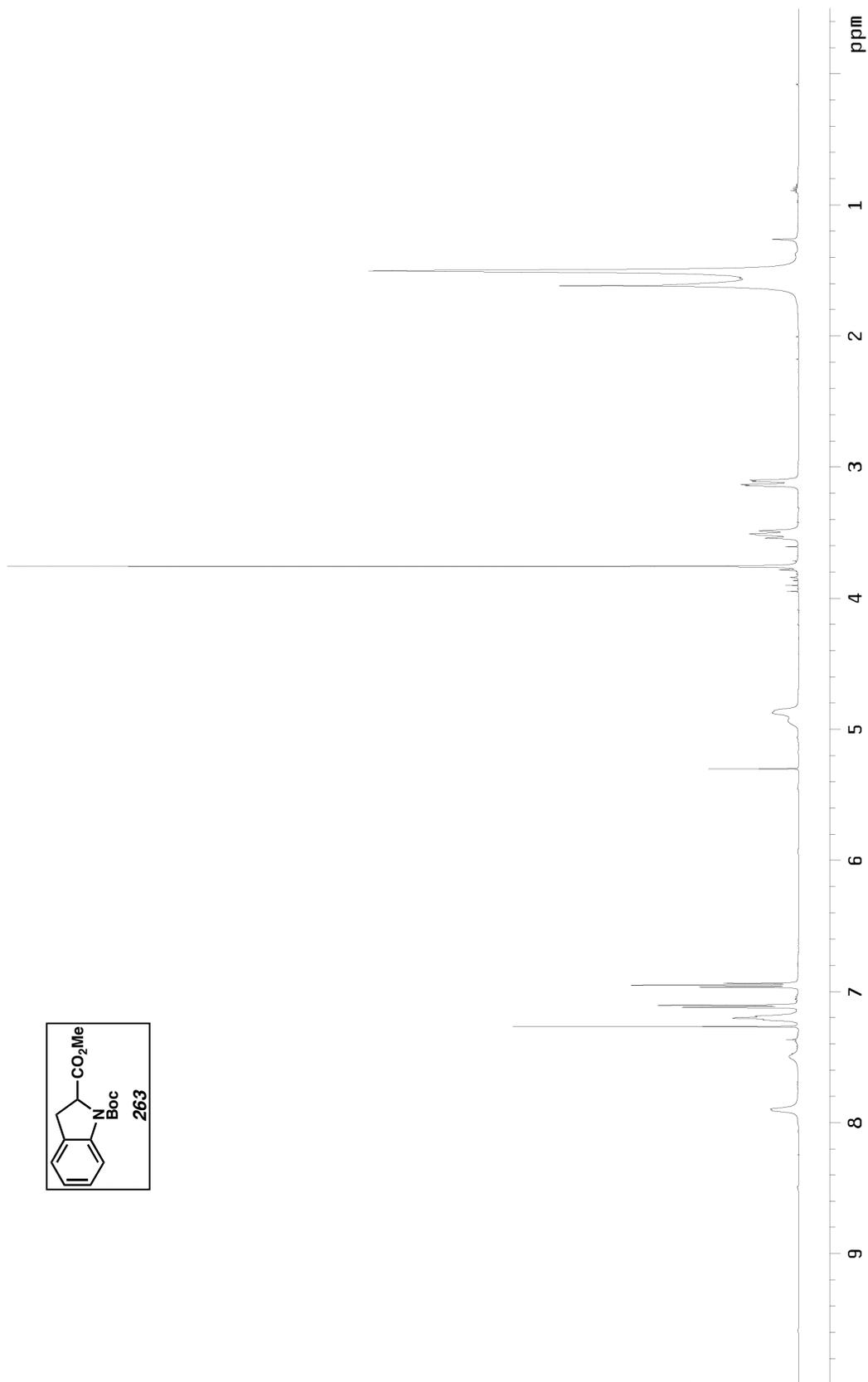


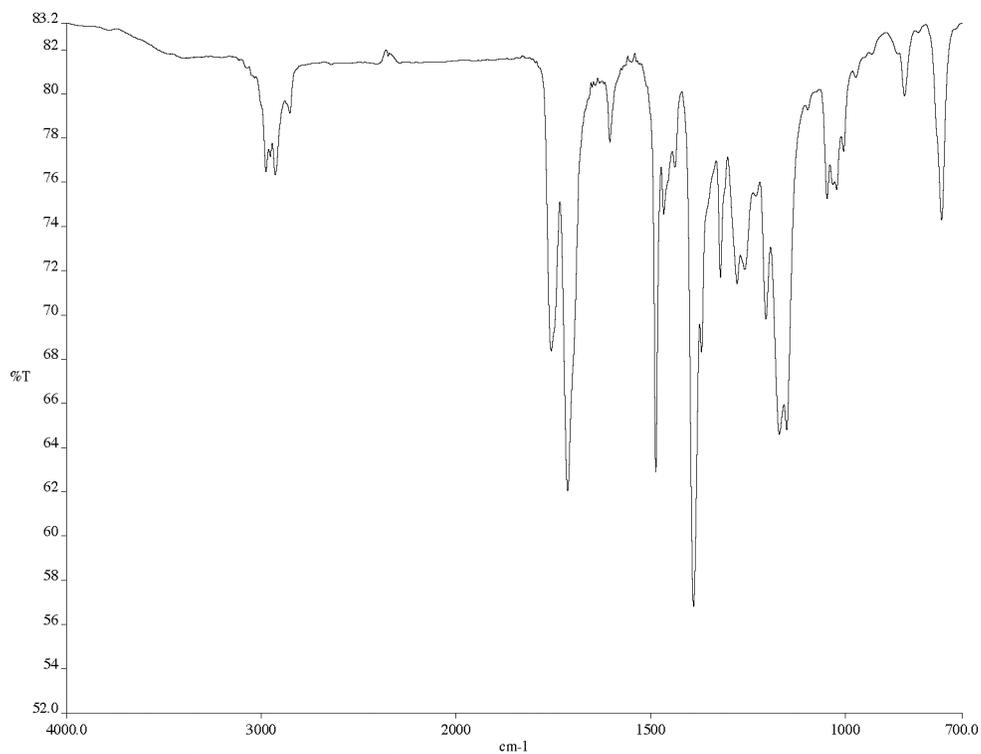
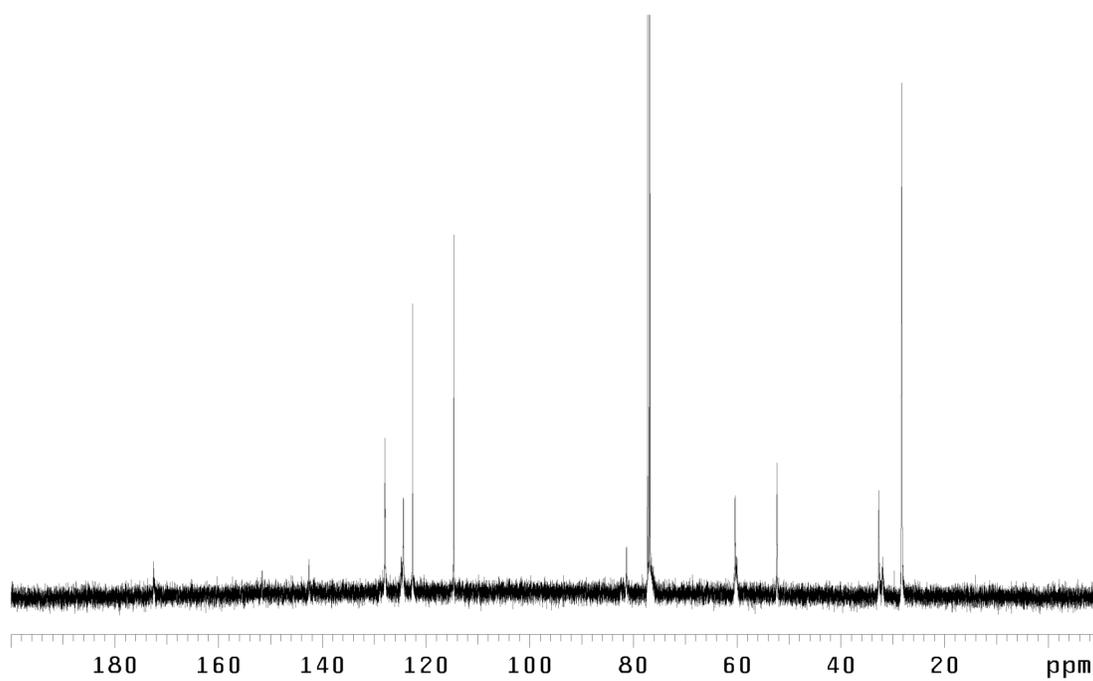
APPENDIX 1

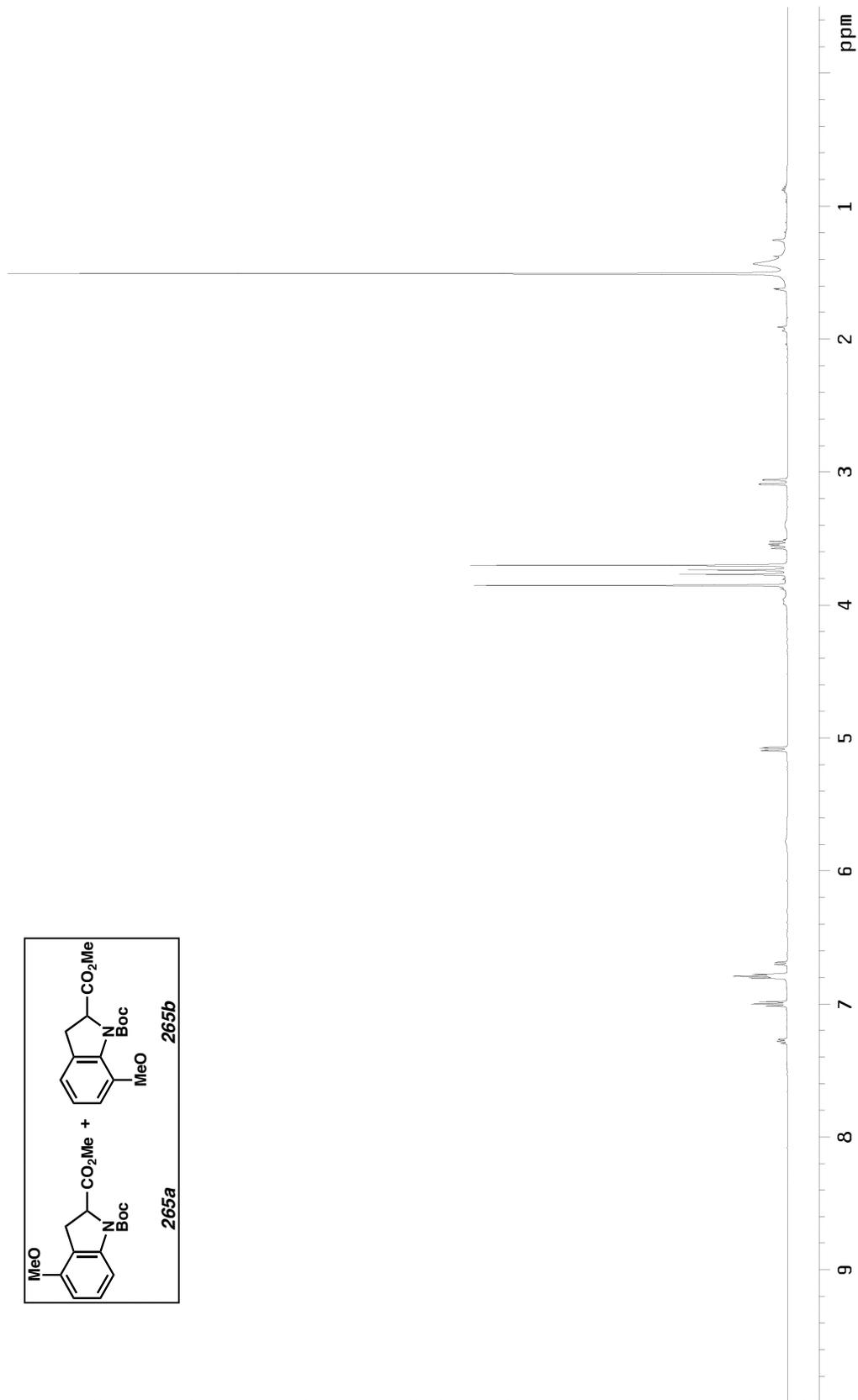
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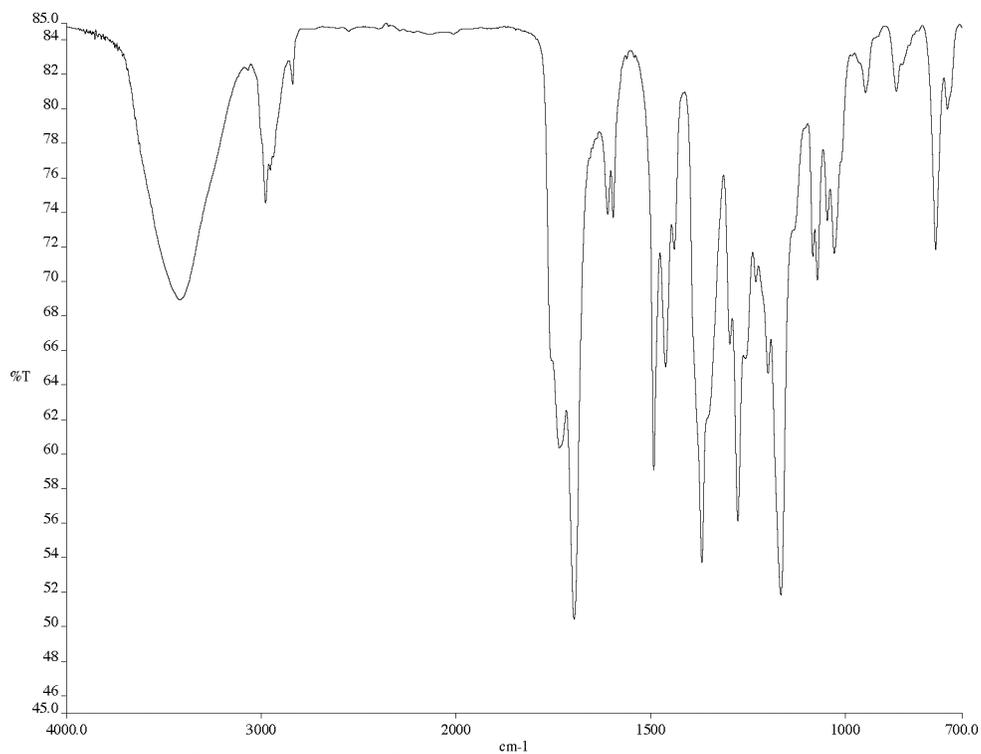
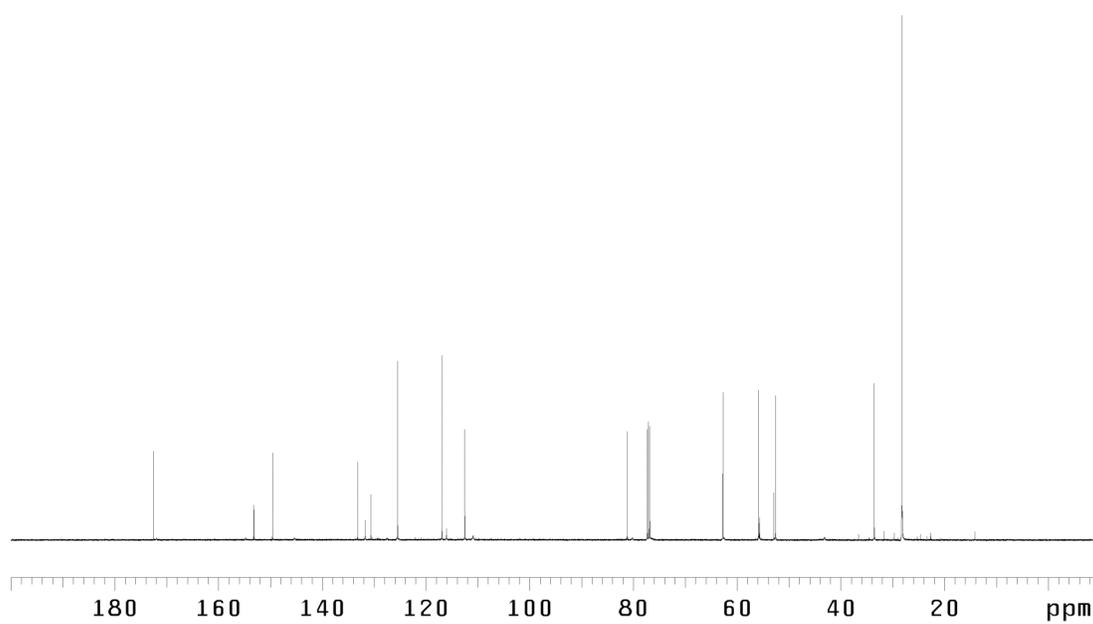
Orthogonal Synthesis of Indolines and Isoquinolines

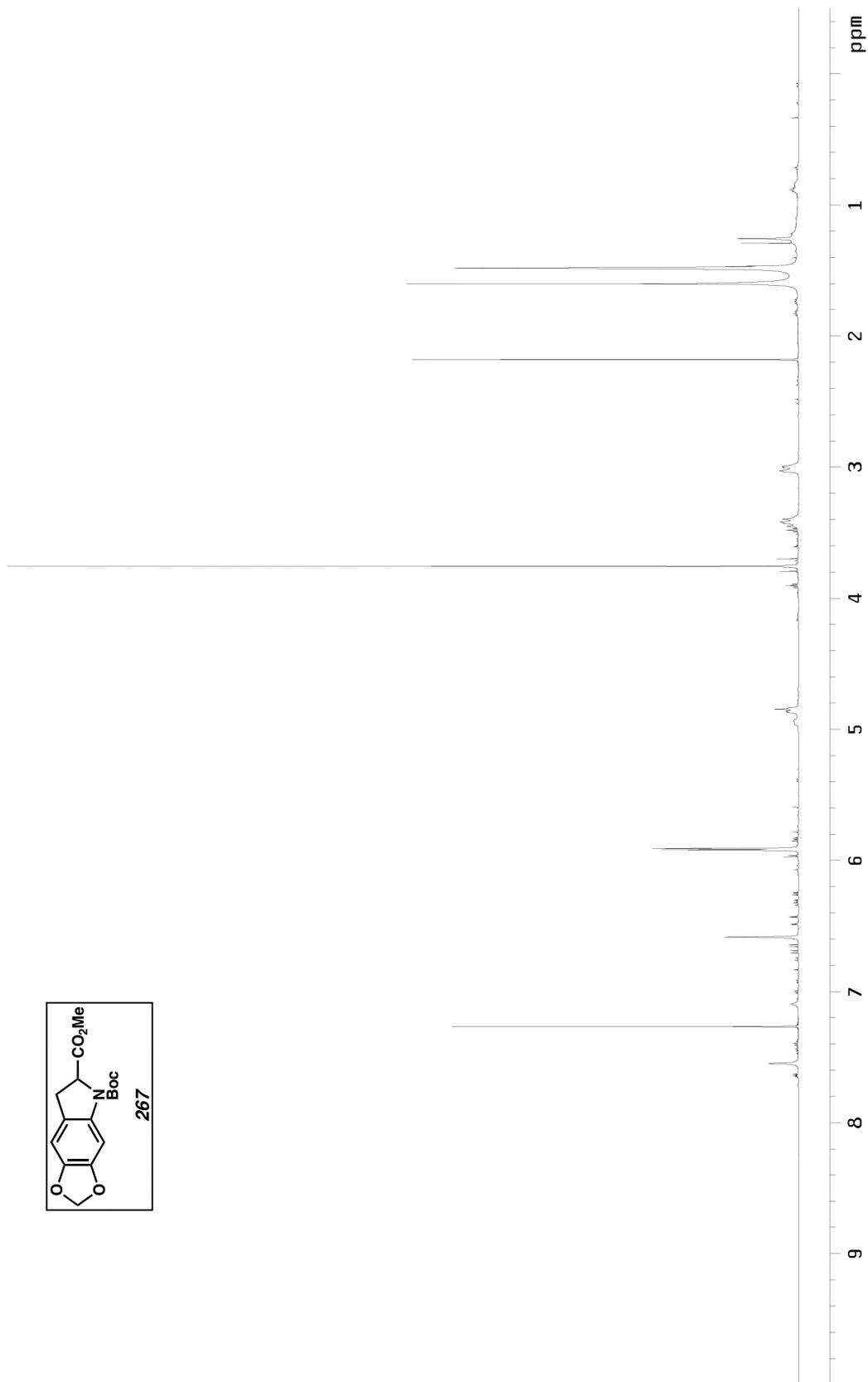
via Aryne Annulation

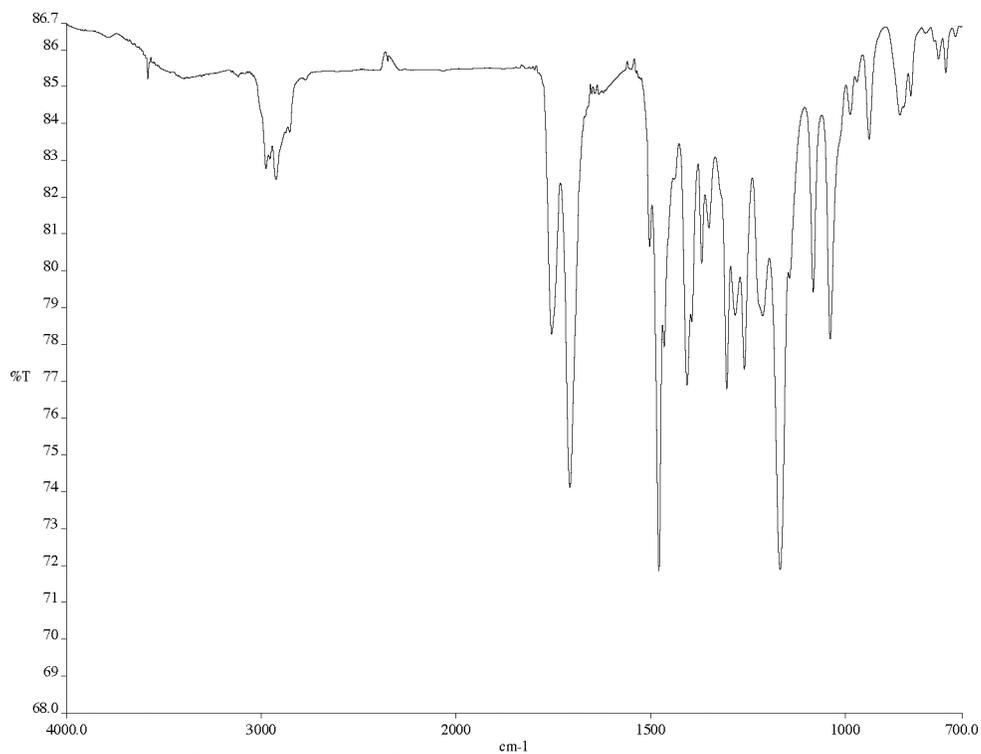
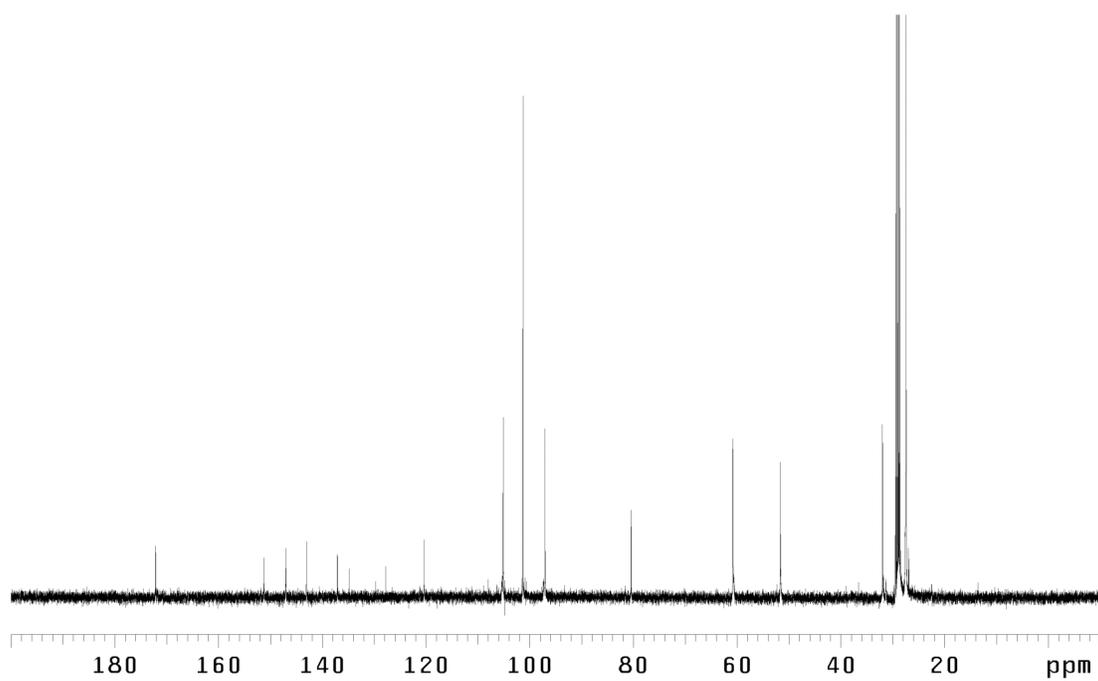
Figure A1.1.1 ^1H NMR (500 MHz, CDCl_3) of compound 263

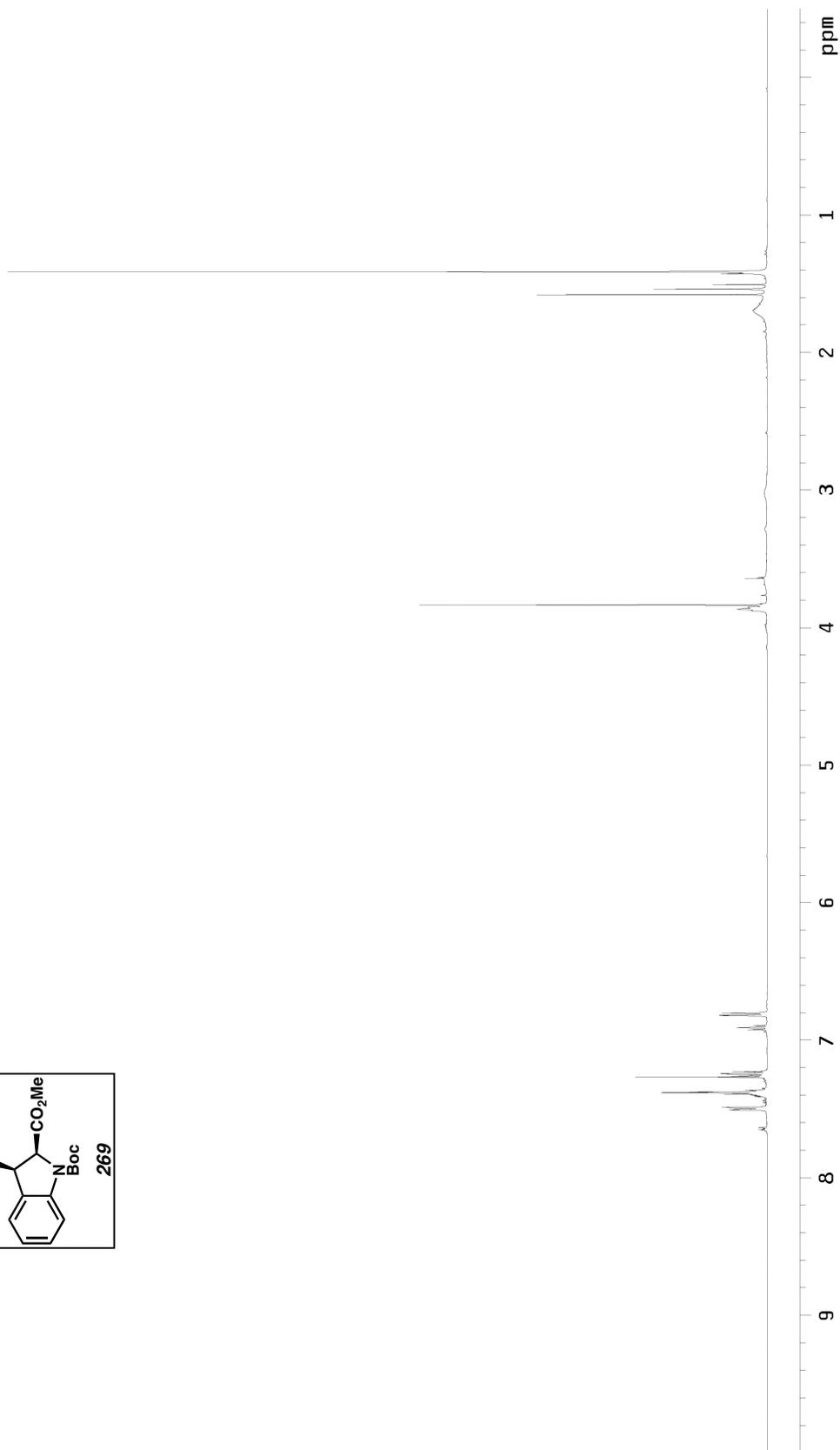
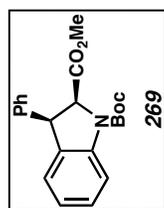
Figure A1.1.2 Infrared spectrum (thin film/NaCl) of compound **263**Figure A1.1.3 ¹³C NMR (125 MHz, CDCl₃) of compound **263**

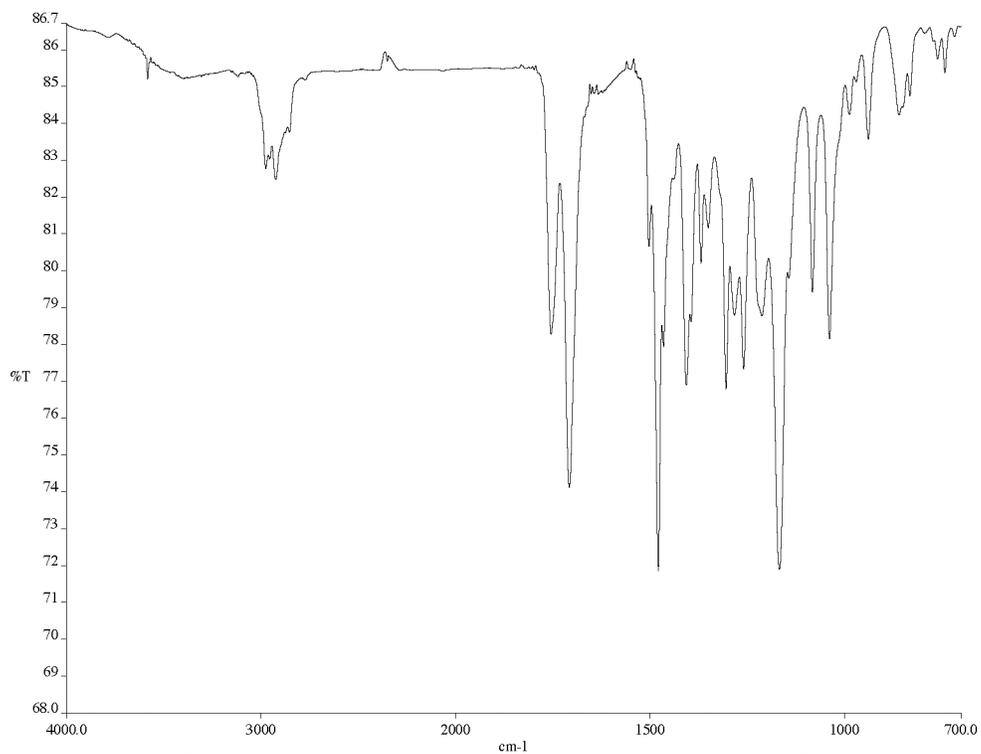
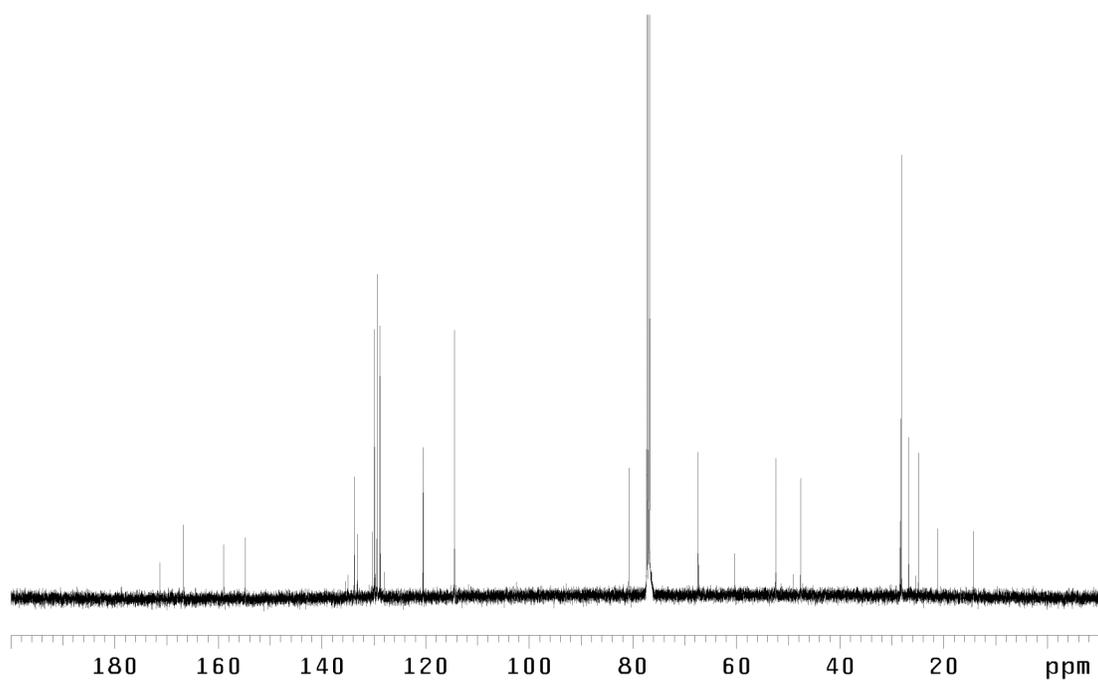
Figure A1.2.1 ^1H NMR (500 MHz, CDCl_3) of compound 265a and 265b

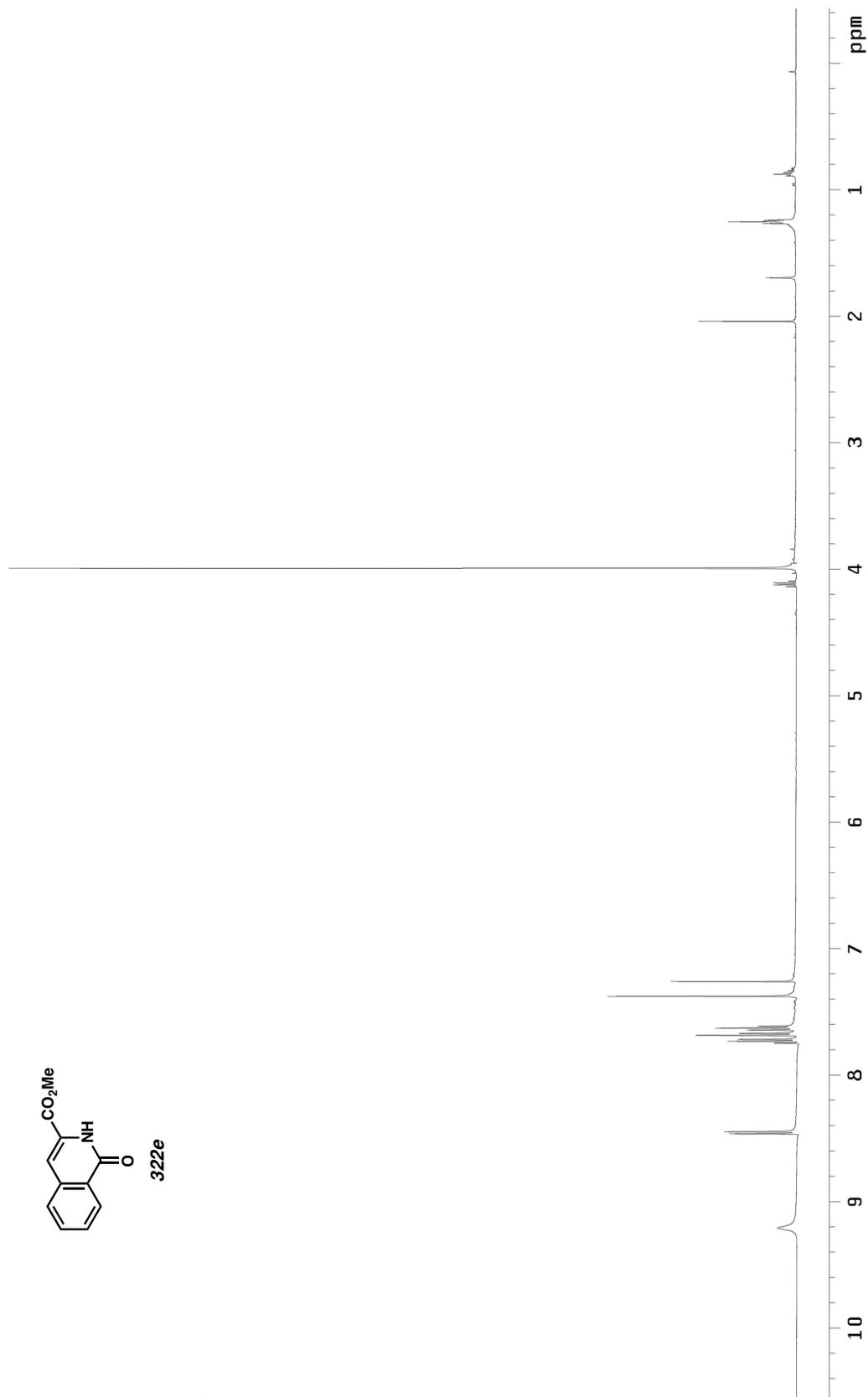
Figure A1.2.2 Infrared spectrum (thin film/NaCl) of compound **265a** and **265b**Figure A1.2.3 ¹³C NMR (125 MHz, CDCl₃) of compound **265a** and **265b**

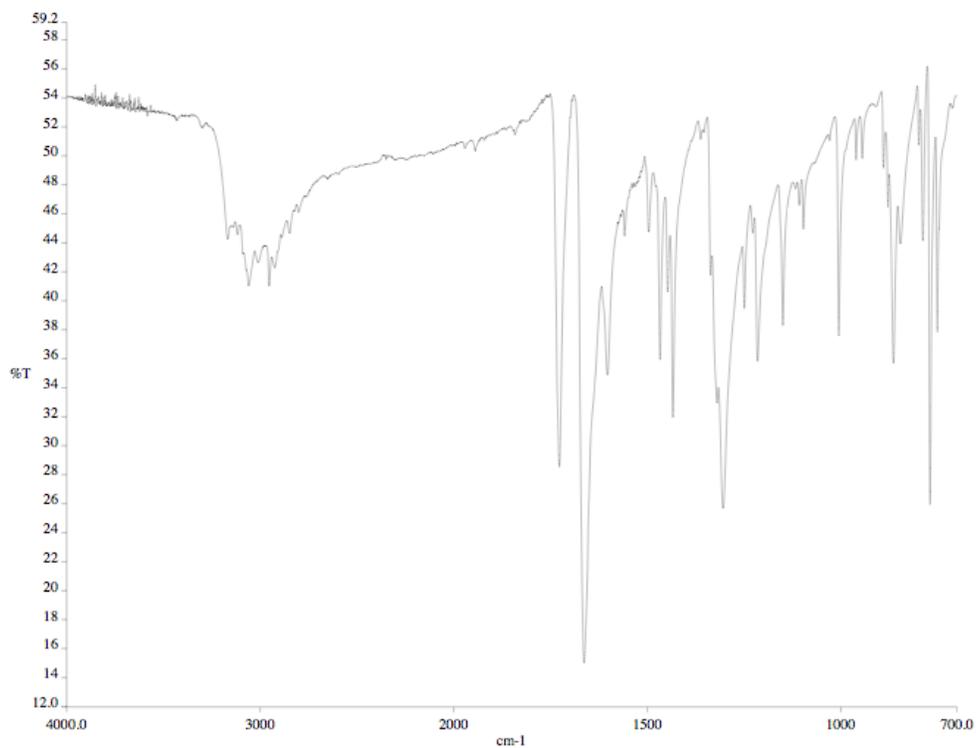
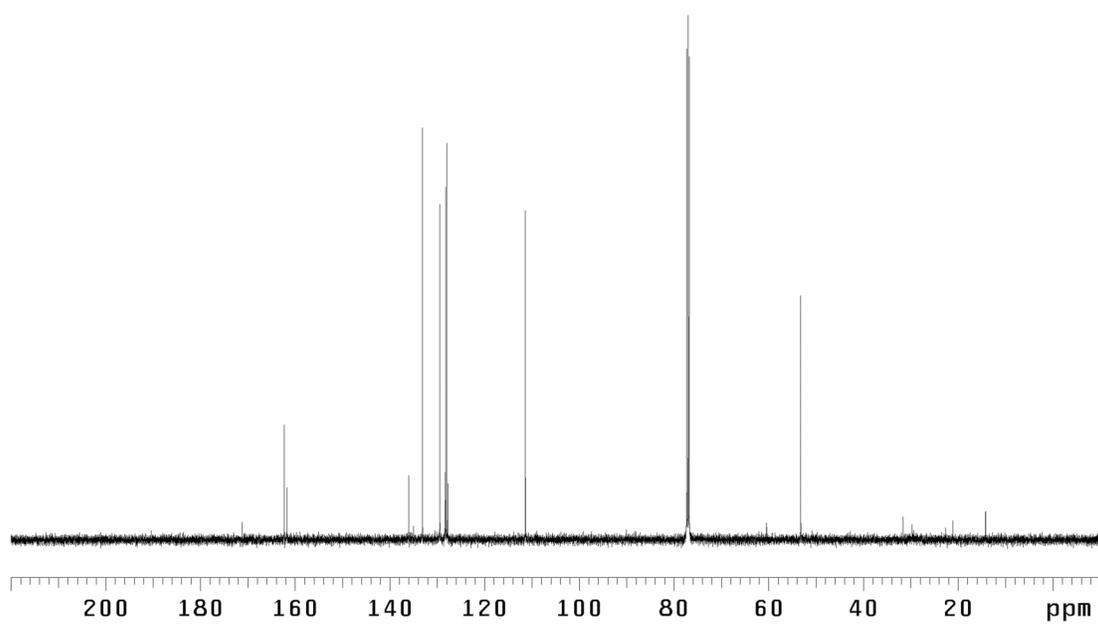
Figure A1.3.1 ¹H NMR (500 MHz, CDCl₃) of compound 267

