Supplementary Materials

1. H-NMR

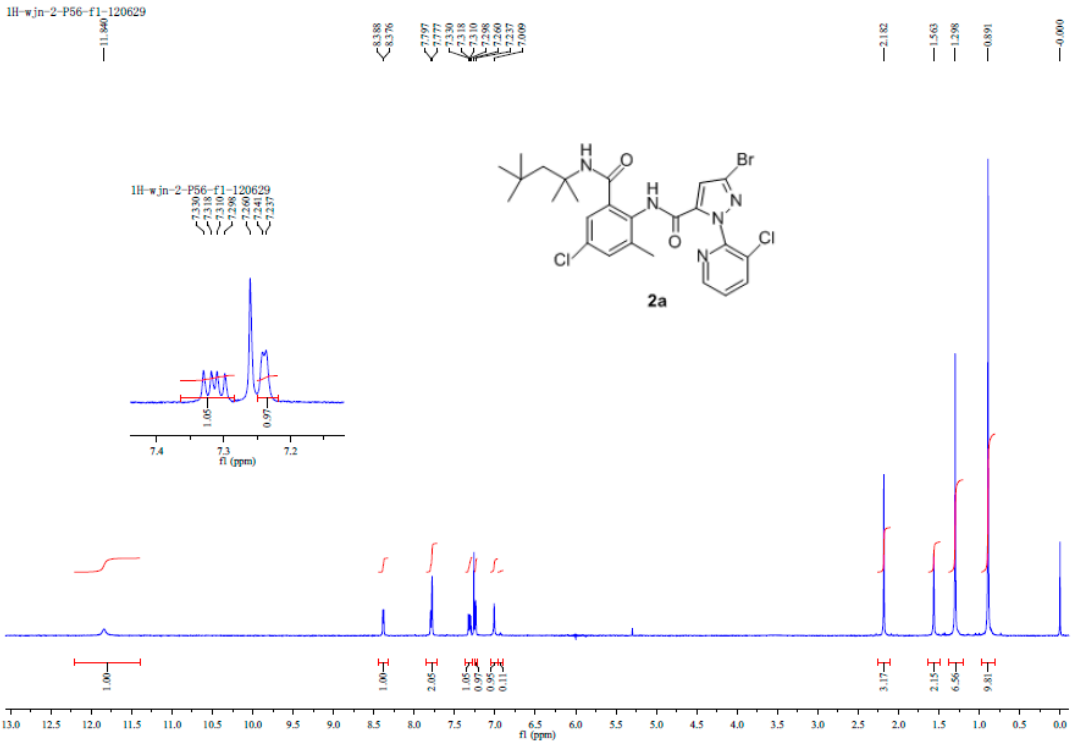


Figure S1. [1]H-NMR spectrum of compound **2a**.

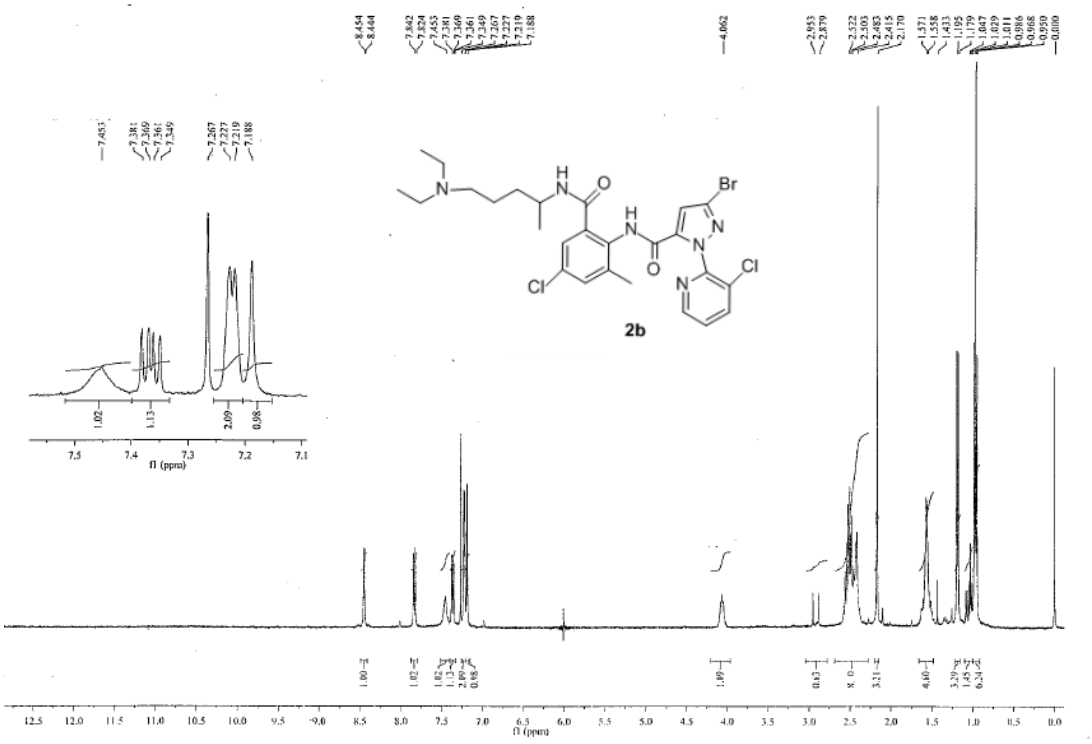


Figure S2. [1]H-NMR spectrum of compound **2b**.

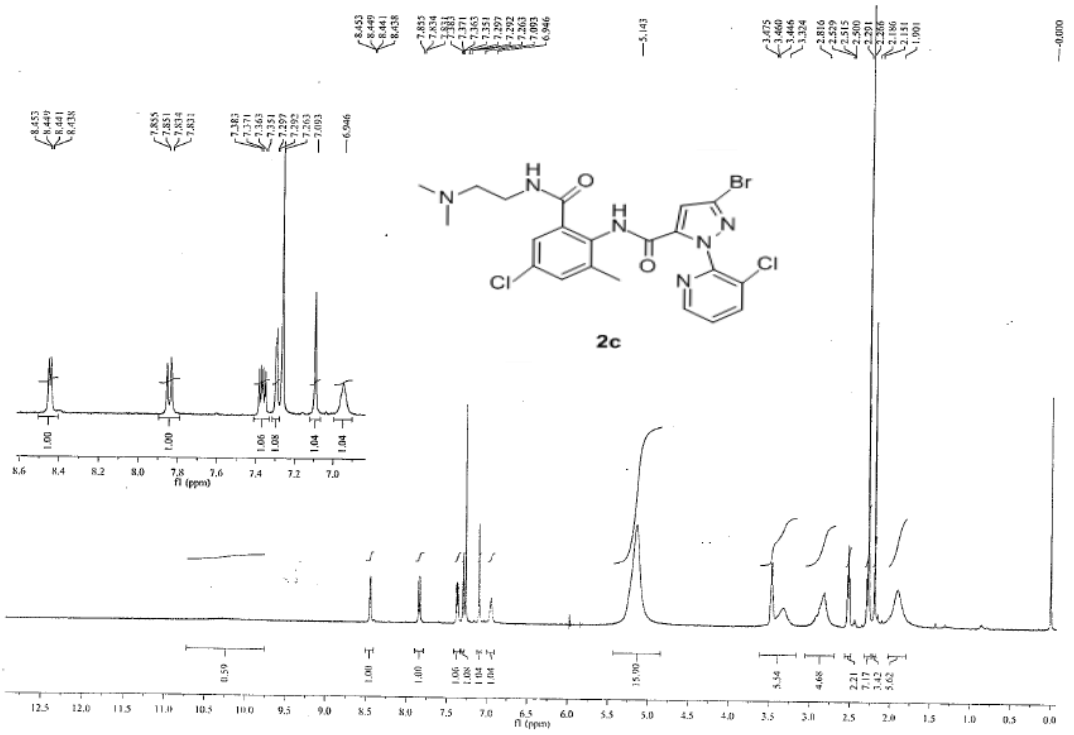


Figure S3. ^{1}H-NMR spectrum of compound **2c**.

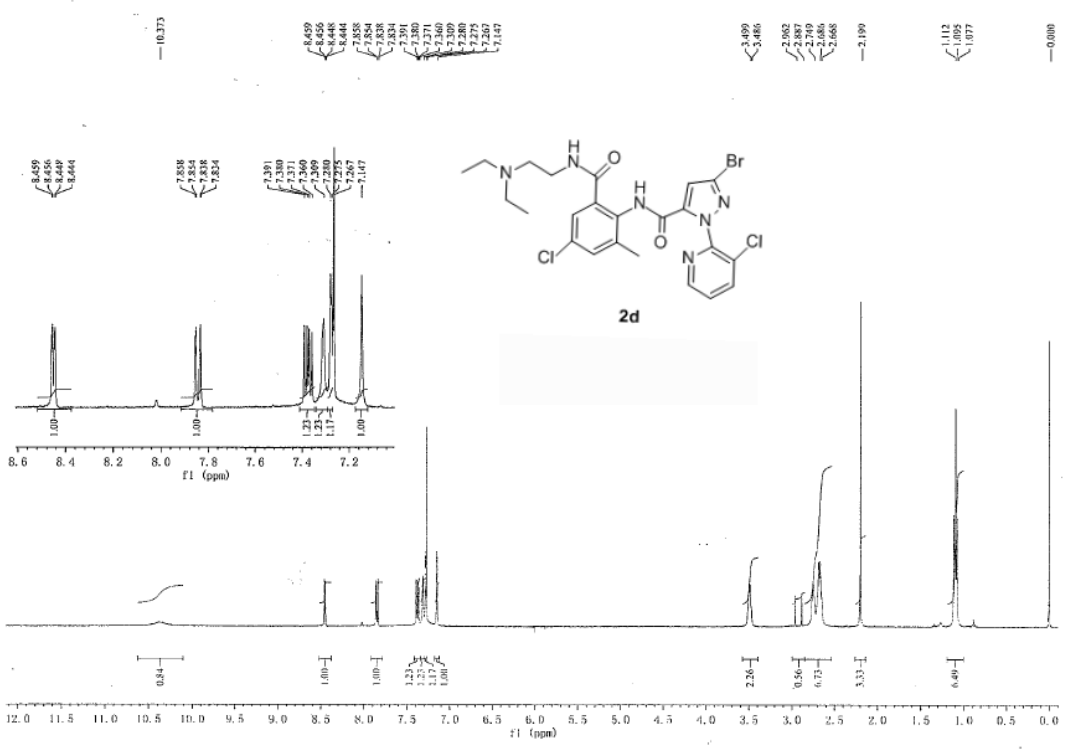


Figure S4. ^{1}H-NMR spectrum of compound **2d**.

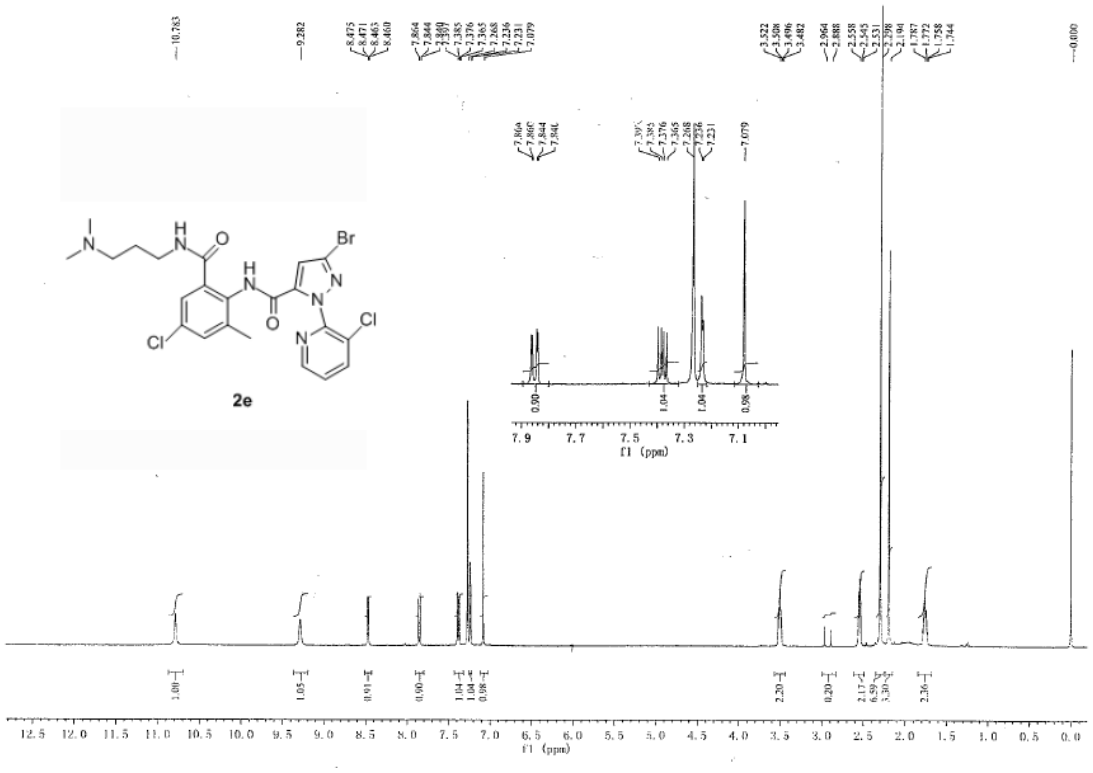


Figure S5. ^{1}H-NMR spectrum of compound **2e**.

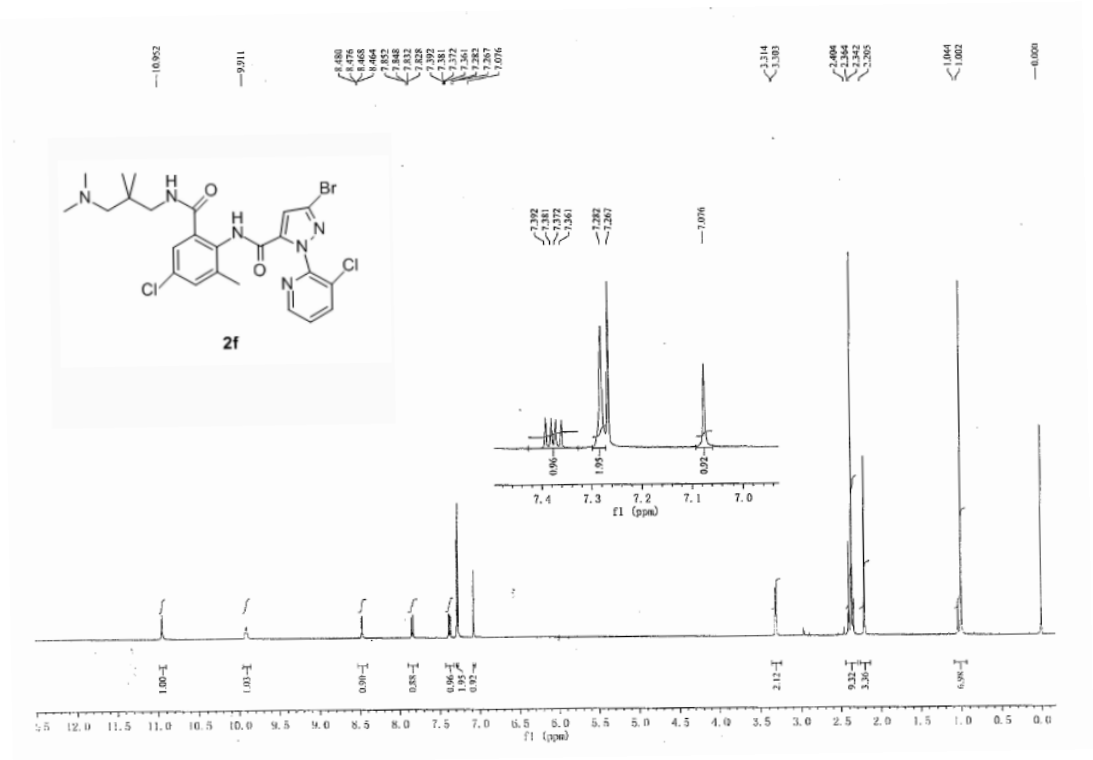


Figure S6. ^{1}H-NMR spectrum of compound **2f**.

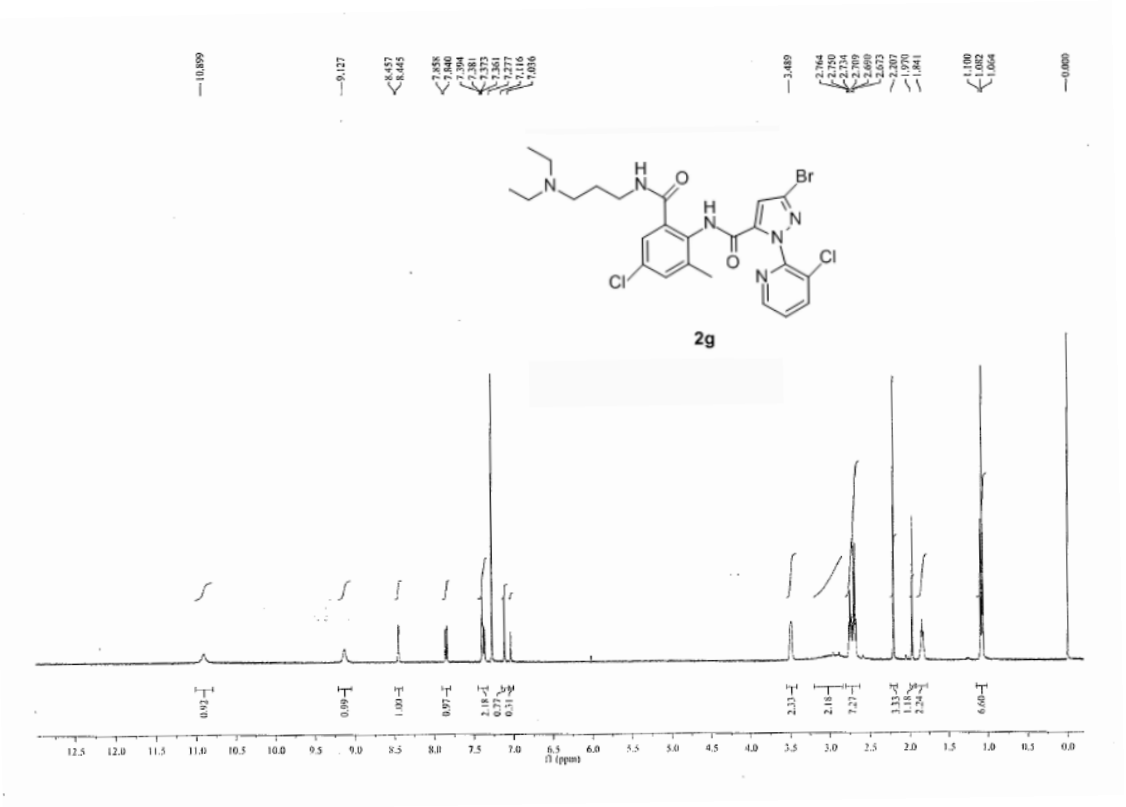


Figure S7. ^{1}H-NMR spectrum of compound **2g**.

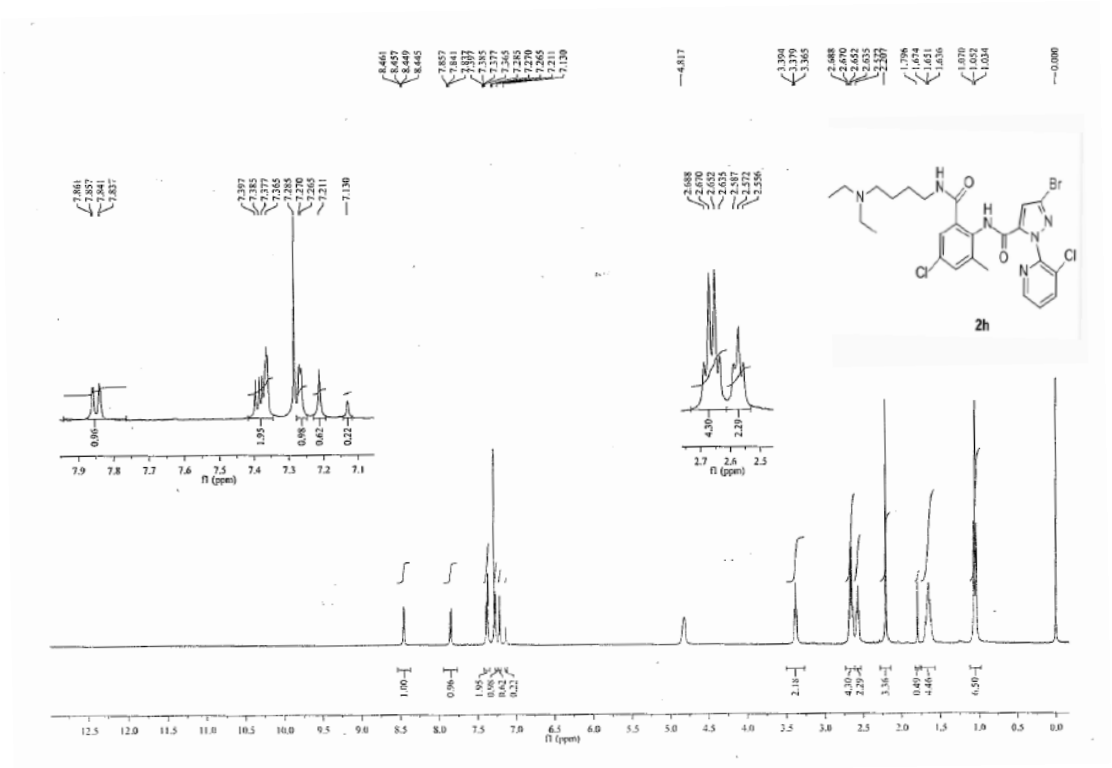


Figure S8. ^{1}H-NMR spectrum of compound **2h**.

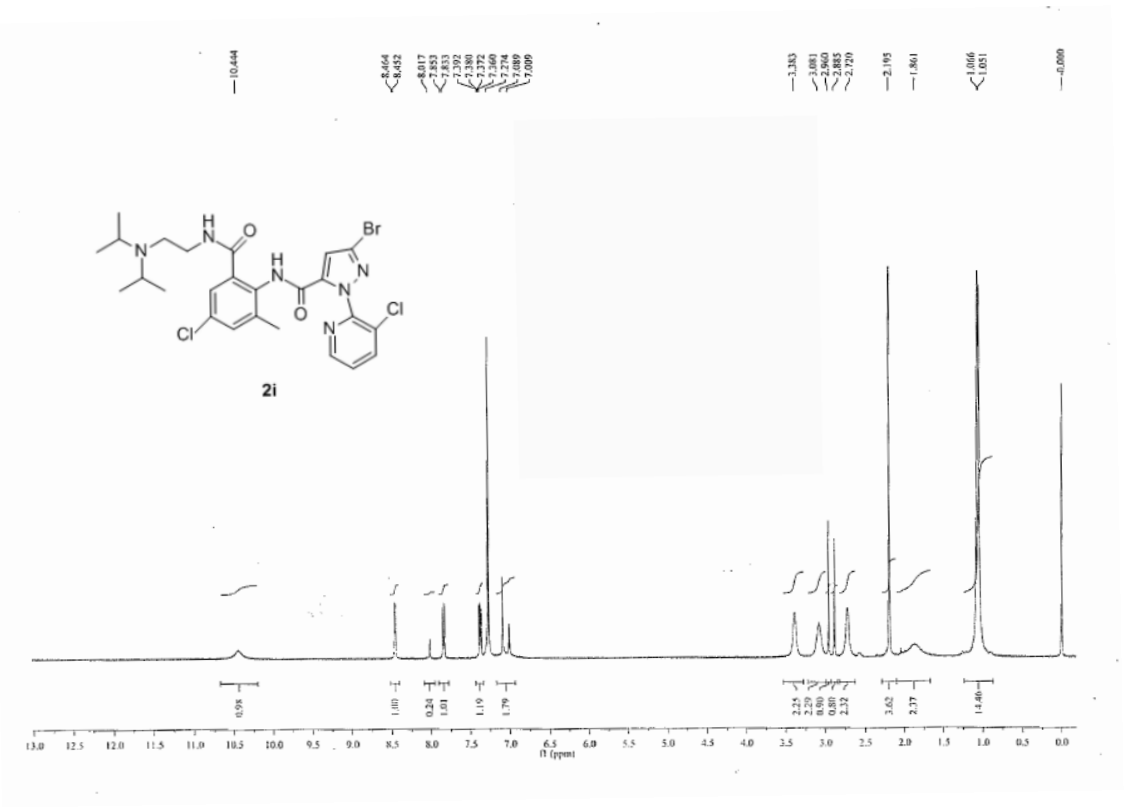


Figure S9. ^{1}H-NMR spectrum of compound **2i**.

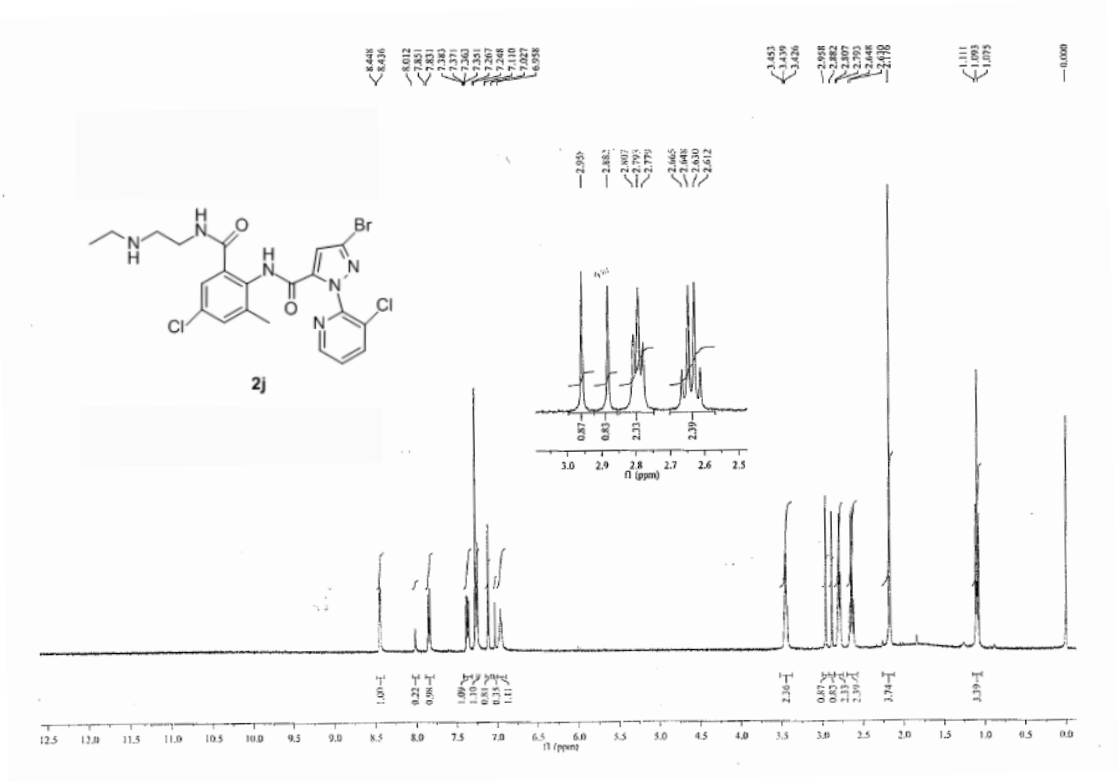


Figure S10. ^{1}H-NMR spectrum of compound **2j**.

