Supplementary Information

Synthesis and Bioactivity Assessment of Novel Quinolinone-Triazole Hybrids

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All newly synthesized compounds were fully characterized by NMR (^{1}H and ^{13}C) spectroscopy and HR-MS spectroscopy, while FT-IR spectra were obtained for the synthesized hybrid molecules (**5a**-**5j**). The spectra included below represent the complete analytical dataset obtained in this study and confirm the structures and purity of the compounds.

Nuclear Magnetic Resonance data

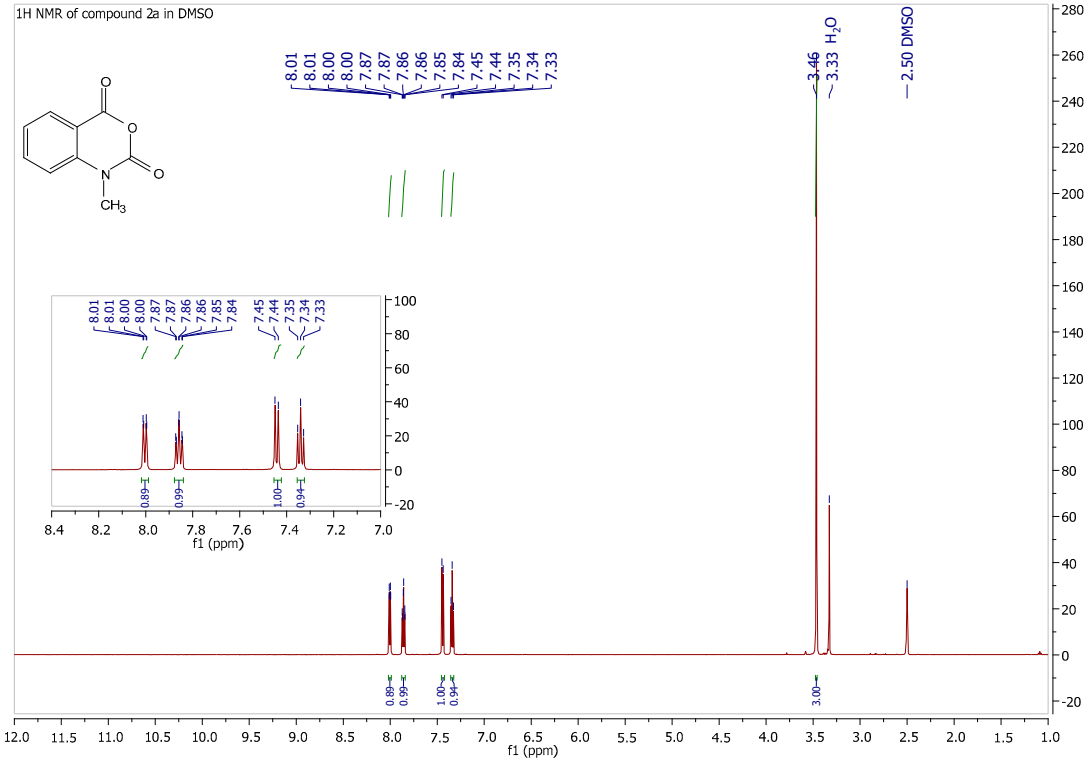


Figure S1. ^{1}H NMR spectrum of **2a**

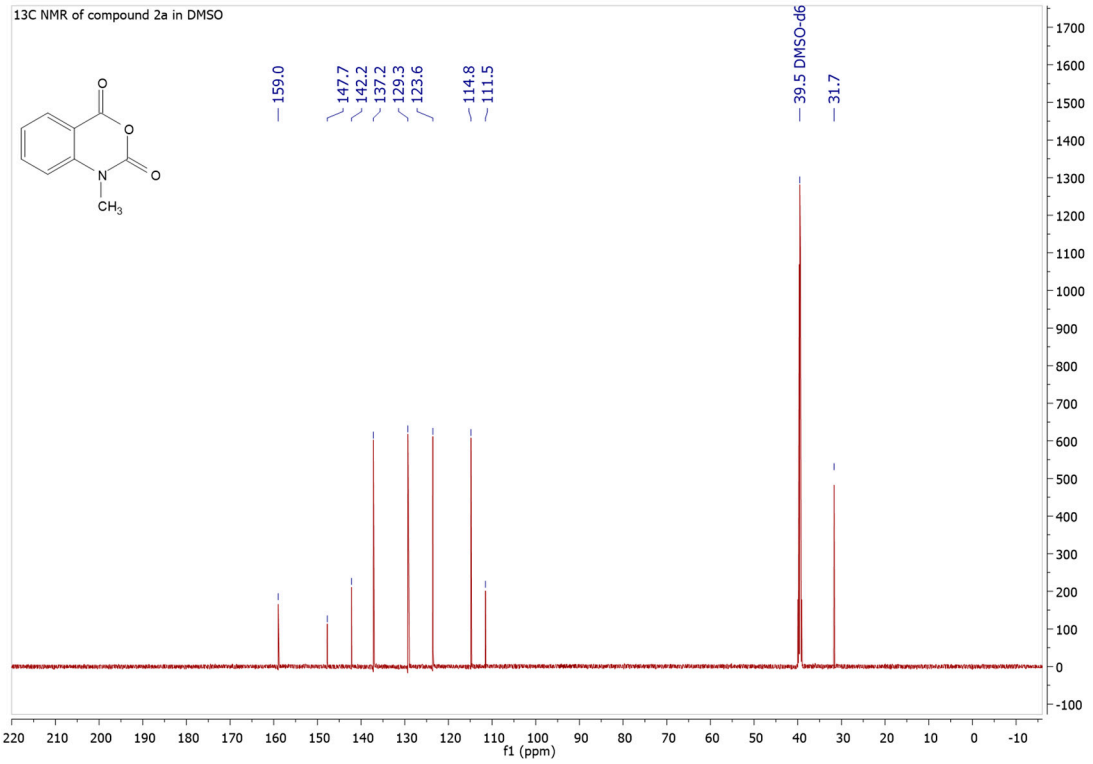


Figure S2. ^{13}C NMR spectrum of **2a**

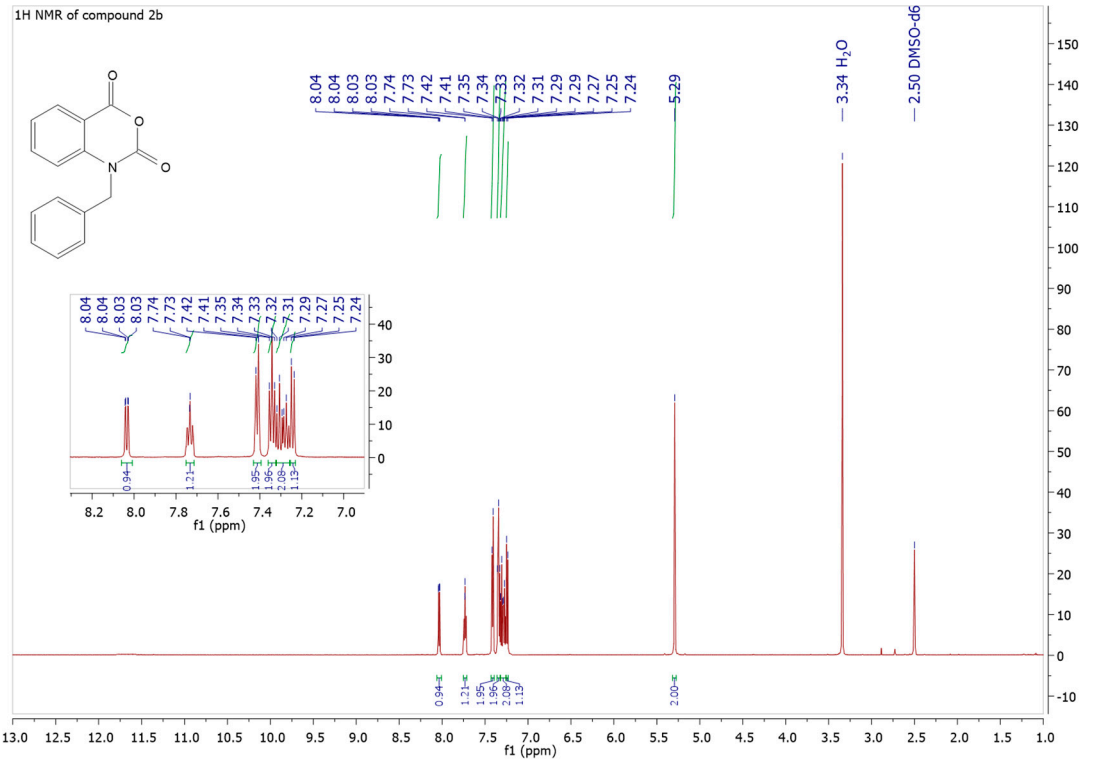


Figure S3. ^{1}H NMR spectrum of **2b**

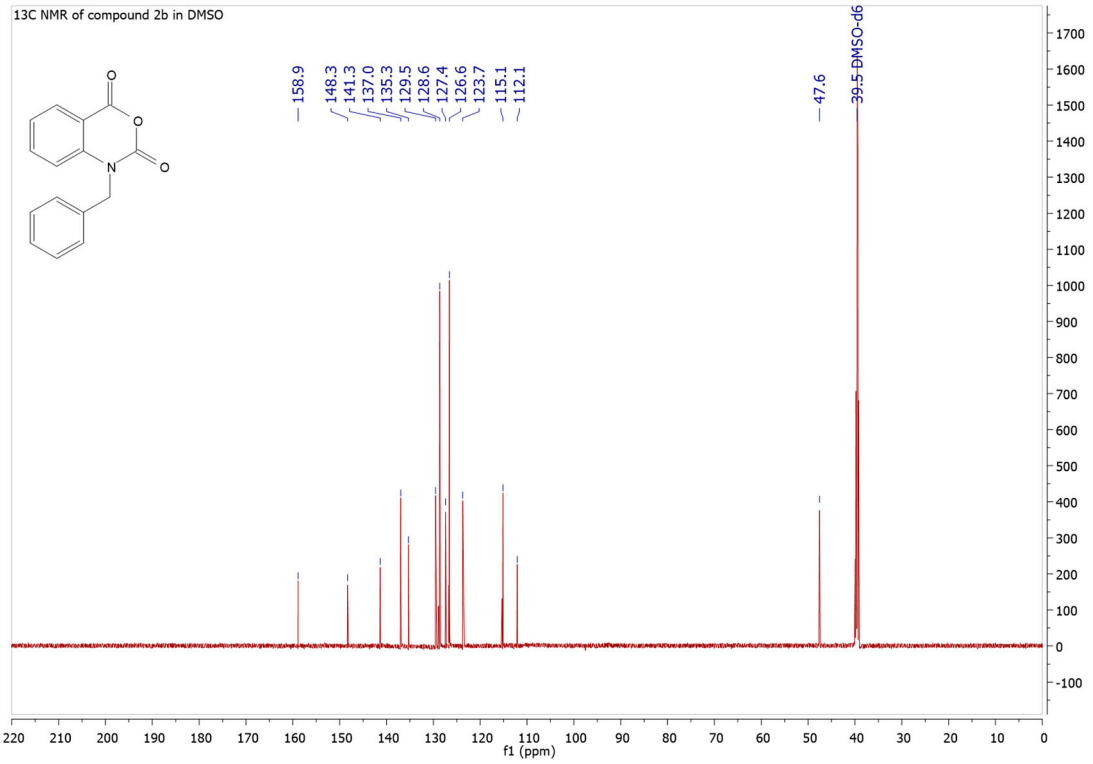


Figure S4. ^{13}C NMR spectrum of **2b**

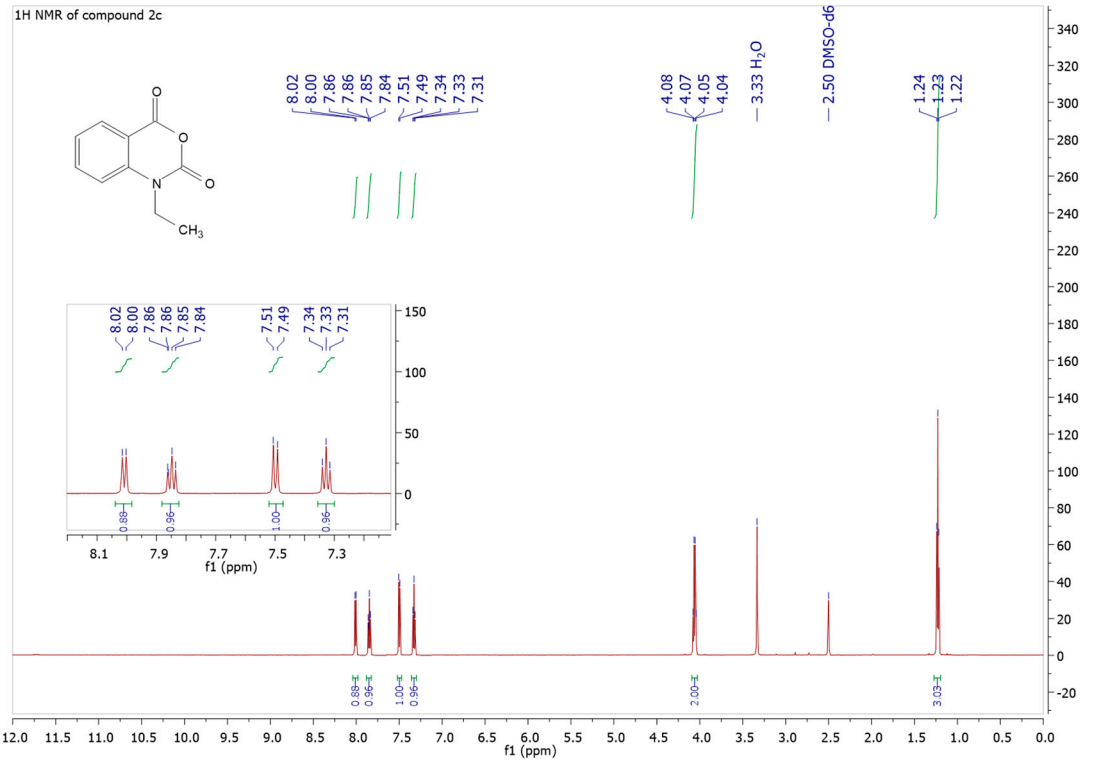


Figure S5. ^{1}H NMR spectrum of **2c**

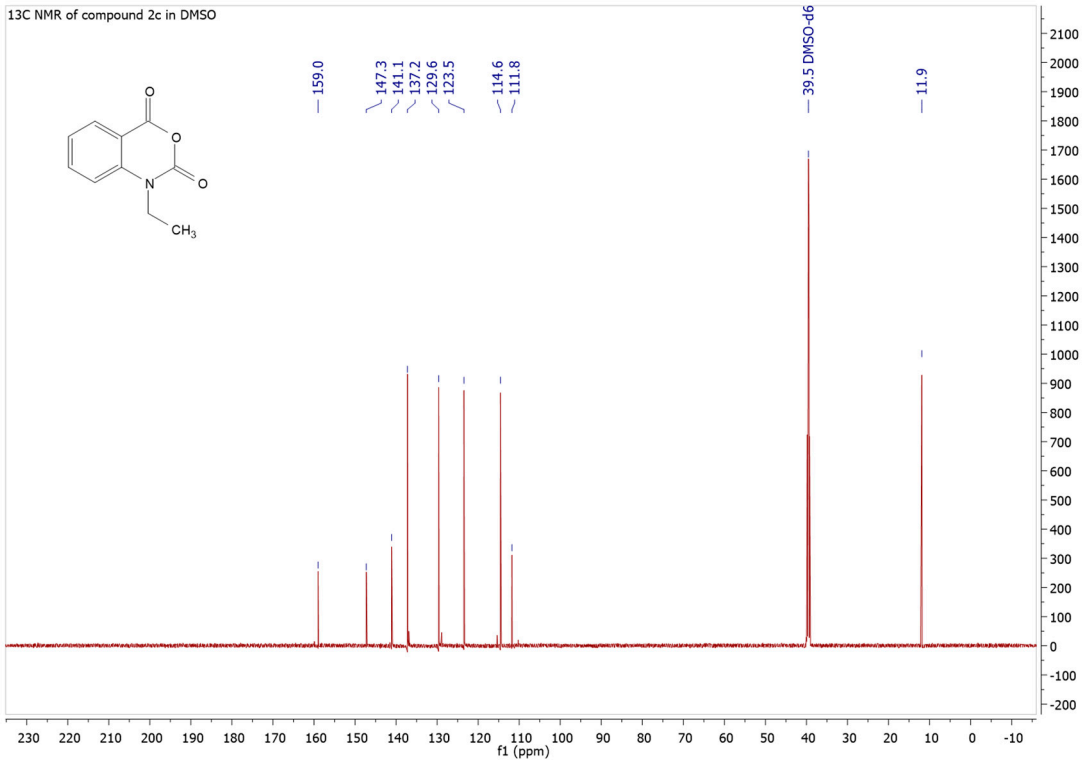


Figure S6. ^{13}C NMR spectrum of **2c**

