

Figure S1. HRMS of compound 6a

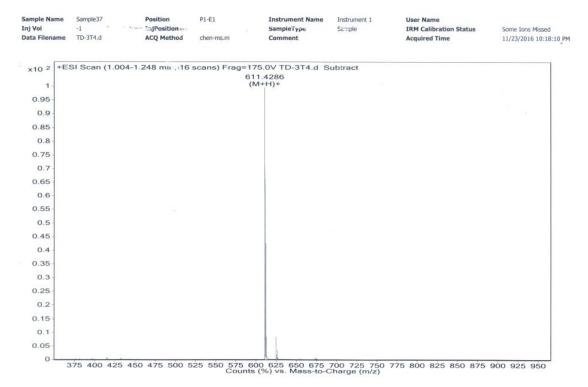
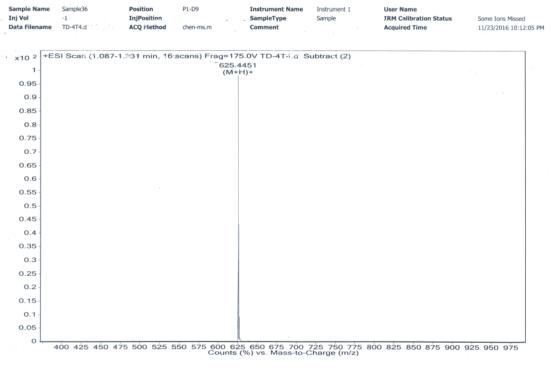
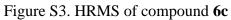
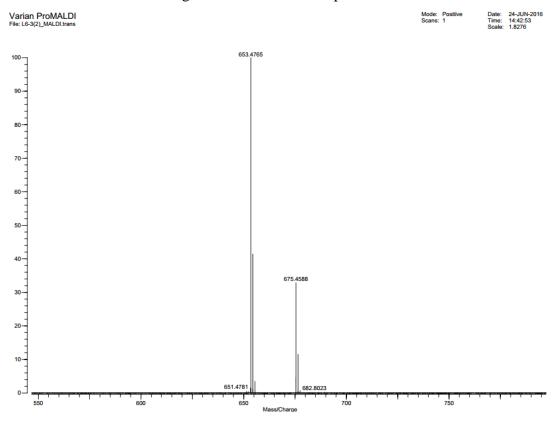
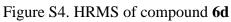


Figure S2. HRMS of compound 6b

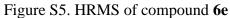












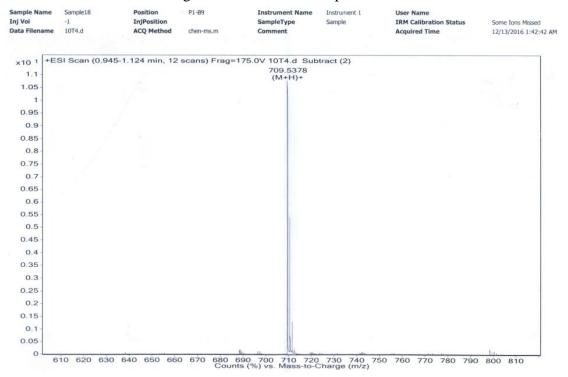
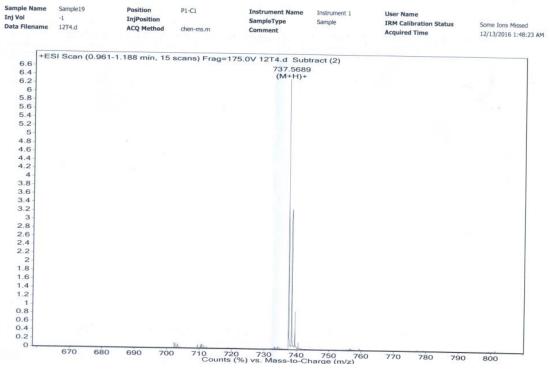
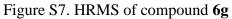


Figure S6. HRMS of compound 6f





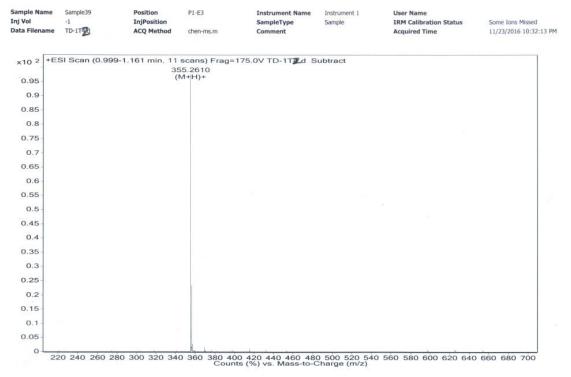
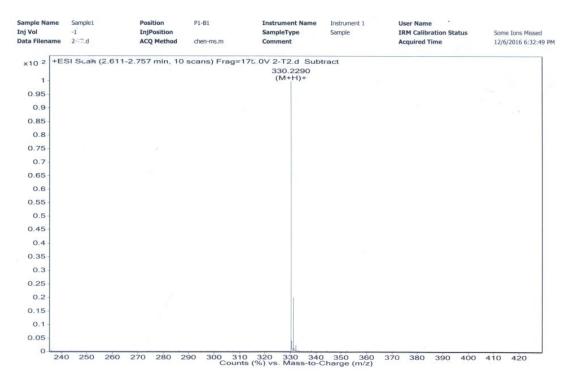
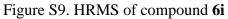


Figure S8. HRMS of compound 6h





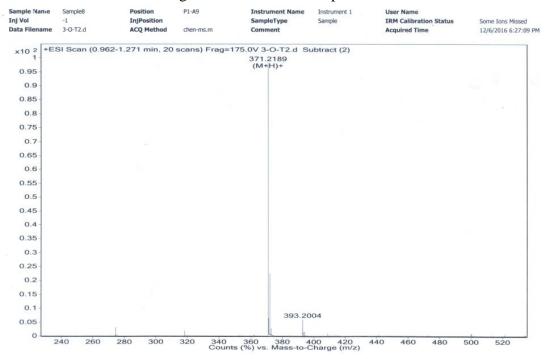
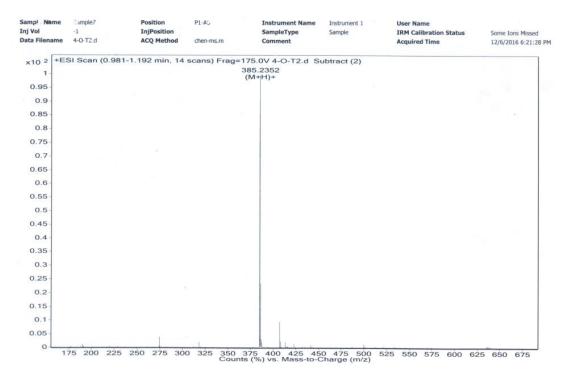
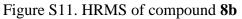


Figure S10. HRMS of compound 8a





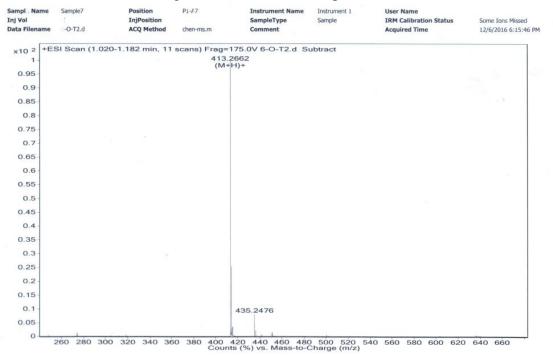
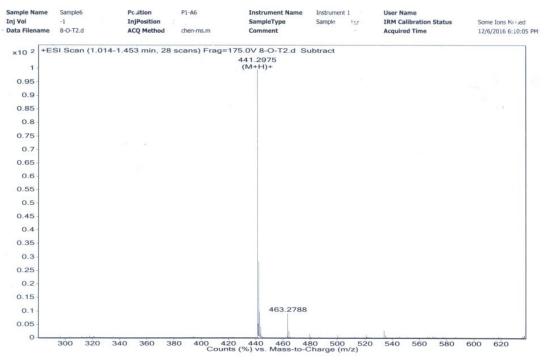


Figure S12. HRMS of compound 8c





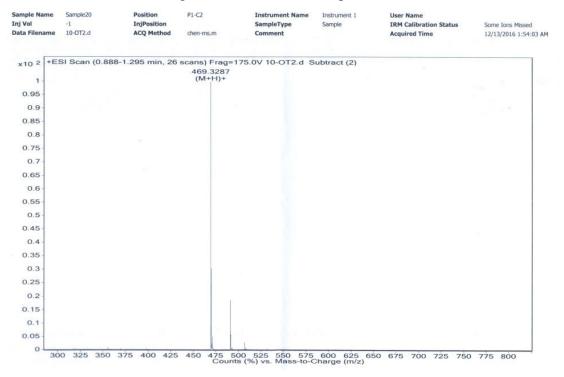
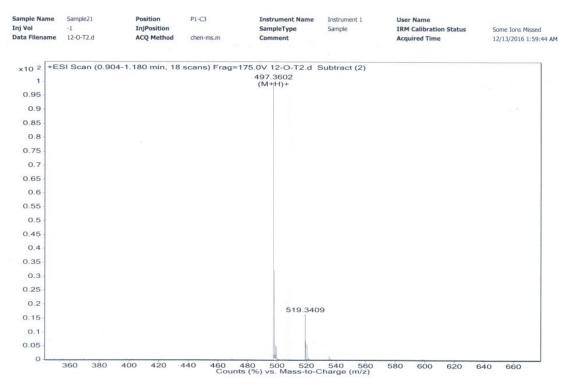


Figure S14. HRMS of compound 8e





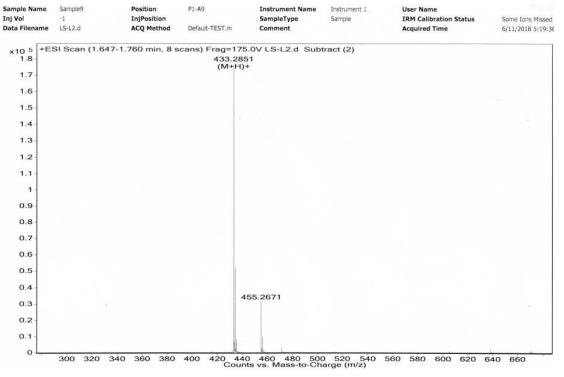
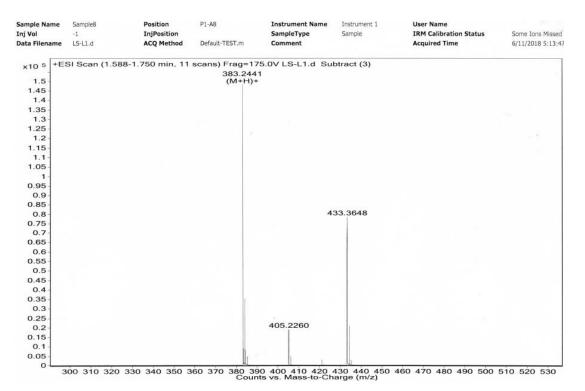
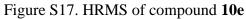


Figure S16. HRMS of compound 9e





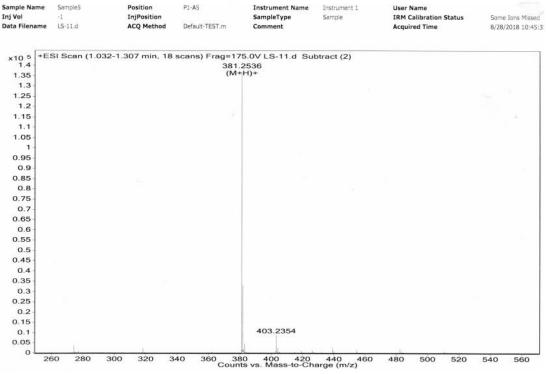


Figure S18. HRMS of compound 11e

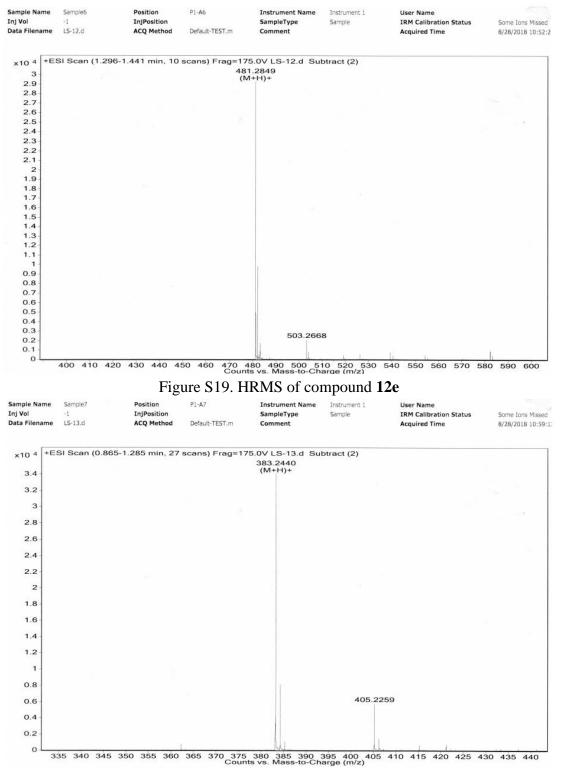
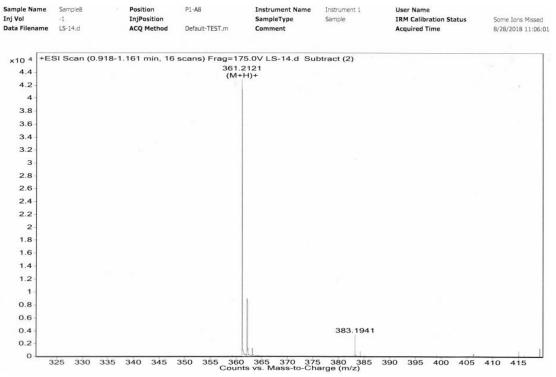
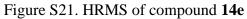


Figure S20. HRMS of compound 13e





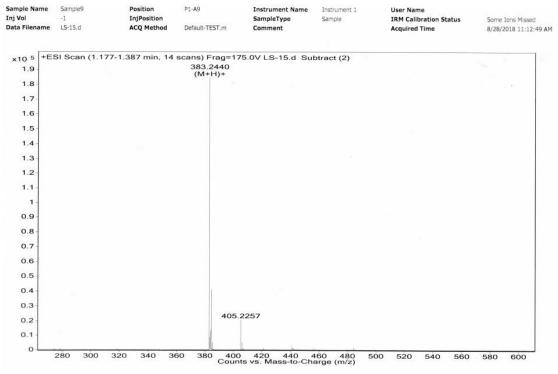
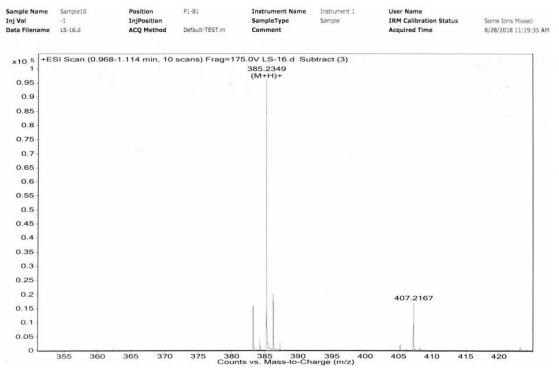
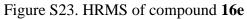


