

Supplementary material for:

Synthesis and *in vitro* anti-*Toxoplasma gondii* activity of novel thiazolidin-4-one derivatives

Nazar Trotsko^{1*}, Adrian Bekier², Agata Paneth¹, Monika Wujec¹ and Katarzyna Dzitko^{2*}

¹ Department of Organic Chemistry, Faculty of Pharmacy with Medical Analytics Division, Medical University of Lublin, 4A Chodźki, 20-093 Lublin, Poland; nazar.trotsko@umlub.pl (N.T.); agata.paneth@umlub.pl (A.P.); monika.wujec@umlub.pl (M.W.).

² Department of Immunoparasitology, Faculty of Biology and Environmental Protection, University of Lodz, Banacha 12/16, 90-237 Lodz, Poland; katarzyna.dzitko@biol.uni.lodz.pl (K.D.); adrian.bekier@unilodz.eu (A.B.).

* Correspondence: nazar.trotsko@umlub.pl and katarzyna.dzitko@biol.uni.lodz.pl

Contents:

1. ¹ H NMR and ¹³ C NMR spectra for thiazolidin-4-ones (42-73)	2
2. ¹ H NMR and ¹³ C NMR spectra for (4-oxothiazolidin-5-yl)acetic acid derivatives (74-88).....	58
3. ¹ H NMR and ¹³ C NMR spectra for (4-oxothiazolidin-5-ylidene)acetic acid derivatives (89-104).....	86

