

Supplementary Materials

New Rare Triterpene Glycosides from Pacific Sun Star, *Solaster pacificus*, and Their Anticancer Activity

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Figure S1. HRESIMS spectrum of pacificusoside L (**1**).

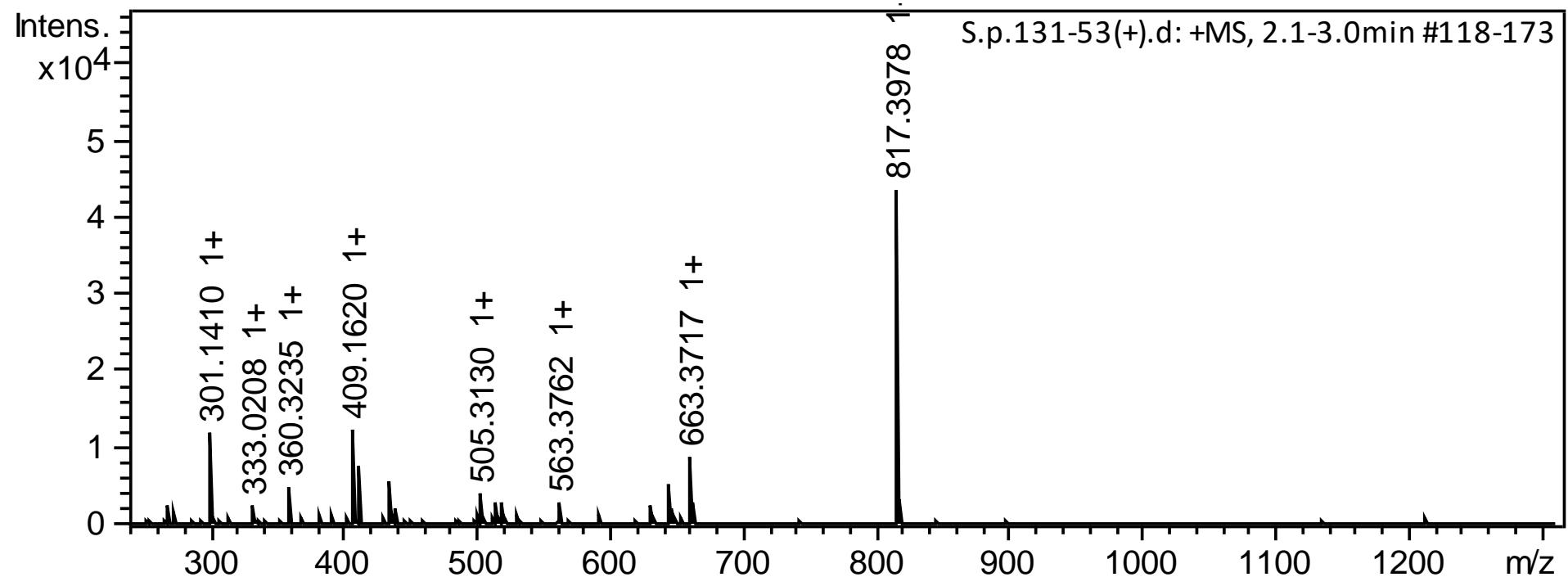


Figure S2. IR spectrum of pacificusoside L (**1**) in KBr (transmittance vs wave number).

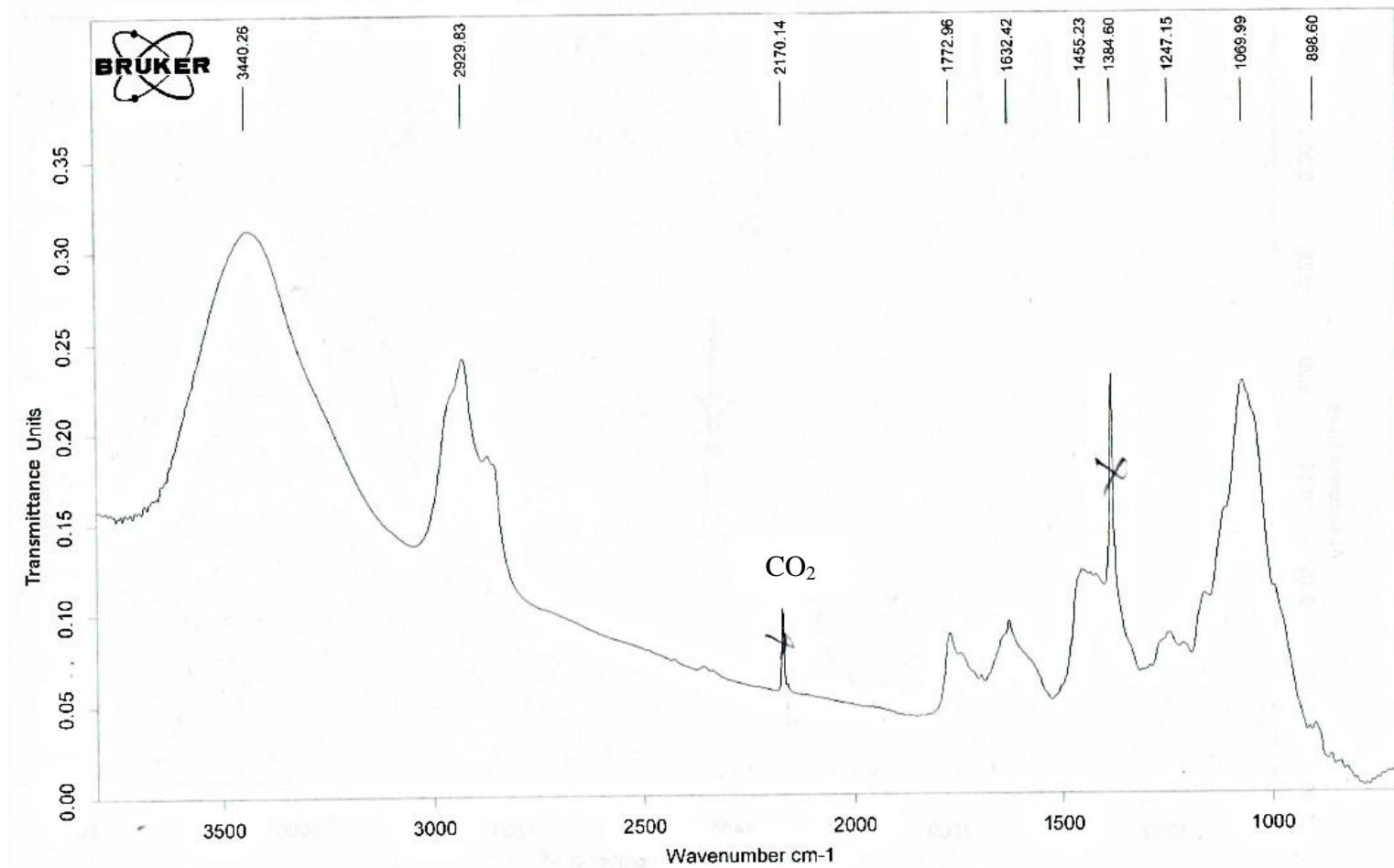


Figure S3. ^1H -NMR spectrum of pacificusoside L (**1**) in $\text{C}_5\text{D}_5\text{N}$.

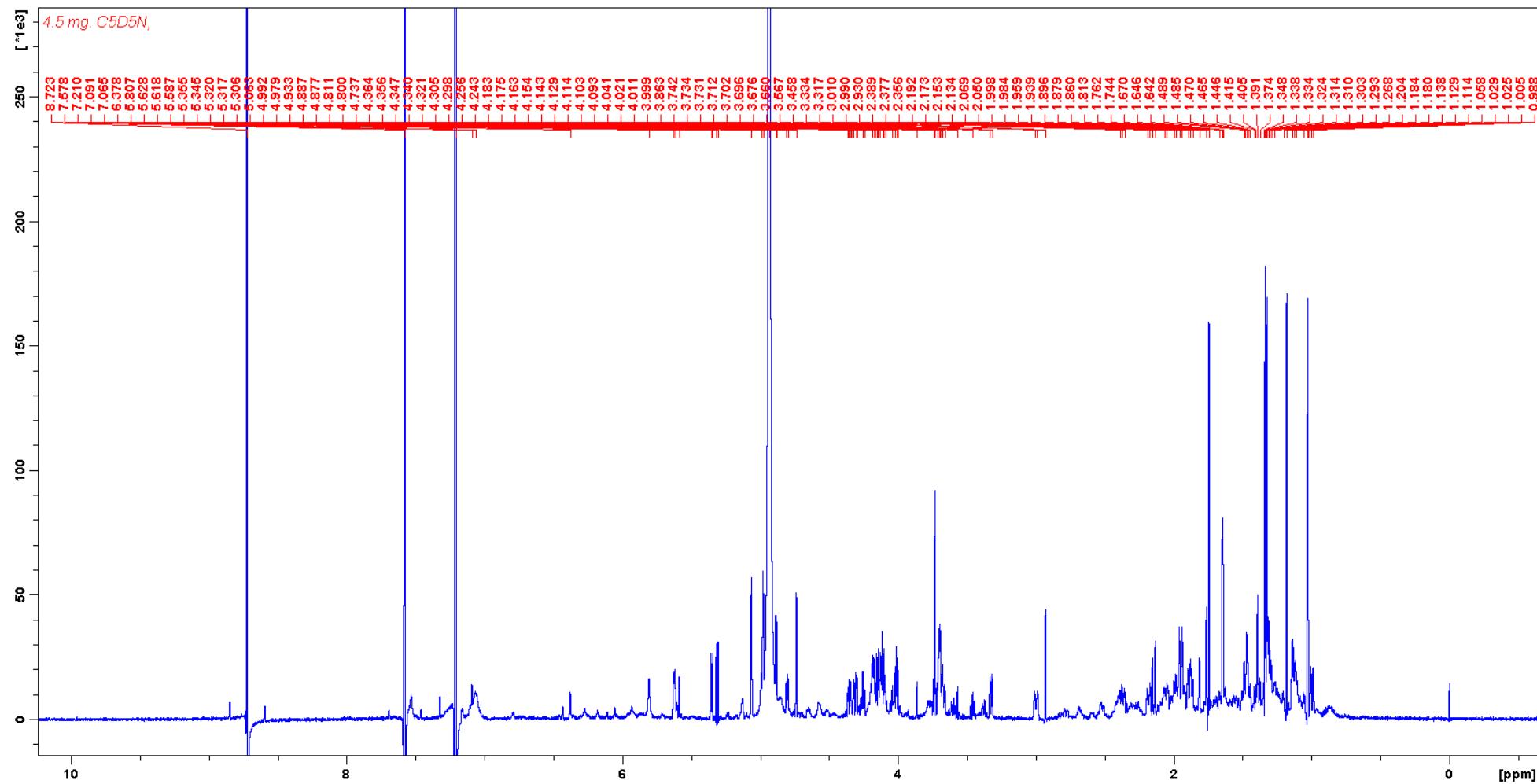


Figure S4. ^{13}C -NMR spectrum of pacificusoside L (**1**) in $\text{C}_5\text{D}_5\text{N}$.

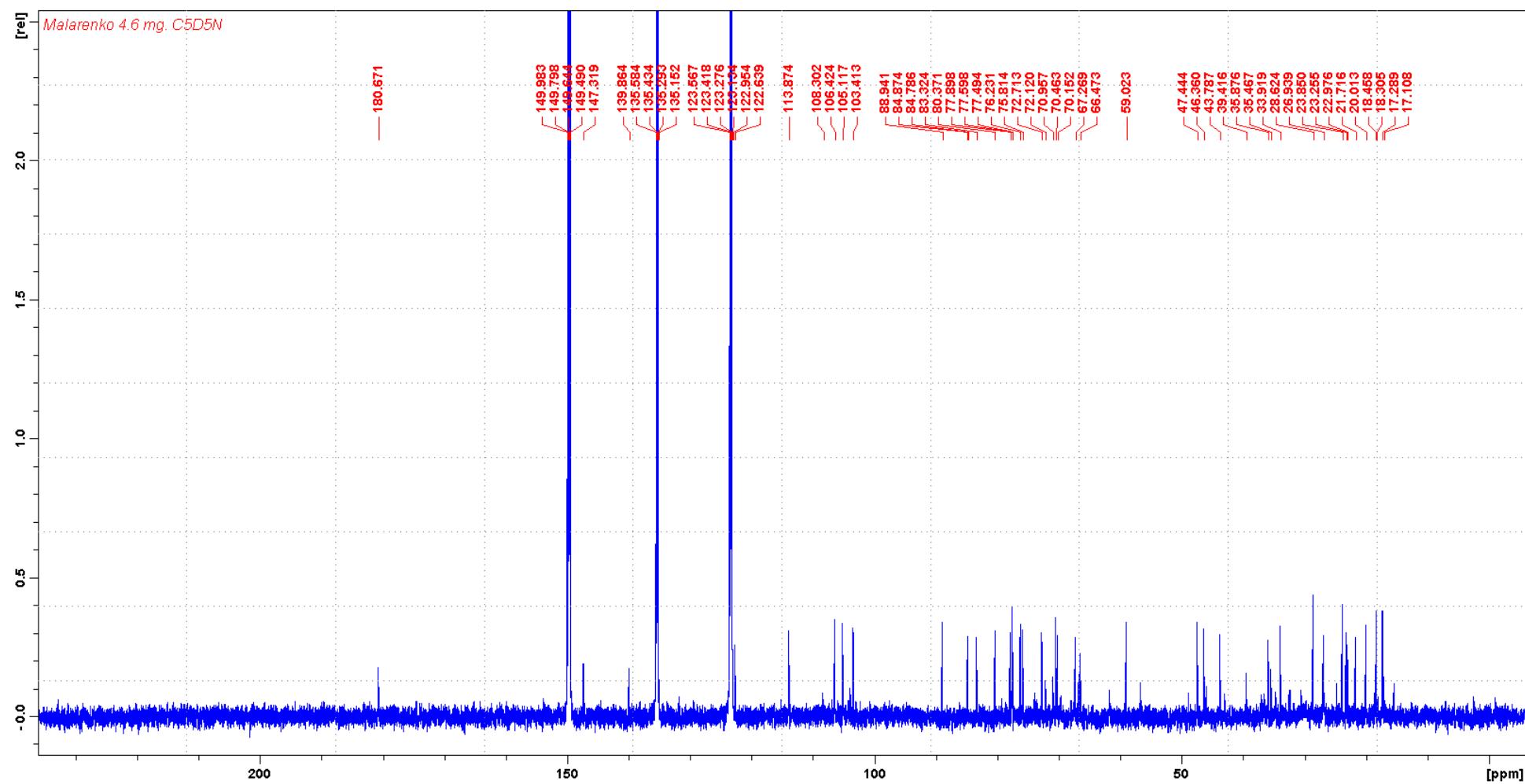


Figure S5. ^1H - ^1H COSY spectrum of pacificusoside L (**1**) in $\text{C}_5\text{D}_5\text{N}$.

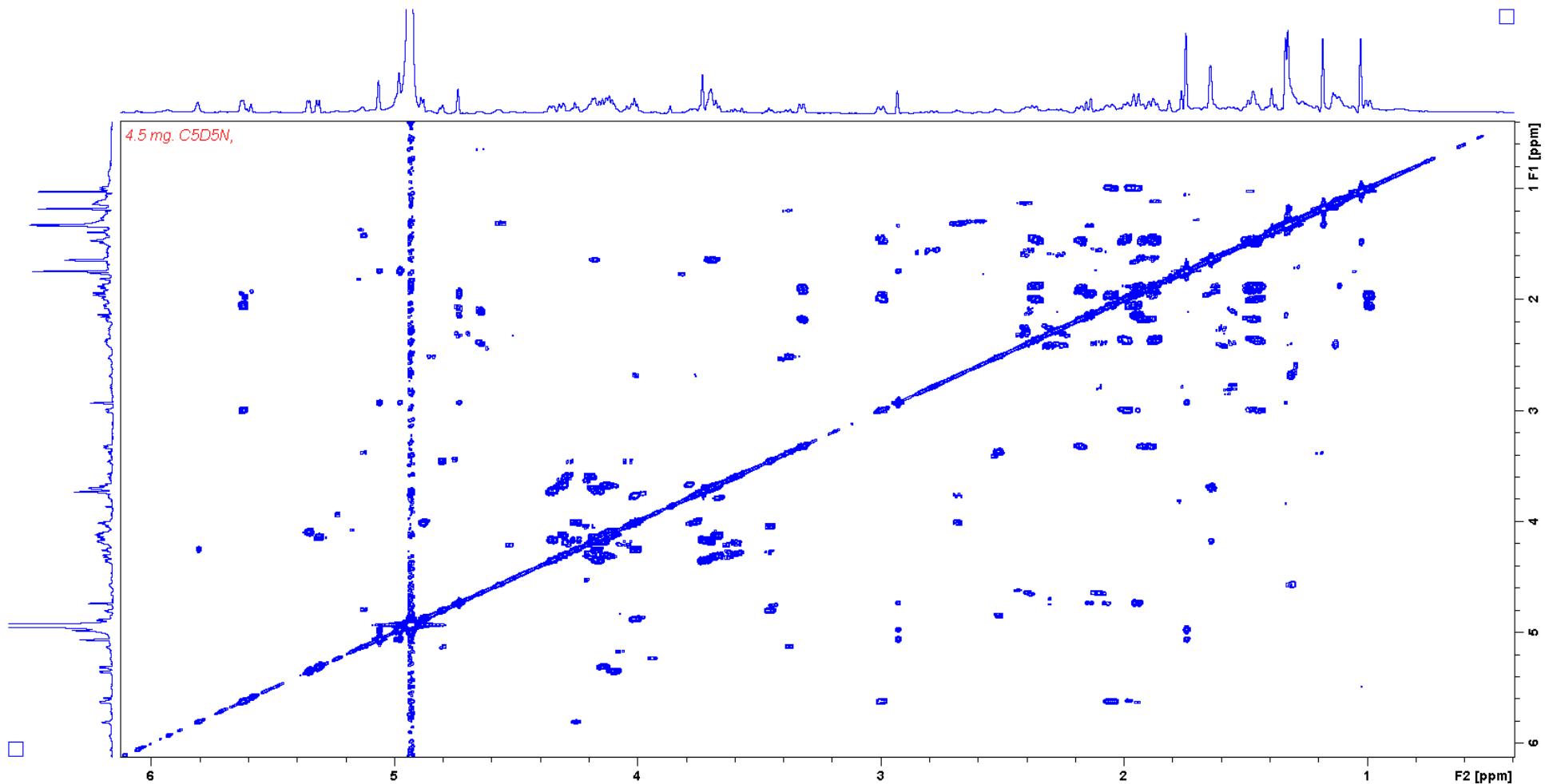


Figure S6. HSQC spectrum of pacificusoside L (**1**) in C₅D₅N.

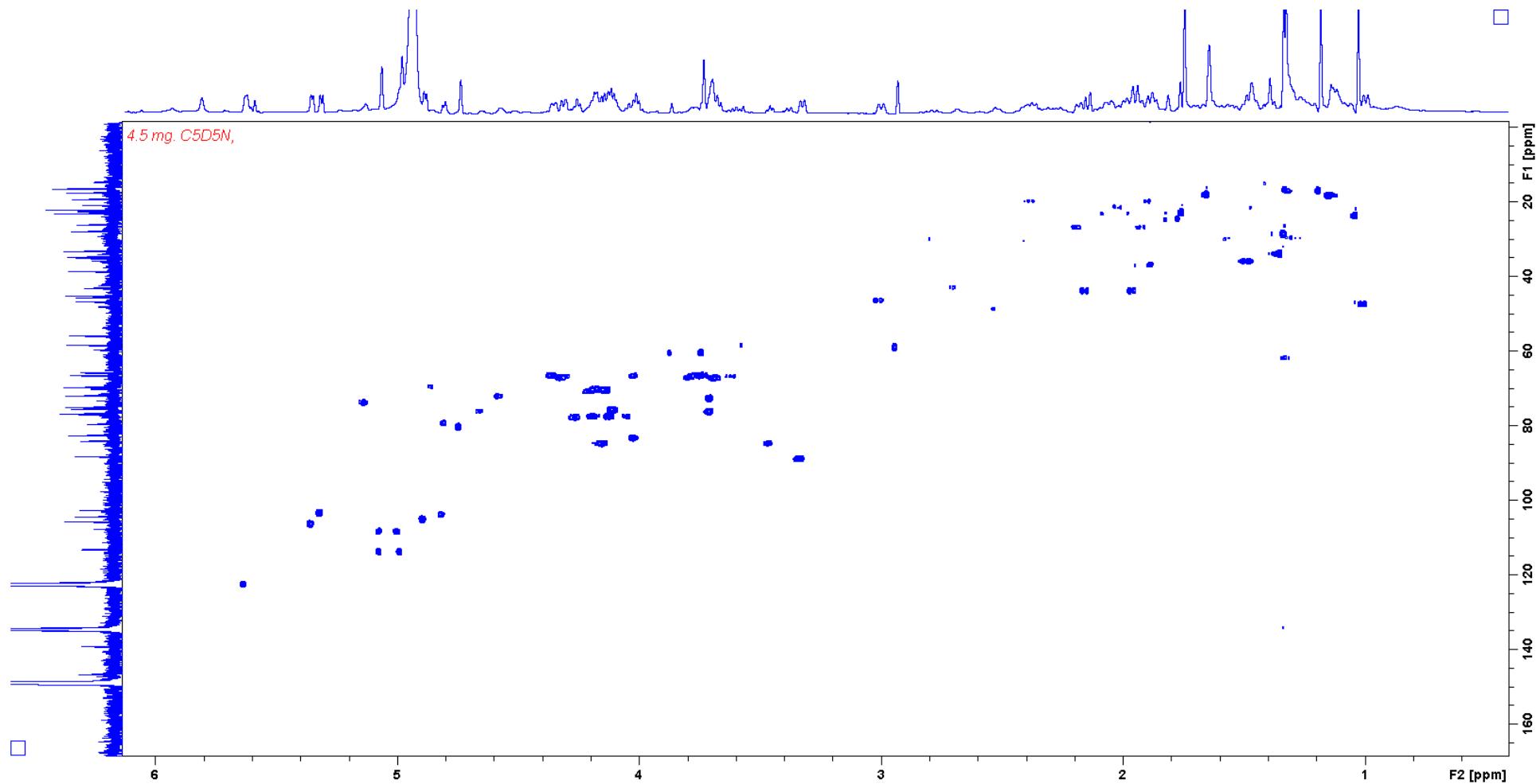


Figure S7. HMBC spectrum of pacificusoside L (**1**) in C₅D₅N.

