

APPENDIX 6

Spectra Relevant to Chapter 2:

*Progress toward the Total Synthesis of
Scandine and the Melodinus Alkaloids*

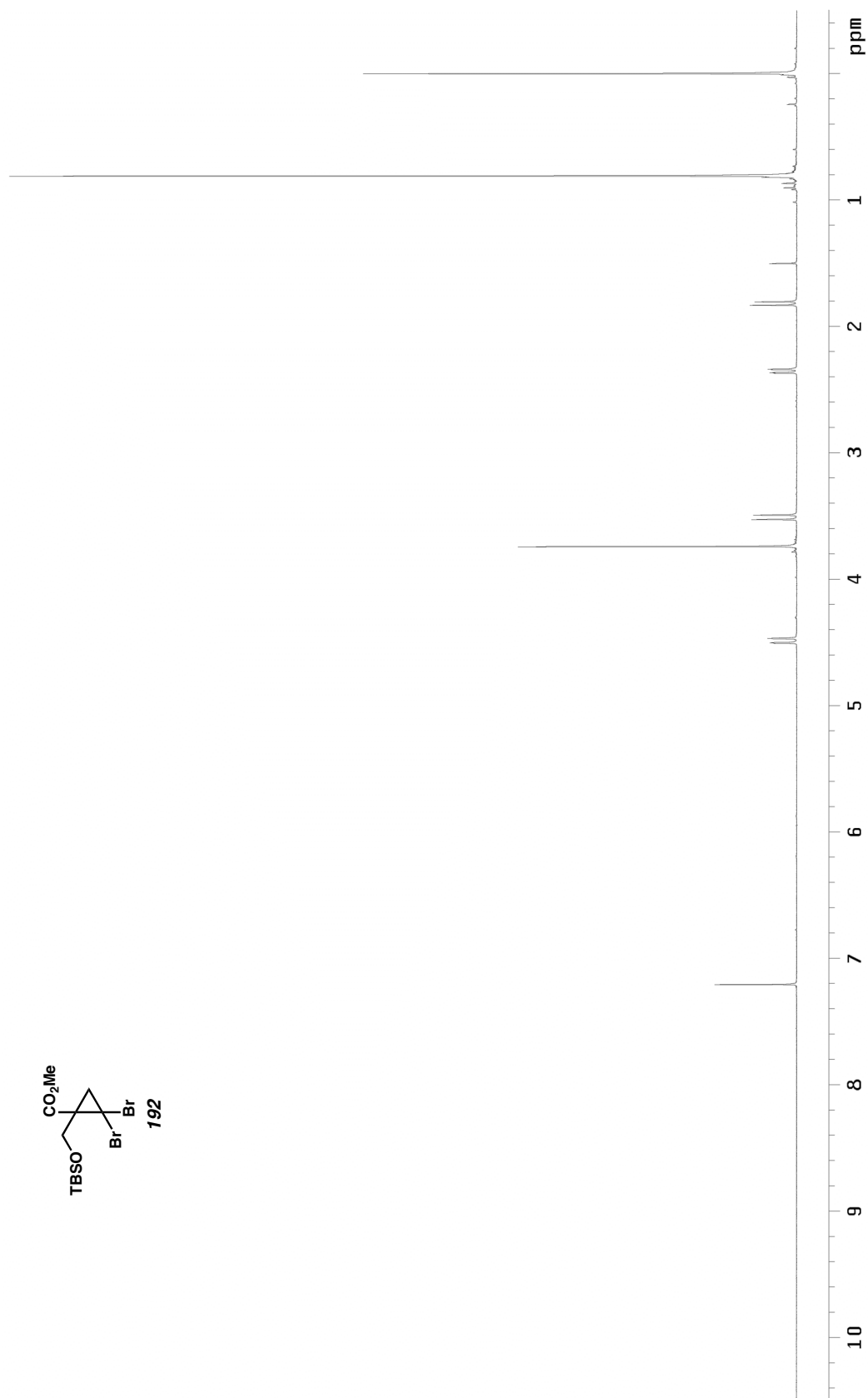
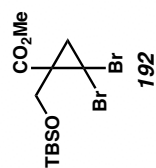


Figure A6.1 ¹H NMR (300 MHz, CDCl₃) of compound **192**

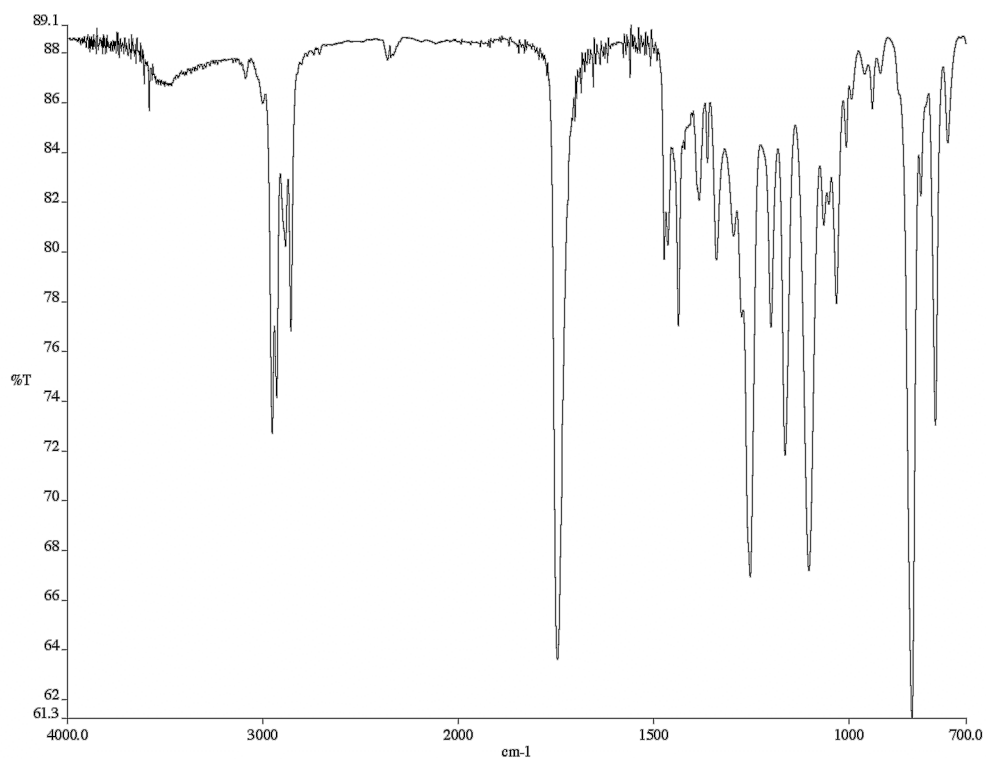


Figure A6.2 Infrared spectrum (thin film/NaCl) of compound **192**

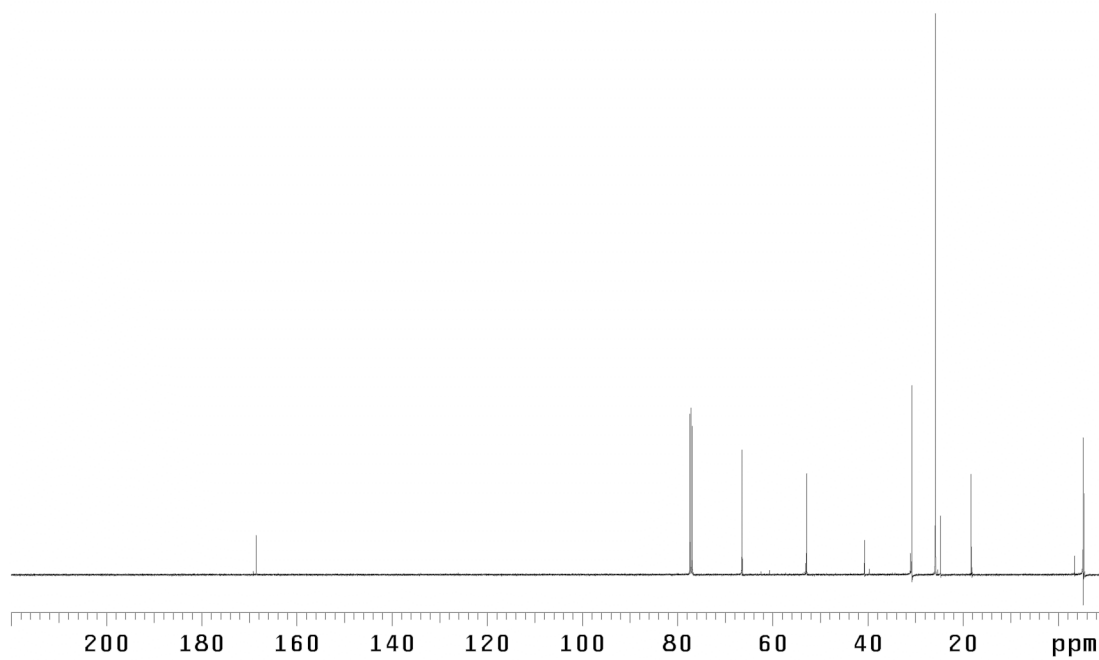


Figure A6.3 ¹³C NMR (126 MHz, CDCl₃) of compound **192**

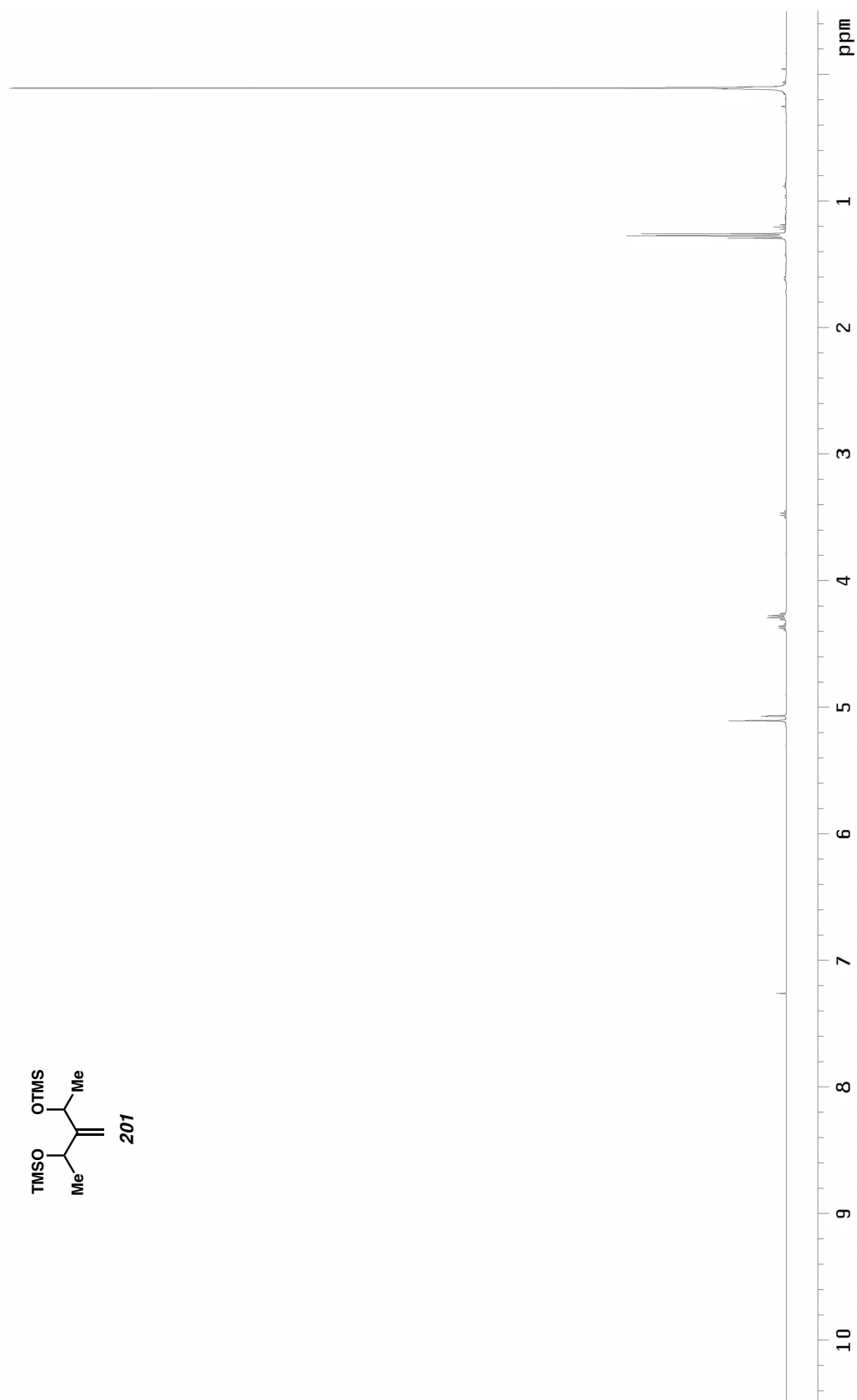
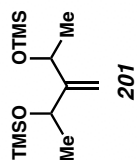


