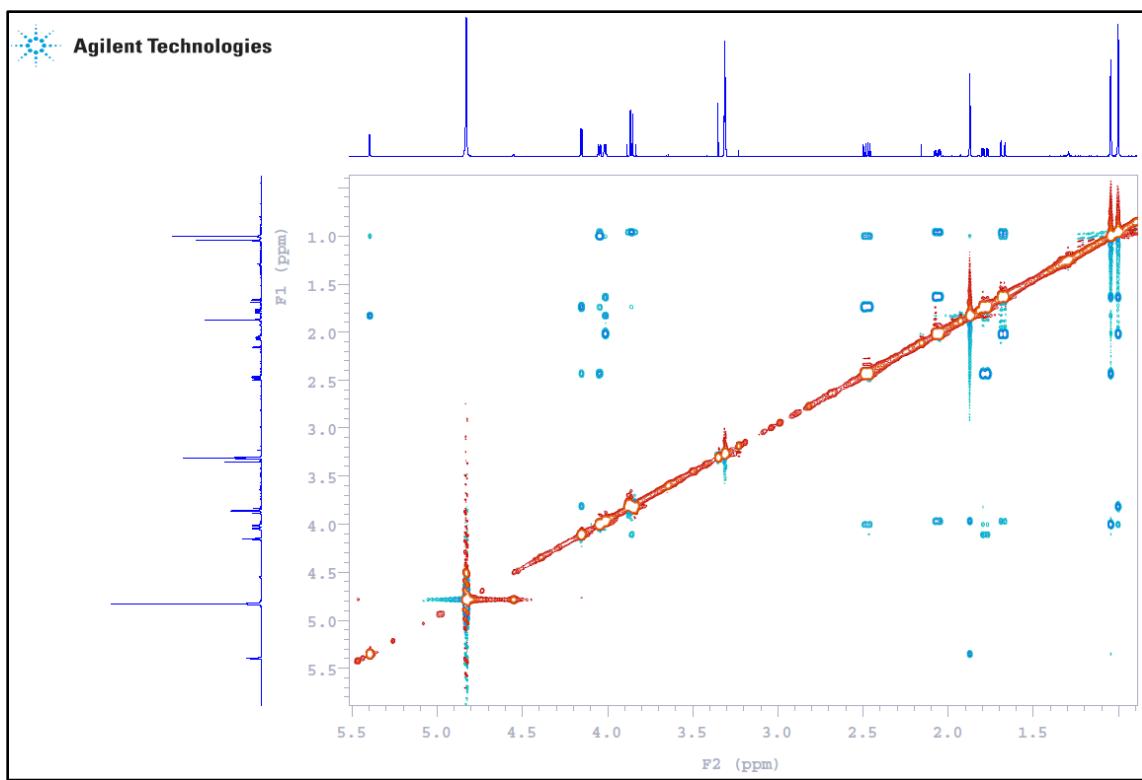


Figure S7. NOESY of **1**.

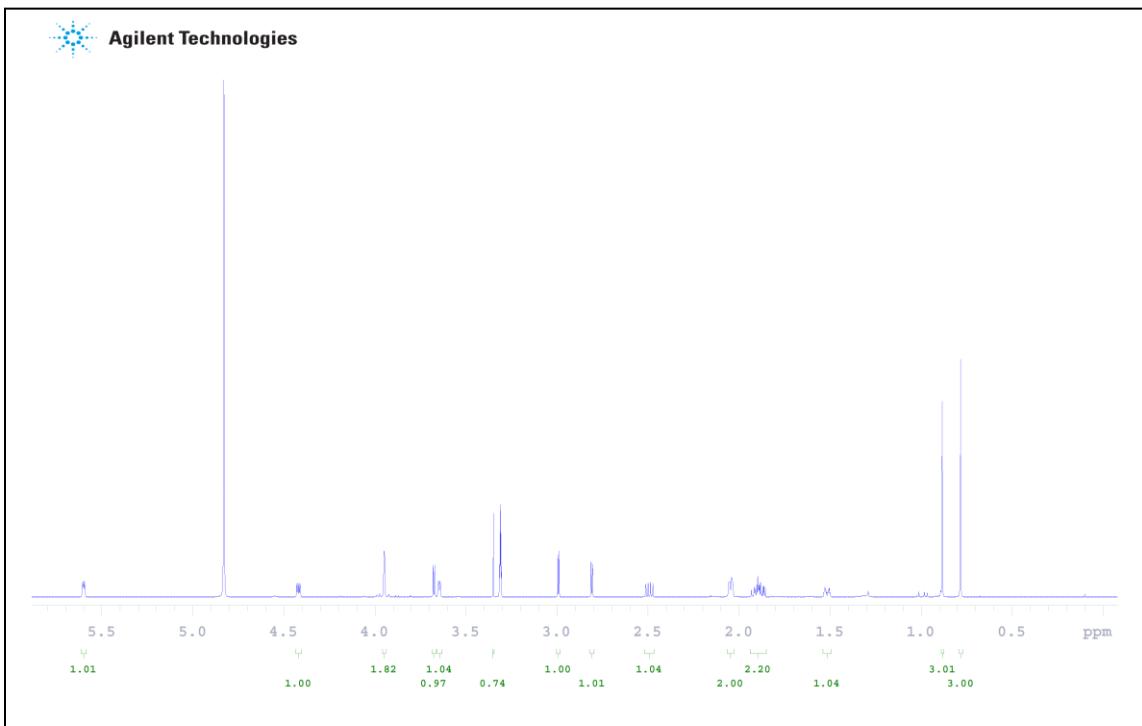


Figure S8. ^1H NMR (600 MHz, MeOH- d_4) of **2**

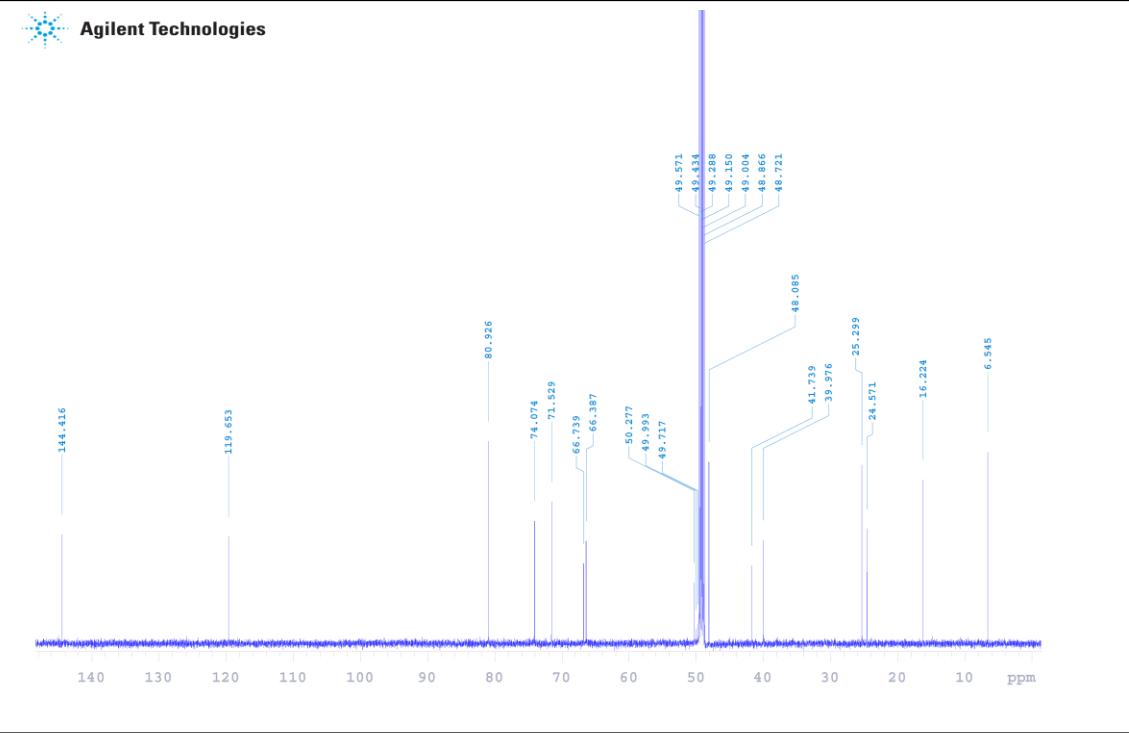


Figure S9. ^{13}C NMR (150 MHz, MeOH-*d*₄) of **2**.