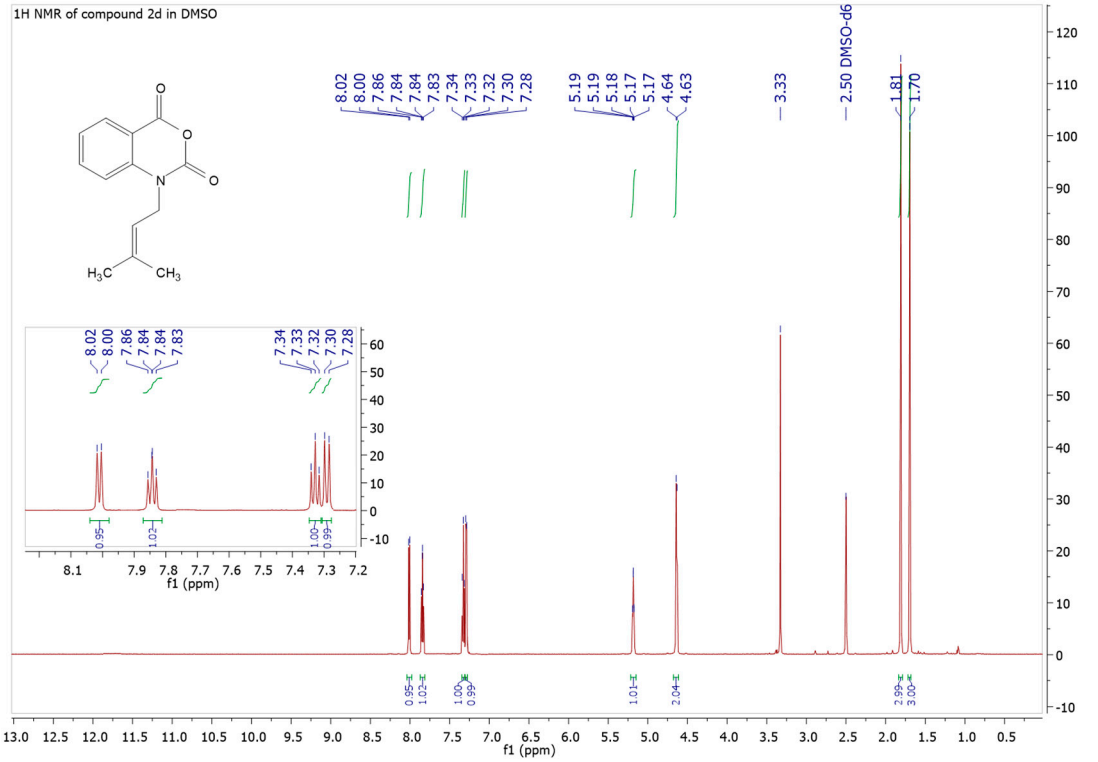


Figure S7. ^{1}H NMR spectrum of **2d**

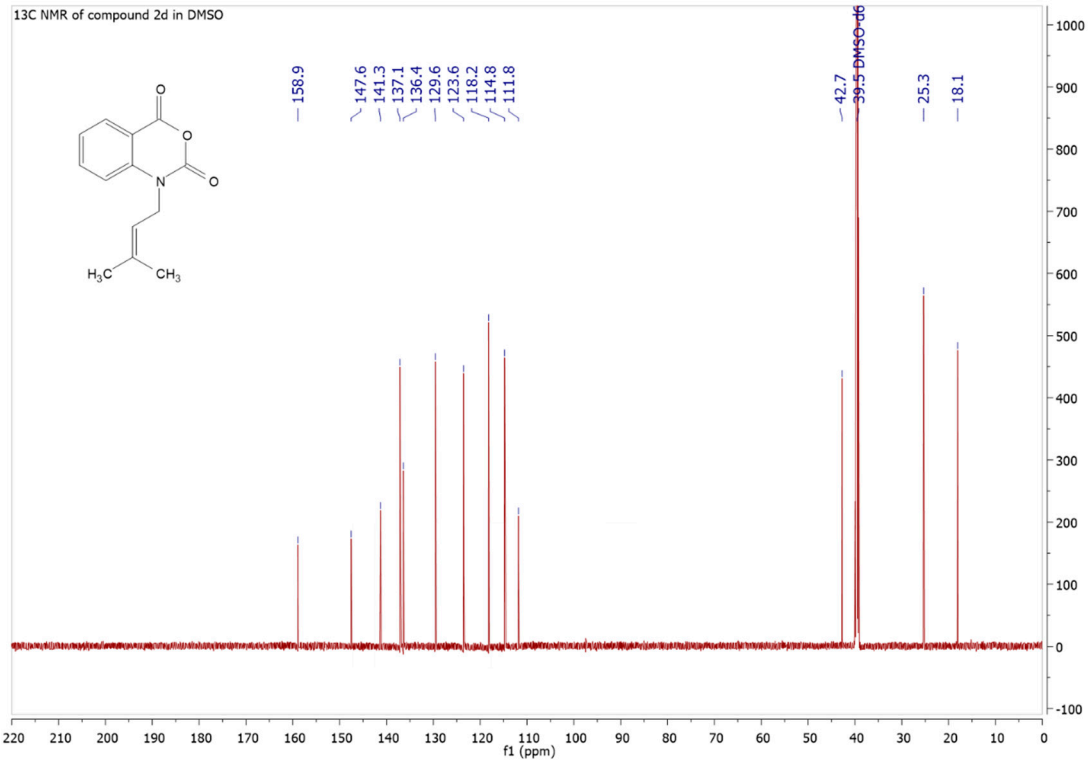


Figure S8. ^{13}C NMR spectrum of **2d**

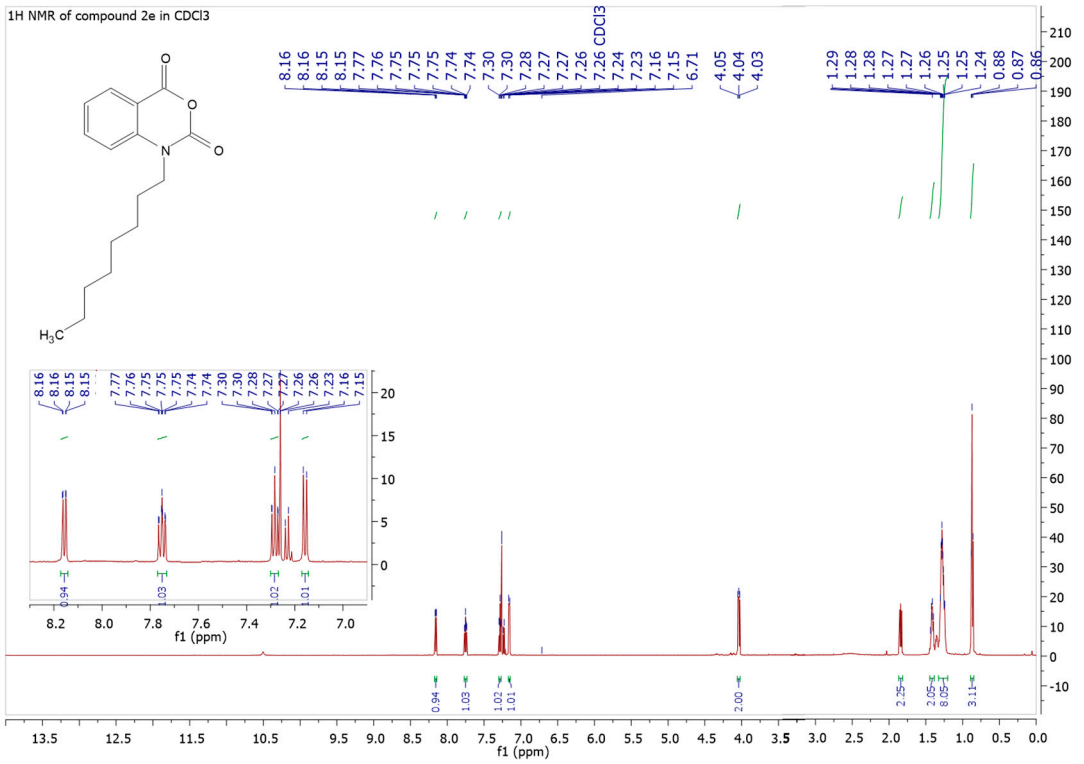


Figure S9. ^{1}H NMR spectrum of **2e**

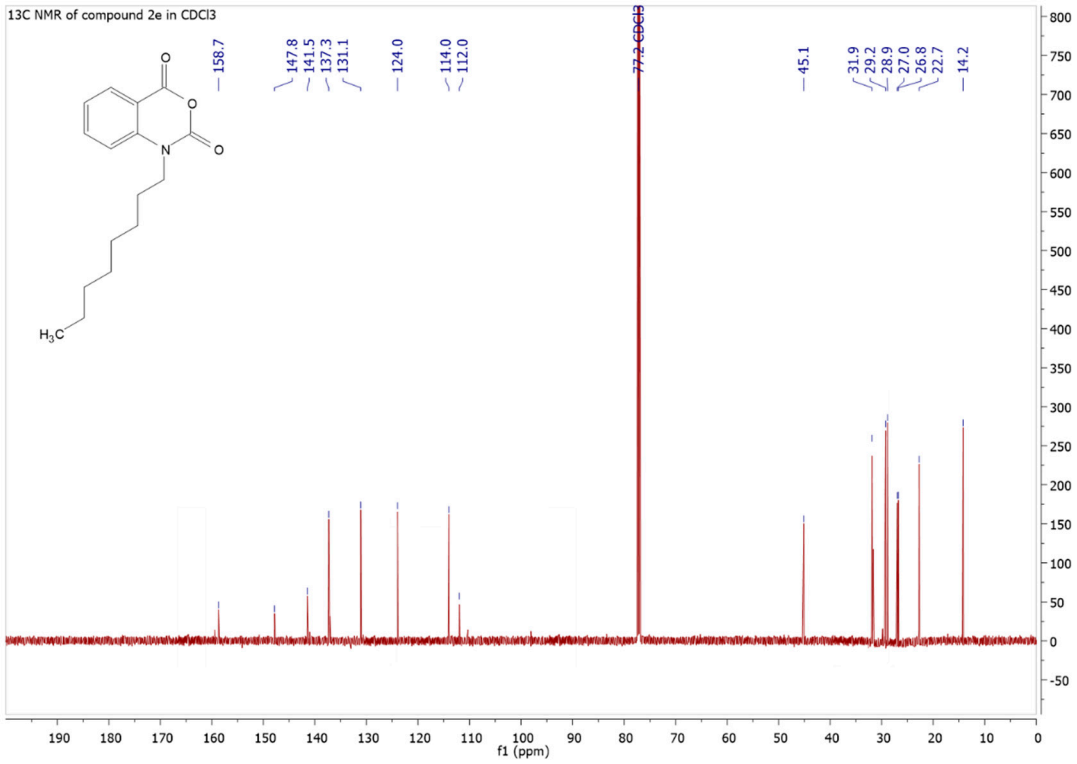


Figure S10. ^{13}C NMR spectrum of **2e**

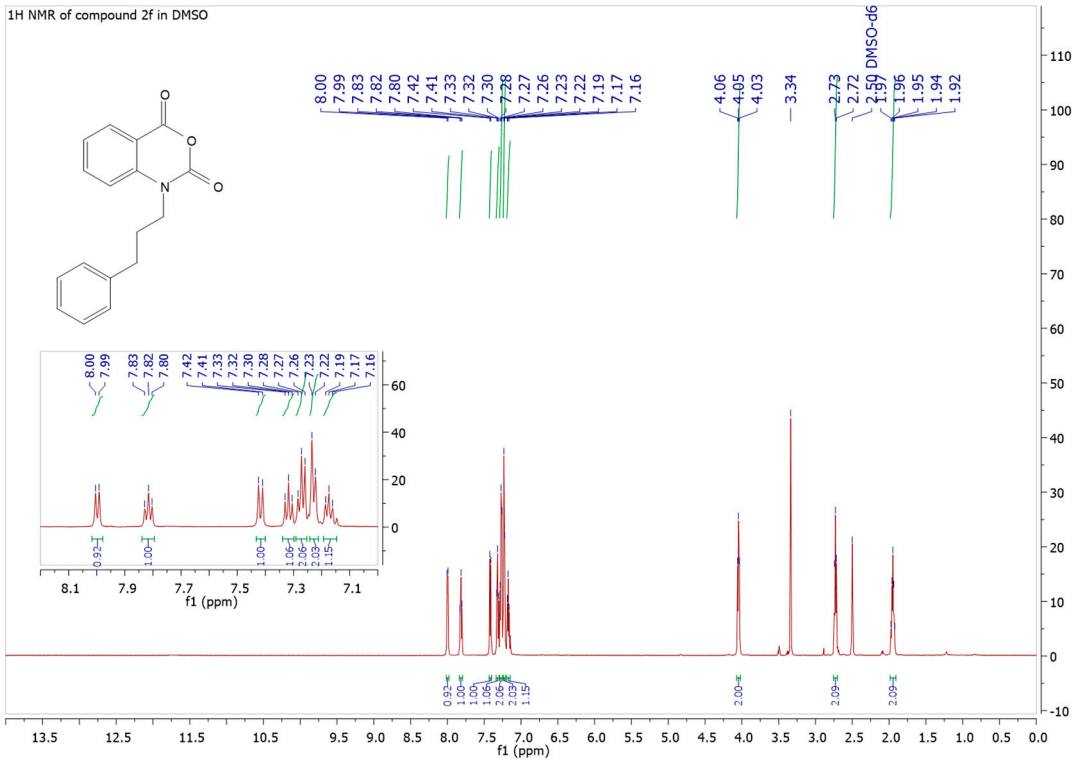


Figure S11. ^{1}H NMR spectrum of **2f**

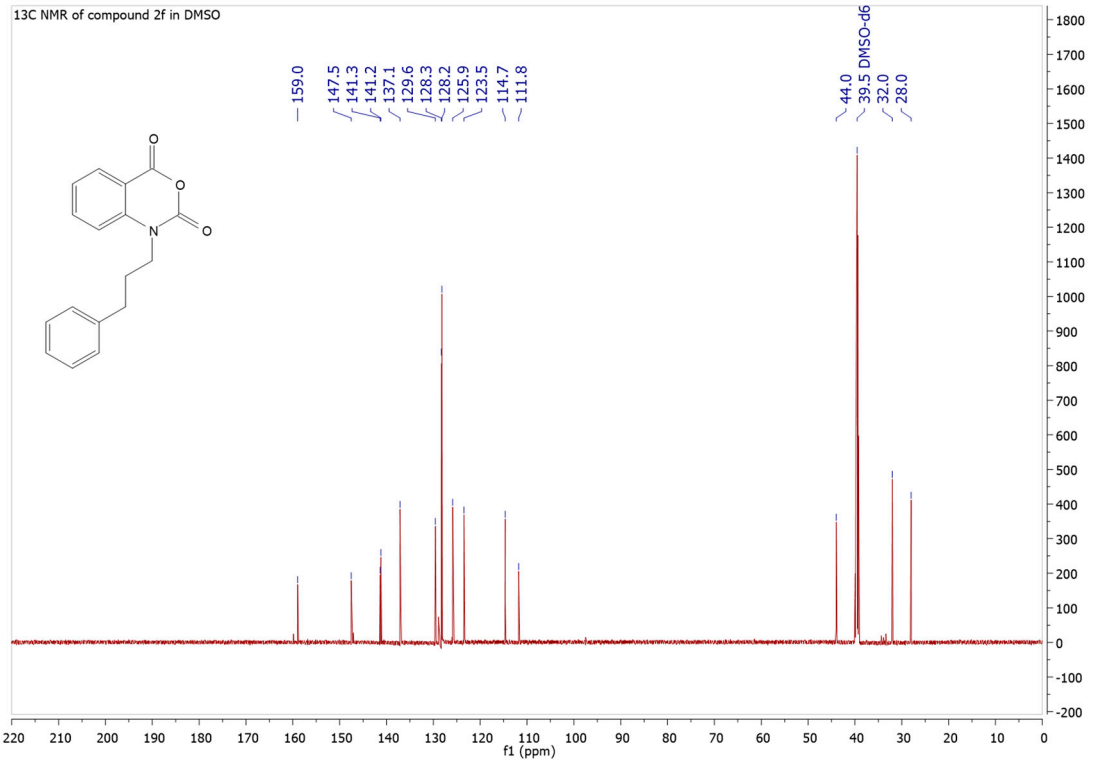


Figure S12. ^{13}C NMR spectrum of **2f**

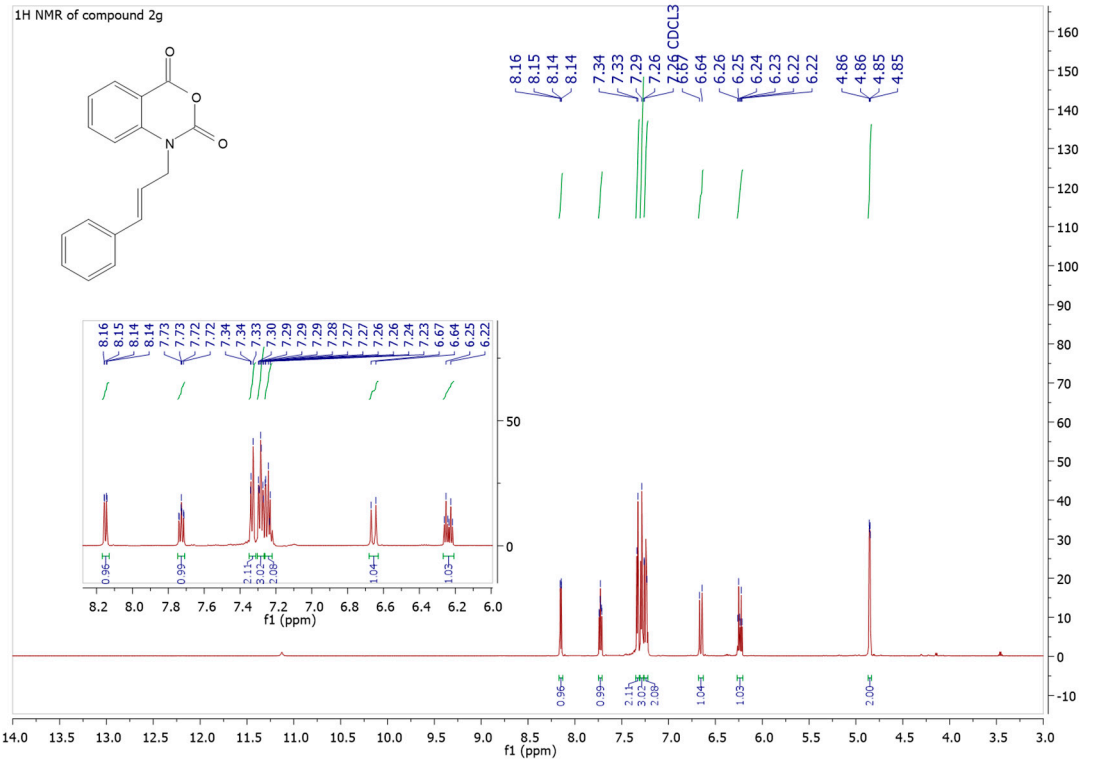


Figure S13. ^{1}H NMR spectrum of **2g**

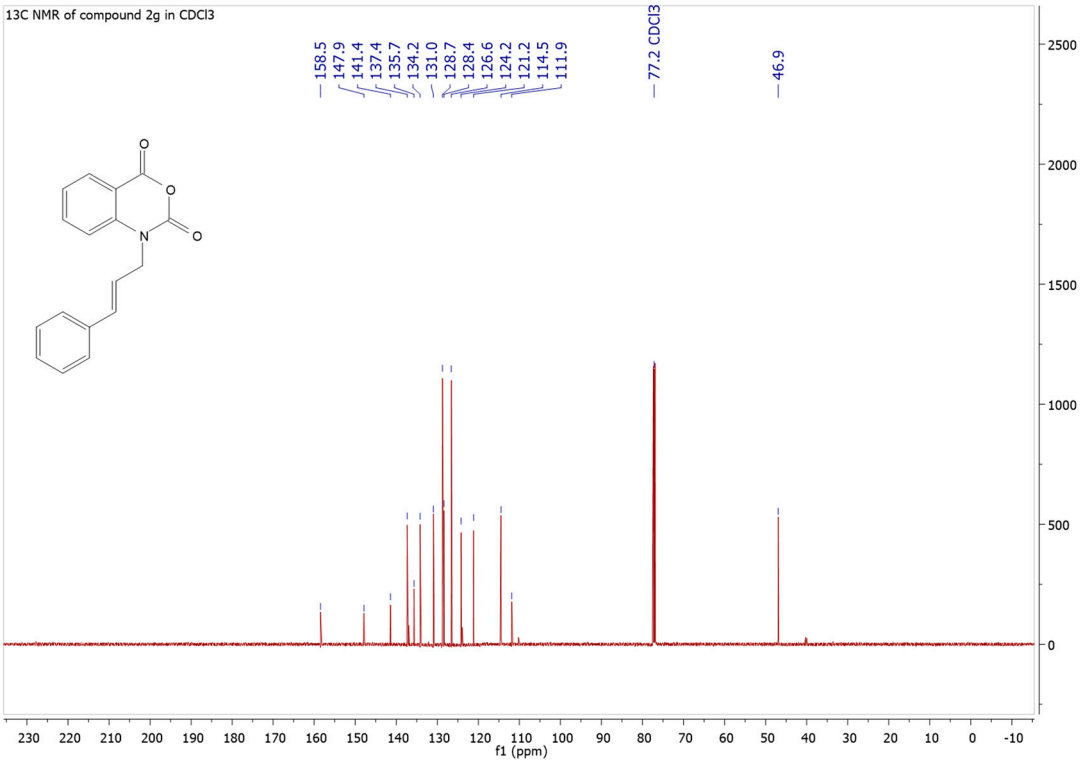


Figure S14. ^{13}C NMR spectrum of **2g**

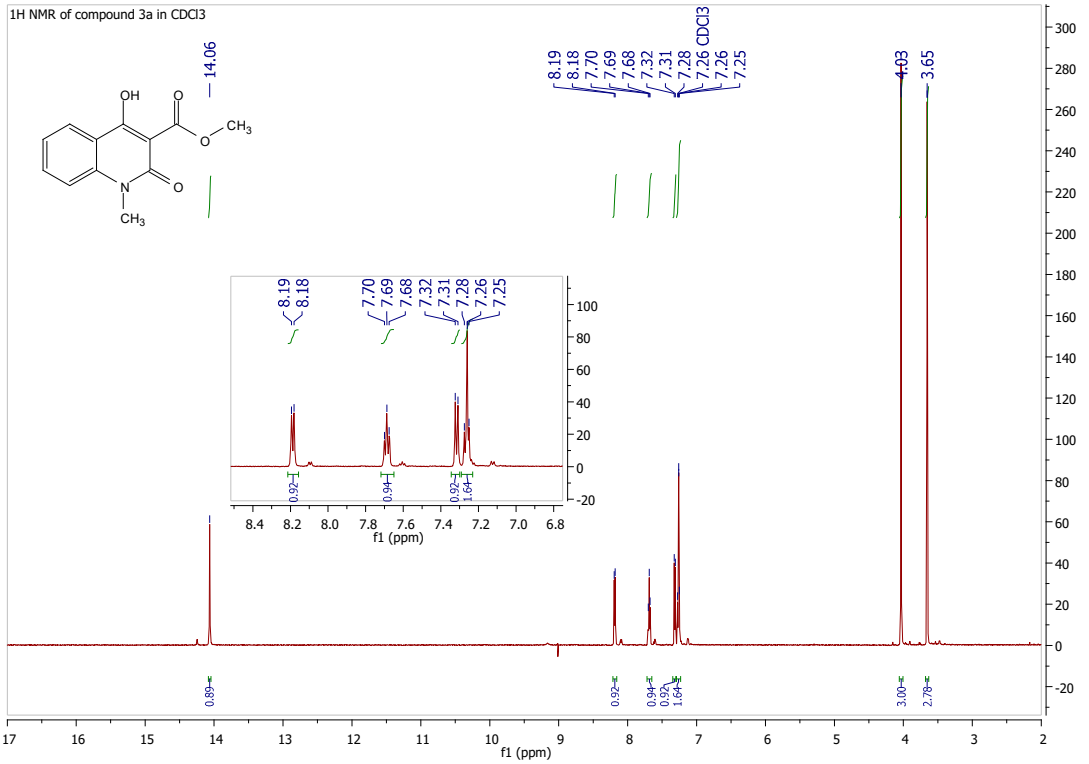


Figure S15. ^{1}H NMR spectrum of **3a**

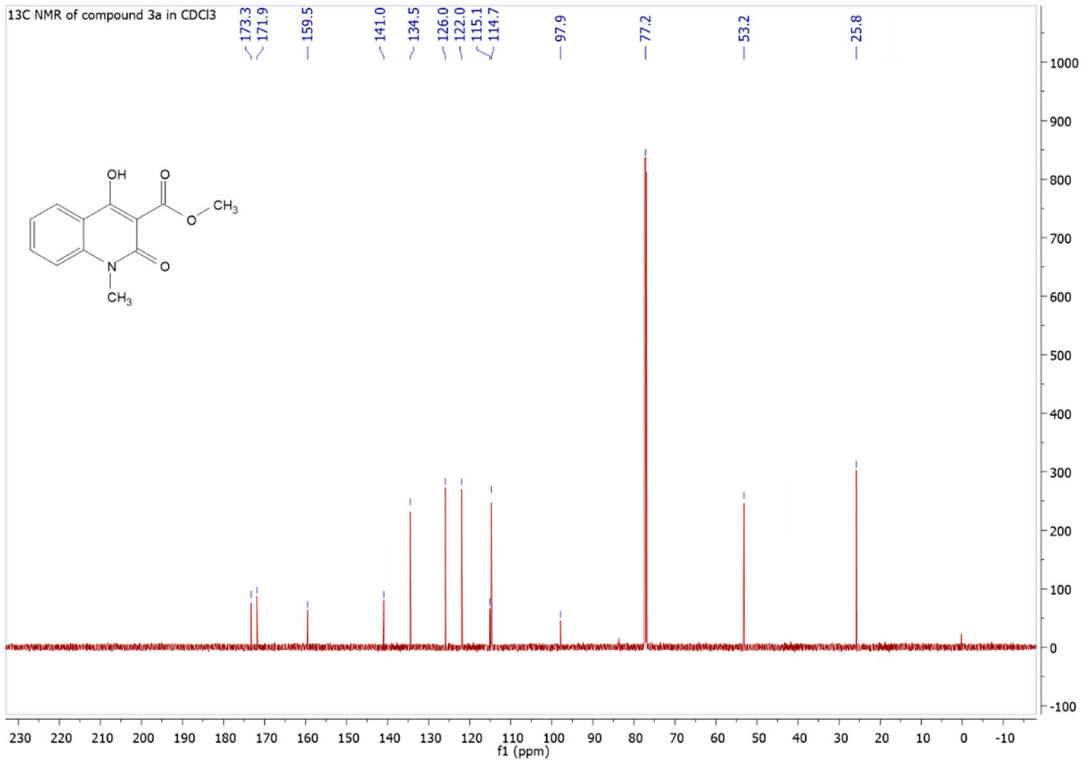


Figure S16. ^{13}C NMR spectrum of **3a**

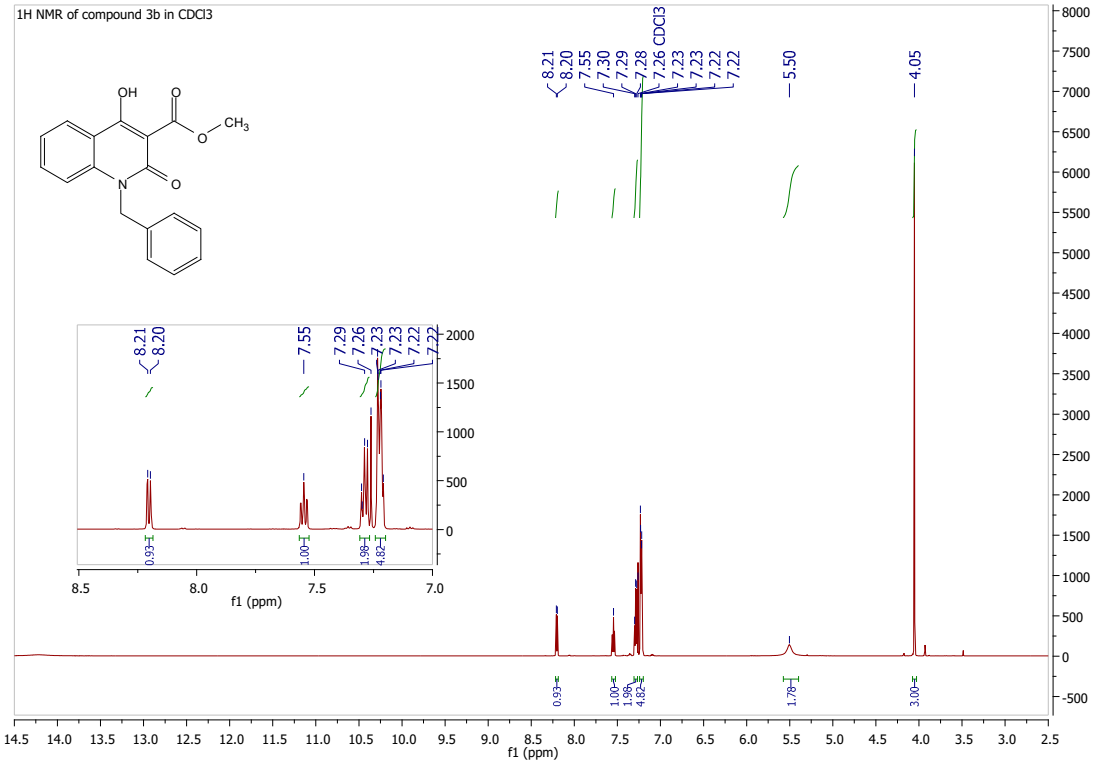


Figure S17. ^{1}H NMR spectrum of **3b**

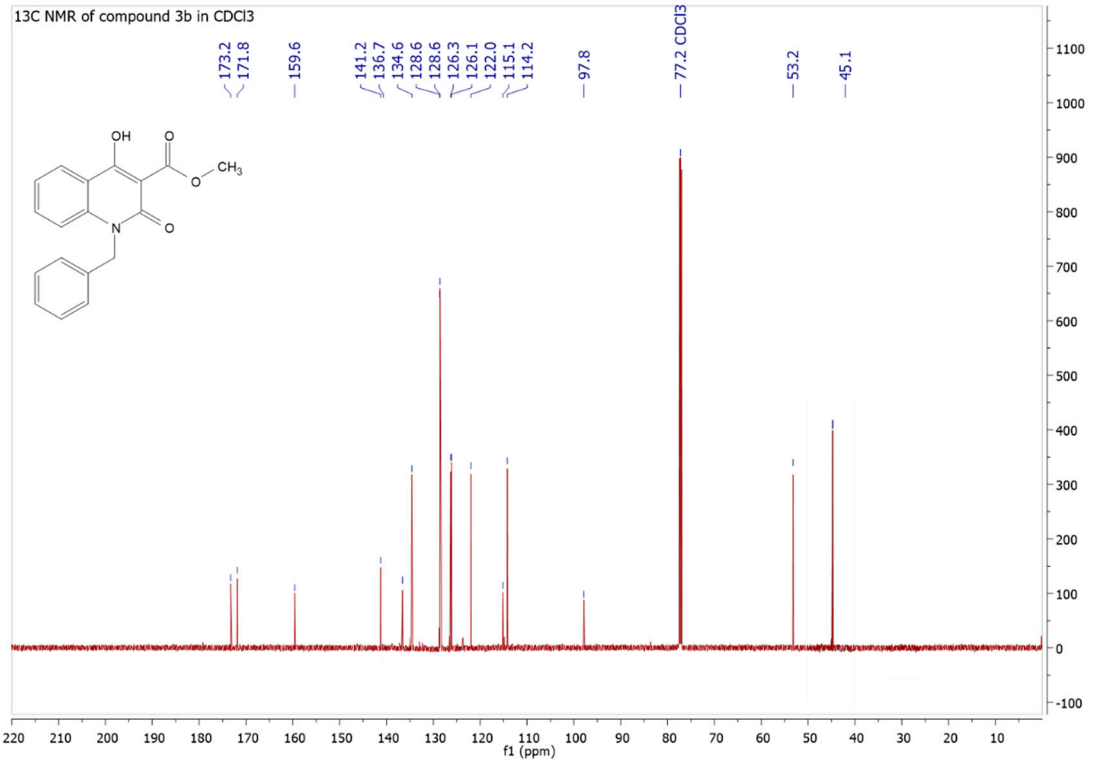


Figure S18. ^{13}C NMR spectrum of **3b**

