

Supplementary Materials: A Modular Synthetic Approach to Isosteric Sulfonic Acid Analogues of the Anticoagulant Pentasaccharide Idraparinux

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^1H - and ^{13}C -NMR spectra of compounds 12, 17, 18, 21, 6, 7, 8, 9, 10, 25, 26, 27, 30, 31, 32, 33, 34 and 35.

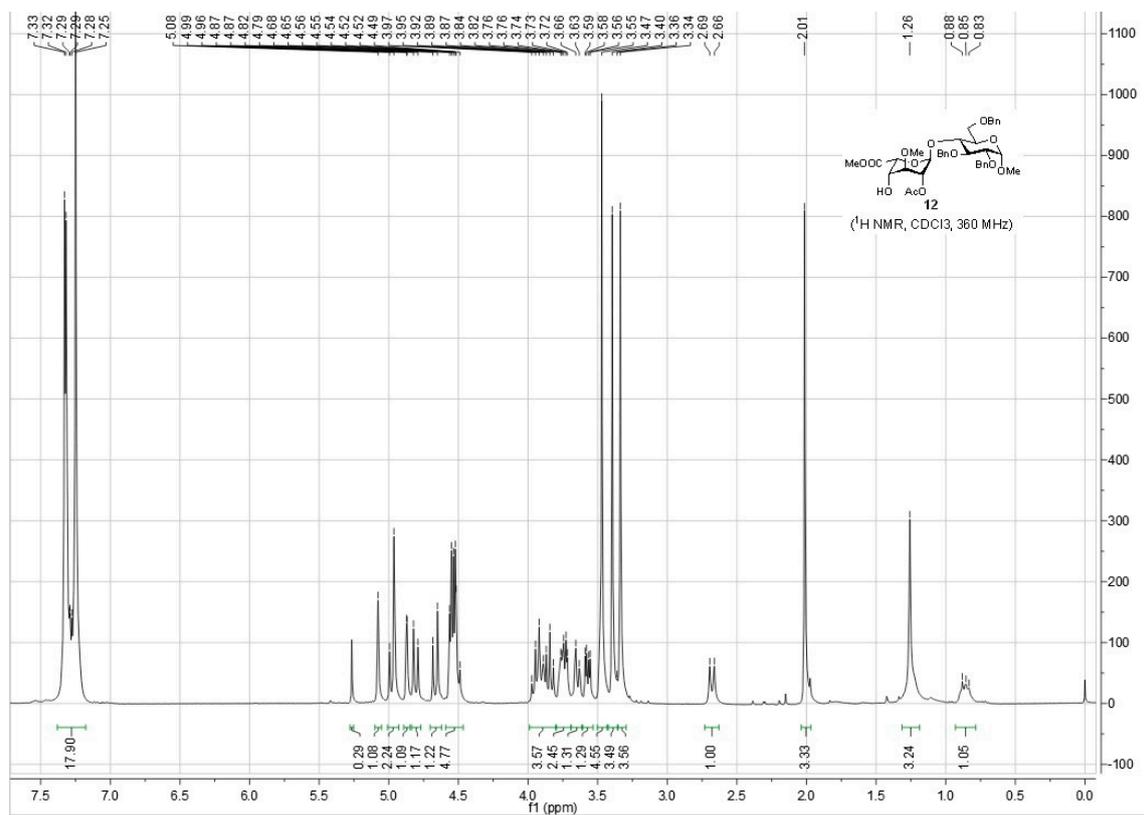


Figure S1. ^1H -NMR spectrum of compound 12 in CDCl_3 .

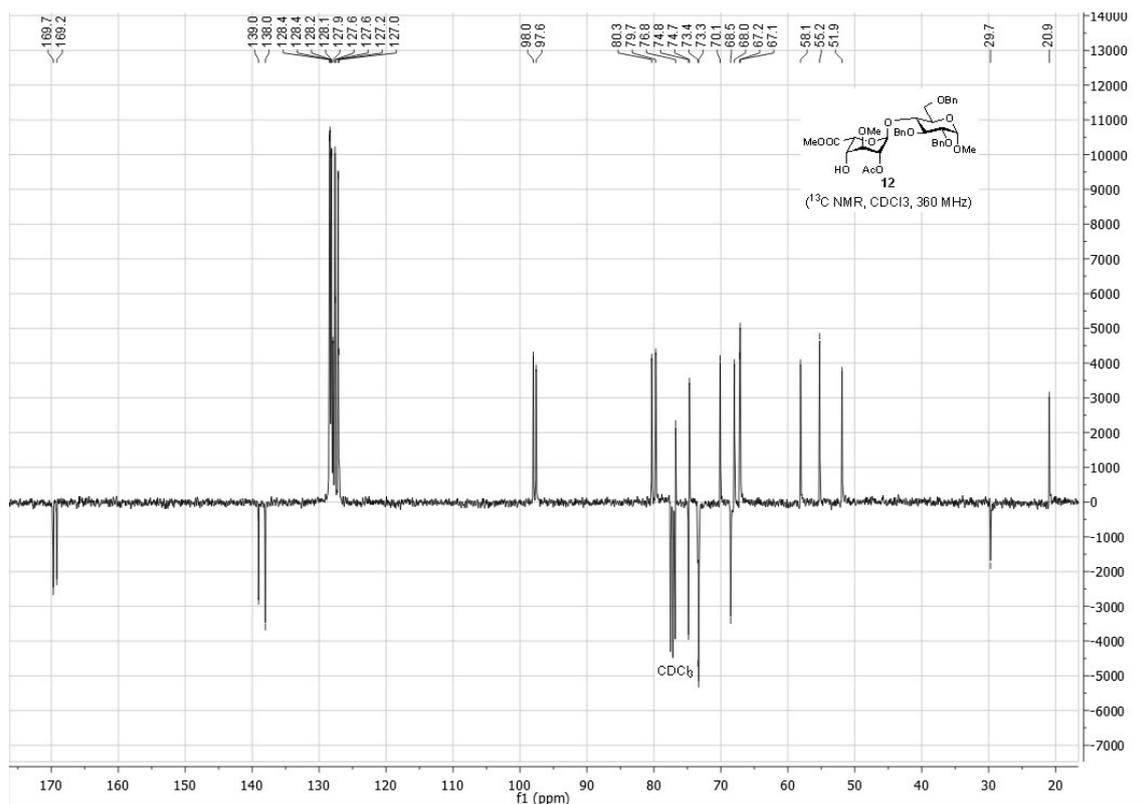


Figure S2. ^{13}C -NMR spectrum of compound **12** in CDCl_3 .

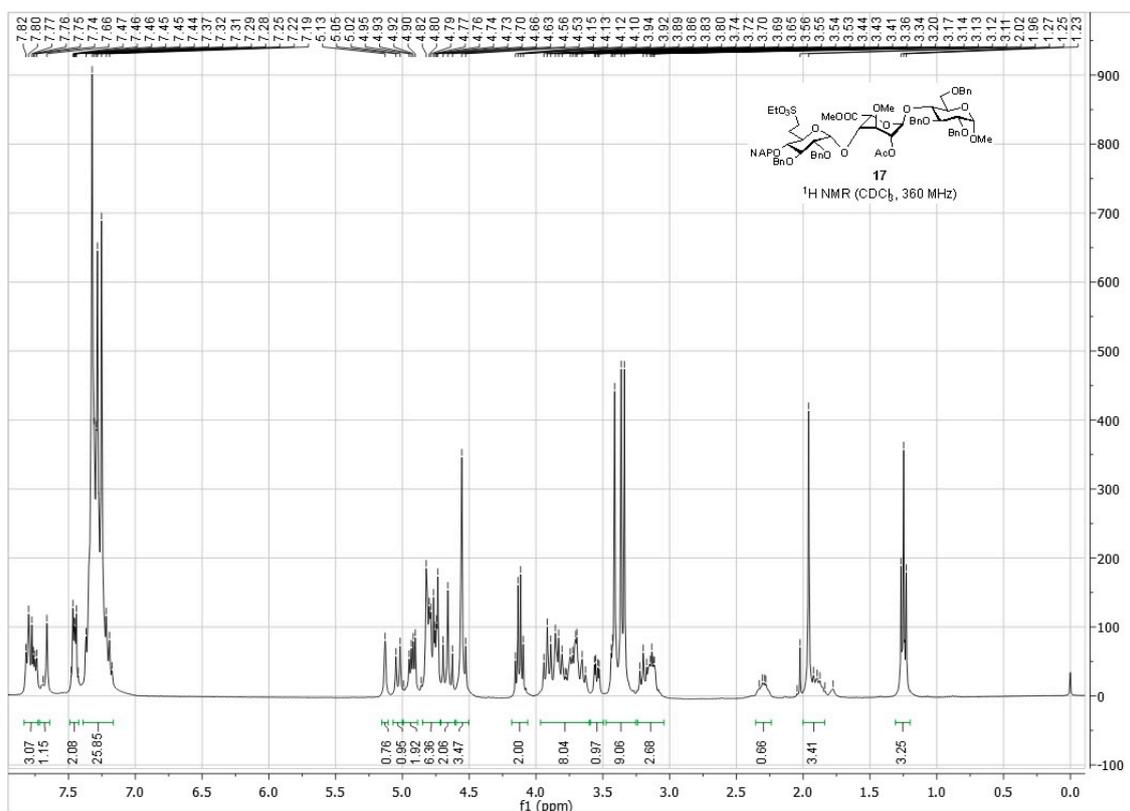
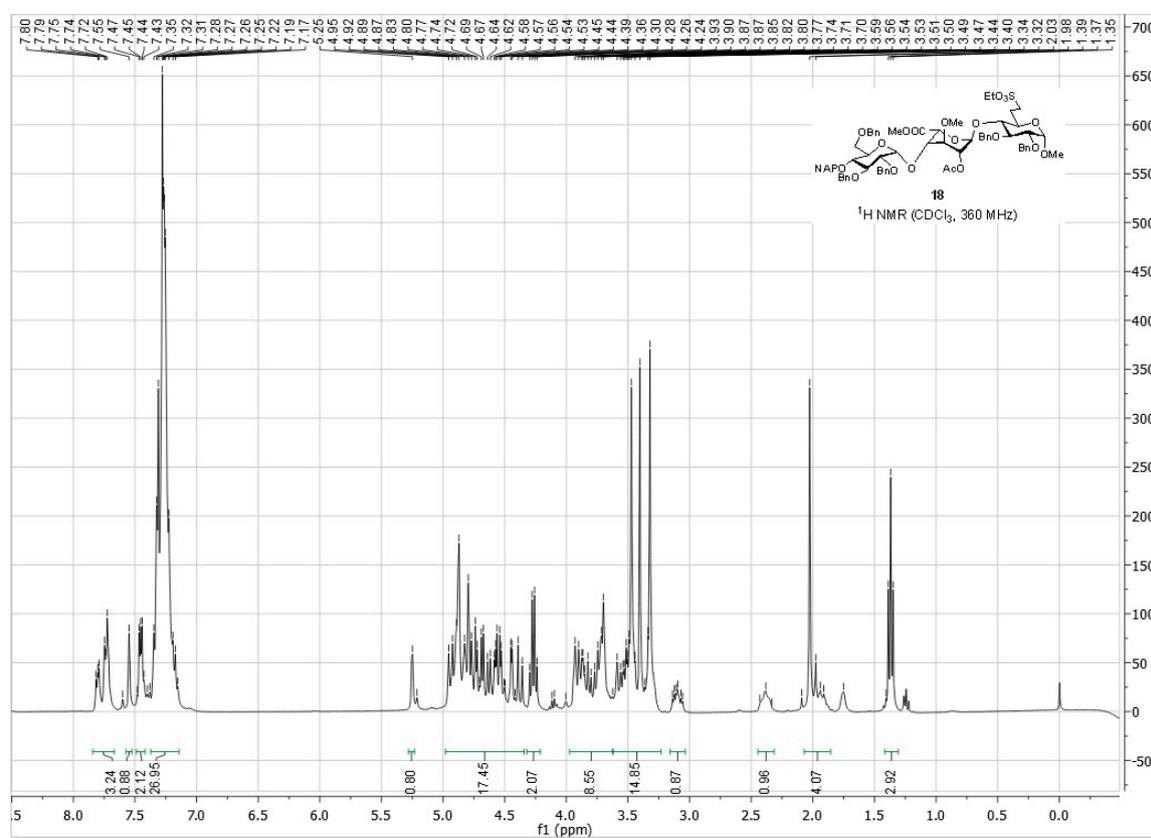
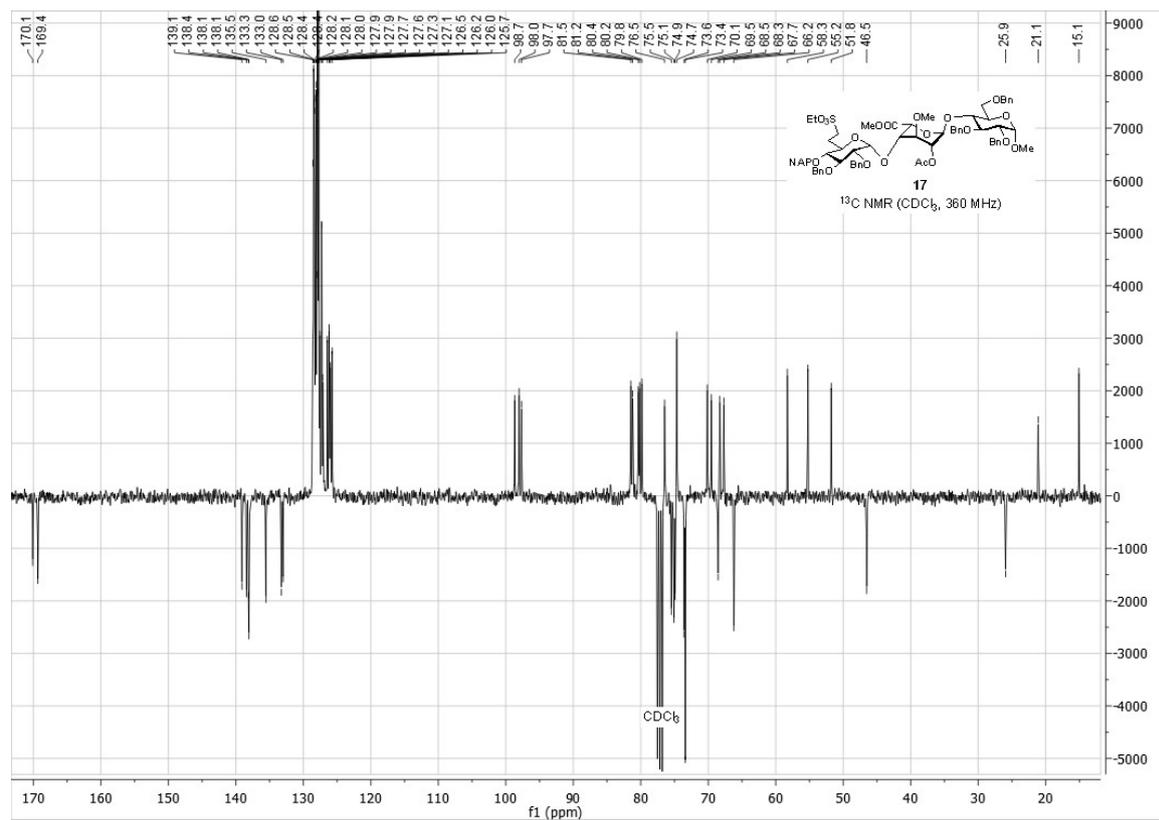


Figure S3. ^1H -NMR spectrum of compound **17** in CDCl_3 .



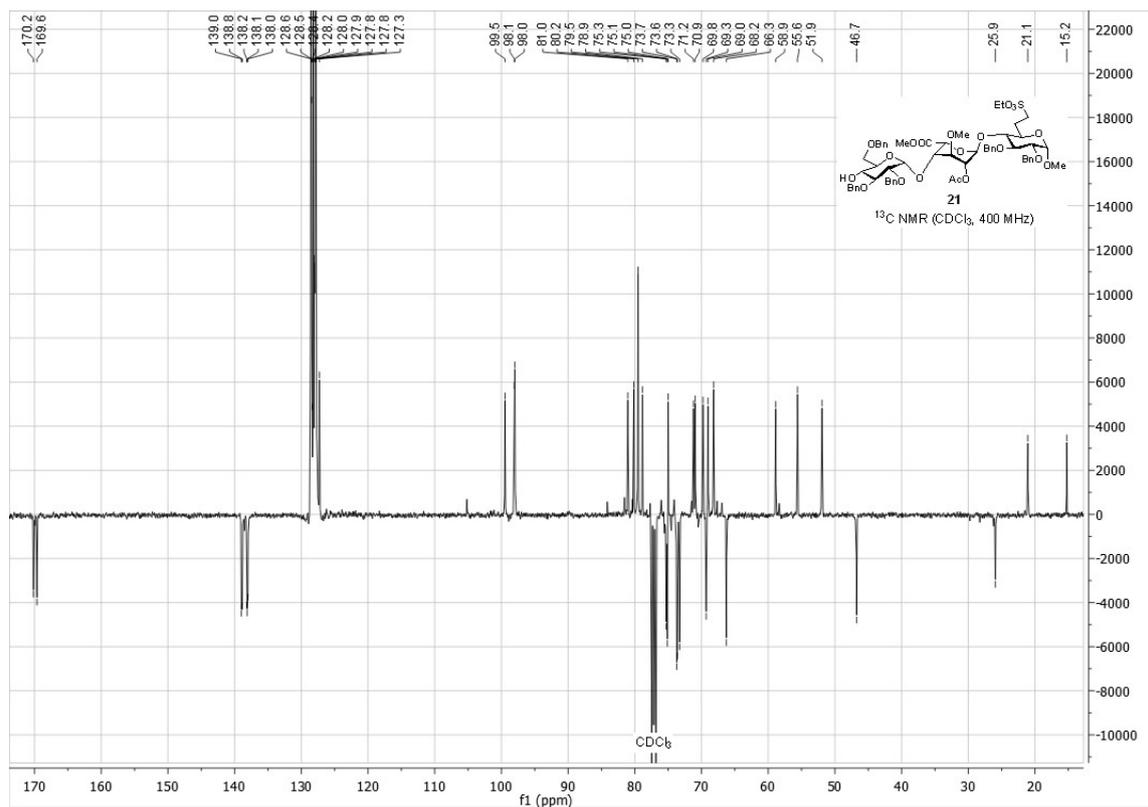


Figure S8. ¹³C-NMR spectrum of compound 21 in CDCl₃.