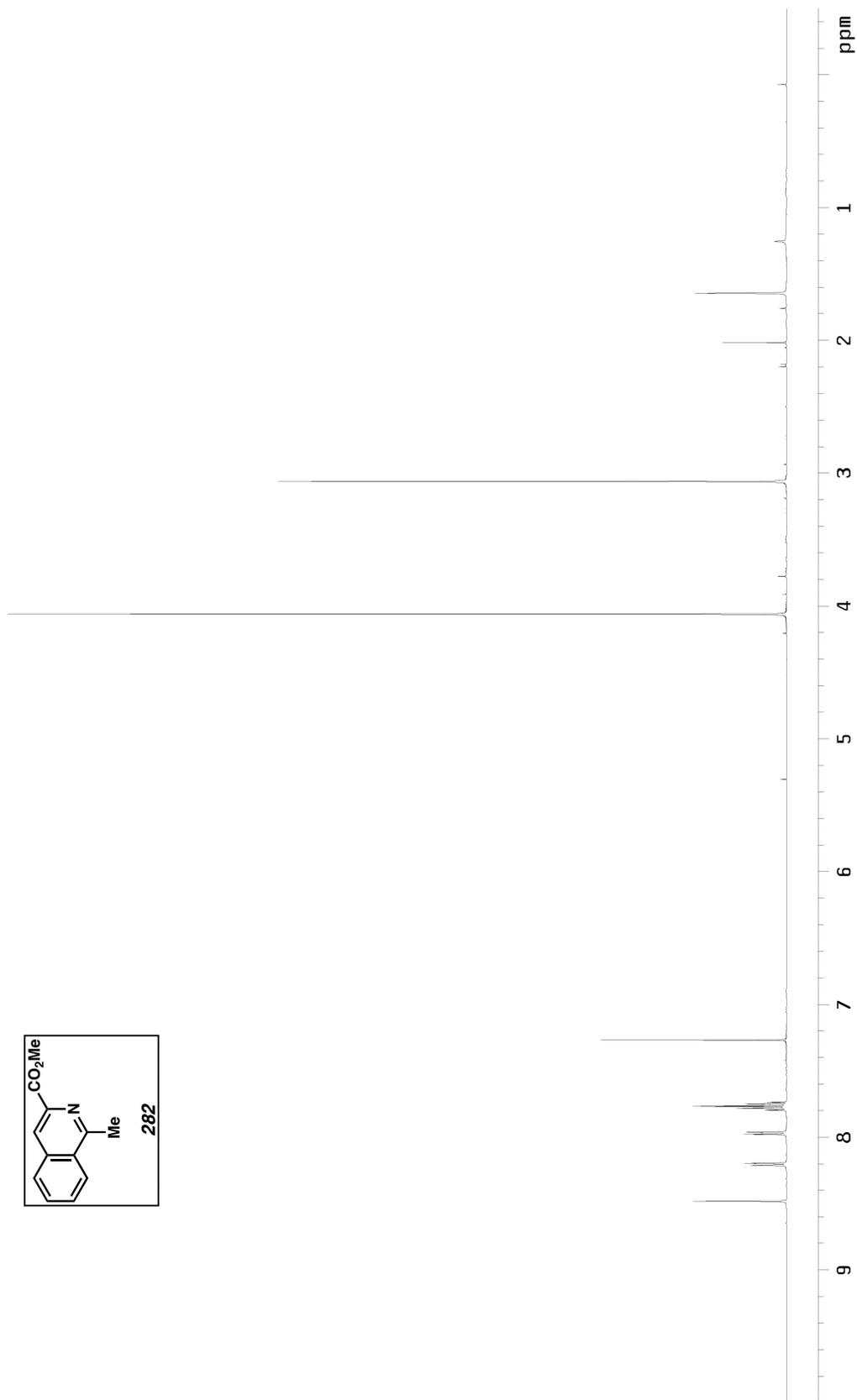
Figure A1.3.2 Infrared spectrum (thin film/NaCl) of compound **267**Figure A1.3.3 ¹³C NMR (125 MHz, CDCl₃) of compound **267**

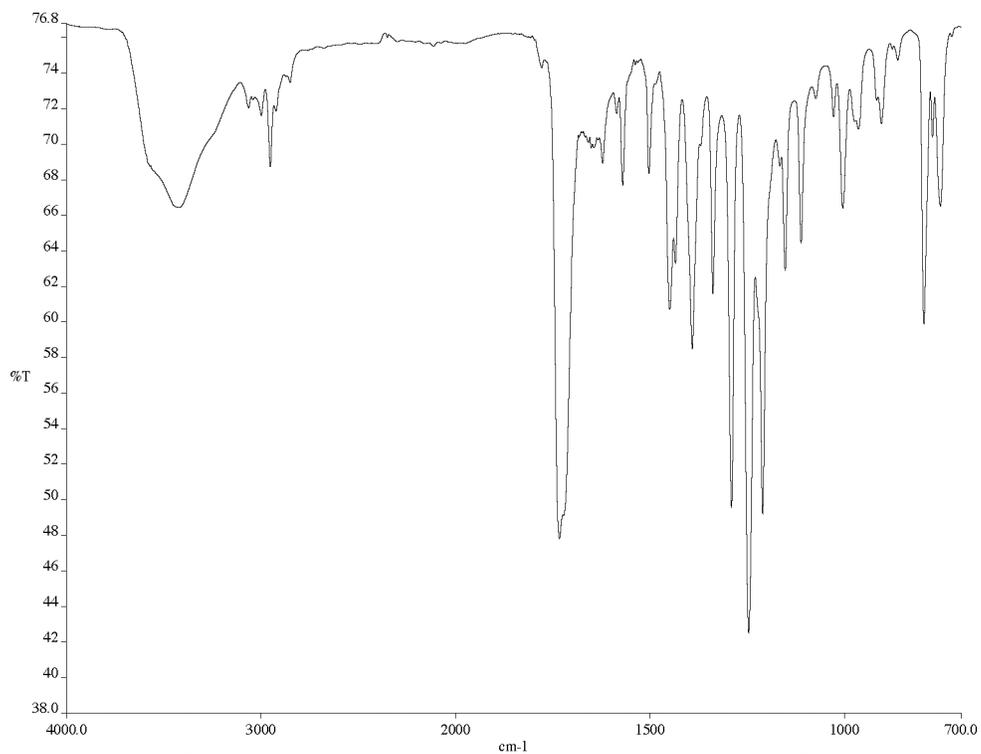
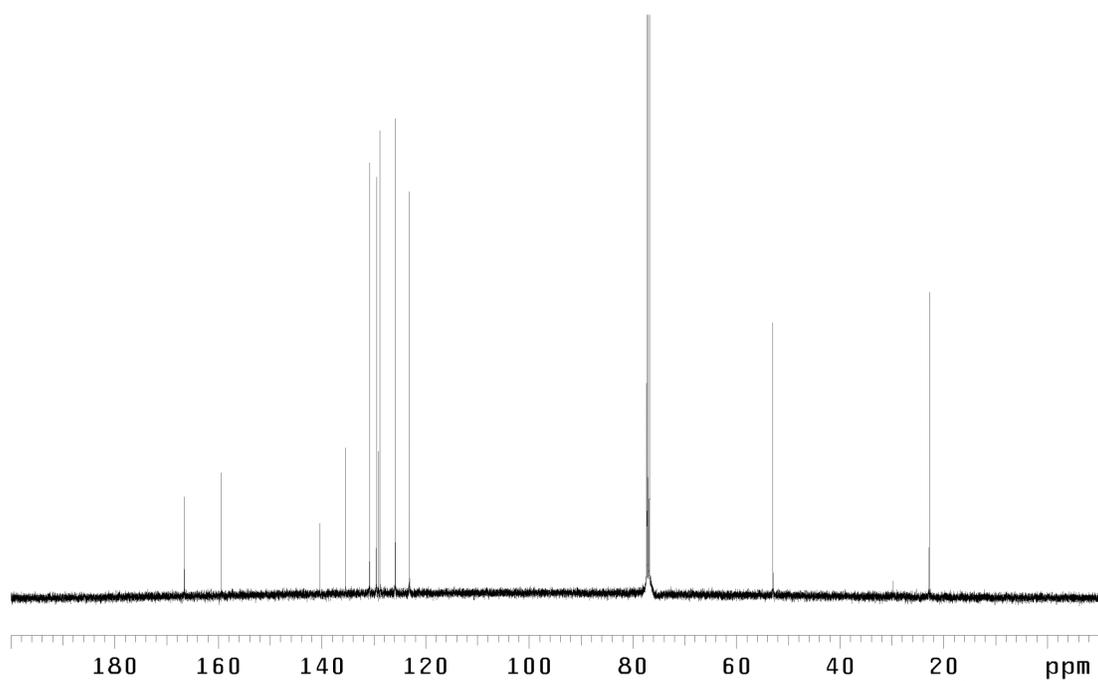
Figure A1.4.1 ¹H NMR (500 MHz, CDCl₃) of compound 269

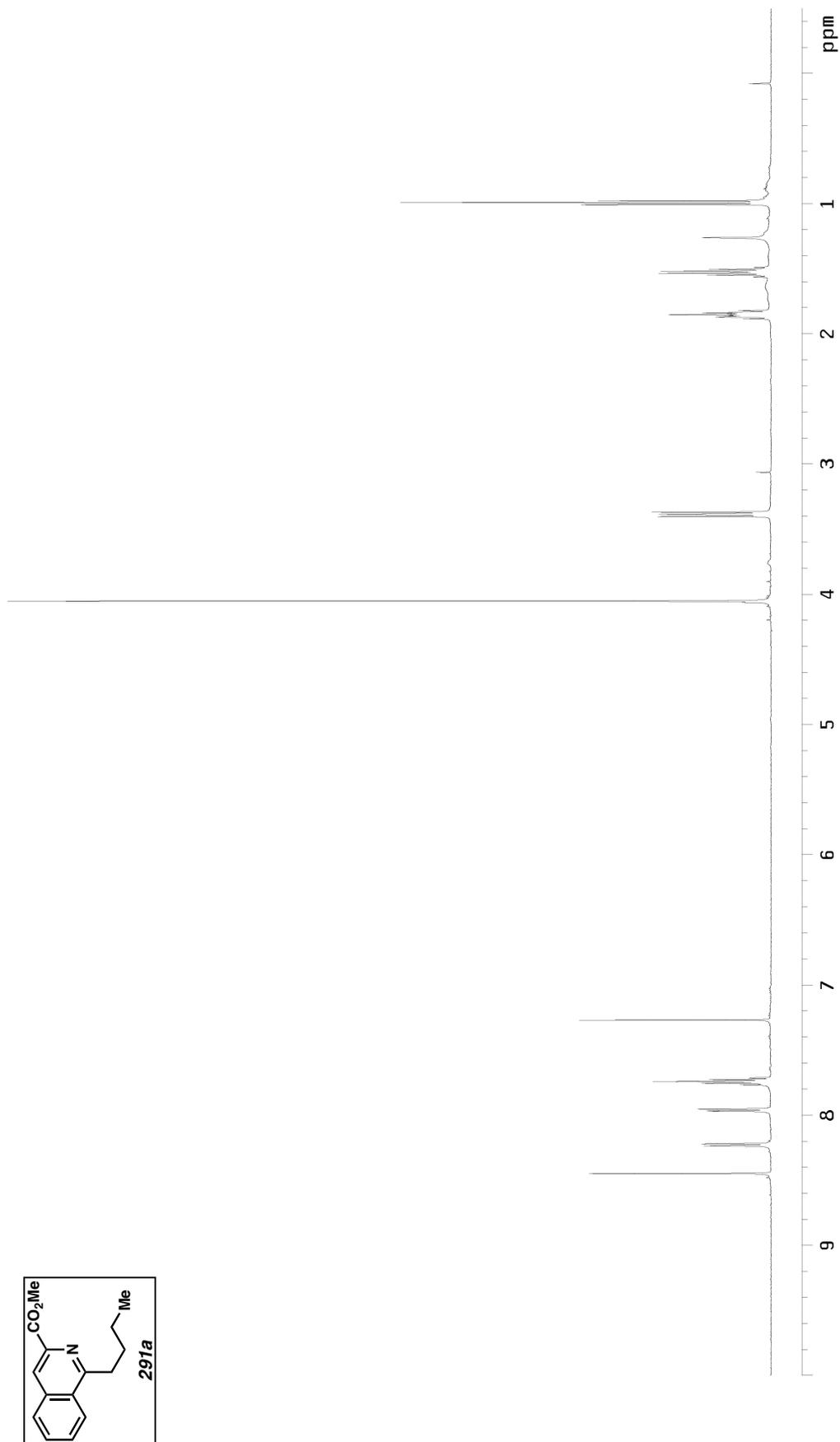
Figure A1.4.2 Infrared spectrum (thin film/NaCl) of compound **269**Figure A1.4.3 ¹³C NMR (125 MHz, CDCl₃) of compound **269**

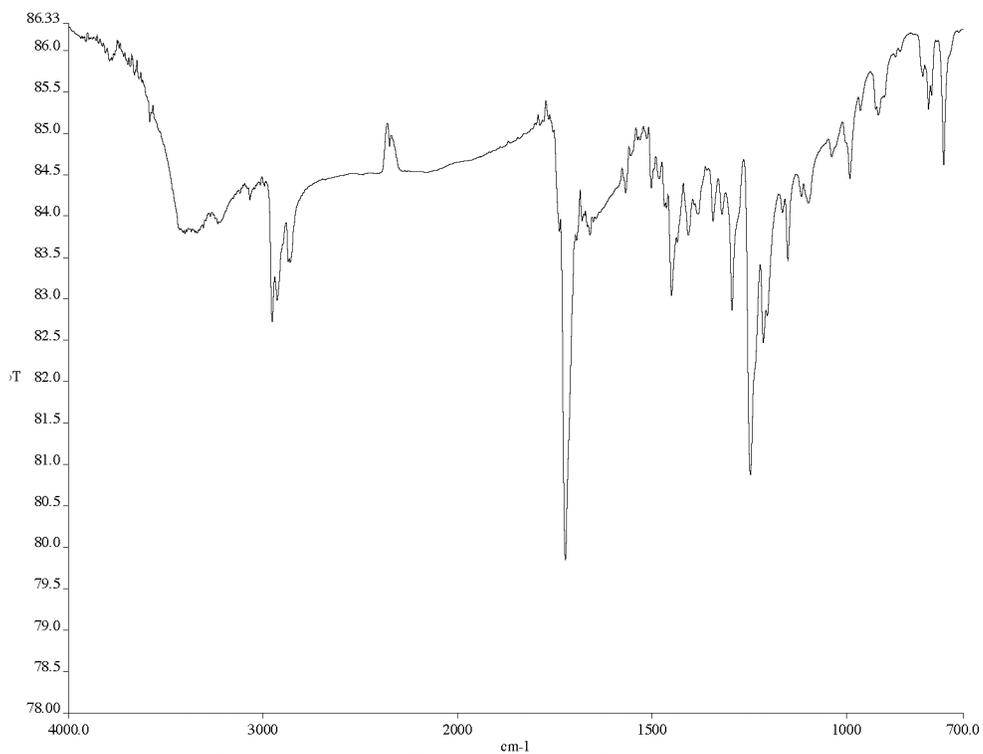
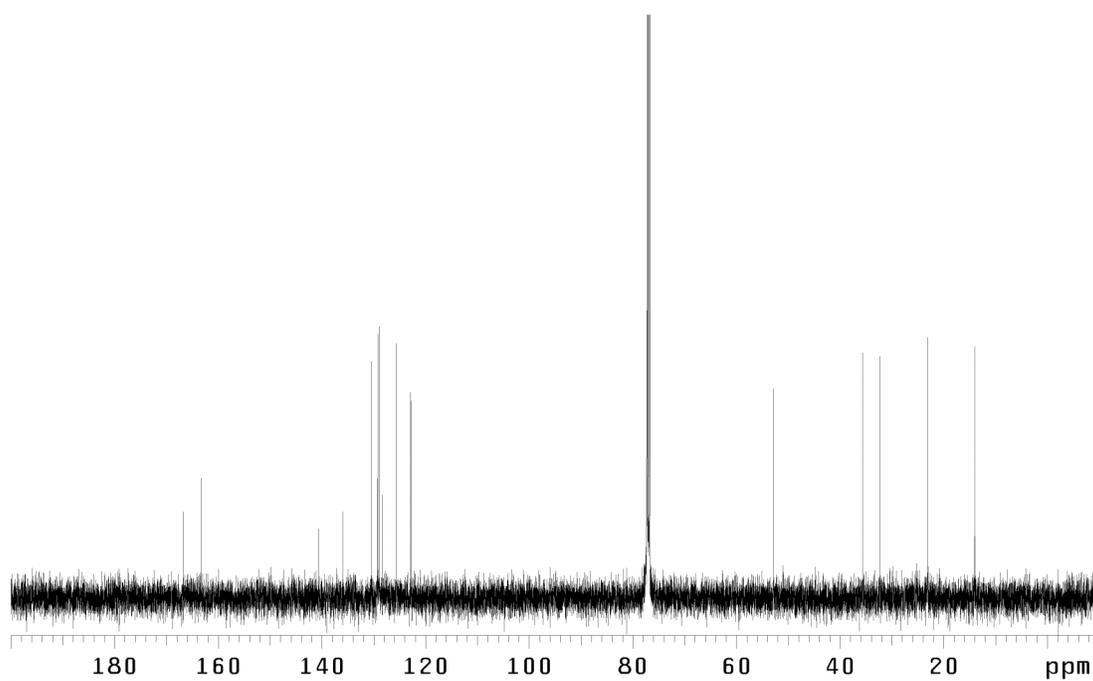
Figure A1.5.1 ^1H NMR (500 MHz, CDCl_3) of compound **322e**

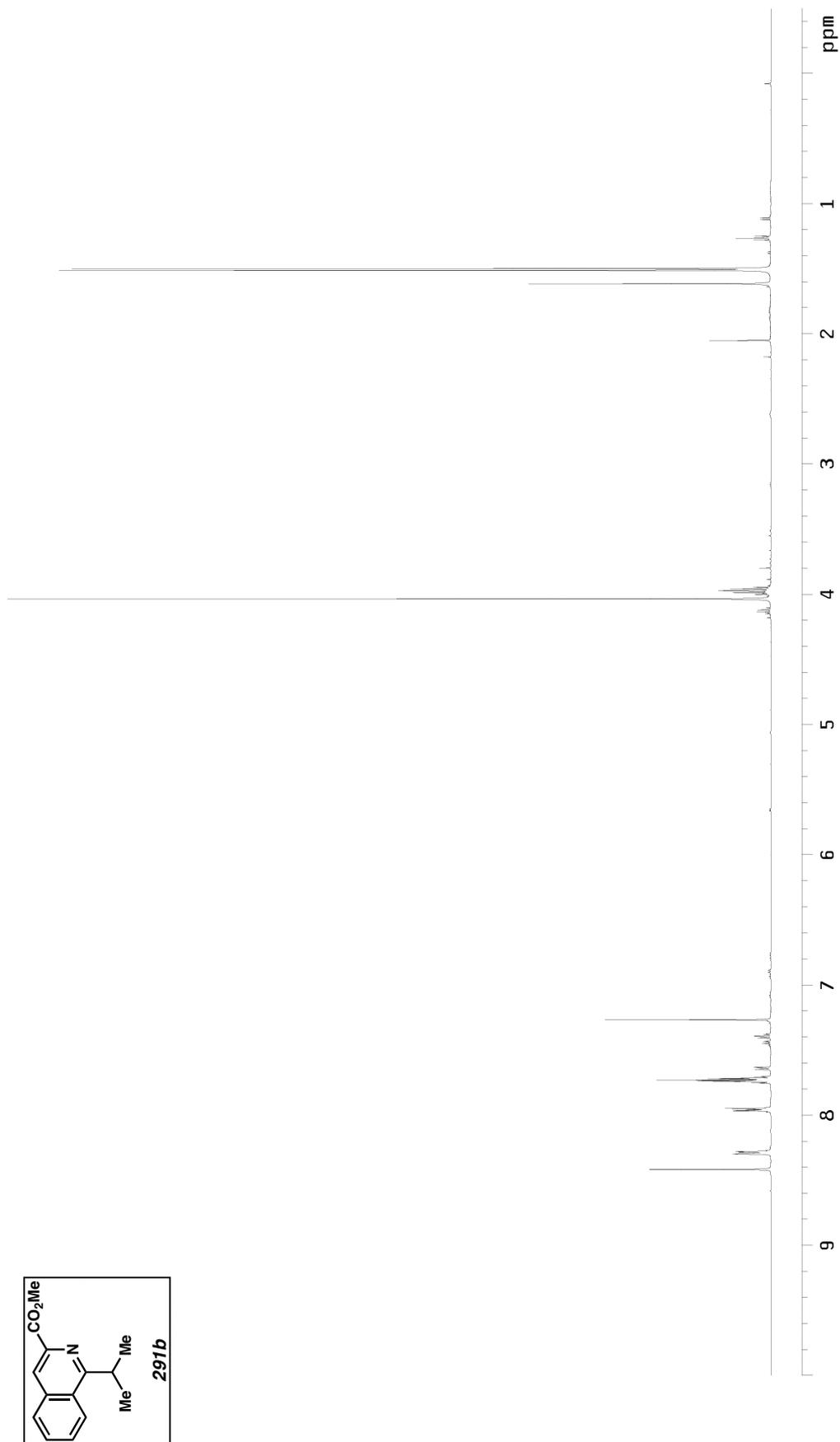
Figure A1.5.2 Infrared spectrum (thin film/NaCl) of compound **322e**Figure A1.5.3 ¹³C NMR (125 MHz, CDCl₃) of compound **322e**

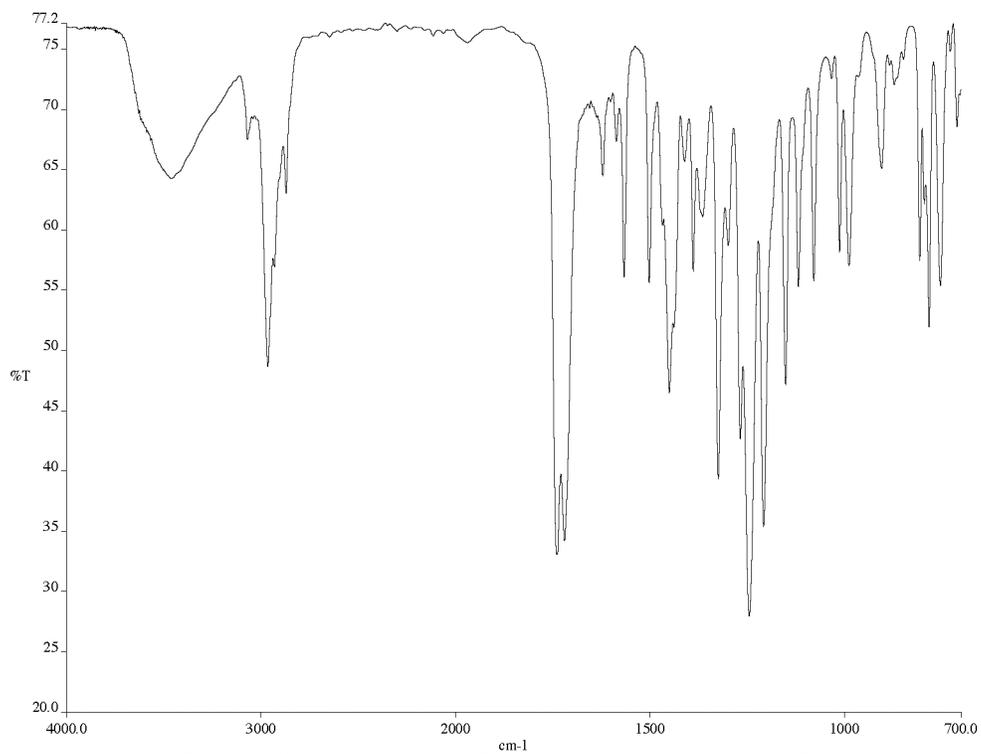
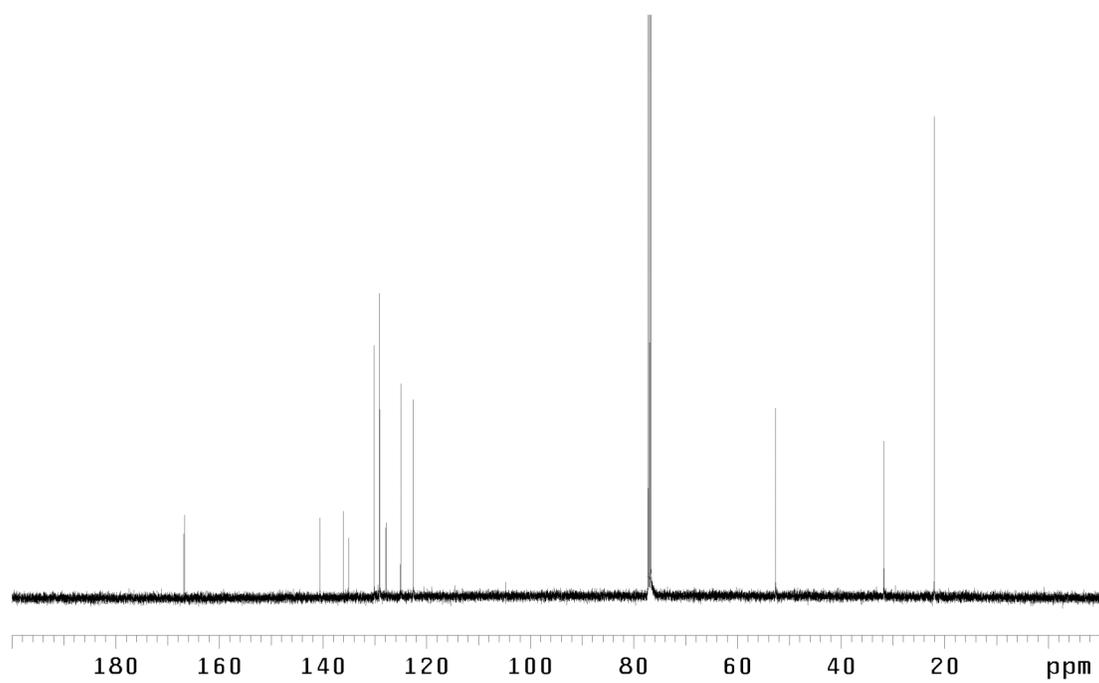
Figure A1.6.1 ¹H NMR (500 MHz, CDCl₃) of compound 282

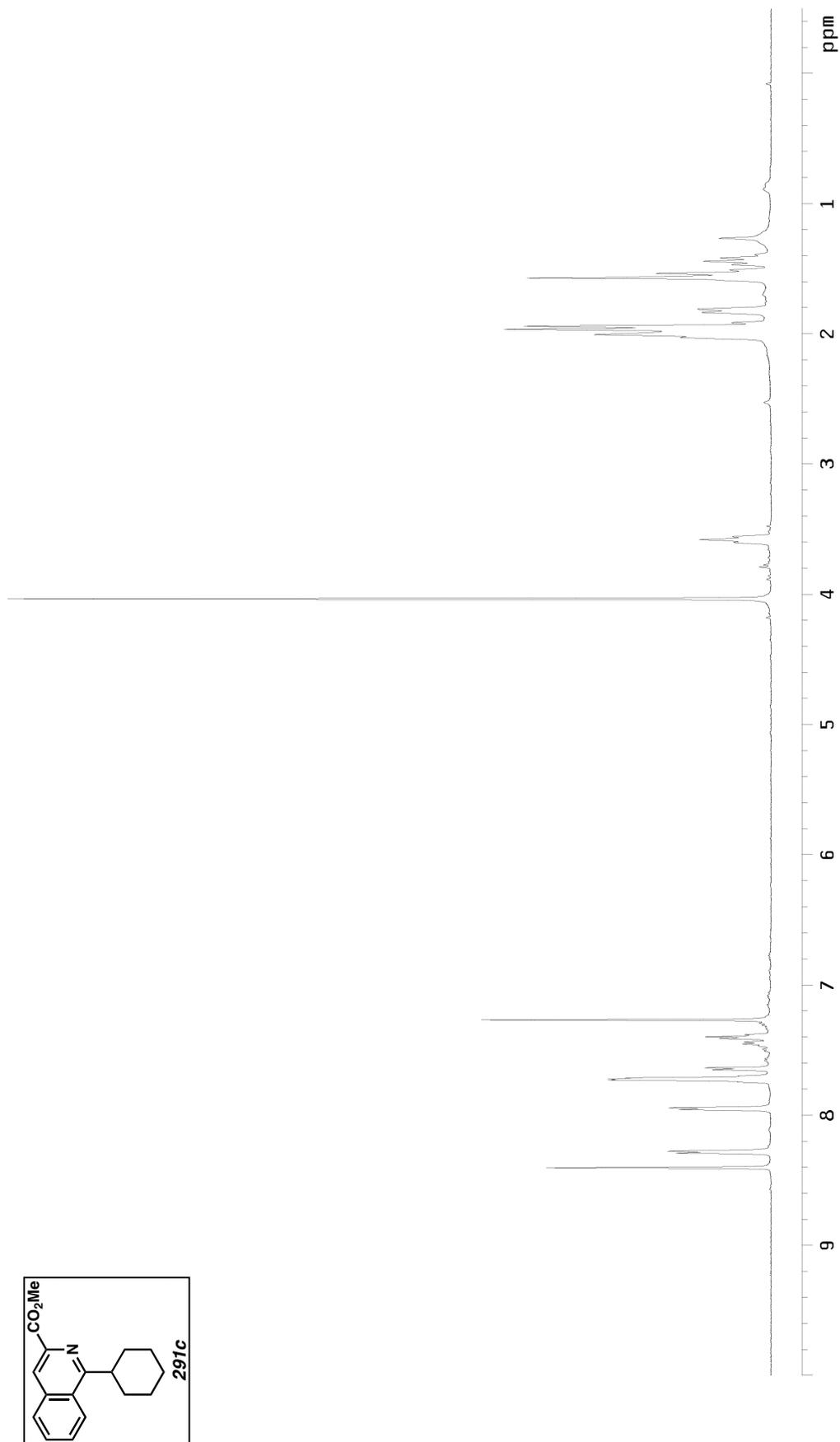
Figure A1.6.2 Infrared spectrum (thin film/NaCl) of compound **282**Figure A1.6.3 ¹³C NMR (125 MHz, CDCl₃) of compound **282**

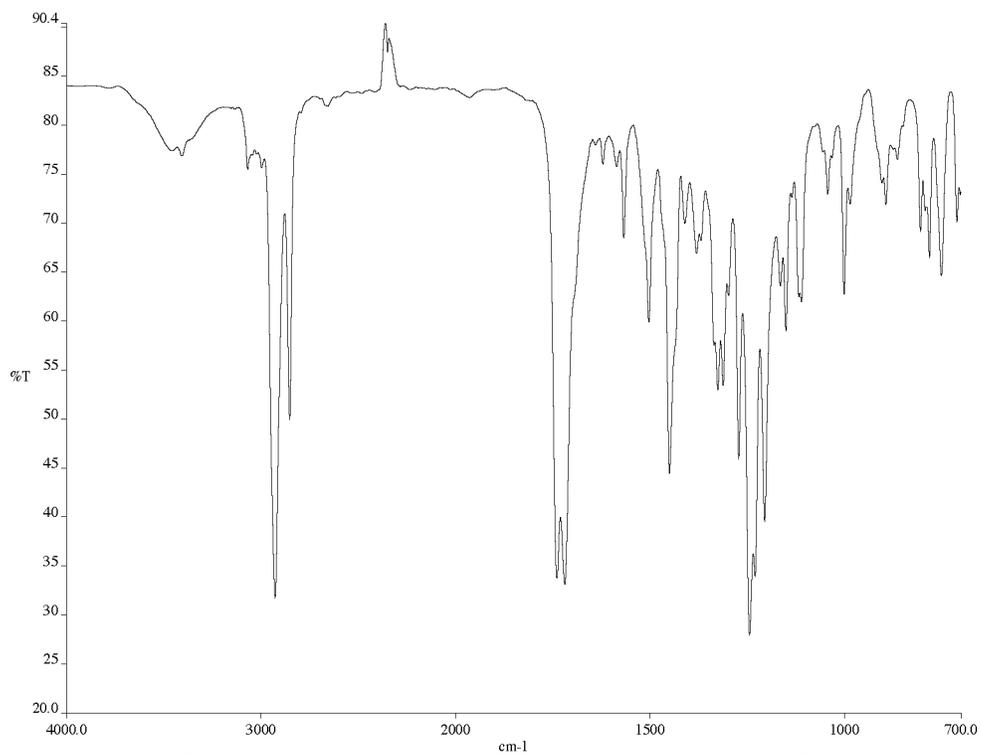
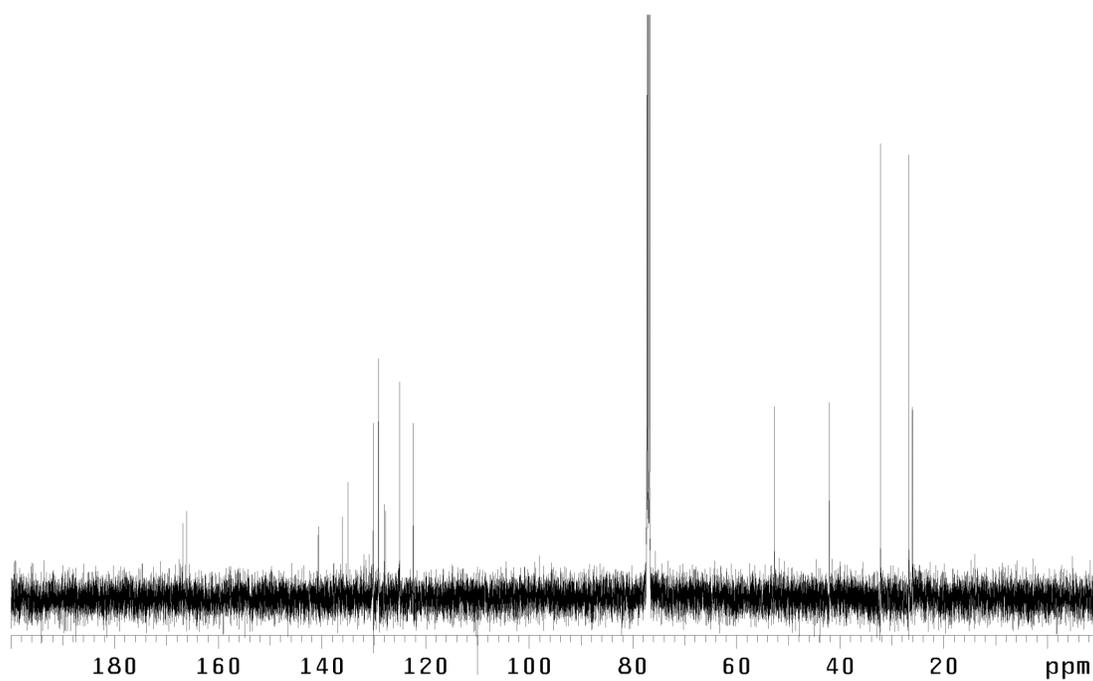
Figure A1.7.1 ¹H NMR (500 MHz, CDCl₃) of compound **291a**

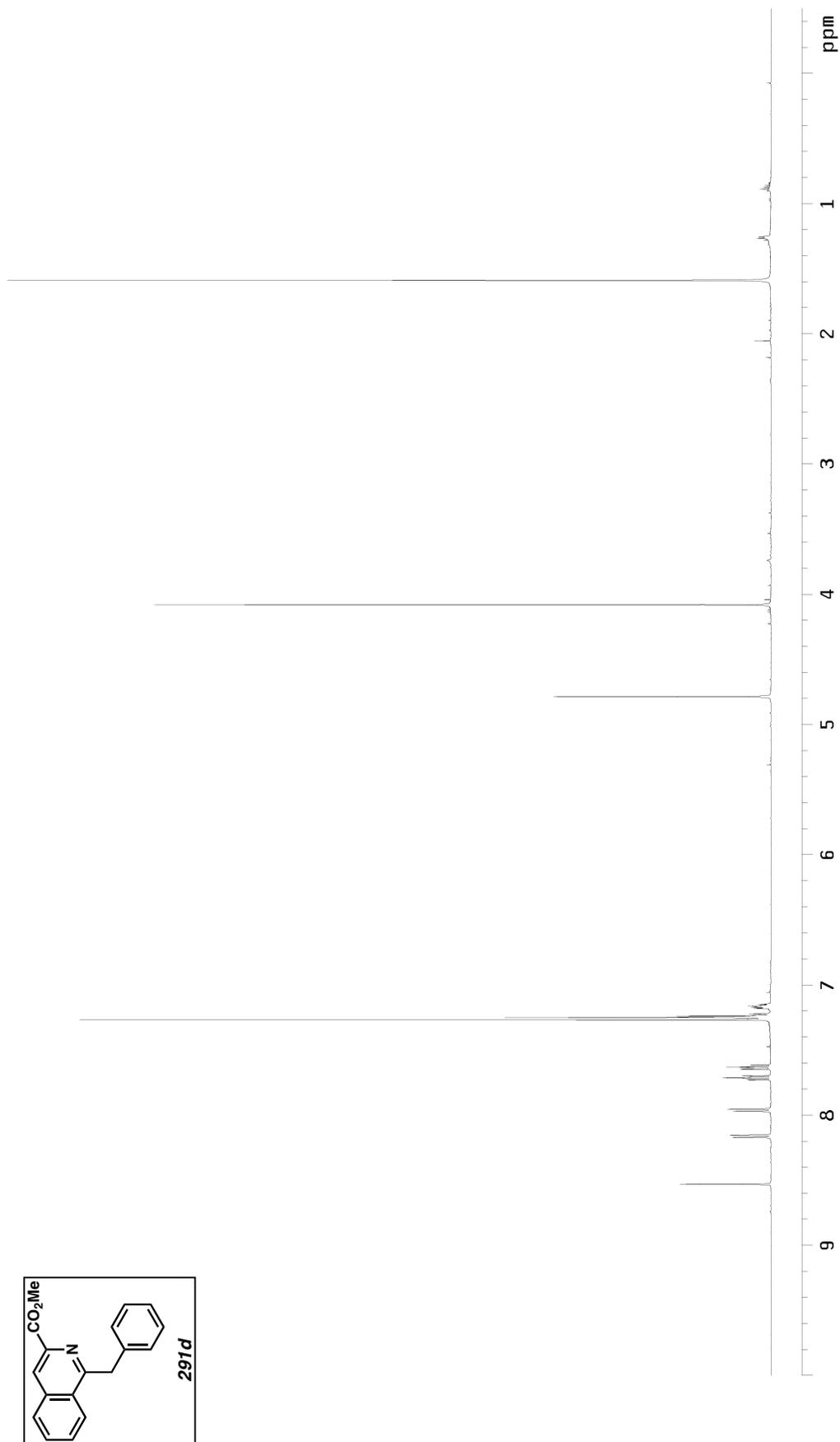
Figure A1.7.2 Infrared spectrum (thin film/NaCl) of compound **291a**Figure A1.7.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291a**

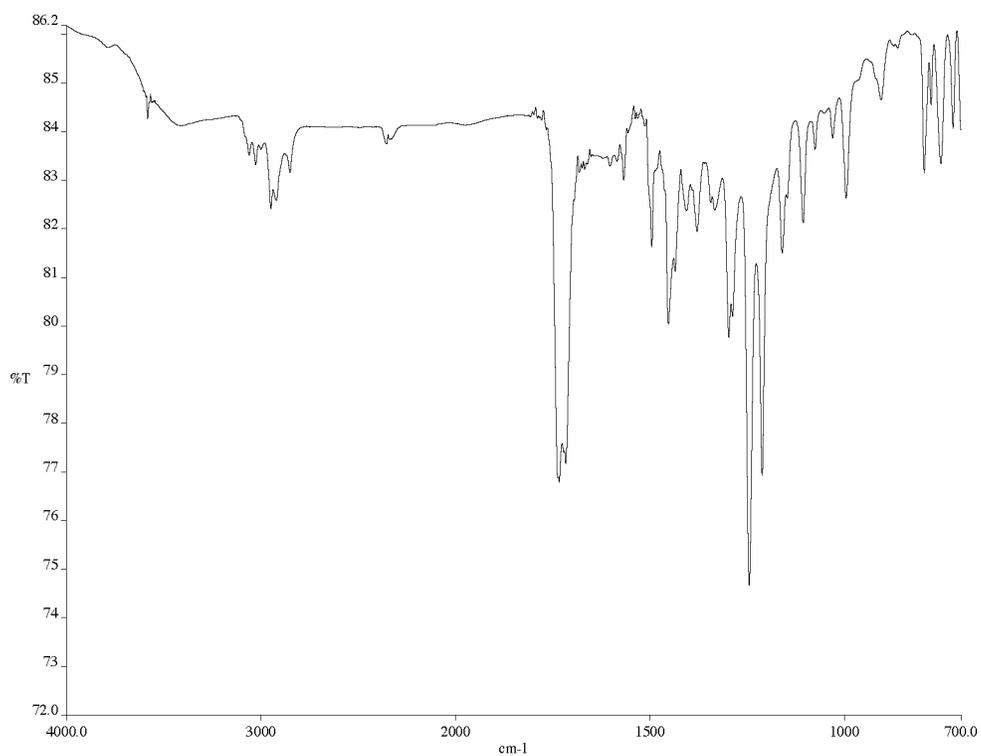
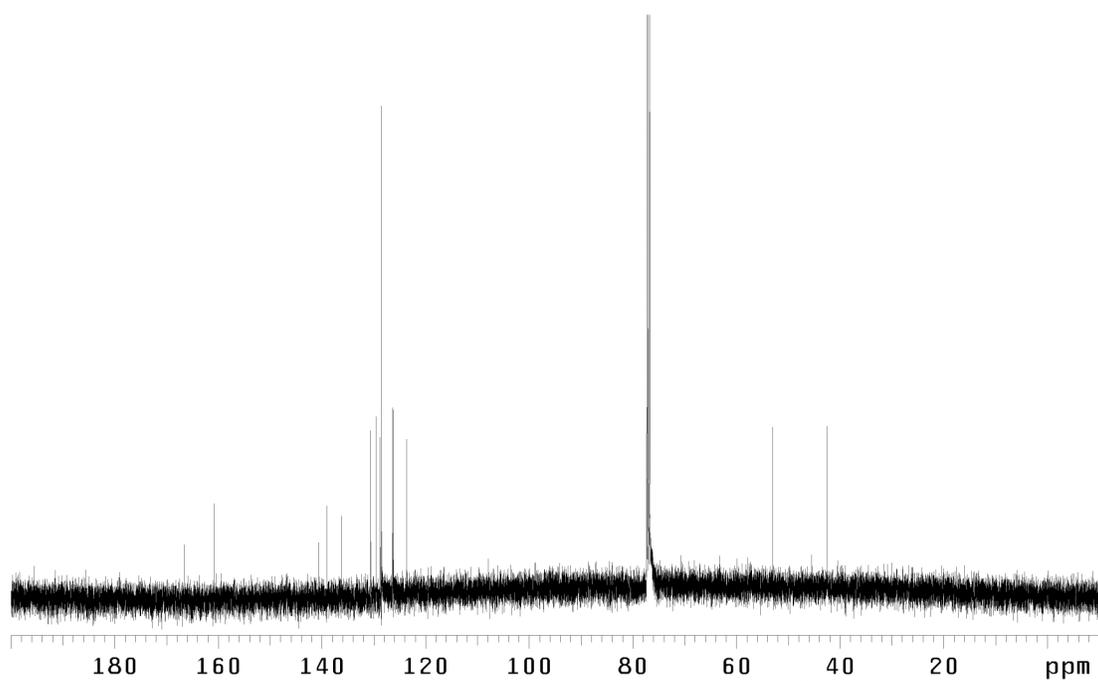
Figure A1.8.1 ^1H NMR (500 MHz, CDCl_3) of compound **291b**