Figure S22. HRMS of compound 15e





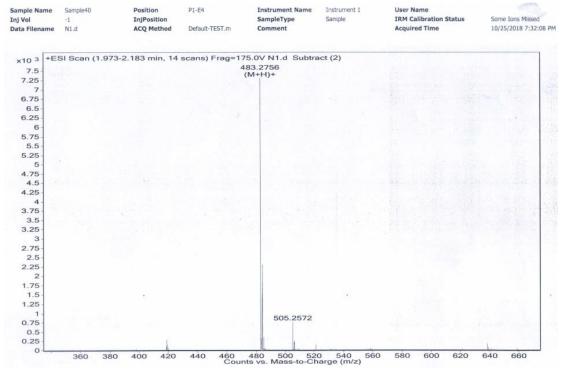
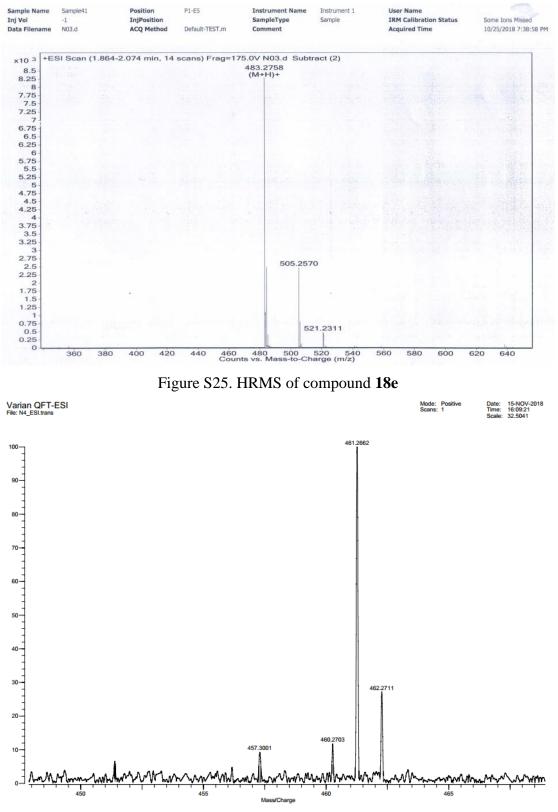
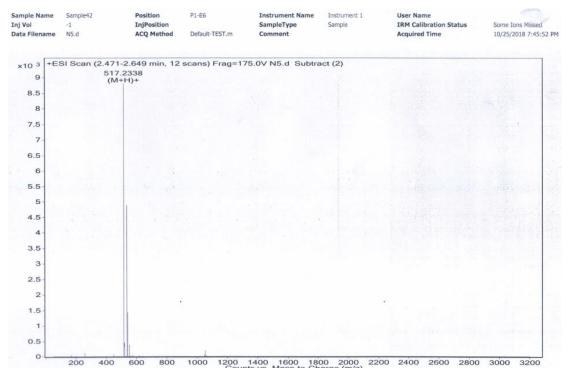
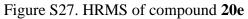


Figure S24. HRMS of compound 17e









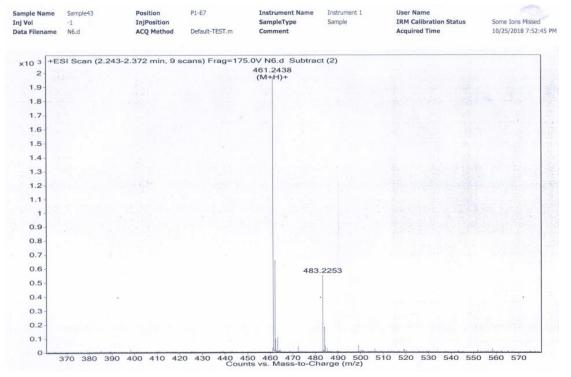
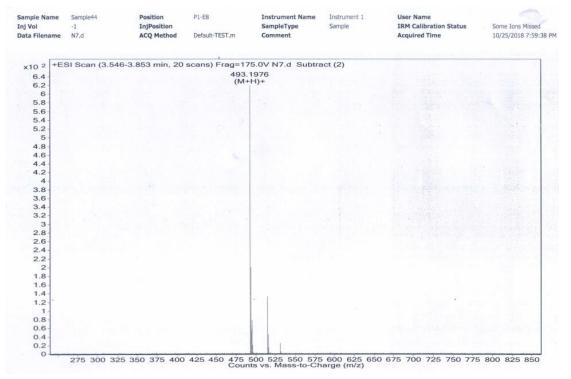


Figure S28. HRMS of compound 21e





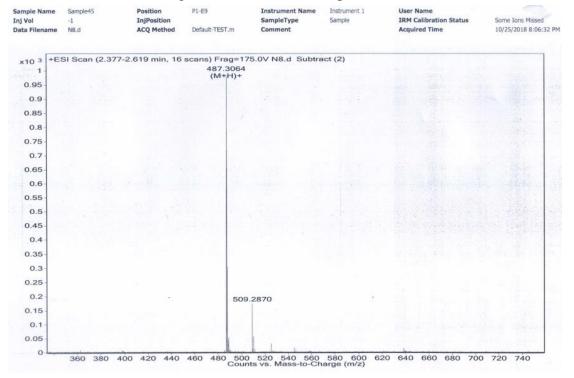
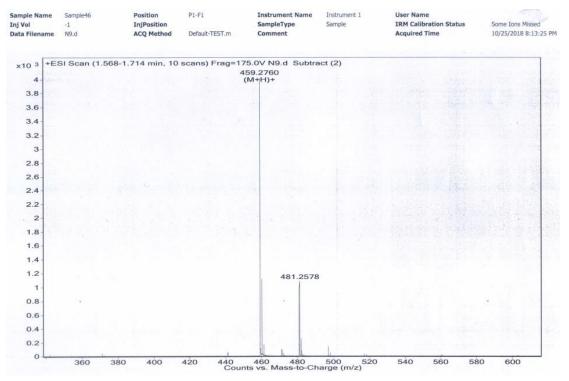
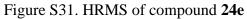


Figure S30. HRMS of compound 23e





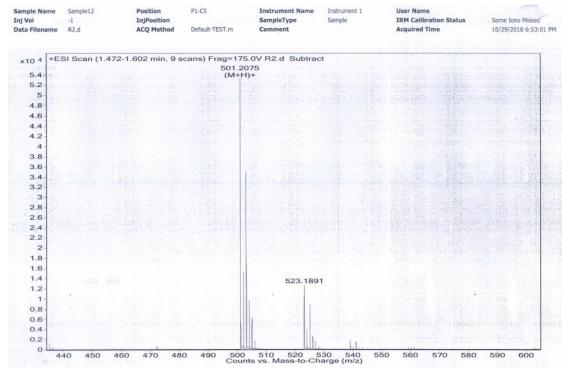
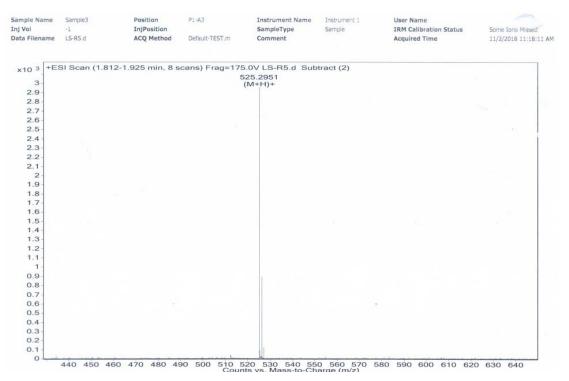
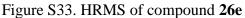


Figure S32. HRMS of compound 25e





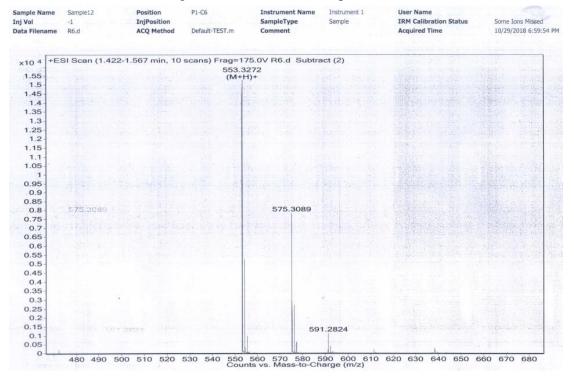
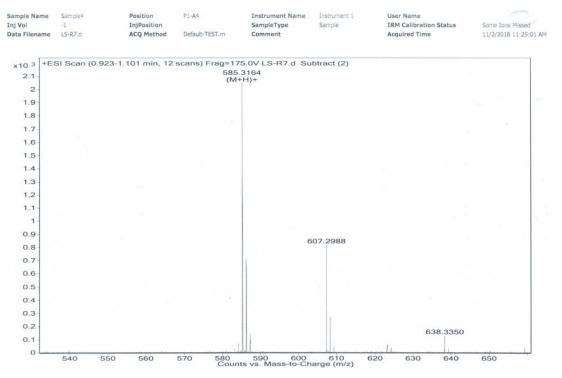
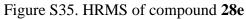


Figure S34. HRMS of compound 27e





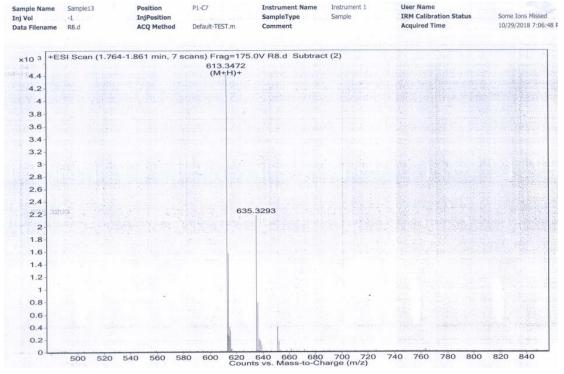
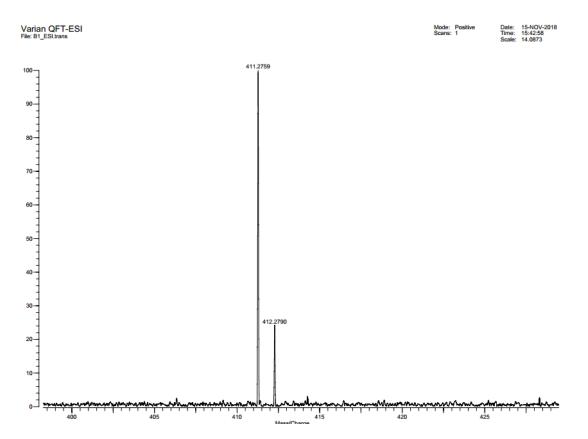
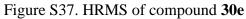


Figure S36. HRMS of compound 29e





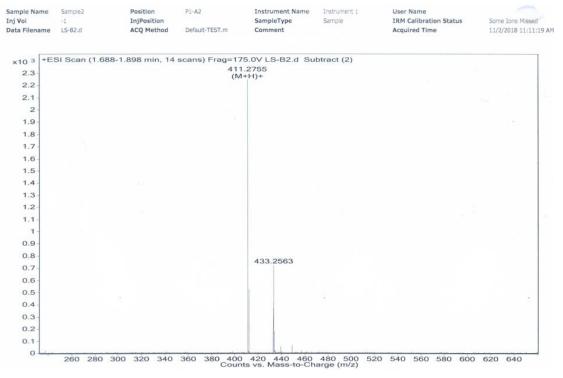
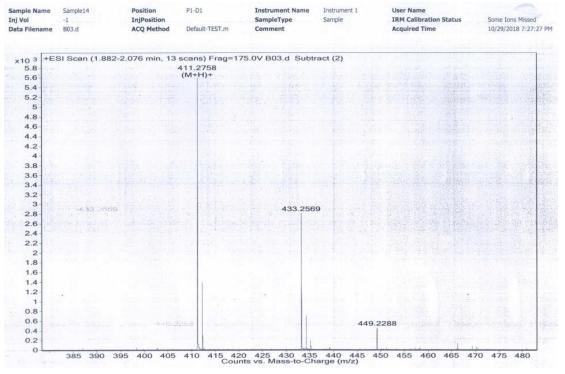
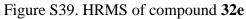


Figure S38. HRMS of compound 31e





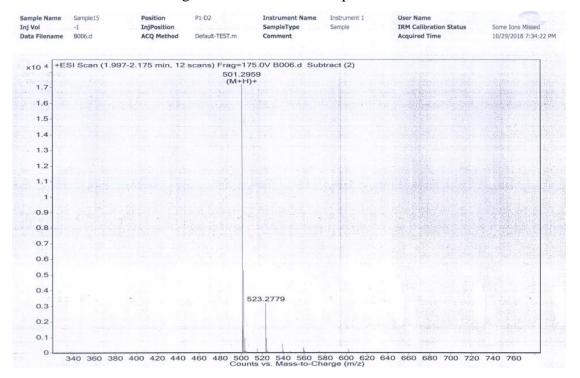
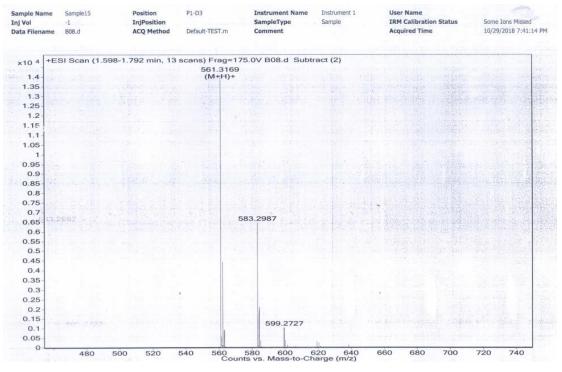
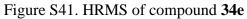


Figure S40. HRMS of compound 33e





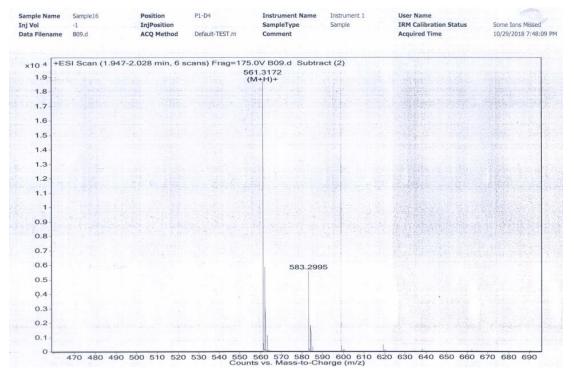
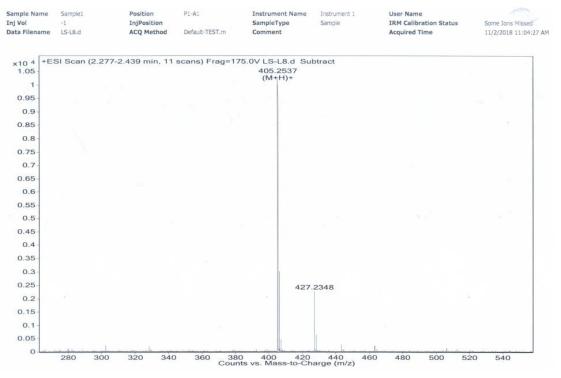
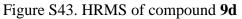