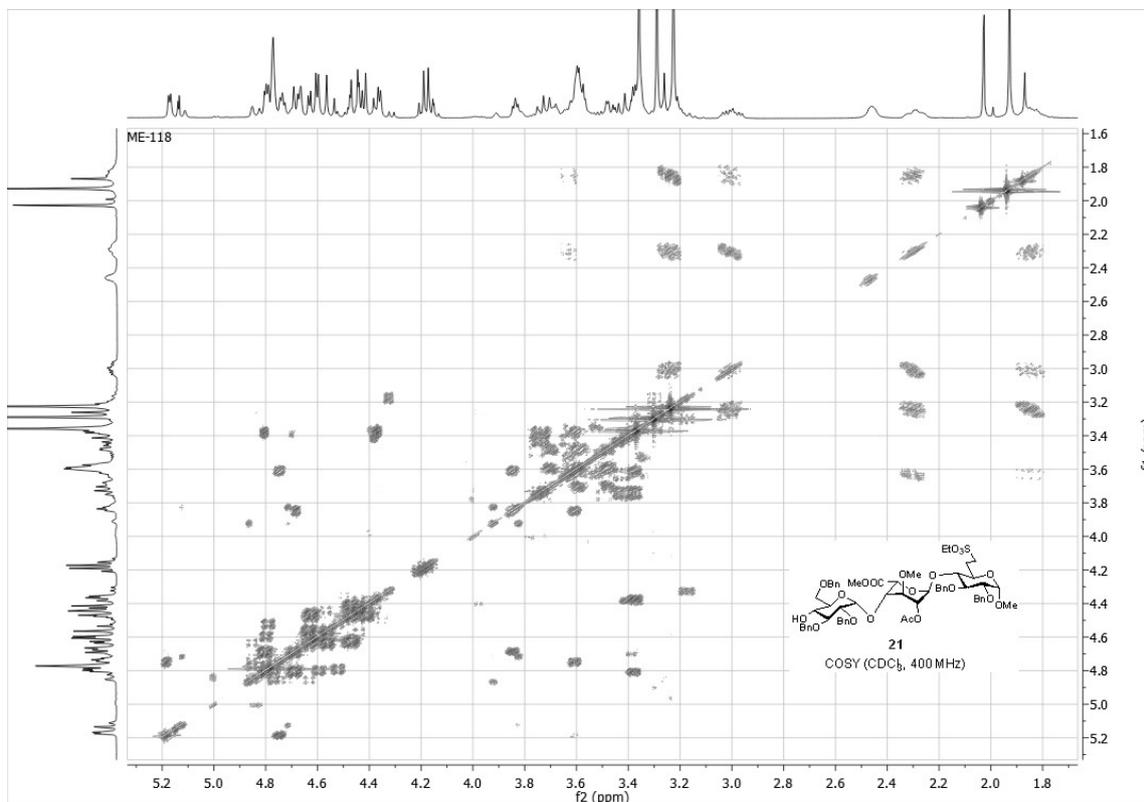


Figure S9. ¹H-¹H COSY (homonuclear correlation spectroscopy) spectrum of compound 21 in CDCl₃.

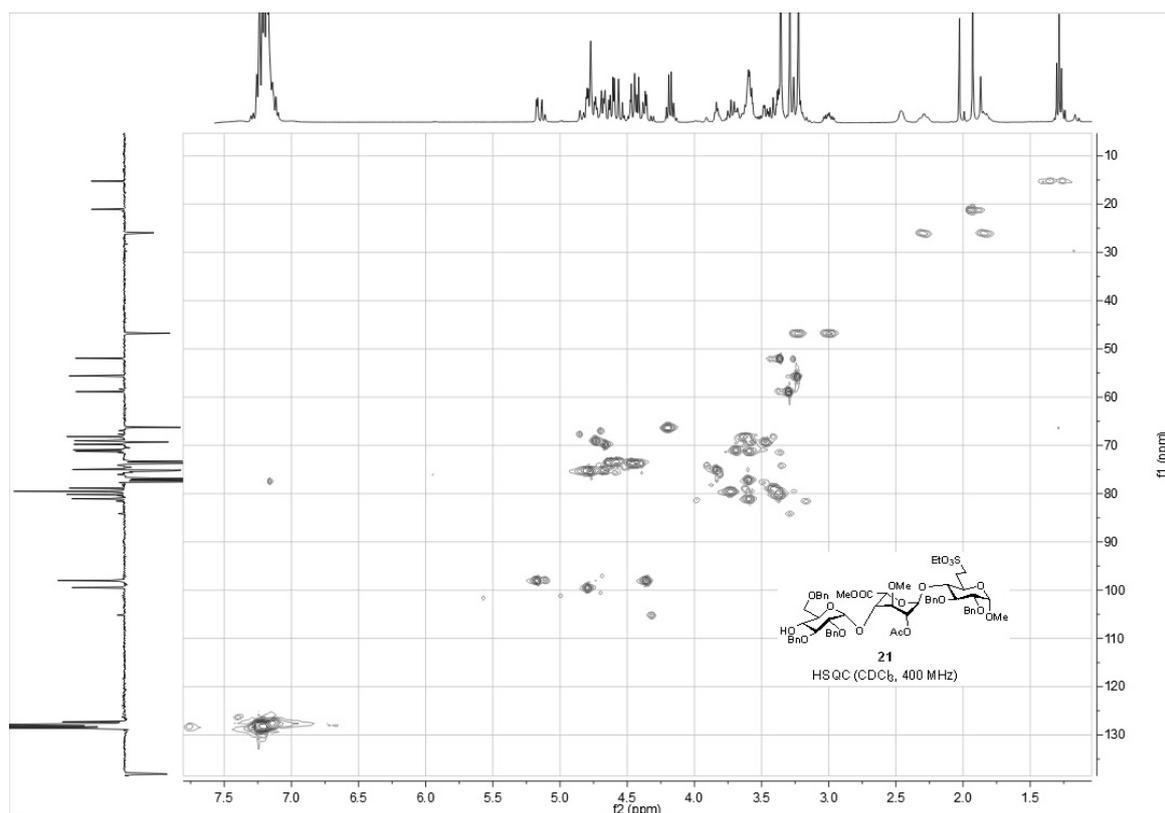


Figure S10. ^1H - ^{13}C HSQC (heteronuclear single-quantum correlation spectroscopy) spectrum of compound **21** in CDCl_3 .

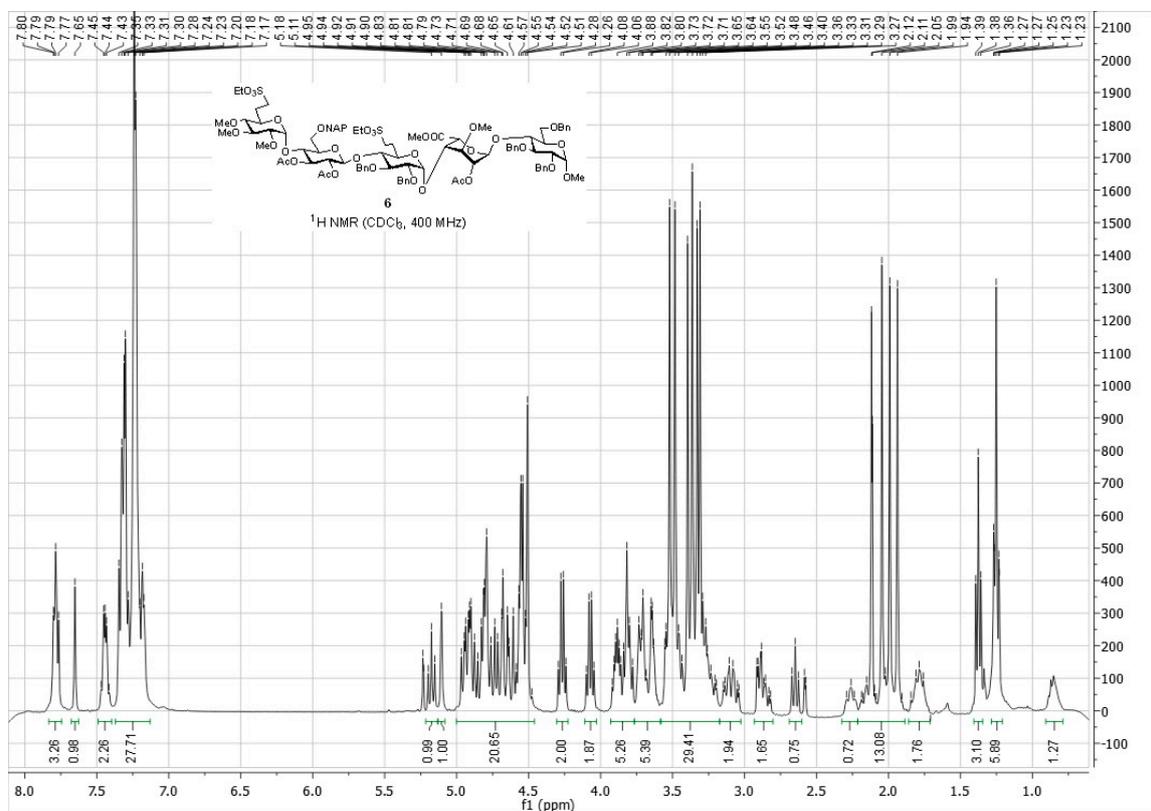


Figure S11. ^1H -NMR spectrum of compound **6** in CDCl_3 .

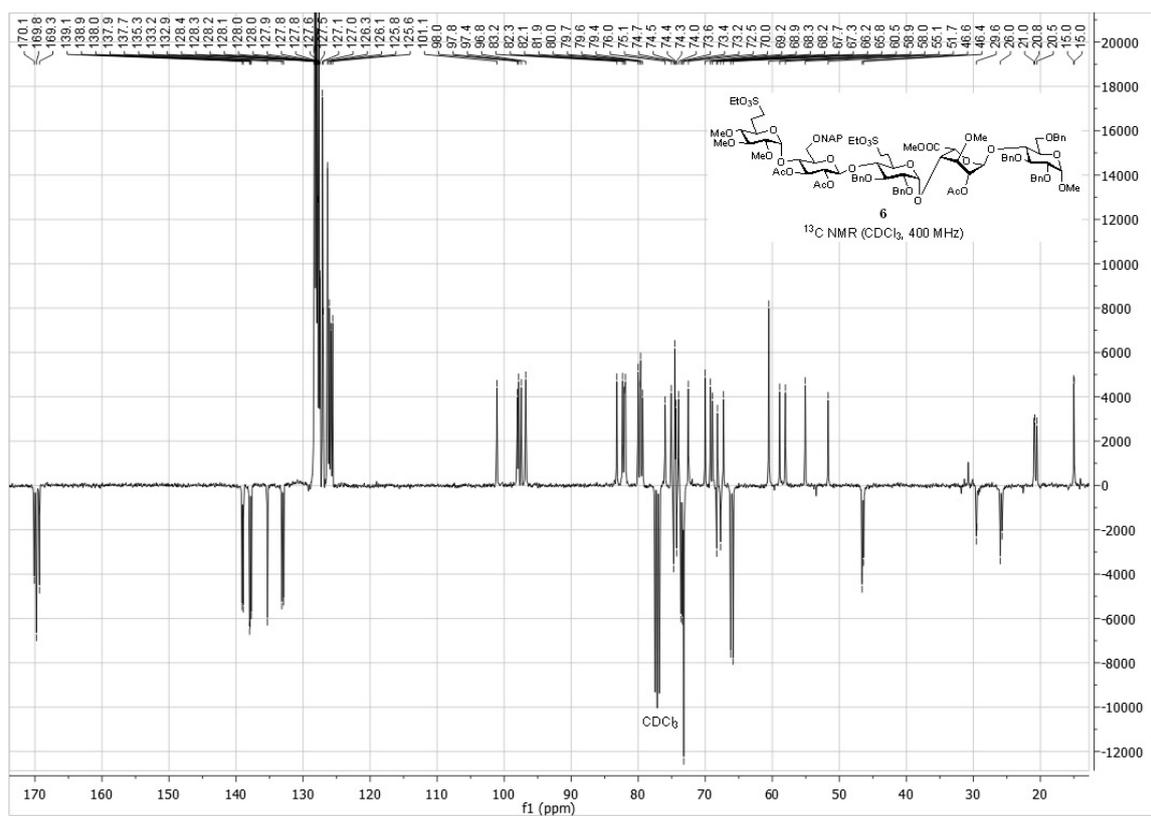


Figure S12. ^{13}C -NMR spectrum of compound **6** in CDCl_3 .

