

Supporting Information

Synthesis and Antileishmanial Evaluation of Arylimidamide-Azole Hybrids Containing a Phenoxyalkyl Linker

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Table of Contents

Figures S1-S4: ¹ H and ¹³ C NMR spectra for compound 9a	S2-S5
Figures S5-S8: ¹ H and ¹³ C NMR spectra for compound 9b	S6-S9
Figures S9-S12: ¹ H and ¹³ C NMR spectra for compound 9c	S10-S13
Figures S13-S16: ¹ H and ¹³ C NMR spectra for compound 9d	S14-S17
Figures S17-S20: ¹ H and ¹³ C NMR spectra for compound 9e	S18-S21
Figures S21-S24: ¹ H and ¹³ C NMR spectra for compound 9f	S22-S25
Figures S25-S28: ¹ H and ¹³ C NMR spectra for compound 9g	S26-S29
Figures S29-S32: ¹ H and ¹³ C NMR spectra for compound 9h	S30-S33
Figures S33-S36: ¹ H and ¹³ C NMR spectra for compound 9i	S34-S37
Figures S37-S40: ¹ H and ¹³ C NMR spectra for compound 9j	S38-S41
Figures S41-S44: ¹ H and ¹³ C NMR spectra for compound 9k	S42-S45
Figures S45-S48: ¹ H and ¹³ C NMR spectra for compound 9l	S46-S49
Figures S49-S52: ¹ H and ¹³ C NMR spectra for compound 9m	S50-S53
Figures S53-S56: ¹ H and ¹³ C NMR spectra for compound 9n	S54-S57
Figures S57-S60: ¹ H and ¹³ C NMR spectra for compound 17a	S58-S61
Figures S61-S64: ¹ H and ¹³ C NMR spectra for compound 17b	S62-S65
Figures S65-S68: ¹ H and ¹³ C NMR spectra for compound 17c	S66-S69
Figures S69-S72: ¹ H and ¹³ C NMR spectra for compound 24a	S70-S73
Figures S73-S76: ¹ H and ¹³ C NMR spectra for compound 24b	S74-S77
Figures S77-S80: ¹ H and ¹³ C NMR spectra for compound 24c	S78-S81
Figures S81-S84: ¹ H and ¹³ C NMR spectra for compound 28	S82-S85

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9a 2 1 C:\Bruker\TopSpin4.0.8\examdata

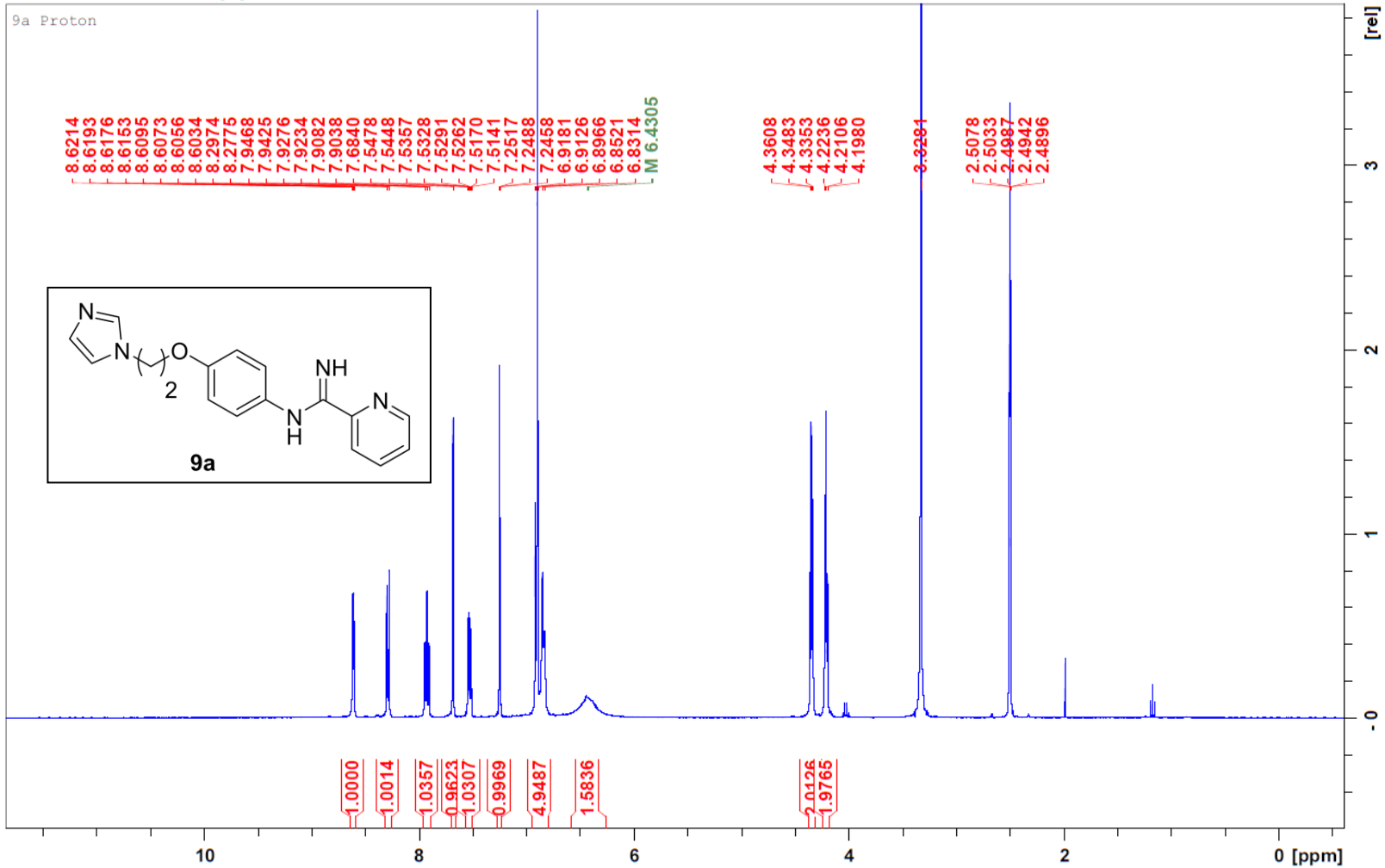


Figure S1. ^1H NMR spectrum of compound **9a** (400 MHz, $\text{DMSO-}d_6$).

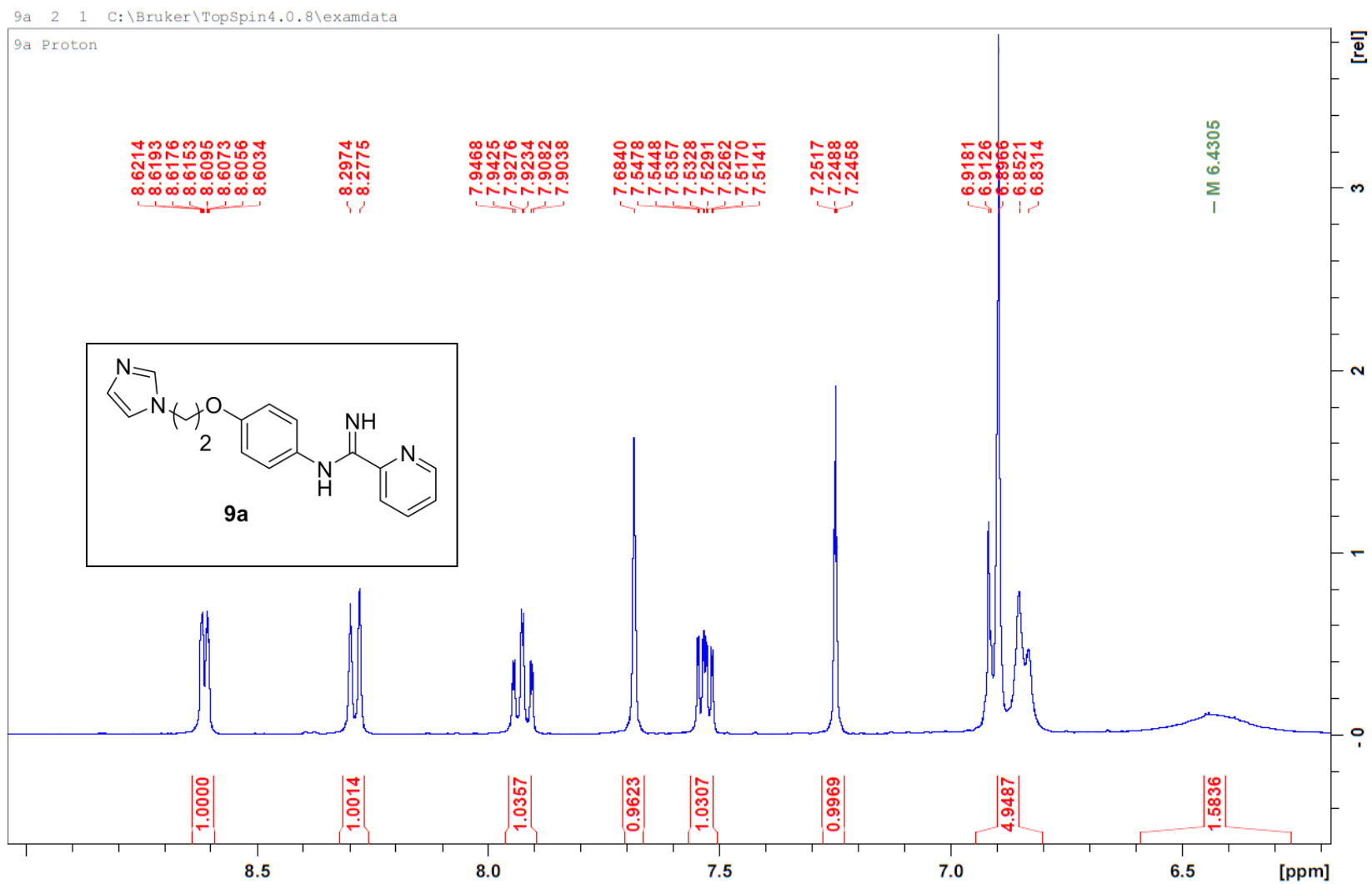


Figure S2. Expanded ^1H NMR spectrum of compound **9a** (400 MHz, $\text{DMSO-}d_6$).

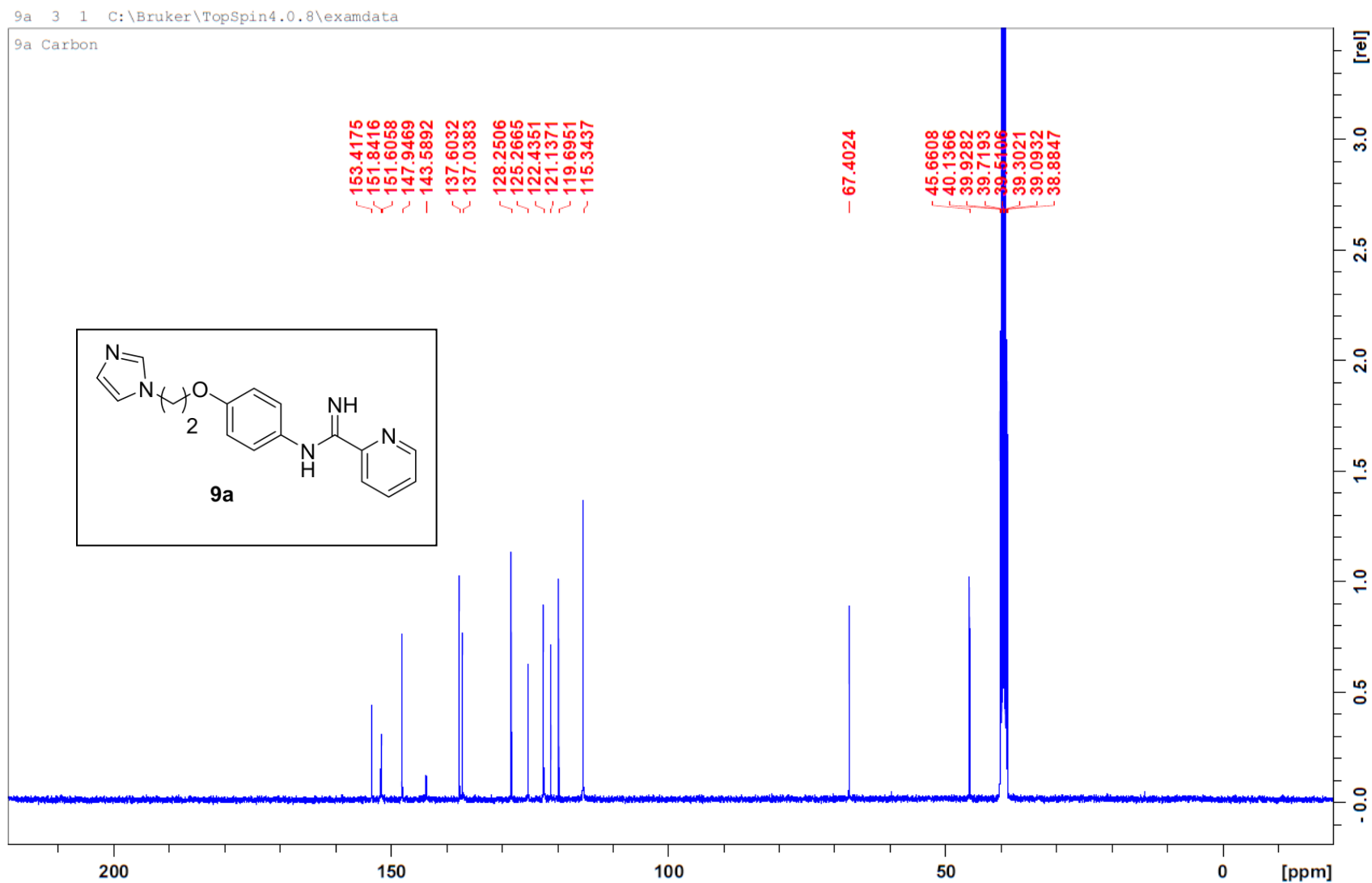


Figure S3. ^{13}C NMR spectrum of compound **9a** (100 MHz, $\text{DMSO-}d_6$).

9a 3 1 C:\Bruker\TopSpin4.0.8\examdata

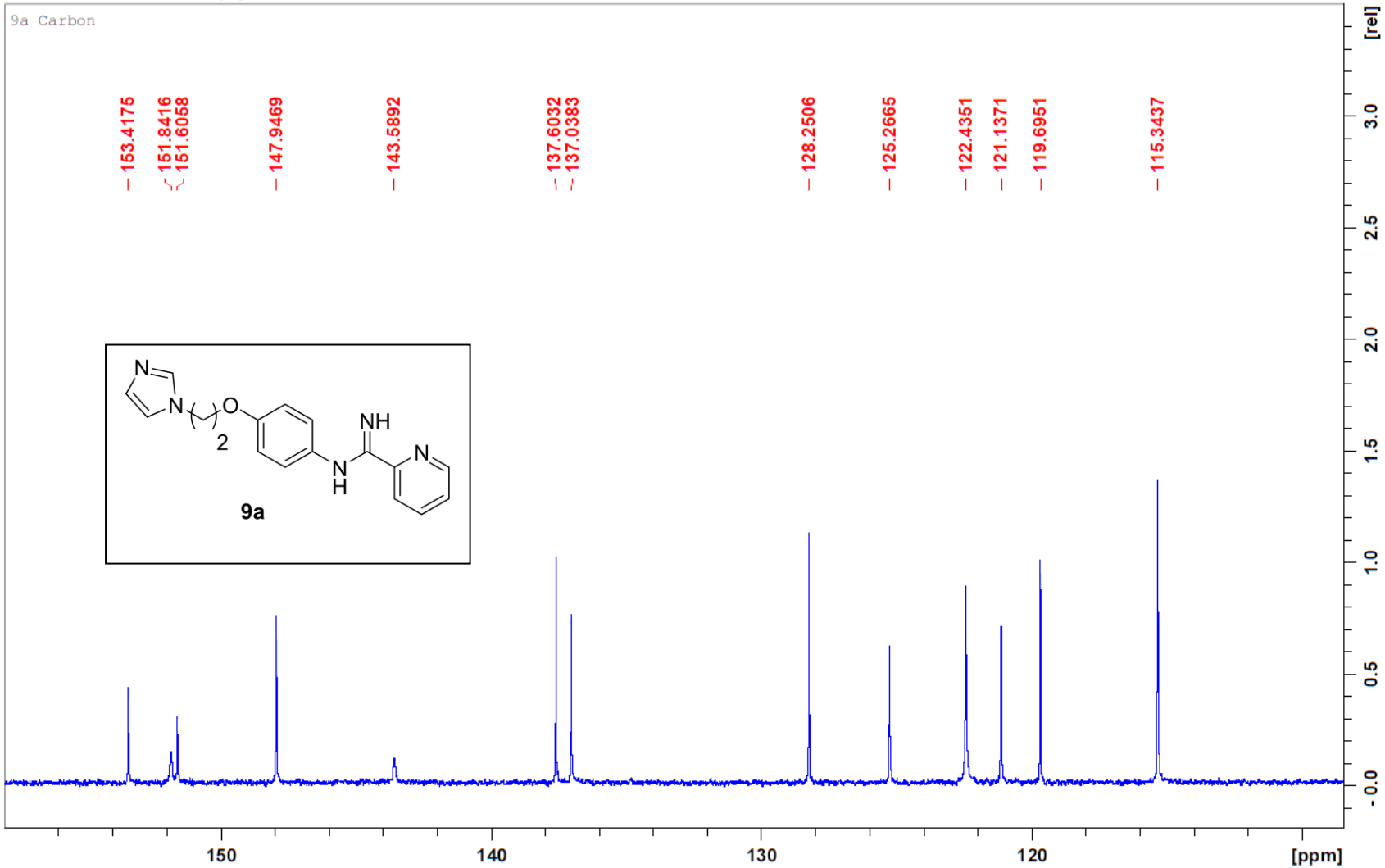


Figure S4. Expanded ^{13}C NMR spectrum of compound **9a** (100 MHz, $\text{DMSO-}d_6$).

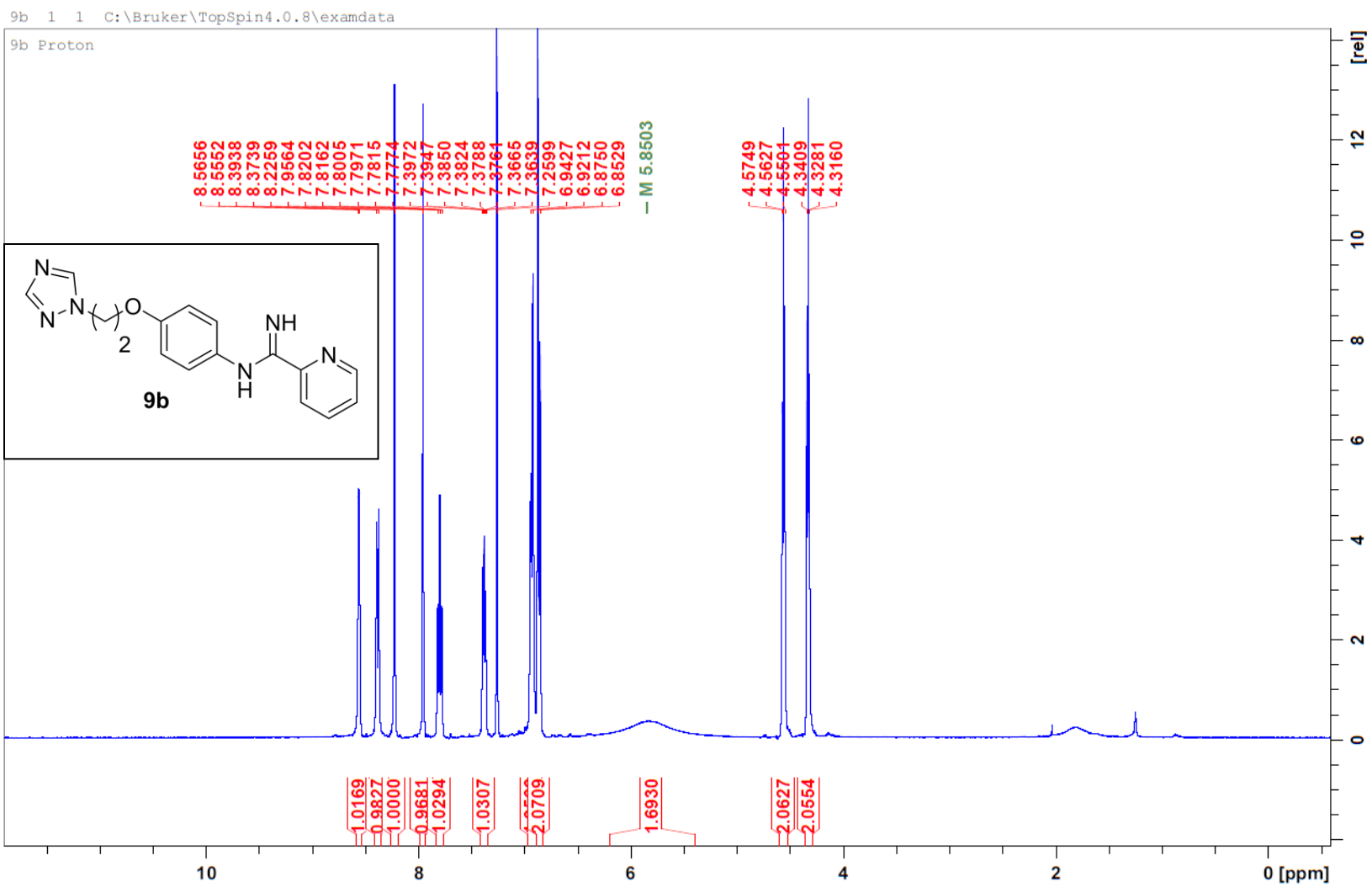


Figure S5. ¹H NMR spectrum of compound **9b** (400 MHz, CDCl₃).

9b 1 1 C:\Bruker\TopSpin4.0.8\examdata

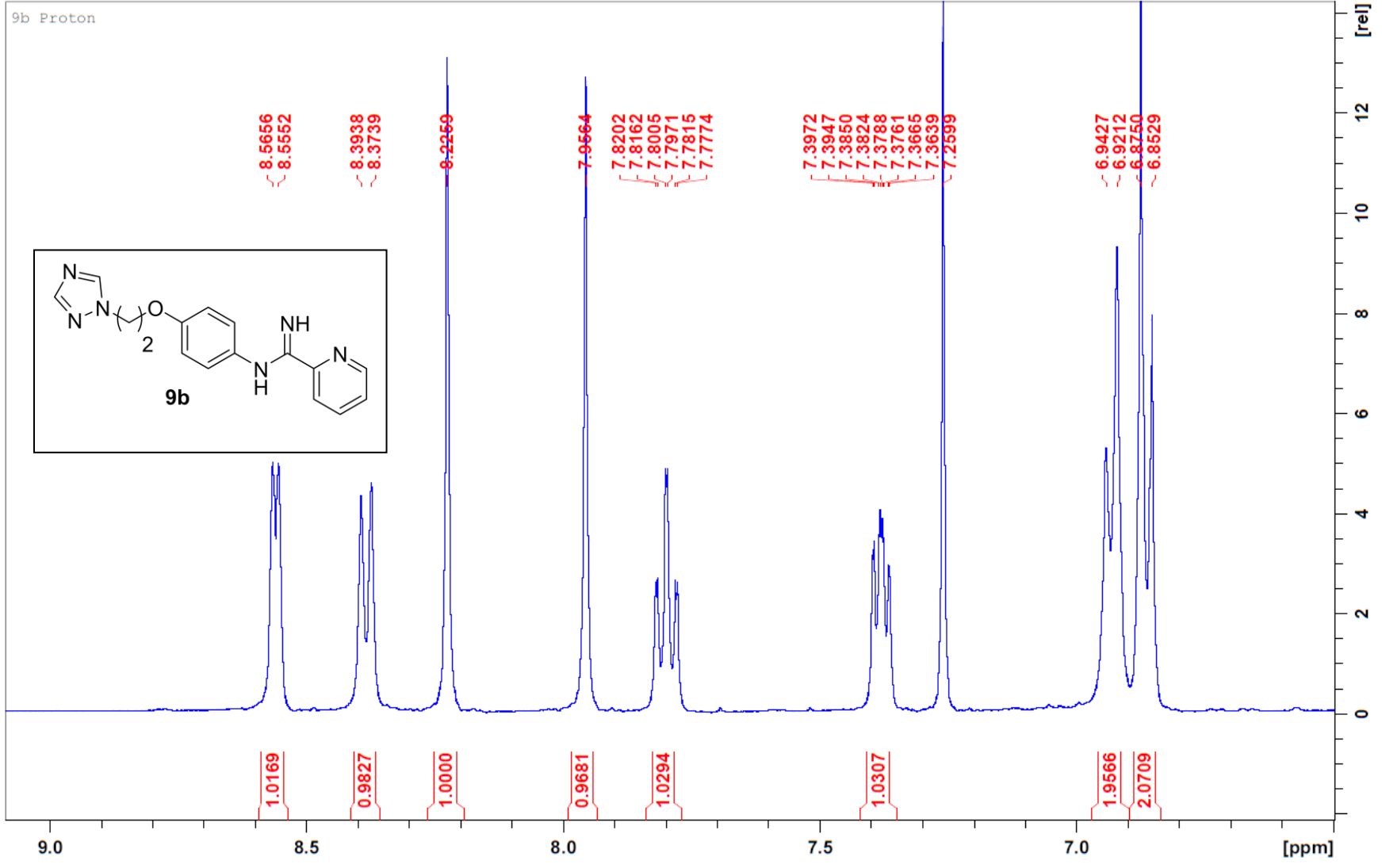


Figure S6. Expanded ¹H NMR spectrum of compound **9b** (400 MHz, CDCl₃).

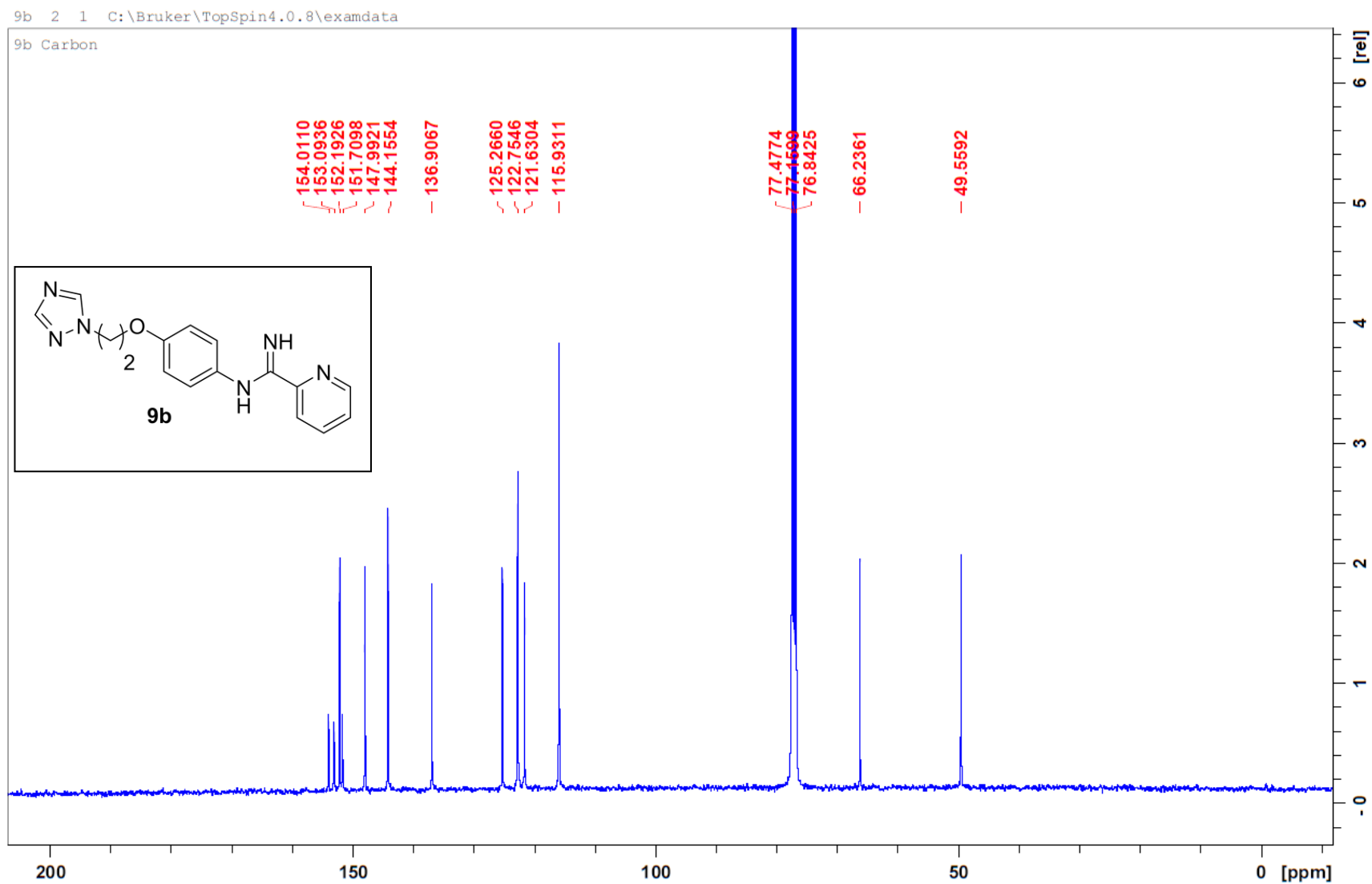


Figure S7. ^{13}C NMR spectrum of compound **9b** (100 MHz, CDCl_3).

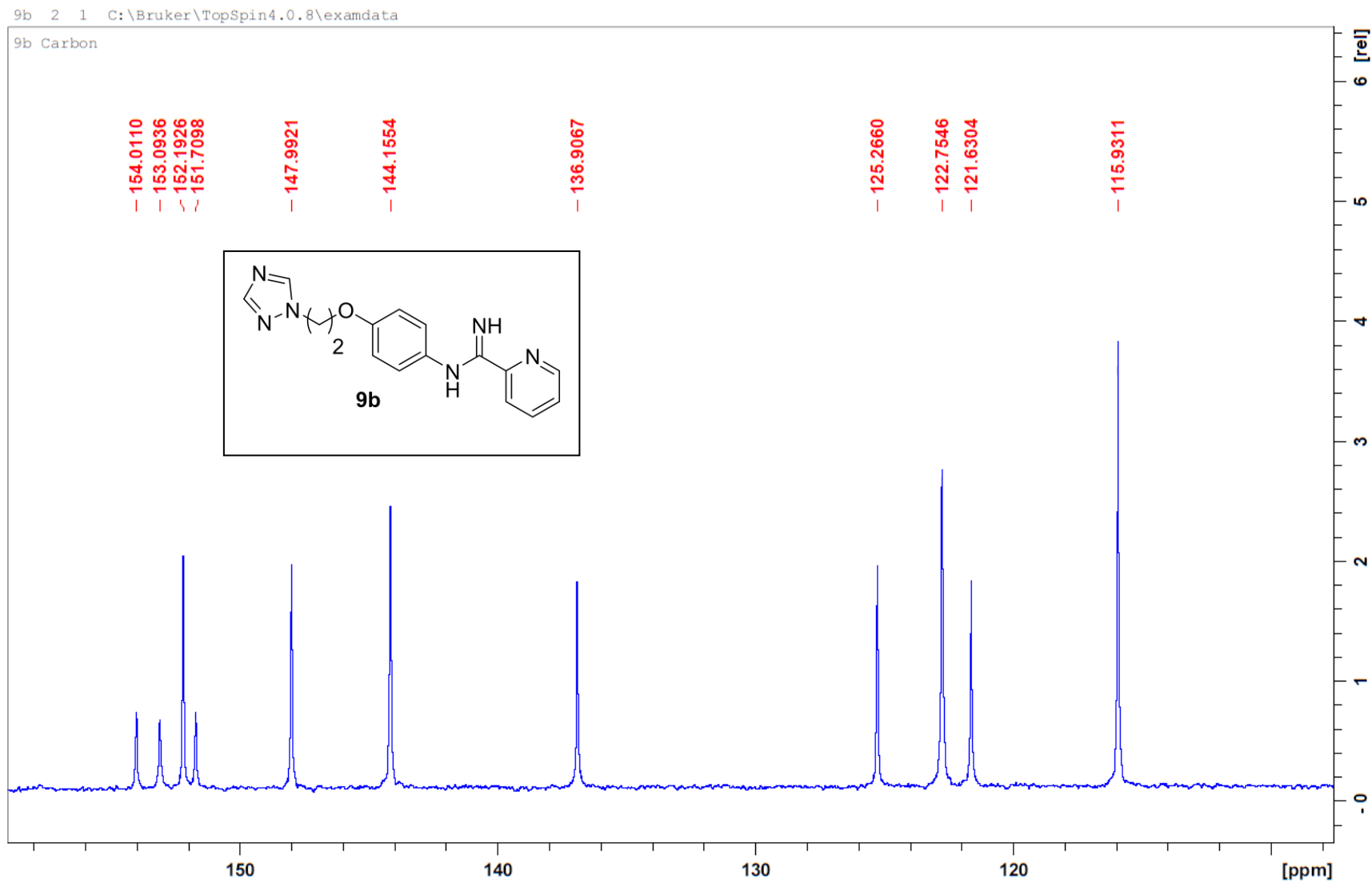


Figure S8. Expanded ^{13}C NMR spectrum of compound **9b** (100 MHz, CDCl_3).

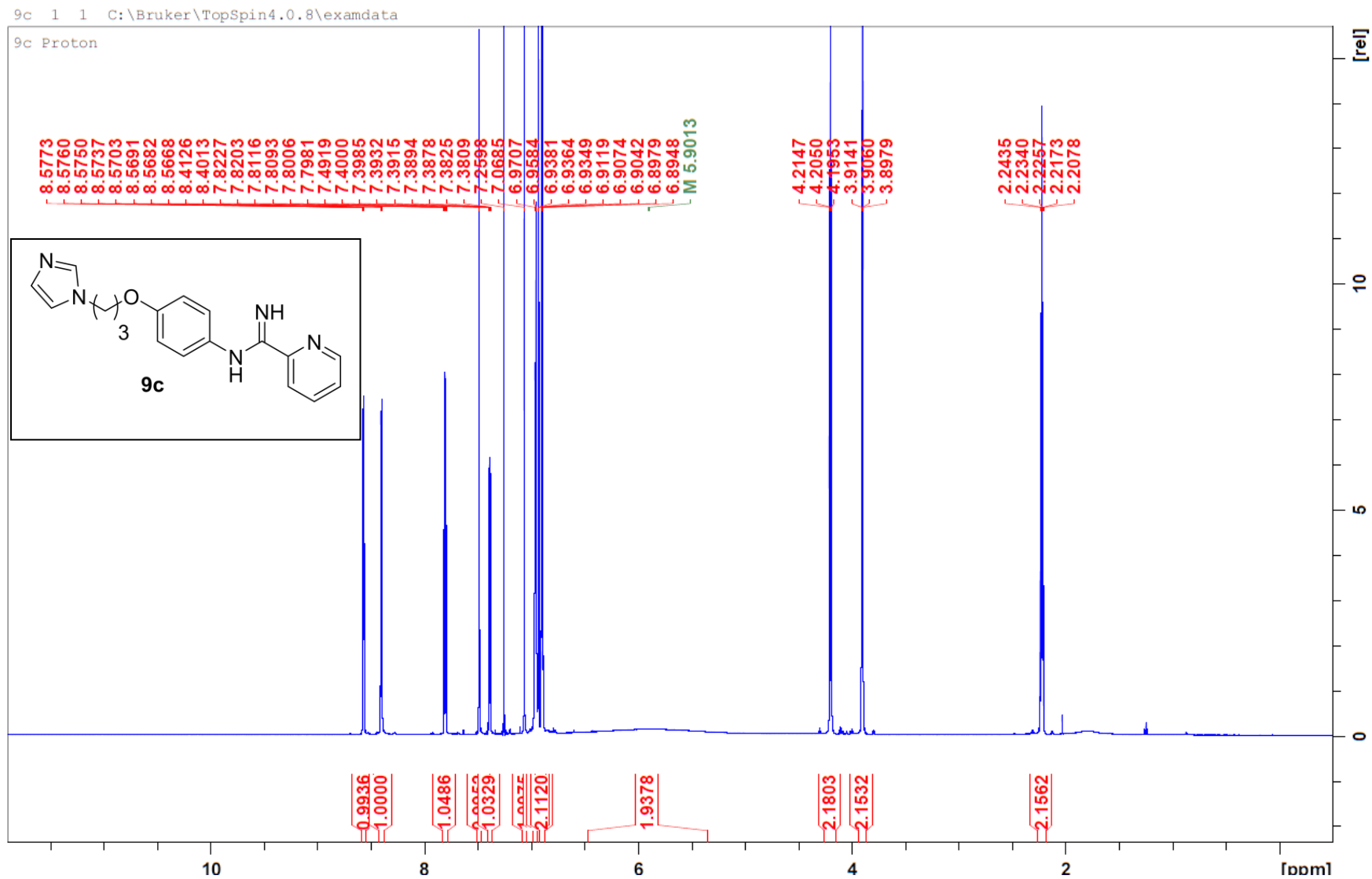


Figure S9. ^1H NMR spectrum of compound **9c** (700 MHz, CDCl_3).

9c 1 1 C:\Bruker\TopSpin4.0.8\examdata

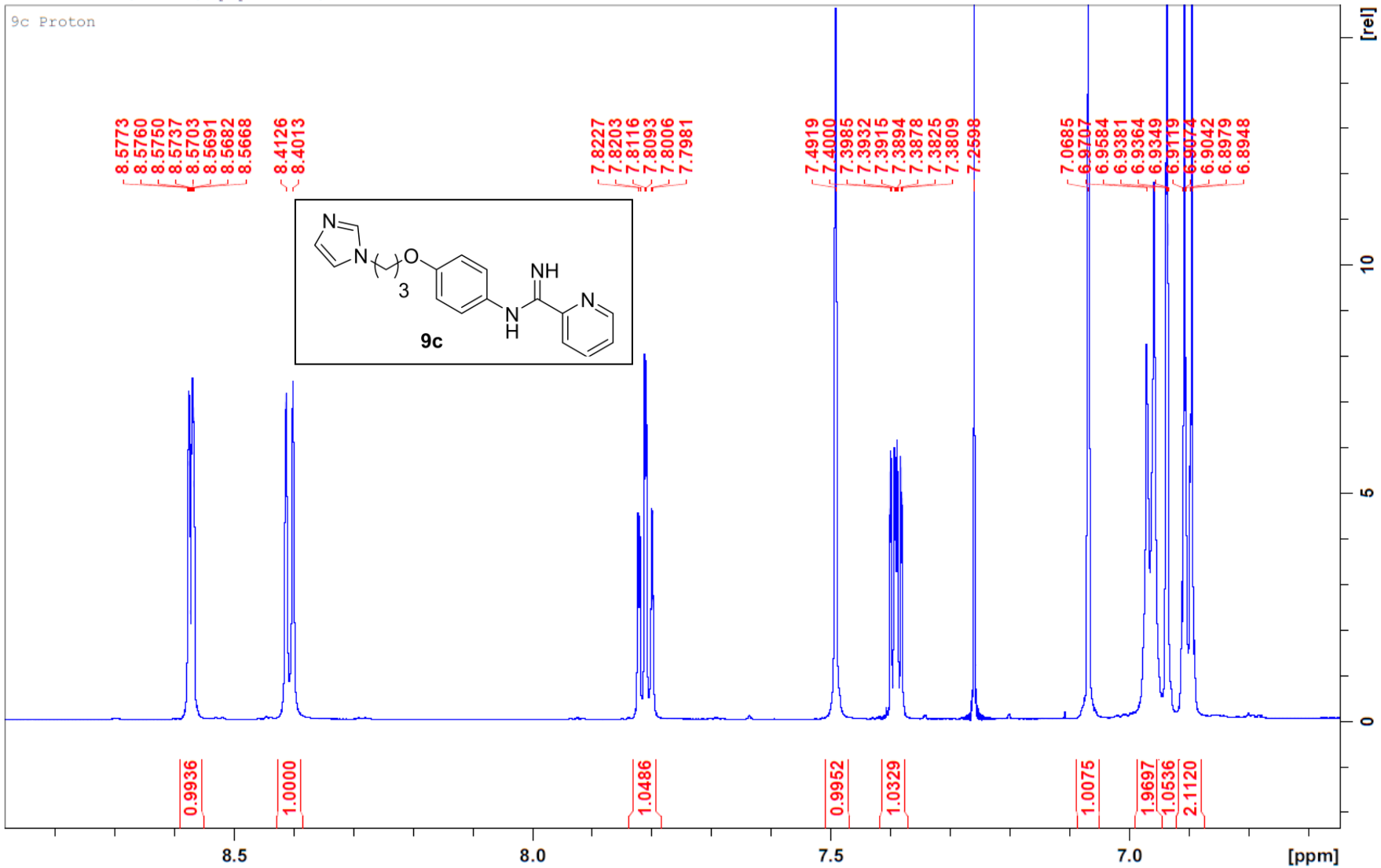


Figure S10. Expanded ^1H NMR spectrum of compound **9c** (700 MHz, CDCl_3).

