

Supplementary Materials:

**Design, Synthesis, Fungicidal and Insecticidal
Activities of Novel Diamide Compounds
Combining Pyrazolyl and Polyfluoro-Substituted
Phenyl into Alanine or 2-Aminobutyric acid
Skeletons**

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The NMR spectrogram of title compounds

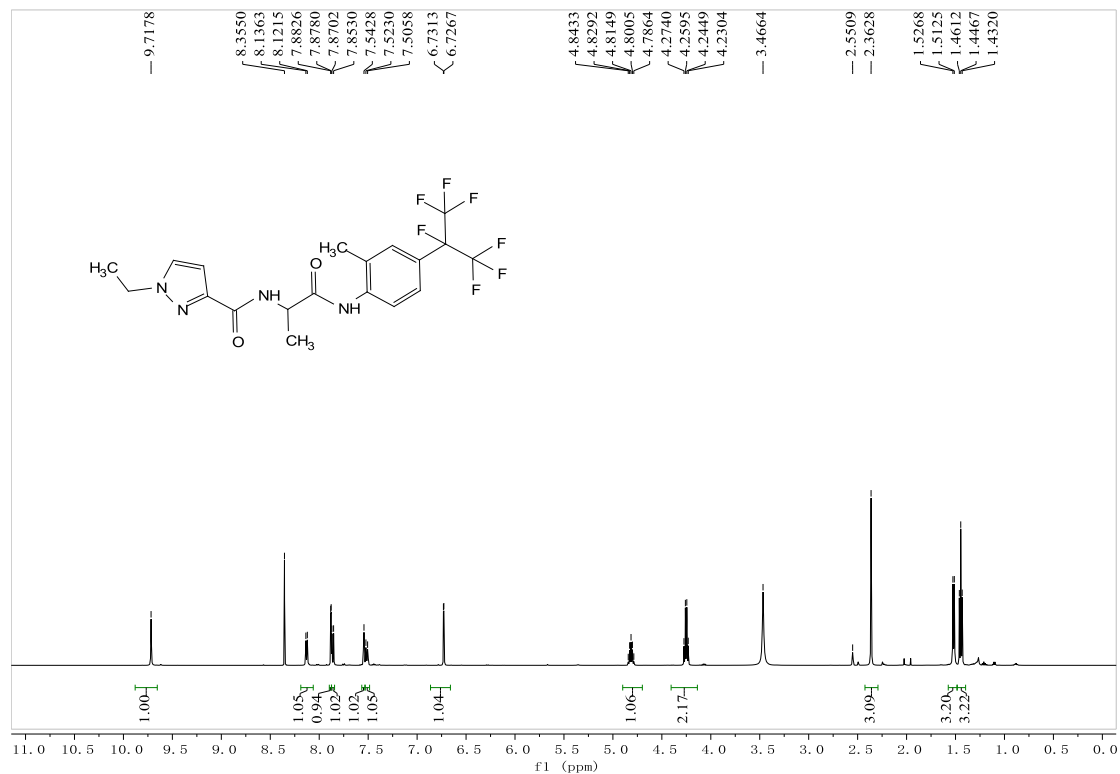


Figure S1. ¹H NMR spectrum of compound I-1.

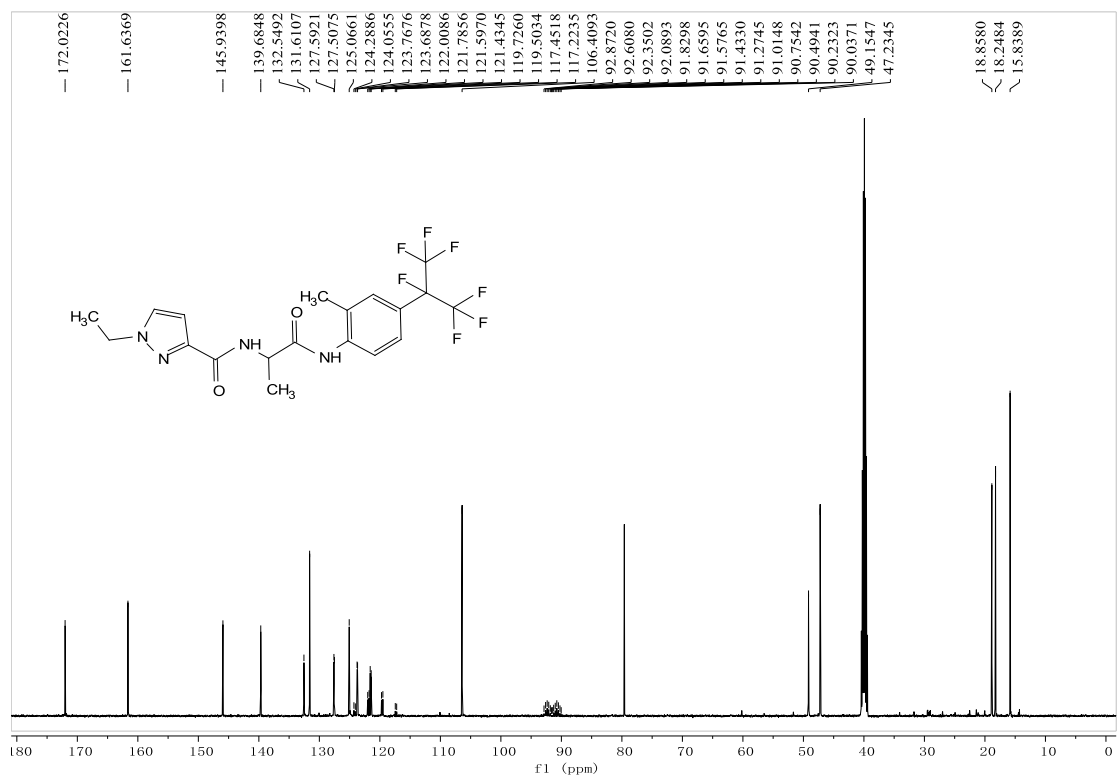


Figure S2. ¹³C NMR spectrum of compound I-1.

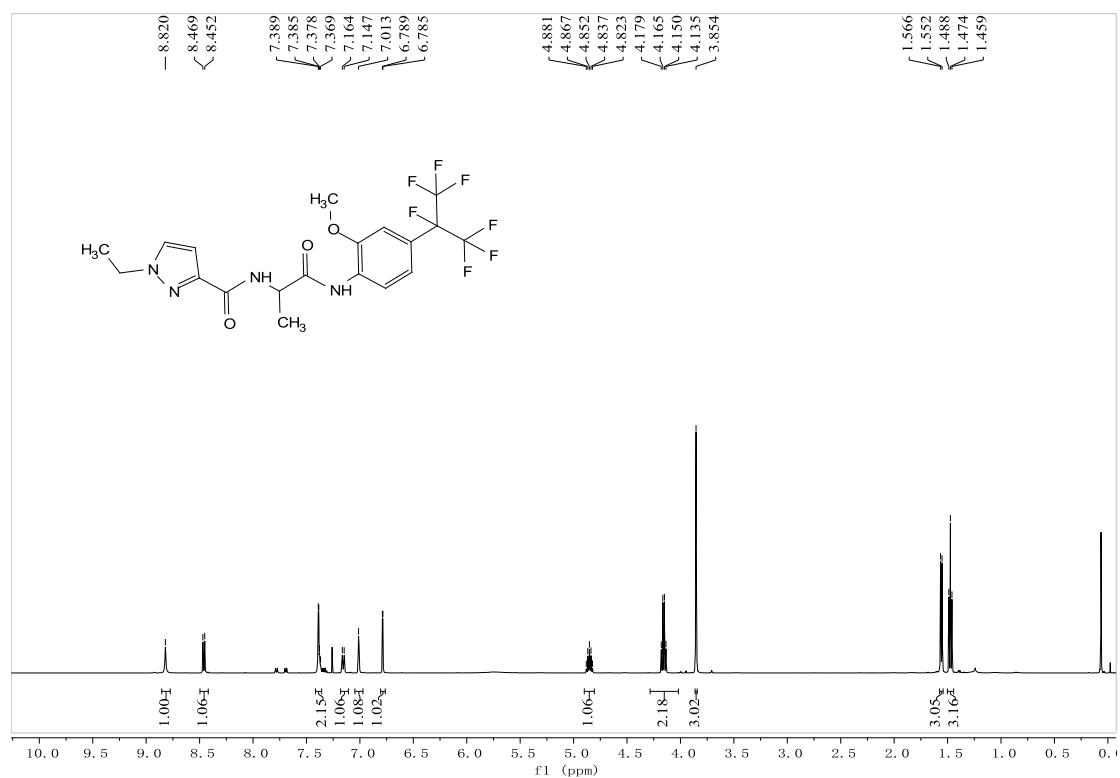


Figure S3. ¹H NMR spectrum of compound I-2.

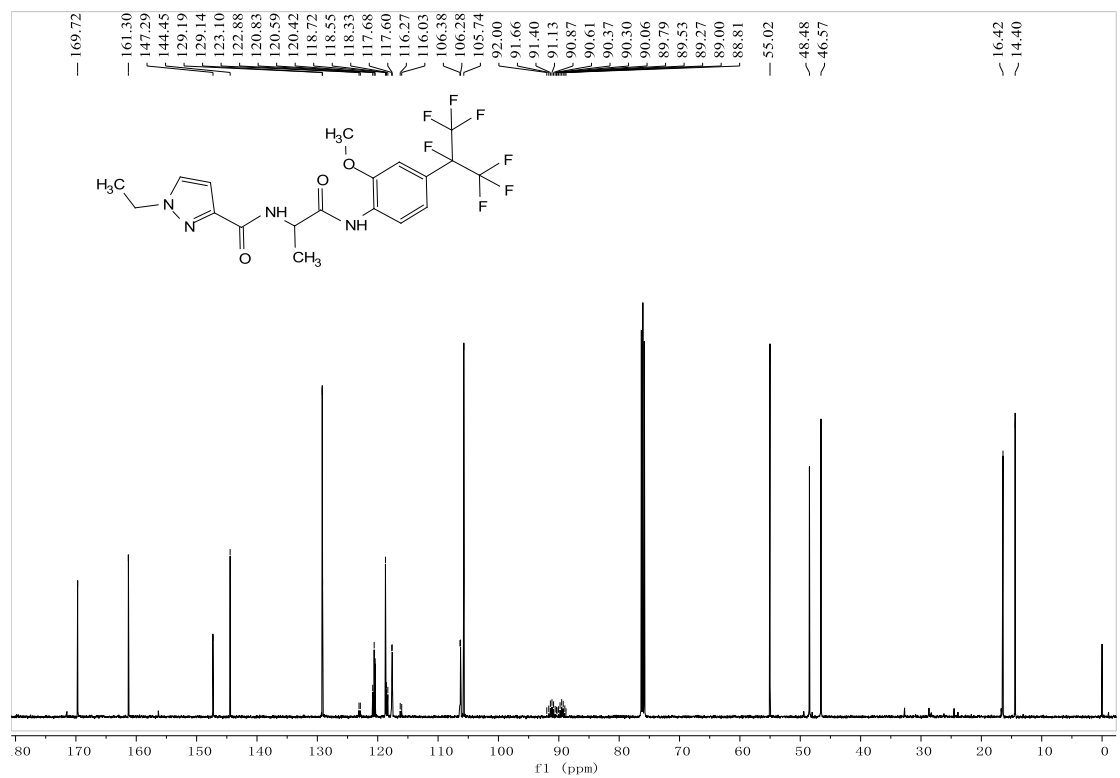
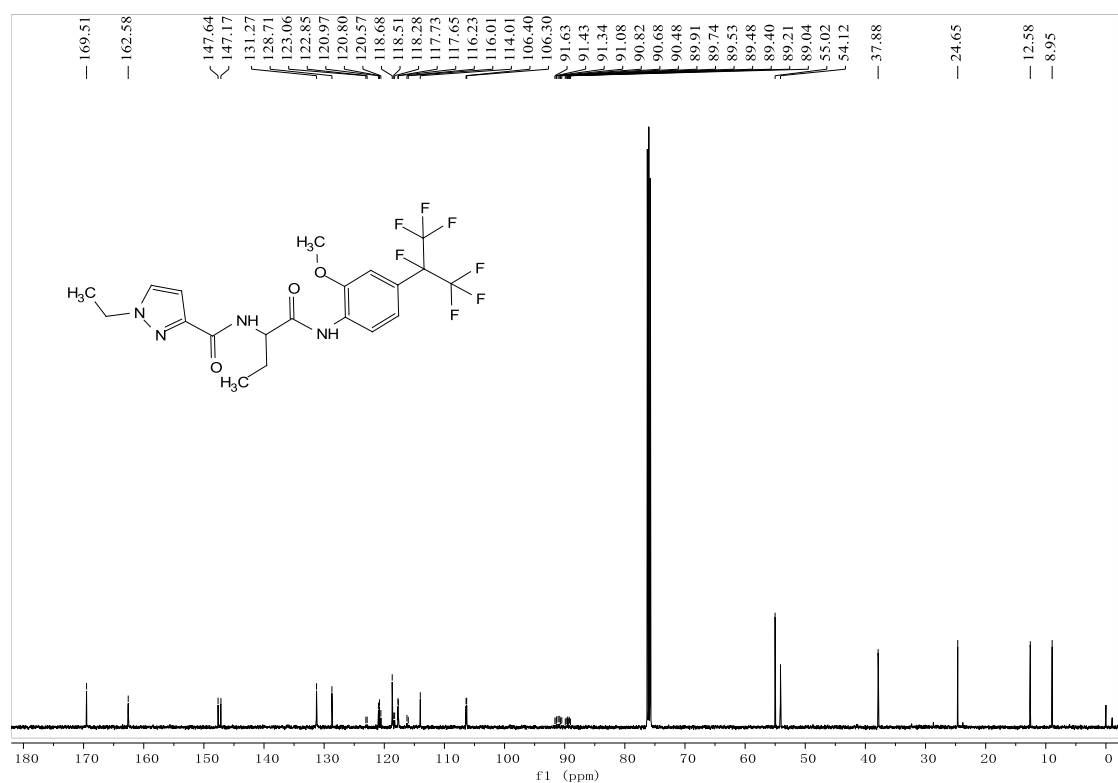
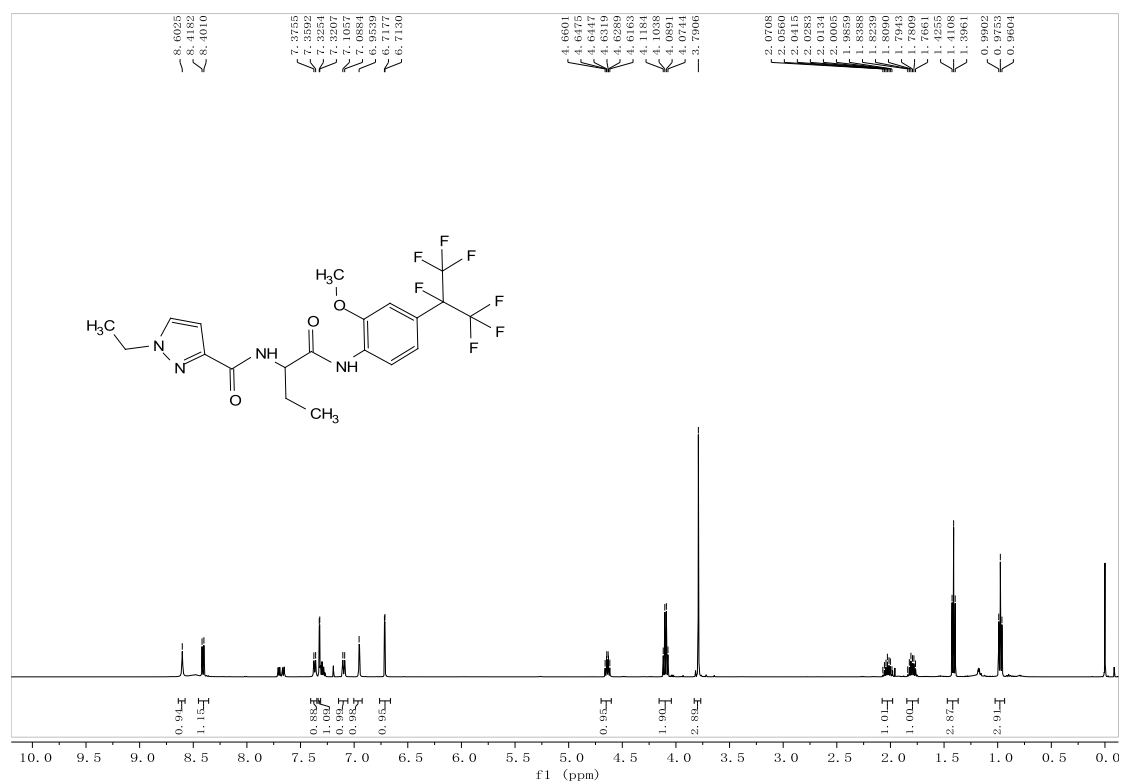


Figure S4. ¹³C NMR spectrum of compound I-2.



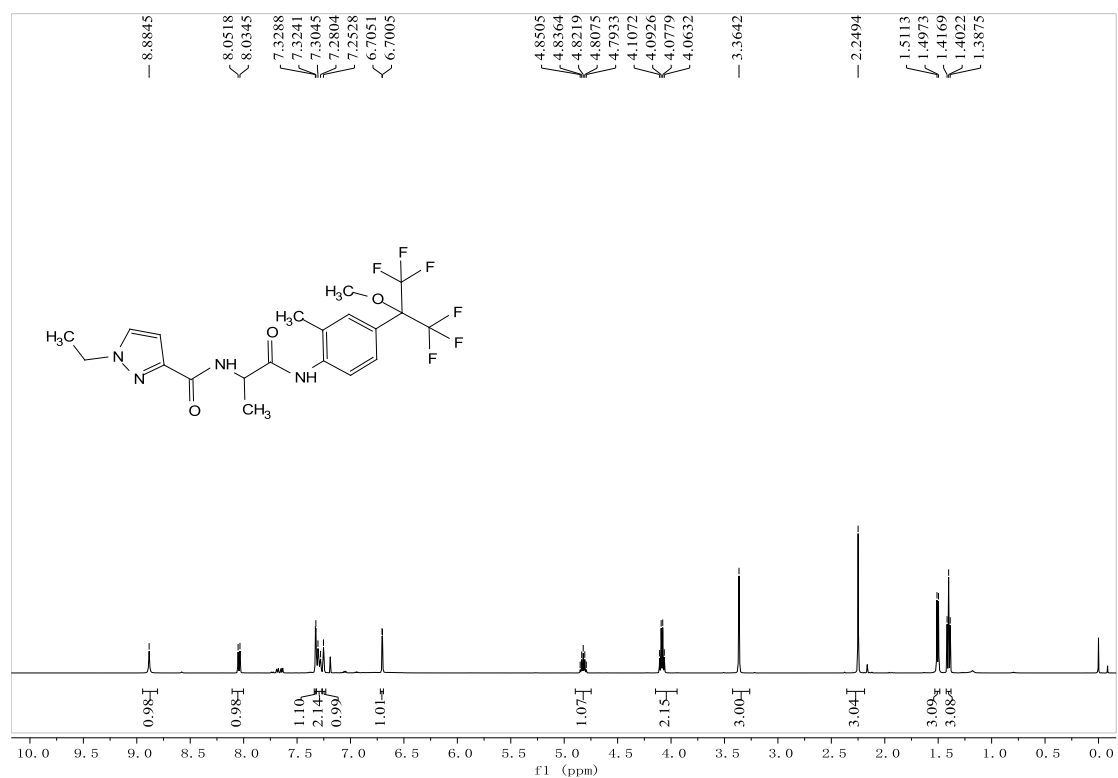


Figure S7. ¹H NMR spectrum of compound I-4.

