

Supplementary Material

Silver-catalyzed benzannulation, part 1: total synthesis of (7*S*,10*R*)-2,15-dihydroxycalamene, (7*S*,10*R*)-2-hydroxy-15-calamenenal and (7*S*,10*R*)-2-hydroxy-15-calamenenoic acid

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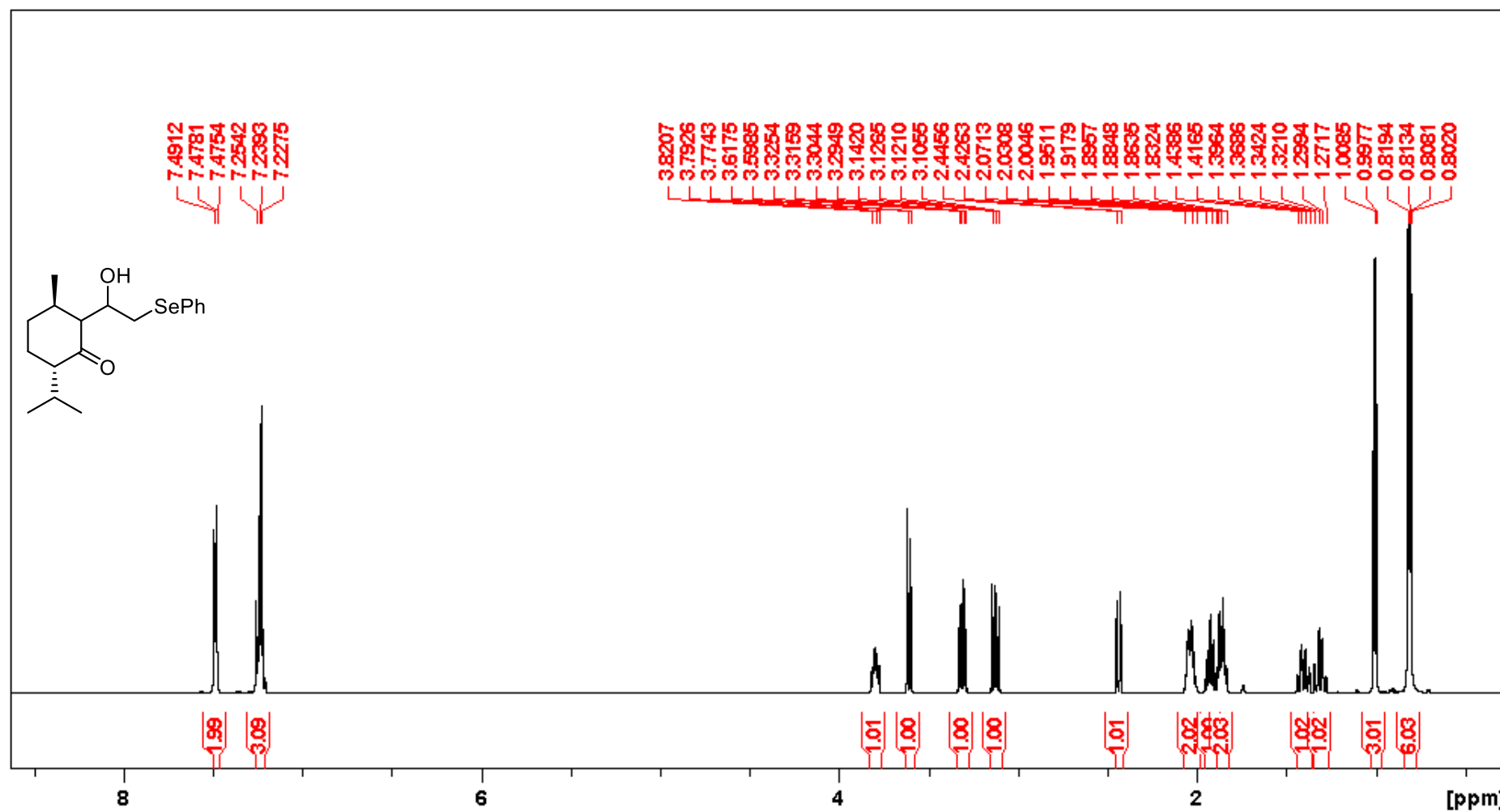


Figure S1. ¹H NMR spectrum of **8** (600 MHz, CDCl₃).

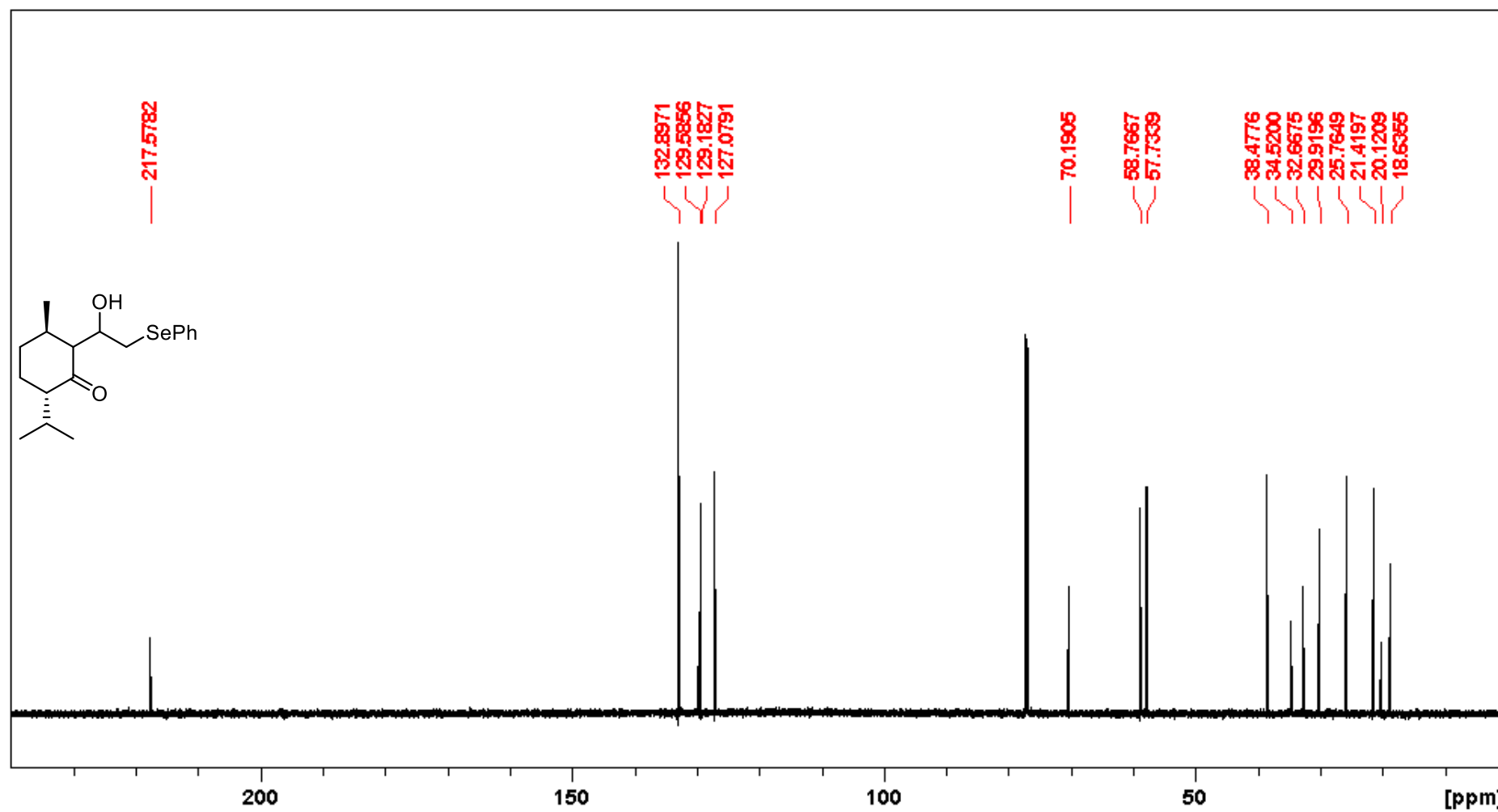


Figure S2. ¹³C NMR spectrum of **8** (150 MHz, CDCl₃).

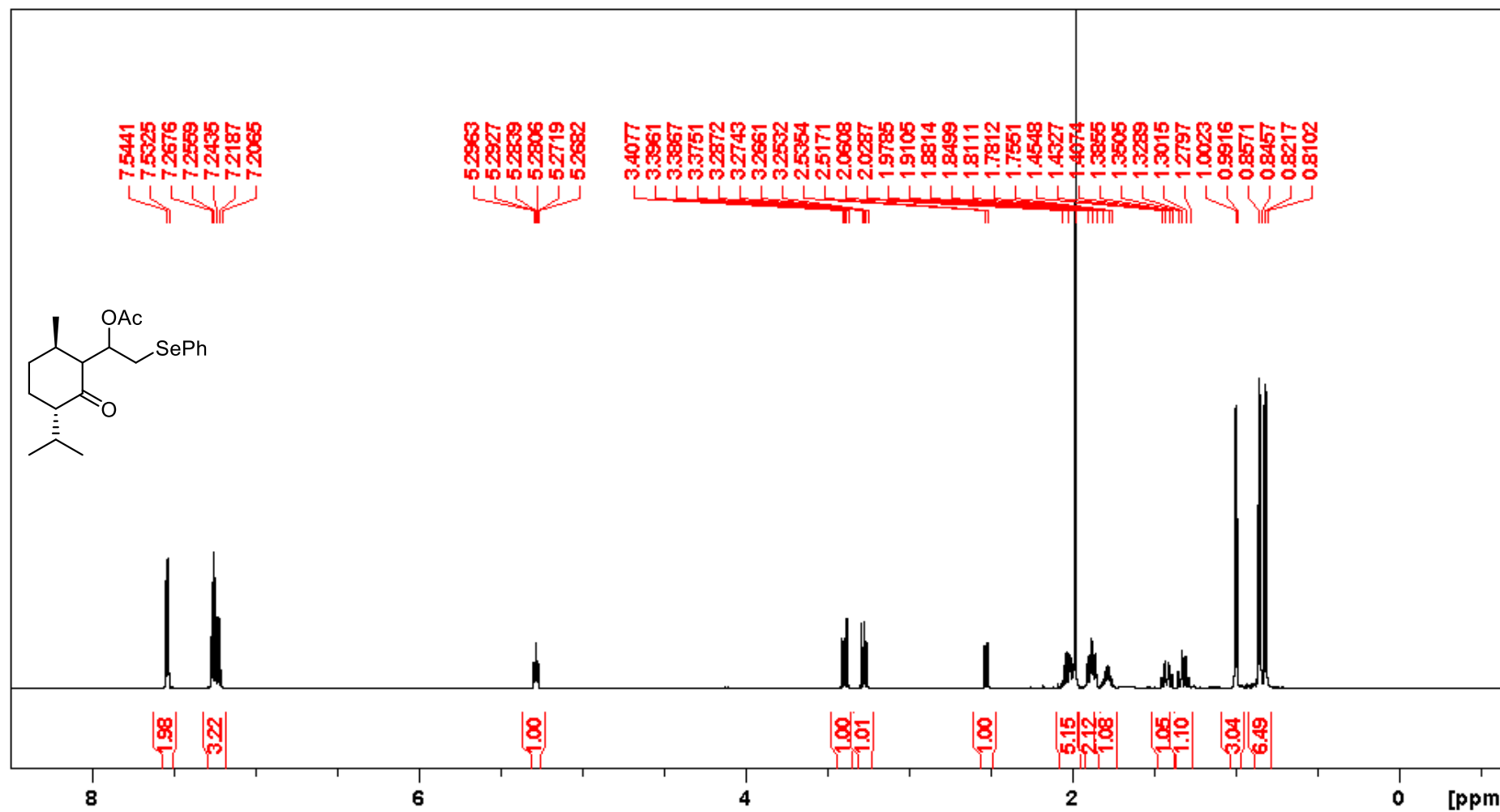


Figure S3. ¹H NMR spectrum of **9** (600 MHz, CDCl₃).

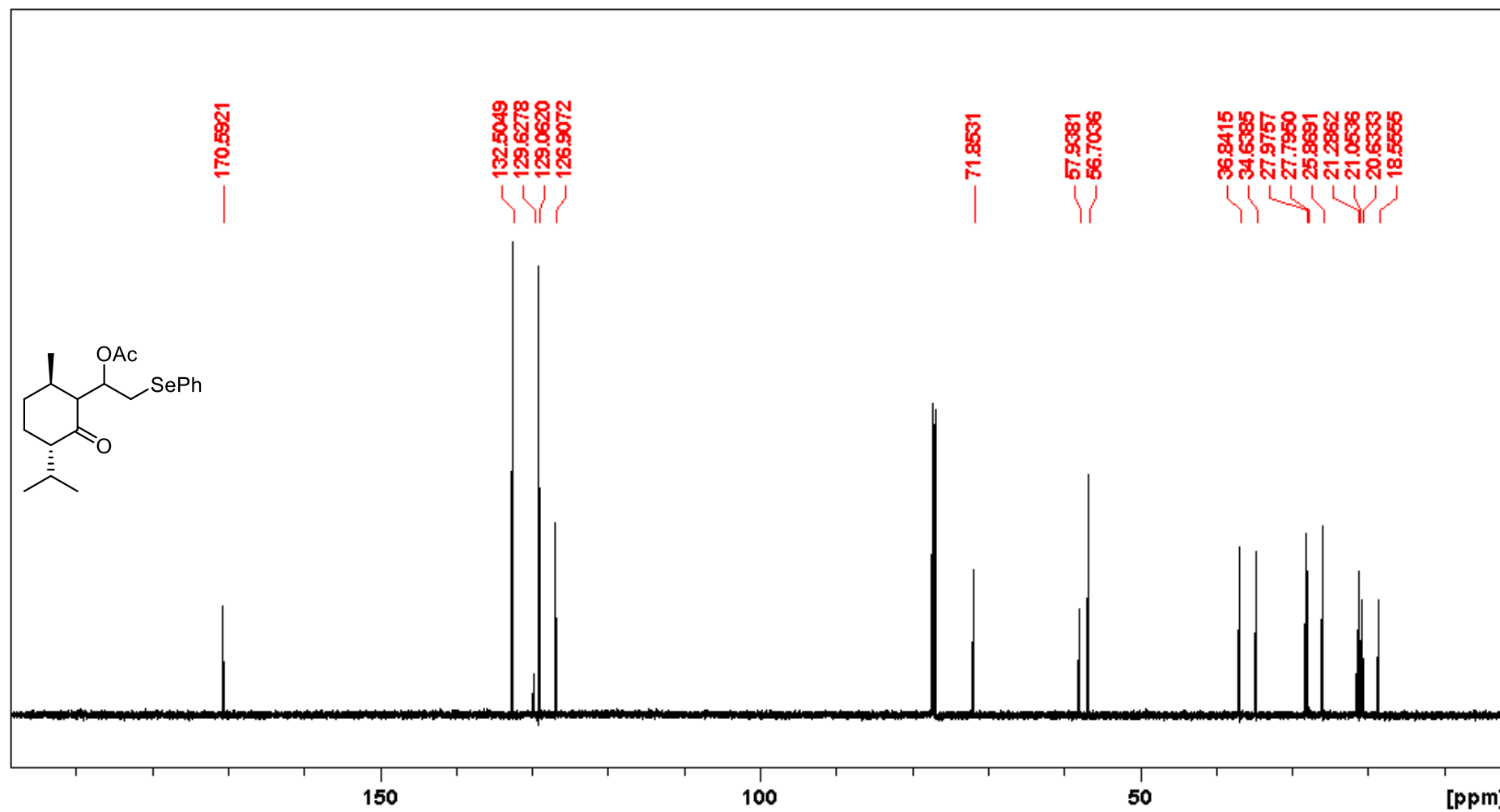


Figure S4. ¹³C NMR spectrum of **9** (150 MHz, CDCl₃).

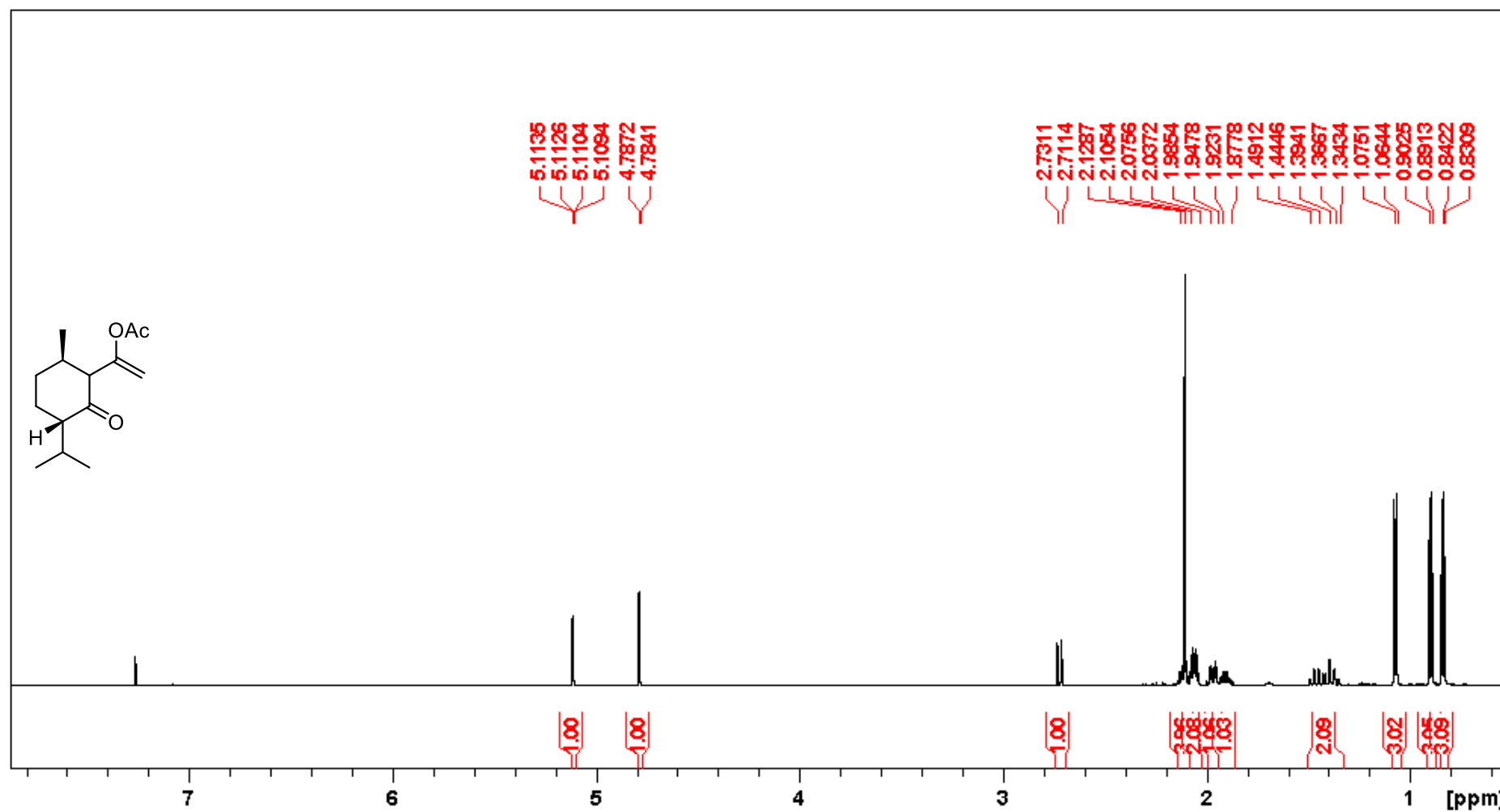


Figure S5. ¹H NMR spectrum of **10** (600 MHz, CDCl₃).

