

Supporting Information
for DOI: 10.1055/s-0037-1611723
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SUPPORTING INFORMATION

for

Synthesis of 1-Azaspiro[4.5]deca-1,3-dienes from *N*-Propargylic β -Enaminones in Basic Medium

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Copies of ^1H and ^{13}C NMR spectra

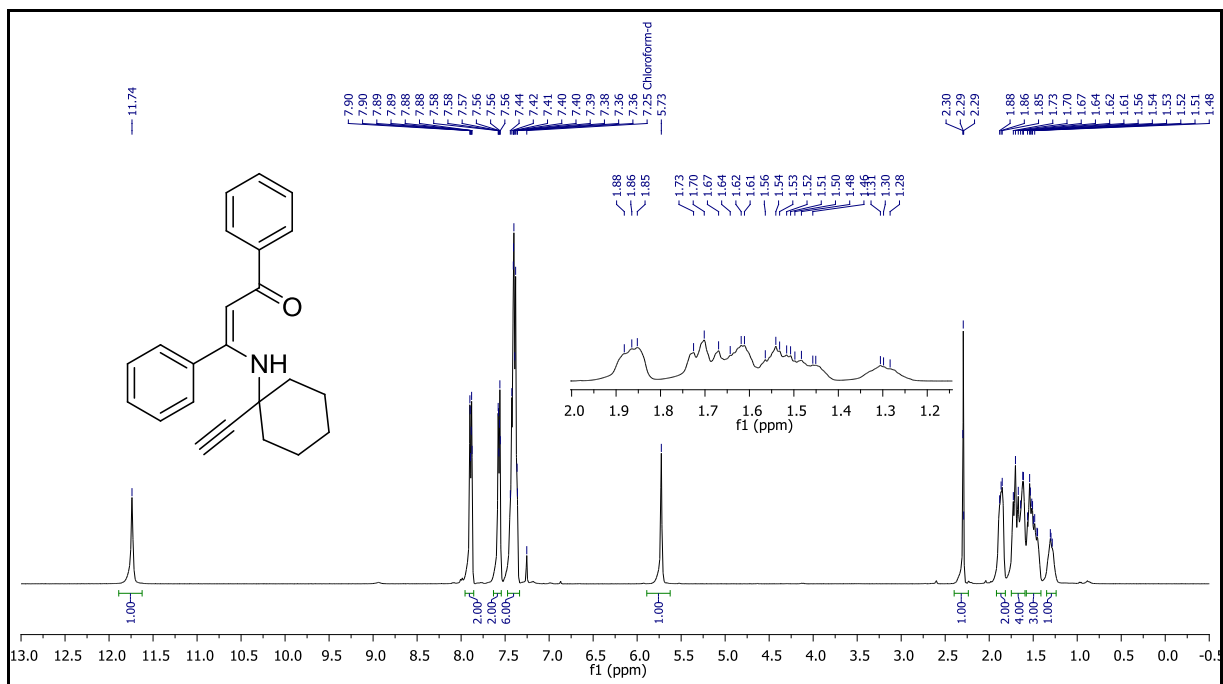


Figure S1. ^1H NMR spectrum of compound **1a**.

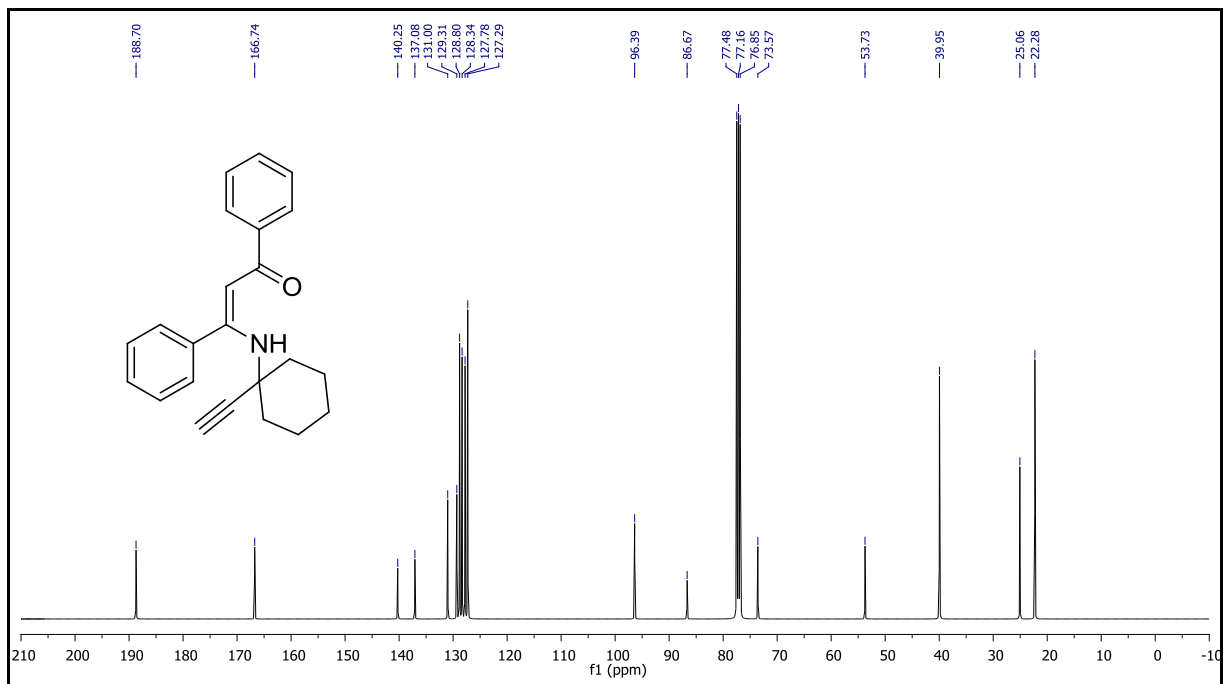


Figure S2. ^{13}C NMR spectrum of compound **1a**.

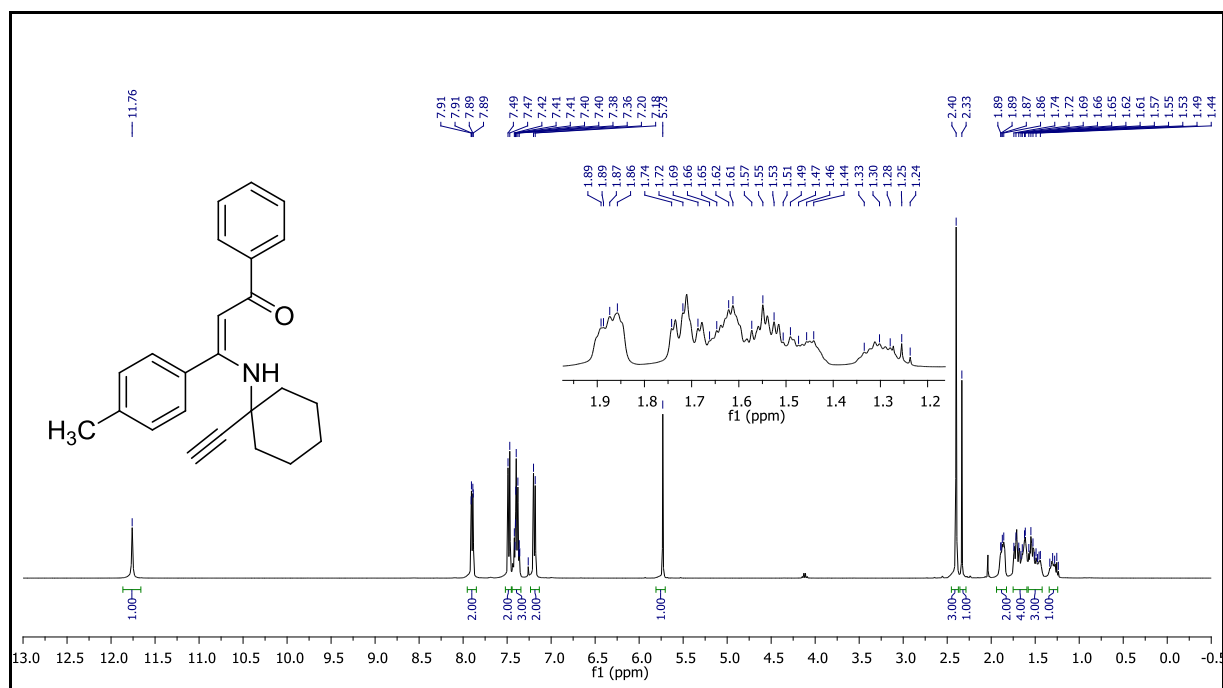


Figure S3. ^1H NMR spectrum of compound **1b**.

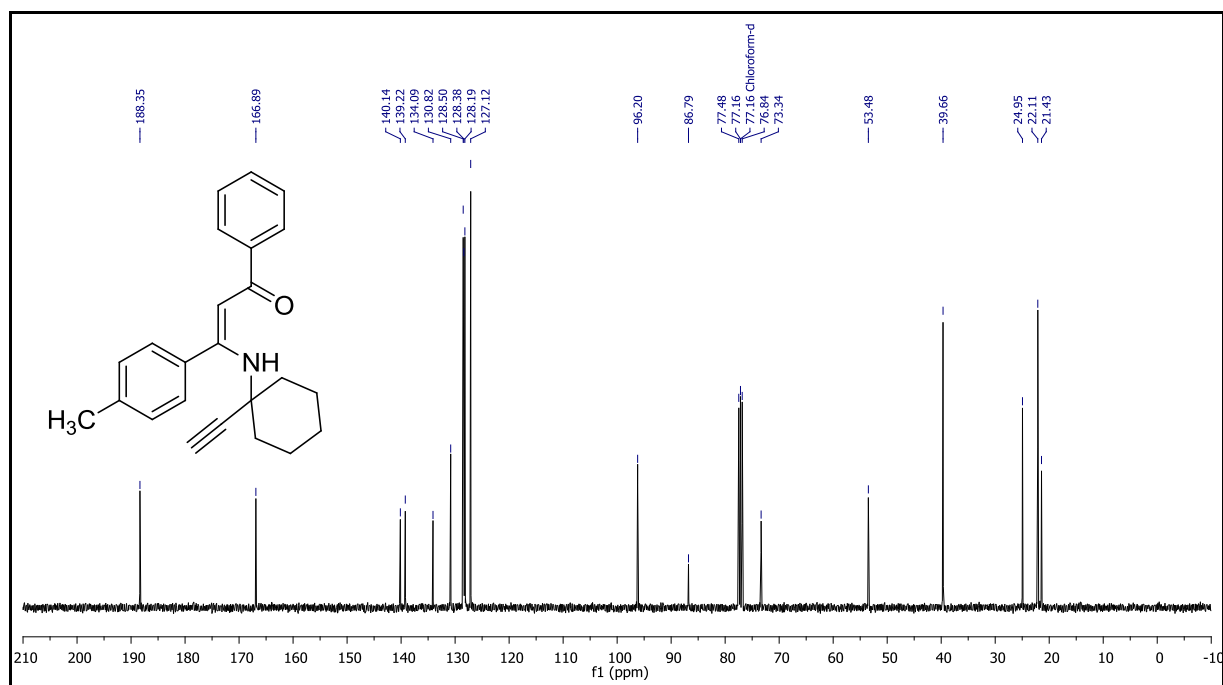


Figure S4. ^{13}C NMR spectrum of compound **1b**.

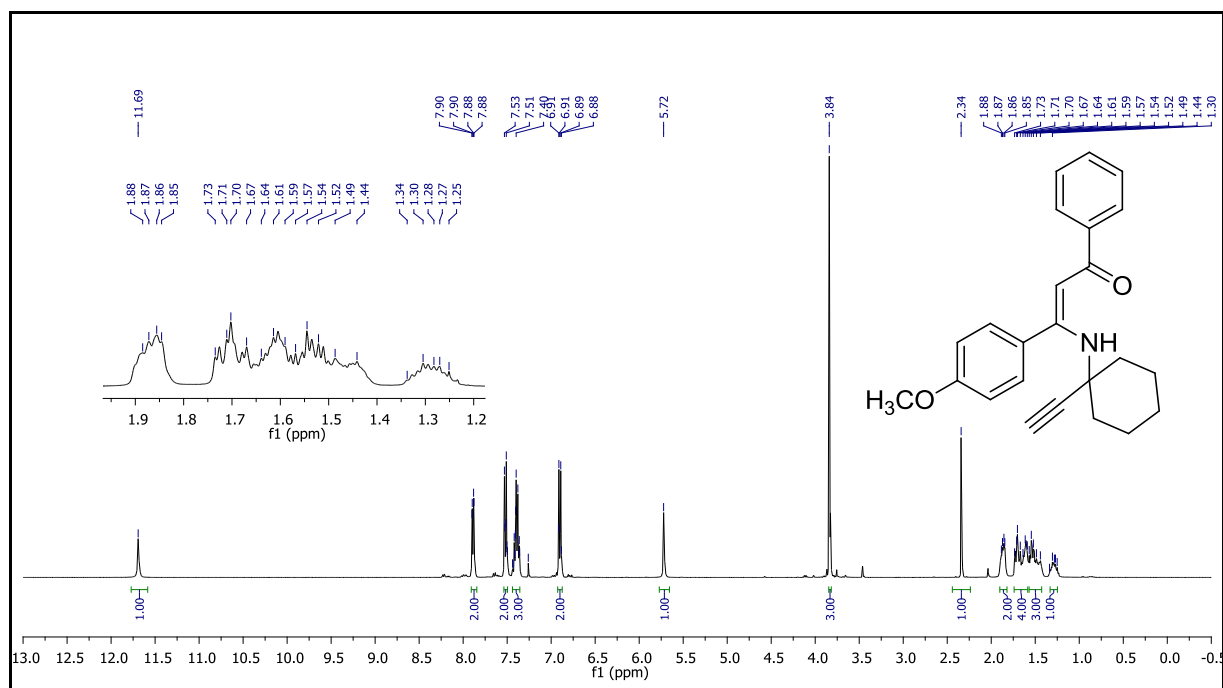


Figure S5. ¹H NMR spectrum of compound **1c**.

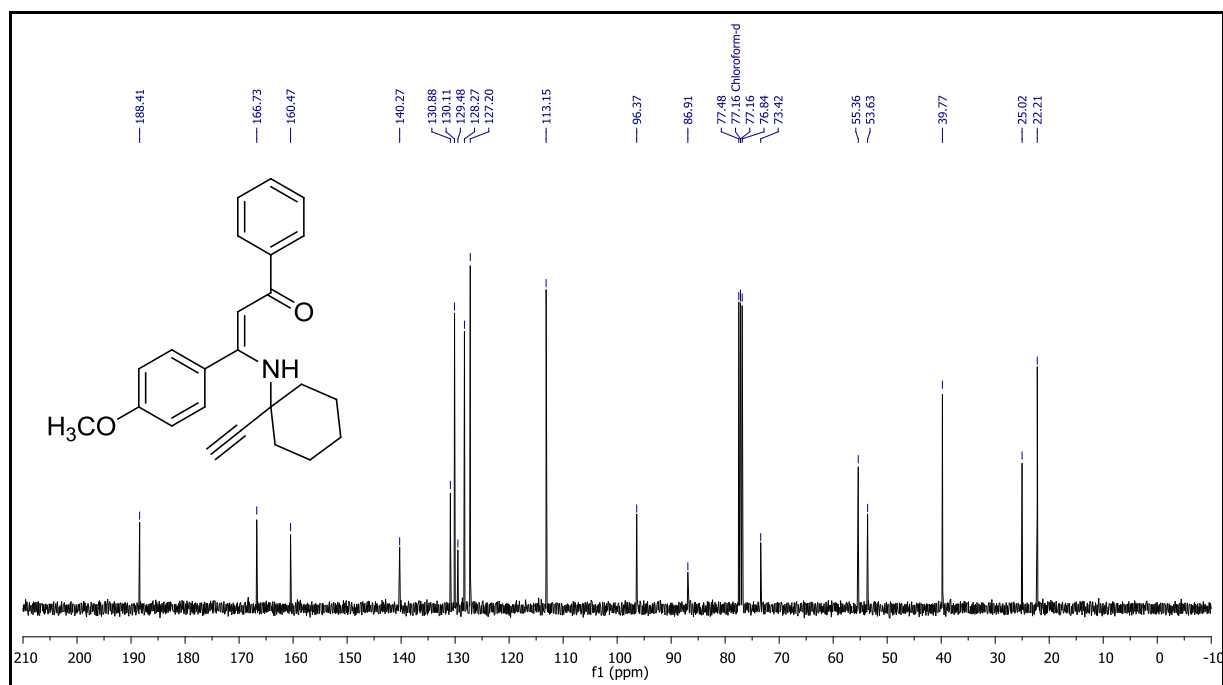


Figure S6. ¹³C NMR of compound **1c**.

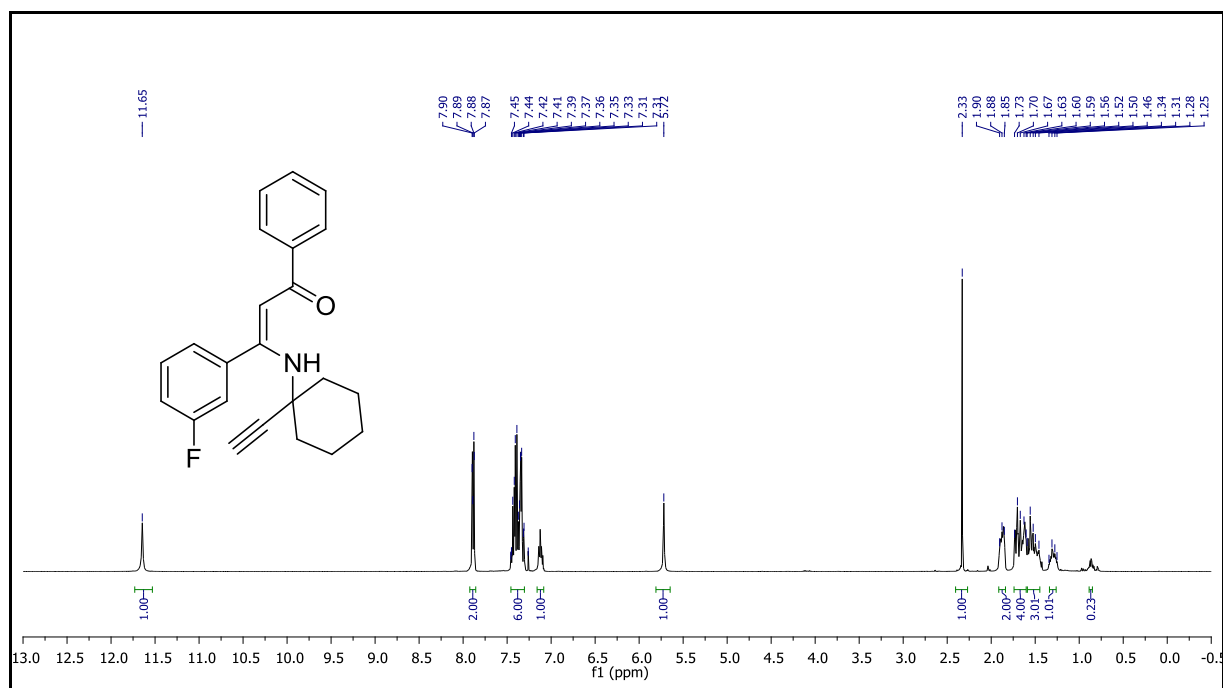


Figure S7. ^1H NMR spectrum of compound **1d**.

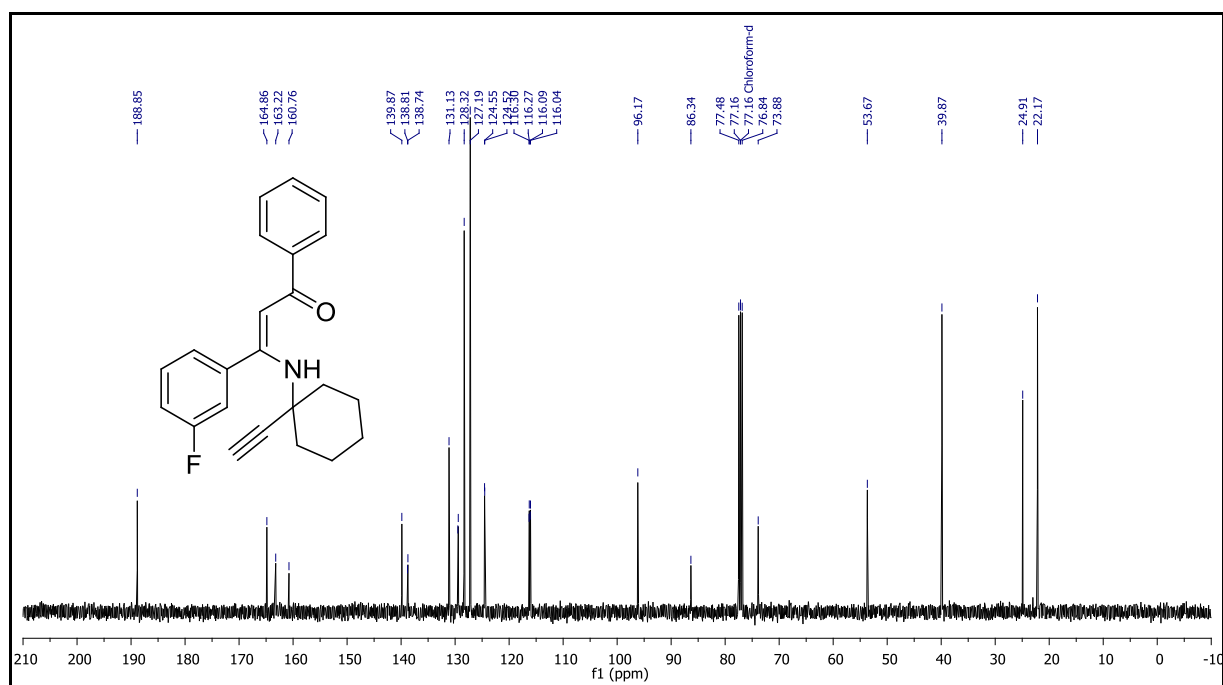


Figure S8. ^{13}C NMR spectrum of compound **1d**.

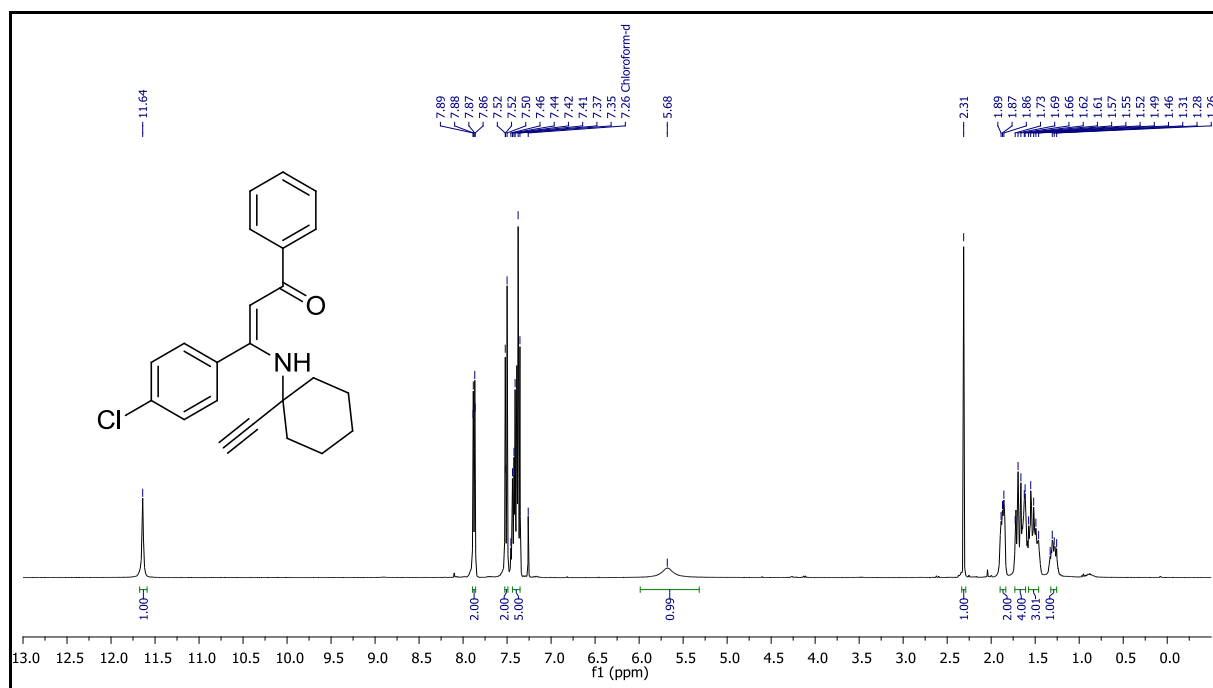


Figure S9. ^1H NMR spectrum of compound **1e**.

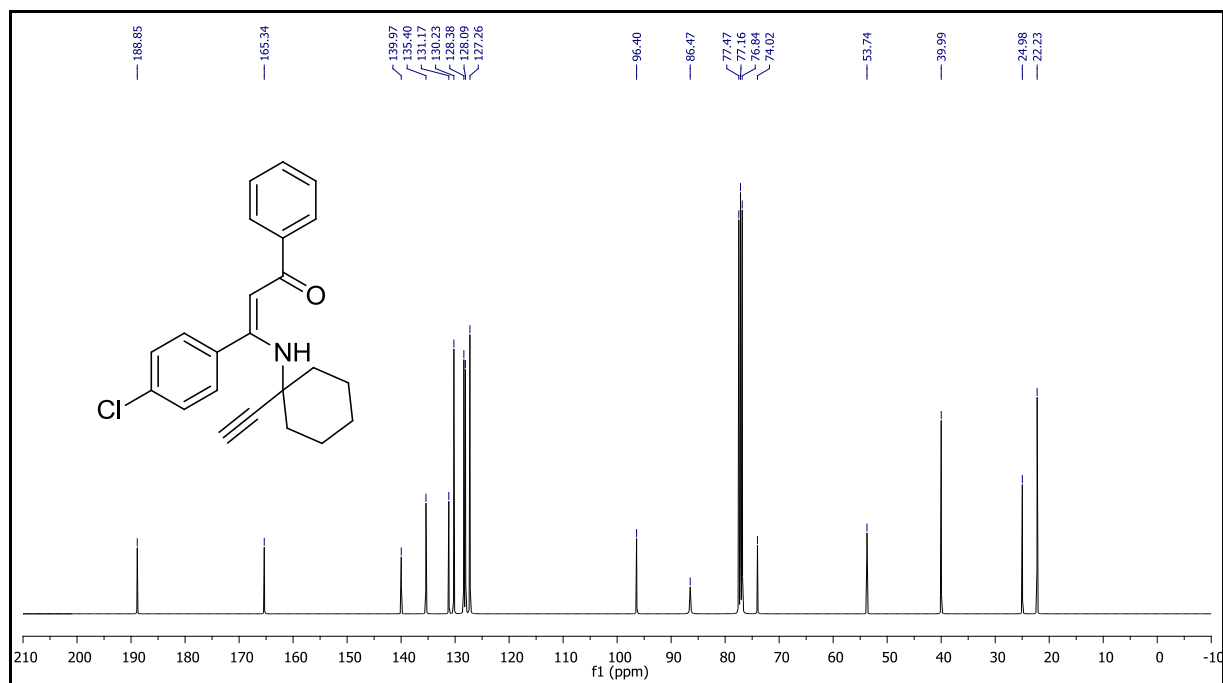


Figure S10. ^{13}C NMR spectrum of compound **1e**.

