

¹H and ¹³C NMR spectra

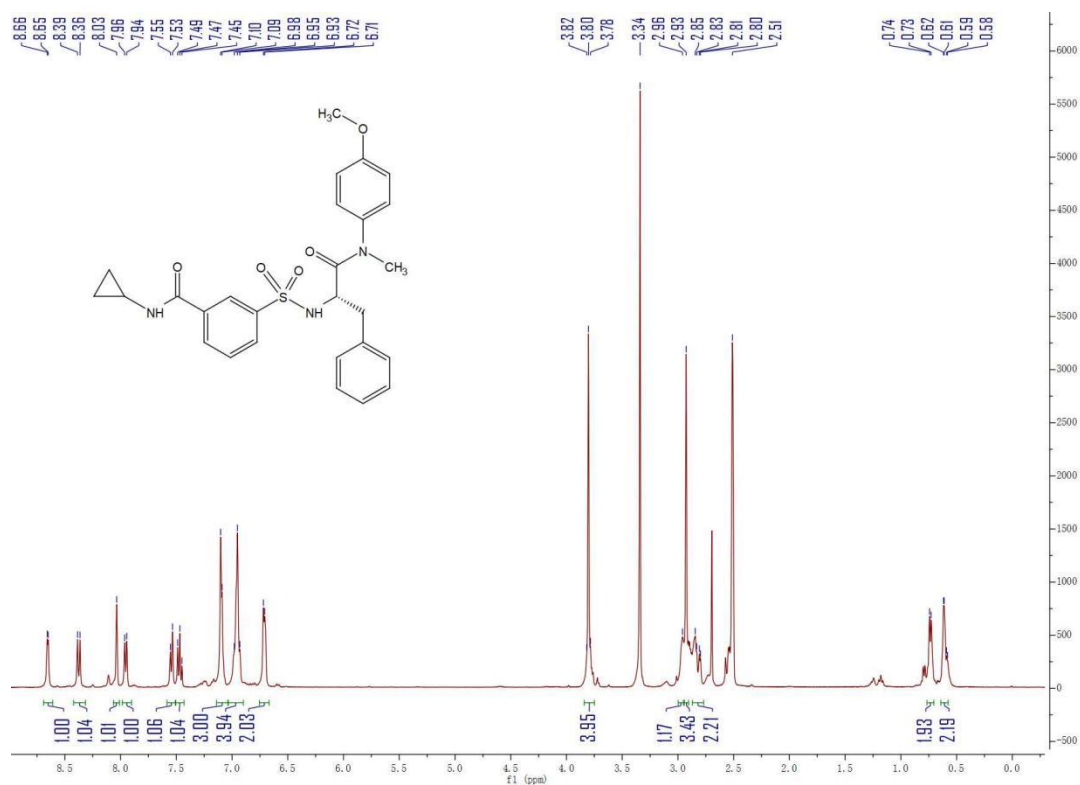


Fig.1: ¹H NMR spectrum of I-10a

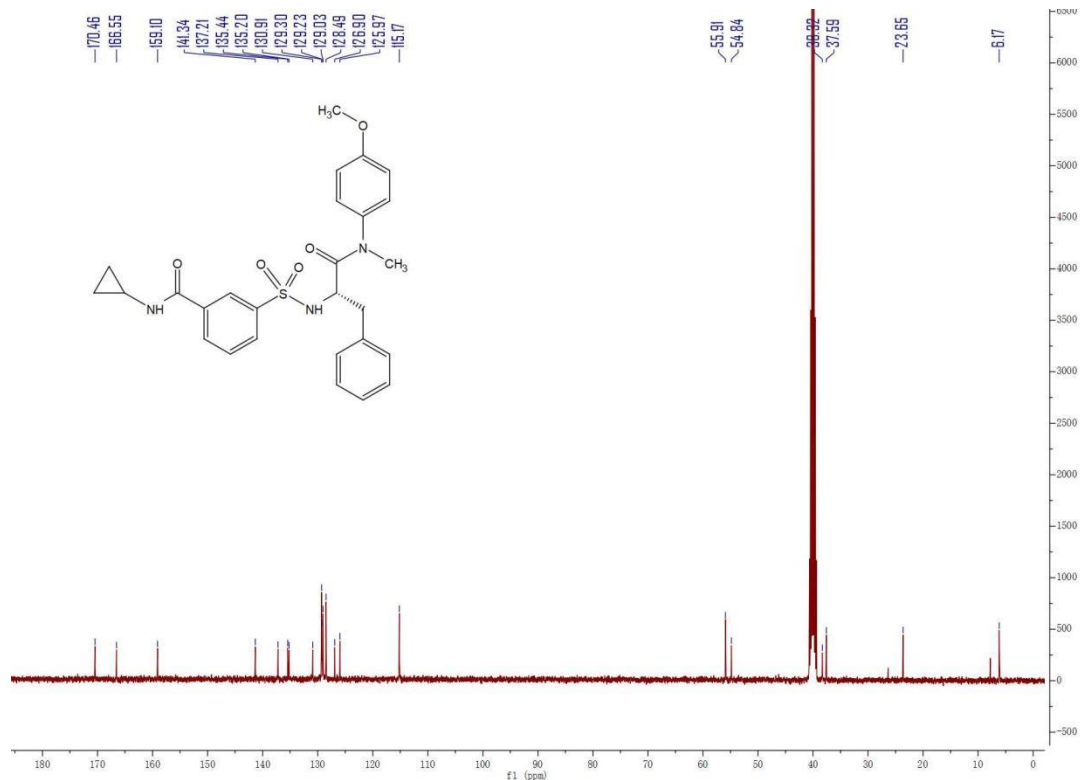


Fig. 2: ¹³C NMR spectrum of I-10a

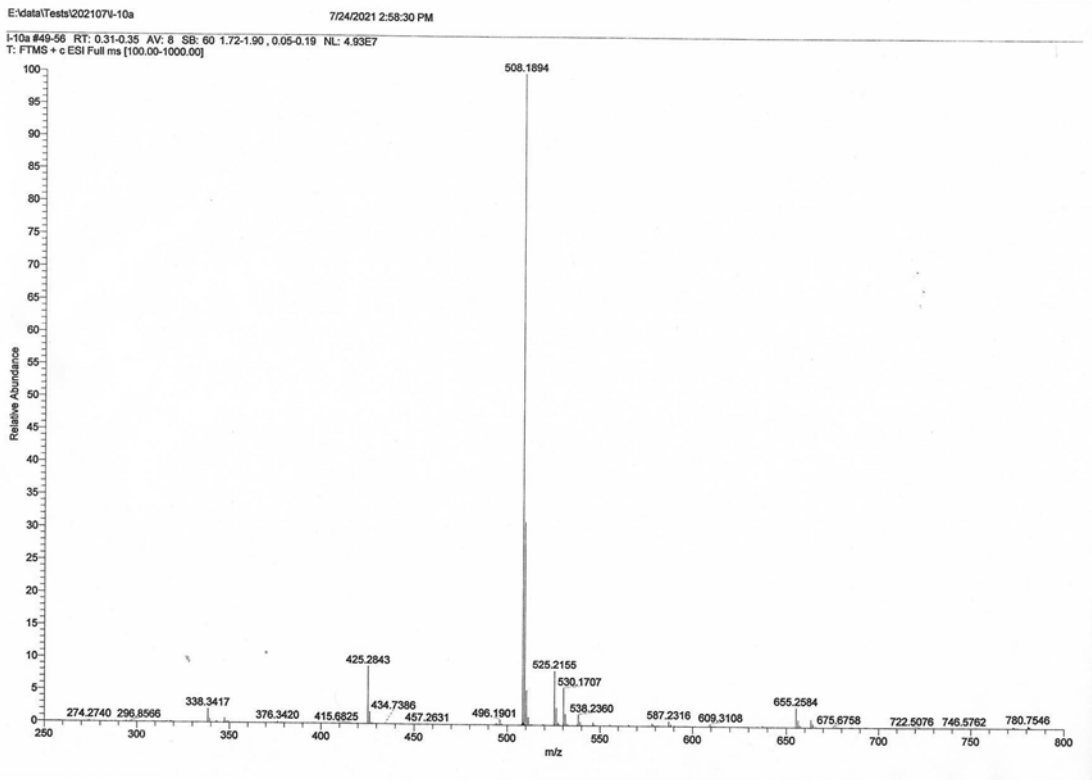


Fig. 3: HRMS spectrum of I-10a

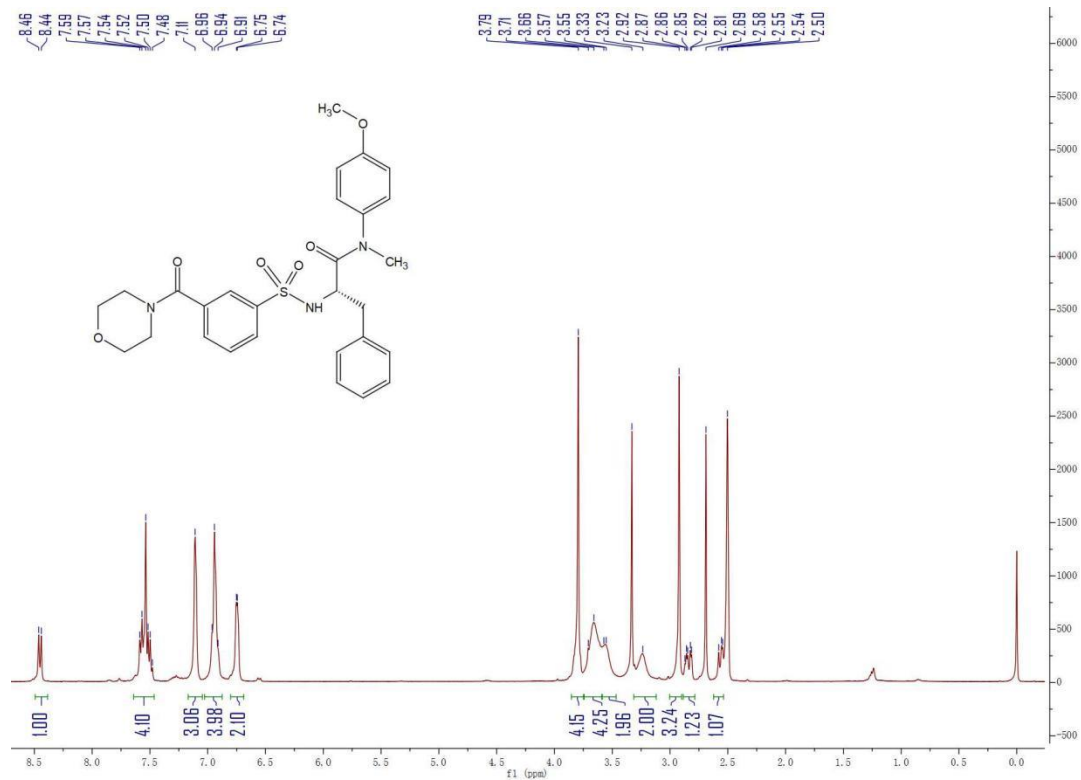


Fig.4: ¹H NMR spectrum of I-10b

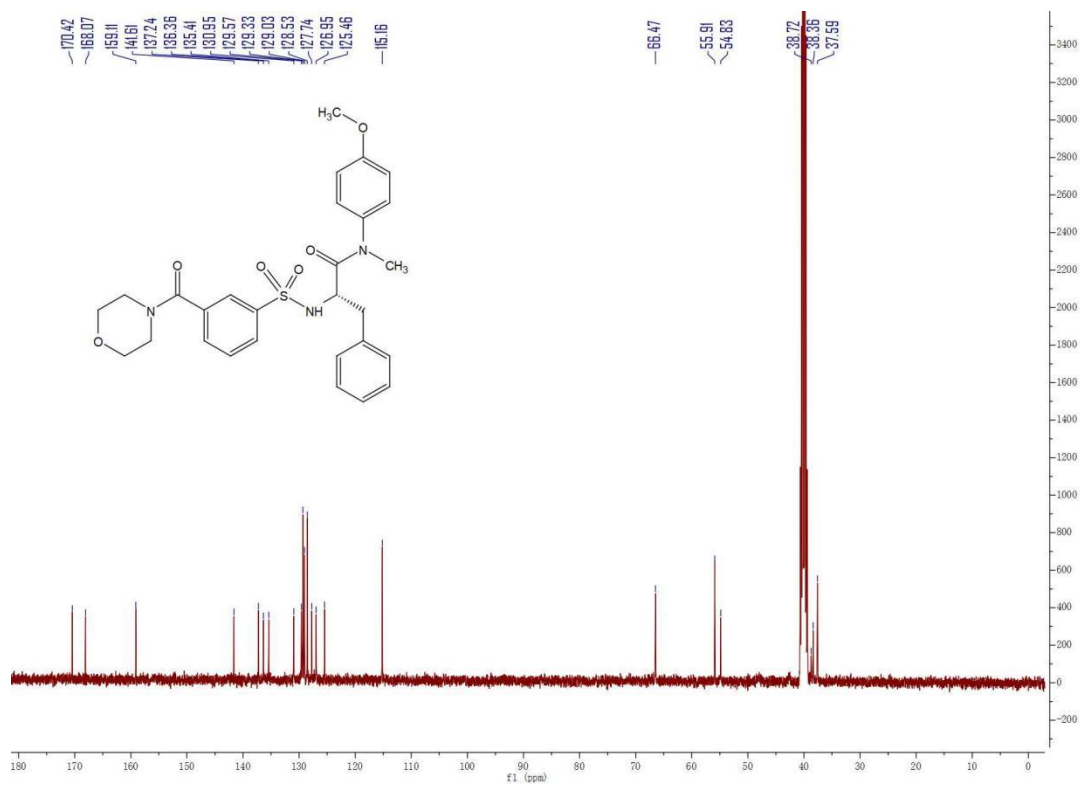


Fig. 5: ¹³C NMR spectrum of I-10b

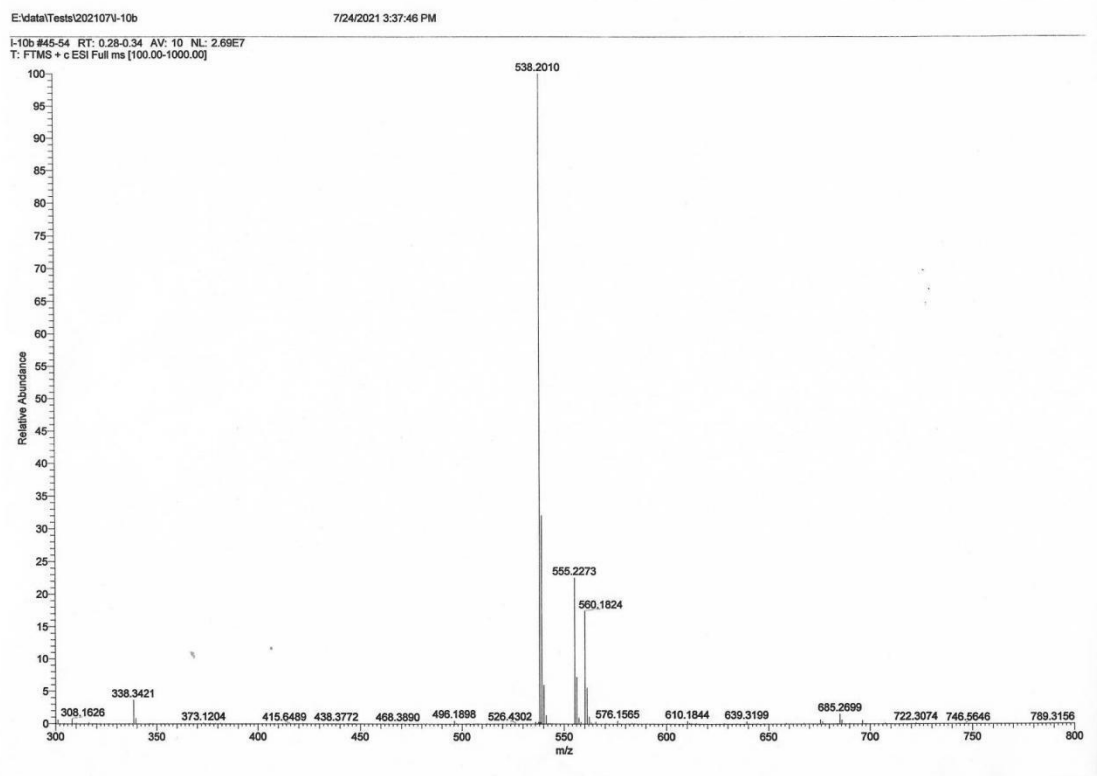


Fig. 6: HRMS spectrum of I-10b

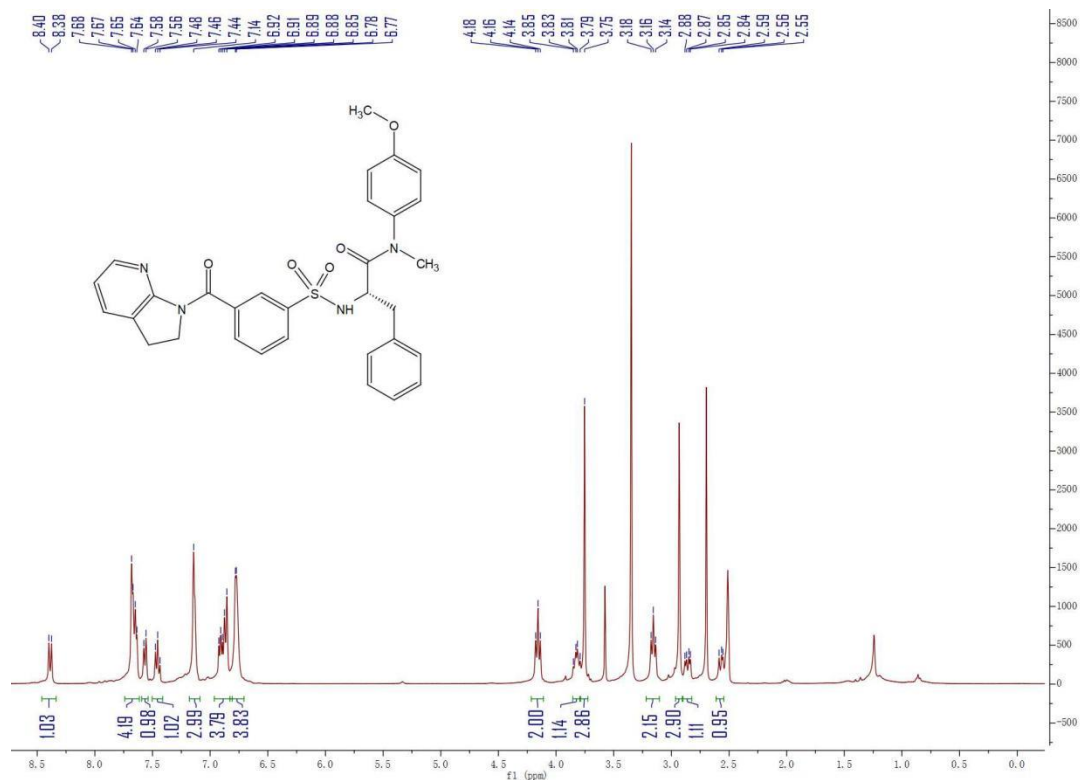


Fig. 7: ¹H NMR spectrum of I-10c

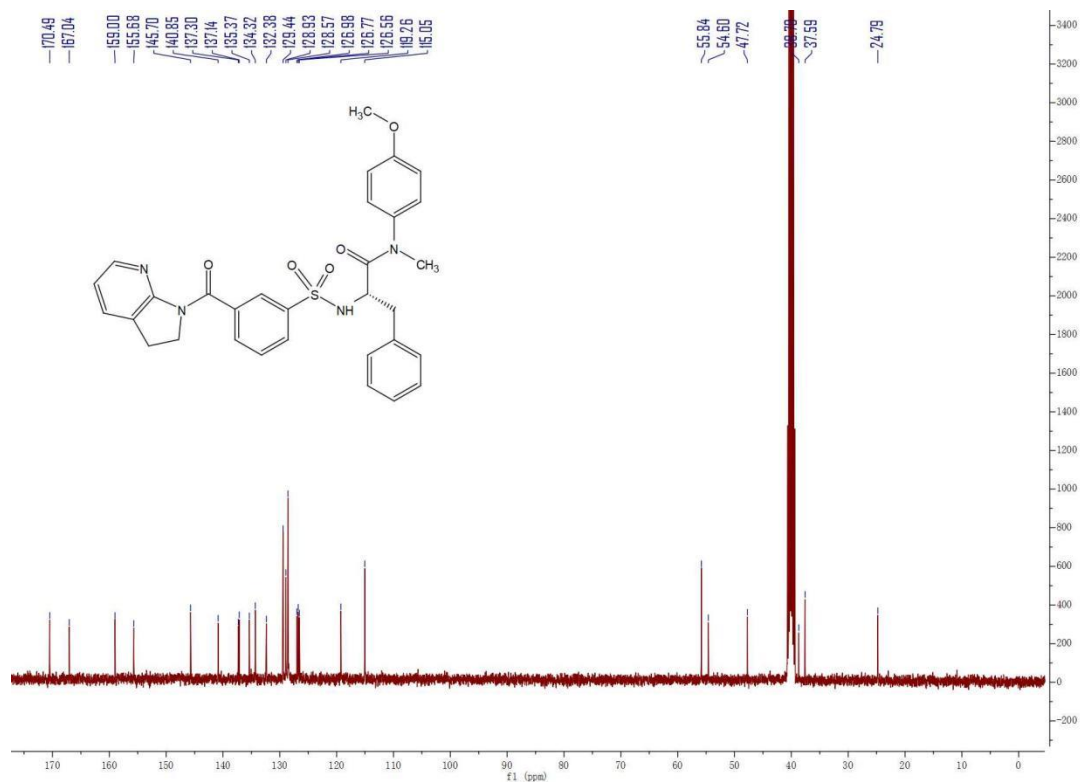


Fig. 8: ¹³C NMR spectrum of I-10c

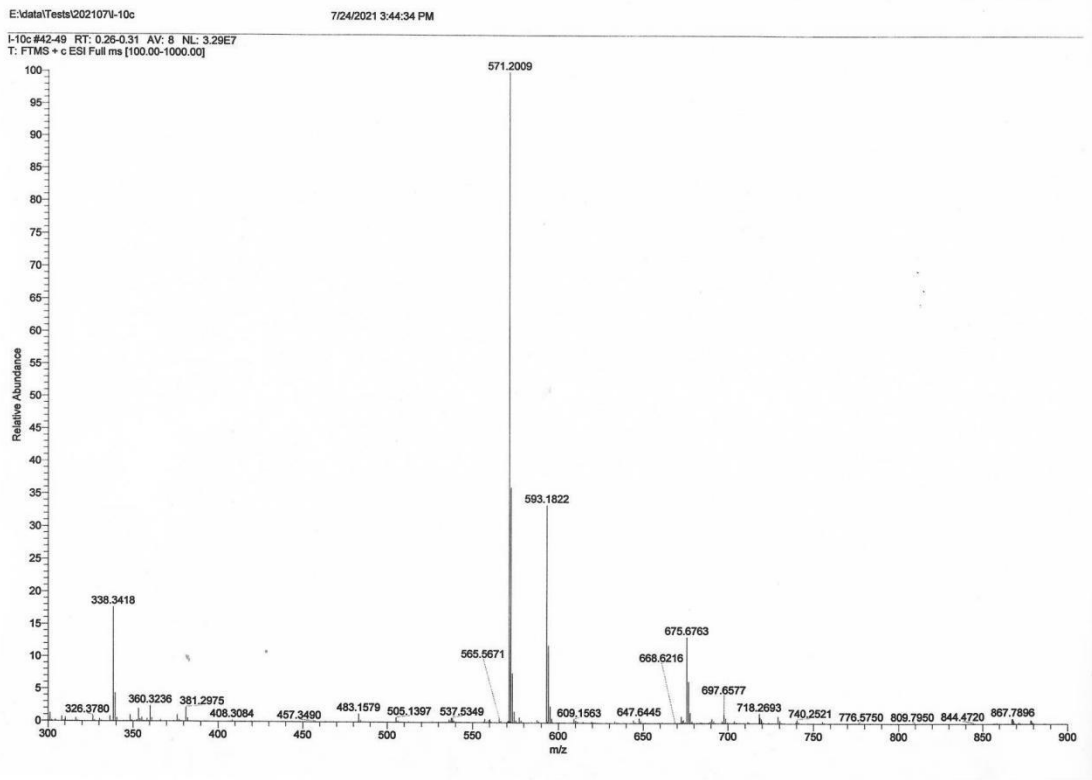


Fig. 9: HRMS spectrum of I-10c

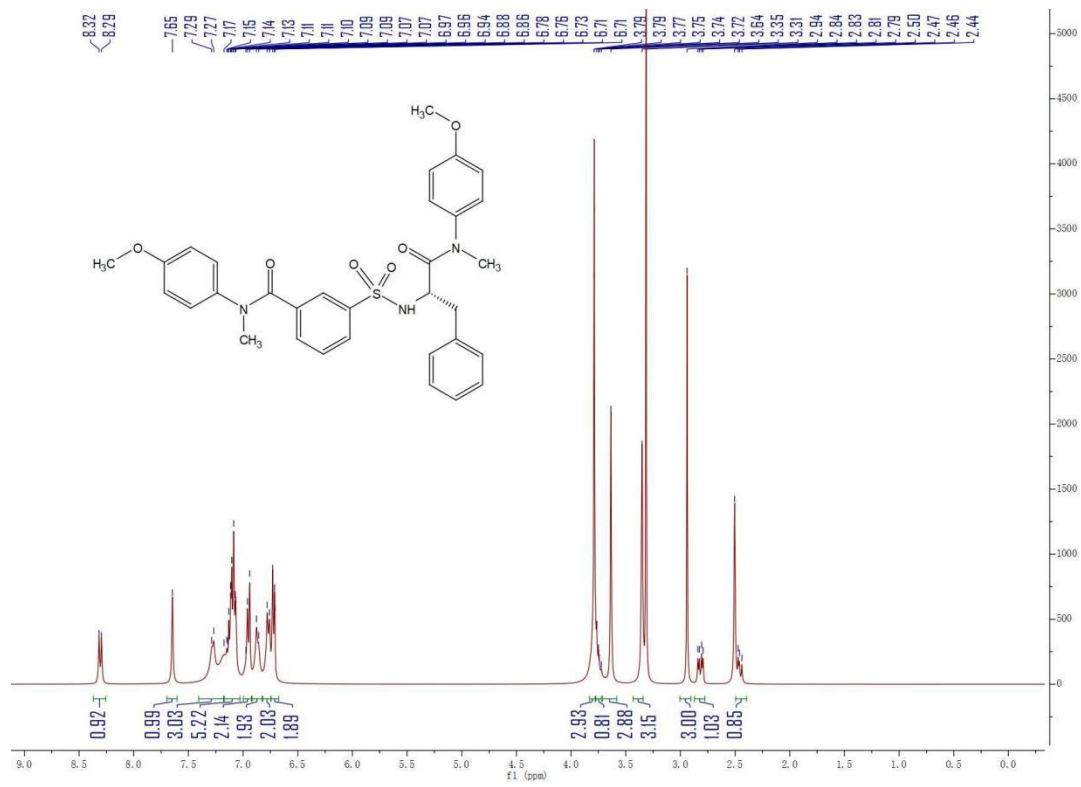


Fig.10: ¹H NMR spectrum of I-10d

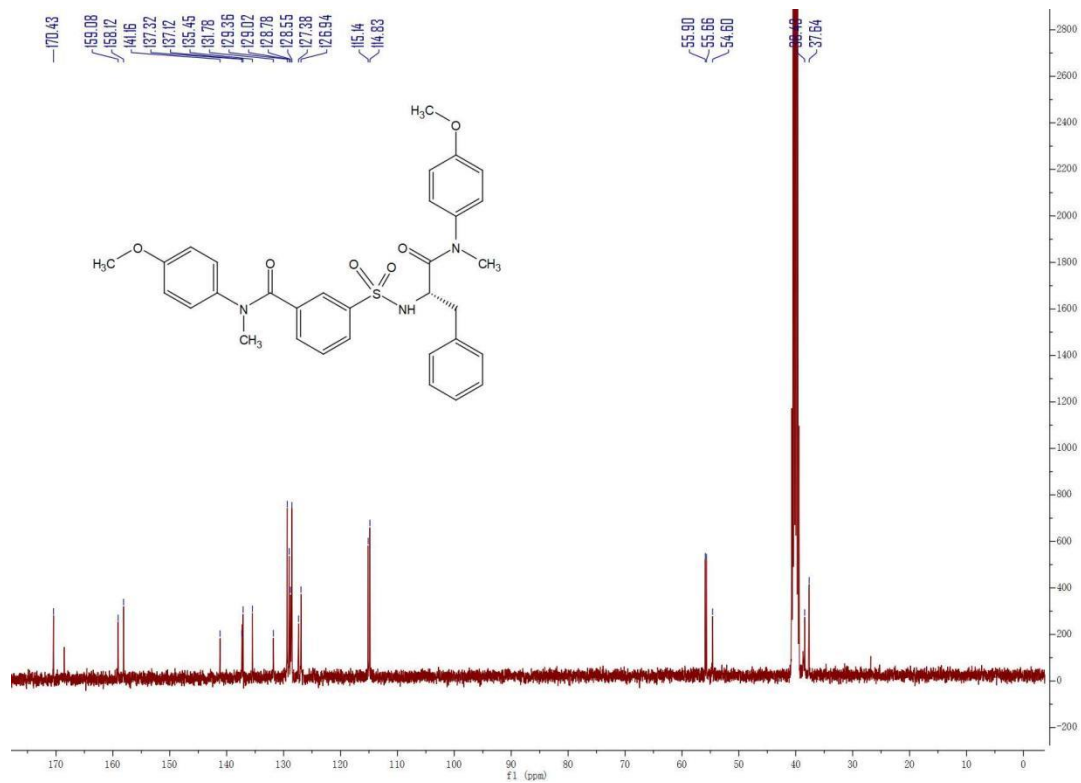


Fig. 11: ¹³C NMR spectrum of I-10d

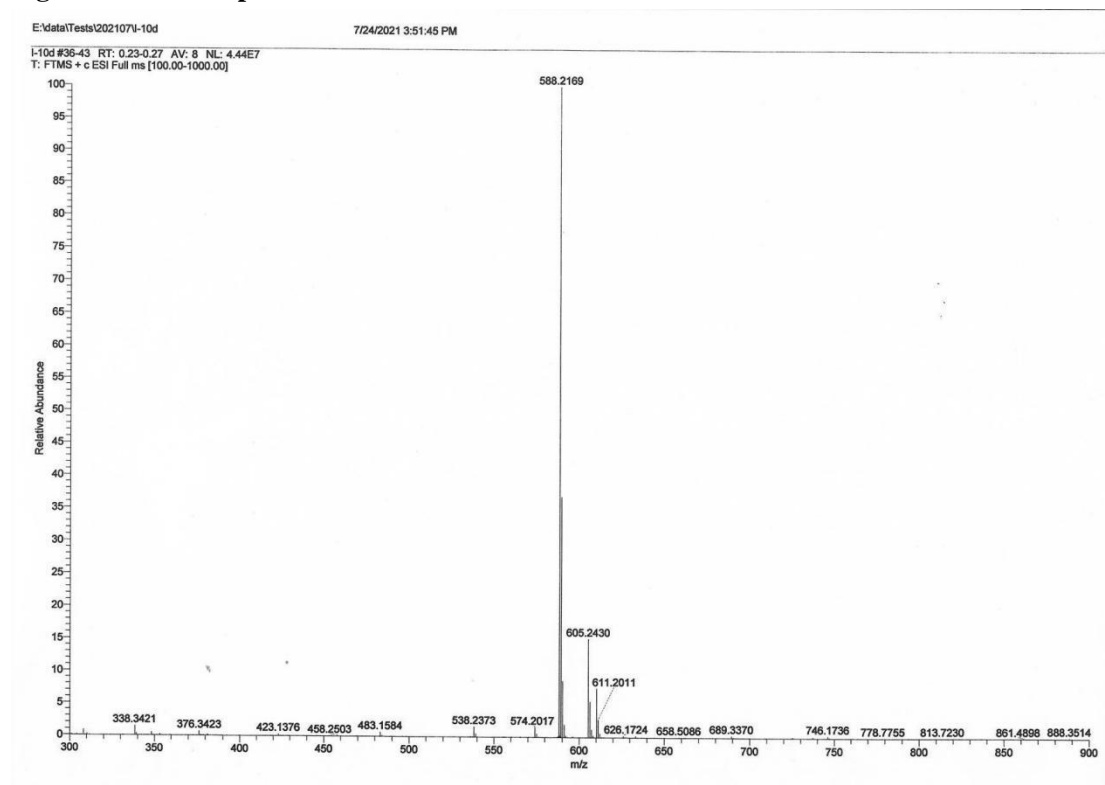


Fig. 12: HRMS spectrum of I-10d