Figure S42. HRMS of compound 35e





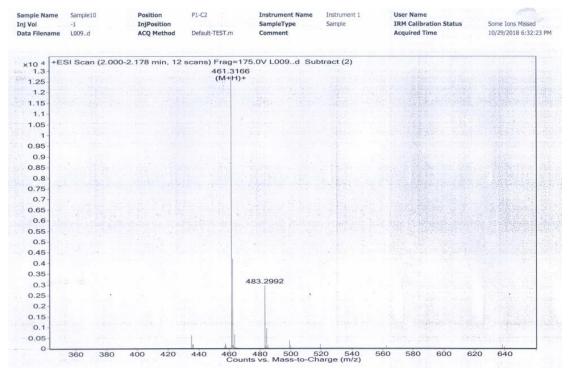
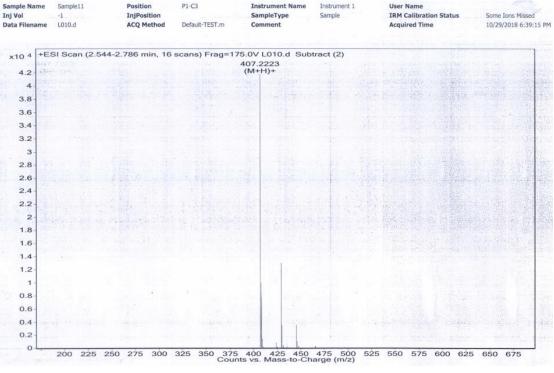
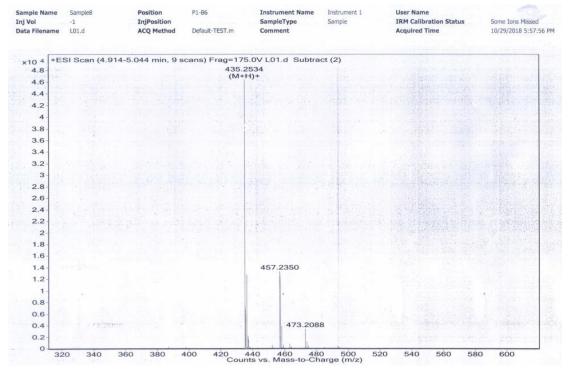
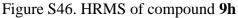


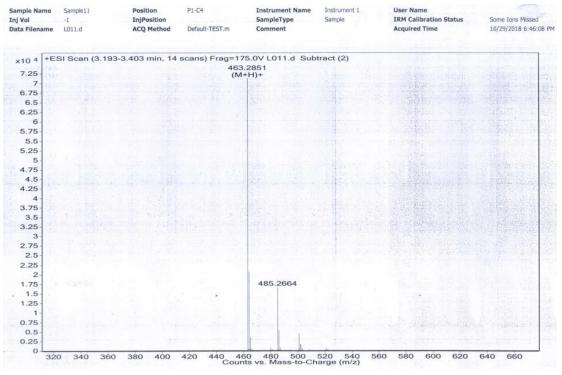
Figure S44. HRMS of compound 9f

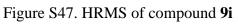












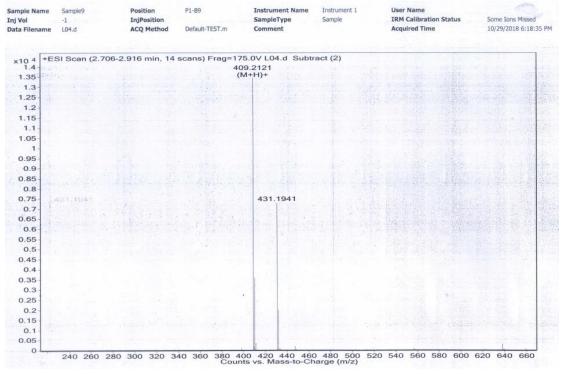
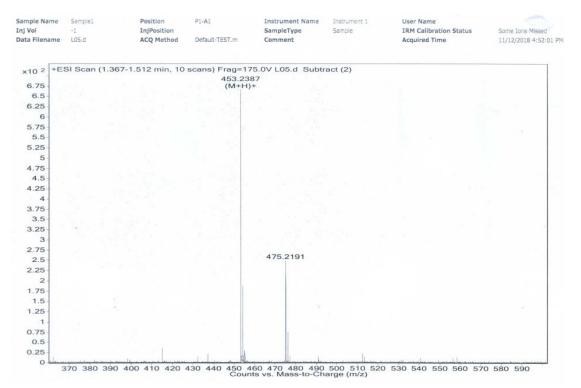


Figure S48. HRMS of compound 9j





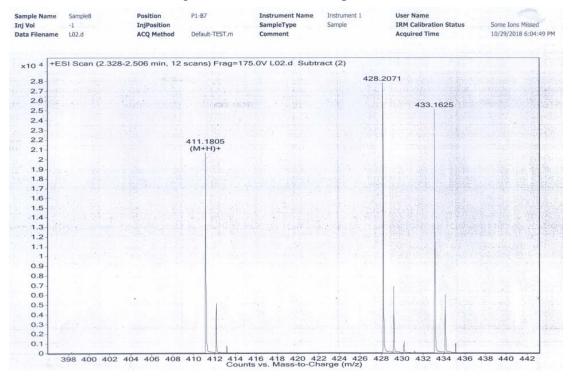


Figure S50. HRMS of compound 91

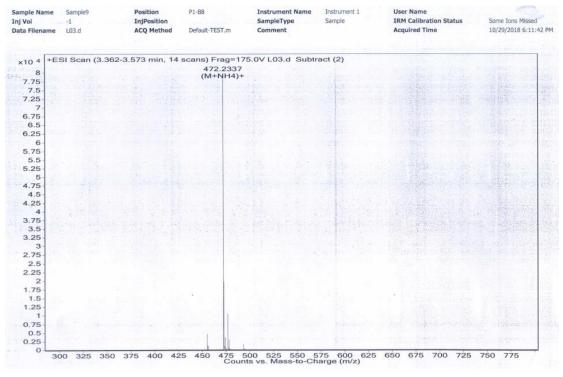


Figure S51. HRMS of compound 9m

1H-NMR

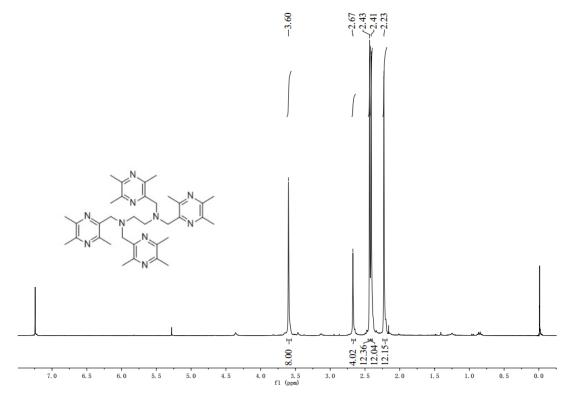


Figure S52 ¹H NMR spectrum of compound **6a.**

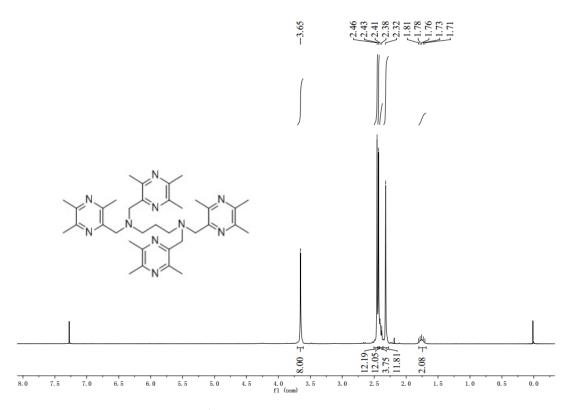


Figure S53 ¹H NMR spectrum of compound **6b.**

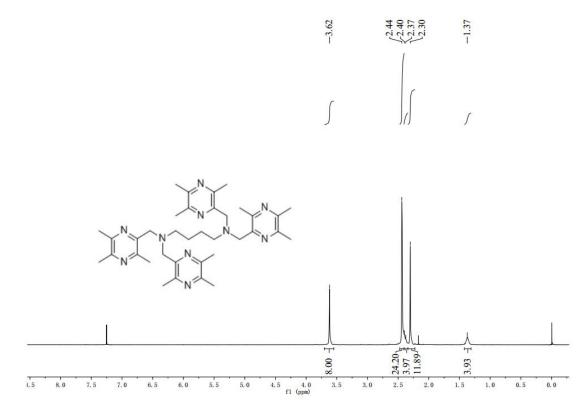


Figure S54 ¹H NMR spectrum of compound **6c.**

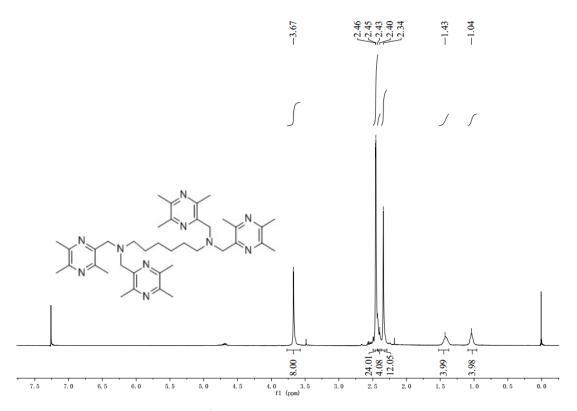


Figure S55 ¹H NMR spectrum of compound **6d.**

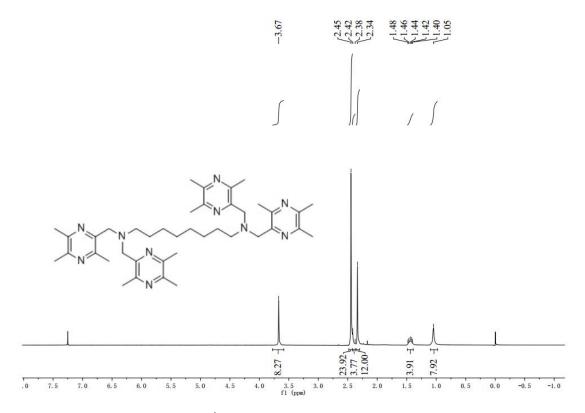
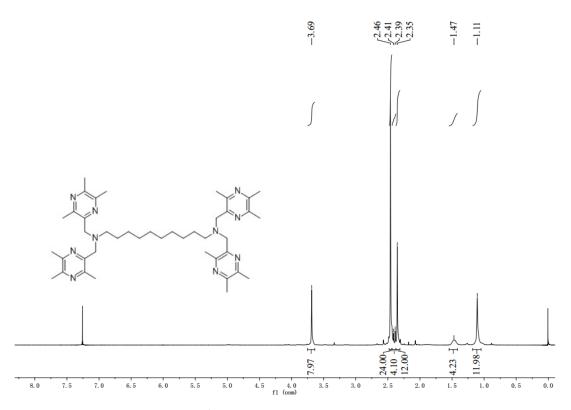
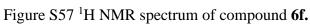


Figure S56 ¹H NMR spectrum of compound **6e.**





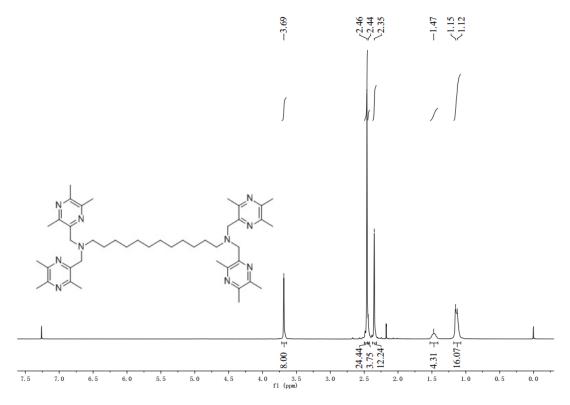


Figure S58 ¹H NMR spectrum of compound **6g.**

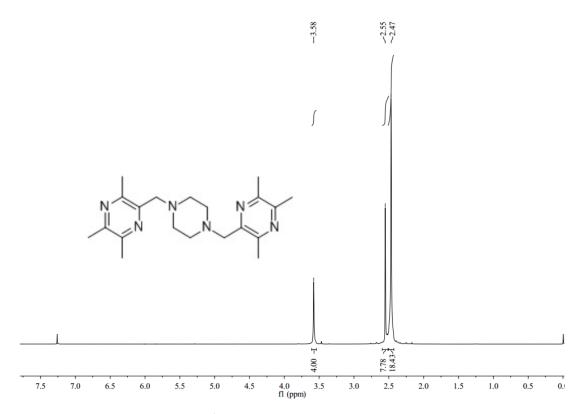


Figure S59 ¹H NMR spectrum of compound **6h.**

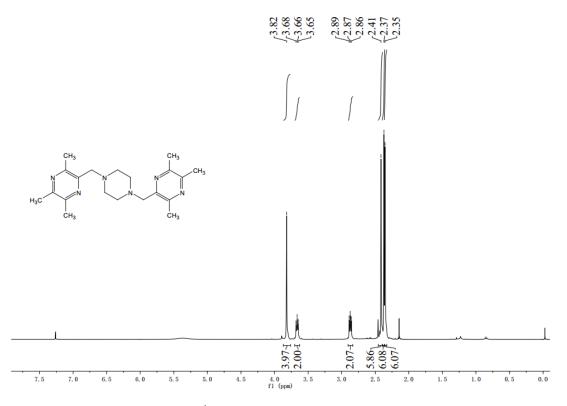


Figure S60 ¹H NMR spectrum of compound **6i.**

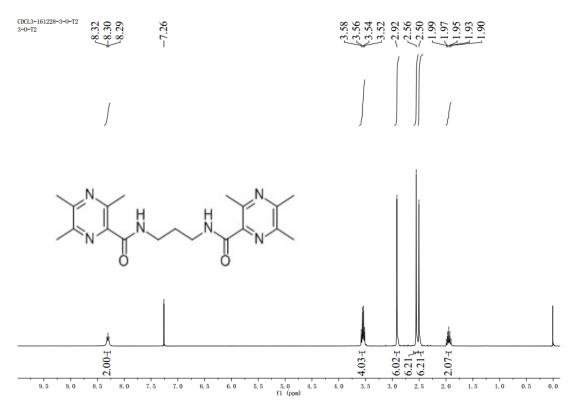


Figure S61 ¹H NMR spectrum of compound 8a.

