

Supplementary Information (SI)

Rhamnopyranoside-Based Fatty acid Esters as Antimicrobials: Synthesis, Spectral Characterization, PASS, Antimicrobial, and Molecular Docking Studies

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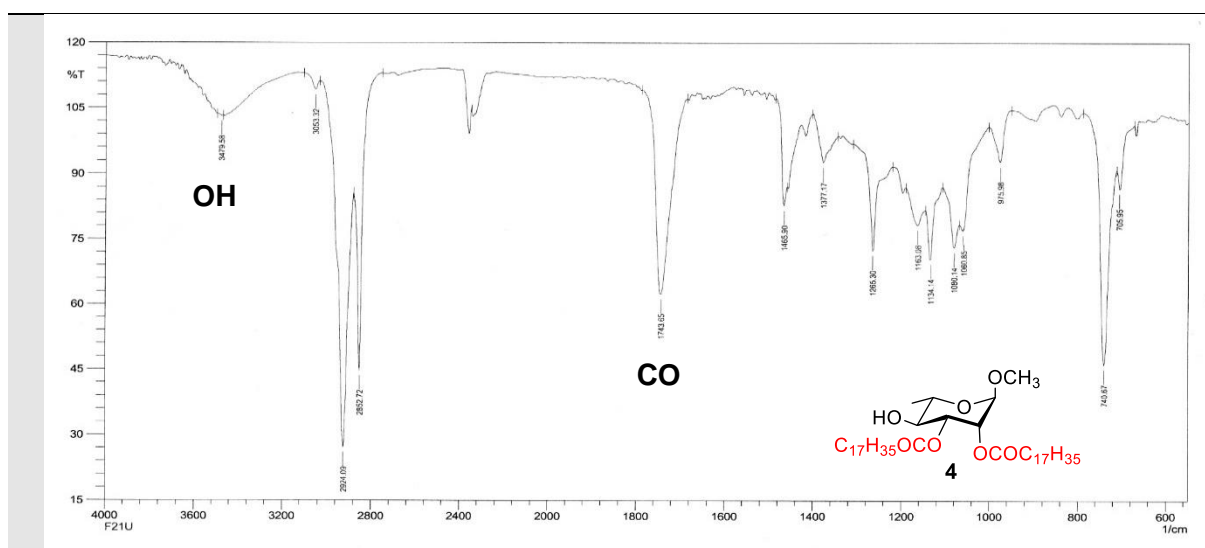


Figure S1. FT-IR (neat) spectrum of compound 4.

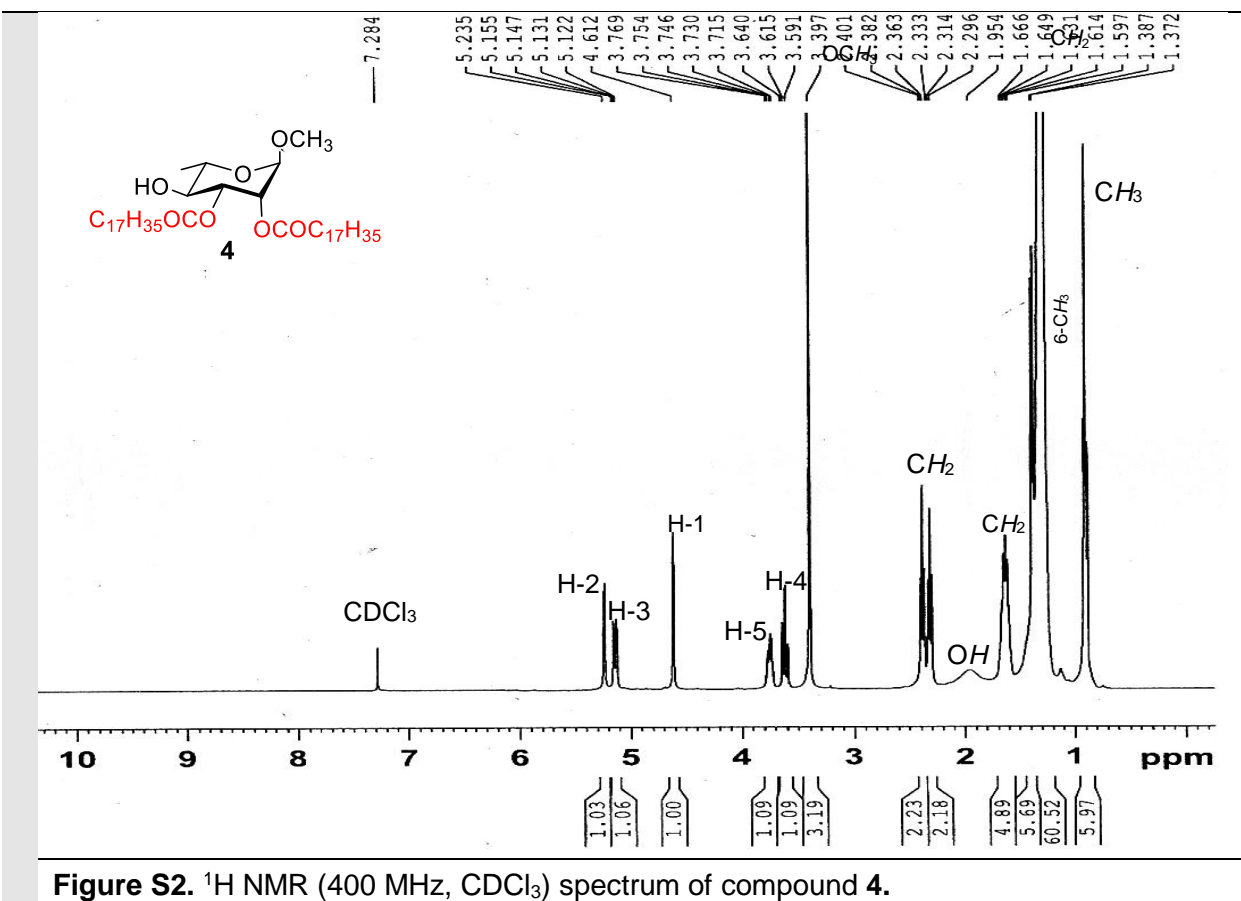


Figure S2. ¹H NMR (400 MHz, CDCl₃) spectrum of compound **4**.

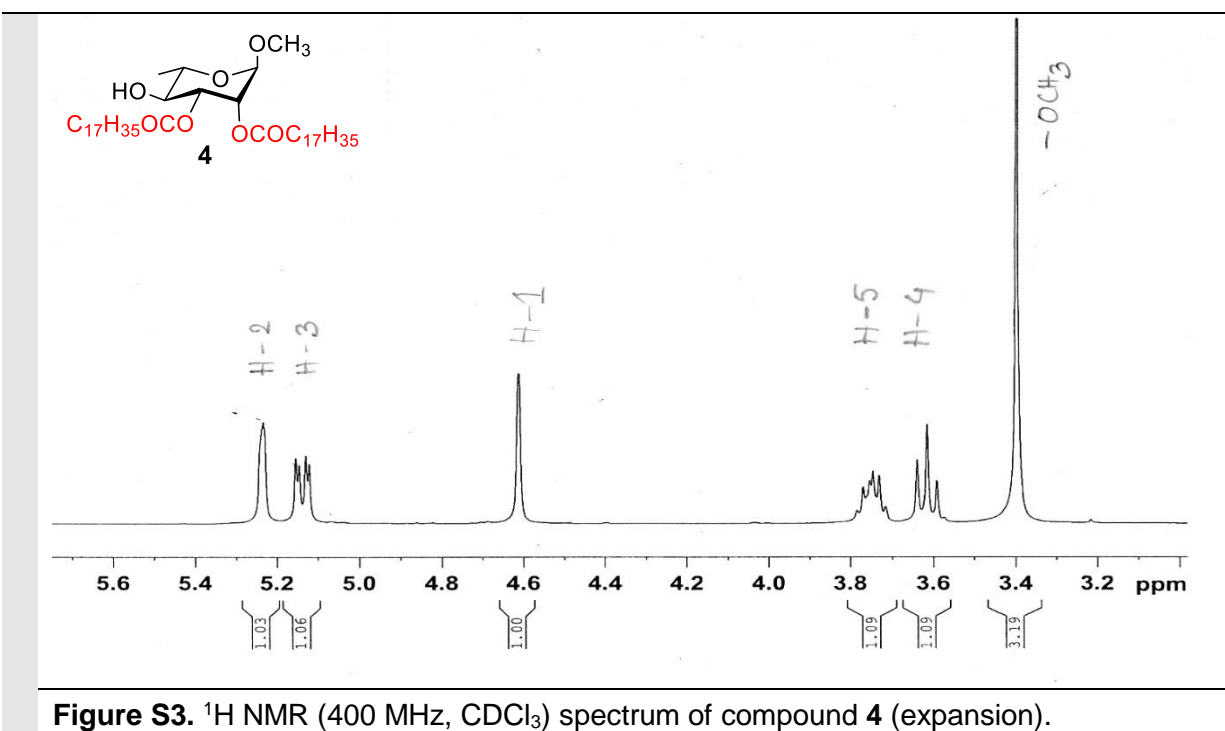
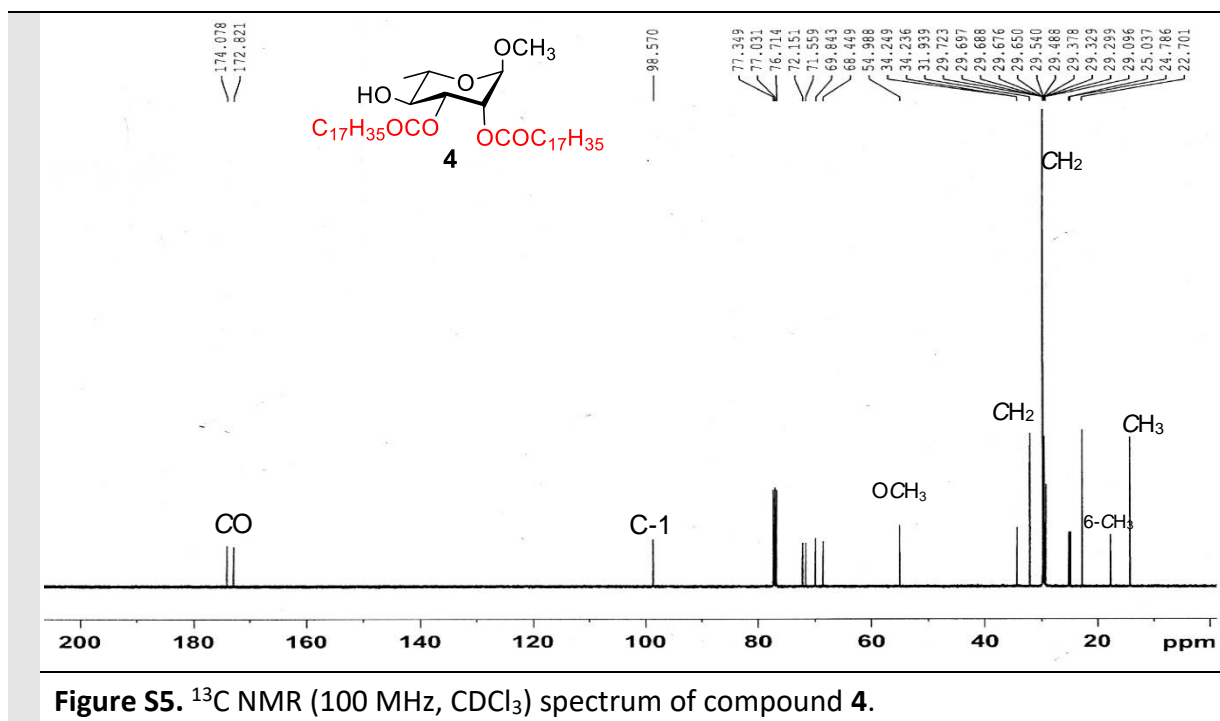
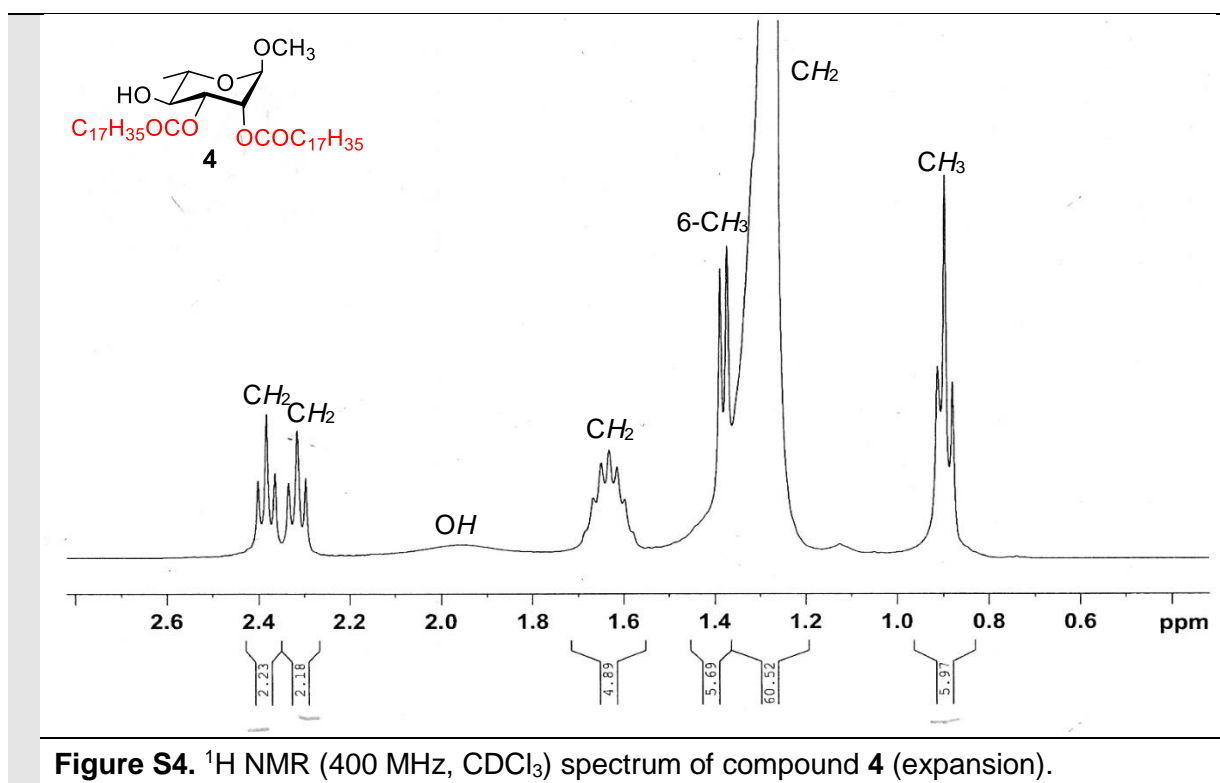
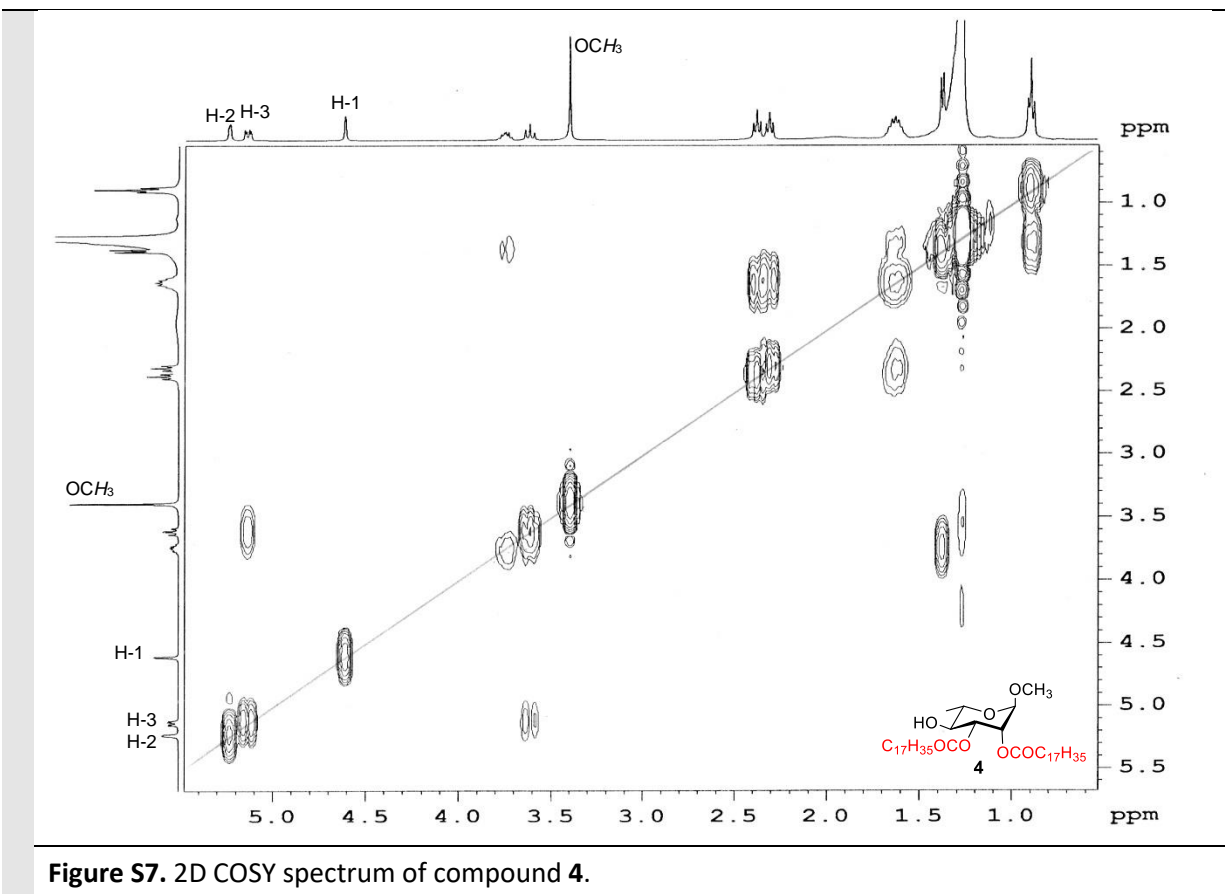
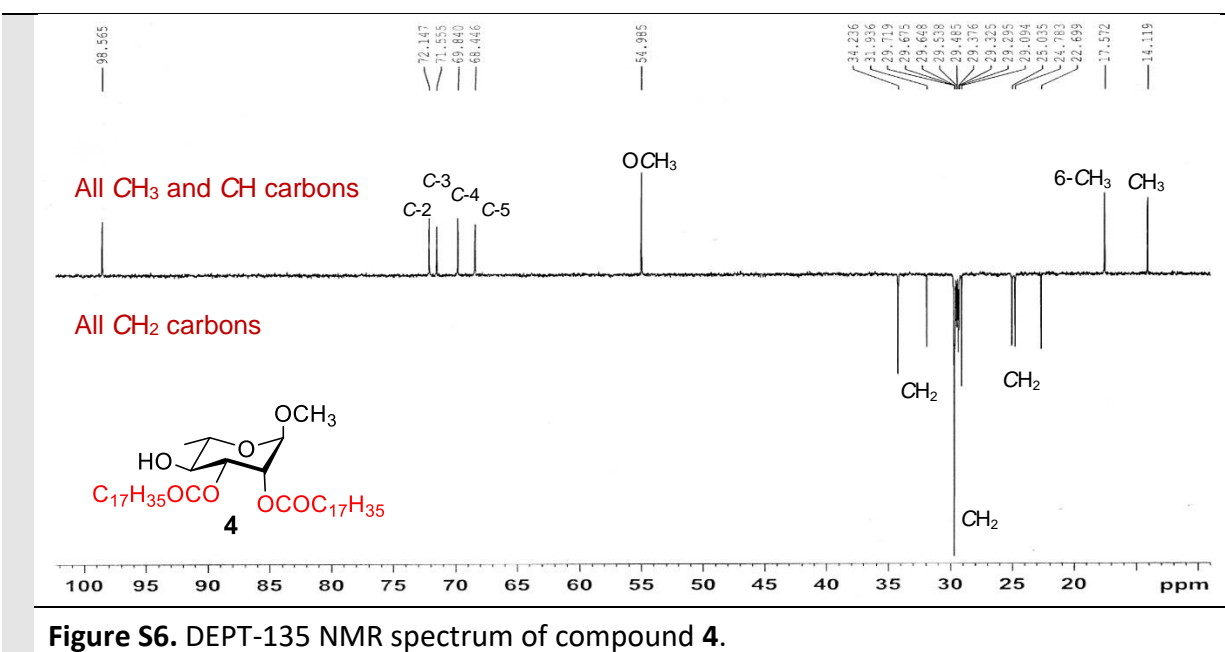