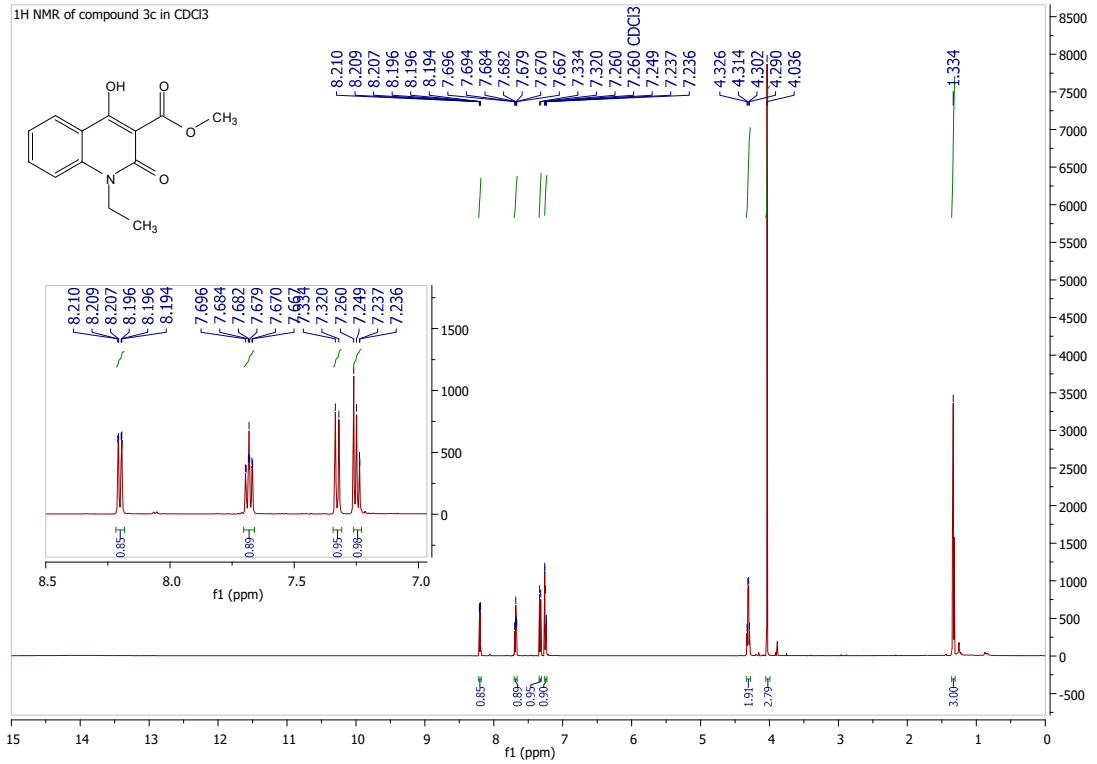


Figure S19. ^{1}H NMR spectrum of **3c**

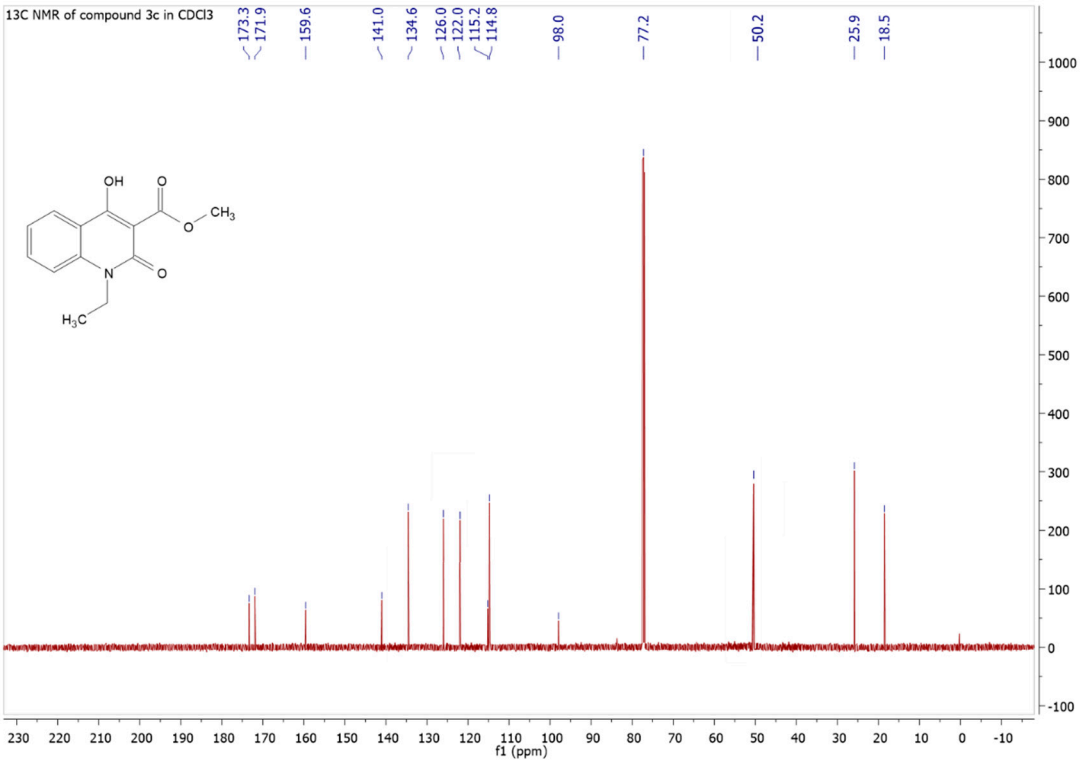


Figure S20. ^{13}C NMR spectrum of **3c**

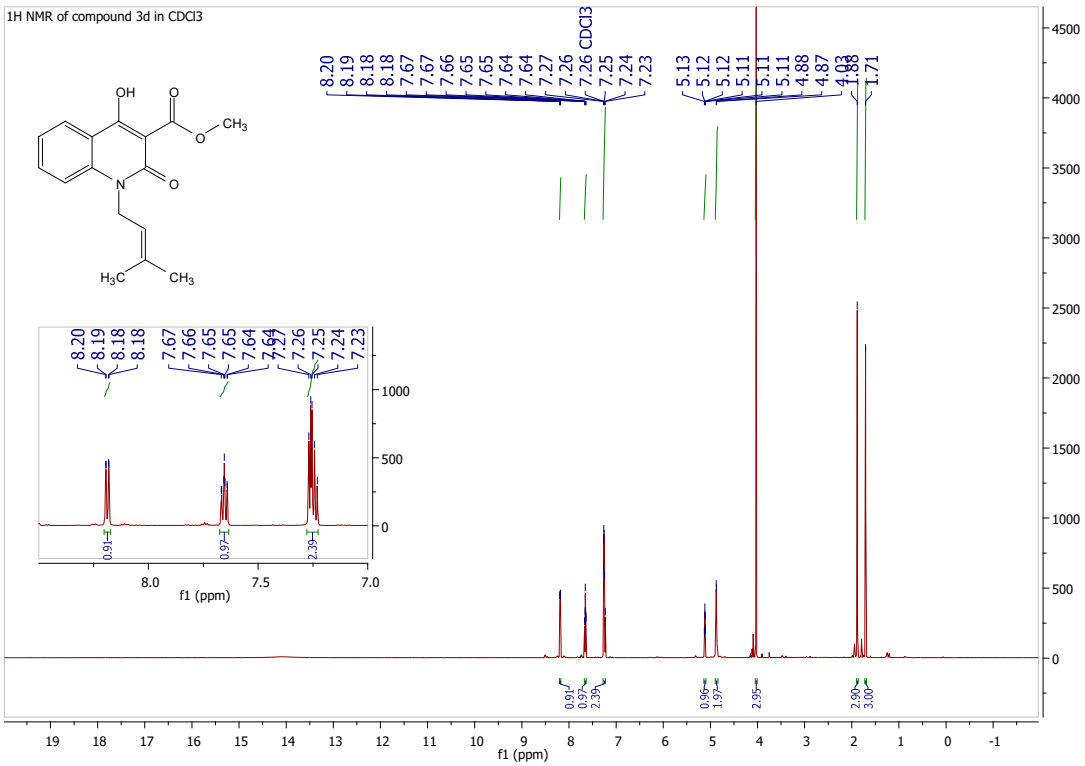


Figure S21. ^{1}H NMR spectrum of **3d**

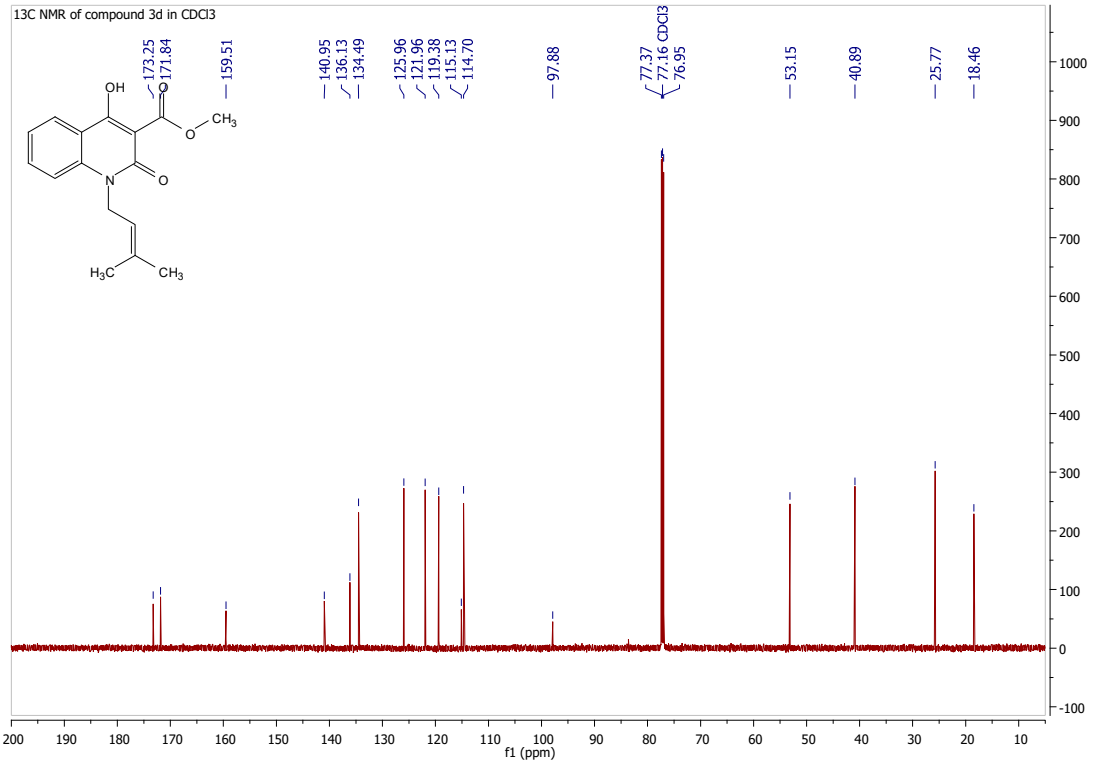


Figure S22. ^{13}C NMR spectrum of **3d**

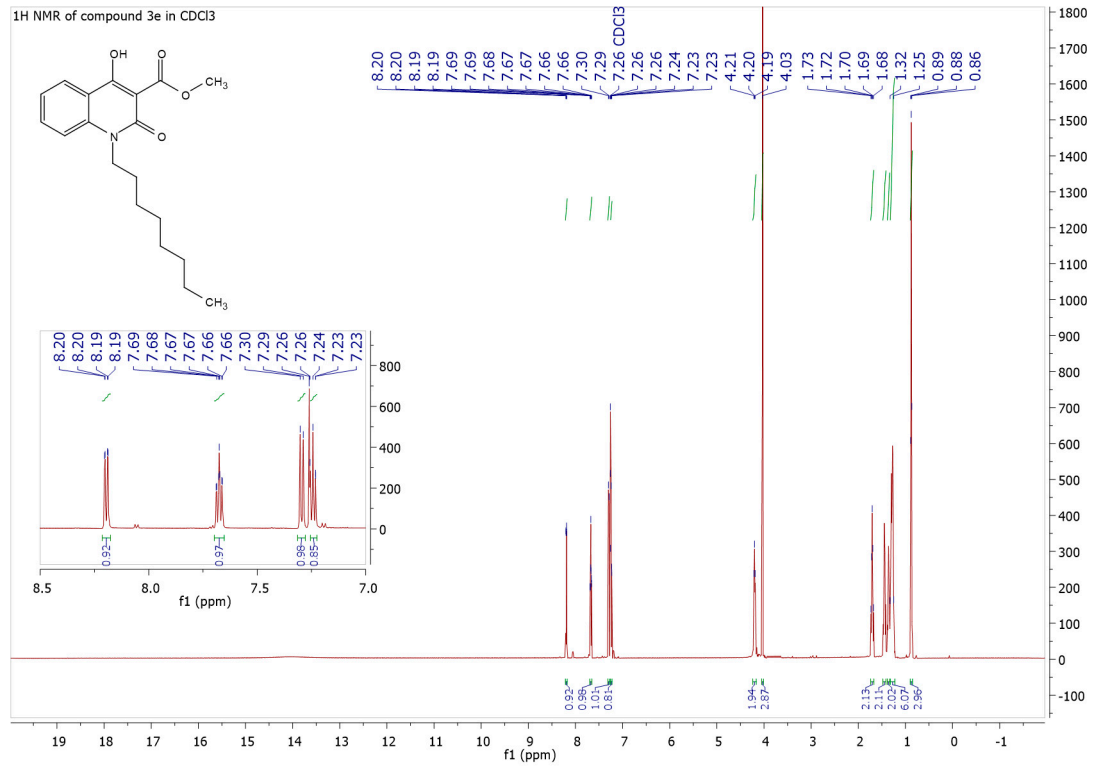


Figure S23. ^{1}H NMR spectrum of **3e**

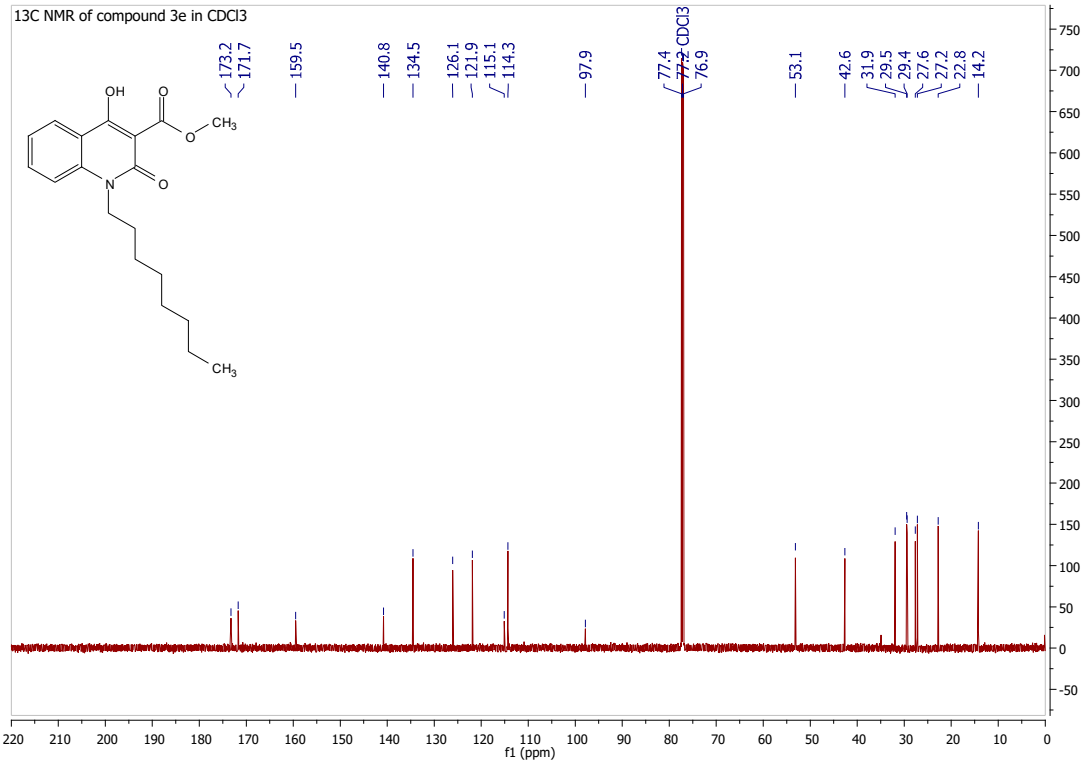


Figure S24. ^{13}C NMR spectrum of **3e**

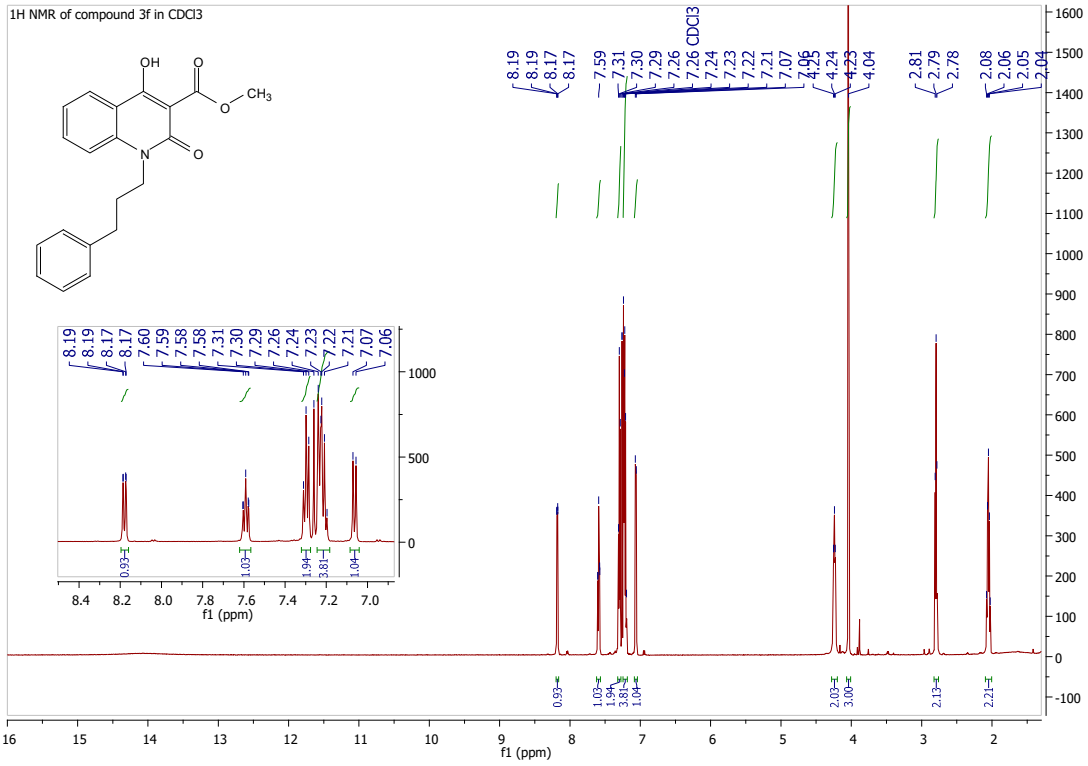


Figure S25. ^{1}H NMR spectrum of **3f**

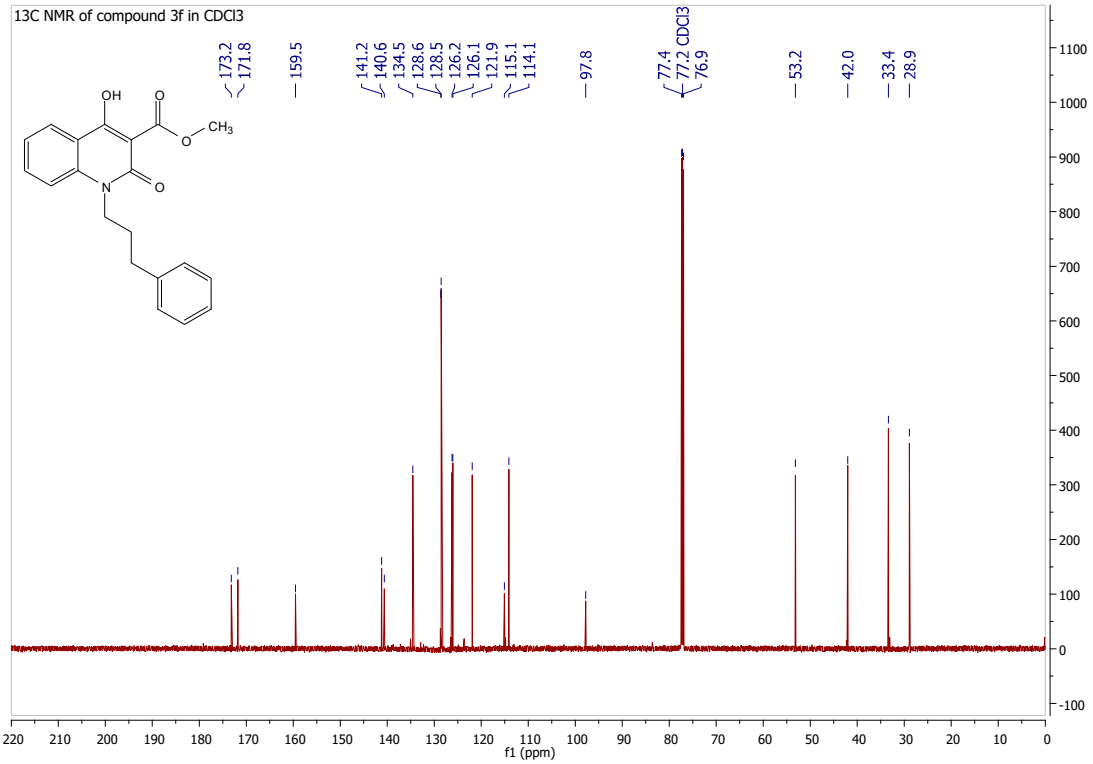


Figure S26. ^{13}C NMR spectrum of **3f**

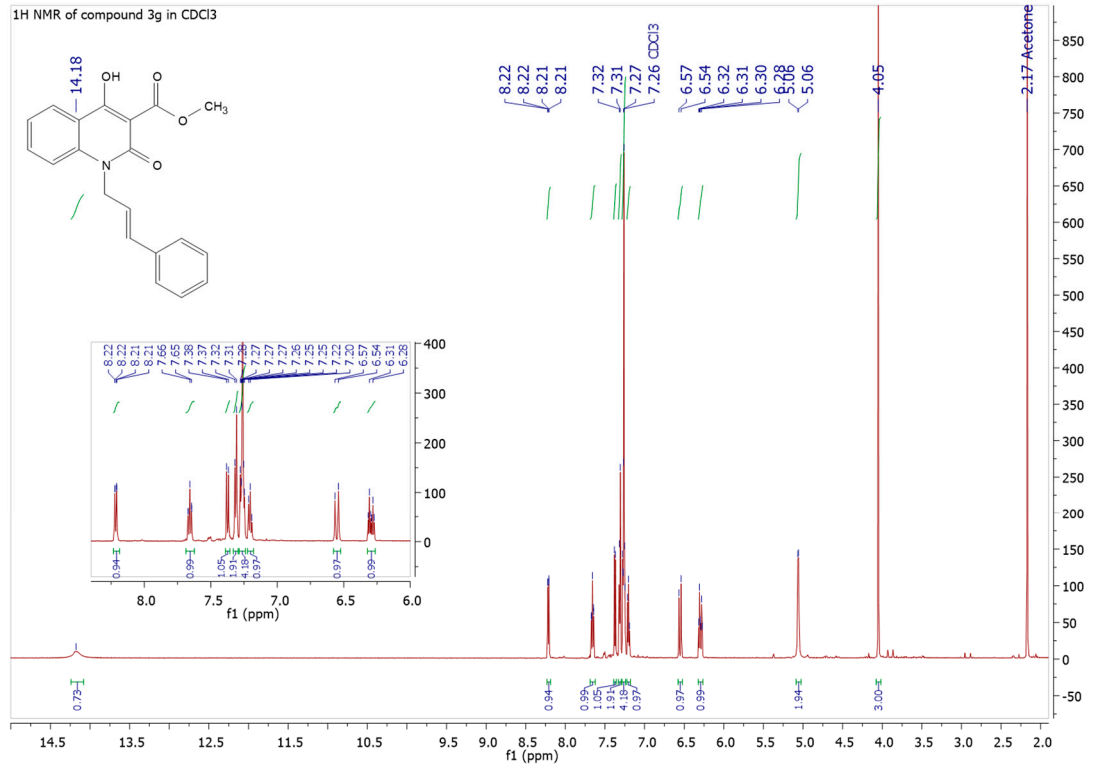


Figure S27. ^{1}H NMR spectrum of **3g**

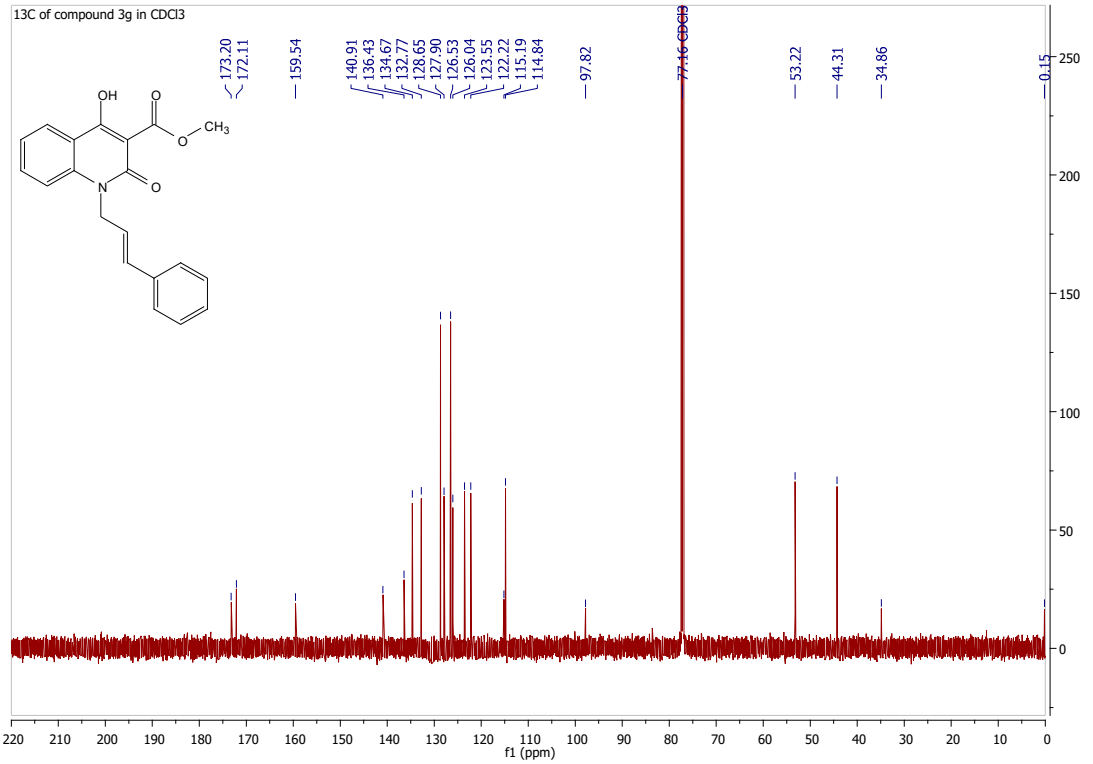


Figure S28. ^{13}C NMR spectrum of **3g**

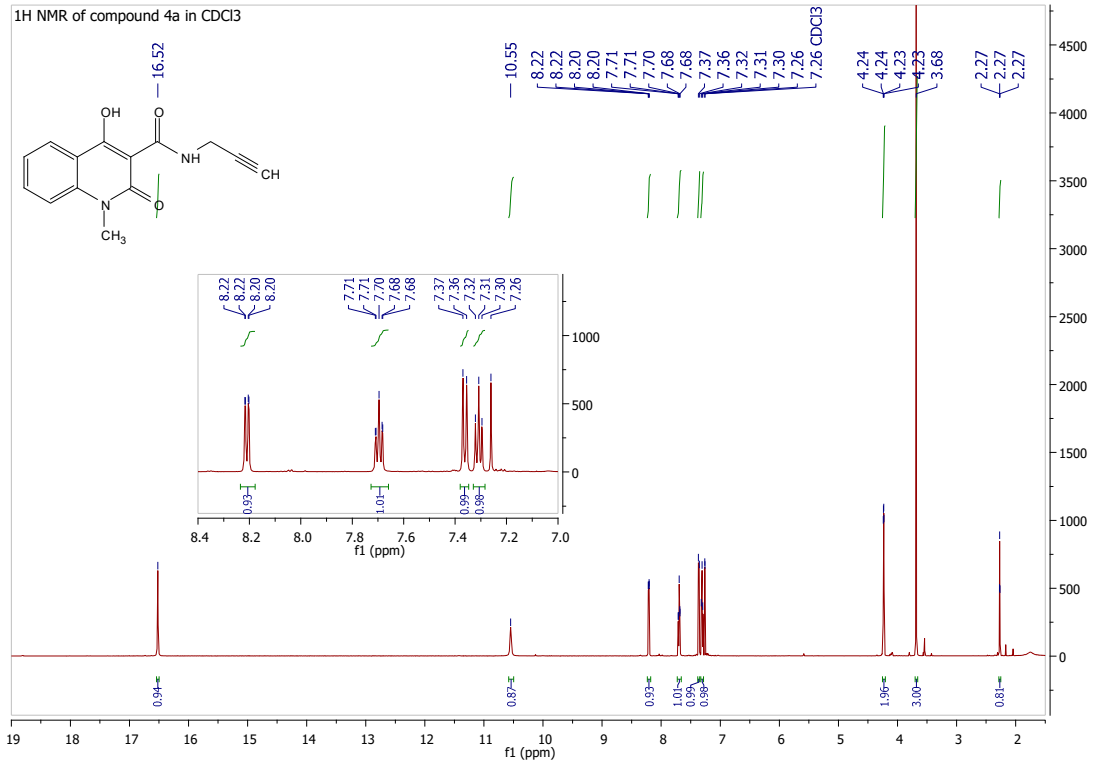


Figure S29. ^{1}H NMR spectrum of **4a**

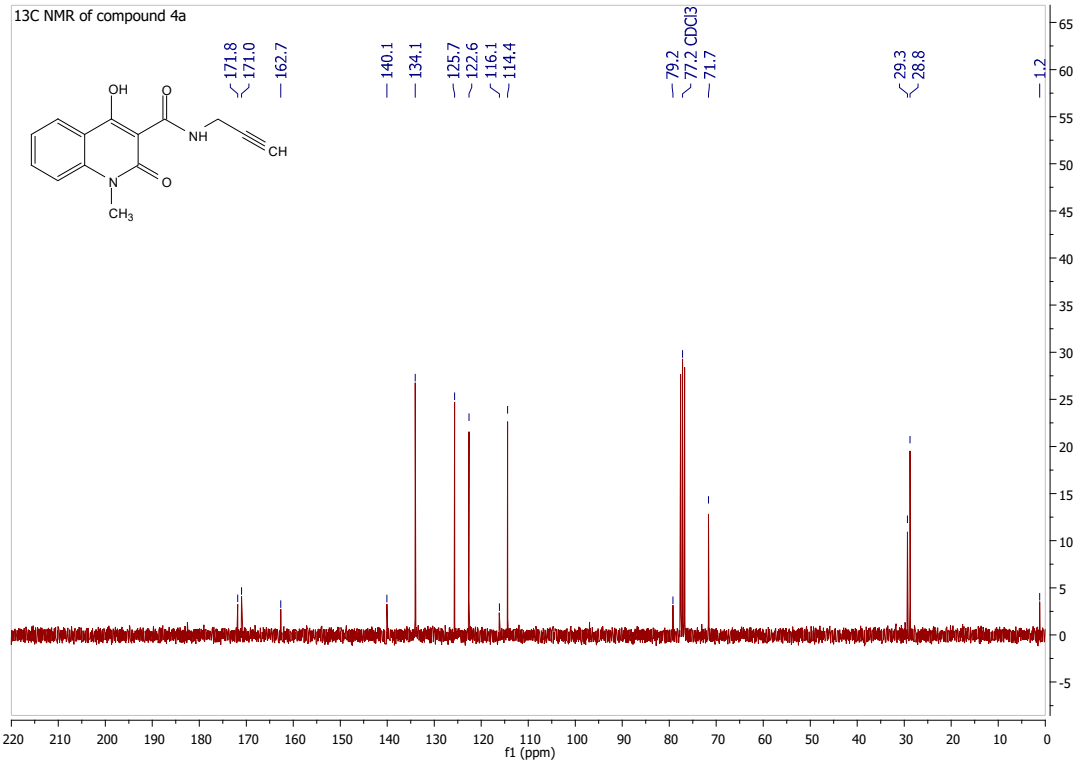


Figure S30. ^{13}C NMR spectrum of **4a**