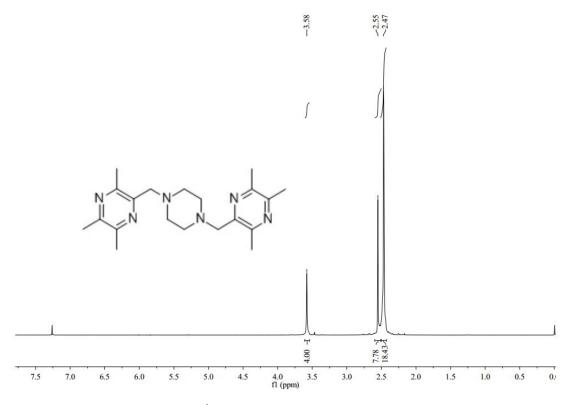


Figure S62 ¹H NMR spectrum of compound **8b.**

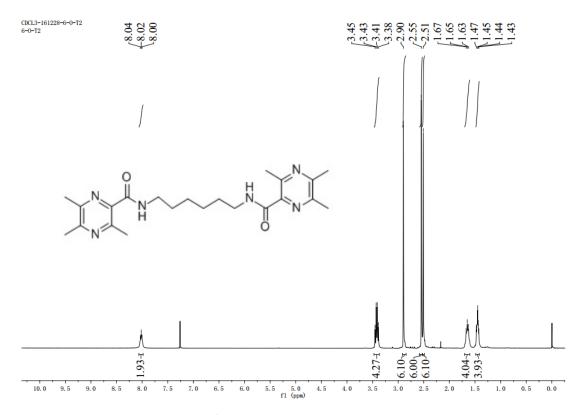


Figure S63 ¹H NMR spectrum of compound 8c.

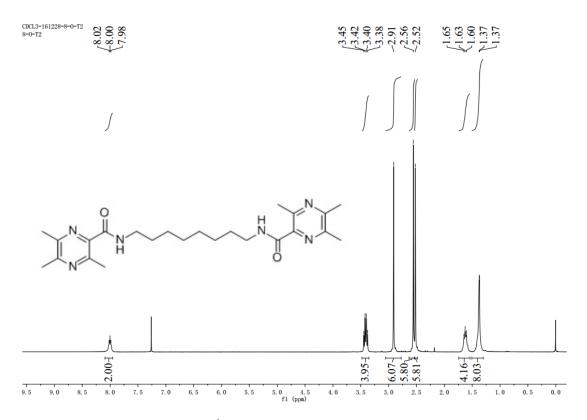


Figure S64 ¹H NMR spectrum of compound 8d.

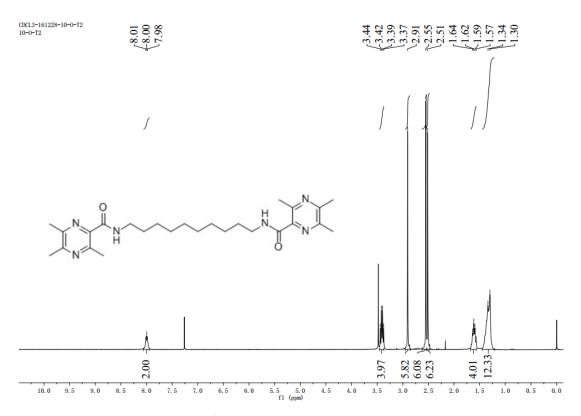


Figure S65 ¹H NMR spectrum of compound 8e.

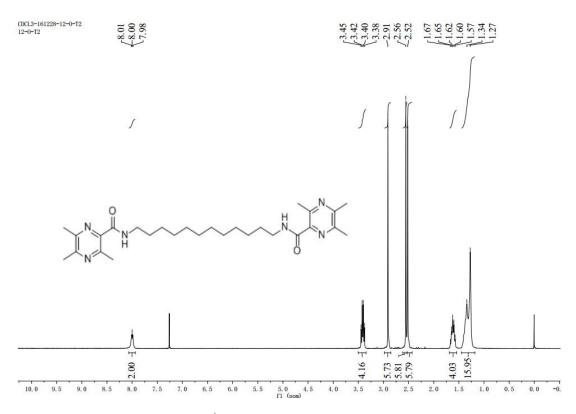


Figure S66 ¹H NMR spectrum of compound **8f.**

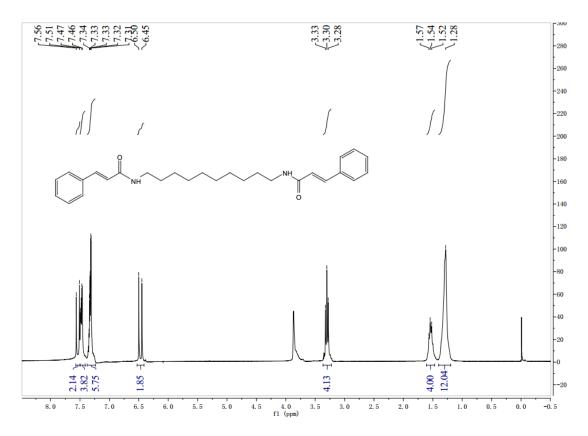


Figure S67 ¹H NMR spectrum of compound **9e.**



Figure S68 ¹H NMR spectrum of compound **10e.**

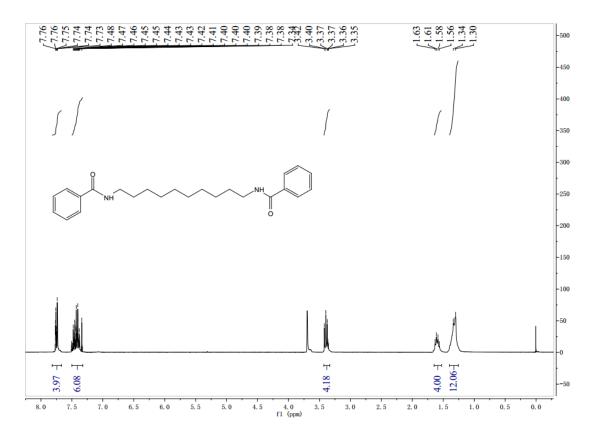


Figure S69 ¹H NMR spectrum of compound **11e.**

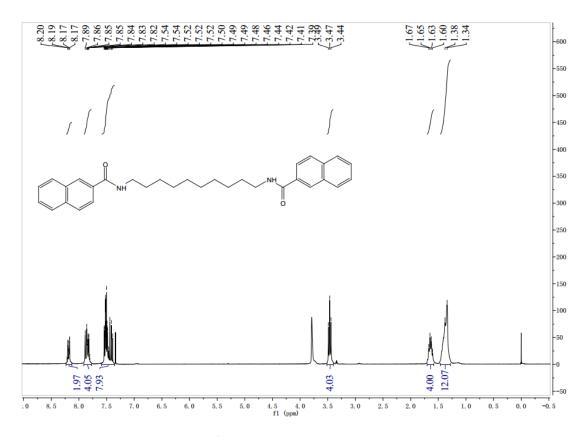


Figure S70 ¹H NMR spectrum of compound **12e.**

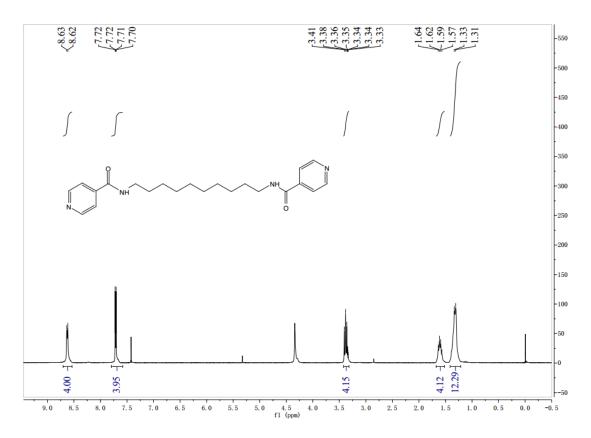


Figure S71 ¹H NMR spectrum of compound **13e.**

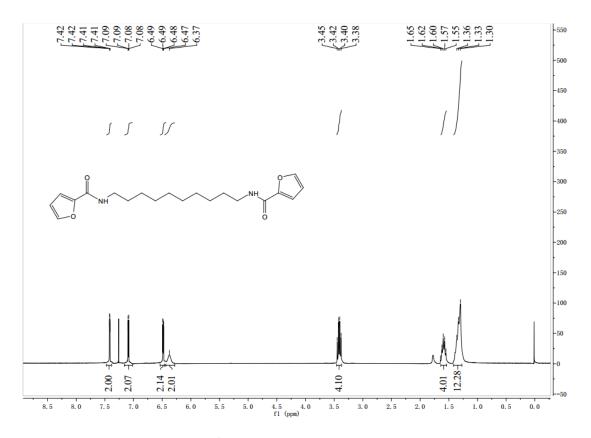


Figure S72 ¹H NMR spectrum of compound **14e.**

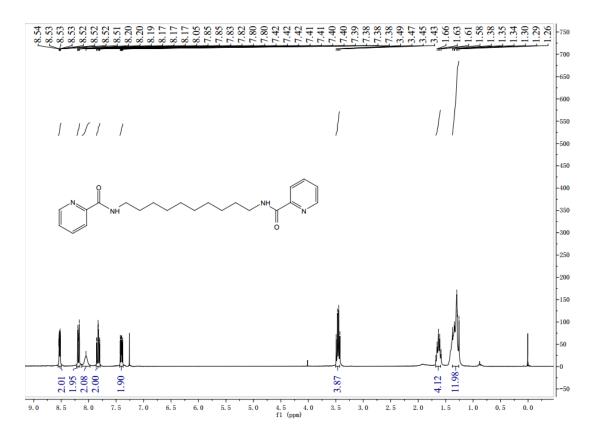


Figure S73 ¹H NMR spectrum of compound **15e.**

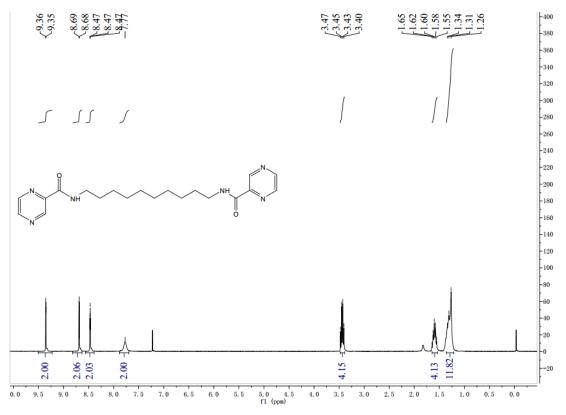


Figure S74 ¹H NMR spectrum of compound **16e.**

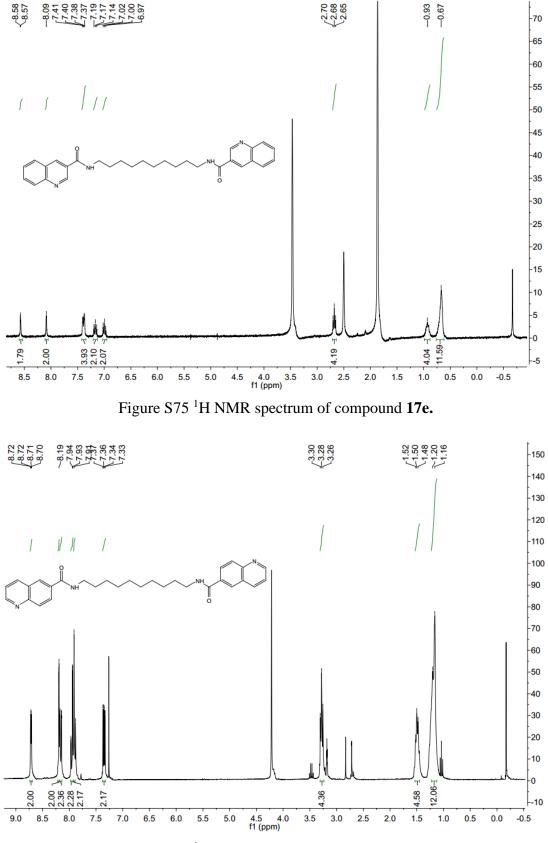


Figure S76 ¹H NMR spectrum of compound **18e.**

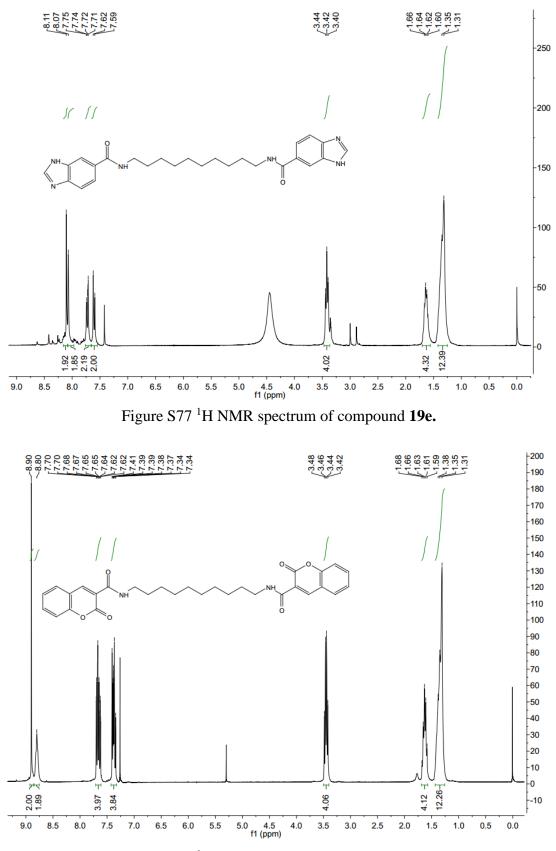


Figure S78 ¹H NMR spectrum of compound **20e.**

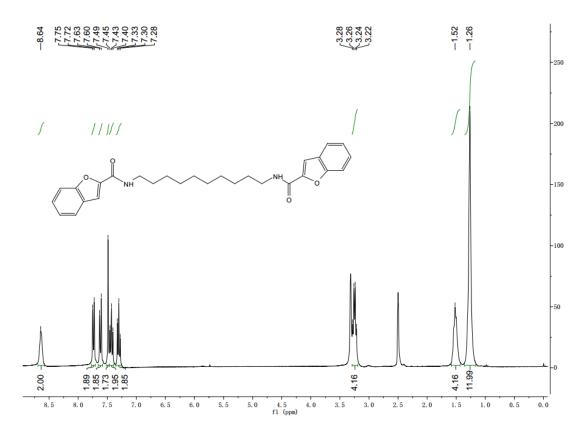


Figure S79 ¹H NMR spectrum of compound **21e.**

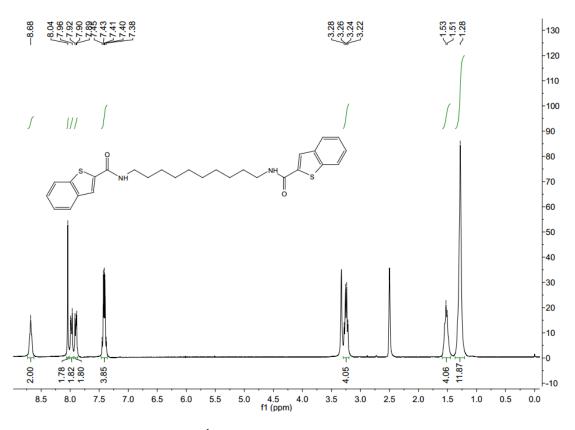


Figure S80 ¹H NMR spectrum of compound **22e.**

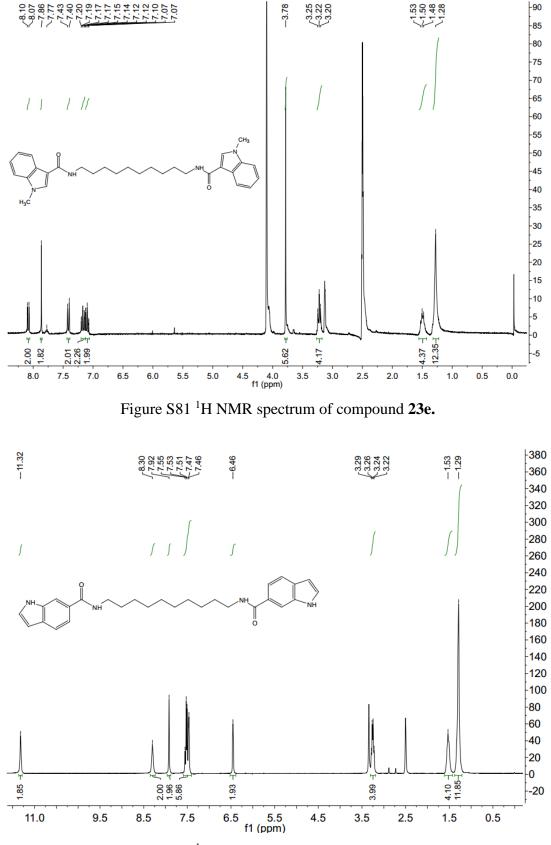


Figure S82 ¹H NMR spectrum of compound 24e.