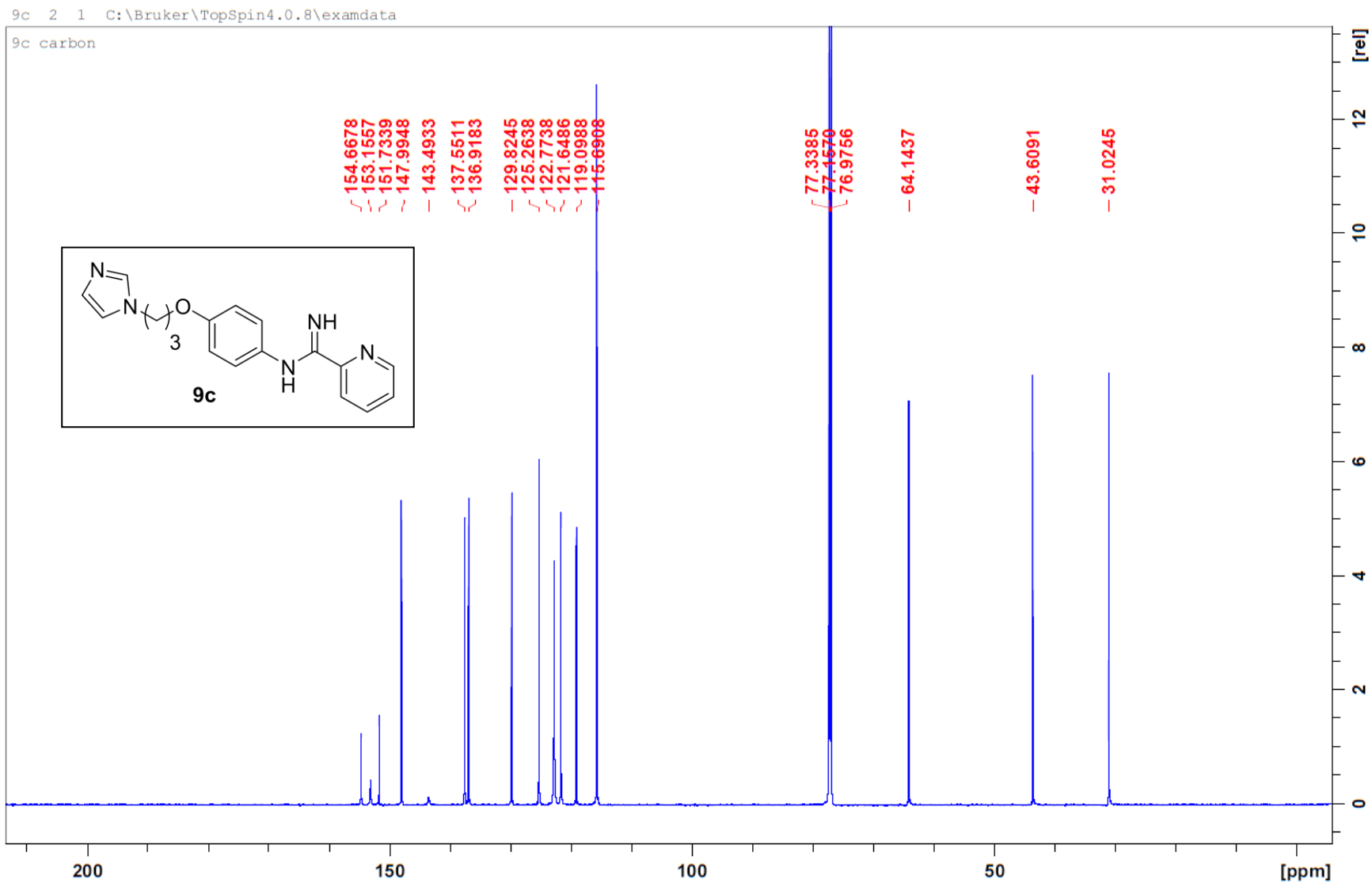


Figure S11. ^{13}C NMR spectrum of compound **9c** (176 MHz, CDCl_3).

9c 2 1 C:\Bruker\TopSpin4.0.8\examdata

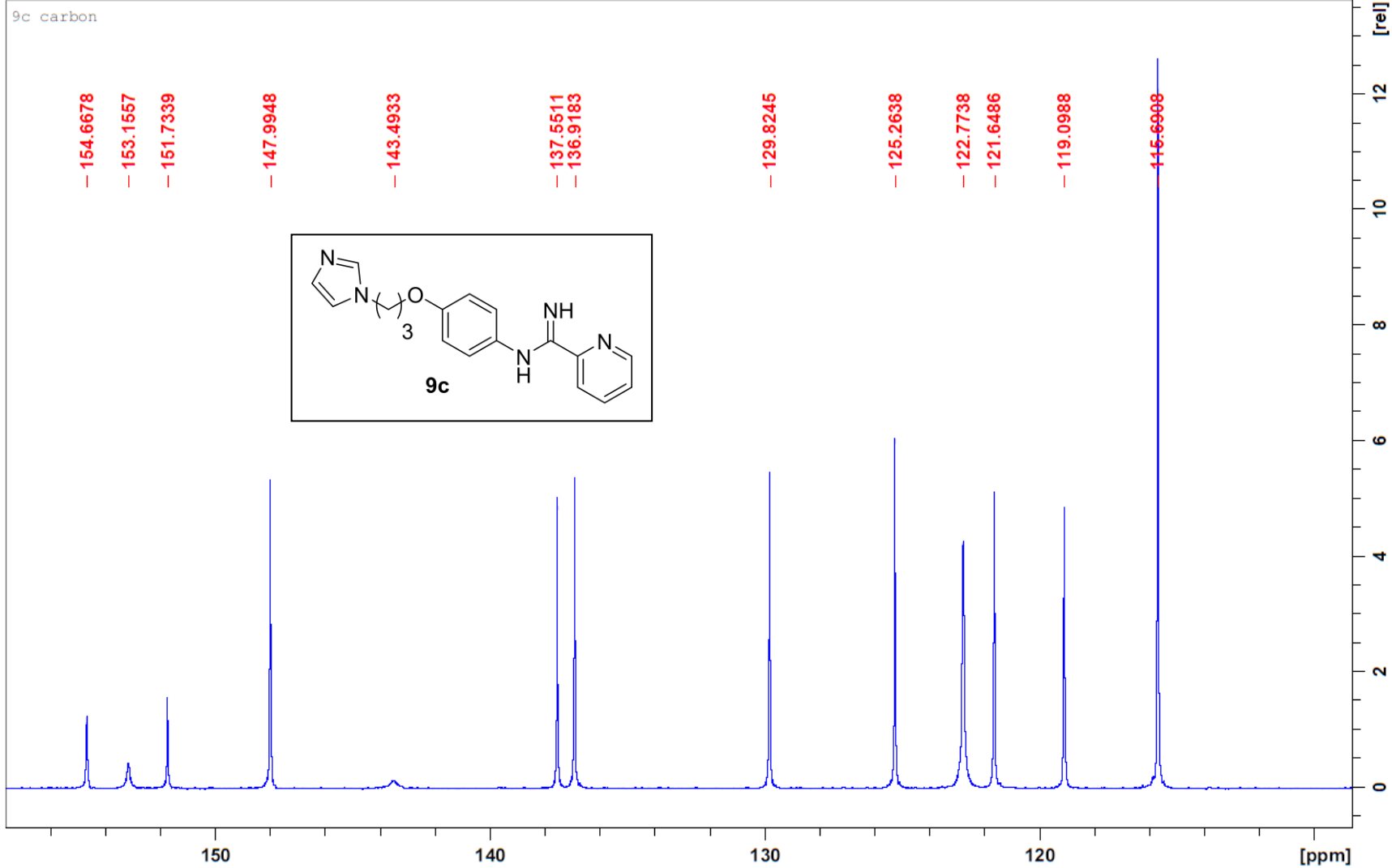


Figure S12. Expanded ^{13}C NMR spectrum of compound **9c** (176 MHz, CDCl_3).

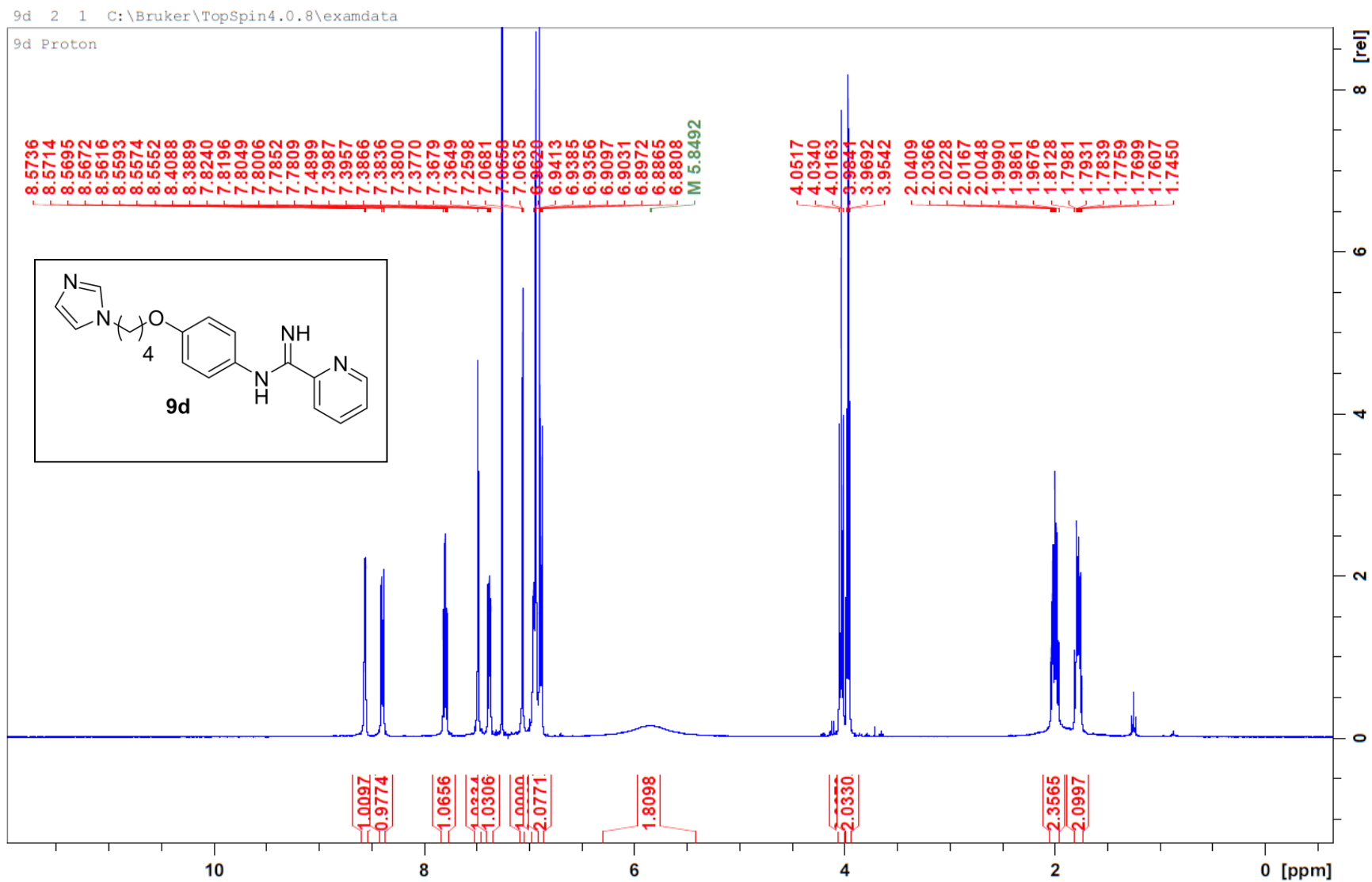


Figure S13. ¹H NMR spectrum of compound **9d** (400 MHz, CDCl₃).

9d 2 1 C:\Bruker\TopSpin4.0.8\examdata

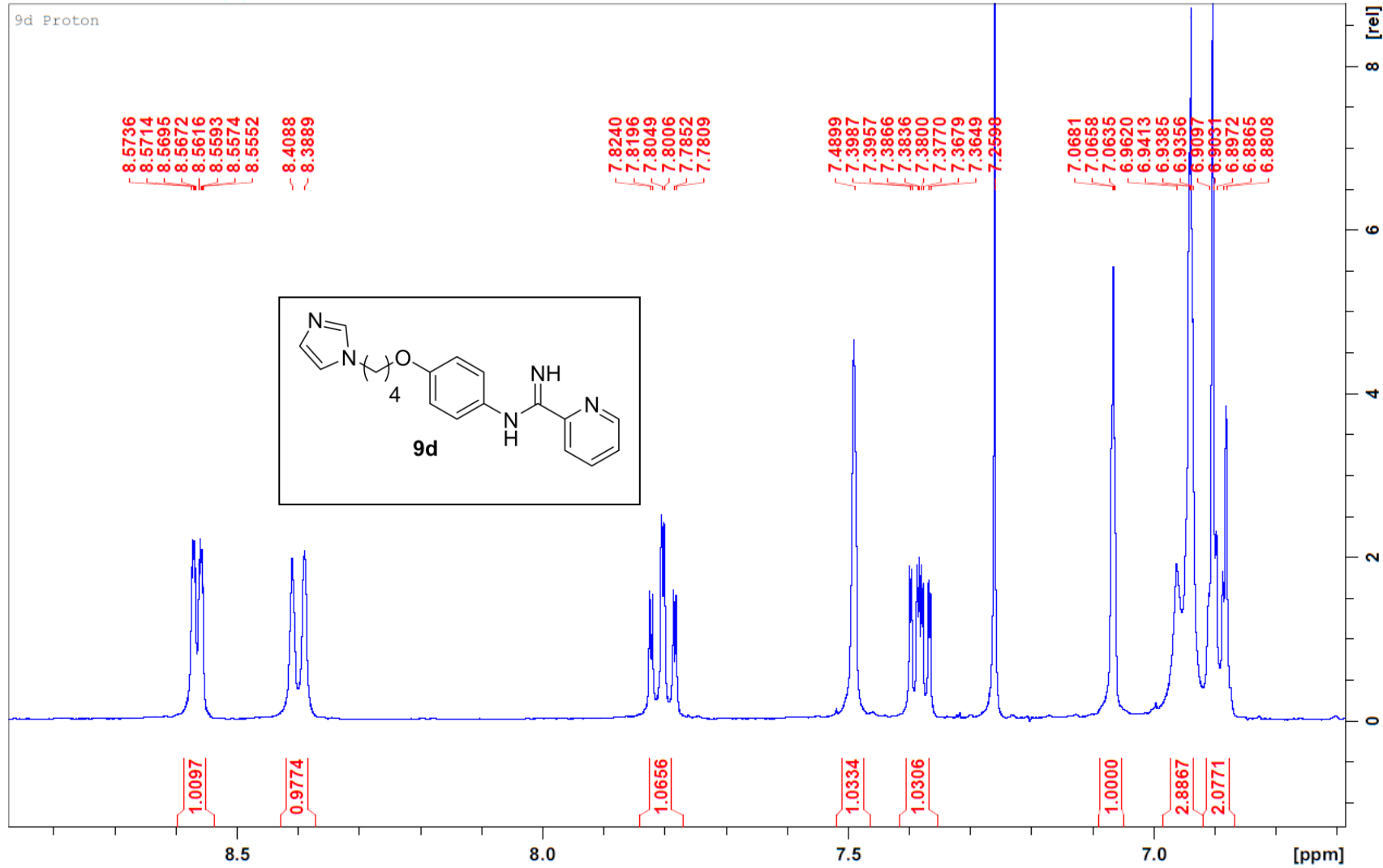


Figure S14. Expanded ^1H NMR spectrum of compound **9d** (400 MHz, CDCl_3).

9d 3 1 C:\Bruker\TopSpin4.0.8\examdata

9d Carbon

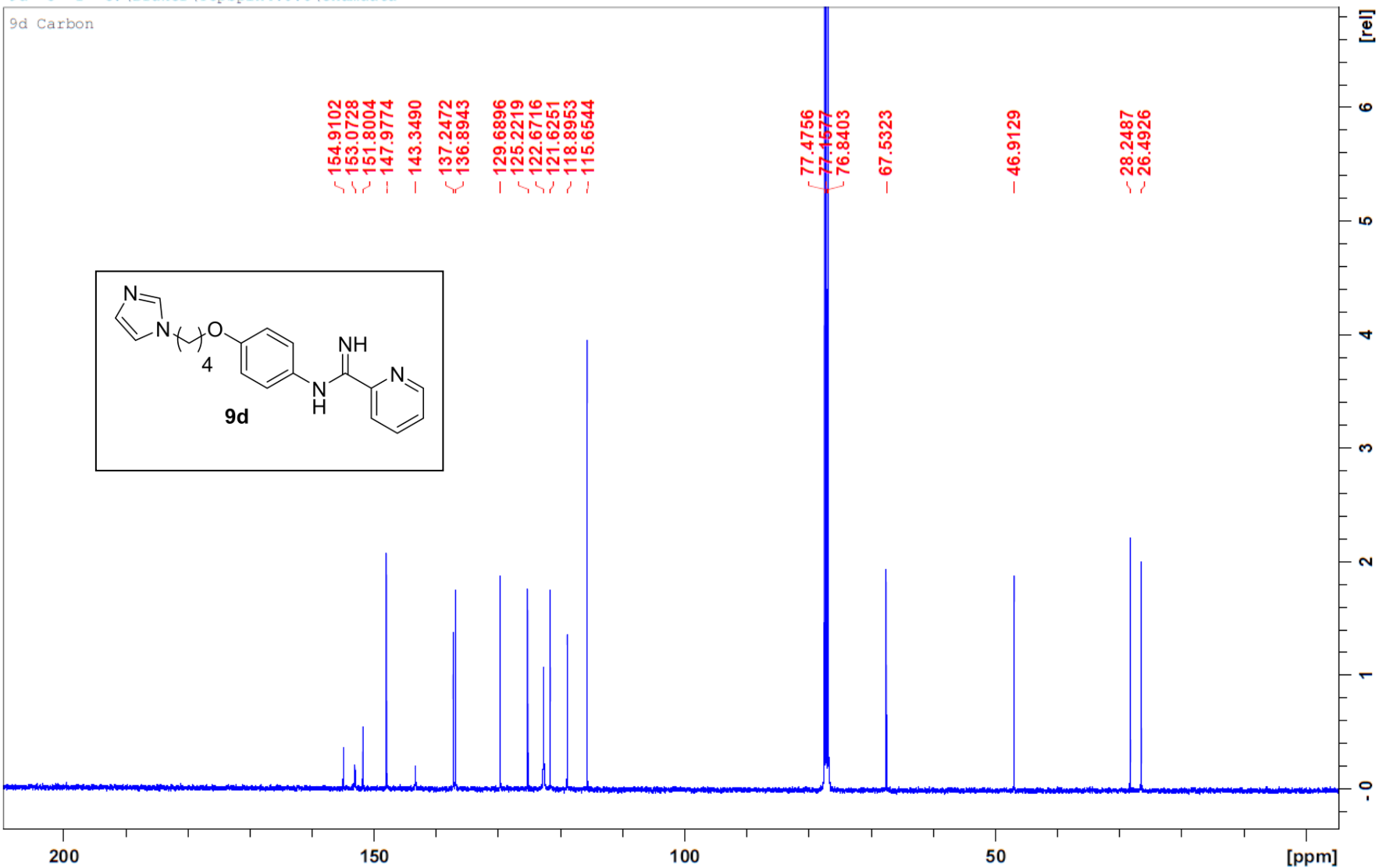


Figure S15. ^{13}C NMR spectrum of compound **9d** (100 MHz, CDCl_3).

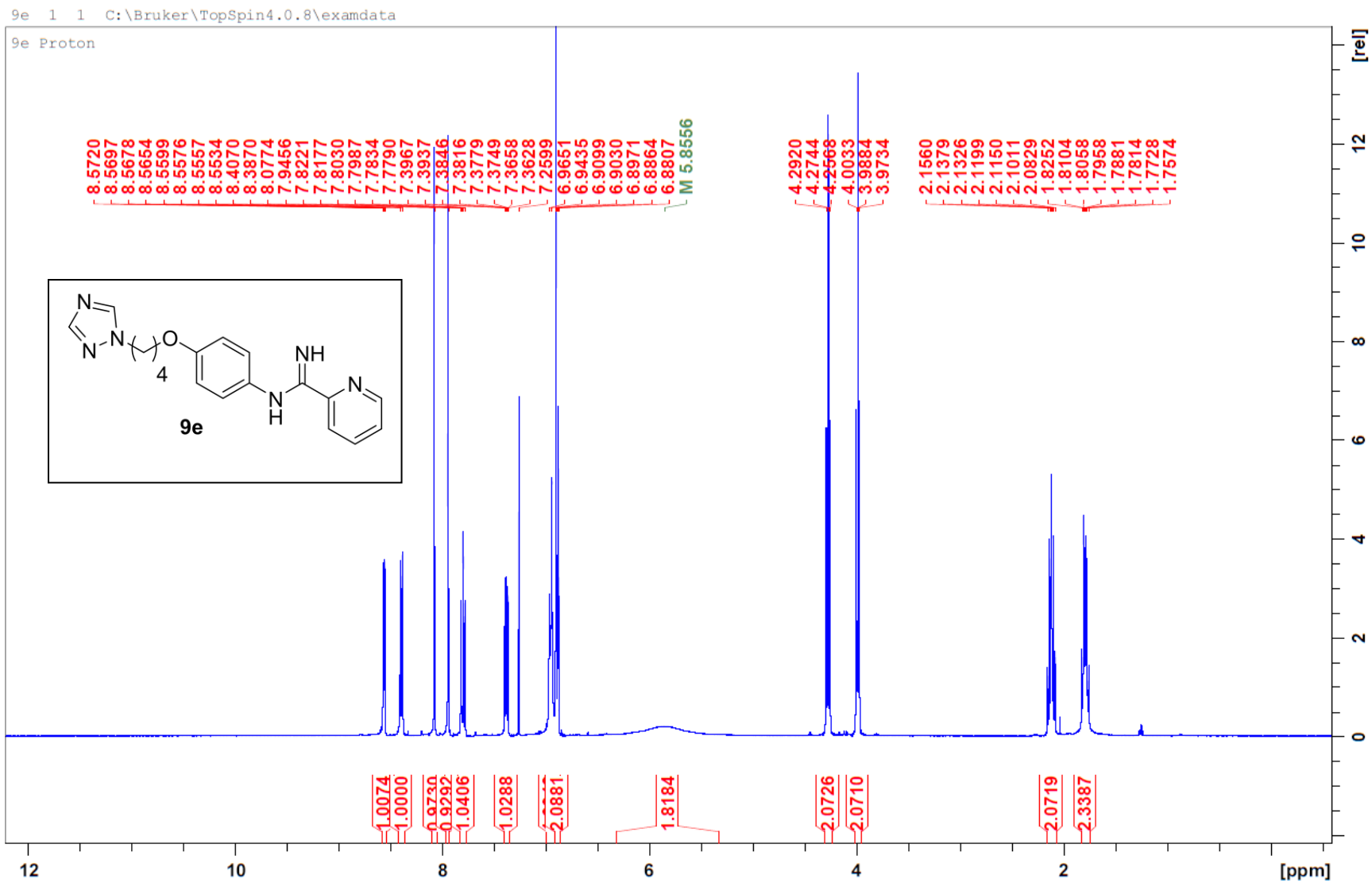


Figure S17. ¹H NMR spectrum of compound **9e** (400 MHz, CDCl₃).

9e 1 1 C:\Bruker\TopSpin4.0.8\examdata

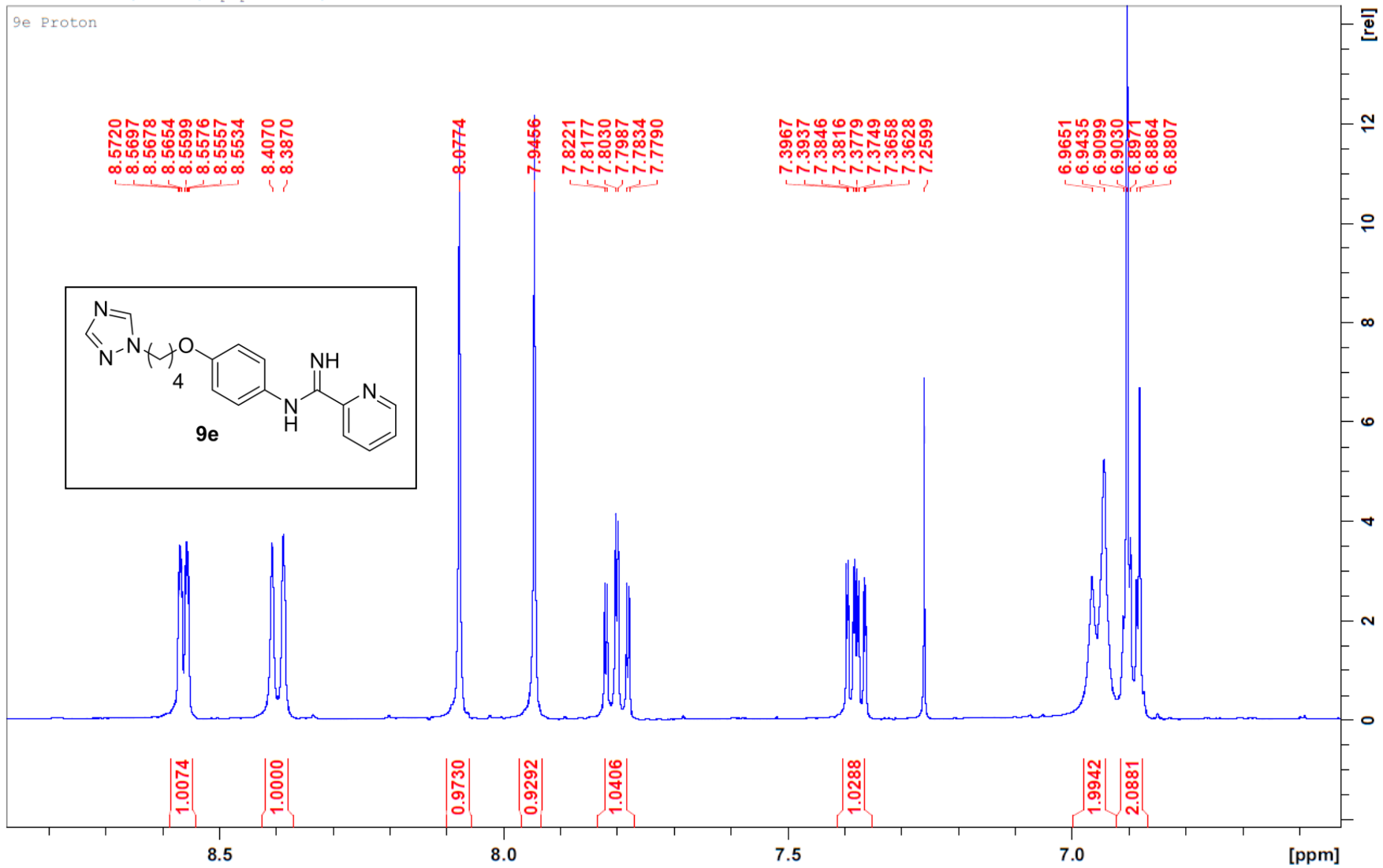


Figure S18. Expanded ¹H NMR spectrum of compound **9e** (400 MHz, CDCl₃).

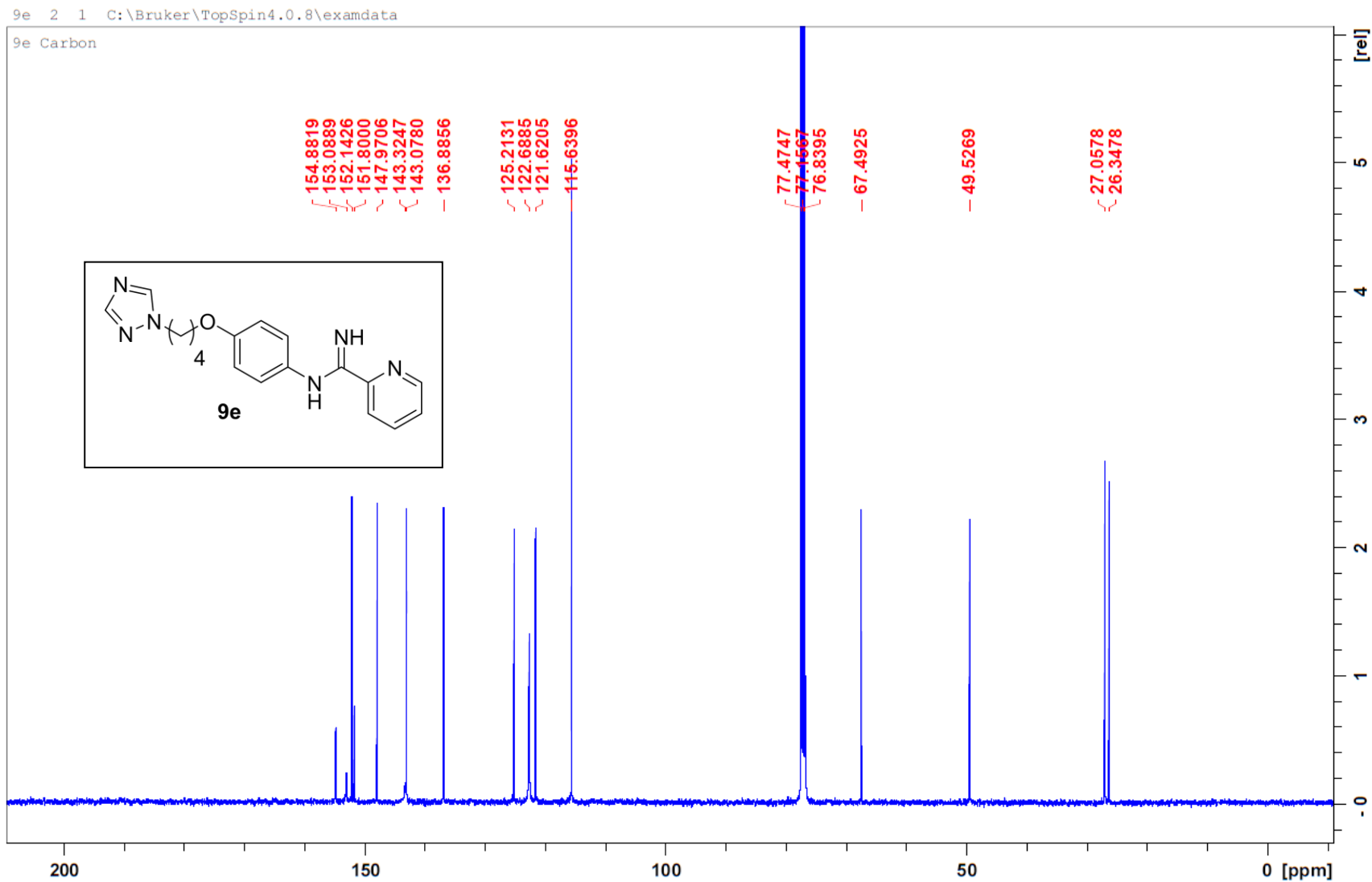


Figure S19. ^{13}C NMR spectrum of compound **9e** (100 MHz, CDCl_3).

9e 2 1 C:\Bruker\TopSpin4.0.8\examdata

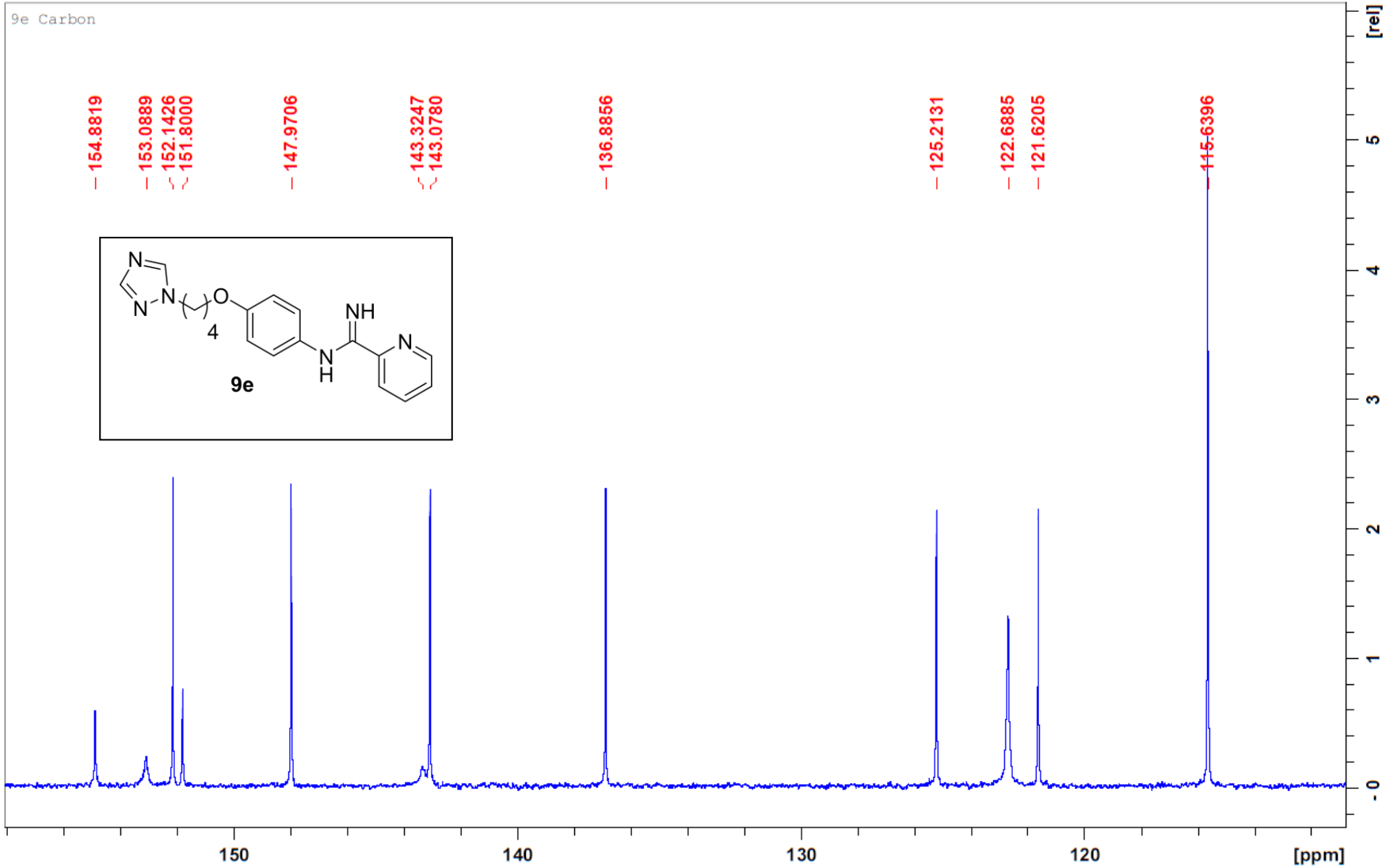


Figure S20. Expanded ^{13}C NMR spectrum of compound **9e** (100 MHz, CDCl_3).

9f 3 1 C:\Bruker\TopSpin4.0.8\examdata

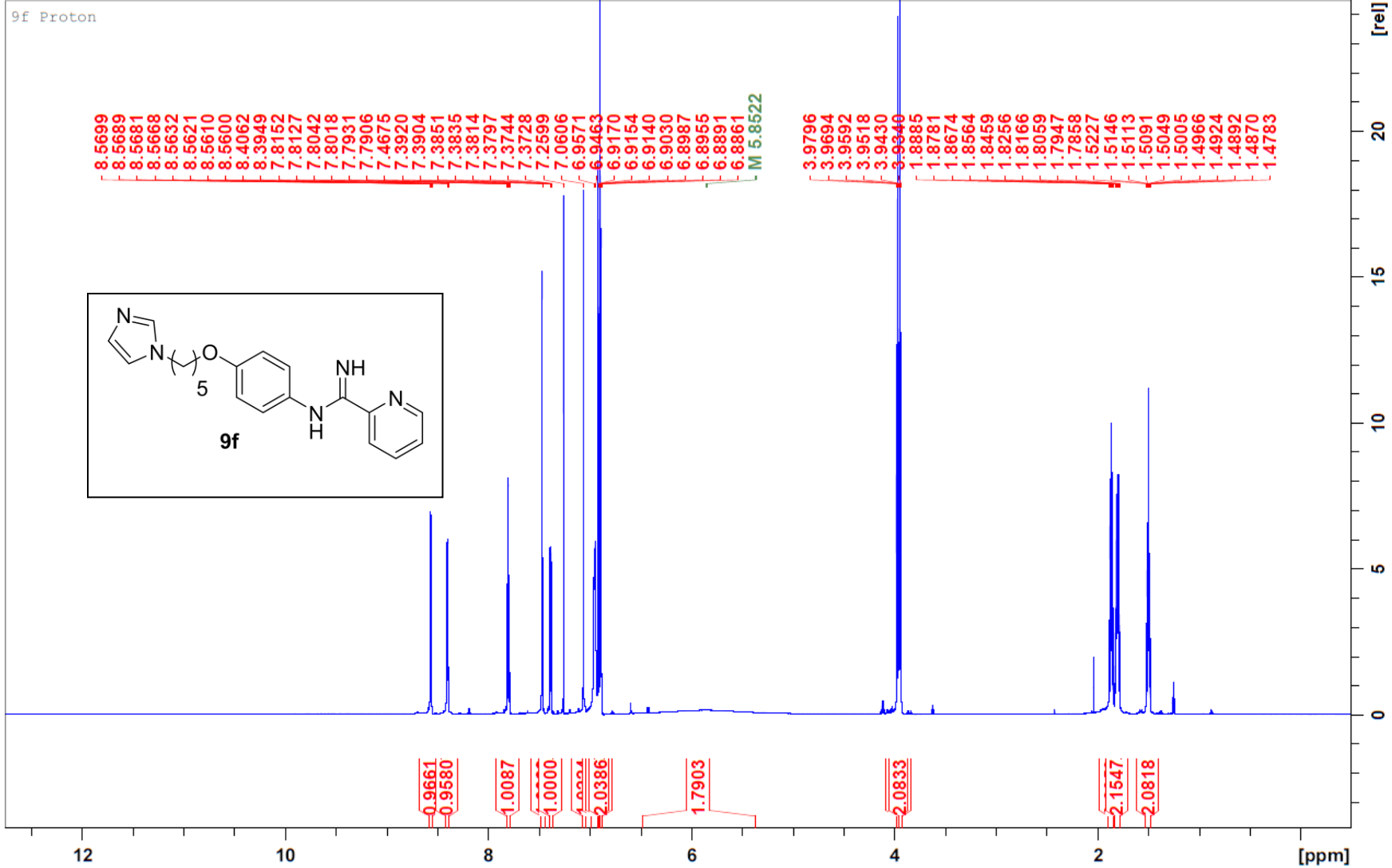


Figure S21. ^1H NMR spectrum of compound **9f** (700 MHz, CDCl_3).