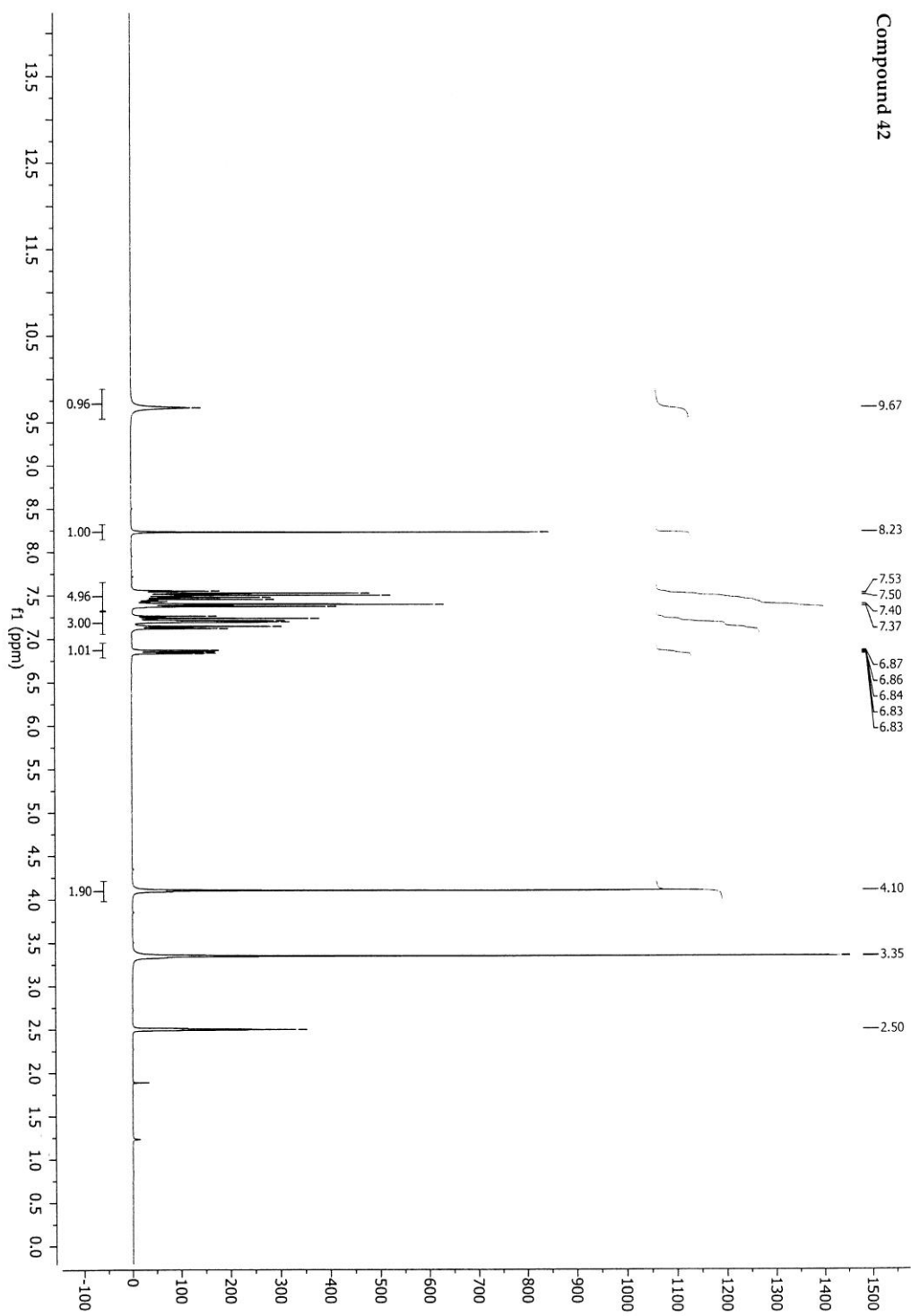


Fig. S1. ^1H NMR spectrum for compound 42

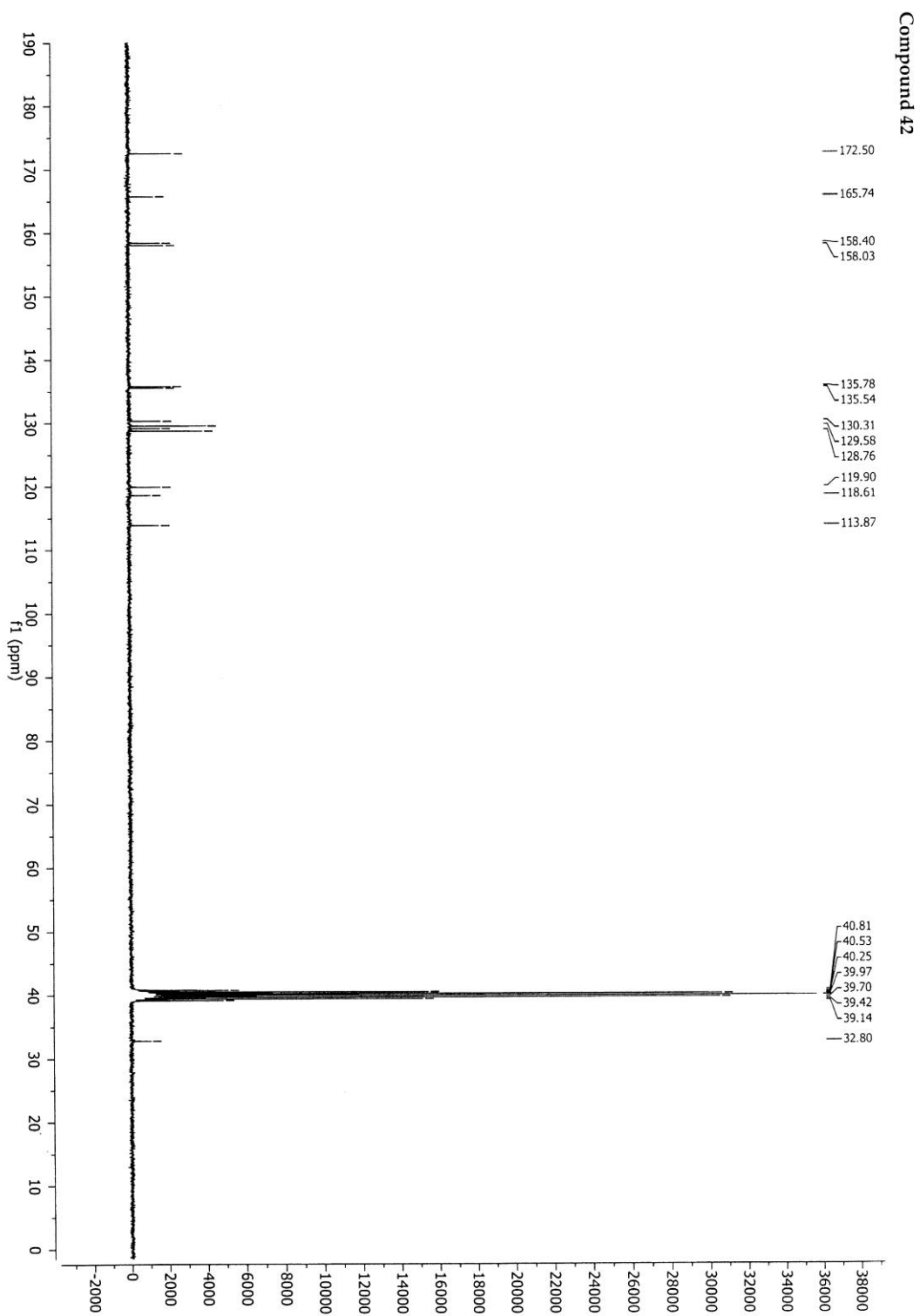


Fig. S2. ^{13}C NMR spectrum for compound 42

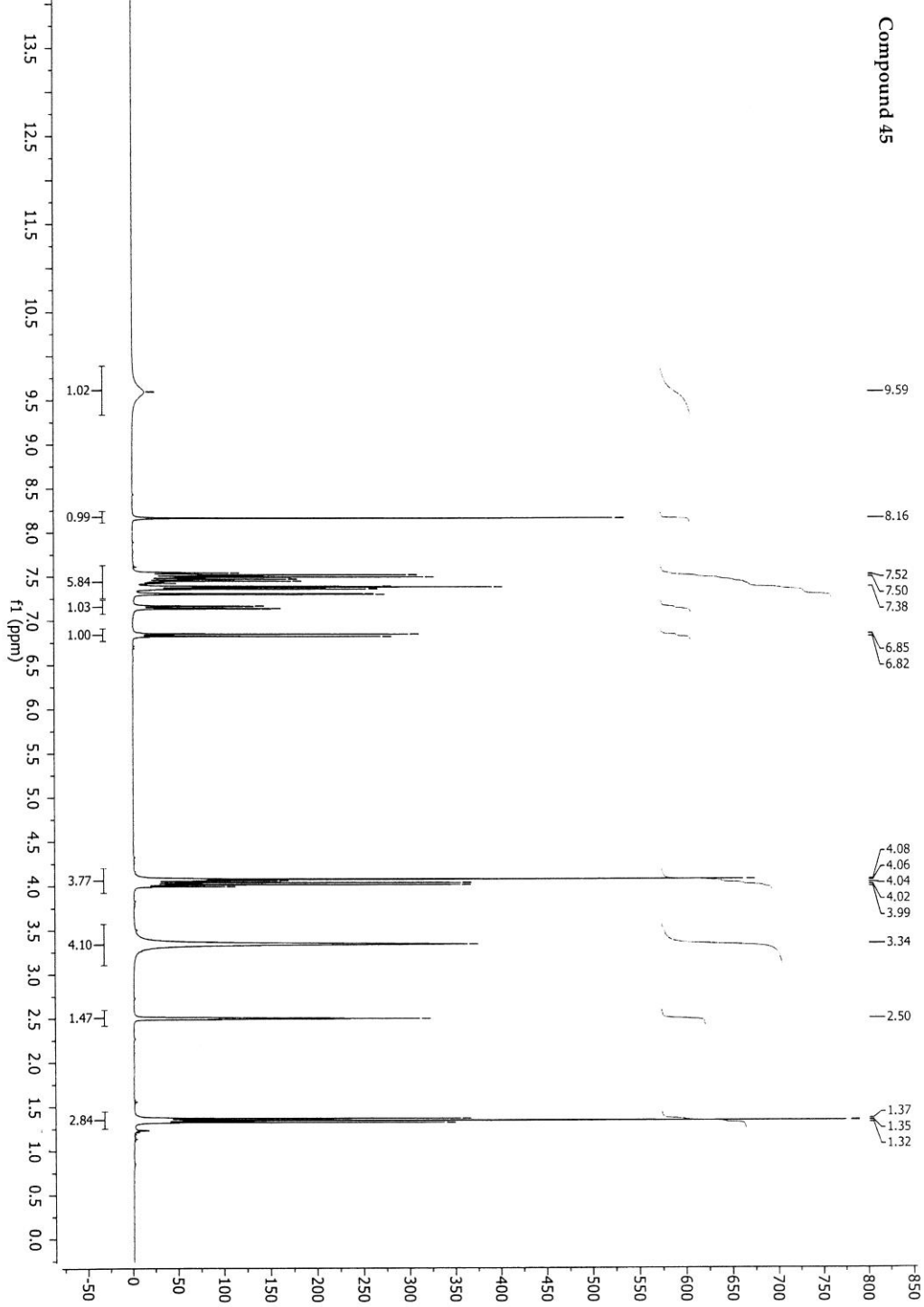


Fig. S3. ¹H NMR spectrum for compound 45

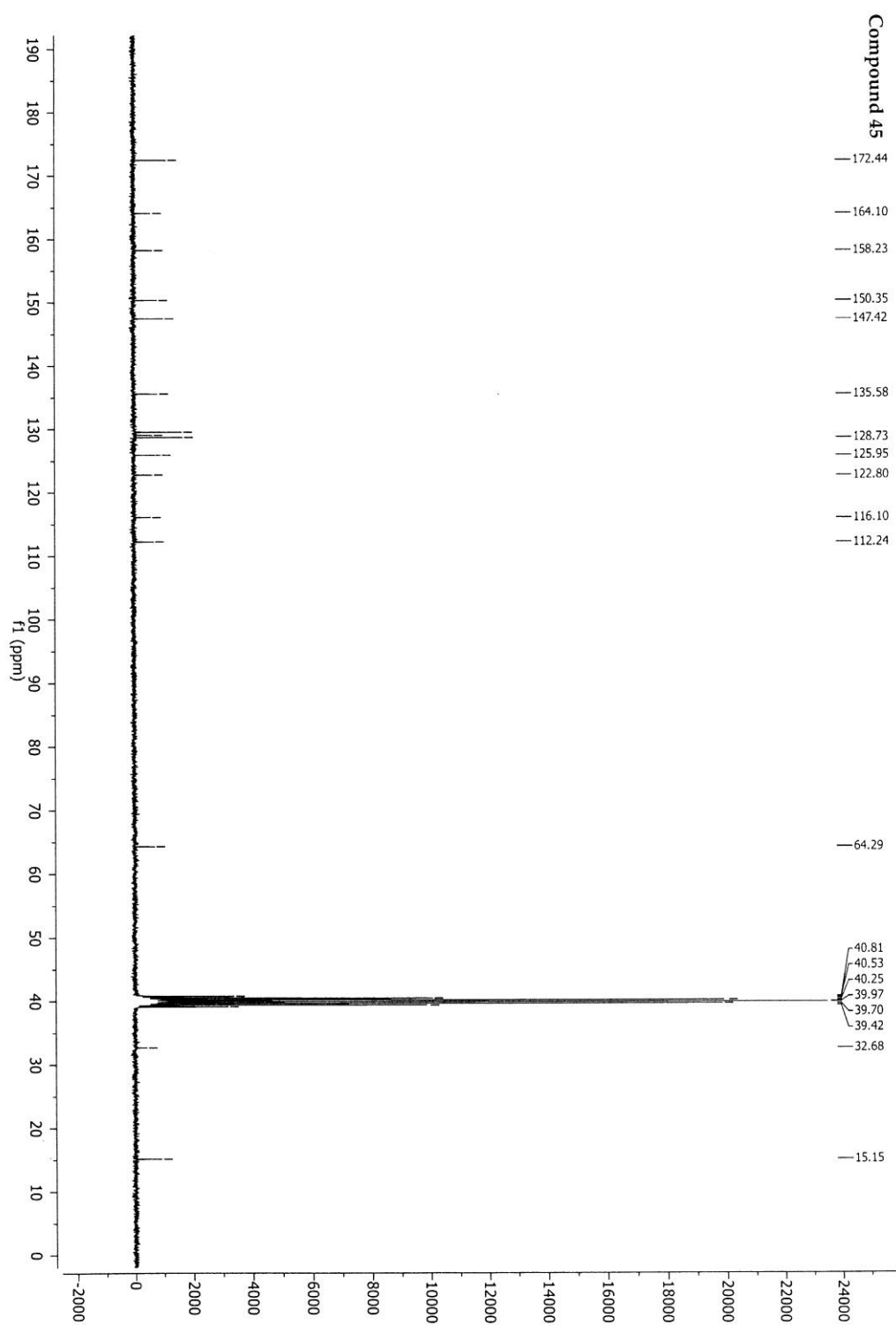


Fig. S4. ^{13}C NMR spectrum for compound 45

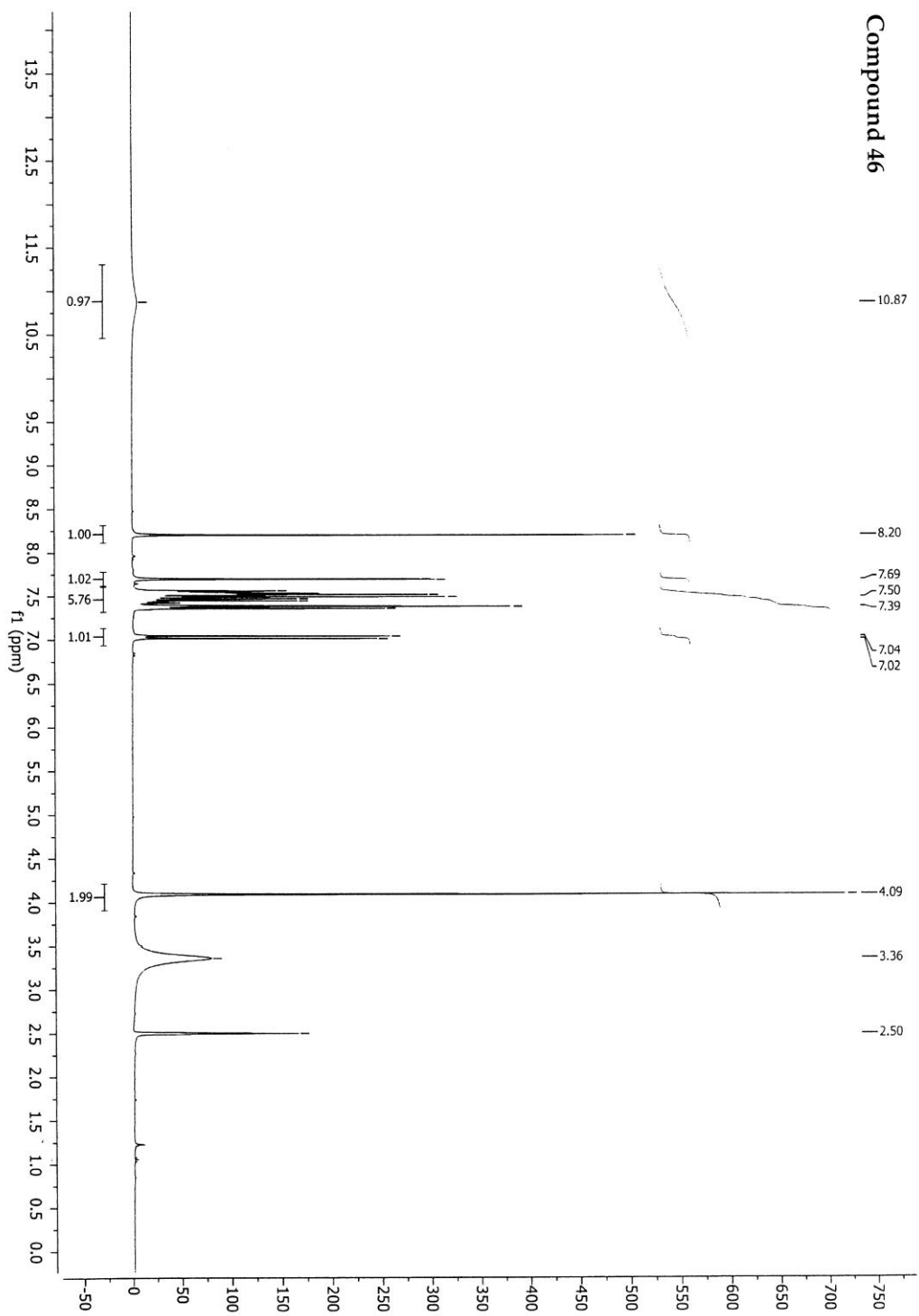


Fig. S5. ^1H NMR spectrum for compound 46

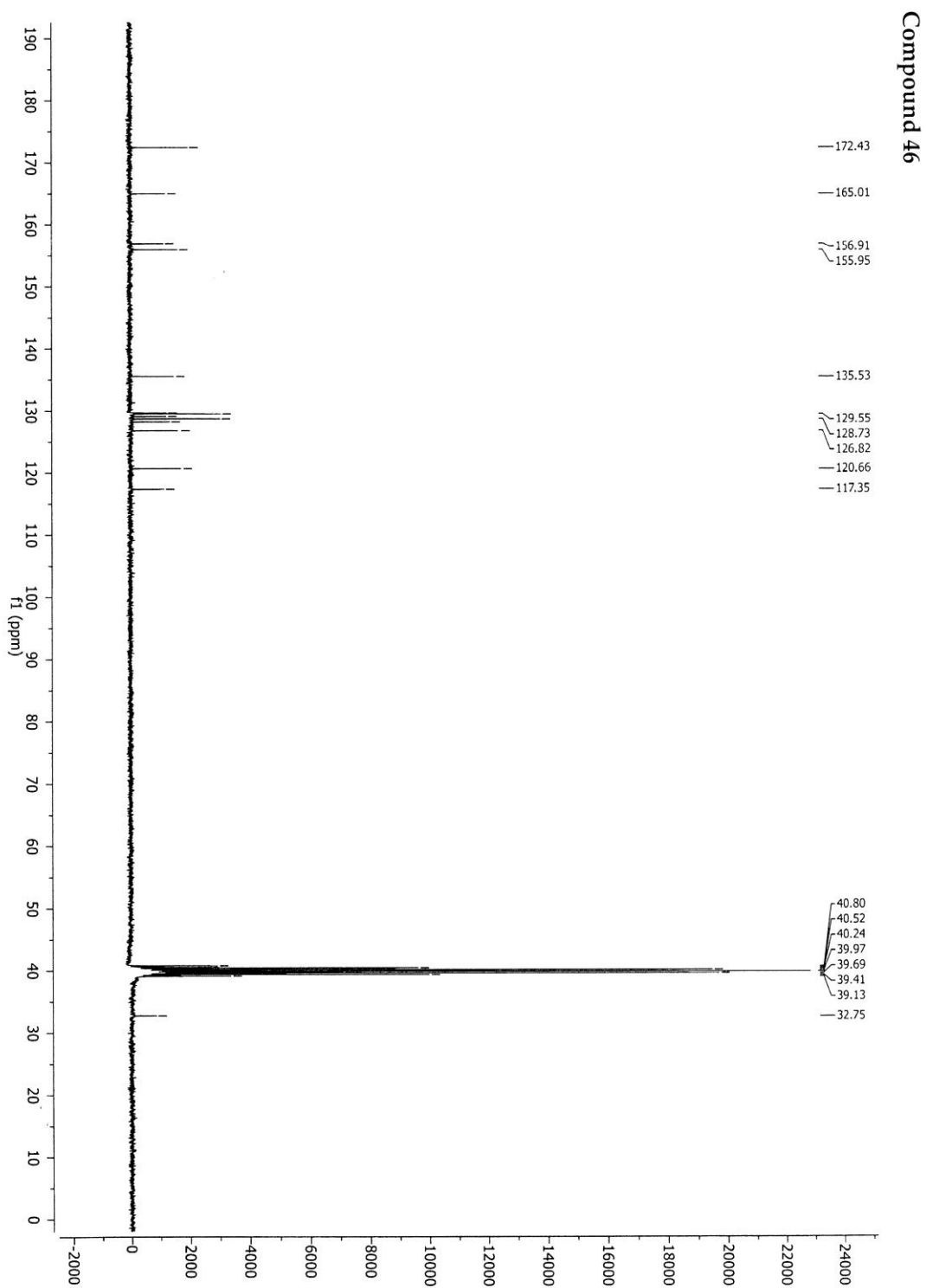


Fig. S6. ^{13}C NMR spectrum for compound 46

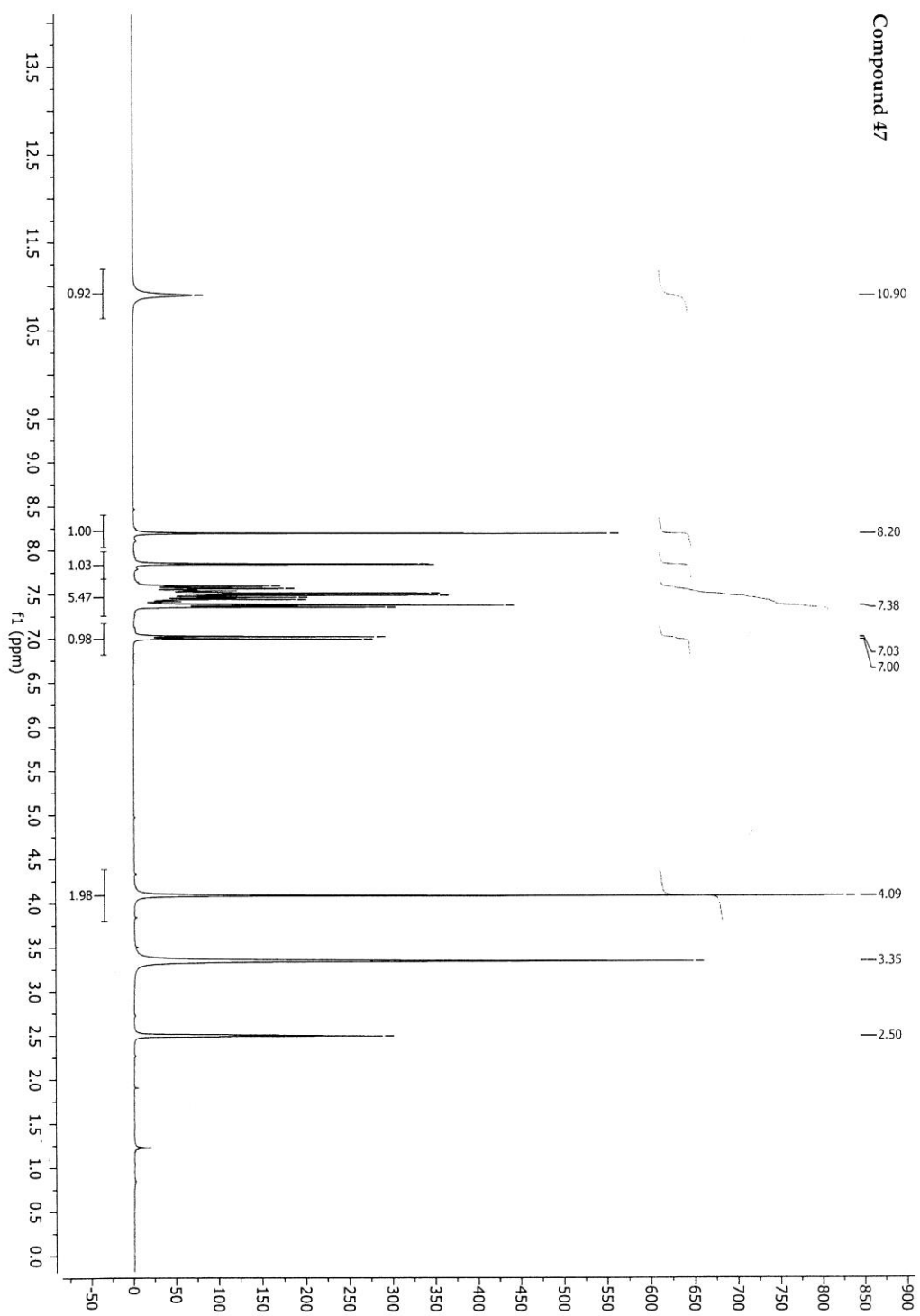


Fig. S7. ^1H NMR spectrum for compound 47

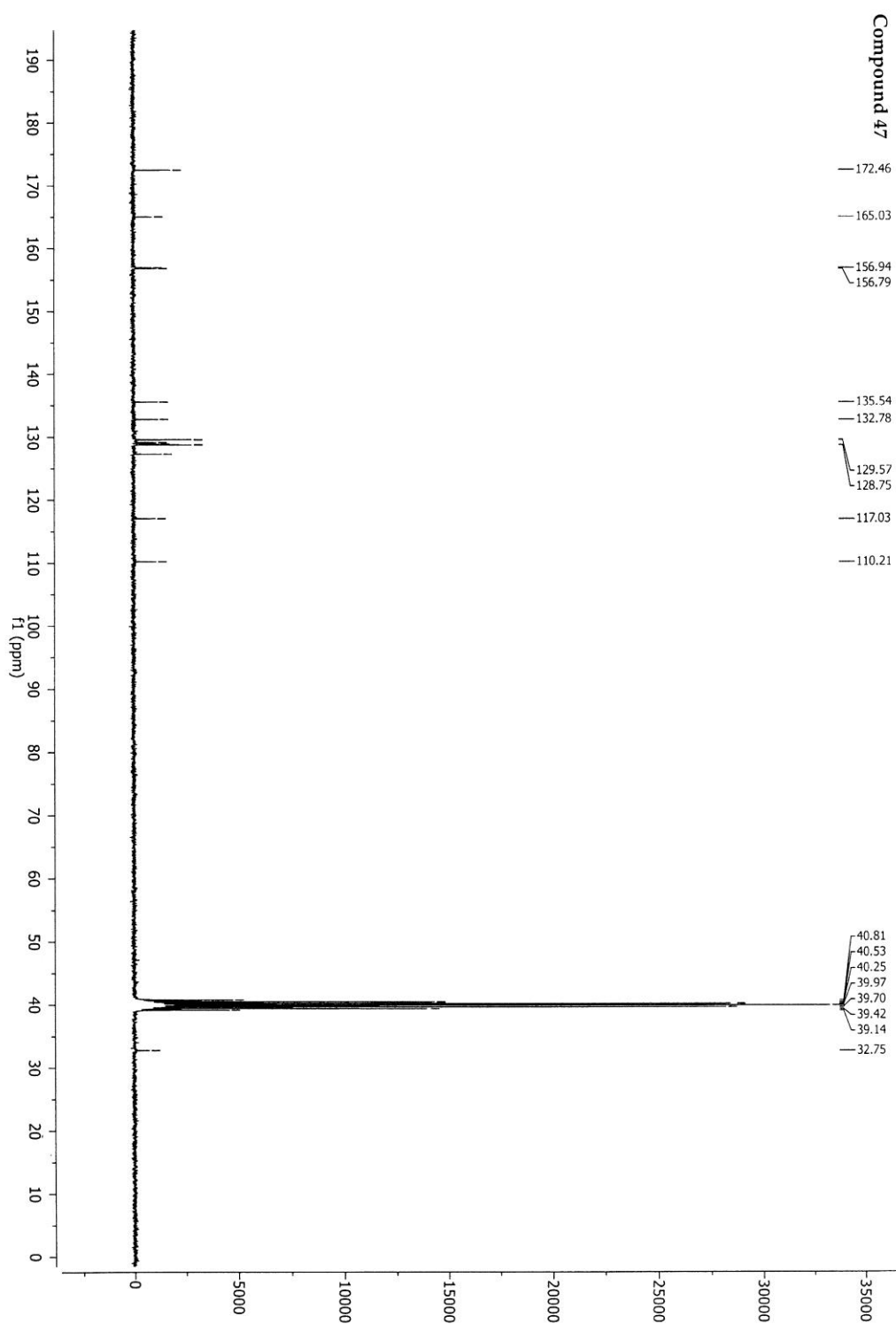


Fig. S8. ^{13}C NMR spectrum for compound 47

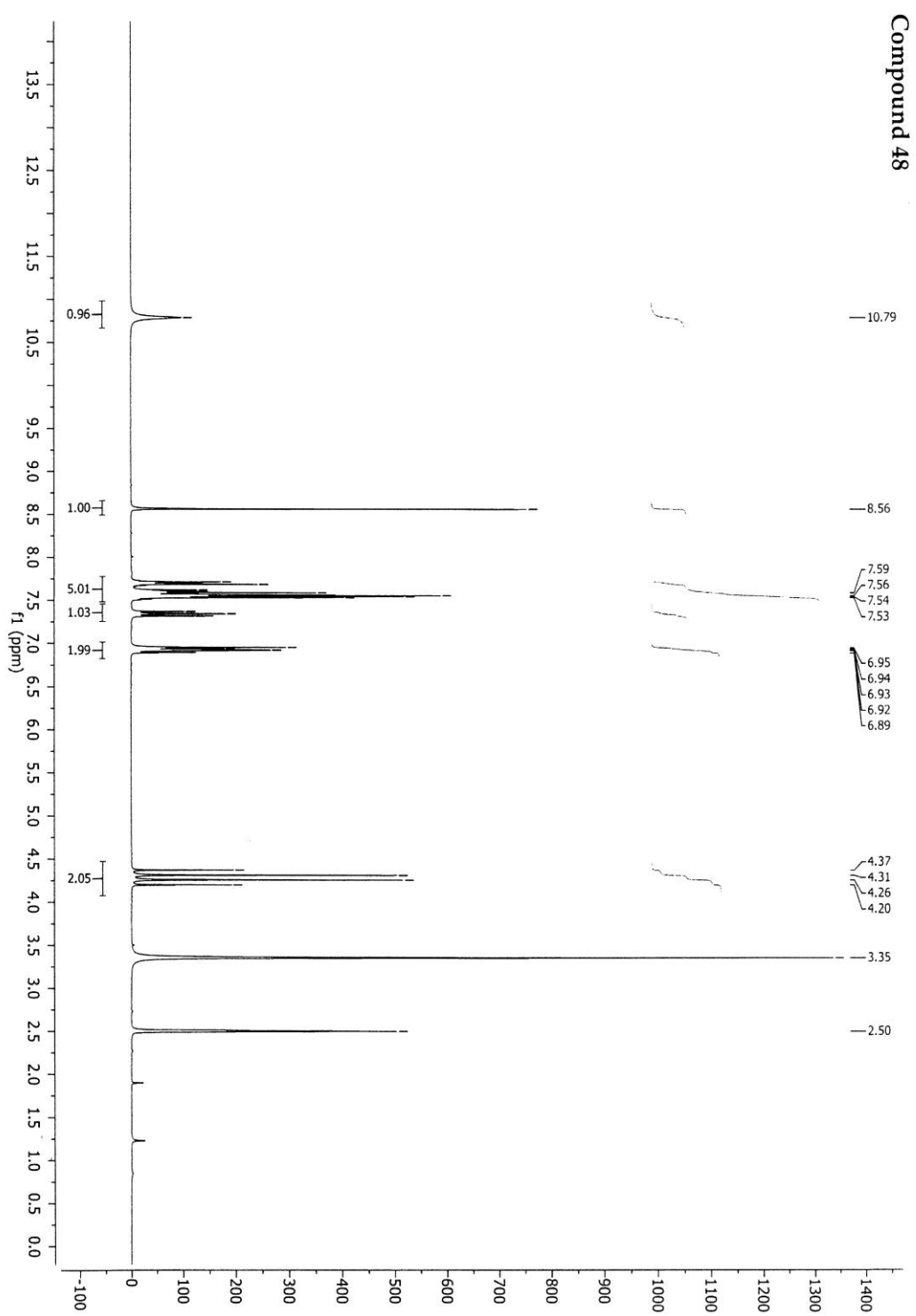


Fig. S9. ¹H NMR spectrum for compound 48

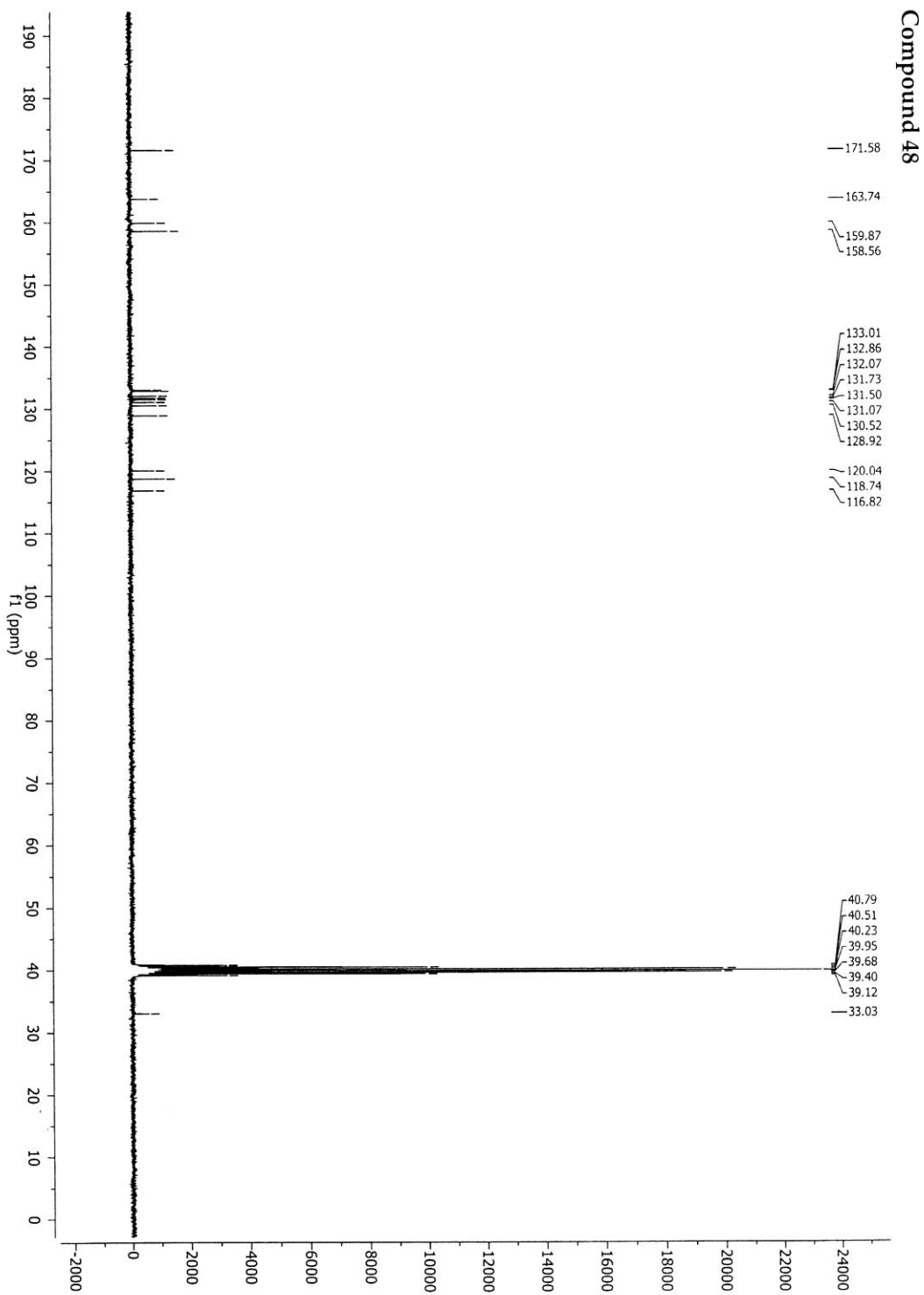


Fig. S10. ^{13}C NMR spectrum for compound 48

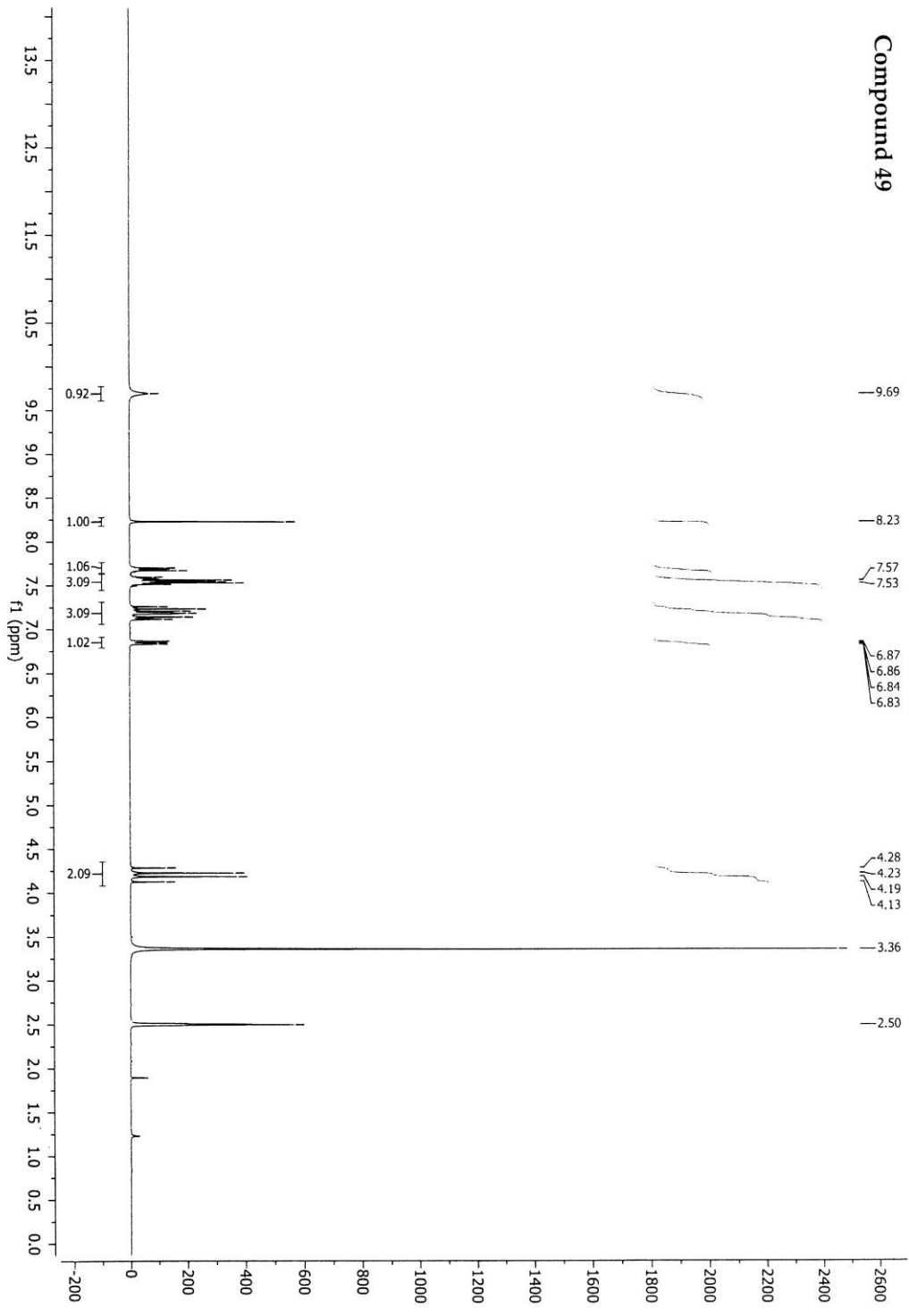


Fig. S11. ¹H NMR spectrum for compound 49

Compound 49

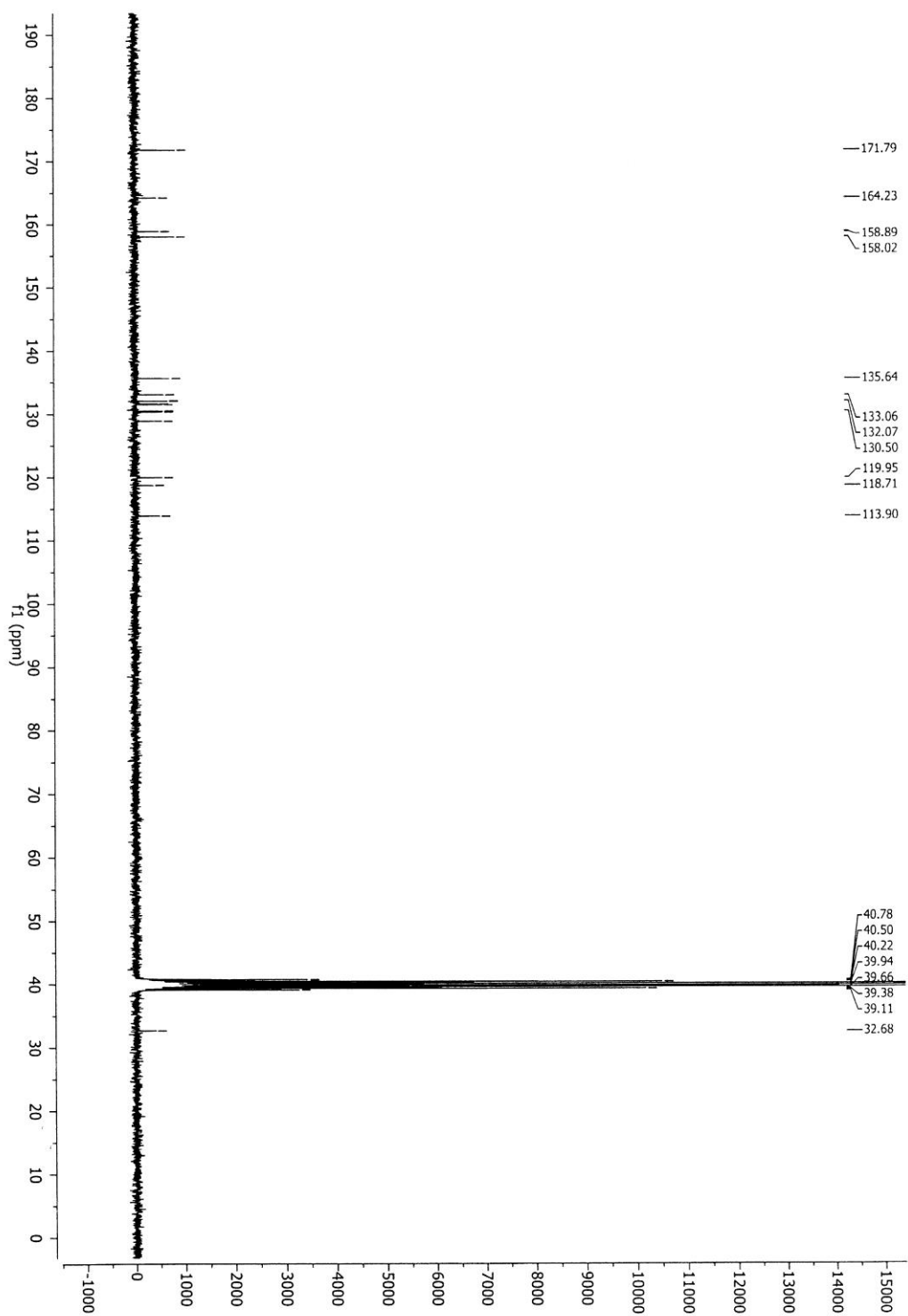


Fig. S12. ^{13}C NMR spectrum for compound 49

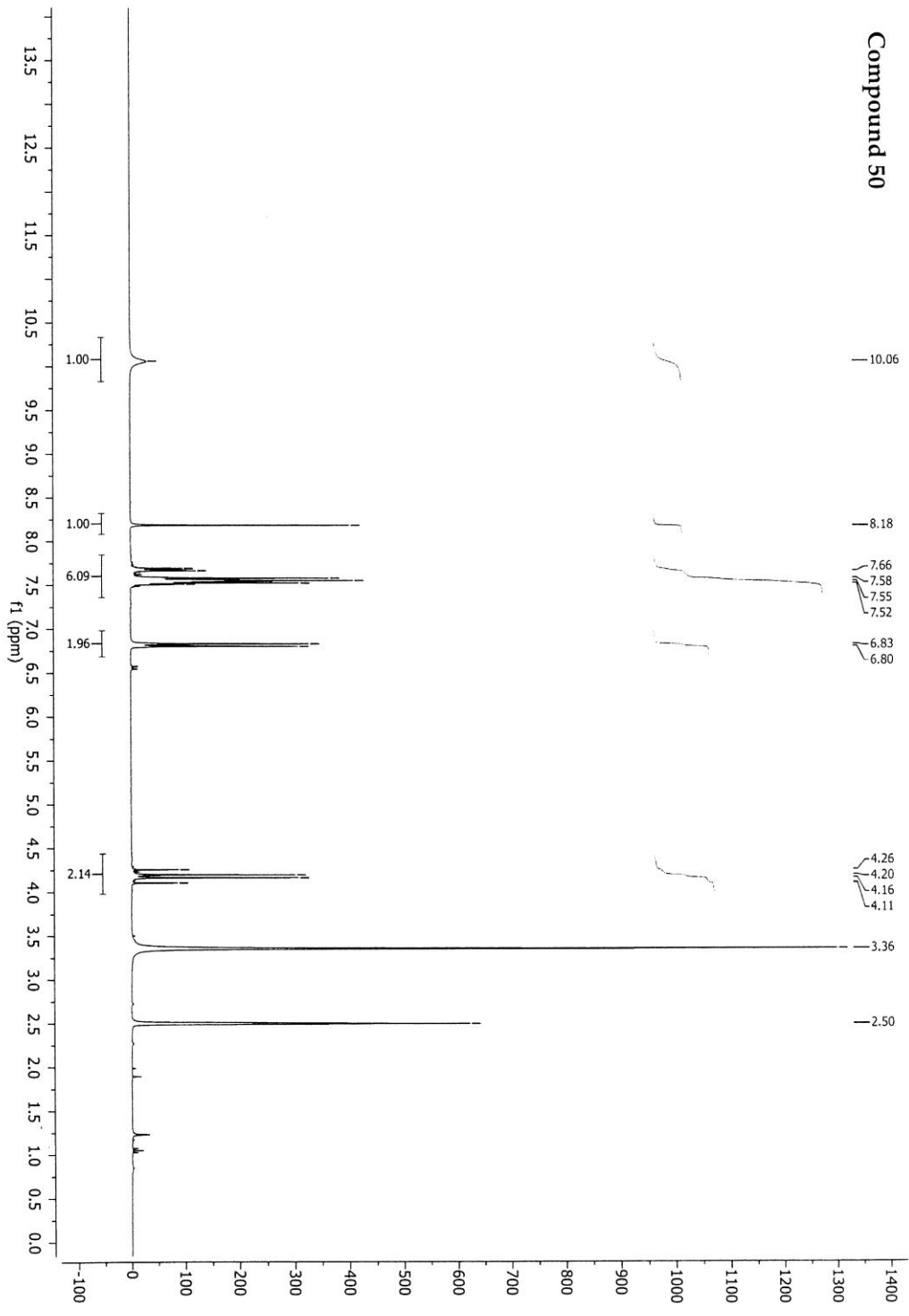


Fig. S13. ¹H NMR spectrum for compound 50

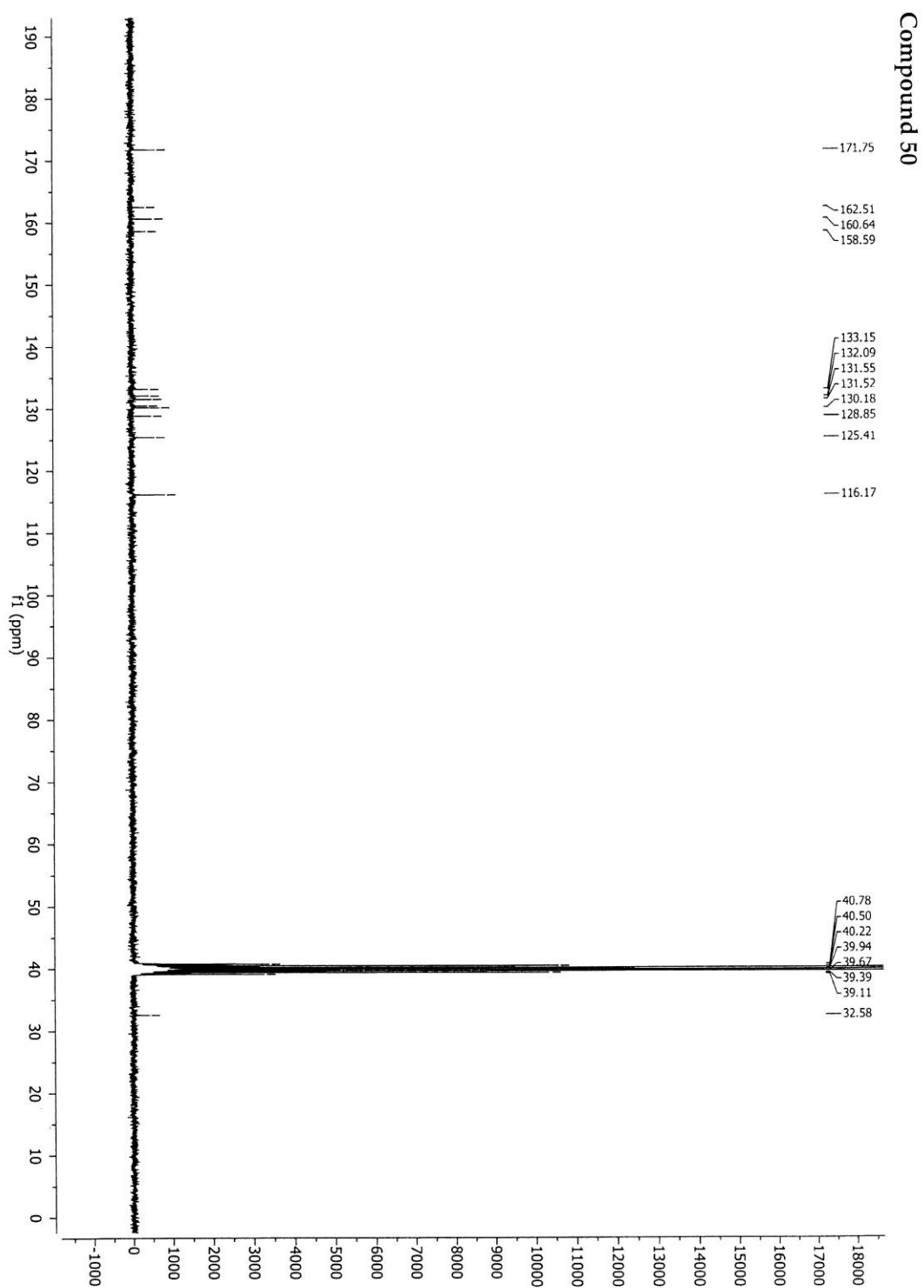


Fig. S14. ^{13}C NMR spectrum for compound 50

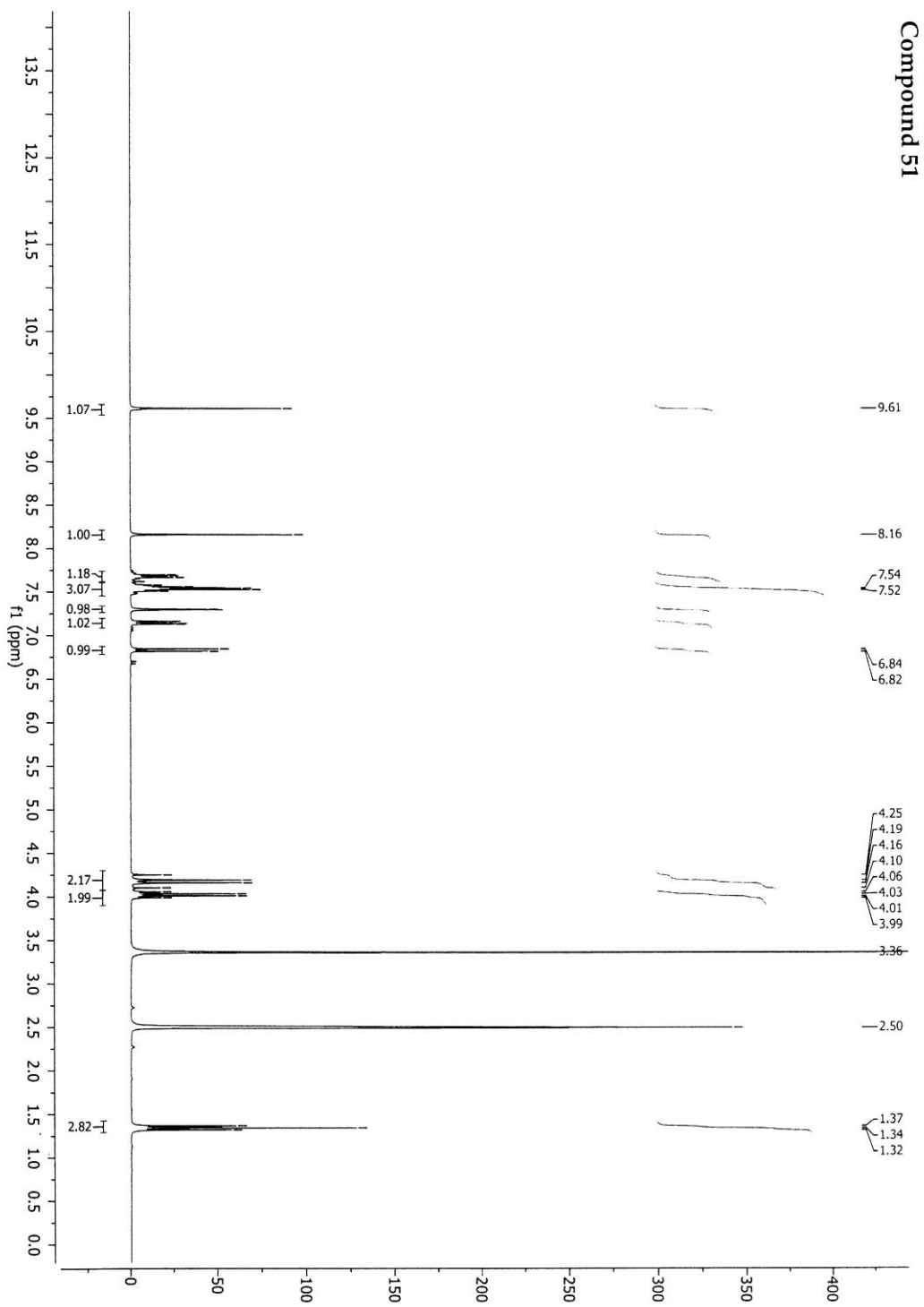


Fig. S15. ¹H NMR spectrum for compound 51

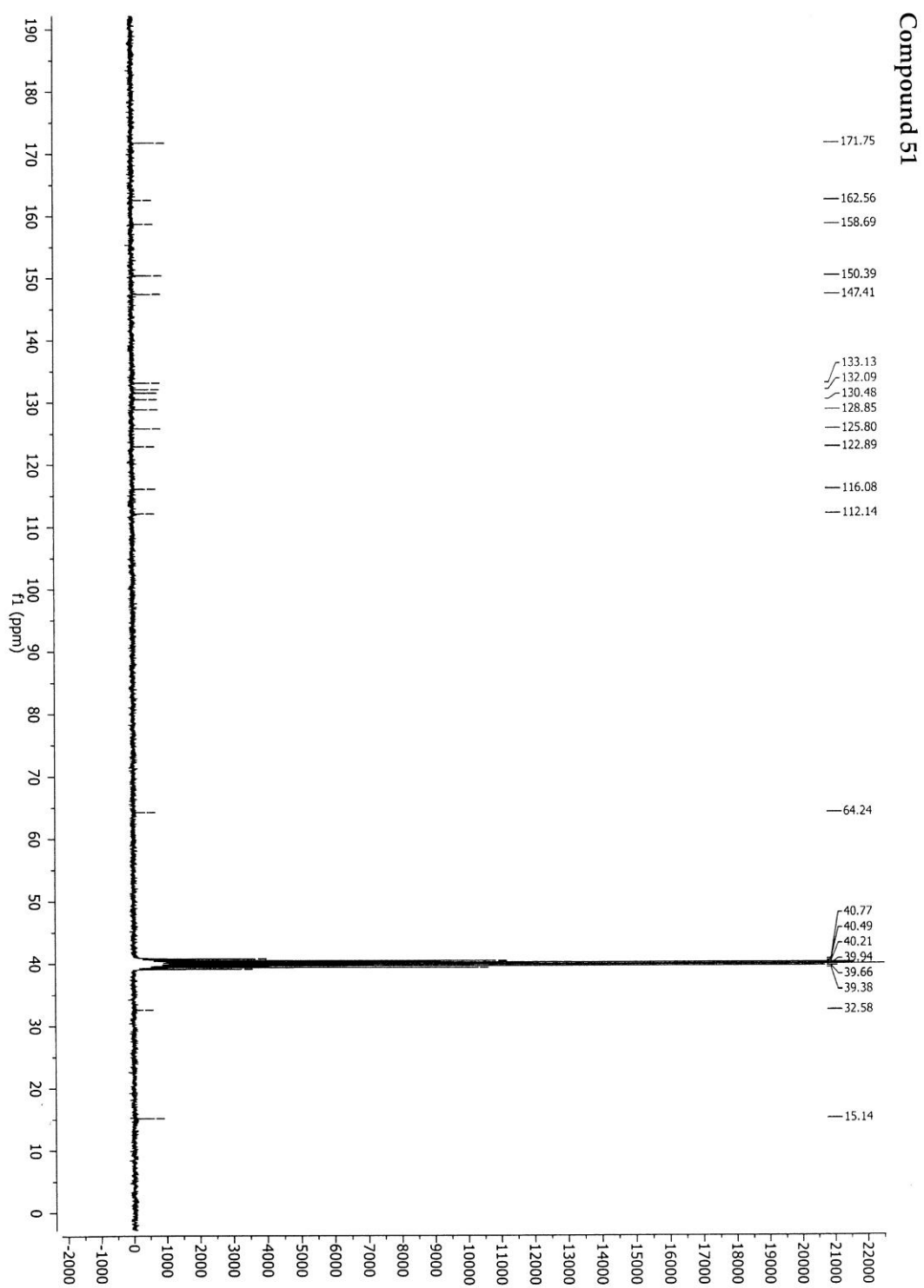


Fig. S16. ^{13}C NMR spectrum for compound 51

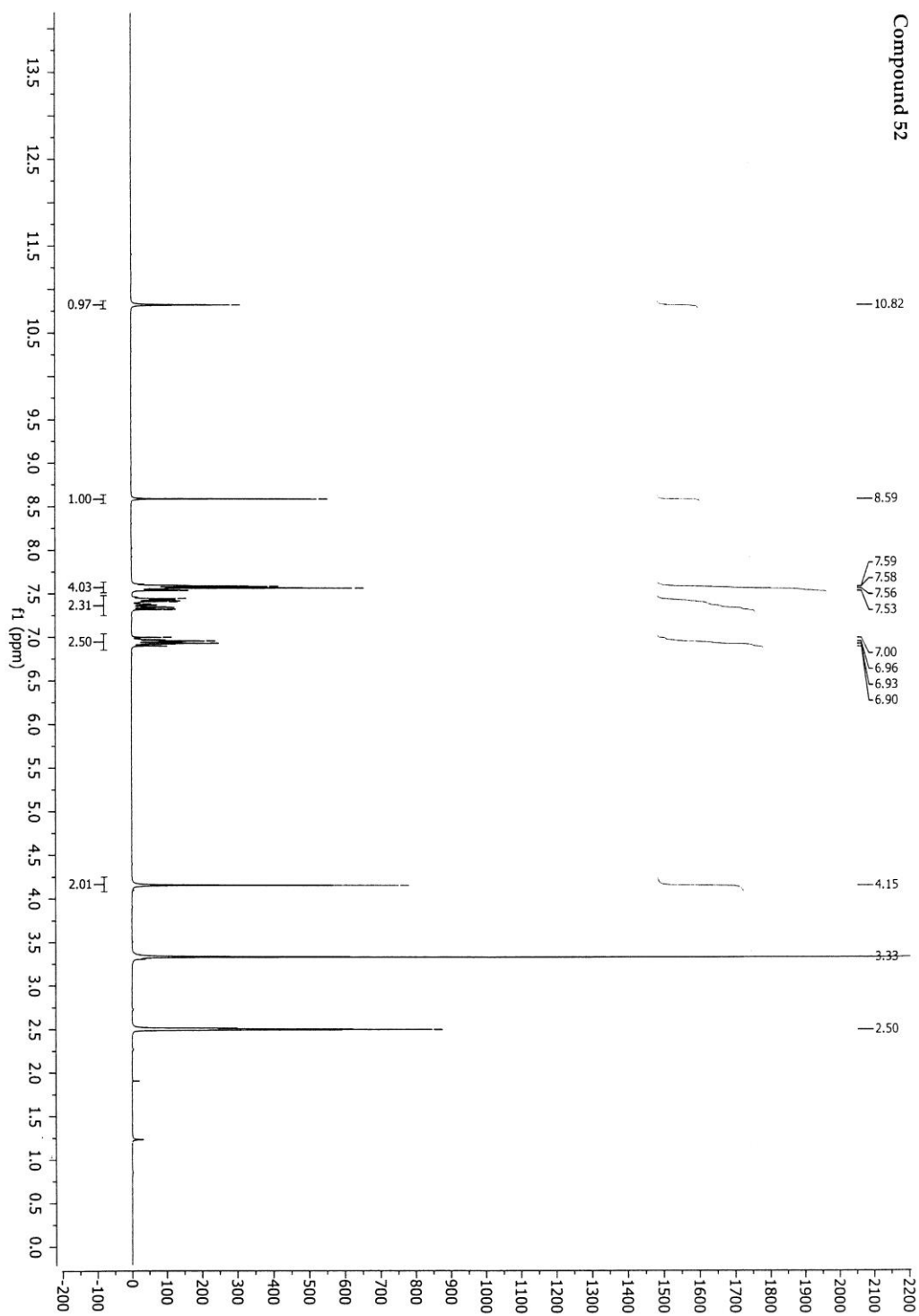


