

Supplementary Figures

For Compound 1

Figure S1. ^1H -NMR spectrum of Compound 1 in CD_3OD .

Figure S2. ^{13}C -NMR spectrum of Compound 1 in CD_3OD .

Figure S3. ^1H - ^1H COSY spectrum of Compound 1 in CD_3OD .

Figure S4. gHSQC spectrum of Compound 1 in CD_3OD .

Figure S5. gHMBC spectrum of Compound 1 in CD_3OD .

Figure S6. NOESY spectrum of Compound 1 in CD_3OD .

Figure S7. HRESIMS spectrum of Compound 1.

Figure S8. Absolute configuration determination for C-1 and C-5 in 1 by modified Mosher's ester method.

For Compound 2

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Figure S10. ^{13}C -NMR spectrum of Compound 2 in CD_3OD .

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For Compound 3

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Figure S23. NOESY spectrum of Compound 3 in CDCl_3 .

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For Compound 4

Figure S25. ^1H -NMR spectrum of Compound 4 in CD_3OD .

Figure S26. ^{13}C -NMR spectrum of Compound 4 in CD_3OD .

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Figure S28. gHSQC spectrum of Compound 4 in CD_3OD .

Figure S29. gHMBC spectrum of Compound 4 in CD_3OD .

Figure S30. NOESY spectrum of Compound 4 in CD_3OD .

Figure S31. HRESIMS spectrum of Compound 4.

For Compound 5

Figure S32. ^1H -NMR spectrum of Compound 5 in CDCl_3 .

Figure S33. ^{13}C -NMR spectrum of Compound 5 in CDCl_3 .

Figure S34. ^1H - ^1H COSY spectrum of Compound 5 in CDCl_3 .

Figure S35. gHSQC spectrum of Compound 5 in CDCl_3 .

Figure S36. gHMBC spectrum of Compound 5 in CDCl_3 .

Figure S37. NOESY spectrum of Compound 5 in CDCl_3 .

Figure S38. HRESIMS spectrum of Compound 5.

Figure S1. ^1H -NMR spectrum of Compound 1 in CD_3OD .

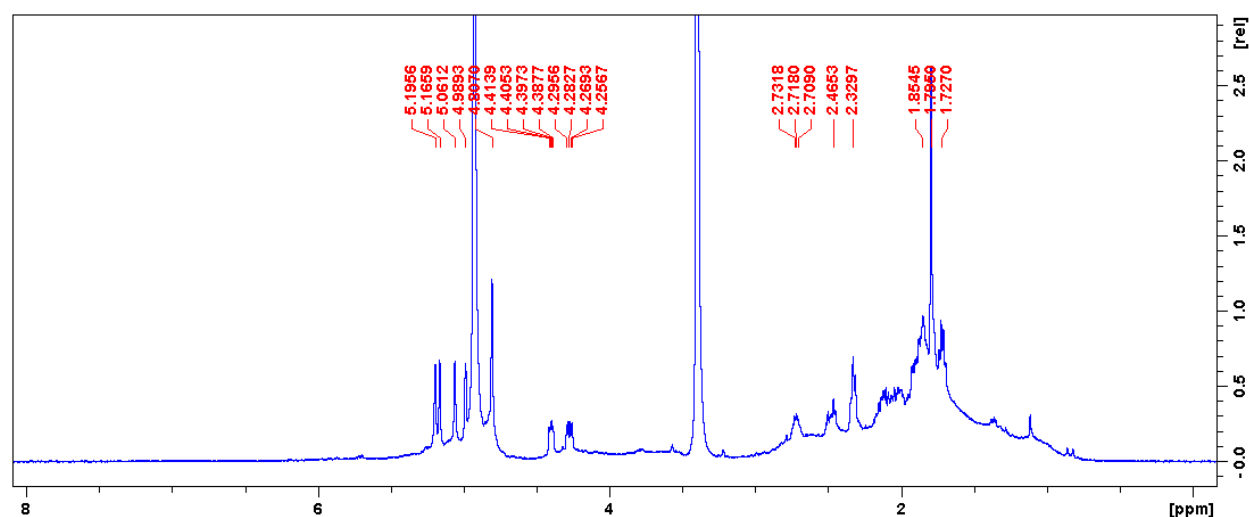


Figure S2. ^{13}C -NMR spectrum of Compound 1 in CD_3OD .

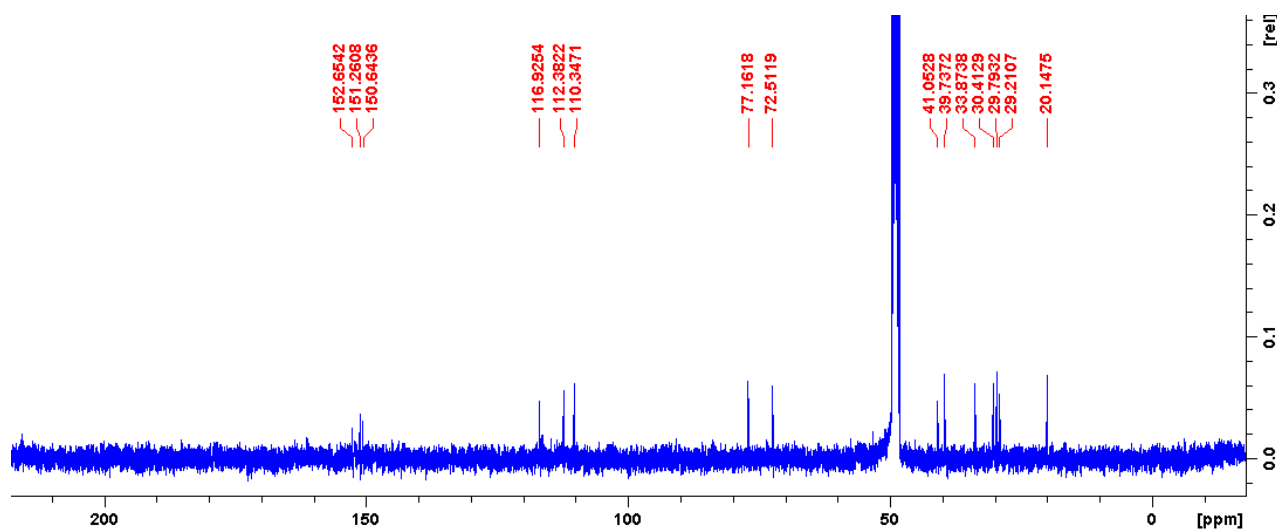


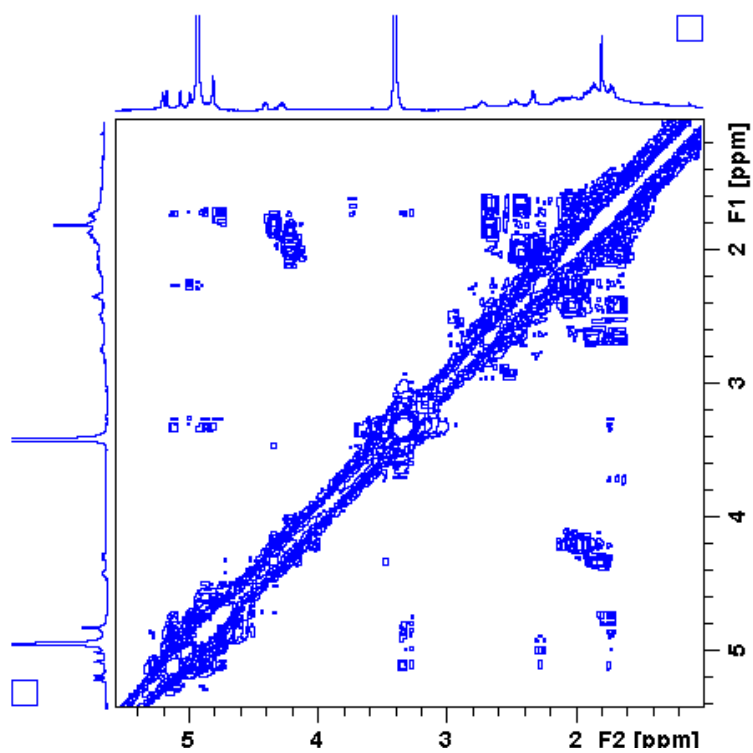
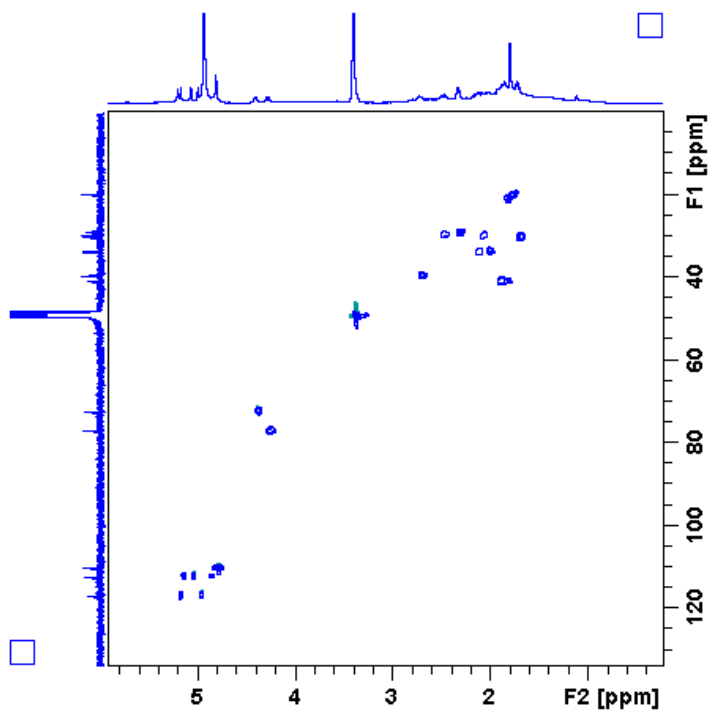
Figure S3. ^1H - ^1H COSY spectrum of Compound 1 in CD_3OD .**Figure S4.** gHSQC spectrum of Compound 1 in CD_3OD .