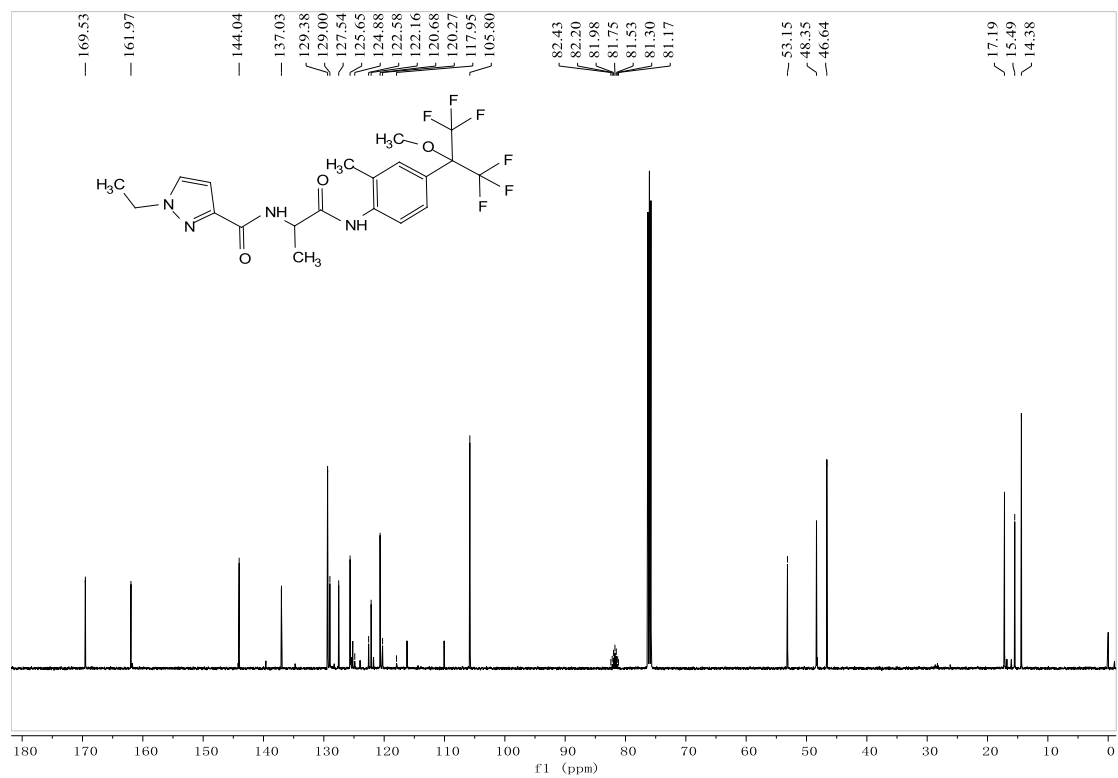


Figure S8. ¹³C NMR spectrum of compound I-4.

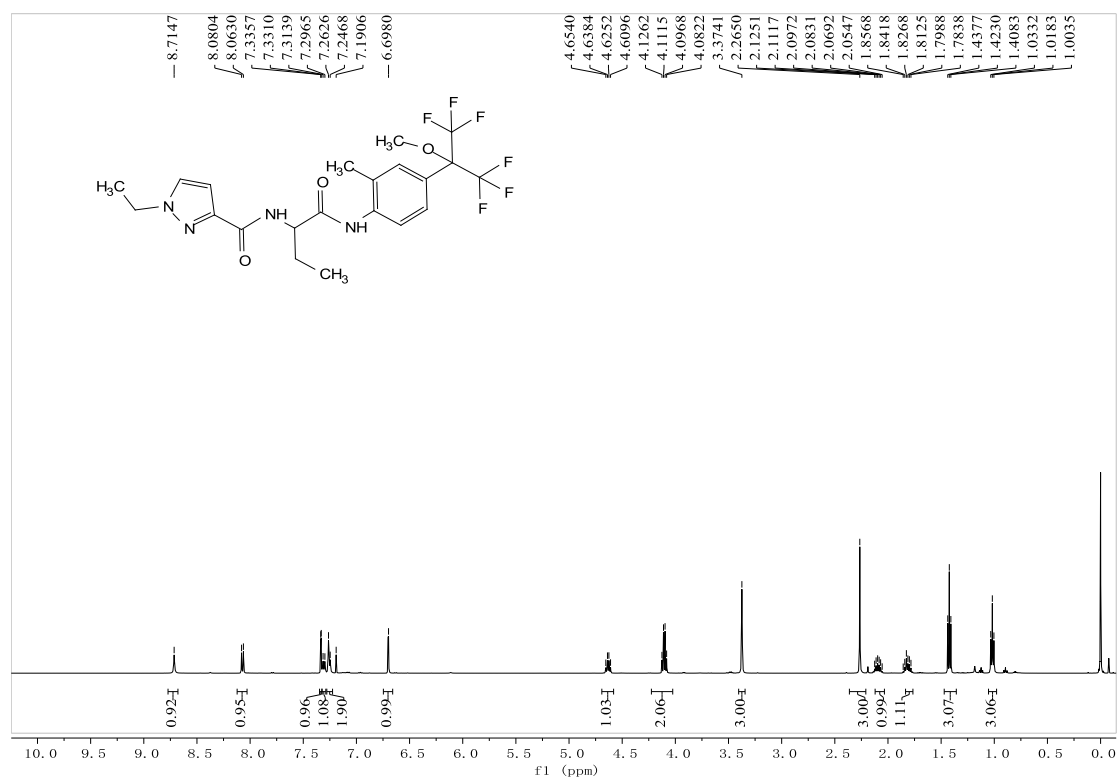


Figure S9. ¹H NMR spectrum of compound I-5.

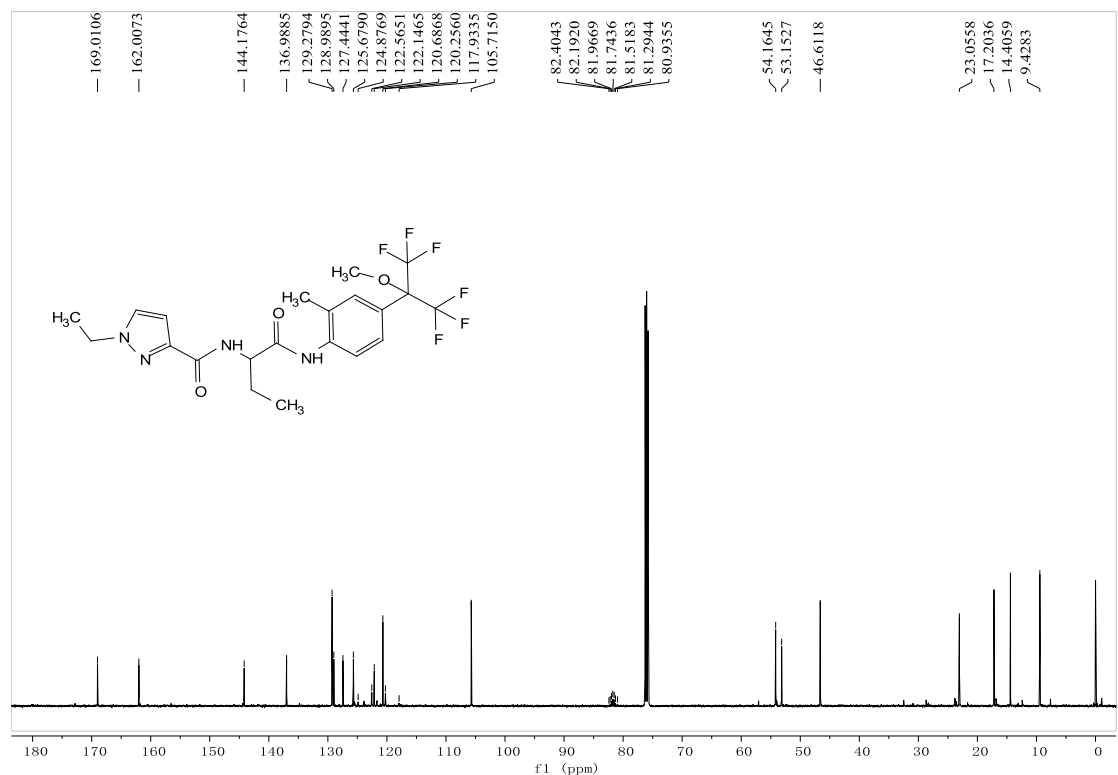


Figure S10. ¹³C NMR spectrum of compound I-5.

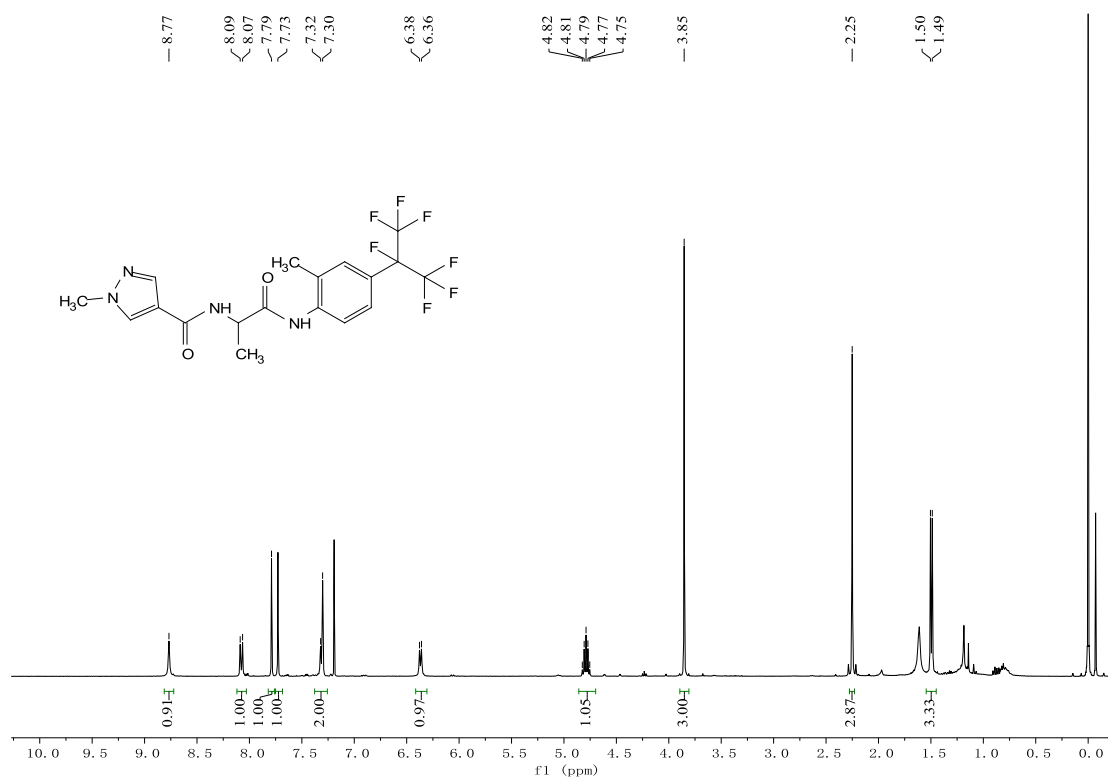


Figure S11. ¹H NMR spectrum of compound II-a-6.

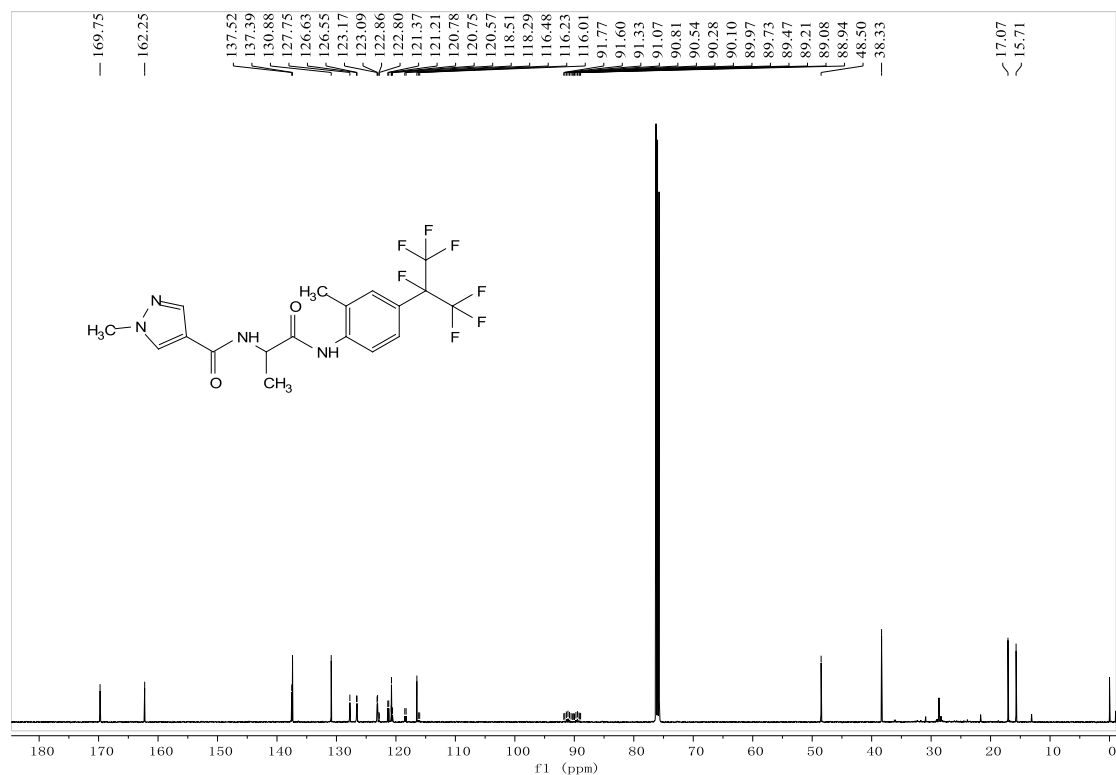
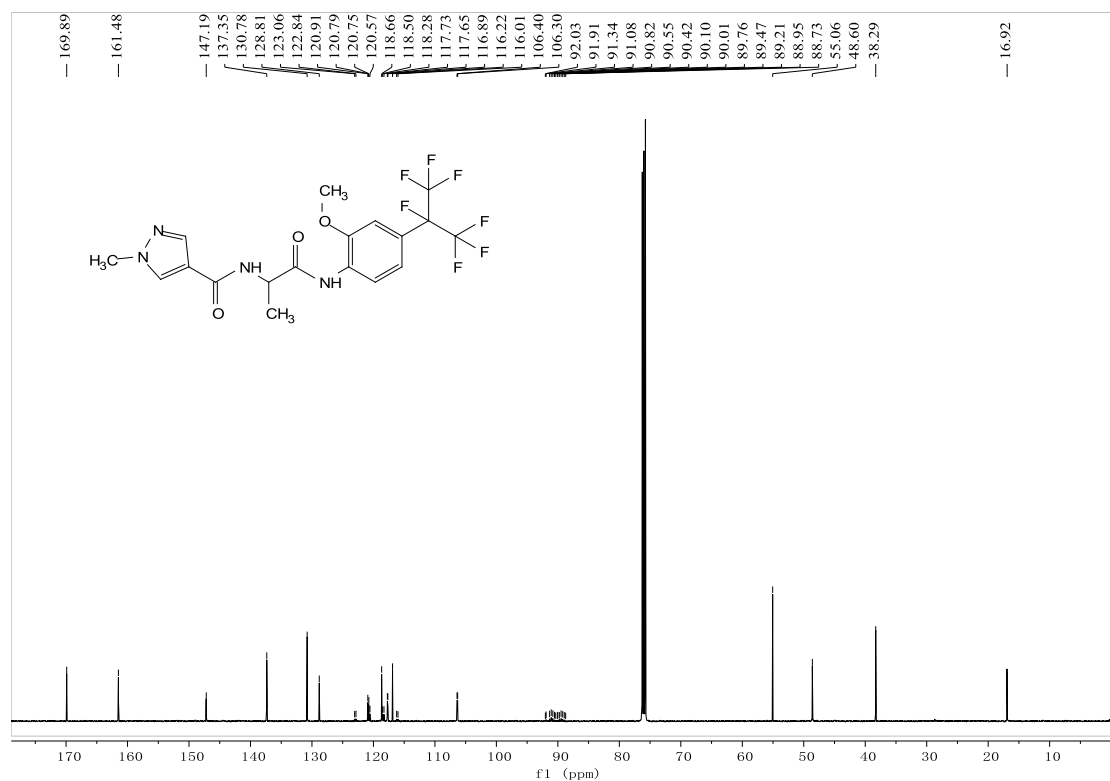
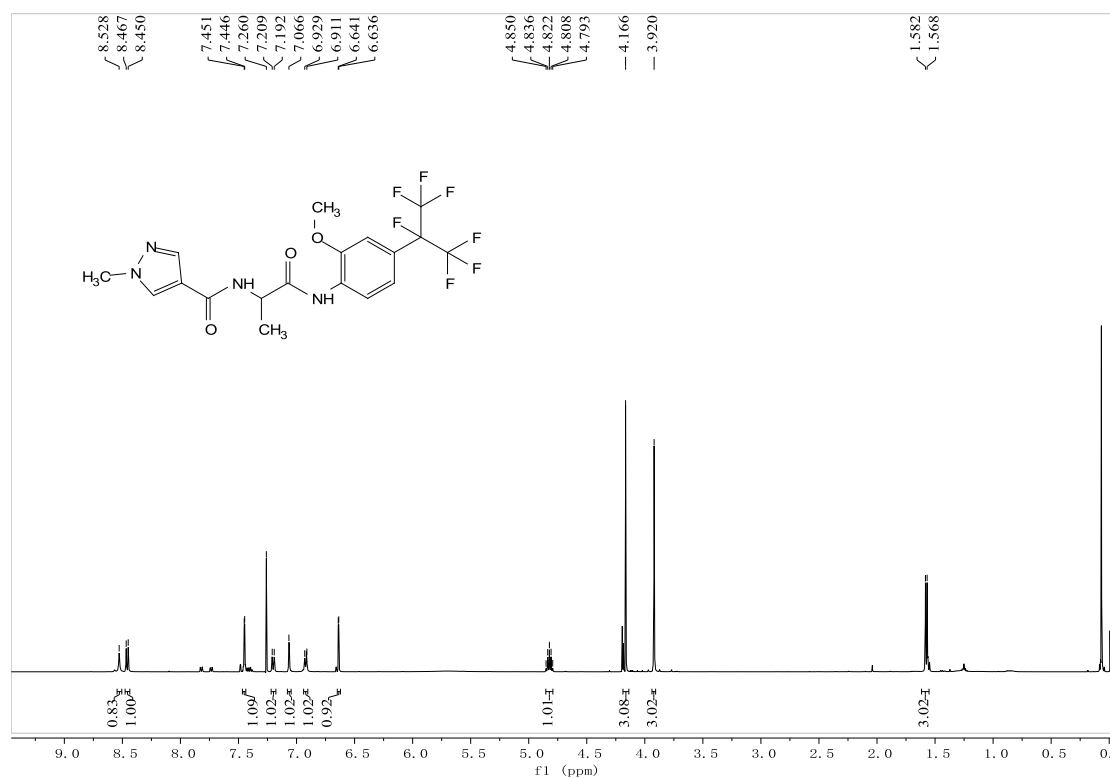
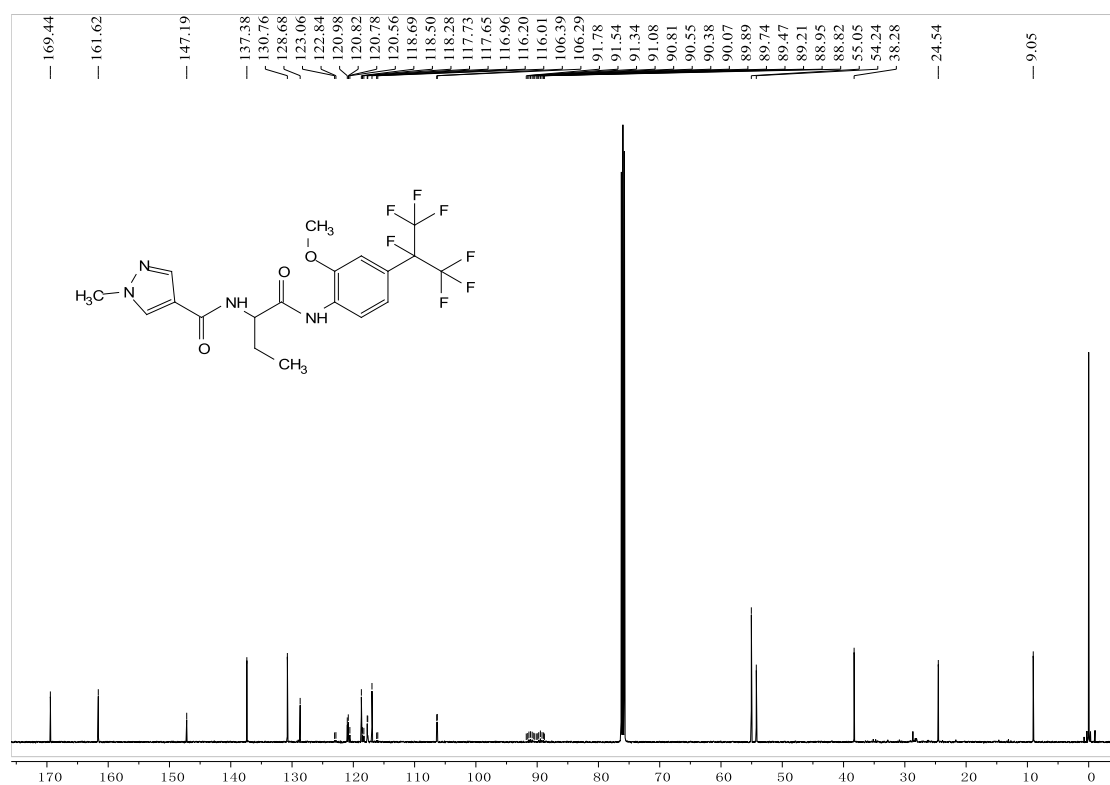
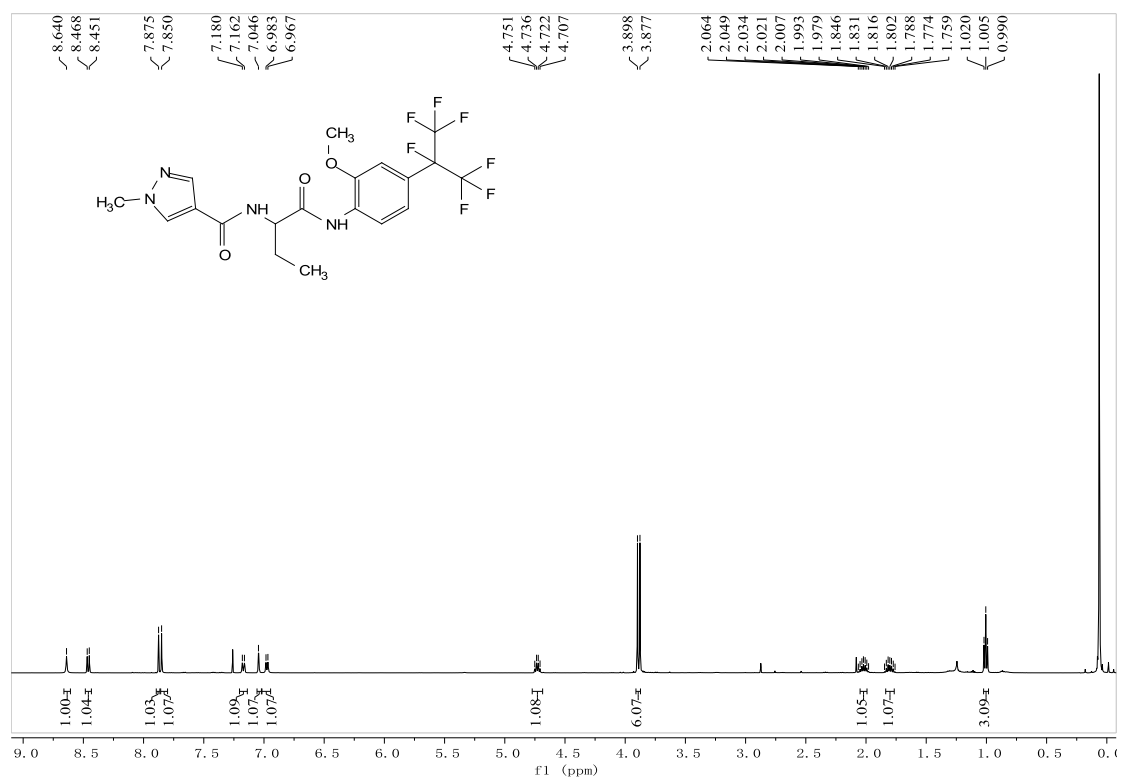


Figure S12. ¹³C NMR spectrum of compound II-a-6.