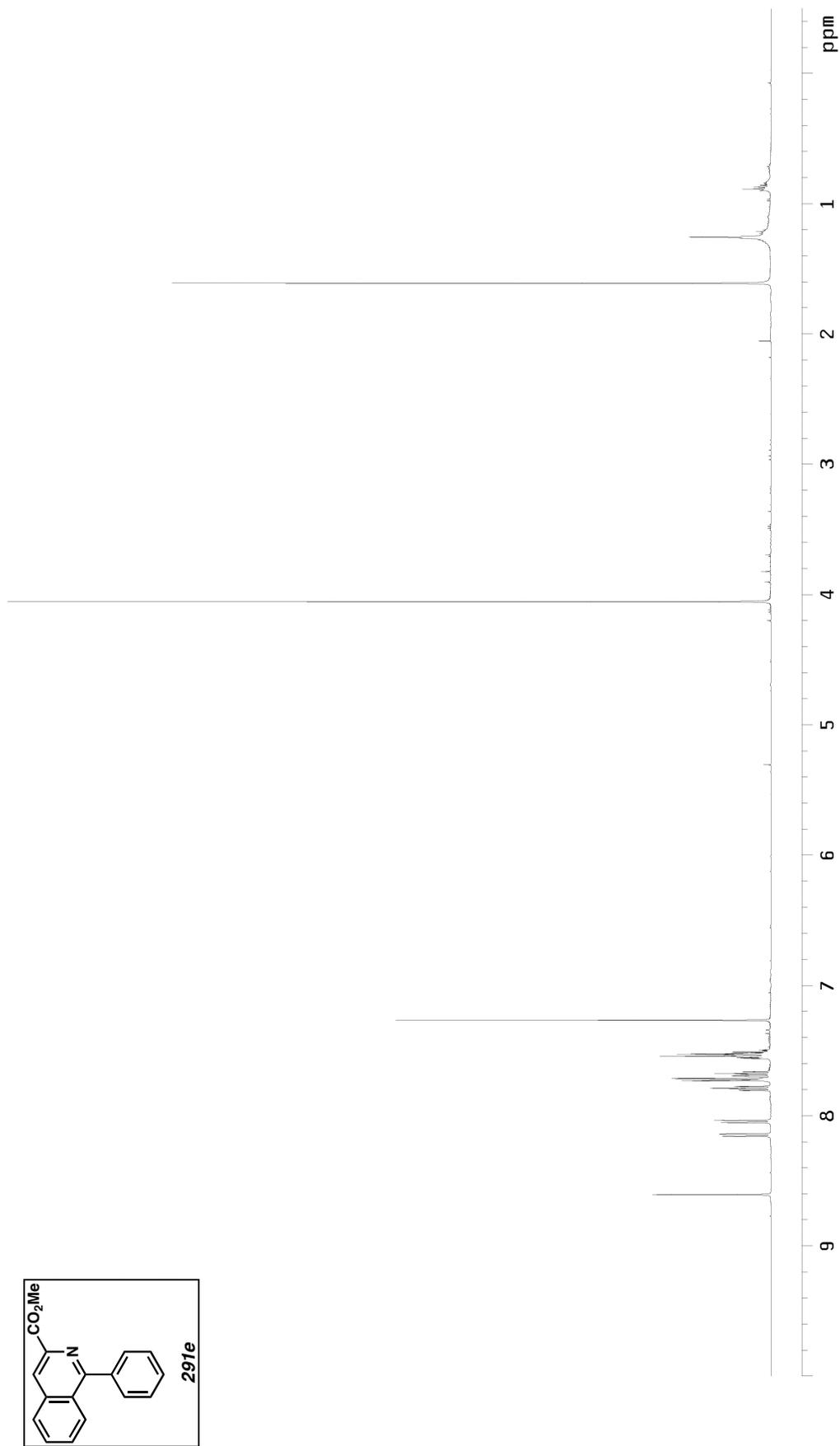
Figure A1.8.2 Infrared spectrum (thin film/NaCl) of compound **291b**Figure A1.8.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291b**

Figure A1.9.1 ¹H NMR (500 MHz, CDCl₃) of compound **291c**

Figure A1.9.2 Infrared spectrum (thin film/NaCl) of compound **291c**Figure A1.9.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291c**

Figure A1.10.1 ¹H NMR (500 MHz, CDCl₃) of compound **291d**

Figure A1.10.2 Infrared spectrum (thin film/NaCl) of compound **291d**Figure A1.10.3 ¹³C NMR (500 MHz, CDCl₃) of compound **291d**

Figure A1.11.1 ^1H NMR (500 MHz, CDCl_3) of compound **291e**

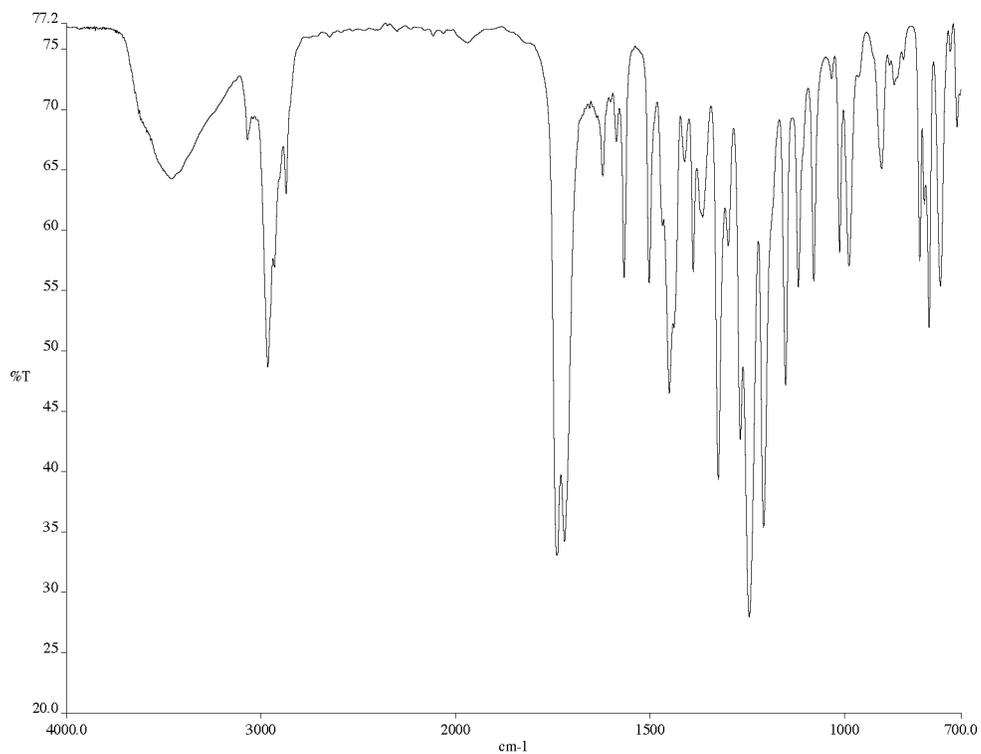
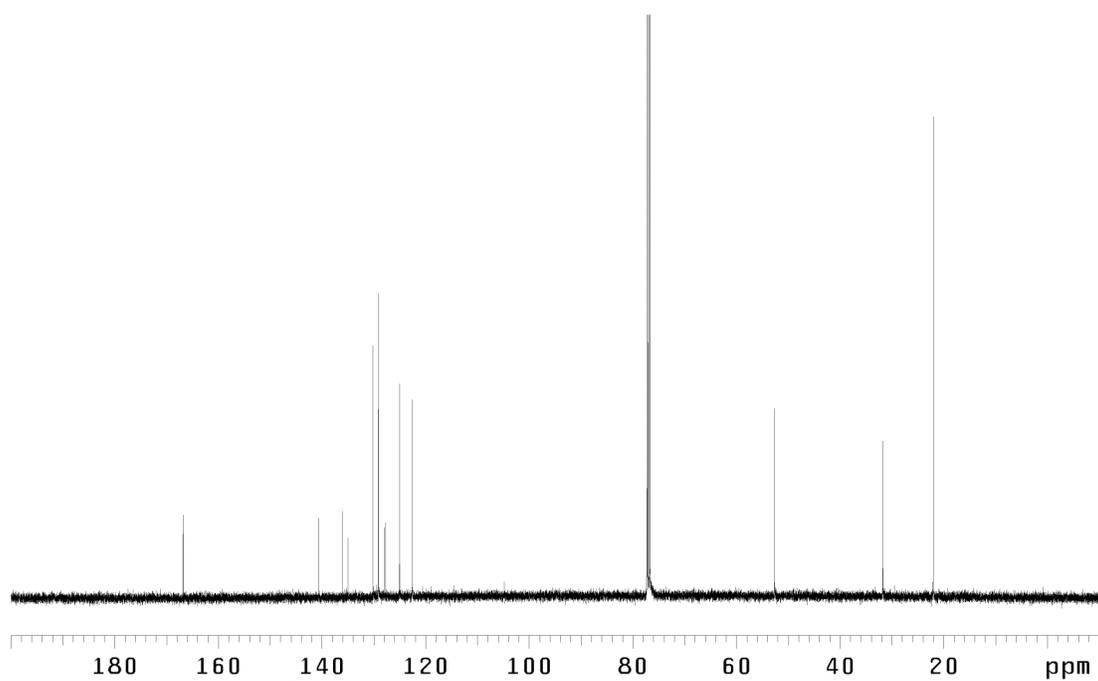
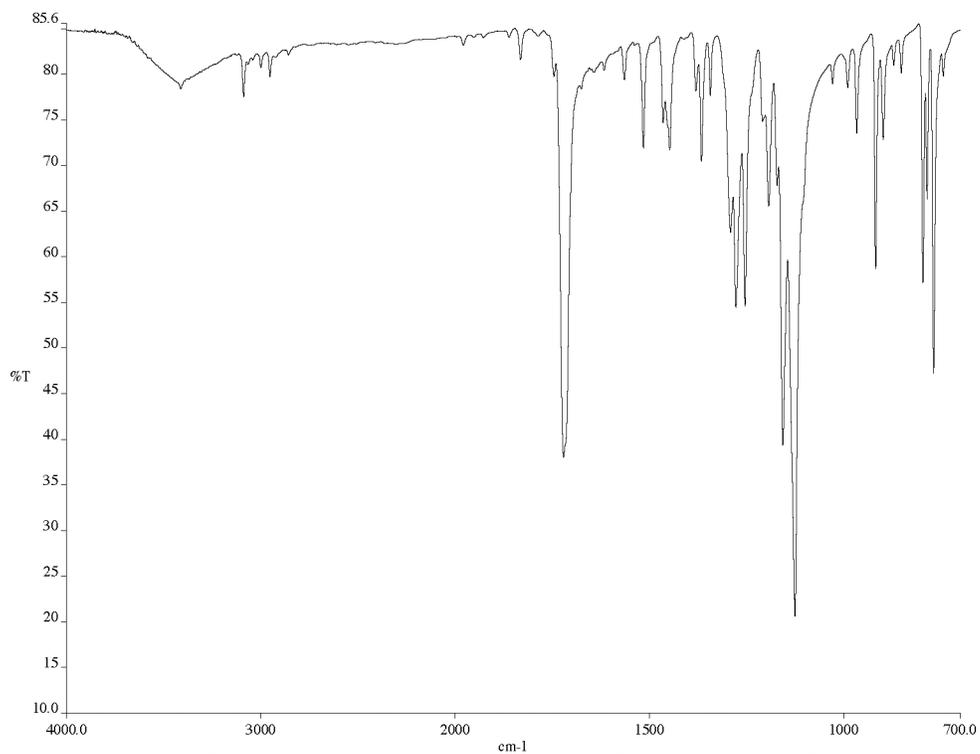
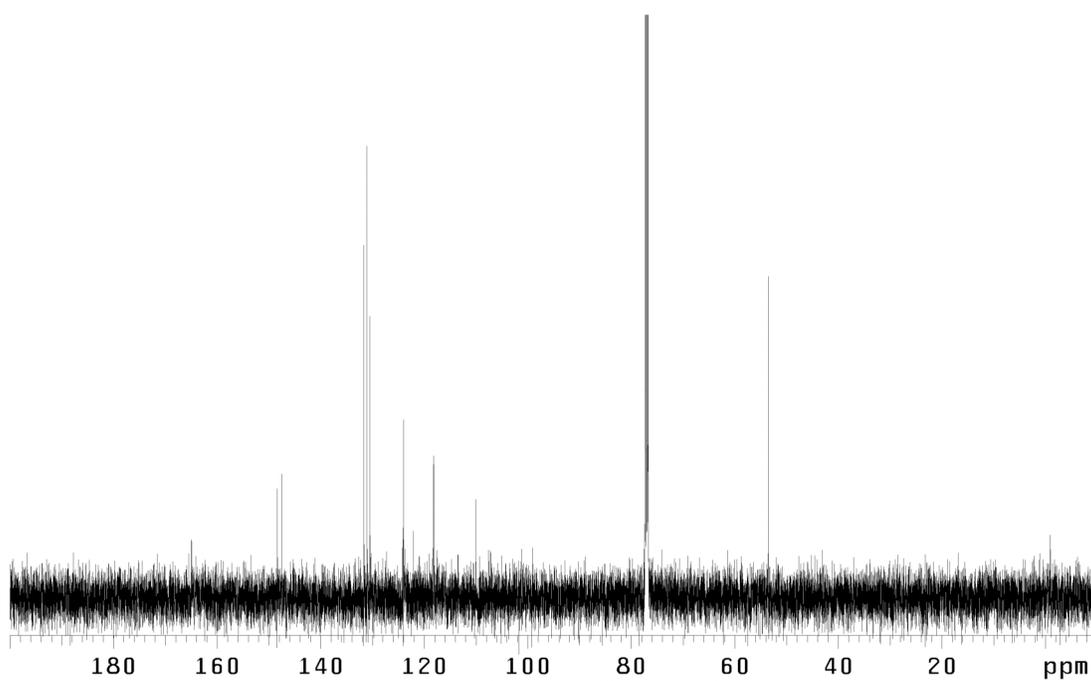
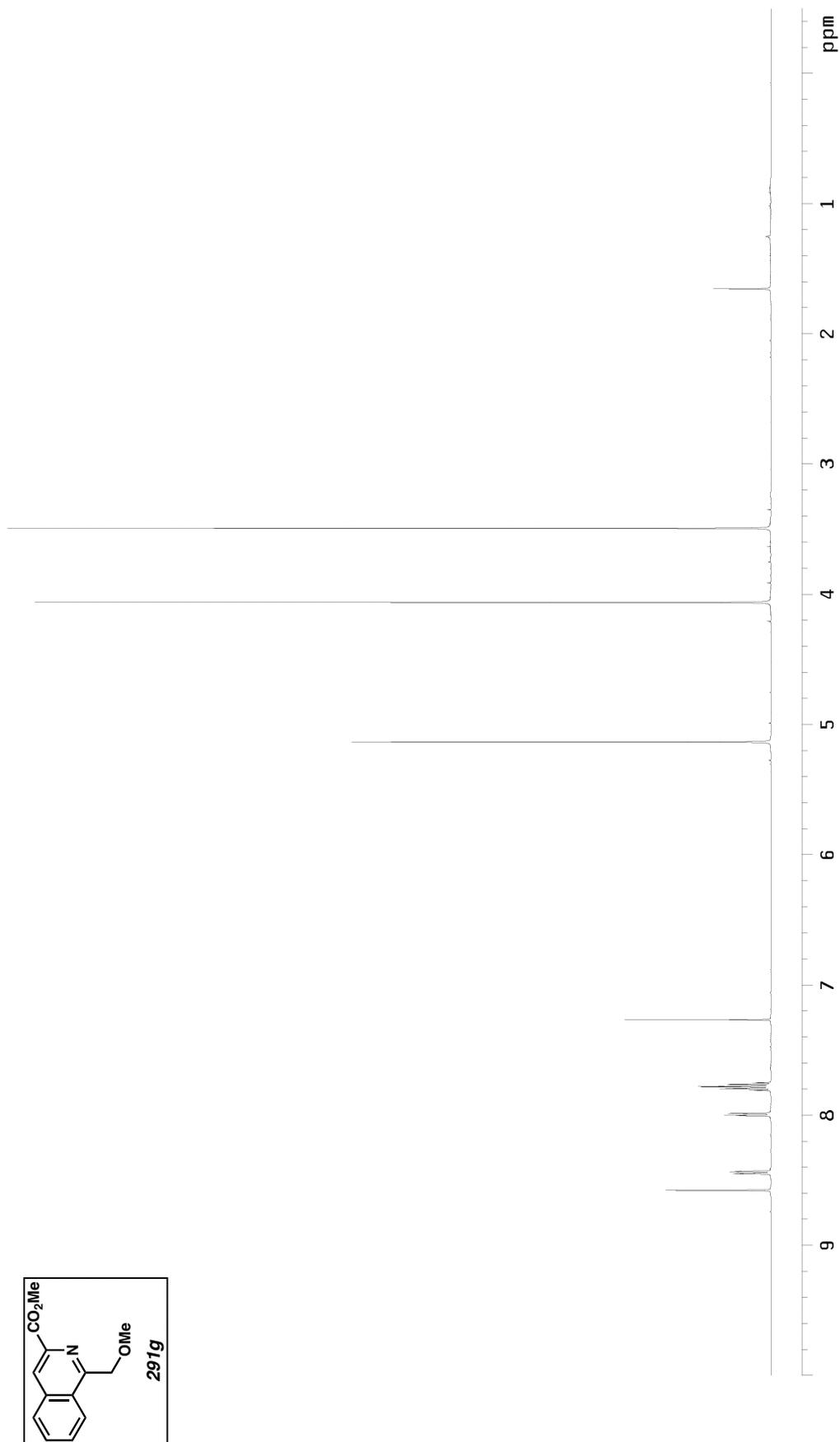
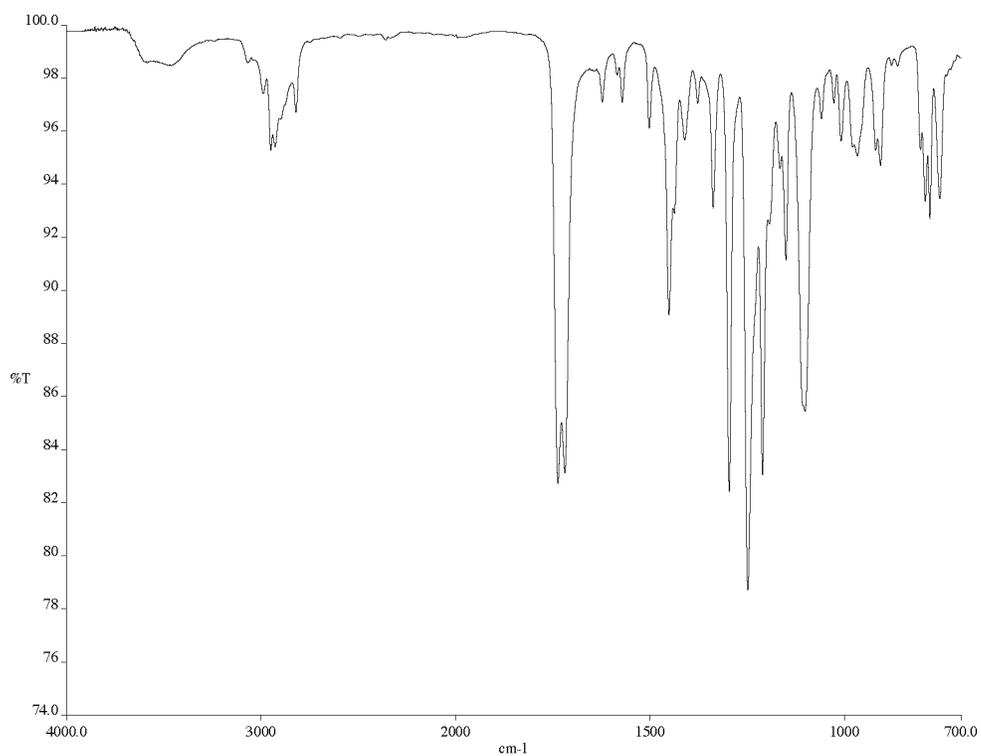
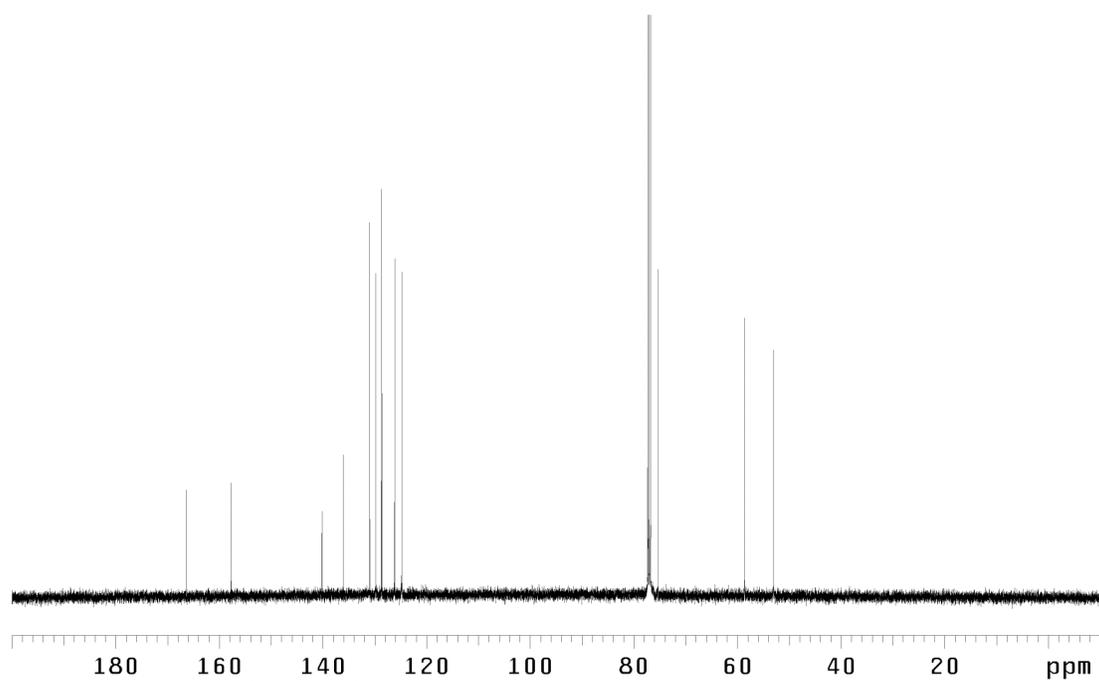
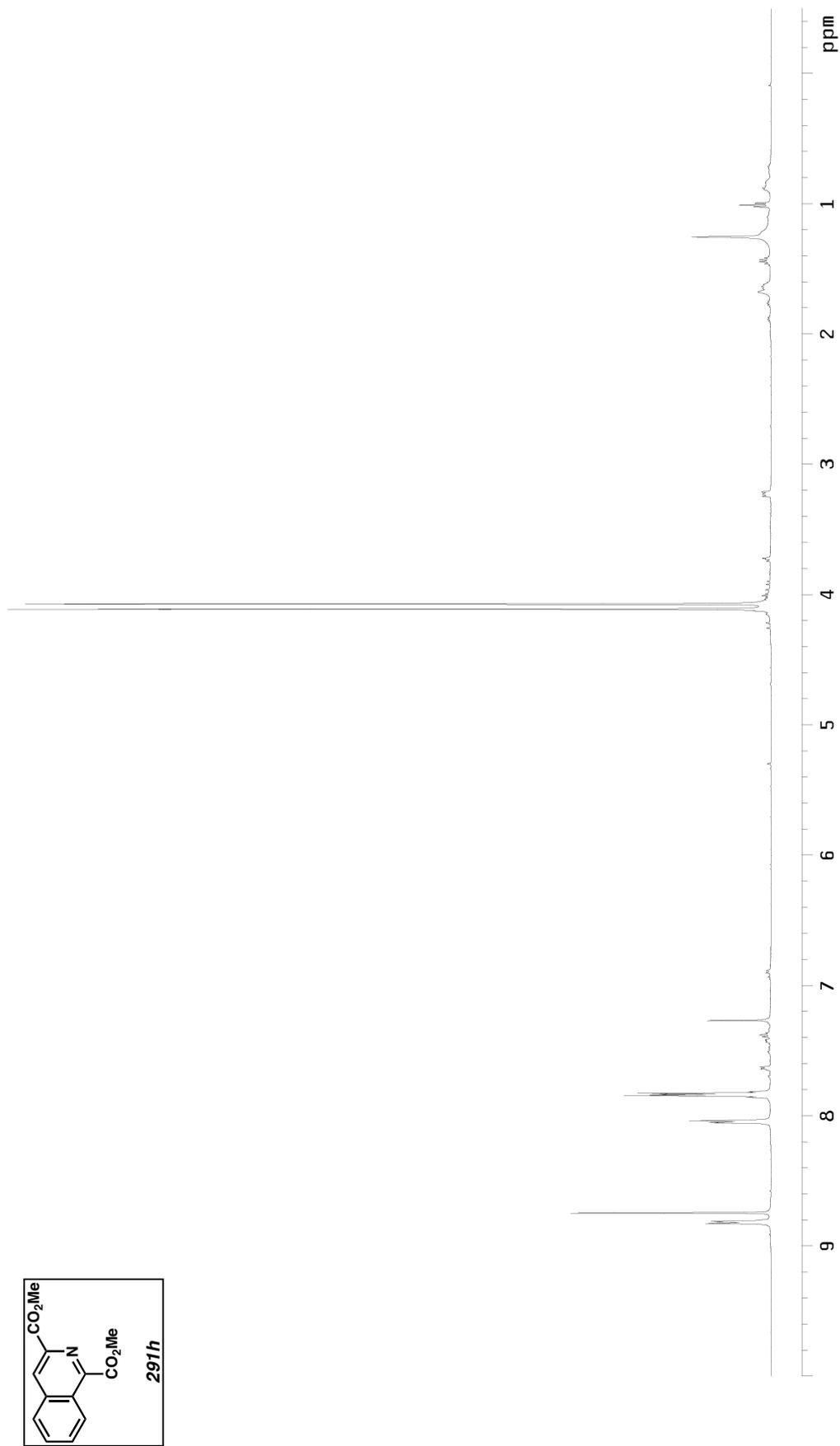
Figure A1.11.2 Infrared spectrum (thin film/NaCl) of compound **291e**Figure A1.11.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291e**

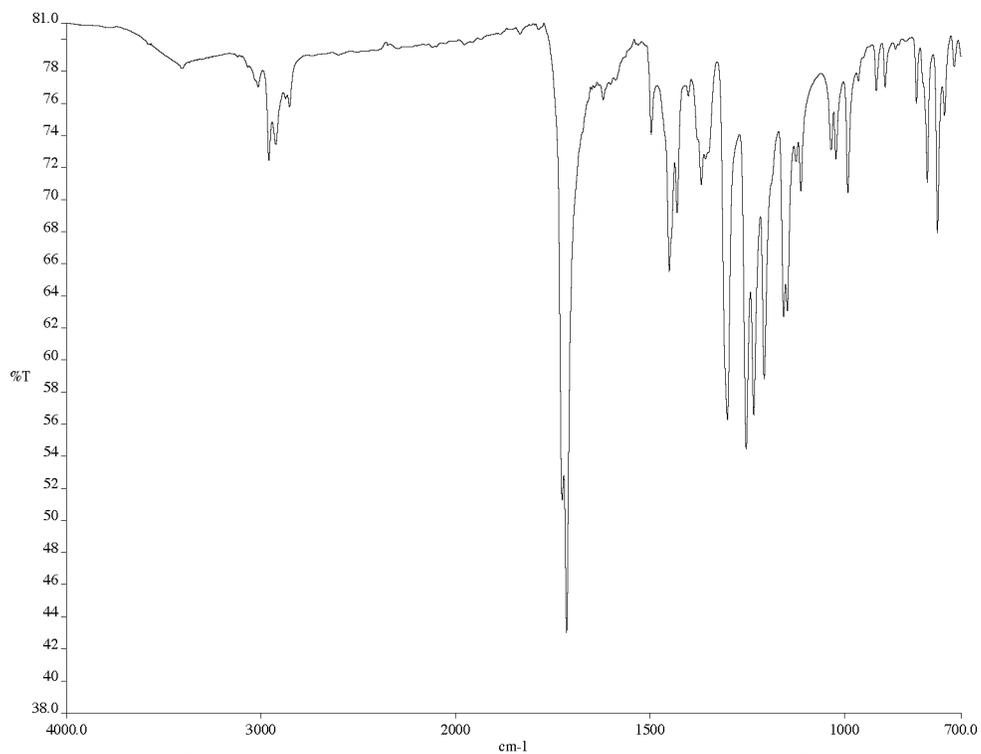
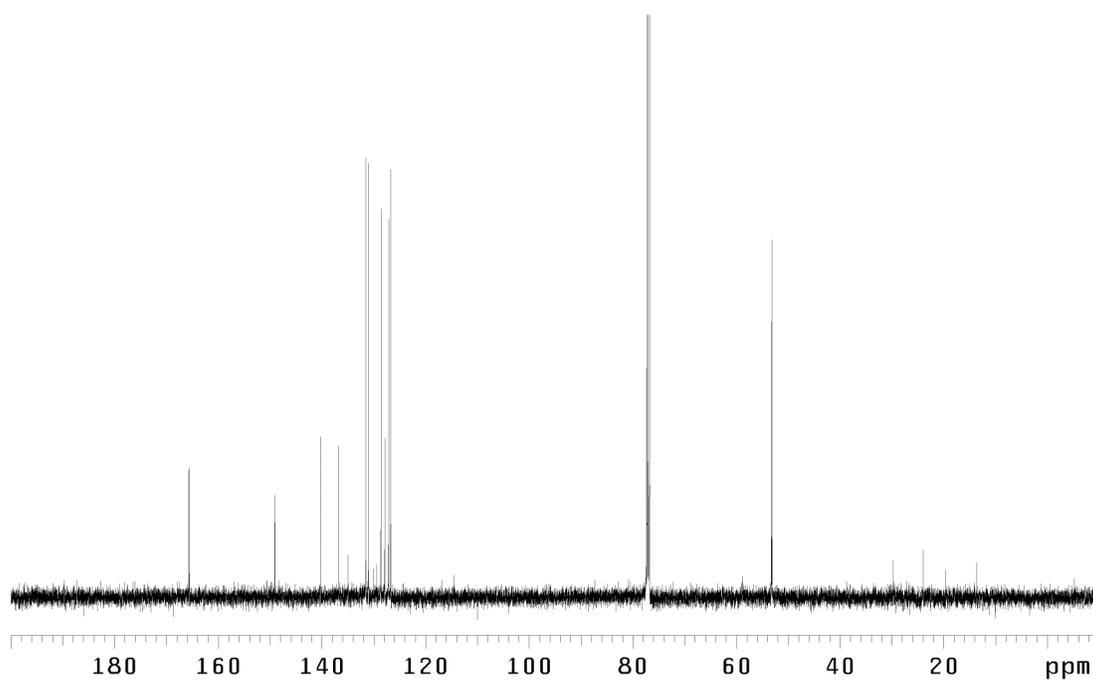
Figure A1.12.1 ¹H NMR (500 MHz, CDCl₃) of compound **291f**

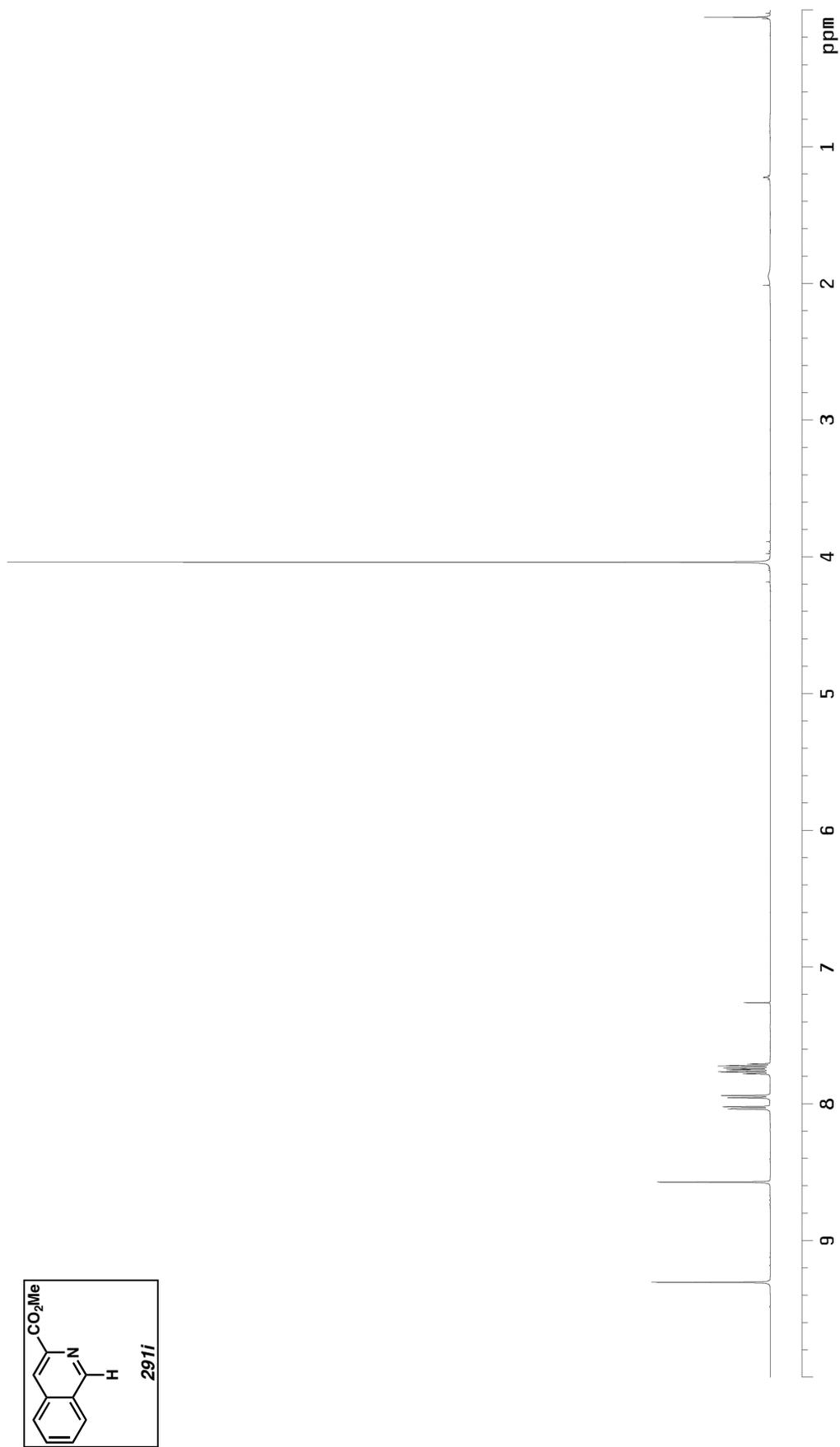
Figure A1.12.2 Infrared spectrum (thin film/NaCl) of compound **291f**Figure A1.12.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291f**

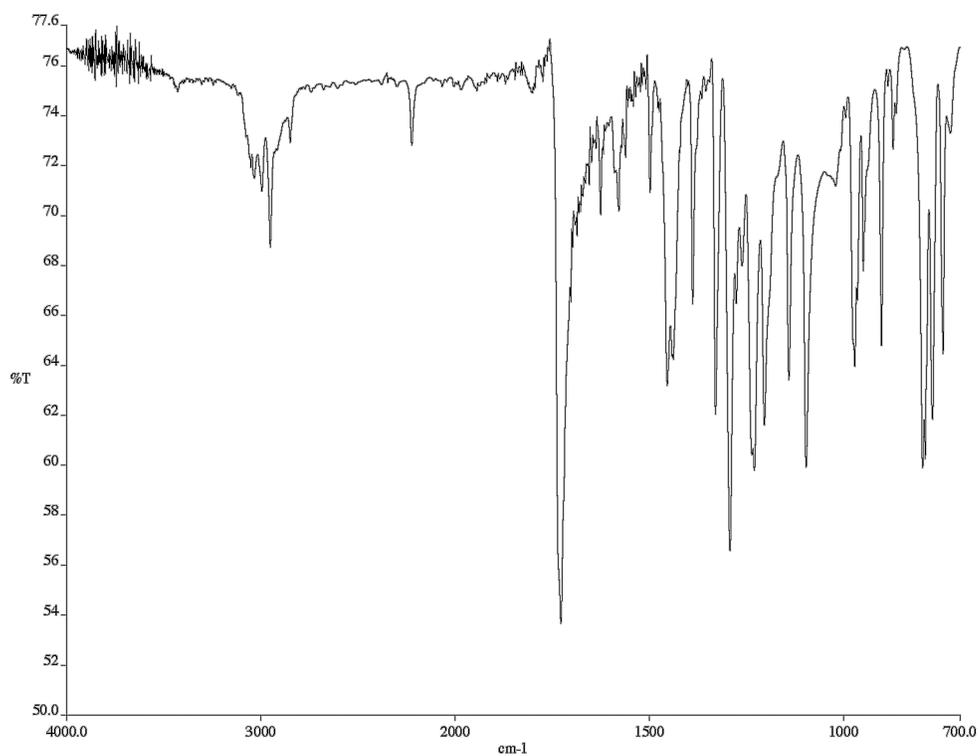
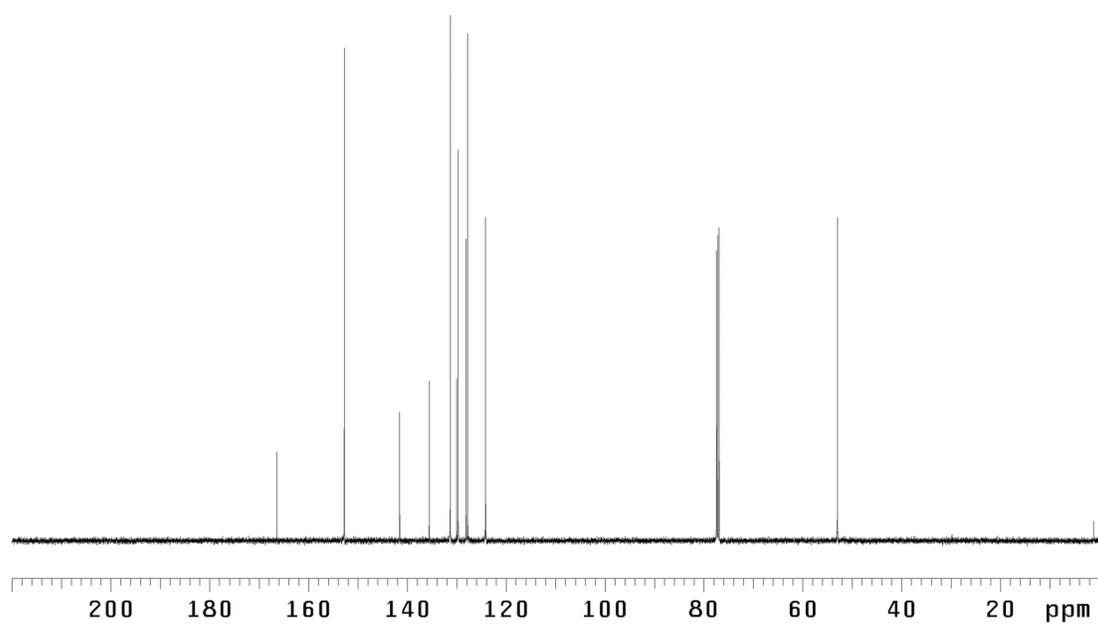
Figure A1.13.1 ¹H NMR (500 MHz, CDCl₃) of compound **291g**

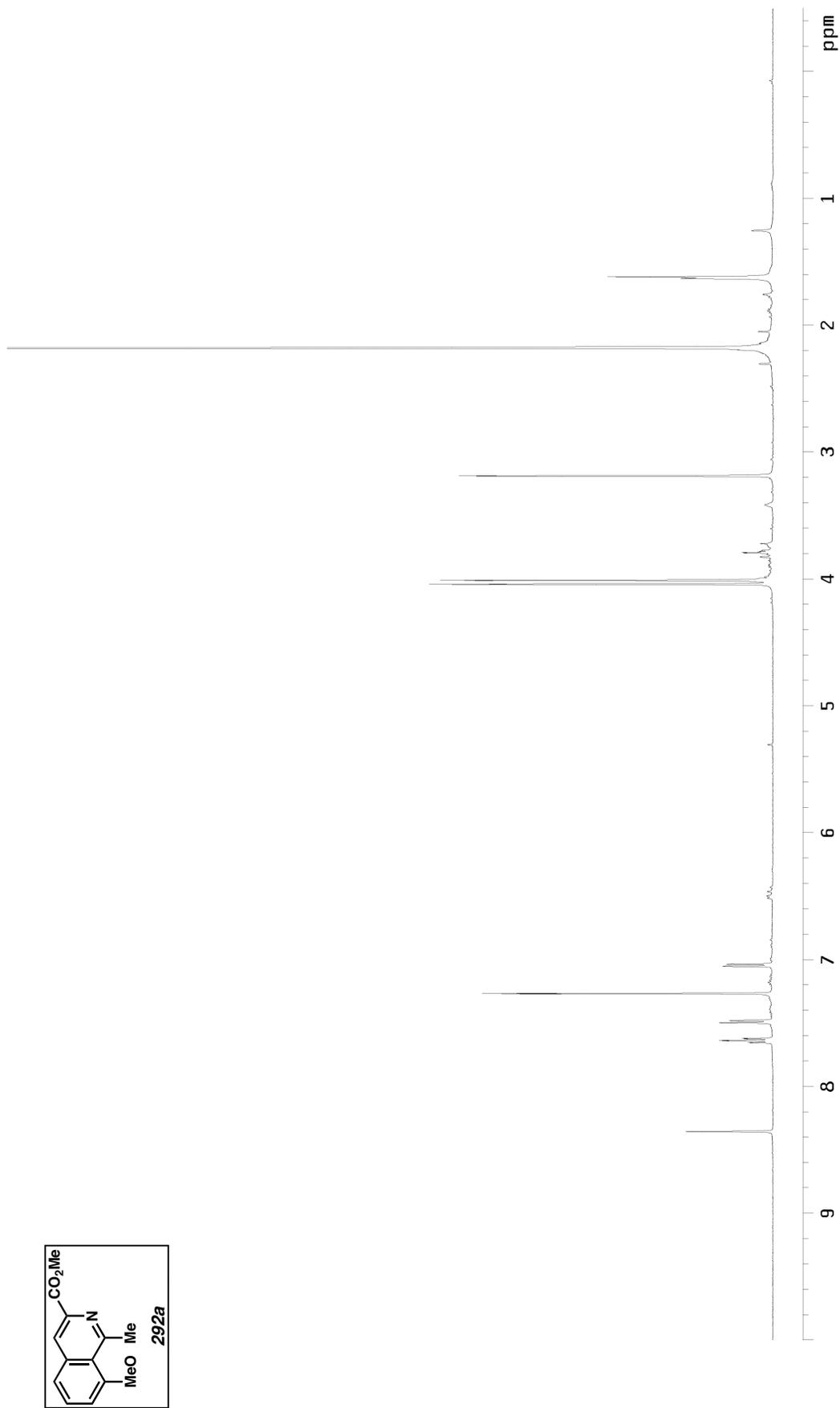
Figure A1.13.2 Infrared spectrum (thin film/NaCl) of compound **291g**Figure A1.13.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291g**