Figure A6.4 ^1H NMR (400 MHz, CDCl_3) of compound **201**

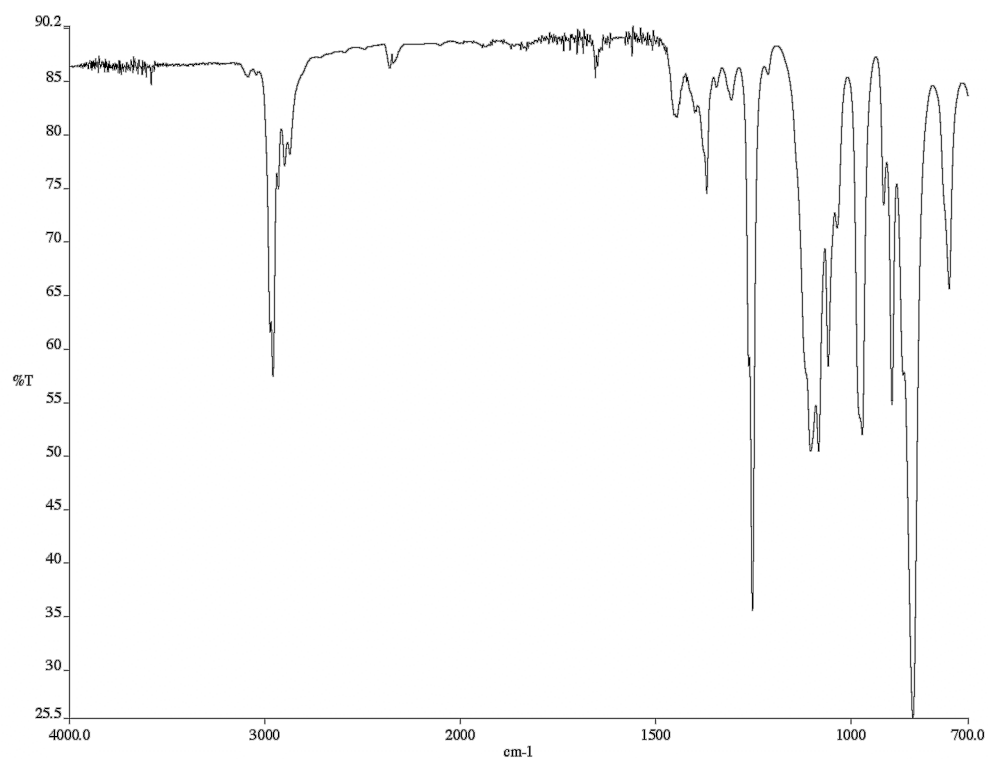


Figure A6.5 Infrared spectrum (thin film/NaCl) of compound **201**

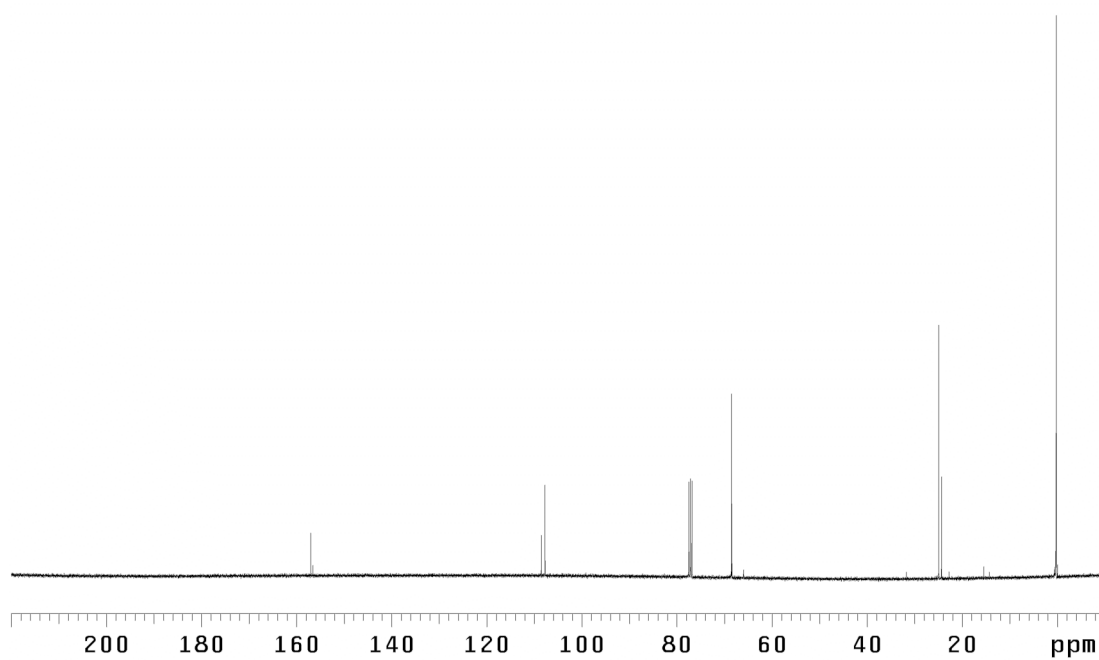


Figure A6.6 ¹³C NMR (100 MHz, CDCl₃) of compound **201**

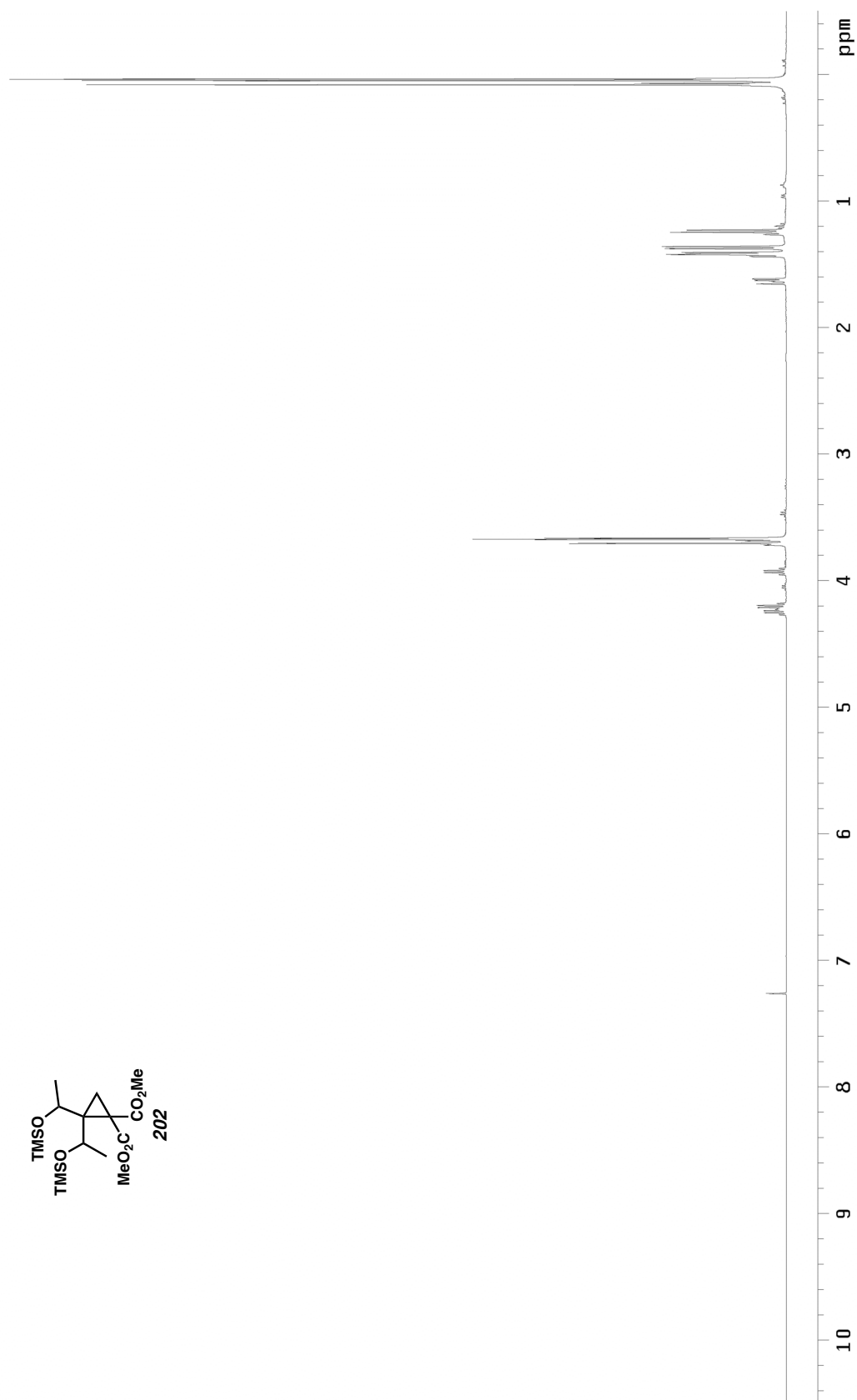


Figure A6.7 ^1H NMR (400 MHz, CDCl₃) of compound **202**

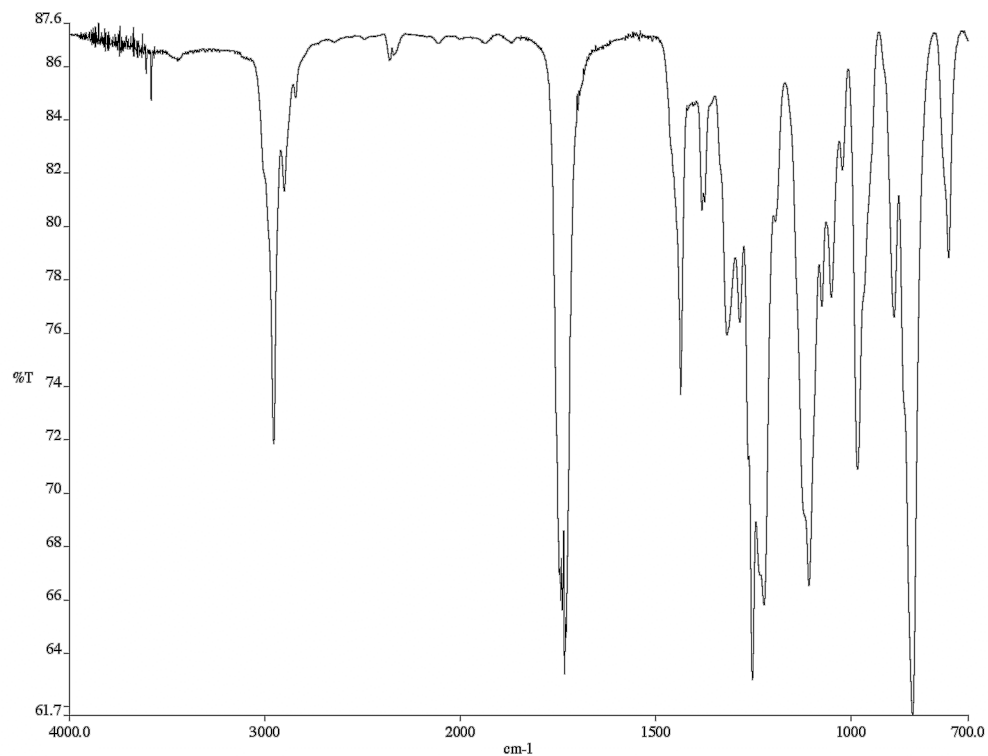


Figure A6.8 Infrared spectrum (thin film/NaCl) of compound **202**