Figure S3. ¹H NMR (400 MHz, CDCl₃) spectrum of compound **4** (expansion).





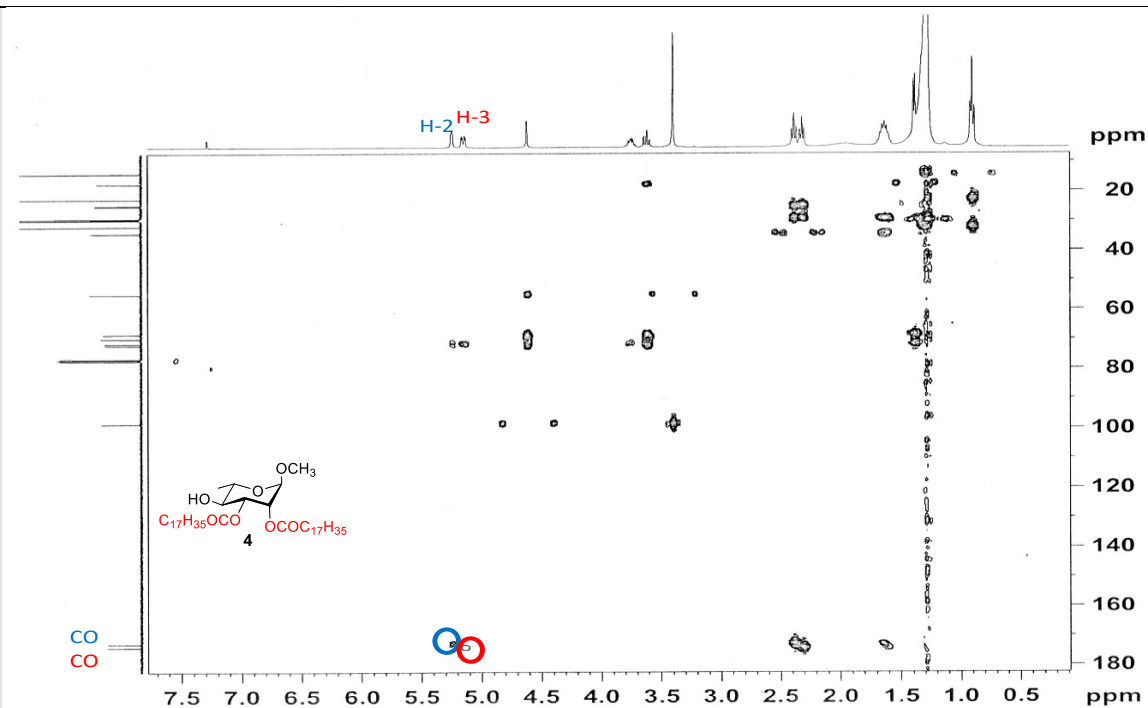


Figure S8. 2D HMBC spectrum of compound 4.

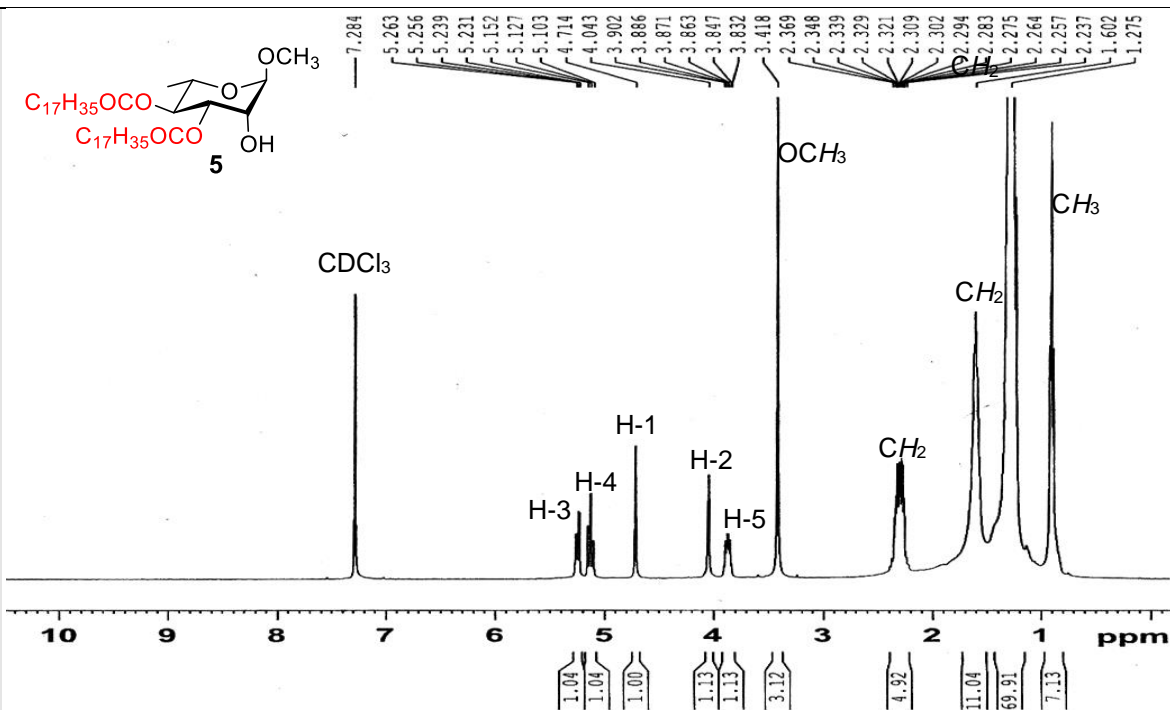


Figure S9. ^1H NMR (400 MHz, CDCl_3) spectrum of compound 5.

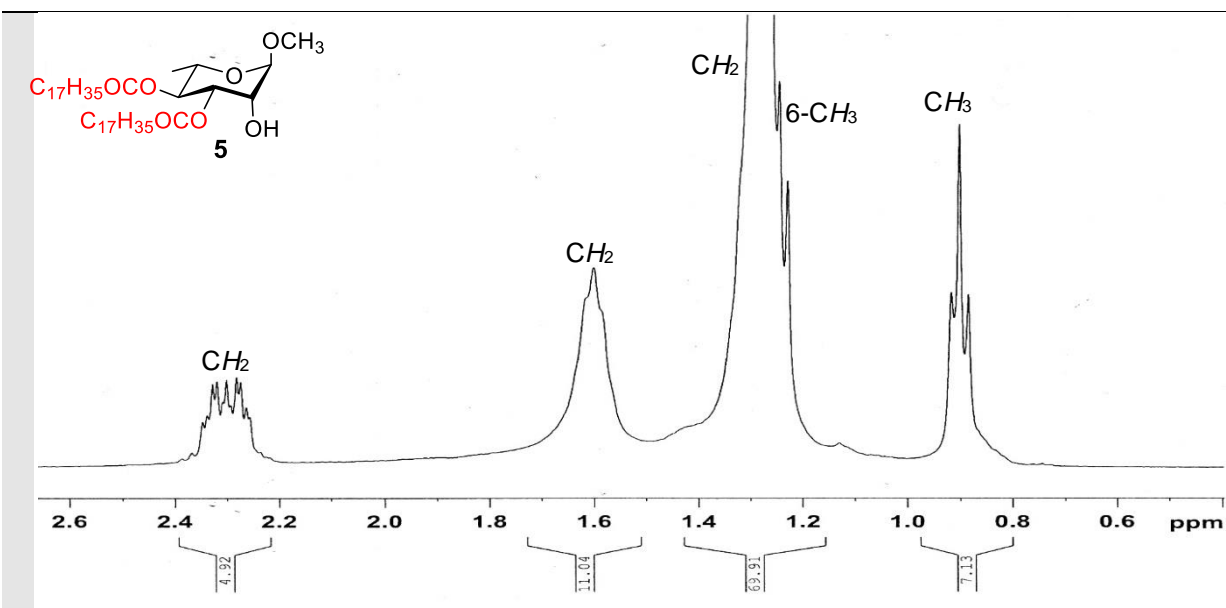


Figure S10. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 5.