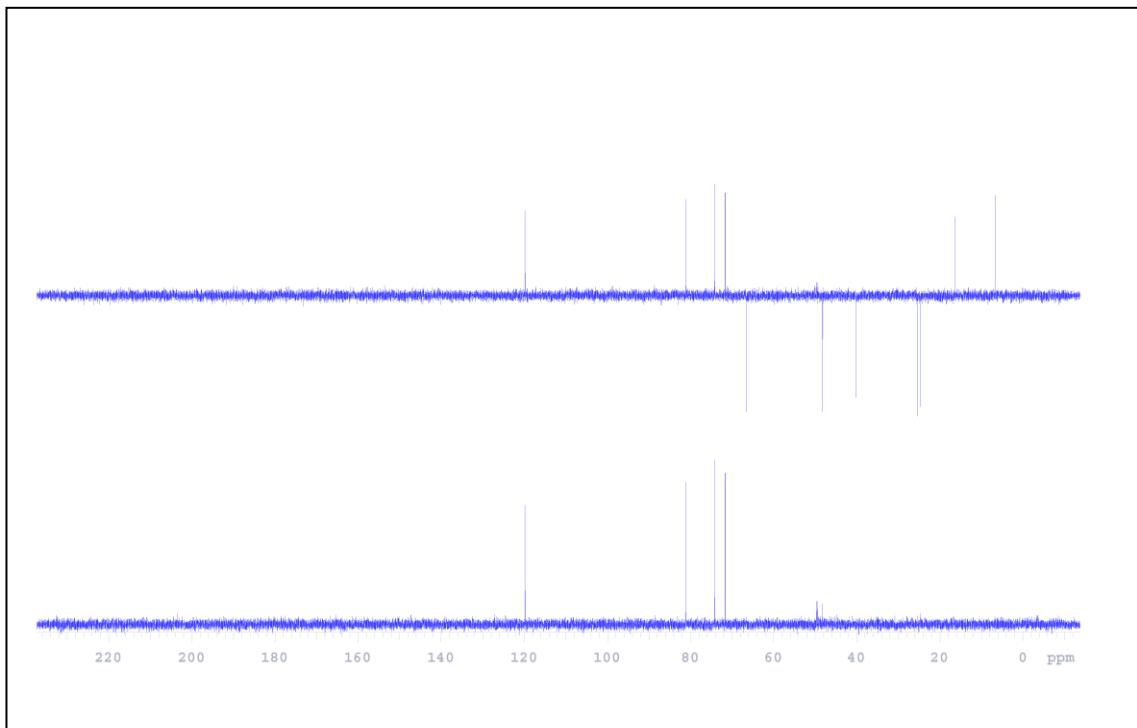


Figure S10. DEPT -90 (down) and -135(up) of **2**

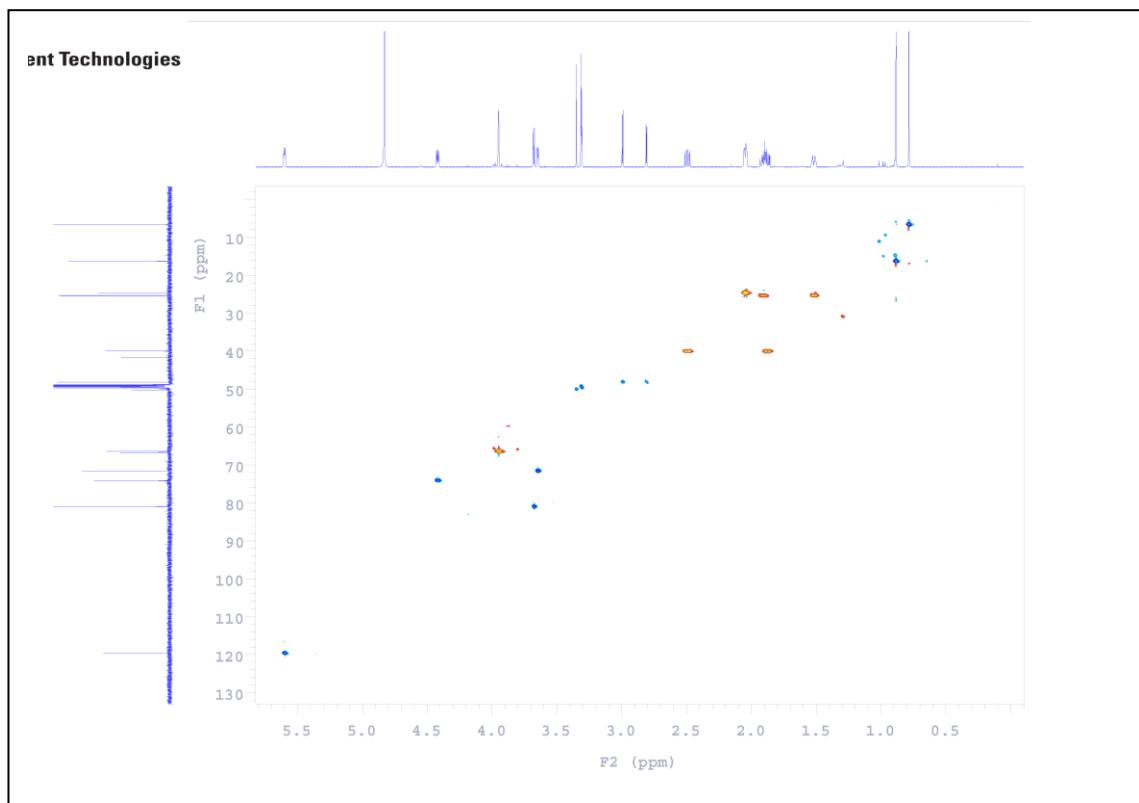


Figure S11. HSQC of **2**

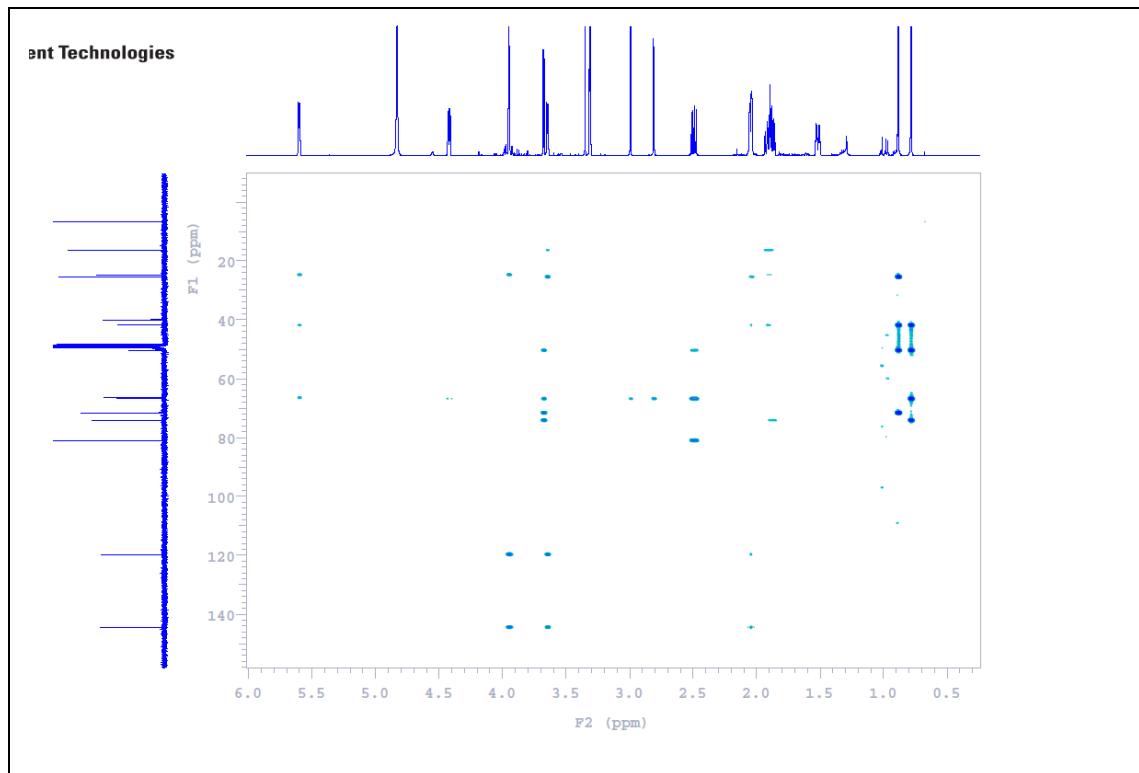


Figure S12. HMBC of **2**.

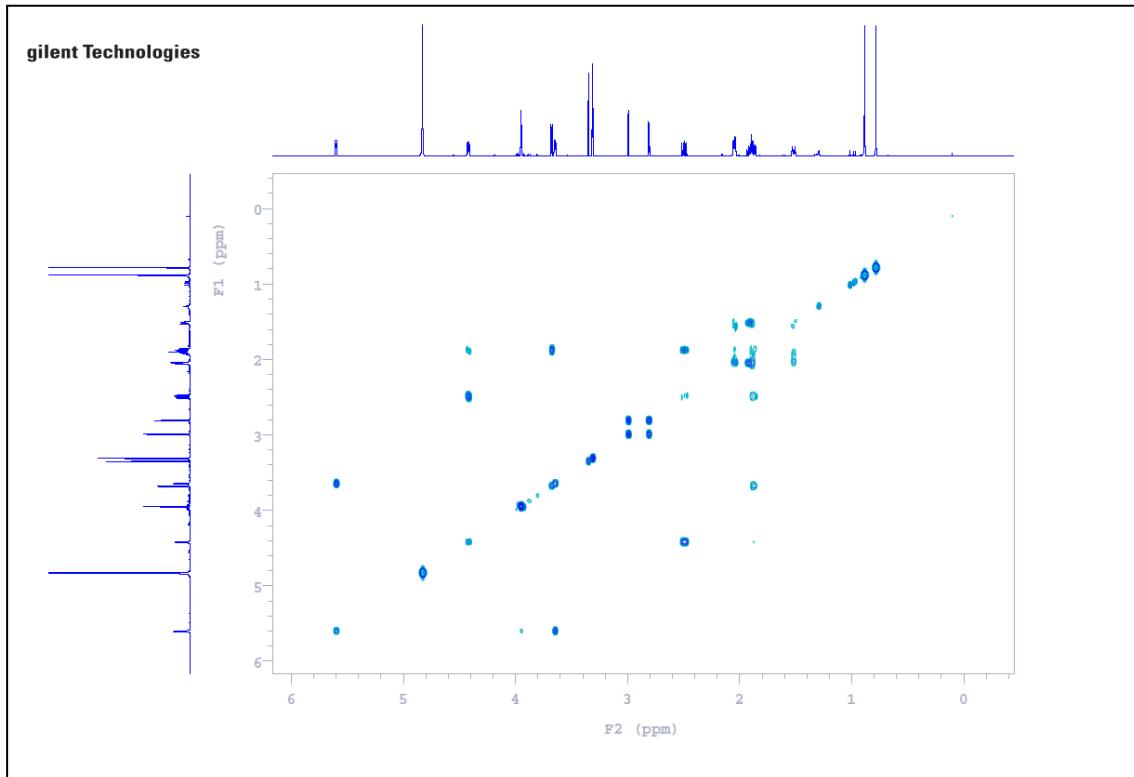


Figure S13. COSY of **2**.

