

Supplementary Materials

Bostrychines A-F, Six Novel Mycosporine-Like Amino-Acids and a Novel Betaine from the Red Alga *Bostrychia scorpioides*

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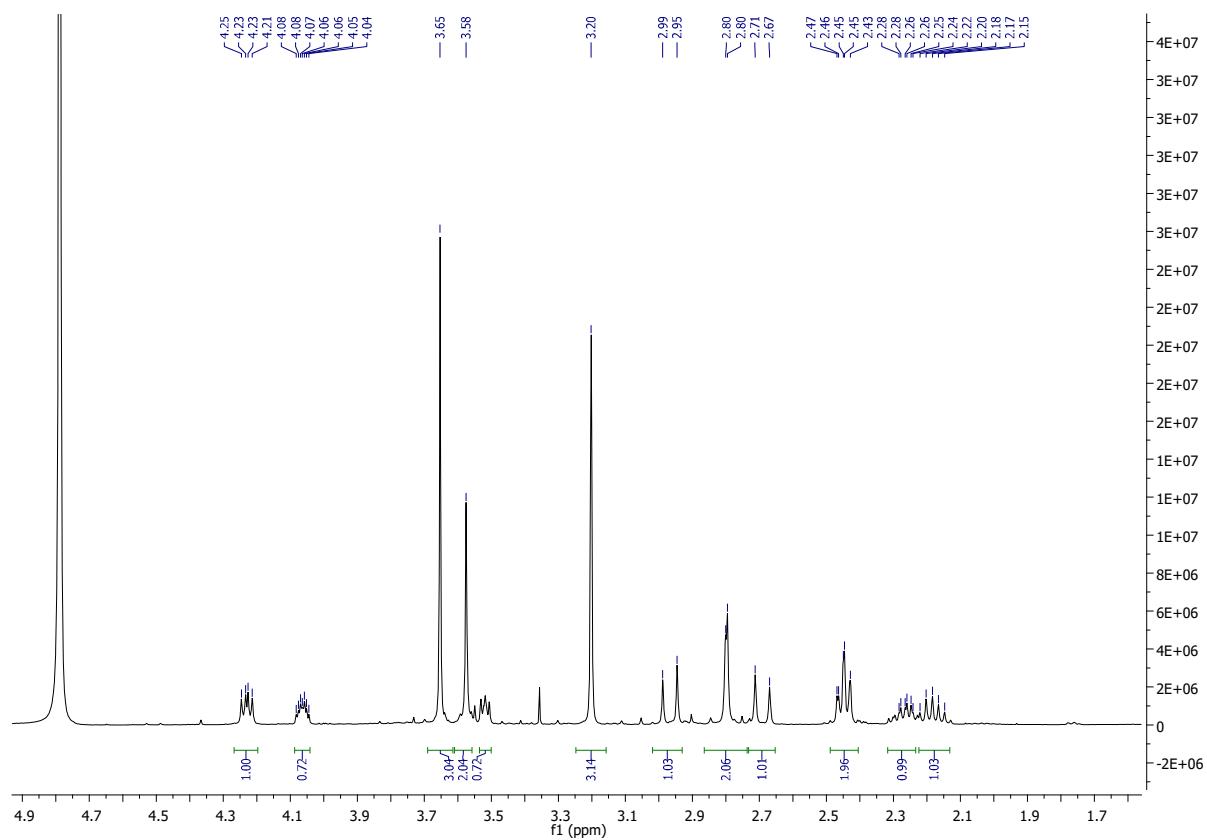
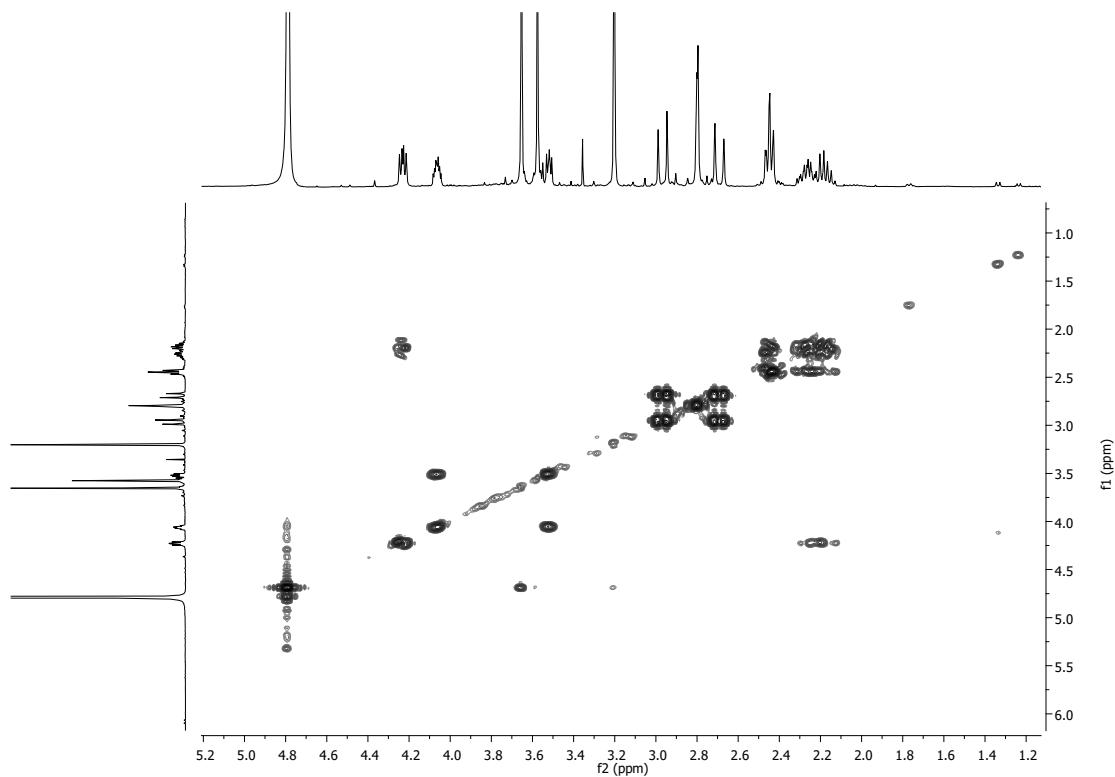
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Table S1 Absorption maxima and molecular masses of unidentified compounds in the methanolic extract of *B.scorpioides*

Compound	λ_{max} (nm)	Mass (Da)
i	331	359
ii	331	360
iii	308	316
iv	332	373
v	360	355
vi	357	357

Figure S1. ¹H NMR spectrum of compound **1** in D_2O Figure S2. COSY spectrum of compound **1** in D_2O

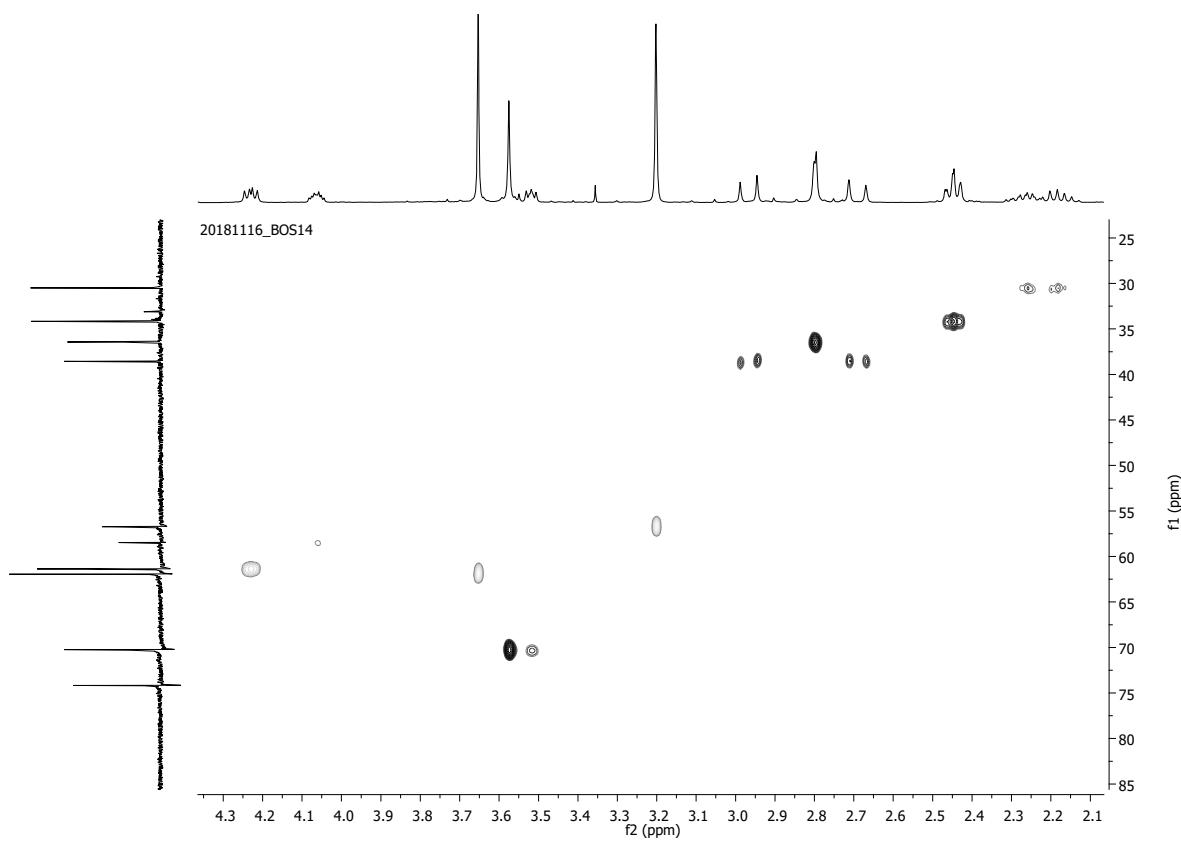


Figure S3. HSQC spectrum of compound **1** in D_2O

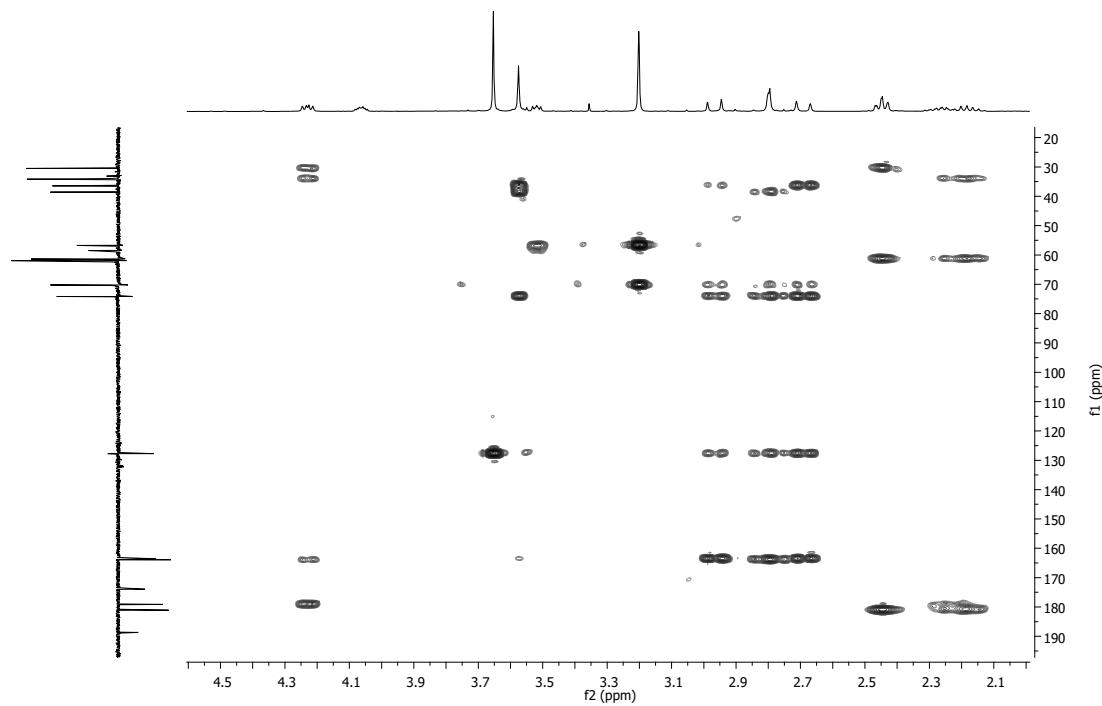
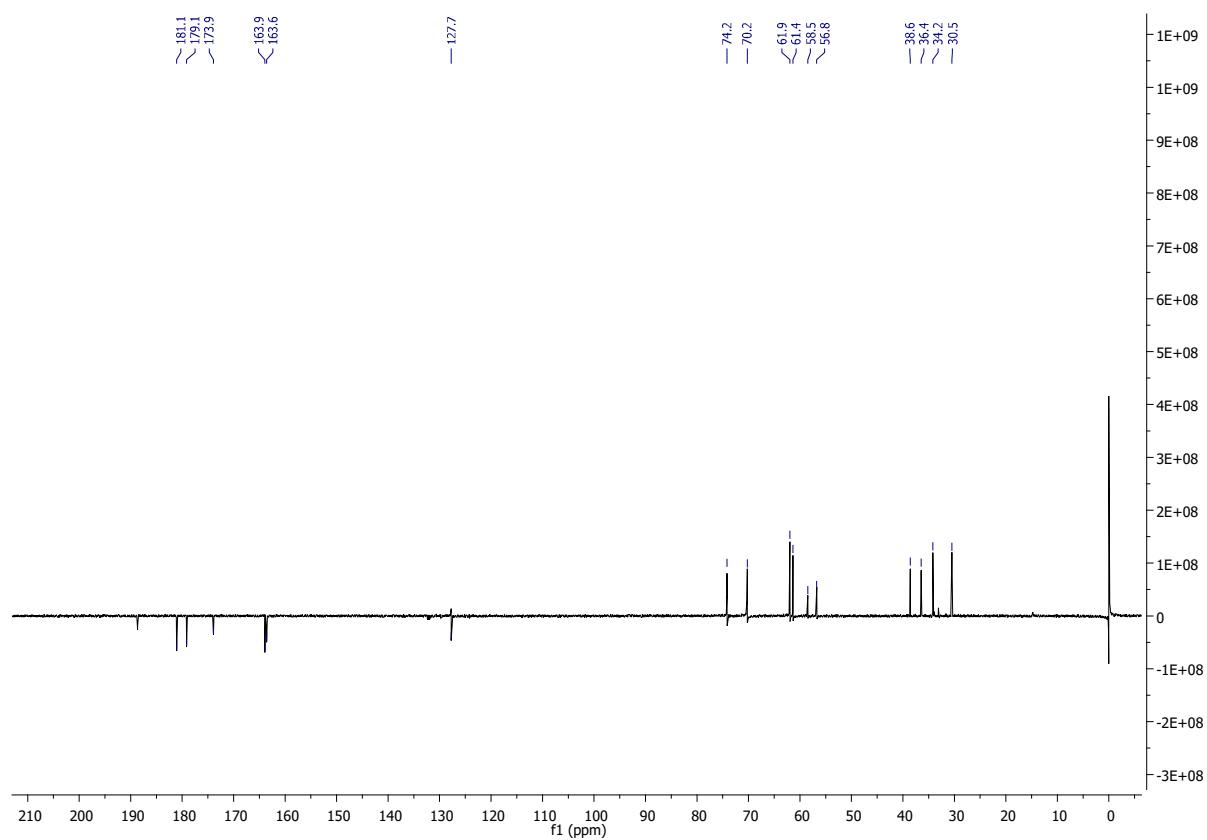
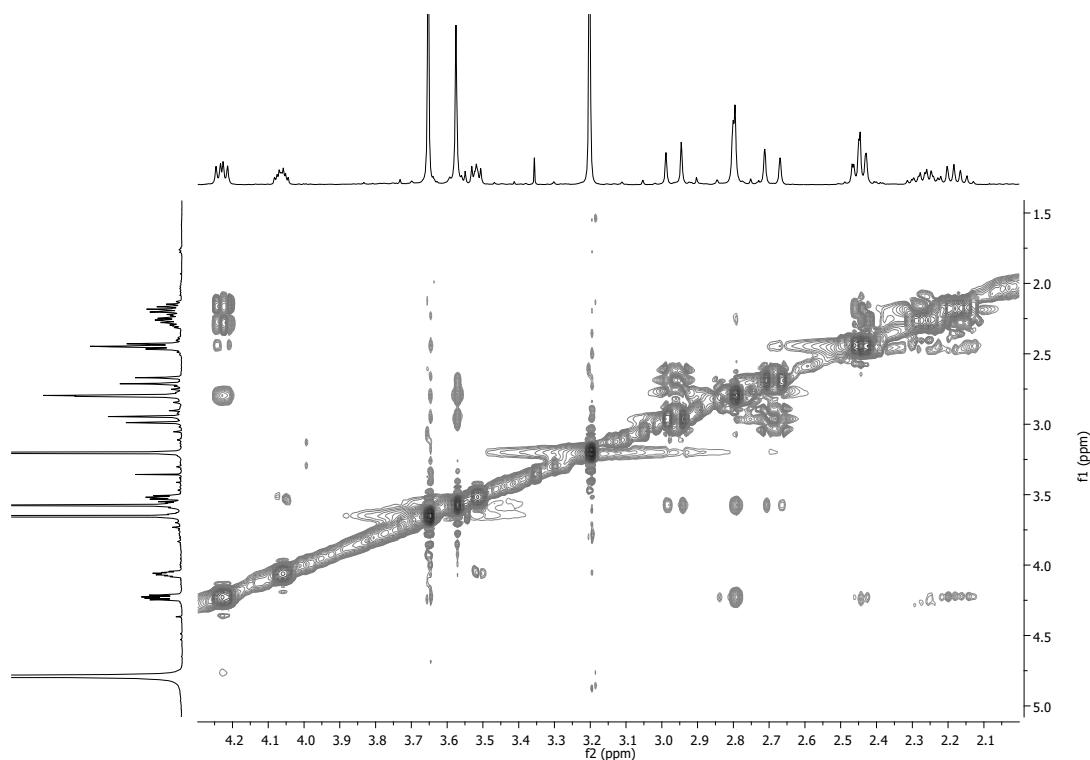


Figure S4. HMBC spectrum of compound **1** in D_2O

Figure S5. ¹³C NMR spectrum of compound **1** in D_2O Figure S6. NOESY spectrum of compound **1** in D_2O