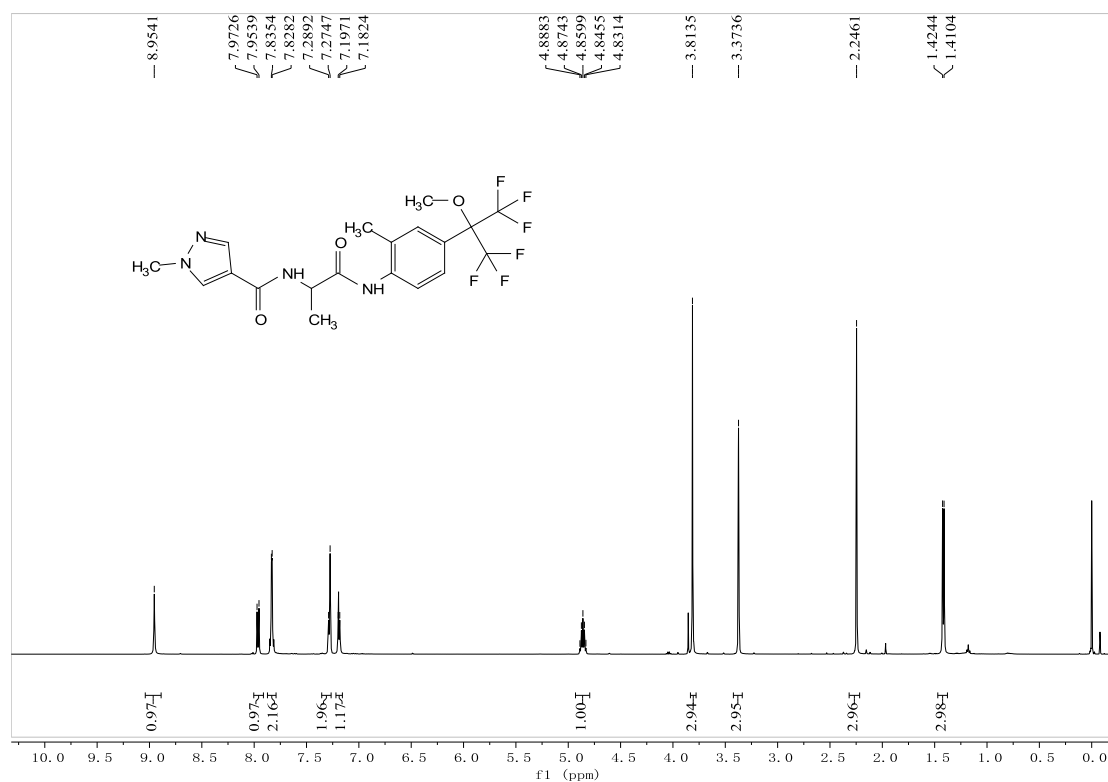


Figure S17. ¹H NMR spectrum of compound II-a-9.

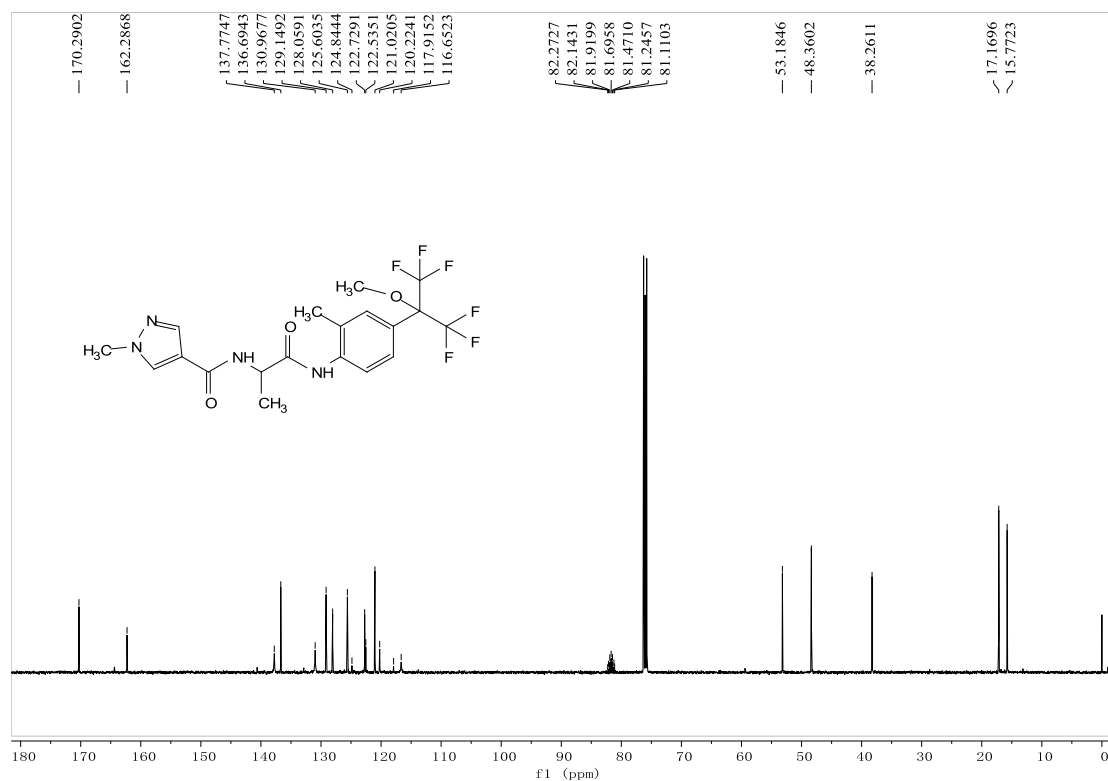


Figure S18. ¹³C NMR spectrum of compound II-a-9.

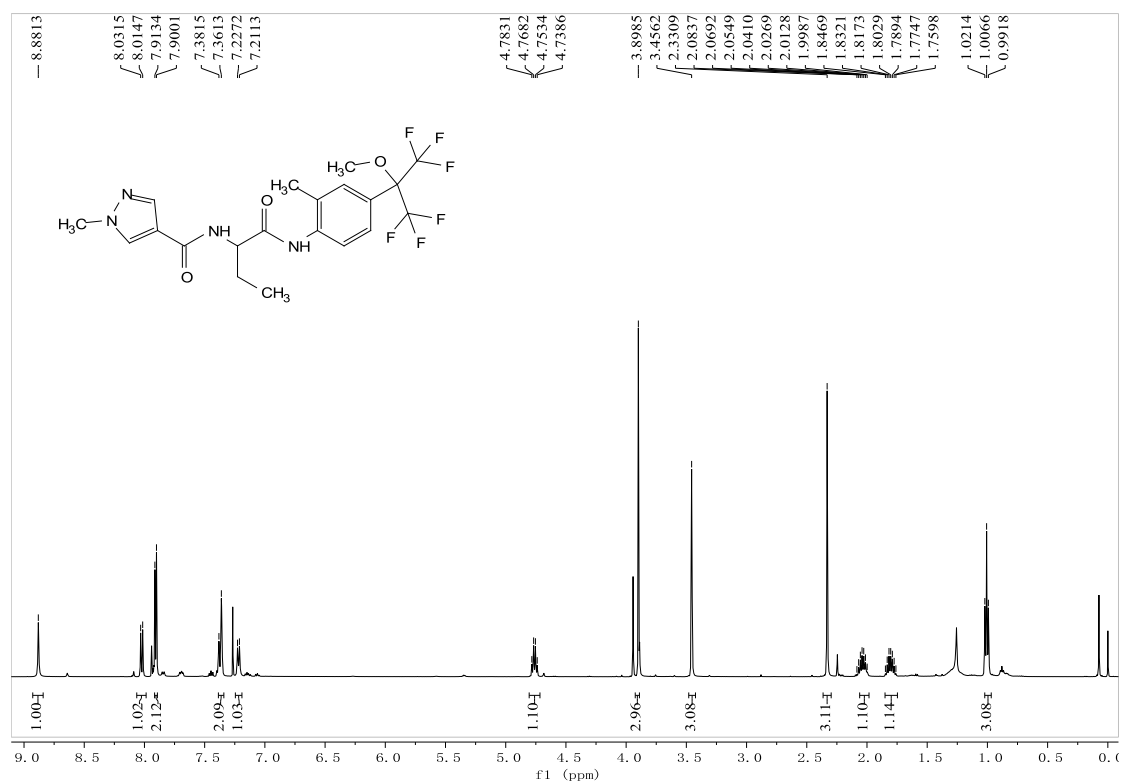


Figure S19. ¹H NMR spectrum of compound II-a-10.

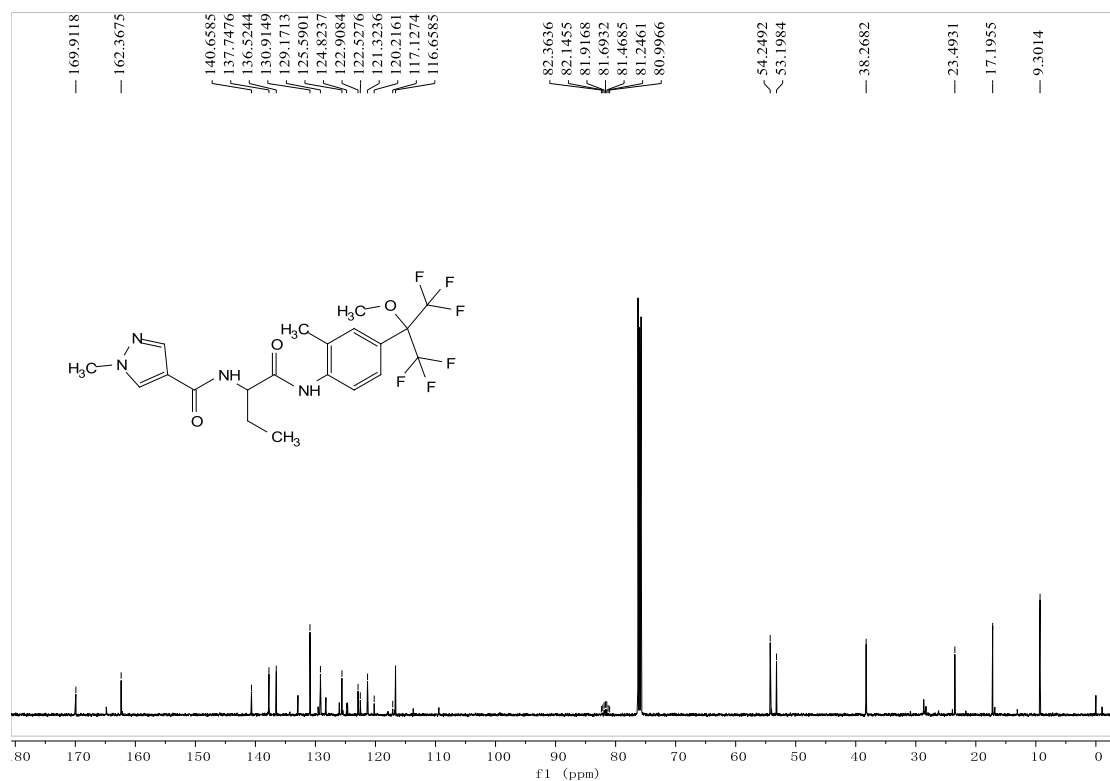


Figure S20. ¹³C NMR spectrum of compound II-a-10.

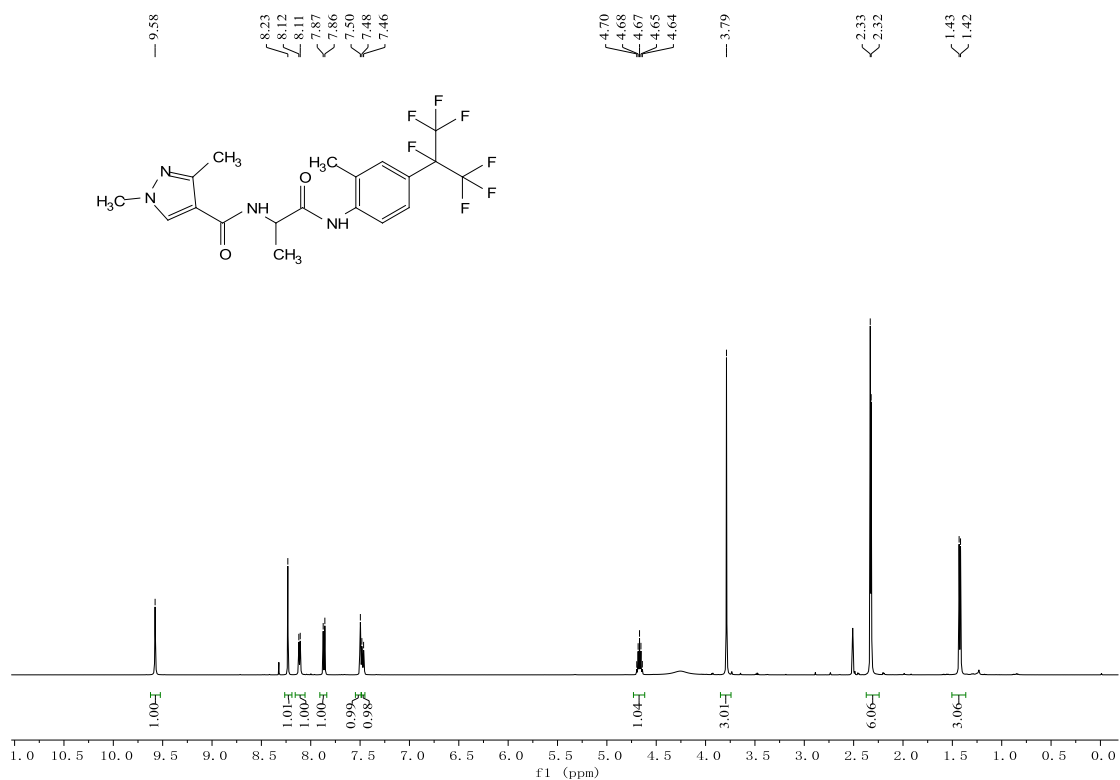


Figure S21. ¹H NMR spectrum of compound II-a-11.

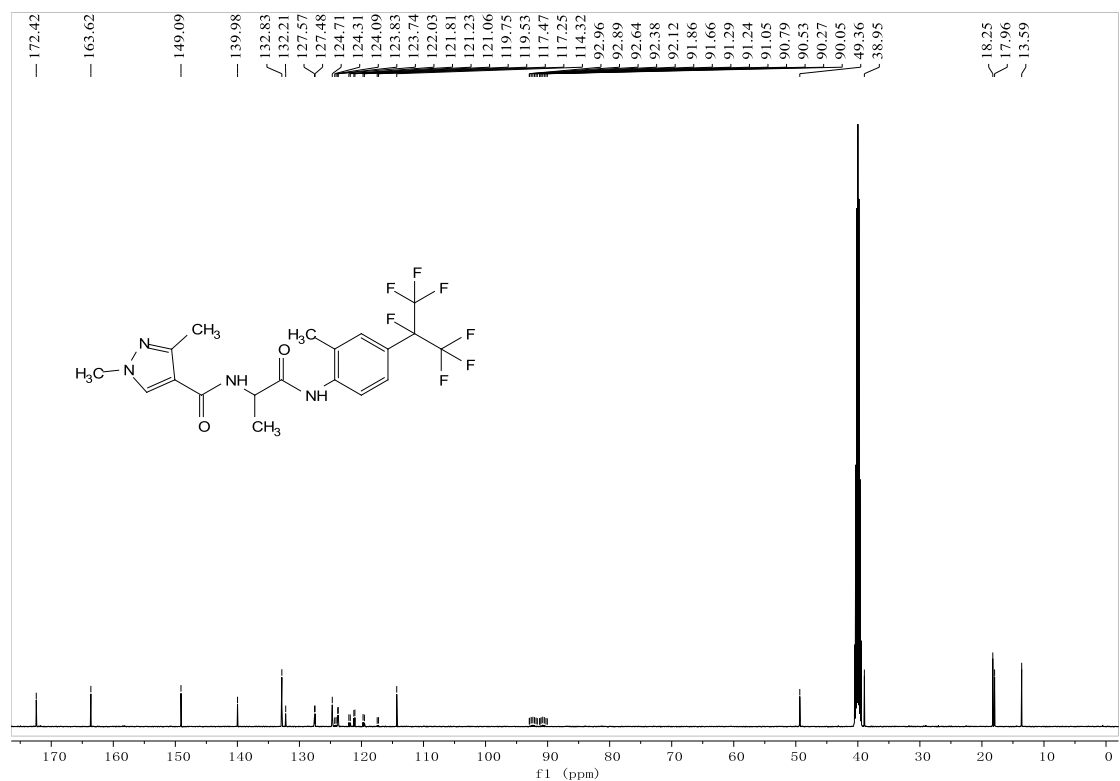
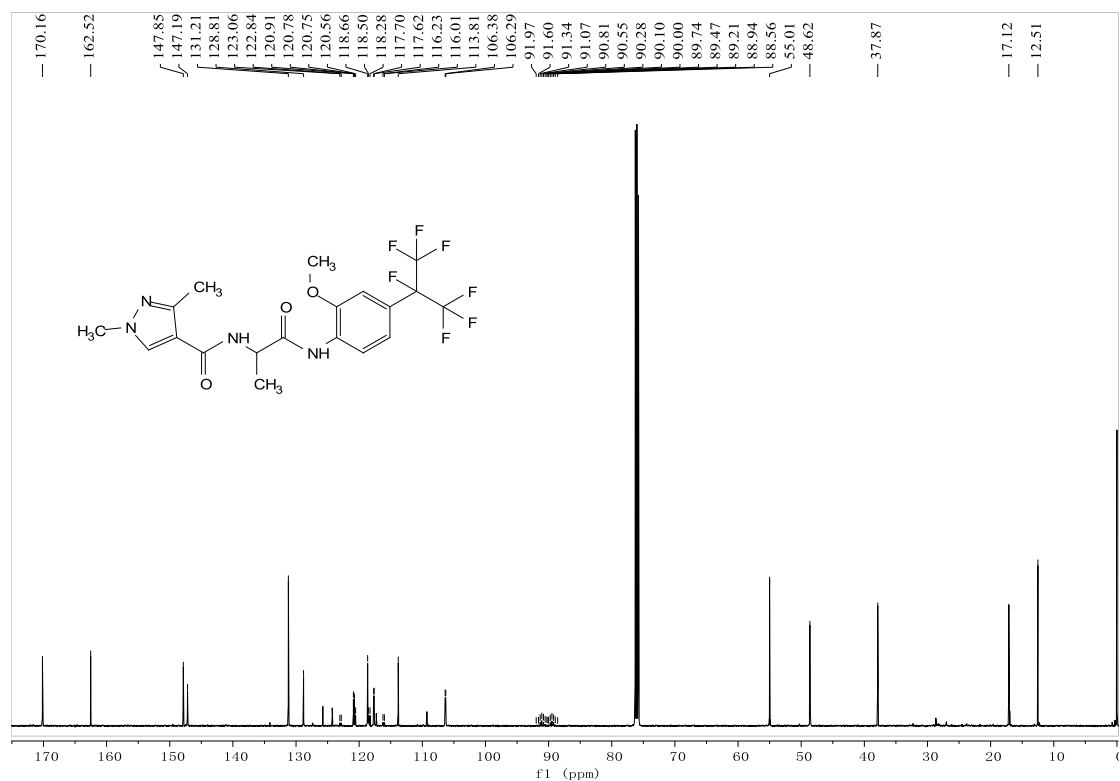
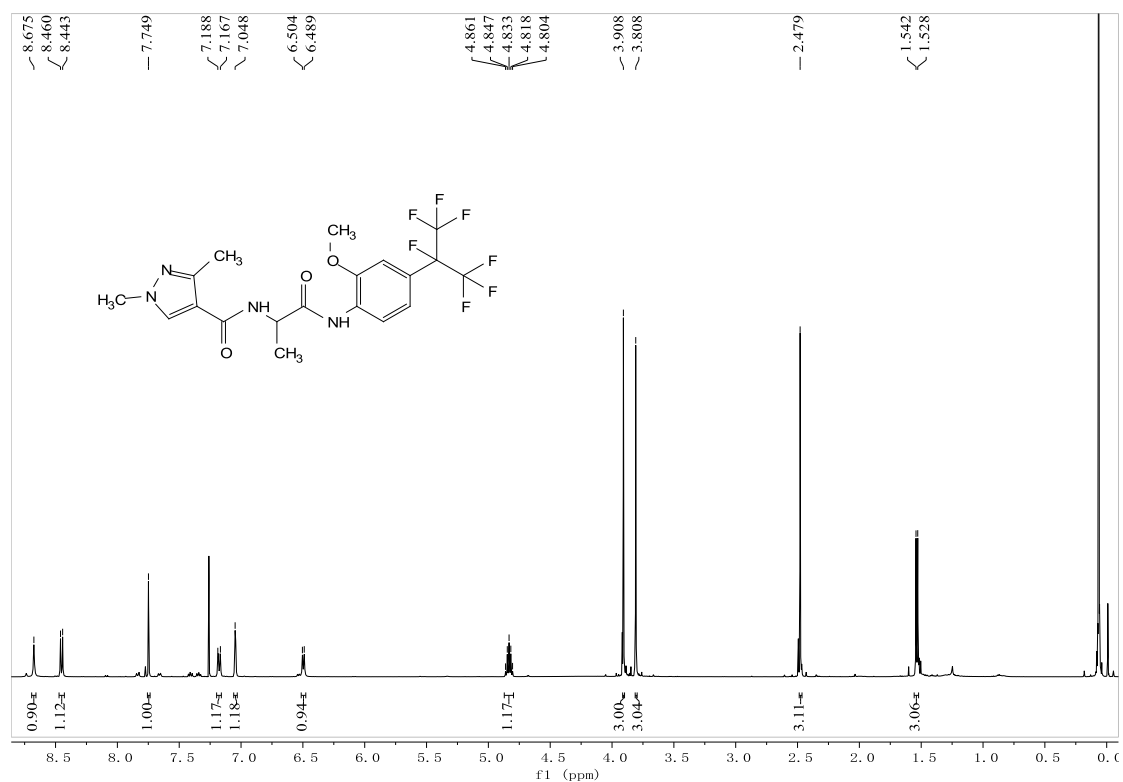