9f 3 1 C:\Bruker\TopSpin4.0.8\examdata

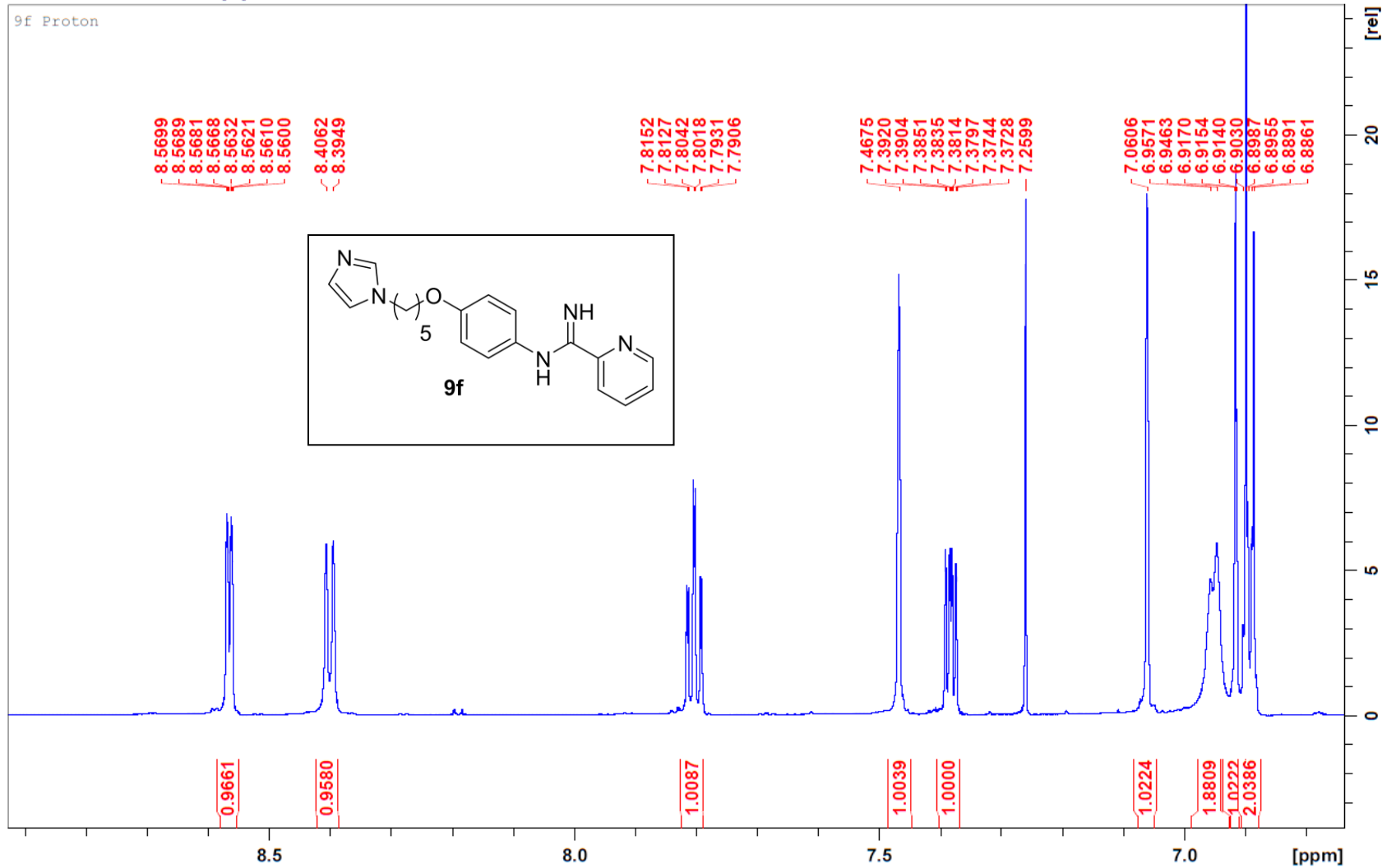


Figure S22. Expanded ^1H NMR spectrum of compound 9f (700 MHz, CDCl_3).

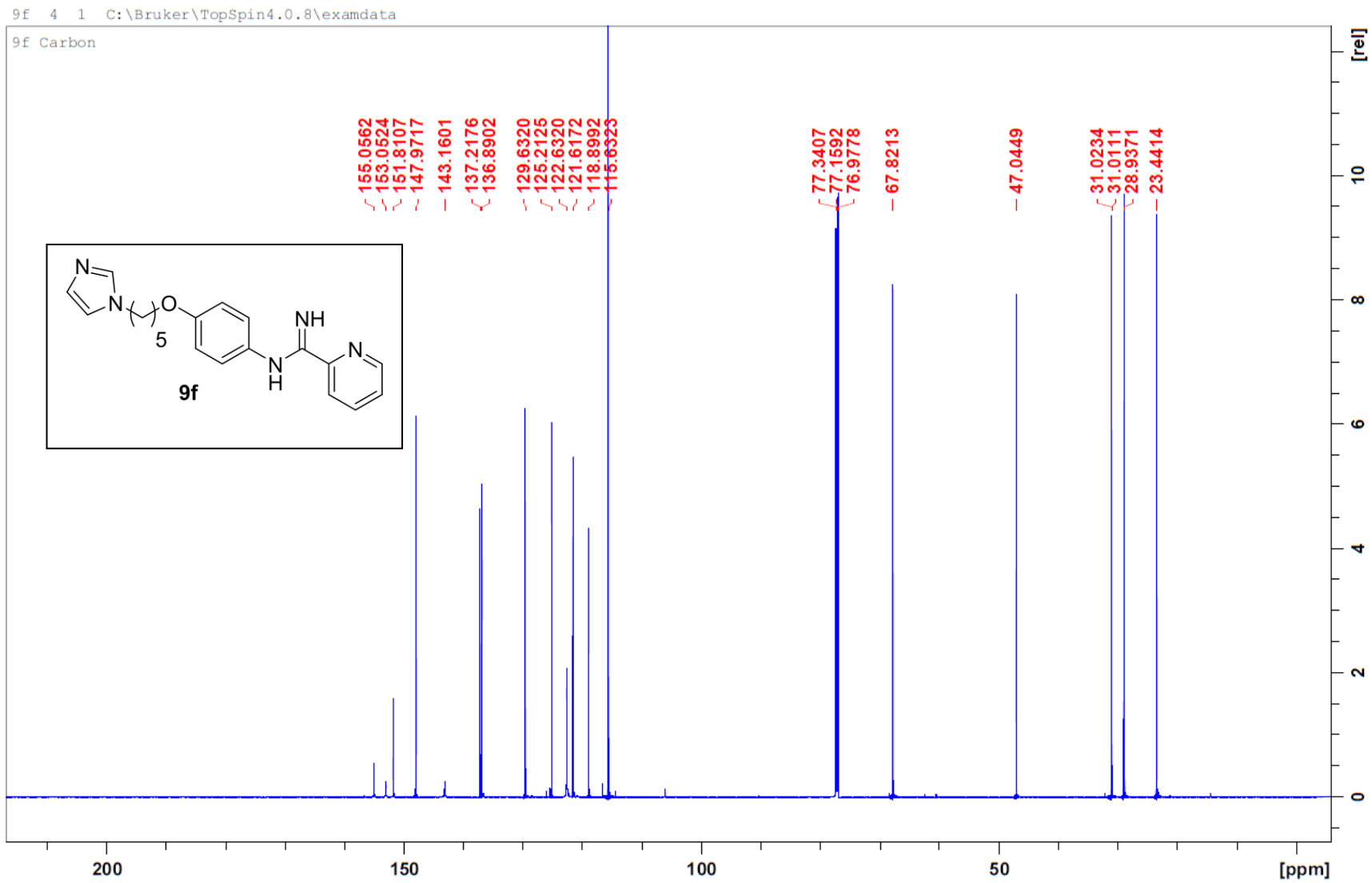


Figure S23. ^{13}C NMR spectrum of compound **9f** (176 MHz, CDCl_3).

9f 4 1 C:\Bruker\TopSpin4.0.8\examdata

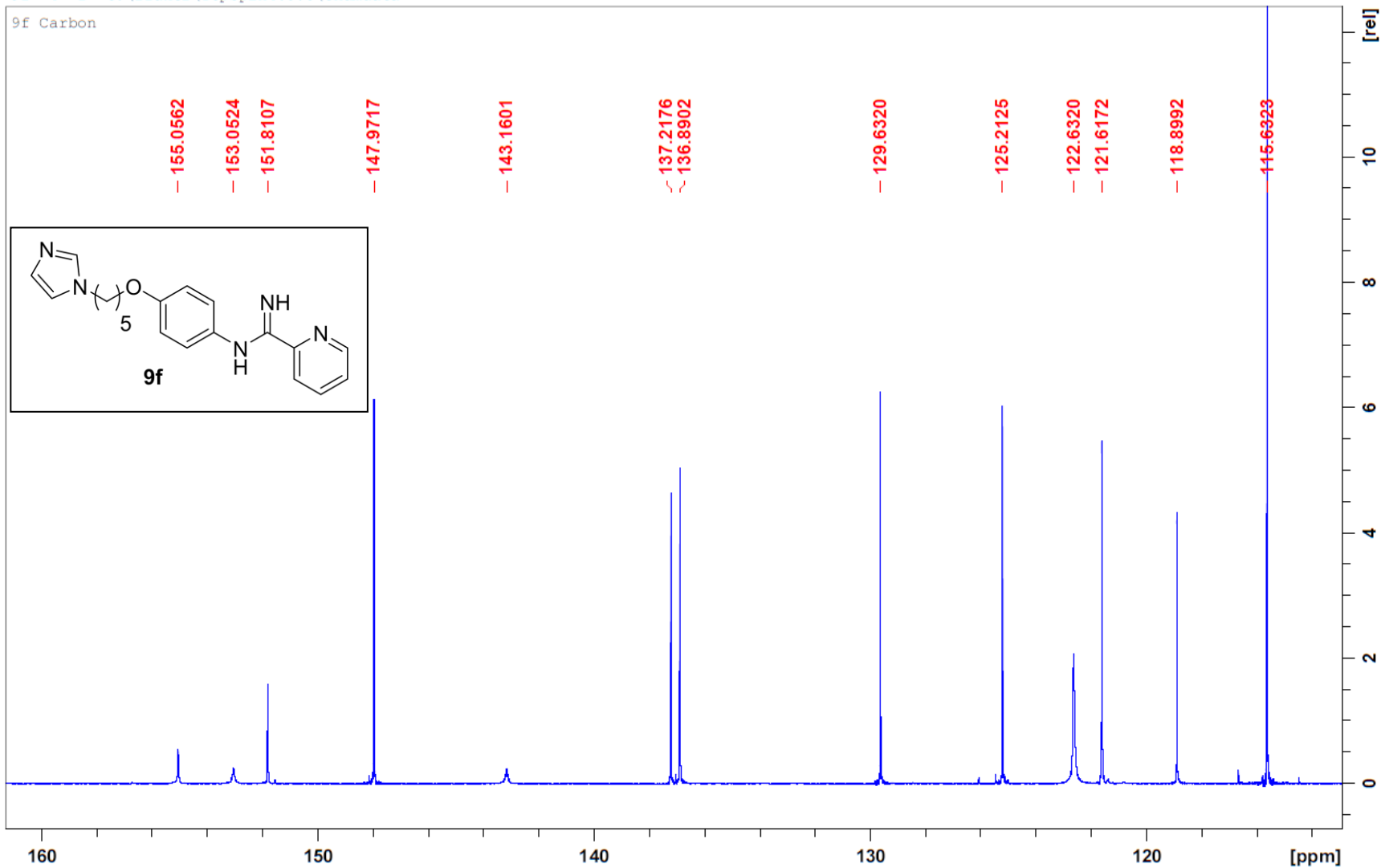


Figure S24. Expanded ^{13}C NMR spectrum of compound **9f** (176 MHz, CDCl_3).

9g 1 1 C:\Bruker\TopSpin4.0.8\examdata

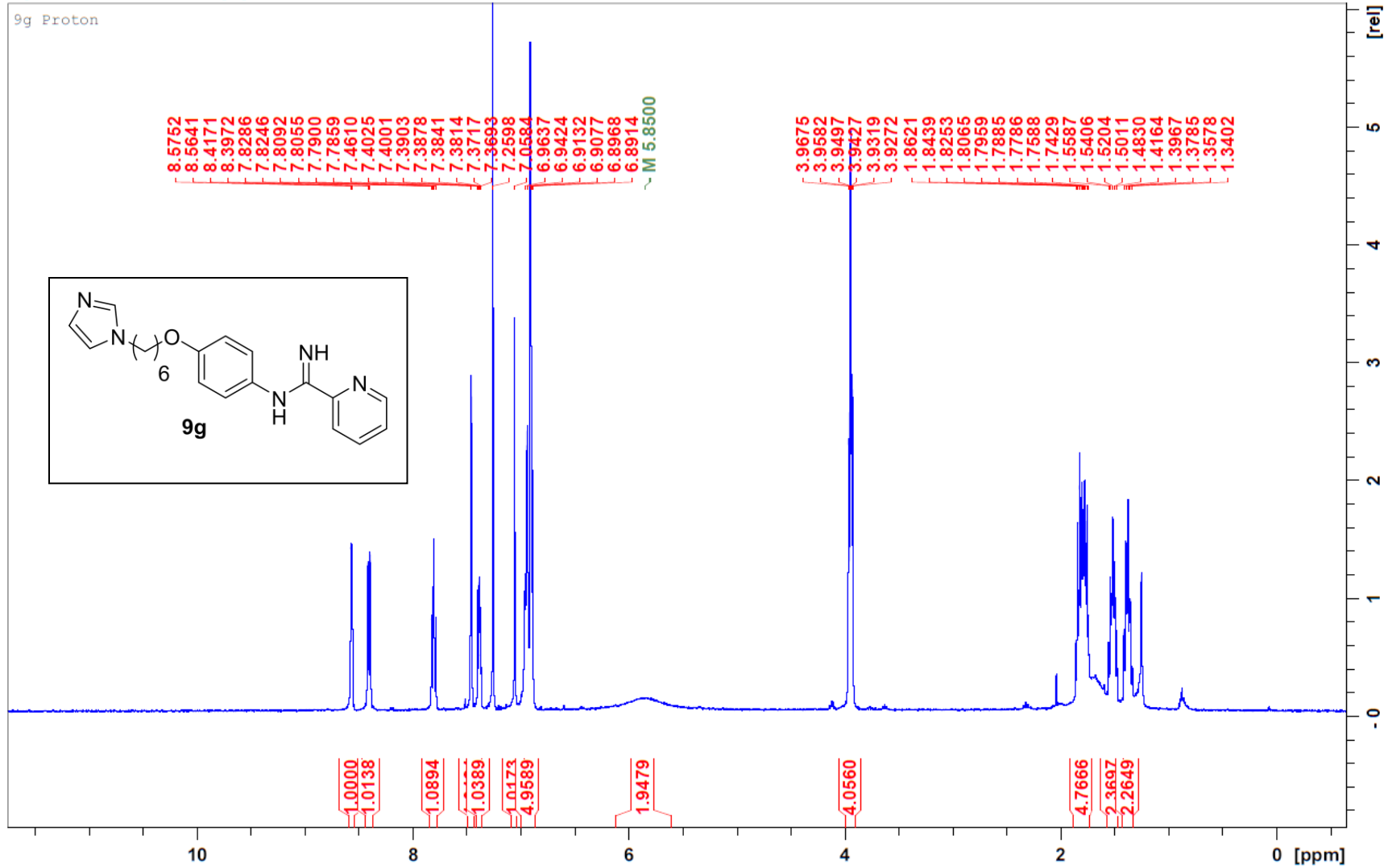


Figure S25. ^1H NMR spectrum of compound **9g** (400 MHz, CDCl_3).

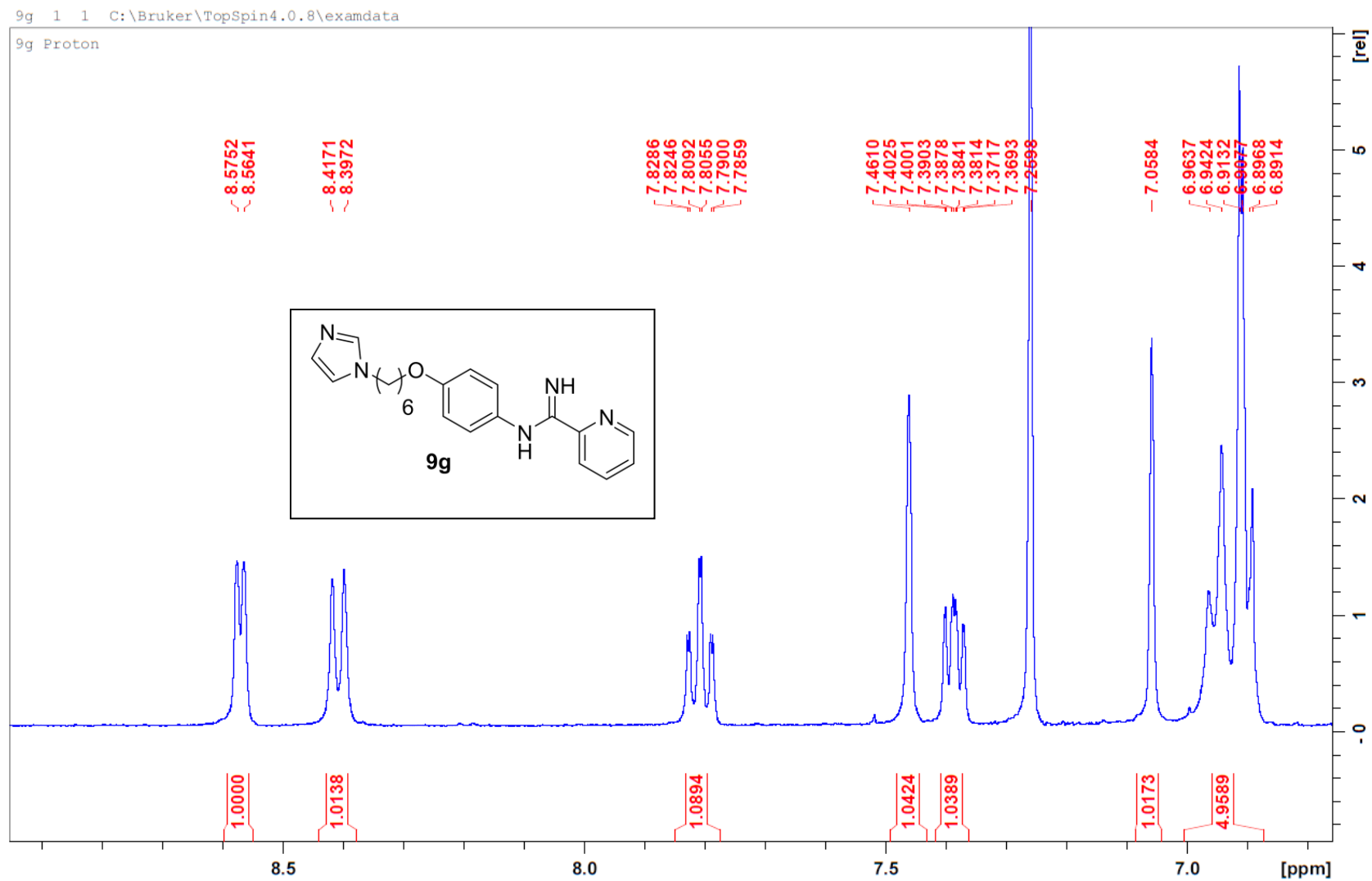


Figure S26. Expanded ^1H NMR spectrum of compound **9g** (400 MHz, CDCl_3).

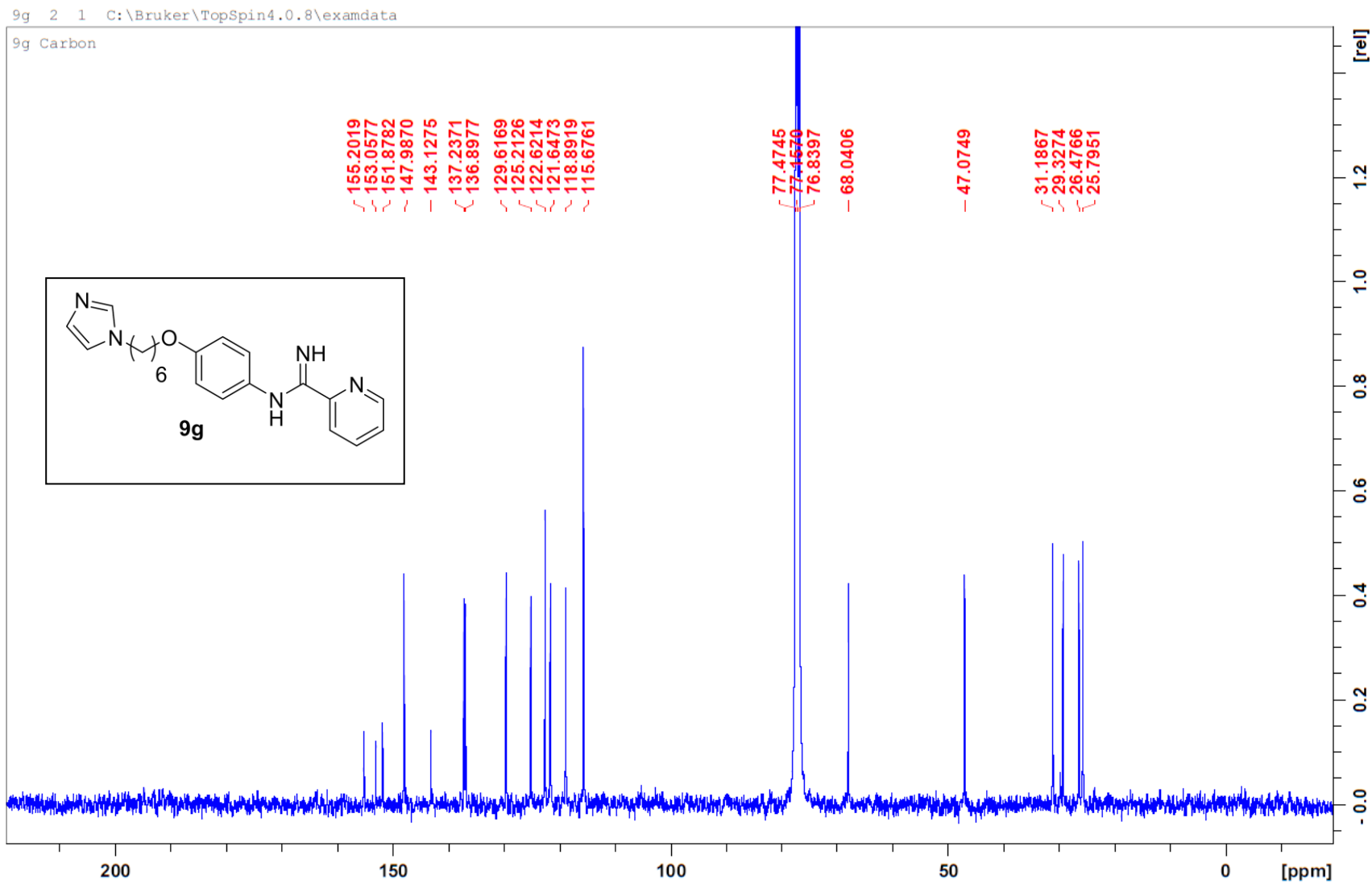


Figure S27. ^{13}C NMR spectrum of compound **9g** (100 MHz, CDCl_3).

9g 2 1 C:\Bruker\TopSpin4.0.8\examdata

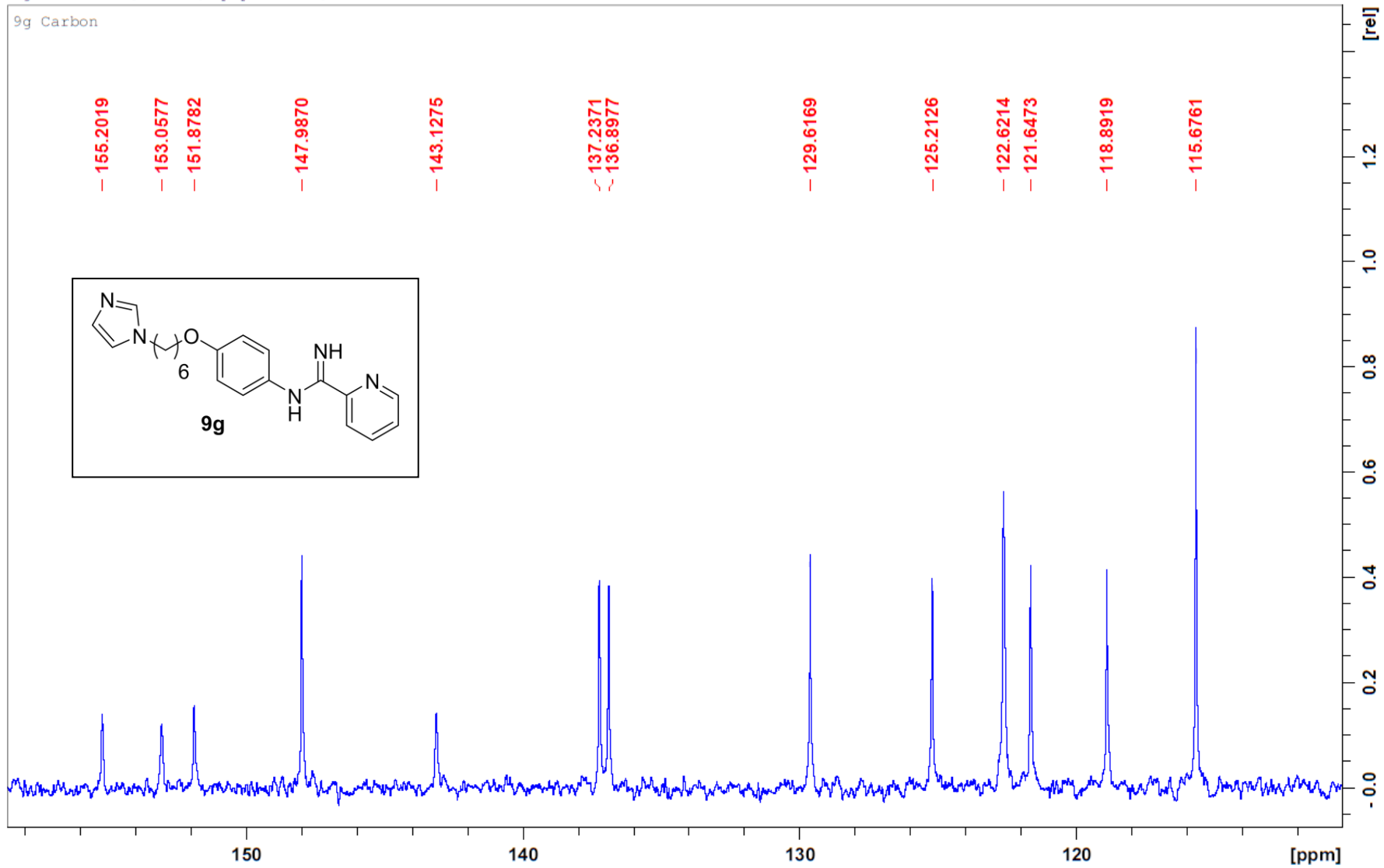


Figure S28. Expanded ^{13}C NMR spectrum of compound **9g** (100 MHz, CDCl_3).

9h 1 1 C:\Bruker\TopSpin4.0.8\examdata

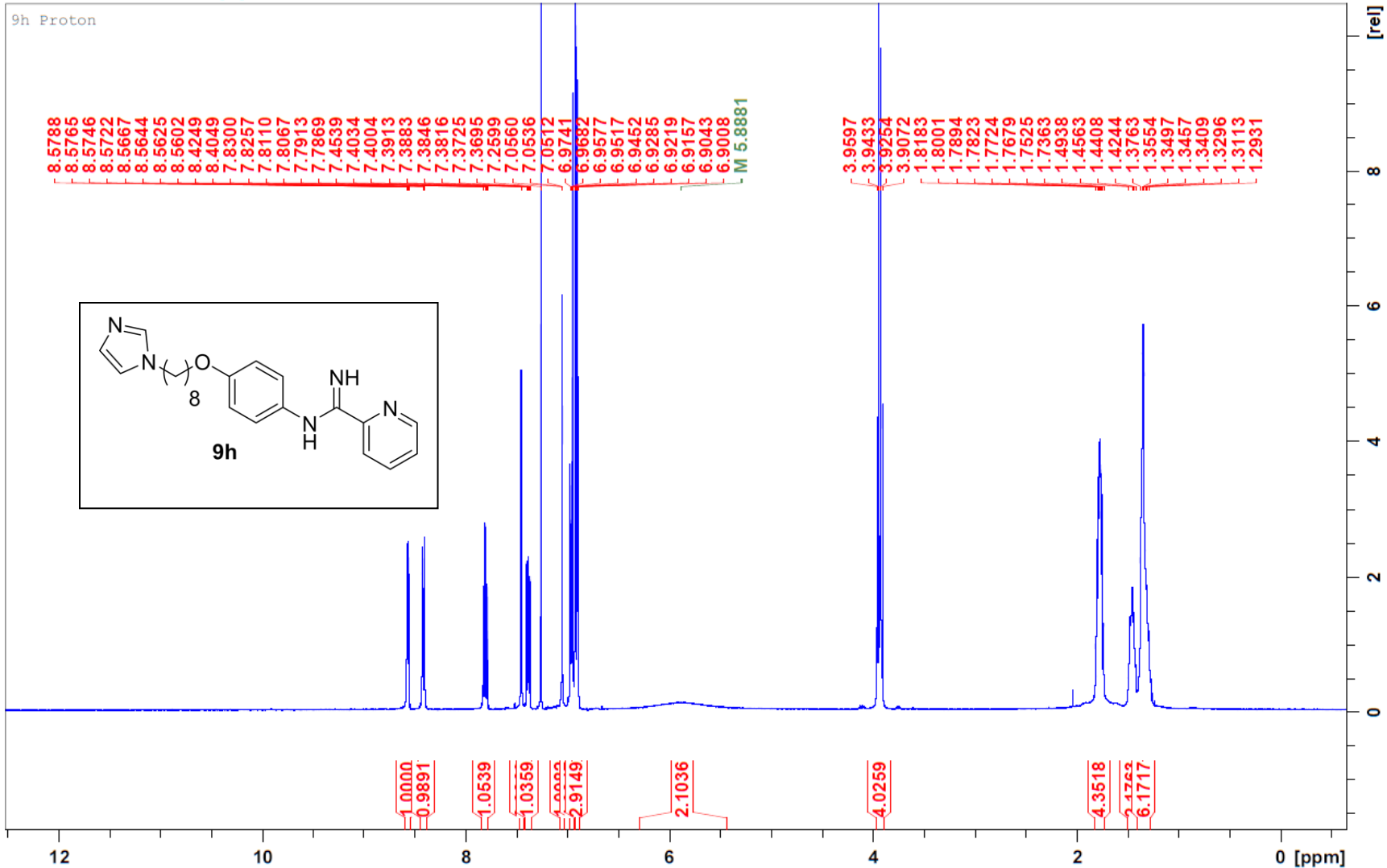


Figure S29. ^1H NMR spectrum of compound 9h (400 MHz, CDCl_3).

9h 1 1 C:\Bruker\TopSpin4.0.8\examdata

9h Proton

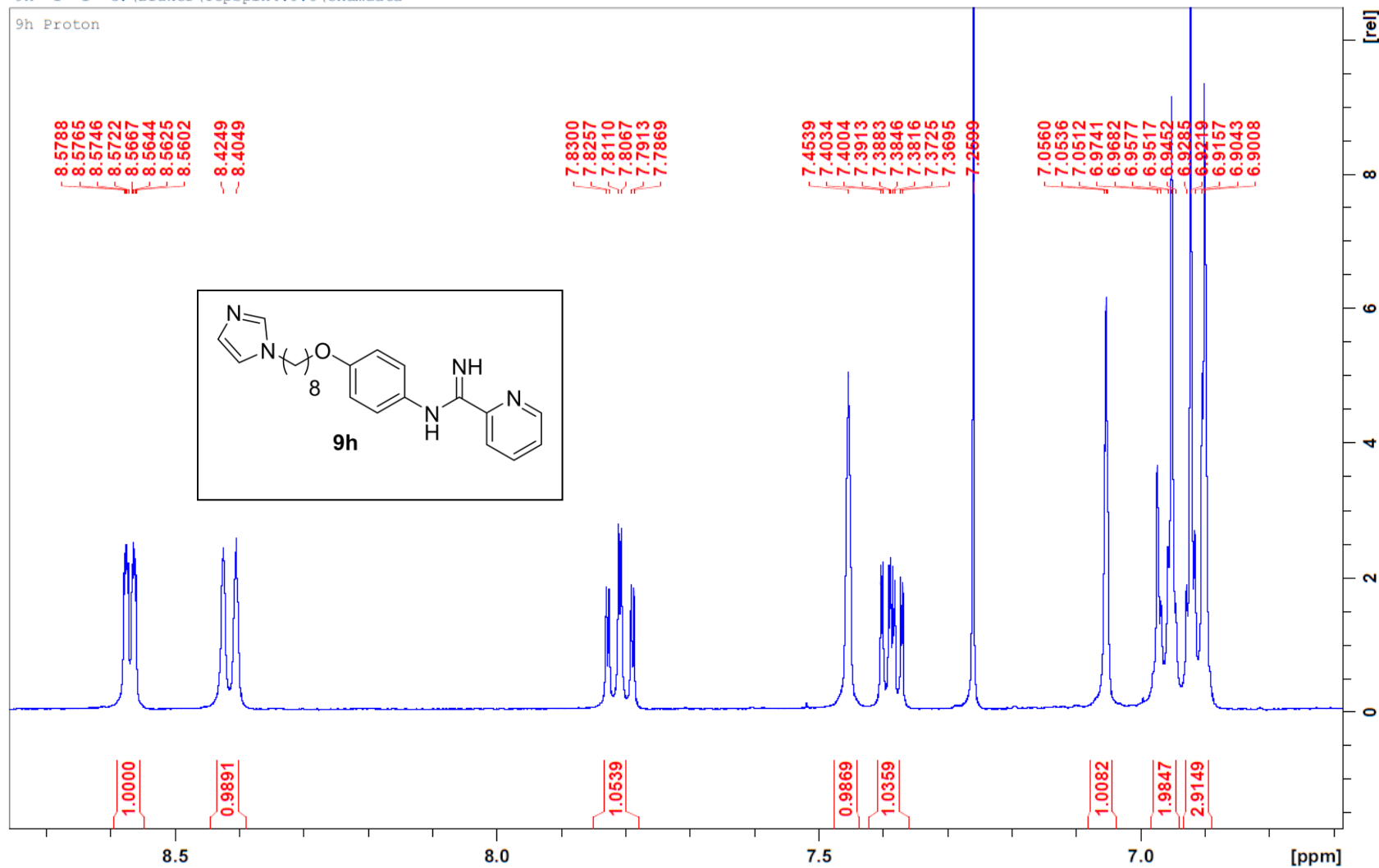


Figure S30. Expanded ¹H NMR spectrum of compound **9h** (400 MHz, CDCl₃).

9h 2 1 C:\Bruker\TopSpin4.0.8\examdata

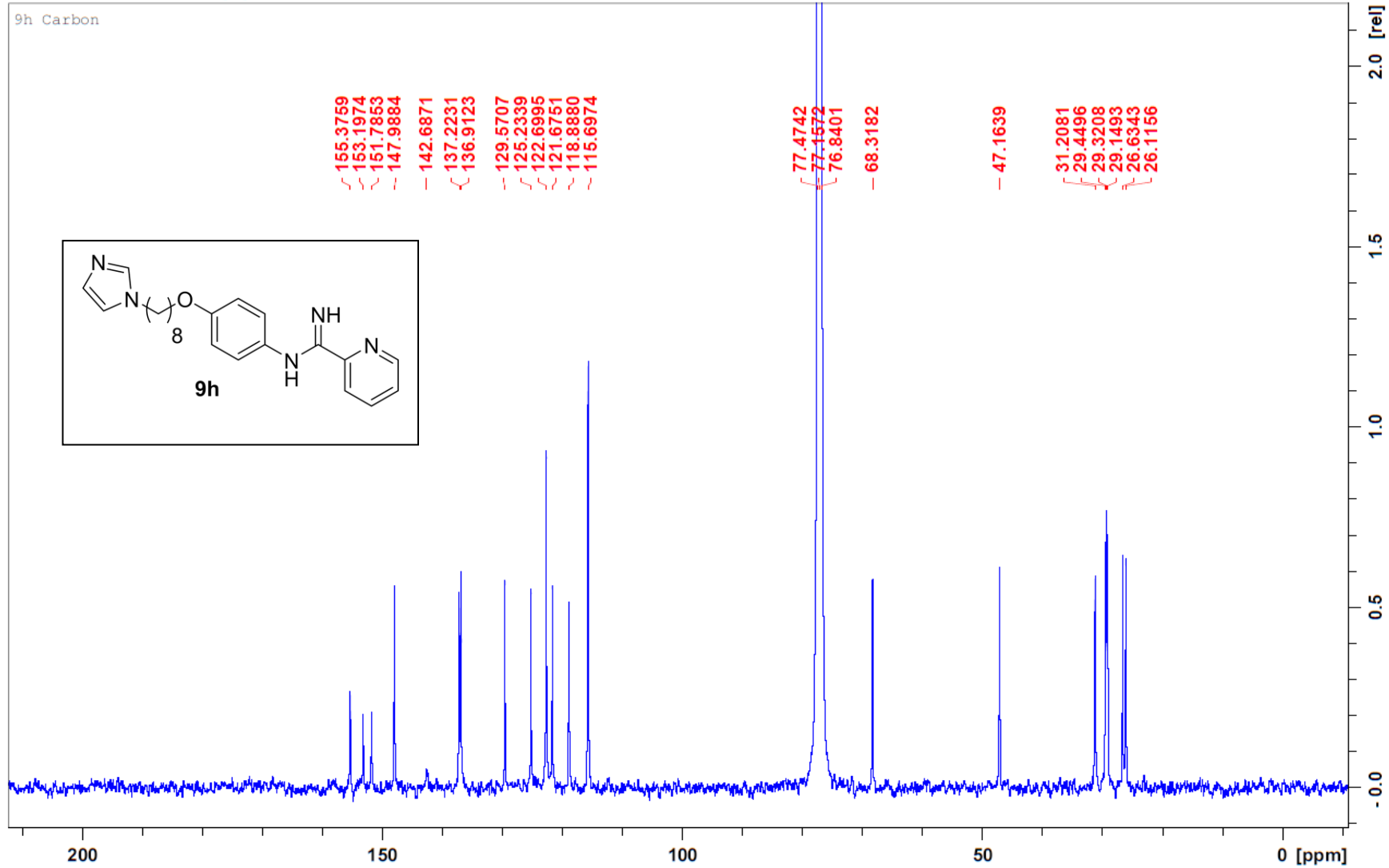


Figure S31. ¹³C NMR spectrum of compound **9h** (100 MHz, CDCl₃).