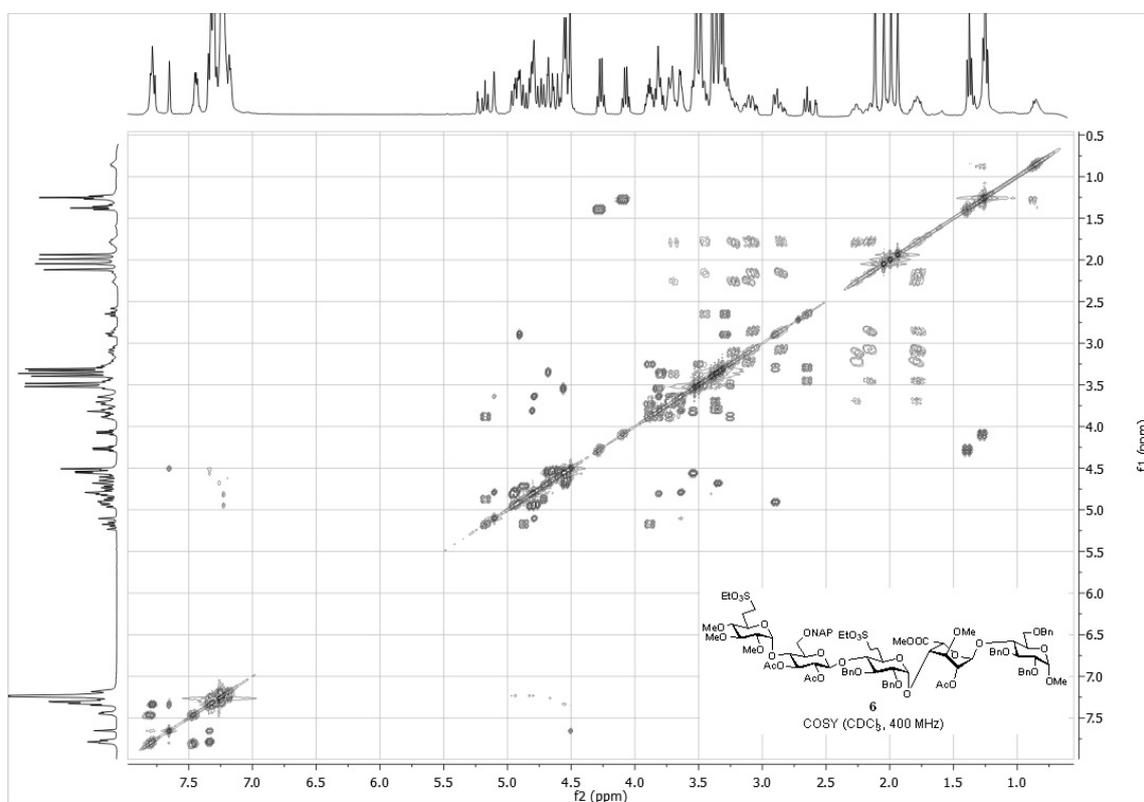
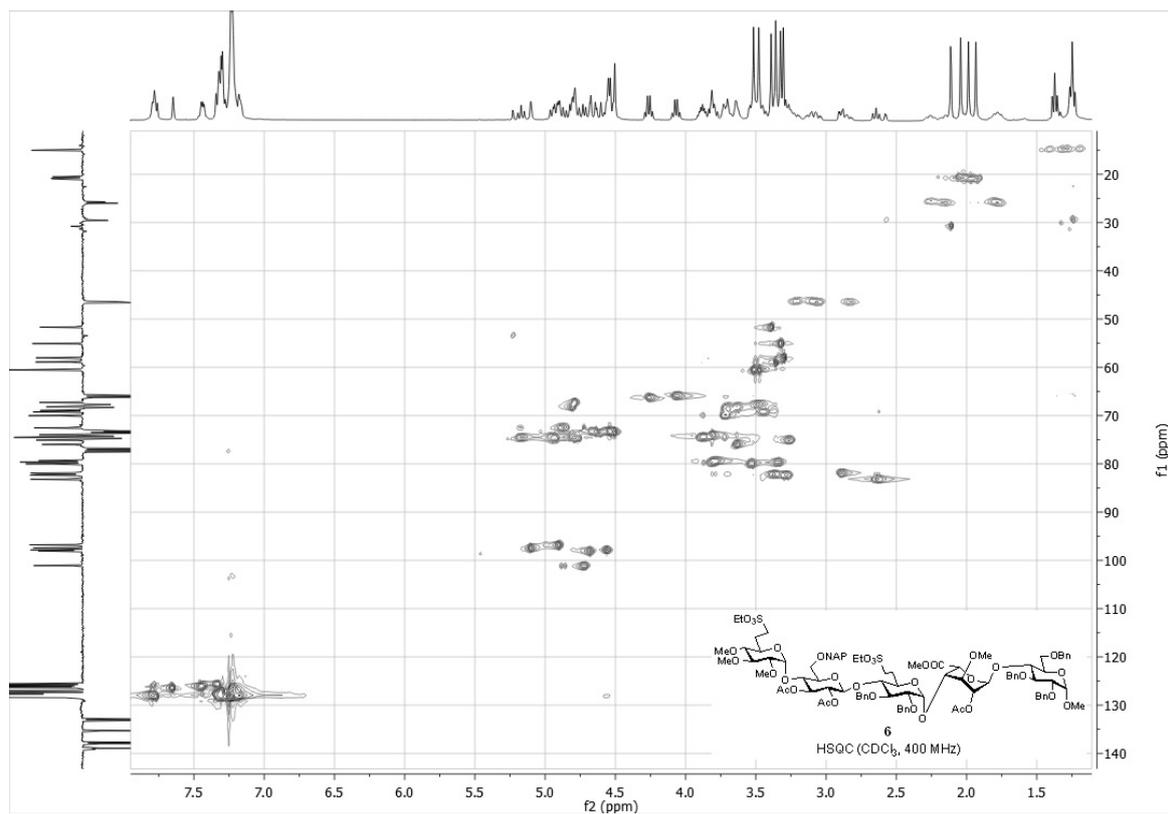
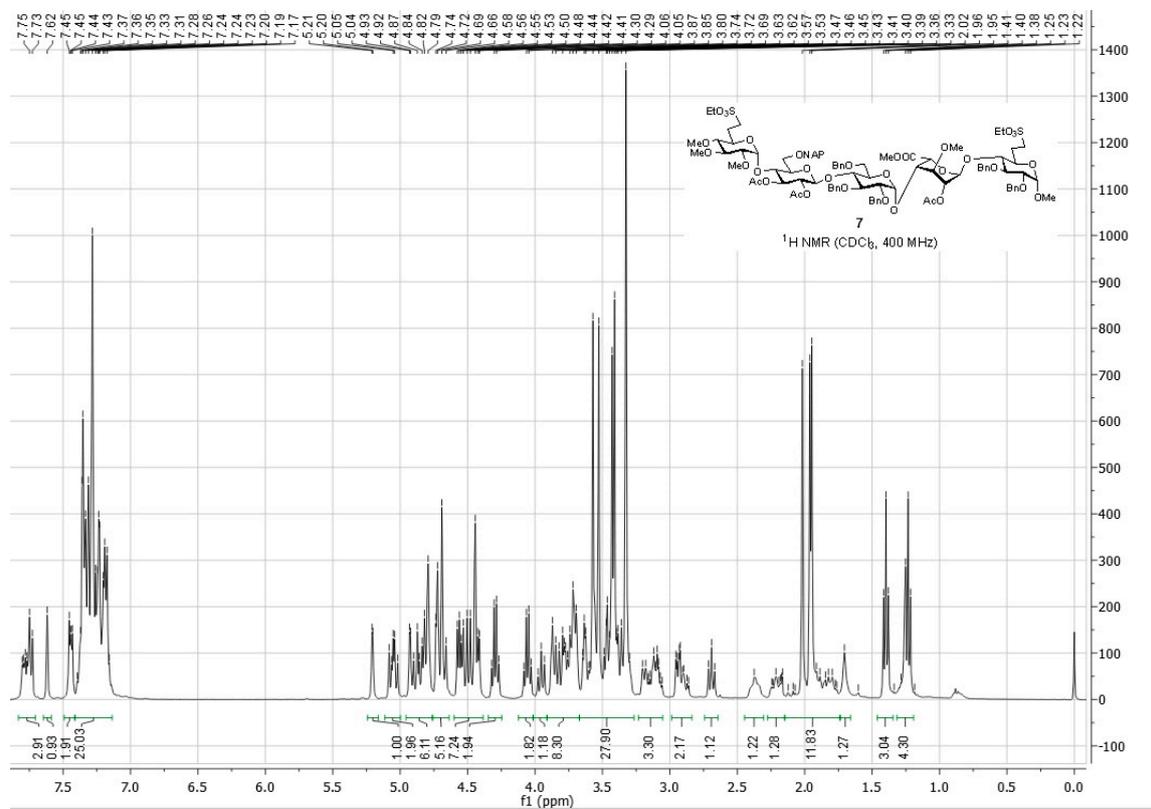


Figure S13. ^1H - ^1H COSY spectrum of compound **6** in CDCl_3 .

Figure S14. ^1H - ^{13}C HSQC spectrum of compound 6 in CDCl_3 .Figure S15. ^1H -NMR spectrum of compound 7 in CDCl_3 .

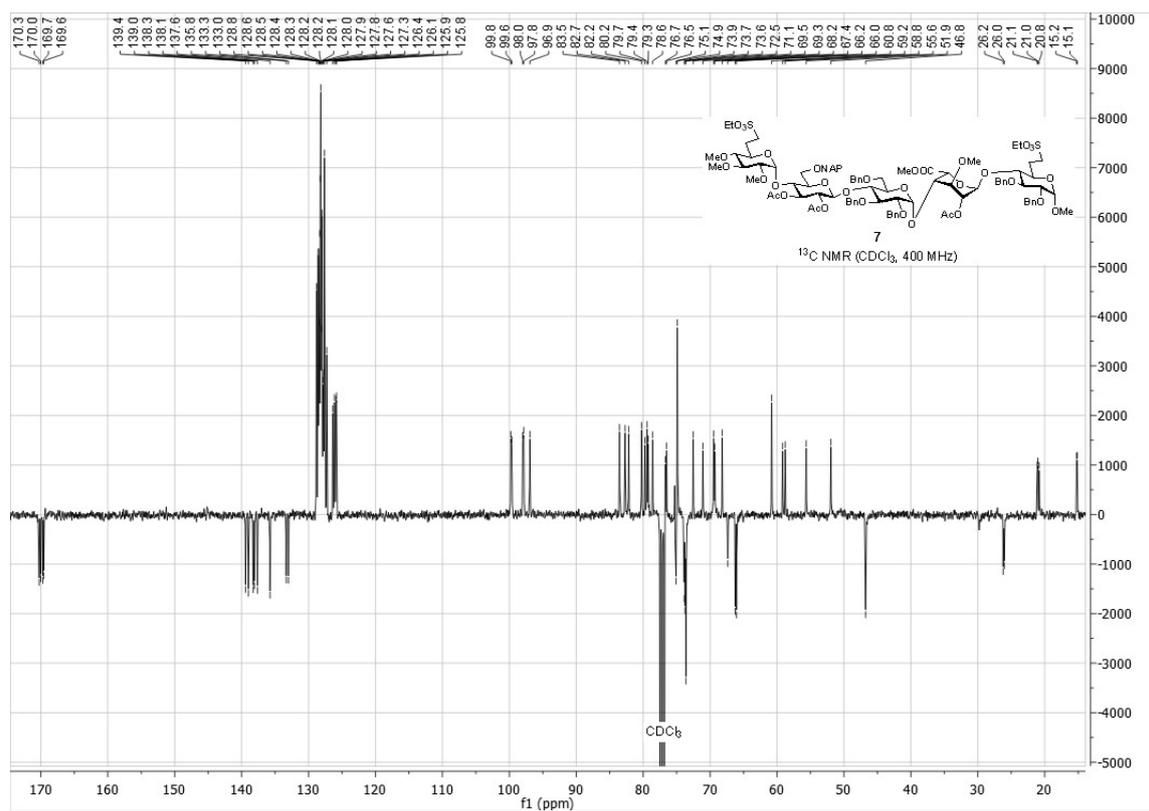


Figure S16. ¹³C-NMR spectrum of compound 7 in CDCl₃.

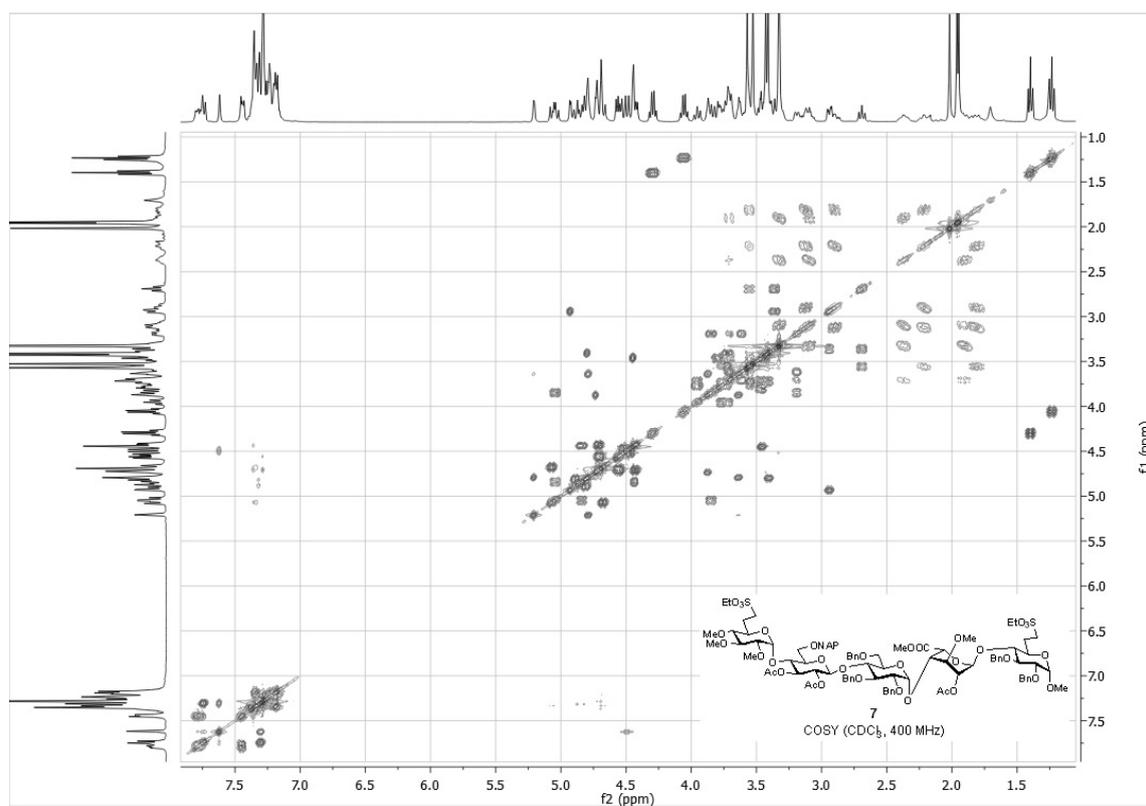


Figure S17. ¹H-¹H COSY spectrum of compound 7 in CDCl₃.

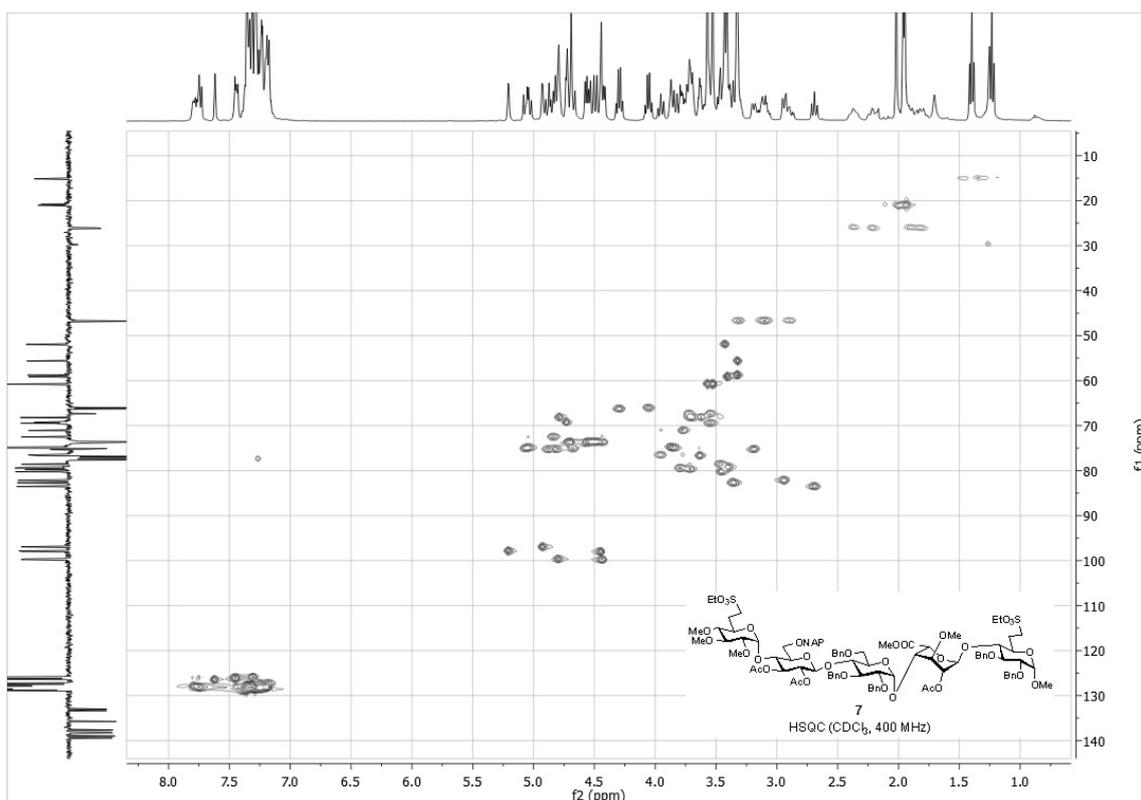


Figure S18. ^1H - ^{13}C HSQC spectrum of compound 7 in CDCl_3 .