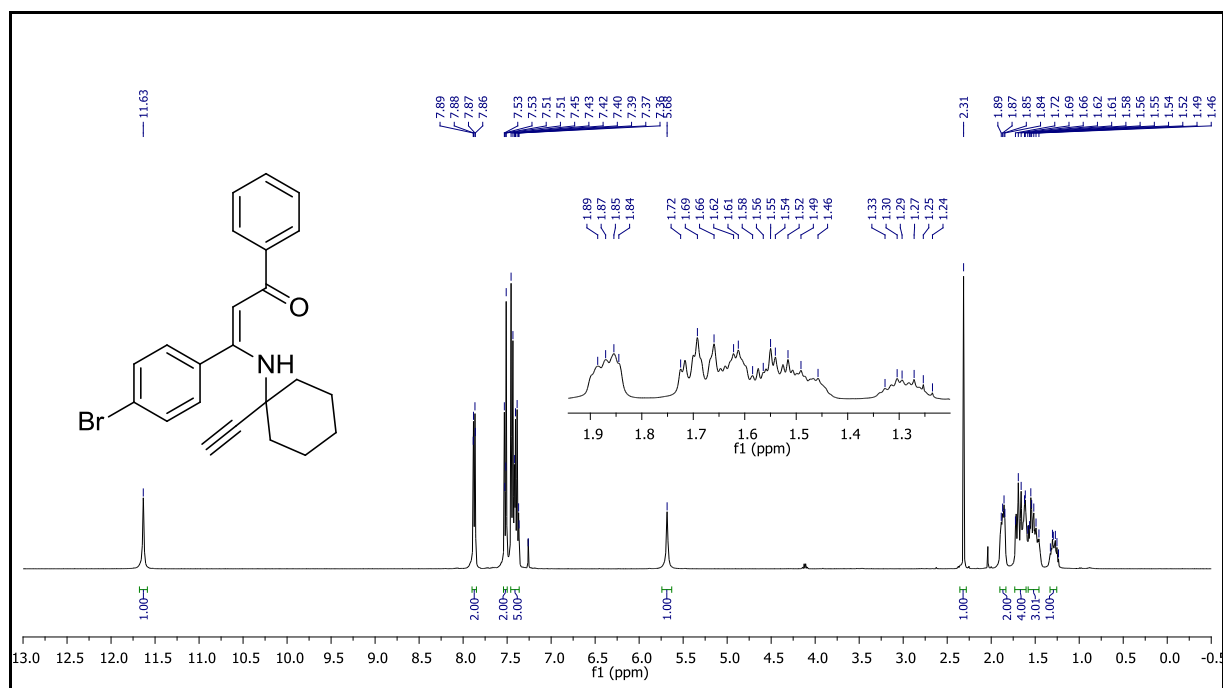


Figure S11. ^1H NMR spectrum of compound **1f**.

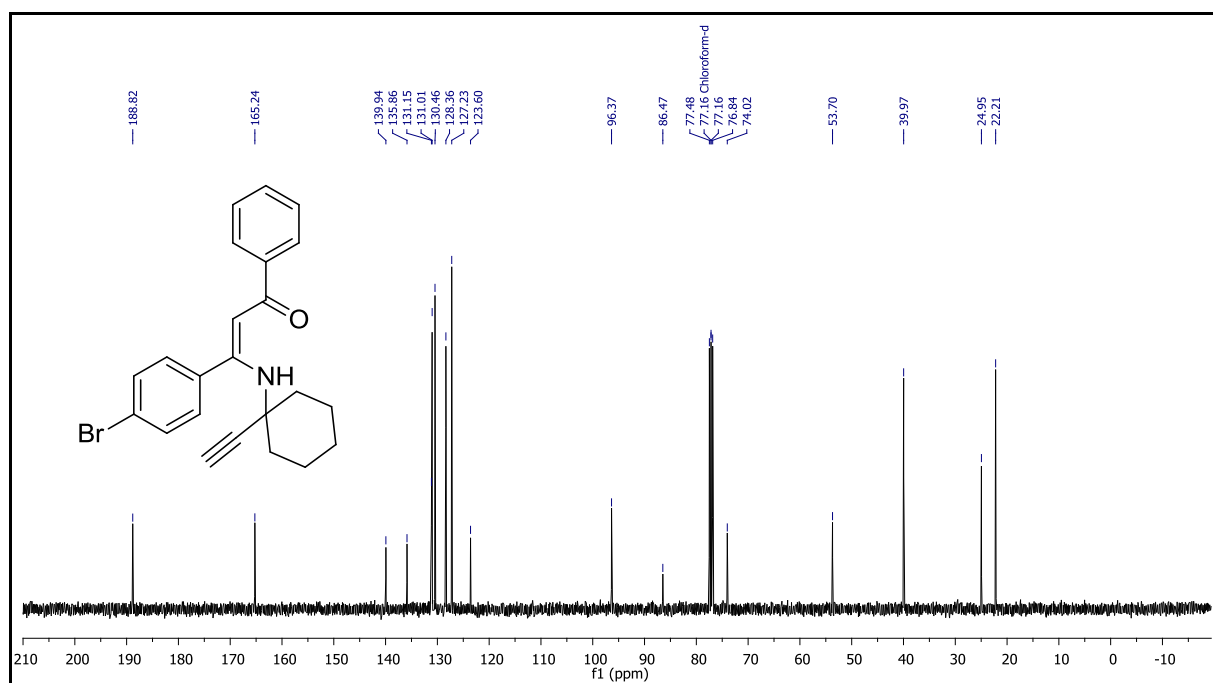


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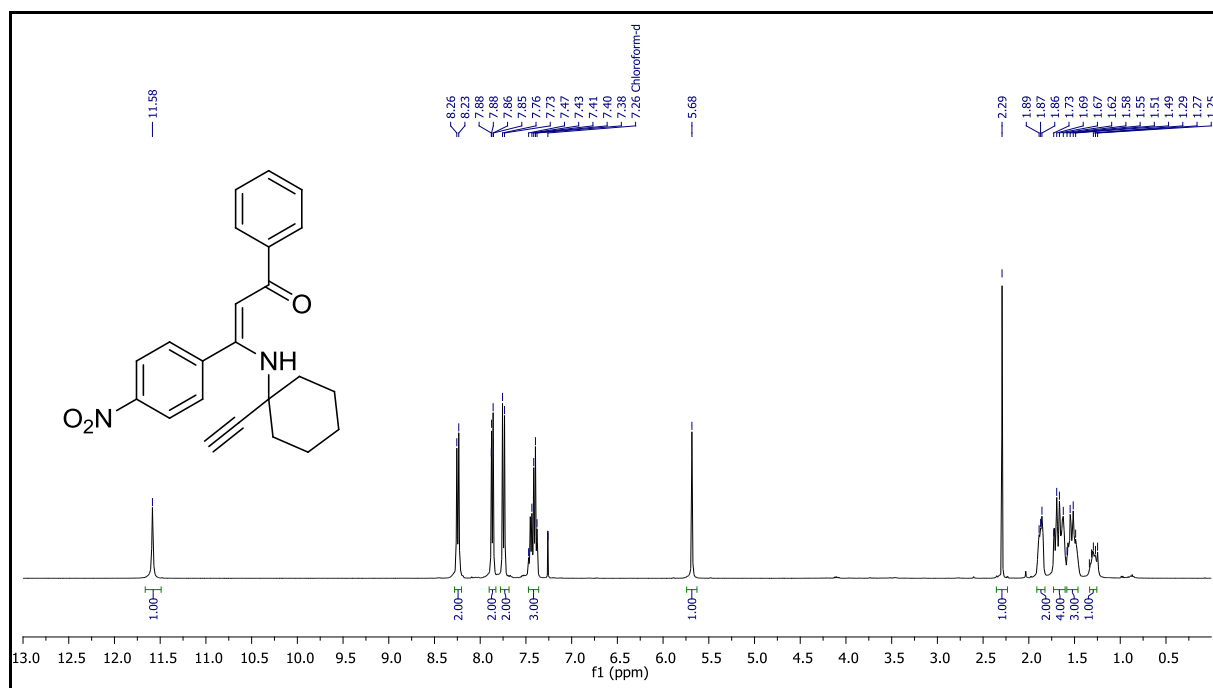


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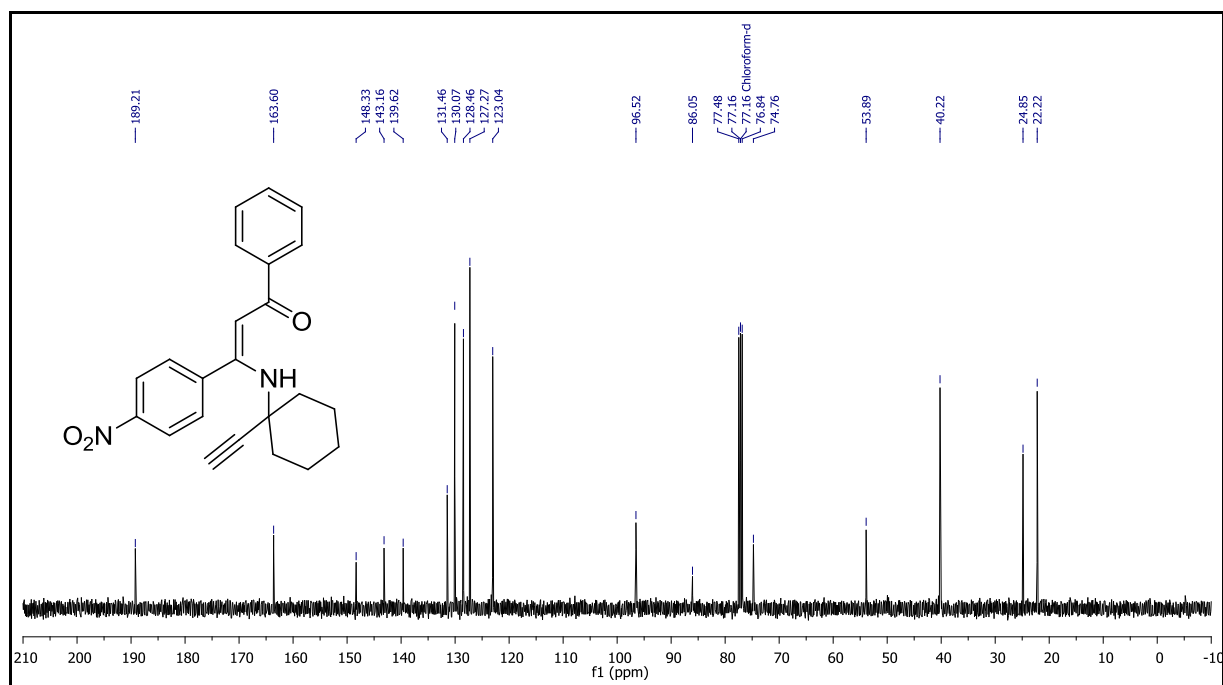


Figure S14. ¹³C NMR spectrum of compound **1g.**

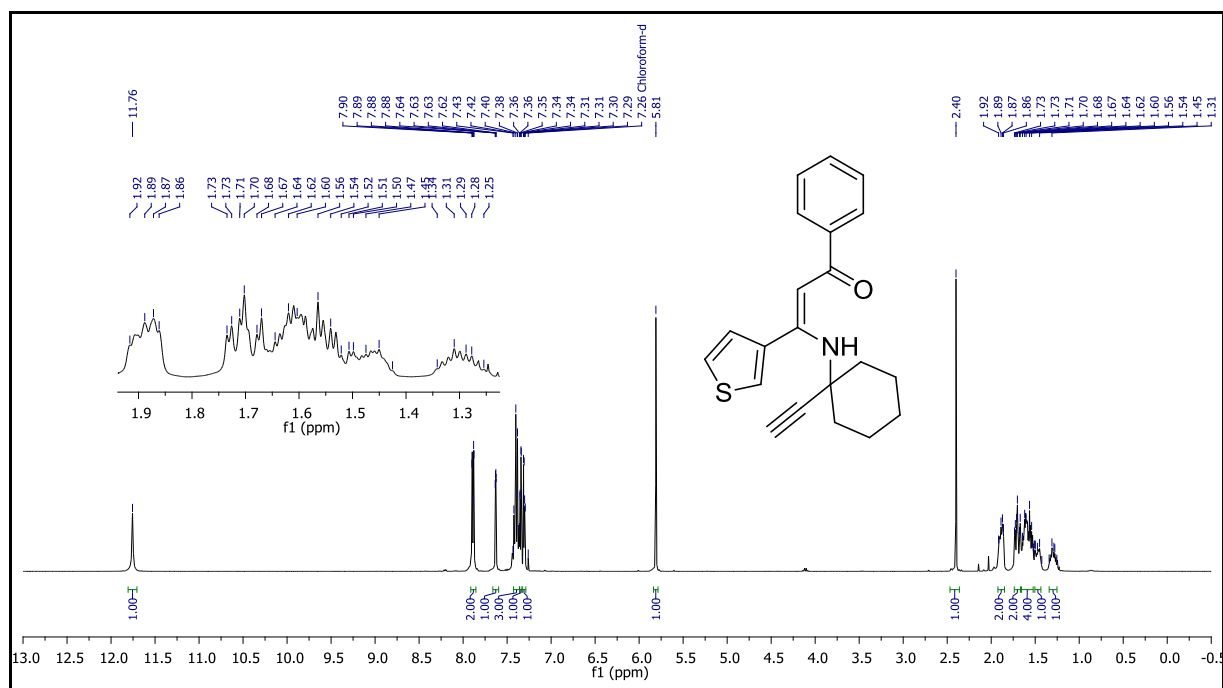


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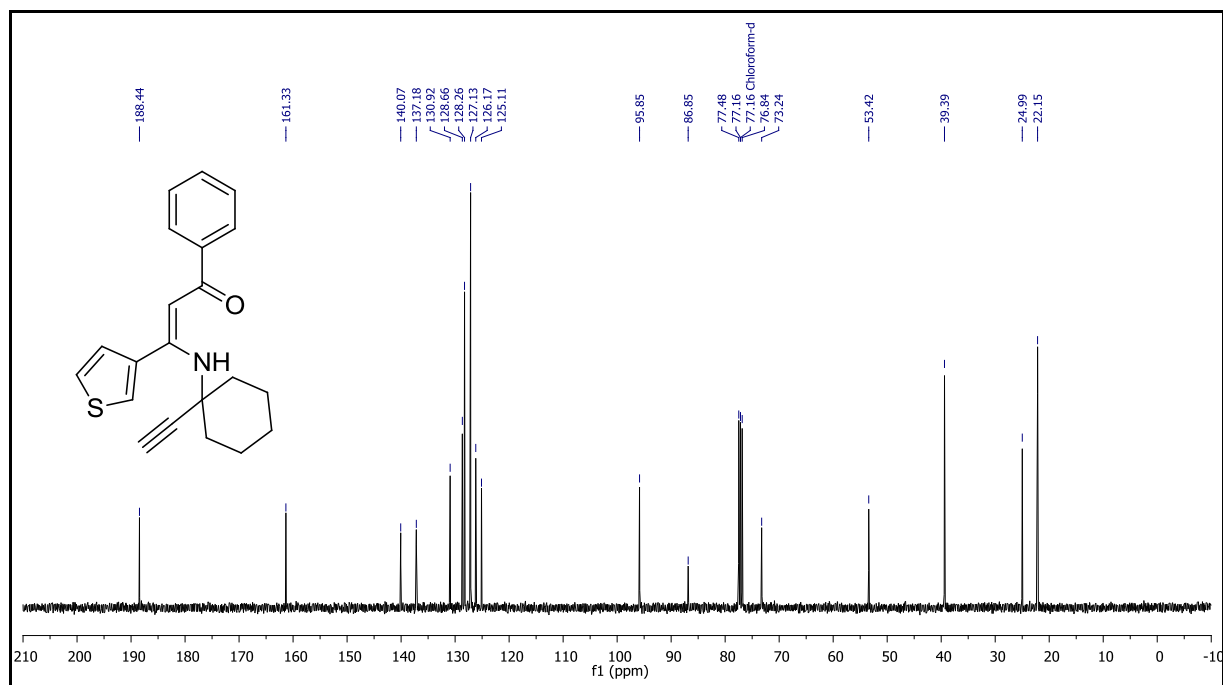


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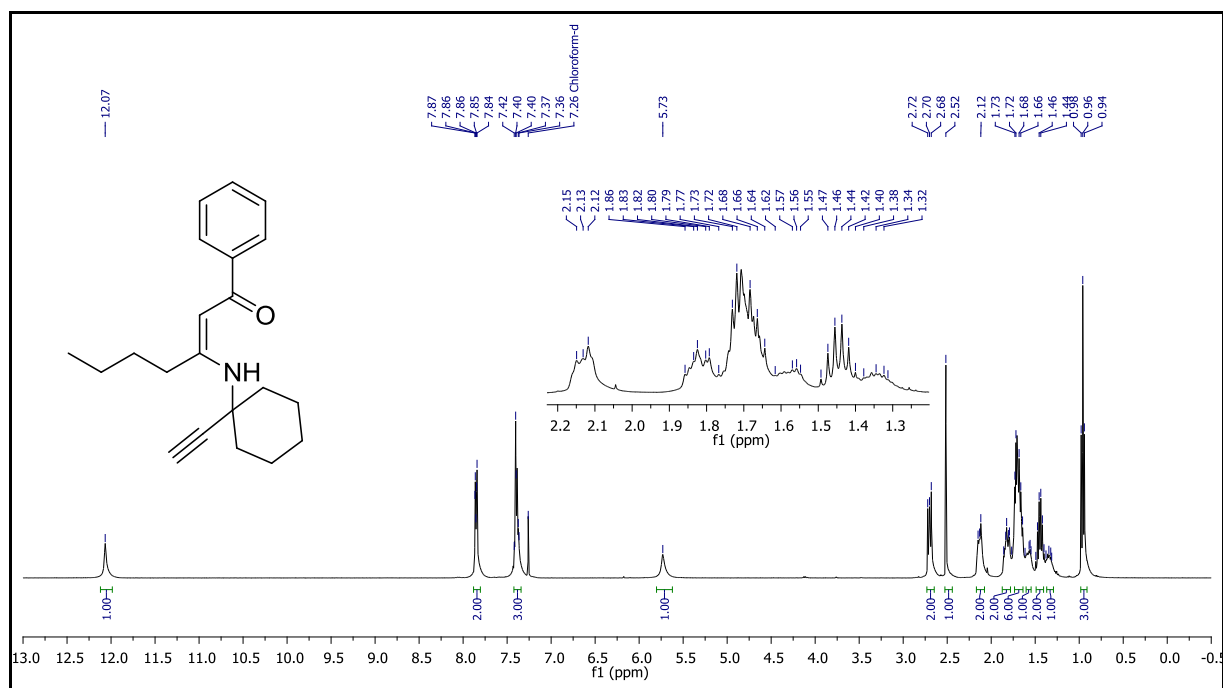


Figure S17. ^1H NMR spectrum of compound **1i**.

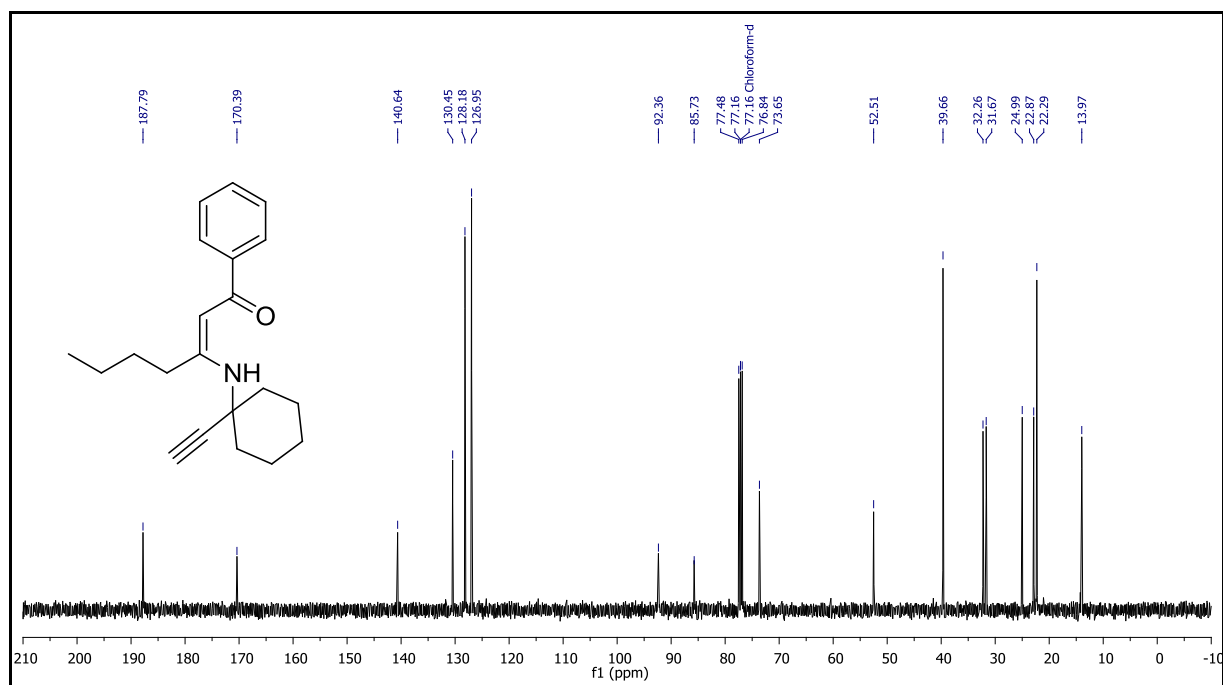


Figure S18. ^{13}C NMR spectrum of compound **1i**.

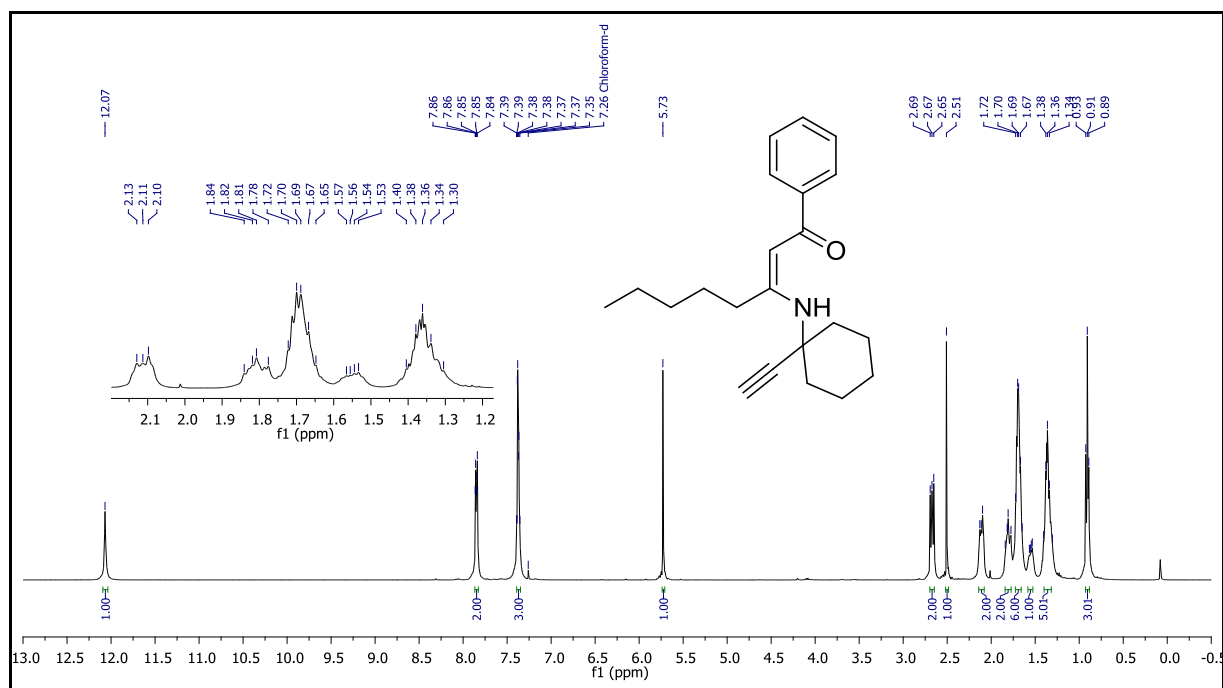


Figure S19. ¹H NMR spectrum of compound **1j**.