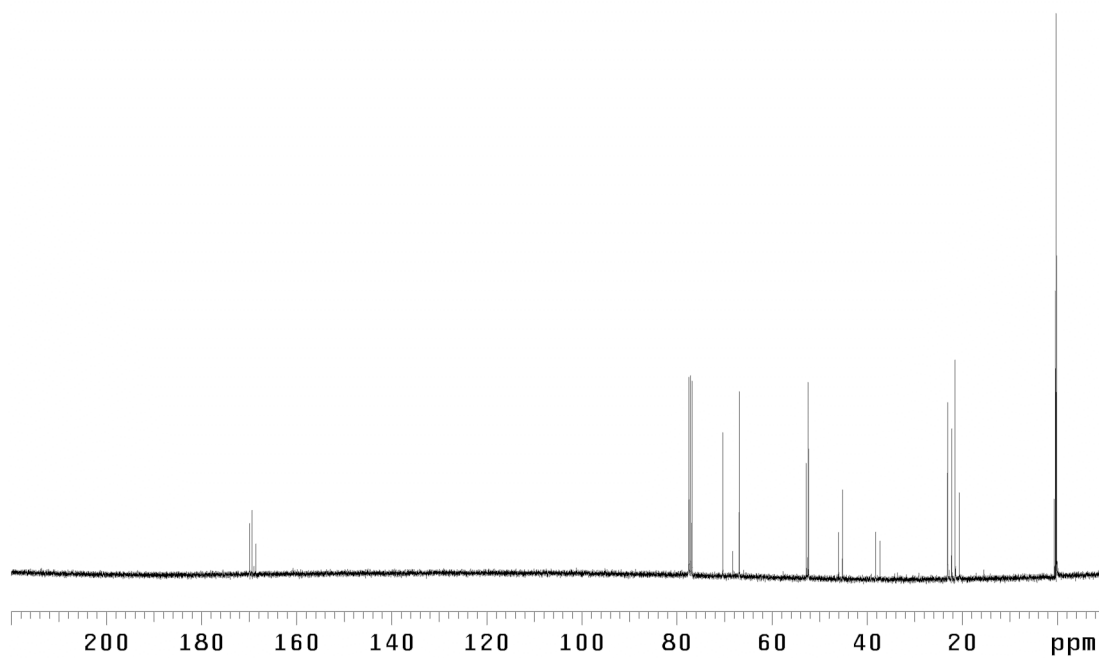


Figure A6.9 ¹³C NMR (100 MHz, CDCl₃) of compound **202**

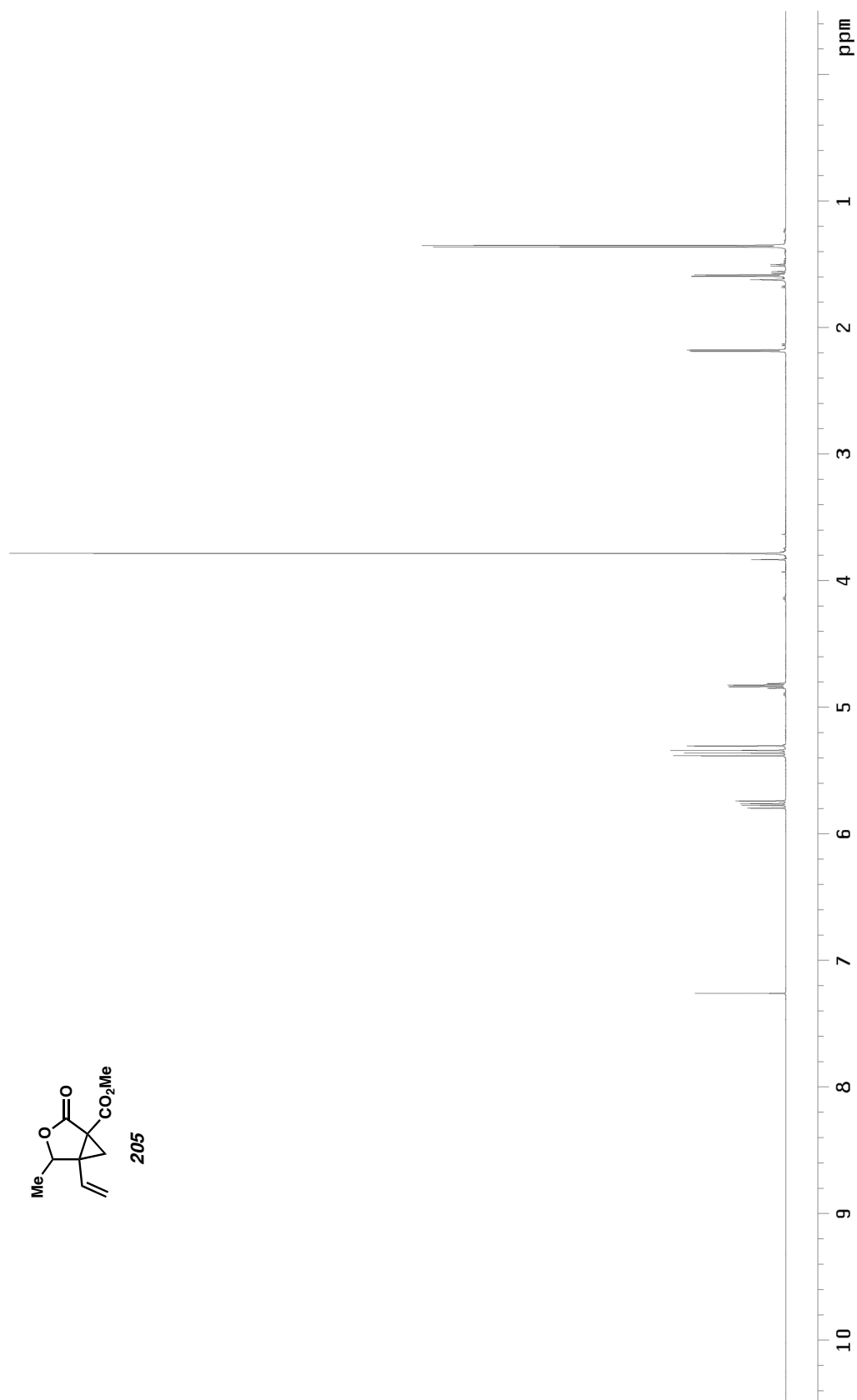


Figure A6.10 ¹H NMR (500 MHz, CDCl₃) of compound **205**

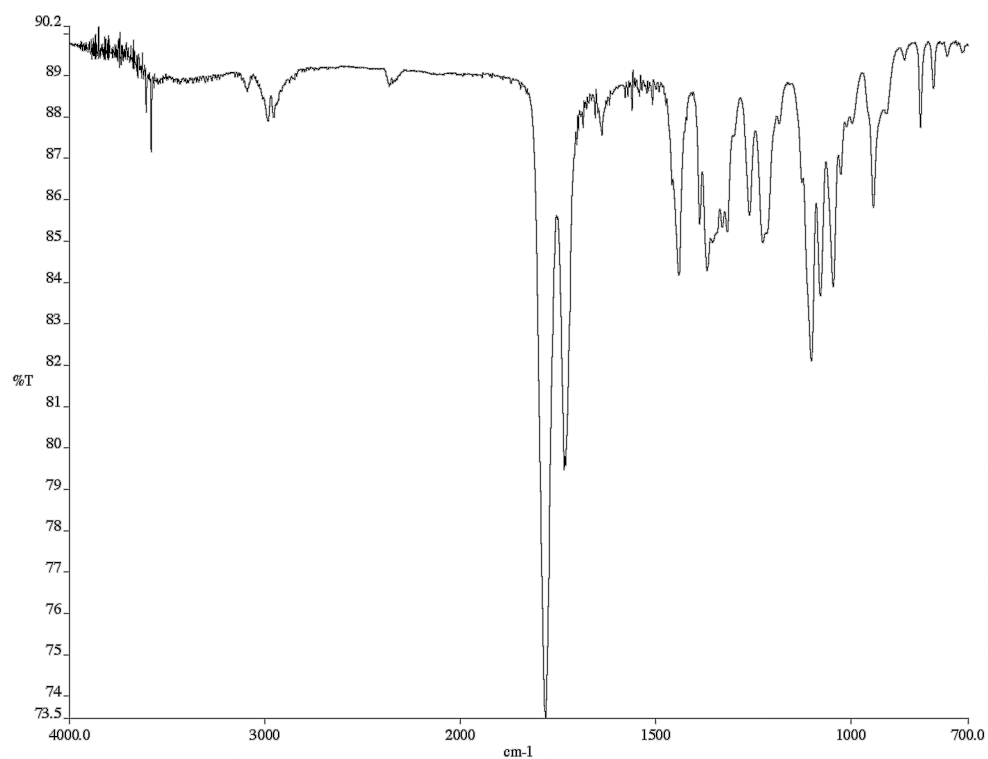


Figure A6.11 Infrared spectrum (thin film/NaCl) of compound **205**

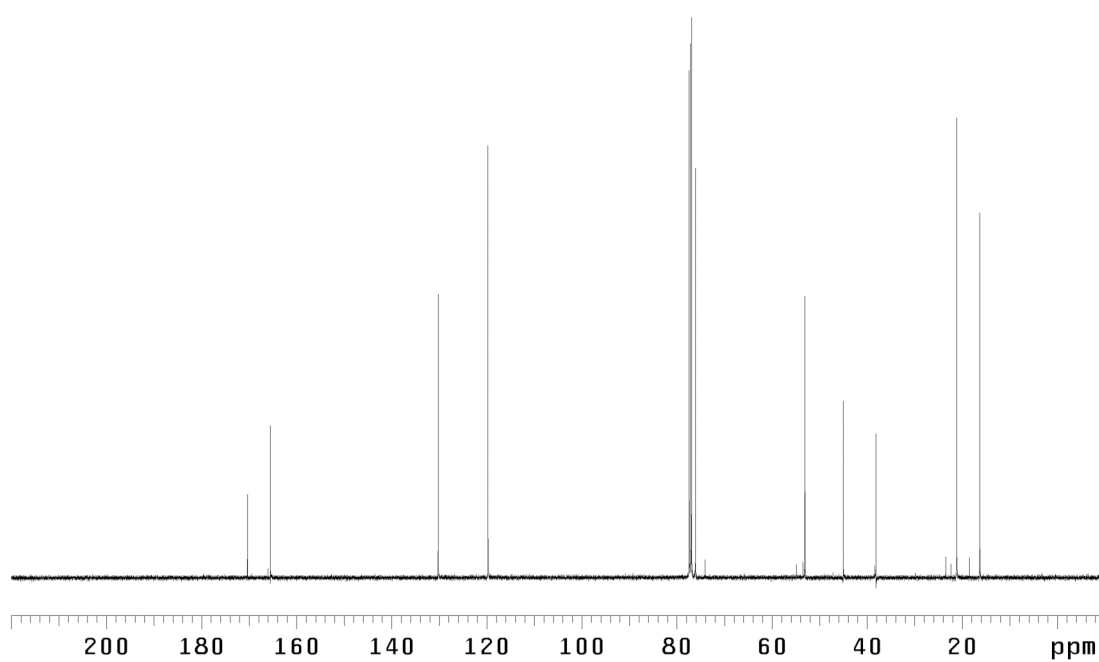


Figure A6.12 ¹³C NMR (126 MHz, CDCl₃) of compound **205**

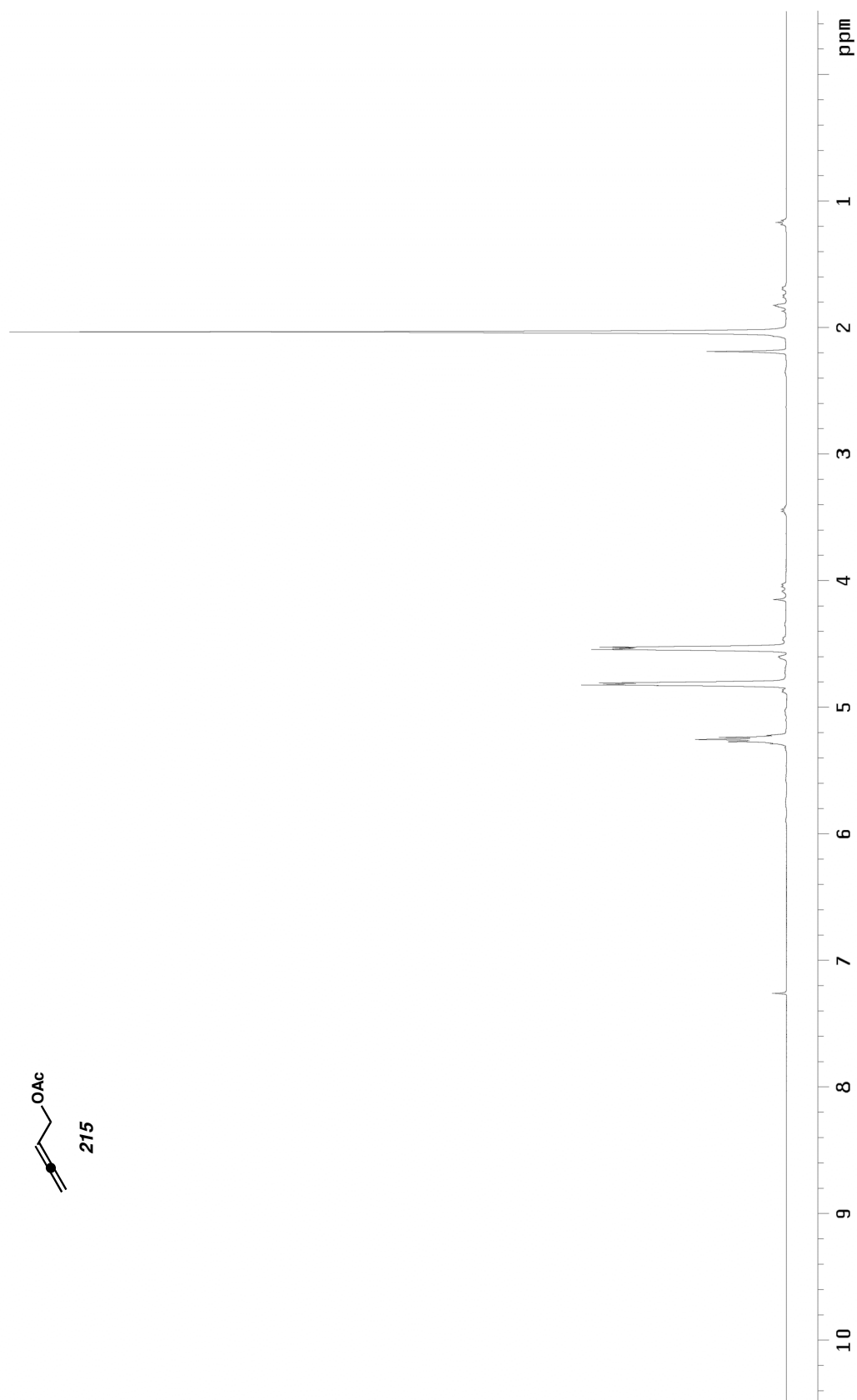