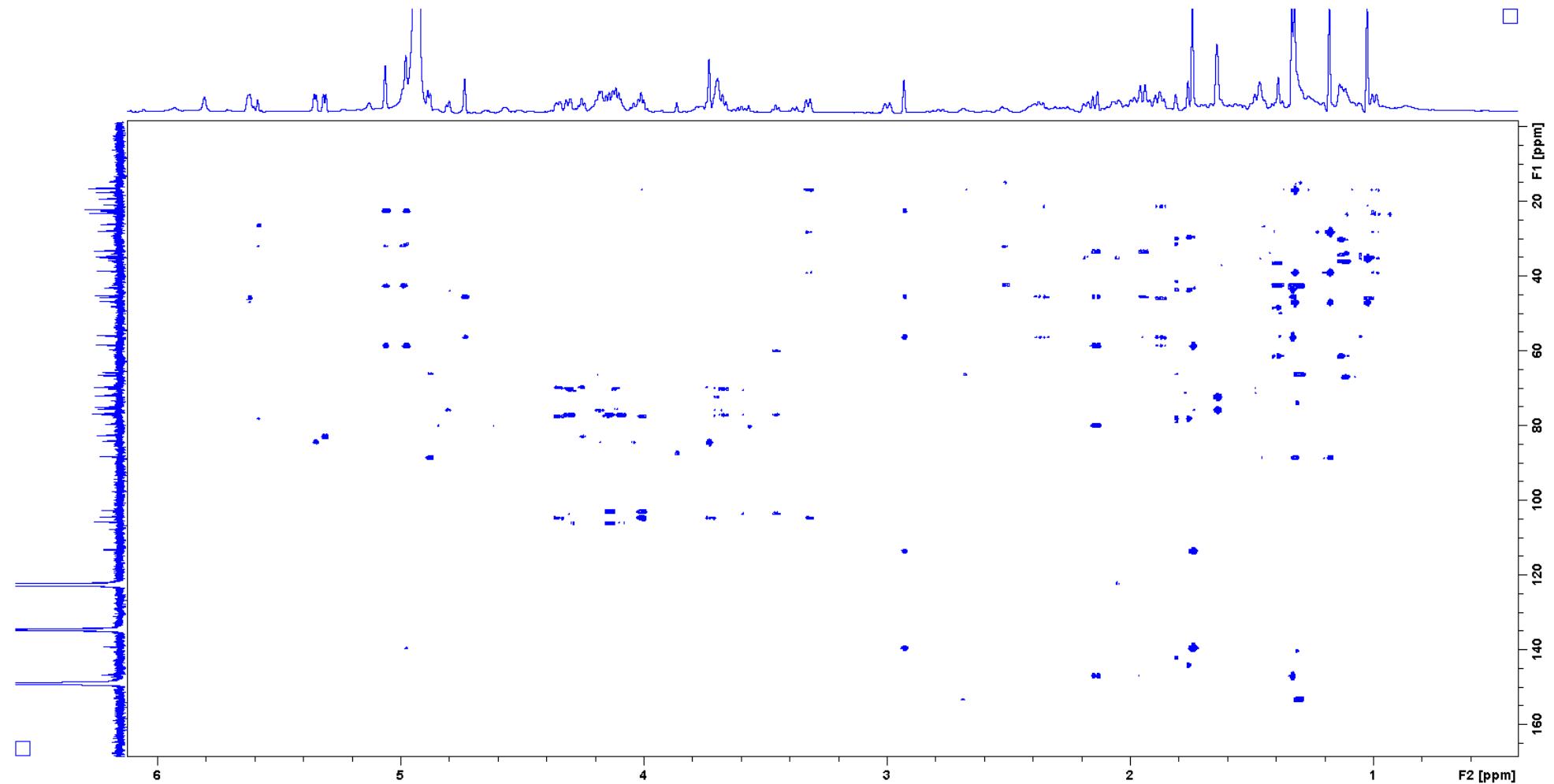


Figure S8. ROESY spectrum of pacificusoside L (**1**) in C₅D₅N.

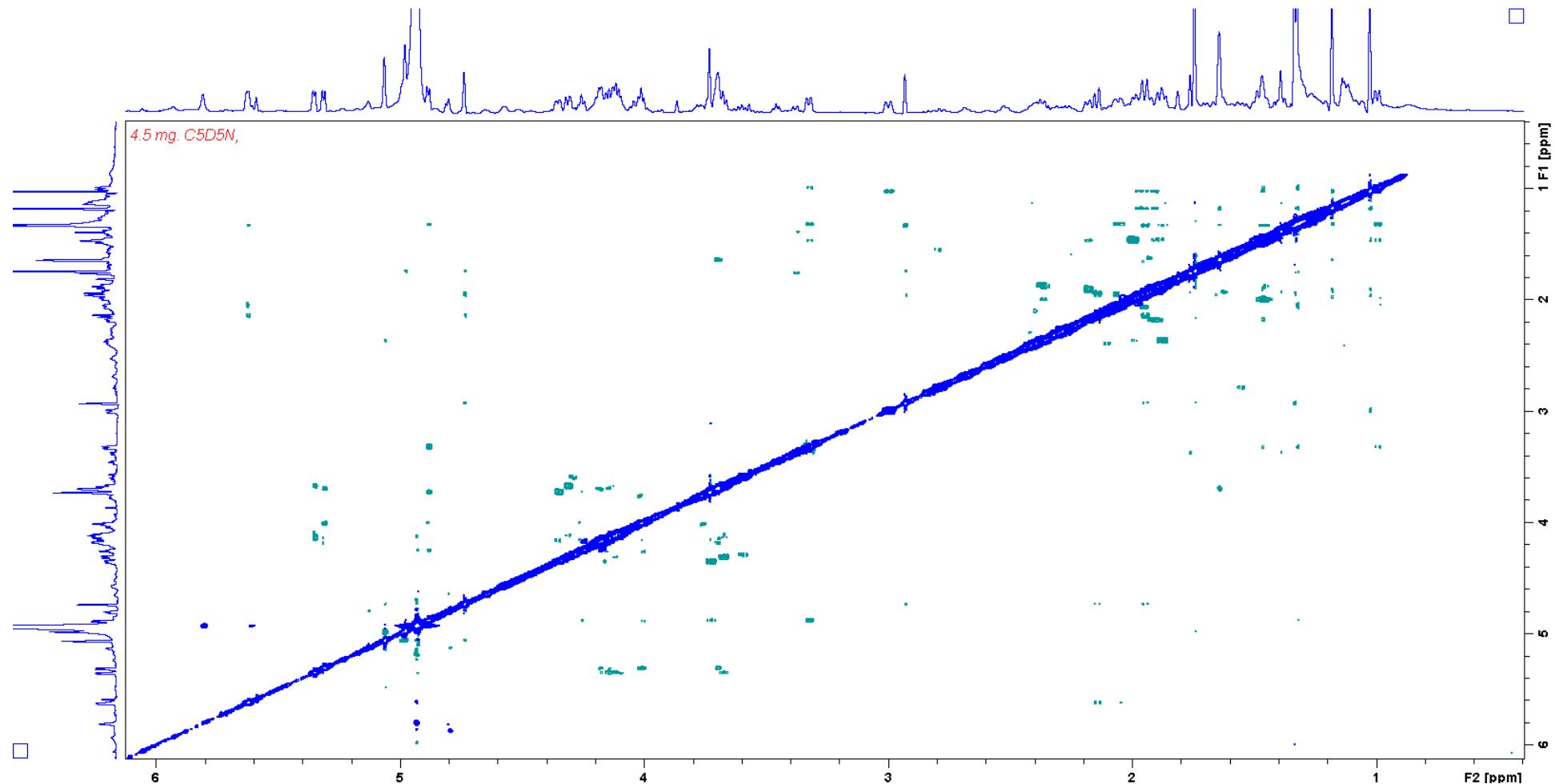


Figure S9. (-)ESIMS/MS spectrum of pacificusoside L (**1**).

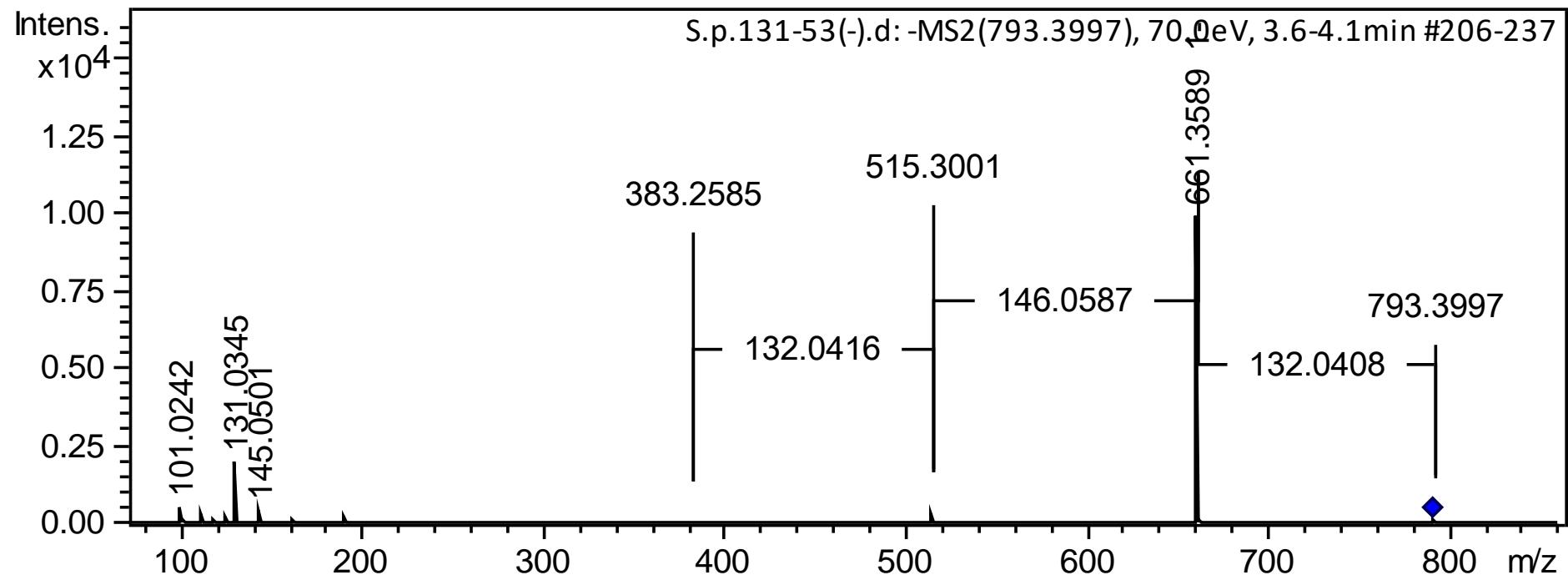


Figure S10. (+)ESIMS/MS spectrum of pacificusoside L (**1**).

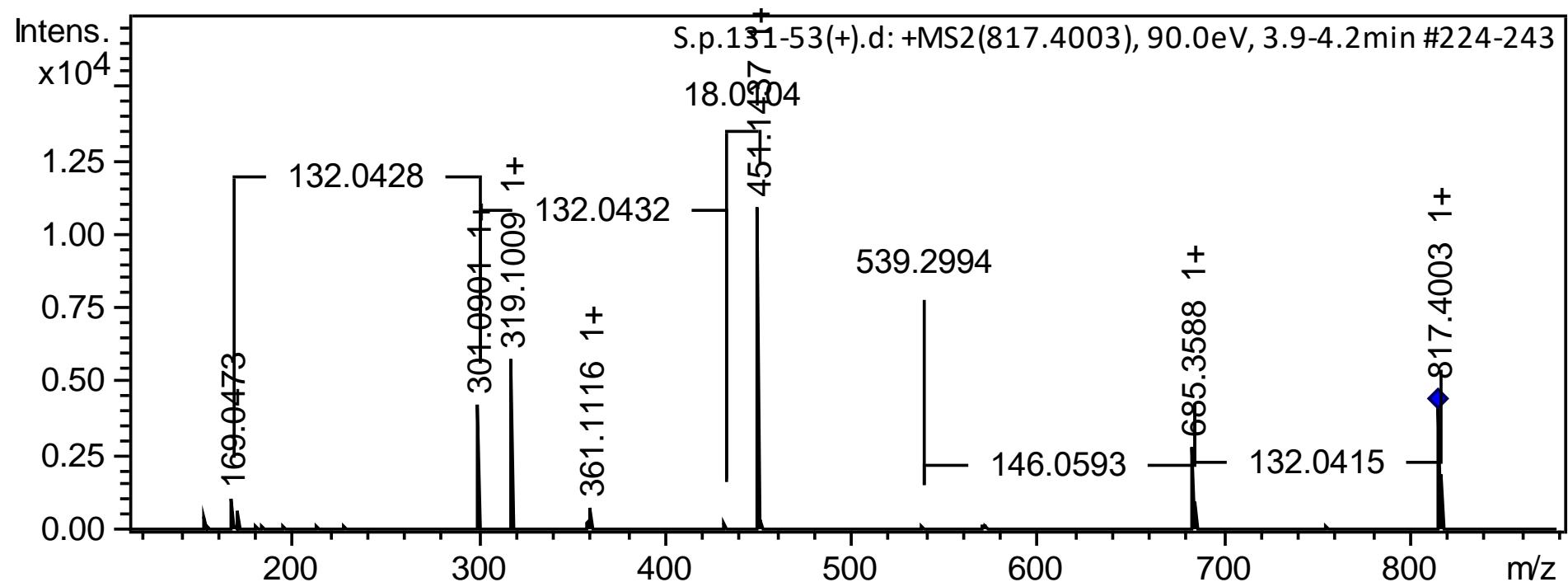


Figure S11. GC chromatogram of acetylated 2-octylglycosides of the hydrolysate of **1** (the following peaks were detected: D-xylose (tr 19.27, 19.44, and 19.72 min) and D-quinovose (tr 18.89, 19.09, 19.44, and 19.72 min)).

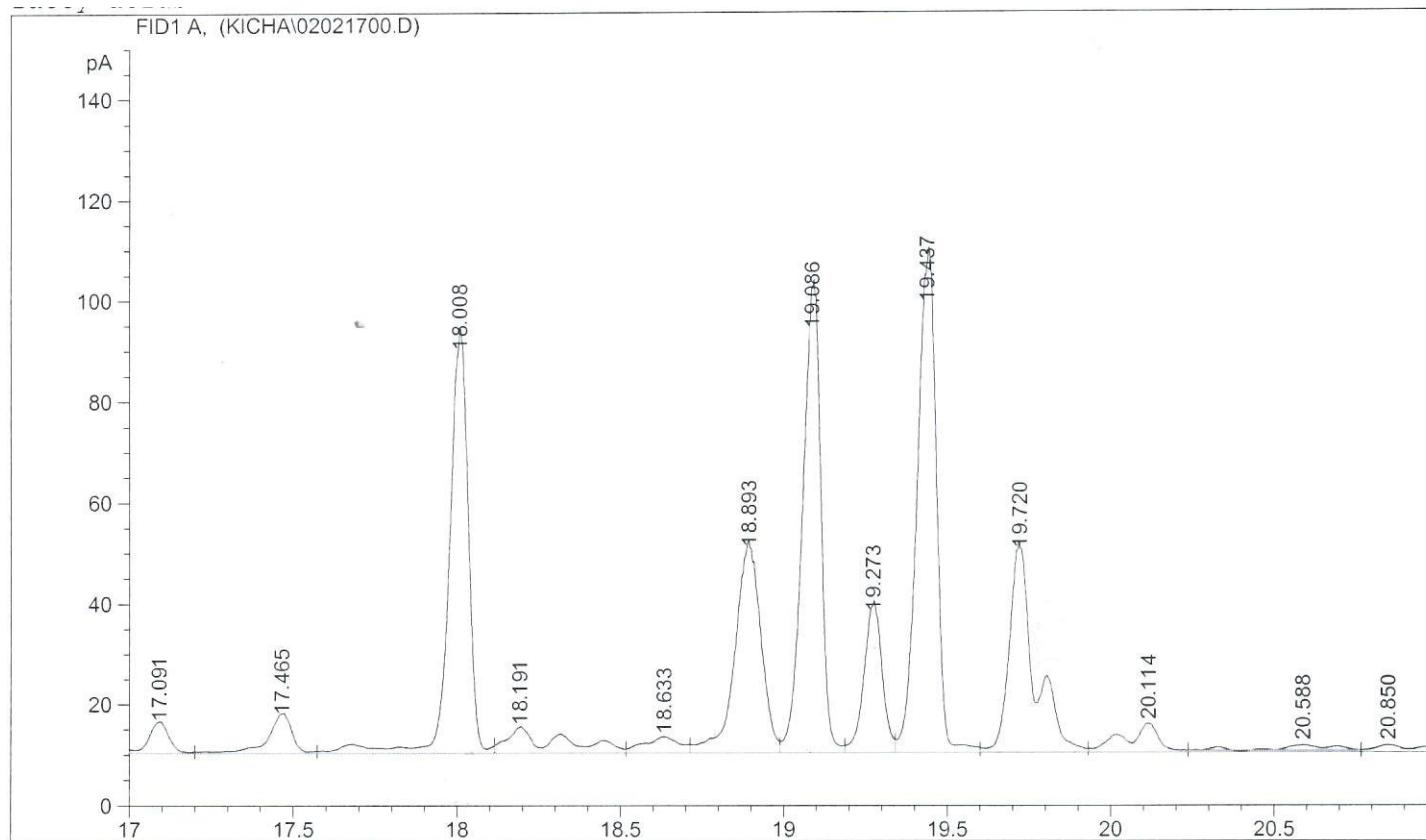


Figure S12. GC chromatogram of acetylated 2-octylglycosides of D-xylose (t_R 19.26, 19.42, and 19.73 min).

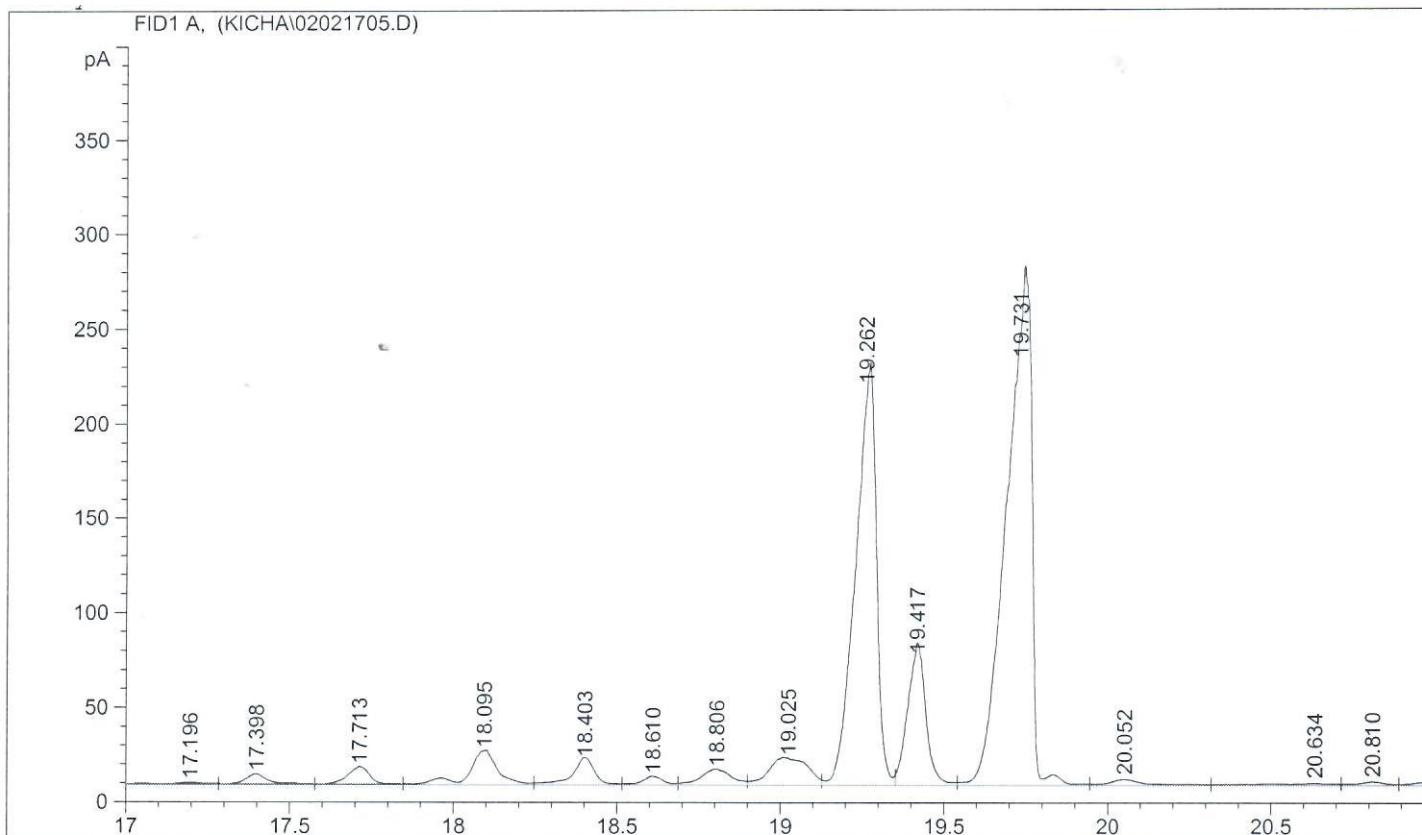


Figure S13. GC chromatogram of acetylated 2-octylglycosides of D-quinovose (t_R 18.89, 19.12, 19.47, and 19.75 min).

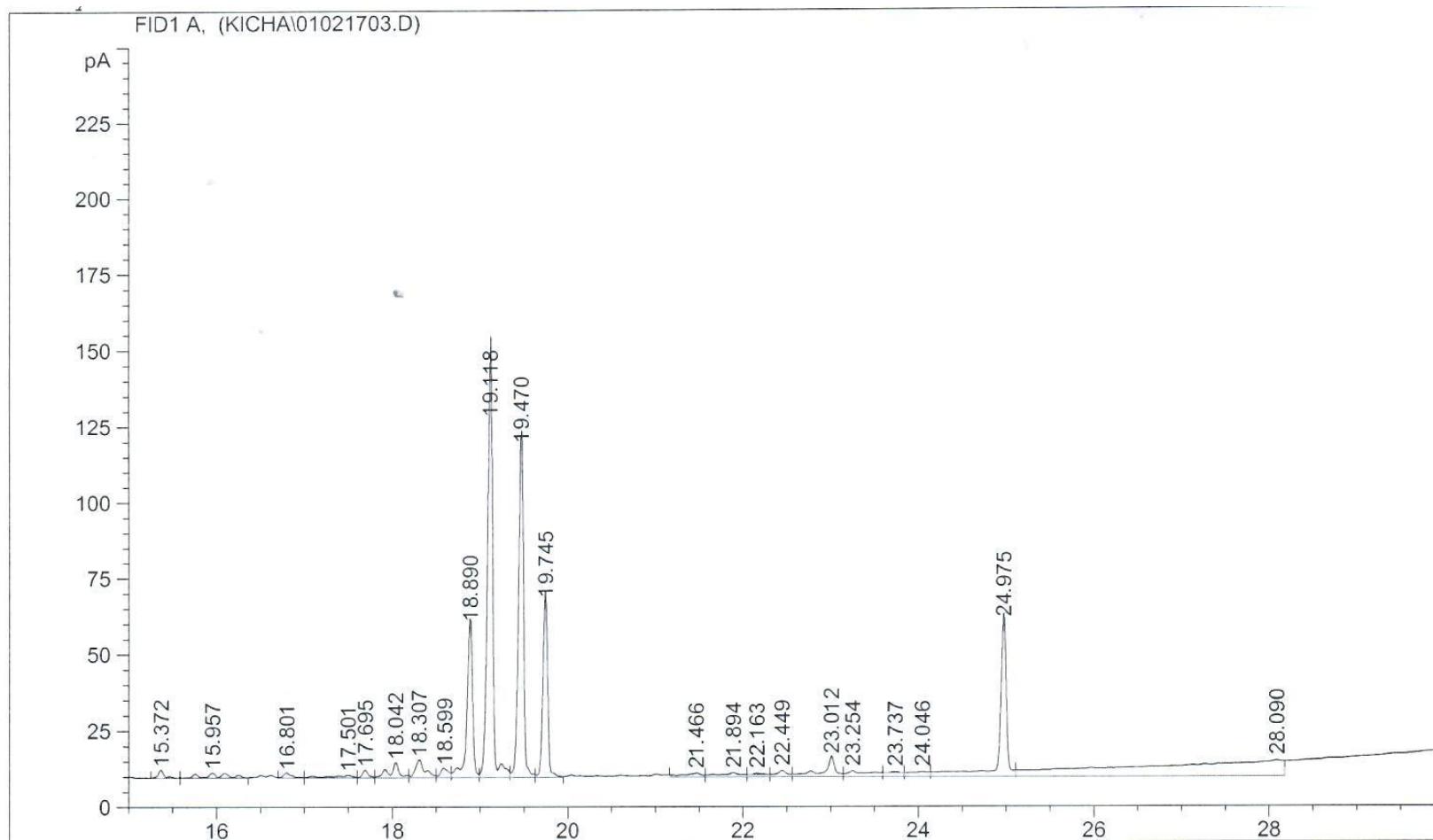


Figure S14. GC chromatogram of acetylated 2-octylglycosides of L-xylose (t_r 19.14, 19.67, and 19.95 min).