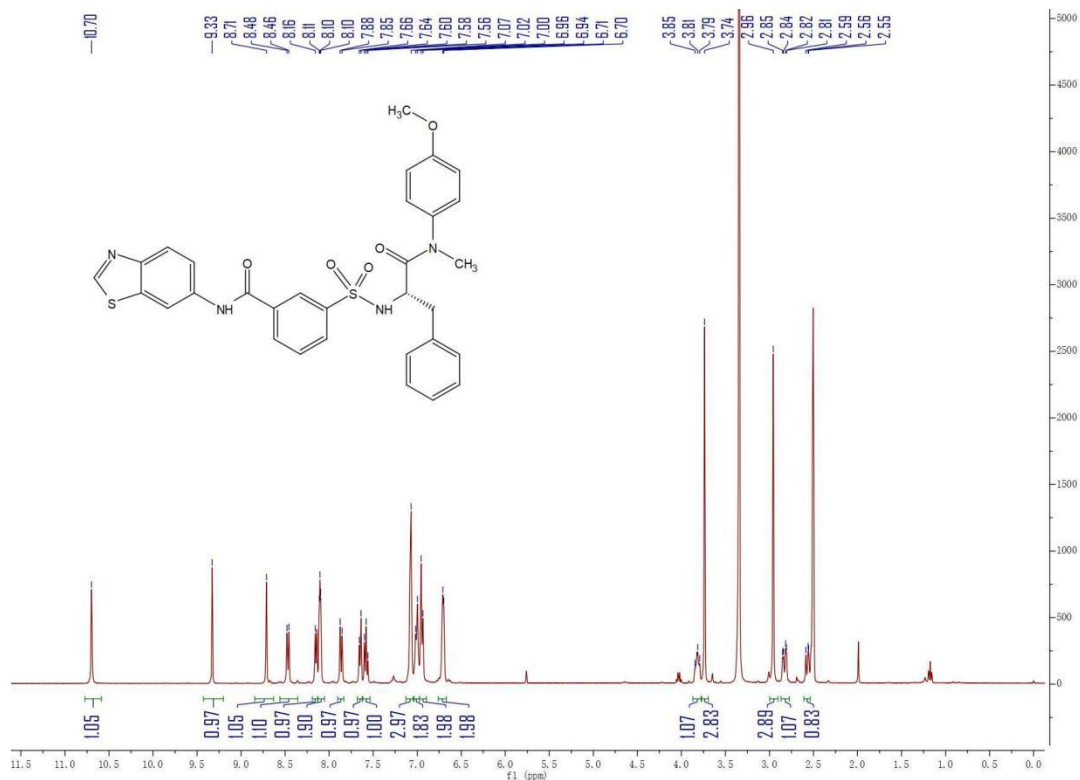


Fig.13: ^1H NMR spectrum of I-10e

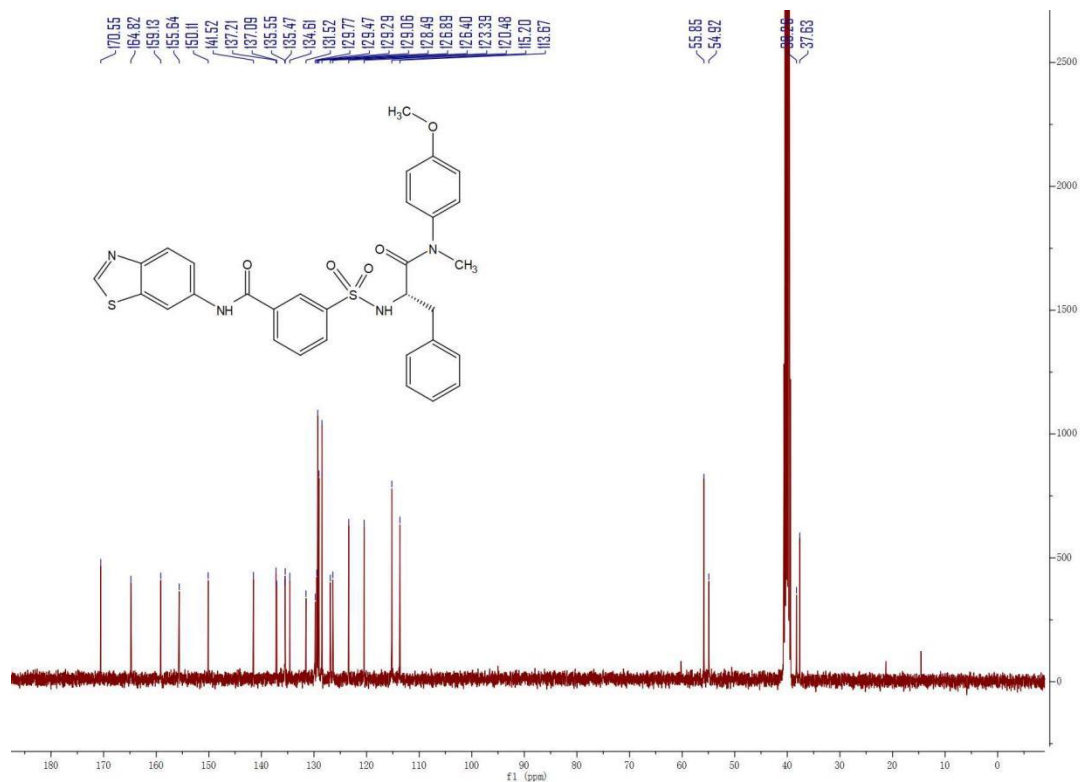


Fig. 14: ^{13}C NMR spectrum of I-10e

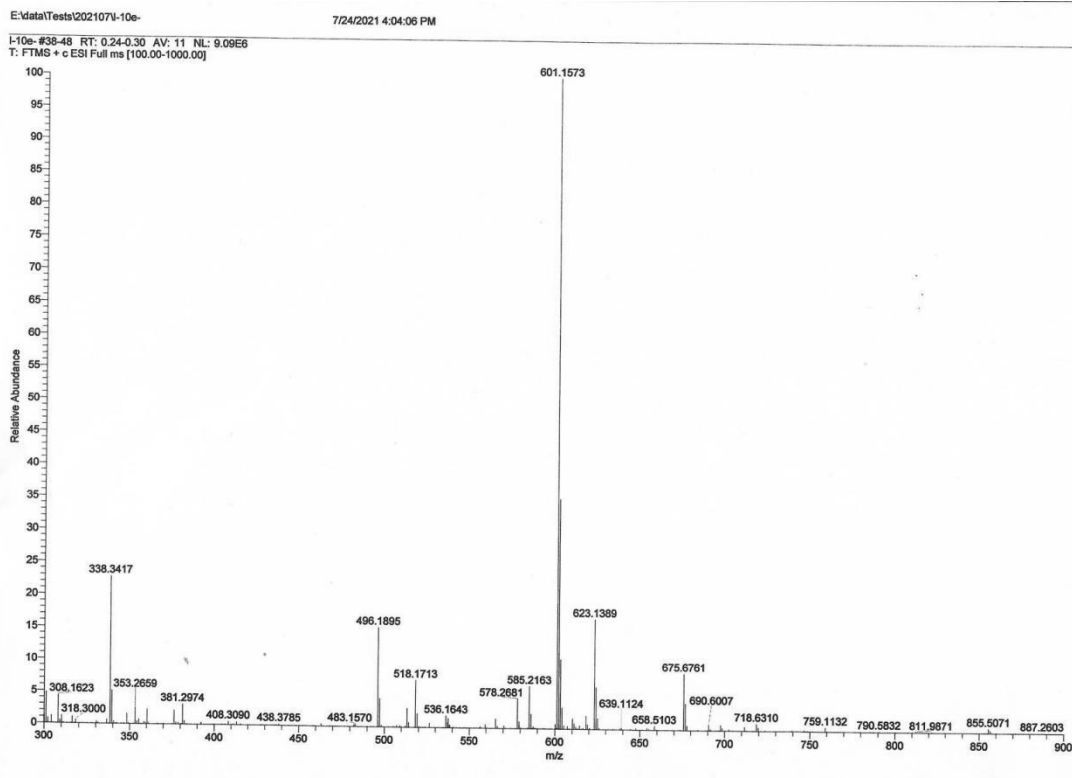


Fig. 15: HRMS spectrum of I-10e

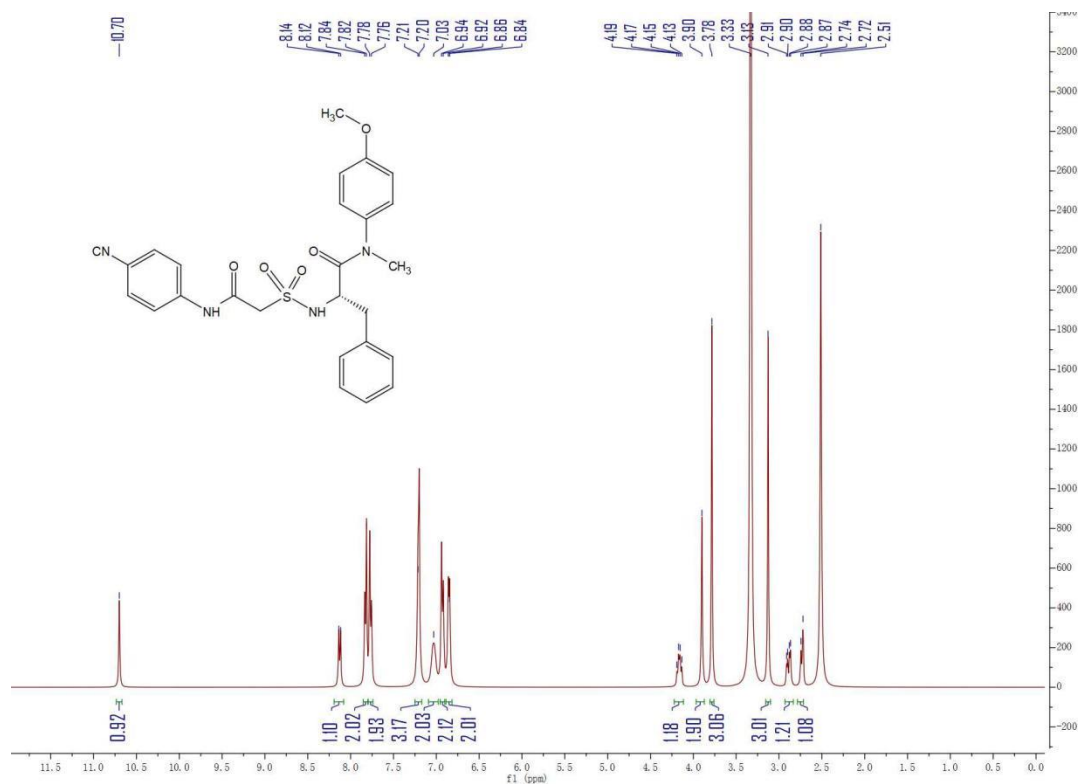


Fig.16: ¹H NMR spectrum of II-13a

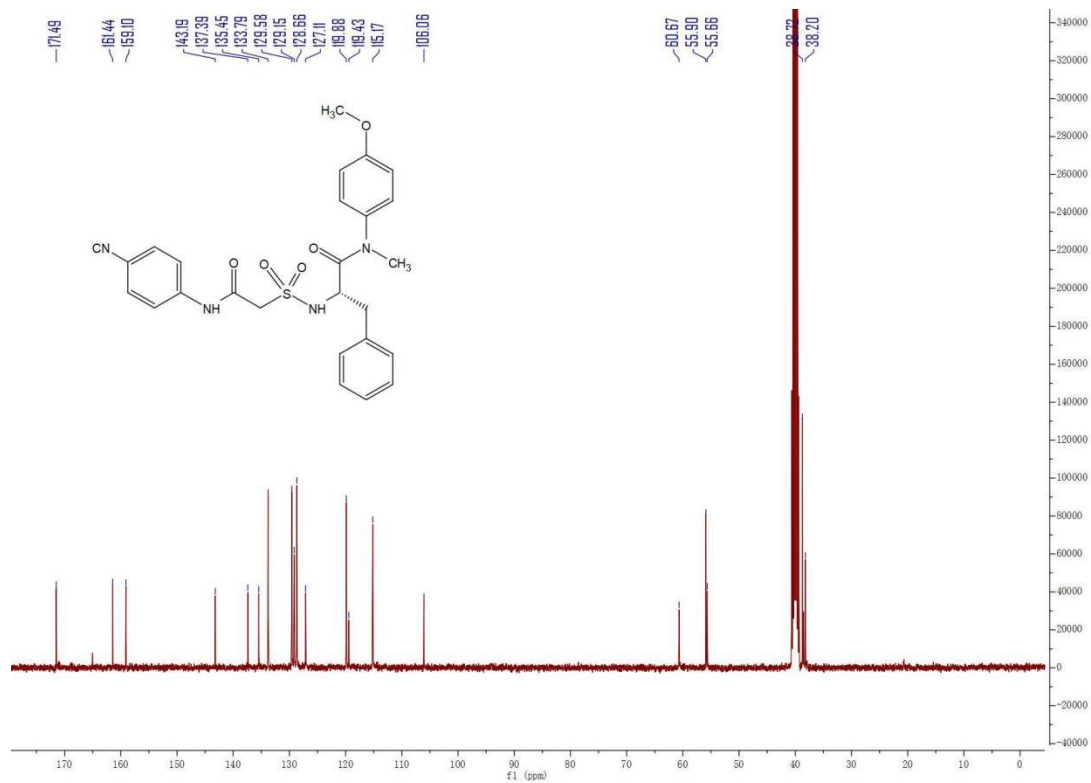


Fig. 17: ¹³C NMR spectrum of II-13a

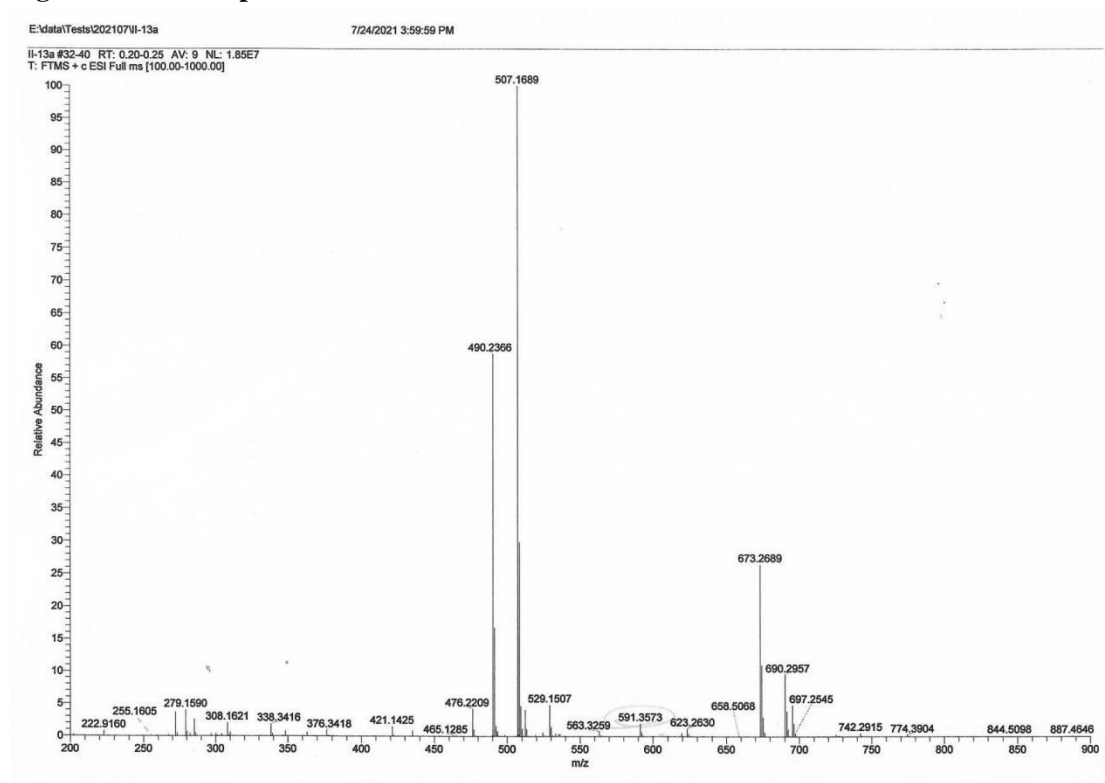


Fig. 18: HRMS spectrum of II-13a

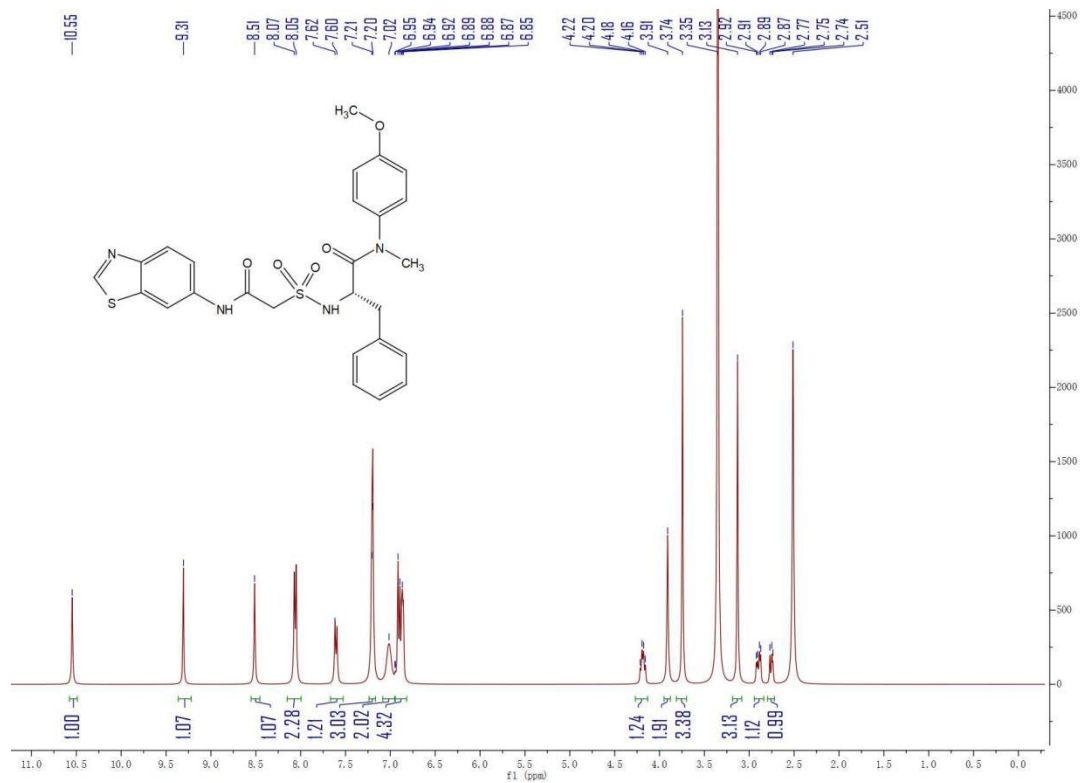


Fig.19: ¹H NMR spectrum of II-13b

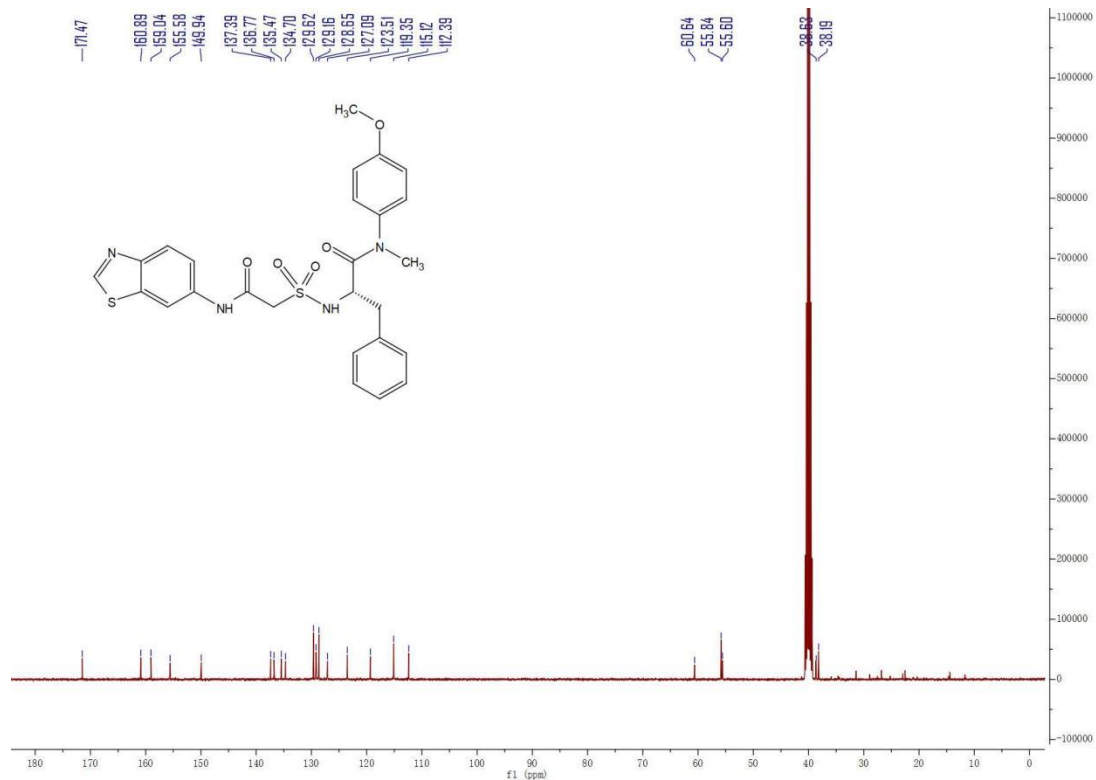


Fig. 20: ¹³C NMR spectrum of II-13b

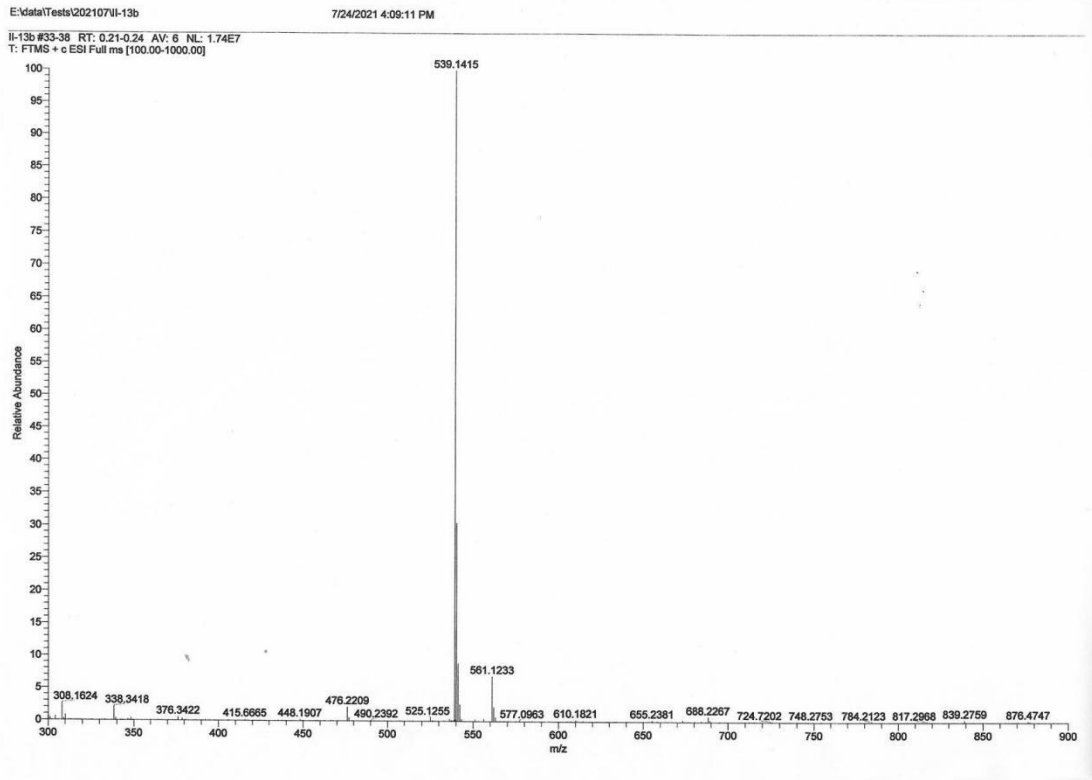


Fig. 21: HRMS spectrum of II-13b

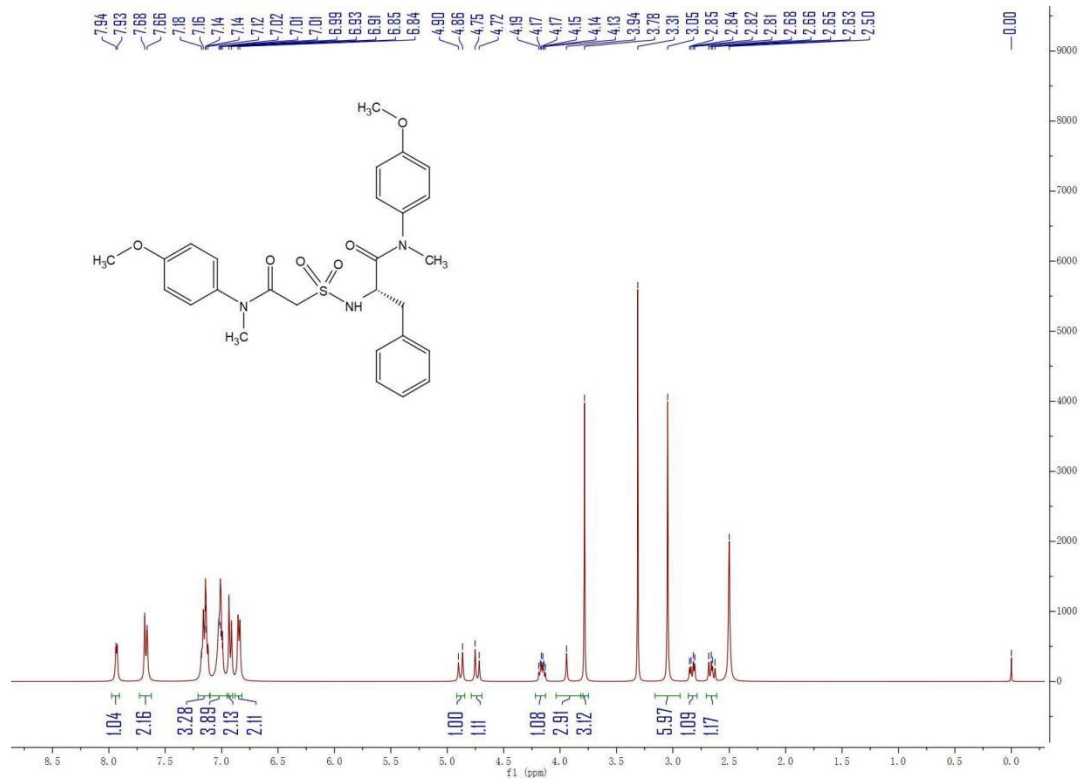


Fig.22: ¹H NMR spectrum of II-13c

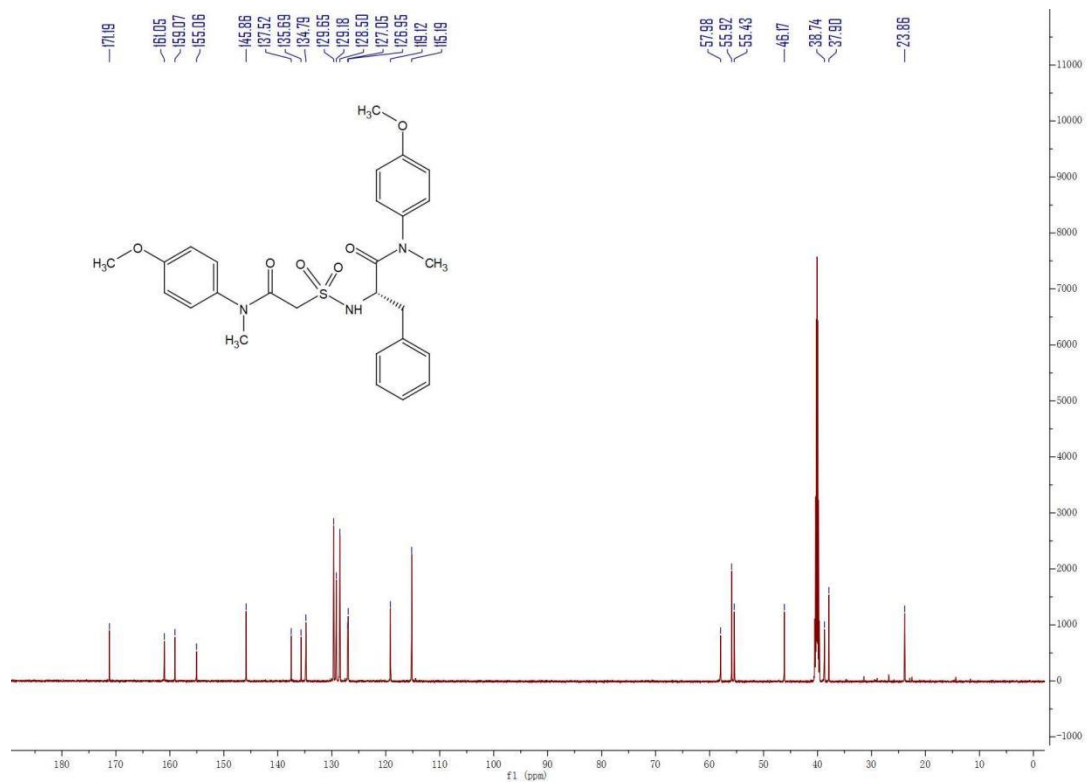


Fig. 23: ¹³C NMR spectrum of II-13c

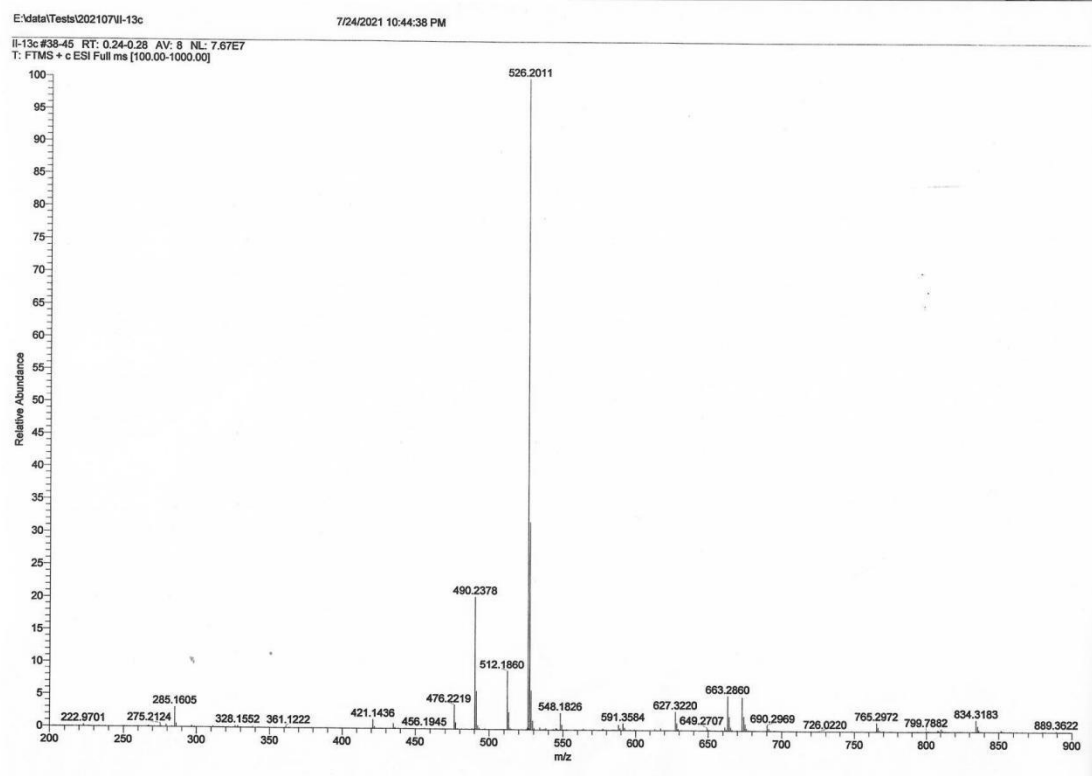


