Supporting Information for

The *o*-xylylene protecting group in carbohydrate chemistry: application to the regioselective protection of a single *vic*-diol segment in cyclodextrins

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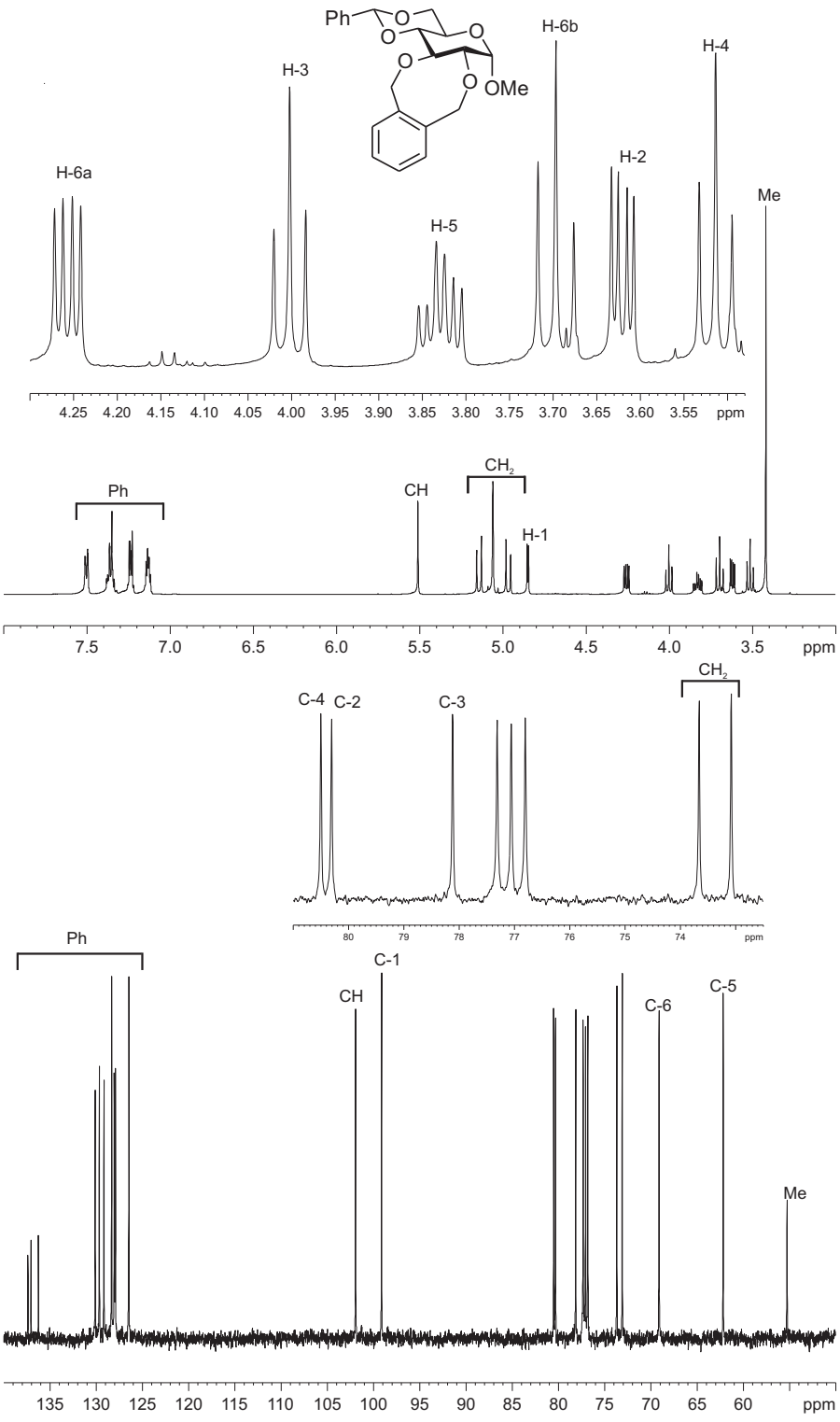


Figure S1. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **6**.

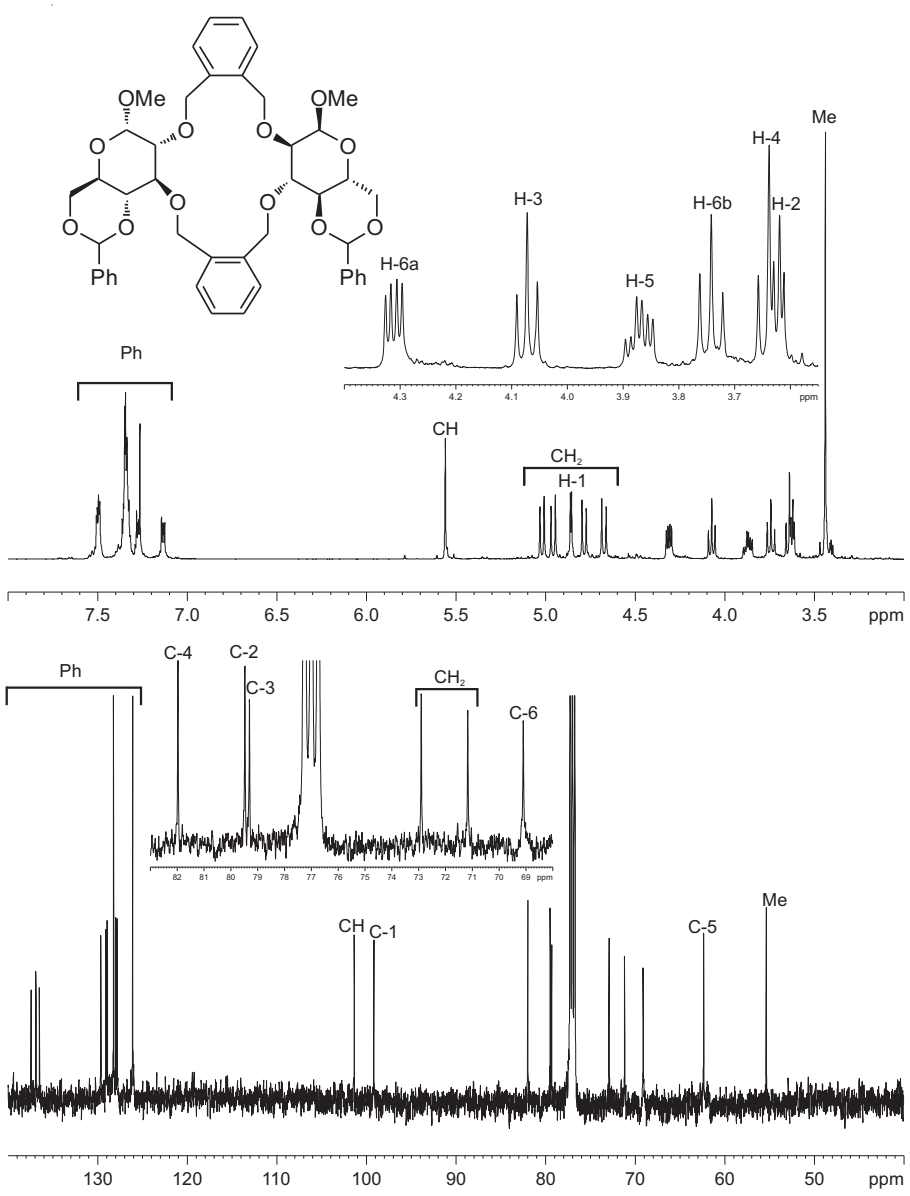


Figure S2. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **7**.

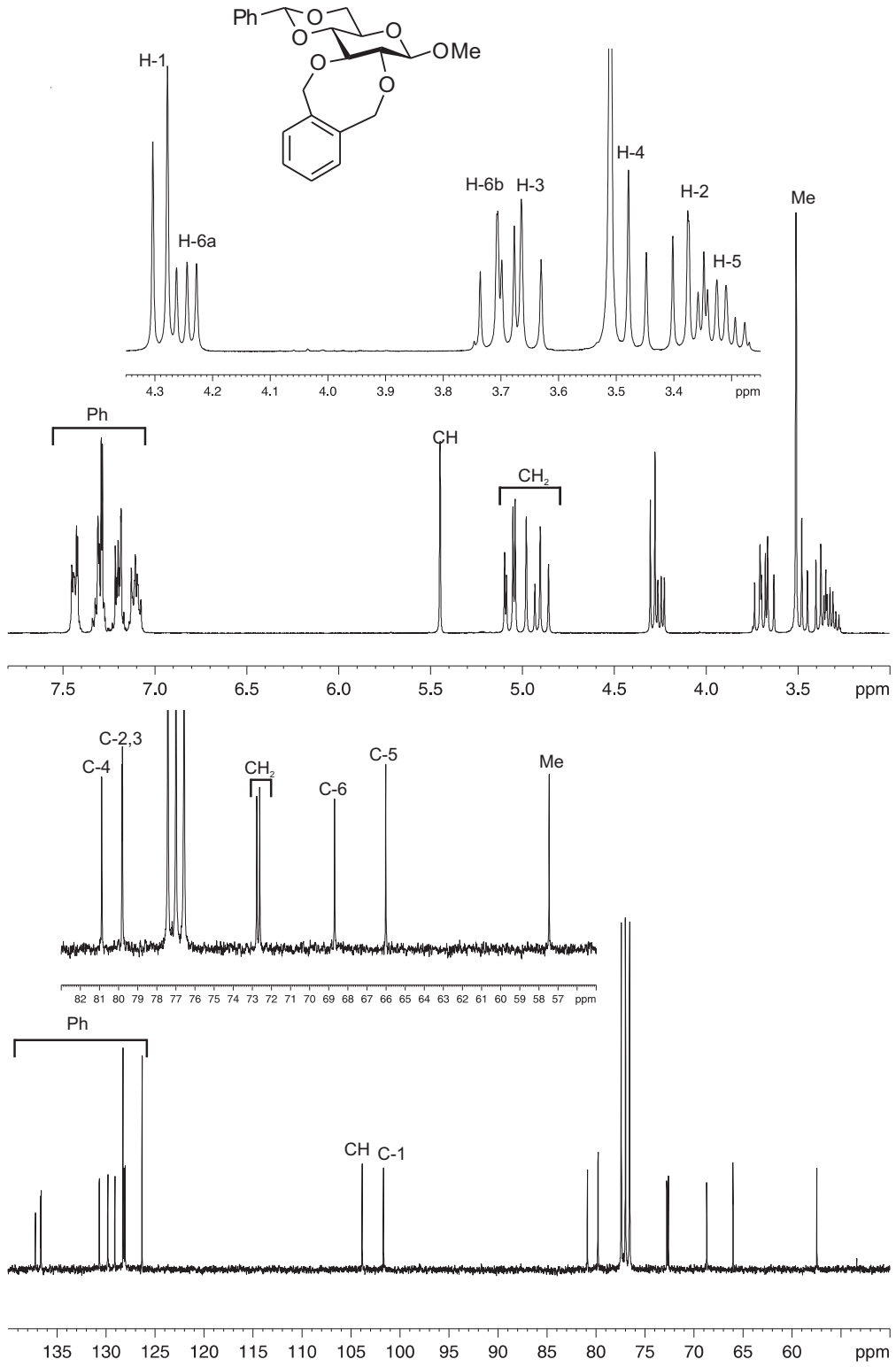


Figure S3. ^{1}H and ^{13}C NMR spectra (300 MHz, 75.5 MHz, $CDCl_3$) of **8**.

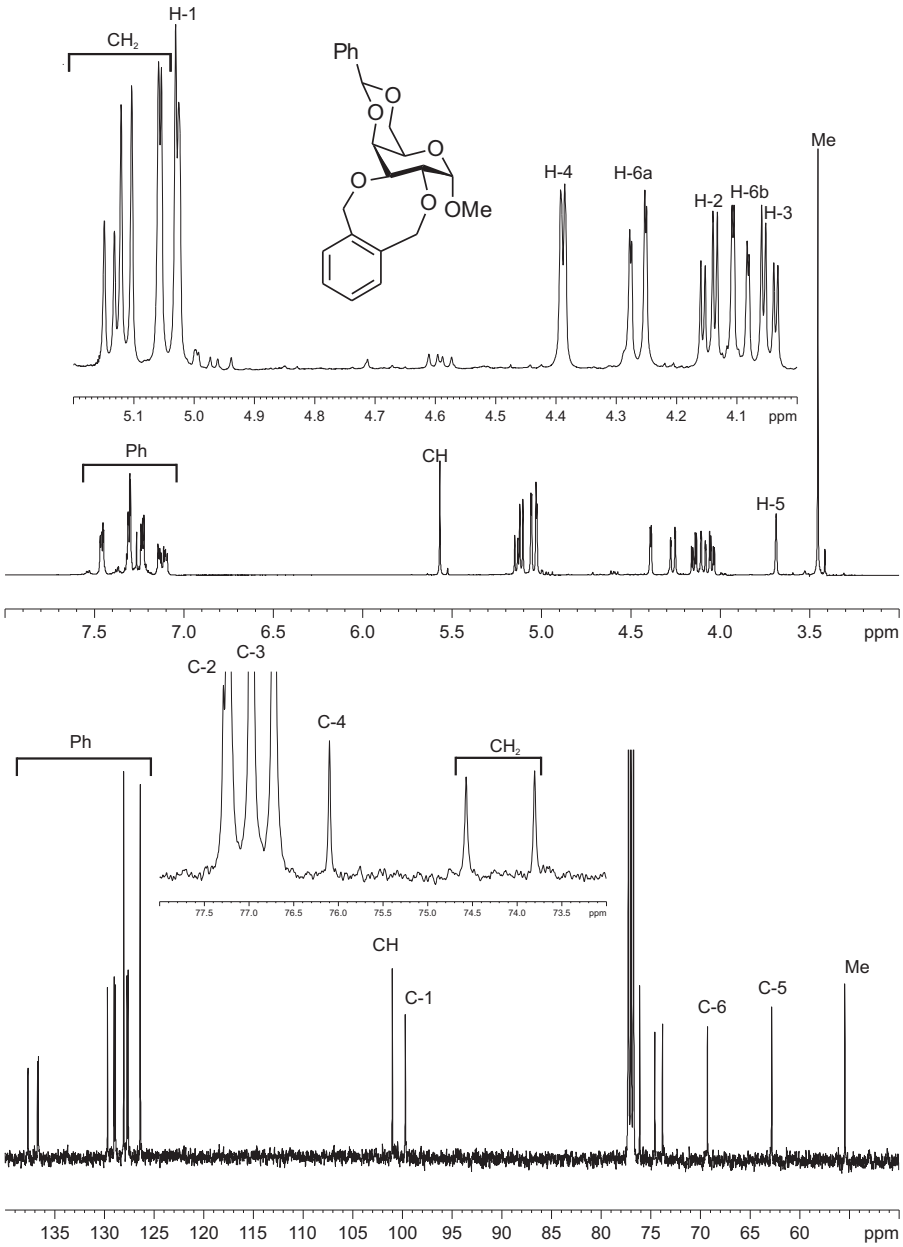


Figure S4. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **10**.

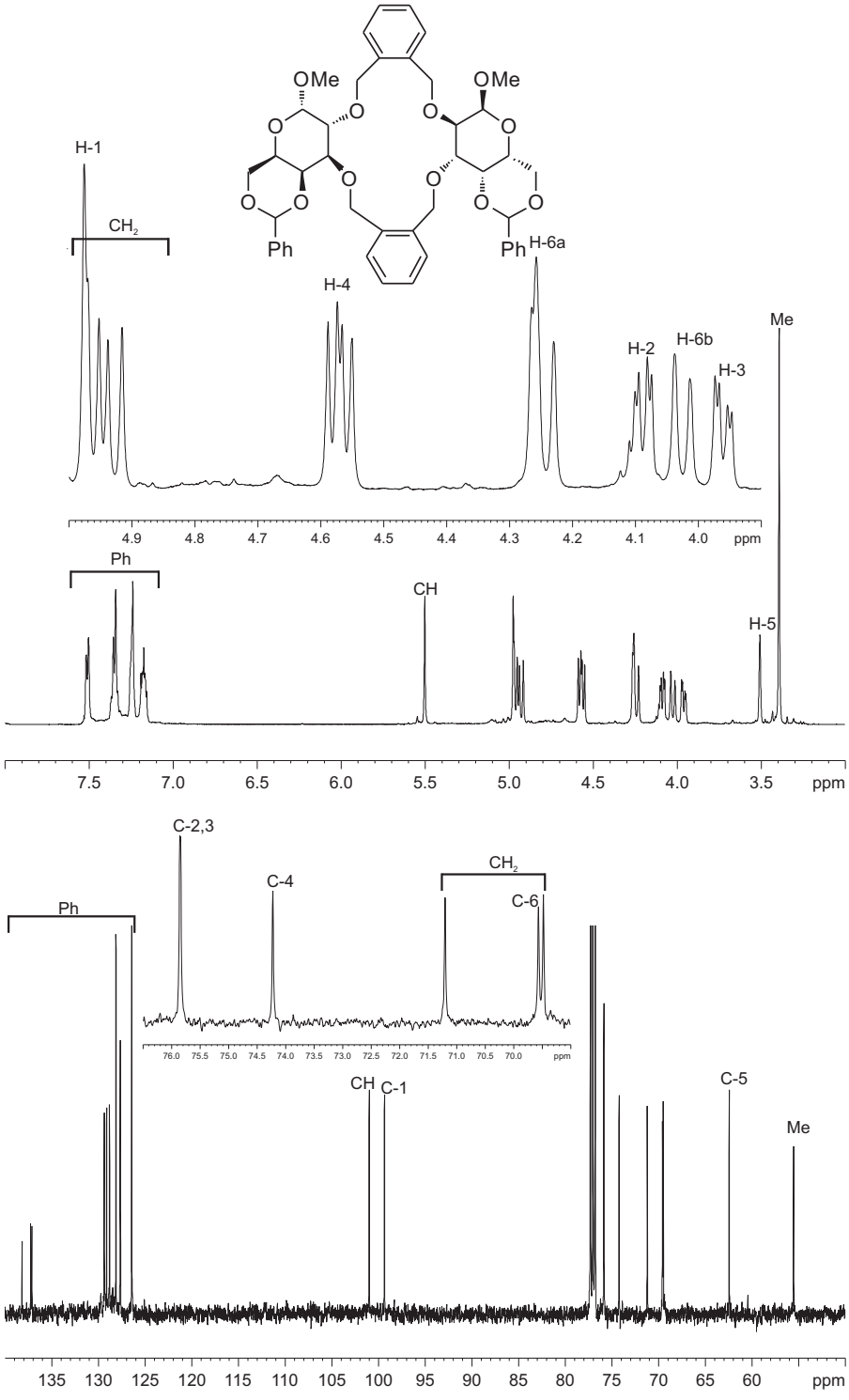


Figure S5. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **11**.

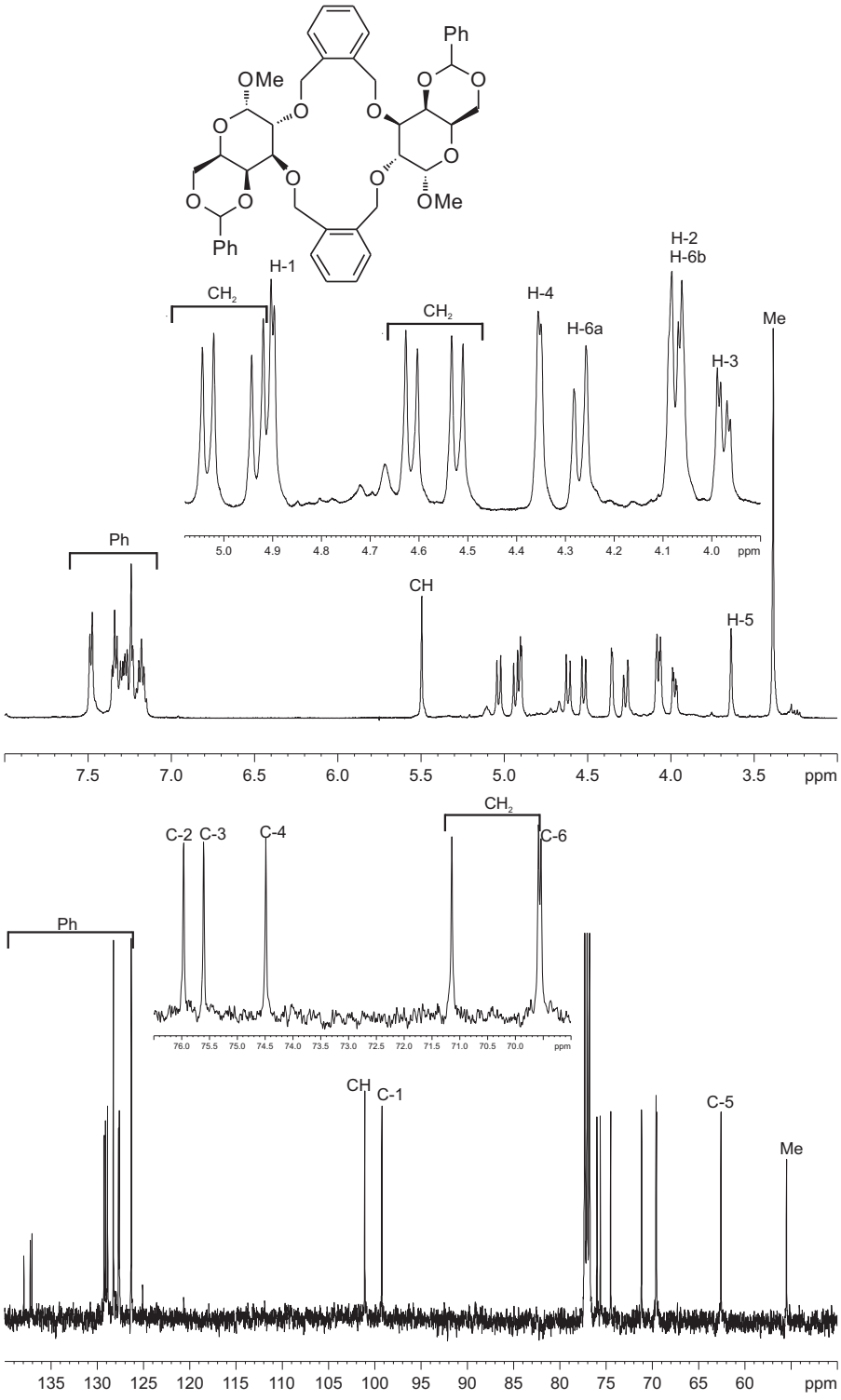


Figure S6. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **12**.