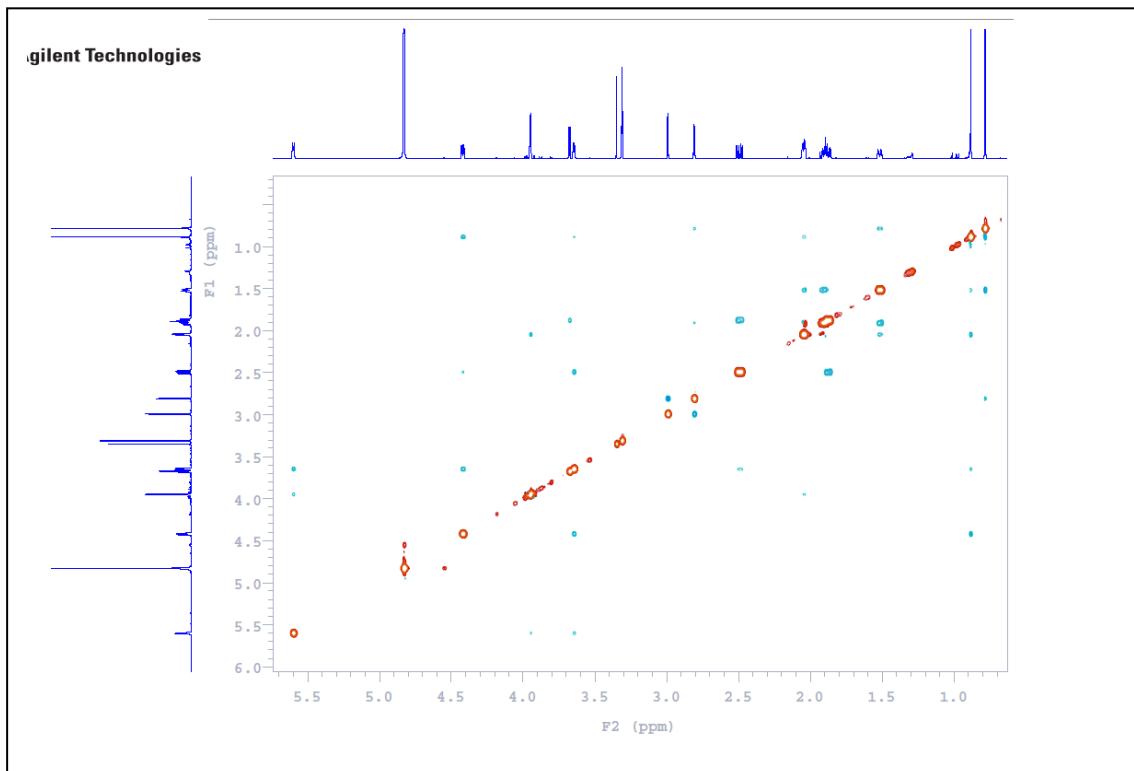


Figure S14. NOESY of **2**.

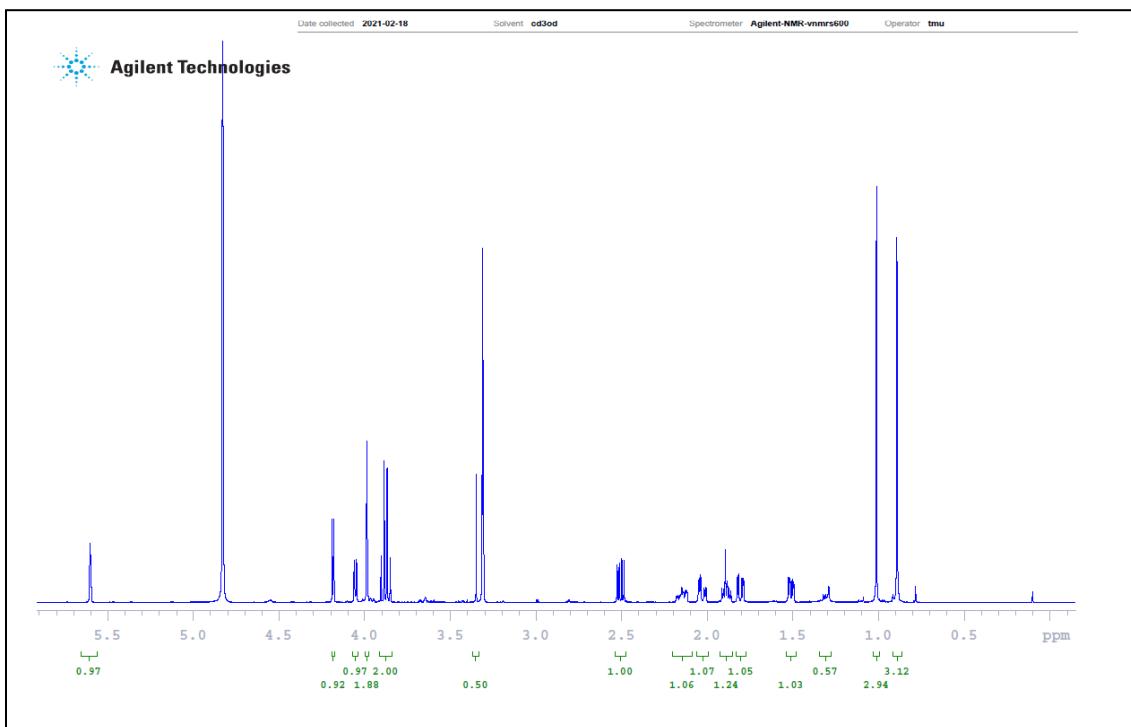


Figure S15. ^1H NMR (600 MHz, $\text{MeOH-}d_4$) of **3**

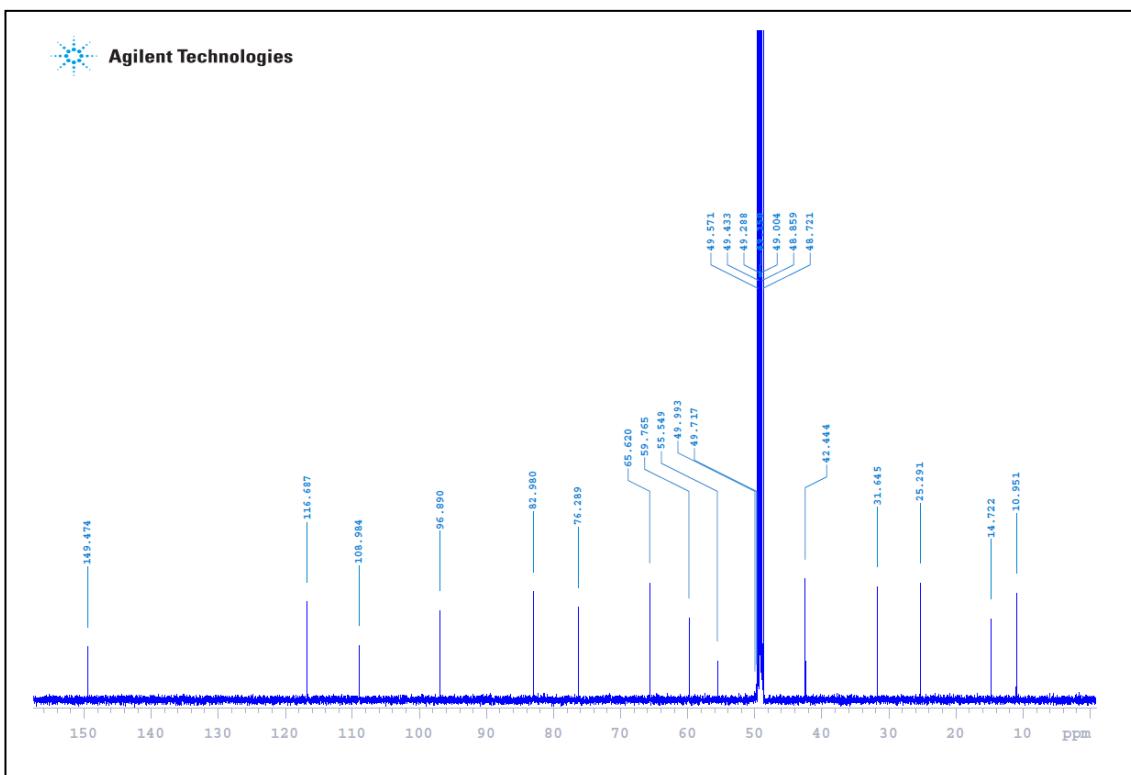


Figure S16. ^{13}C NMR (150 MHz, $\text{MeOH-}d_4$) of **3**

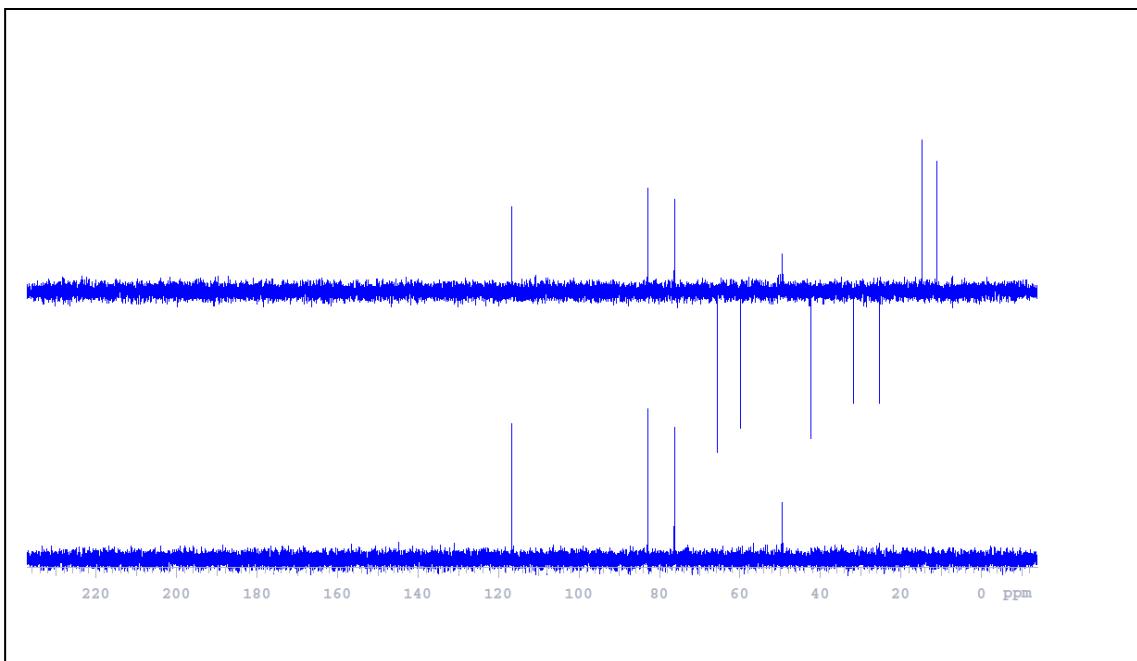


Figure S17. DEPT -90 (down) and -135(up) of **3**.