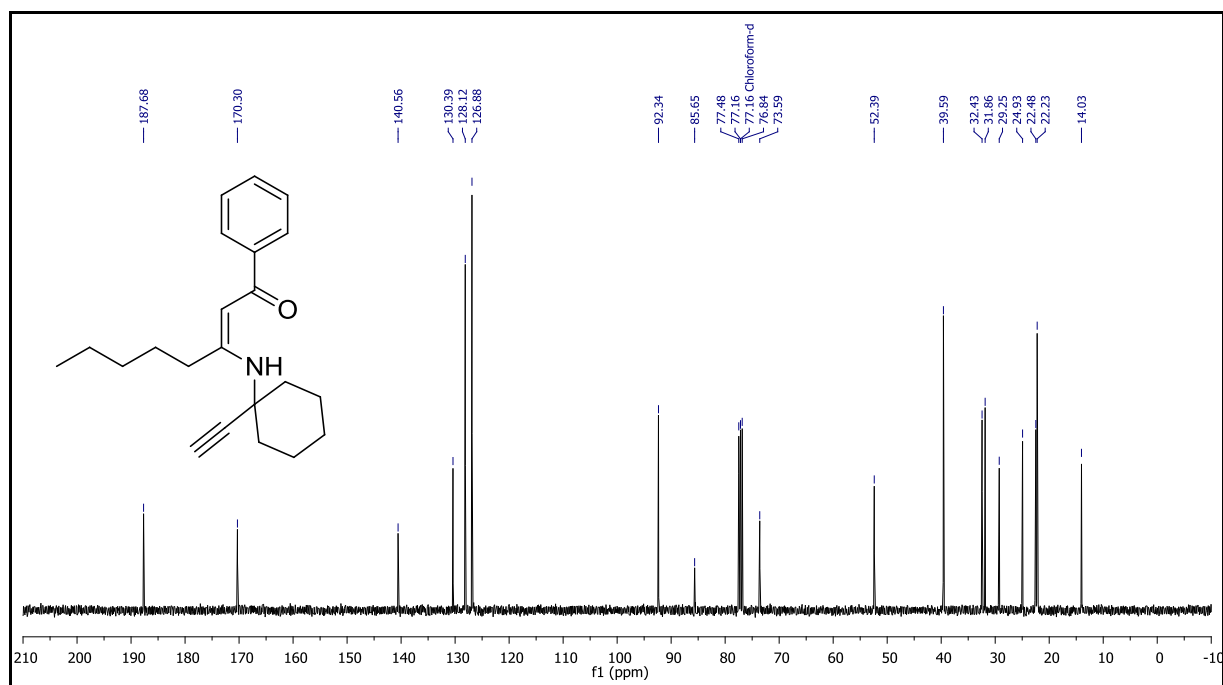


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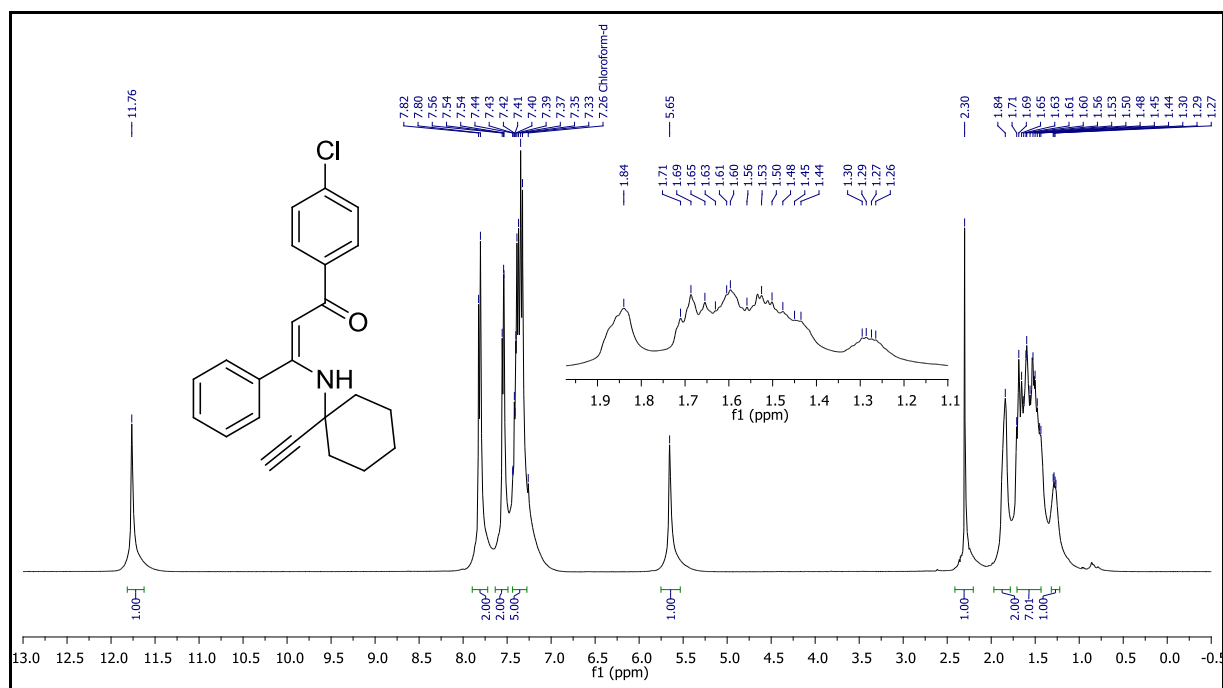


Figure S21. ¹H NMR spectrum of compound **1k**.

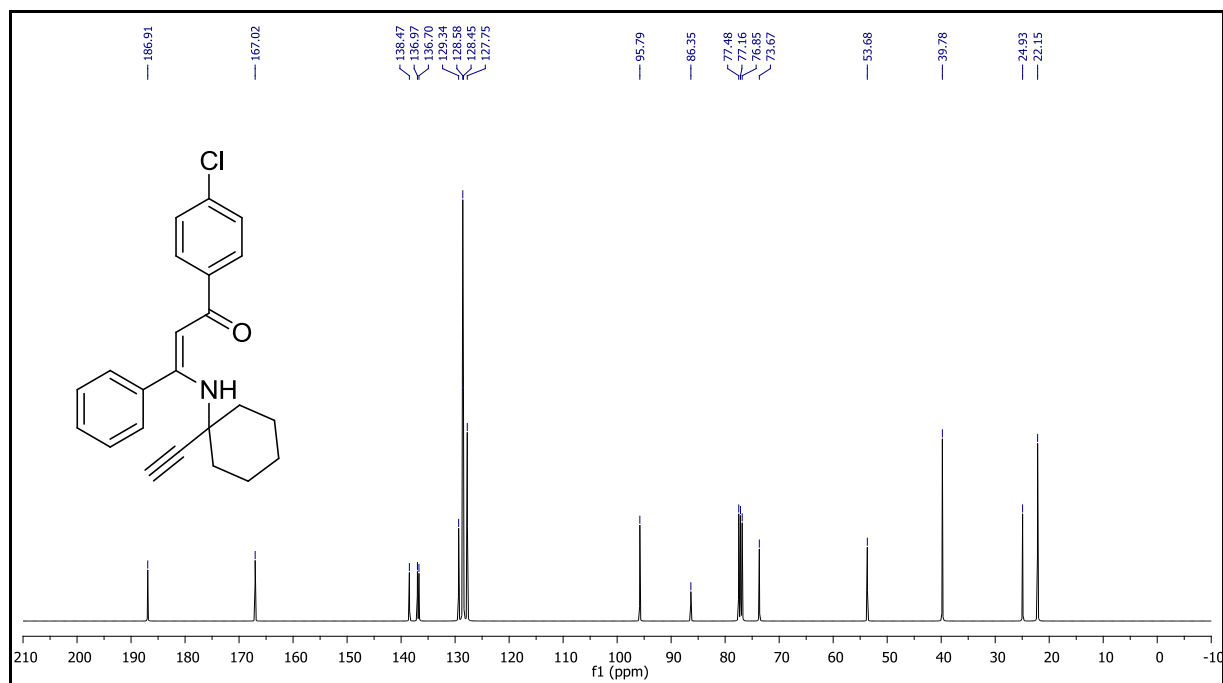


Figure S22. ¹³C NMR spectrum of compound **1k**.

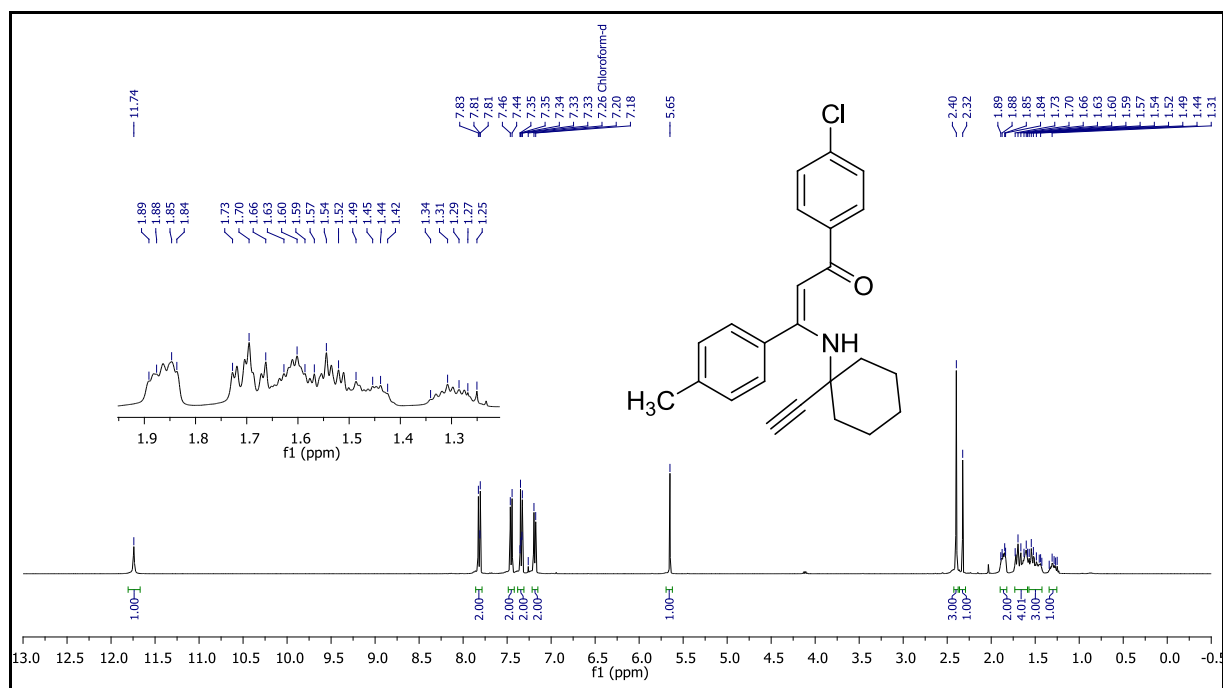


Figure S23. ¹H NMR spectrum of compound 1I.

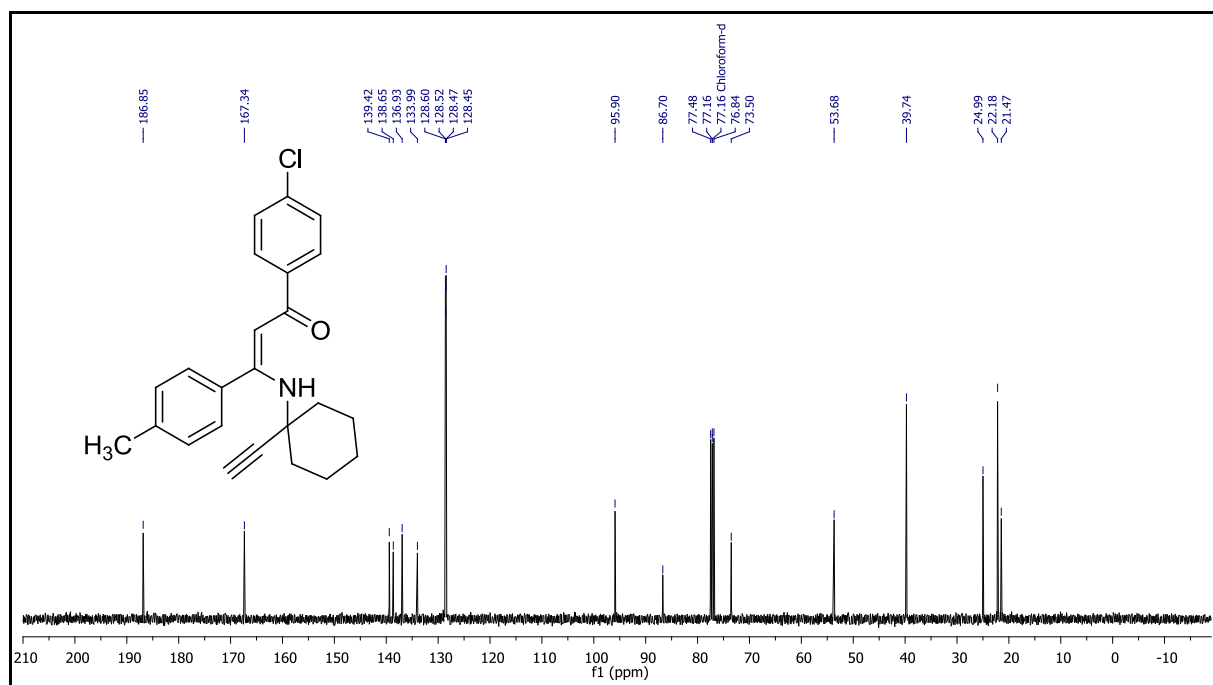


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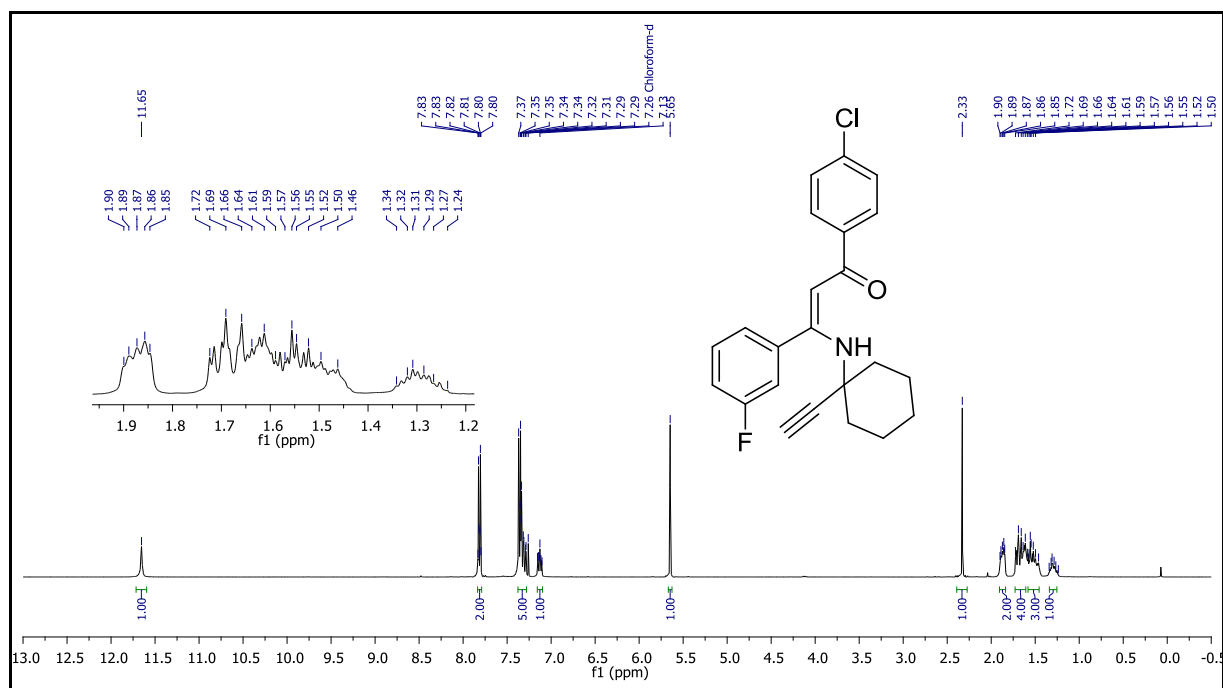


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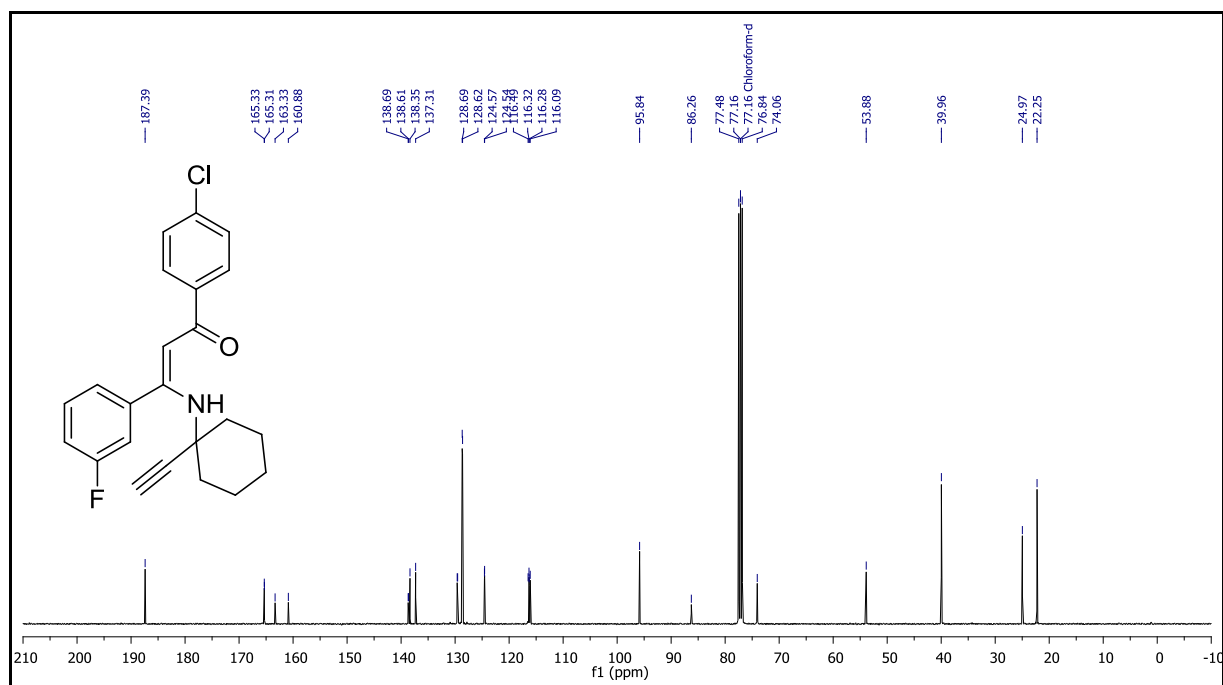
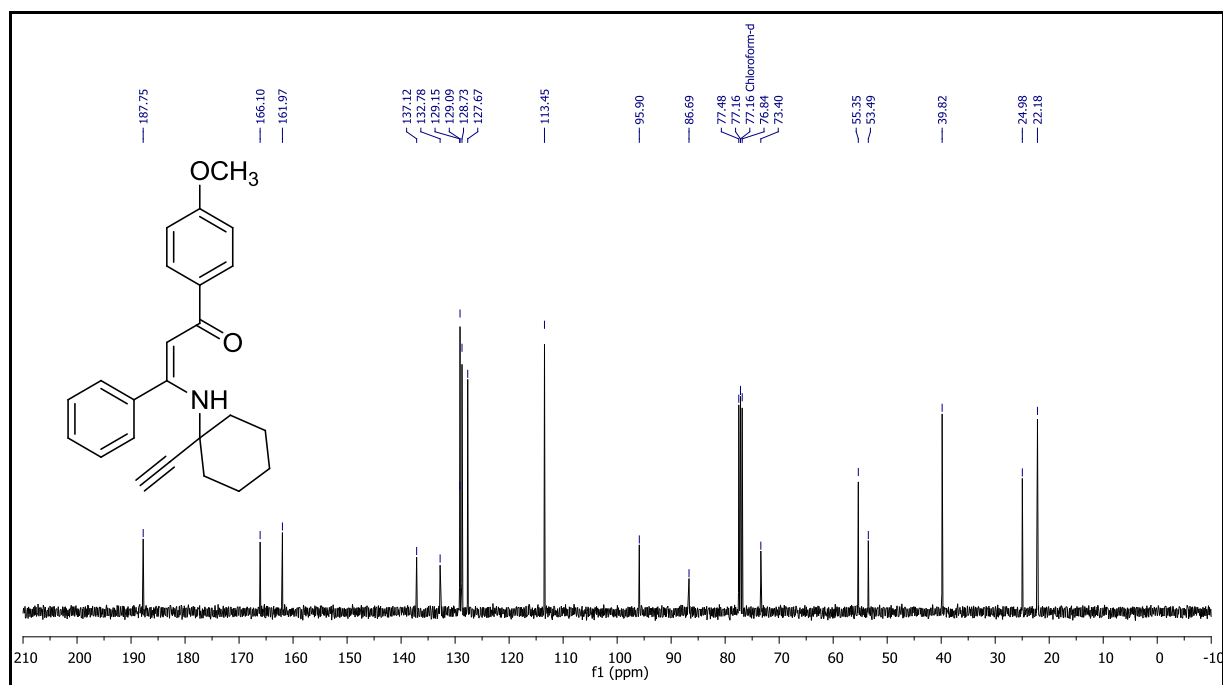
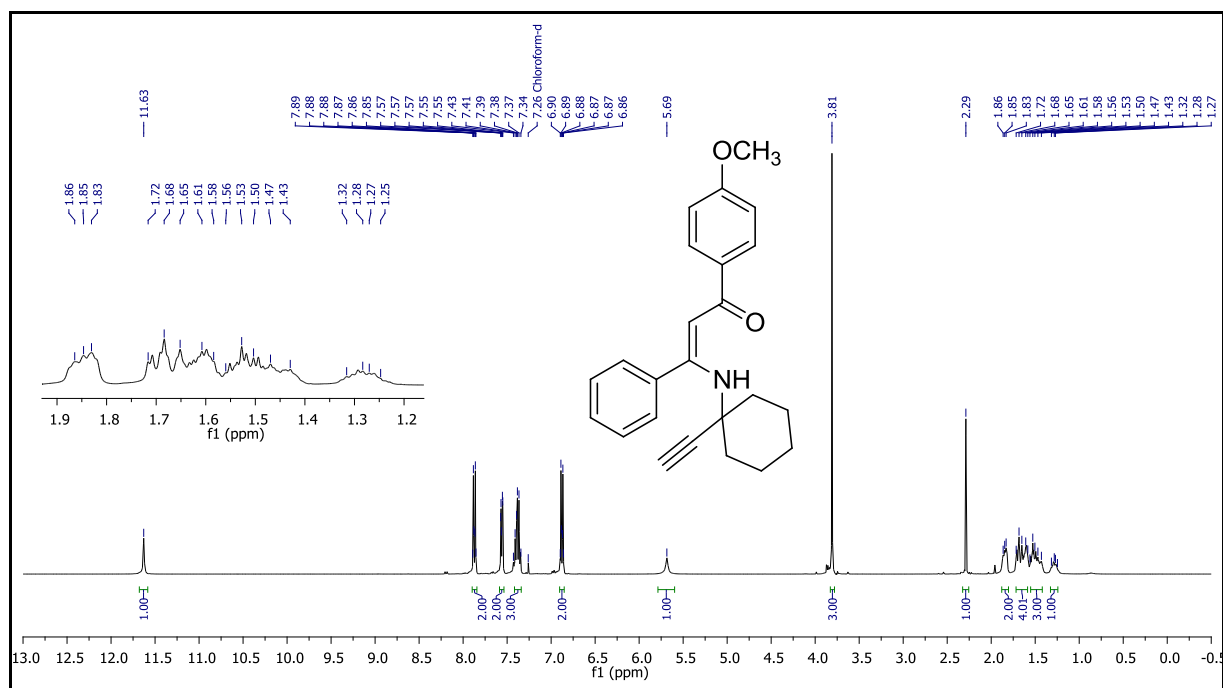


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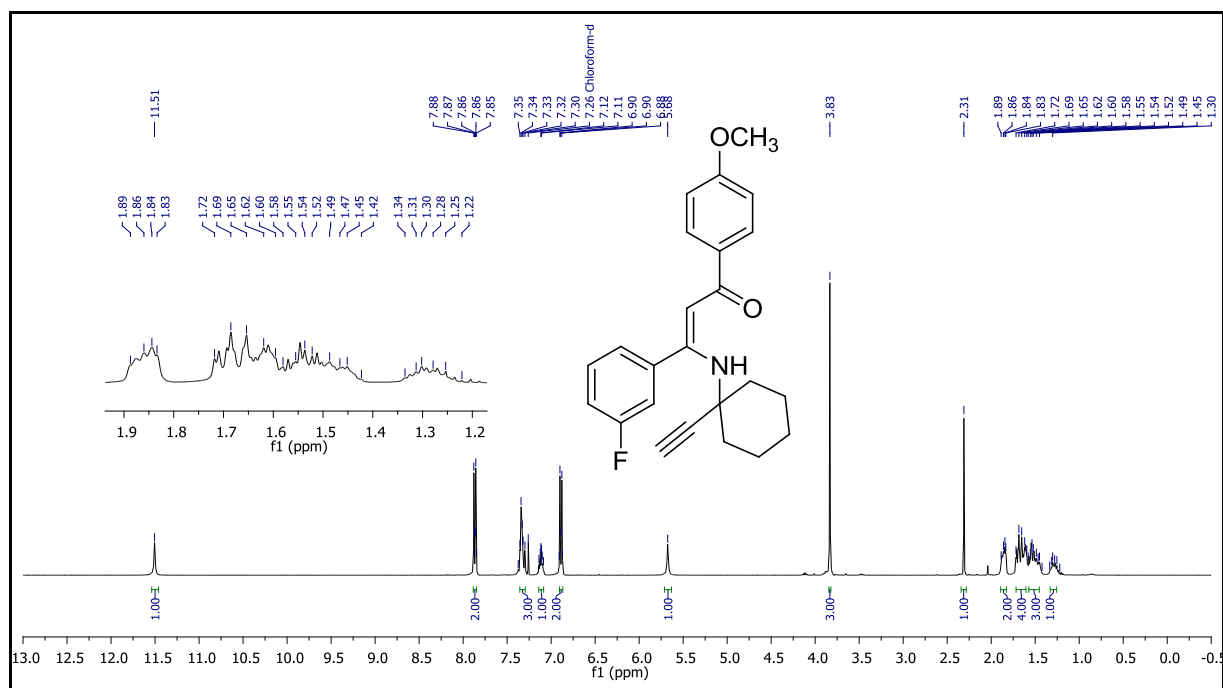


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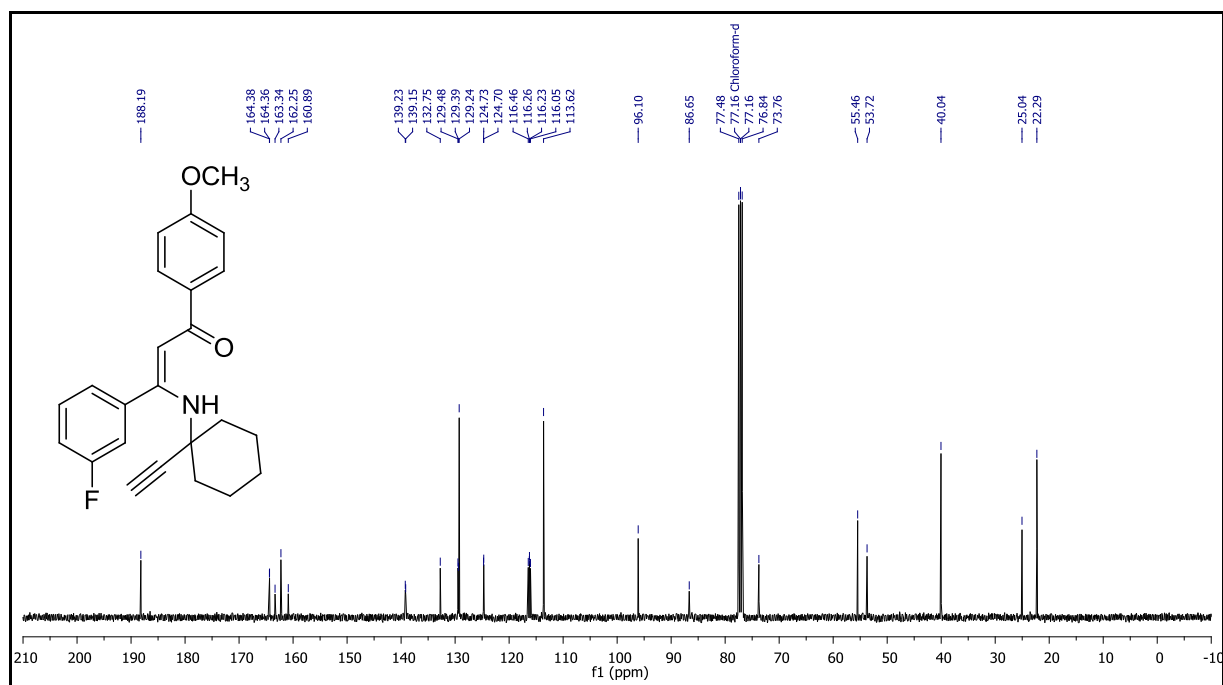


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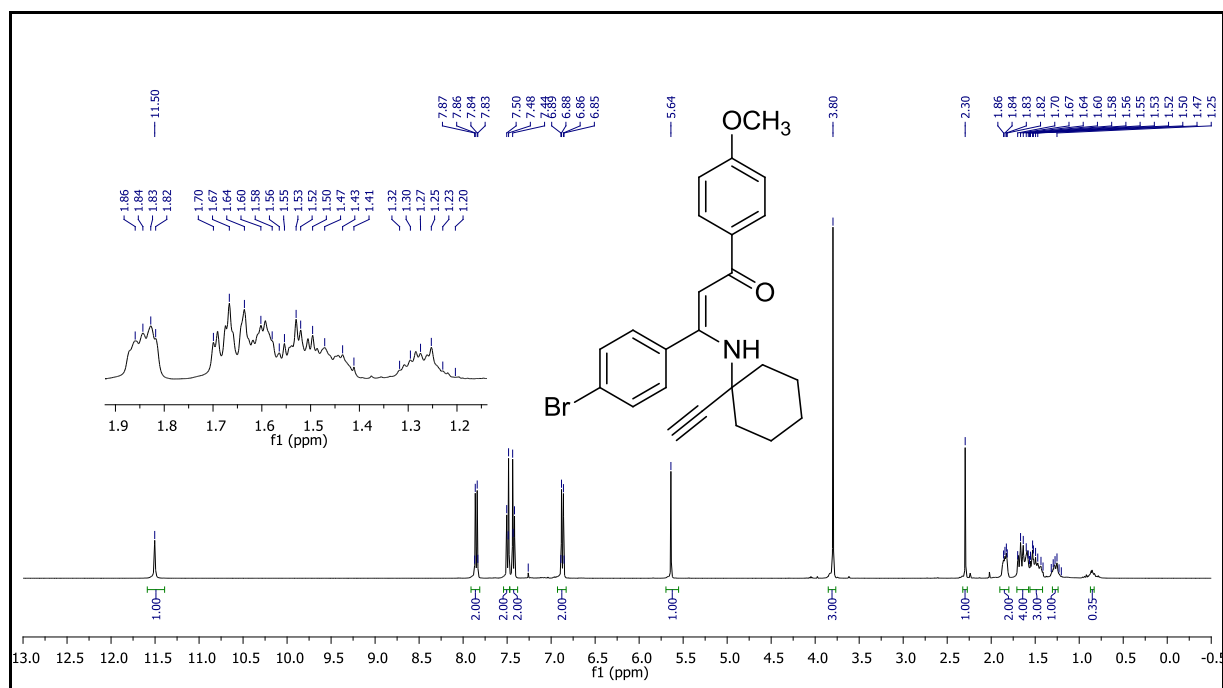


Figure S31. ¹H NMR spectrum of compound 1p.