9h 2 1 C:\Bruker\TopSpin4.0.8\examdata

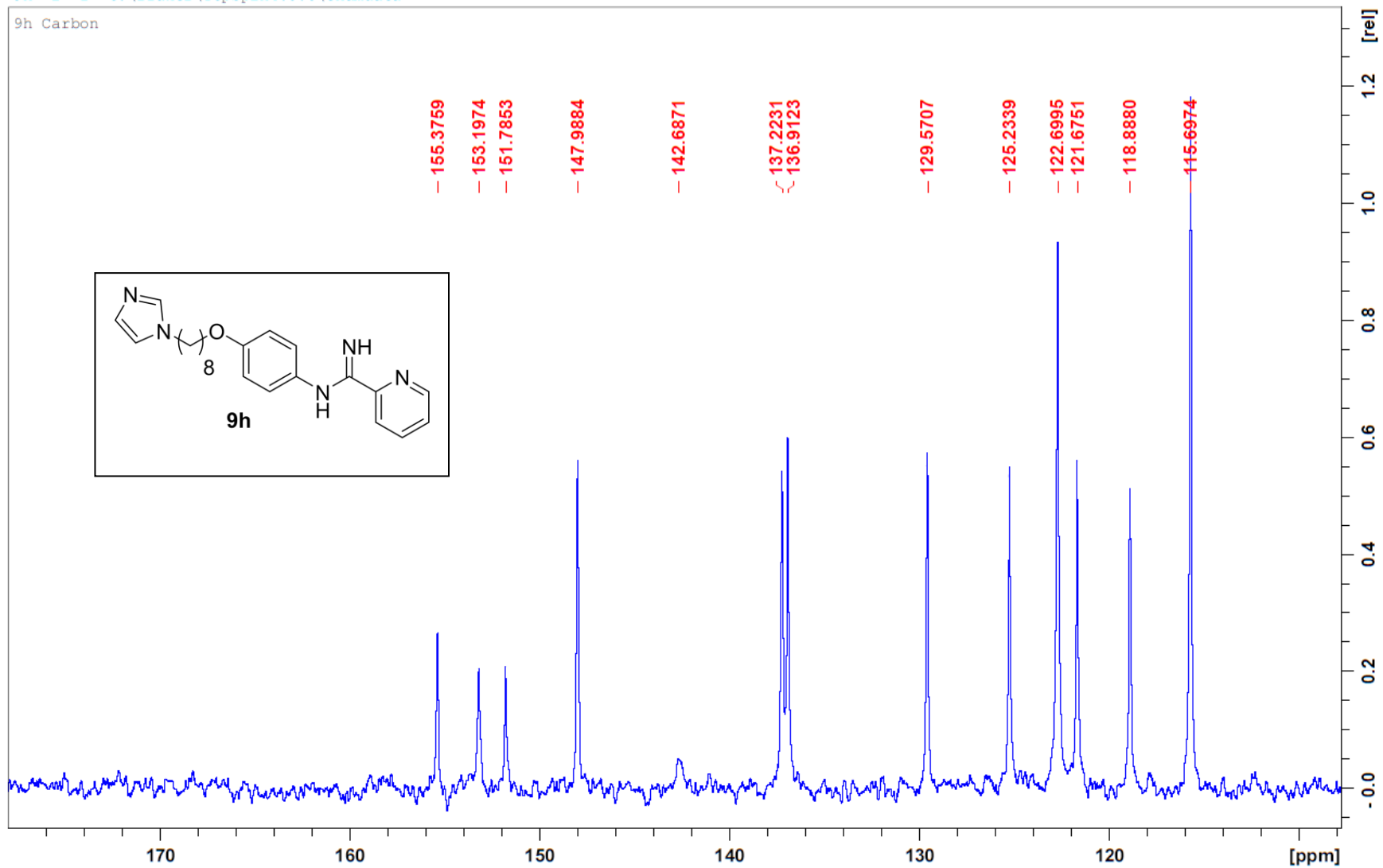


Figure S32. Expanded ^{13}C NMR spectrum of compound **9h** (100 MHz, CDCl_3).

9i 1 1 C:\Bruker\TopSpin4.0.8\examdata

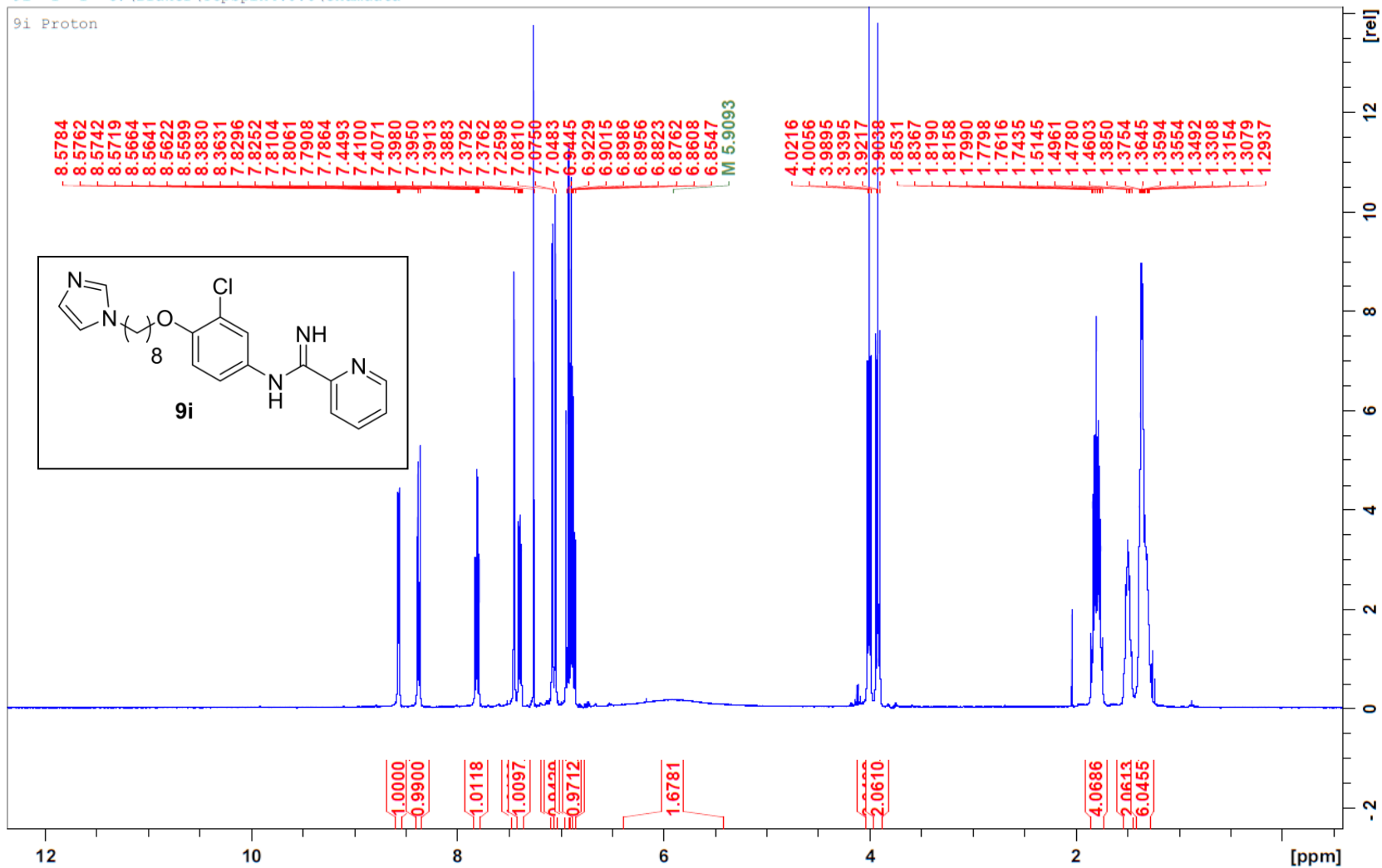


Figure S33. ^1H NMR spectrum of compound **9i** (400 MHz, CDCl_3).

9i 1 1 C:\Bruker\TopSpin4.0.8\examdata

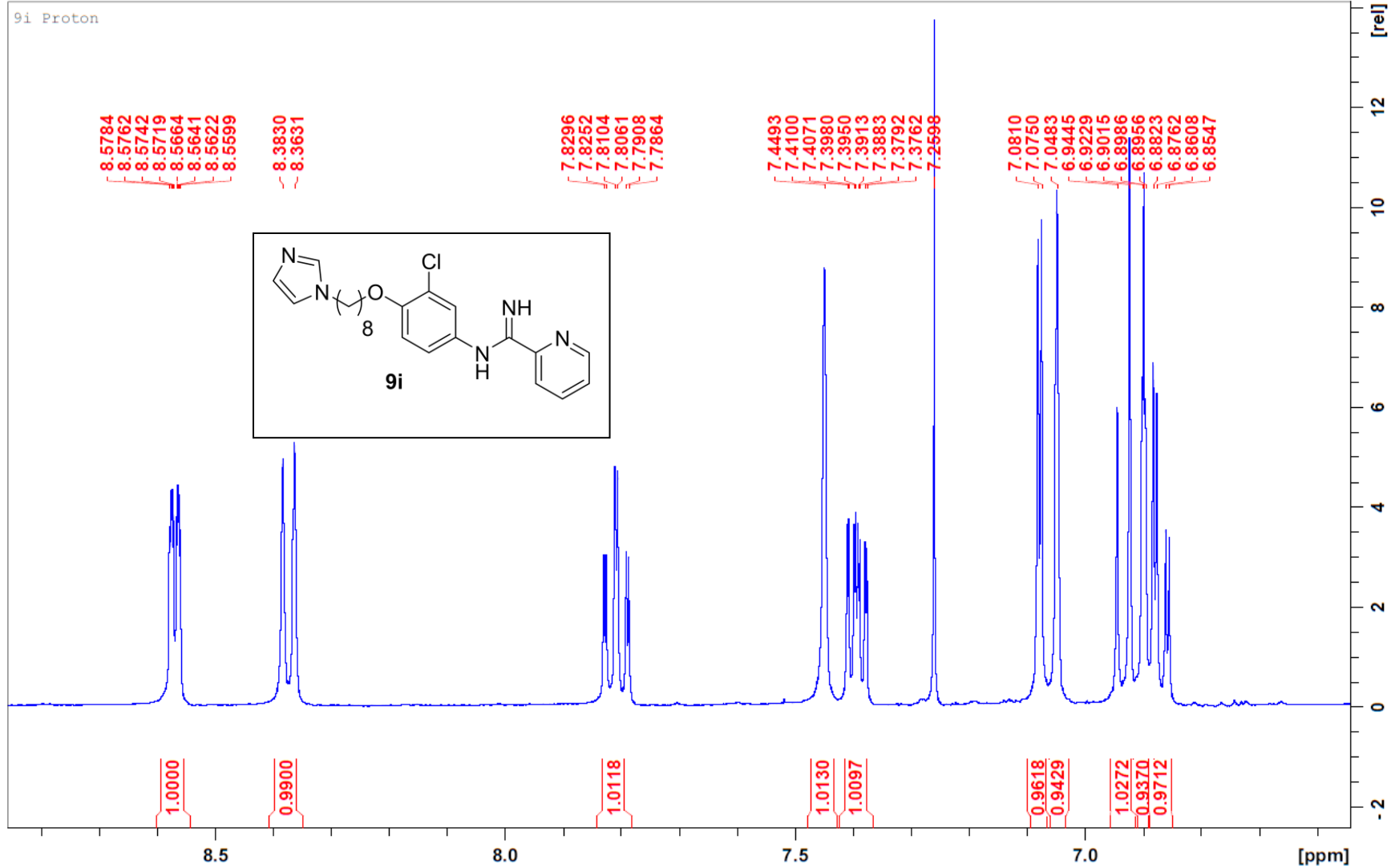


Figure S34. Expanded ^1H NMR spectrum of compound **9i** (400 MHz, CDCl_3).

9i 2 1 C:\Bruker\TopSpin4.0.8\examdata

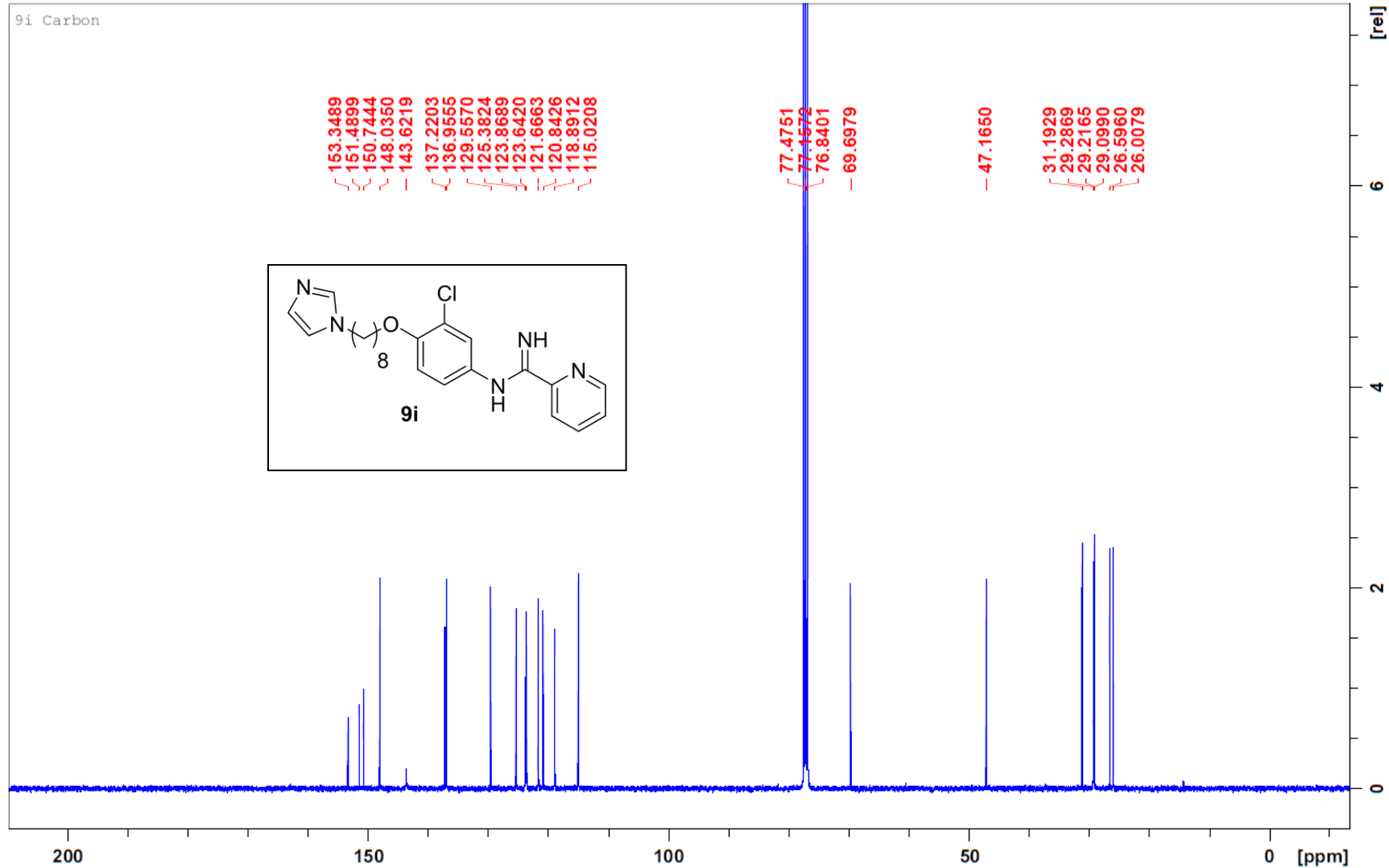


Figure S35. ^{13}C NMR spectrum of compound **9i** (100 MHz, CDCl_3).

9i 2 1 C:\Bruker\TopSpin4.0.8\examdata

9i Carbon

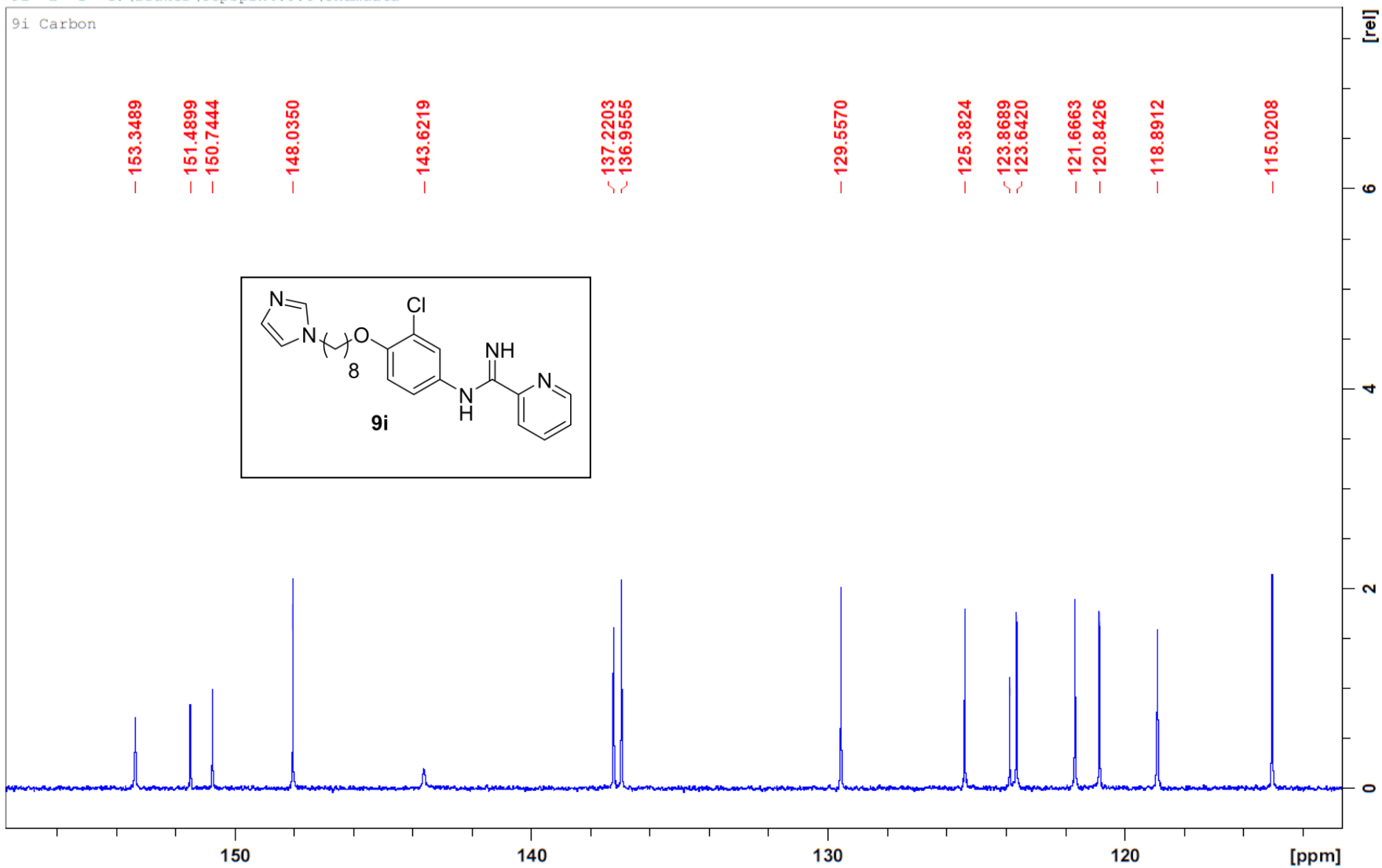


Figure S36. Expanded ^{13}C NMR spectrum of compound **9i** (100 MHz, CDCl_3).

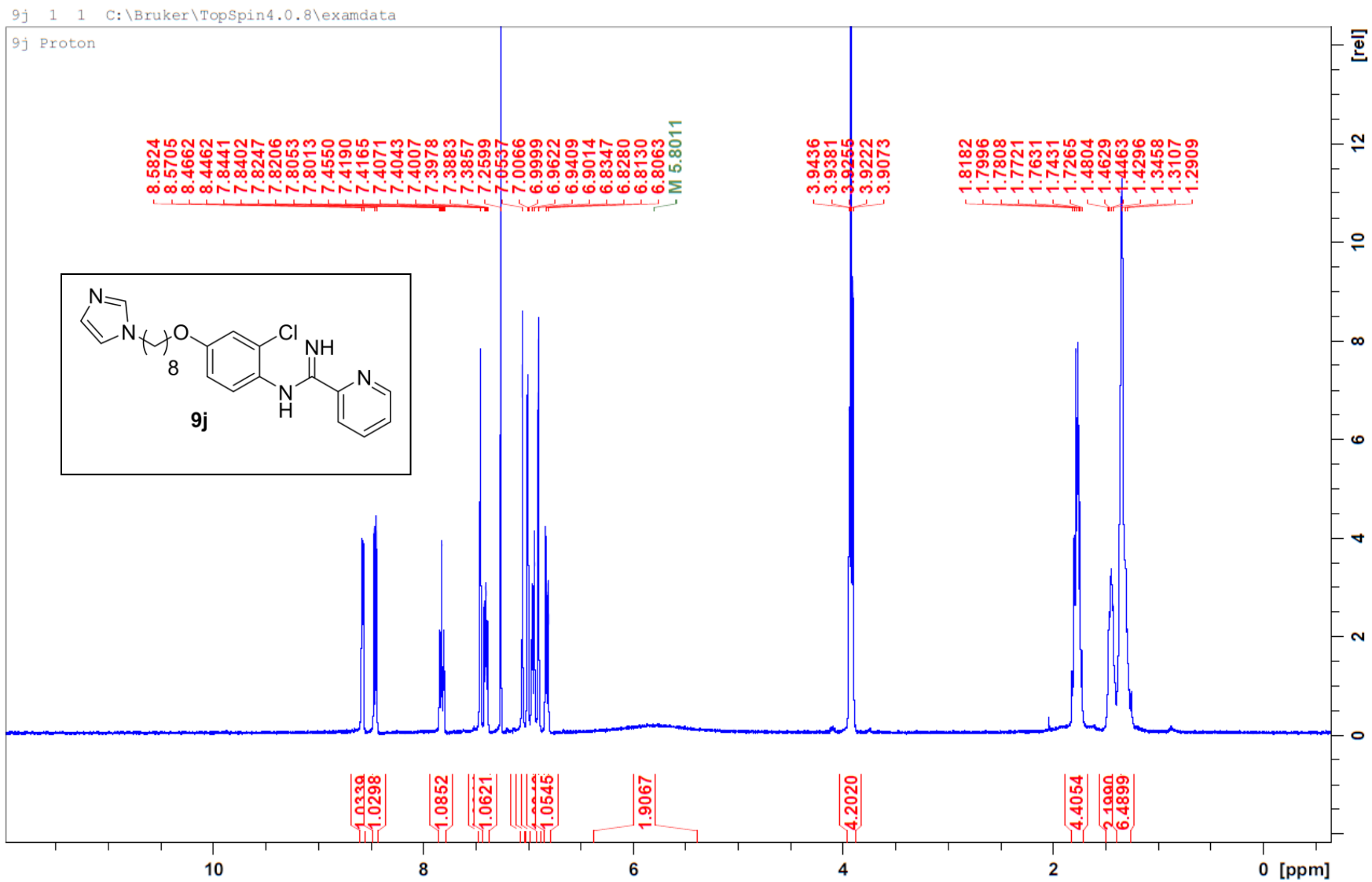


Figure S37. ^1H NMR spectrum of compound **9j** (400 MHz, CDCl_3).

9j 1 1 C:\Bruker\TopSpin4.0.8\examdata

9j Proton

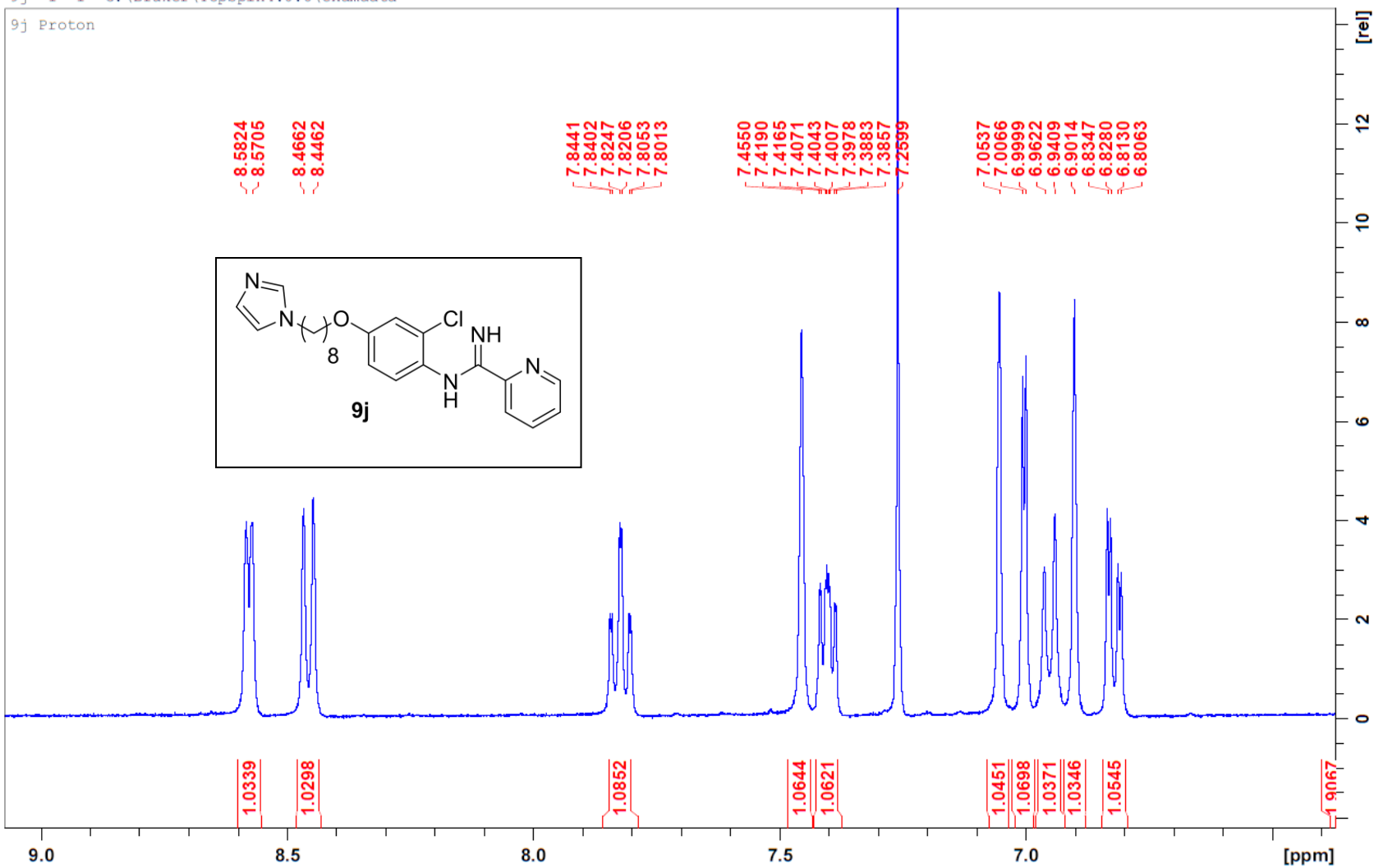


Figure S38. Expanded ^1H NMR spectrum of compound **9j** (400 MHz, CDCl_3).

9j 2 1 C:\Bruker\TopSpin4.0.8\examdata

9j Carbon

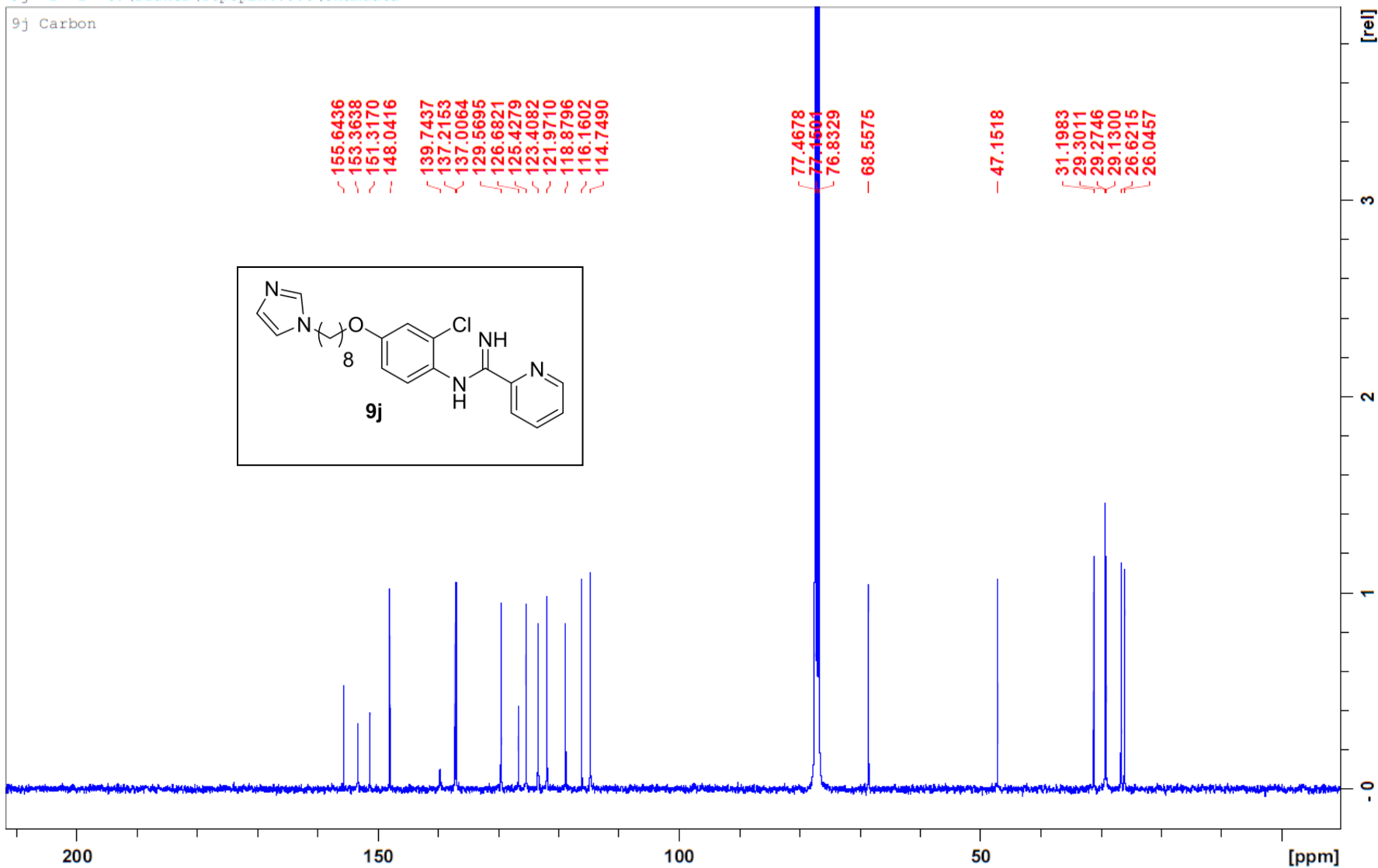


Figure S39. ^{13}C NMR spectrum of compound 9j (100 MHz, CDCl_3).

9j 2 1 C:\Bruker\TopSpin4.0.8\examdata

9j Carbon

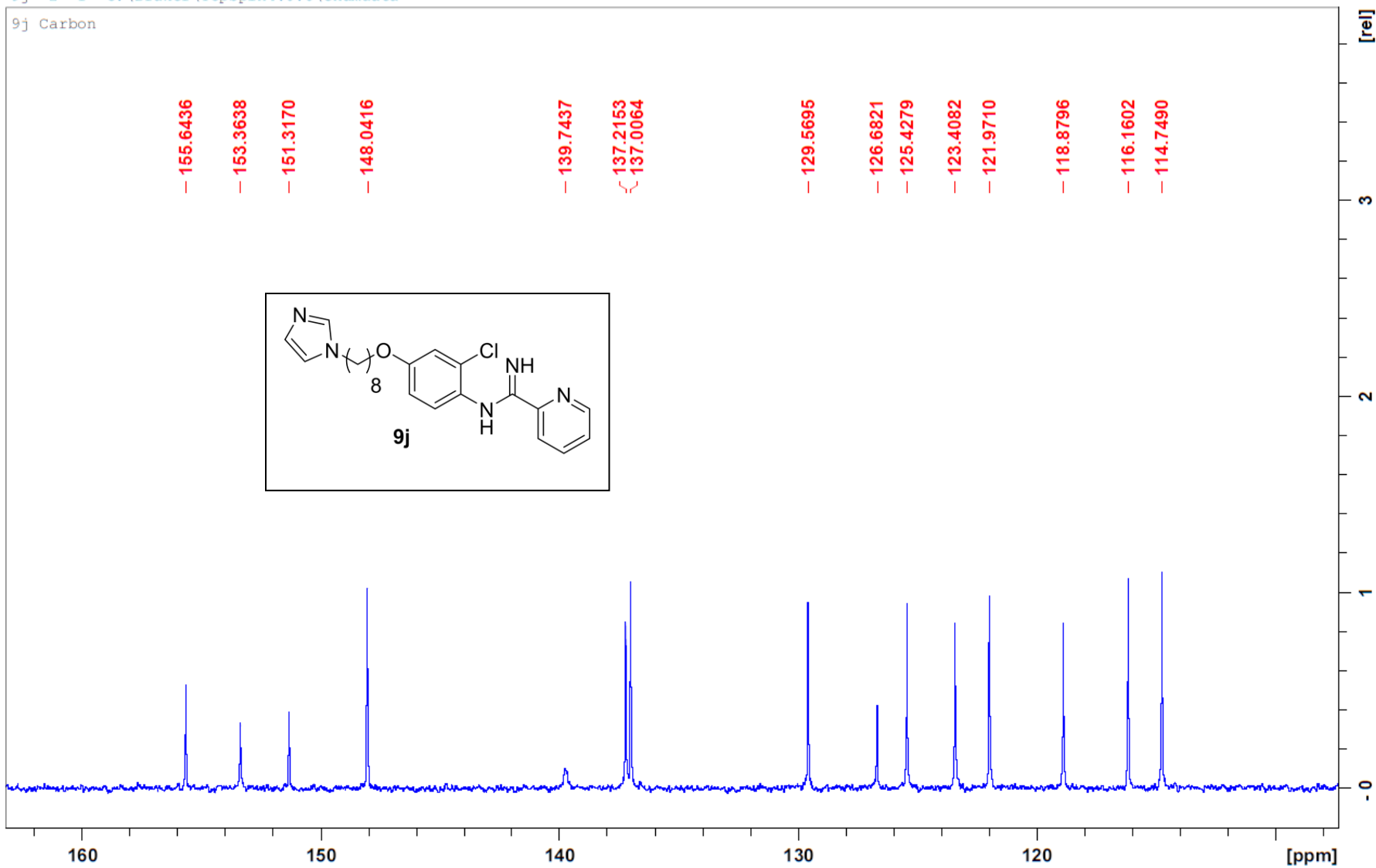


Figure S40. Expanded ^{13}C NMR spectrum of compound **9j** (100 MHz, CDCl_3).

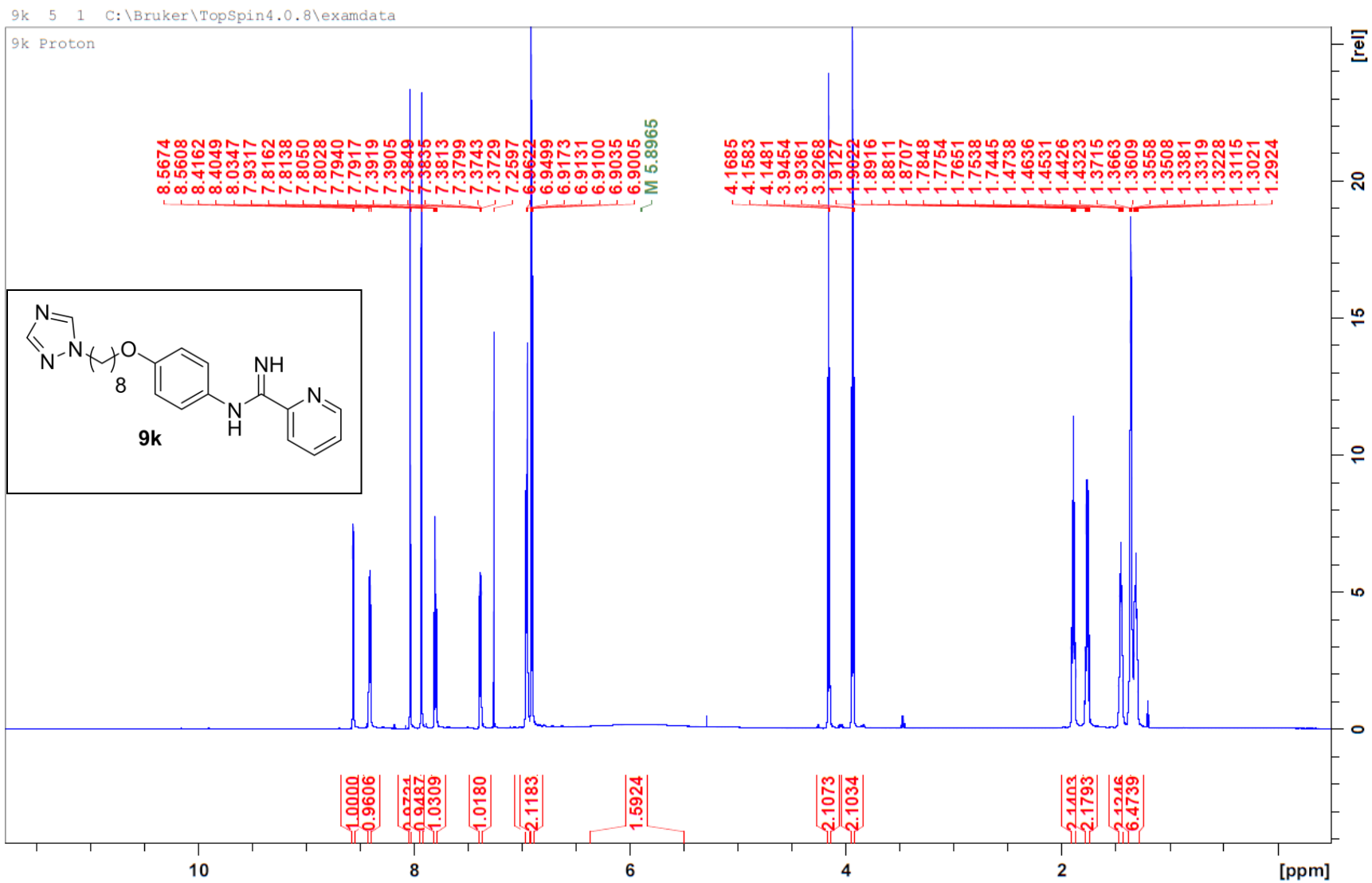


Figure S41. ¹H NMR spectrum of compound **9k** (700 MHz, CDCl₃).

9k 5 1 C:\Bruker\TopSpin4.0.8\examdata

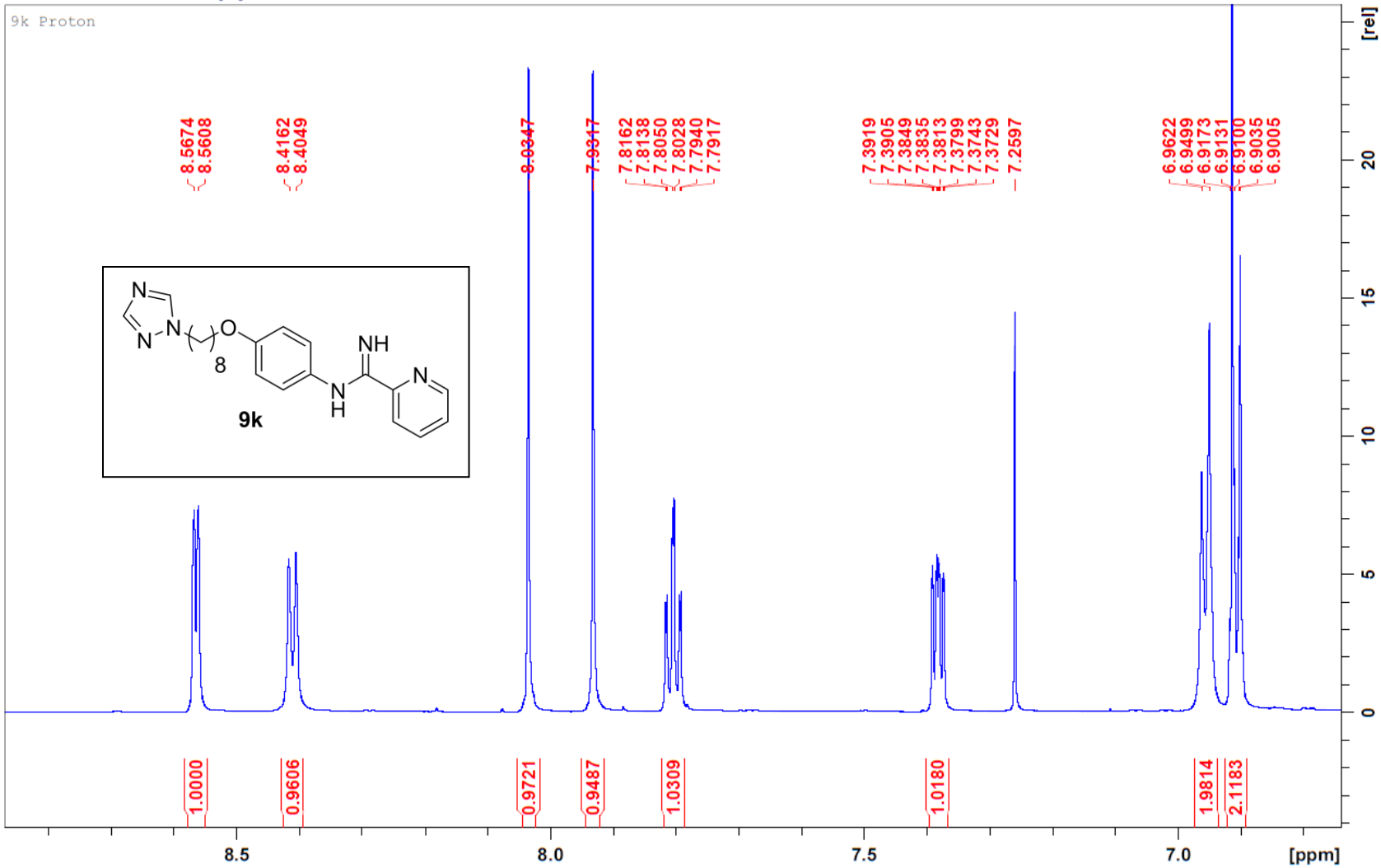


Figure S42. Expanded ^1H NMR spectrum of compound **9k** (700 MHz, CDCl_3).