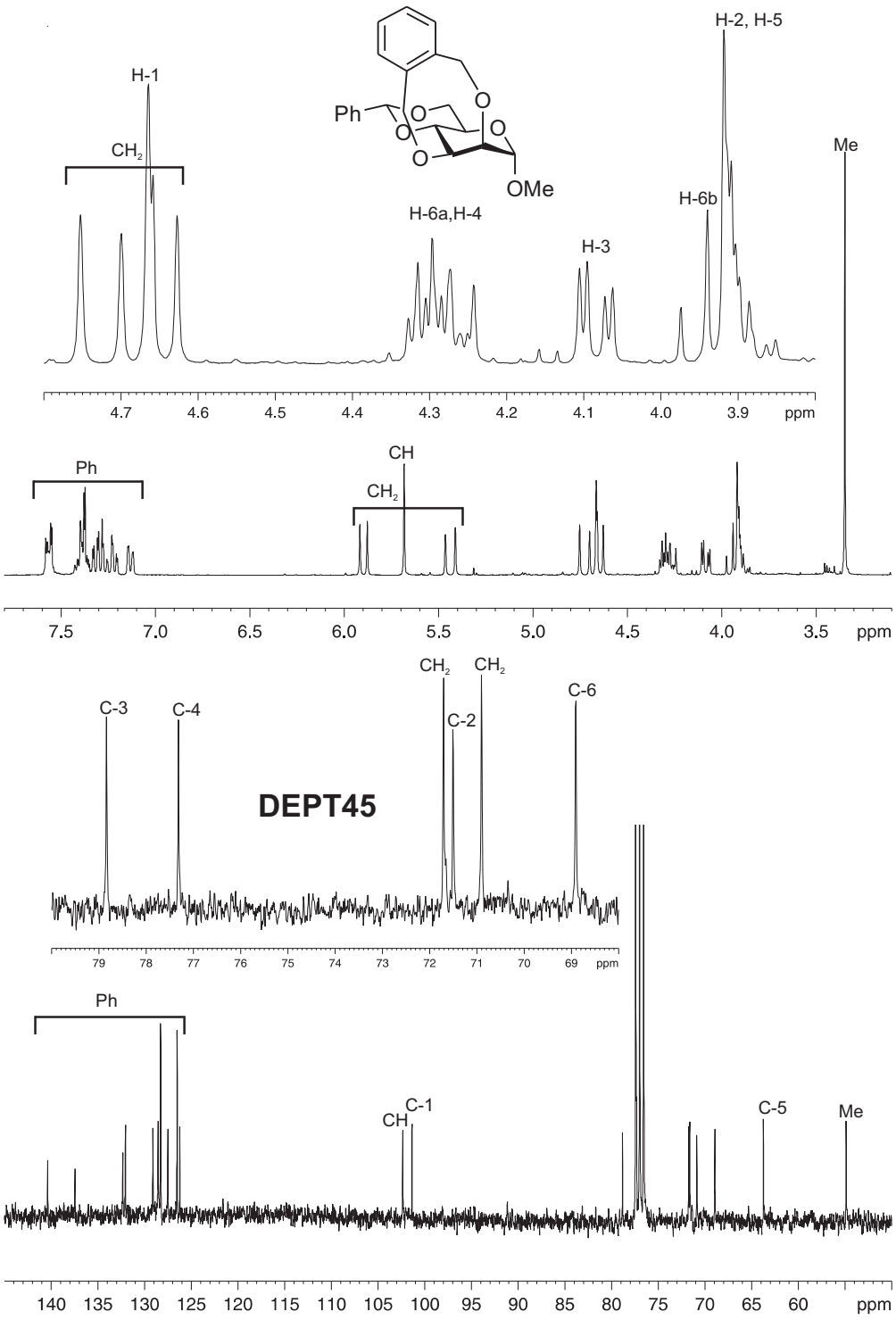


Figure S7. ^{1}H, ^{13}C-decopled and DEPT45 NMR spectra (300 MHz, 75.5 MHz, $CDCl_3$) of **14**.

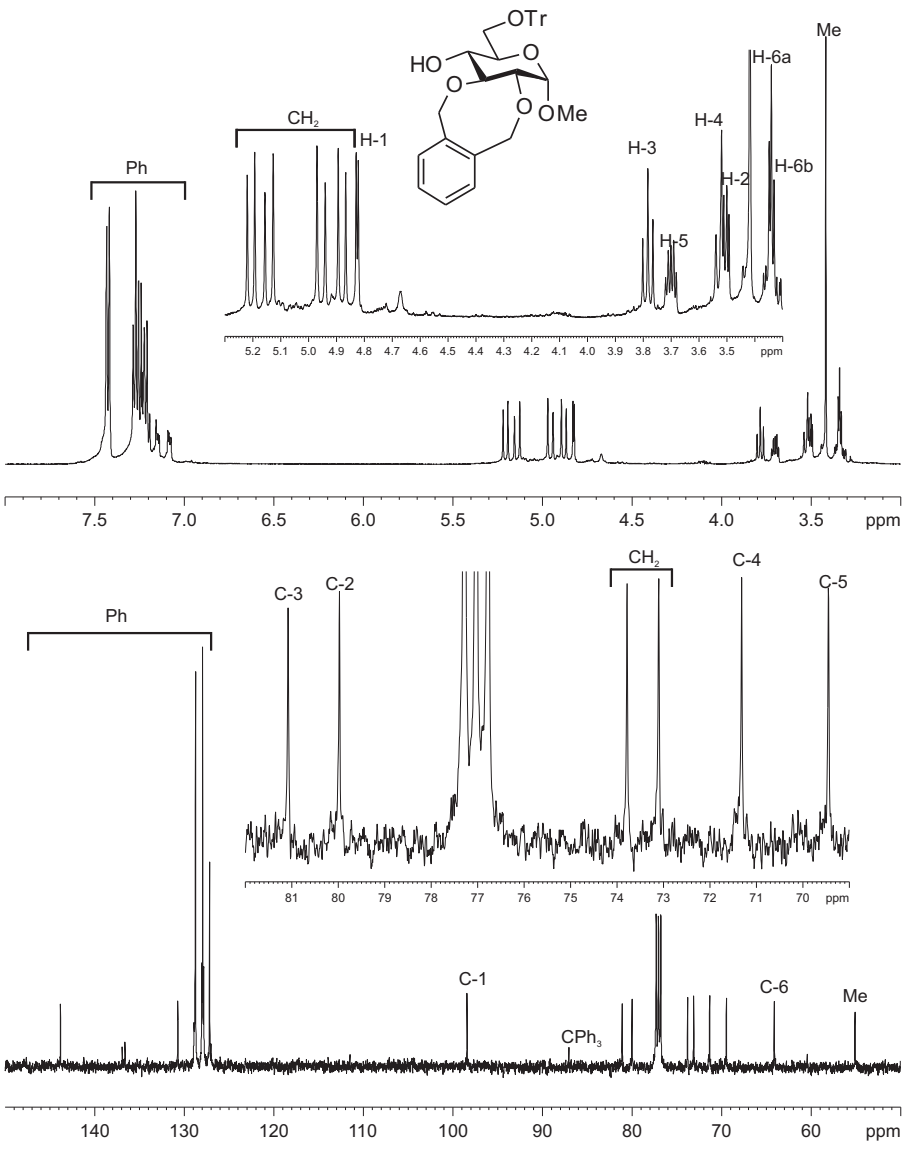


Figure S8. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **17**.

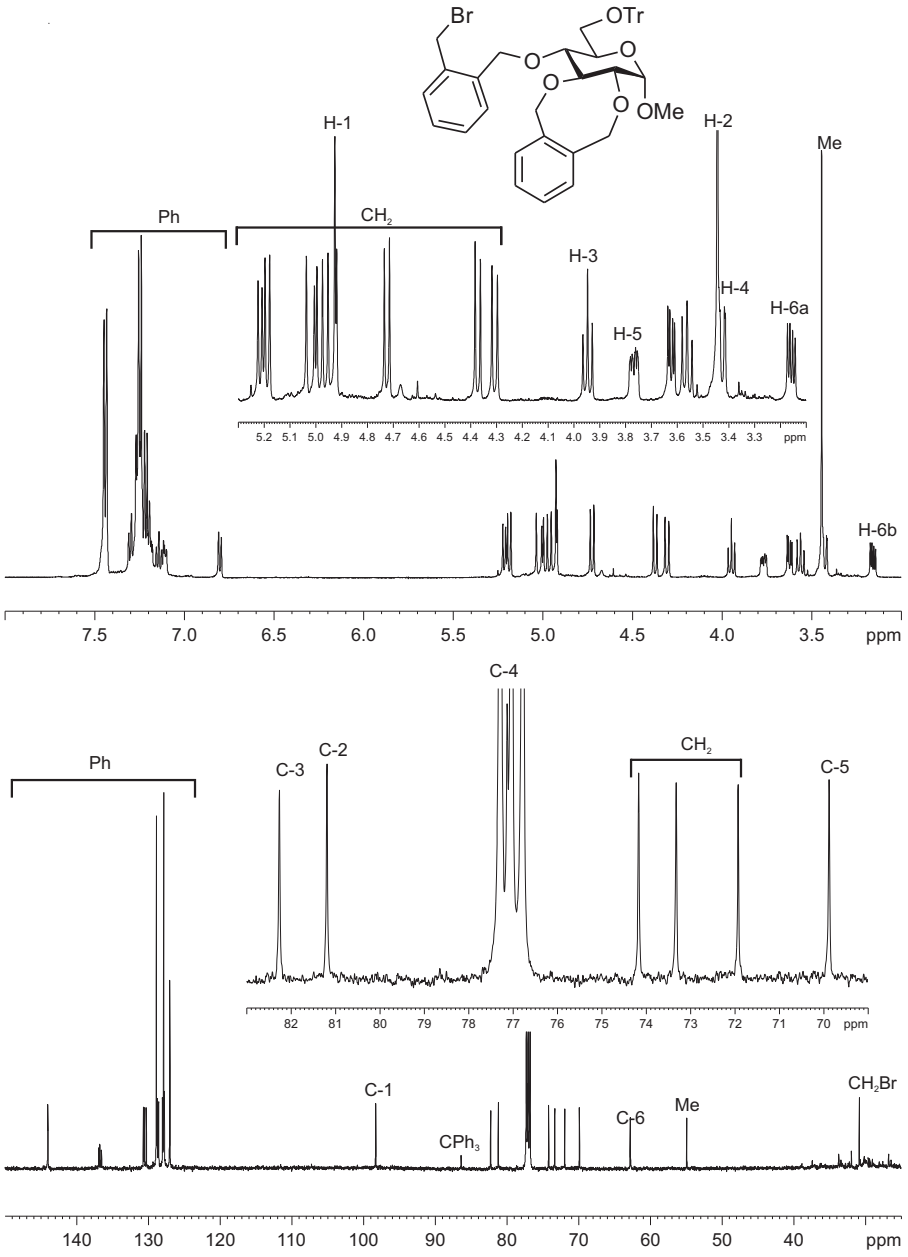


Figure S9. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **18**.

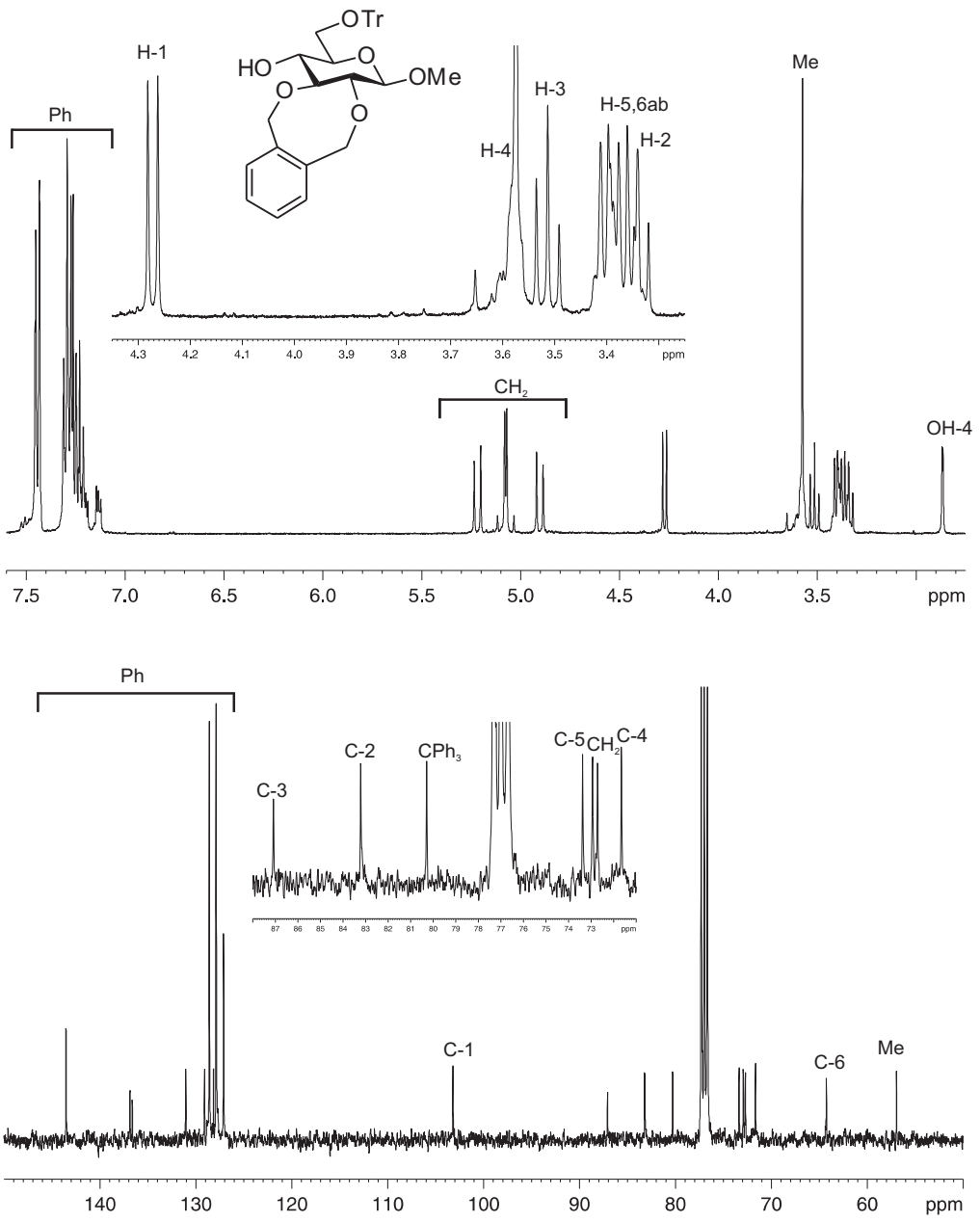


Figure S10. ^{1}H and ^{13}C NMR spectra (400 MHz, 100.6 MHz, $CDCl_3$) of **19**.

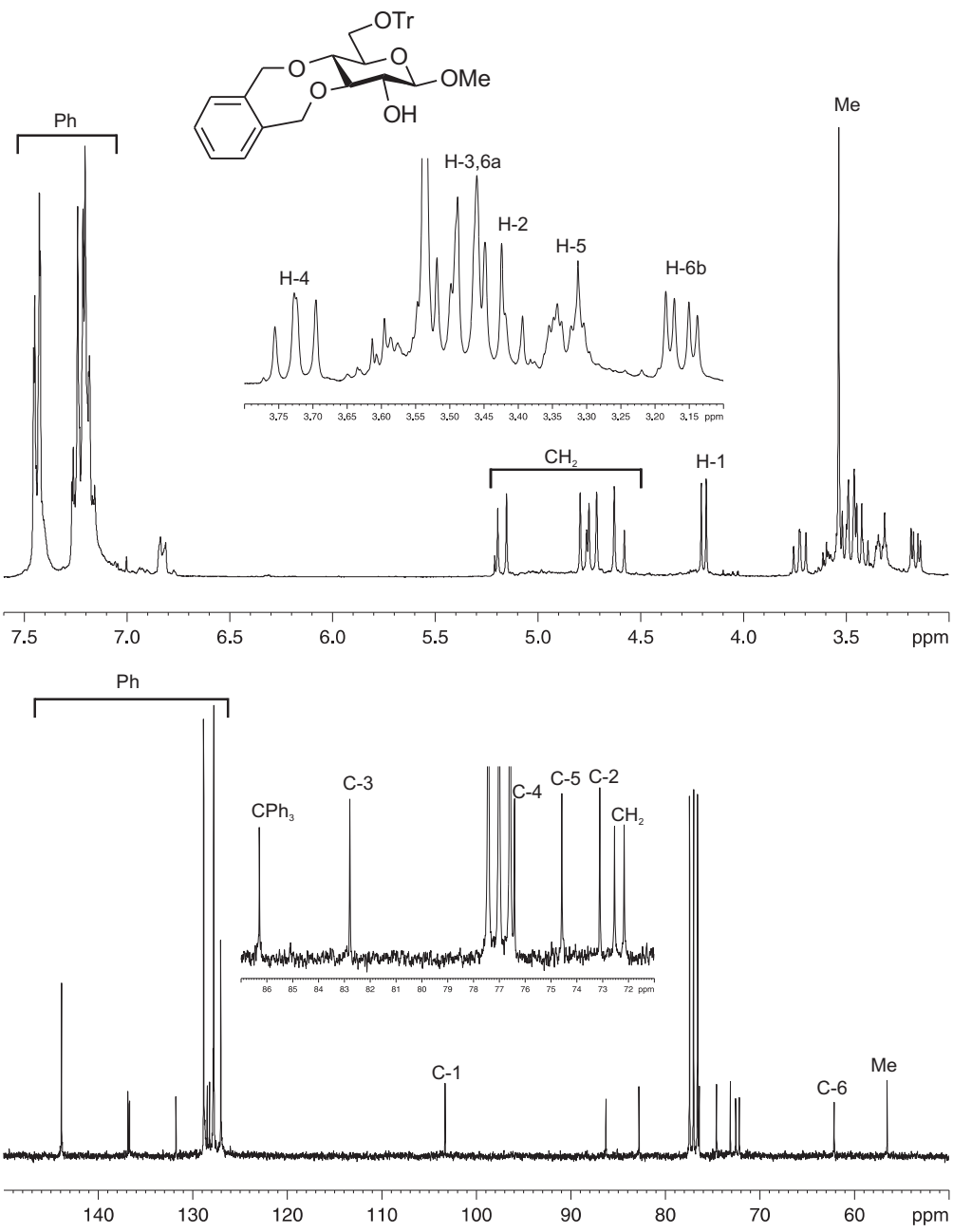


Figure S11. ^{1}H and ^{13}C NMR spectra (300 MHz, 75.5 MHz, $CDCl_3$) of **20**.