Fig. 24: HRMS spectrum of II-13c

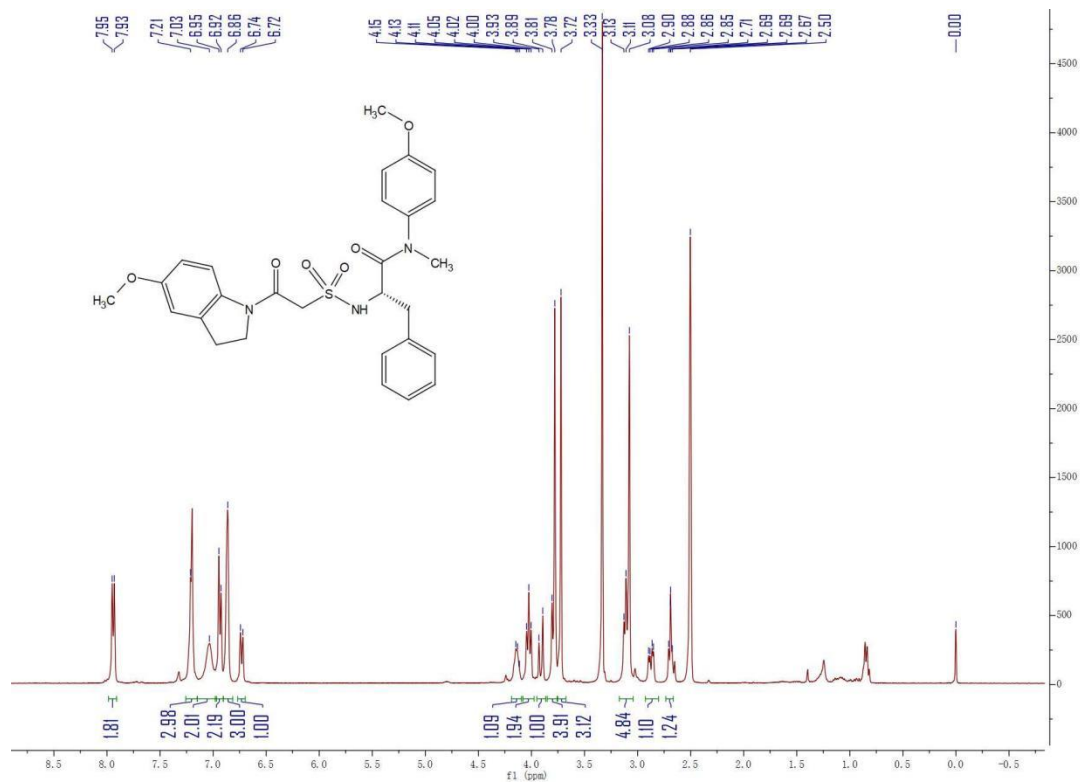


Fig.25: ¹H NMR spectrum of II-13d

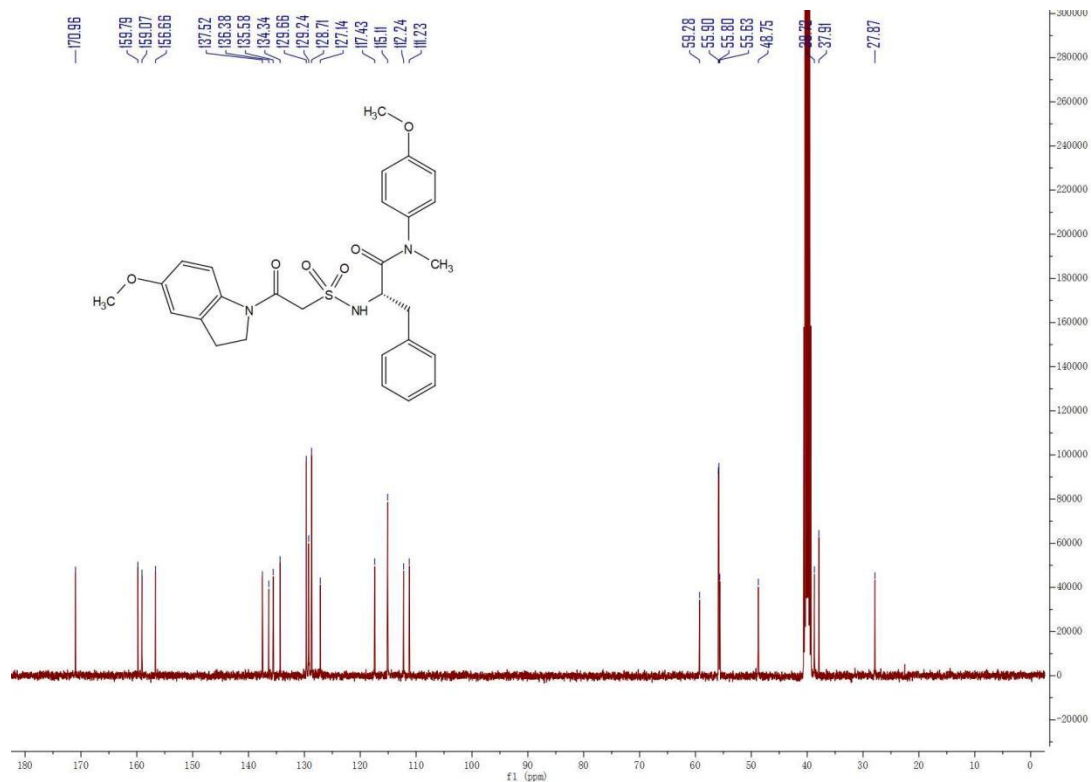


Fig. 26: ¹³C NMR spectrum of II-13d

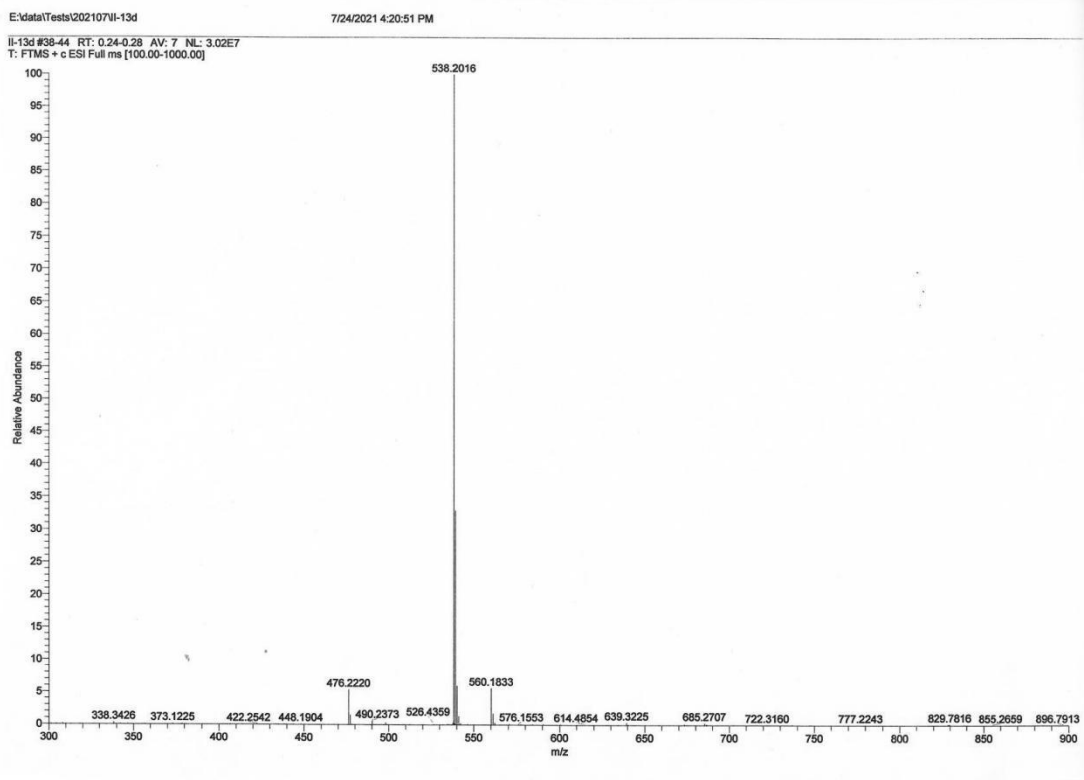


Fig. 27: HRMS spectrum of II-13d

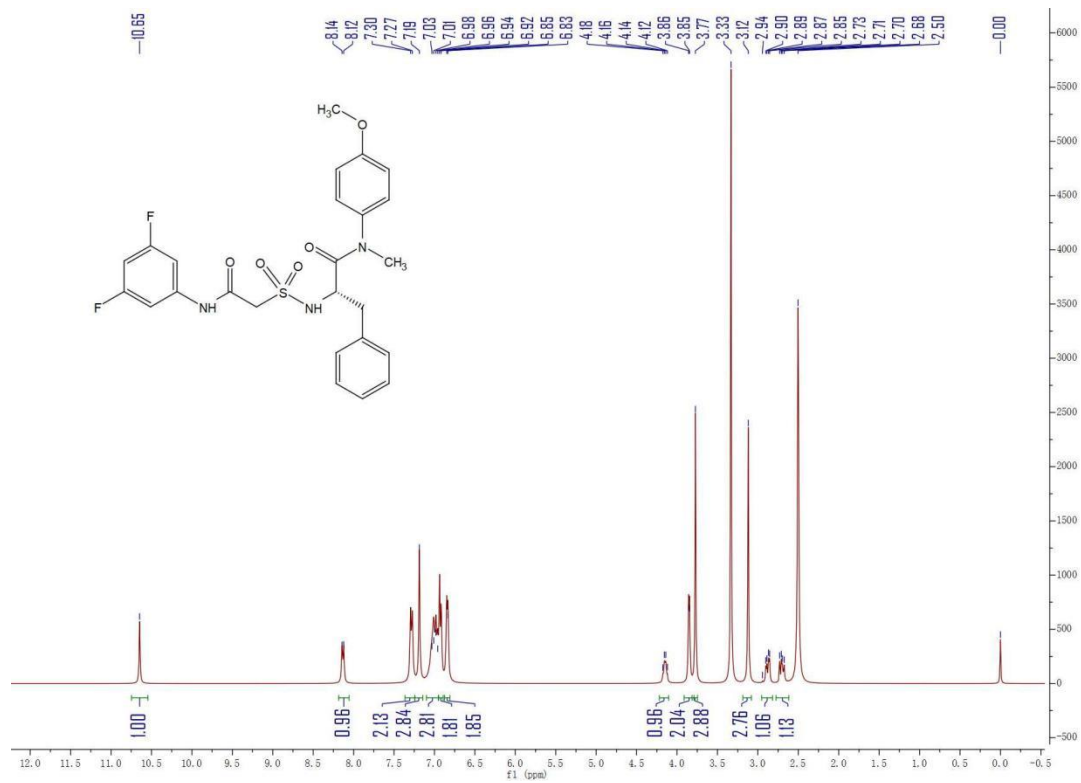


Fig.28: ¹H NMR spectrum of II-13e

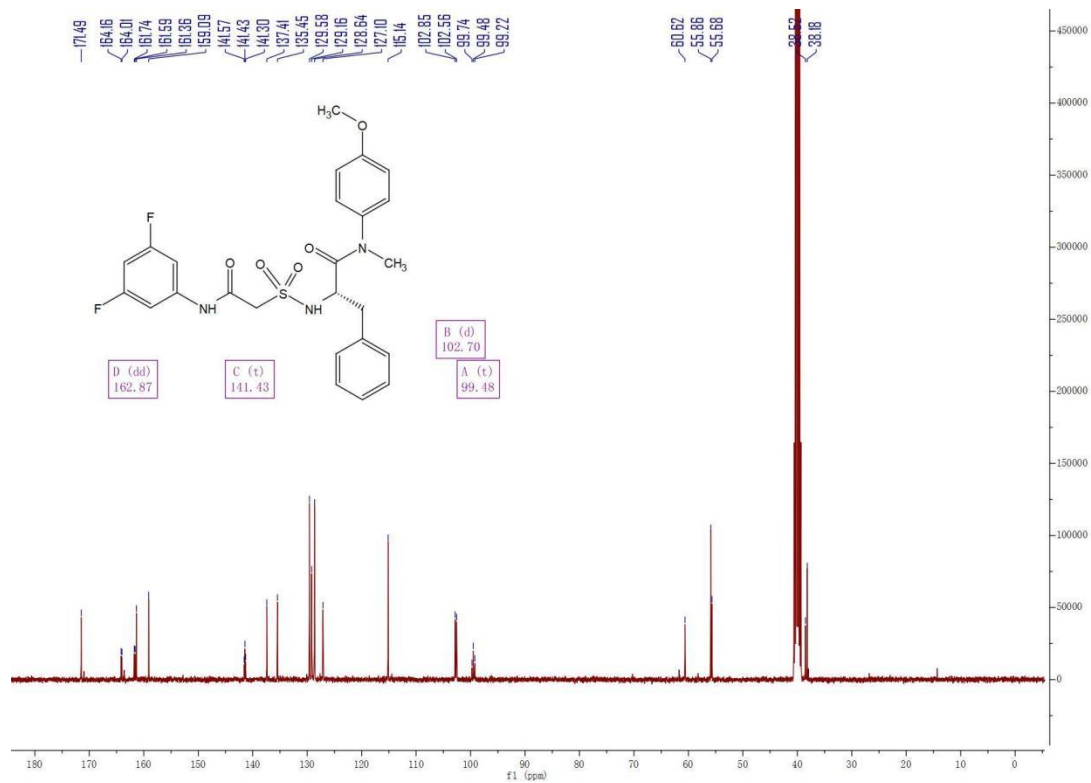


Fig. 29: ^{13}C NMR spectrum of II-13e

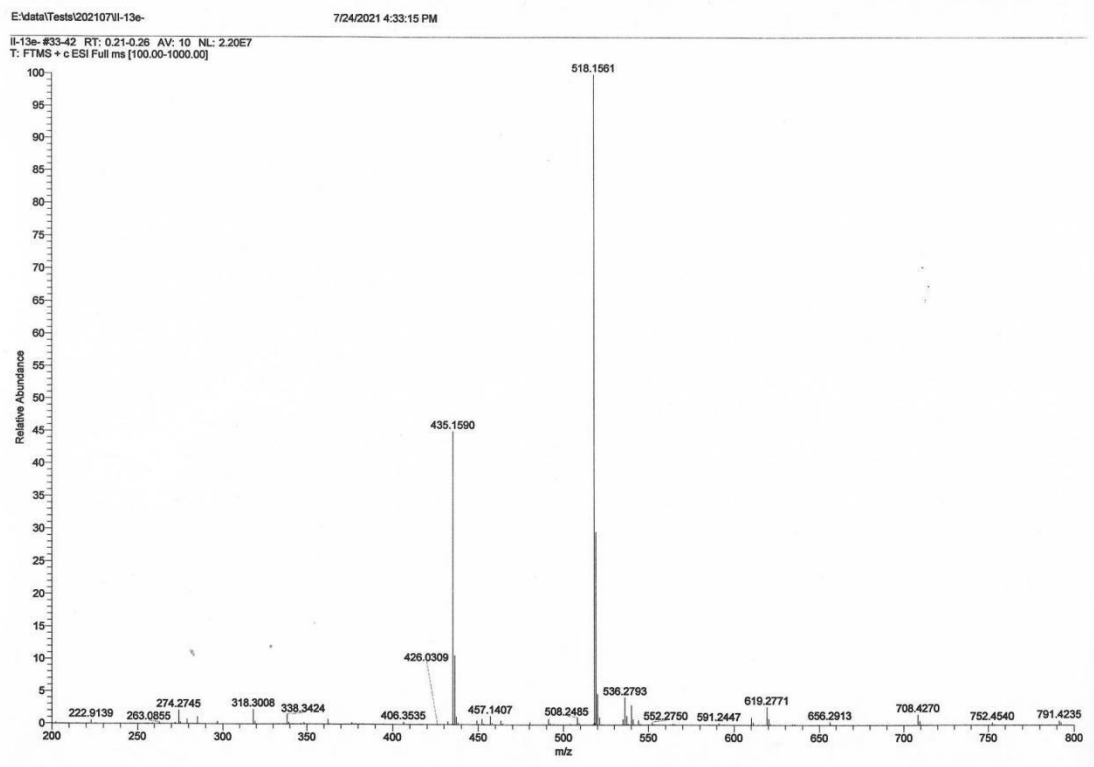


Fig. 30: HRMS spectrum of II-13e

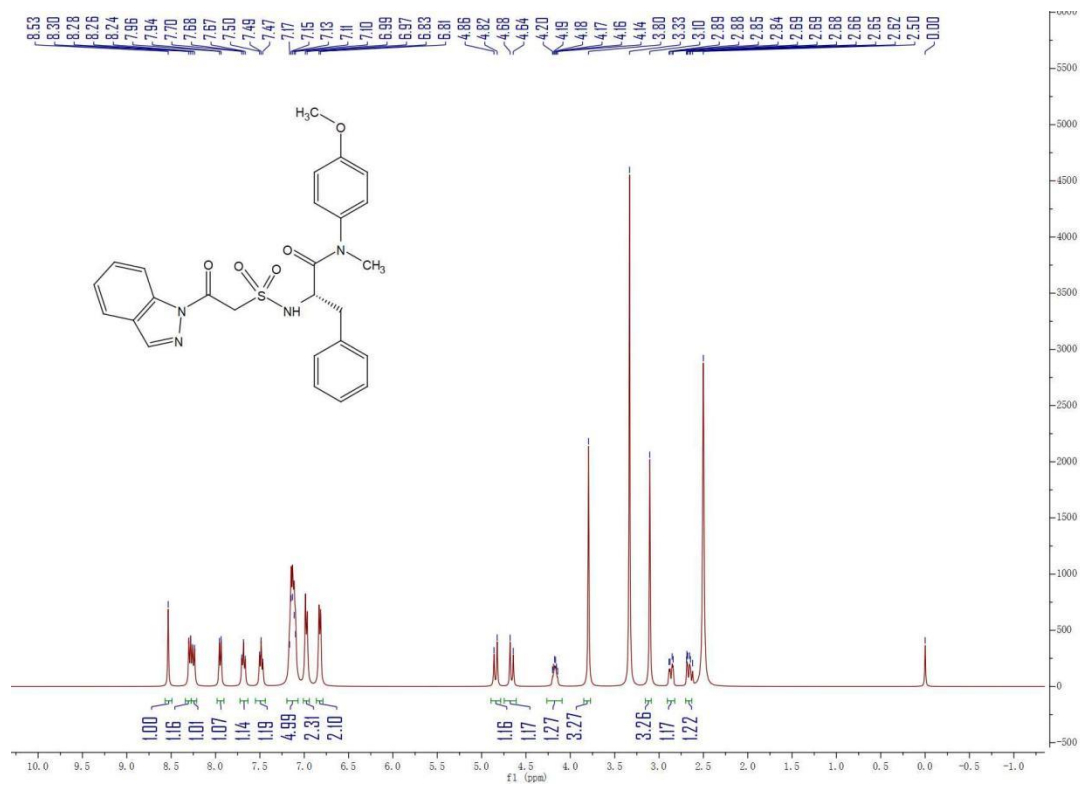


Fig.31: ¹H NMR spectrum of II-13f

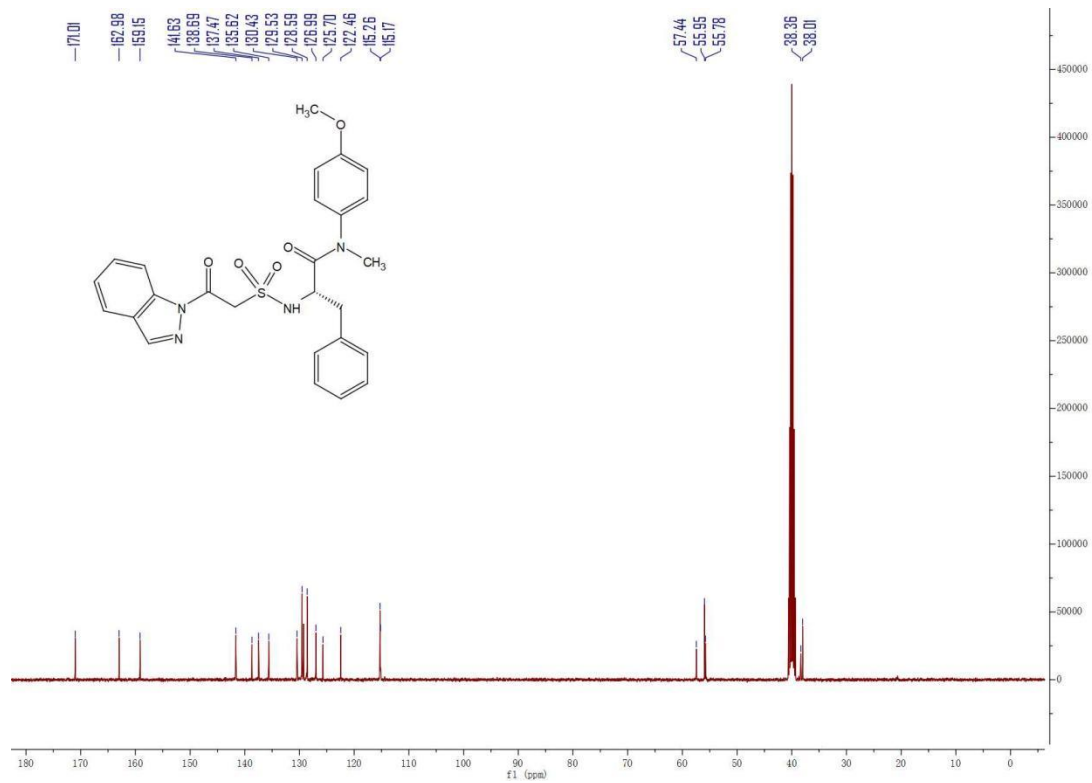


Fig. 32: ¹³C NMR spectrum of II-13f

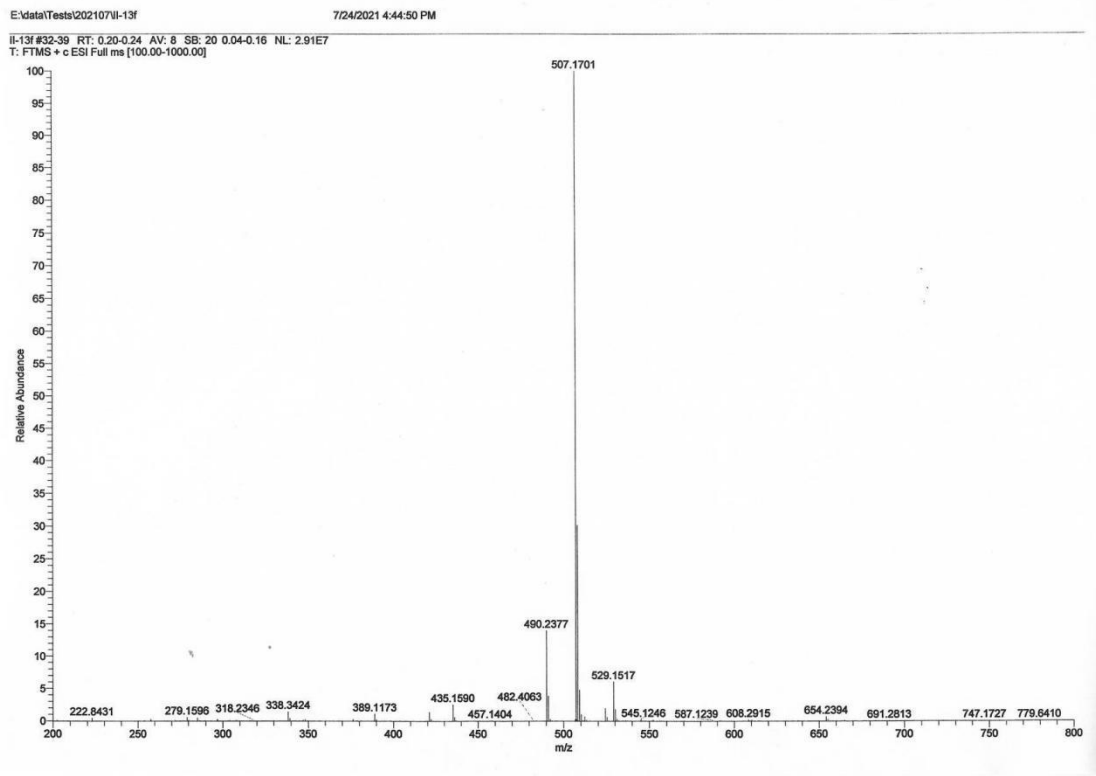


Fig. 33: HRMS spectrum of II-13f

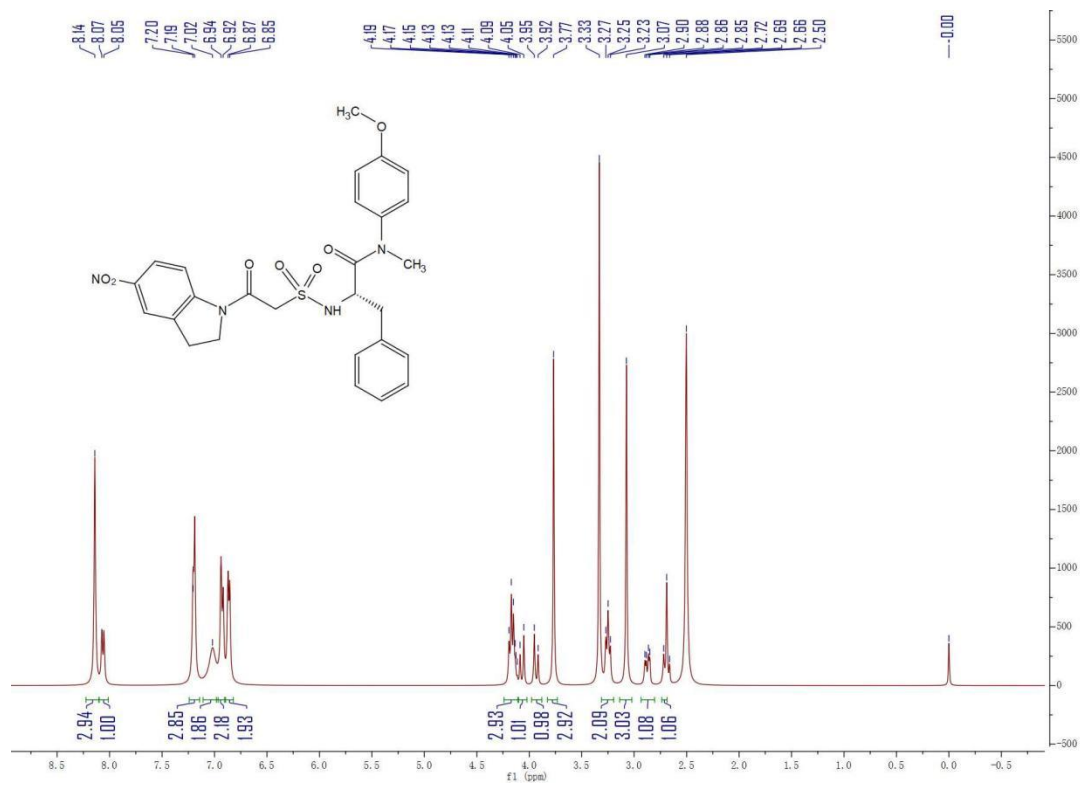


Fig. 34: ¹H NMR spectrum of II-13g

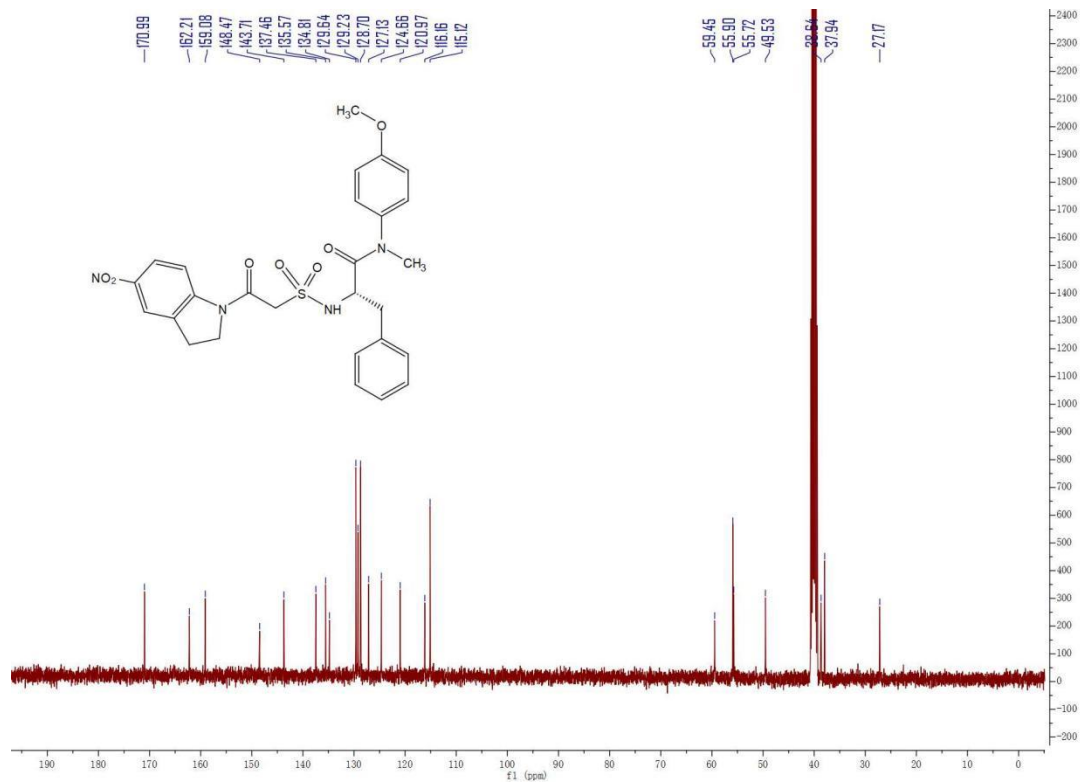


Fig. 35: ^{13}C NMR spectrum of II-13g

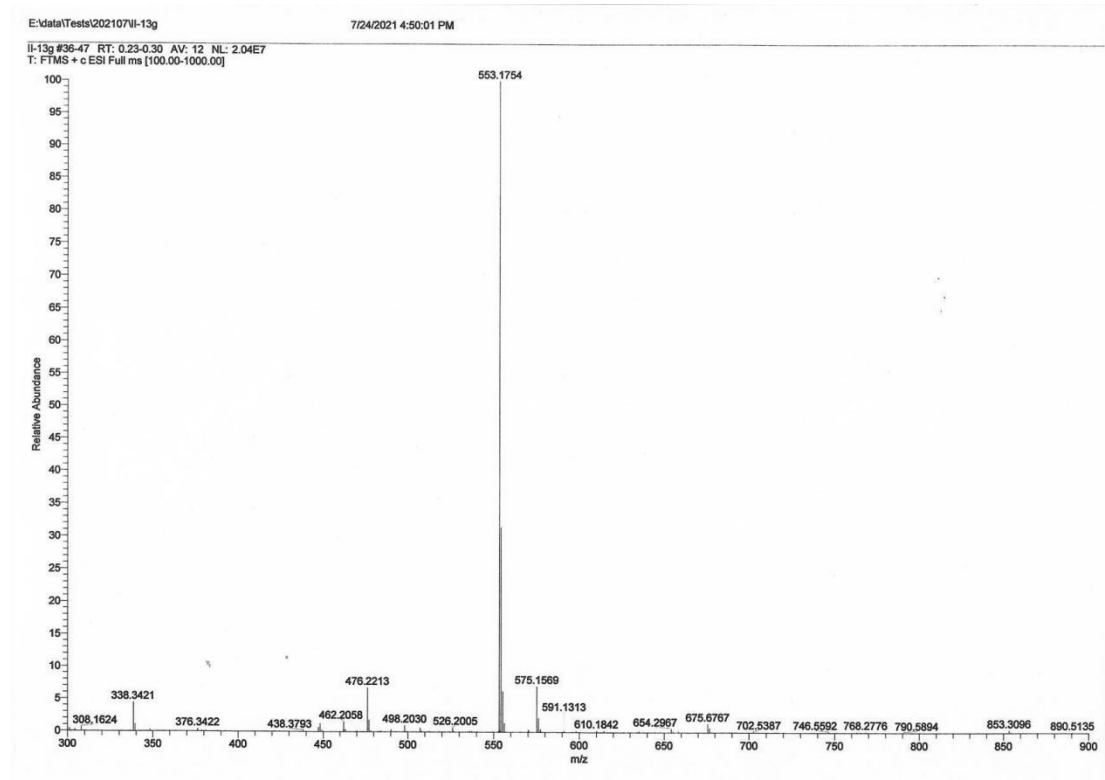