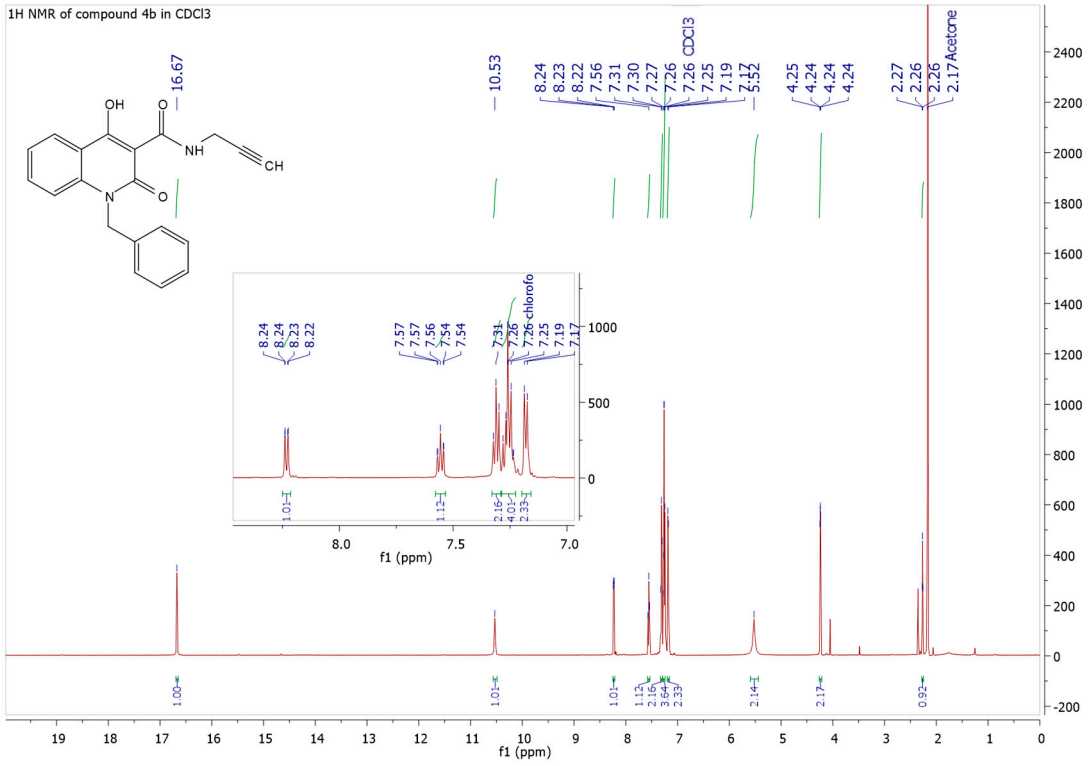


Figure S31. ^{1}H NMR spectrum of **4b**

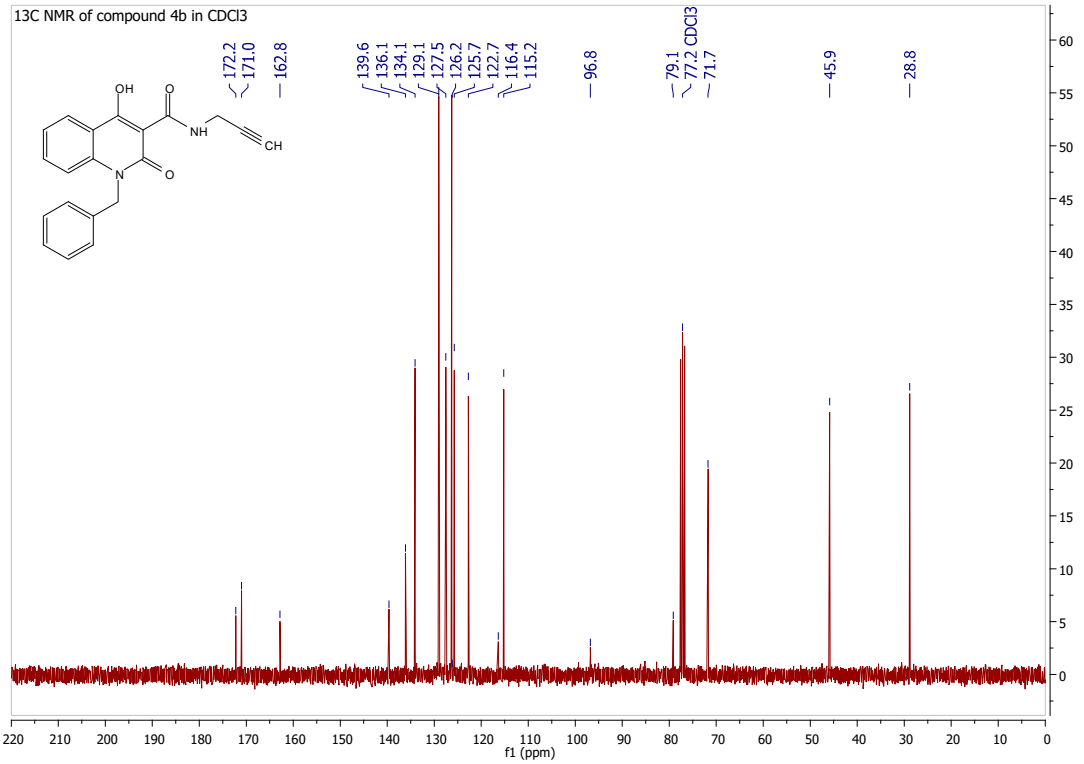


Figure S32. ^{13}C NMR of compound **4b**

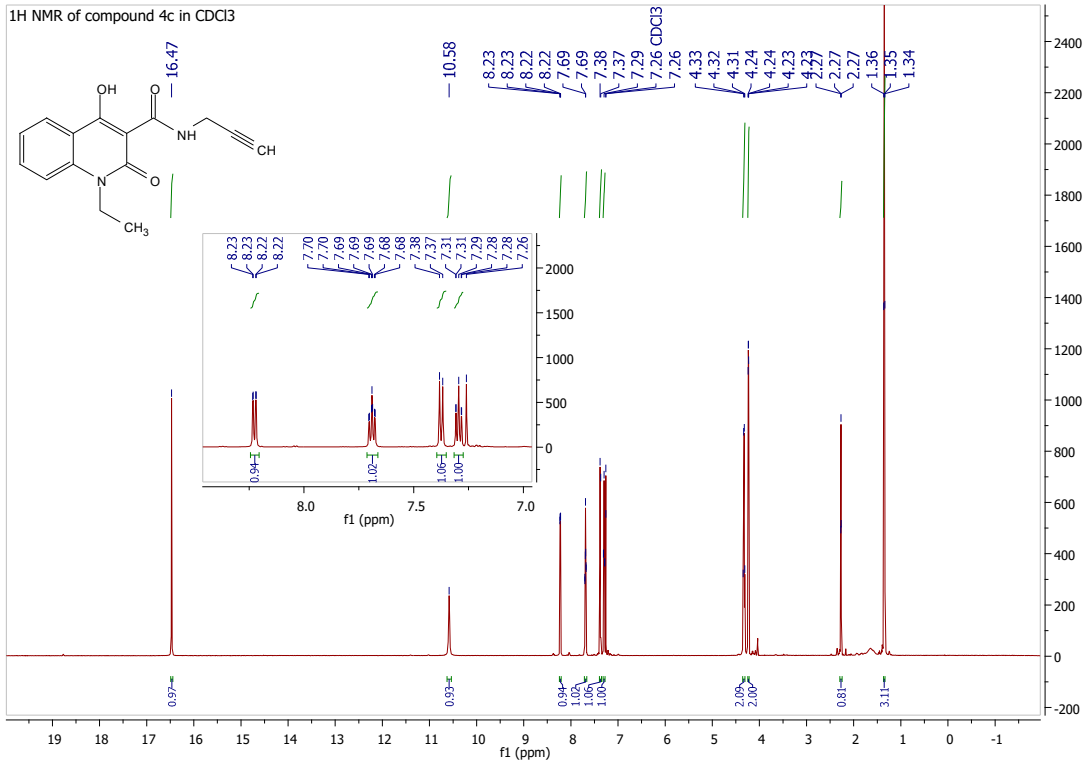


Figure S33. ^{1}H NMR of compound **4c**

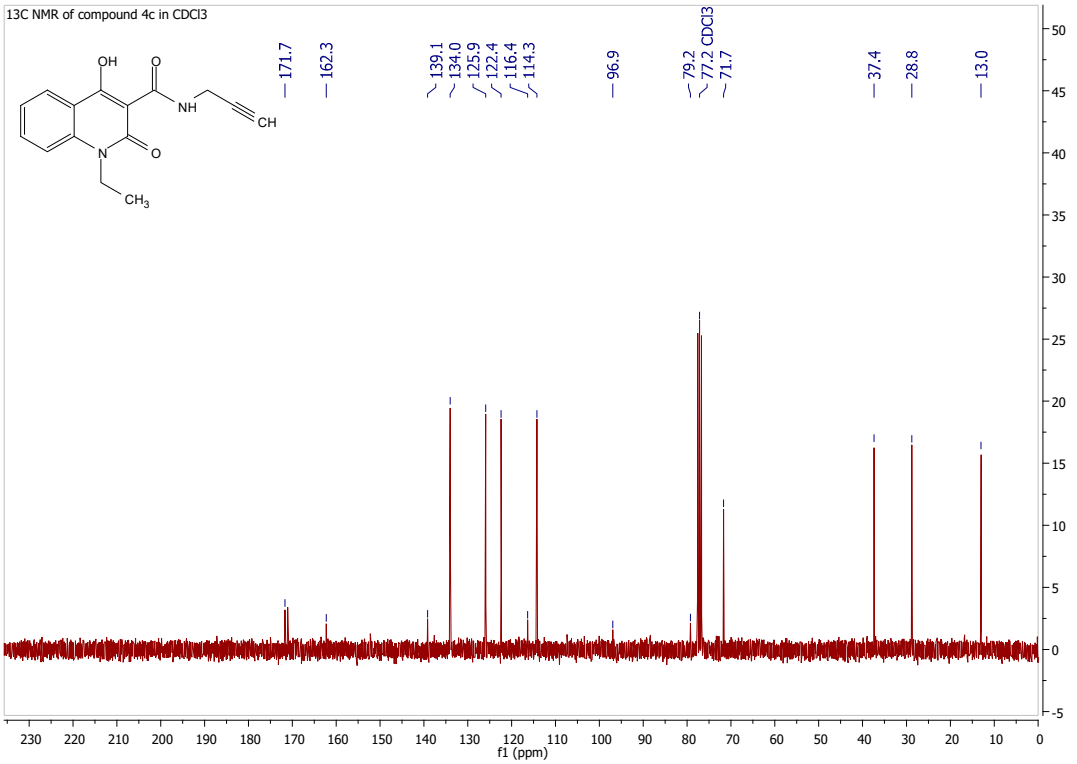


Figure S34. ^{13}C NMR of compound **4c**

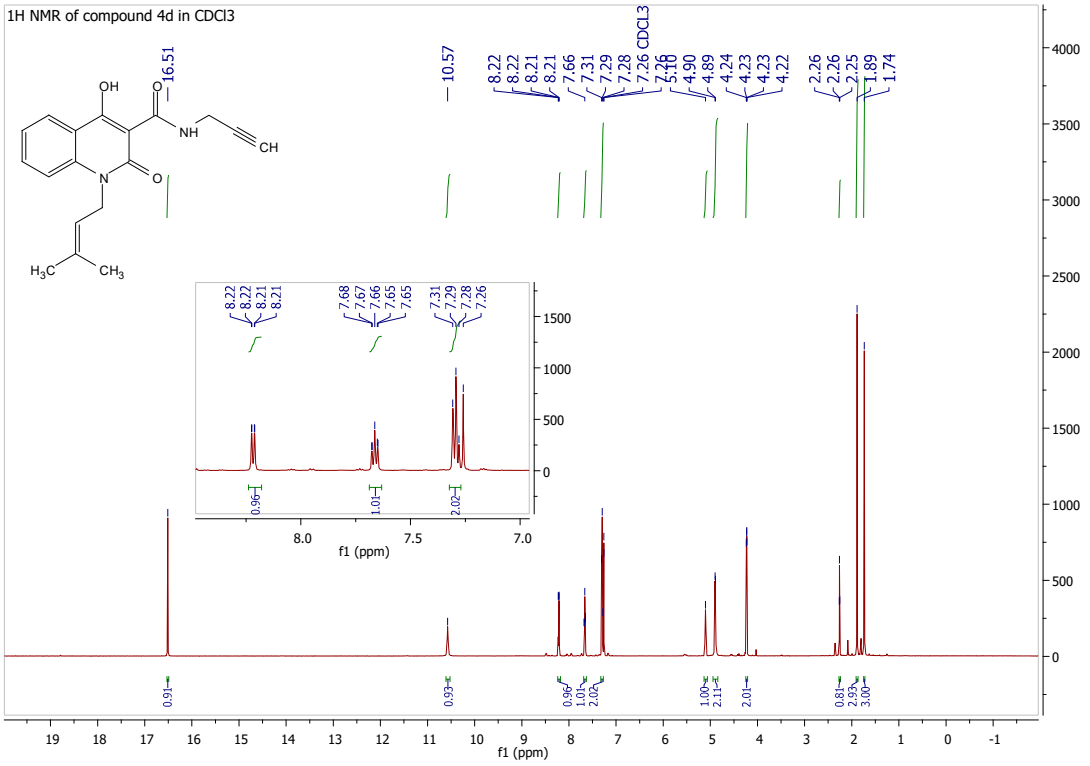


Figure S35. ^{1}H NMR of compound **4d**

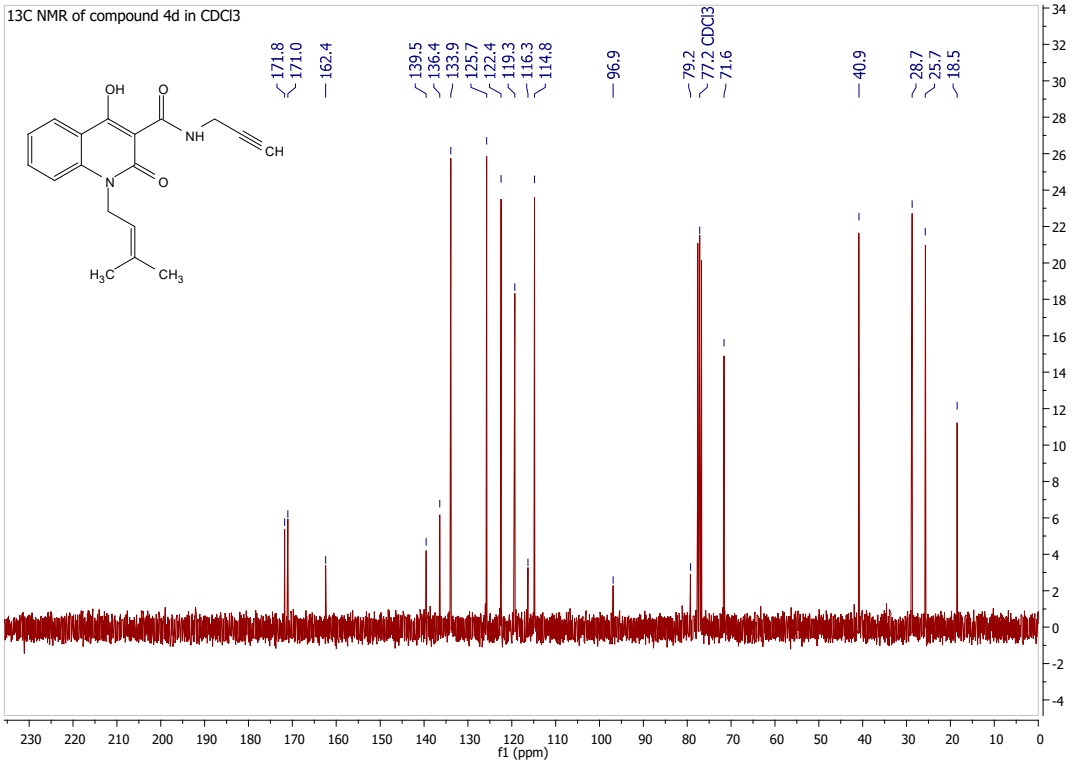


Figure S36. ^{13}C NMR of compound **4d**

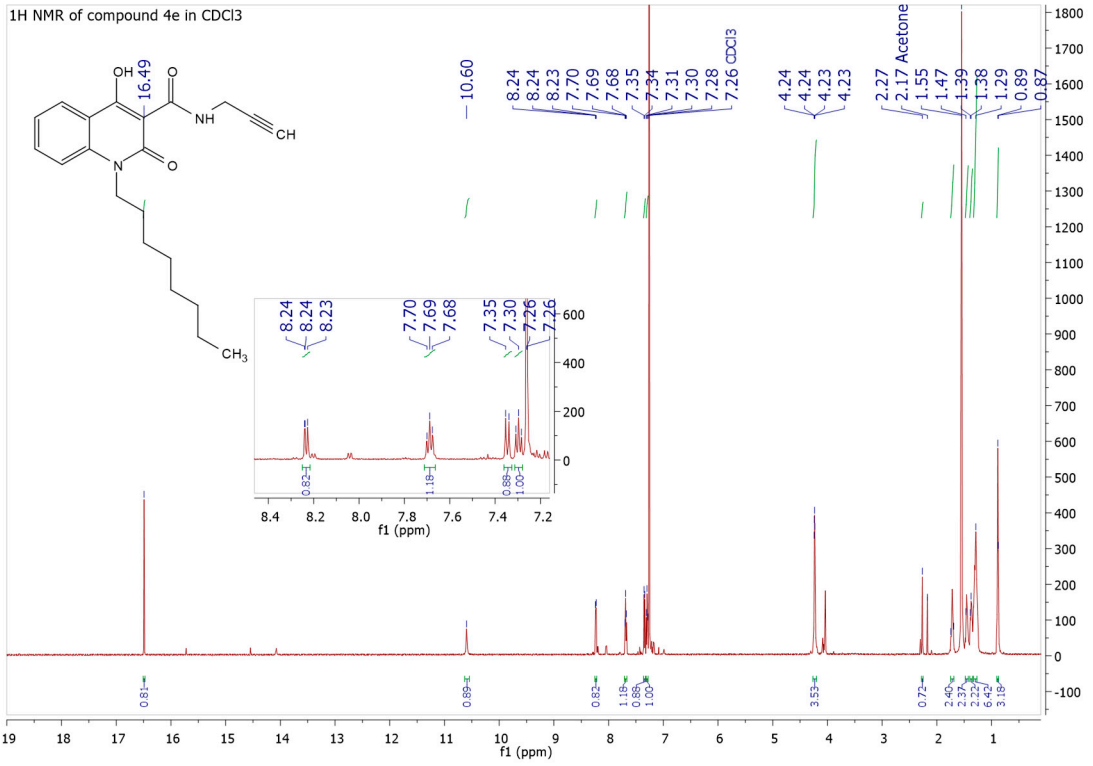


Figure S37. ^{1}H NMR of compound **4e**

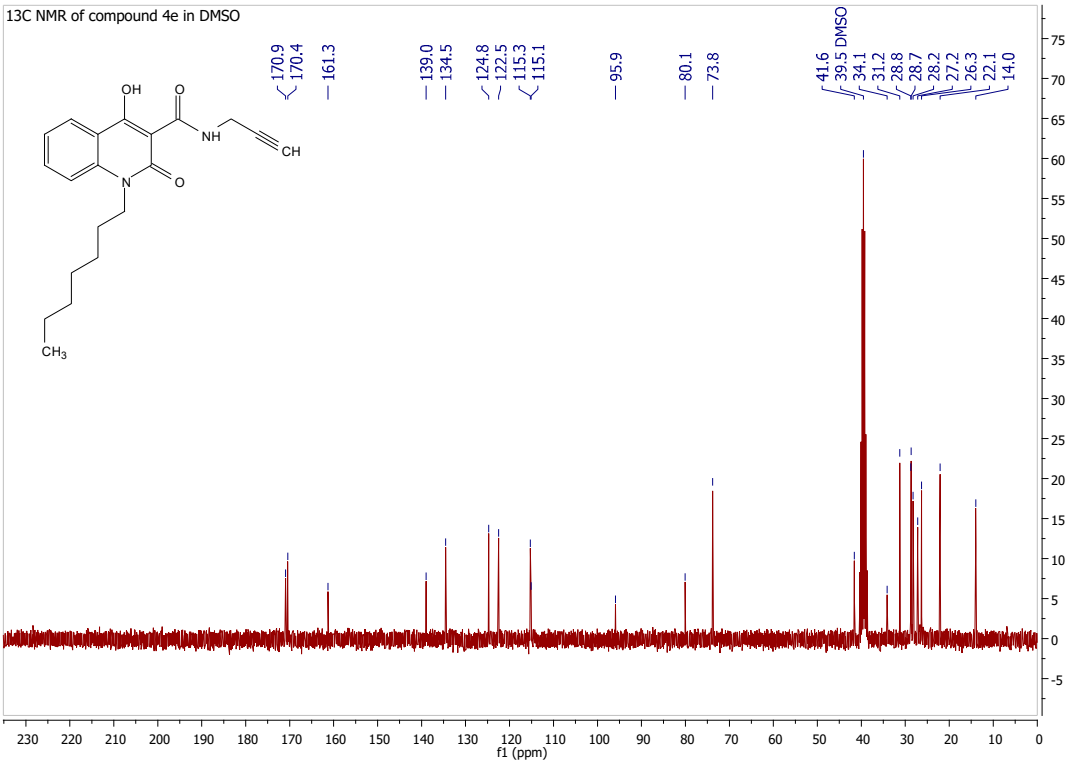


Figure S38. ^{13}C NMR of compound **4e**

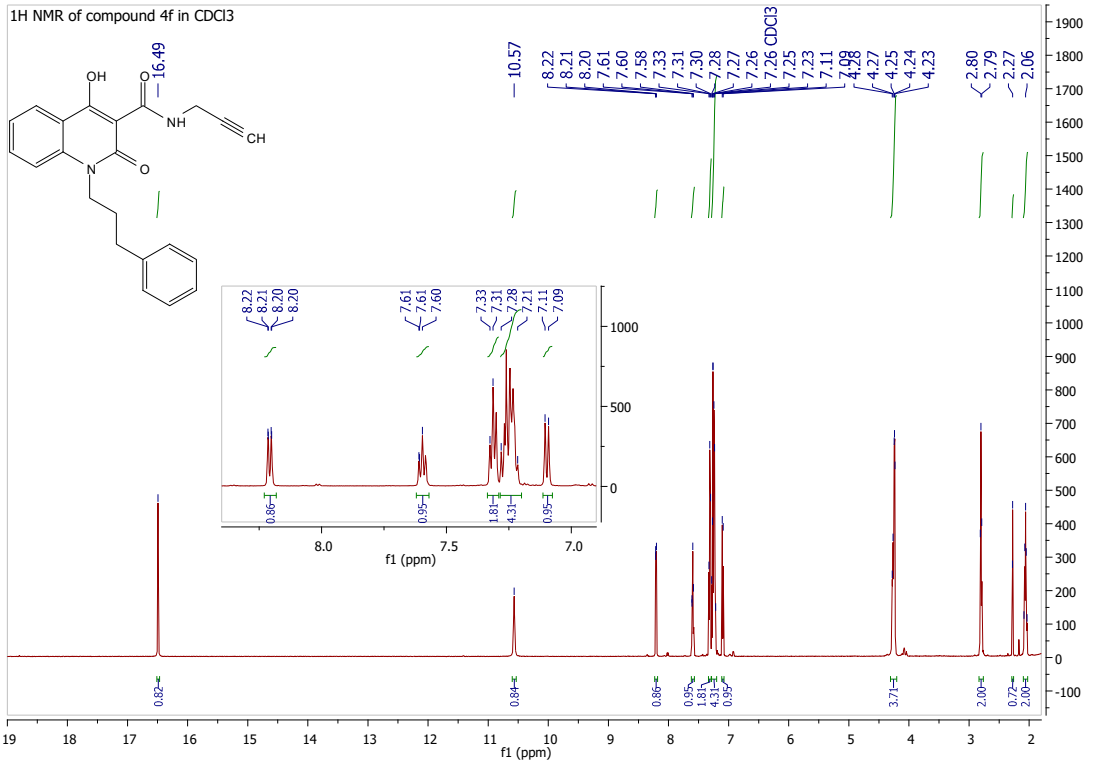


Figure S39. ^{1}H NMR of compound **4f**

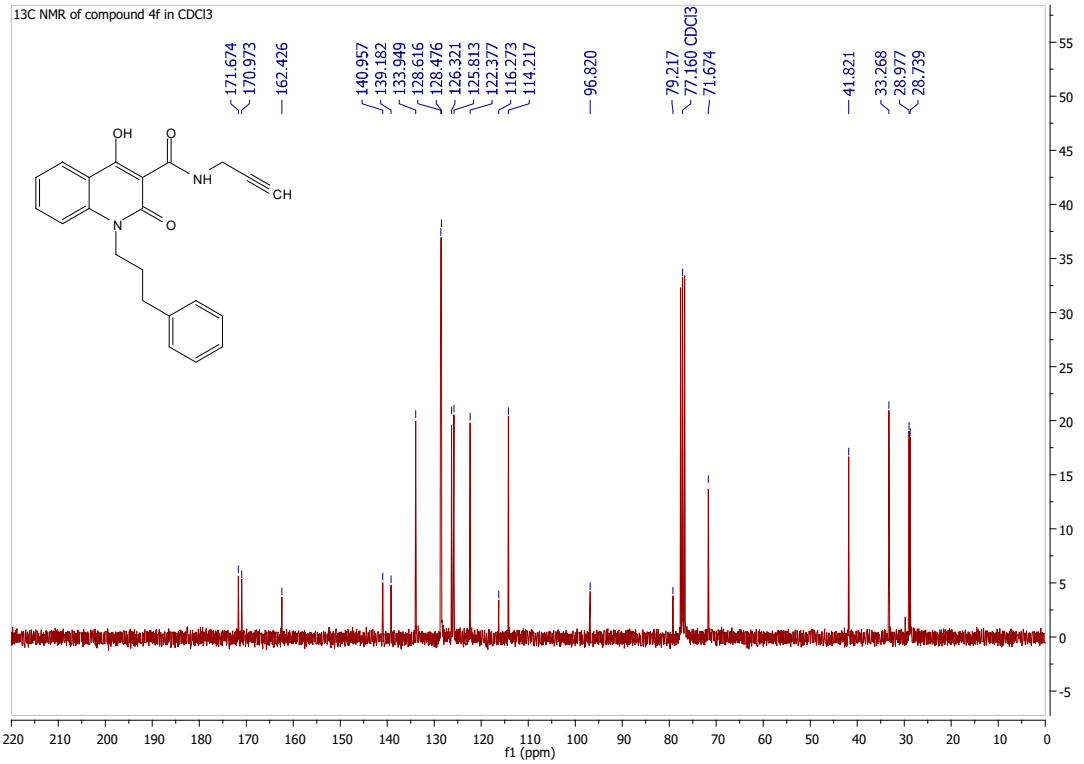


Figure S40. ^{13}C NMR of compound **4f**

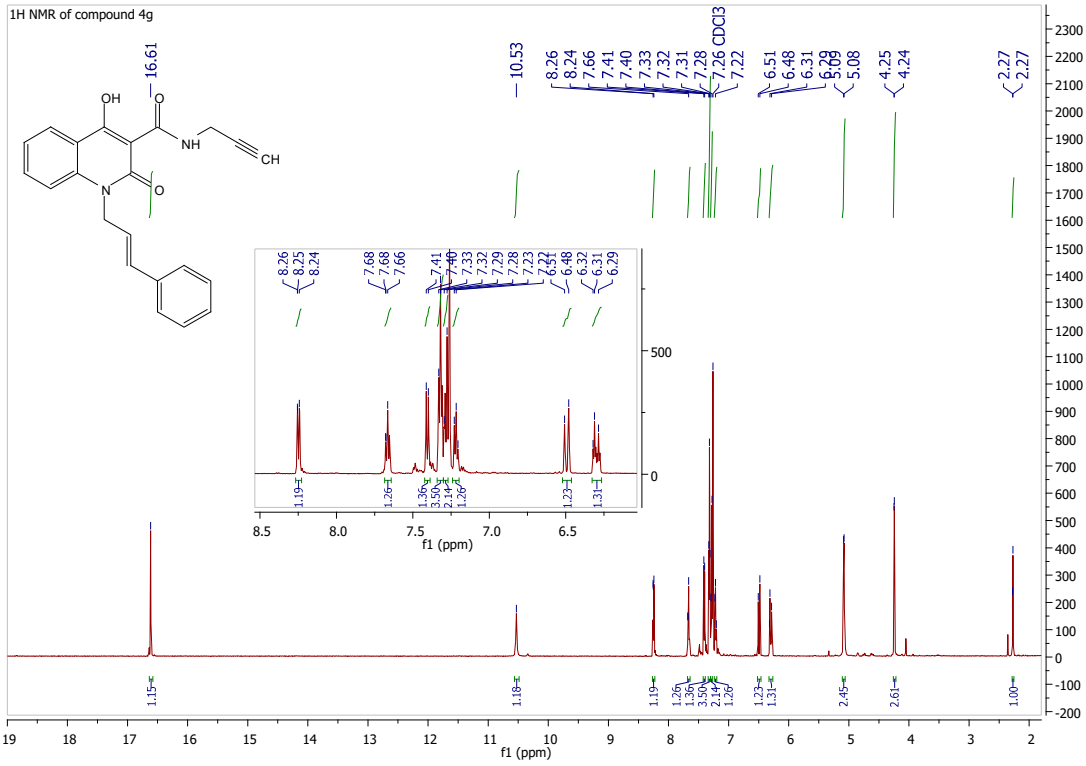


Figure S41. ^{1}H NMR of compound **4g**

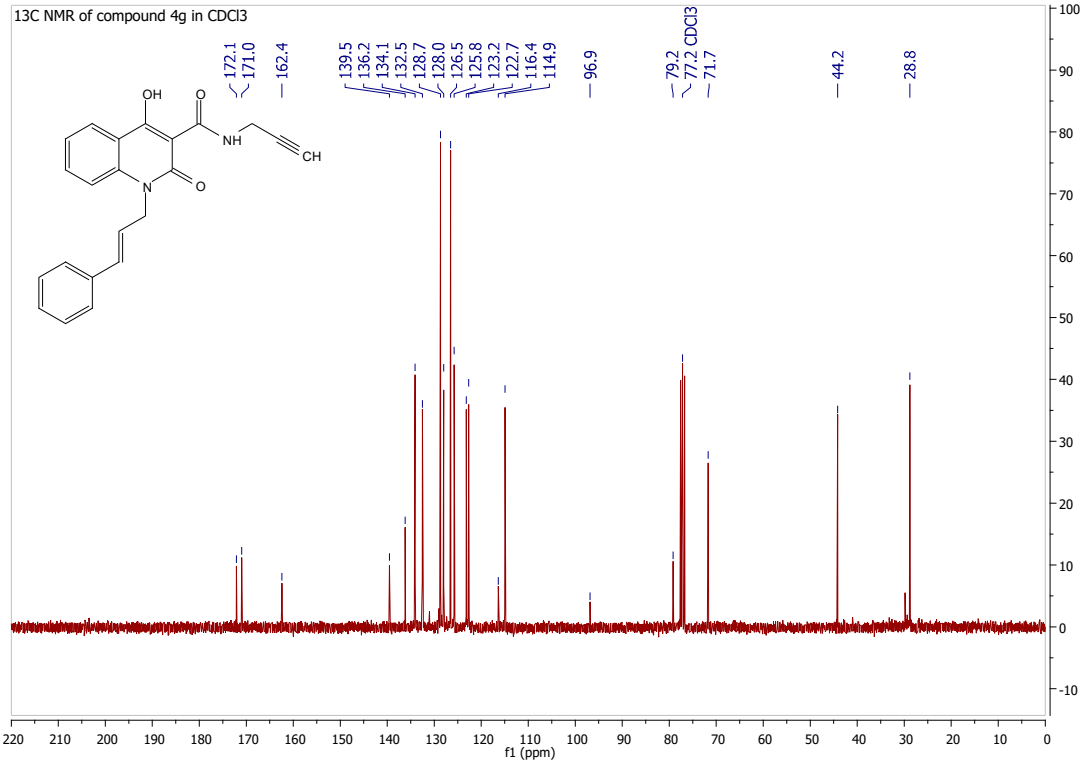


Figure S42. ^{13}C NMR of compound **4g**