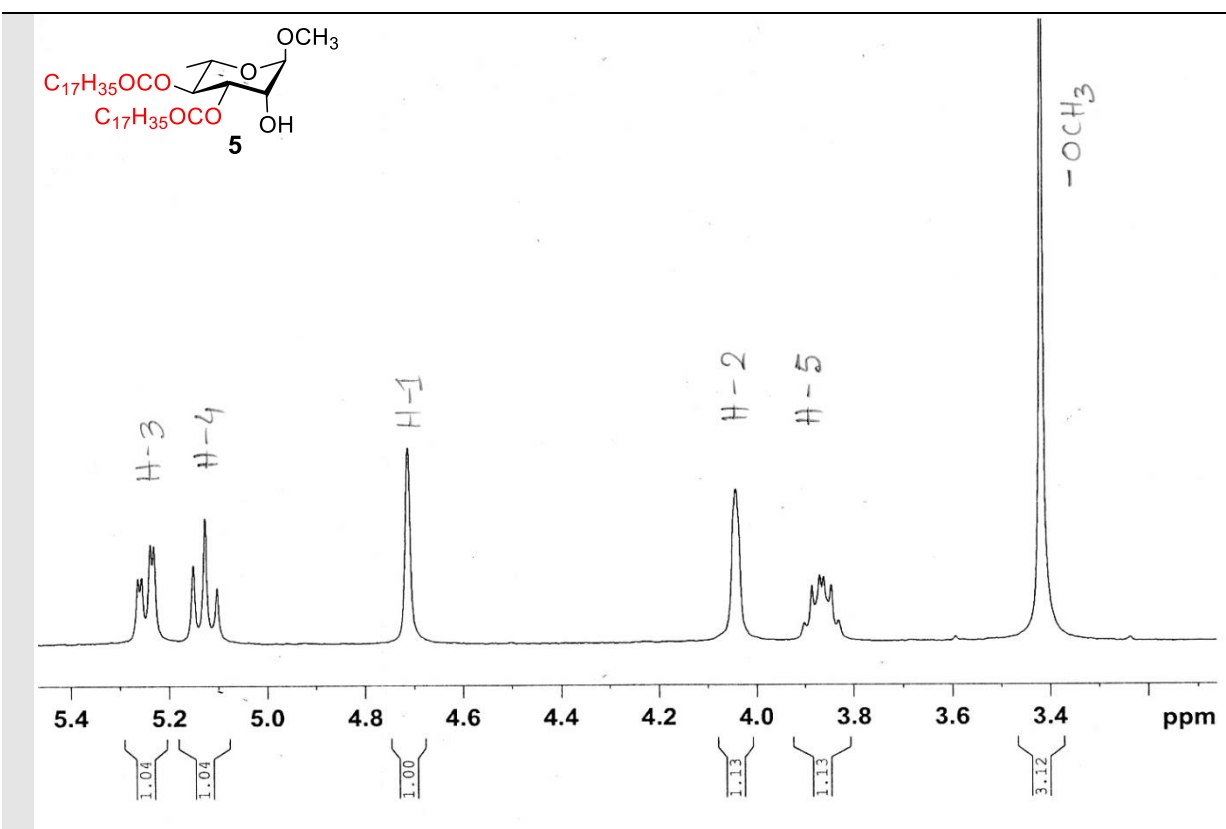


Figure S11. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 5.

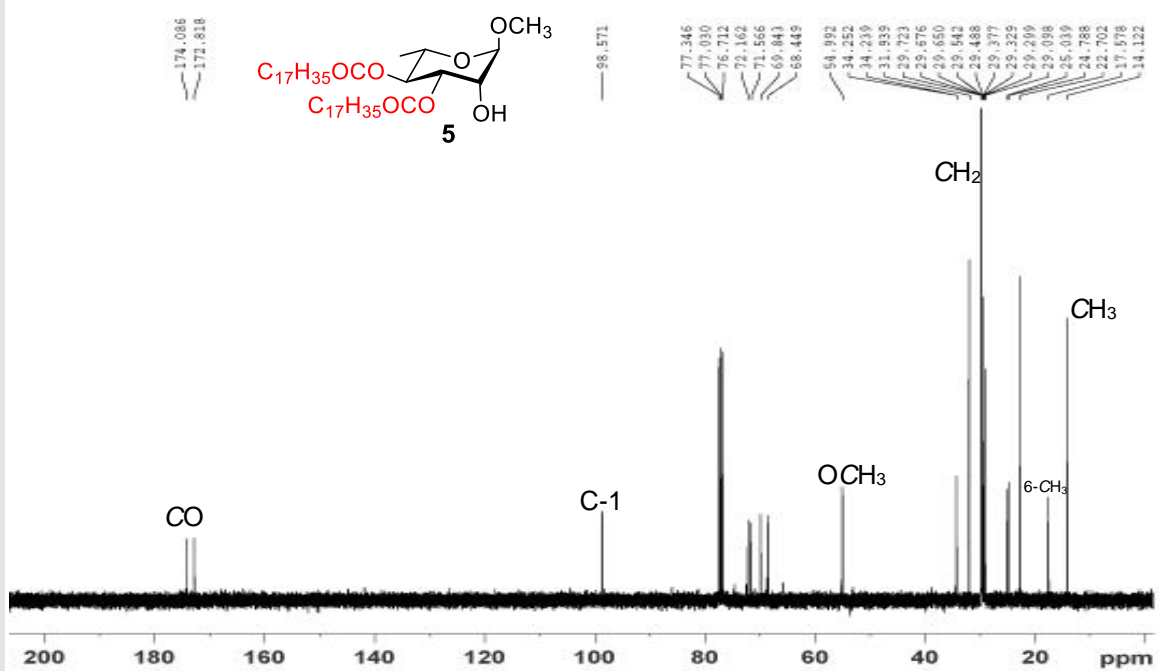


Figure S12. ¹³C NMR (100 MHz, CDCl₃) spectrum of compound 5.

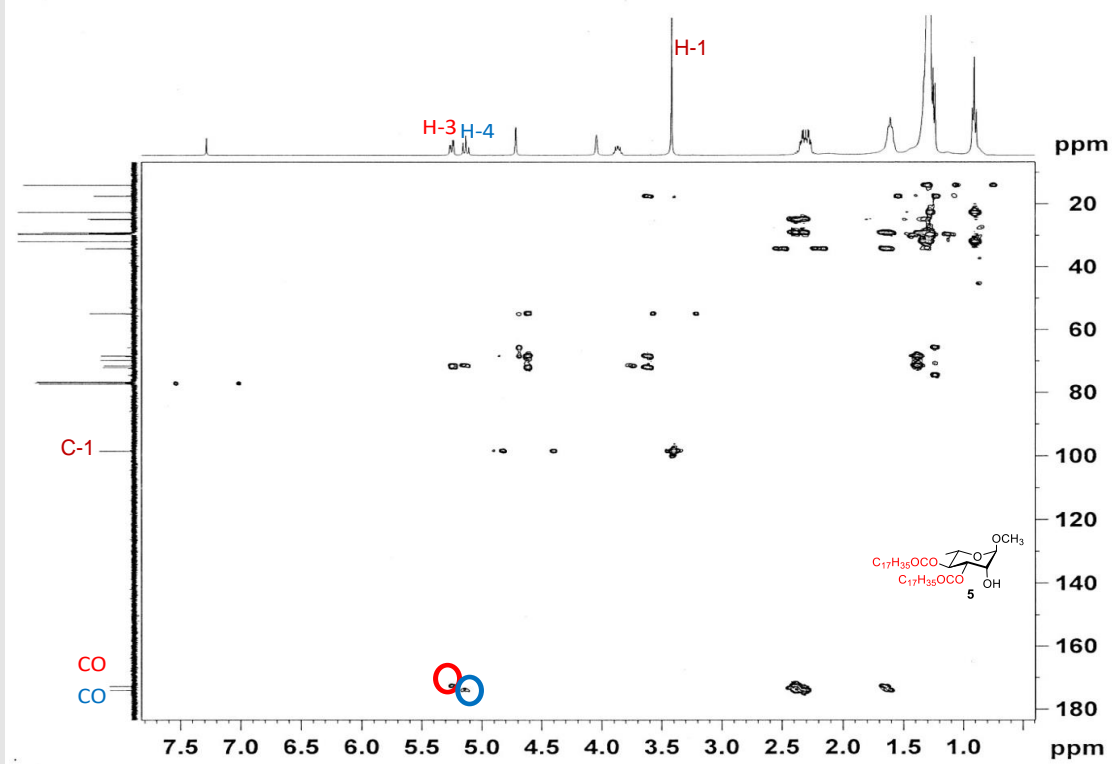


Figure S13. 2D HMBC spectrum of compound 5.

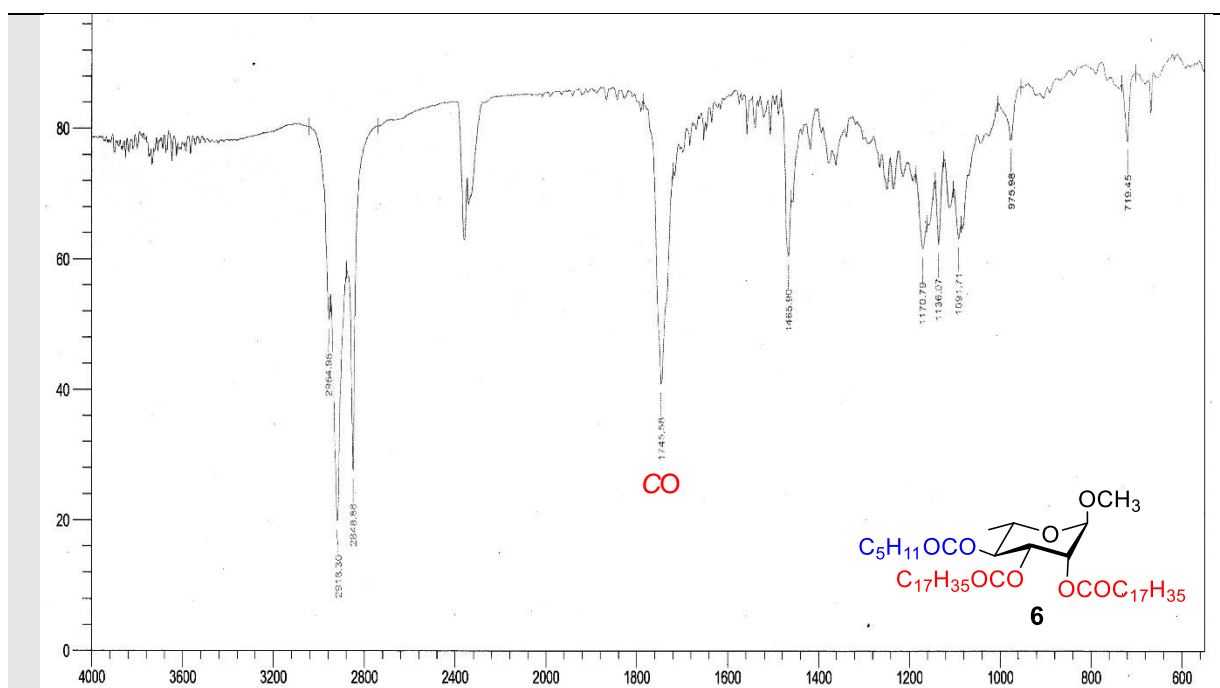


Figure S14. IR (neat) spectrum of compound **6**.

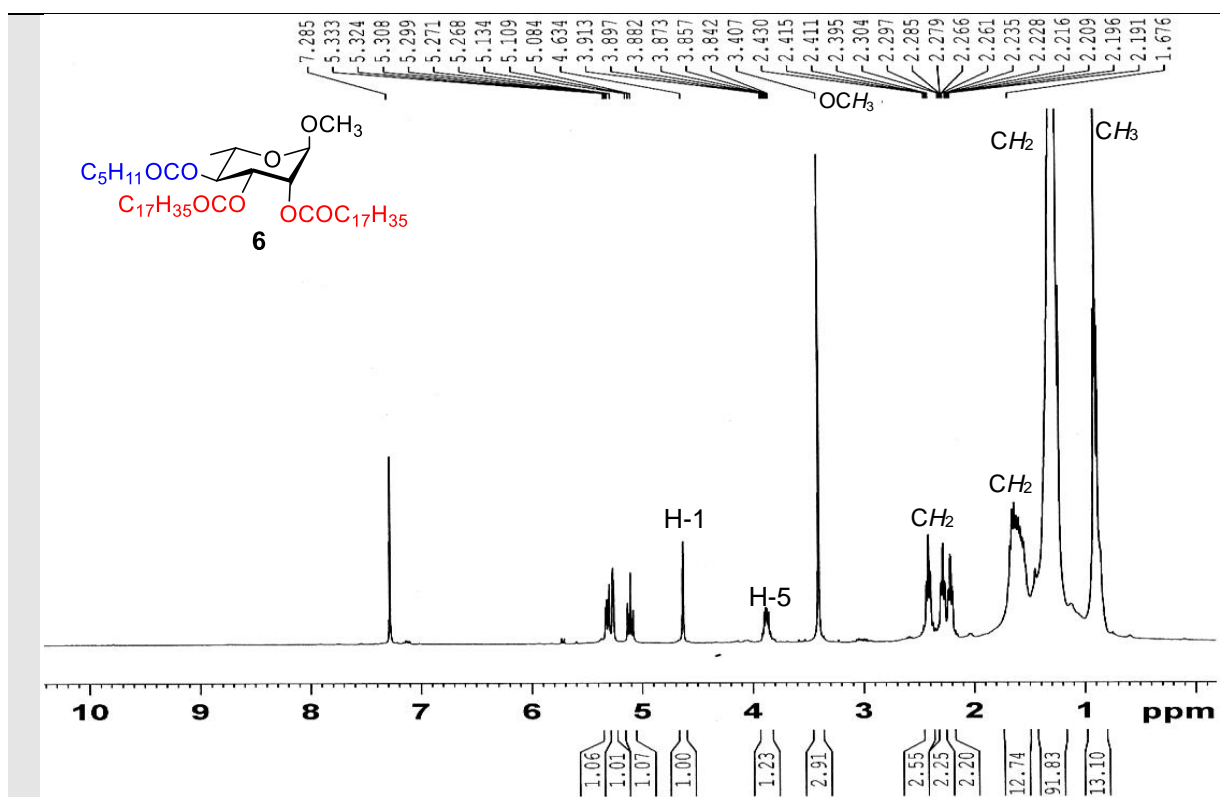


Figure S15. ^1H NMR (400 MHz, CDCl_3) spectrum of compound **6**.