Figure S22. ¹³C NMR spectrum of compound II-a-11.



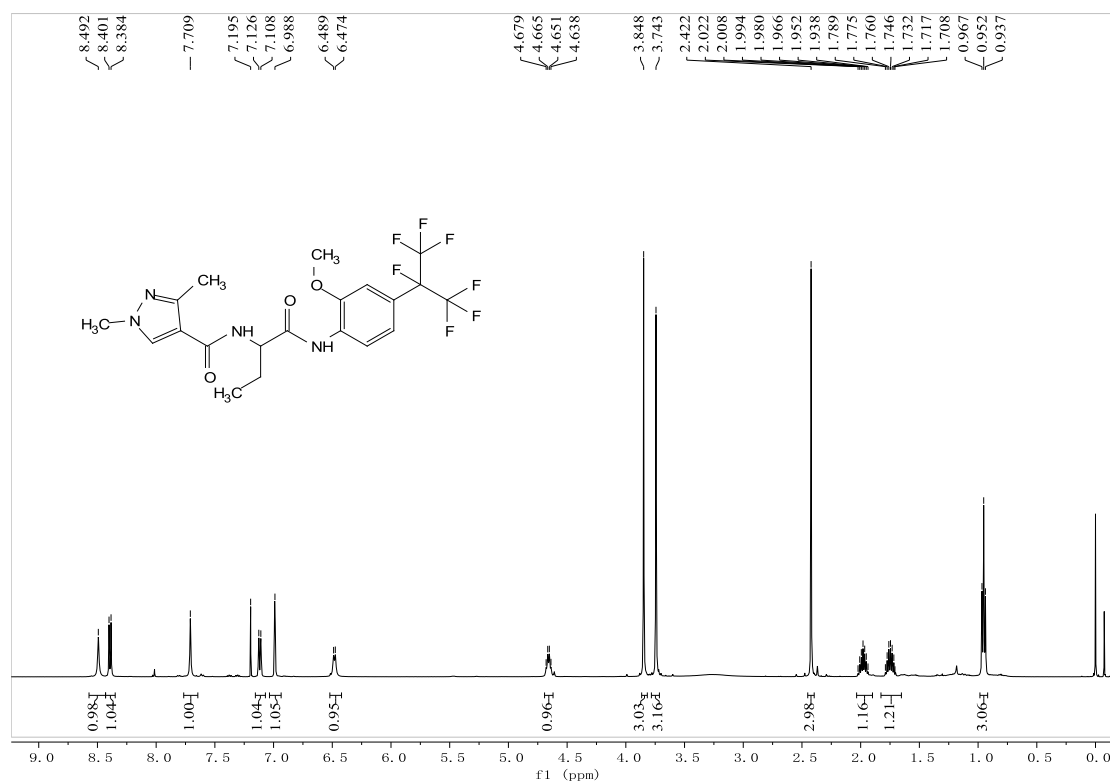


Figure S25. ¹H NMR spectrum of compound II-a-13.

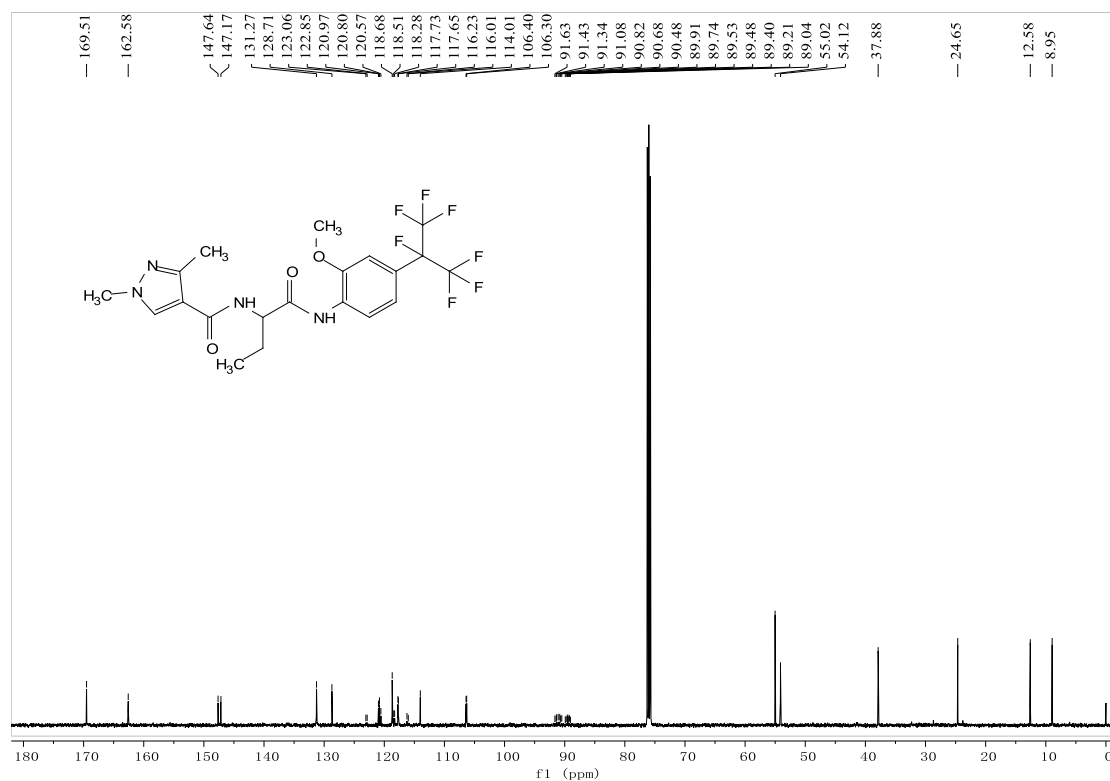


Figure S26. ¹³C NMR spectrum of compound II-a-13.

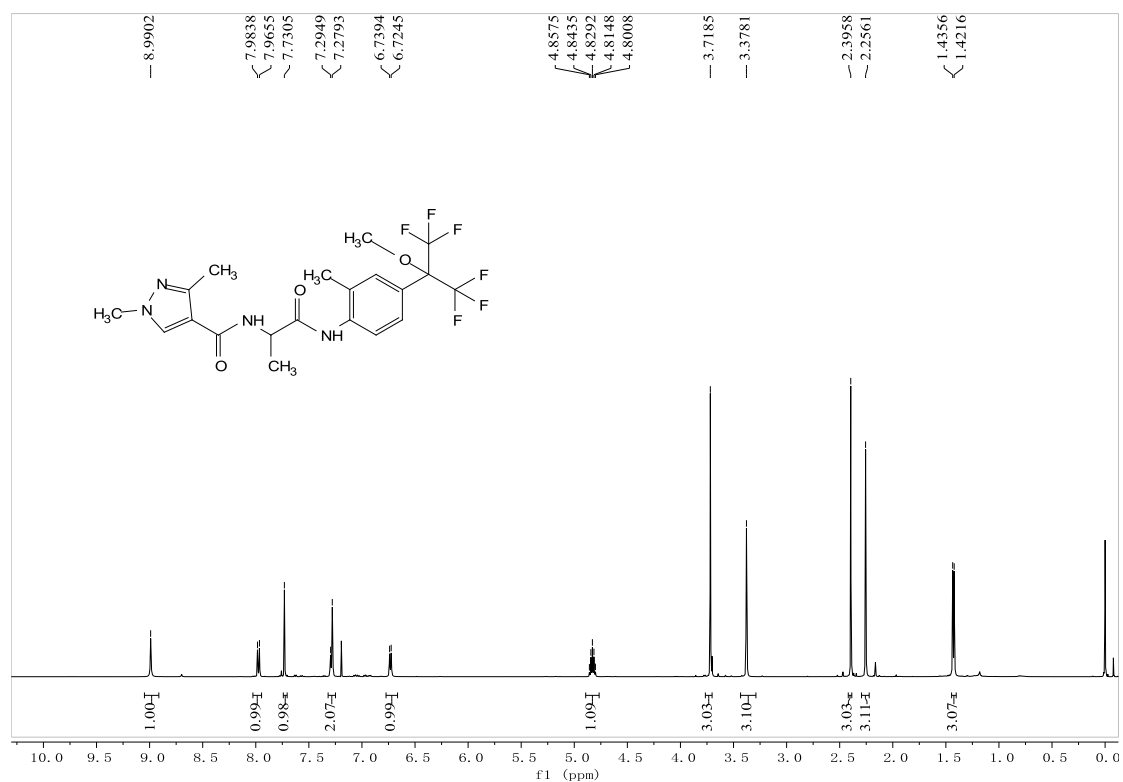


Figure S27. ^1H NMR spectrum of compound II-a-14.

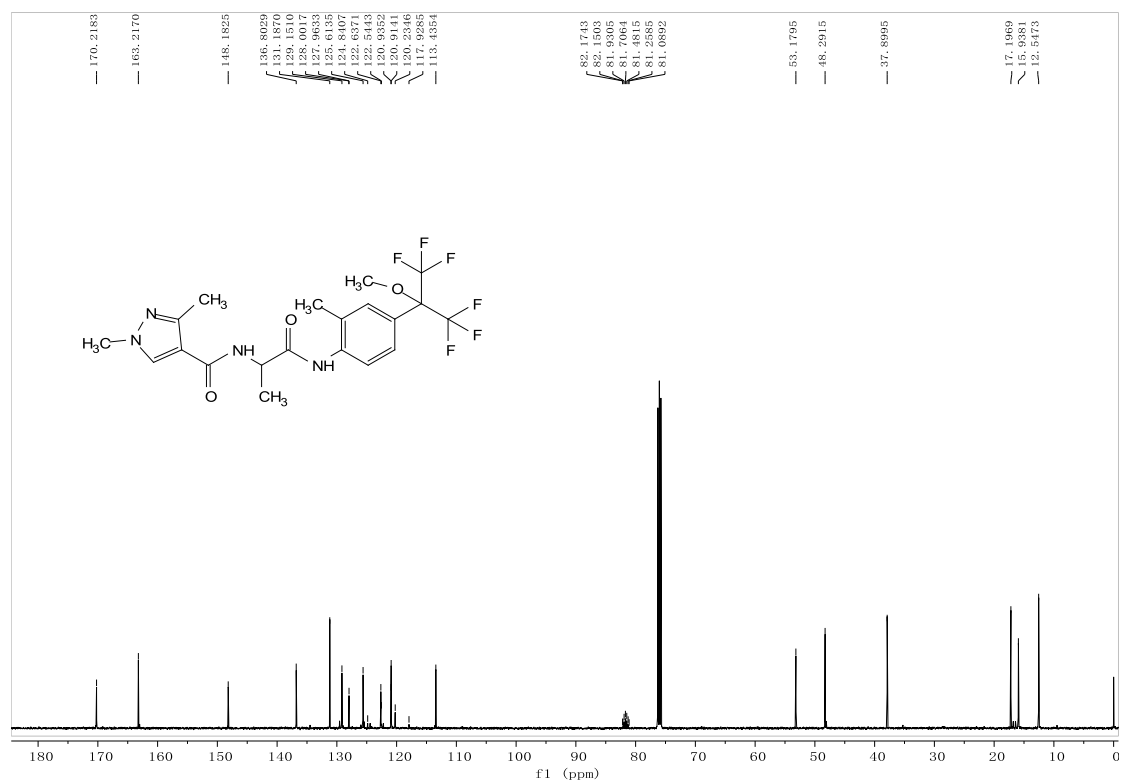


Figure S28. ^{13}C NMR spectrum of compound II-a-14.

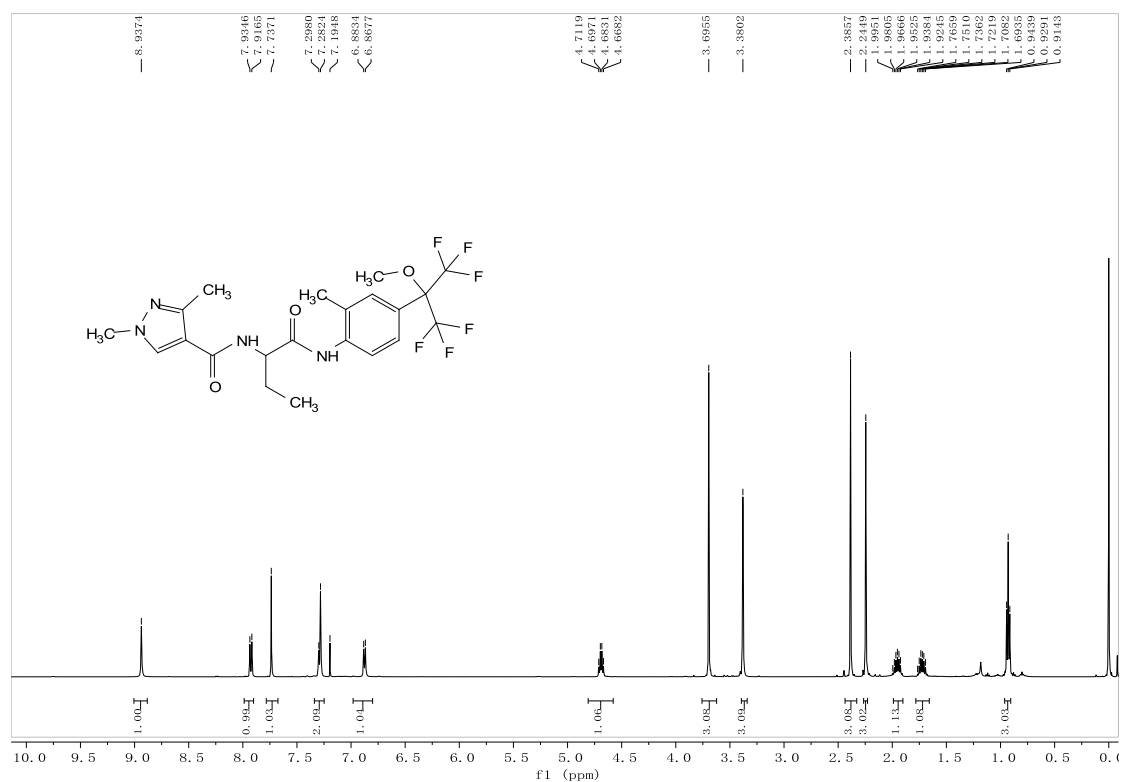


Figure S29. ¹H NMR spectrum of compound II-a-15.

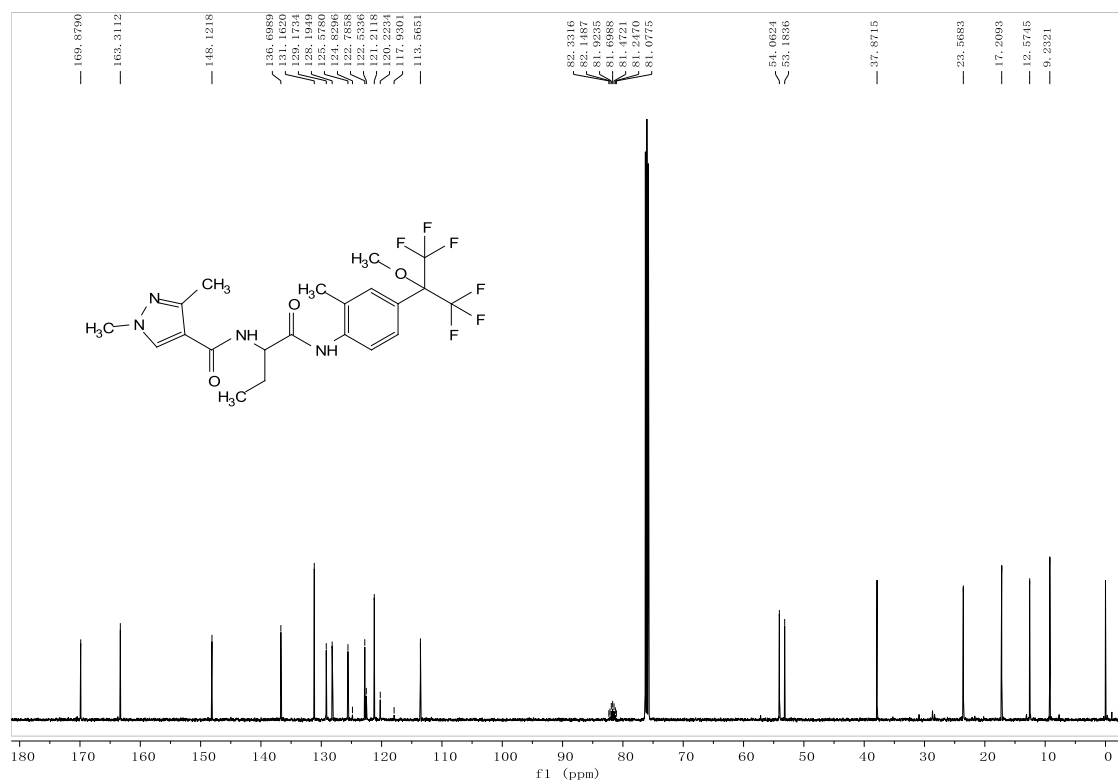


Figure S30. ¹³C NMR spectrum of compound II-a-15.