Fig. 36: HRMS spectrum of II-13g

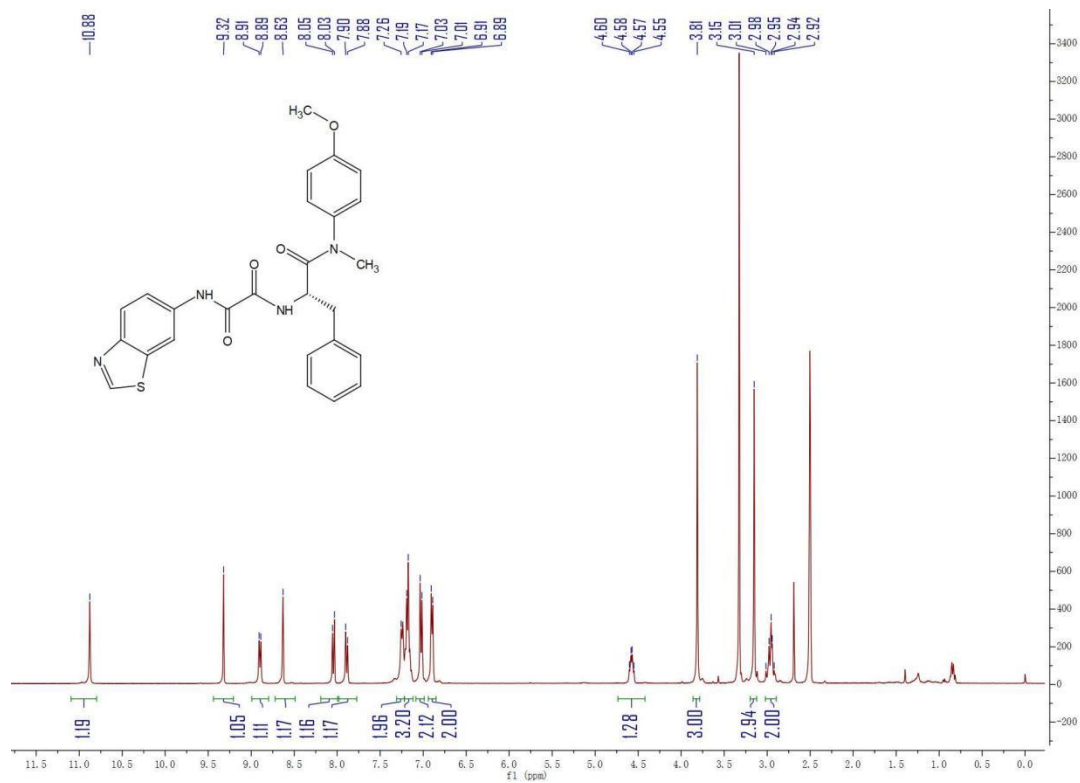


Fig. 37: ¹H NMR spectrum of III-16a

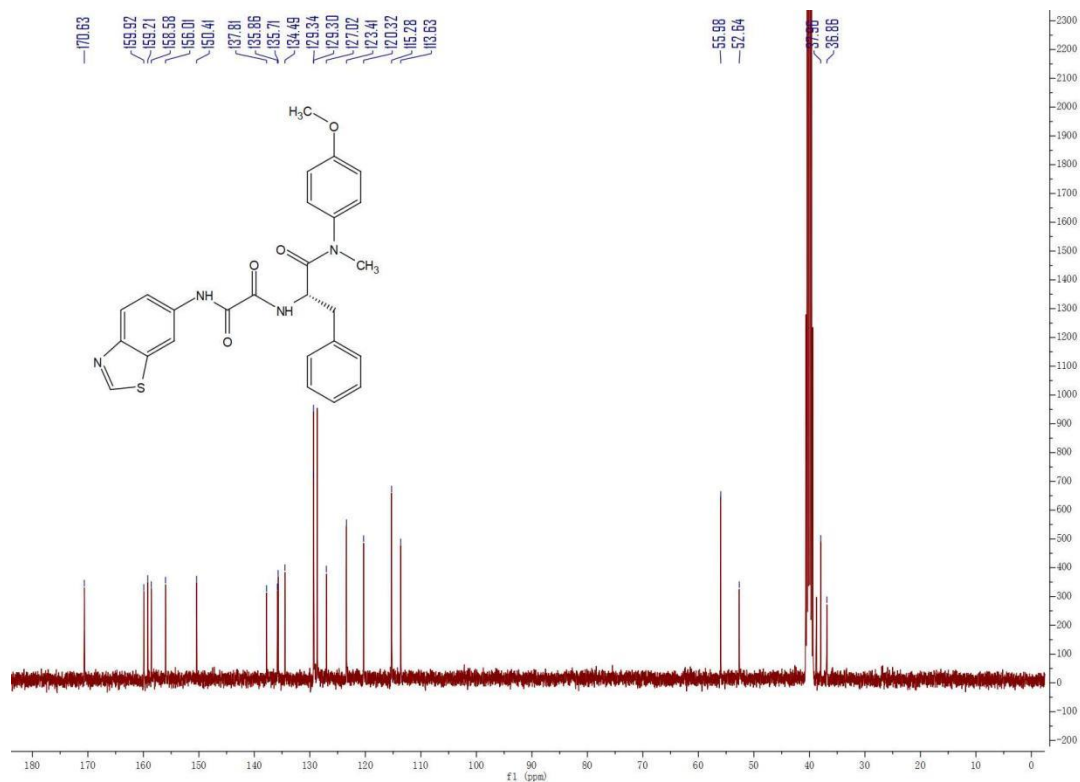


Fig. 38: ¹³C NMR spectrum of III-16a

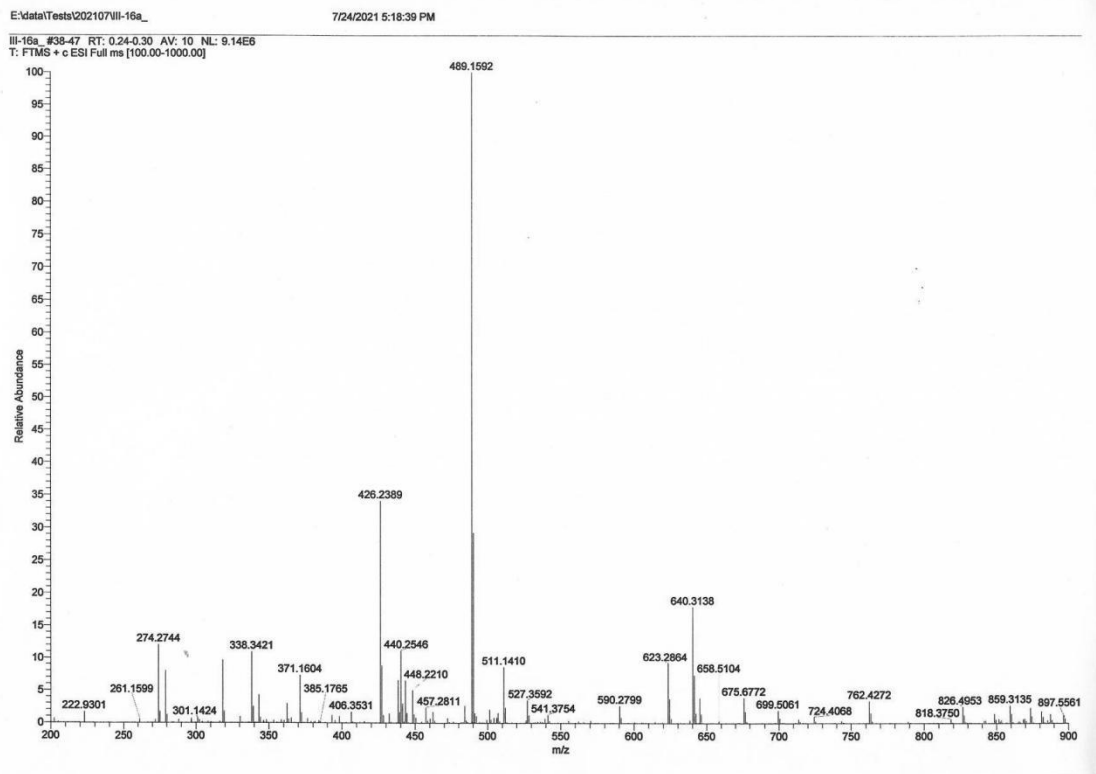


Fig. 39: HRMS spectrum of III-16a

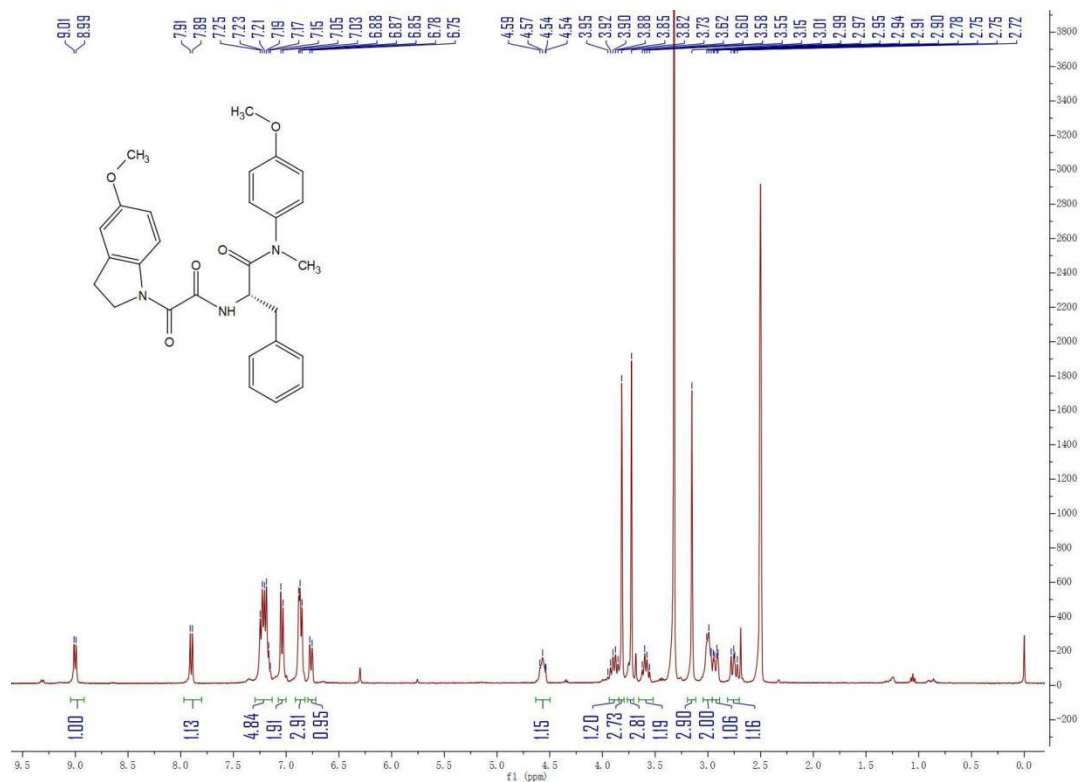


Fig. 40: ¹H NMR spectrum of III-16b

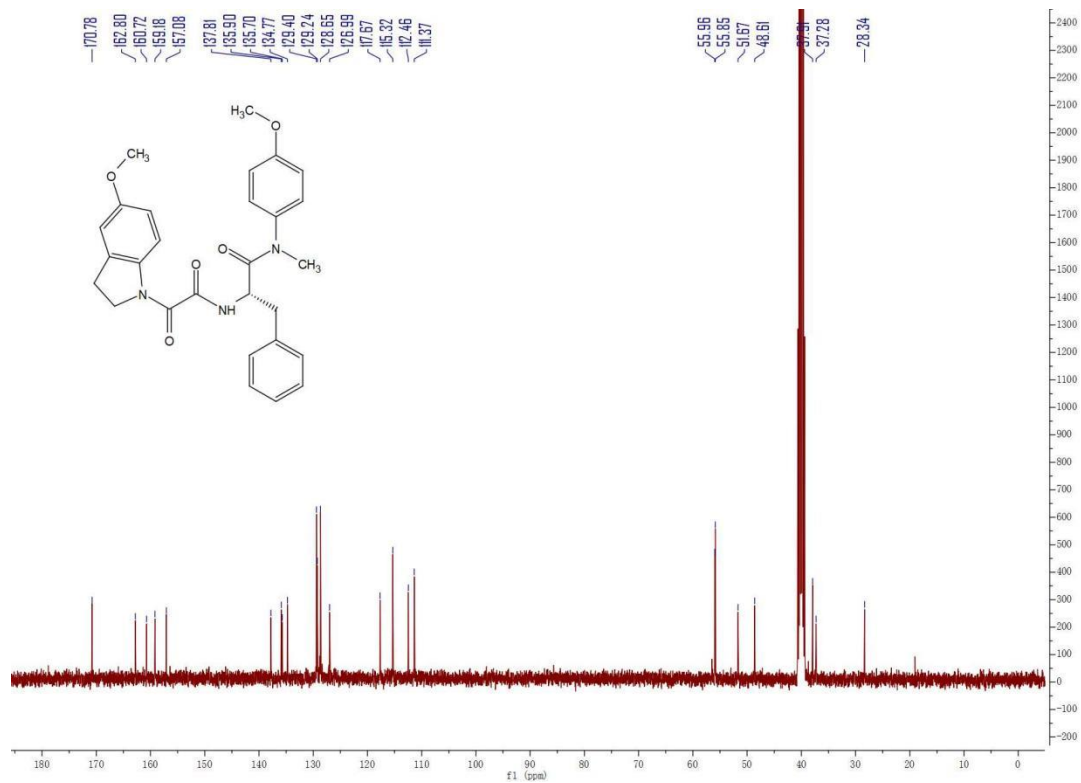


Fig. 41: ^{13}C NMR spectrum of III-16b

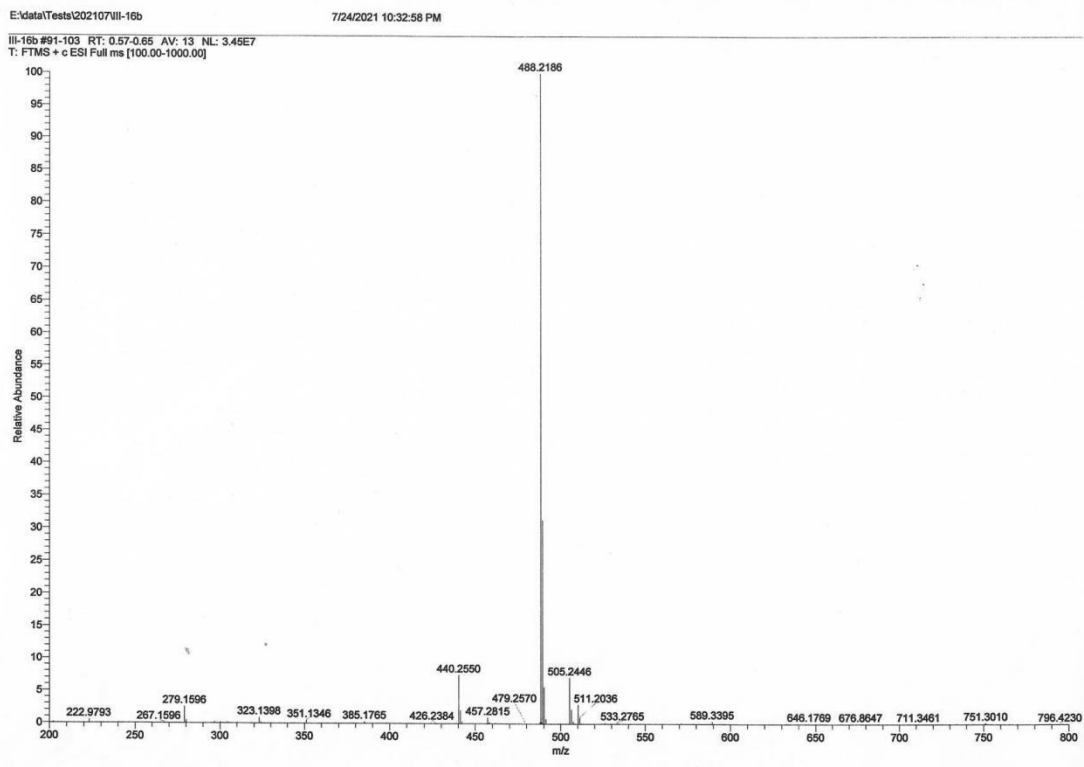


Fig. 42: HRMS spectrum of III-16b

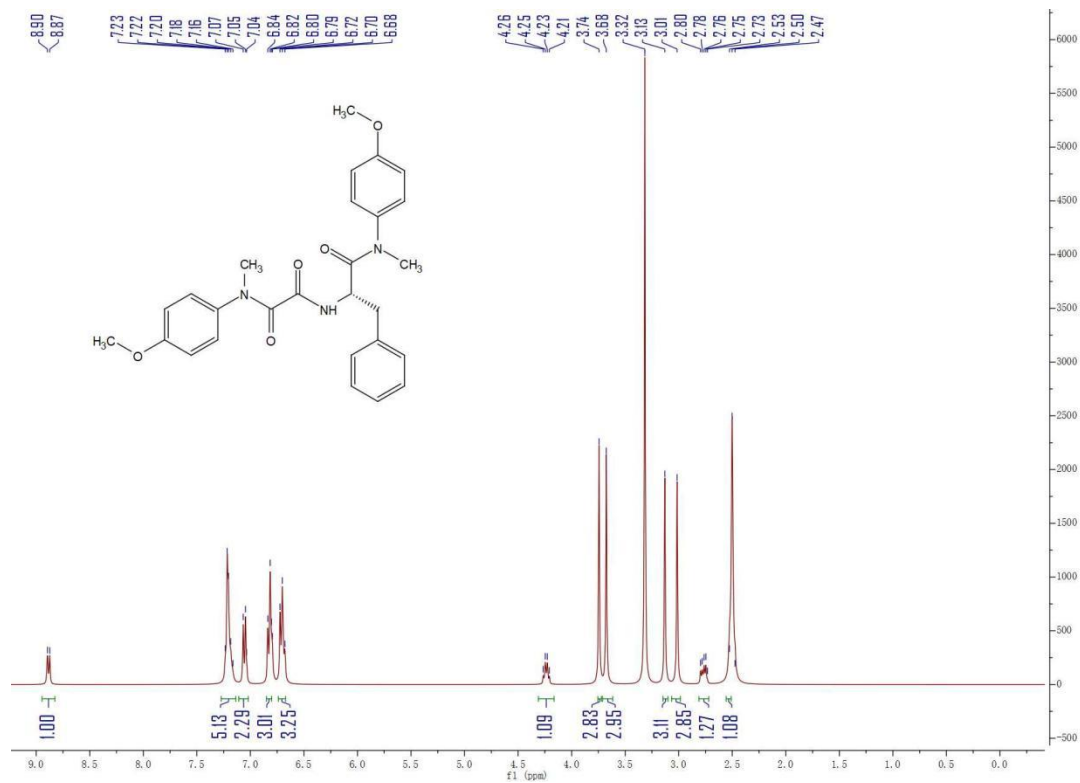


Fig. 43: ^1H NMR spectrum of III-16c

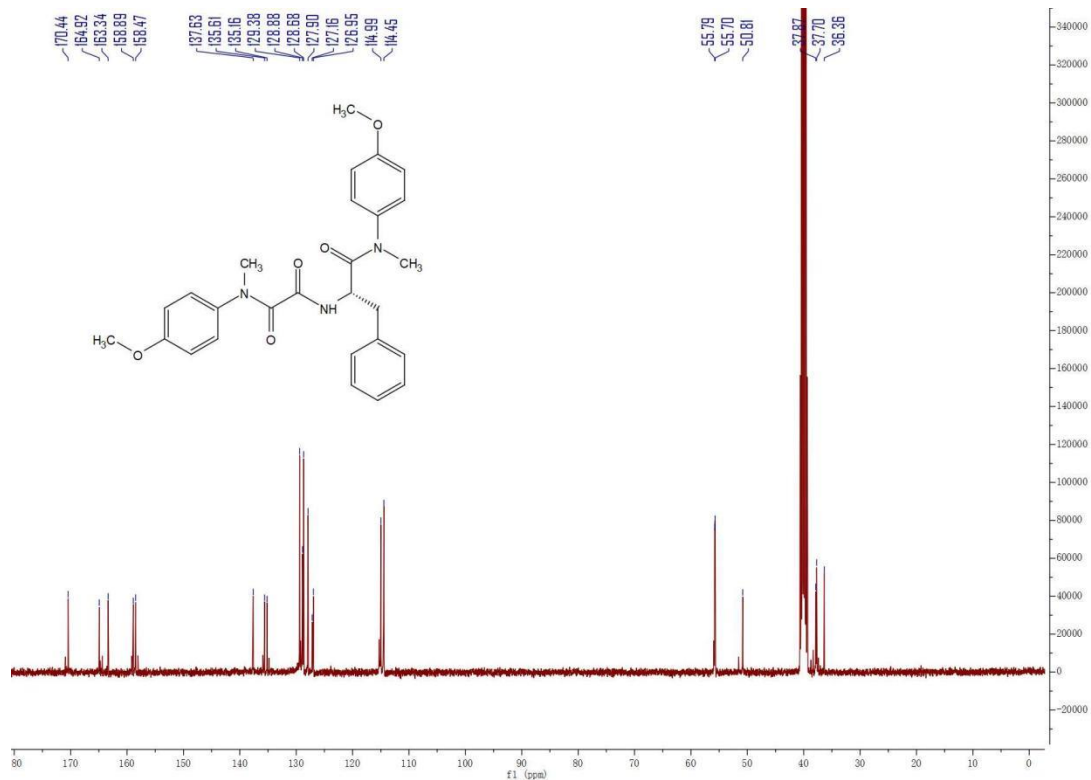


Fig. 44: ^{13}C NMR spectrum of III-16c

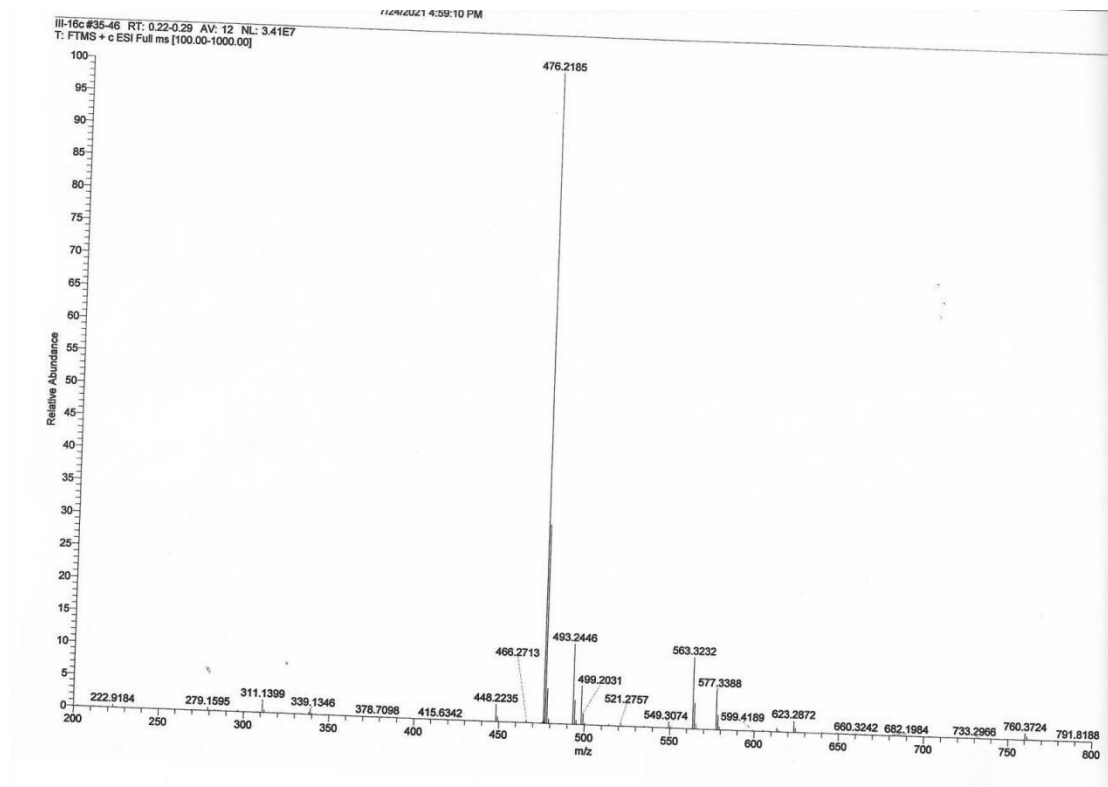


Fig. 45: HRMS spectrum of III-16c

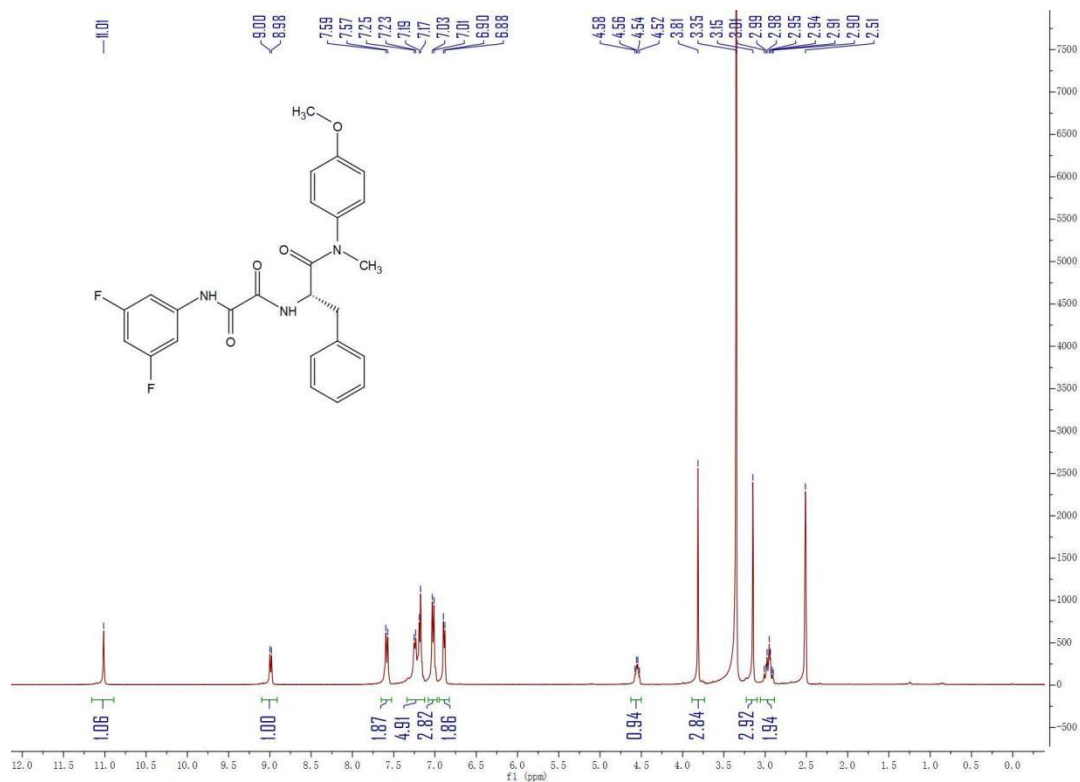


Fig. 46: ^1H NMR spectrum of III-16d

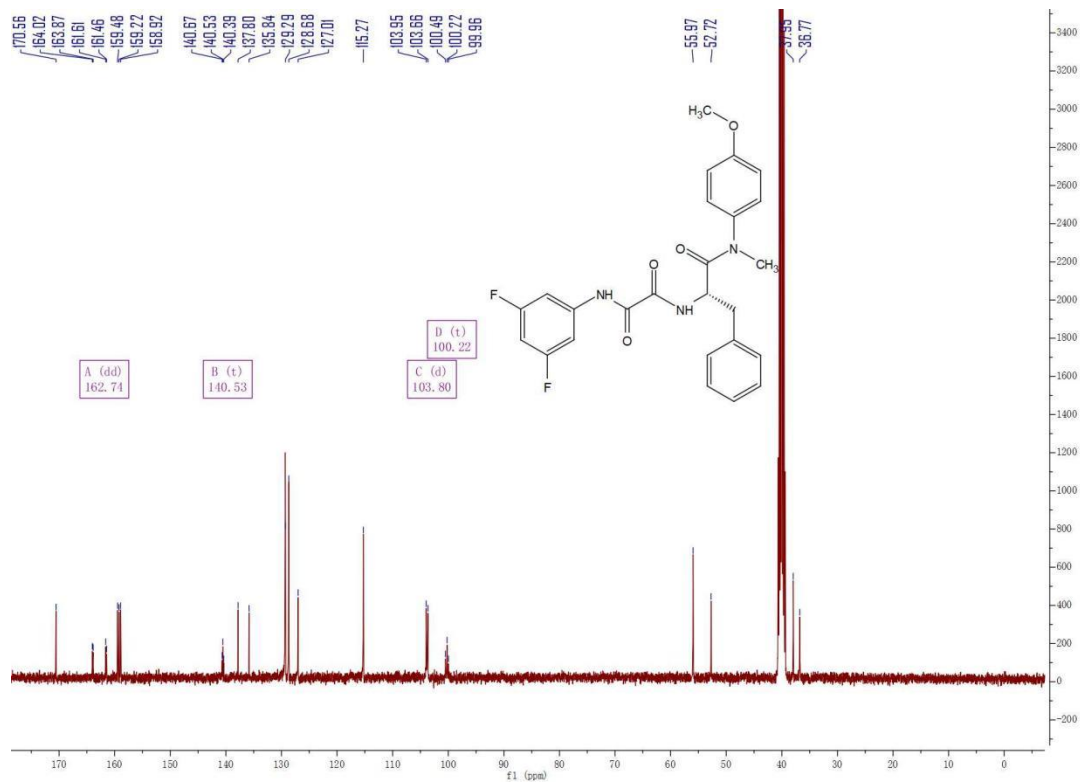


Fig. 47: ¹³C NMR spectrum of III-16d