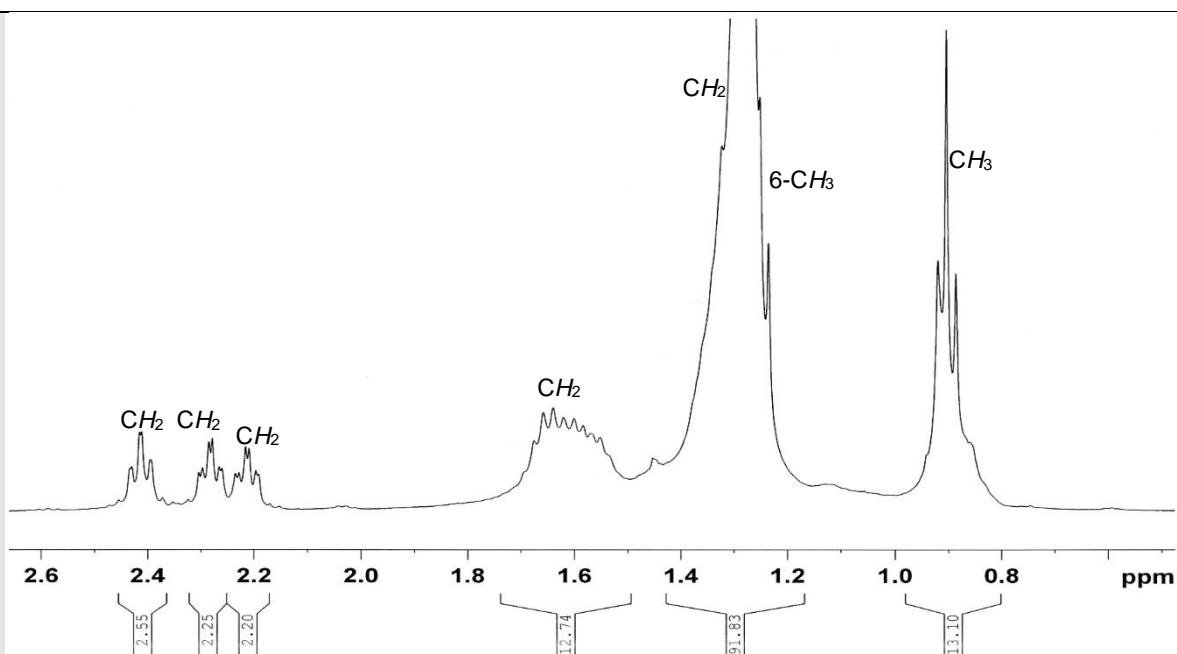


Figure S16. ^1H NMR (400 MHz, CDCl_3) spectrum (Expansion) of compound 6.

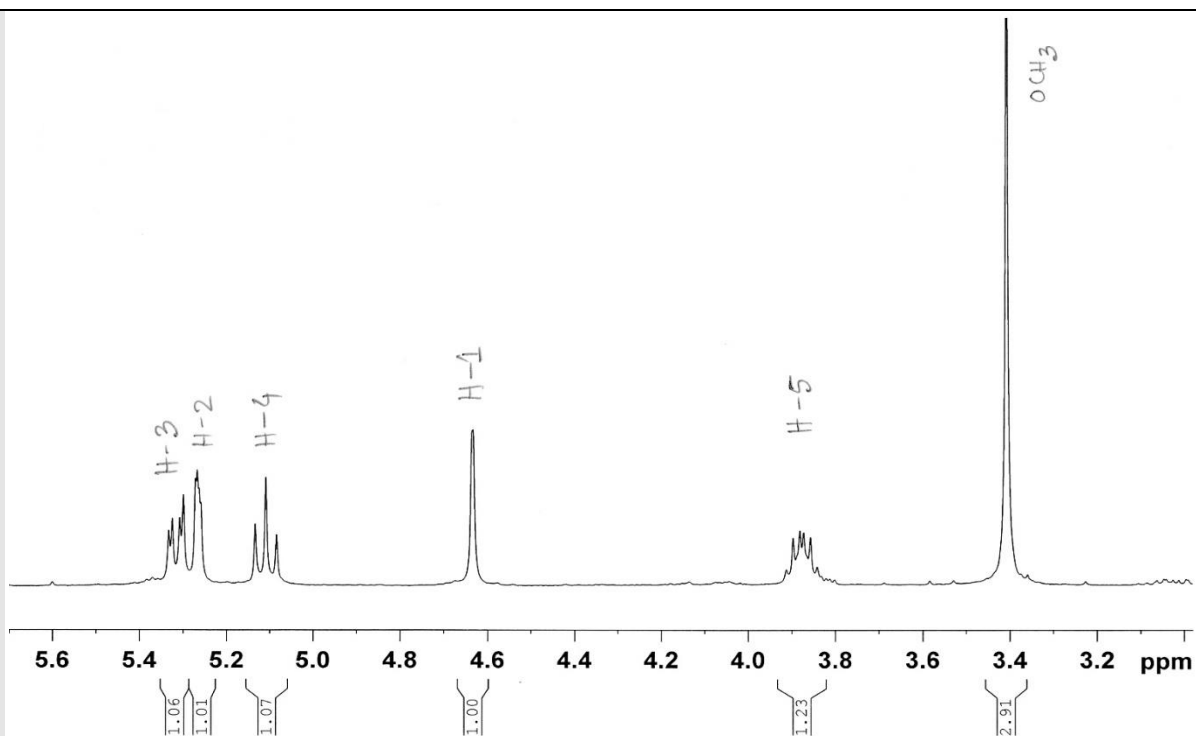


Figure S17. ^1H NMR (400 MHz, CDCl_3) spectrum (Expansion) of compound 6.

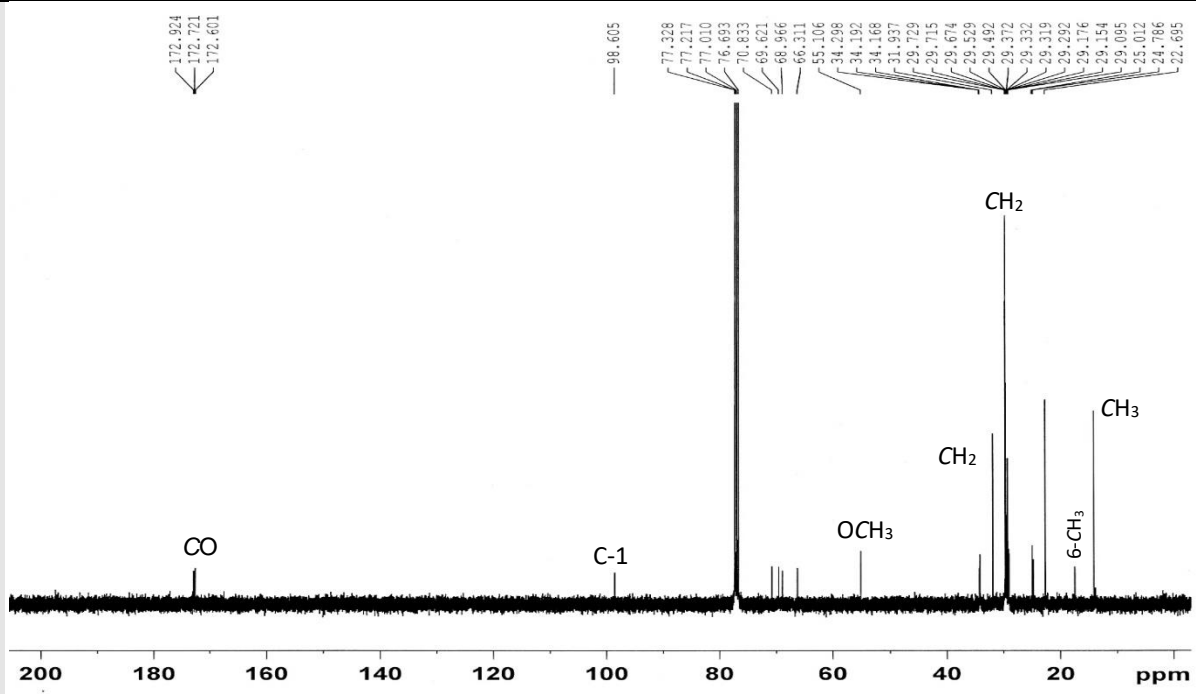


Figure S18. ¹³C NMR (100 MHz, CDCl₃) spectrum of compound 6.

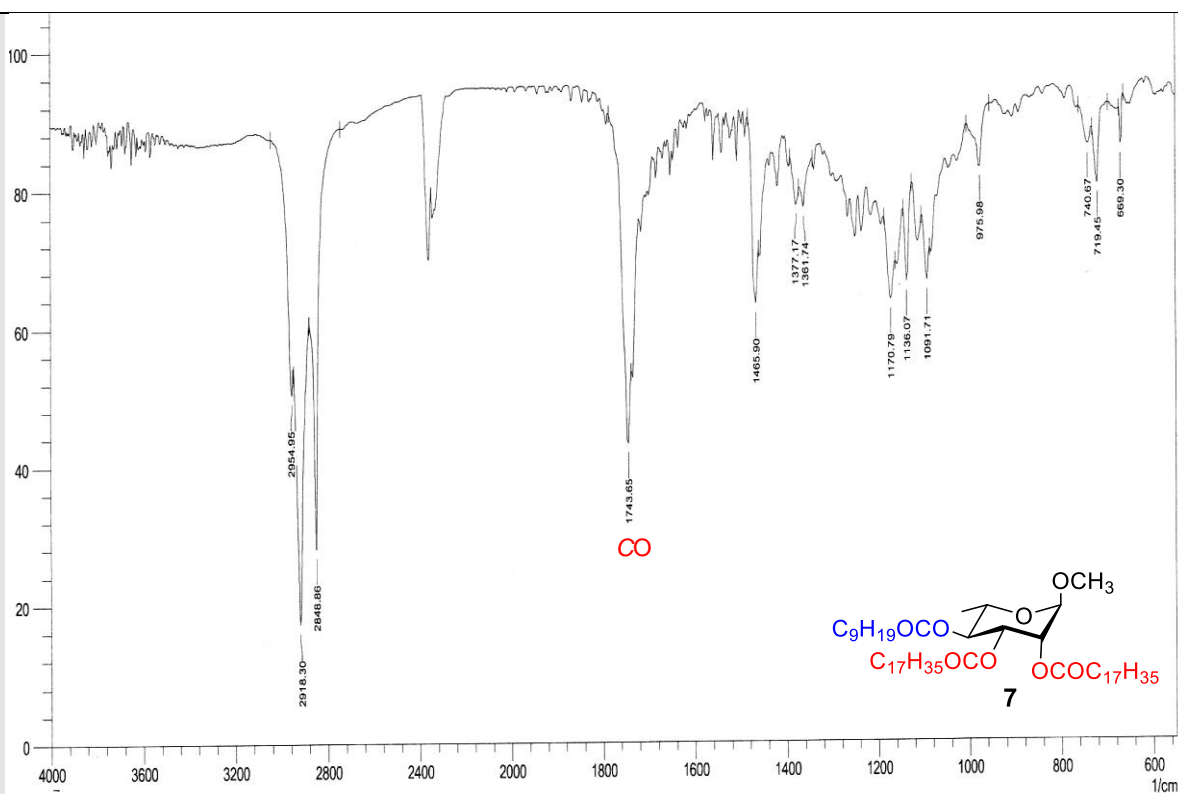
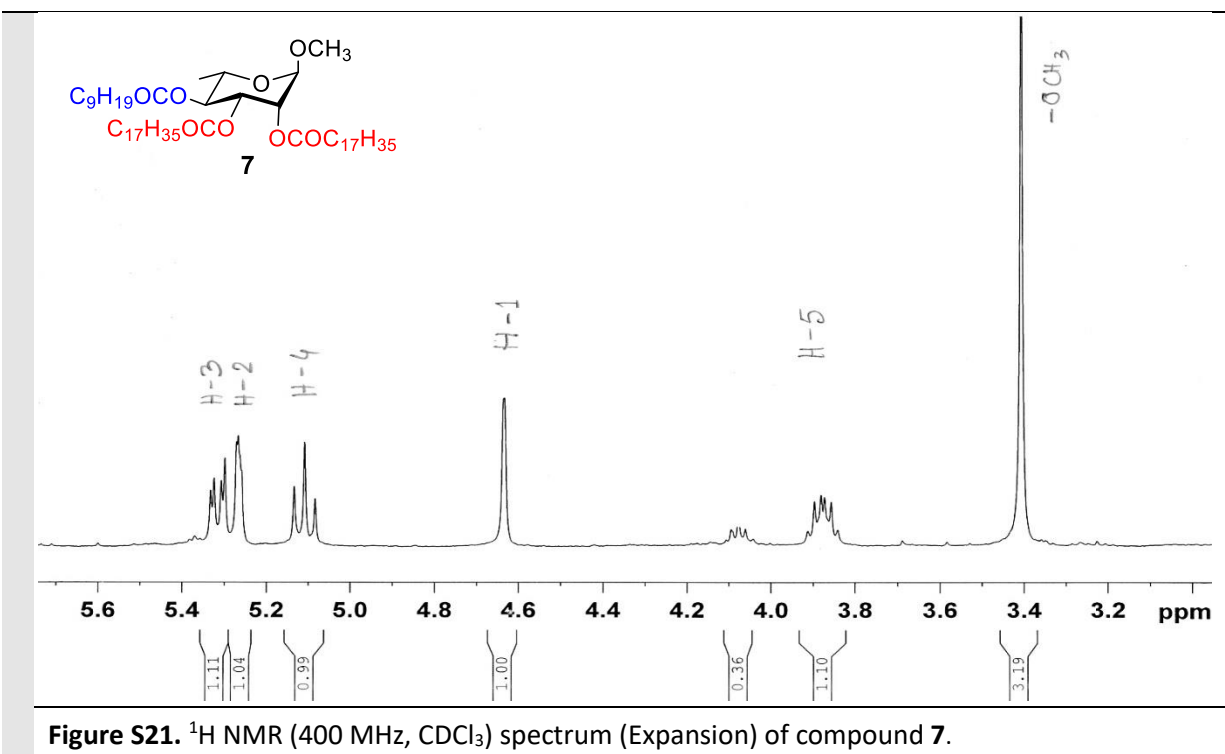
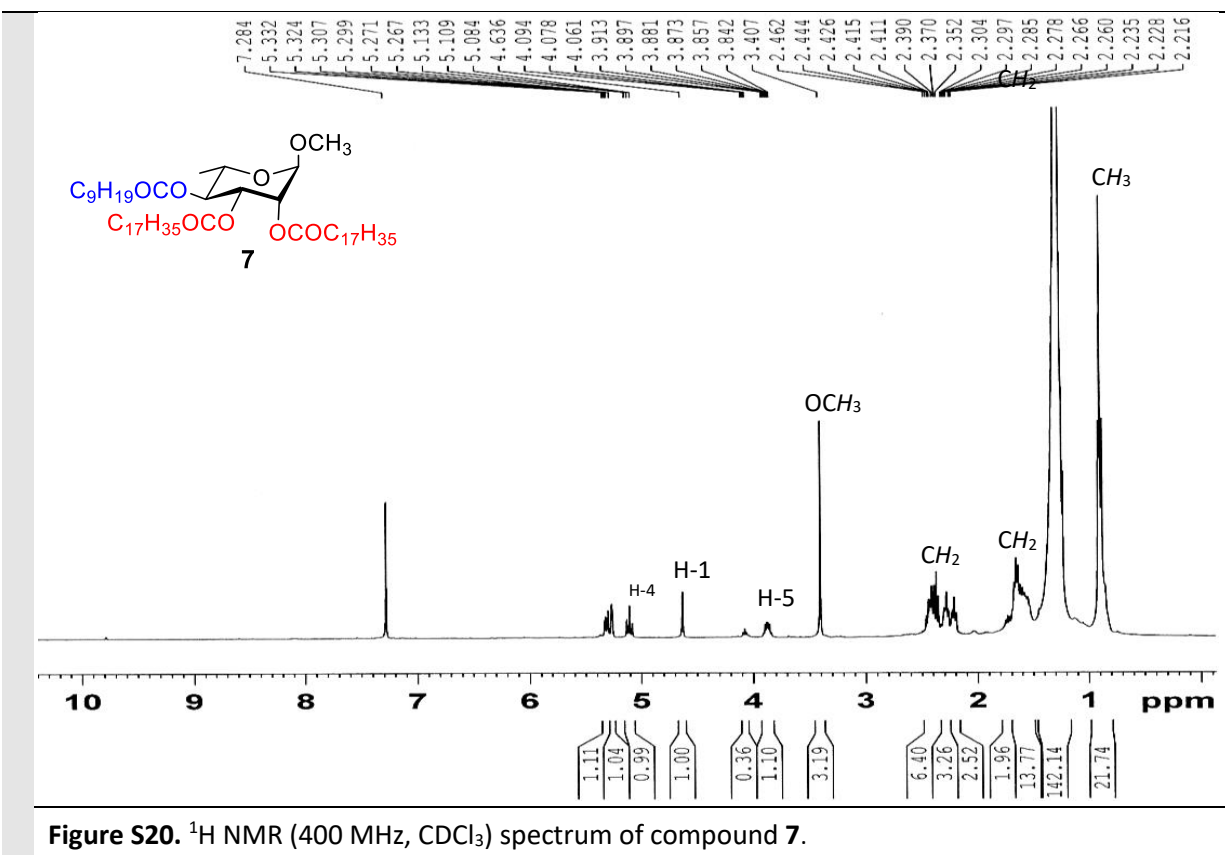