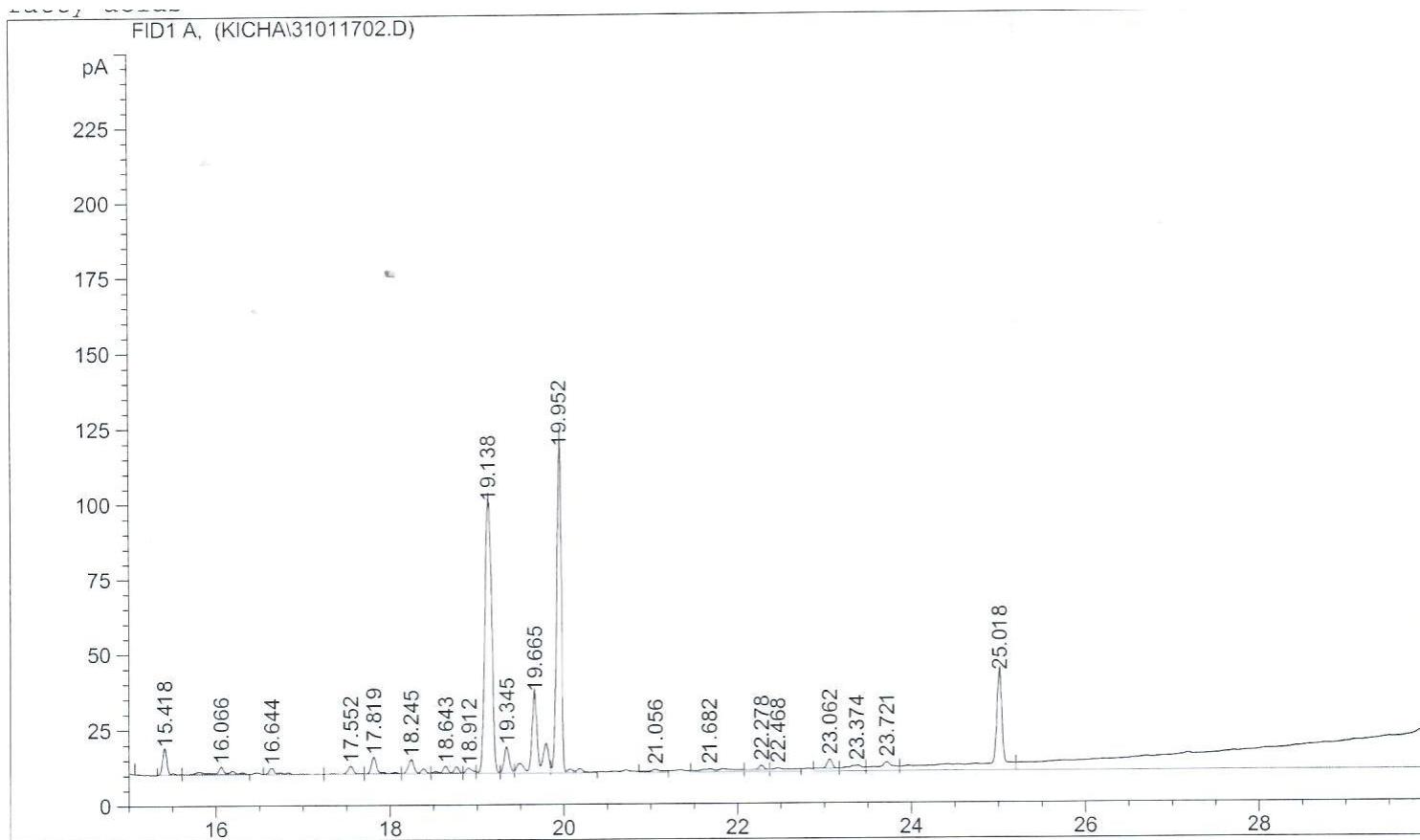


Figure S15. GC chromatogram of acetylated 2-octylglycosides of L-quinovose (t_r 18.73, 19.20, and 19.77 min).

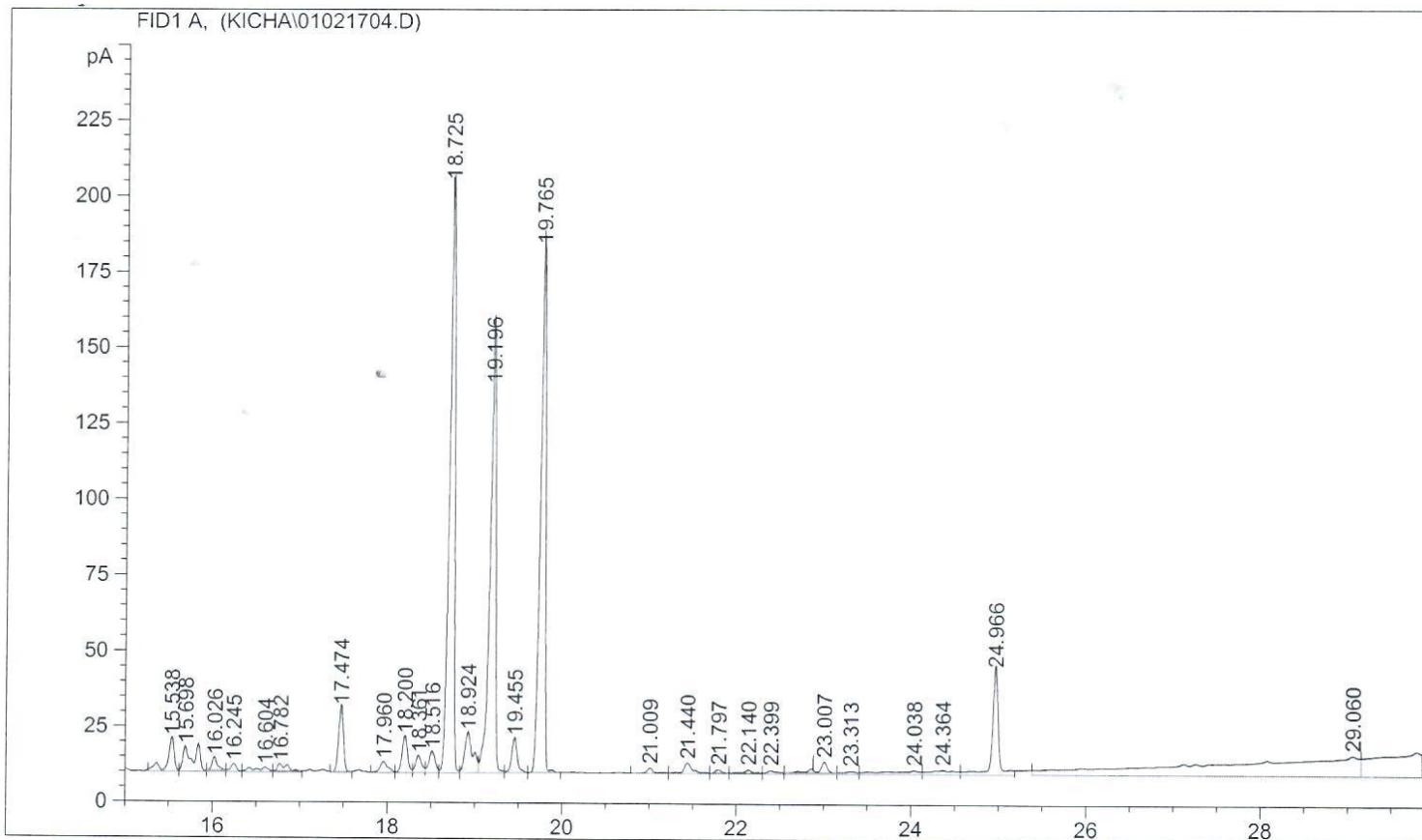


Figure S16. HRESIMS spectrum of pacificusoside M (**2**).

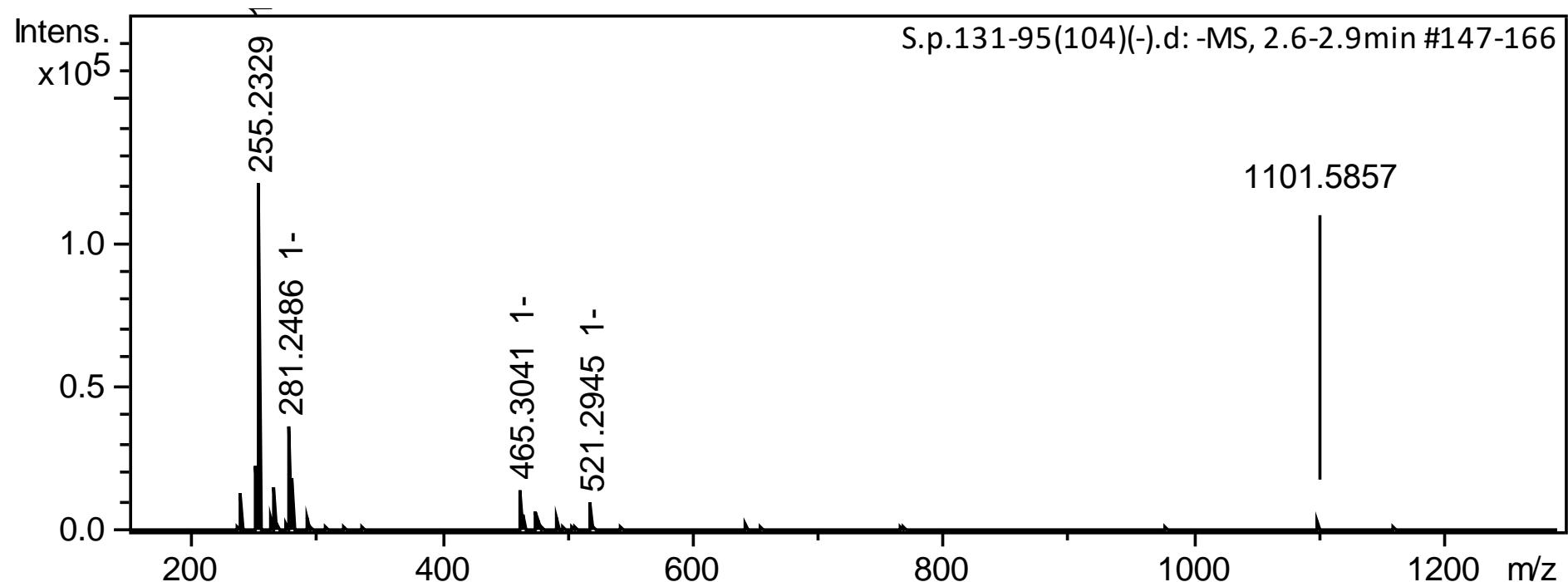


Figure S17. IR spectrum of pacificusoside M (**2**) in KBr (transmittance vs wave number).

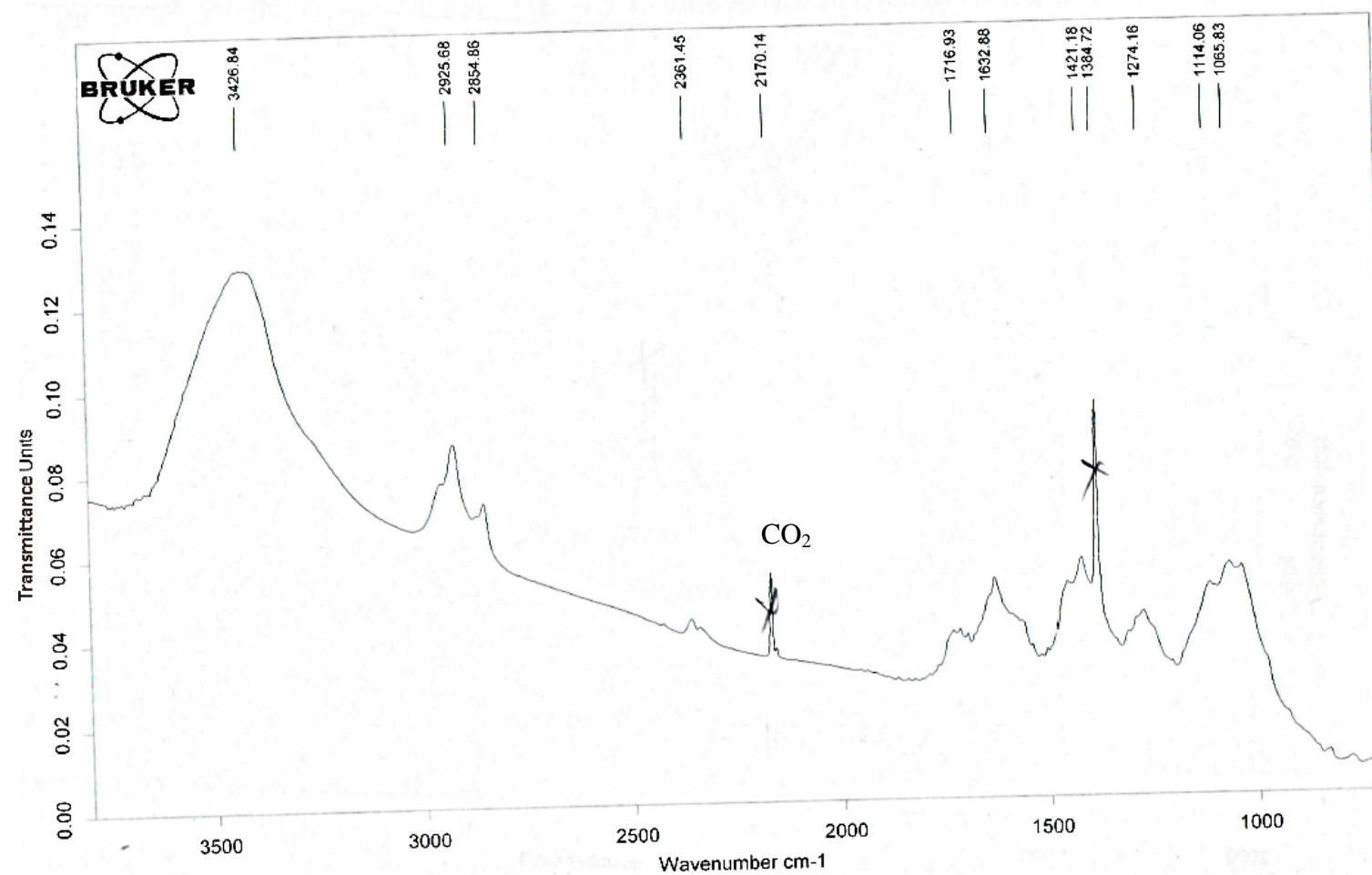


Figure S18. ^1H -NMR spectrum of pacificusoside M (**2**) in $\text{C}_5\text{D}_5\text{N}$.

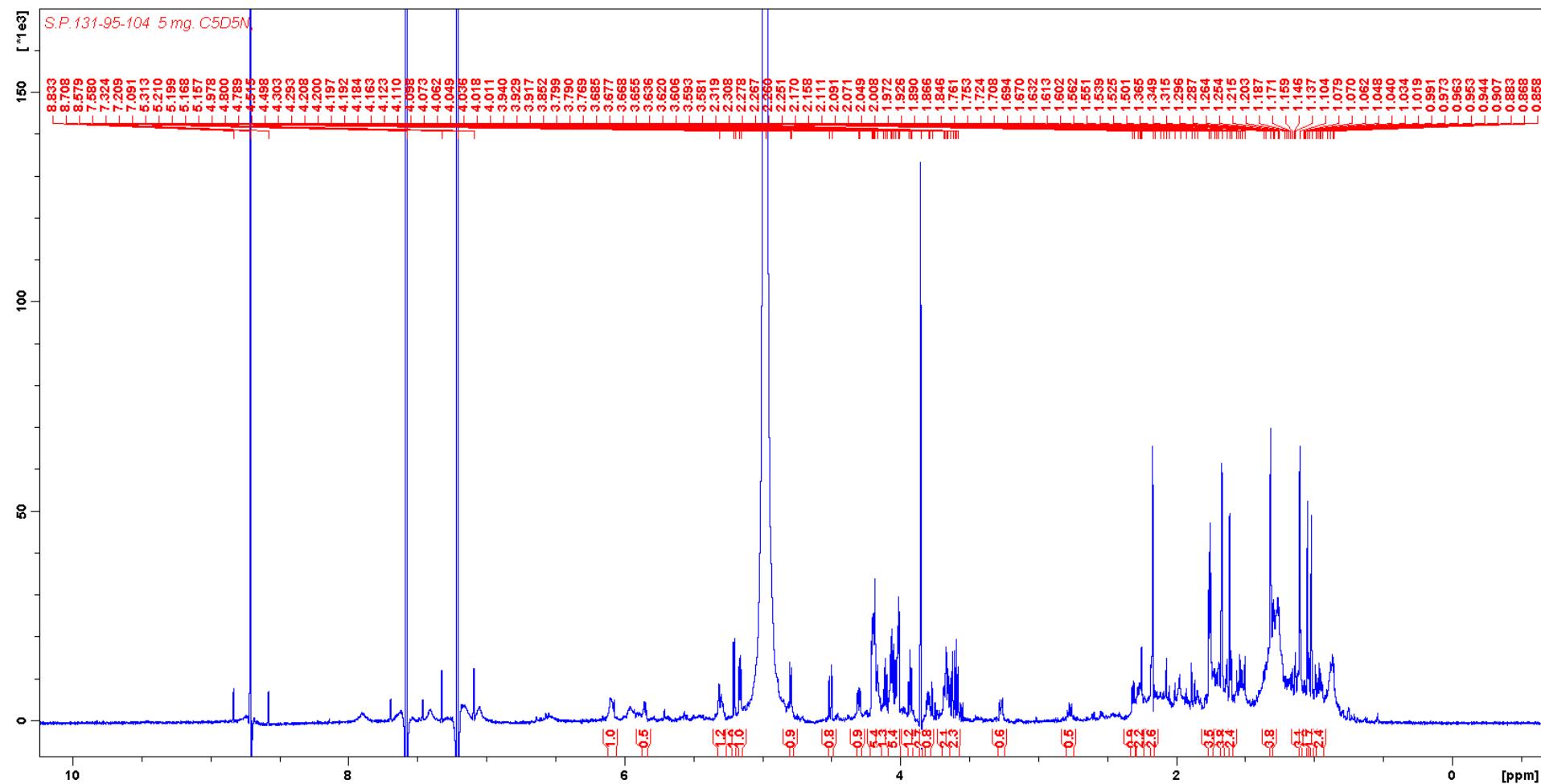


Figure S19. ^{13}C -NMR spectrum of pacificusoside M (**2**) in $\text{C}_5\text{D}_5\text{N}$.

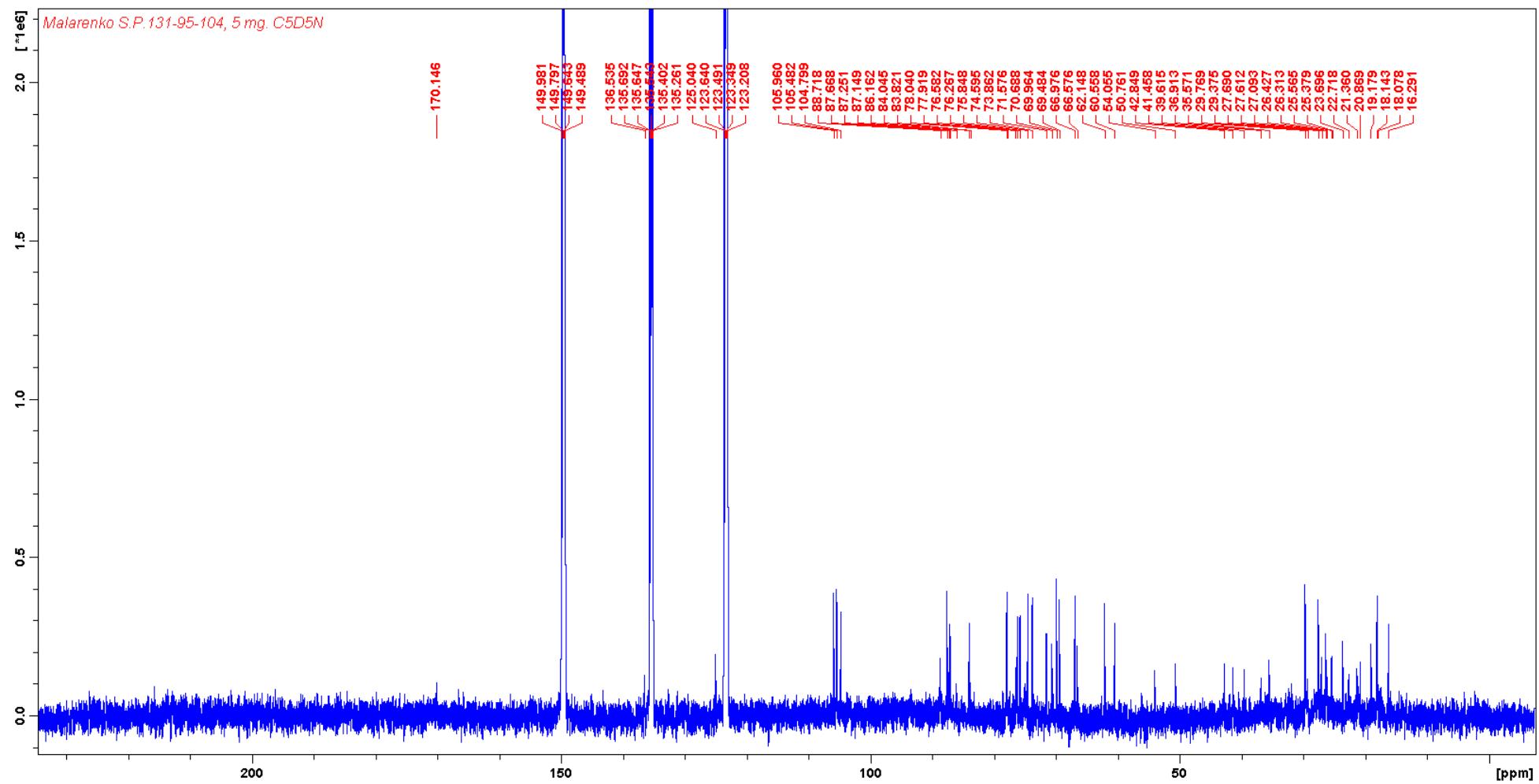


Figure S20. ^1H - ^1H COSY spectrum of pacificusoside M (**2**) in $\text{C}_5\text{D}_5\text{N}$.