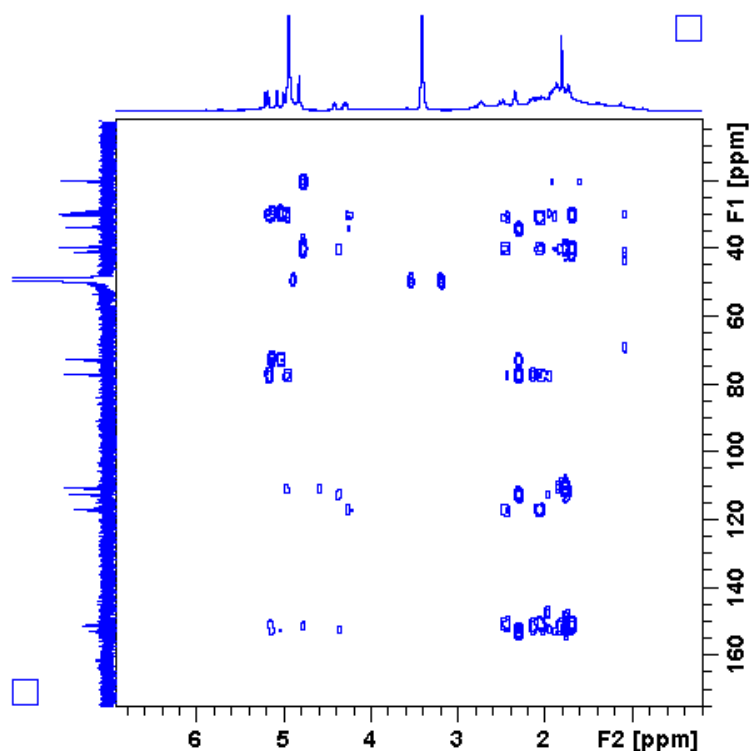
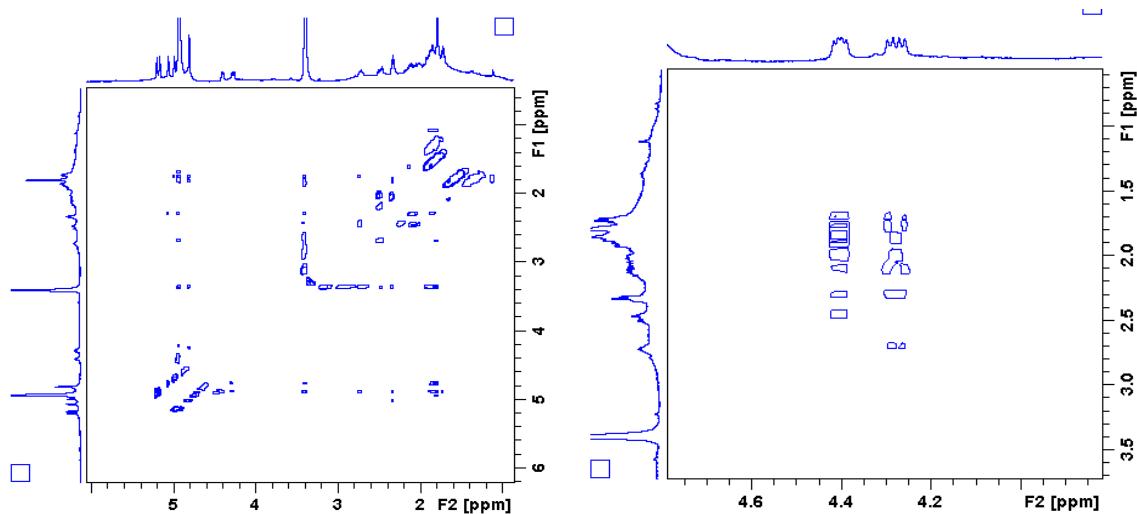
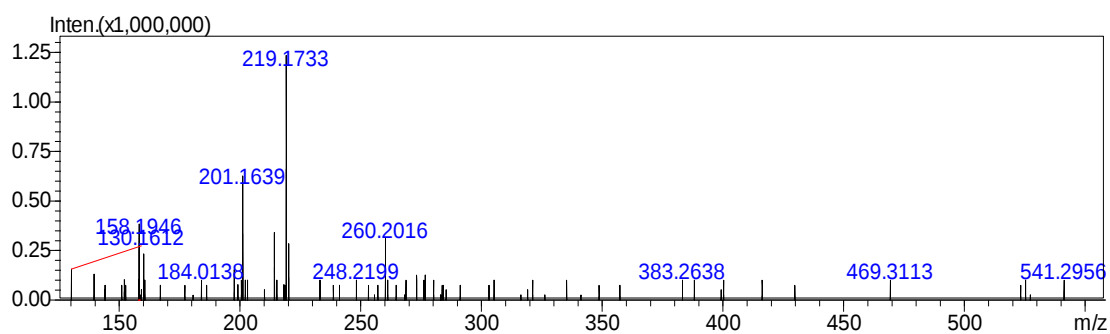
Figure S5. gHMBC spectrum of Compound 1 in CD₃OD.**Figure S6.** NOESY spectrum of Compound 1 in CD₃OD.**Figure S7.** HRESIMS spectrum of Compound 1.

Figure S8. Absolute configuration determination for C-1 and C-5 in **1** by modified Mosher's ester method.

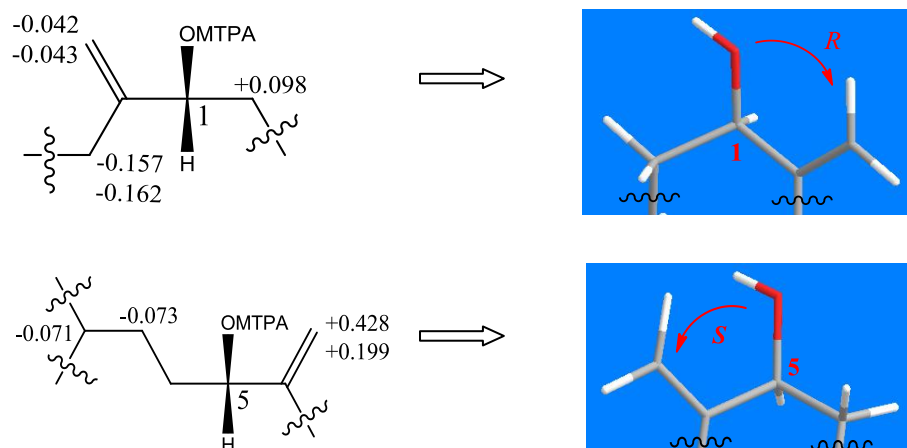


Figure S9. ^1H -NMR spectrum of Compound **2** in CD_3OD .