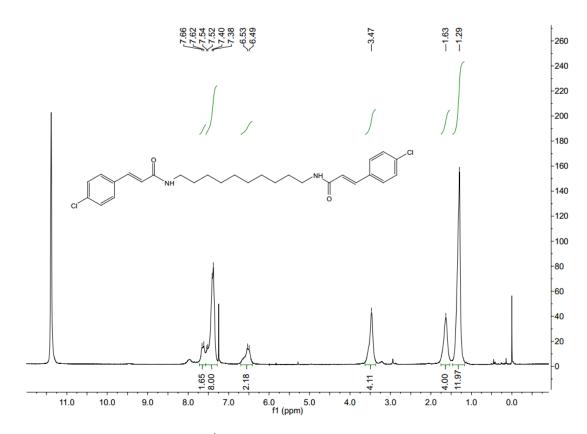


Figure S83 ¹H NMR spectrum of compound **25e.**

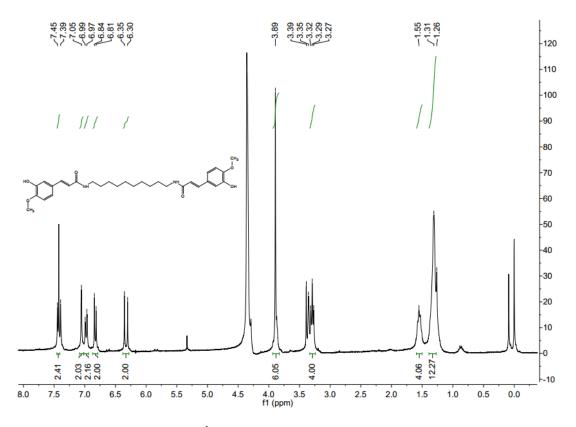


Figure S84 ¹H NMR spectrum of compound **26e.**

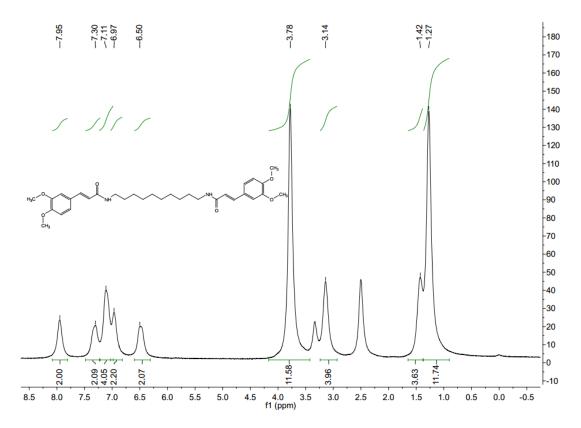


Figure S85 ¹H NMR spectrum of compound **27e.**

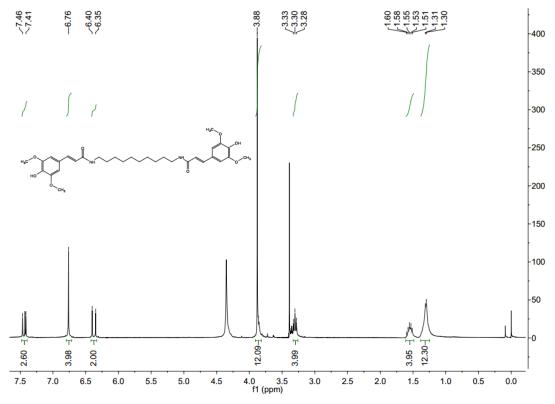


Figure S86 ¹H NMR spectrum of compound **28e.**

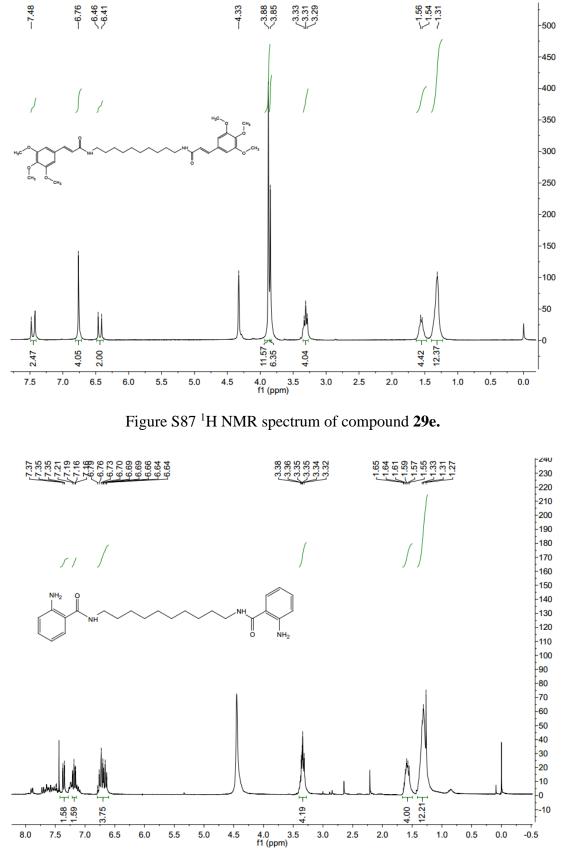


Figure S88 ¹H NMR spectrum of compound **30e.**

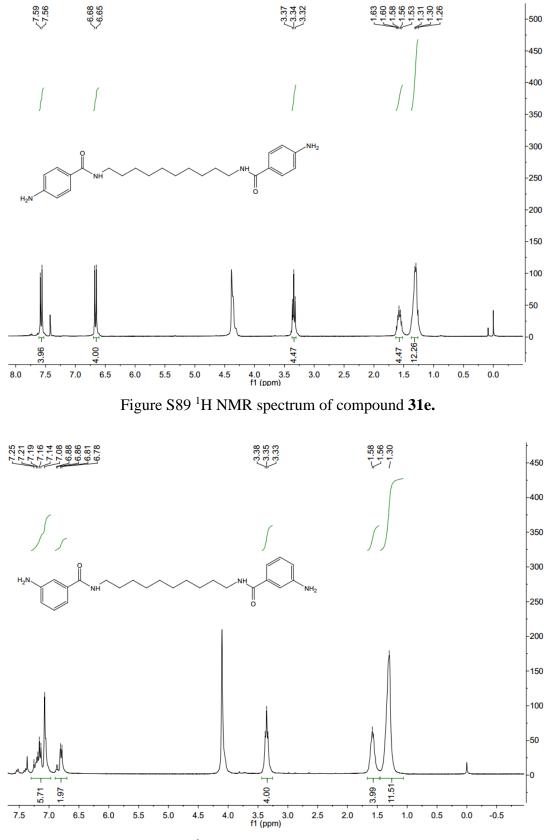


Figure S90 ¹H NMR spectrum of compound **32e.**

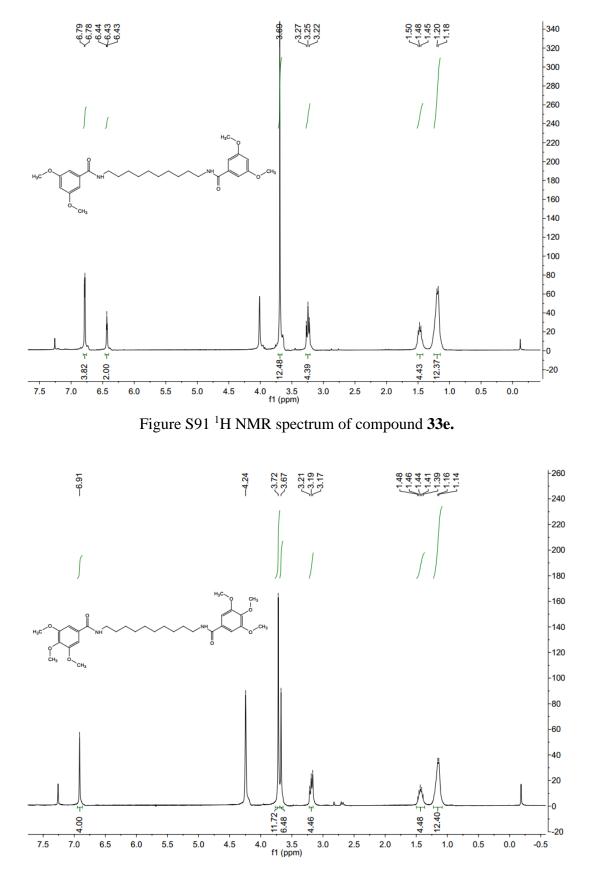


Figure S92 ¹H NMR spectrum of compound **34e.**

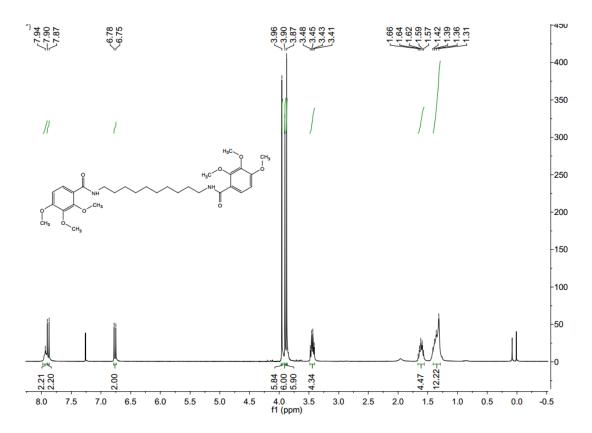


Figure S93 ¹H NMR spectrum of compound **35e.**

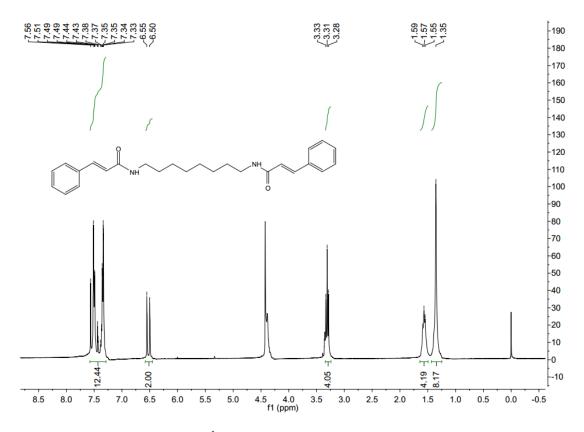


Figure S94 ¹H NMR spectrum of compound **9d.**

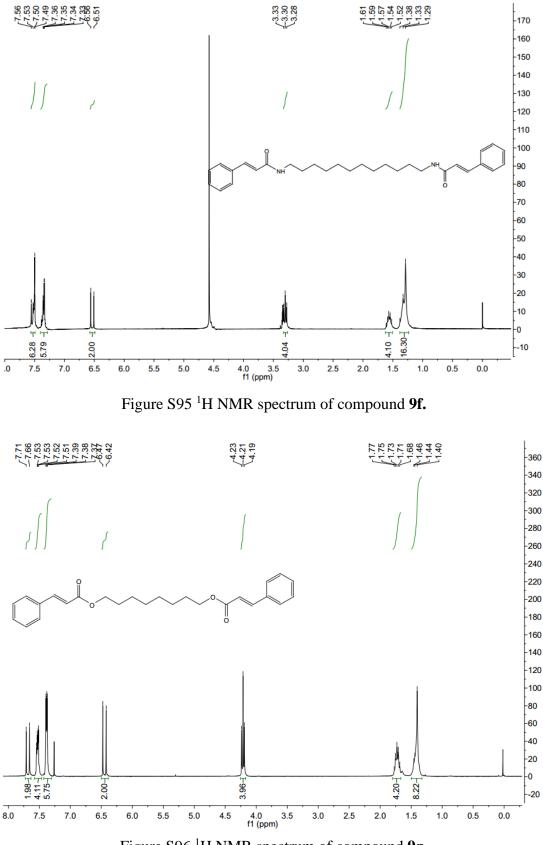
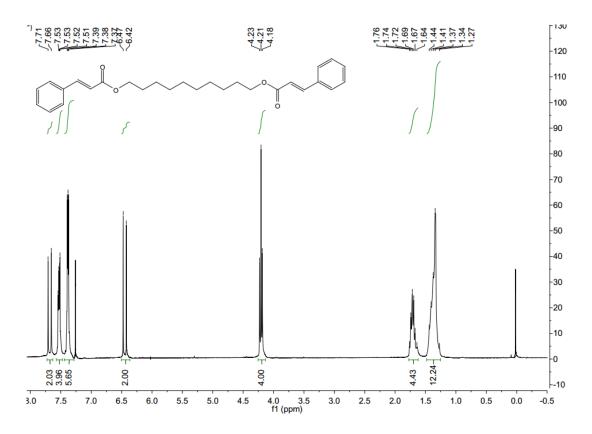
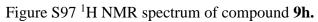