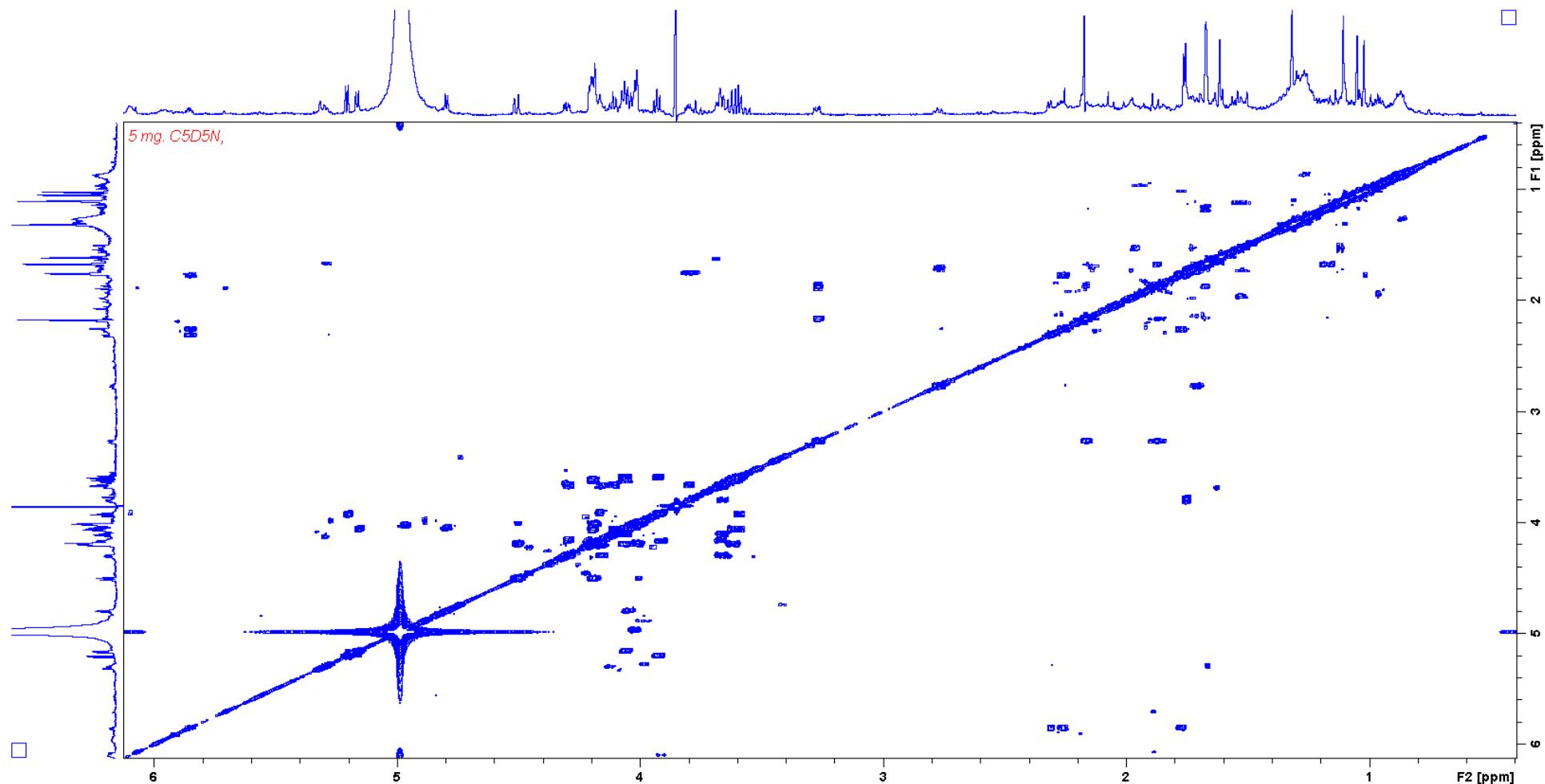


Figure S21. HSQC spectrum of pacificusoside M (**2**) in C₅D₅N.

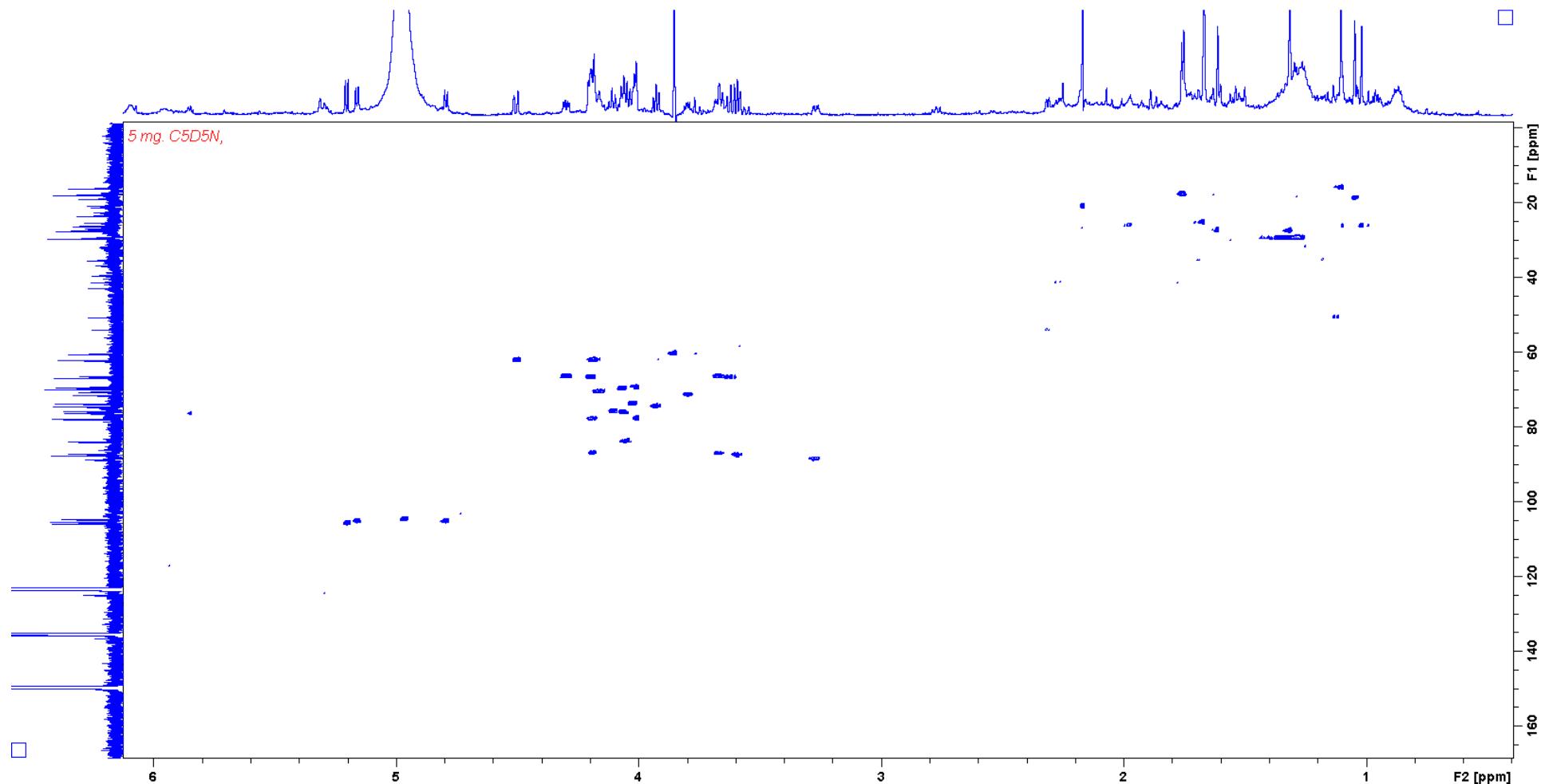


Figure S22. HMBC spectrum of pacificusoside M (**2**) in C₅D₅N.

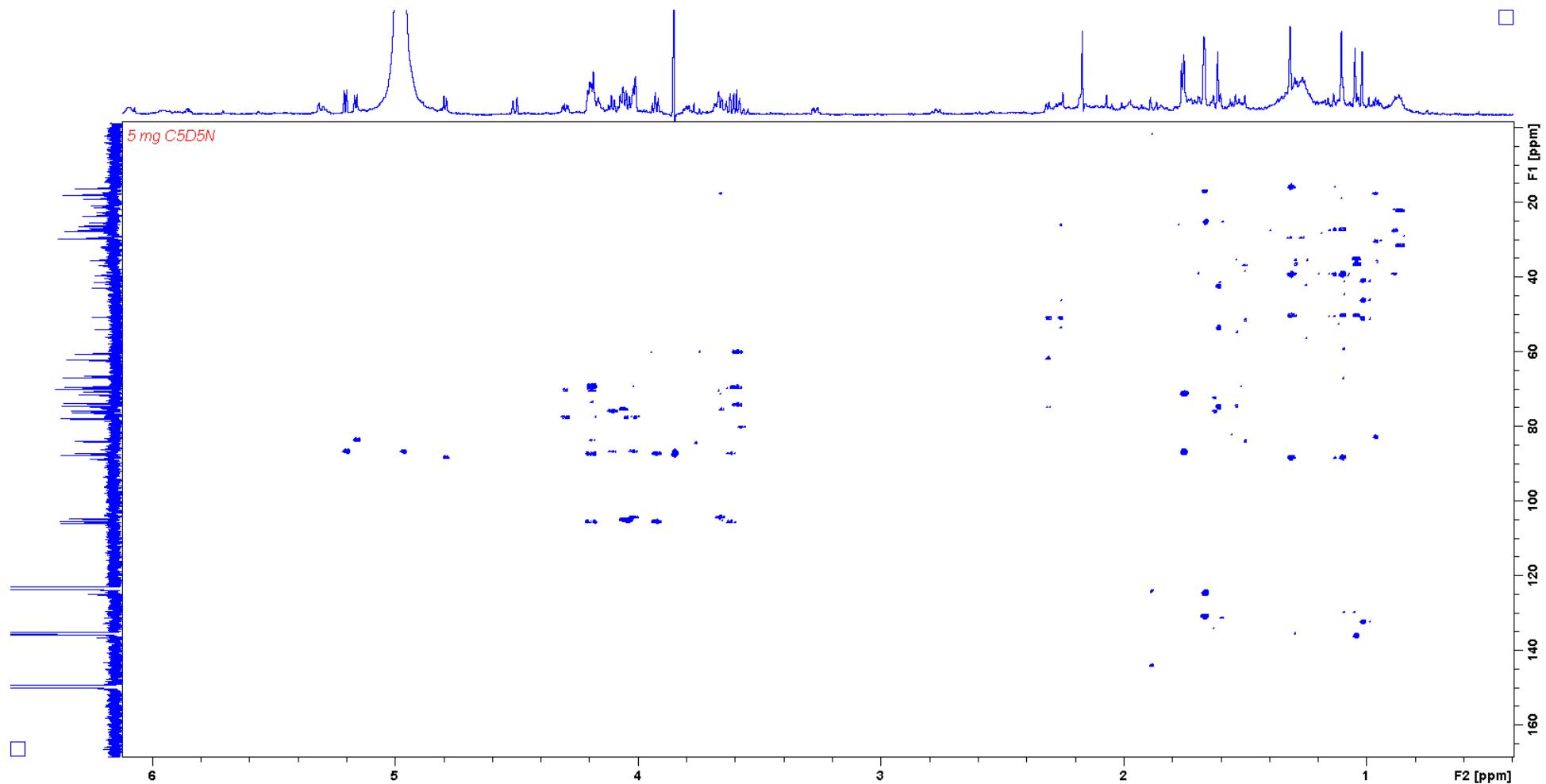


Figure S23. ROESY spectrum of pacificusoside M (**2**) in C₅D₅N.

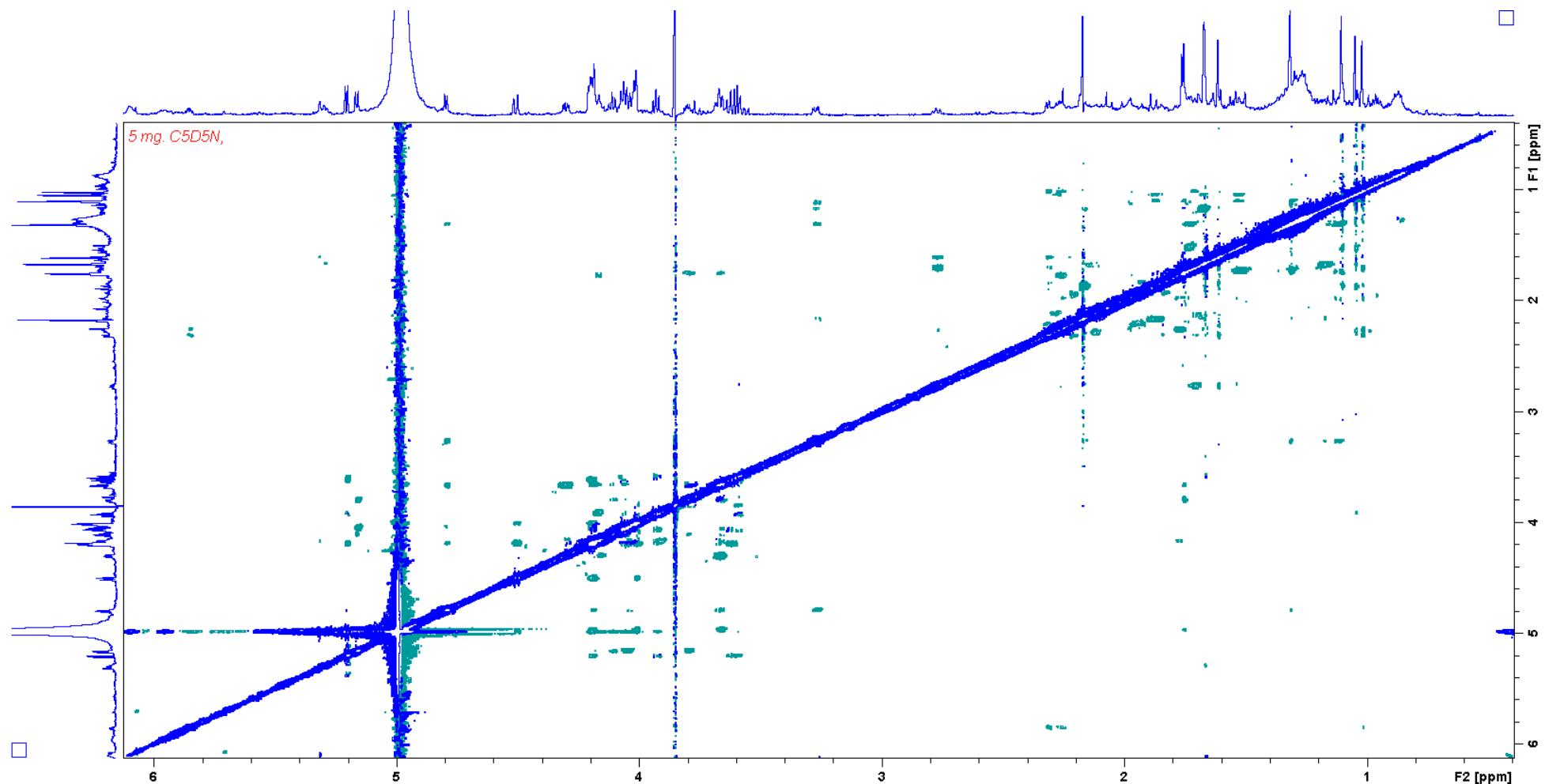


Figure S24. (-)ESIMS/MS spectrum of pacificusoside M (2).

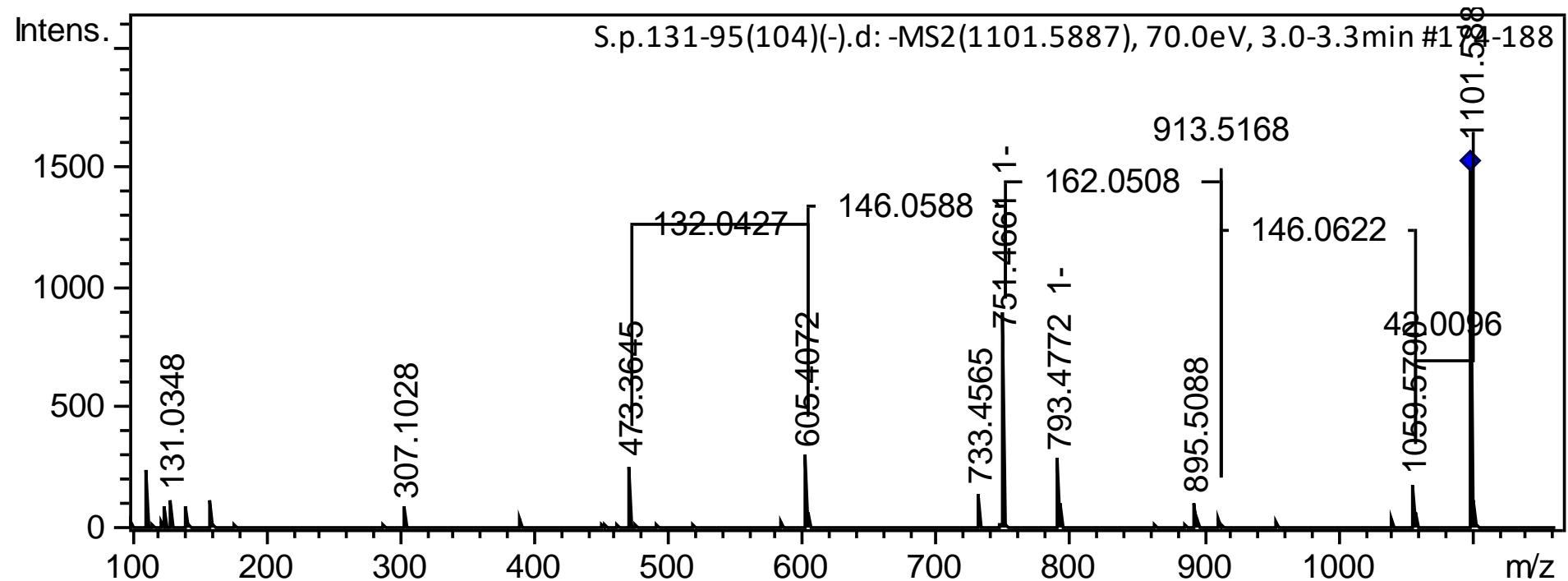


Figure S25. (+)ESIMS/MS spectrum of pacificusoside M (2).

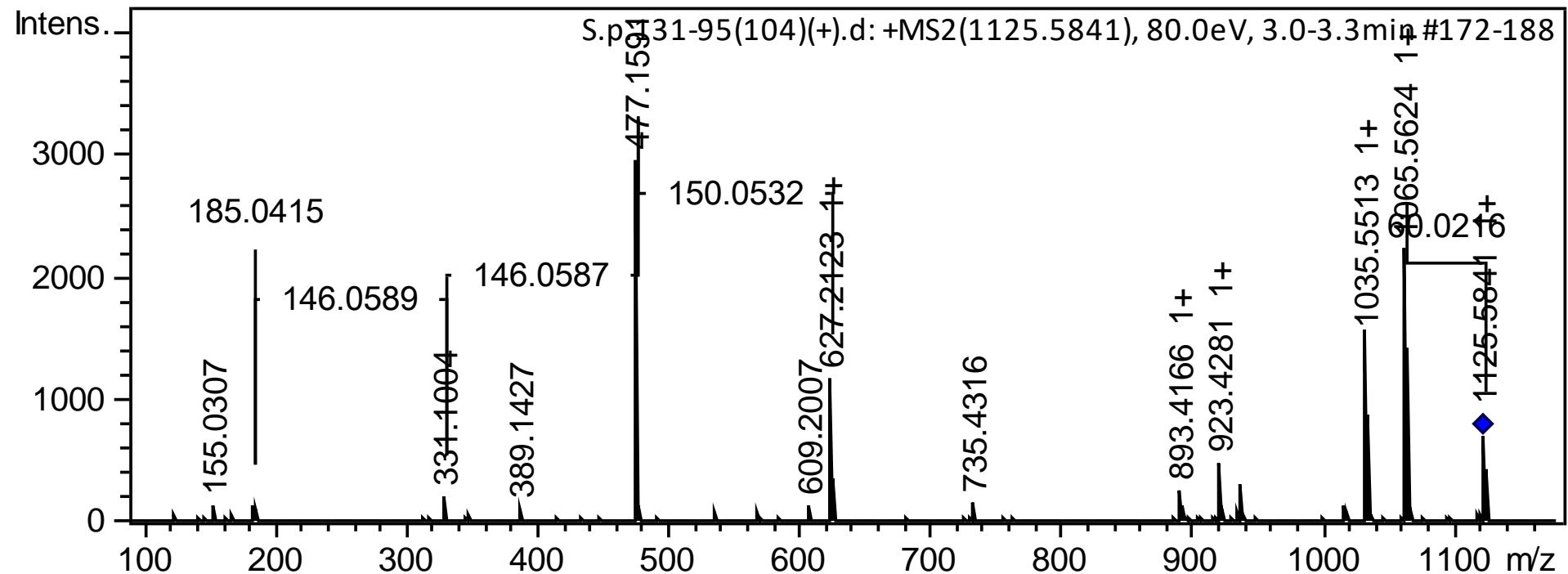


Figure S26. HRESIMS spectrum of pacificusoside N (3).

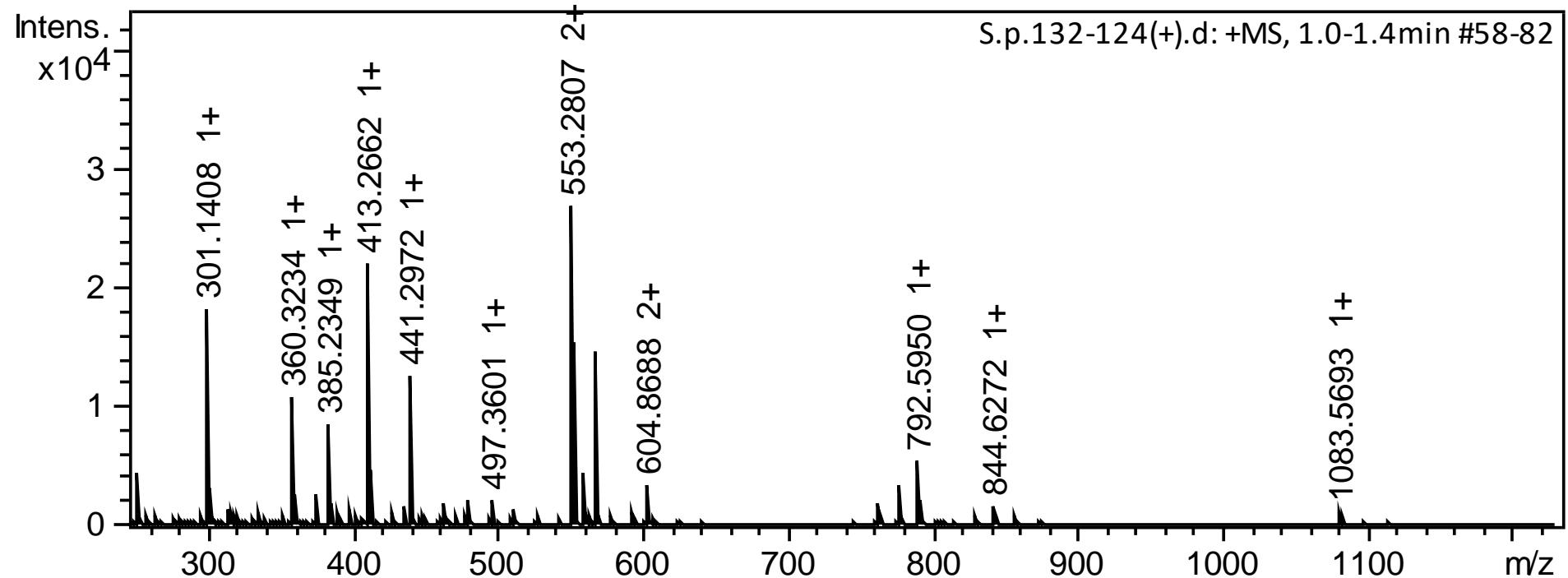


Figure S27. ^1H -NMR spectrum of pacificusoside N (**3**) in $\text{C}_5\text{D}_5\text{N}$.