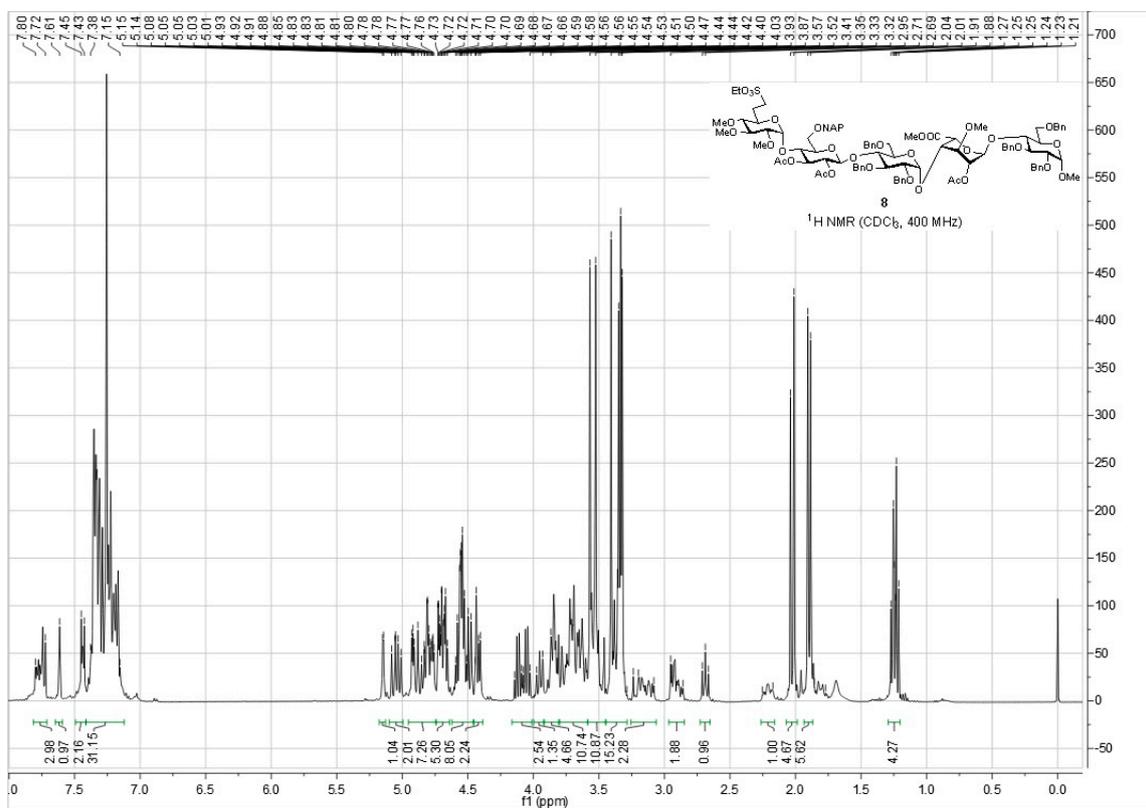
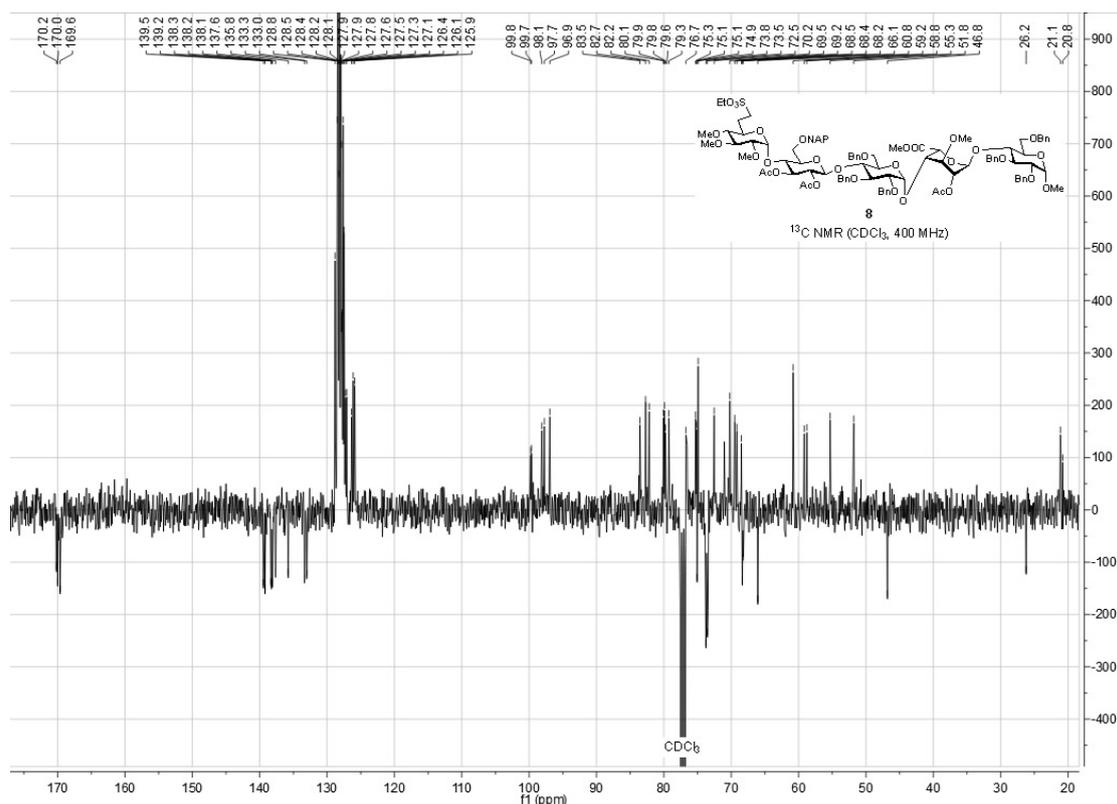
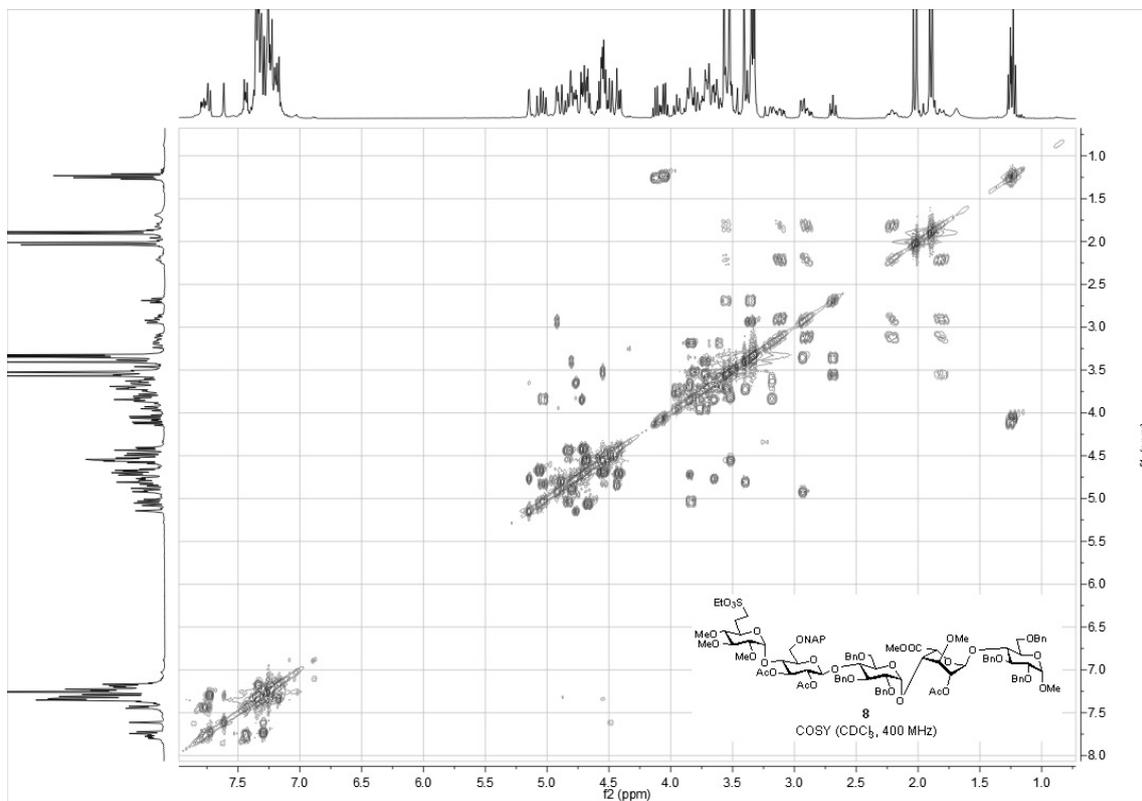
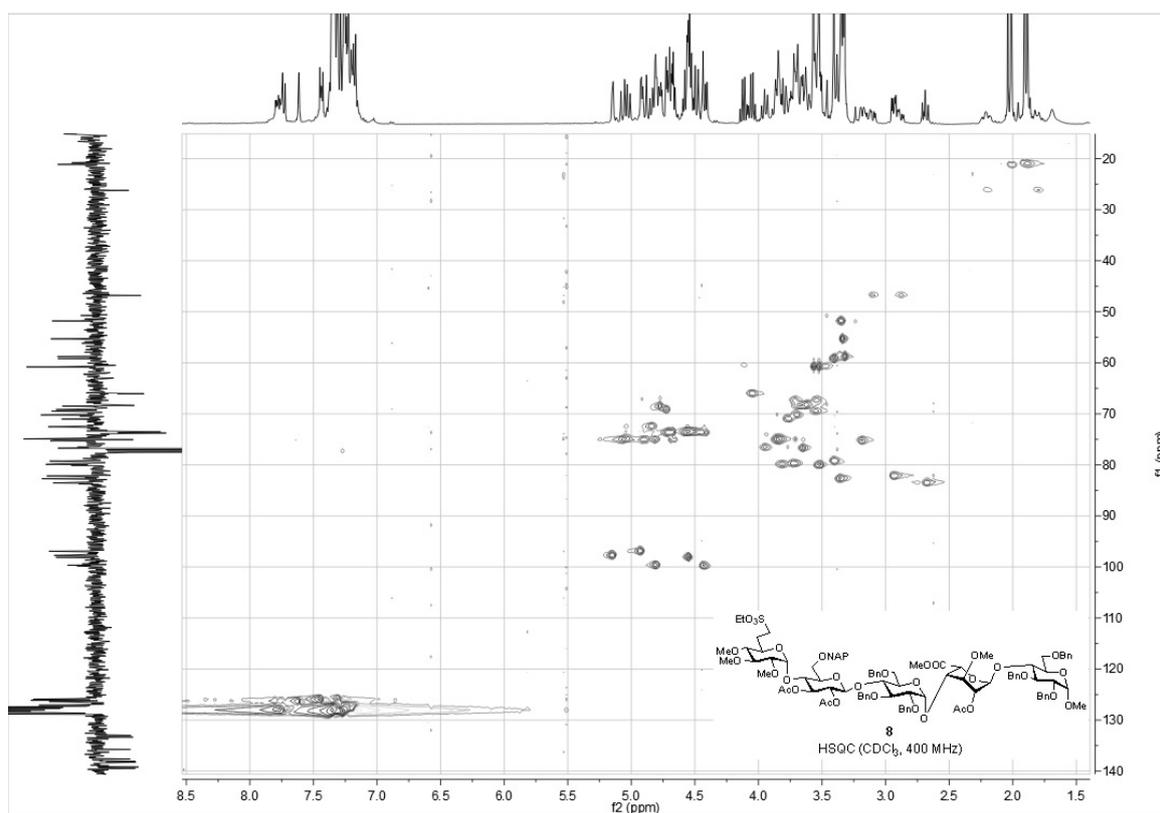
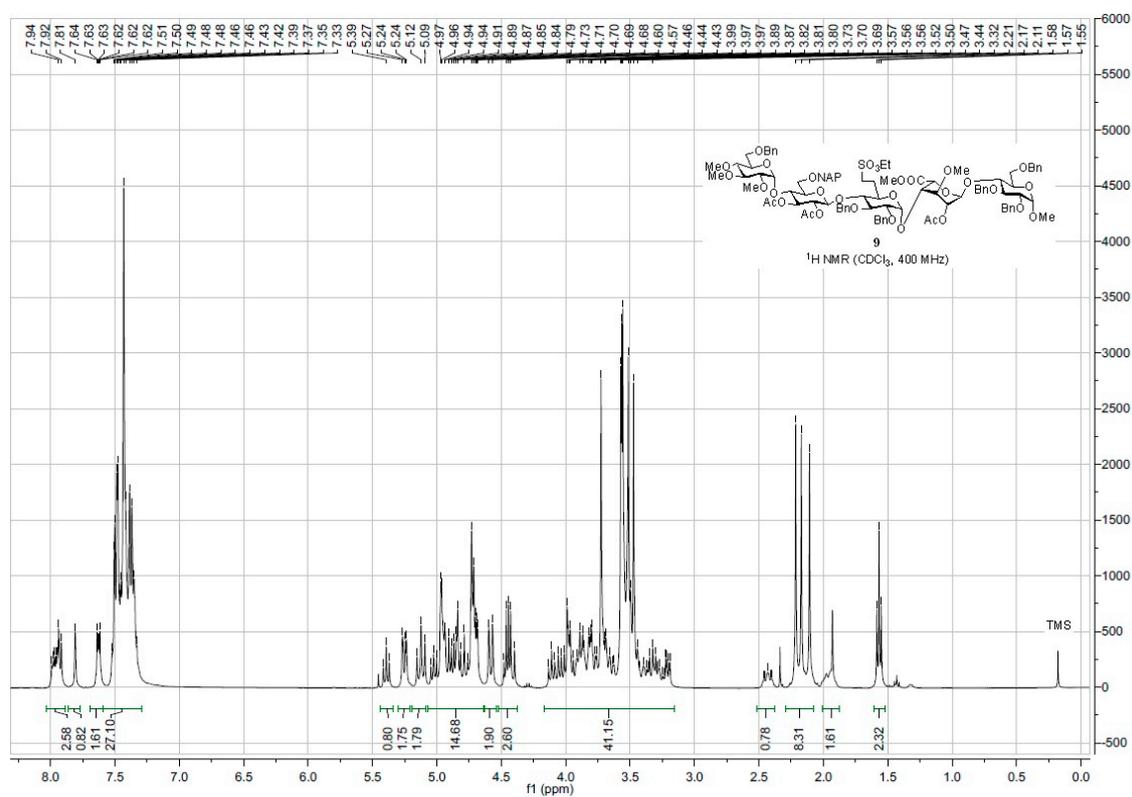
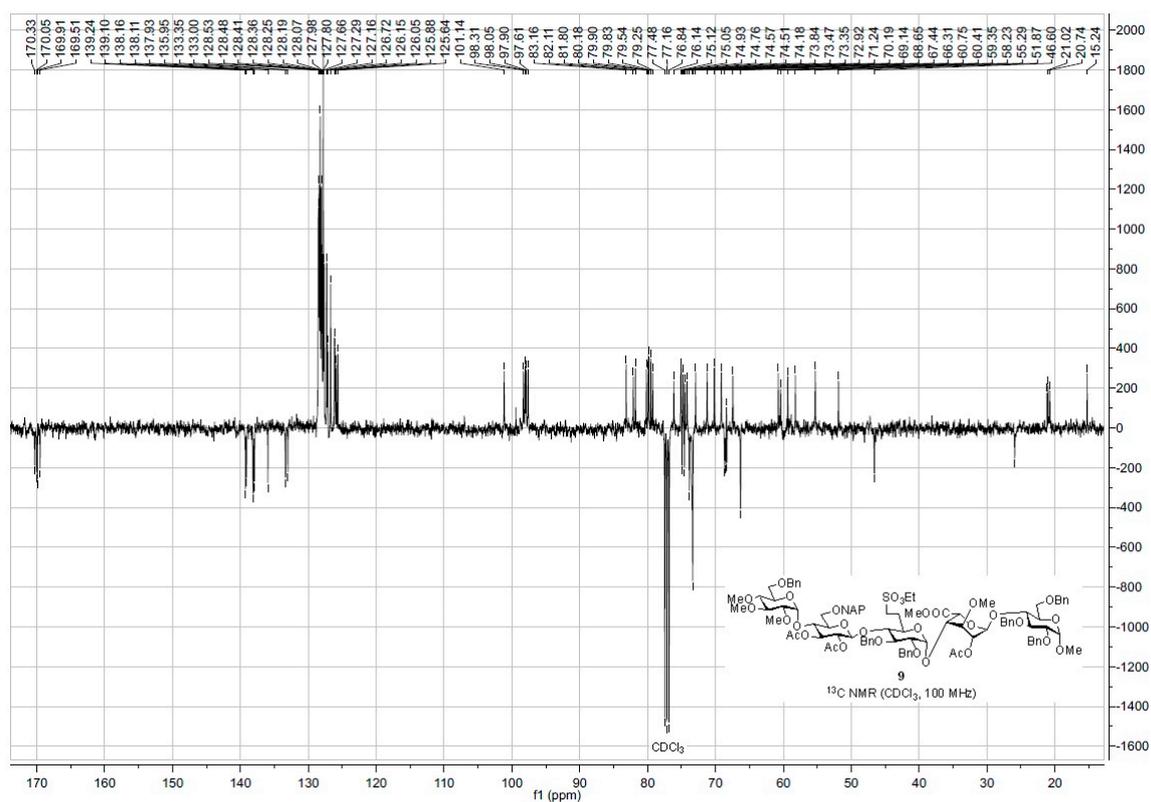
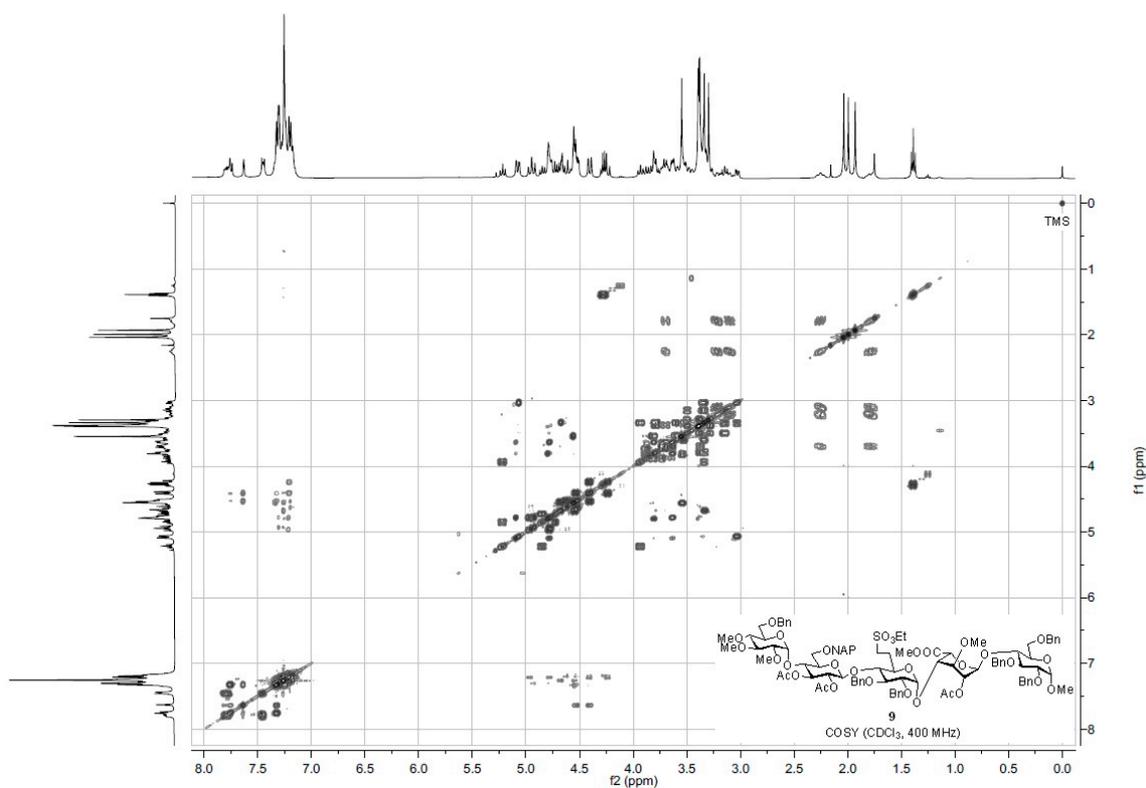


Figure S19. ^1H -NMR spectrum of compound 8 in CDCl_3 .

Figure S20. ¹³C-NMR spectrum of compound 8 in CDCl₃.Figure S21. ¹H-¹H COSY spectrum of compound 8 in CDCl₃.