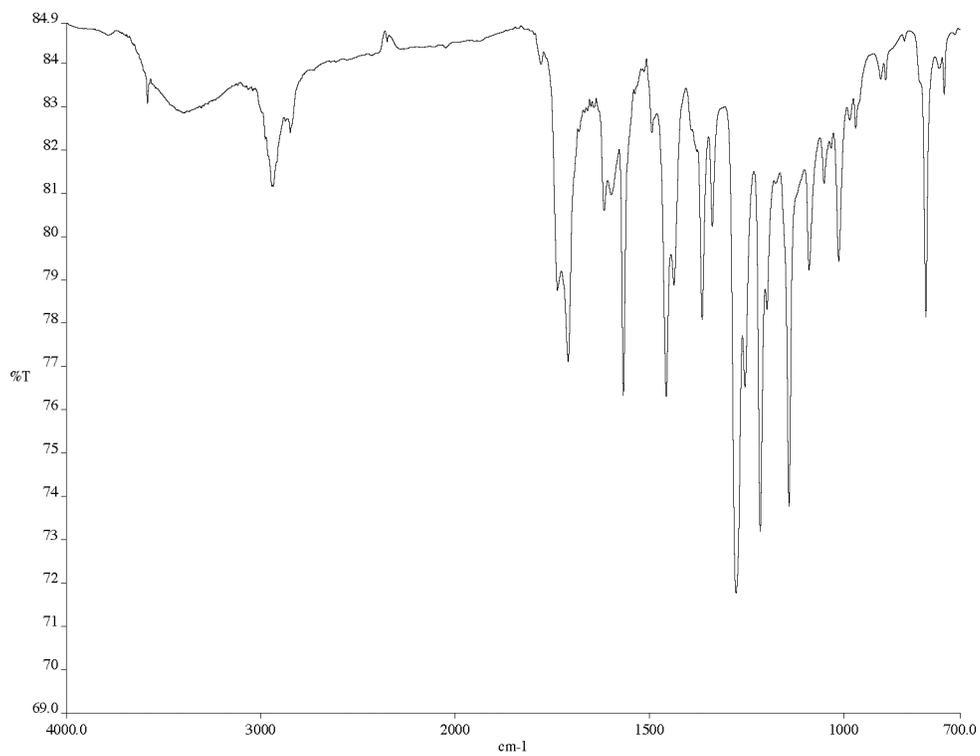
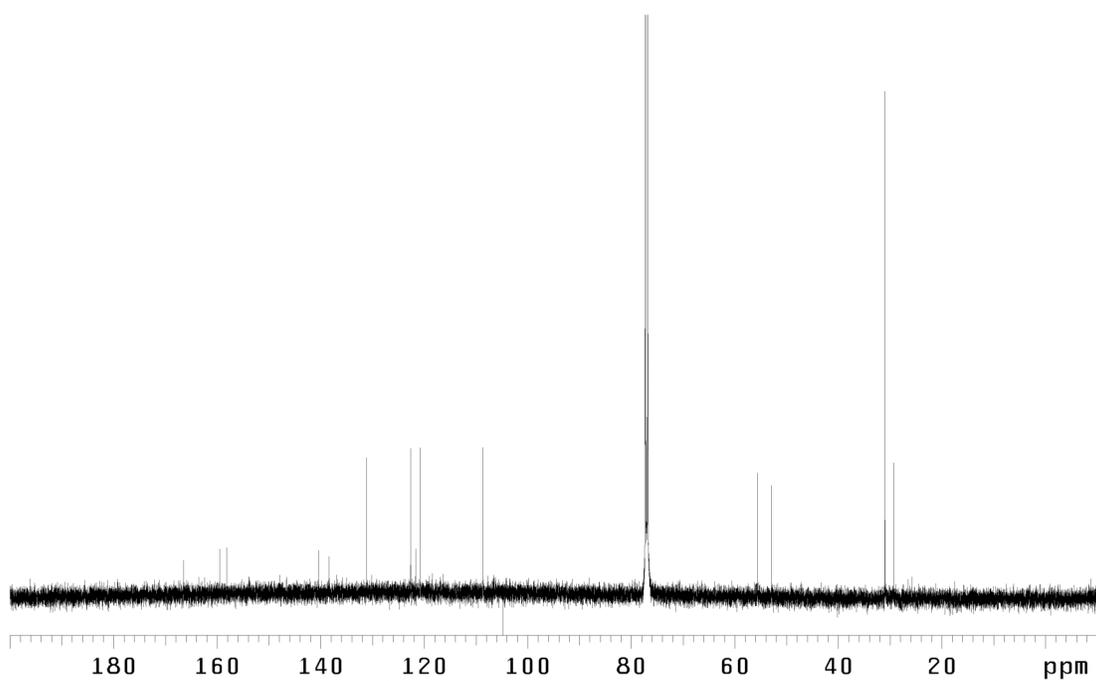
Figure A1.14.1 ^1H NMR (500 MHz, CDCl_3) of compound **291h**

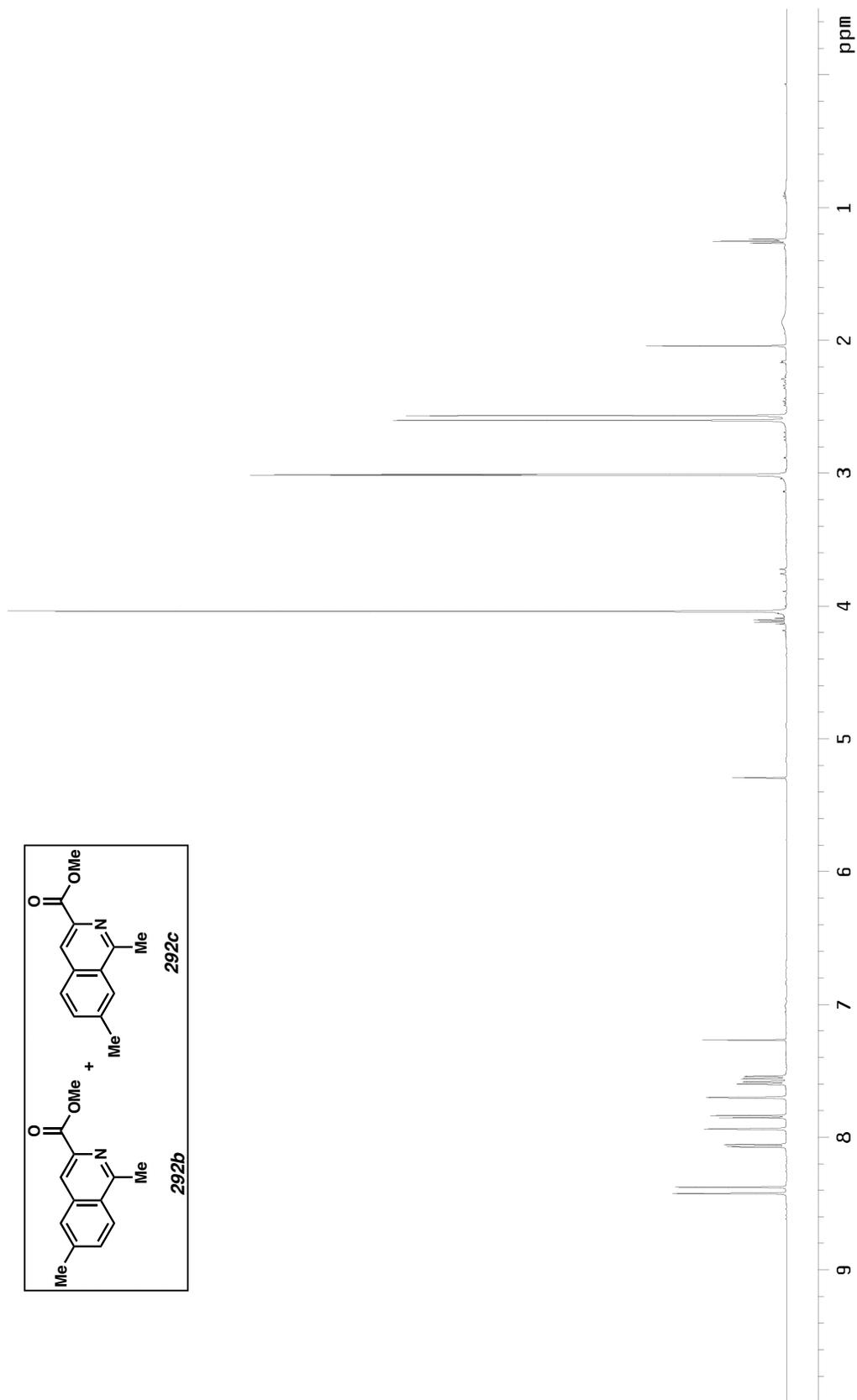
Figure A1.14.2 Infrared spectrum (thin film/NaCl) of compound **291h**Figure A1.14.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291h**

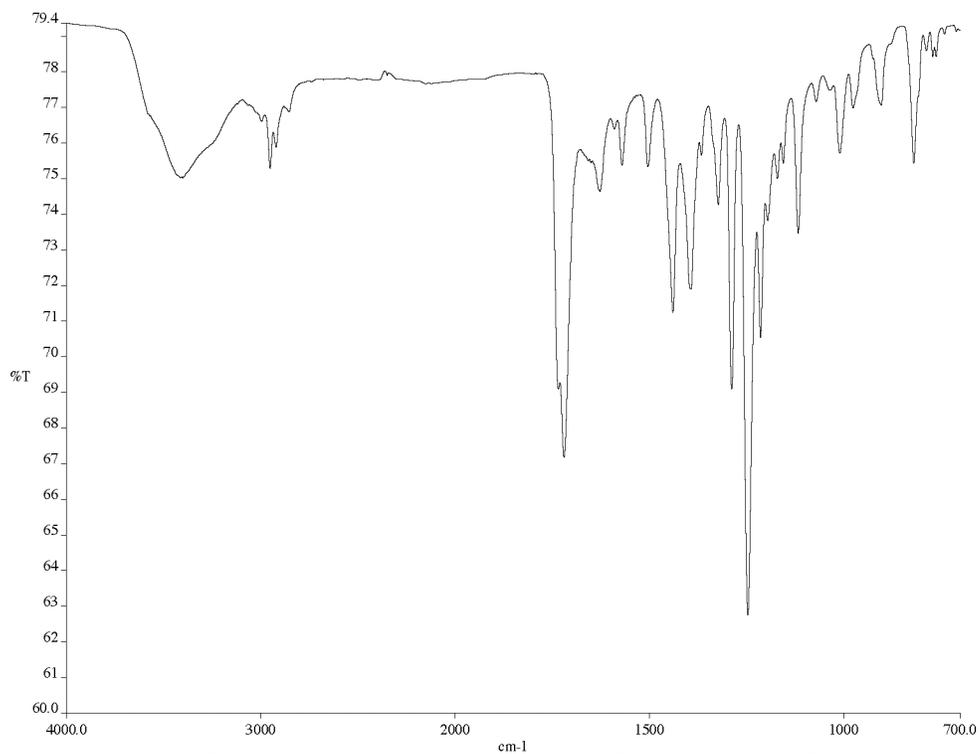
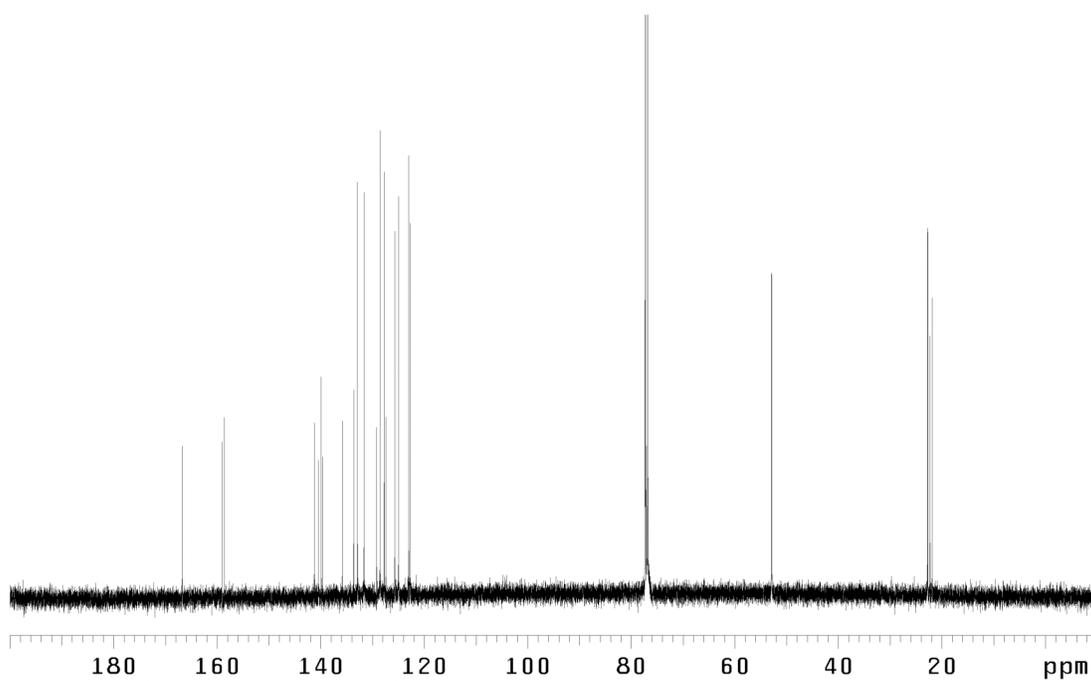
Figure A1.15.1 ^1H NMR (500 MHz, CDCl_3) of compound **291i**

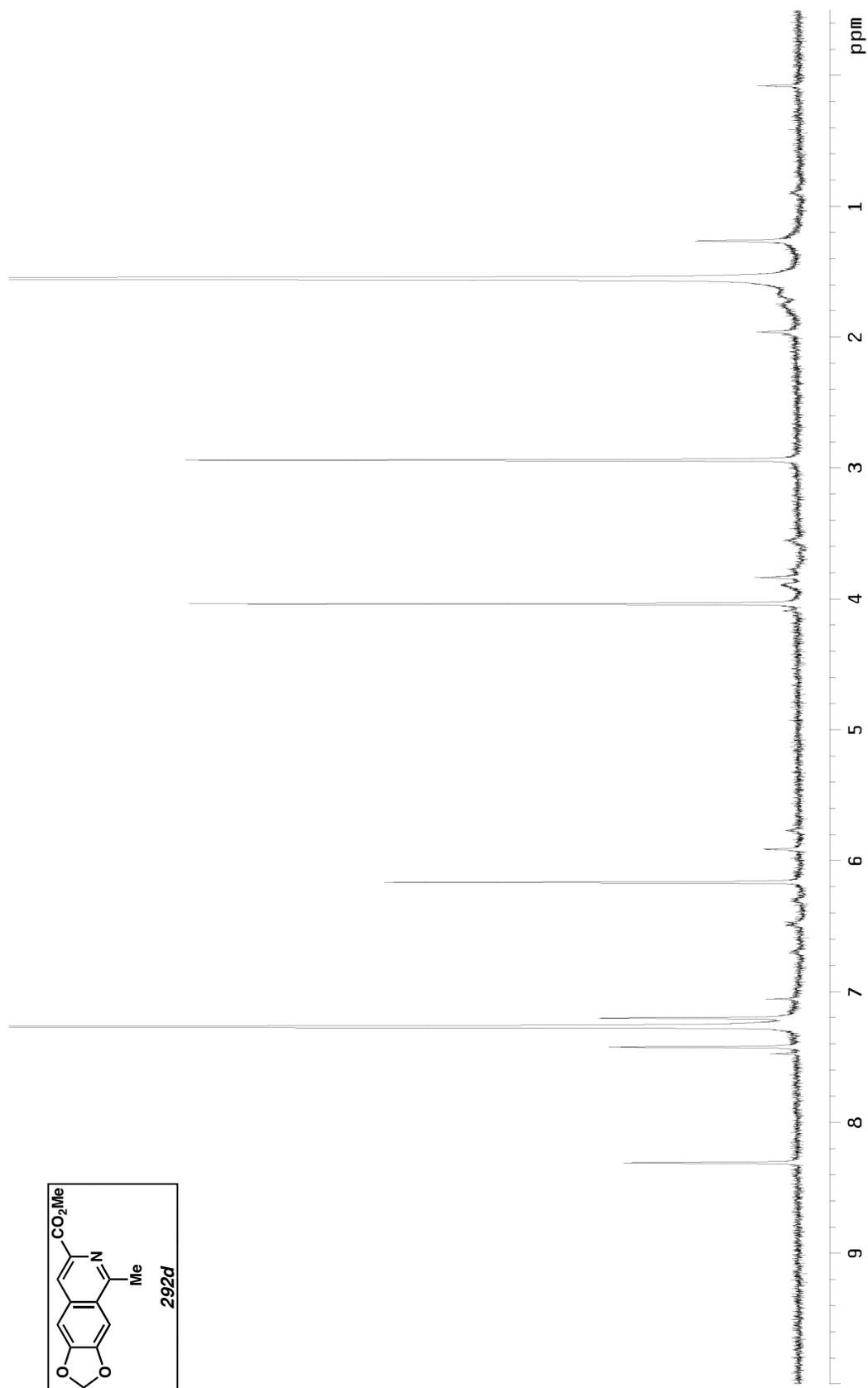
Figure A1.15.2 Infrared spectrum (thin film/NaCl) of compound **291i**Figure A1.15.3 ¹³C NMR (125 MHz, CDCl₃) of compound **291i**

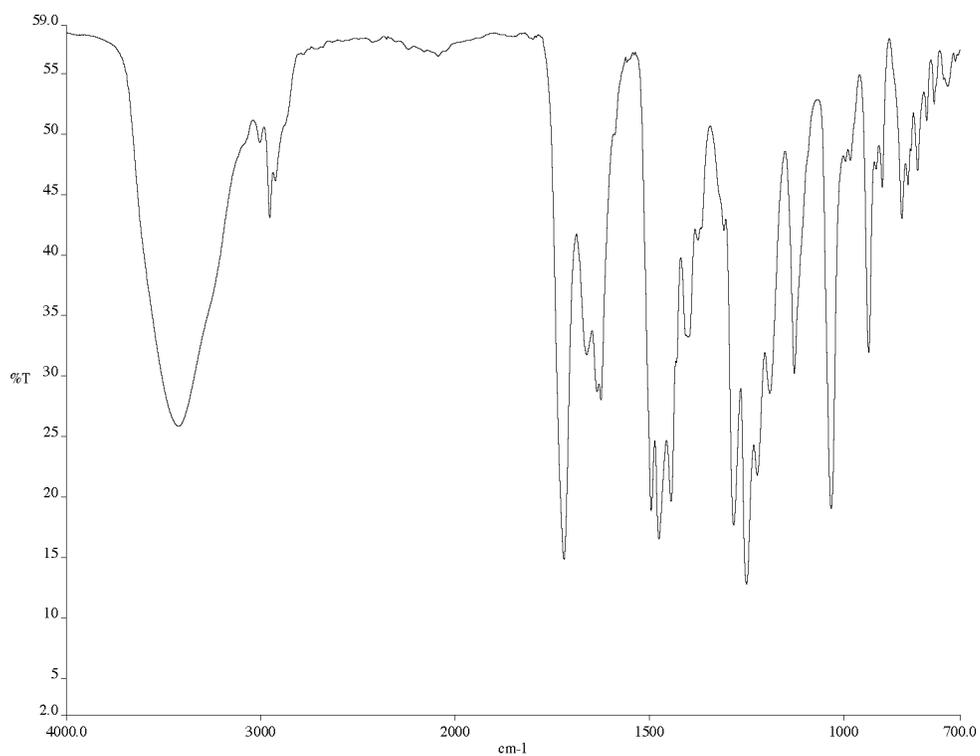
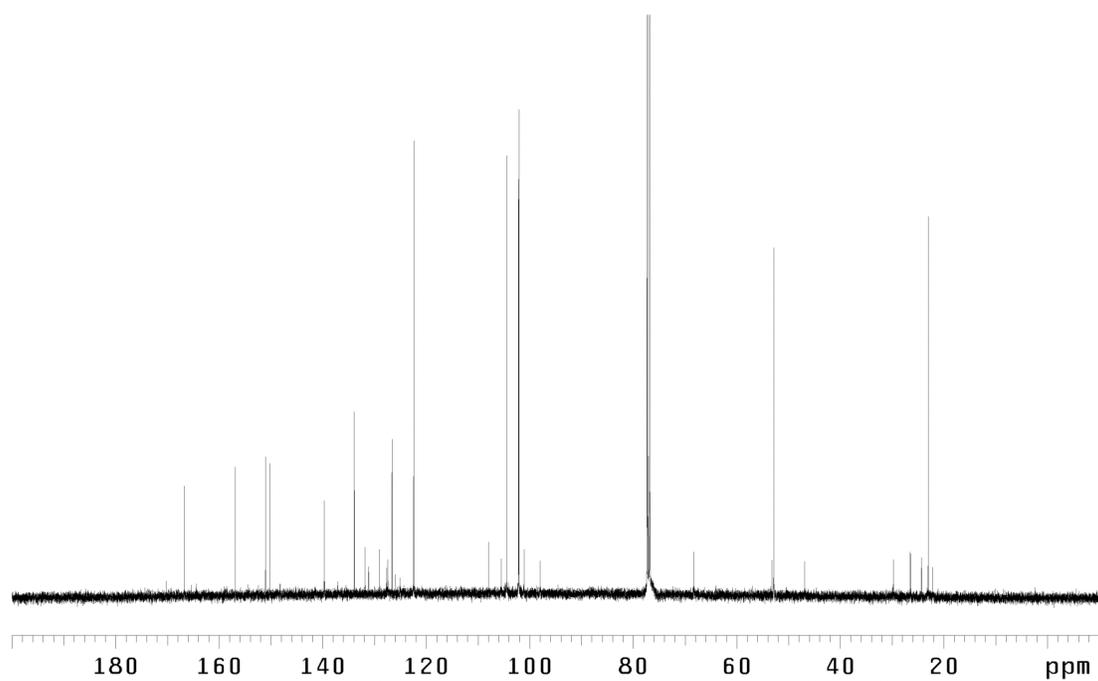
Figure A1.16.1 ¹H NMR (500 MHz, CDCl₃) of compound 292a

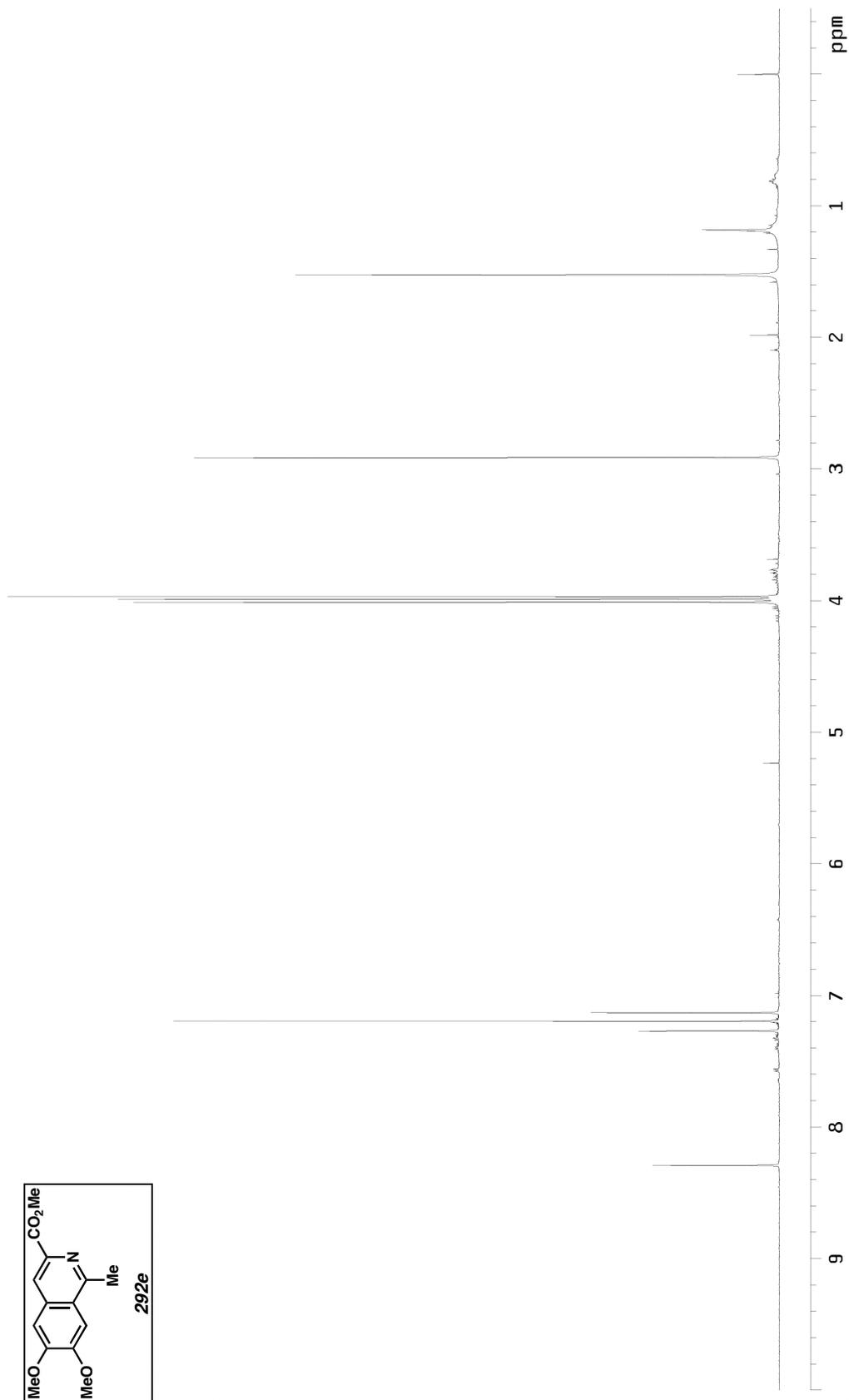
Figure A1.16.2 Infrared spectrum (thin film/NaCl) of compound **292a**Figure A1.16.3 ¹³C NMR (125 MHz, CDCl₃) of compound **292a**

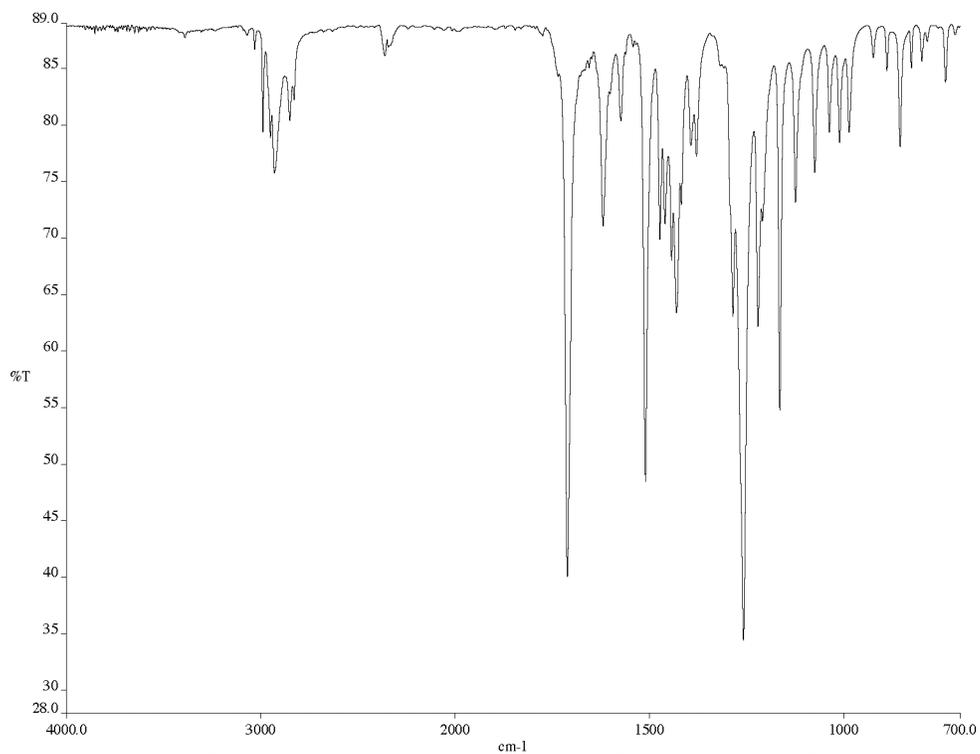
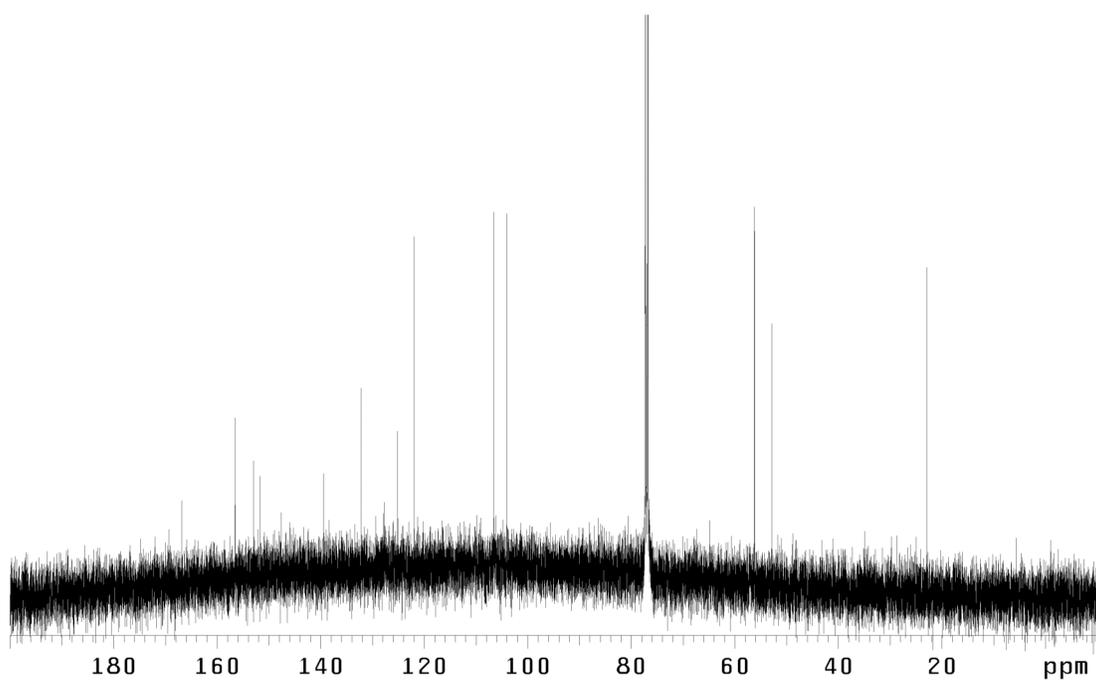
Figure A1.17.1 ^1H NMR (500 MHz, CDCl_3) of compound 292b and 292c

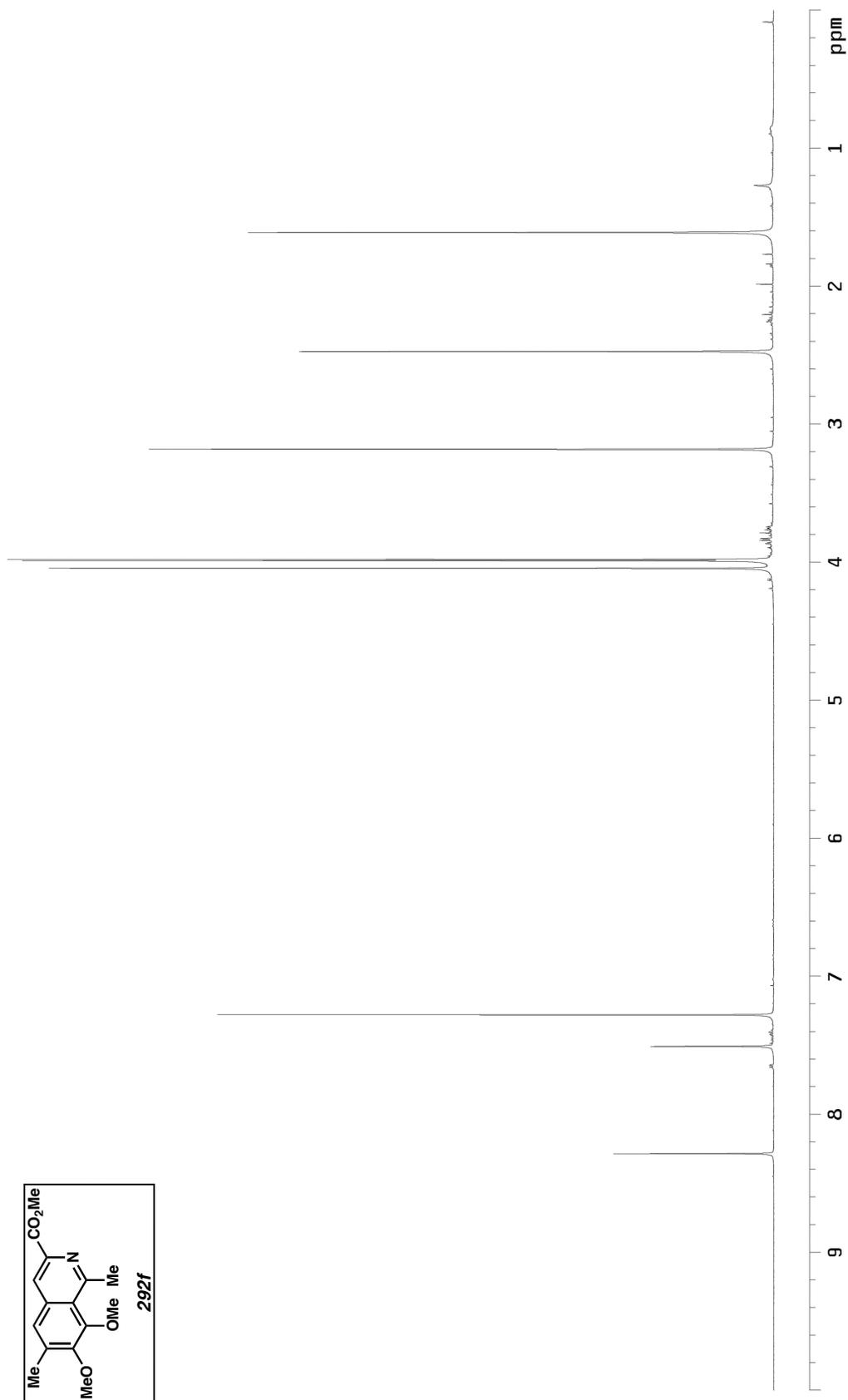
Figure A1.17.2 Infrared spectrum (thin film/NaCl) of compound **292b** and **292c**Figure A1.17.3 ¹³C NMR (125 MHz, CDCl₃) of compound **292b** and **292c**

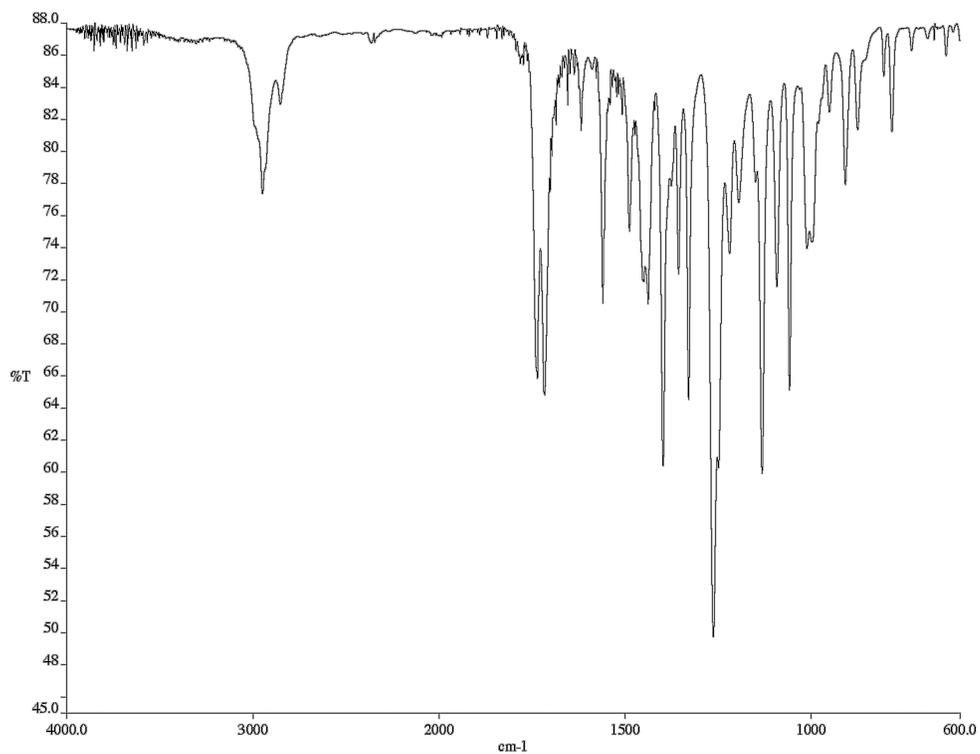
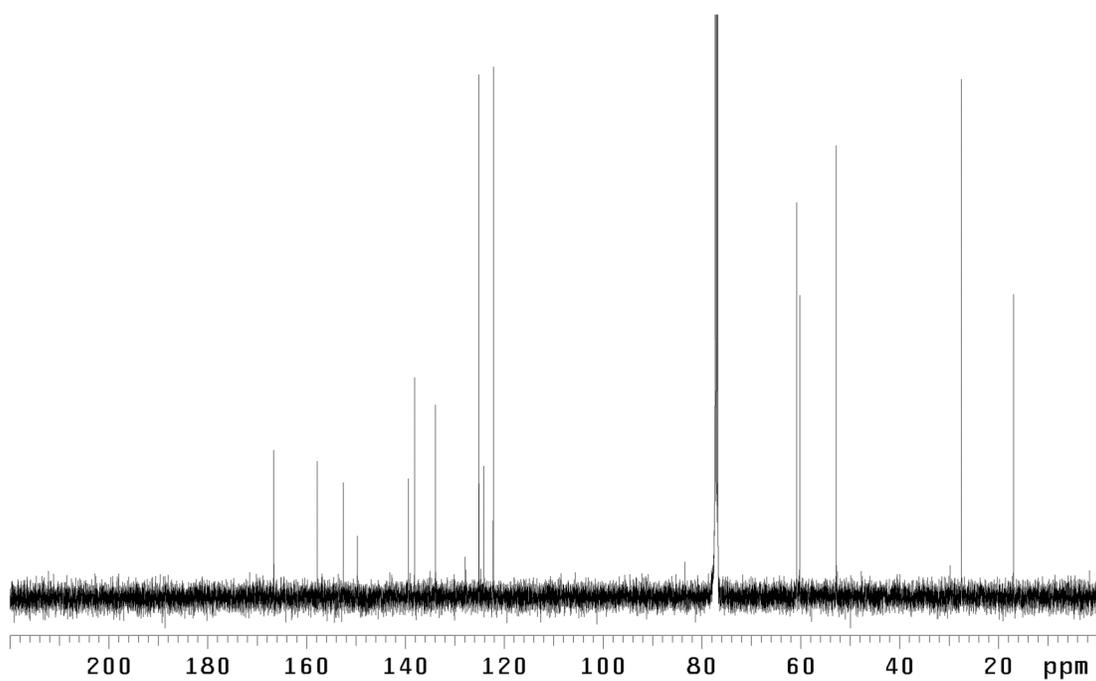
Figure A1.18.1 ¹H NMR (500 MHz, CDCl₃) of compound 292d