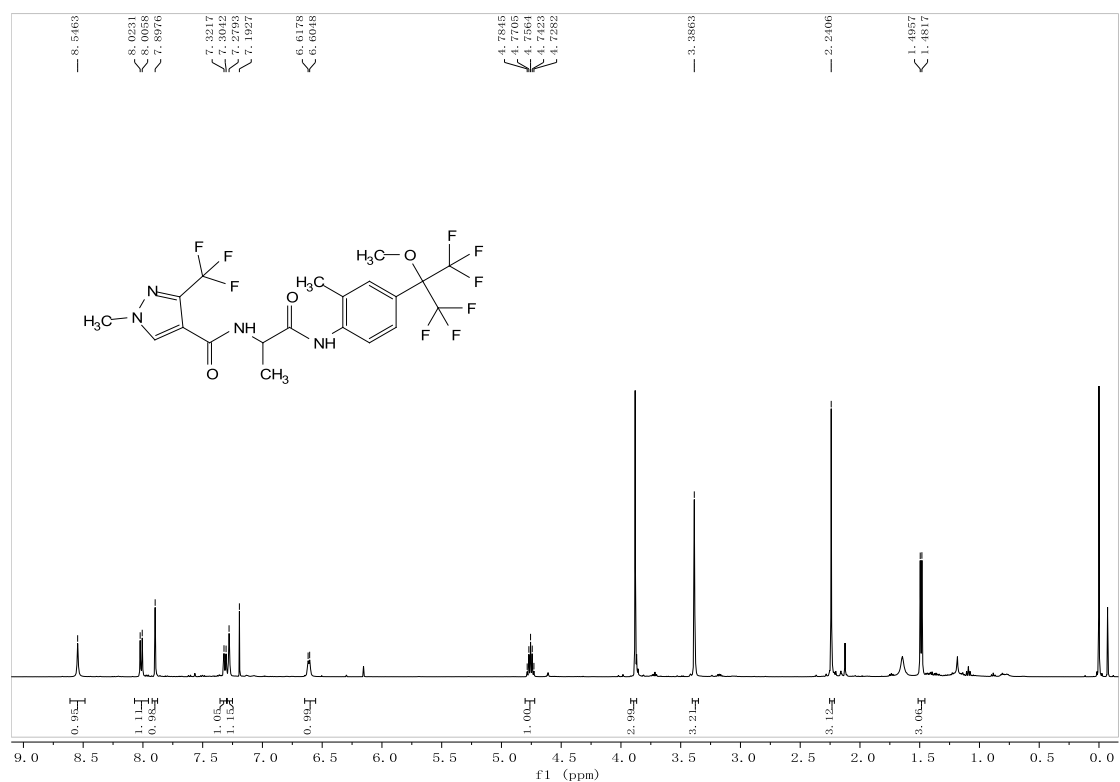


Figure S31. ¹H NMR spectrum of compound II-a-16.

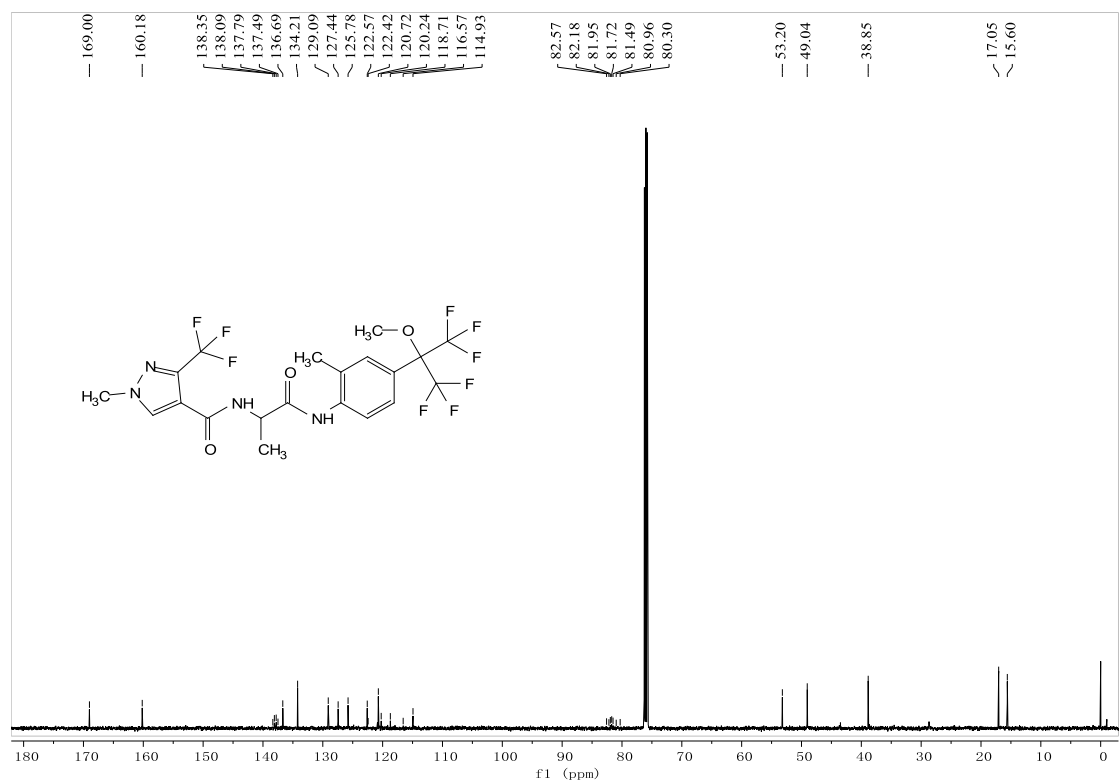


Figure S32. ¹³C NMR spectrum of compound II-a-16.

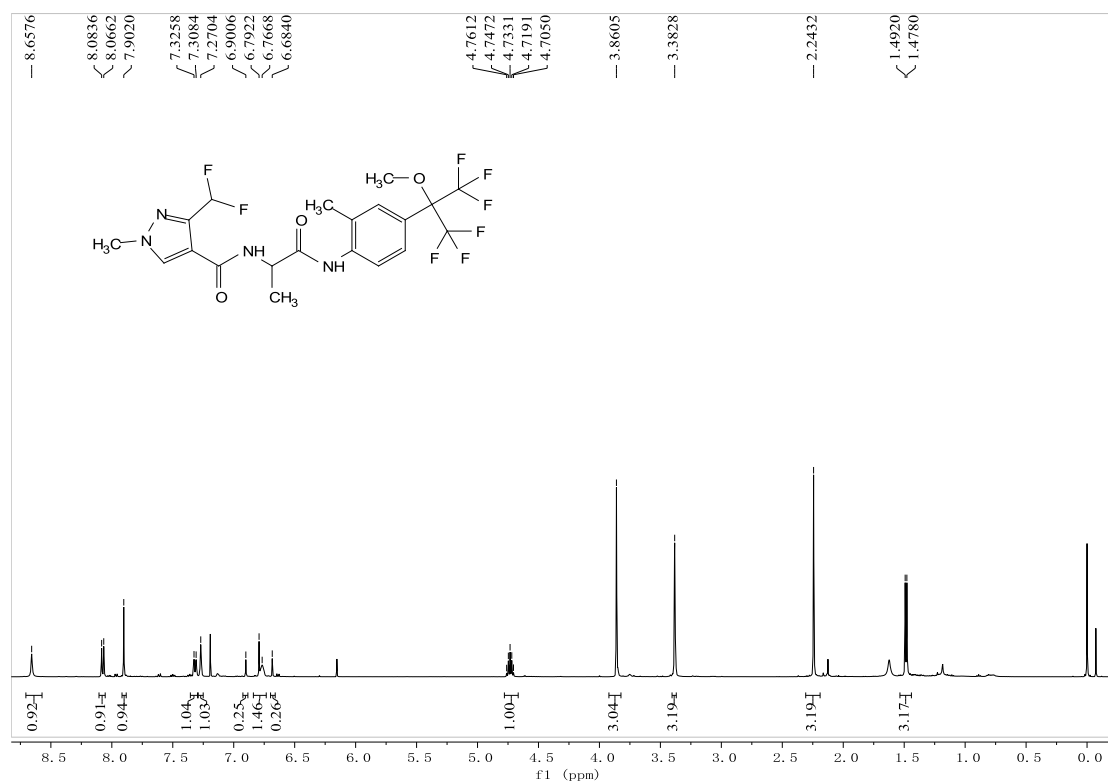


Figure S33. ¹H NMR spectrum of compound II-a-17.

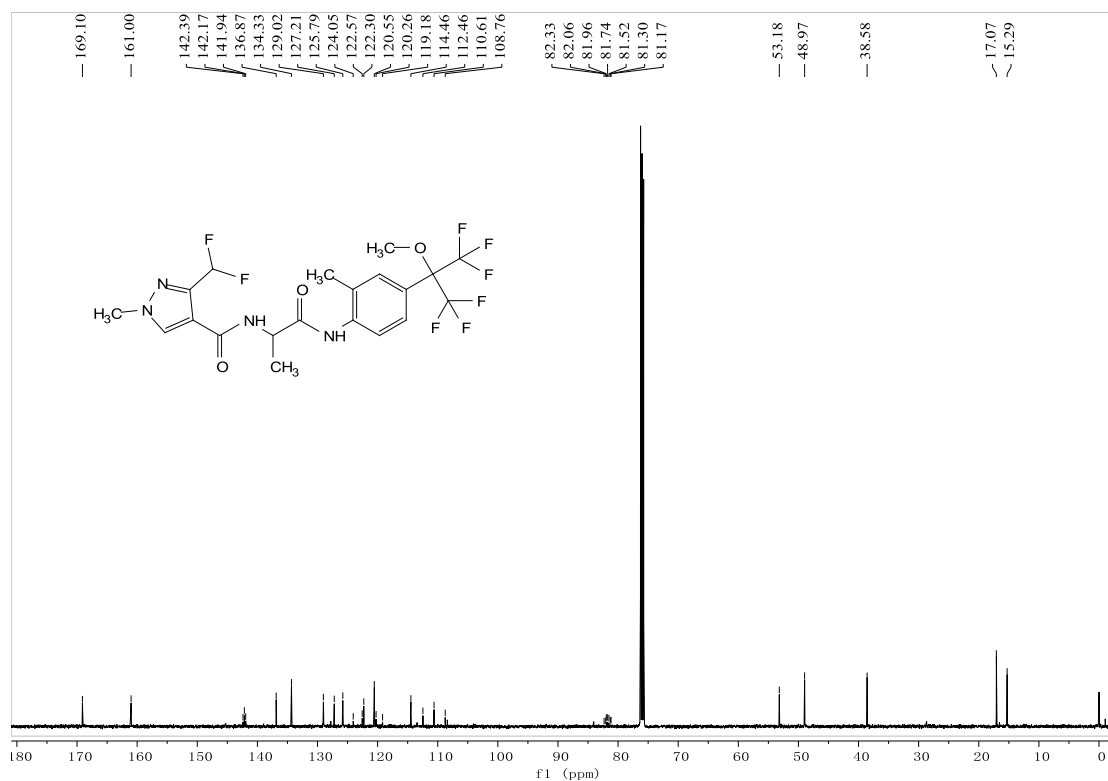


Figure S34. ¹³C NMR spectrum of compound II-a-17.

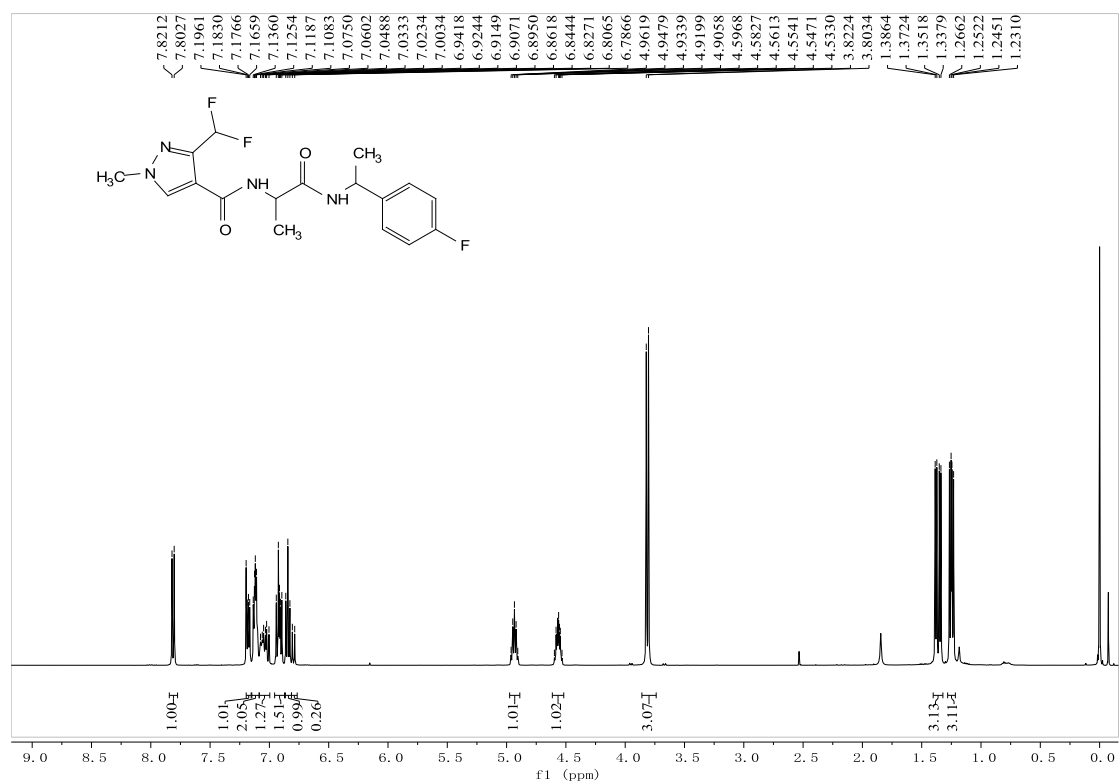


Figure S35. ¹H NMR spectrum of compound II-b-18.

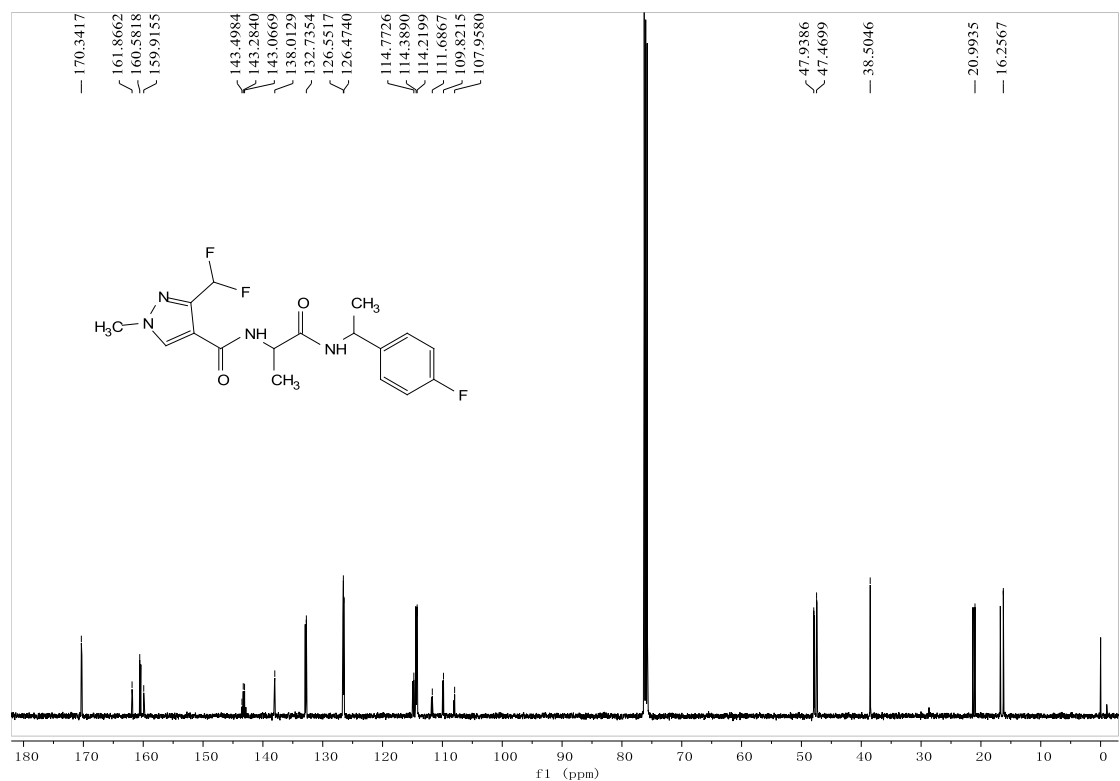
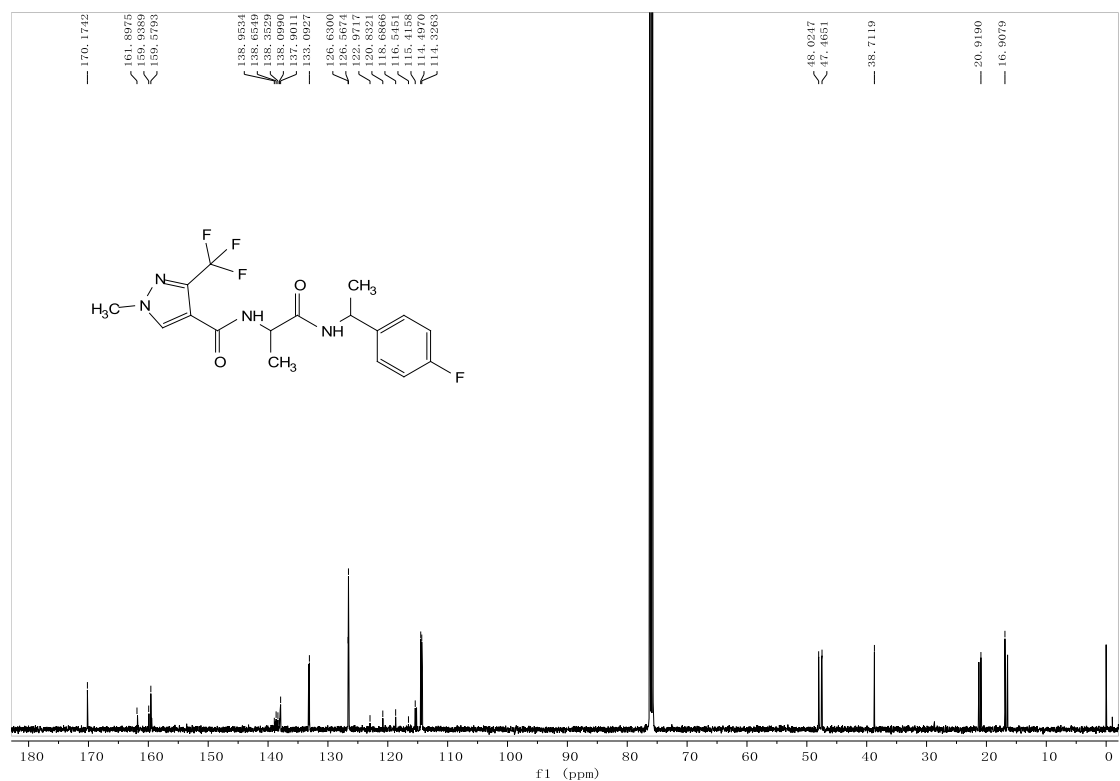
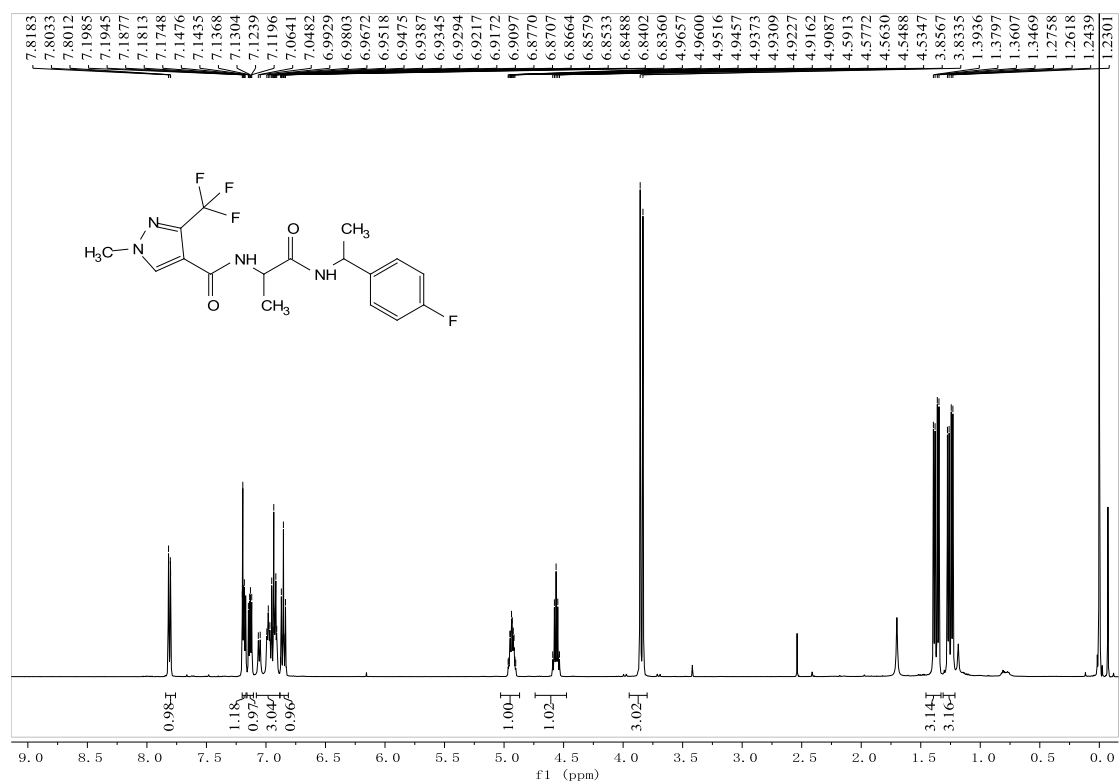


Figure S36. ¹³C NMR spectrum of compound II-b-18.