9k 6 1 C:\Bruker\TopSpin4.0.8\examdata

9k Carbon

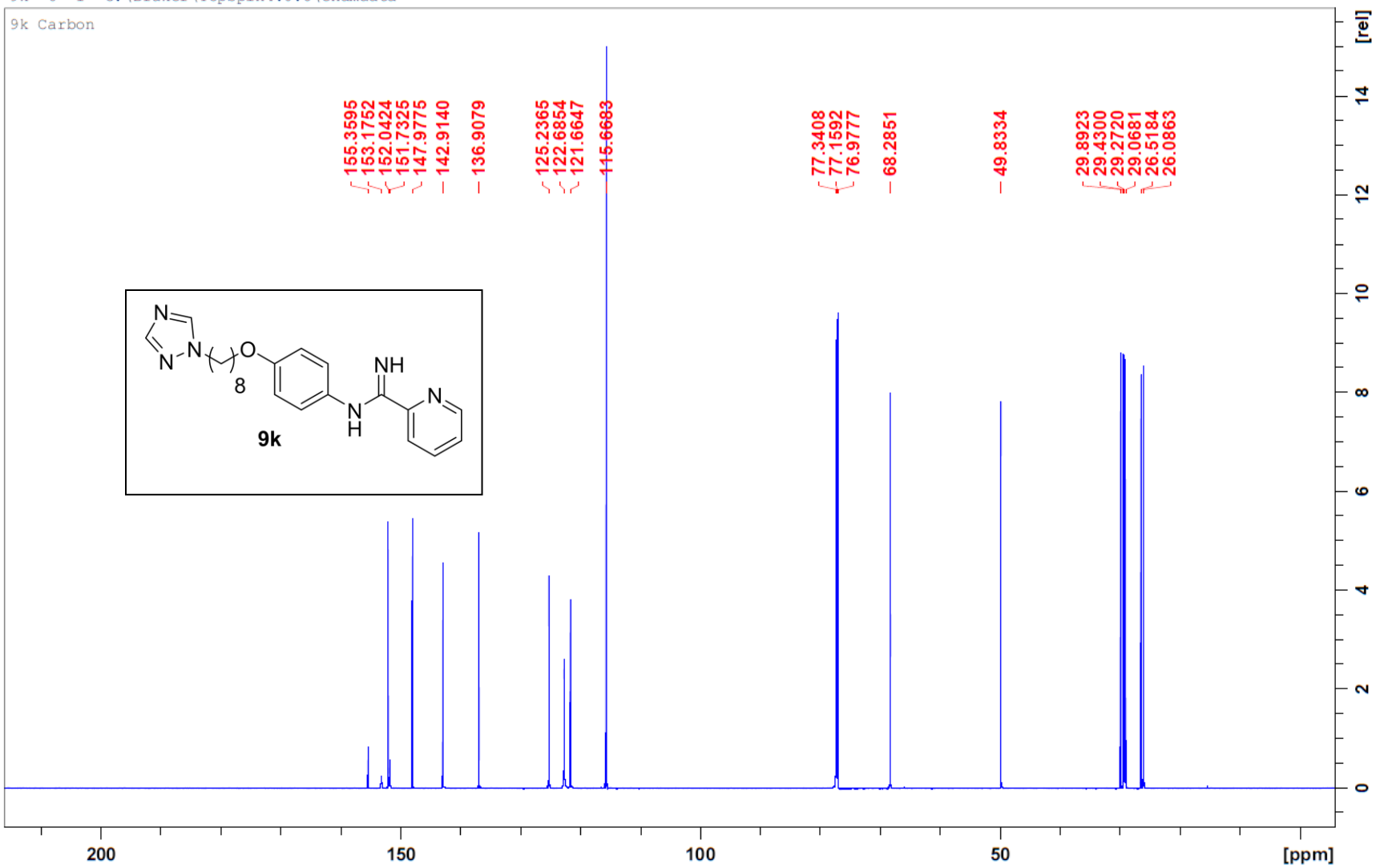


Figure S43. ^{13}C NMR spectrum of compound 9k (176 MHz, CDCl_3).

9k 6 1 C:\Bruker\TopSpin4.0.8\examdata

9k Carbon

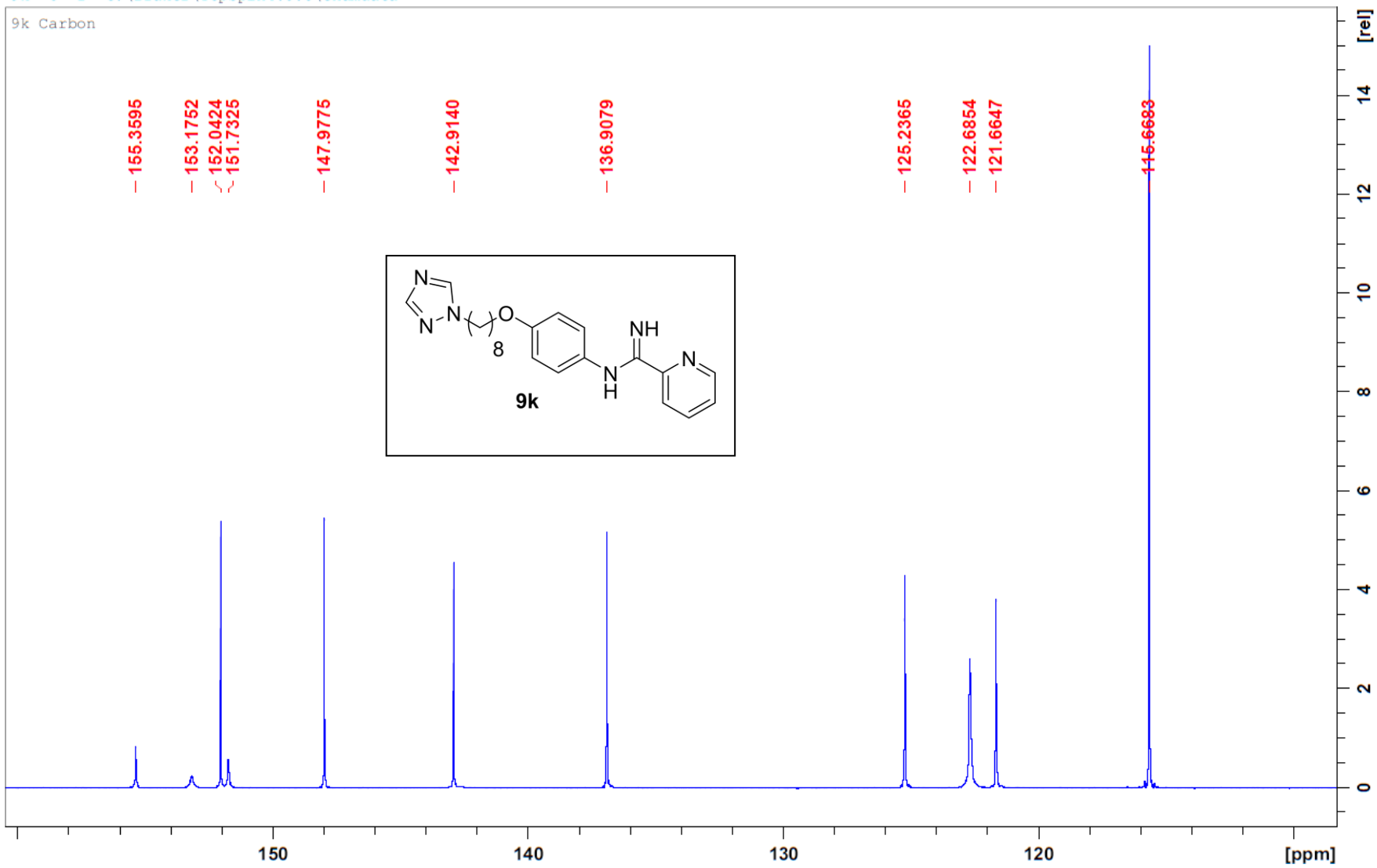


Figure S44. Expanded ^{13}C NMR spectrum of compound **9k** (176 MHz, CDCl_3).

91 2 1 C:\Bruker\TopSpin4.0.8\examdata

91 Proton

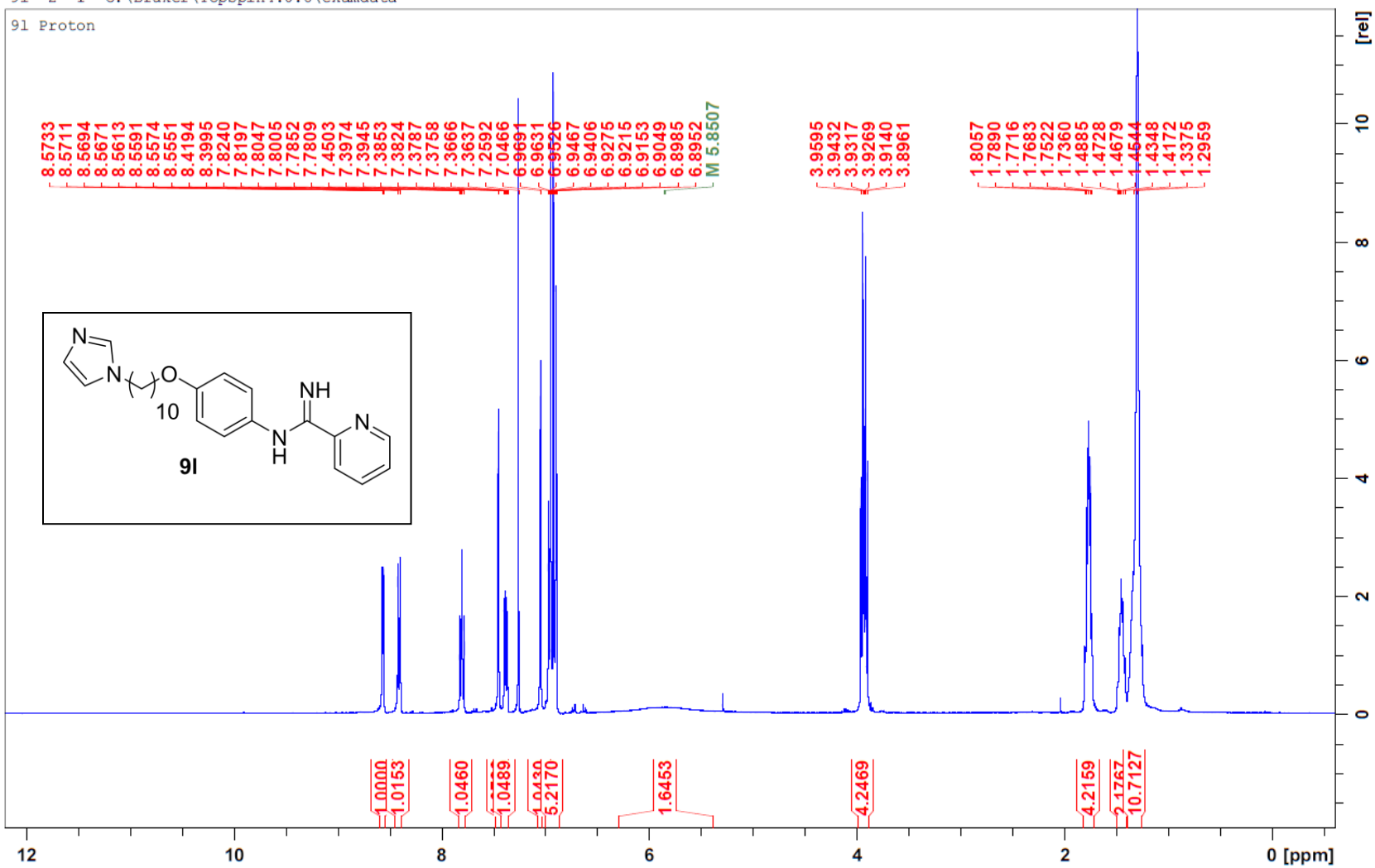


Figure S45. ¹H NMR spectrum of compound 91 (400 MHz, CDCl₃).

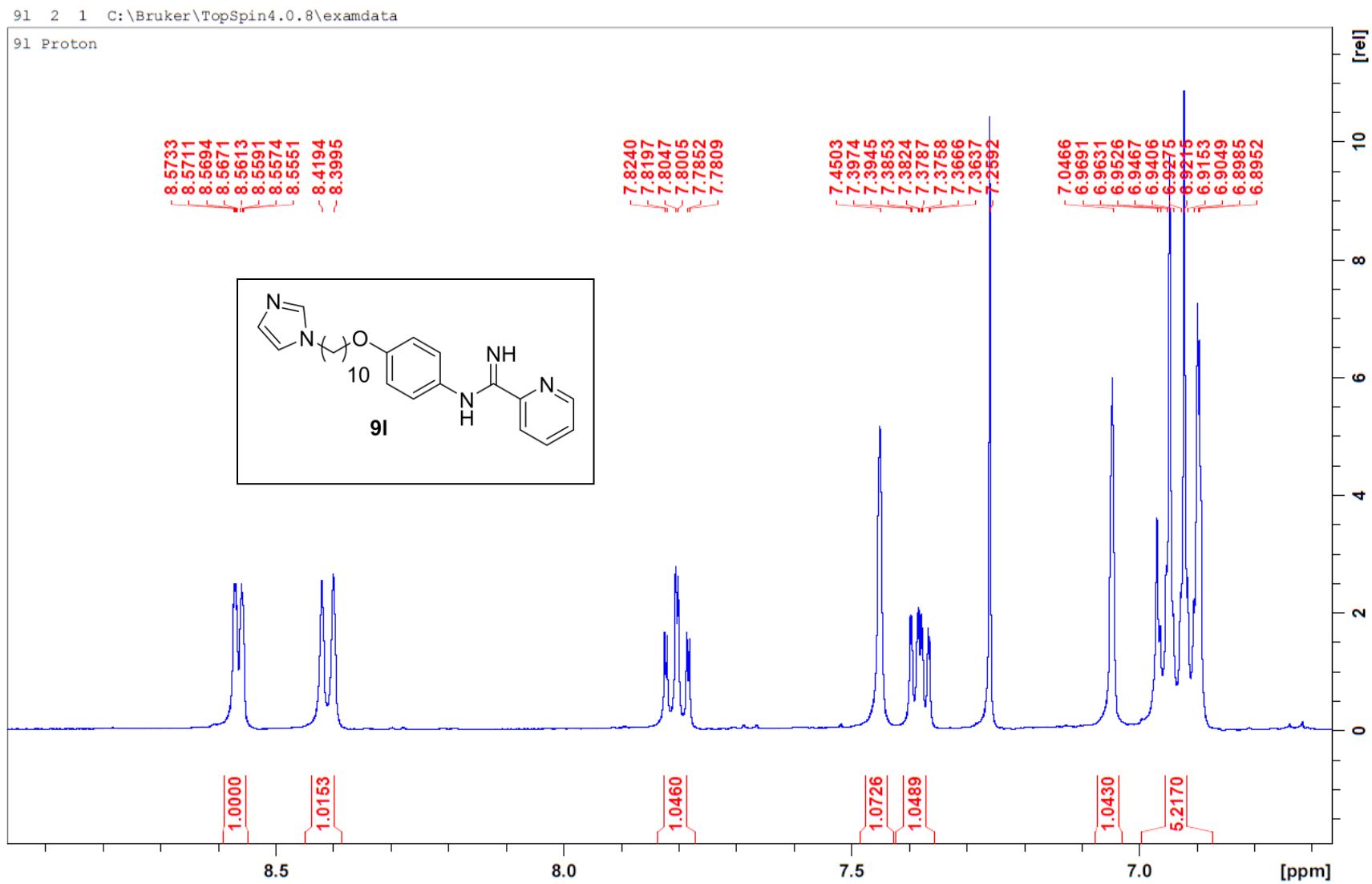


Figure S46. Expanded ^1H NMR spectrum of compound **9I** (400 MHz, CDCl_3).

91 3 1 C:\Bruker\TopSpin4.0.8\examdata

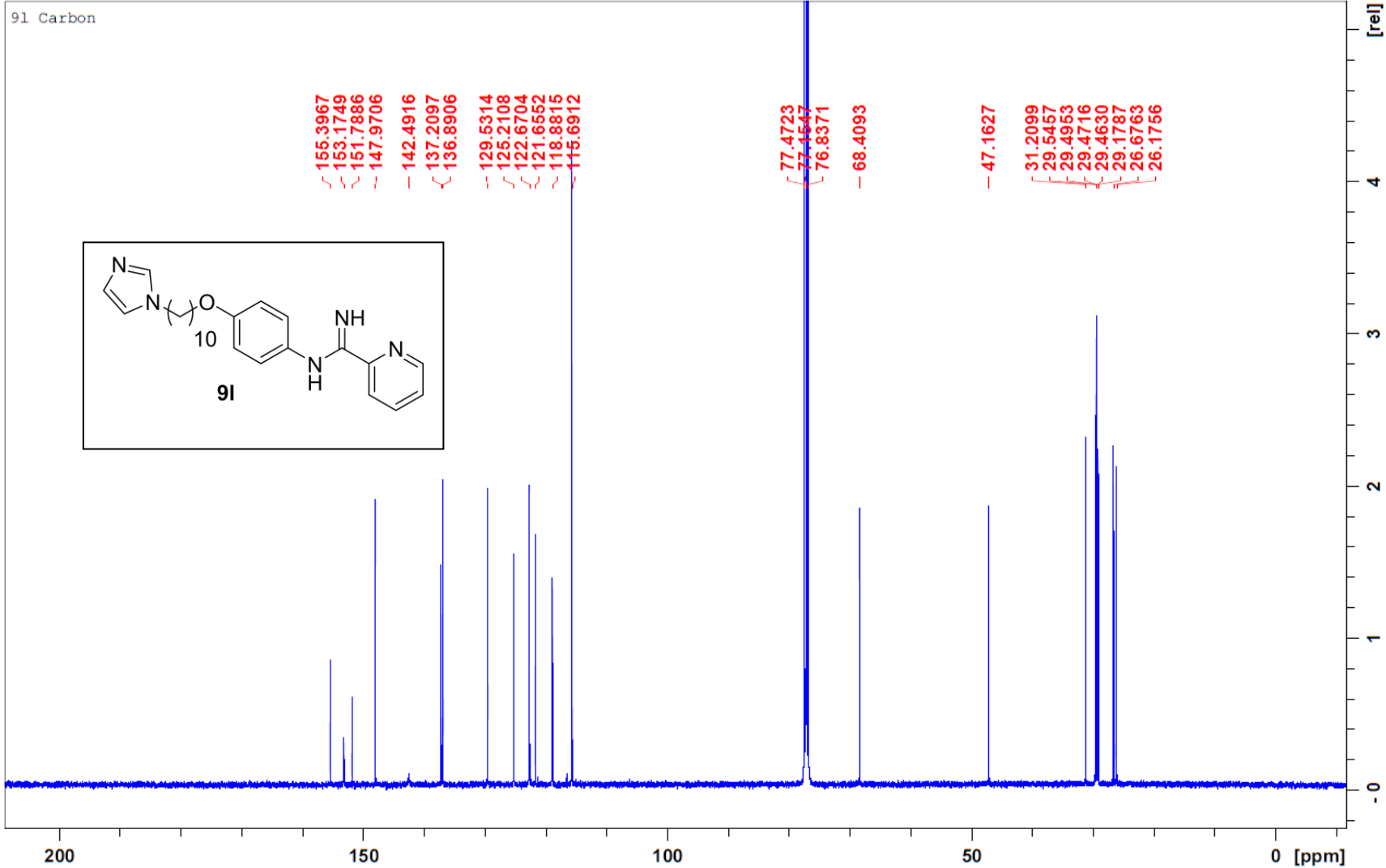


Figure S47. ¹³C NMR spectrum of compound 9I (100 MHz, CDCl₃).

91 3 1 C:\Bruker\TopSpin4.0.8\examdata

91 Carbon

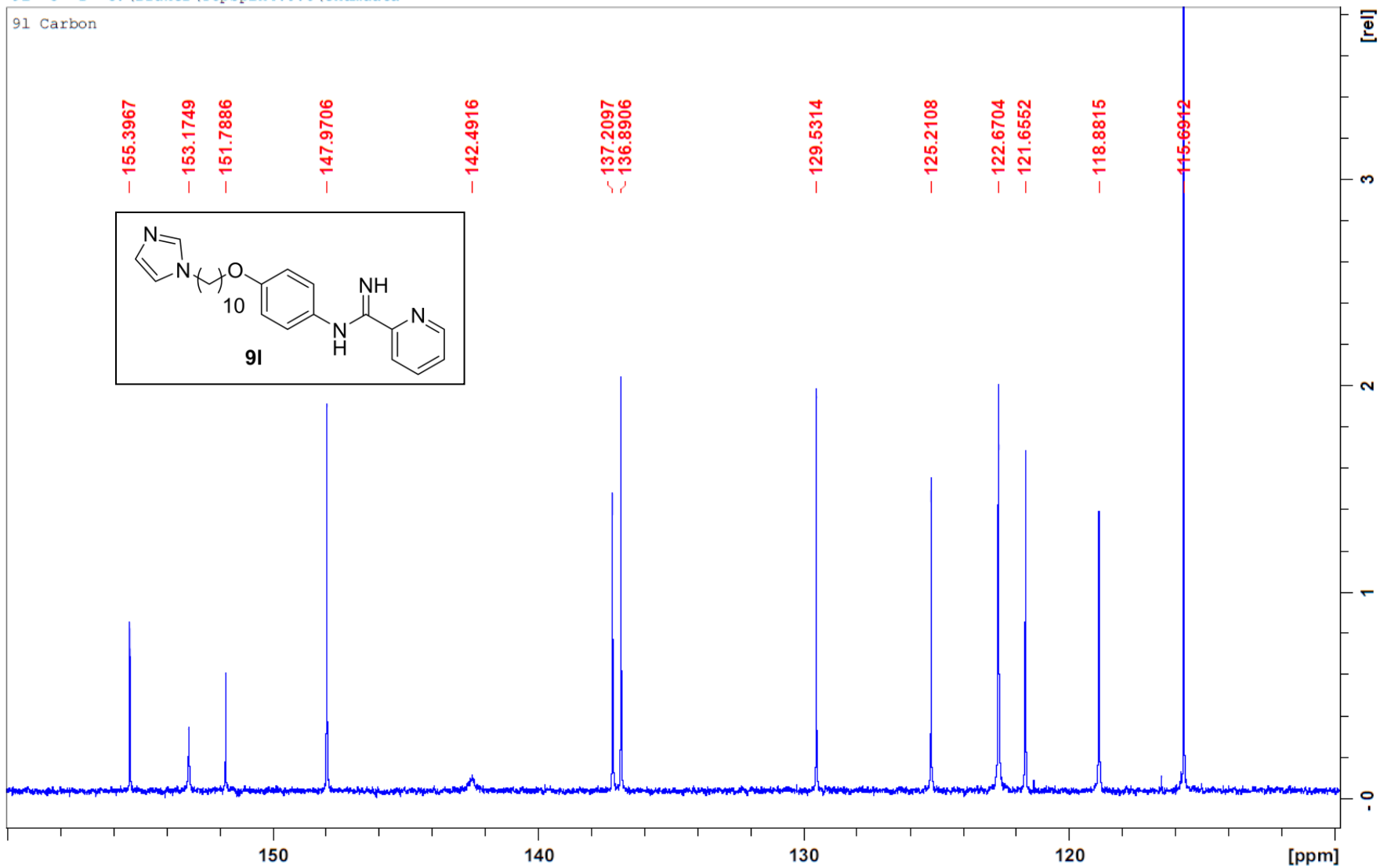


Figure S48. Expanded ^{13}C NMR spectrum of compound **9I** (100 MHz, CDCl_3).

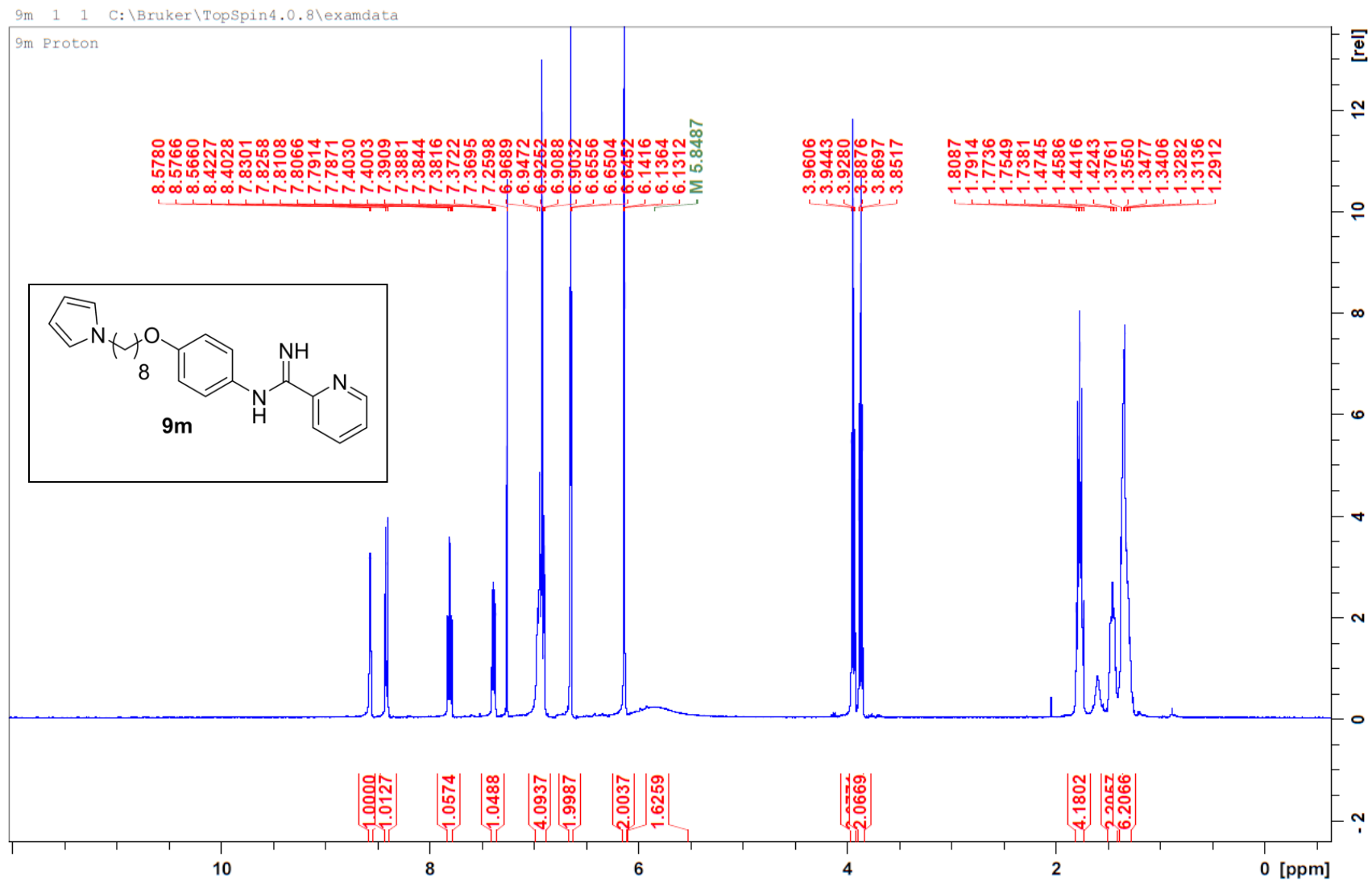


Figure S49. ¹H NMR spectrum of compound **9m** (400 MHz, CDCl₃).

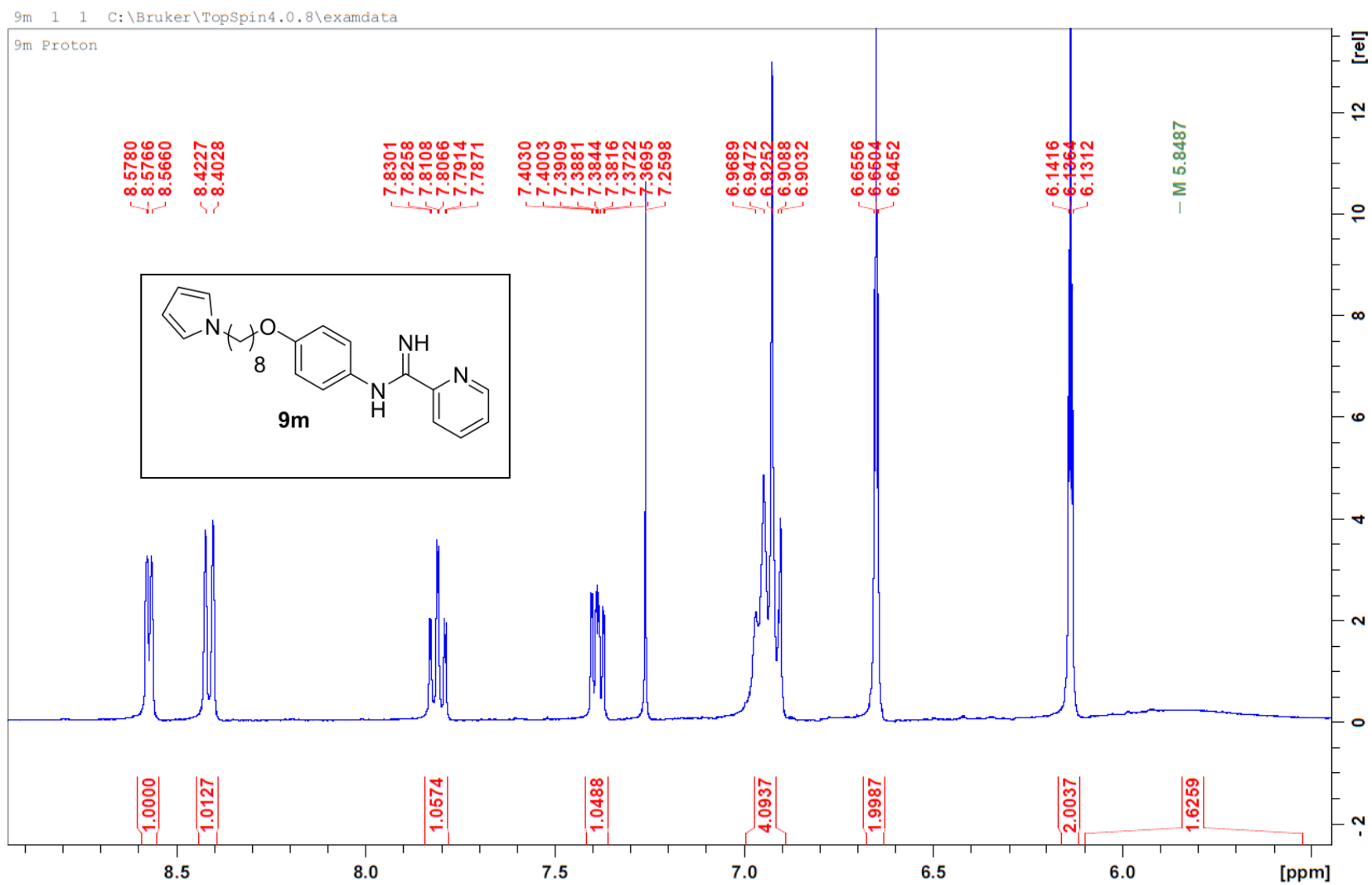


Figure S50. Expanded ^1H NMR spectrum of compound **9m** (400 MHz, CDCl_3).

9m 2 1 C:\Bruker\TopSpin4.0.8\examdata

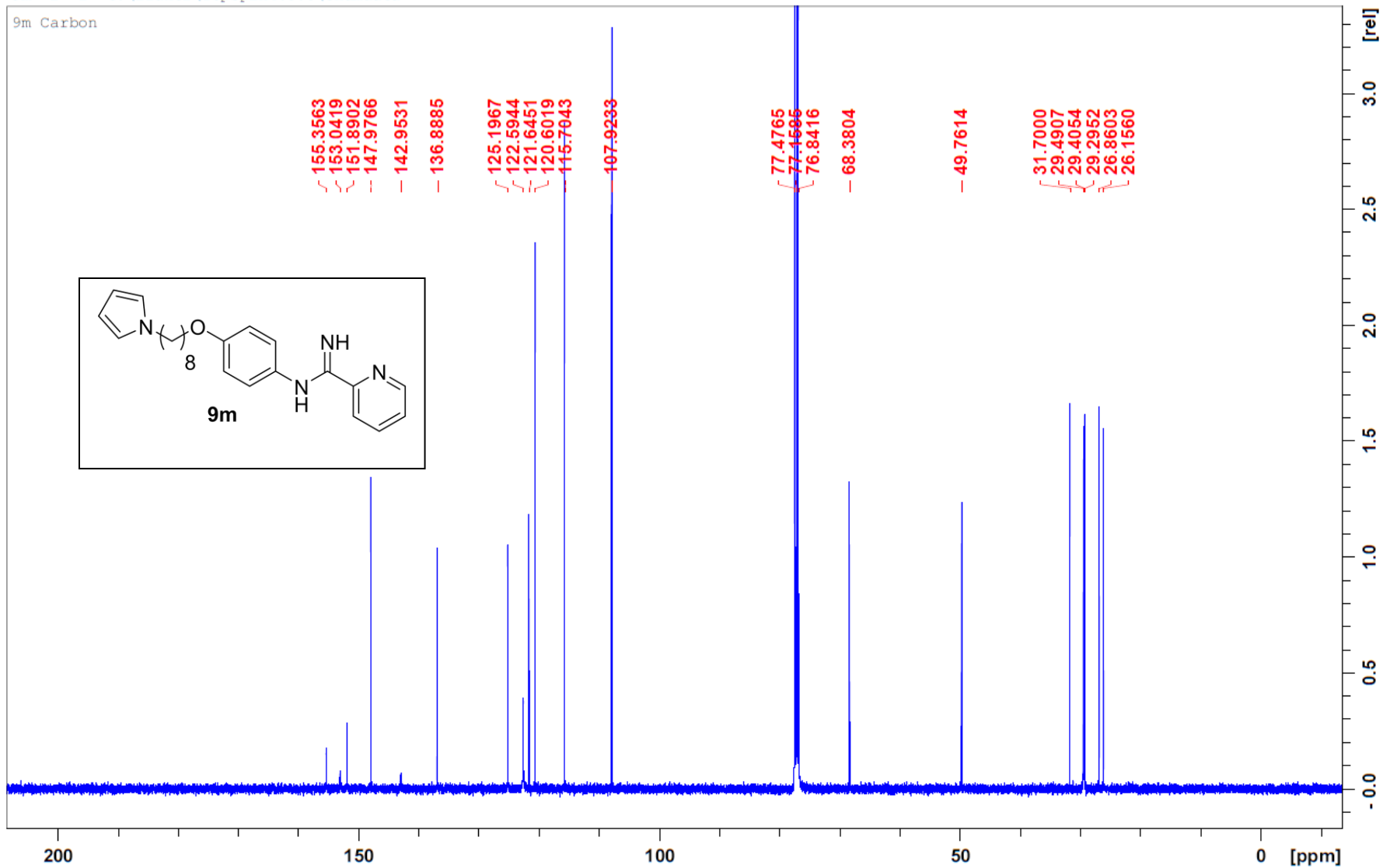


Figure S51. ^{13}C NMR spectrum of compound **9m** (100 MHz, CDCl_3).

9m 2 1 C:\Bruker\TopSpin4.0.8\examdata

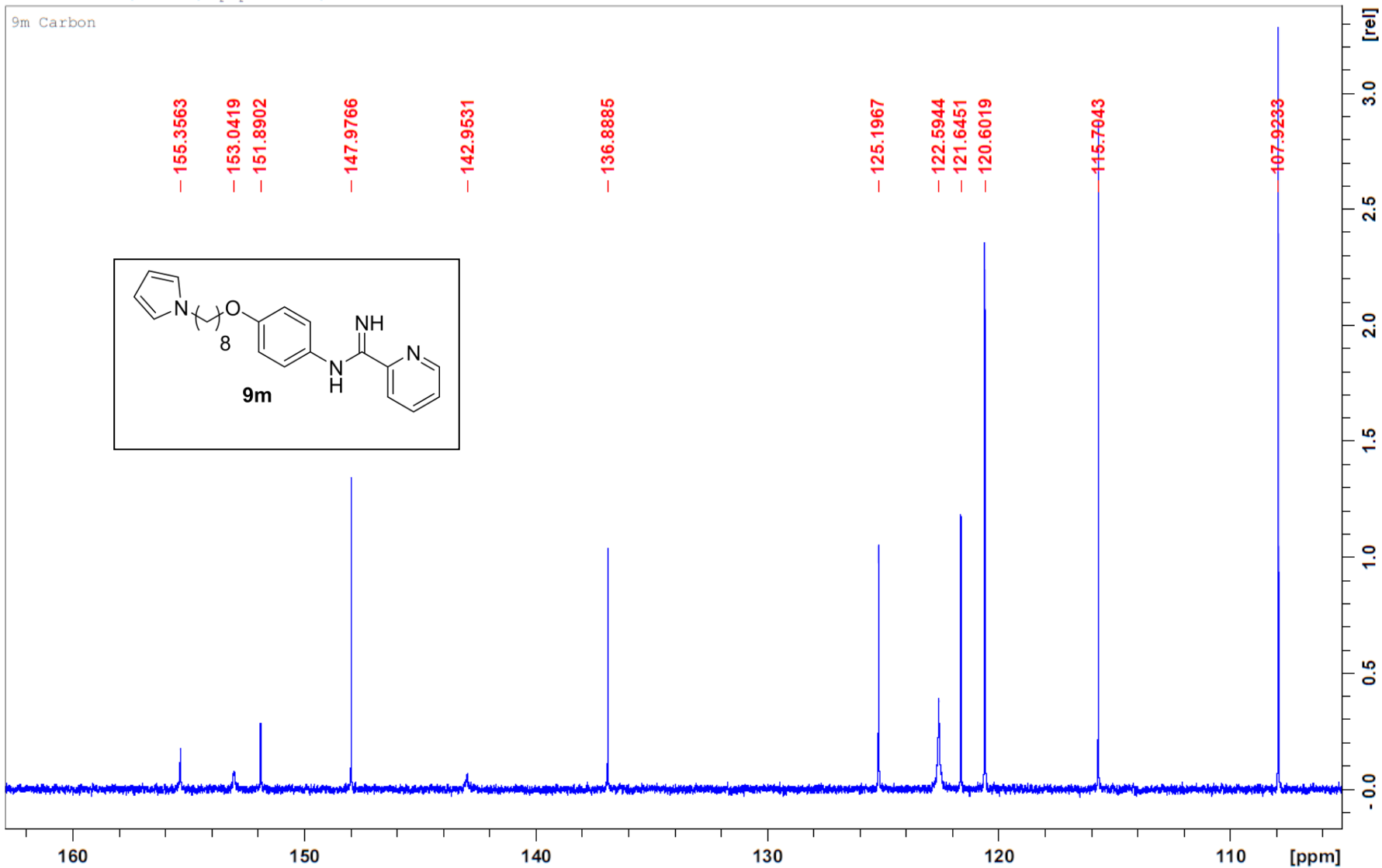


Figure S52. Expanded ^{13}C NMR spectrum of compound **9m** (100 MHz, CDCl_3).