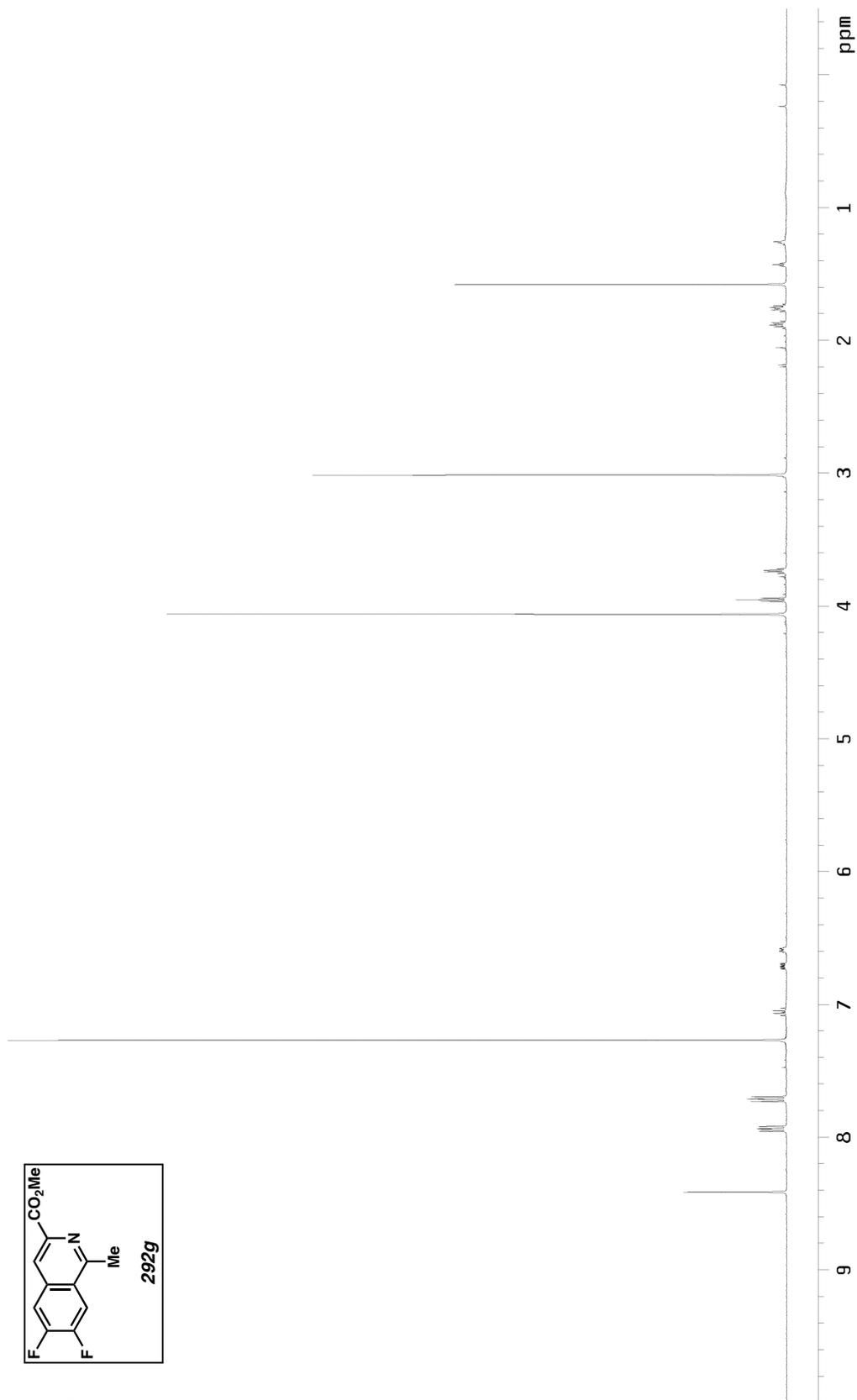
Figure A1.18.2 Infrared spectrum (thin film/NaCl) of compound **292d**Figure A1.18.3 ^{13}C NMR (125 MHz, CDCl_3) of compound **292d**

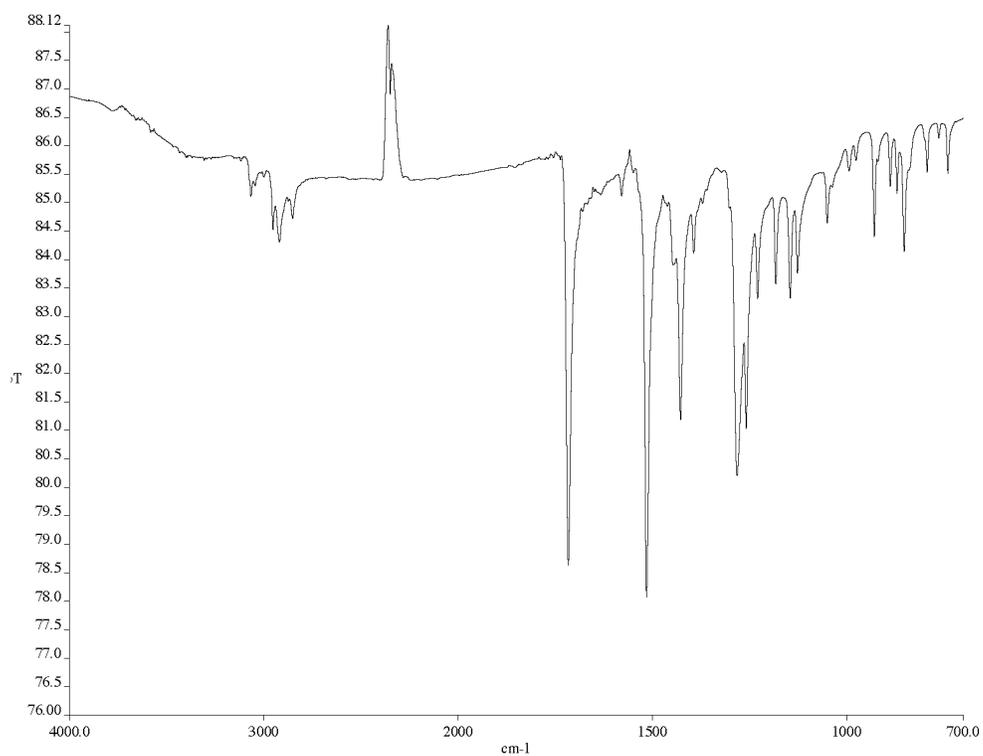
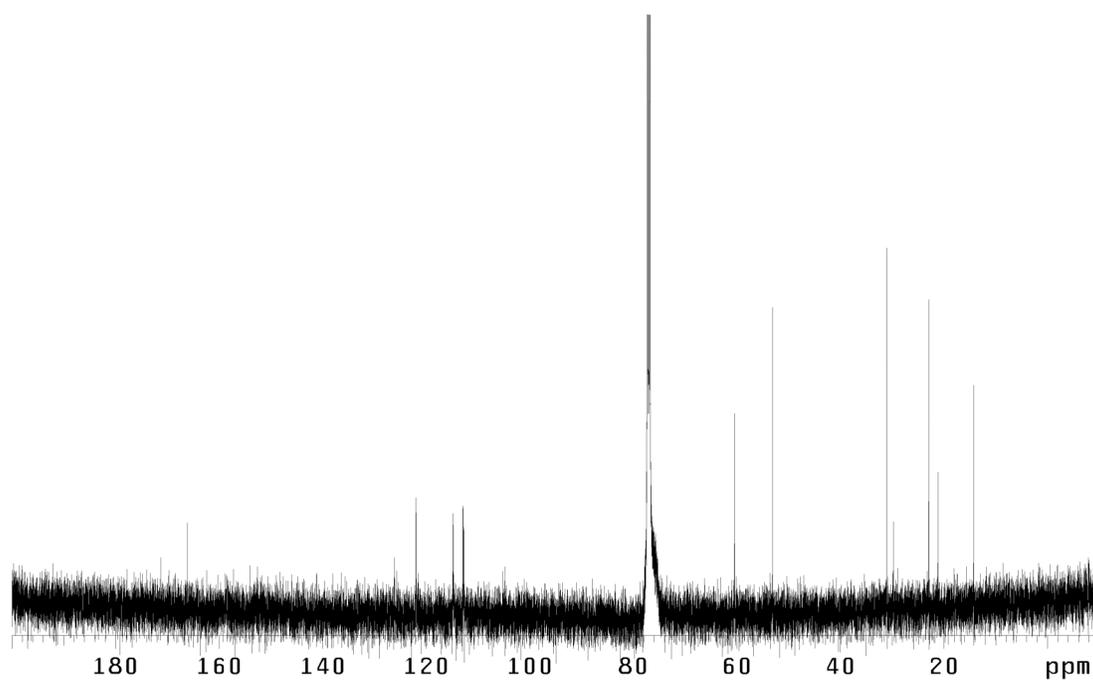
Figure A1.19.1 ^1H NMR (500 MHz, CDCl_3) of compound **292e**

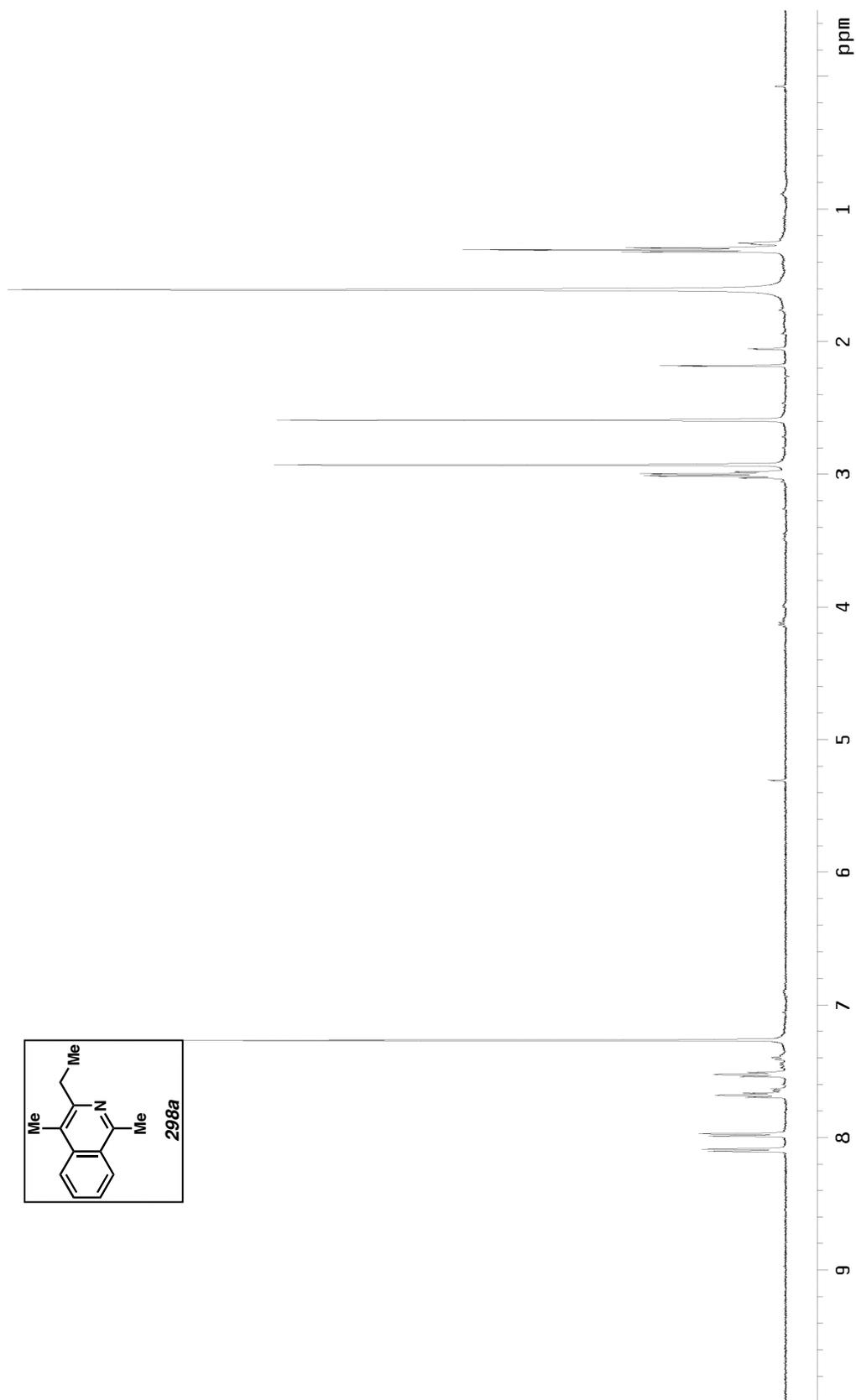
Figure A1.19.2 Infrared spectrum (thin film/NaCl) of compound **292e**Figure A1.19.3 ¹³C NMR (125 MHz, CDCl₃) of compound **292e**

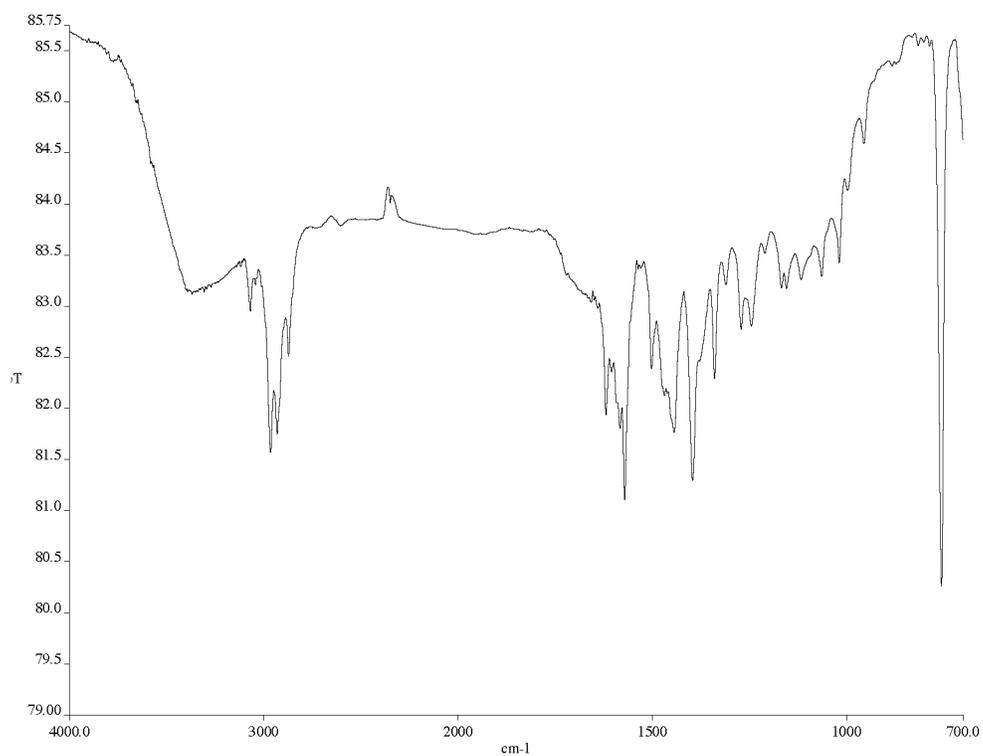
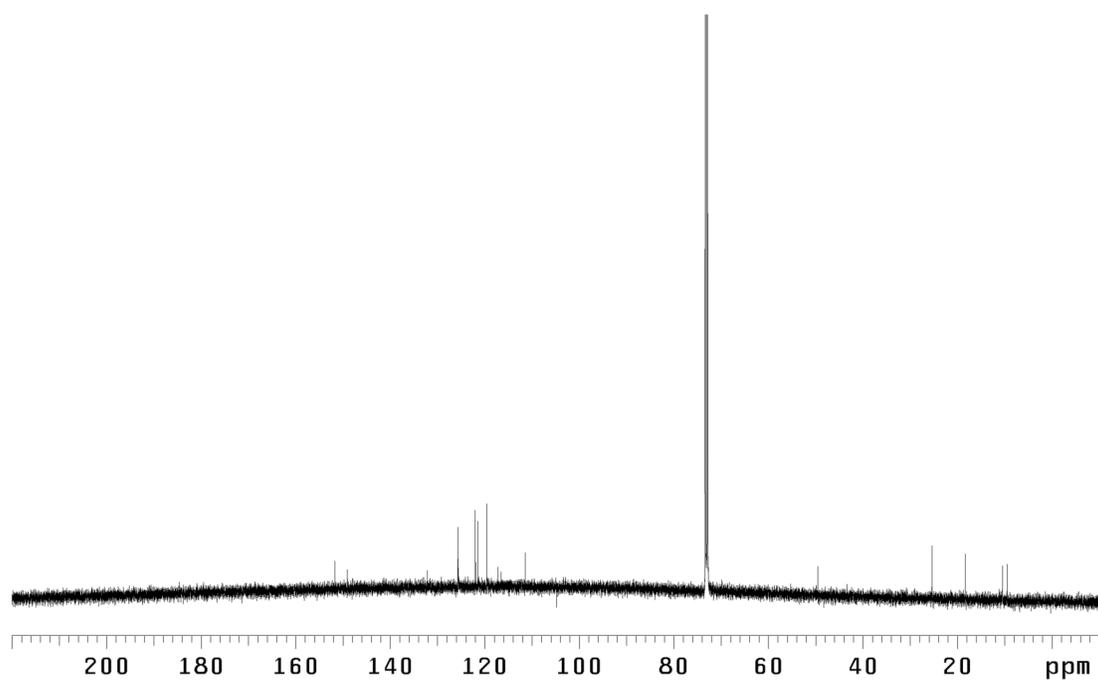
Figure A1.20.1 ¹H NMR (500 MHz, CDCl₃) of compound 292f

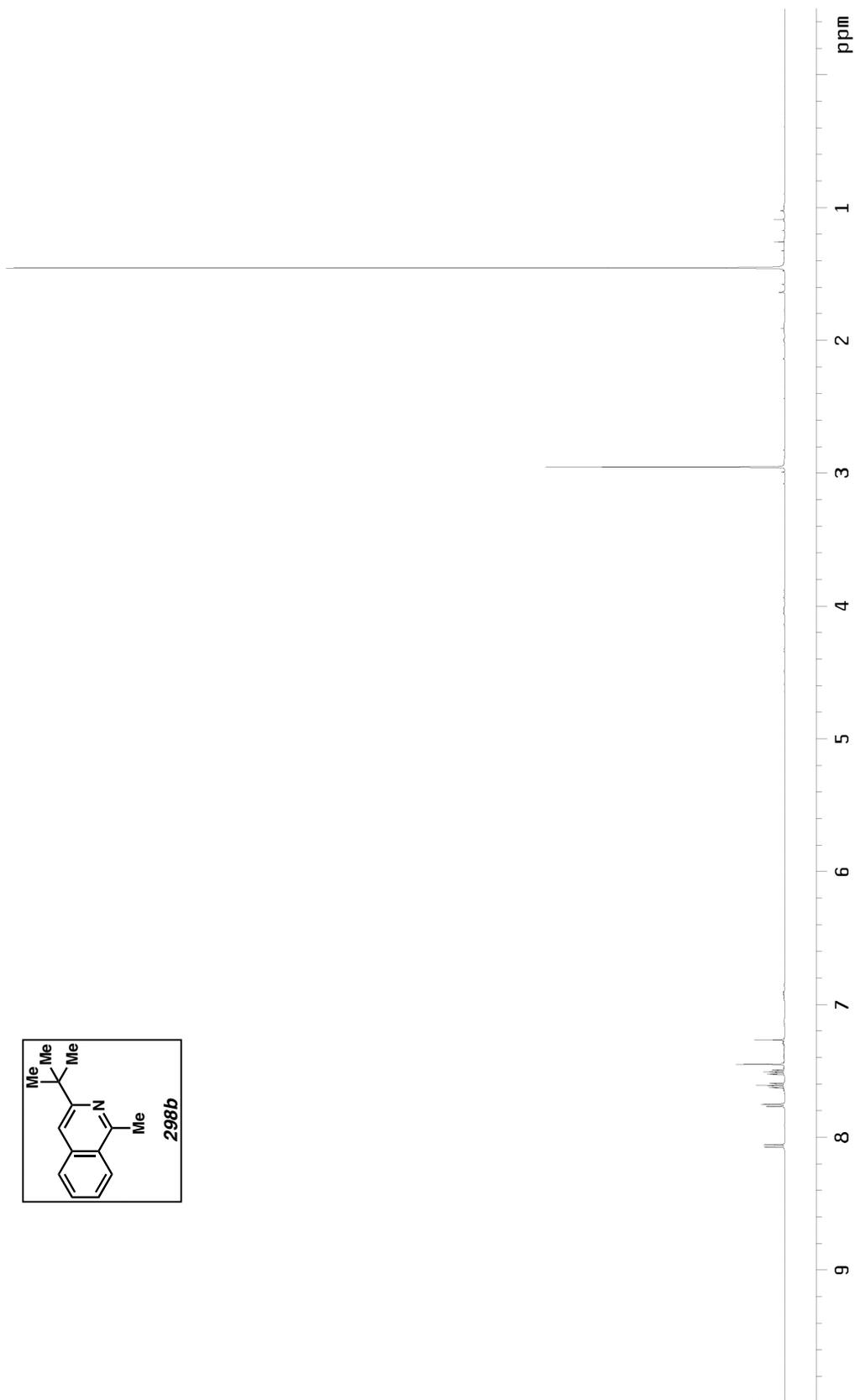
Figure A1.20.2 Infrared spectrum (thin film/NaCl) of compound **292f**Figure A1.20.3 ¹³C NMR (125 MHz, CDCl₃) of compound **292f**

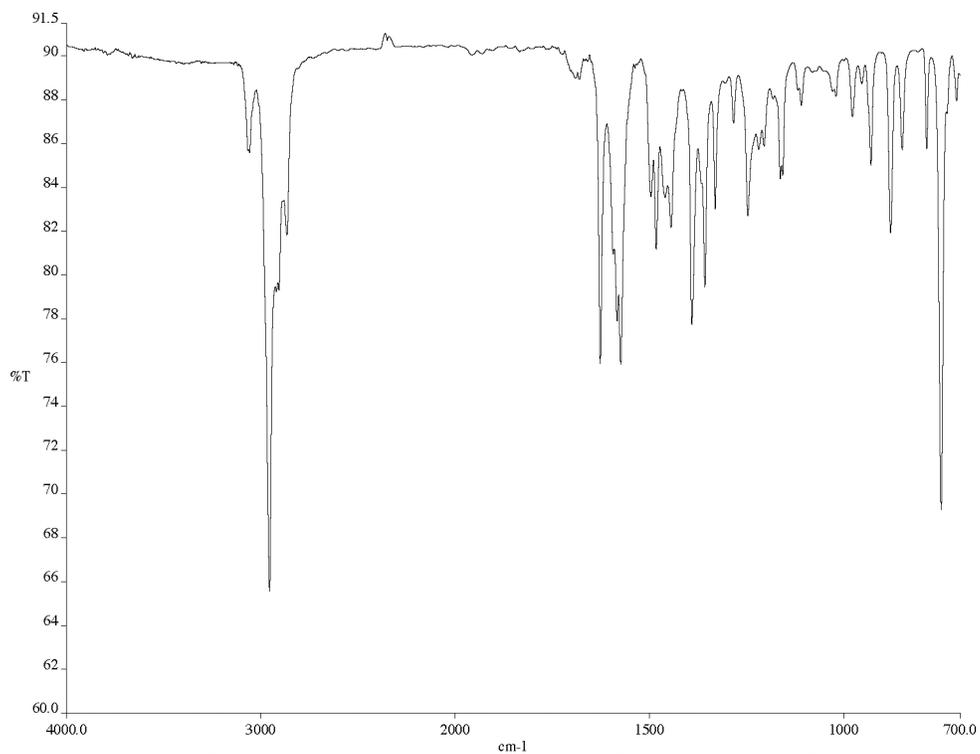
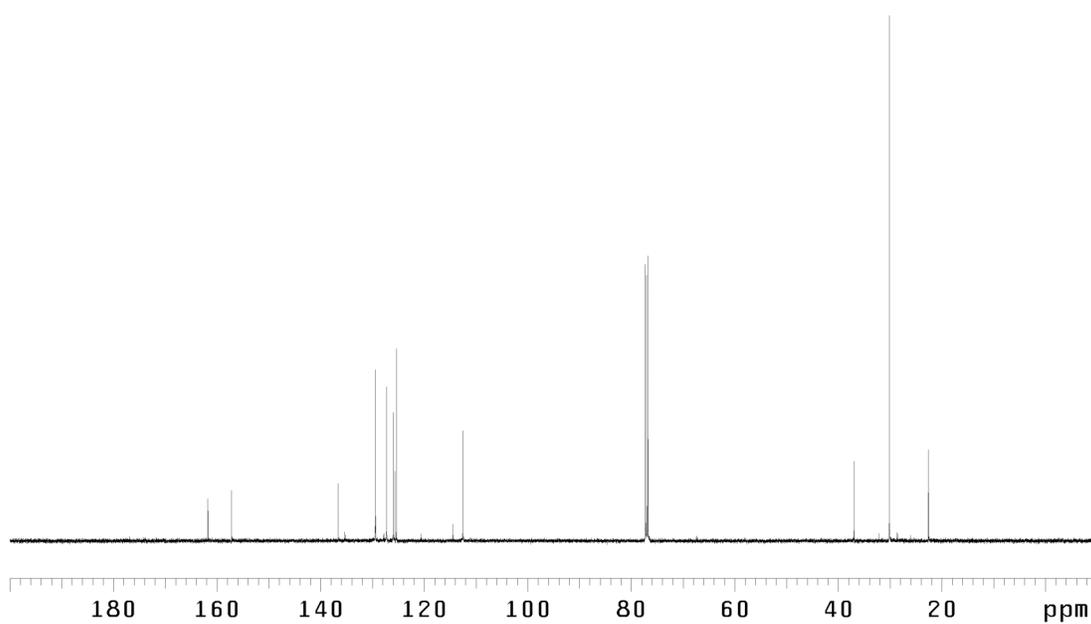
Figure A1.21.1 ^1H NMR (500 MHz, CDCl_3) of compound **292g**

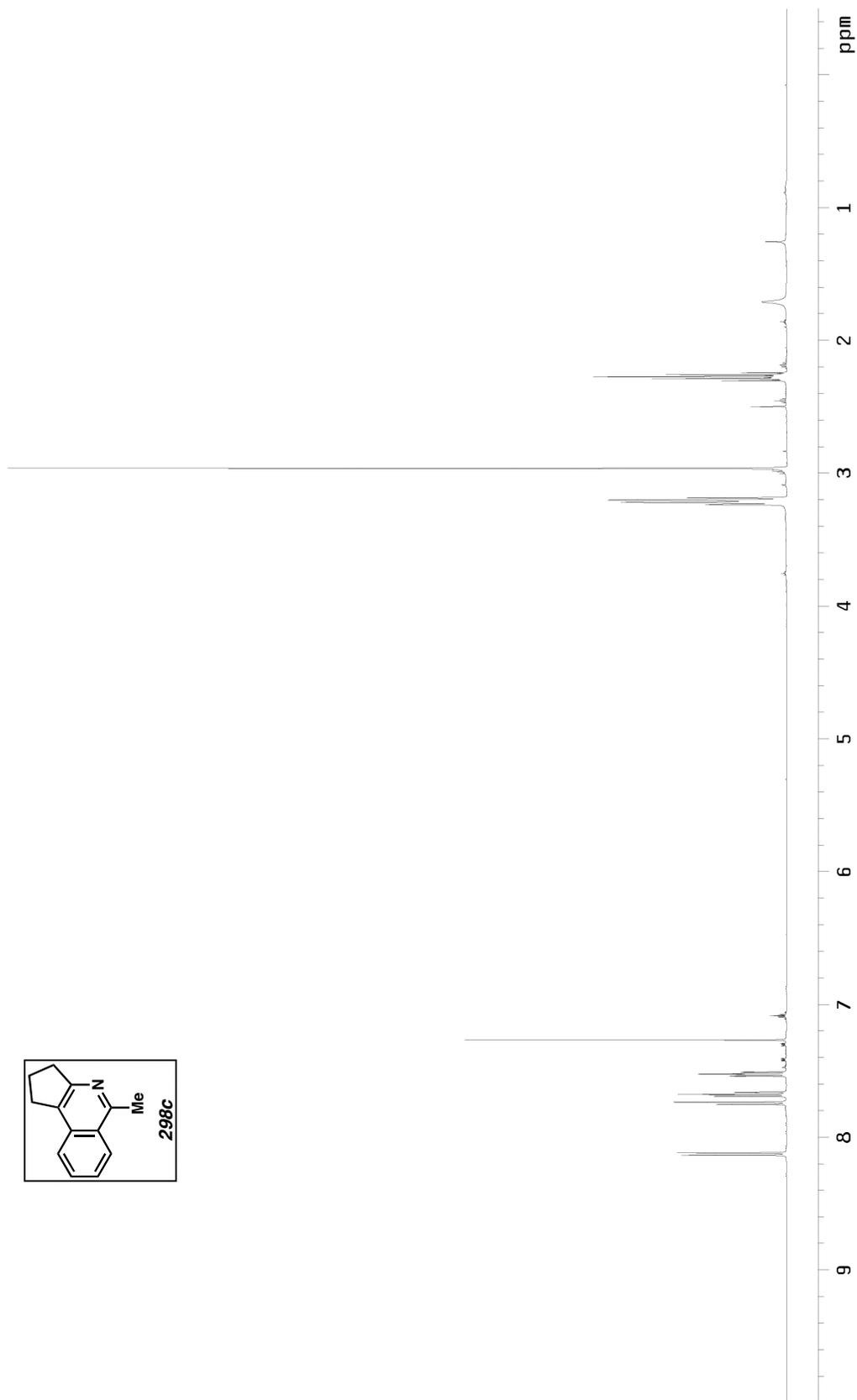
Figure A1.21.2 Infrared spectrum (thin film/NaCl) of compound **292g**Figure A1.21.3 ¹³C NMR (125 MHz, CDCl₃) of compound **292g**

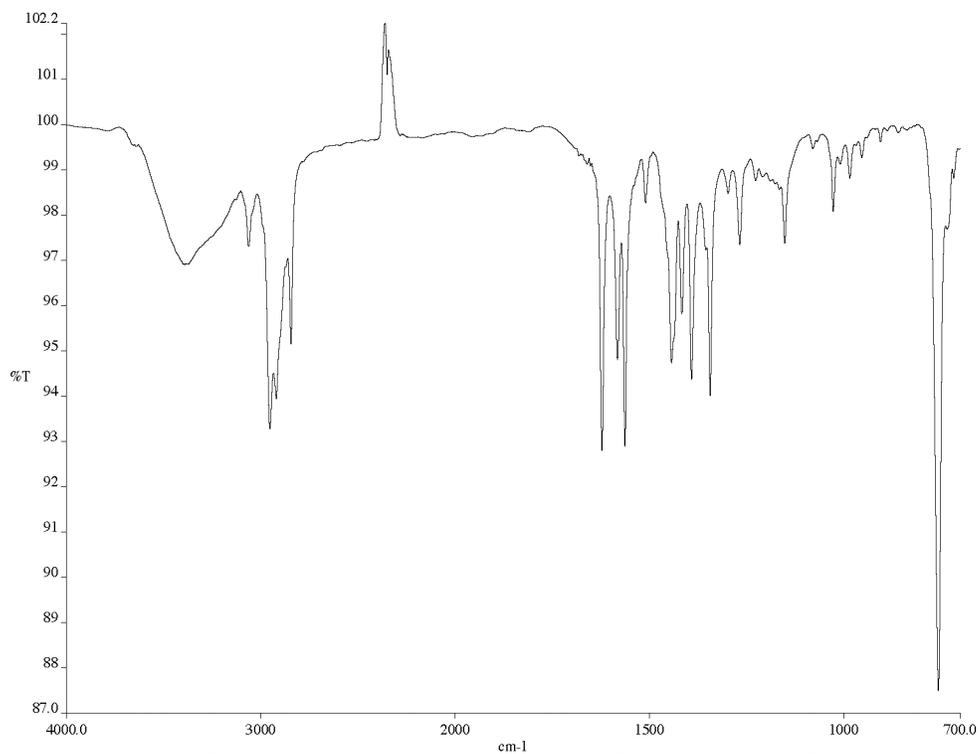
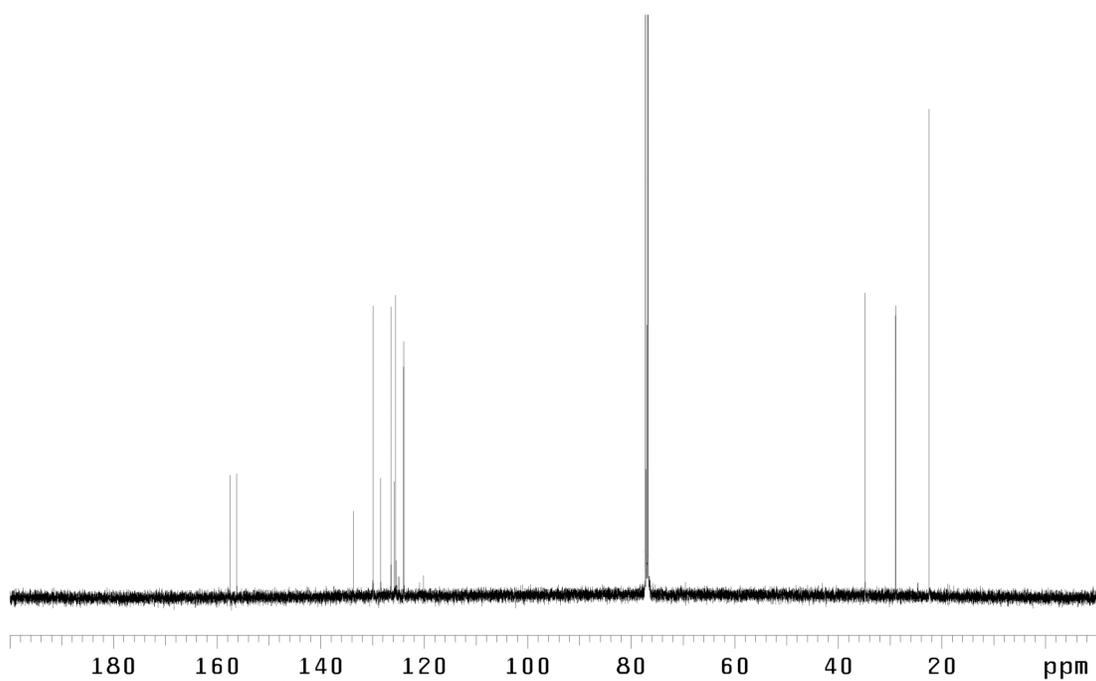
Figure A1.22.1 ^1H NMR (500 MHz, acetone- d_6) of compound **298a**

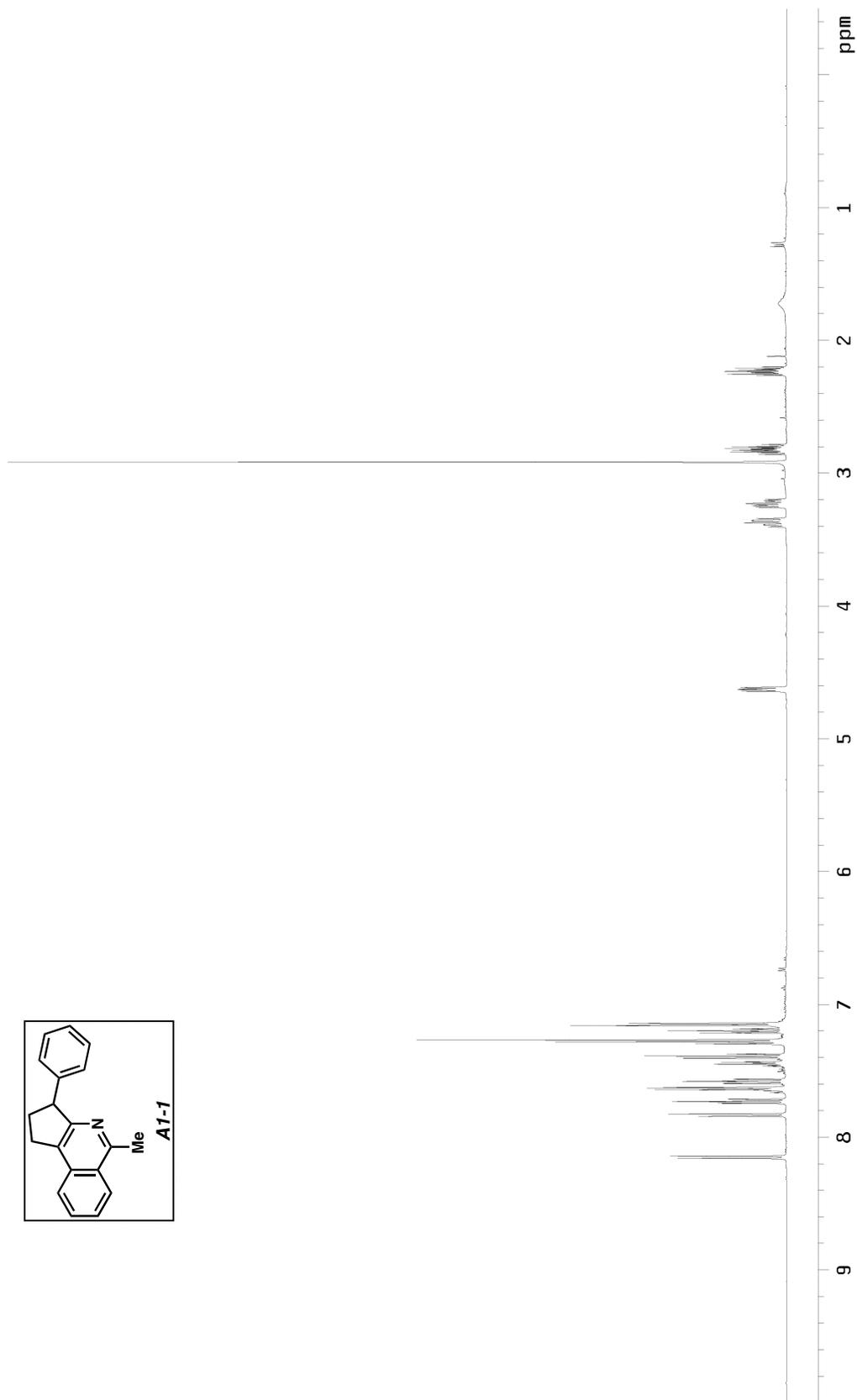
Figure A1.22.2 Infrared spectrum (thin film/NaCl) of compound **298a**Figure A1.22.3 ¹³C NMR (125 MHz, acetone-d₆) of compound **298a**

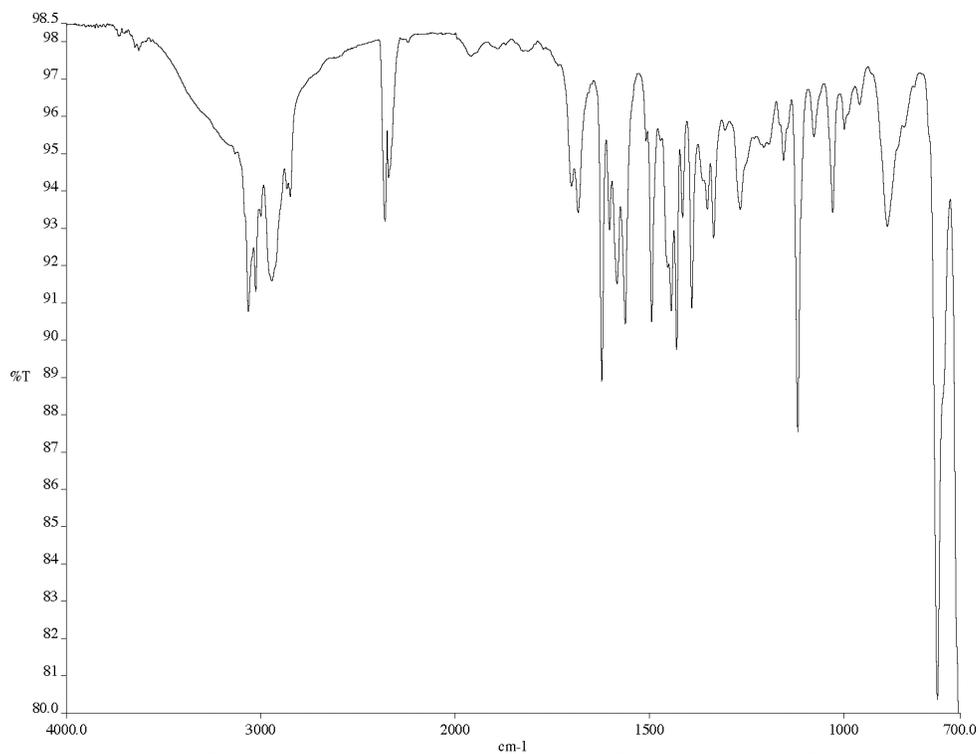
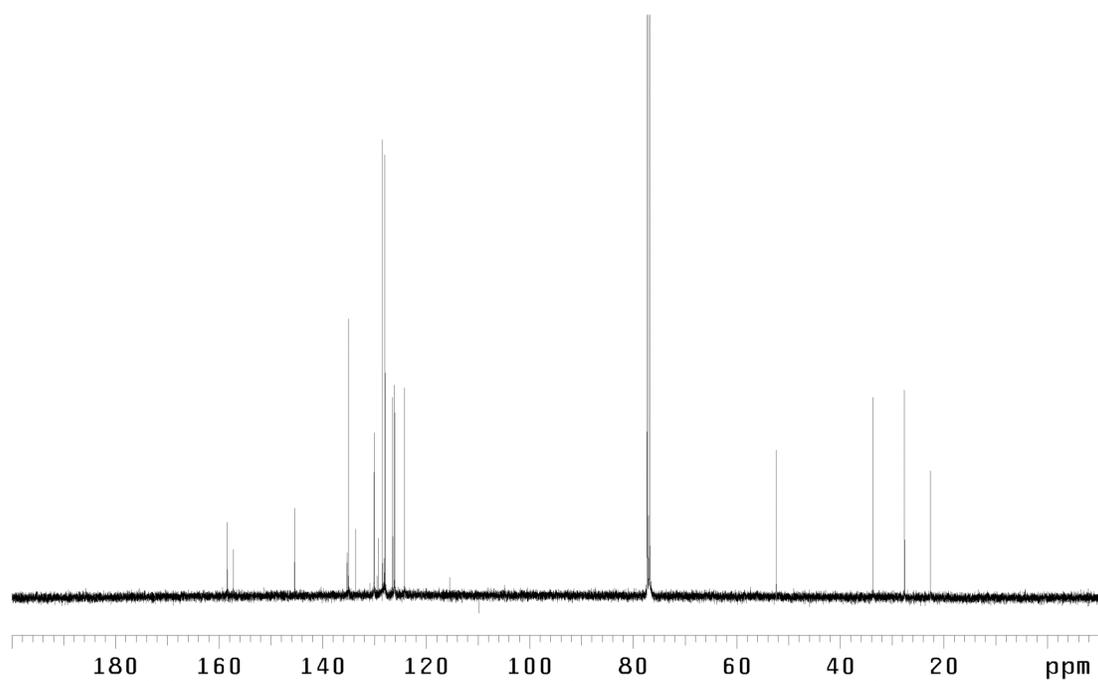
Figure A1.23.1 ^1H NMR (500 MHz, CDCl_3) of compound **298b**