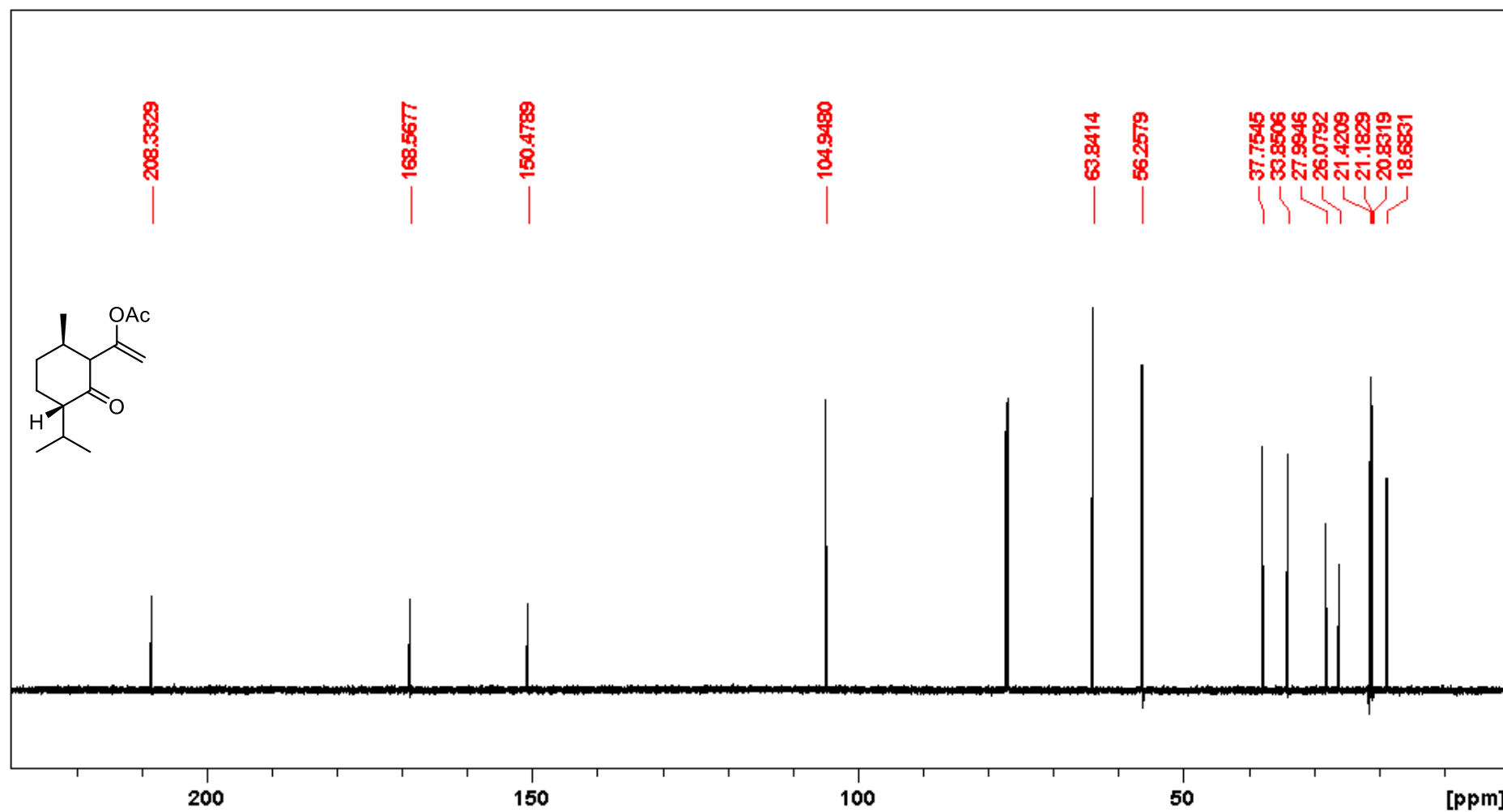


Figure S6. ^{13}C NMR spectrum of **10** (150 MHz, CDCl_3).

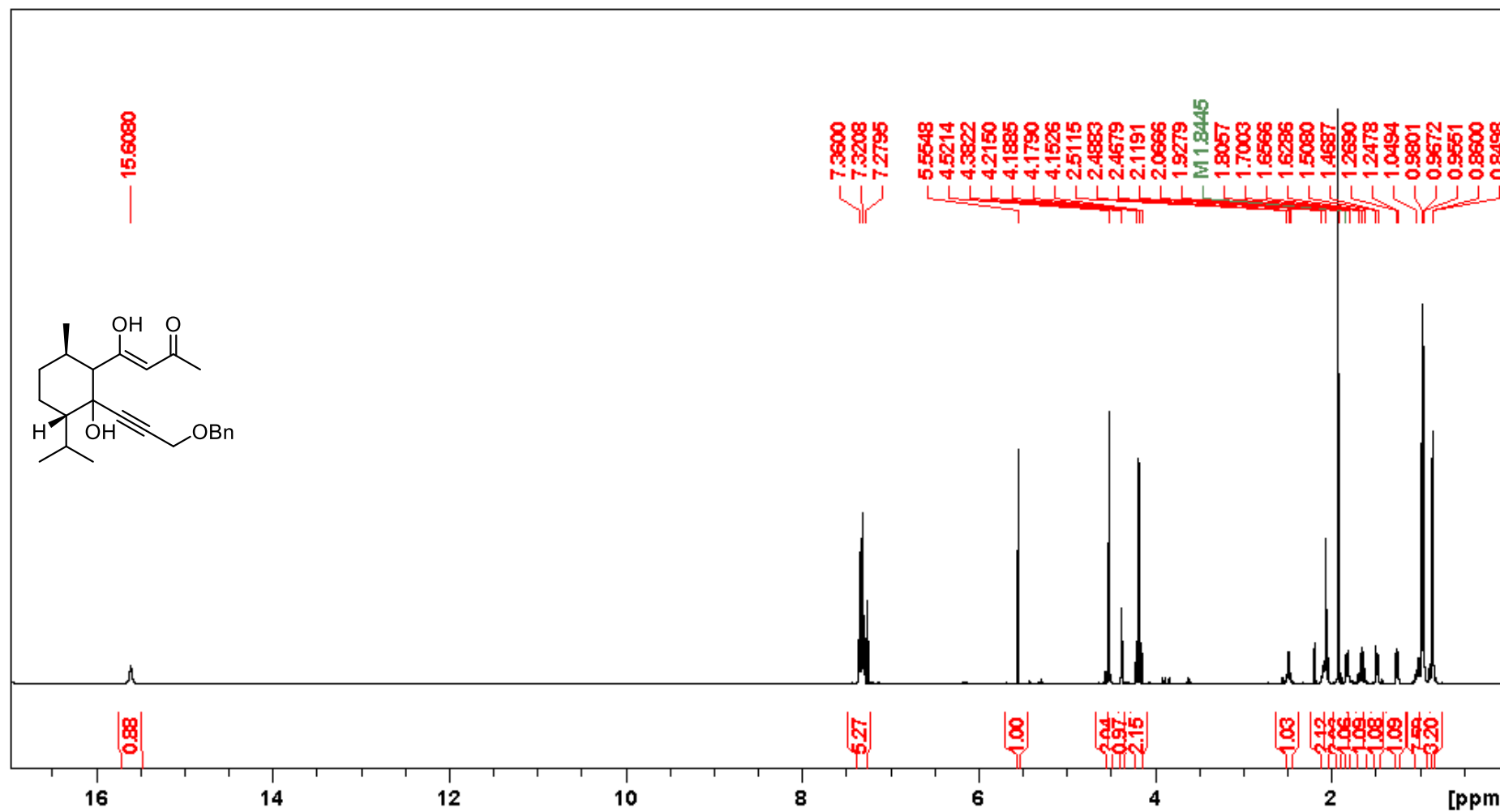


Figure S7. ¹H NMR spectrum of **12** (600 MHz, CDCl₃).

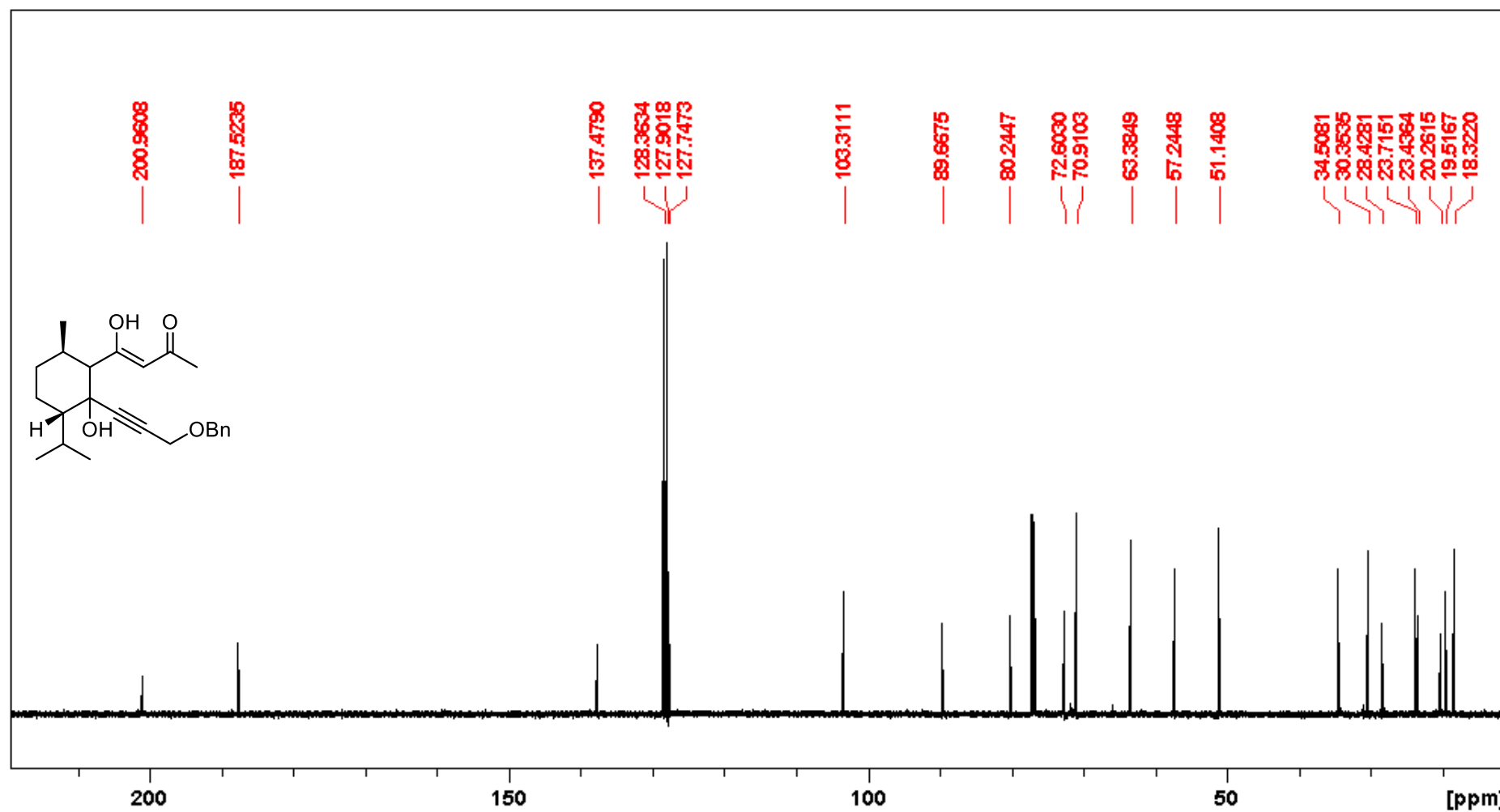


Figure S8. ¹³C NMR spectrum of **12** (150 MHz, CDCl₃).

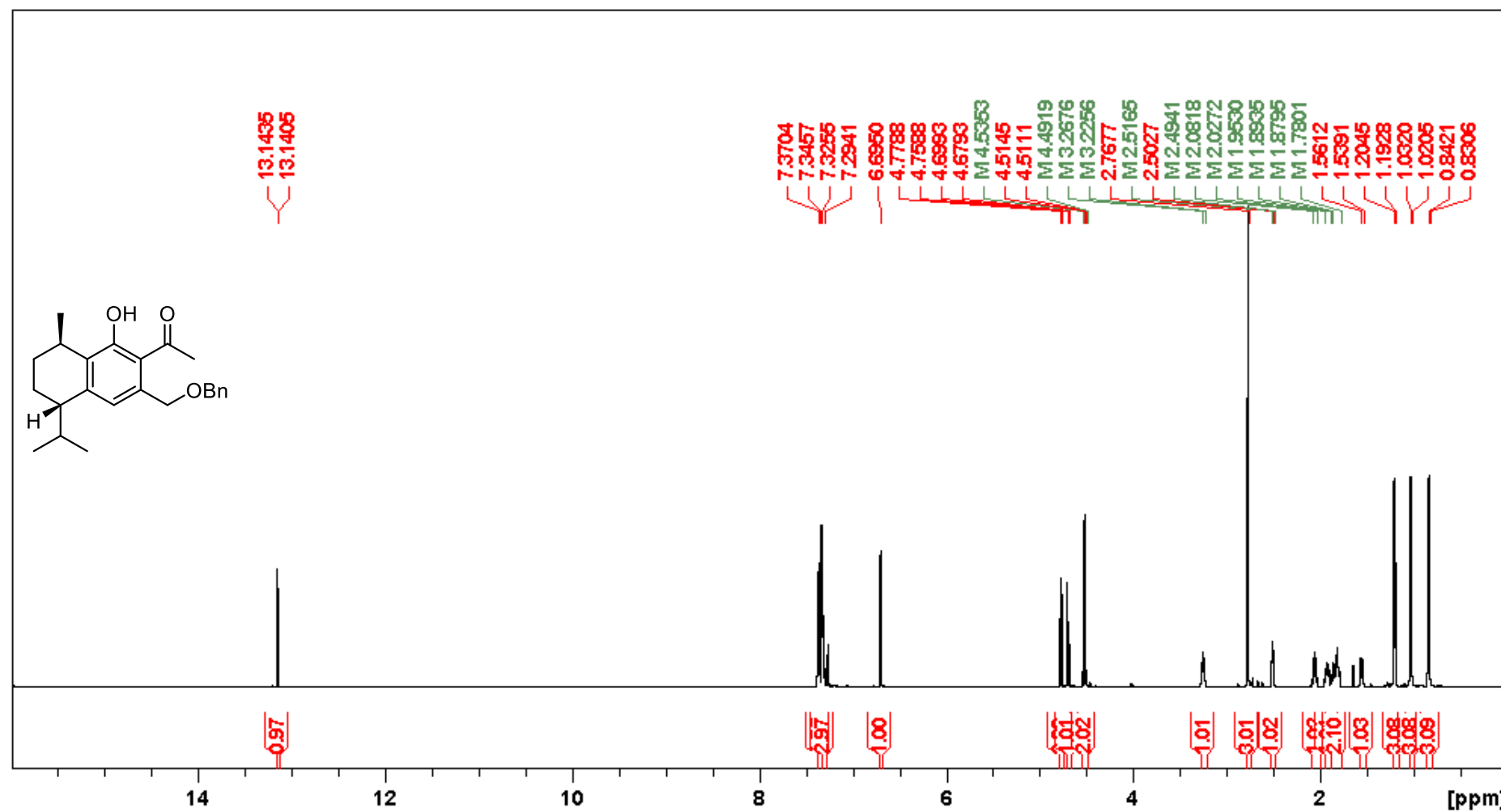


Figure S9. ^1H NMR spectrum of **13** (600 MHz, CDCl_3).

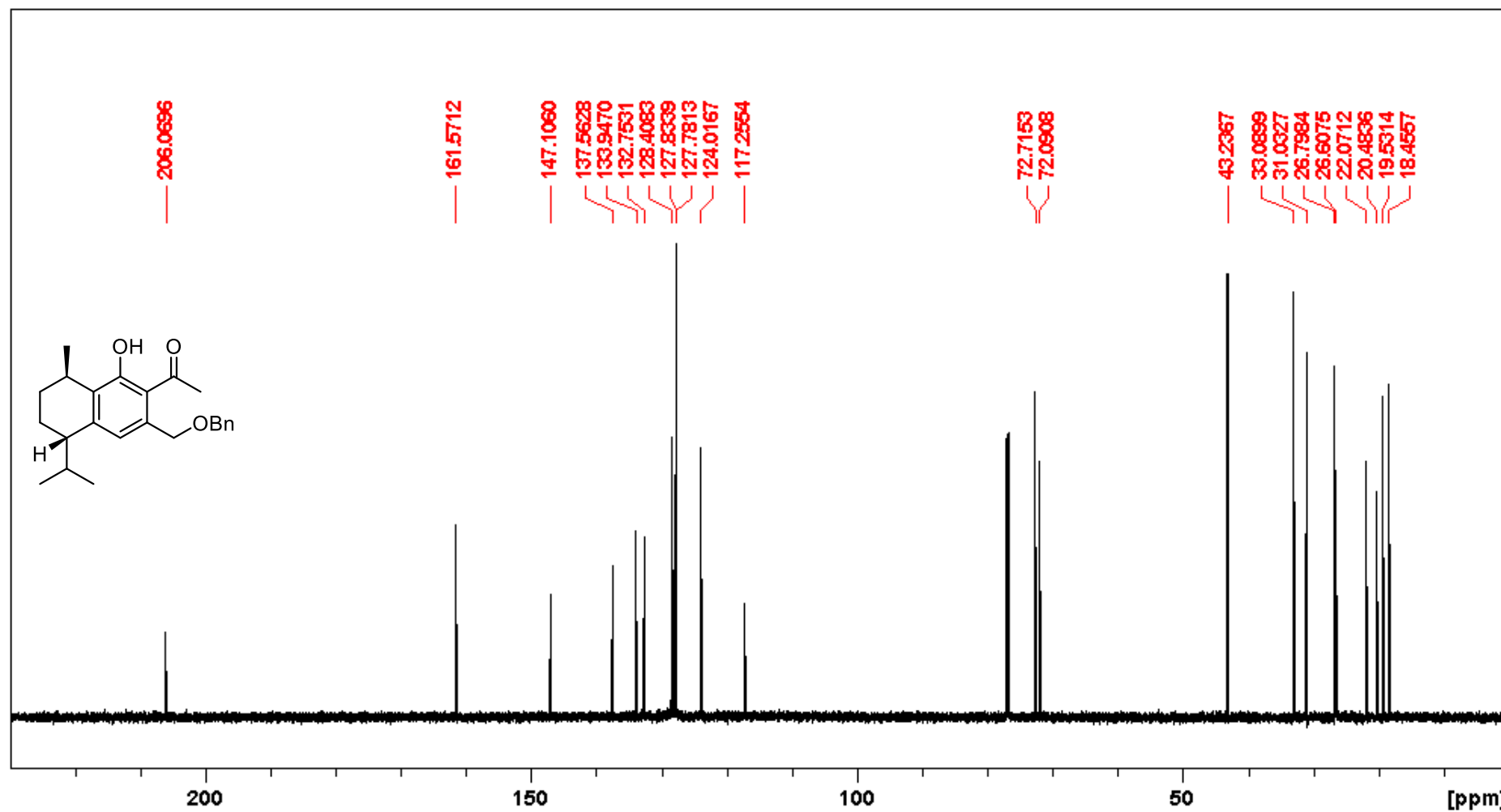


Figure S10. ^{13}C NMR spectrum of **13** (150 MHz, CDCl_3).