Figure S22. ^1H - ^{13}C HSQC spectrum of compound **8** in CDCl_3 .Figure S23. ^1H -NMR spectrum of compound **9** in CDCl_3 .

Figure S24. ^{13}C -NMR spectrum of compound 9 in CDCl_3 .Figure S25. ^1H - ^1H COSY spectrum of compound 9 in CDCl_3 .

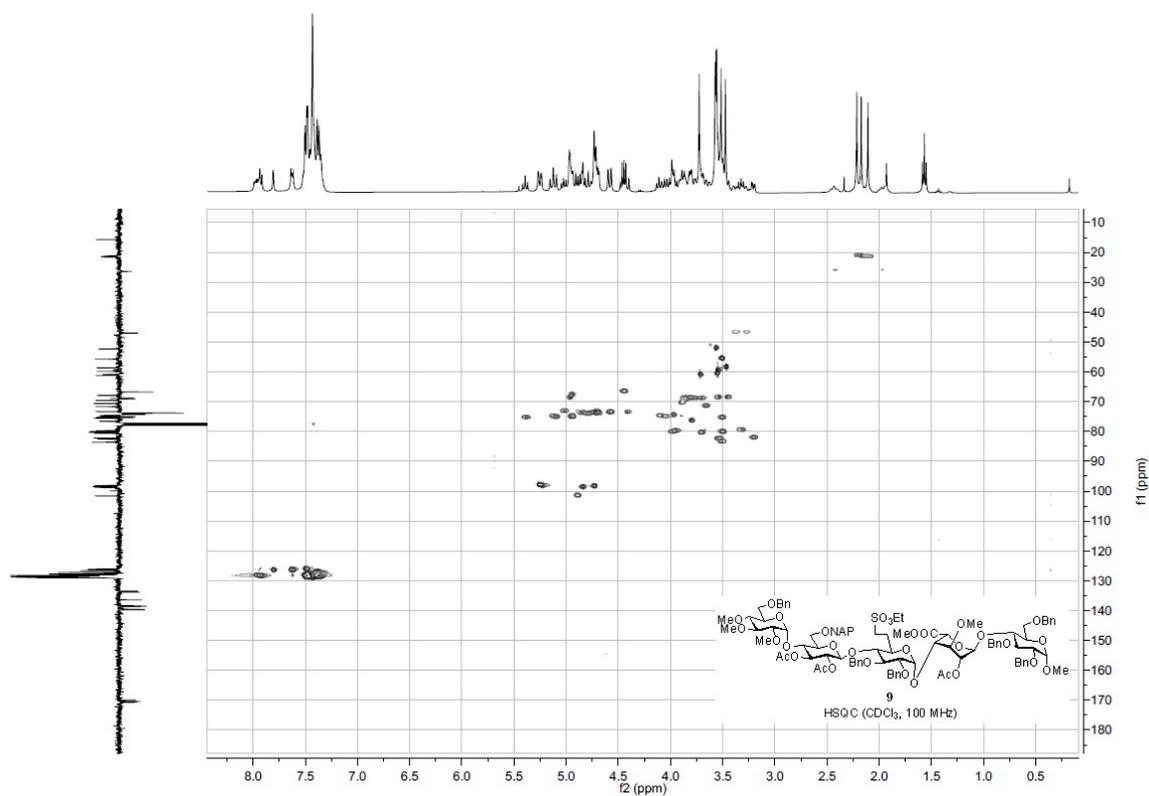


Figure S26. ^1H - ^{13}C HSQC spectrum of compound **9** in CDCl_3 .

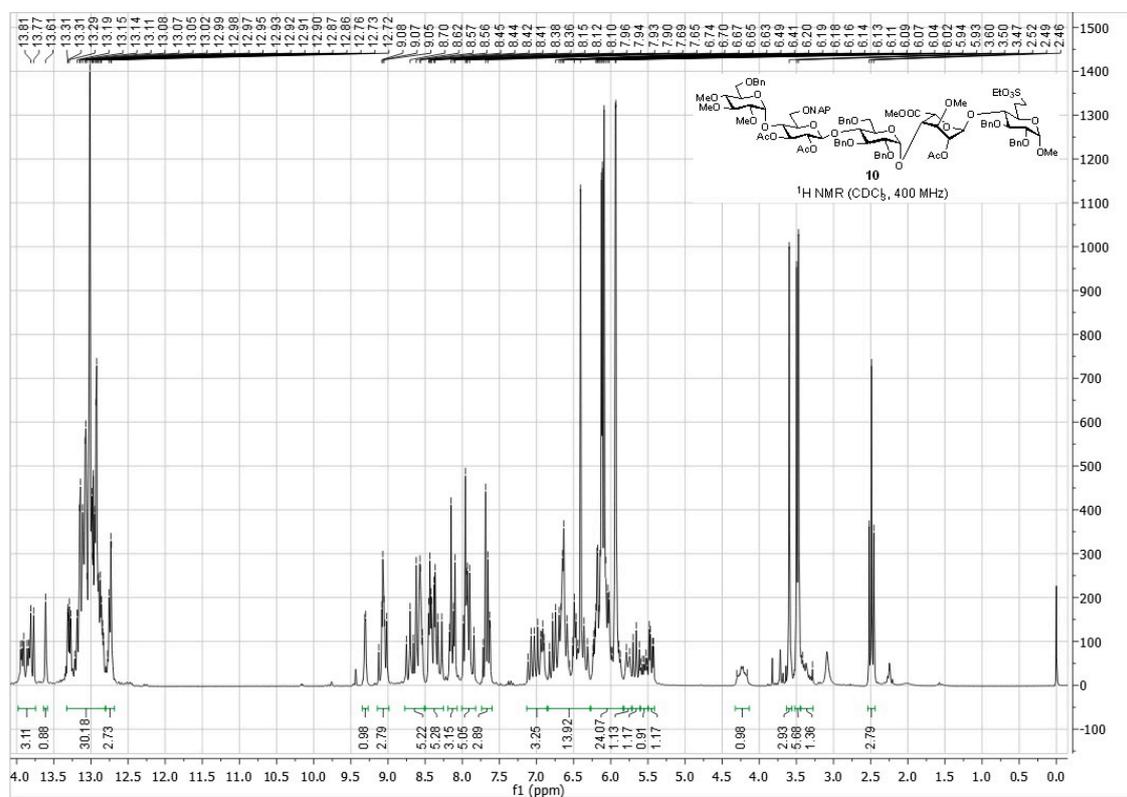
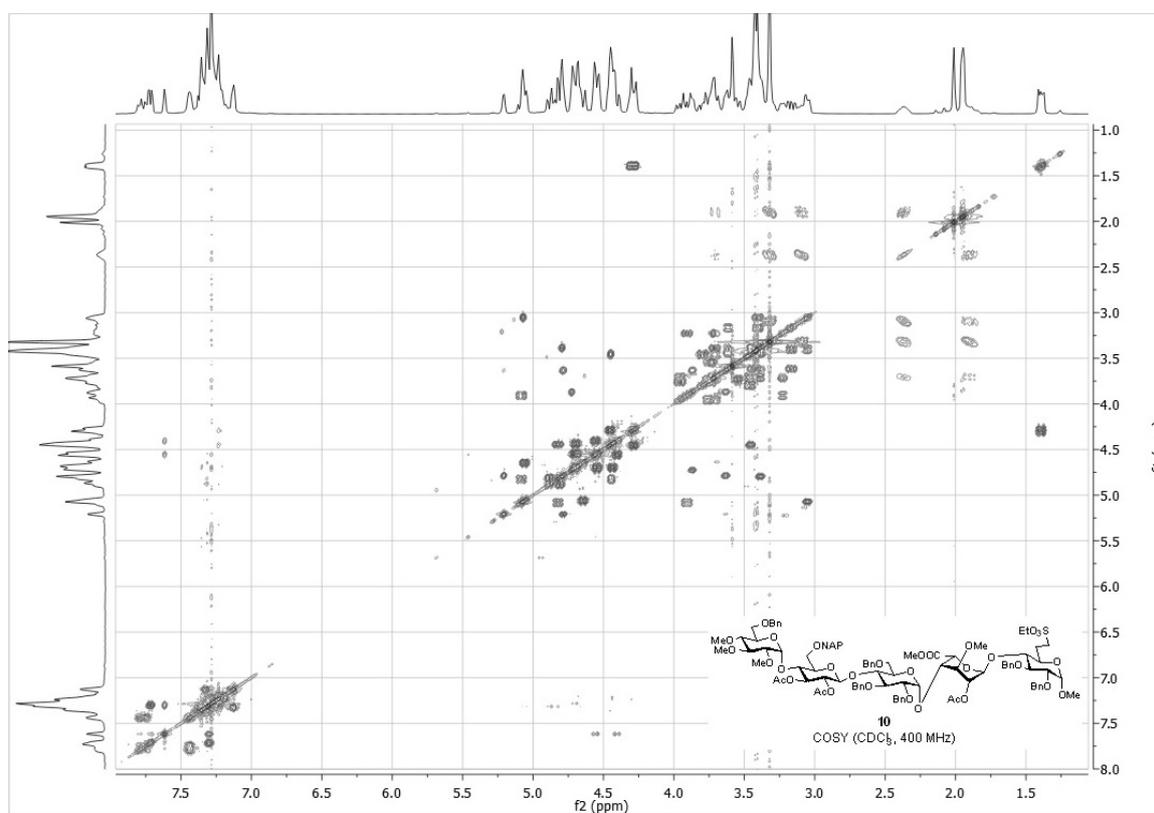
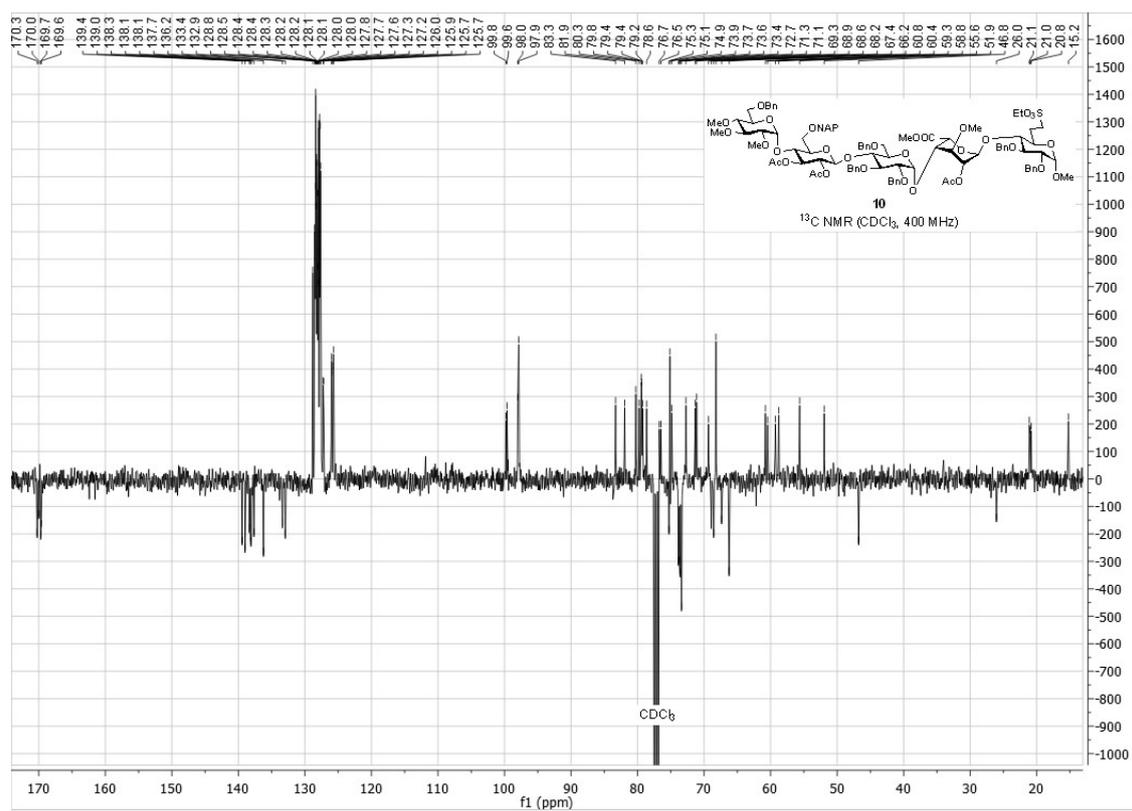
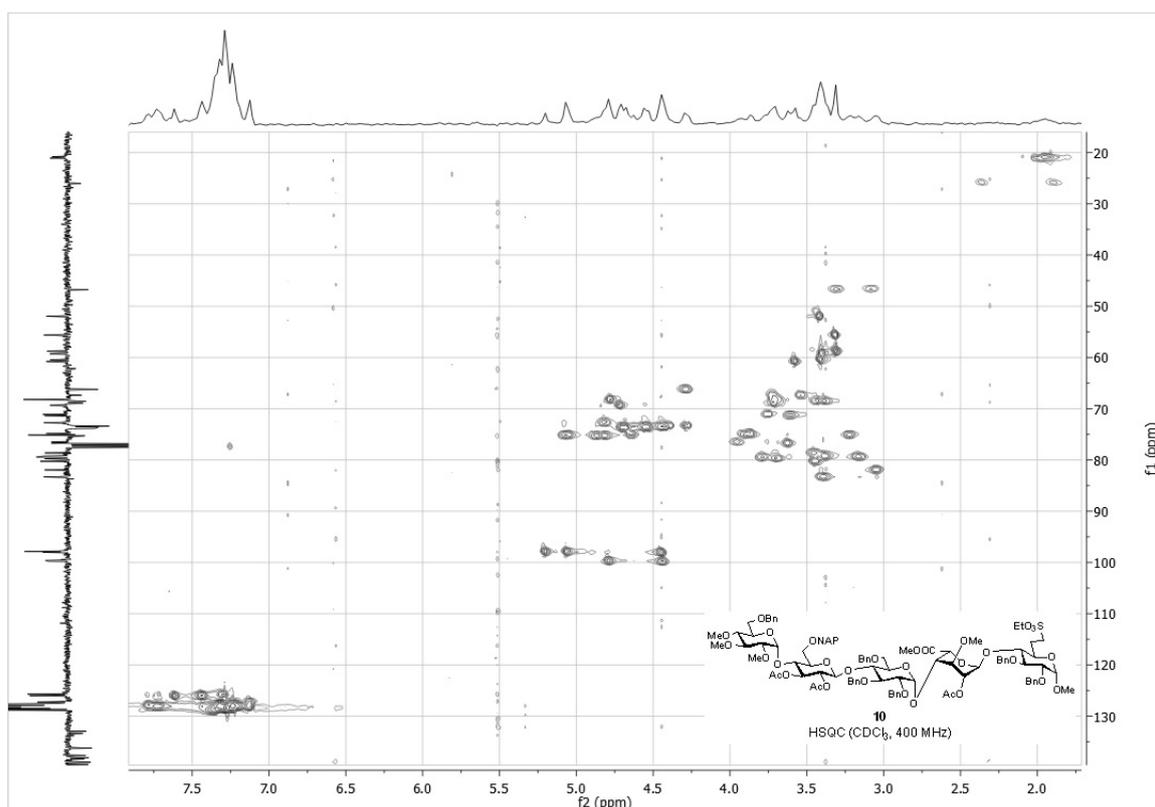
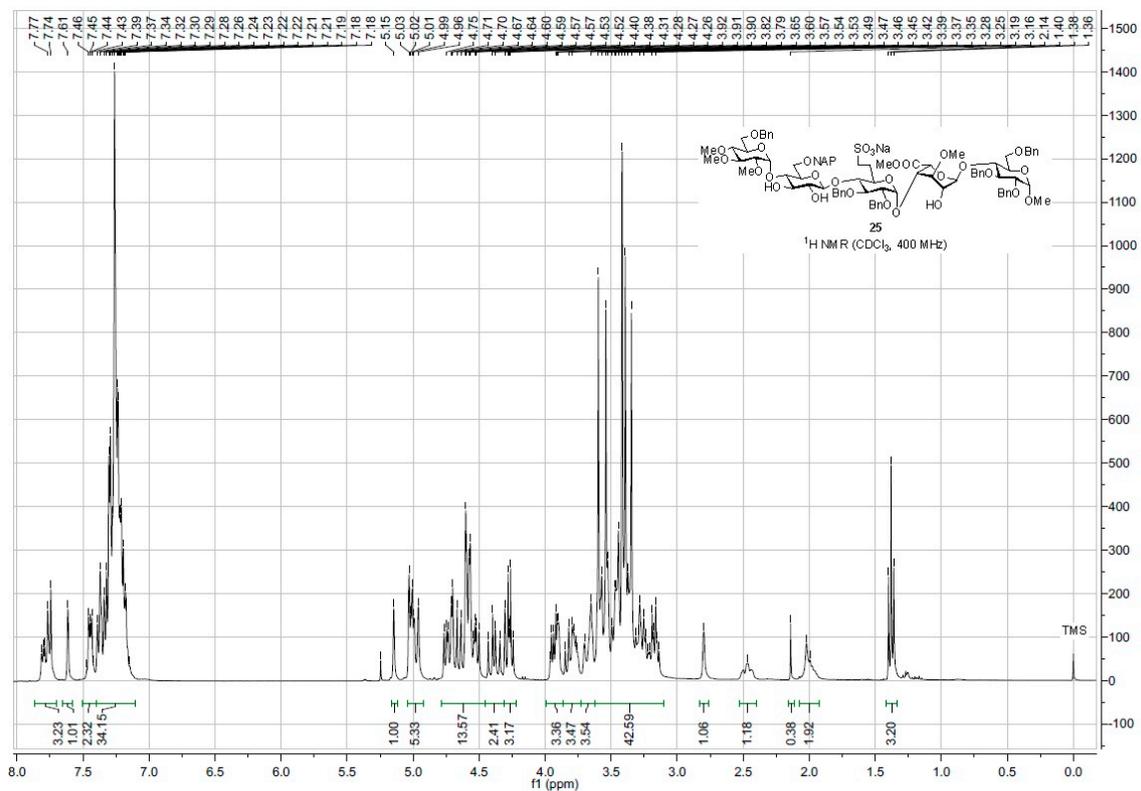


Figure S27. ^1H -NMR spectrum of compound **10** in CDCl_3 .