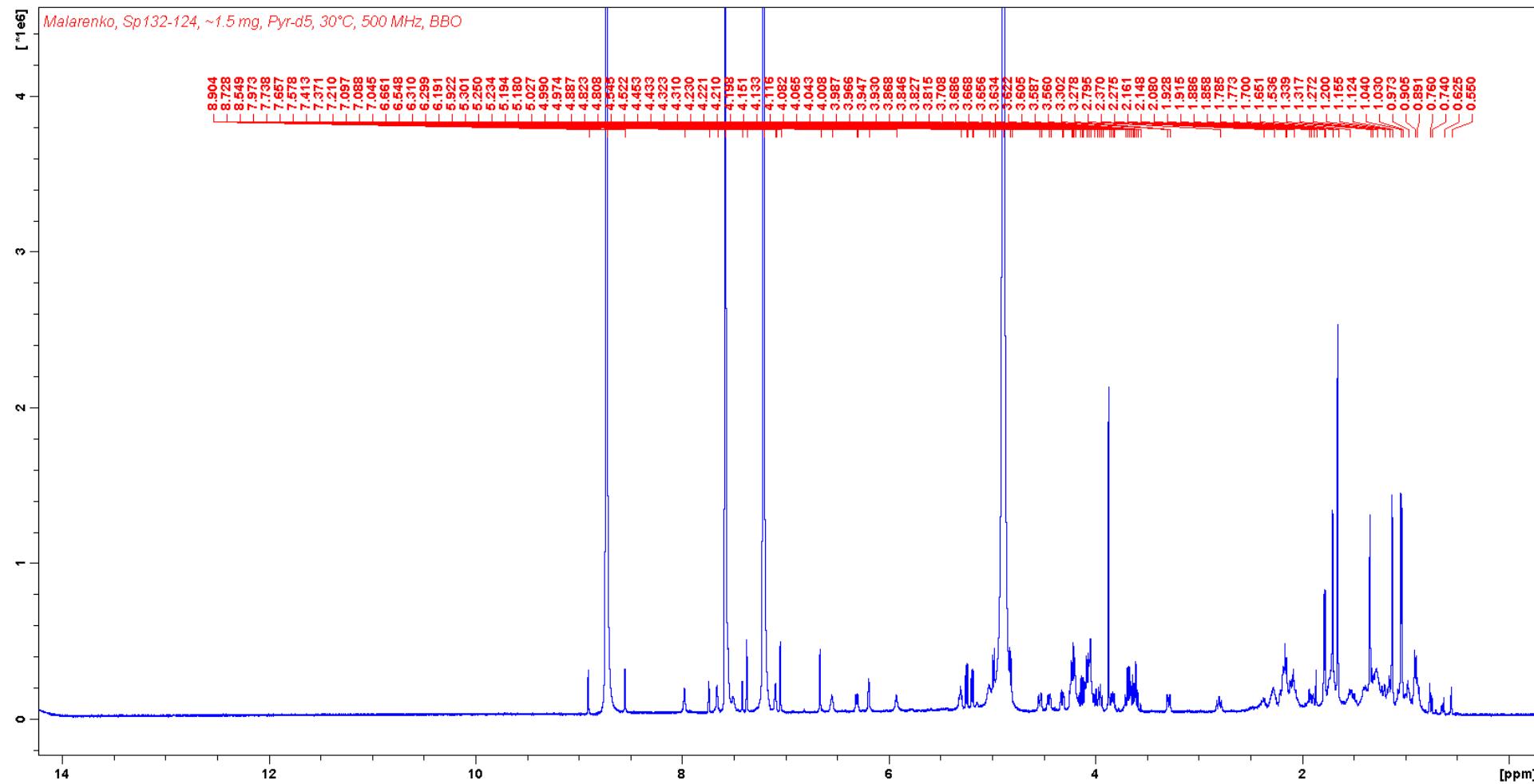


Figure S28. ^{13}C -NMR spectrum of pacificusoside N (3) in $\text{C}_5\text{D}_5\text{N}$.

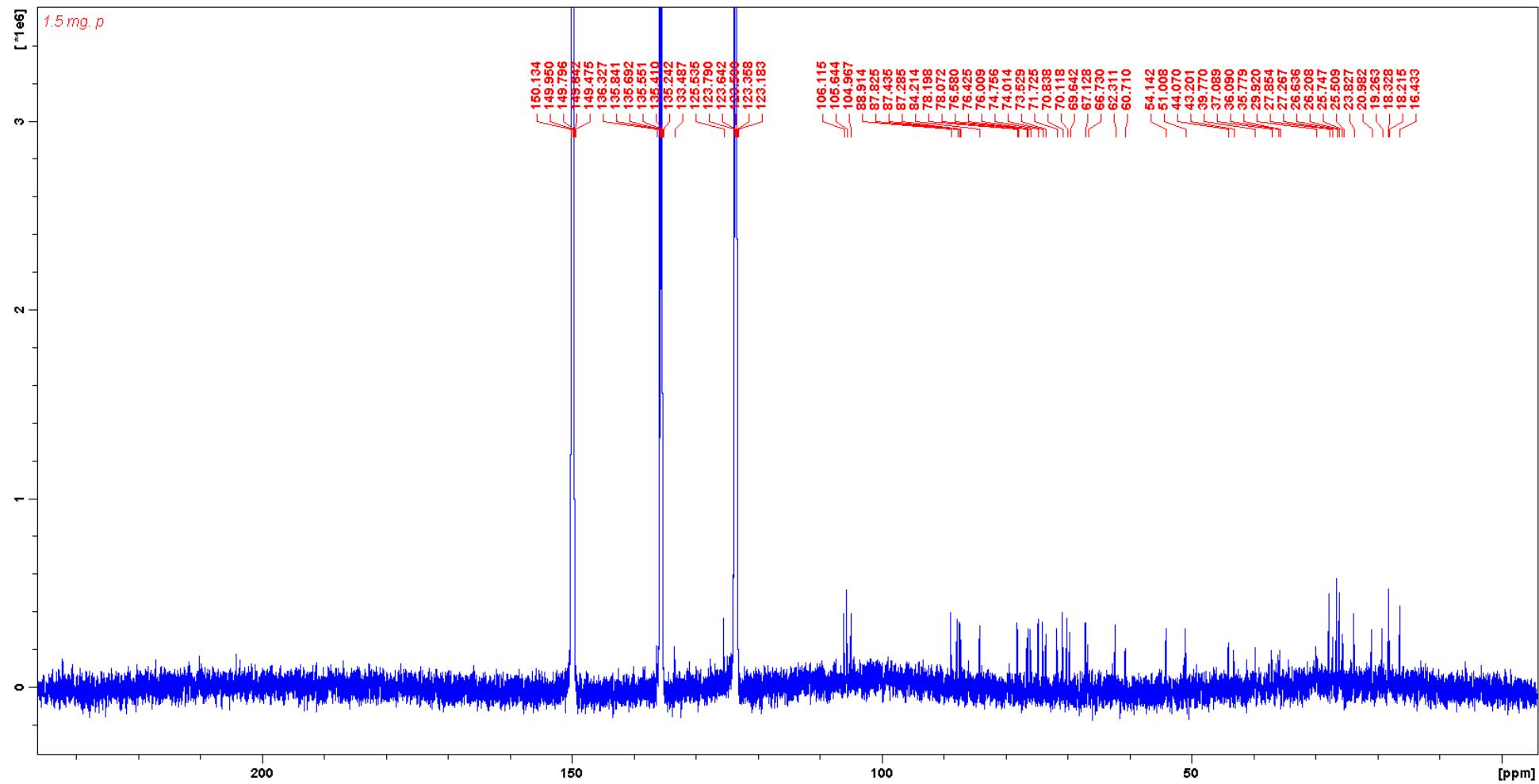


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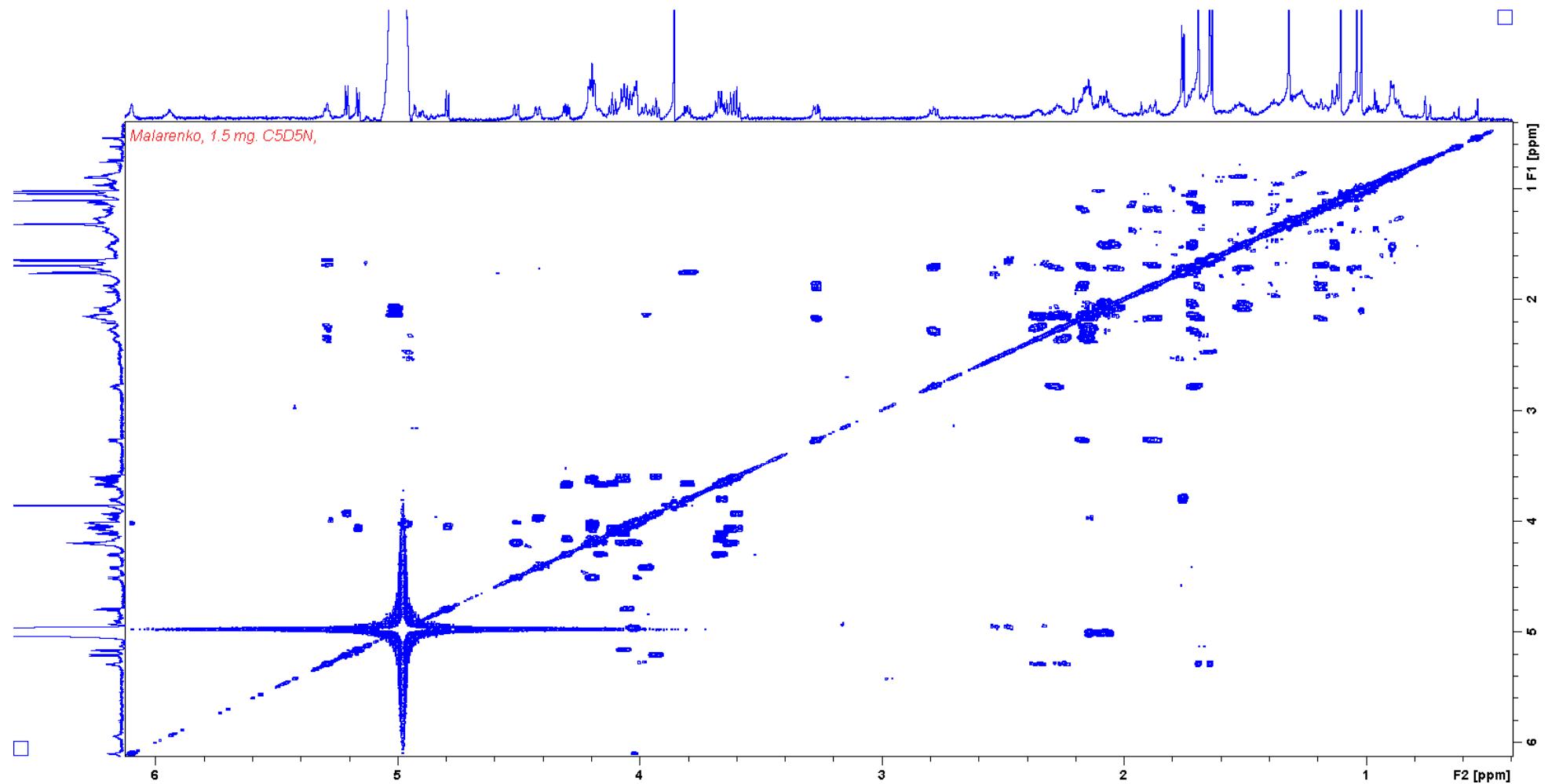


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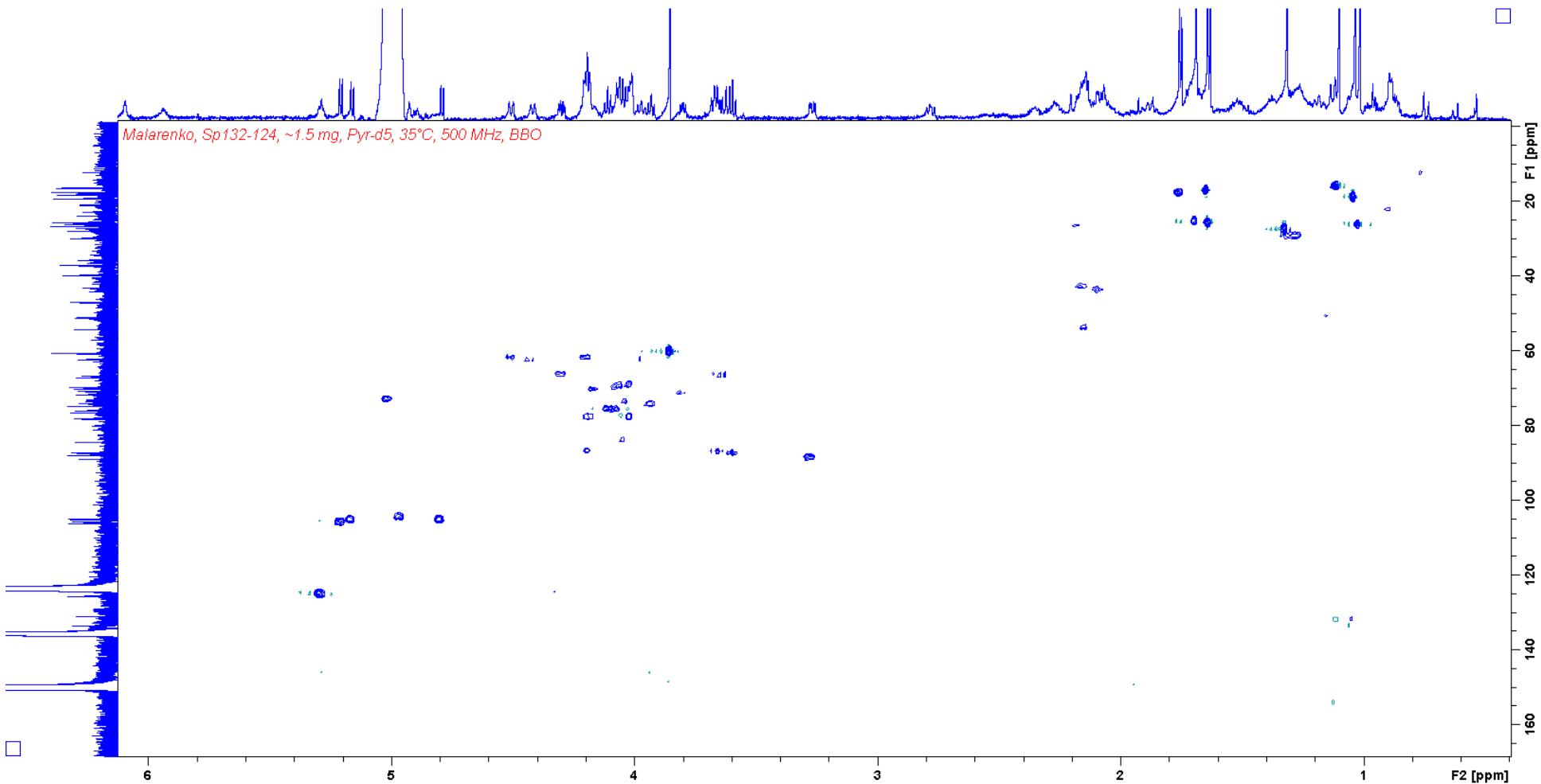


Figure S31. HMBC spectrum of pacificusoside N (3) in C₅D₅N.

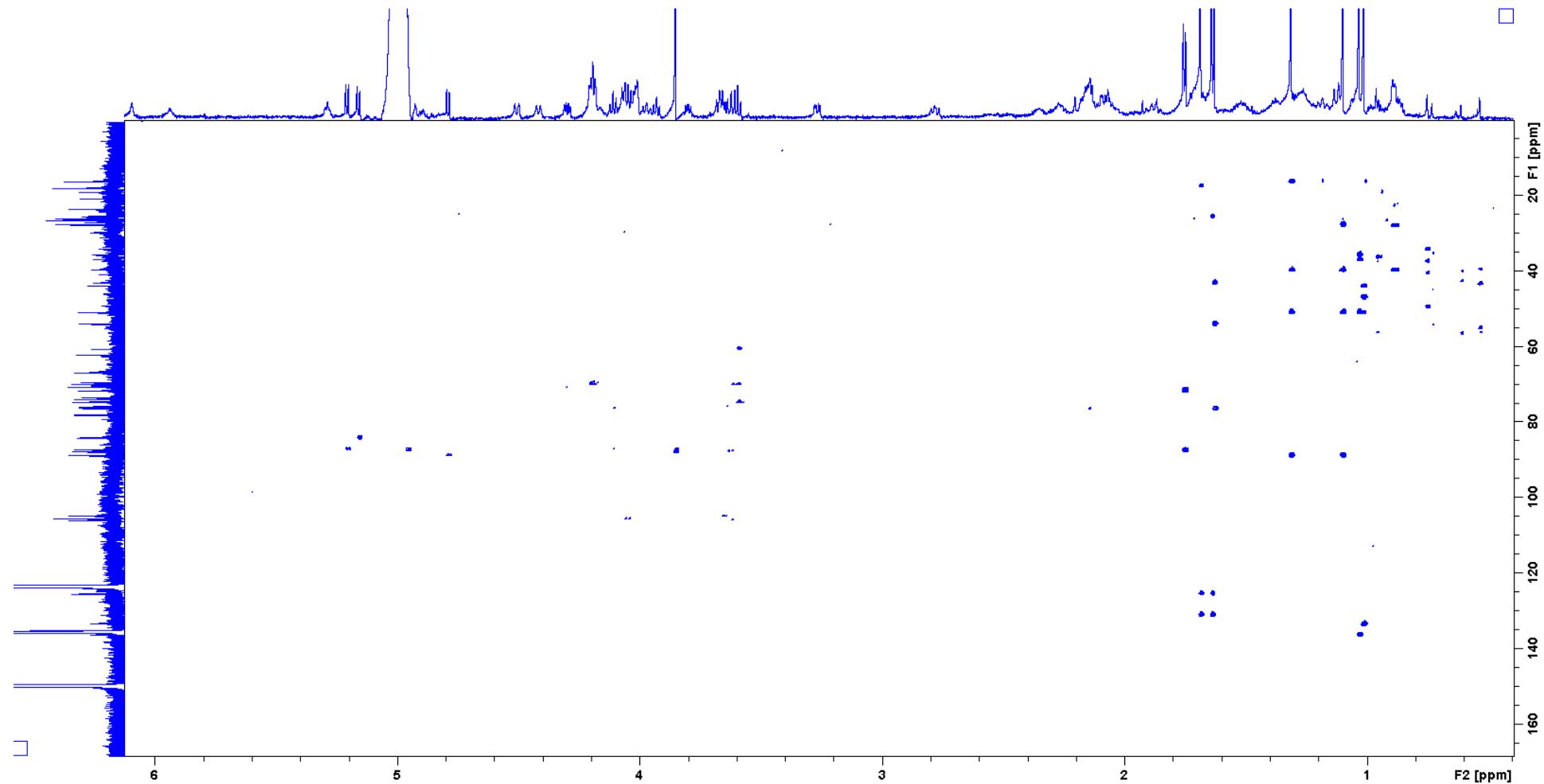


Figure S32. ROESY spectrum of pacificusoside N (3) in C₅D₅N.

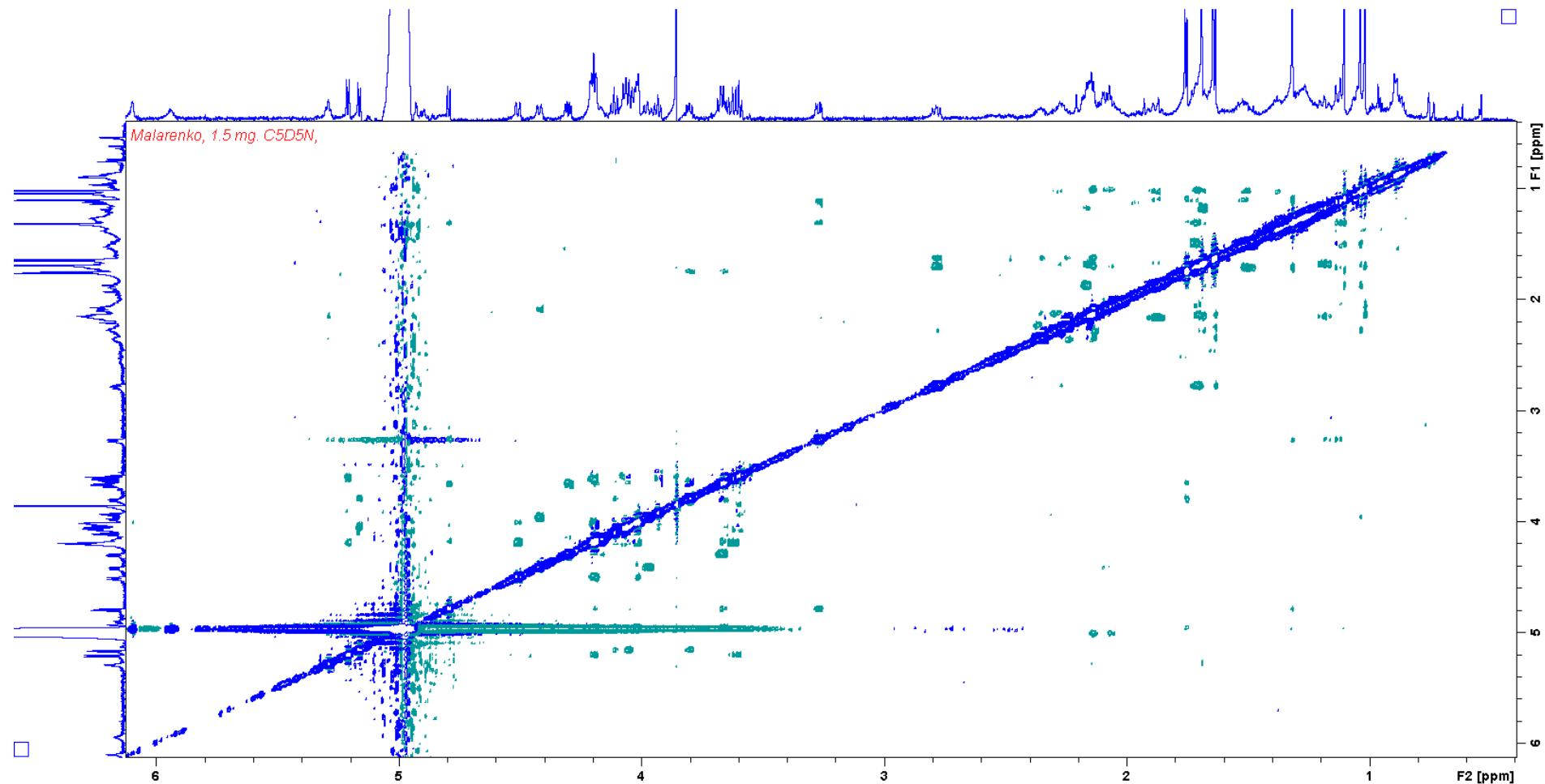


Figure S33. (-)ESIMS/MS spectrum of pacificusoside N (3).