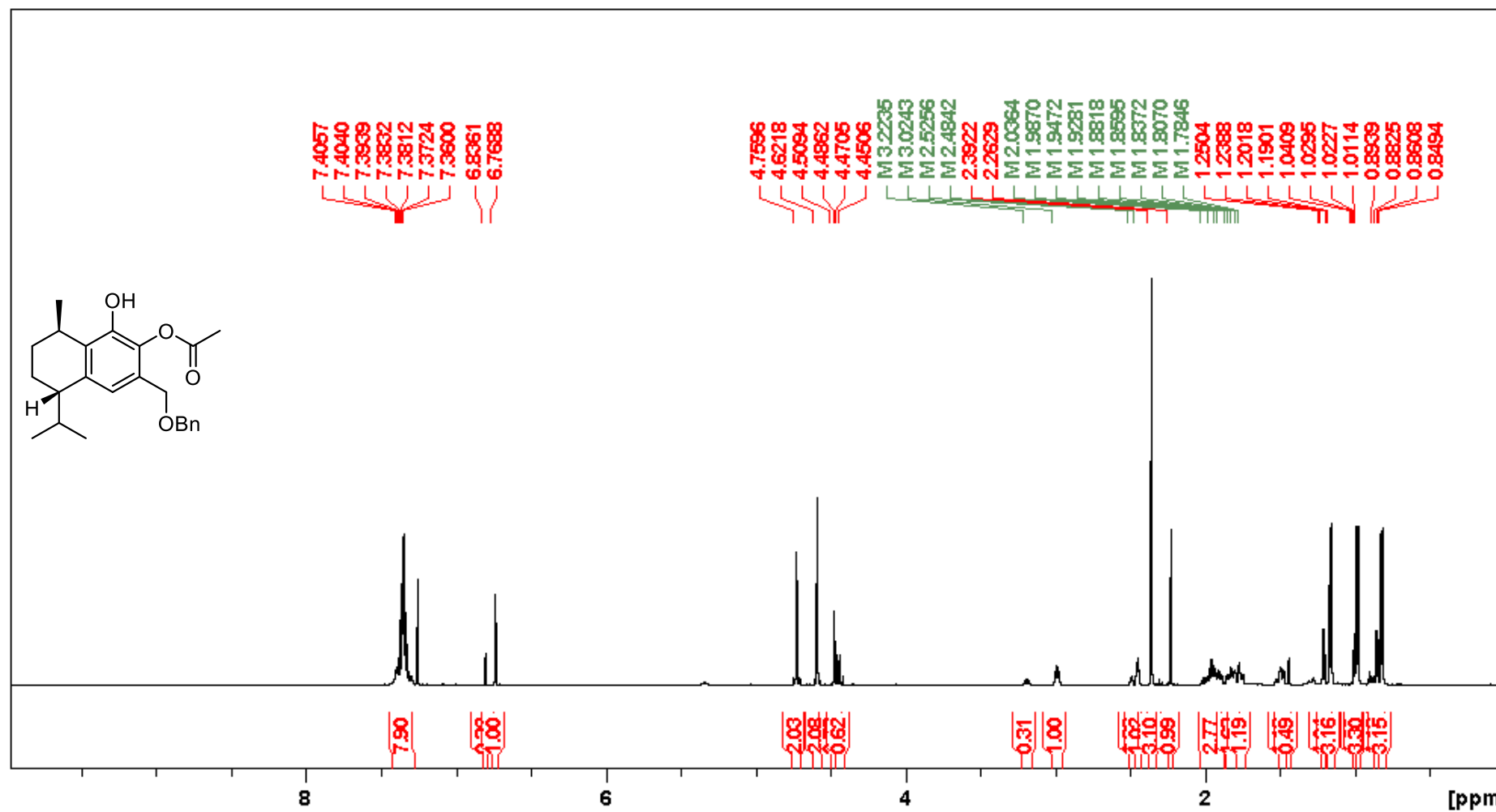


Figure S11. ¹H NMR spectrum of **14** (600 MHz, CDCl₃).

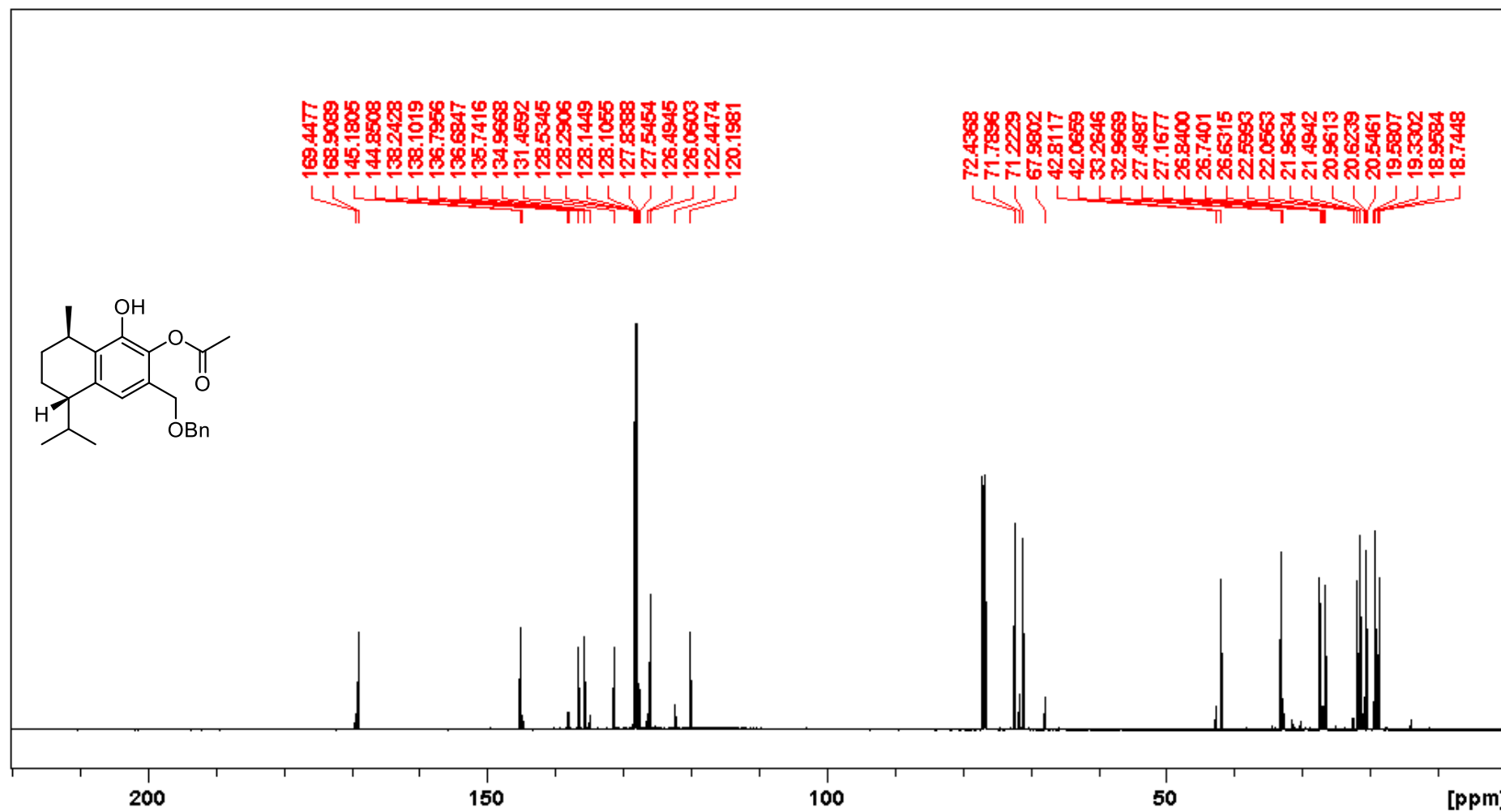


Figure S12. ^{13}C NMR spectrum of **14** (150 MHz, CDCl_3).



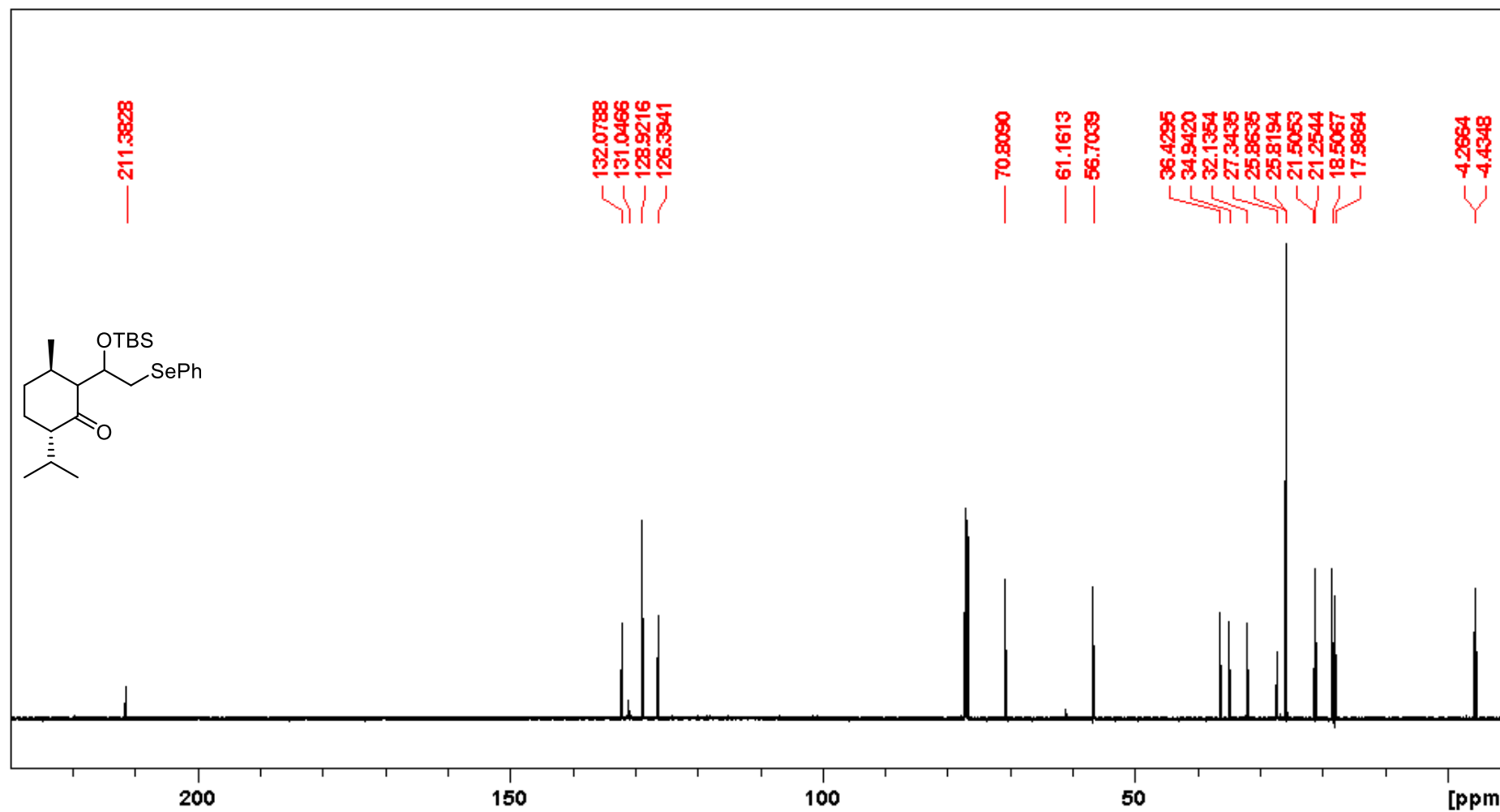


Figure S14. ^{13}C NMR spectrum of **15** (150 MHz, CDCl_3).

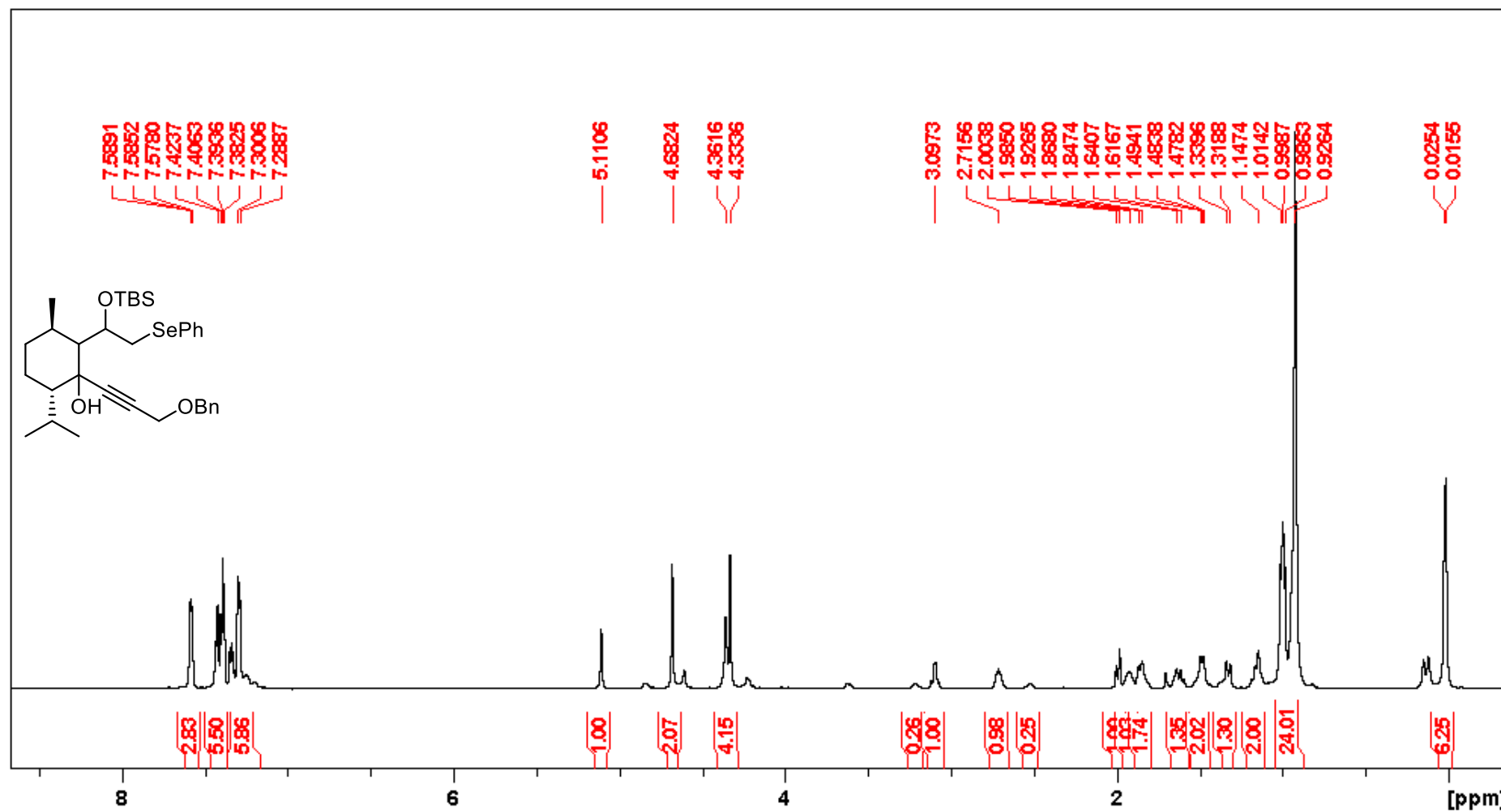


Figure S15. ¹H NMR spectrum of **16** (600 MHz, CDCl₃).

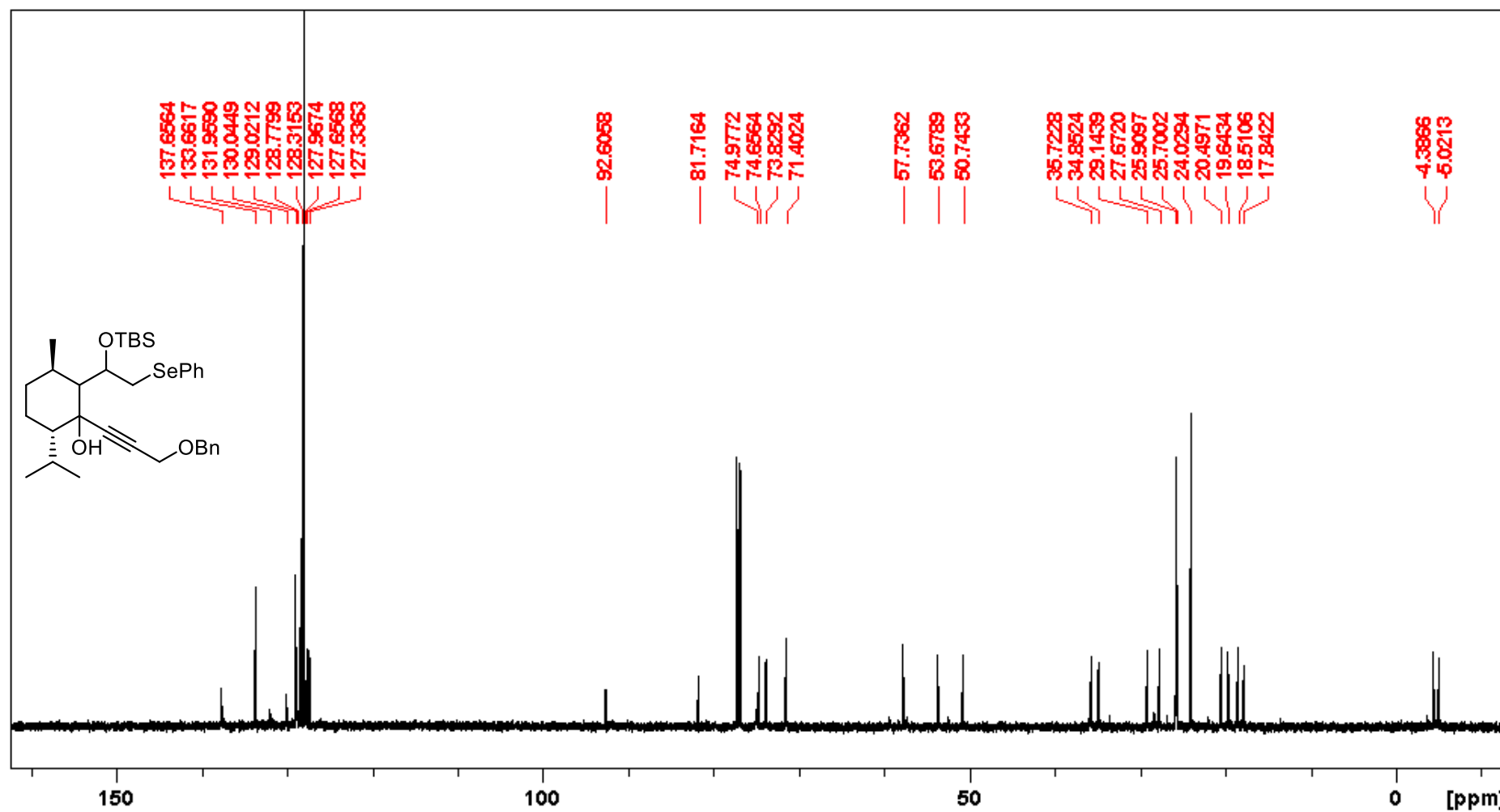


Figure S16. ¹³C NMR spectrum of **16** (150 MHz, CDCl₃).