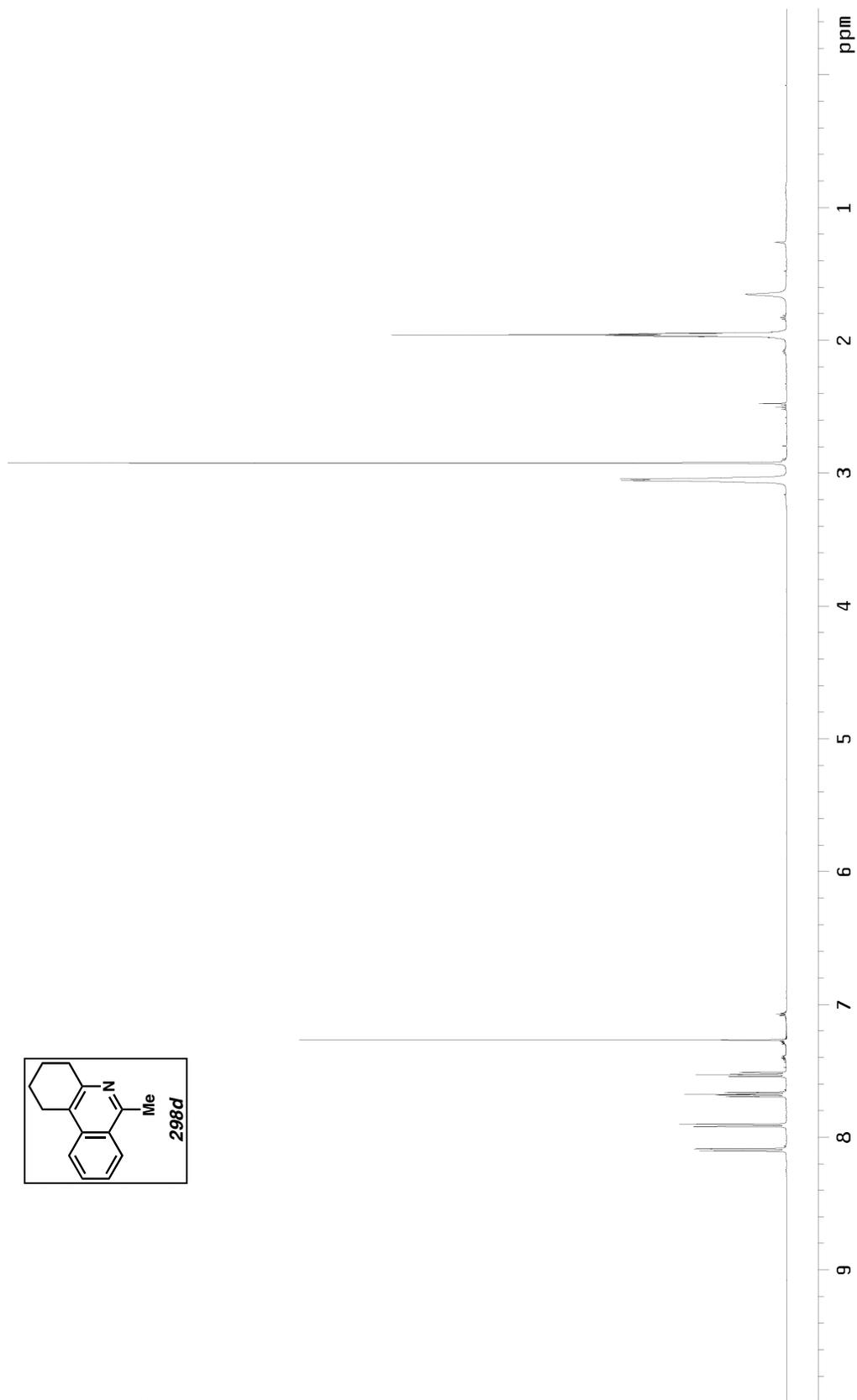
Figure A1.23.2 Infrared spectrum (thin film/NaCl) of compound **298b**Figure A1.23.3 ¹³C NMR (125 MHz, CDCl₃) of compound **298b**

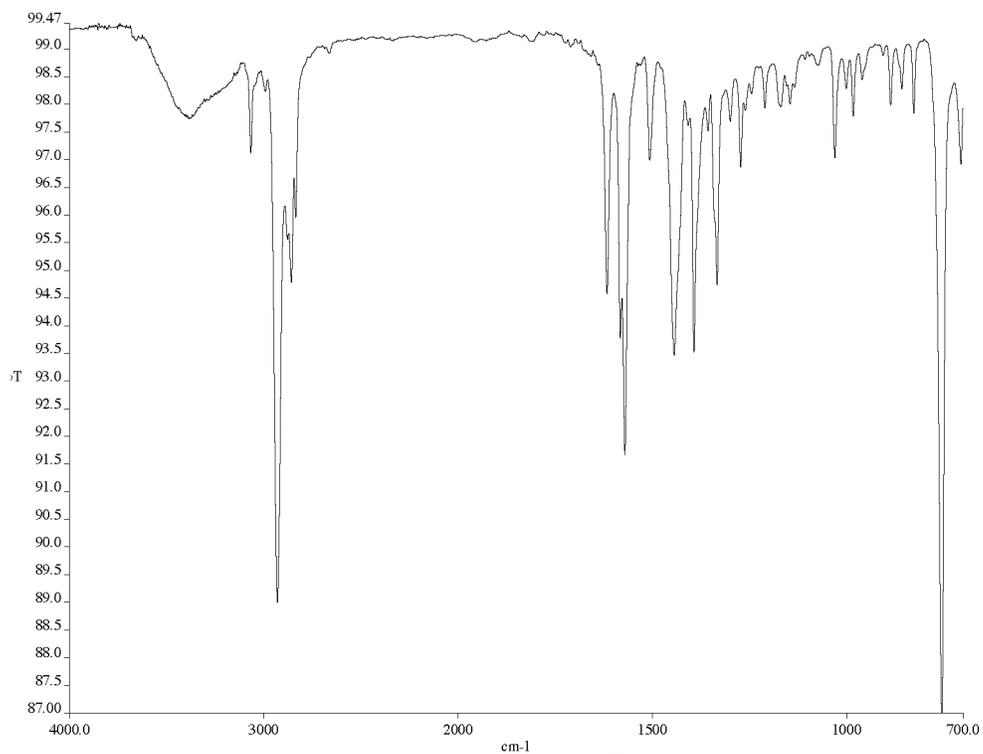
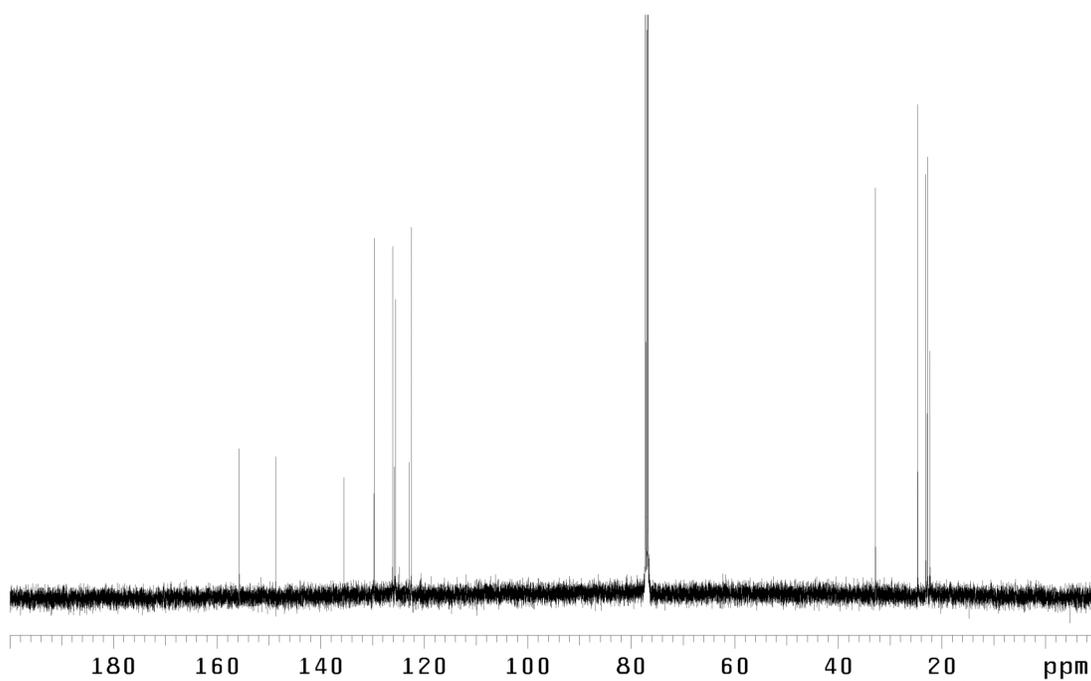
Figure A1.24.1 ^1H NMR (500 MHz, CDCl_3) of compound **298c**

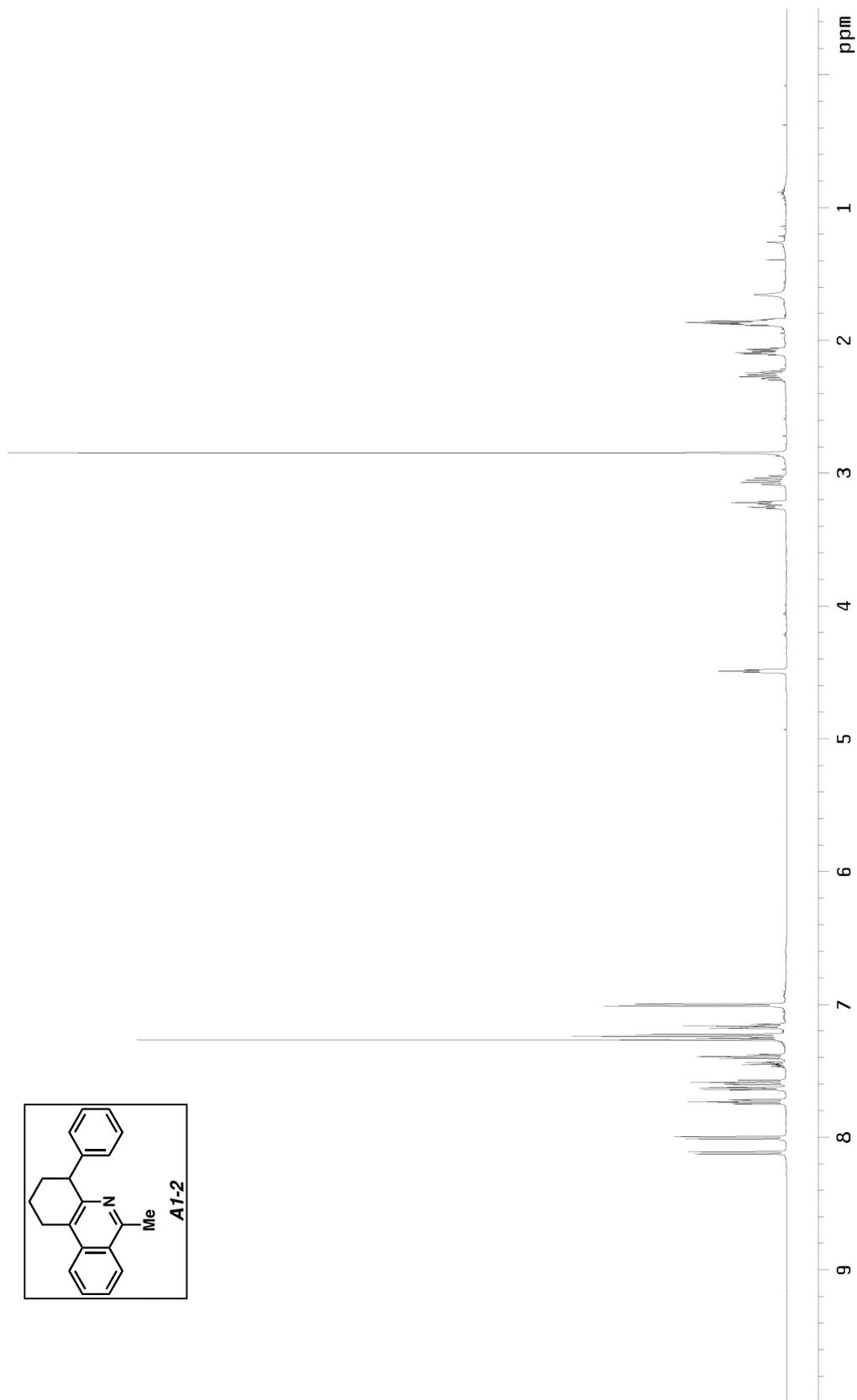
Figure A1.24.2 Infrared spectrum (thin film/NaCl) of compound **298c**Figure A1.24.3 ¹³C NMR (500 MHz, CDCl₃) of compound **298c**

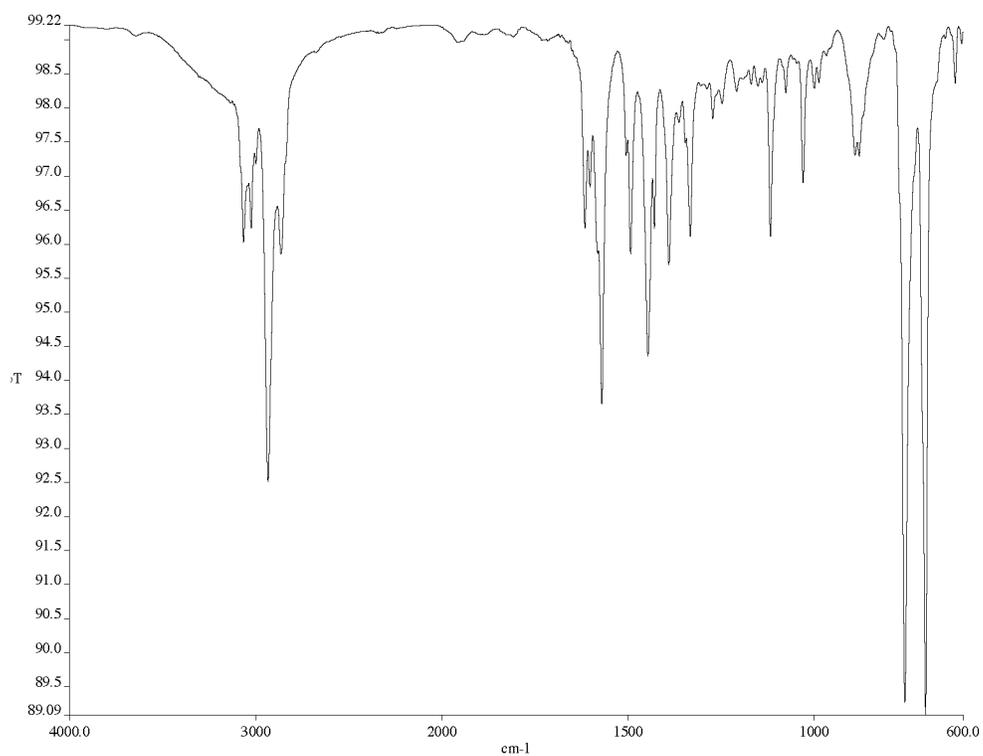
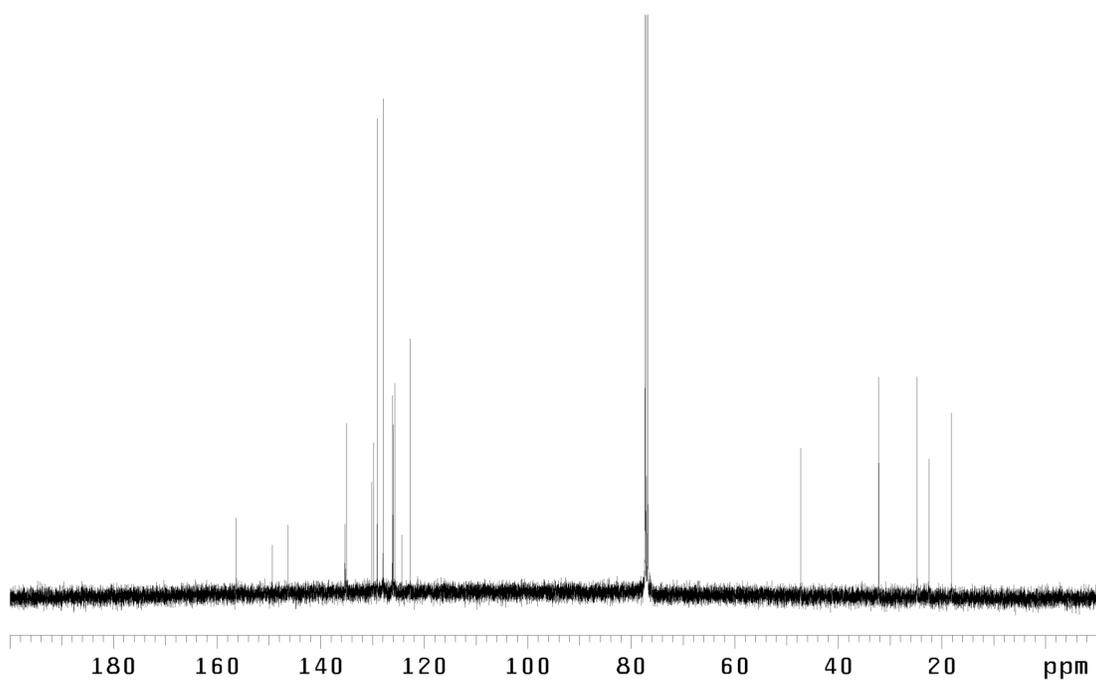
Figure A1.25.1 ¹H NMR (500 MHz, CDCl₃) of compound A1-1

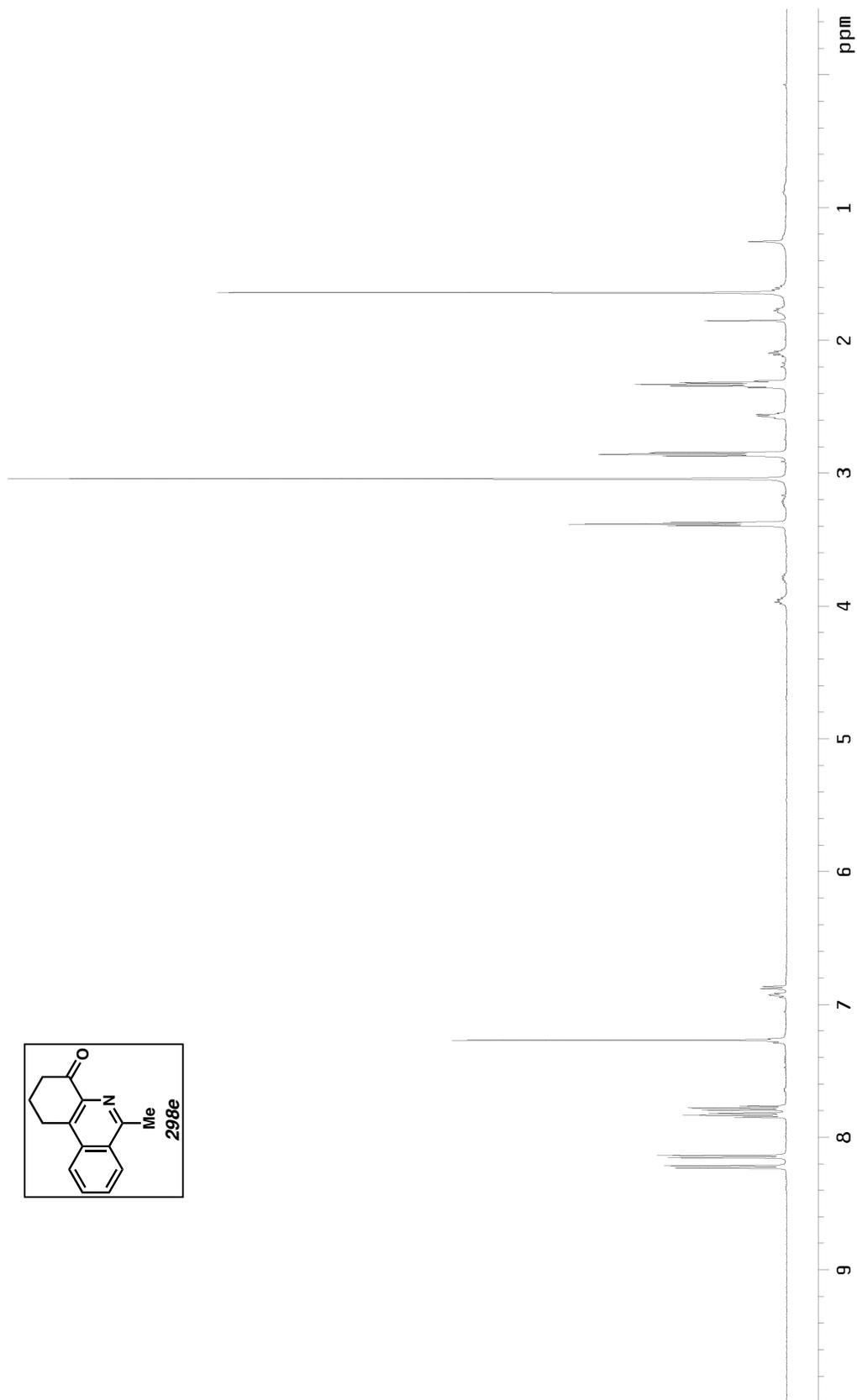
Figure A1.25.2 Infrared spectrum (thin film/NaCl) of compound **A1-1**Figure A1.25.3 ¹³C NMR (125 MHz, CDCl₃) of compound **A1-1**

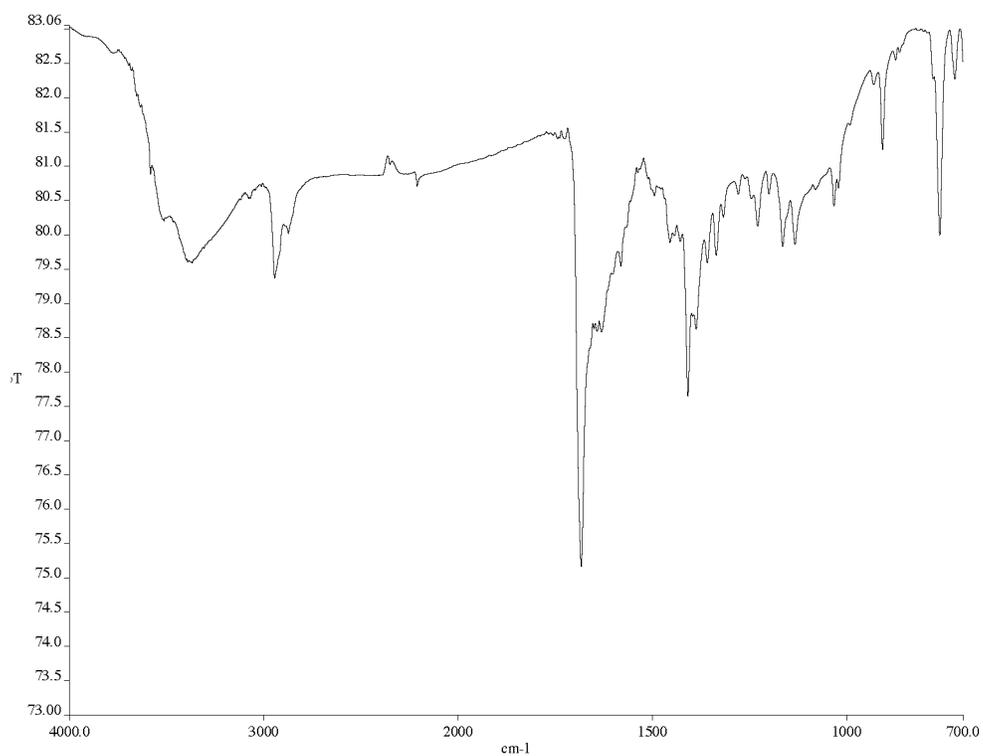
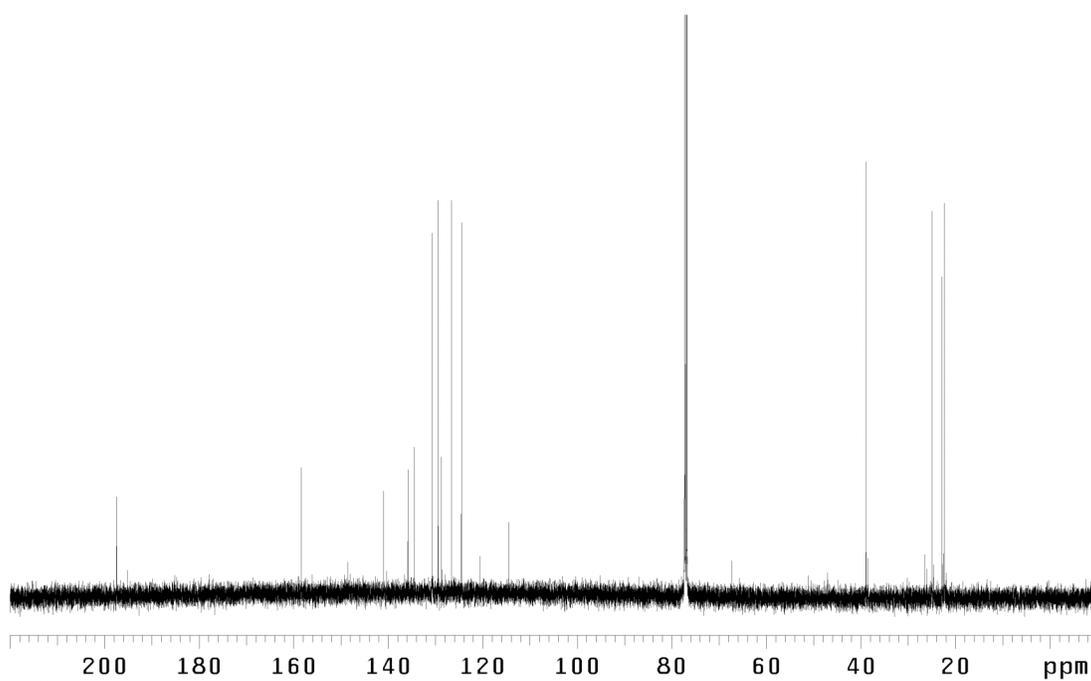
Figure A1.26.1 ^1H NMR (500 MHz, CDCl_3) of compound **298d**

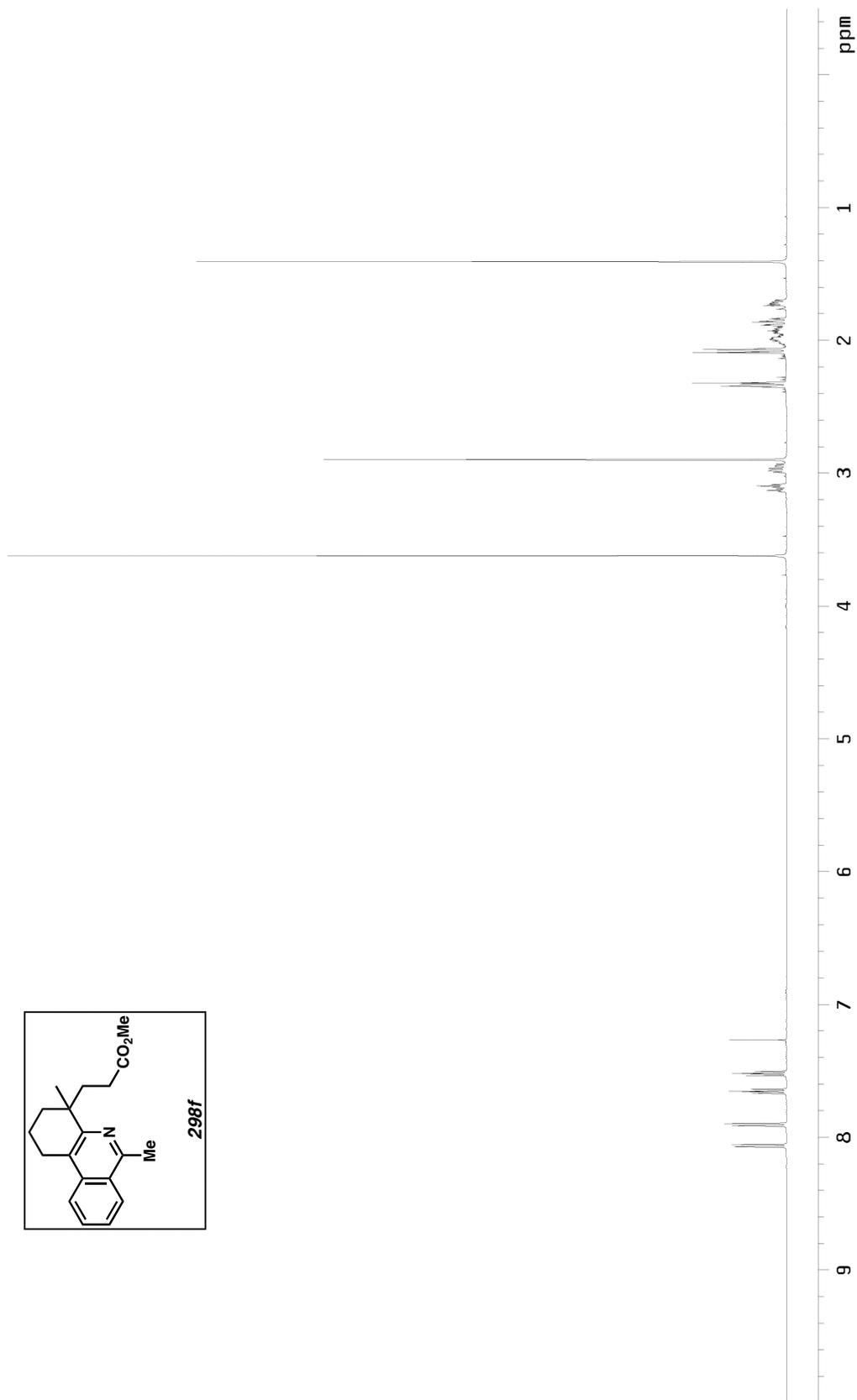
Figure A1.26.2 Infrared spectrum (thin film/NaCl) of compound **298d**Figure A1.26.3 ¹³C NMR (125 MHz, CDCl₃) of compound **298d**

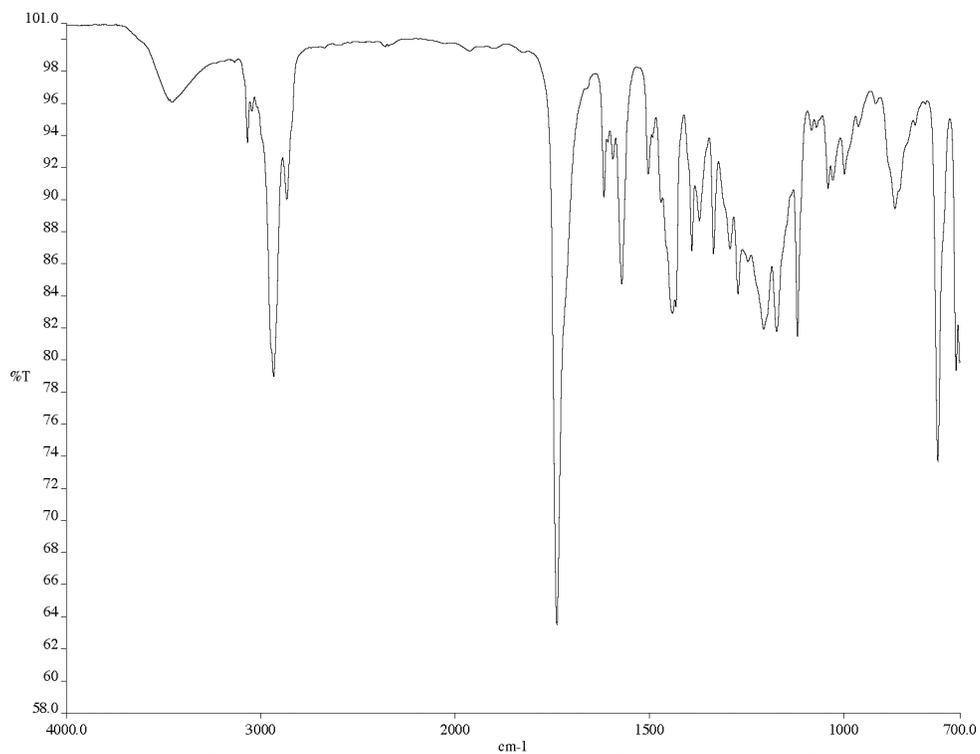
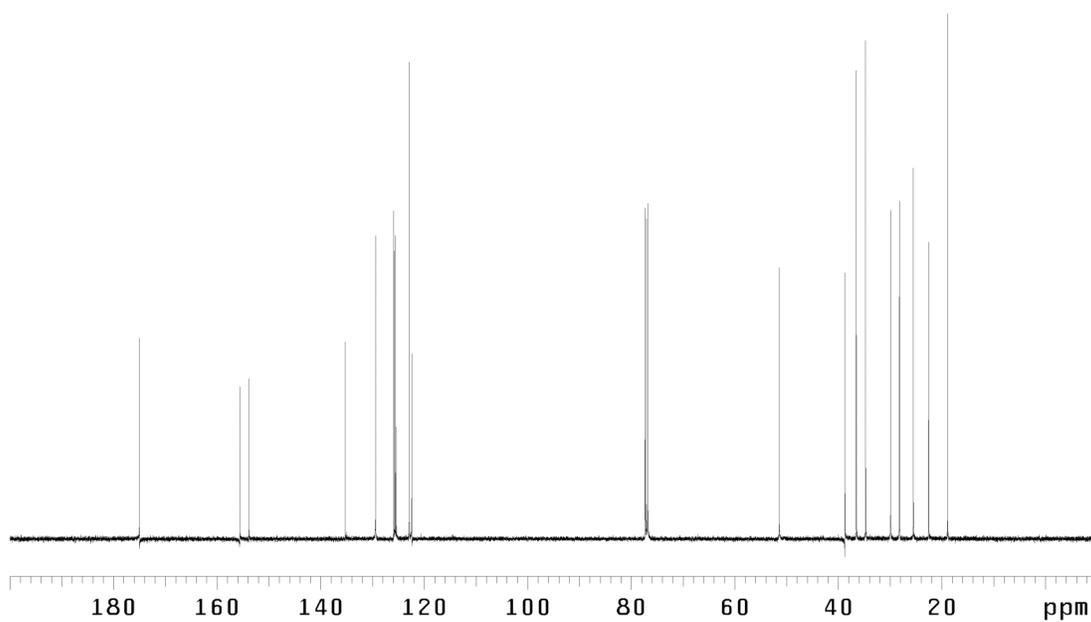
Figure A1.27.1 ^1H NMR (500 MHz, CDCl_3) of compound A1-2

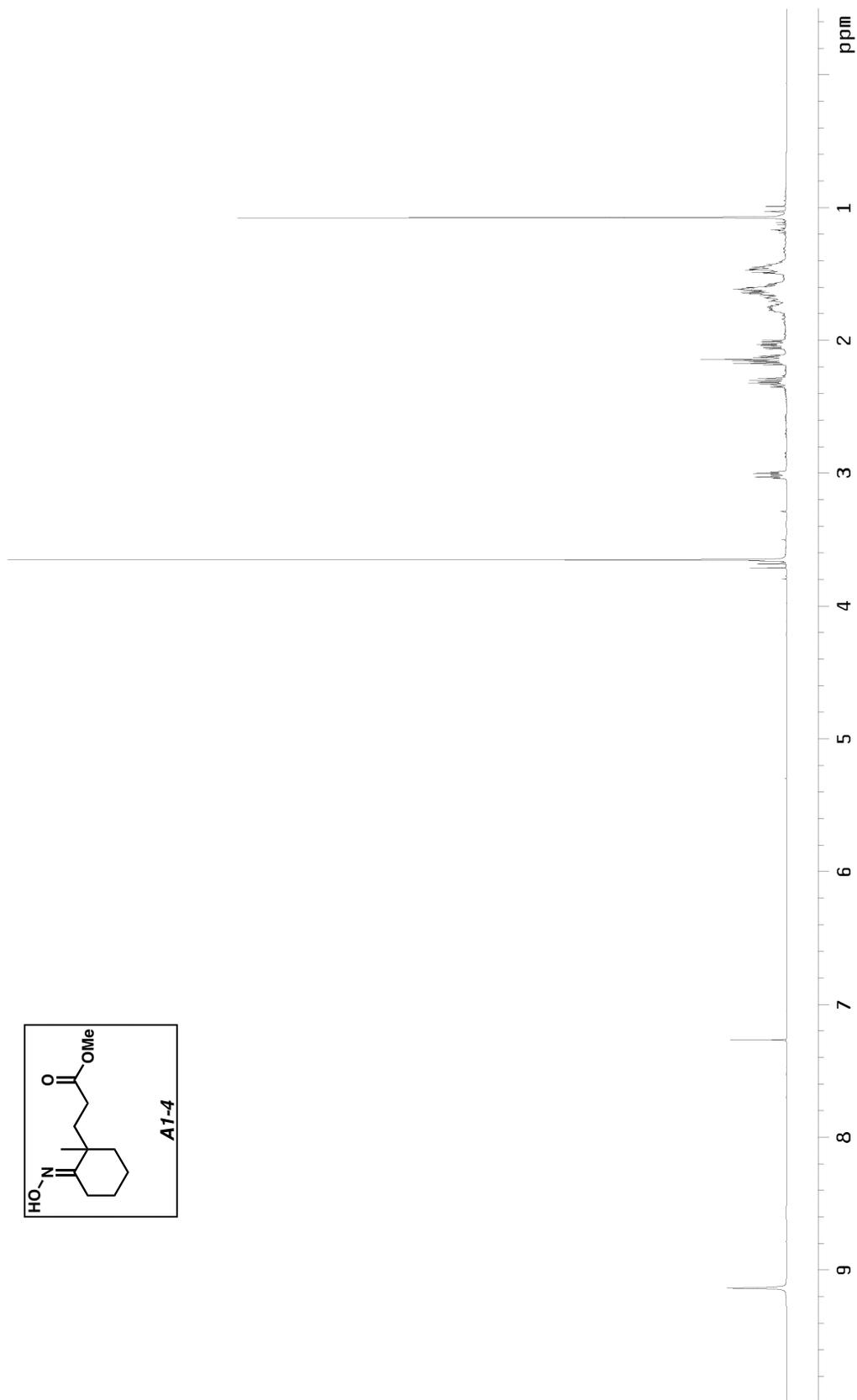
Figure A1.27.2 Infrared spectrum (thin film/NaCl) of compound **A1-2**Figure A1.27.3 ¹³C NMR (125 MHz, CDCl₃) of compound **A1-2**

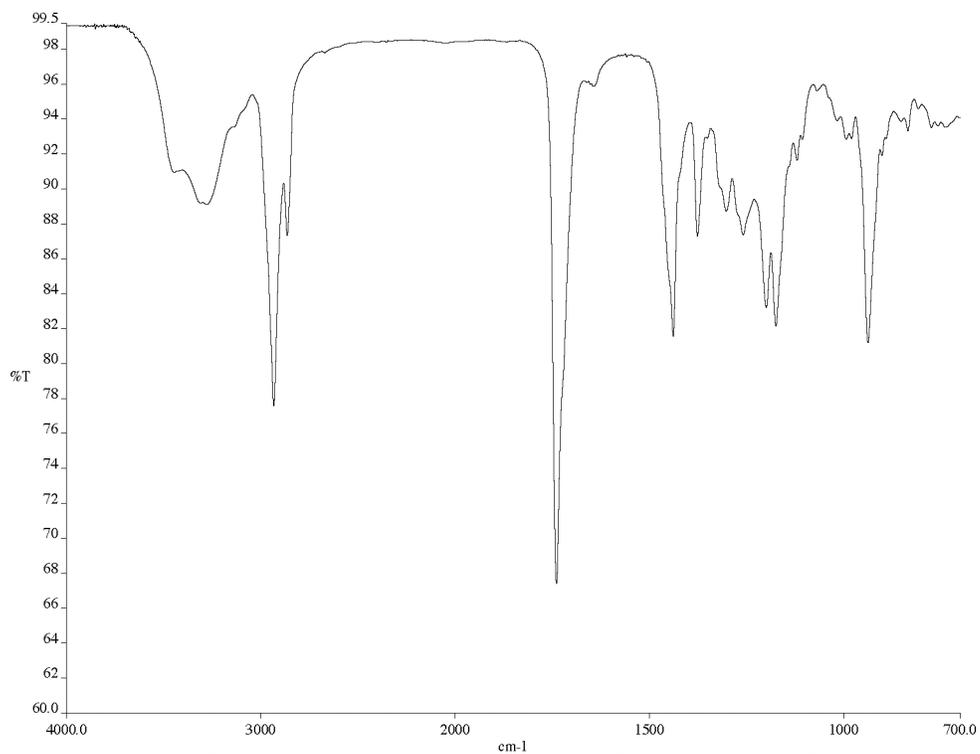
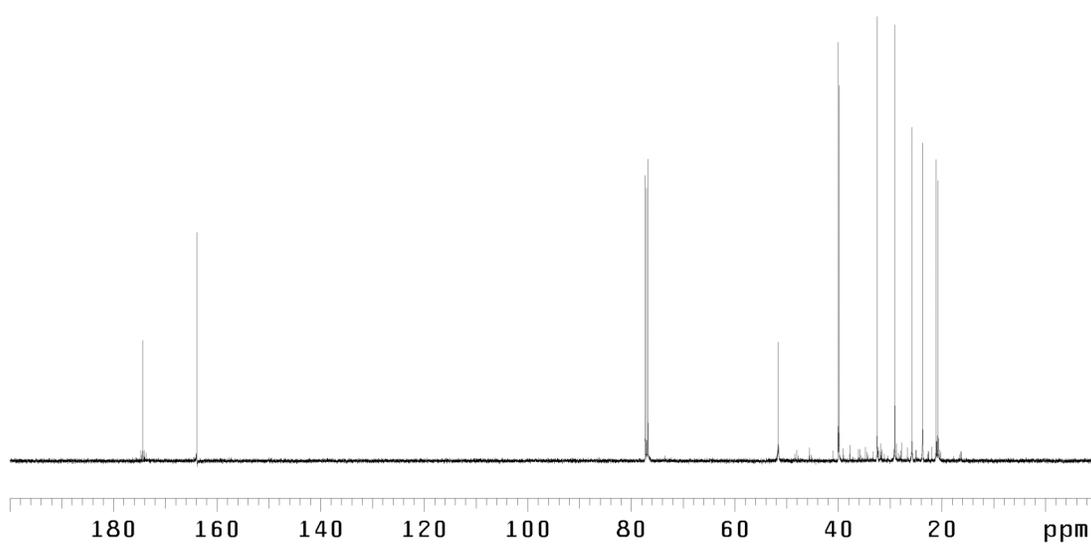
Figure A1.28.1 ^1H NMR (500 MHz, CDCl_3) of compound **298e**