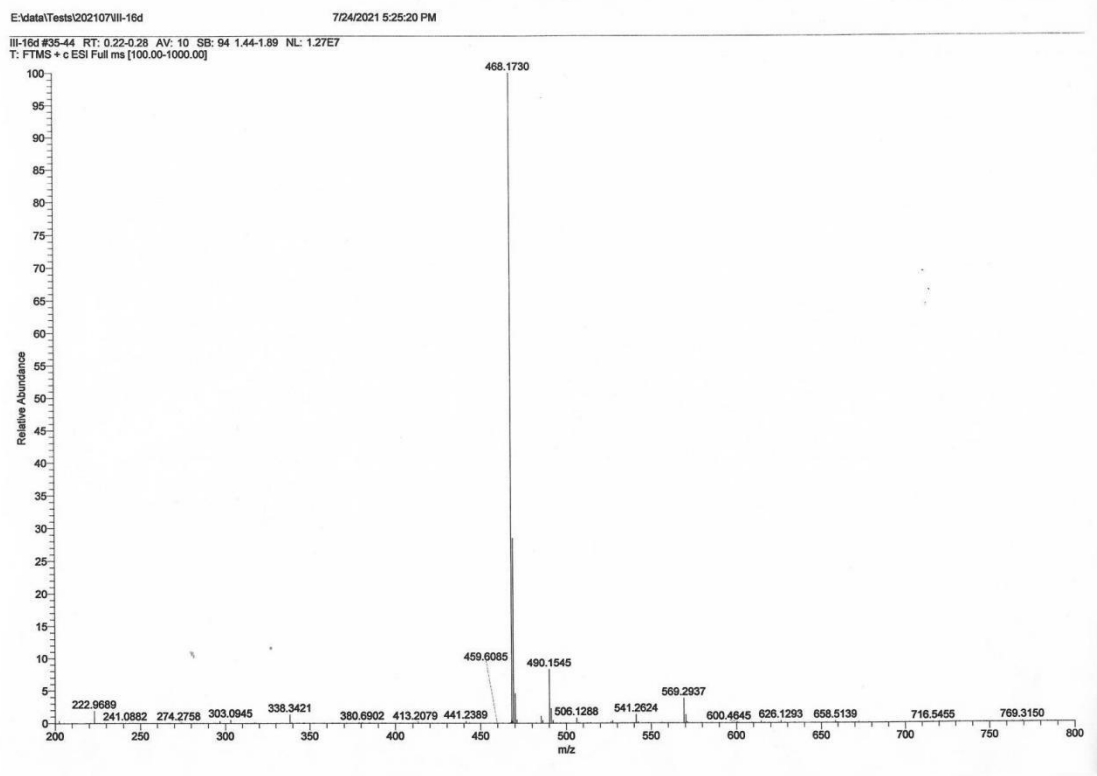


Fig. 48: ¹³C NMR spectrum of III-16d

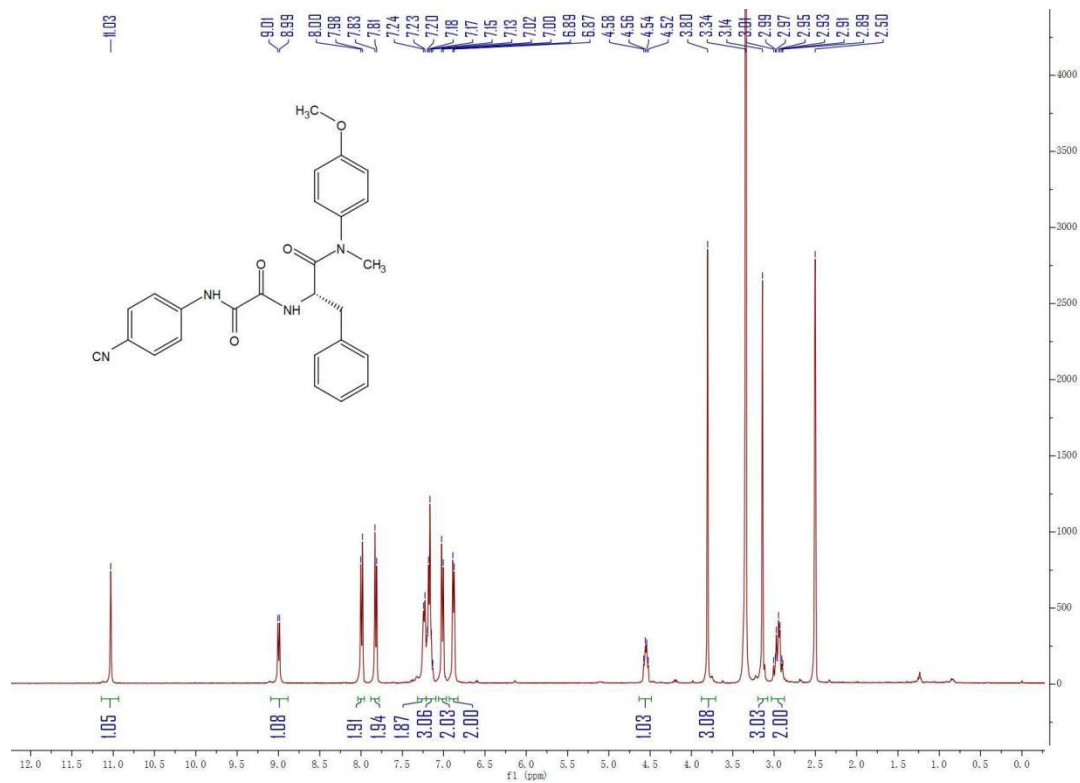


Fig. 49: ^1H NMR spectrum of III-16e

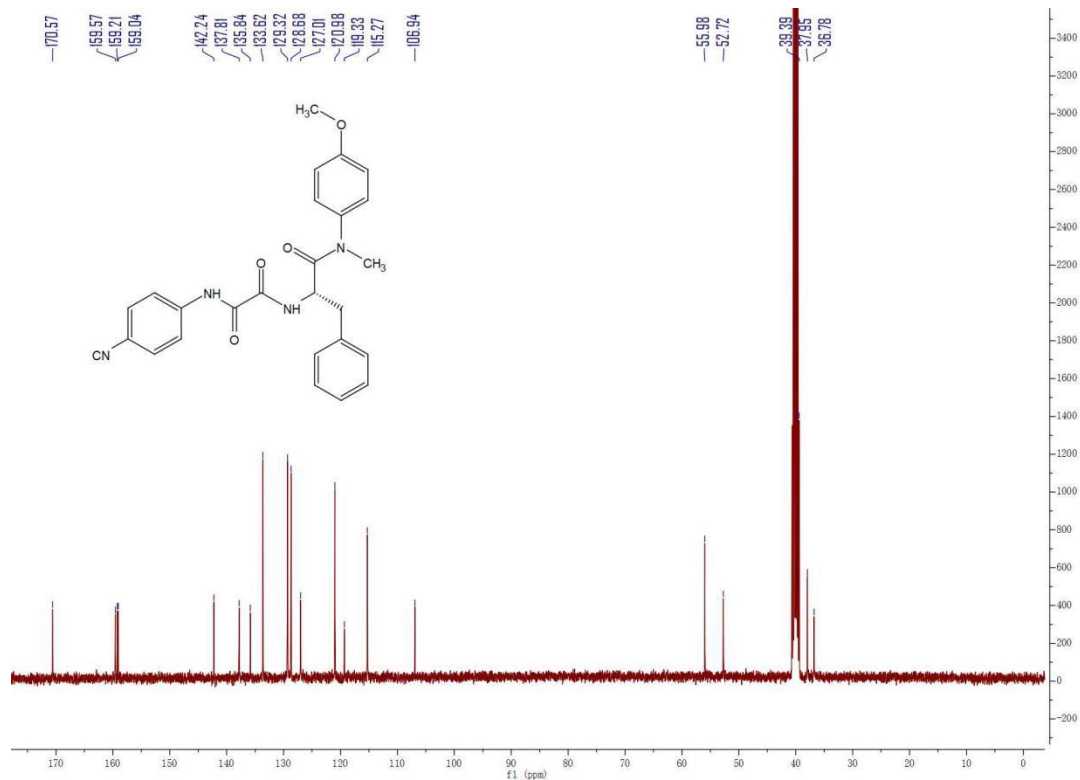


Fig. 50: ^{13}C NMR spectrum of III-16e

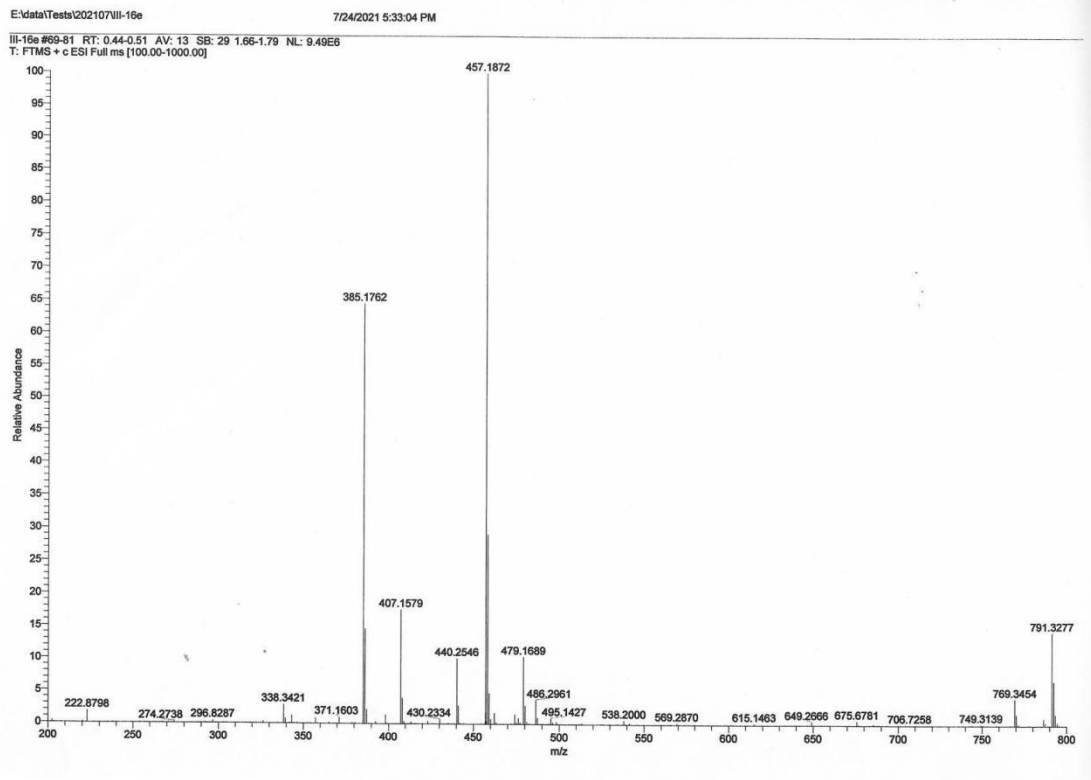


Fig. 51: HRMS spectrum of III-16e

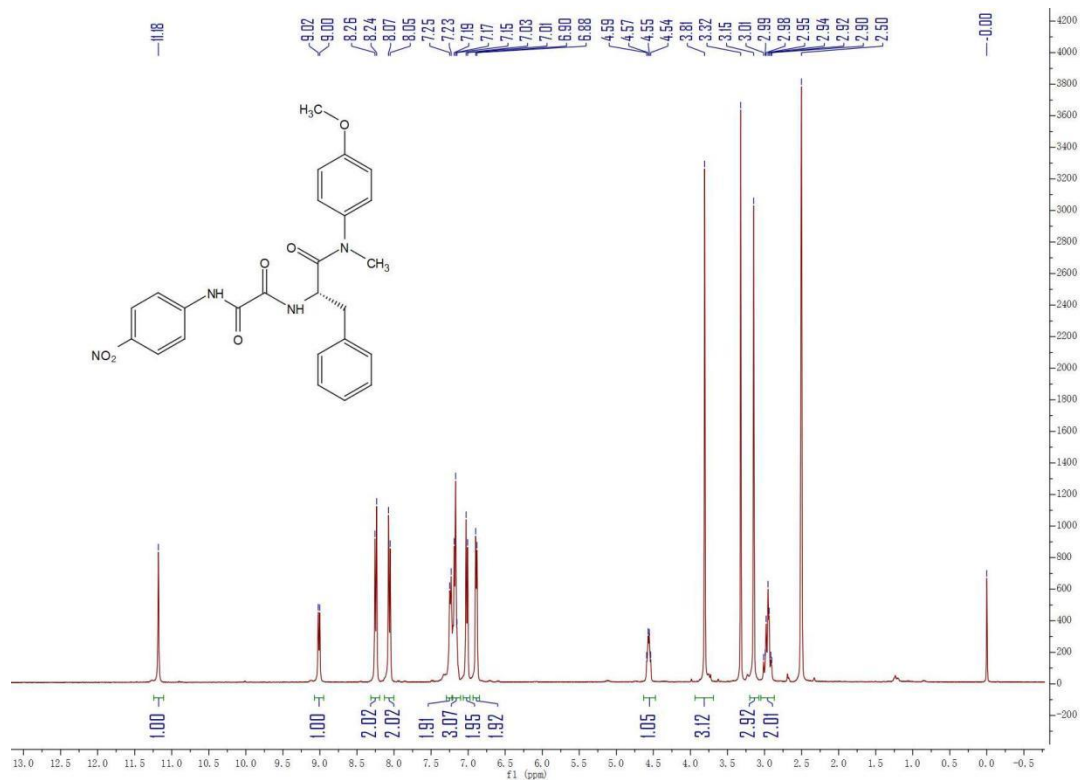


Fig. 52: ¹H NMR spectrum of III-16f

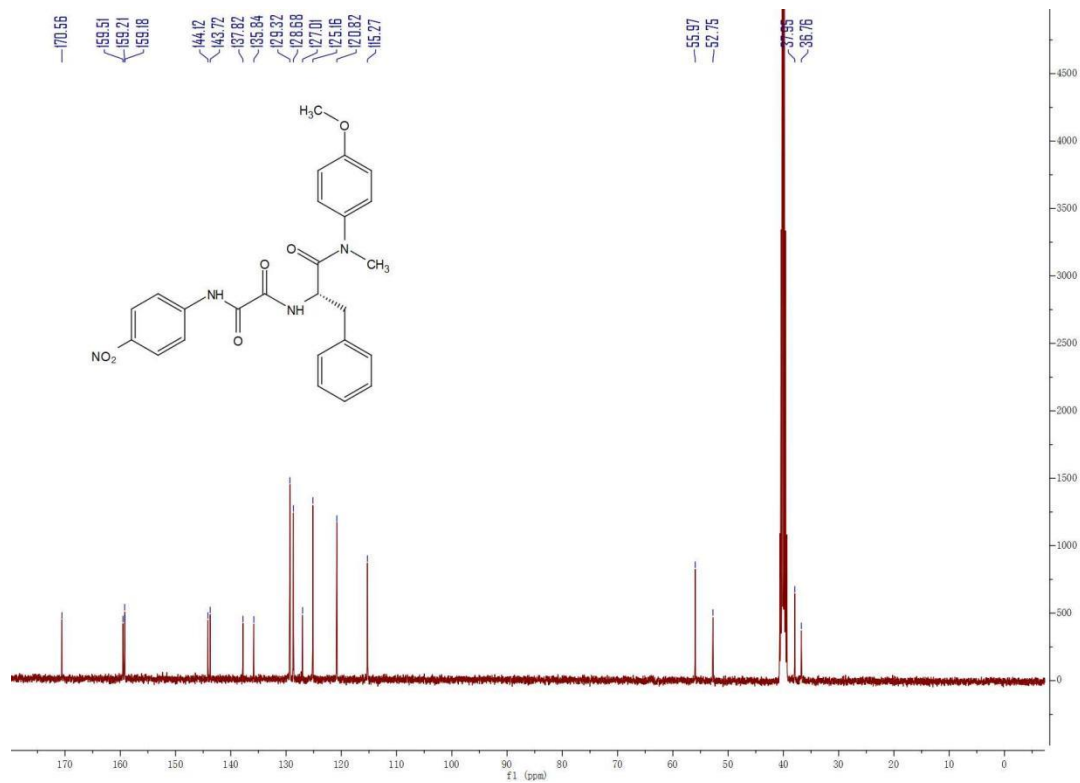


Fig. 53: ^{13}C NMR spectrum of III-16f

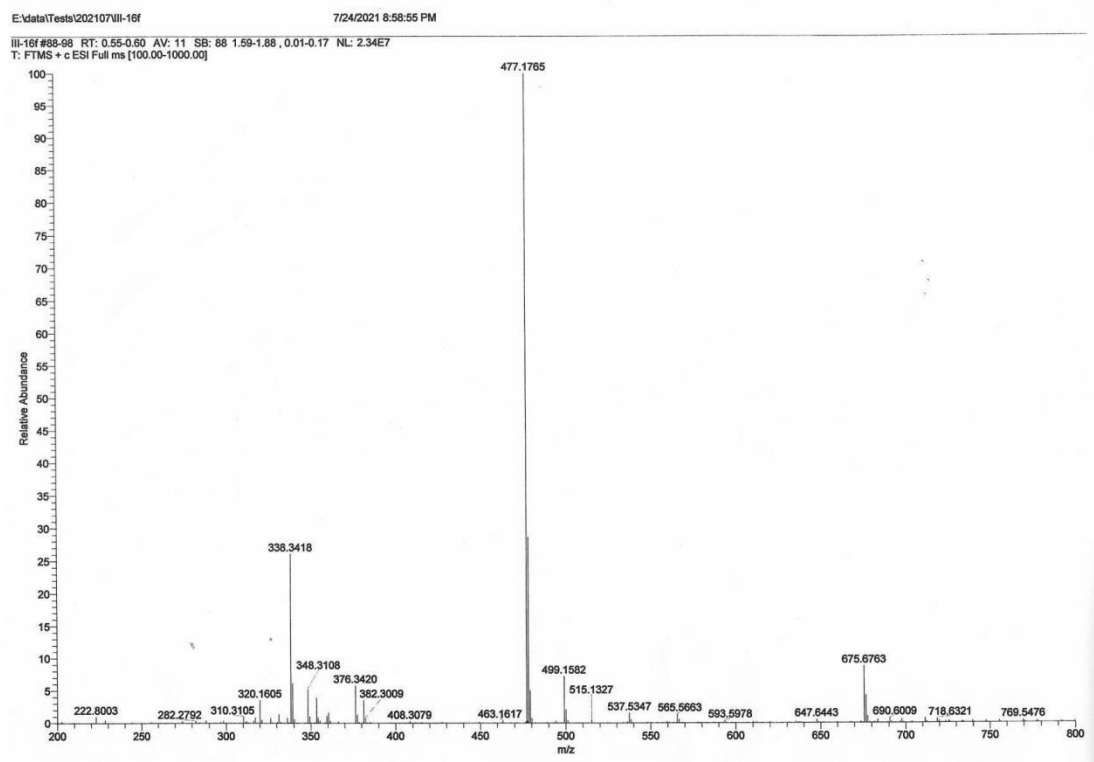


Fig. 54: HRMS spectrum of III-16f

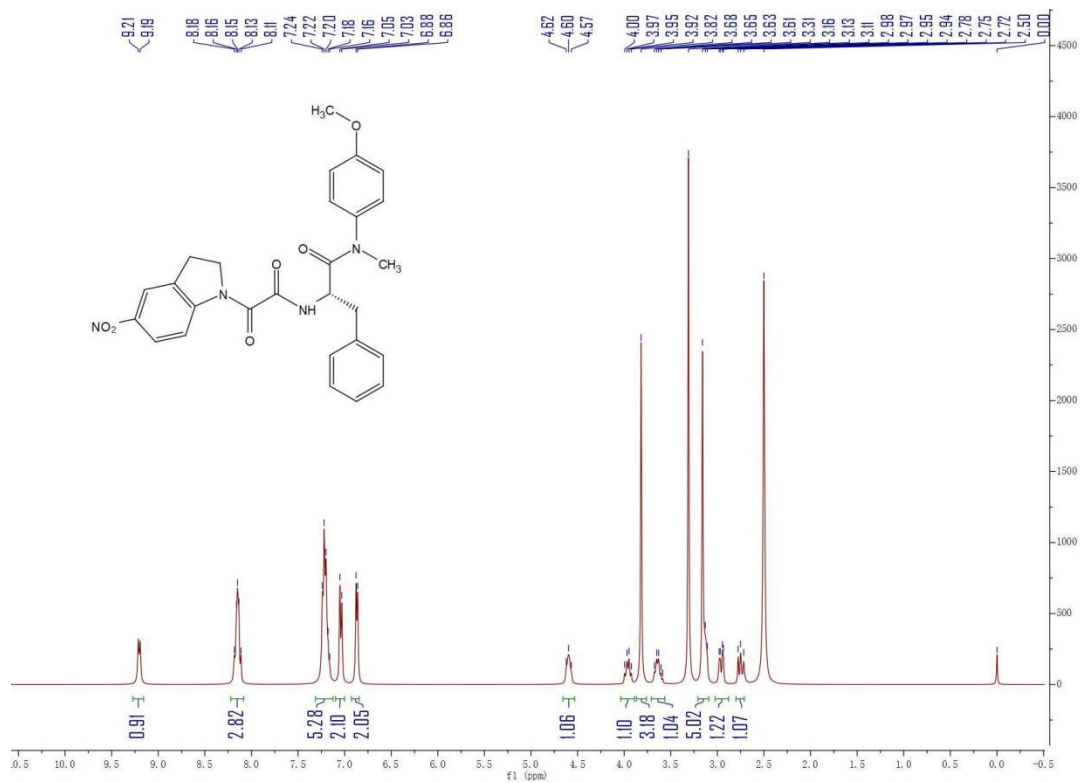


Fig. 55: ¹H NMR spectrum of III-16g

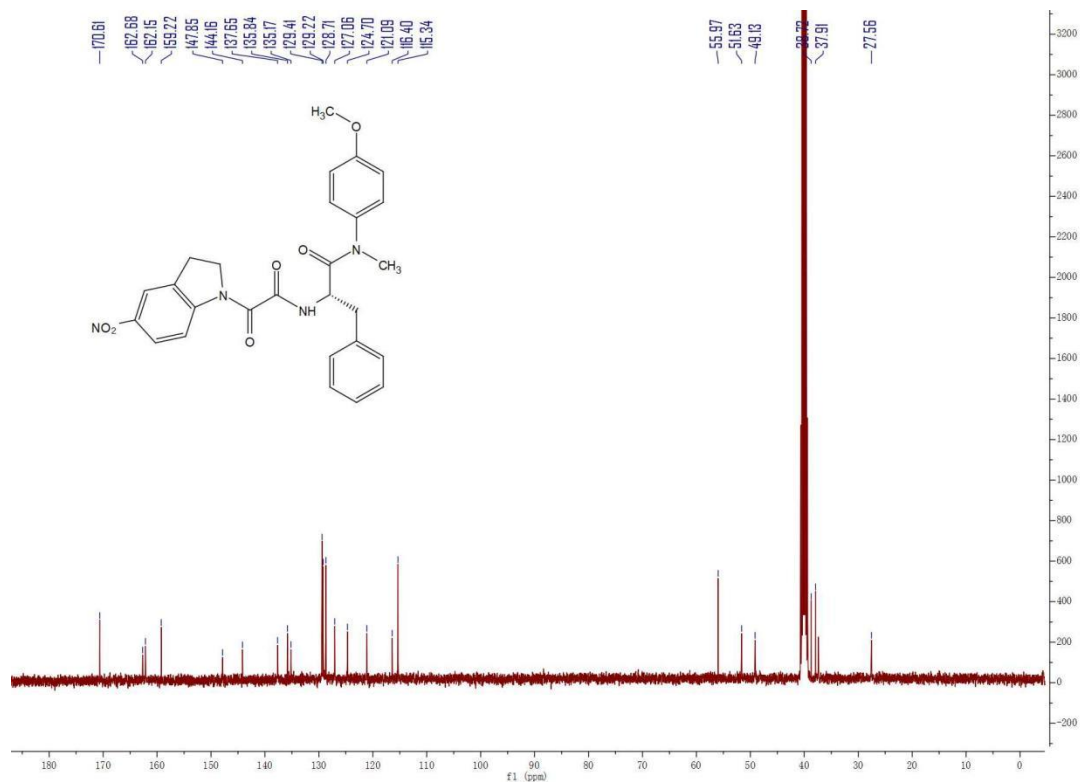


Fig. 56: ¹³C NMR spectrum of III-16g

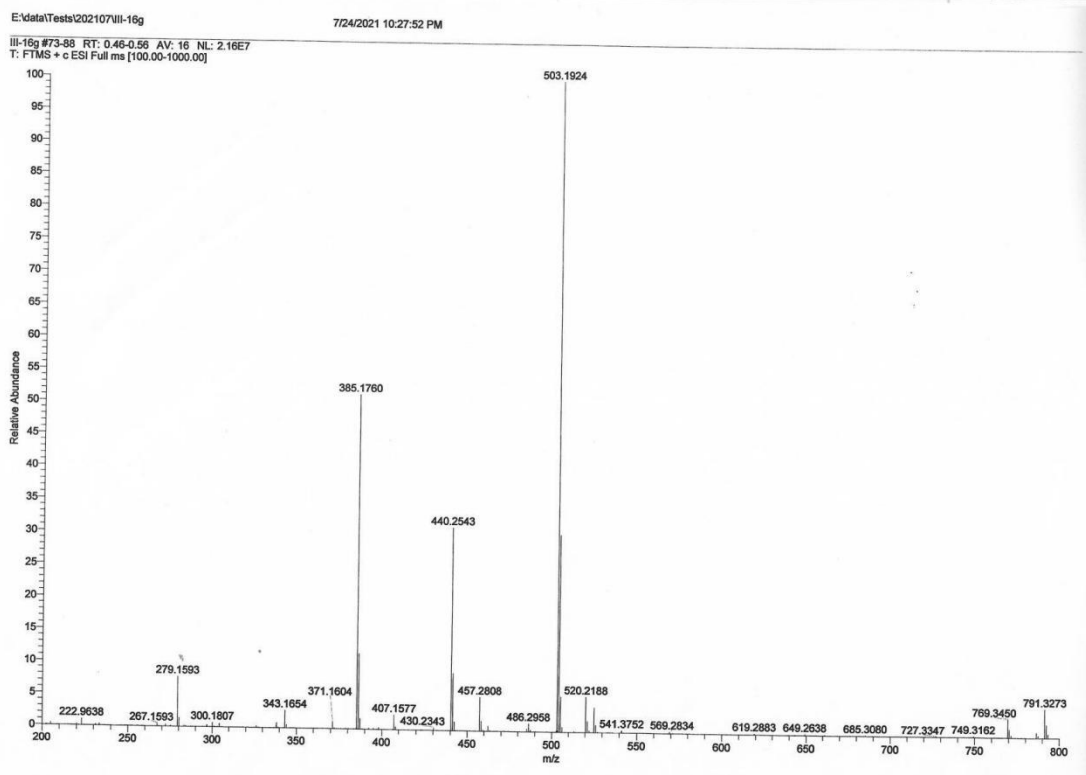


Fig. 57: HRMS spectrum of III-16g

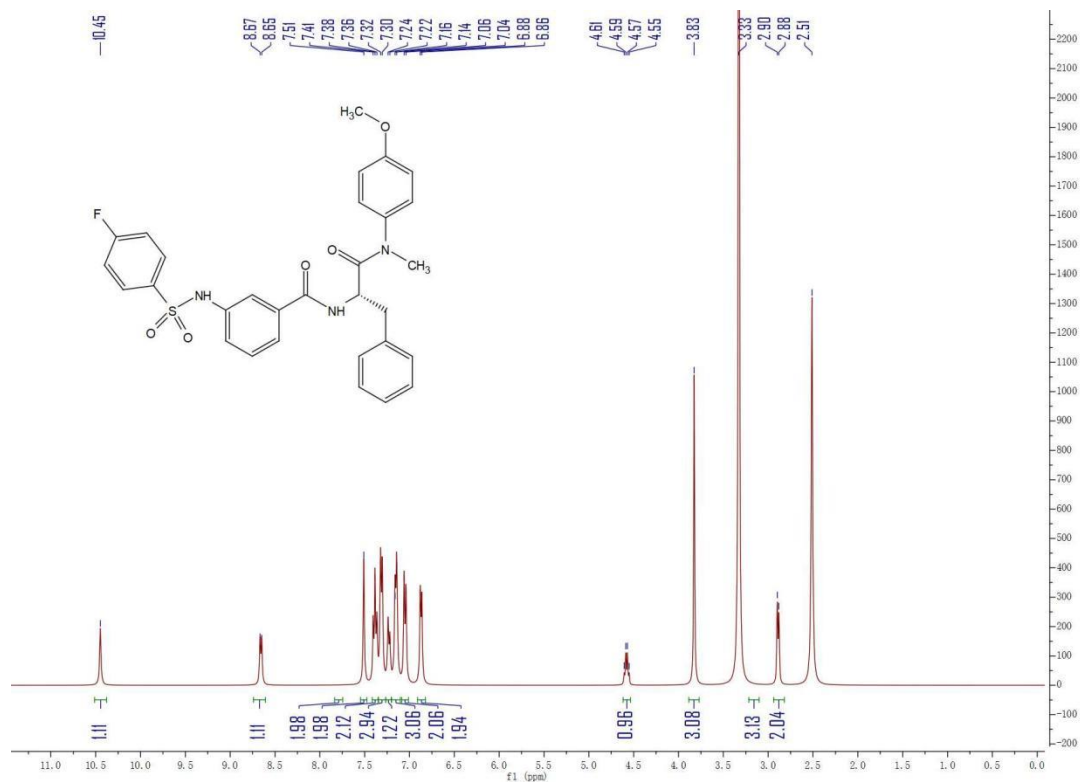
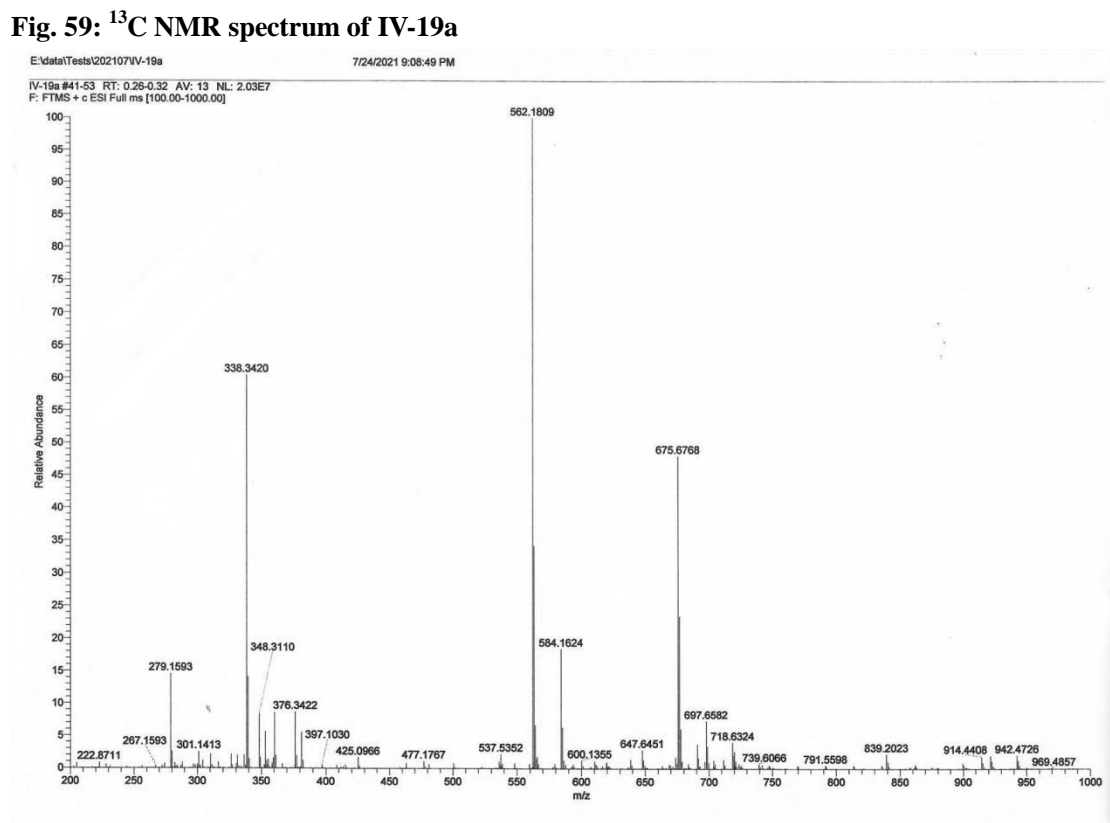
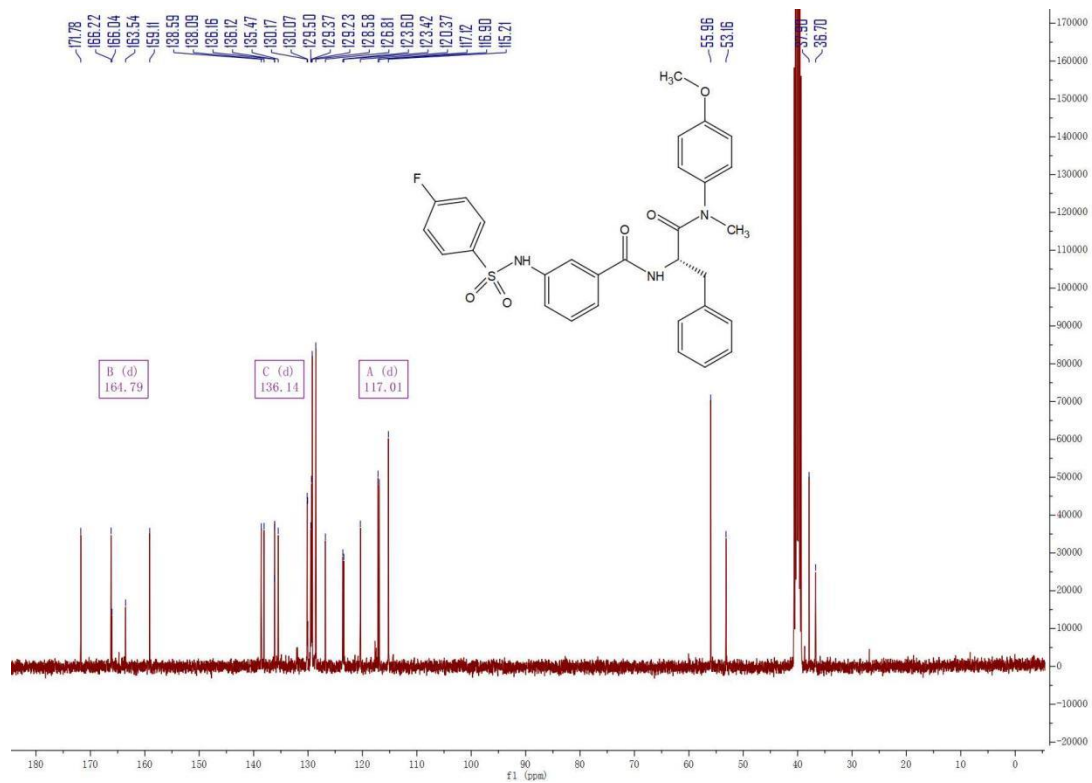