Figure S19. IR (neat) spectrum of compound 7.



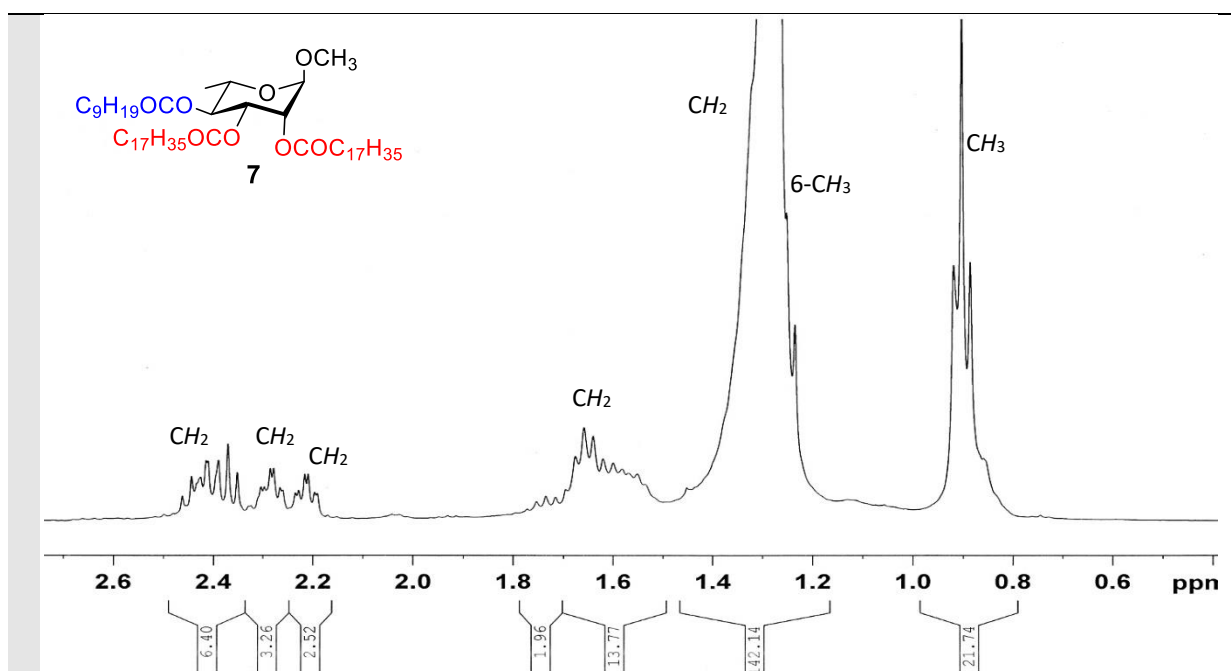


Figure S22. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 7.

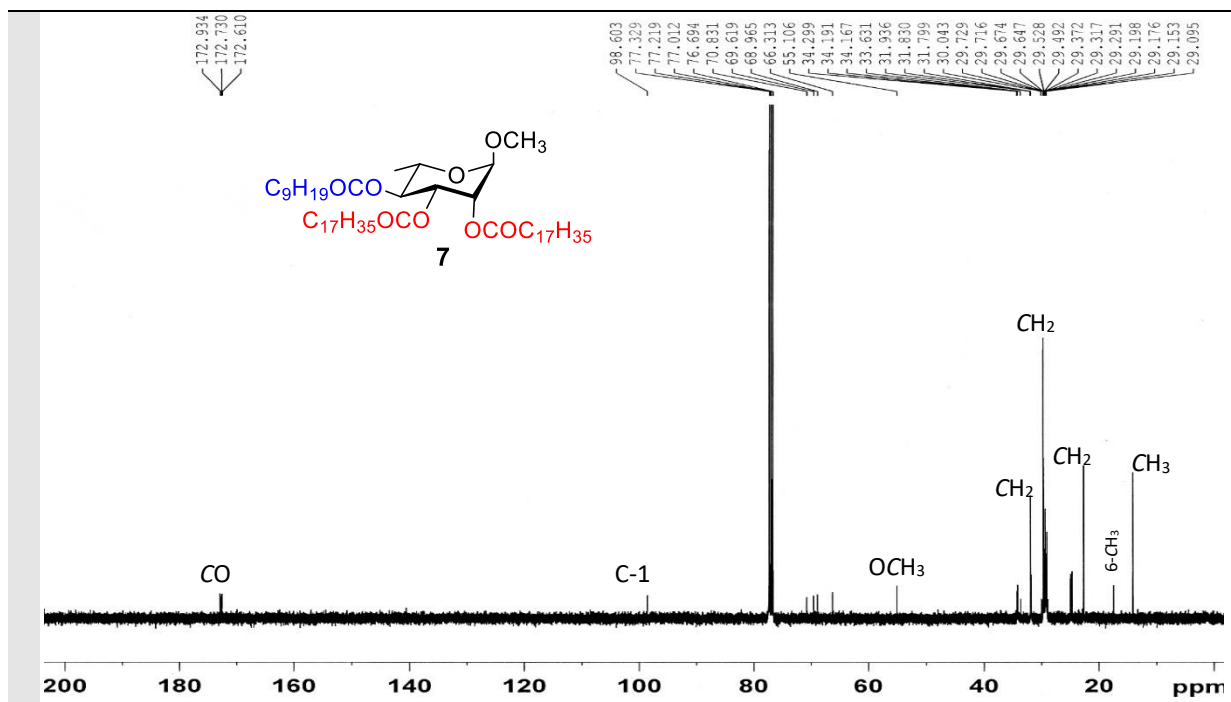


Figure S23. ¹³C NMR (100 MHz, CDCl₃) spectrum of compound 7.

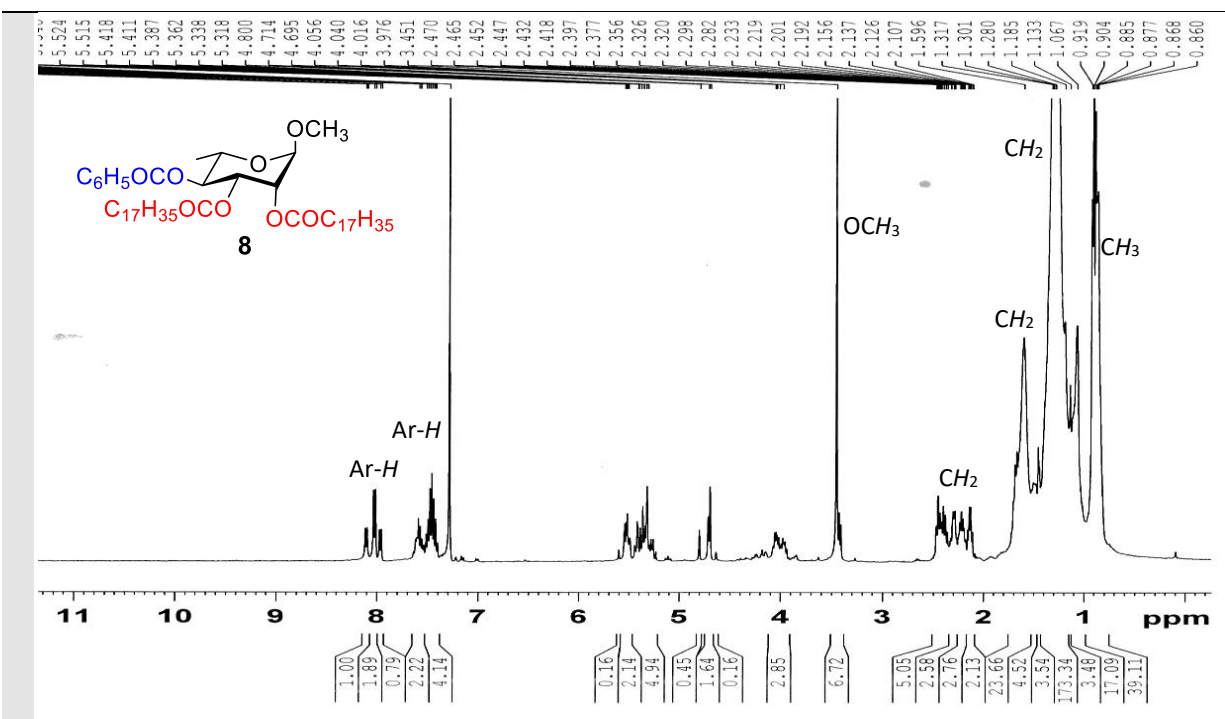


Figure S24. ¹H NMR (400 MHz, CDCl₃) spectrum of compound 8.