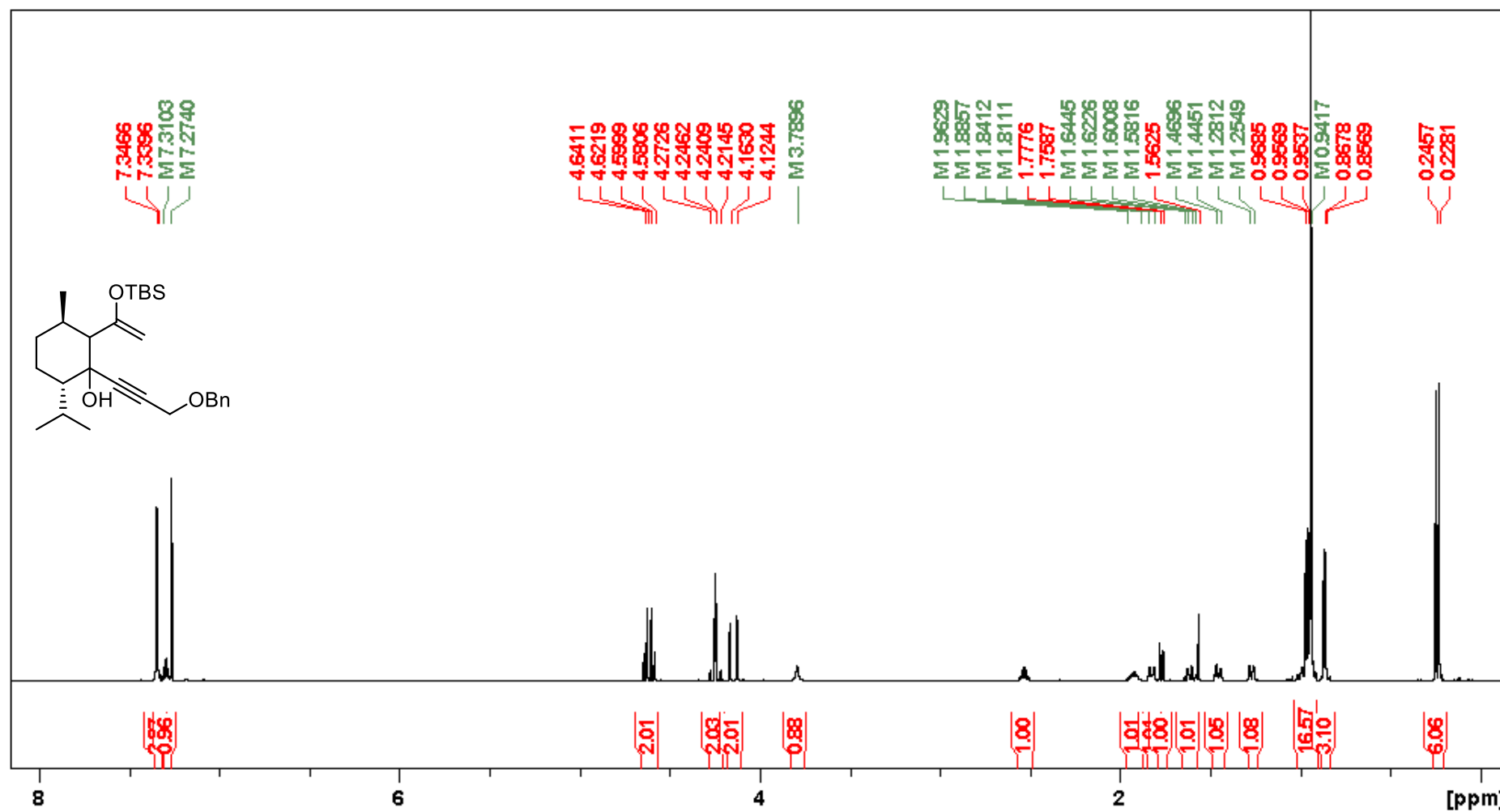


Figure S17. ¹H NMR spectrum of **17** (600 MHz, CDCl₃).

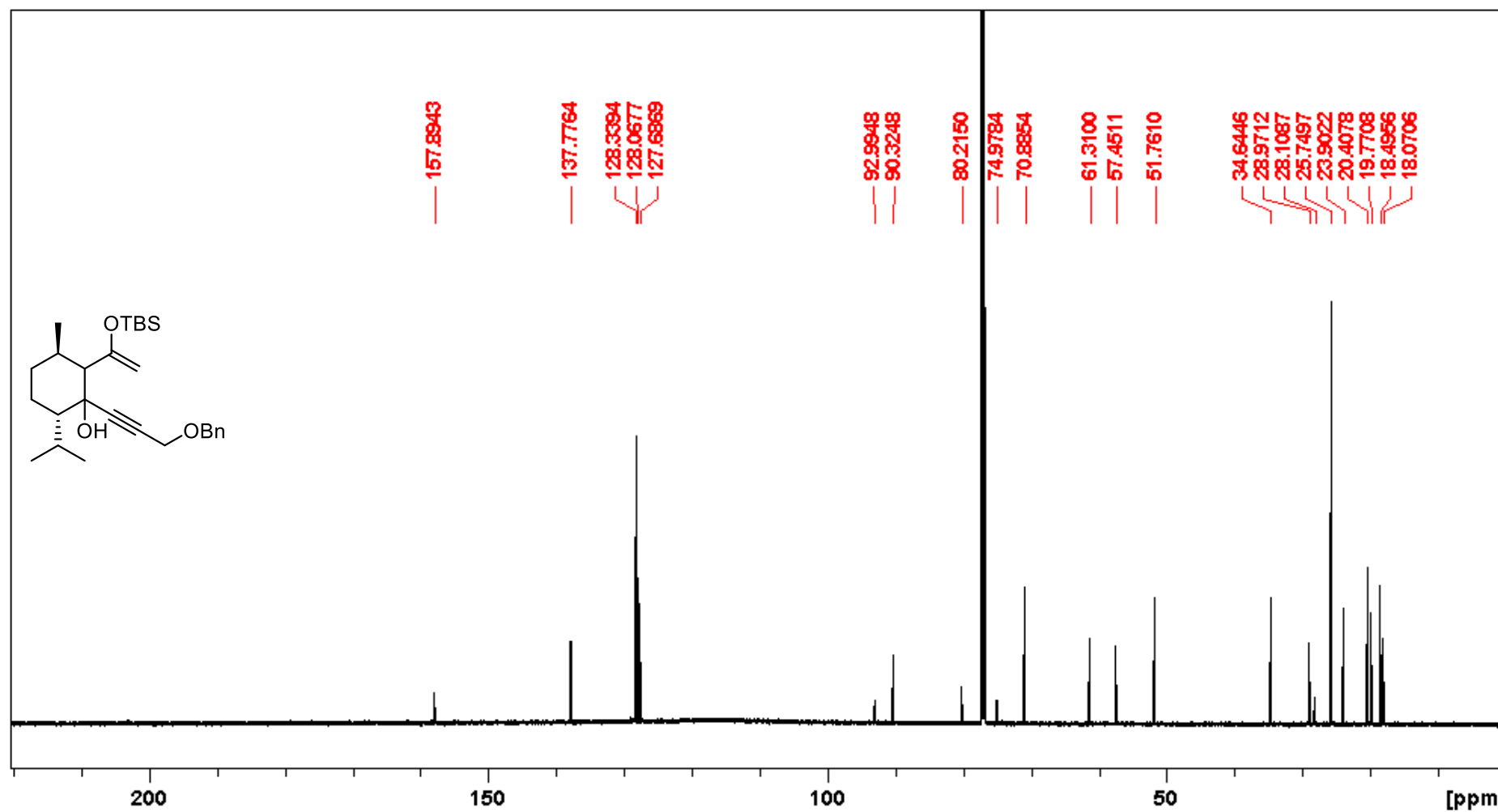


Figure S18. ^{13}C NMR spectrum of **17** (150 MHz, CDCl_3).

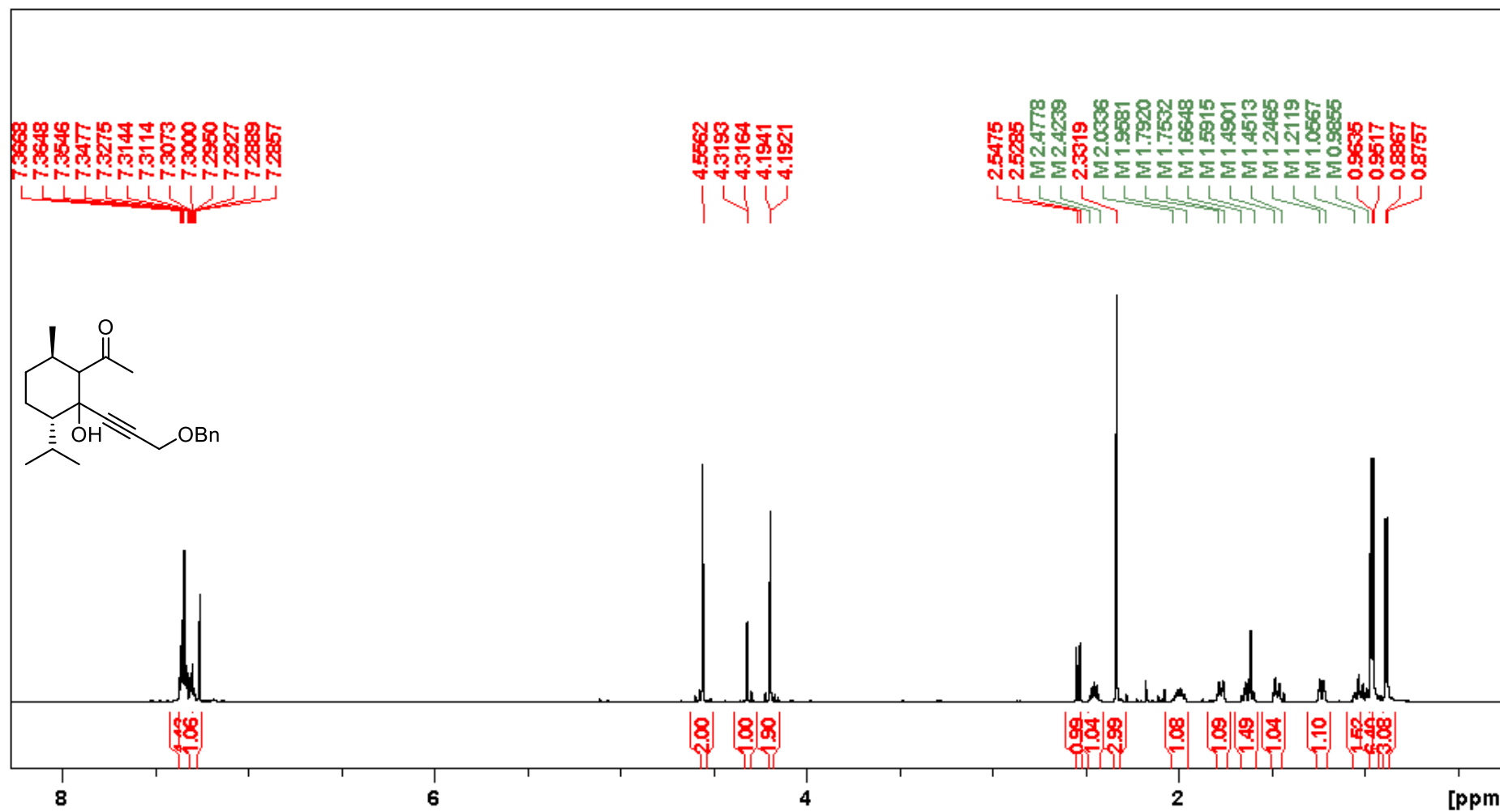


Figure S19. ^1H NMR spectrum of **18** (600 MHz, CDCl_3).

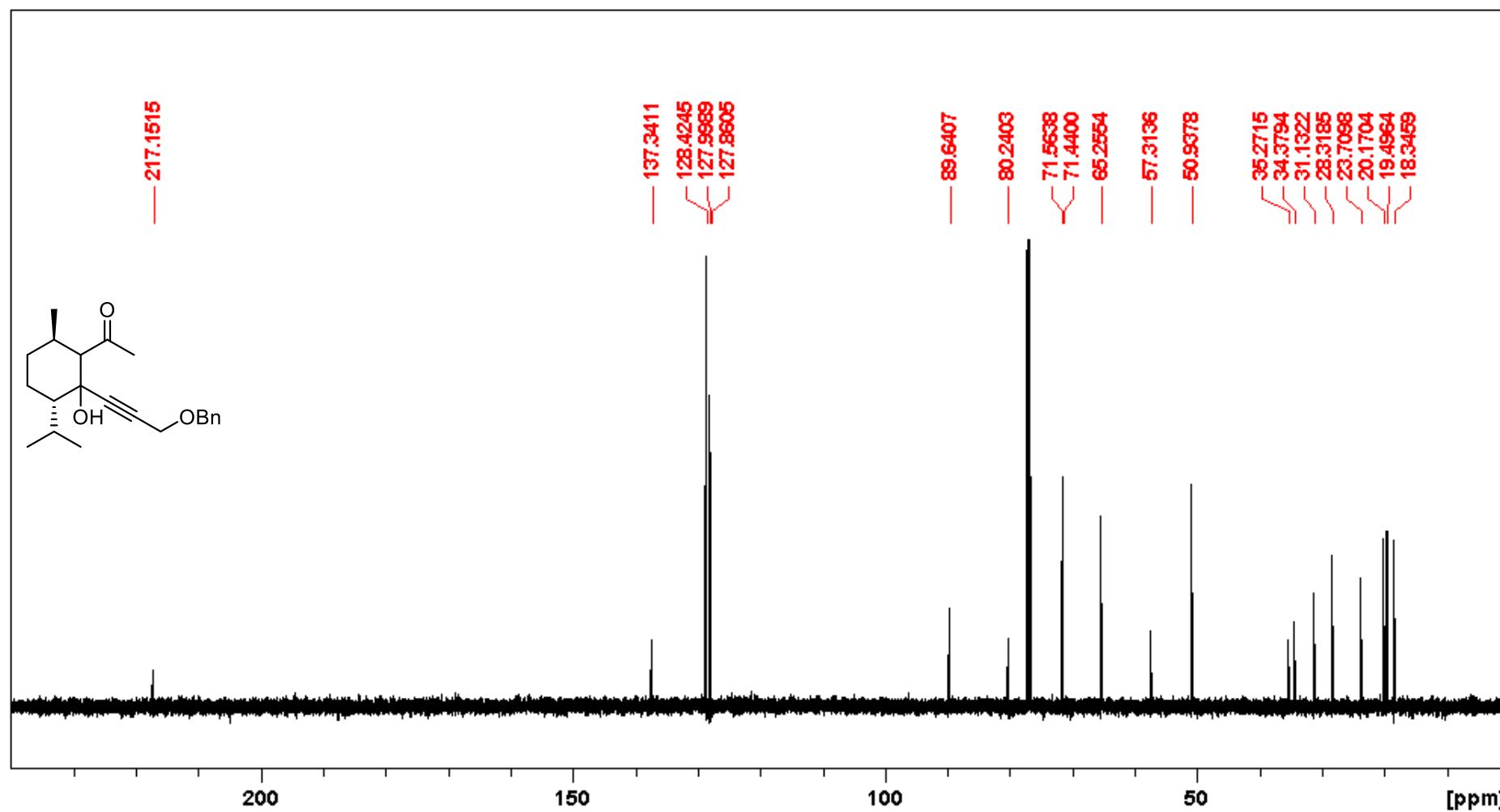


Figure S20. ^{13}C NMR spectrum of **18** (150 MHz, CDCl_3).

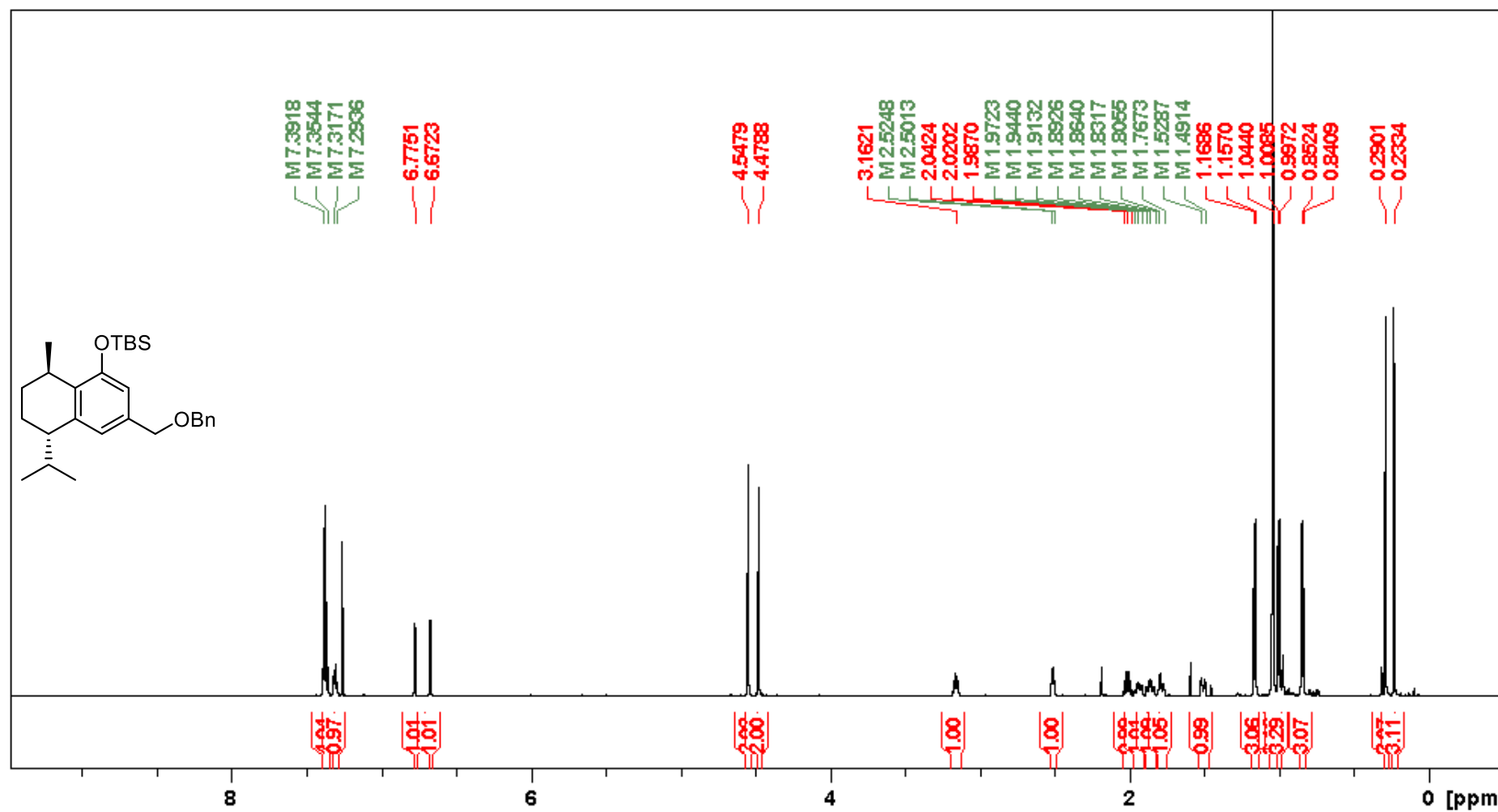


Figure S21. ¹H NMR spectrum of **19** (600 MHz, CDCl₃).

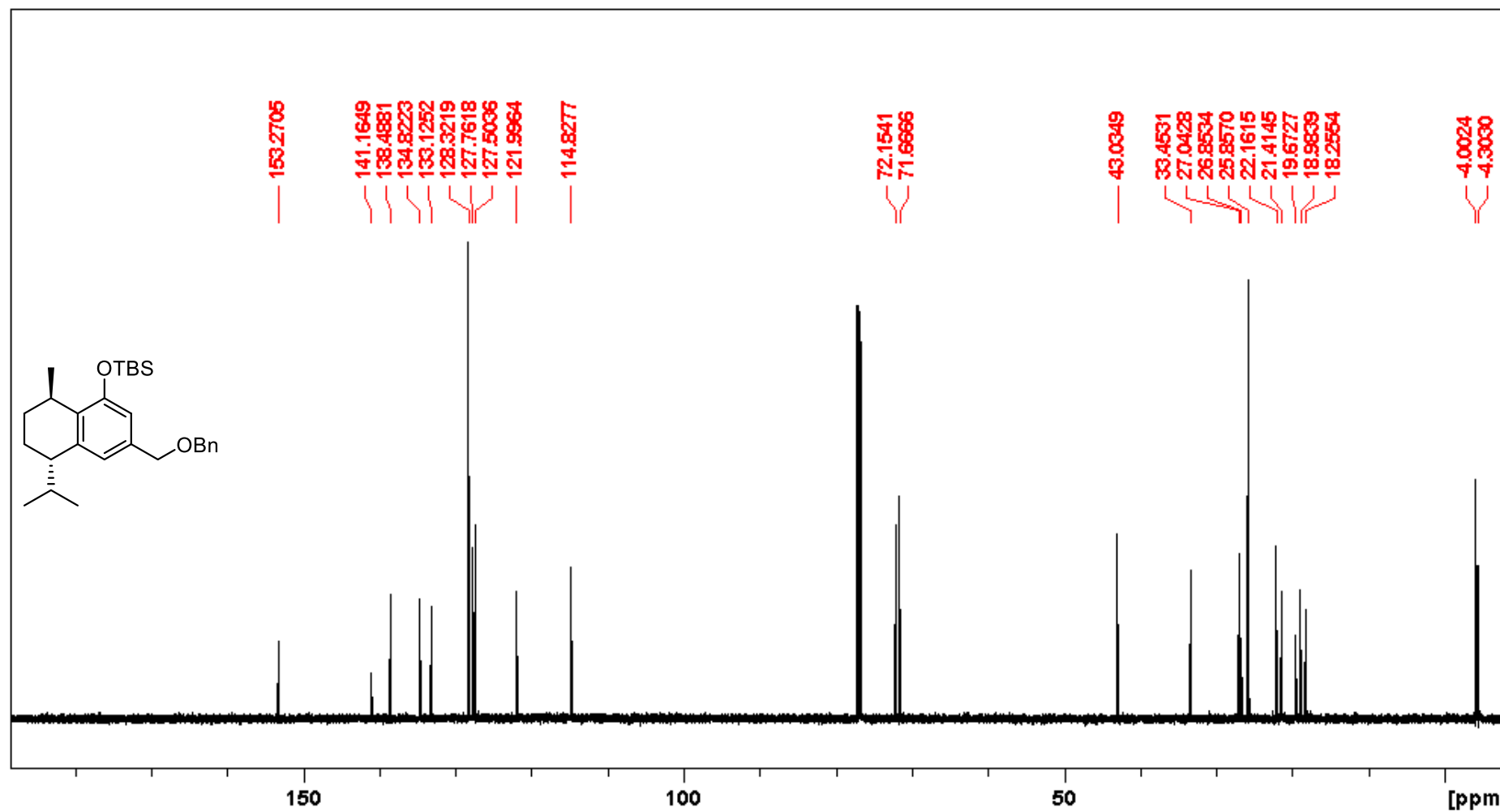


Figure S22. ¹³C NMR spectrum of **19** (150 MHz, CDCl₃).