Fig. 58: ¹H NMR spectrum of IV-19a



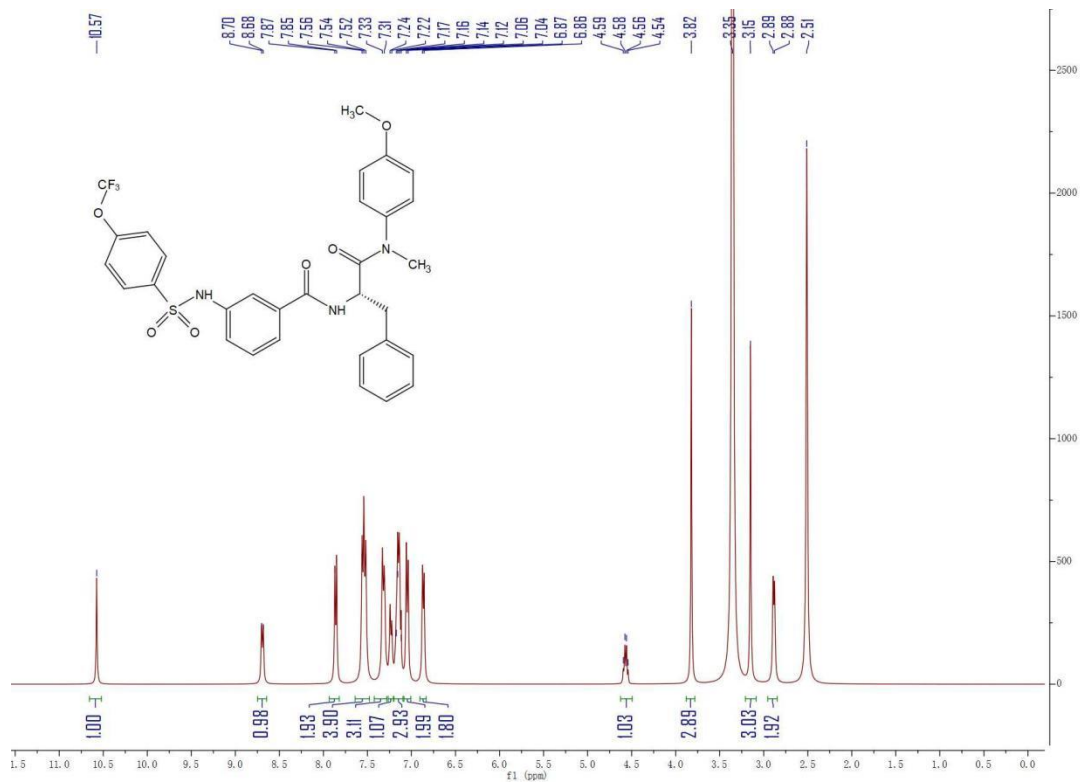


Fig. 61: ¹H NMR spectrum of IV-19b

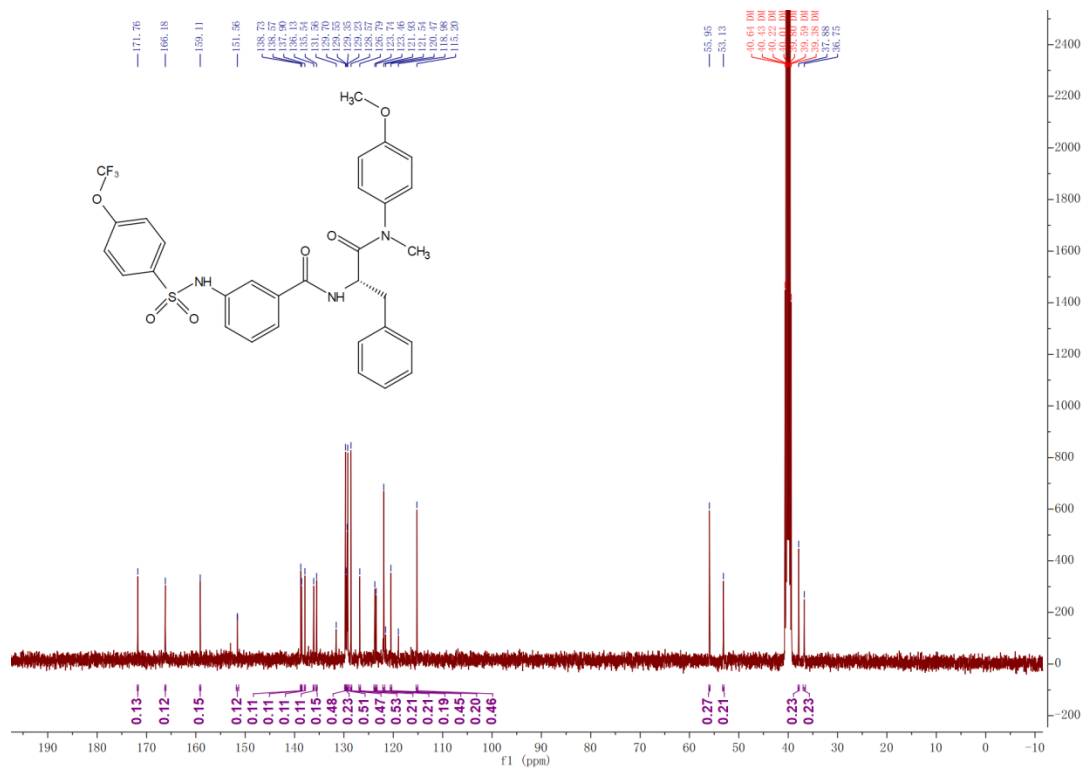


Fig. 62: ¹³C NMR spectrum of IV-19b

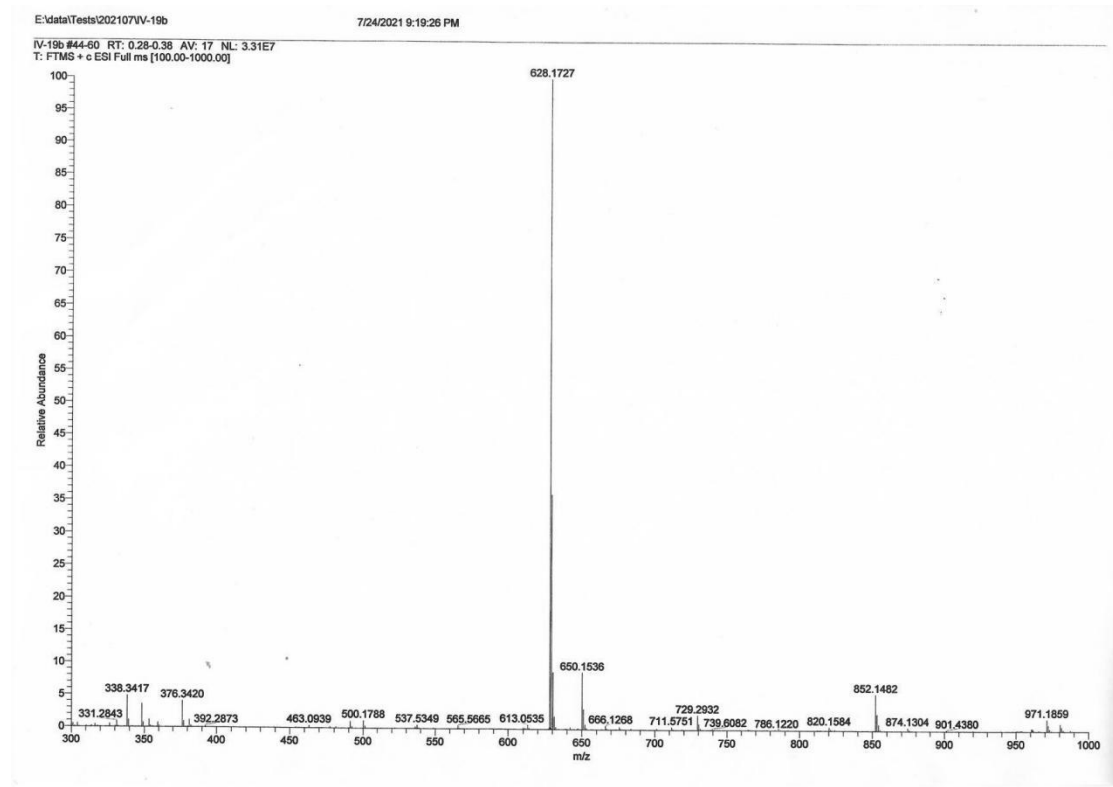


Fig. 63: HRMS spectrum of IV-19b

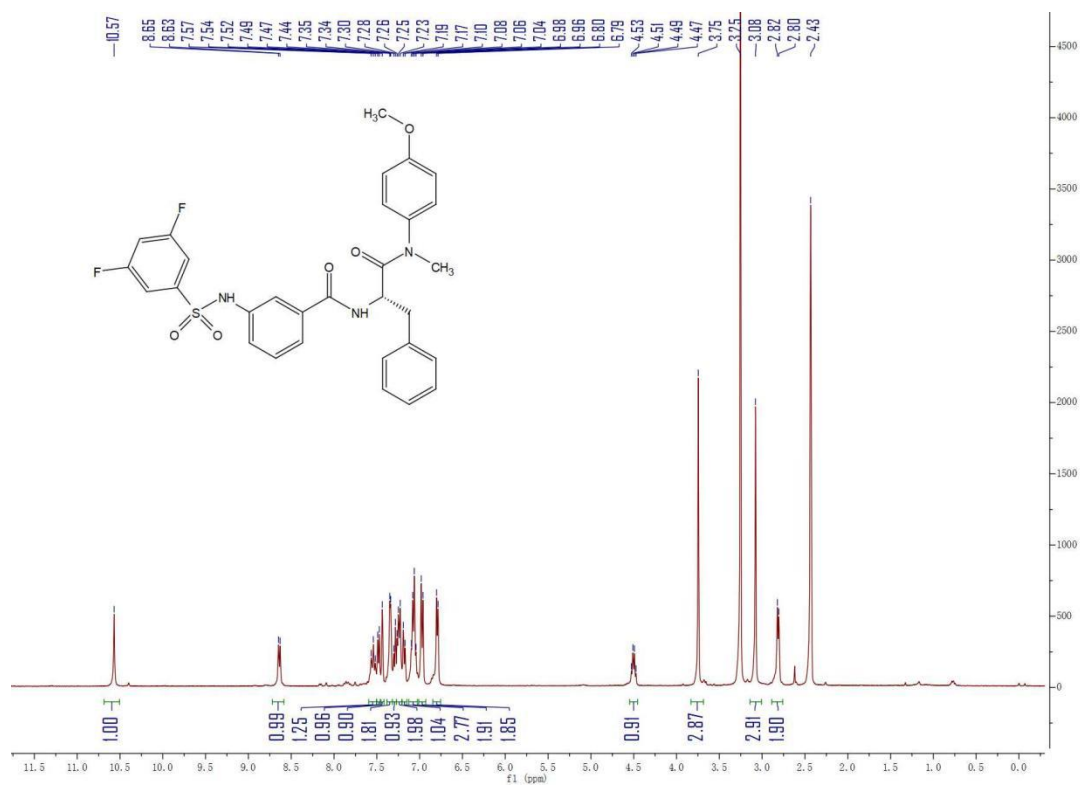


Fig. 64: ¹H NMR spectrum of IV-19c

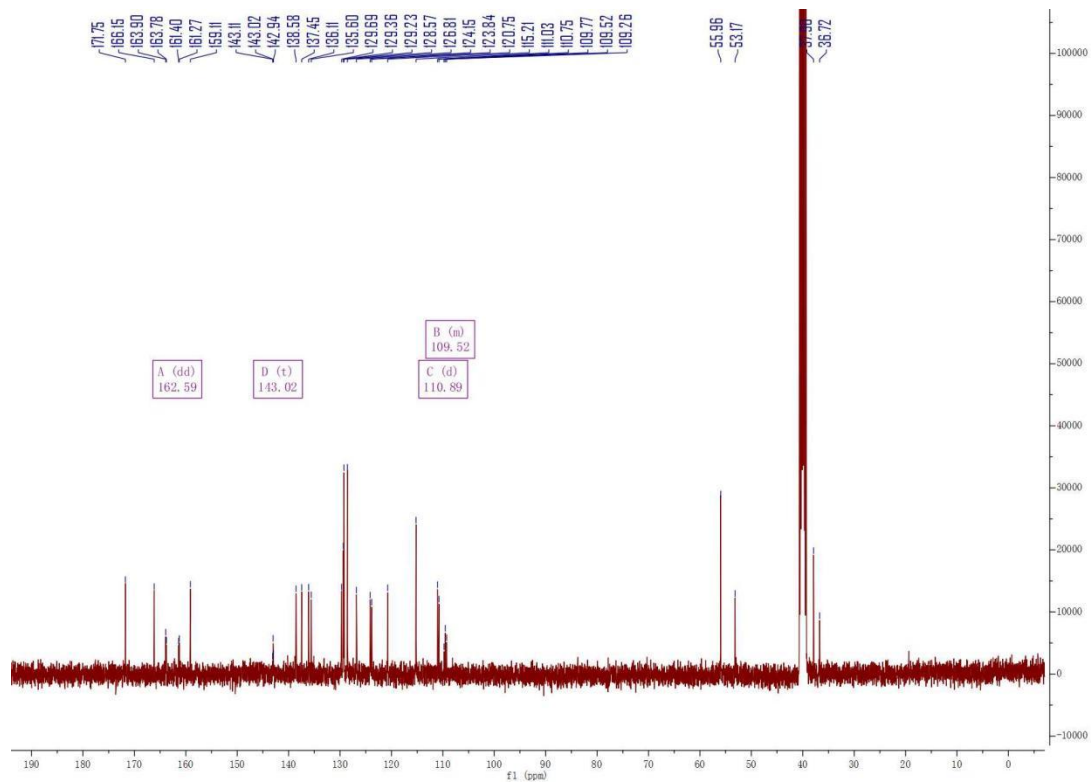


Fig. 65: ^{13}C NMR spectrum of IV-19c

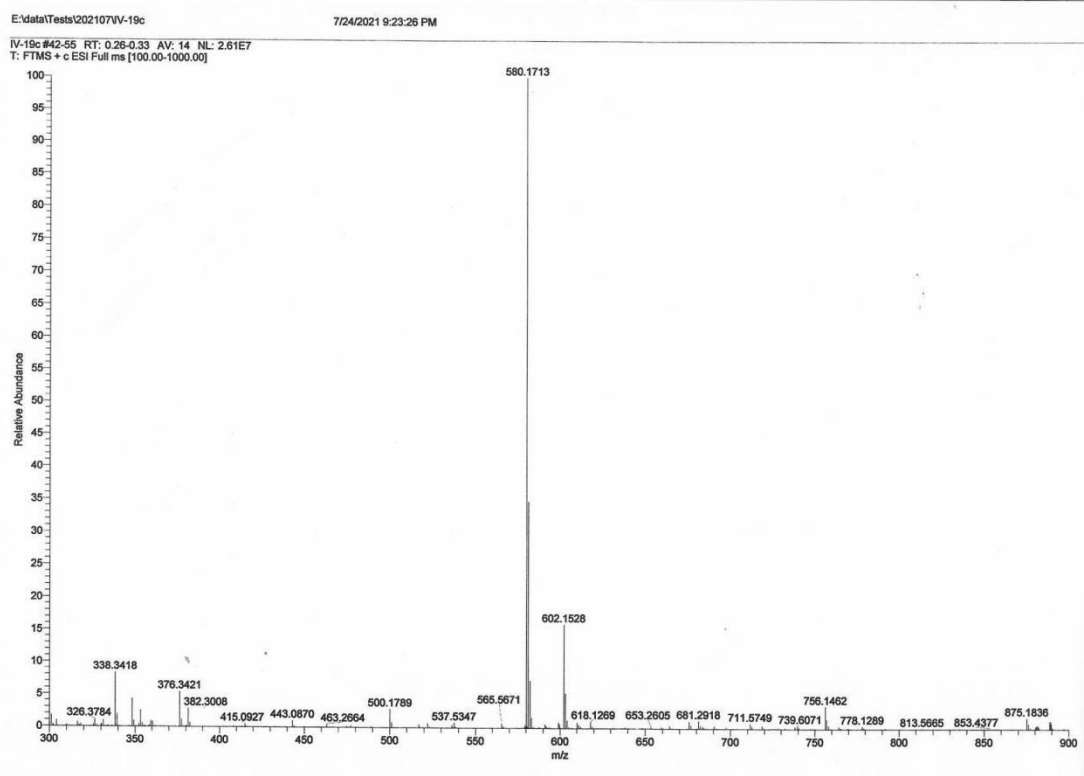


Fig. 66: HRMS spectrum of IV-19c

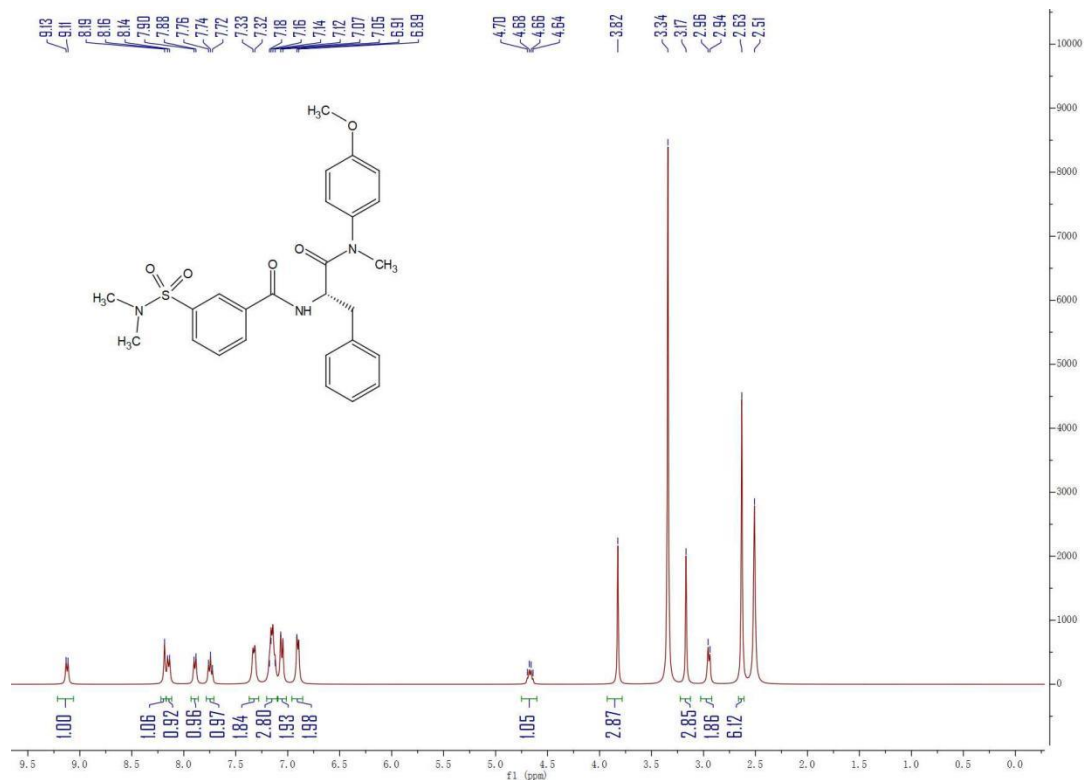


Fig. 67: ¹H NMR spectrum of V-25a

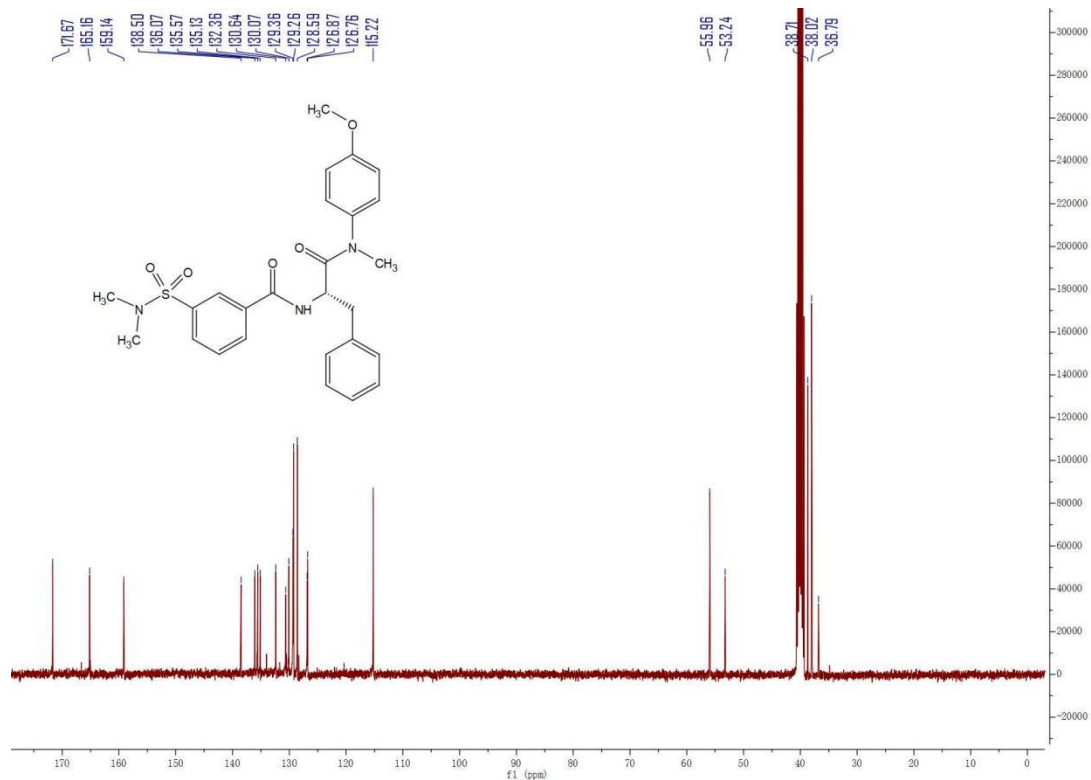


Fig. 68: ¹³C NMR spectrum of V-25a

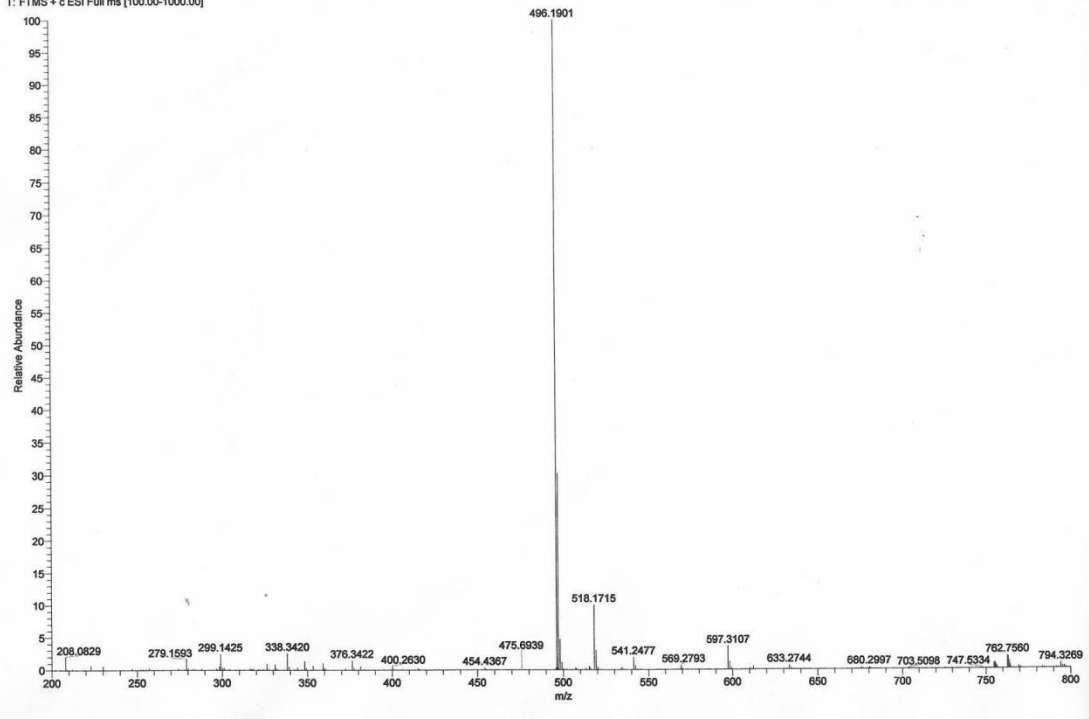
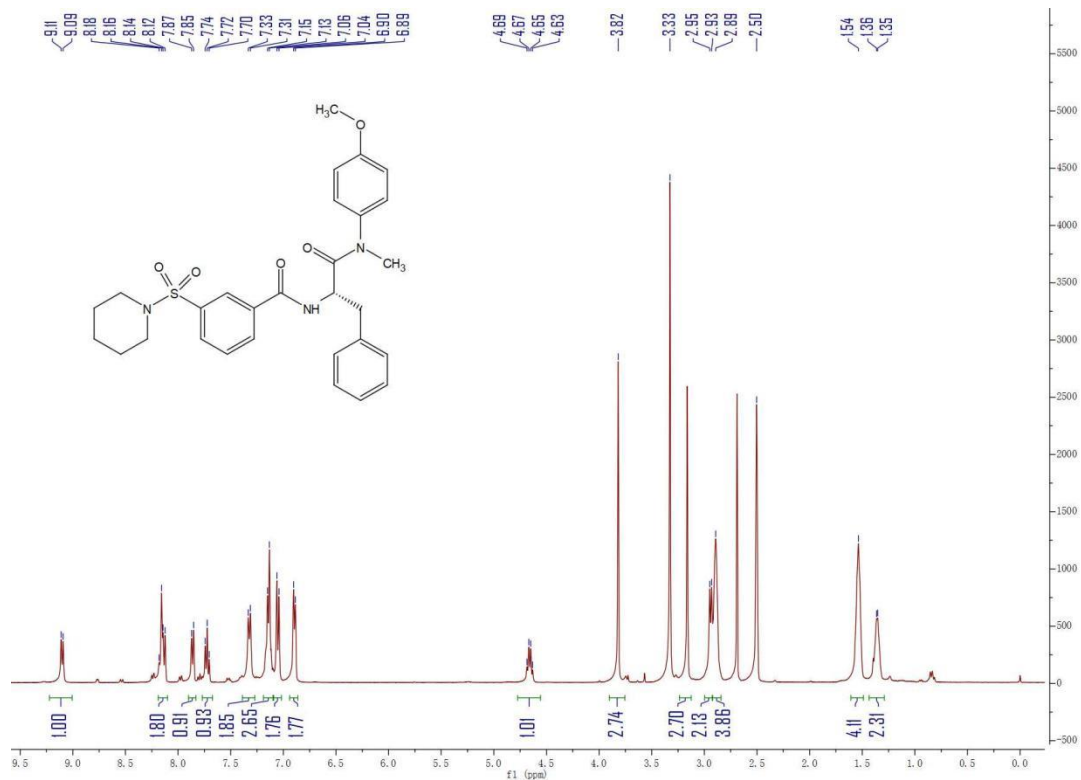
V-20a #39-48 RT: 0.24-0.30 AV: 10 NL: 4.48E7
T: FTMS + c ESI Full ms [100.00-1000.00]