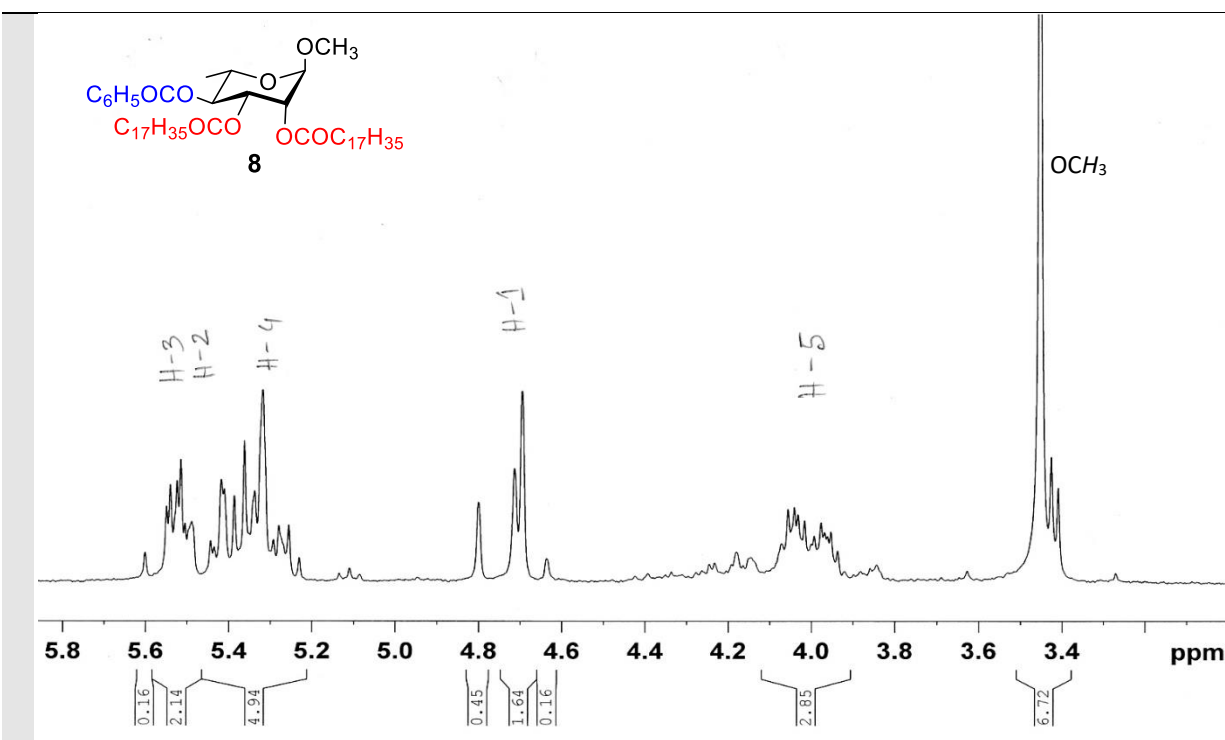
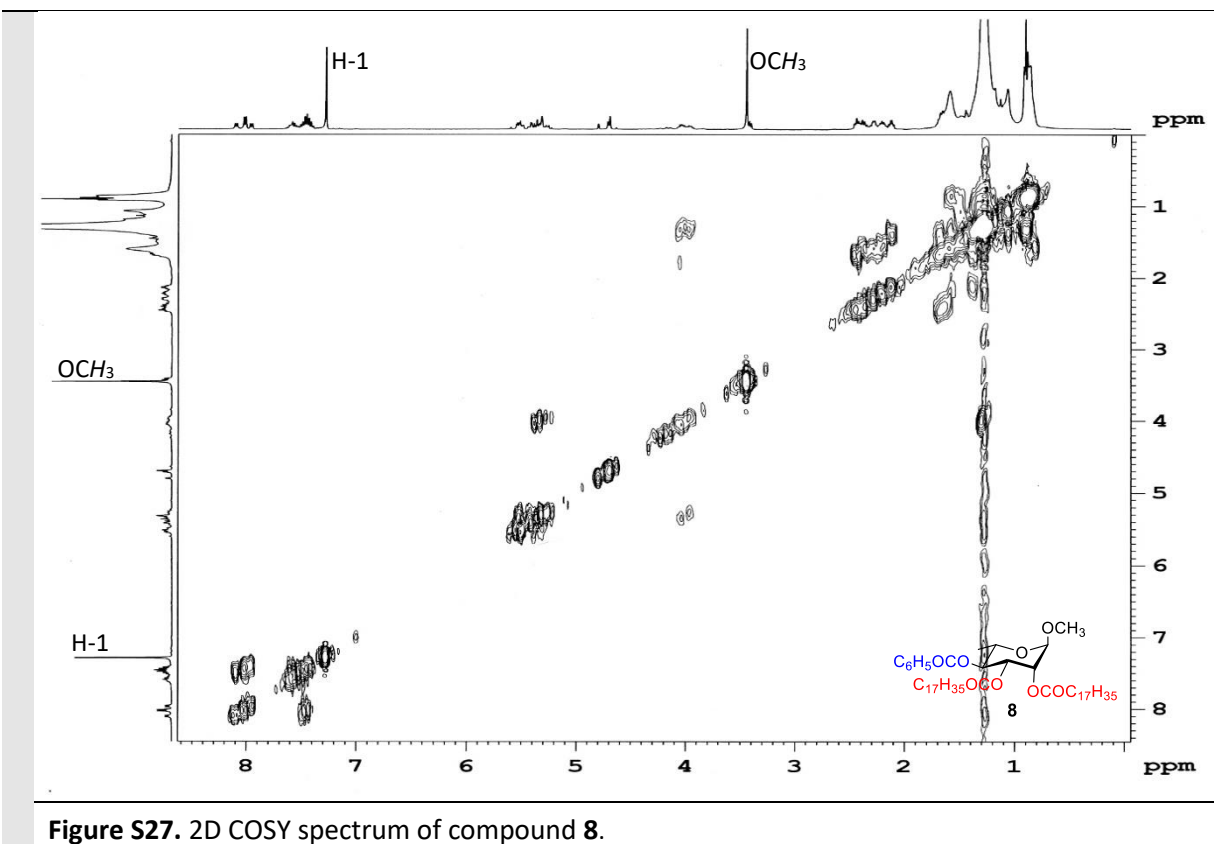
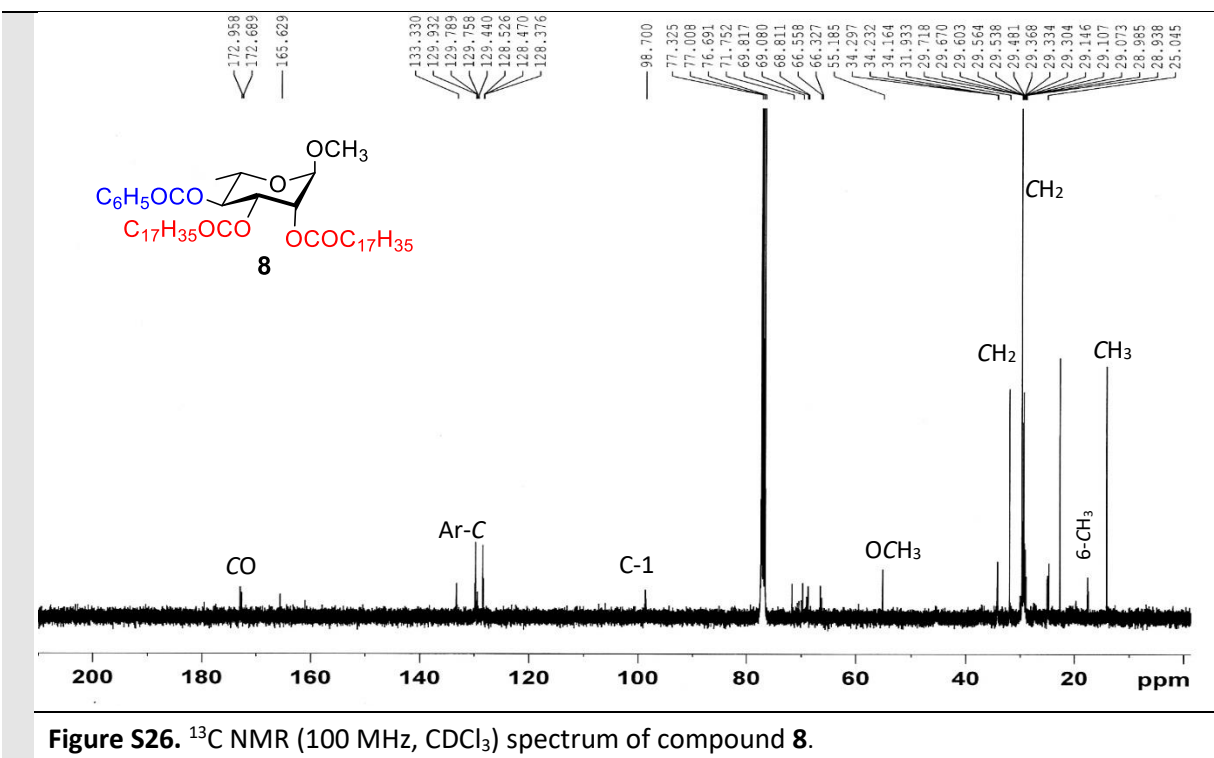
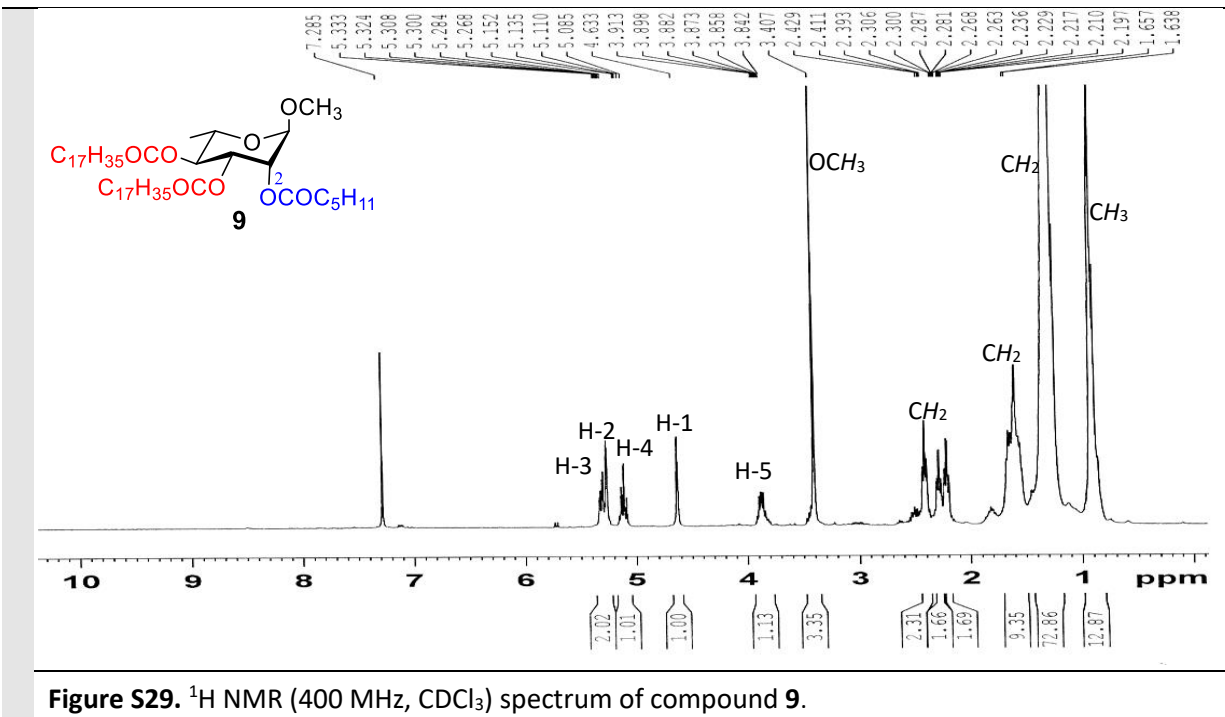
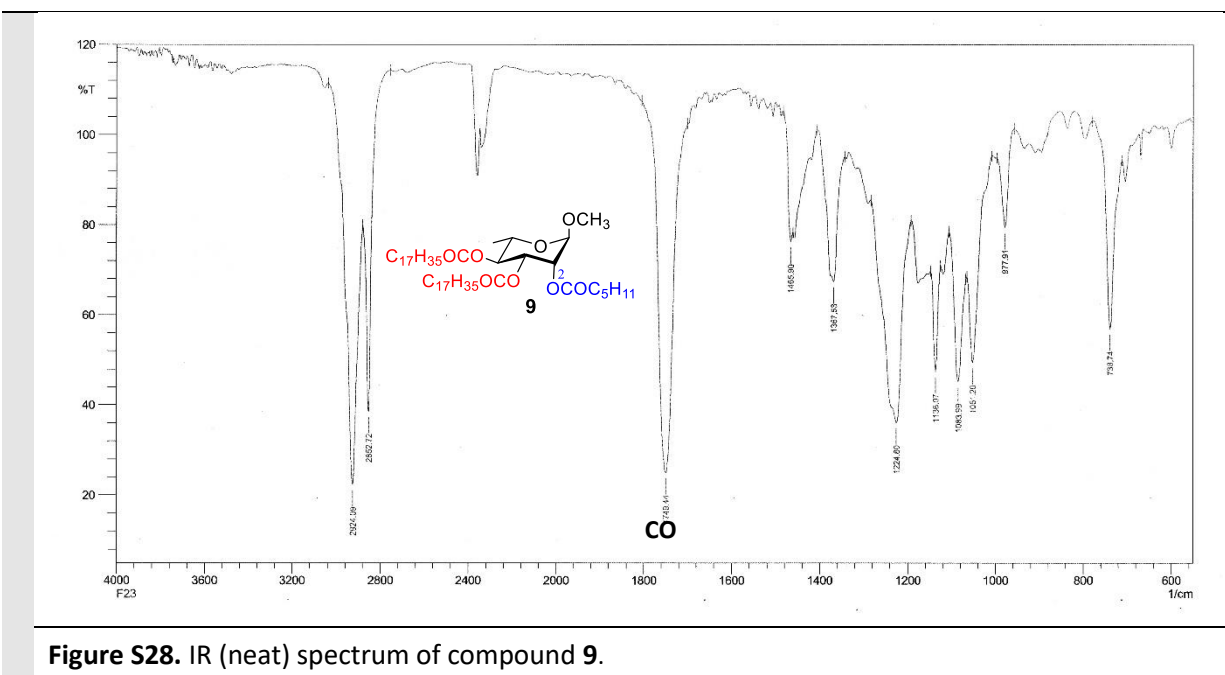
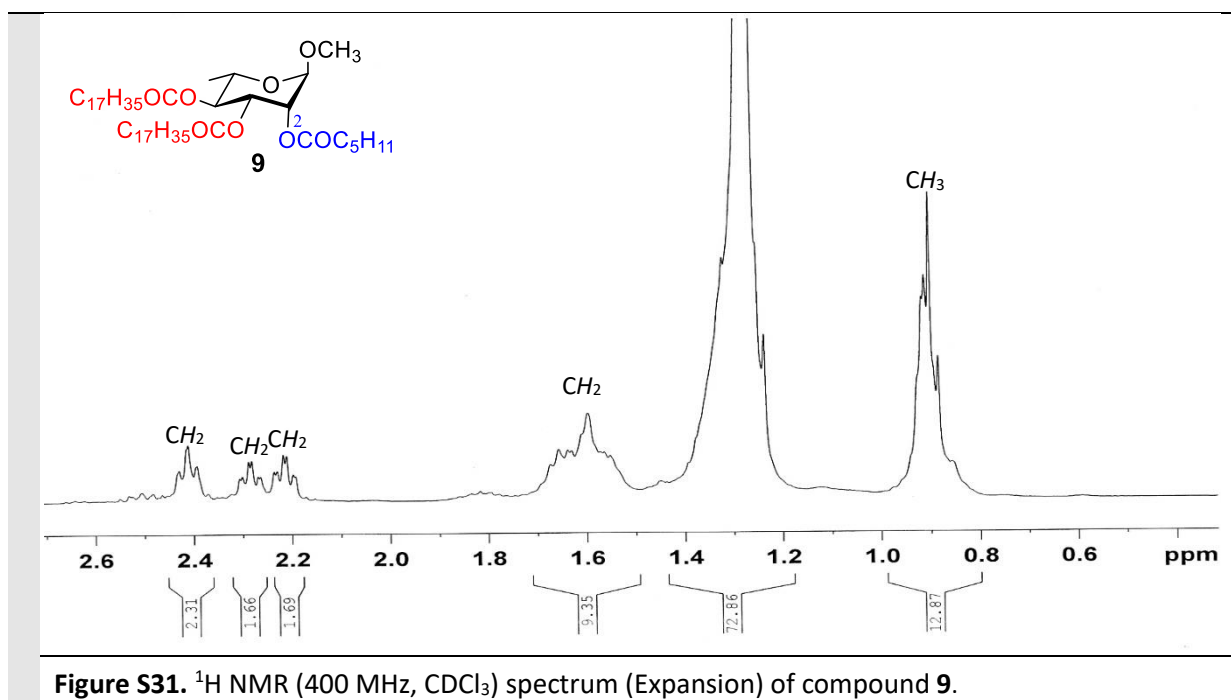
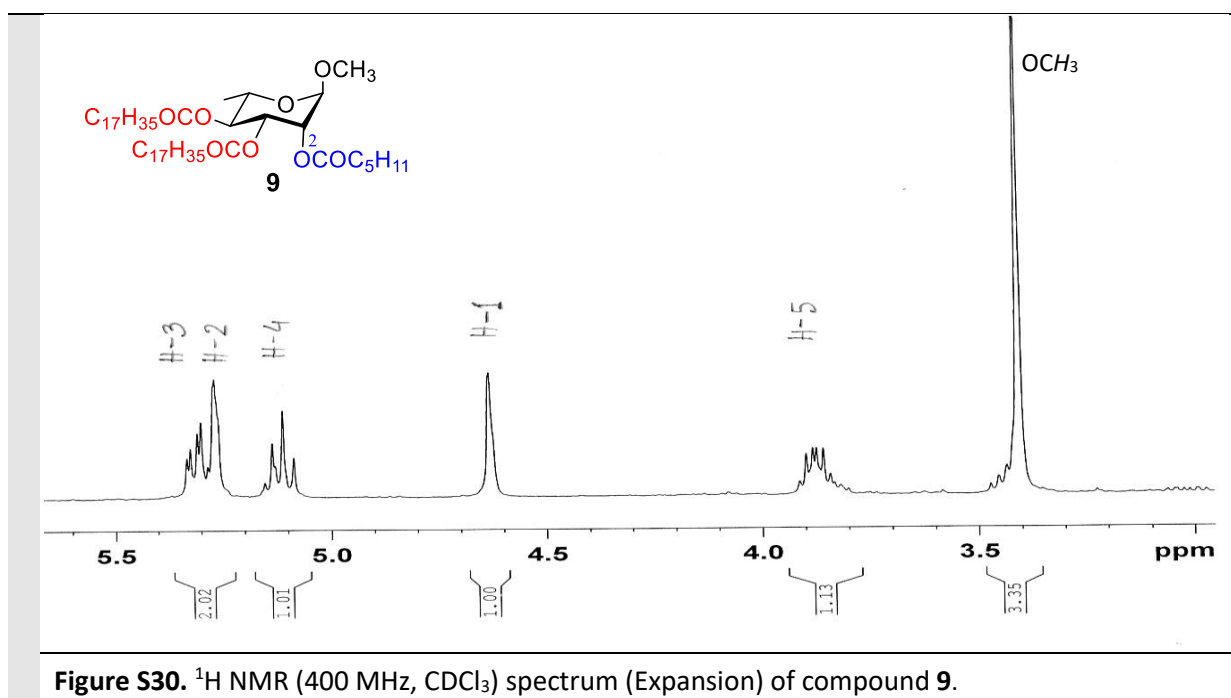
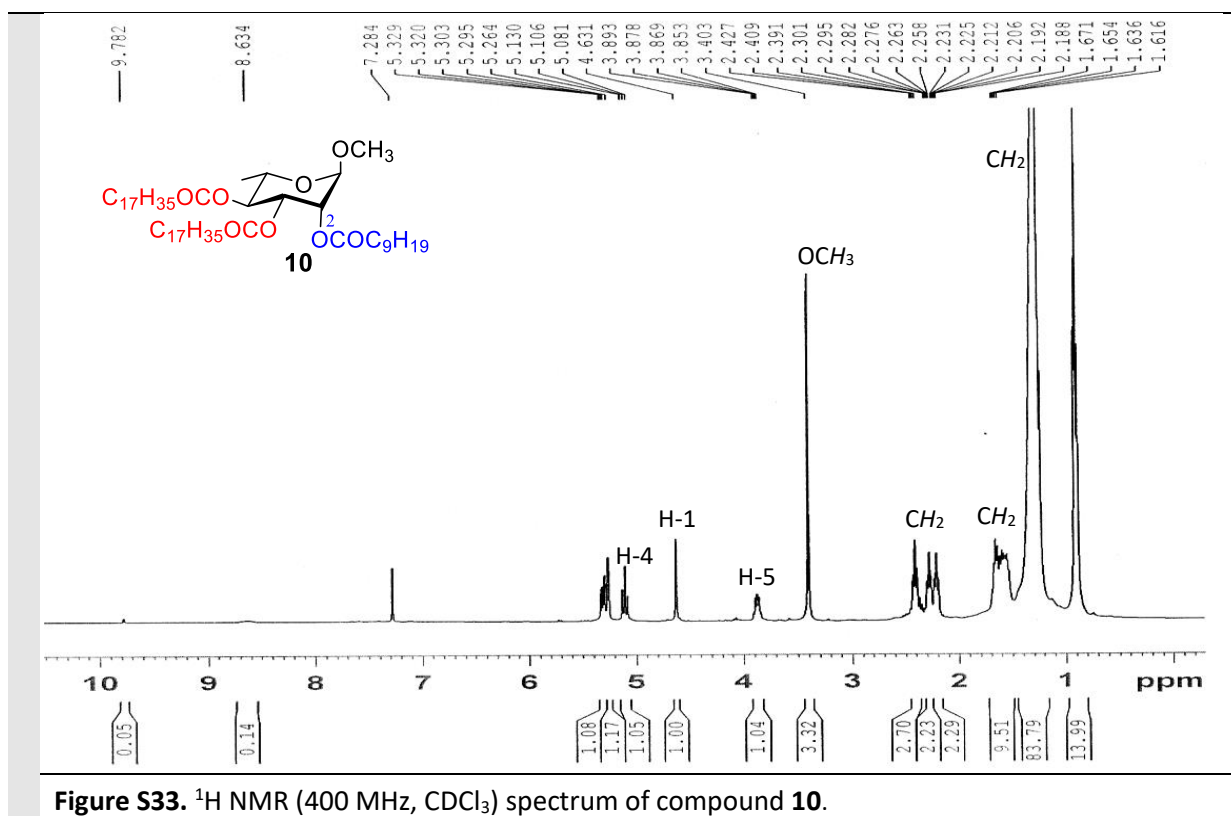
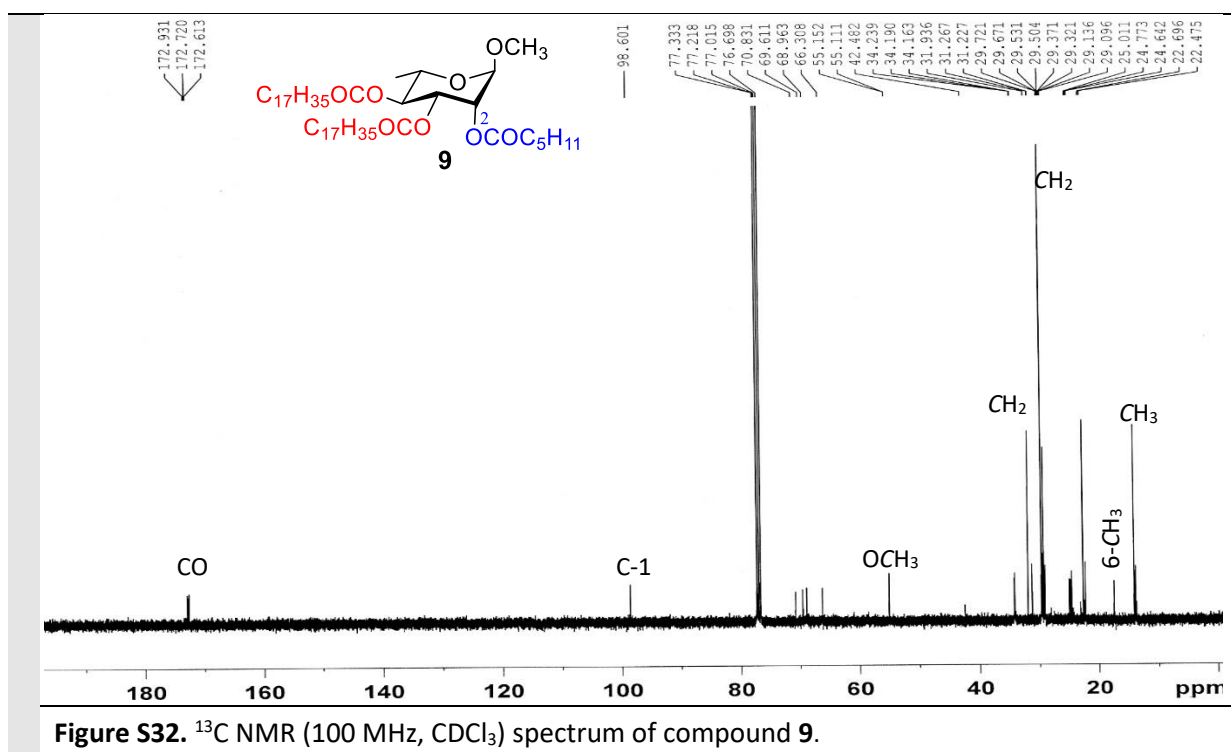