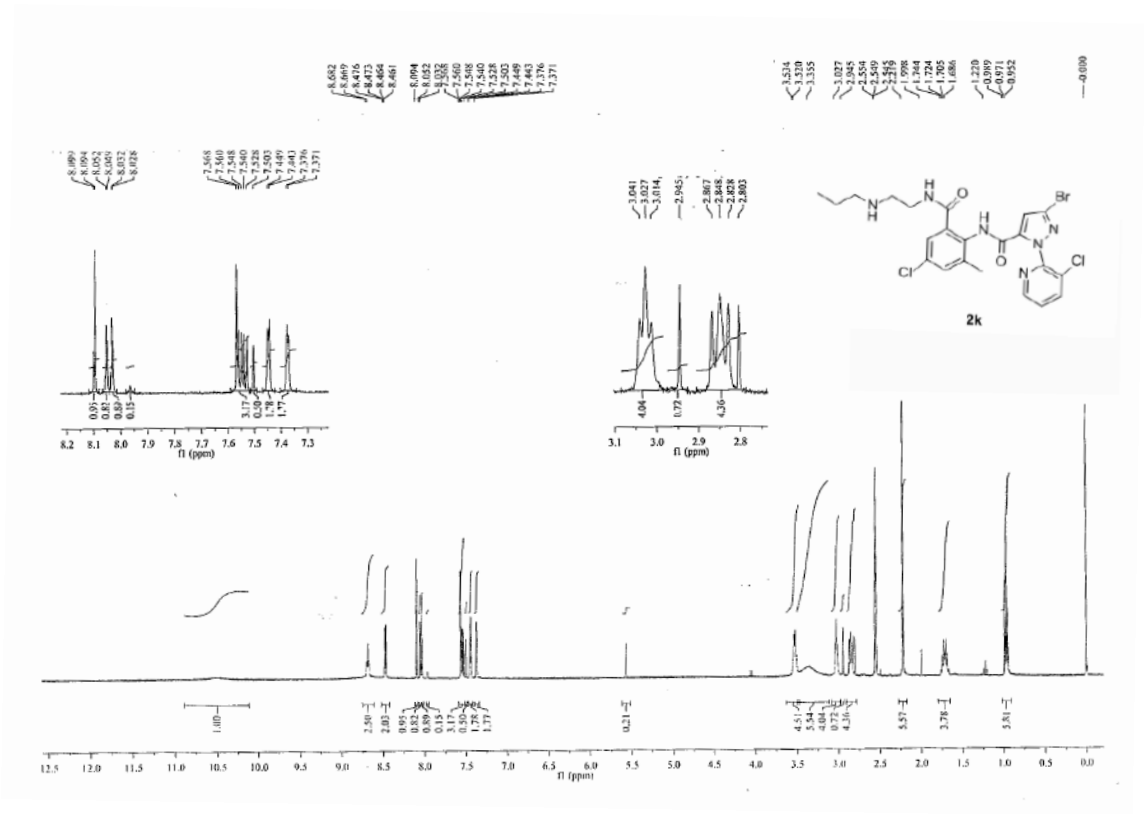


Figure S11. ^{1}H-NMR spectrum of compound **2k**.

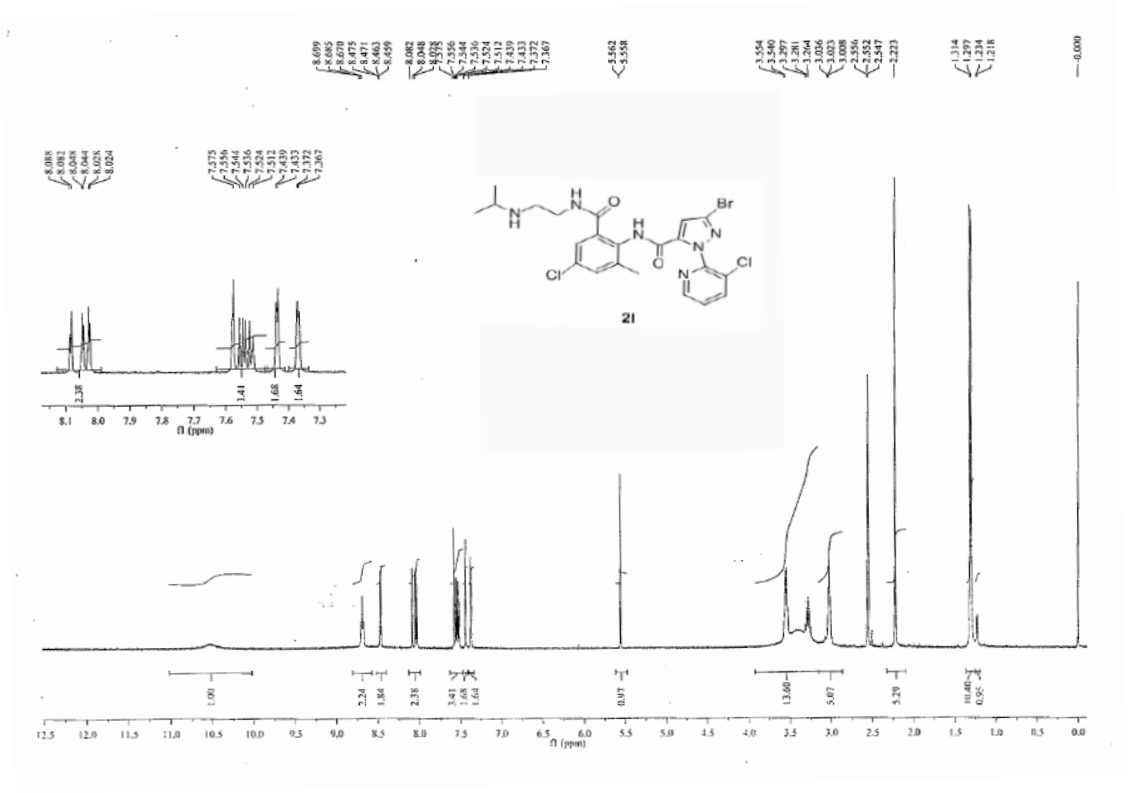


Figure S12. ^{1}H-NMR spectrum of compound **2l**.

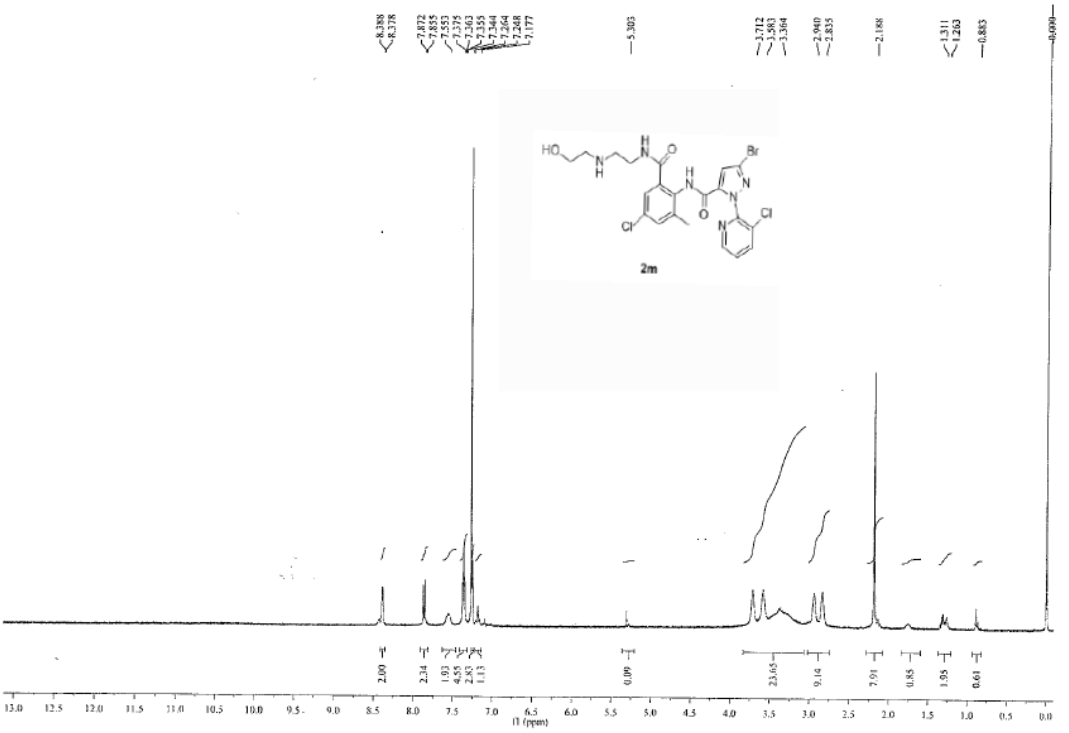


Figure S13. ^{1}H-NMR spectrum of compound **2m**.

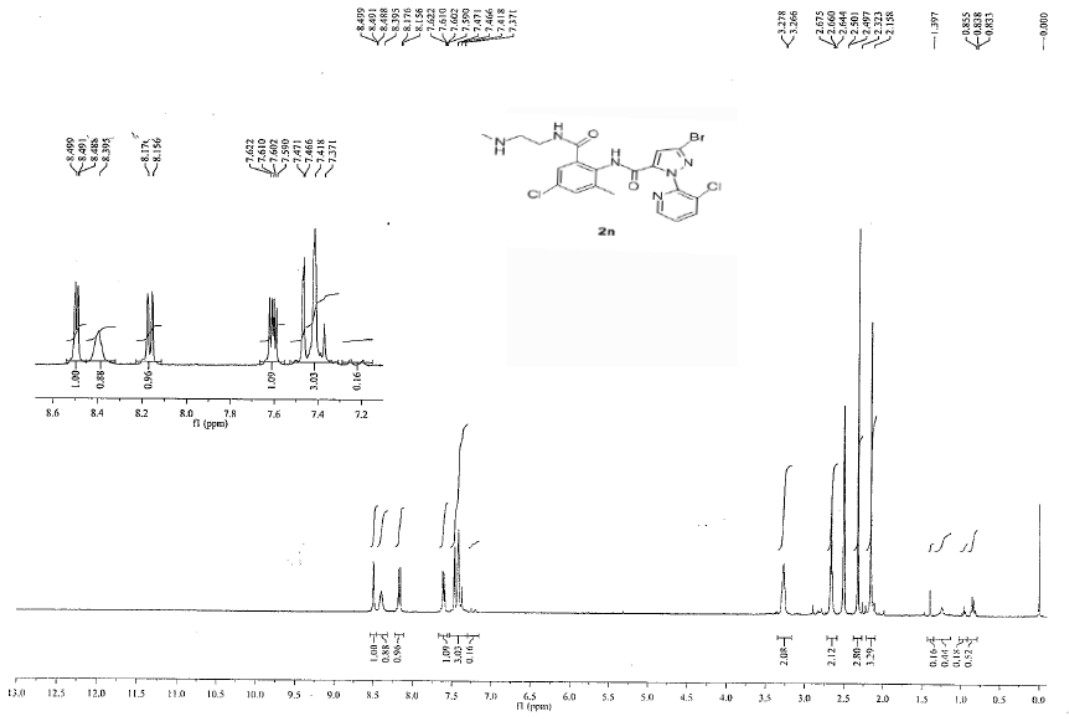


Figure S14. ^{1}H-NMR spectrum of compound **2n**.

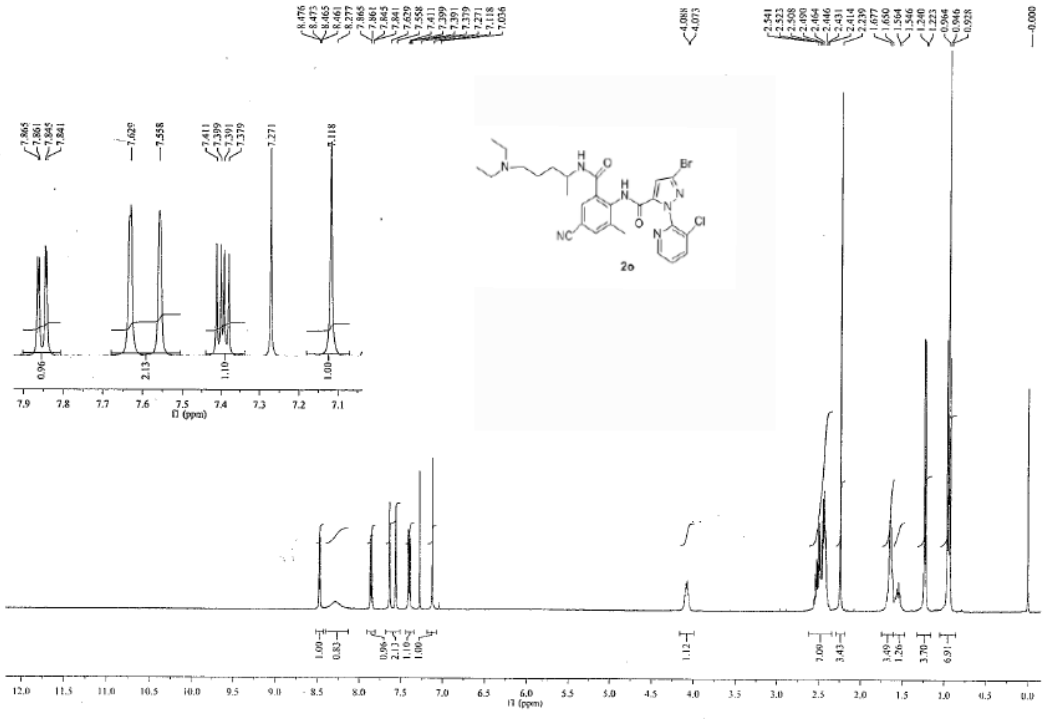


Figure S15. [1]H-NMR spectrum of compound **2o**.

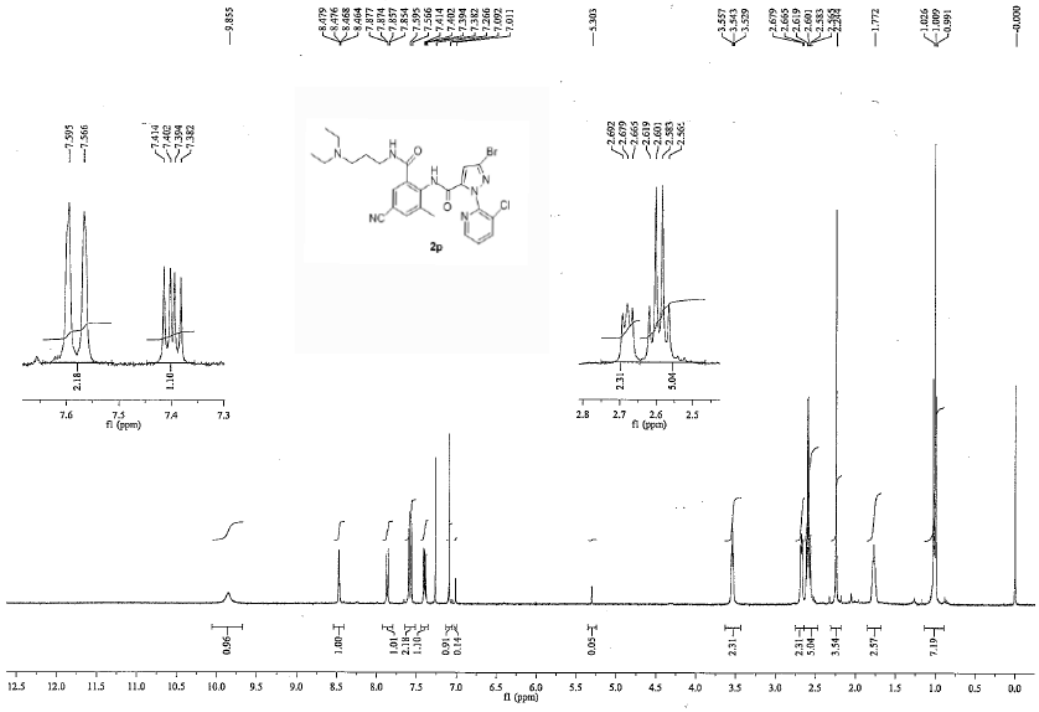


Figure S16. [1]H-NMR spectrum of compound **2p**.

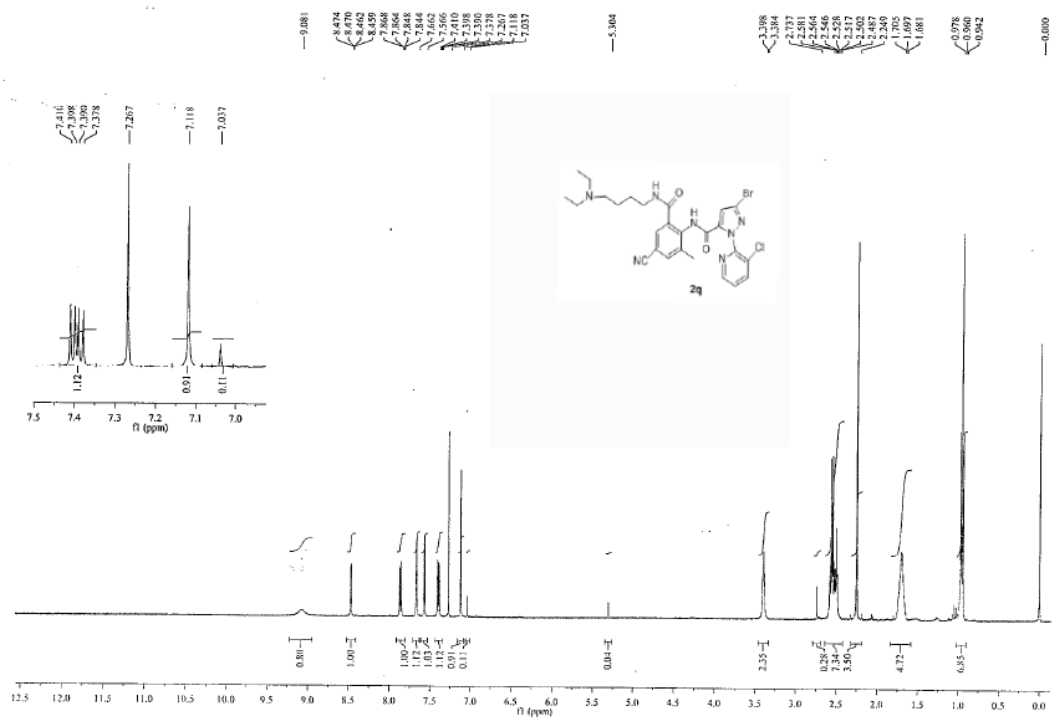


Figure S17. ^{1}H-NMR spectrum of compound **2q**.

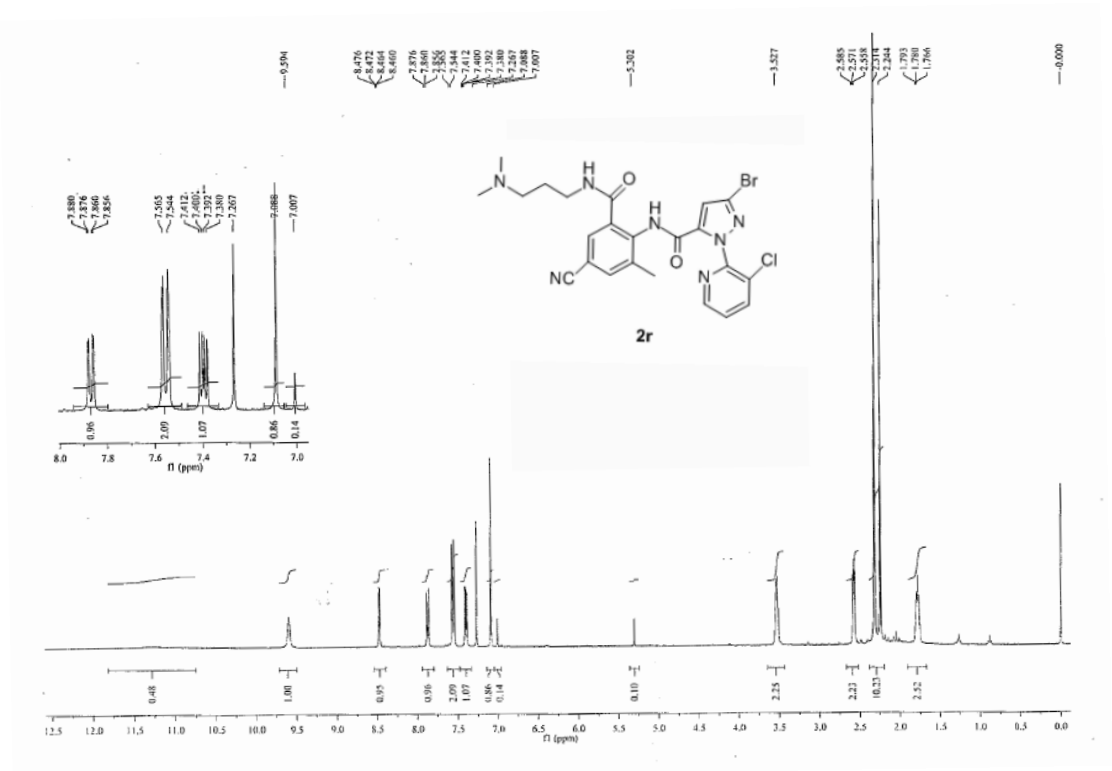


Figure S18. ^{1}H-NMR spectrum of compound **2r**.

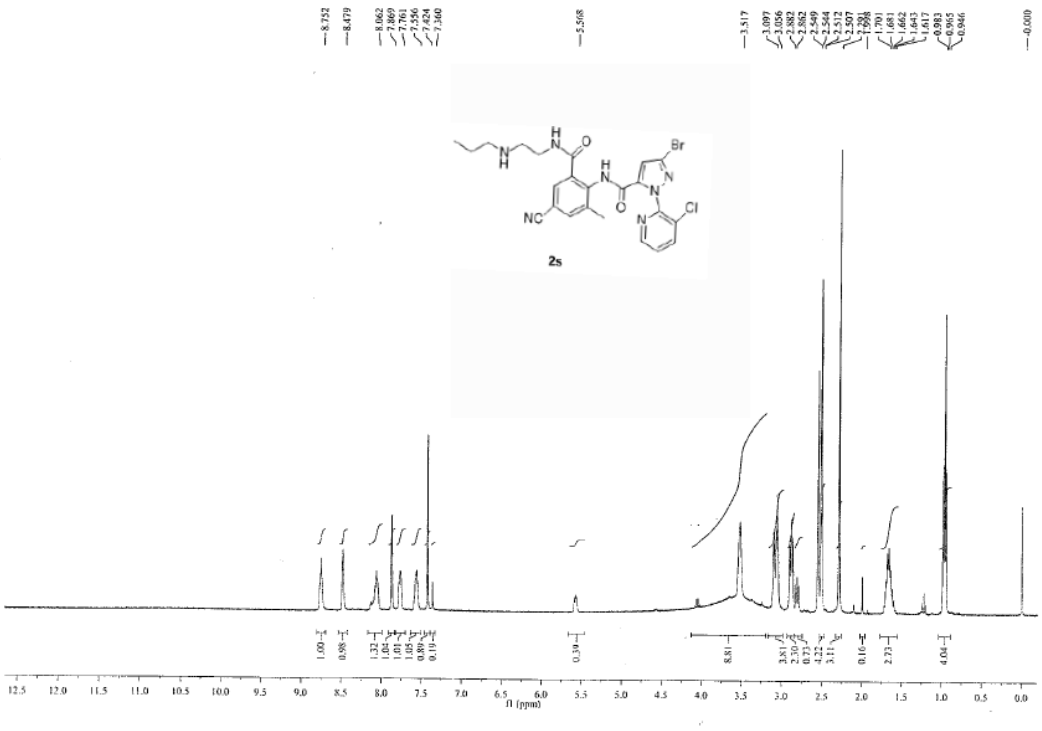


Figure S19. ^{1}H-NMR spectrum of compound **2s**.

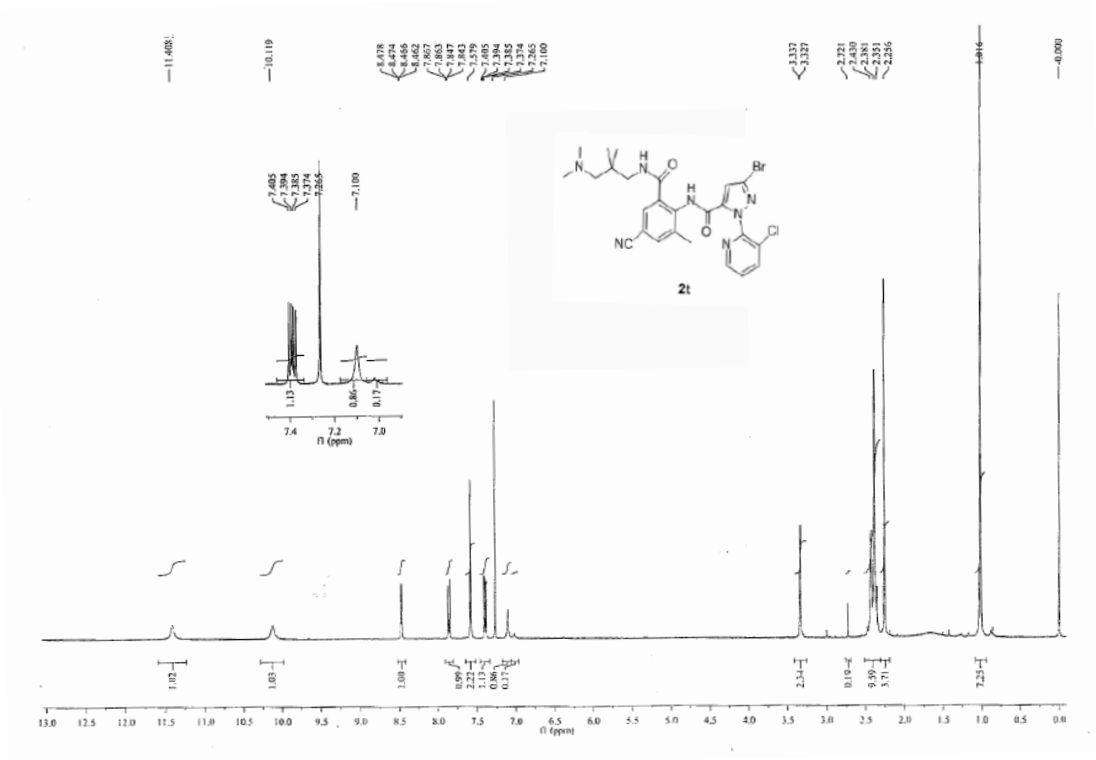


Figure S20. ^{1}H-NMR spectrum of compound **2t**.