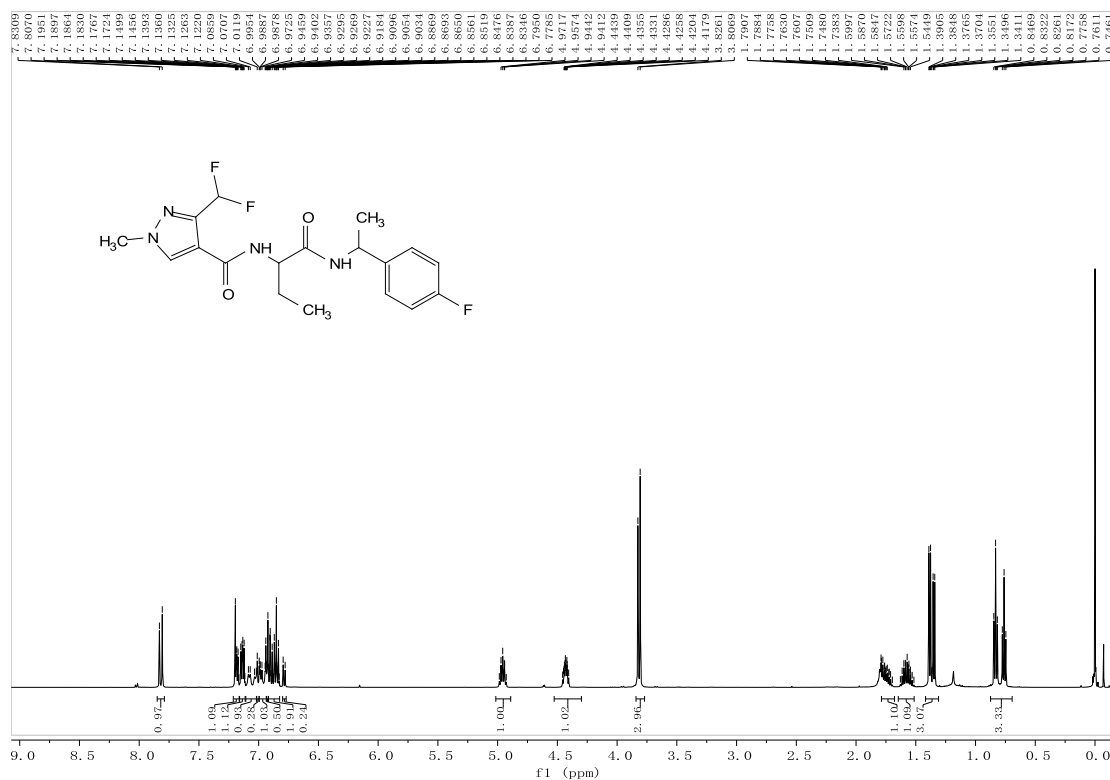


Figure S39. ¹H NMR spectrum of compound II-b-20.

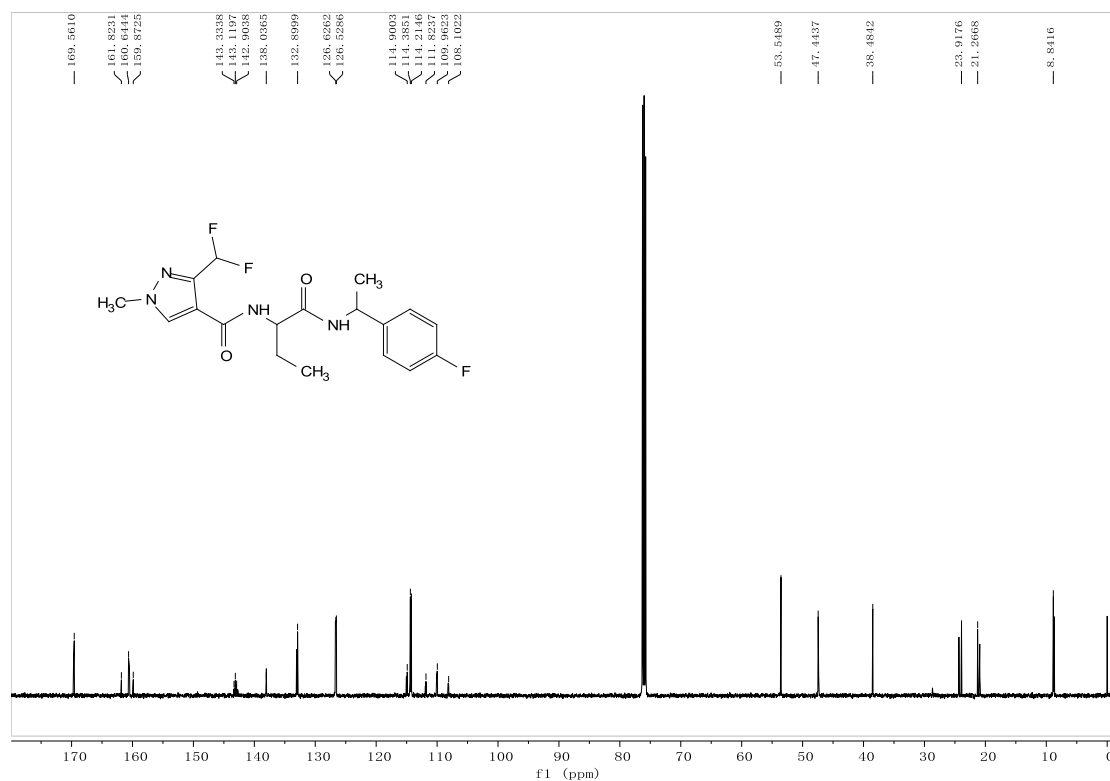


Figure S40. ¹³C NMR spectrum of compound II-b-20.

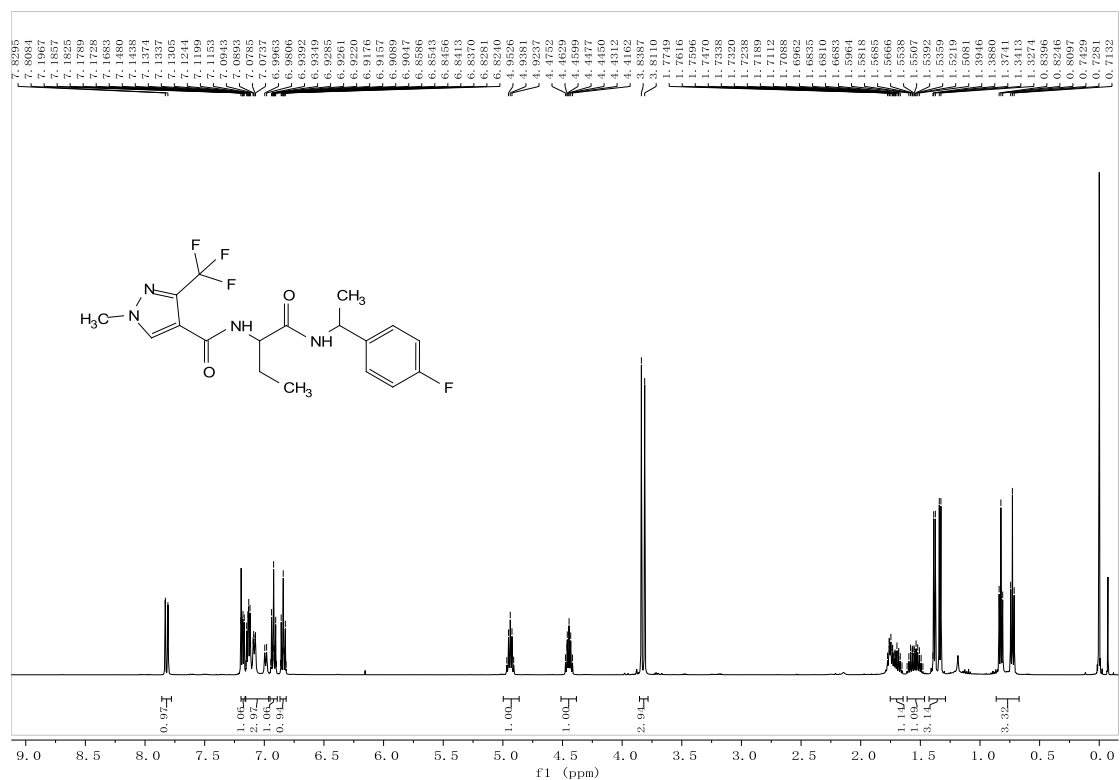


Figure S41. ¹H NMR spectrum of compound II-b-21.

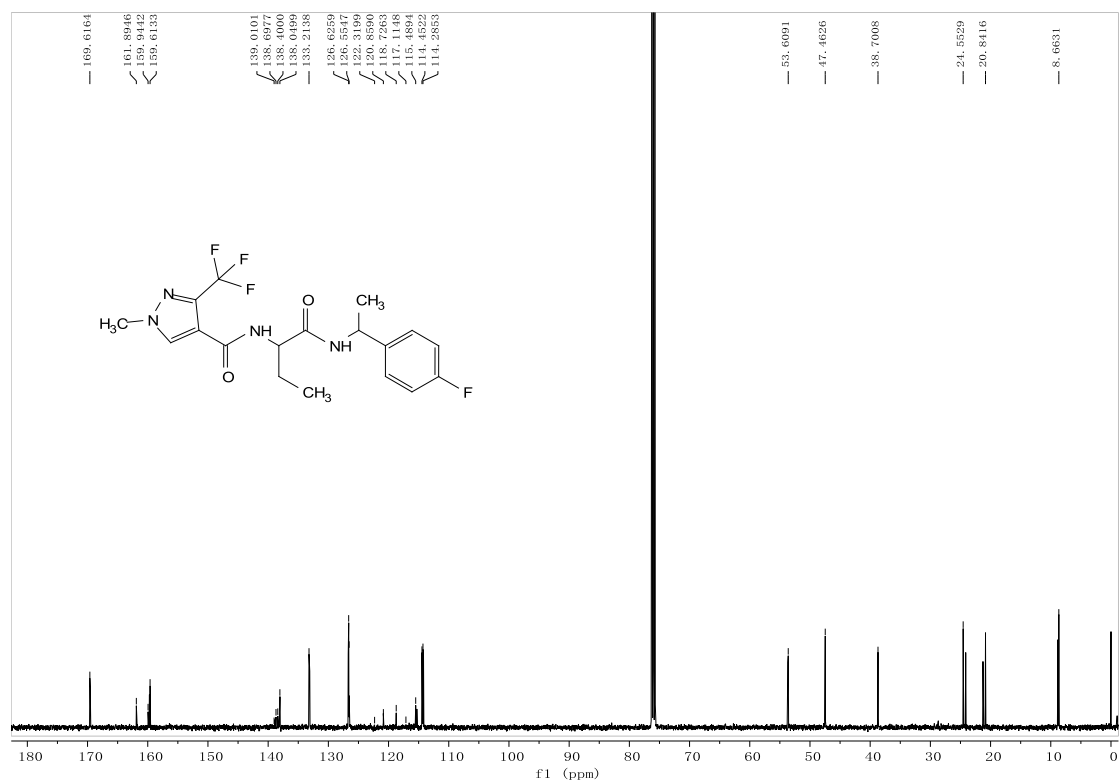


Figure S42. ¹³C NMR spectrum of compound II-b-21.

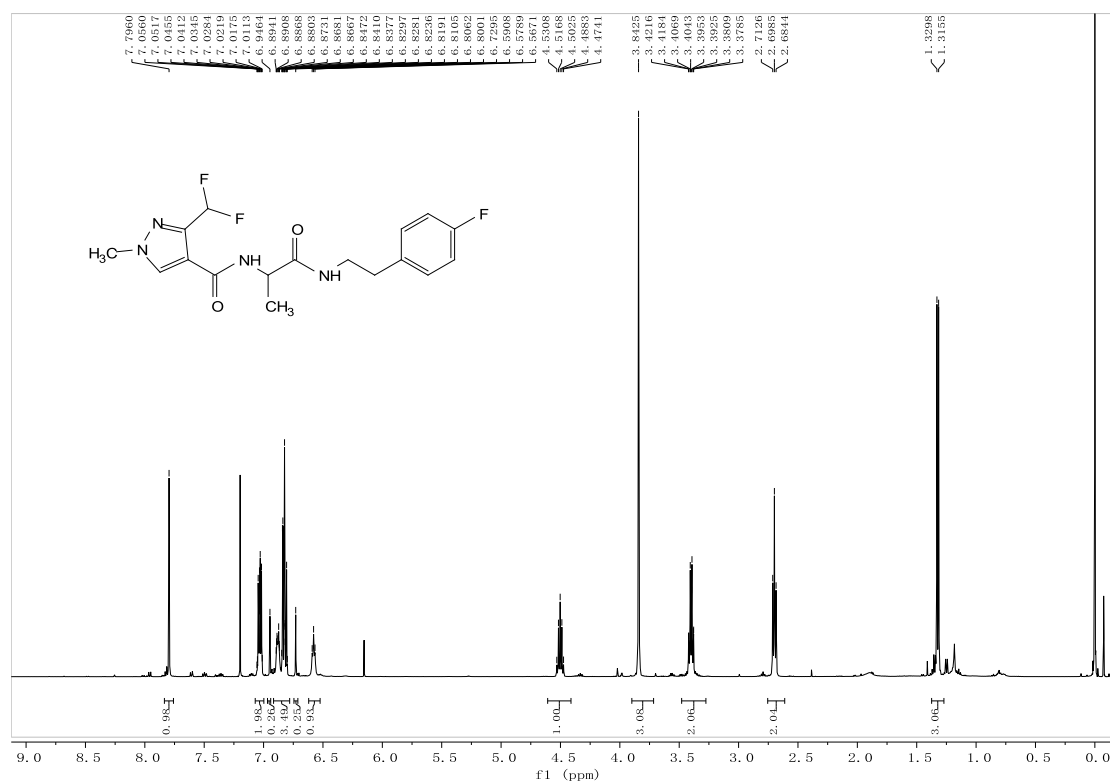


Figure S43. ^1H NMR spectrum of compound II-c-22.

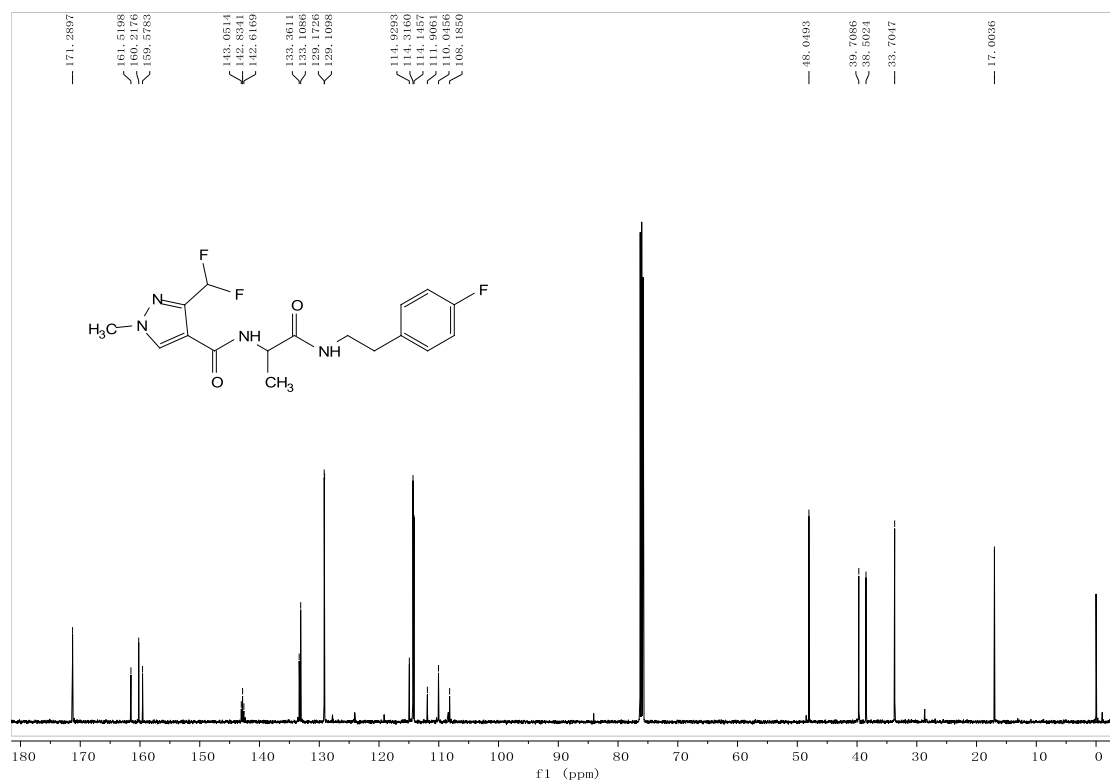
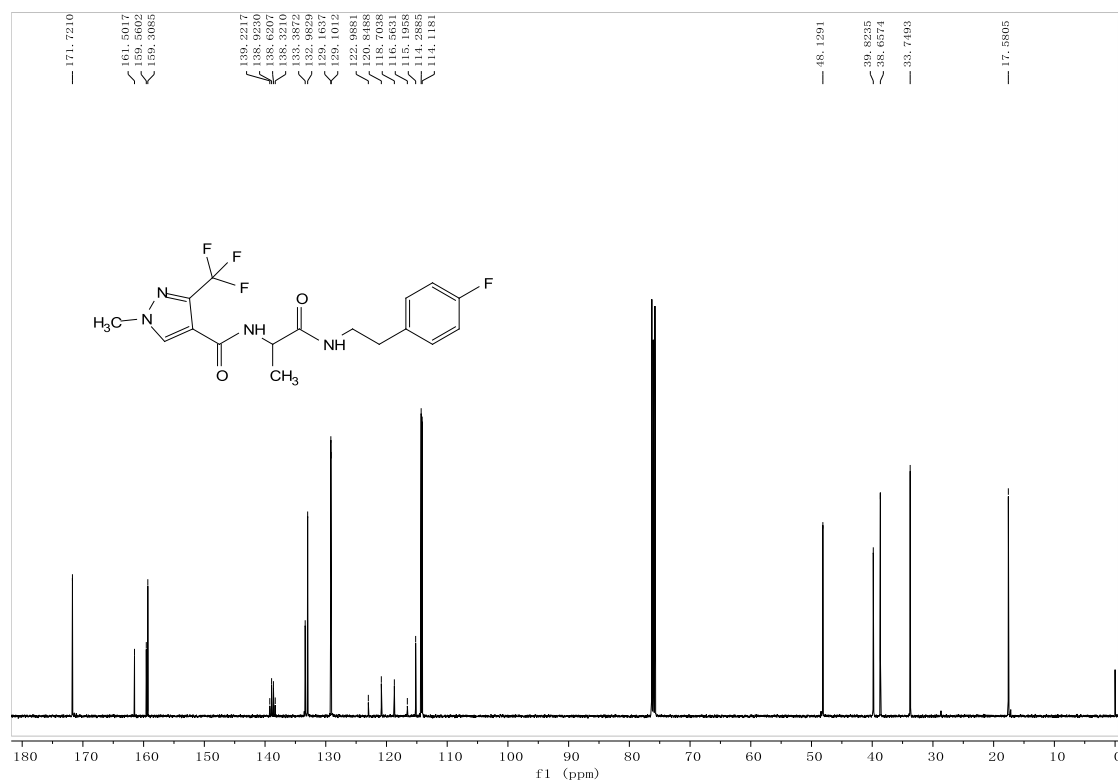
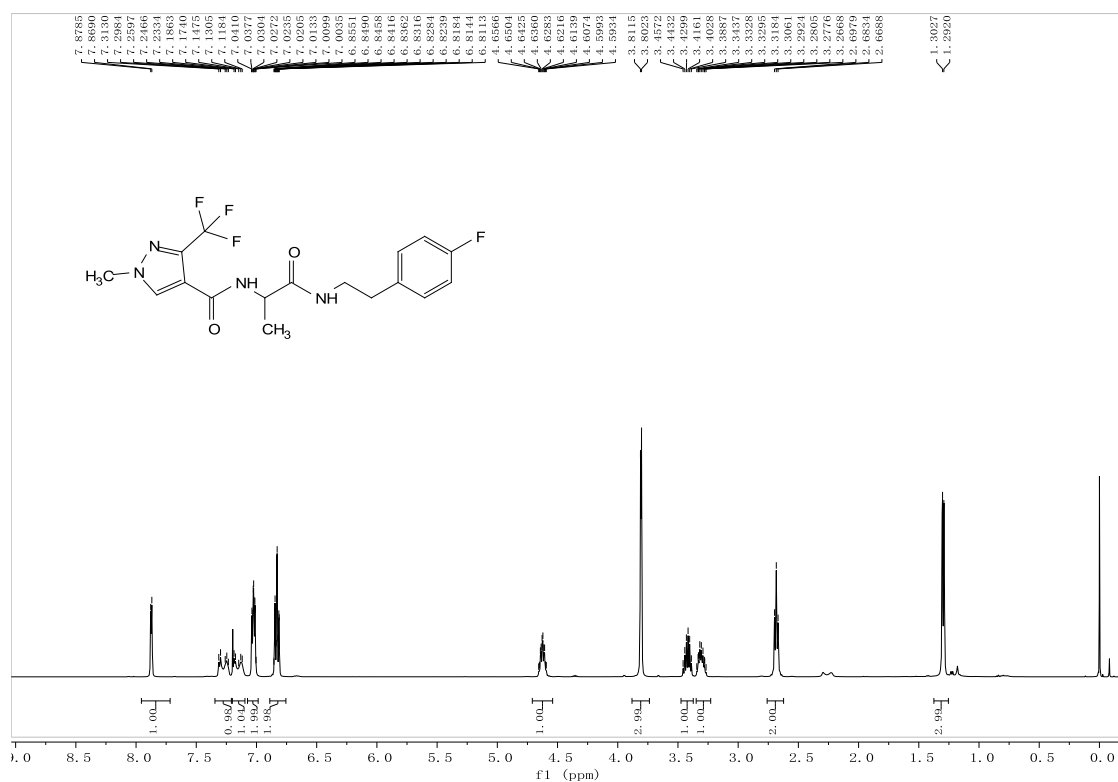


Figure S44. ^{13}C NMR spectrum of compound II-c-22.