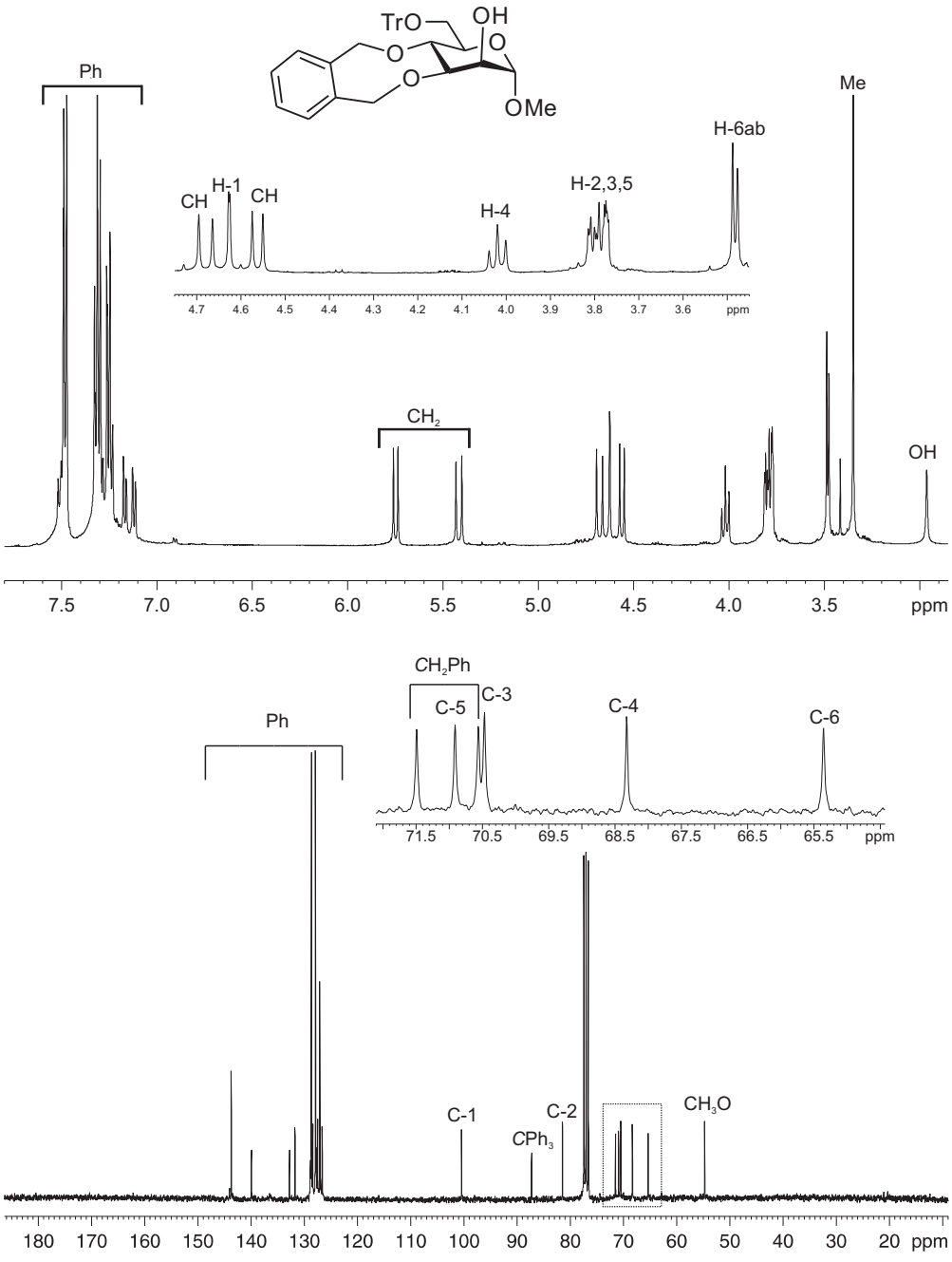


Figure S12. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **23**.

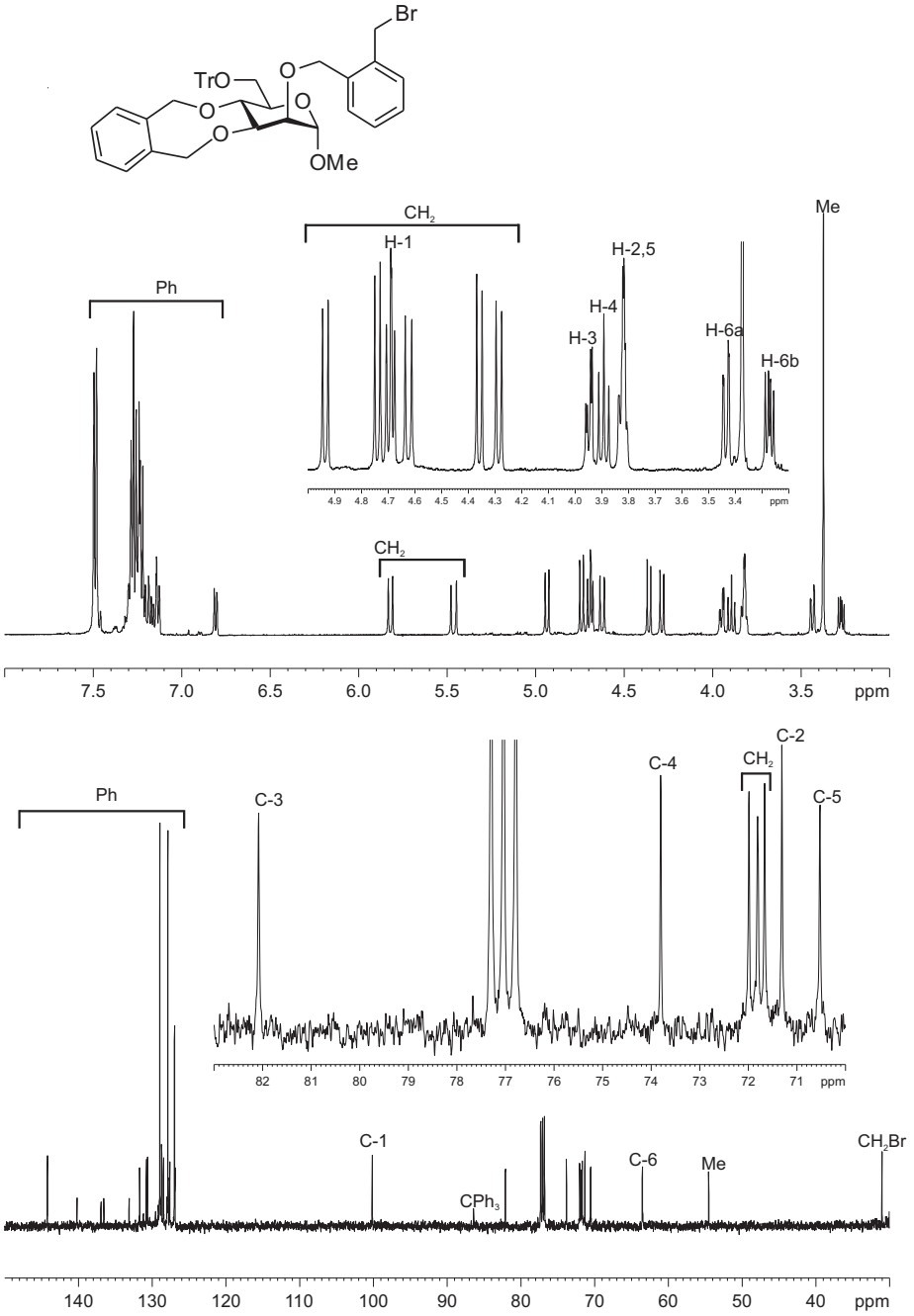


Figure S13. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **24**.

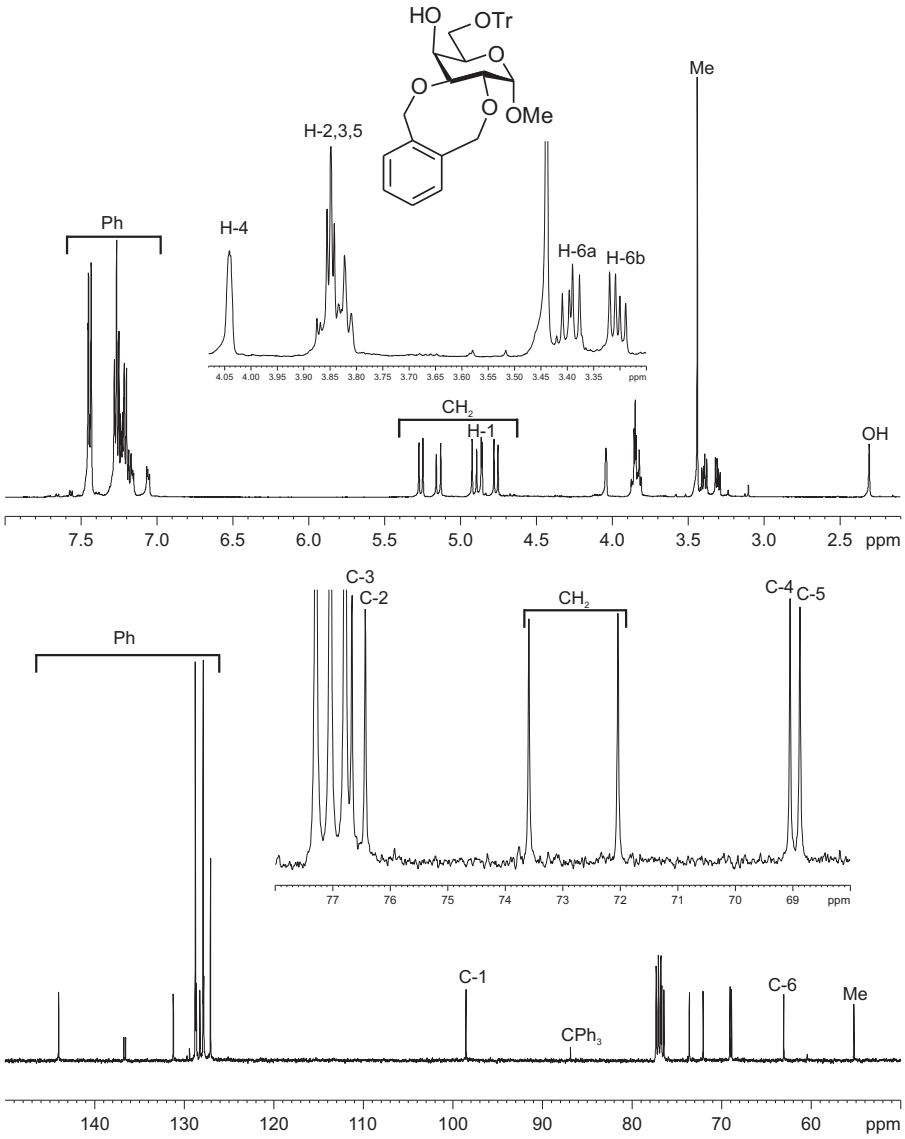


Figure S14. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **25**.

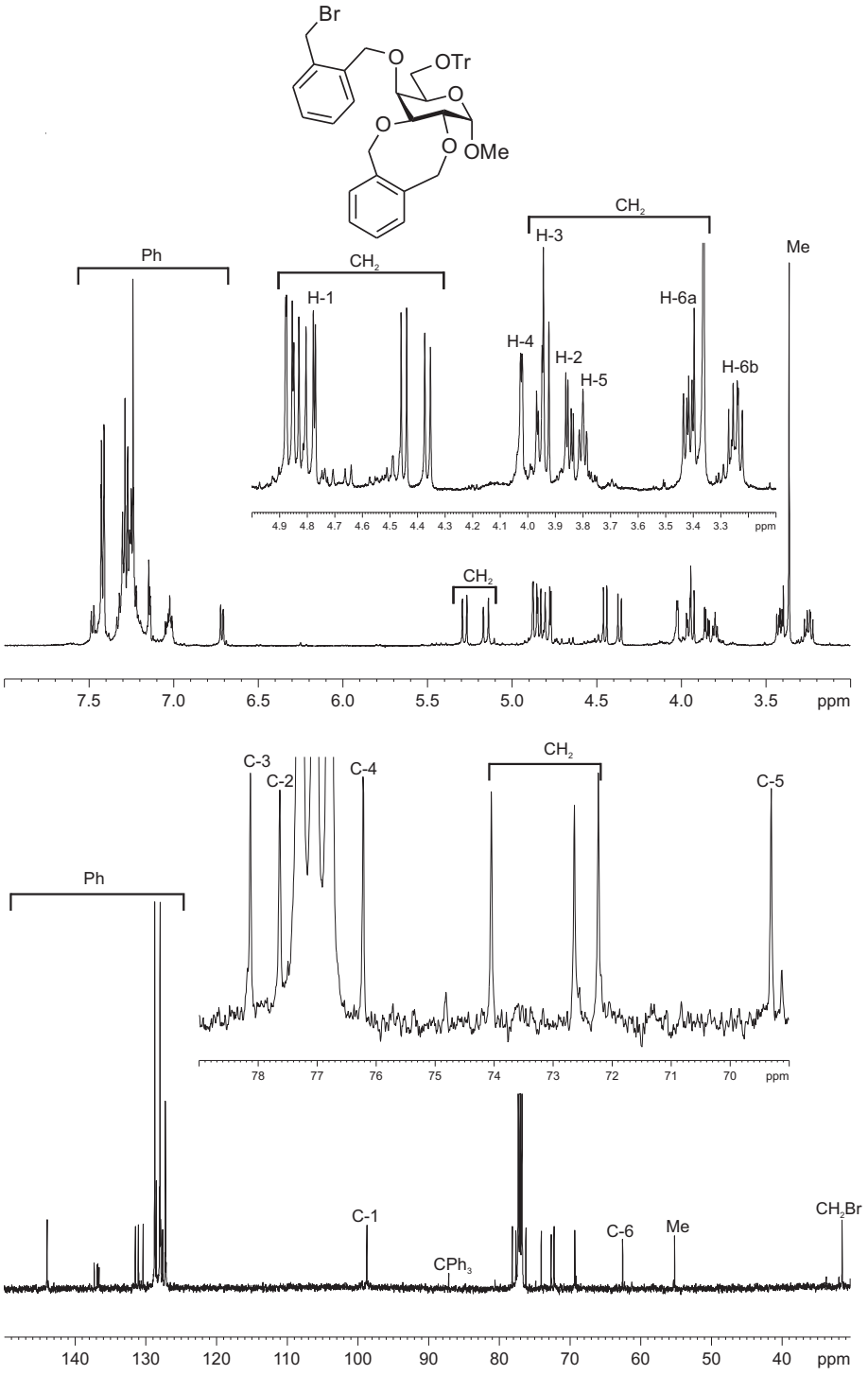


Figure S15. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **26**.

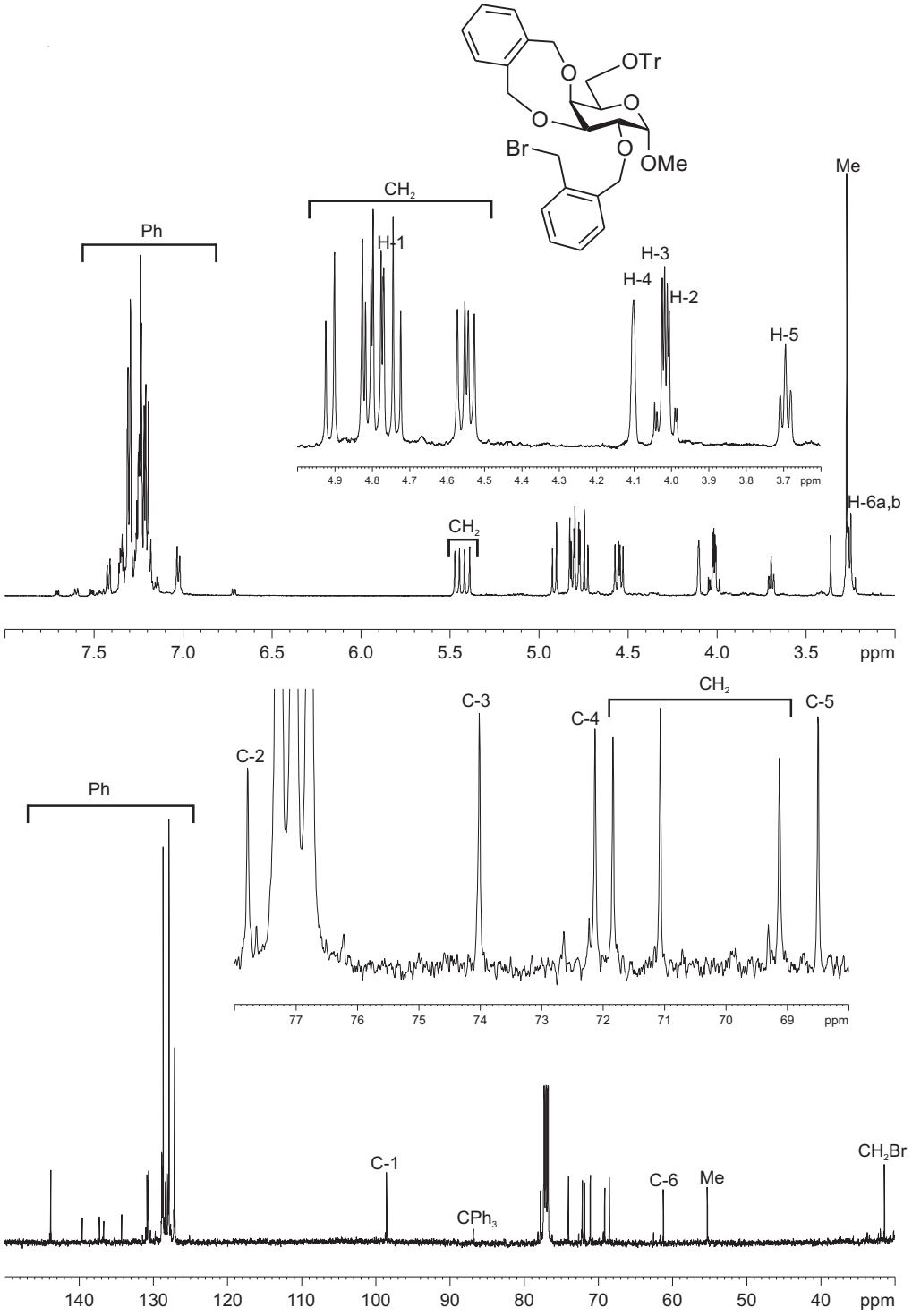


Figure S16. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **27**.

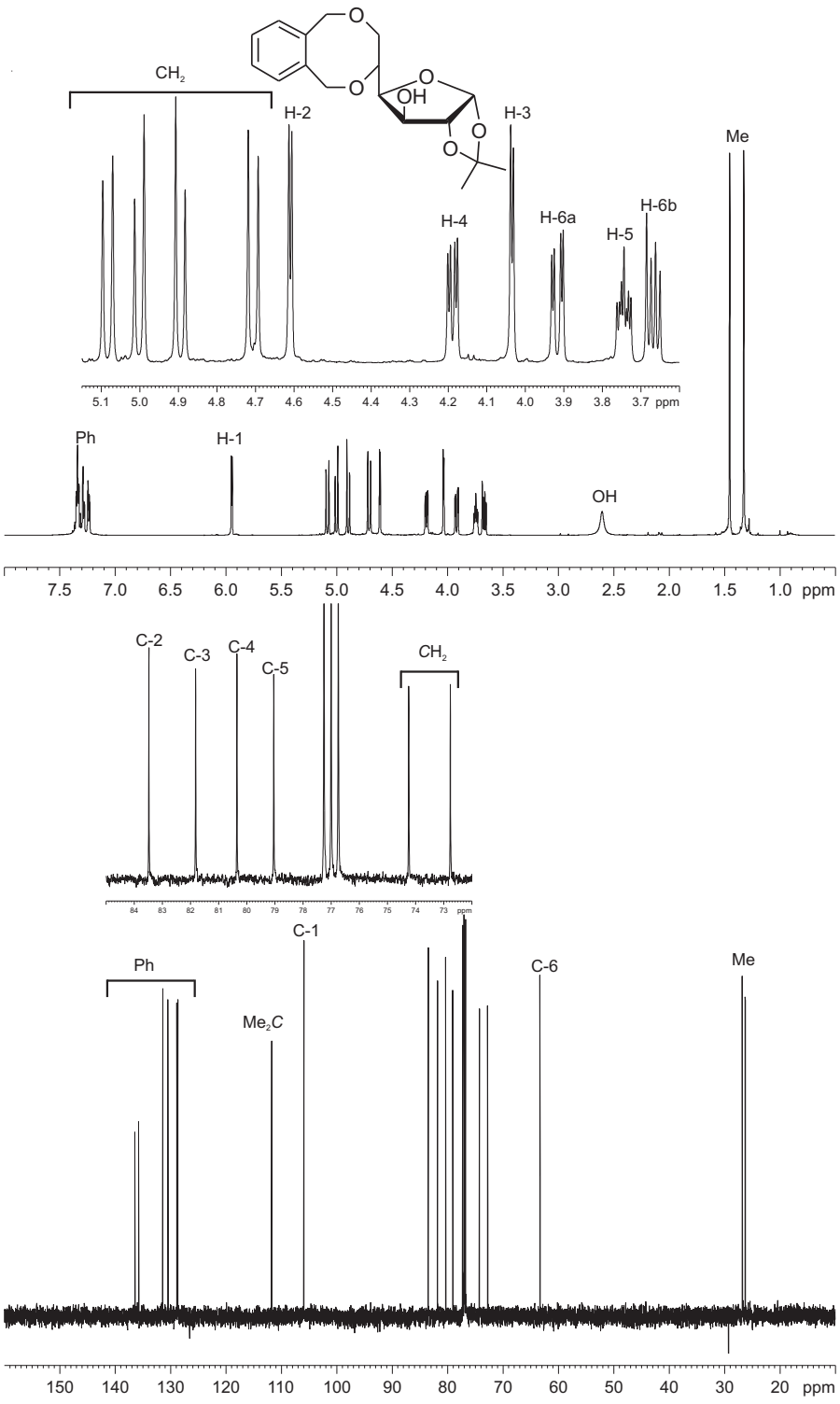


Figure S17. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **29**.