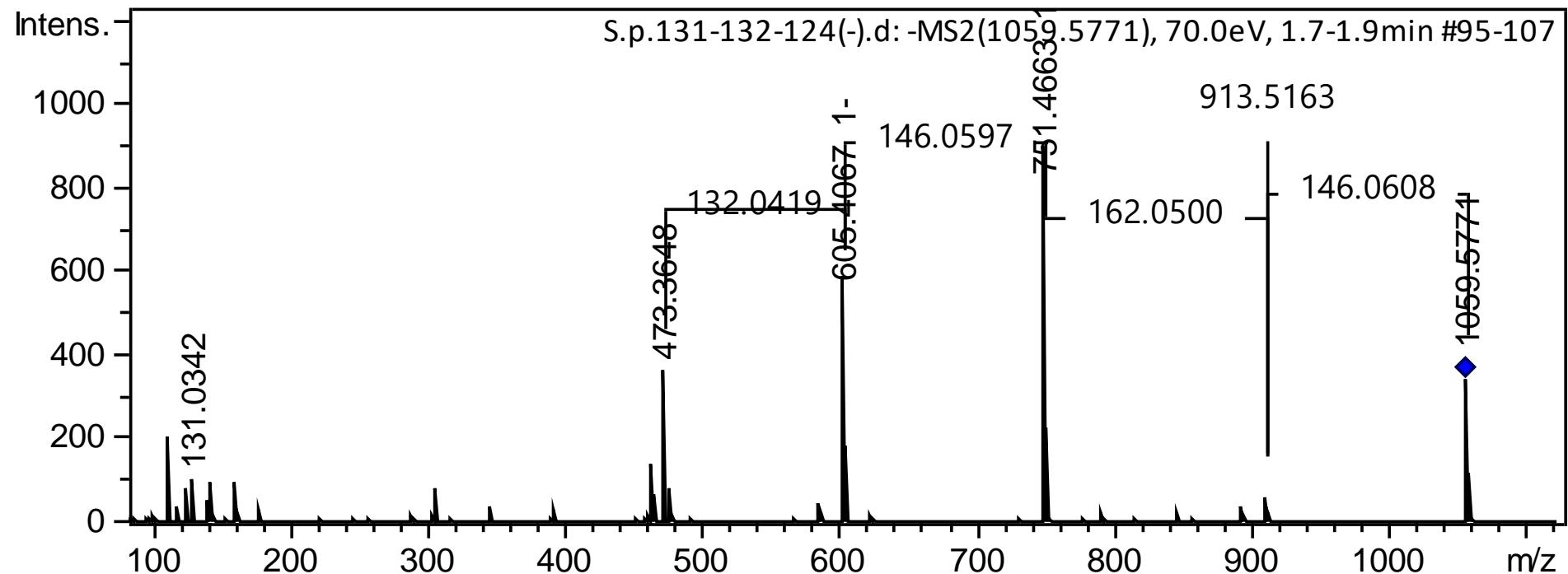


Figure S34. (+)ESIMS/MS spectrum of pacificusoside N (3).

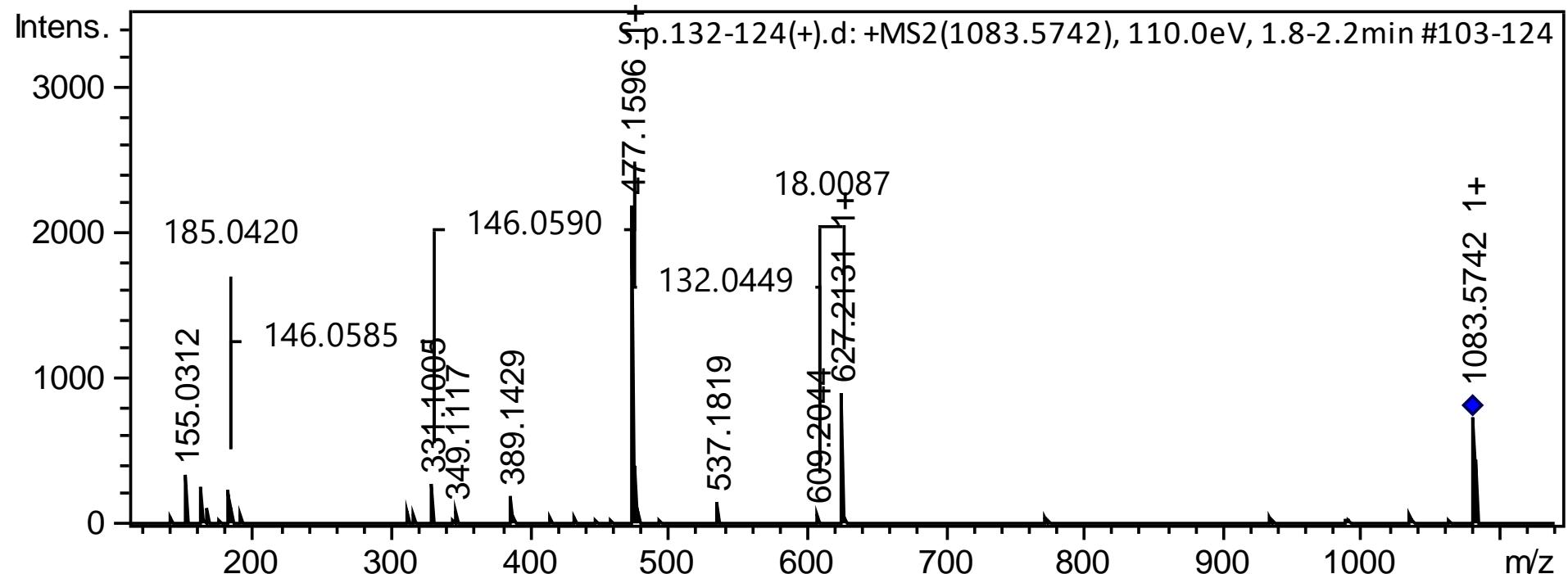


Figure S35. HRESIMS spectrum of pacificusosides O and P (4 and 5).

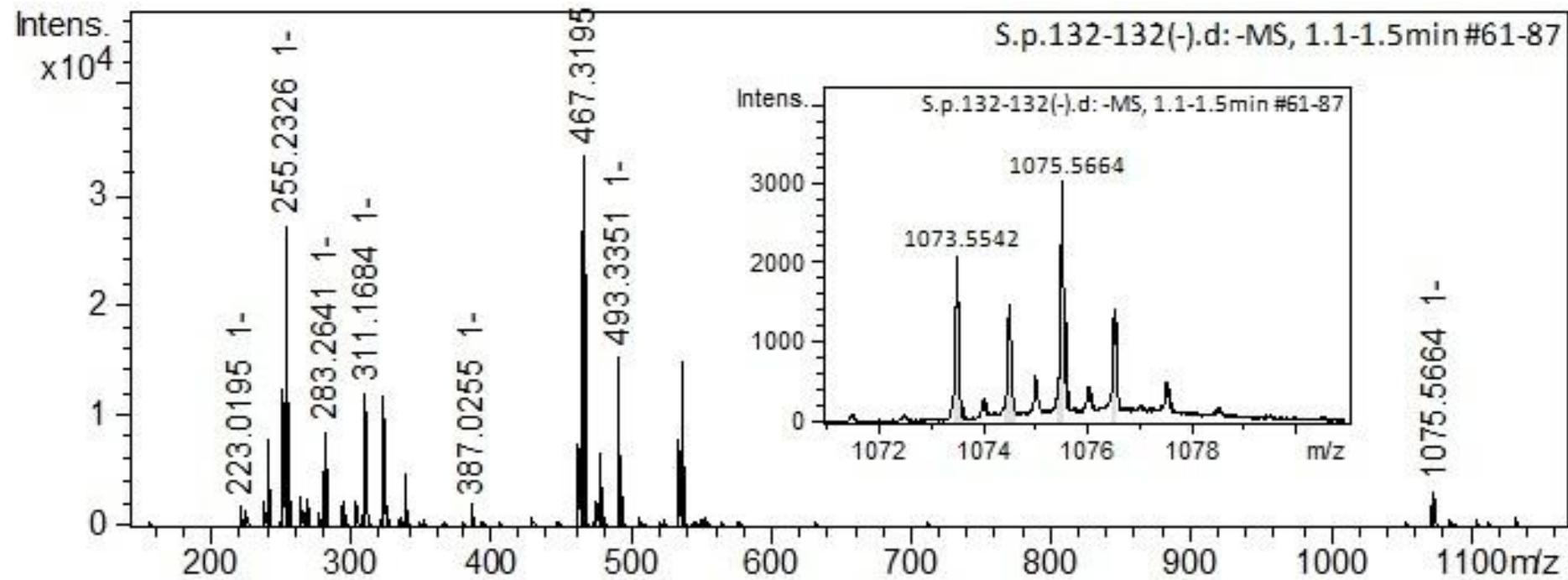


Figure S36. IR spectrum of pacificusosides O and P (**4** and **5**) in KBr (transmittance vs wave number).

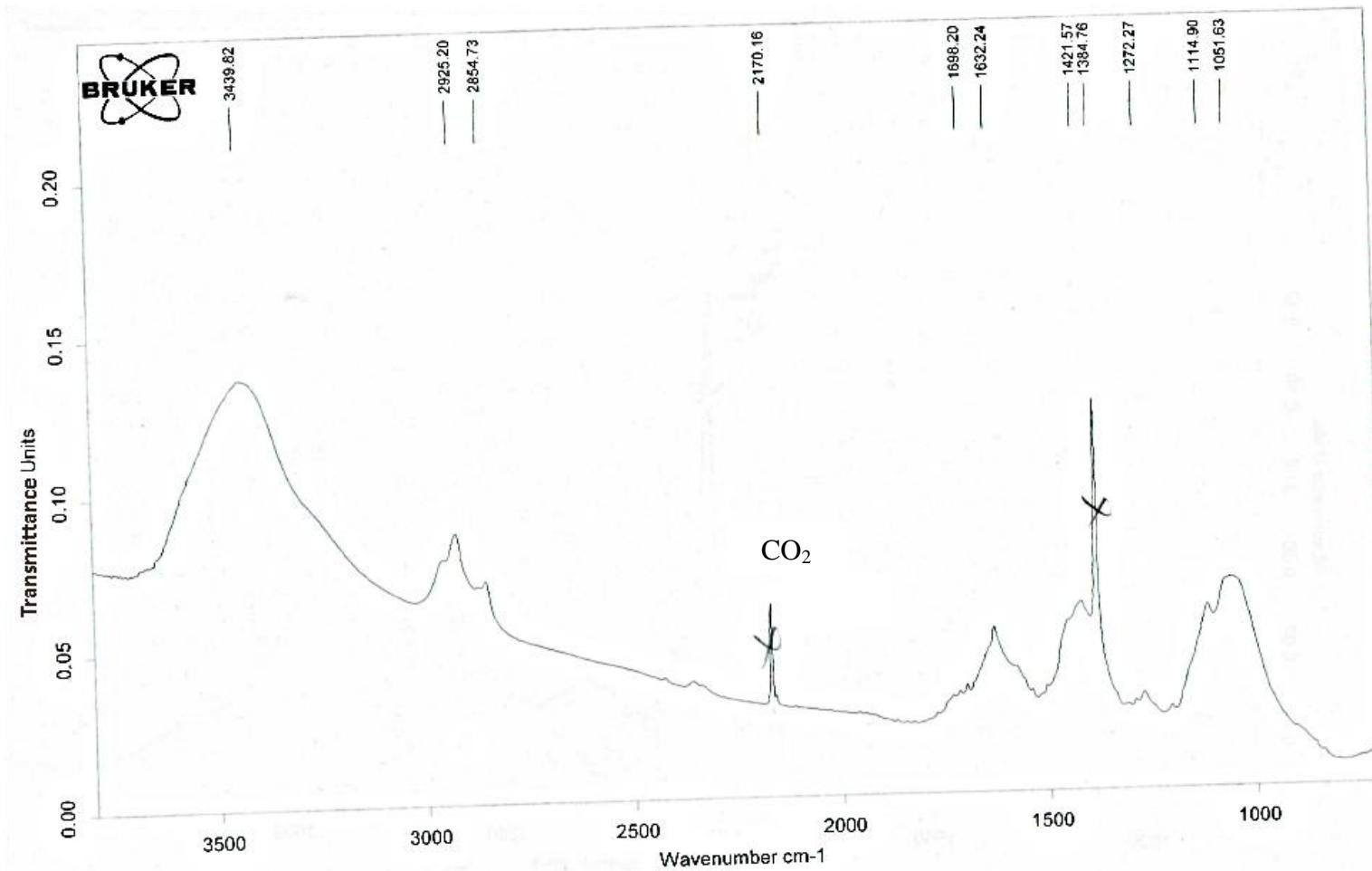


Figure S37. ^1H -NMR spectrum of pacificusosides O and P (**4** and **5**) in $\text{C}_5\text{D}_5\text{N}$.

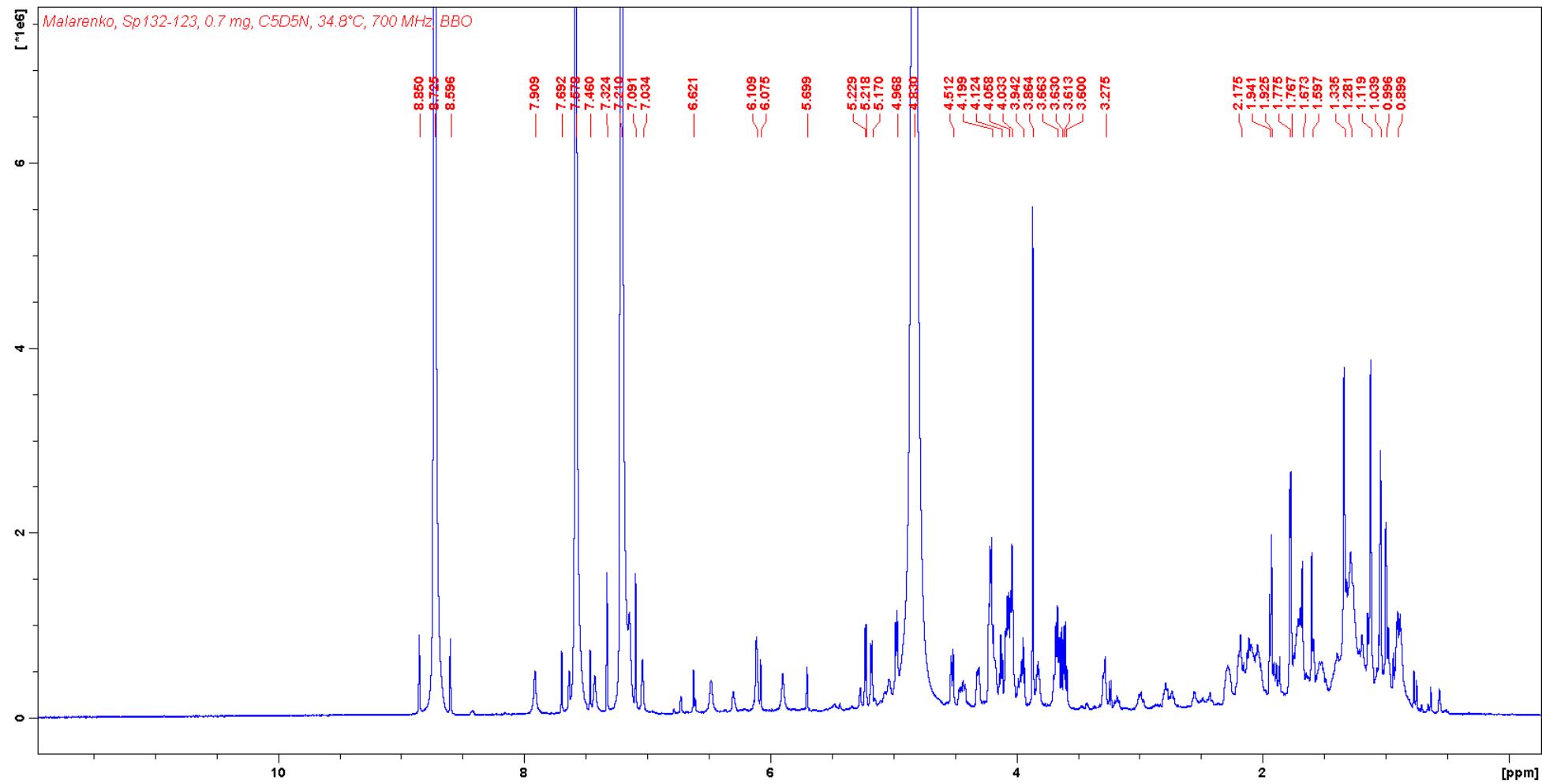


Figure S38. ^{13}C -NMR spectrum of pacificusosides O and P (**4** and **5**) in $\text{C}_5\text{D}_5\text{N}$.

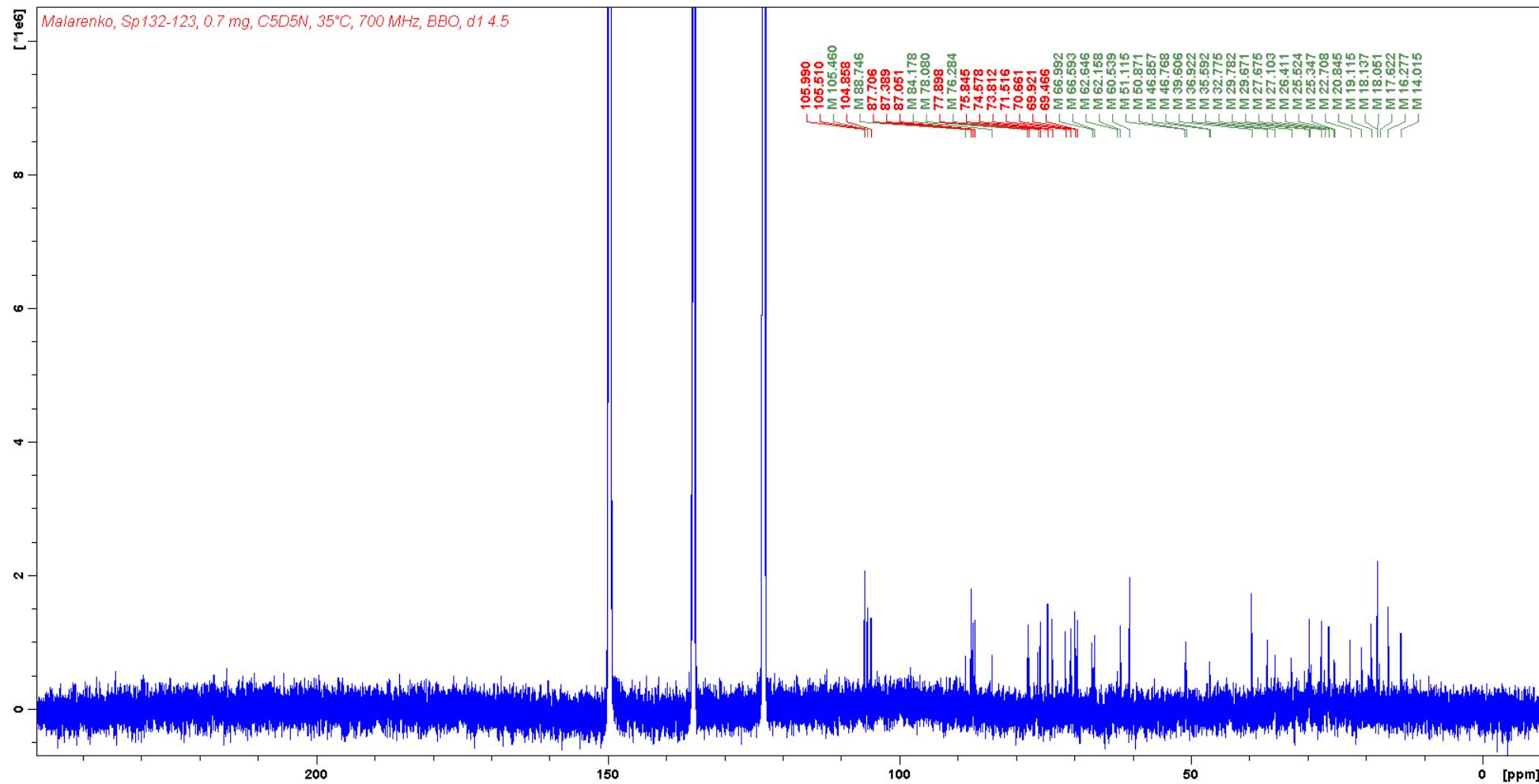


Figure S39. ^1H - ^1H COSY spectrum of pacificusosides O and P (**4** and **5**) in $\text{C}_5\text{D}_5\text{N}$.

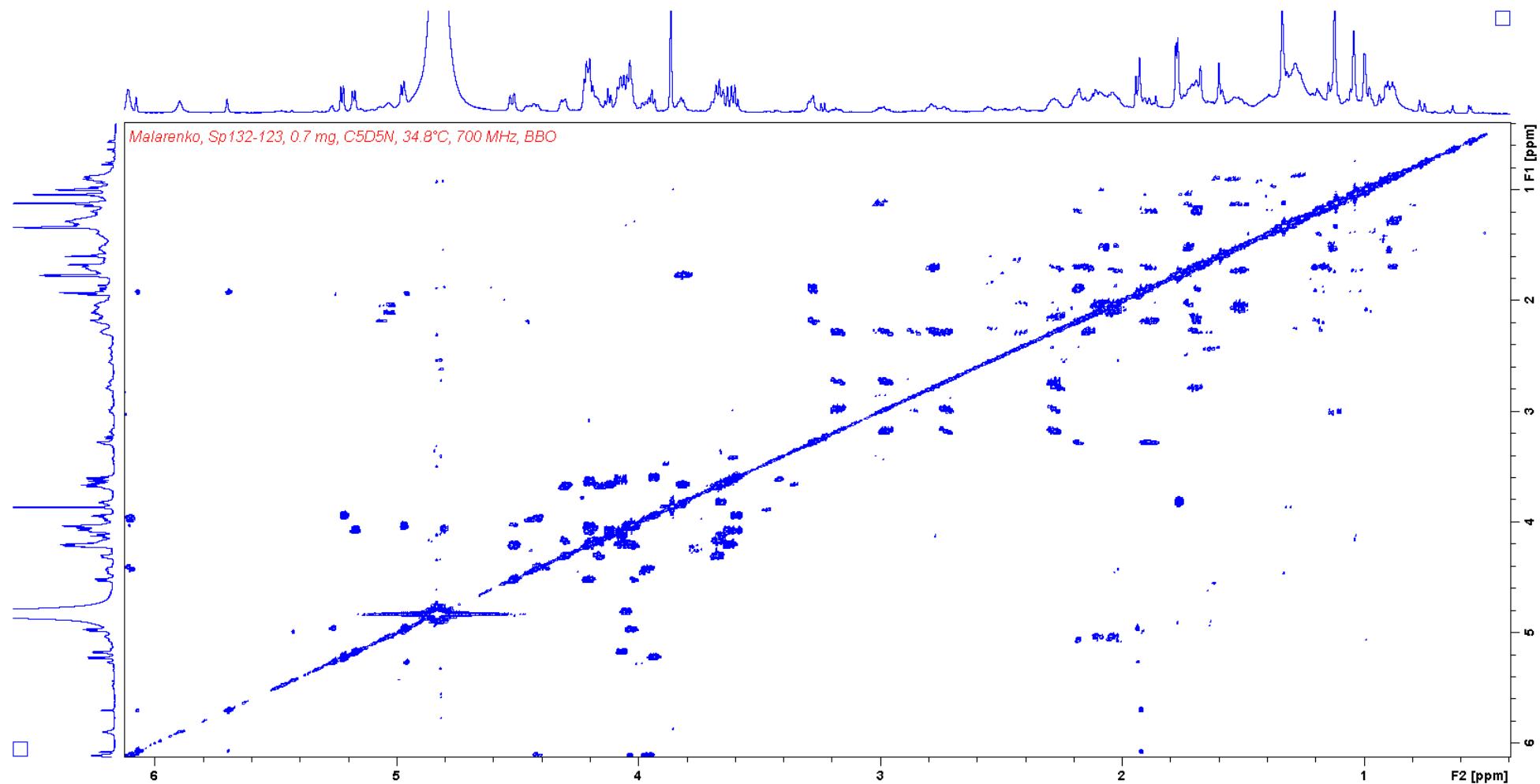


Figure S40. HSQC spectrum of pacificusosides O and P (**4** and **5**) in C₅D₅N.