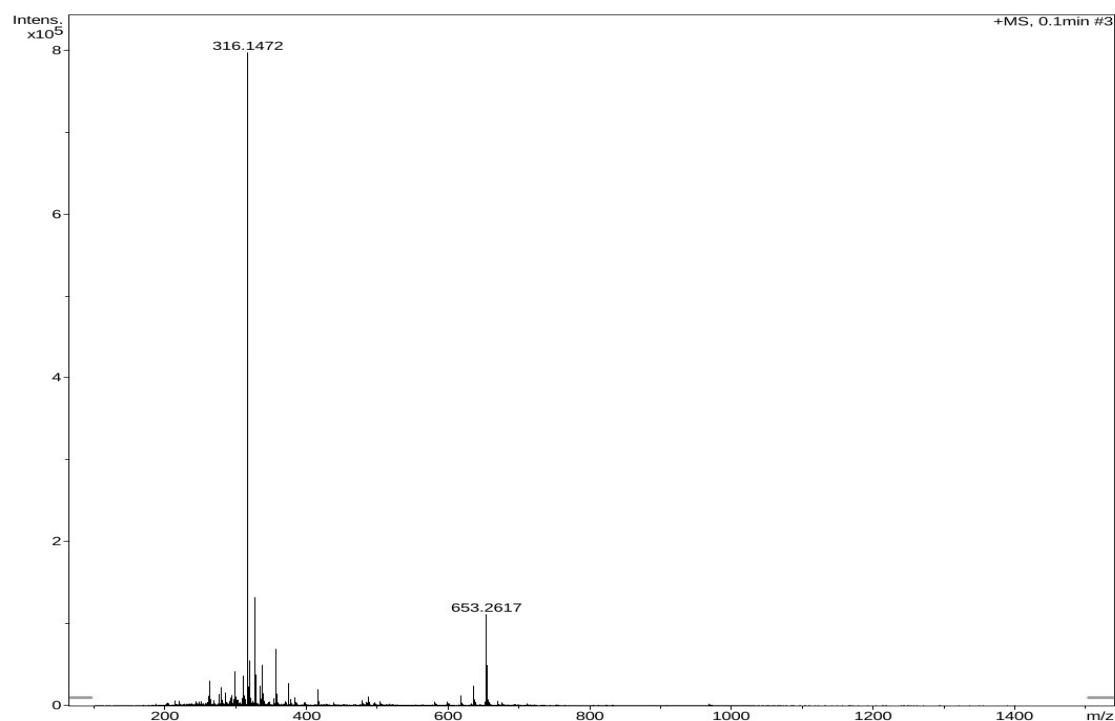


Figure S7. High-resolution mass spectrum of compound 1



Figure S8. LC-MS of Marfey's analysis of compound 1

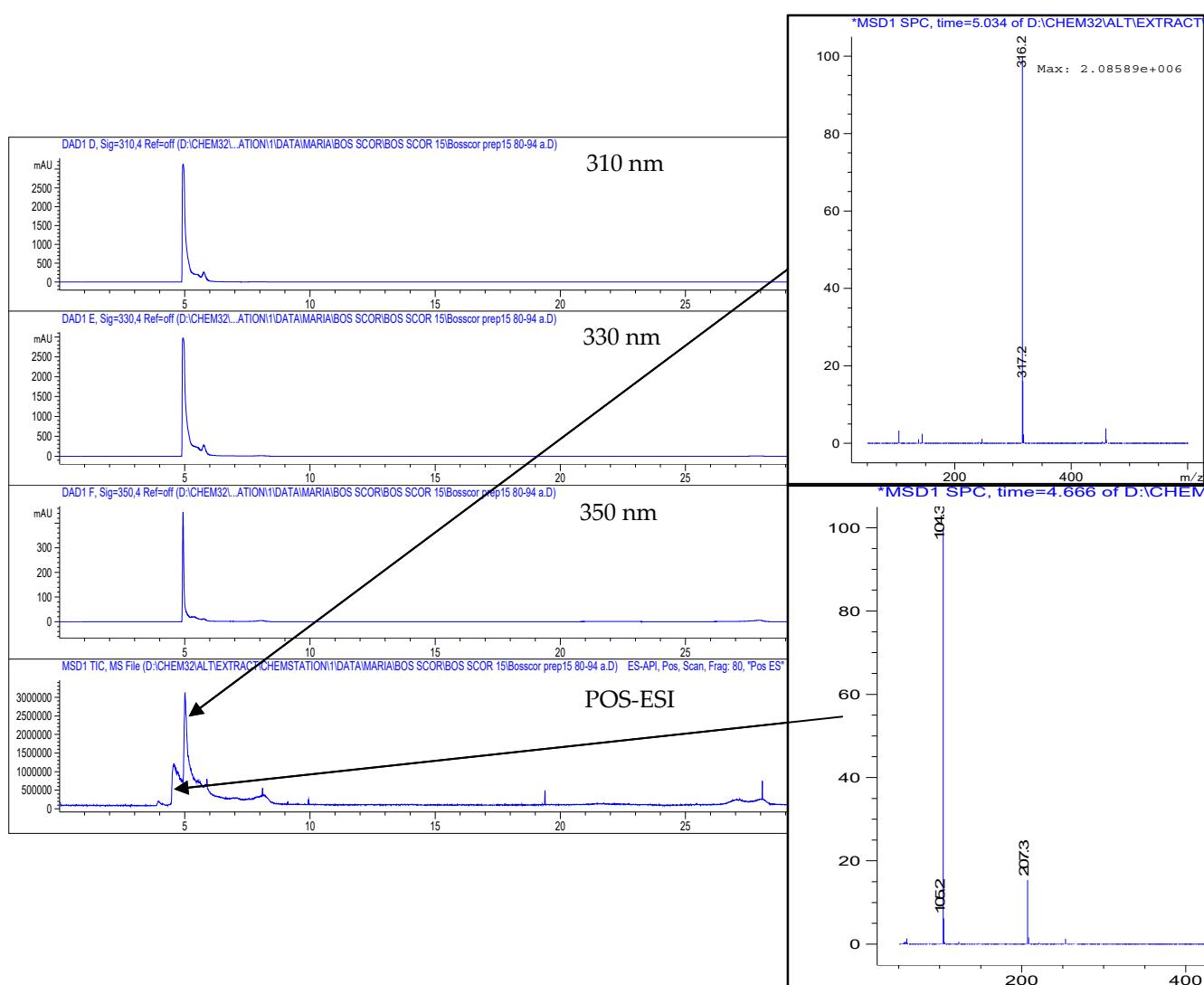
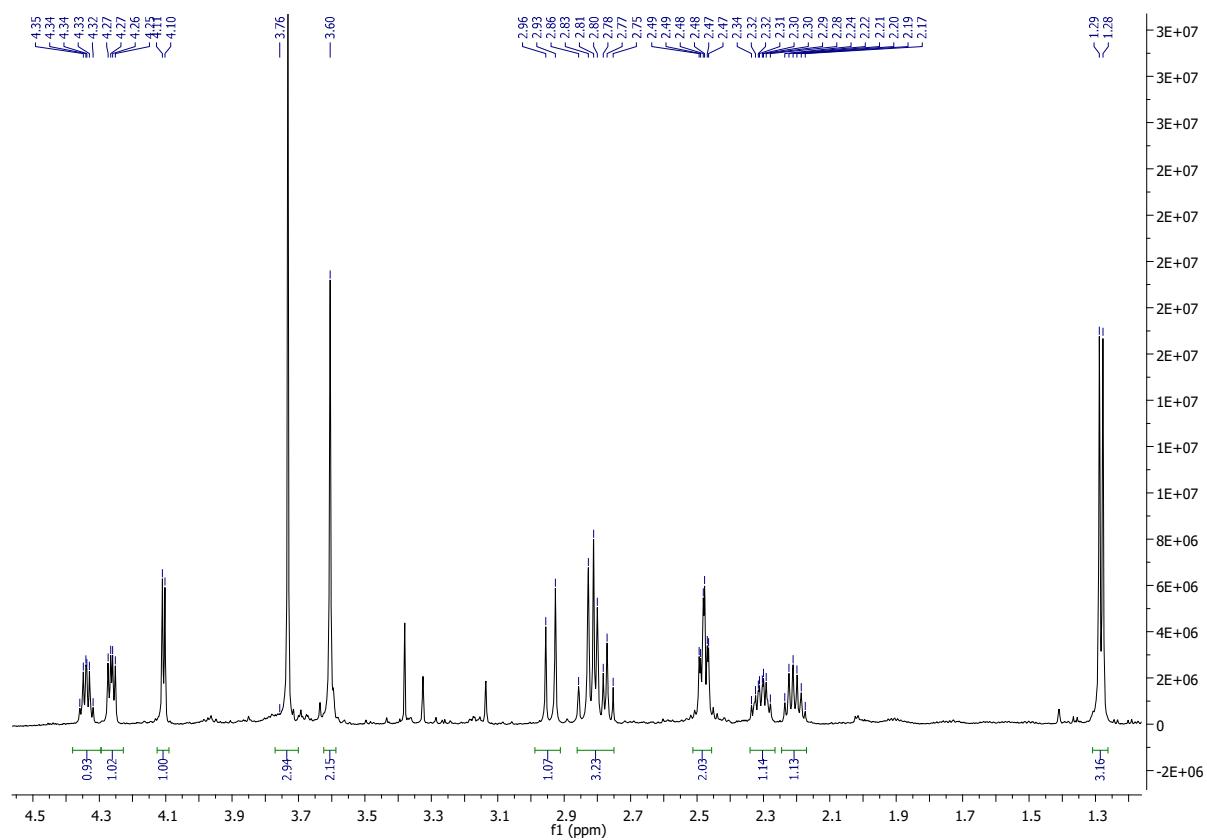
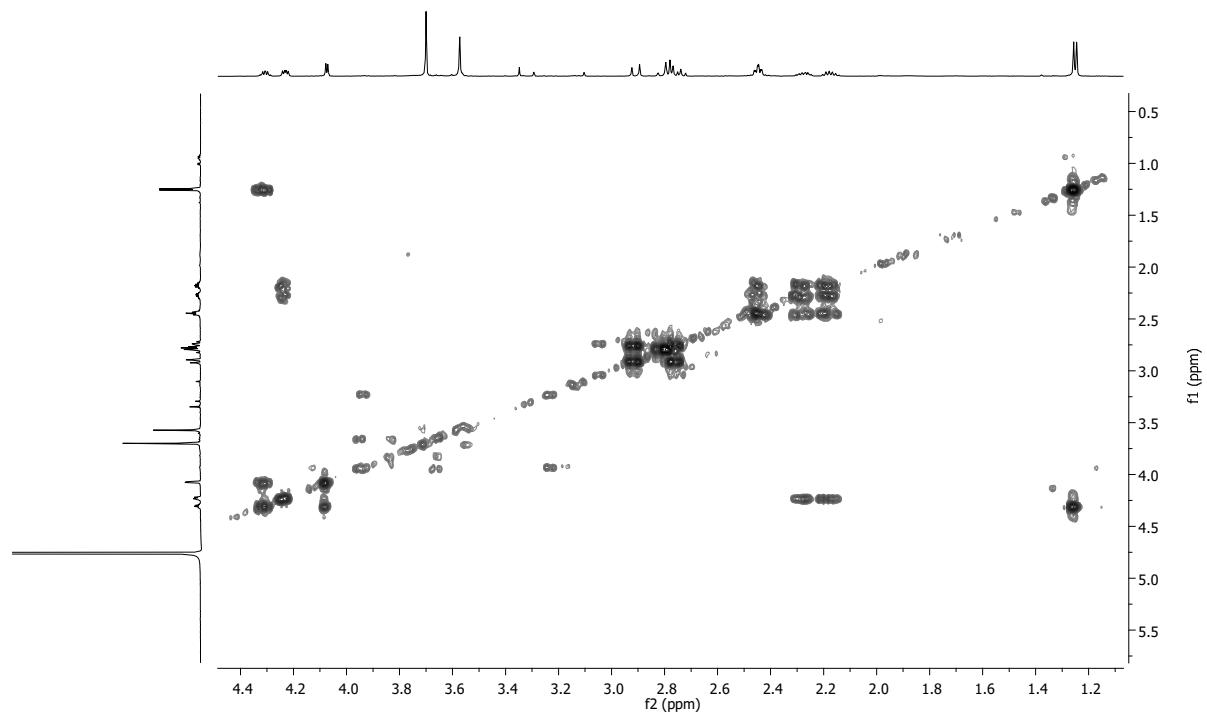


Figure S9. LC-MS of the compound 1

Figure S10. ¹H NMR spectrum of compound 2 in ²D_OFigure S11. COSY spectrum of compound 2 in ²D_O