Figure S30. ^1H - ^{13}C HSQC spectrum of compound **10** in CDCl_3 .Figure S31. ^1H -NMR spectrum of compound **25** in CDCl_3 .

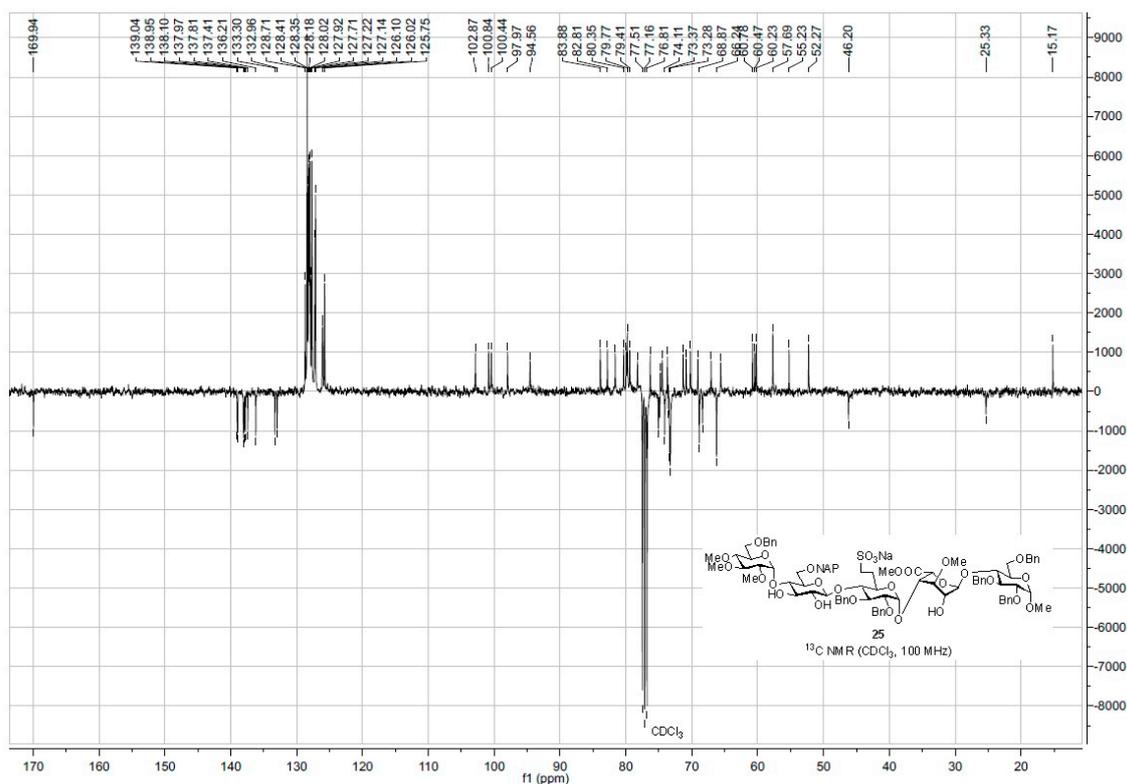


Figure S32. ¹³C-NMR spectrum of compound 25 in CDCl₃.

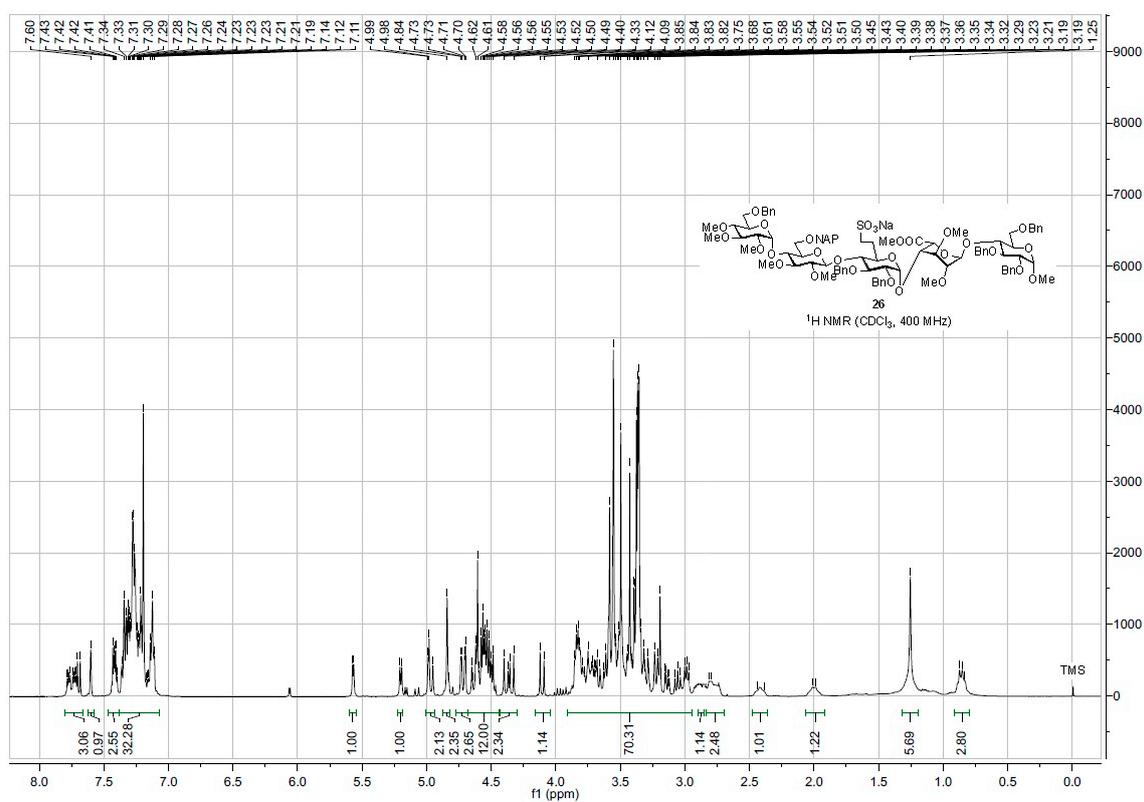


Figure S33. ¹H-NMR spectrum of compound 26 in a mixture of CDCl₃ and CD₃OD.

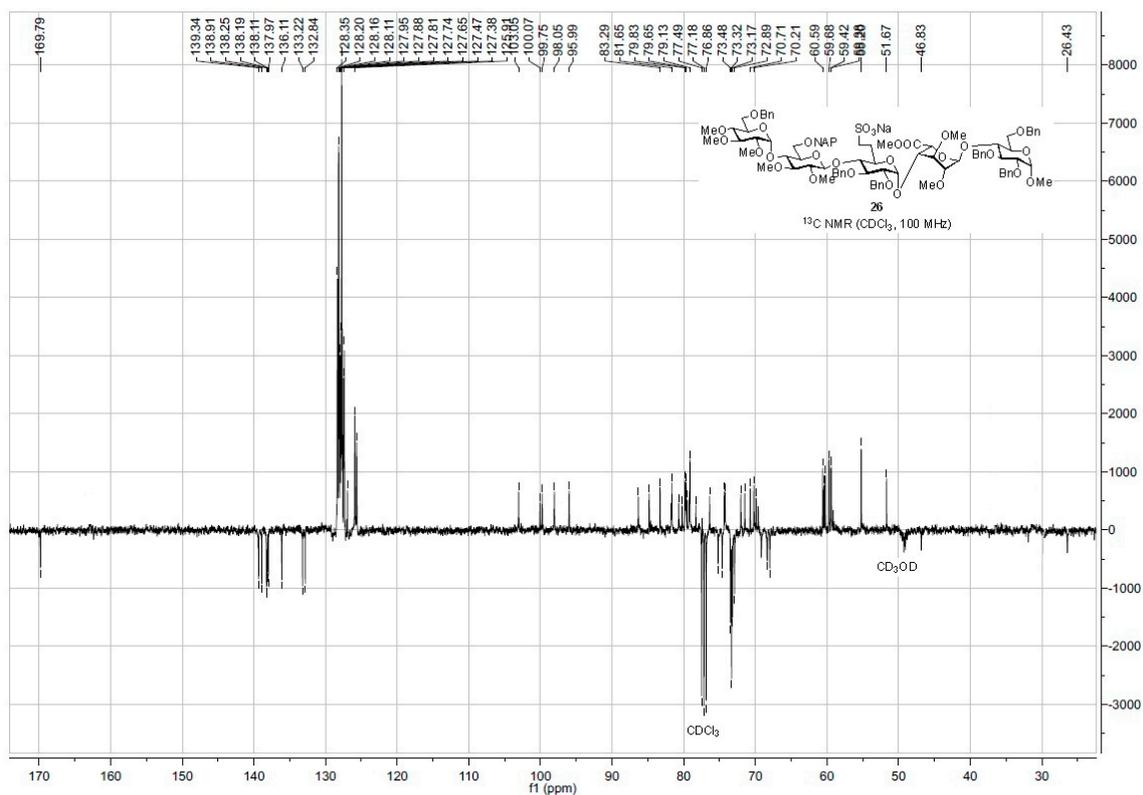


Figure S34. ¹³C-NMR spectrum of compound 26 in a mixture of CDCl₃ and CD₃OD.

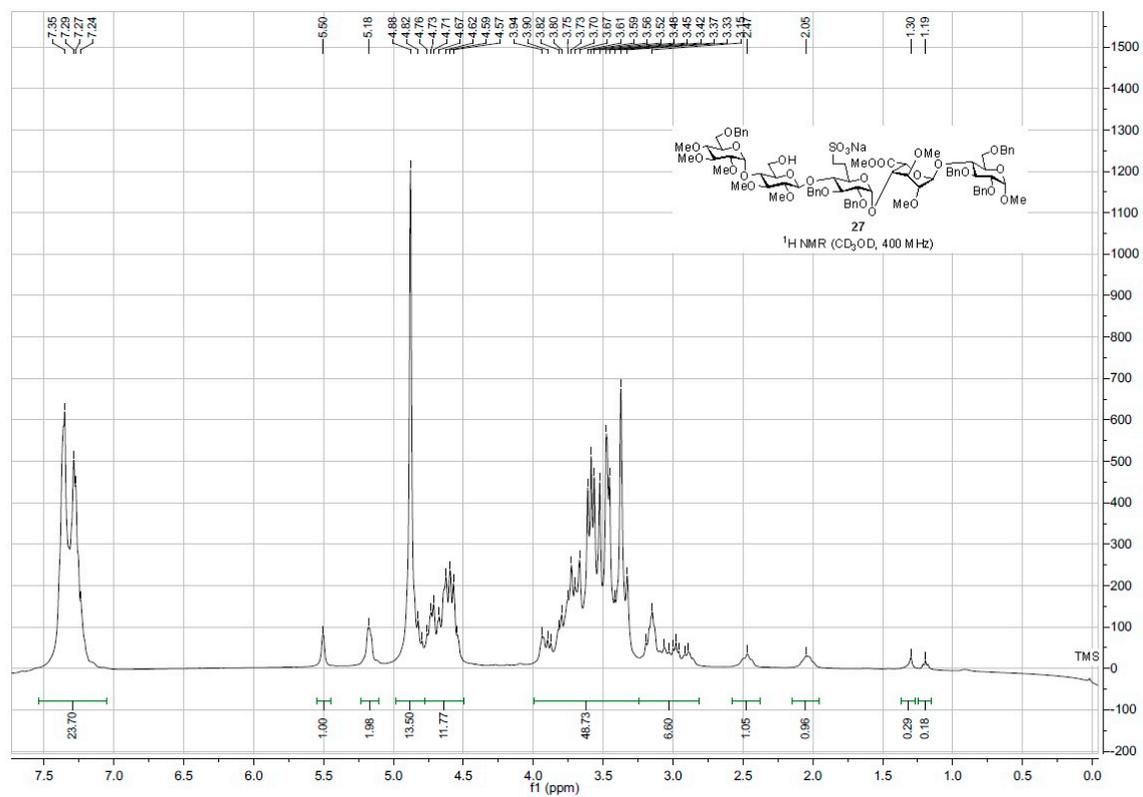


Figure S35. ¹H-NMR spectrum of compound 27 in CD₃OD.

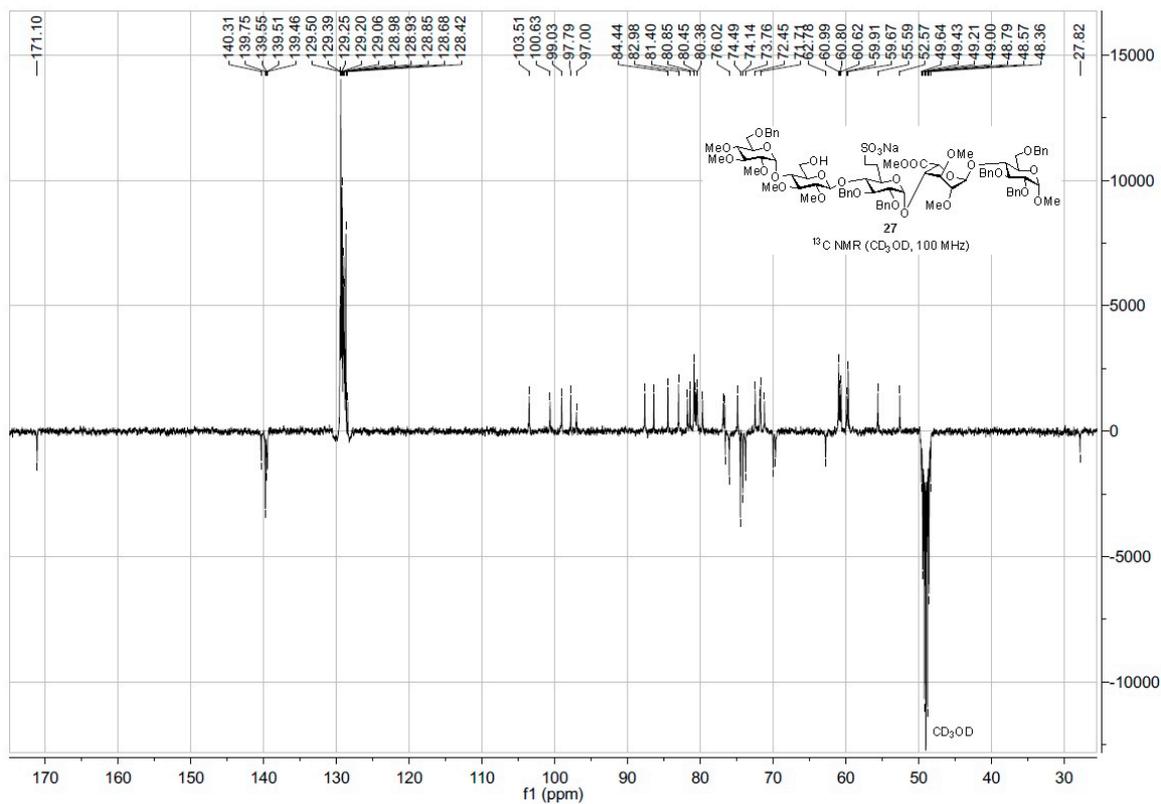


Figure S36. ^{13}C -NMR spectrum of compound 27 in CD_3OD .

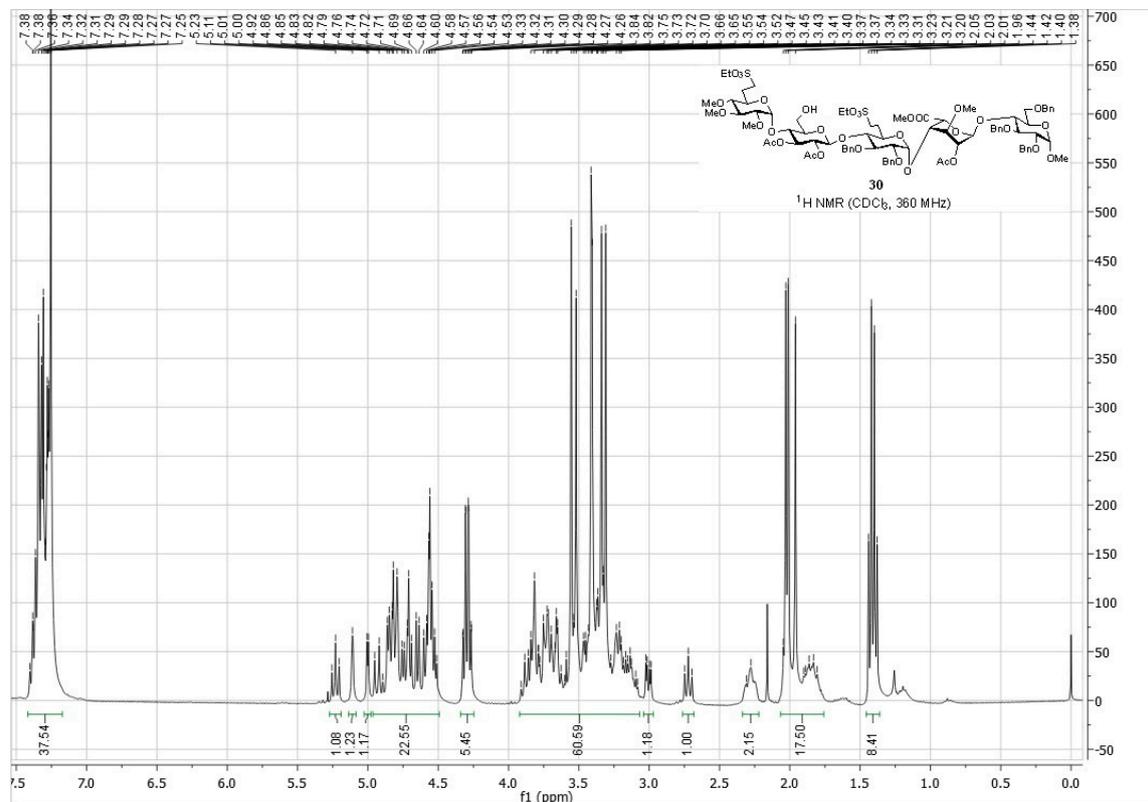


Figure S37. ^1H -NMR spectrum of compound 30 in CDCl_3 .