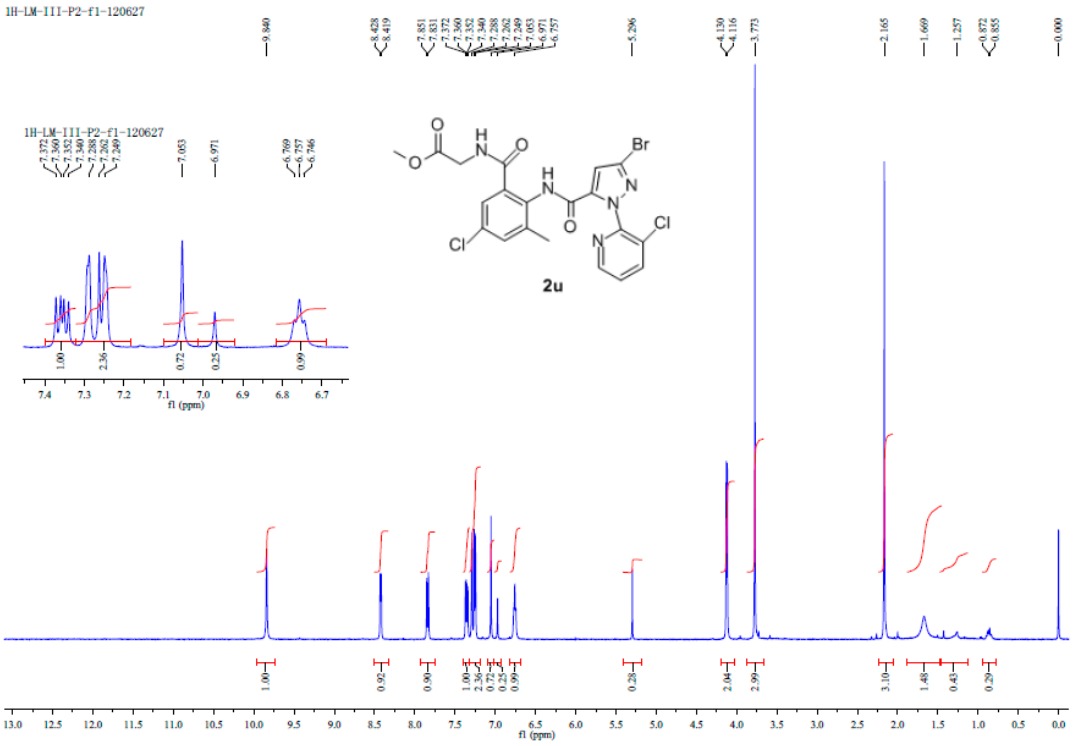


Figure S21. ^{1}H-NMR spectrum of compound **2u**.

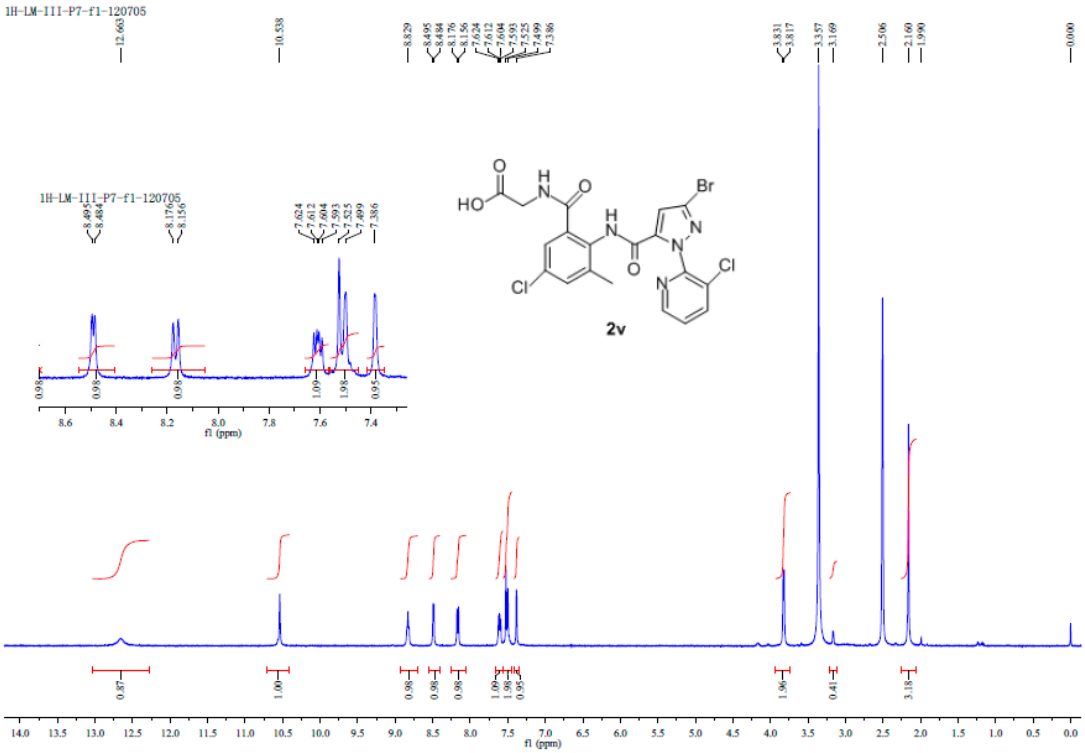


Figure S22. ^{1}H-NMR spectrum of compound **2v**.

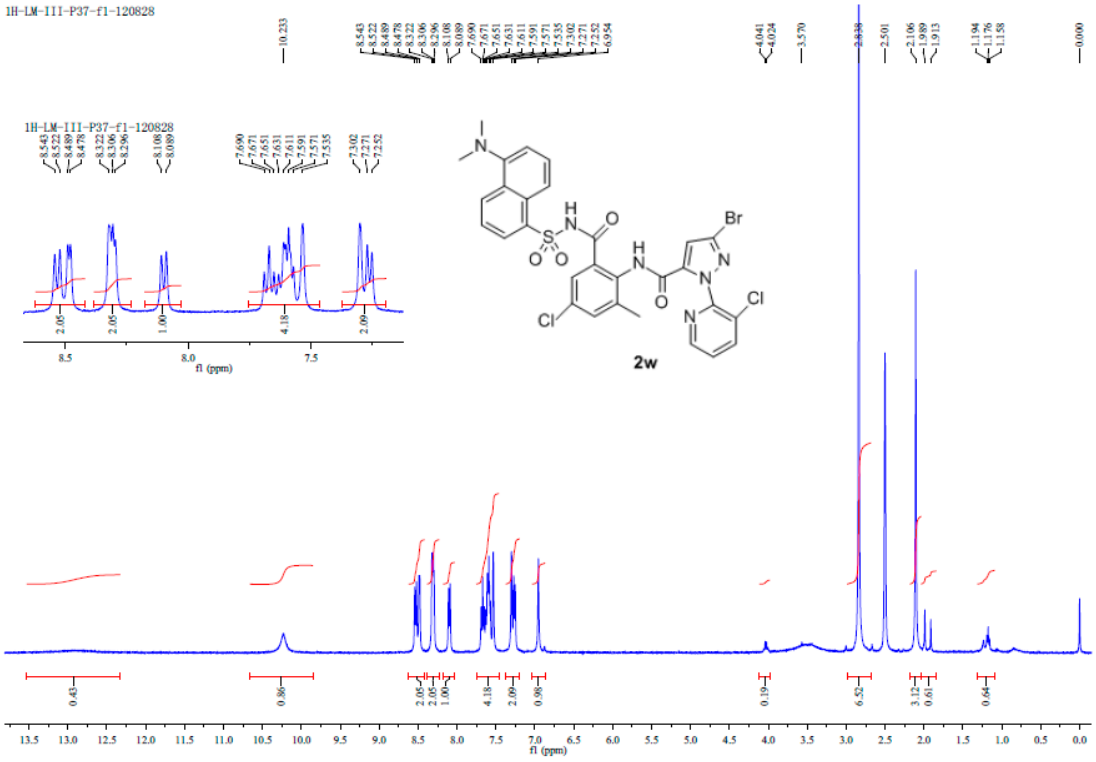


Figure S23. ^{1}H-NMR spectrum of compound **2w**.

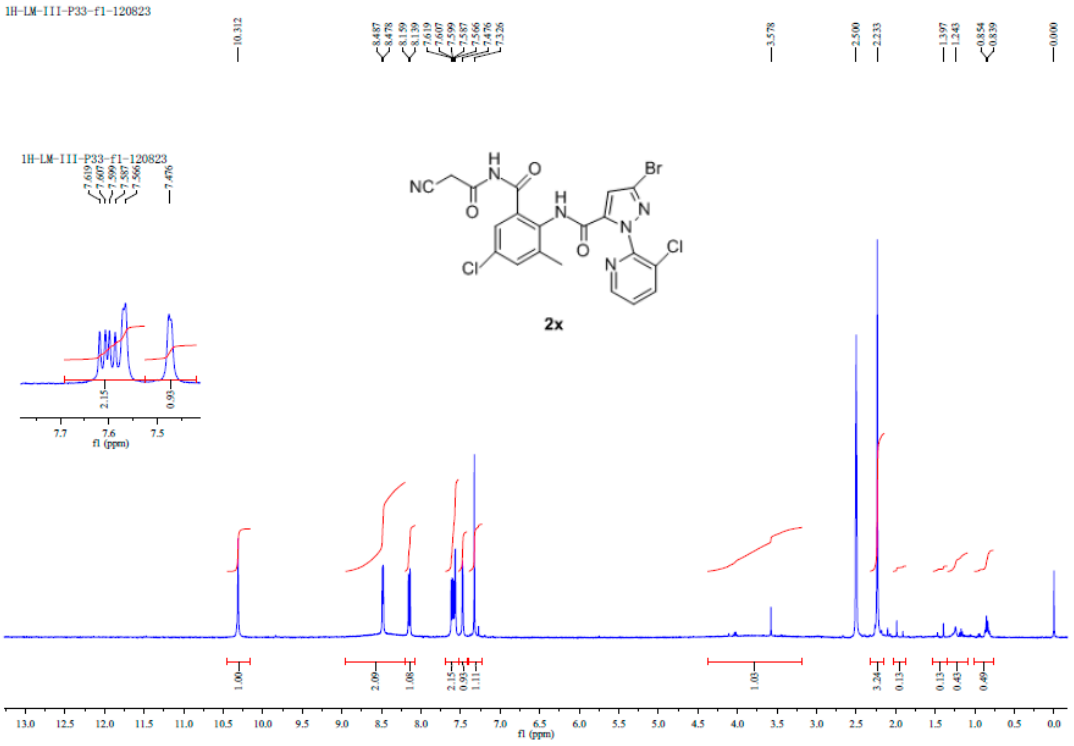


Figure S24. ^{1}H-NMR spectrum of compound **2x**.

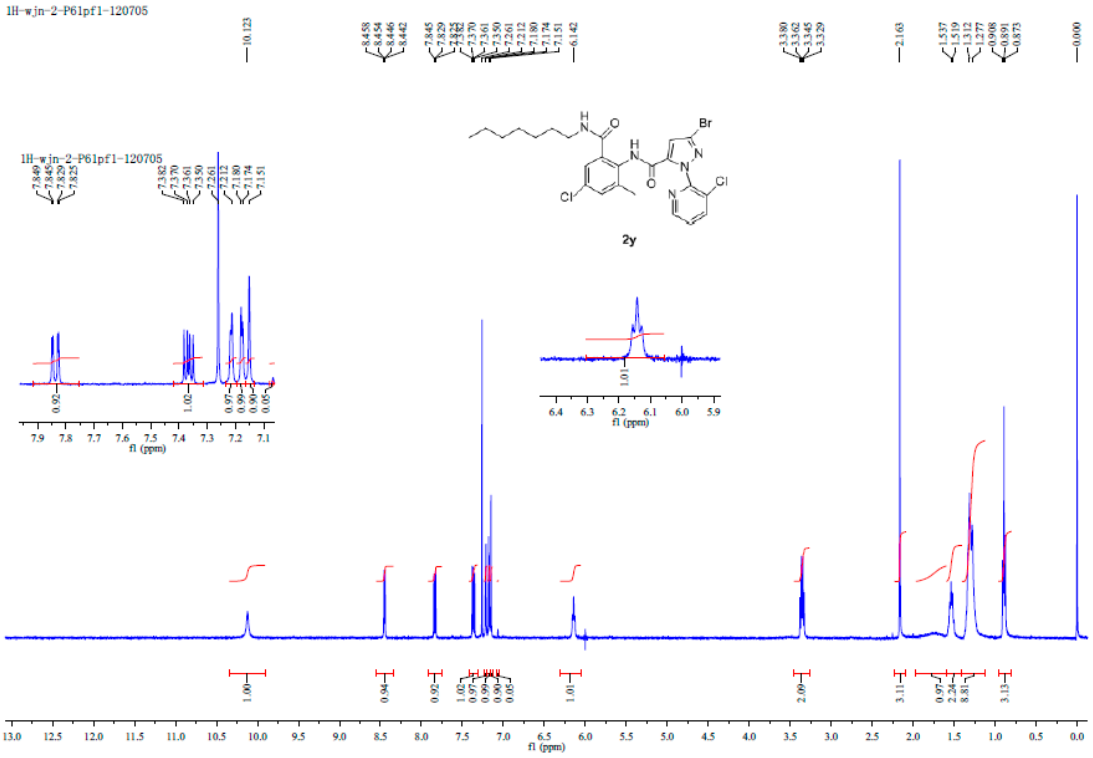


Figure S25. ^{1}H-NMR spectrum of compound **2y**.

2. C-NMR

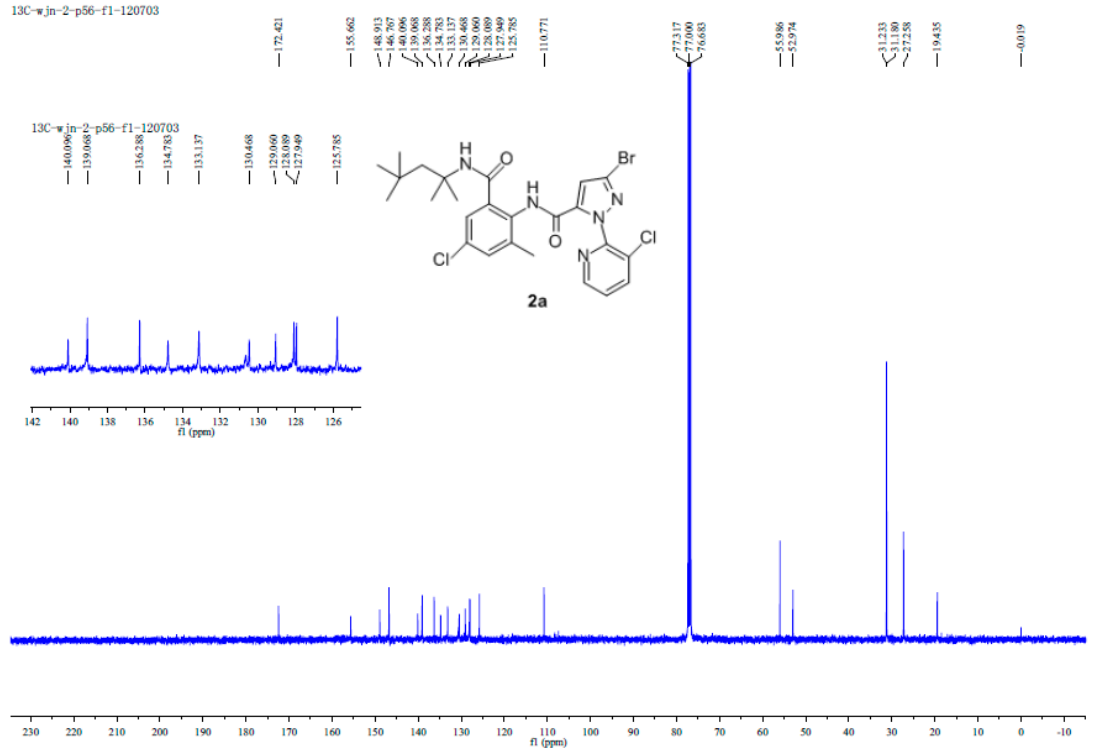


Figure S26. ^{13}C-NMR spectrum of compound **2a**.

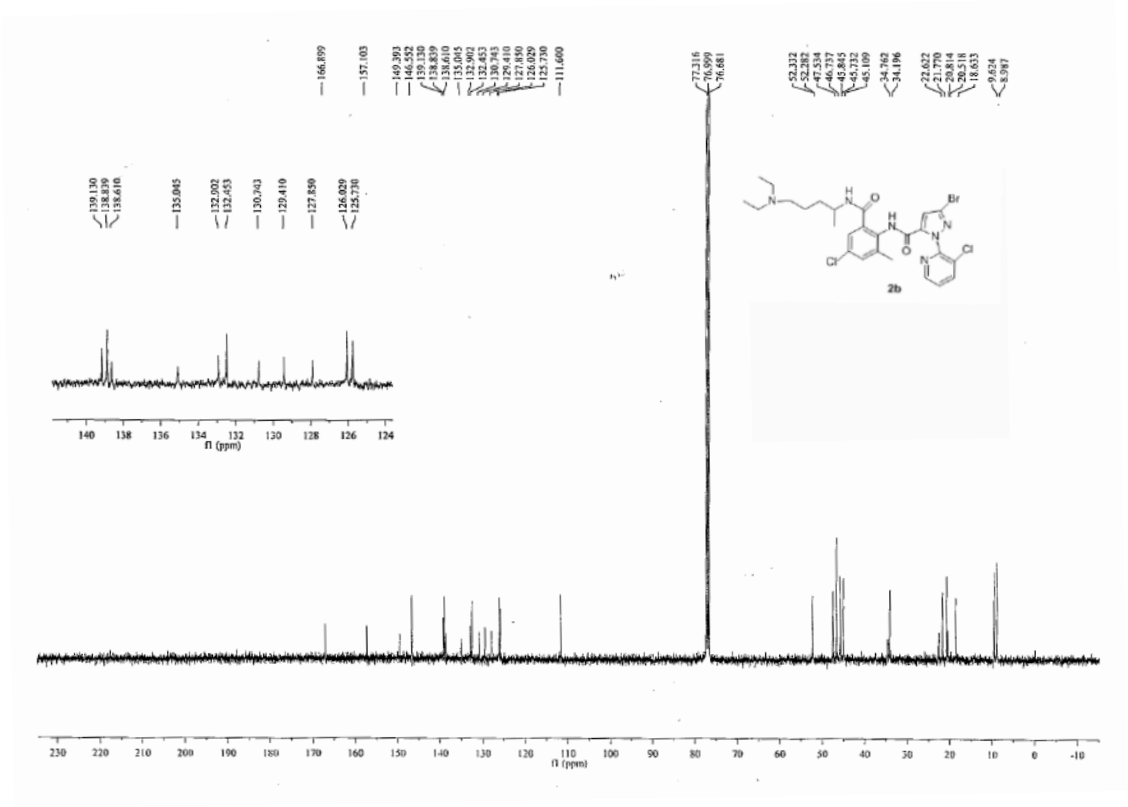


Figure S27. ^{13}C-NMR spectrum of compound **2b**.

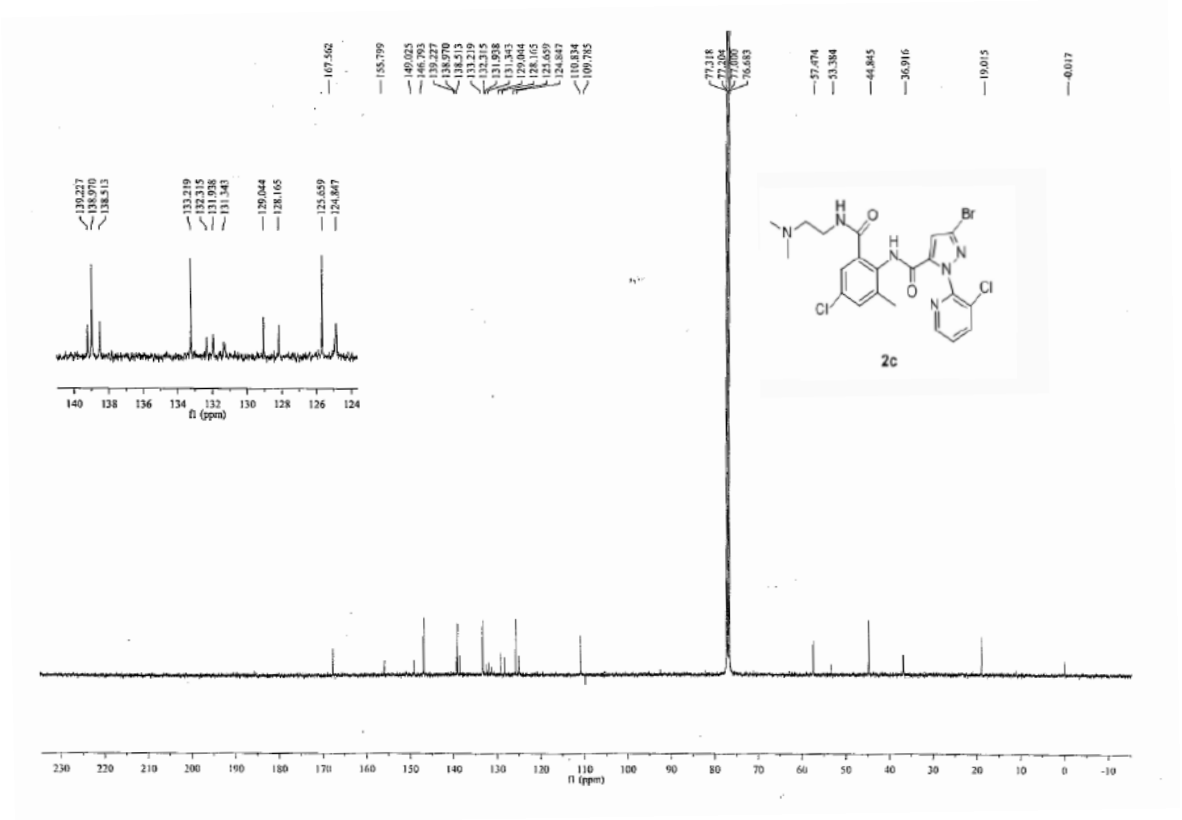


Figure S28. ^{13}C-NMR spectrum of compound **2c**.

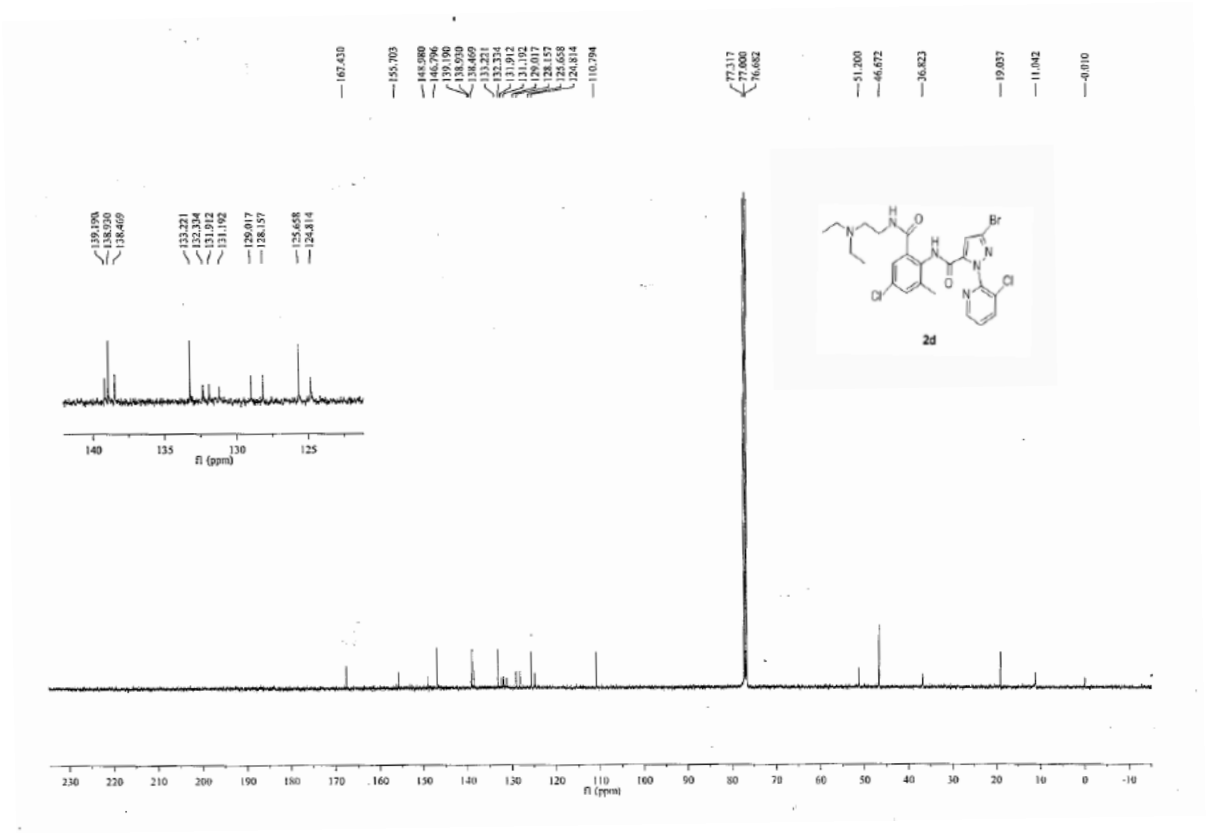


Figure S29. ^{13}C-NMR spectrum of compound **2d**.