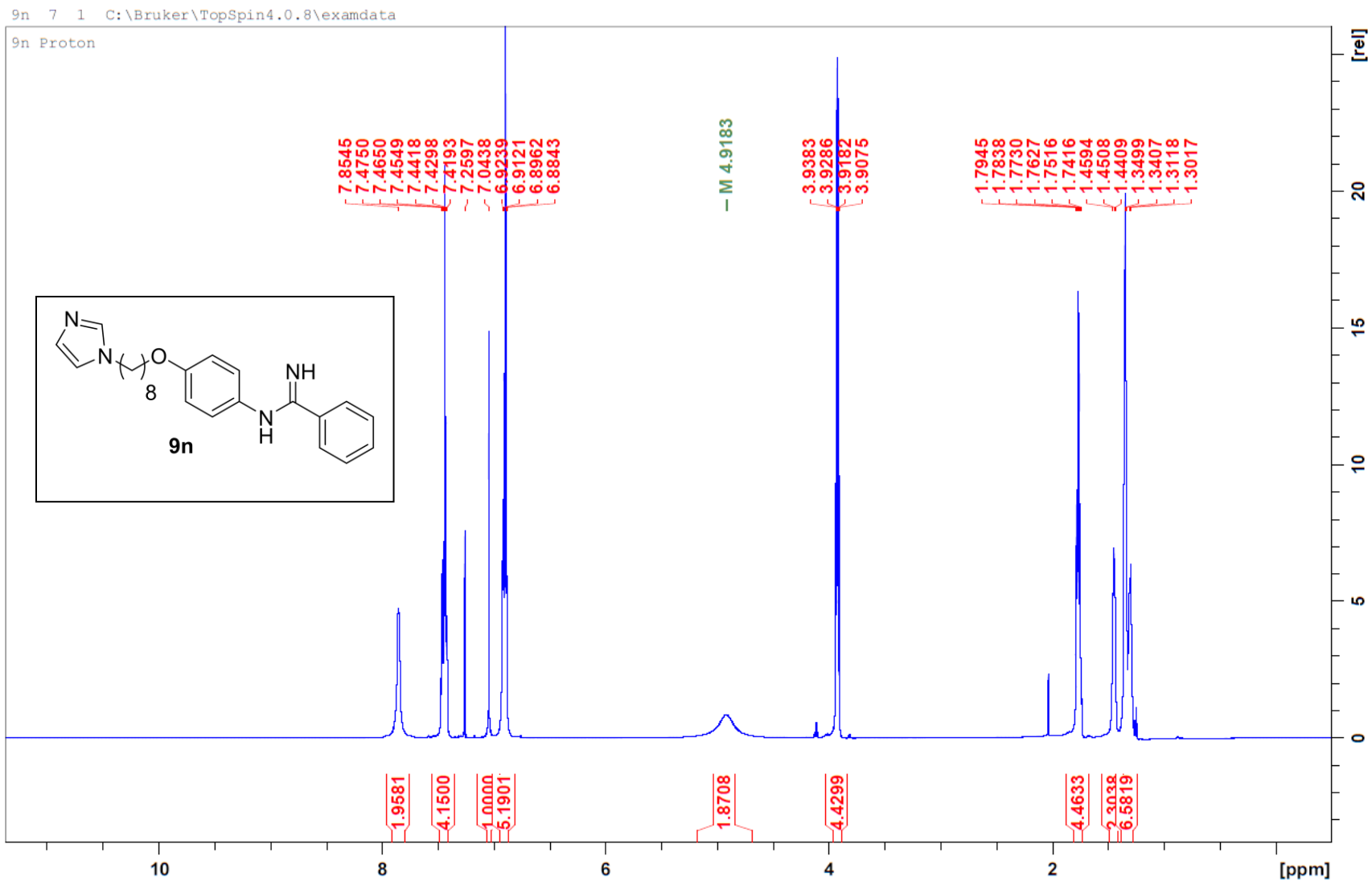


Figure S53. ^1H NMR spectrum of compound **9n** (700 MHz, CDCl_3).

9n 7 1 C:\Bruker\TopSpin4.0.8\examdata

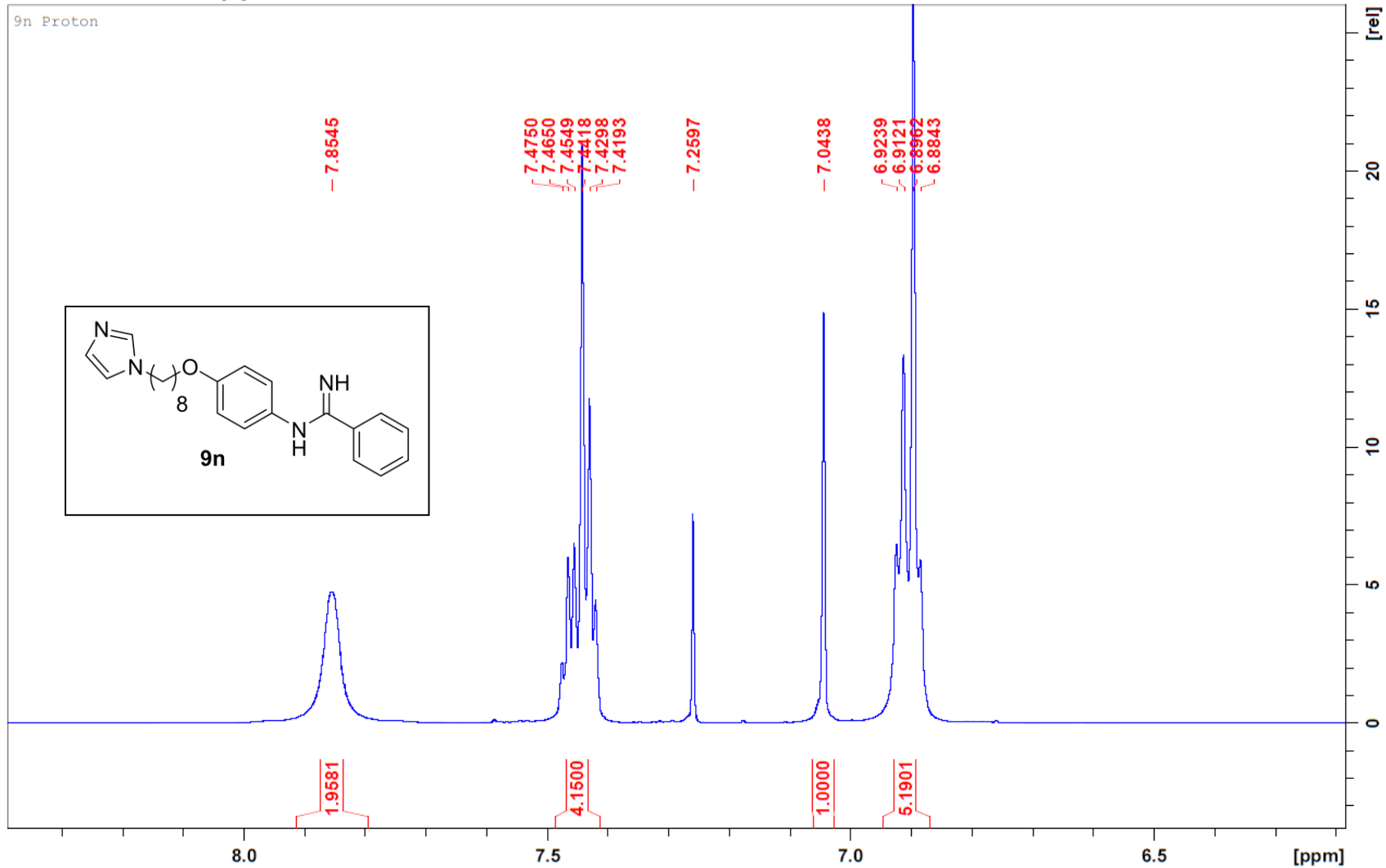


Figure S54. Expanded ^1H NMR spectrum of compound **9n** (700 MHz, CDCl_3).

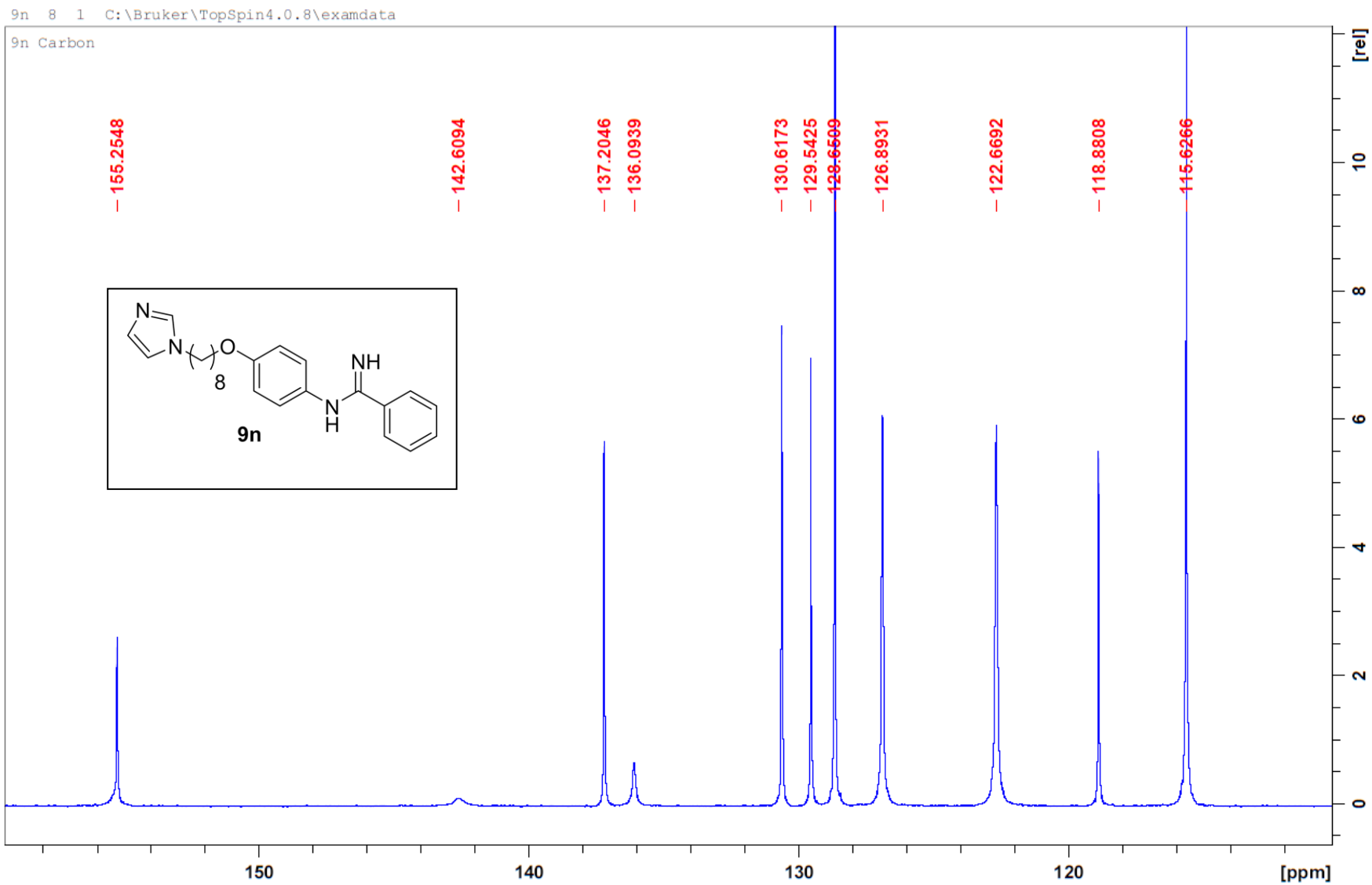


Figure S56. Expanded ^{13}C NMR spectrum of compound **9n** (176 MHz, CDCl_3).

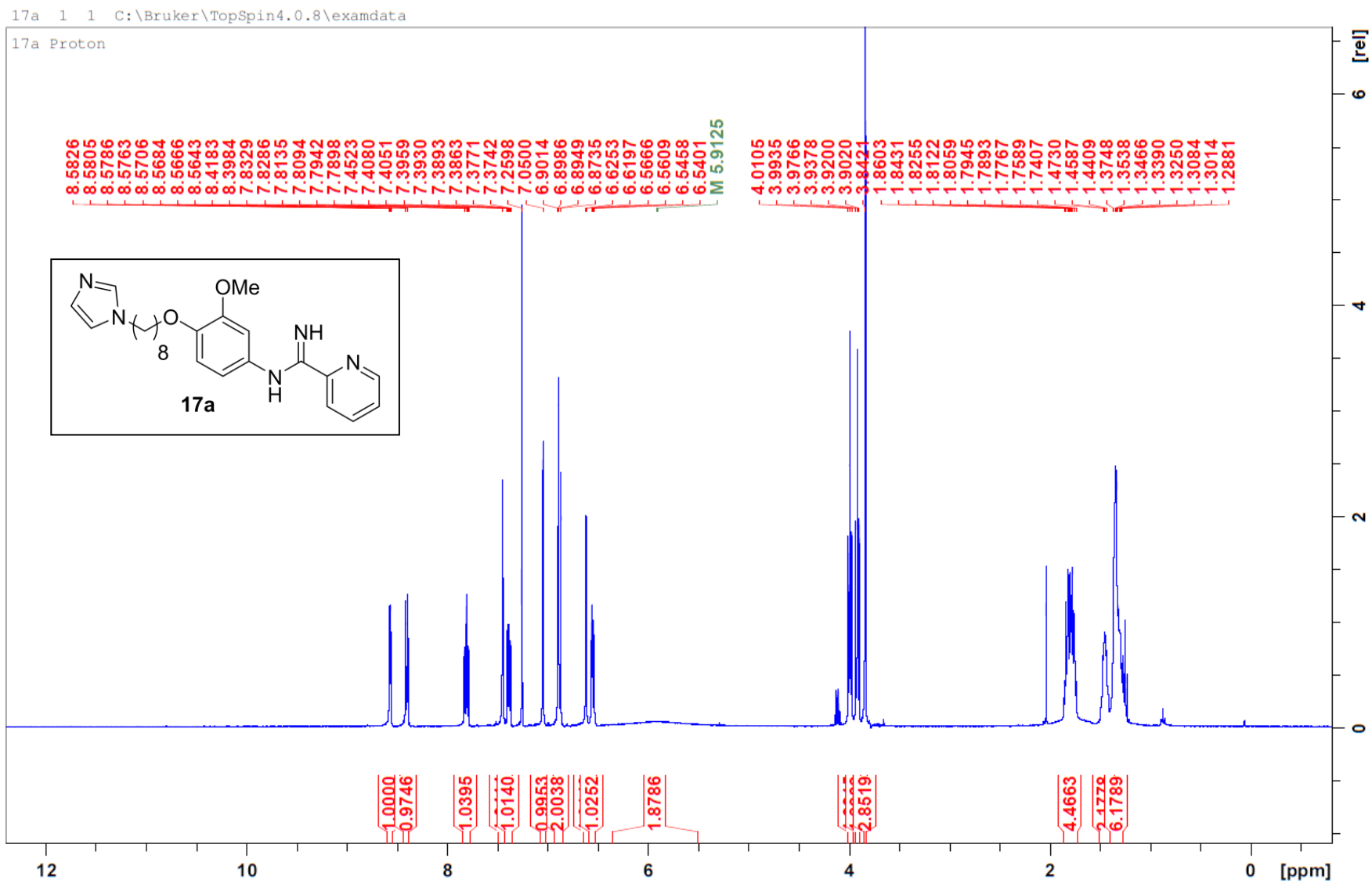


Figure S57. ^1H NMR spectrum of compound **17a** (400 MHz, CDCl_3).

17a 1 1 C:\Bruker\TopSpin4.0.8\examdata

17a Proton

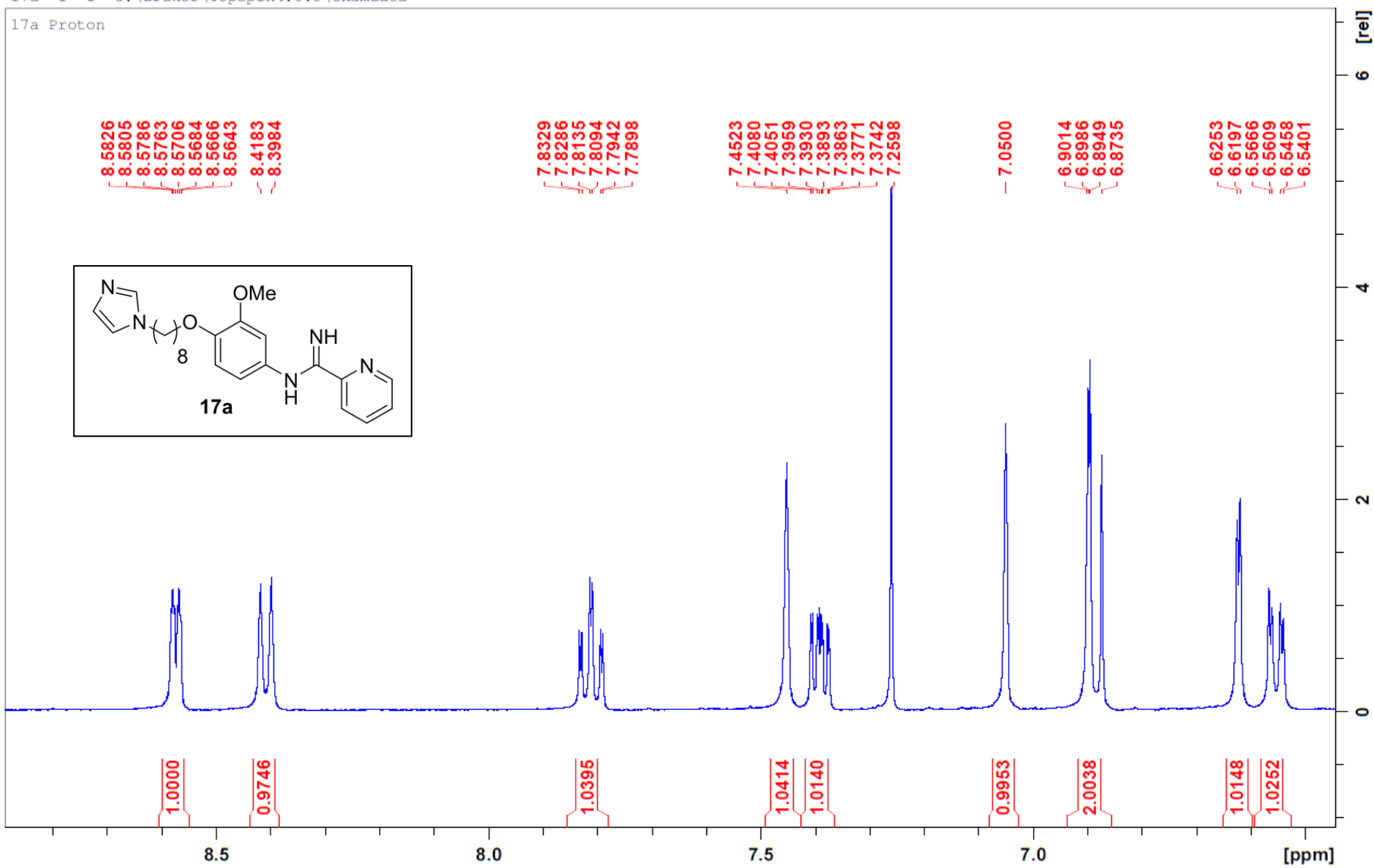


Figure S58. Expanded ^1H NMR spectrum of compound **17a** (400 MHz, CDCl_3).

17a 2 1 C:\Bruker\TopSpin4.0.8\examdata

17a Carbon

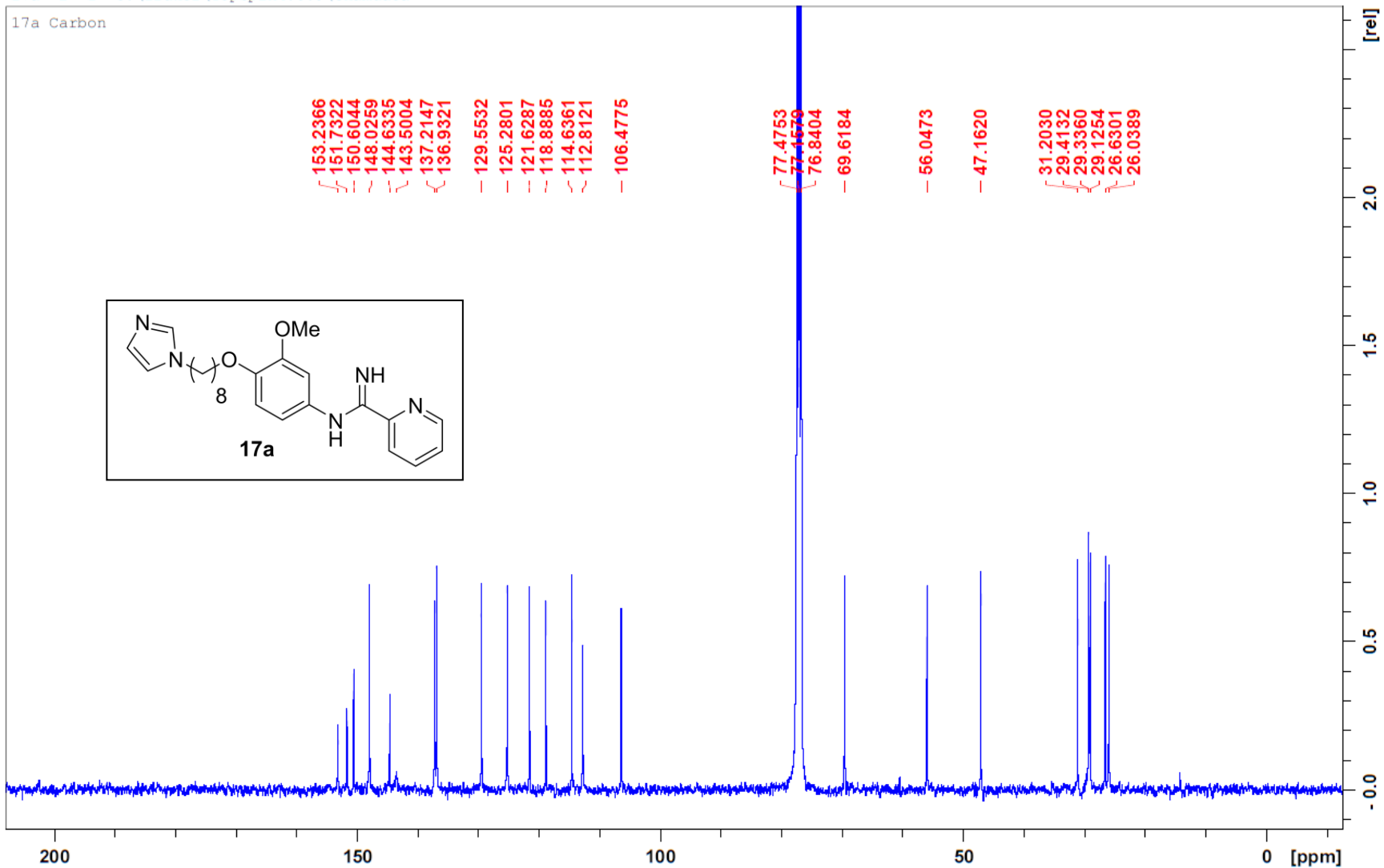


Figure S59. ^{13}C NMR spectrum of compound **17a** (100 MHz, CDCl_3).

17a 2 1 C:\Bruker\TopSpin4.0.8\examdata

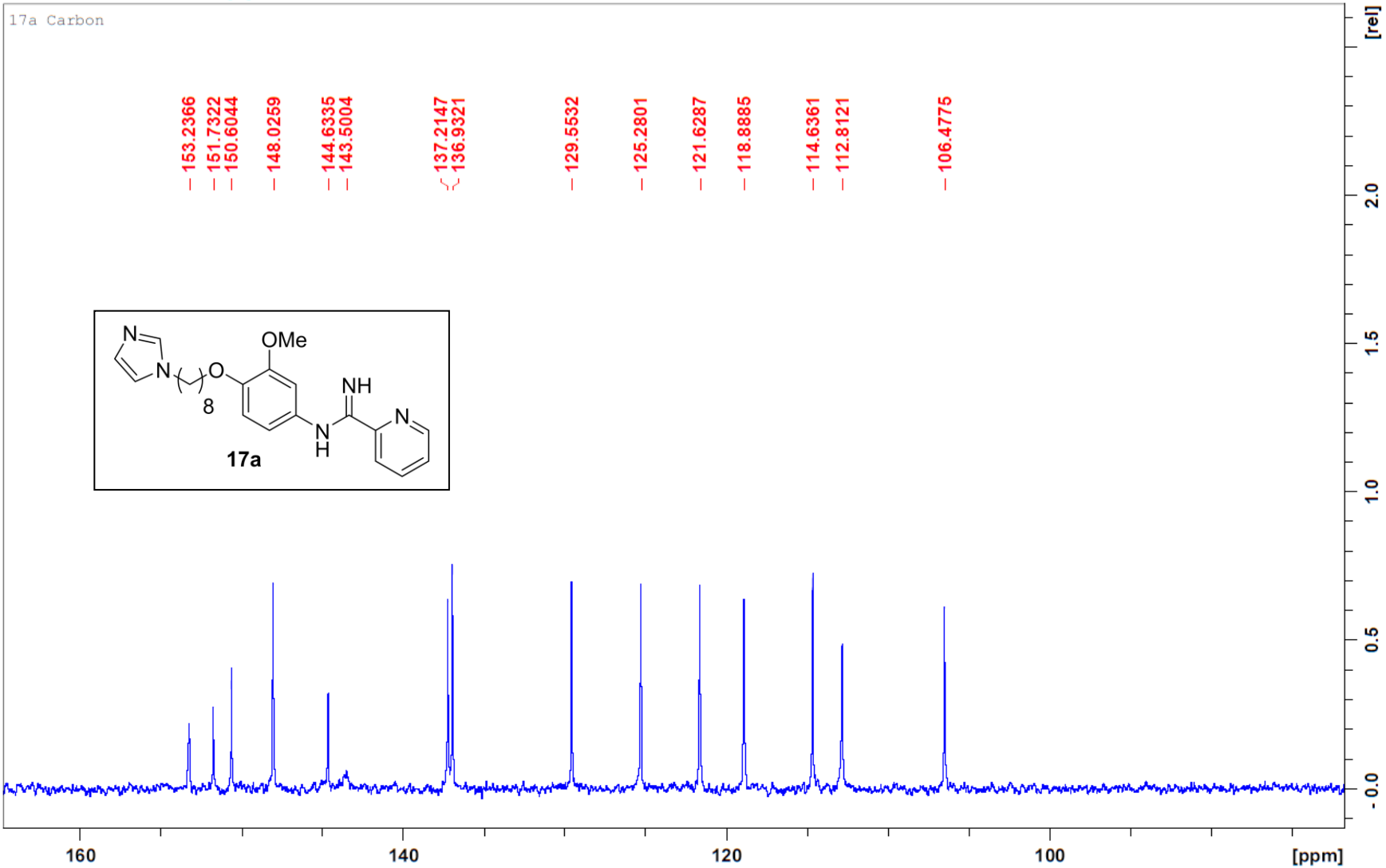


Figure S60. Expanded ^{13}C NMR spectrum of compound **17a** (100 MHz, CDCl_3).

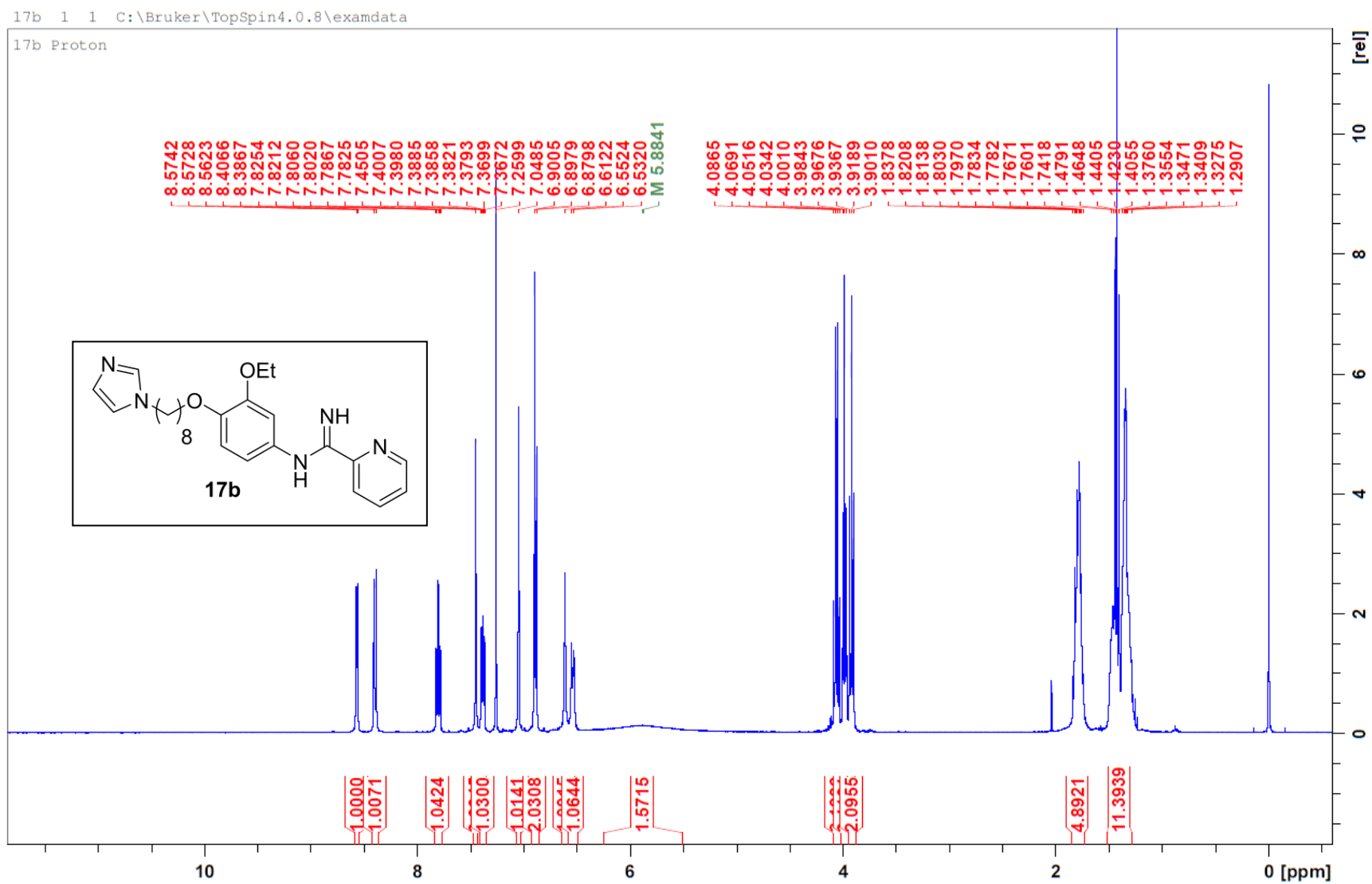


Figure S61. ^1H NMR spectrum of compound **17b** (400 MHz, CDCl_3).

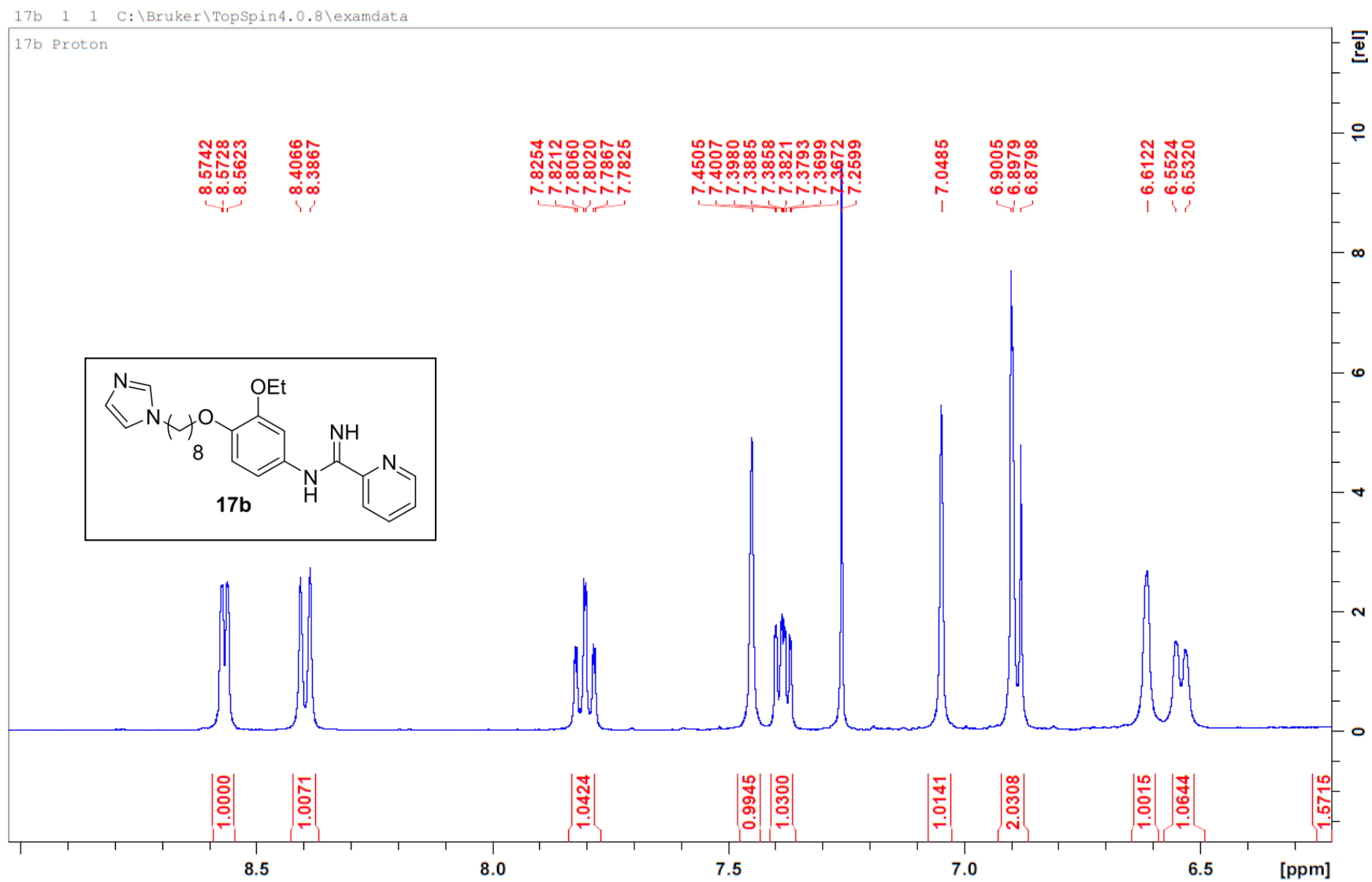


Figure S62. Expanded ^1H NMR spectrum of compound **17b** (400 MHz, CDCl_3).

17b 2 1 C:\Bruker\TopSpin4.0.8\examdata

17b carbon

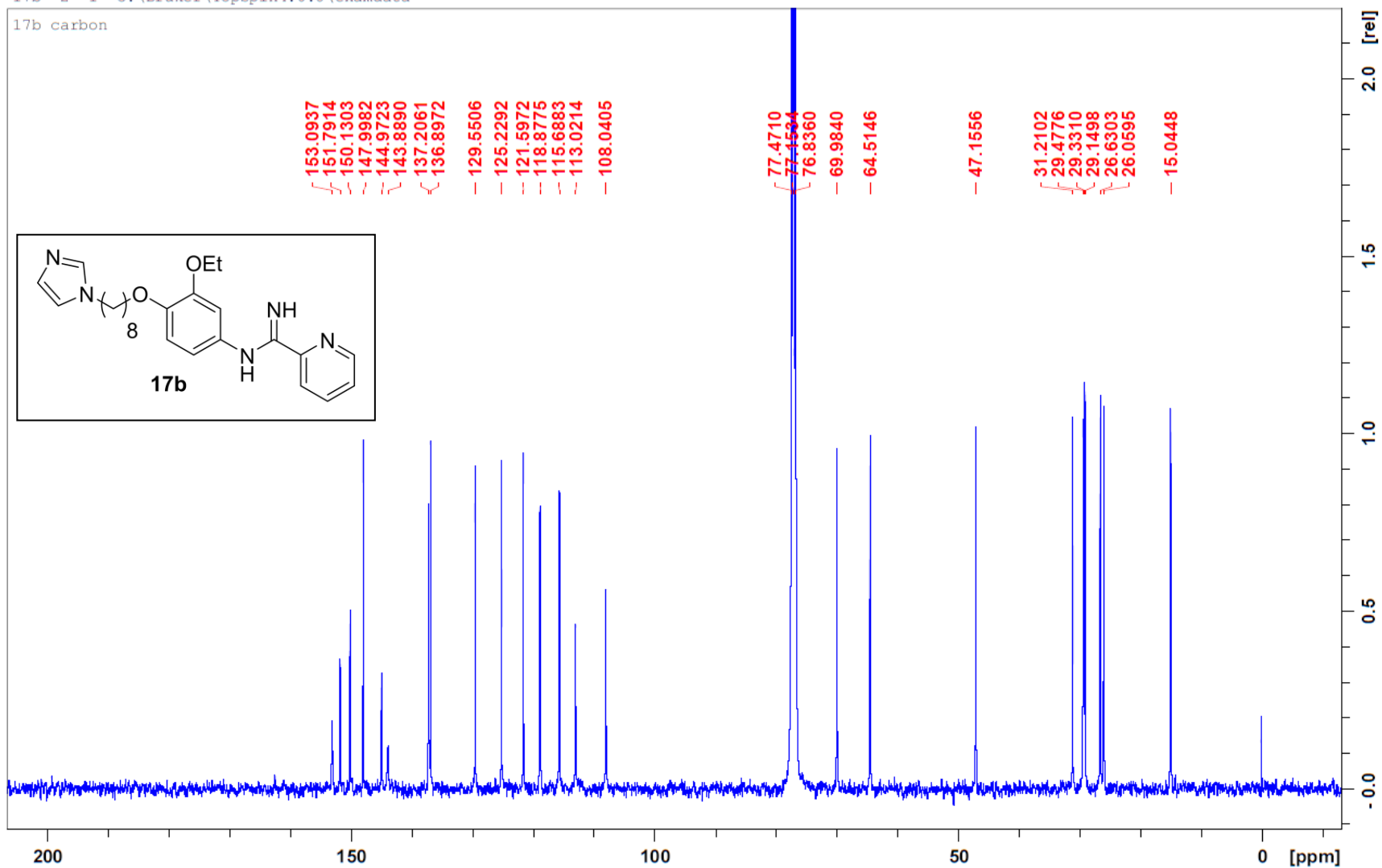


Figure S63. ¹³C NMR spectrum of compound **17b** (100 MHz, CDCl₃).