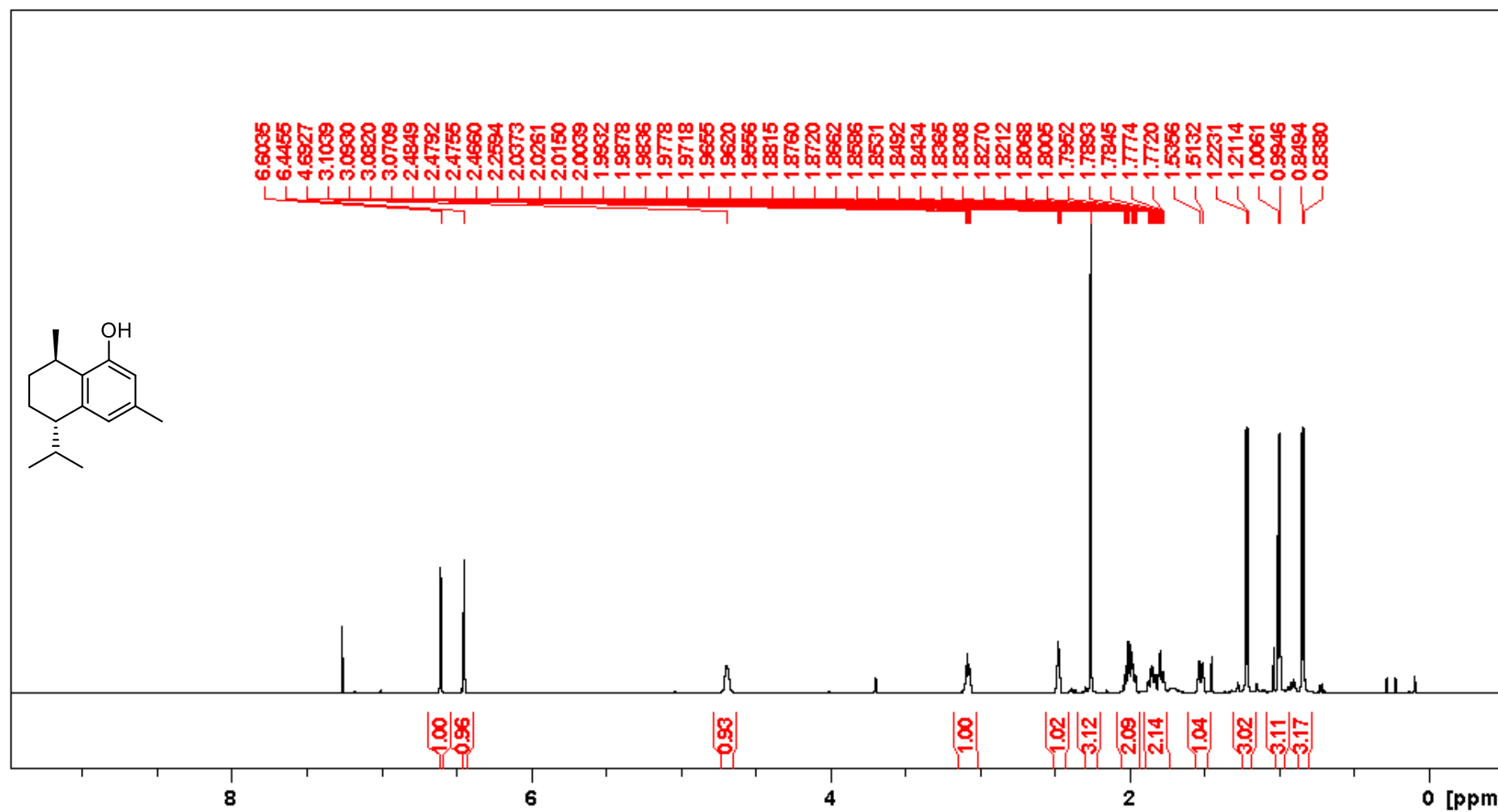


Figure S23. ¹H NMR spectrum of **20** (600 MHz, CDCl₃).

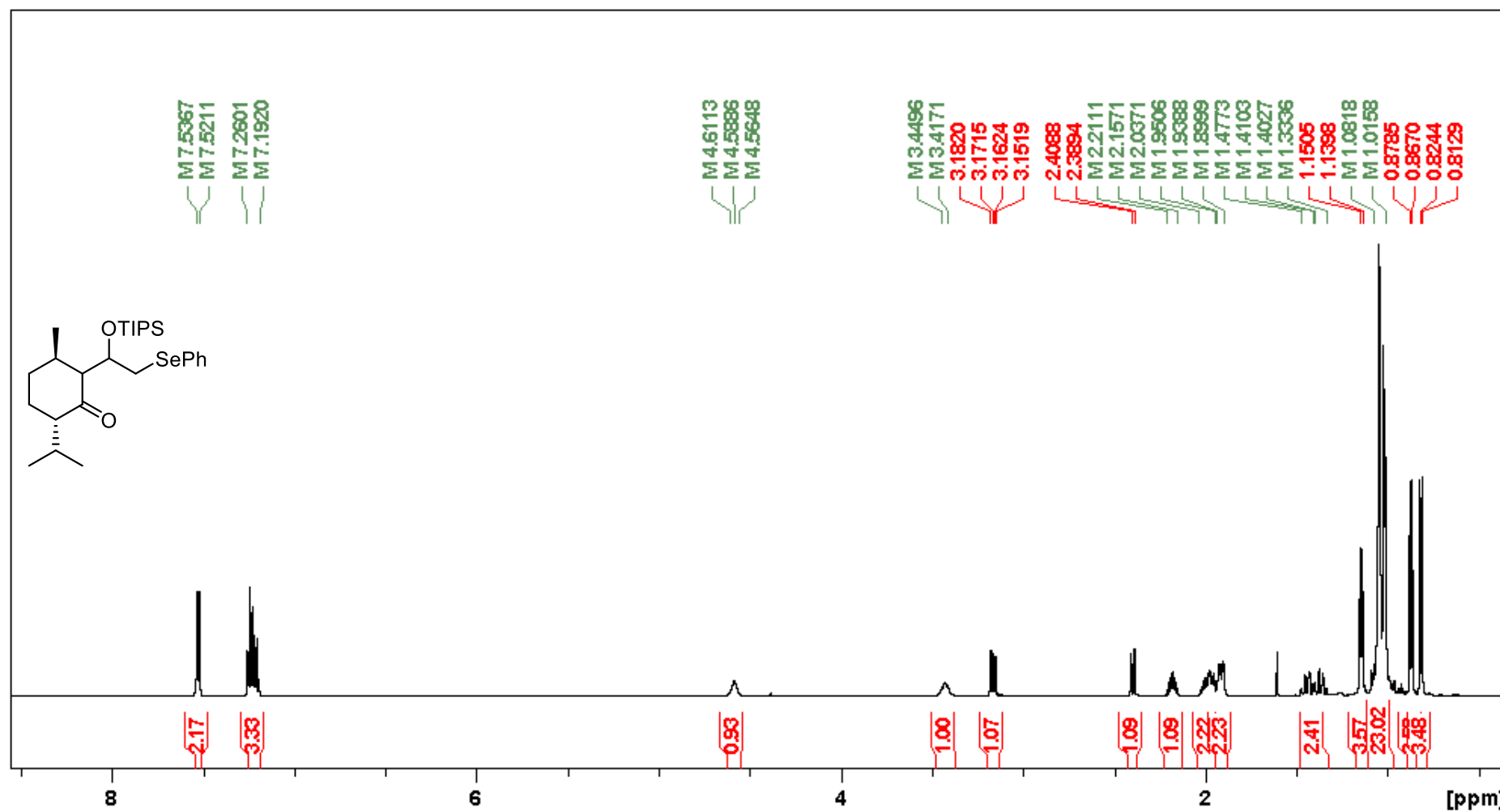


Figure S24. ¹H NMR spectrum of **22** (600 MHz, CDCl₃).

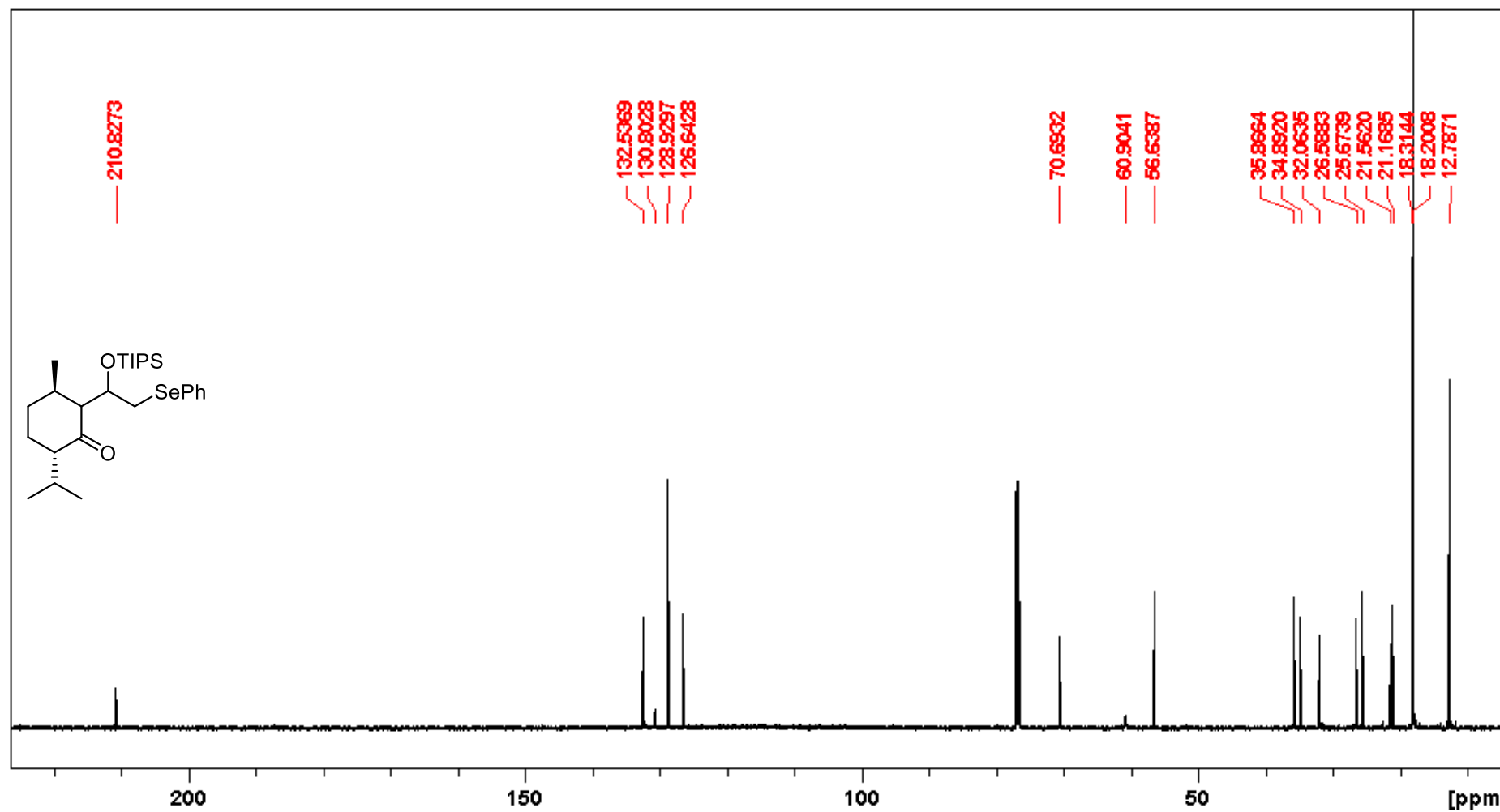


Figure S25. ^{13}C NMR spectrum of **22** (150 MHz, CDCl_3).

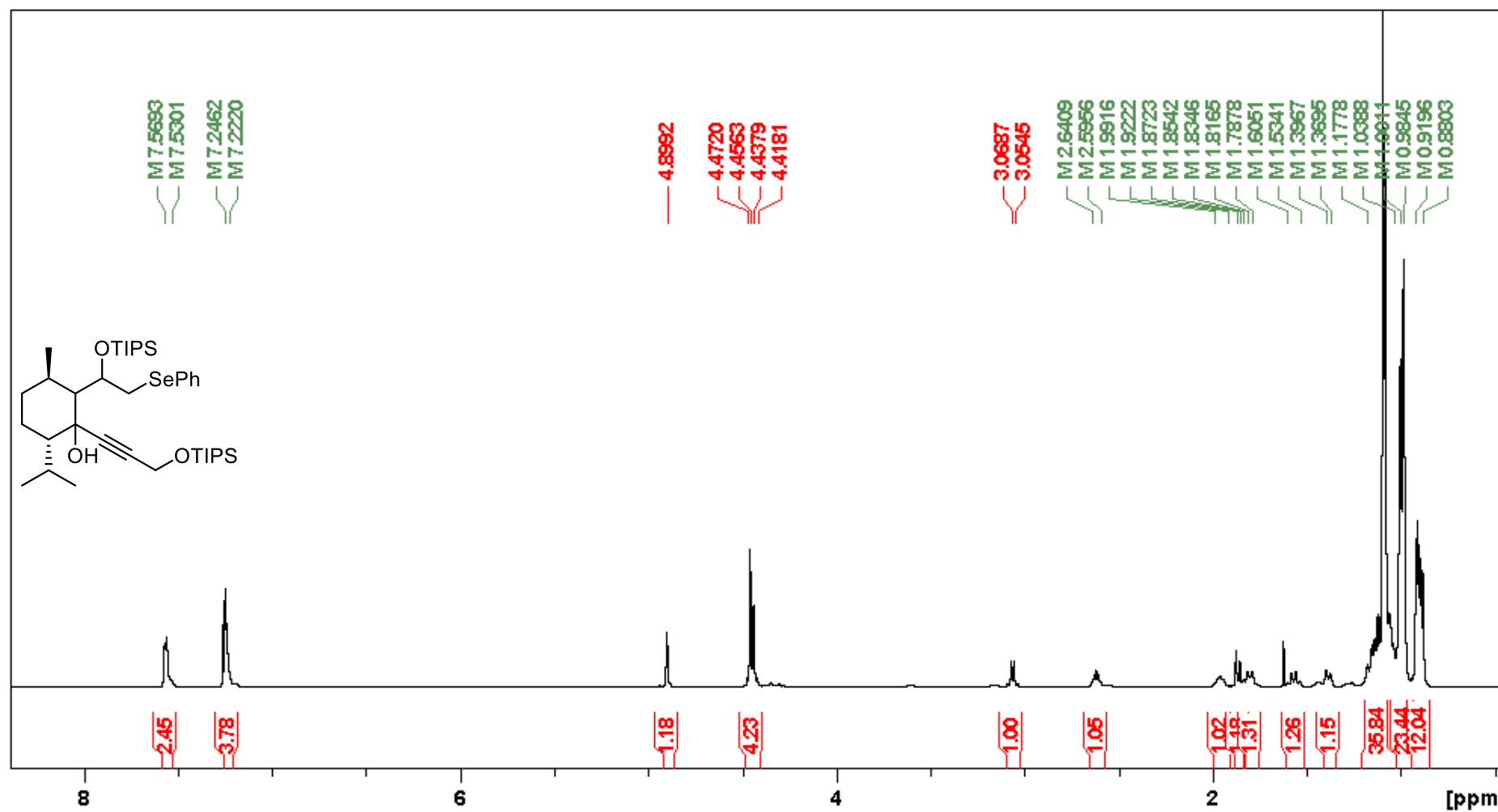


Figure S26. ¹H NMR spectrum of **23** (600 MHz, CDCl₃).

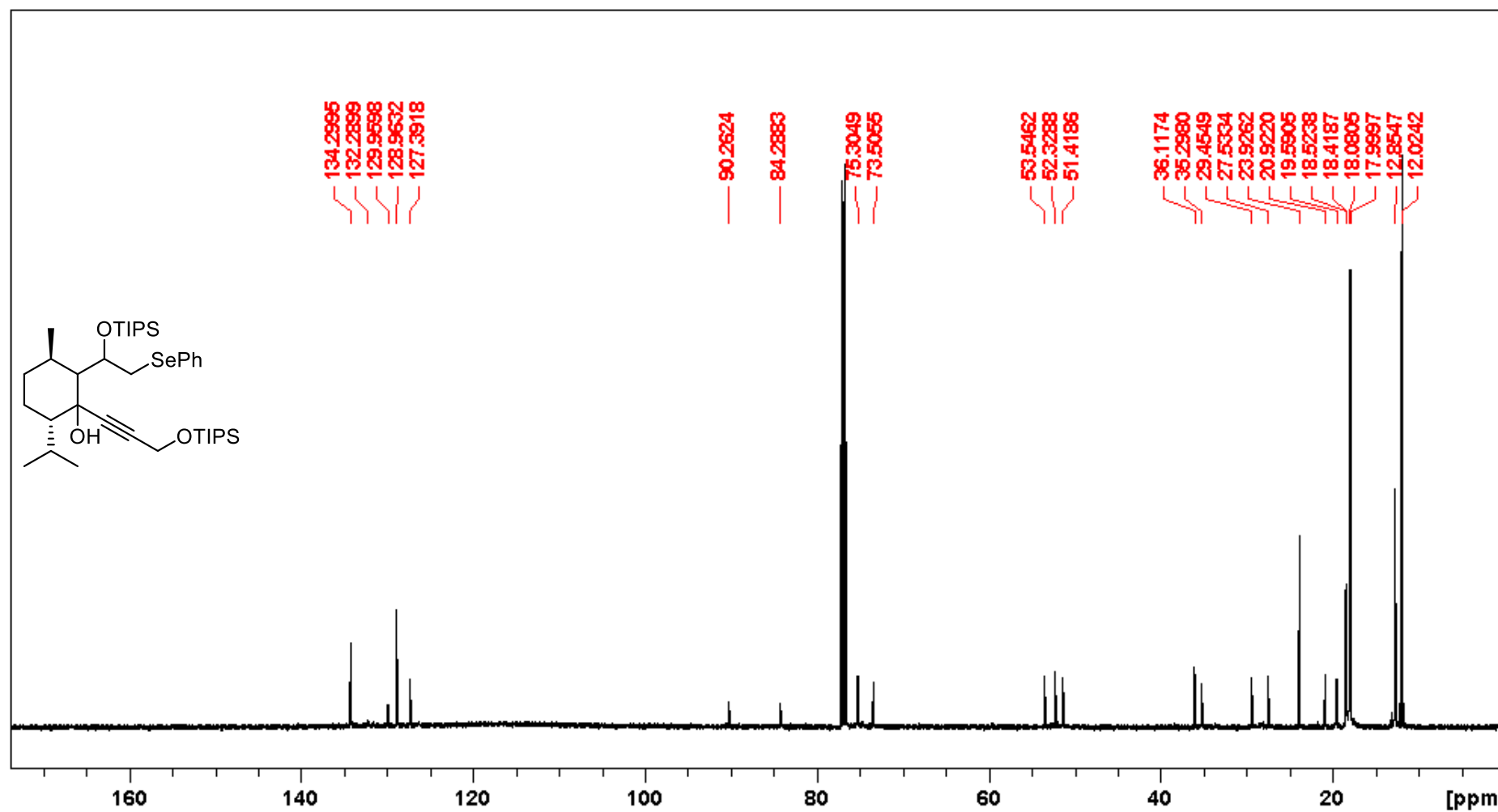


Figure S27. ¹³C NMR spectrum of **23** (150 MHz, CDCl₃).

