

# Supplementary Materials: One-Pot Three-Component Synthesis of Novel diethyl ((2-oxo-1,2-dihydroquinolin-3-yl)(arylamino)methyl)phosphonate as Potential Anticancer Agents

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<sup>1</sup>H-NMR and <sup>13</sup>C-NMR Spectrogram of compounds 4a–x

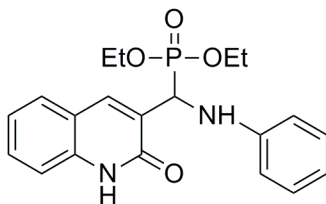


Figure S1. Chemical structure of compound 4a.

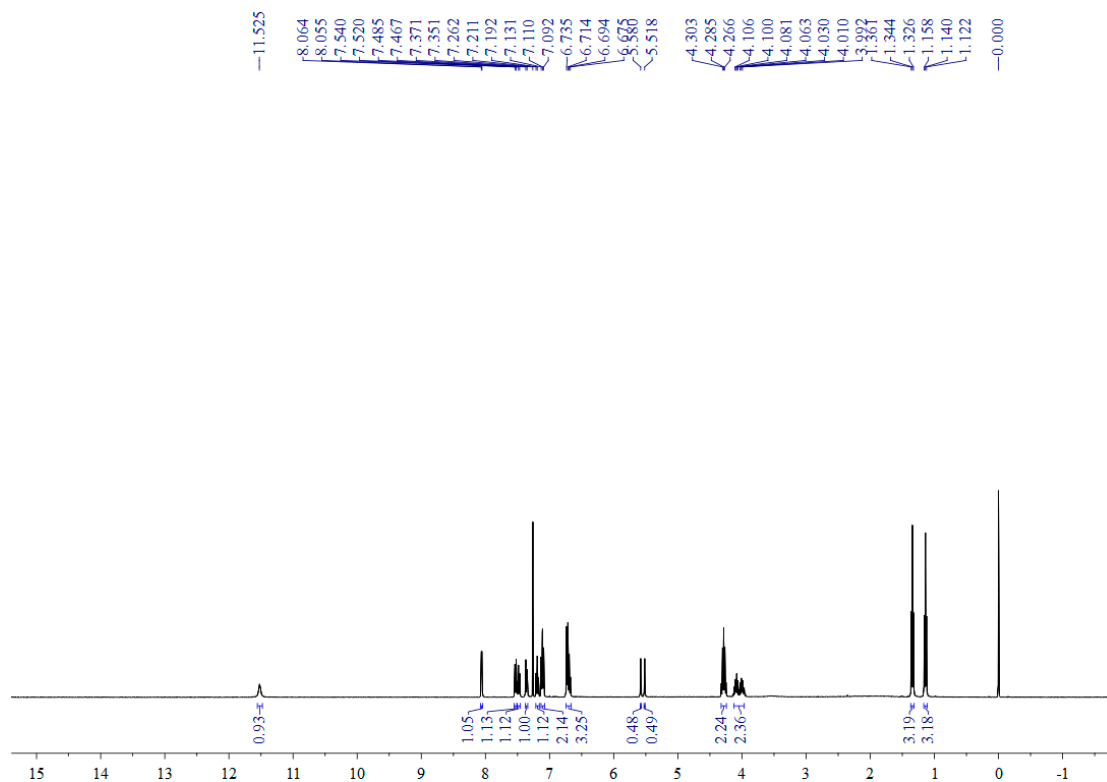


Figure S2. <sup>1</sup>H-NMR of compound 4a.

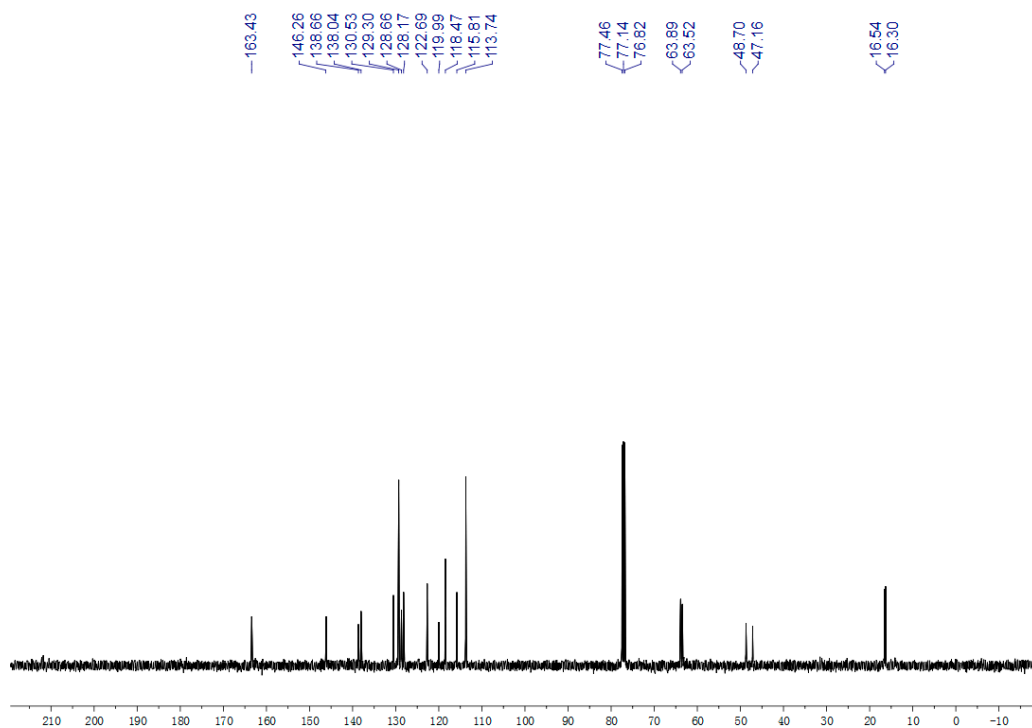
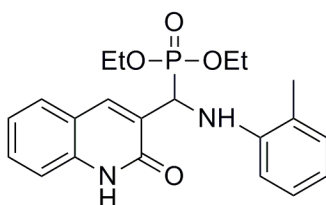
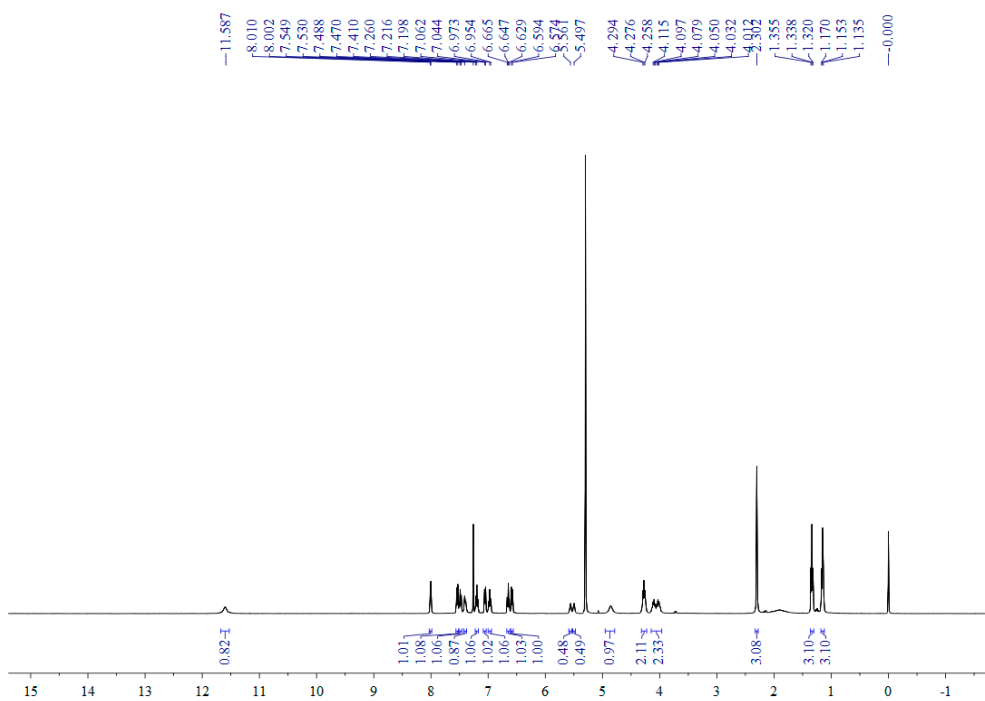
Figure S3. <sup>13</sup>C-NMR of compound 4a.

Figure S4. Chemical structure of compound 4b.

Figure S5. <sup>1</sup>H-NMR of compound 4b.

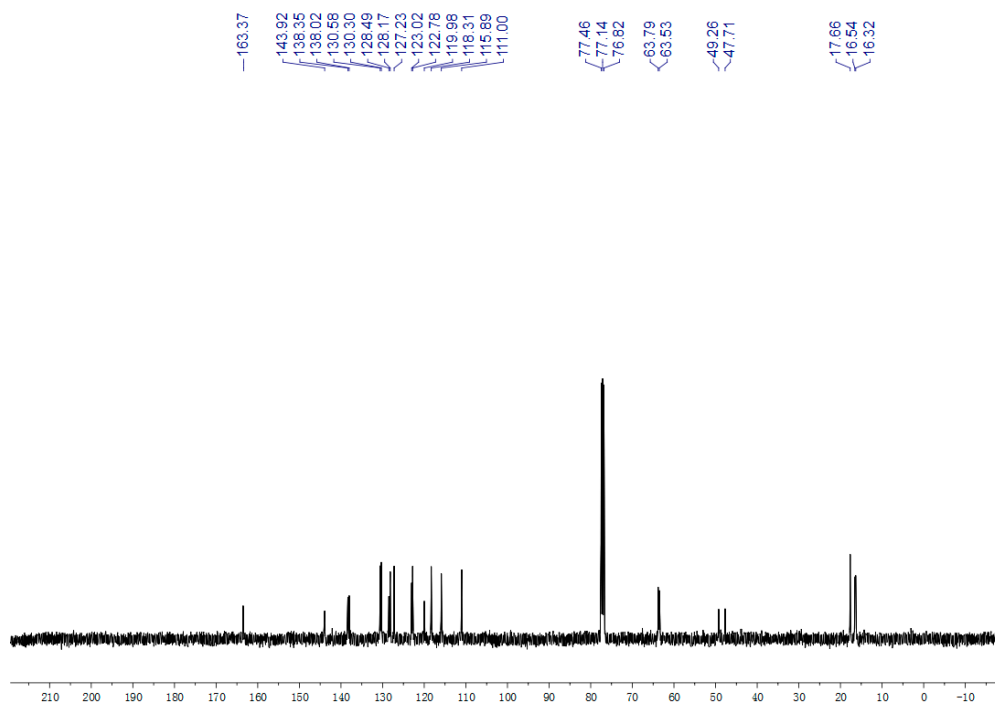
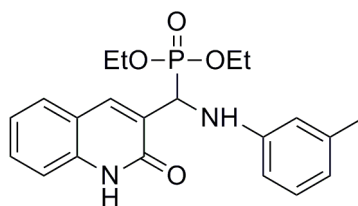
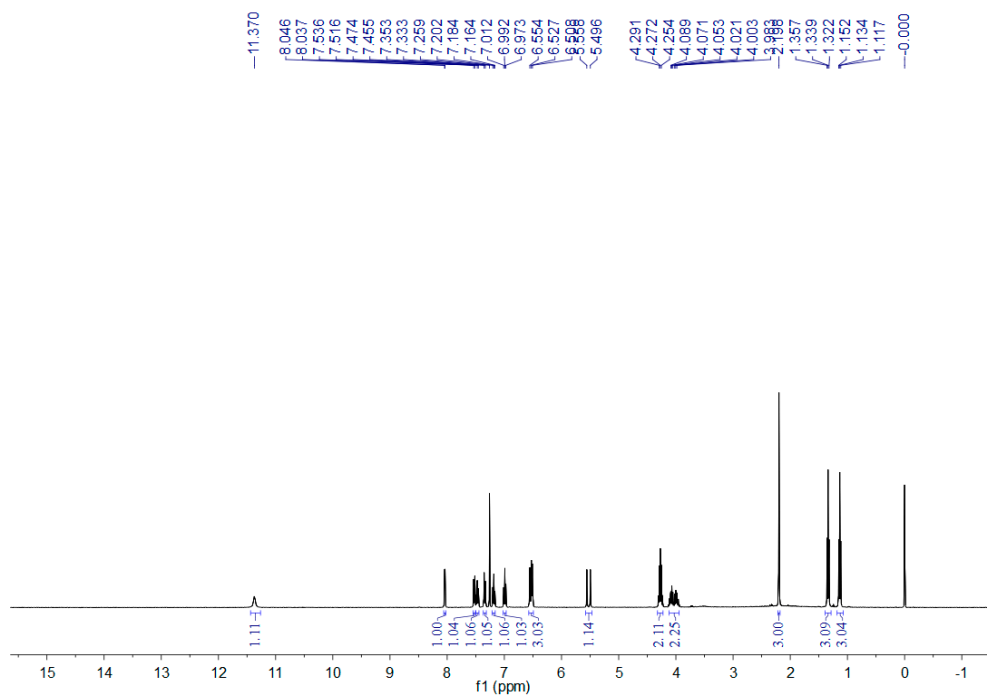
Figure S6. <sup>13</sup>C-NMR of compound 4b.

Figure S7. Chemical structure of compound 4c.

Figure S8. <sup>1</sup>H-NMR of compound 4c.