17b 2 1 C:\Bruker\TopSpin4.0.8\examdata

17b carbon

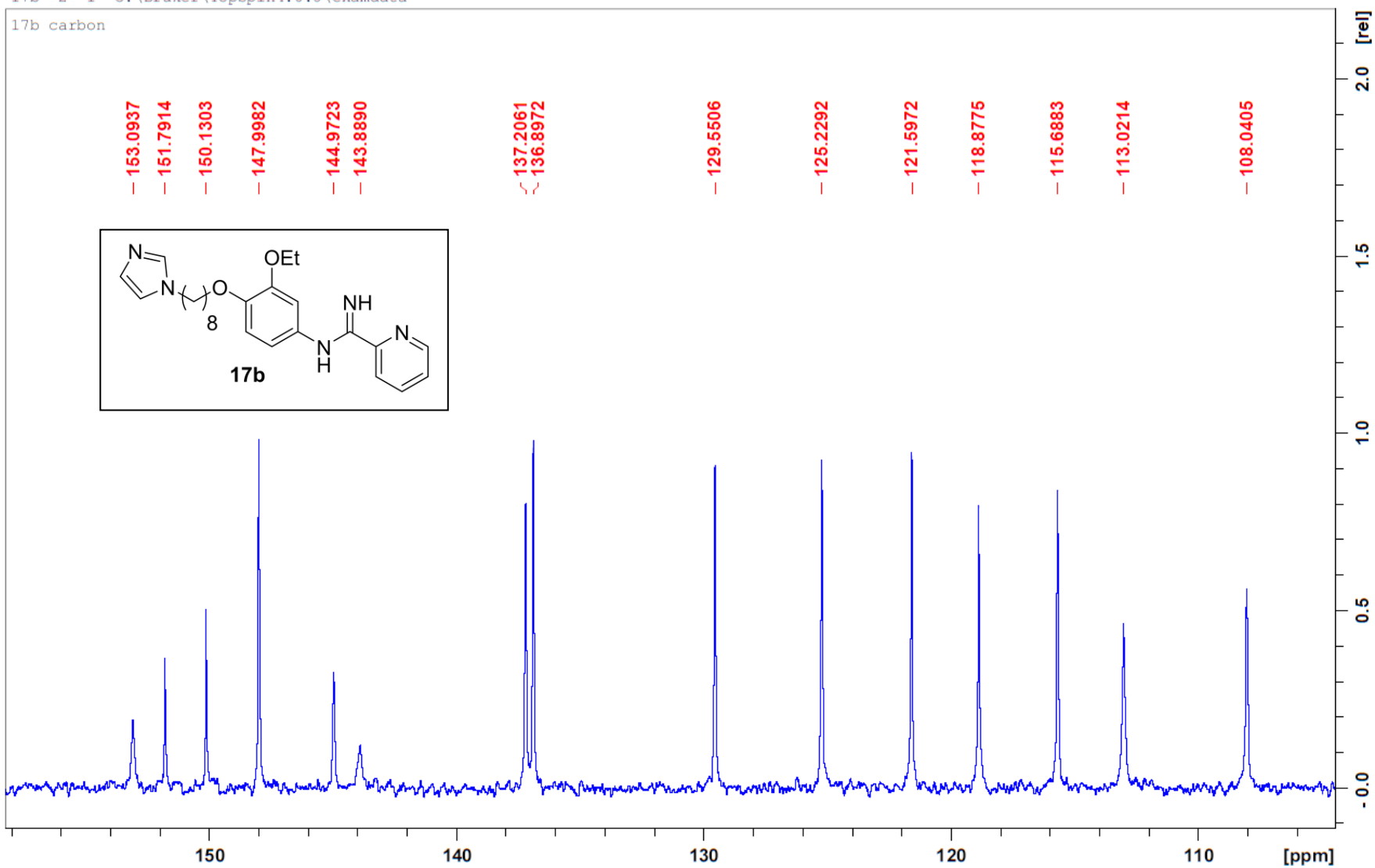


Figure S64. Expanded ^{13}C NMR spectrum of compound **17b** (100 MHz, CDCl_3).

17c 1 1 C:\Bruker\TopSpin4.0.8\examdata

17c Proton

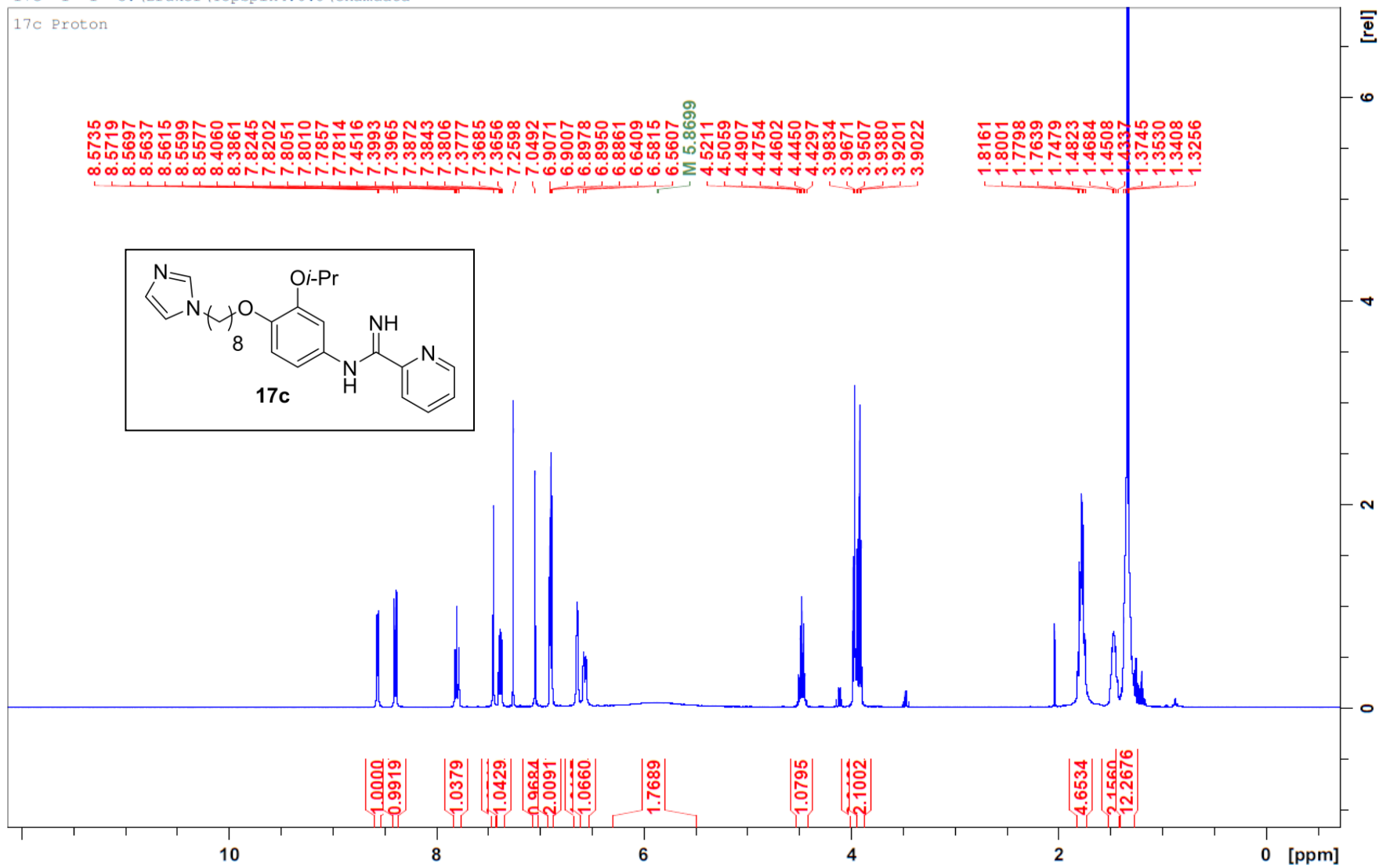


Figure S65. ¹H NMR spectrum of compound 17c (400 MHz, CDCl₃).

17c 1 1 C:\Bruker\TopSpin4.0.8\examdata

17c Proton

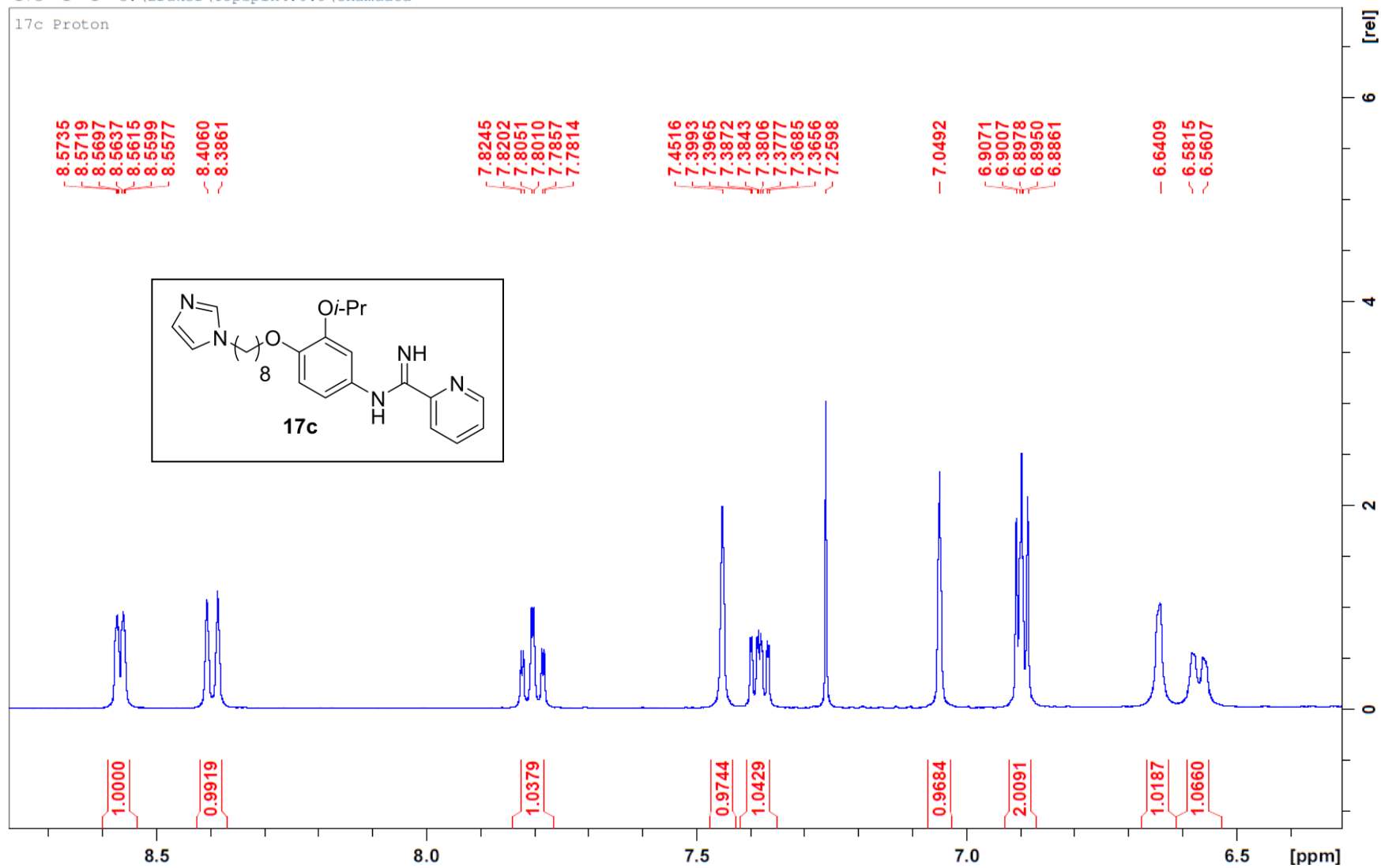


Figure S66. Expanded ^1H NMR spectrum of compound **17c** (400 MHz, CDCl_3).

17c 2 1 C:\Bruker\TopSpin4.0.8\examdata

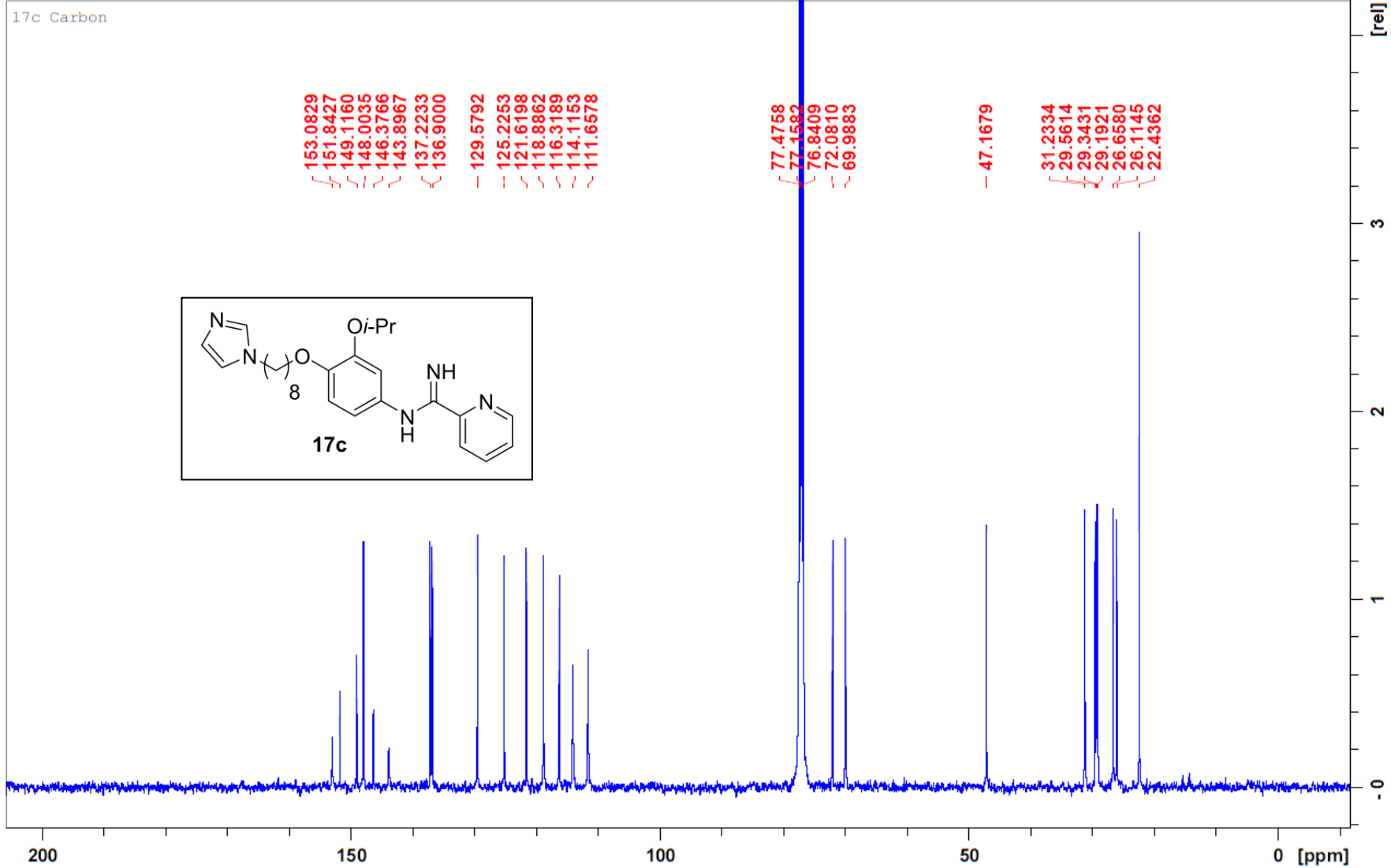


Figure S67. ^{13}C NMR spectrum of compound **17c** (100 MHz, CDCl_3).

17c 2 1 C:\Bruker\TopSpin4.0.8\examdata

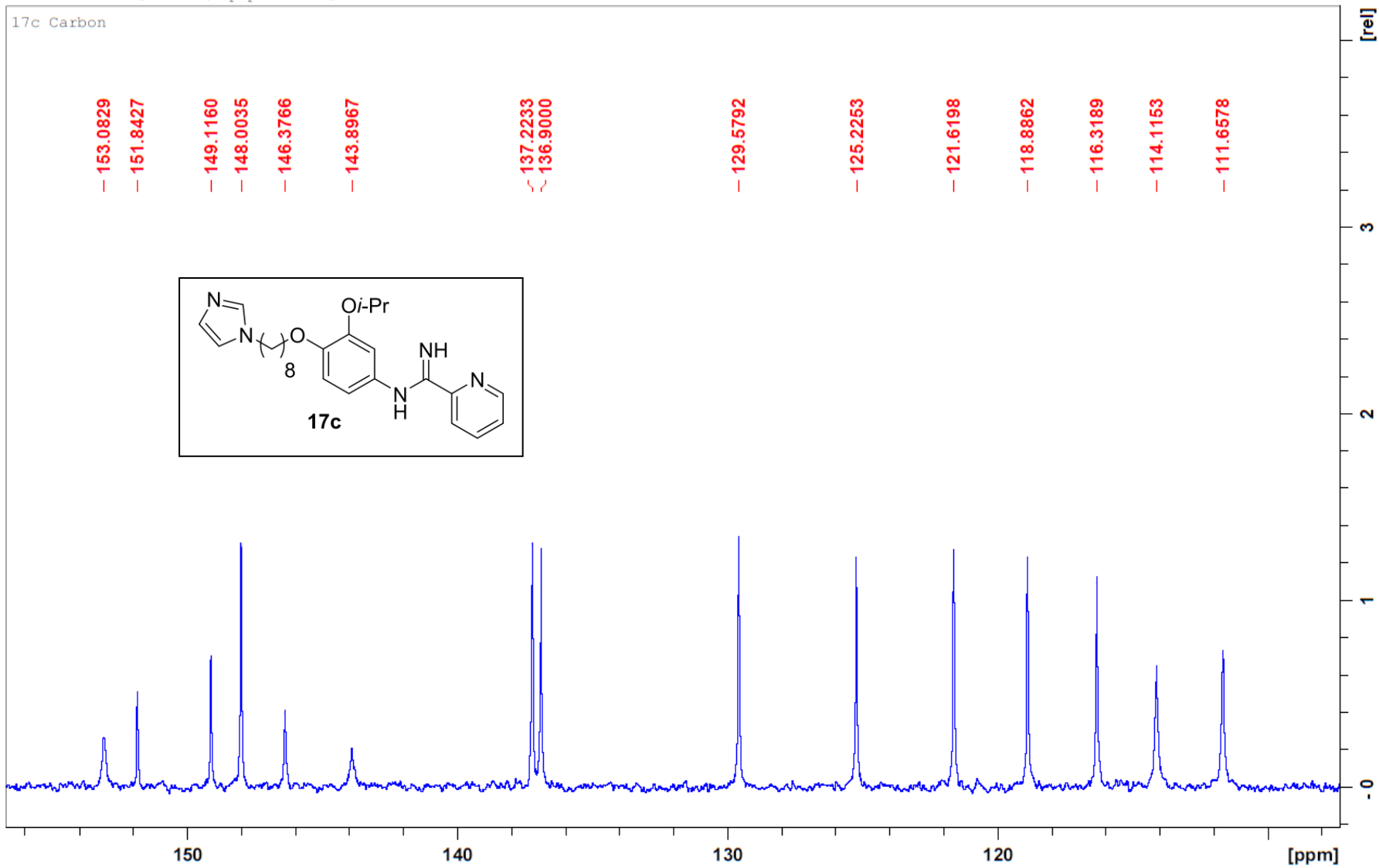


Figure S68. Expanded ^{13}C NMR spectrum of compound **17c** (100 MHz, CDCl_3).

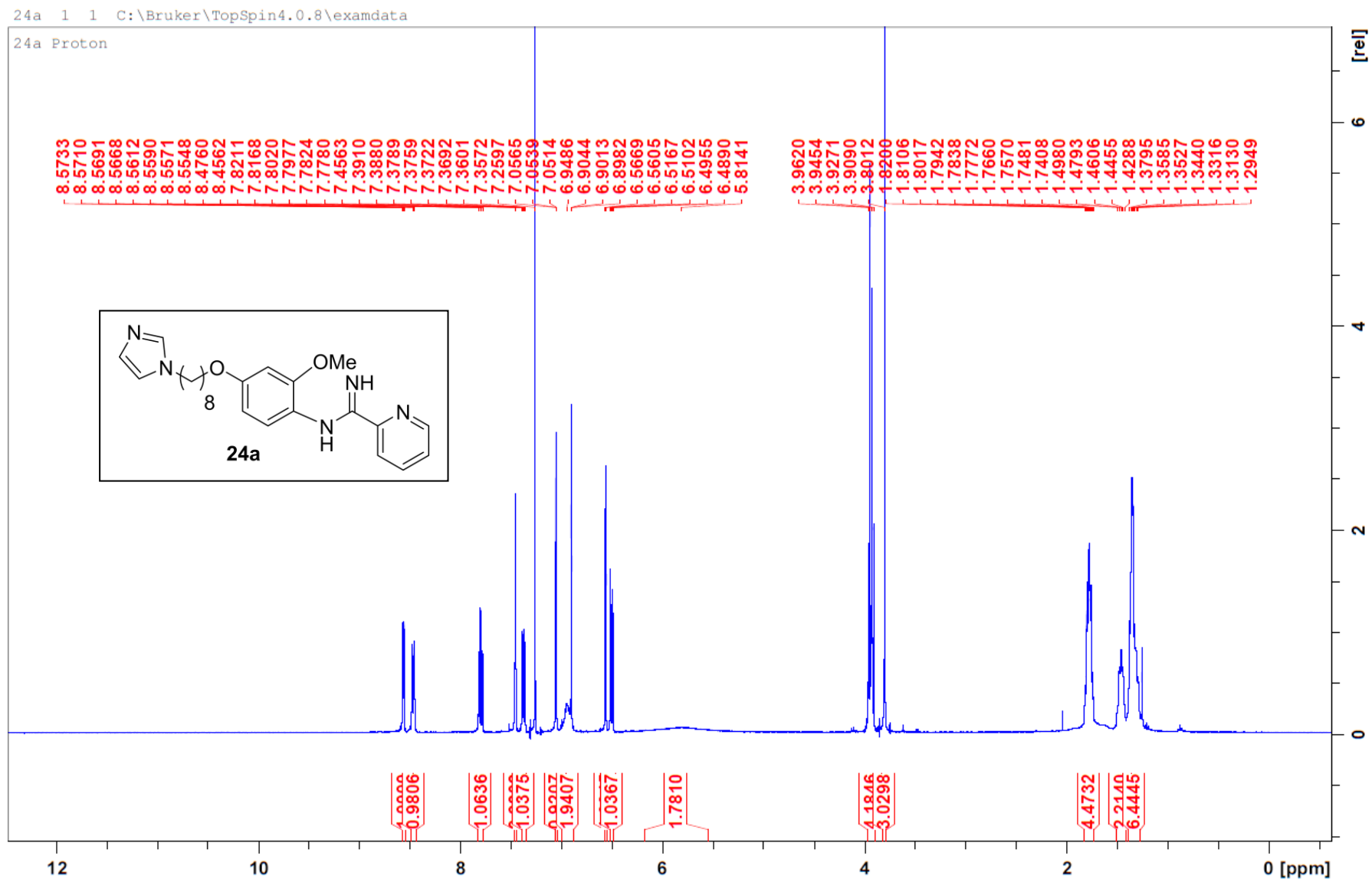


Figure S69. ^1H NMR spectrum of compound **24a** (400 MHz, CDCl_3).

24a 1 1 C:\Bruker\TopSpin4.0.8\examdata

24a Proton

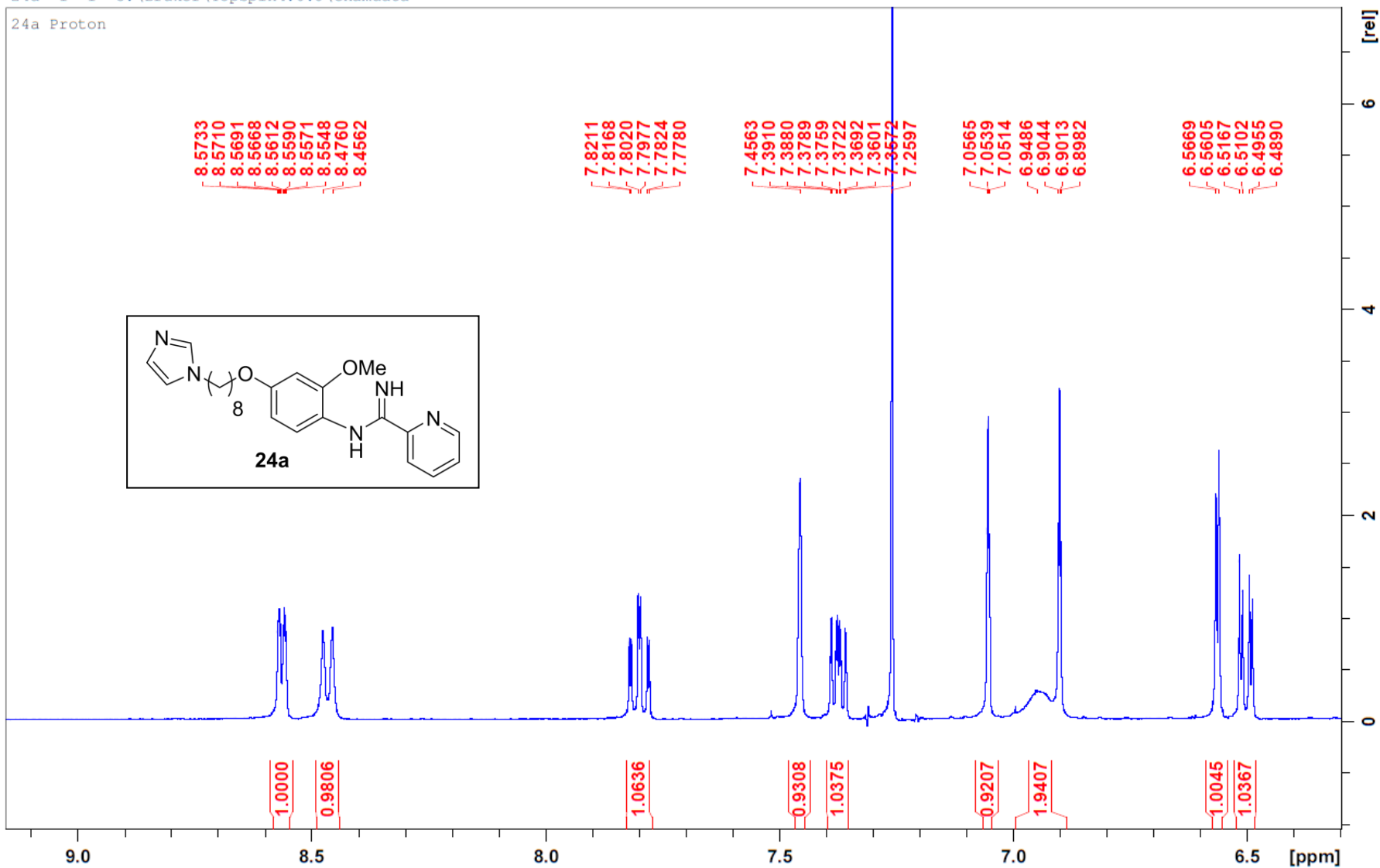


Figure S70. Expanded ¹H NMR spectrum of compound 24a (400 MHz, CDCl₃).

24a 2 1 C:\Bruker\TopSpin4.0.8\examdata

24a Carbon

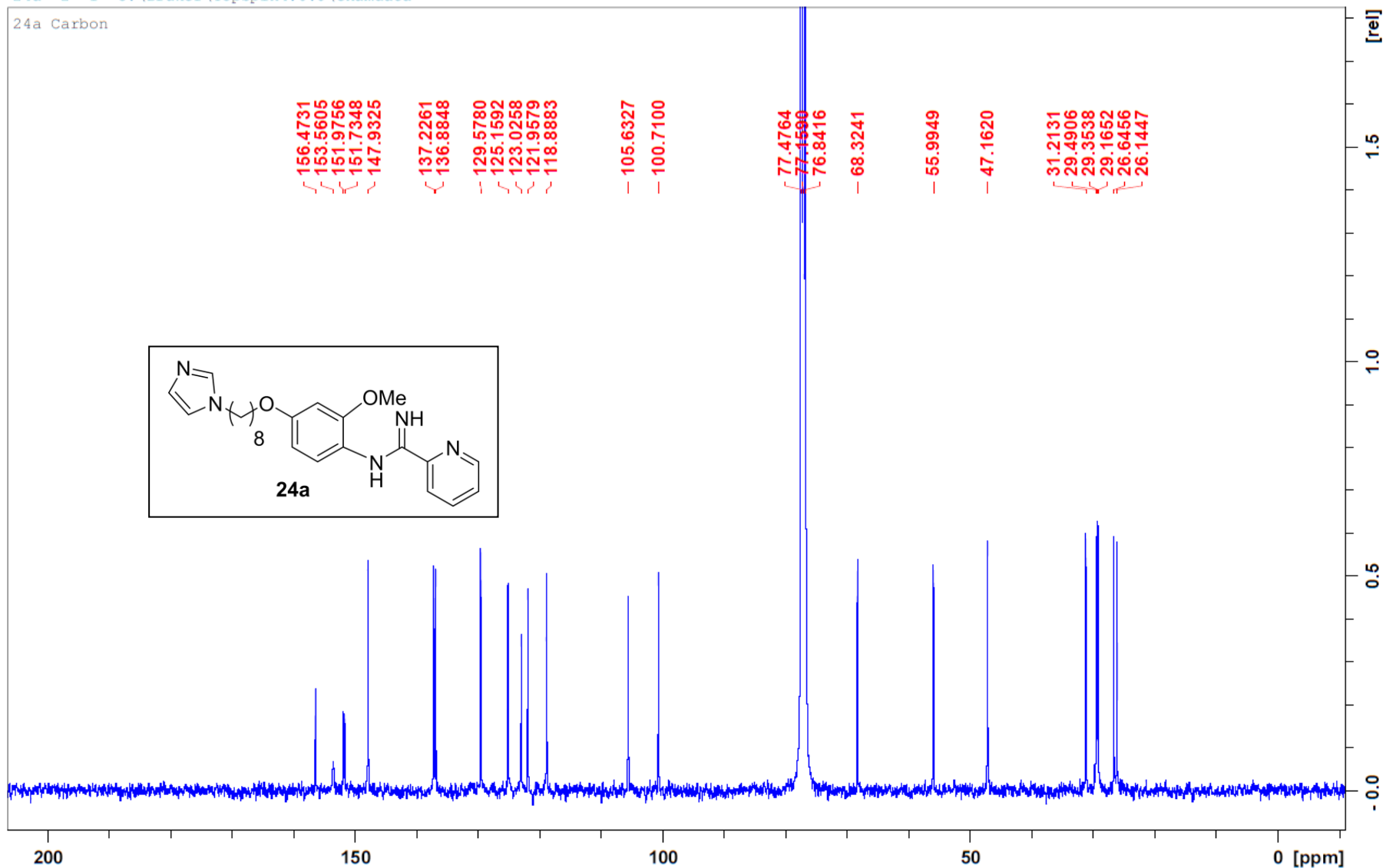


Figure S71. ^{13}C NMR spectrum of compound 24a (100 MHz, CDCl_3).

24a 2 1 C:\Bruker\TopSpin4.0.8\examdata

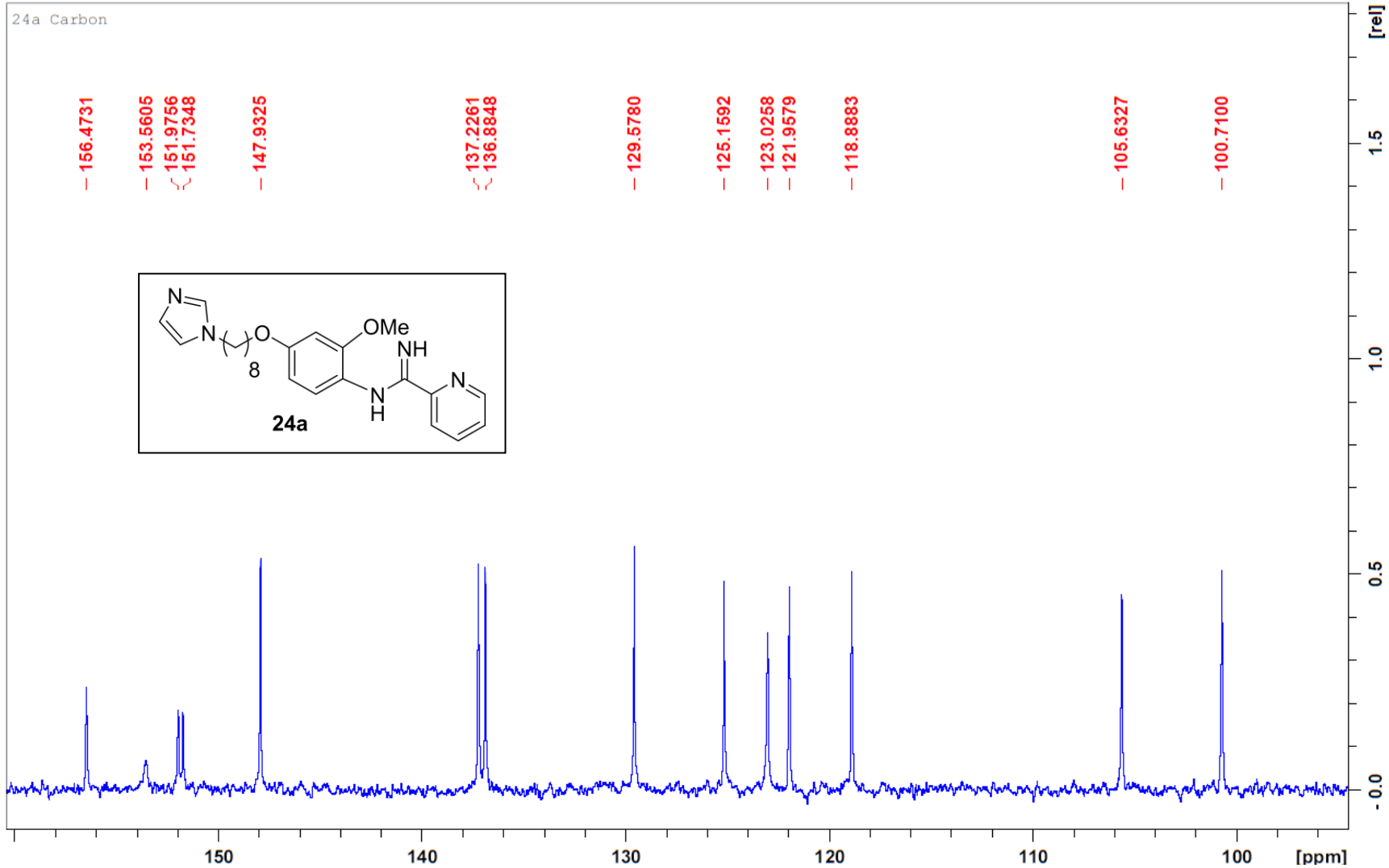


Figure S72. Expanded ^{13}C NMR spectrum of compound **24a** (100 MHz, CDCl_3).

24b 9 1 C:\Bruker\TopSpin4.0.8\examdata

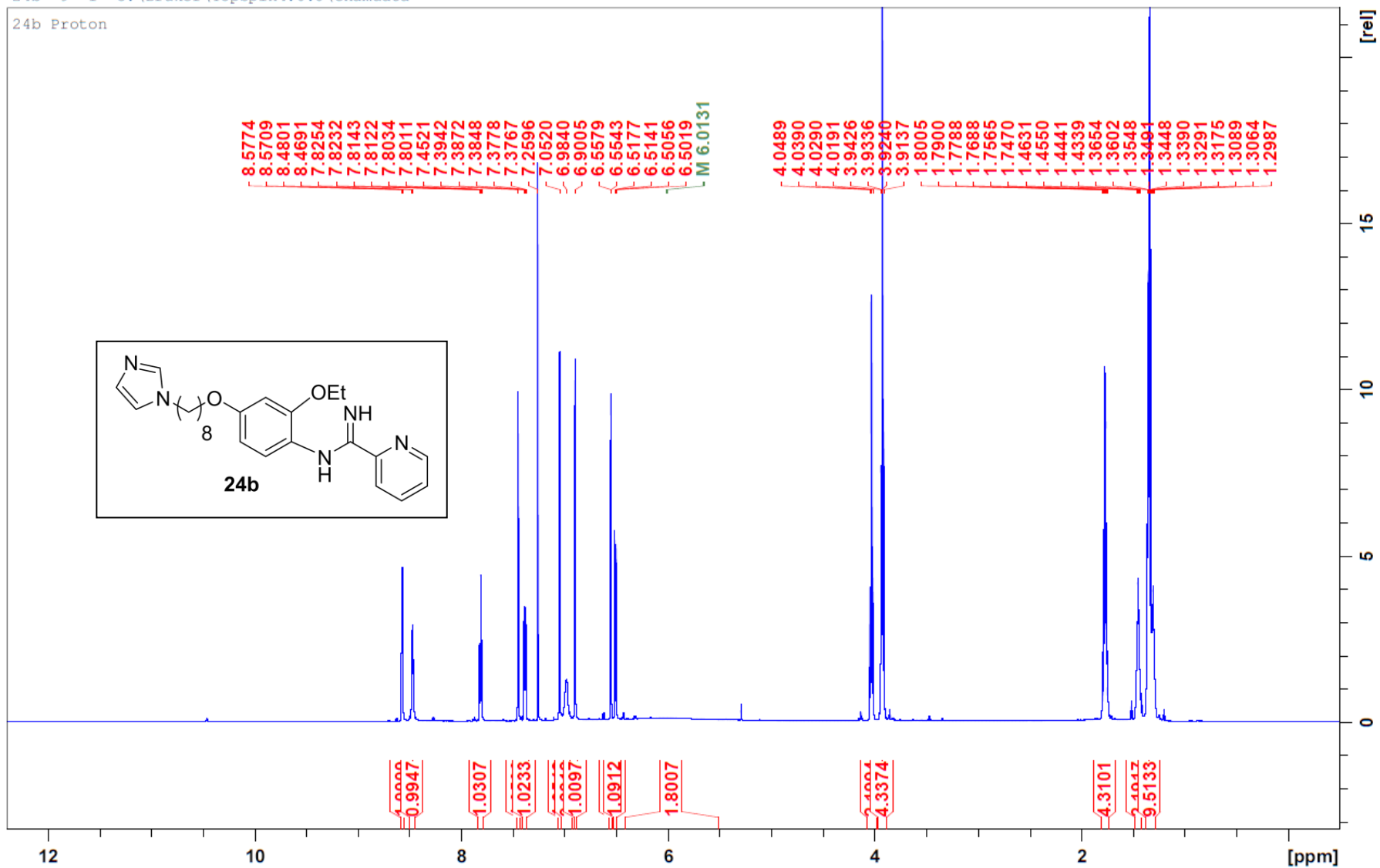


Figure S73. ^1H NMR spectrum of compound **24b** (700 MHz, CDCl_3).

24b 9 1 C:\Bruker\TopSpin4.0.8\examdata

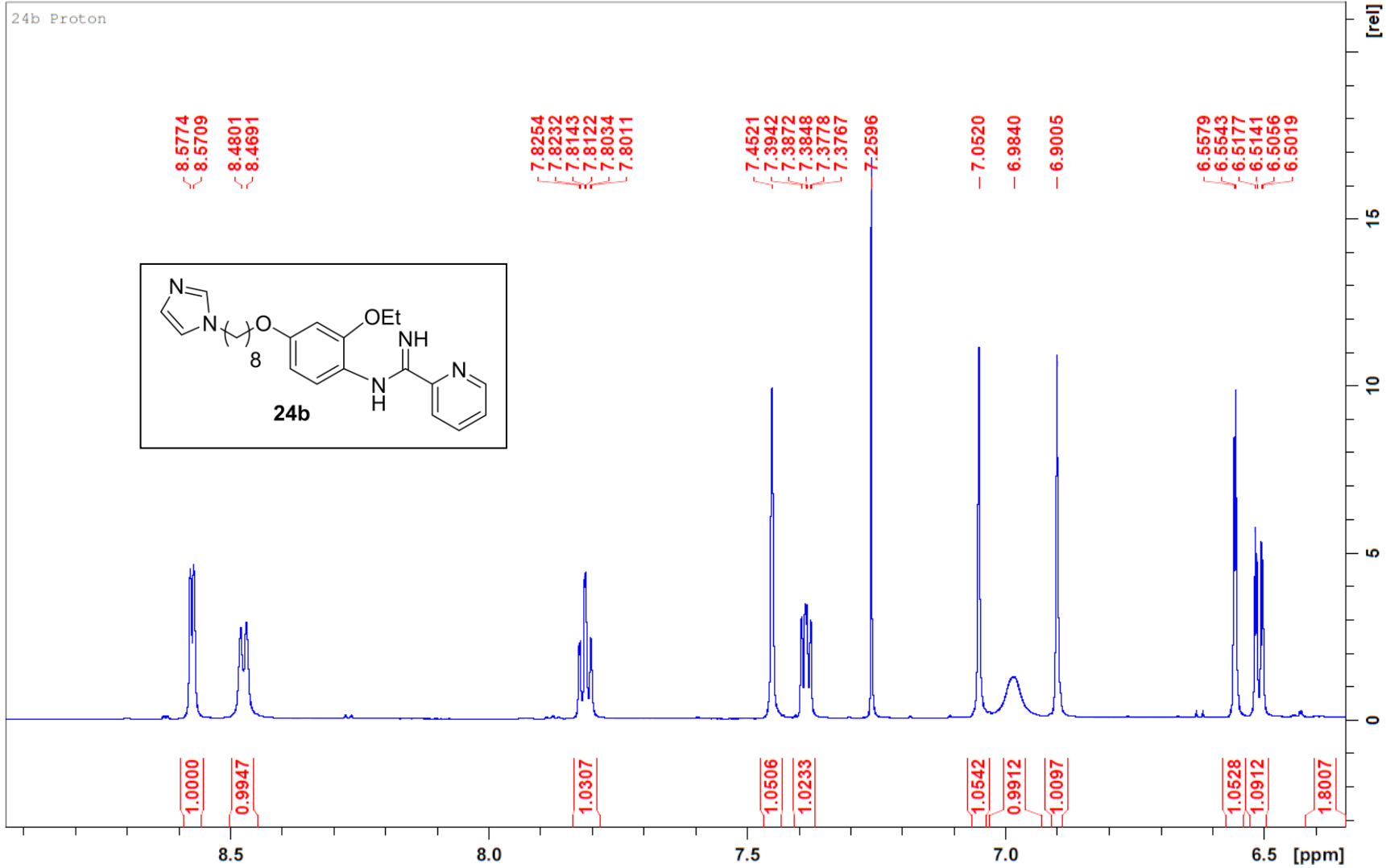


Figure S74. Expanded ^1H NMR spectrum of compound **24b** (700 MHz, CDCl_3).