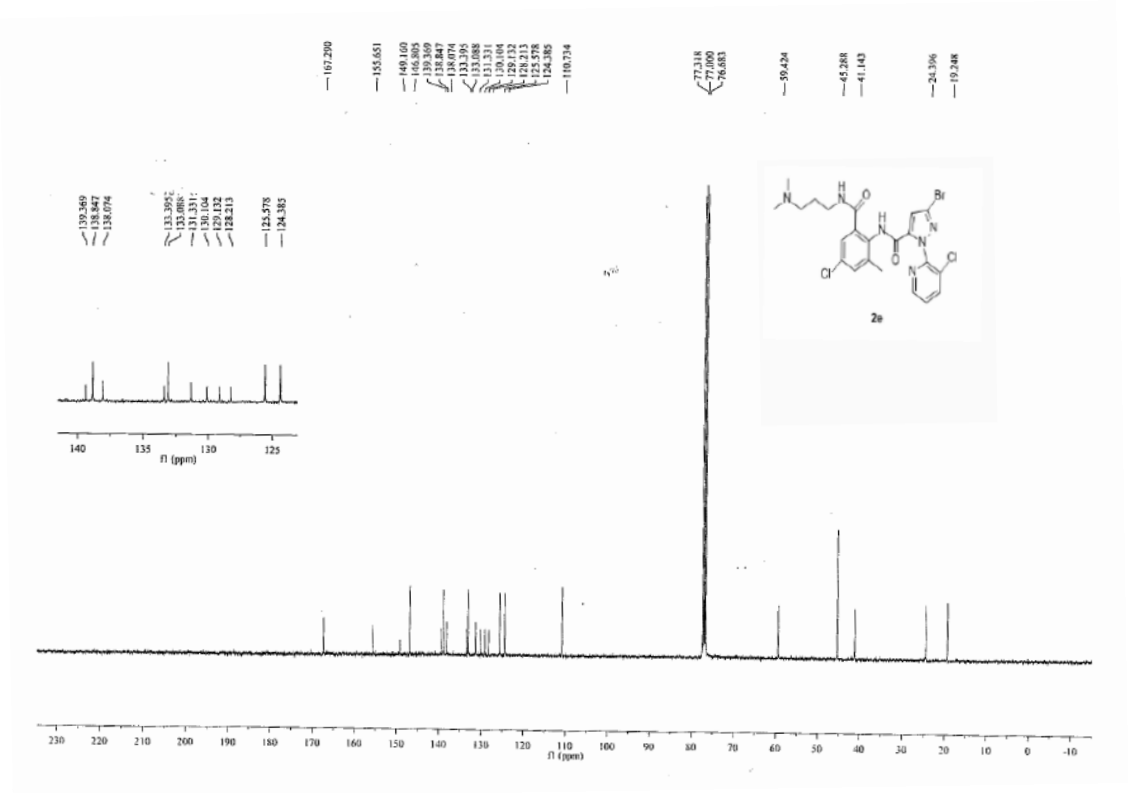


Figure S30. ^{13}C-NMR spectrum of compound **2e**.

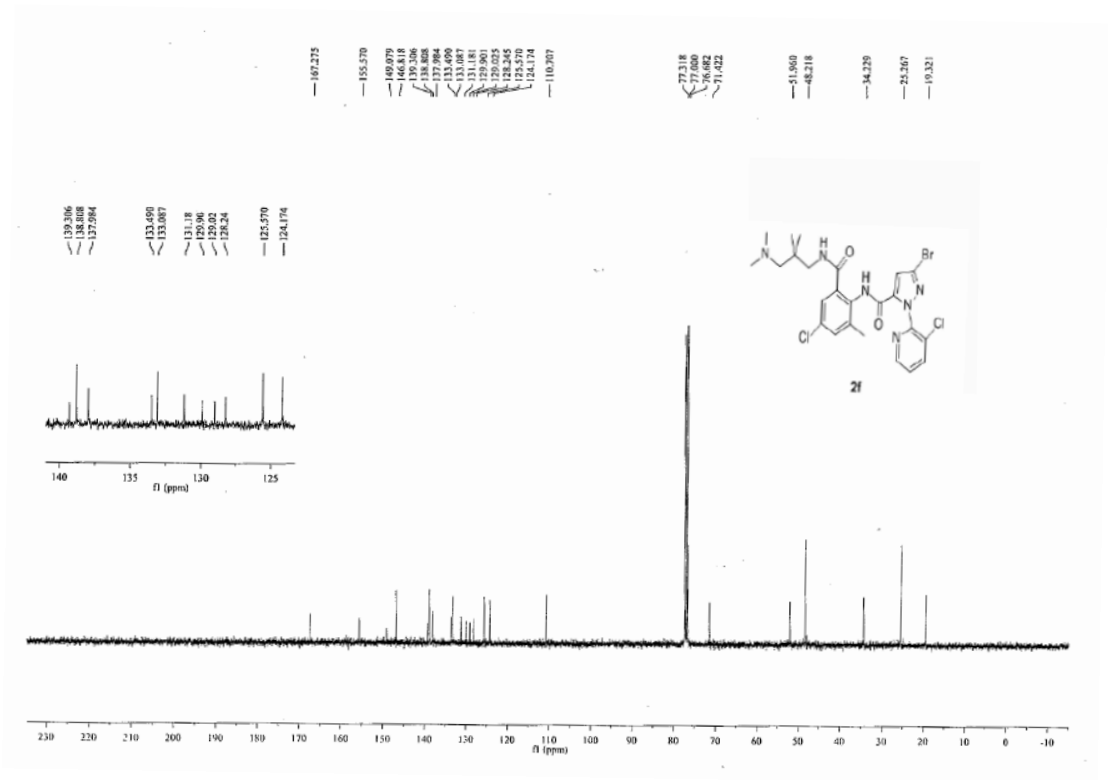


Figure S31. ^{13}C-NMR spectrum of compound **2f**.

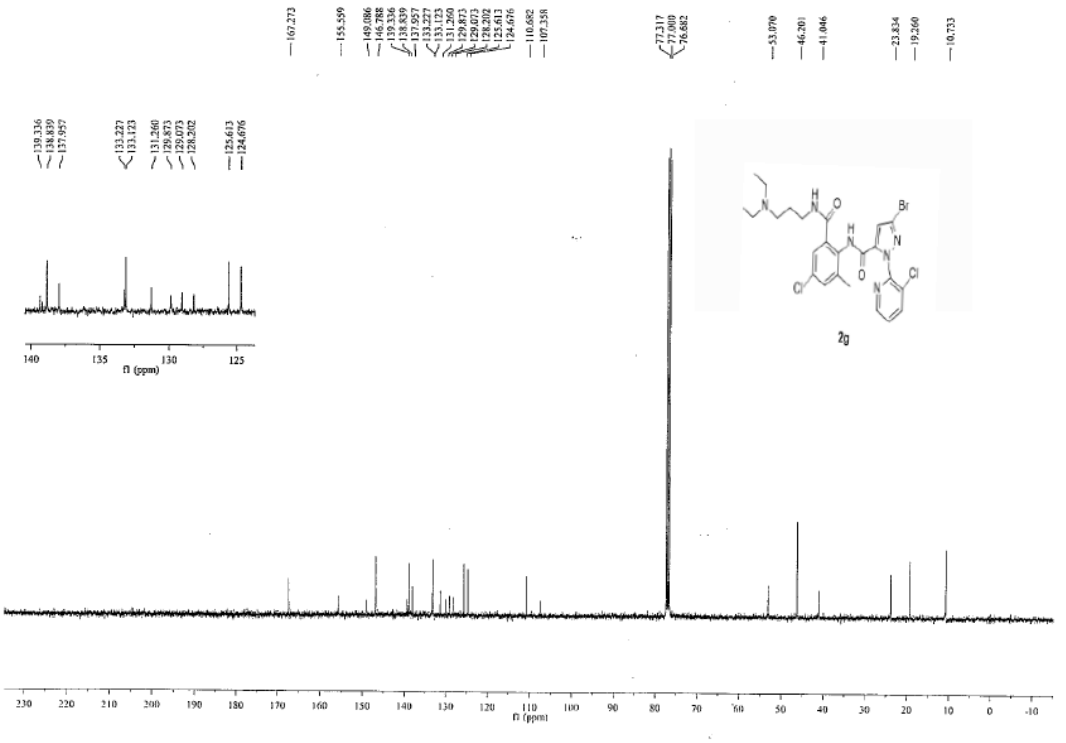


Figure S32. ^{13}C-NMR spectrum of compound **2g**.

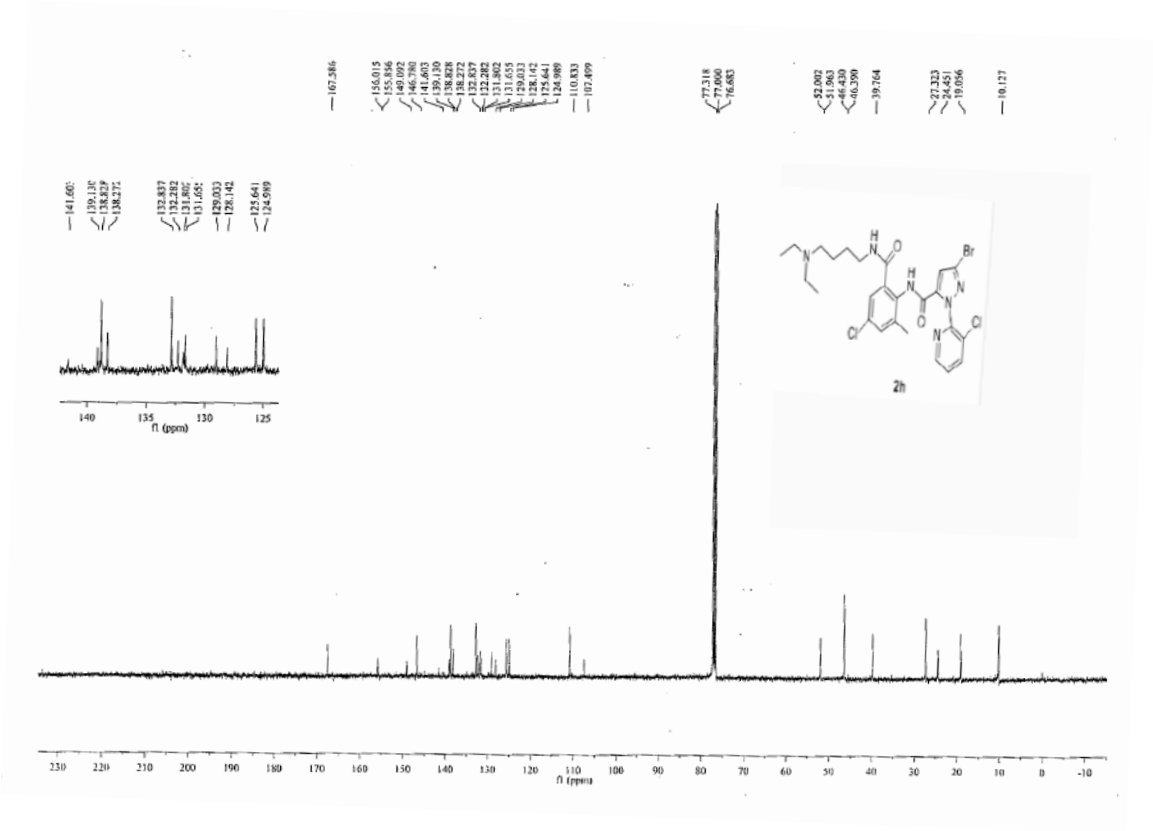


Figure S33. ^{13}C-NMR spectrum of compound **2h**.

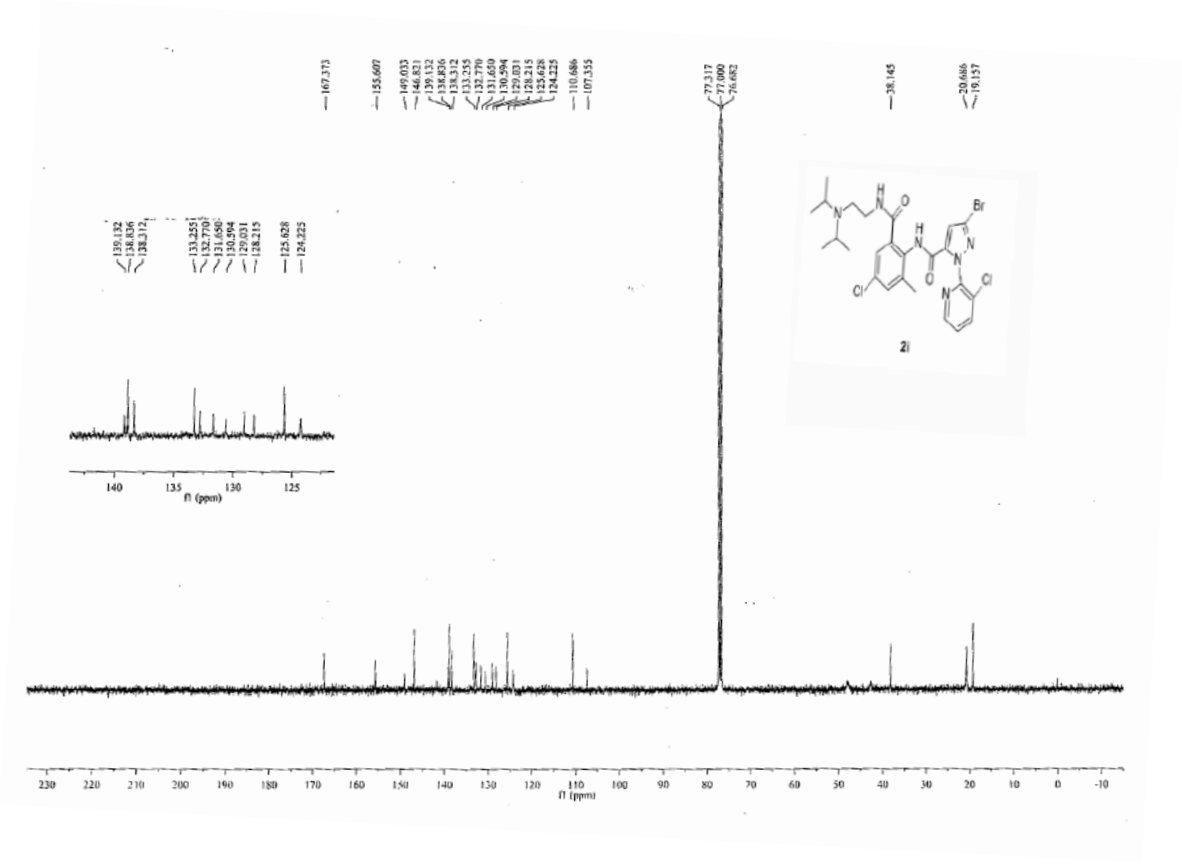


Figure S34. ^{13}C-NMR spectrum of compound **2i**.

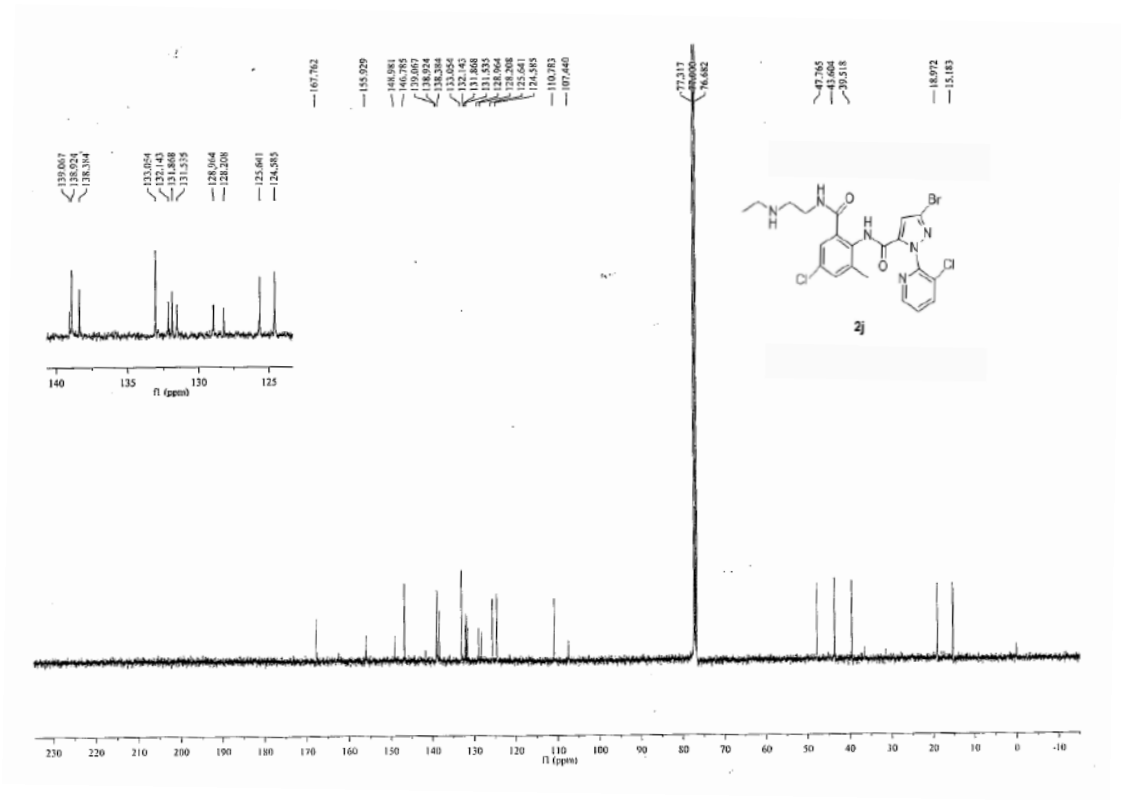


Figure S35. ^{13}C-NMR spectrum of compound **2j**.

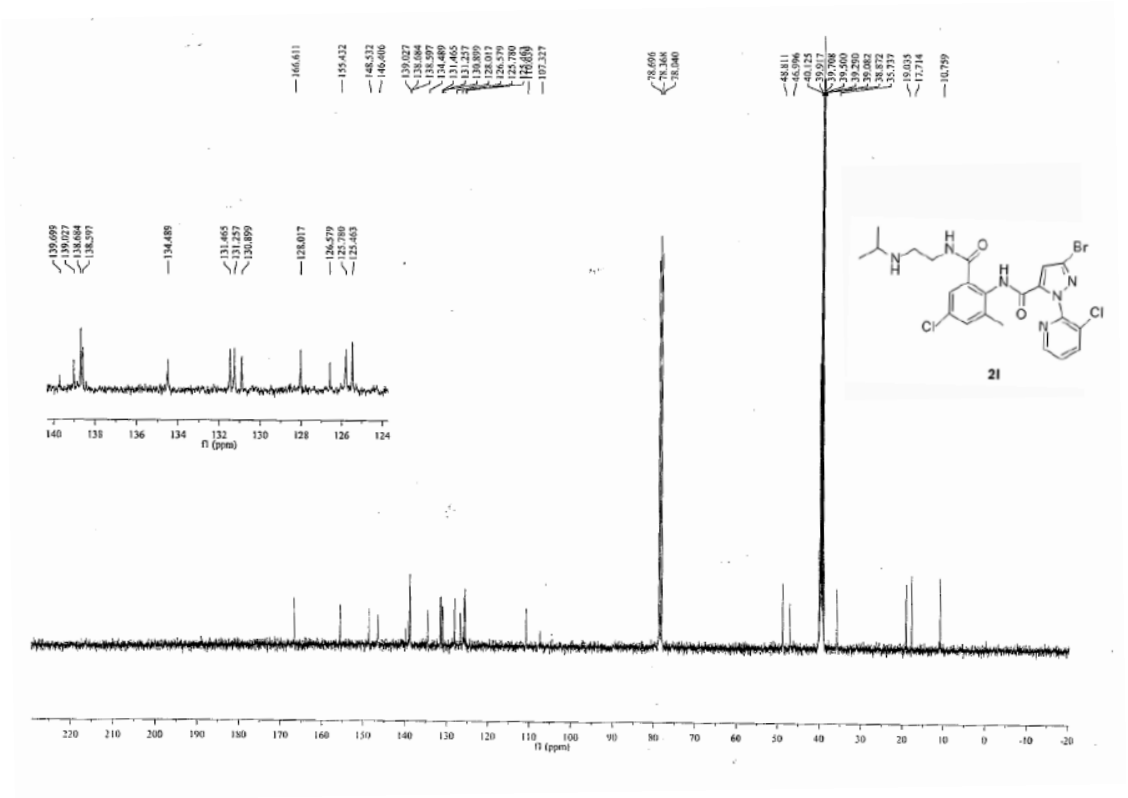


Figure S36. ^{13}C-NMR spectrum of compound **2k**.

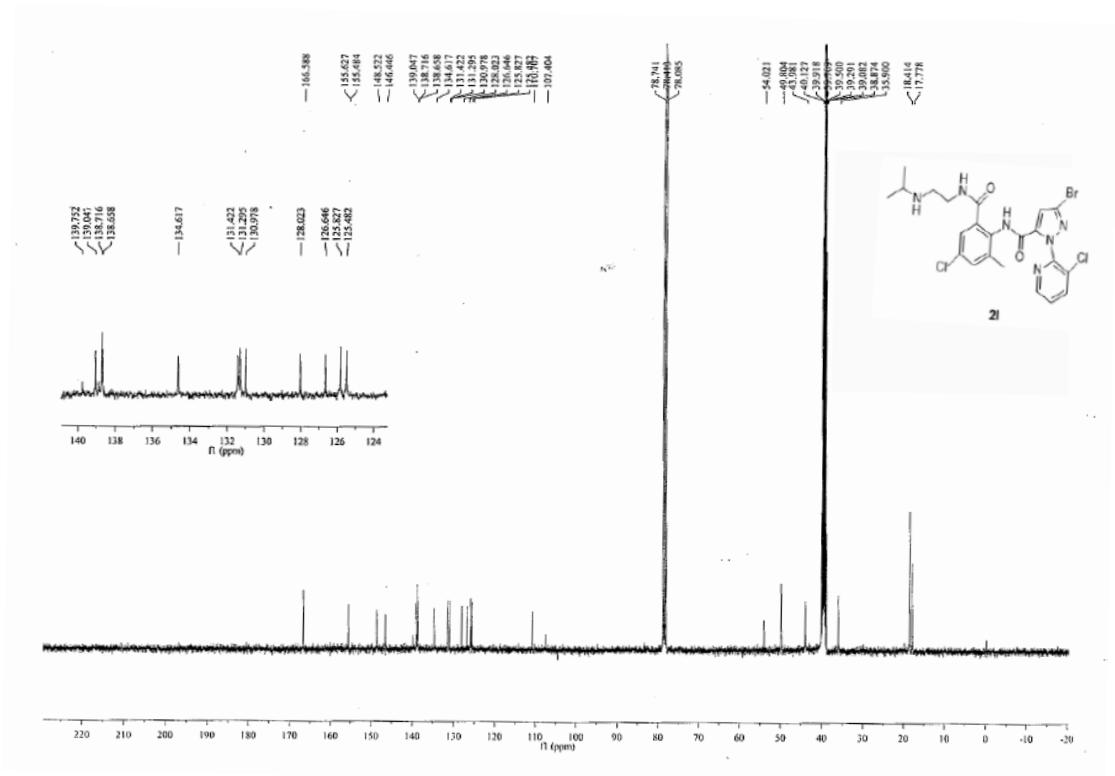


Figure S37. ^{13}C-NMR spectrum of compound **2l**.

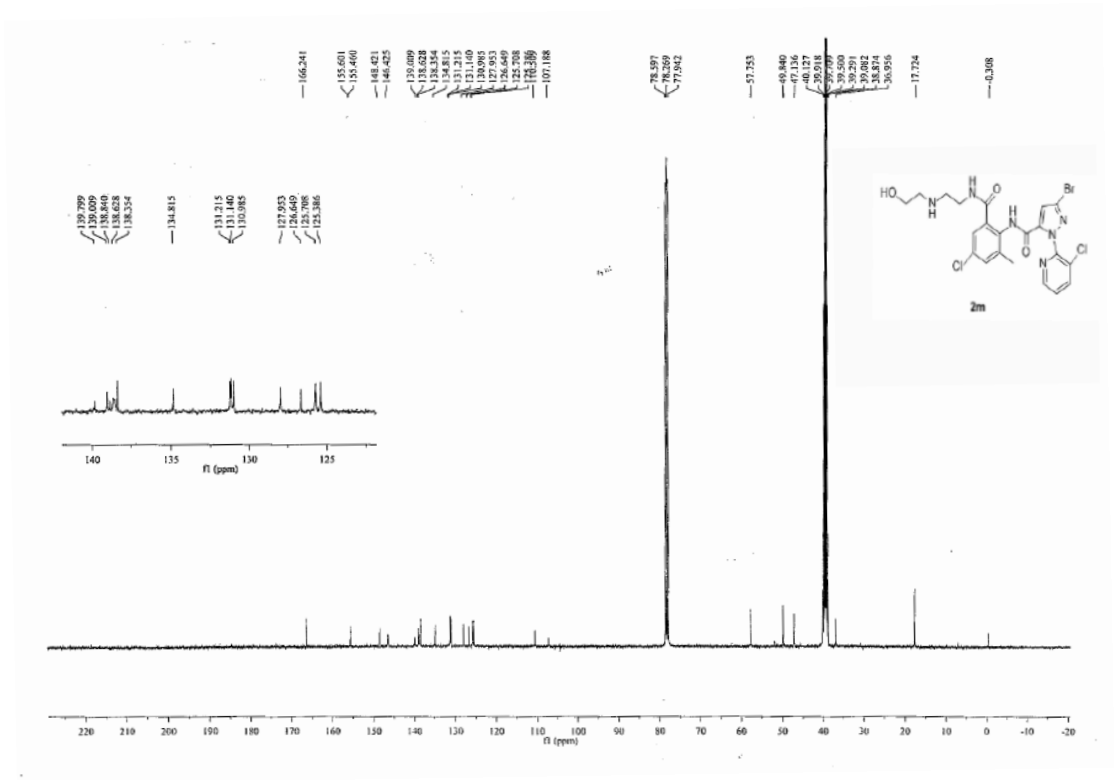


Figure S38. ^{13}C-NMR spectrum of compound **2m**.