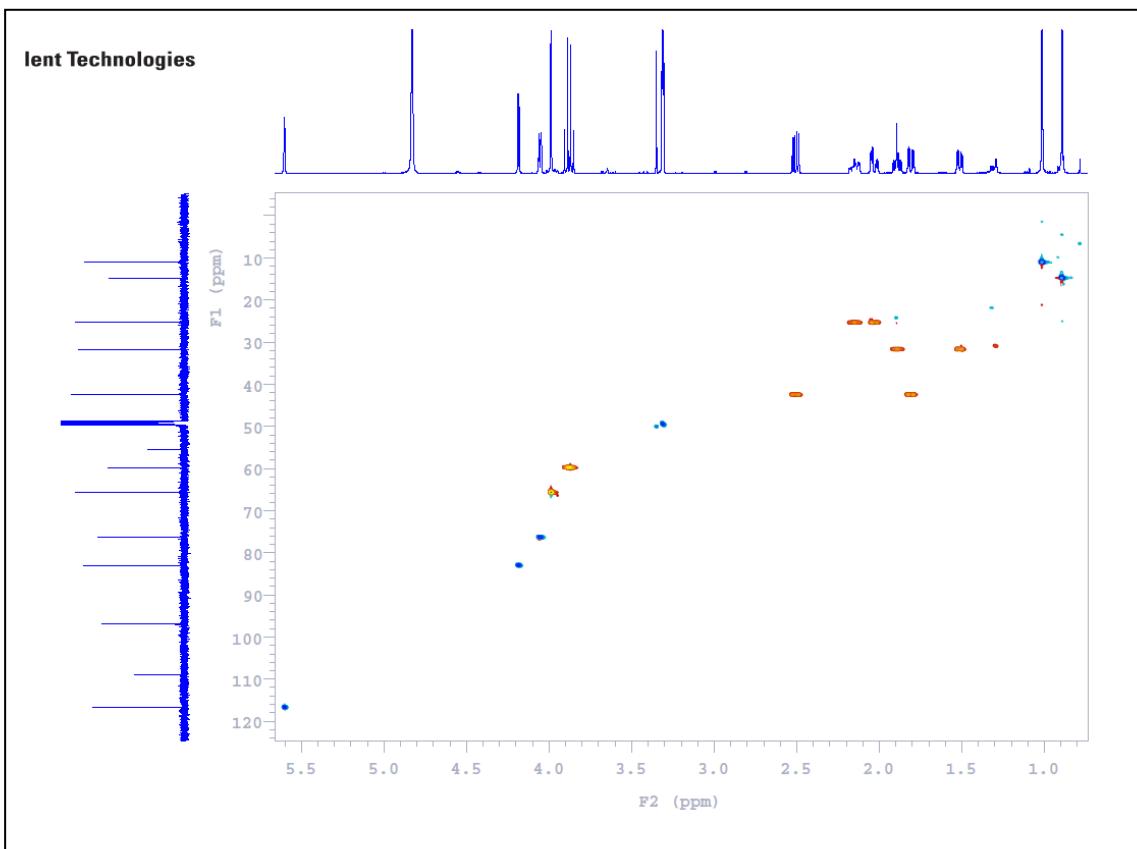


Figure S18. HSQC of **3**.

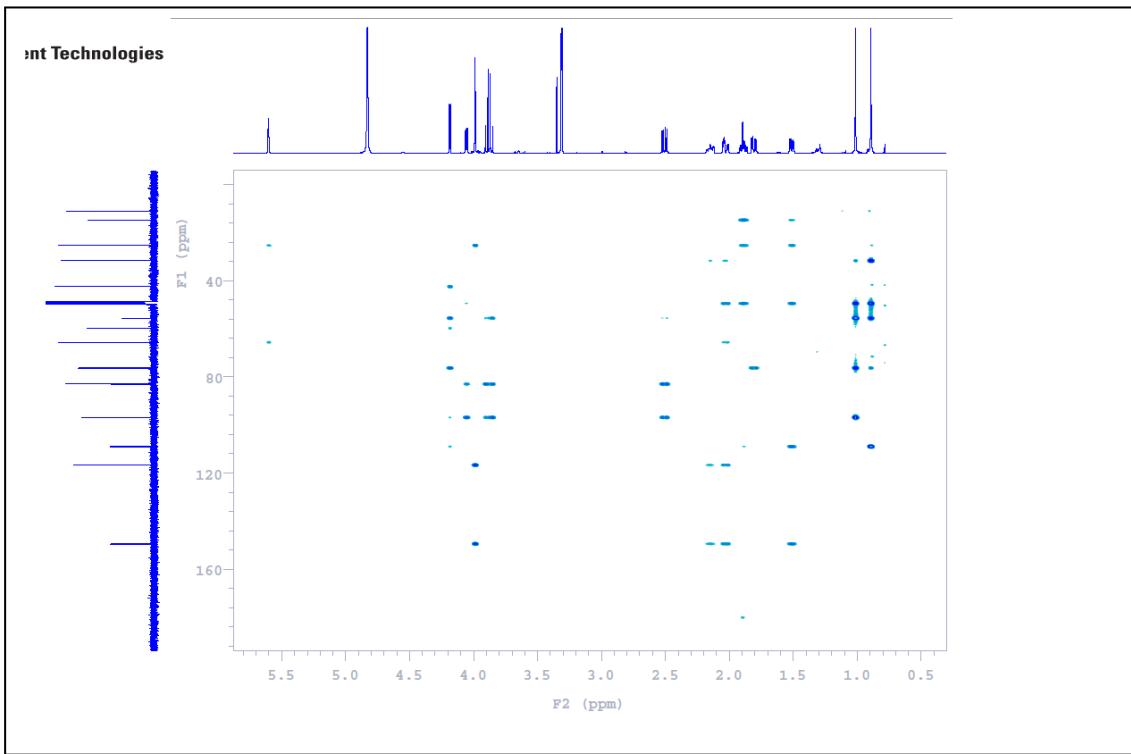


Figure S19. HMBC of **3**.

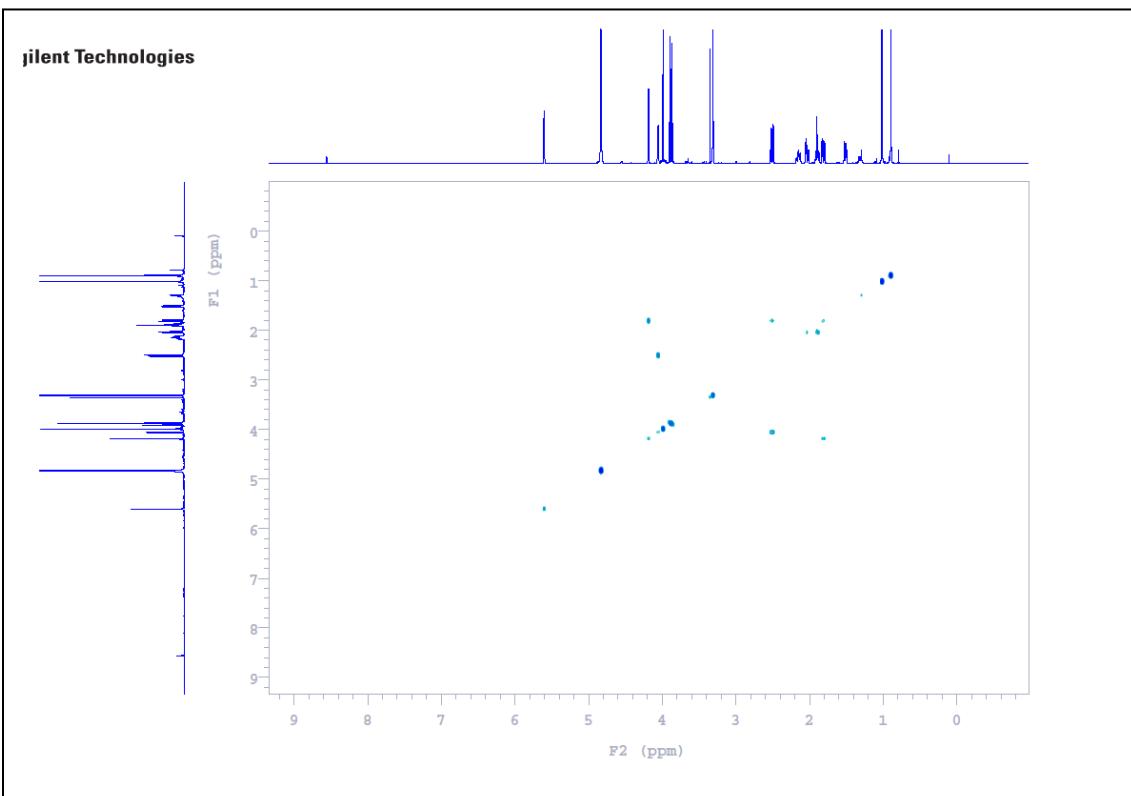


Figure S20. COSY of **3**.

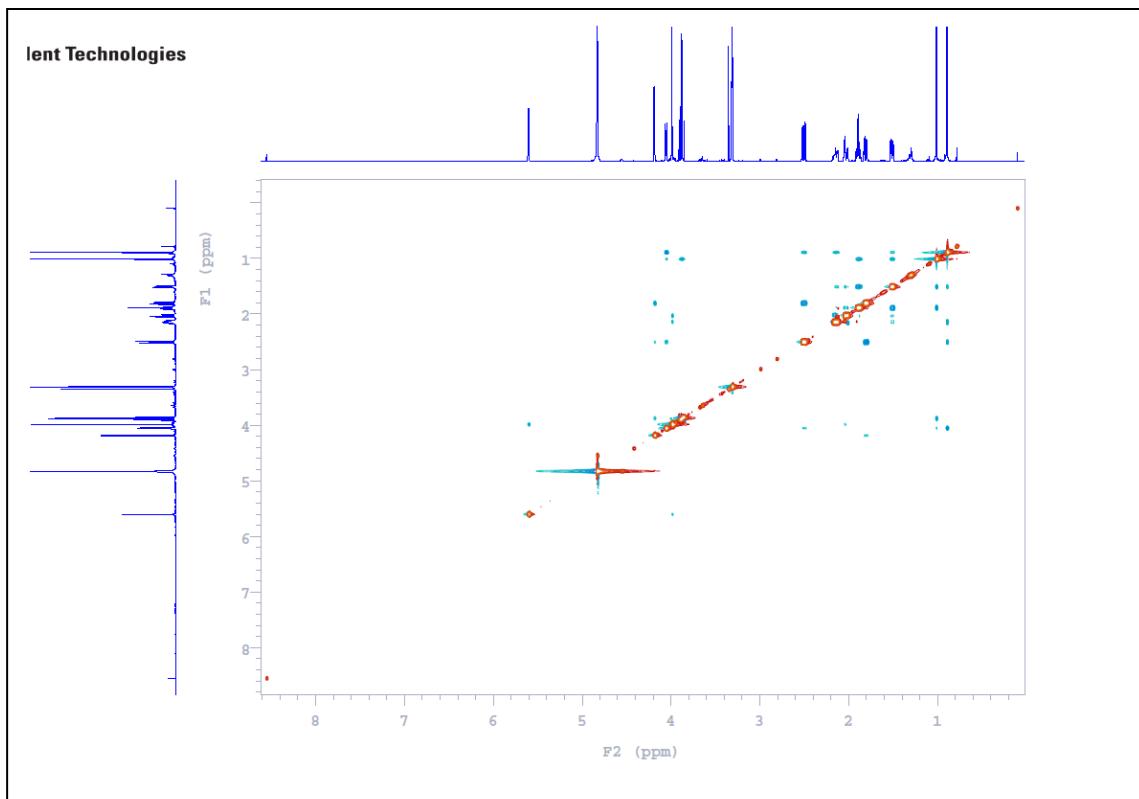


Figure S21. NOESY of **3**.