Fig. S17. ^1H NMR spectrum for compound 52

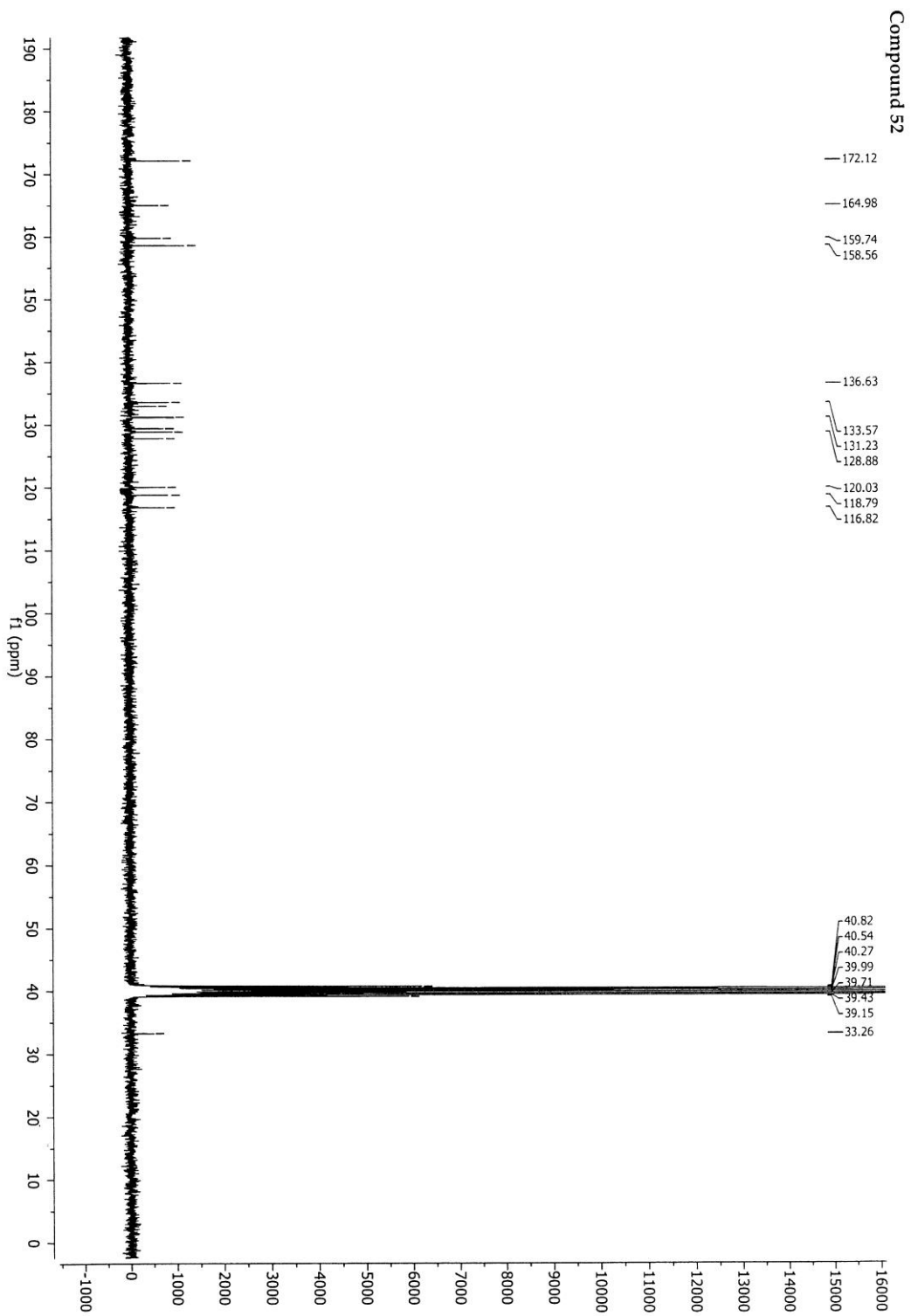


Fig. S18. ^{13}C NMR spectrum for compound 52

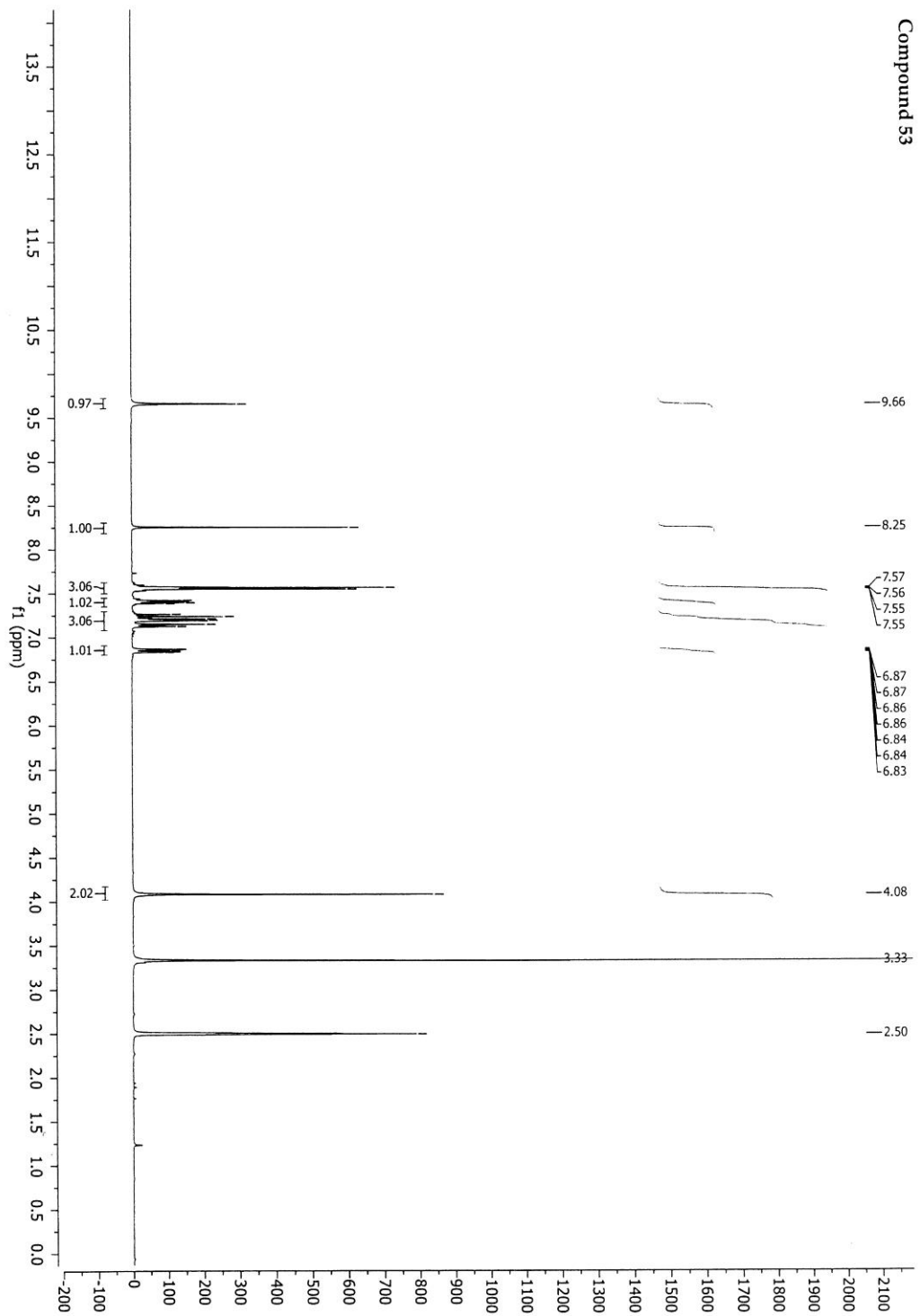


Fig. S19. ¹H NMR spectrum for compound 53

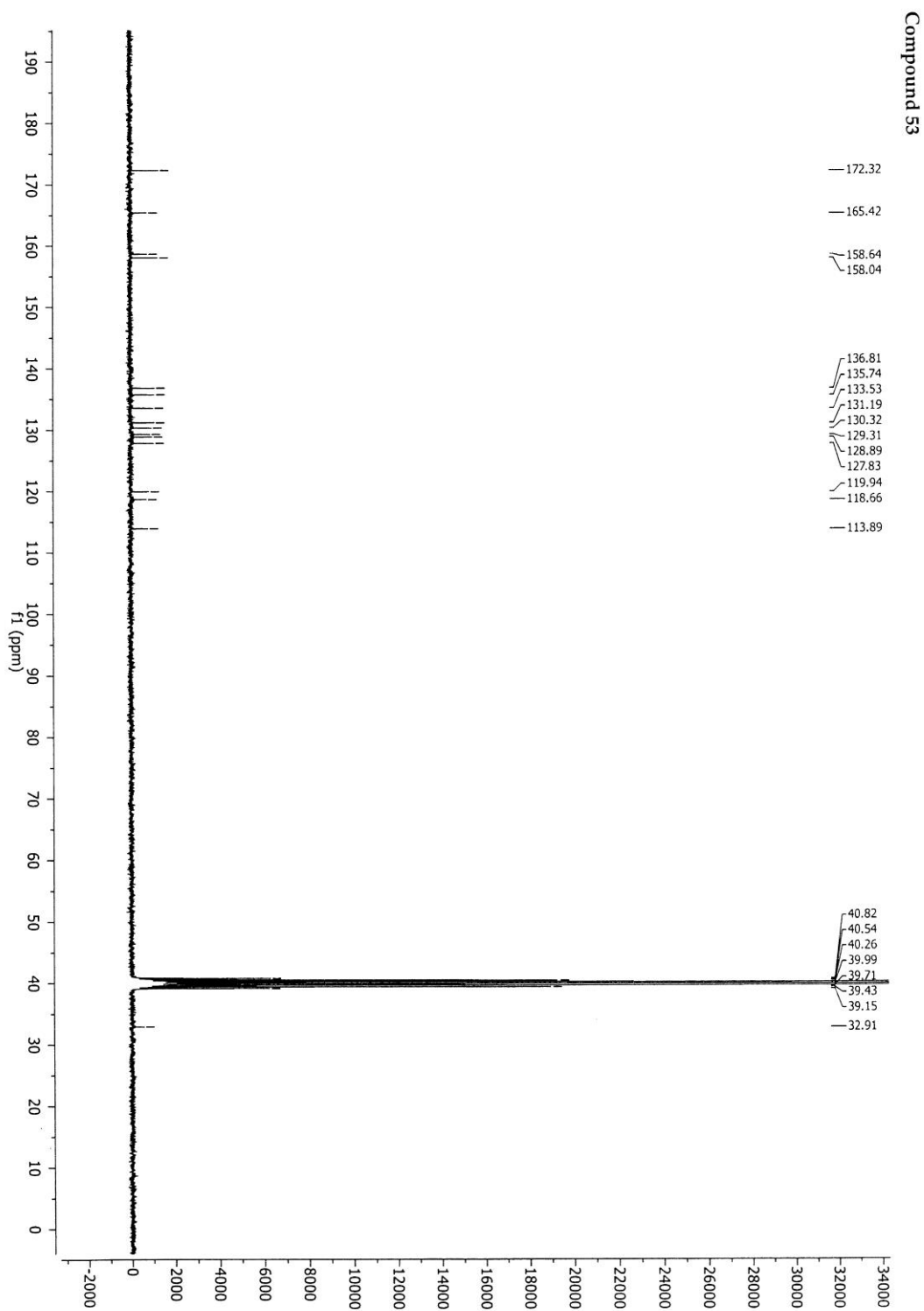


Fig. S20. ^{13}C NMR spectrum for compound 53

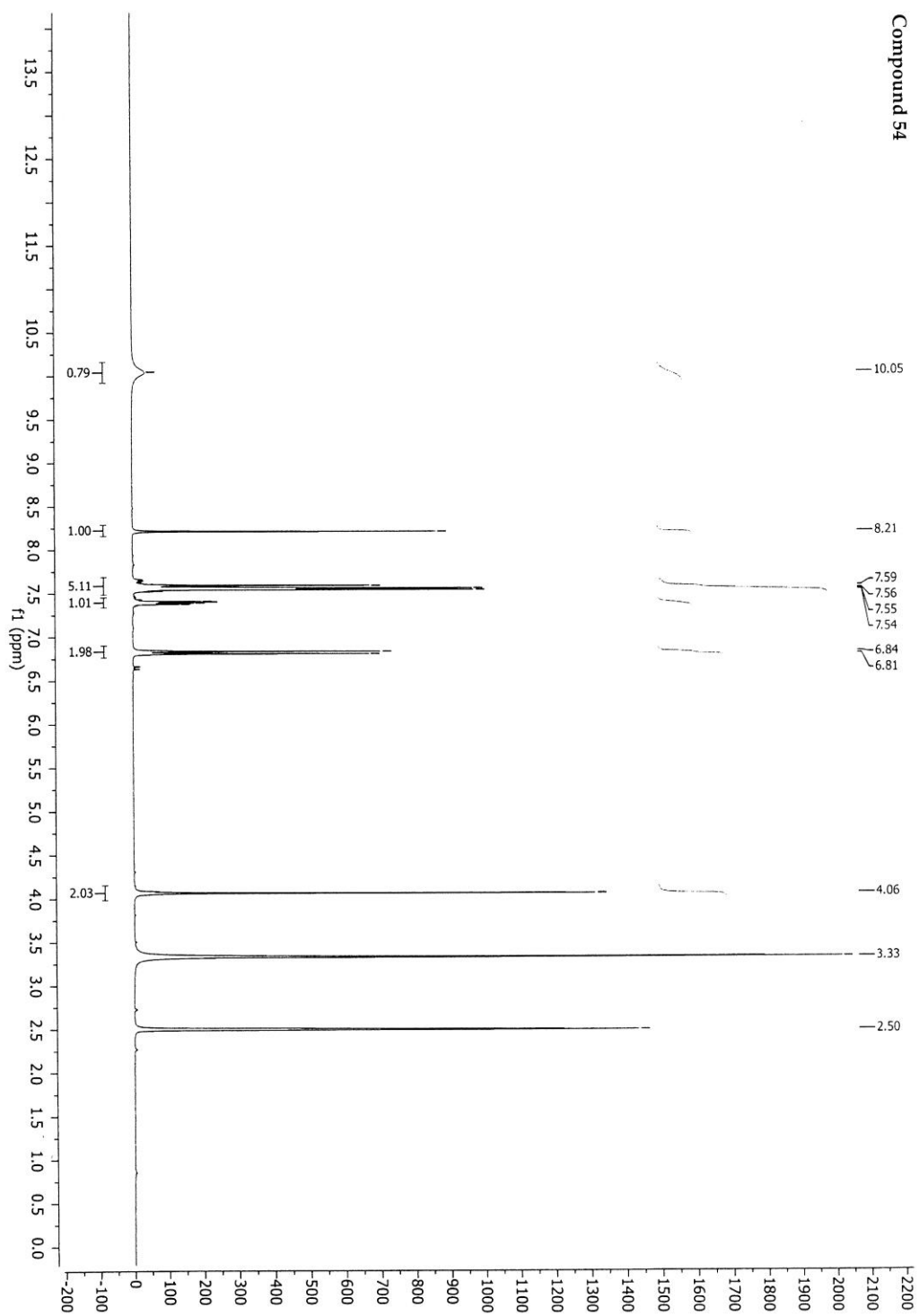


Fig. S21. ^1H NMR spectrum for compound 54

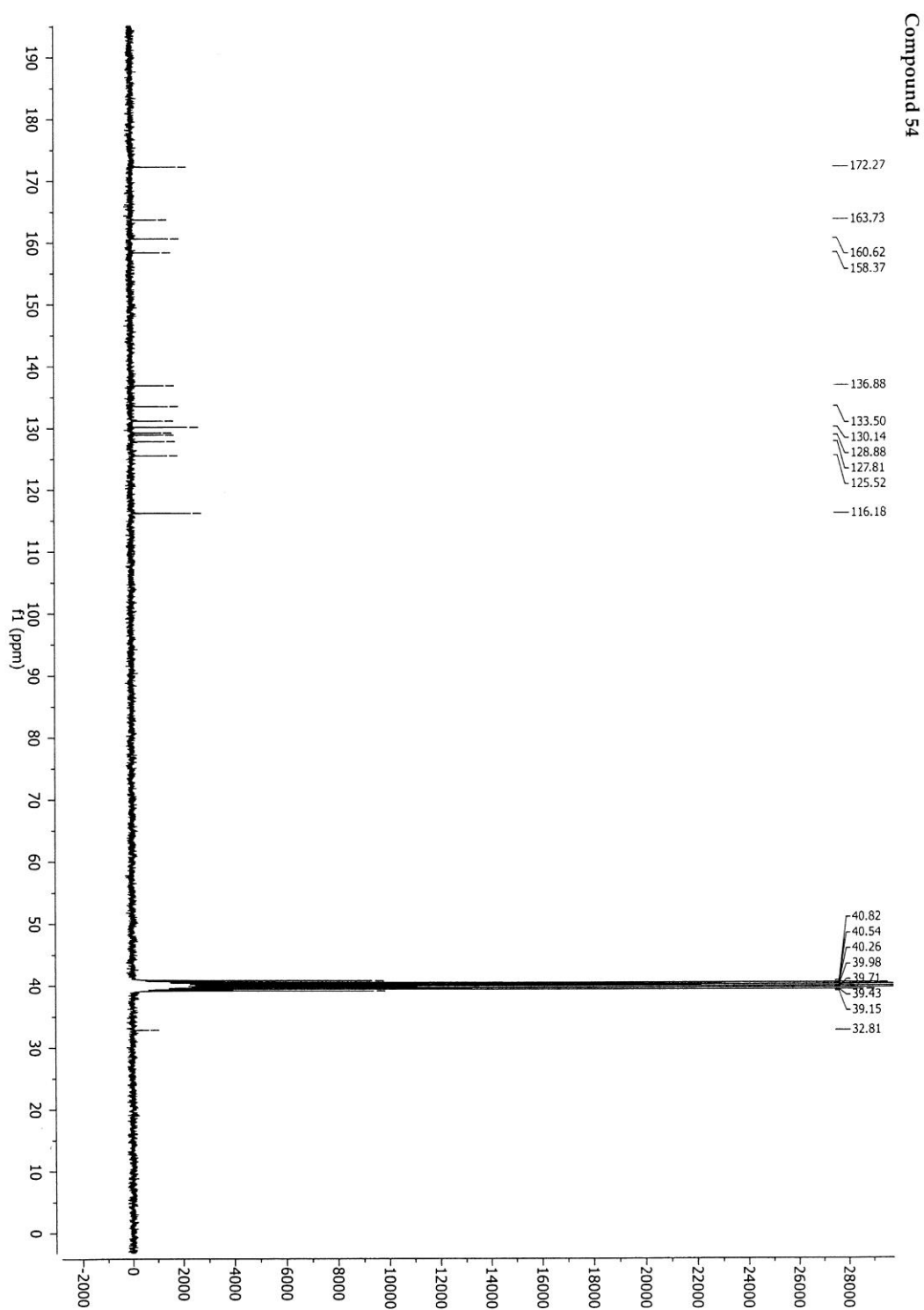


Fig. S22. ^{13}C NMR spectrum for compound 54

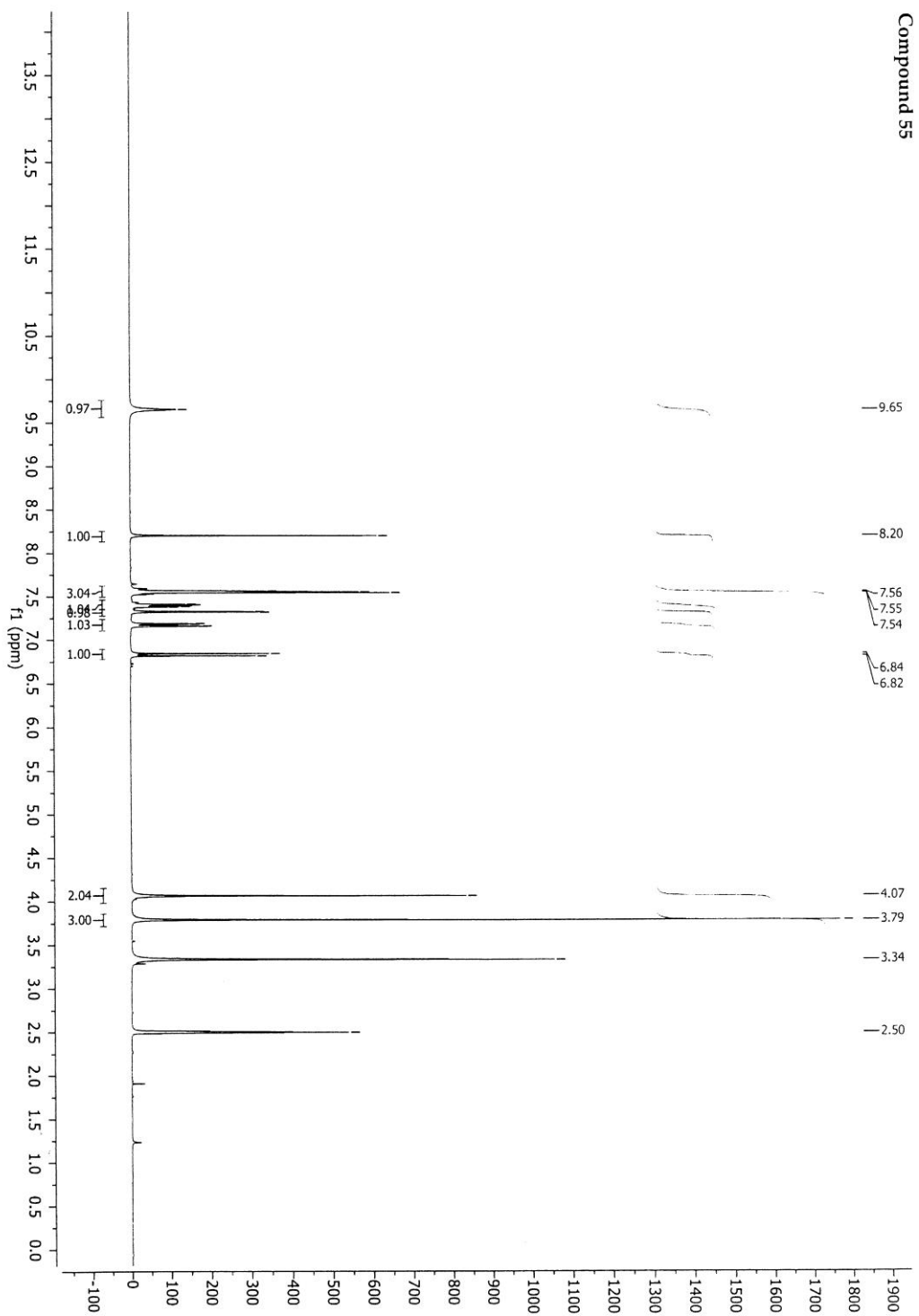


Fig. S23. ¹H NMR spectrum for compound 55

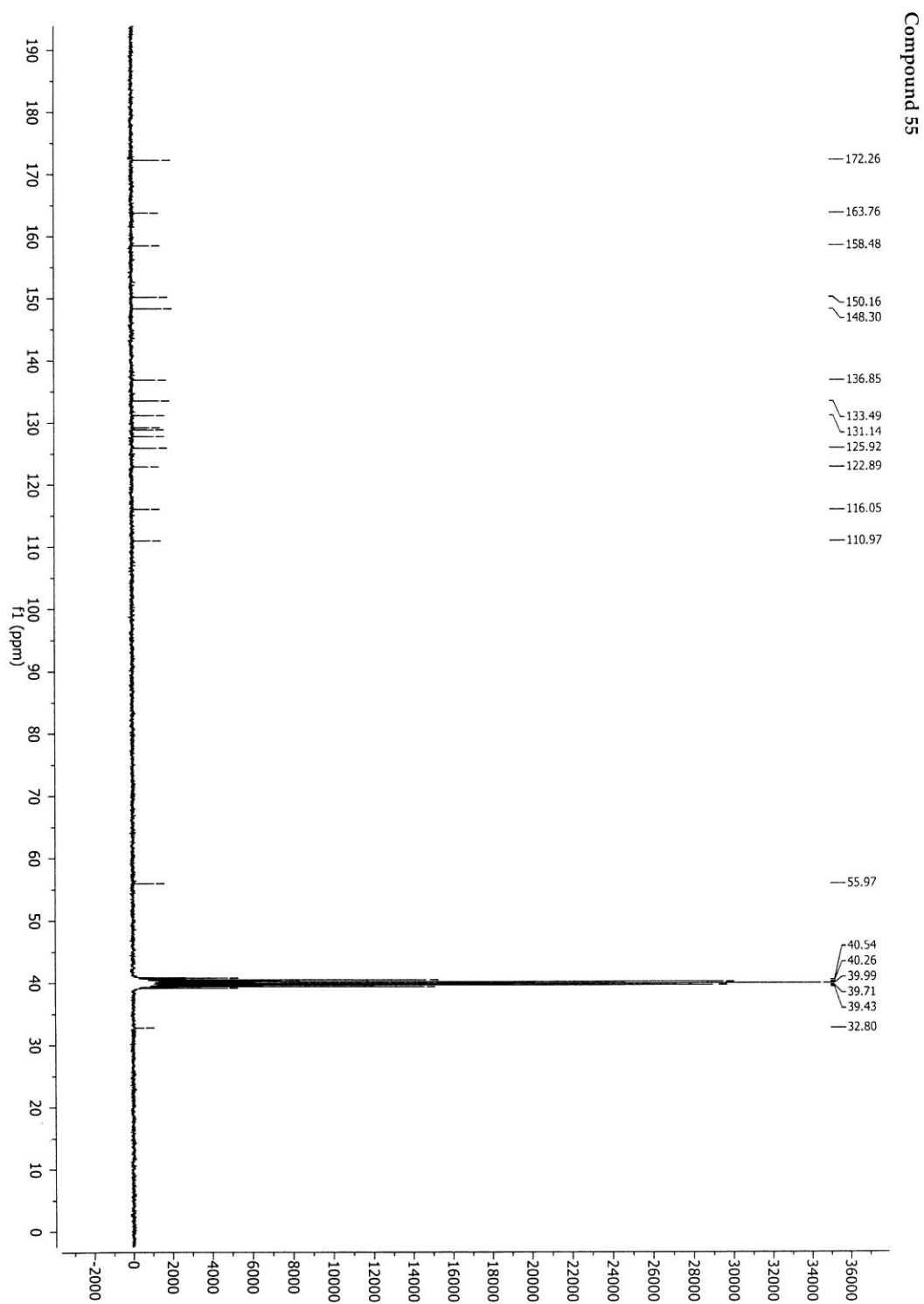


Fig. S24. ^{13}C NMR spectrum for compound 55

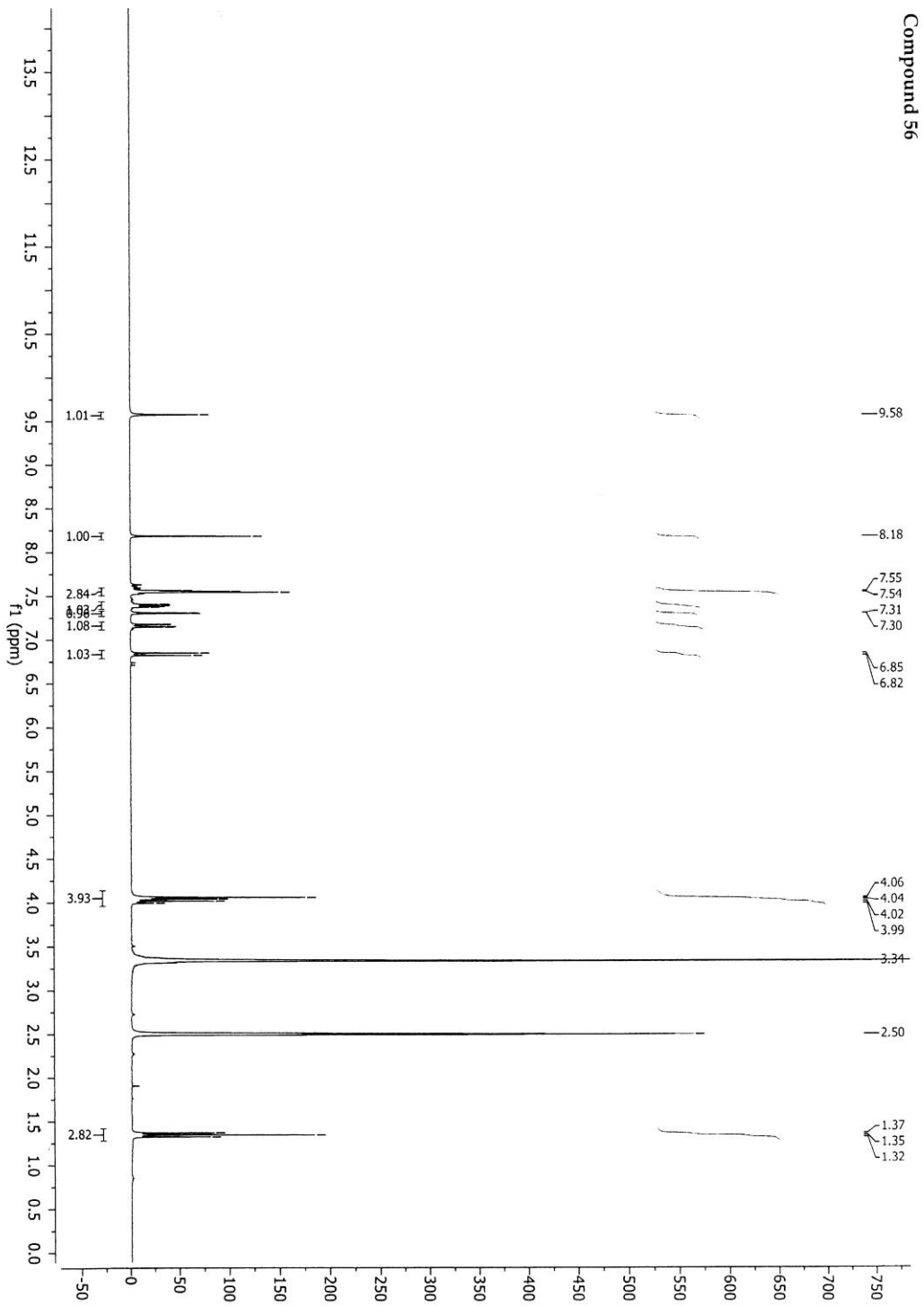


Fig. S25. ¹H NMR spectrum for compound 56

Compound 56

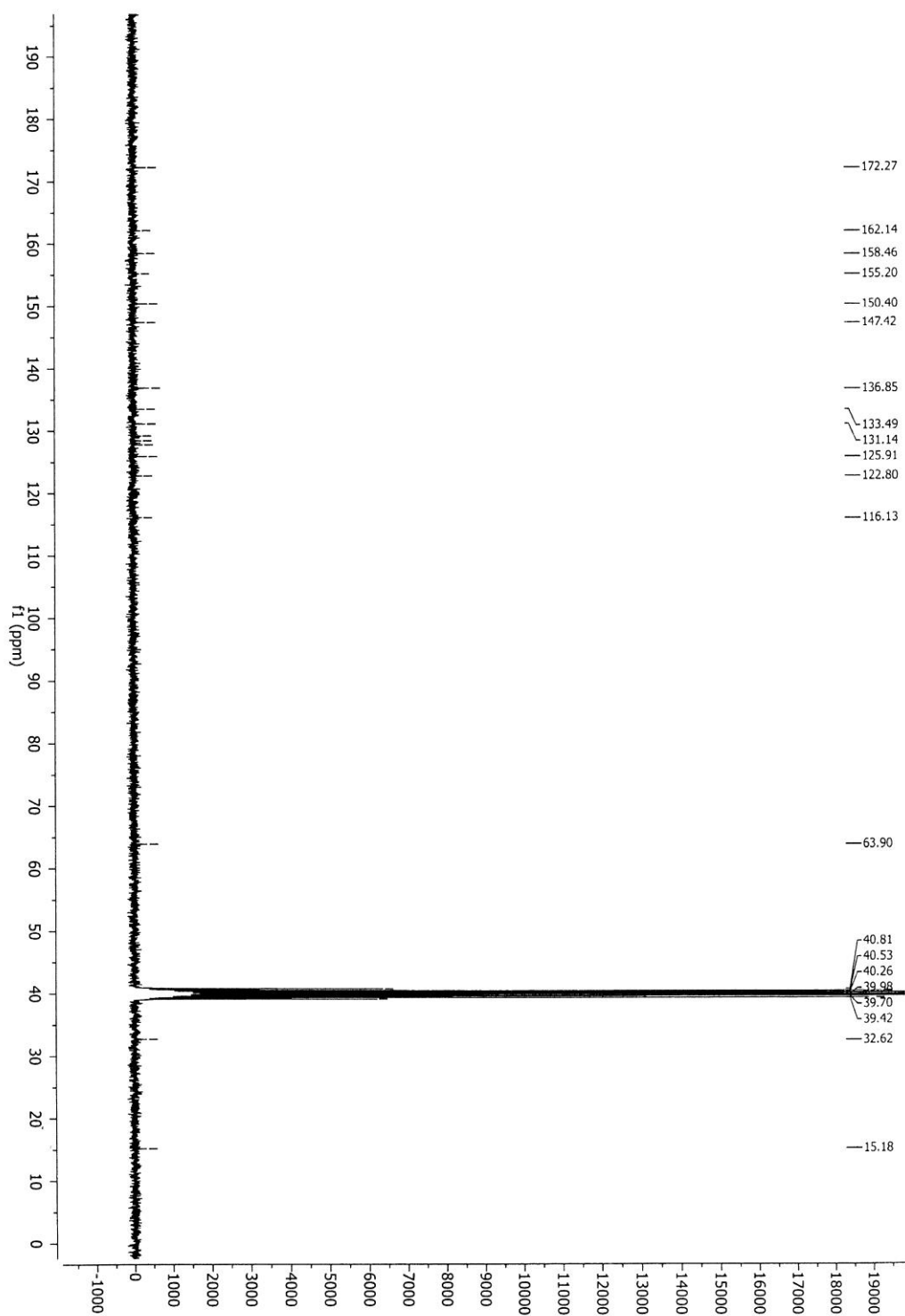


Fig. S26. ^{13}C NMR spectrum for compound 56

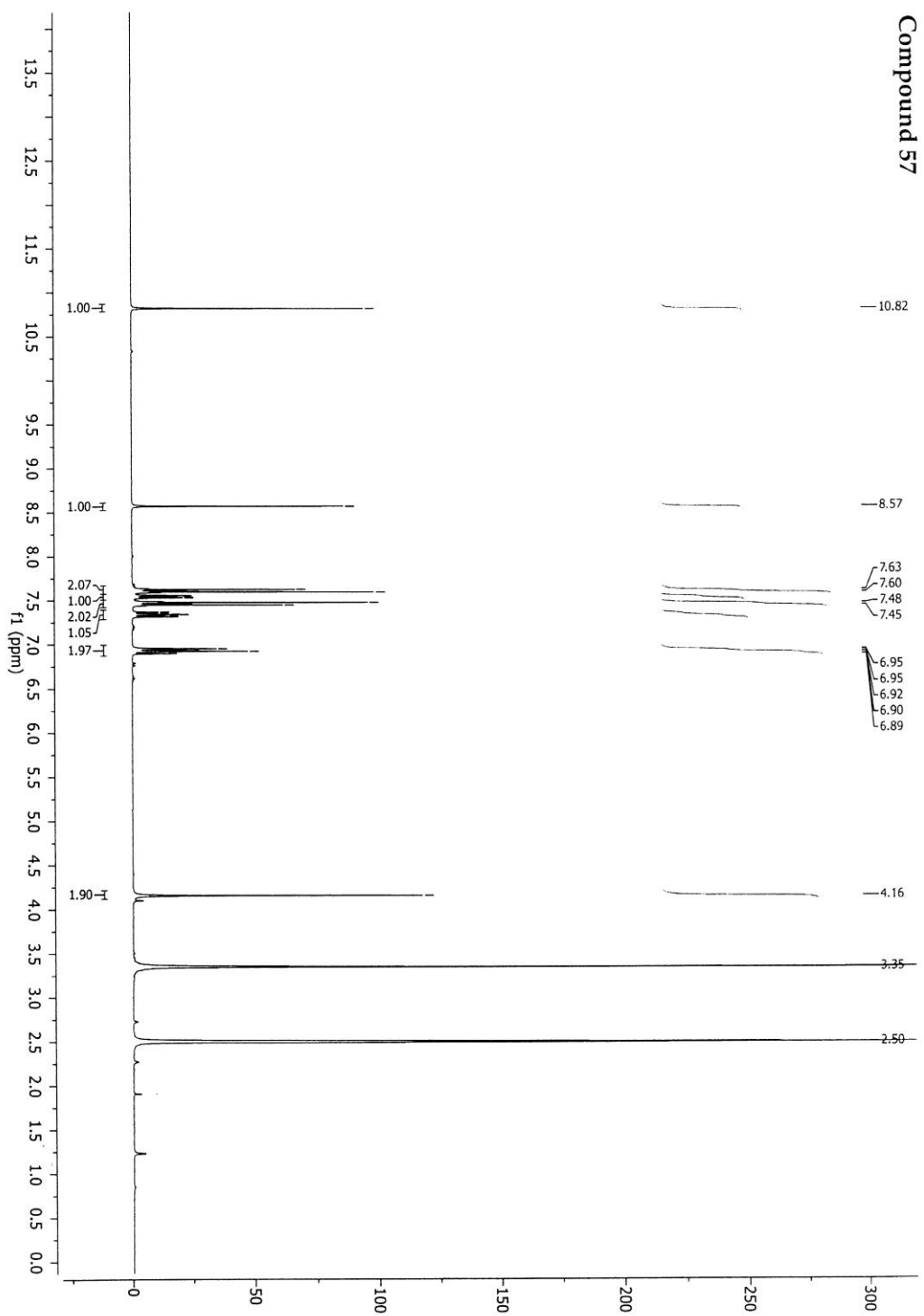


Fig. S27. ¹H NMR spectrum for compound 57

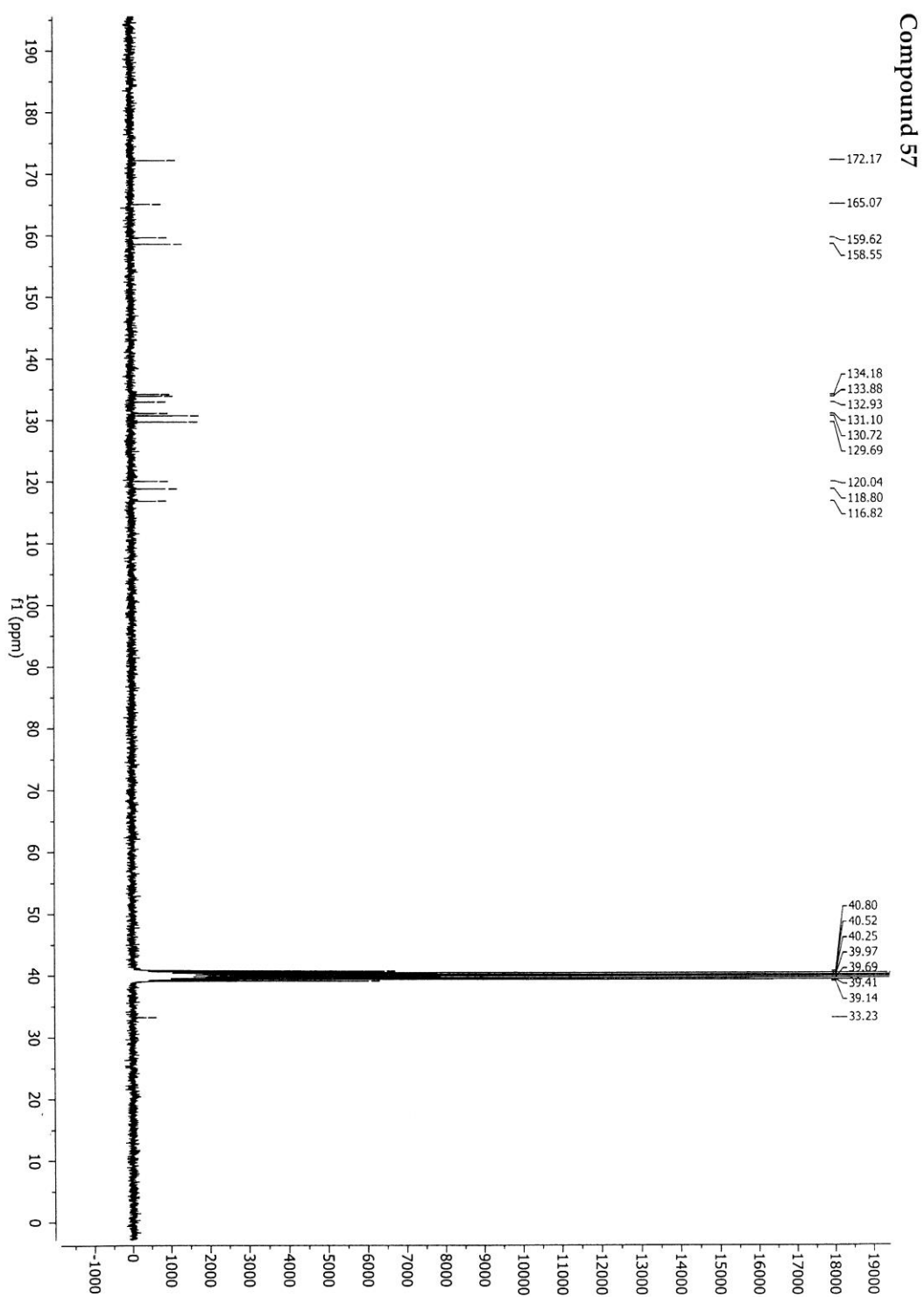


Fig. S28. ^{13}C NMR spectrum for compound 57

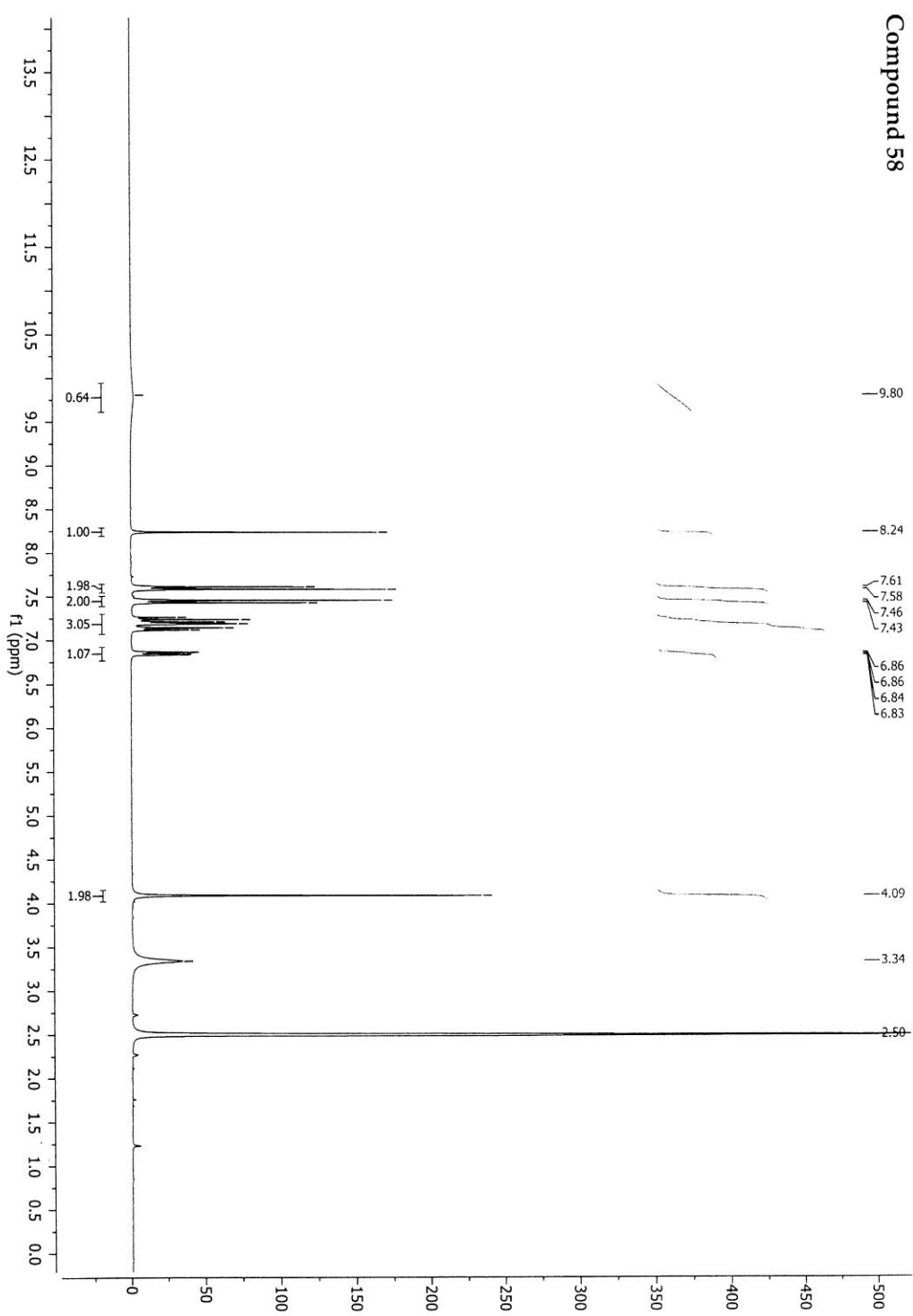


Fig. S29. ¹H NMR spectrum for compound 58

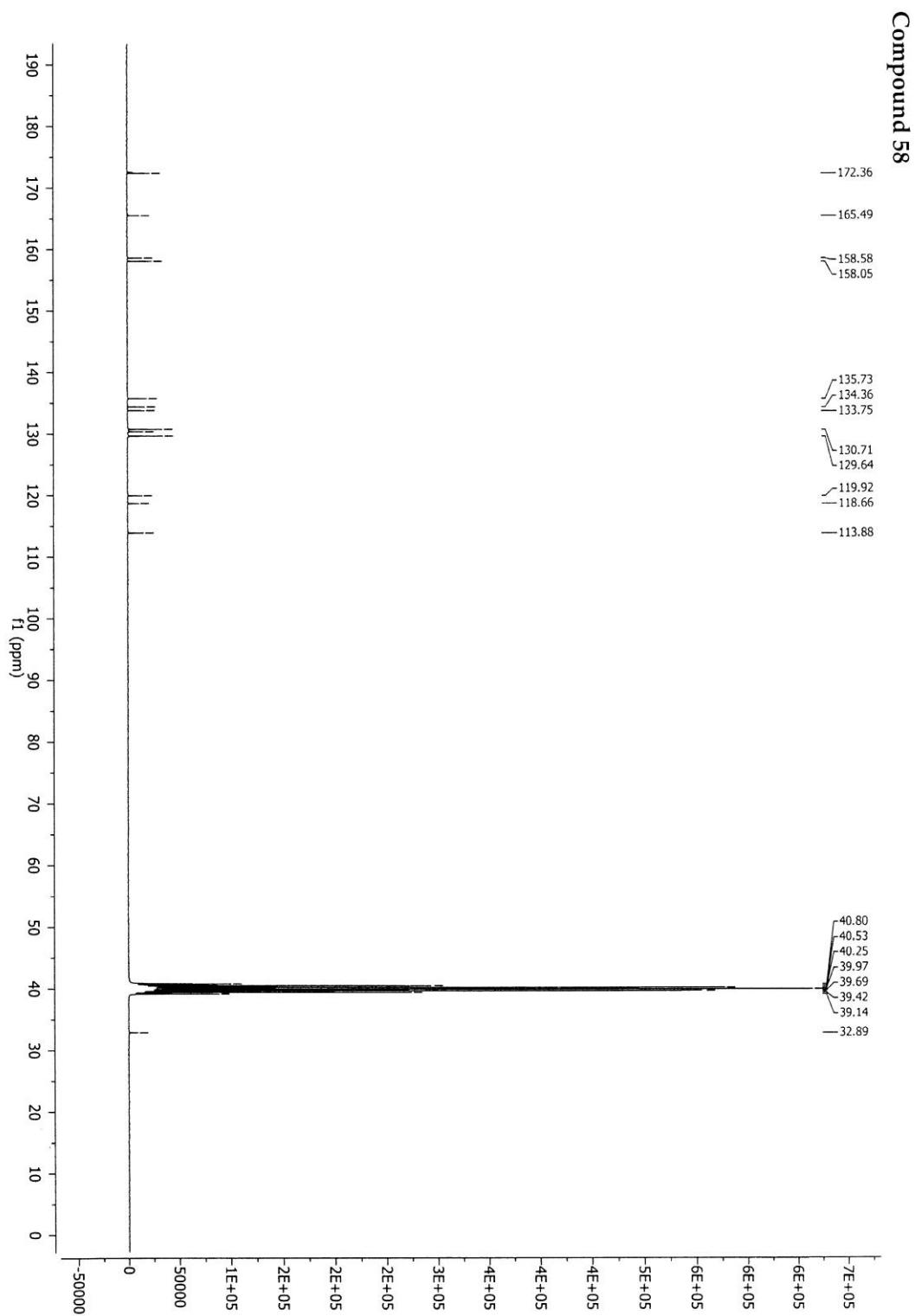


Fig. S30. ^{13}C NMR spectrum for compound 58

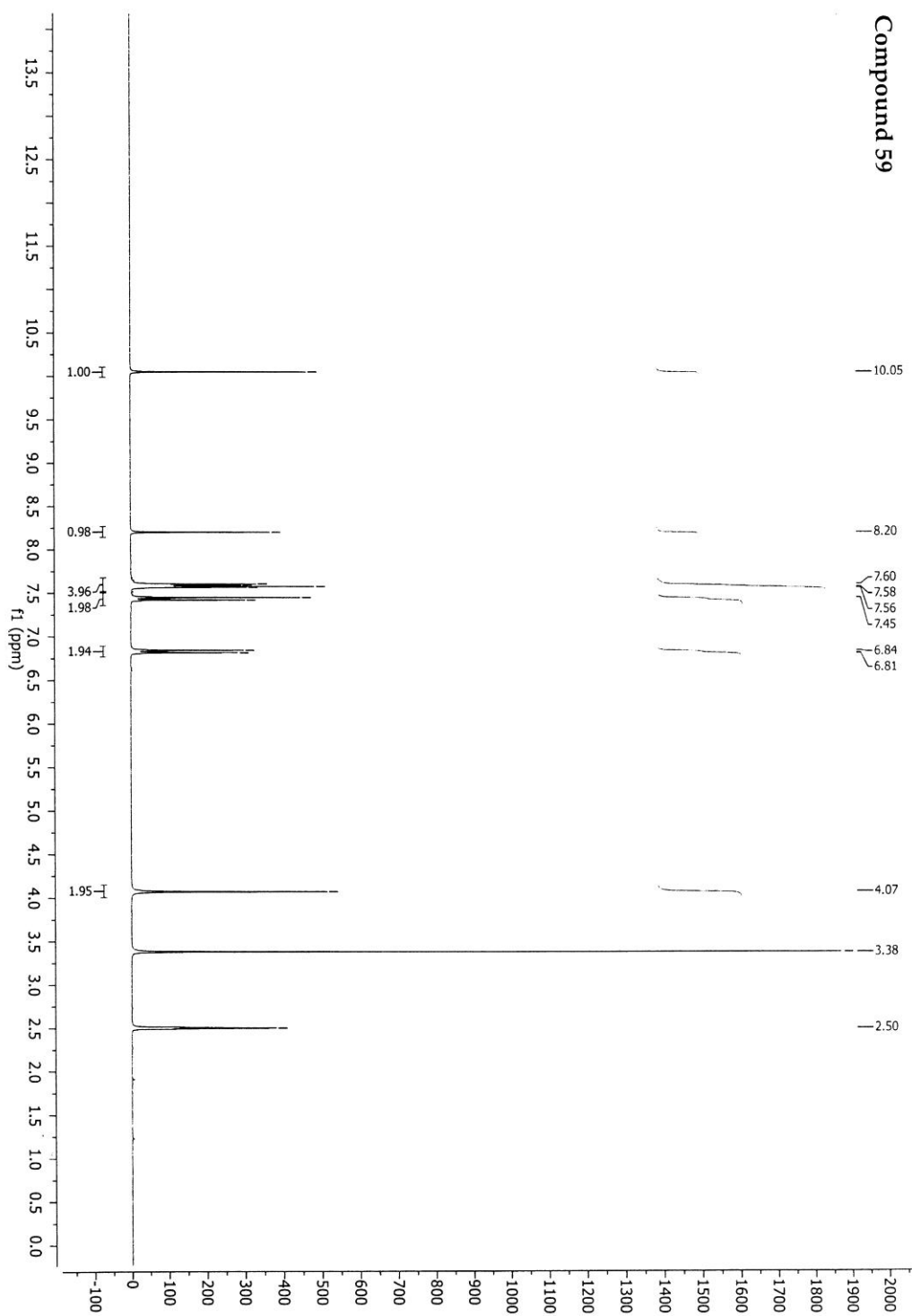


Fig. S31. ^1H NMR spectrum for compound 59

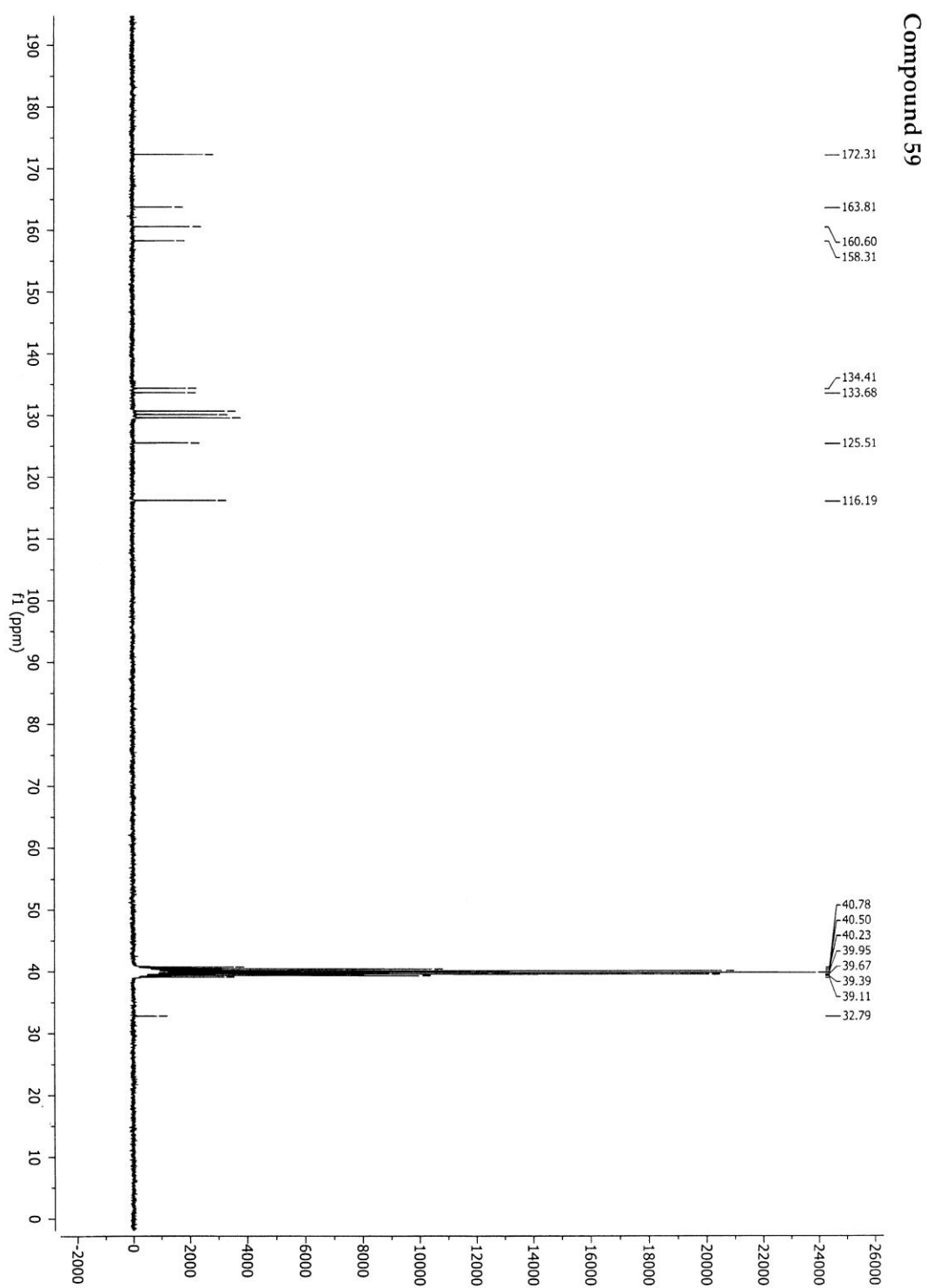


Fig. S32. ^{13}C NMR spectrum for compound 59

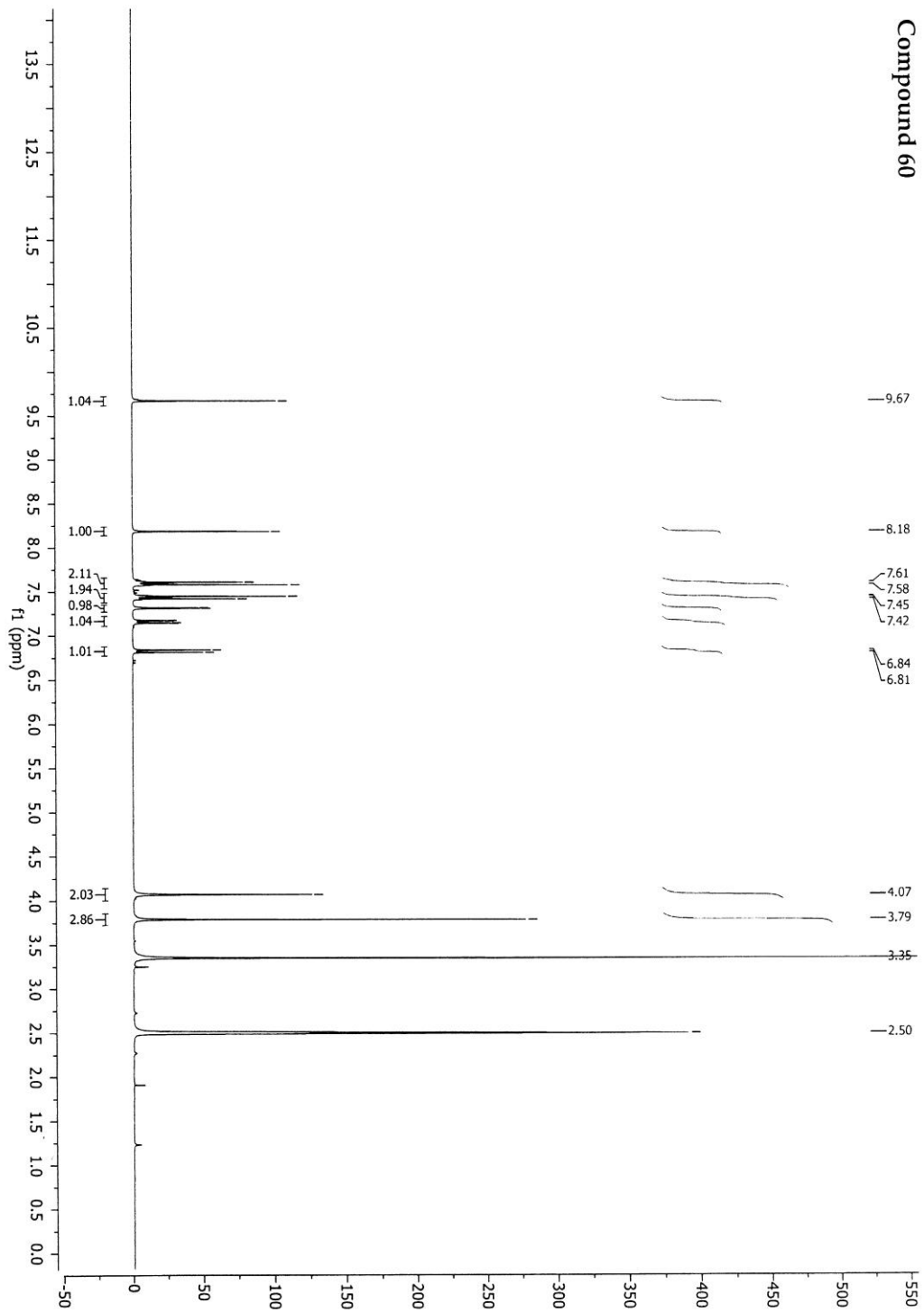


Fig. S33. ¹H NMR spectrum for compound 60