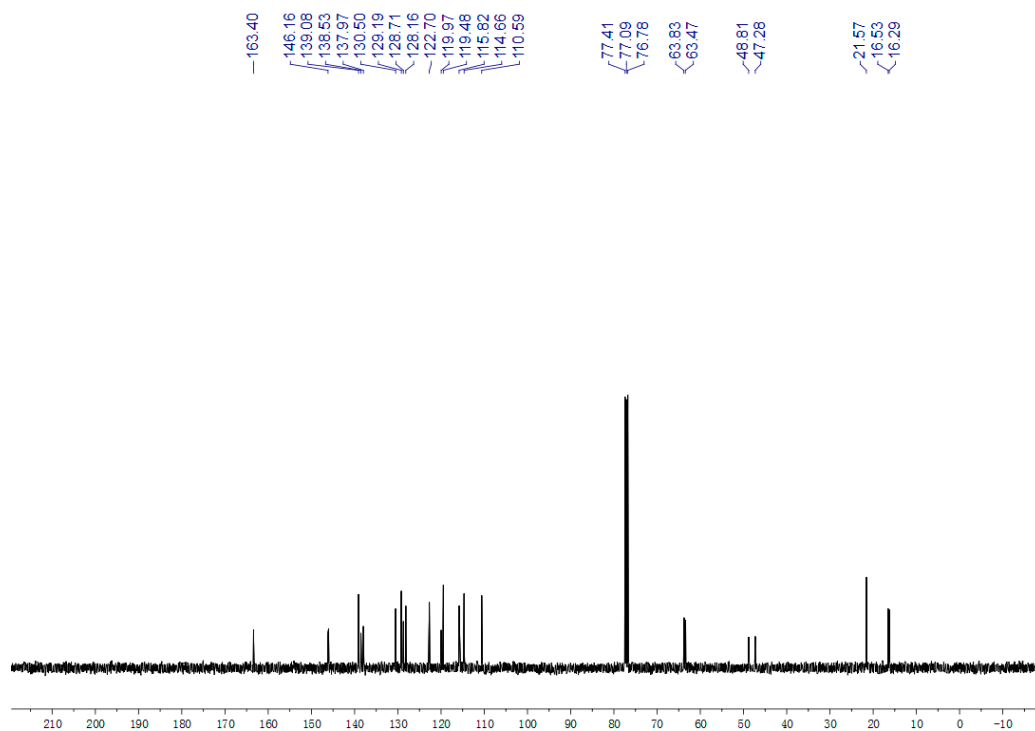
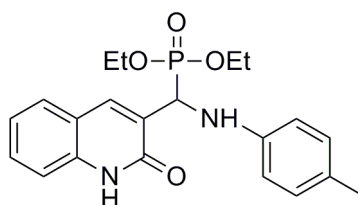
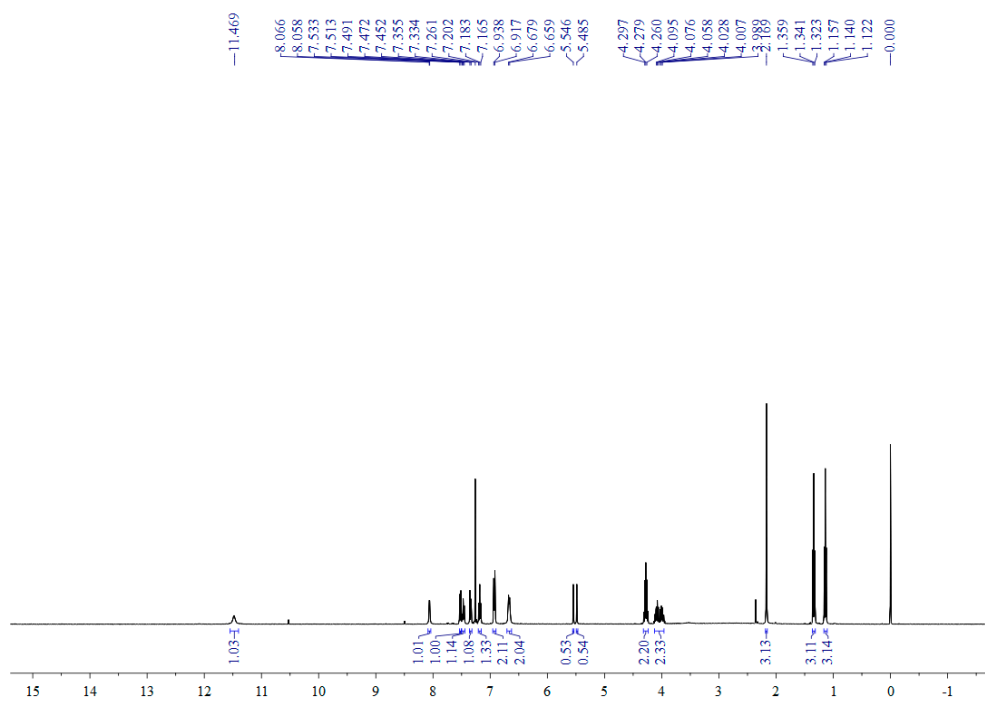
Figure S9.  $^{13}\text{C}$ -NMR of compound 4c.

Figure S10. Chemical structure of compound 4d.

Figure S11.  $^1\text{H}$ -NMR of compound 4d.

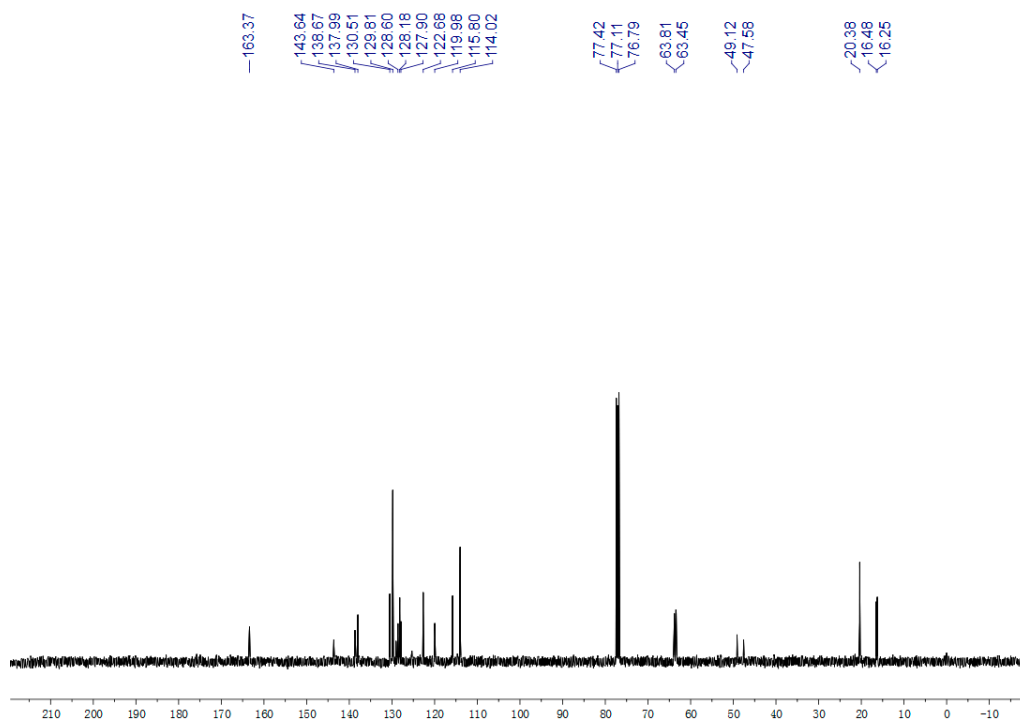
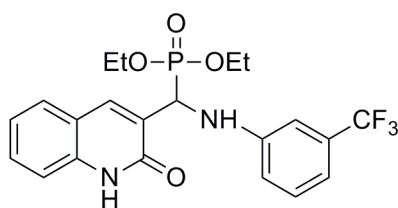
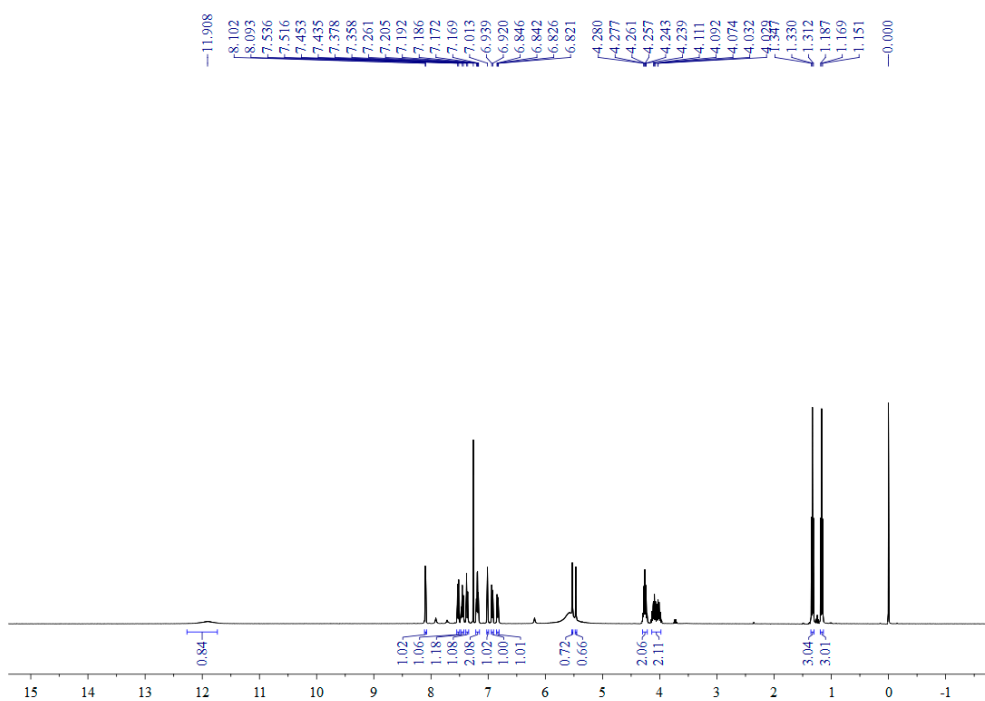
Figure S12.  $^{13}\text{C}$ -NMR of compound 4d.

Figure S13. Chemical structure of compound 4e.

Figure S14.  $^1\text{H}$ -NMR of compound 4e.

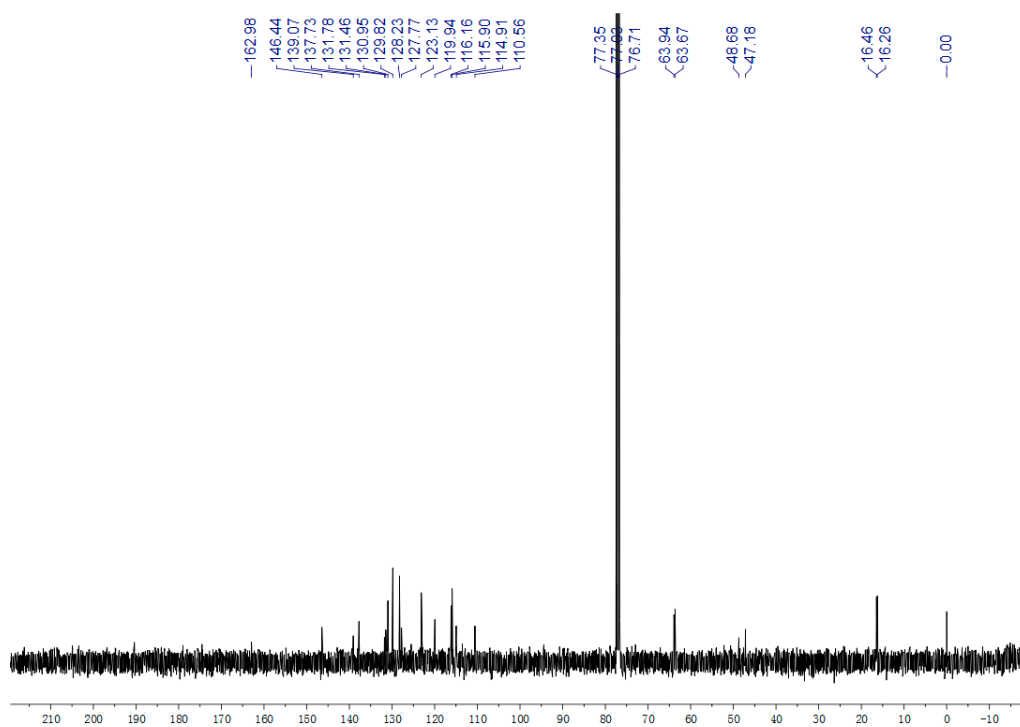
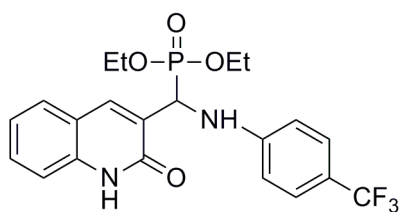
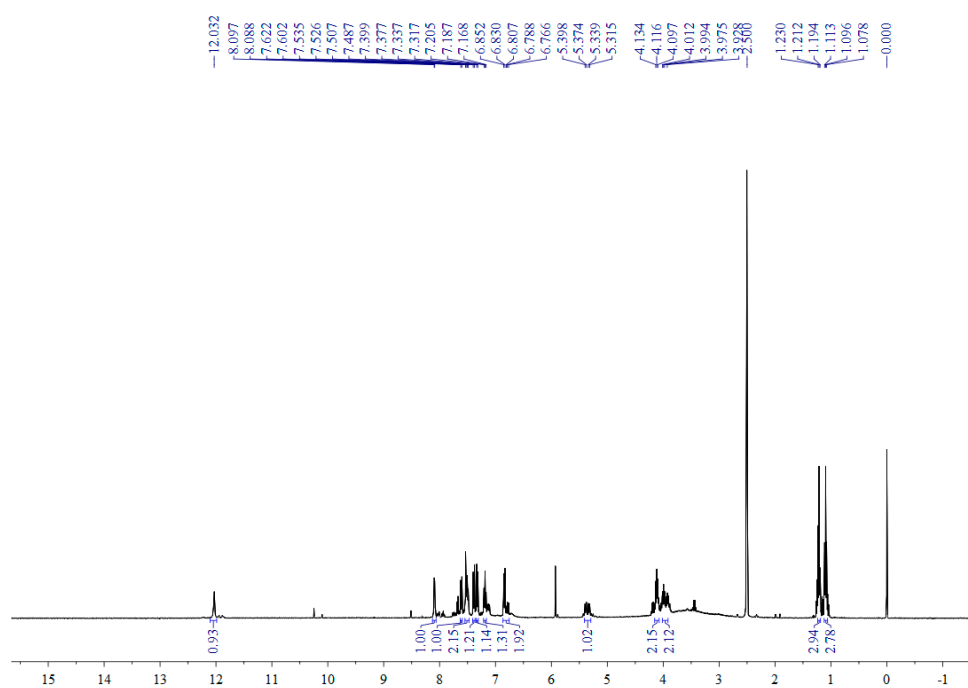
Figure S15.  $^{13}\text{C}$ -NMR of compound 4e.

Figure S16. Chemical structure of compound 4f.

Figure S17.  $^1\text{H}$ -NMR of compound 4f.