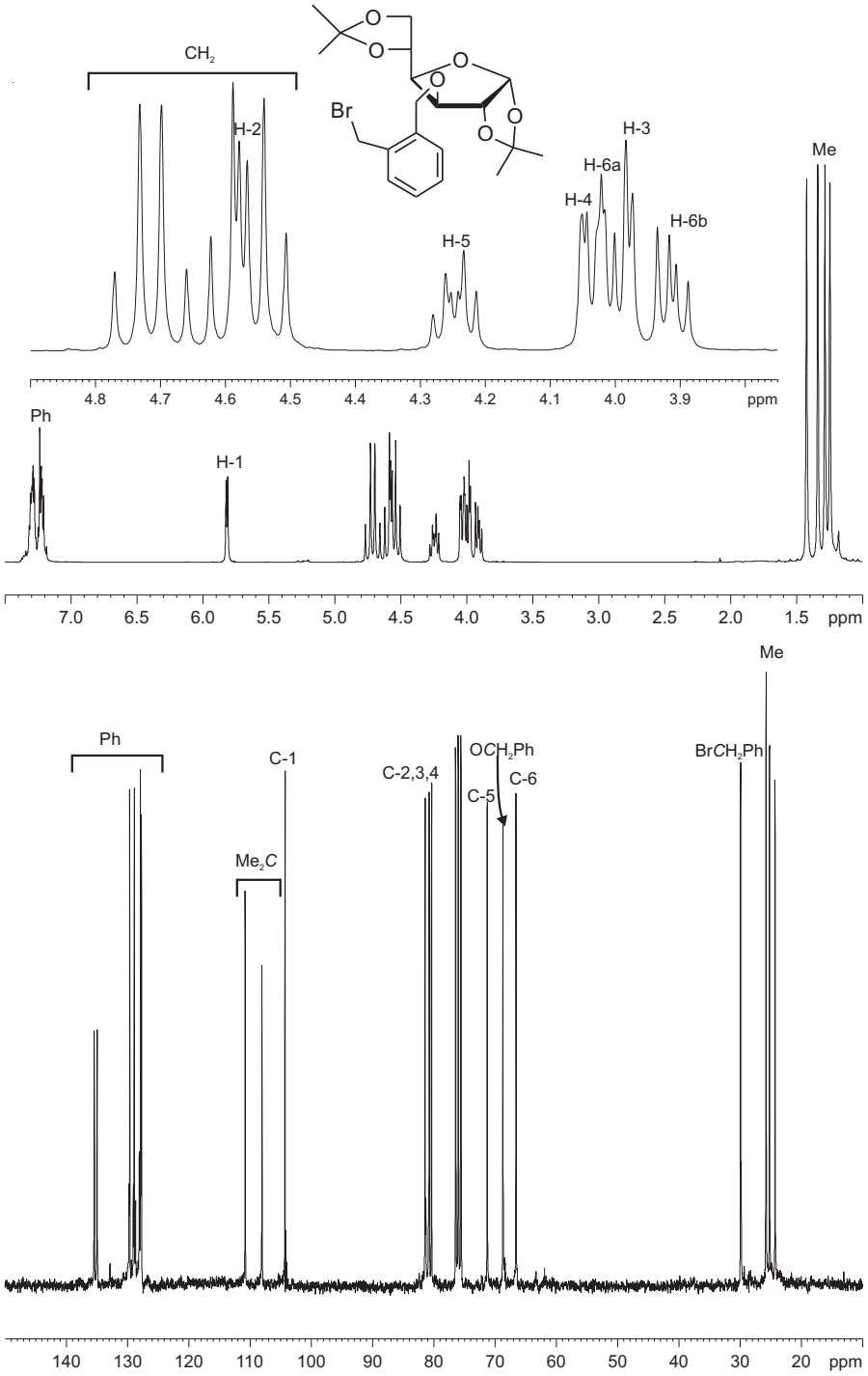


Figure S18. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **31**.

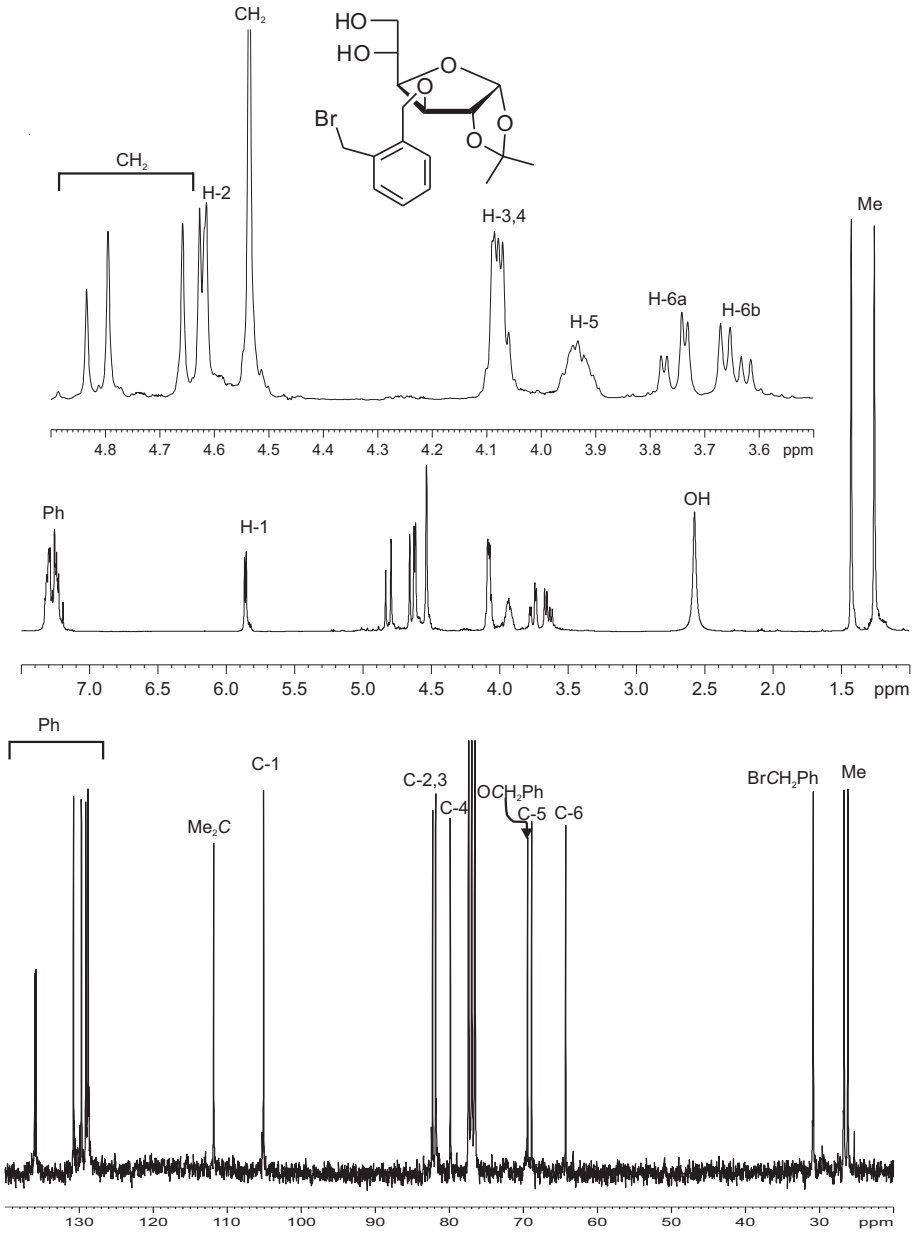


Figure S19. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **32**.

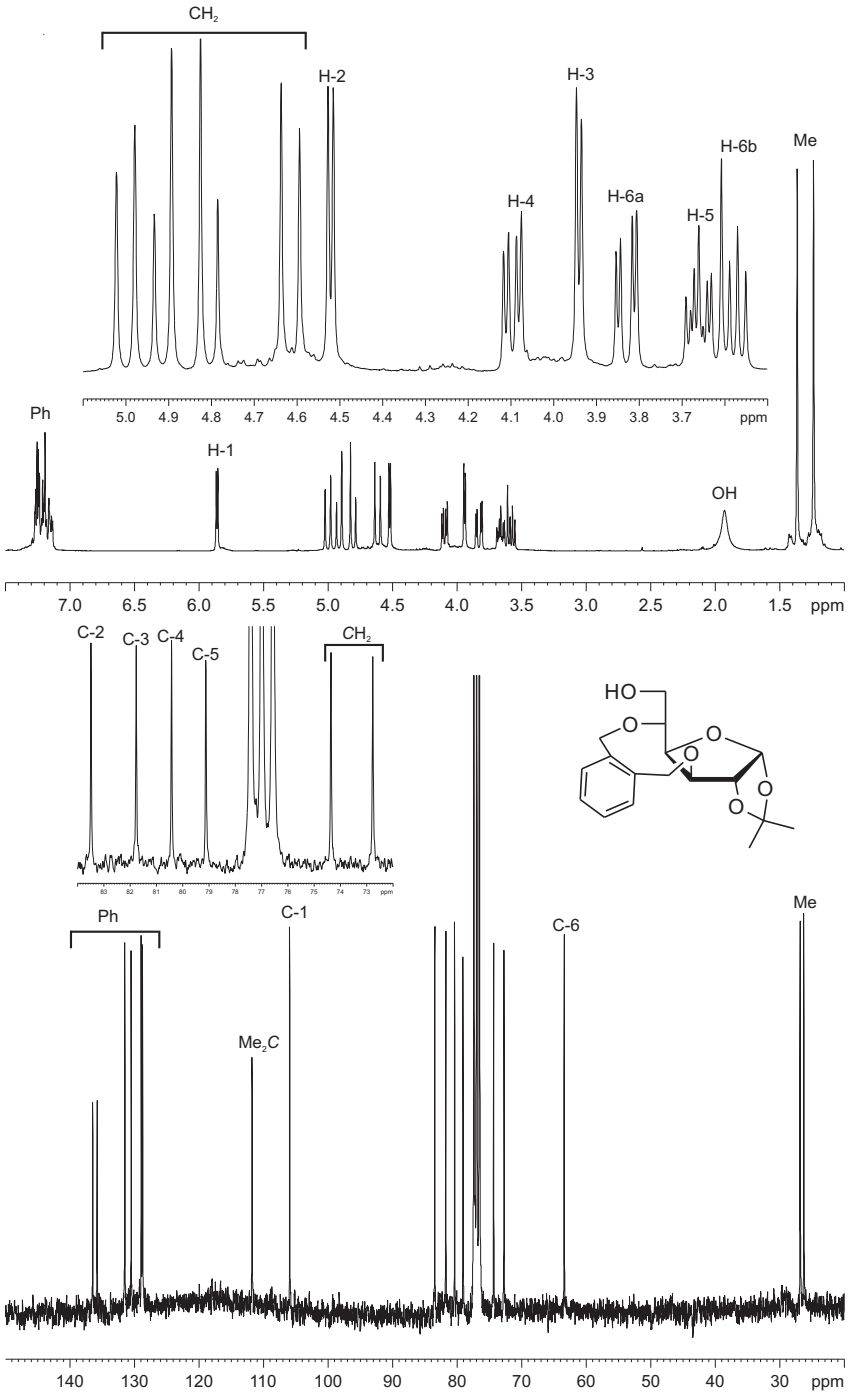


Figure S20. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **33**.

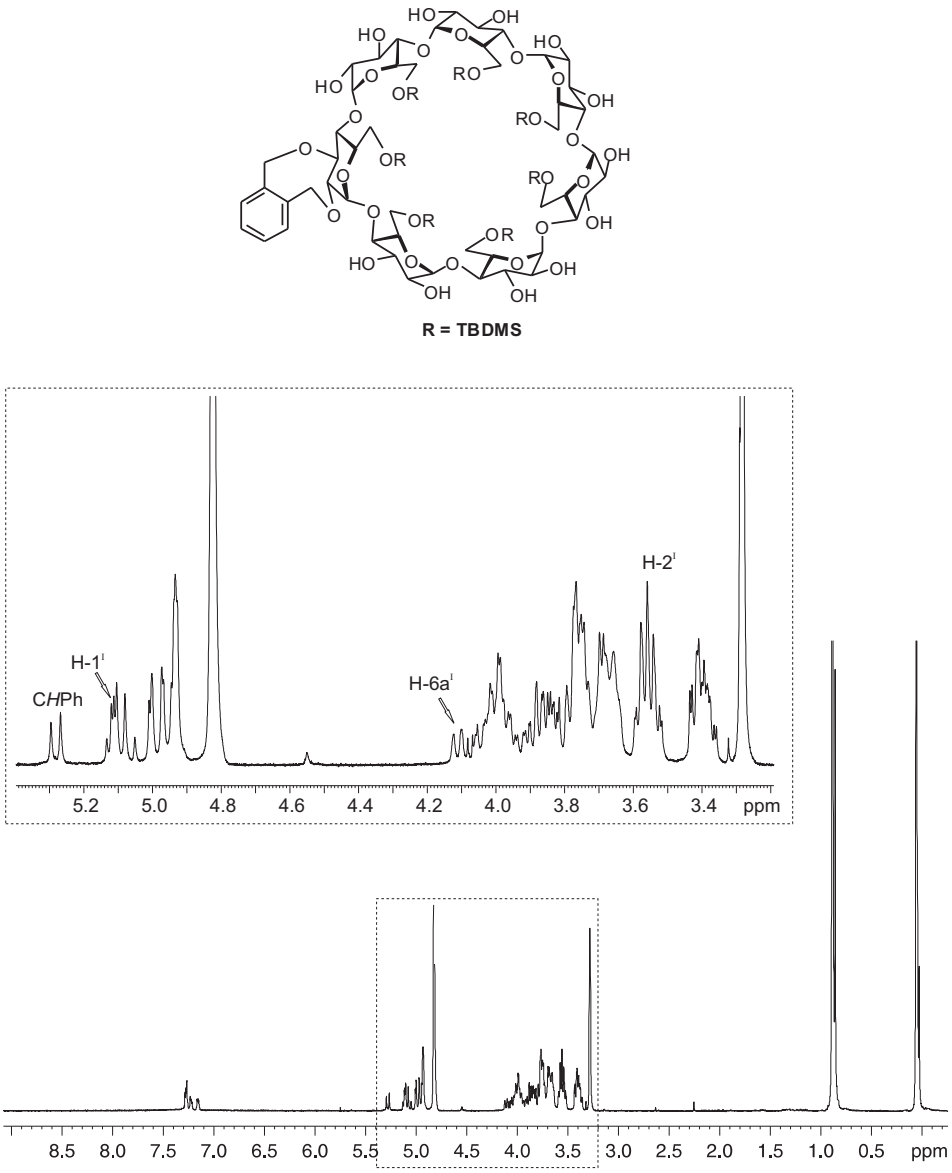


Figure S21. ^{1}H NMR spectrum (500 MHz, CD_3OD) of **35**.

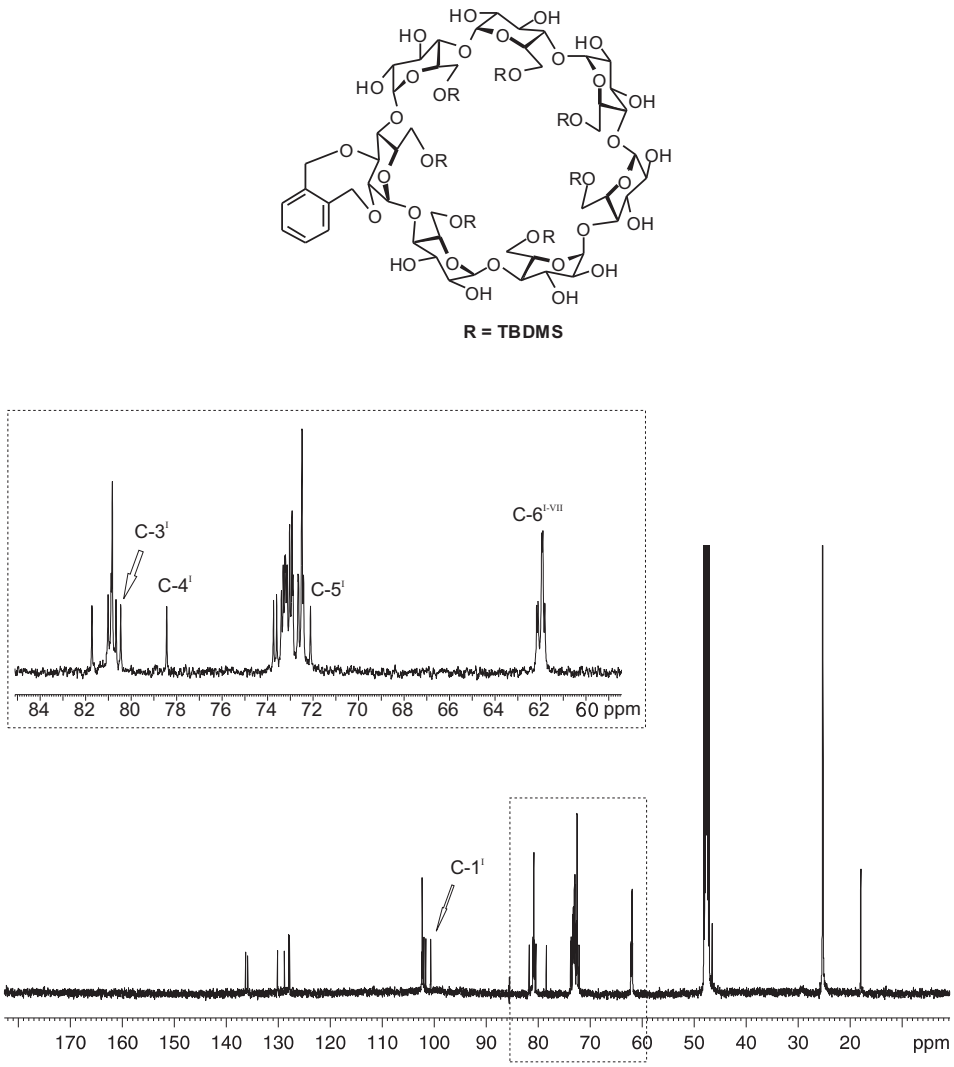
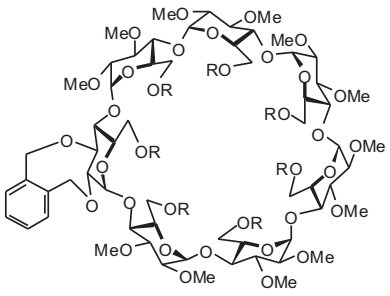


Figure S22. ^{13}C NMR spectrum (125.7 MHz, CD_3OD) of **35**.