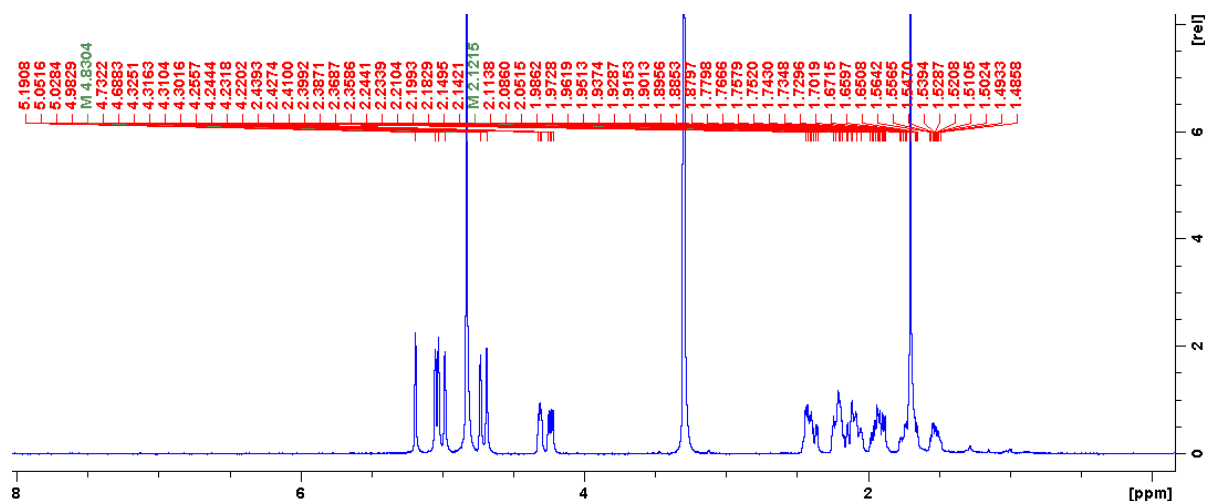


Figure S10. ^{13}C -NMR spectrum of Compound **2** in CD_3OD .

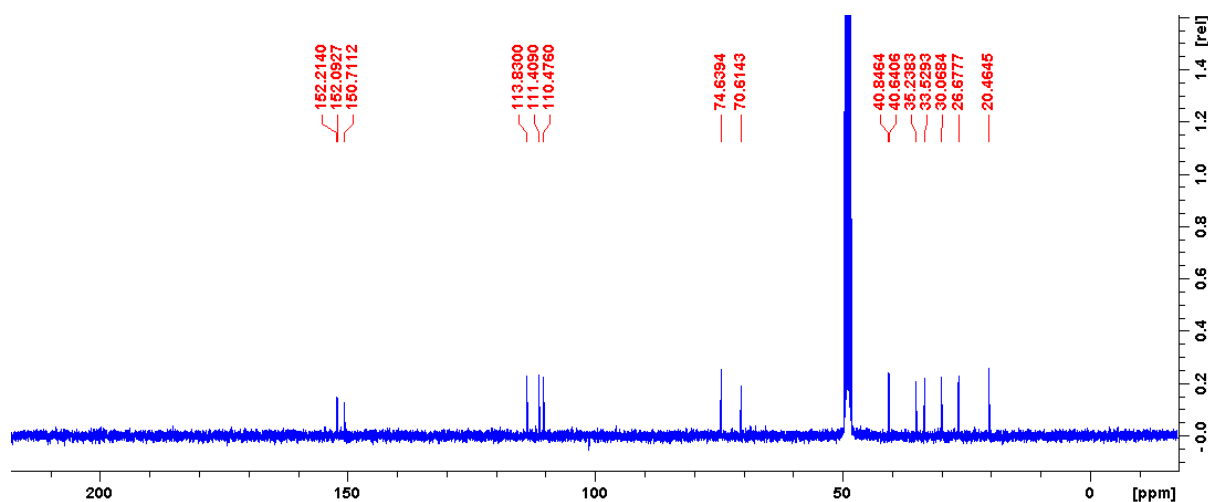


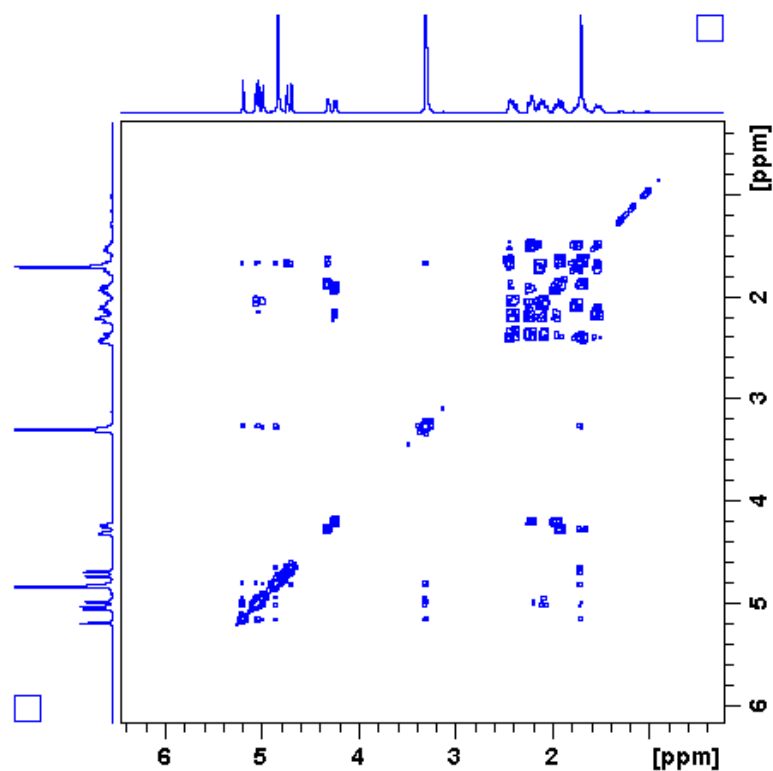
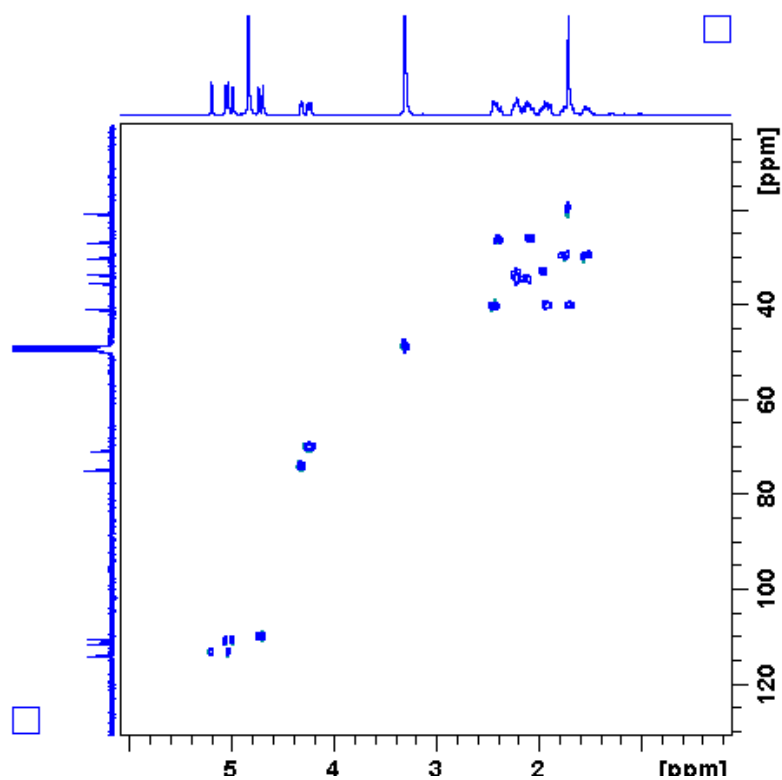
Figure S11. ^1H - ^1H COSY spectrum of Compound 2 in CD_3OD .**Figure S12.** gHSQC spectrum of Compound 2 in CD_3OD .