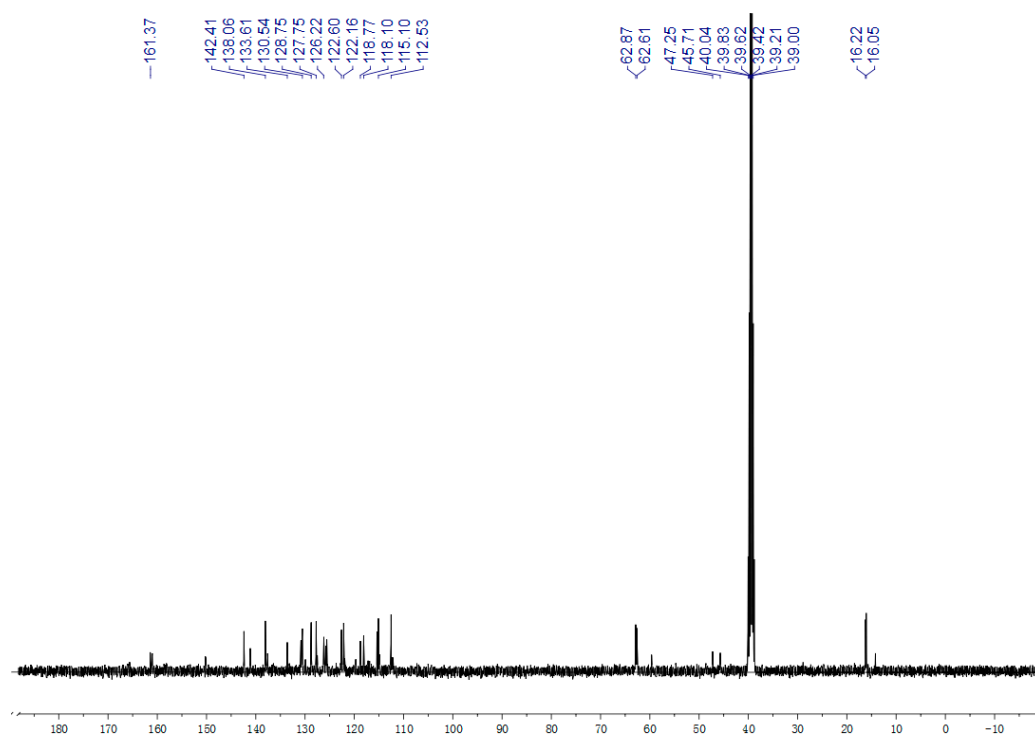
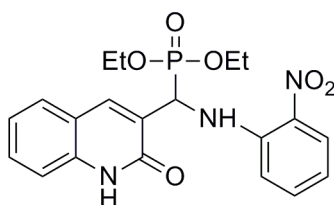
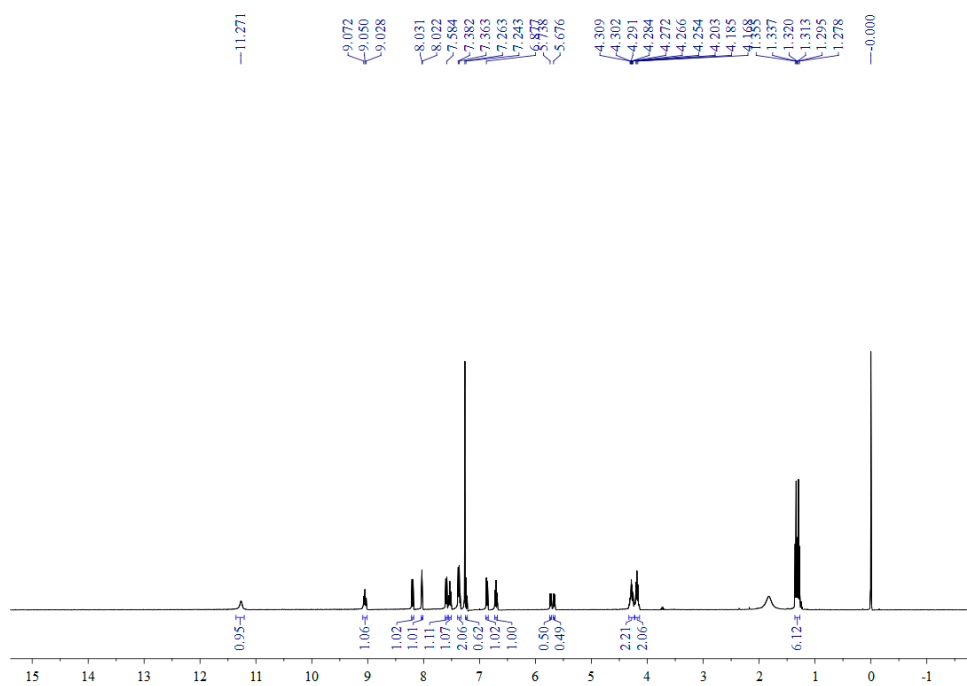
Figure S18.  $^{13}\text{C}$ -NMR of compound 4f.

Figure S19. Chemical structure of compound 4g.

Figure S20.  $^1\text{H}$ -NMR of compound 4g.

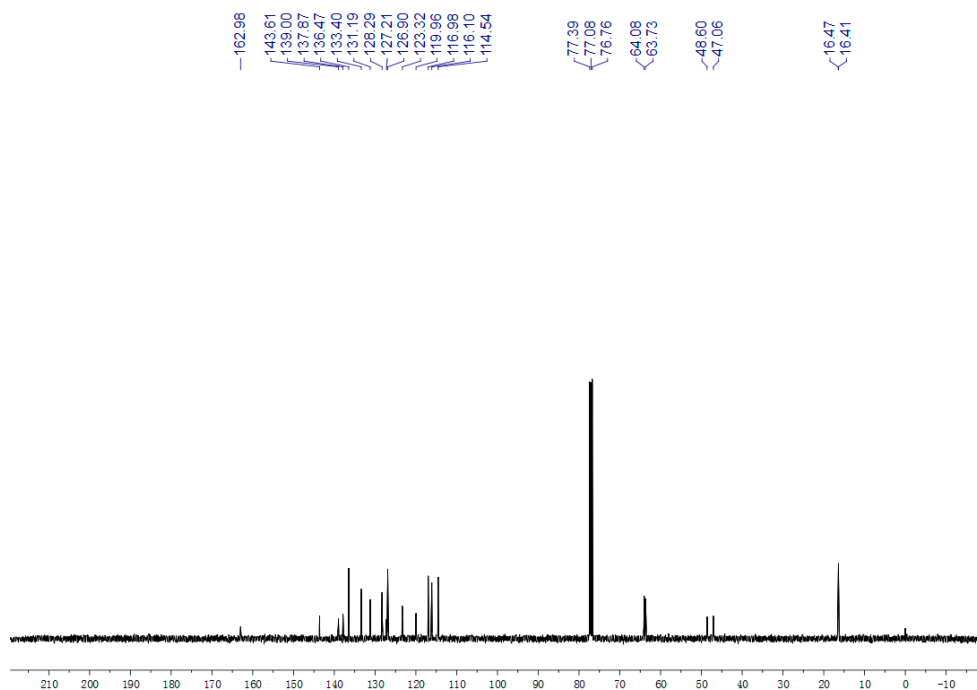
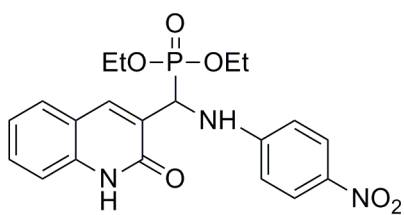
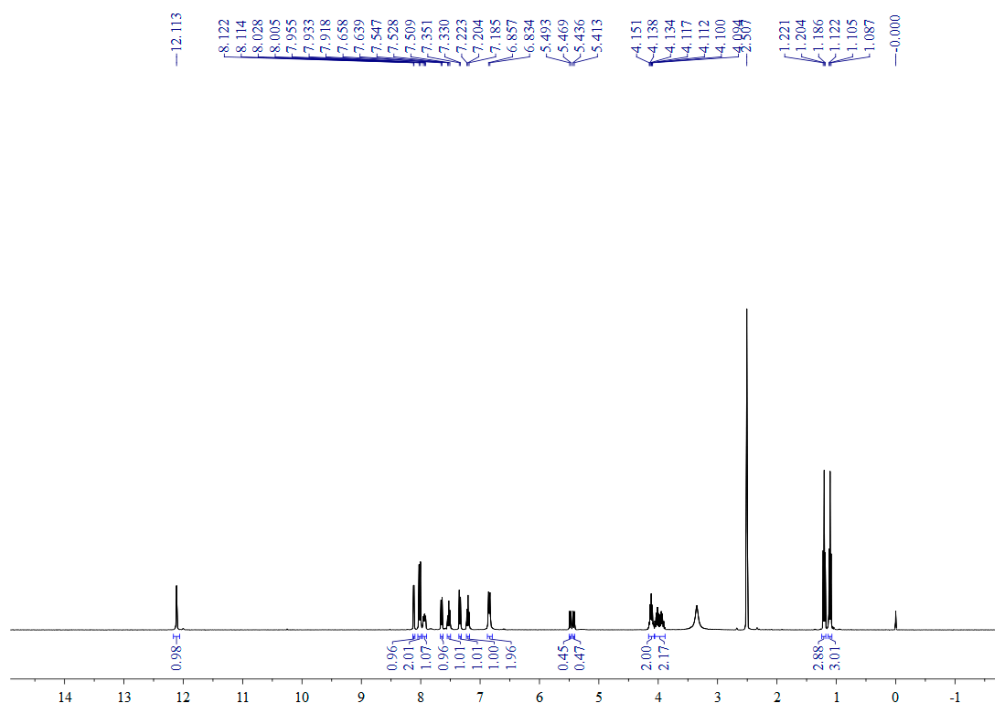
Figure S21.  $^{13}\text{C}$ -NMR of compound 4g.

Figure S22. Chemical structure of compound 4h.

Figure S23.  $^1\text{H}$ -NMR of compound 4h.



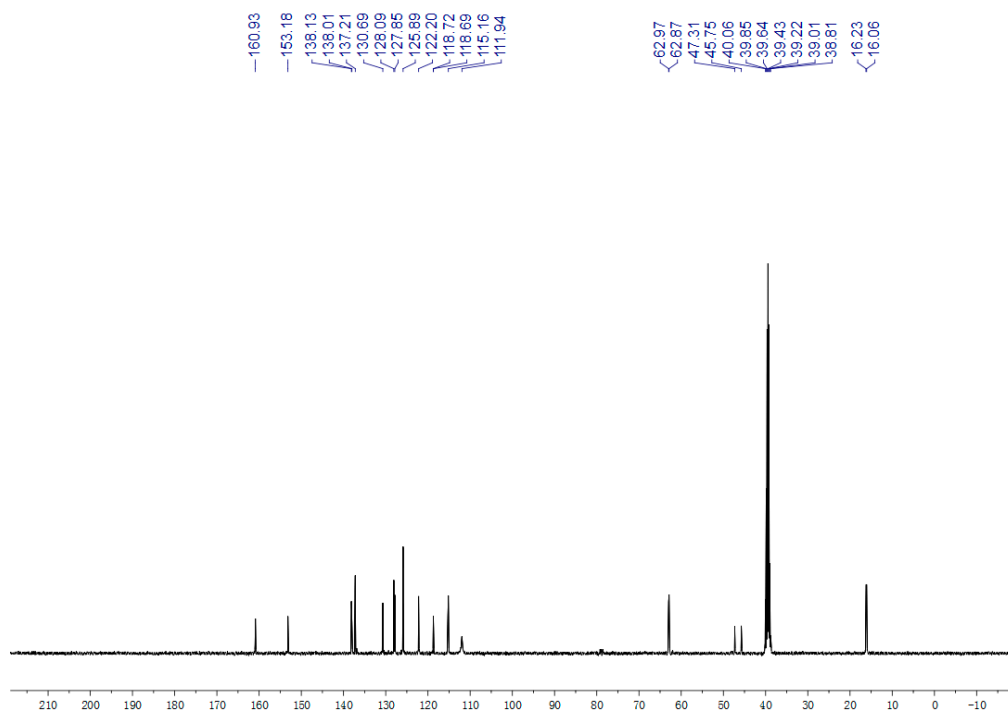
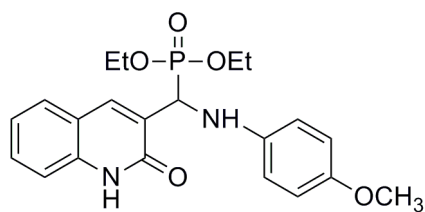
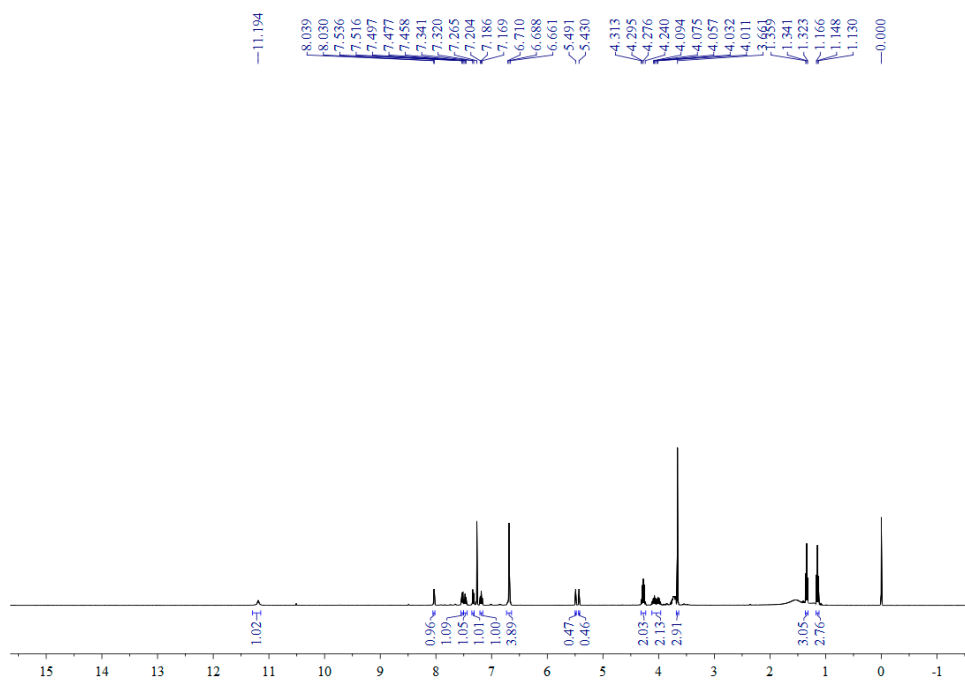
Figure S24.  $^{13}\text{C}$ -NMR of compound 4h.

Figure S25. Chemical structure of compound 4i.

Figure S26.  $^1\text{H}$ -NMR of compound 4i.