Figure A6.13 ^1H NMR (400 MHz, CDCl_3) of compound **215**

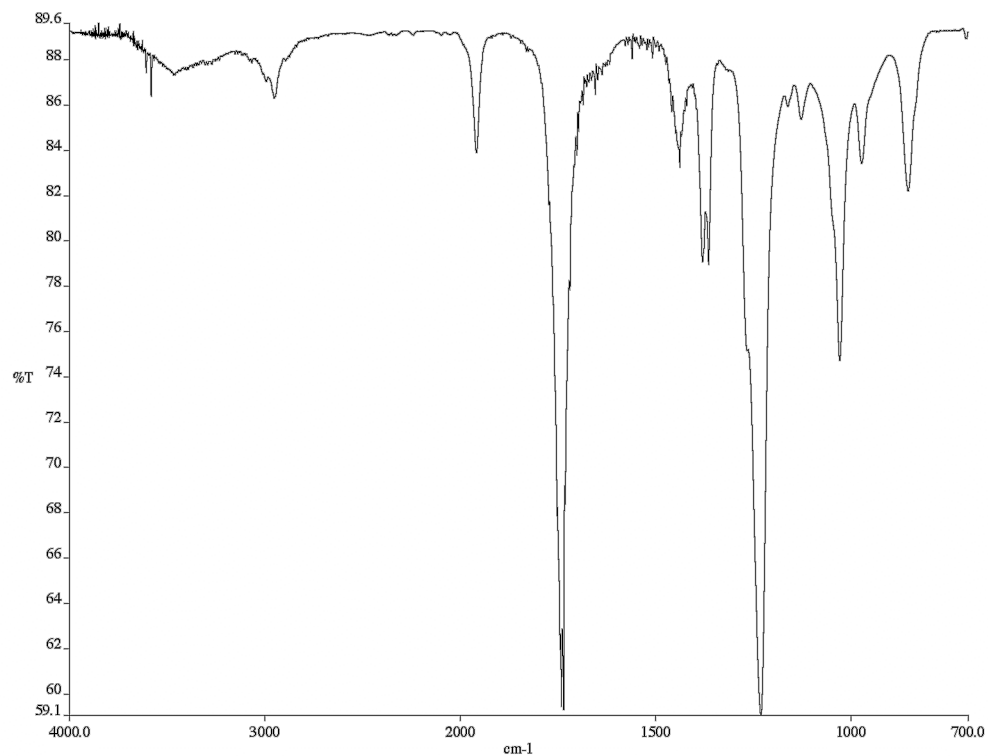


Figure A6.14 Infrared spectrum (thin film/NaCl) of compound **215**

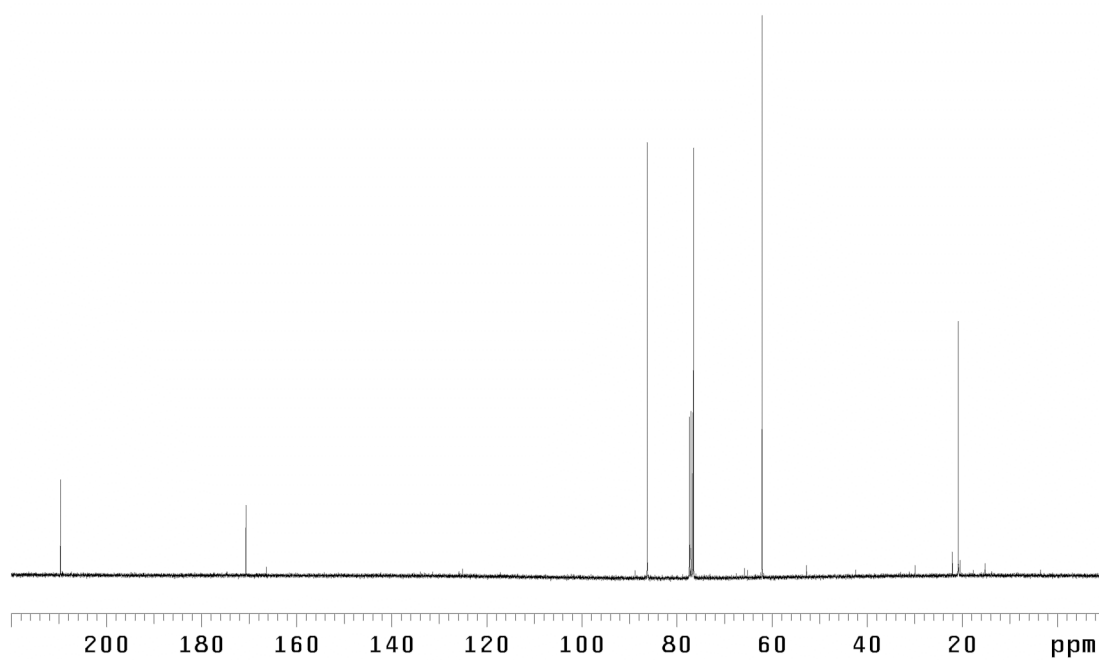


Figure A6.15 ¹³C NMR (100 MHz, CDCl₃) of compound **215**

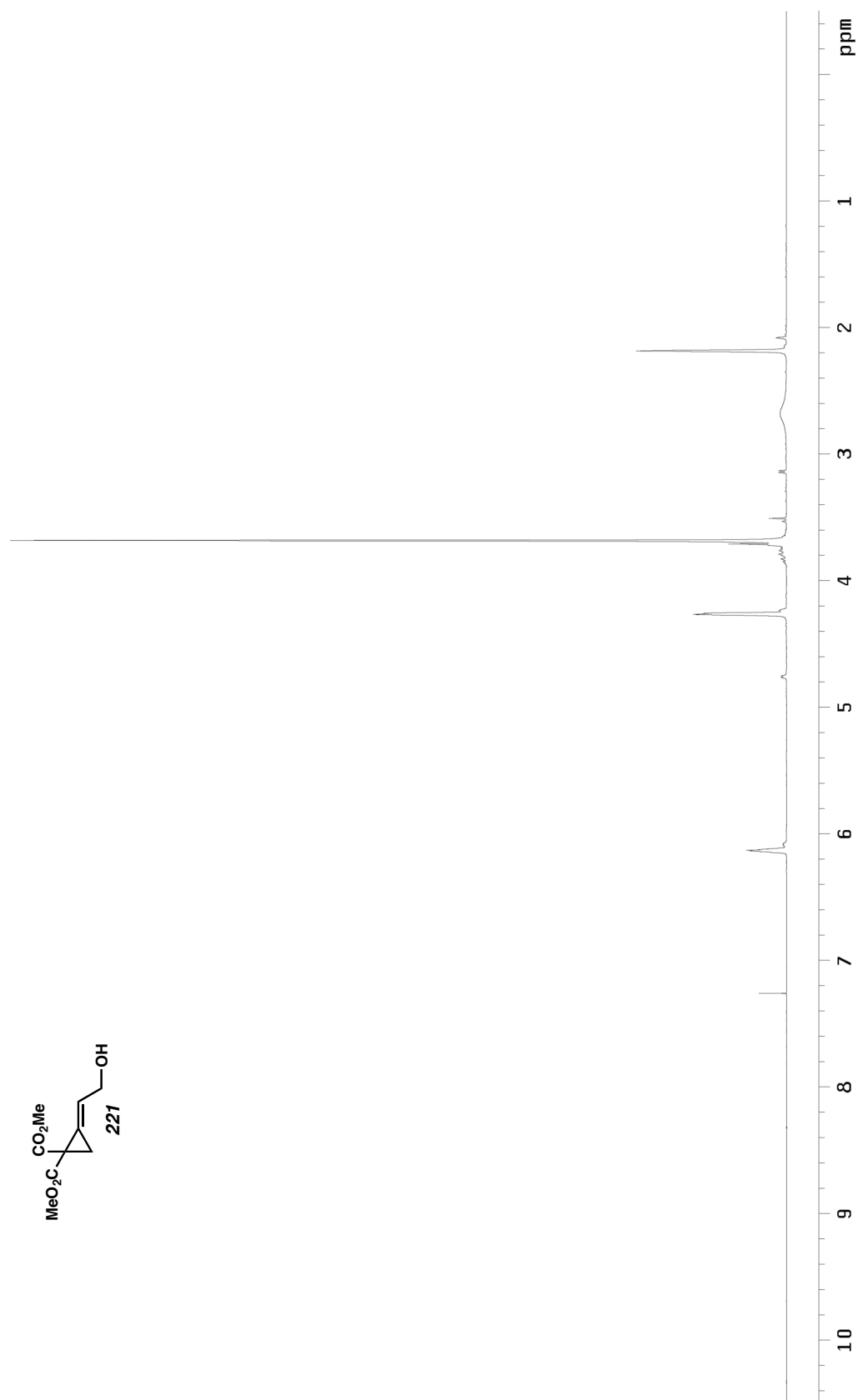


Figure A6.16 ¹H NMR (500 MHz, CDCl₃) of compound **221**

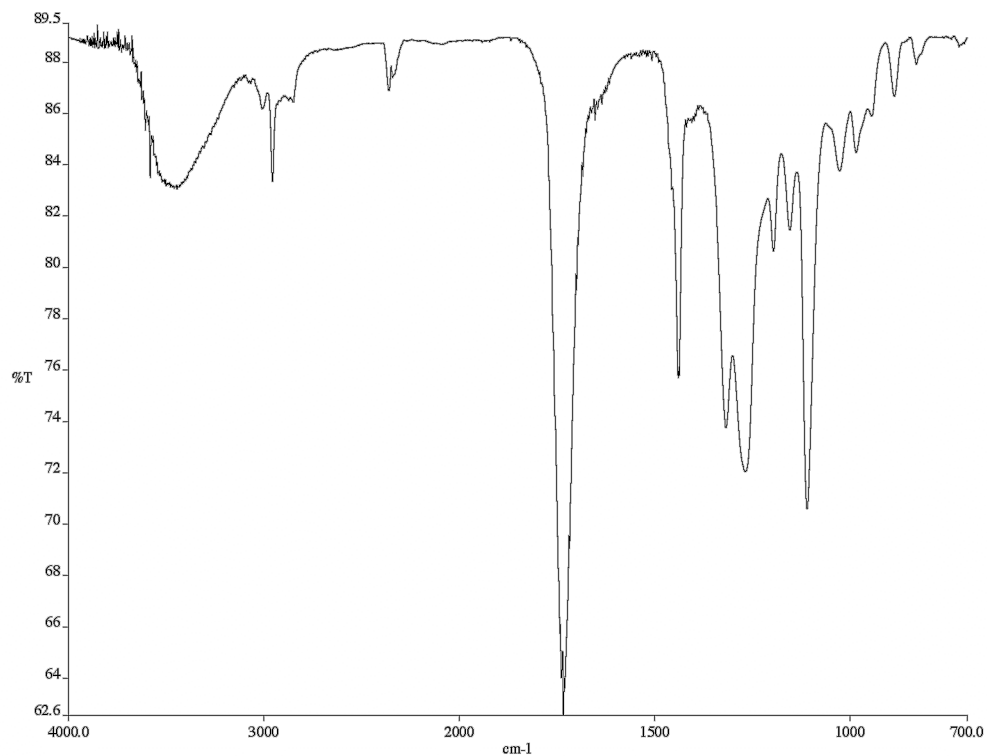


Figure A6.17 Infrared spectrum (thin film/NaCl) of compound **221**