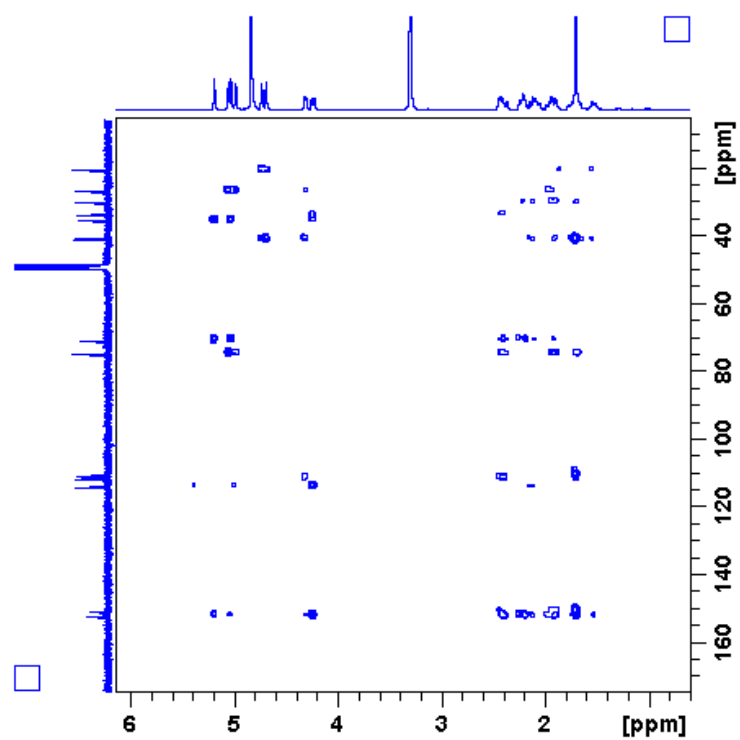
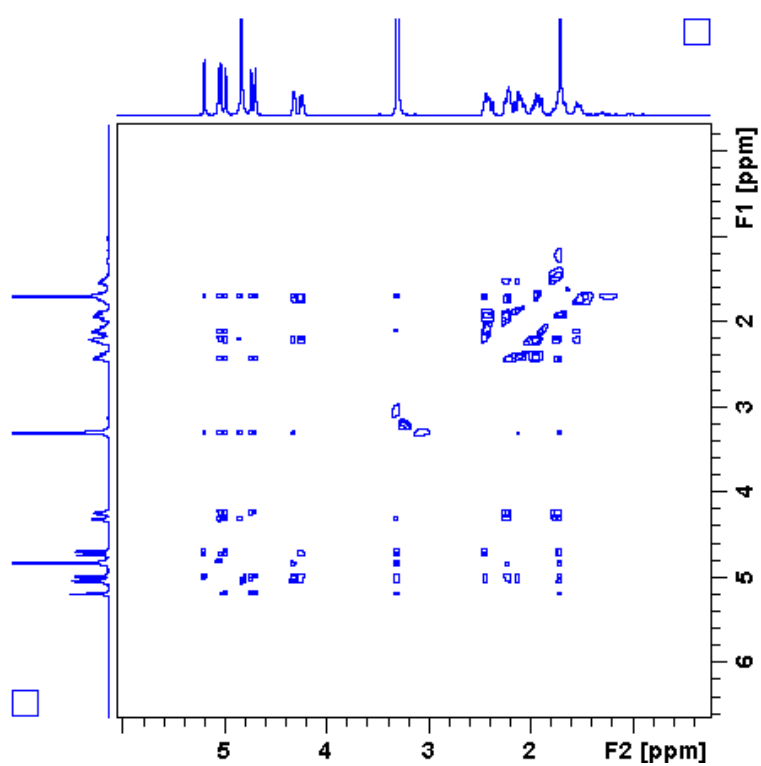
Figure S13. gHMBC spectrum of Compound 2 in CD₃OD.**Figure S14.** NOESY spectrum of Compound 2 in CD₃OD.

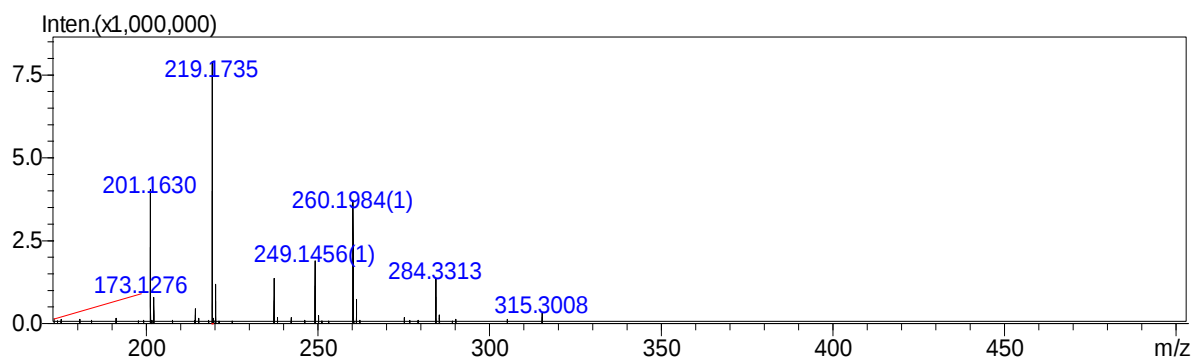
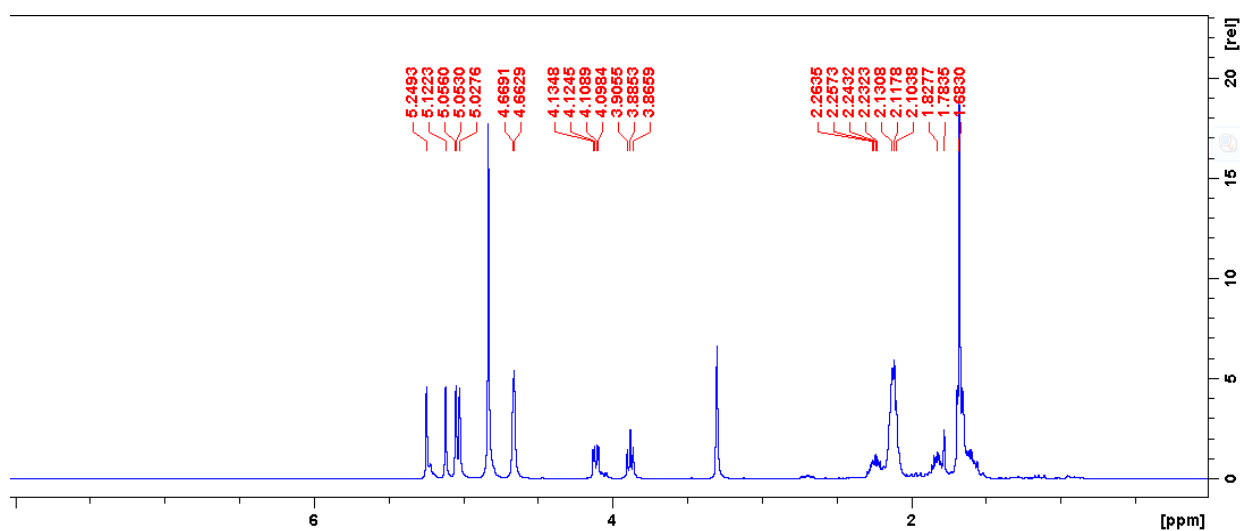
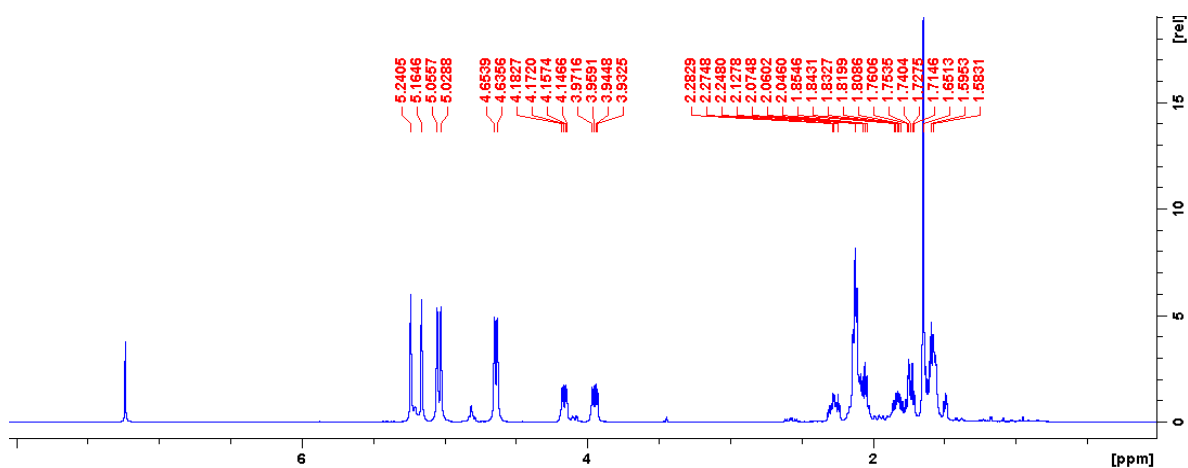
Figure S15. HRESIMS spectrum of Compound 2.**Figure S16.** ^1H -NMR spectrum of Compound 3 in CD_3OD .**Figure S17.** ^1H -NMR spectrum of Compound 3 in CDCl_3 .