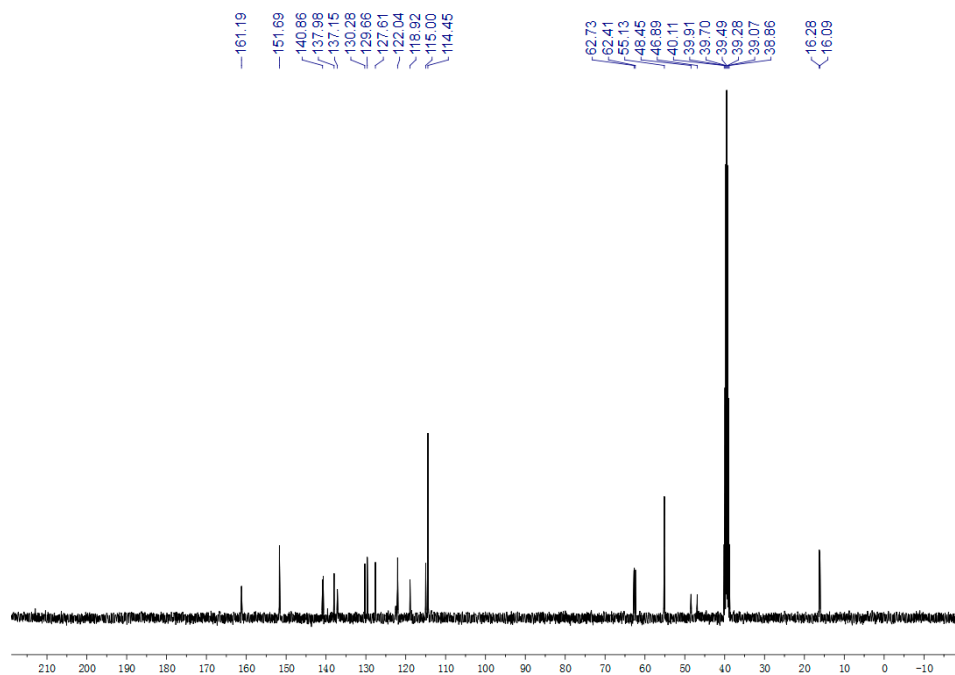
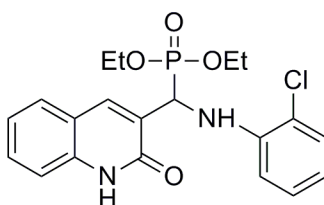
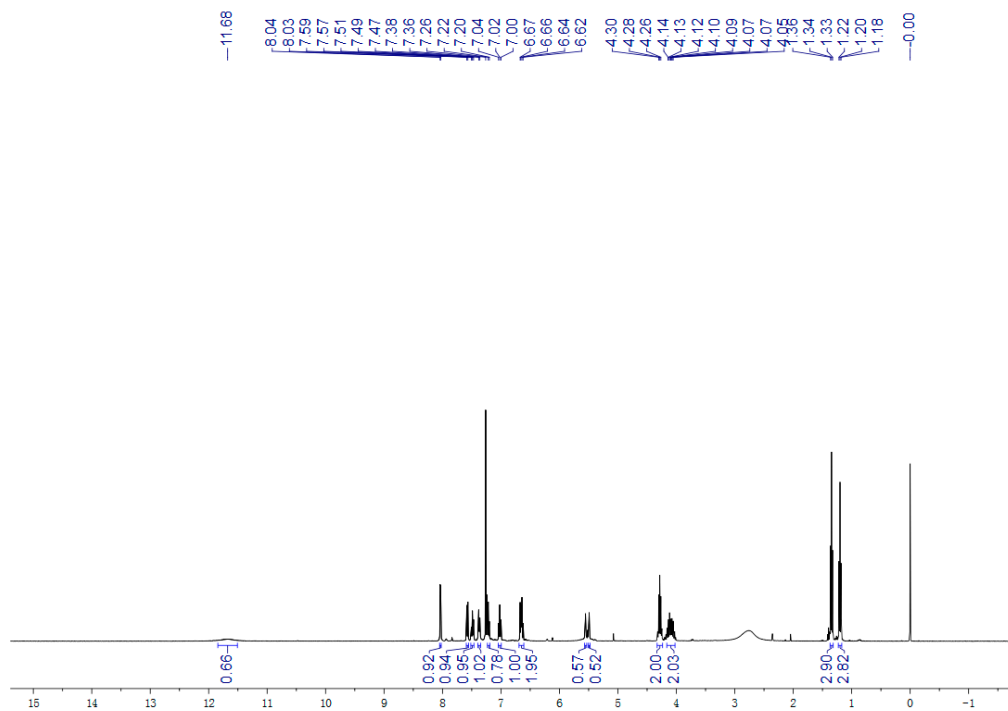
Figure S27. <sup>13</sup>C-NMR of compound 4i.

Figure S28. Chemical structure of compound 4j.

Figure S29. <sup>1</sup>H-NMR of compound 4j.

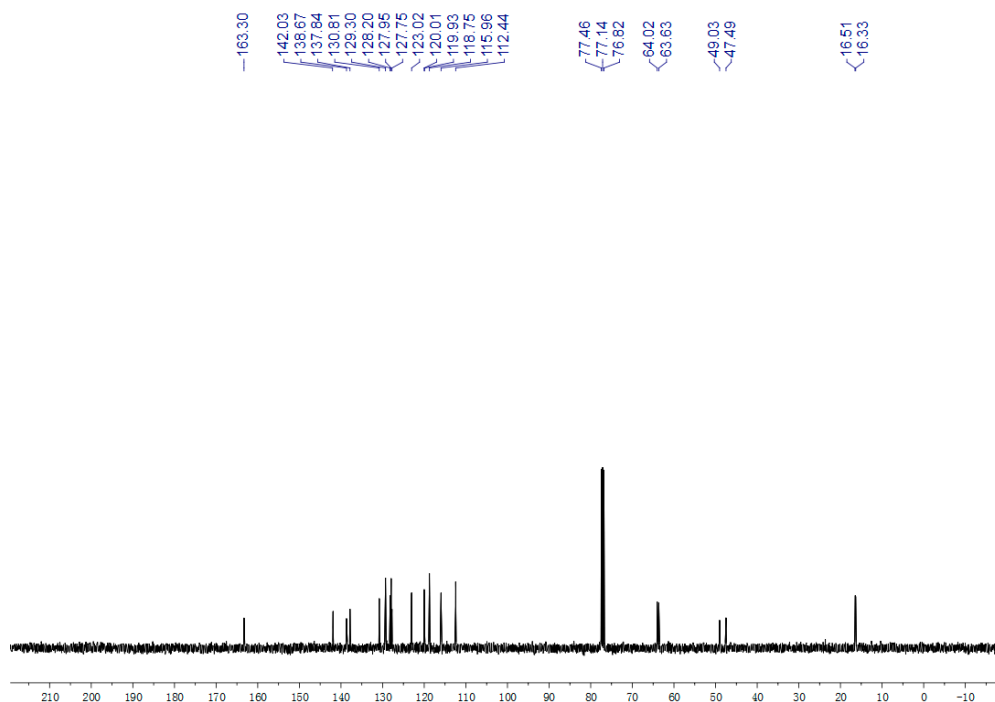
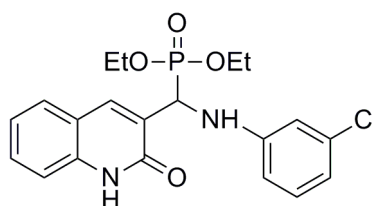
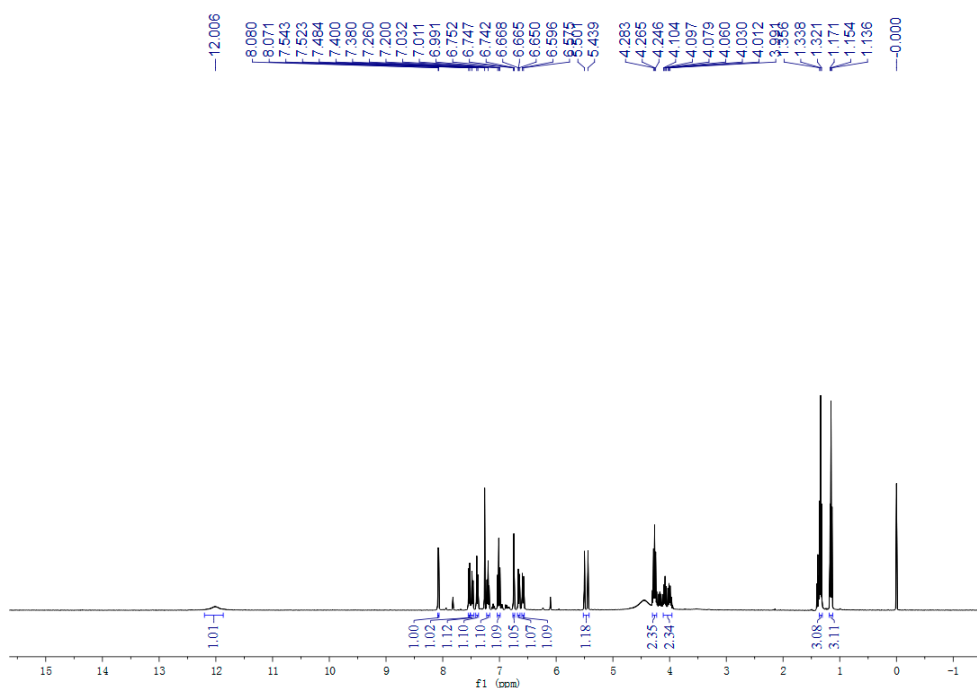
Figure S30.  $^{13}\text{C}$ -NMR of compound 4j.

Figure S31. Chemical structure of compound 4k.

Figure S32.  $^1\text{H}$ -NMR of compound 4k.

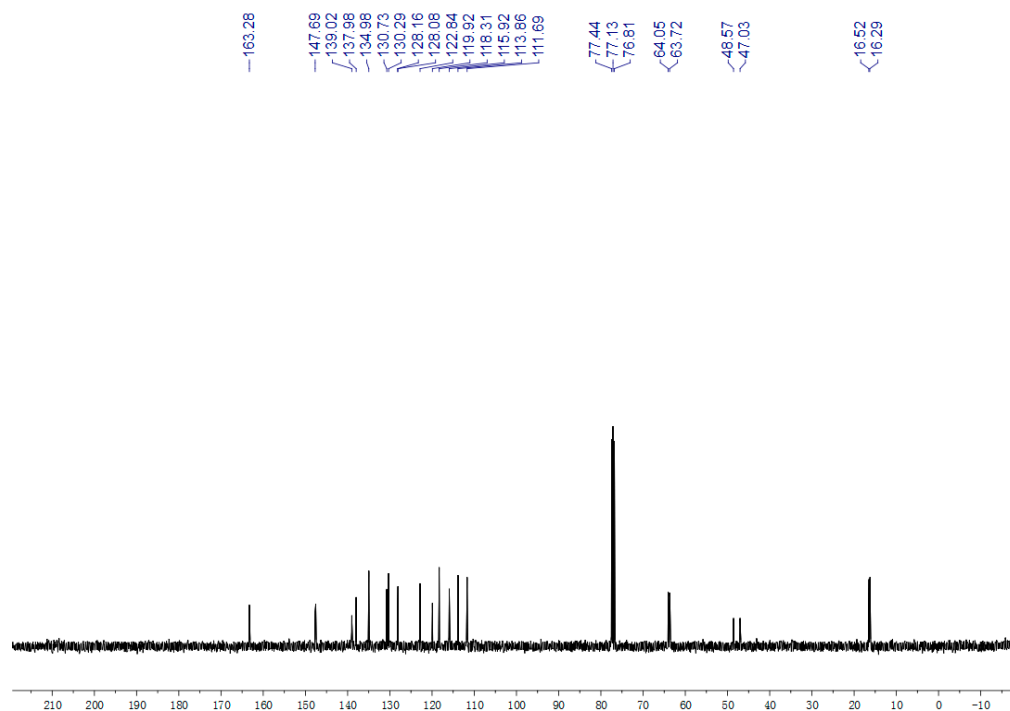
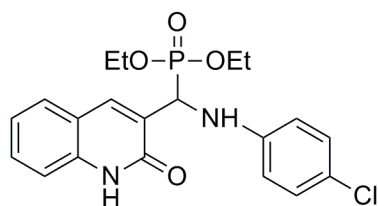
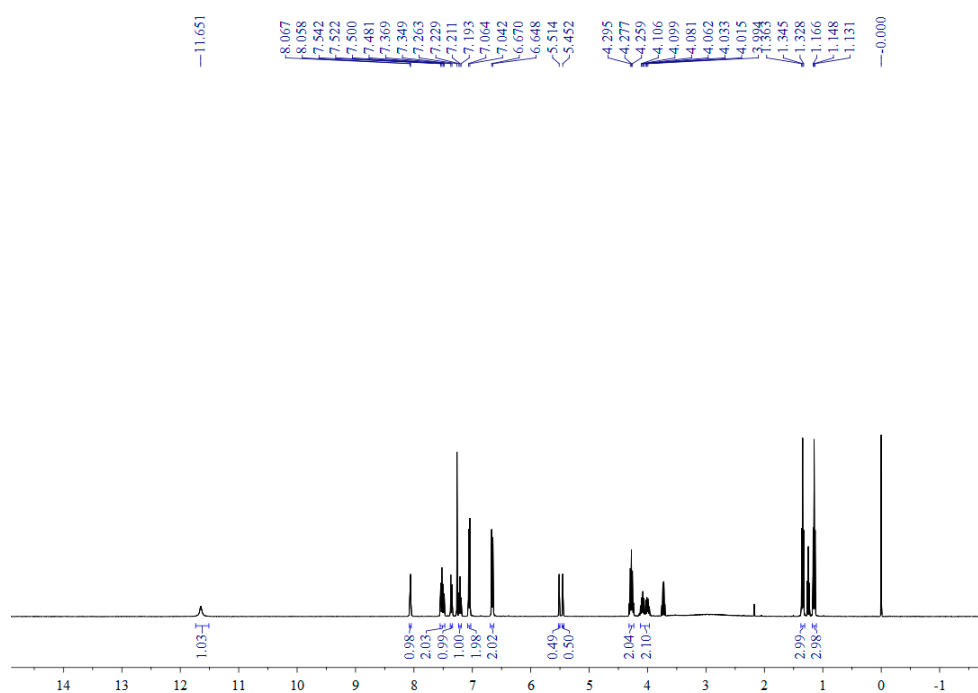
Figure S33.  $^{13}\text{C}$ -NMR of compound 4k.

Figure S34. Chemical structure of compound 4l.

Figure S35.  $^1\text{H}$ -NMR of compound 4l.