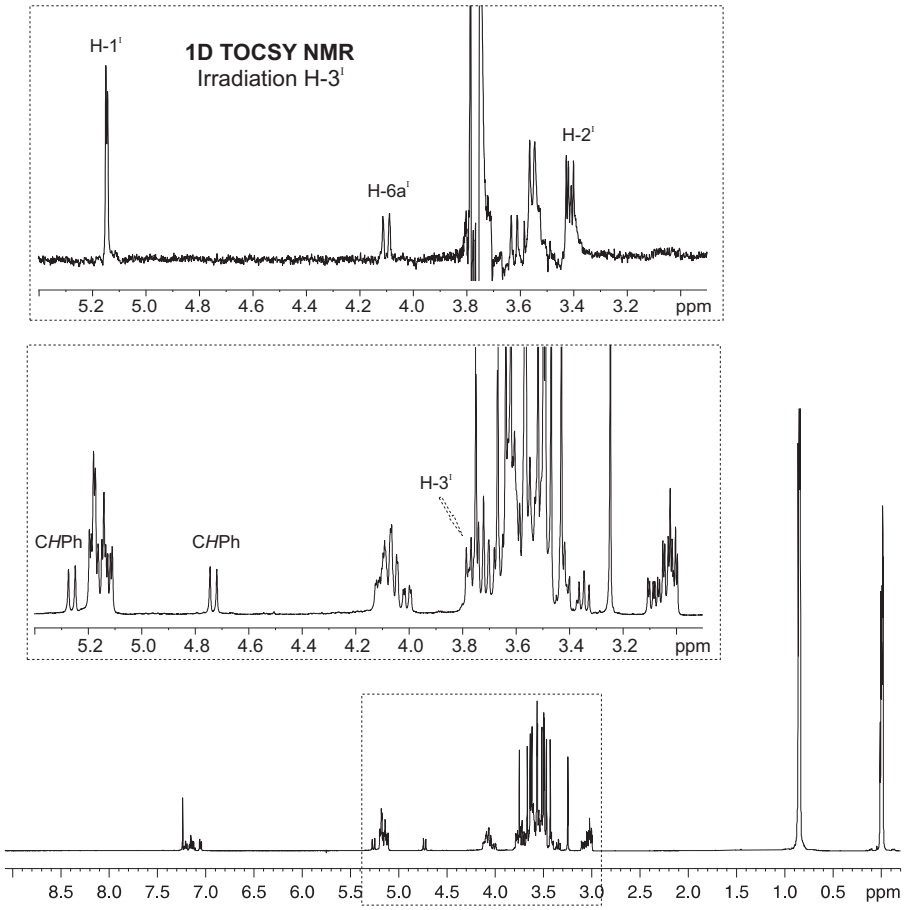
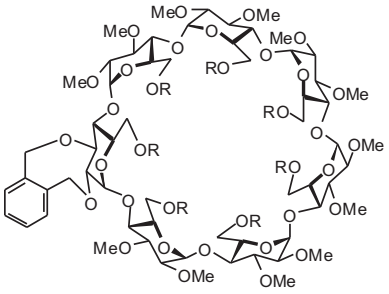


Figure S23. ^{1}H and 1D TOCSY NMR spectra (500 MHz, $CDCl_3$) of **36**.



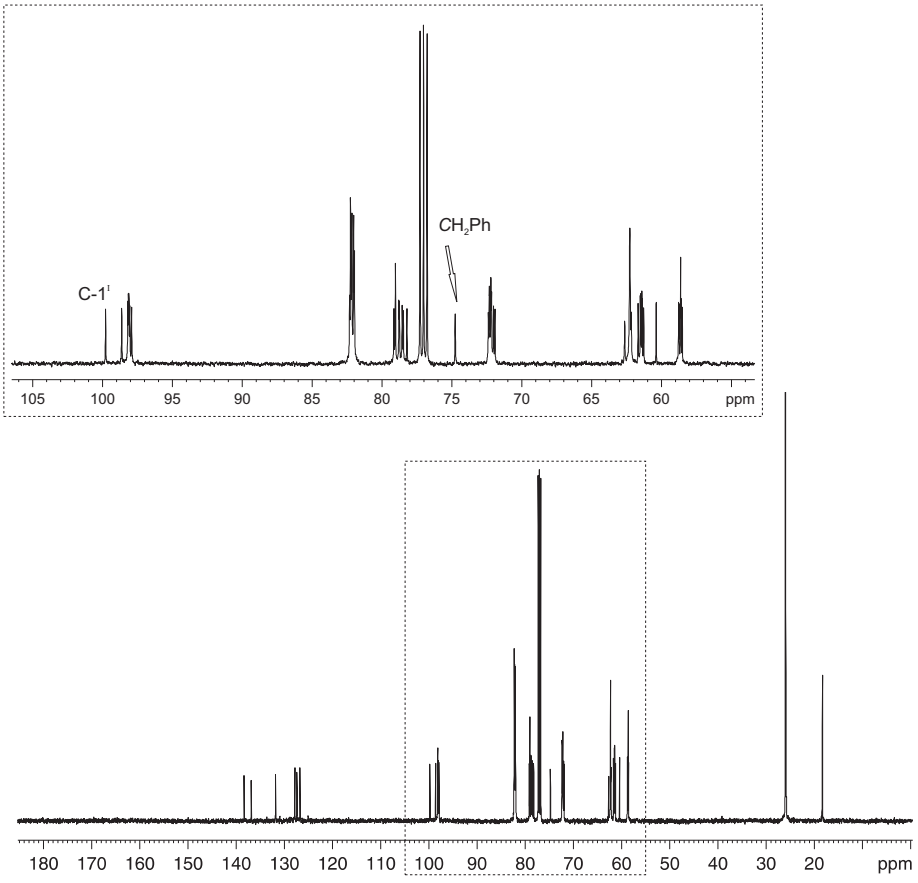


Figure S24. ^{13}C NMR spectrum (125.7 MHz, $CDCl_3$) of **36**.

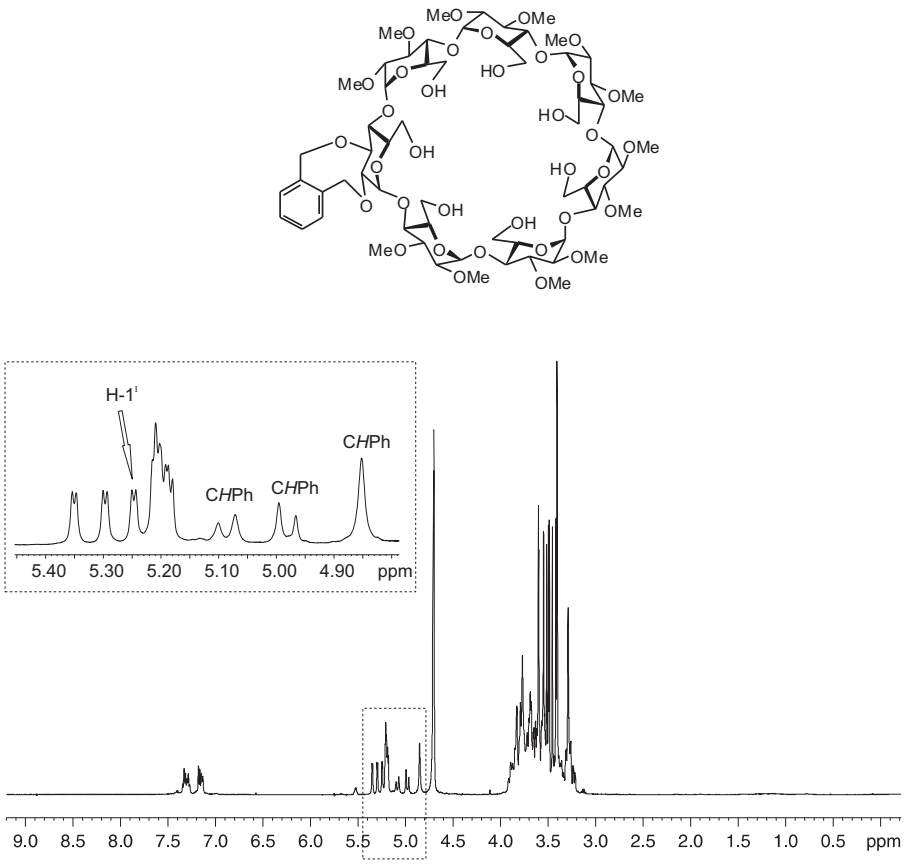


Figure S25. ^{1}H NMR spectra (500 MHz, D_2O) of **37**.

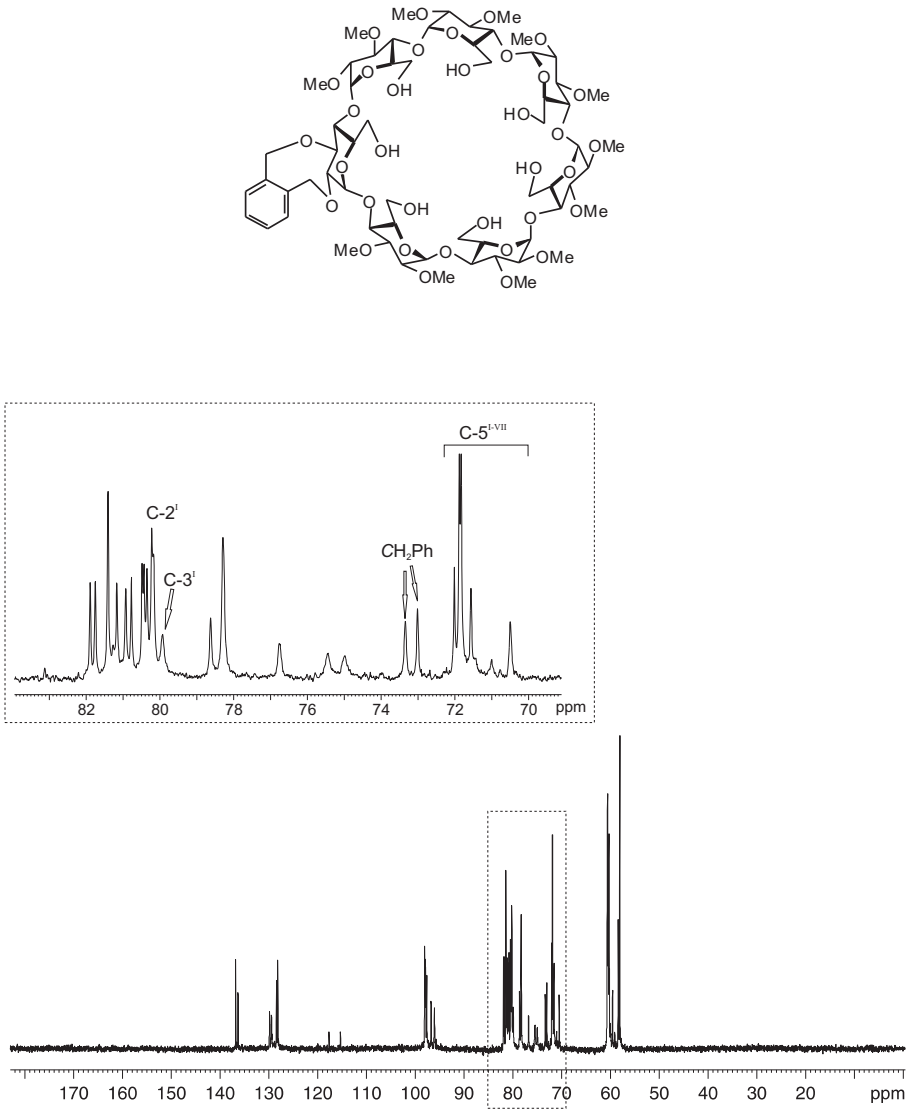


Figure S26. ^{13}C NMR spectra (125.7 MHz, D_2O) of **37**.

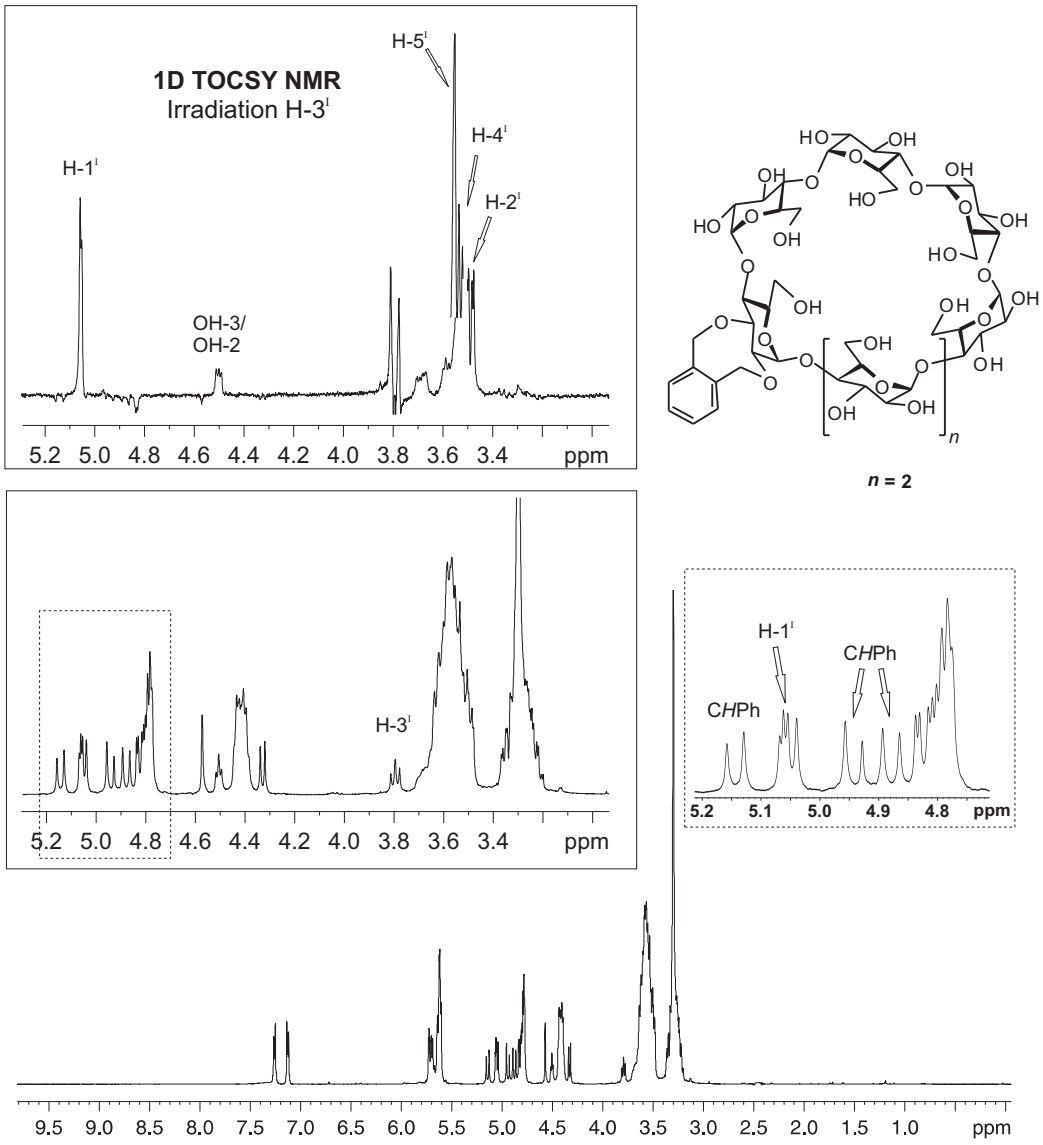


Figure S27. ^{1}H and 1D TOCSY NMR spectra (500 MHz, DMSO-d_6) of **38**.

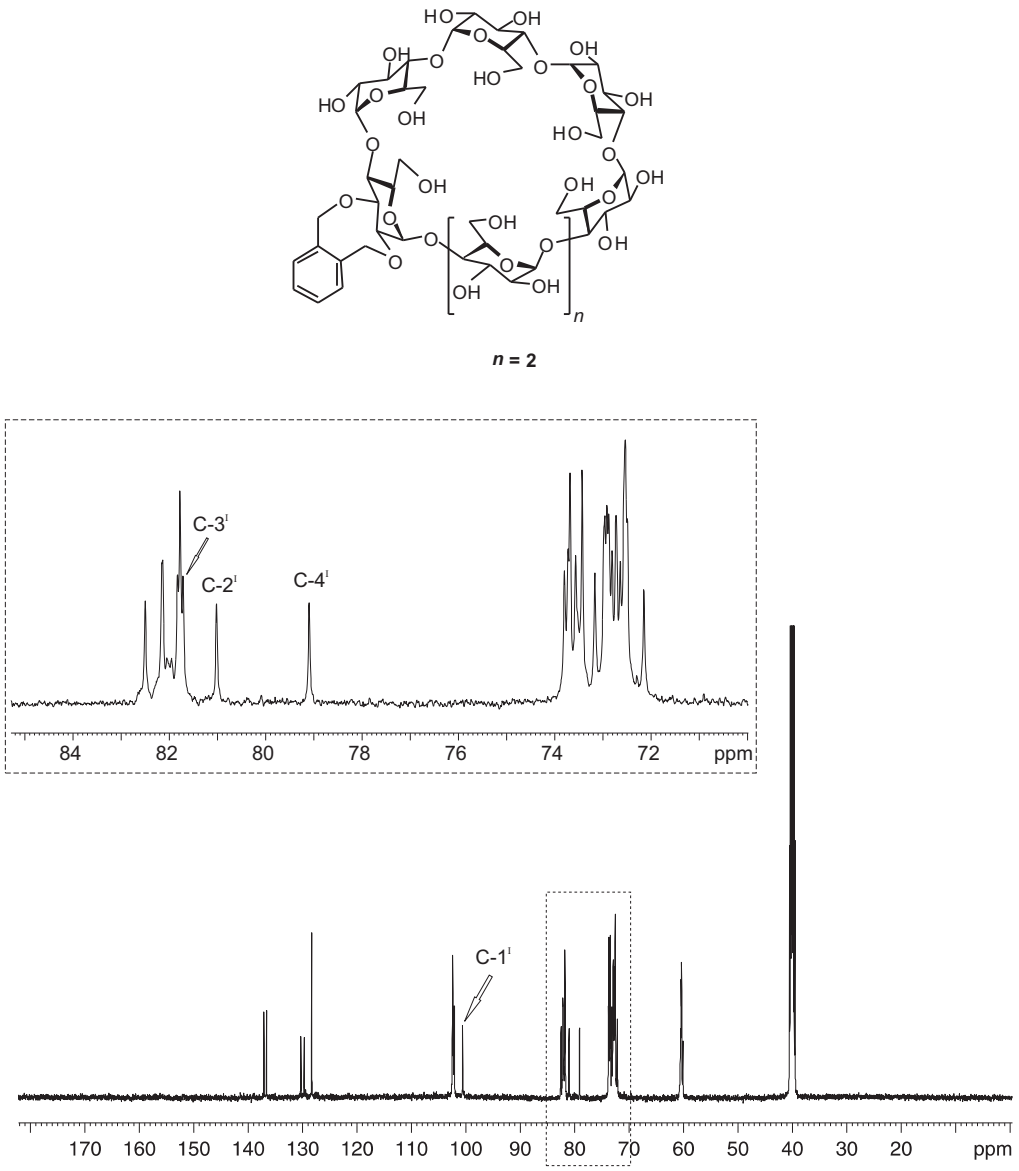


Figure S28. ^{13}C NMR spectrum (125.7 MHz, DMSO-d_6) of **38**.

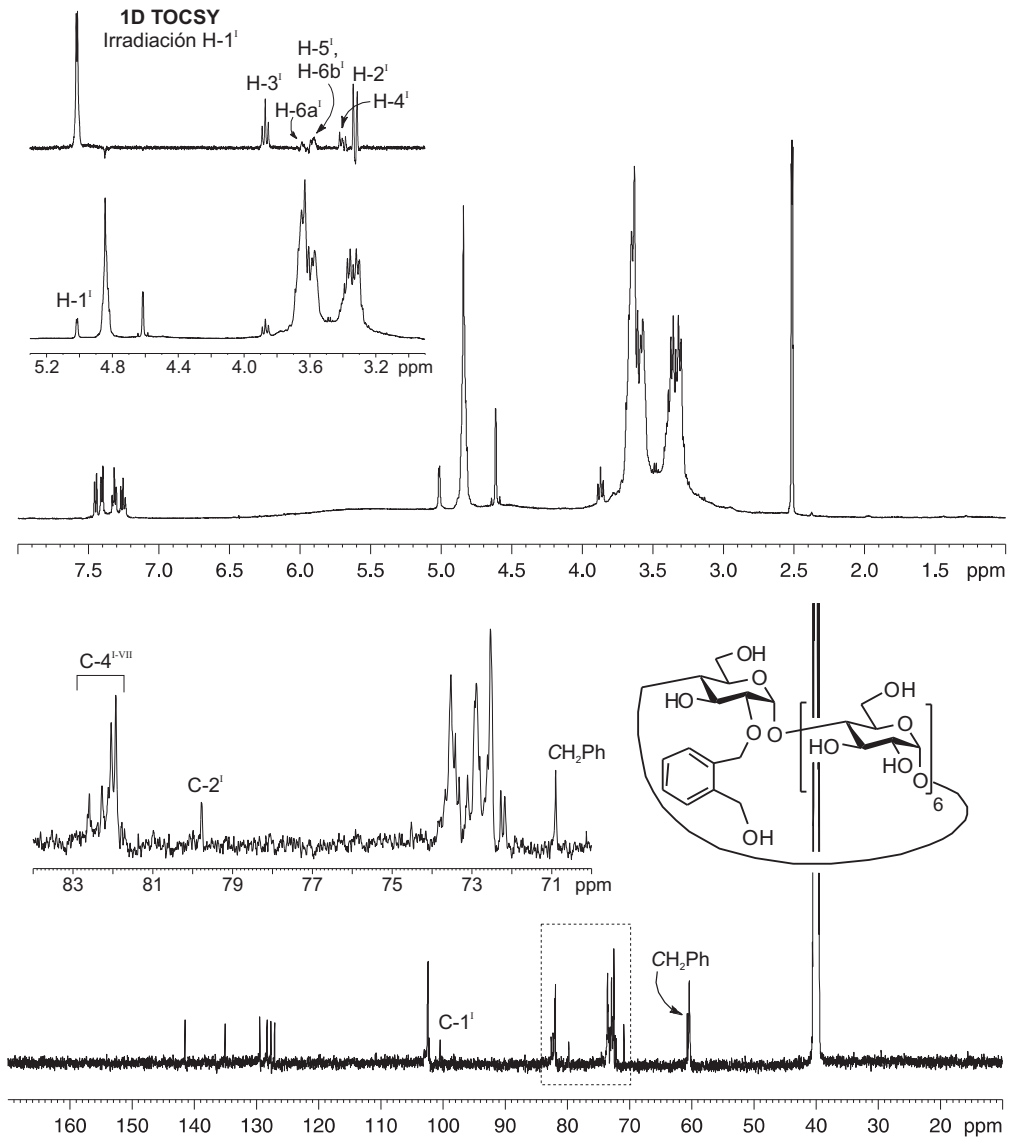


Figure S29. ^{1}H, 1D TOCSY and ^{13}C RMN spectra (500 MHz, 125.7 MHz, DMSO-d_6) of **39**.