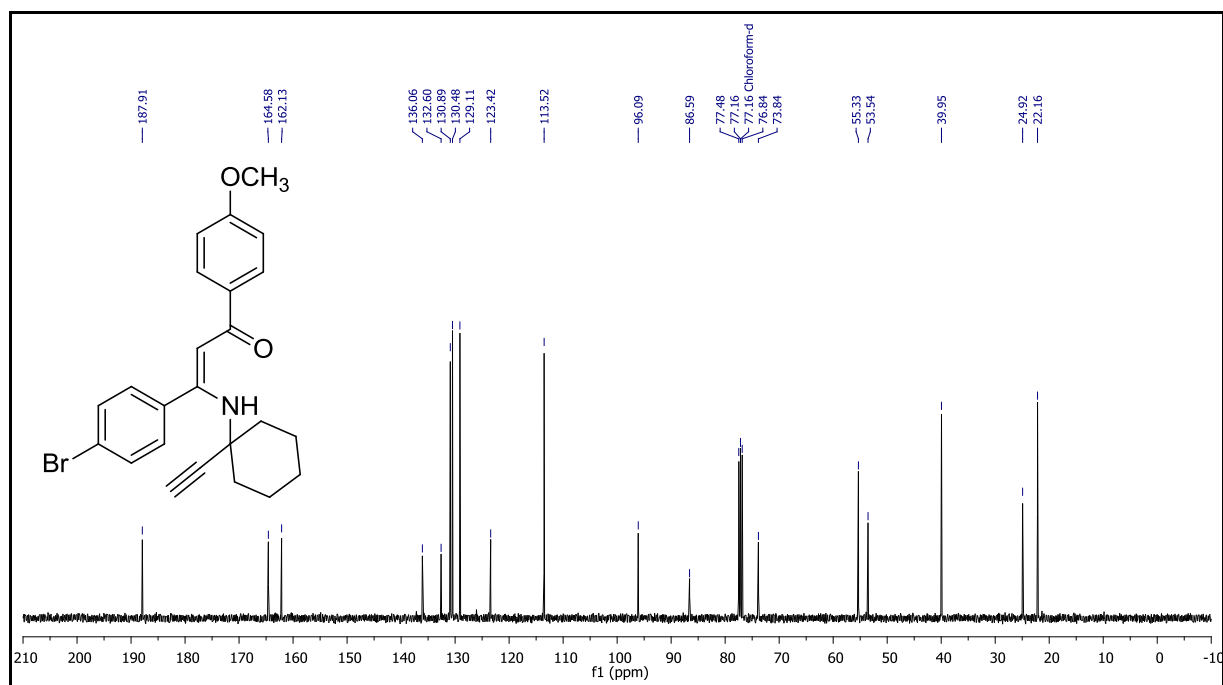


Figure S32. ¹³C NMR spectrum of compound 1p.

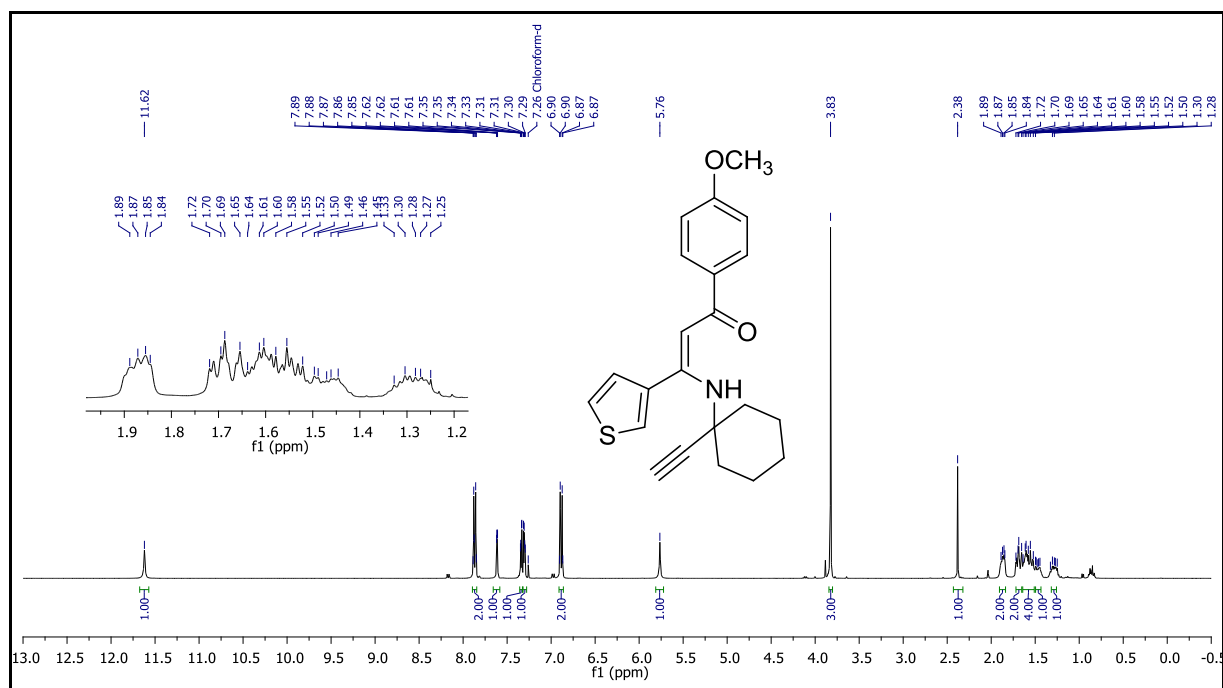


Figure S33. ^1H NMR spectrum of compound **1q.**

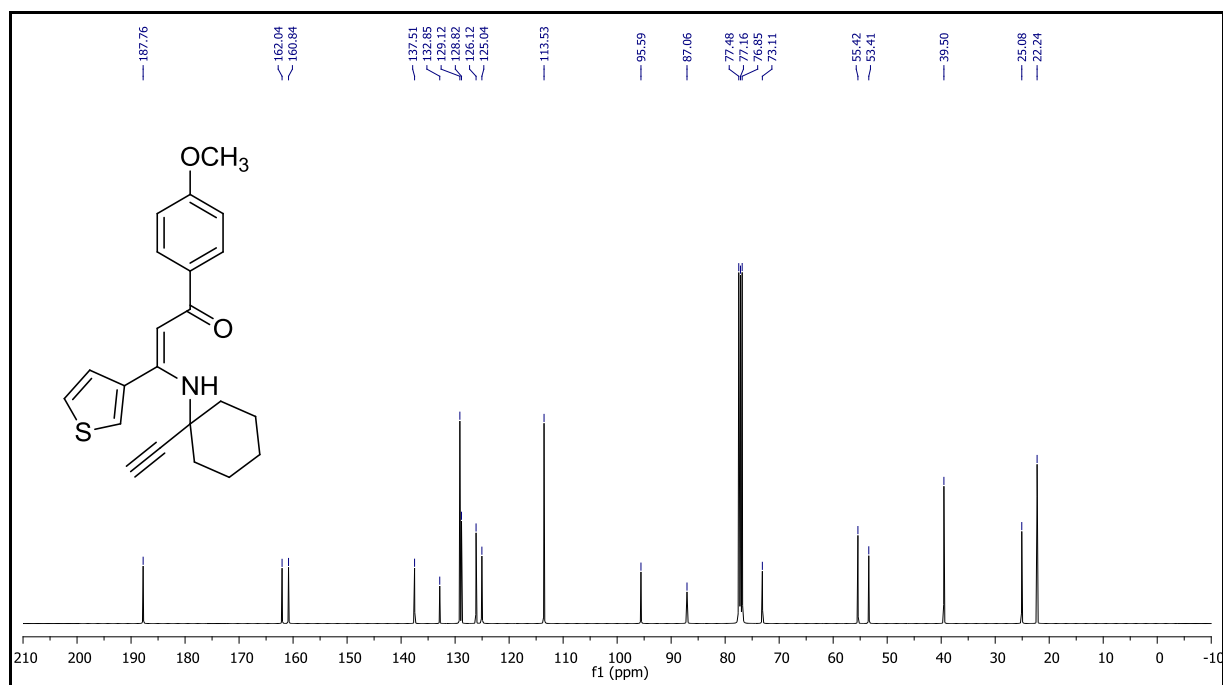


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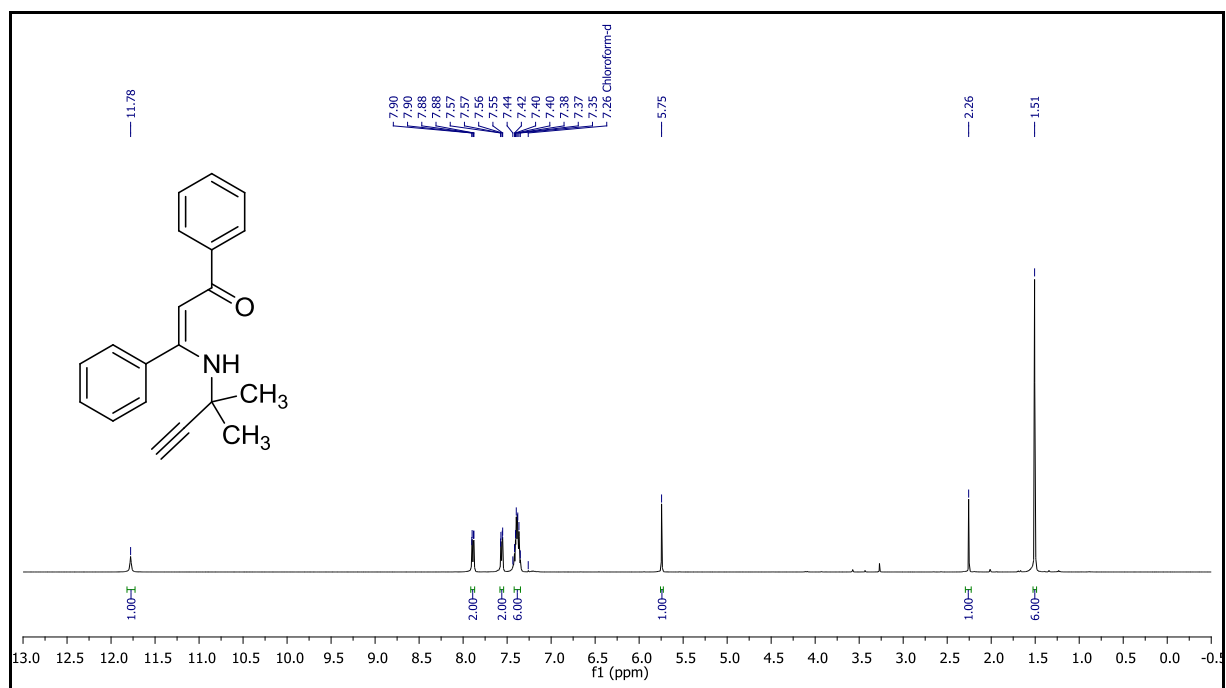


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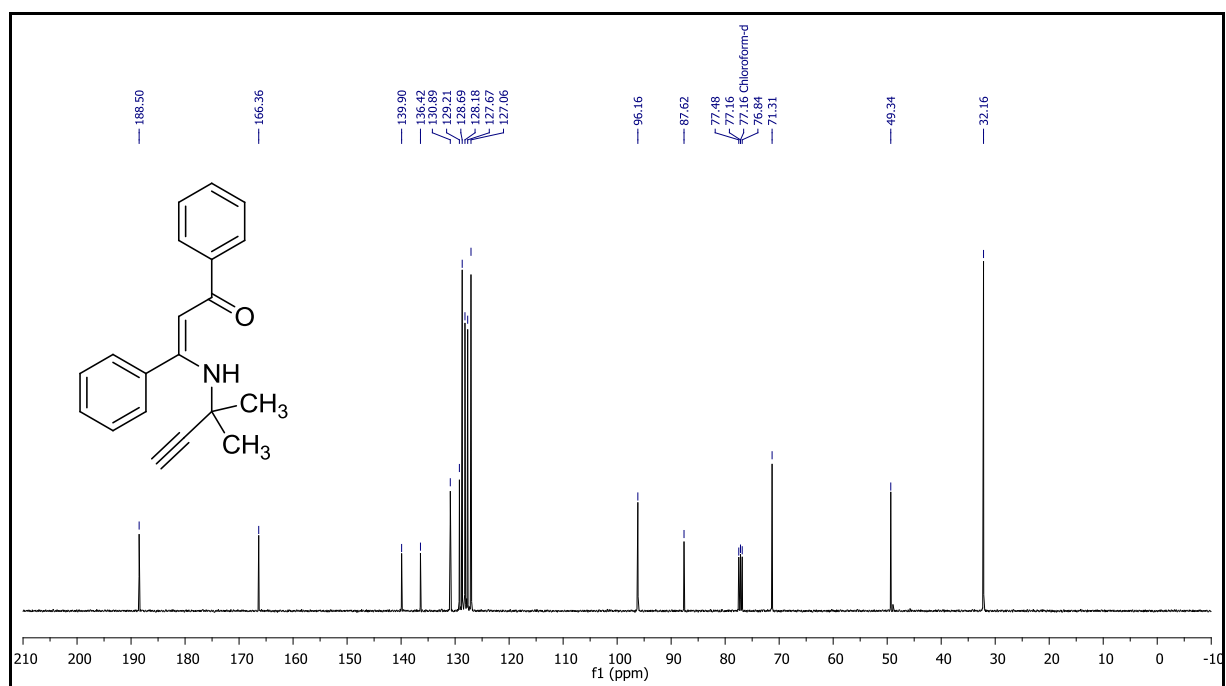


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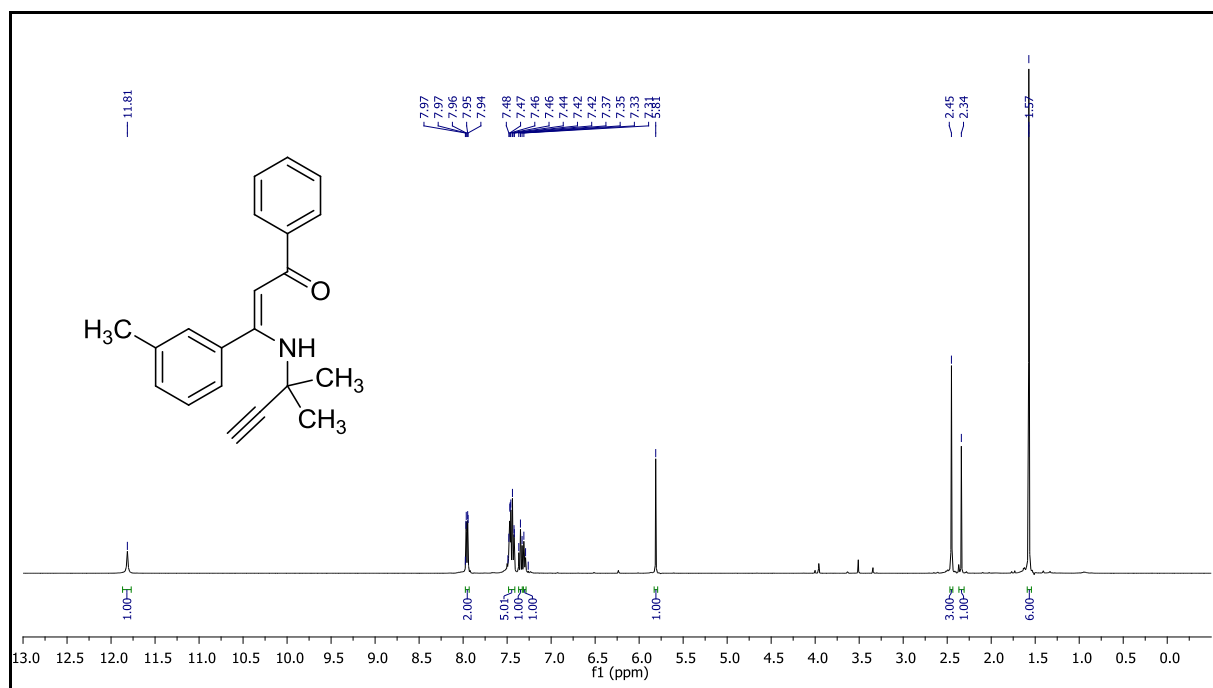


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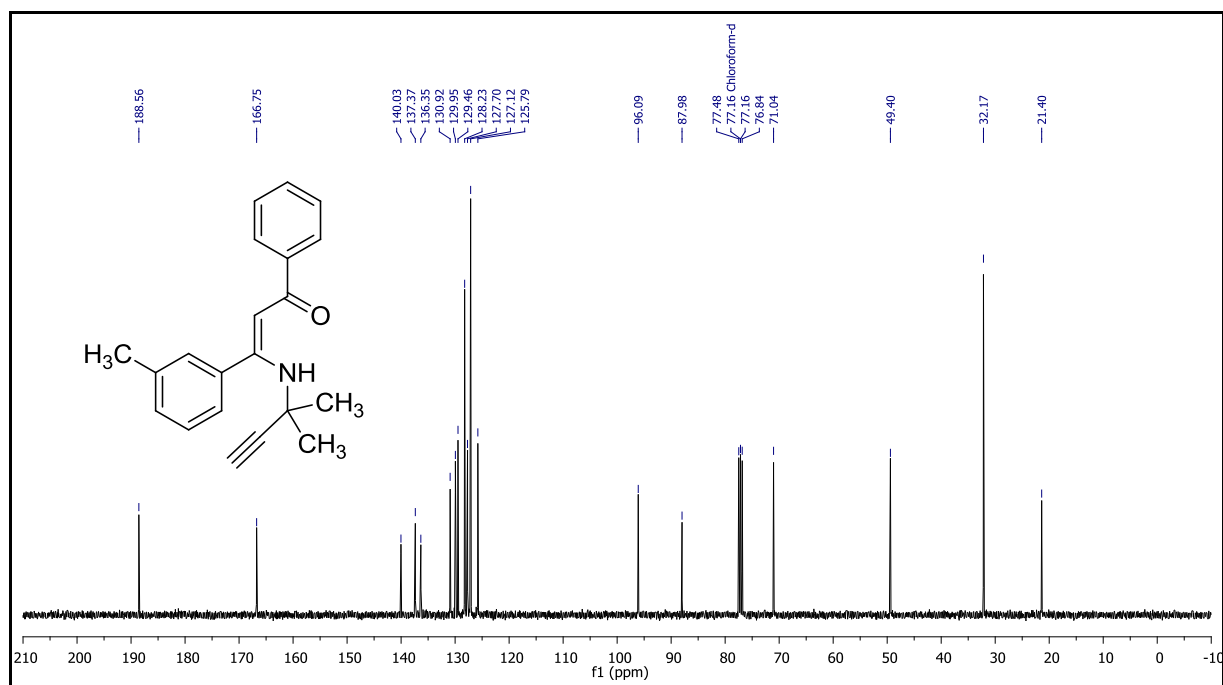


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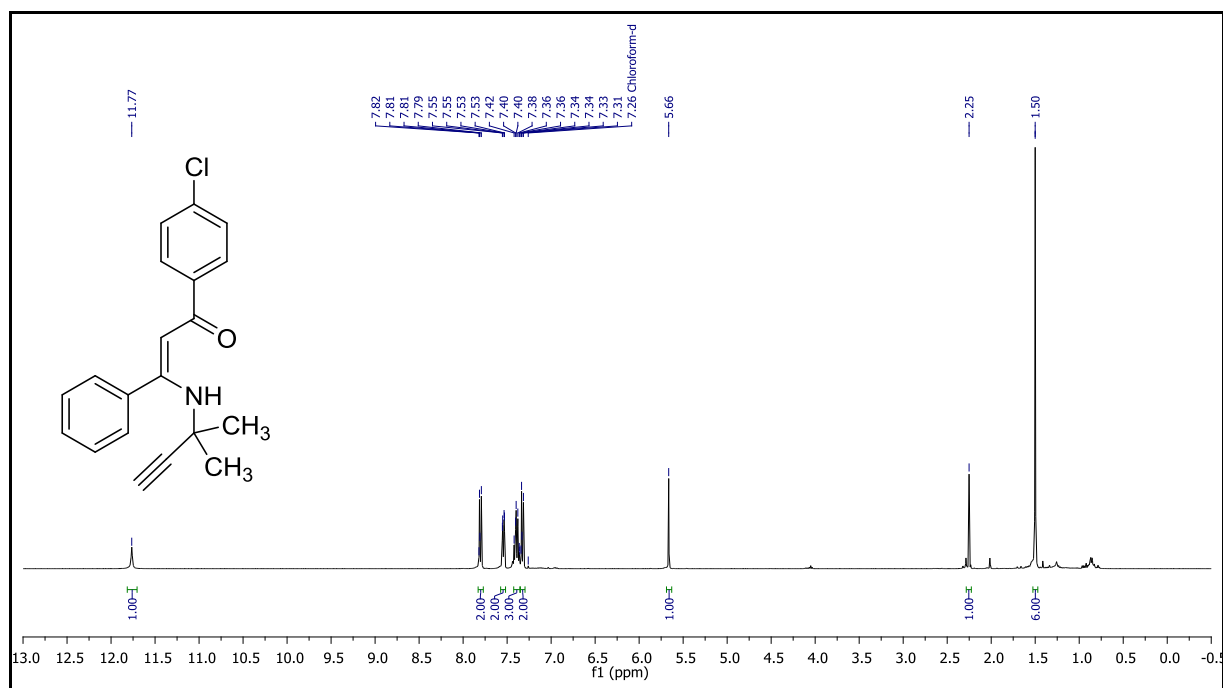


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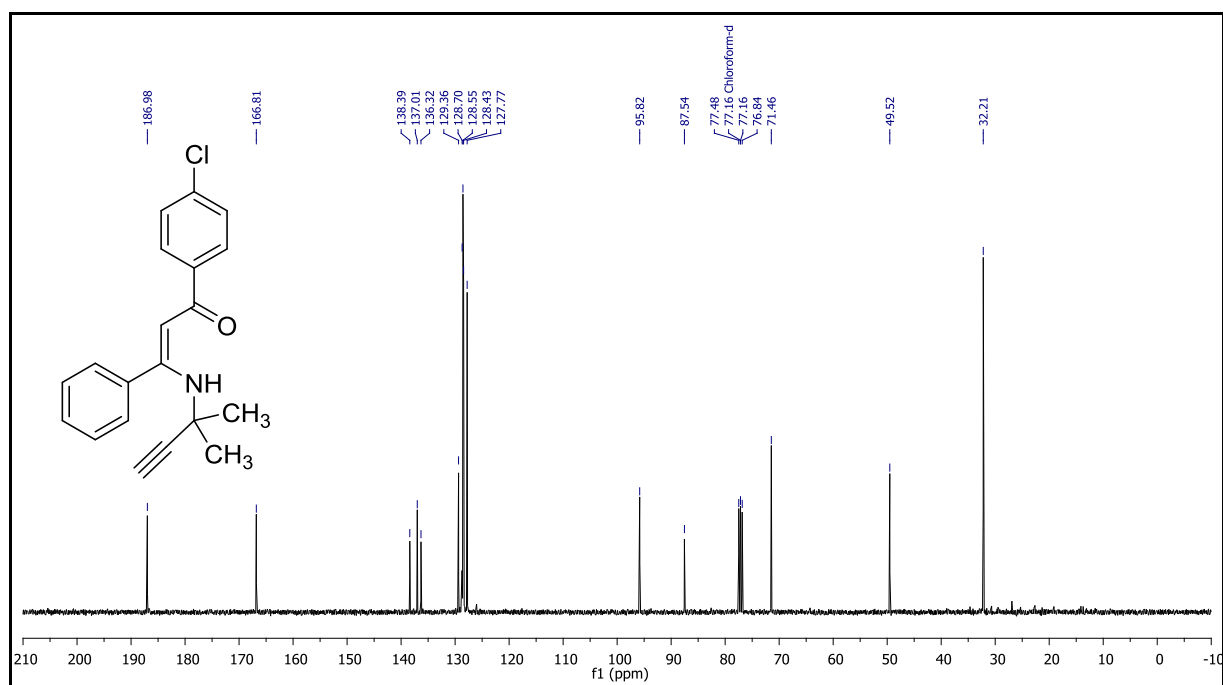