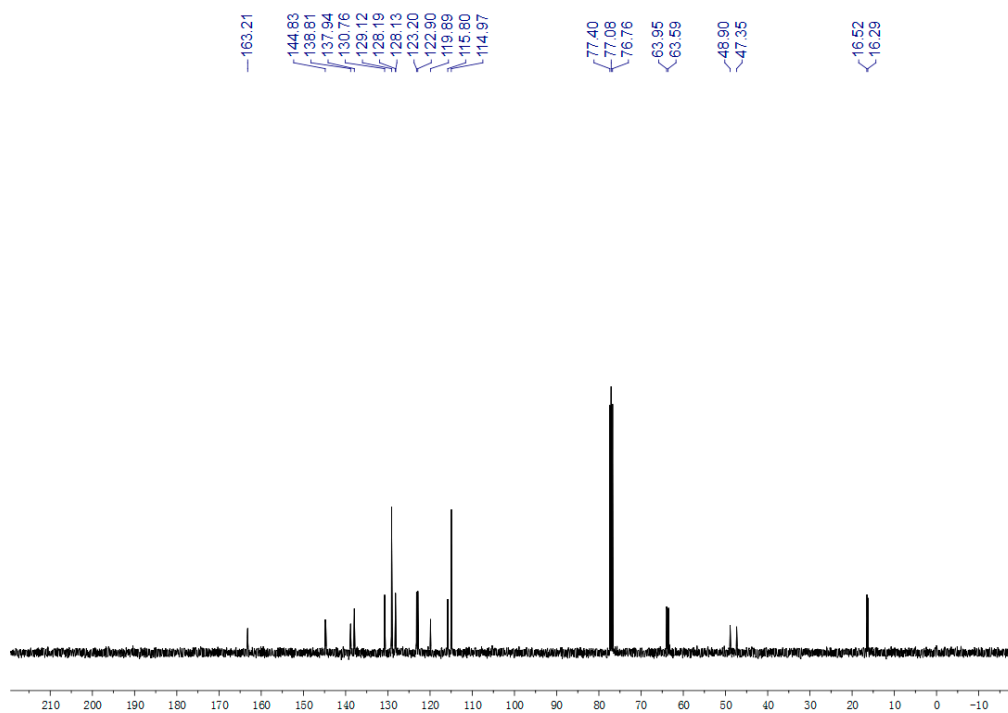
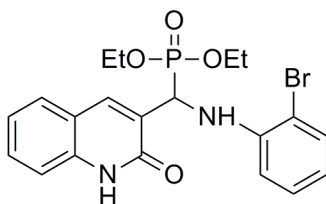
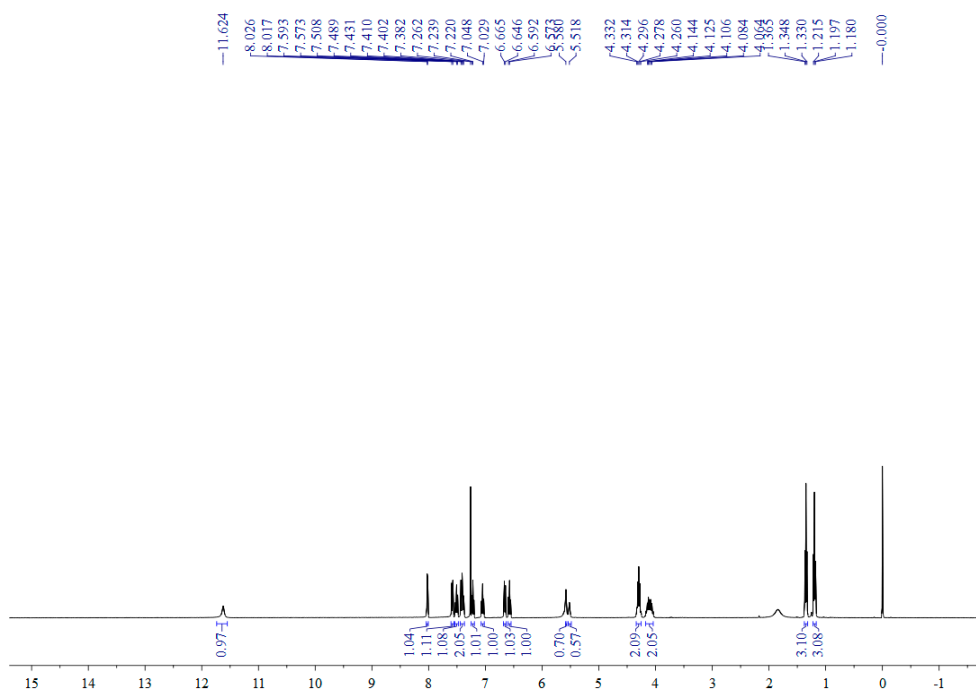
Figure S36.  $^{13}\text{C}$ -NMR of compound 4l.

Figure S37. Chemical structure of compound 4m.

Figure S38.  $^1\text{H}$ -NMR of compound 4m.

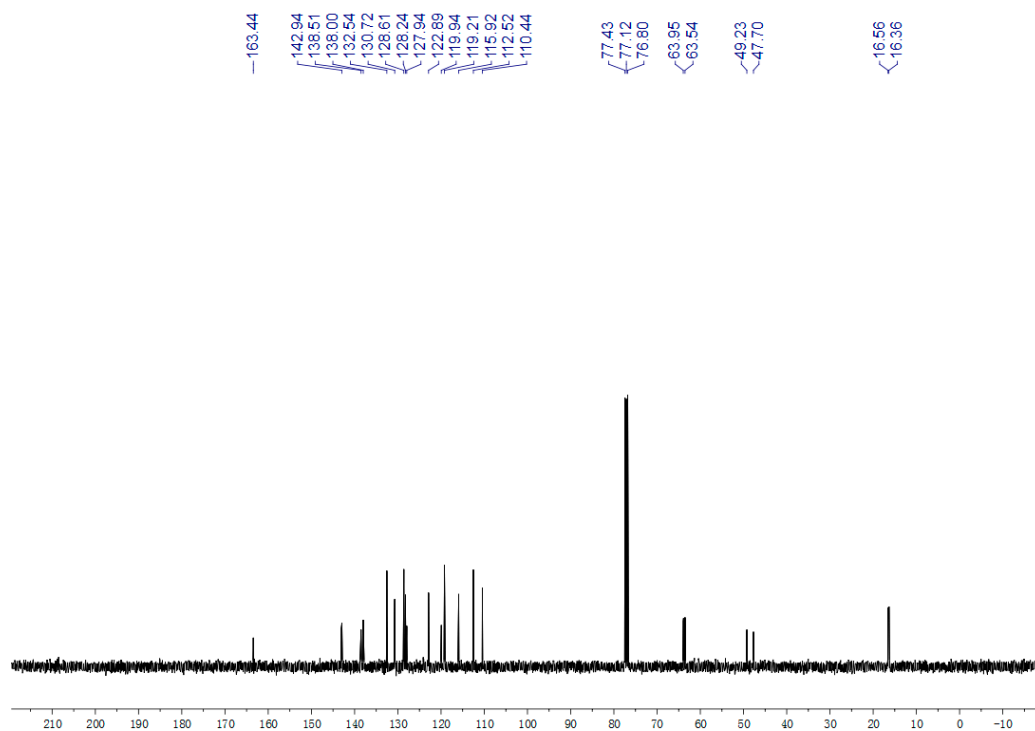
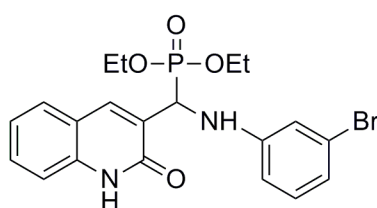
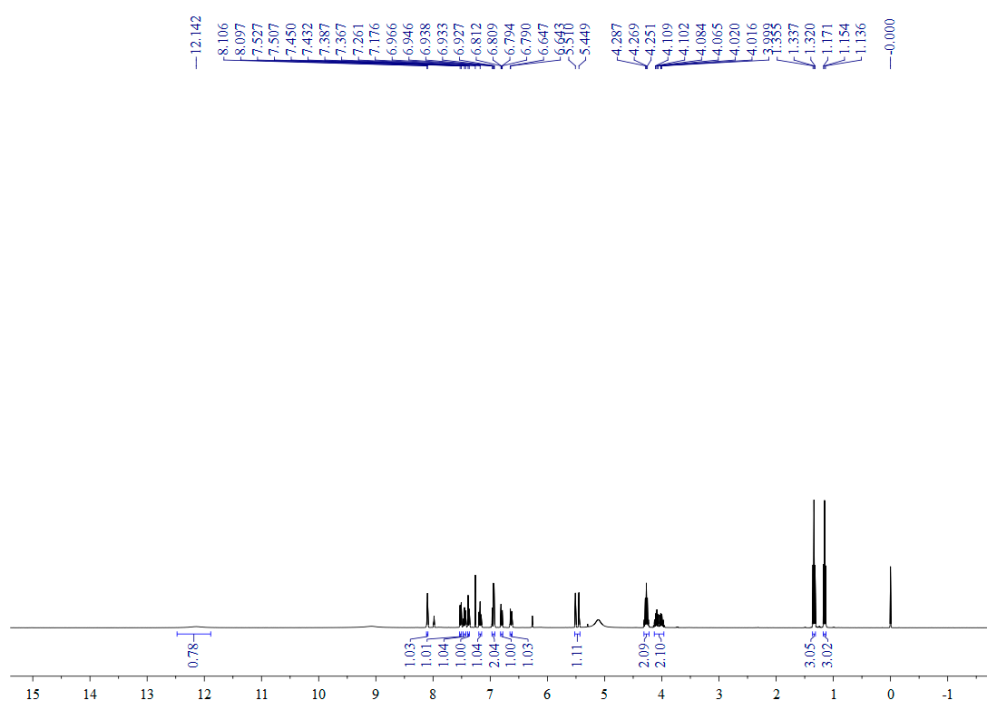
Figure S39.  $^{13}\text{C}$ -NMR of compound 4m.

Figure S40. Chemical structure of compound 4n.

Figure S41.  $^1\text{H}$ -NMR of compound 4n.

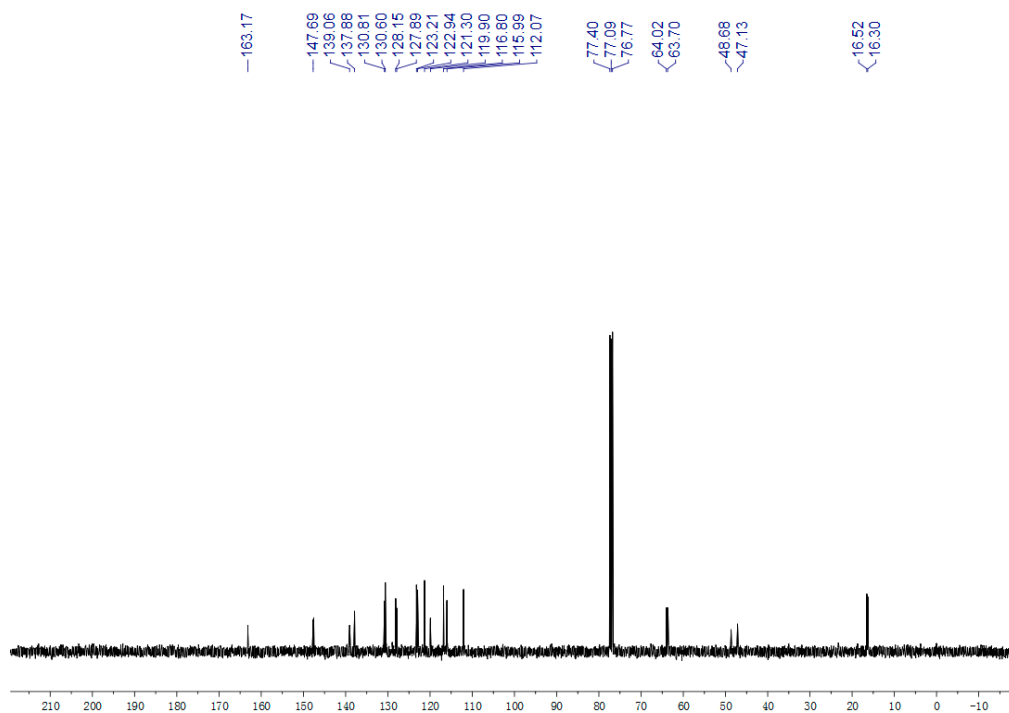
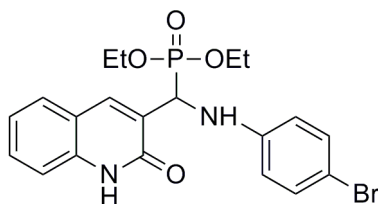
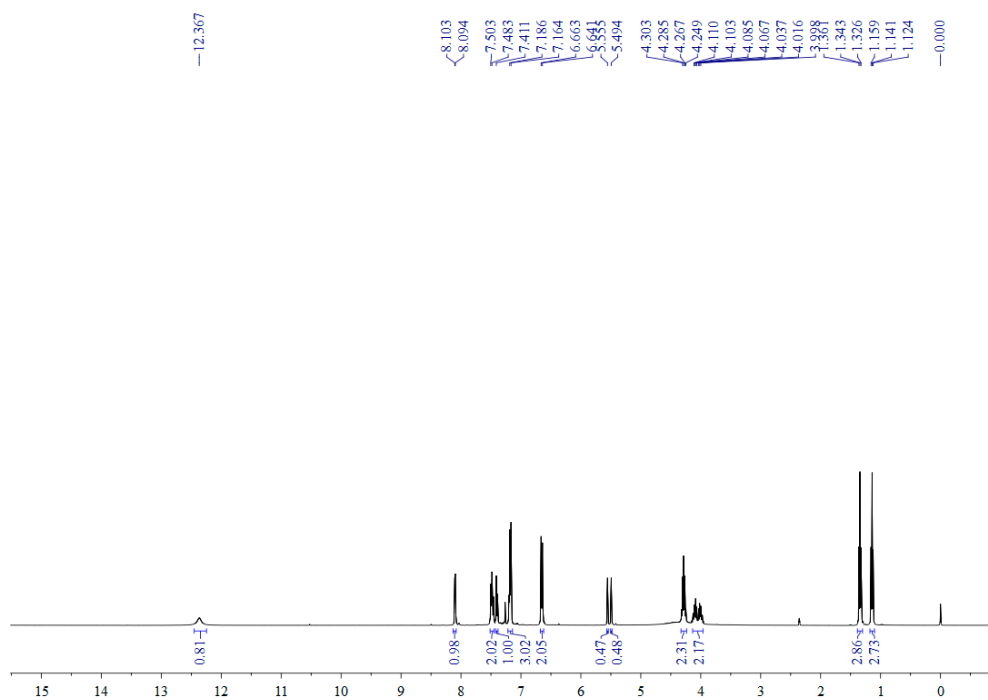
Figure S42.  $^{13}\text{C}$ -NMR of compound 4n.

Figure S43. Chemical structure of compound 4o.

Figure S44.  $^1\text{H}$ -NMR of compound 4o.