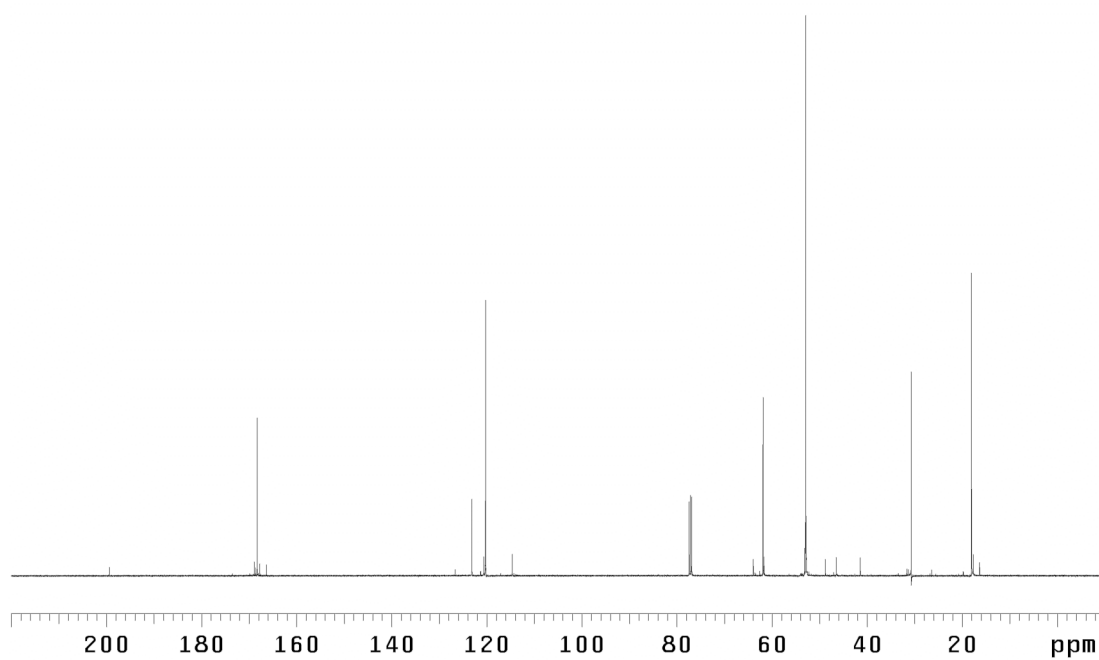


Figure A6.18 ¹³C NMR (126 MHz, CDCl₃) of compound **221**

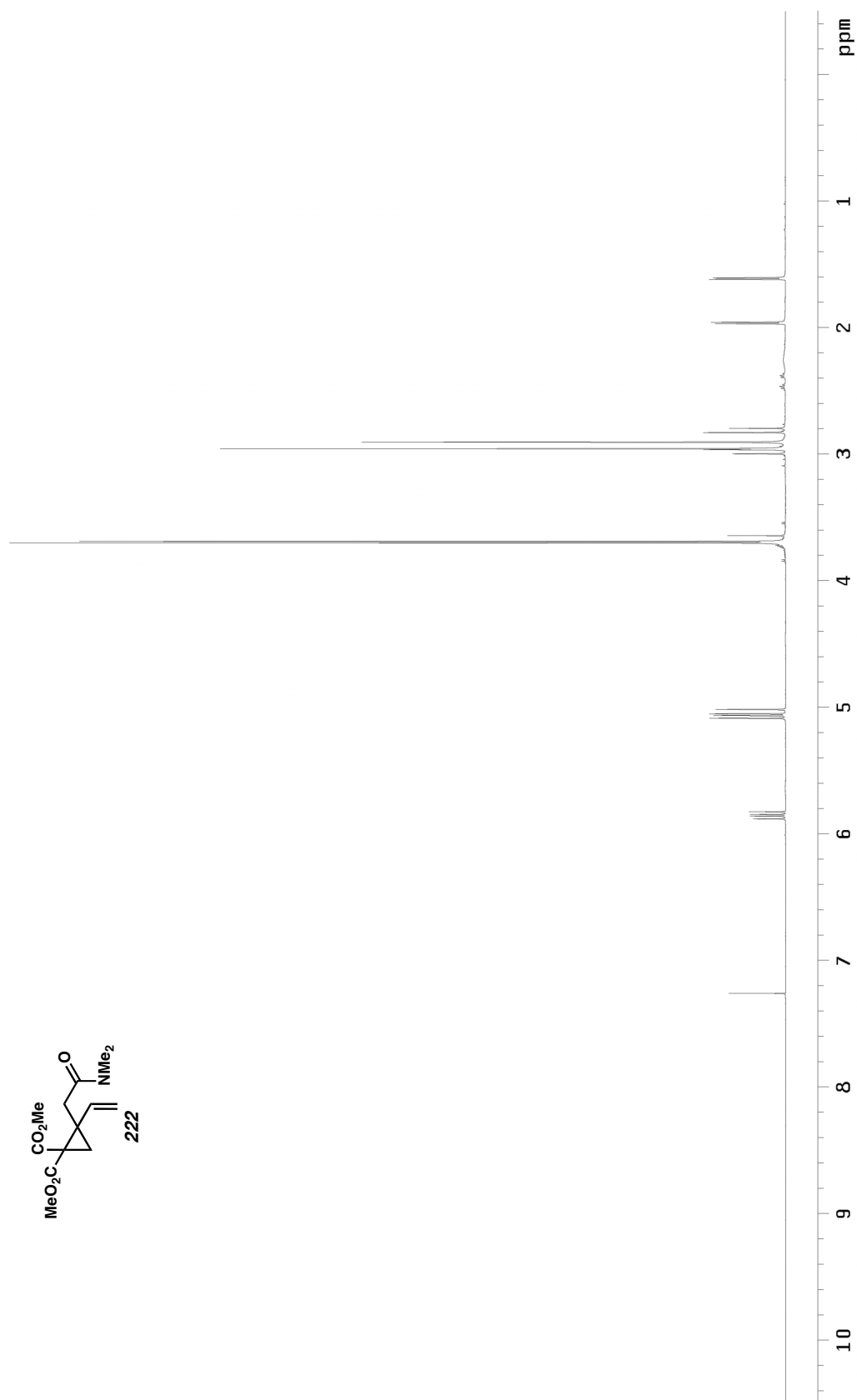


Figure A6.19 ^1H NMR (500 MHz, CDCl_3) of compound **222**

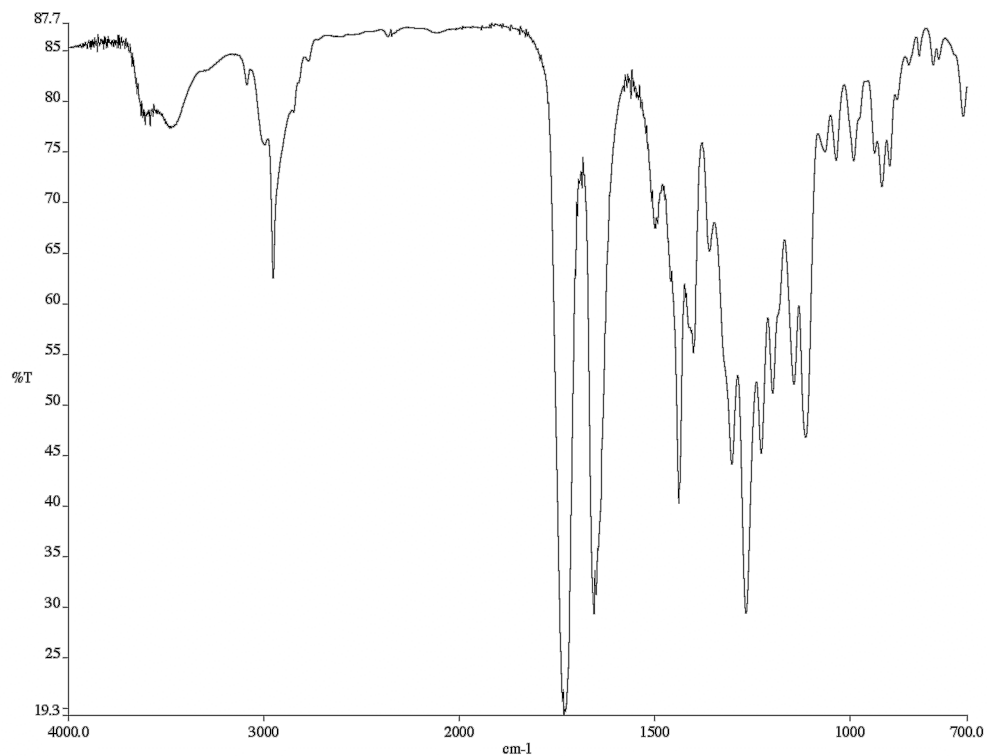


Figure A6.20 Infrared spectrum (thin film/NaCl) of compound **222**

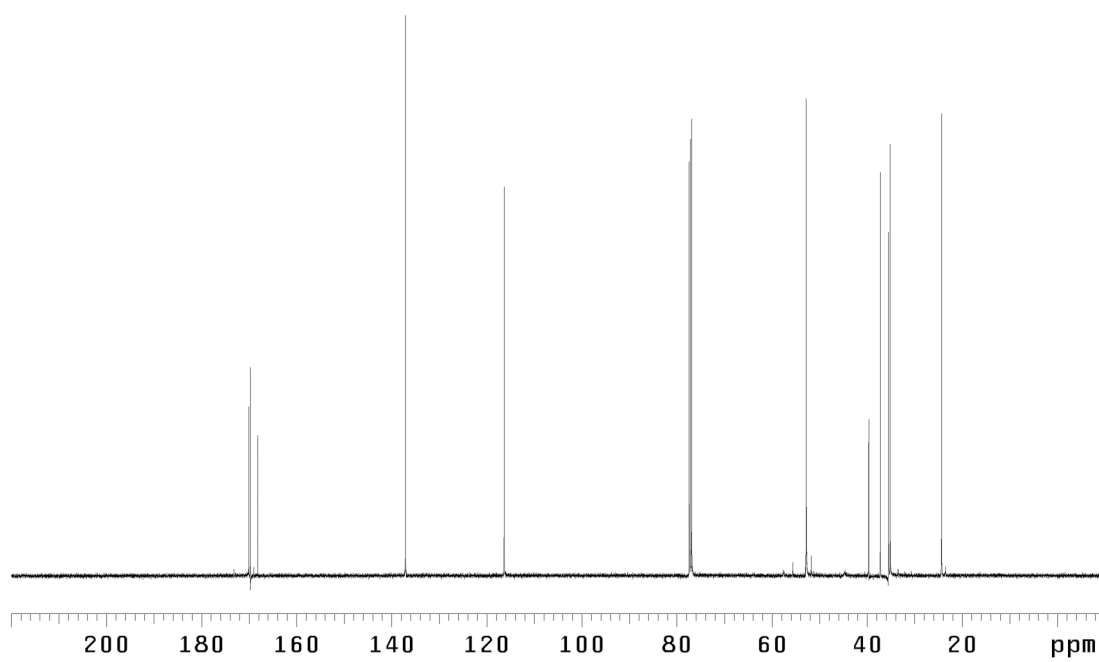


Figure A6.21 ¹³C NMR (126 MHz, CDCl₃) of compound **222**

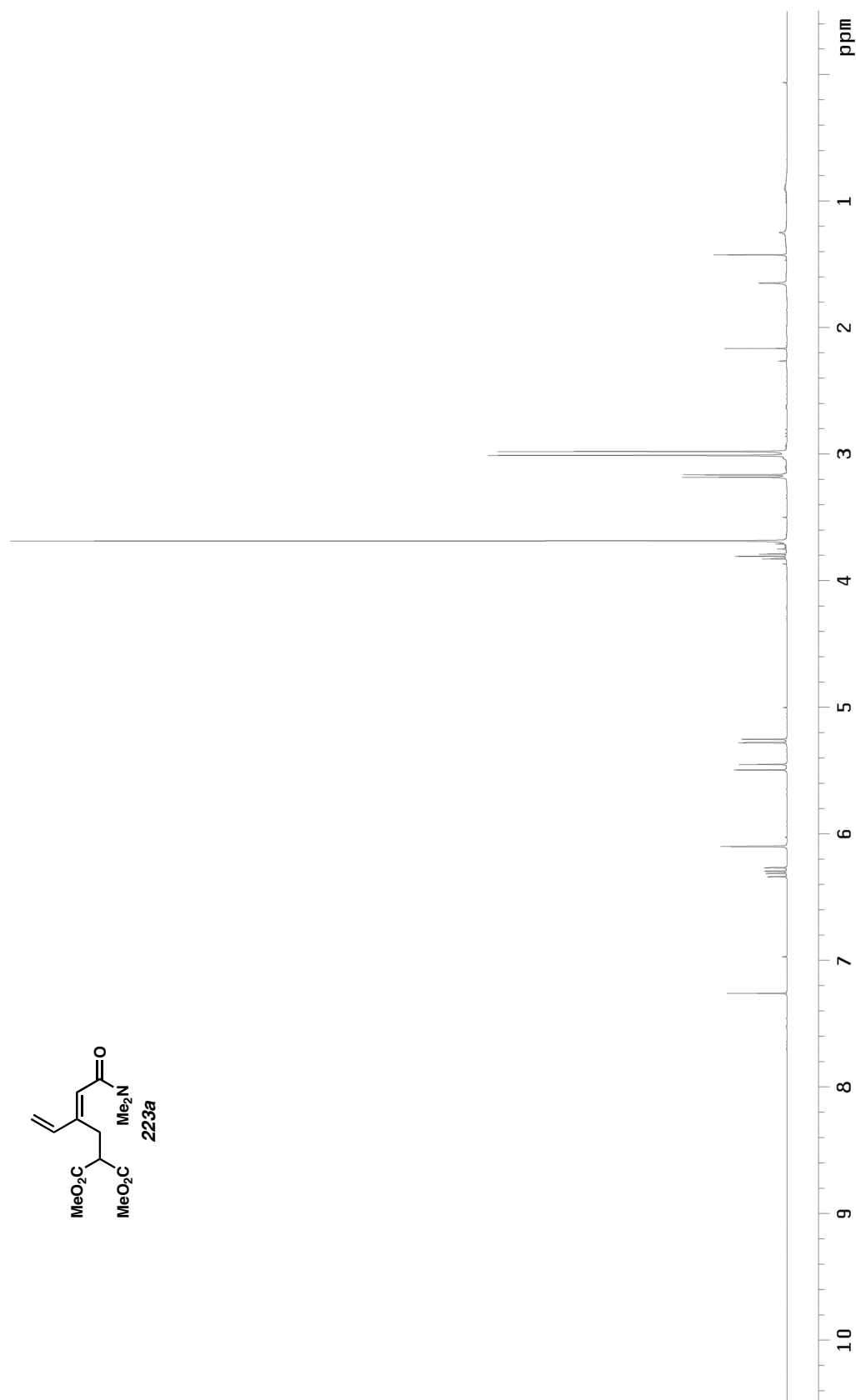
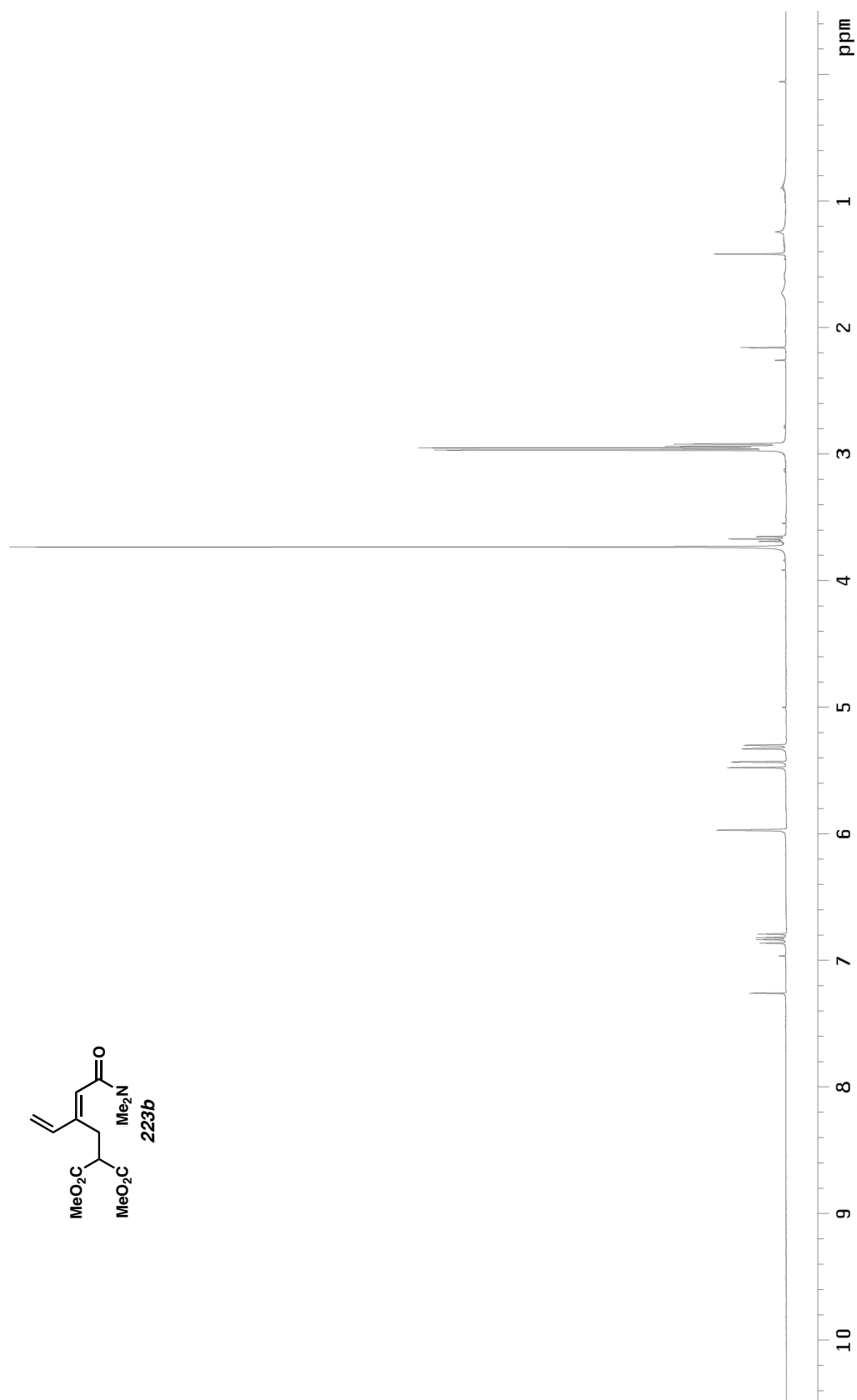