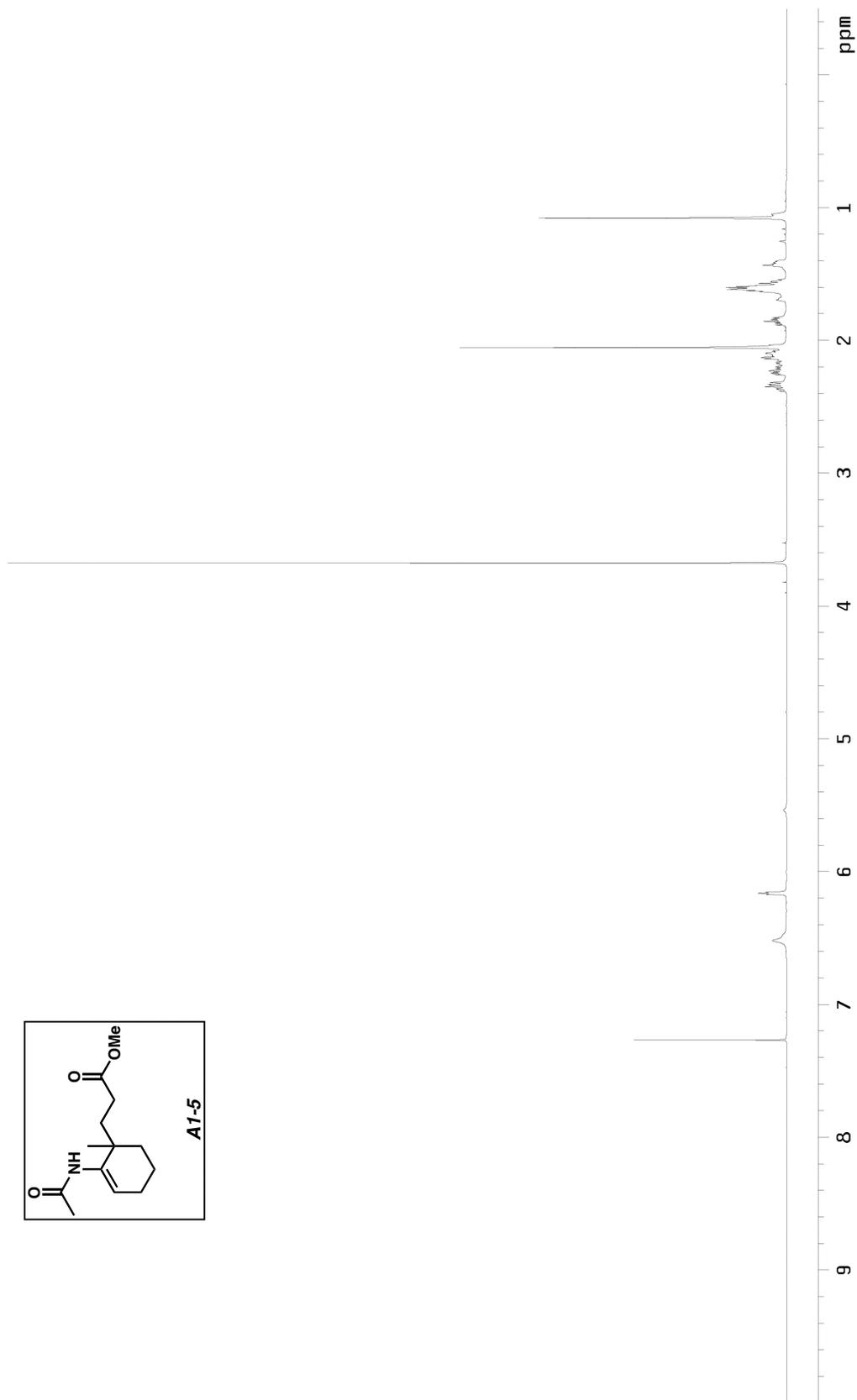
Figure A1.28.2 Infrared spectrum (thin film/NaCl) of compound **298e**Figure A1.28.3 ¹³C NMR (125 MHz, CDCl₃) of compound **298e**

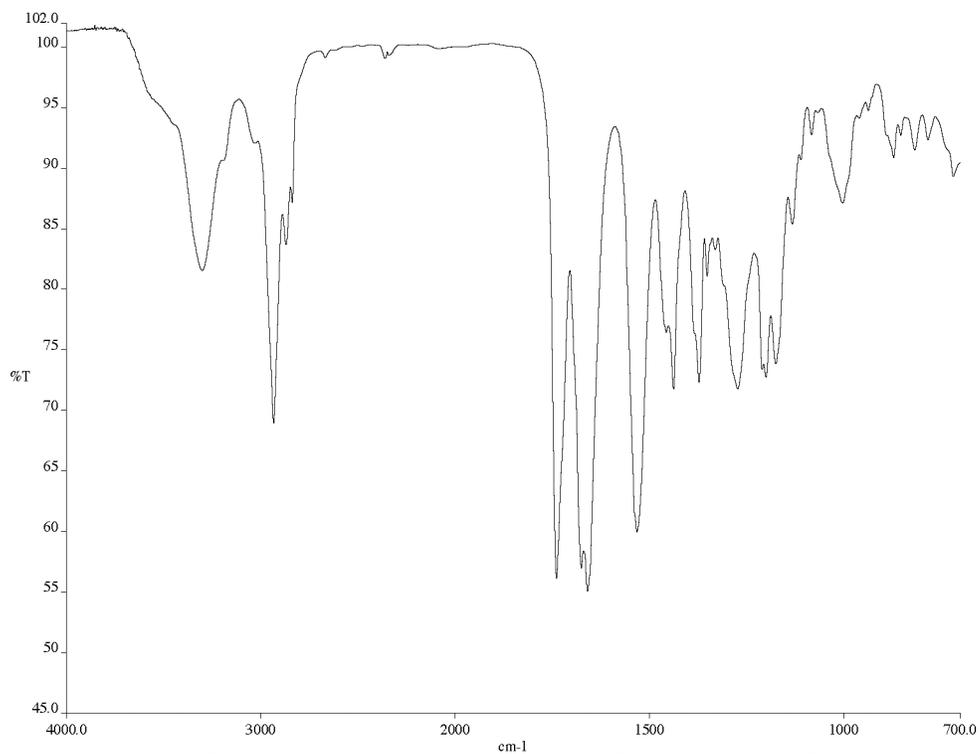
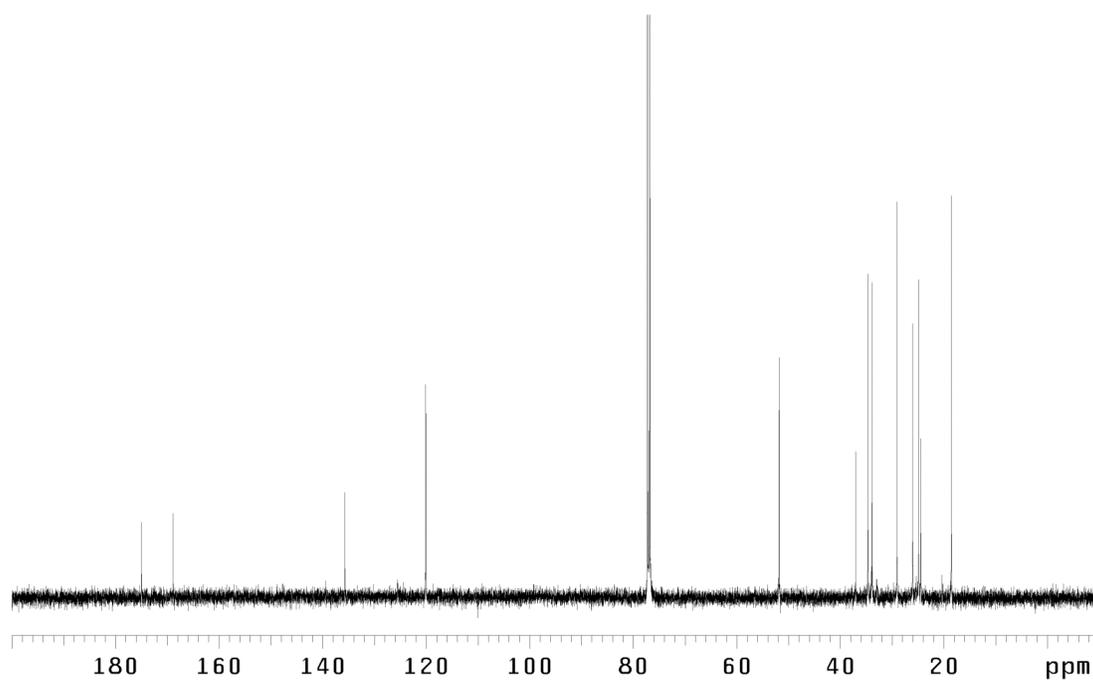
Figure A1.29.1 ¹H NMR (500 MHz, CDCl₃) of compound 298f

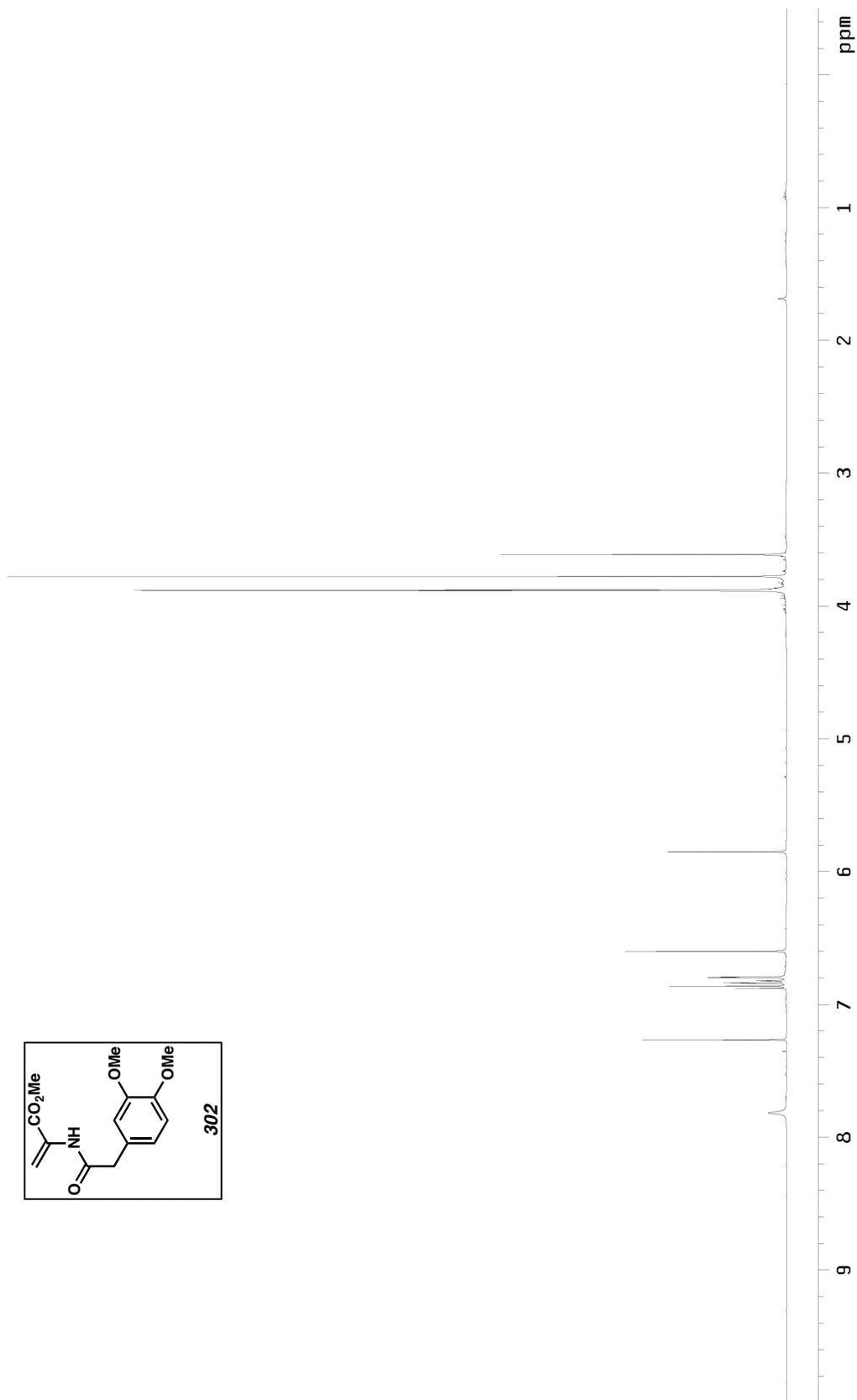
Figure A1.29.2 Infrared spectrum (thin film/NaCl) of compound **298f**Figure A1.29.3 ¹³C NMR (125 MHz, CDCl₃) of compound **298f**

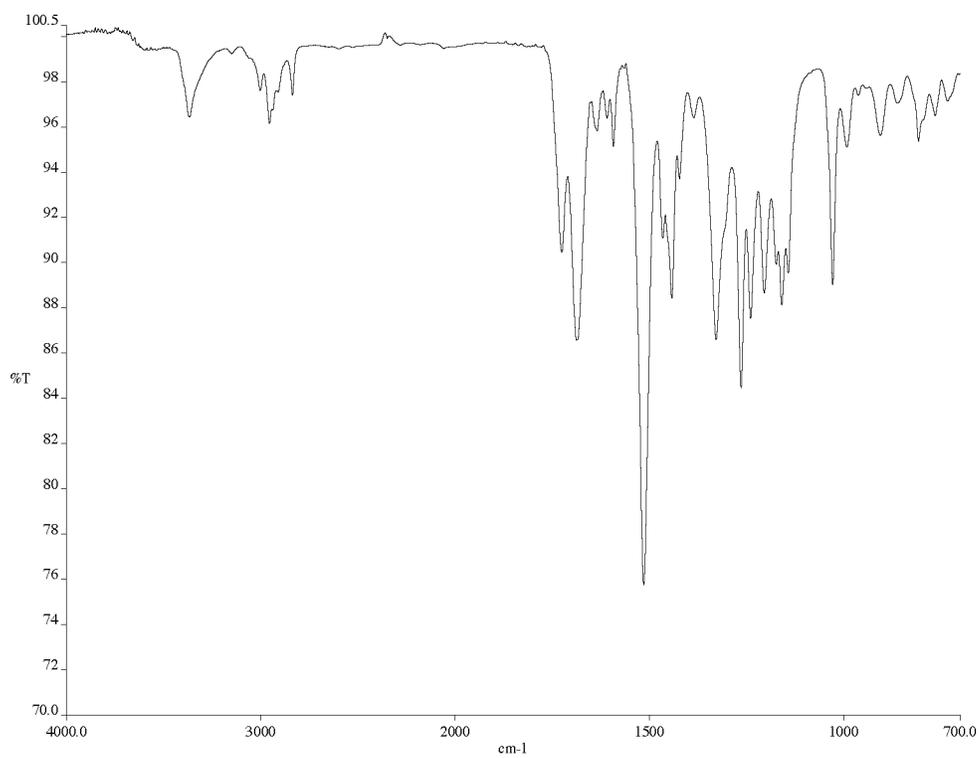
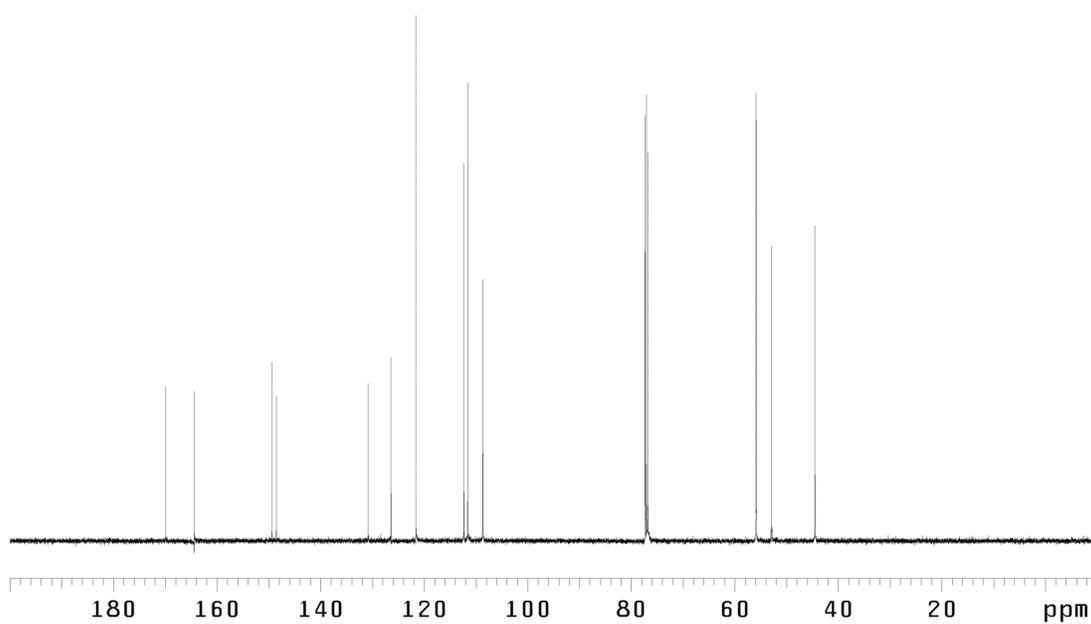
Figure A1.30.1 ¹H NMR (500 MHz, CDCl₃) of compound A1-4

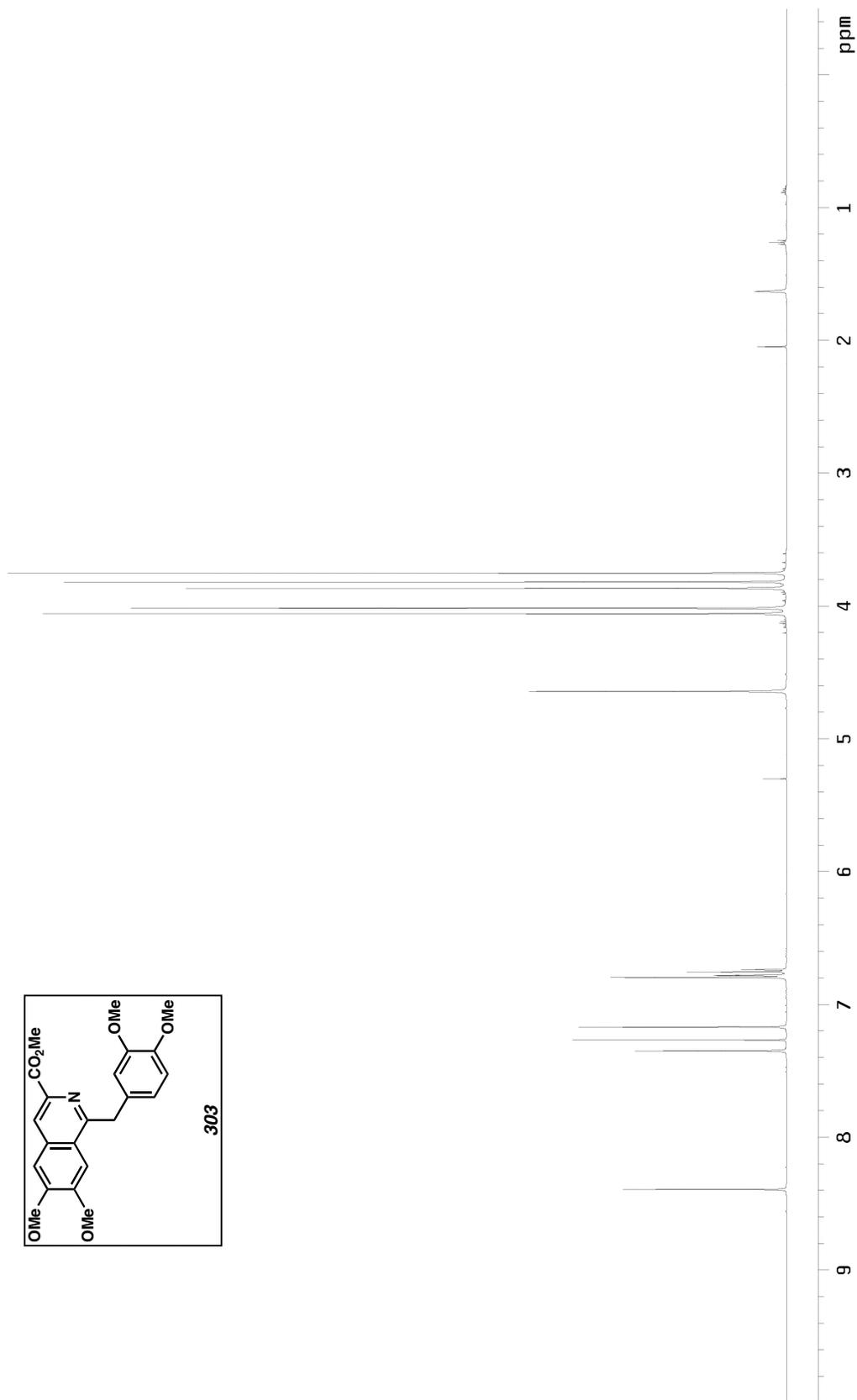
Figure A1.30.2 Infrared spectrum (thin film/NaCl) of compound **A1-4**Figure A1.30.3 ¹³C NMR (125 MHz, CDCl₃) of compound **A1-4**

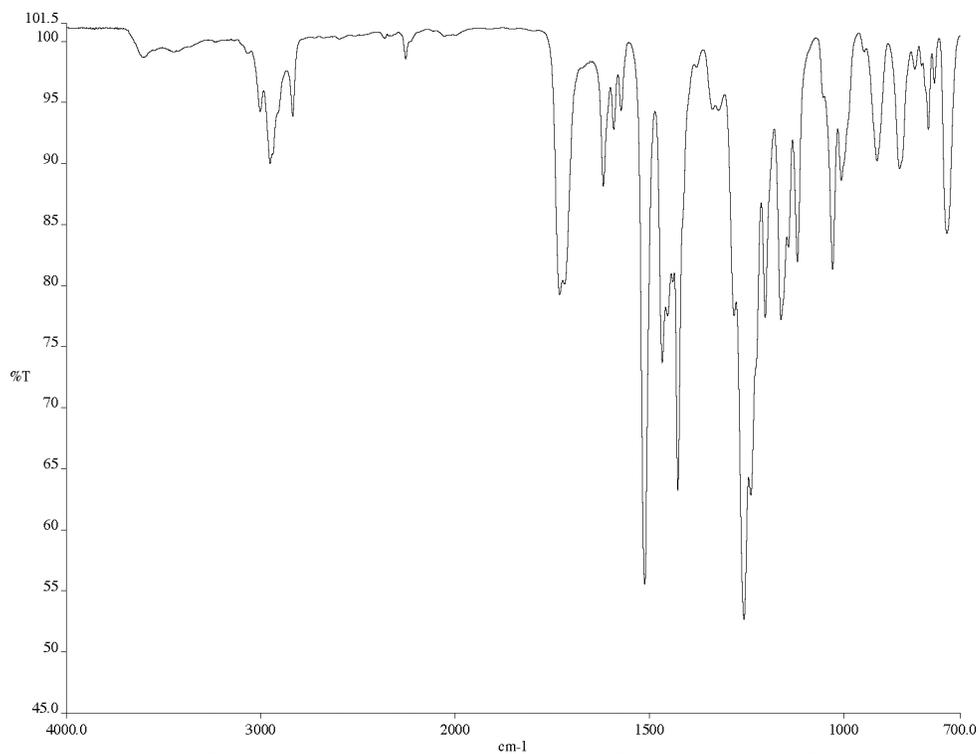
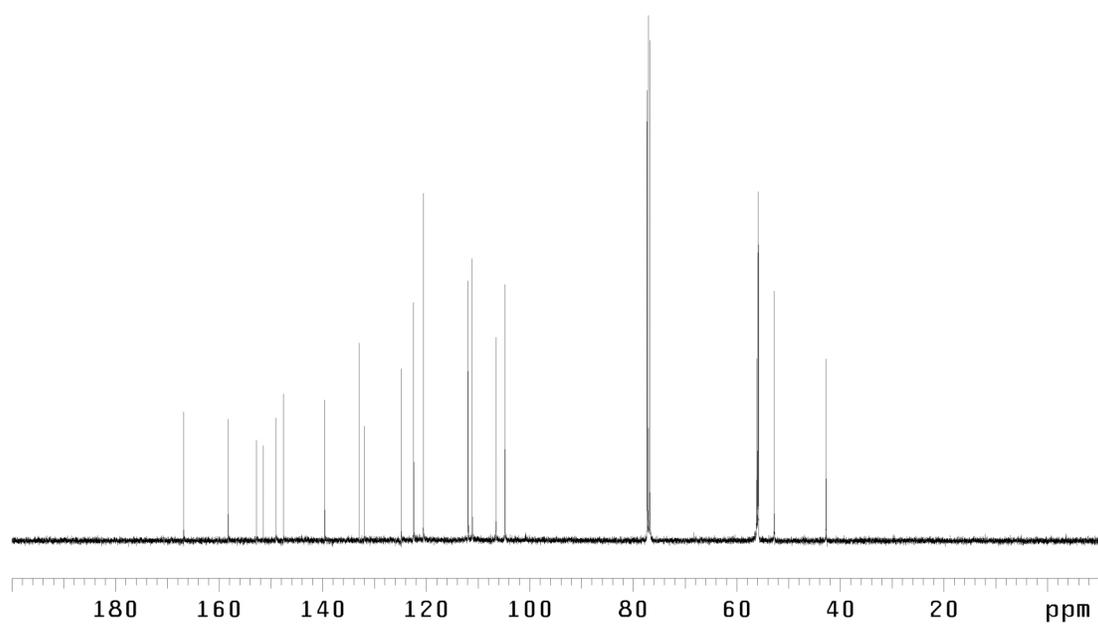
Figure A1.31.1 ^1H NMR (500 MHz, CDCl_3) of compound A1-5

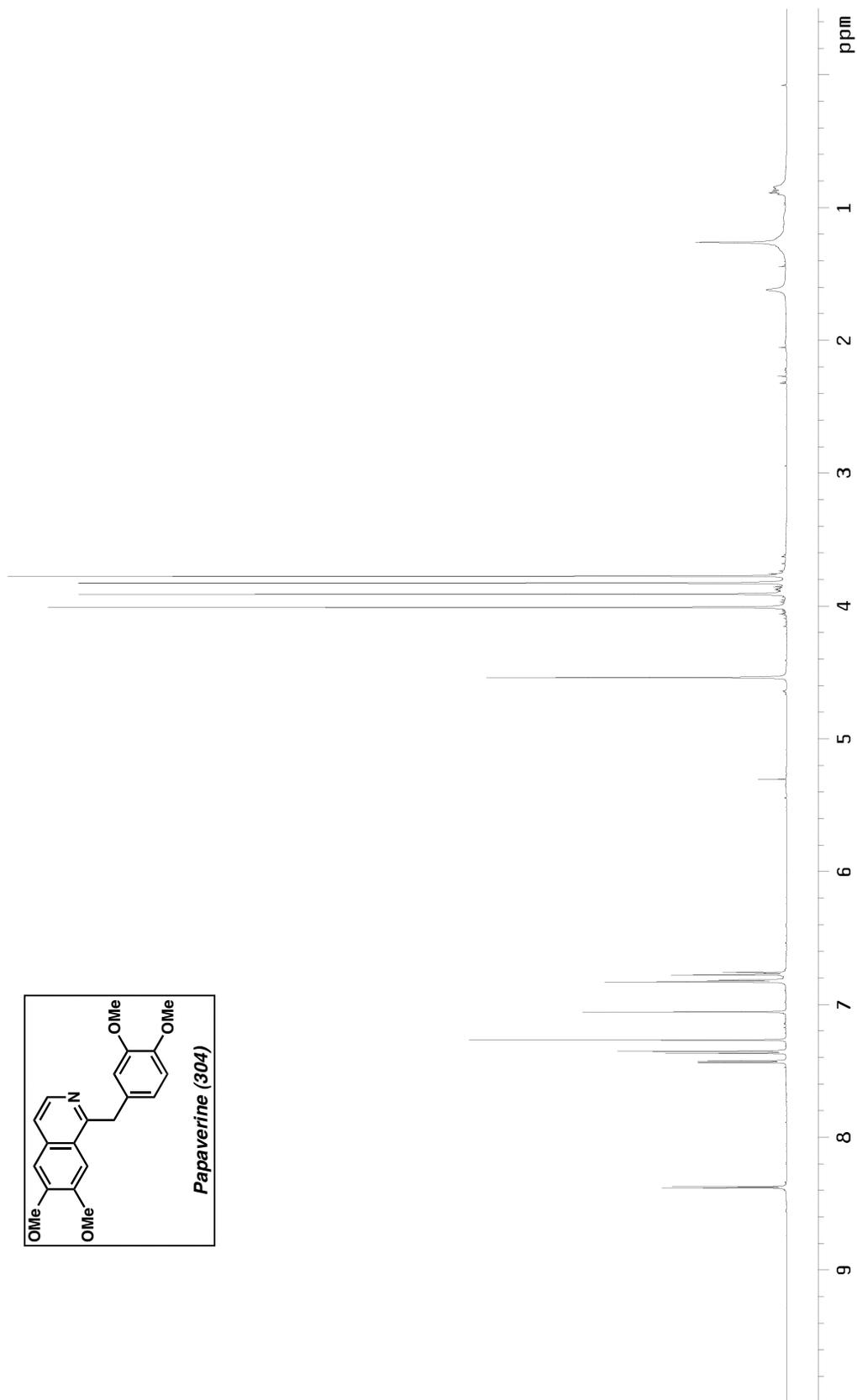
Figure A1.31.2 Infrared spectrum (thin film/NaCl) of compound **A1-5**Figure A1.31.3 ^{13}C NMR (125 MHz, CDCl_3) of compound **A1-5**

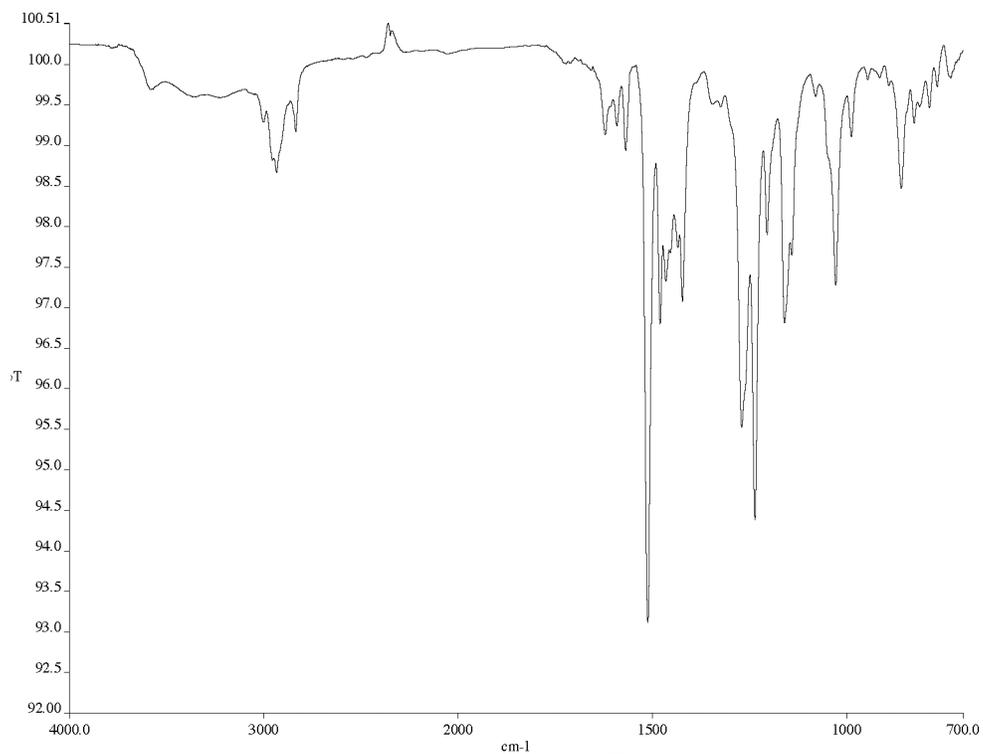
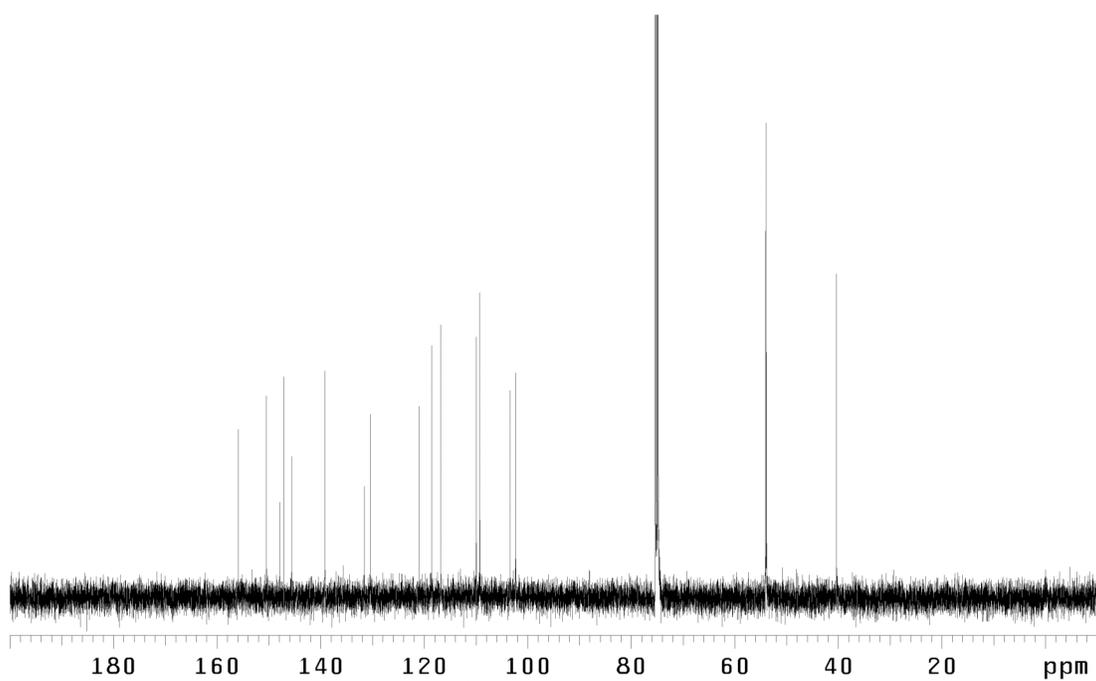
Figure A1.32.1 ^1H NMR (500 MHz, CDCl_3) of compound **302**

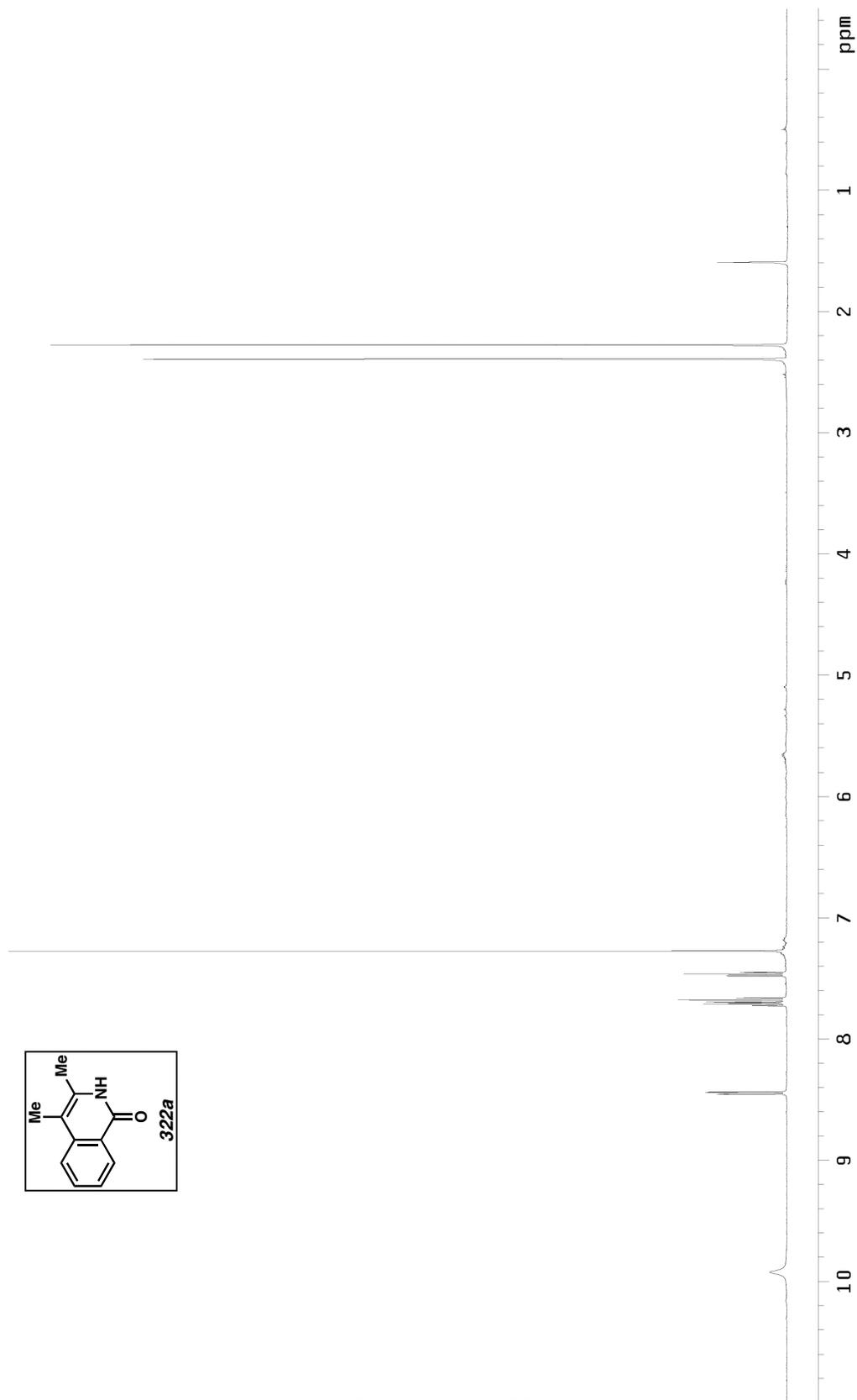
Figure A1.32.2 Infrared spectrum (thin film/NaCl) of compound **302**Figure A1.32.3 ¹³C NMR (125 MHz, CDCl₃) of compound **302**

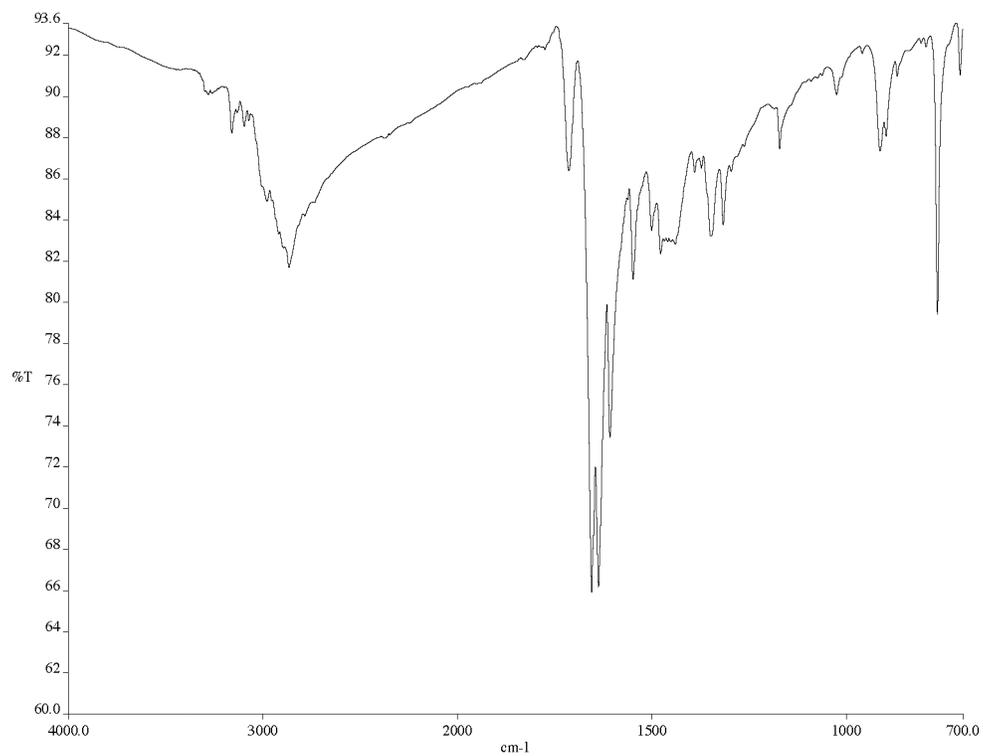
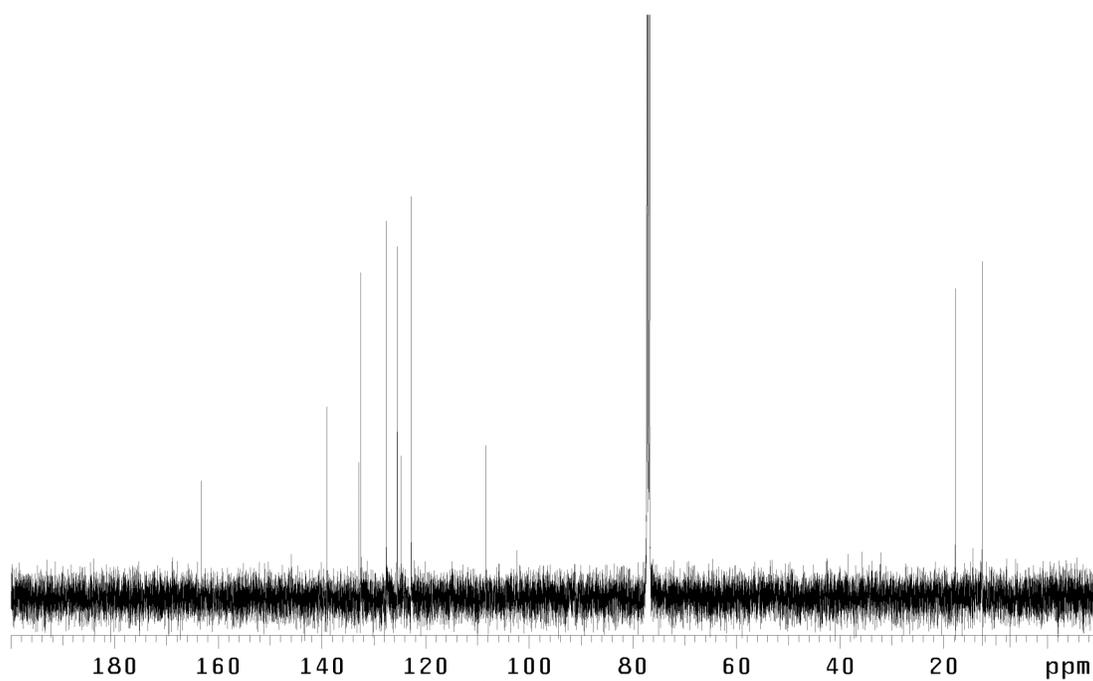
Figure A1.33.1 ¹H NMR (500 MHz, CDCl₃) of compound **303**