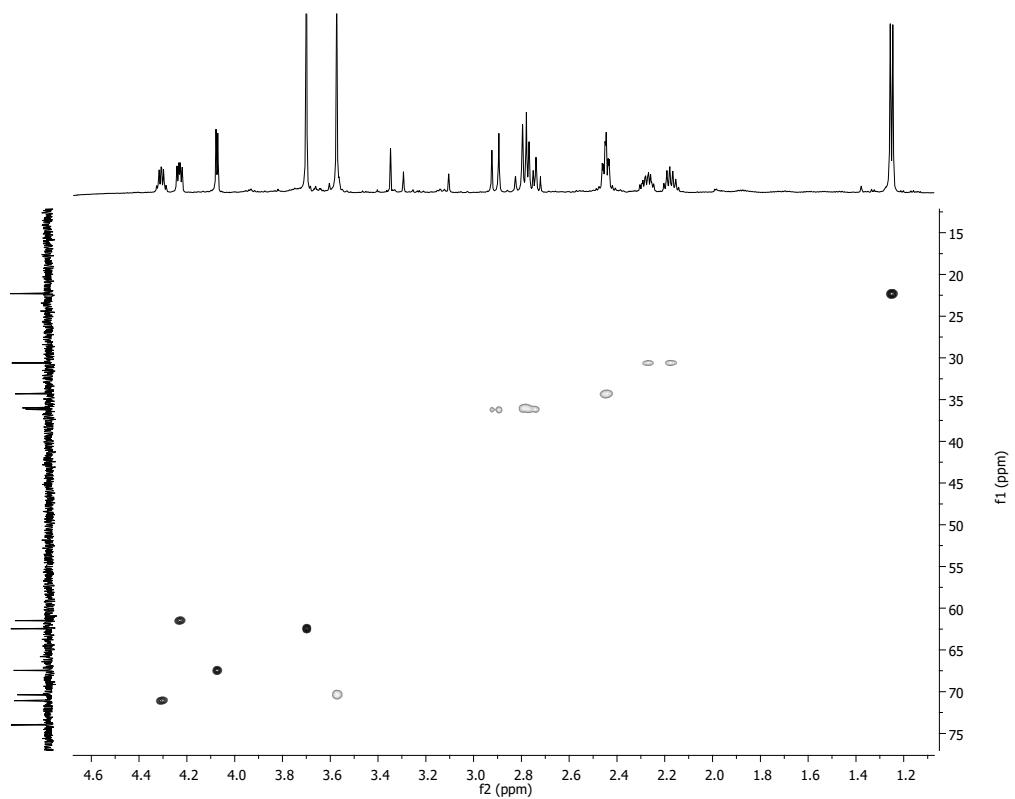


Figure S12. HSQC spectrum of compound **2** in D₂O

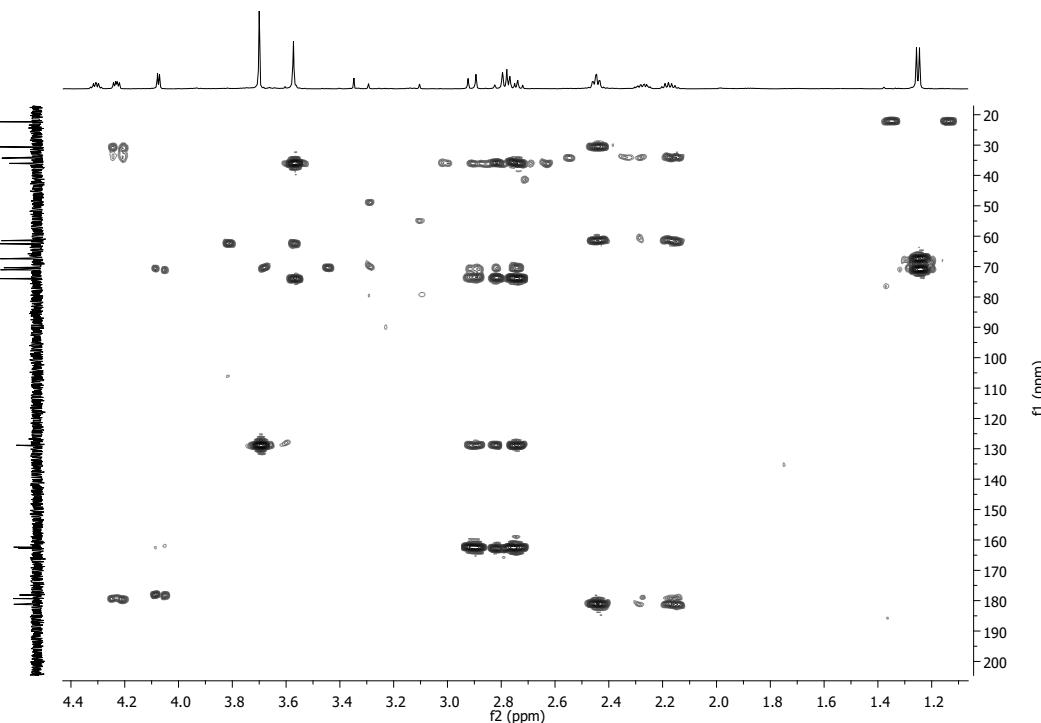


Figure S13. HMBC spectrum of compound **2** in D₂O

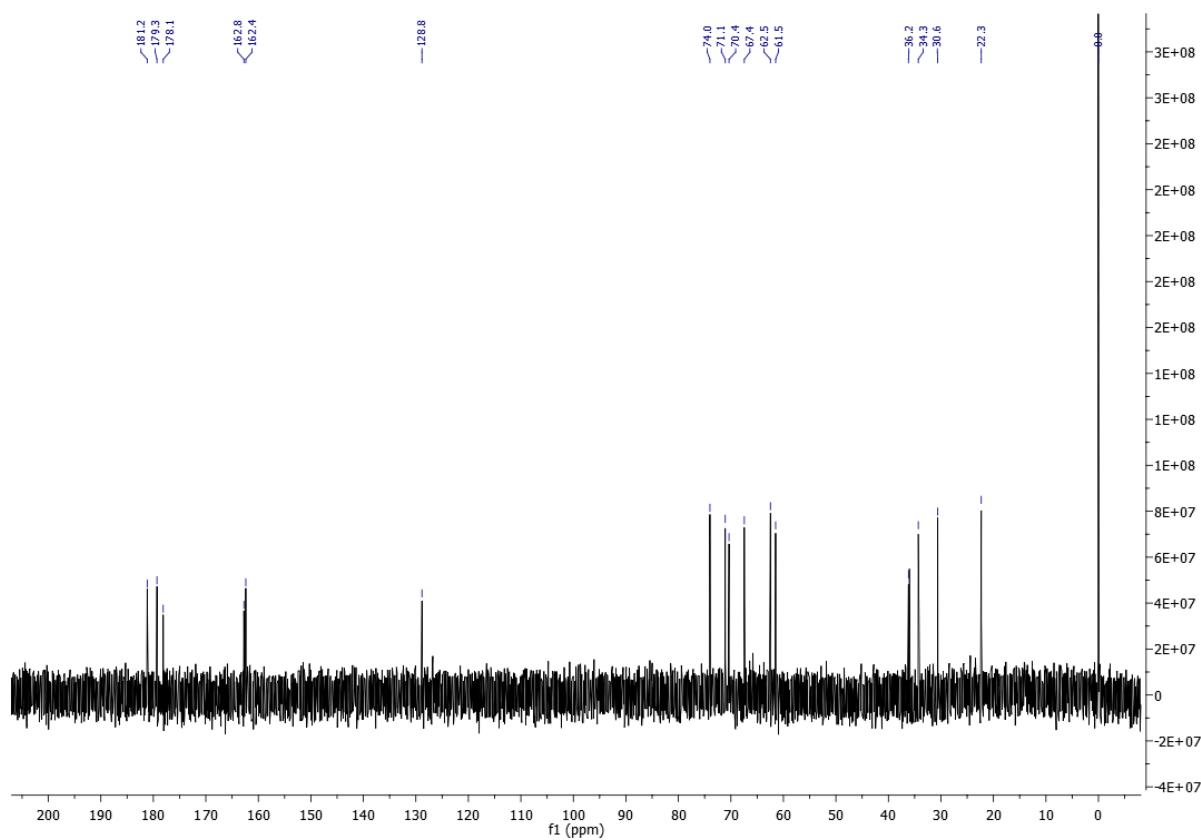


Figure S14. ¹³C NMR spectrum of compound 2 in D₂O

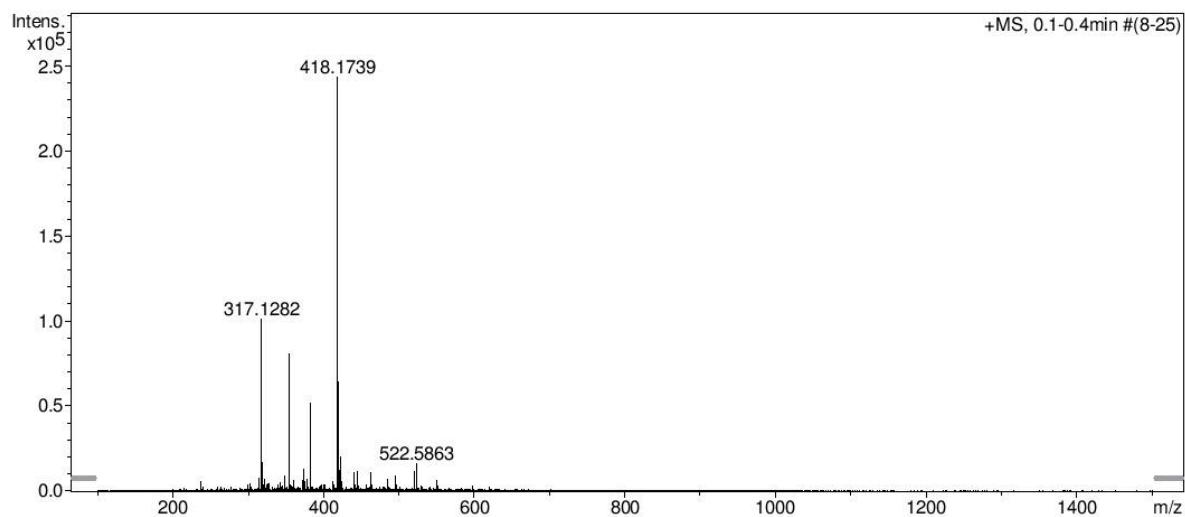


Figure S15. High-resolution mass spectrum of compound 2

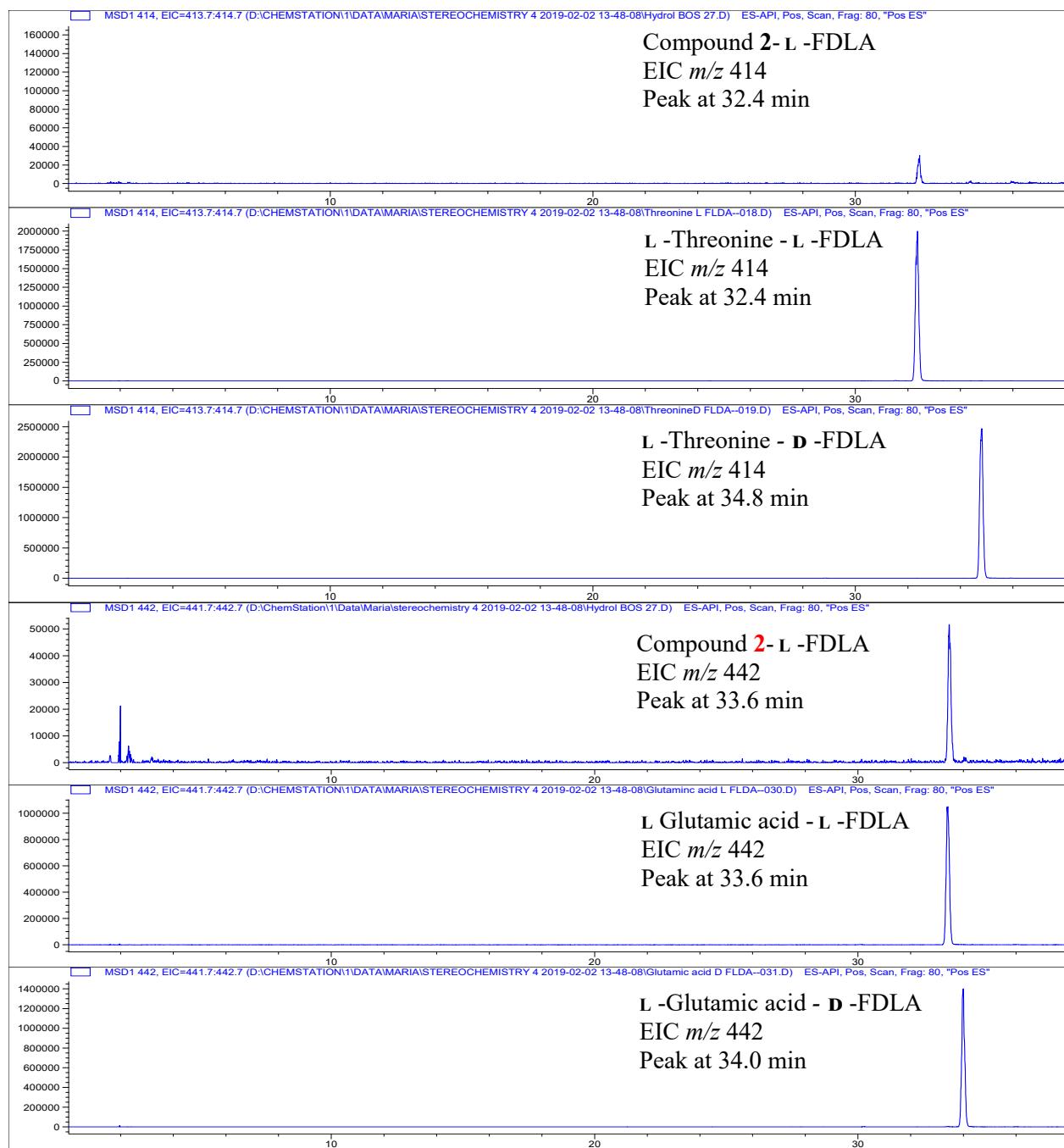
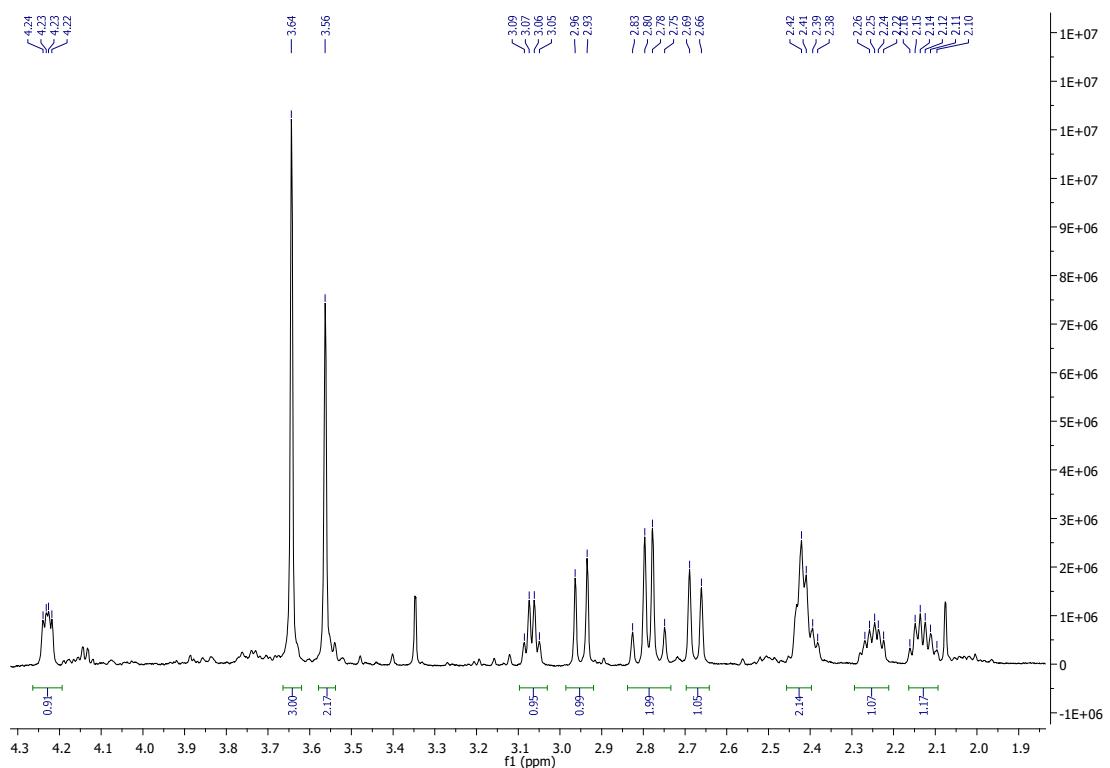
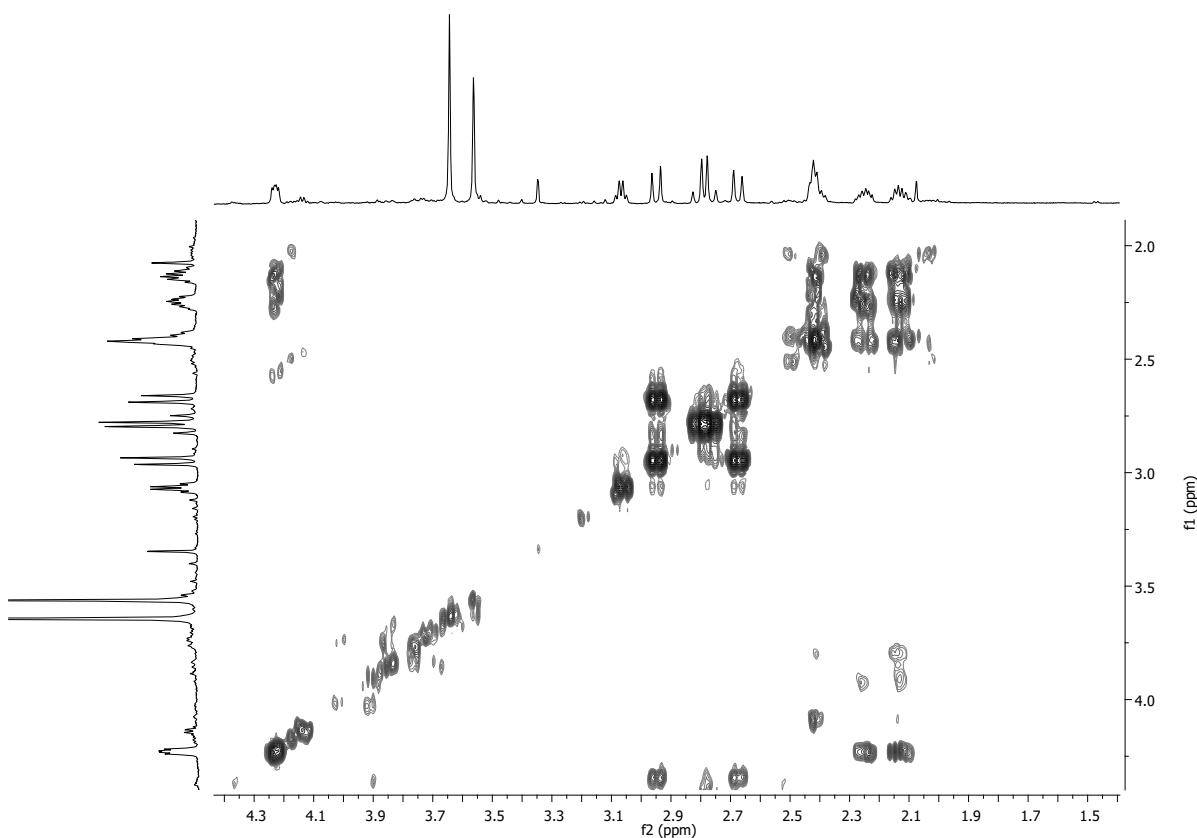


Figure S16. LC-MS of Marfey's analysis of compound 2

Figure S17. ¹H NMR spectrum of compound 3 in ²D_OFigure S18. COSY spectrum of compound 3 in ²D_O