Figure A6.22 ^1H NMR (400 MHz, CDCl_3) of compound **223a**



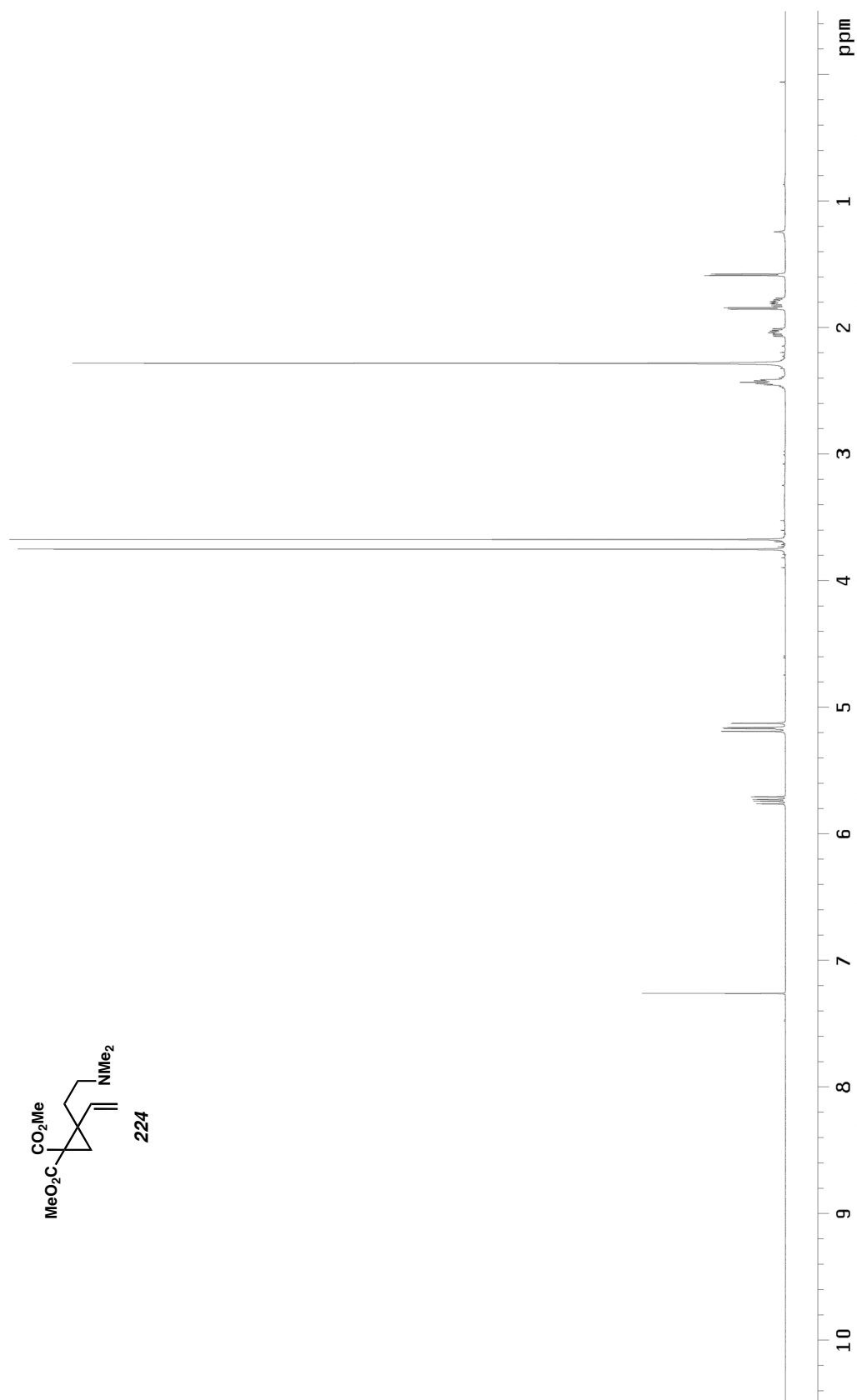


Figure A6.24 ^1H NMR (500 MHz, CDCl_3) of compound **224**

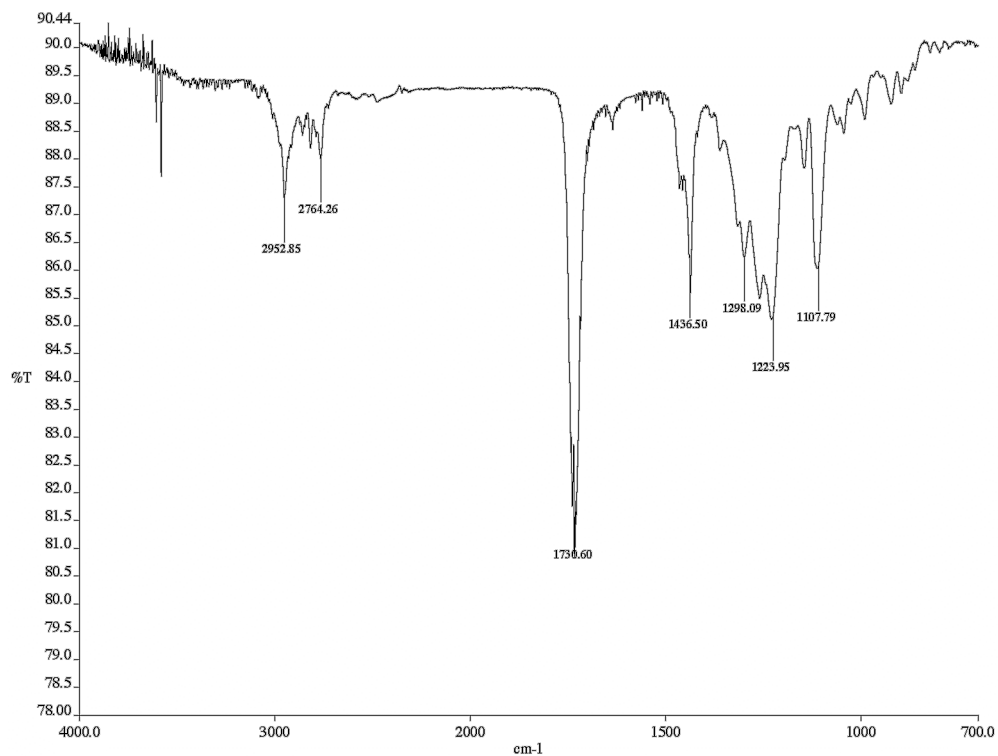


Figure A6.25 Infrared spectrum (thin film/NaCl) of compound **224**

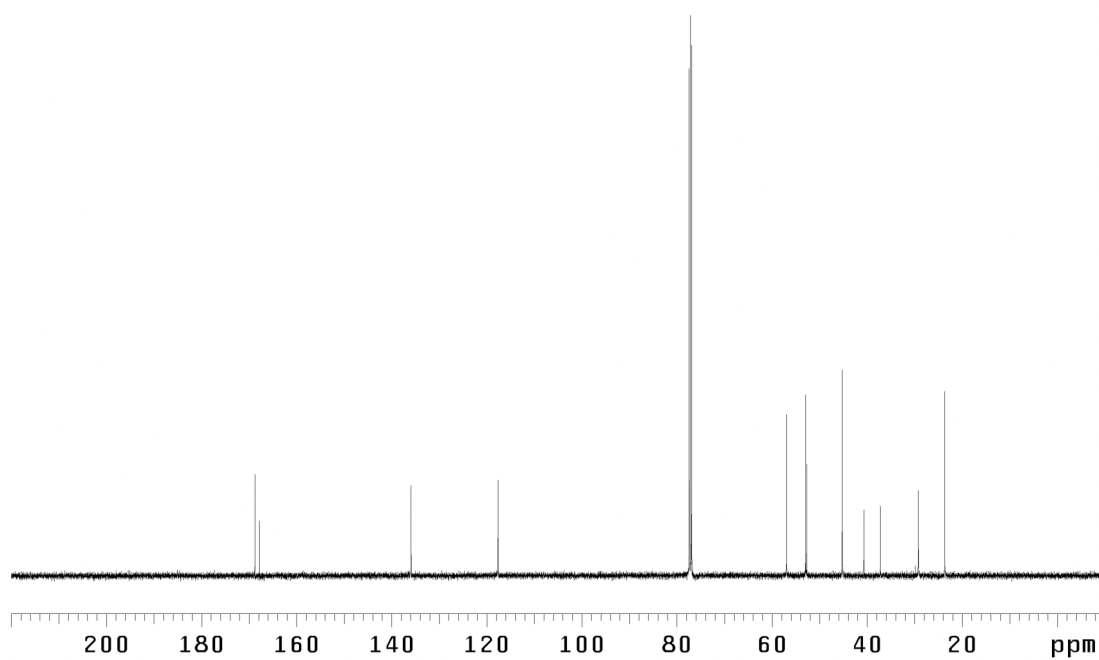


Figure A6.26 ^{13}C NMR (126 MHz, CDCl_3) of compound **224**

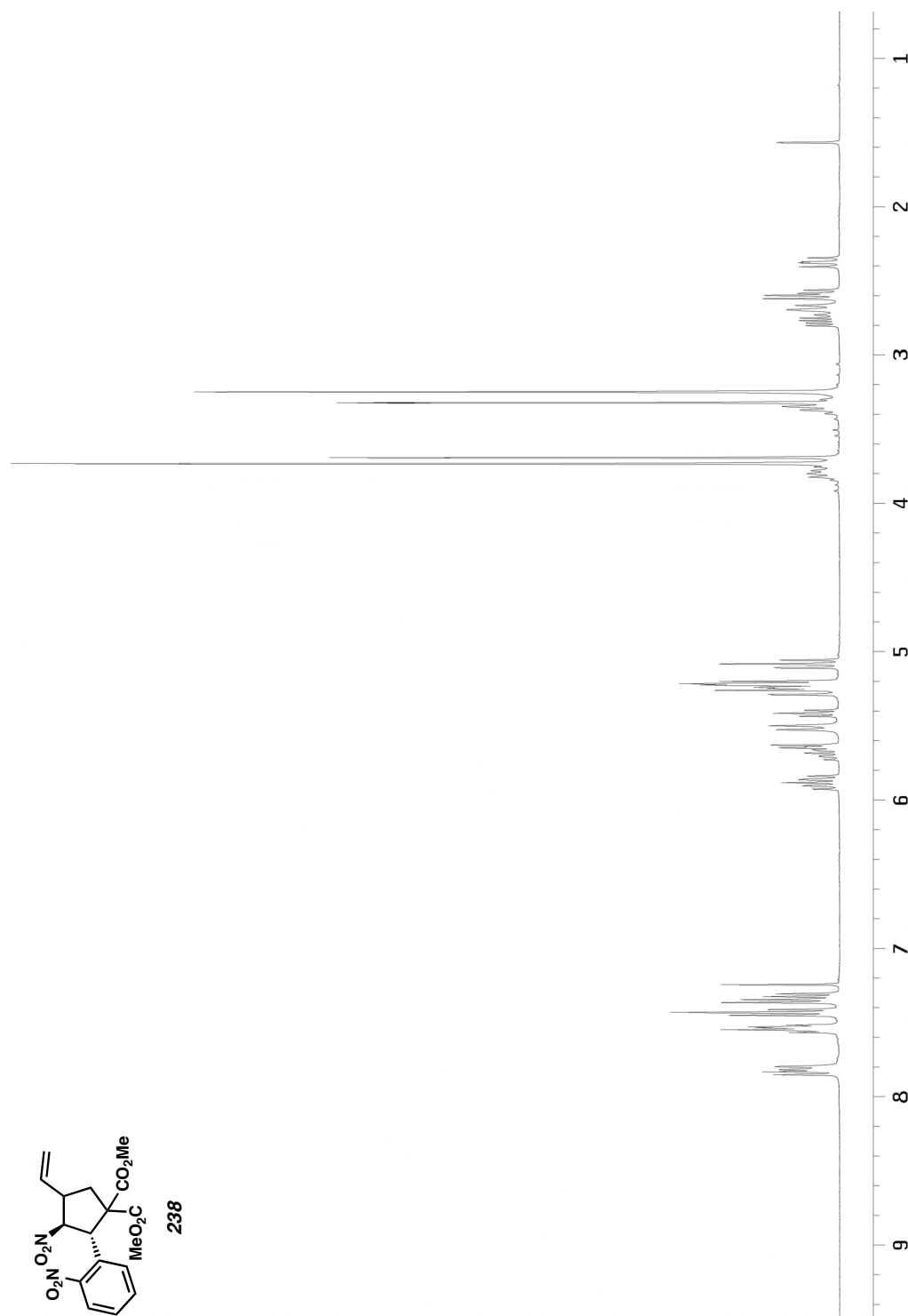


Figure A6.27 ^1H NMR (400 MHz, CDCl_3) of compound **238**

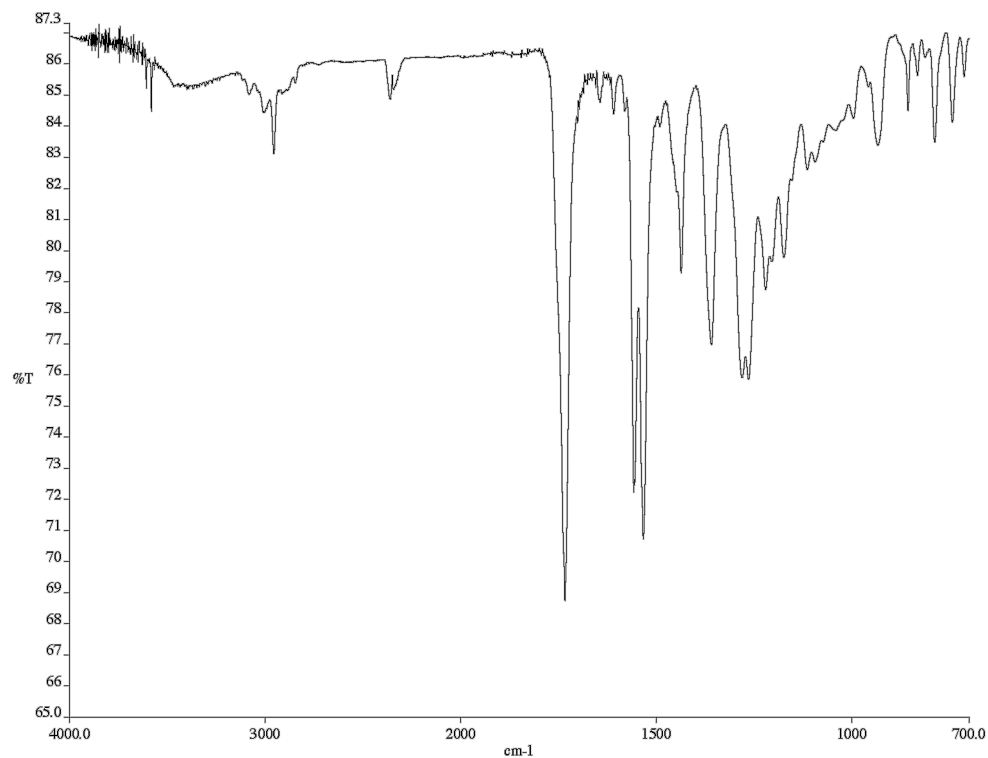


Figure A6.28 Infrared spectrum (thin film/NaCl) of compound **238**