Figure S96 ¹H NMR spectrum of compound **9g.**





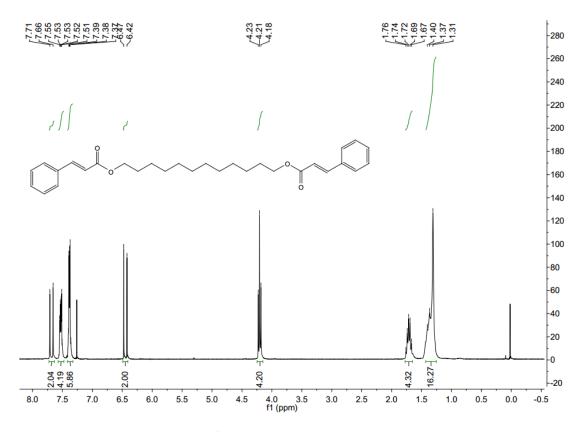
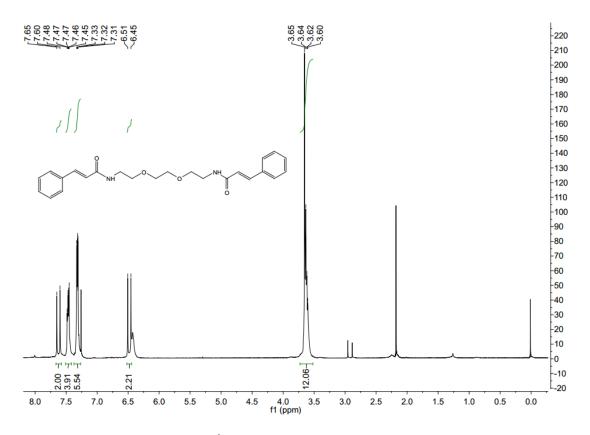
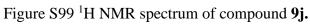


Figure S98 ¹H NMR spectrum of compound **9i.**





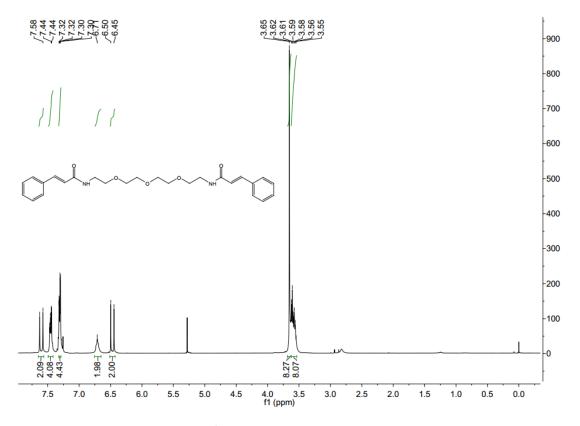


Figure S100 ¹H NMR spectrum of compound **9k.**

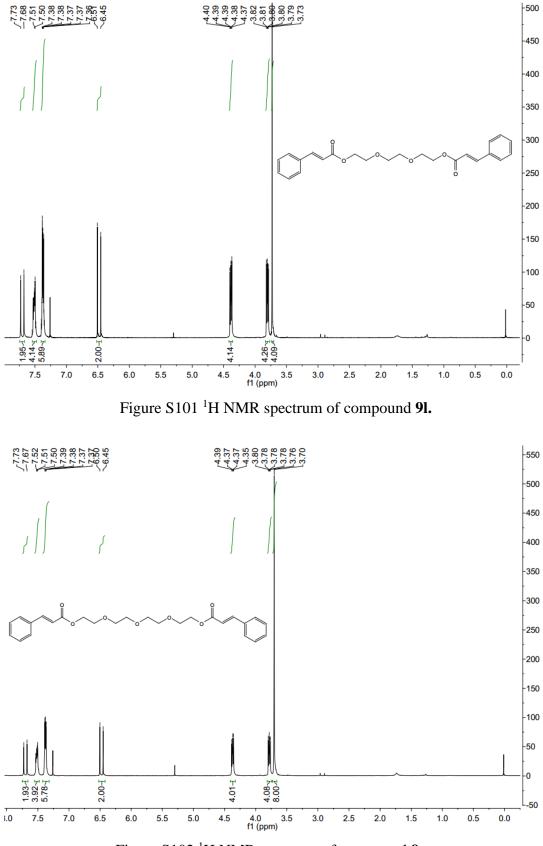


Figure S102 ¹H NMR spectrum of compound **9m.**

13C-NMR

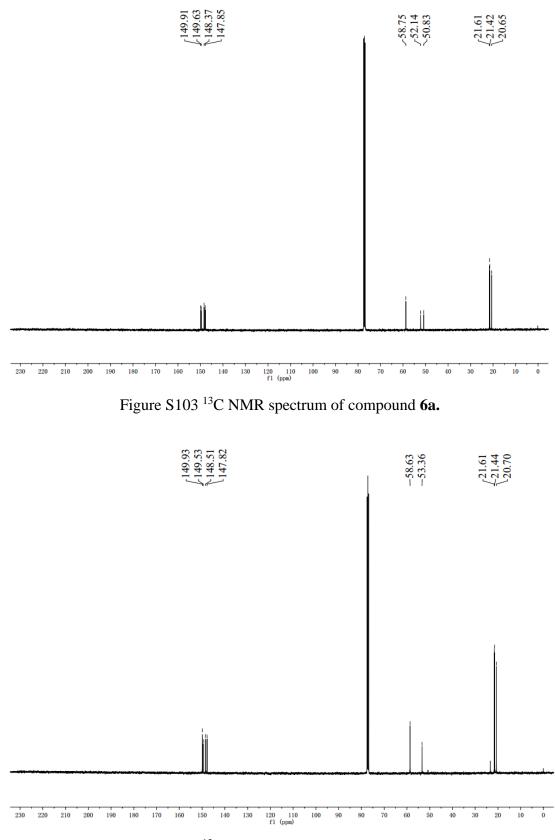


Figure S104 ¹³C NMR spectrum of compound **6b.**

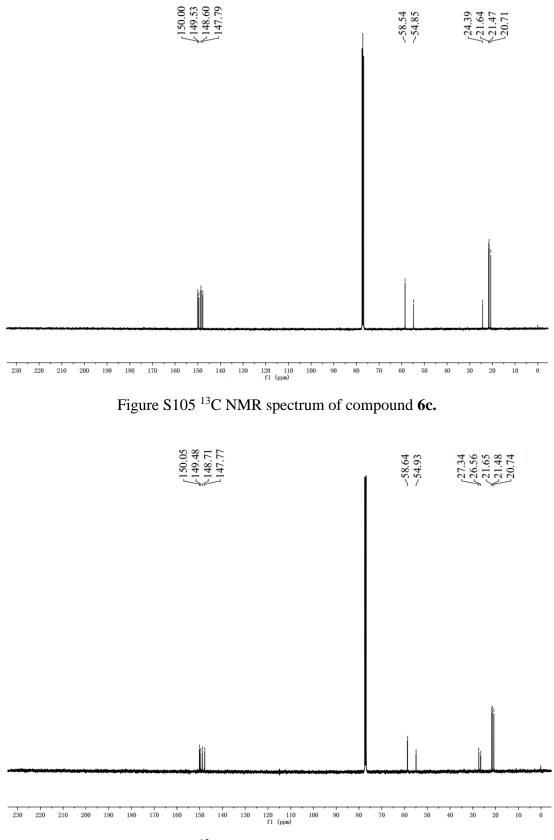


Figure S106 ¹³C NMR spectrum of compound **6d.**

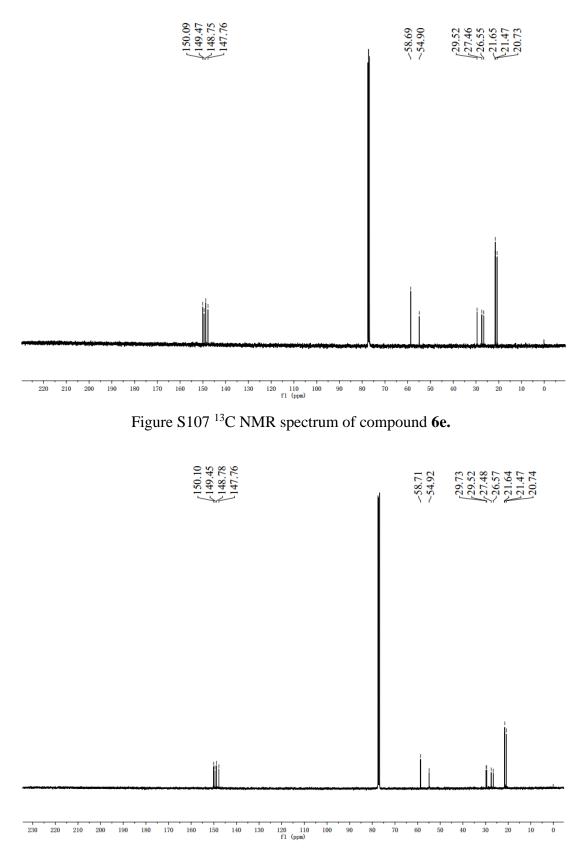


Figure S108 ¹³C NMR spectrum of compound **6f.**

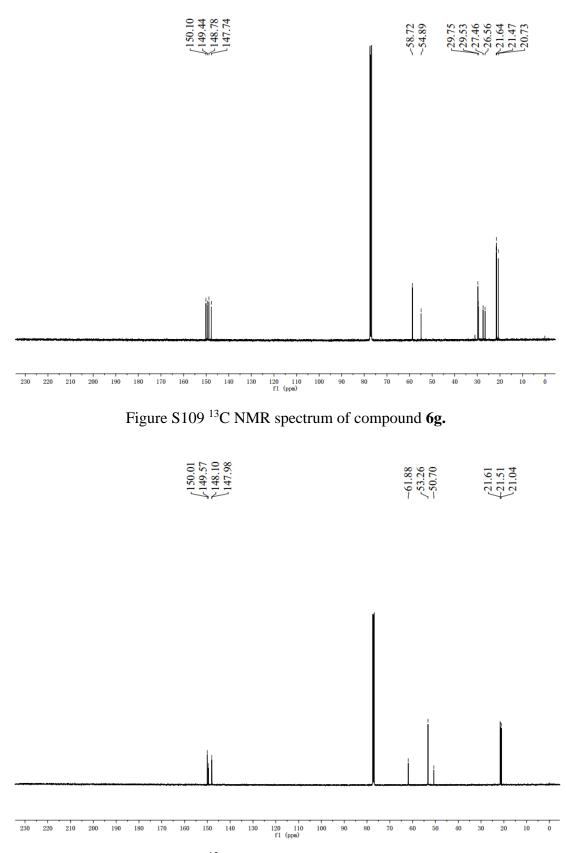


Figure S110 ¹³C NMR spectrum of compound **6h.**

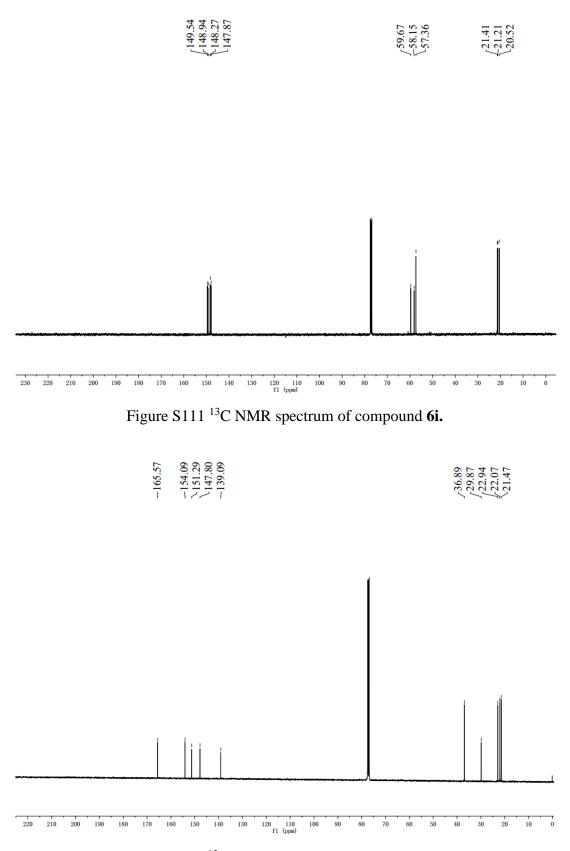


Figure S112 ¹³C NMR spectrum of compound 8a.

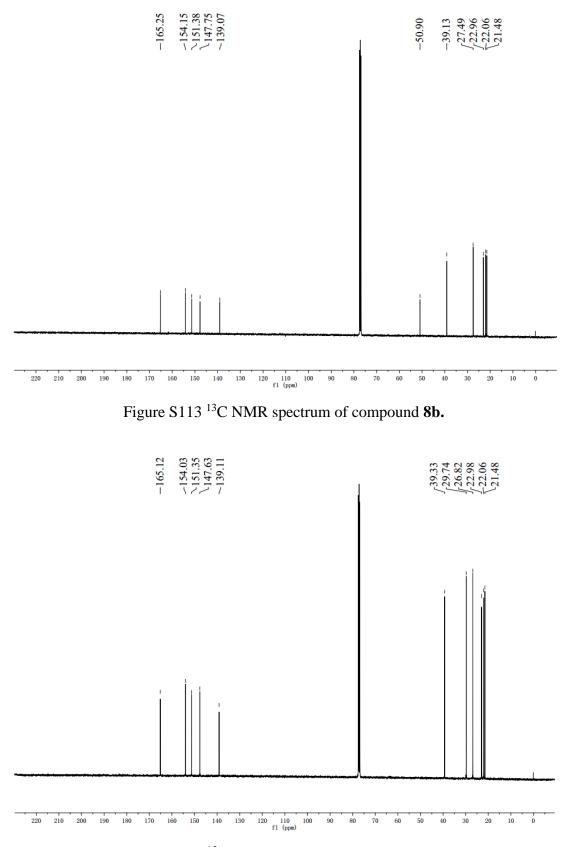


Figure S114 ¹³C NMR spectrum of compound 8c.

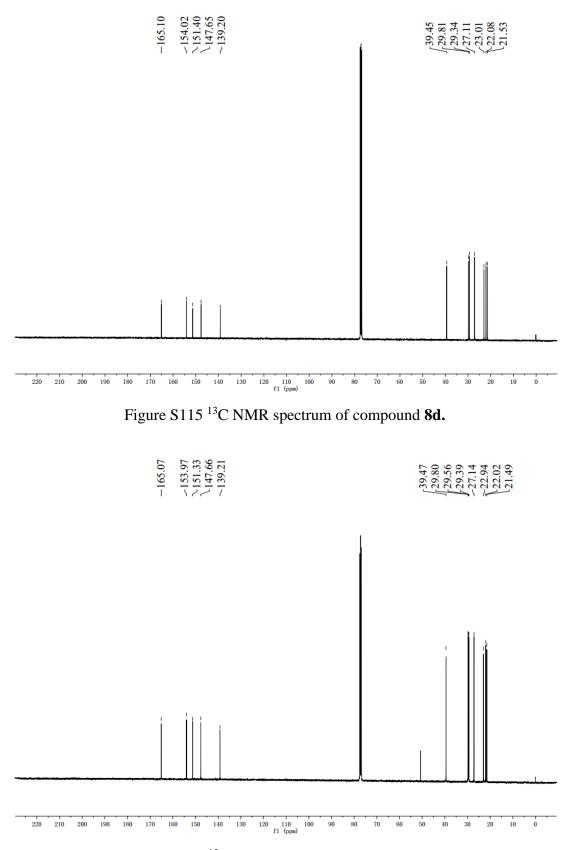


Figure S116 ¹³C NMR spectrum of compound 8e.