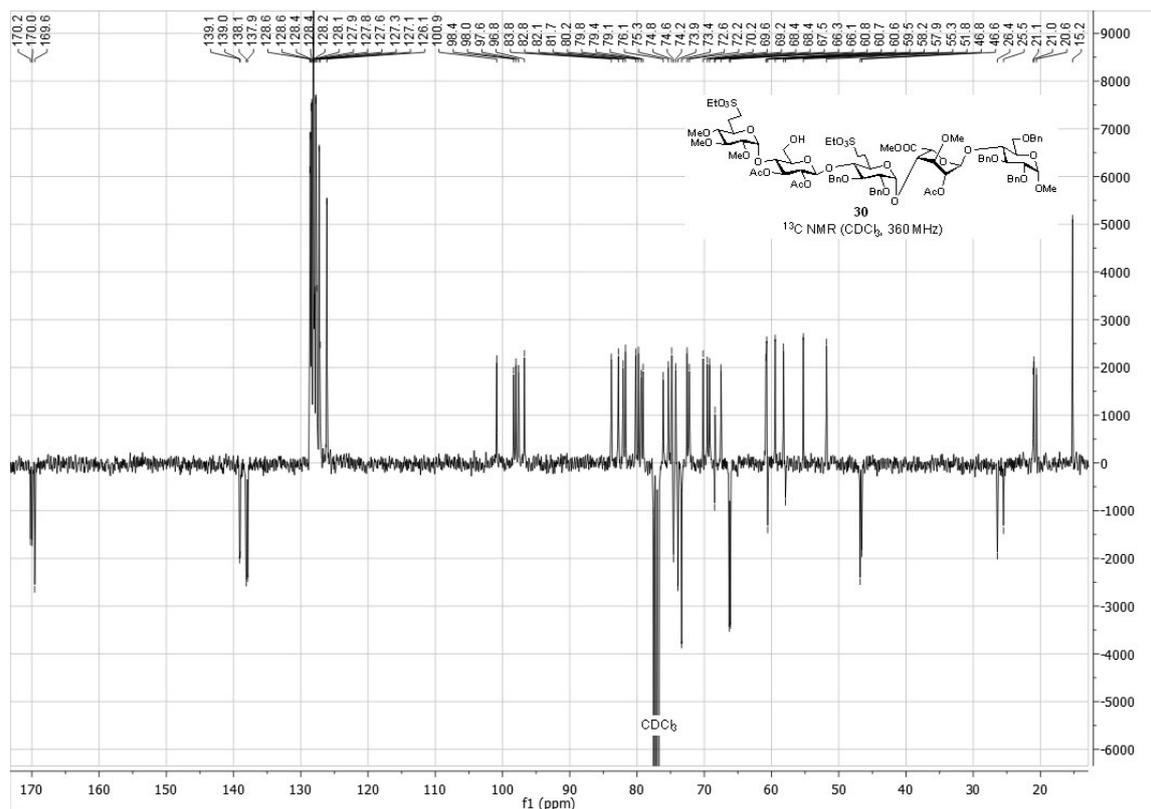


Figure S38. ^{13}C -NMR spectrum of compound **30** in CDCl_3 .

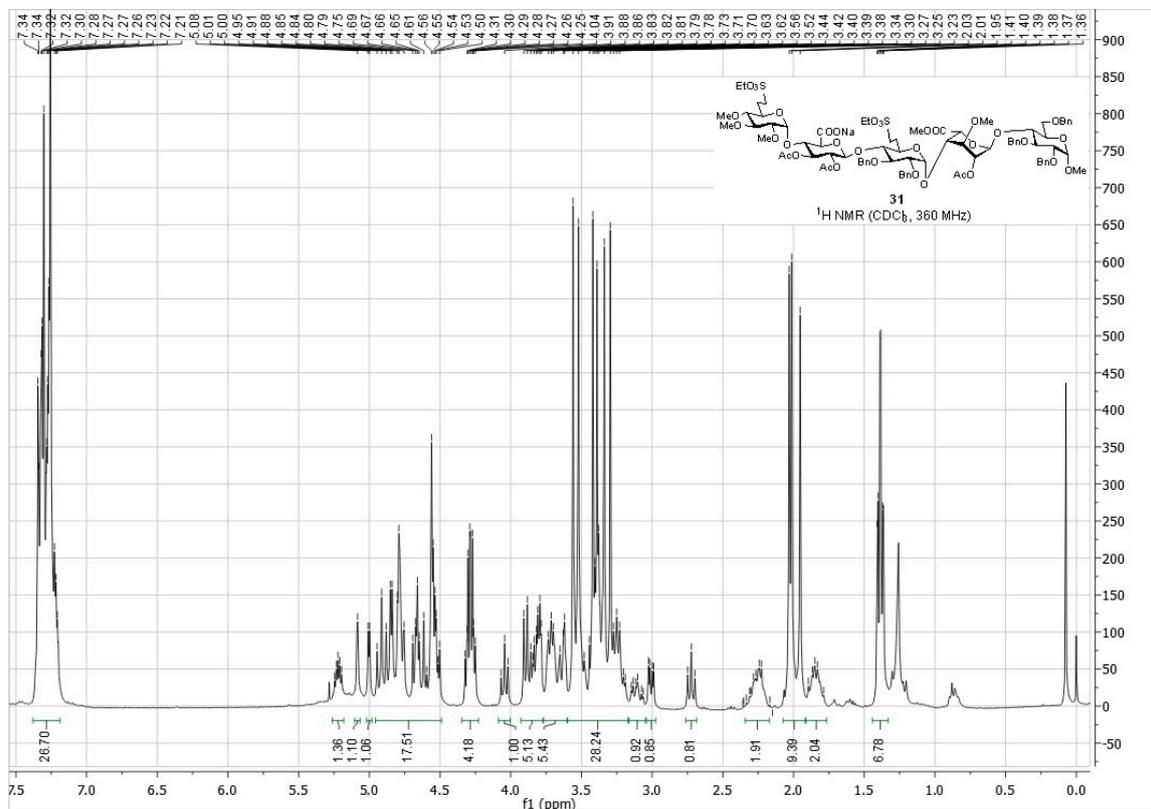


Figure S39. ^1H -NMR spectrum of compound **31** in CDCl_3 .

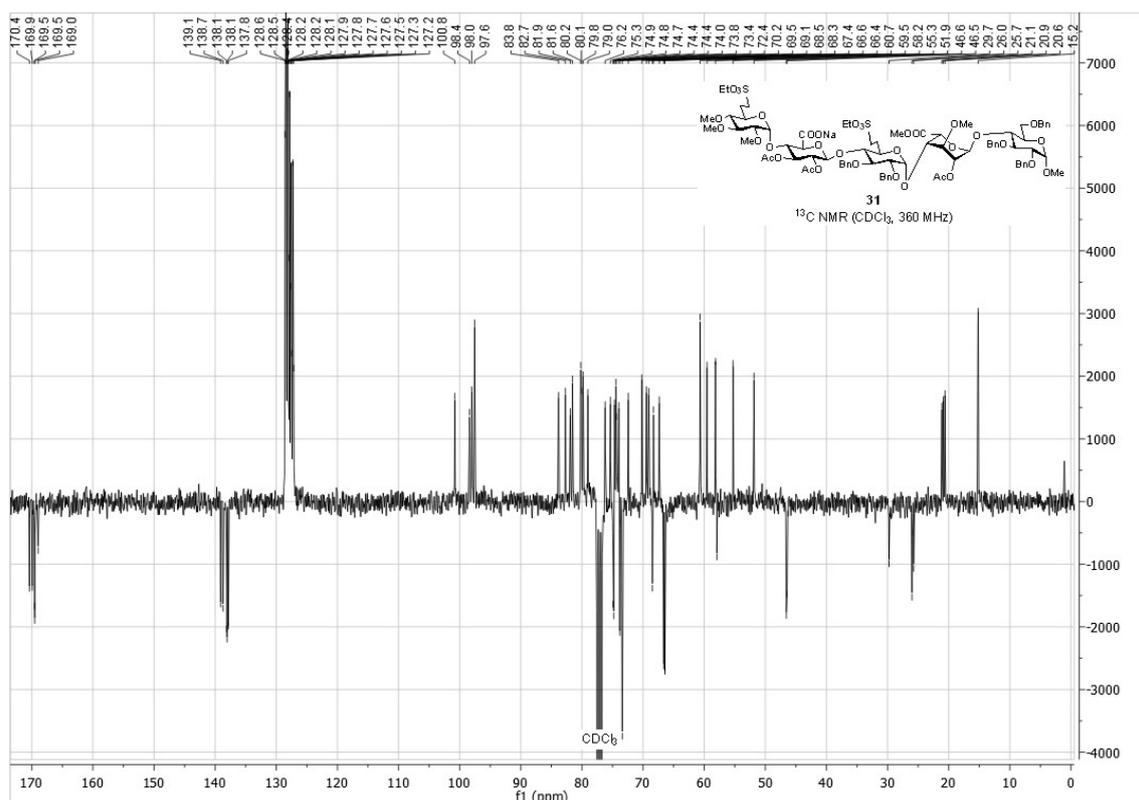


Figure S40. ^{13}C -NMR spectrum of compound 31 in CDCl_3 .

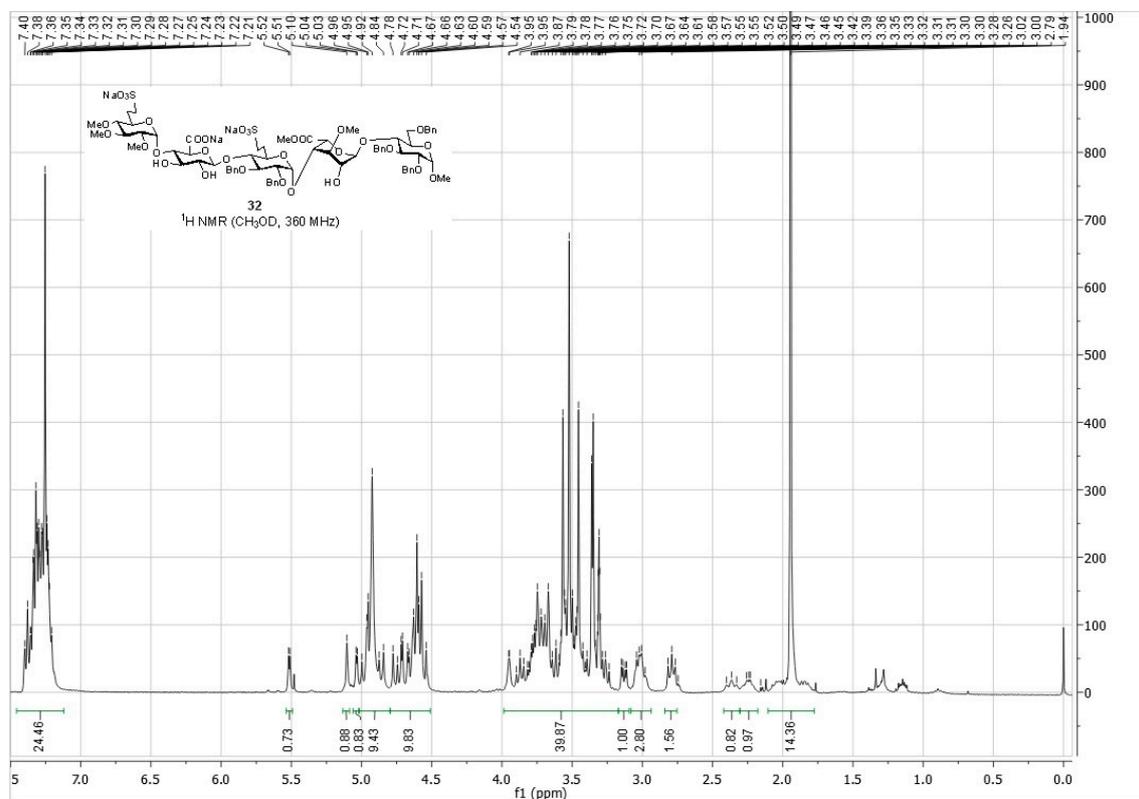


Figure S41. ^1H -NMR spectrum of compound 32 in CD_3OD .

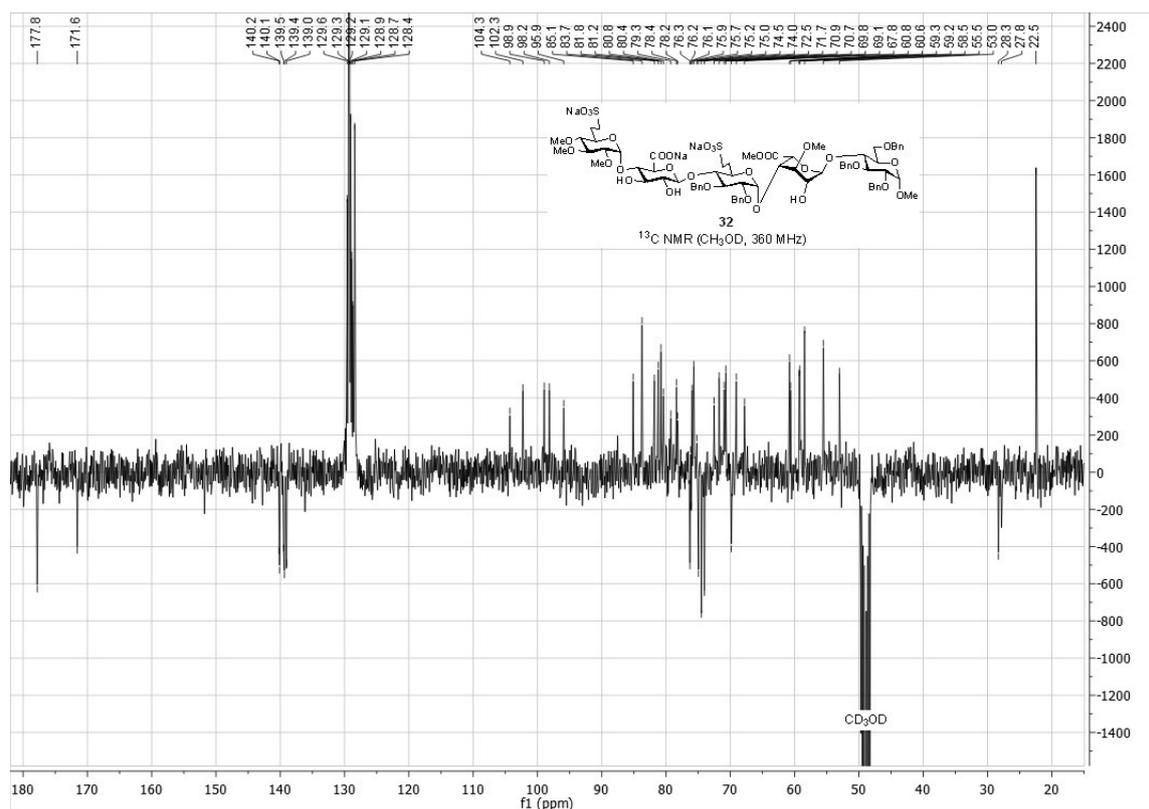


Figure S42. ^{13}C -NMR spectrum of compound **32** in CD_3OD .