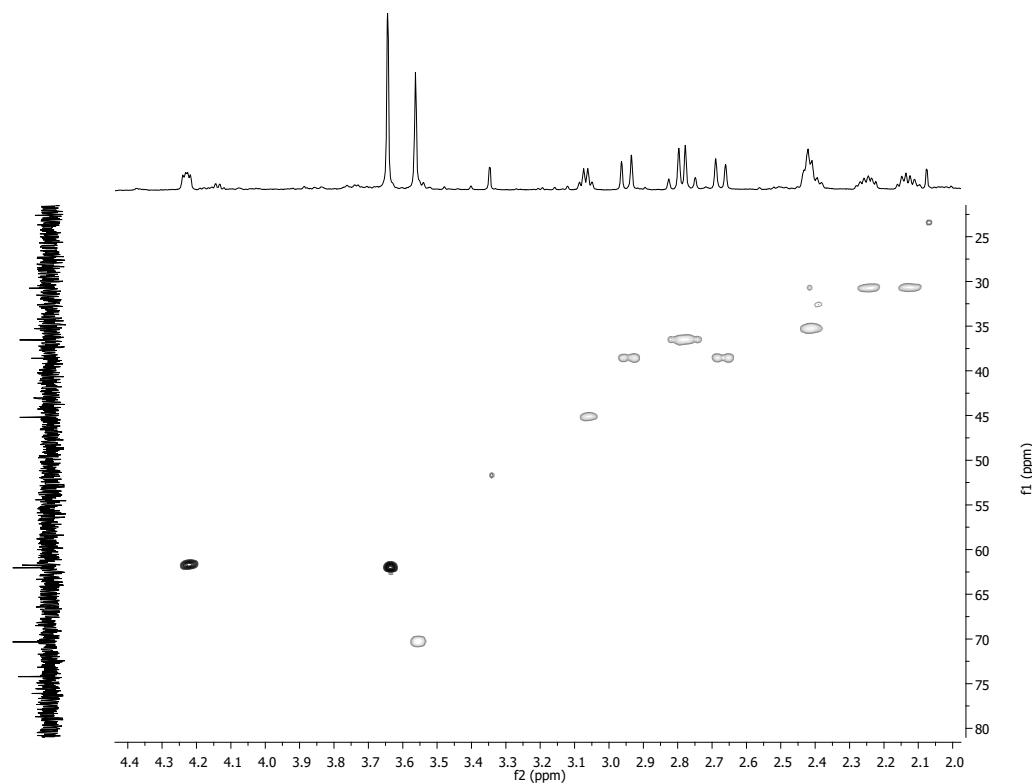


Figure S19. HSQC spectrum of compound **3** in D_2O

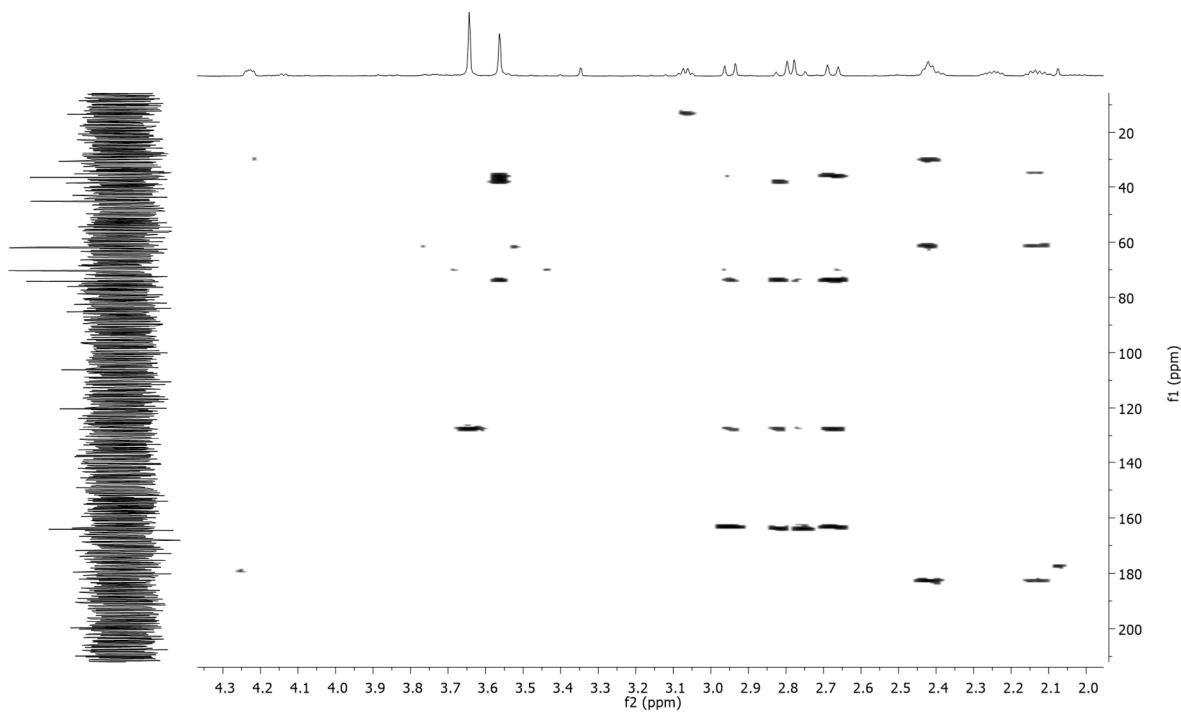


Figure S20. HMBC spectrum of compound **3** in D_2O

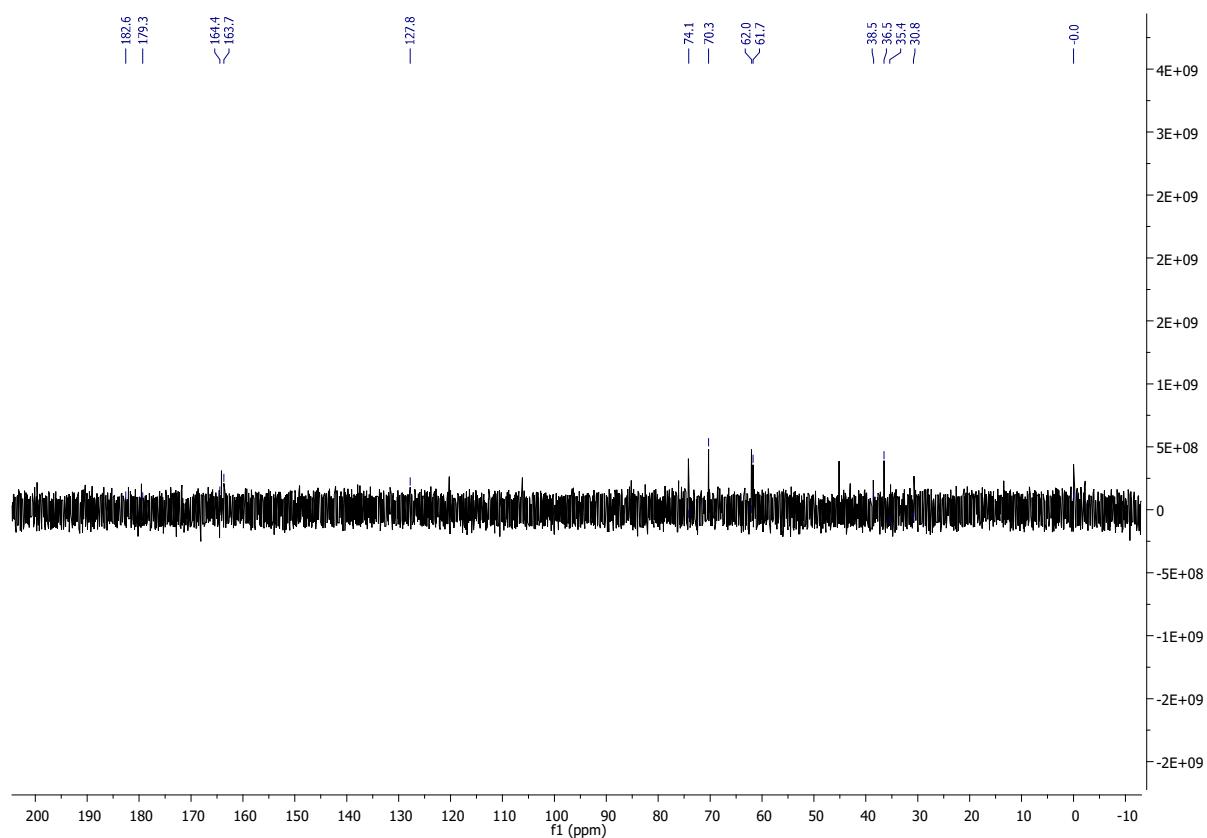
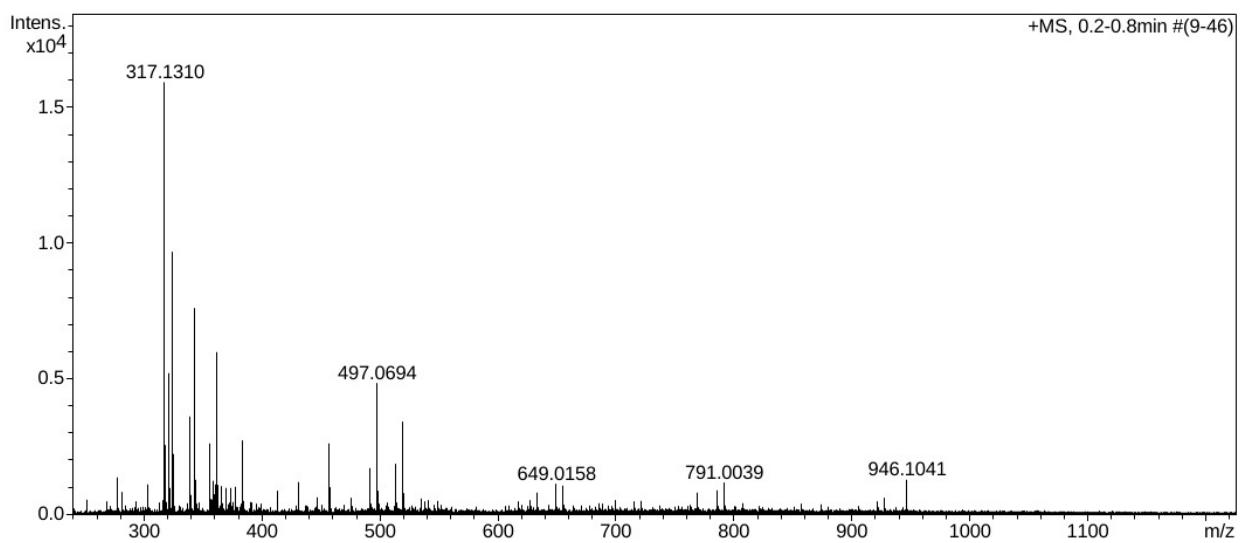
Figure S21. ¹³C NMR spectrum of compound 3 in D₂O