Figure S25. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 8.









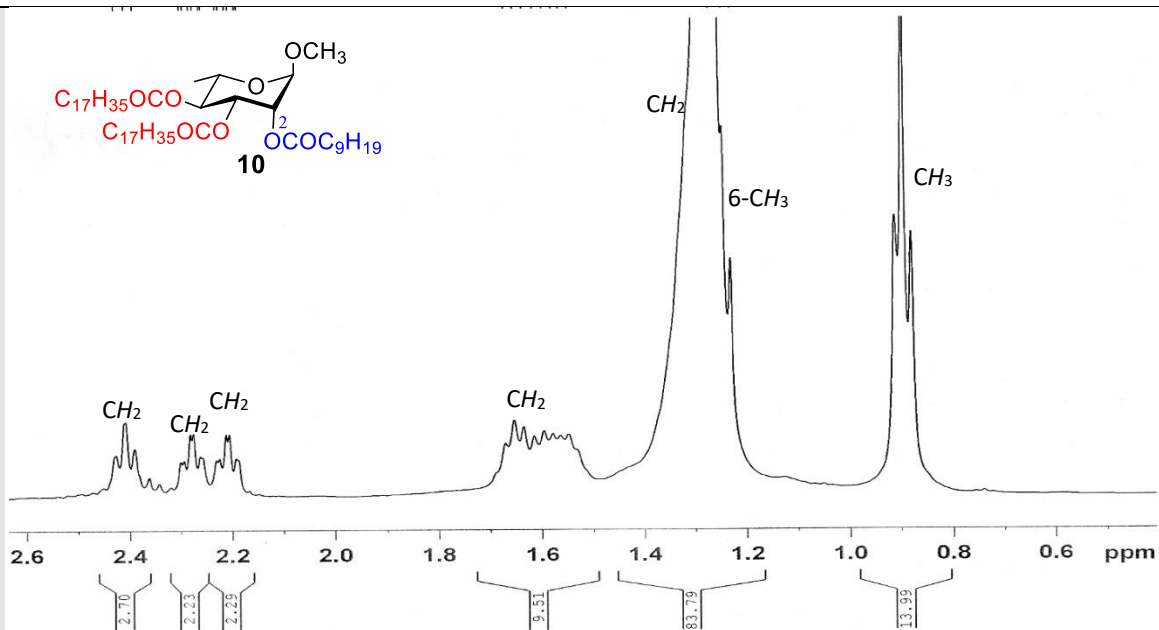


Figure S34. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 10.

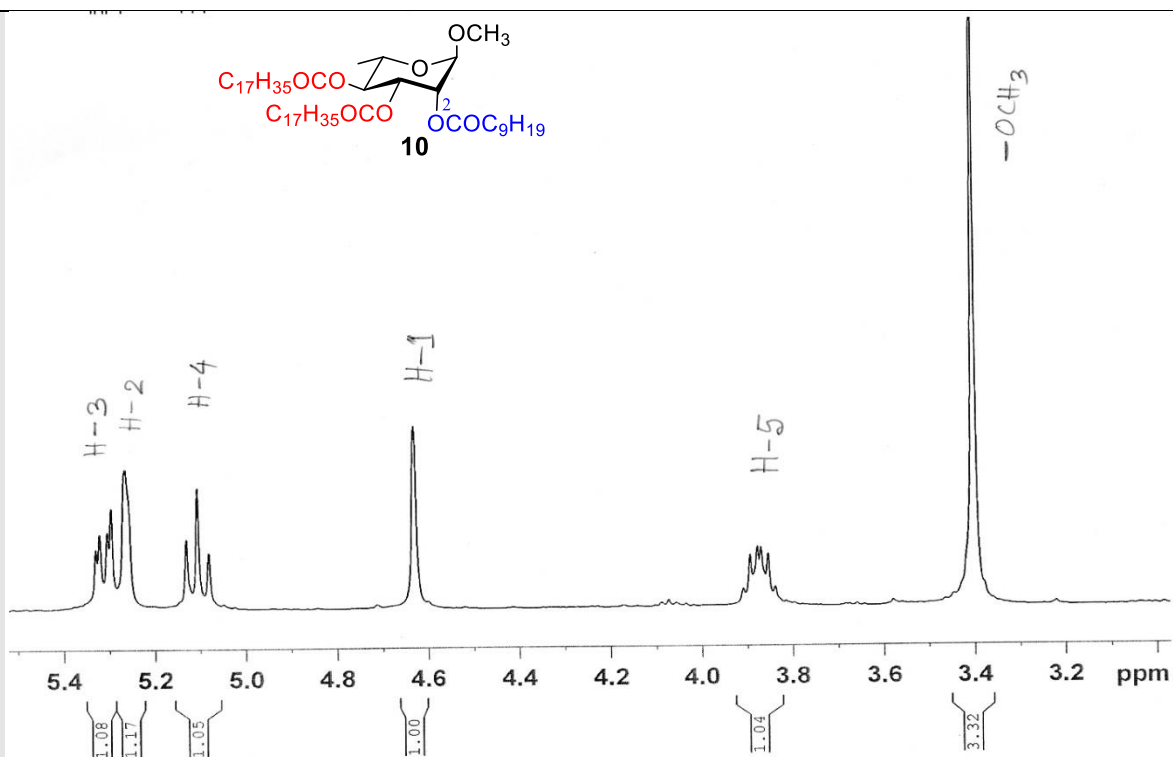


Figure S35. ¹H NMR (400 MHz, CDCl₃) spectrum (Expansion) of compound 10.