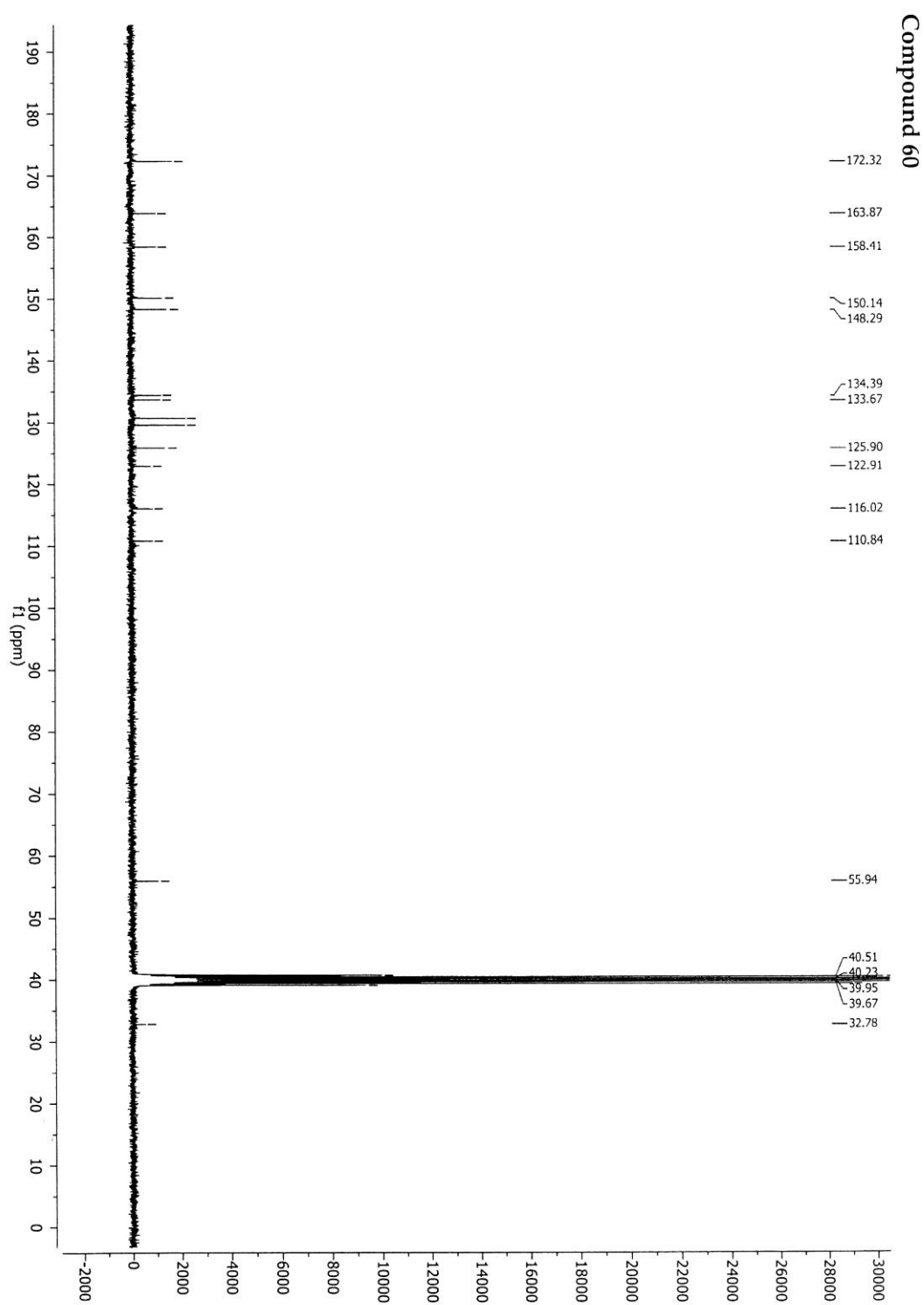


Fig. S34. ^{13}C NMR spectrum for compound **60**

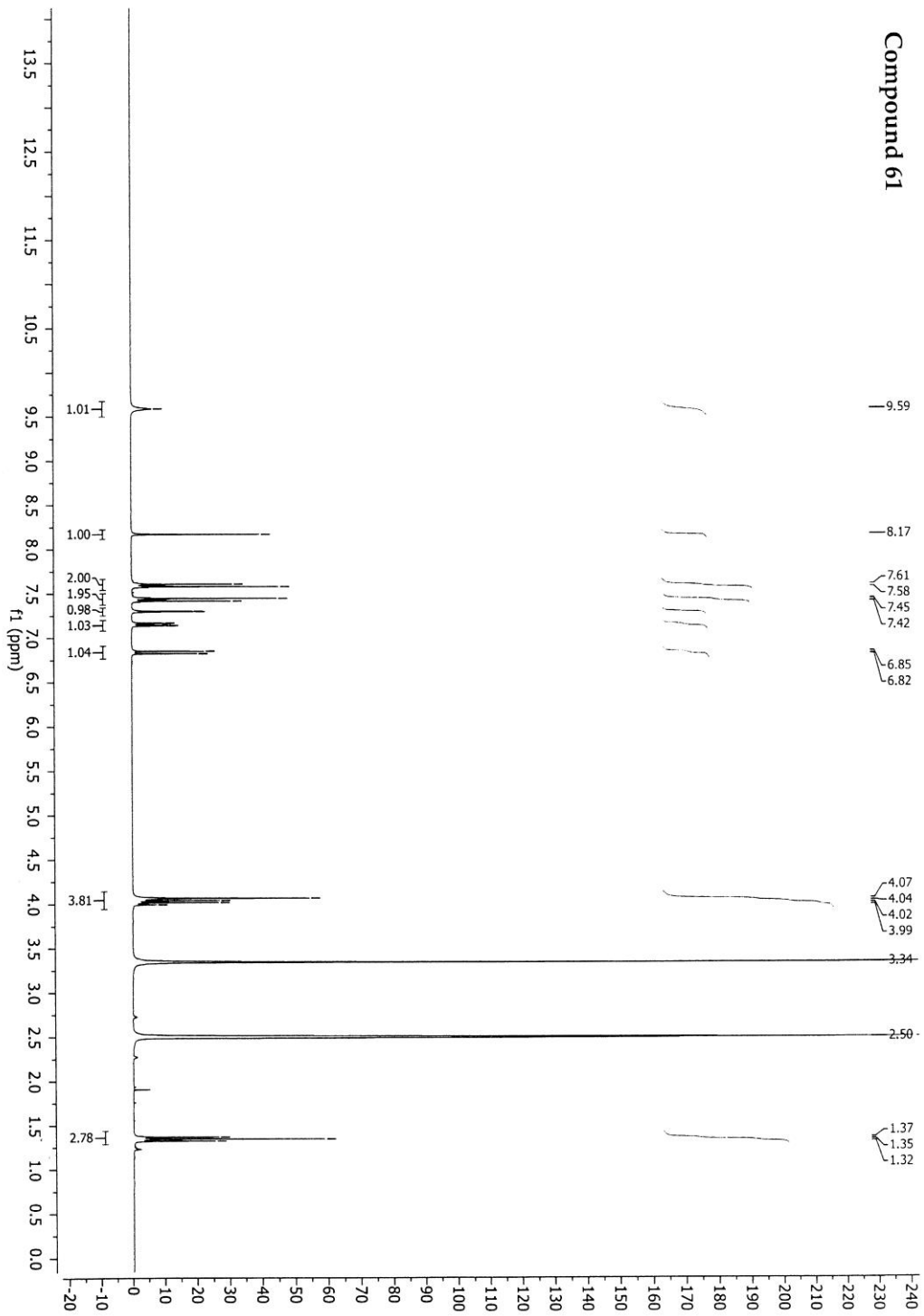


Fig. S35. ^1H NMR spectrum for compound 61

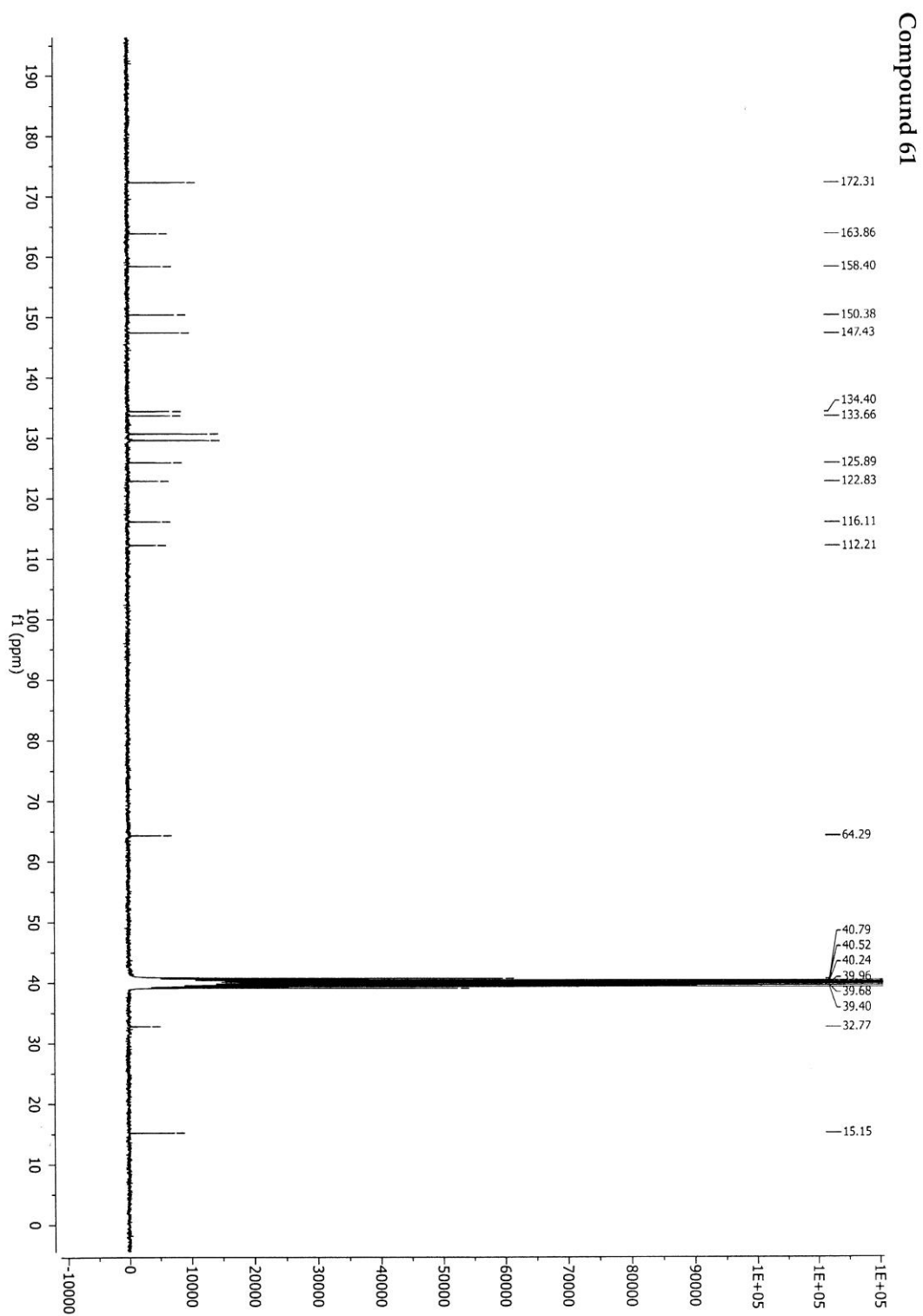


Fig. S36. ^{13}C NMR spectrum for compound 61

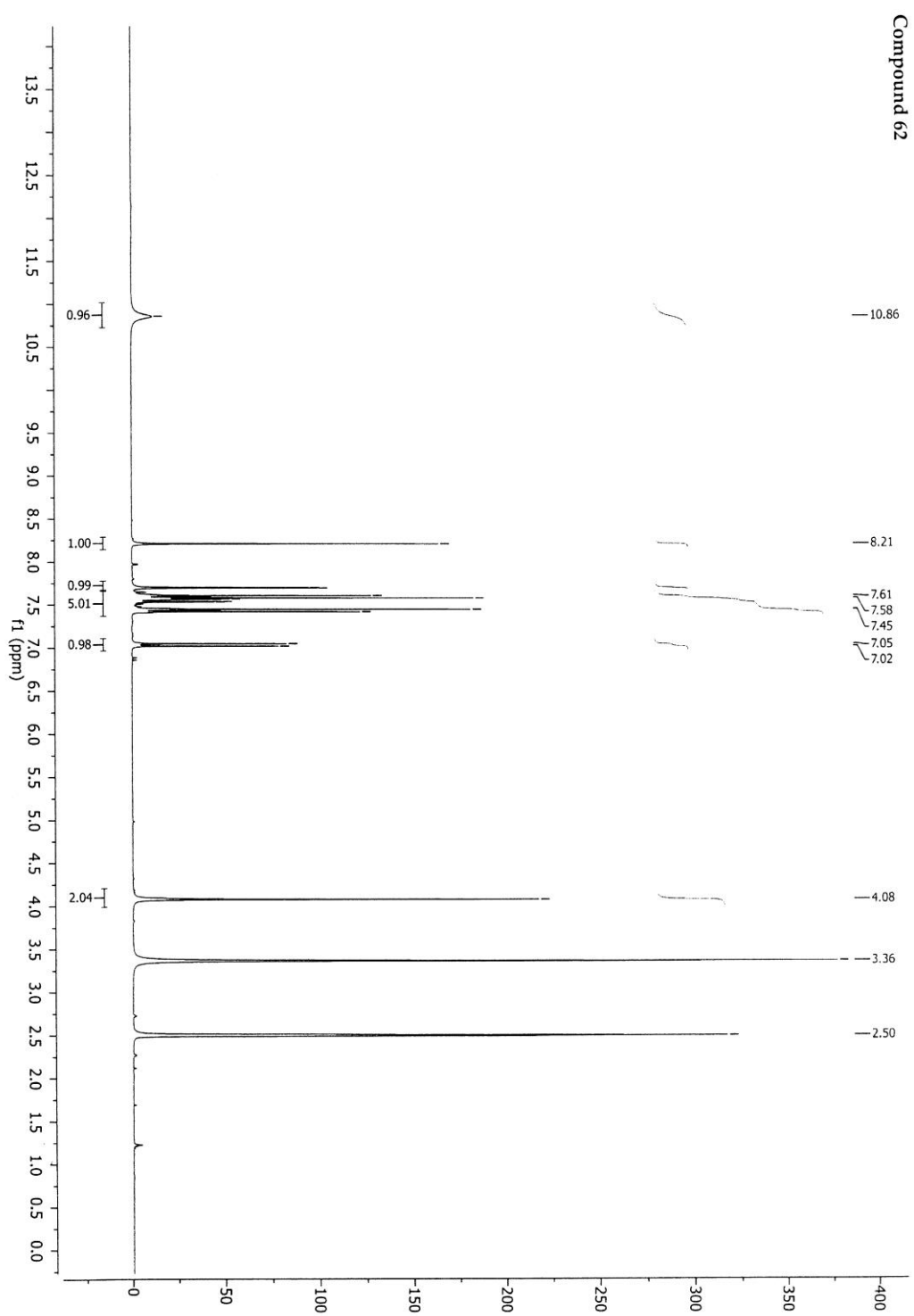


Fig. S37. ^1H NMR spectrum for compound 62

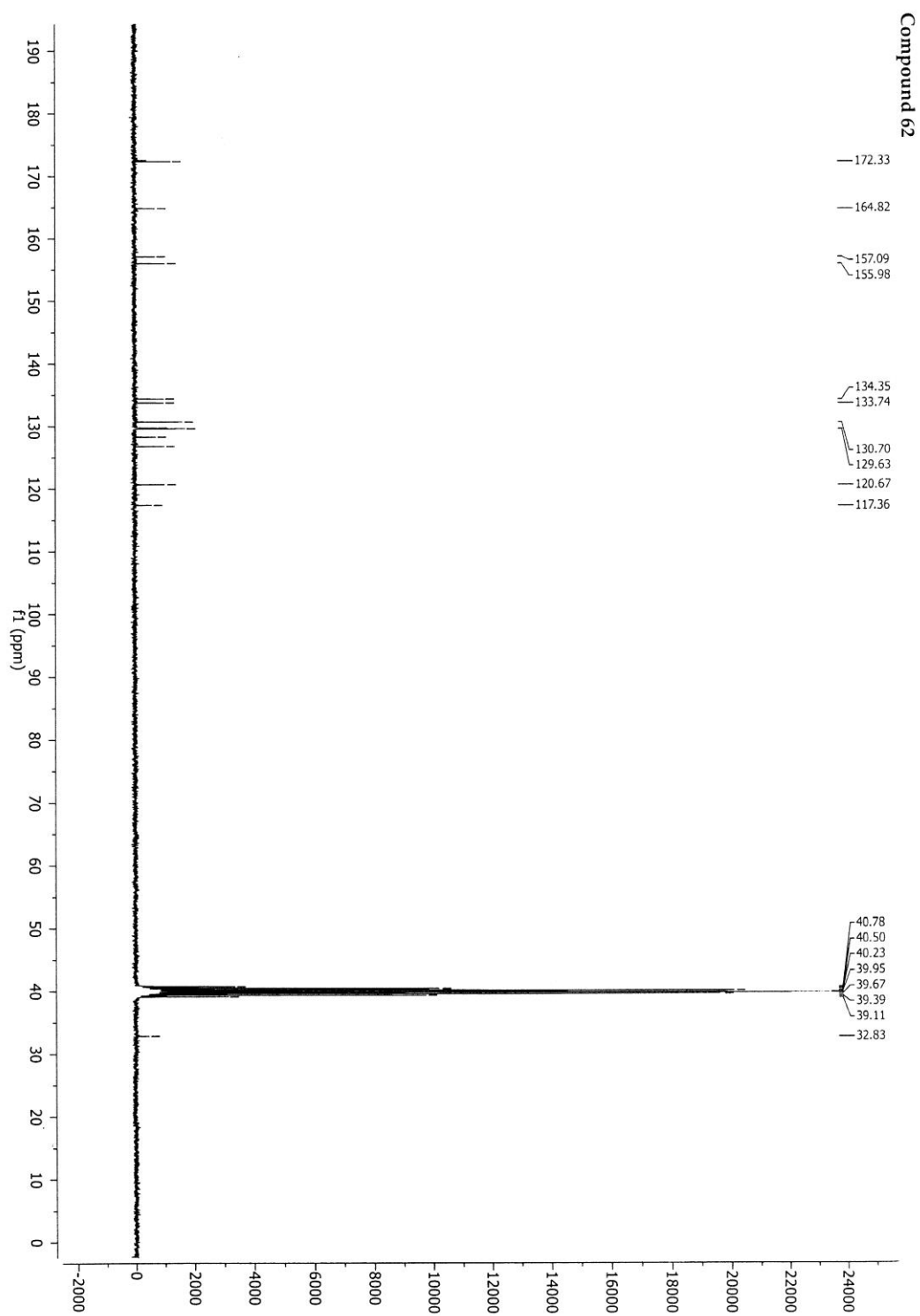


Fig. S38. ^{13}C NMR spectrum for compound 62

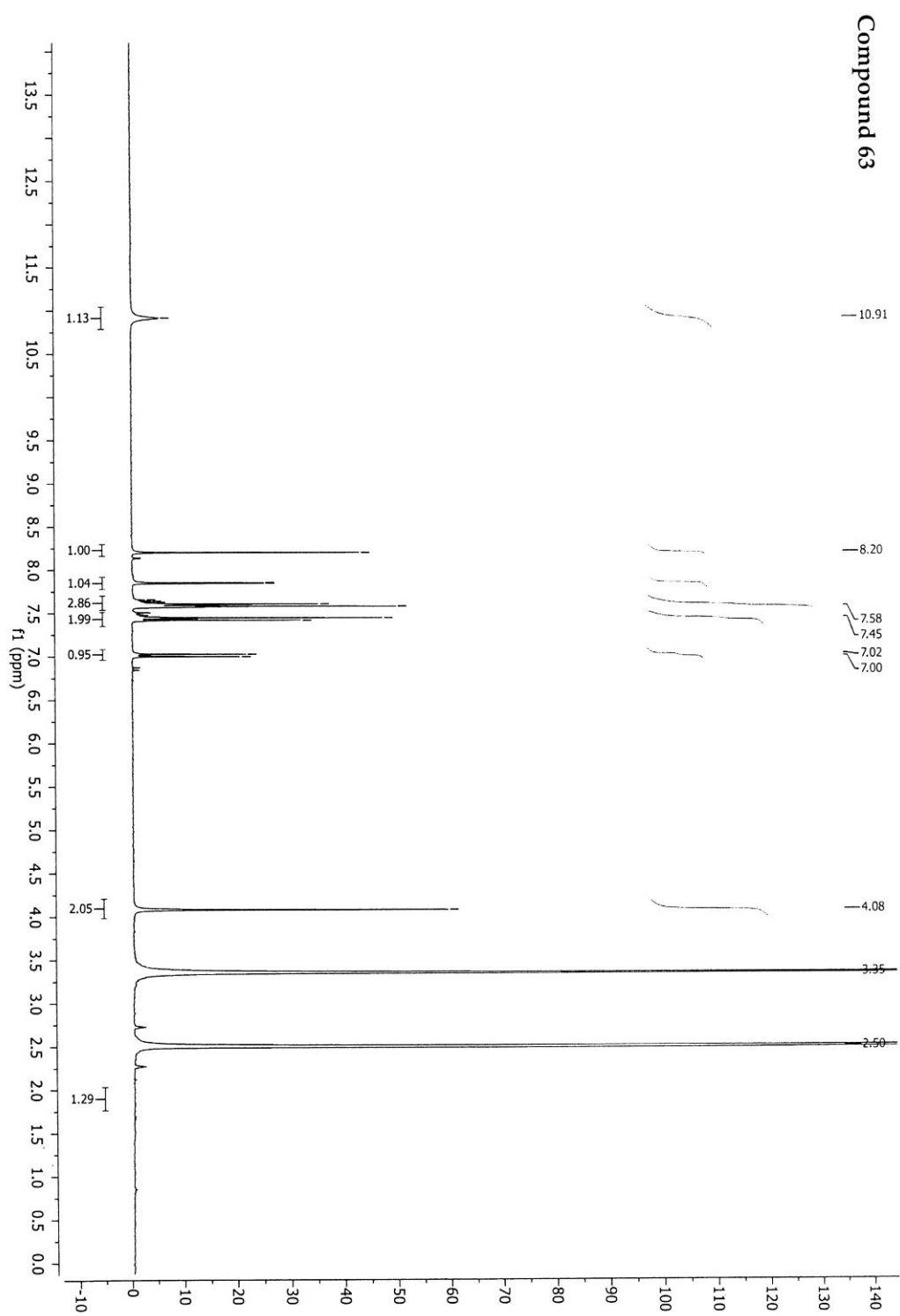


Fig. S39. ^1H NMR spectrum for compound 63

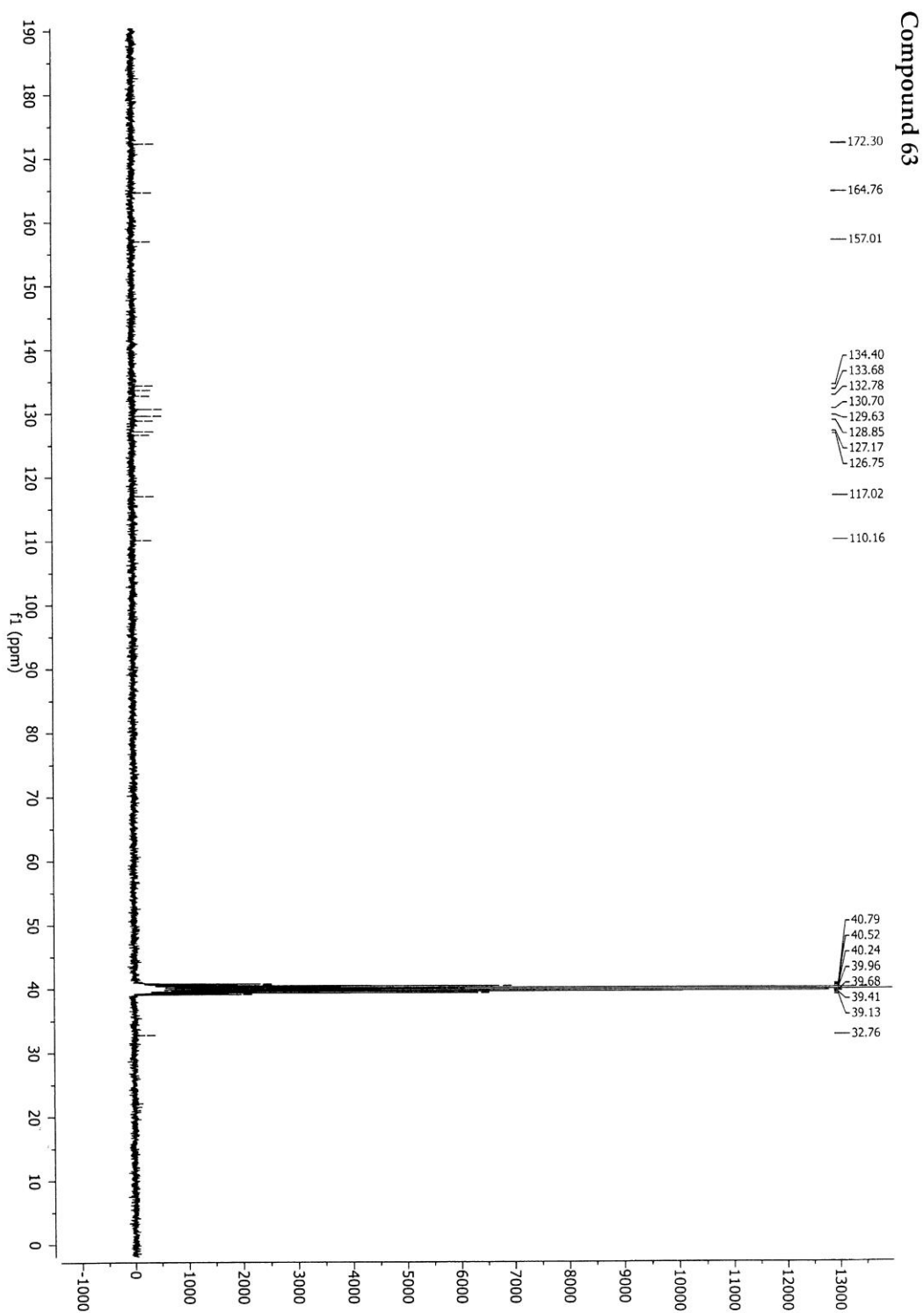


Fig. S40. ^{13}C NMR spectrum for compound 63

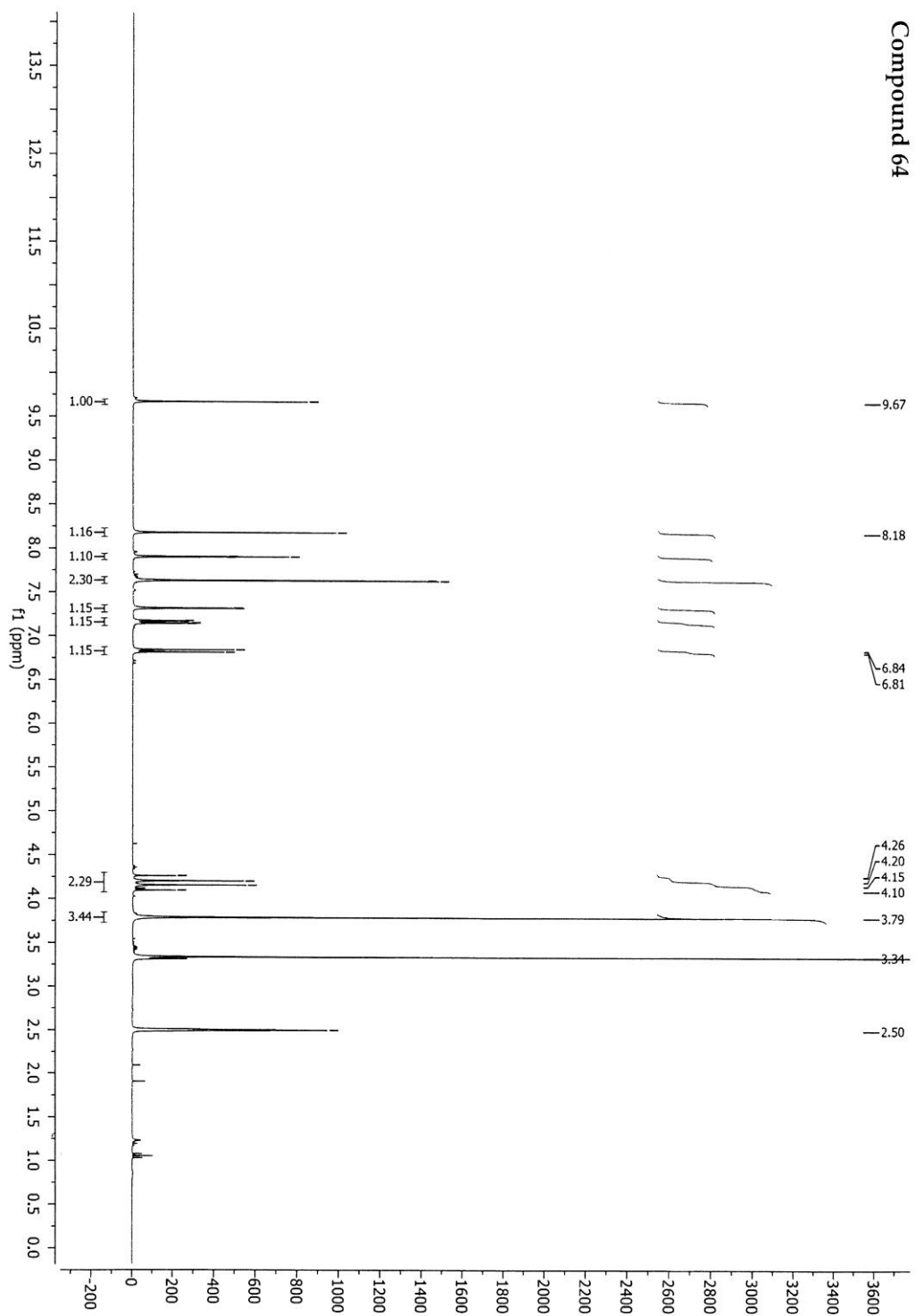


Fig. S41. ¹H NMR spectrum for compound 64

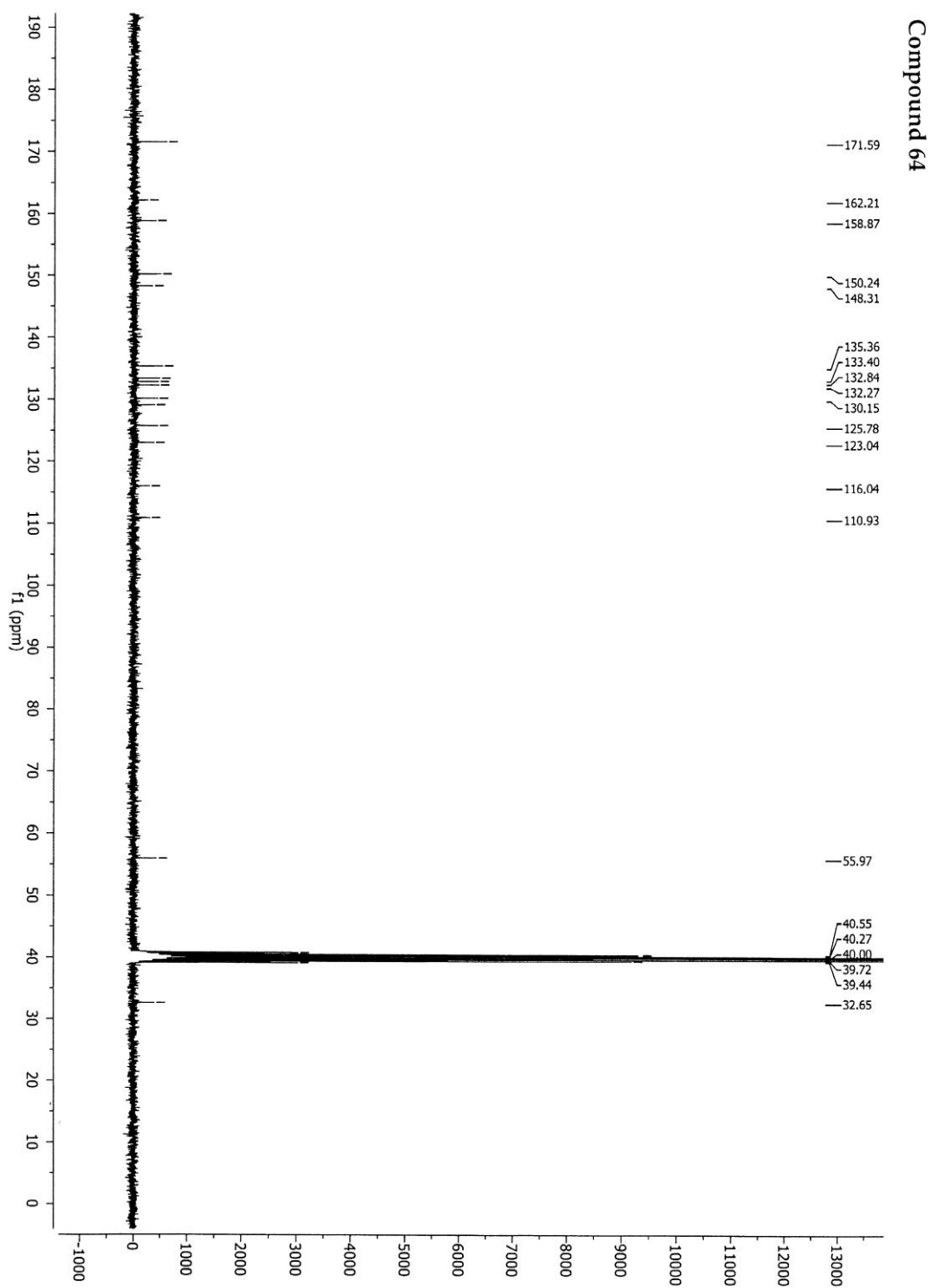


Fig. S42. ^{13}C NMR spectrum for compound **64**

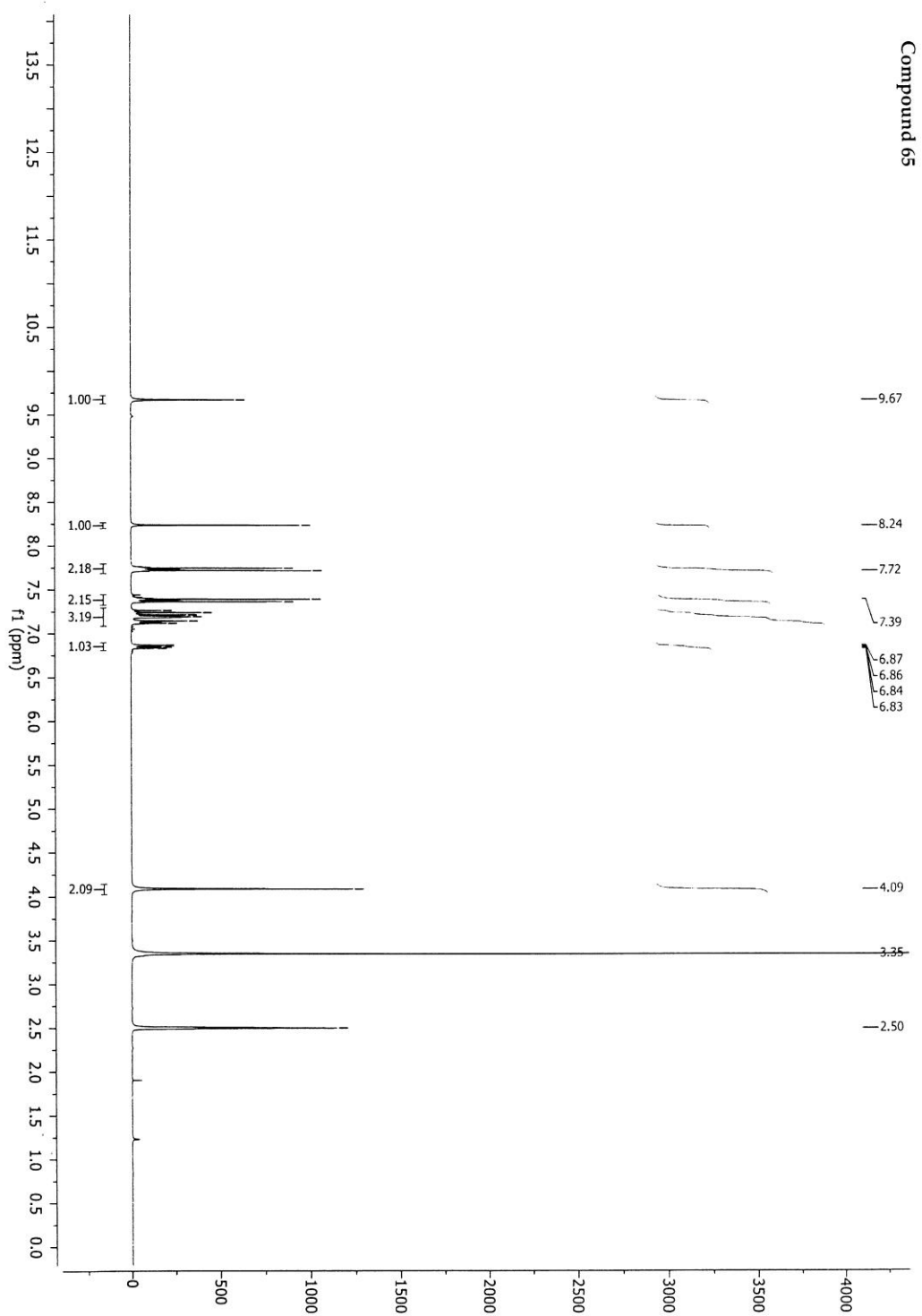


Fig. S43. ^1H NMR spectrum for compound 65

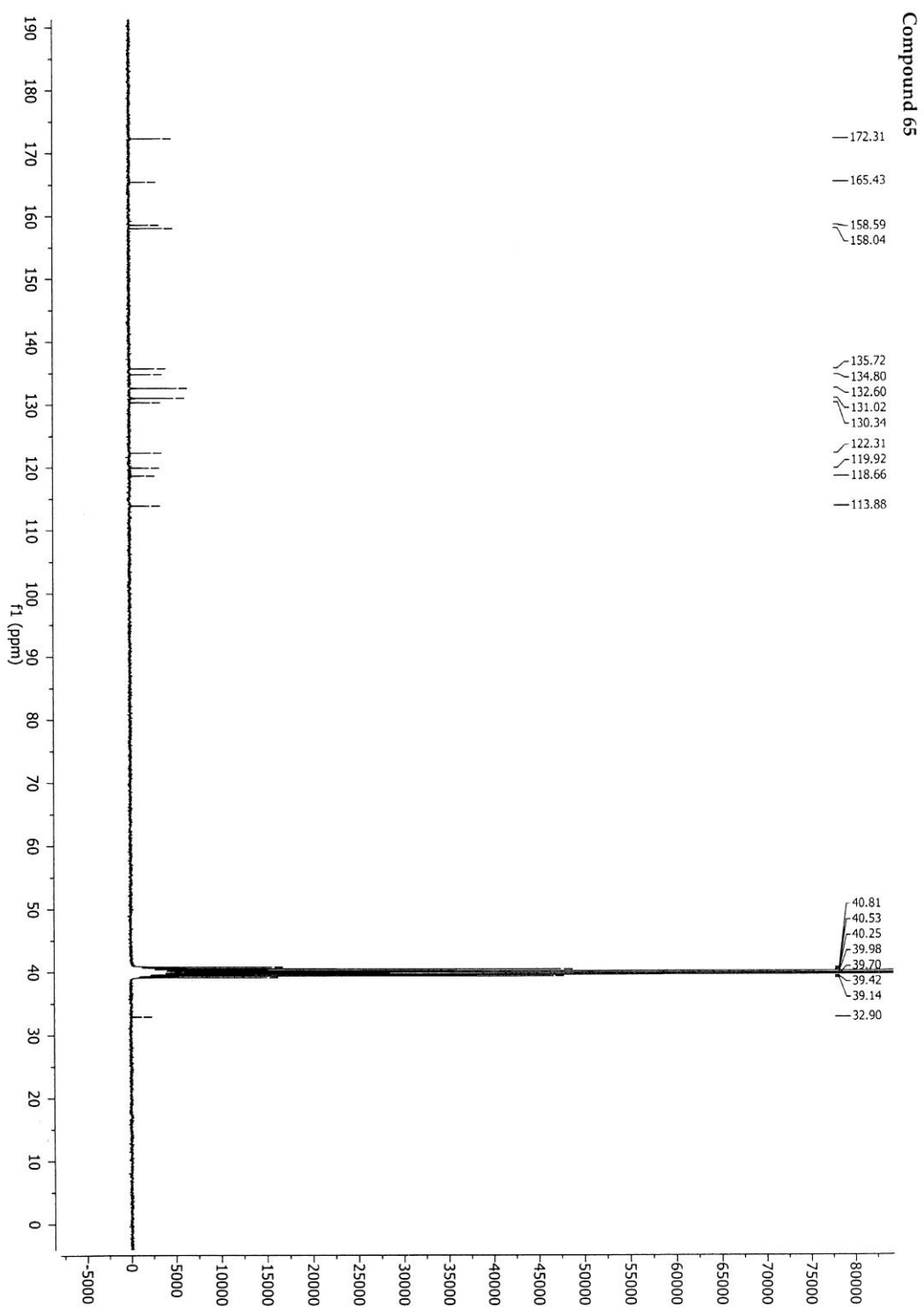


Fig. S44. ^{13}C NMR spectrum for compound 65

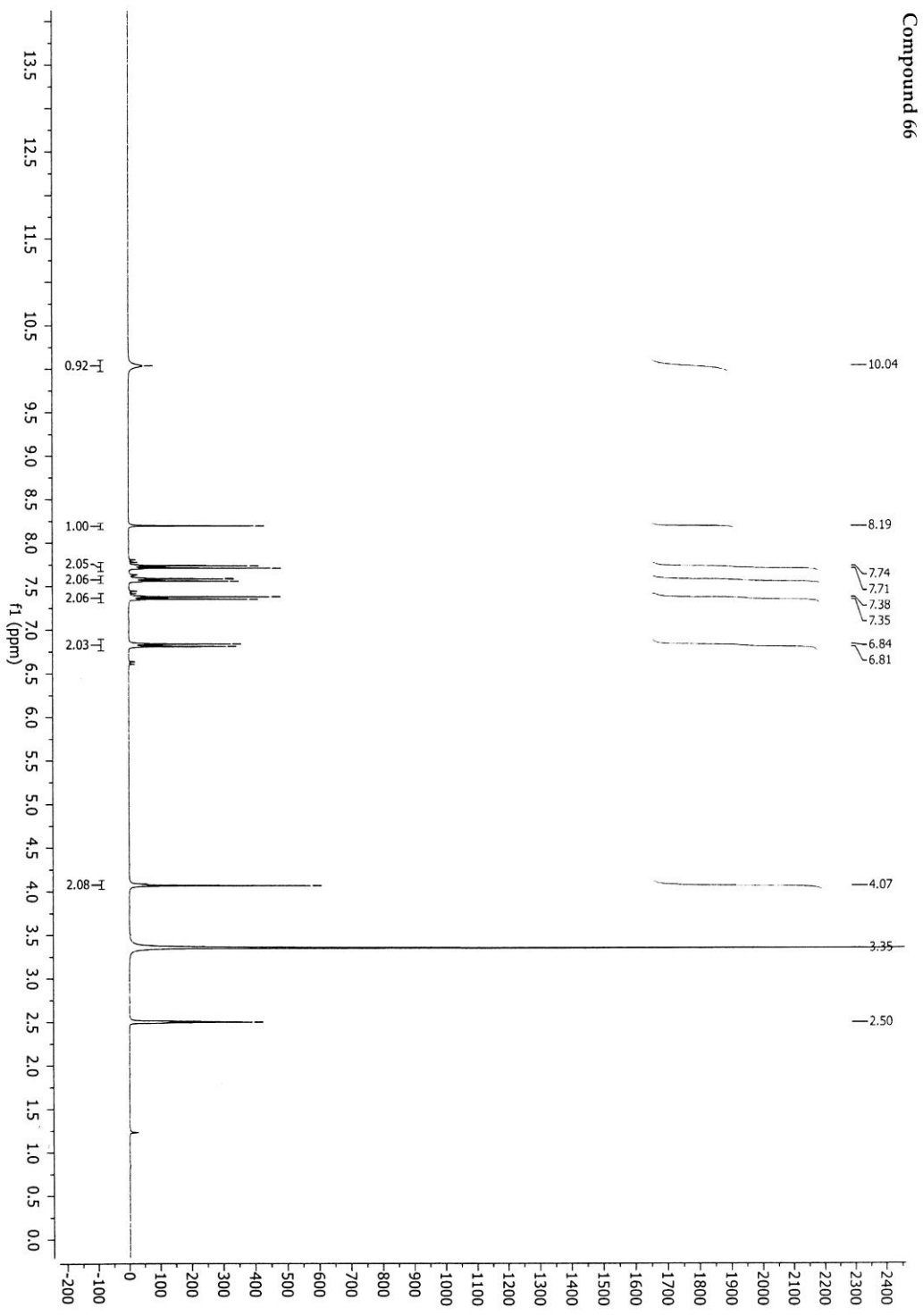


Fig. S45. ¹H NMR spectrum for compound 66

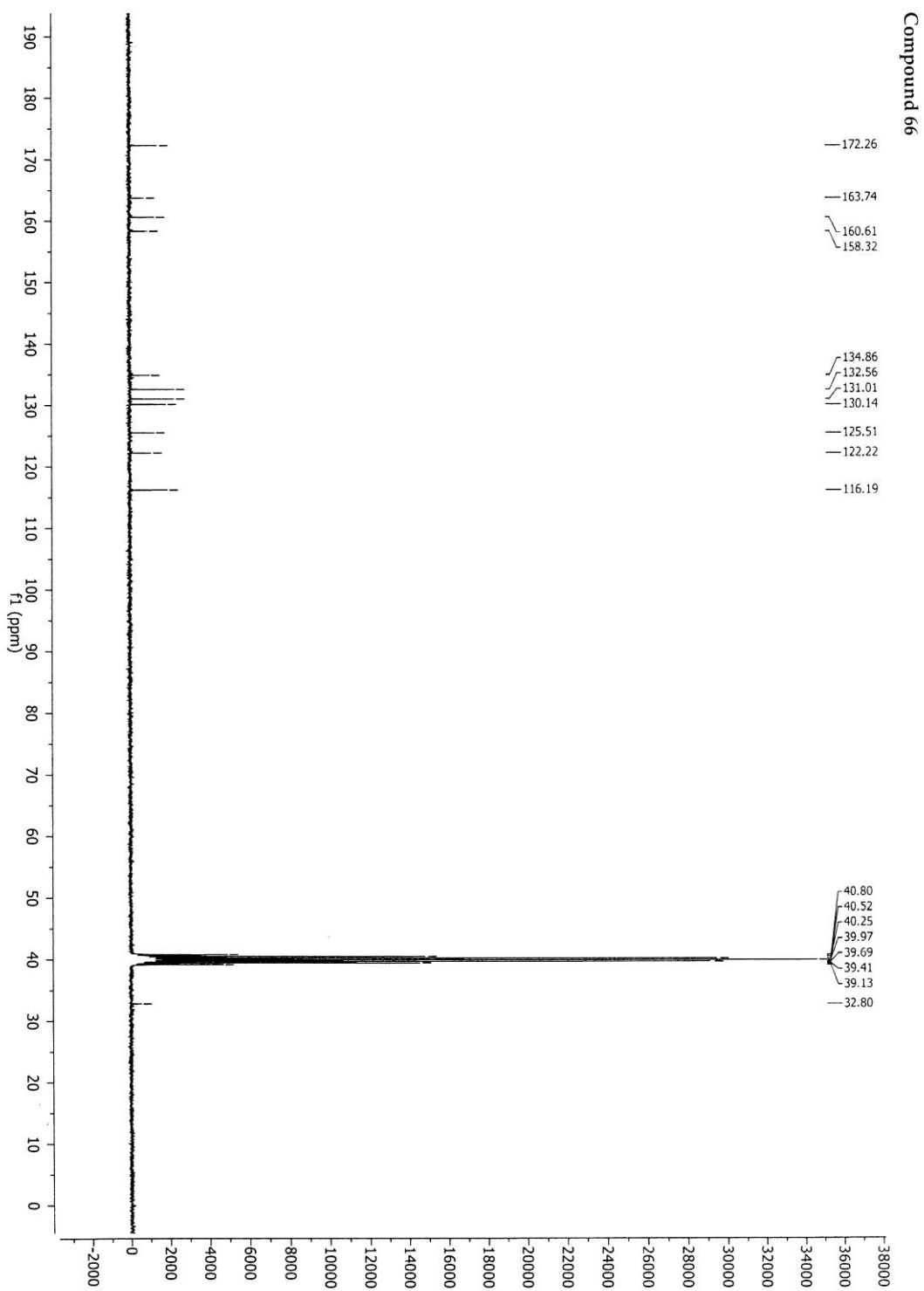


Fig. S46. ^{13}C NMR spectrum for compound 66

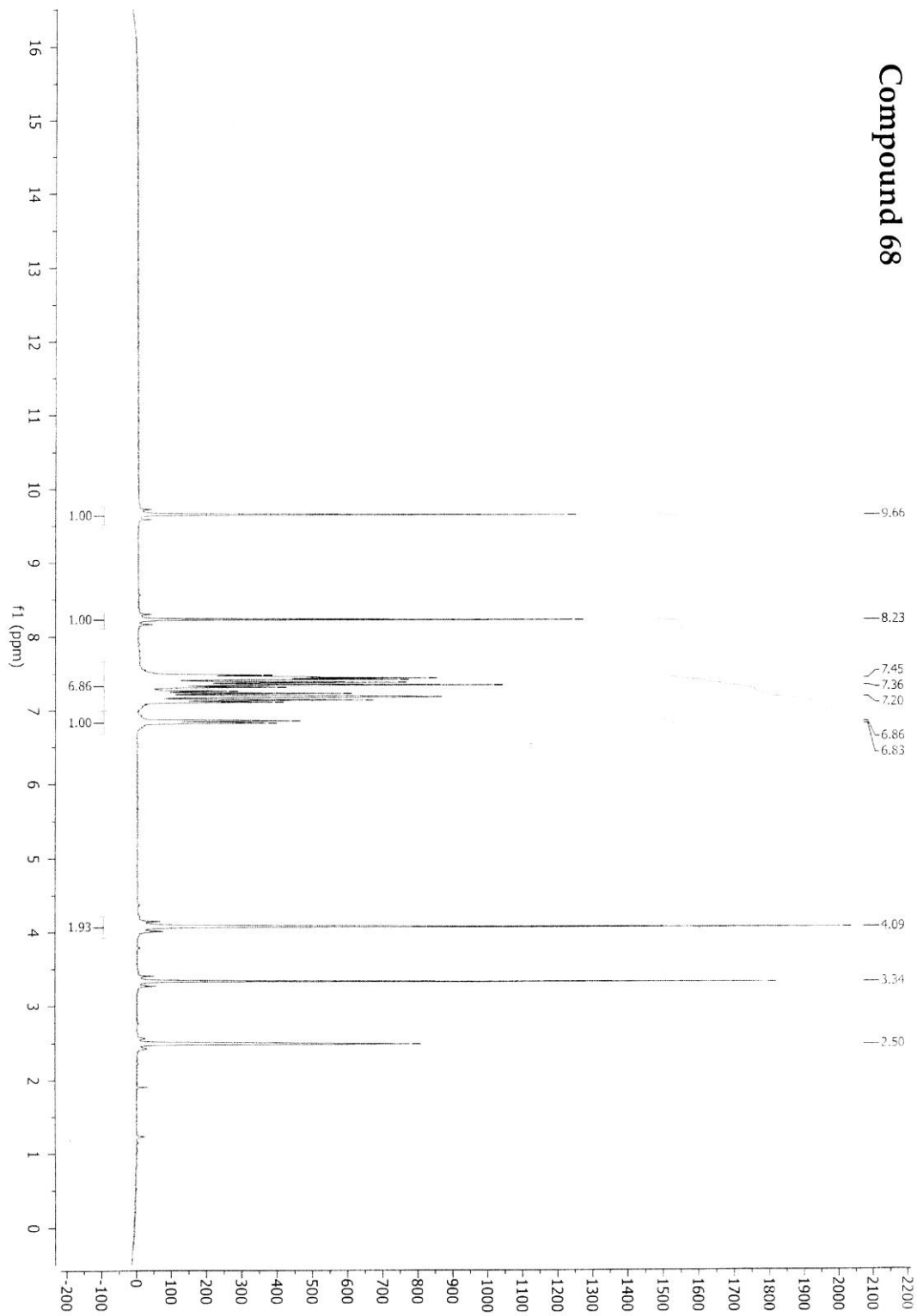


Fig. S47. ^1H NMR spectrum for compound 68

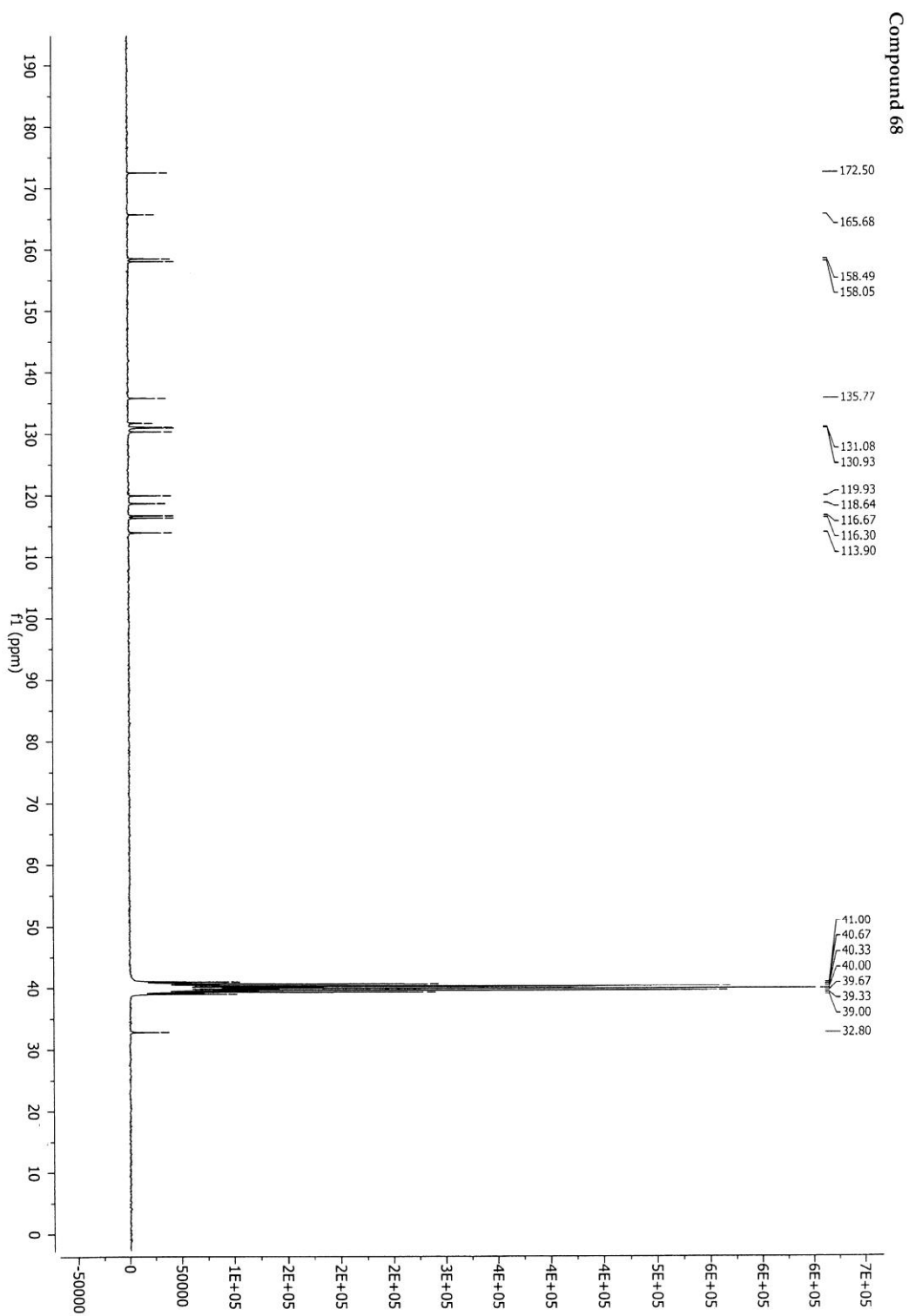


Fig. S48. ^{13}C NMR spectrum for compound 68

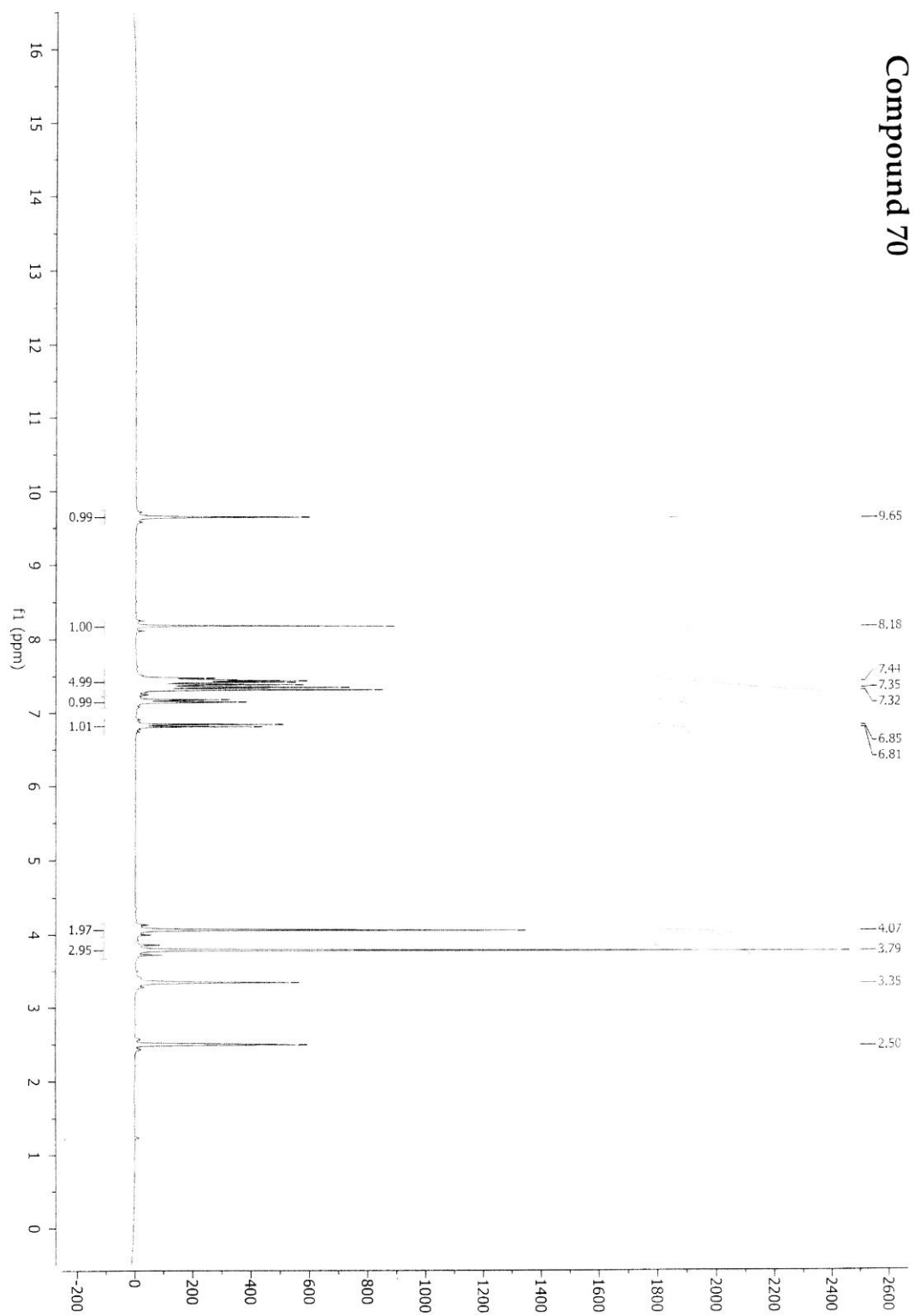


Fig. S49. ¹H NMR spectrum for compound 70

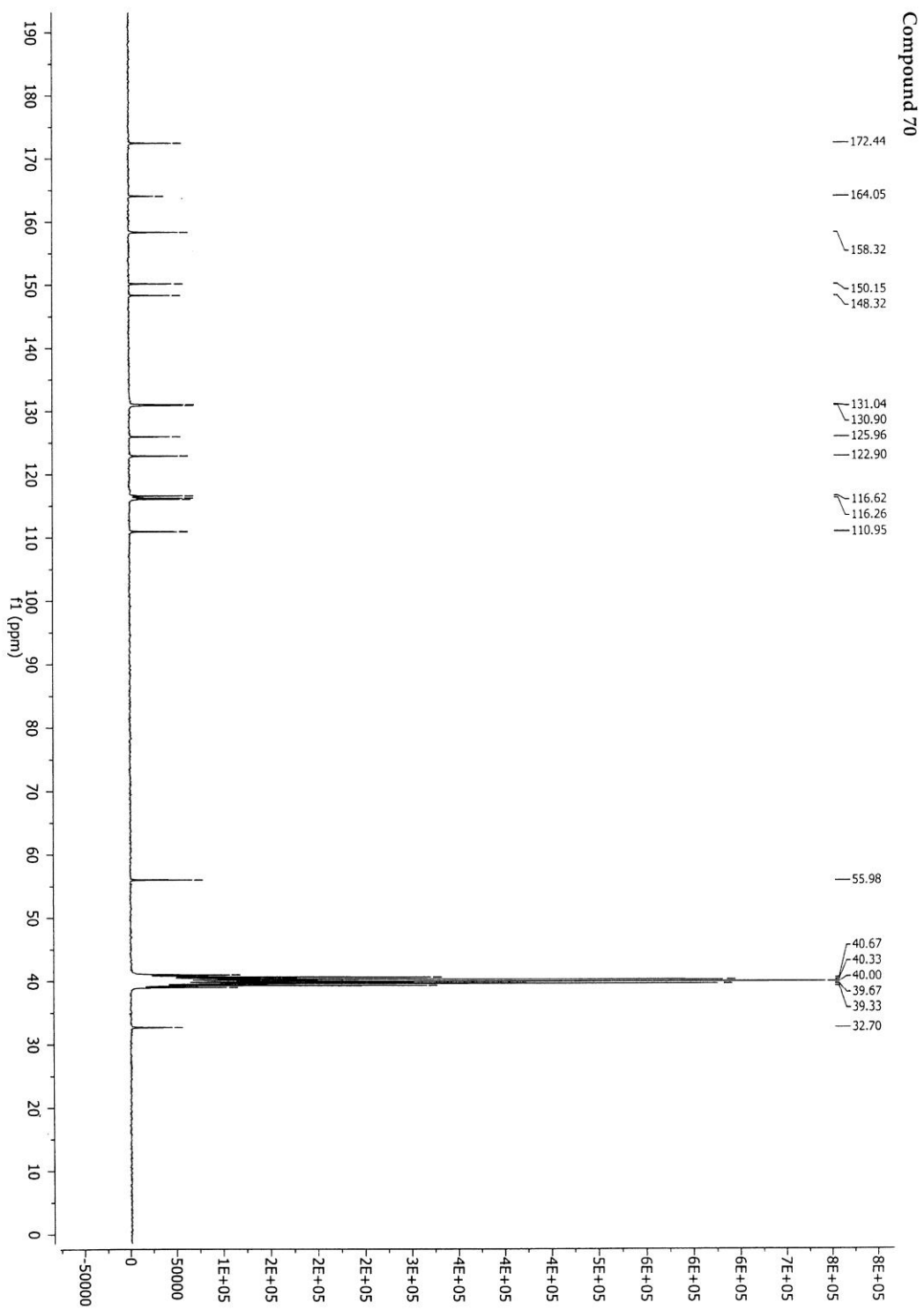