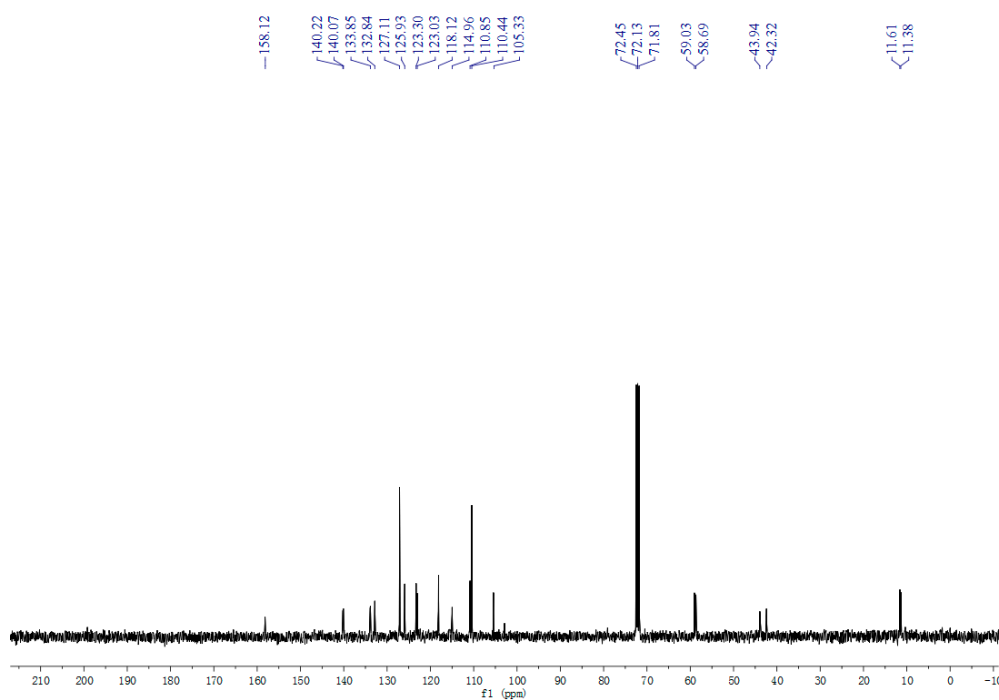
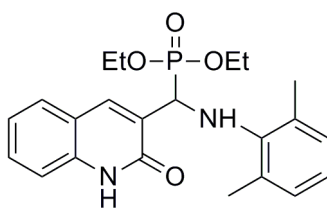
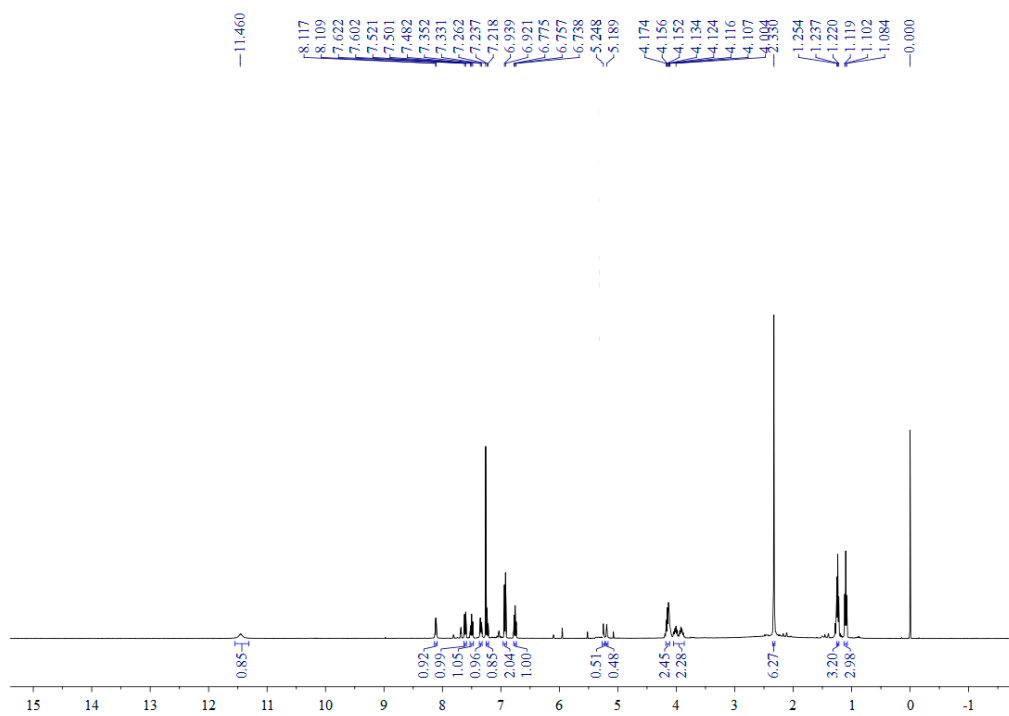
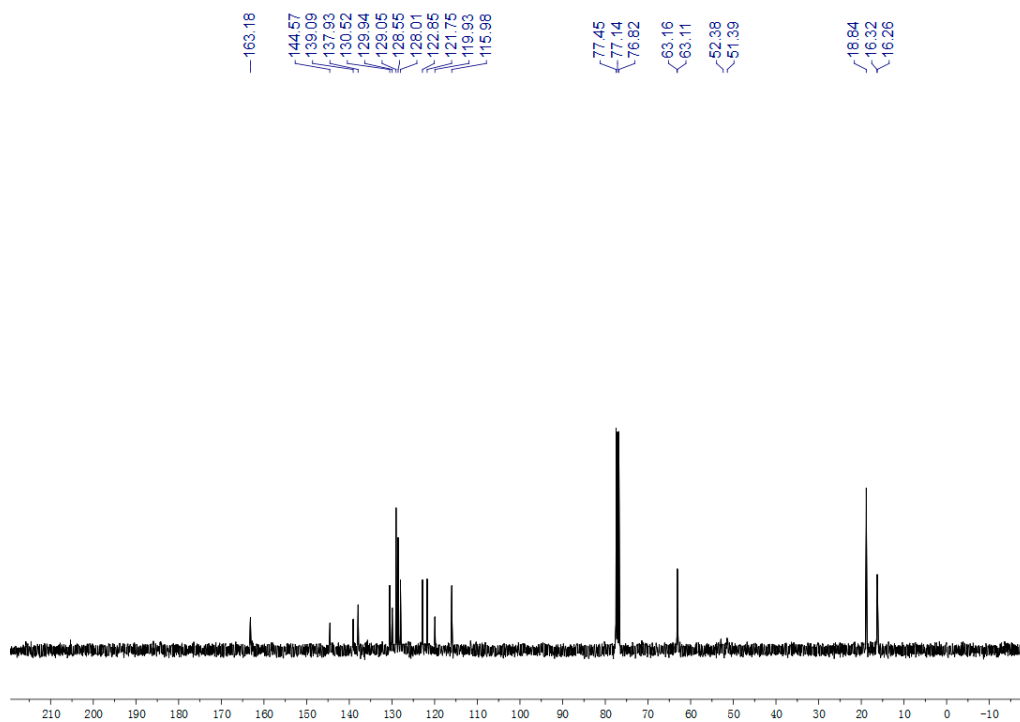
Figure S45.  $^{13}\text{C}$ -NMR of compound 4o.

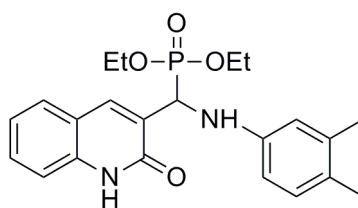
Figure S46. Chemical structure of compound 4p.

Figure S47.  $^1\text{H}$ -NMR of compound 4p.

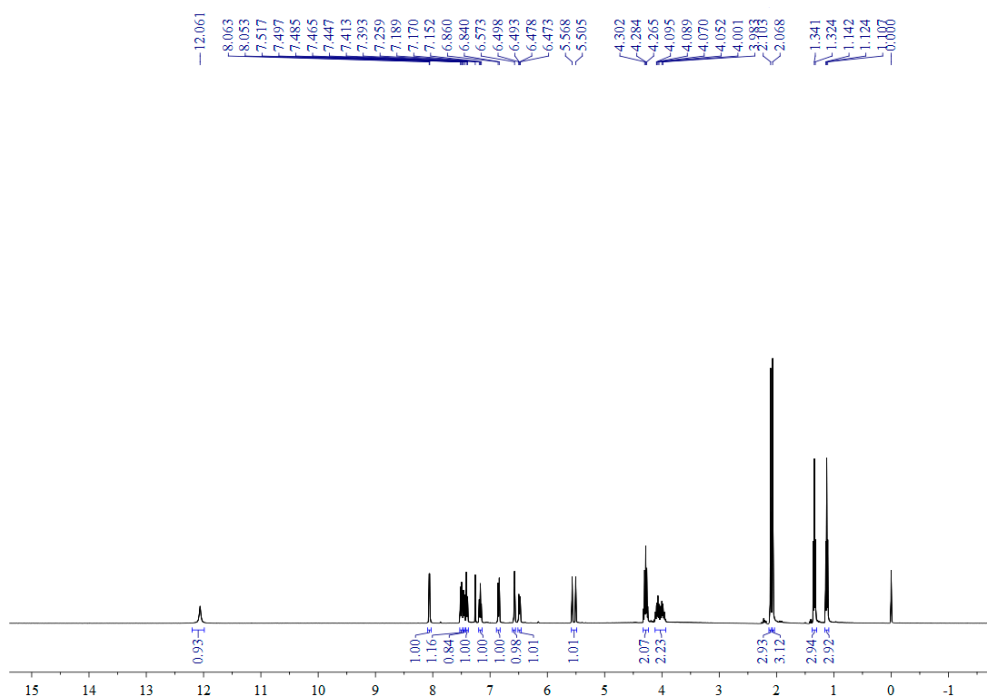




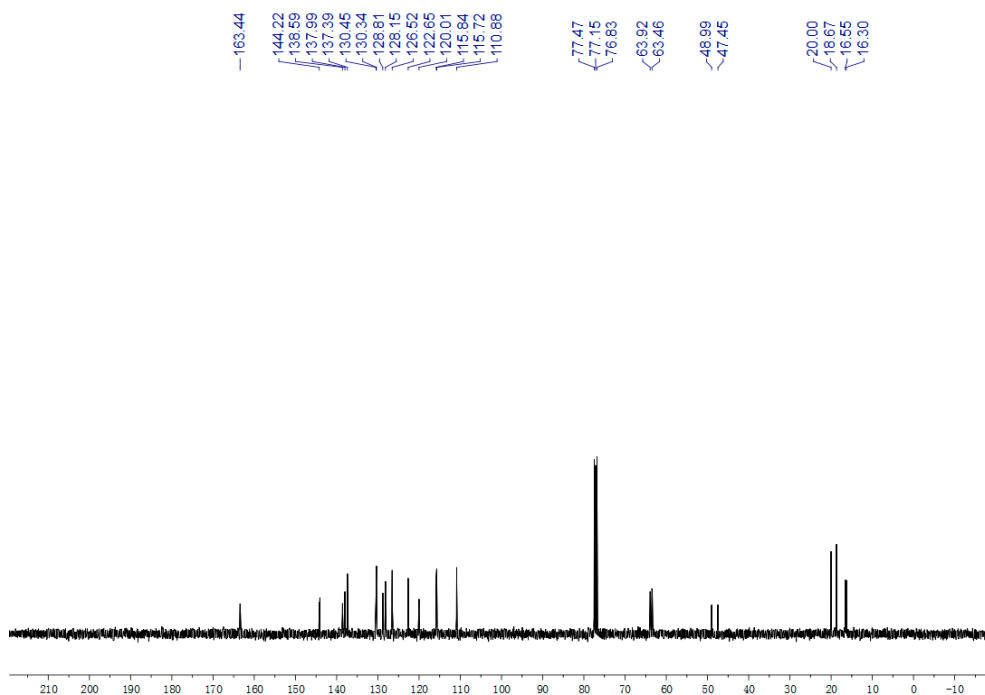
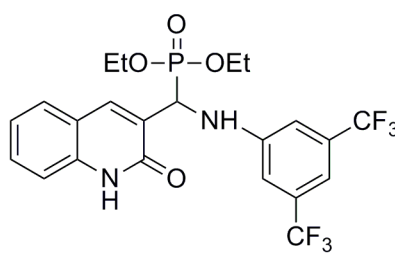
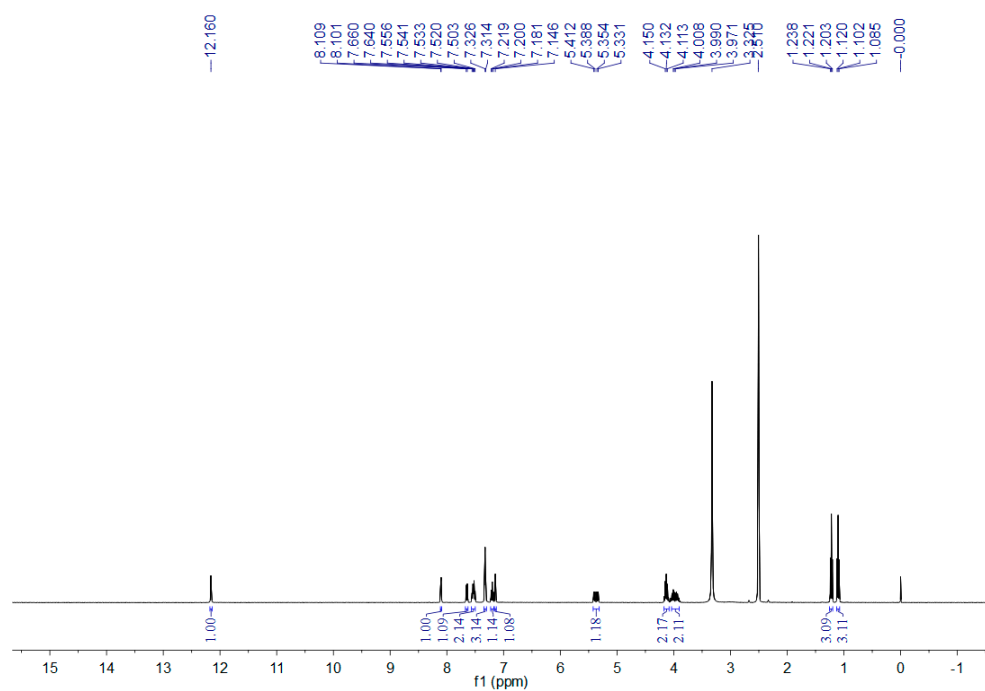
**Figure S48.**  $^{13}\text{C}$ -NMR of compound **4p**.



**Figure S49.** Chemical structure of compound **4q**.



**Figure S50.**  $^1\text{H}$ -NMR of compound **4q**.

Figure S51.  $^{13}\text{C}$ -NMR of compound **4q**.Figure S52. Chemical structure of compound **4r**.Figure S53.  $^1\text{H}$ -NMR of compound **4r**.