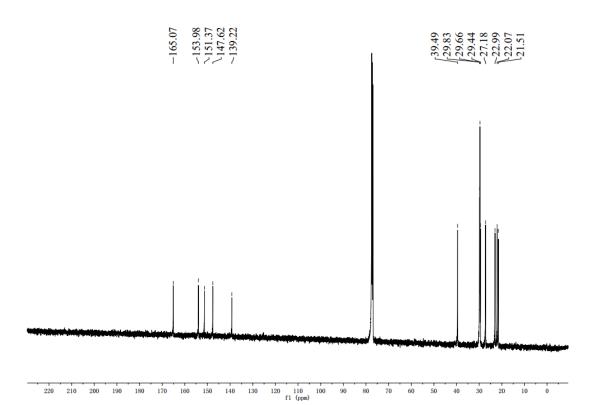


Figure S117 ¹³C NMR spectrum of compound **8f.**

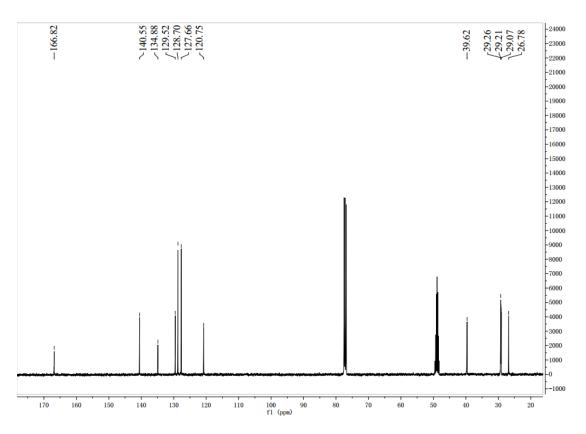


Figure S118 ¹³C NMR spectrum of compound **9e.**

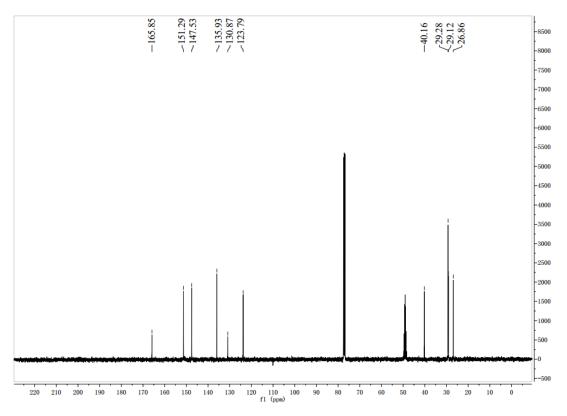


Figure S119 ¹³C NMR spectrum of compound **10e.**

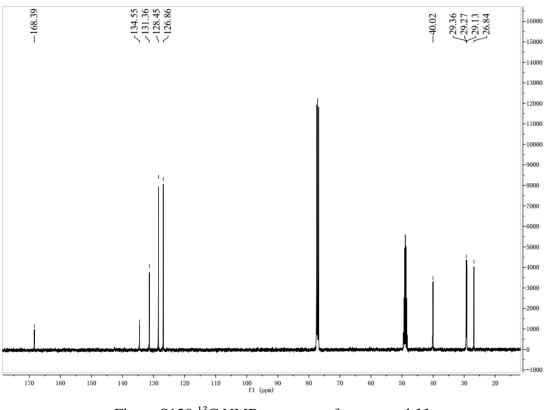


Figure S120 ¹³C NMR spectrum of compound **11e.**

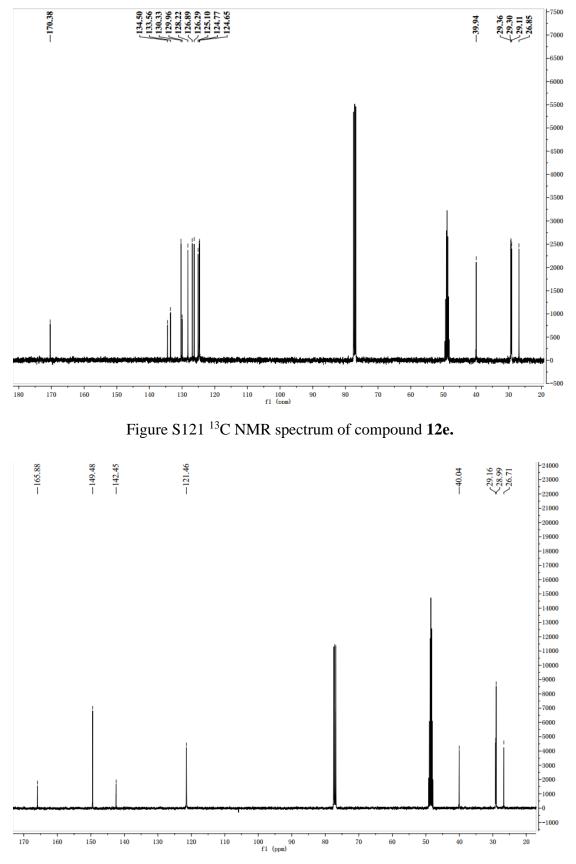
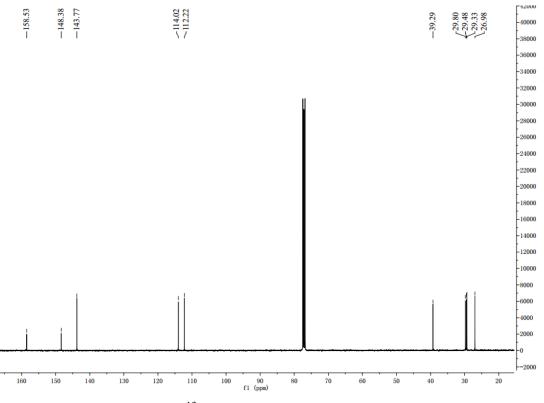
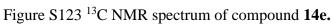


Figure S122 ¹³C NMR spectrum of compound **13e.**





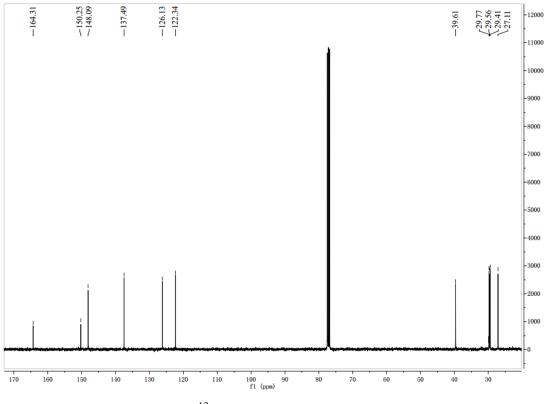


Figure S124 ¹³C NMR spectrum of compound **15e.**

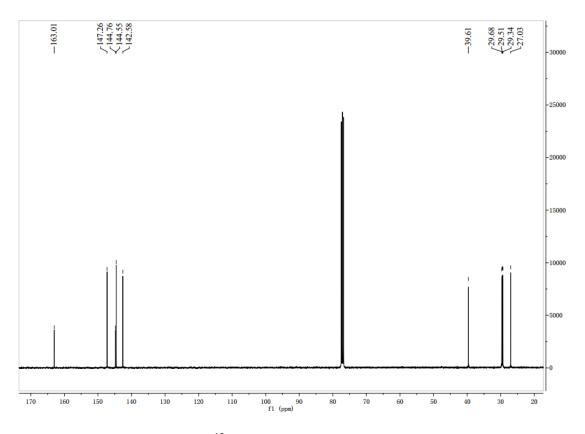


Figure S125 ¹³C NMR spectrum of compound **16e.**

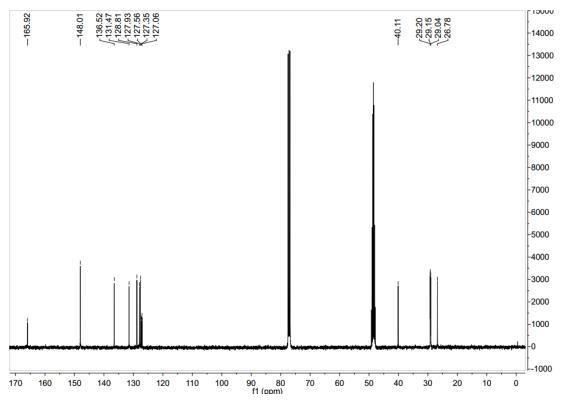


Figure S126 ¹³C NMR spectrum of compound **17e.**

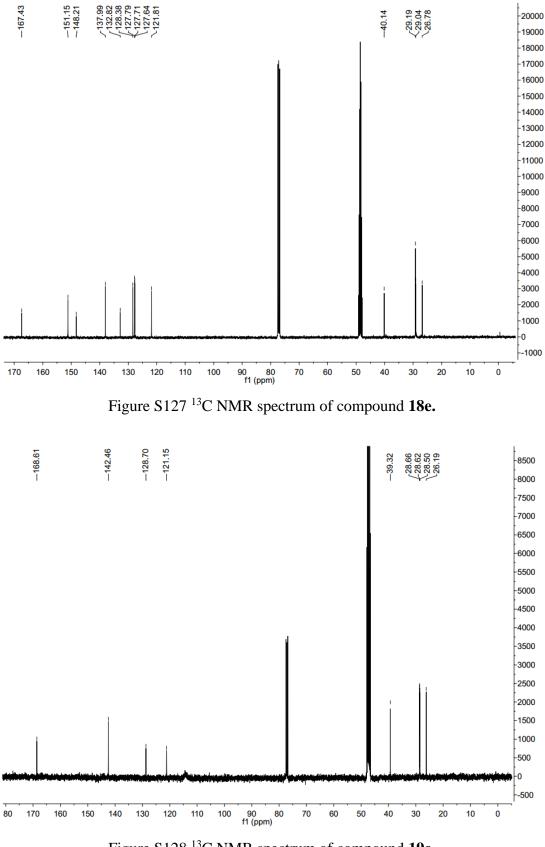


Figure S128 ¹³C NMR spectrum of compound **19e.**

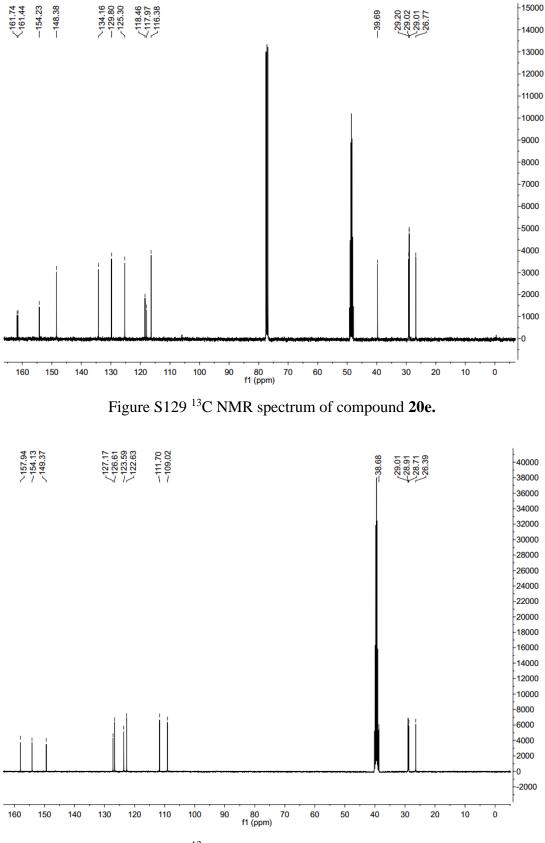
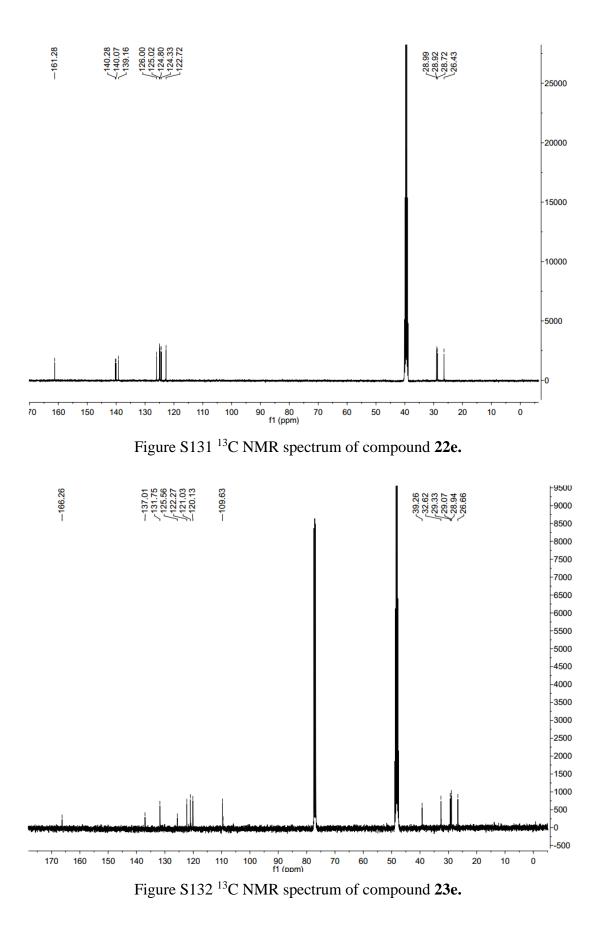


Figure S130¹³C NMR spectrum of compound **21e.**



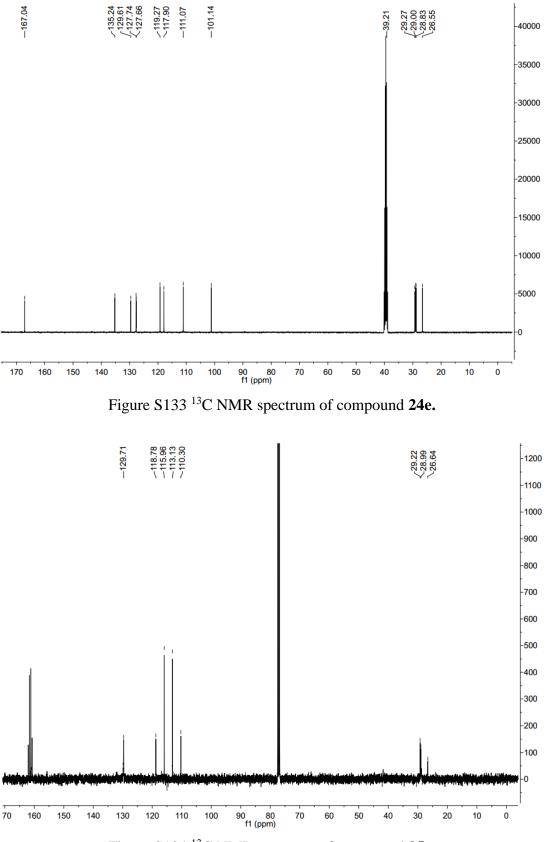
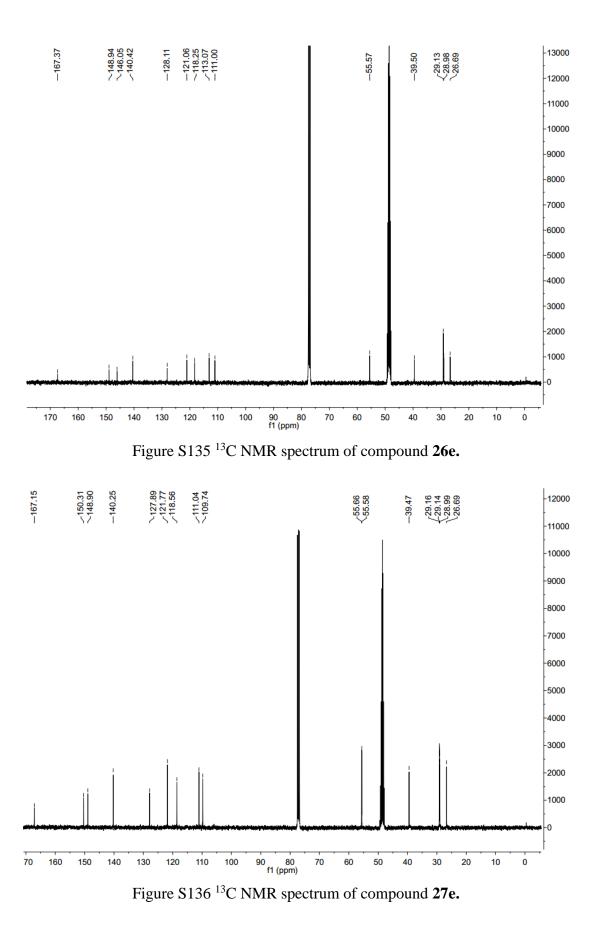