Fig. S50. ^{13}C NMR spectrum for compound 70

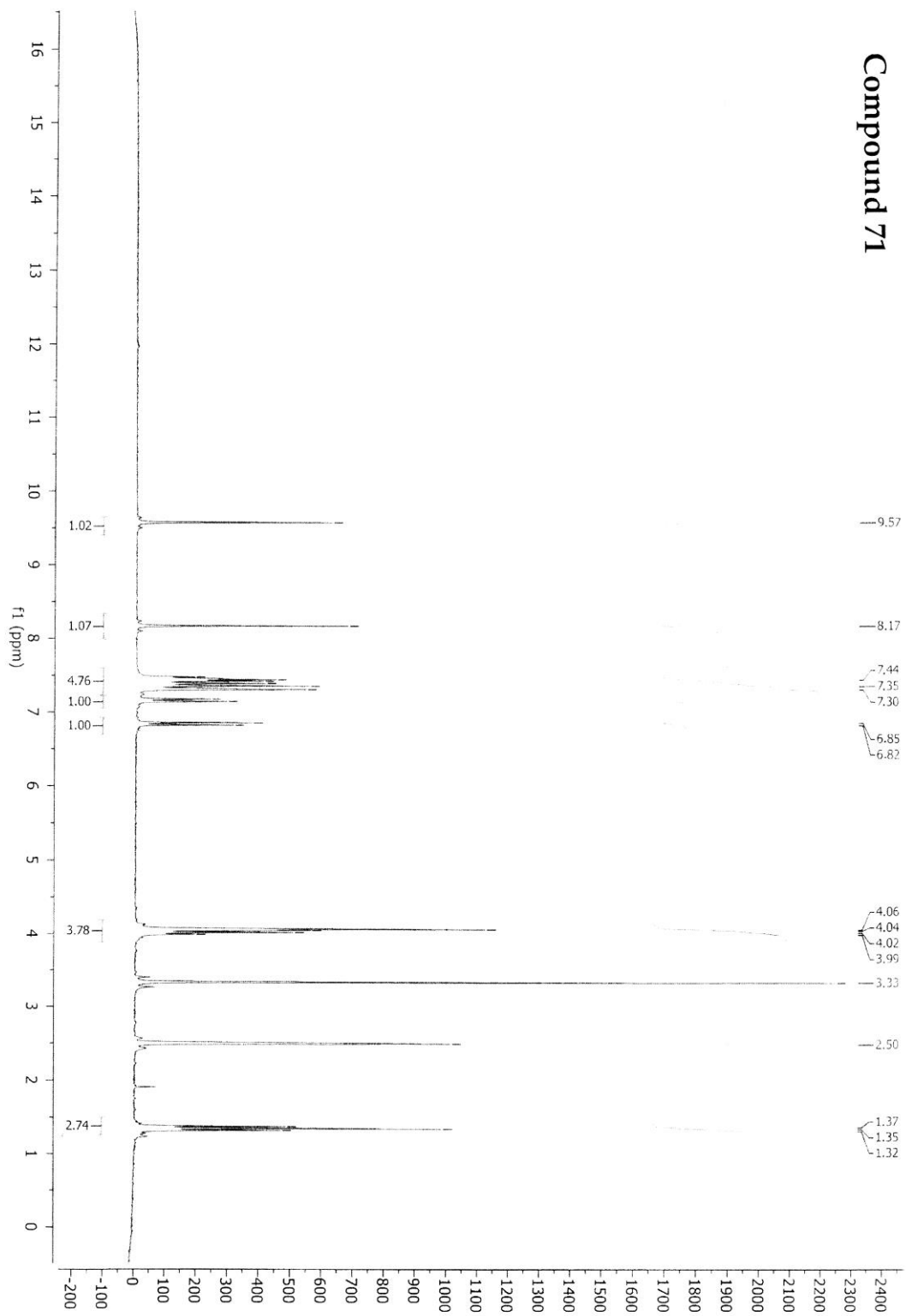


Fig. S51. ¹H NMR spectrum for compound 71

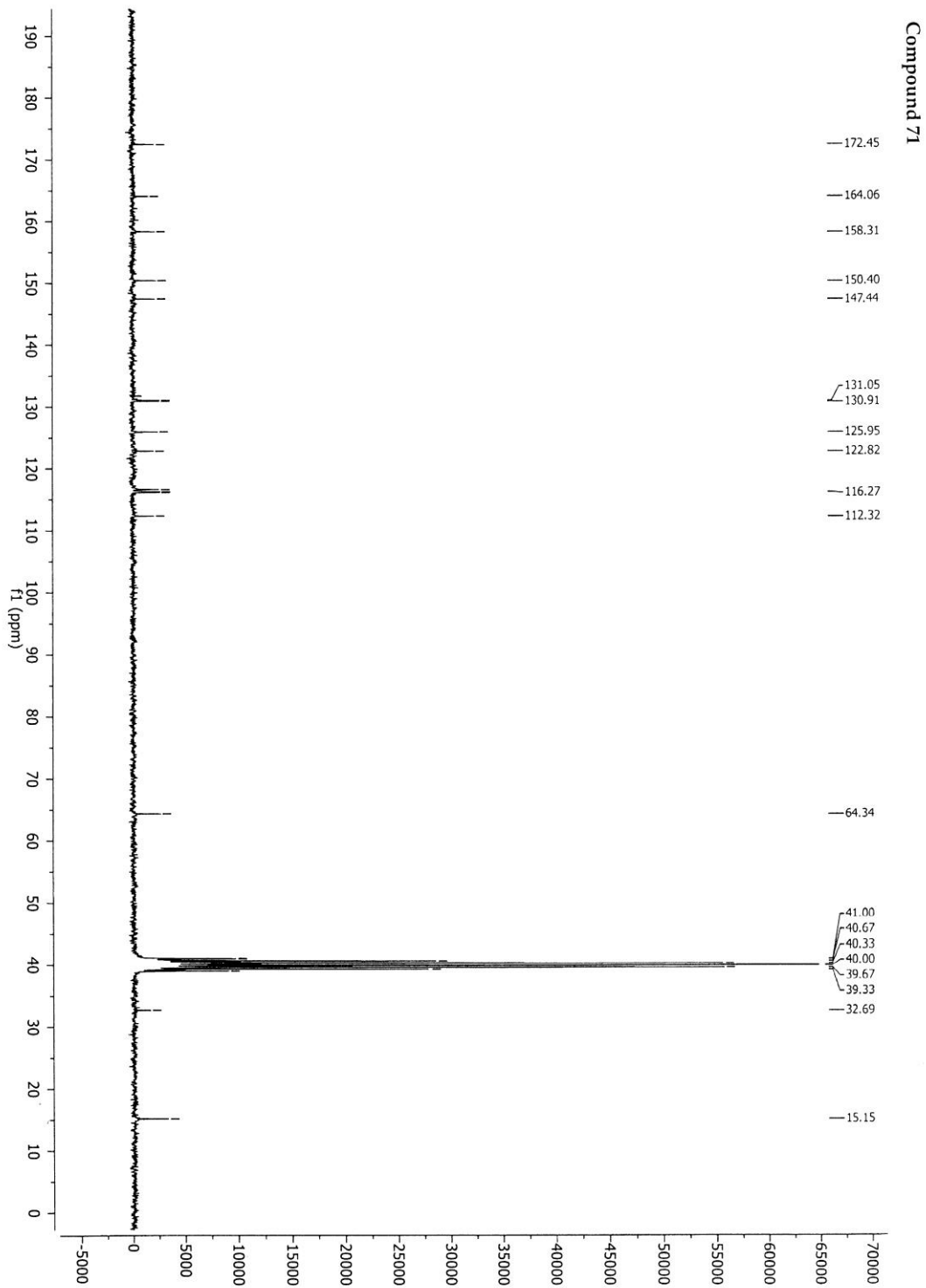


Fig. S52. ^{13}C NMR spectrum for compound 71

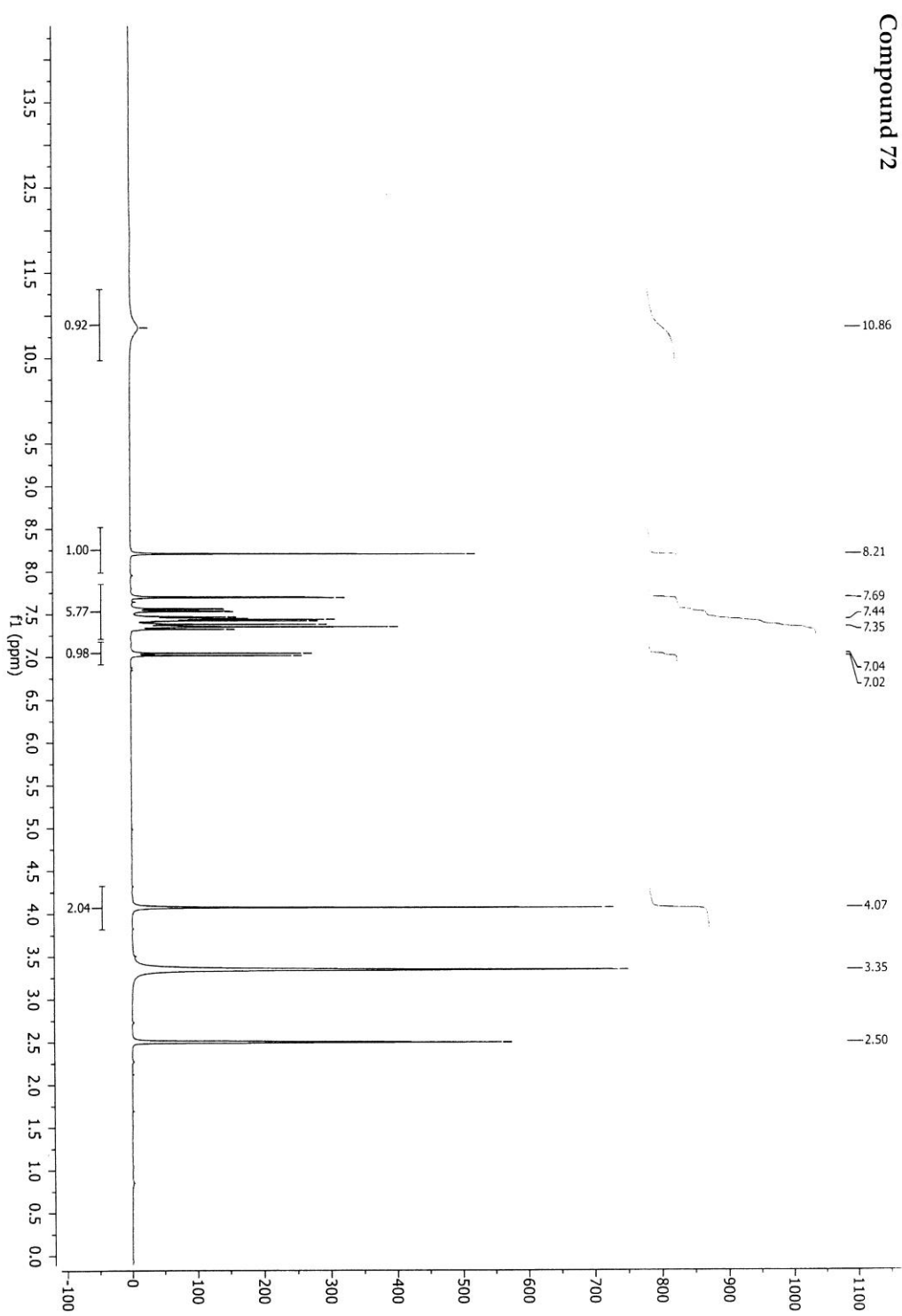


Fig. S53. ¹H NMR spectrum for compound 72

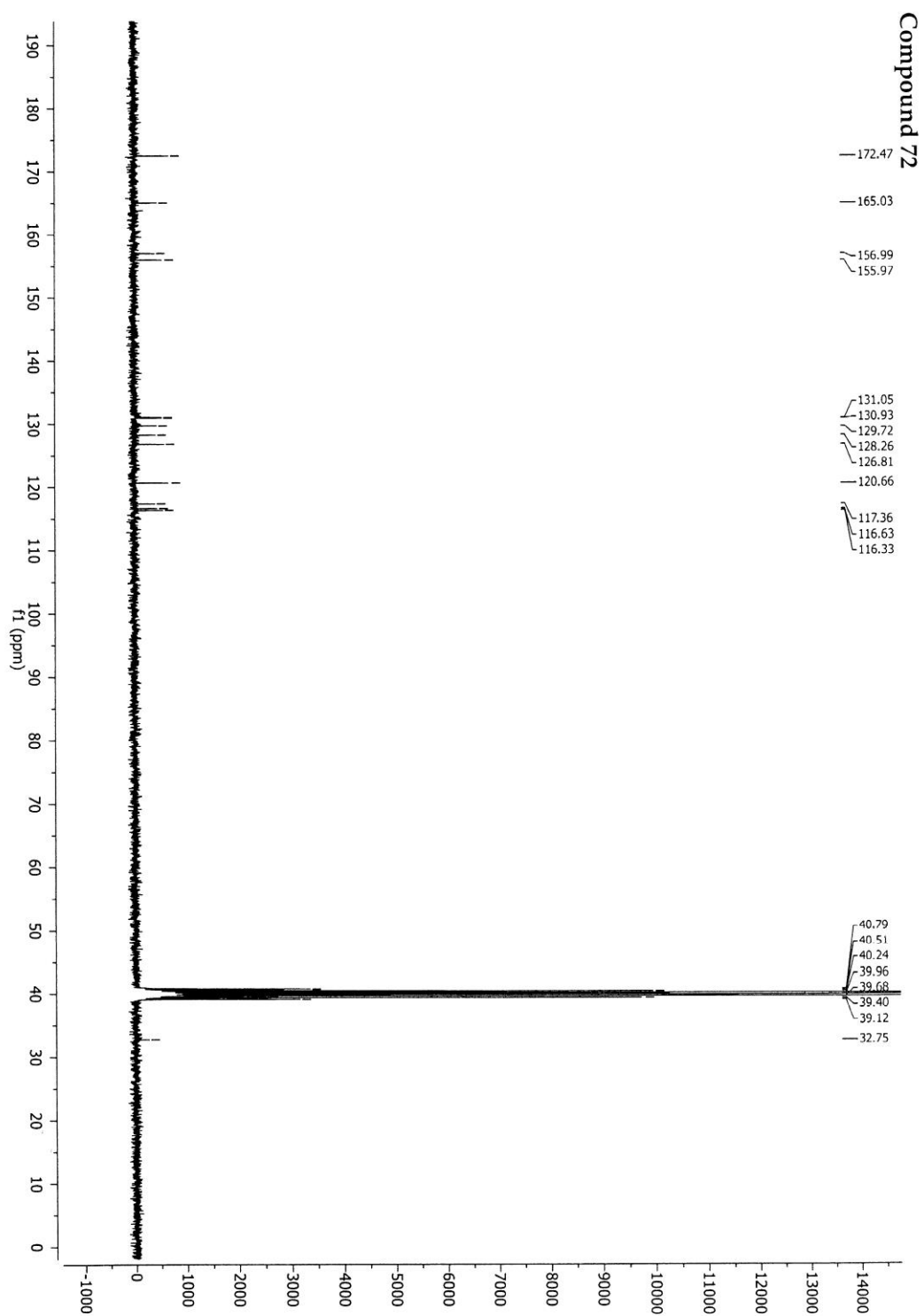


Fig. S54. ^{13}C NMR spectrum for compound 72

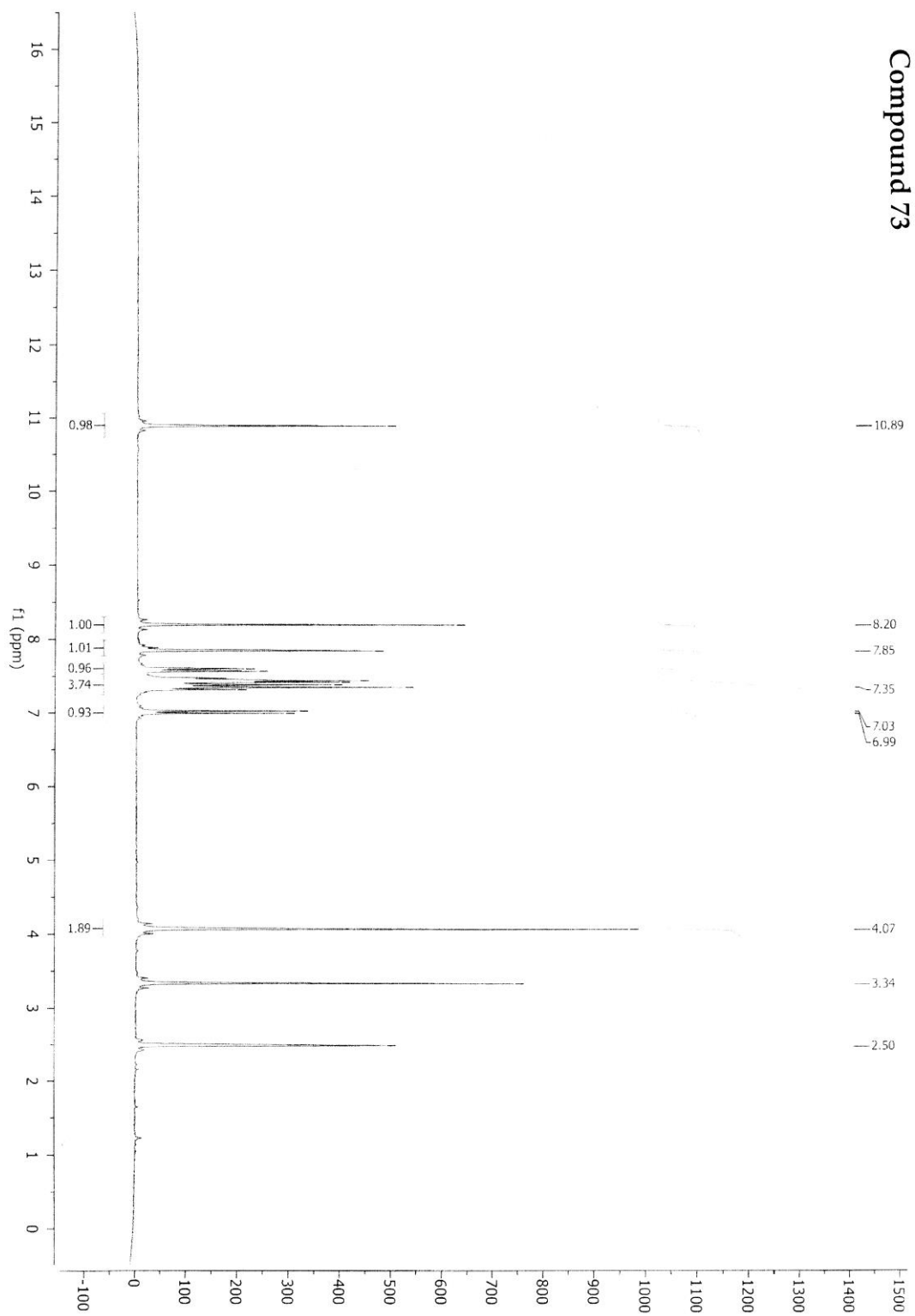


Fig. S55. ¹H NMR spectrum for compound 73

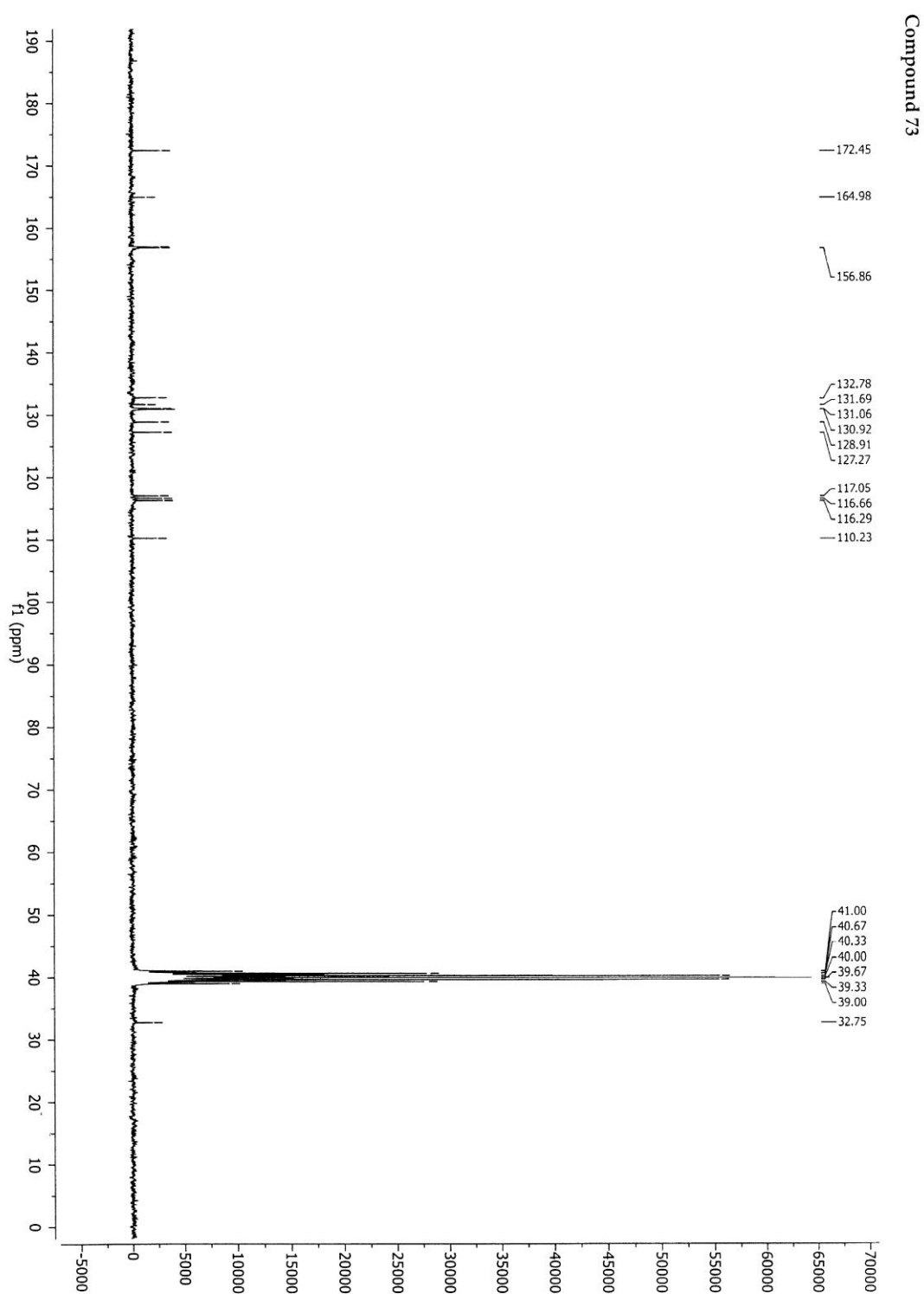


Fig. S56. ^{13}C NMR spectrum for compound 73

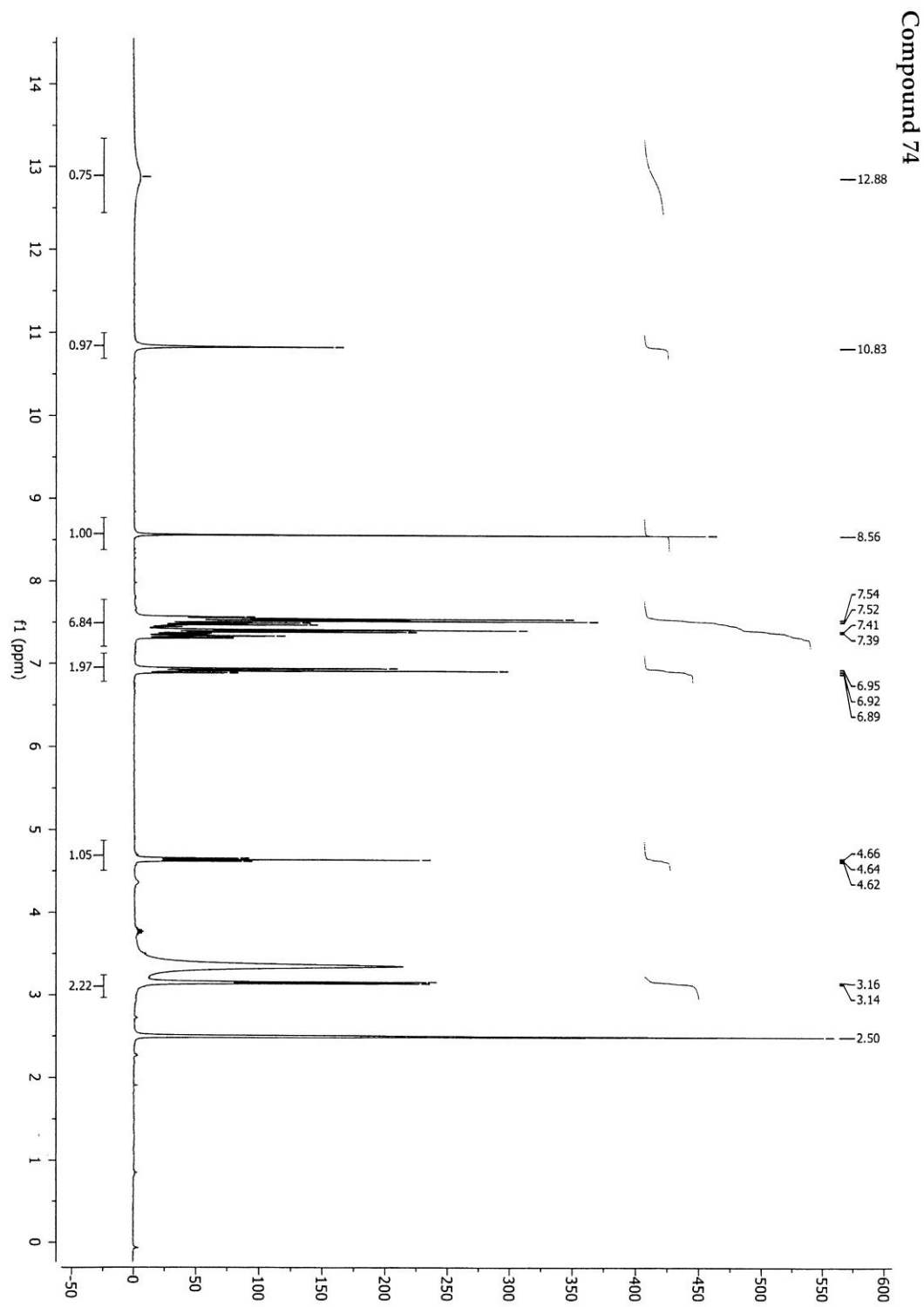


Fig. S57. ¹H NMR spectrum for compound 74

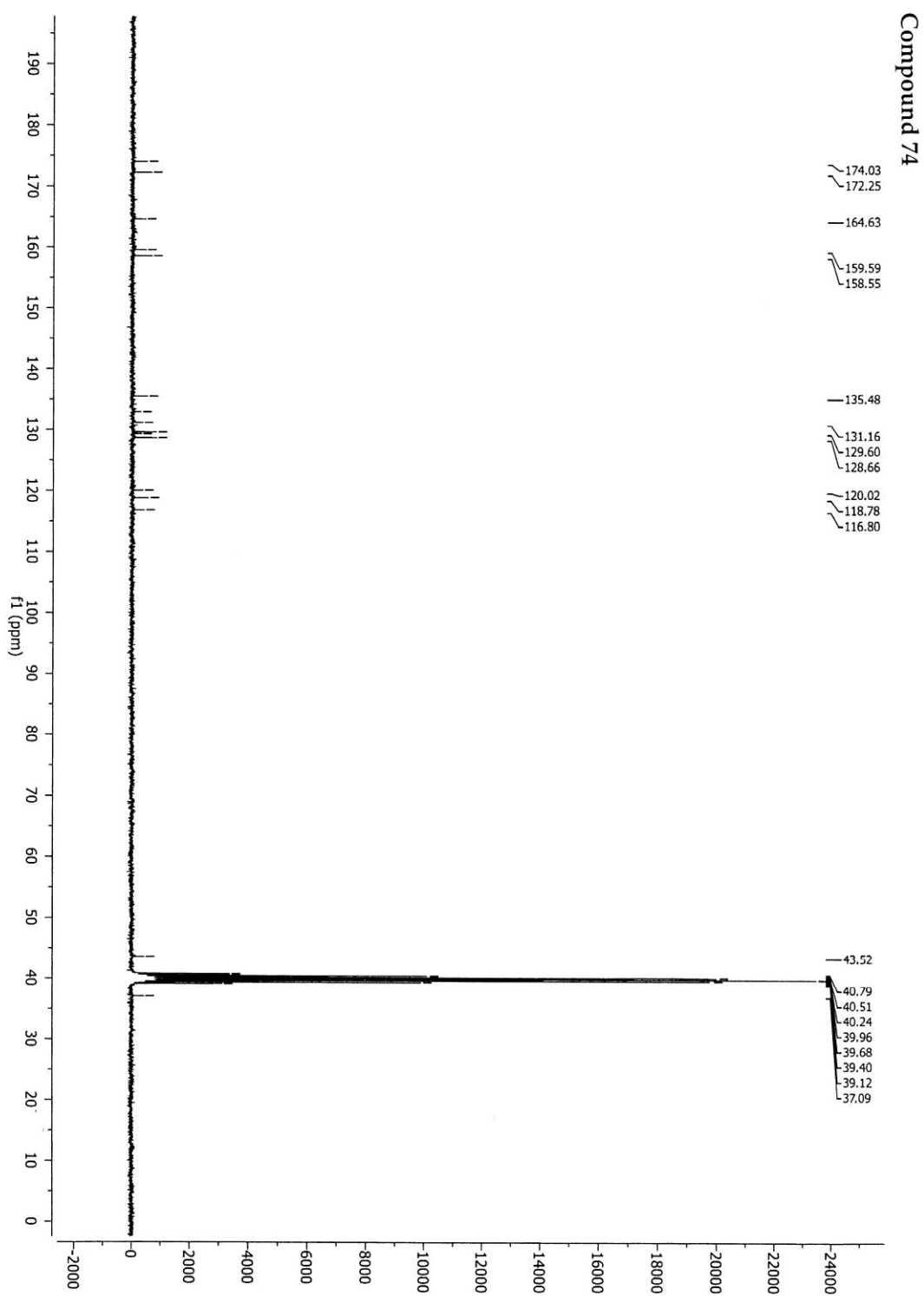


Fig. S58. ¹³C NMR spectrum for compound 74

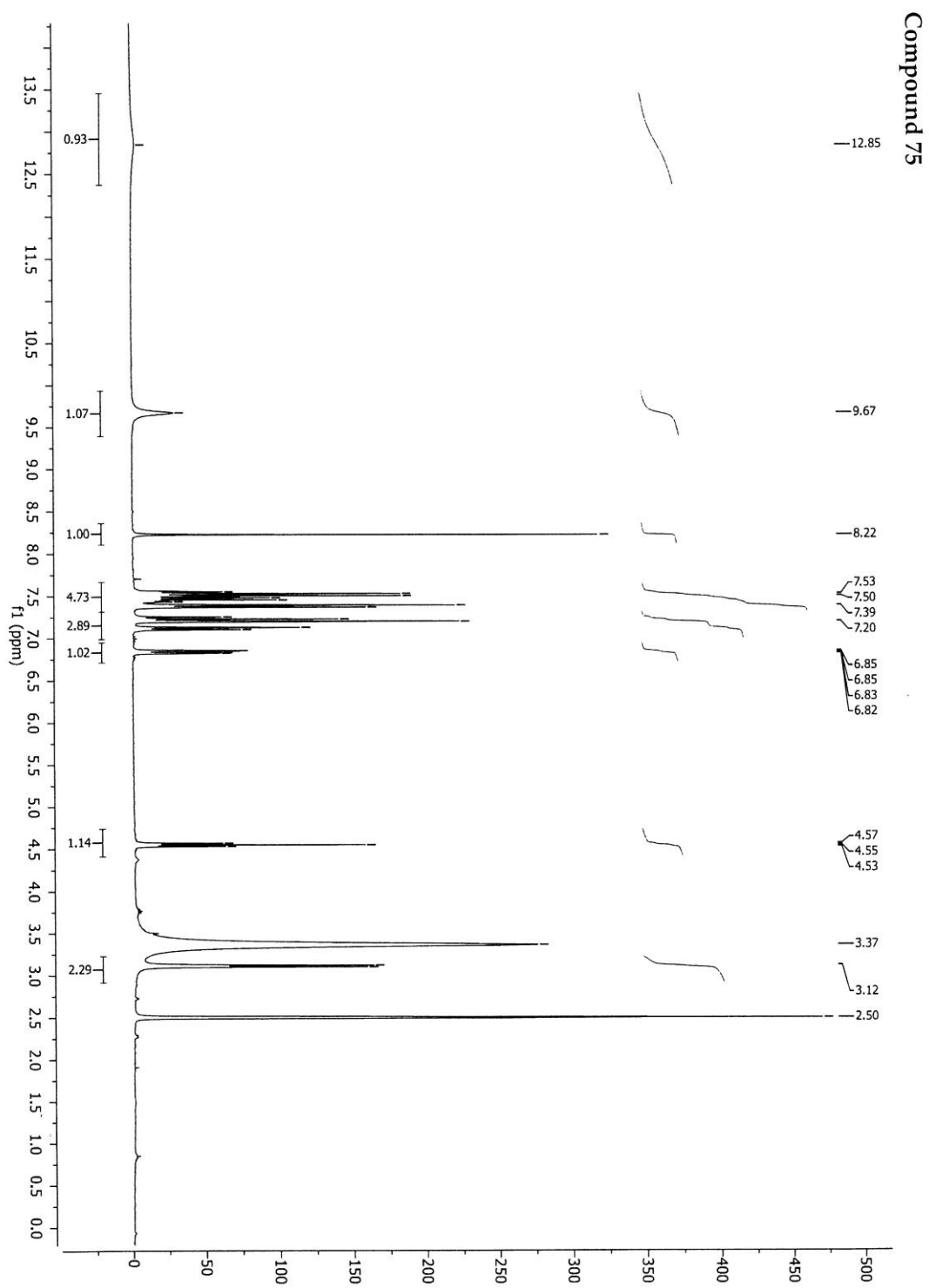


Fig. S59. ¹H NMR spectrum for compound 75

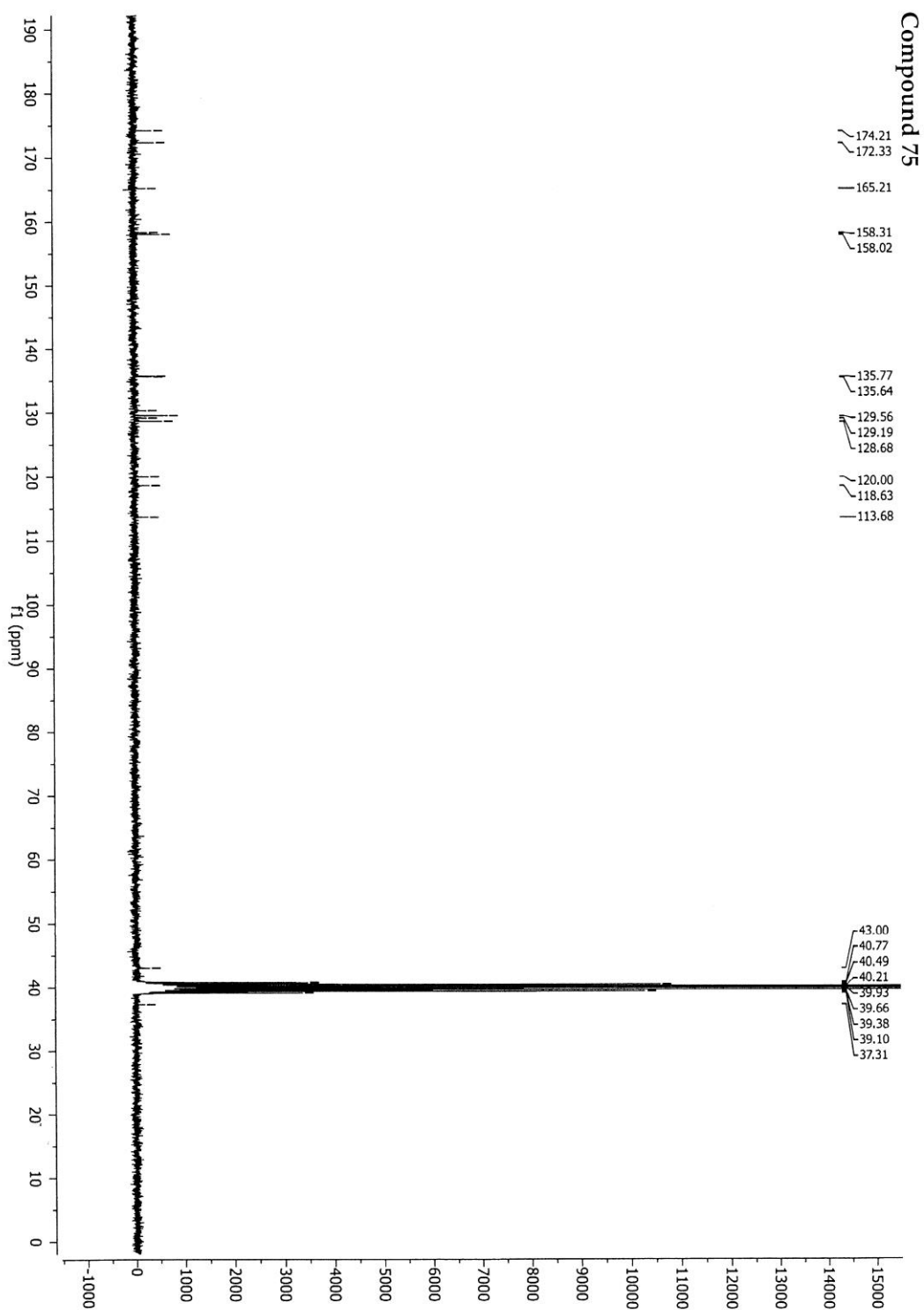


Fig. S60. ^{13}C NMR spectrum for compound 75

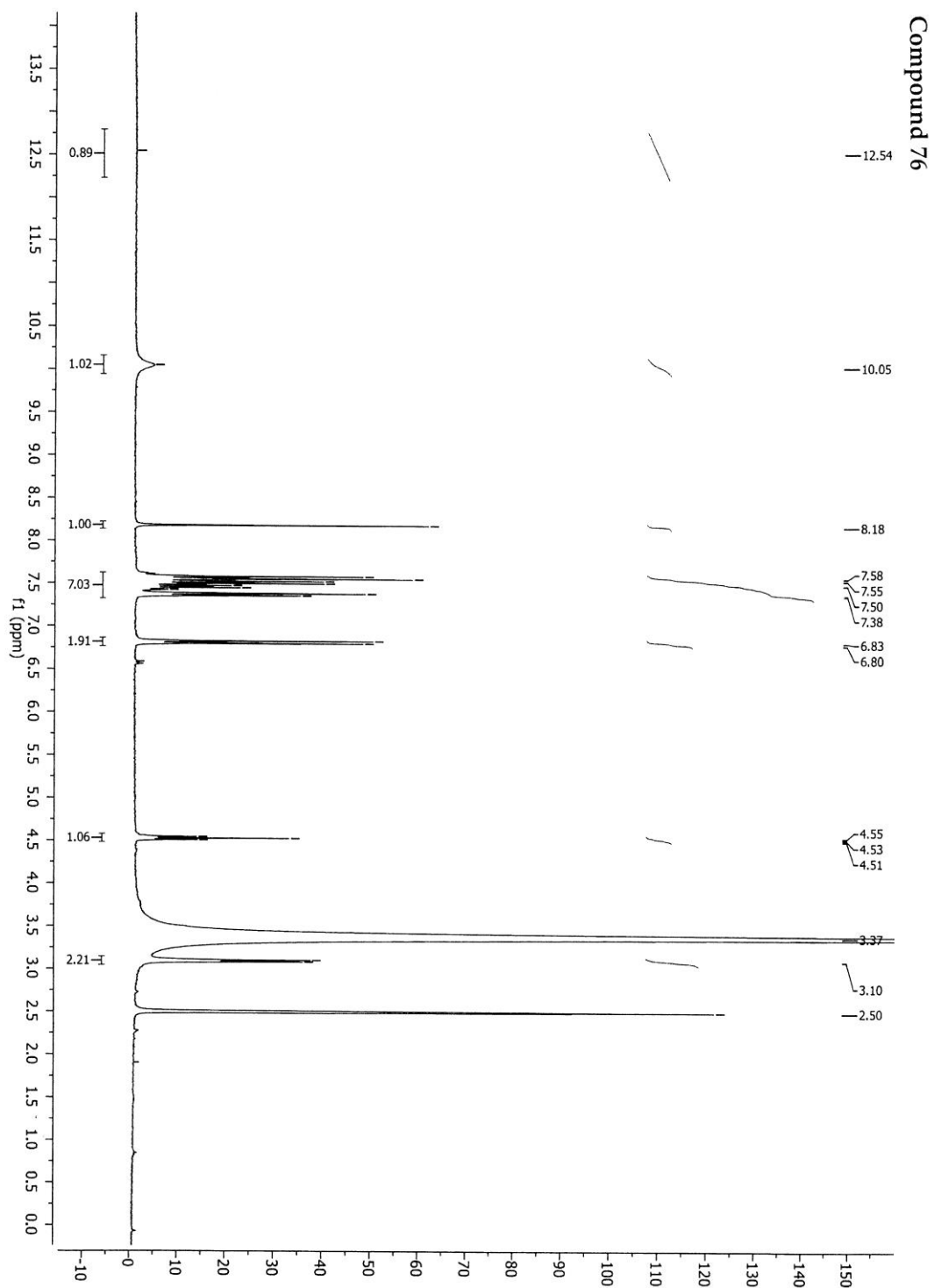


Fig. S61. ¹H NMR spectrum for compound 76

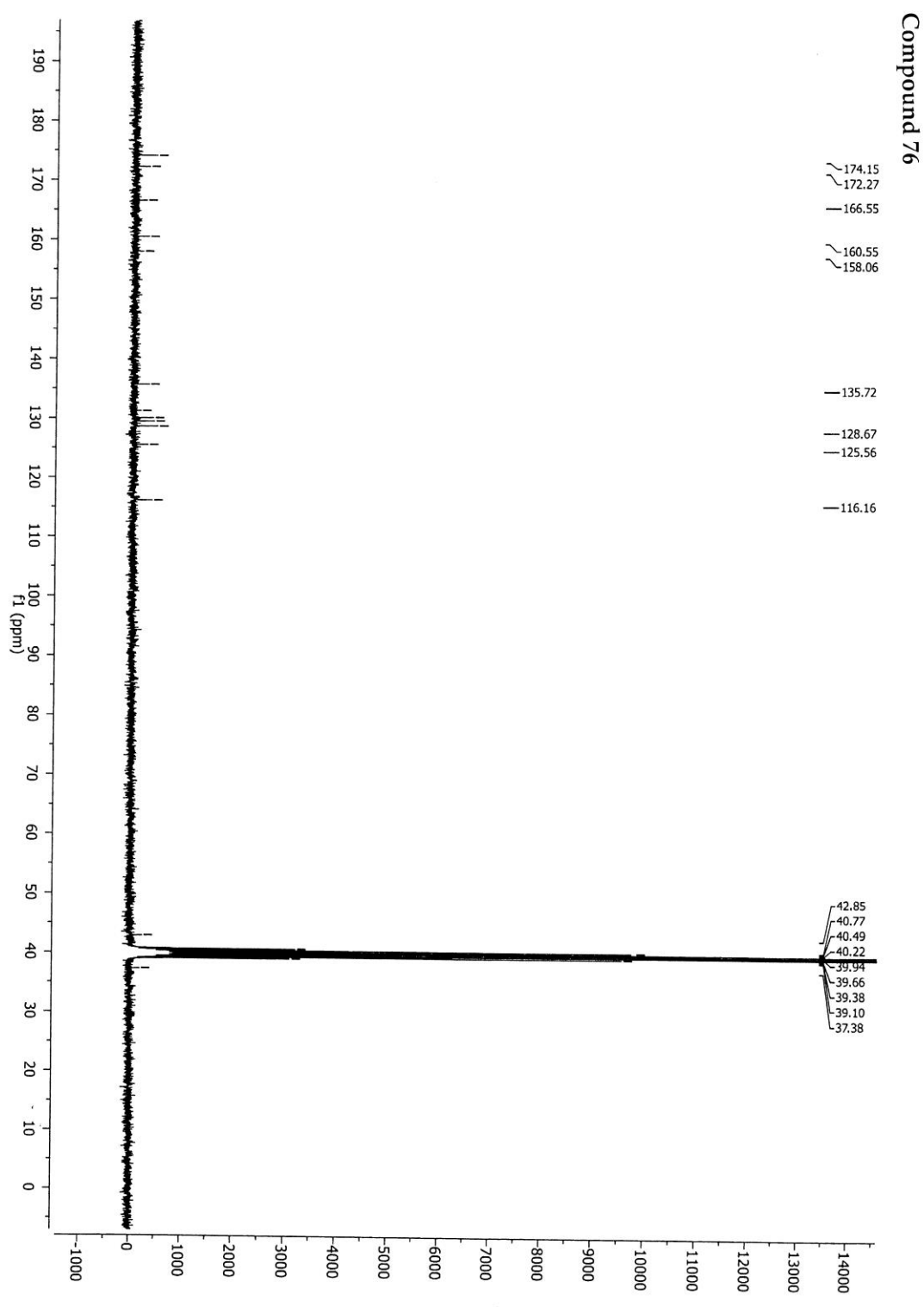


Fig. S62. ^{13}C NMR spectrum for compound 76

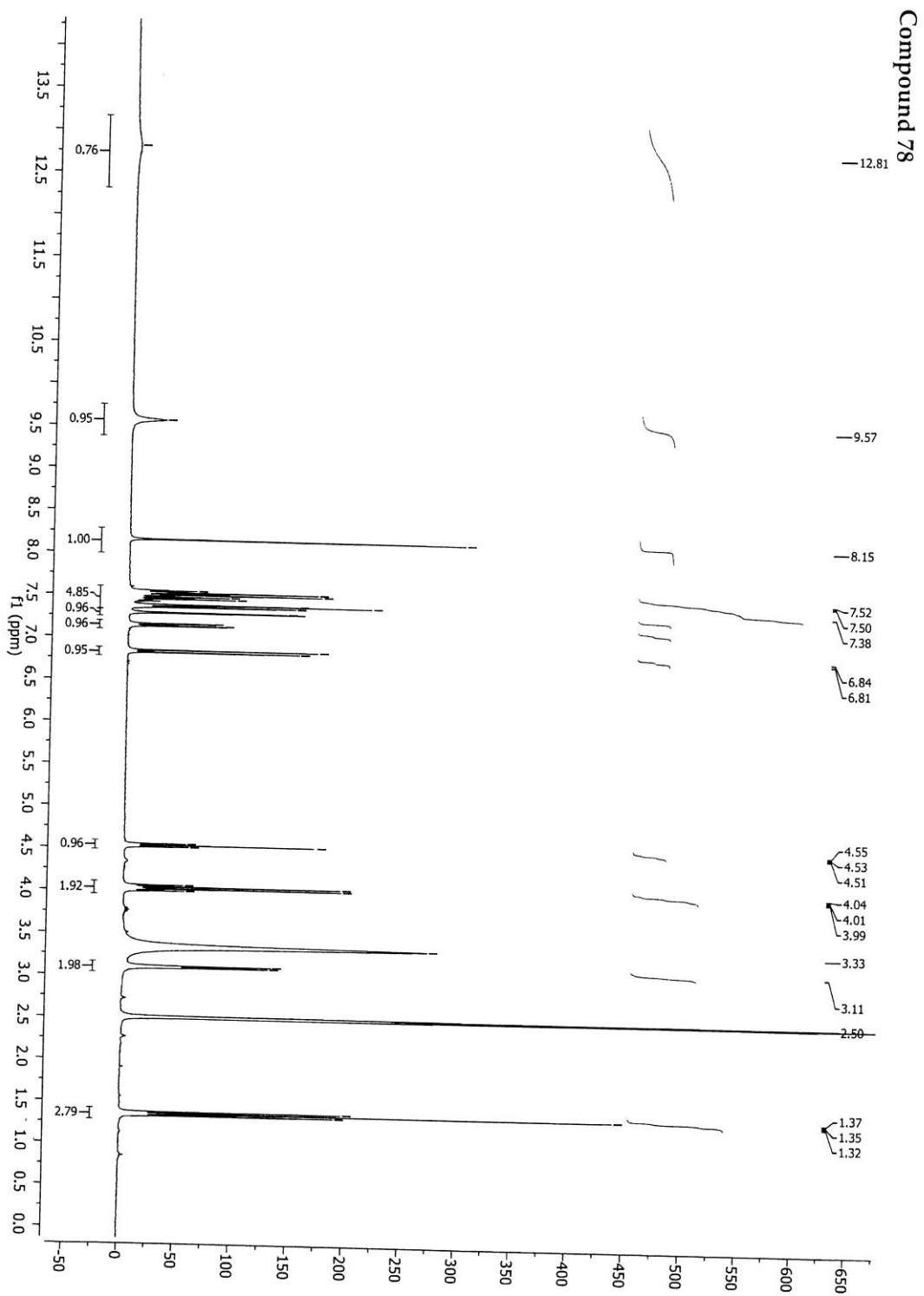


Fig. S63. ^1H NMR spectrum for compound 78

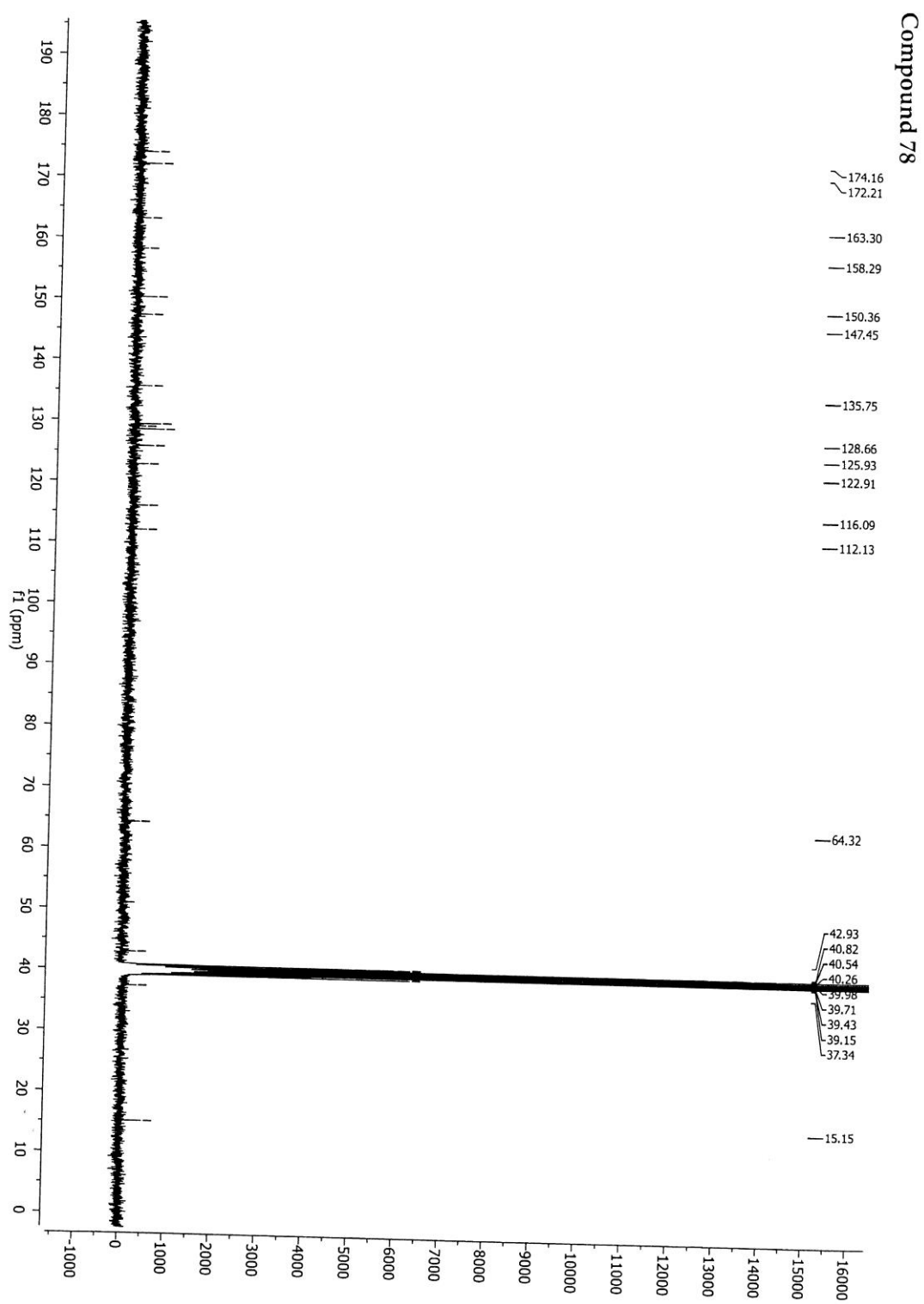


Fig. S64. ^{13}C NMR spectrum for compound 78

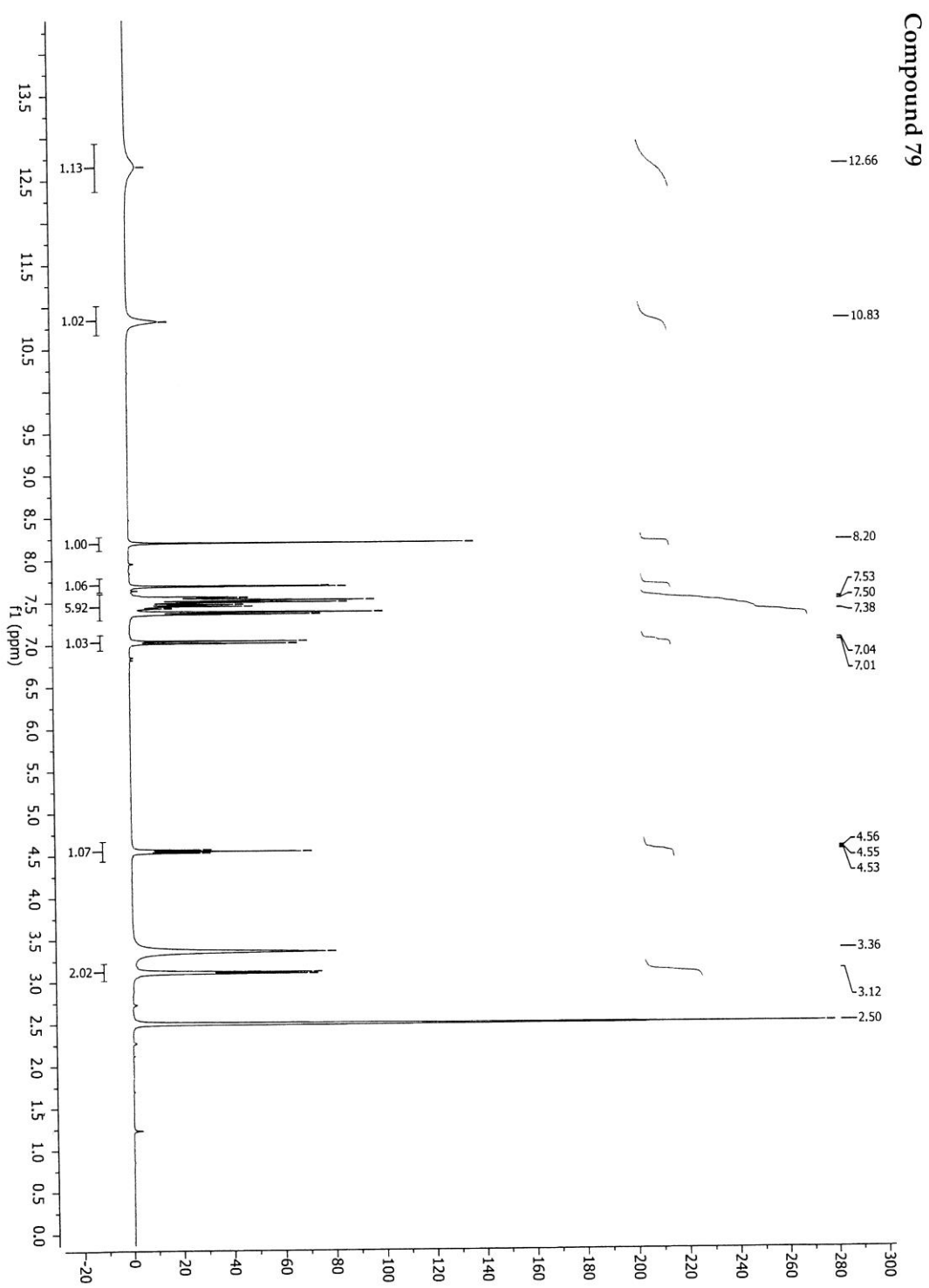


Fig. S65. ¹H NMR spectrum for compound 79

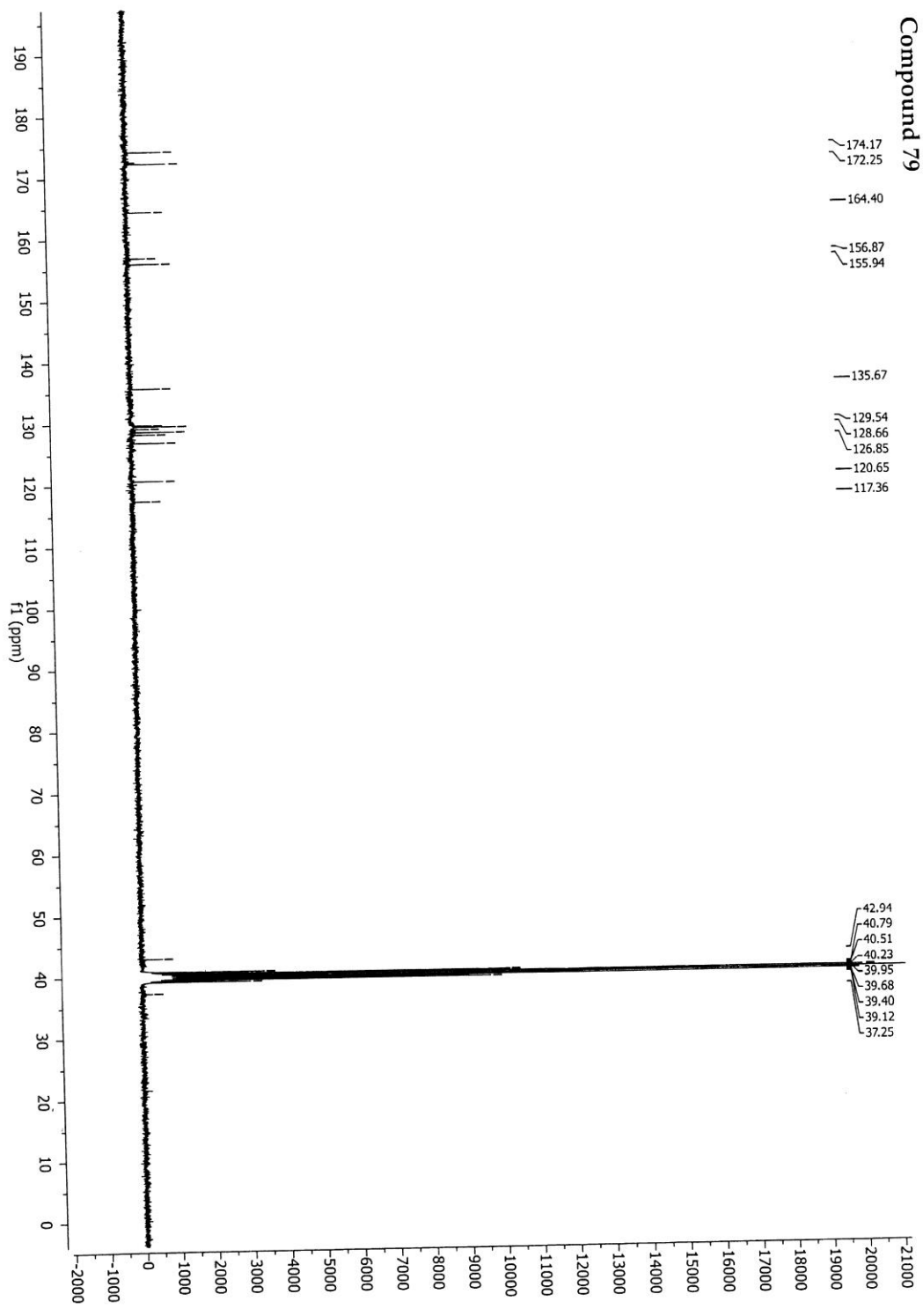


Fig. S66. ^{13}C NMR spectrum for compound 79

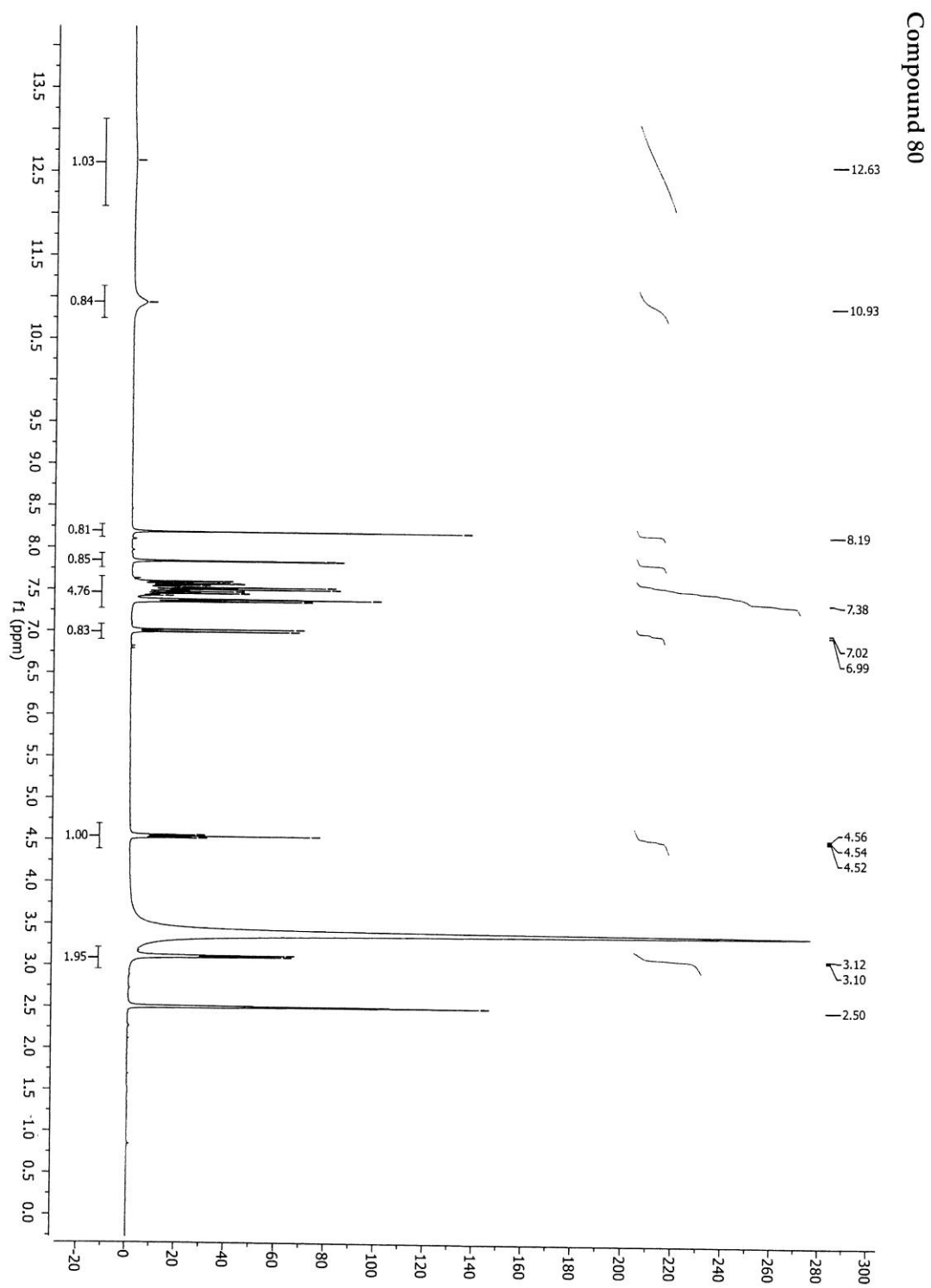