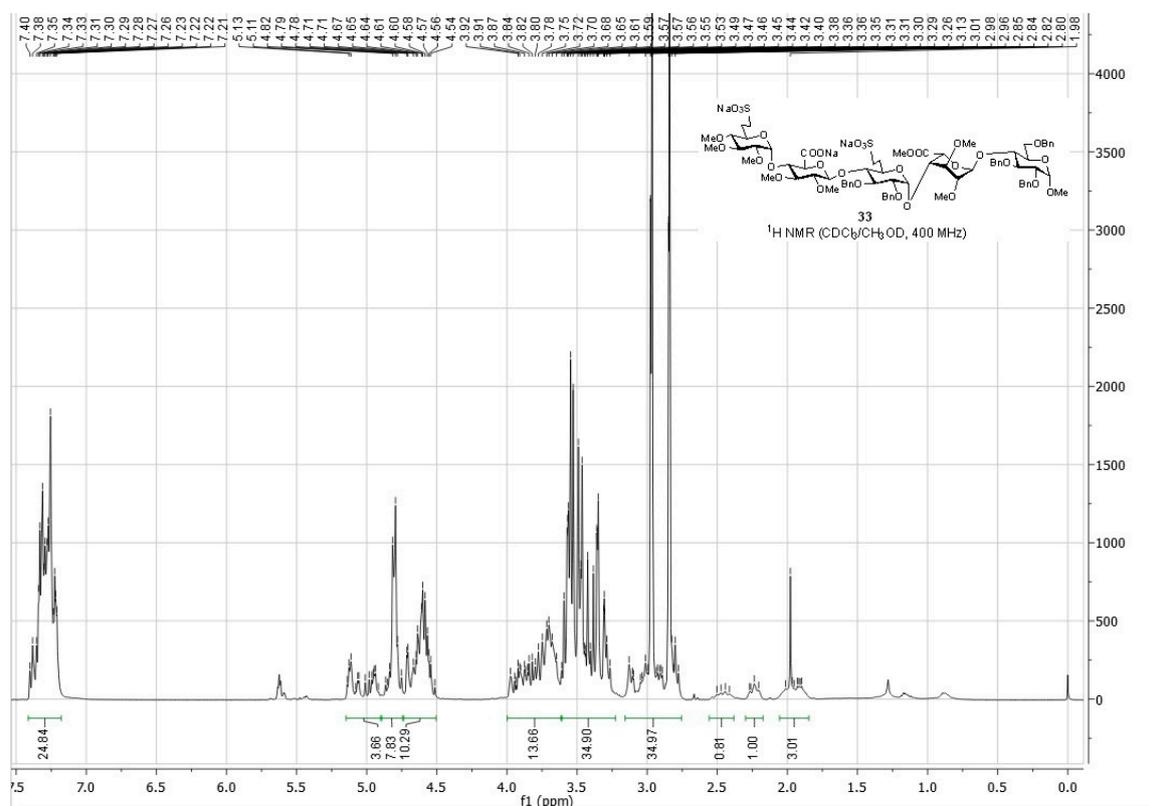


Figure S43. ^1H -NMR spectrum of compound **33** in a mixture of CDCl_3 and CD_3OD .

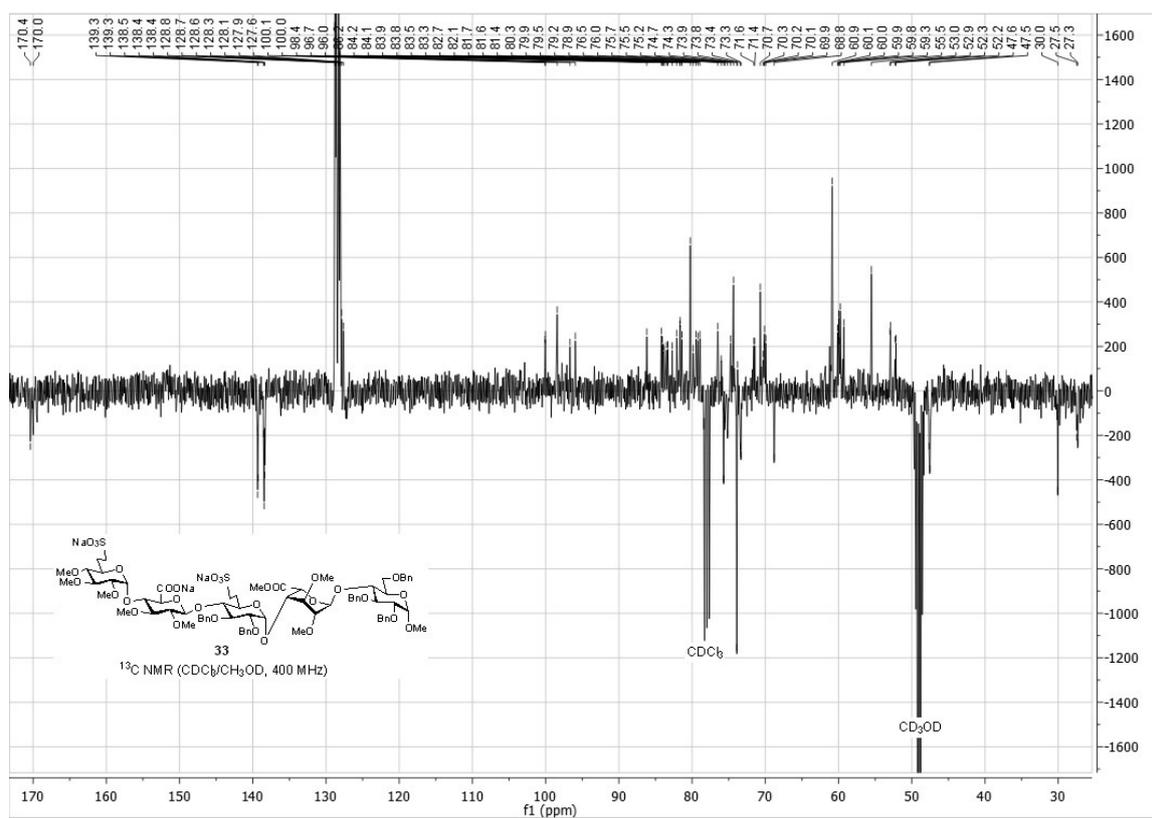


Figure S44. ¹³C-NMR spectrum of compound 33 in a mixture of CDCl₃ and CD₃OD.

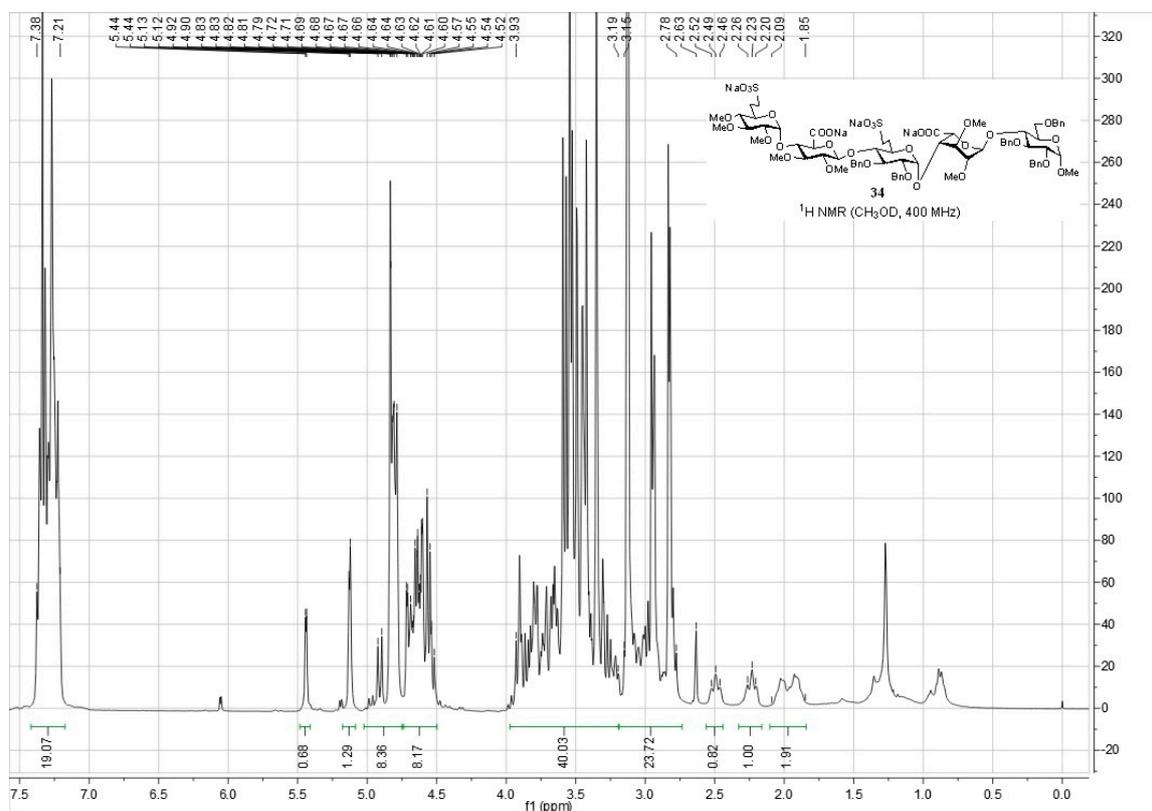


Figure S45. ¹H-NMR spectrum of compound 34 in CD₃OD.

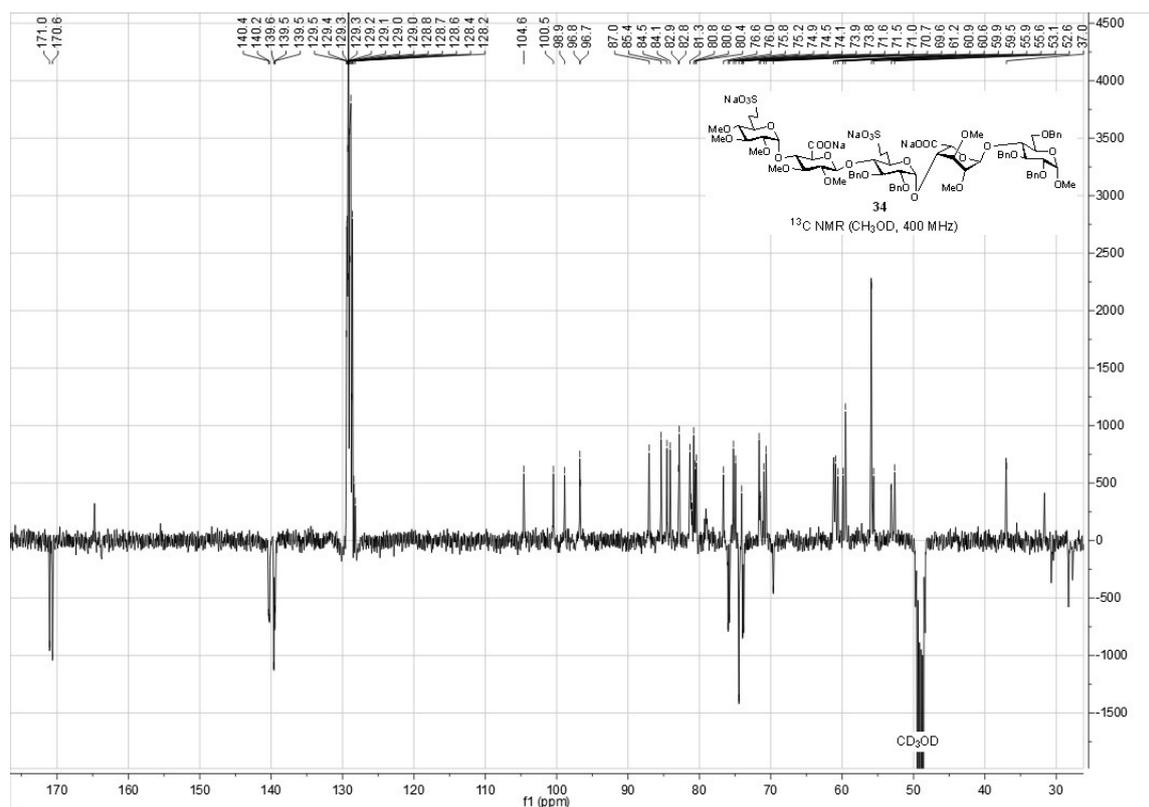


Figure S46. ^{13}C -NMR spectrum of compound **34** in CD_3OD .

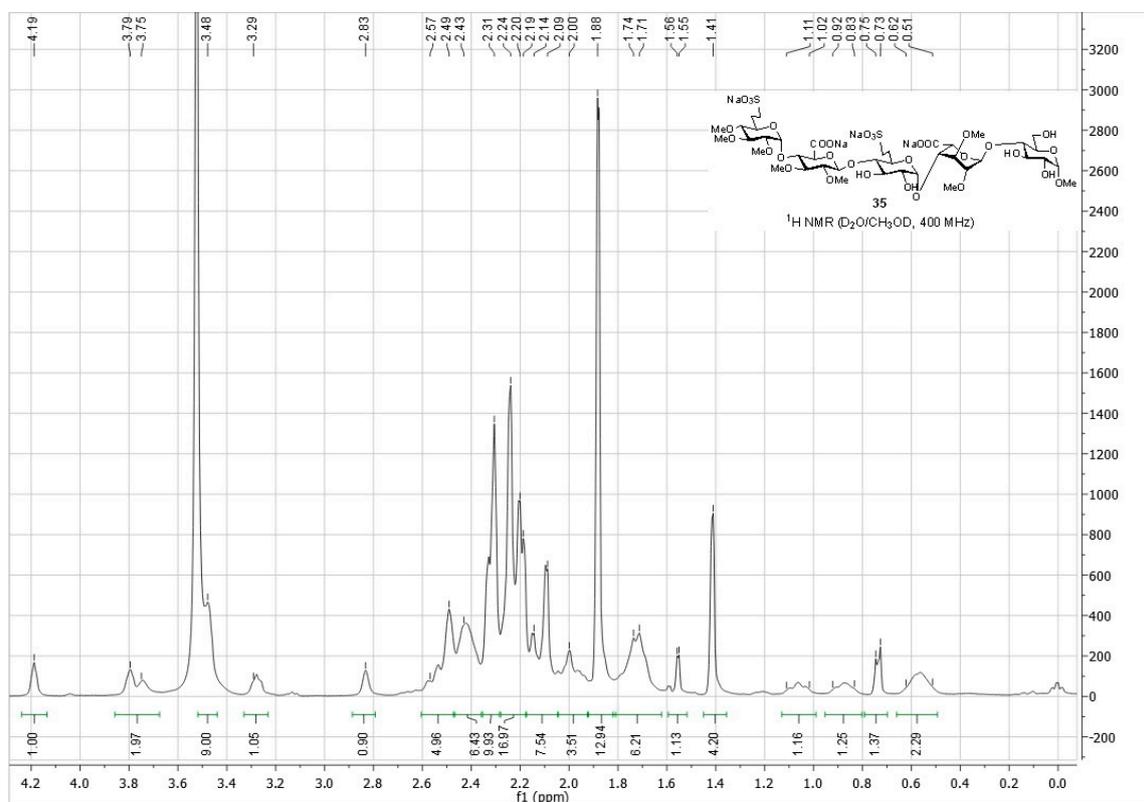


Figure S47. ^1H -NMR spectrum of compound **35** in a mixture of D_2O and CD_3OD .

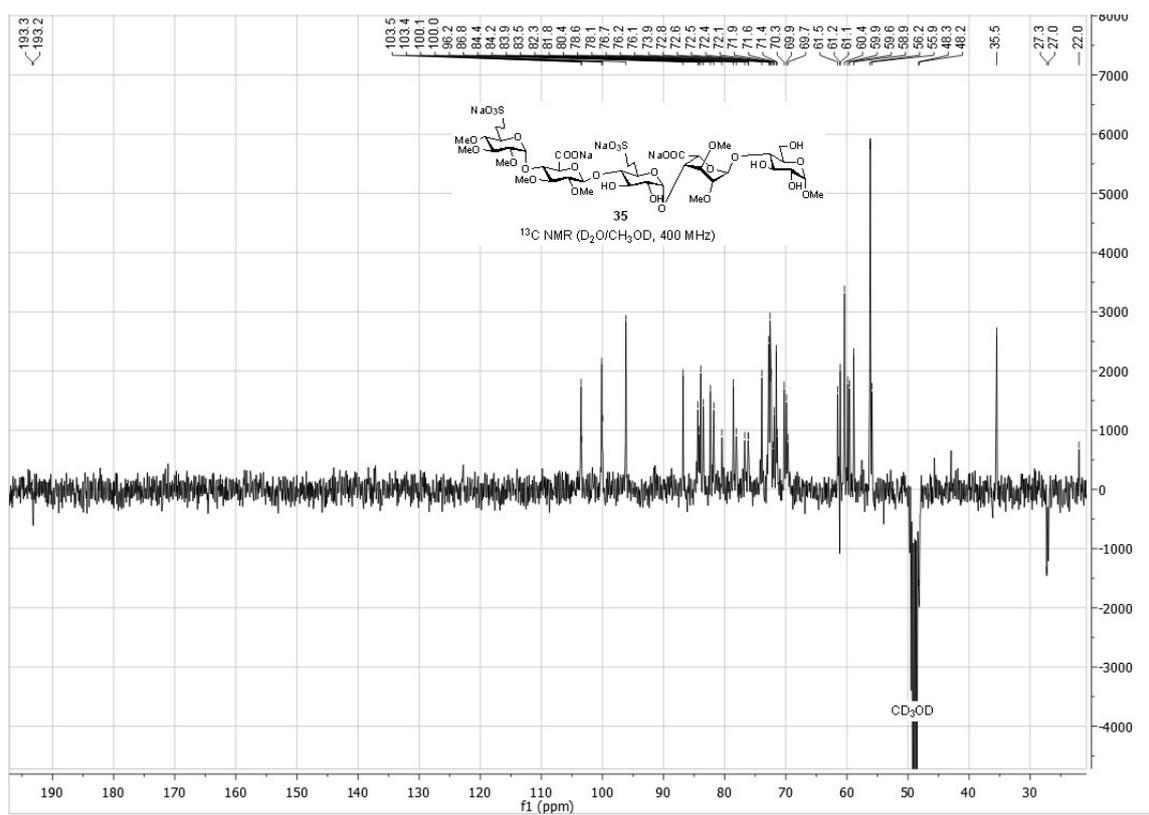


Figure S48. ¹³C-NMR spectrum of compound 35 in a mixture of D₂O and CD₃OD.