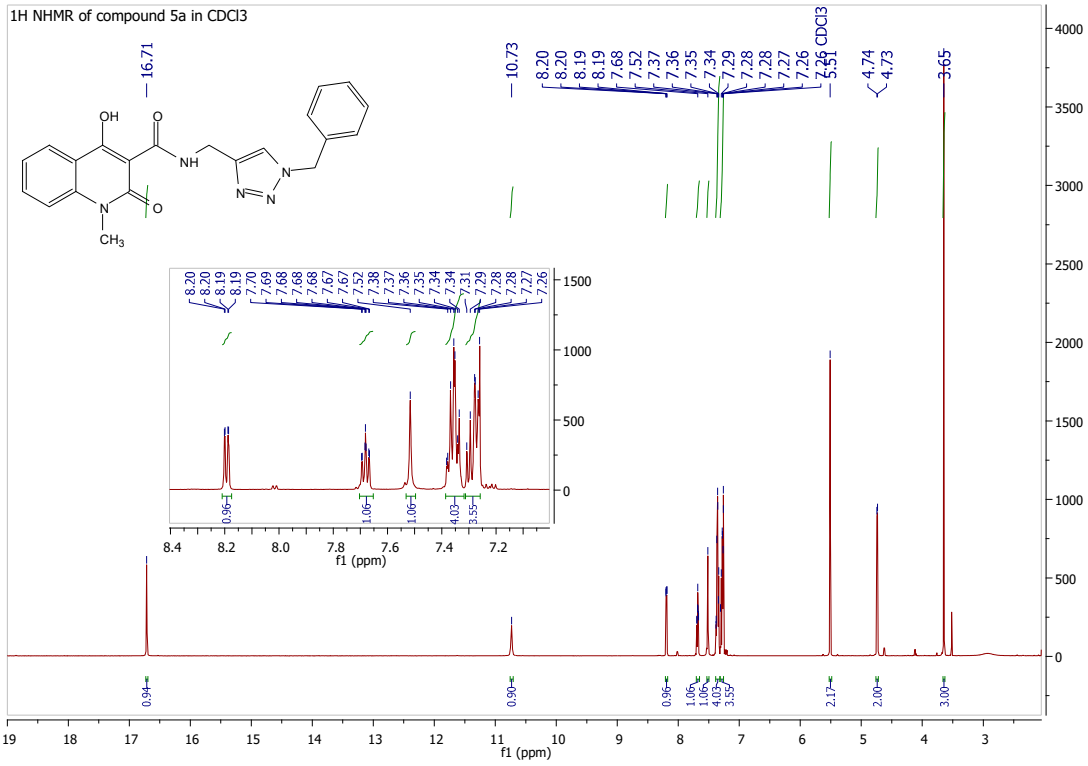


Figure S43. ^{1}H NMR of compound **5a**

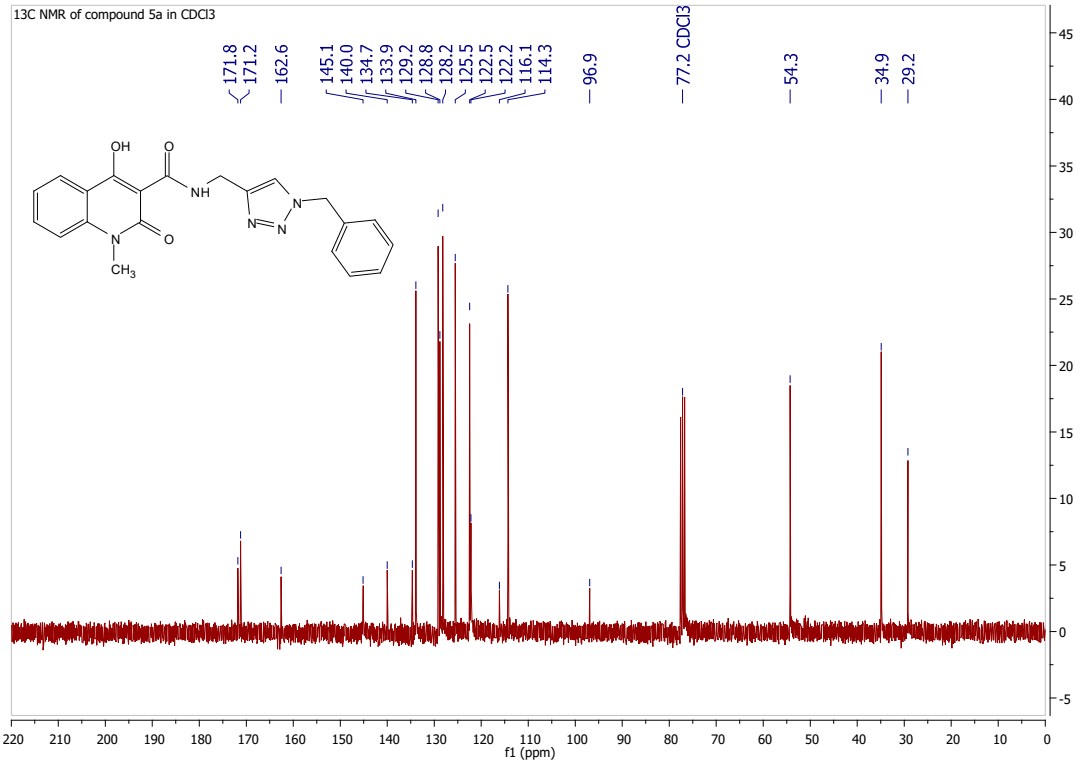


Figure S44. ^{13}C NMR of compound **5a**

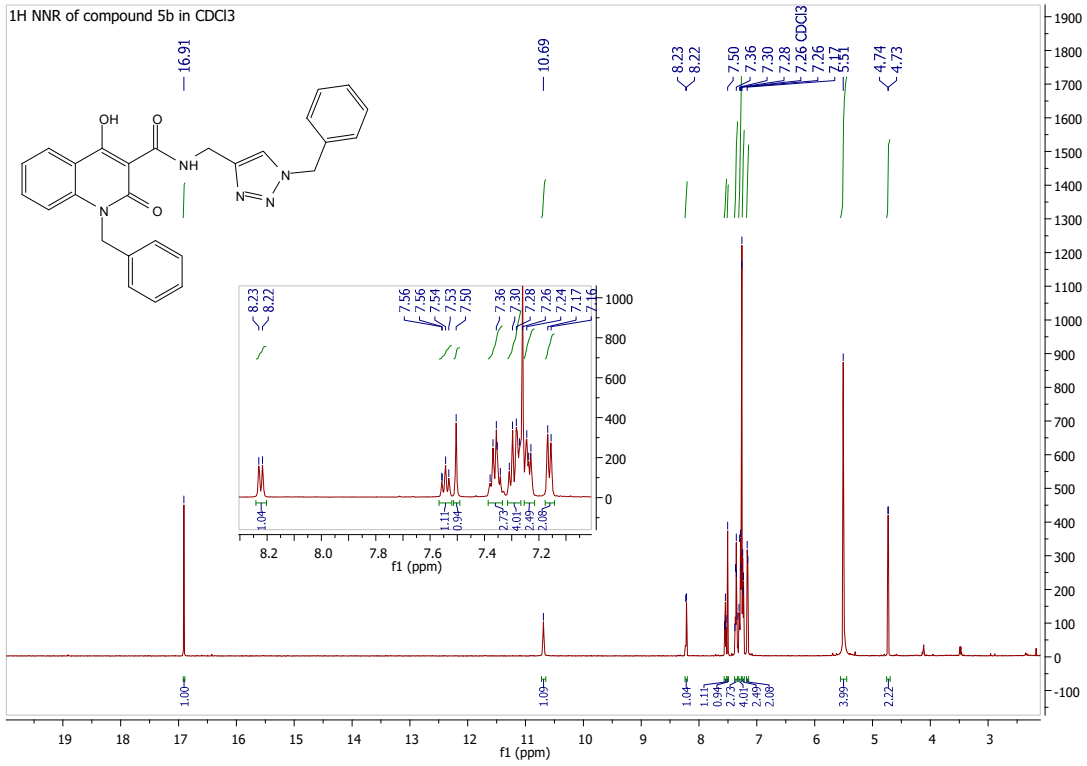


Figure S45. ^{1}H NMR of compound **5b**

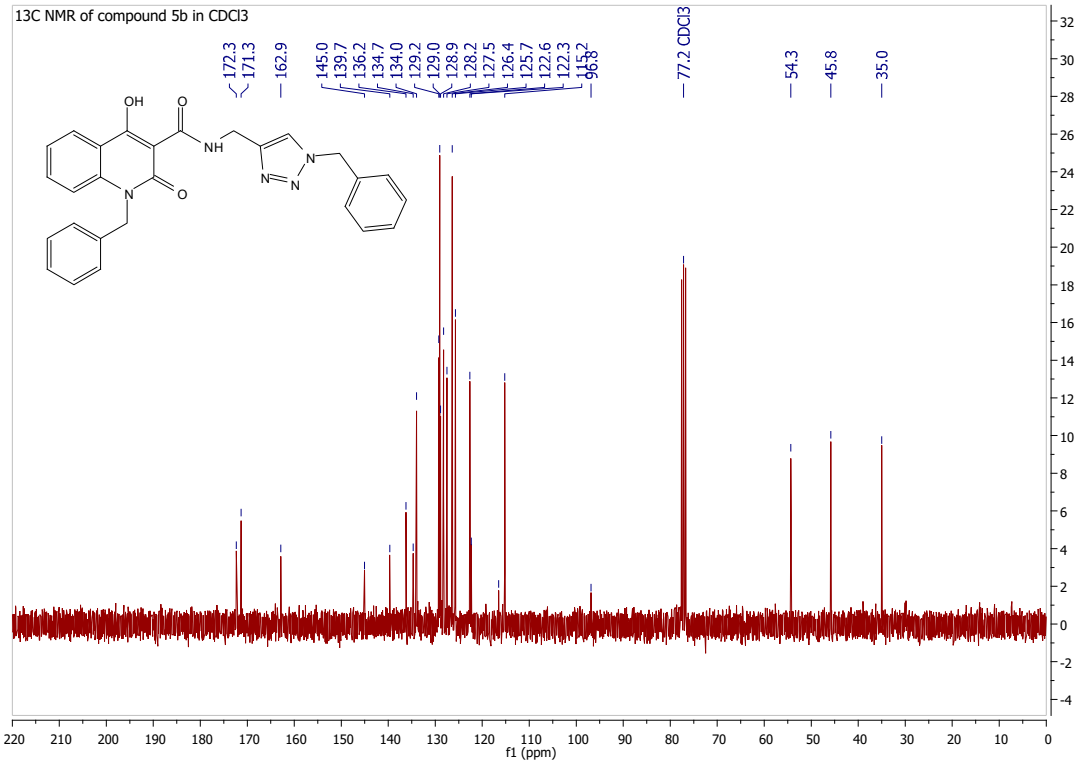


Figure S46. ^{13}C NMR of compound **5b**

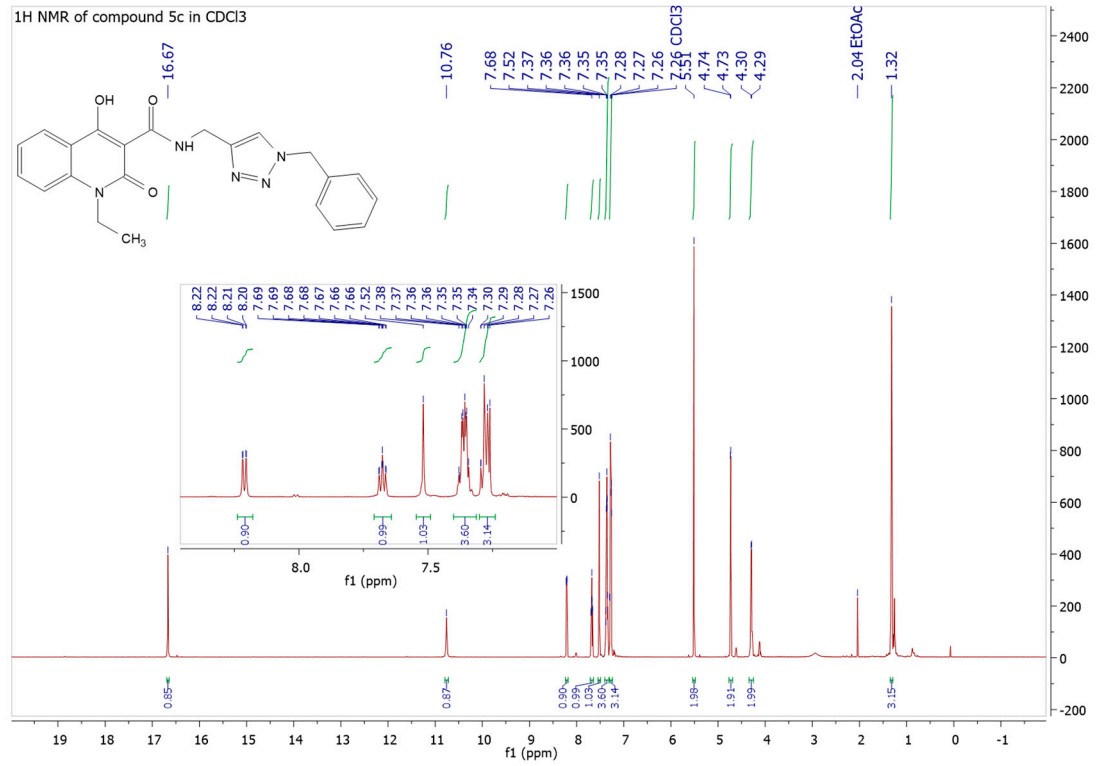


Figure S47. ^{1}H NMR of compound **5c**

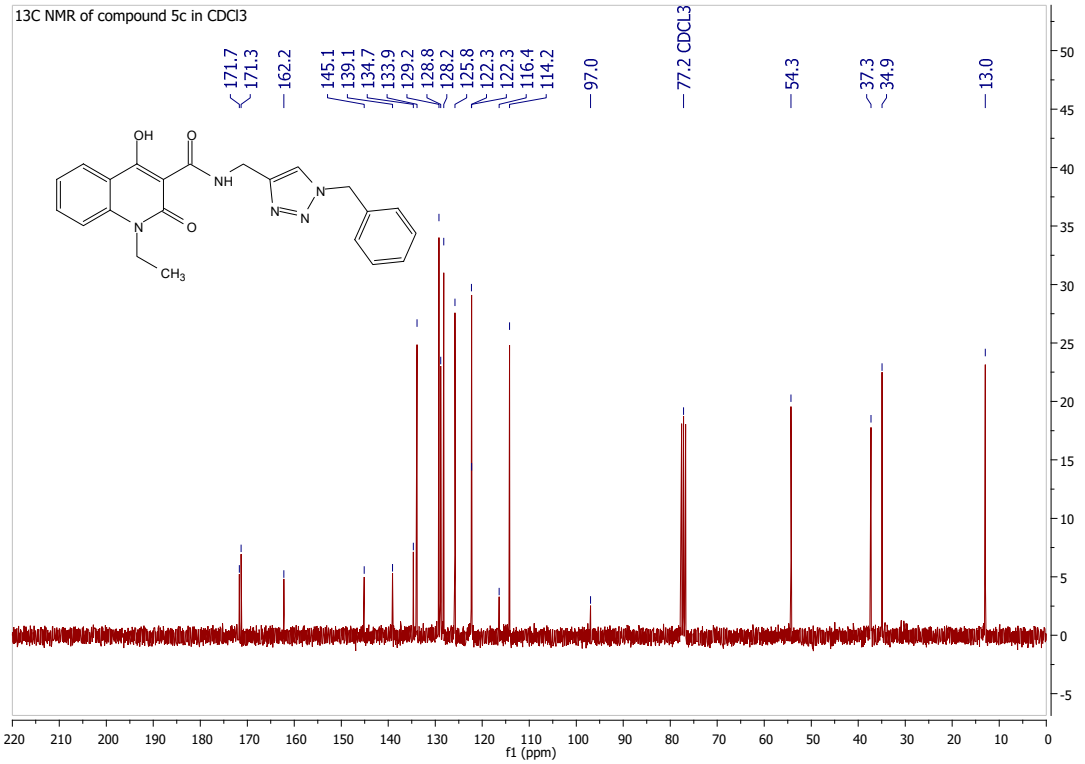


Figure S48. ^{13}C NMR of compound **5c**

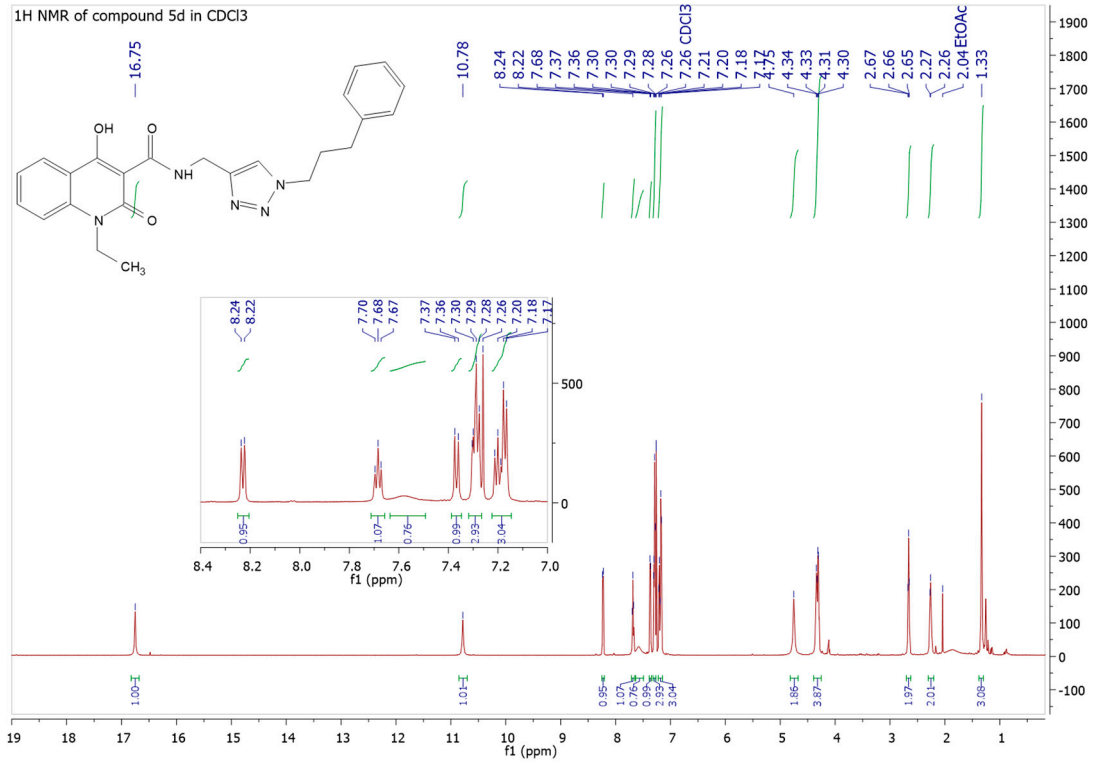


Figure S49. ^{1}H NMR of compound **5d**

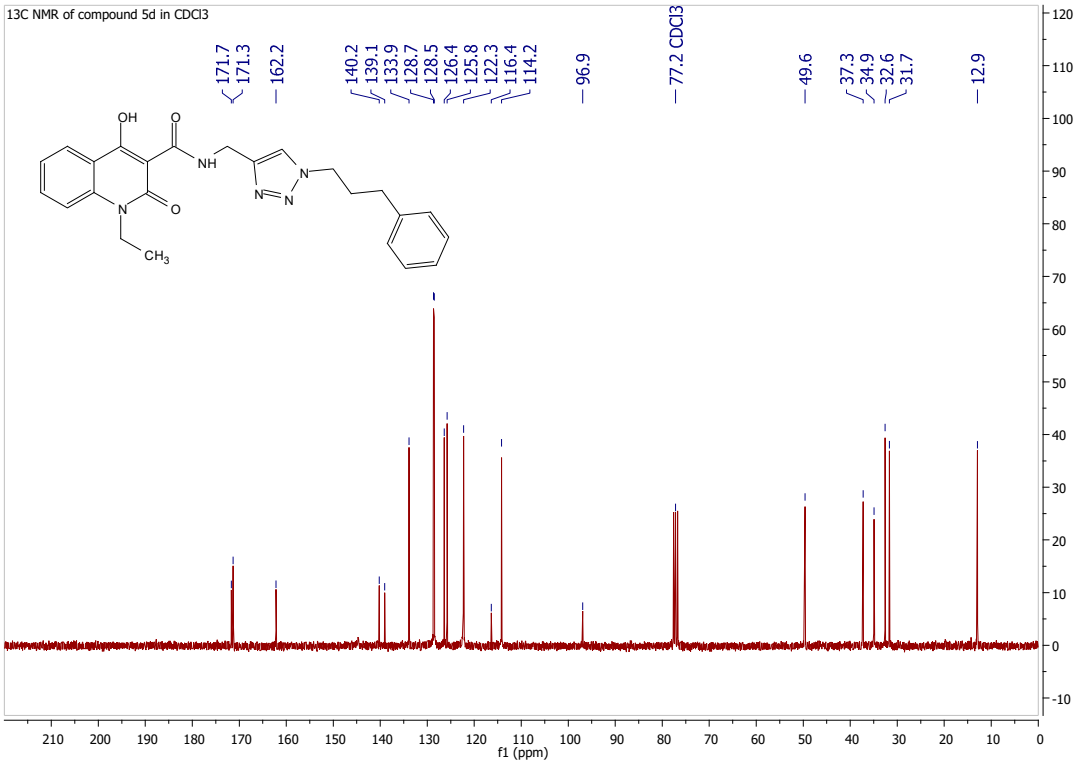


Figure S50. [13]C NMR of compound **5d**

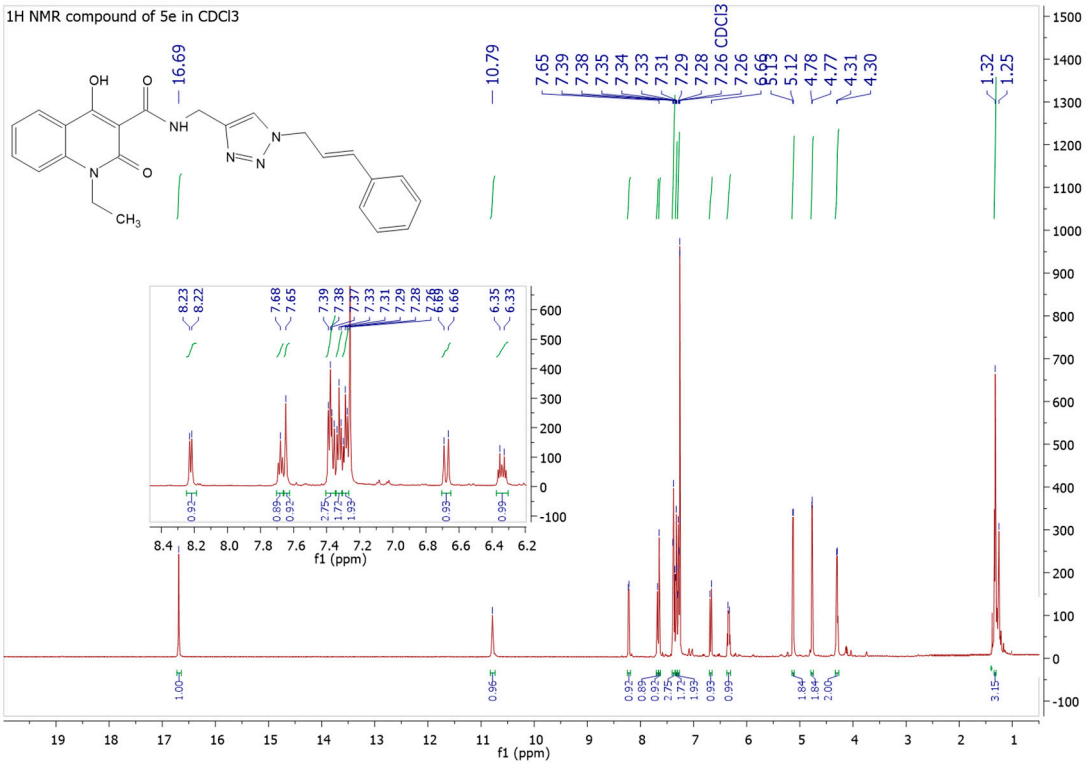


Figure S51. [1]H NMR of compound **5e**

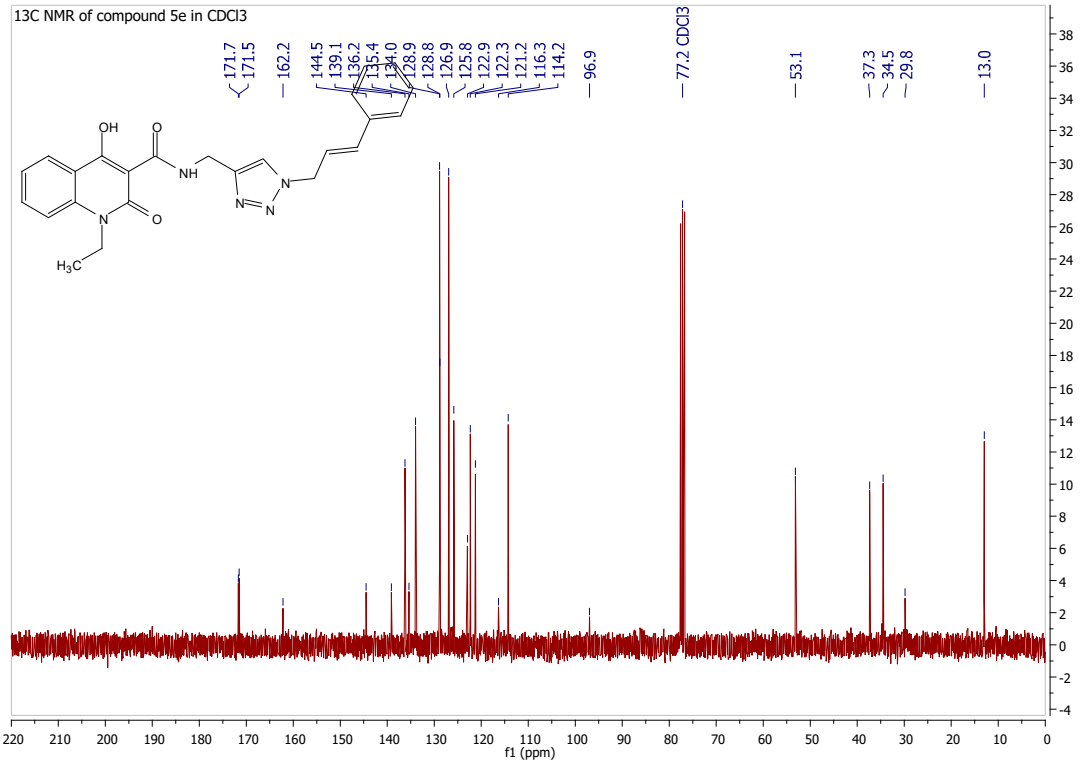


Figure S52. ^{13}C NMR of compound **5e**

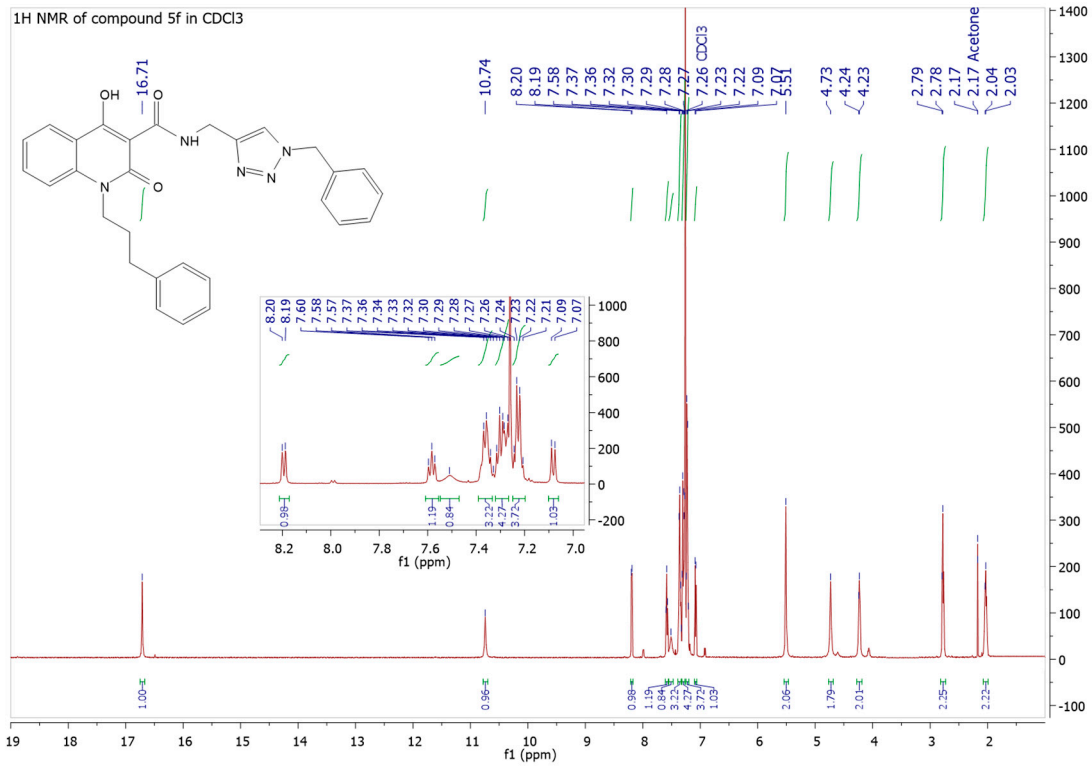


Figure S53. ^{1}H NMR of compound **5f**

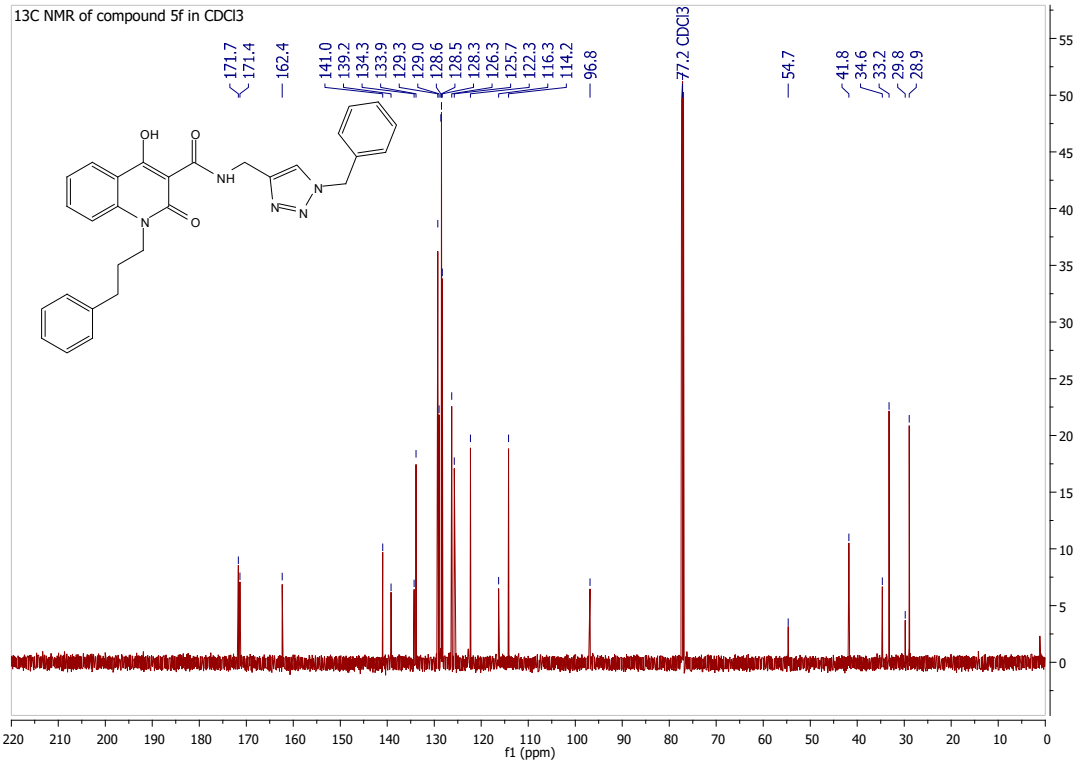


Figure S54. ^{13}C NMR of compound **5f**