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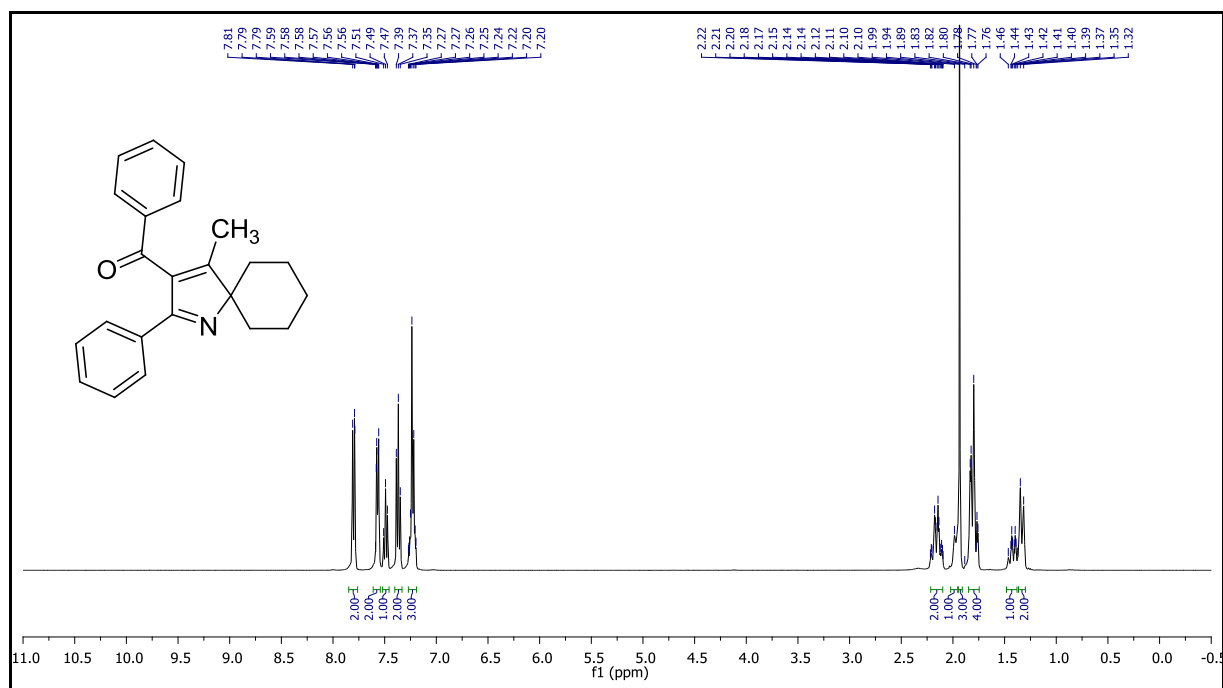


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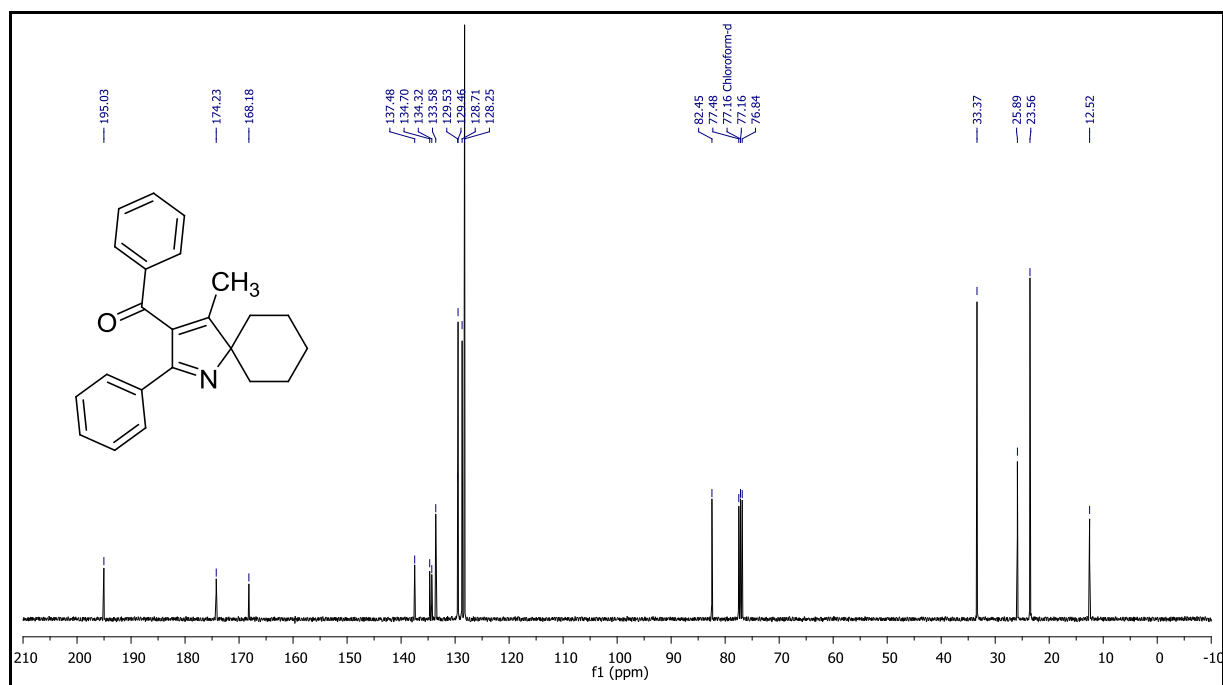


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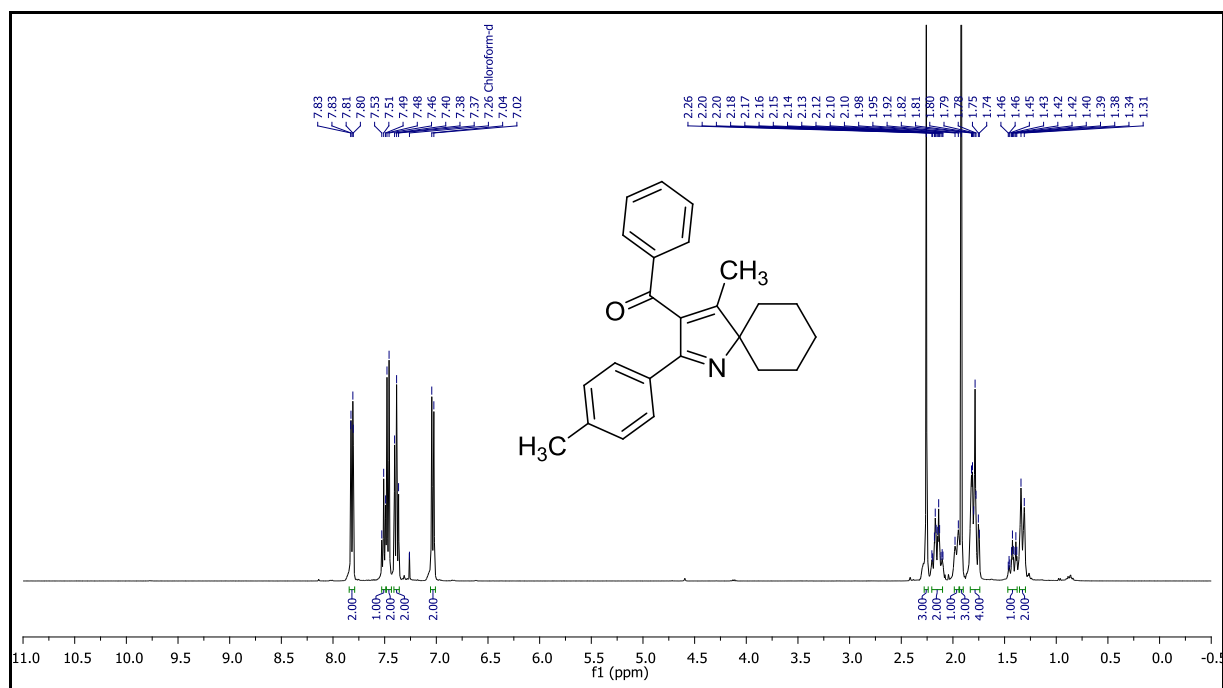


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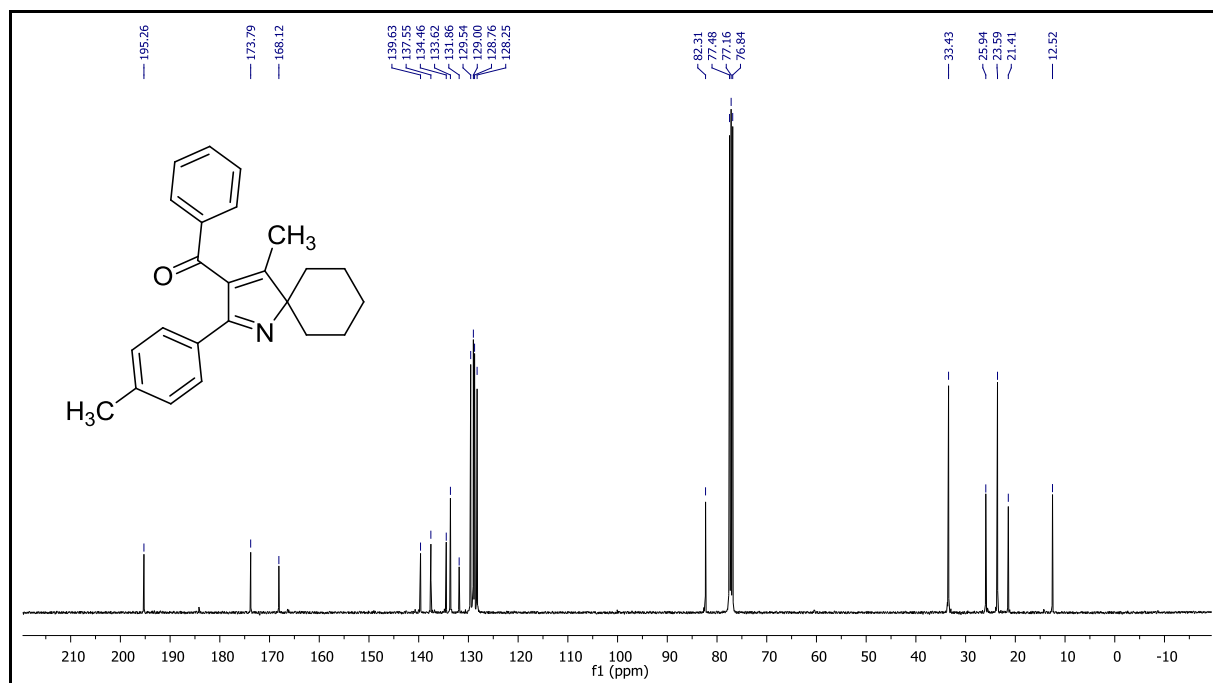


Figure S44. ¹³C NMR spectrum of compound 3b.

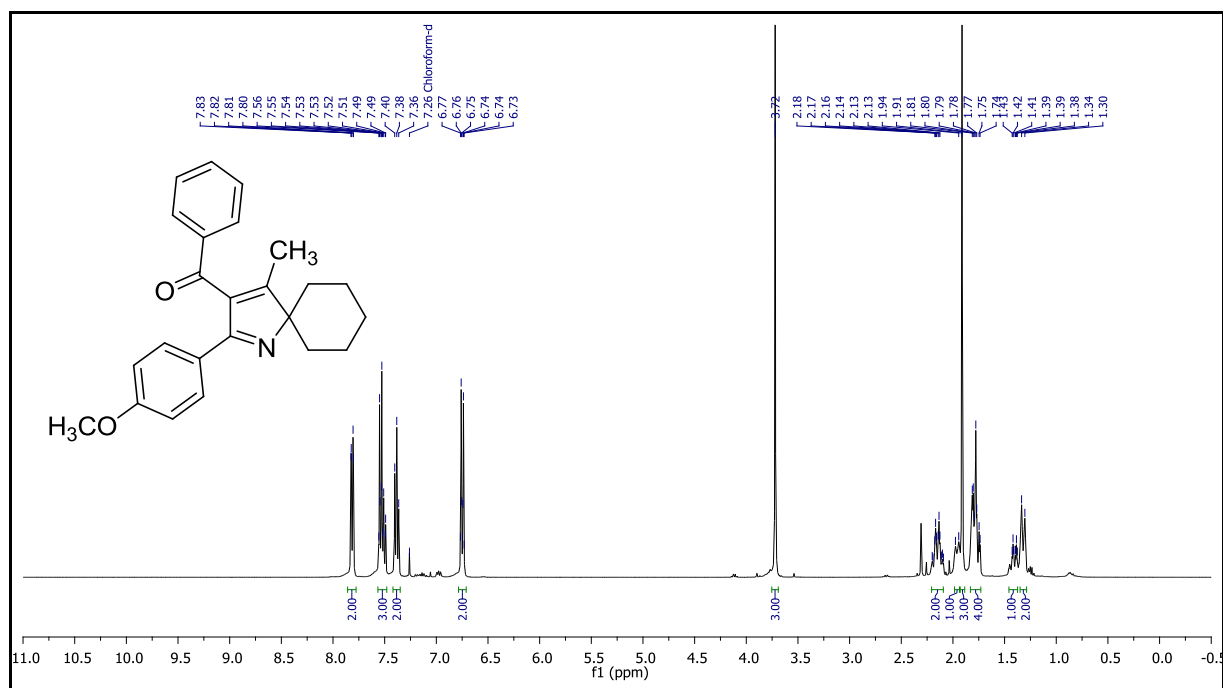


Figure S45. ^1H NMR spectrum of compound 3c.

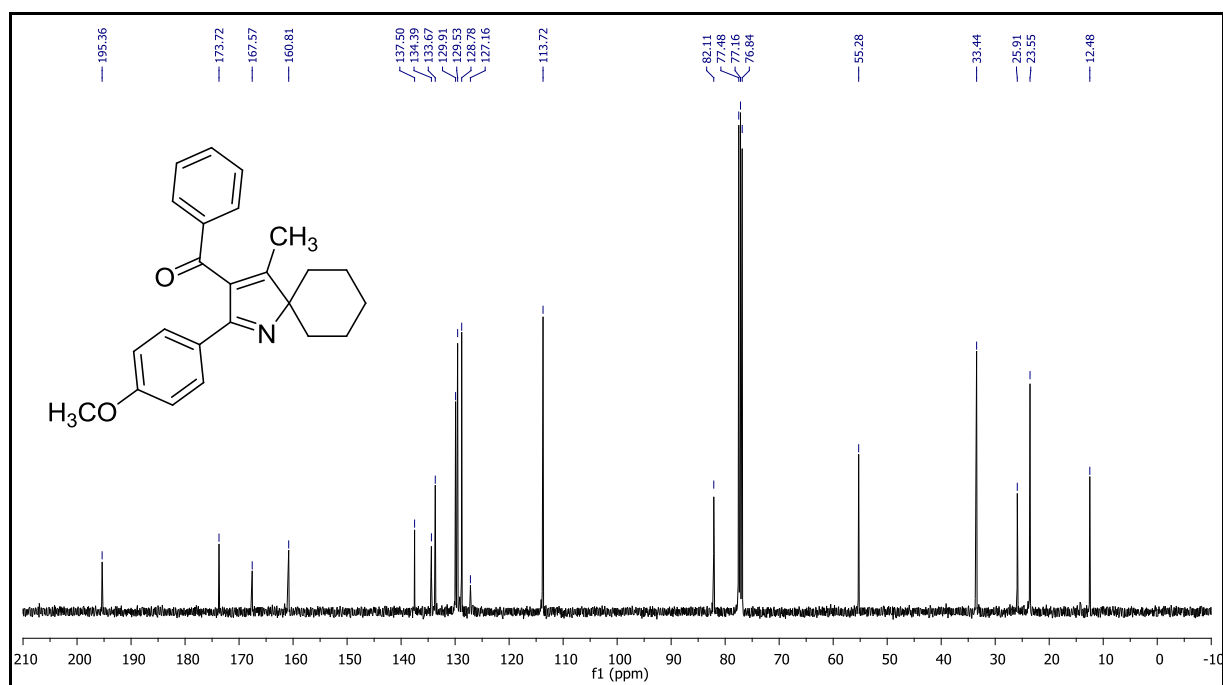


Figure S46. ^{13}C NMR spectrum of compound 3c.

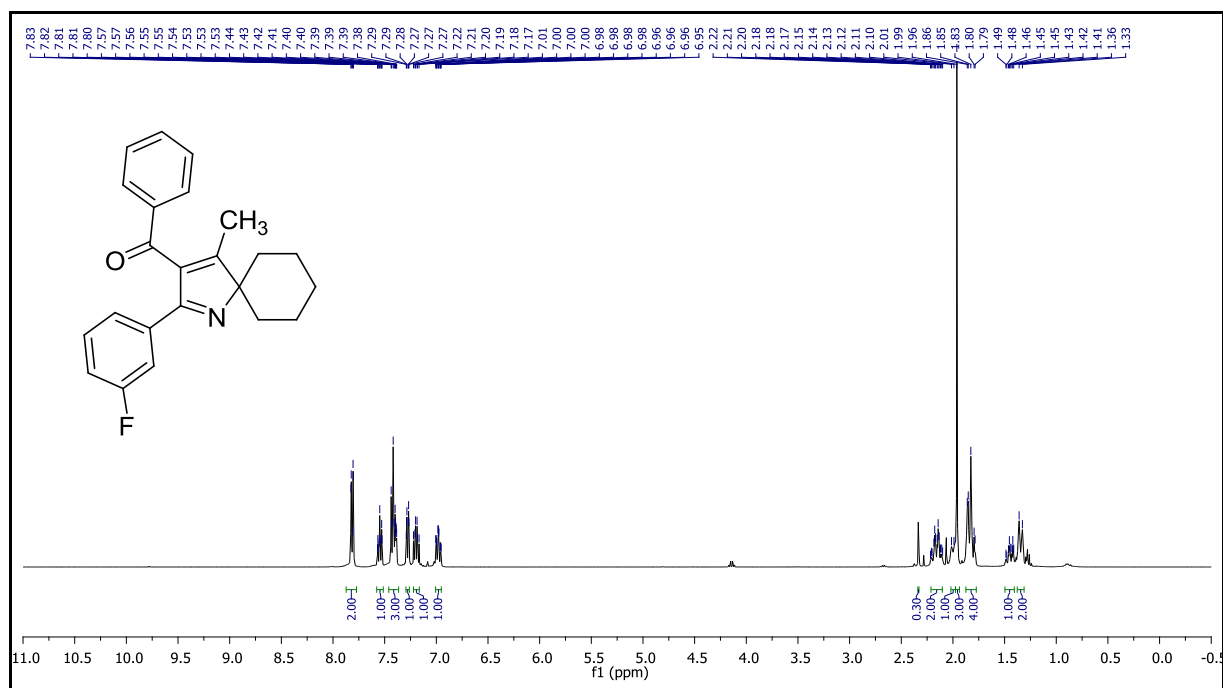


Figure S47. ¹H NMR spectrum of compound 3d.

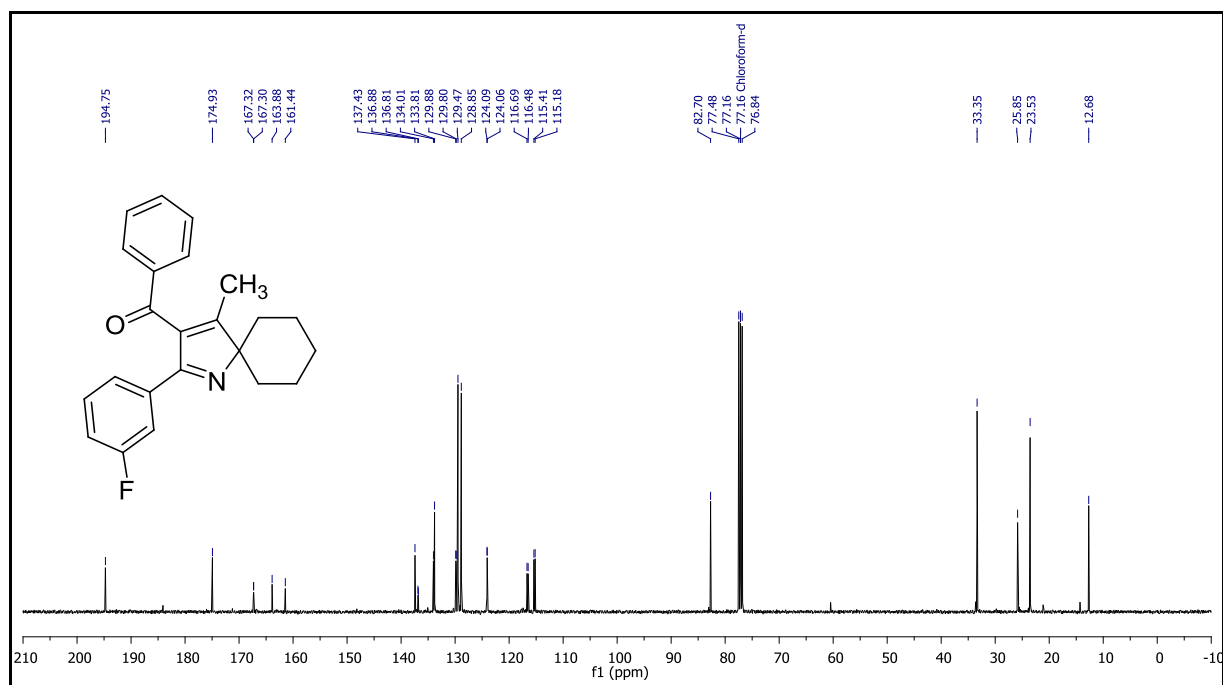


Figure S48. ¹³C NMR spectrum of compound 3d.

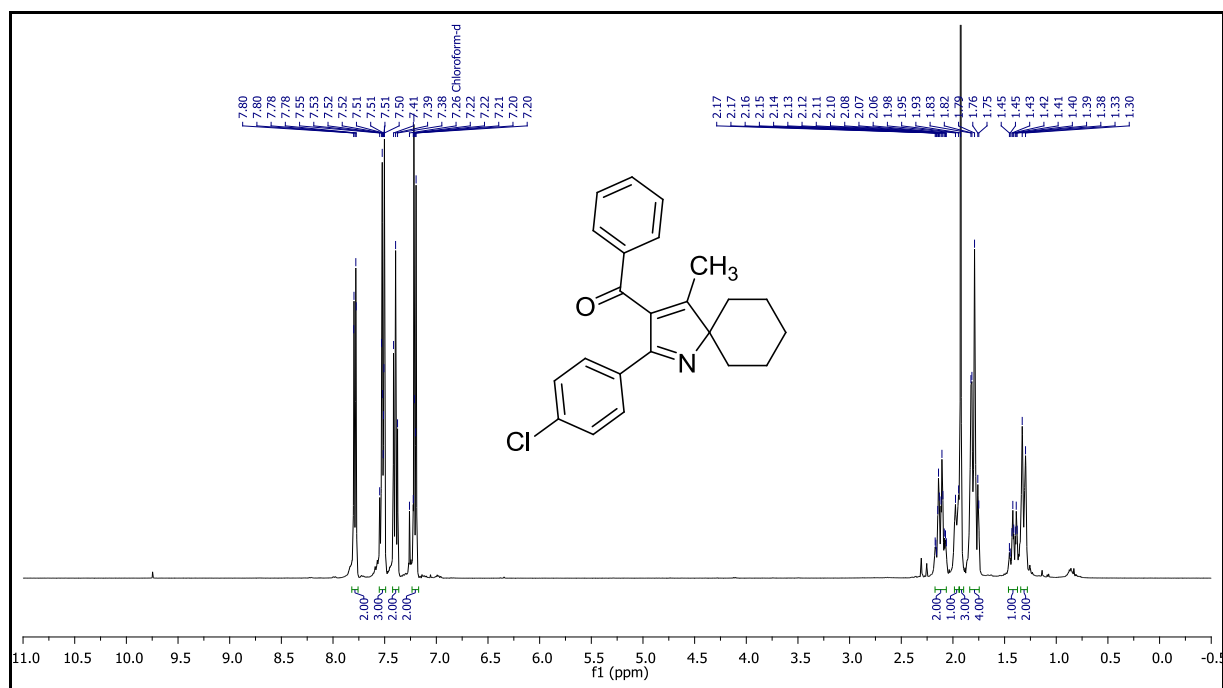


Figure S49. ^1H NMR spectrum of compound 3e.

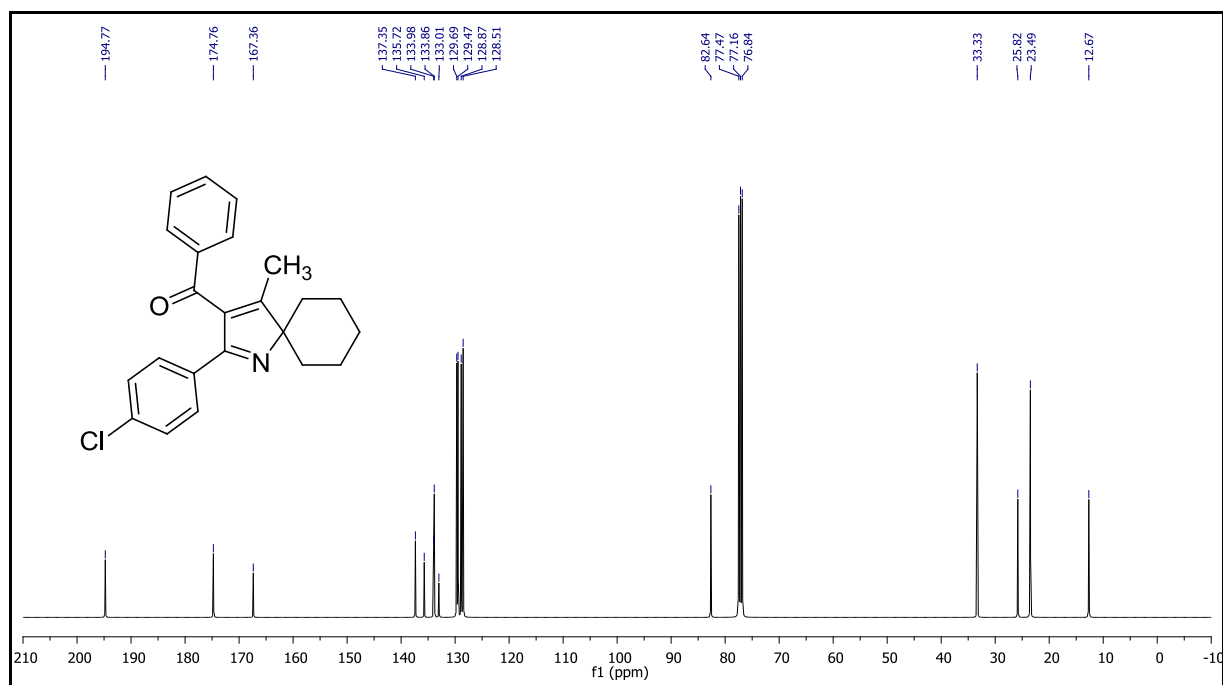


Figure S50. ^{13}C NMR spectrum of compound 3e.