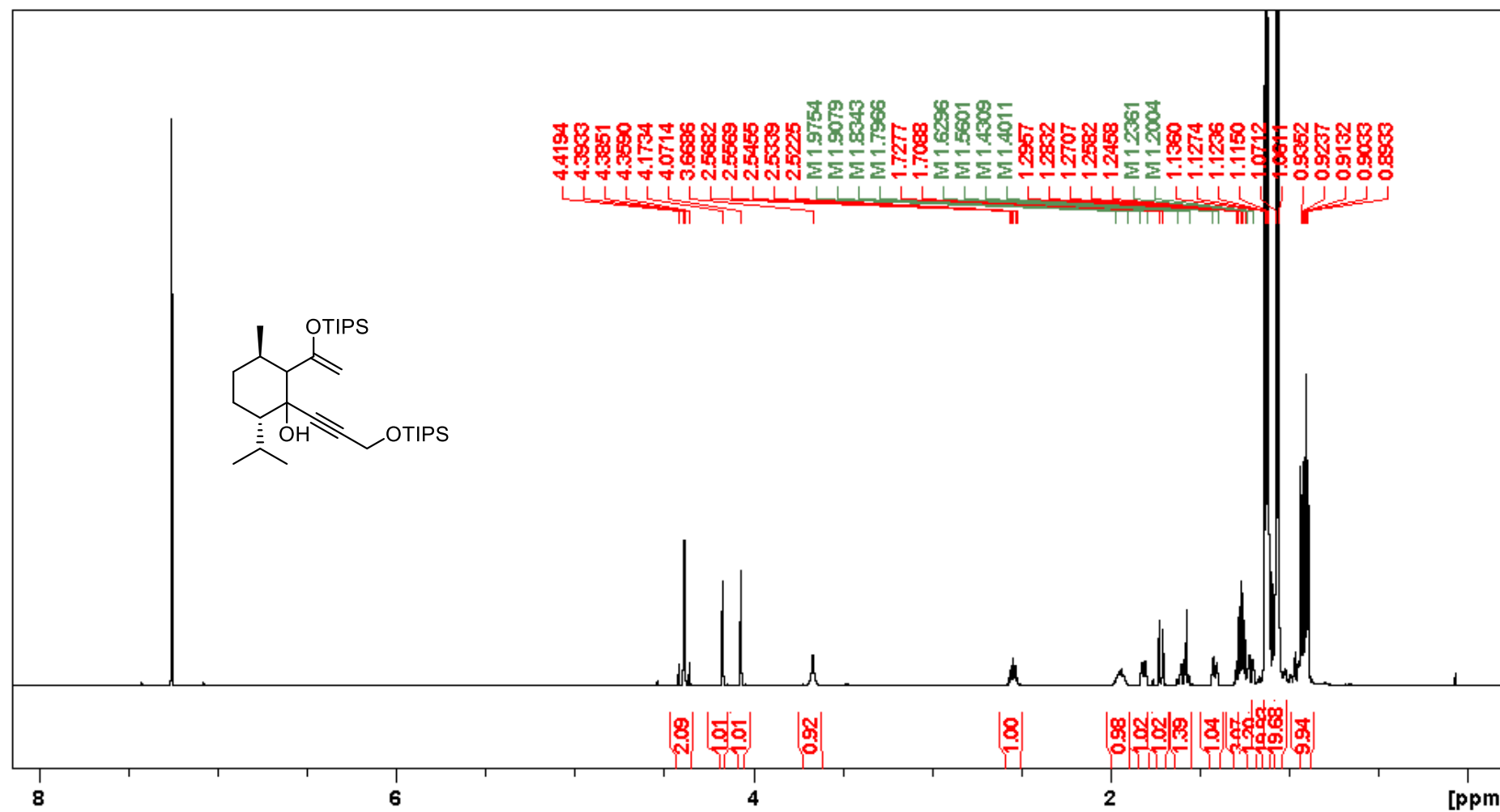


Figure S28. ¹H NMR spectrum of **24** (600 MHz, CDCl₃).

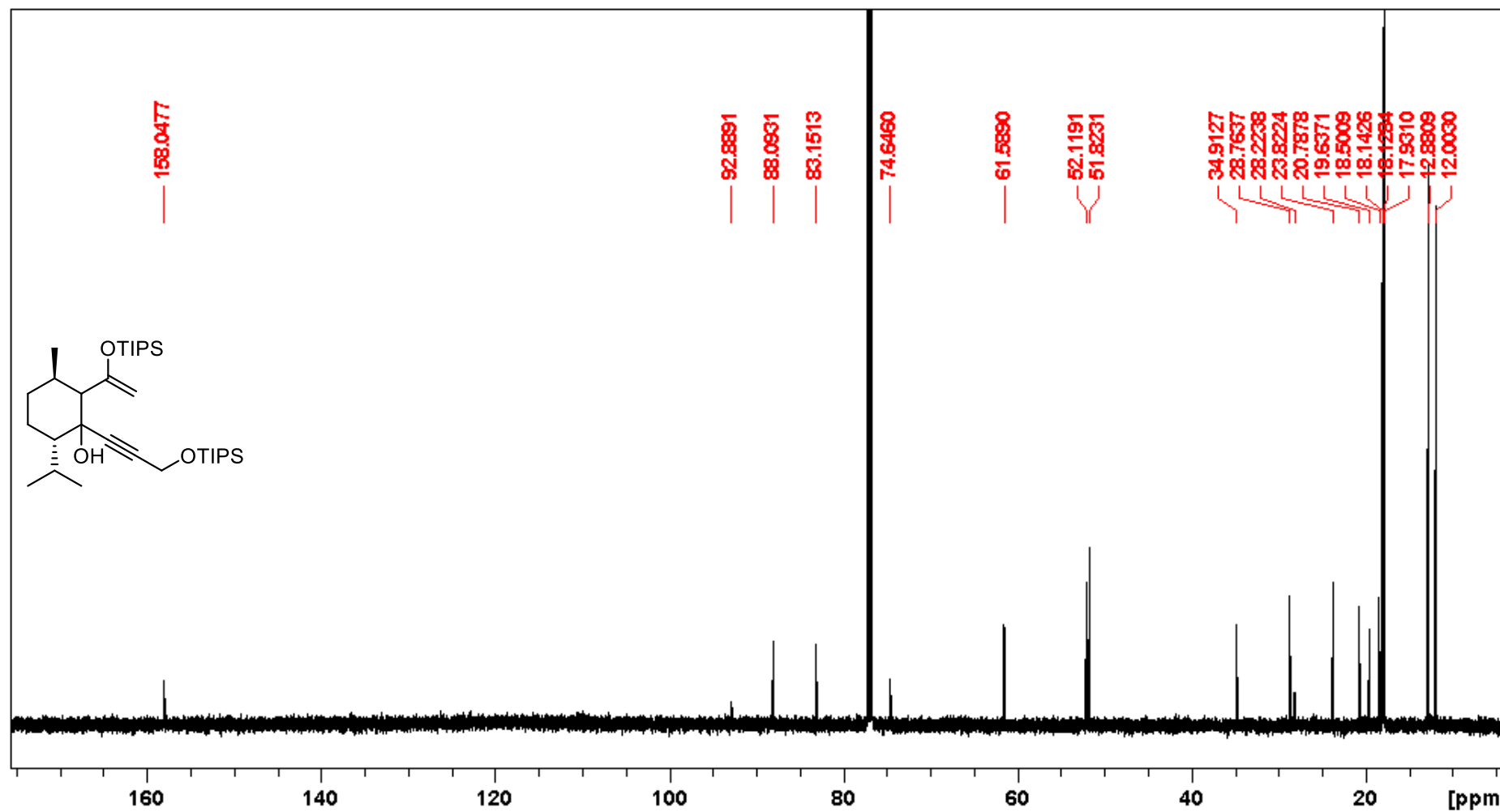


Figure S29. ¹³C NMR spectrum of **24** (150 MHz, CDCl₃).

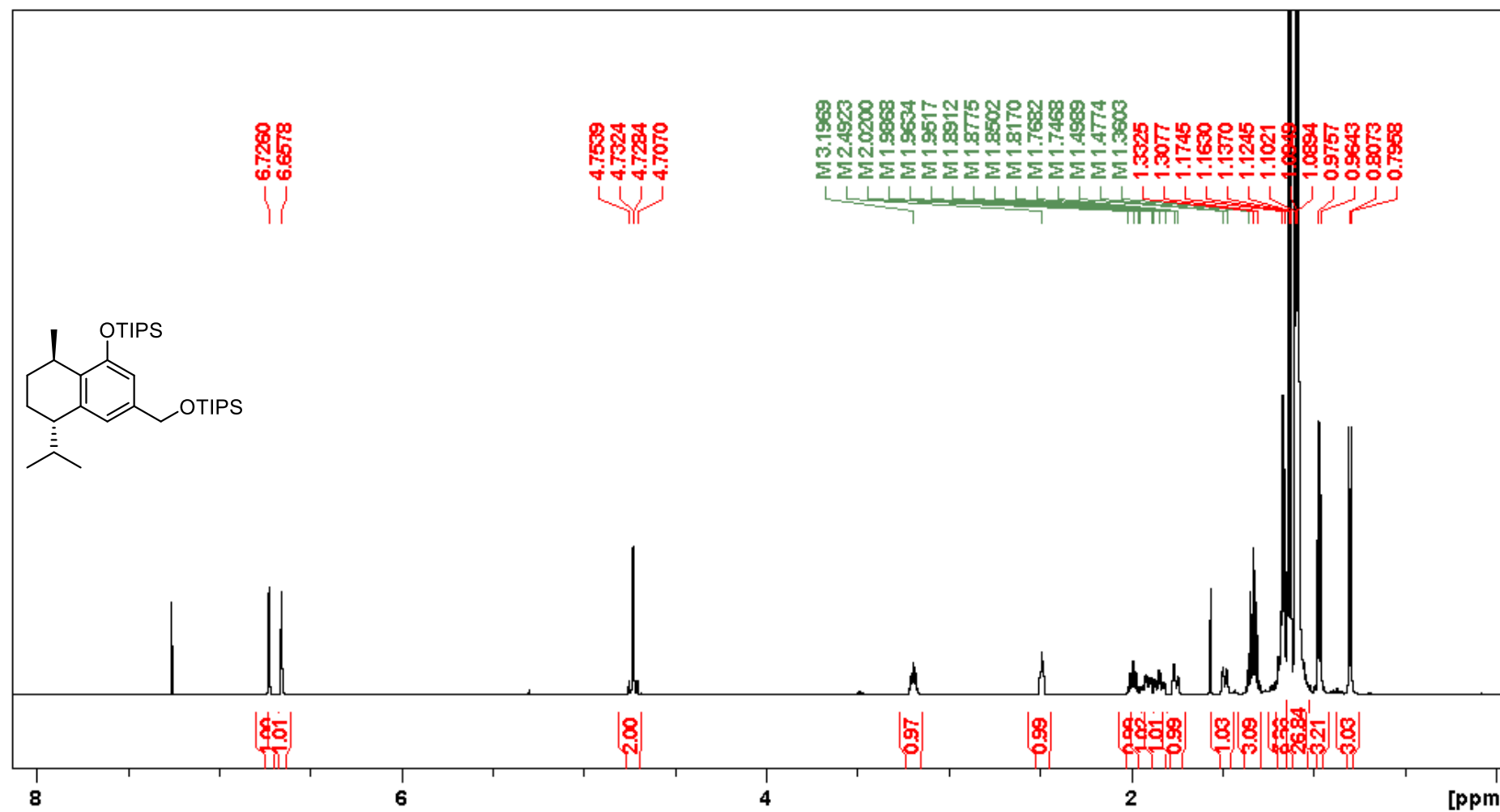


Figure S30. ¹H NMR spectrum of **25** (600 MHz, CDCl₃).

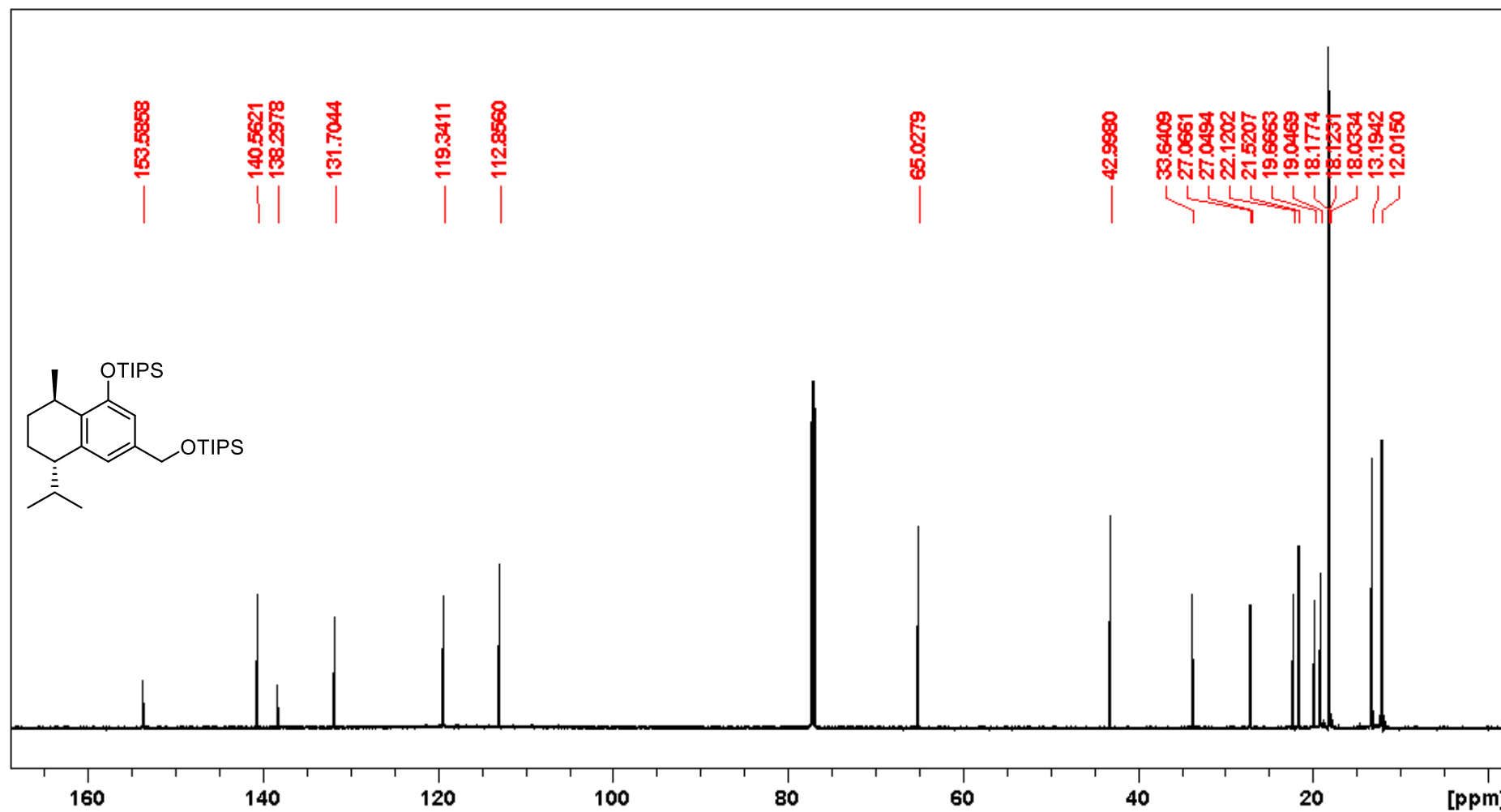


Figure S31. ¹³C NMR spectrum of **25** (150 MHz, CDCl₃).

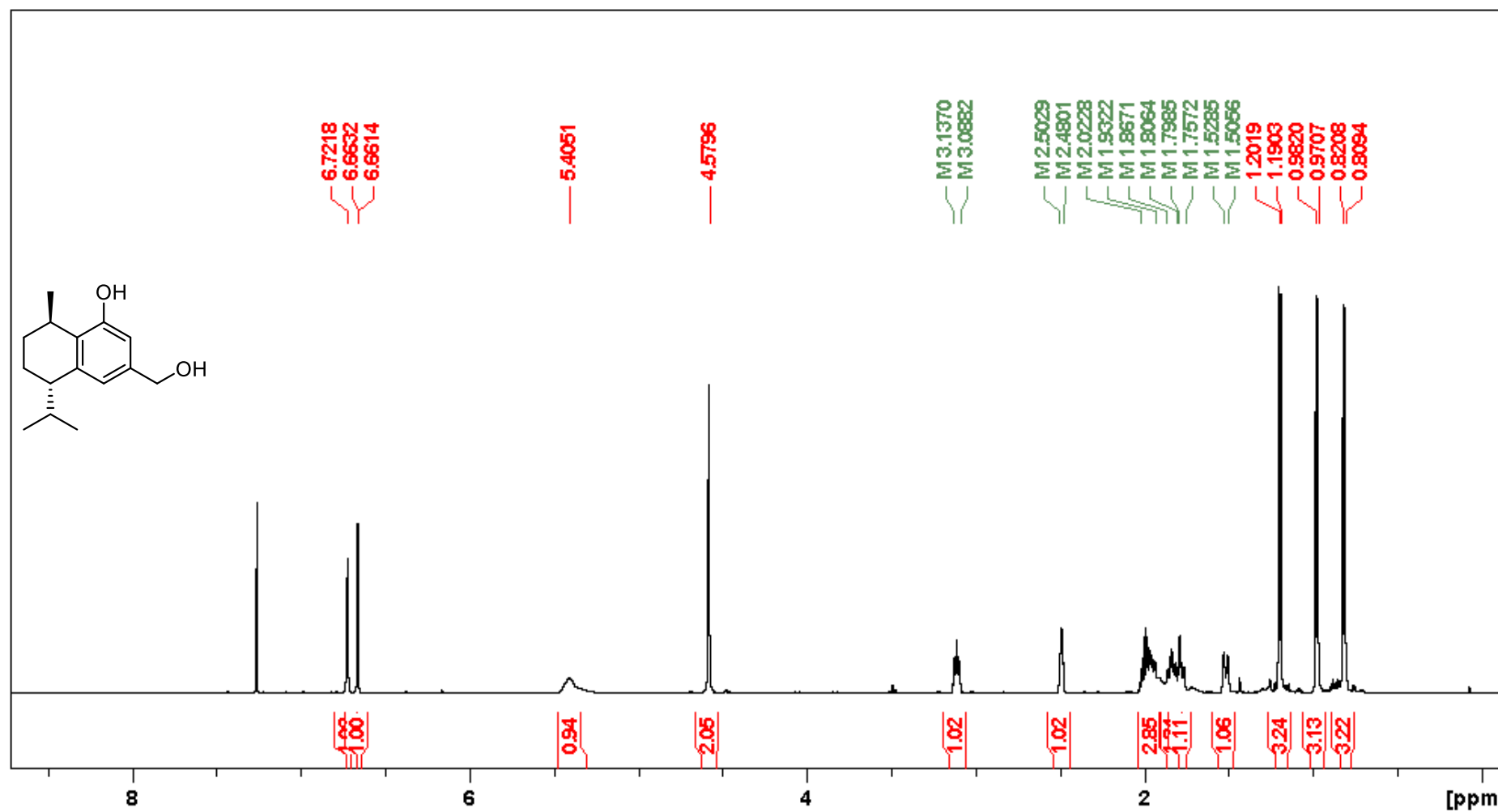


Figure S32. ¹H NMR spectrum of (7S, 10R)-1 (600 MHz, CDCl₃).