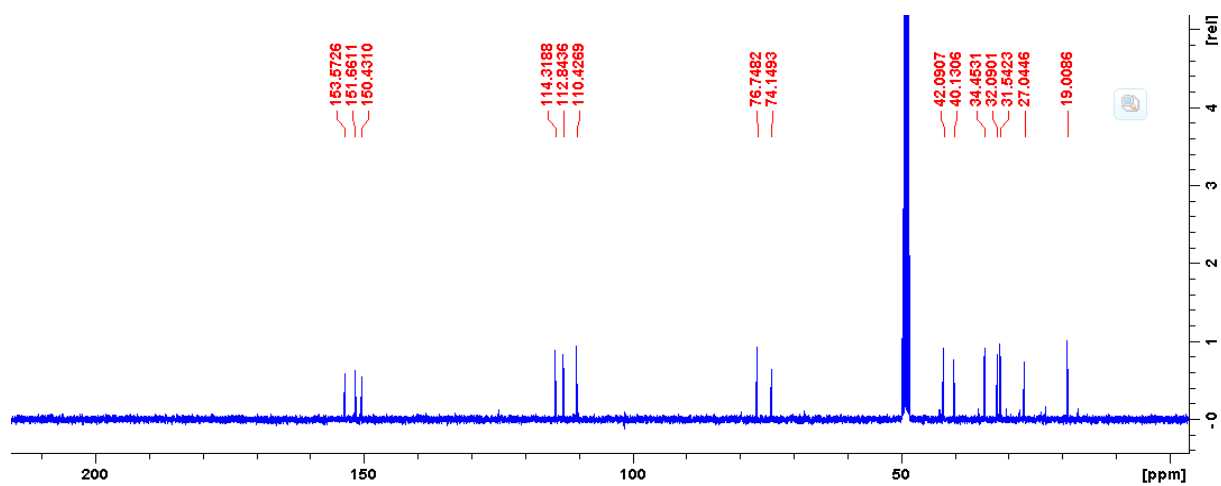
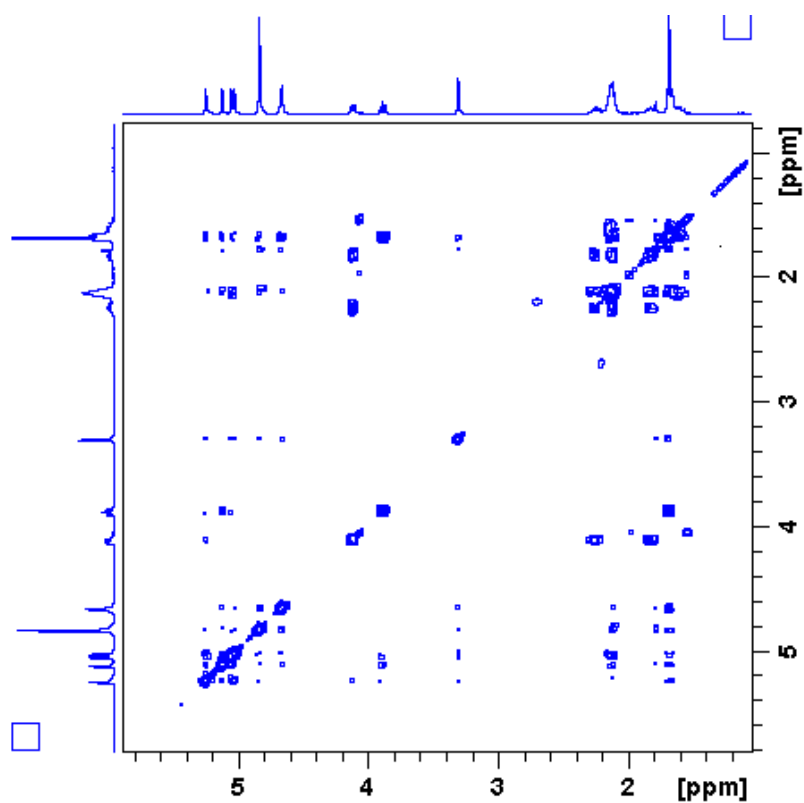
Figure S18. ^{13}C -NMR spectrum of Compound 3 in CD_3OD .**Figure S19.** ^1H - ^1H COSY spectrum of Compound 3 in CD_3OD .

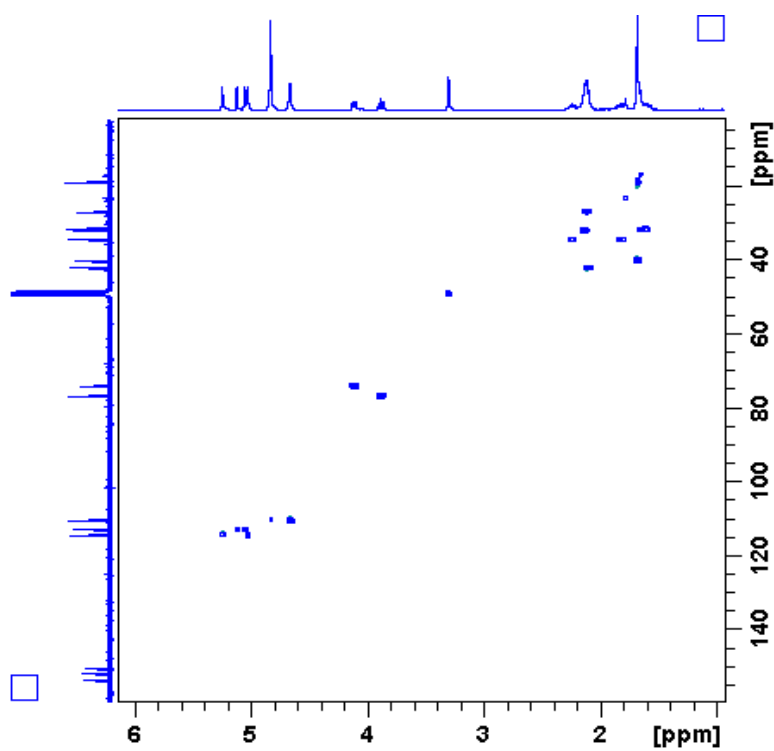
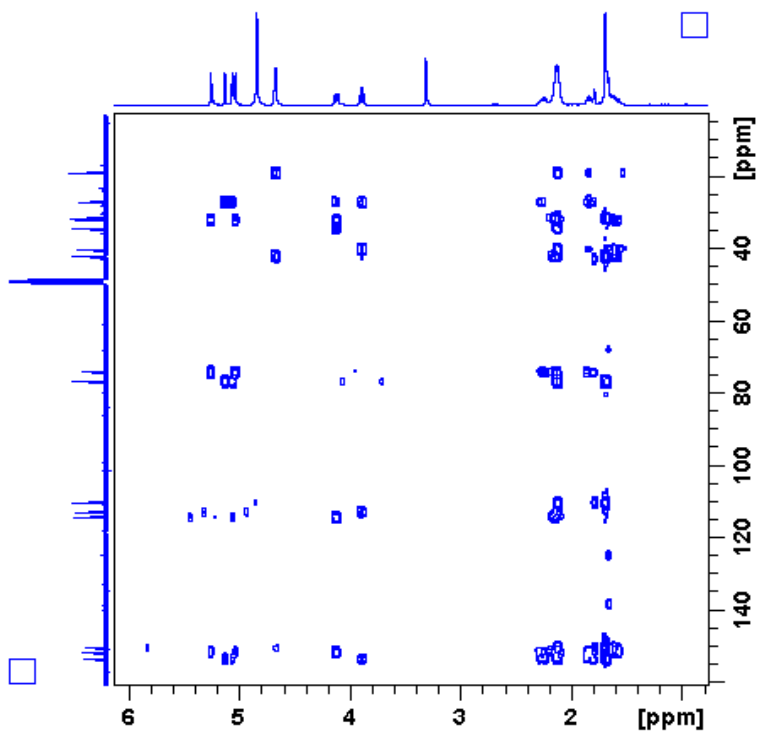
Figure S20. gHSQC spectrum of Compound 3 in CD₃OD.**Figure S21.** gHMBC spectrum of Compound 3 in CD₃OD.