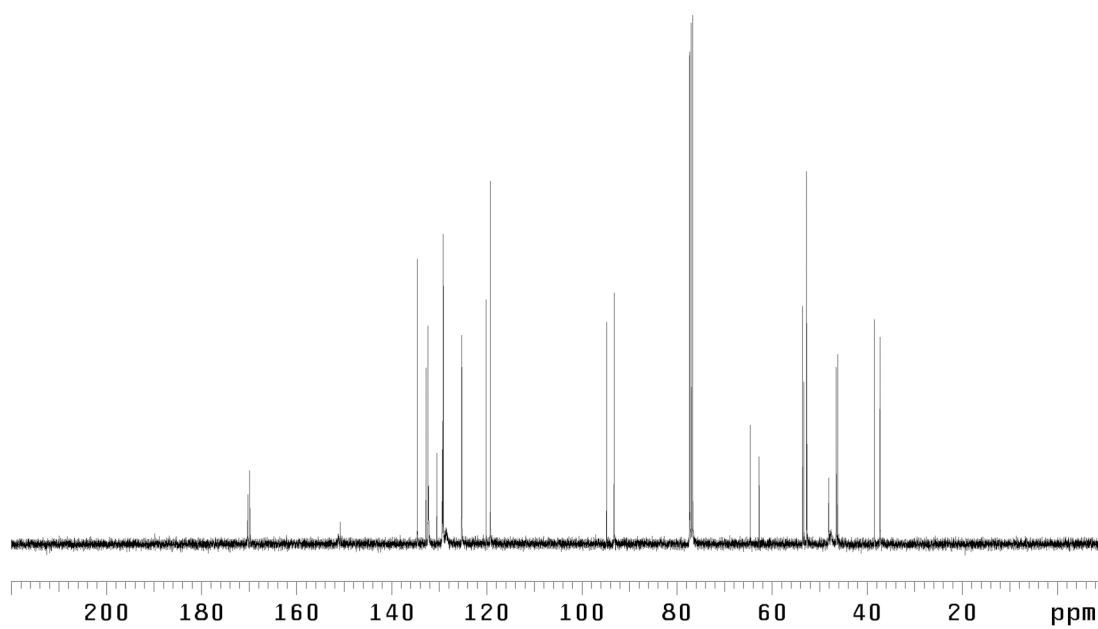


Figure A6.29 ¹³C NMR (100 MHz, CDCl₃) of compound **238**

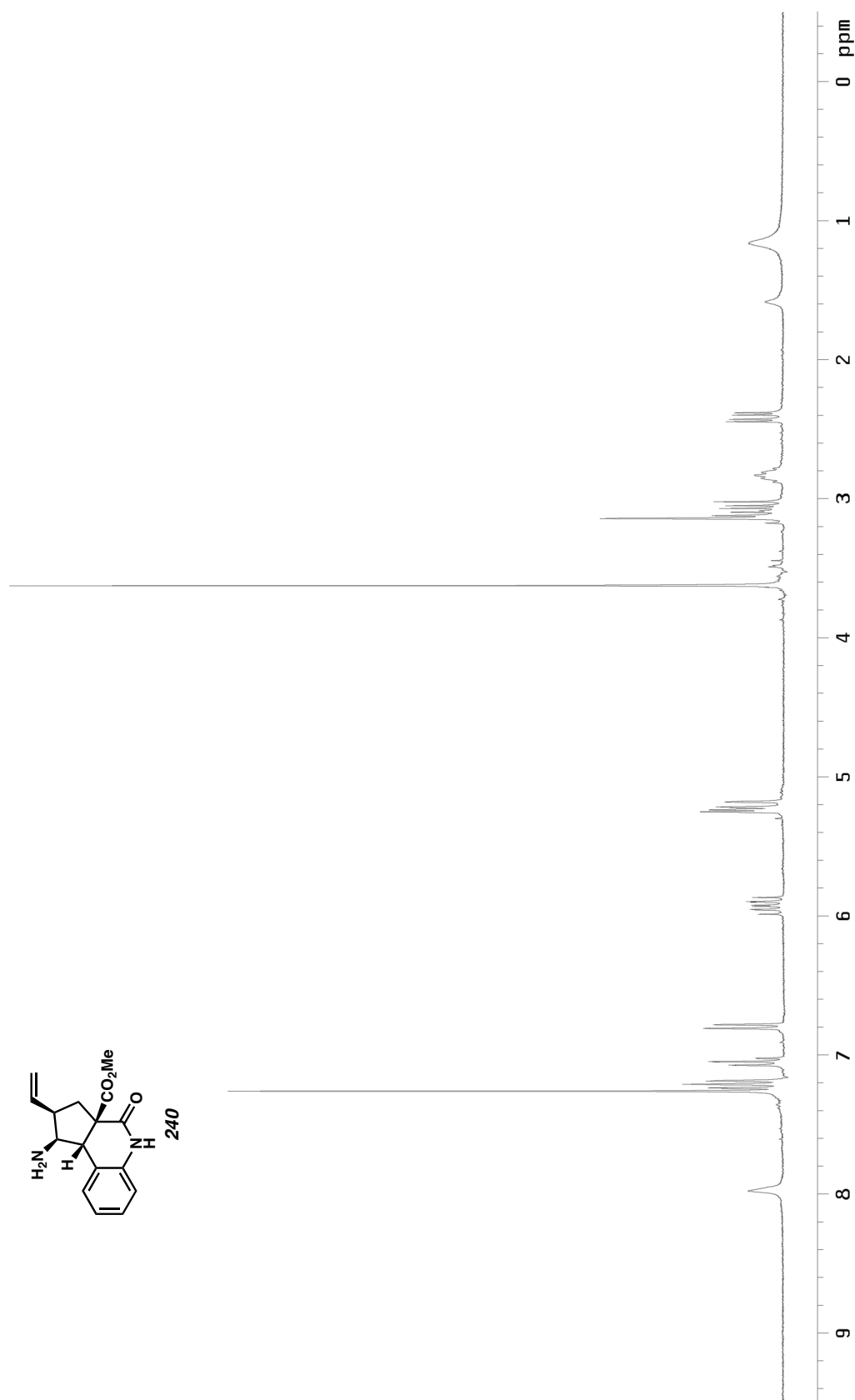


Figure A6.30 ^1H NMR (400 MHz, CDCl_3) of compound **240**

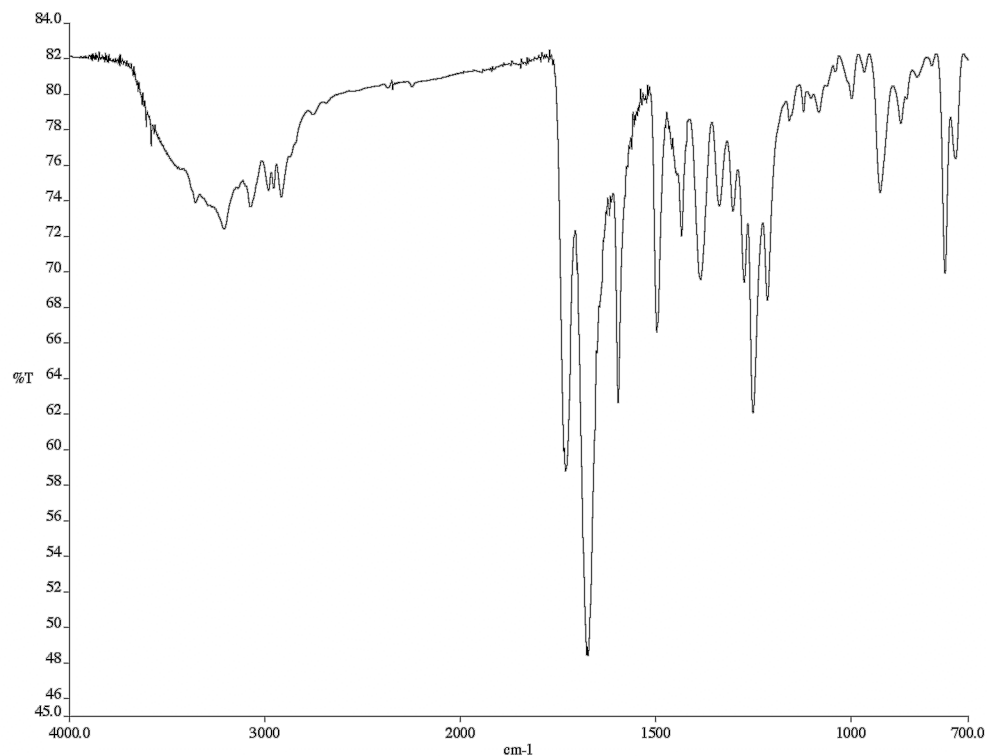


Figure A6.31 Infrared spectrum (thin film/NaCl) of compound **240**

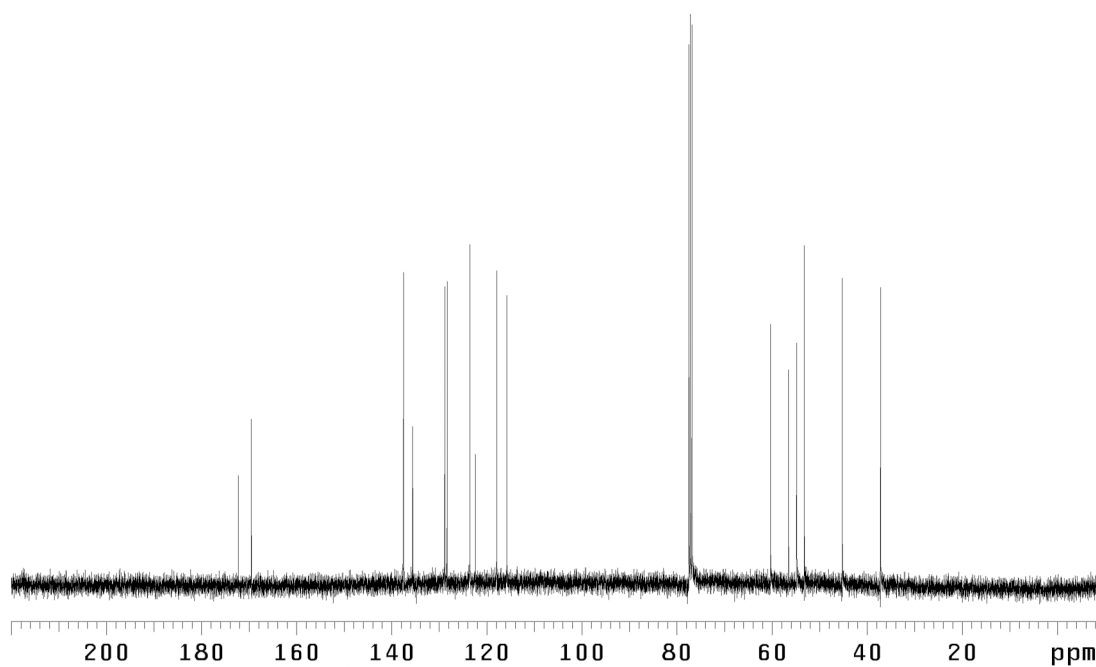


Figure A6.32 ¹³C NMR (100 MHz, CDCl₃) of compound **240**

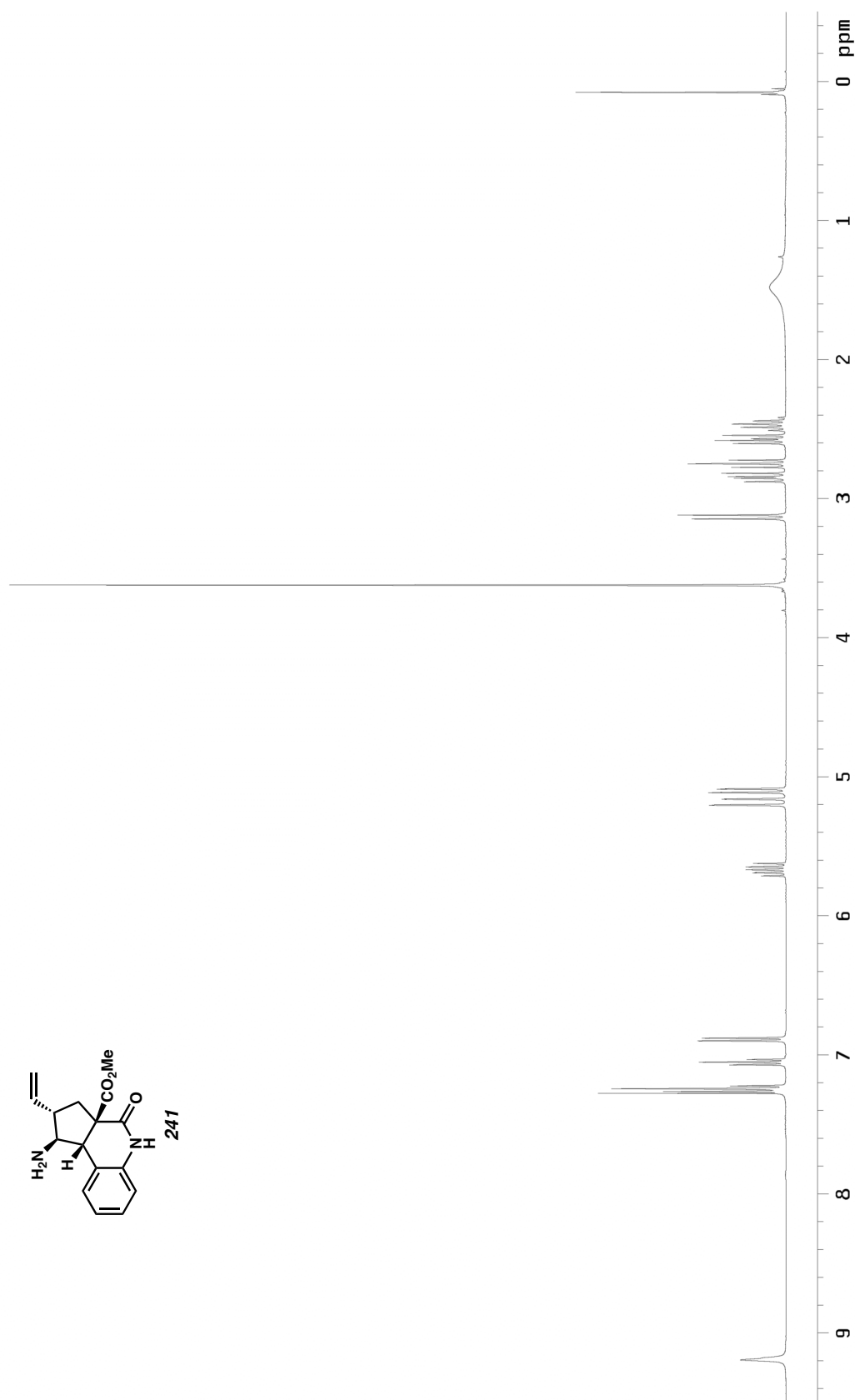


Figure A6.33 ^1H NMR (400 MHz, CDCl_3) of compound **241**

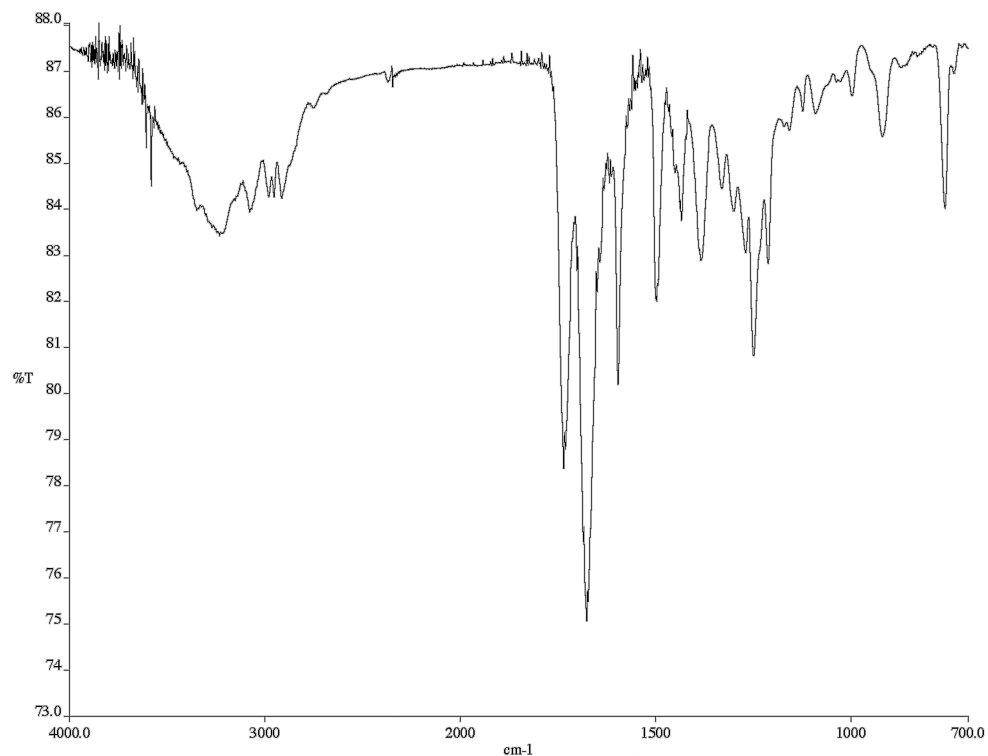