Fig. S67. ¹H NMR spectrum for compound 80

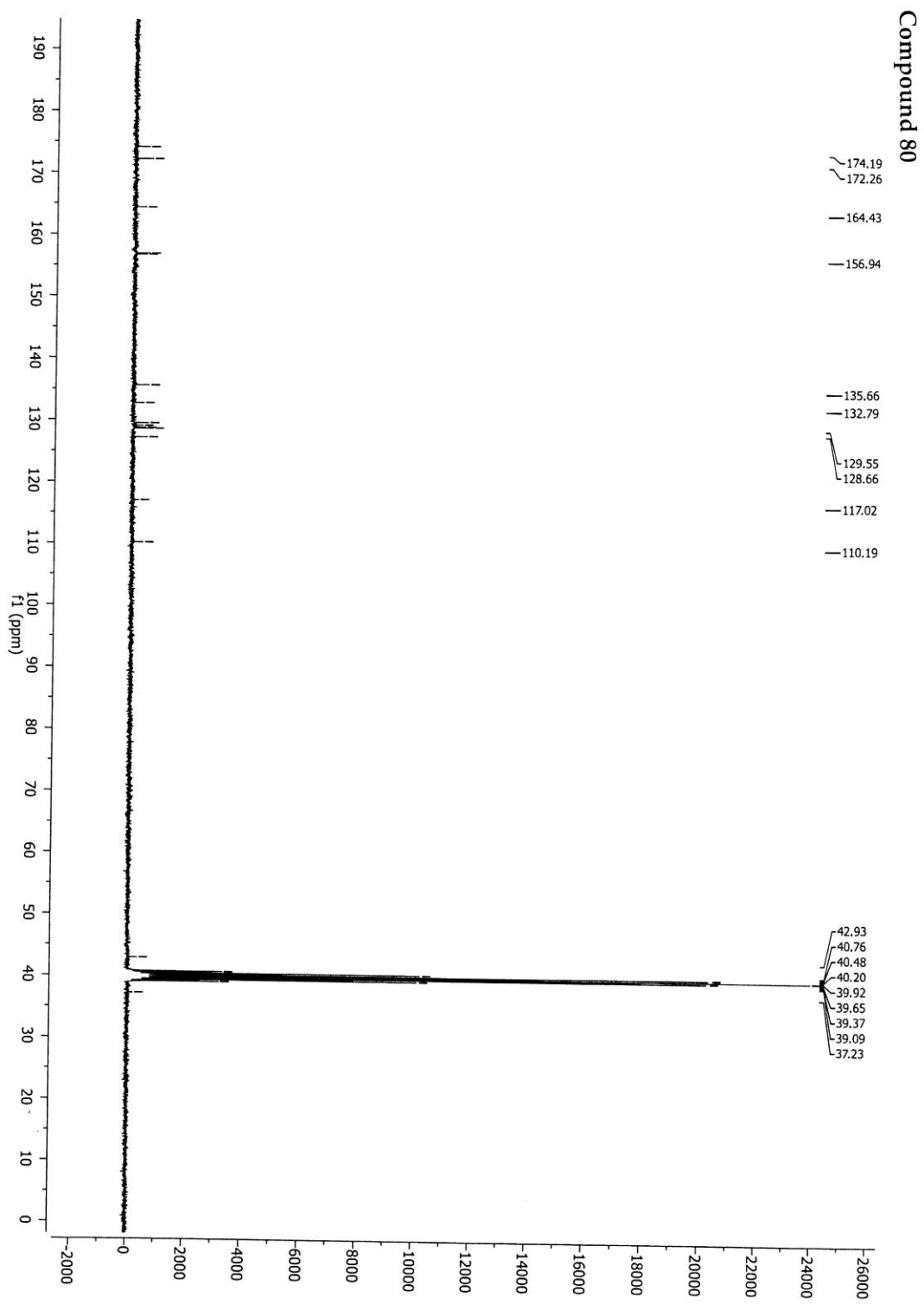


Fig. S68. ^{13}C NMR spectrum for compound 80

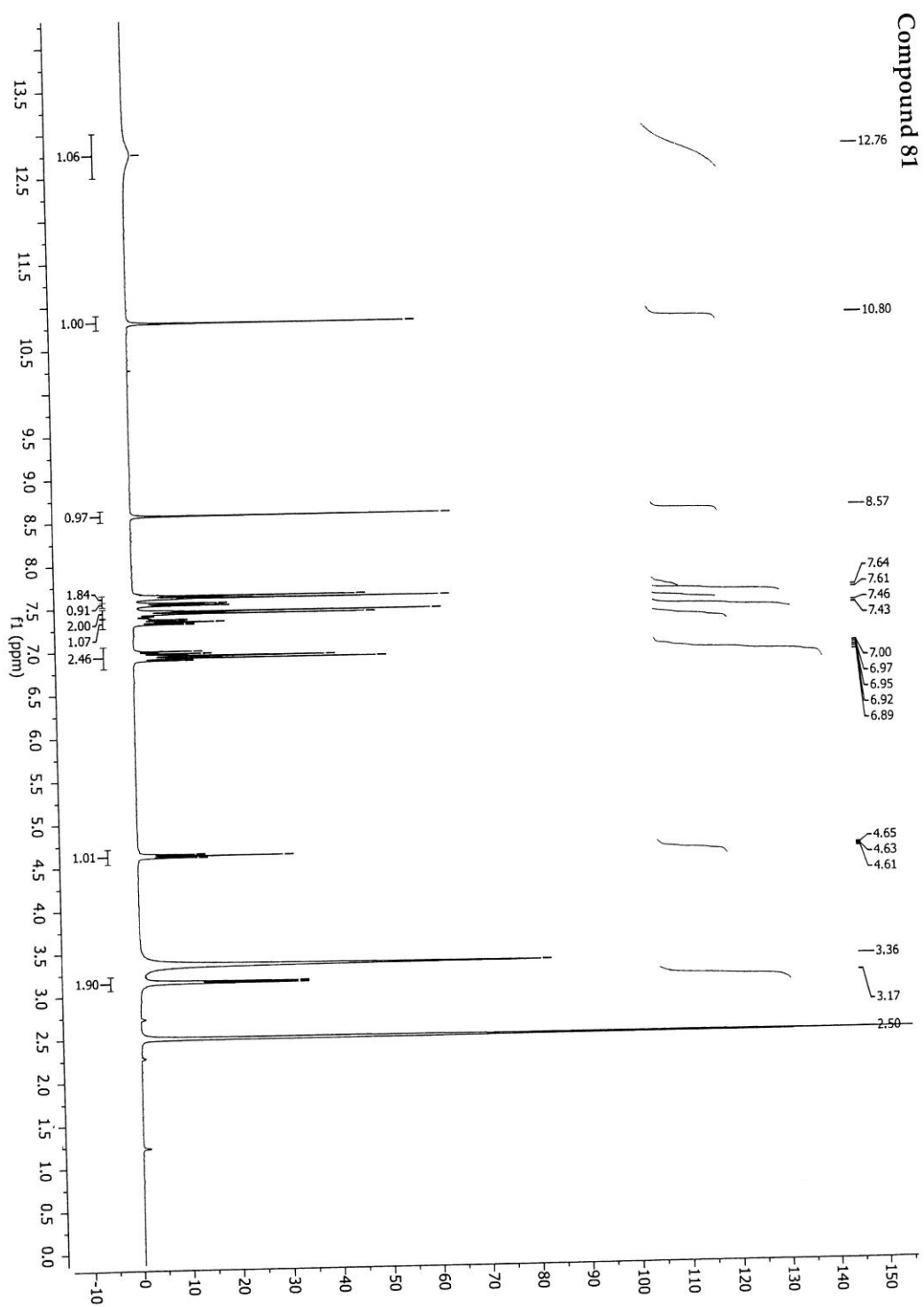


Fig. S69. ^1H NMR spectrum for compound **81**

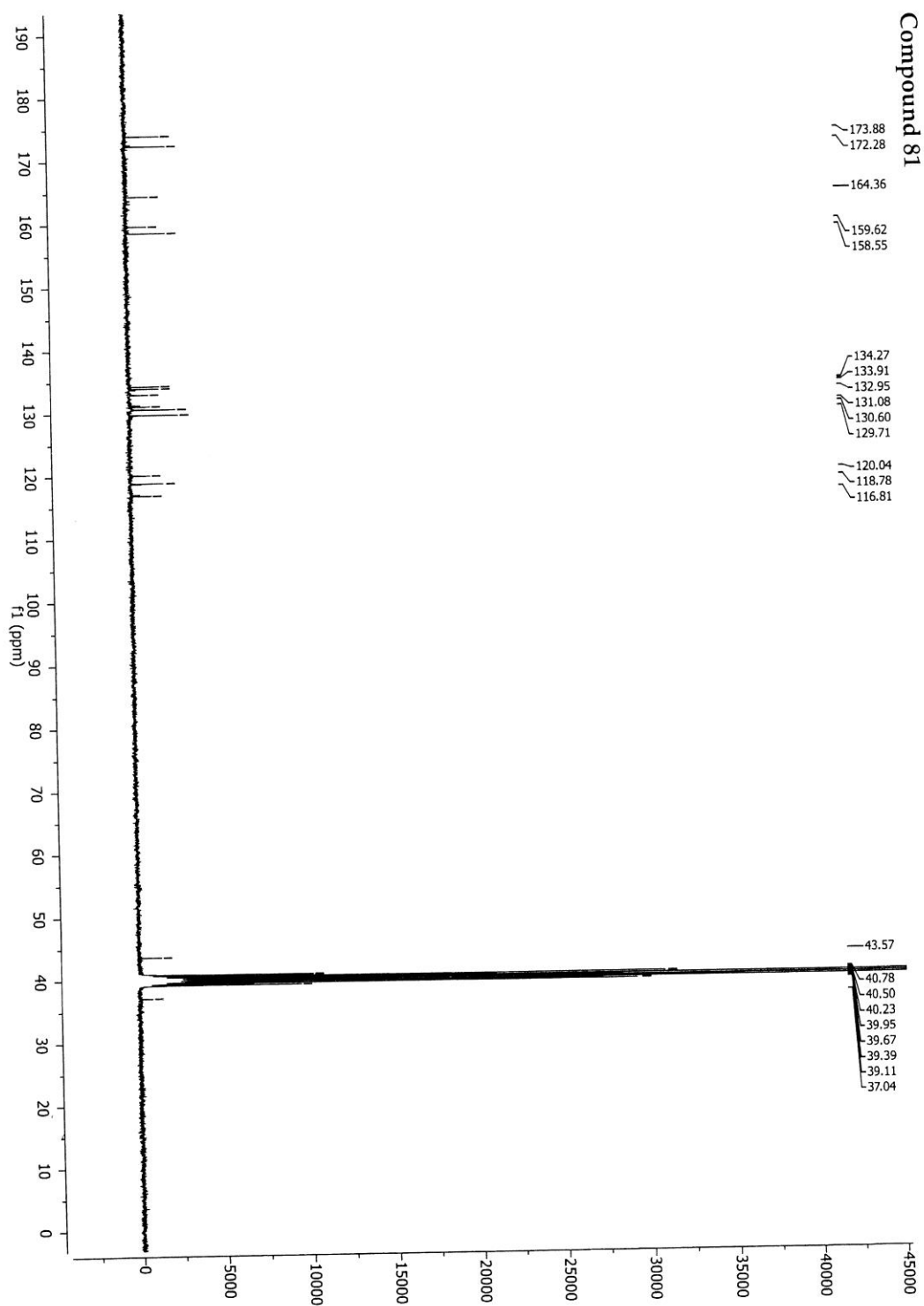


Fig. S70. ^{13}C NMR spectrum for compound 81

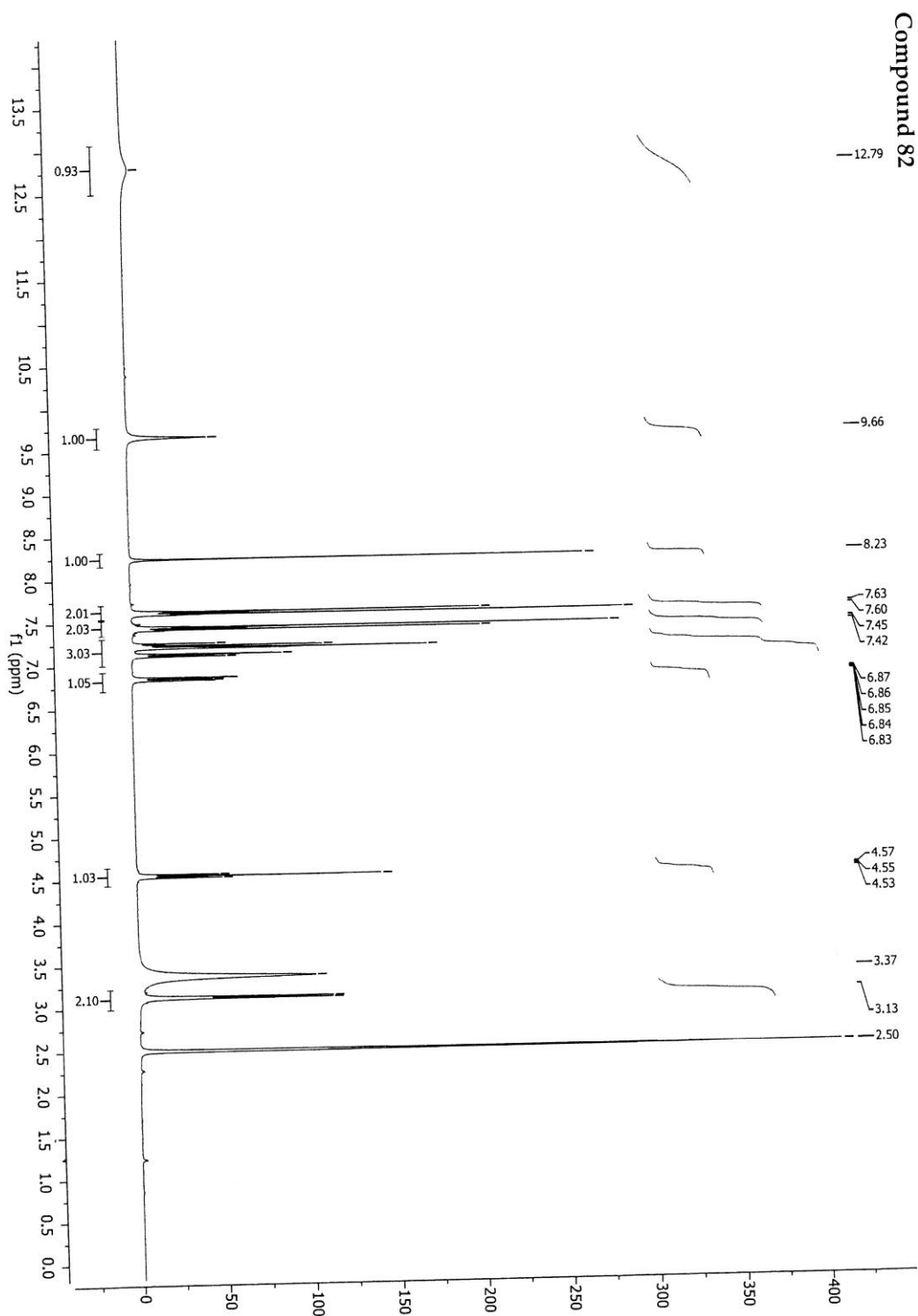


Fig. S71. ¹H NMR spectrum for compound 82

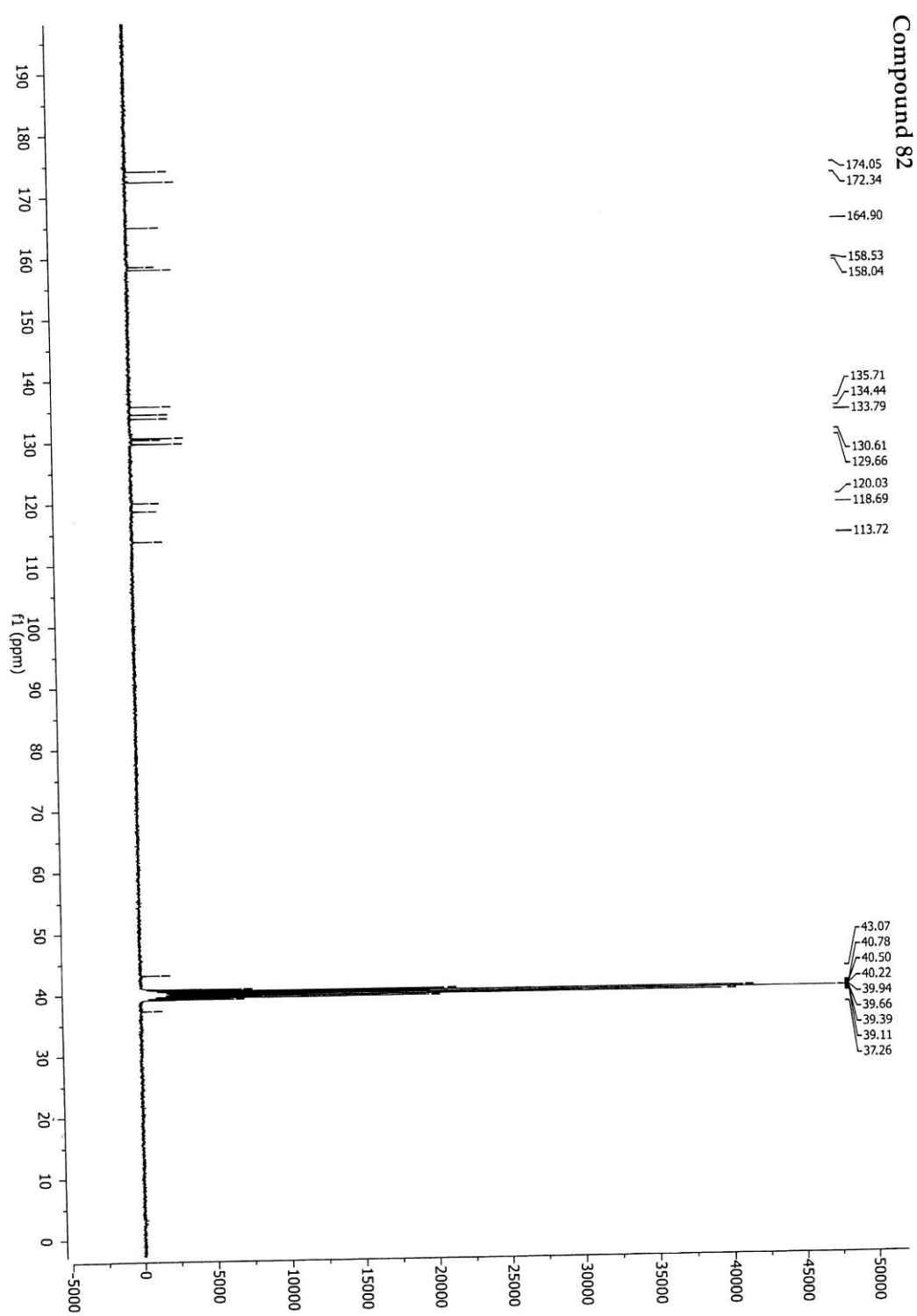


Fig. S72. ^{13}C NMR spectrum for compound 82

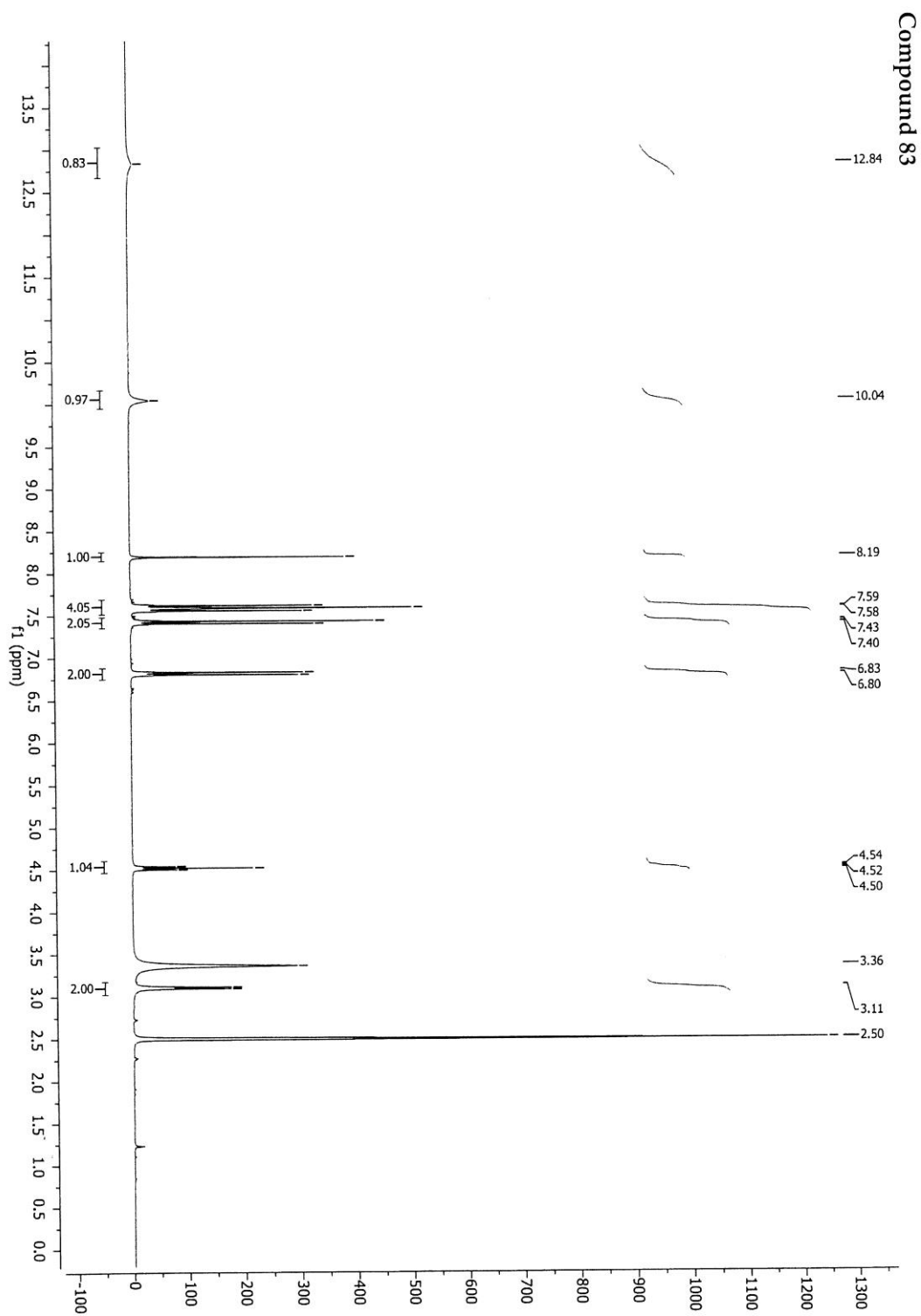


Fig. S73. ¹H NMR spectrum for compound 83

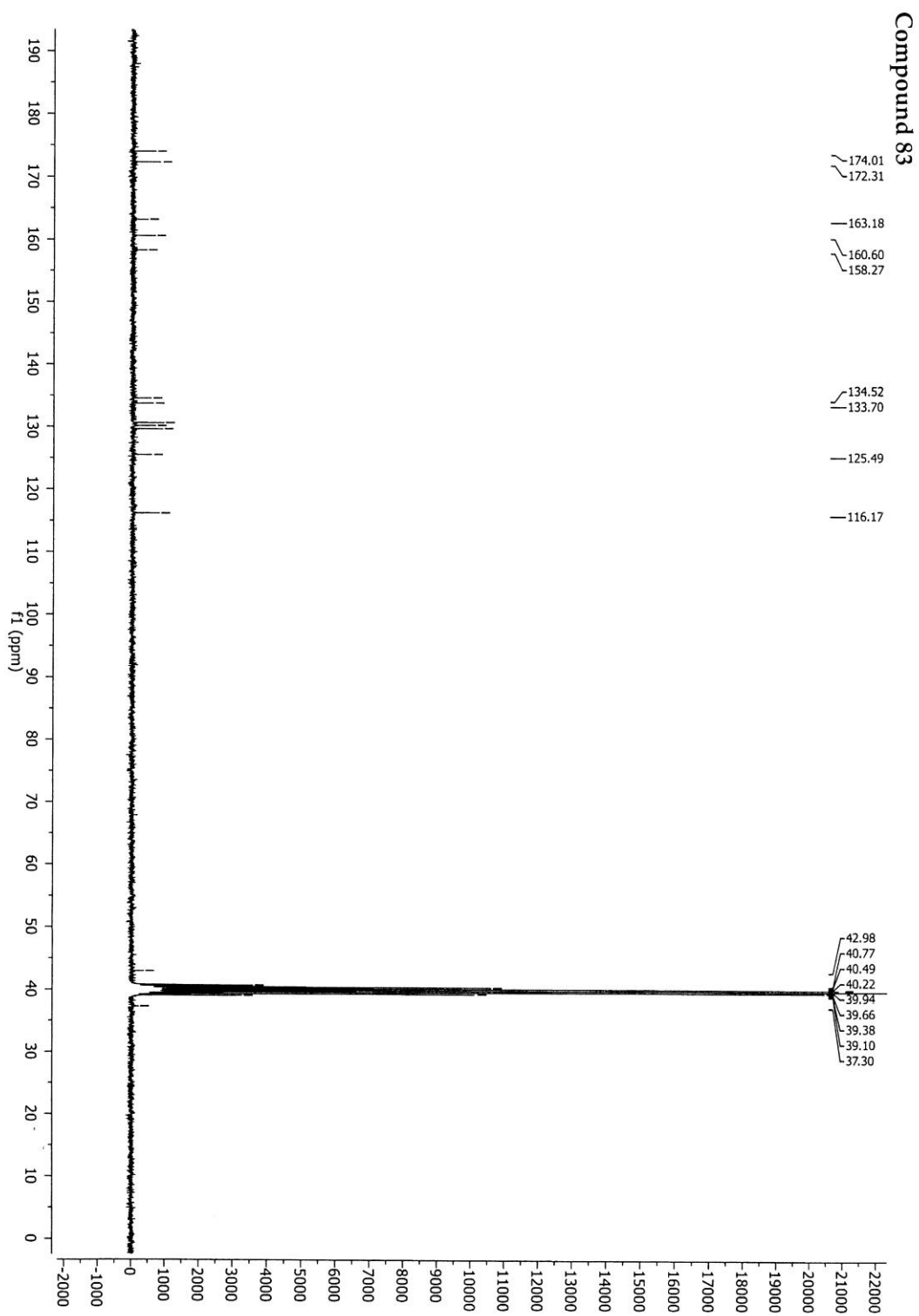


Fig. S74. ^{13}C NMR spectrum for compound 83

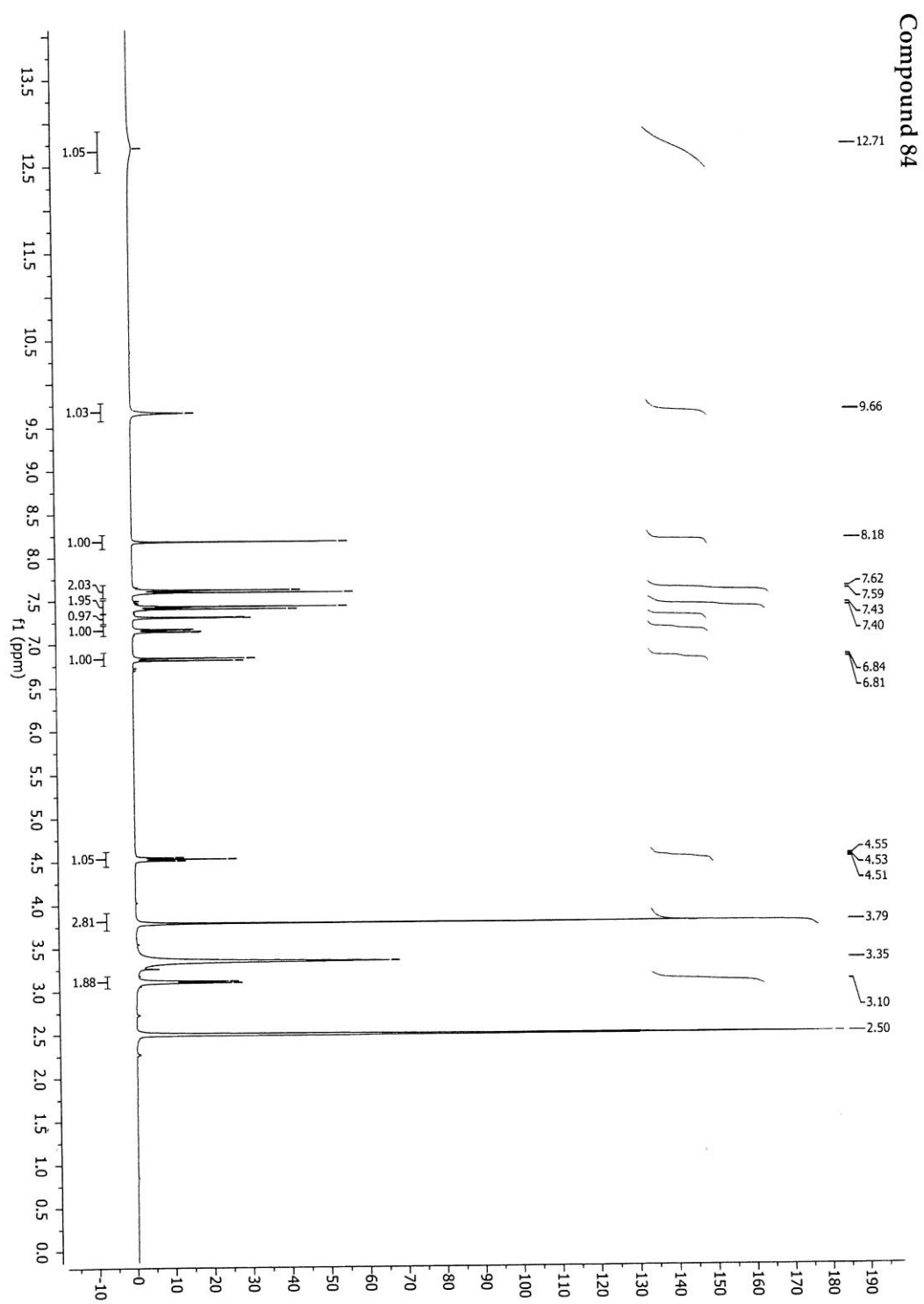


Fig. S75. ¹H NMR spectrum for compound 84

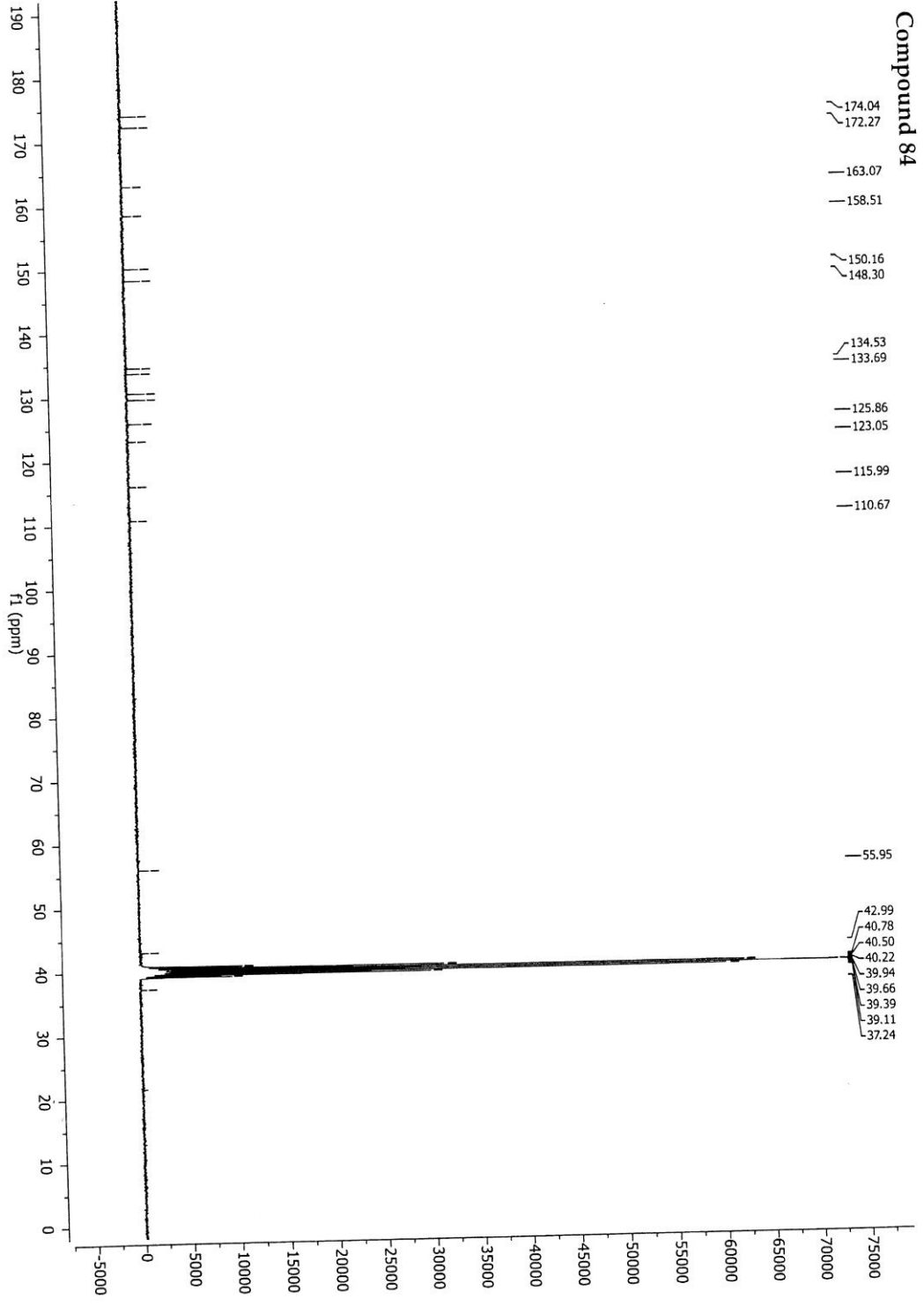


Fig. S76. ^{13}C NMR spectrum for compound 84

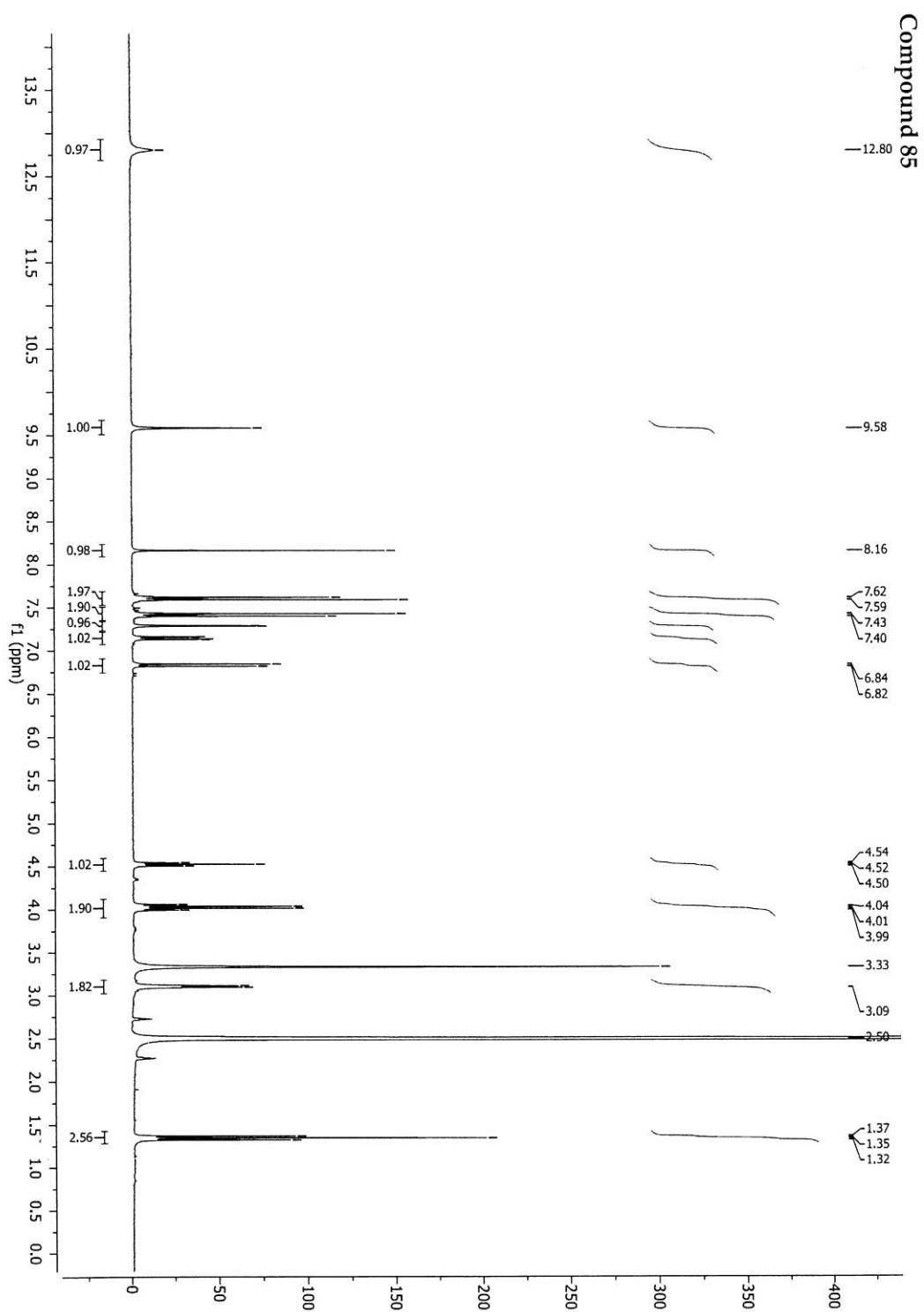


Fig. S77. ¹H NMR spectrum for compound 85

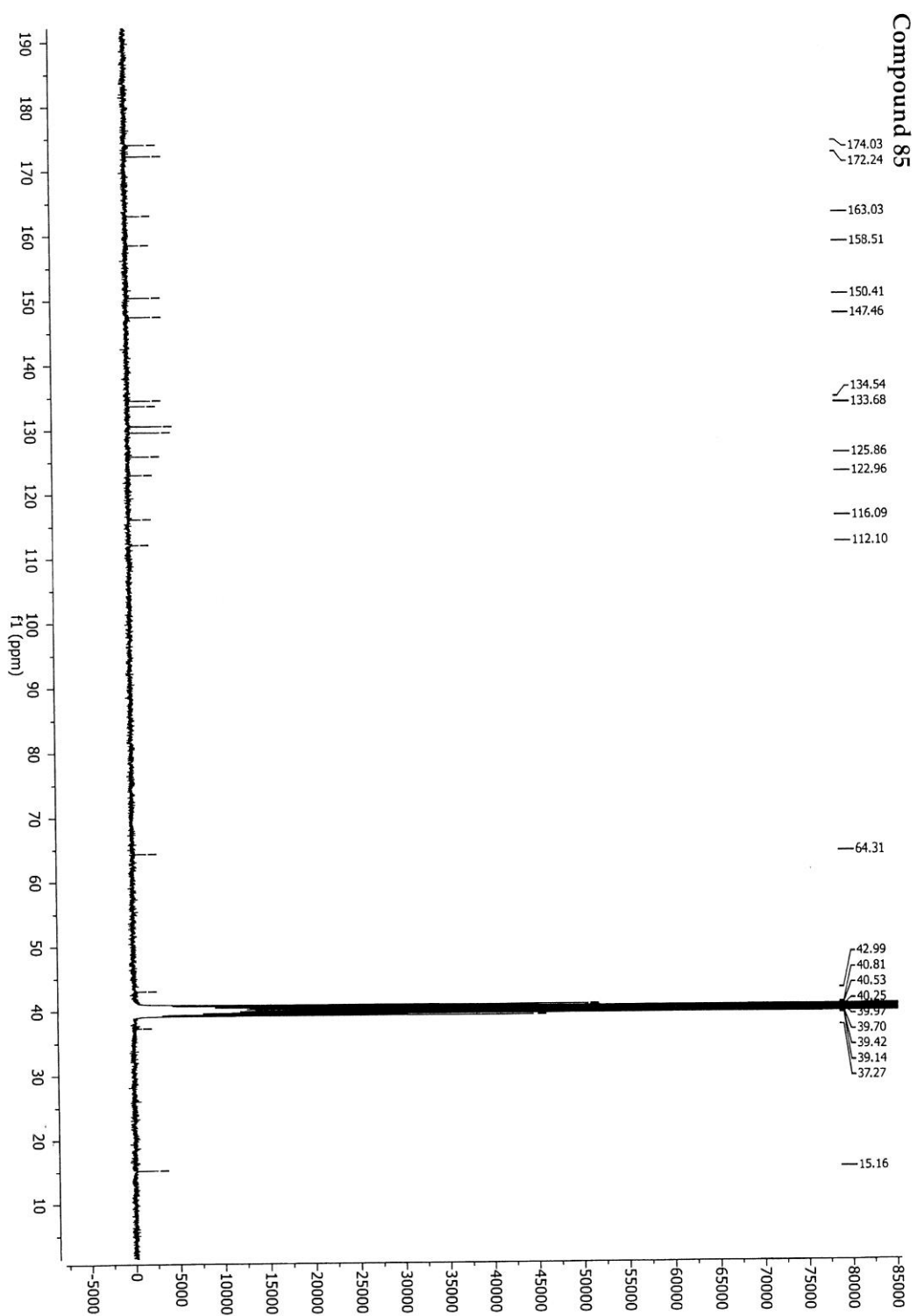


Fig. S78. ^{13}C NMR spectrum for compound 85

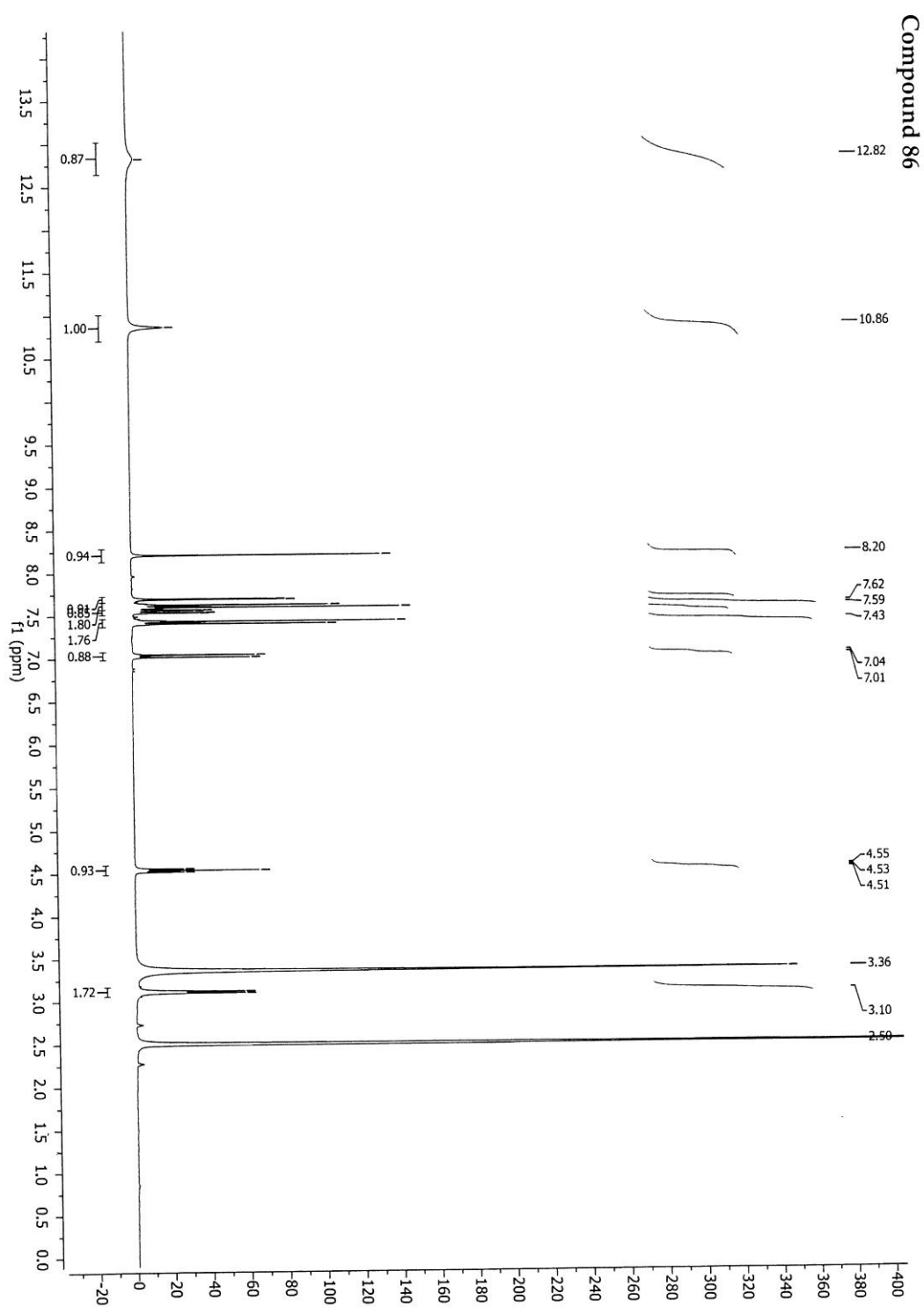


Fig. S79. ¹H NMR spectrum for compound 86

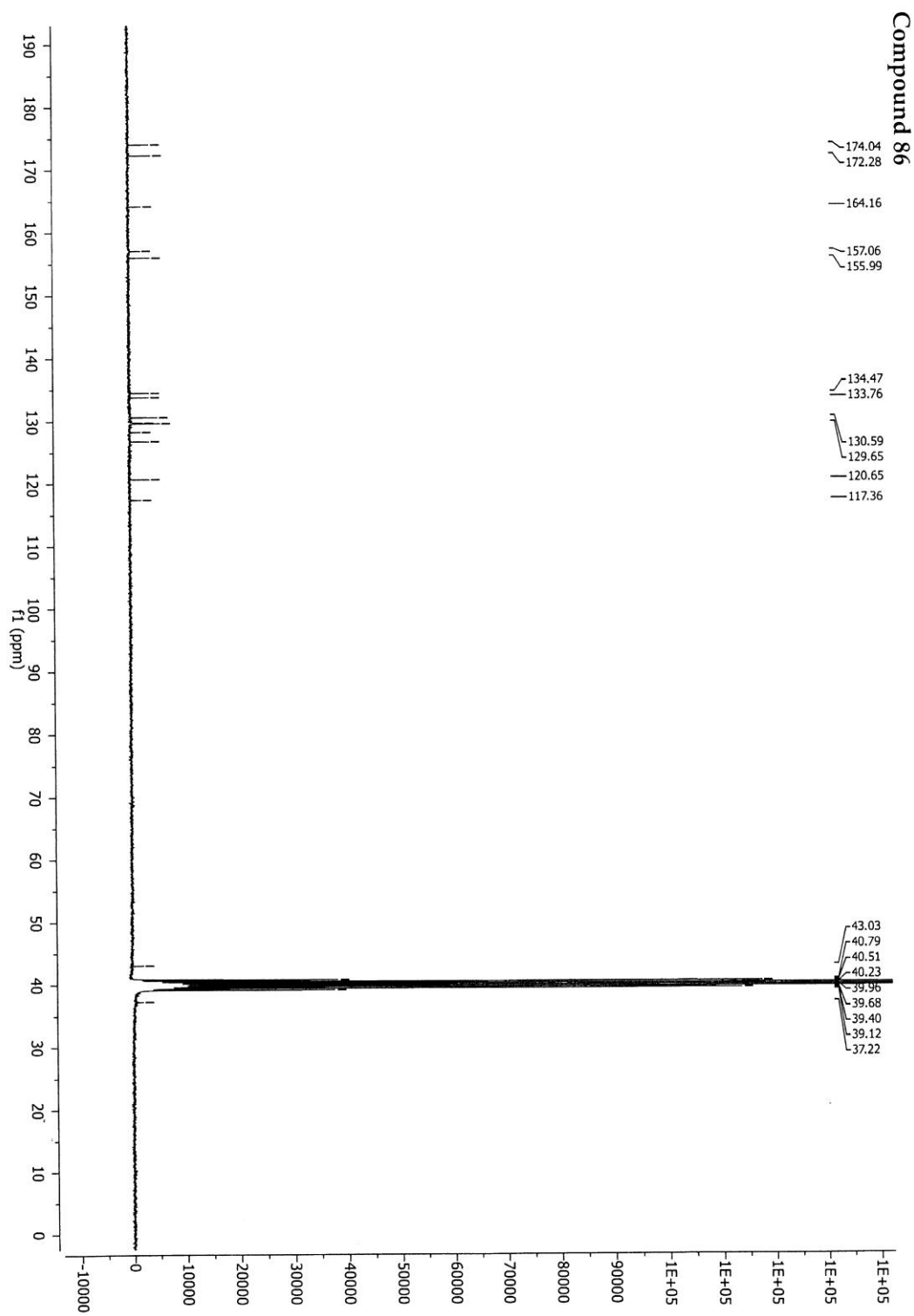


Fig. S80. ^{13}C NMR spectrum for compound 86

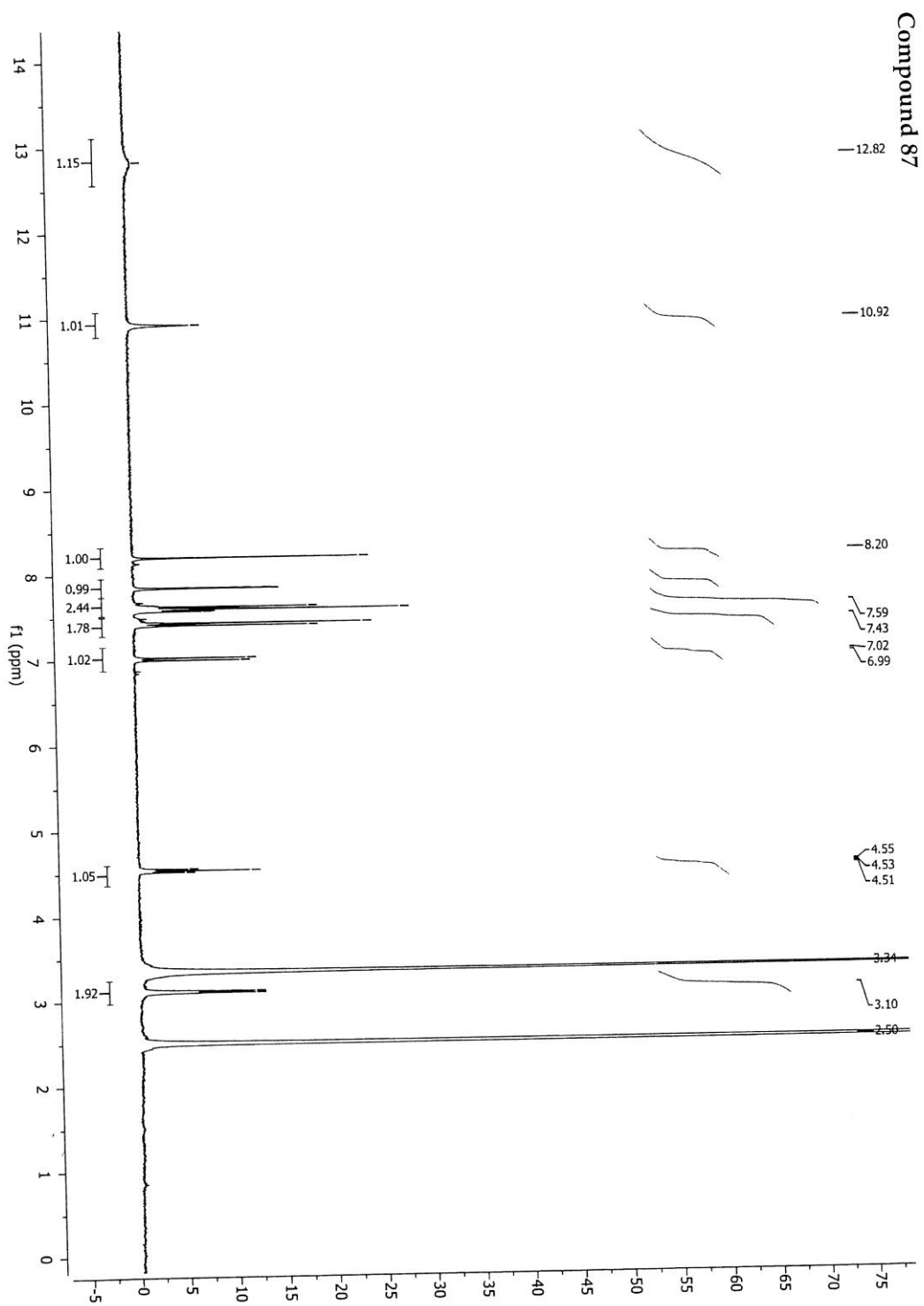


Fig. S81. ^1H NMR spectrum for compound 87

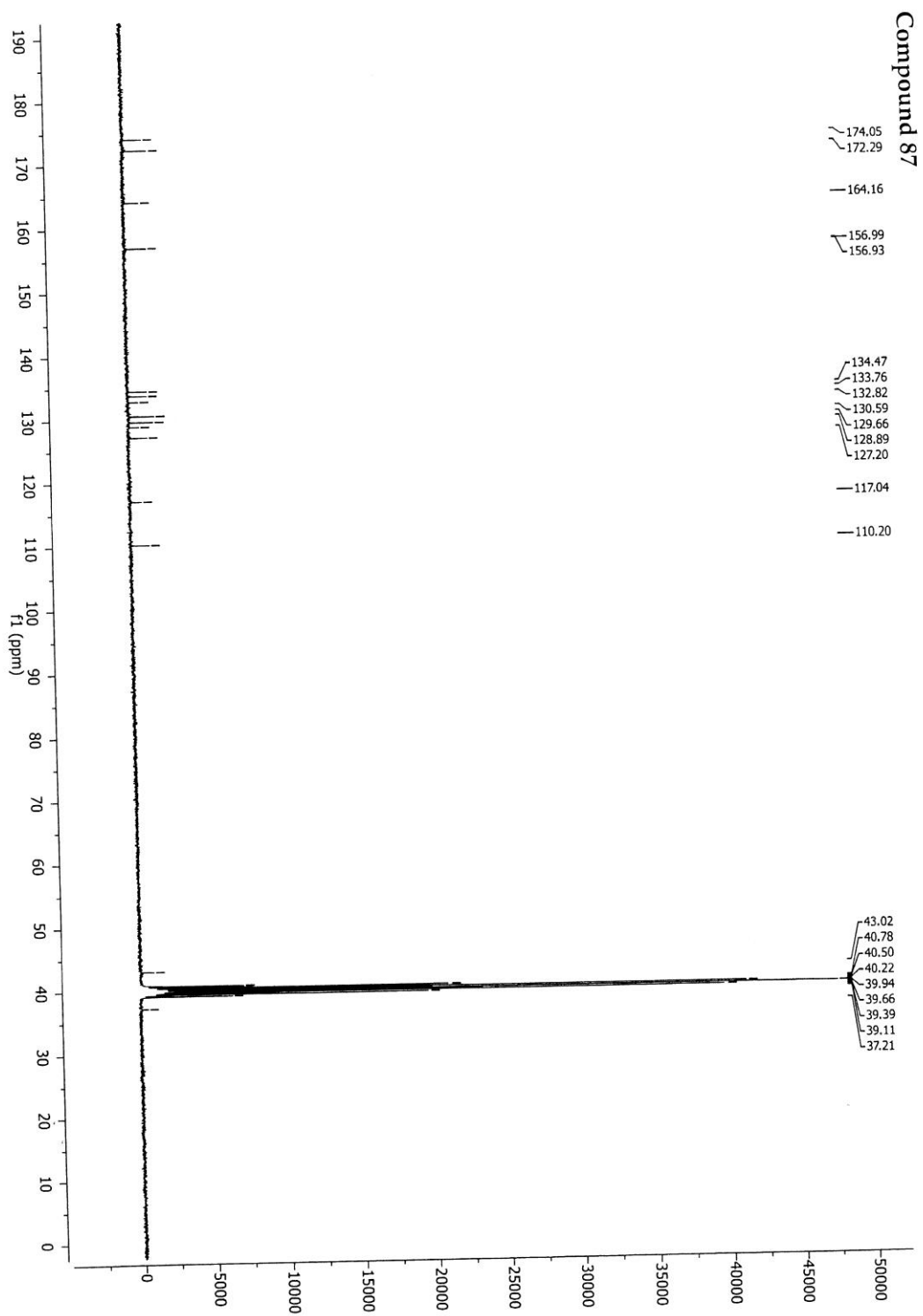


Fig. S82. ^{13}C NMR spectrum for compound 87

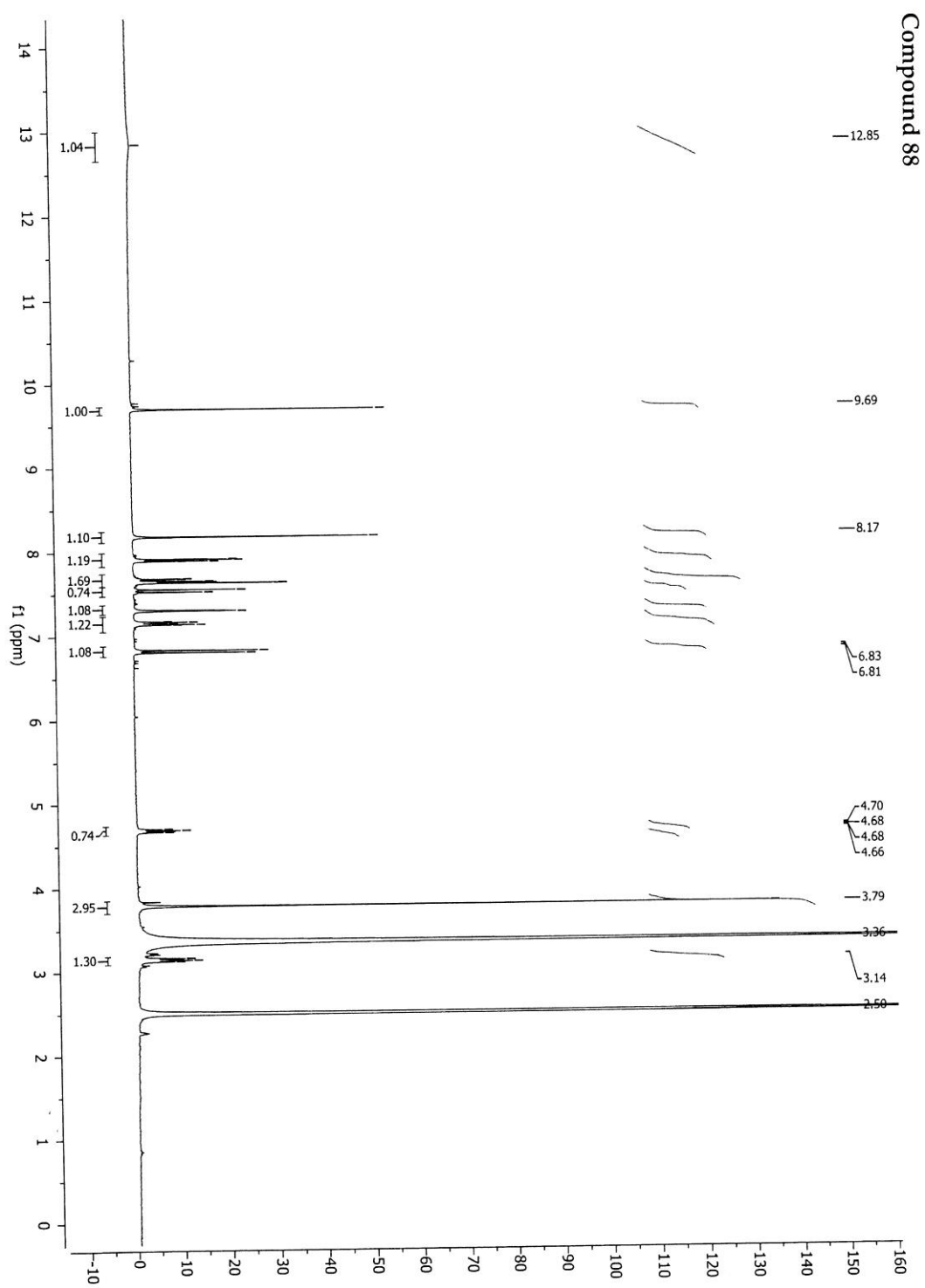


Fig. S83. ¹H NMR spectrum for compound 88