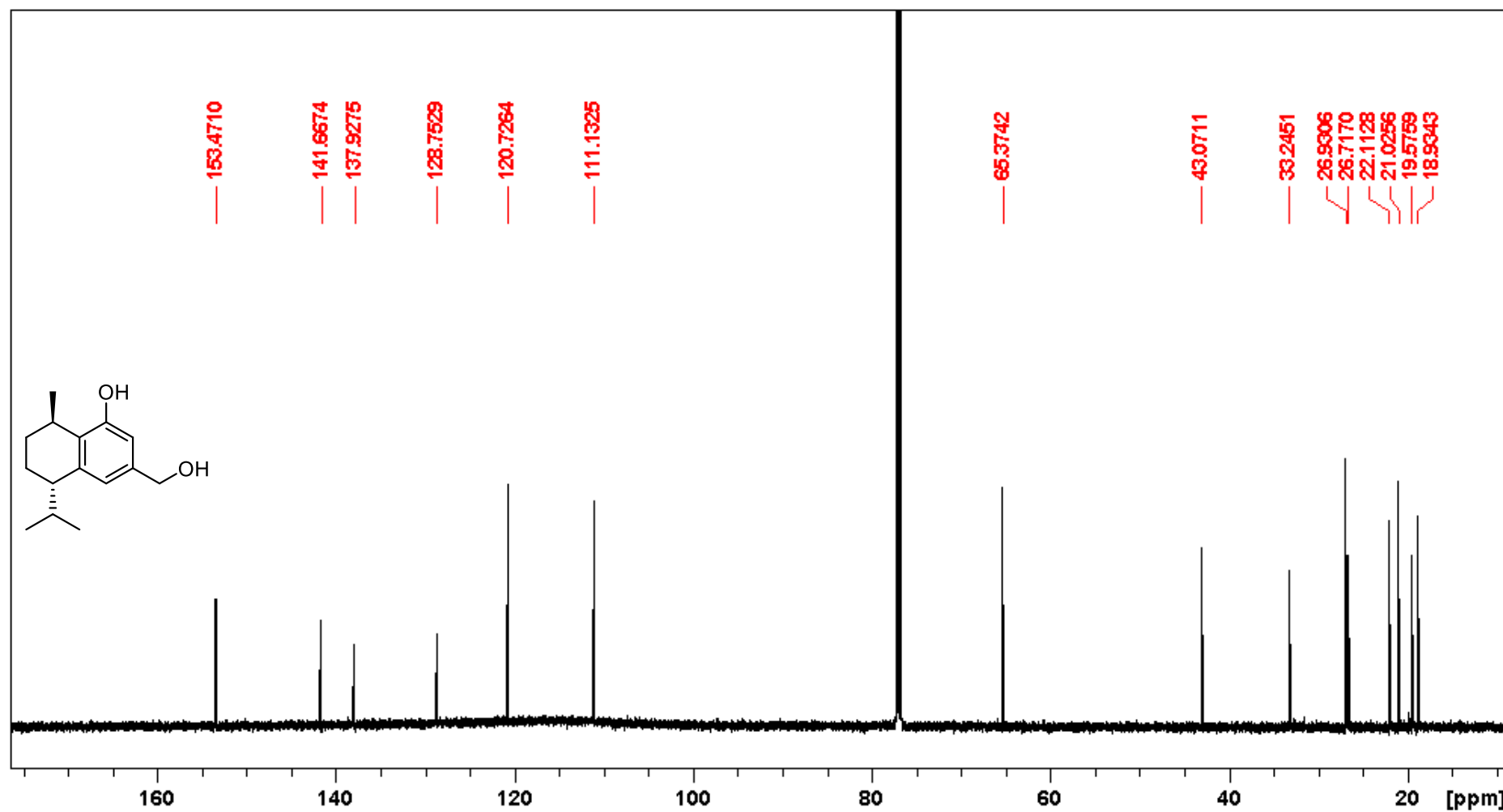


Figure S33. ¹³C NMR spectrum of (7S, 10R)-1 (150 MHz, CDCl₃).

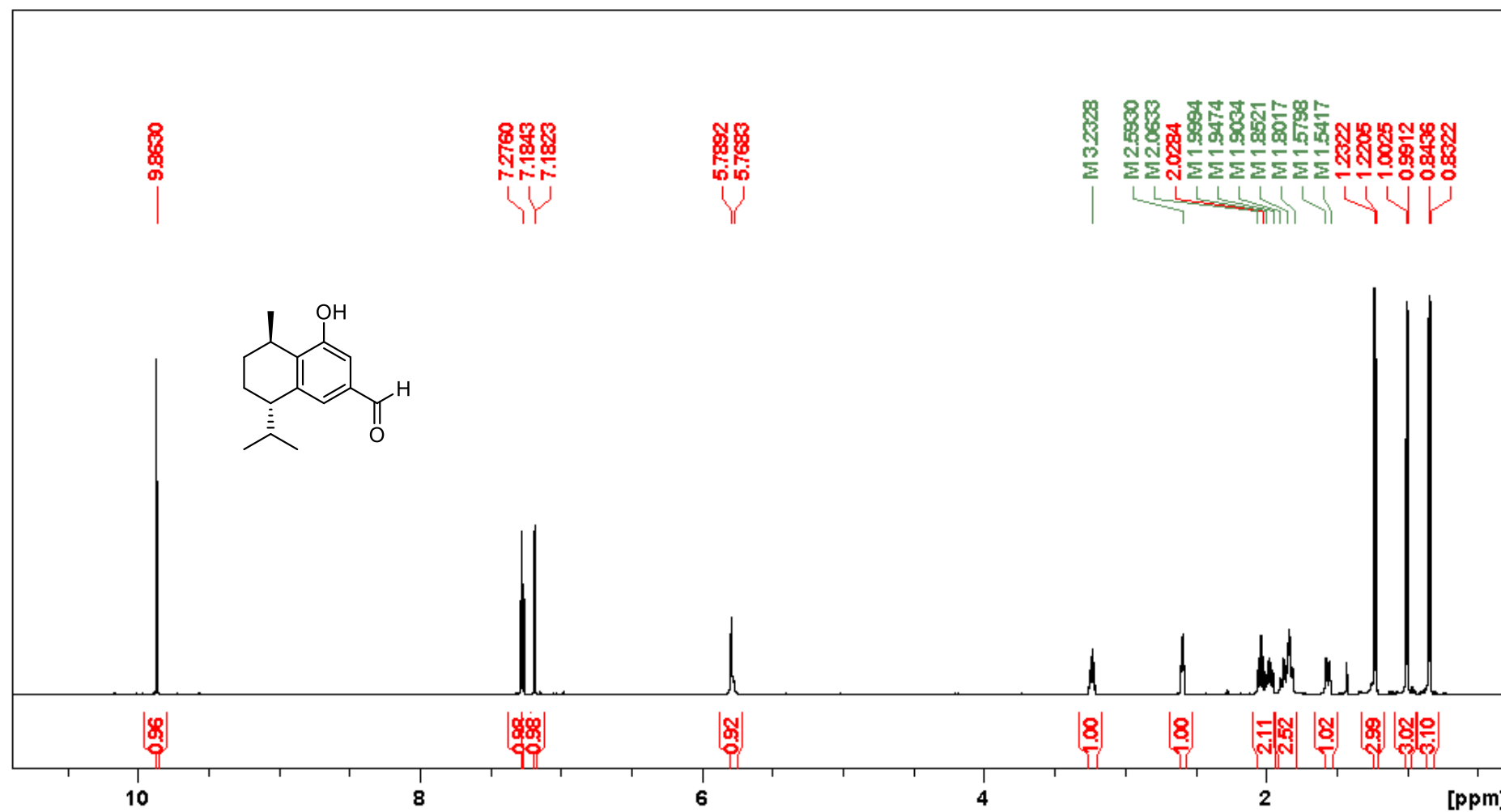


Figure S34. ¹H NMR spectrum of (7S, 10R)-2 (600 MHz, CDCl₃).

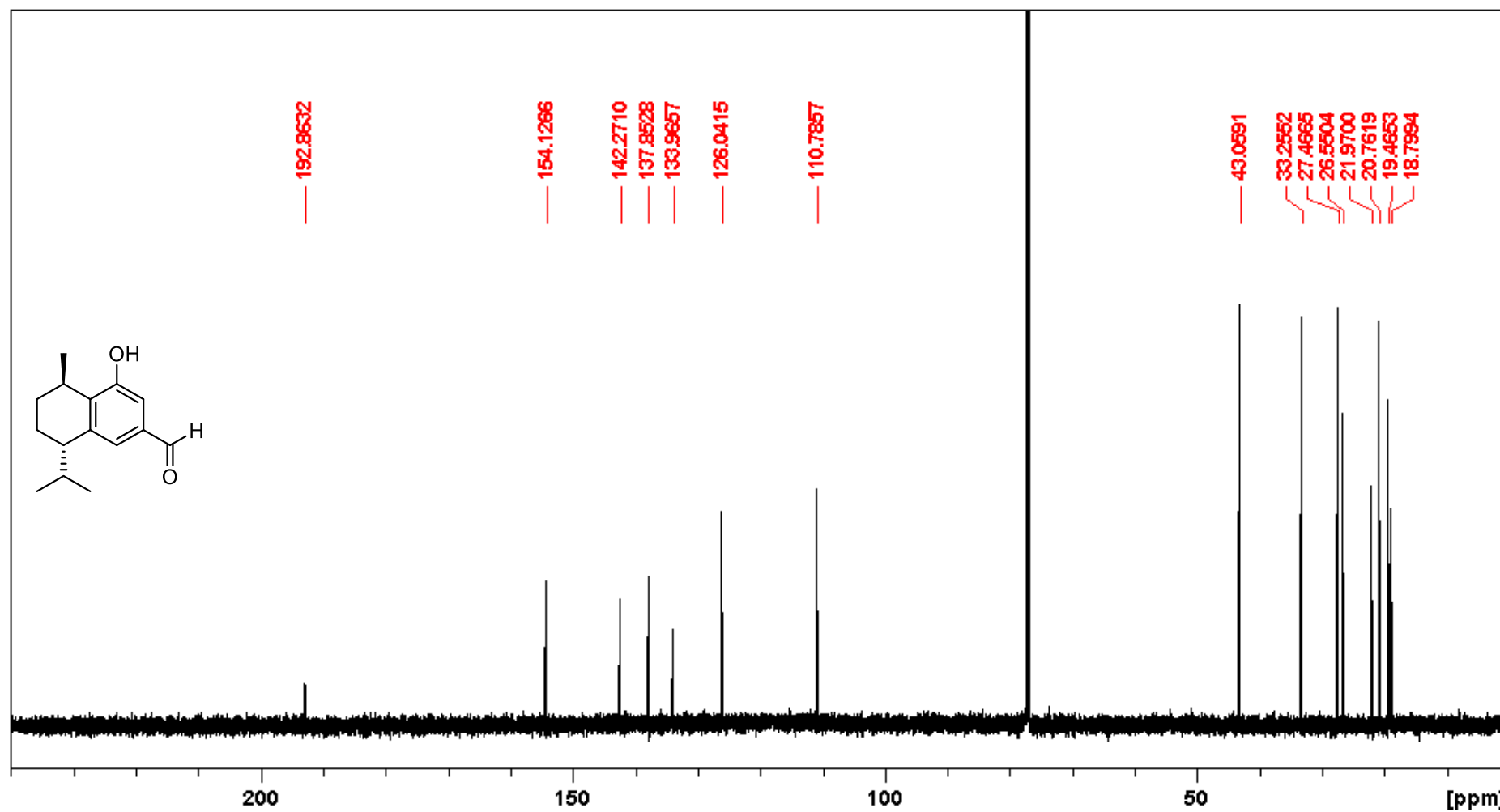


Figure S35. ^{13}C NMR spectrum of **(7S, 10R)-2** (150 MHz, CDCl_3).

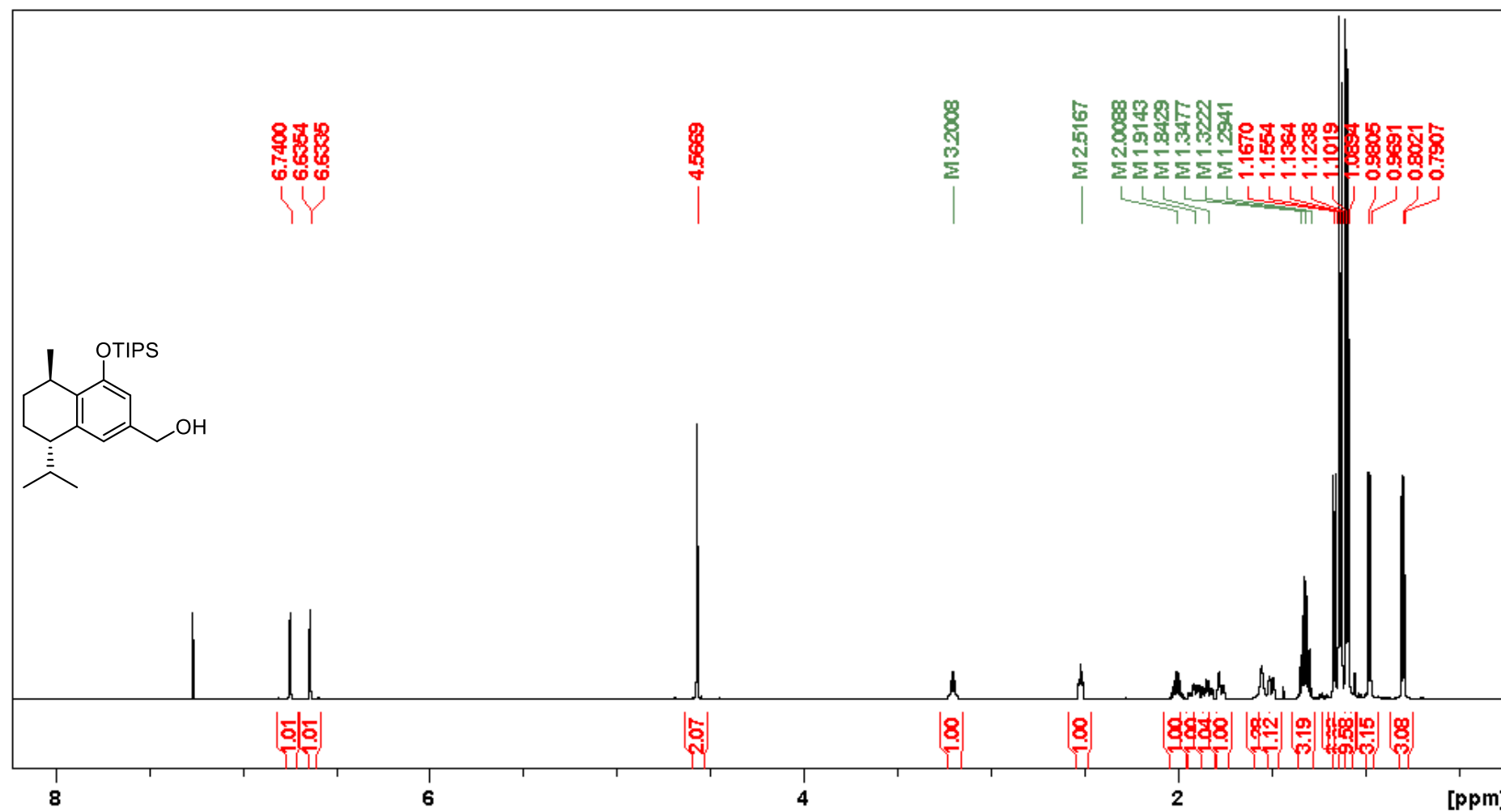


Figure S36. ^1H NMR spectrum of **26** (600 MHz, CDCl_3).

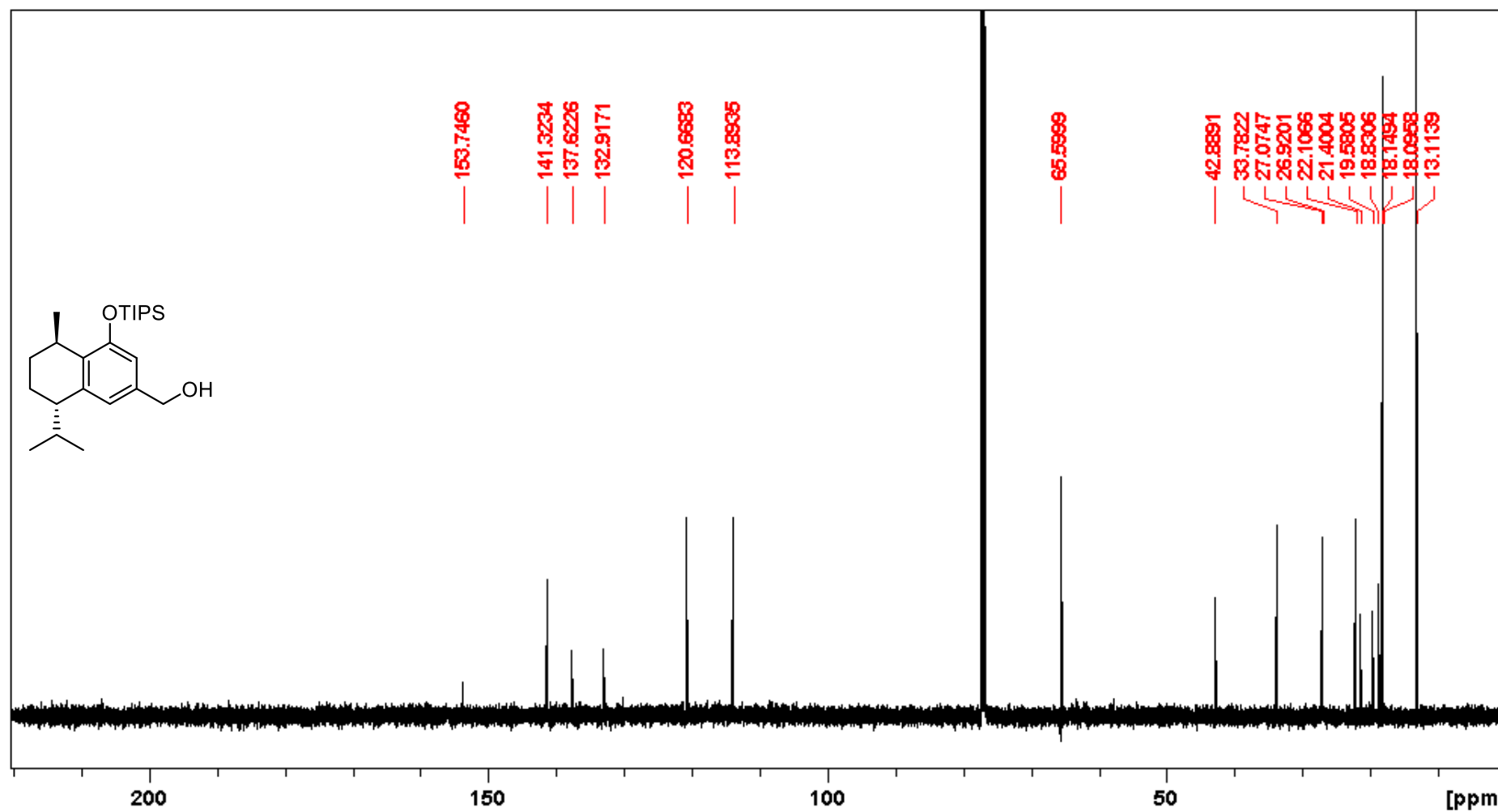


Figure S37. ^{13}C NMR spectrum of **26** (150 MHz, CDCl_3).