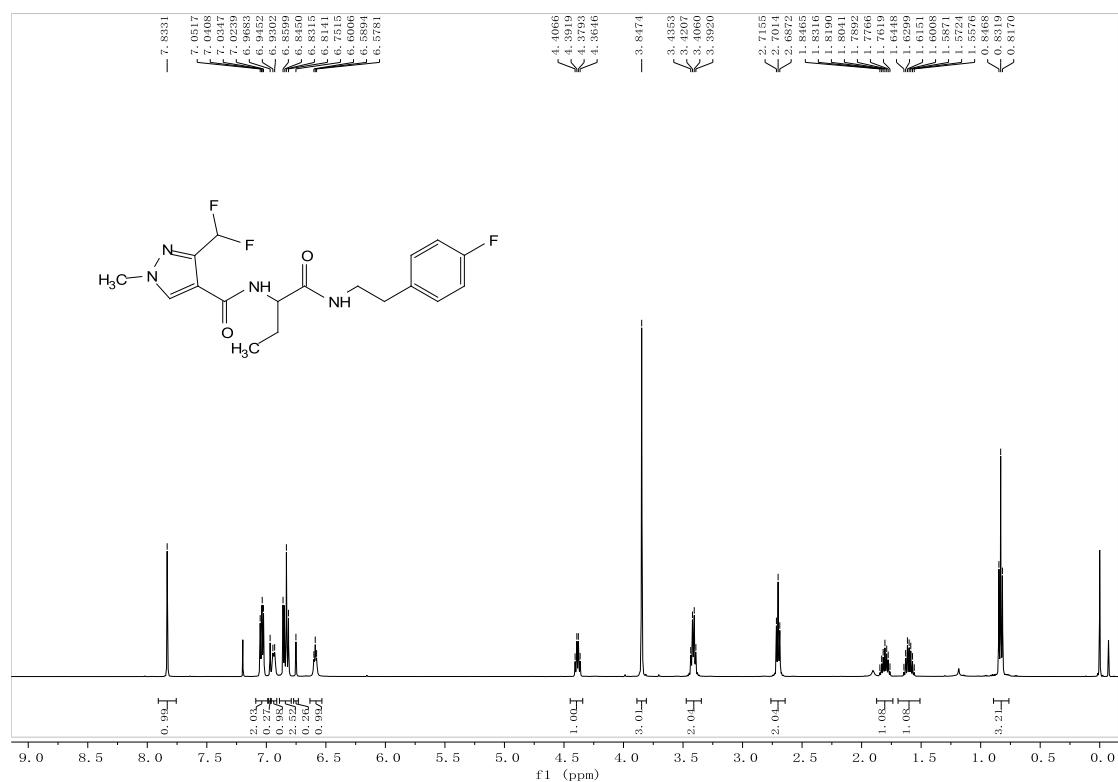


Figure S47. ¹H NMR spectrum of compound II-c-24.

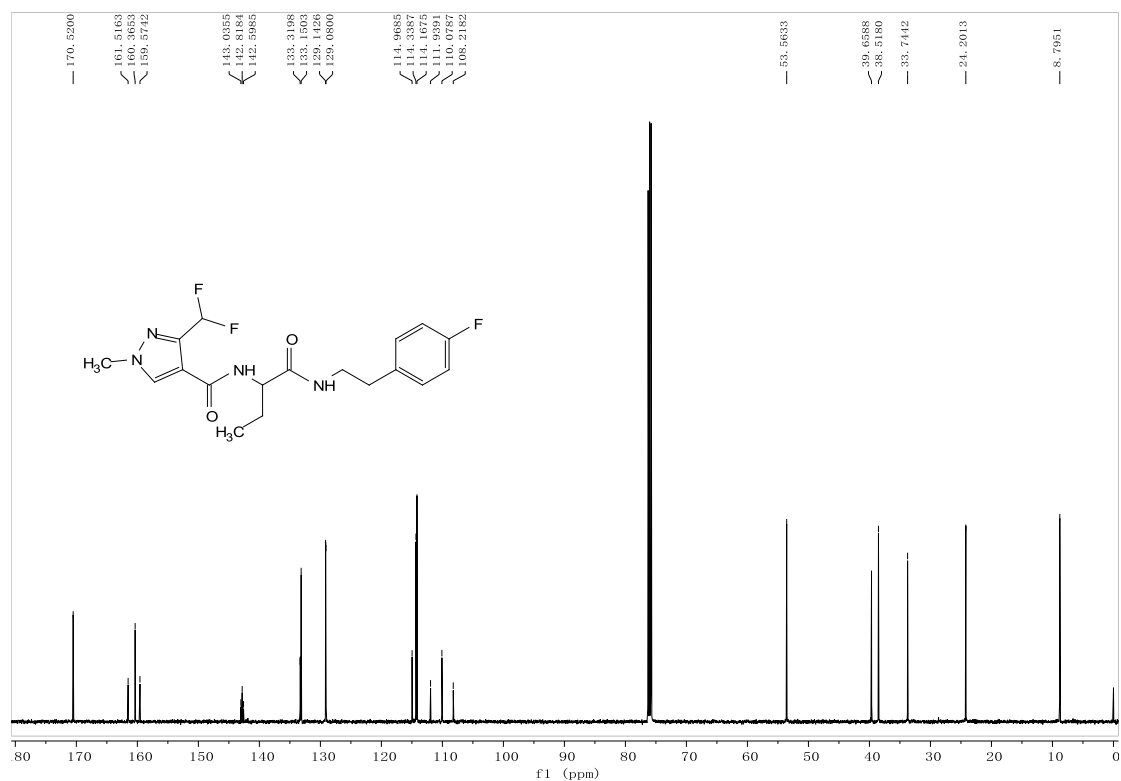


Figure S48. ¹³C NMR spectrum of compound II-c-24.

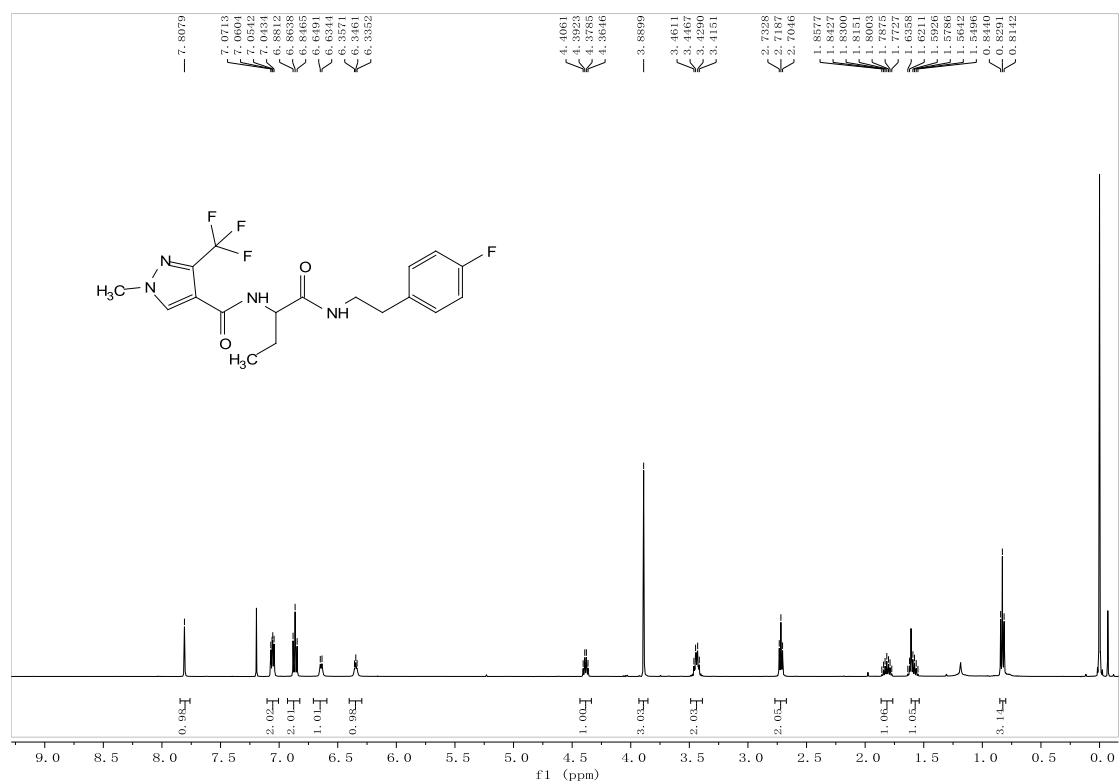


Figure S49. ¹H NMR spectrum of compound II-c-25.

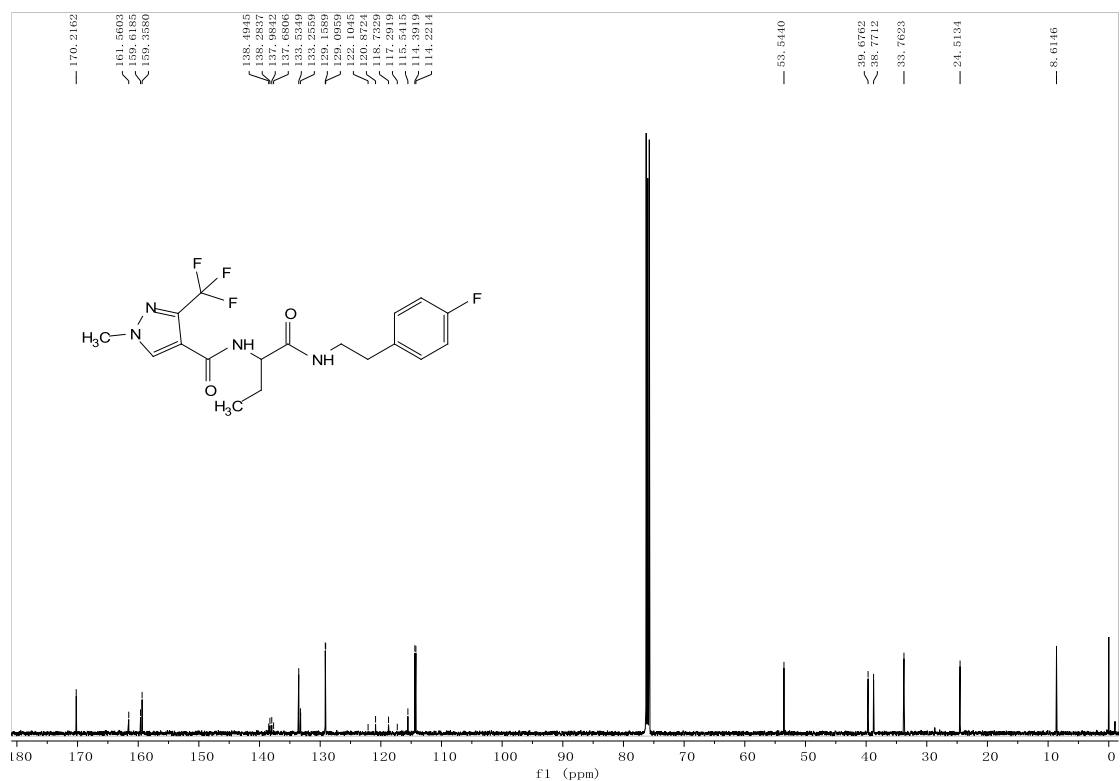


Figure S50. ¹³C NMR spectrum of compound II-c-25.

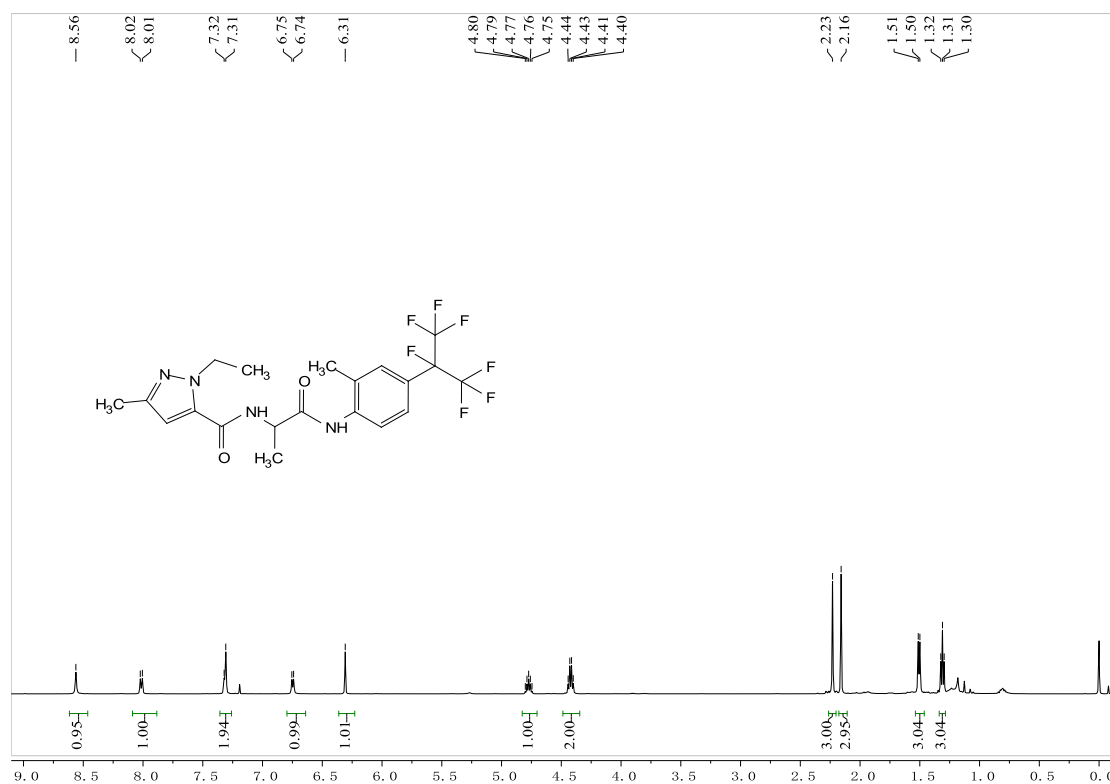


Figure S51. ¹H NMR spectrum of compound III-26.

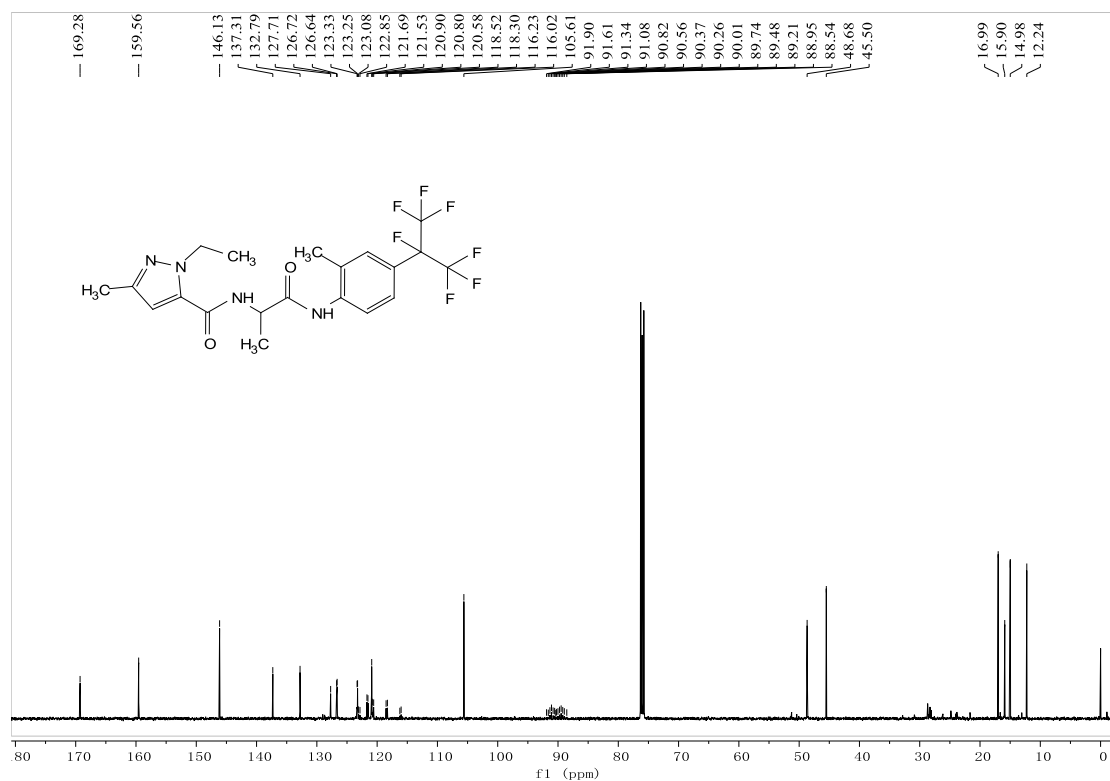


Figure S52. ¹³C NMR spectrum of compound III-26.

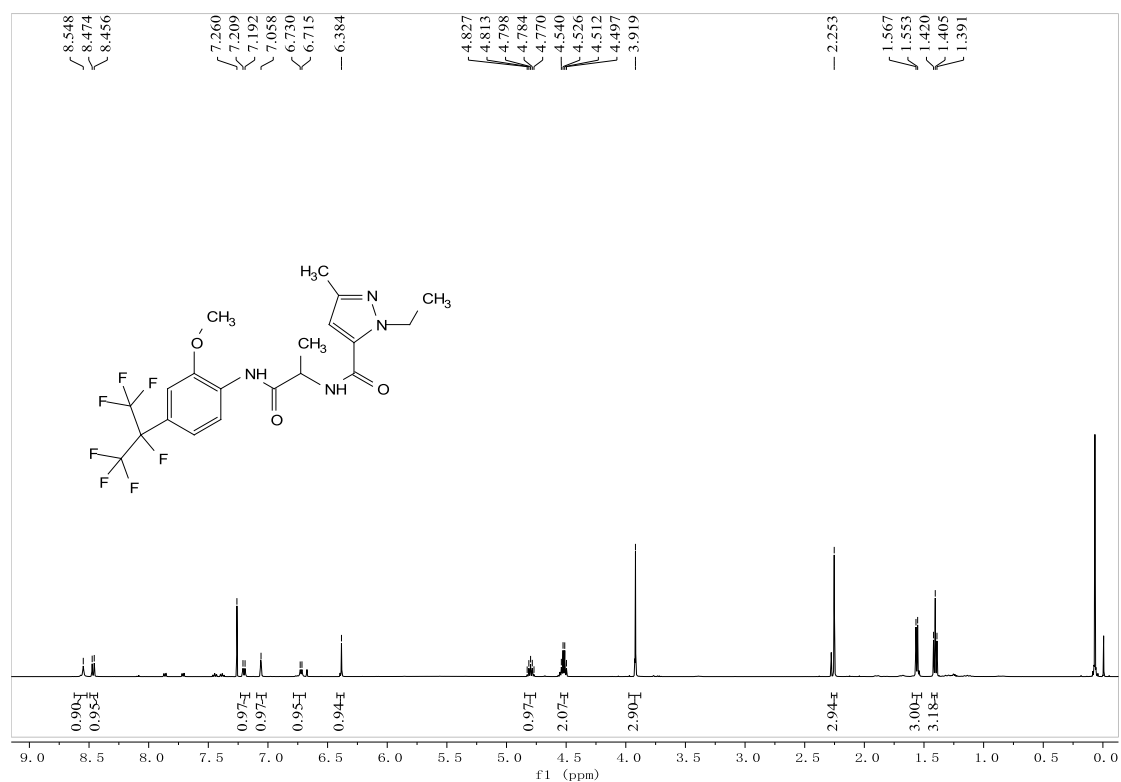


Figure S53. ¹H NMR spectrum of compound III-27.