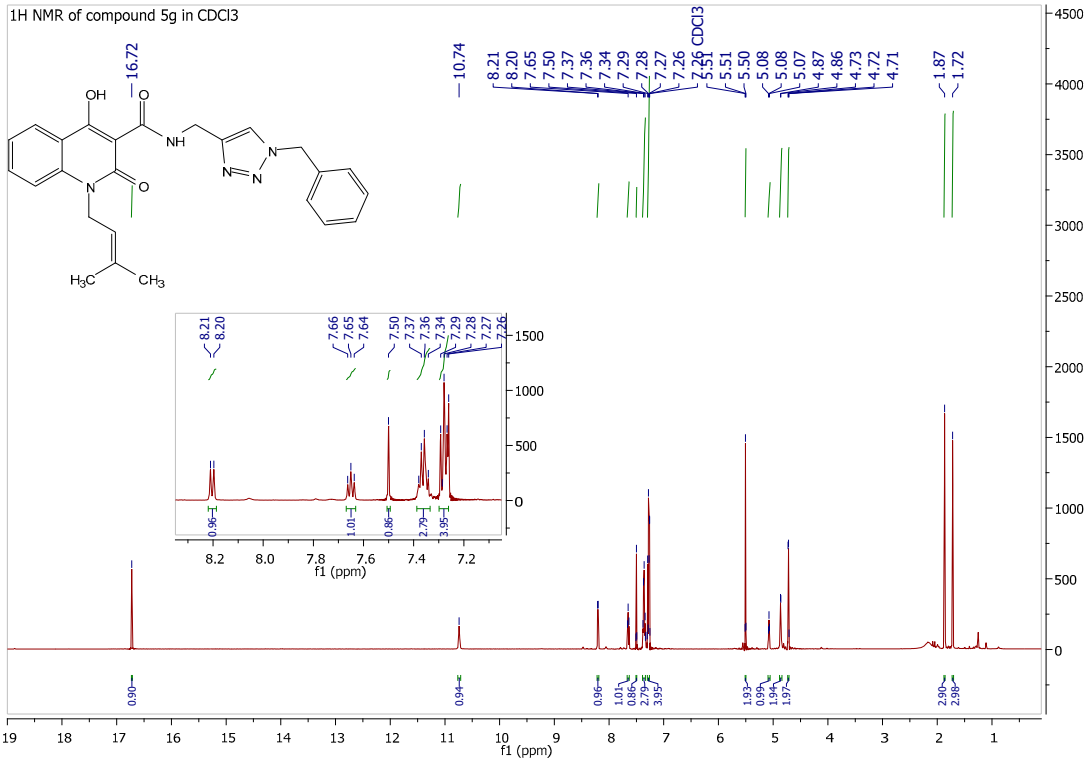


Figure S55. ^{1}H NMR of compound **5g**

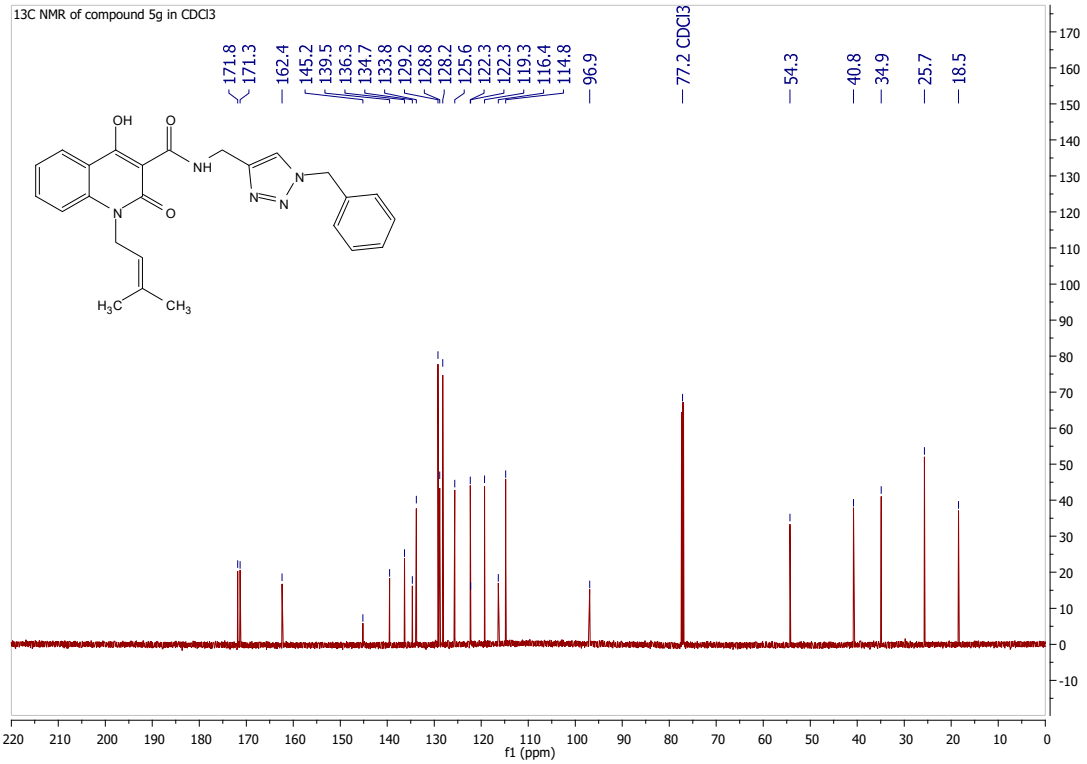


Figure S56. ^{13}C NMR of compound **5g**

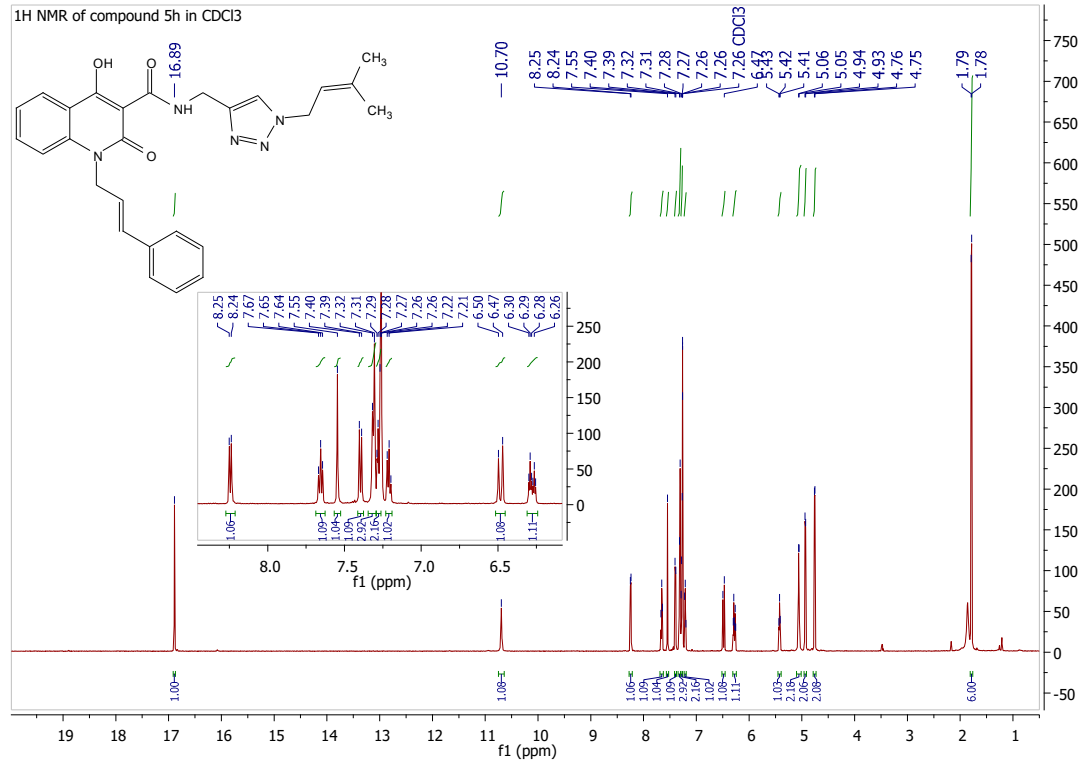


Figure S57. ^{1}H NMR of compound **5h**

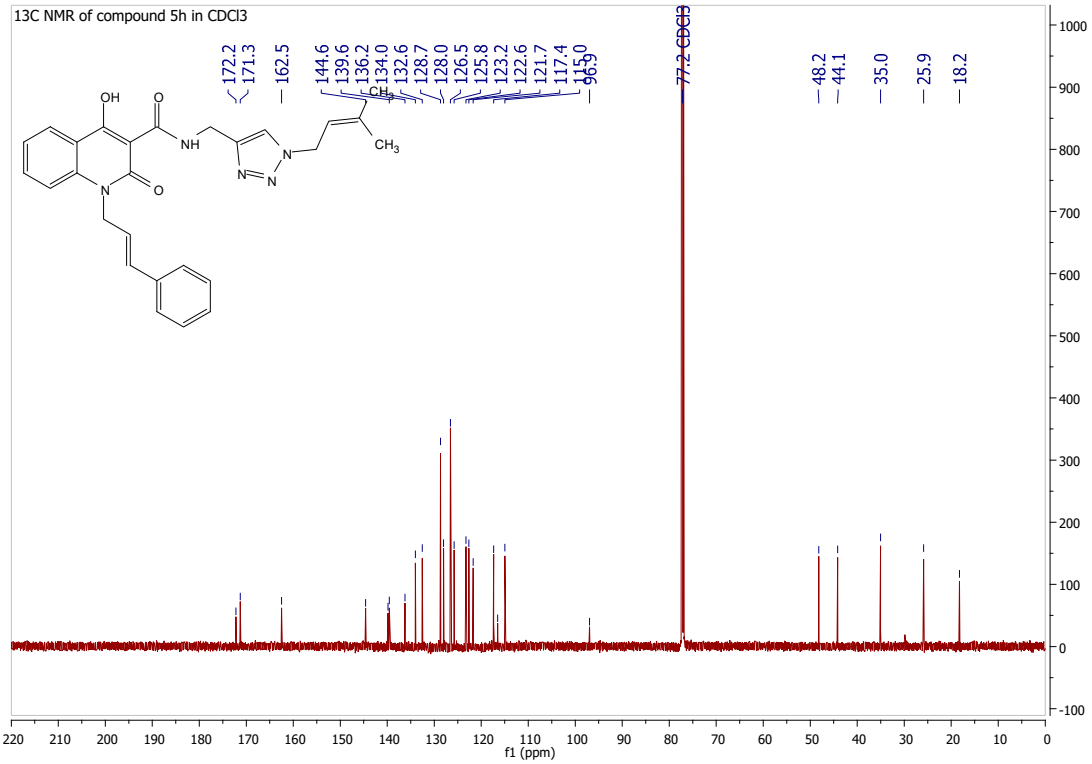


Figure S58. ^{13}C NMR of compound **5h**

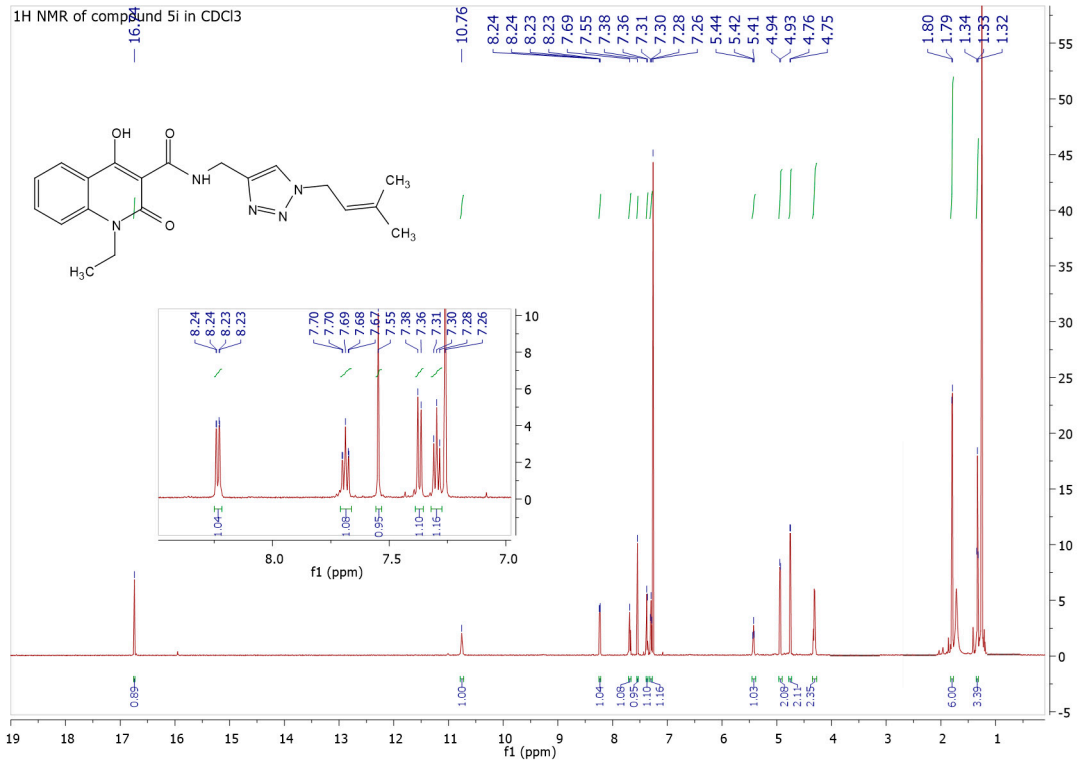


Figure S59. ^{1}H NMR of compound **5i**

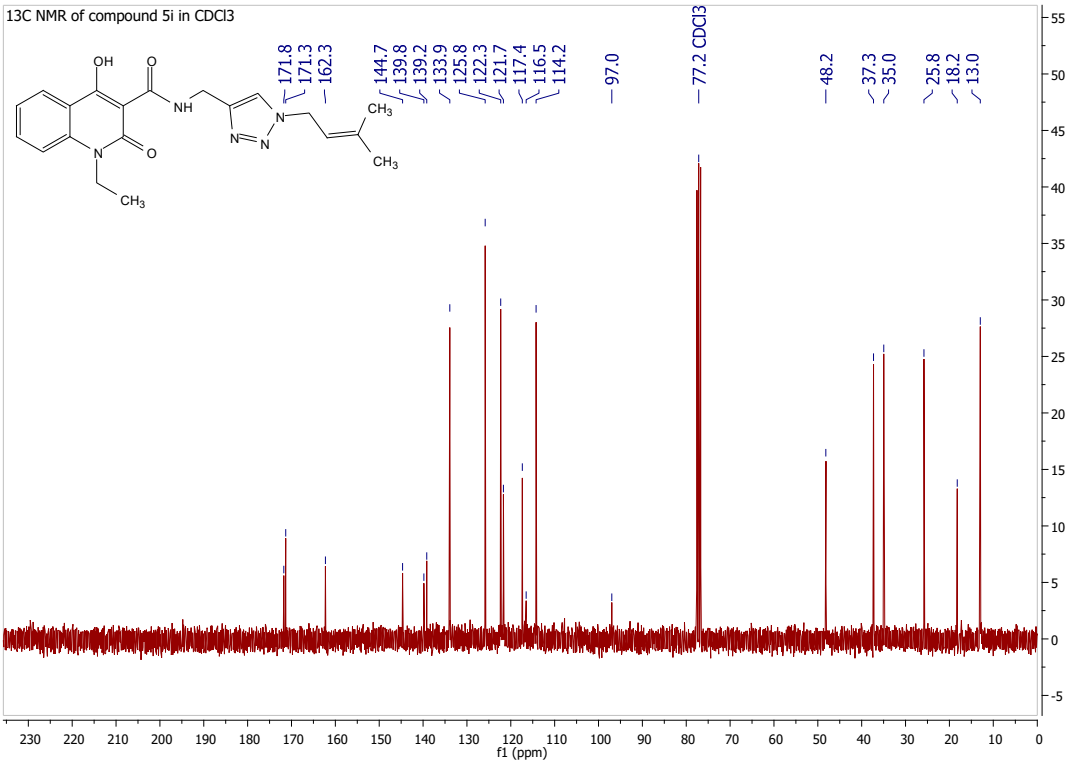


Figure S60. ^{13}C NMR of compound **5i**

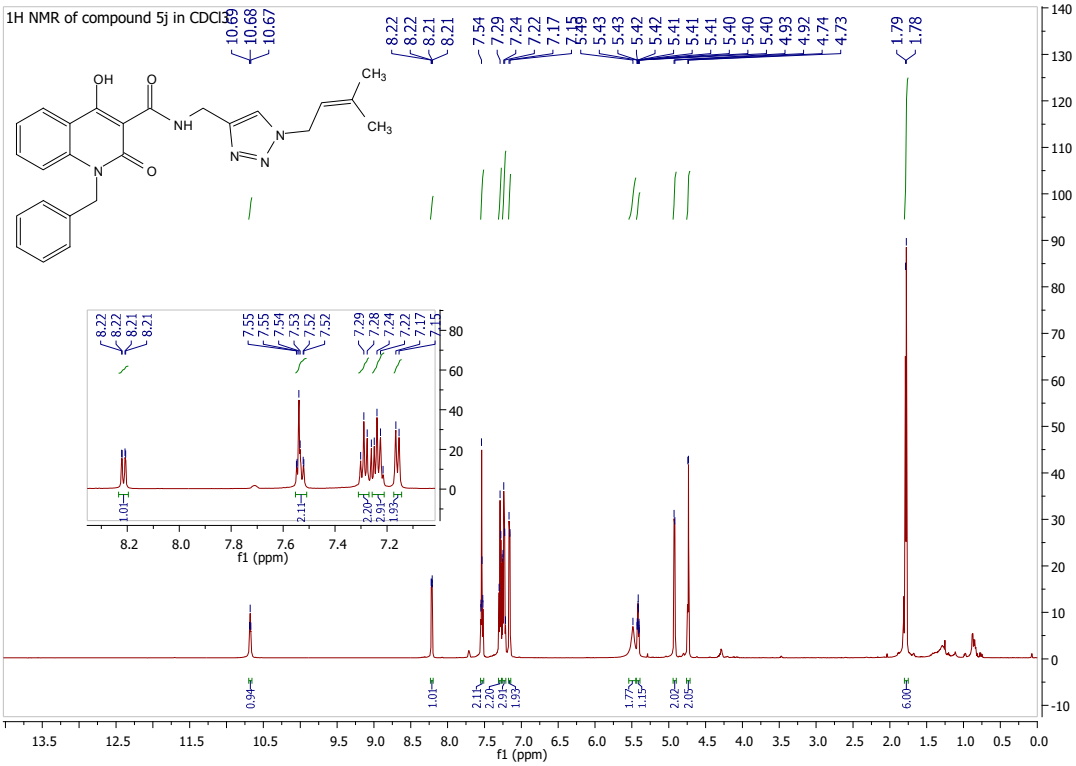


Figure S61. ^{1}H NMR of compound **5j**

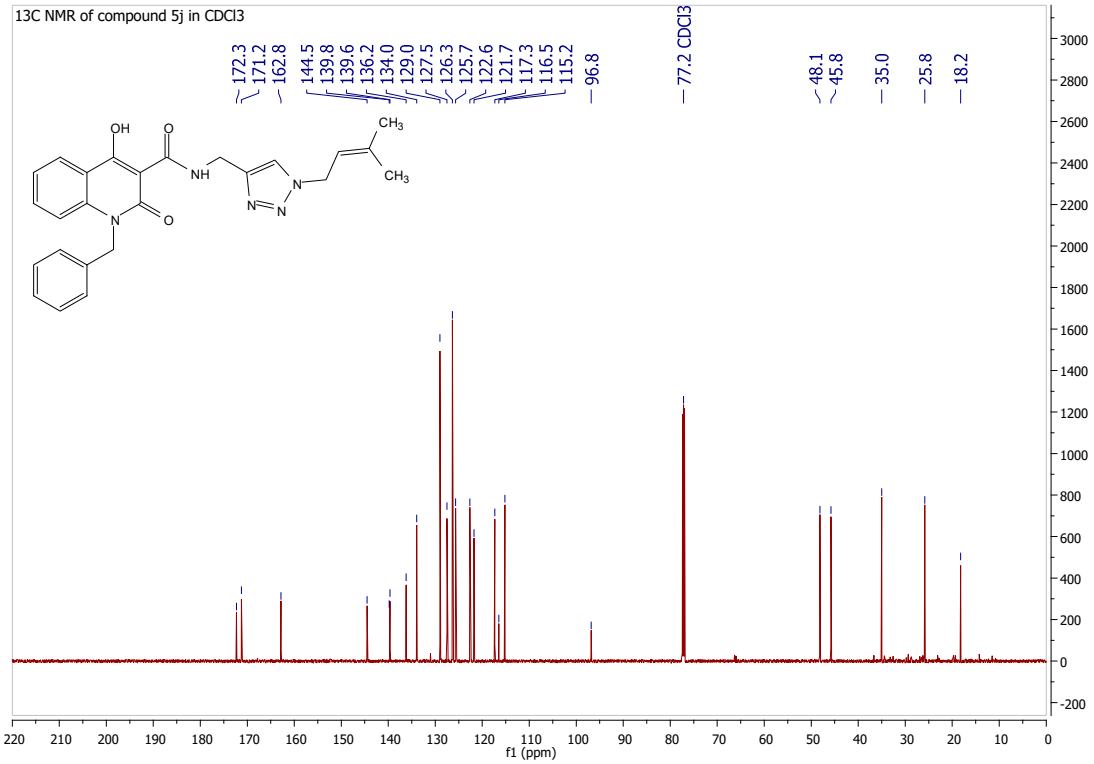


Figure S62. ^{13}C NMR of compound **5j**

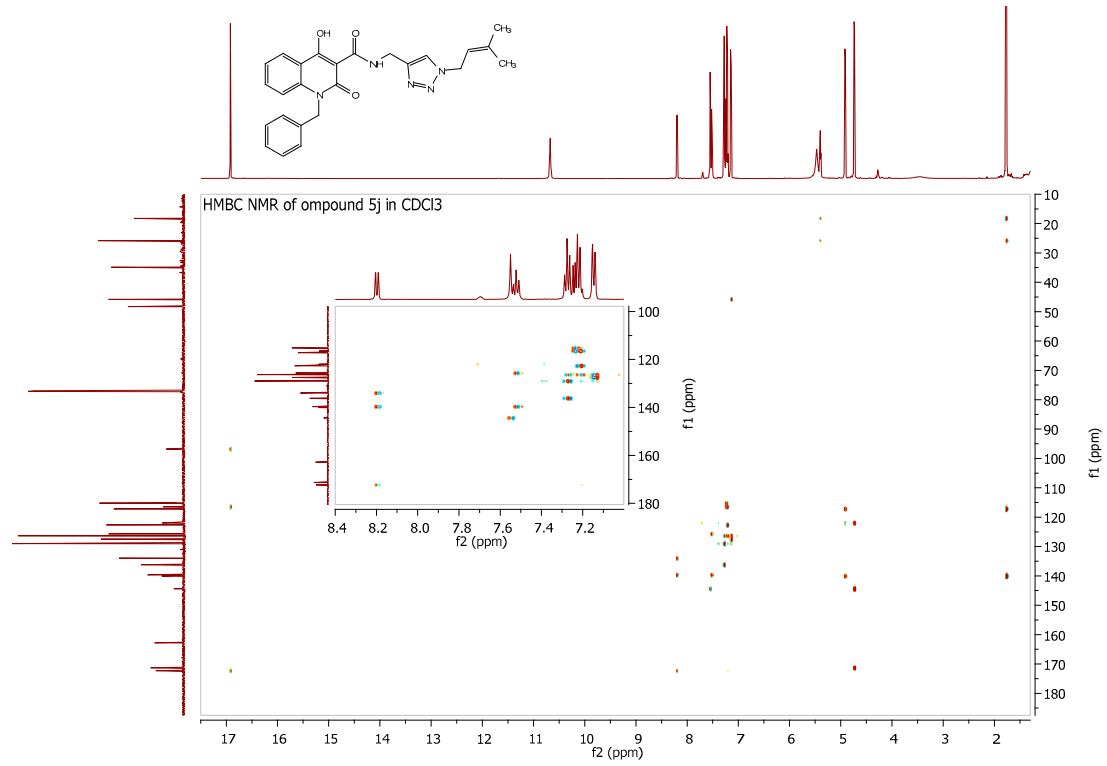


Figure S63. ^{1}H-^{13}C HMBC NMR spectrum of **5j**

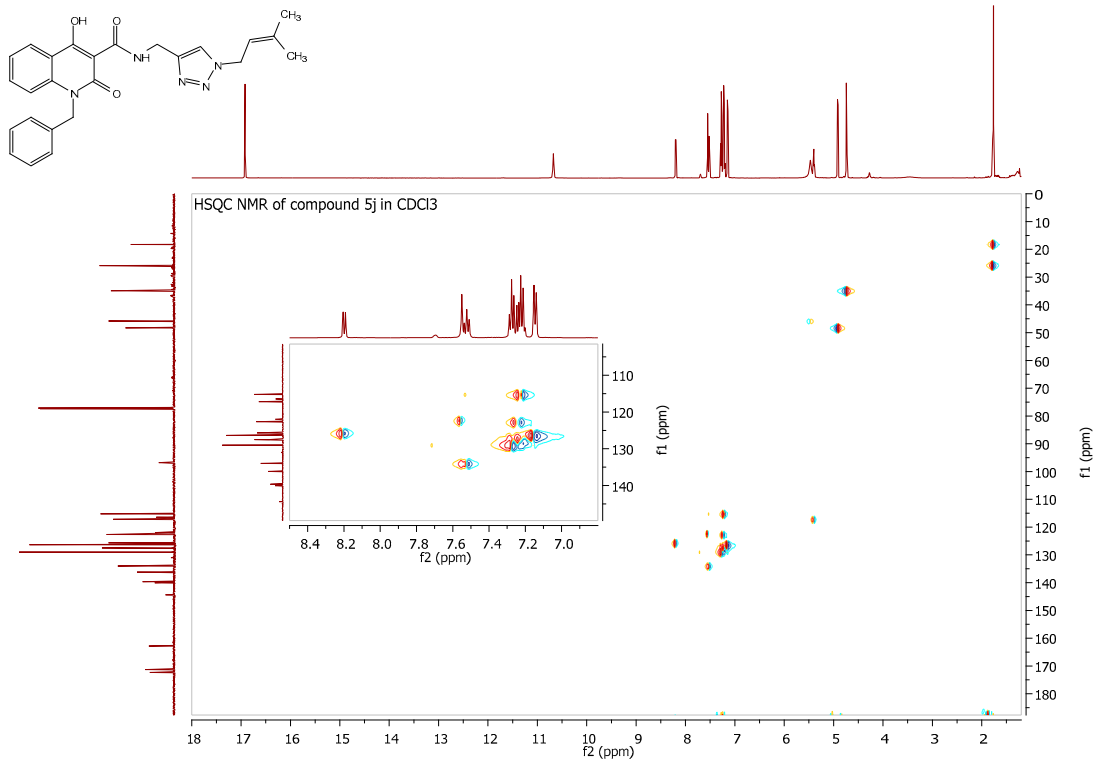


Figure S64. ^{1}H-^{13}C HSQC NMR spectrum of **5j**

HR-MS data

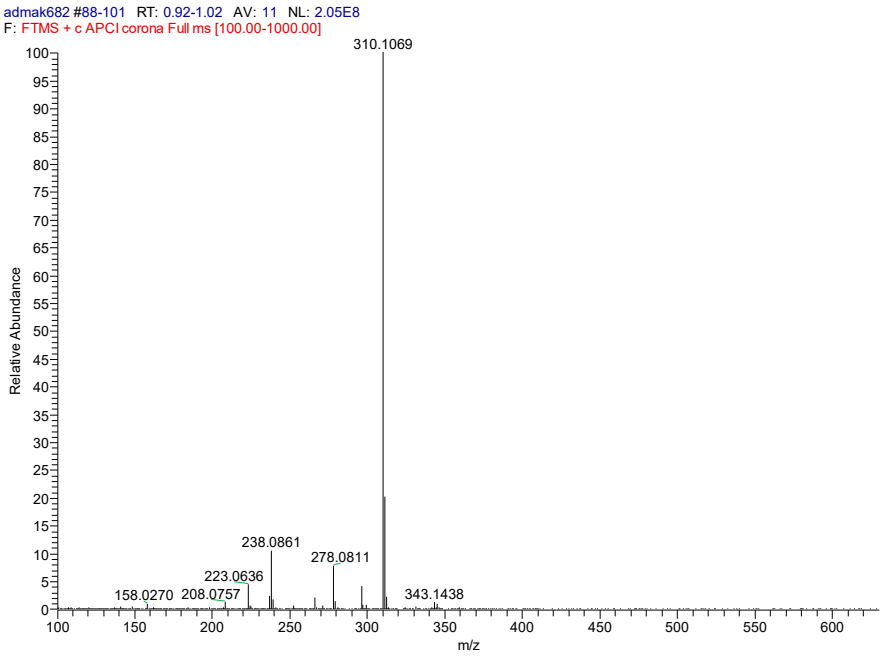


Figure S65. HR-MS spectrum of **3b**

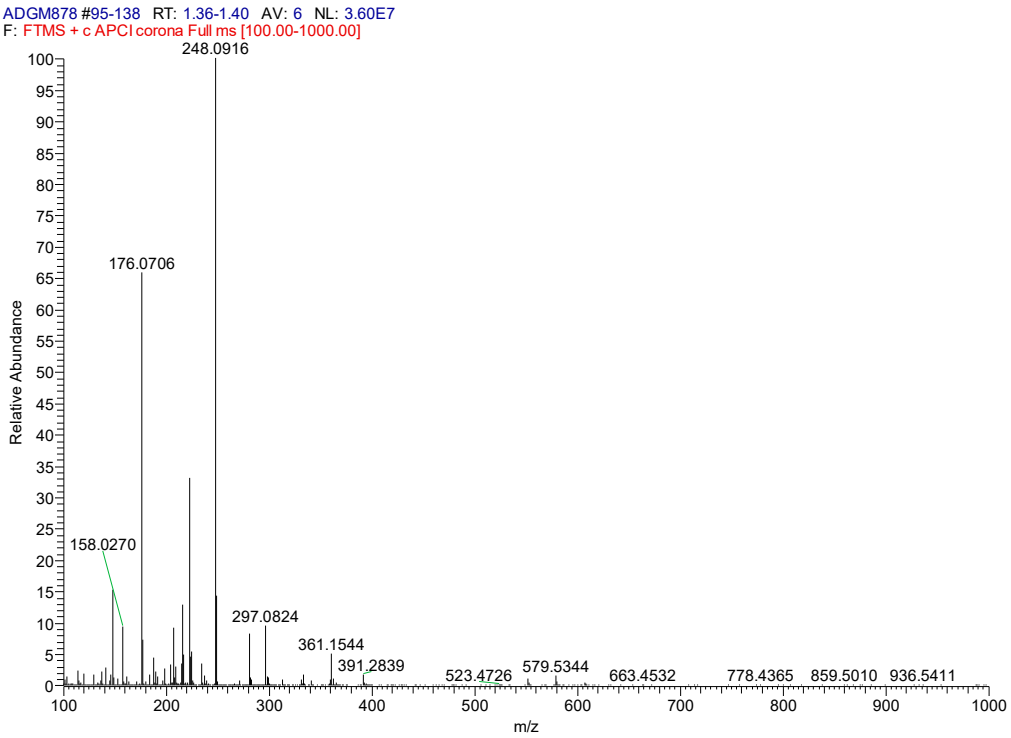


Figure S66. HR-MS spectrum of **3c**.