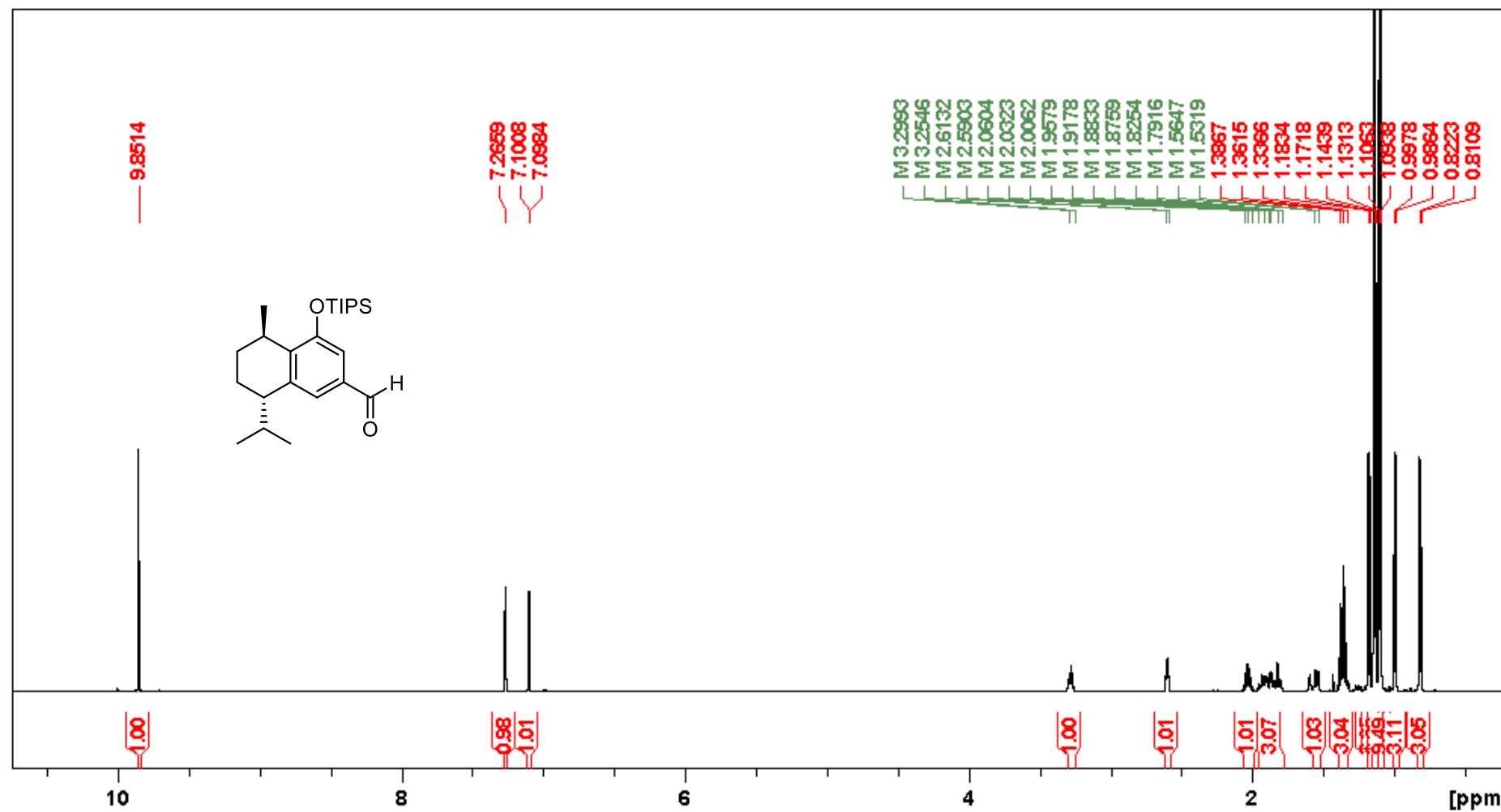


Figure S38. ¹H NMR spectrum of **27** (600 MHz, CDCl₃).

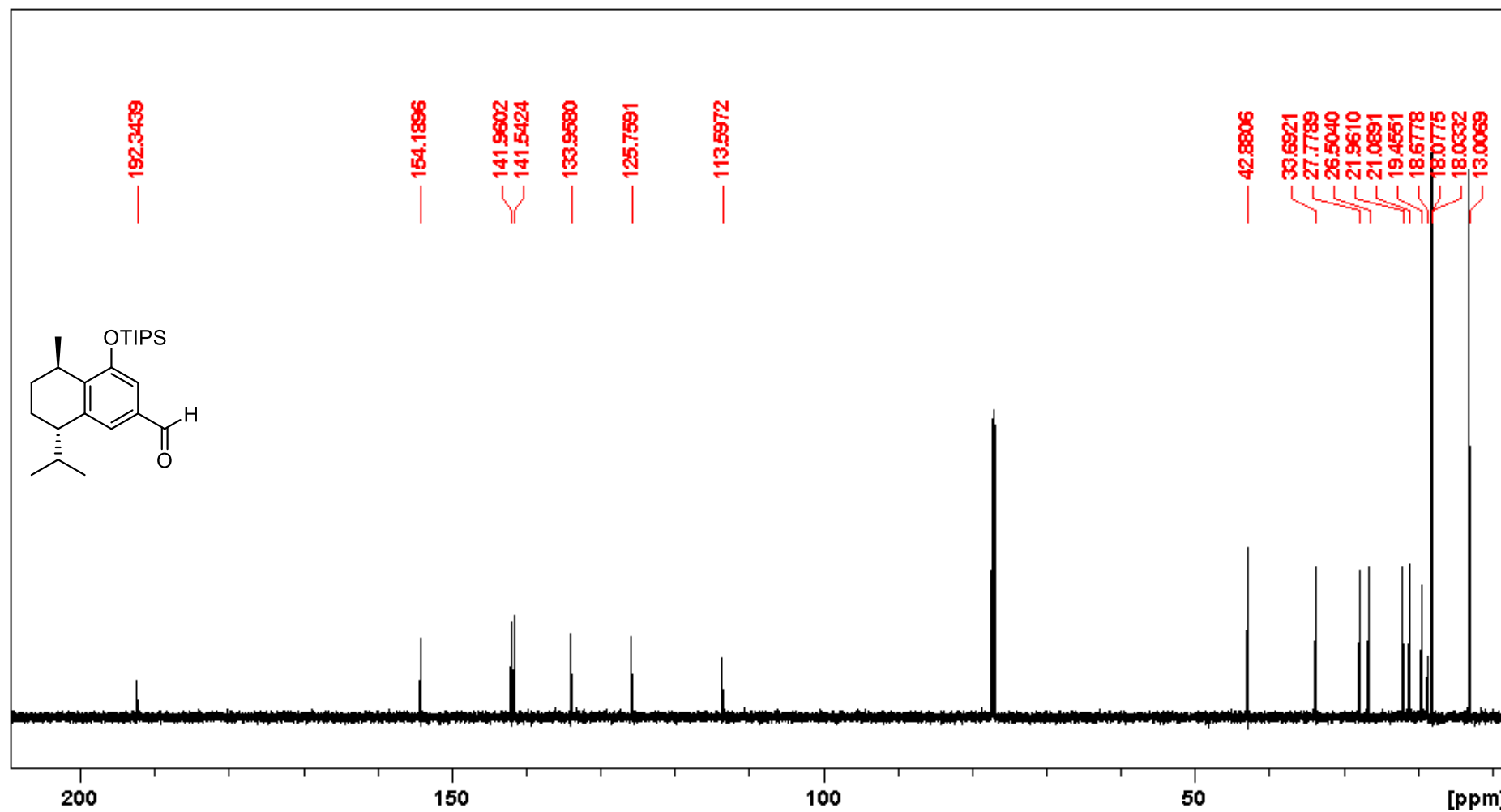


Figure S39. ^{13}C NMR spectrum of **27** (150 MHz, CDCl_3).

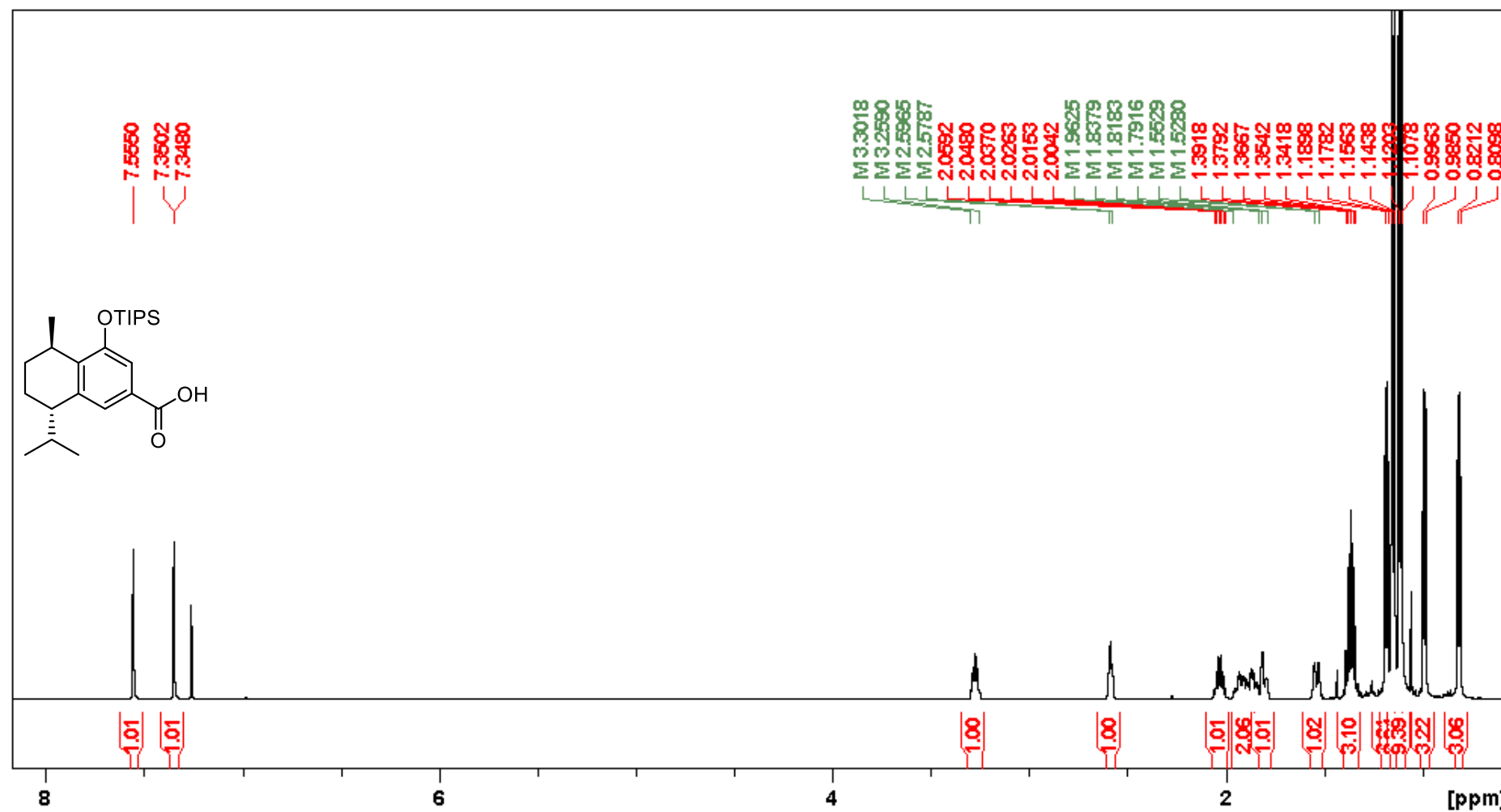
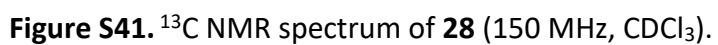


Figure S40. ¹H NMR spectrum of **28** (600 MHz, CDCl₃).



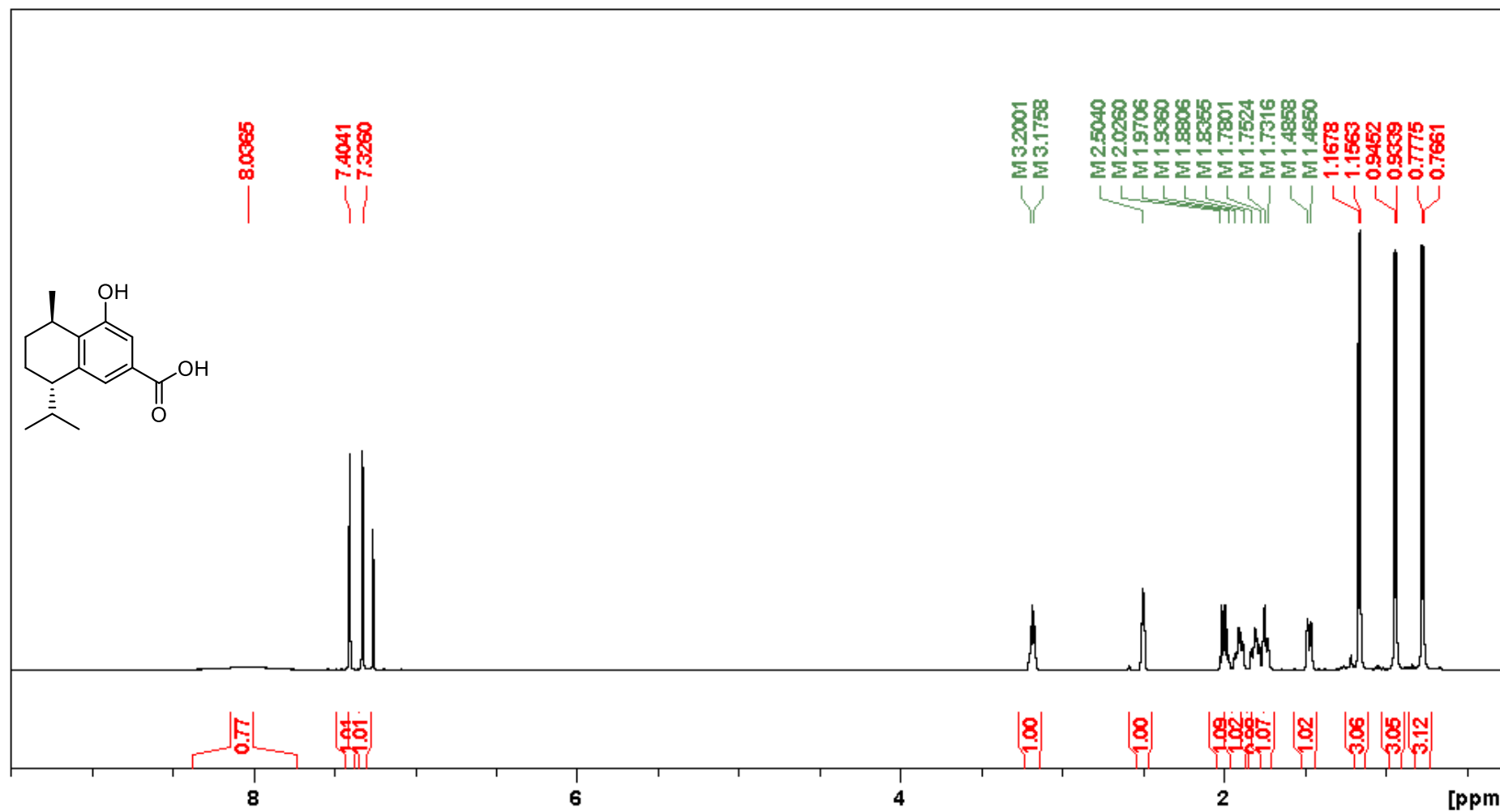


Figure S42. ¹H NMR spectrum of (7S, 10R)-3 (600 MHz, 1% DMSO-d₆/CDCl₃).

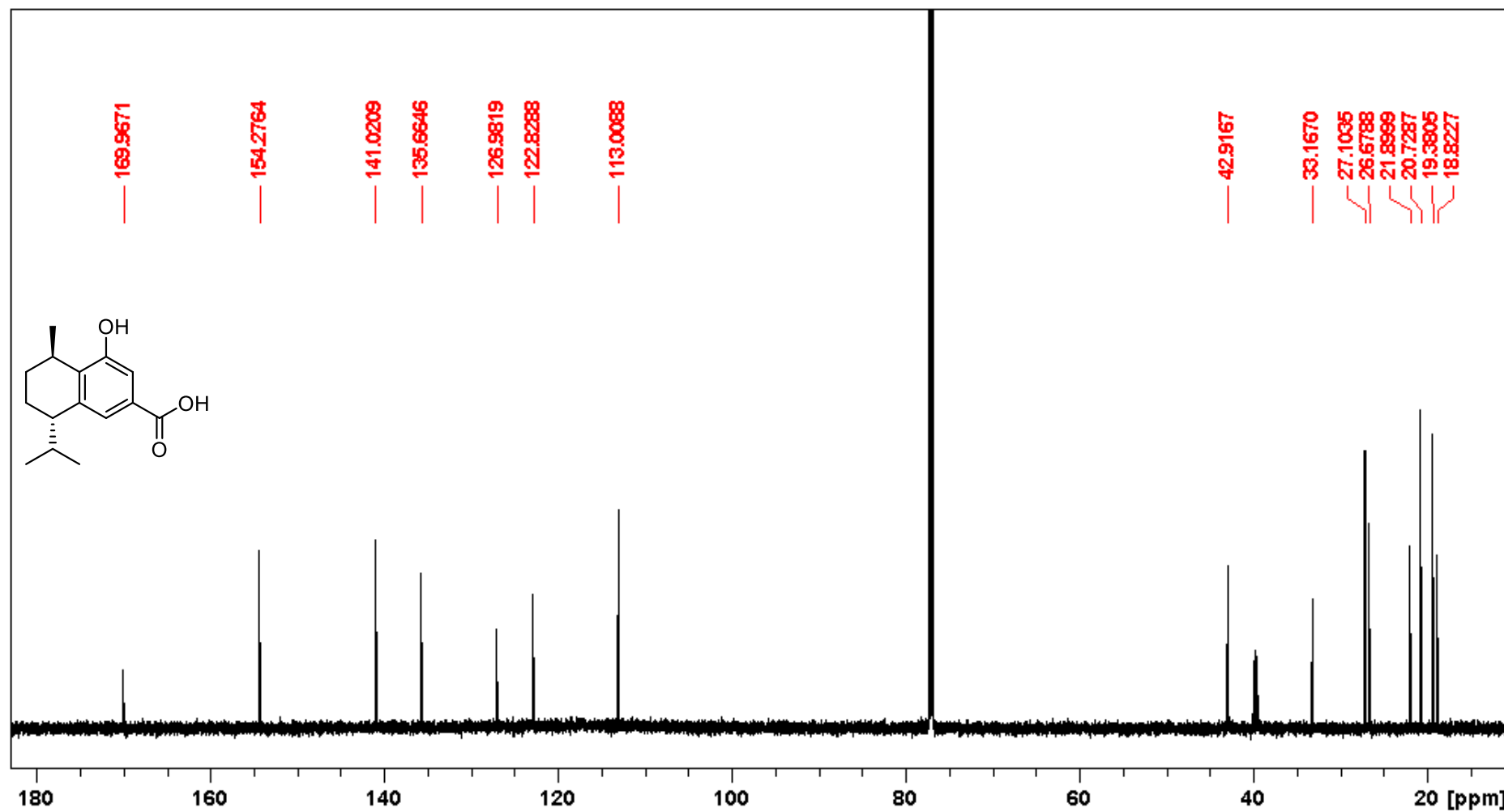


Figure S43. ^{13}C NMR spectrum of **(7S, 10R)-3** (150 MHz, 1% DMSO- d_6 /CDCl $_3$).