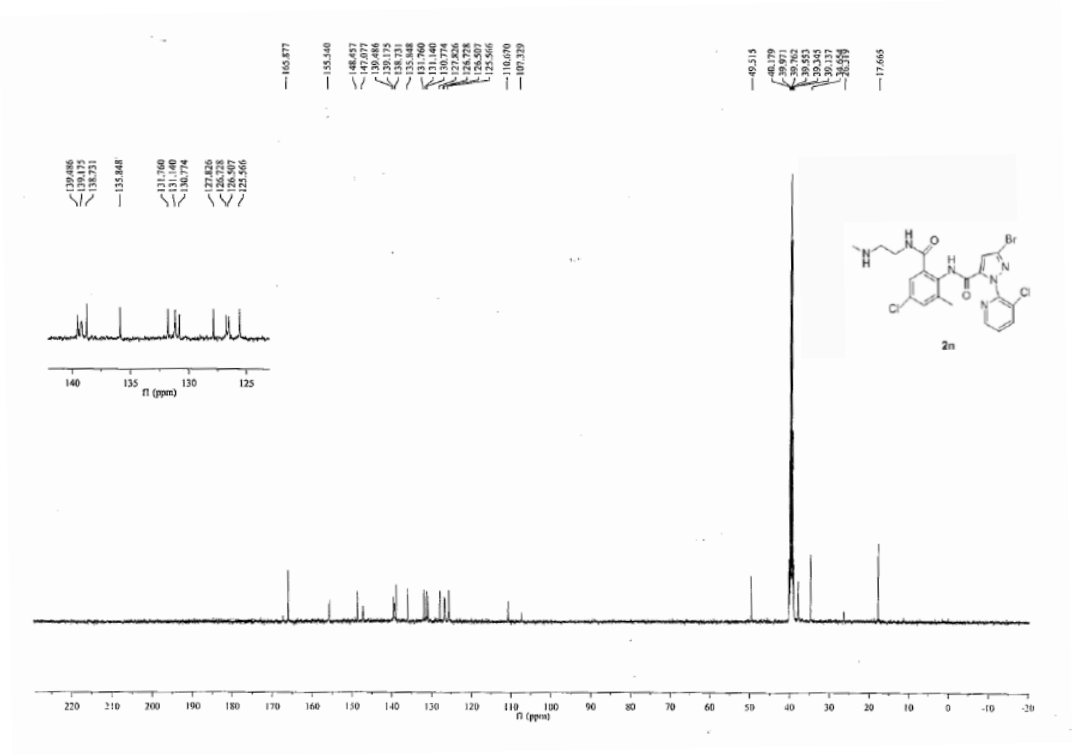


Figure S39. ^{13}C-NMR spectrum of compound **2n**.

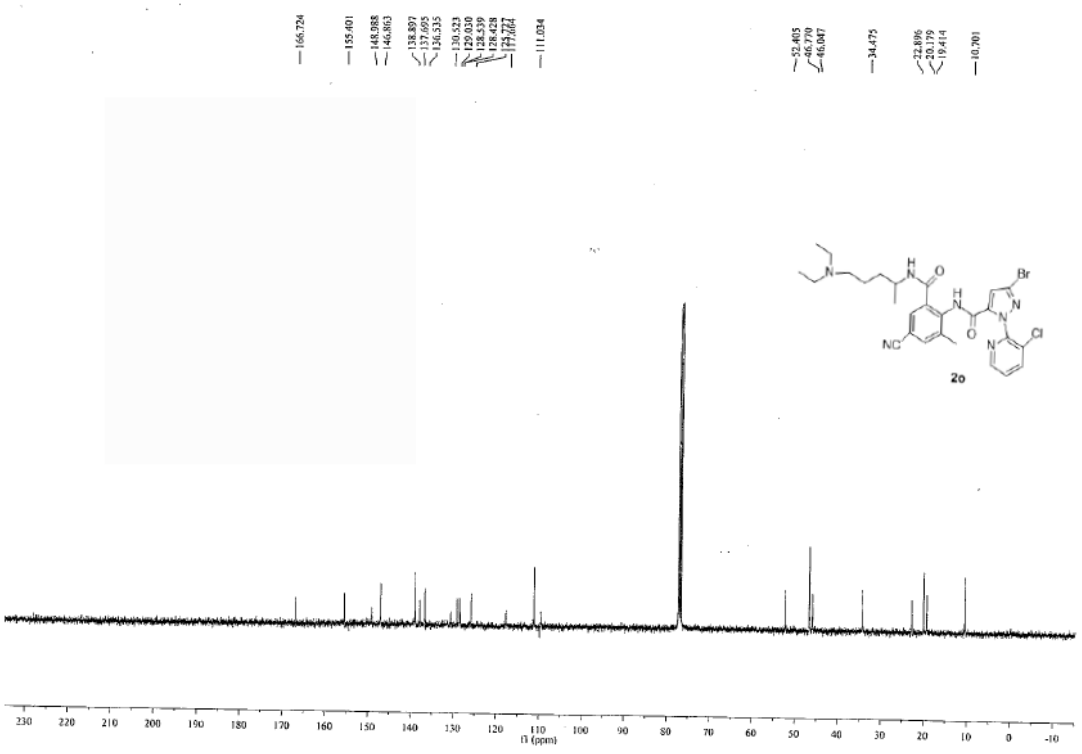


Figure S40. ^{13}C-NMR spectrum of compound **2o**.

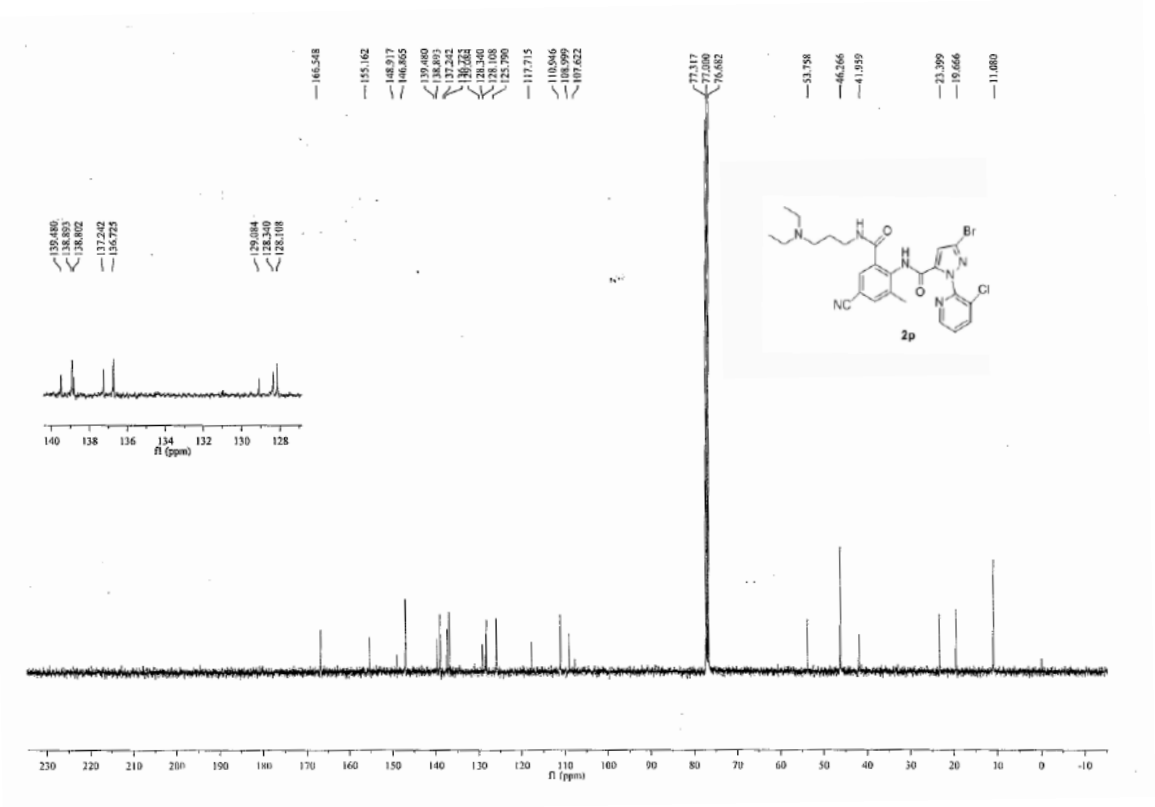


Figure S41. ^{13}C-NMR spectrum of compound **2p**.

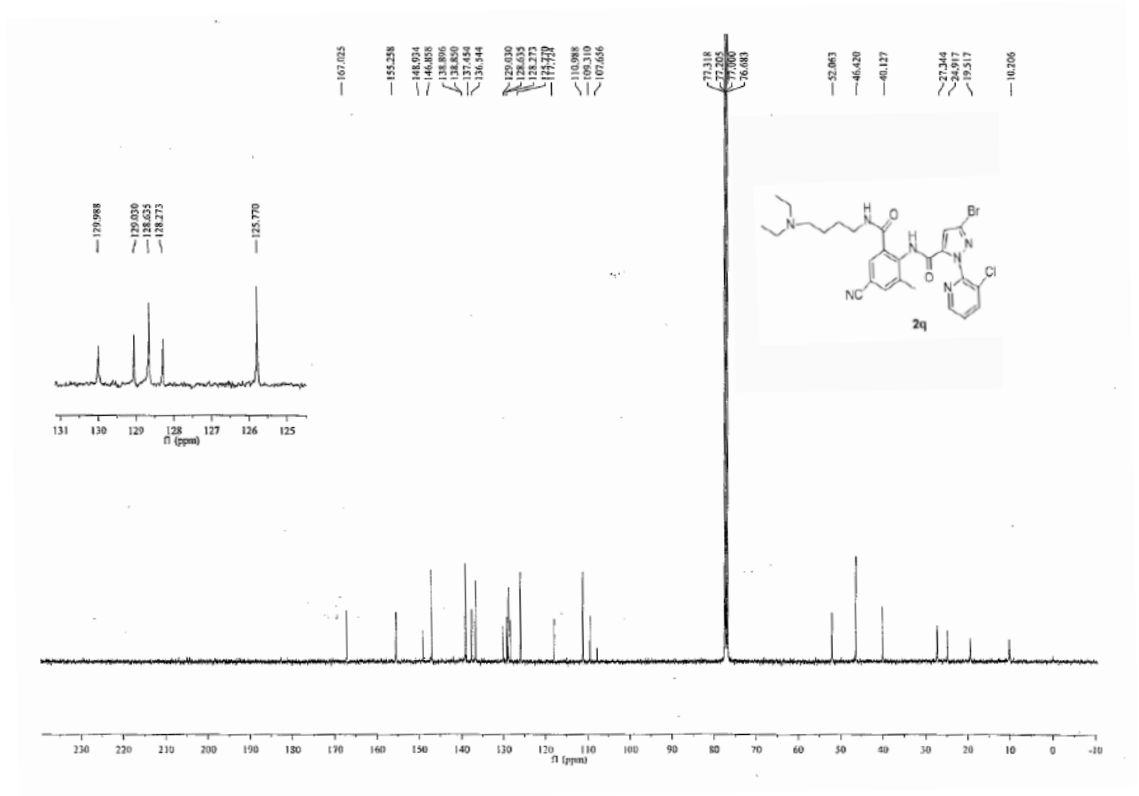


Figure S42. ^{13}C-NMR spectrum of compound **2q**.

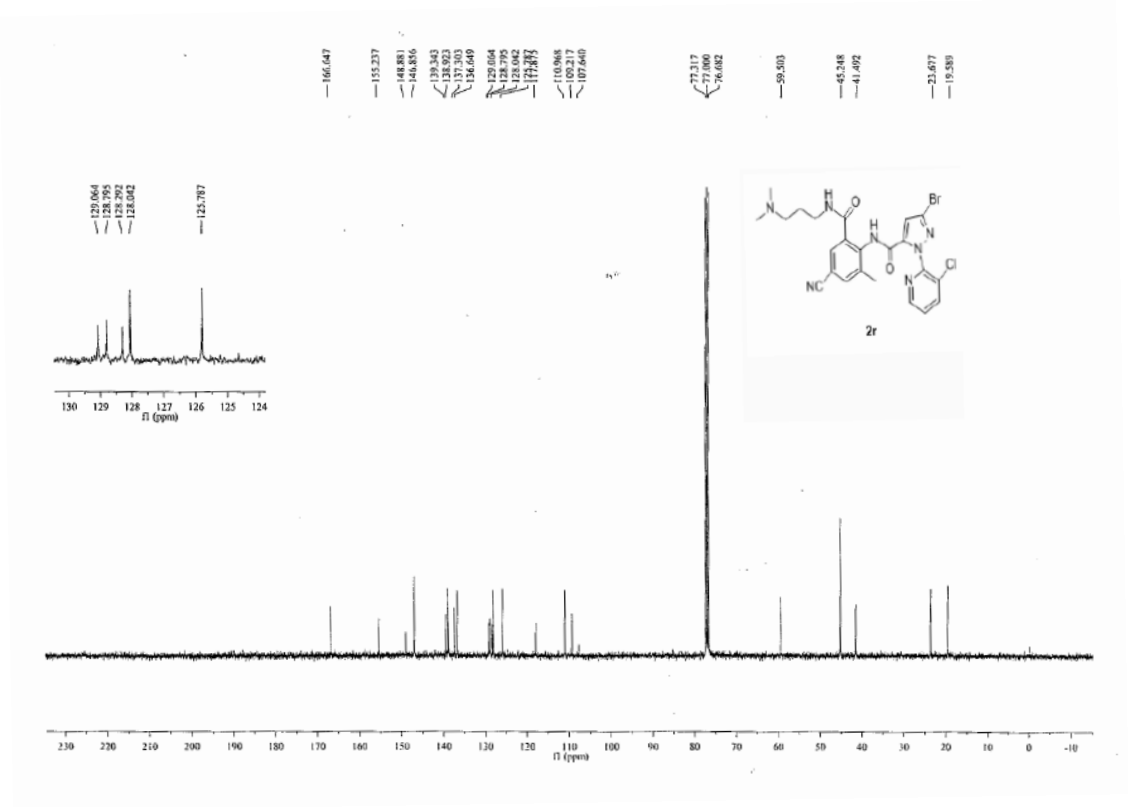


Figure S43. ^{13}C-NMR spectrum of compound **2r**.

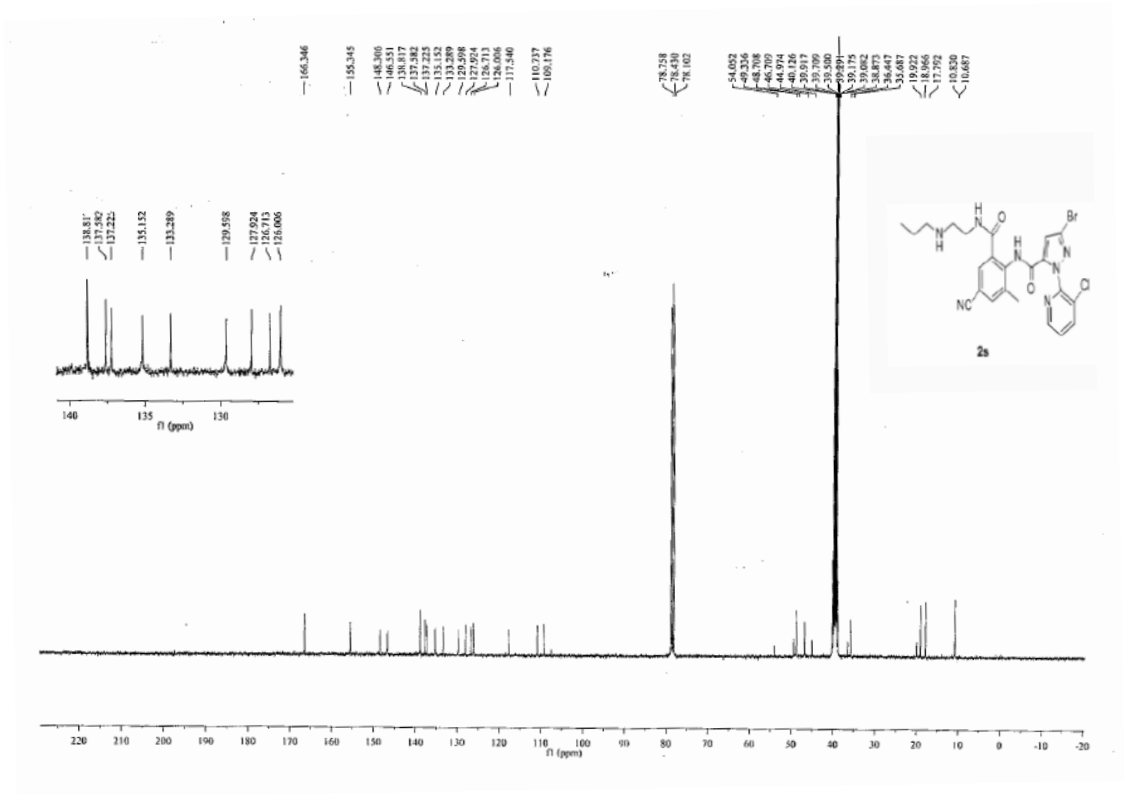


Figure S44. ^{13}C-NMR spectrum of compound **2s**.

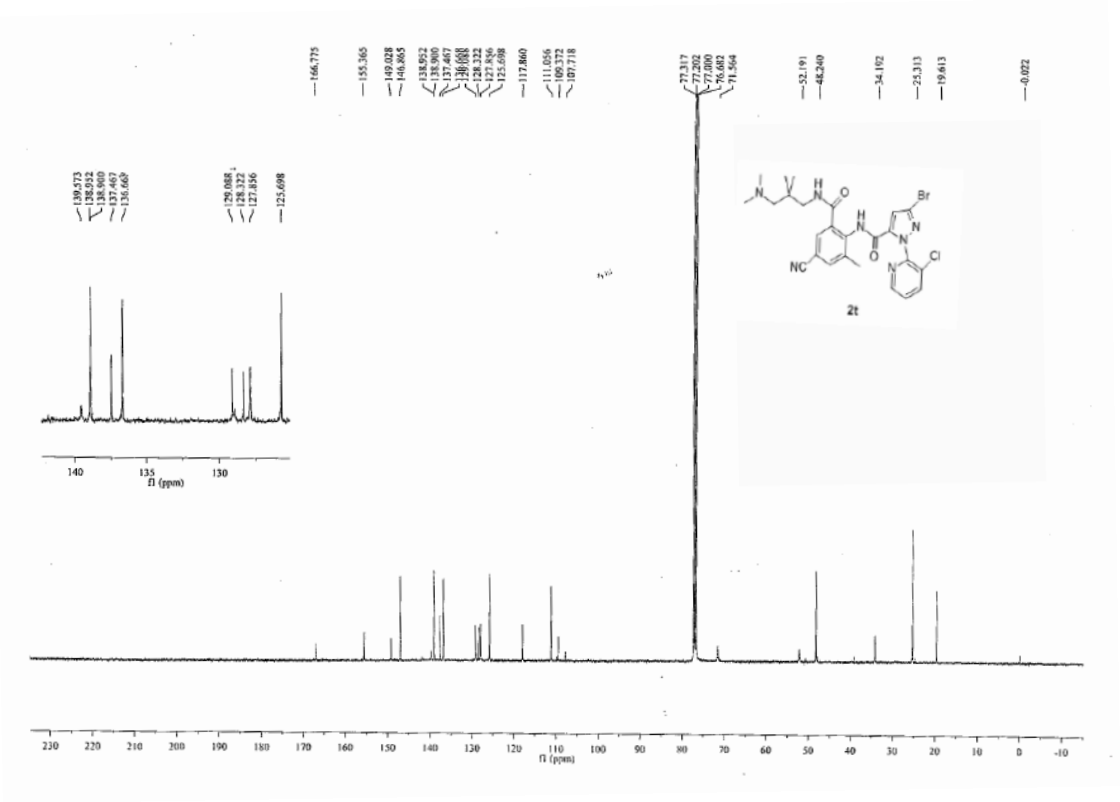


Figure S45. ^{13}C-NMR spectrum of compound **2t**.

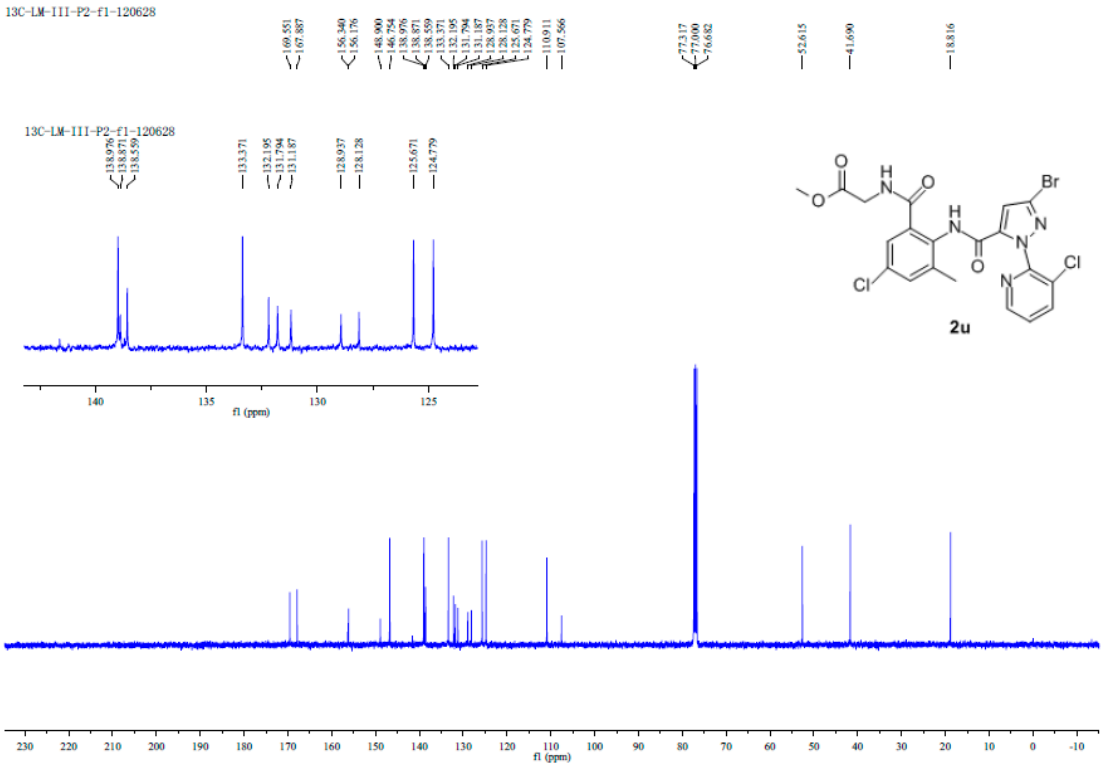


Figure S46. ^{13}C-NMR spectrum of compound **2u**.

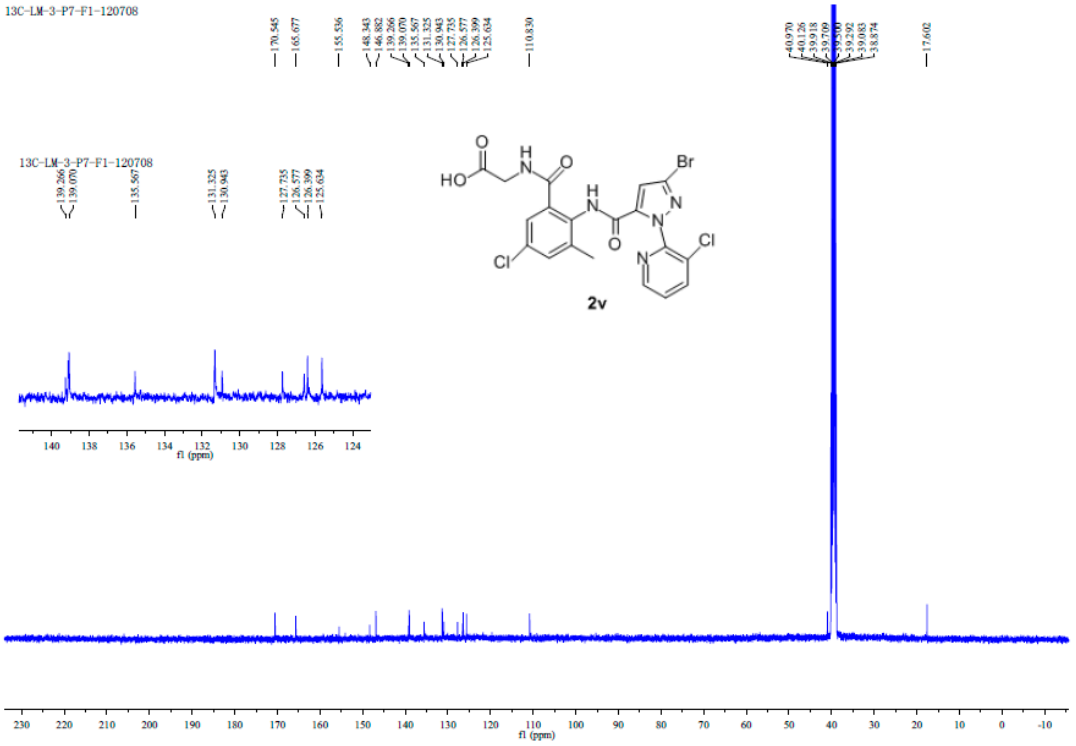


Figure S47. ^{13}C-NMR spectrum of compound **2v**.

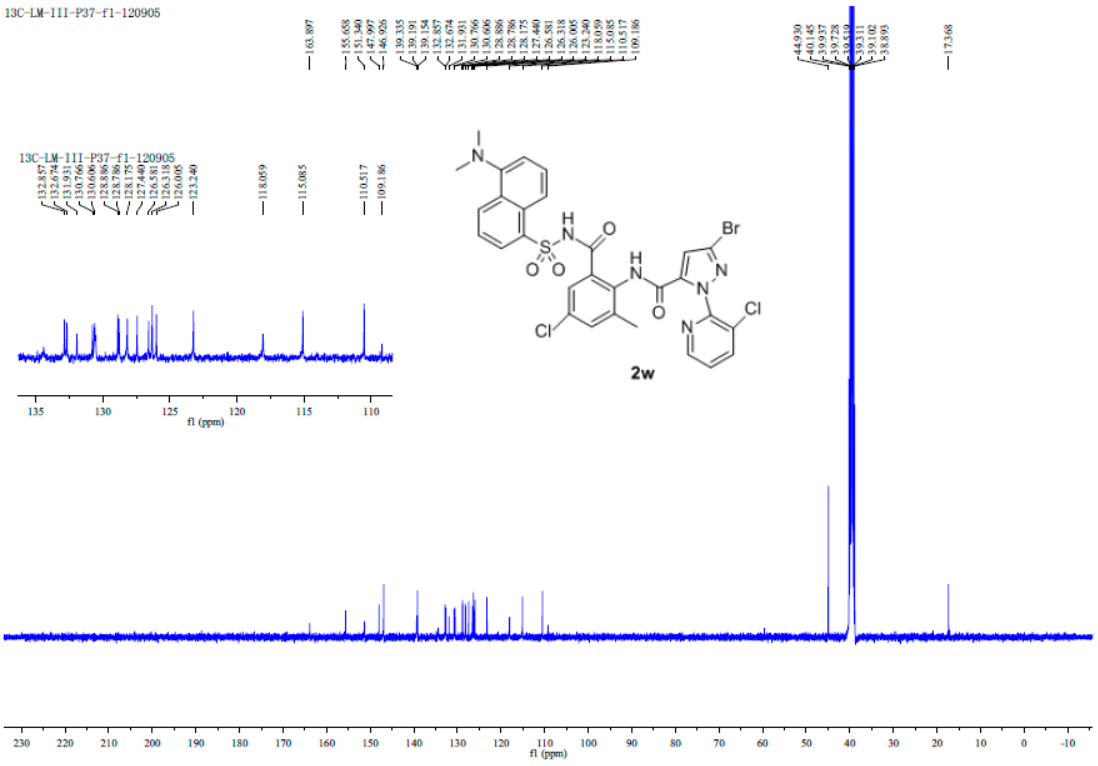


Figure S48. ^{13}C-NMR spectrum of compound **2w**.