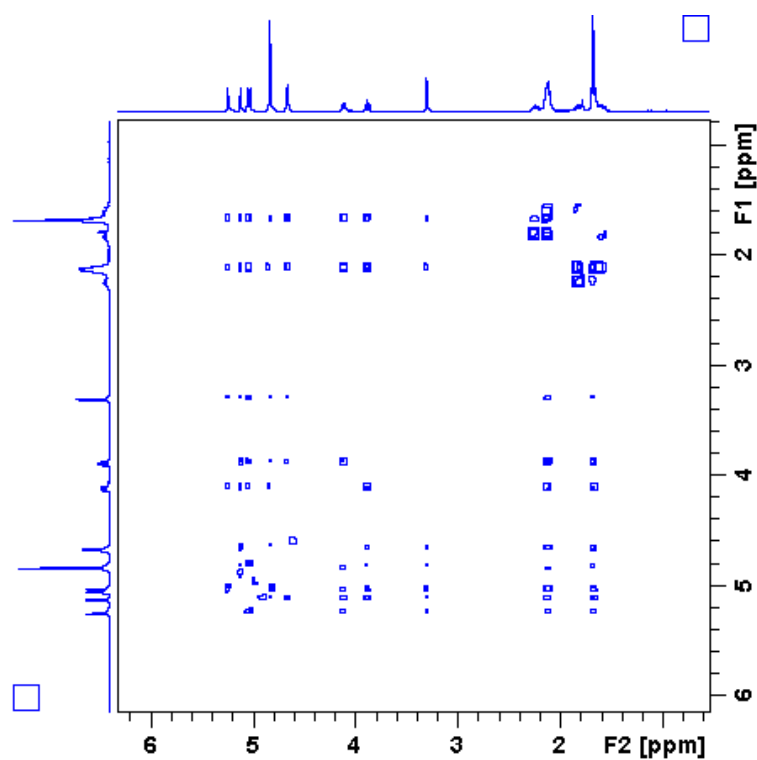
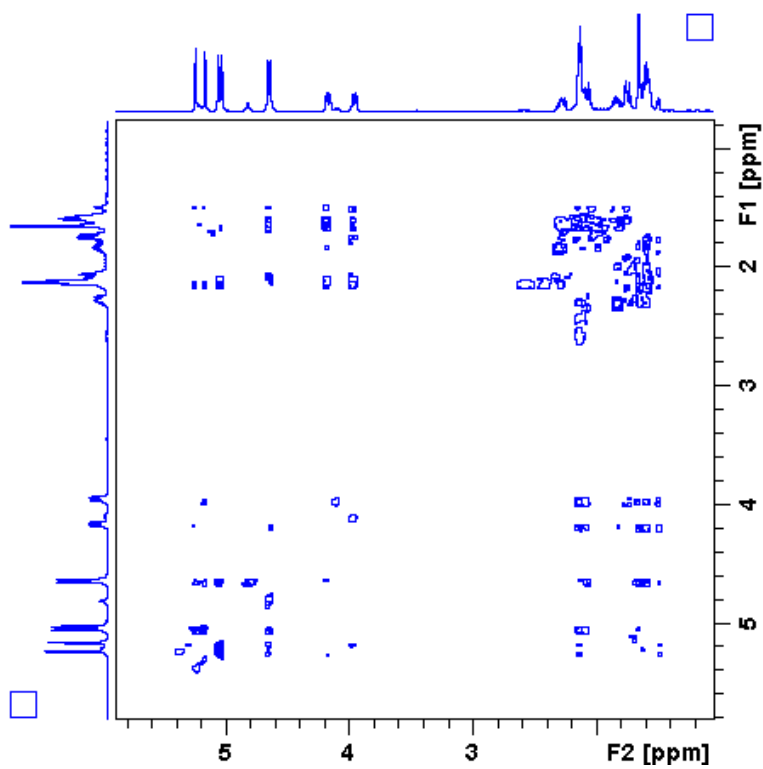
Figure S22. NOESY spectrum of Compound 3 in CD₃OD.**Figure S23.** NOESY spectrum of Compound 3 in CDCl₃.

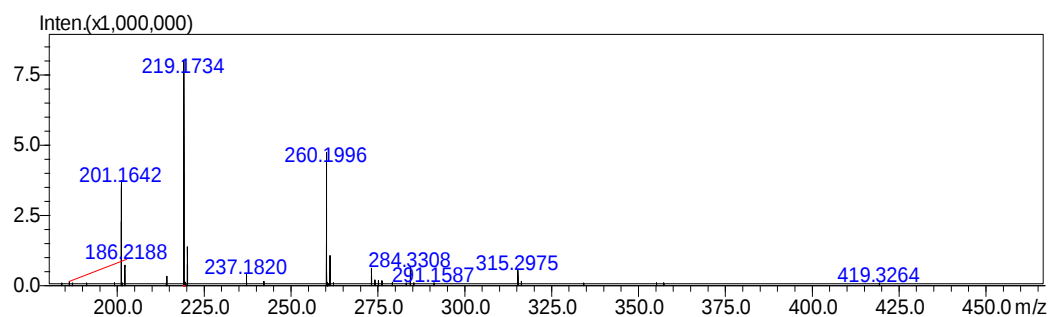
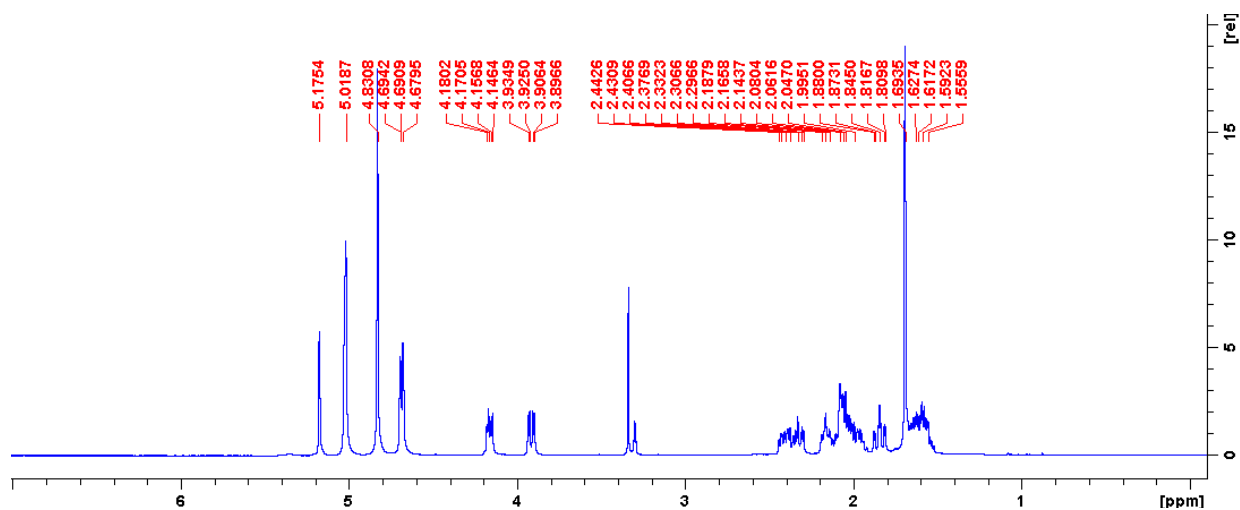
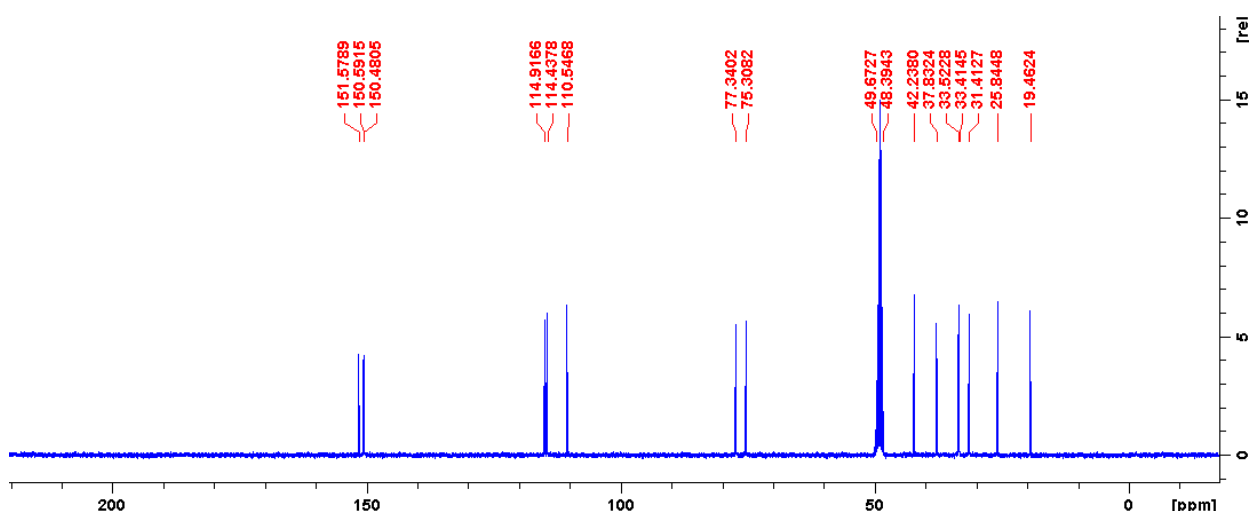
Figure S24. HRESIMS spectrum of Compound 3.**Figure S25.** ^1H -NMR spectrum of Compound 4 in CD_3OD .**Figure S26.** ^{13}C -NMR spectrum of Compound 4 in CD_3OD .