Figure S22. High-resolution mass spectrum of compound 3

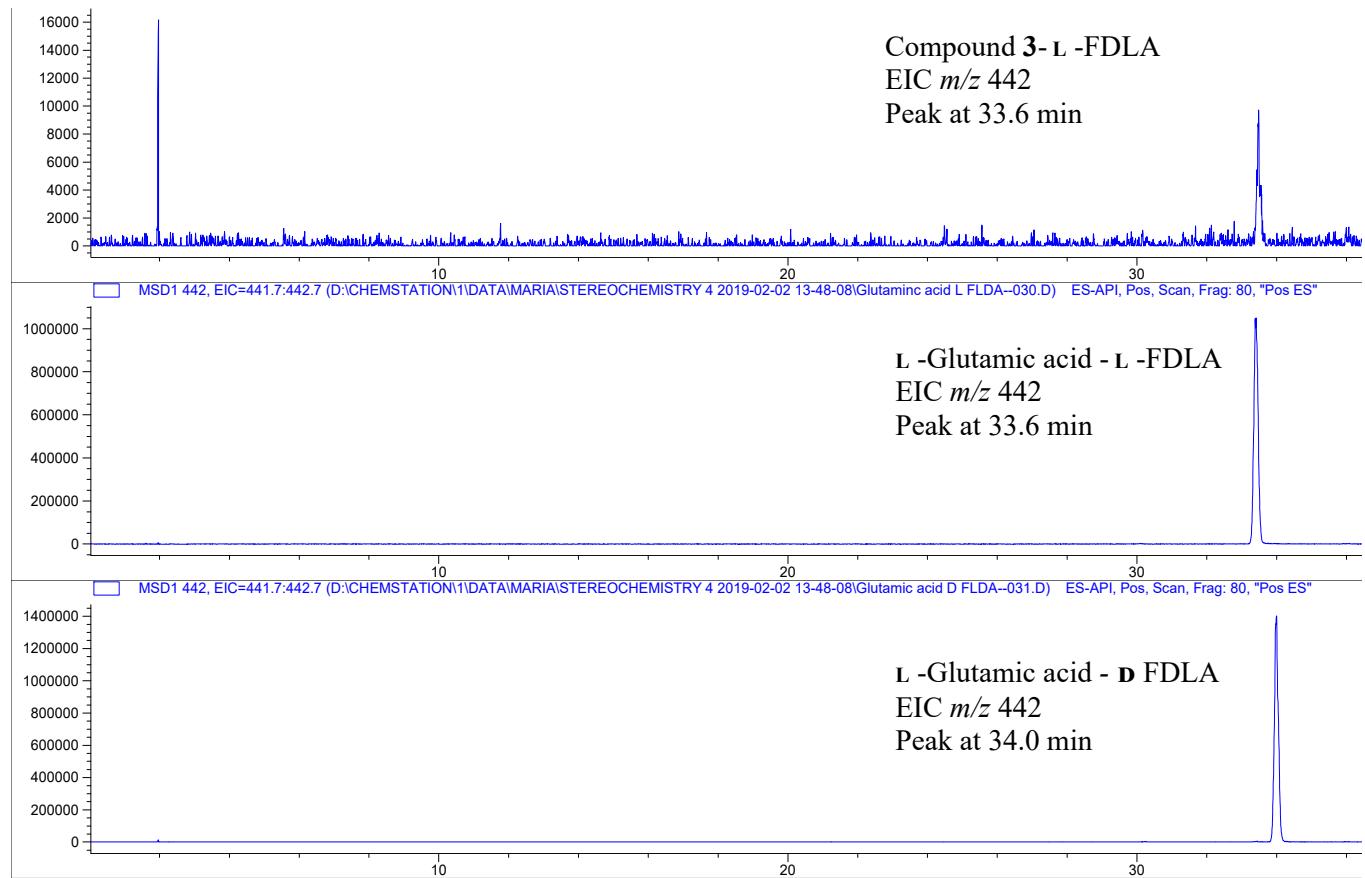


Figure S23. LC-MS of Marfey's analysis of compound 3

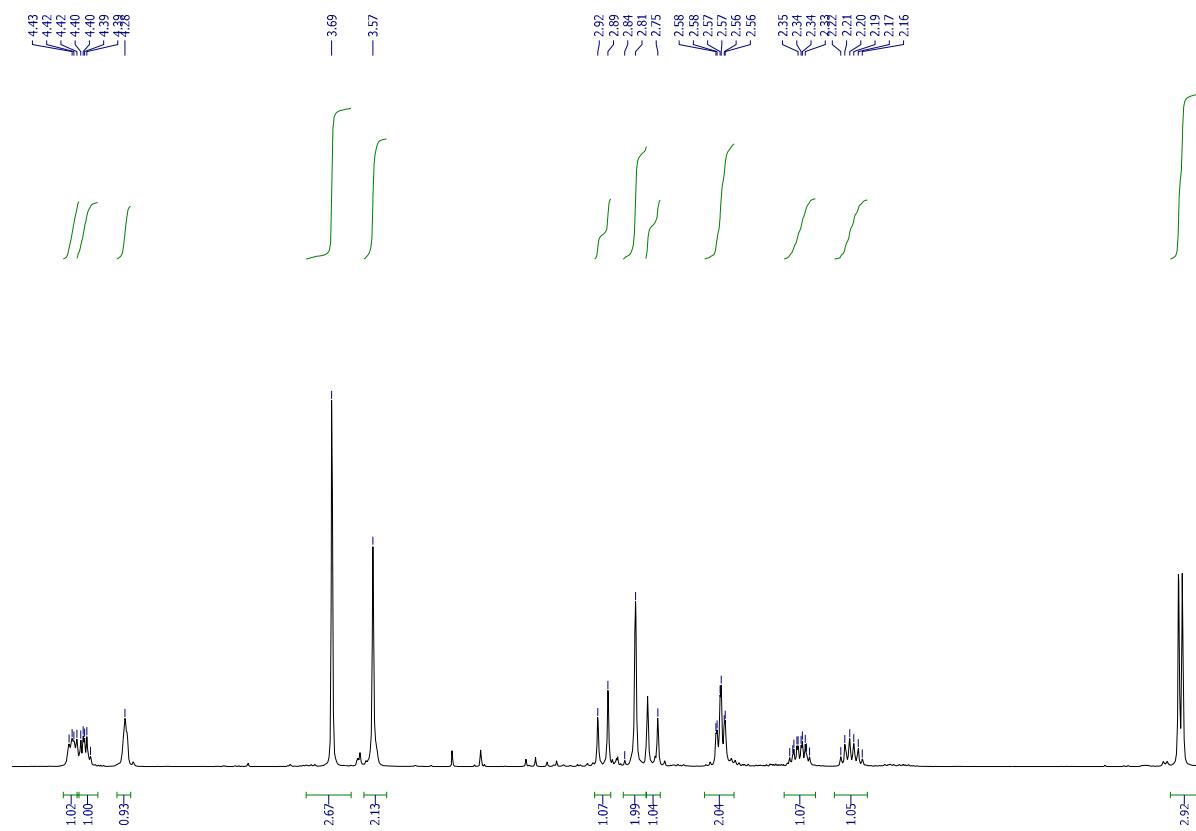


Figure S24. ¹H NMR spectrum of compound 4 in D₂O

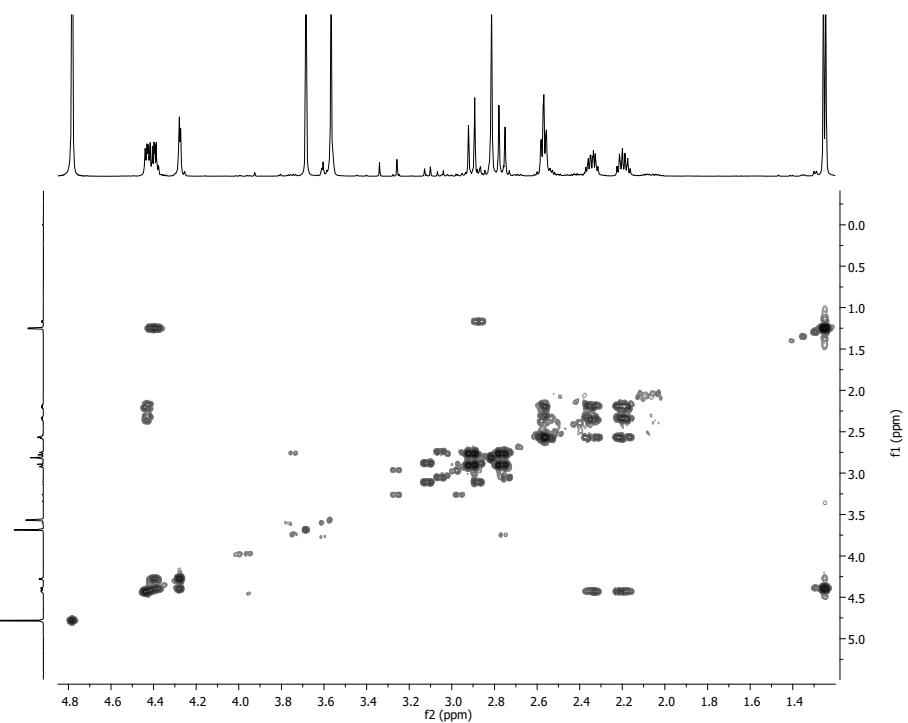


Figure S25. COSY spectrum of compound 4 in D₂O

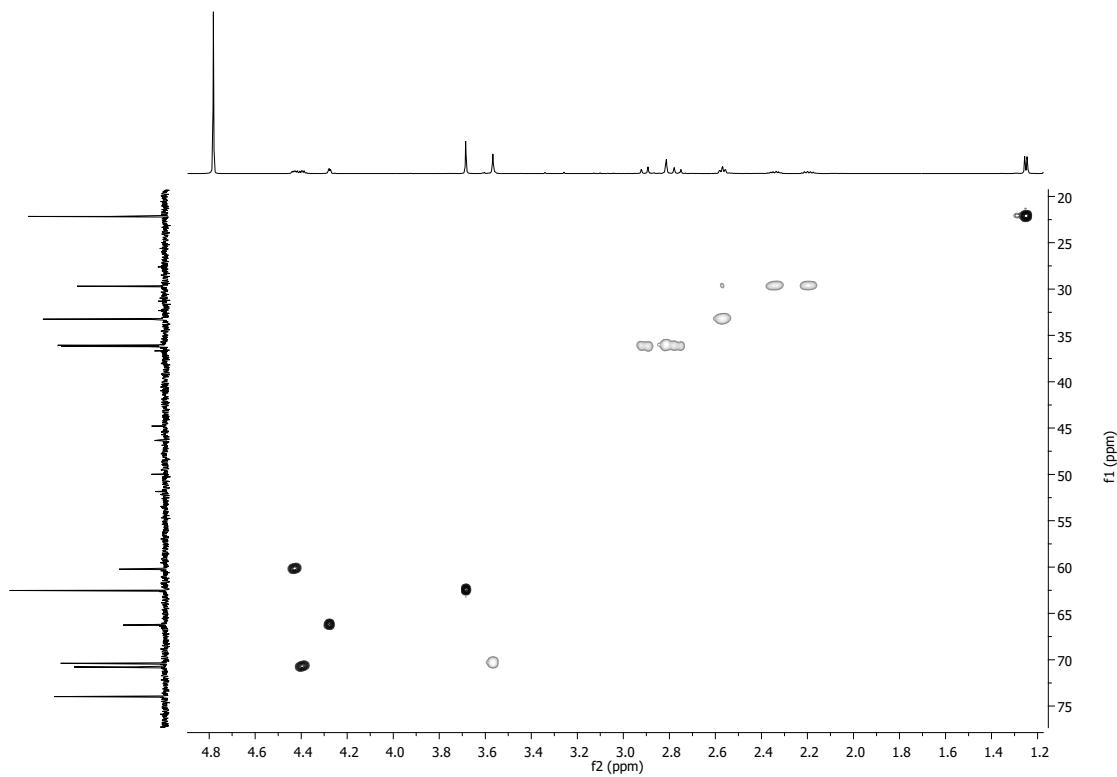
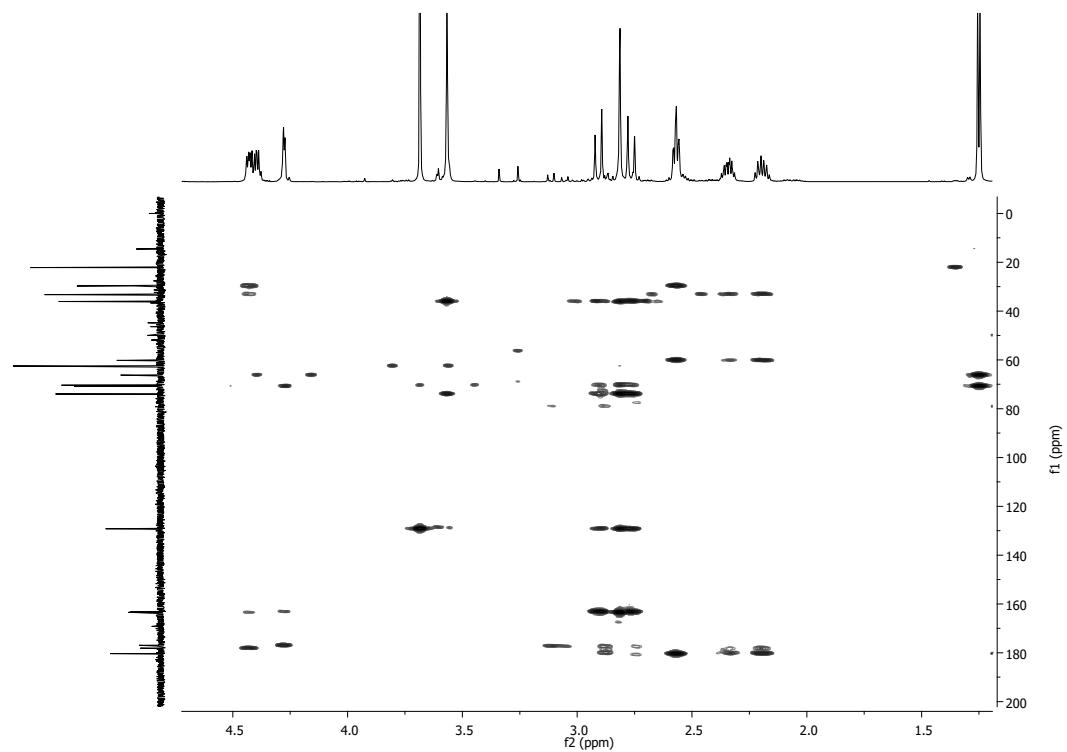
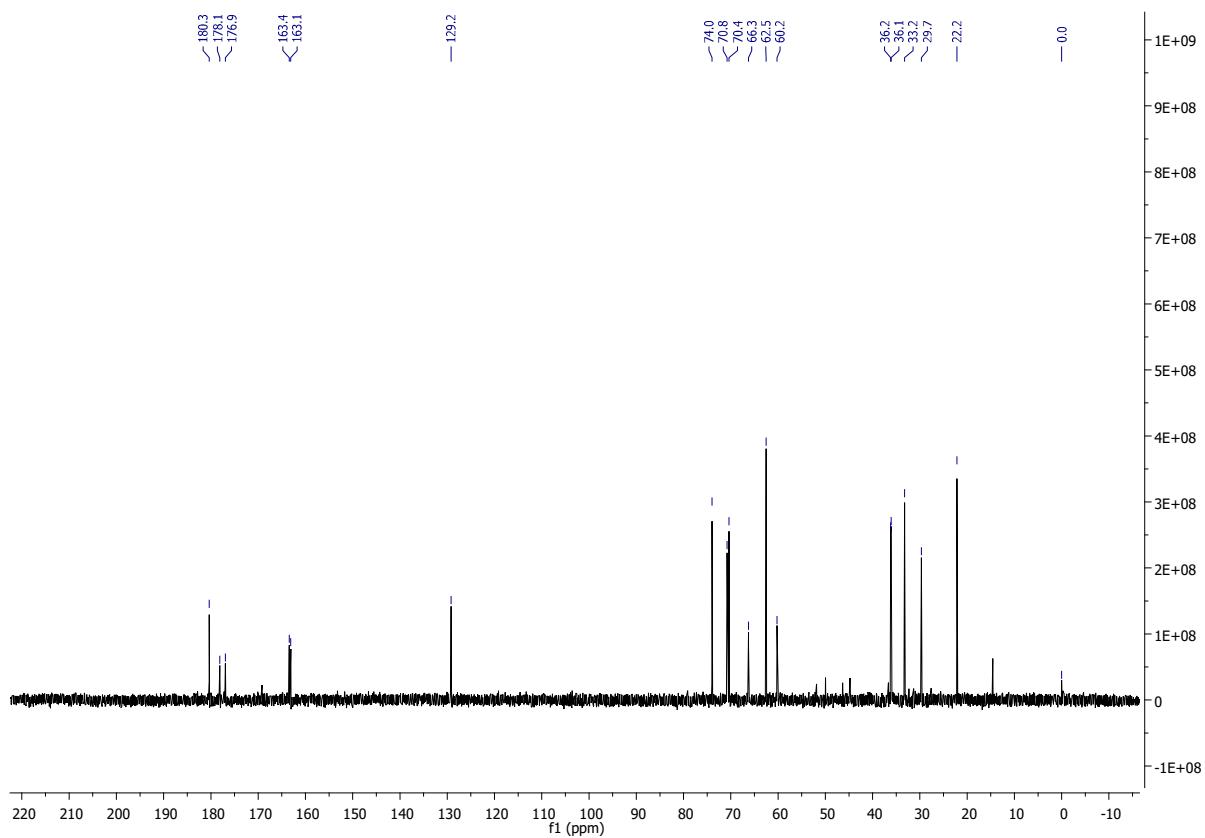


Figure S26. HSQC spectrum of compound **4** in D_2O

Figure S27. HMBC spectrum of compound 4 in D₂OFigure S28. ¹³C NMR spectrum of compound 4 in D₂O