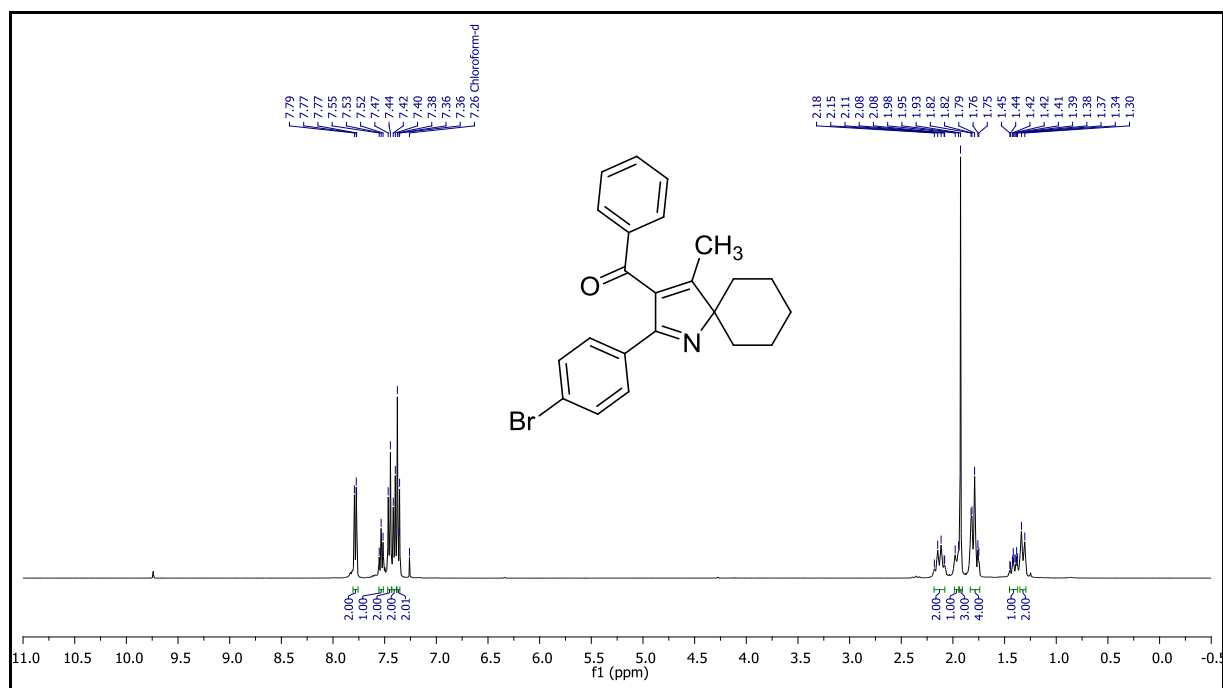


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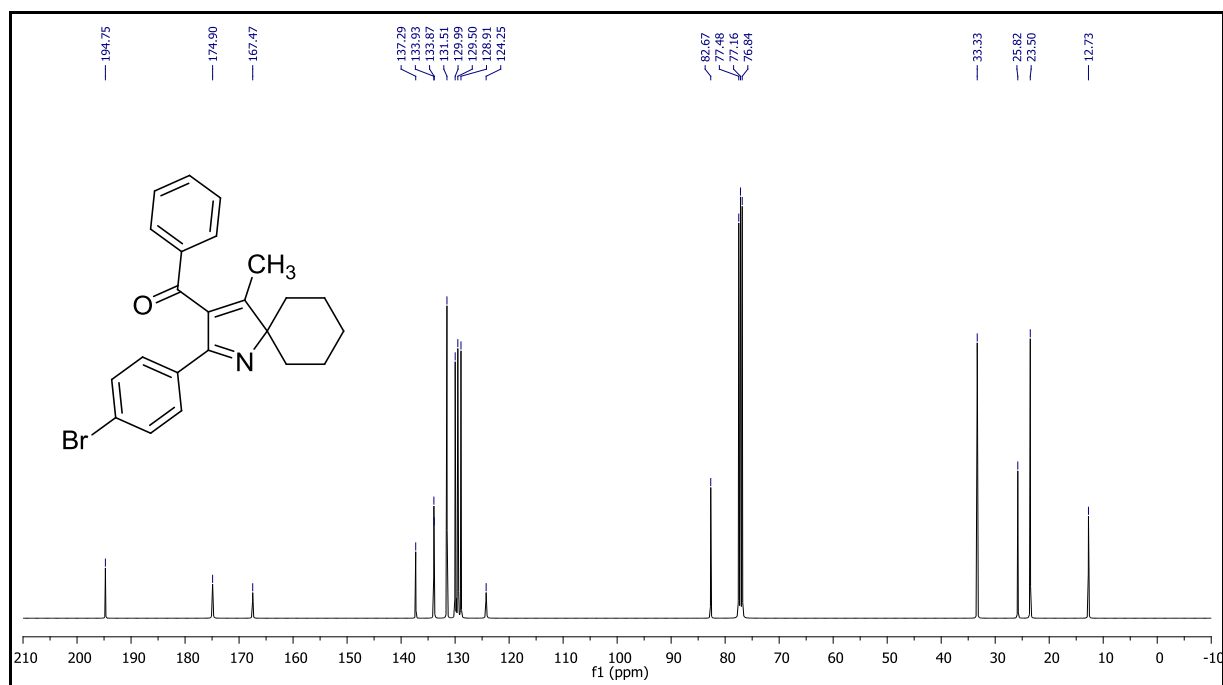


Figure S52. ¹³C NMR spectrum of compound 3f.

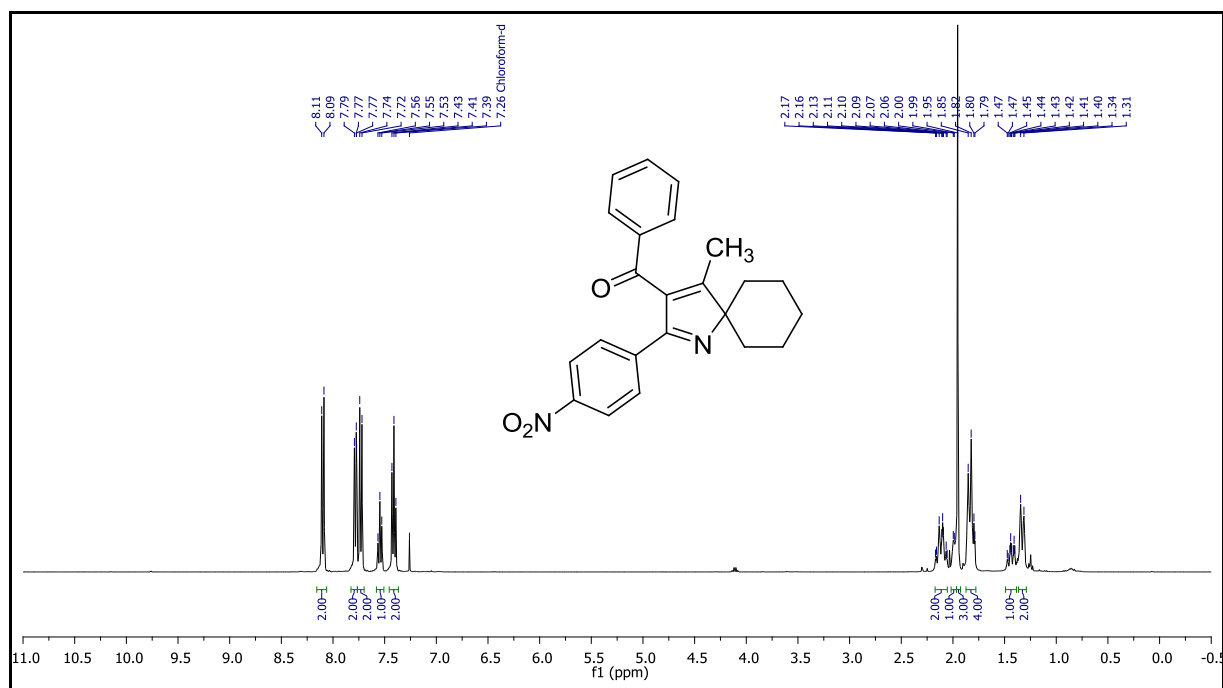


Figure S53. ¹H NMR spectrum of compound **3g**.

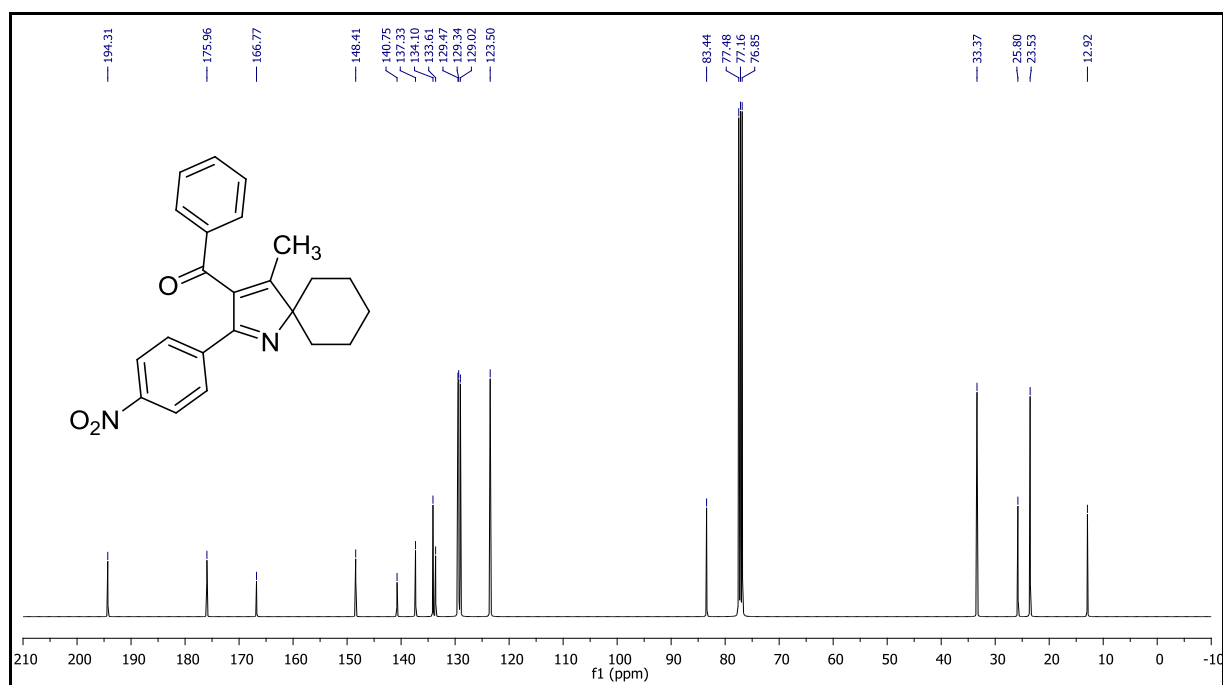


Figure S54. ¹³C NMR spectrum of compound **3g**.

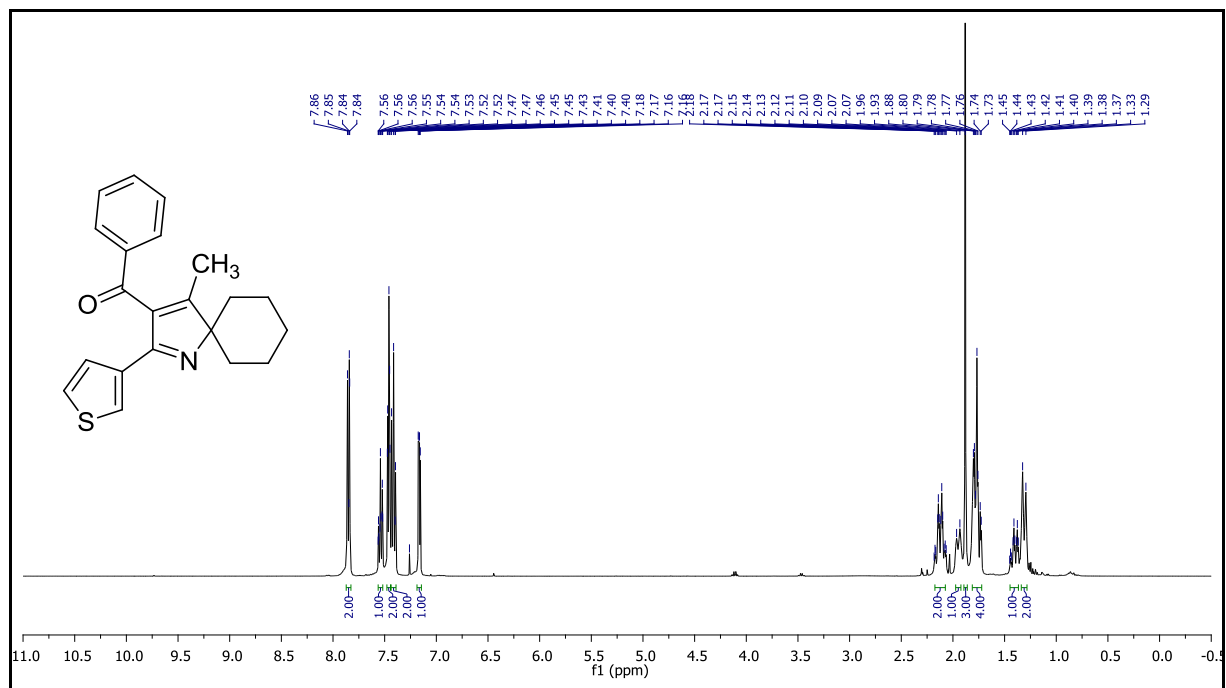


Figure S55. ¹H NMR spectrum of compound 3h.

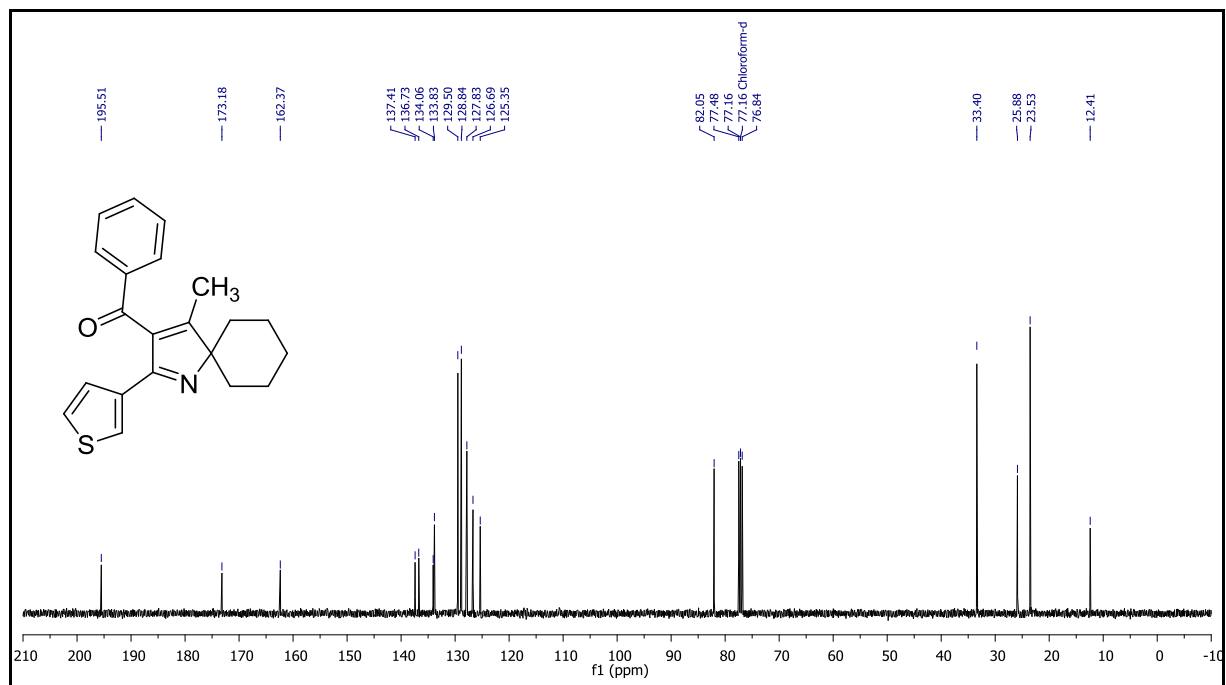


Figure S56. ¹³C NMR spectrum of compound 3h.

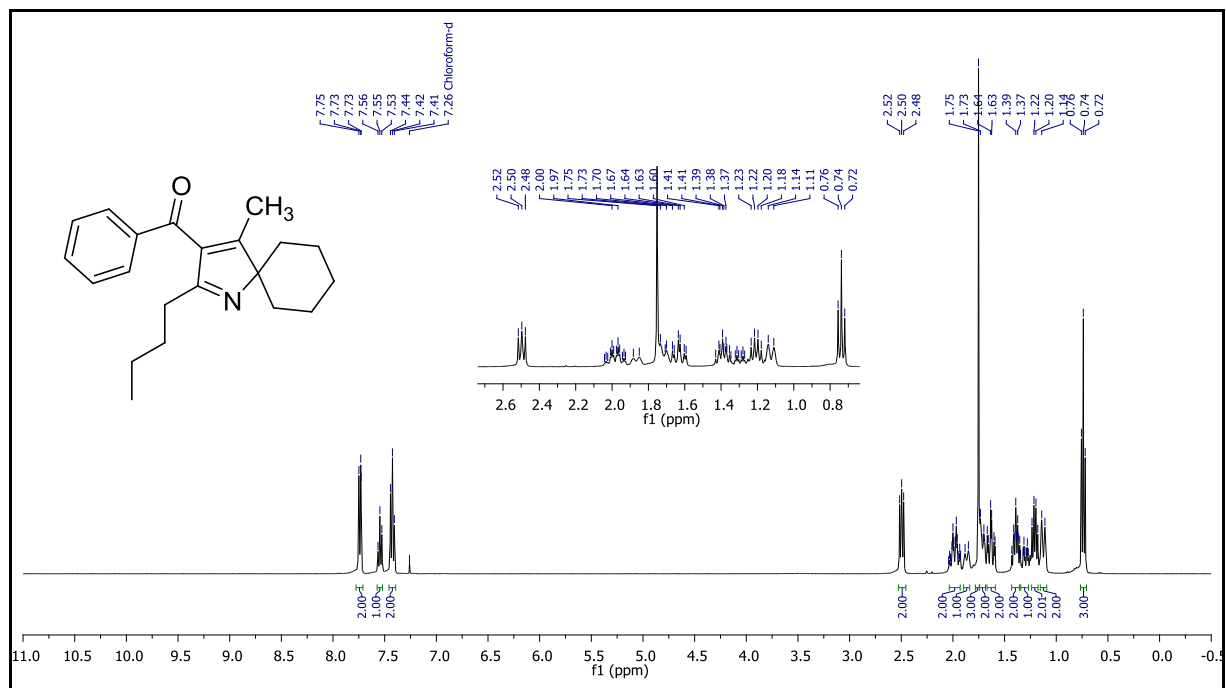


Figure S57. ^1H NMR spectrum of compound 3i.

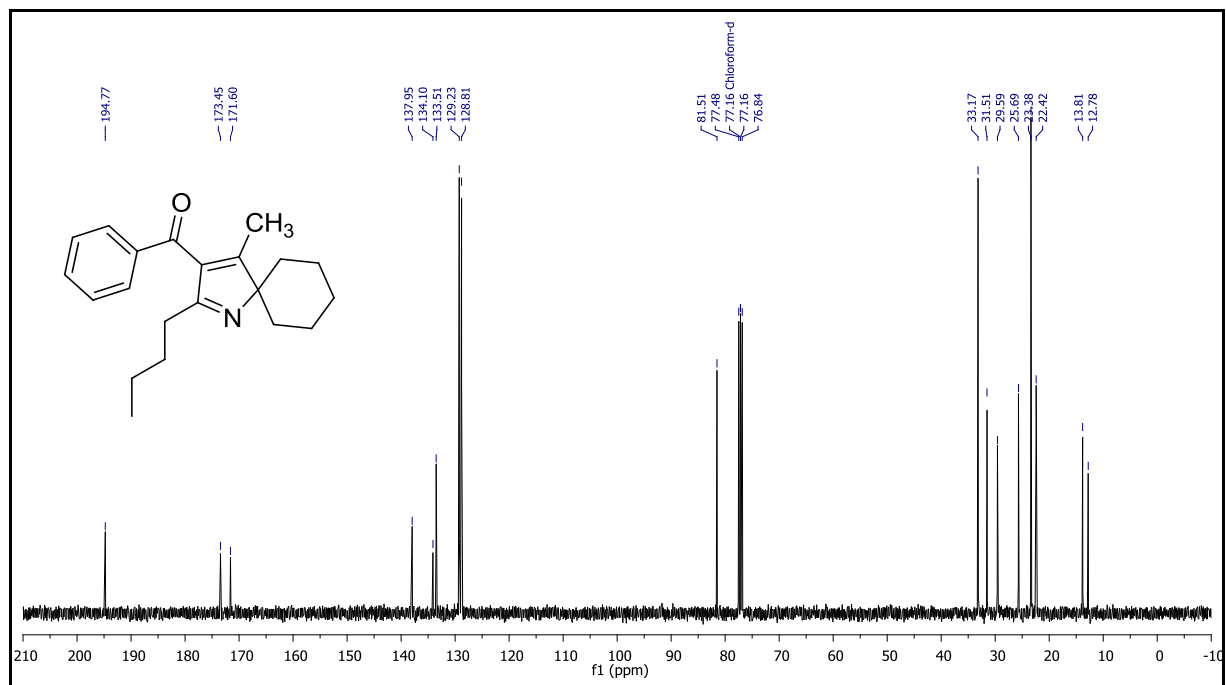


Figure S58. ^{13}C NMR spectrum of compound 3i.

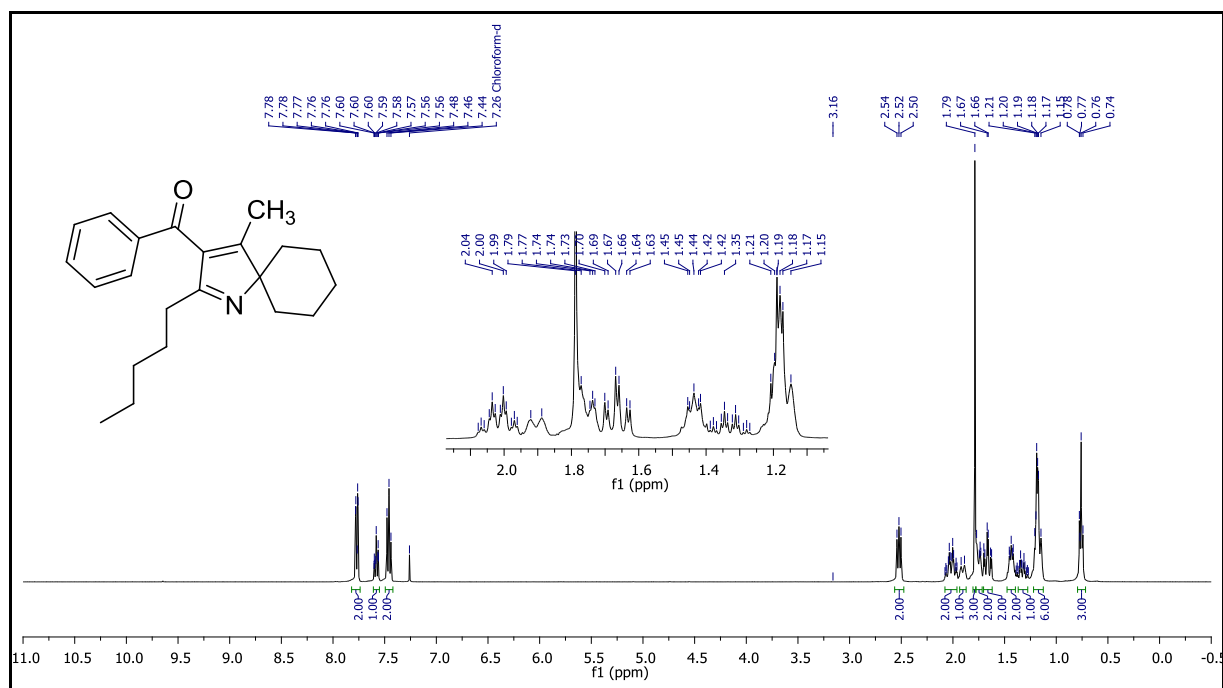


Figure S59. ^1H NMR spectrum of compound **3j**.

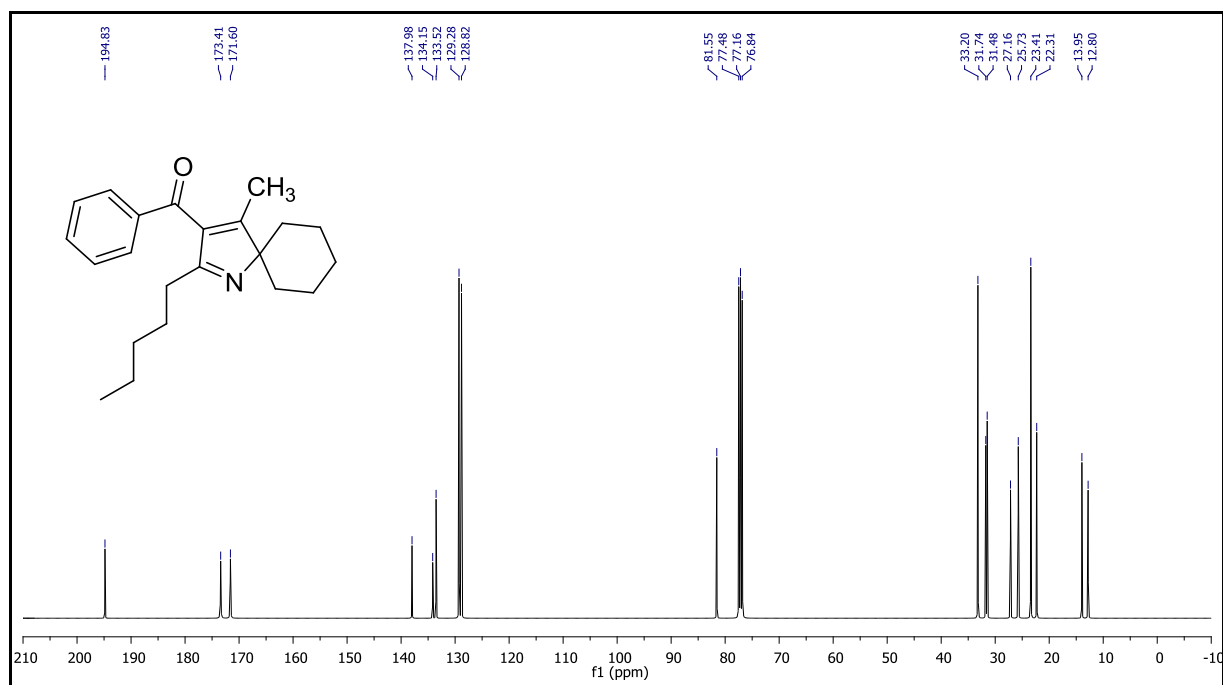


Figure S60. ^{13}C NMR spectrum of compound **3j**.