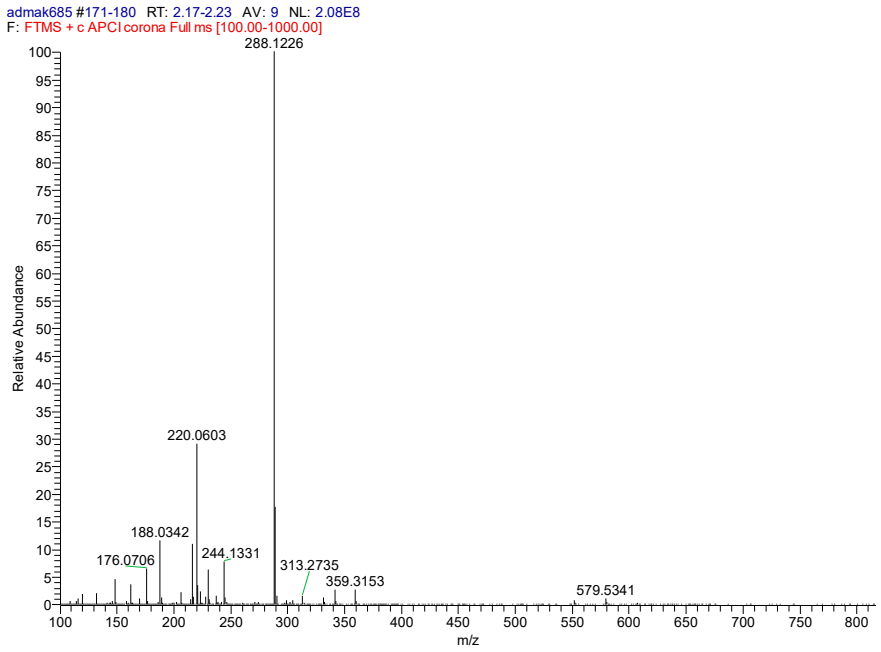


Figure S67. HR-MS spectrum of **3d**

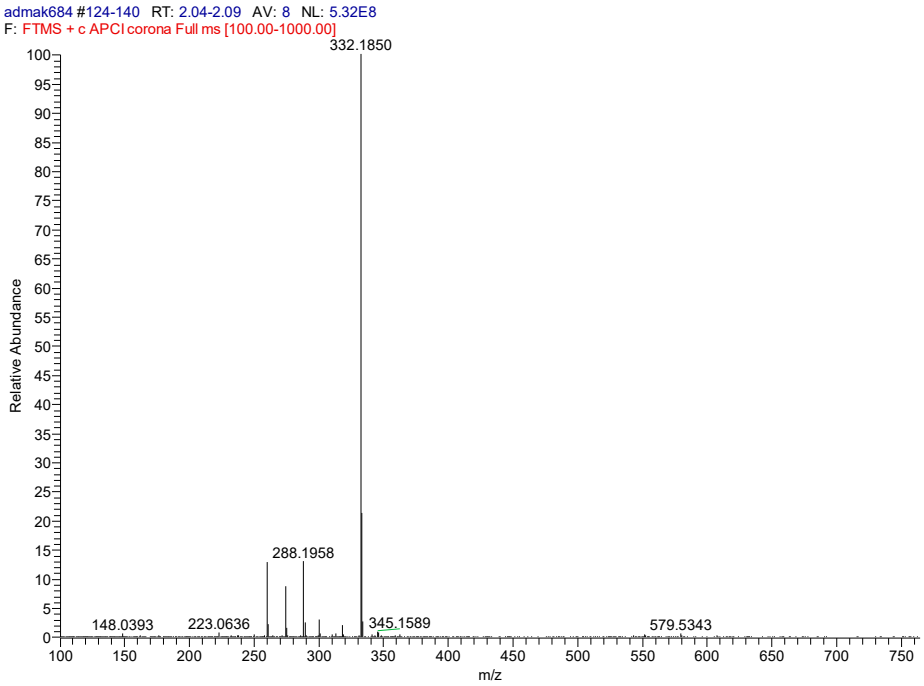


Figure S68. HR-MS spectrum of **3e**

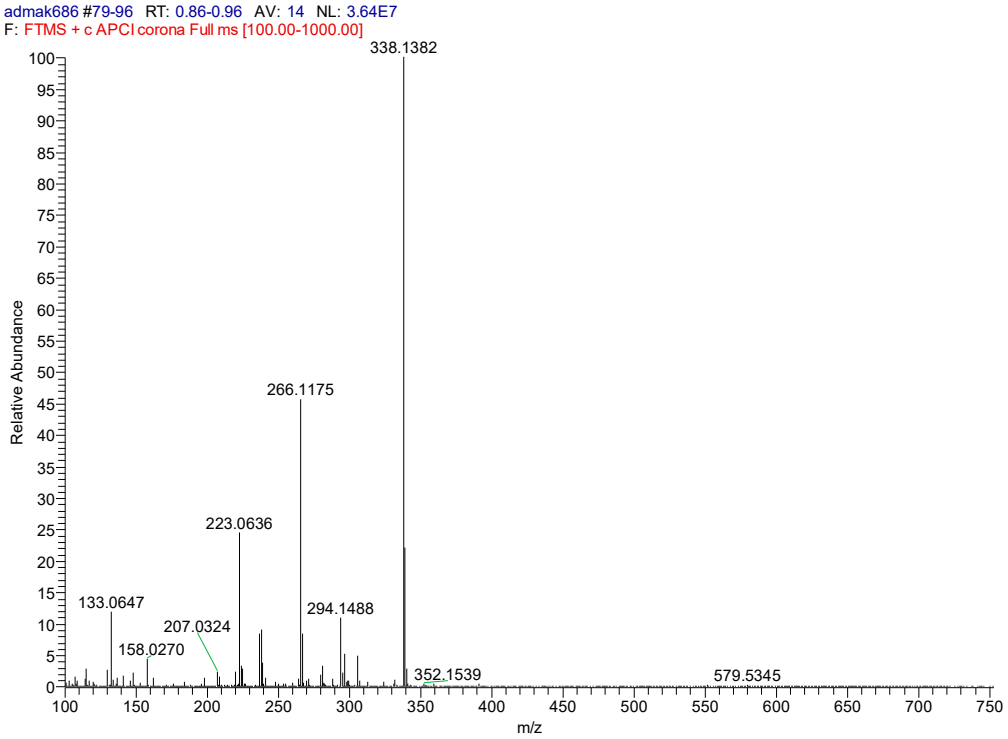


Figure S69. HR-MS spectrum of **3f**

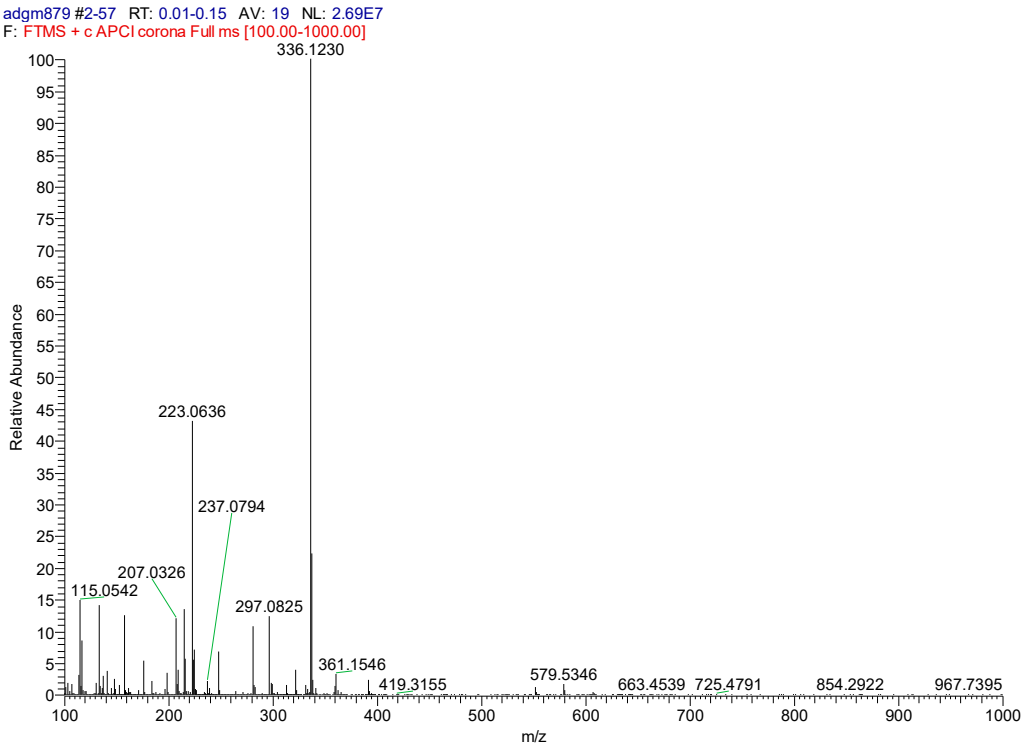


Figure S70. HR-MS spectrum of **3g**

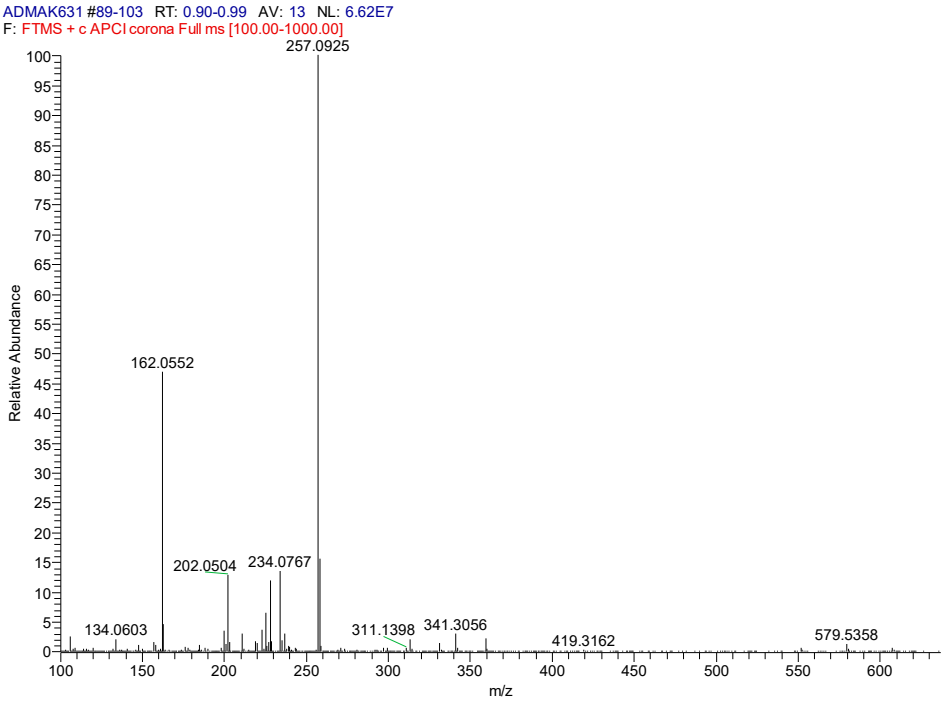


Figure S71. HR-MS spectrum of **4a**.

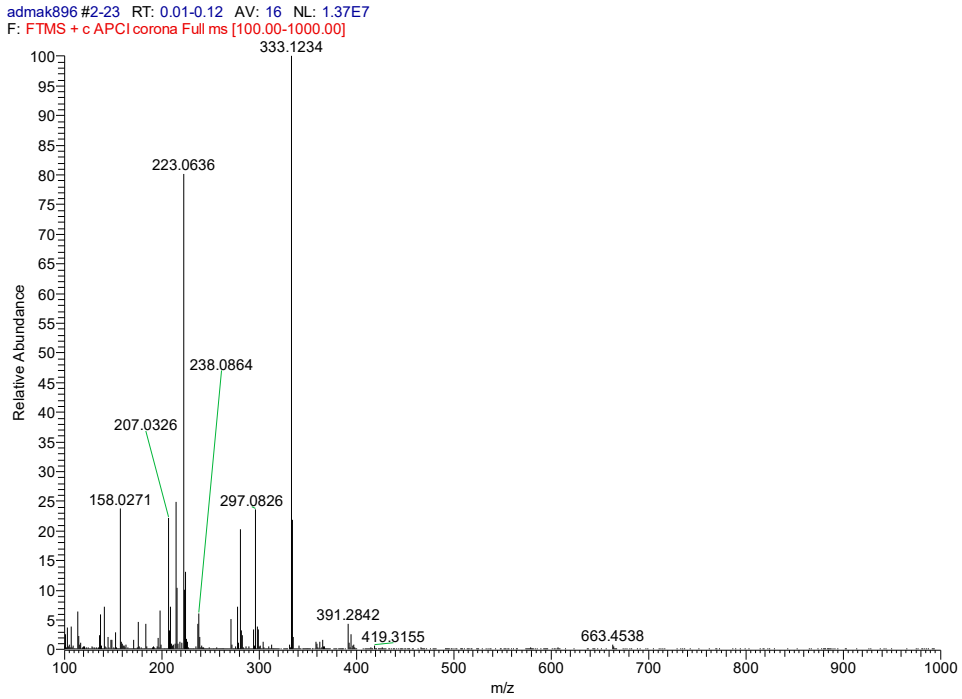


Figure S72. HR-MS spectrum of **4b**.