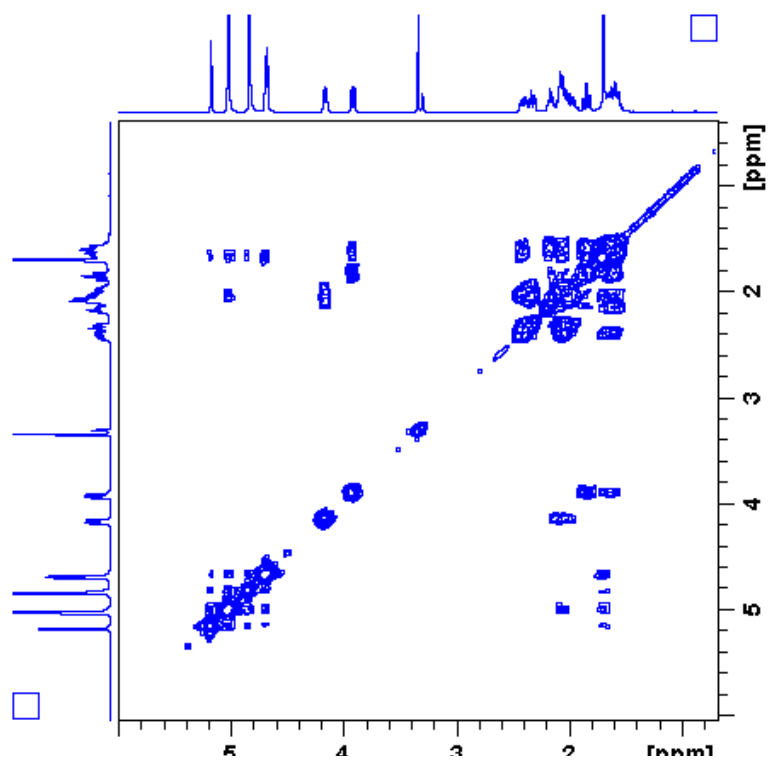
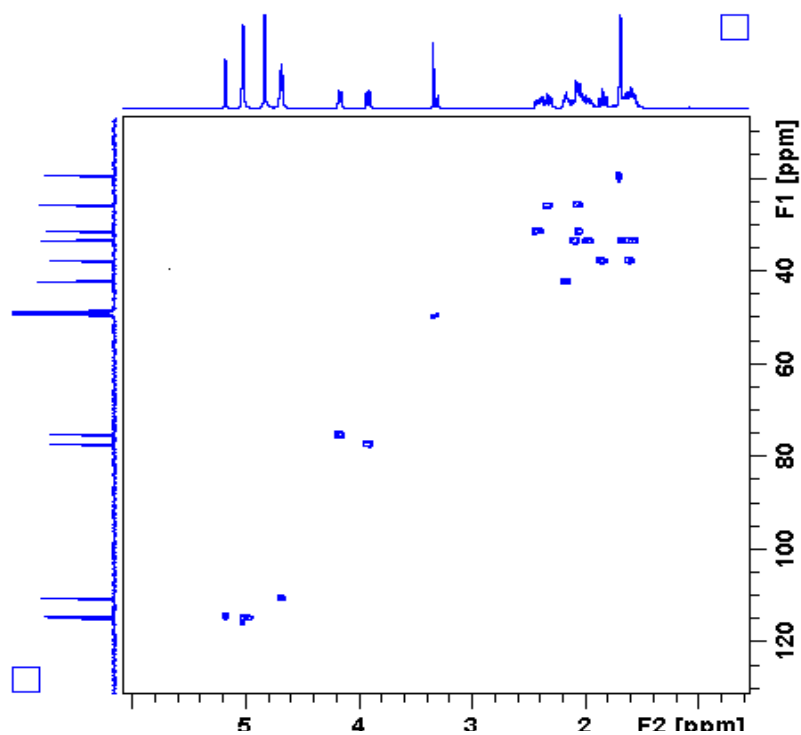
Figure S27. ^1H - ^1H COSY spectrum of Compound 4 in CD_3OD .**Figure S28.** gHSQC spectrum of Compound 4 in CD_3OD .

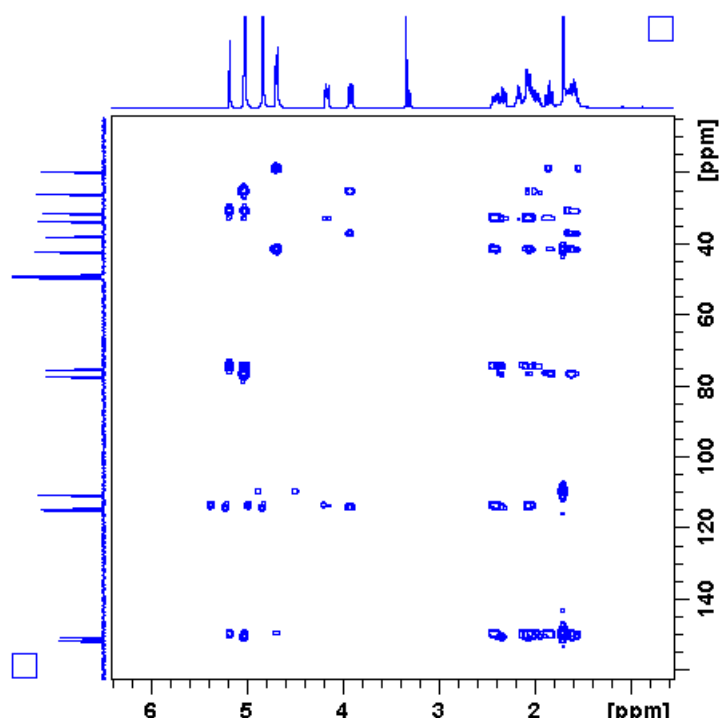
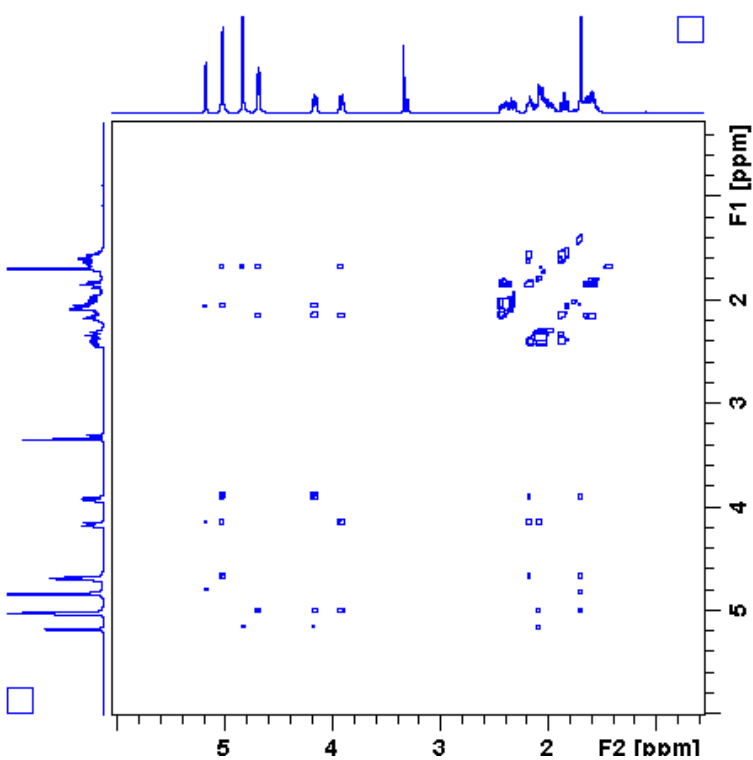
Figure S29. gHMBC spectrum of Compound 4 in CD₃OD.**Figure S30.** NOESY spectrum of Compound 4 in CD₃OD.