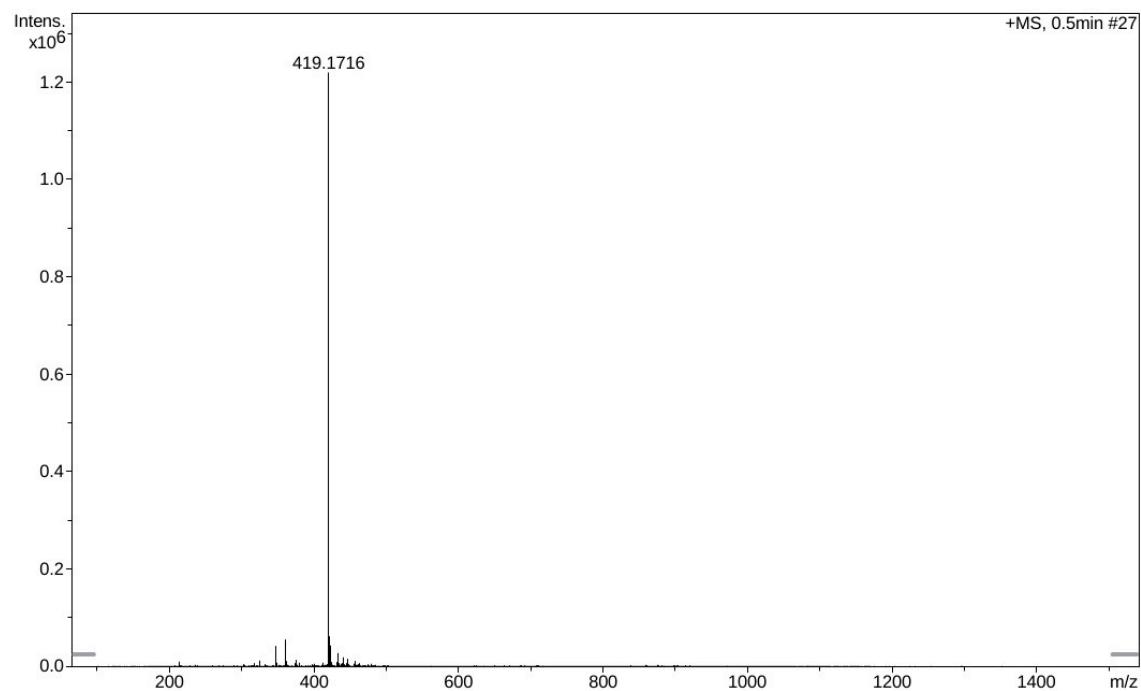


Figure S29. High-resolution mass spectrum of compound 4

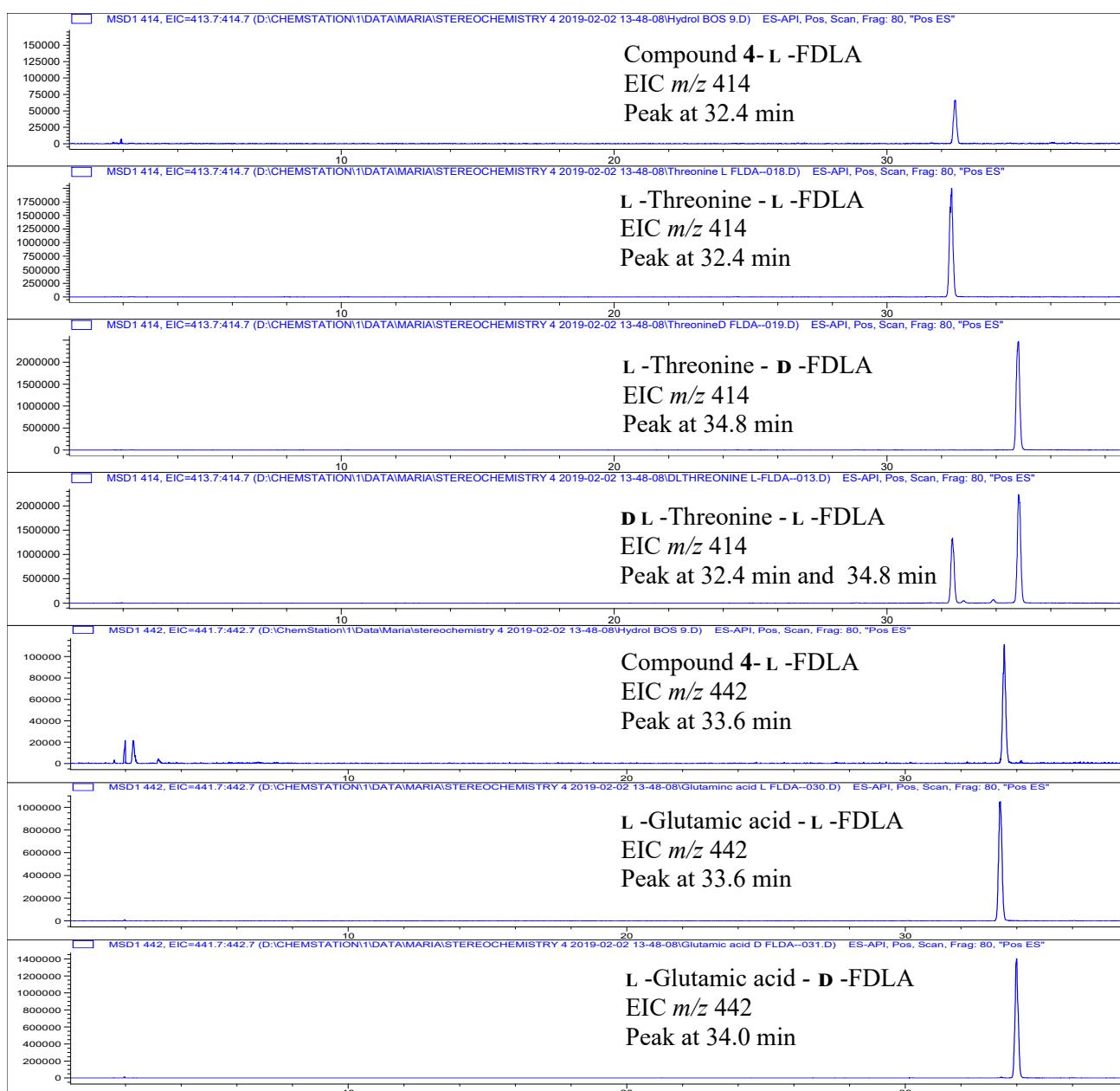


Figure S30. LC-MS of Marfey's analysis of compound 4

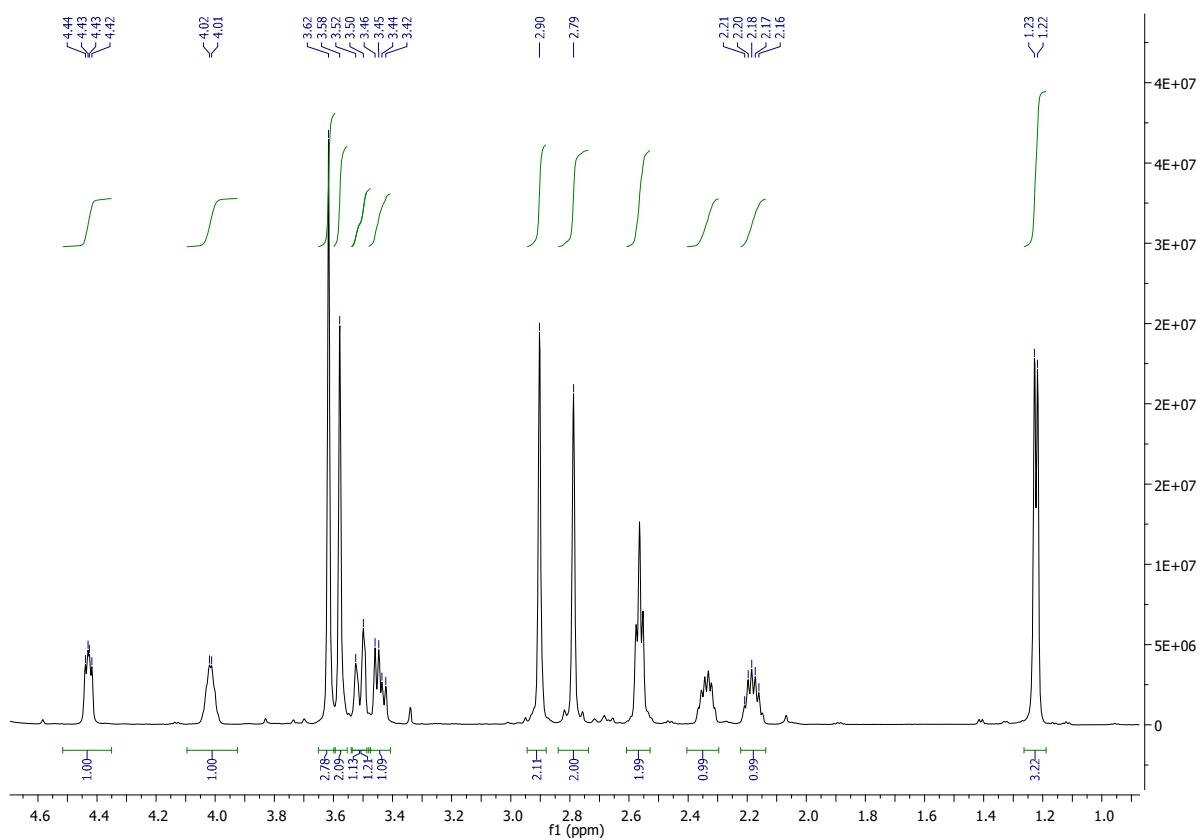


Figure S31. ^1H NMR spectrum of compound **5** in D_2O

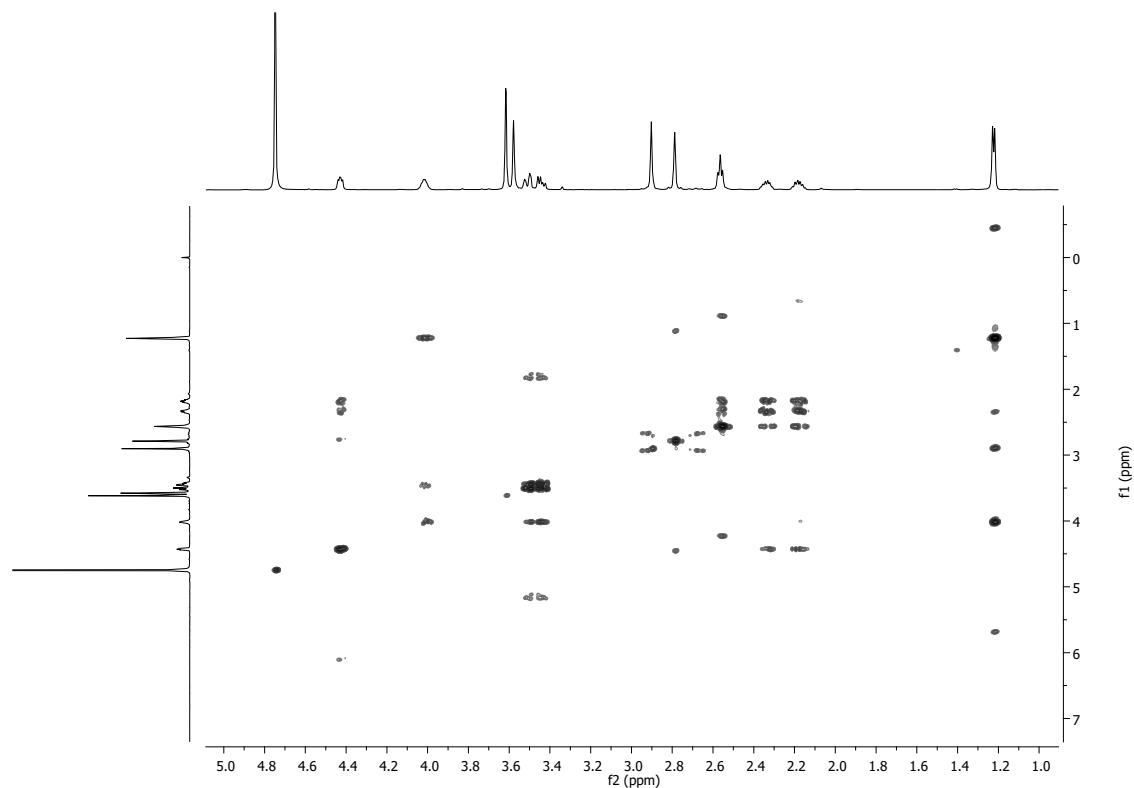
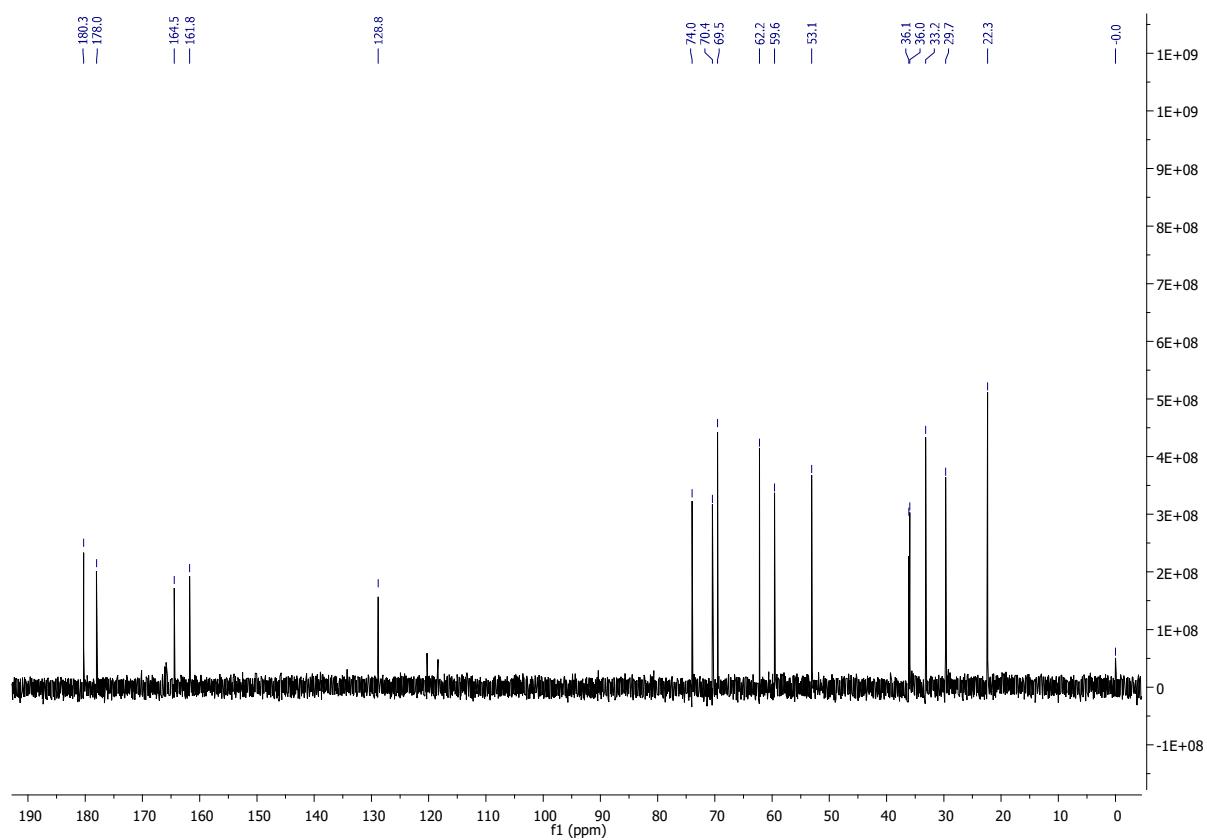
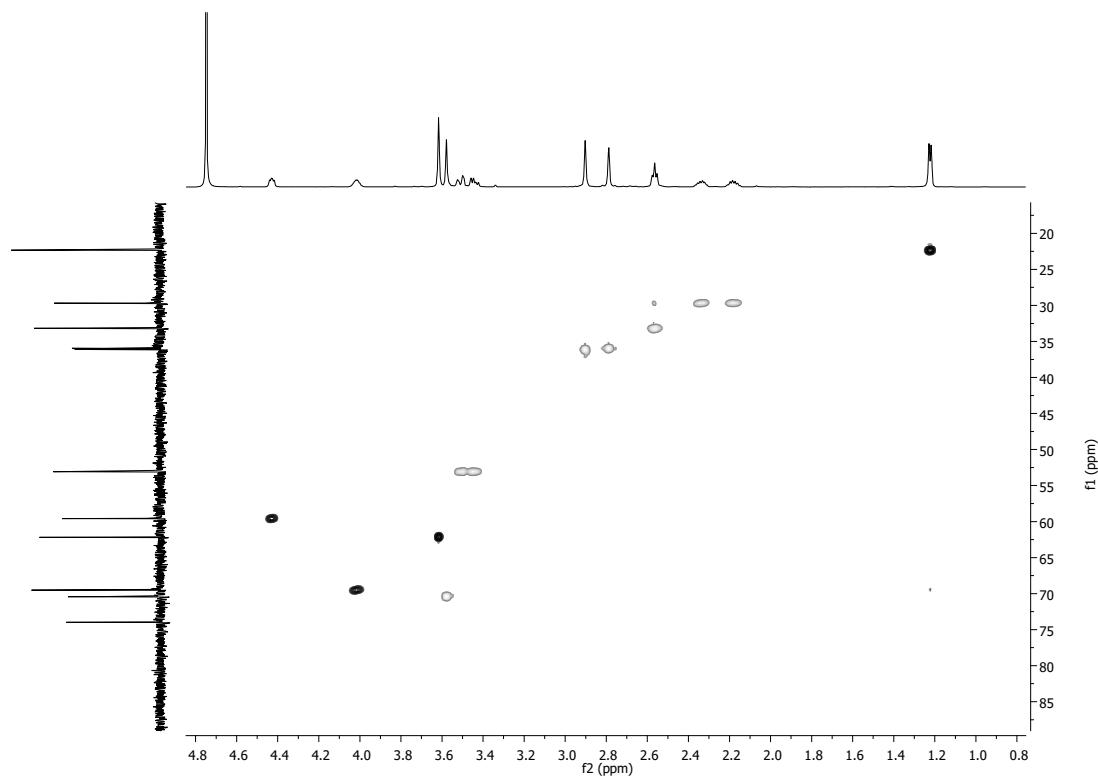
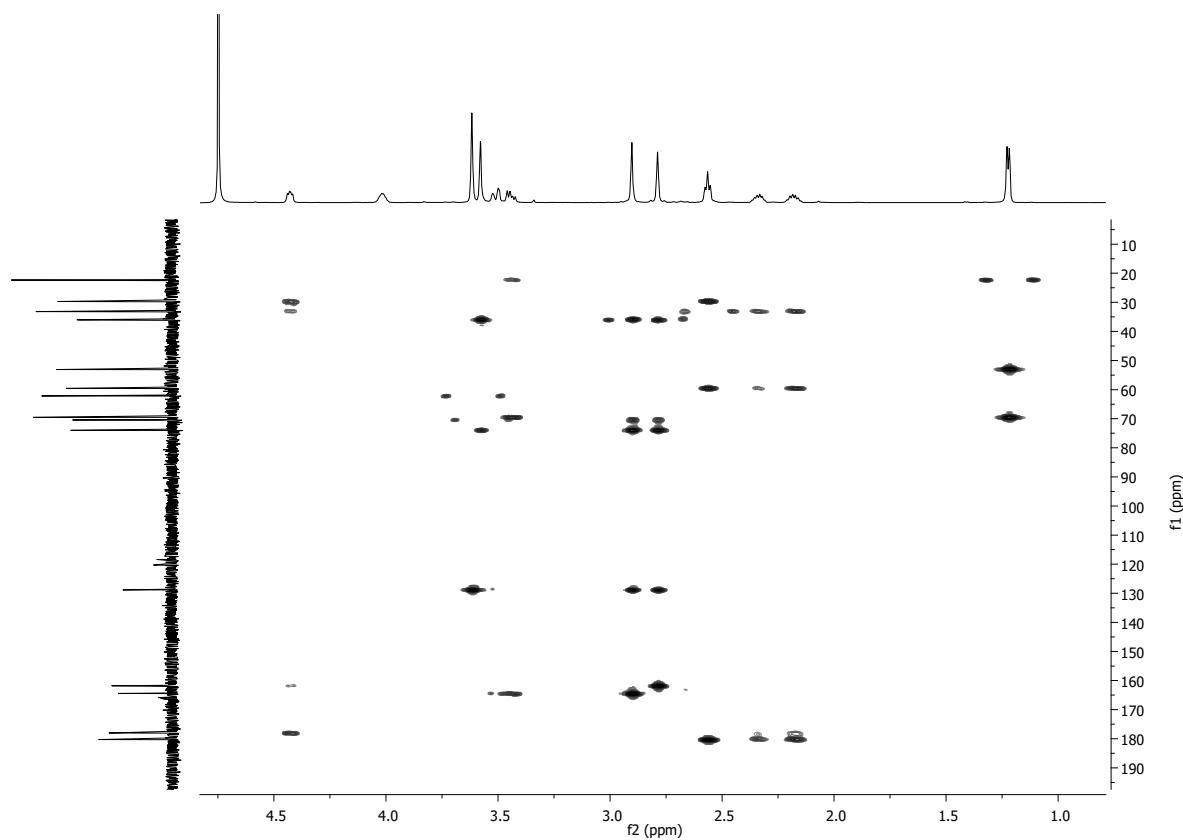
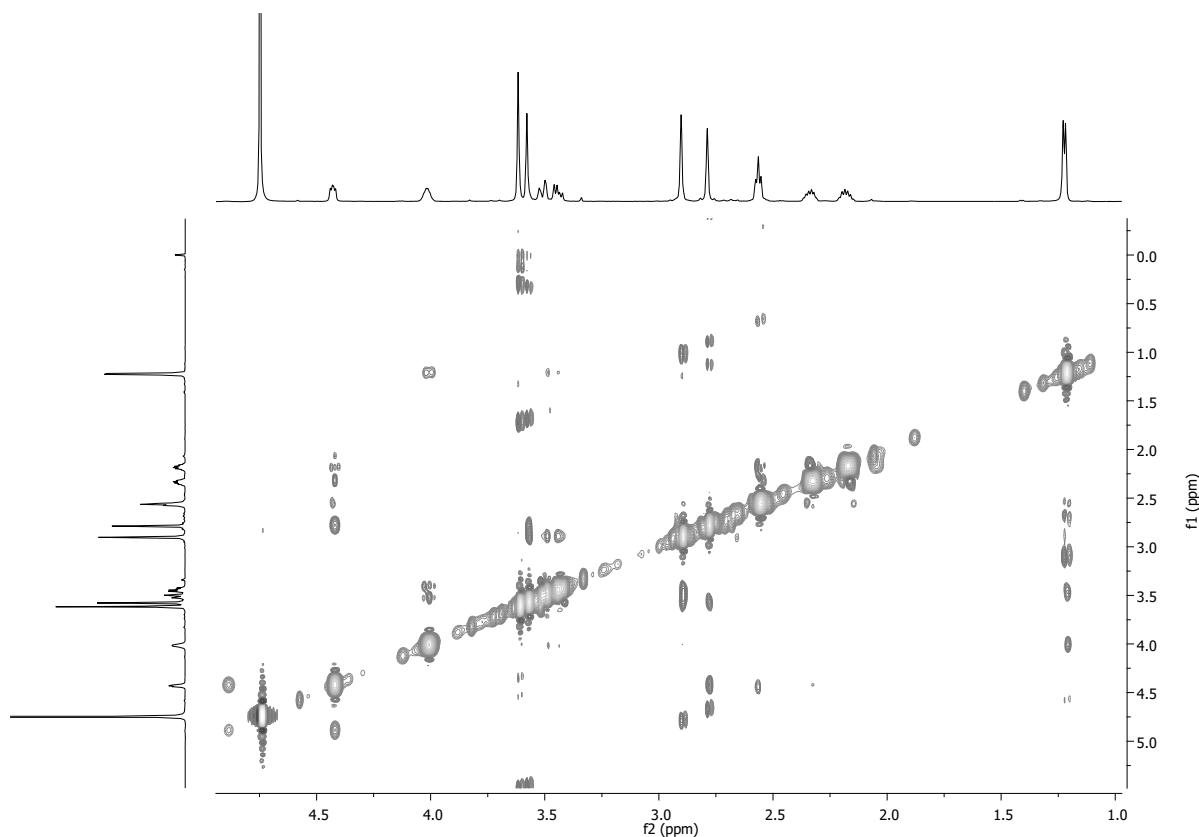


Figure S32. COSY spectrum of compound **5** in D₂O

Figure S33. ¹³C NMR spectrum of compound 5 in D_2O Figure S34. HSQC spectrum of compound 5 in D_2O

Figure S35. HMBC spectrum of compound 5 in D_2O Figure S36. NOESY spectrum of compound 5 in D_2O

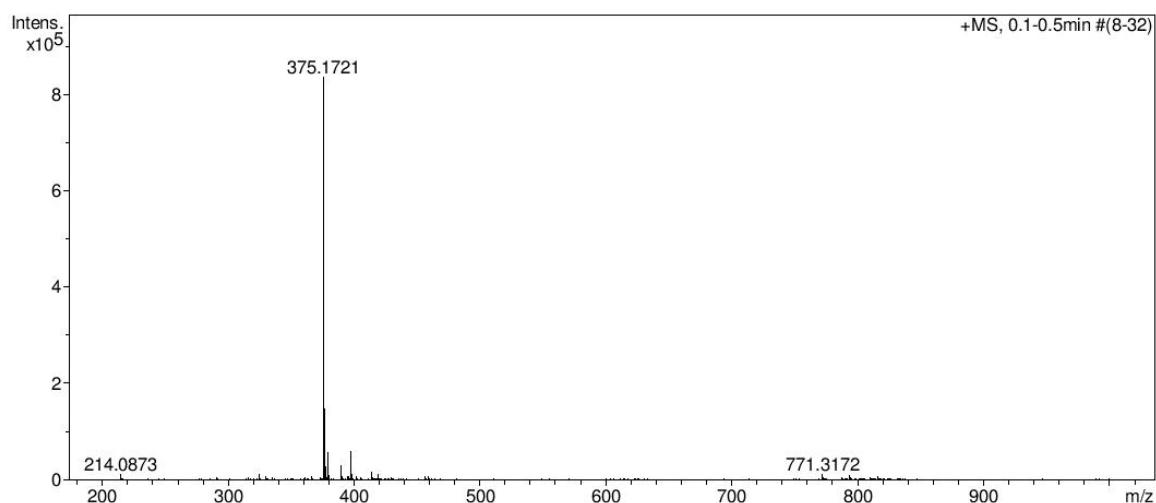


Figure S37. High-resolution mass spectrum of compound 5

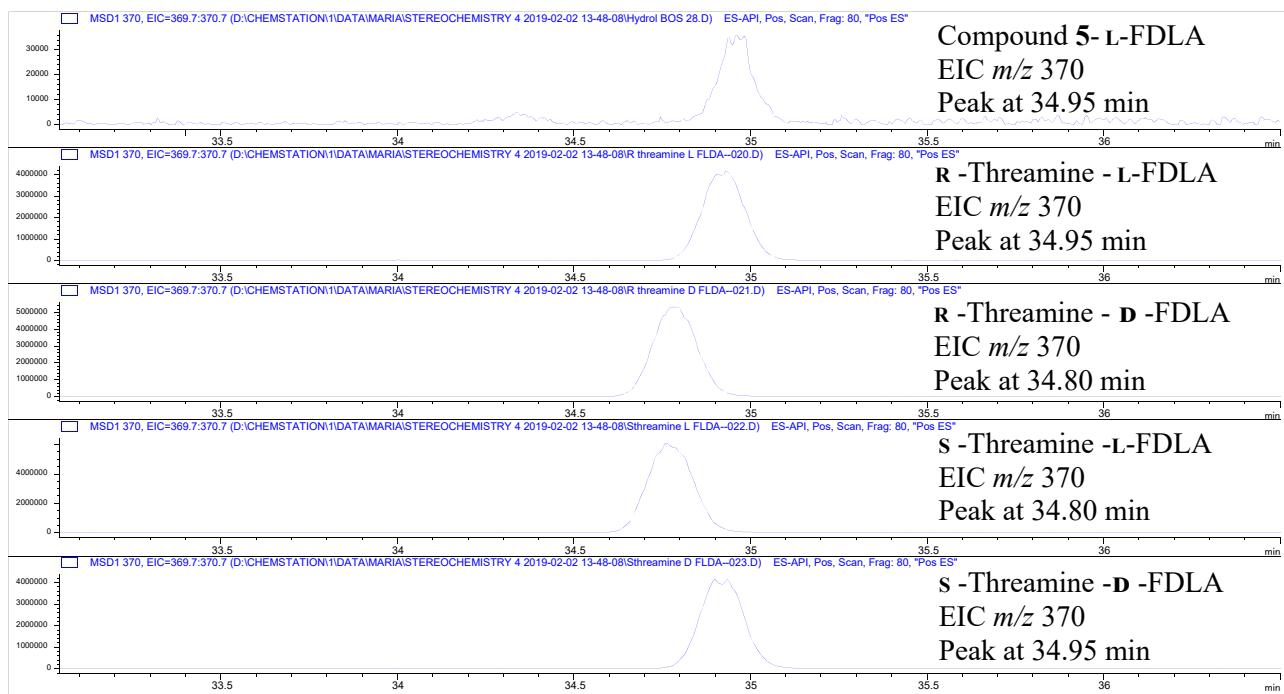


Figure S38. LC-MS of Marfey's analysis of compound 5 (a)