Fig. 69: HRMS spectrum of V-25a

Fig. 70: ¹H NMR spectrum of V-25b

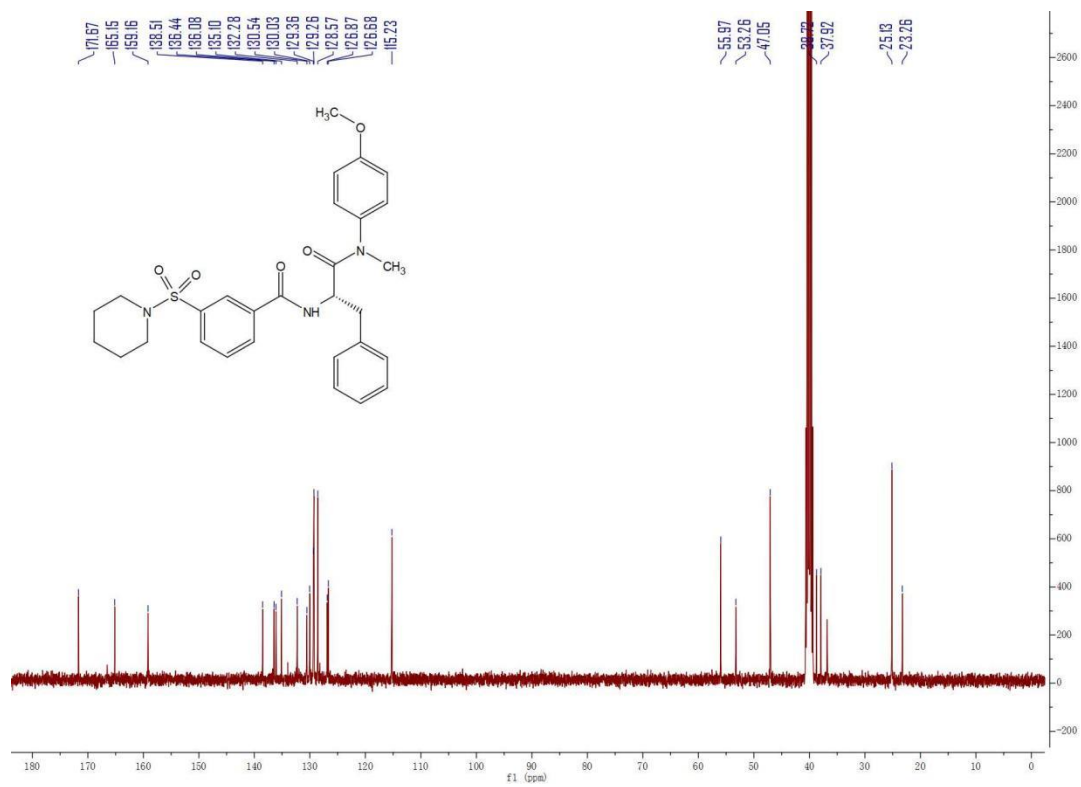


Fig. 71: ¹³C NMR spectrum of V-25b

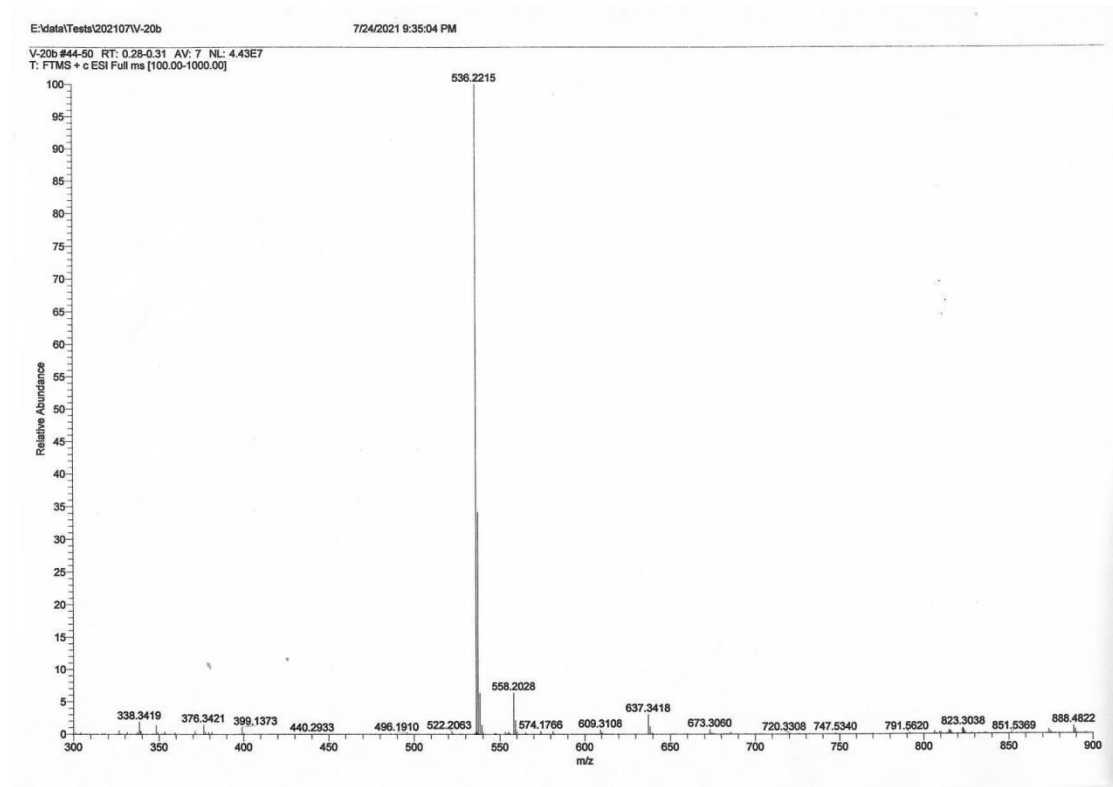


Fig. 72: HRMS spectrum of V-25b

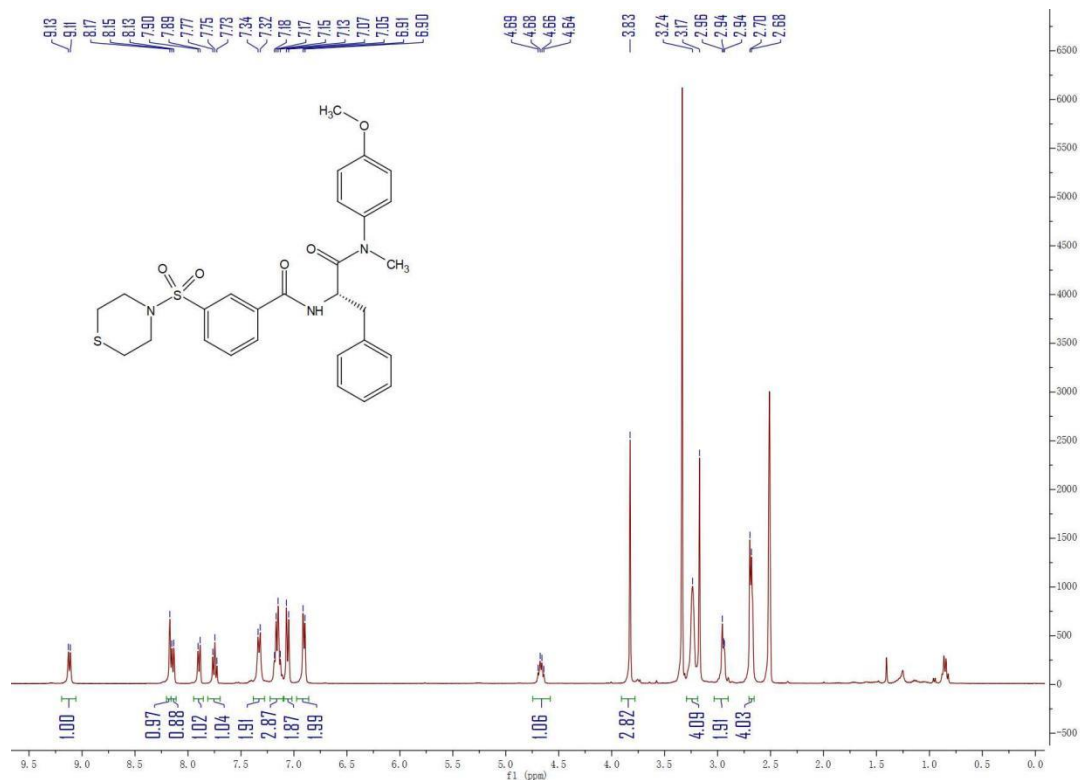


Fig. 73: ¹H NMR spectrum of V-25c

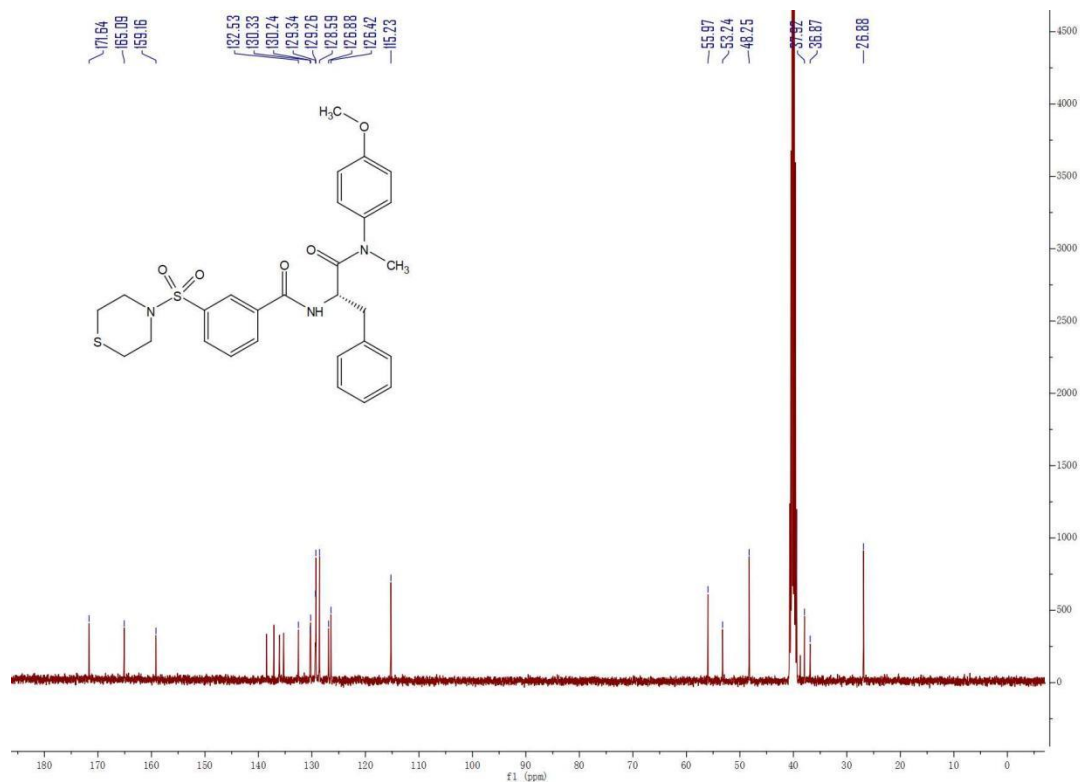


Fig. 74: ¹³C NMR spectrum of V-25c

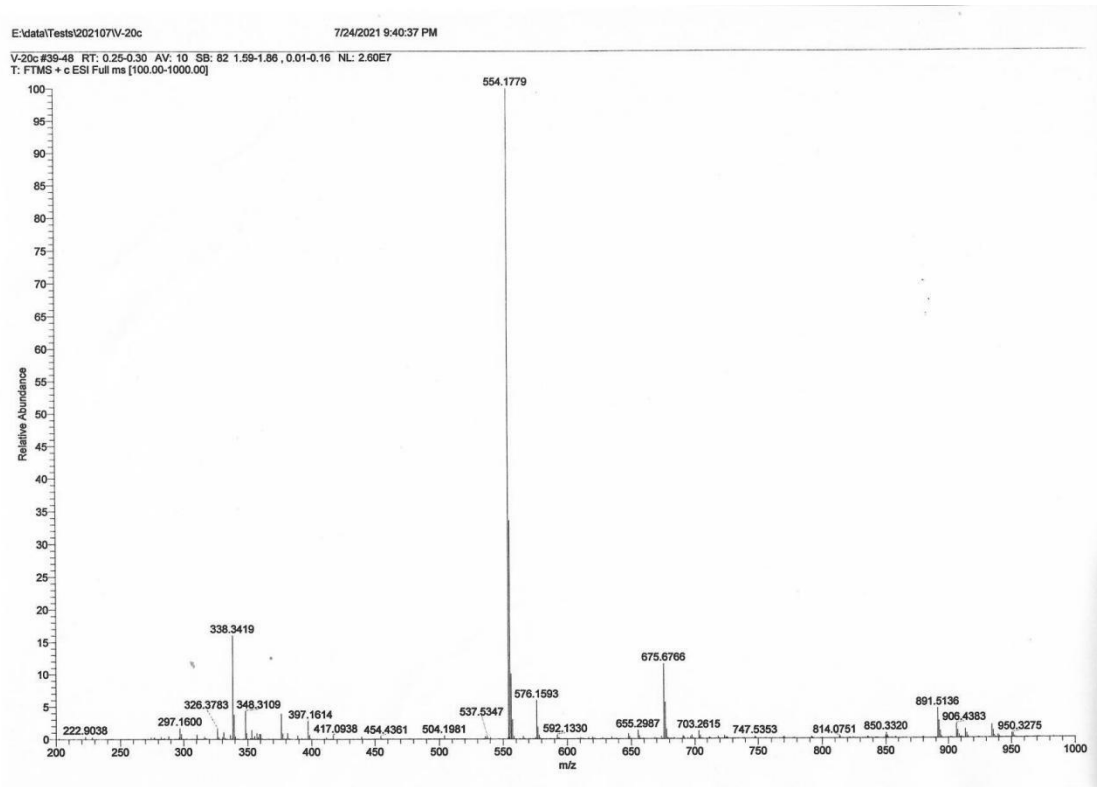


Fig. 75: HRMS spectrum of V-25c

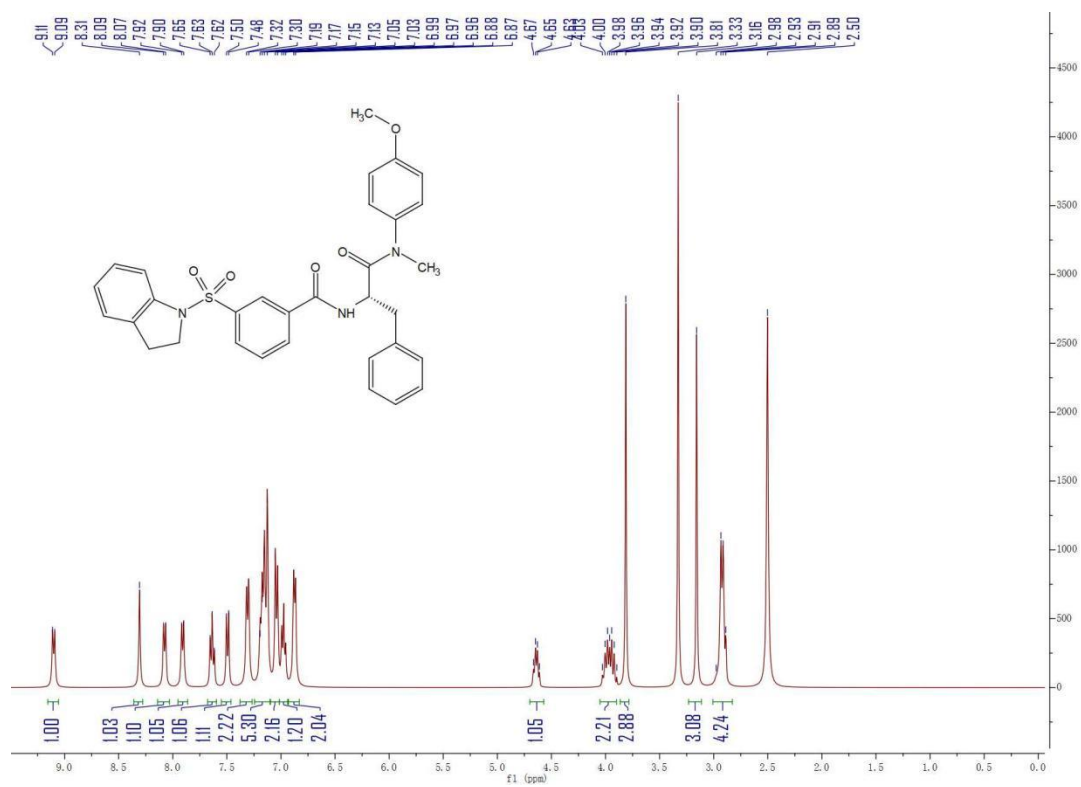


Fig. 76: ¹H NMR spectrum of V-25d

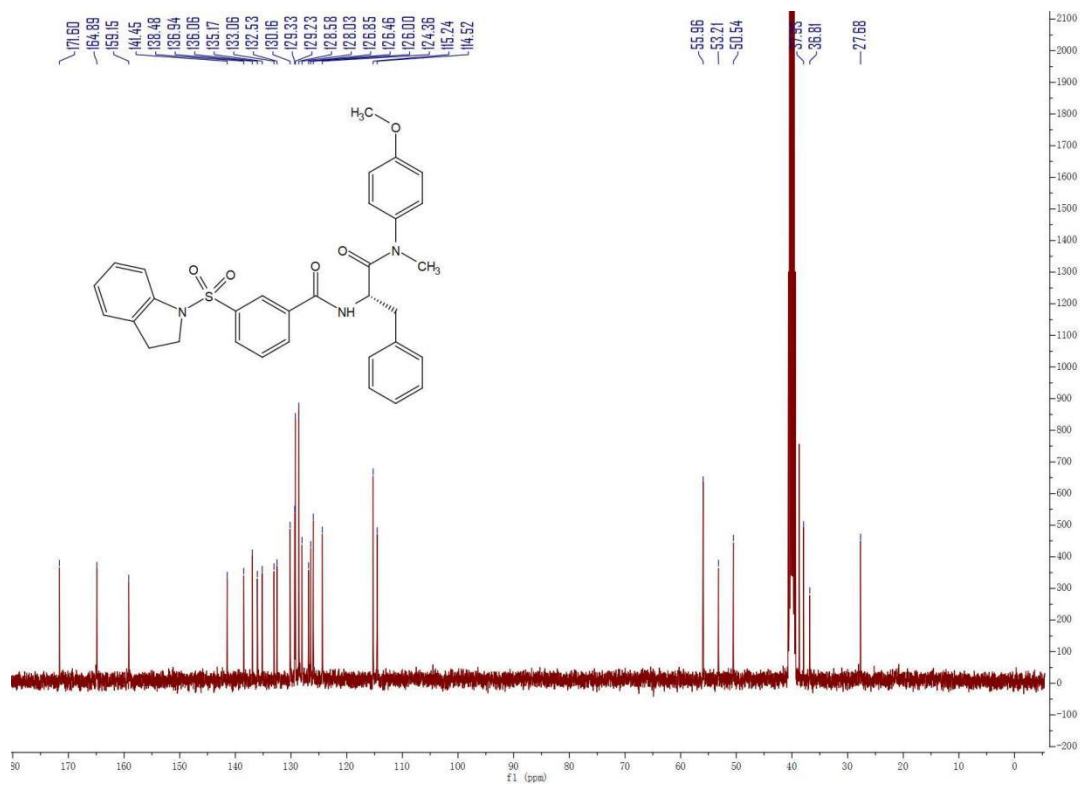


Fig. 77: ¹³C NMR spectrum of V-25d

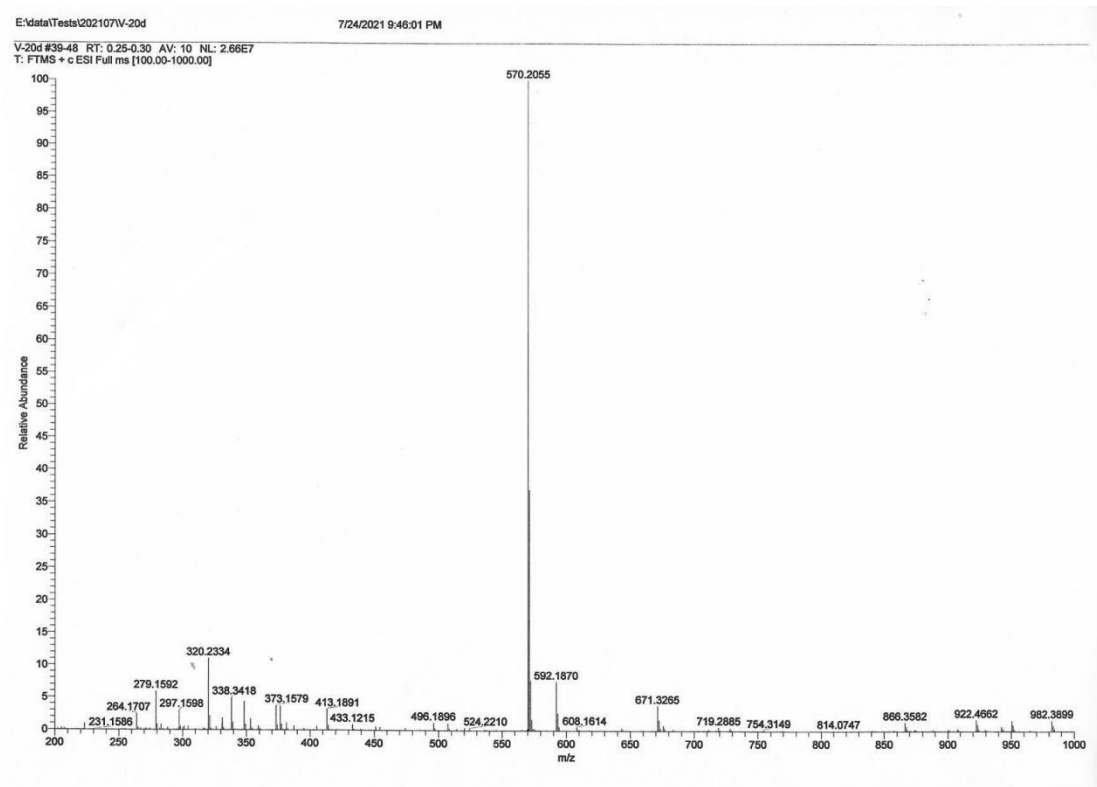


Fig. 78: HRMS spectrum of V-25d

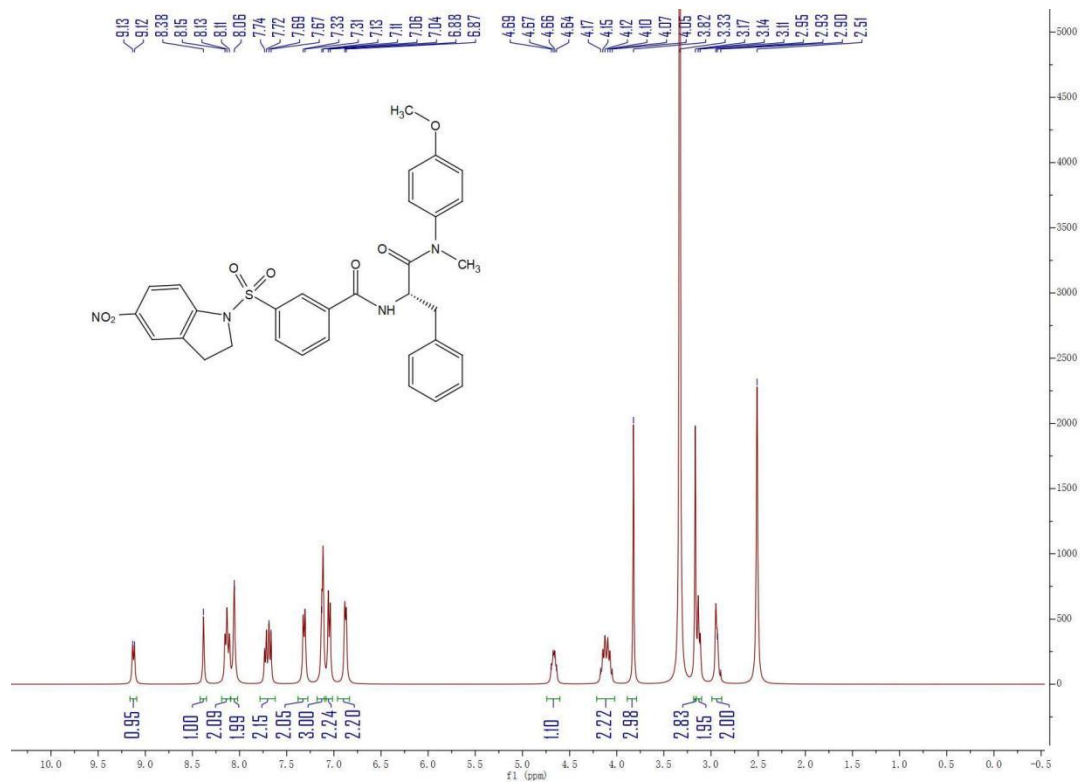


Fig. 79: ^1H NMR spectrum of V-25e

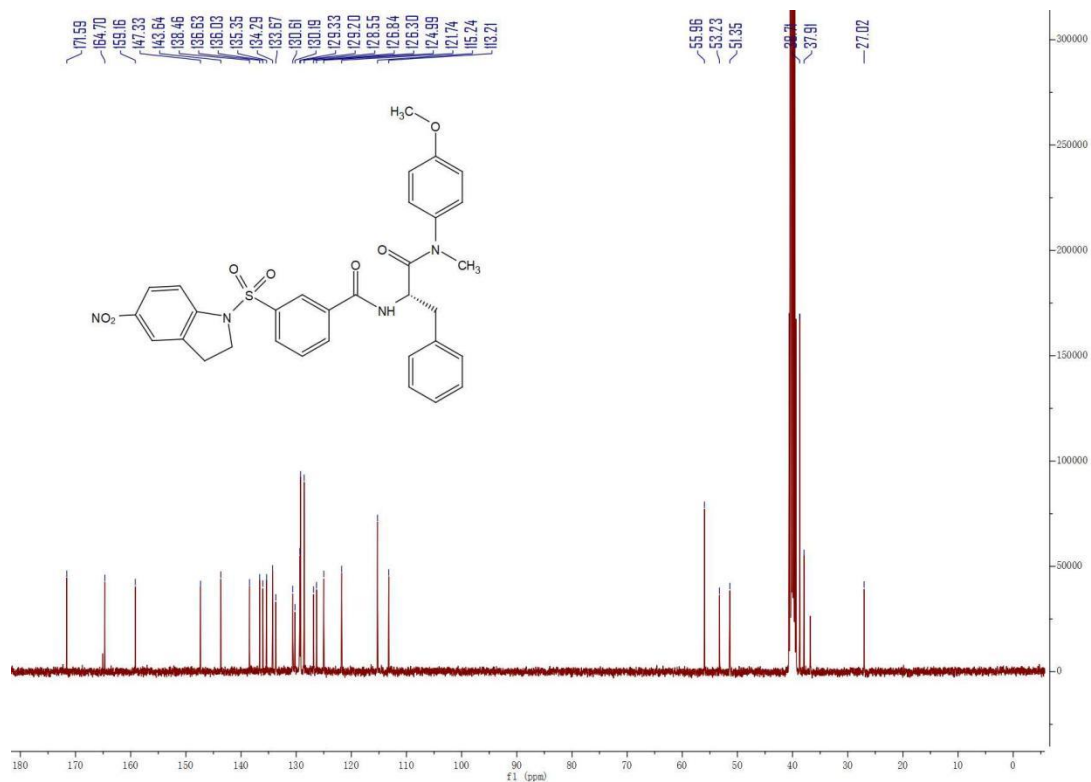


Fig. 80: ^{13}C NMR spectrum of V-25e

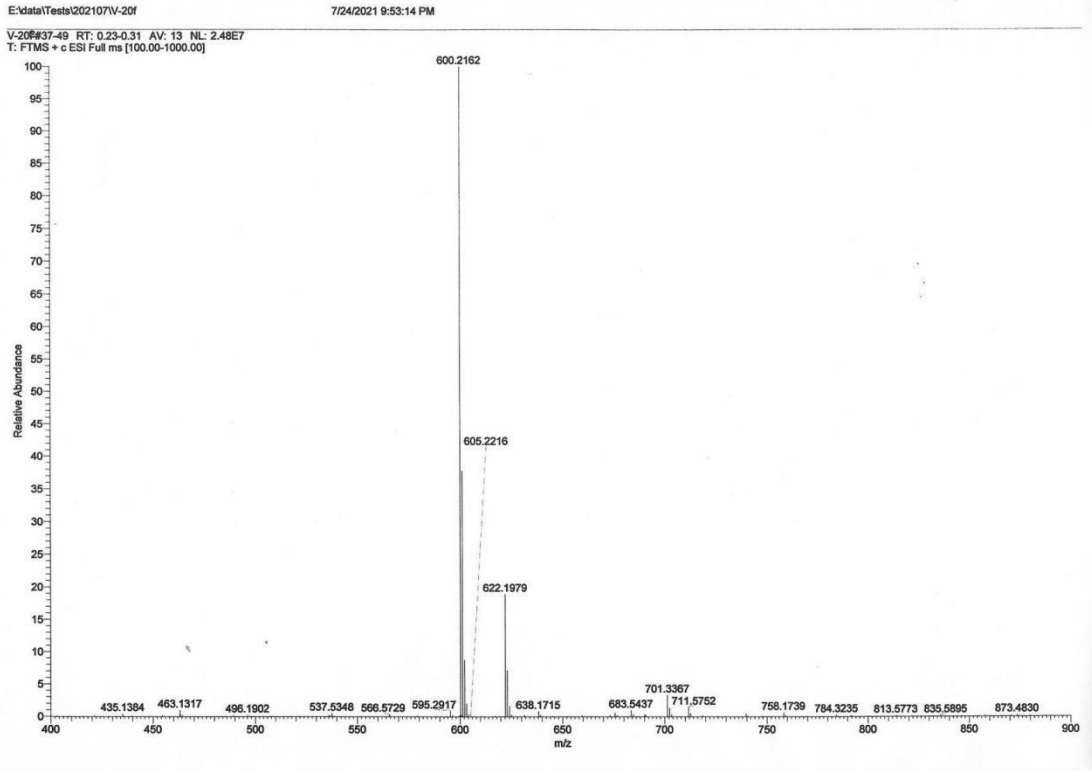


Fig. 81: HRMS spectrum of V-25e

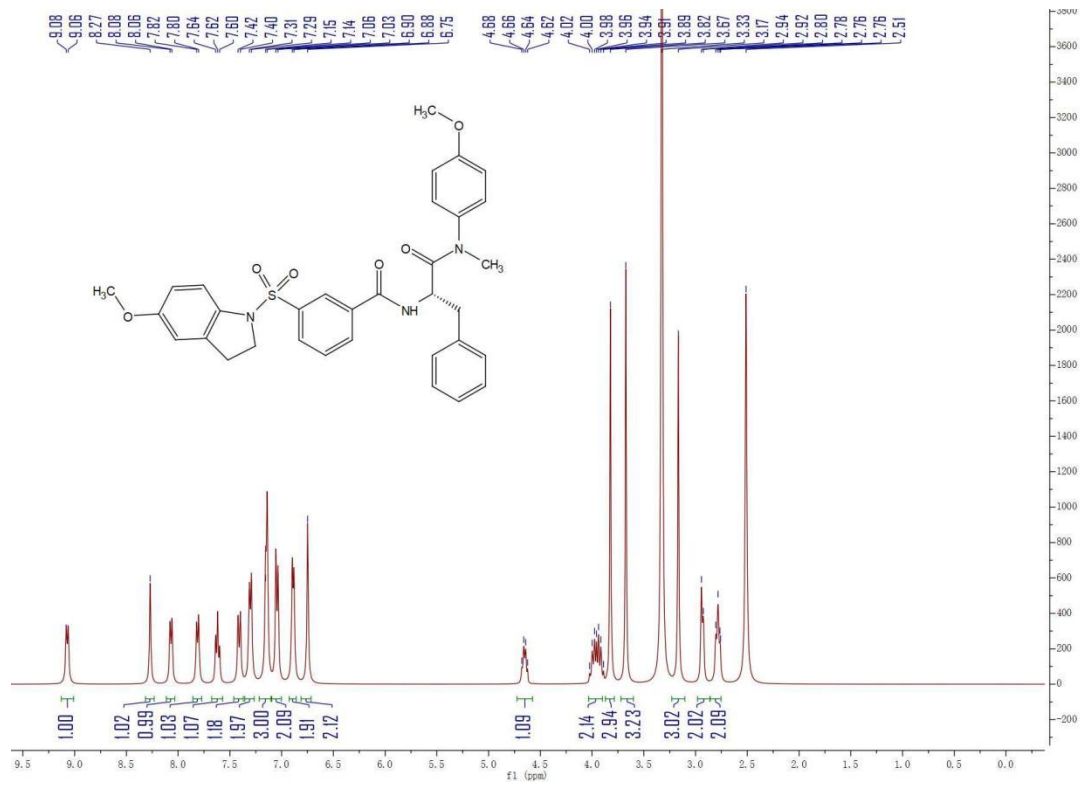


Fig. 82: ¹H NMR spectrum of V-25f