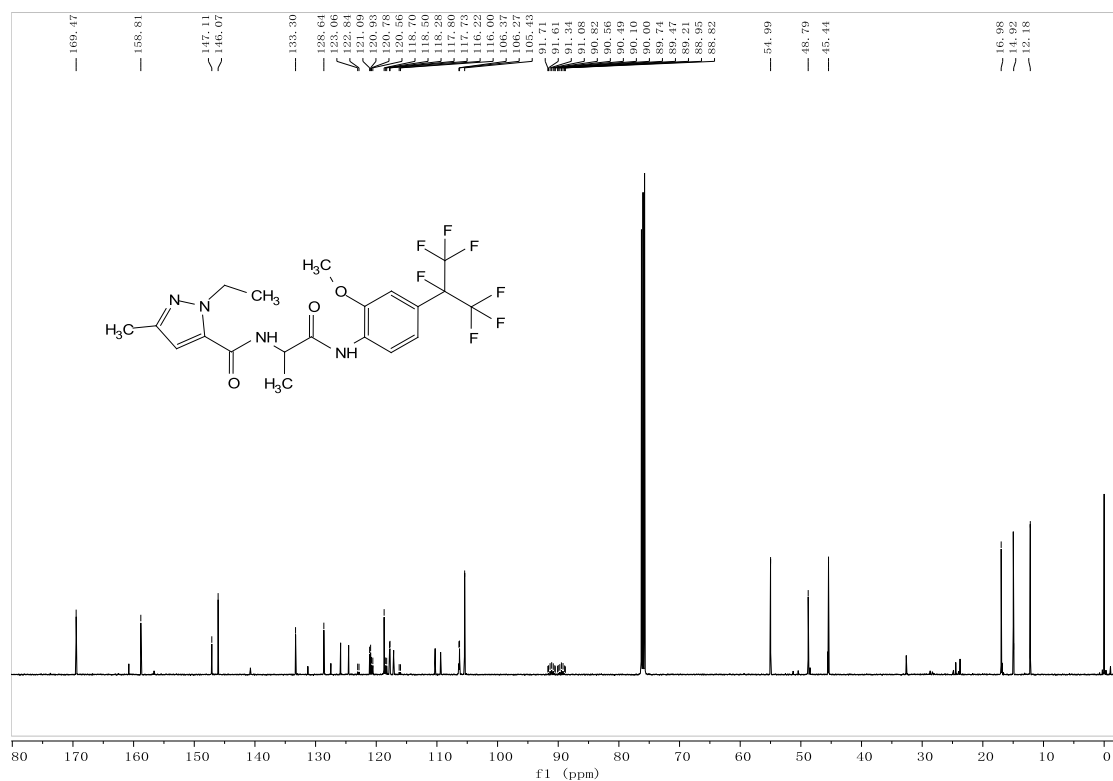


Figure S54. ¹³C NMR spectrum of compound III-27.

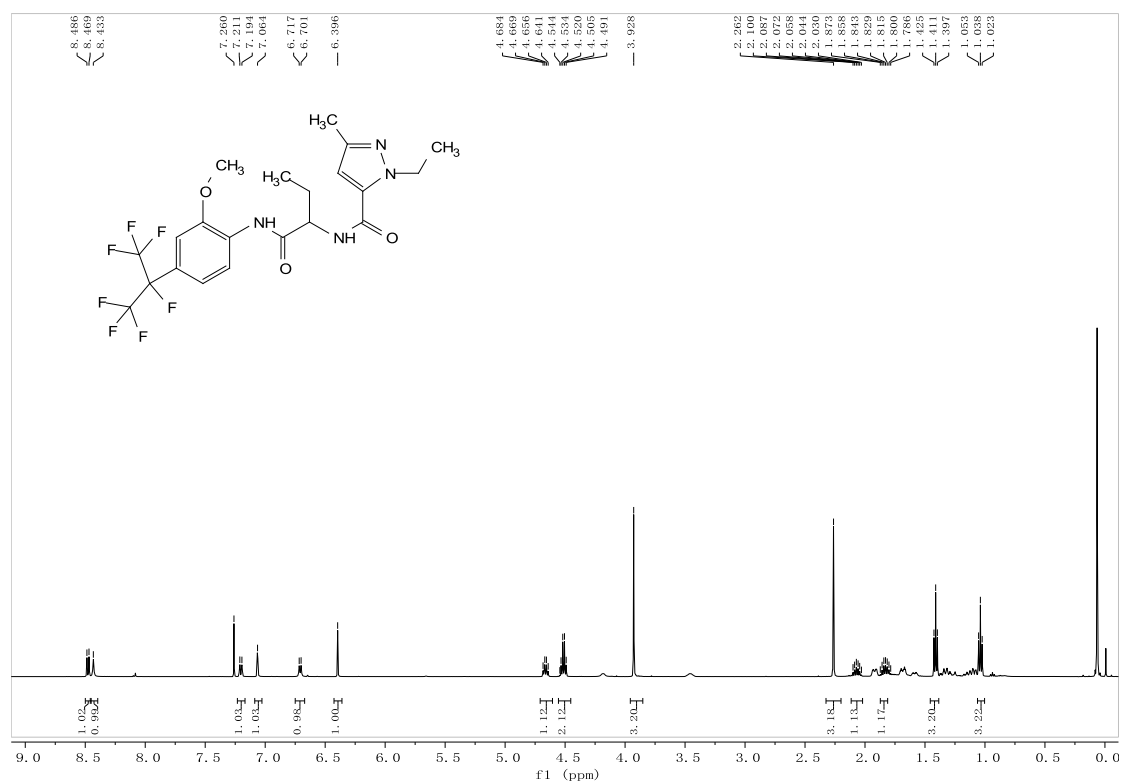


Figure S55. ¹H NMR spectrum of compound III-28.

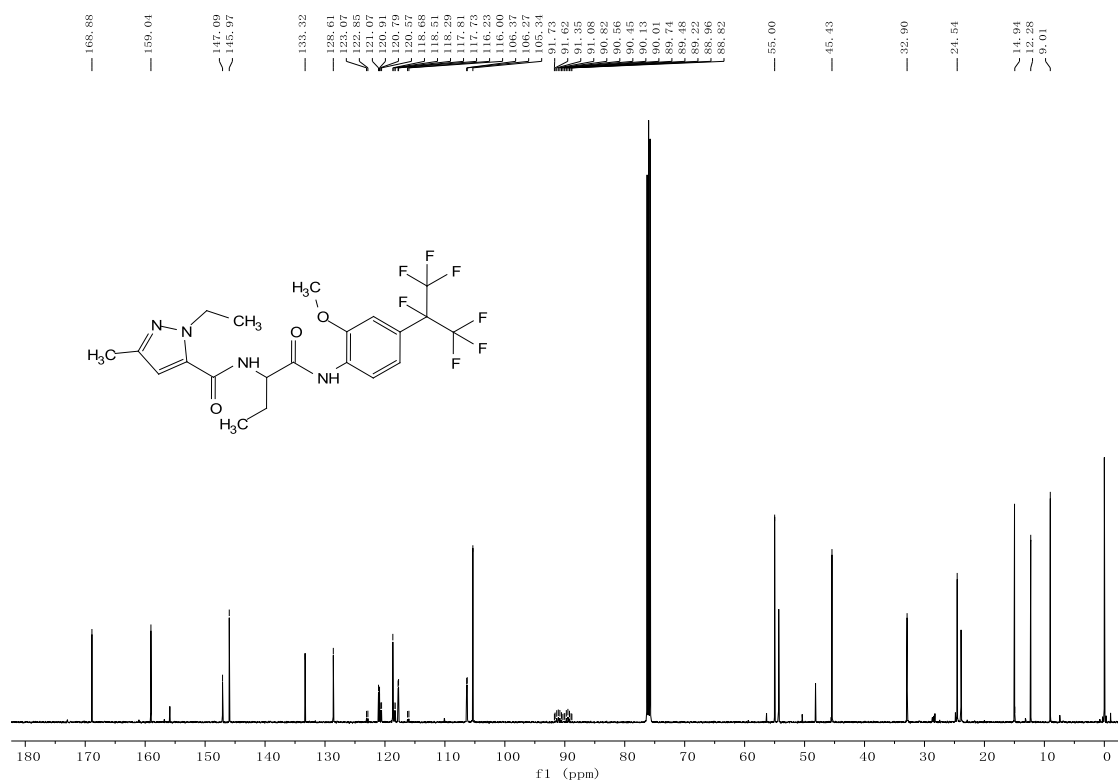


Figure S56. ¹³C NMR spectrum of compound III-28.

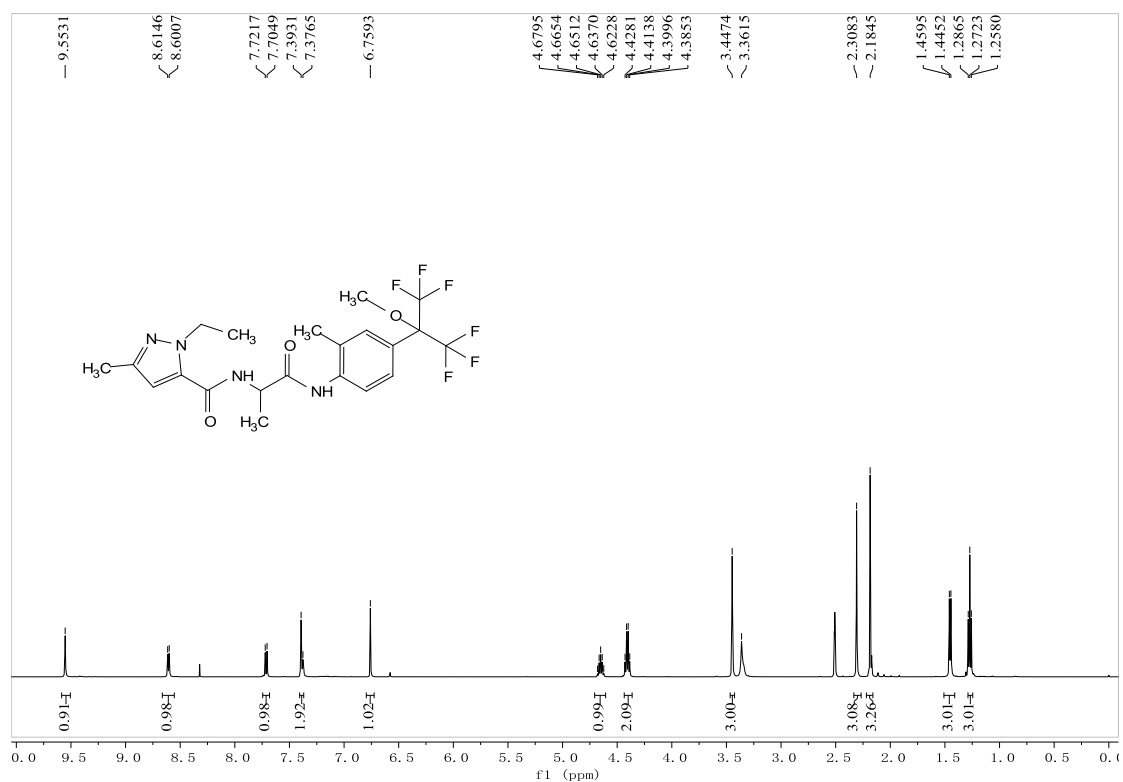


Figure S57. ¹H NMR spectrum of compound III-29.

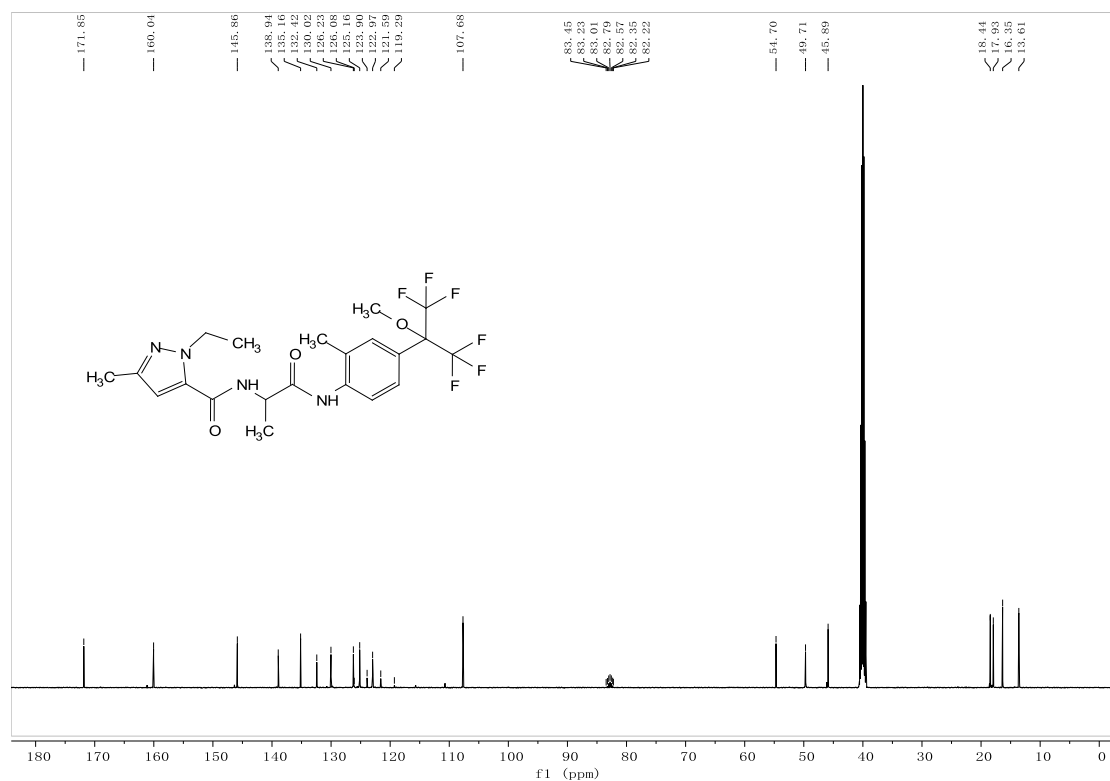


Figure S58. ¹³C NMR spectrum of compound III-29.

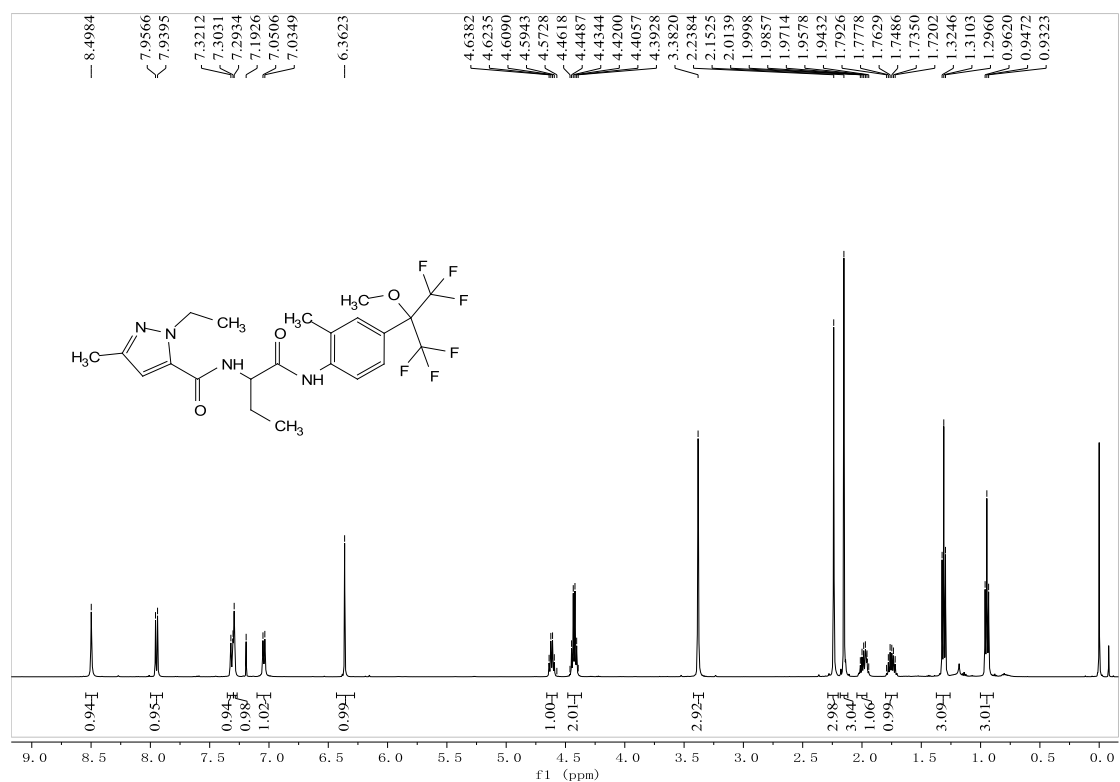


Figure S59. ¹H NMR spectrum of compound III-30.

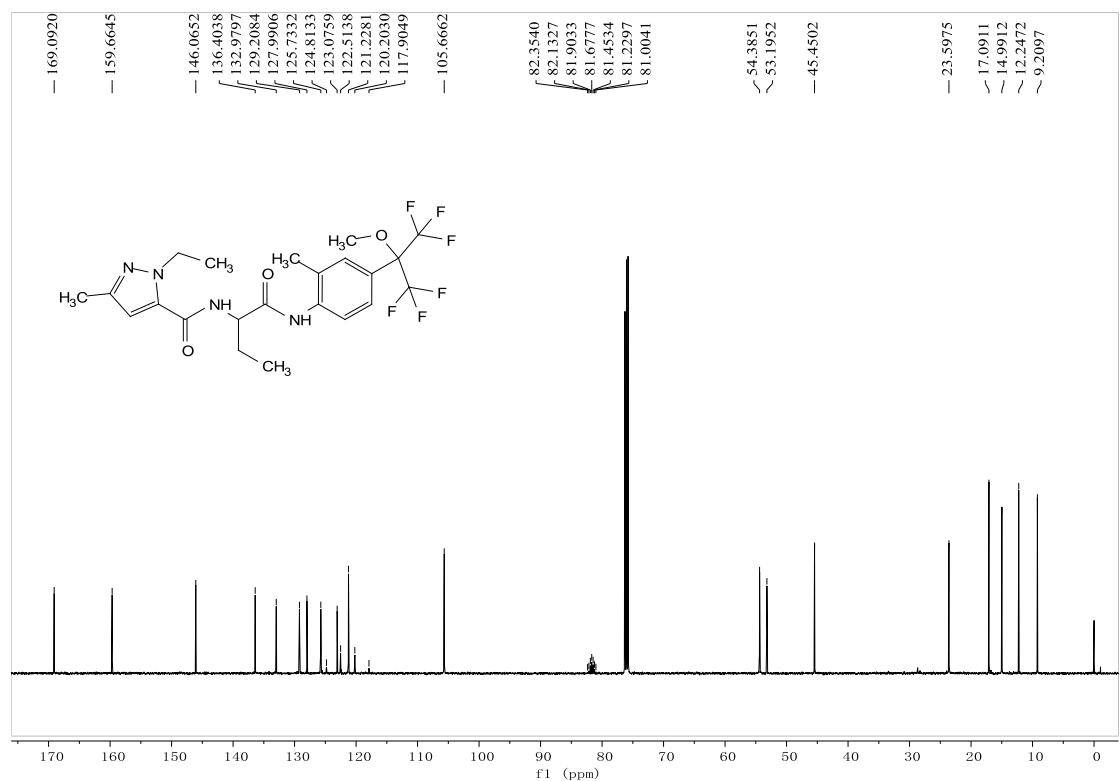


Figure S60. ¹³C NMR spectrum of compound III-30.