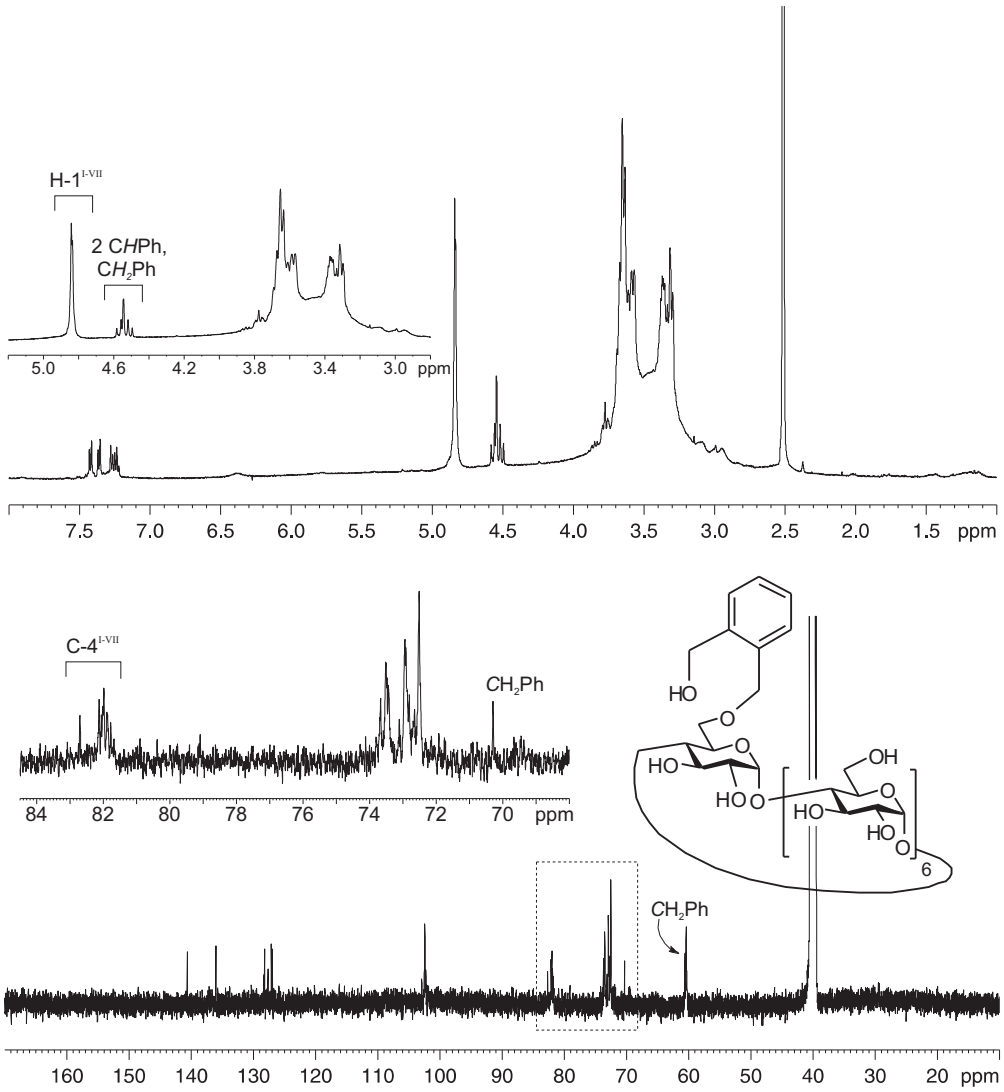


Figure S30. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, DMSO-d_6) of **40**.

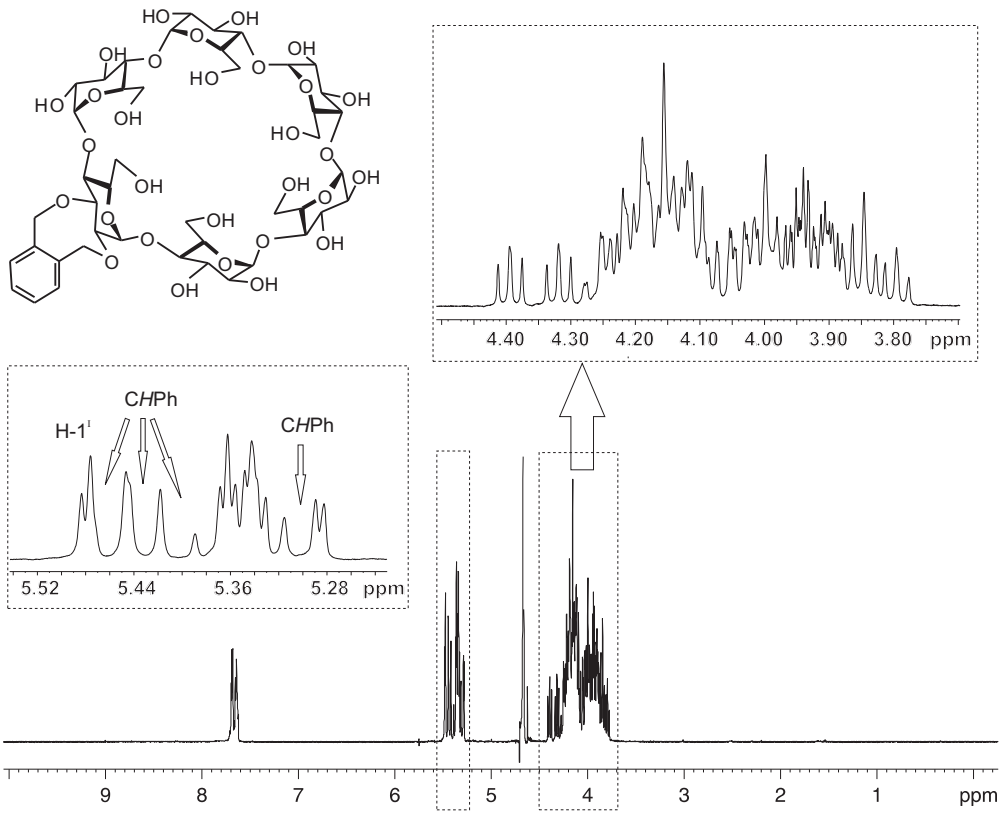


Figure S31. ^{1}H NMR spectrum (500 MHz, D_2O, 333 K) of **44**

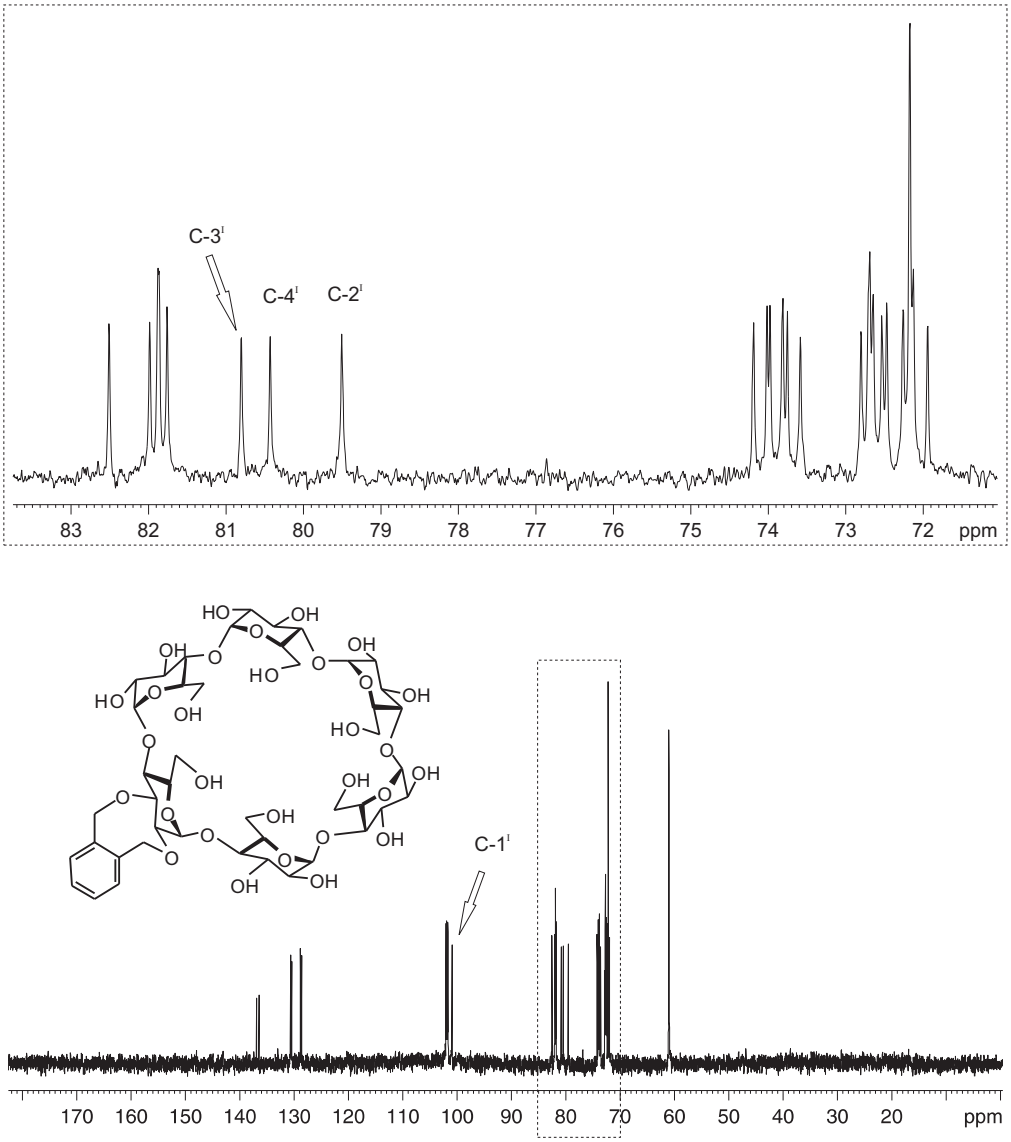


Figure S32. ^{13}C NMR spectrum (125.7 MHz, D_2O, 333 K) of **44**.

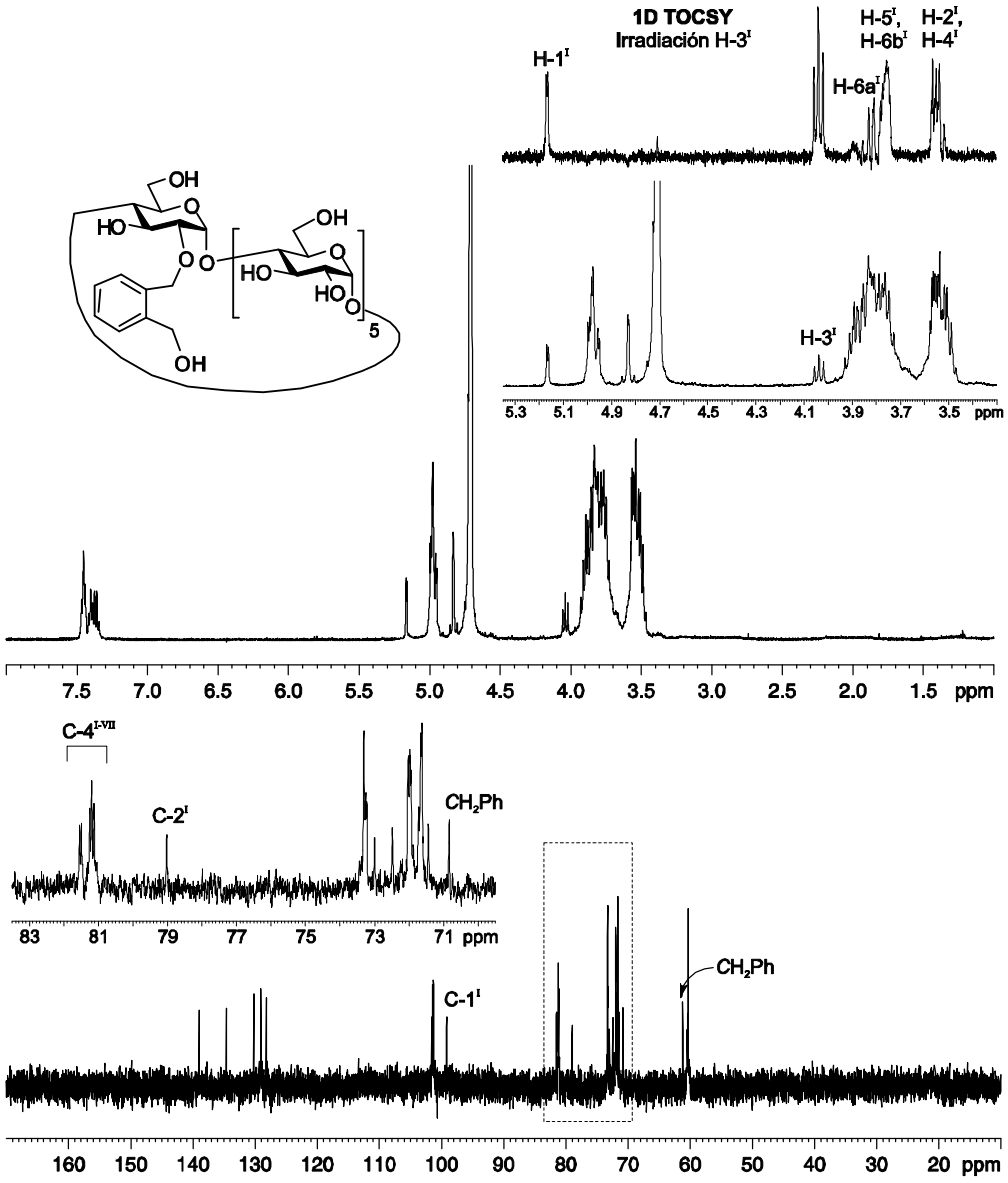


Figure S33. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of **45**.

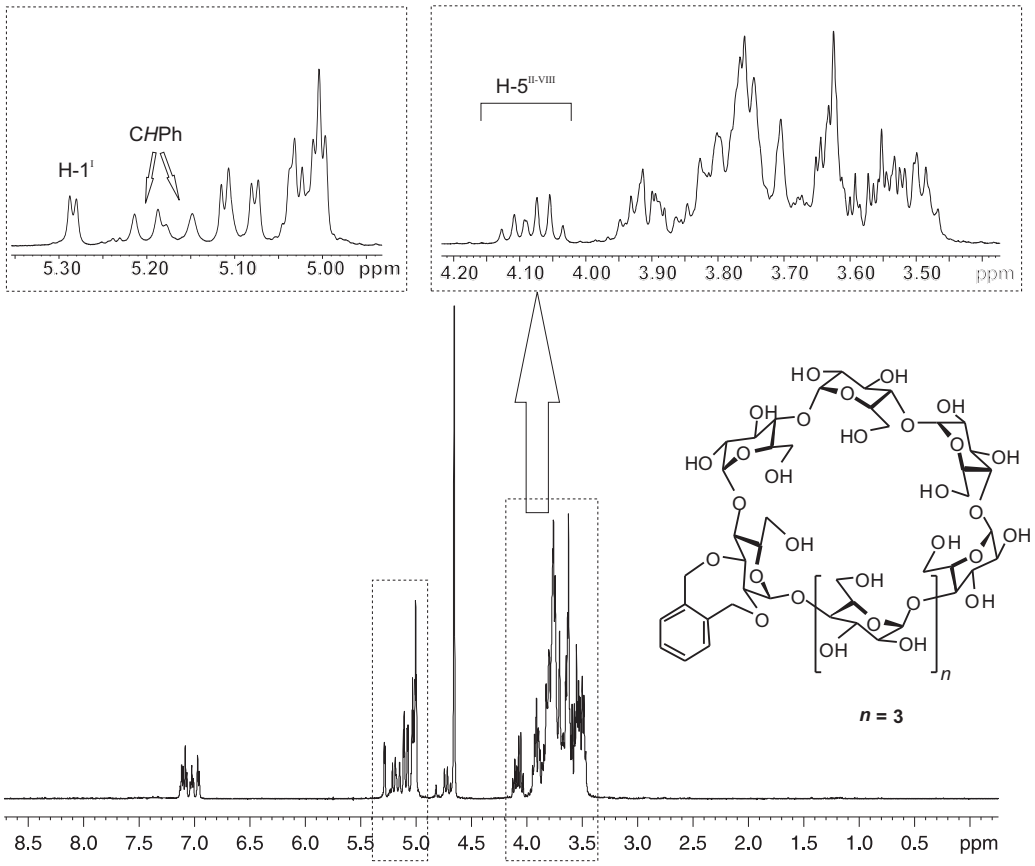


Figure S34. ^{1}H NMR spectrum (500 MHz, D_2O) of **49**.

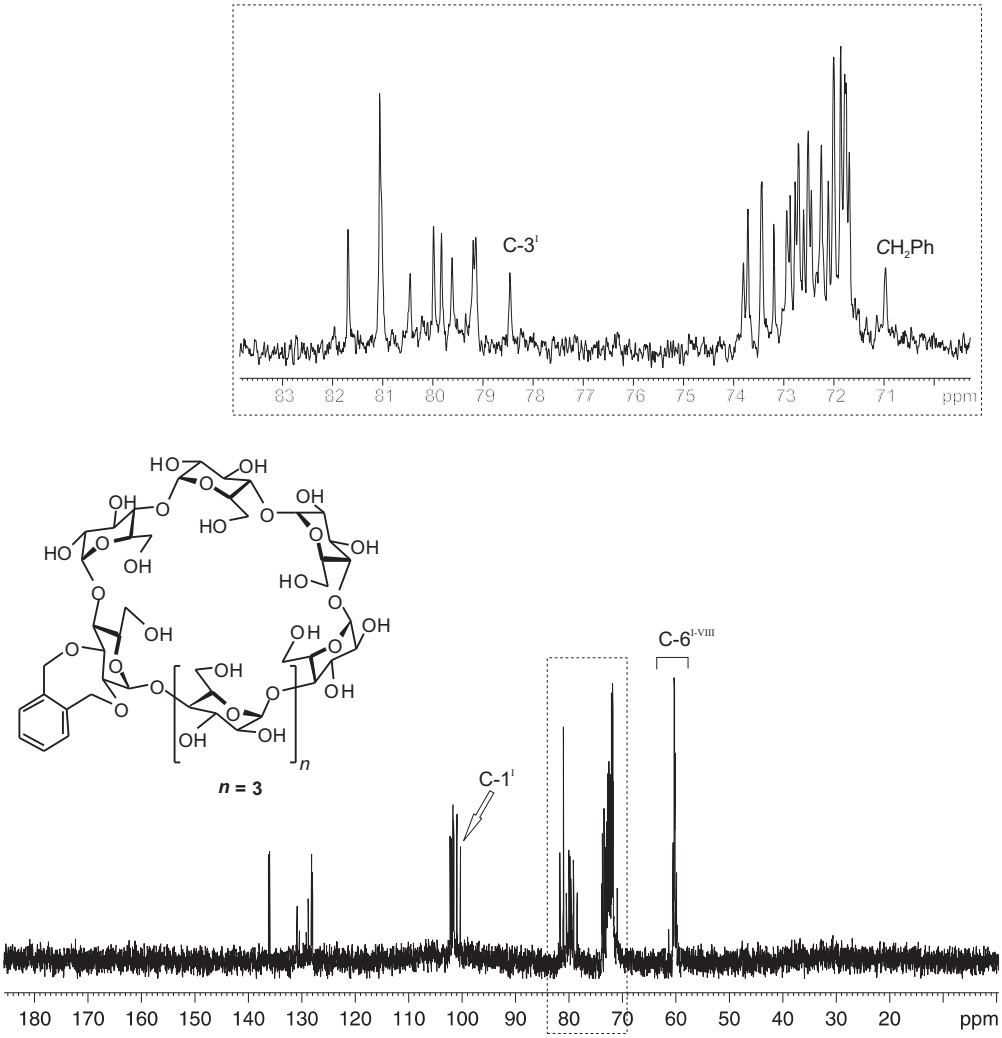


Figure S35. ^{13}C NMR spectrum (125.7 MHz, D_2O) of **49**.