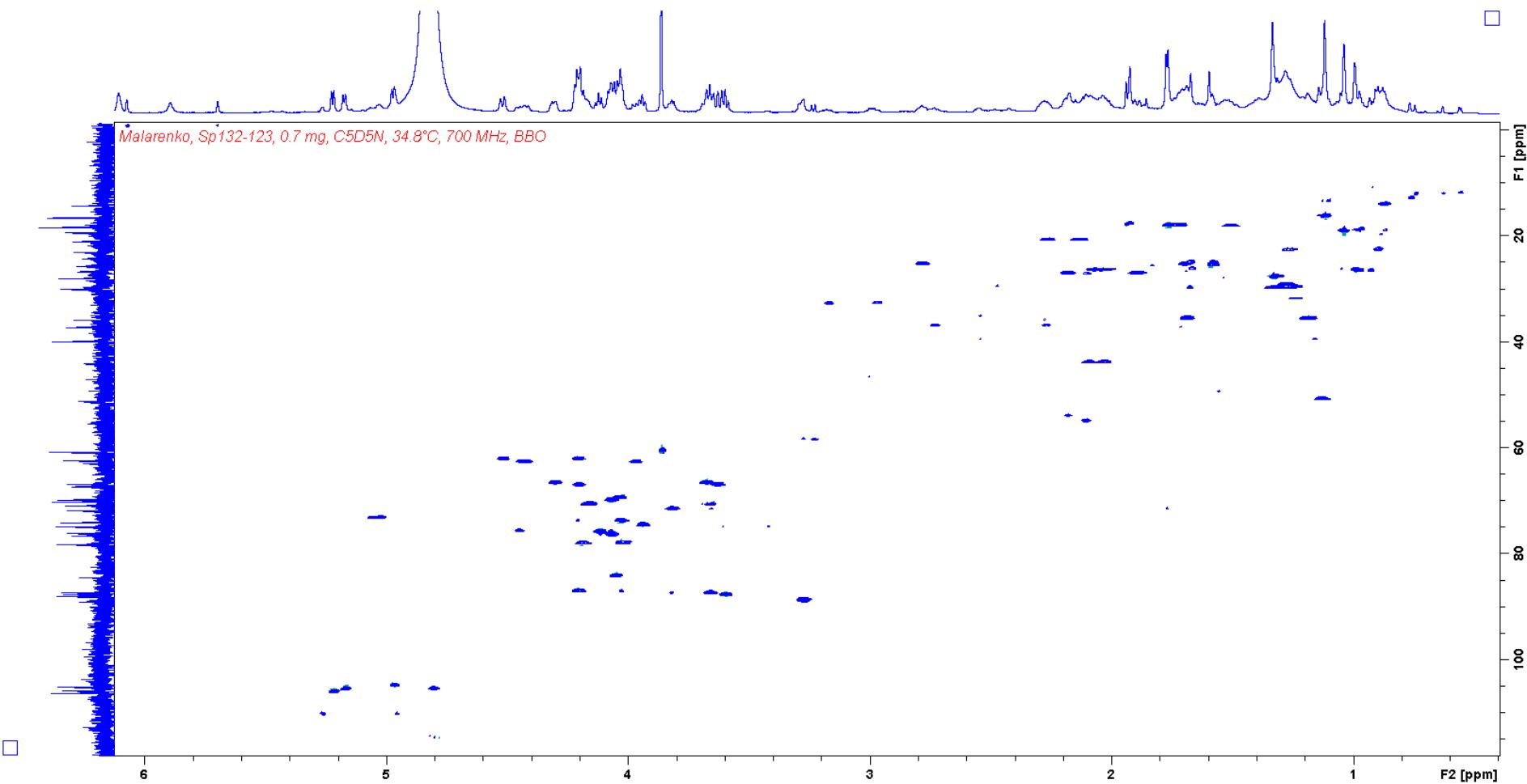


Figure S41. HMBC spectrum of pacificusosides O and P (**4** and **5**) in C₅D₅N.

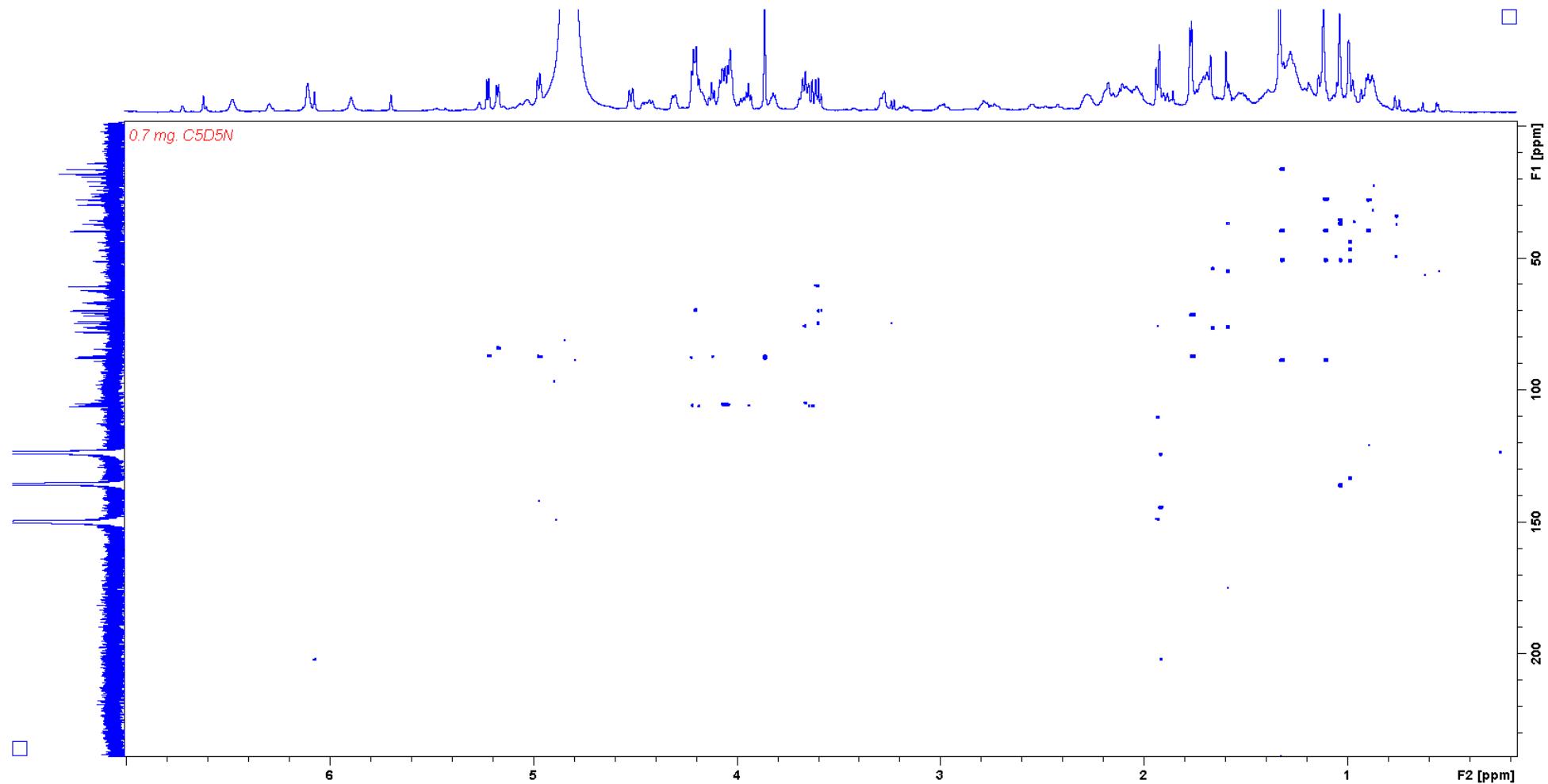


Figure S42. ROESY spectrum of pacificusosides O and P (**4** and **5**) in C₅D₅N.

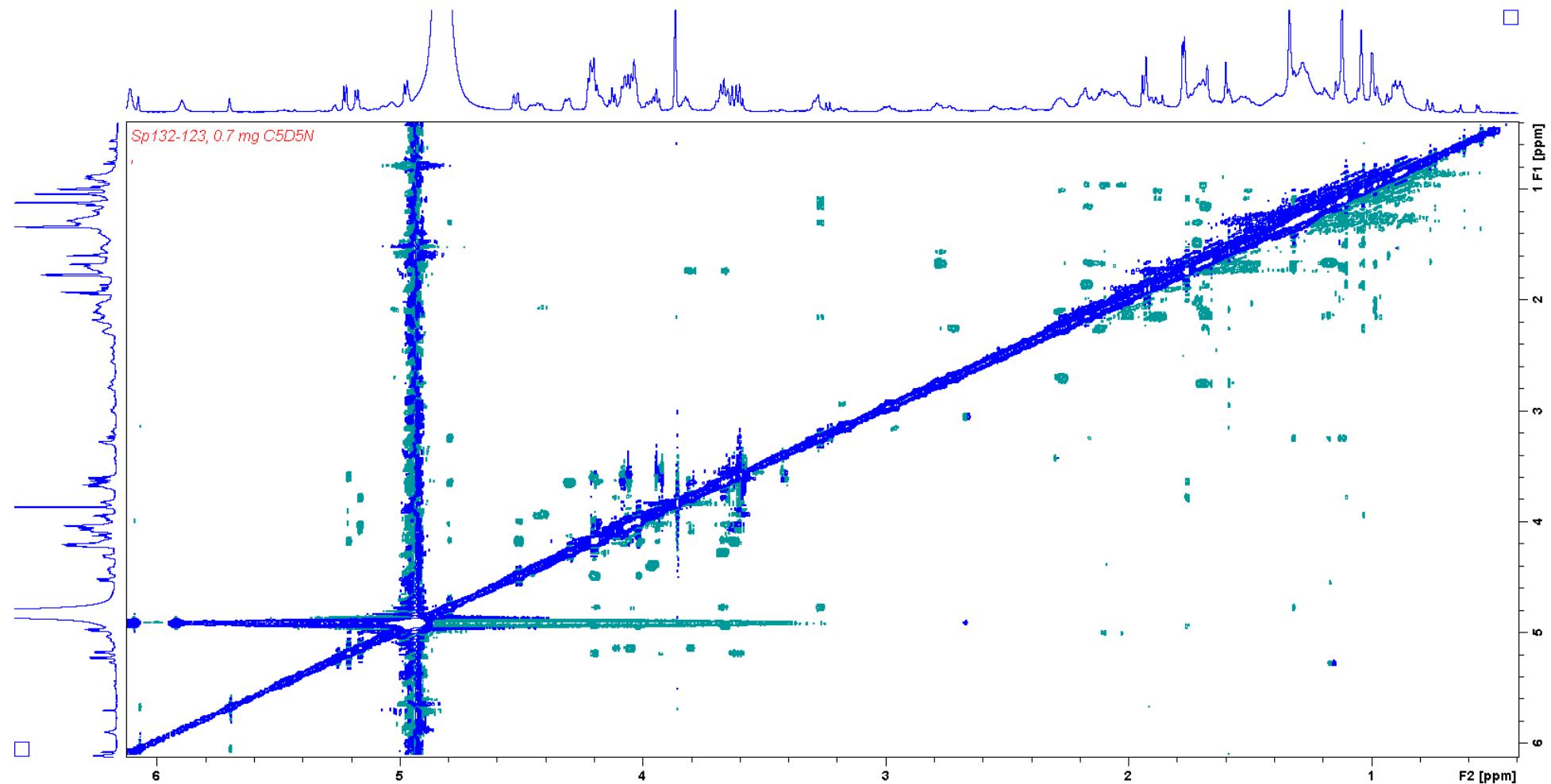


Figure S43. (-)ESIMS/MS spectrum of pacificusoside O and P (**4** and **5**).

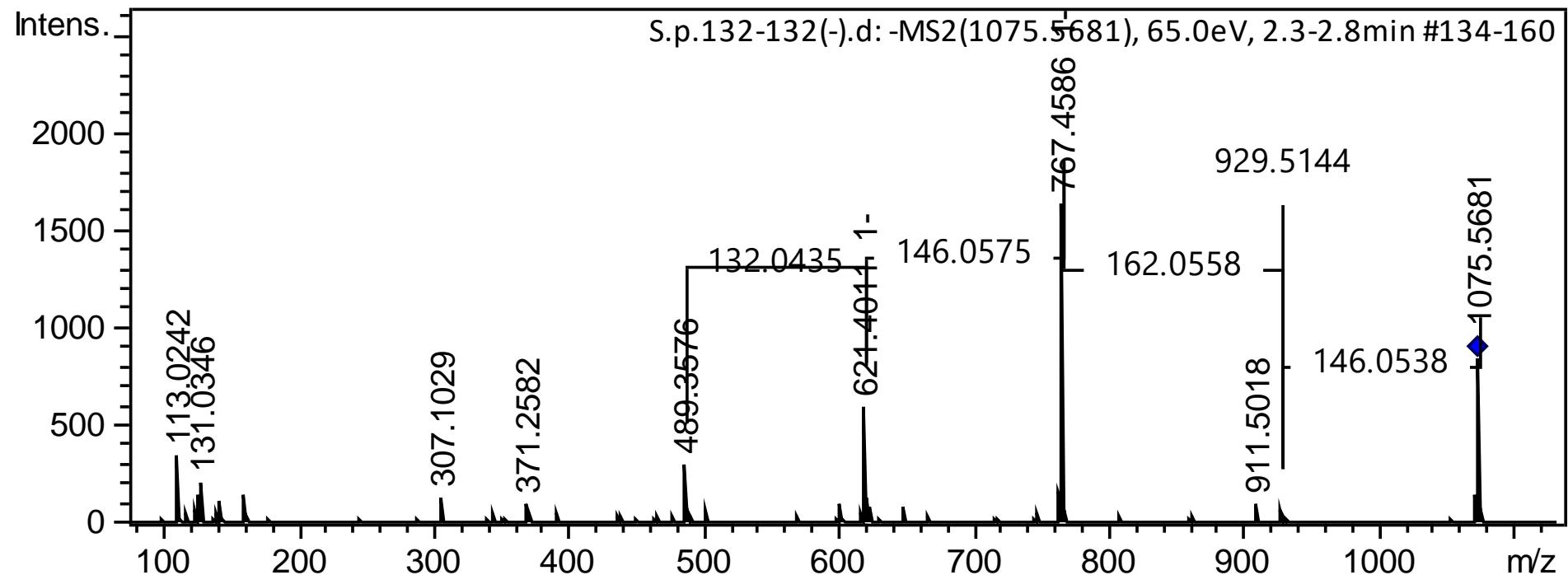


Figure S44. (+)ESIMS/MS spectrum of pacificusoside O and P (4 and 5).

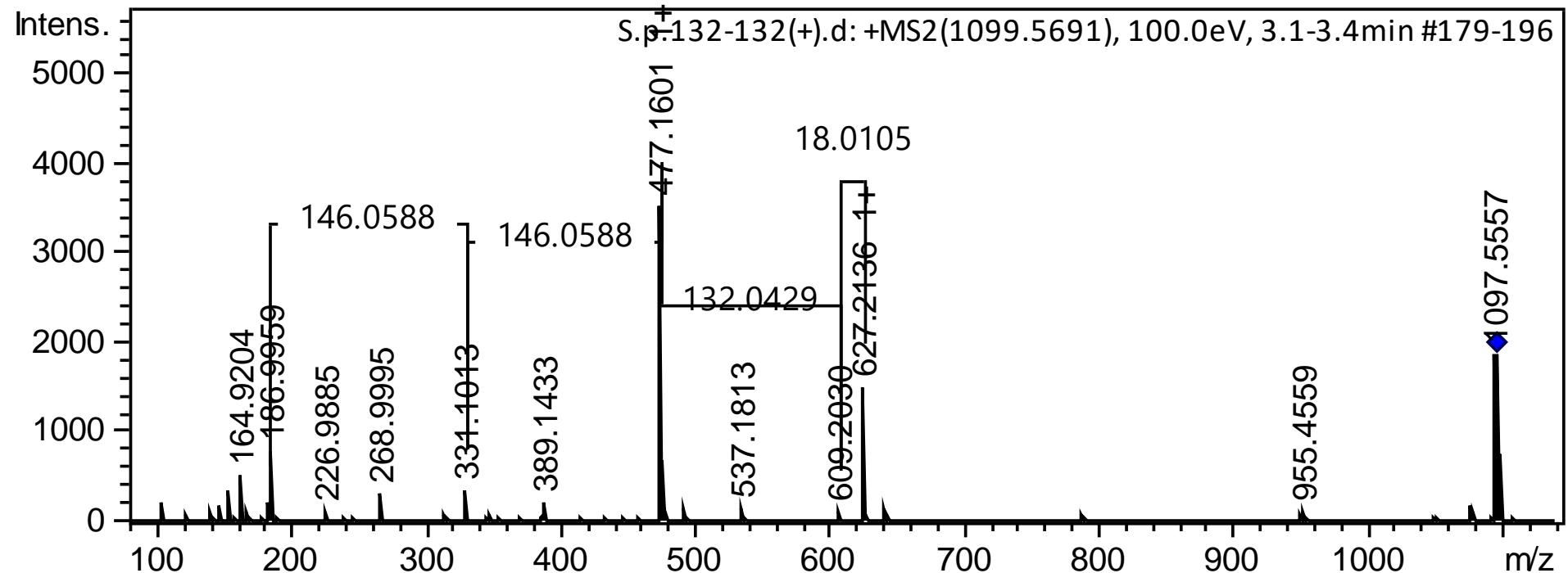


Figure S45. HRESIMS spectrum of pacificusoside Q (6).

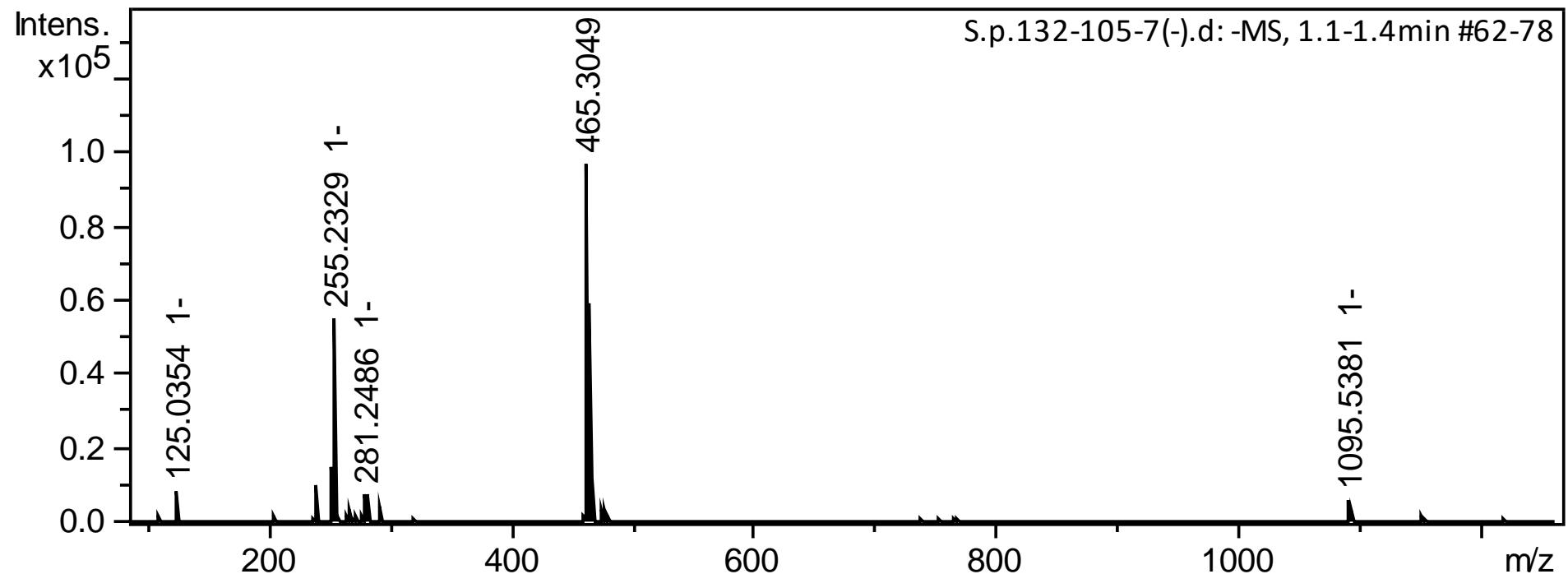


Figure S46. ^1H -NMR spectrum of pacificusoside Q (**6**) in $\text{C}_5\text{D}_5\text{N}$.

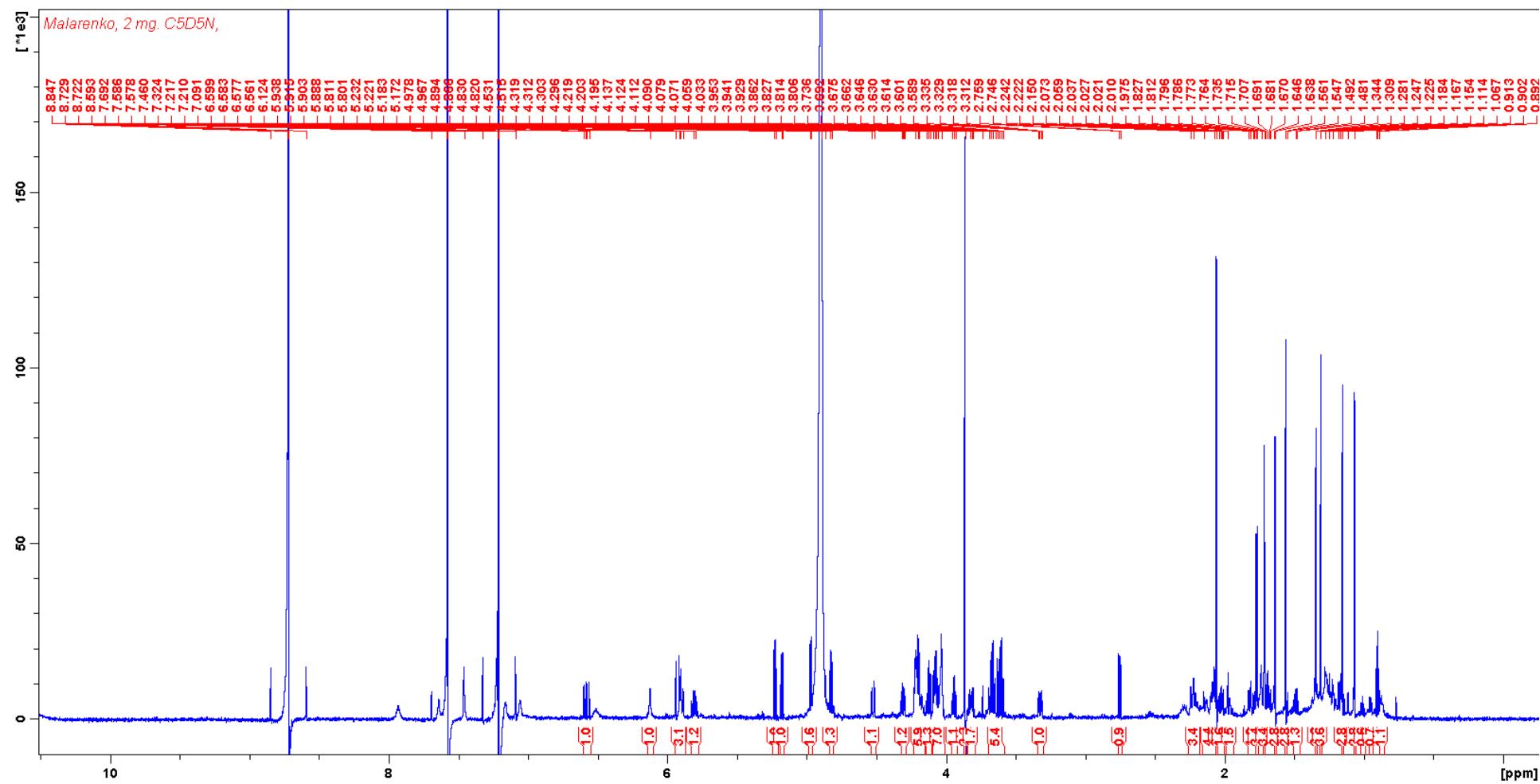


Figure S47. ^{13}C -NMR spectrum of pacificusoside Q (**6**) in $\text{C}_5\text{D}_5\text{N}$.