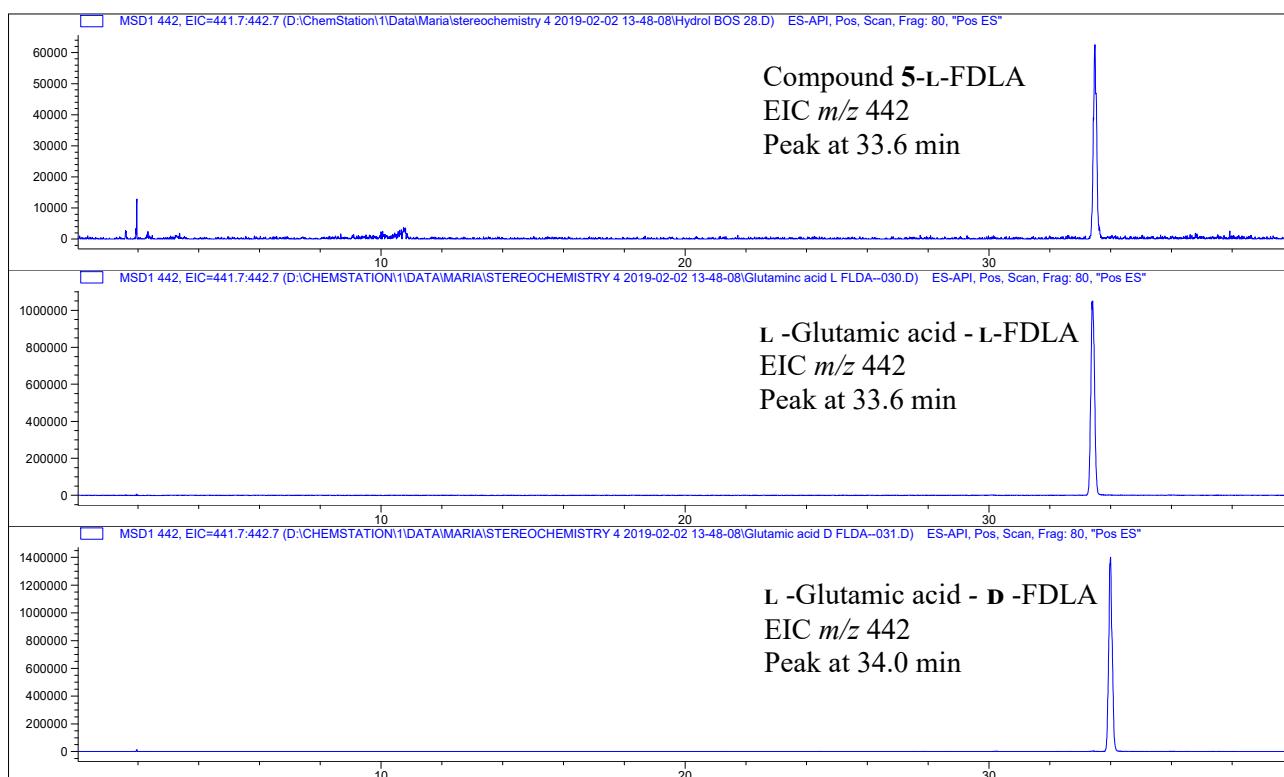
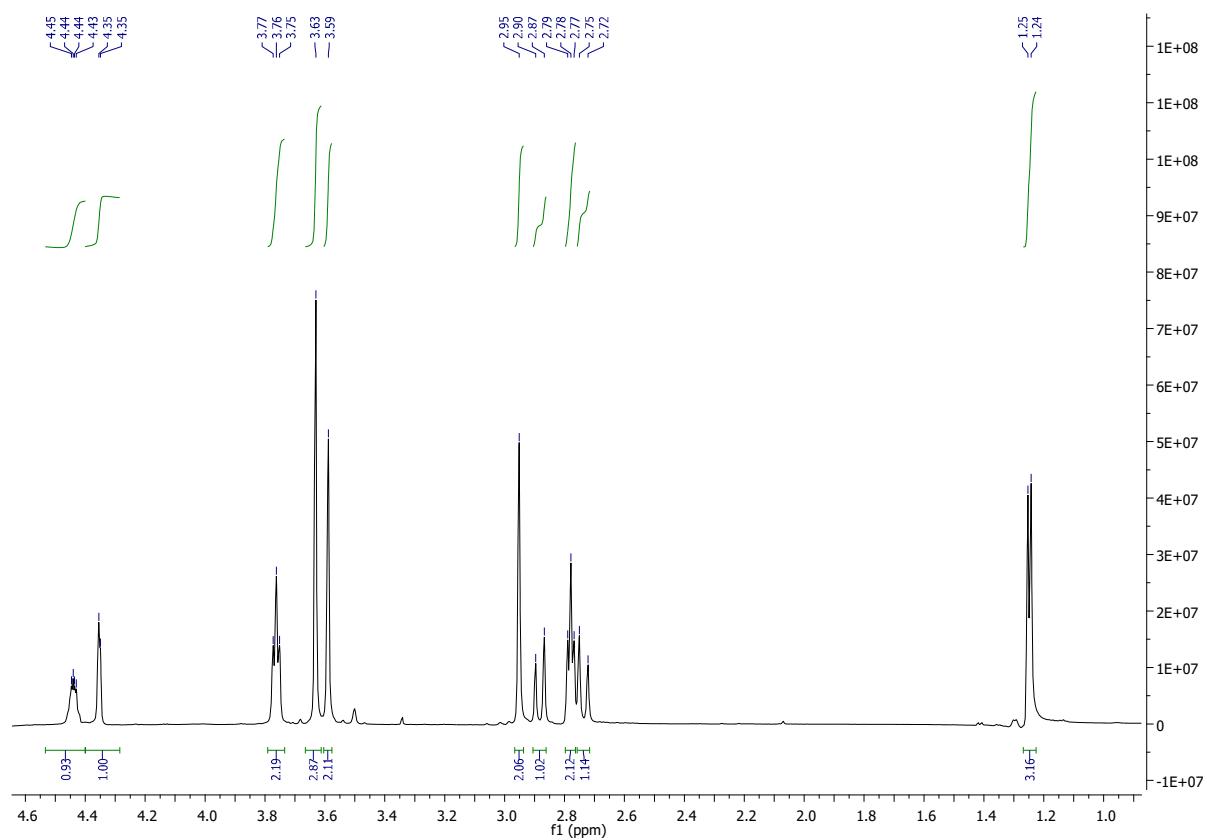
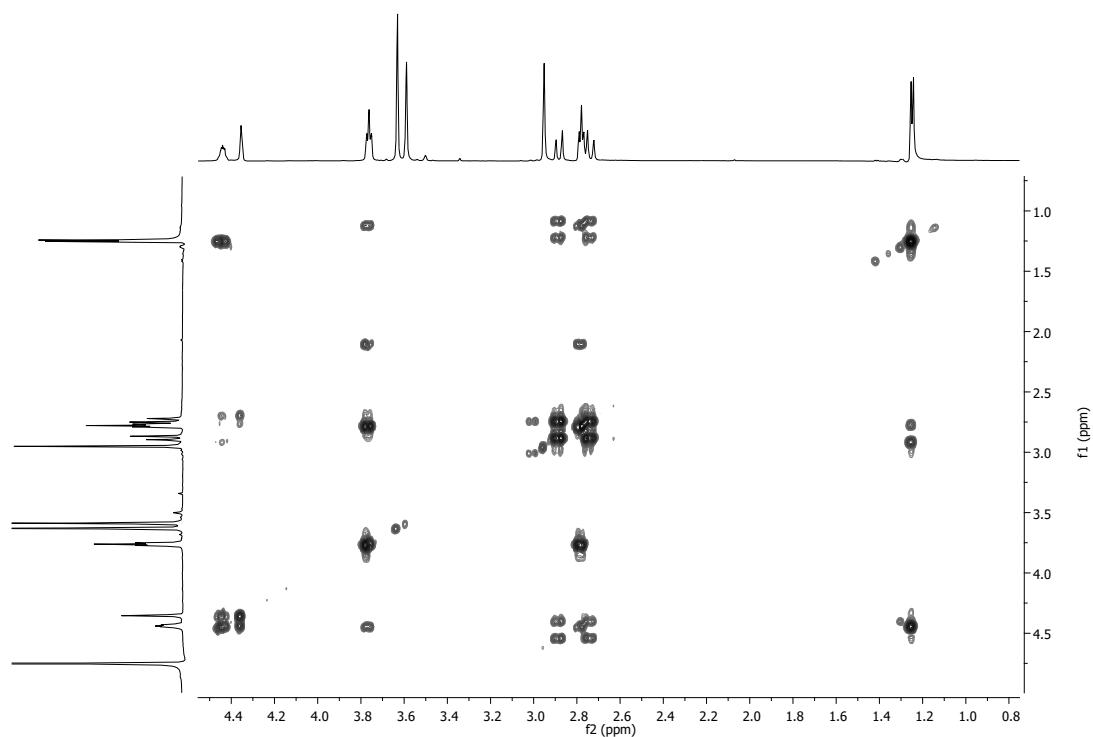


Figure S39. LC-MS of Marfey's analysis of compound 5 (b)

Figure S40. ¹H NMR spectrum of compound 6 in D₂OFigure S41. COSY spectrum of compound 6 in D₂O

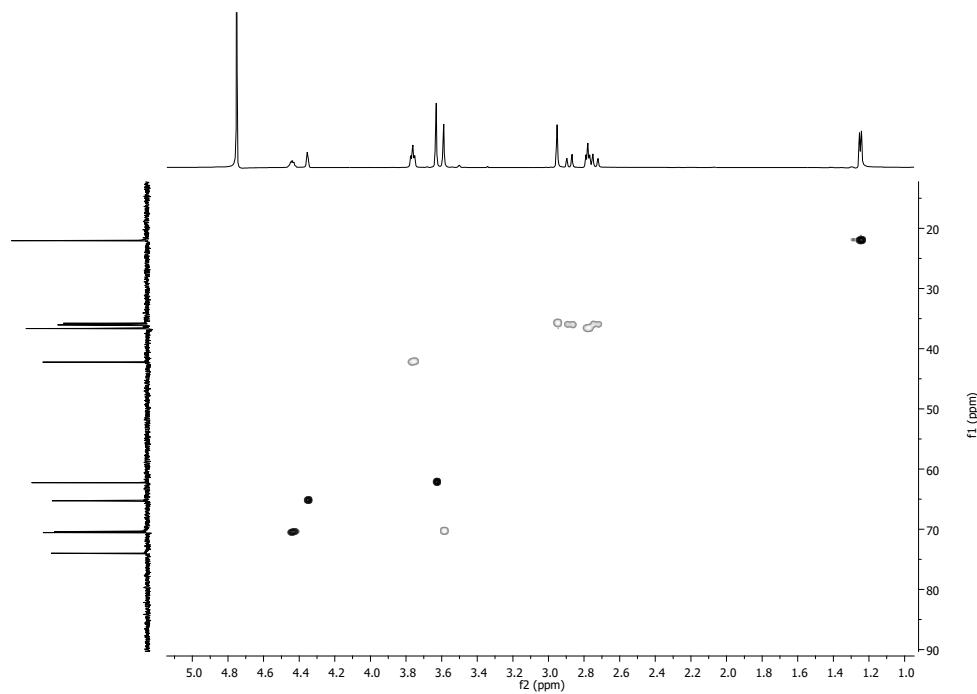


Figure S42. HSQC spectrum of compound **6** in D_2O

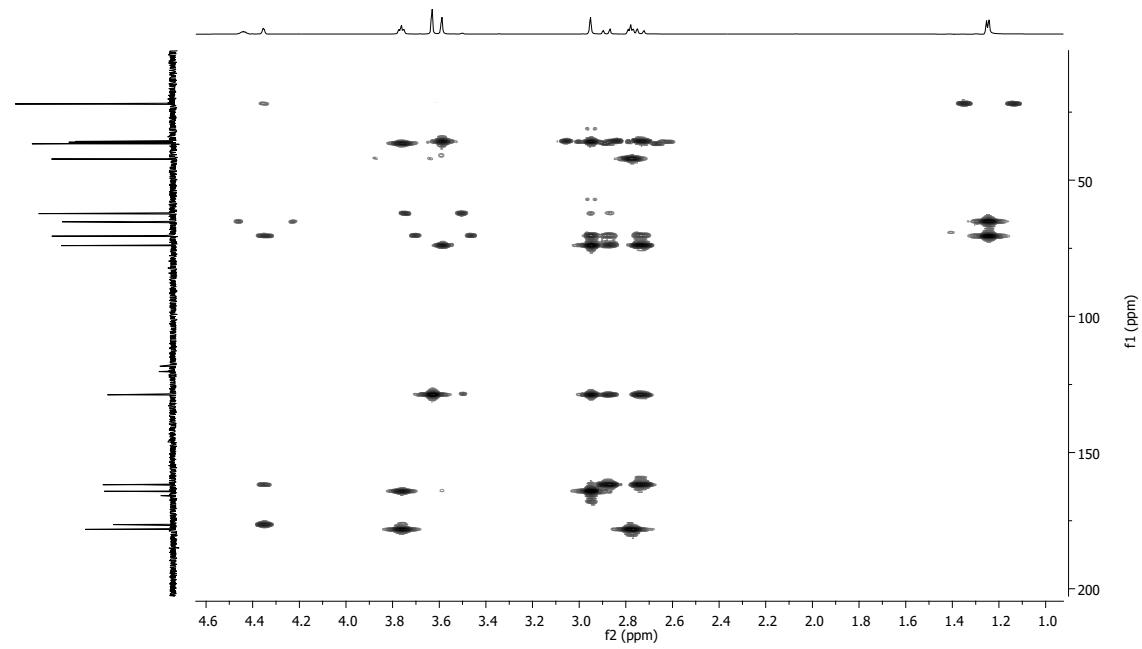
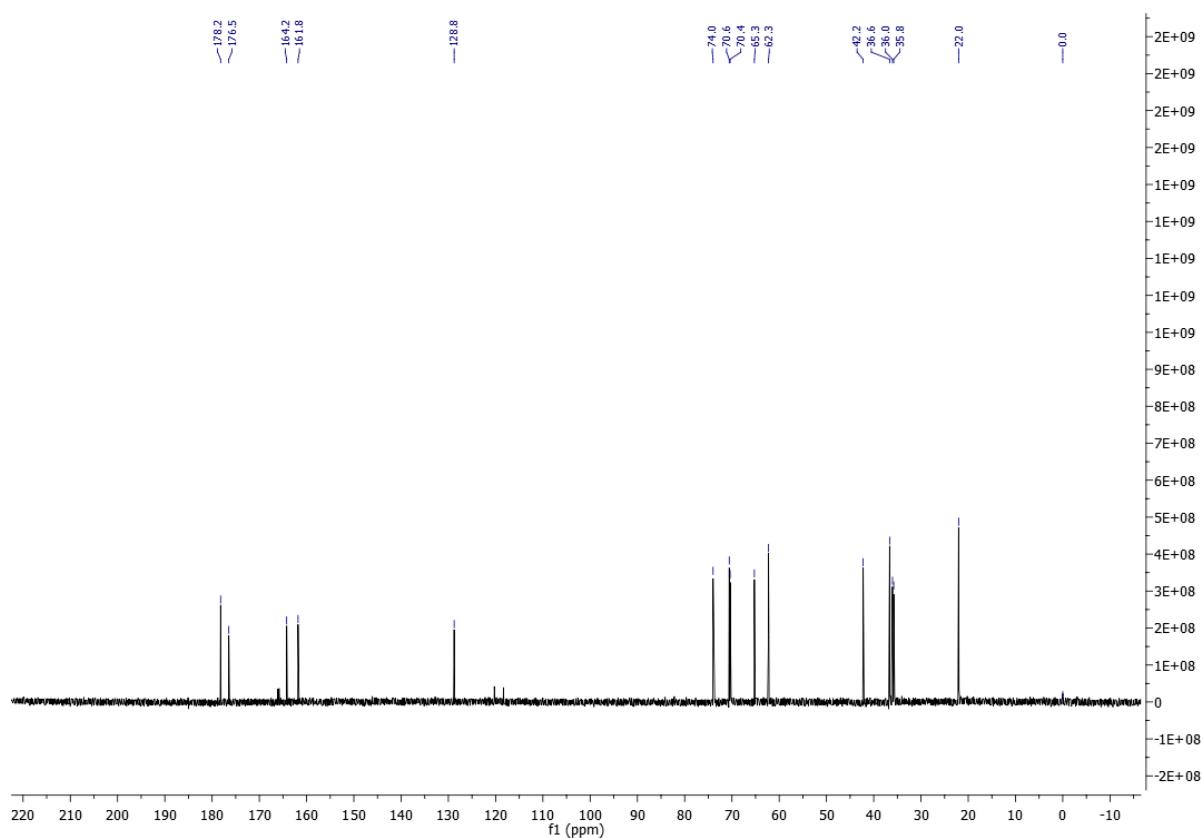
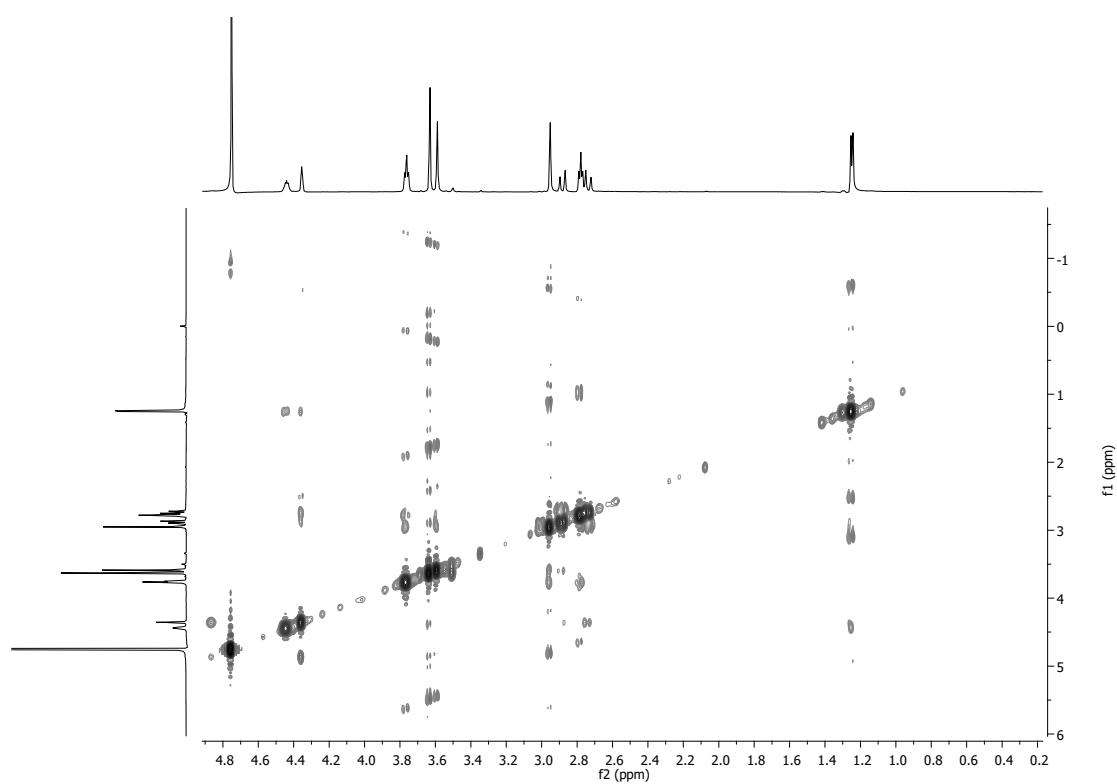
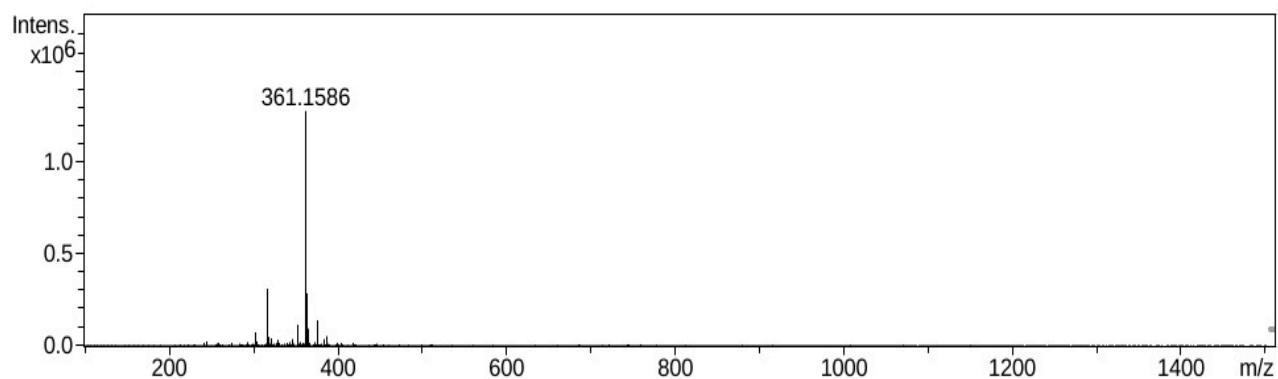
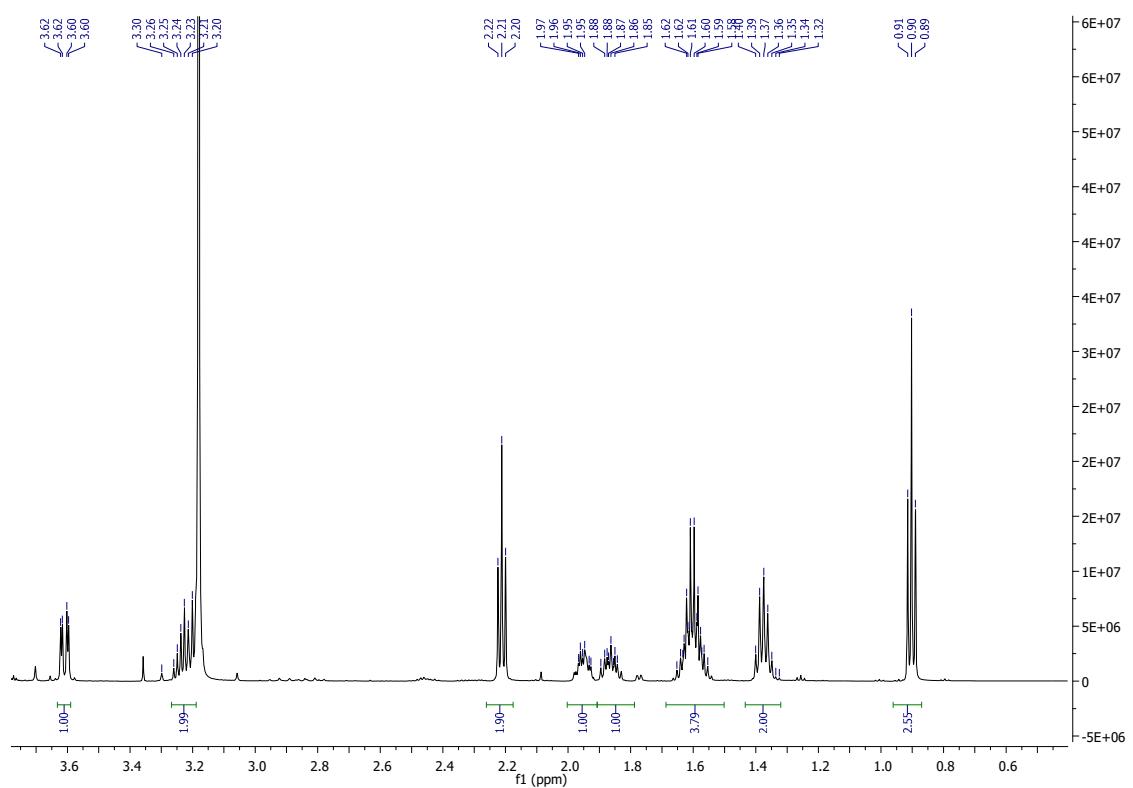
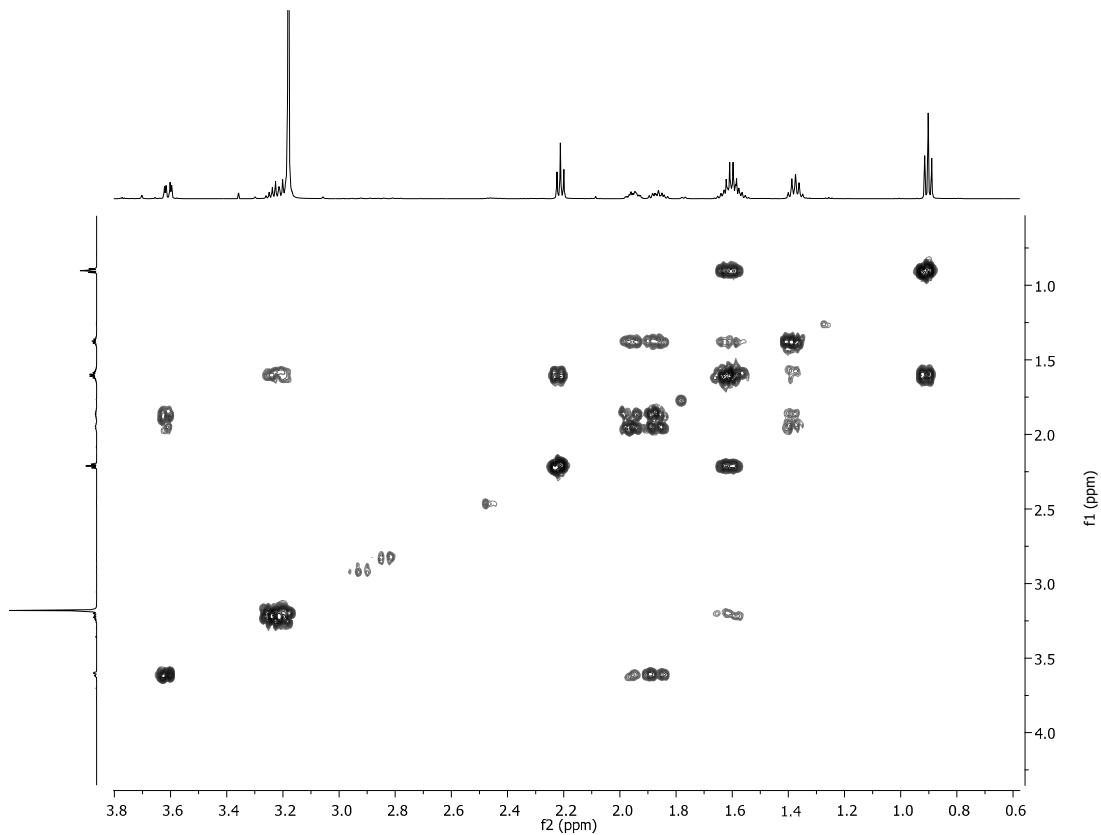