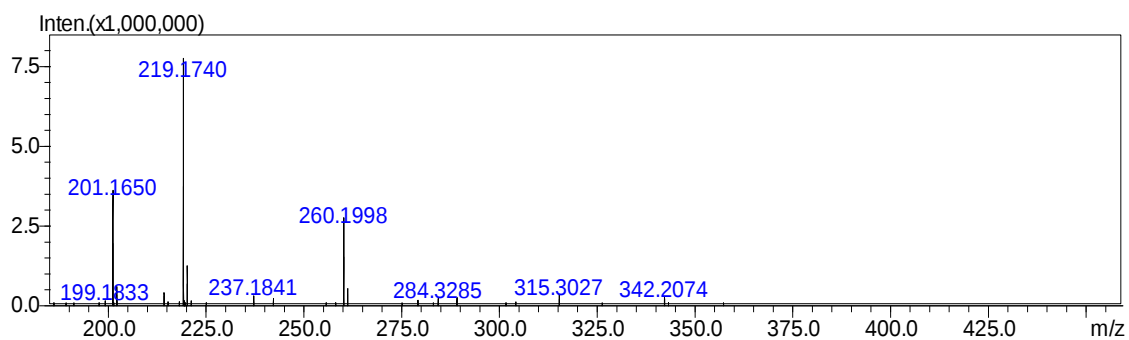
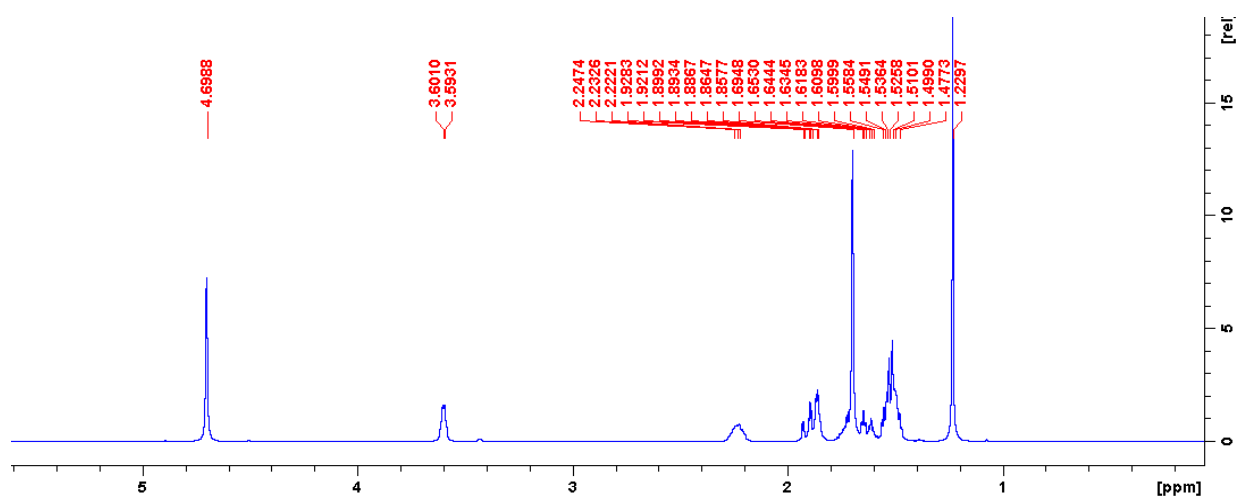
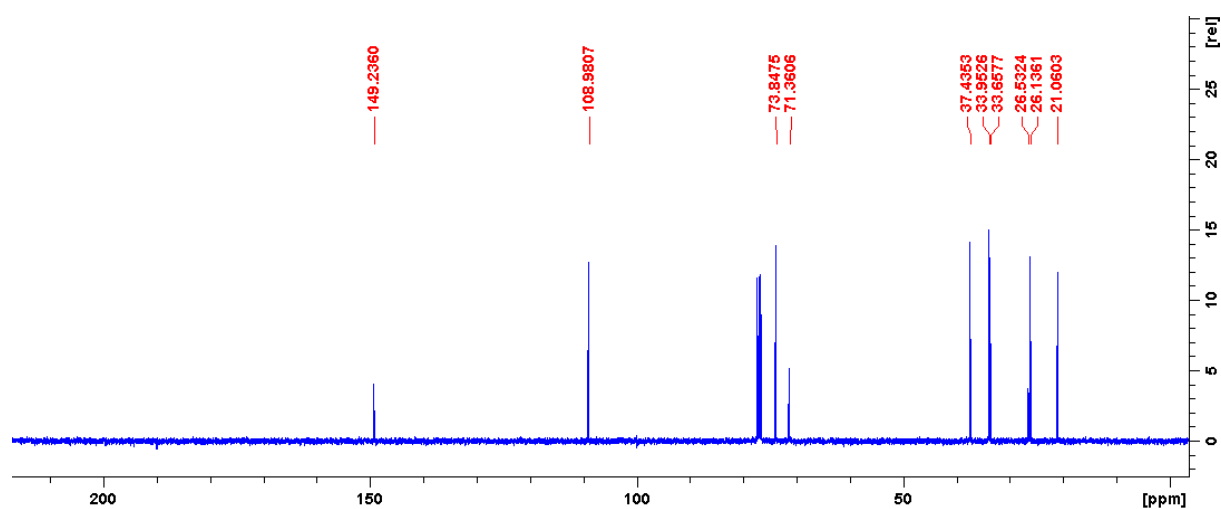
Figure S31. HRESIMS spectrum of Compound 4.**Figure S32.** ^1H -NMR spectrum of Compound 5 in CDCl_3 .**Figure S33.** ^{13}C -NMR spectrum of Compound 5 in CDCl_3 .

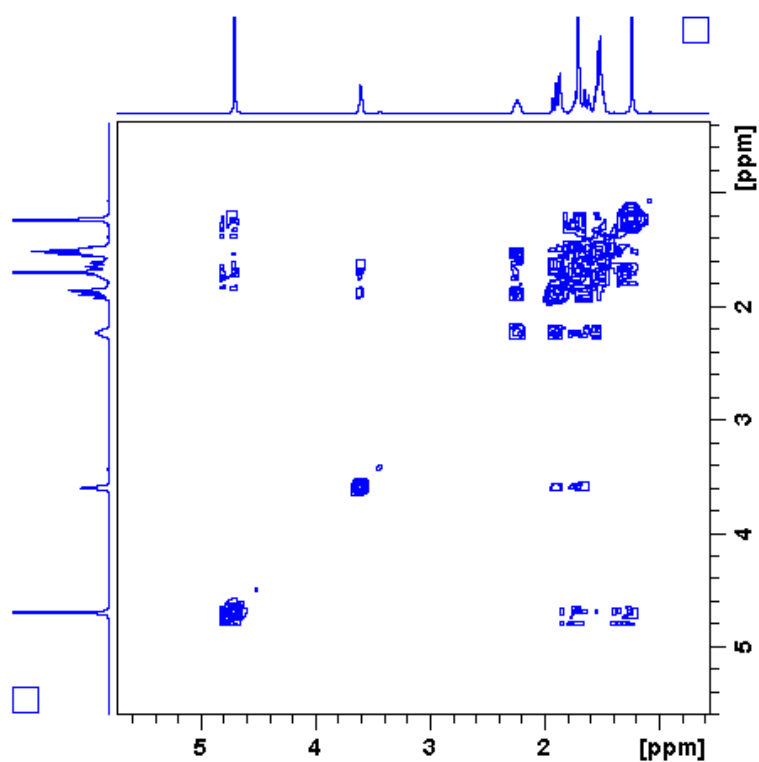
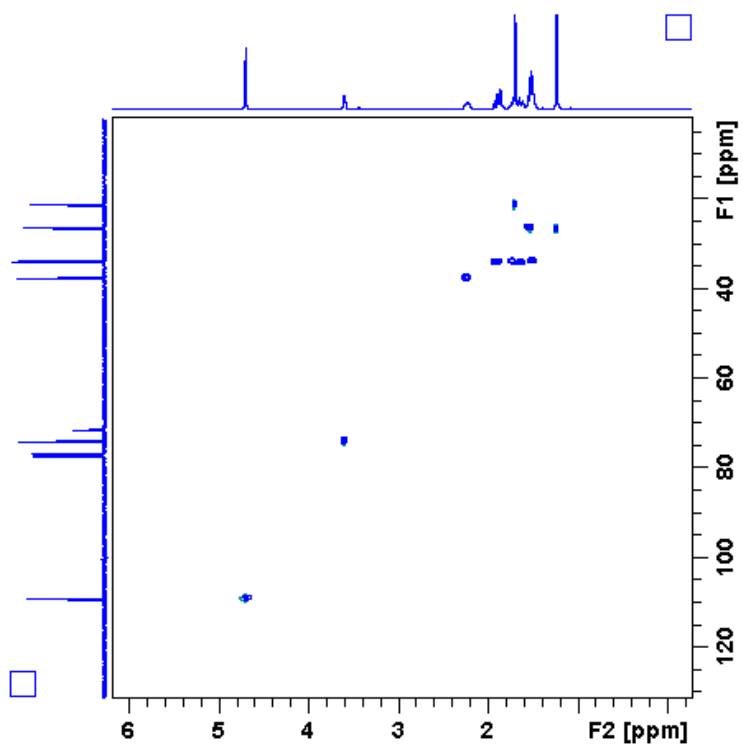
Figure S34. ^1H - ^1H COSY spectrum of Compound 5 in CDCl_3 .**Figure S35.** gHSQC spectrum of Compound 5 in CDCl_3 .

Figure S38. HRESIMS spectrum of Compound 5.