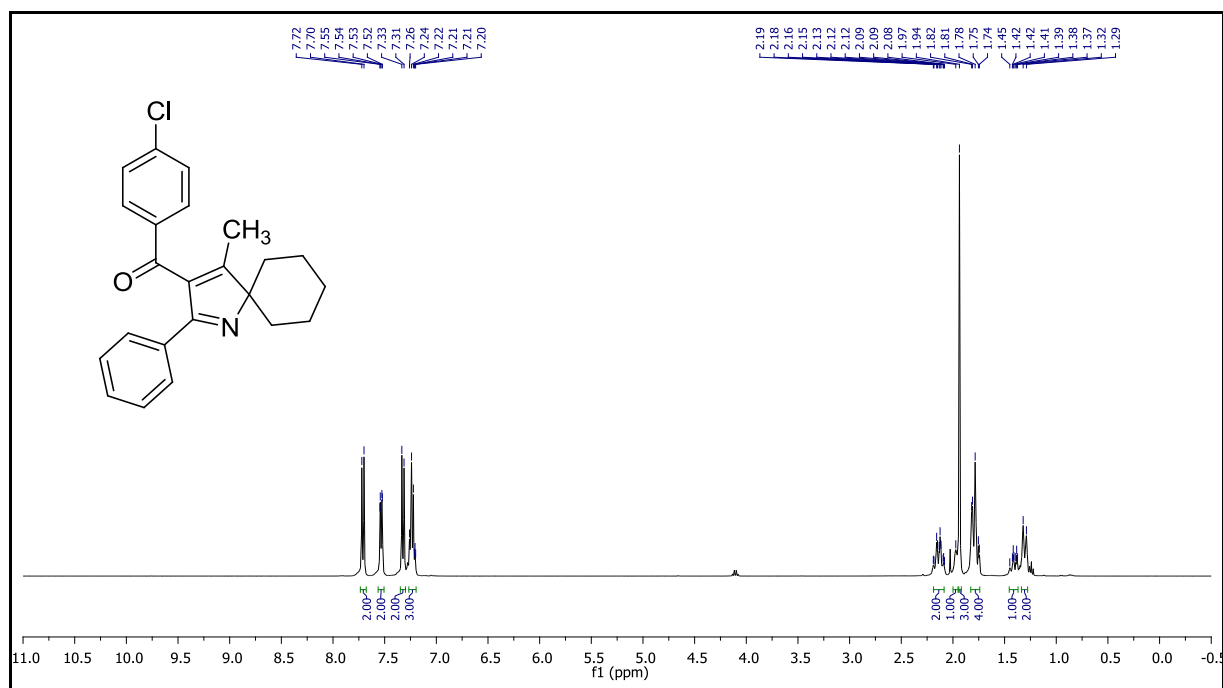


Figure S61. ¹H NMR spectrum of compound 3k.

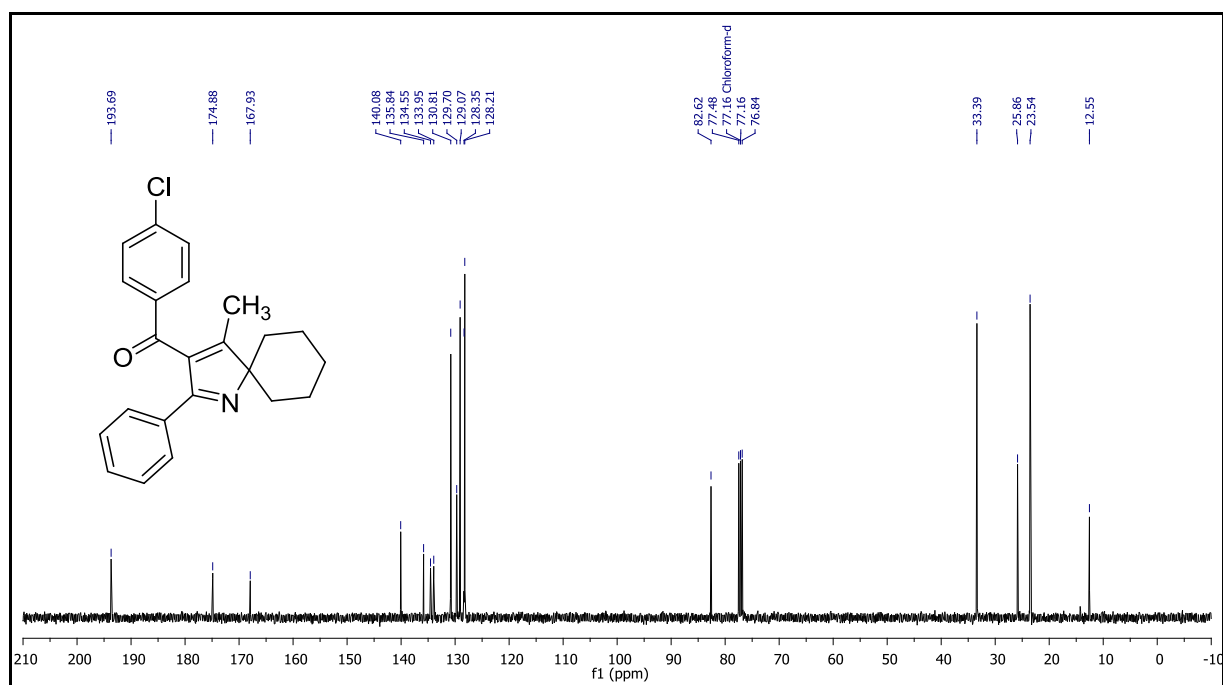


Figure S62. ¹³C NMR spectrum of compound 3k.

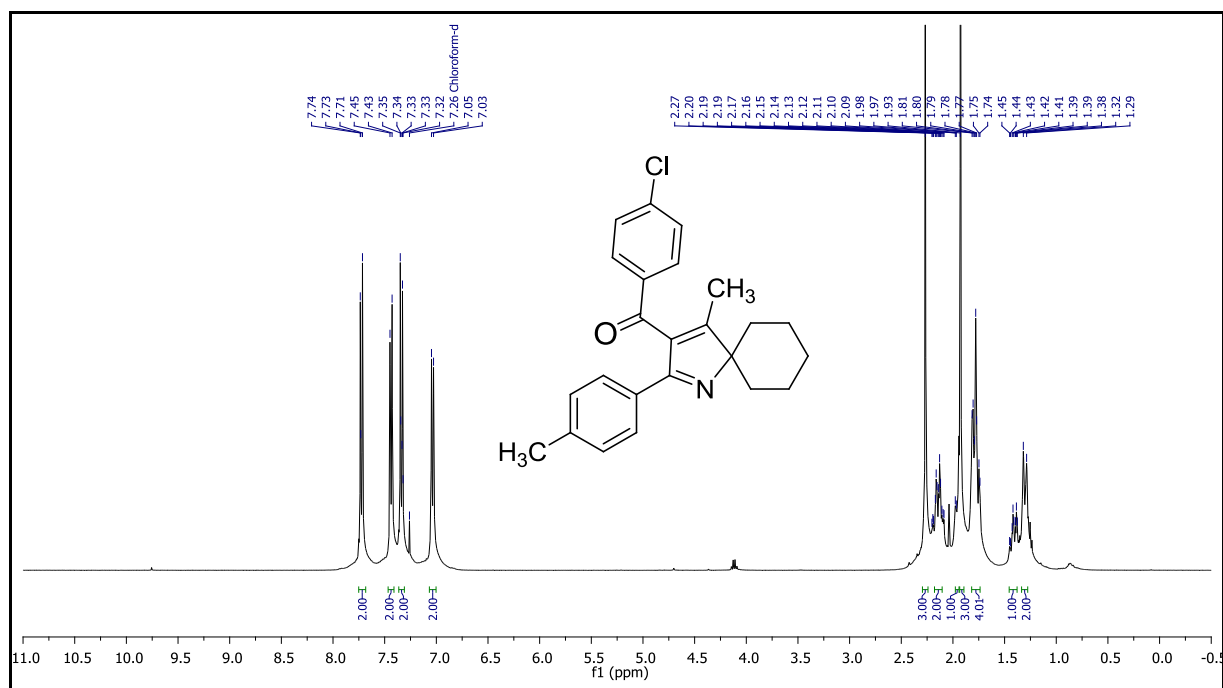


Figure S63. ¹H NMR spectrum of compound 3I.

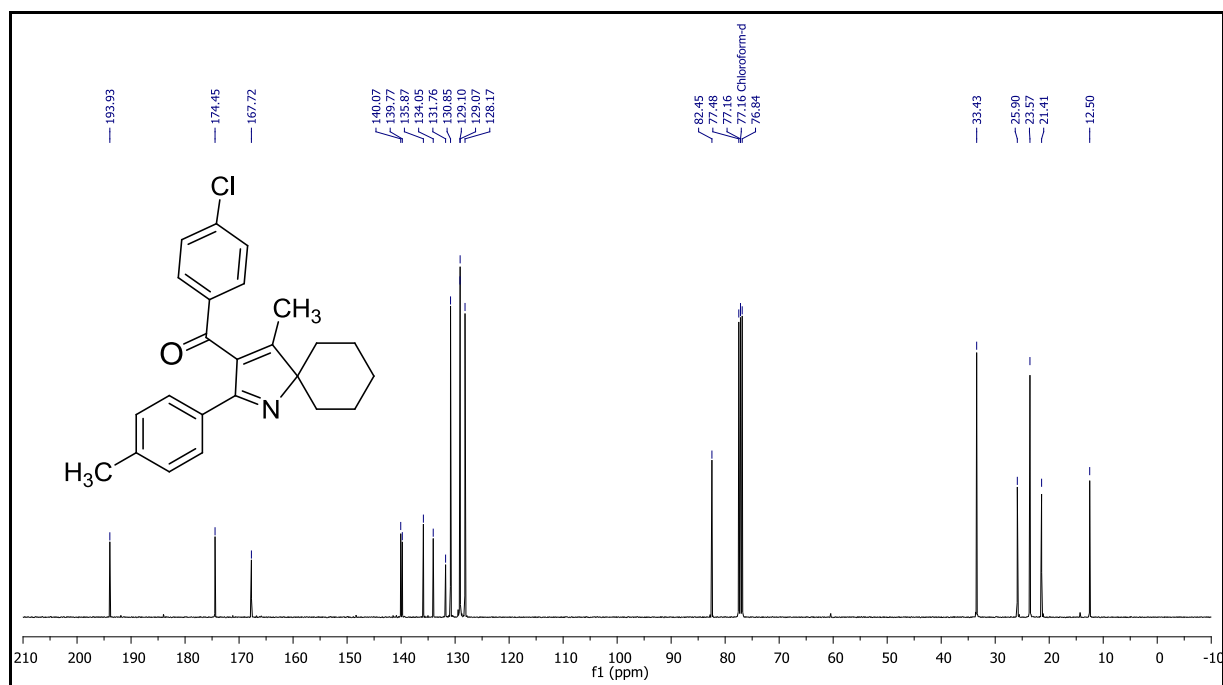


Figure S64. ¹³C NMR spectrum of compound 3I.

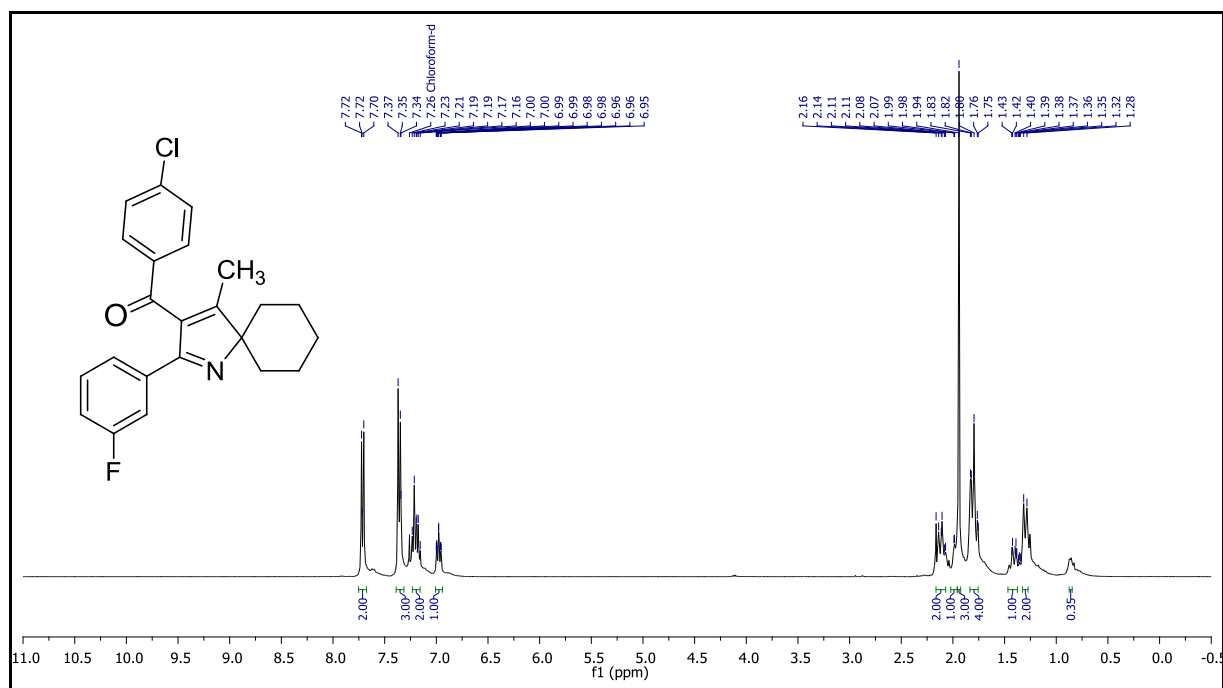


Figure S65. ¹H NMR spectrum of compound **3m**.

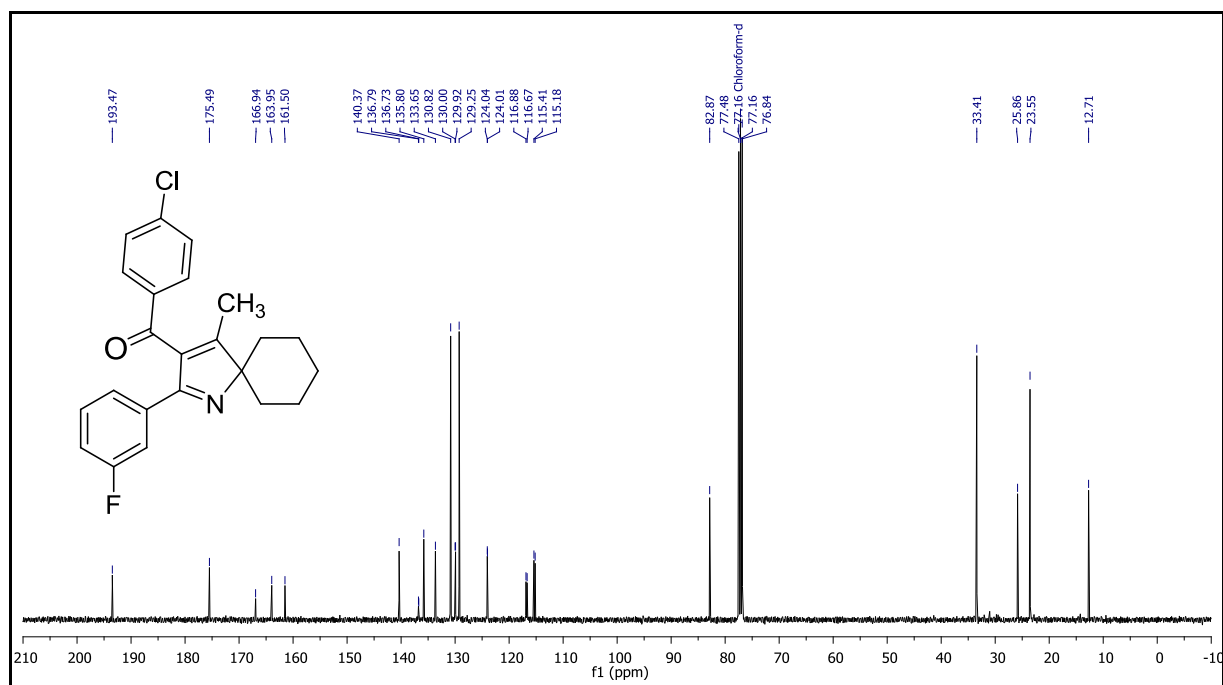


Figure S66. ¹³C NMR spectrum of compound **3m**.

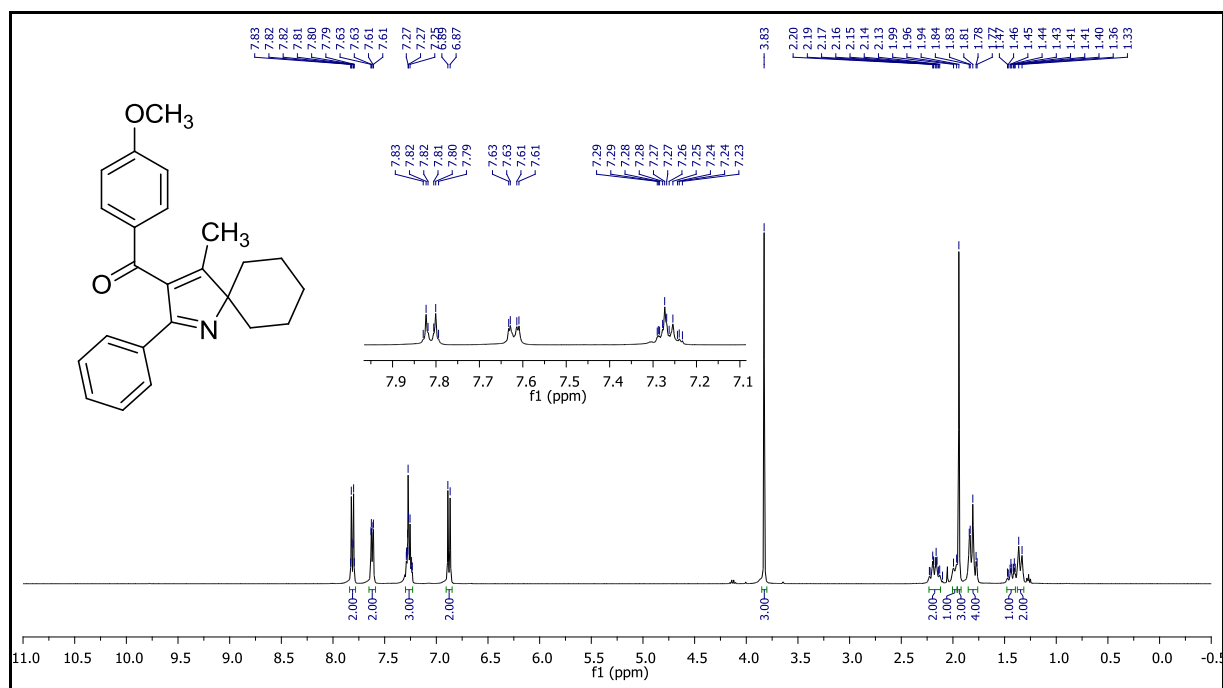


Figure S67. ^1H NMR spectrum of compound 3n.

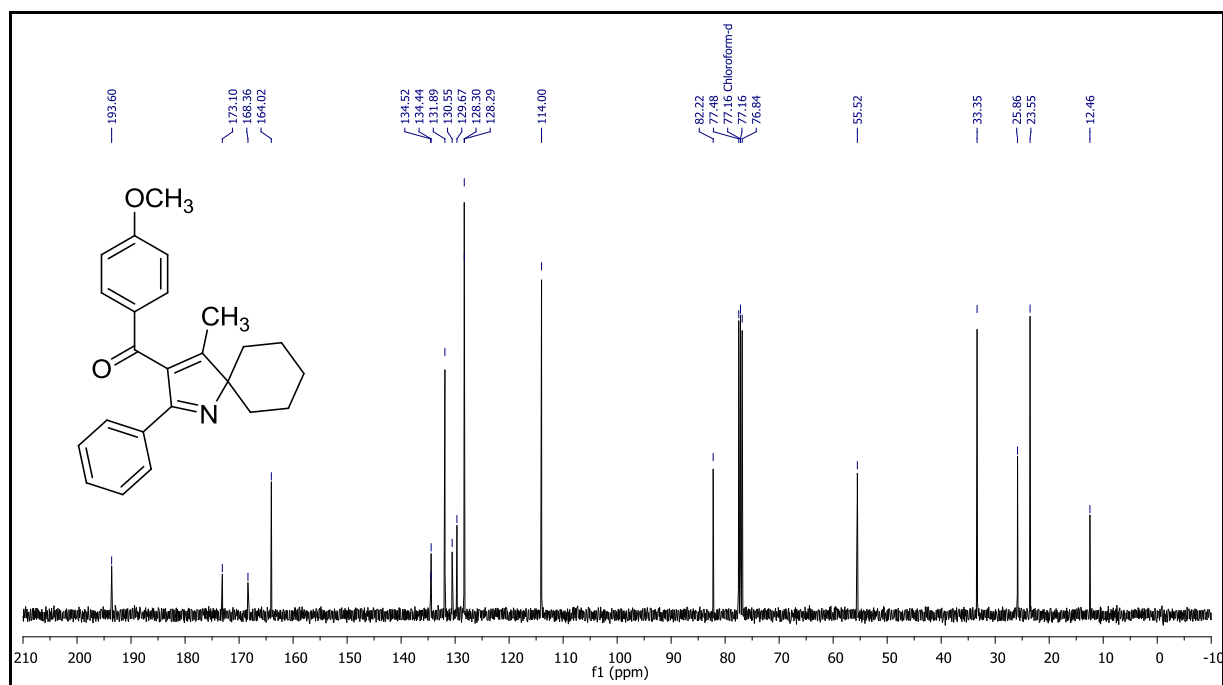


Figure S68. ^{13}C NMR spectrum of compound 3n.

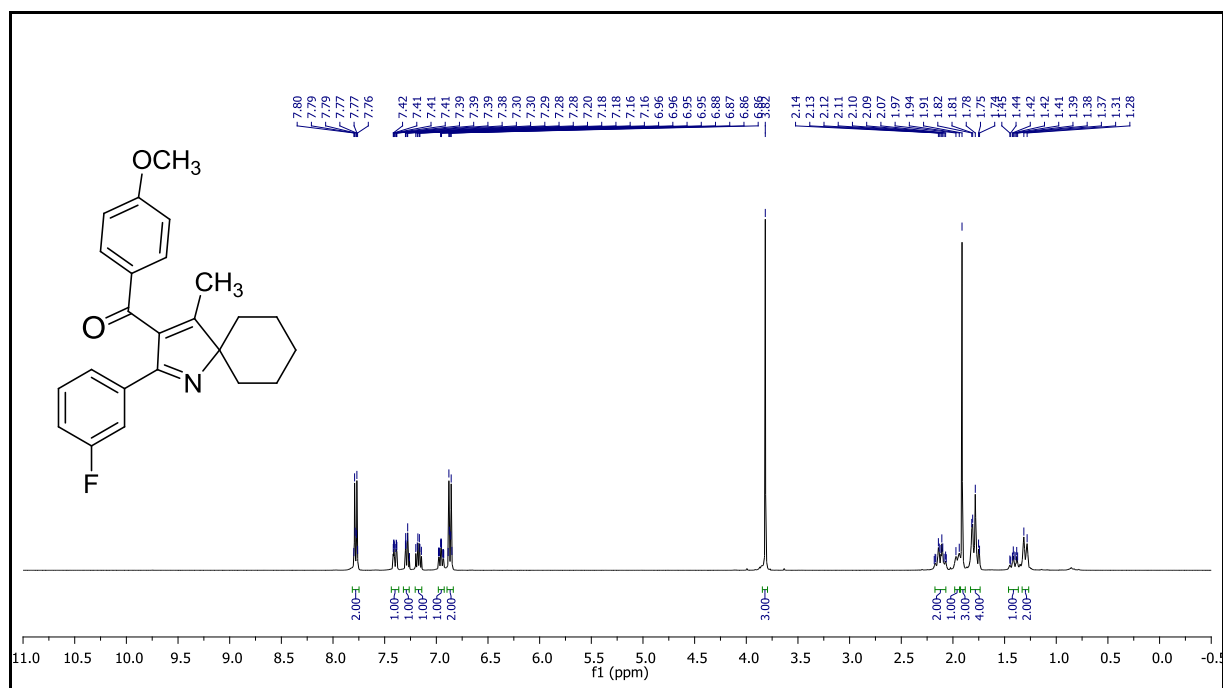


Figure S69. ^1H NMR spectrum of compound **3o**.

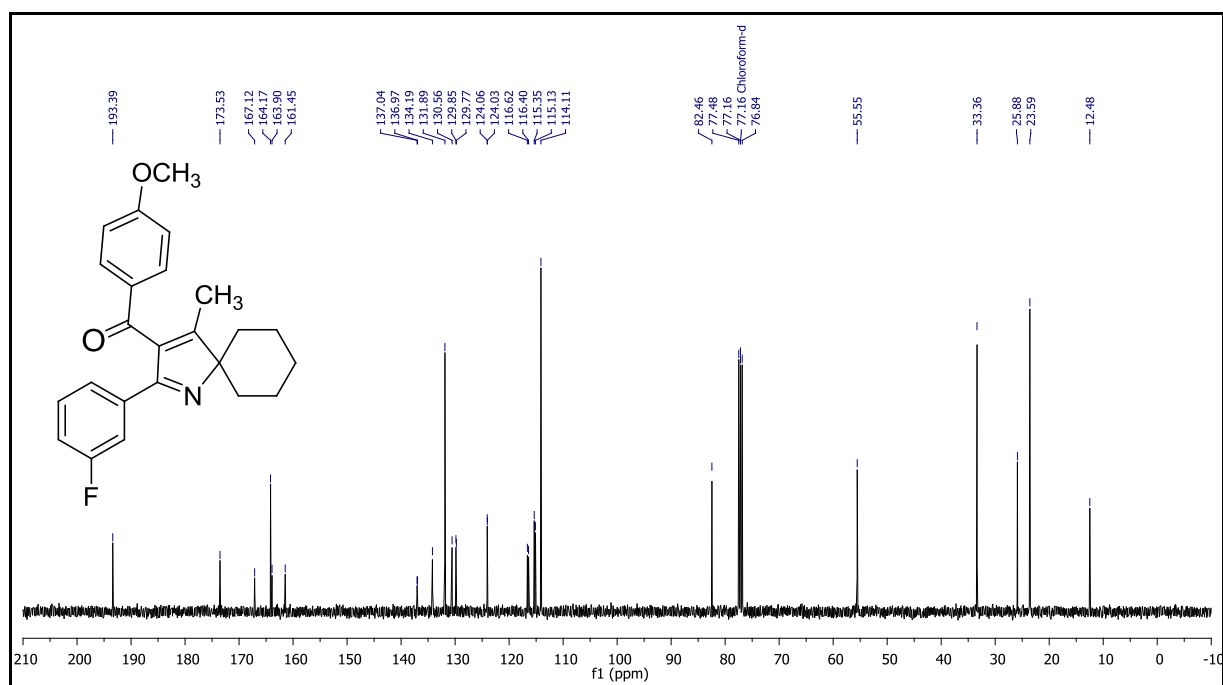


Figure S70. ^{13}C NMR spectrum of compound **3o**.