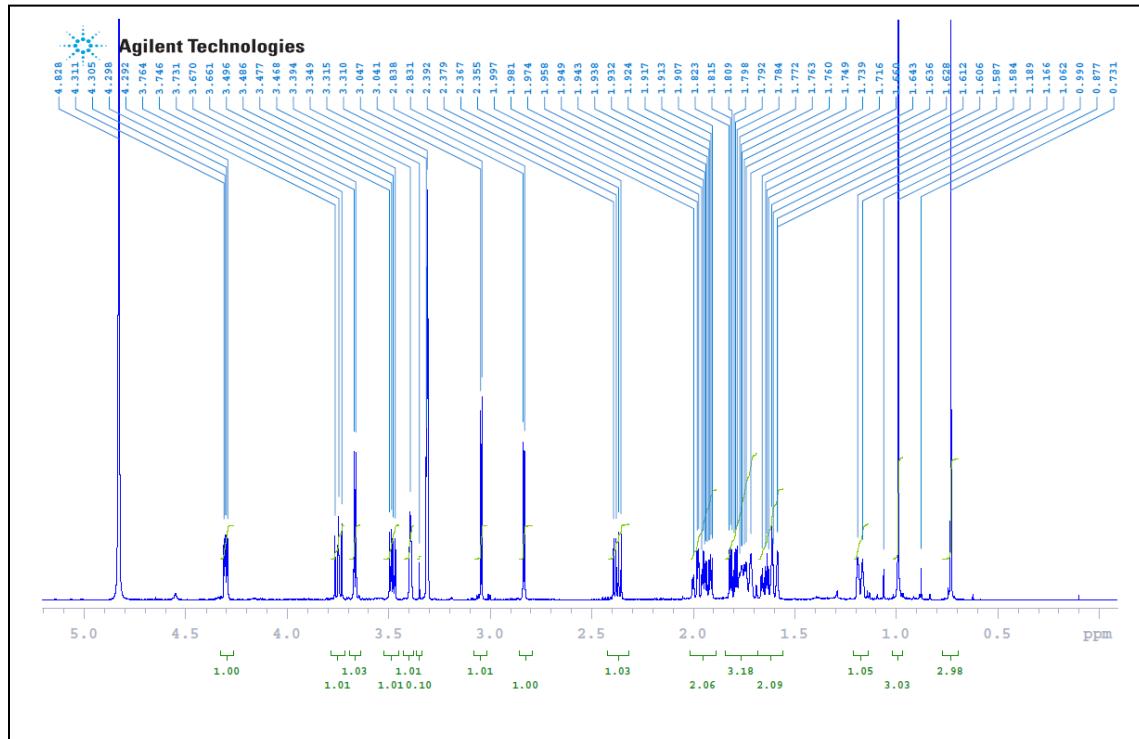


Figure S22. ^1H NMR (600 MHz, MeOH- d_4) of **4**.

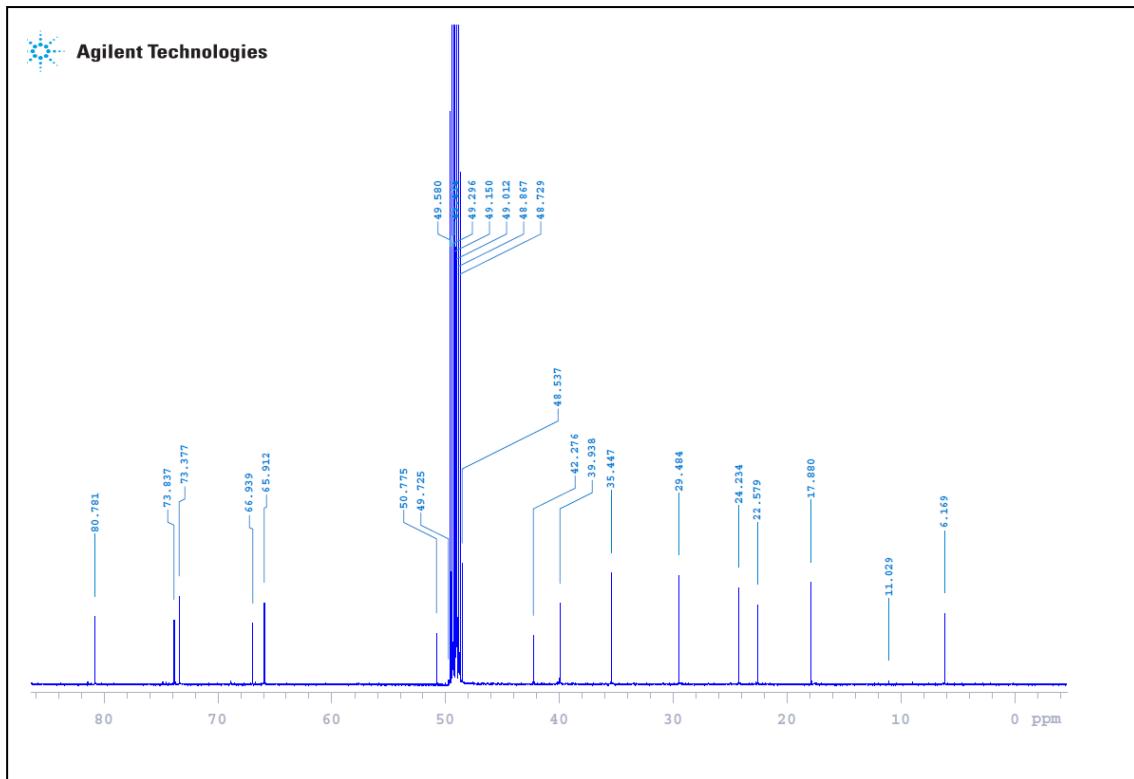


Figure S23. ^{13}C NMR (150 Hz, MeOH-*d*4) of **4**.

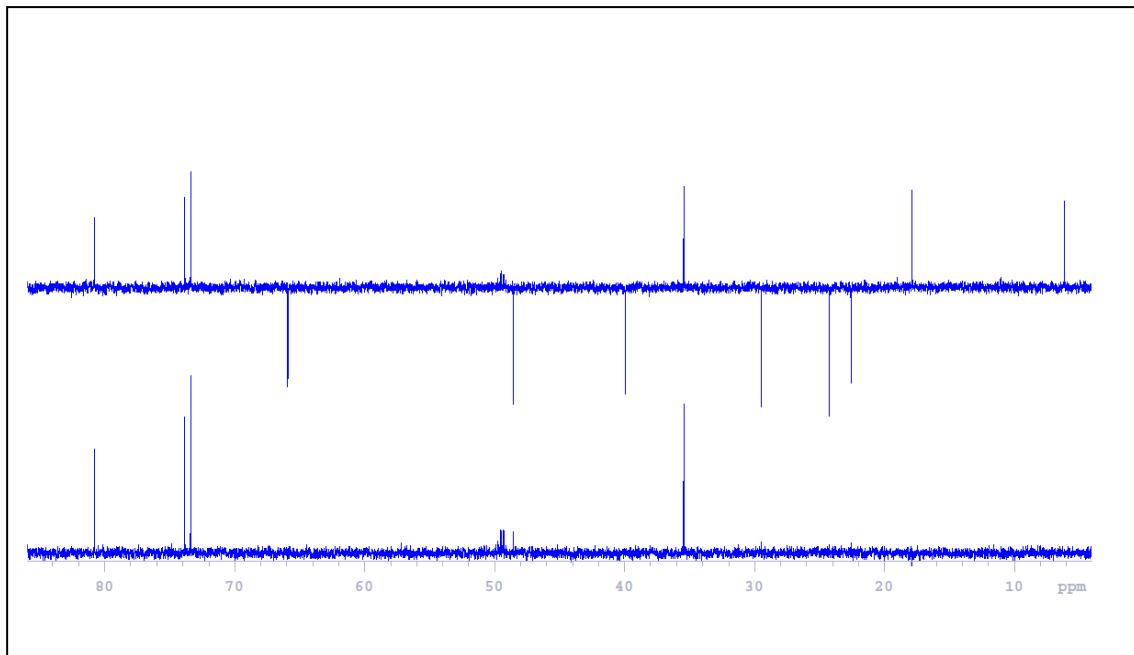


Figure S24. DEPT -90 (down) and -135(up) of **4**.

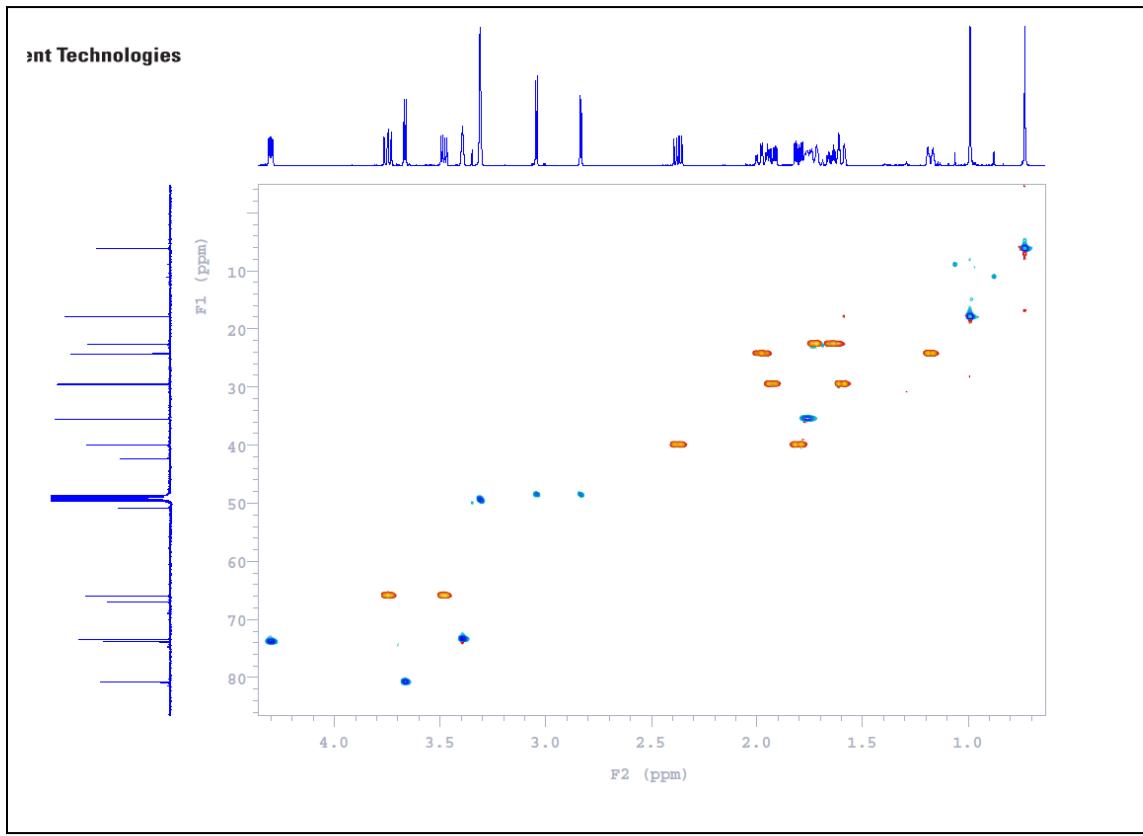


Figure S25. HSQC of **4**.