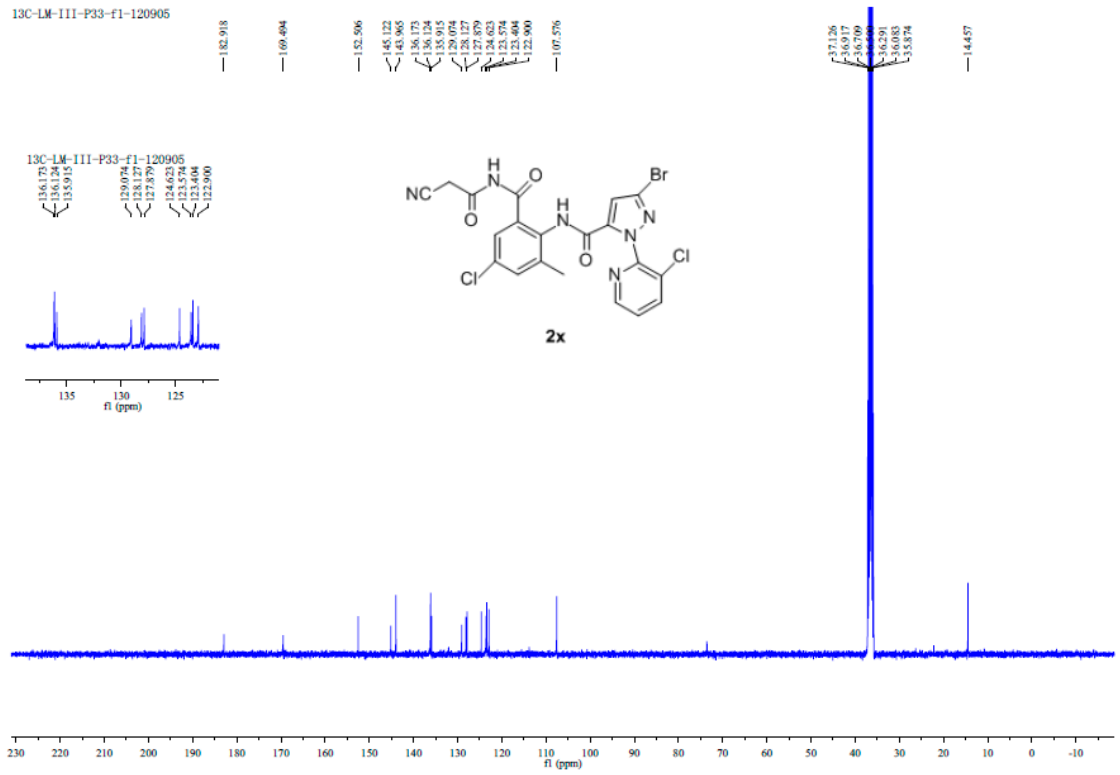


Figure S49. ^{13}C-NMR spectrum of compound **2x**.

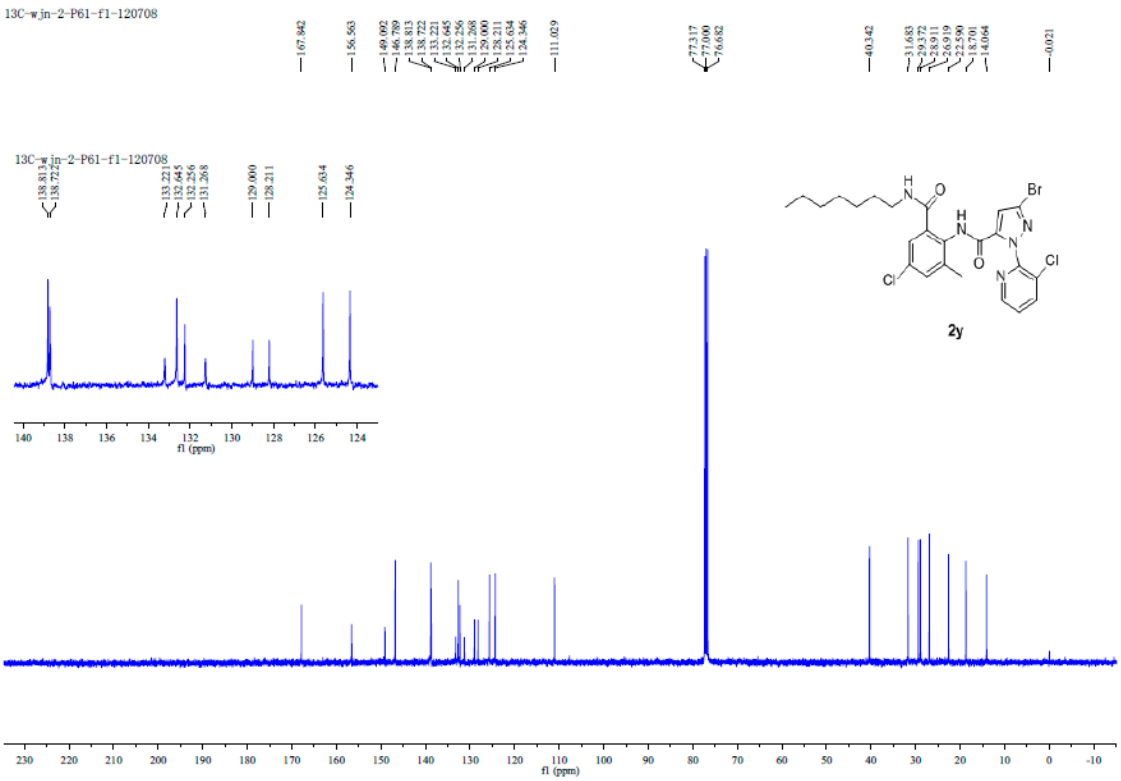


Figure S50. ^{13}C-NMR spectrum of compound **2y**.

3. HR-MS

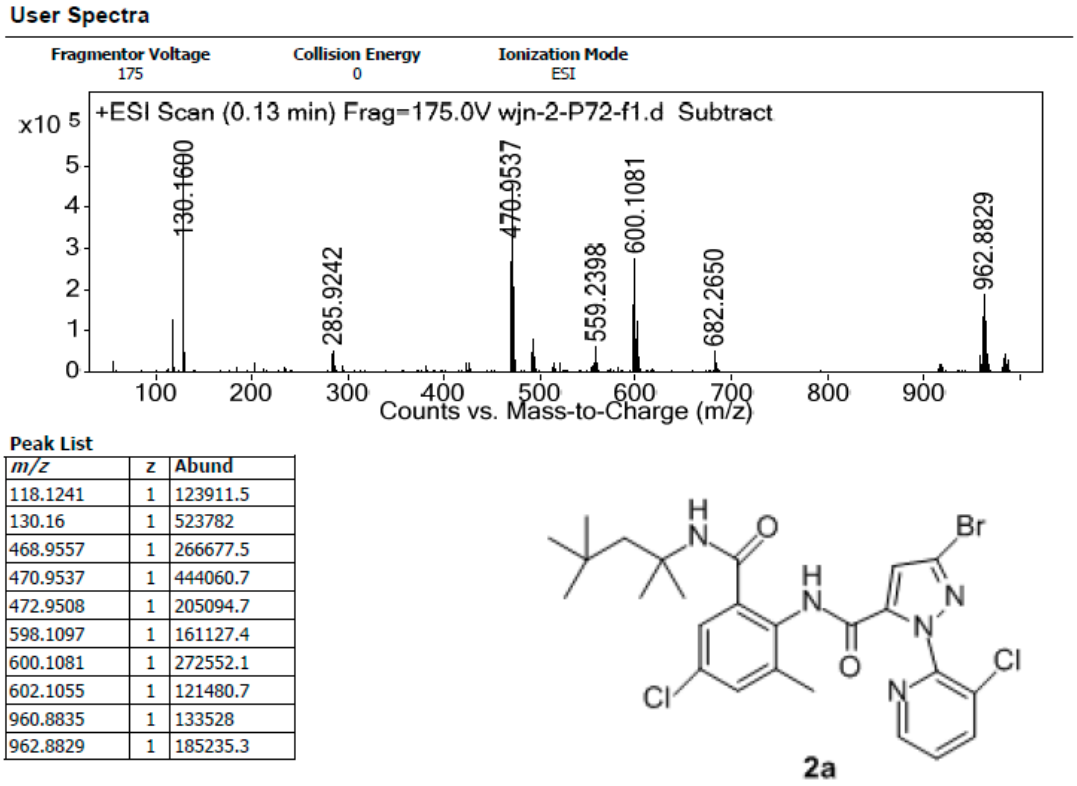


Figure S51. HR-MS spectrum of compound **2a**.

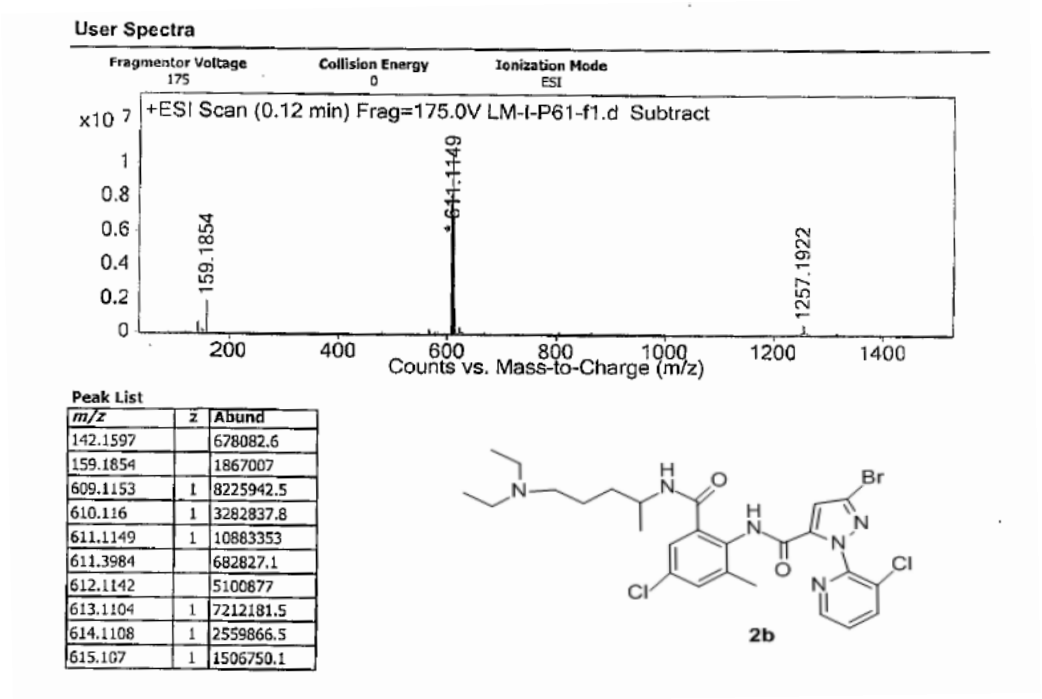


Figure S52. HR-MS spectrum of compound **2b**.

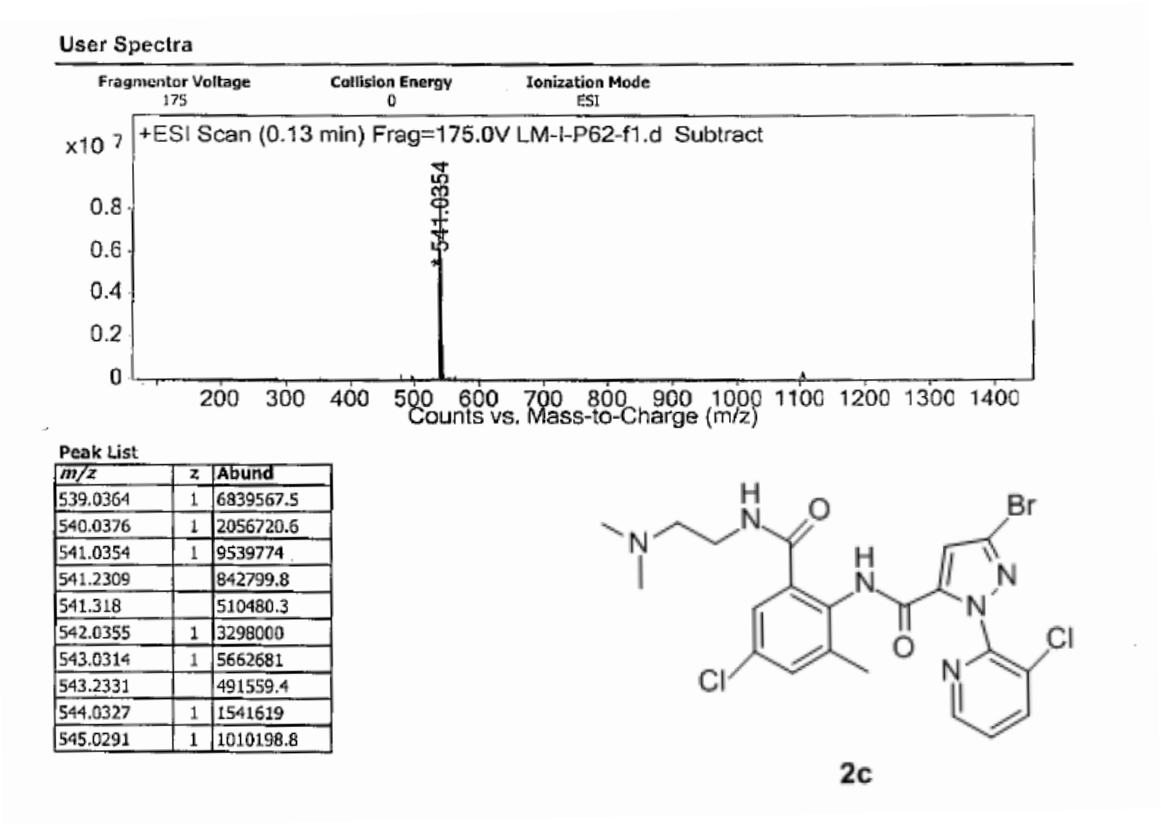


Figure S53. HR-MS spectrum of compound **2c**.

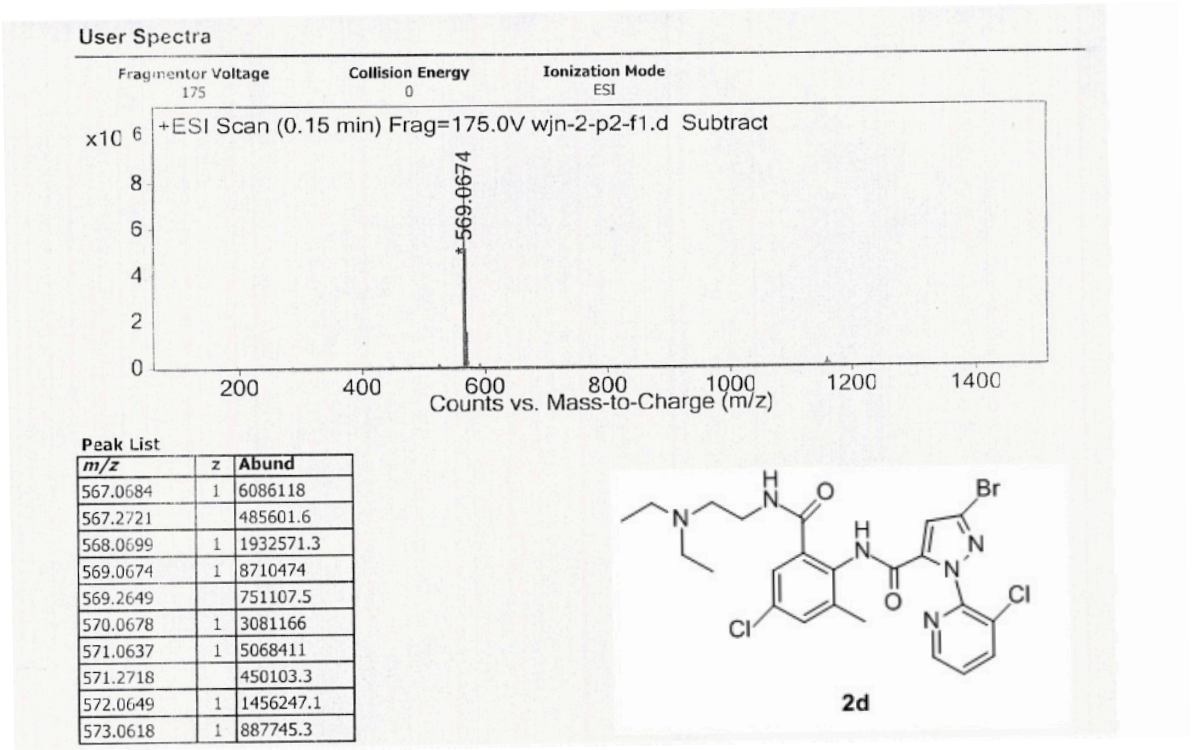


Figure S54. HR-MS spectrum of compound **2d**.

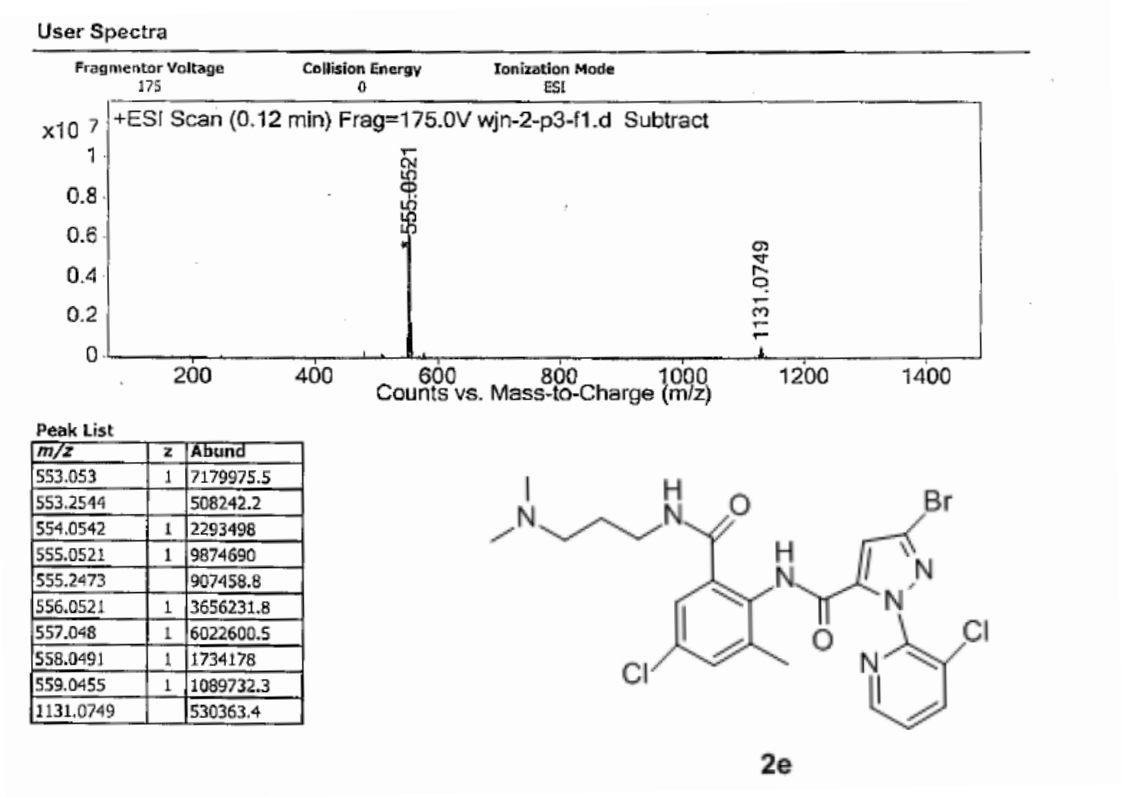


Figure S55. HR-MS spectrum of compound **2e**.

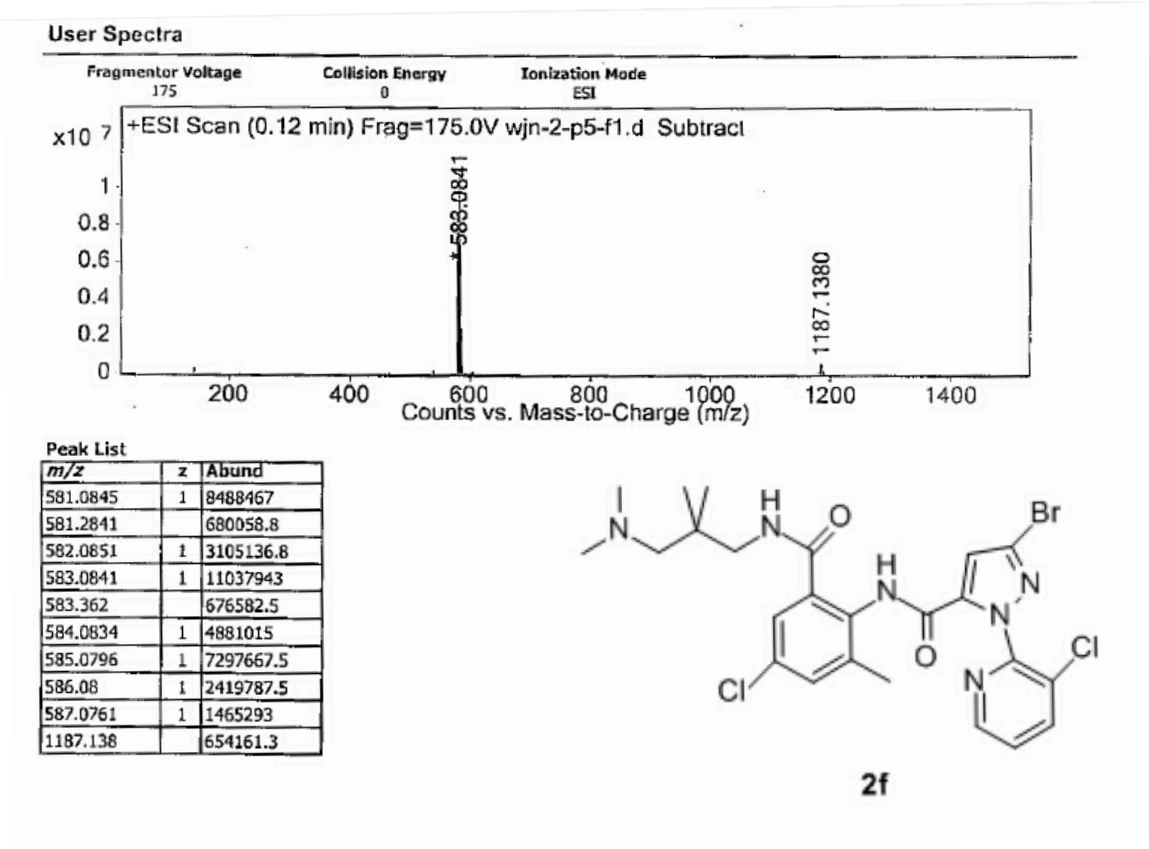


Figure S56. HR-MS spectrum of compound **2f**.

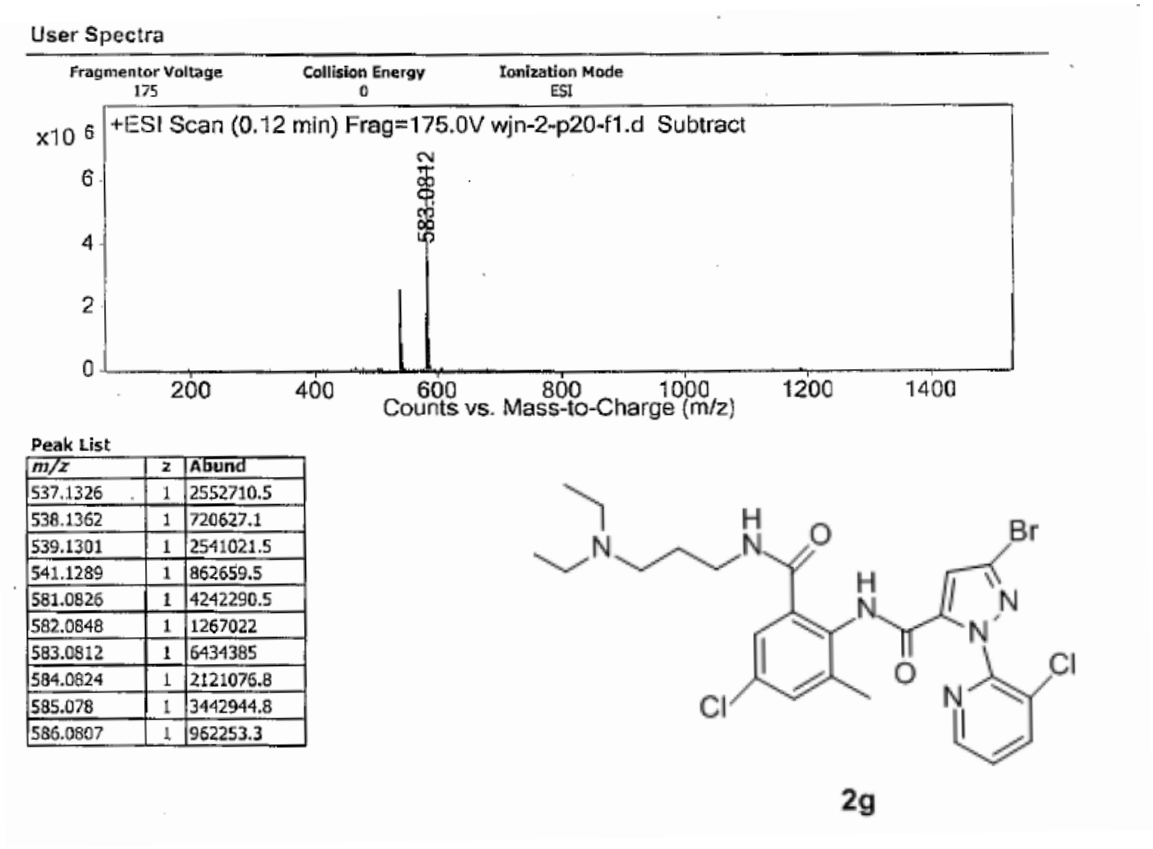


Figure S57. HR-MS spectrum of compound **2g**.