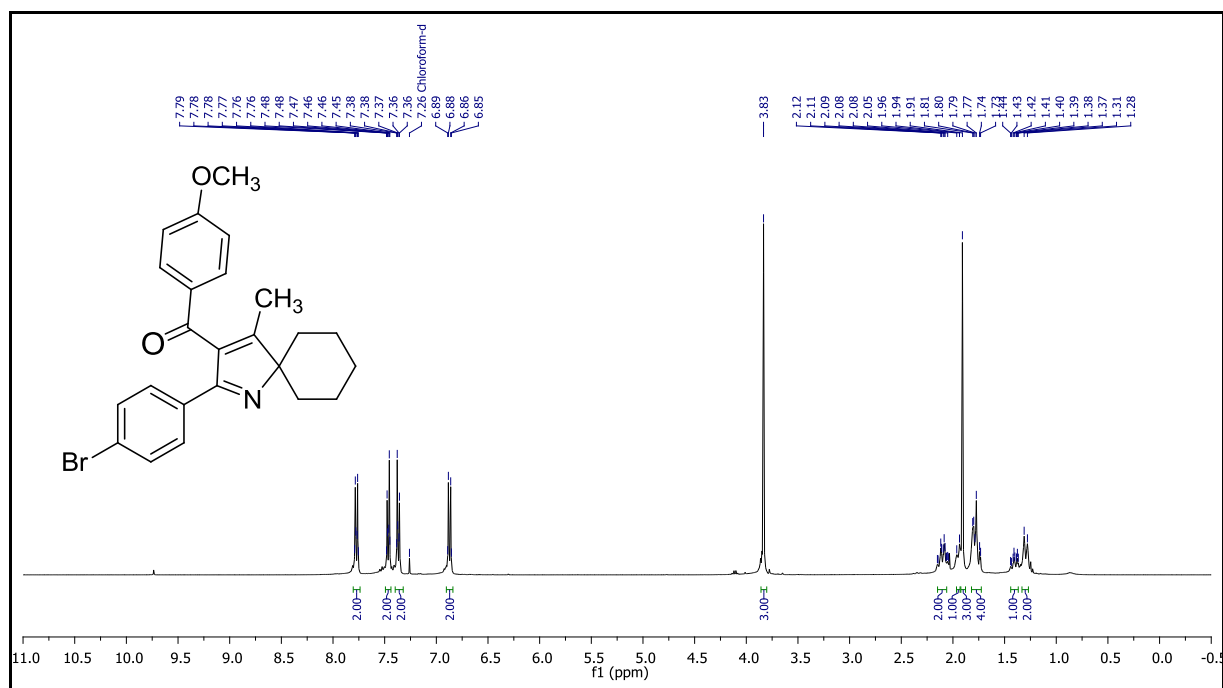


Figure S71. ¹H NMR spectrum of compound 3p.

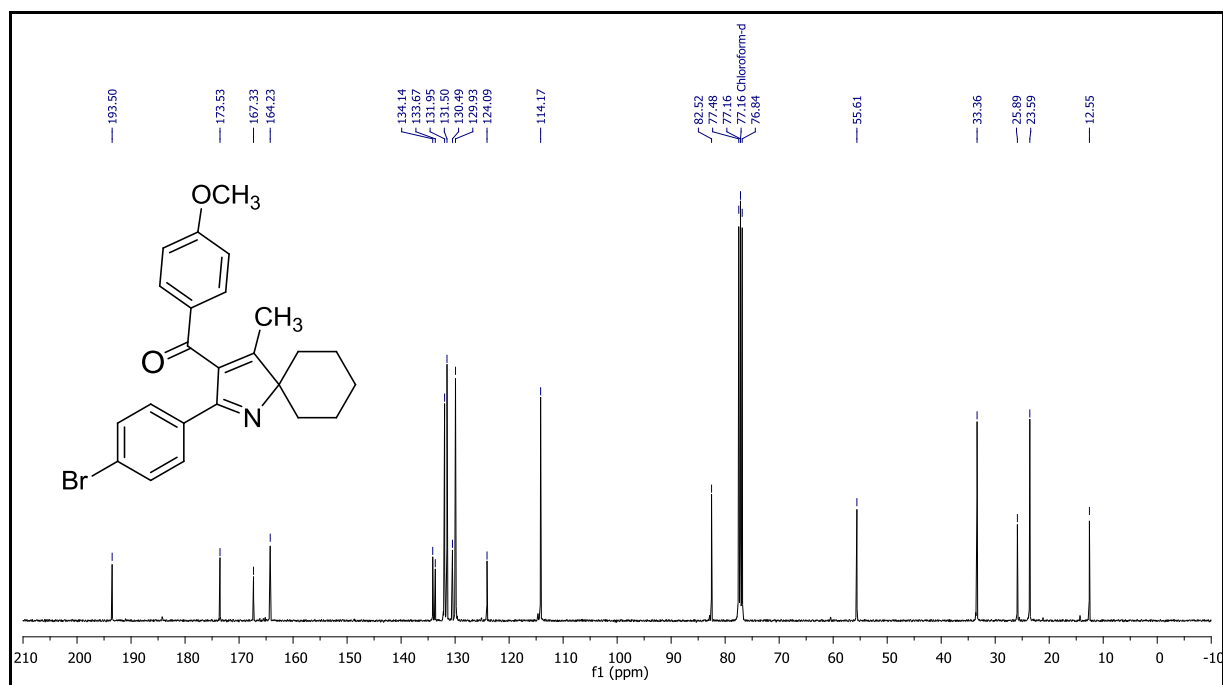


Figure S72. ¹³C NMR spectrum of compound 3p.

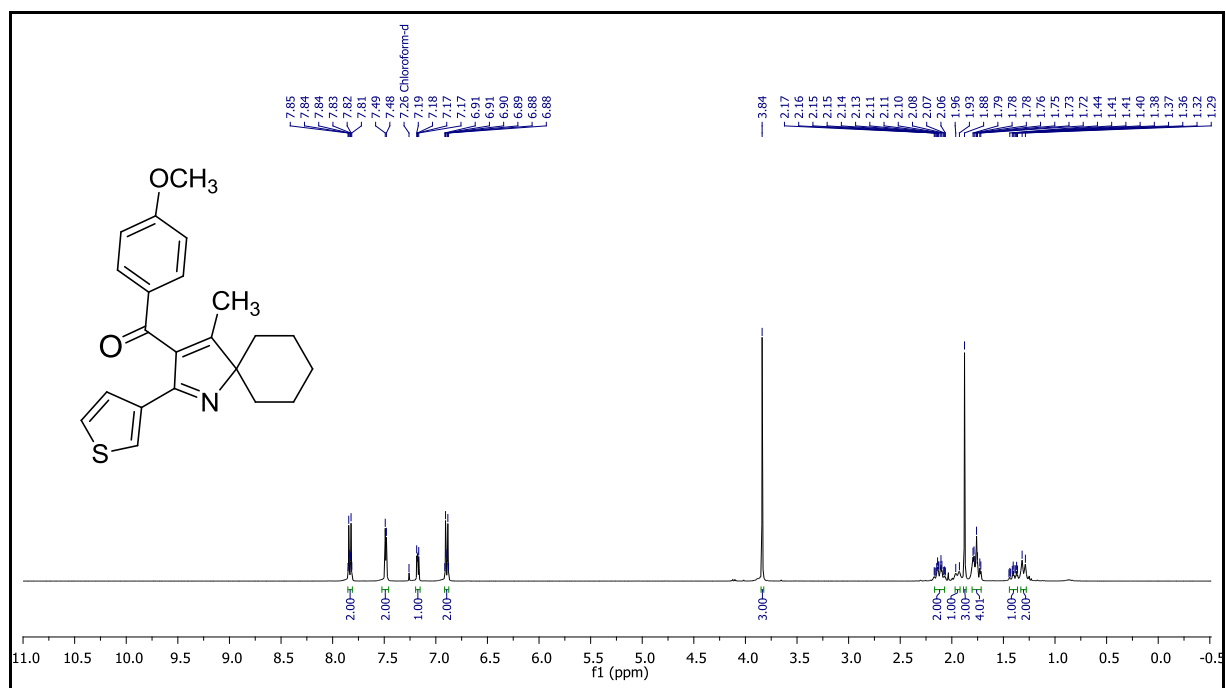


Figure S73. ¹H NMR spectrum of compound **3q**.

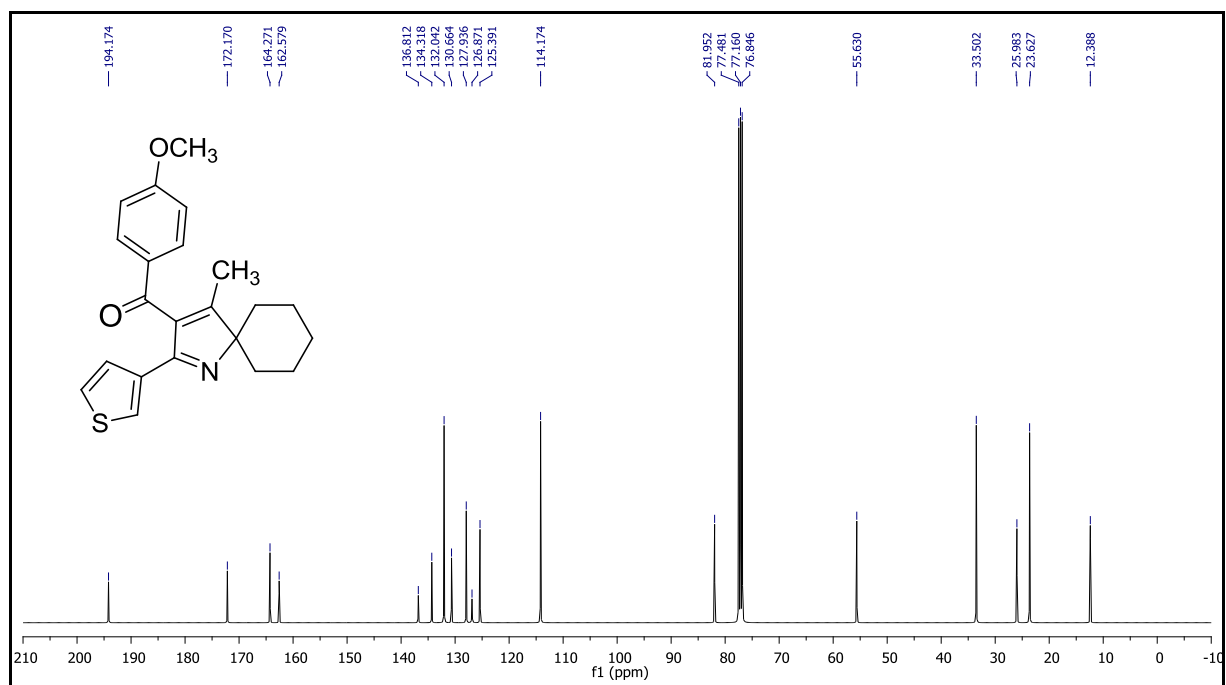


Figure S74. ¹³C NMR spectrum of compound **3q**.

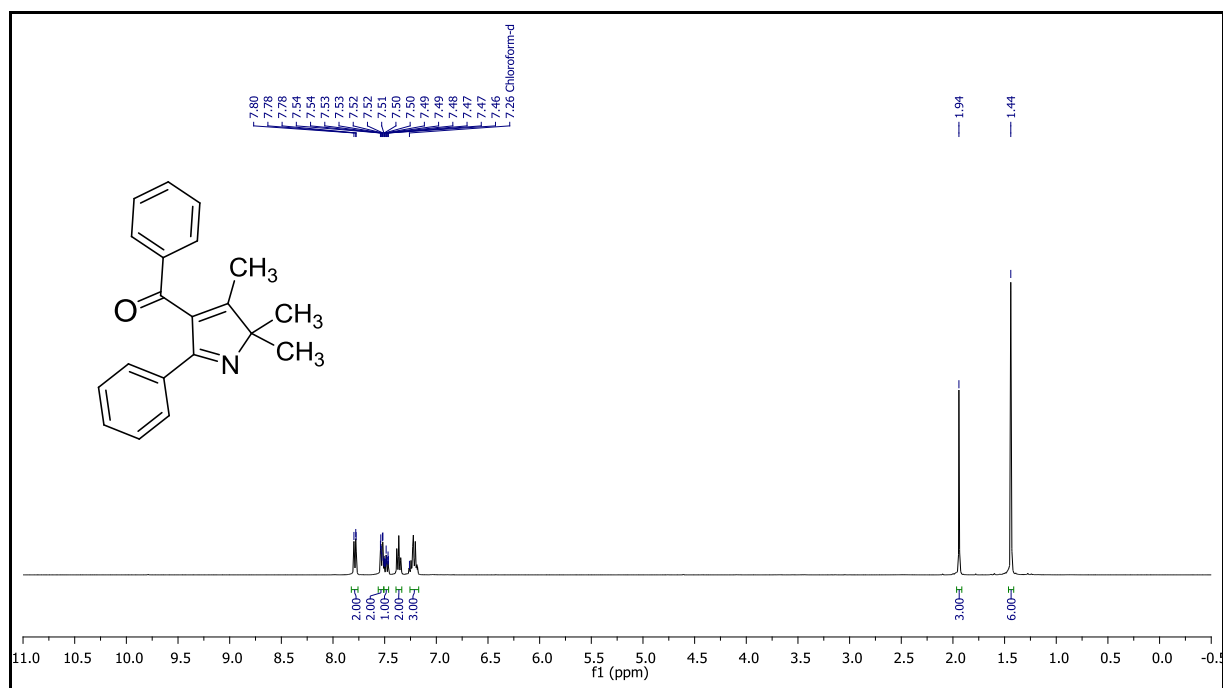


Figure S75. ¹H NMR spectrum of compound **6a**.

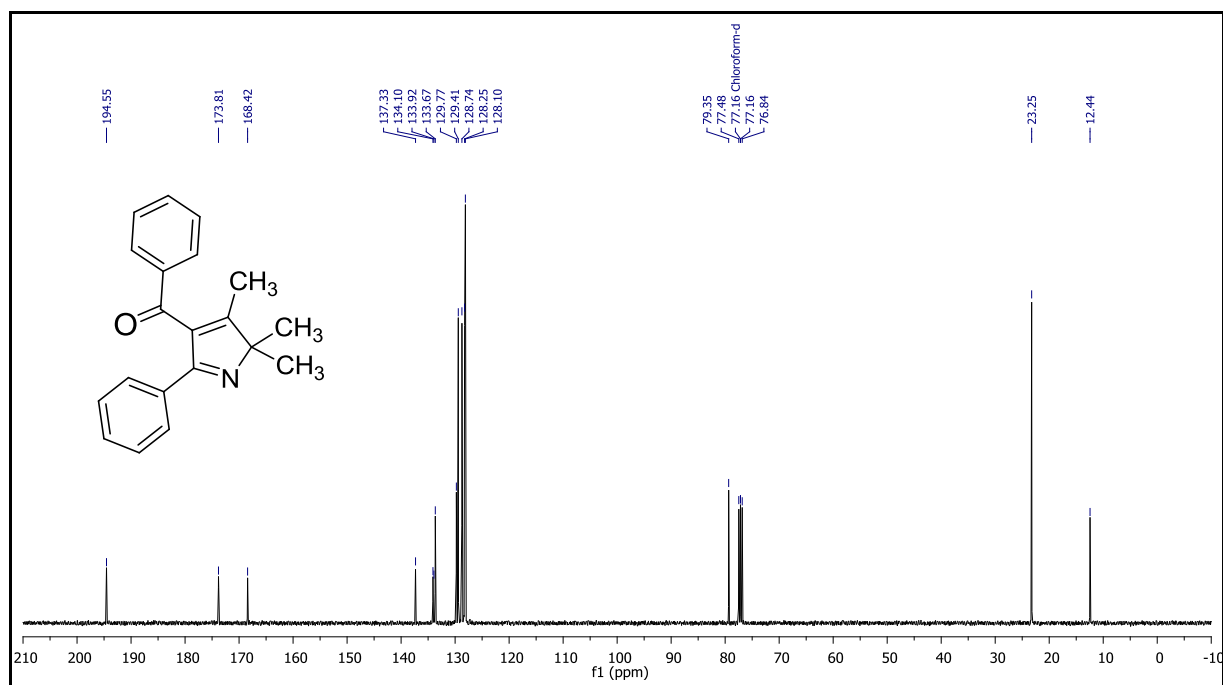


Figure S76. ¹³C NMR spectrum of compound **6a**.

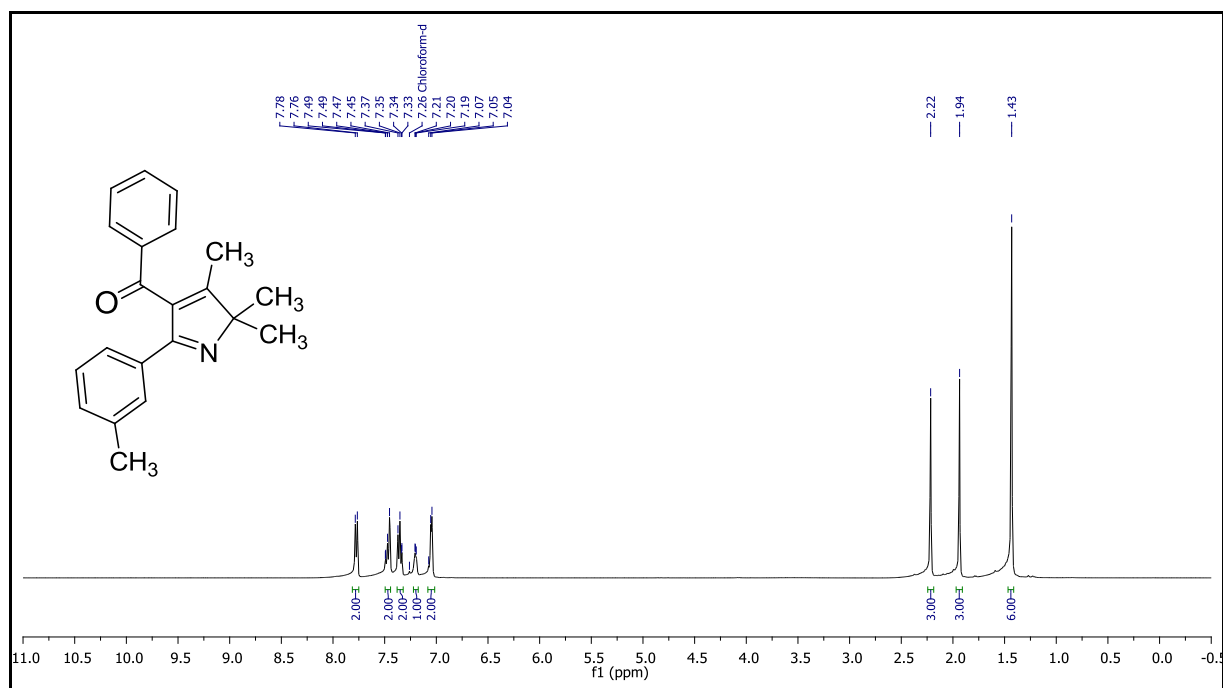


Figure S77. ¹H NMR spectrum of compound 6b.

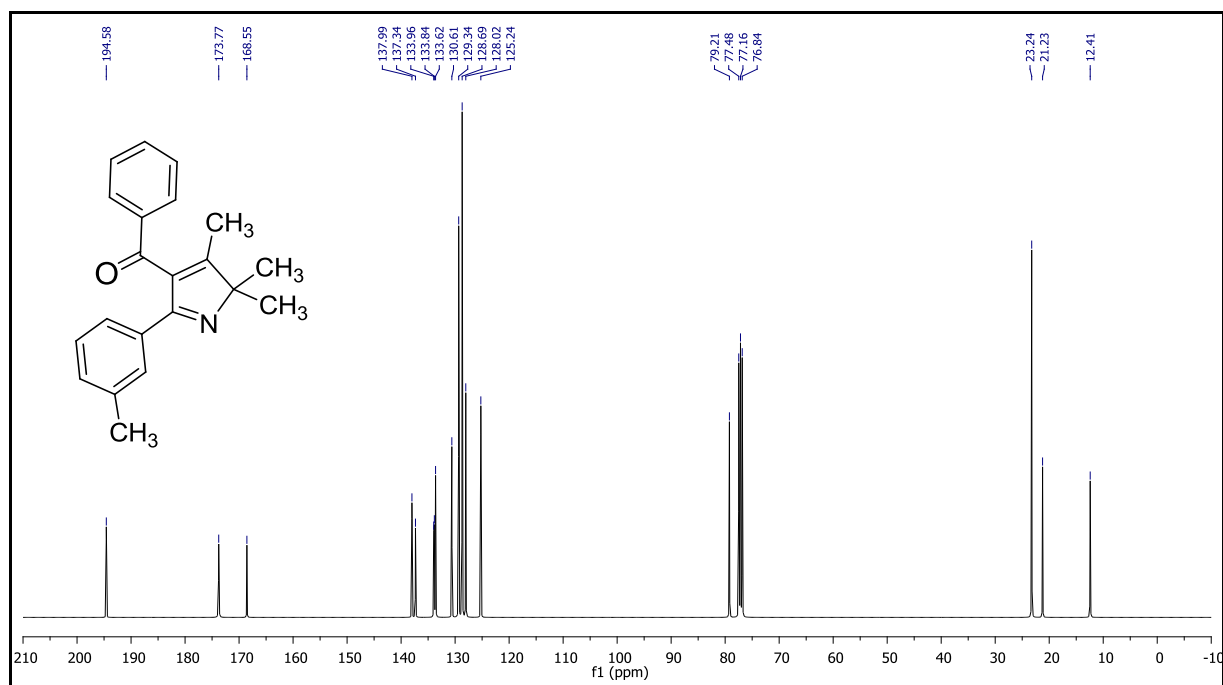


Figure S78. ¹³C NMR spectrum of compound 6b.

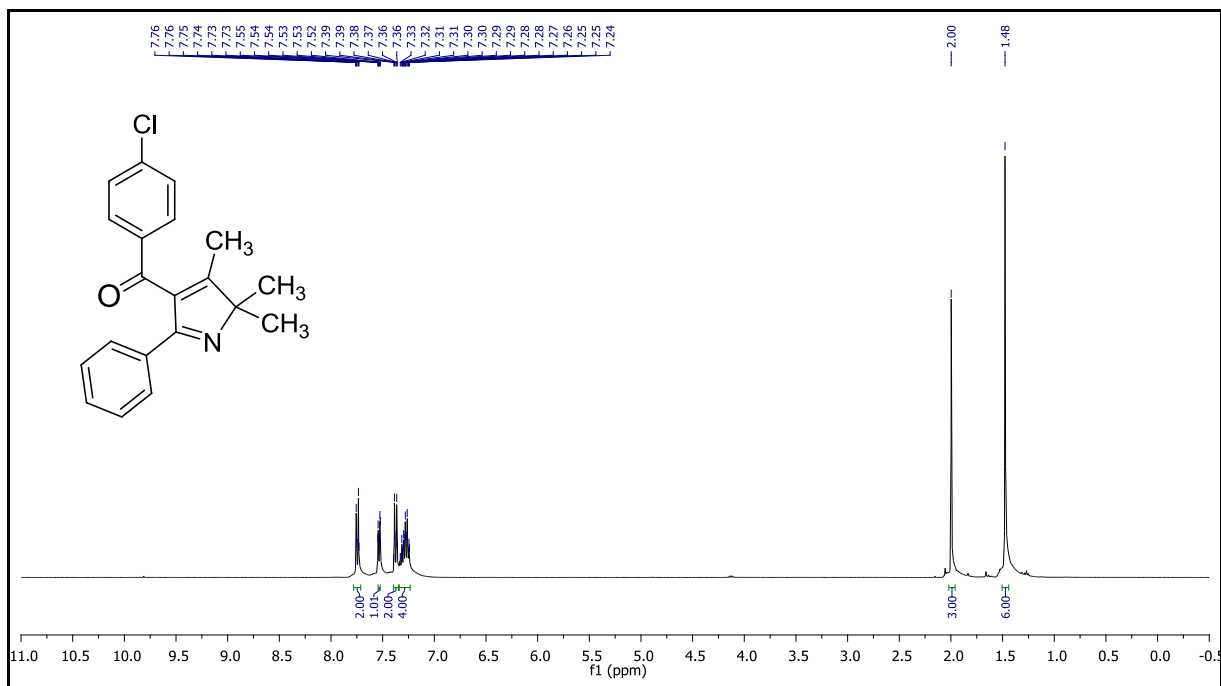


Figure S79. ¹H NMR spectrum of compound **6c**.

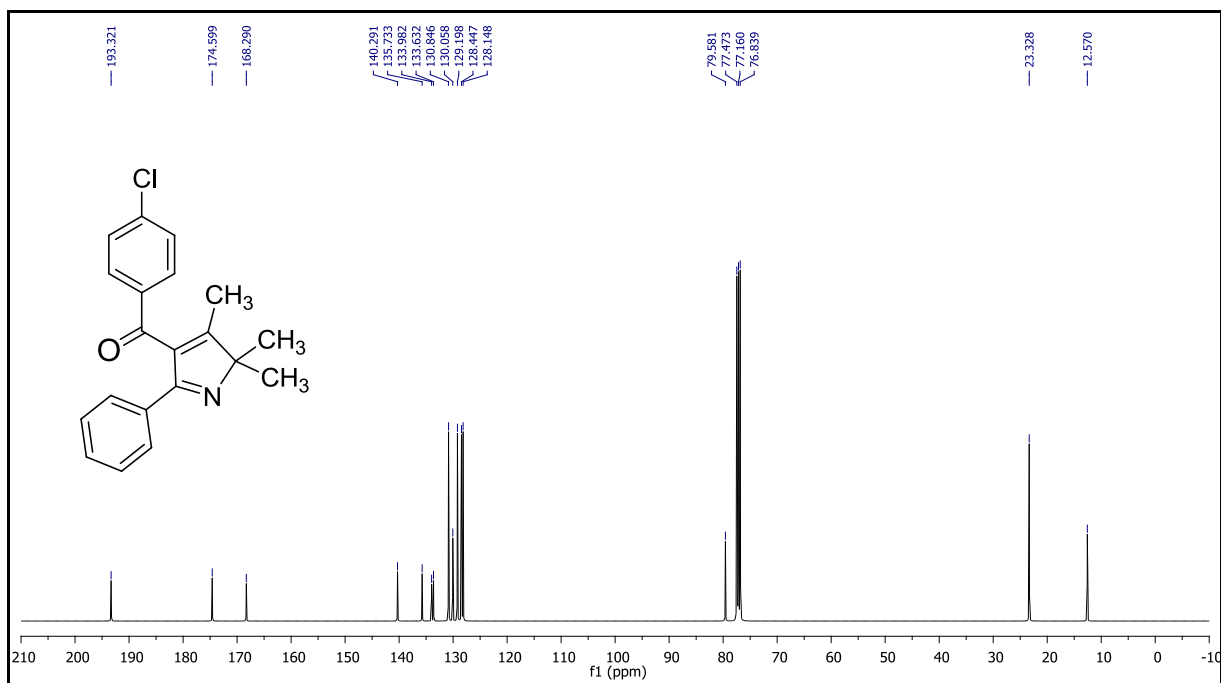


Figure S80. ¹³C NMR spectrum of compound **6c**.