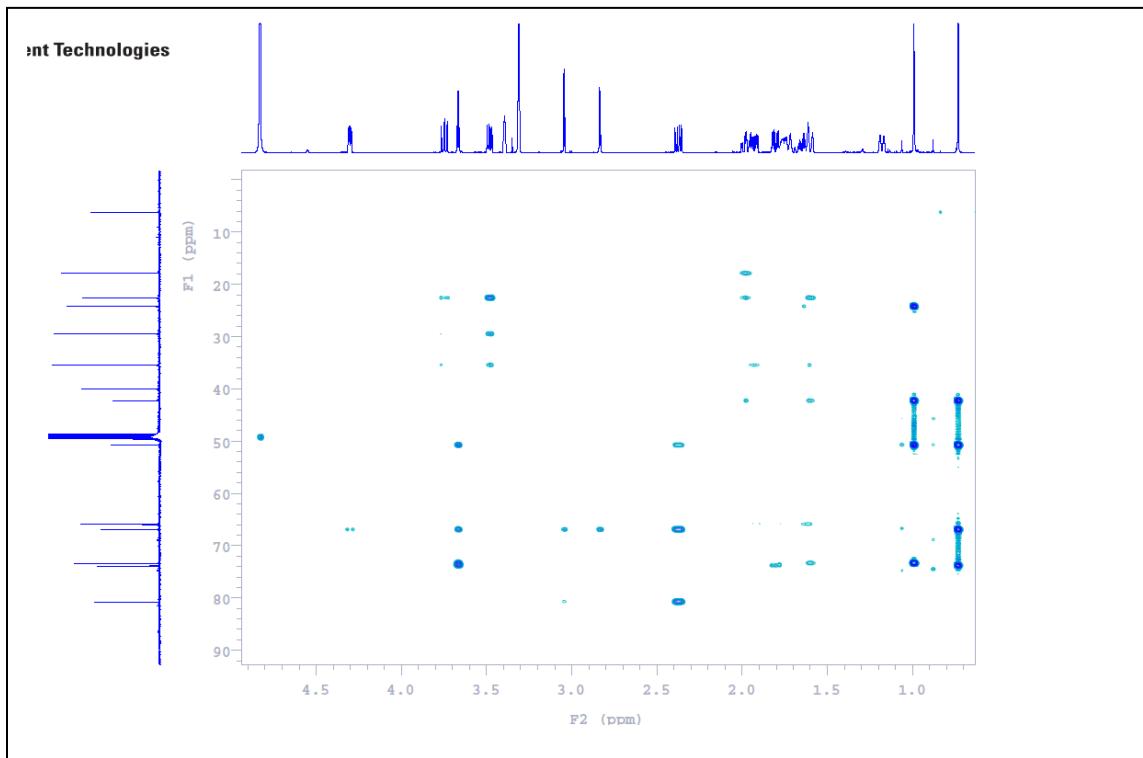


Figure S26. HMBC of **4**.

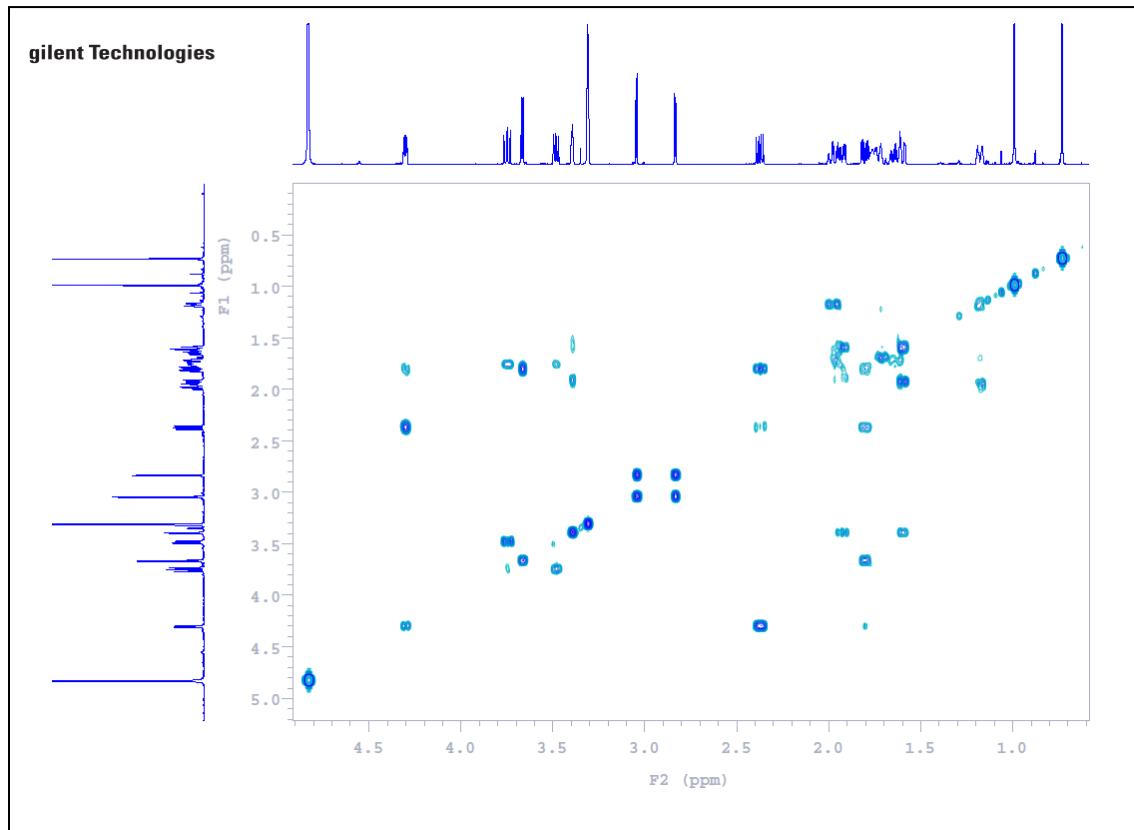


Figure S27. COSY of 4.

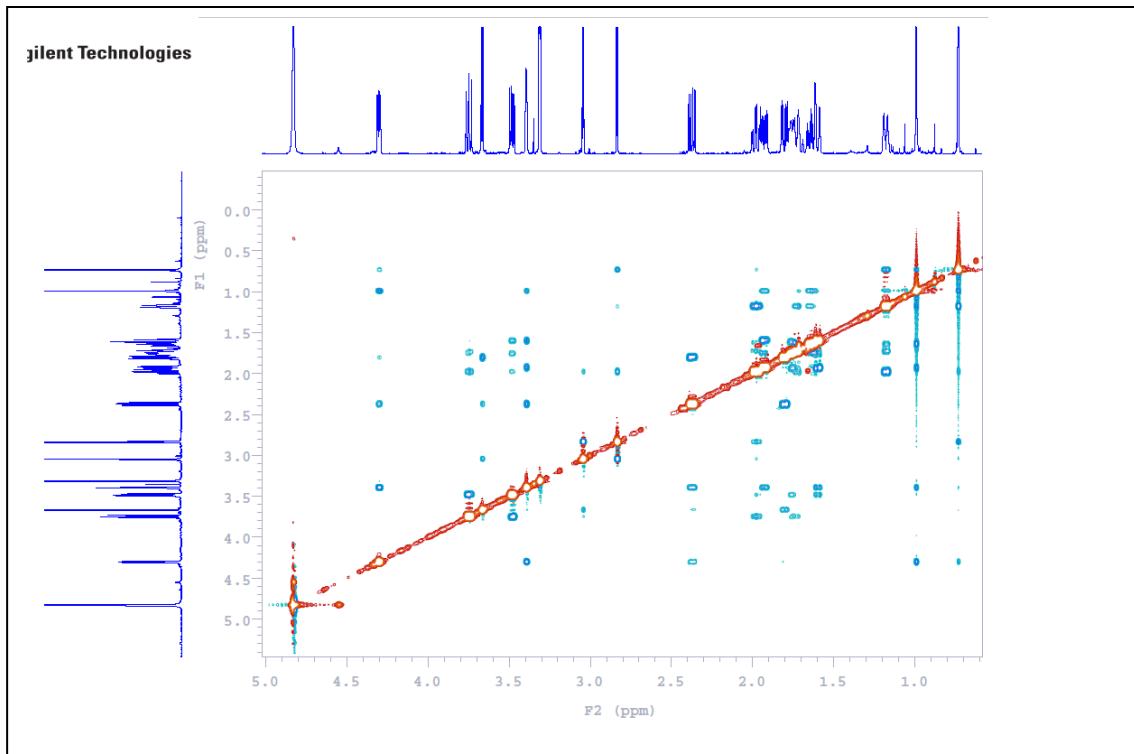


Figure S28. NEOSY of 4.