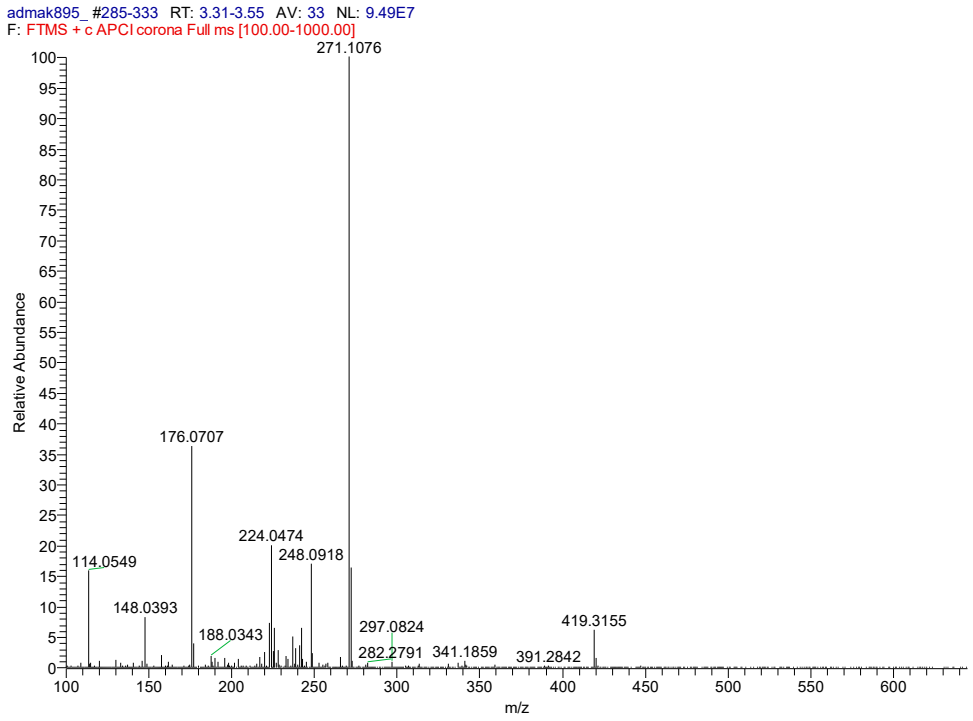


Figure S73. HR-MS spectrum of **4c**

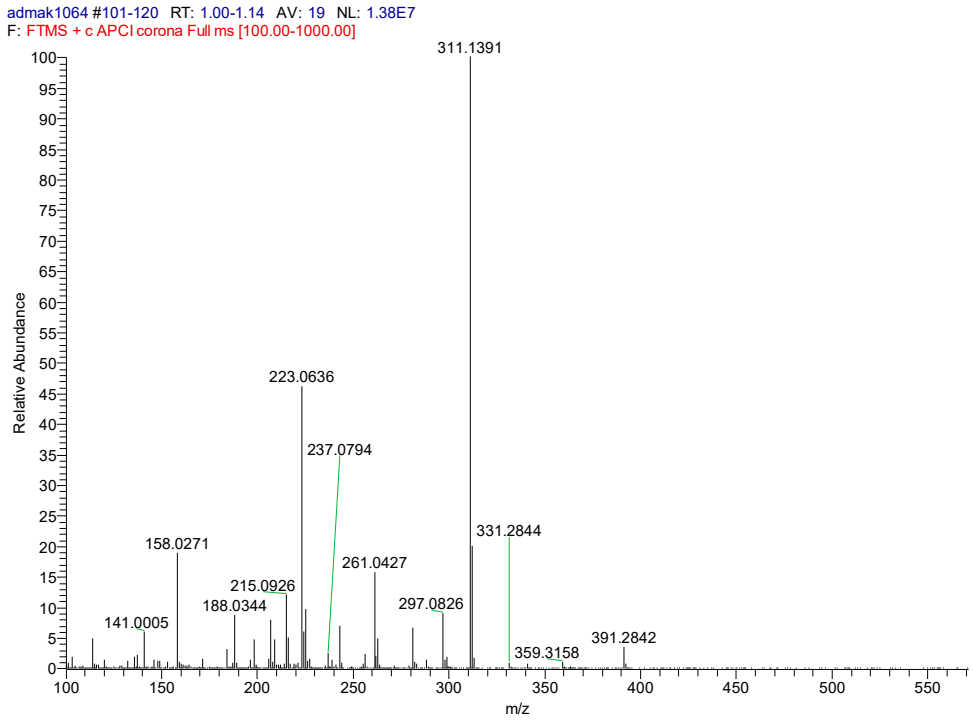


Figure S74. HR-MS spectrum of **4d**

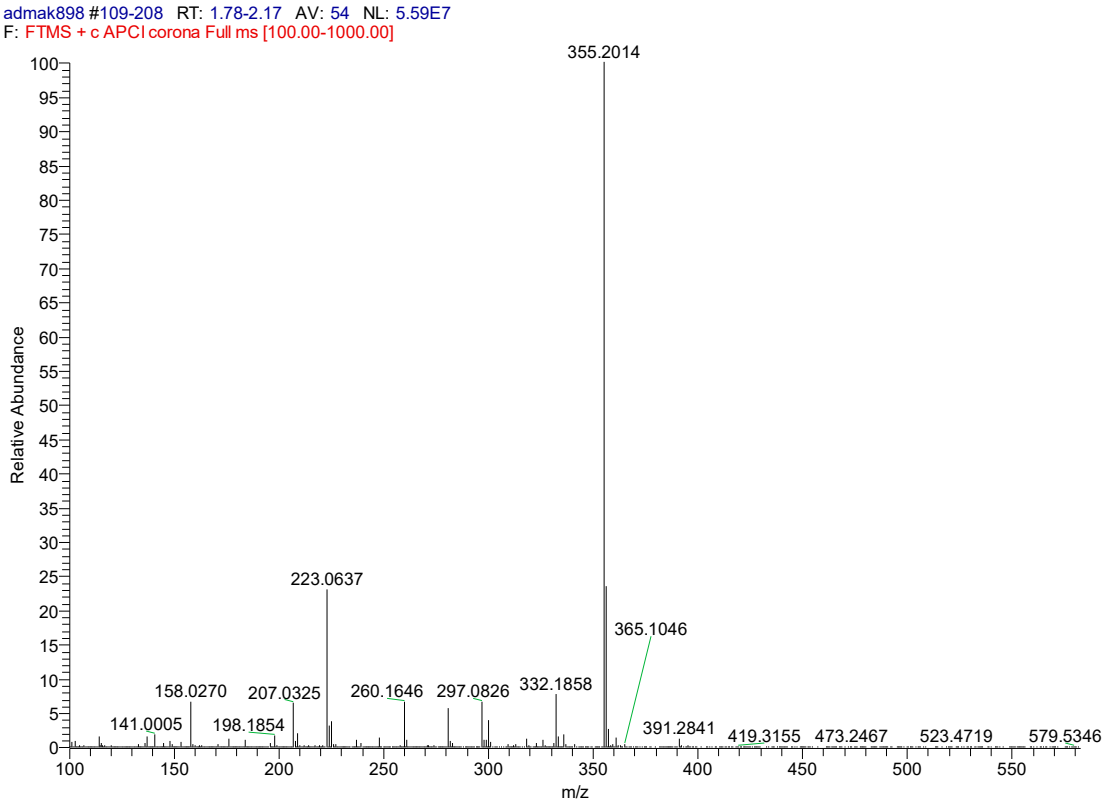


Figure S75. HR-MS spectrum of **4e**

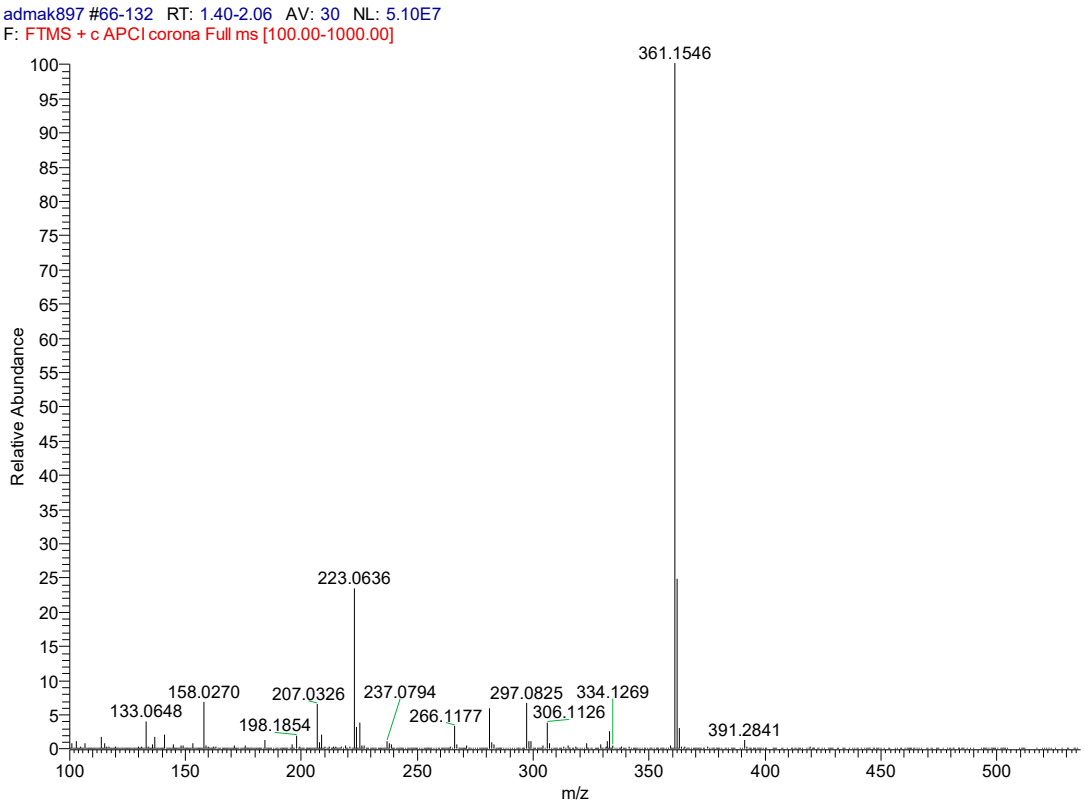


Figure S76. HR-MS spectrum of **4f**

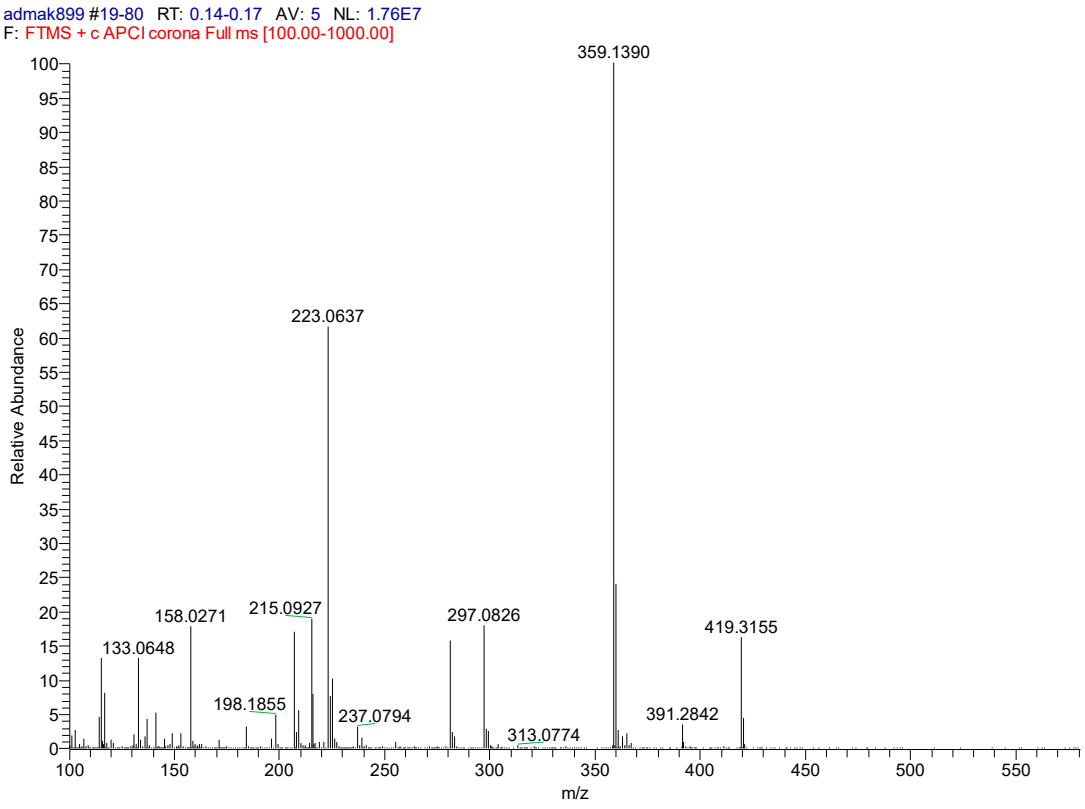


Figure S77. HR-MS spectrum of **4g**

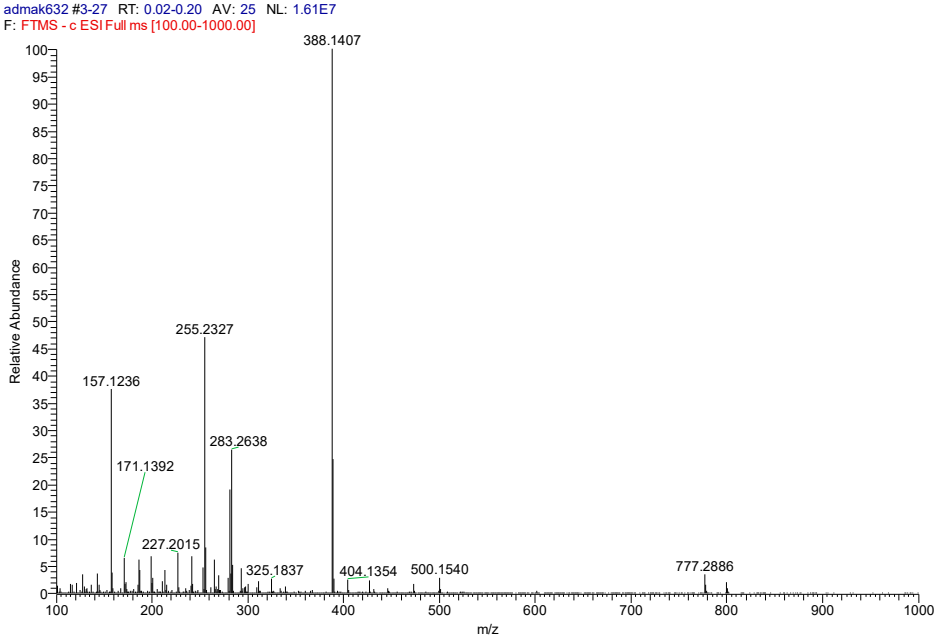


Figure S78. HR-MS spectrum of **5a**

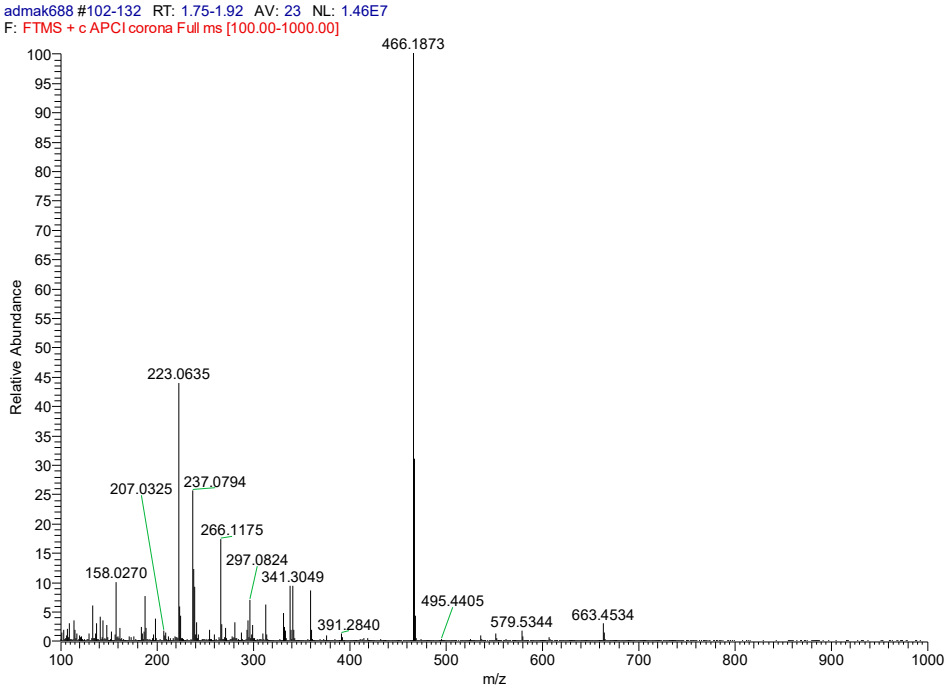


Figure S79. HR-MS spectrum of **5b**

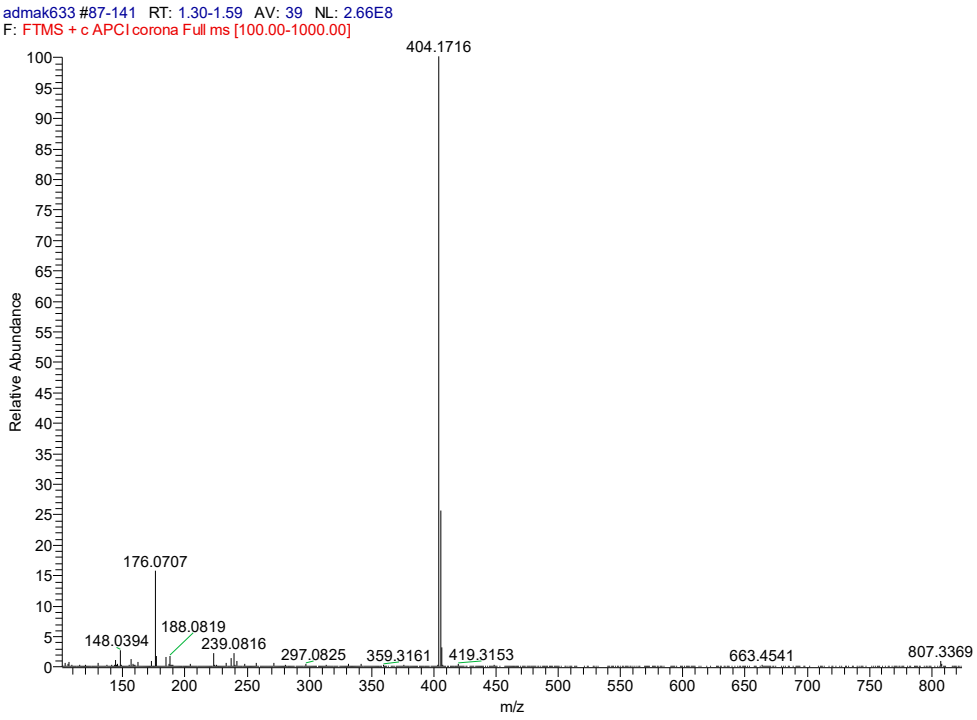


Figure S80. HR-MS spectrum of **5c**

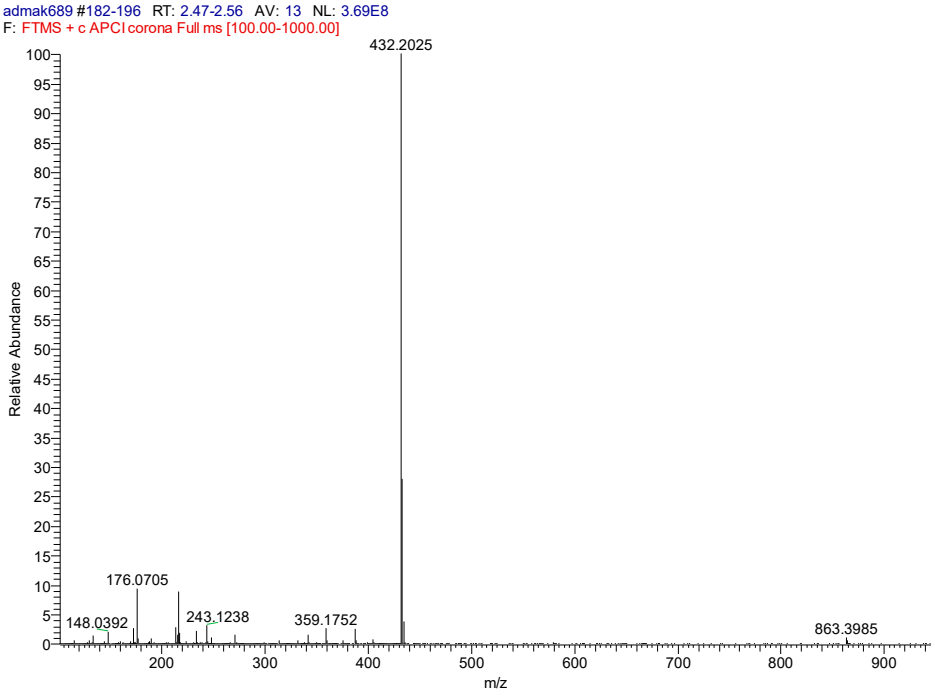


Figure S81. HR-MS spectrum of **5d**

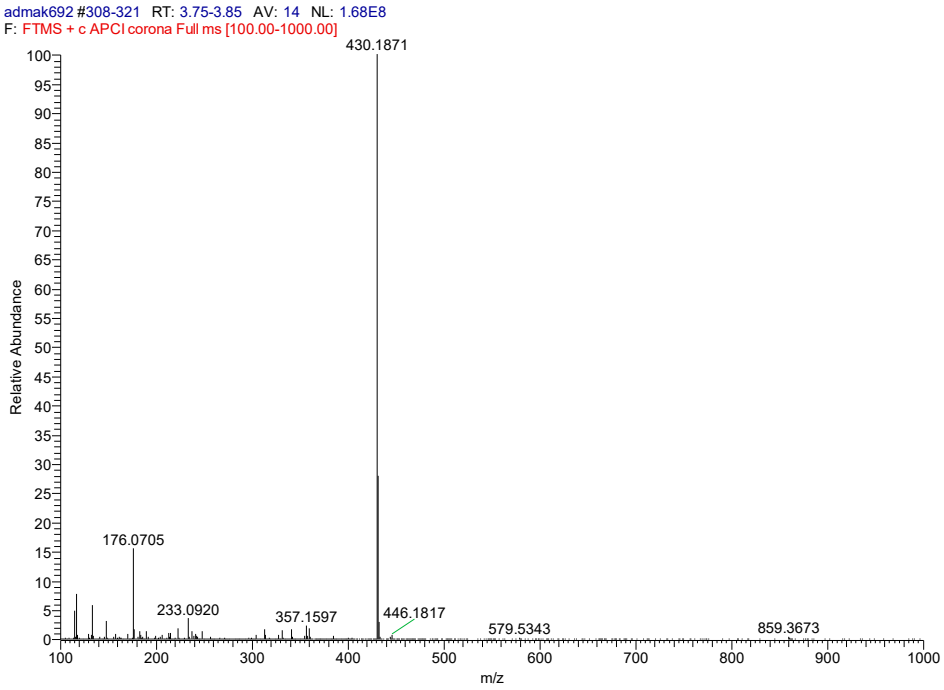


Figure S82. HR-MS spectrum of **5e**

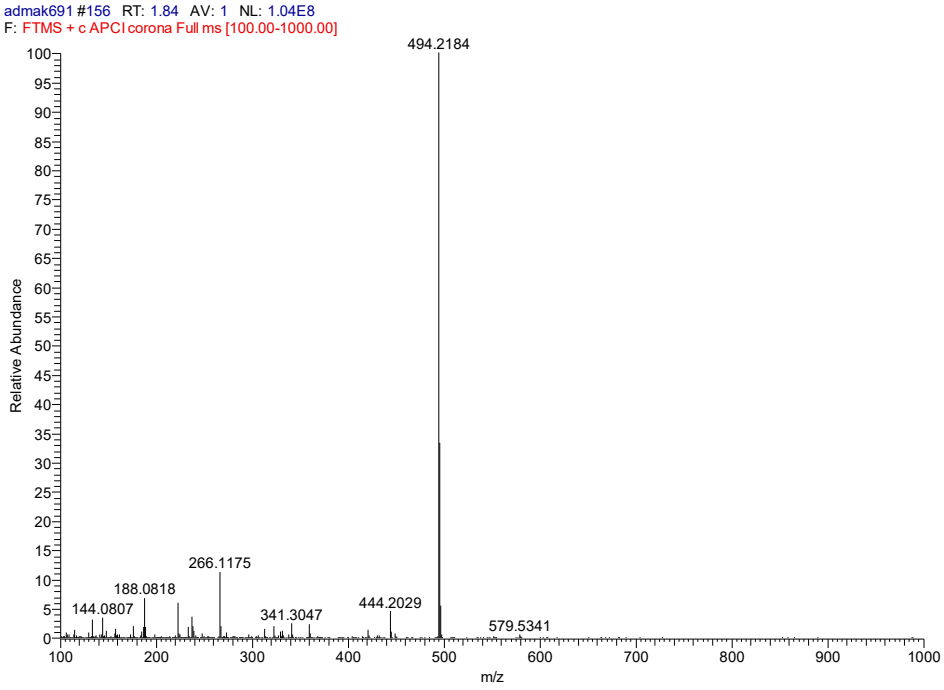


Figure S83. HR-MS spectrum of **5f**

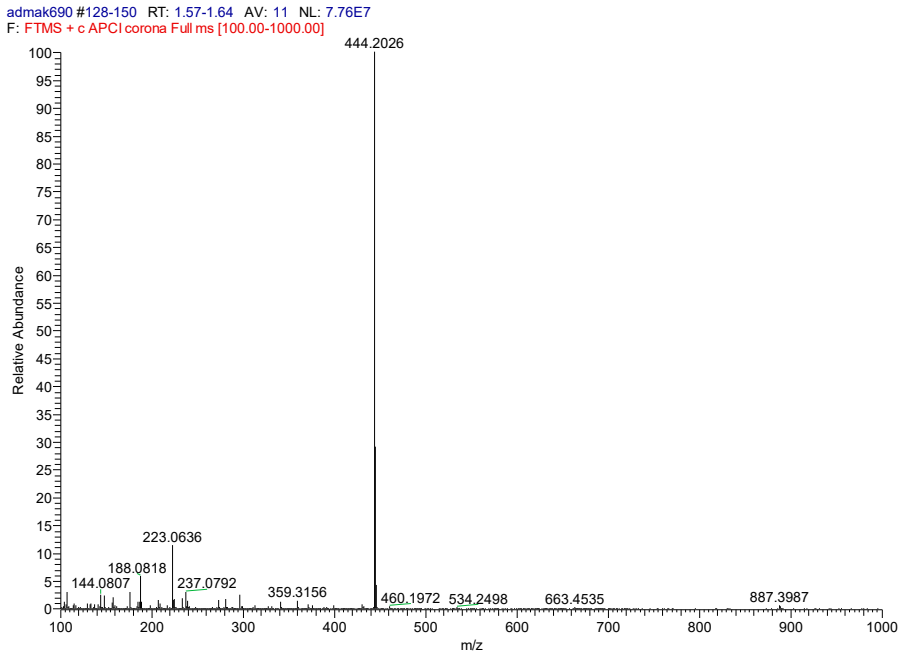


Figure S84. HR-MS spectrum of **5g**

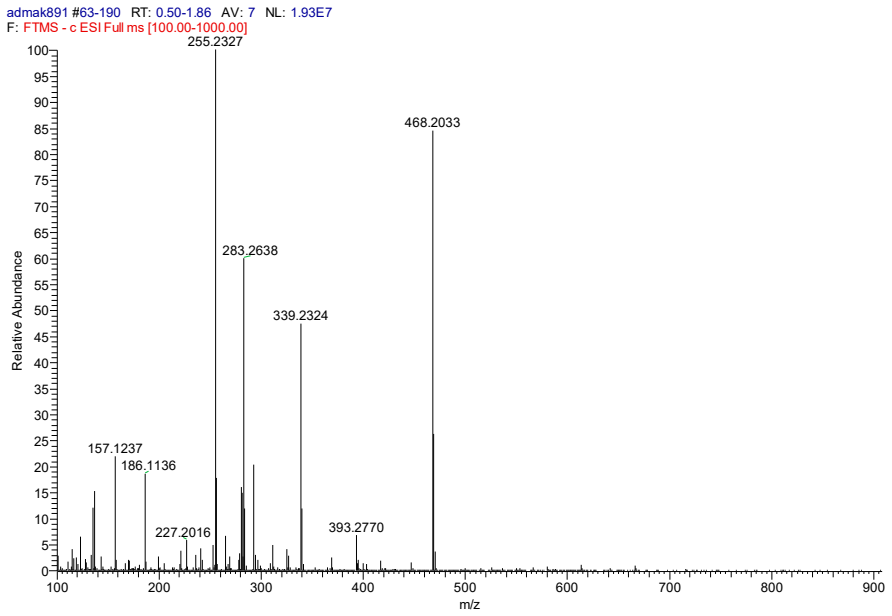


Figure S85. HR-MS spectrum of **5h**

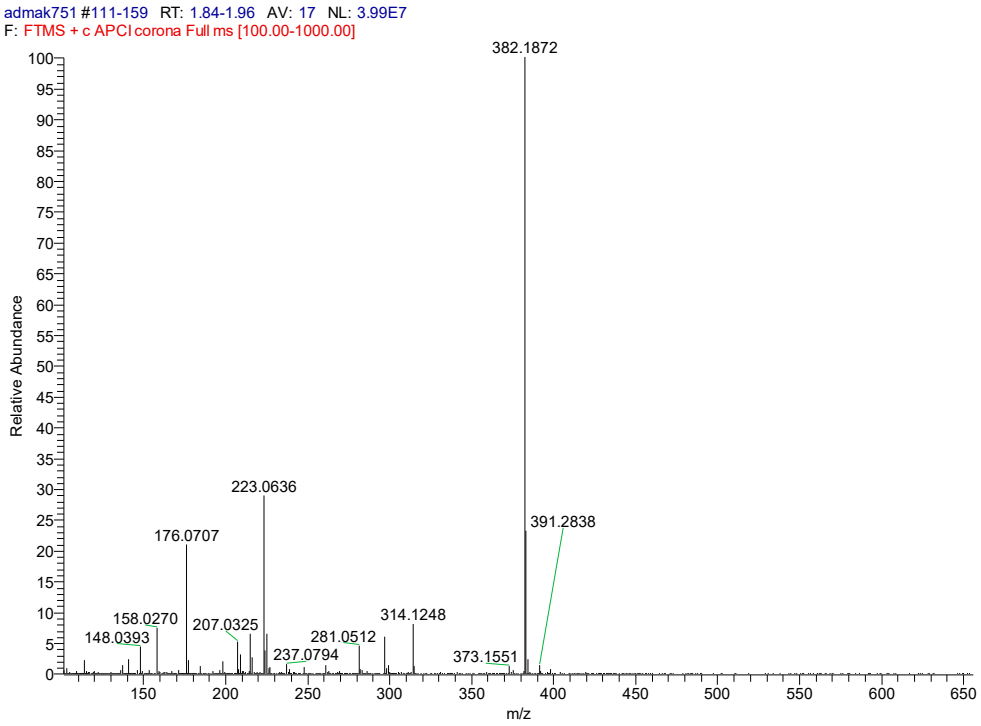


Figure S86. HR-MS spectrum of **5i**

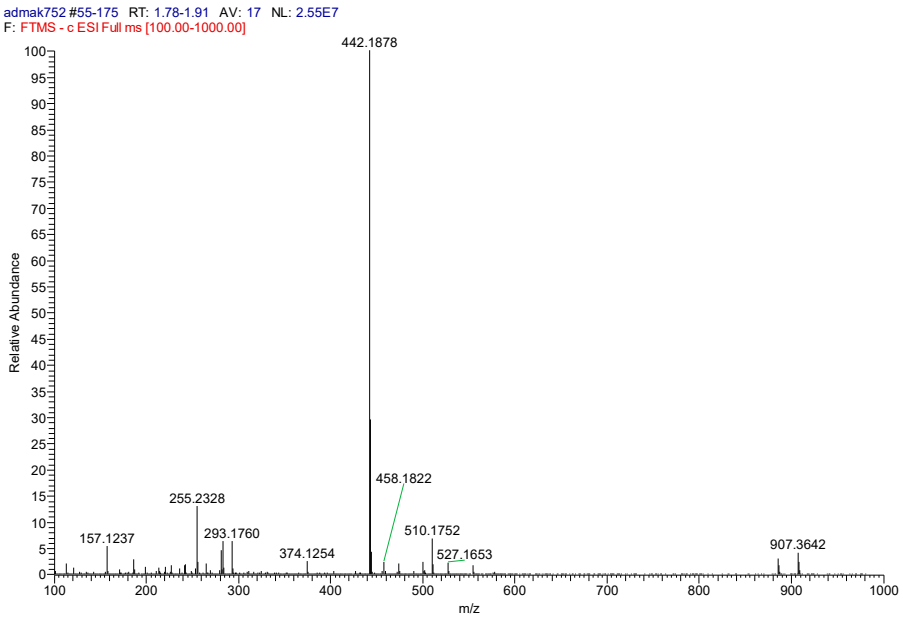


Figure S87. HR-MS spectrum of **5j**

FT-IR data

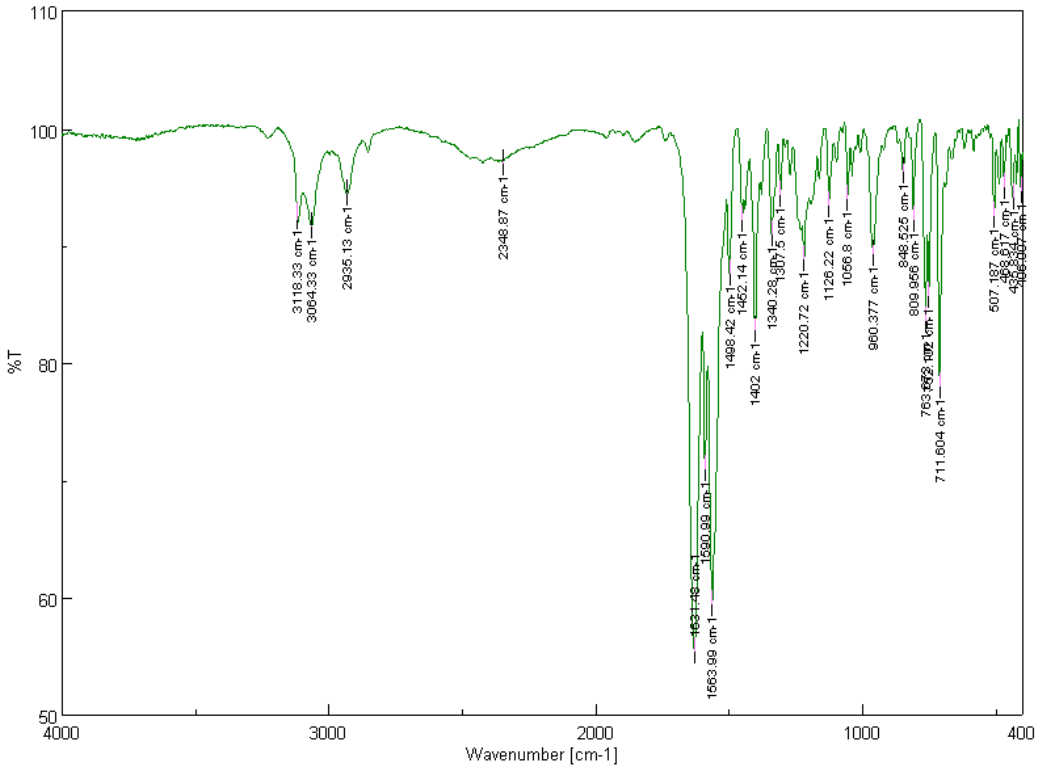


Figure S88. FT-IR spectrum of compound **5a**

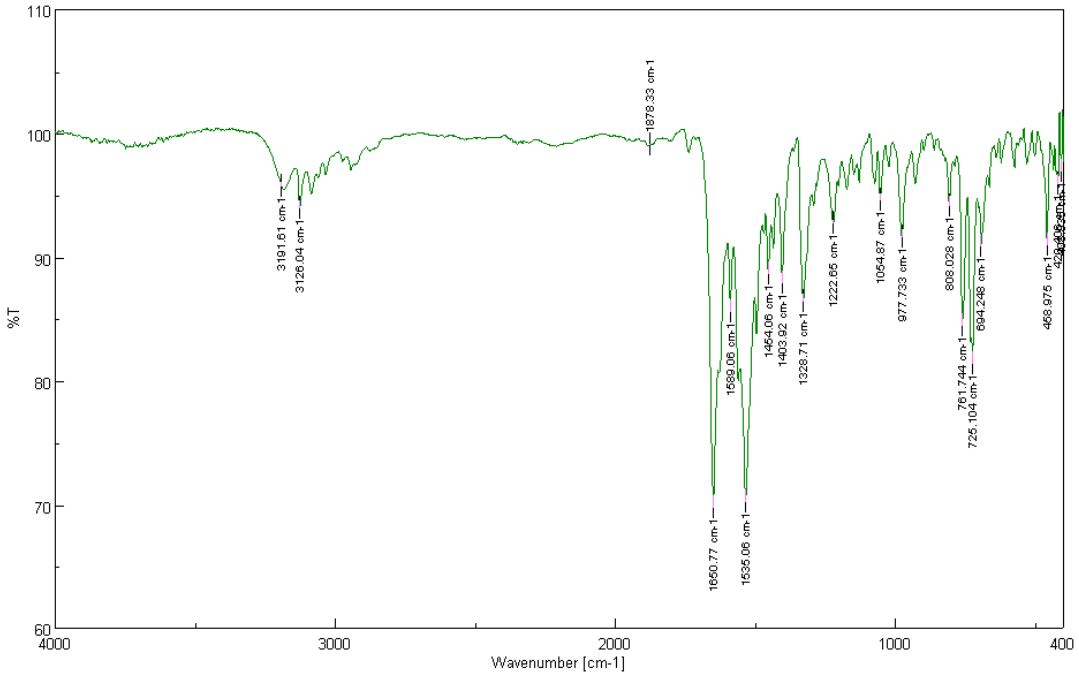


Figure S89. FT- IR spectrum of compound **5b**

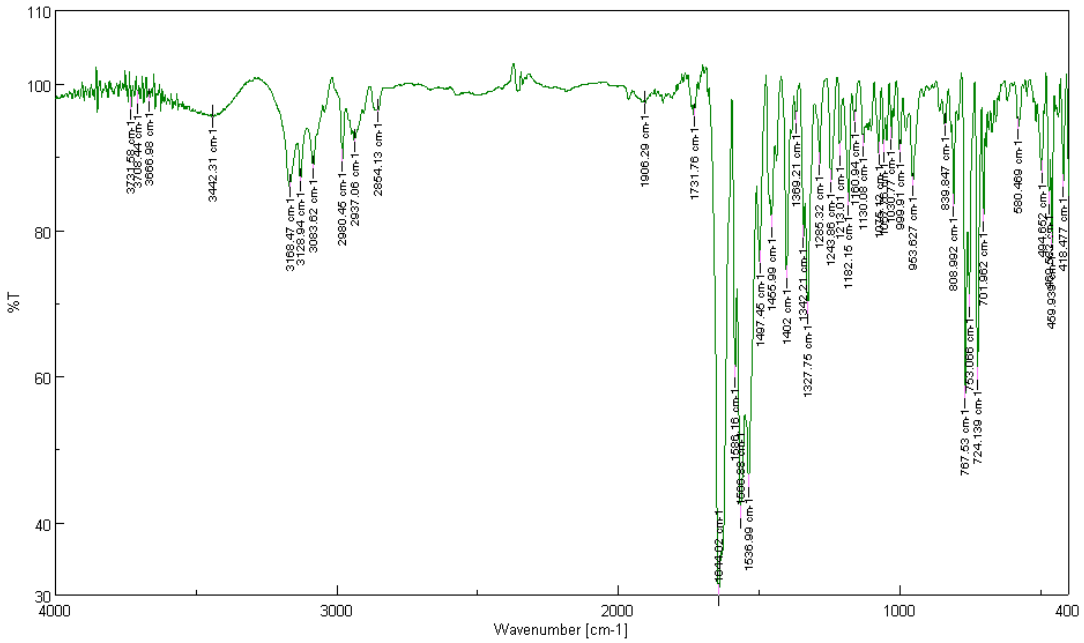


Figure S90. FT- IR spectrum of compound **5c**

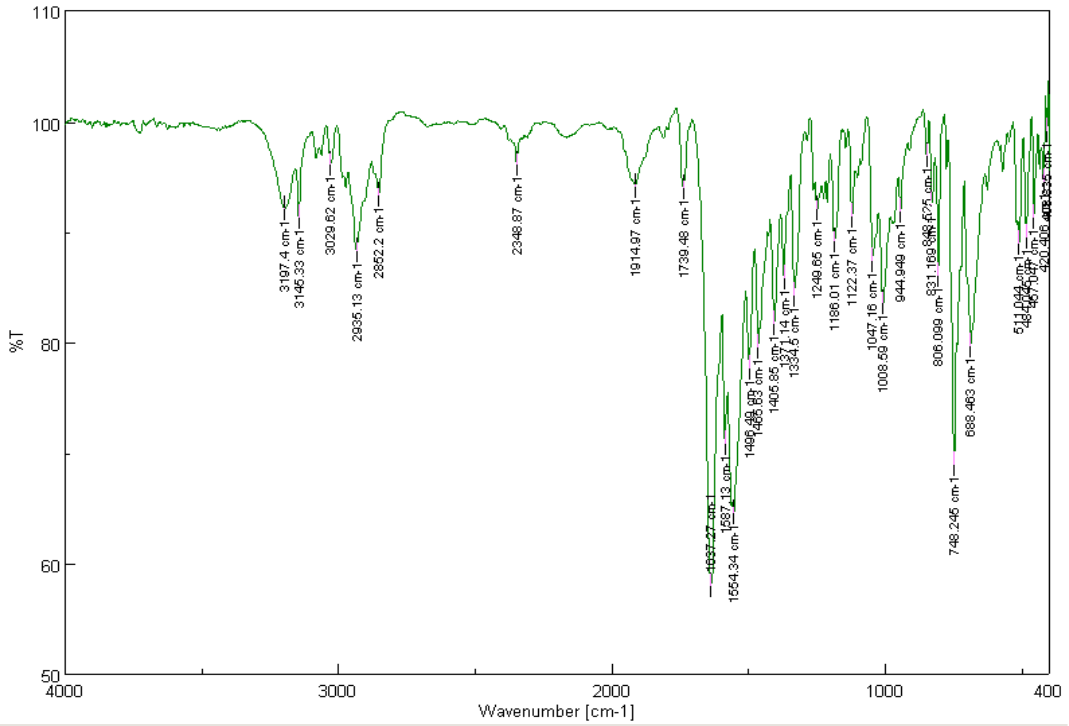


Figure S91. FT- IR spectrum of compound **5d**

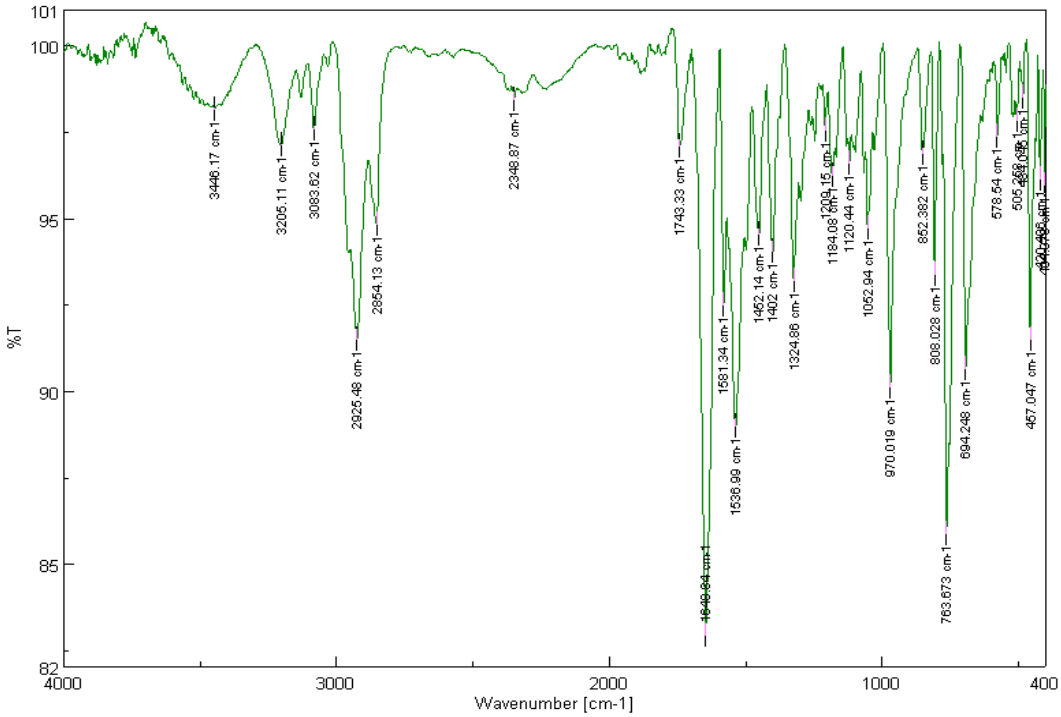


Figure S92. FT- IR spectrum of compound **5e**

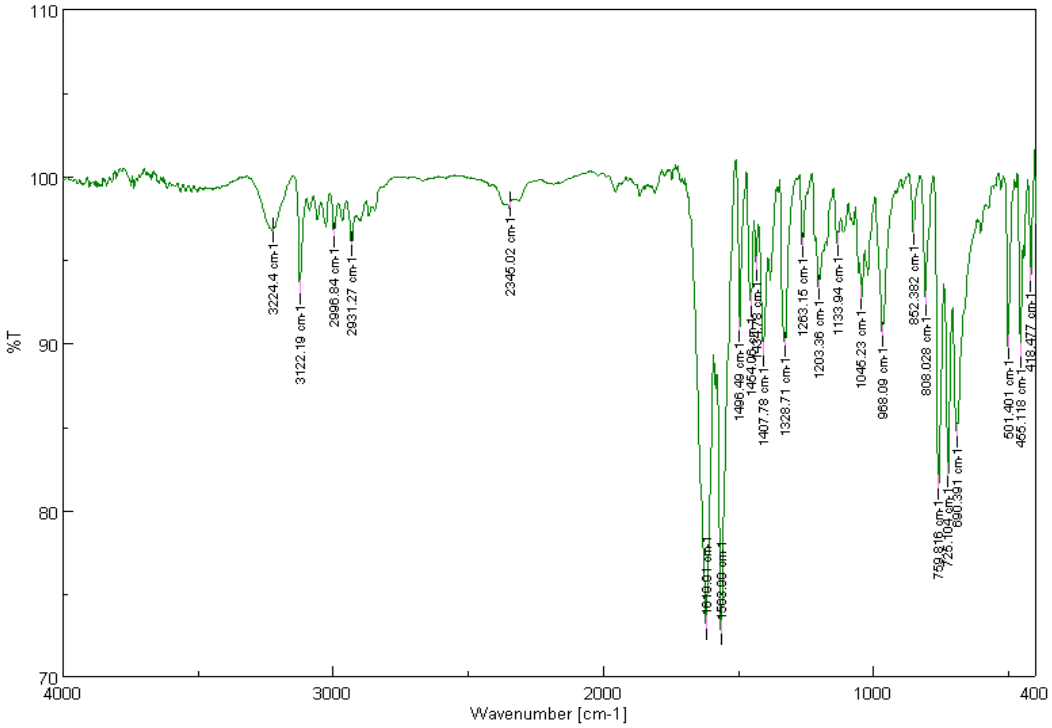


Figure S93. FT- IR spectrum of compound **5f**

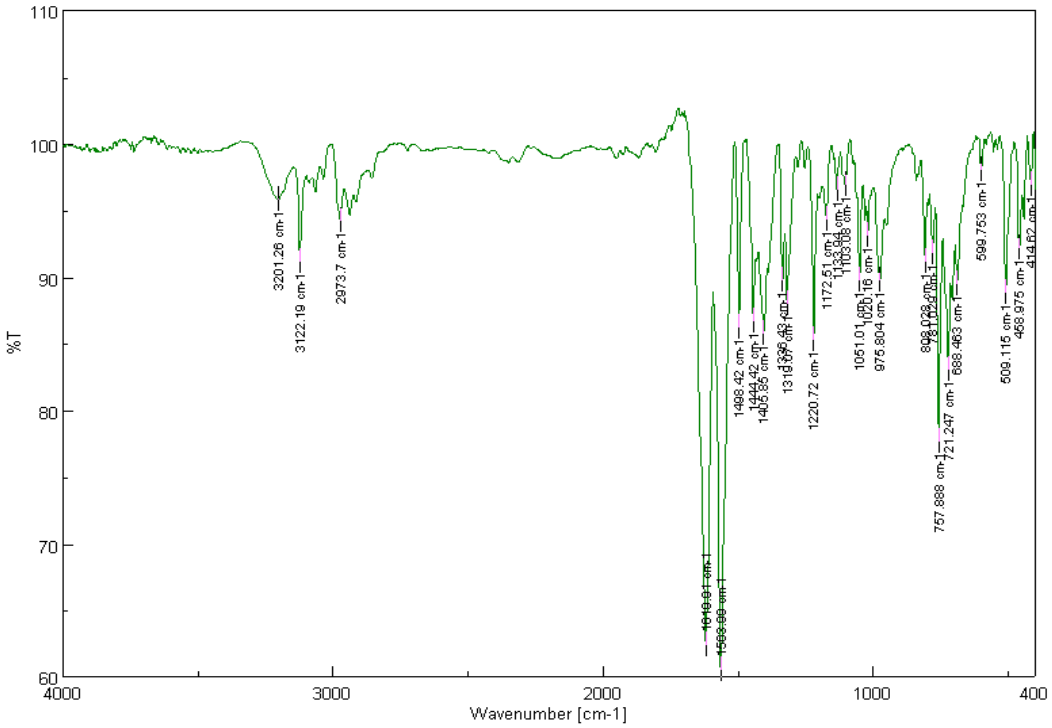


Figure S94. FT- IR spectrum of compound **5g**

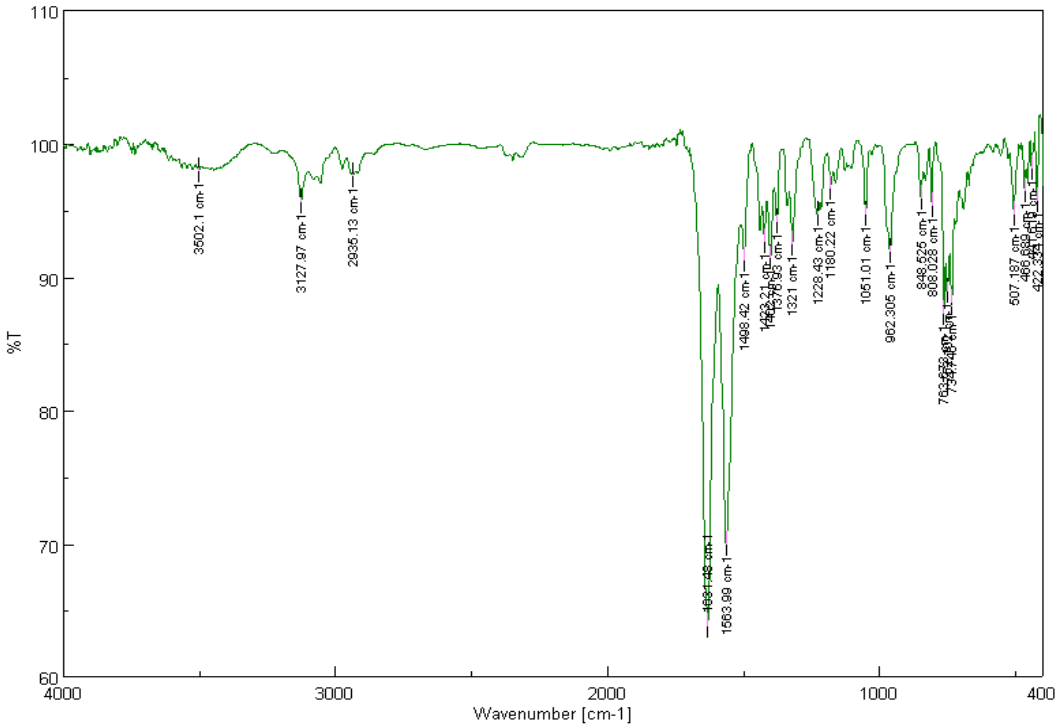


Figure S95. FT-IR spectrum of compound **5j**