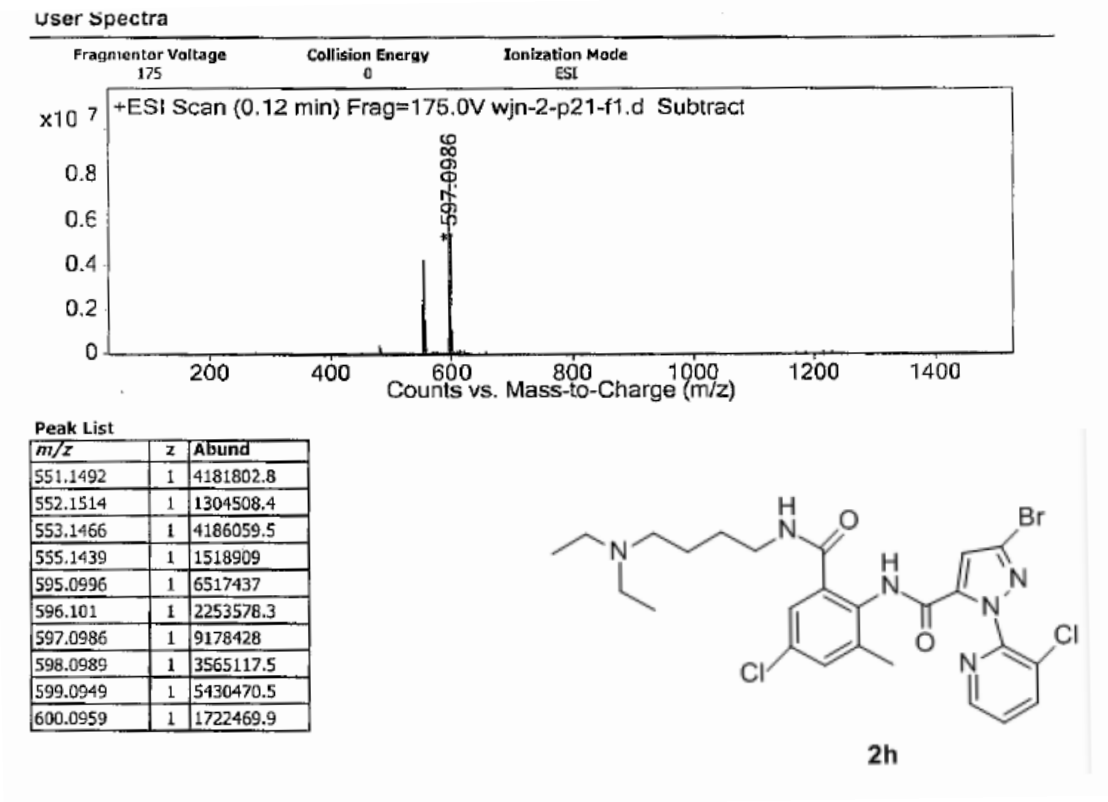


Figure S58. HR-MS spectrum of compound **2h**.

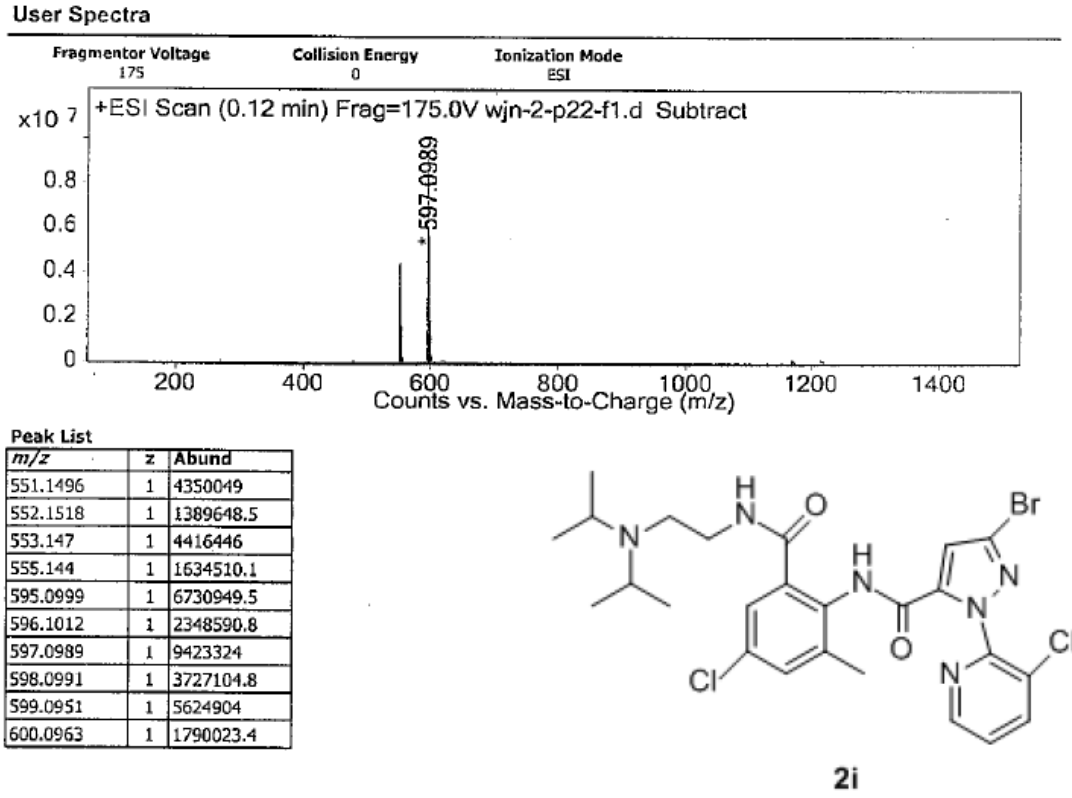


Figure S59. HR-MS spectrum of compound **2i**.

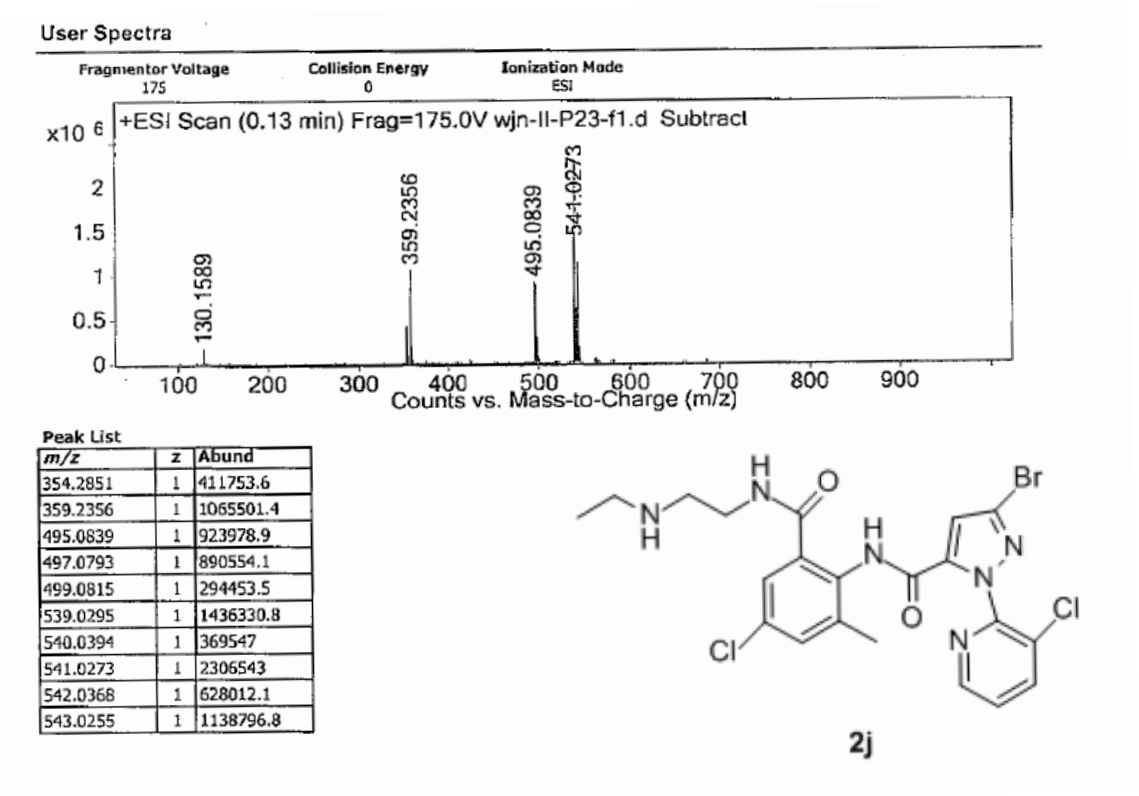


Figure S60. HR-MS spectrum of compound **2j**.

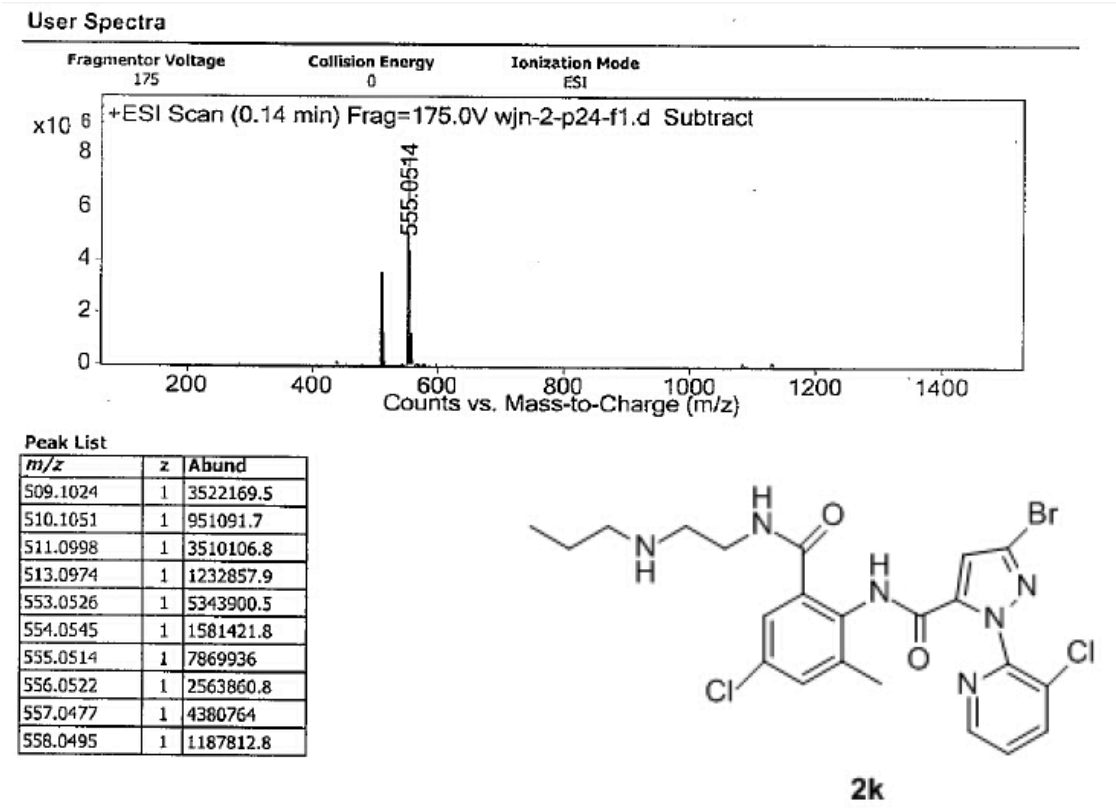


Figure S61. HR-MS spectrum of compound **2k**.

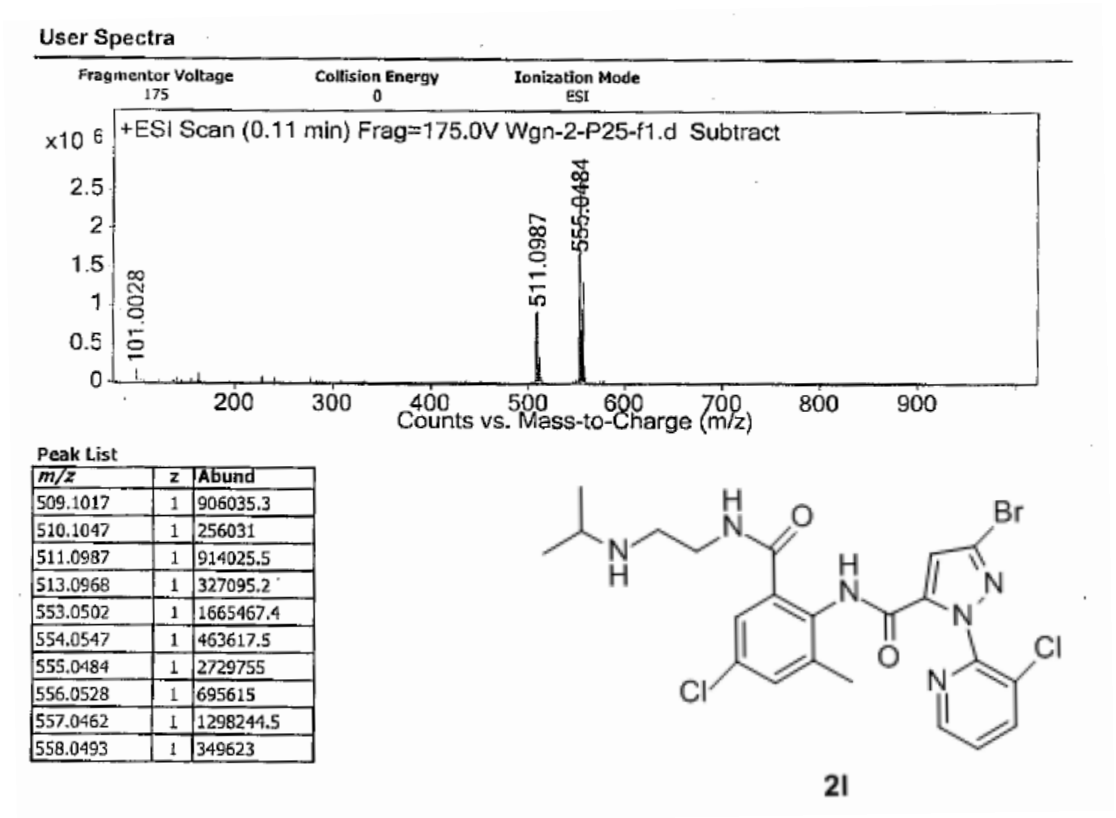


Figure S62. HR-MS spectrum of compound **2l**.

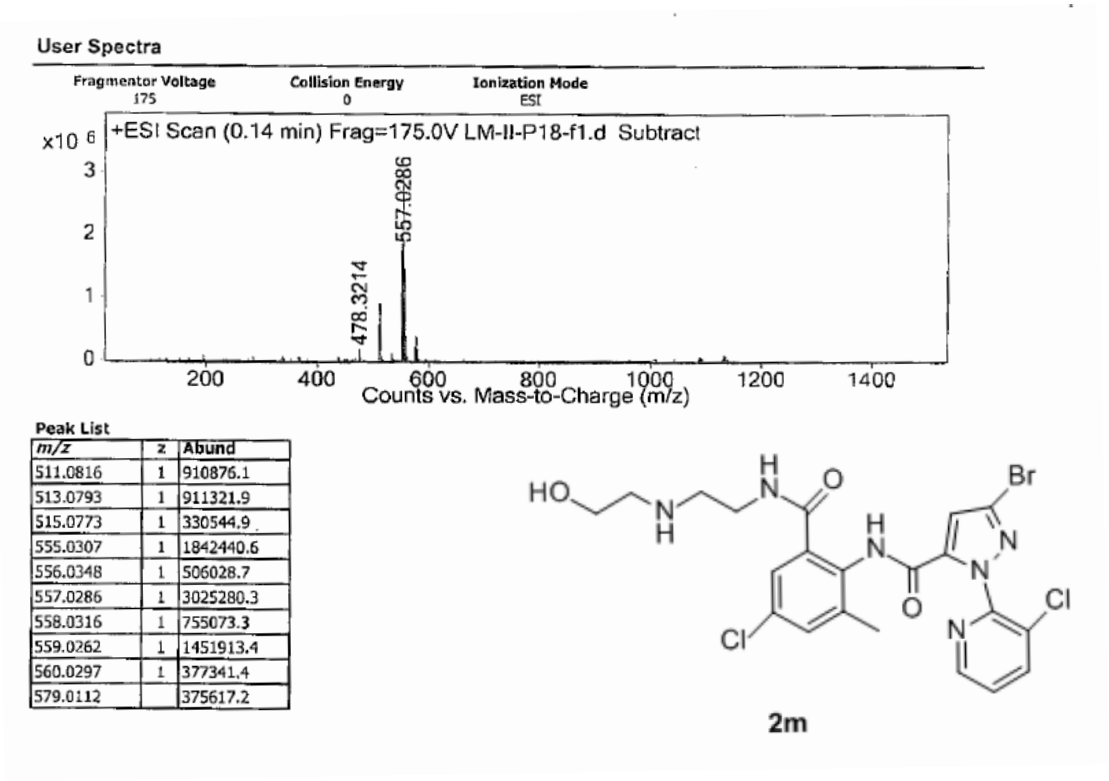


Figure S63. HR-MS spectrum of compound **2m**.

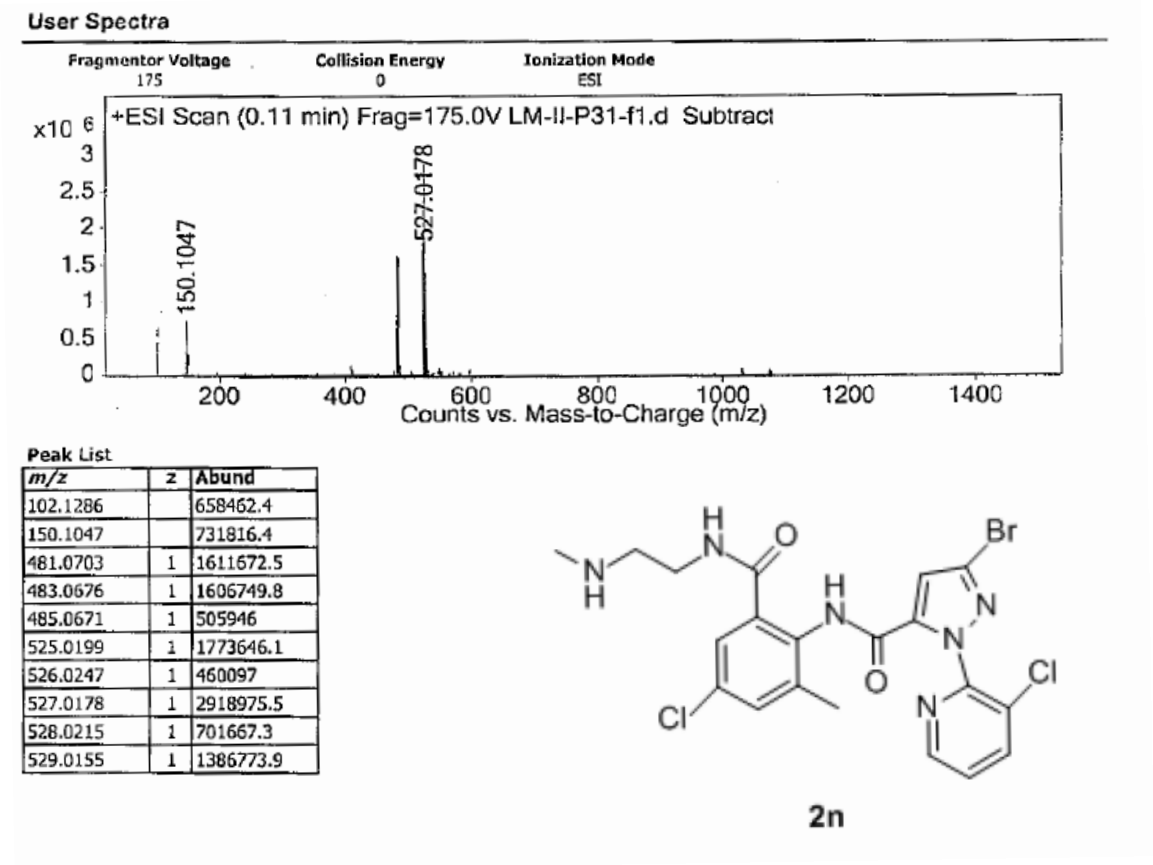


Figure S64. HR-MS spectrum of compound **2n**.

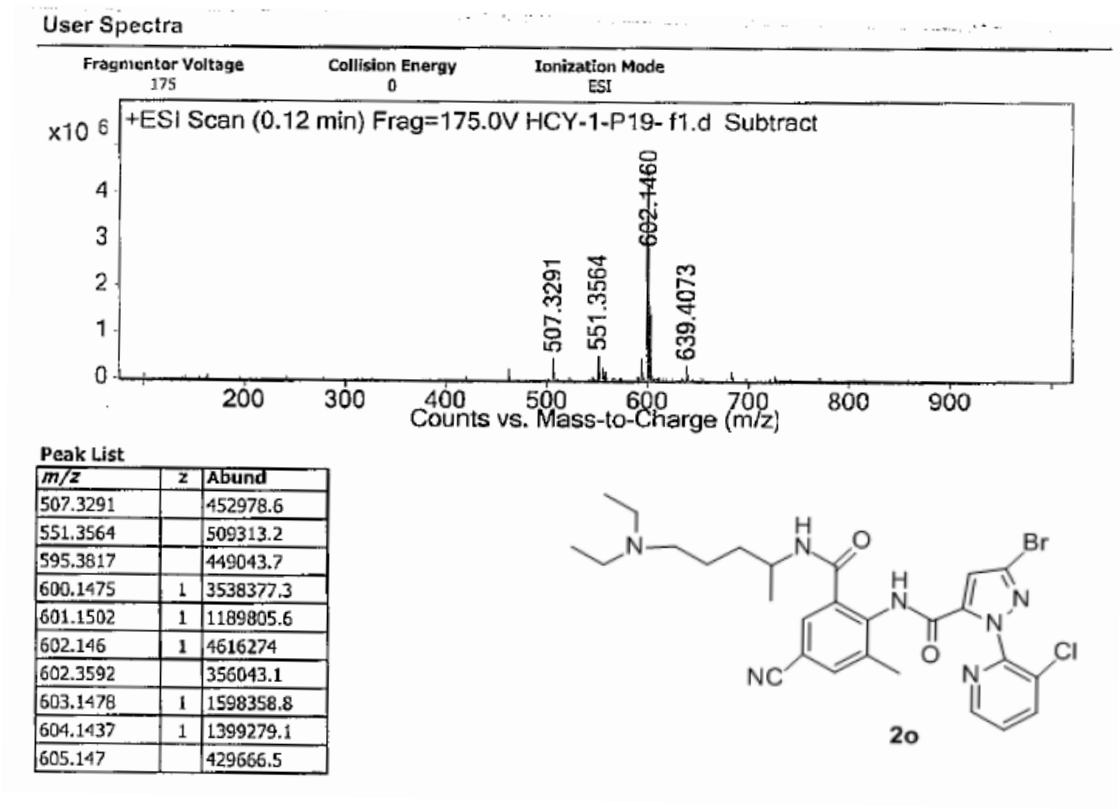


Figure S65. HR-MS spectrum of compound **2o**.

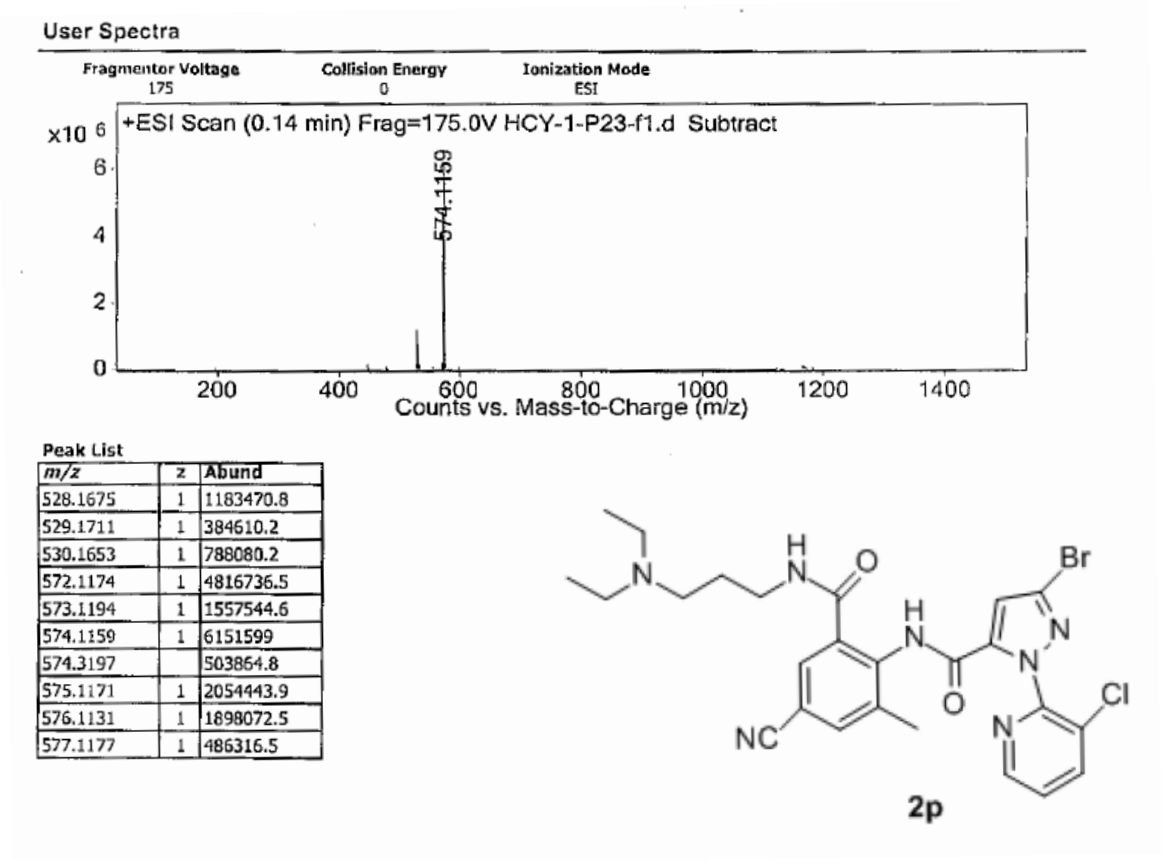


Figure S66. HR-MS spectrum of compound **2p**.