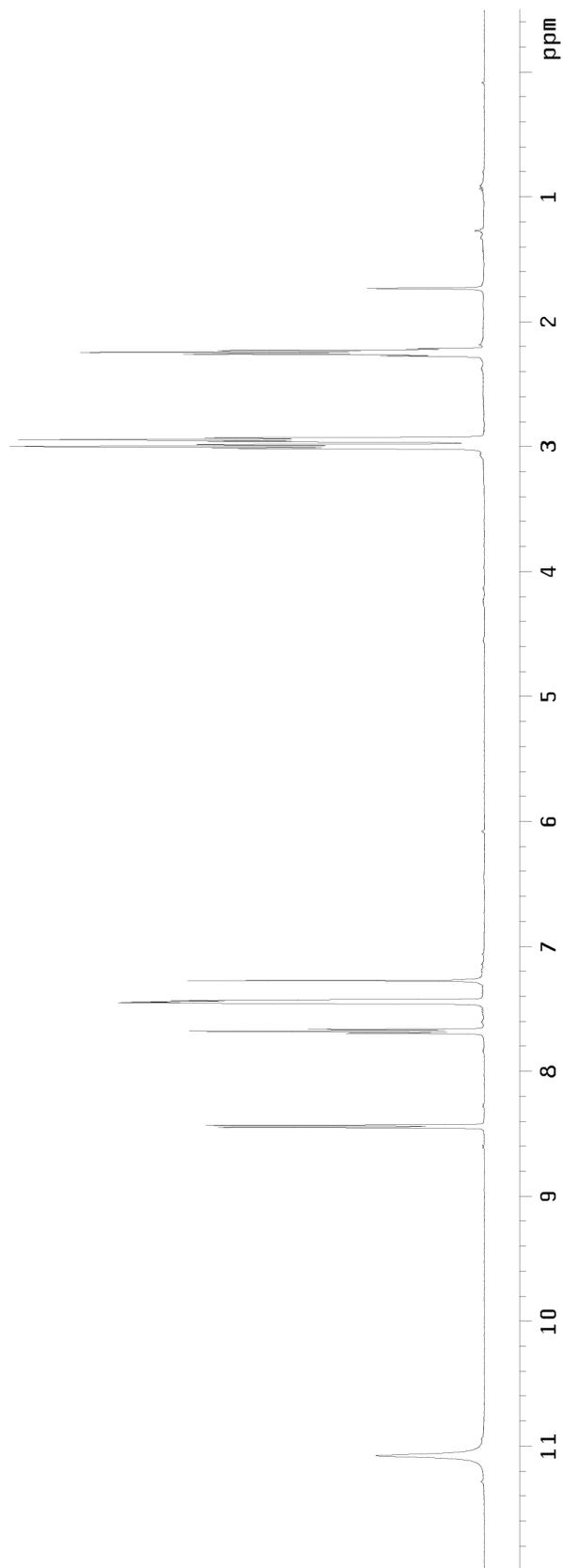
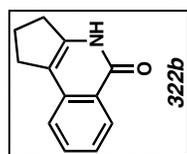
Figure A1.33.2 Infrared spectrum (thin film/NaCl) of compound **303**Figure A1.33.3 ¹³C NMR (125 MHz, CDCl₃) of compound **303**

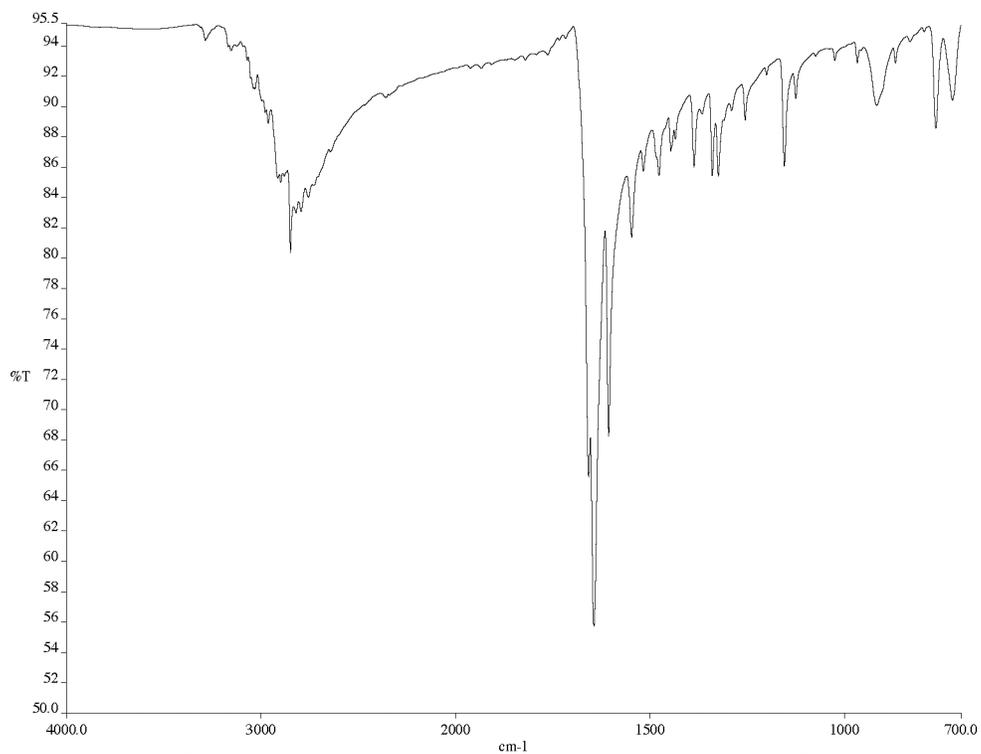
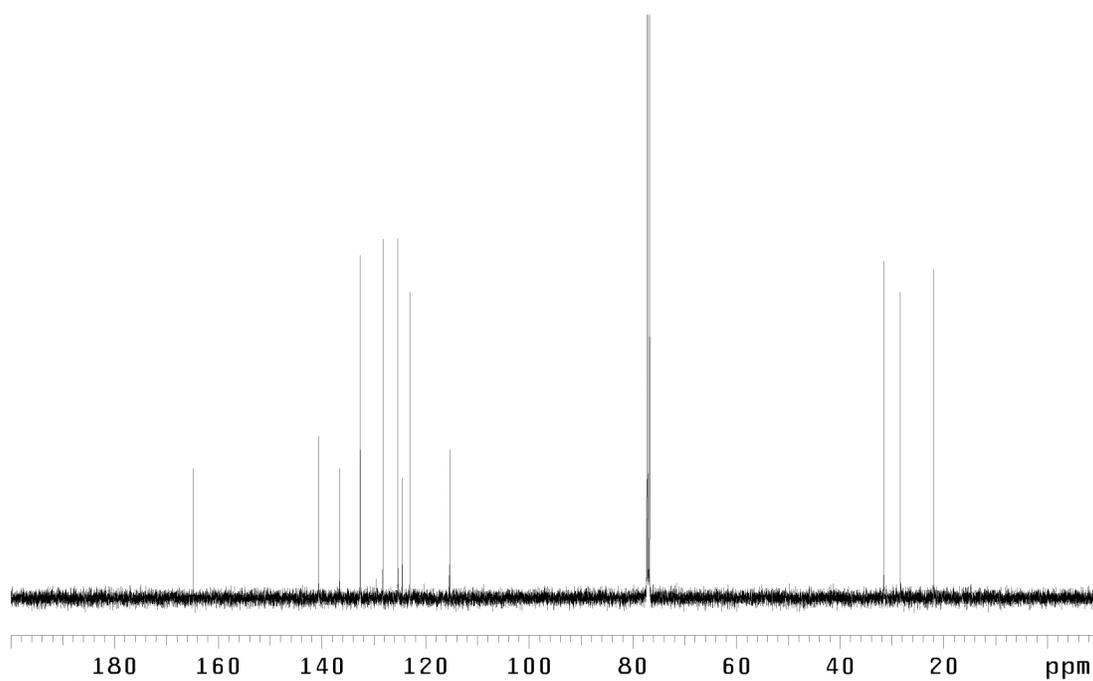


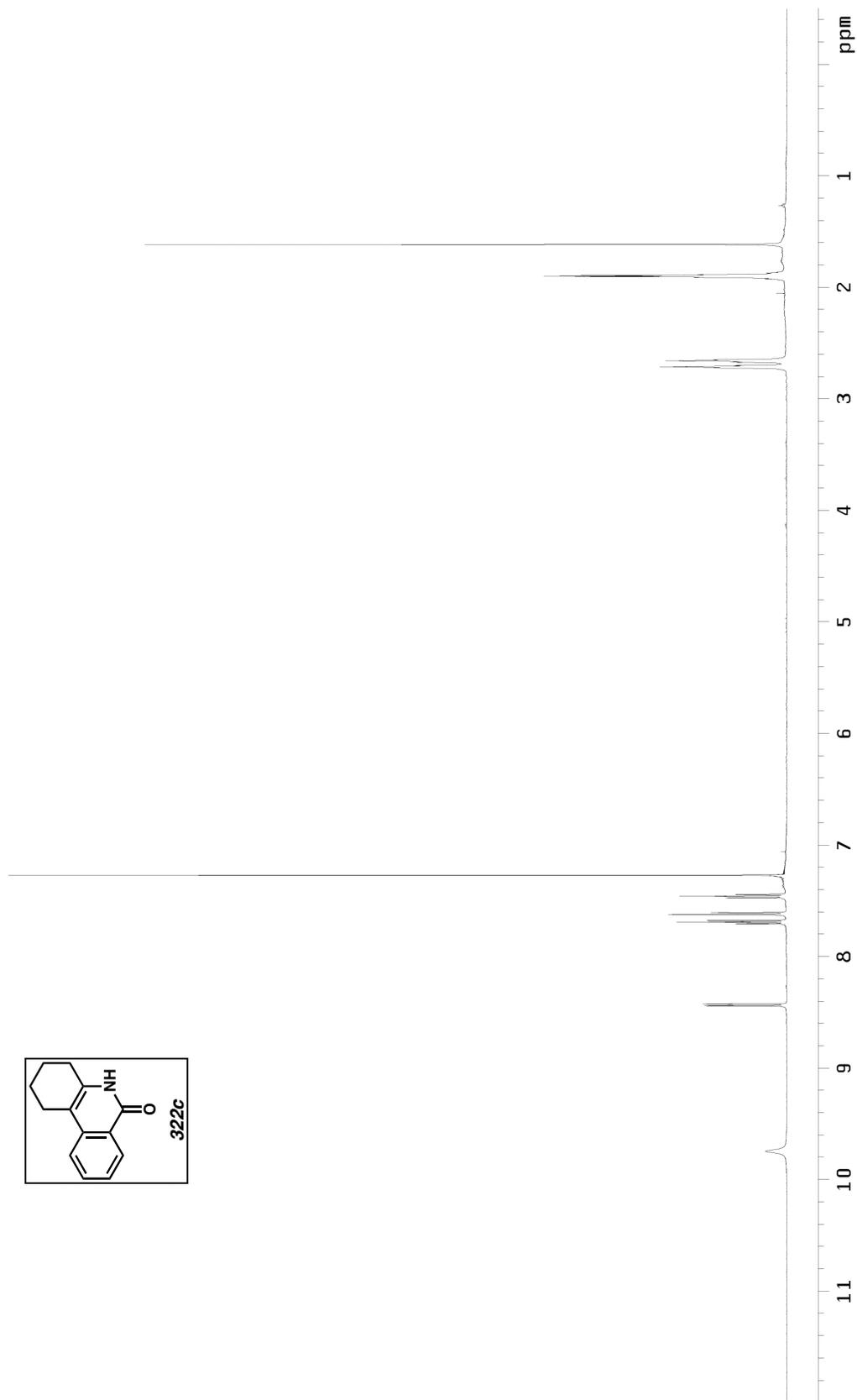
Figure A1.34.2 Infrared spectrum (thin film/NaCl) of compound **304**Figure A1.34.3 ¹³C NMR (125 MHz, CDCl₃) of compound **304**

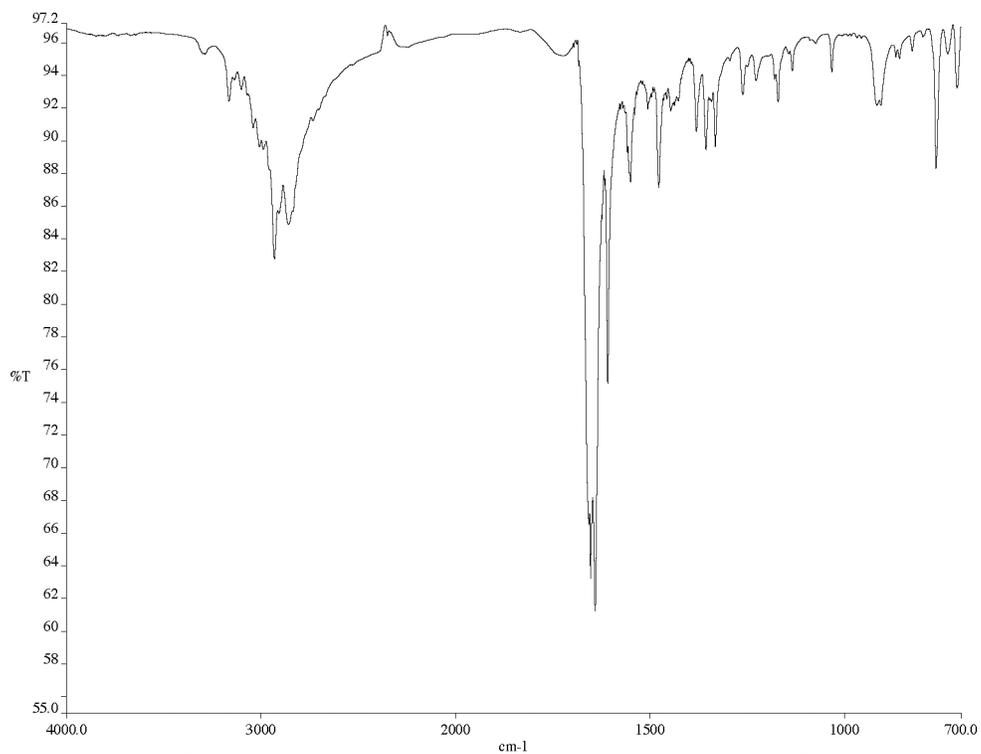
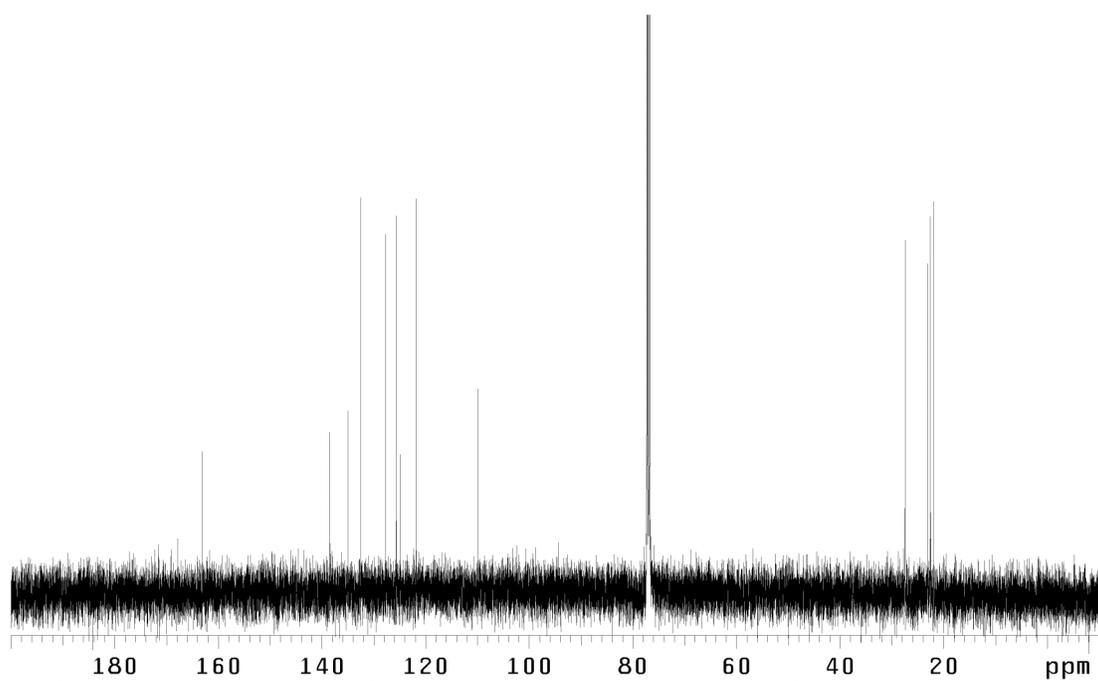
Figure A1.35.1 ^1H NMR (500 MHz, CDCl_3) of compound 322a

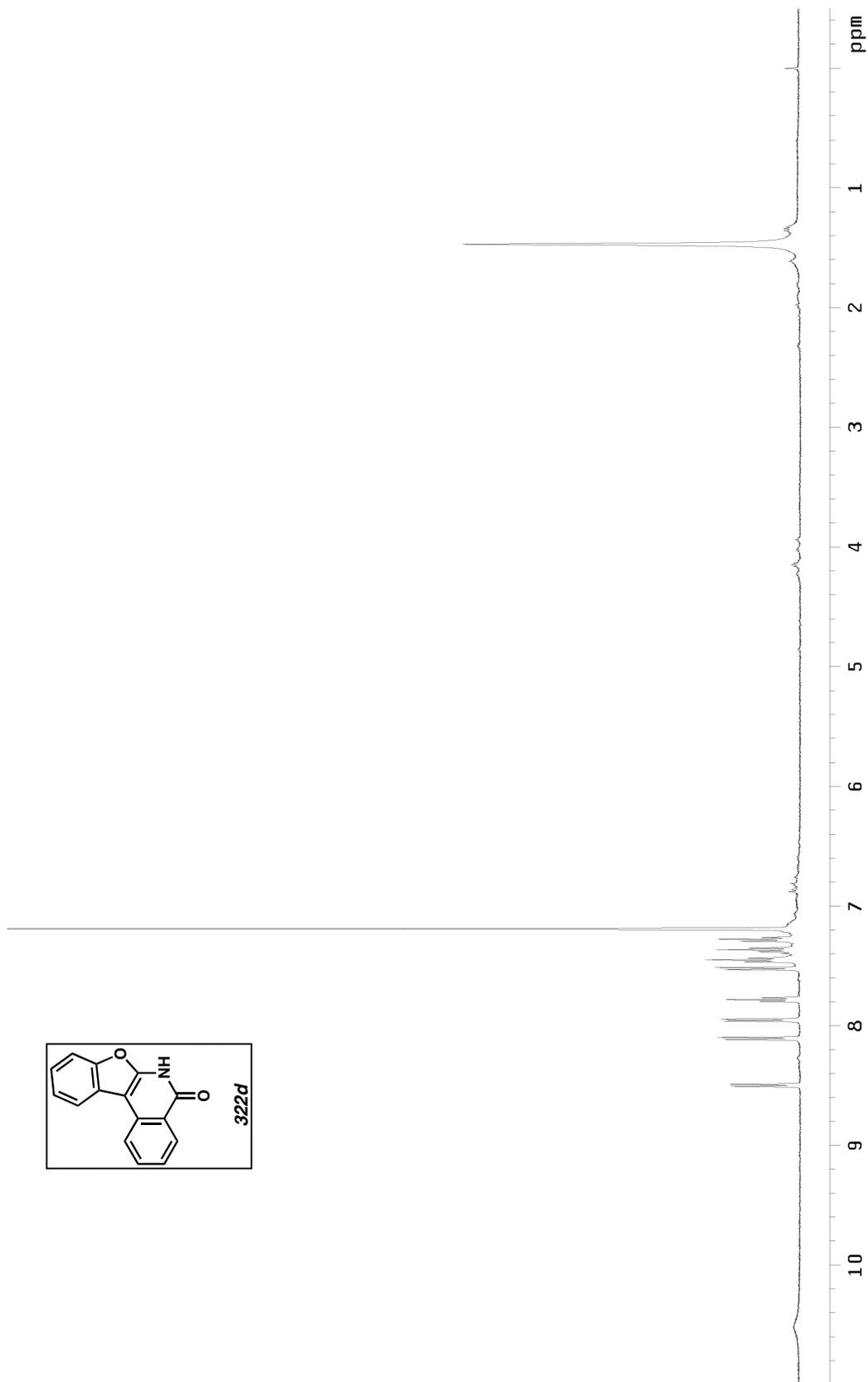
Figure A1.35.2 Infrared spectrum (thin film/NaCl) of compound **322a**Figure A1.35.3 ¹³C NMR (125 MHz, CDCl₃) of compound **322a**

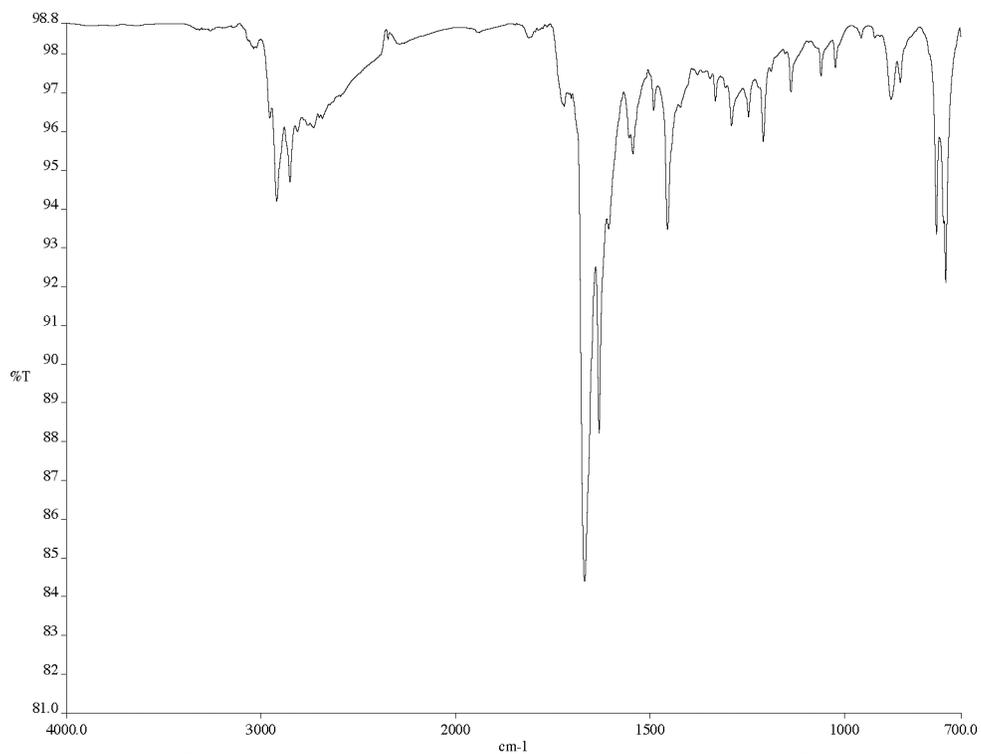
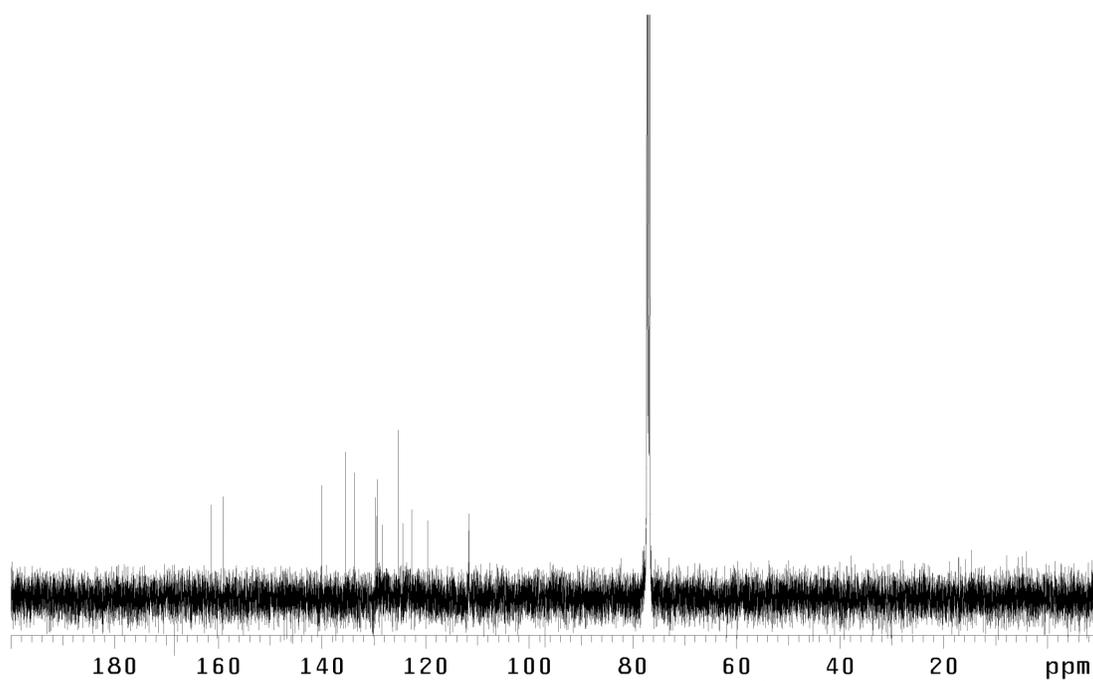
Figure A1.36.1 ¹H NMR (500 MHz, CDCl₃) of compound 322b

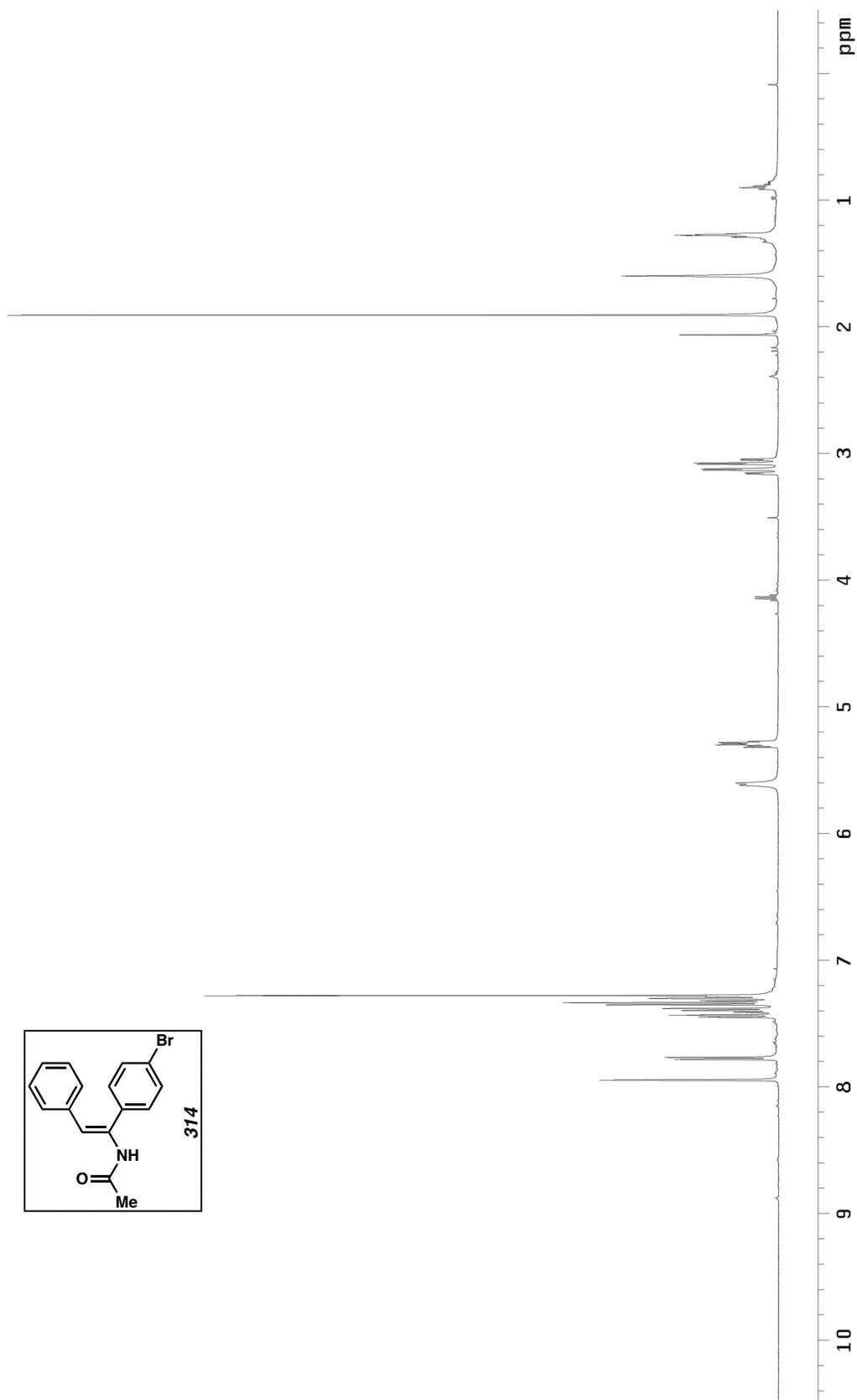
Figure A1.36.2 Infrared spectrum (thin film/NaCl) of compound **322b**Figure A1.36.3 ¹³C NMR (125 MHz, CDCl₃) of compound **322b**

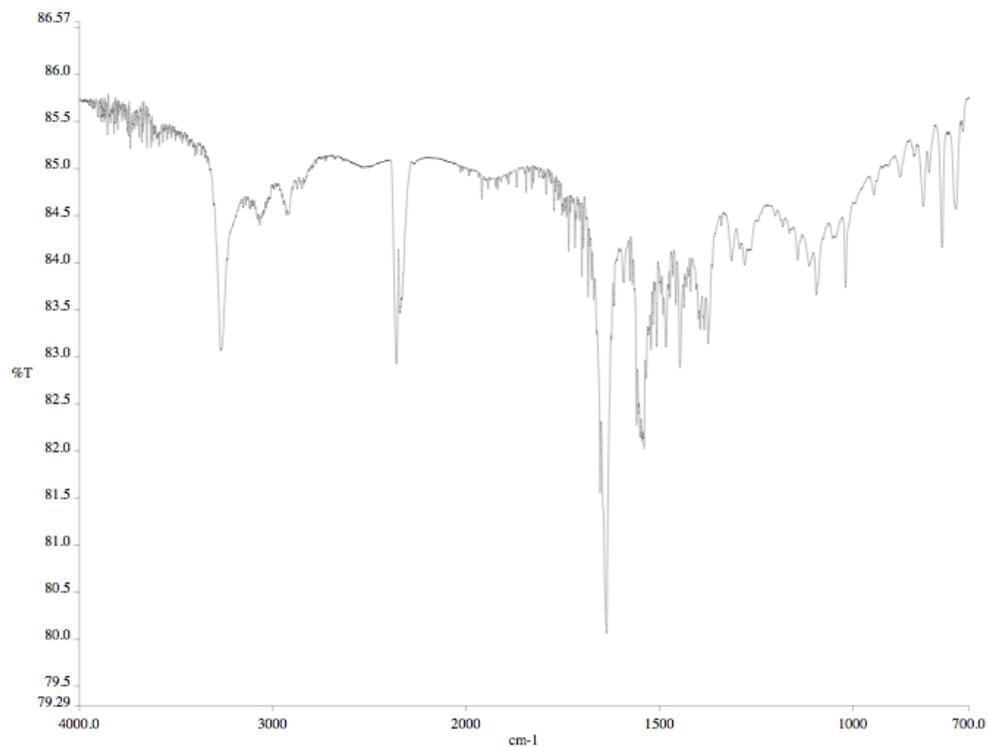
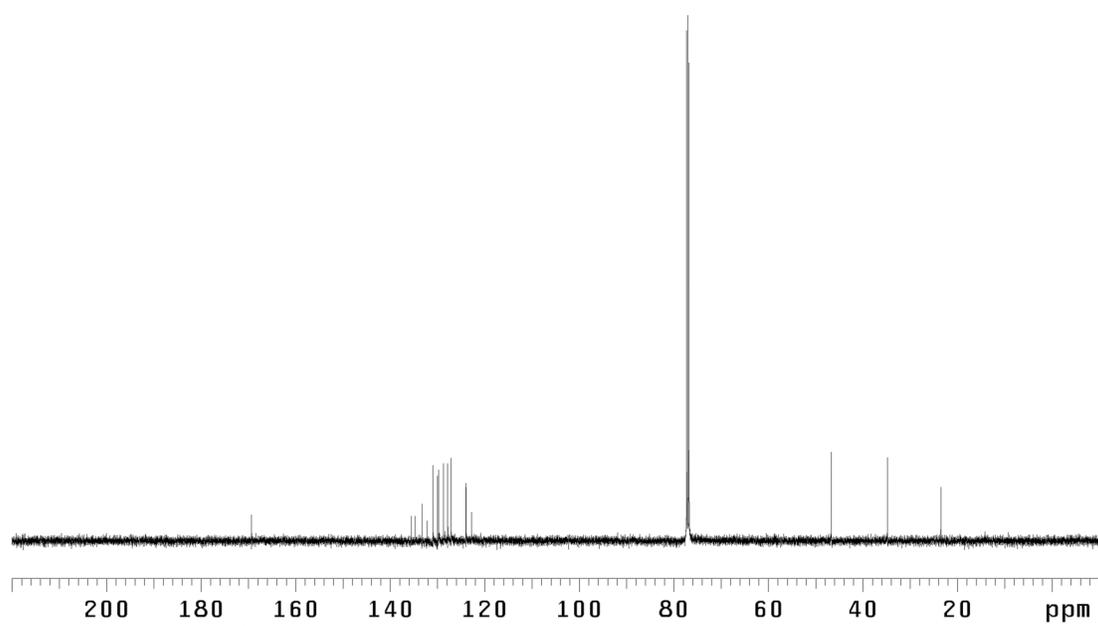
Figure A1.37.1 ¹H NMR (500 MHz, CDCl₃) of compound 322c

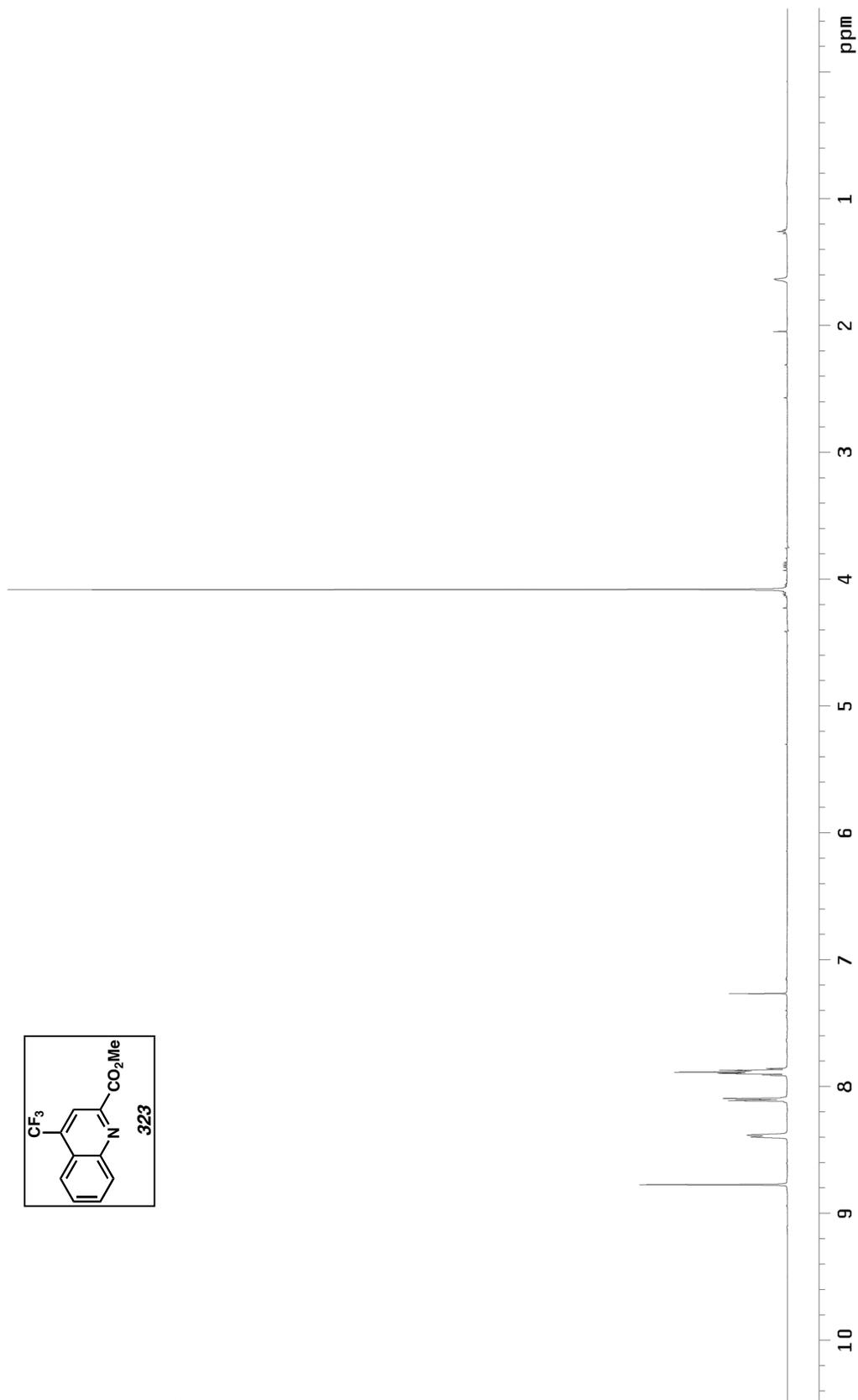
Figure A1.37.2 Infrared spectrum (thin film/NaCl) of compound **322c**Figure A1.37.3 ¹³C NMR (125 MHz, CDCl₃) of compound **322c**

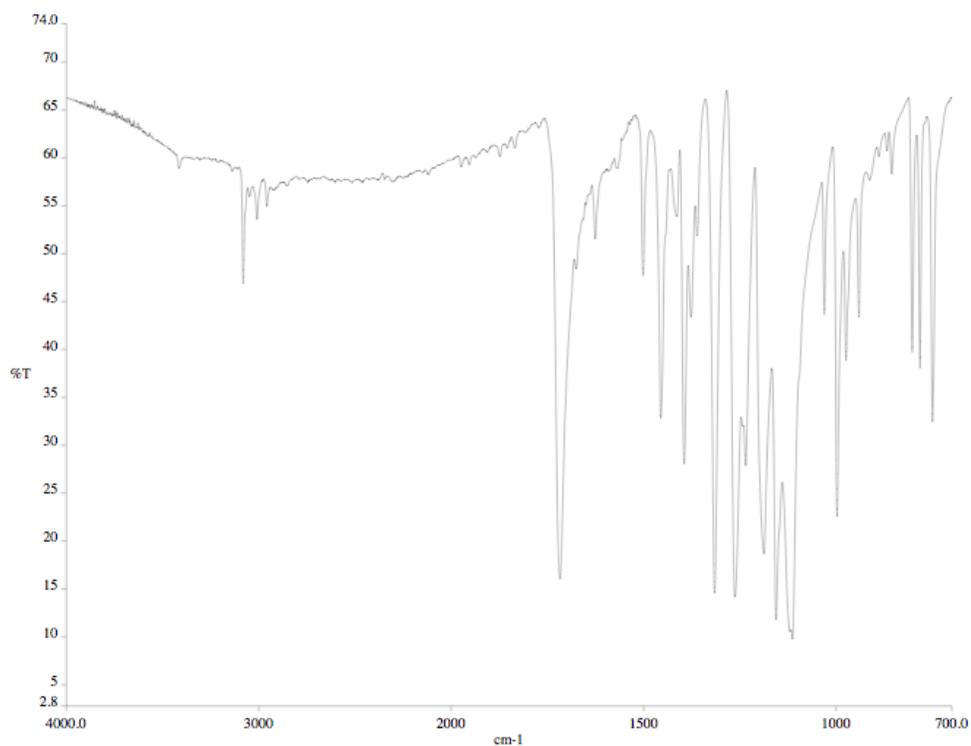
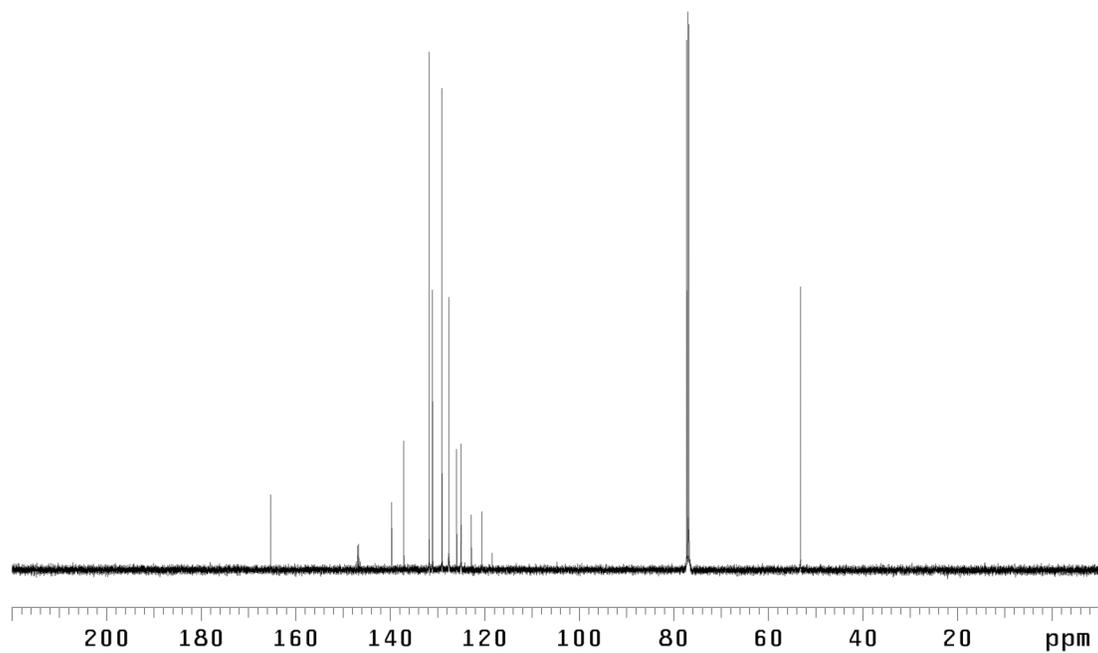
Figure A1.38.1 ¹H NMR (500 MHz, CDCl₃) of compound 322d

Figure A1.38.2 Infrared spectrum (thin film/NaCl) of compound **322d**Figure A1.38.3 ¹³C NMR (125 MHz, CDCl₃) of compound **322d**

Figure A1.39.1 ^1H NMR (500 MHz, CDCl_3) of compound 314

Figure A1.39.2 Infrared spectrum (thin film/NaCl) of compound **314**Figure A1.39.3 ¹³C NMR (125 MHz, CDCl₃) of compound **314**

Figure A1.40.1 ¹H NMR (500 MHz, CDCl₃) of compound 323

Figure A1.40.2 Infrared spectrum (thin film/NaCl) of compound **323**Figure A1.40.3 ¹³C NMR (125 MHz, CDCl₃) of compound **323**