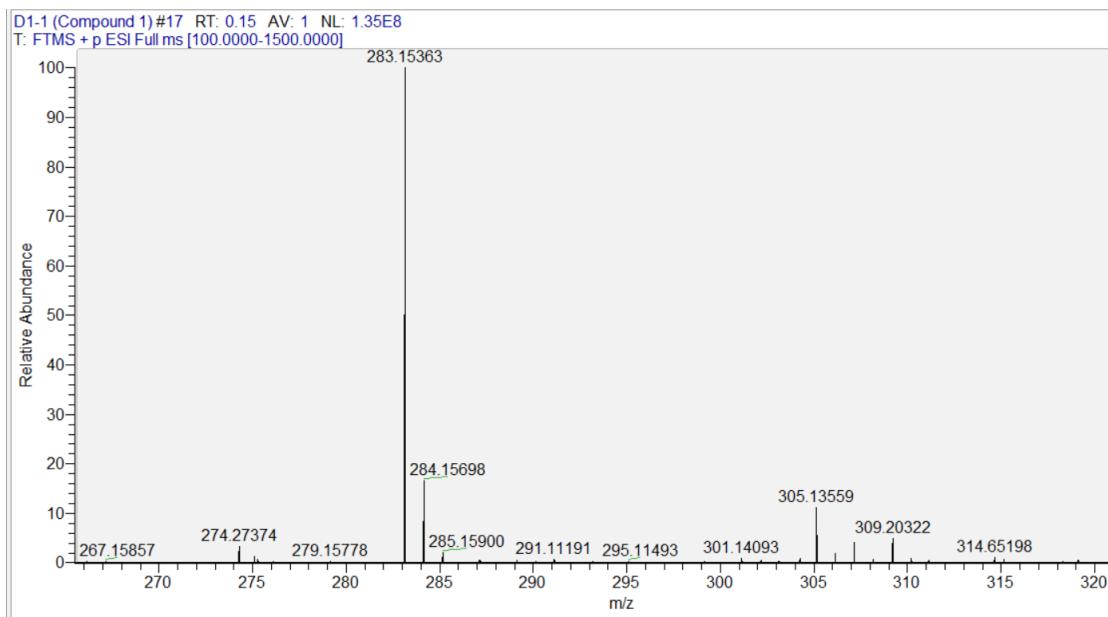


Figure S29. MS spectrum of **1**.

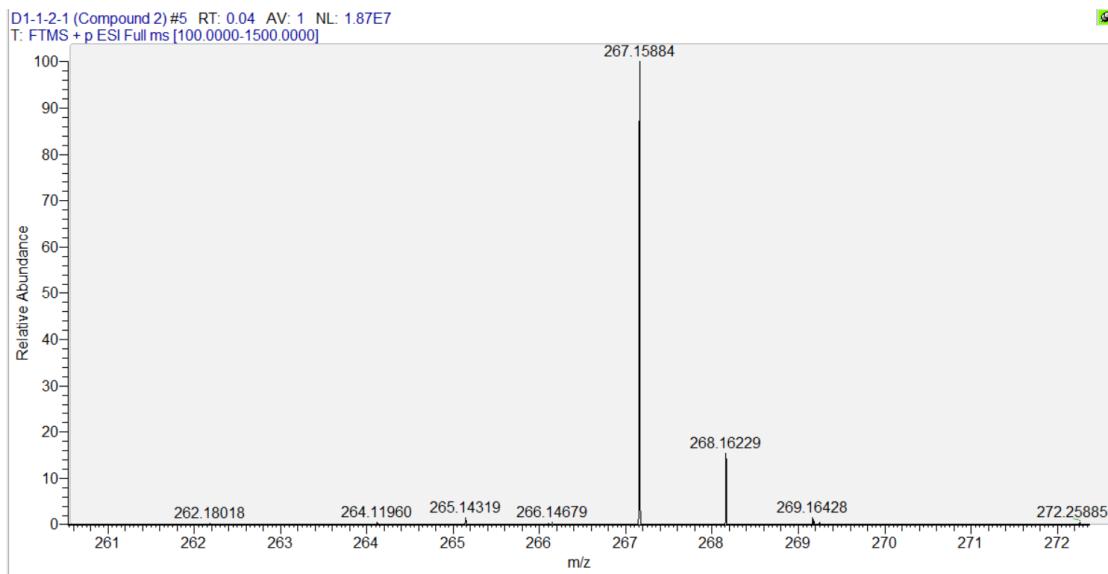


Figure S30. MS spectrum of **2**.

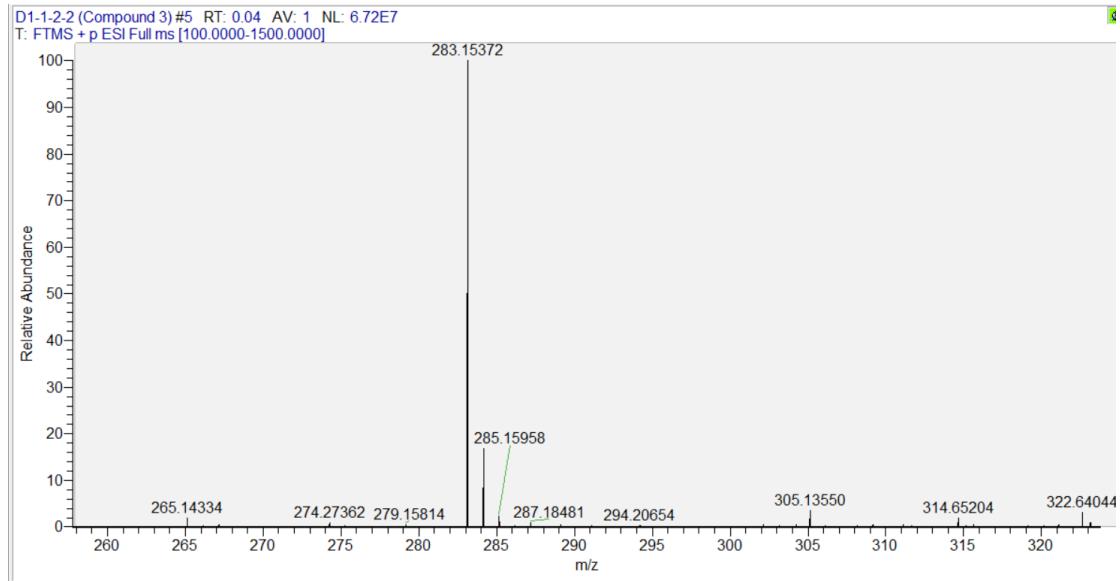


Figure S31. MS spectrum of **3**.

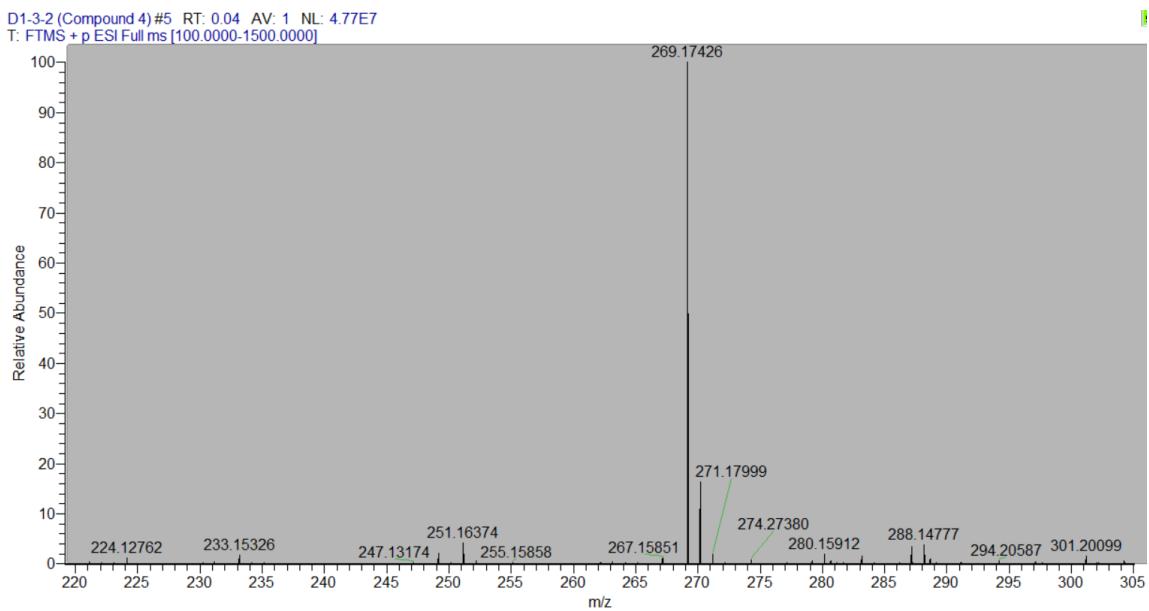


Figure S32. MS spectrum of **4**.

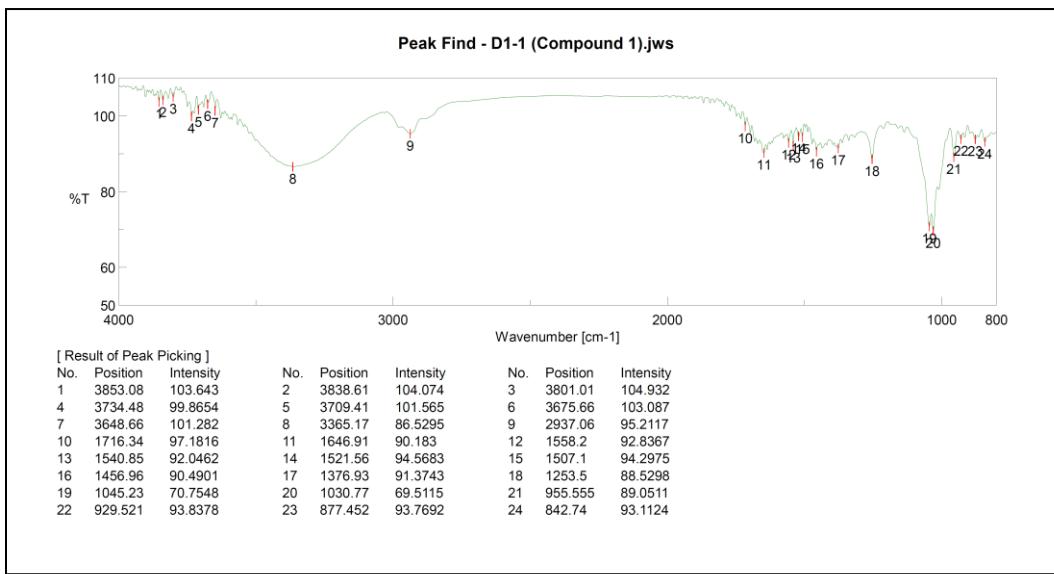


Figure S33. IR spectrum of **1**.