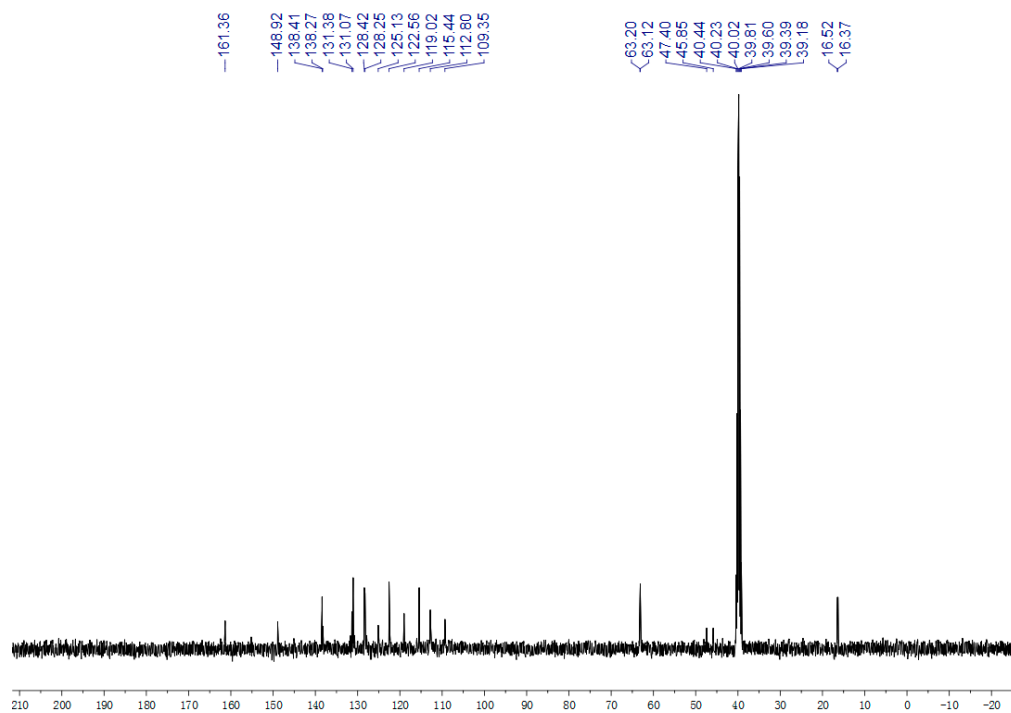
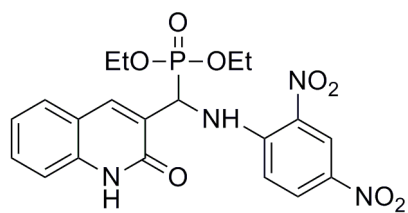
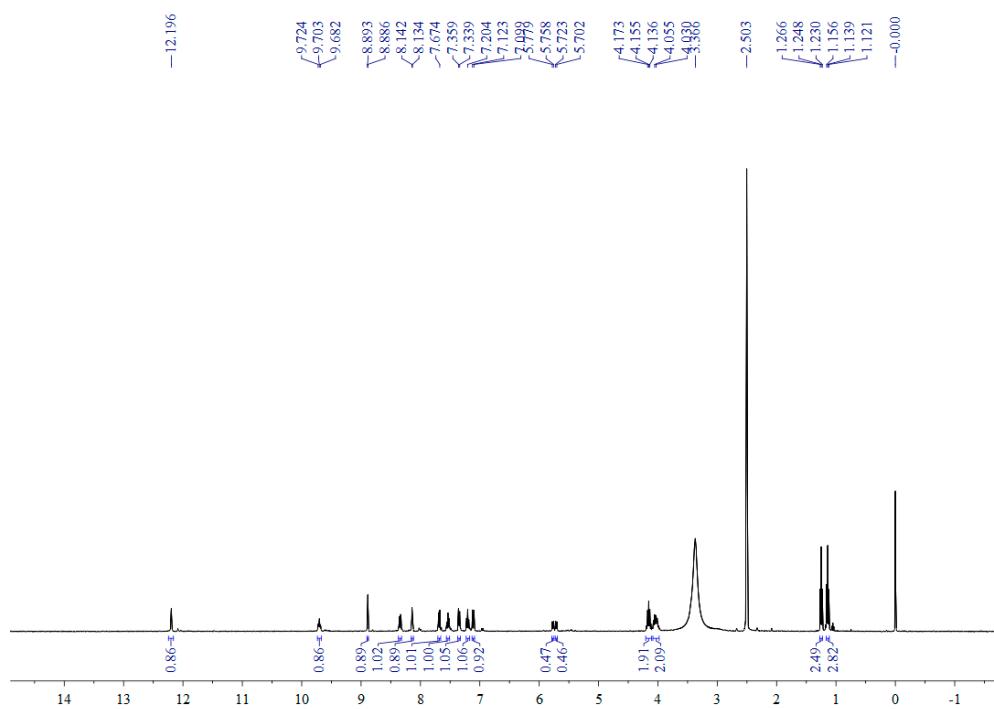
Figure S54. <sup>13</sup>C-NMR of compound 4r.

Figure S55. Chemical structure of compound 4s.

Figure S56. <sup>1</sup>H-NMR of compound 4s.

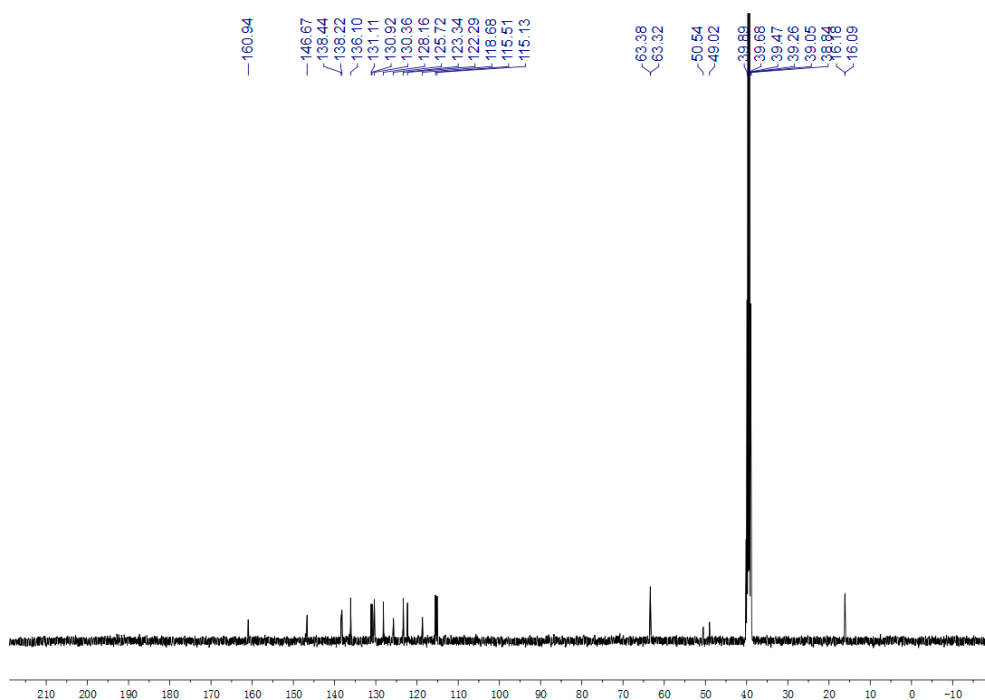
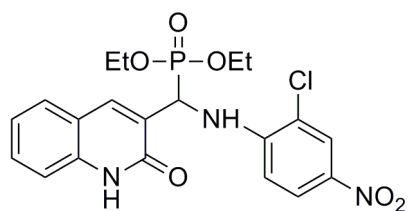
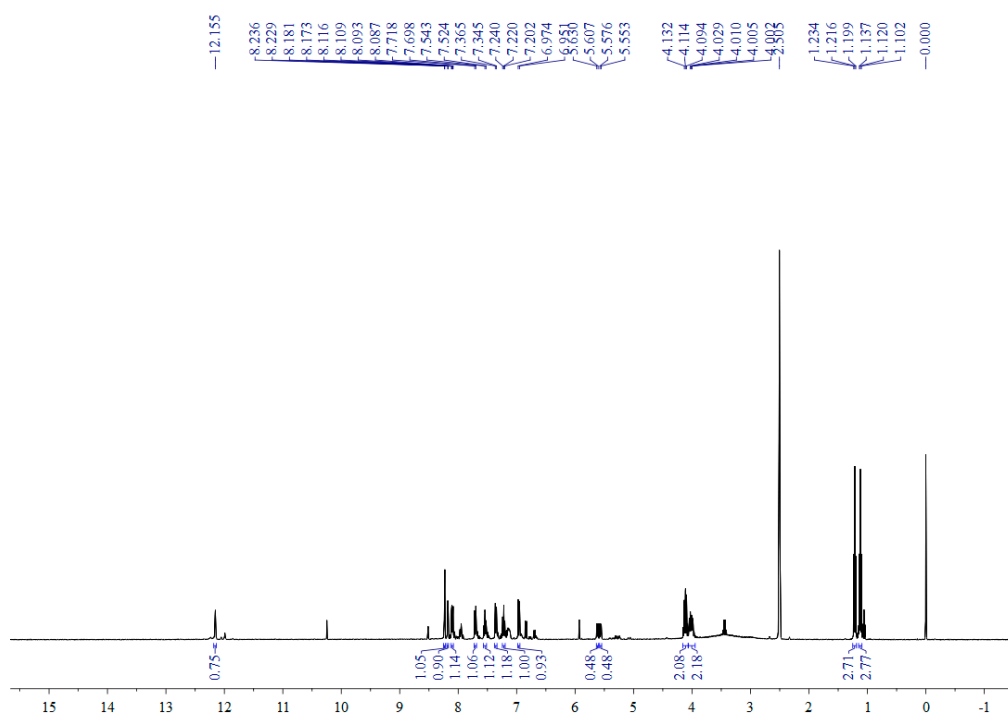
Figure S57.  $^{13}\text{C}$ -NMR of compound 4s.

Figure S58. Chemical structure of compound 4t.

Figure S59.  $^1\text{H}$ -NMR of compound 4t.

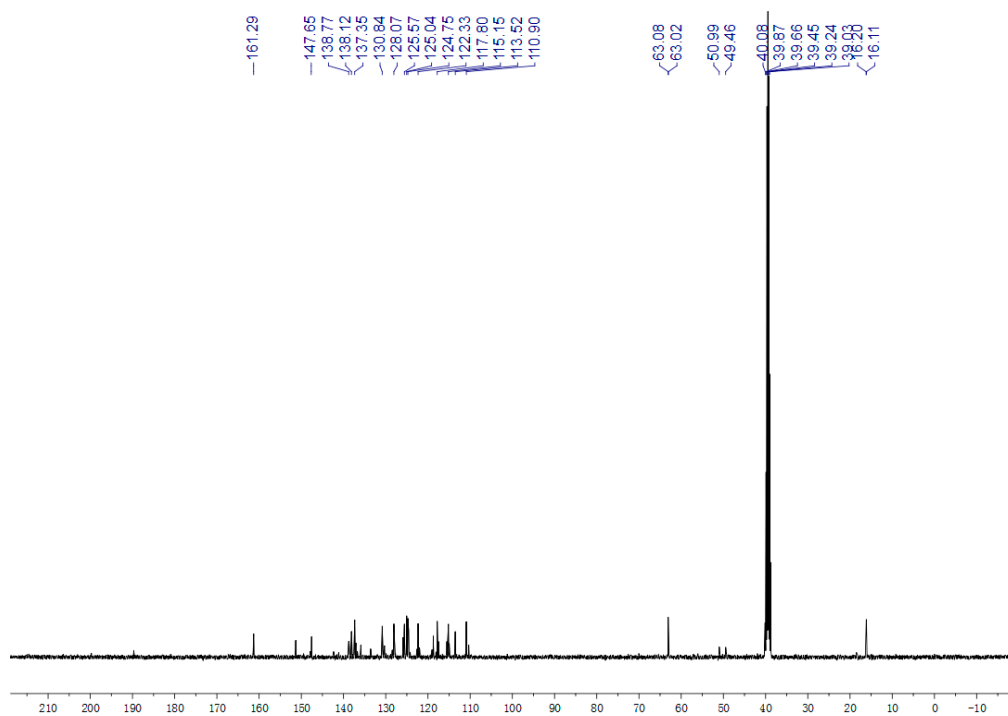
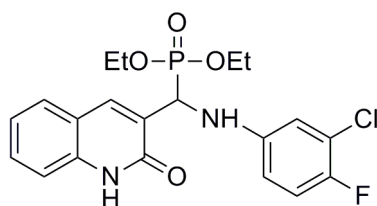
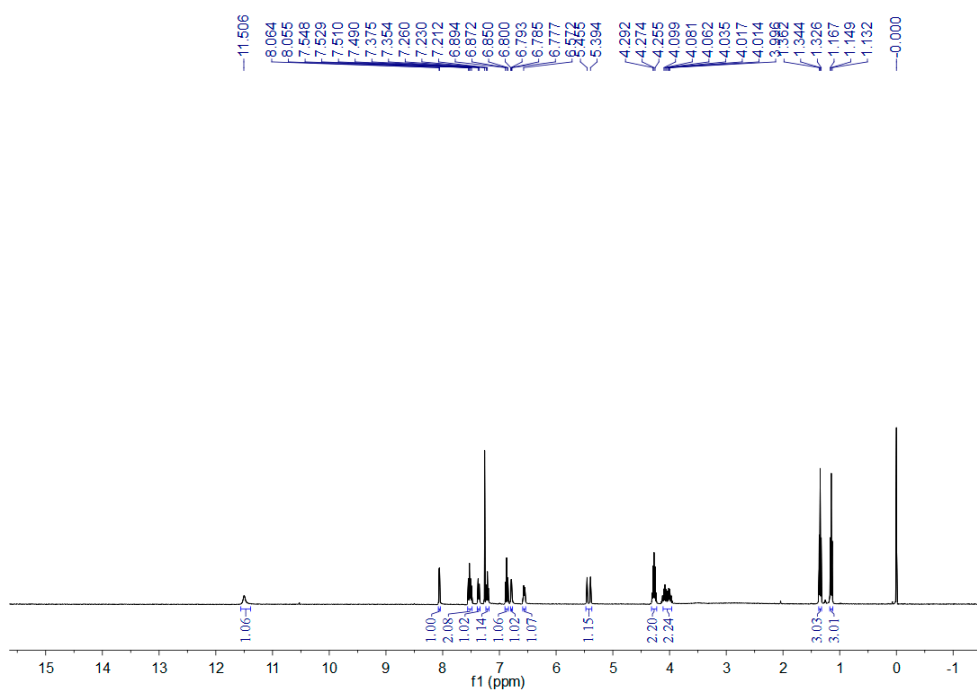
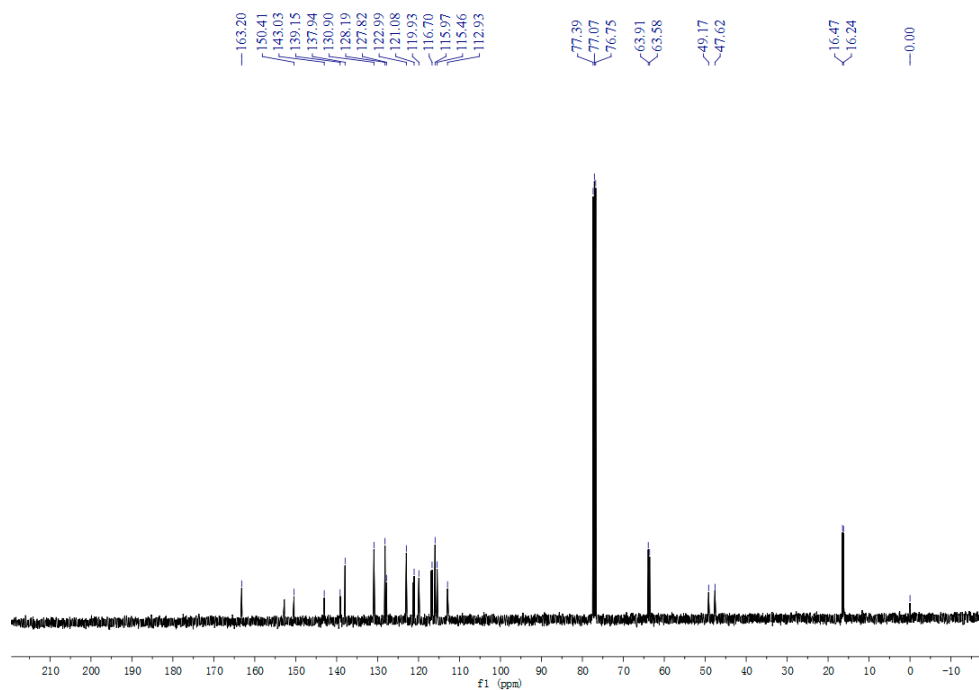
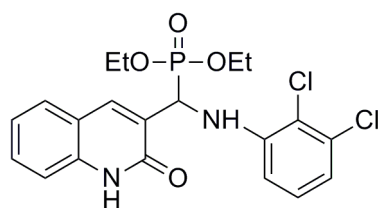
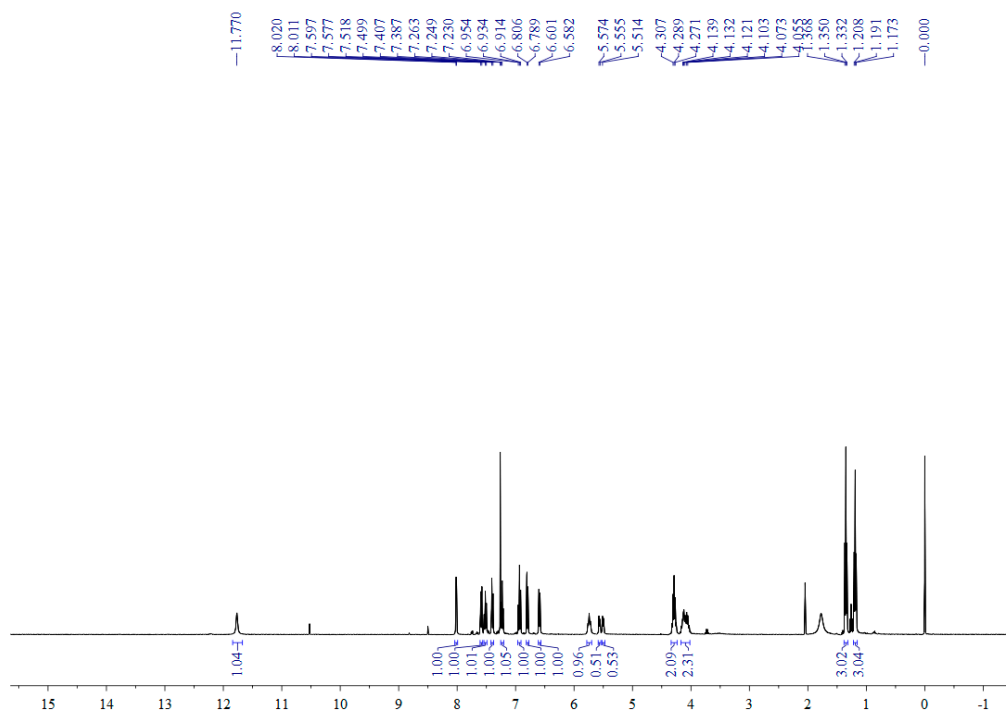
Figure S60.  $^{13}\text{C}$ -NMR of compound 4t.