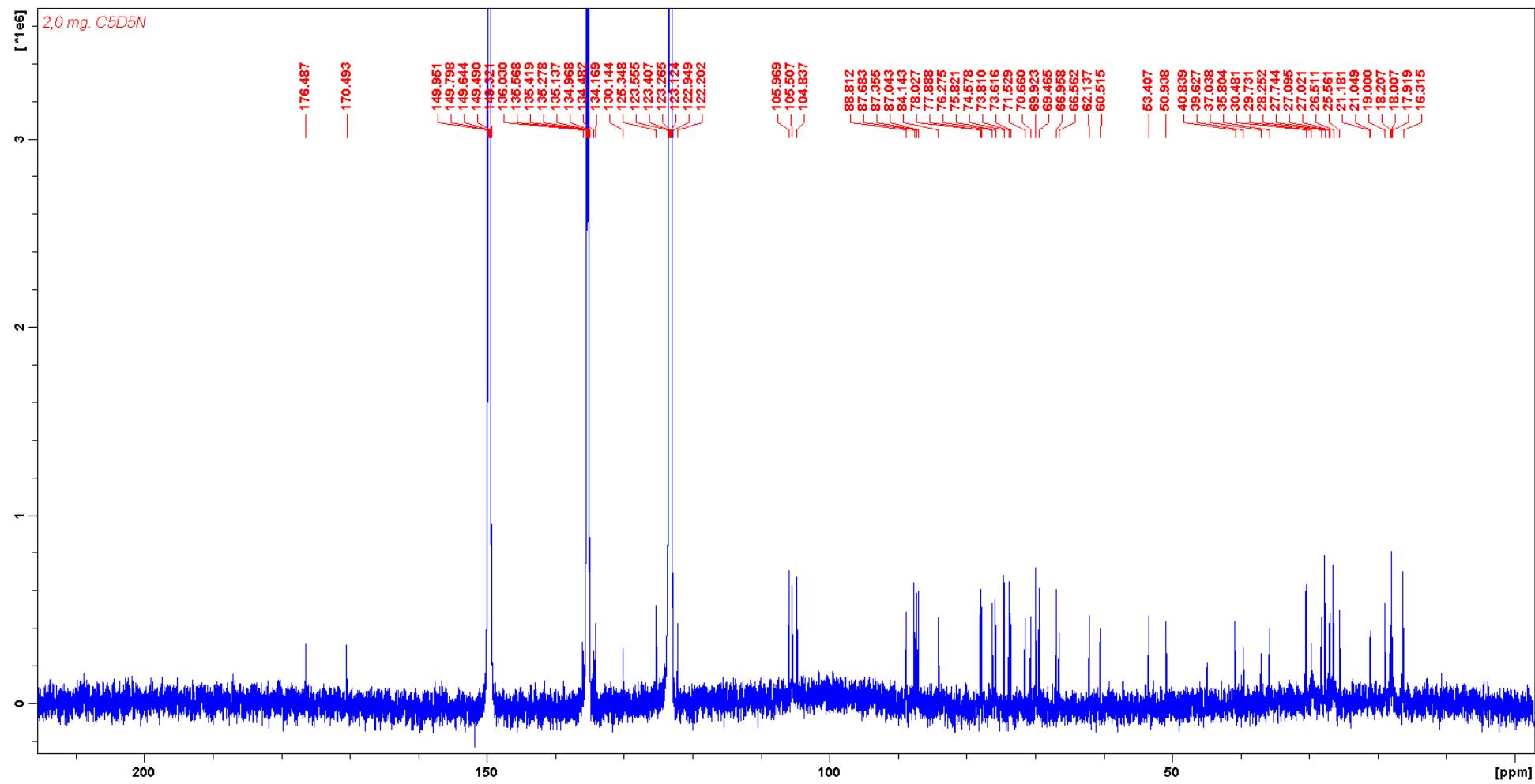


Figure S48. ^1H - ^1H COSY spectrum of pacificusoside Q (**6**) in $\text{C}_5\text{D}_5\text{N}$.

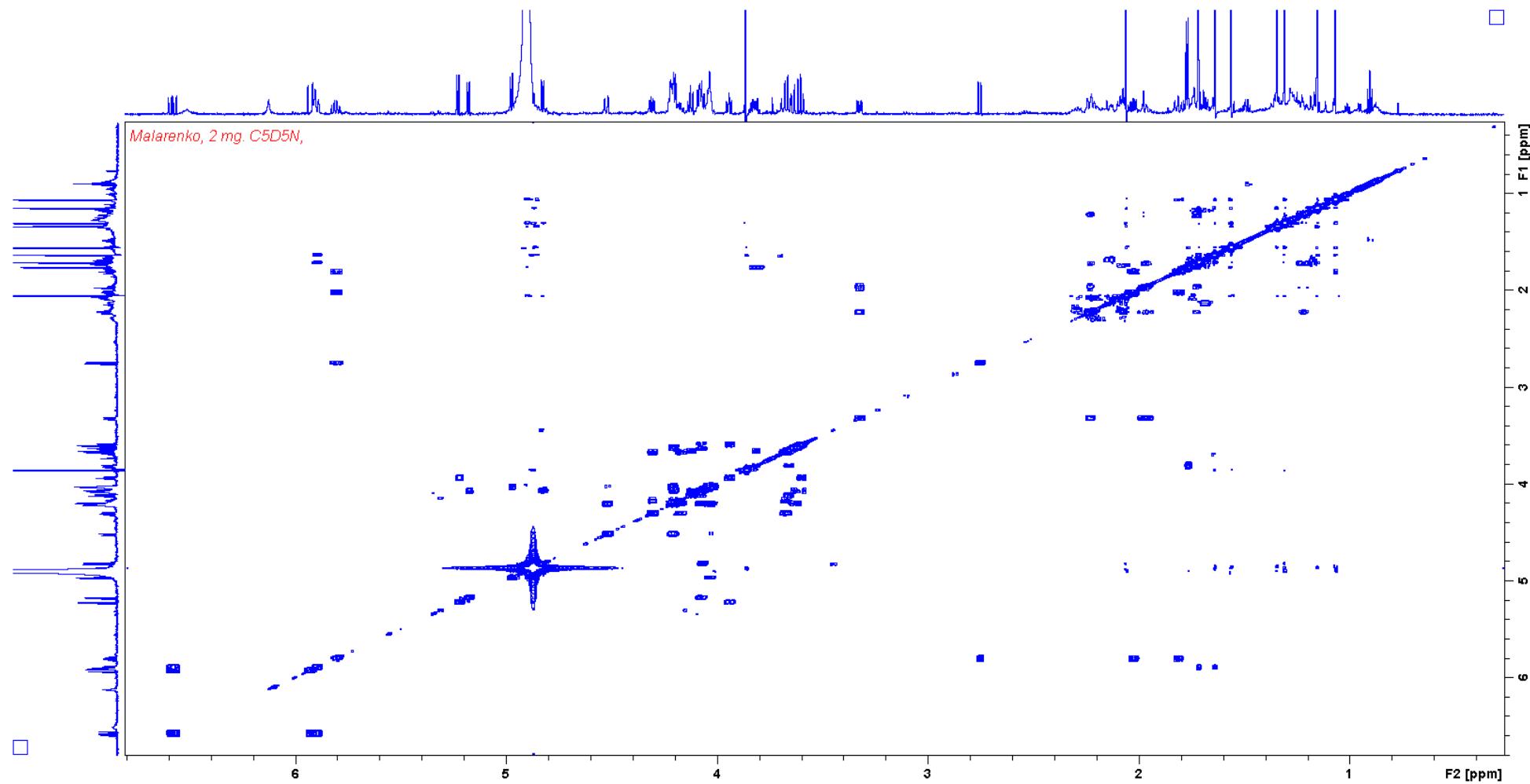


Figure S49. HSQC spectrum of pacificusoside Q (**6**) in C₅D₅N.

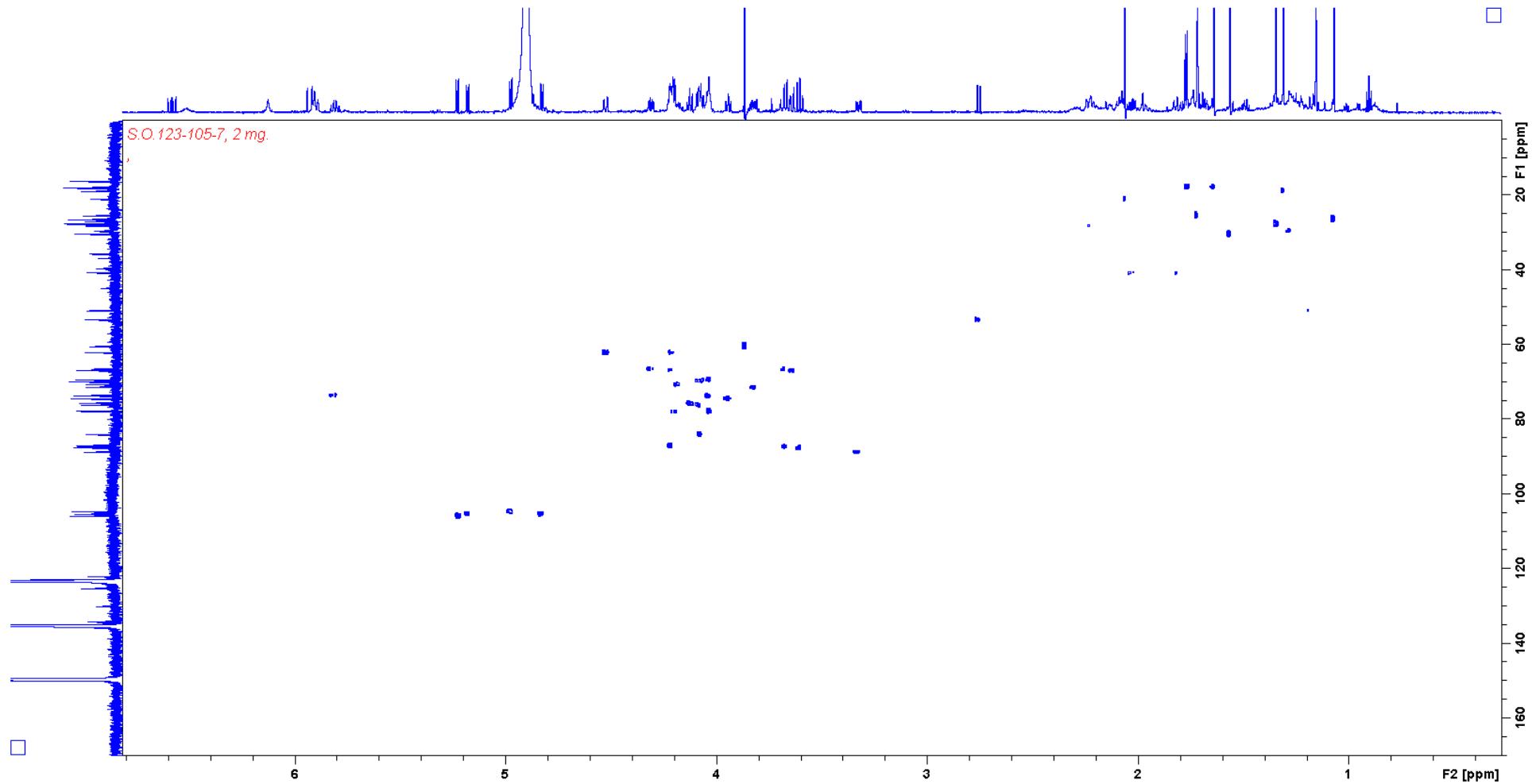


Figure S50. HMBC spectrum of pacificusoside Q (**6**) in C₅D₅N.

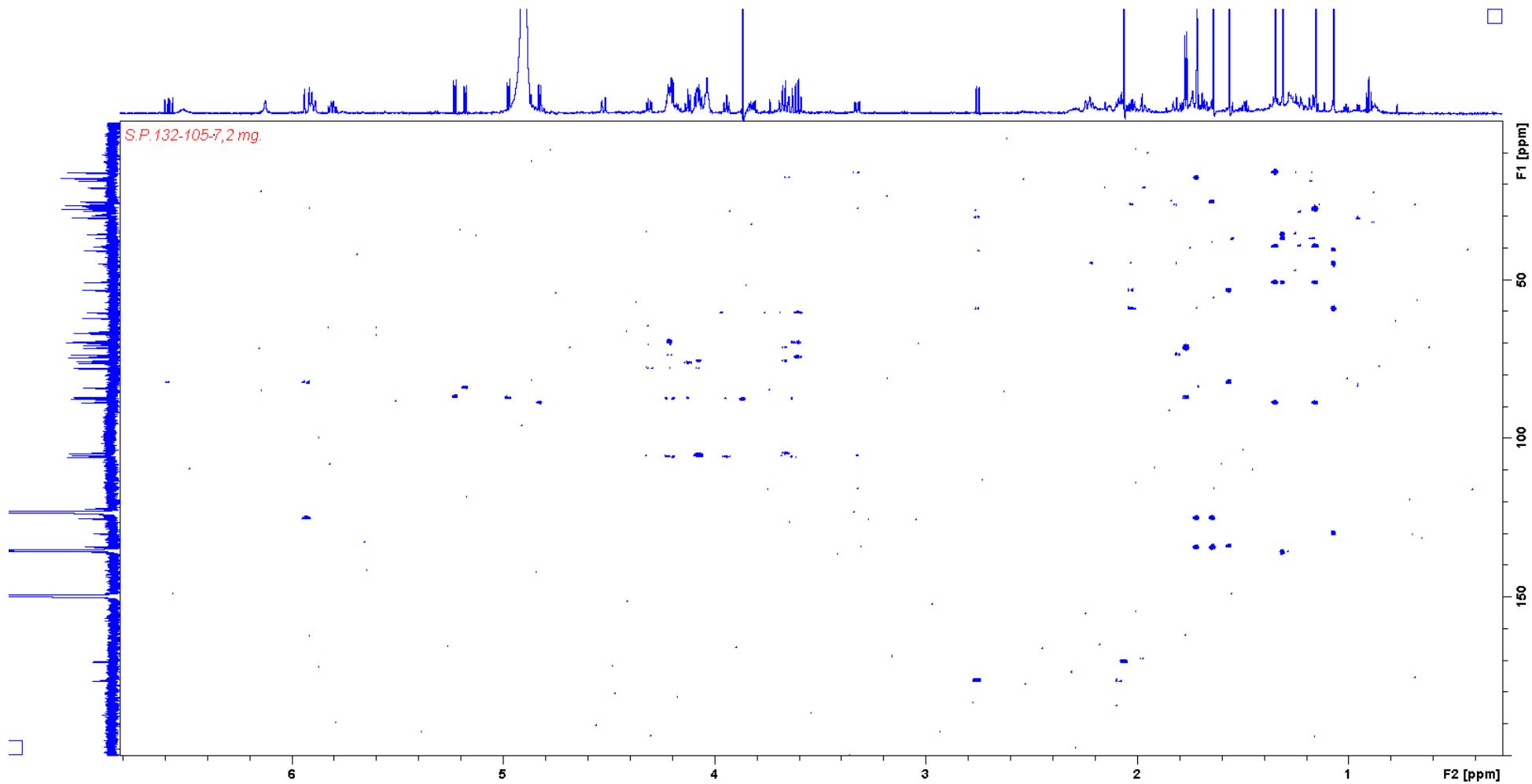


Figure S51. ROESY spectrum of pacificusoside Q (**6**) in C₅D₅N.

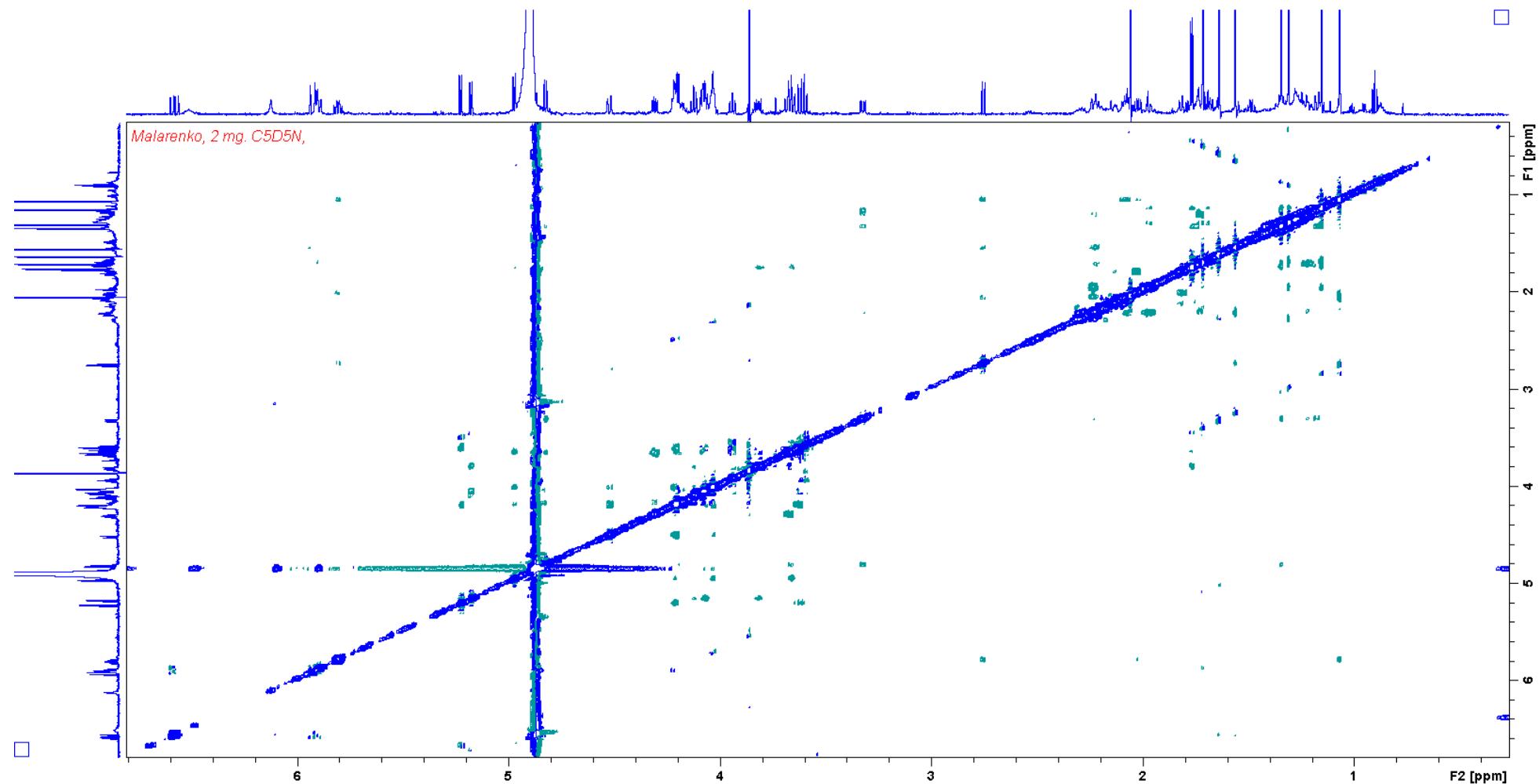


Figure S52. (-)ESIMS/MS spectrum of pacificusoside Q (6).

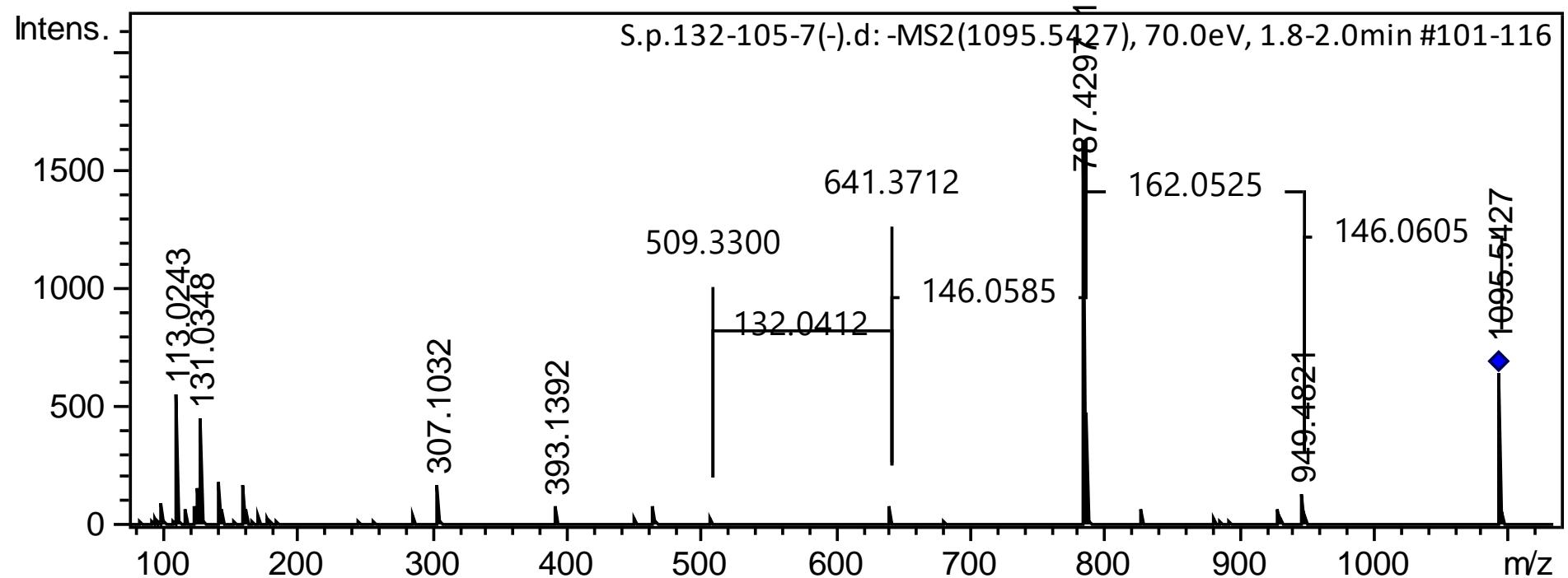


Figure S53. (+)ESIMS/MS spectrum of pacificusoside Q (6).