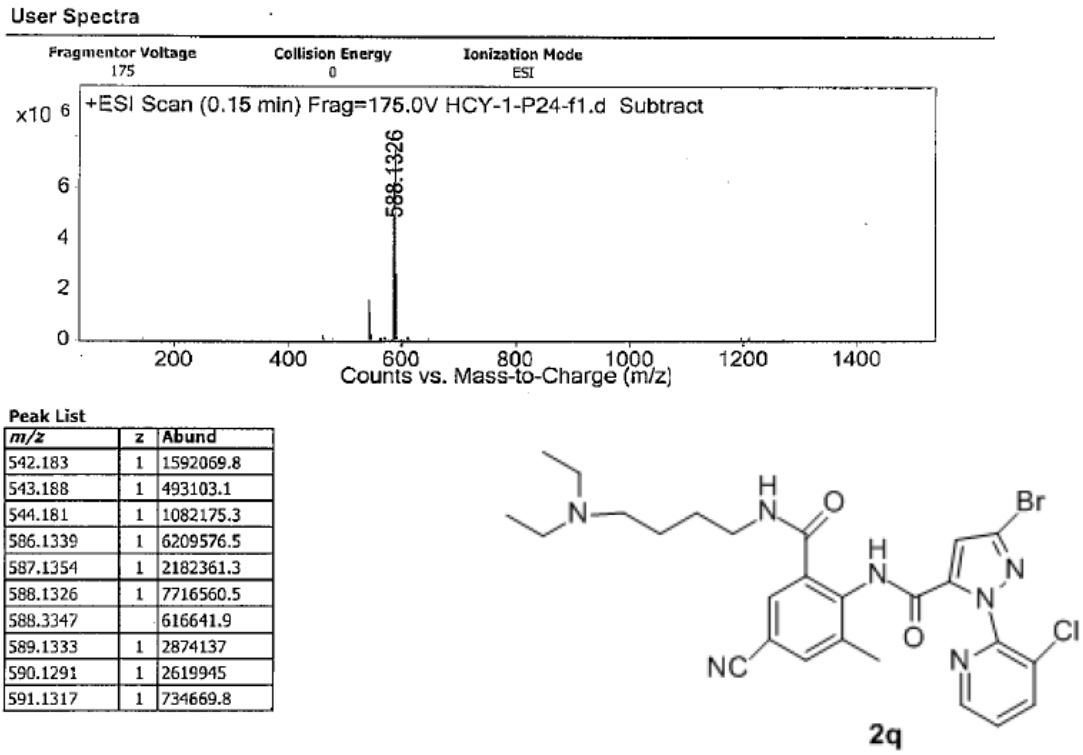


Figure S67. HR-MS spectrum of compound **2q**.

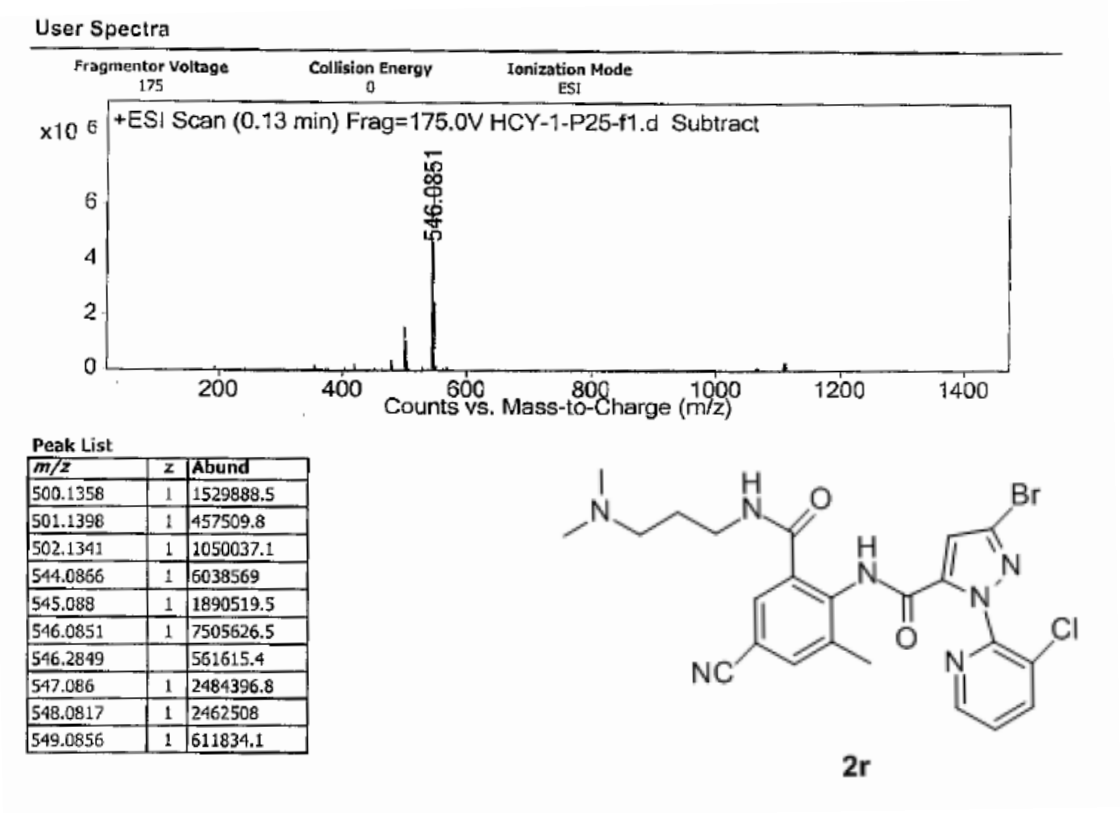


Figure S68. HR-MS spectrum of compound **2r**.

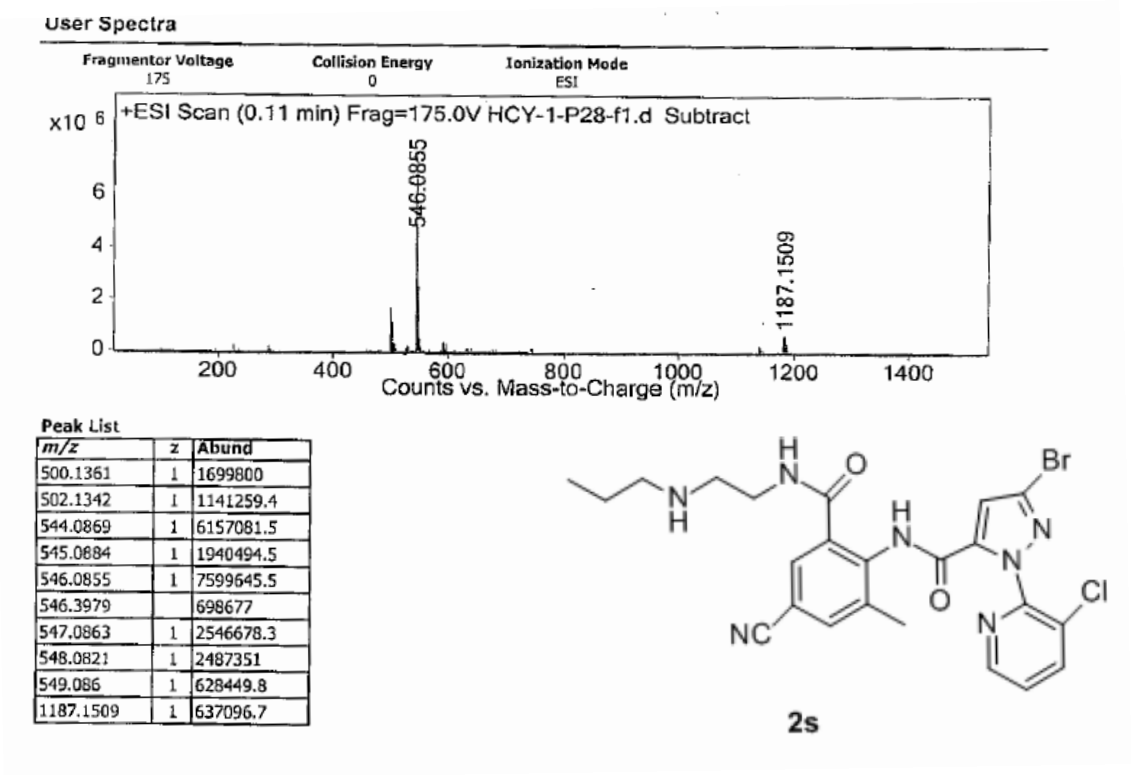


Figure S69. HR-MS spectrum of compound **2s**.

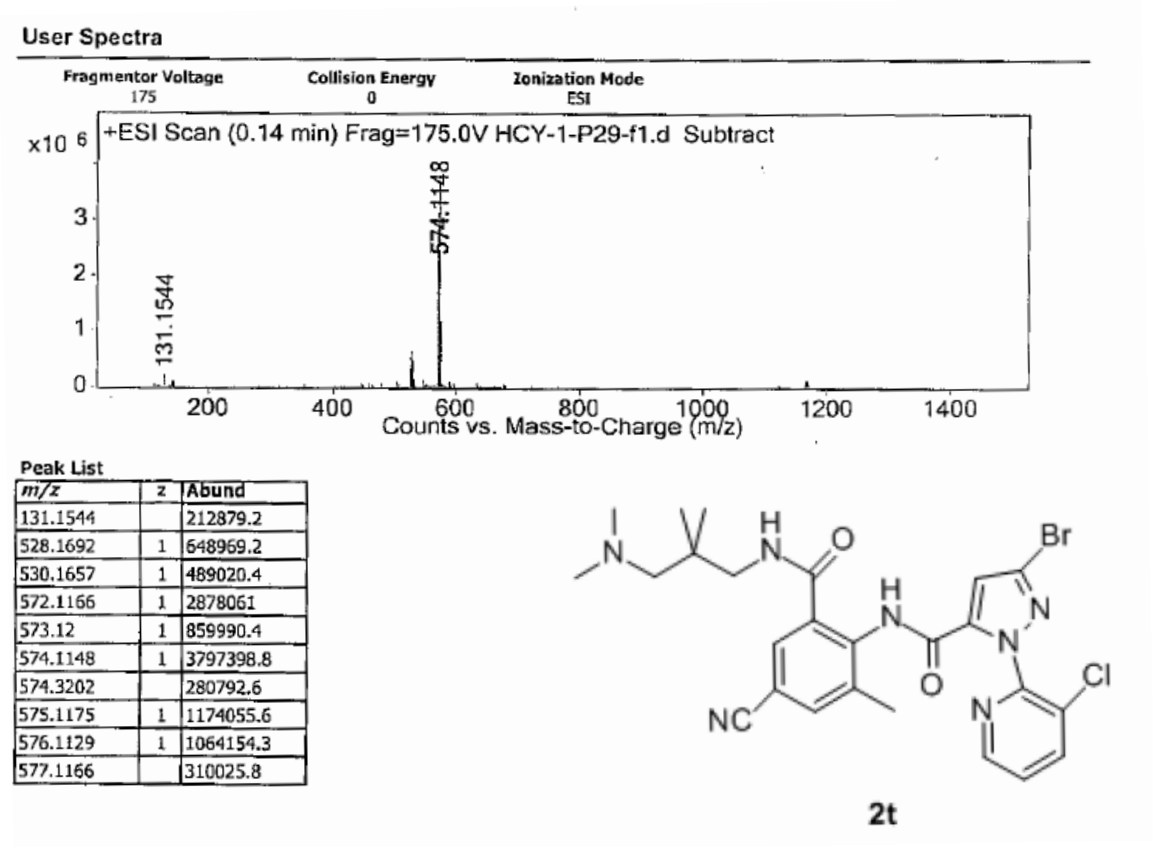


Figure S70. HR-MS spectrum of compound **2t**.

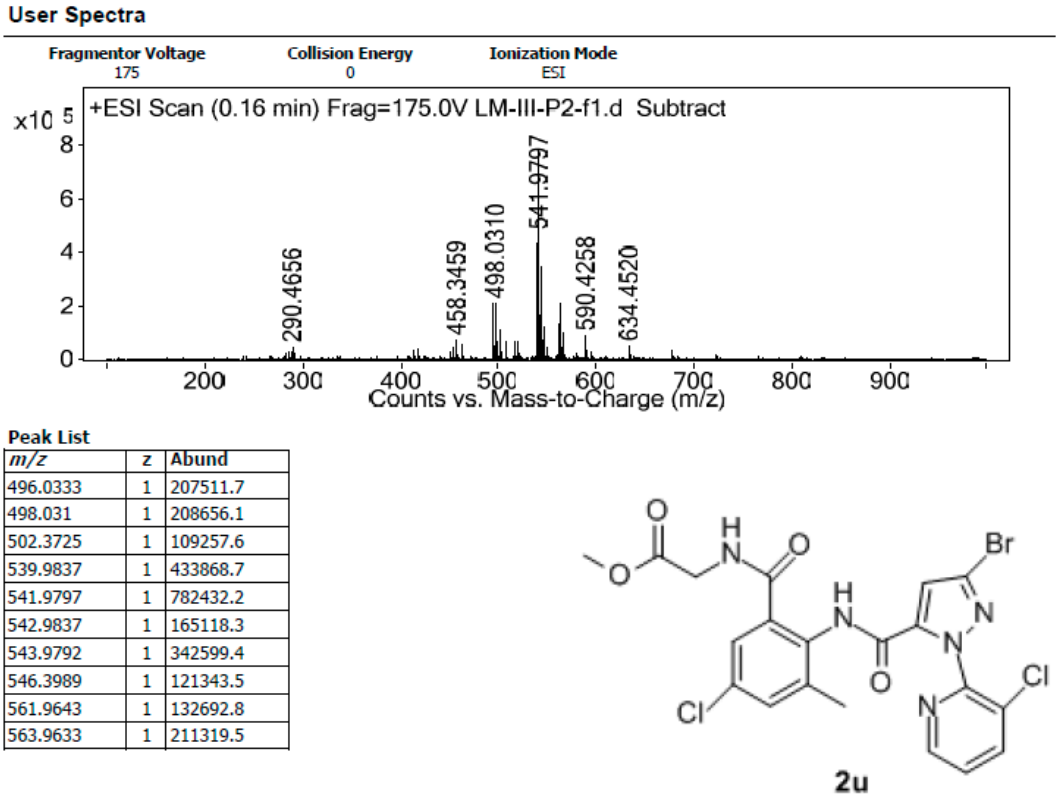


Figure S71. HR-MS spectrum of compound **2u**.

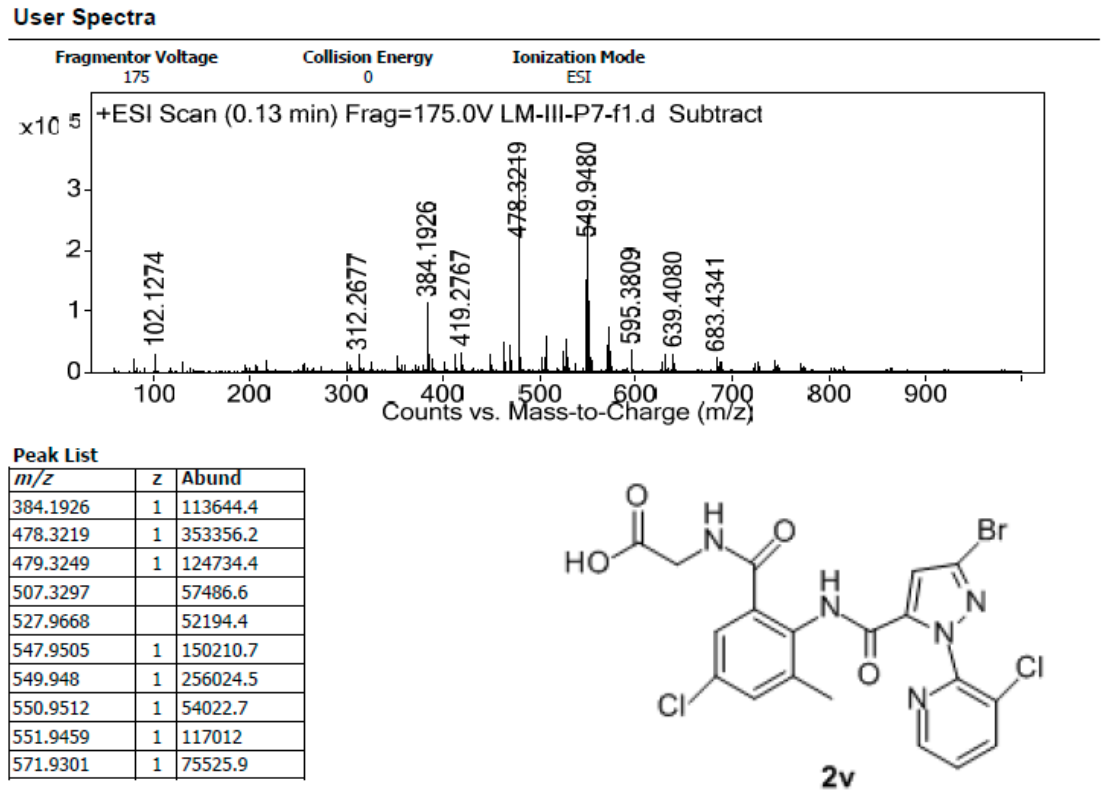


Figure S72. HR-MS spectrum of compound **2v**.

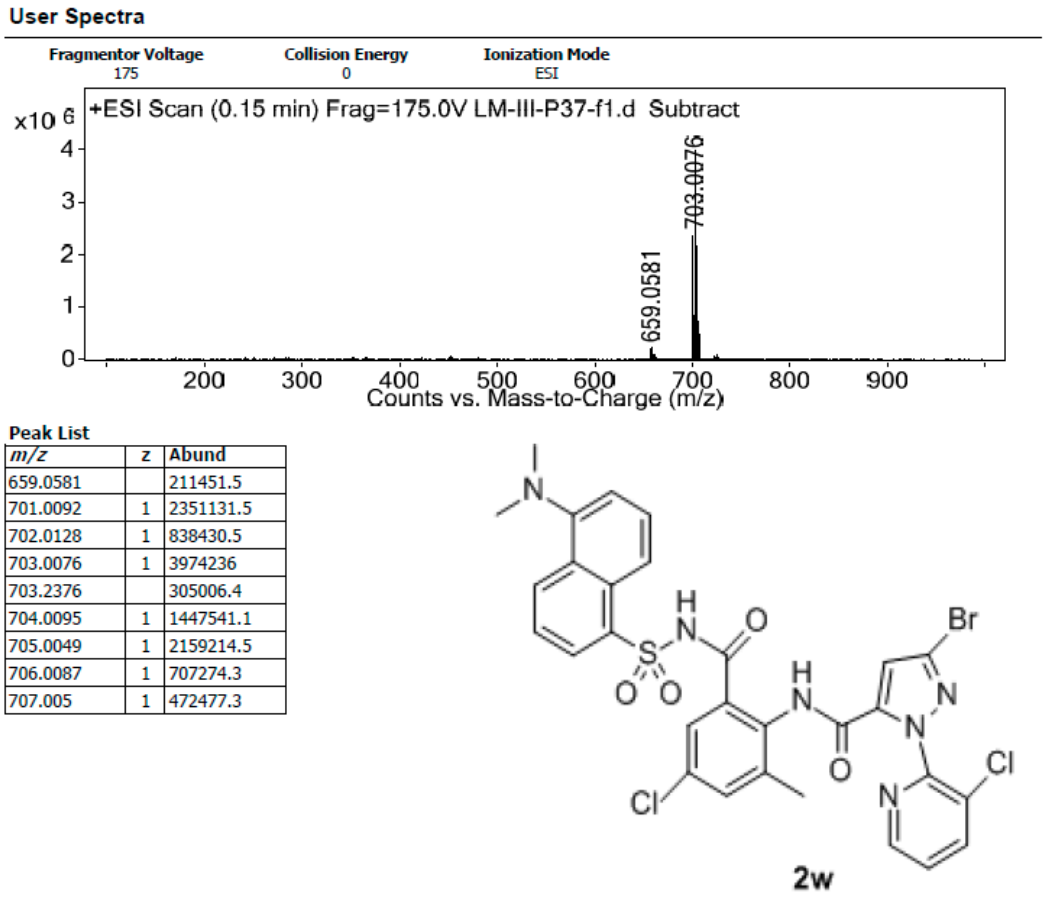


Figure S73. HR-MS spectrum of compound **2w**.

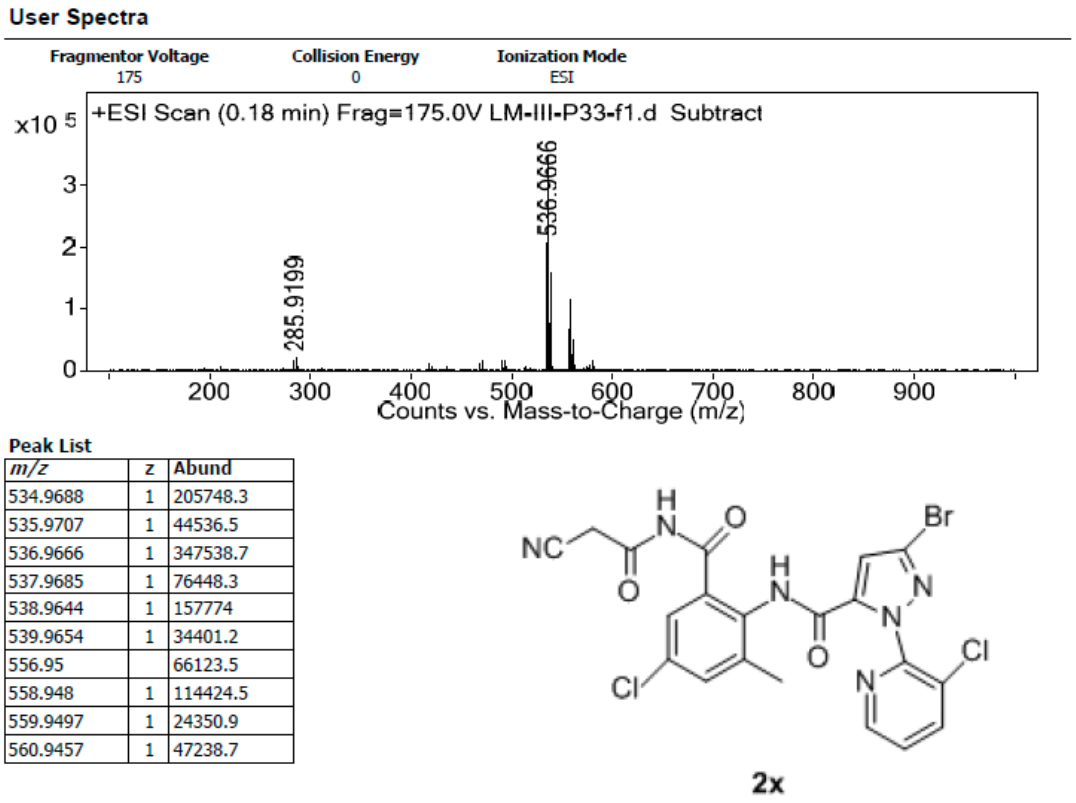
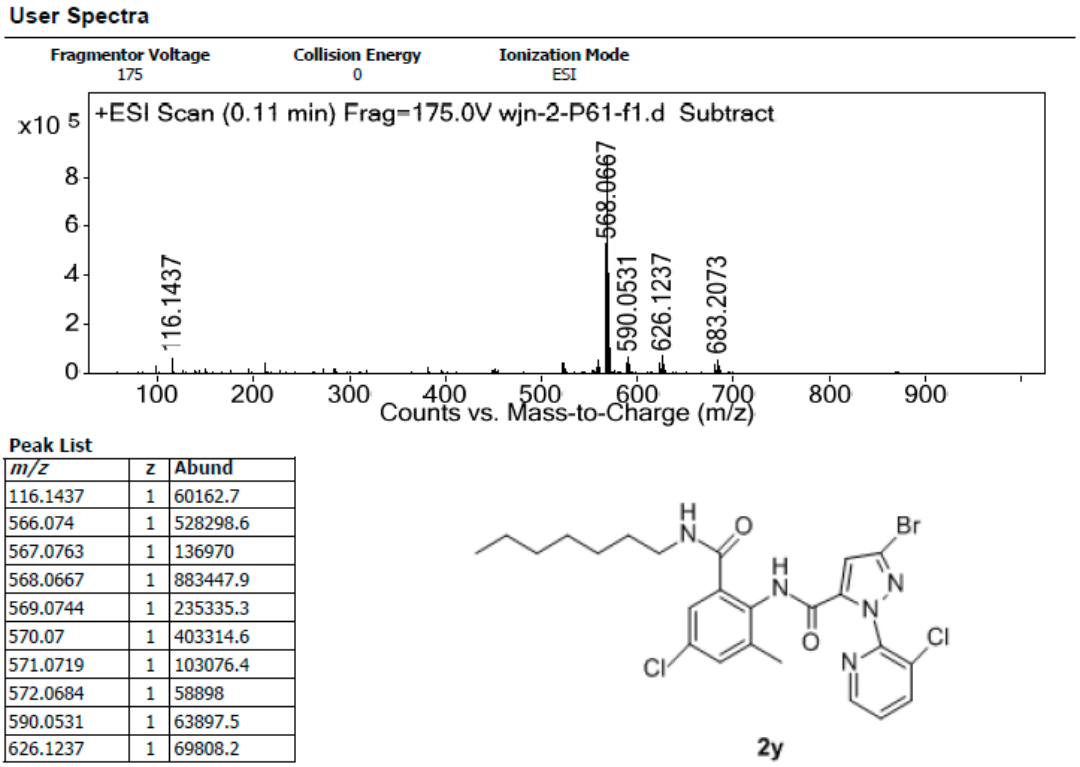


Figure S74. HR-MS spectrum of compound **2x**.



Peak List

m/z	z	Abund
116.1437	1	60162.7
566.074	1	528298.6
567.0763	1	136970
568.0667	1	883447.9
569.0744	1	235335.3
570.07	1	403314.6
571.0719	1	103076.4
572.0684	1	58898
590.0531	1	63897.5
626.1237	1	69808.2

2y

Figure S75. HR-MS spectrum of compound **2y**.