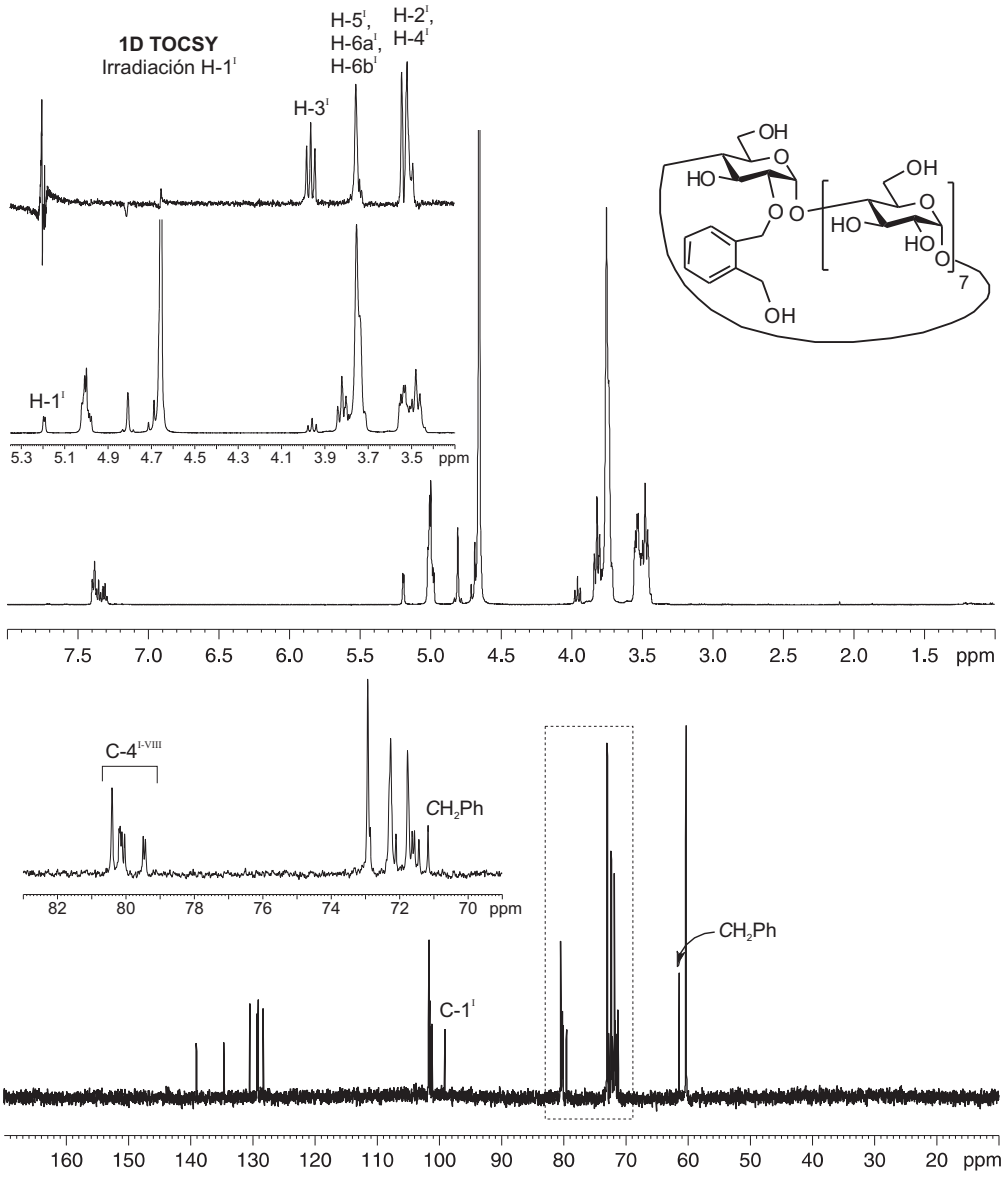


Figure S36. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of **50**.

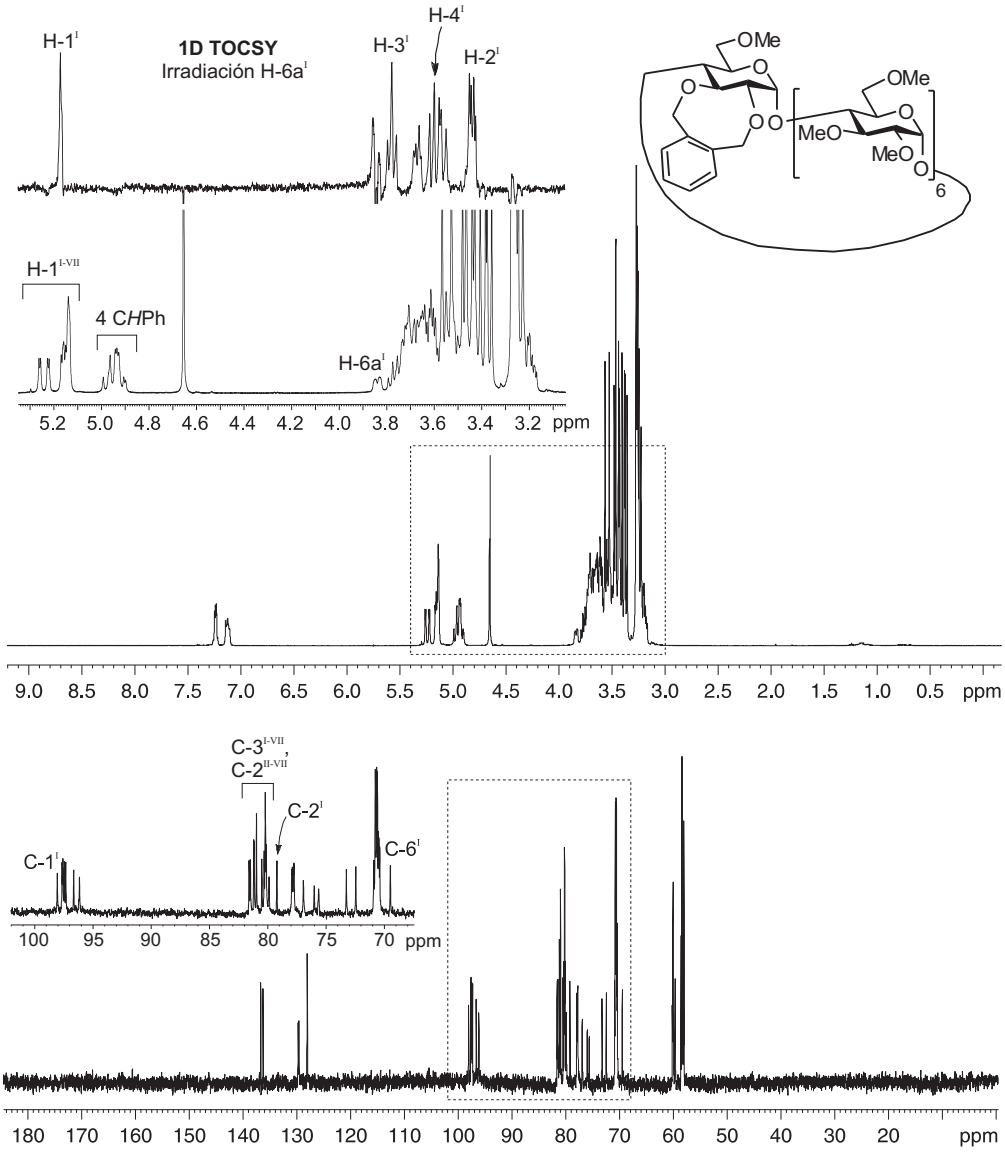


Figure S37. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of **41**.

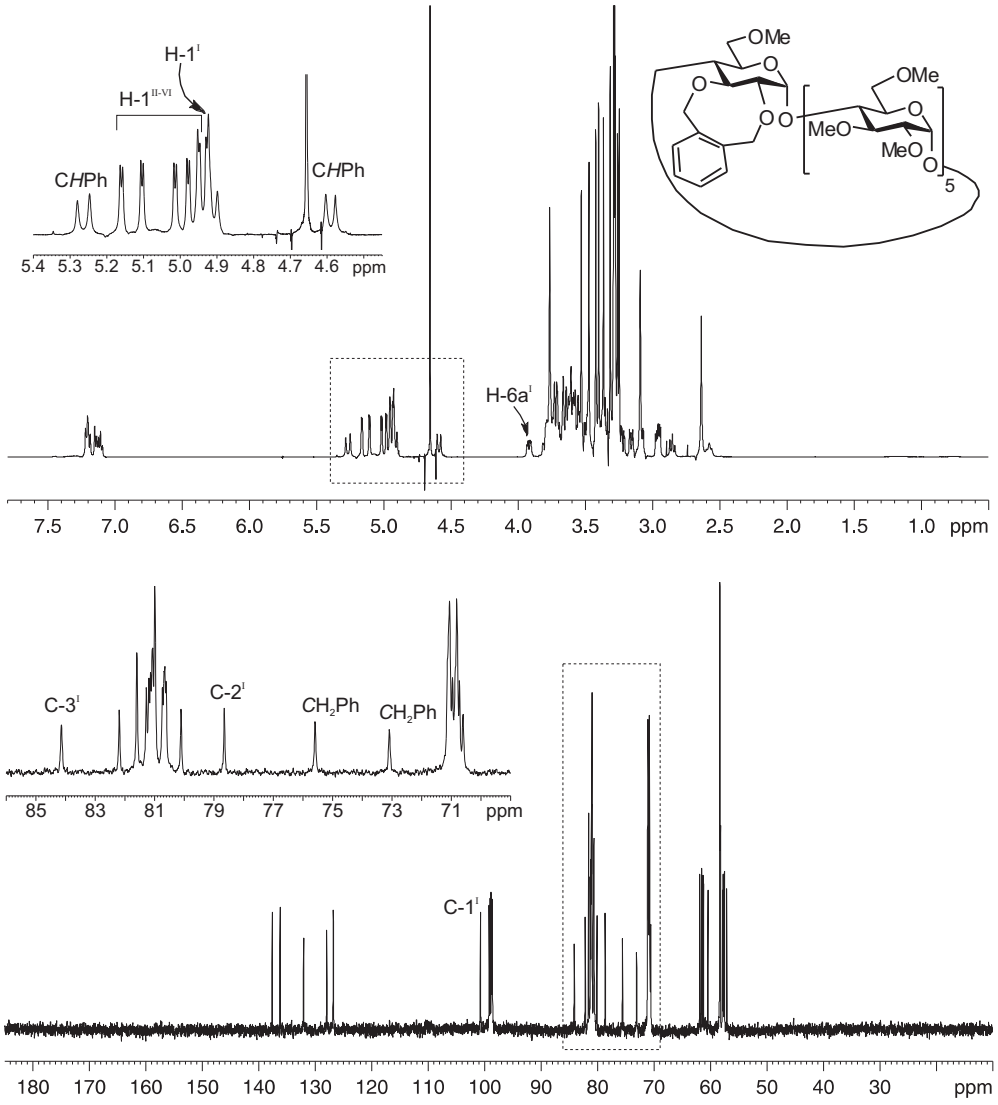


Figure S38. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of **46**.

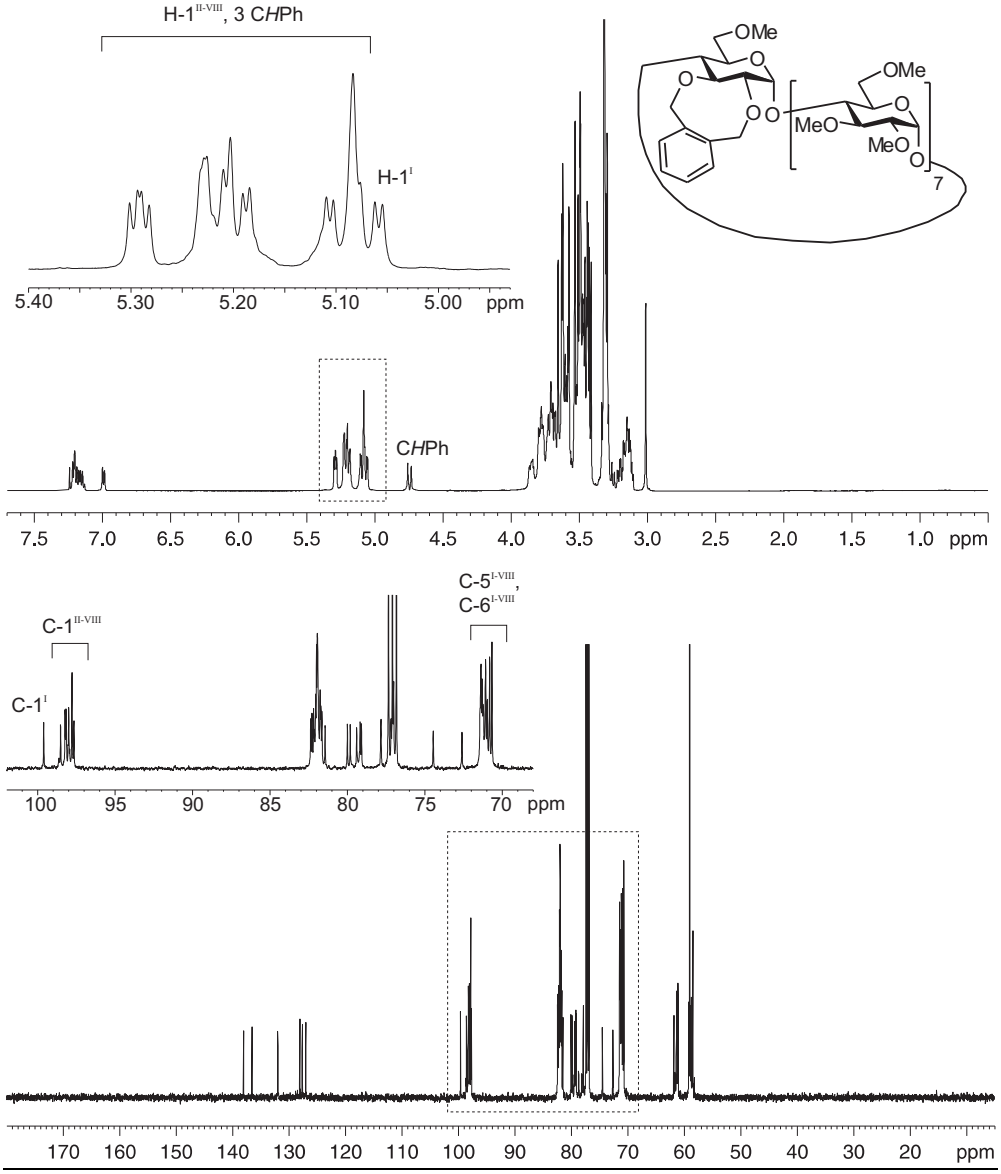


Figure S39. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of **51**.

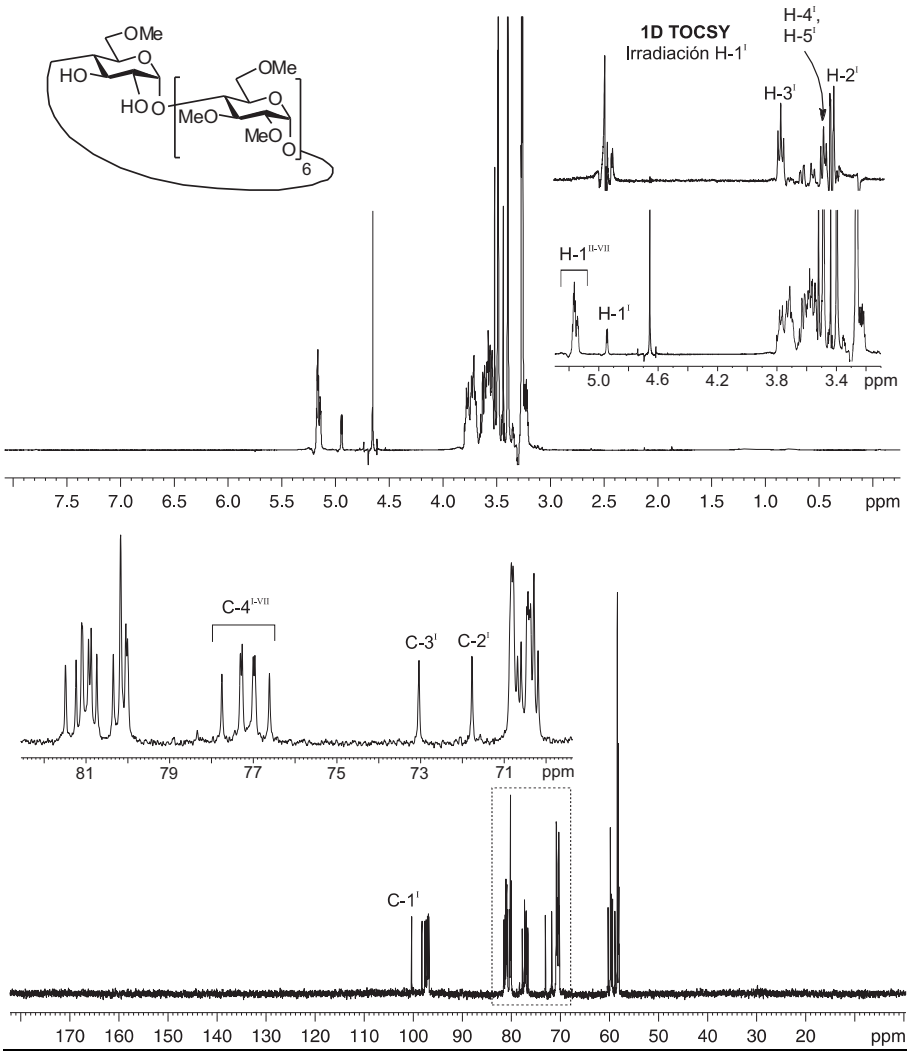


Figure S40. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of **42**.

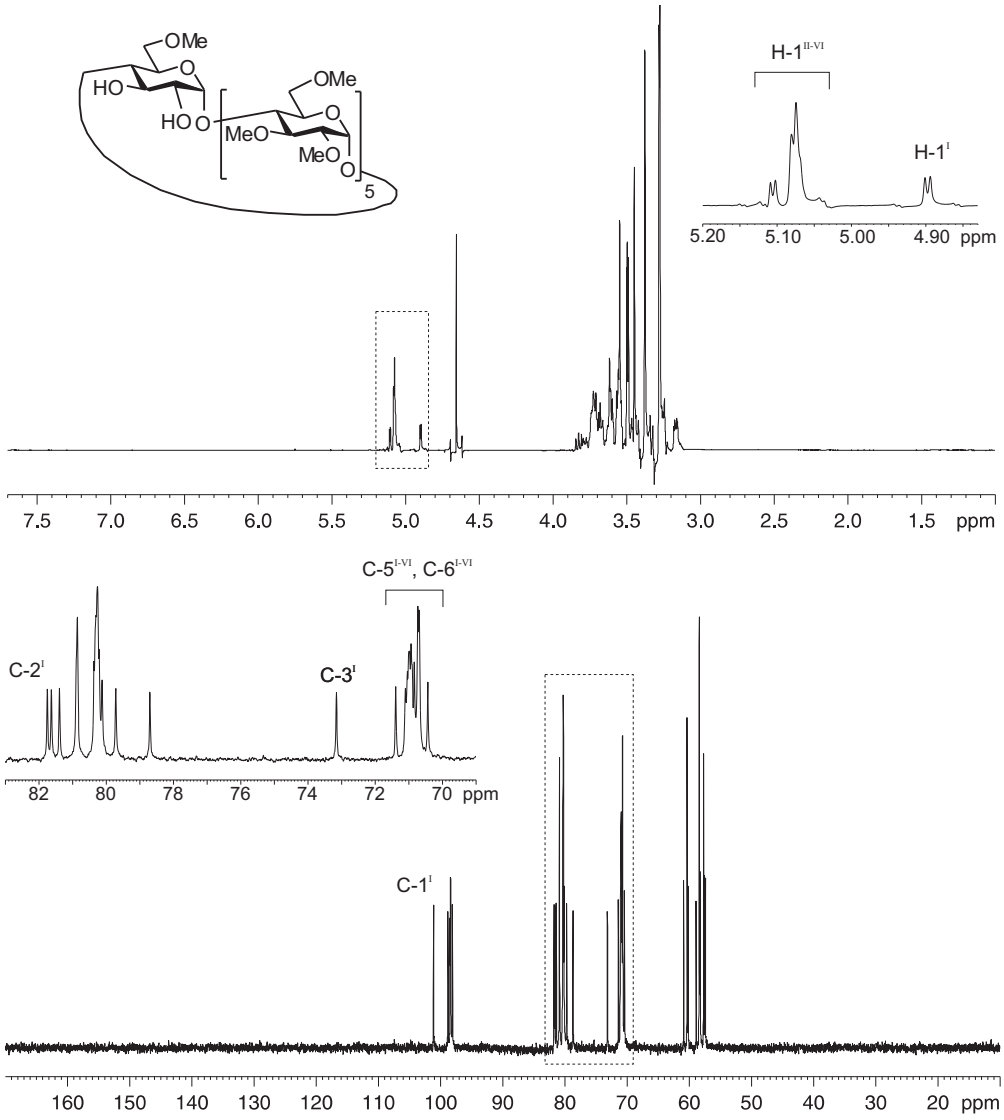


Figure S41. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of compound **47**.