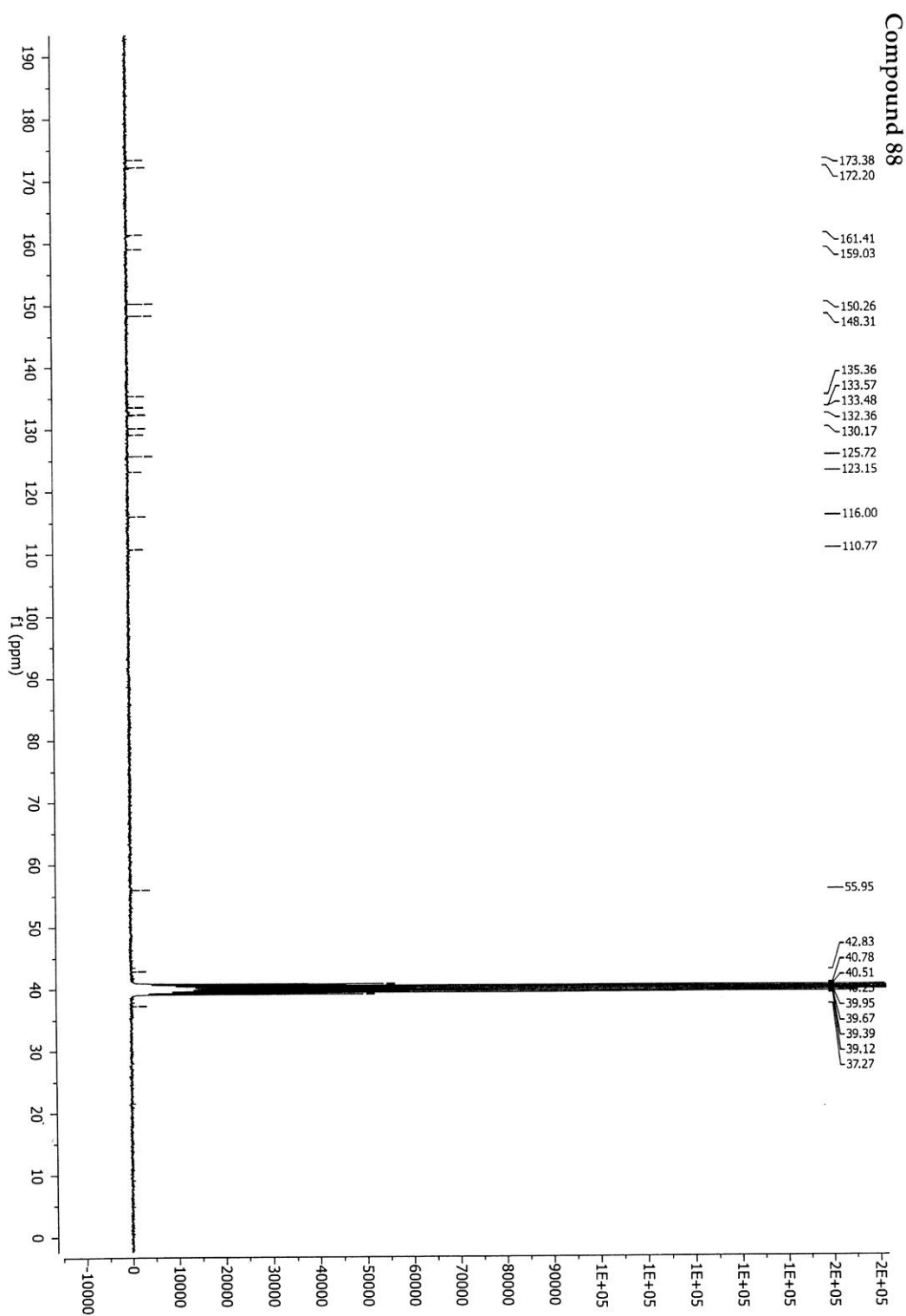


Fig. S84. ^{13}C NMR spectrum for compound 88

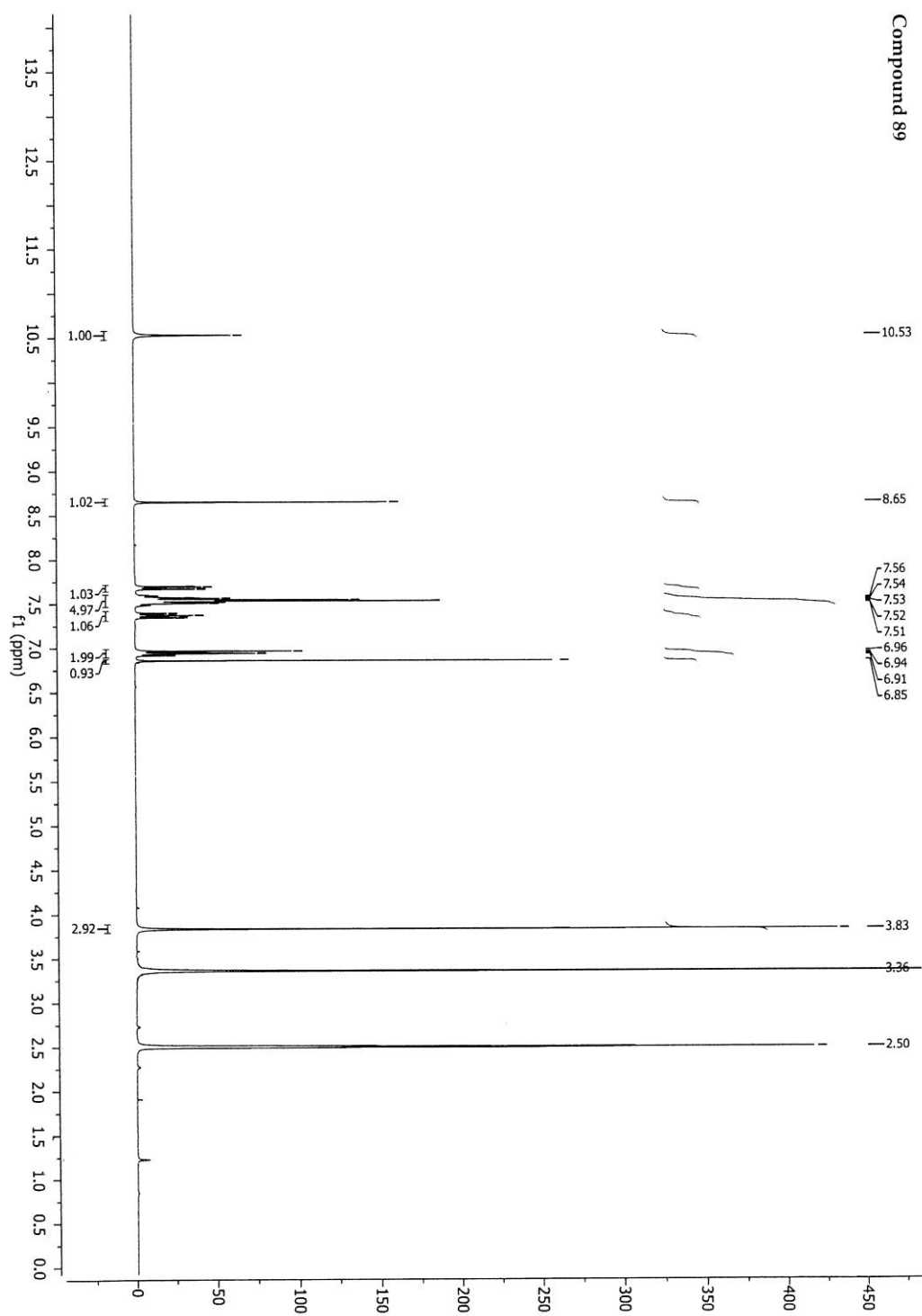


Fig. S85. ^1H NMR spectrum for compound 89

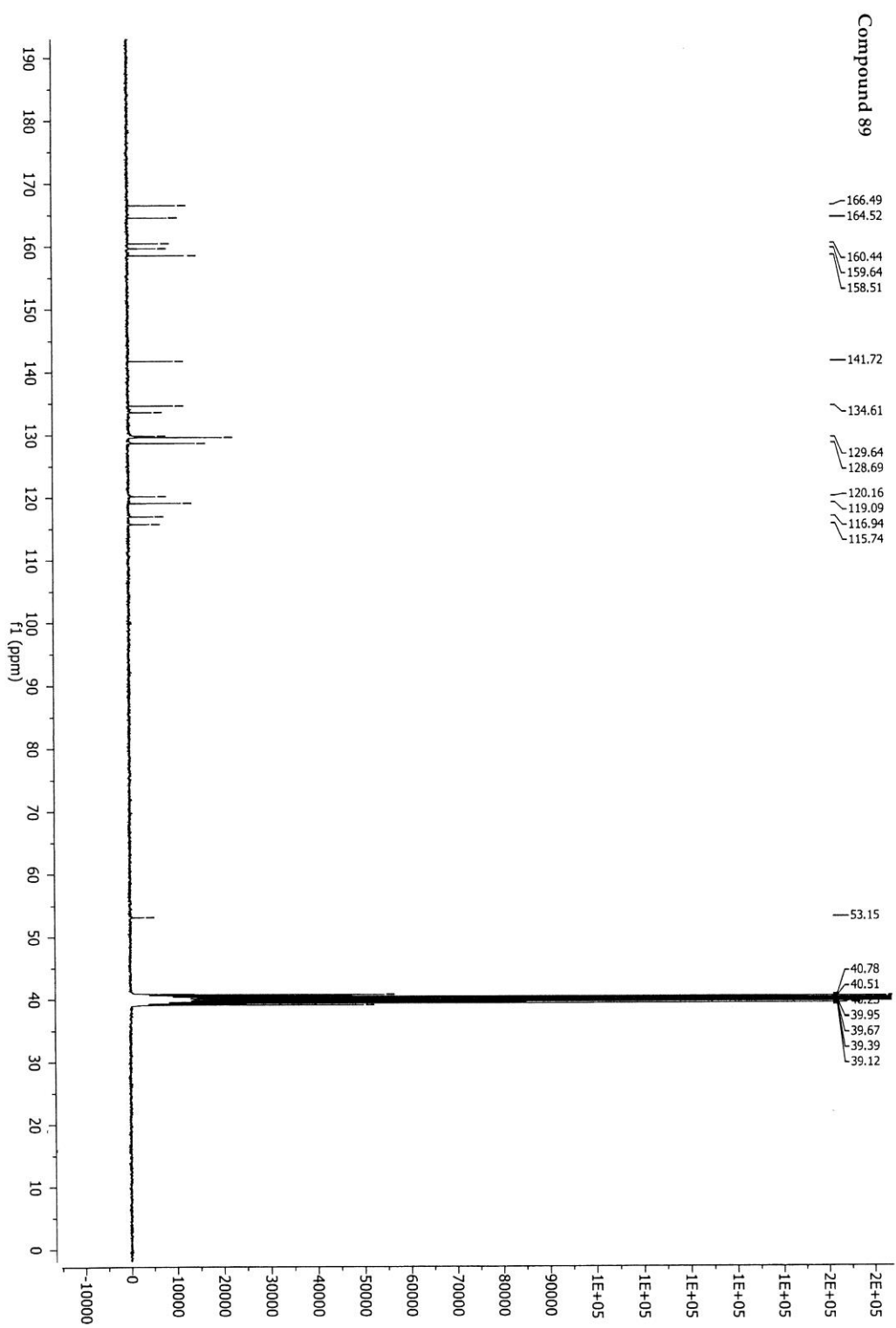


Fig. S86. ^{13}C NMR spectrum for compound 89

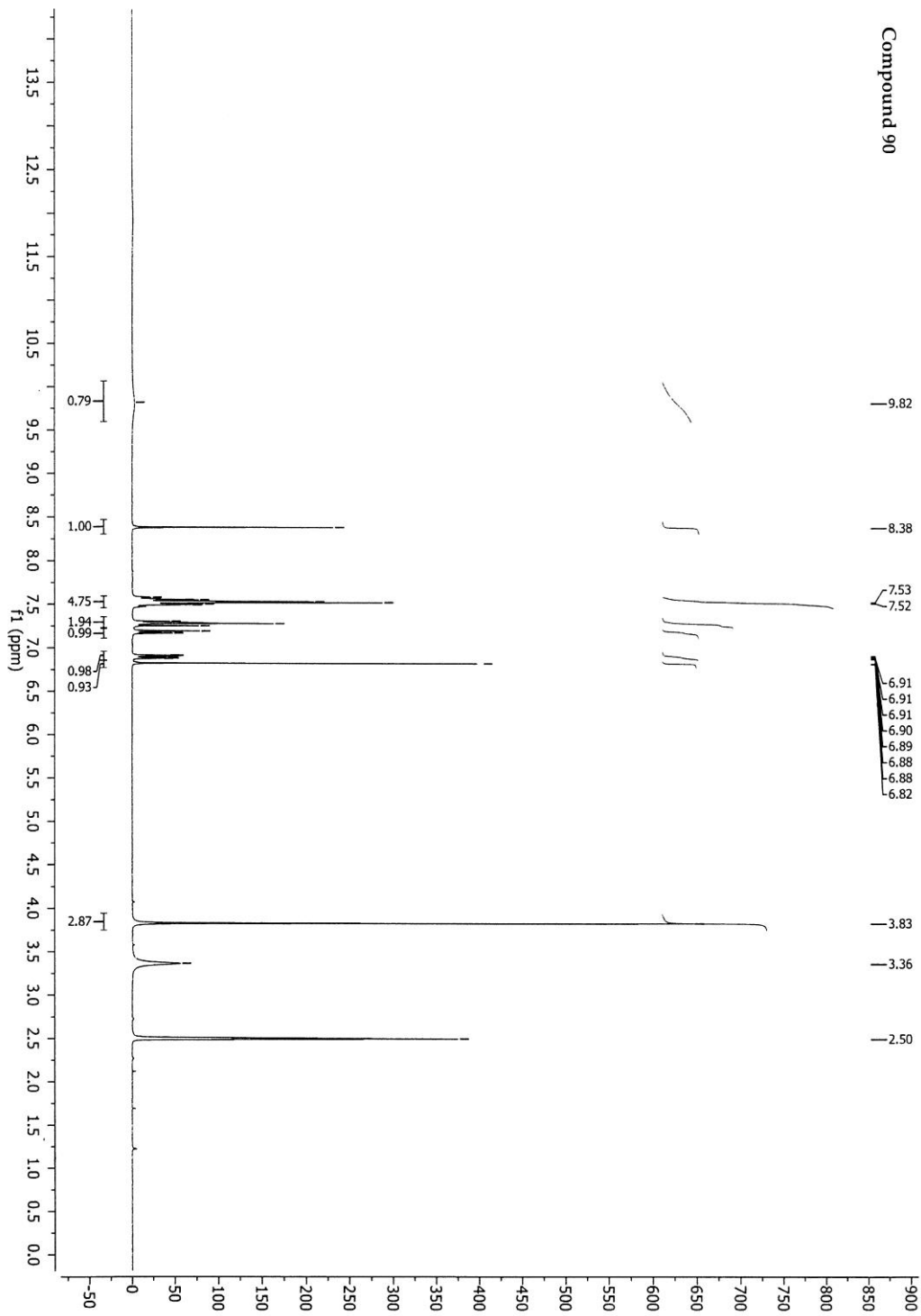


Fig. S87. ¹H NMR spectrum for compound 90

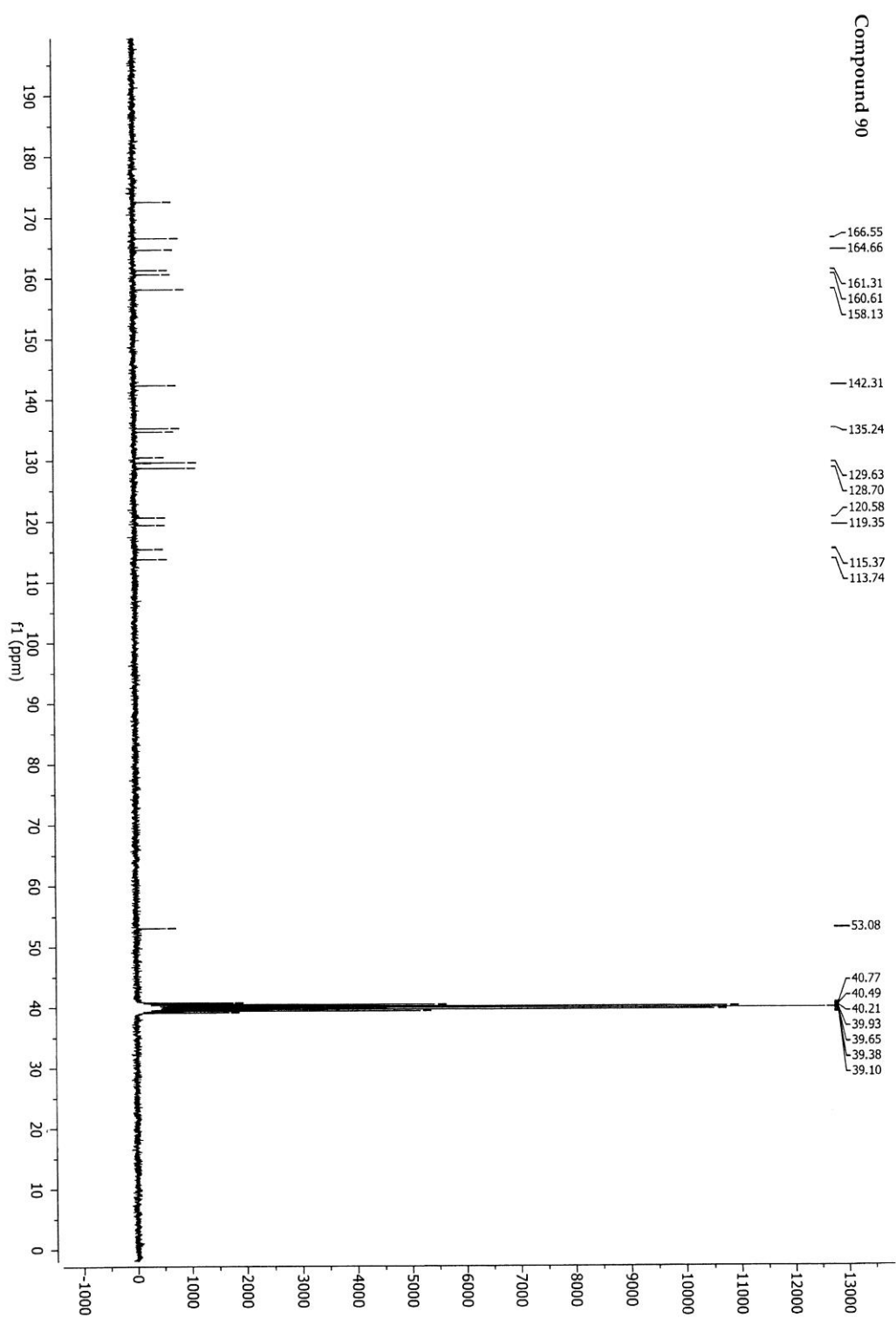


Fig. S88. ^{13}C NMR spectrum for compound 90

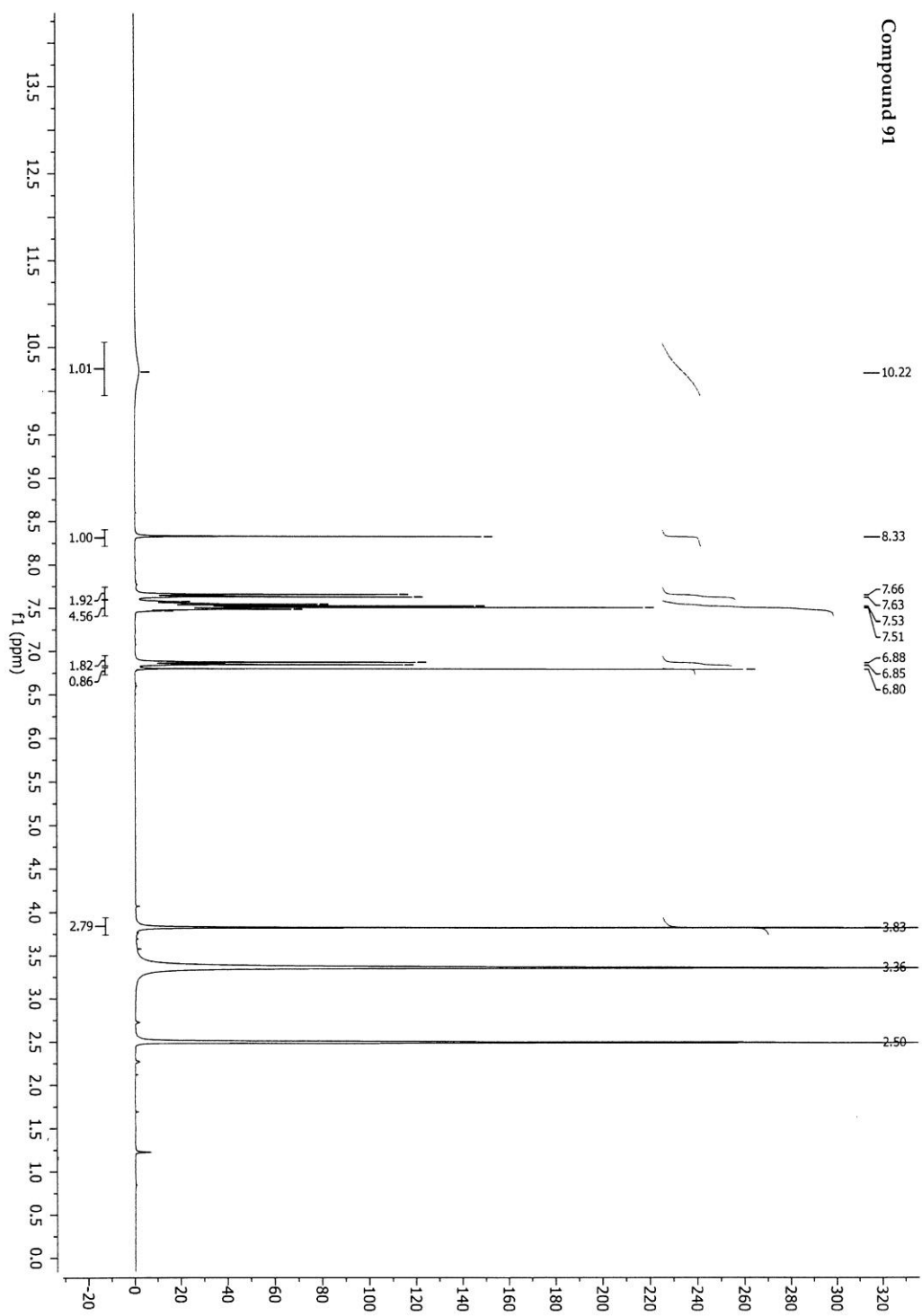


Fig. S89. ¹H NMR spectrum for compound 91

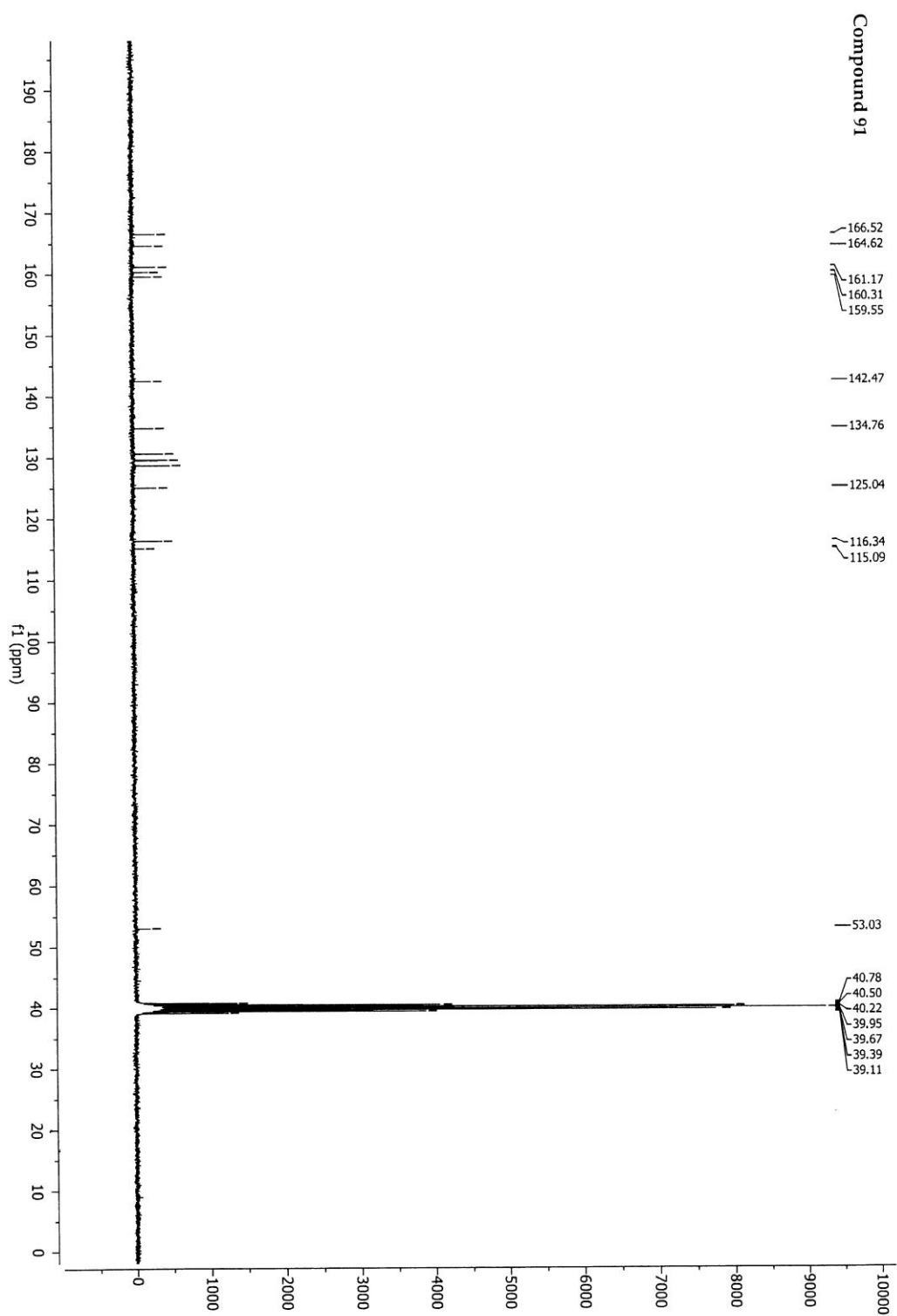


Fig. S90. ^{13}C NMR spectrum for compound 91

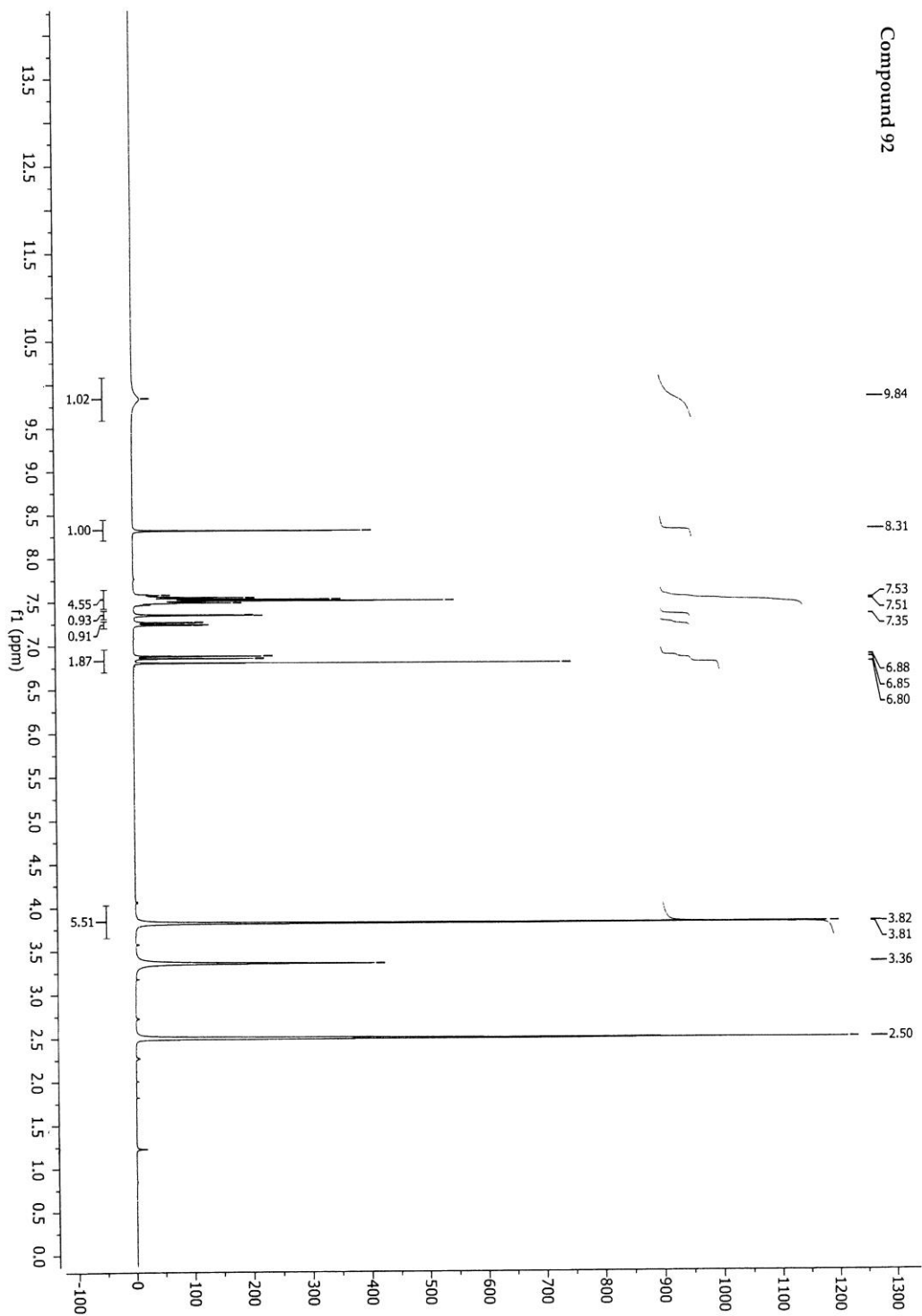


Fig. S91. ¹H NMR spectrum for compound 92

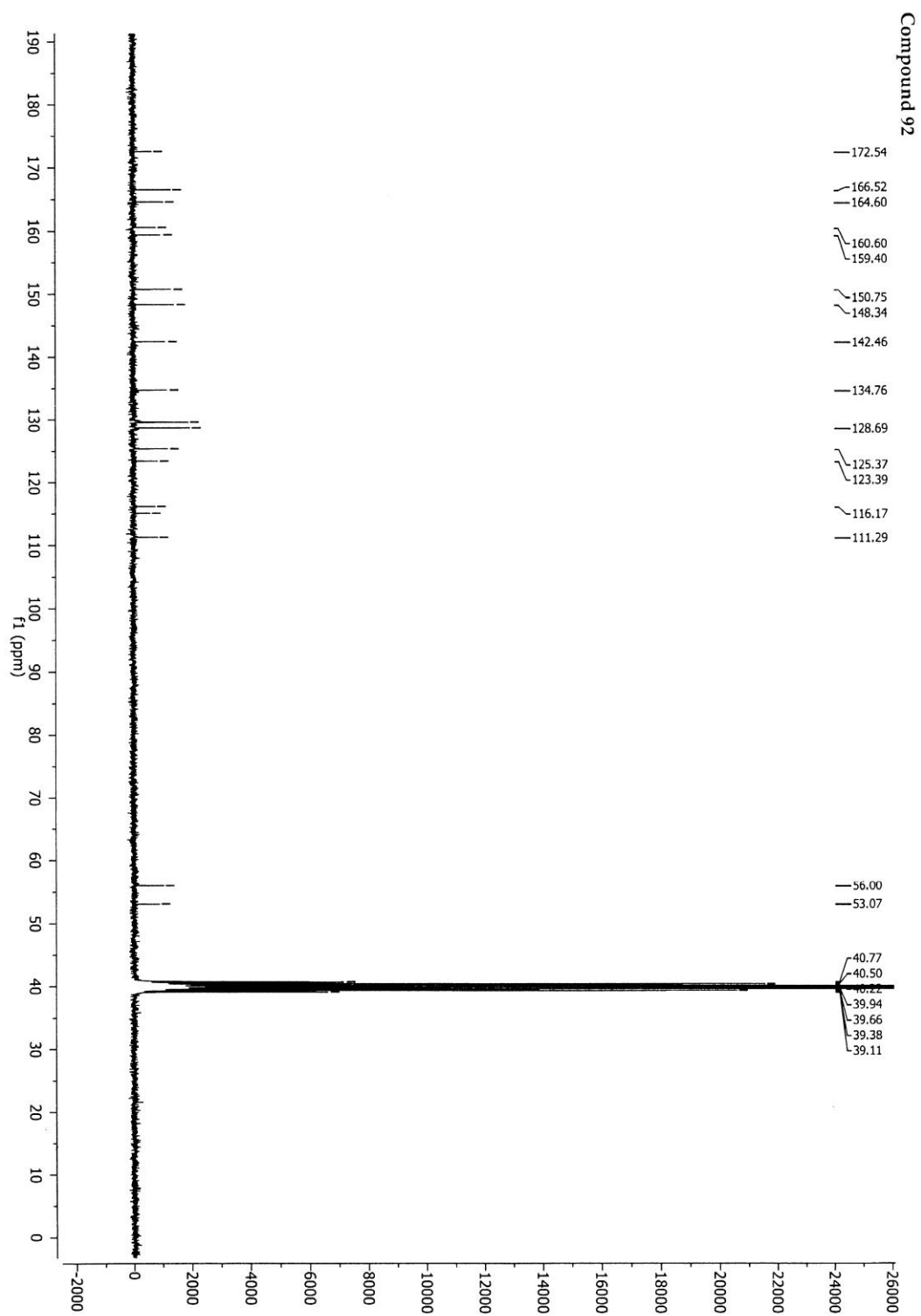


Fig. S92. ^{13}C NMR spectrum for compound 92

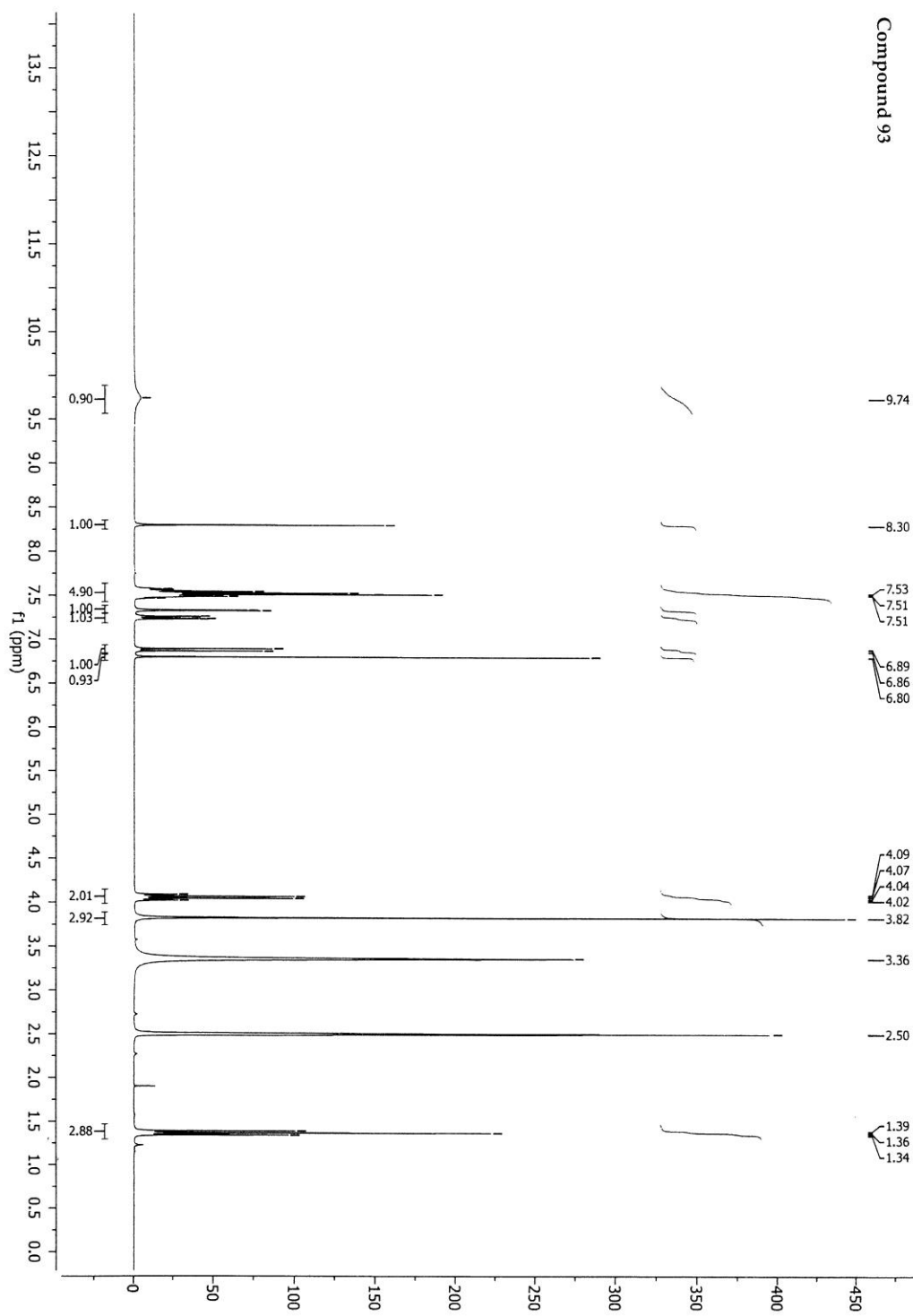


Fig. S93. ¹H NMR spectrum for compound 93

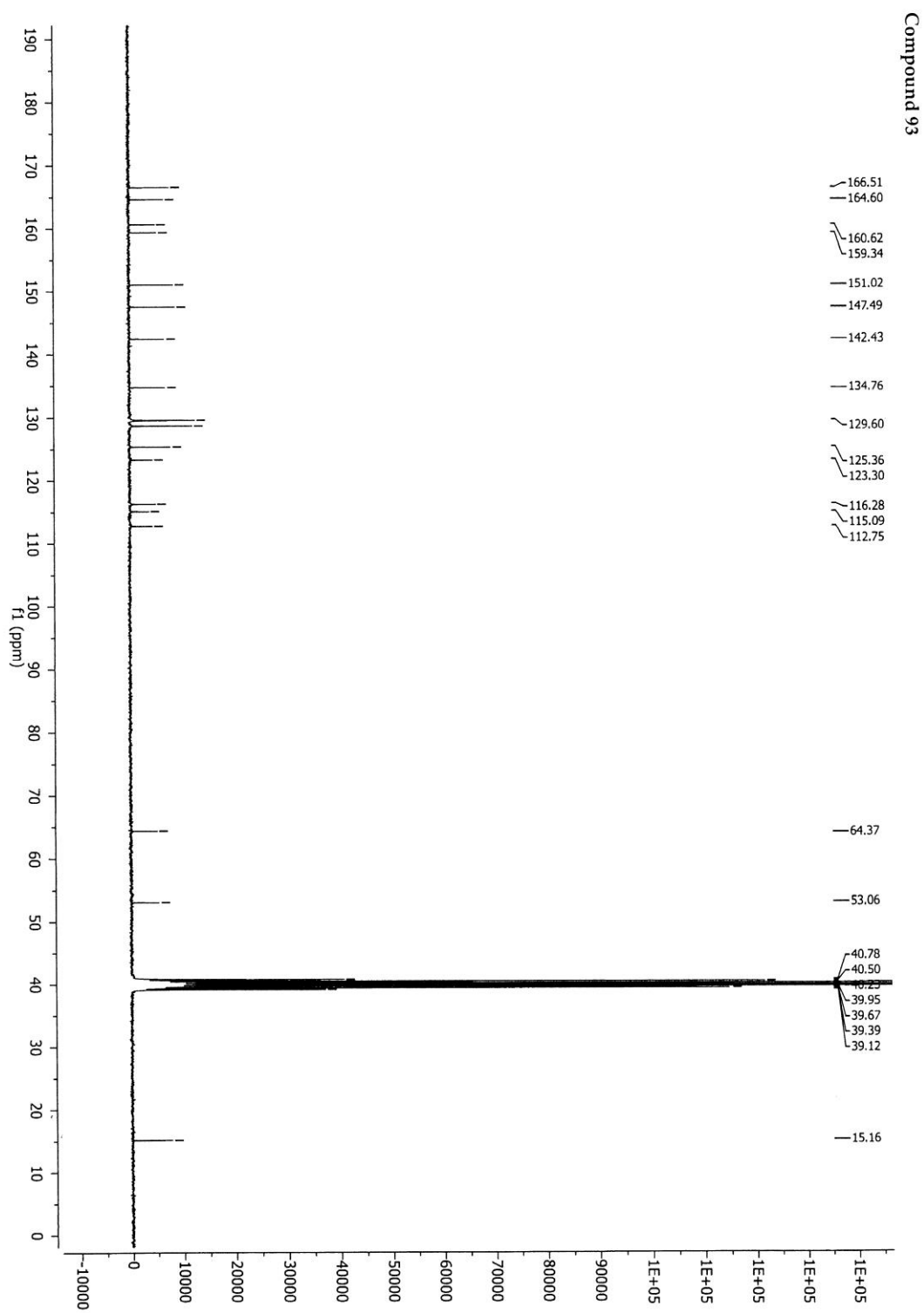


Fig. S94. ^{13}C NMR spectrum for compound 93

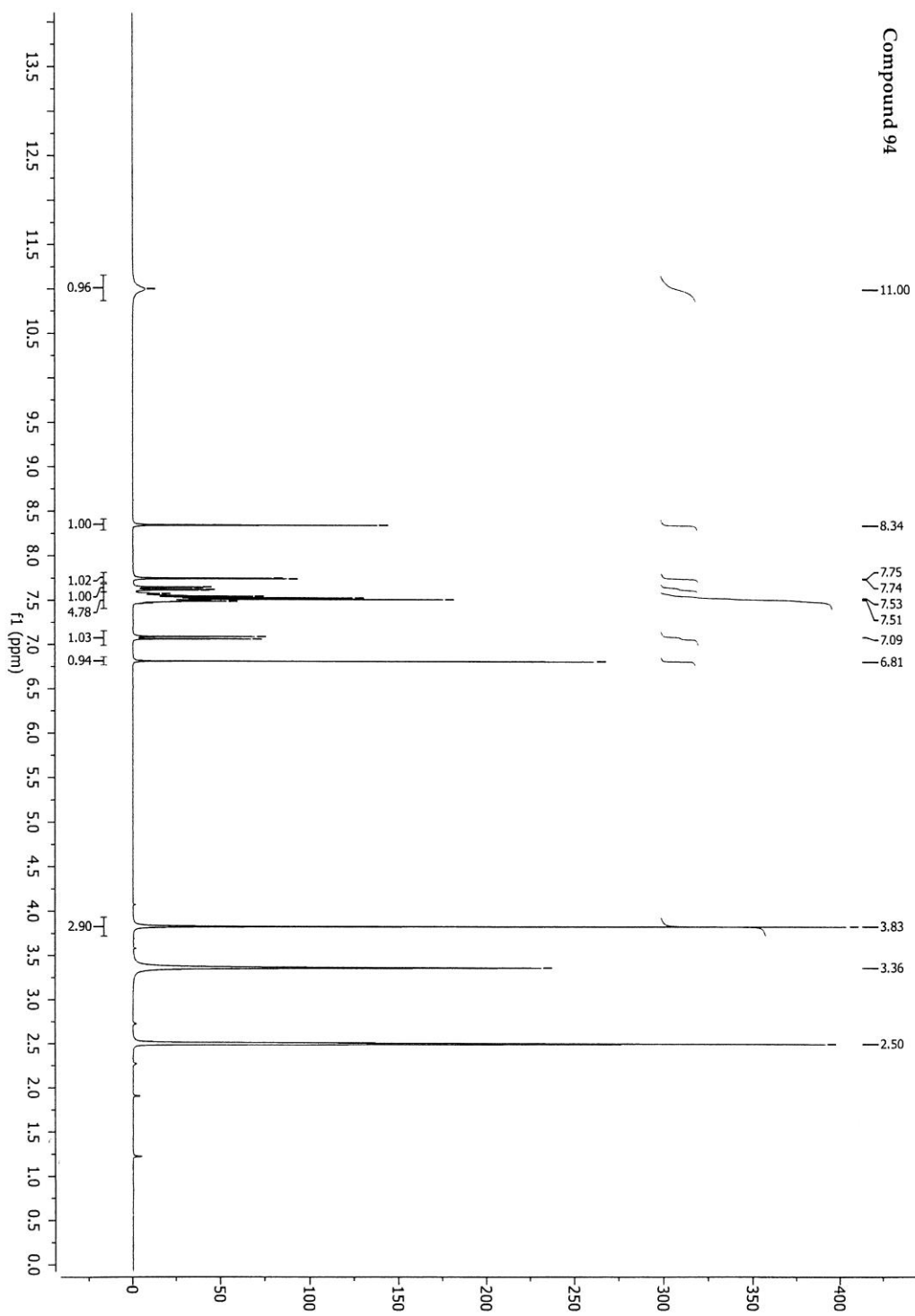


Fig. S95. ¹H NMR spectrum for compound 94

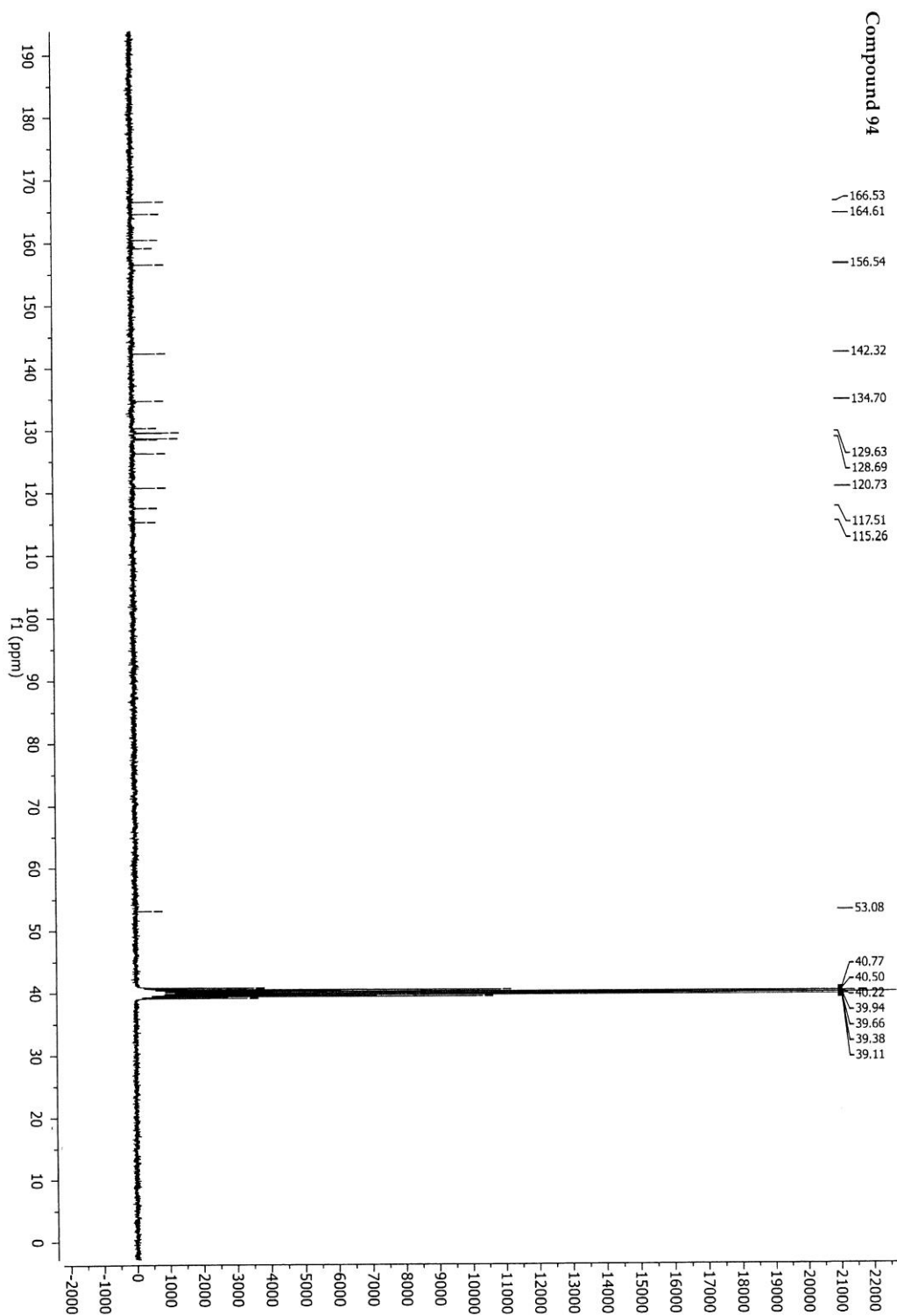


Fig. S96. ^{13}C NMR spectrum for compound 94

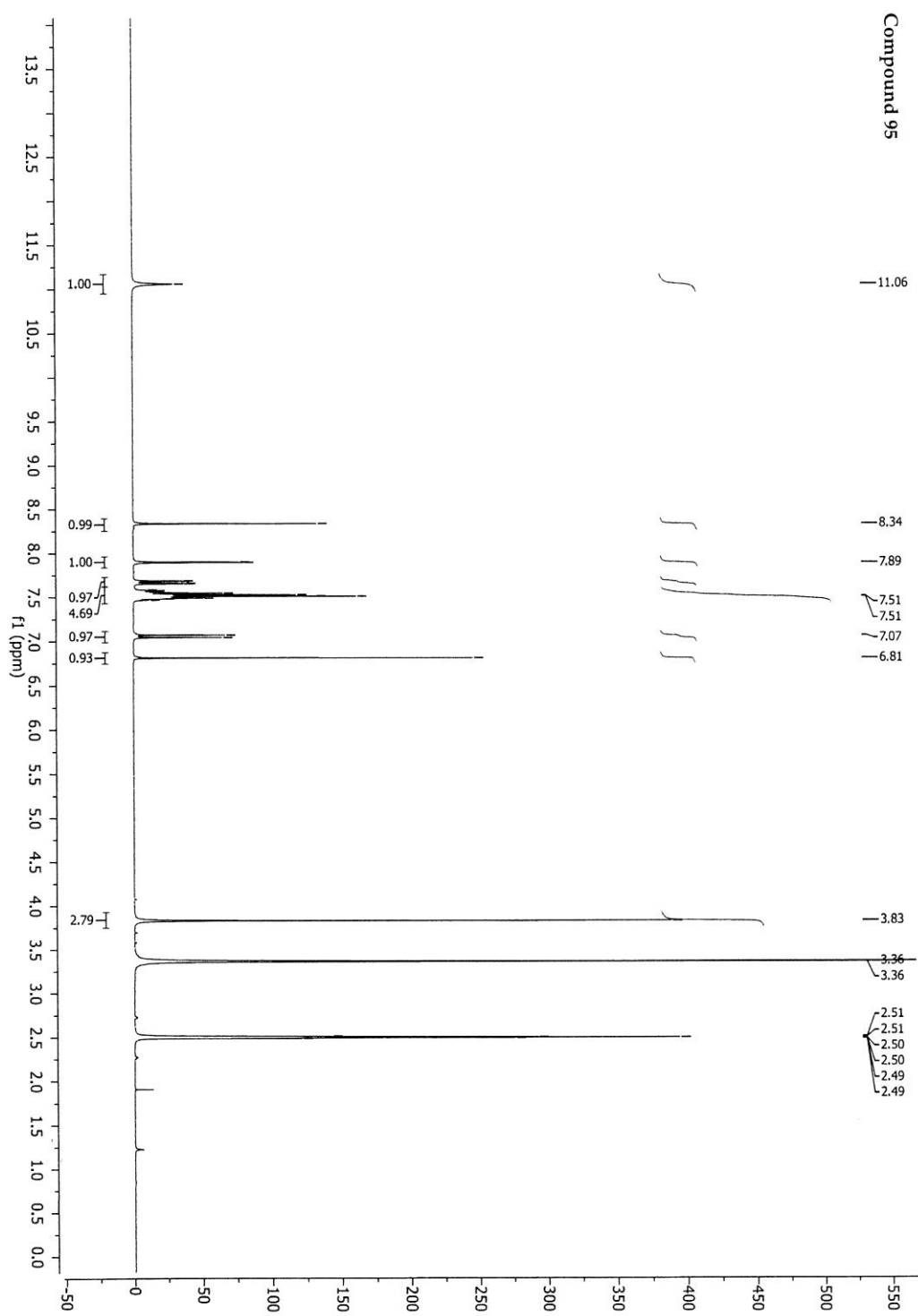


Fig. S97. ¹H NMR spectrum for compound 95

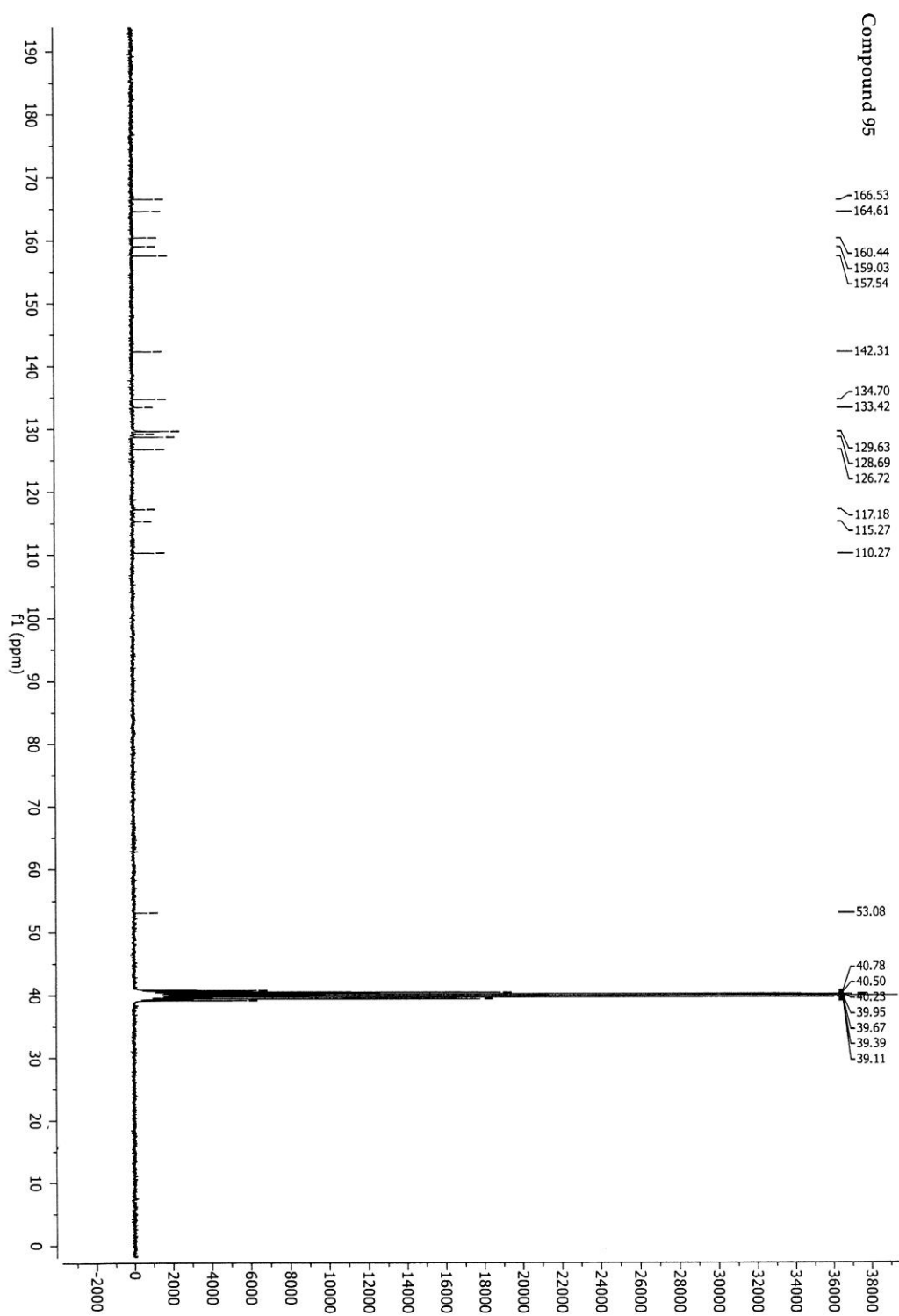


Fig. S98. ^{13}C NMR spectrum for compound 95

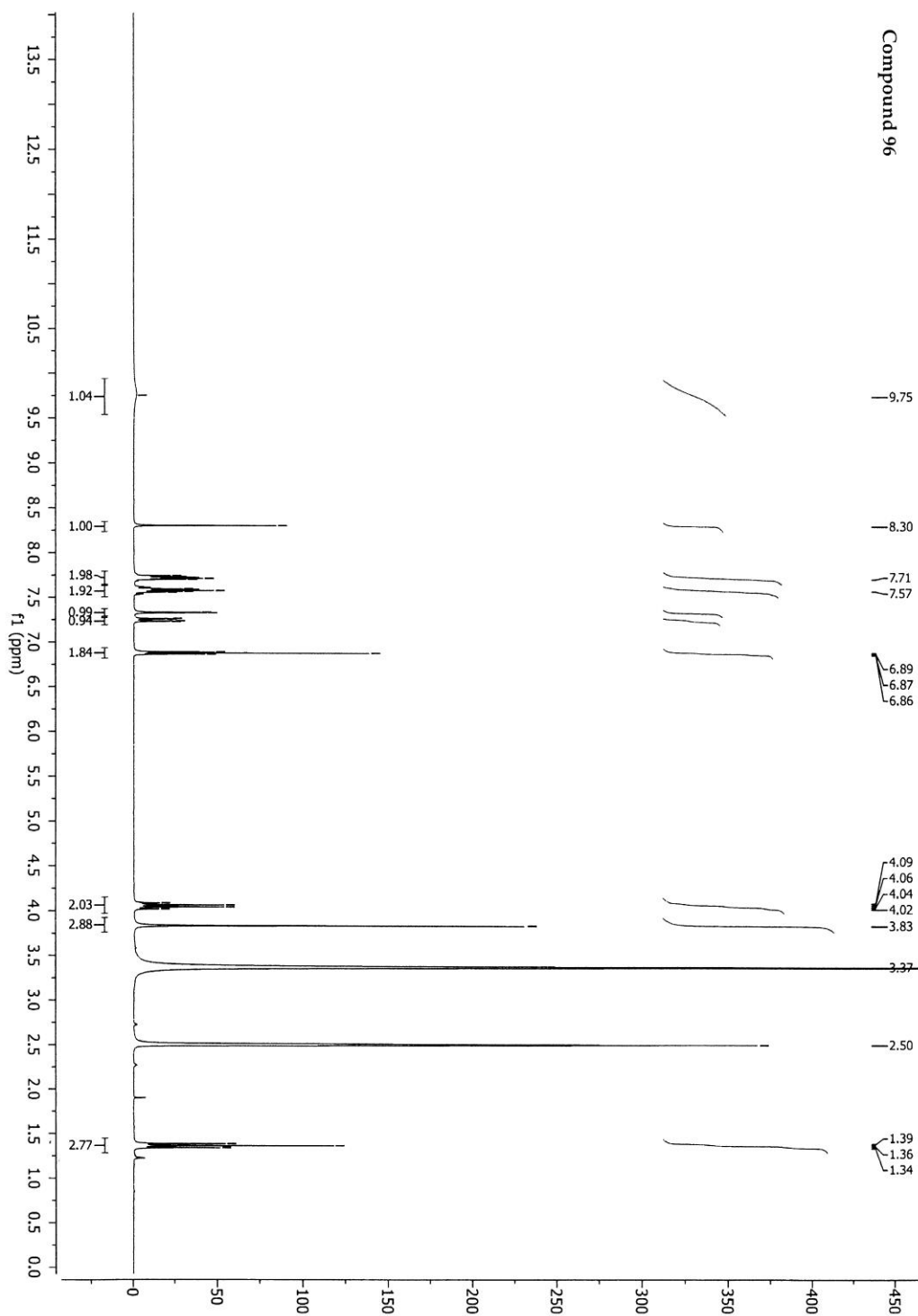


Fig. S99. ¹H NMR spectrum for compound 96

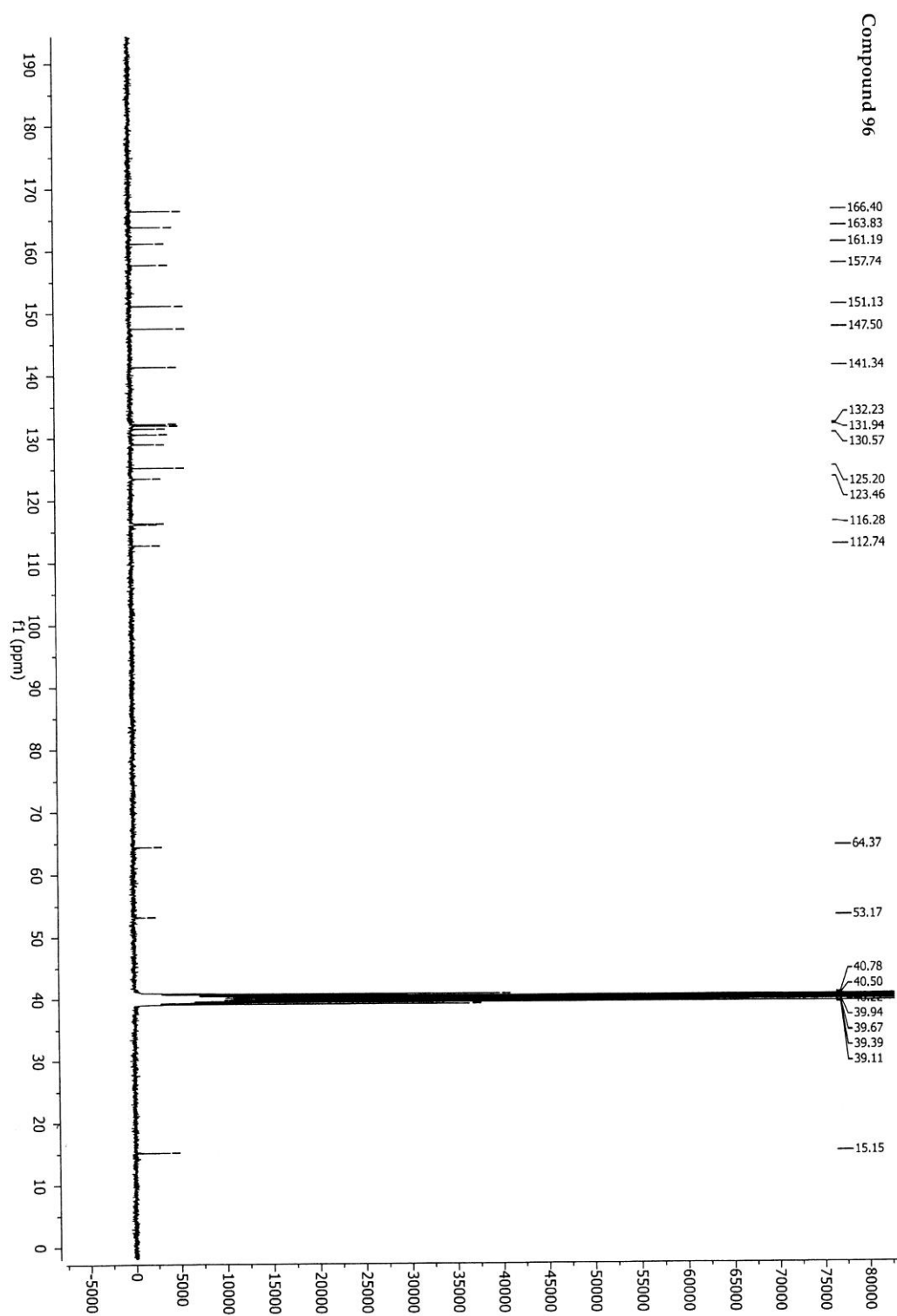