Figure S43. HMBC spectrum of compound **6** in D_2O

Figure S44. ¹³C NMR spectrum of compound 6 in D₂OFigure S45. NOESY spectrum of compound 6 in D₂O

Figure S46. High-resolution mass spectrum of compound **6**Figure S47. LC-MS of Marfey's analysis of compound **6**

Figure S48. ¹H NMR spectrum of compound 8 in D_2O Figure S49. COSY spectrum of compound 8 in D_2O

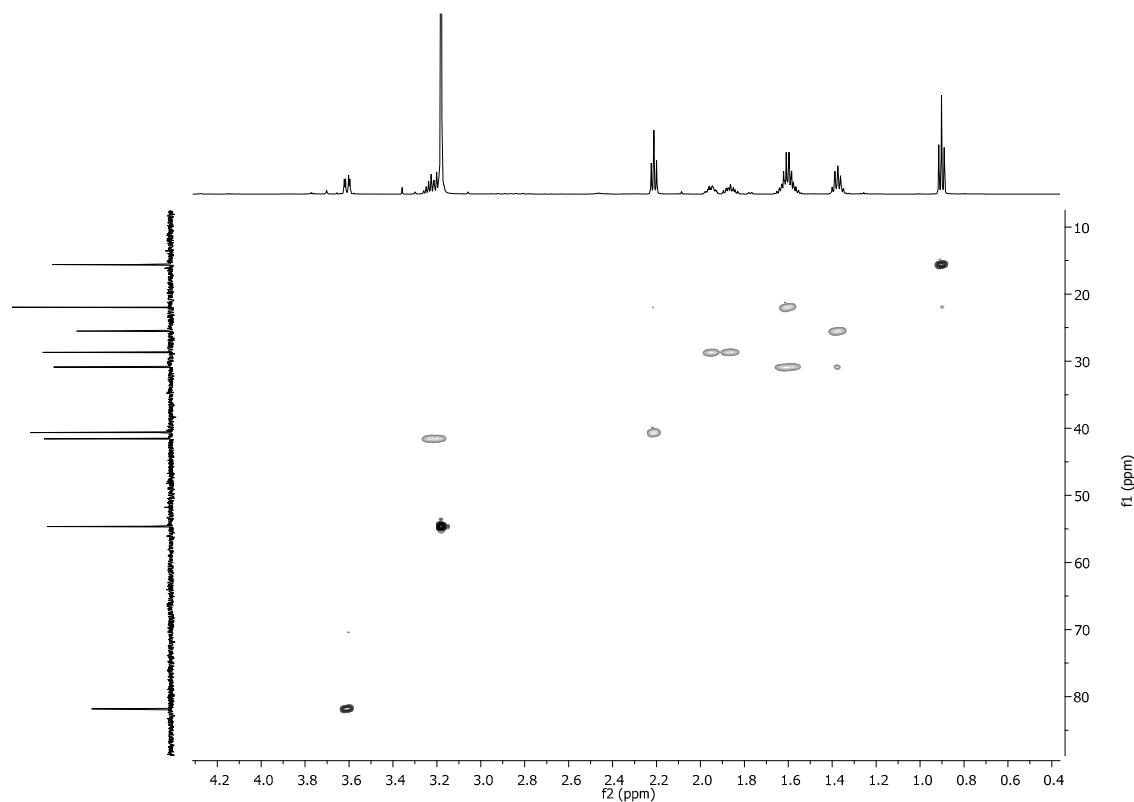


Figure S50. HSQC spectrum of compound **8** in D_2O

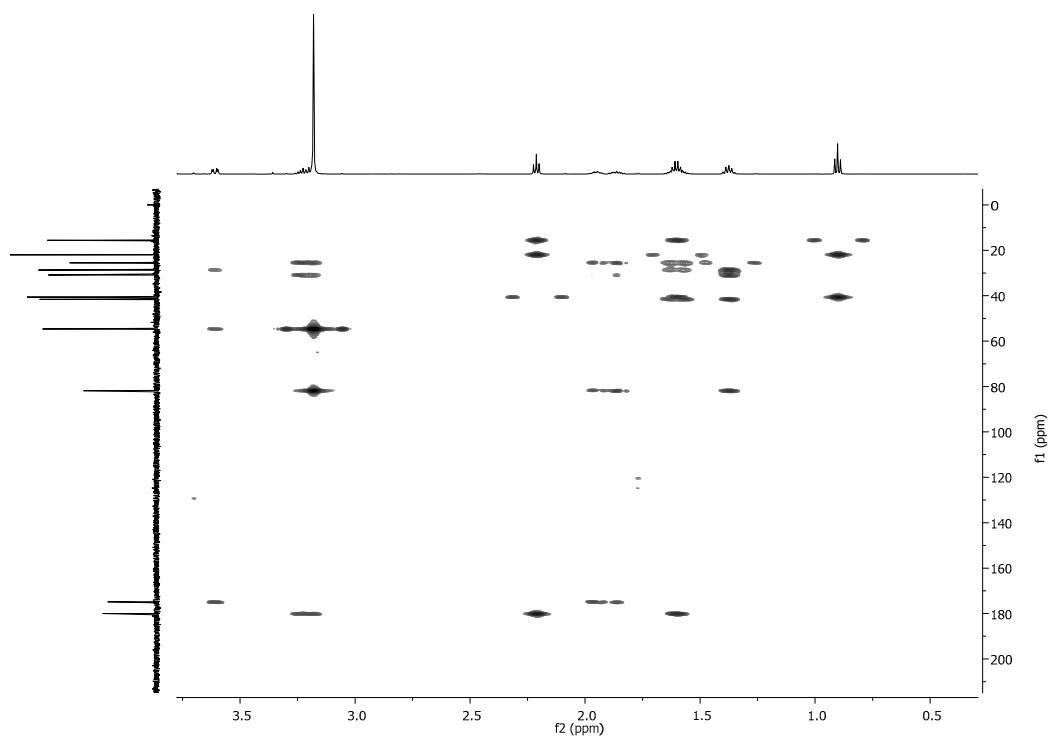


Figure S51. HMBC spectrum of compound **8** in D_2O

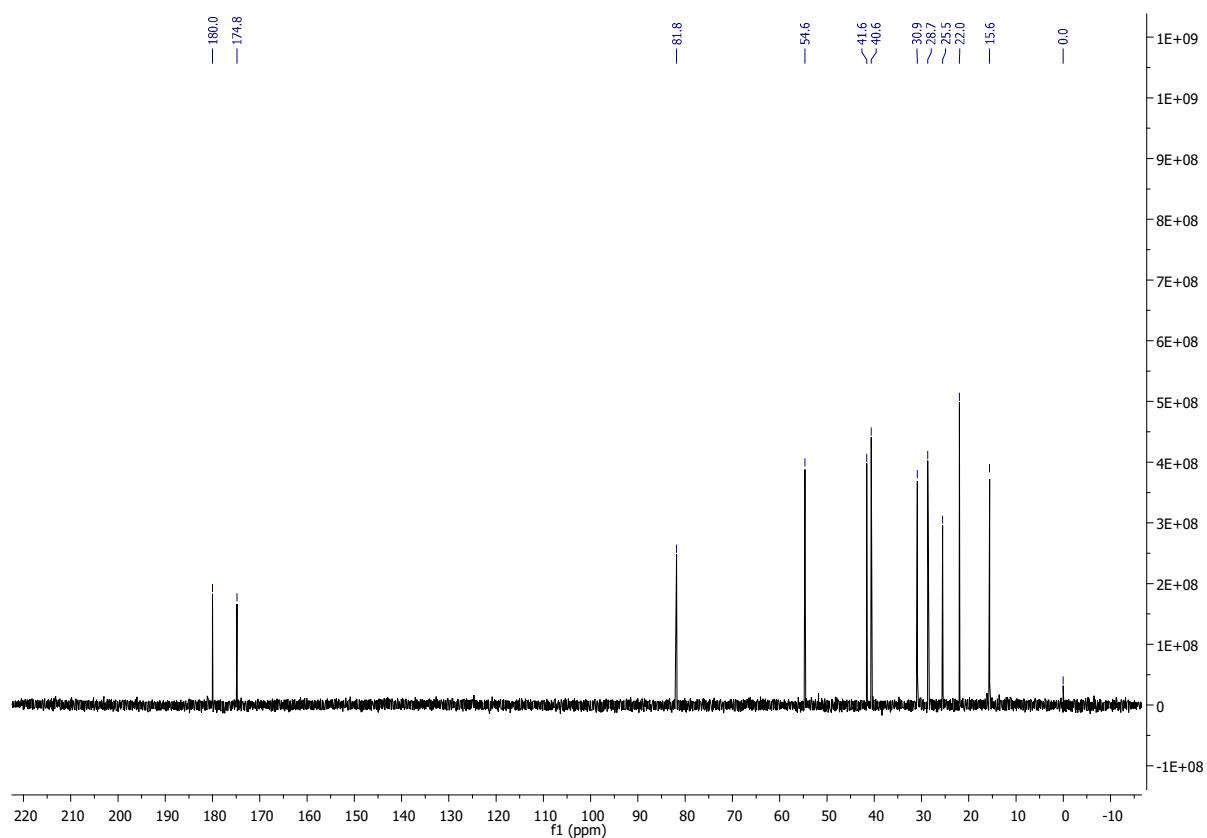
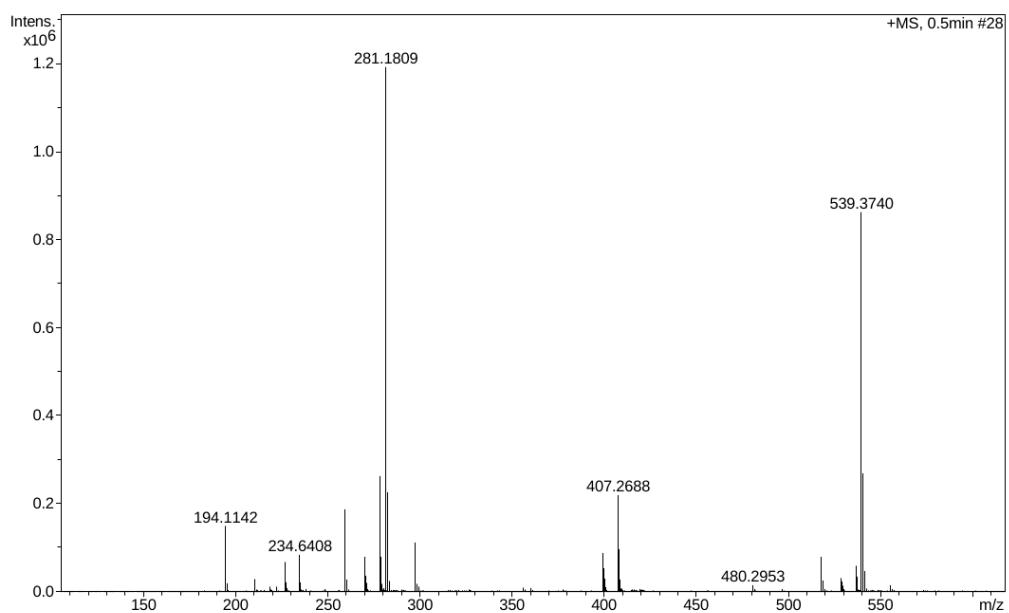
Figure S52. ¹³C NMR spectrum of compound 8 in ²D_O

Figure S53. High-resolution mass spectrum of compound 8