Figure S134 ¹³C NMR spectrum of compound **25e.**



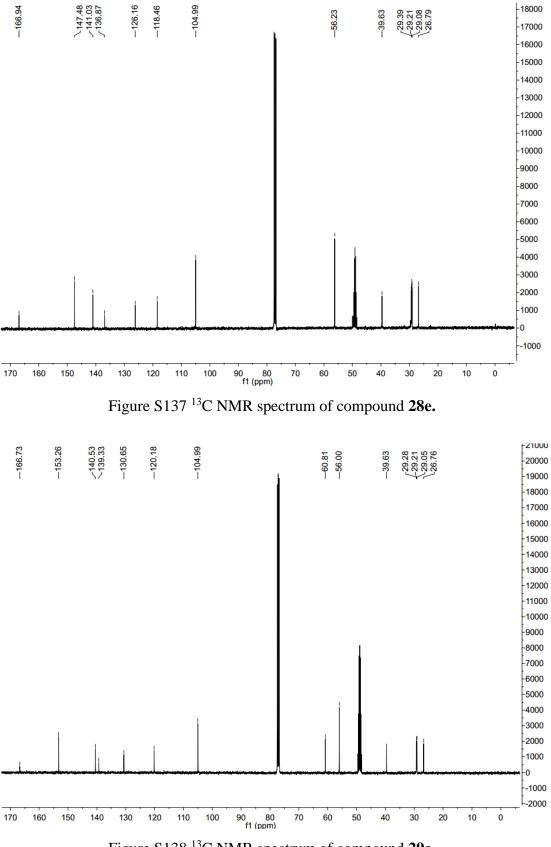


Figure S138 ¹³C NMR spectrum of compound **29e.**

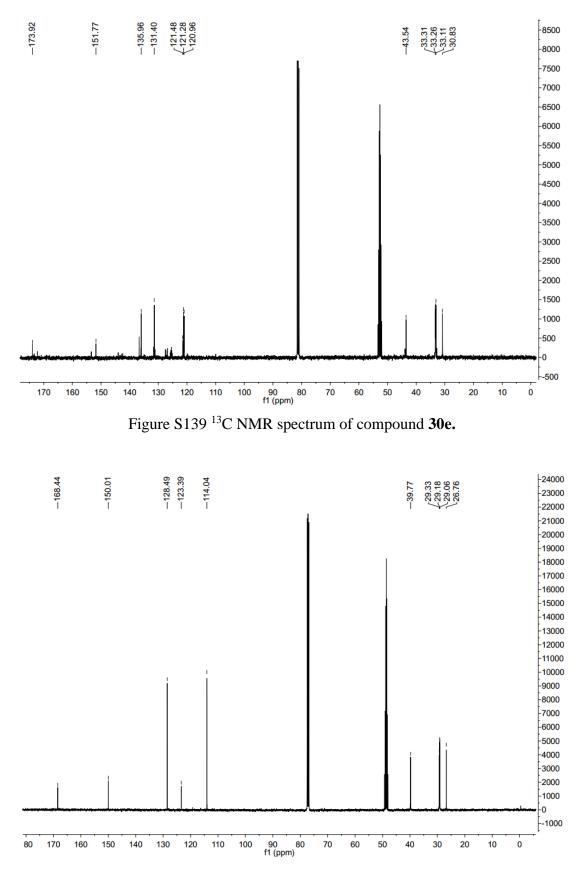


Figure S140 ¹³C NMR spectrum of compound **31e.**

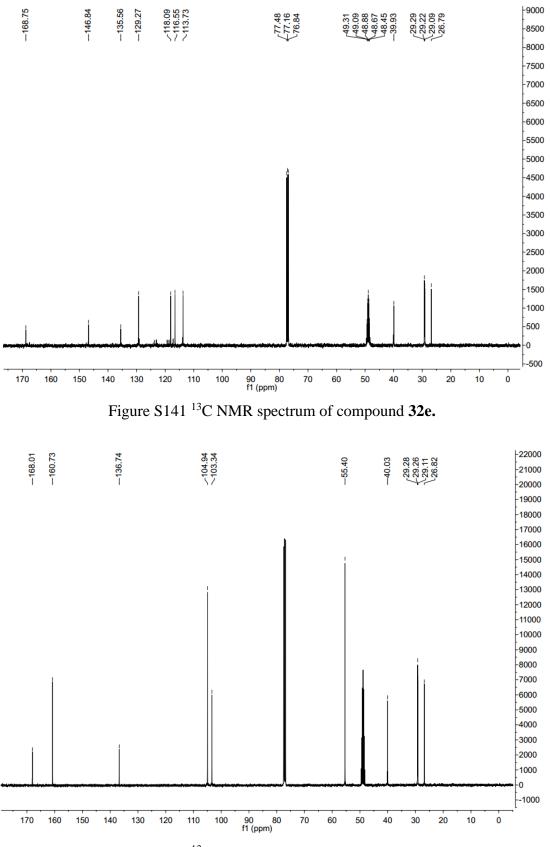


Figure S142 ¹³C NMR spectrum of compound **33e.**

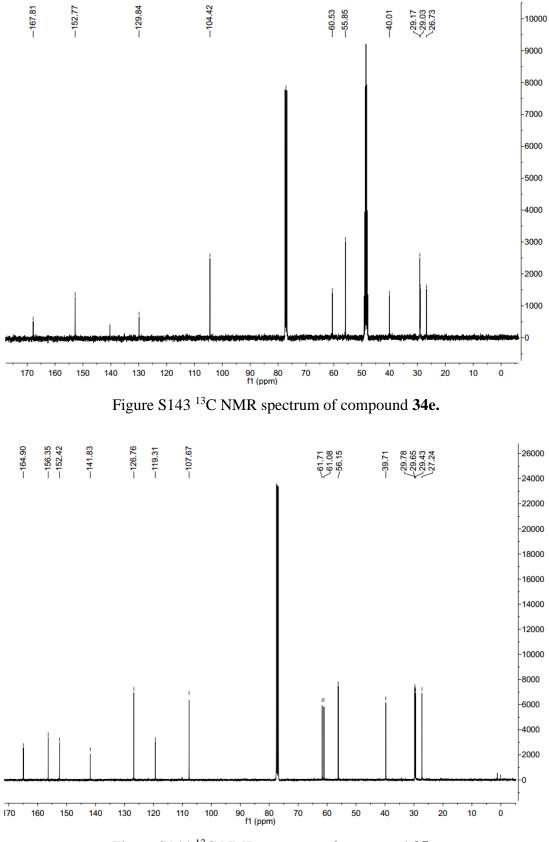


Figure S144 ¹³C NMR spectrum of compound **35e.**

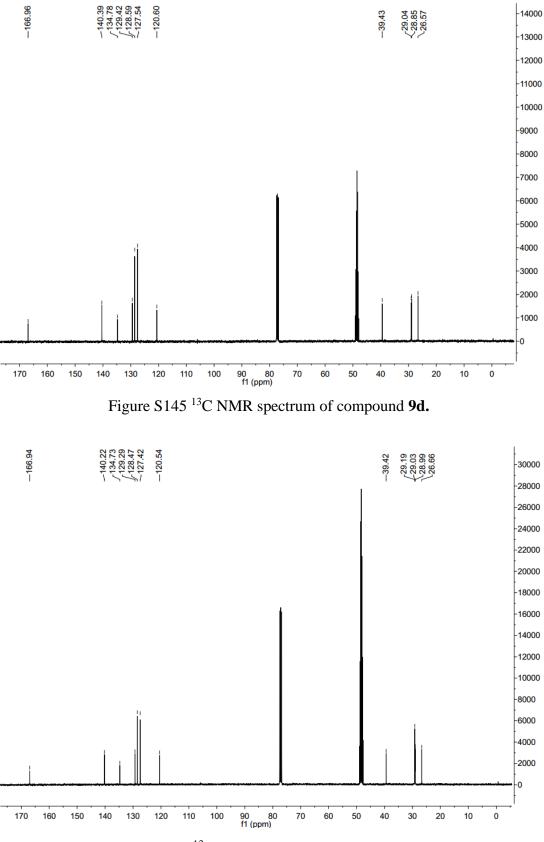


Figure S146¹³C NMR spectrum of compound **9f.**

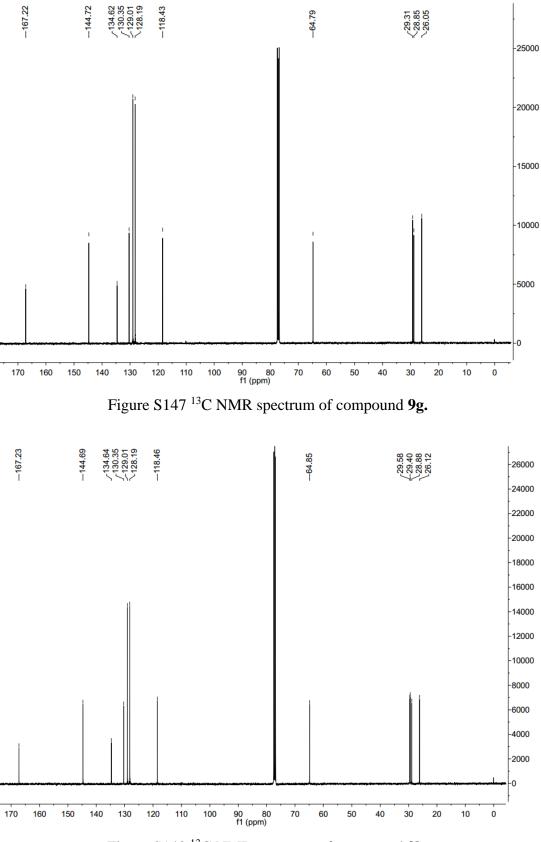


Figure S148 ¹³C NMR spectrum of compound **9h.**

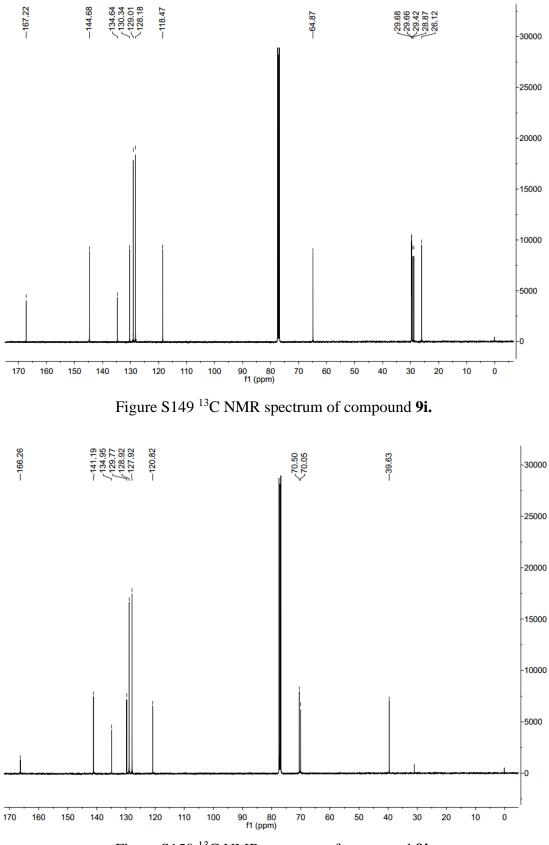


Figure S150 ¹³C NMR spectrum of compound **9j.**

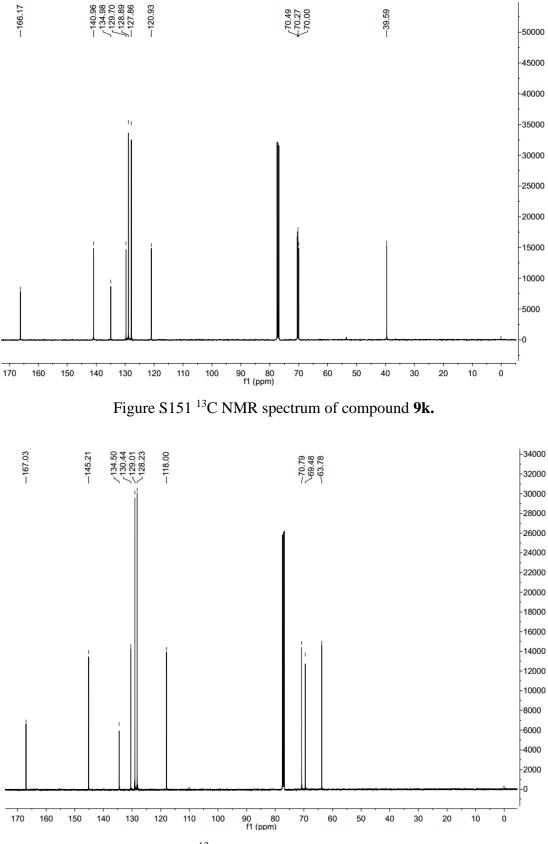


Figure S152 ¹³C NMR spectrum of compound **91.**

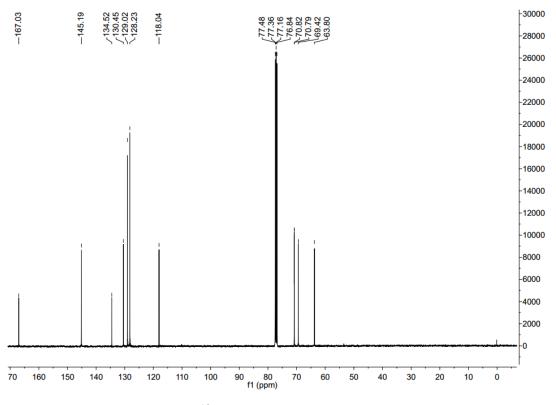


Figure S153 ¹³C NMR spectrum of compound **9m.**