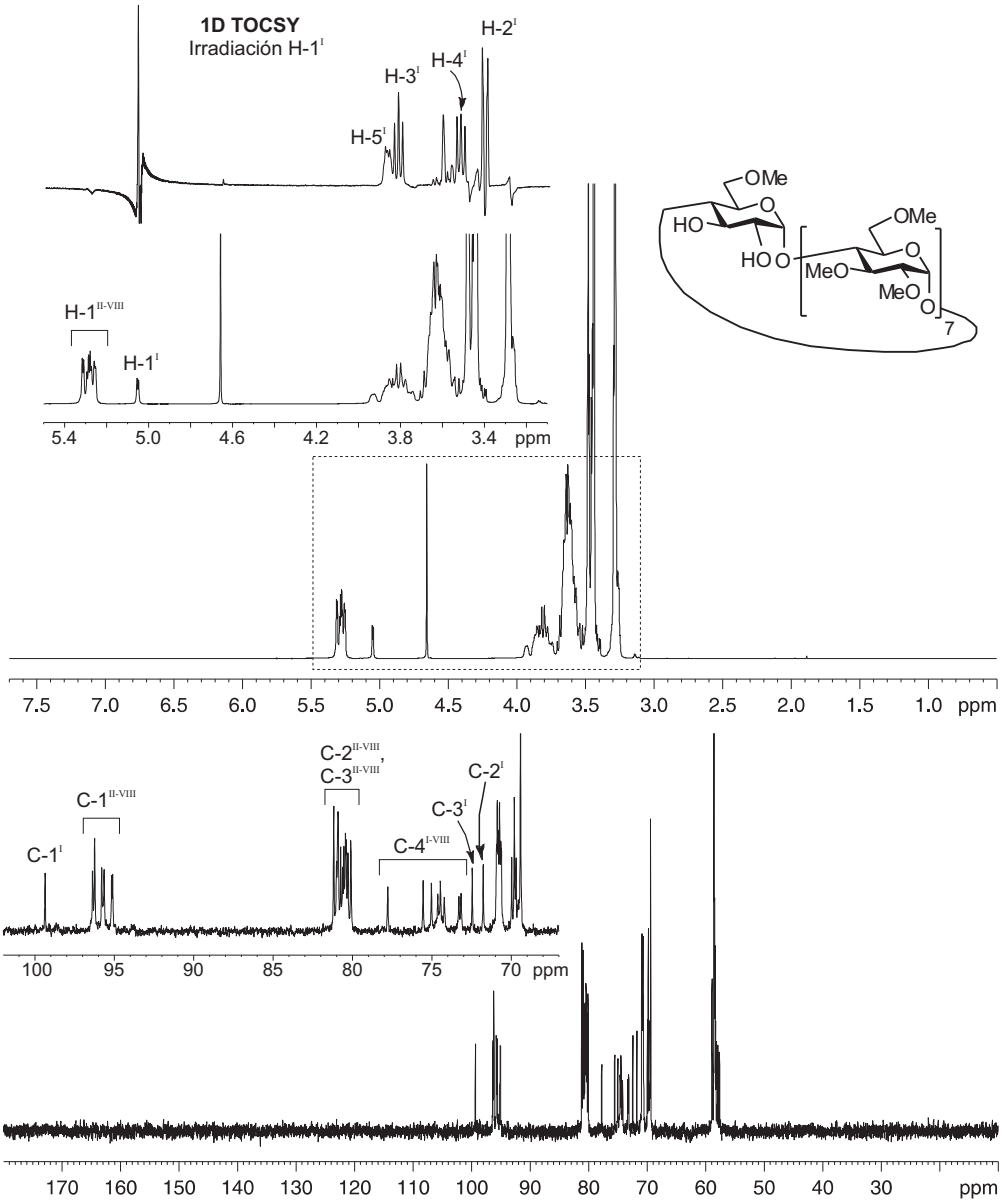


Figure S42. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, D_2O) of compound **52**.

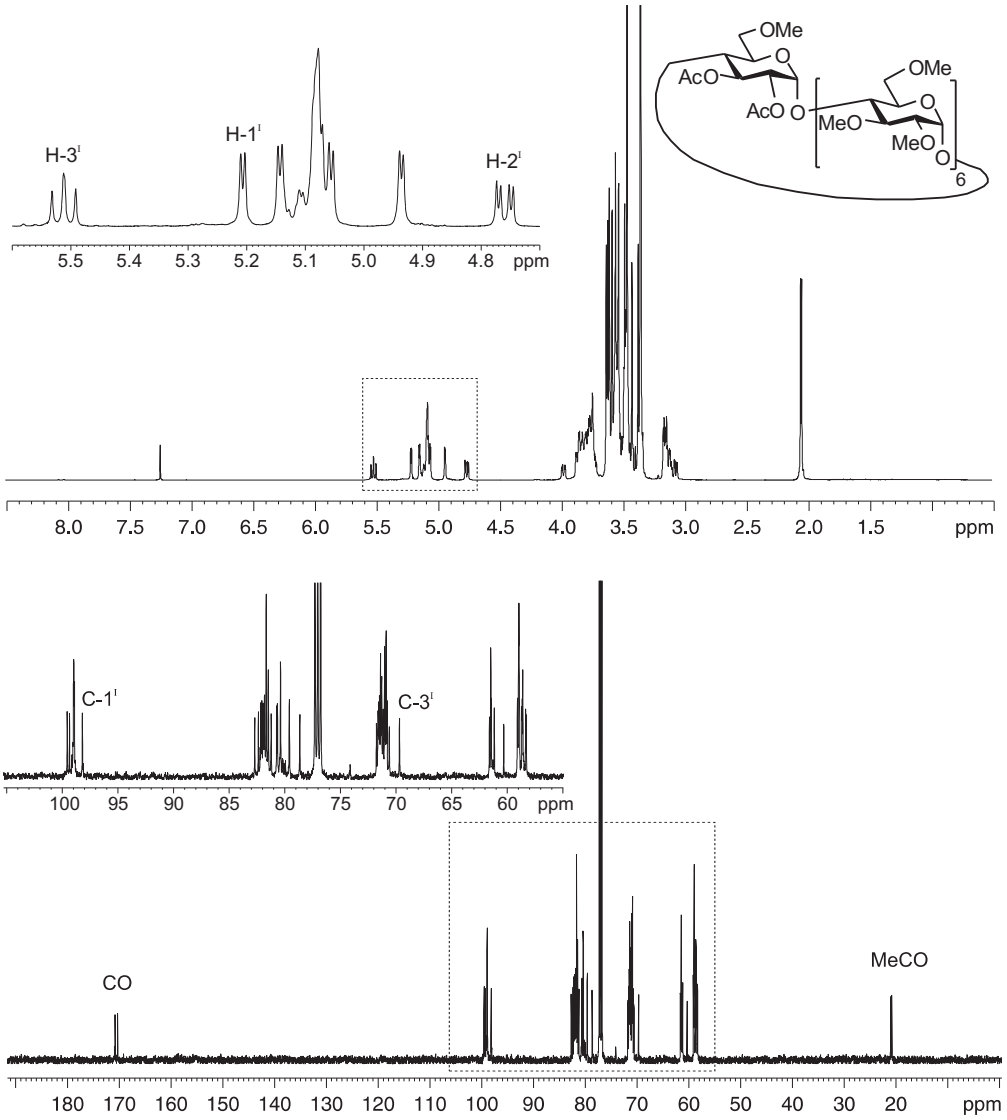


Figure S43. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz $CDCl_3$) of **43**.

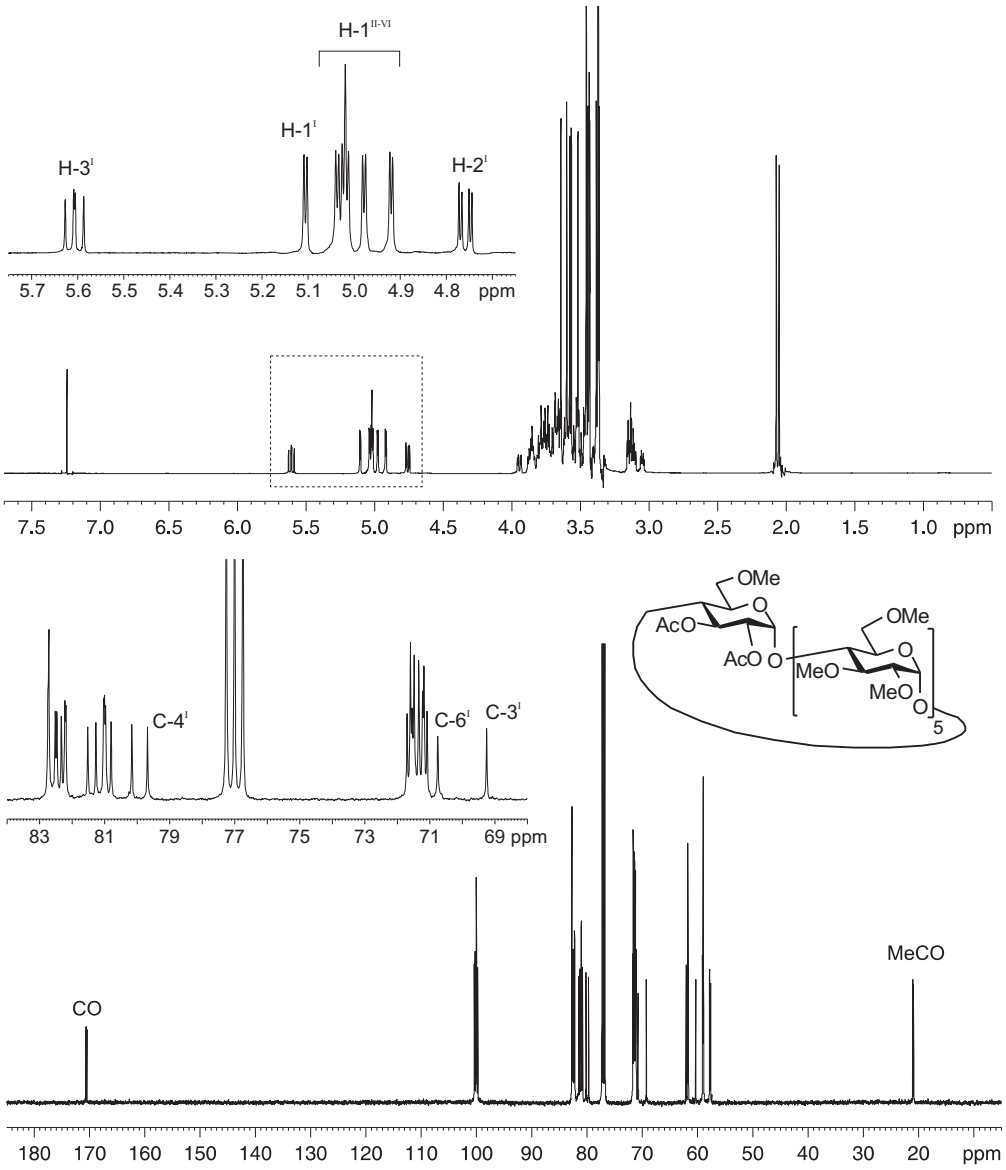


Figure S44. ^{1}H and ^{13}C NMR spectra (500 MHz, 125.7 MHz, CD_3Cl) of **48**.

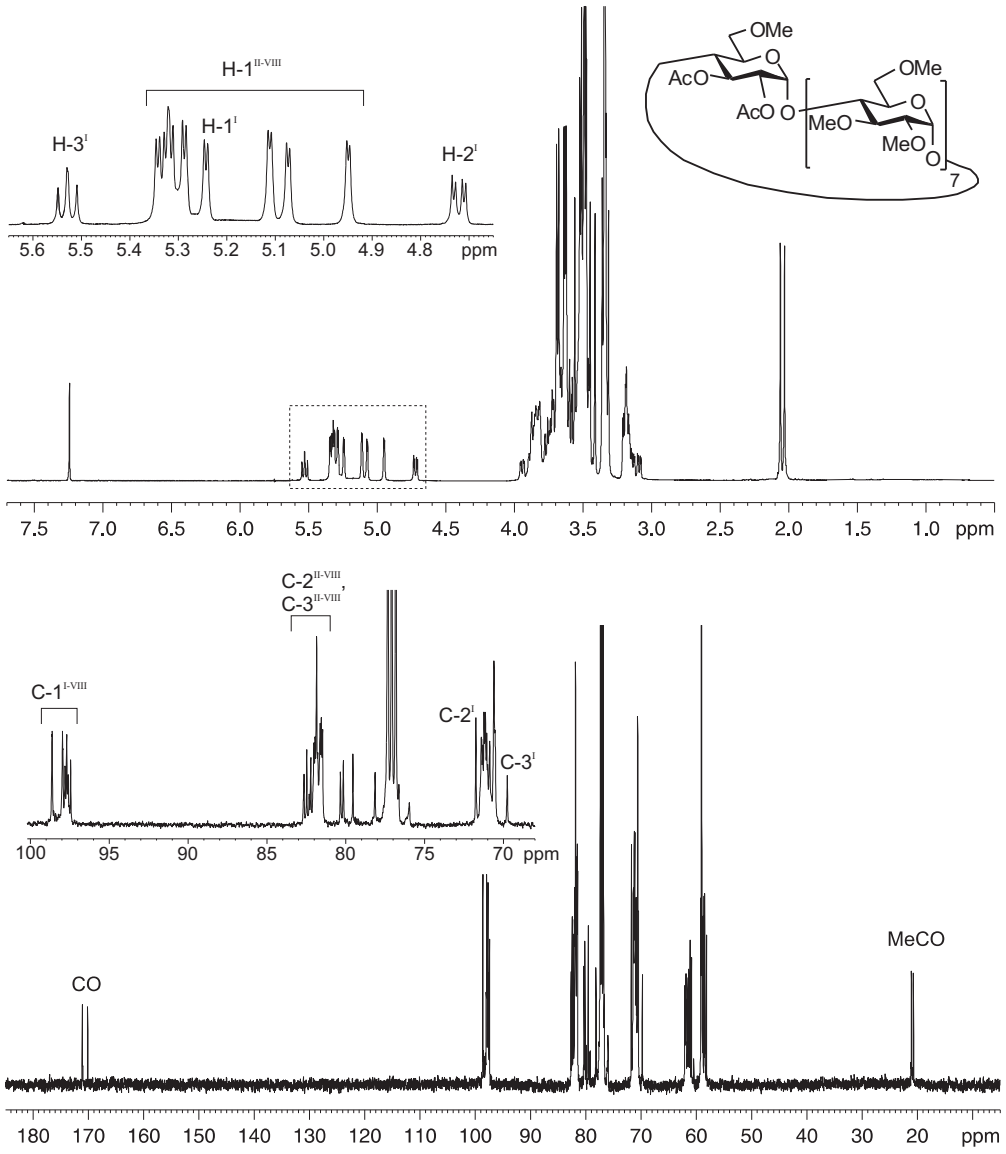


Figure S45. ^{1}H, 1D TOCSY and ^{13}C NMR spectra (500 MHz, 125.7 MHz, $CDCl_3$) of compound **53**.

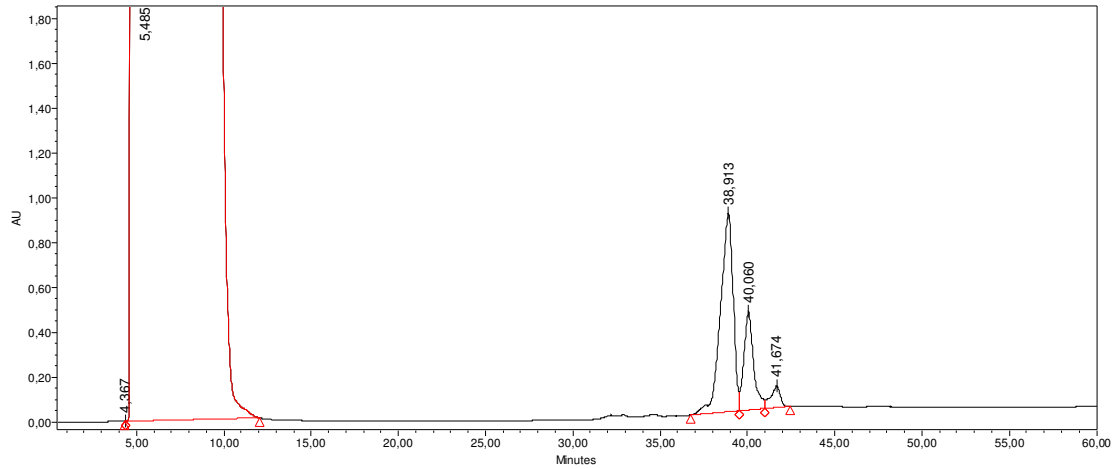


Figure S46. HPLC chromatogram of compounds **38** (t_R 36.9 min), **39** (t_R 40.0 min) and **40** (t_R 41.7 min).

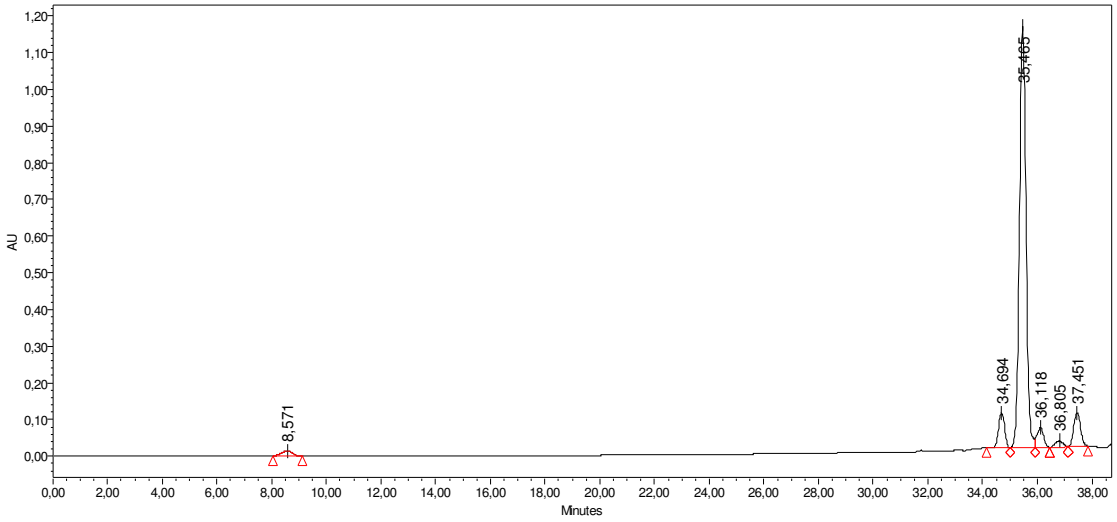


Figure S47. HPLC chromatogram of compounds **44** (t_R 35.4 min) and **45** (t_R 37.4 mi n).

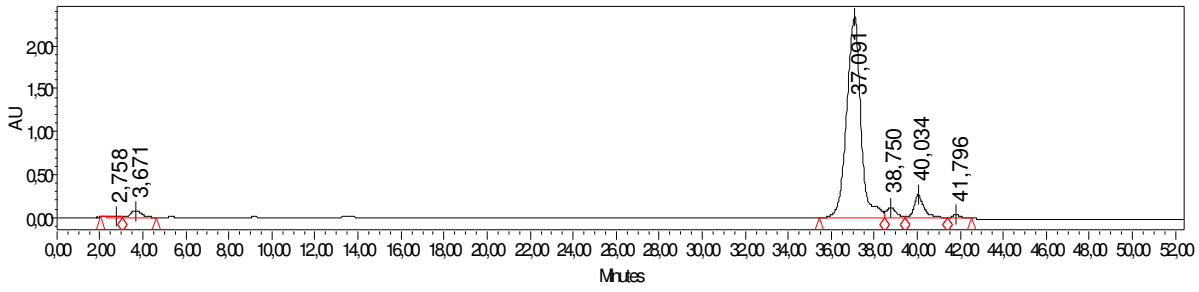


Figure S48. HPLC chromatogram of compounds **49** (t_R 37.1 min) and **50** (t_R 40.0 min).