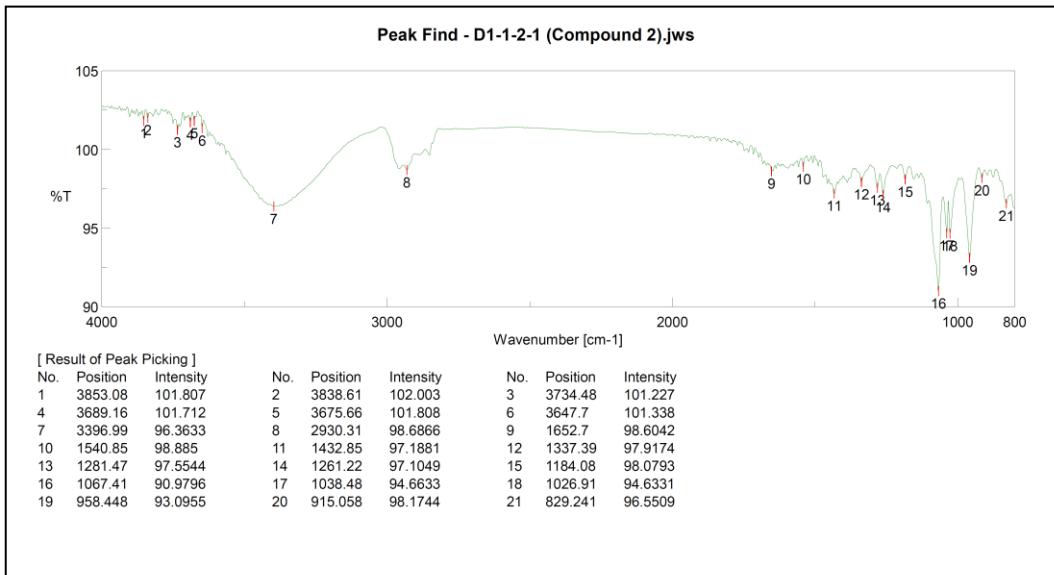


Figure S34. IR spectrum of **2**.

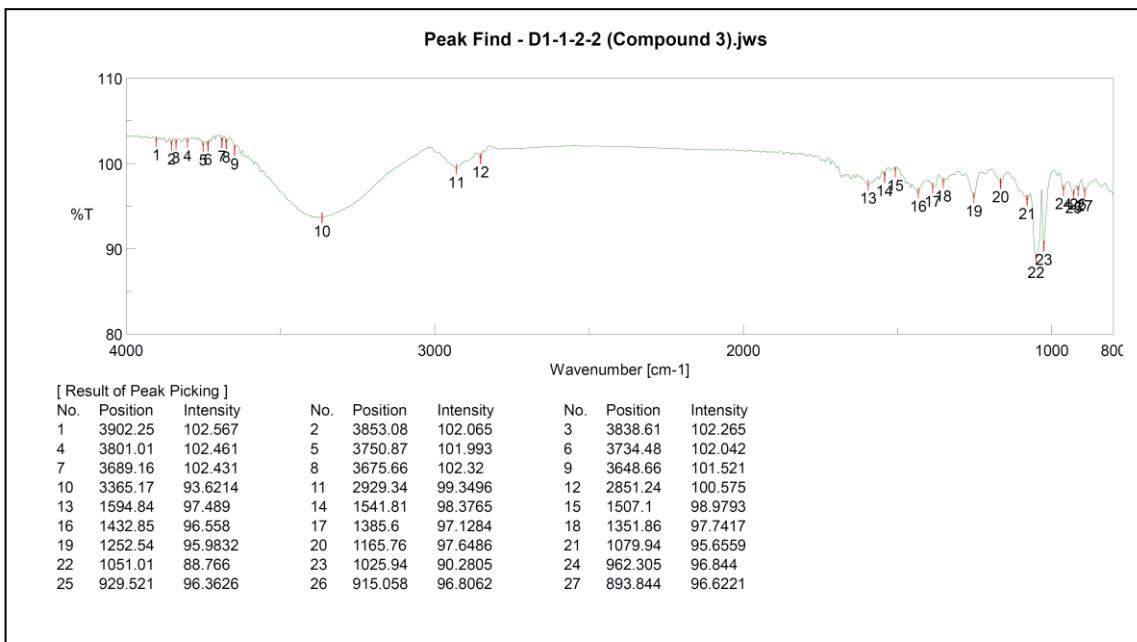


Figure S35. IR spectrum of **3**.

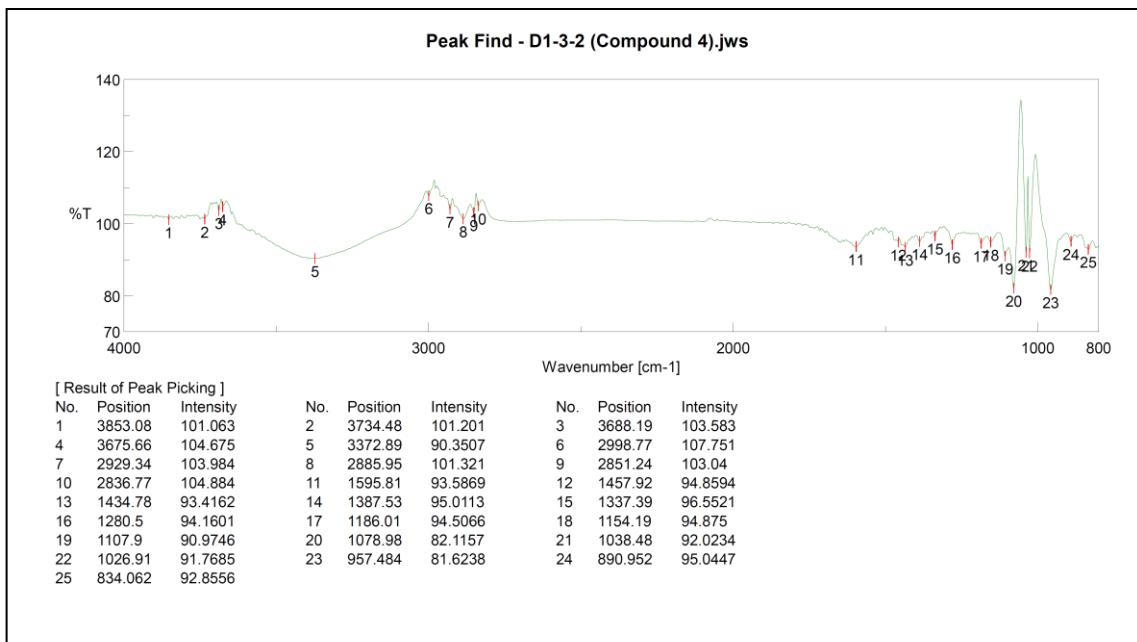


Figure S36. IR spectrum of **4**.

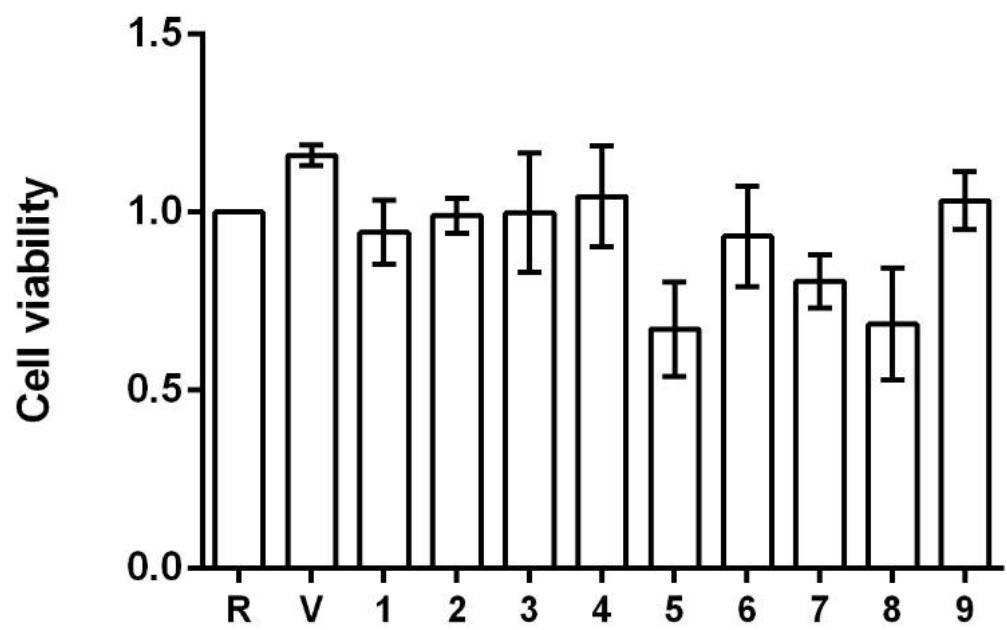


Figure S37. Cell viability in human THP-1 monocytic cells.

Physical data of the new compounds

Trichoderminol B (**1**): Colorless oil; $[\alpha]_D^{25} -37.3$ (*c* 0.2, MeOH); IR (ν_{max} , KBr): 3365, 2937, 1647, 1457, 1377, 1253, 1045, and 1031 cm^{-1} ; ^1H and ^{13}C NMR data: see Table 1; HRESIMS $[\text{M} - \text{H}_2\text{O} + \text{H}]^+$ at *m/z* 283.1536 (calcd. 283.1540 for $\text{C}_{15}\text{H}_{23}\text{O}_5$).

Trichoderminol C (**2**): Colorless oil; $[\alpha]_D^{25} -24.5$ (*c* 0.2, MeOH); IR (ν_{max} , KBr): 3397, 2930, 1652, 1433, 1337, 1261, 1067, and 1038 cm^{-1} ; ^1H and ^{13}C NMR data: see Table 1; HRESIMS $[\text{M} + \text{H}]^+$ at *m/z* 267.1588 (calcd. 267.1590 for $\text{C}_{15}\text{H}_{23}\text{O}_4$).

Trichoderminol D (**3**): Colorless gum; $[\alpha]_D^{25} -18.3$ (*c* 0.2, MeOH); IR (ν_{max} , KBr): 3365, 2929, 2851, 1595, 1433, 1386, 1352, 1252, 1166, 1080, 1051, and 1026 cm^{-1} ; ^1H and ^{13}C NMR data: see Table 1; HRESIMS $[\text{M} - \text{H}_2\text{O} + \text{H}]^+$ at *m/z* 283.1537 (calcd. 283.1540 for $\text{C}_{15}\text{H}_{23}\text{O}_5$).

Trichoderminol E (**4**): Colorless gum; $[\alpha]_D^{25} -10.0$ (*c* 0.2, MeOH); IR (ν_{max} , KBr): 3372, 2929, 2886, 1596, 1458, 1388, 1281, 1186, 1154, 1107, and 1079 cm^{-1} ; ^1H and ^{13}C NMR data: see Table 1; HRESIMS $[\text{M} + \text{H}]^+$ at *m/z* 269.1743 (calcd. 269.1747 for $\text{C}_{15}\text{H}_{25}\text{O}_4$).