24b 10 1 C:\Bruker\TopSpin4.0.8\examdata

24b Carbon

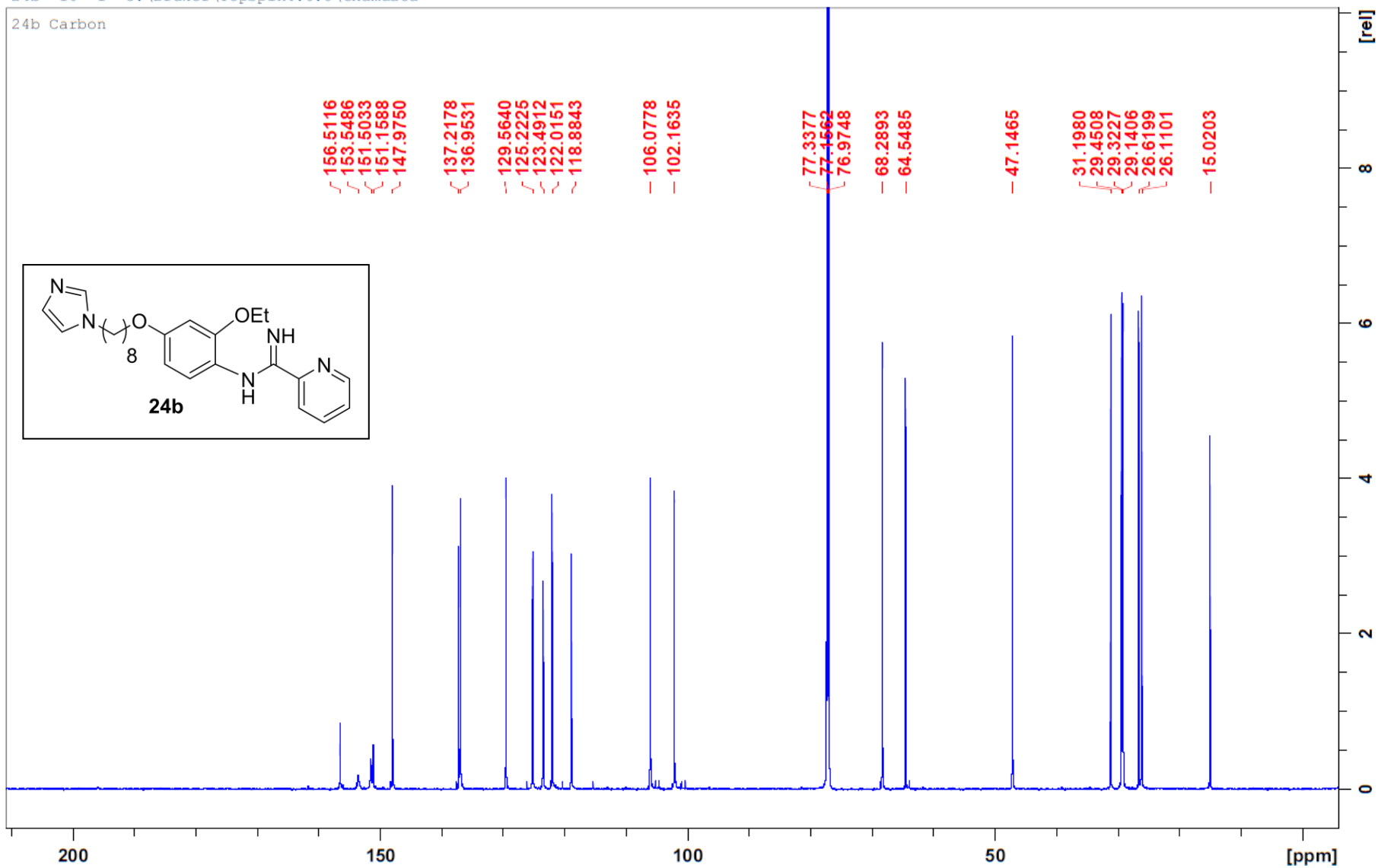


Figure S75. ¹³C NMR spectrum of compound **24b** (176 MHz, CDCl₃).

24b 10 1 C:\Bruker\TopSpin4.0.8\examdata

24b Carbon

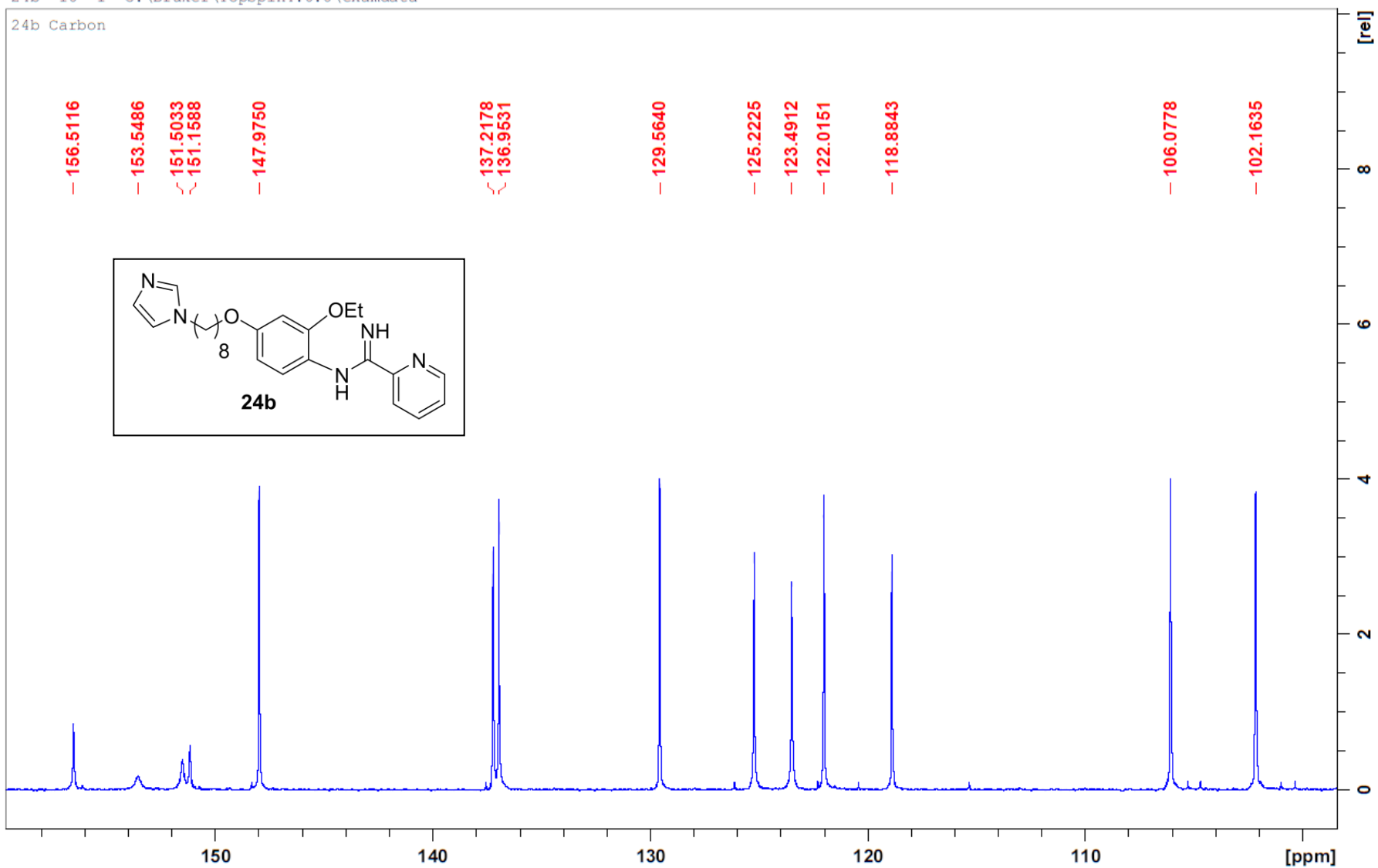


Figure S76. Expanded ^{13}C NMR spectrum of compound **24b** (176 MHz, CDCl_3).

24c 11 1 C:\Bruker\TopSpin4.0.8\examdata

24c Proton

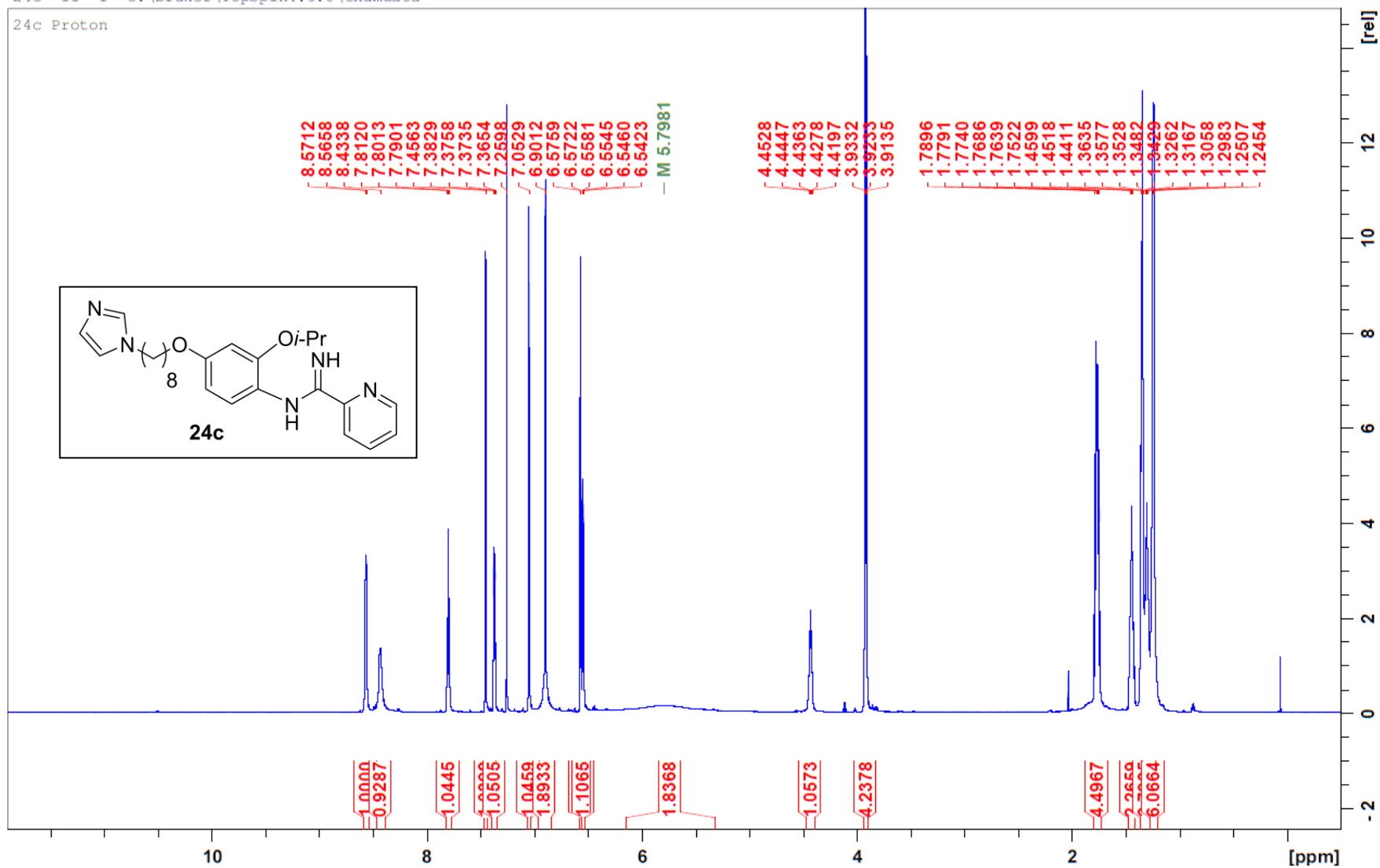


Figure S77. ^1H NMR spectrum of compound **24c** (700 MHz, CDCl_3).

24c 11 1 C:\Bruker\TopSpin4.0.8\examdata

24c Proton

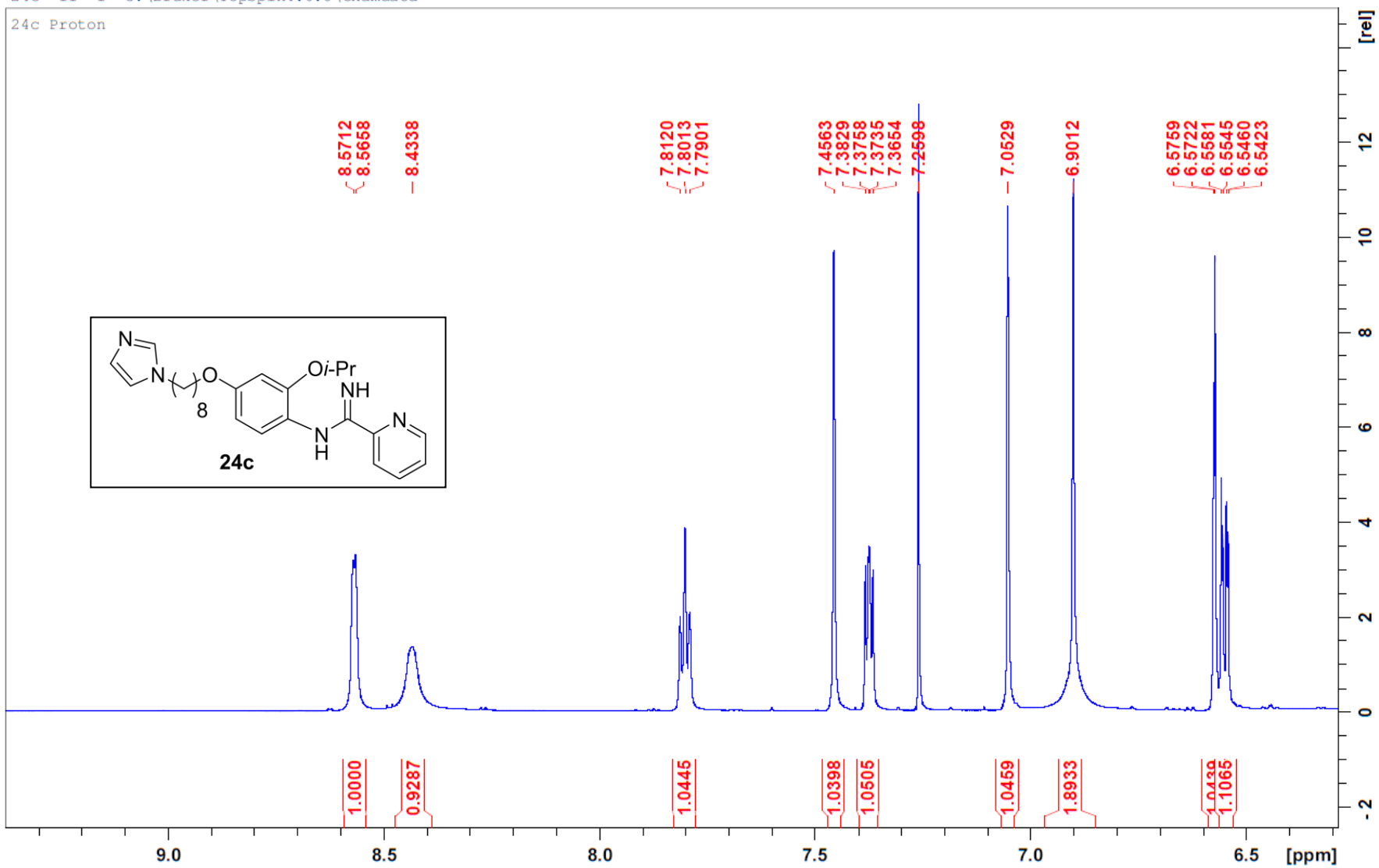


Figure S78. Expanded ¹H NMR spectrum of compound **24c** (700 MHz, CDCl₃).

24c 12 1 C:\Bruker\TopSpin4.0.8\examdata

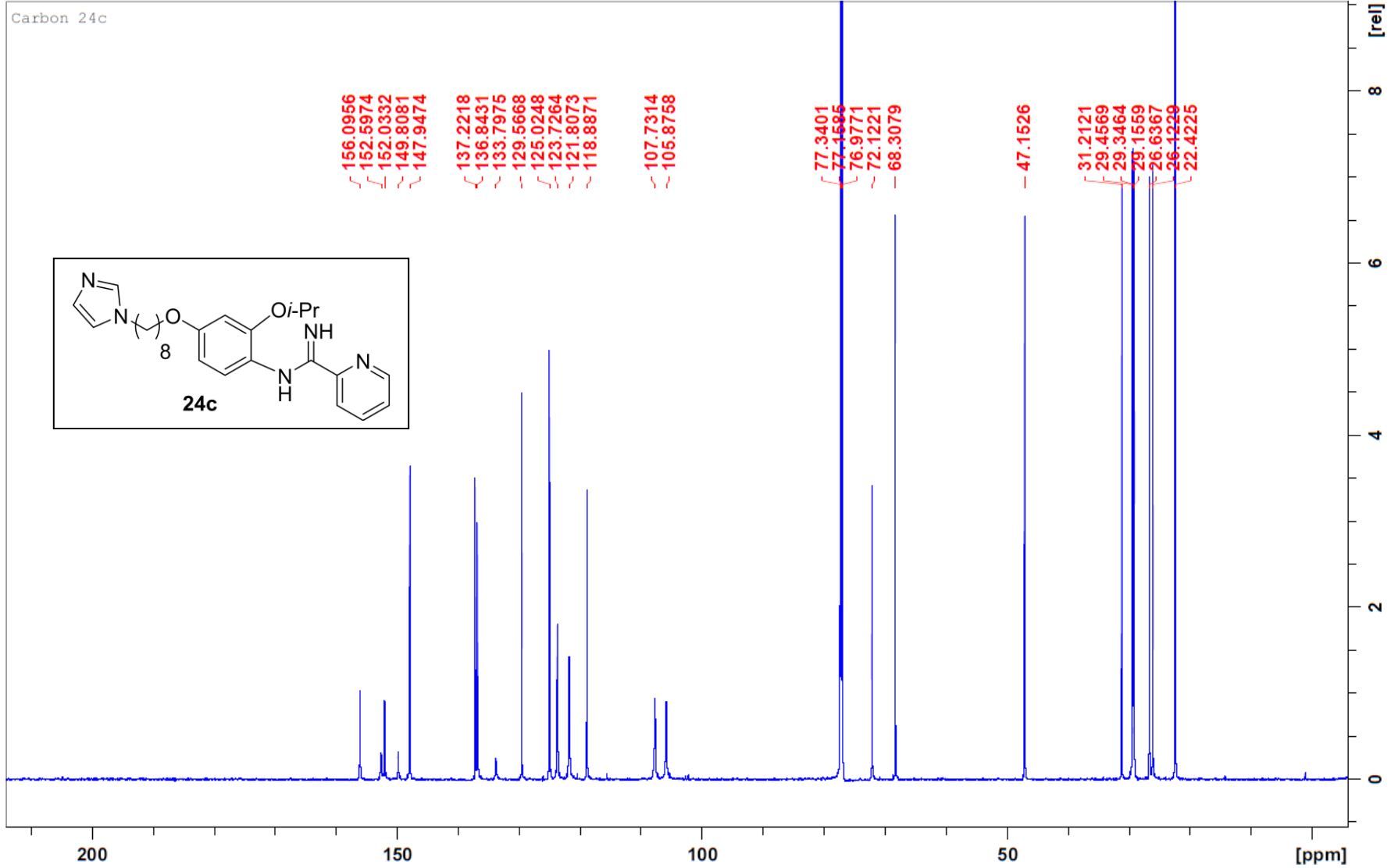


Figure S79. ^{13}C NMR spectrum of compound **24c** (176 MHz, CDCl_3).

24c 12 1 C:\Bruker\TopSpin4.0.8\examdata

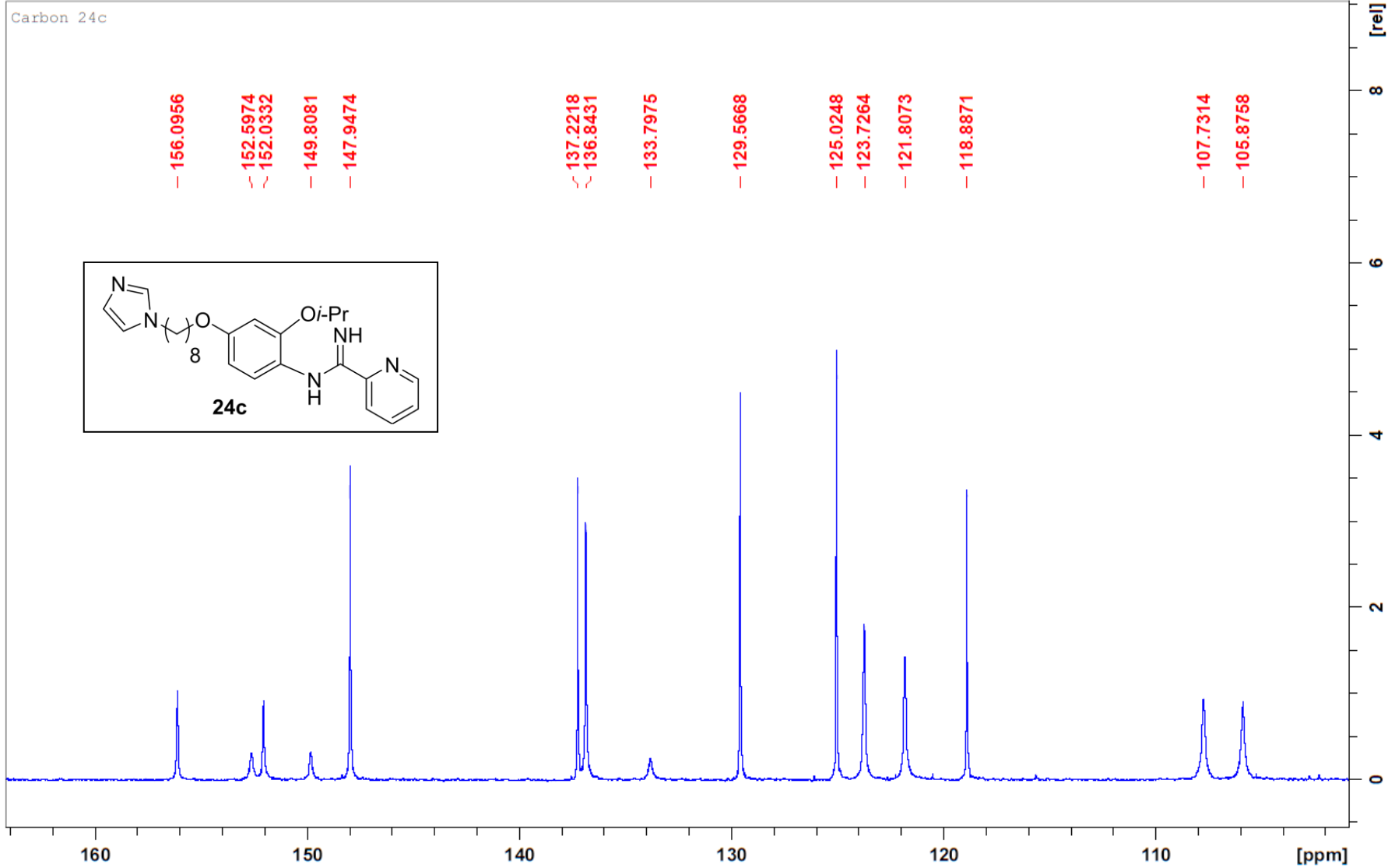


Figure S80. Expanded ^{13}C NMR spectrum of compound **24c** (176 MHz, CDCl_3).

28 5 1 C:\Bruker\TopSpin4.0.9\examdata

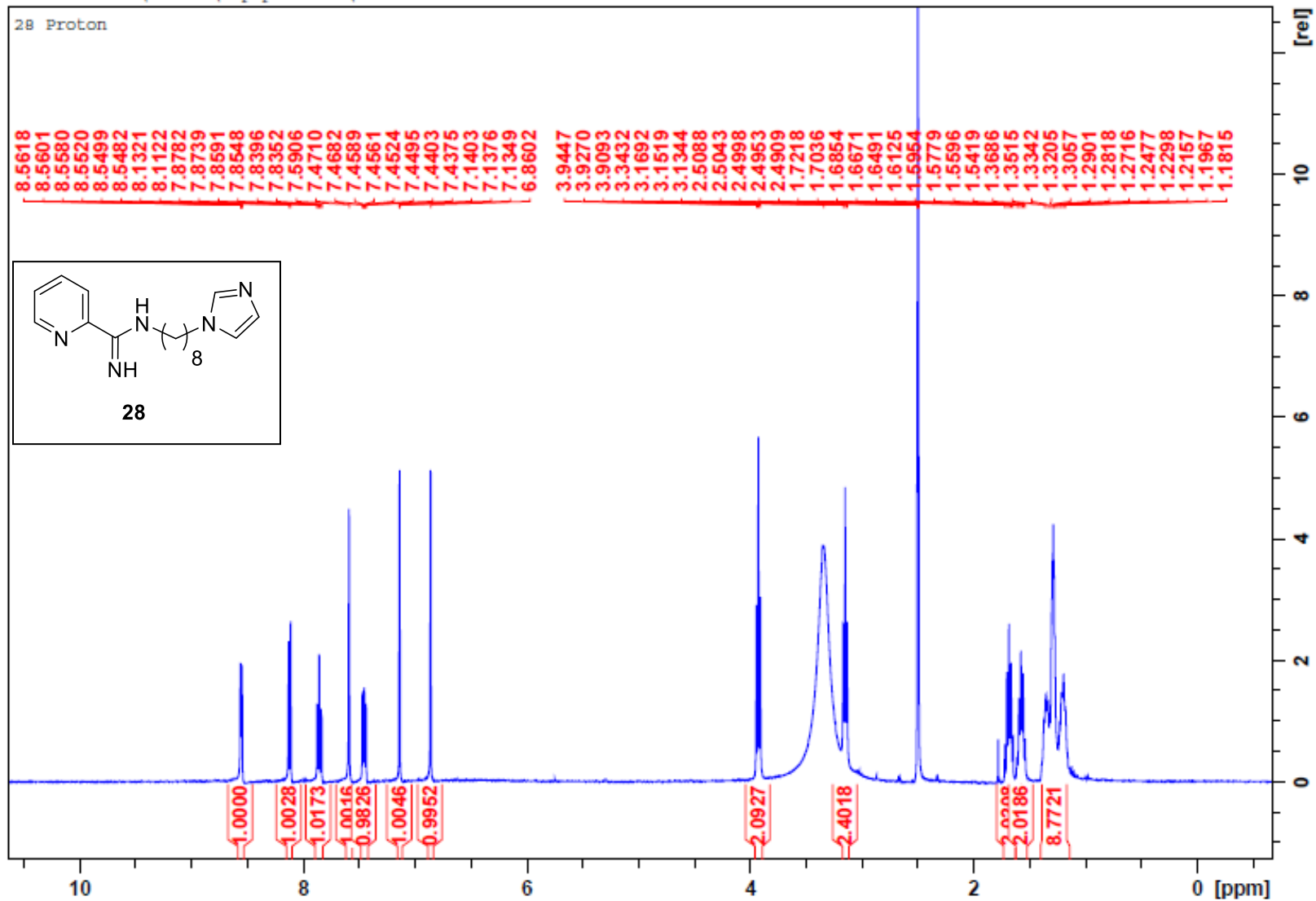


Figure S81. ^1H NMR spectrum of compound **28** (400 MHz, DMSO-d_6)

28 5 1 C:\Bruker\TopSpin4.0.9\examdata

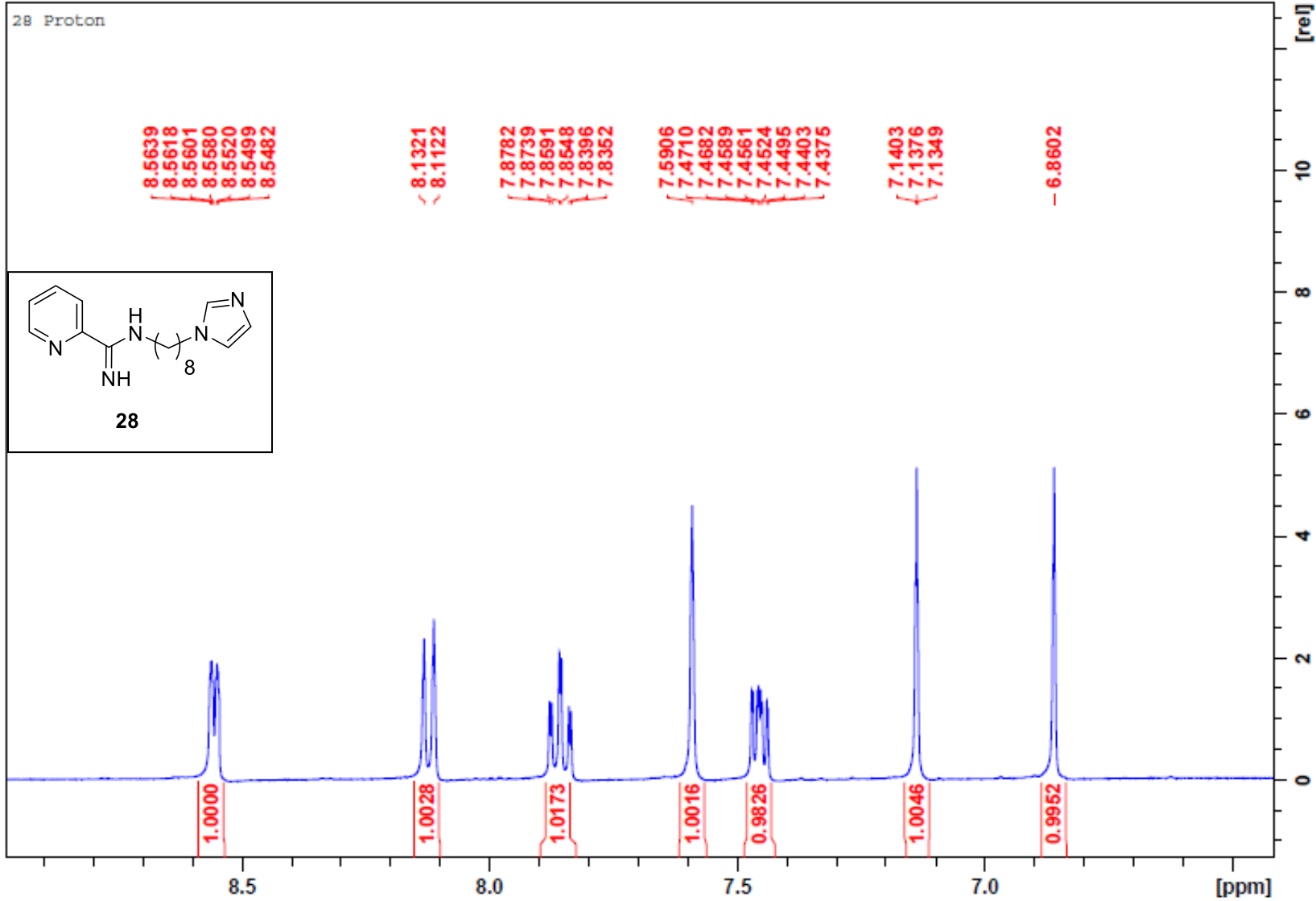


Figure S82. Expanded ^1H NMR spectrum of compound **28** (400 MHz, DMSO-d_6)

28 6 1 C:\Bruker\TopSpin4.0.9\examdata

28 Carbon

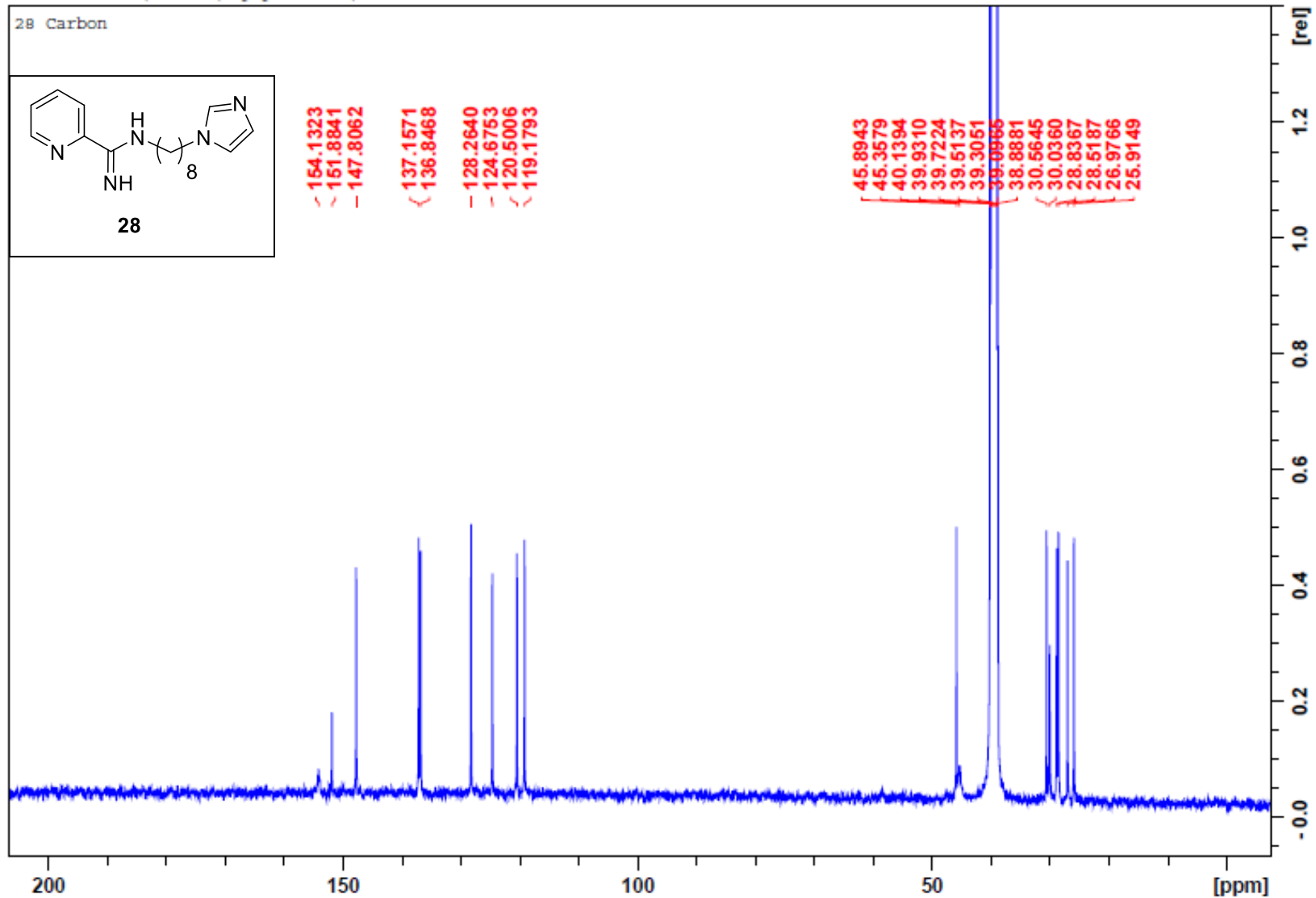
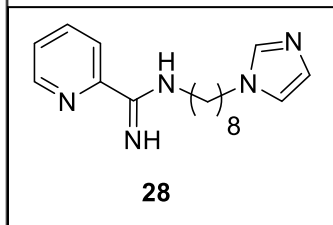


Figure S83. ¹³C NMR spectrum of compound **28** (100 MHz, DMSO-d₆)

28 6 1 C:\Bruker\TopSpin4.0.9\examdata

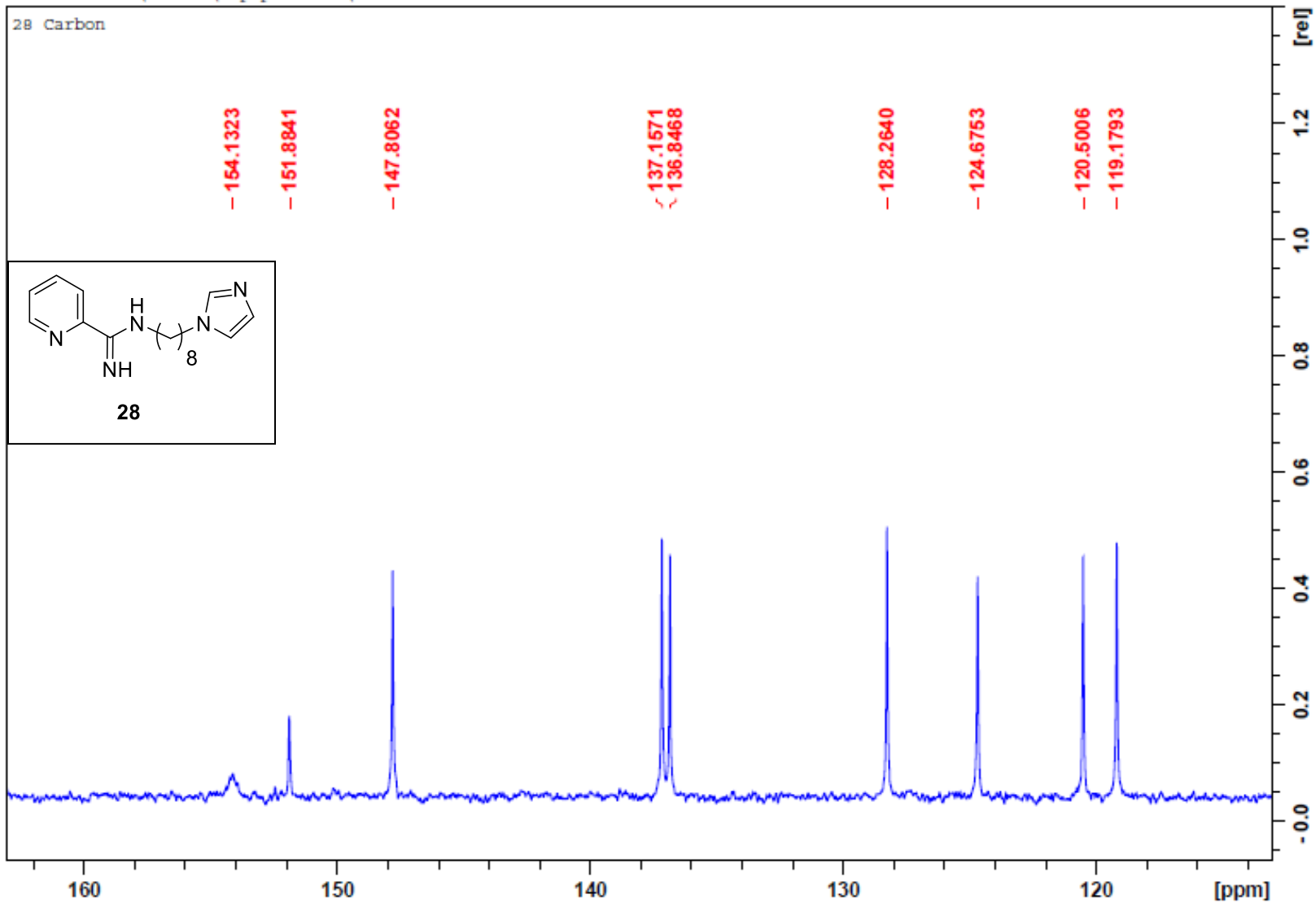


Figure S84. Expanded ^{13}C NMR spectrum of compound **28** (100 MHz, DMSO-d_6)