Figure S61. Chemical structure of compound 4u.

Figure S62.  $^1\text{H}$ -NMR of compound 4u.

Figure S63.  $^{13}\text{C}$ -NMR of compound **4u**.Figure S64. Chemical structure of compound **4v**.Figure S65.  $^1\text{H}$ -NMR of compound **4v**.

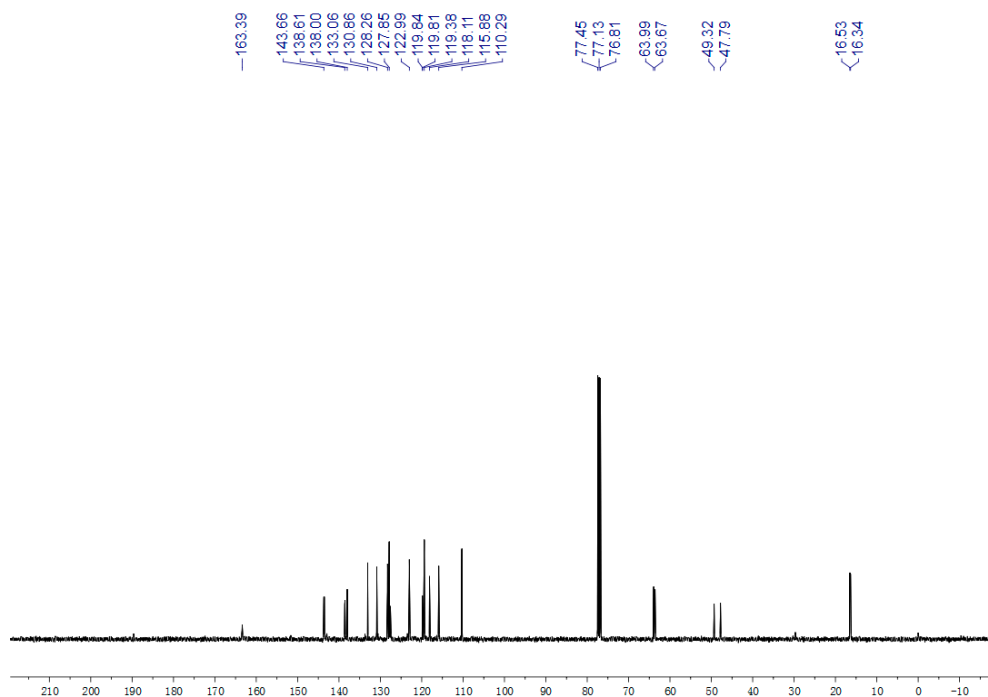
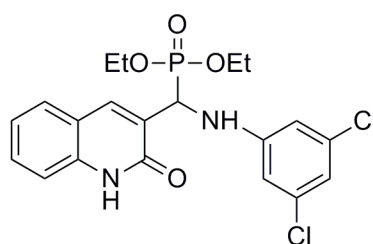
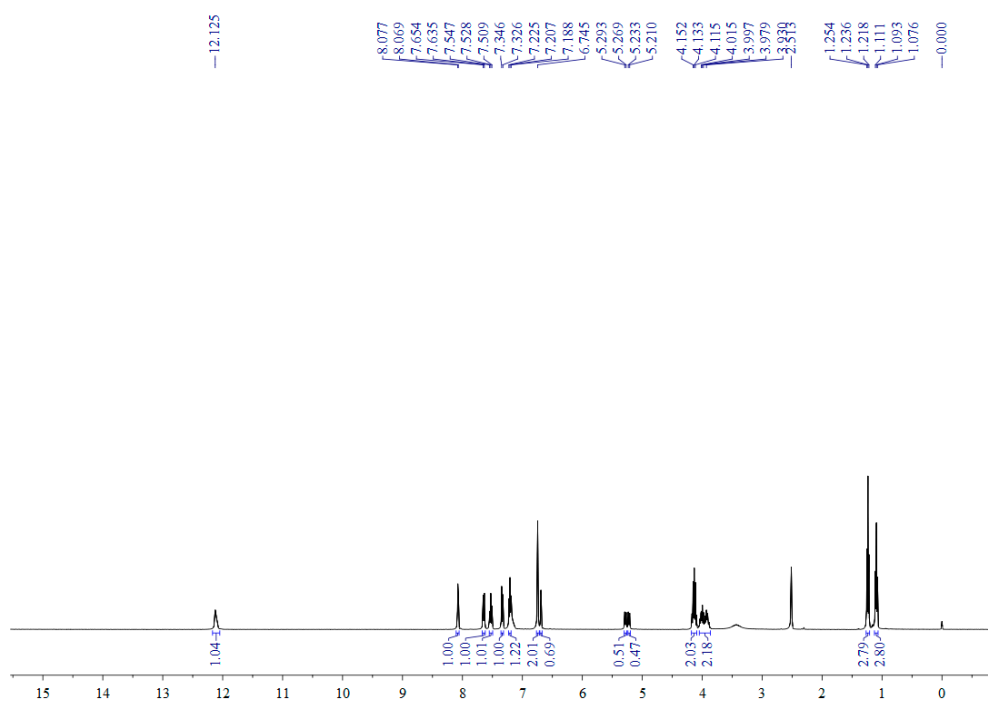
Figure S66.  $^{13}\text{C}$ -NMR of compound 4v.

Figure S67. Chemical structure of compound 4w.

Figure S68.  $^1\text{H}$ -NMR of compound 4w.

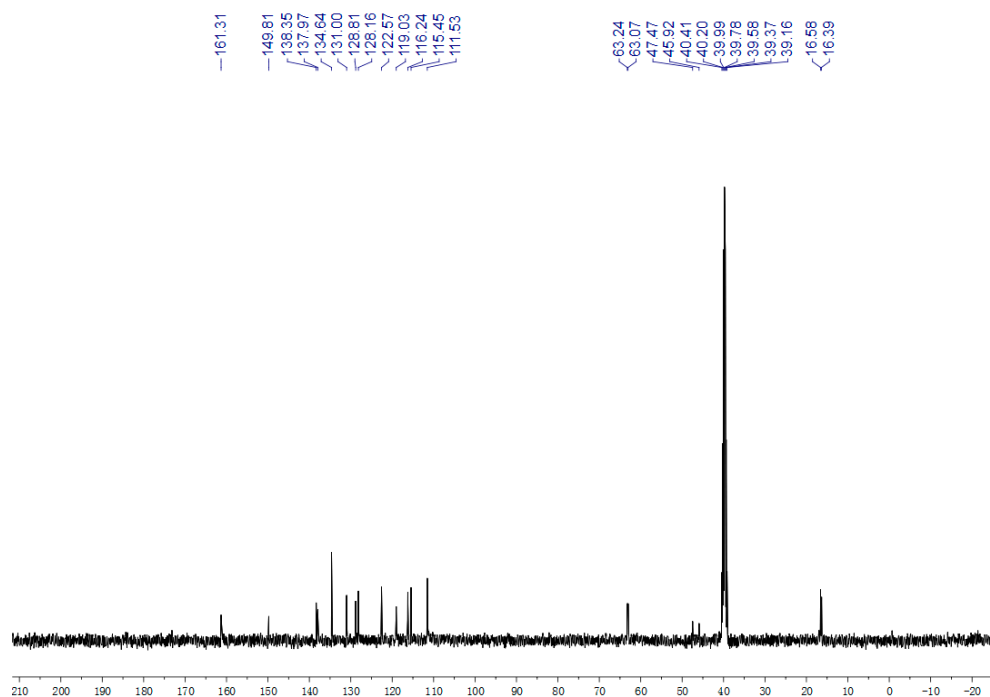
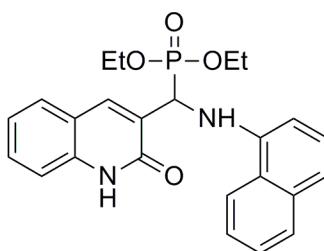
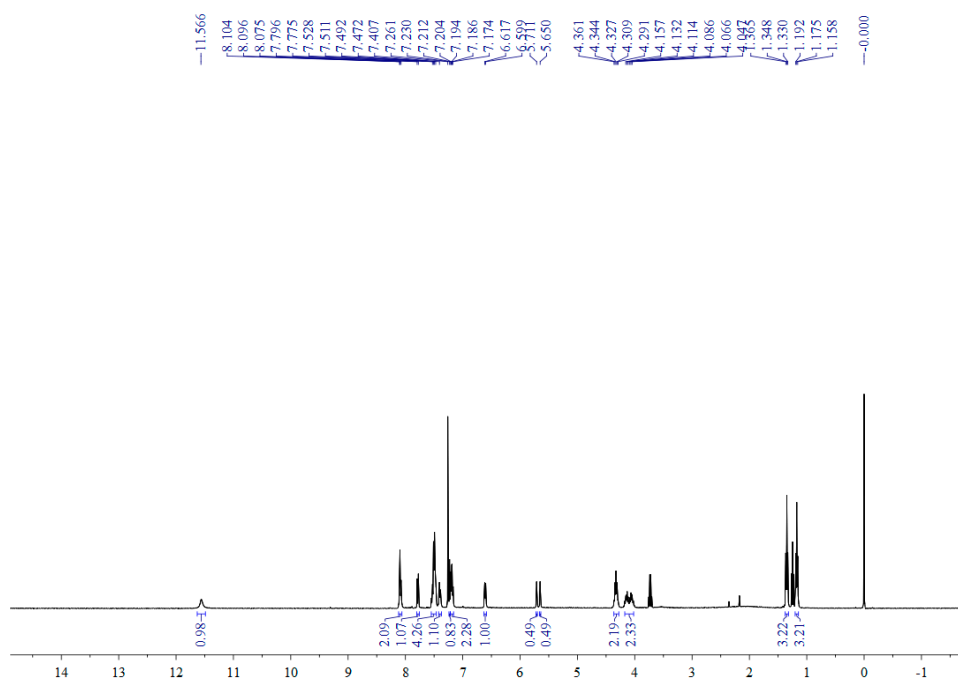
Figure S69.  $^{13}\text{C}$ -NMR of compound 4w.

Figure S70. Chemical structure of compound 4x.

Figure S71.  $^1\text{H}$ -NMR of compound 4x.



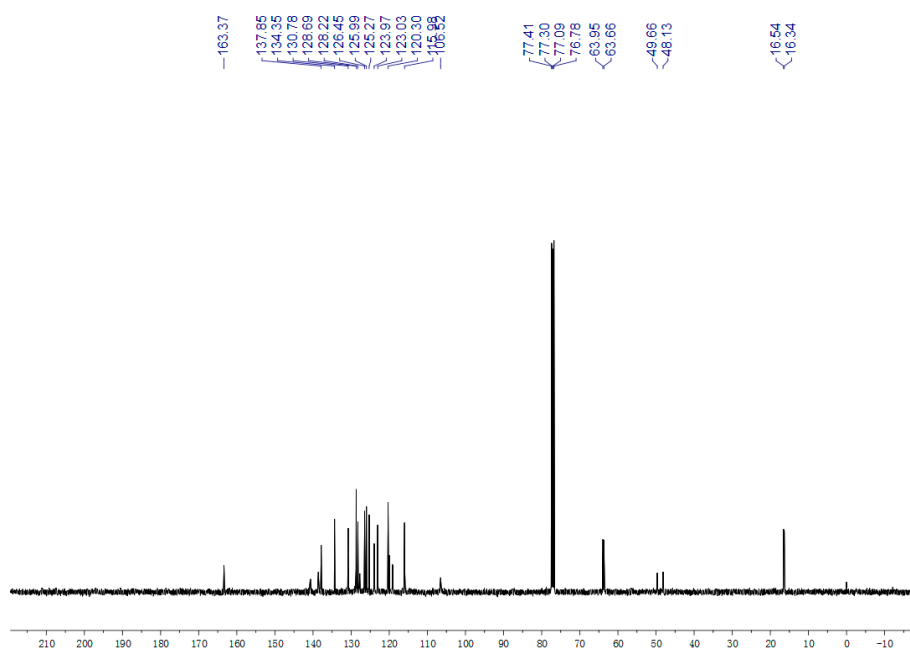


Figure S72.  $^{13}\text{C}$ -NMR of compound 4x.



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