Fig. S100. ^{13}C NMR spectrum for compound 96

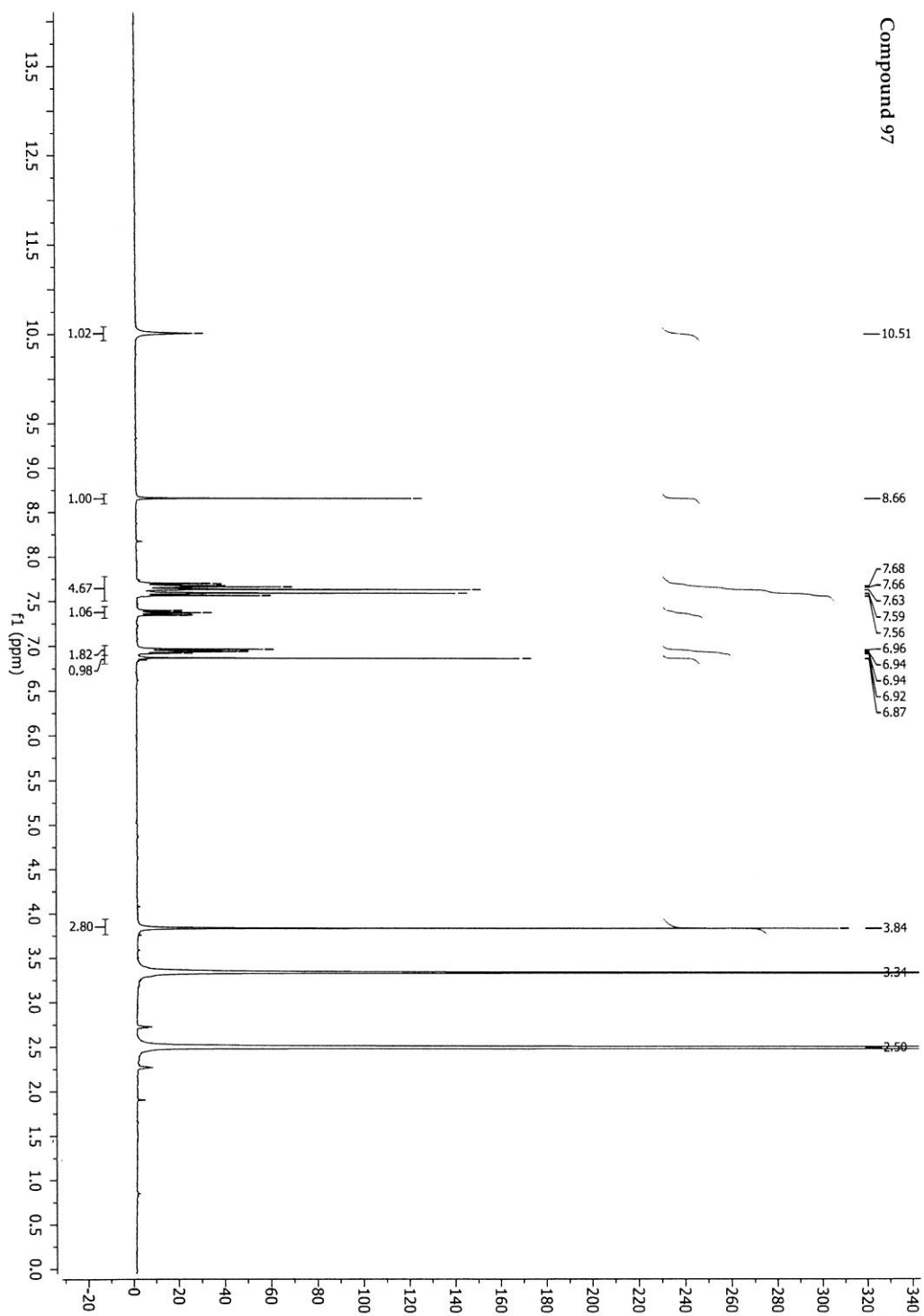


Fig. S101. ^1H NMR spectrum for compound 97

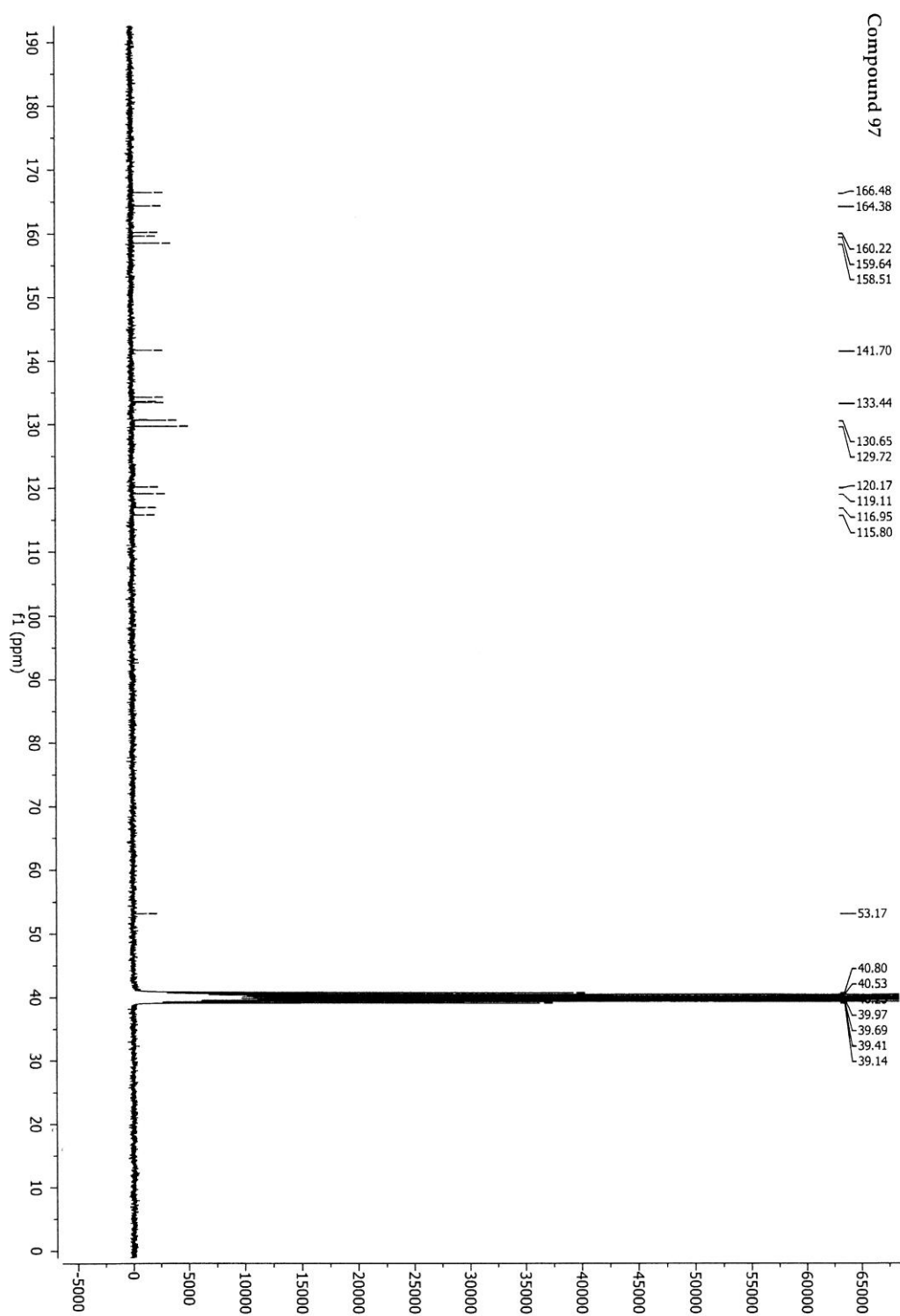


Fig. S102. ^{13}C NMR spectrum for compound 97

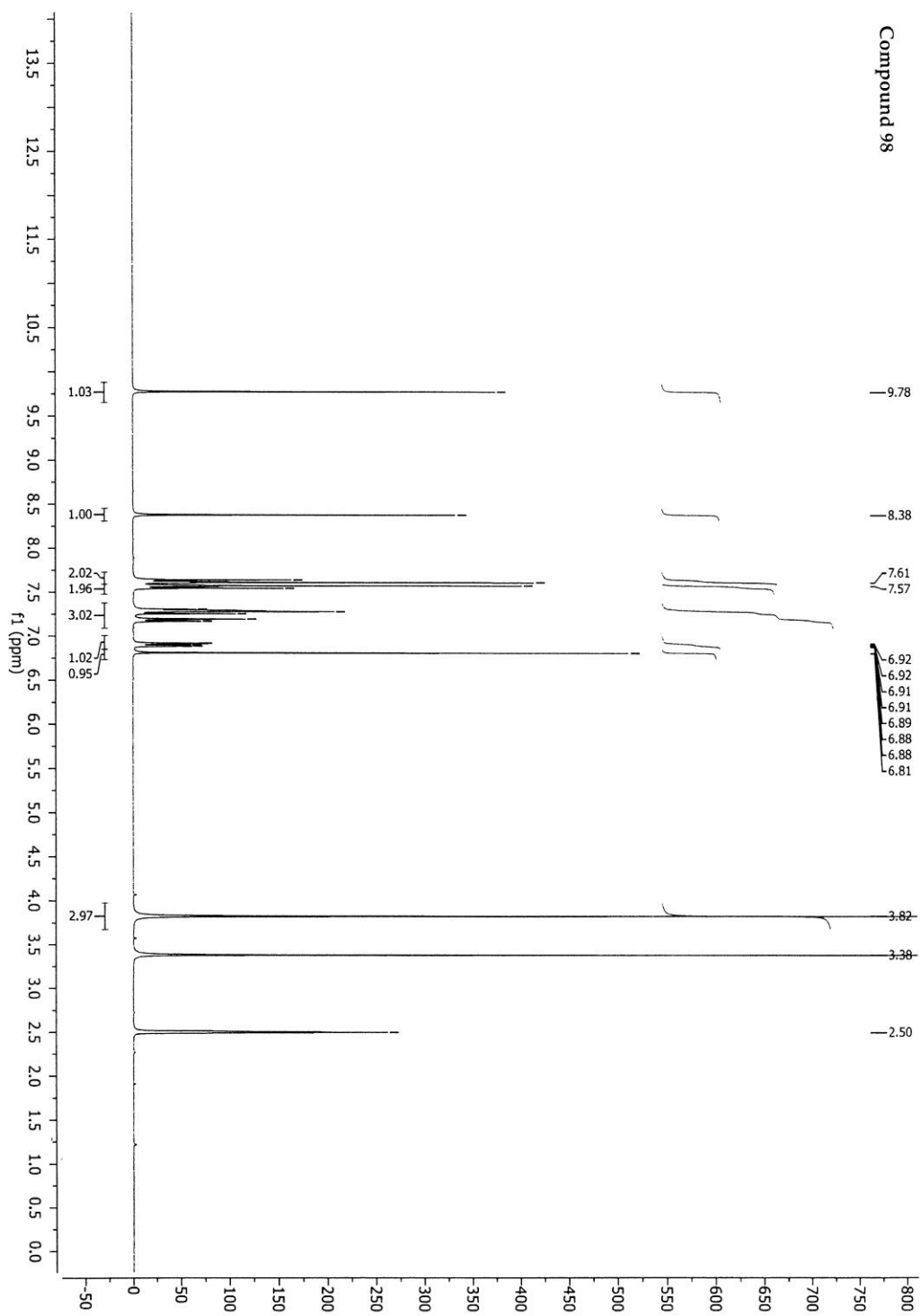


Fig. S103. ¹H NMR spectrum for compound 98

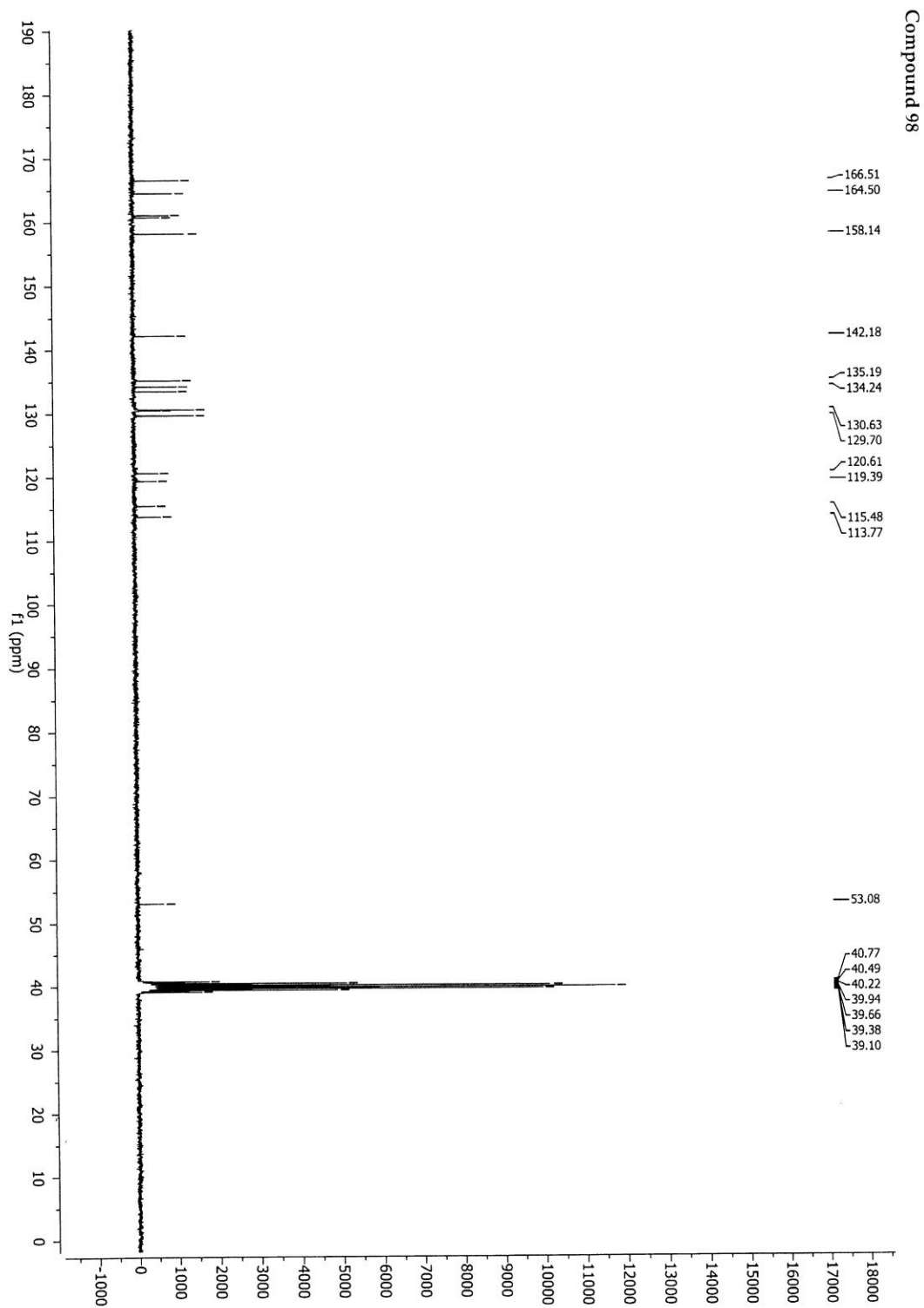


Fig. S104. ^{13}C NMR spectrum for compound 98

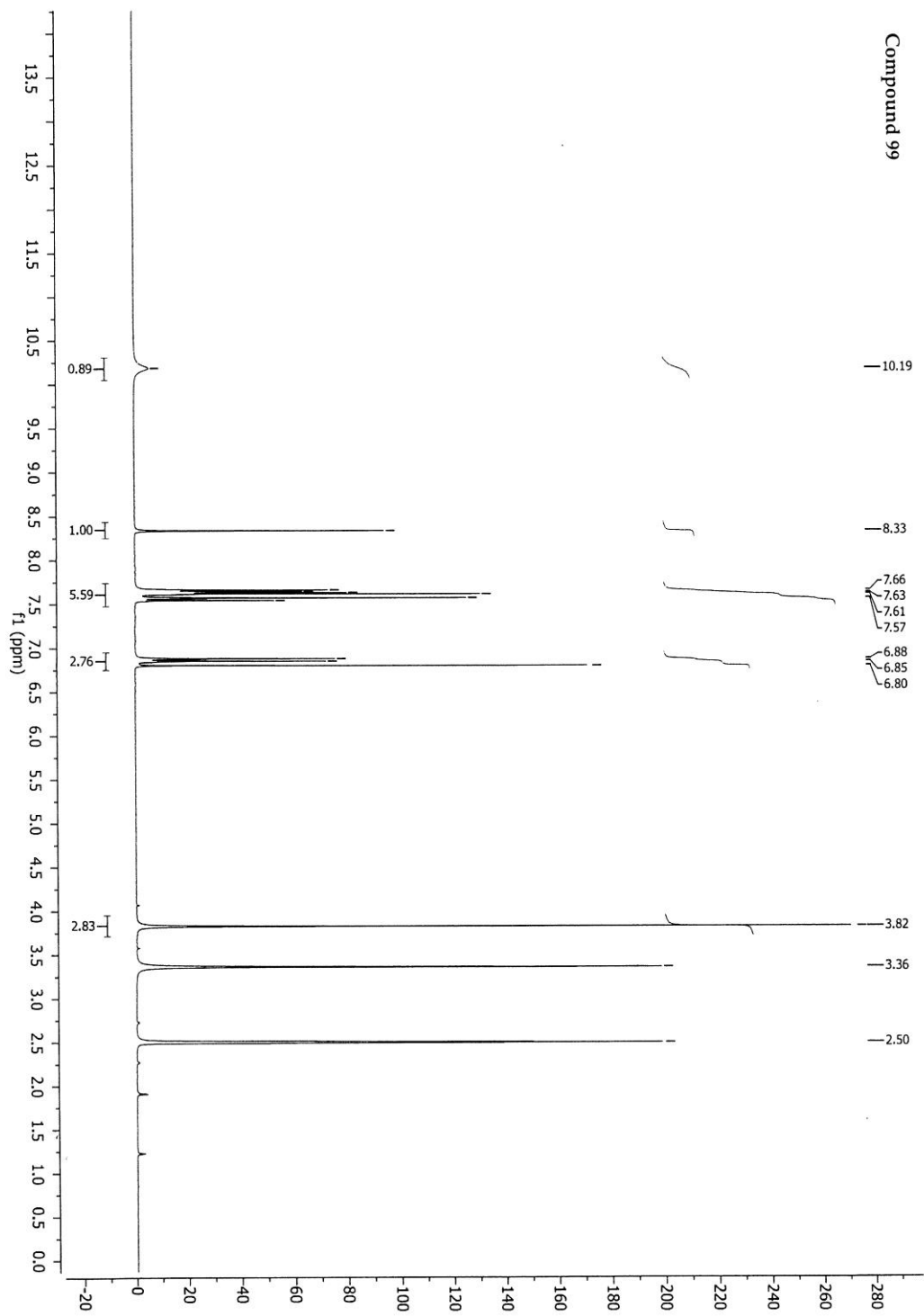


Fig. S105. ¹H NMR spectrum for compound 99

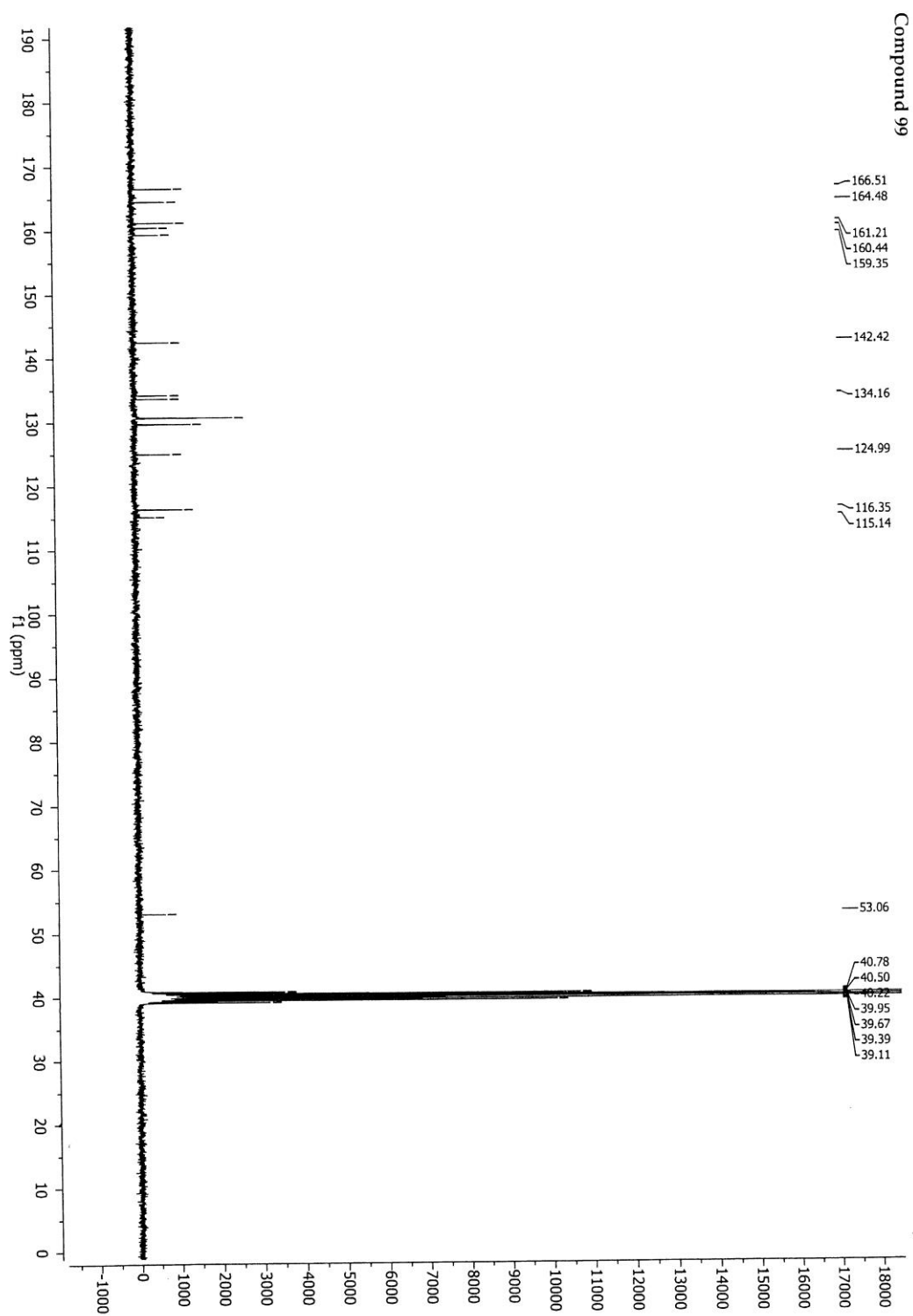


Fig. S106. ^{13}C NMR spectrum for compound 99

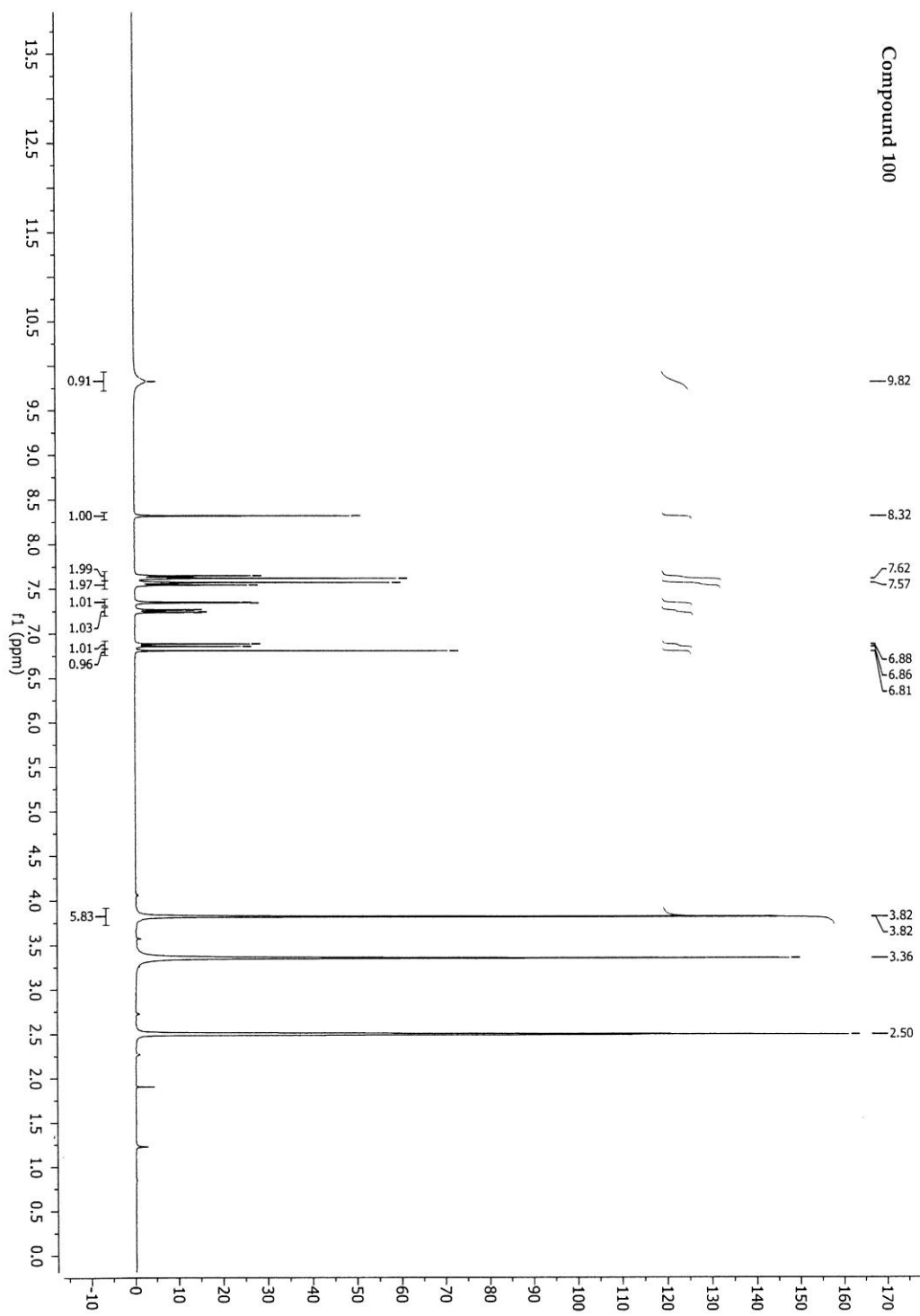


Fig. S107. ^1H NMR spectrum for compound 100

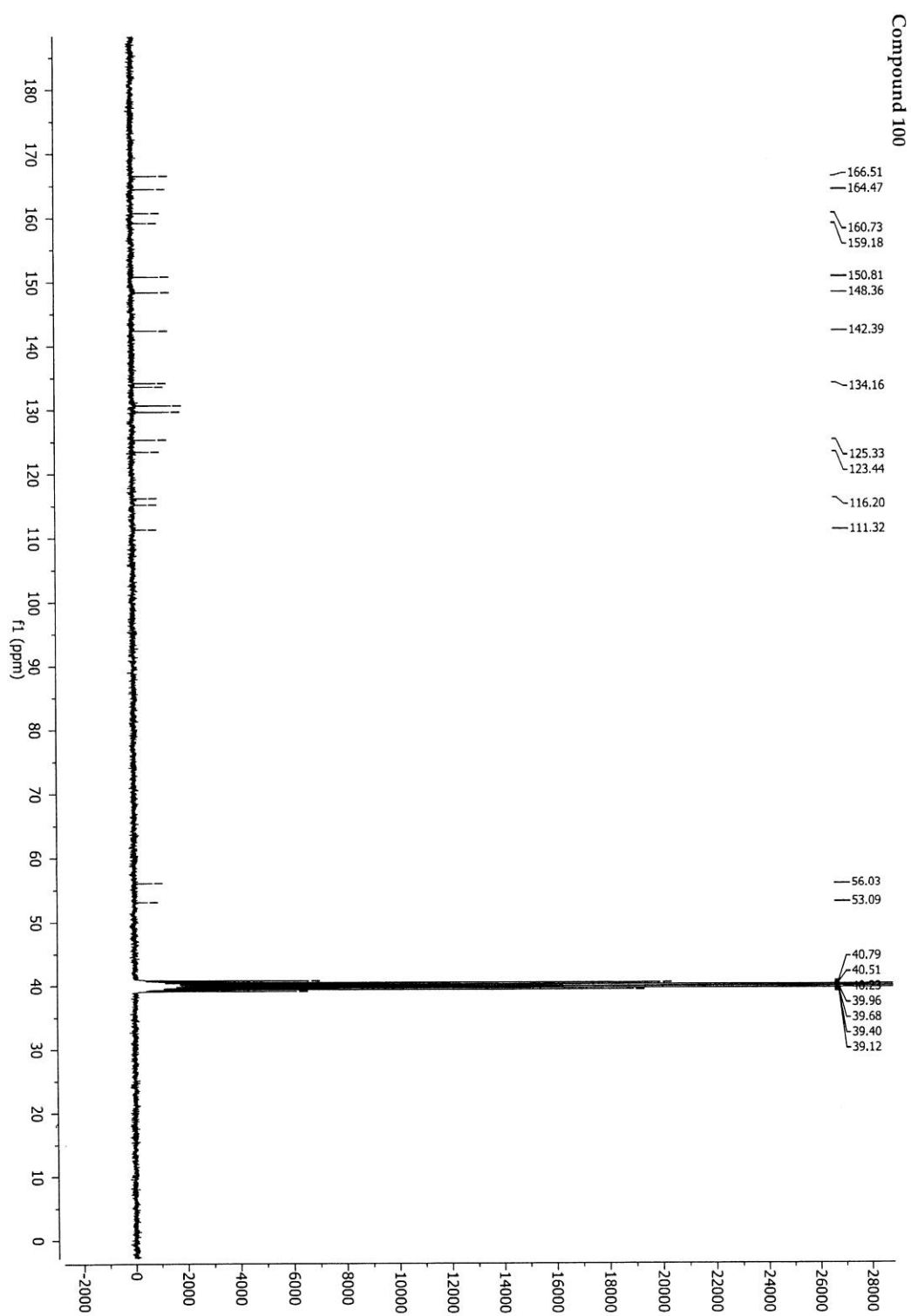


Fig. S108. ^{13}C NMR spectrum for compound 100

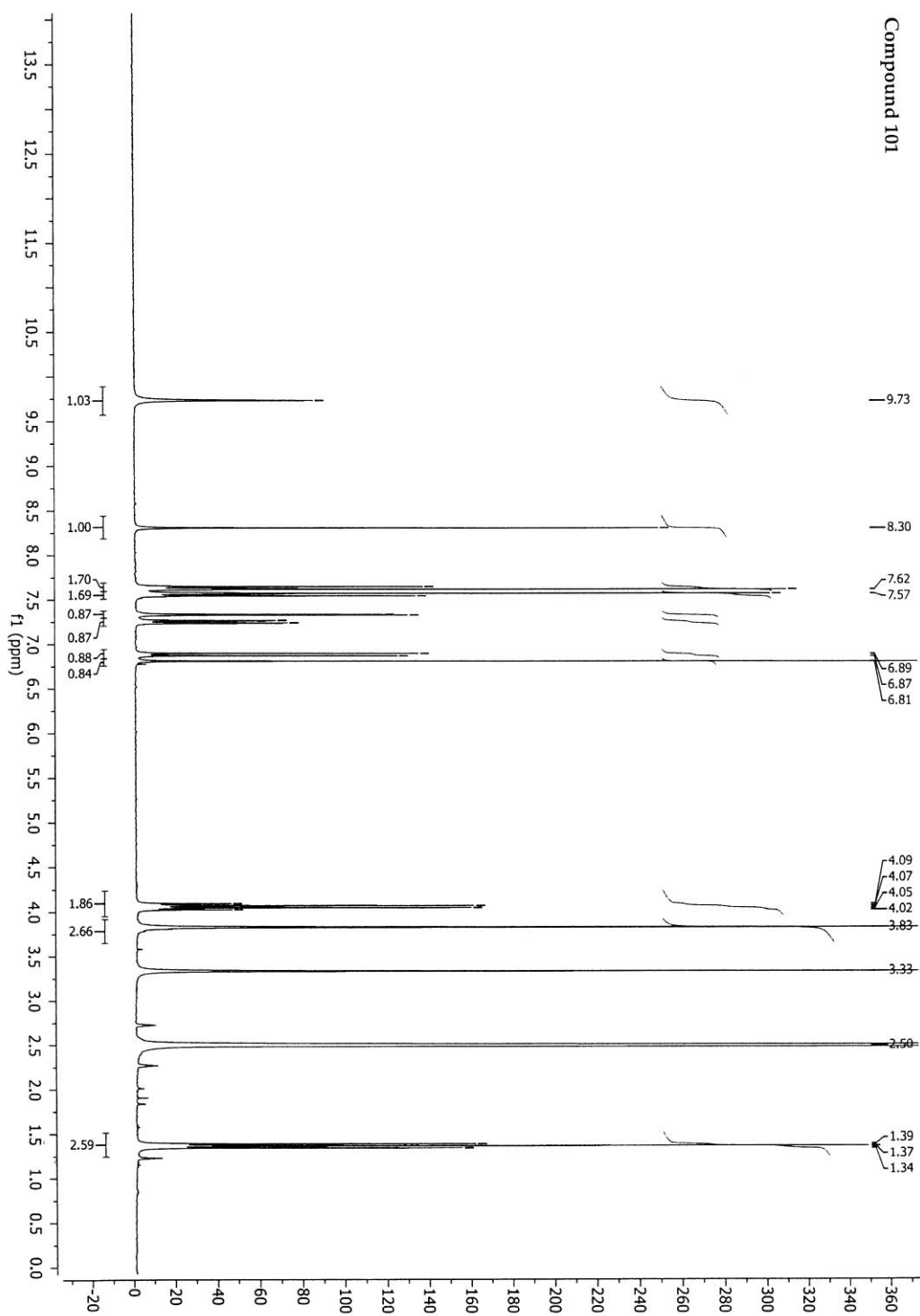


Fig. S109. ¹H NMR spectrum for compound 101

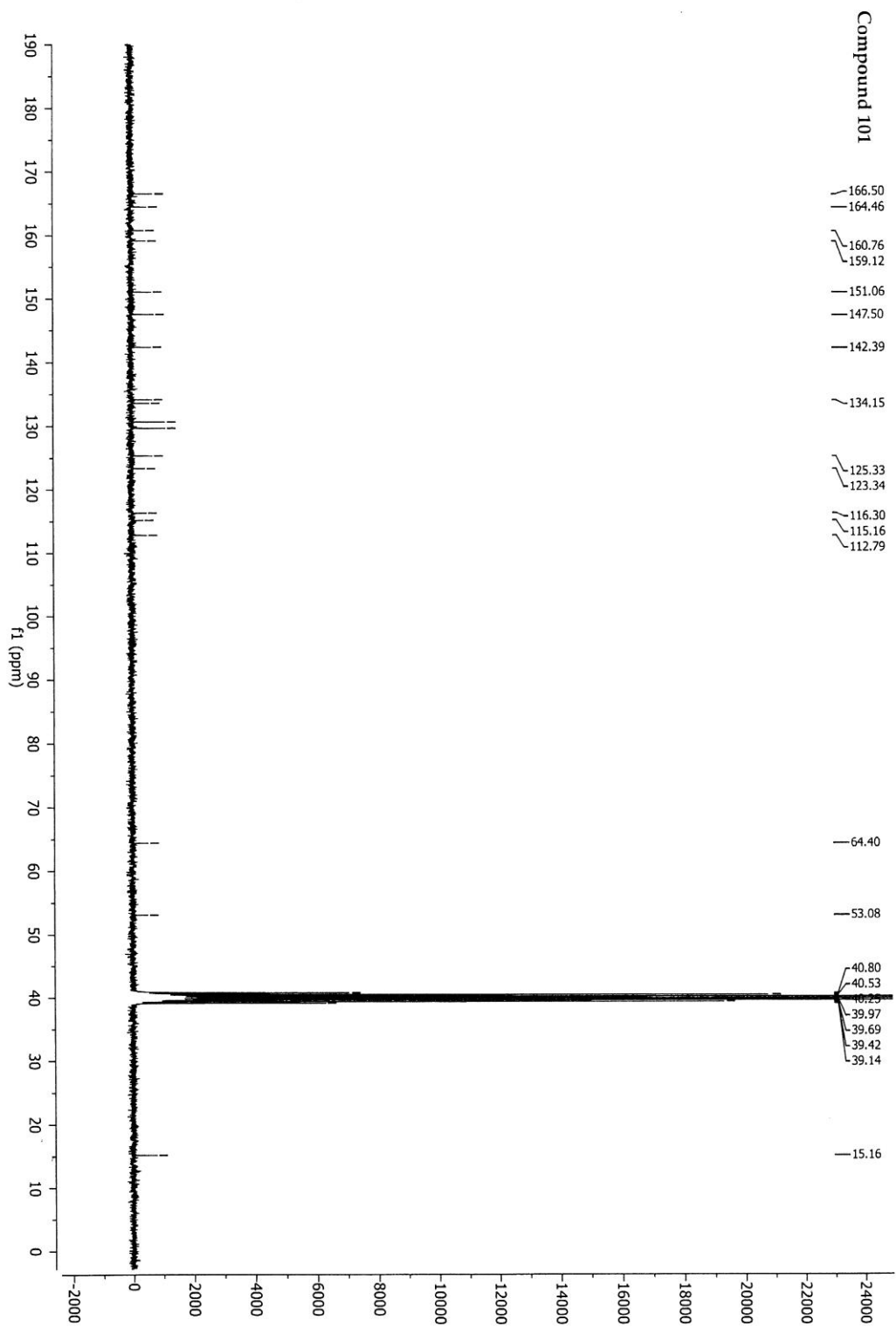


Fig. S110. ^{13}C NMR spectrum for compound 101

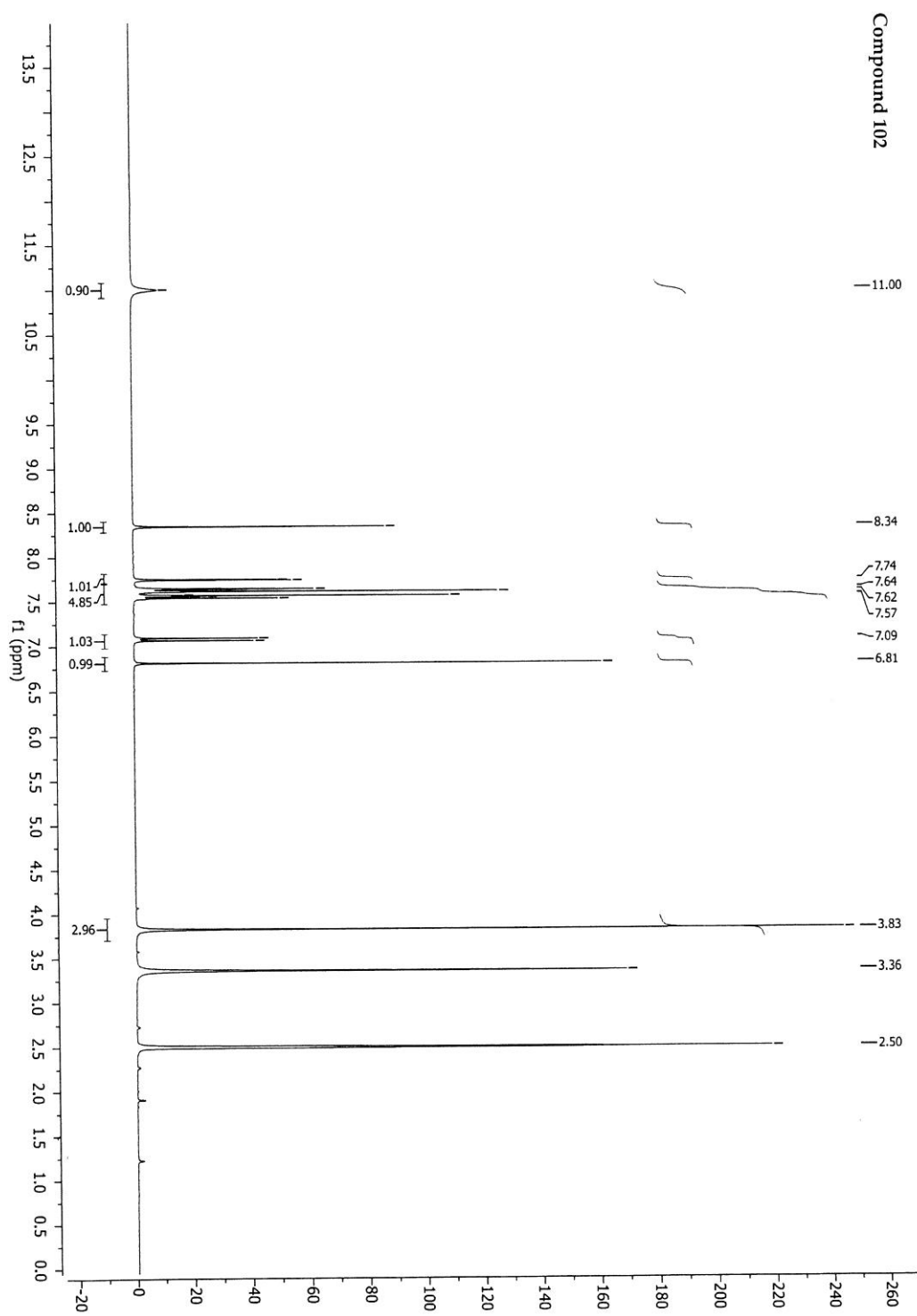


Fig. S111. ¹H NMR spectrum for compound 102

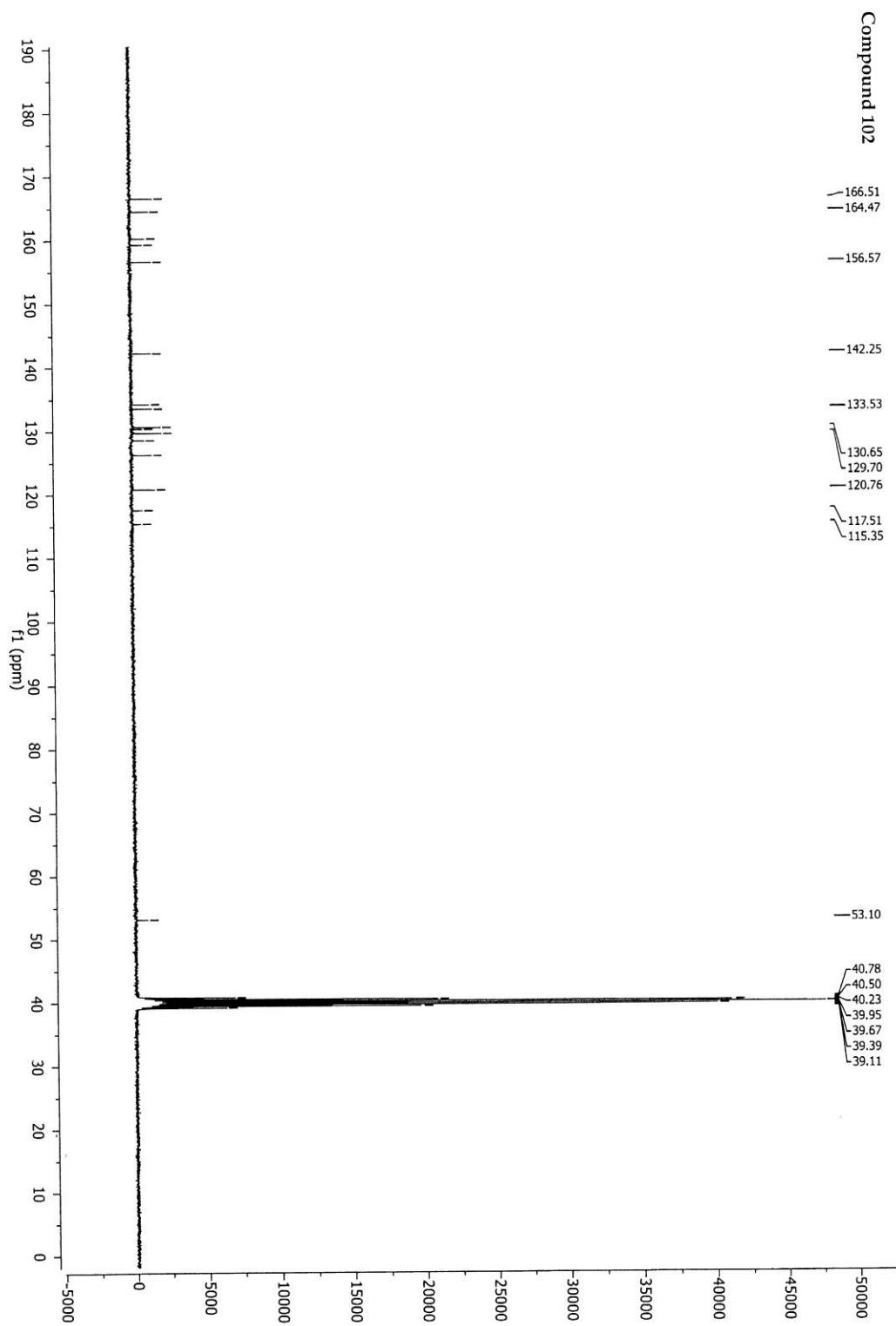


Fig. S112. ^{13}C NMR spectrum for compound 102

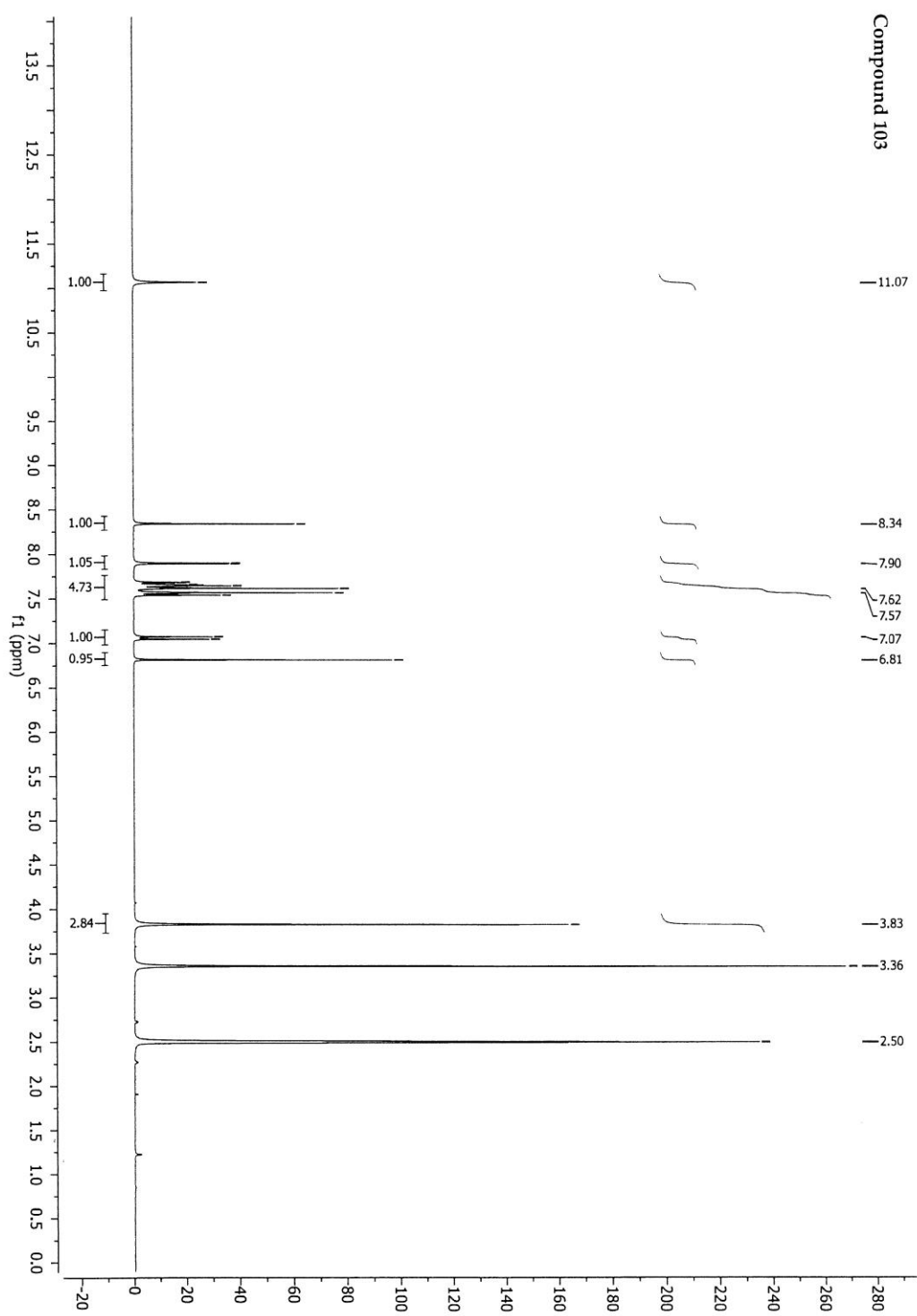


Fig. S113. ^1H NMR spectrum for compound 103

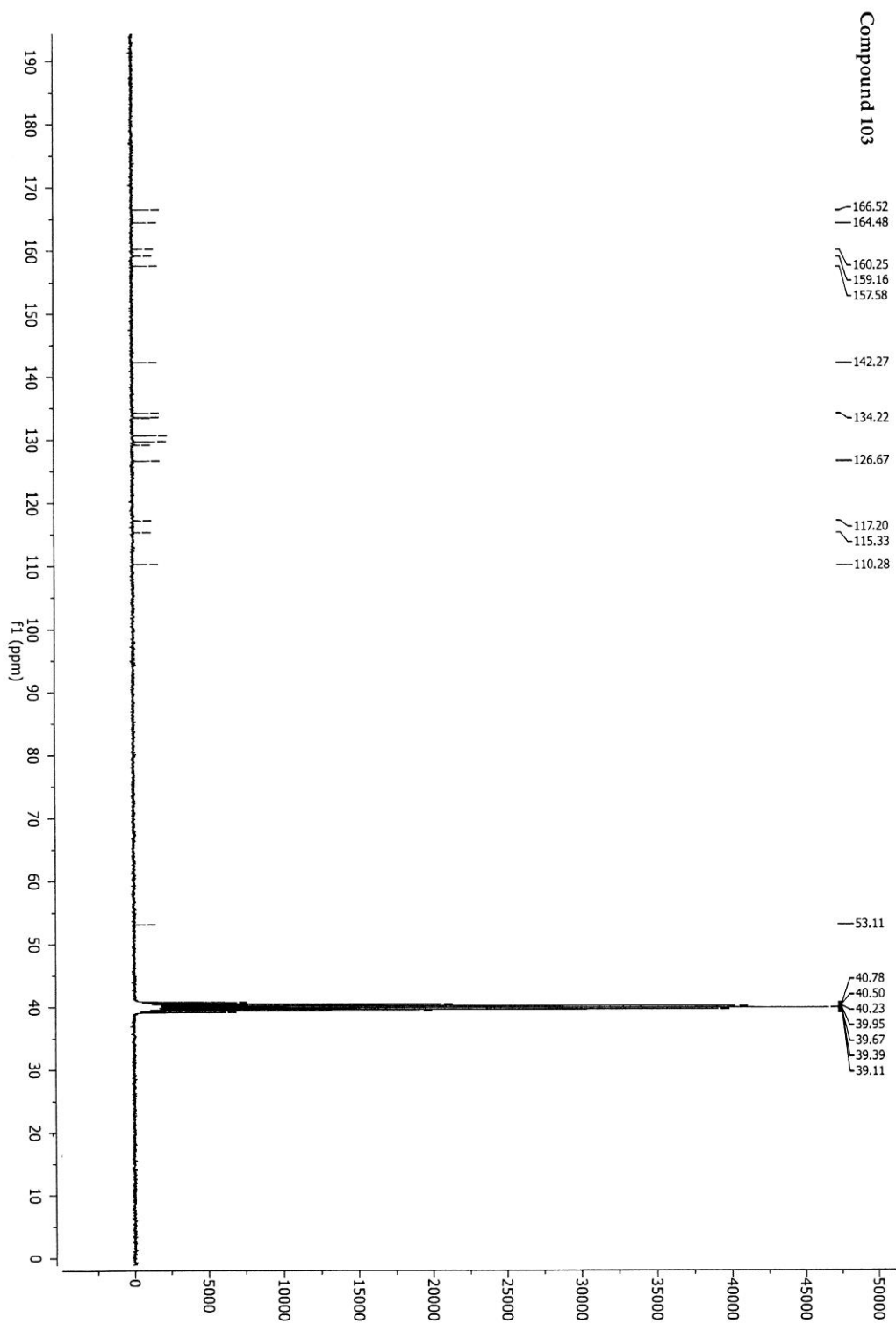


Fig. S114. ^{13}C NMR spectrum for compound 103

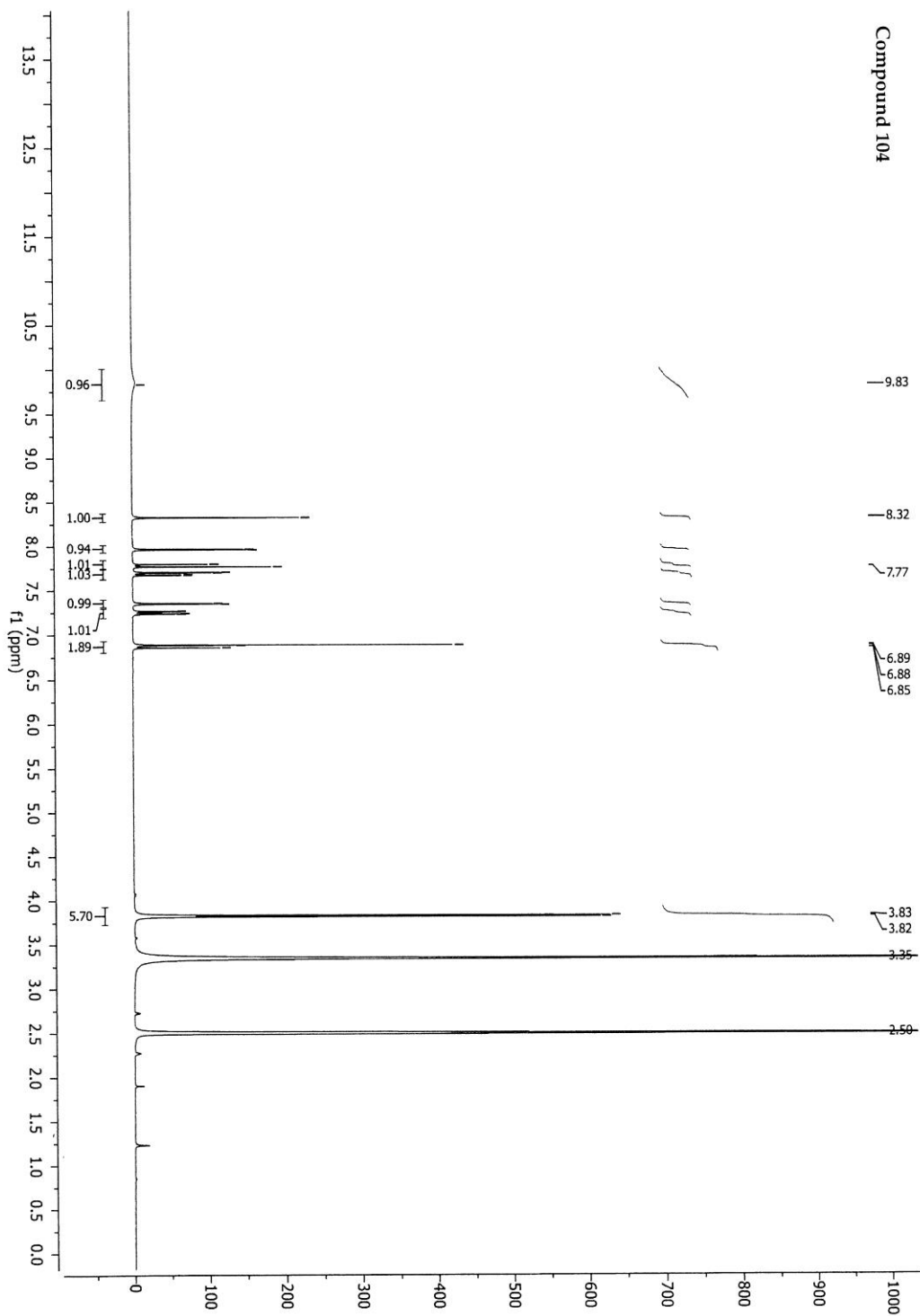


Fig. S115. ¹H NMR spectrum for compound 104

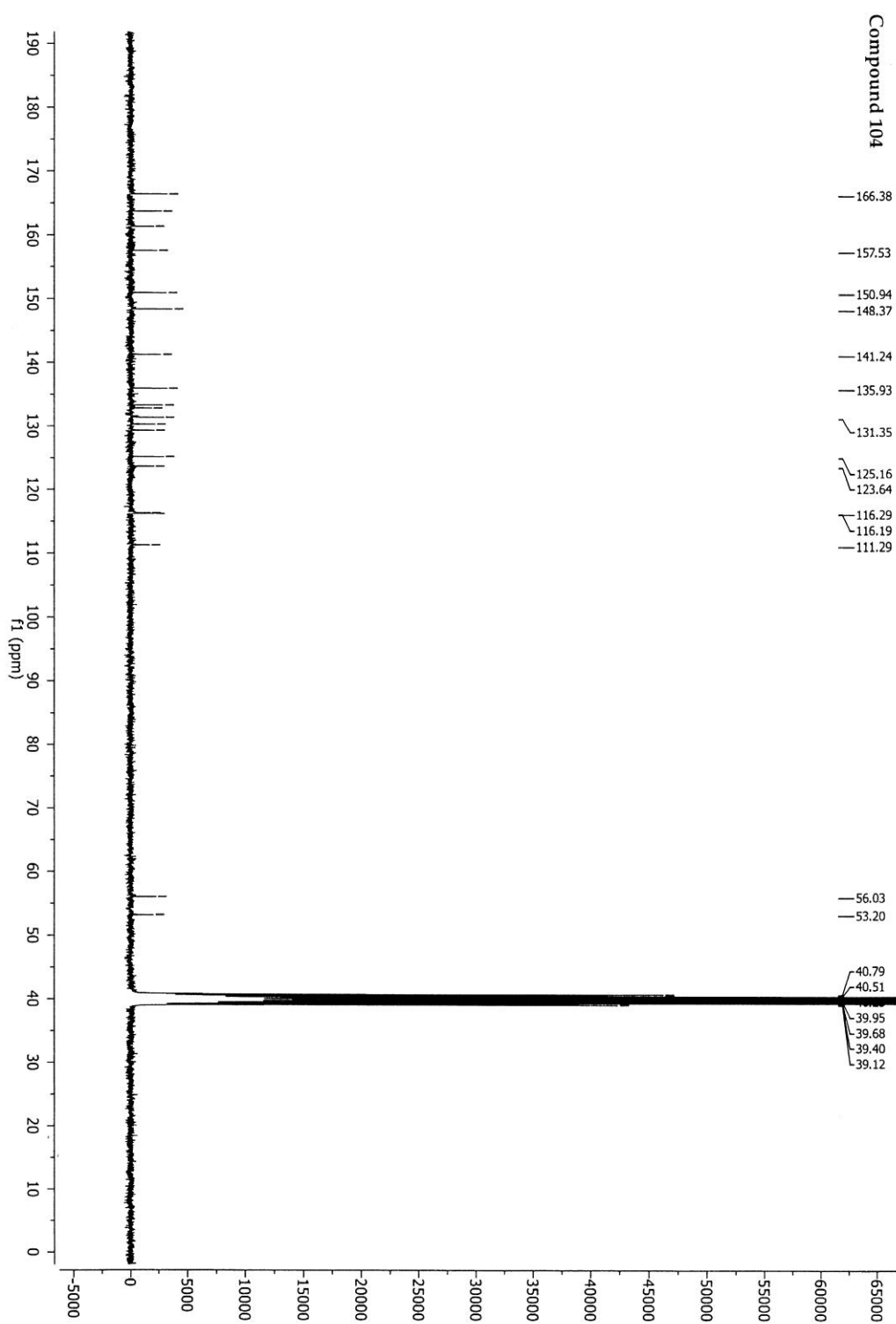


Fig. S116. ^{13}C NMR spectrum for compound 104