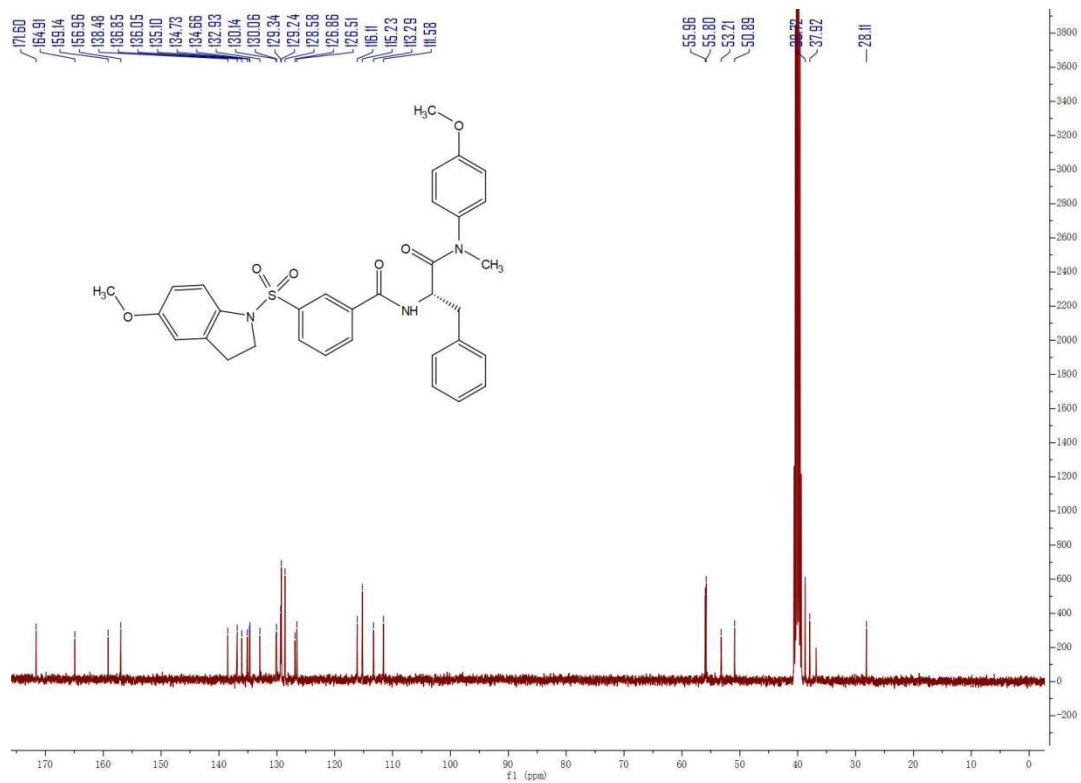


Fig. 83: ¹³C NMR spectrum of V-25f

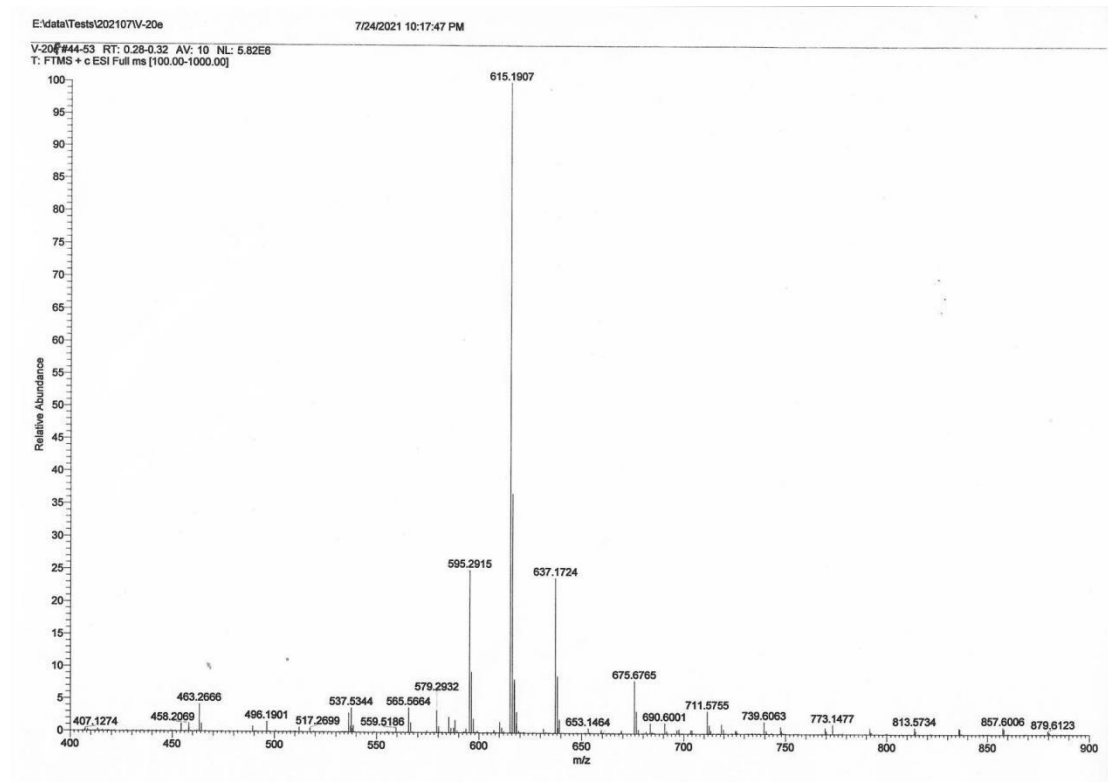


Fig. 84: HRMS spectrum of V-25f

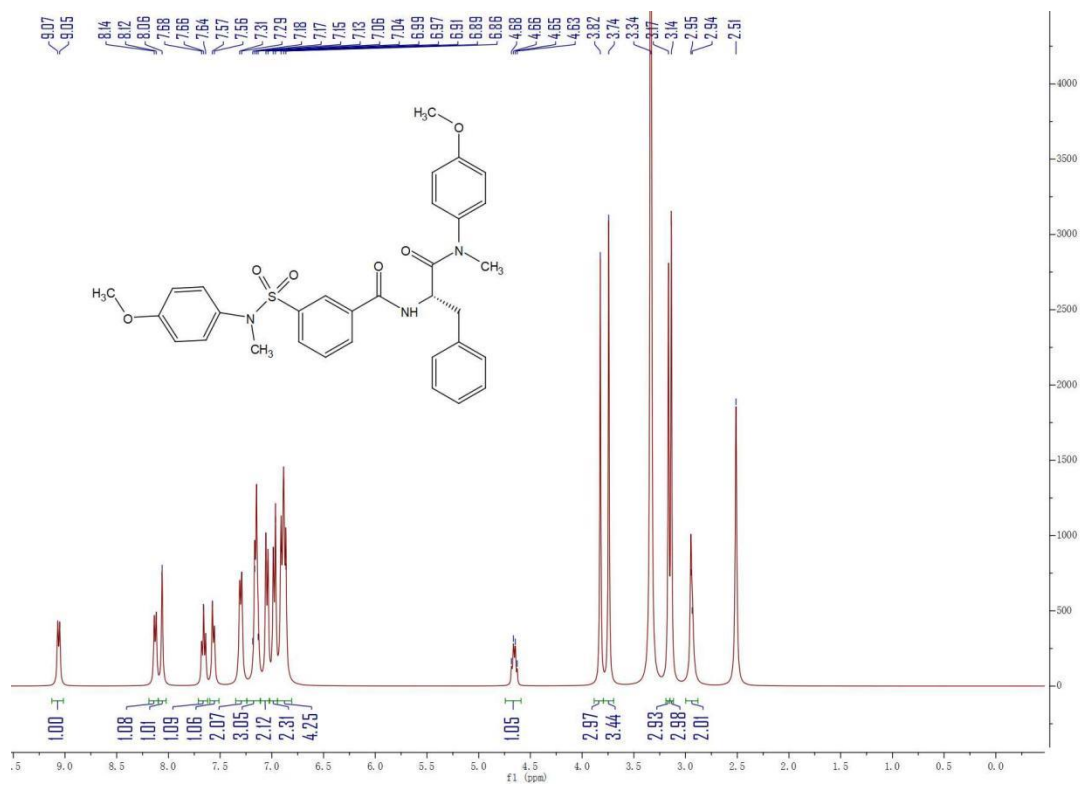


Fig. 85: ¹H NMR spectrum of V-25g

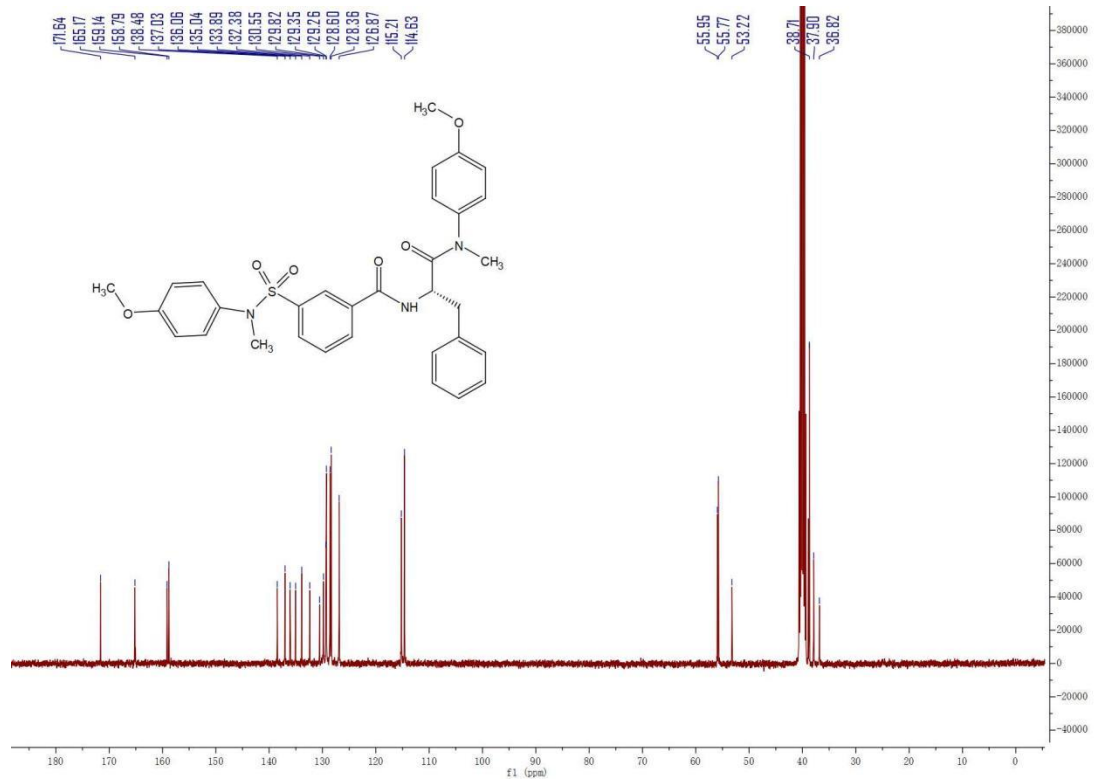


Fig. 86: ¹³C NMR spectrum of V-25g

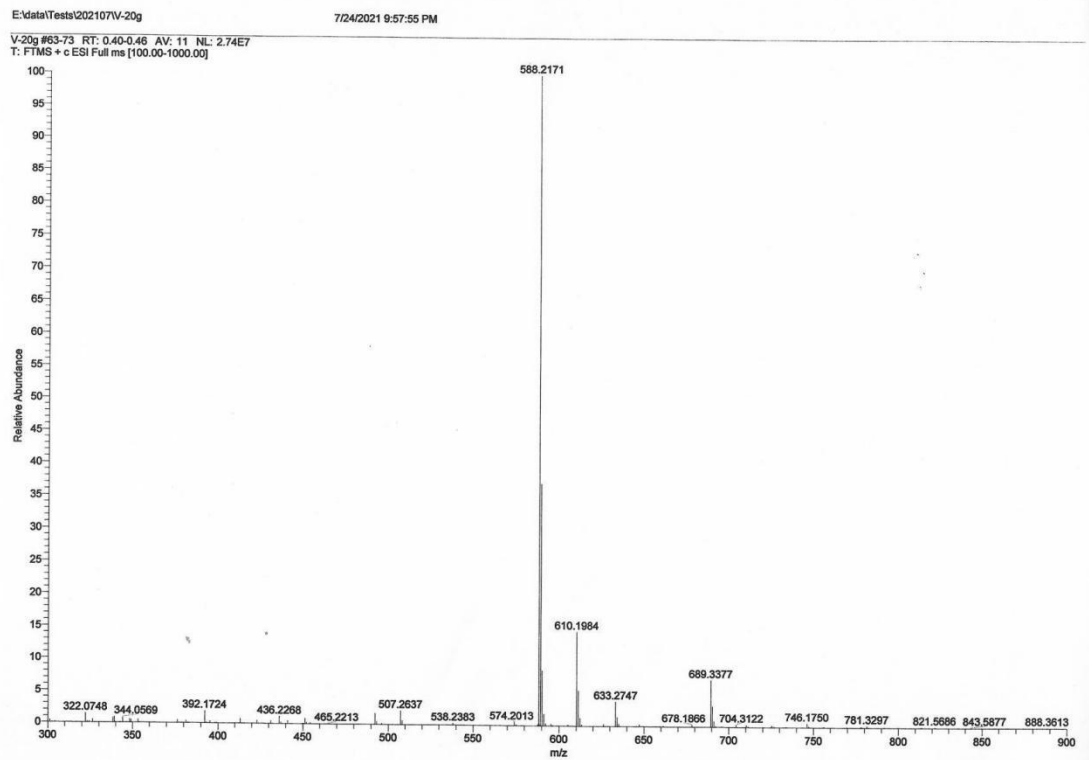


Fig. 87: HRMS spectrum of V-25g

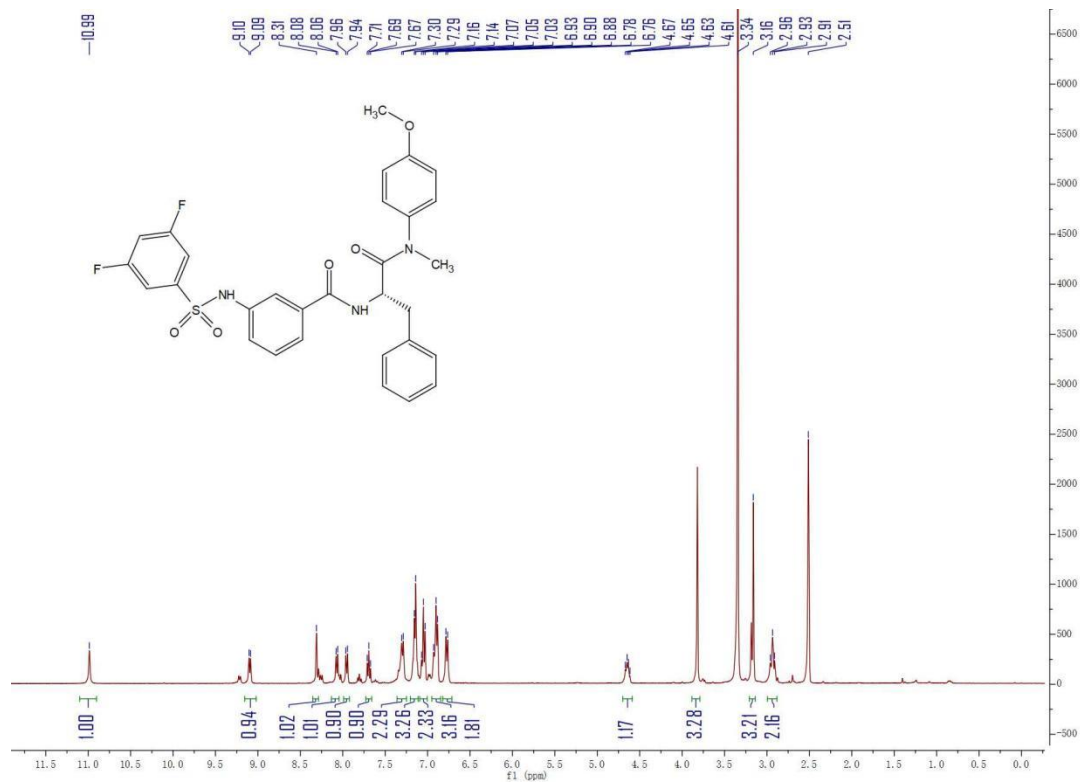


Fig. 88: ¹H NMR spectrum of V-25h

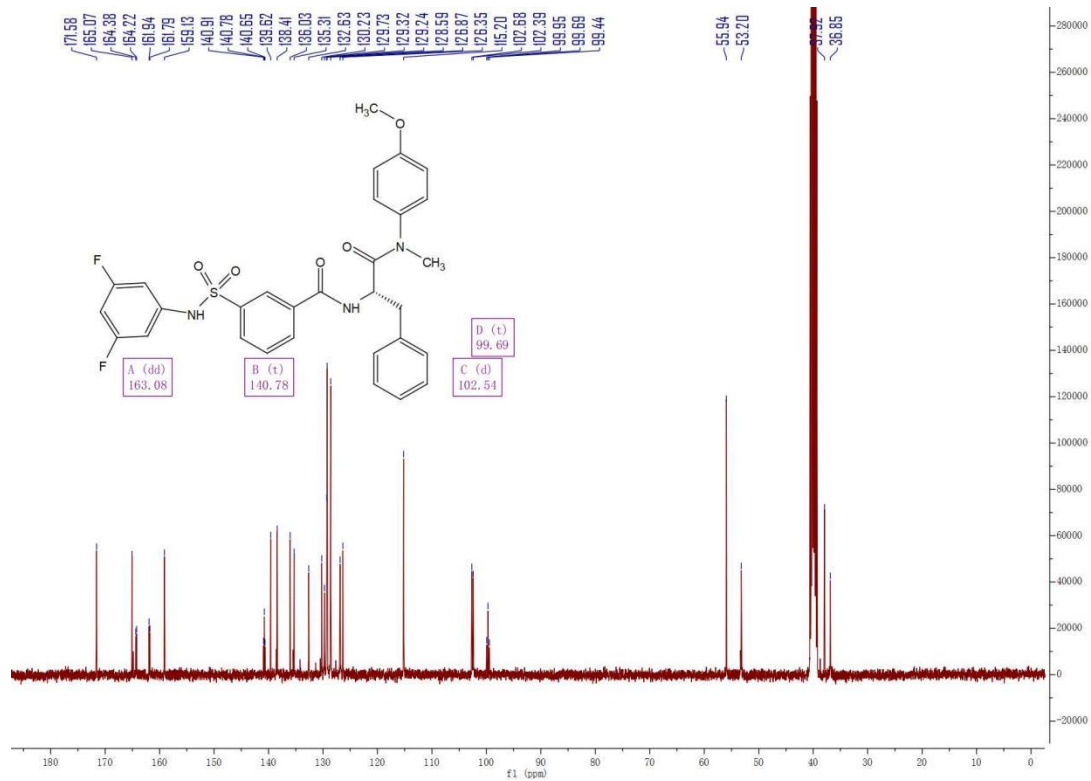


Fig. 89: ^{13}C NMR spectrum of V-25h

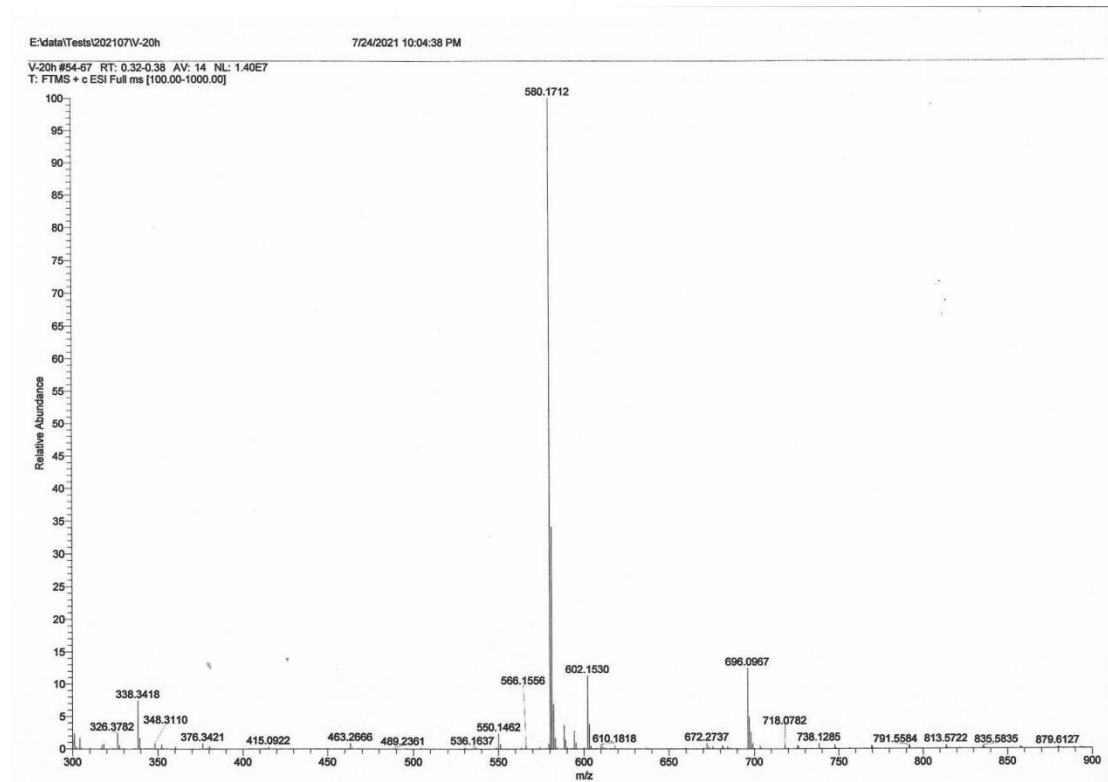


Fig. 90: HRMS spectrum of V-25h

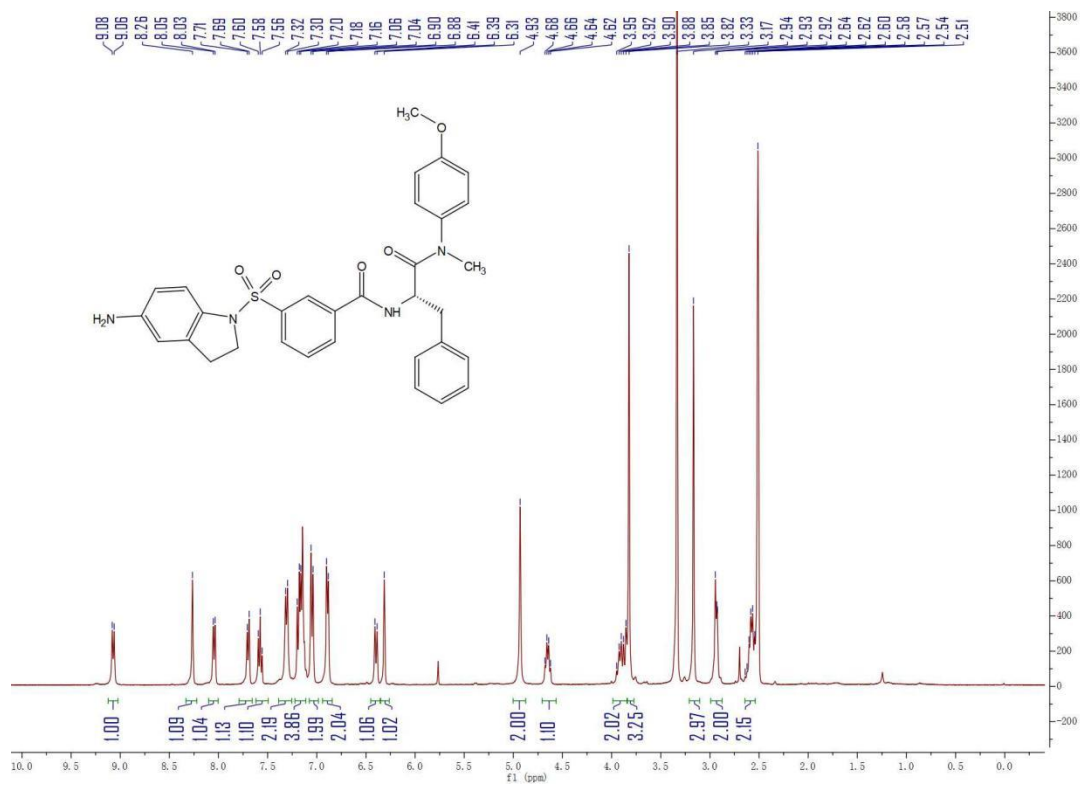


Fig. 90: ^1H NMR spectrum of V-25i

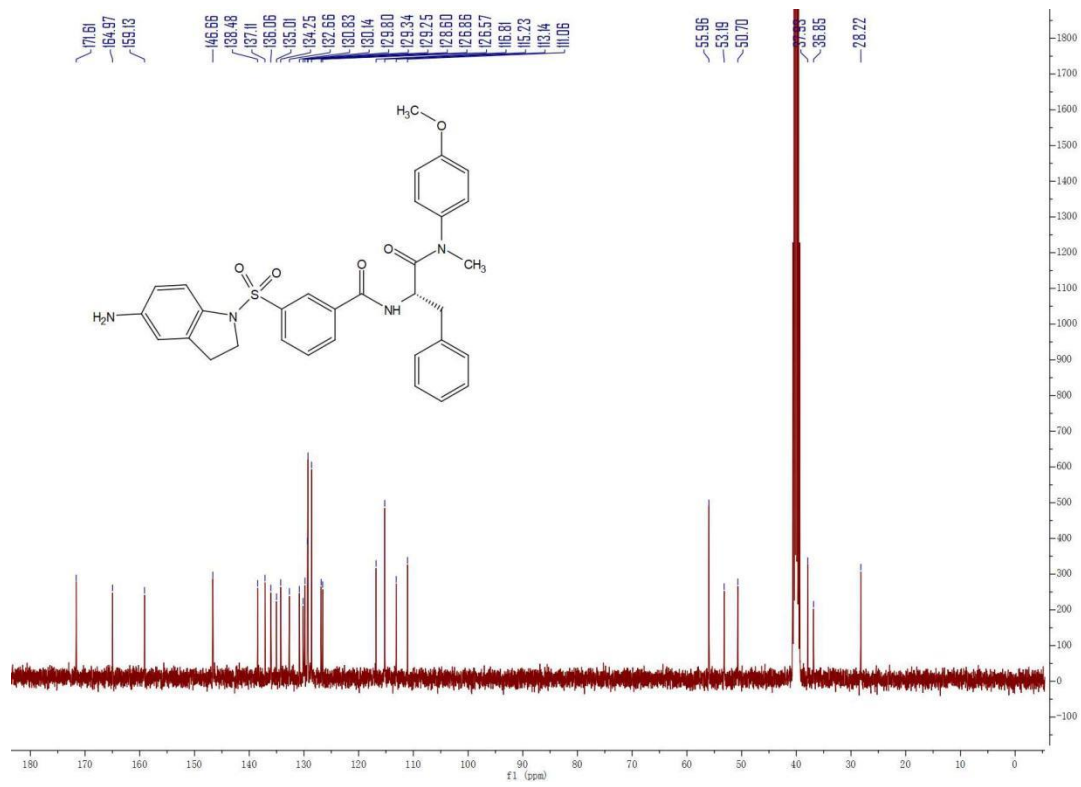


Fig. 91: ^{13}C NMR spectrum of V-25i

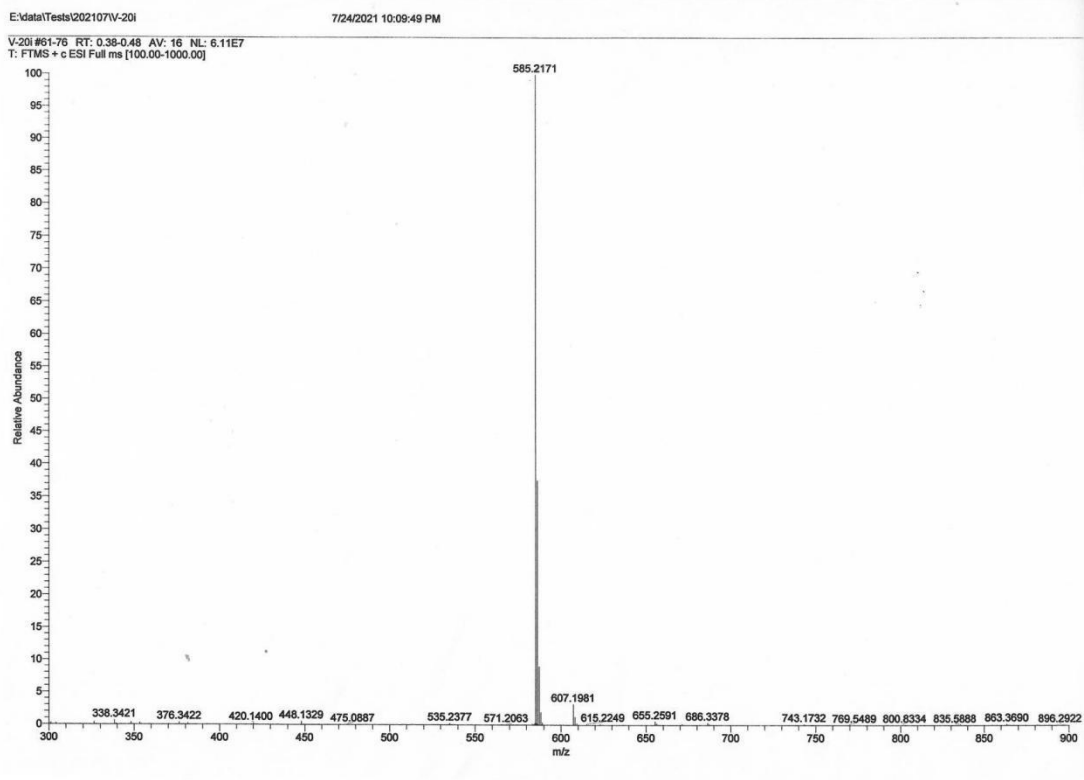


Fig. 92: HRMS spectrum of V-25i

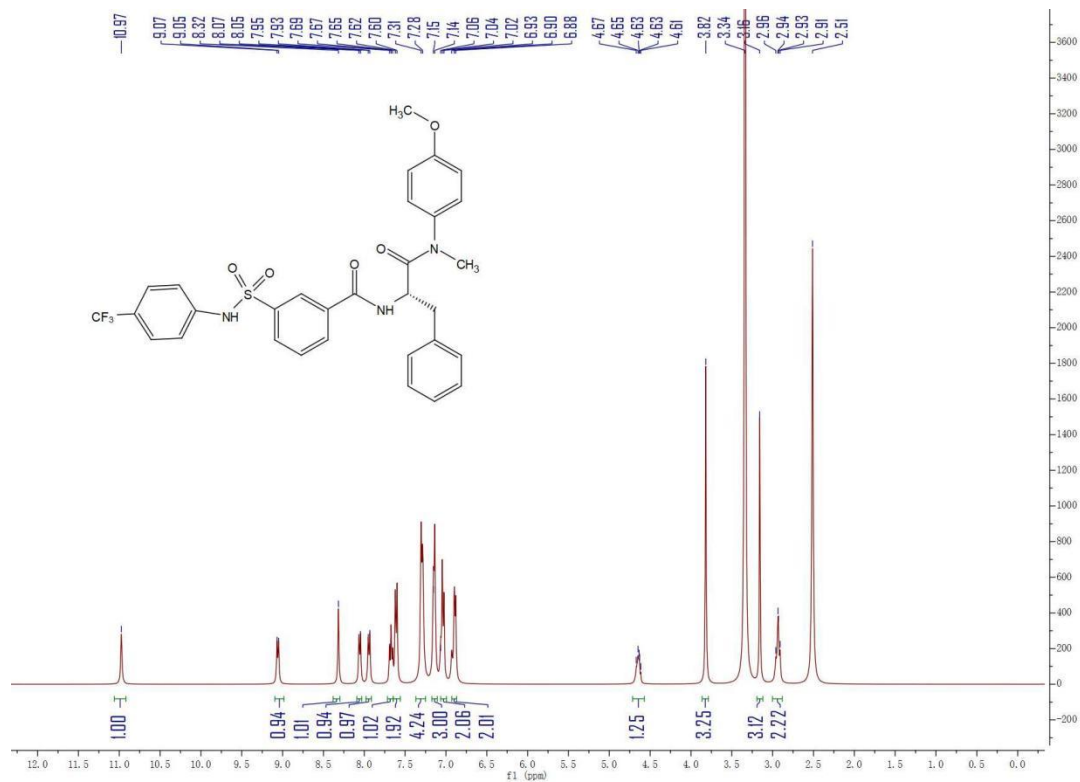


Fig. 93: ¹H NMR spectrum of V-20j

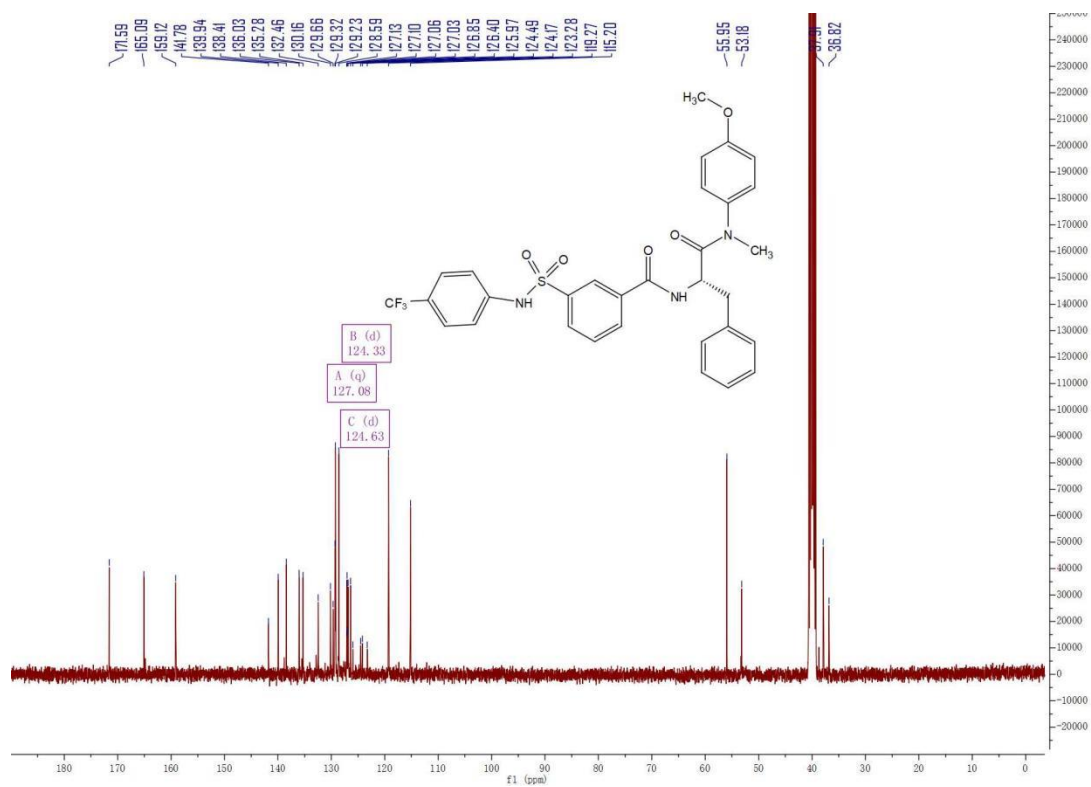


Fig. 94: ^{13}C NMR spectrum of V-20j