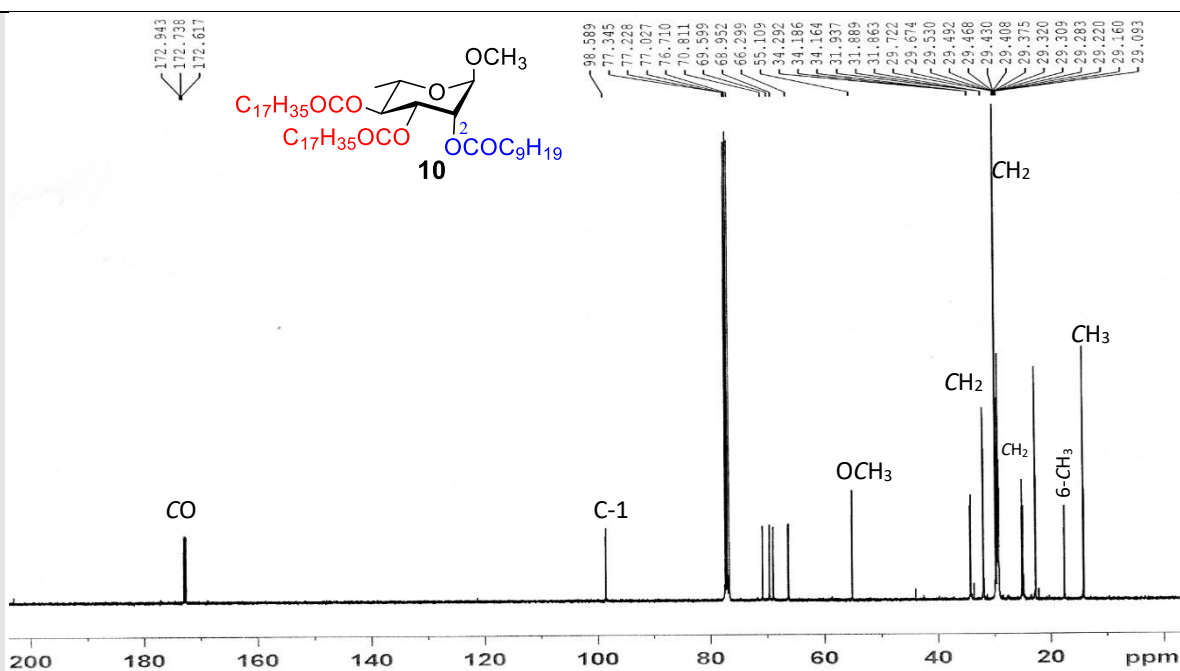


Figure S36. ^{13}C NMR (100 MHz, $CDCl_3$) spectrum of compound 10.

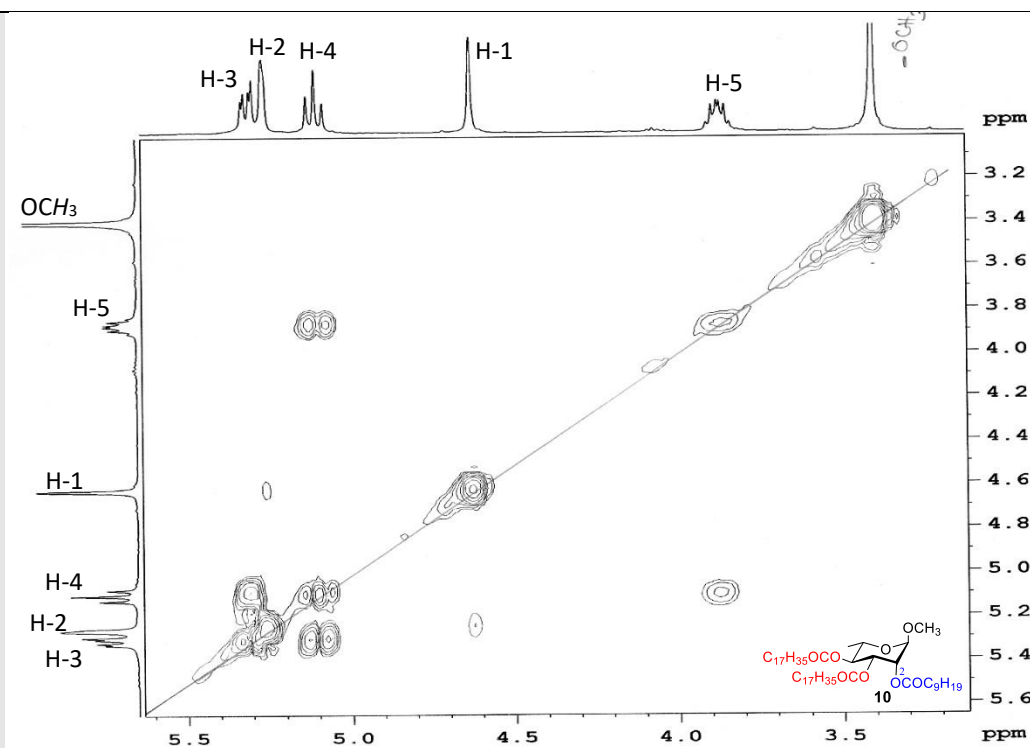


Figure S37. 2D COSY spectrum (Expansion) of compound 10.

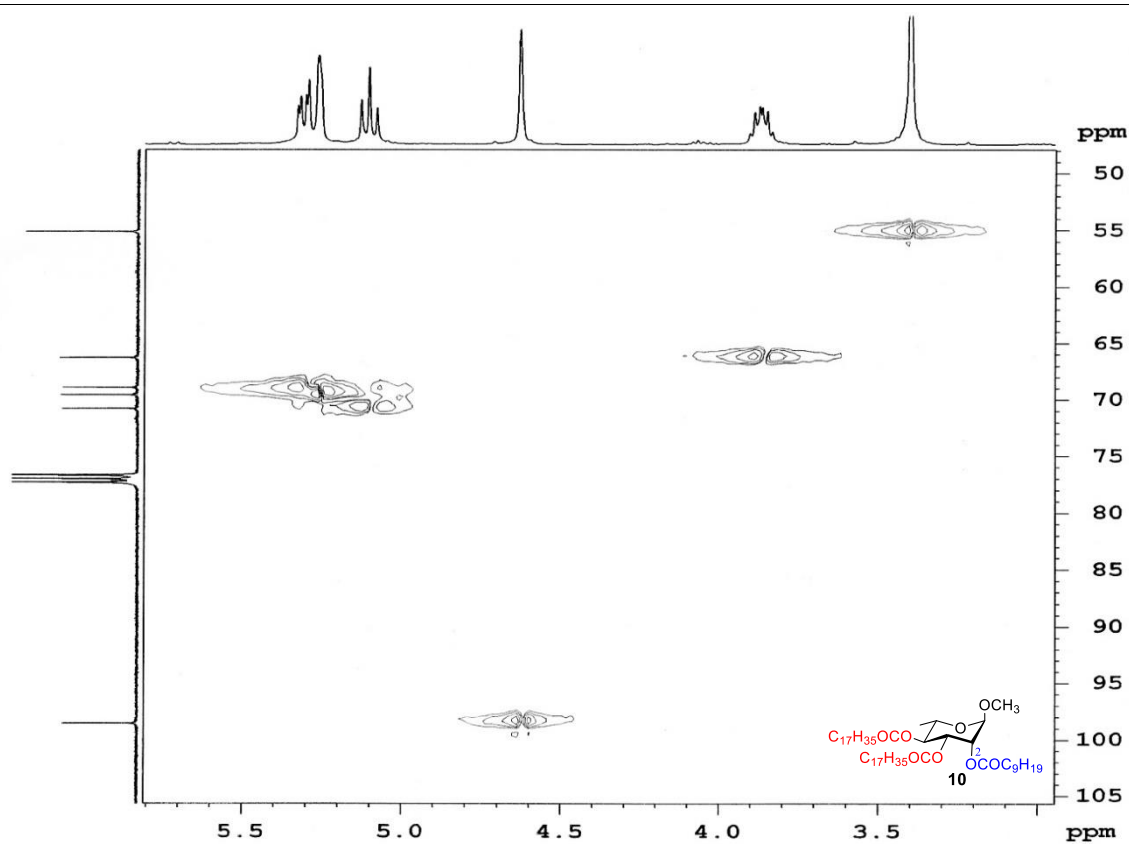


Figure S38. 2D HSQC spectrum (Expansion) of compound **10**.

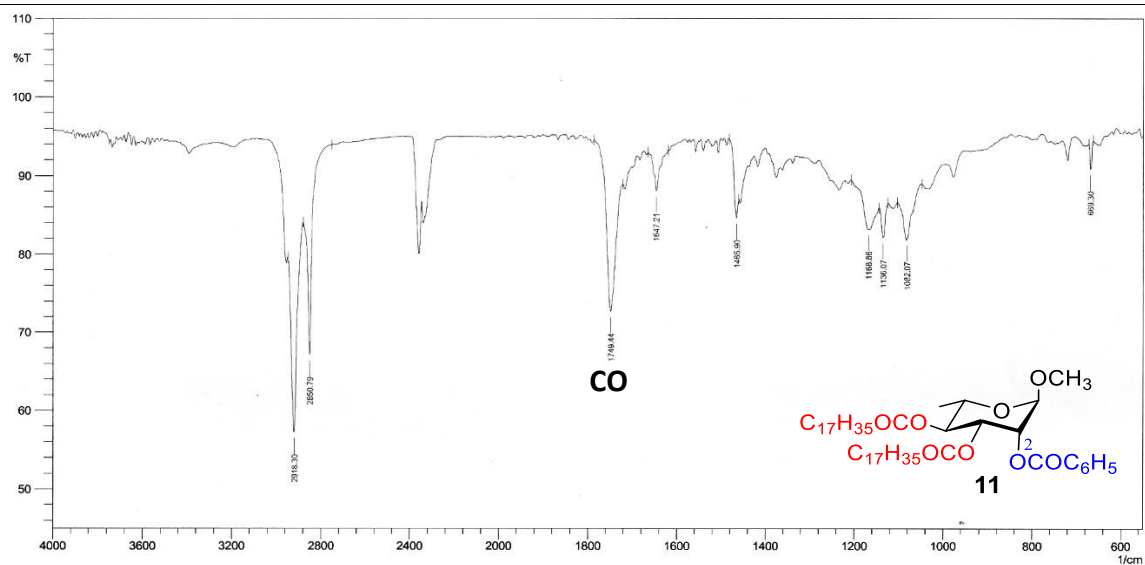


Figure S39. FT-IR (neat) spectrum of compound **11**.

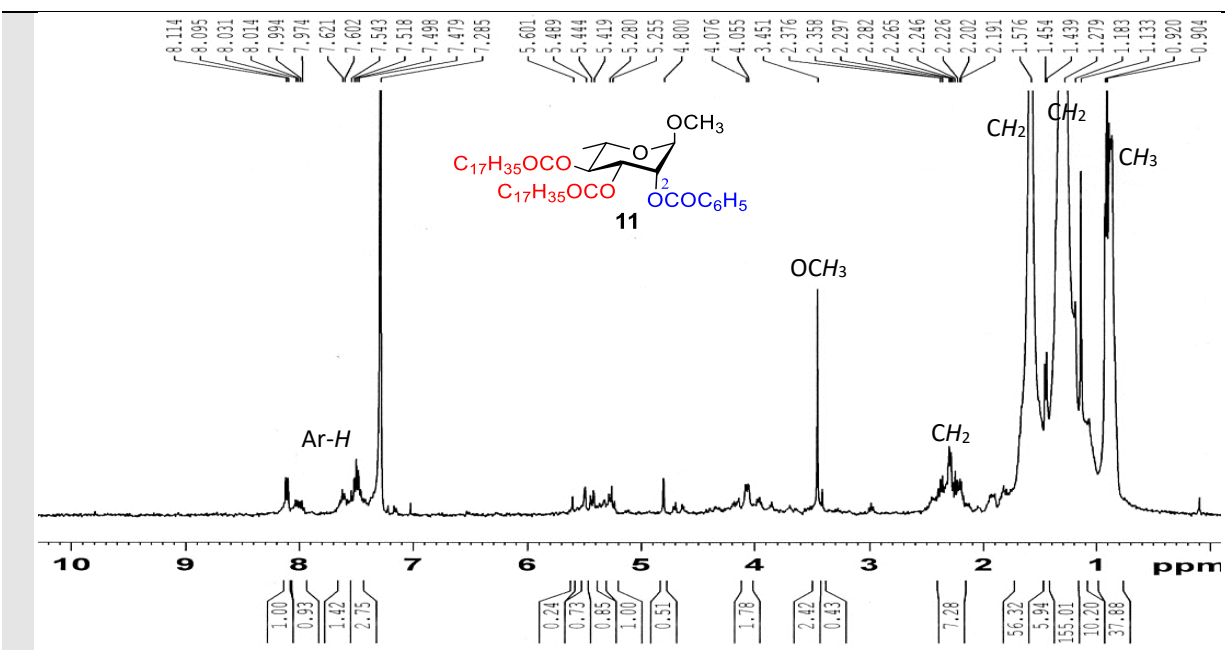


Figure S40. 1H NMR (400 MHz, $CDCl_3$) spectrum of compound **11**.