Figure A6.34 Infrared spectrum (thin film/NaCl) of compound **241**

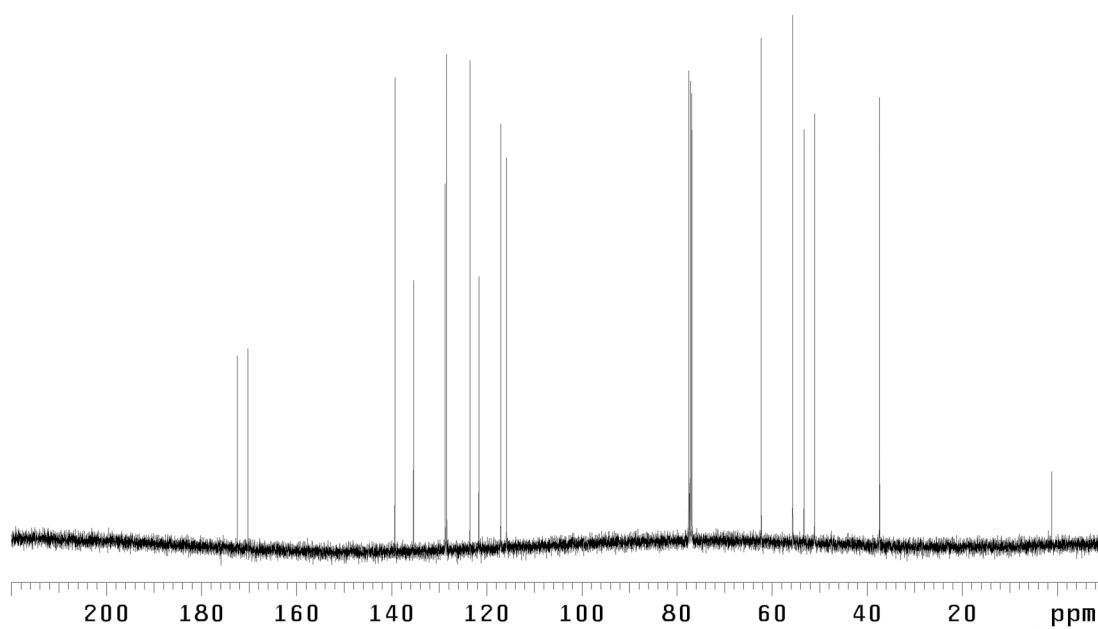


Figure A6.35 ¹³C NMR (100 MHz, CDCl₃) of compound **241**

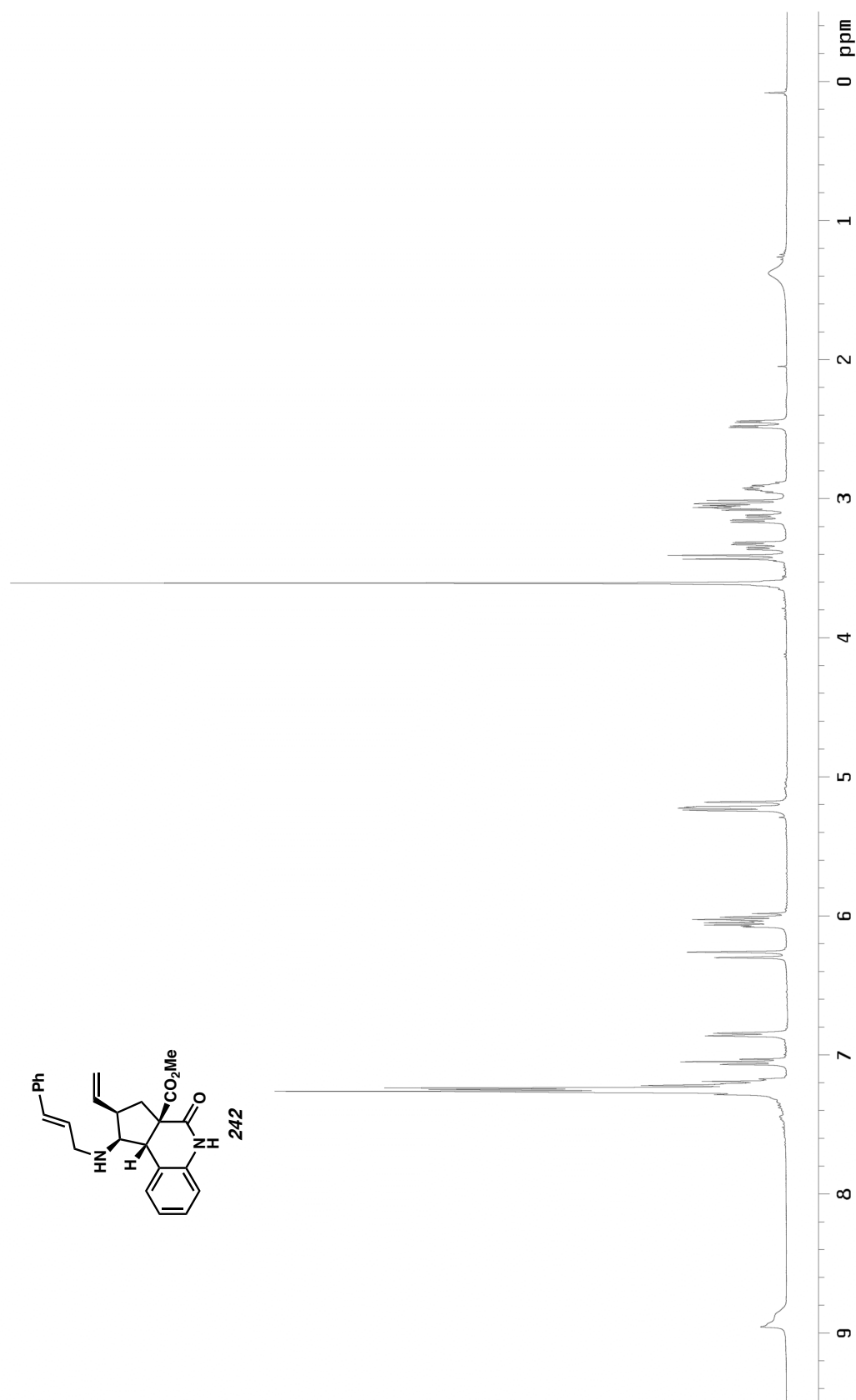


Figure A6.36 ^1H NMR (400 MHz, CDCl_3) of compound **242**

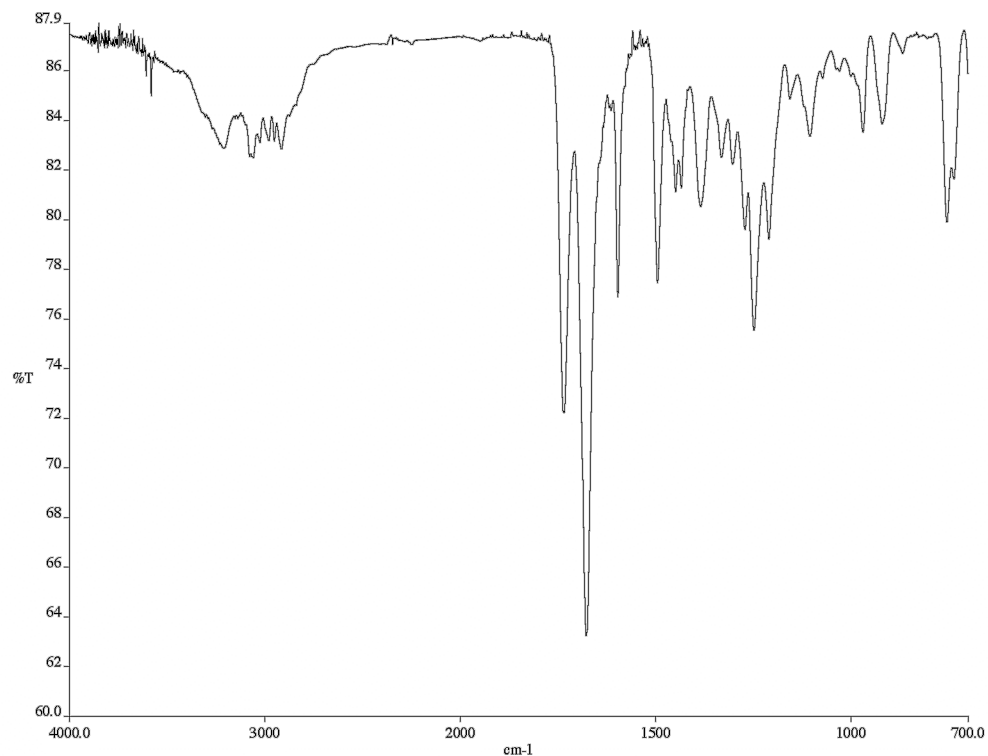


Figure A6.37 Infrared spectrum (thin film/NaCl) of compound **242**

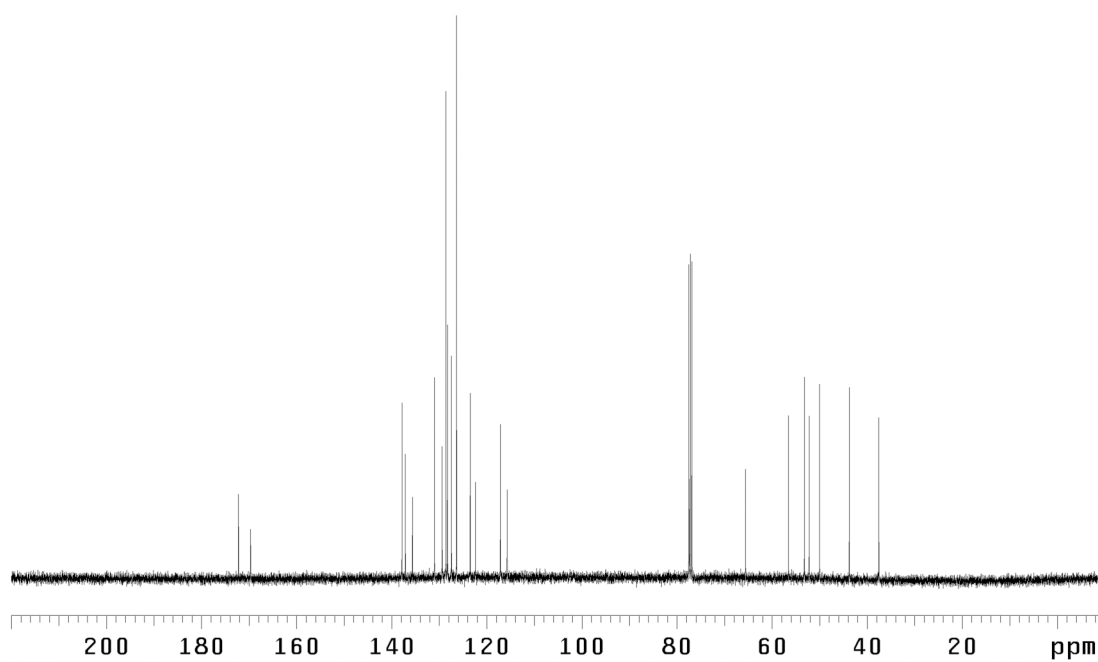


Figure A6.38 ¹³C NMR (100 MHz, CDCl₃) of compound **242**

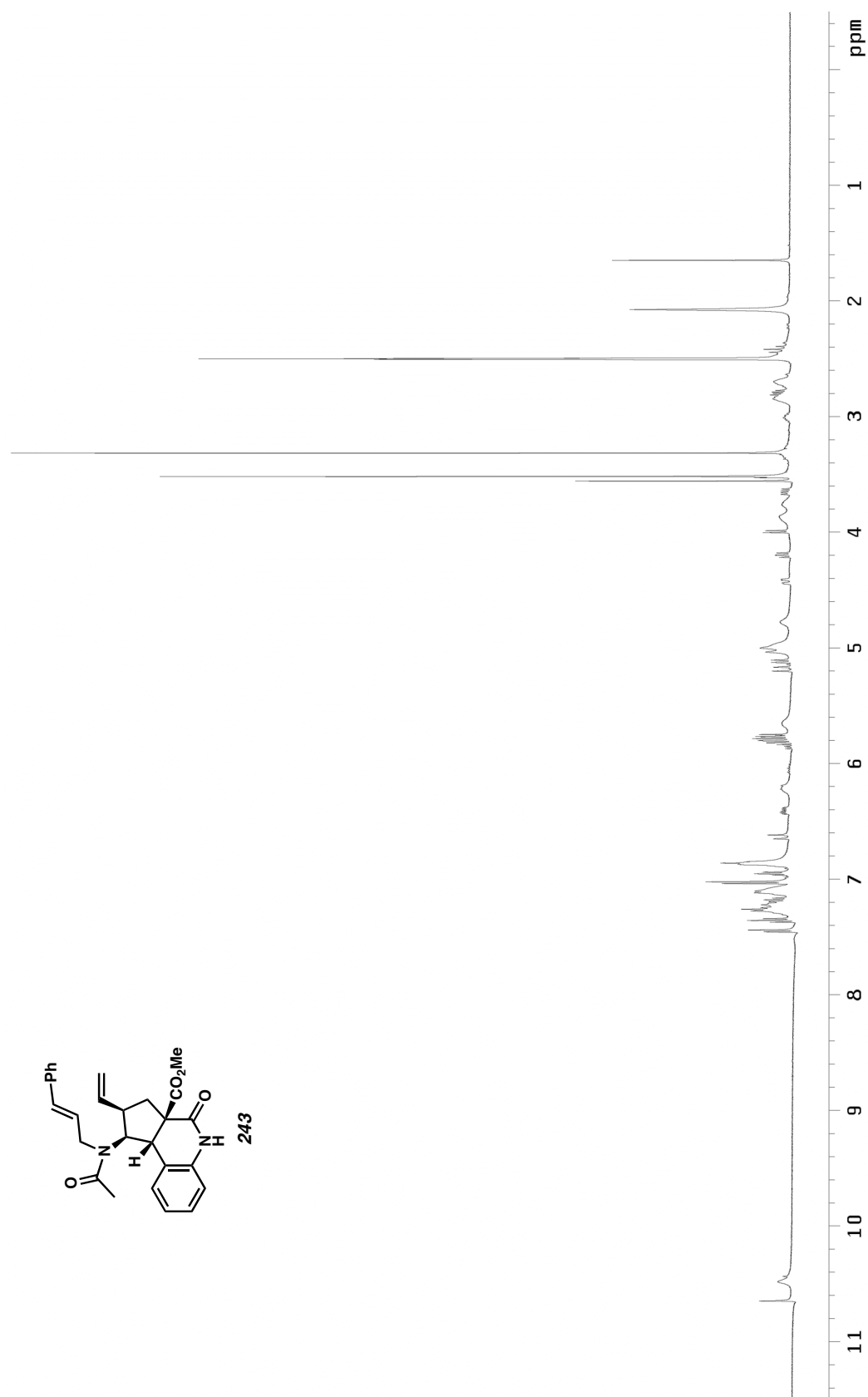


Figure A6.39 ^1H NMR (500 MHz, $\text{d}_6\text{-DMSO}$) of crude compound **243**

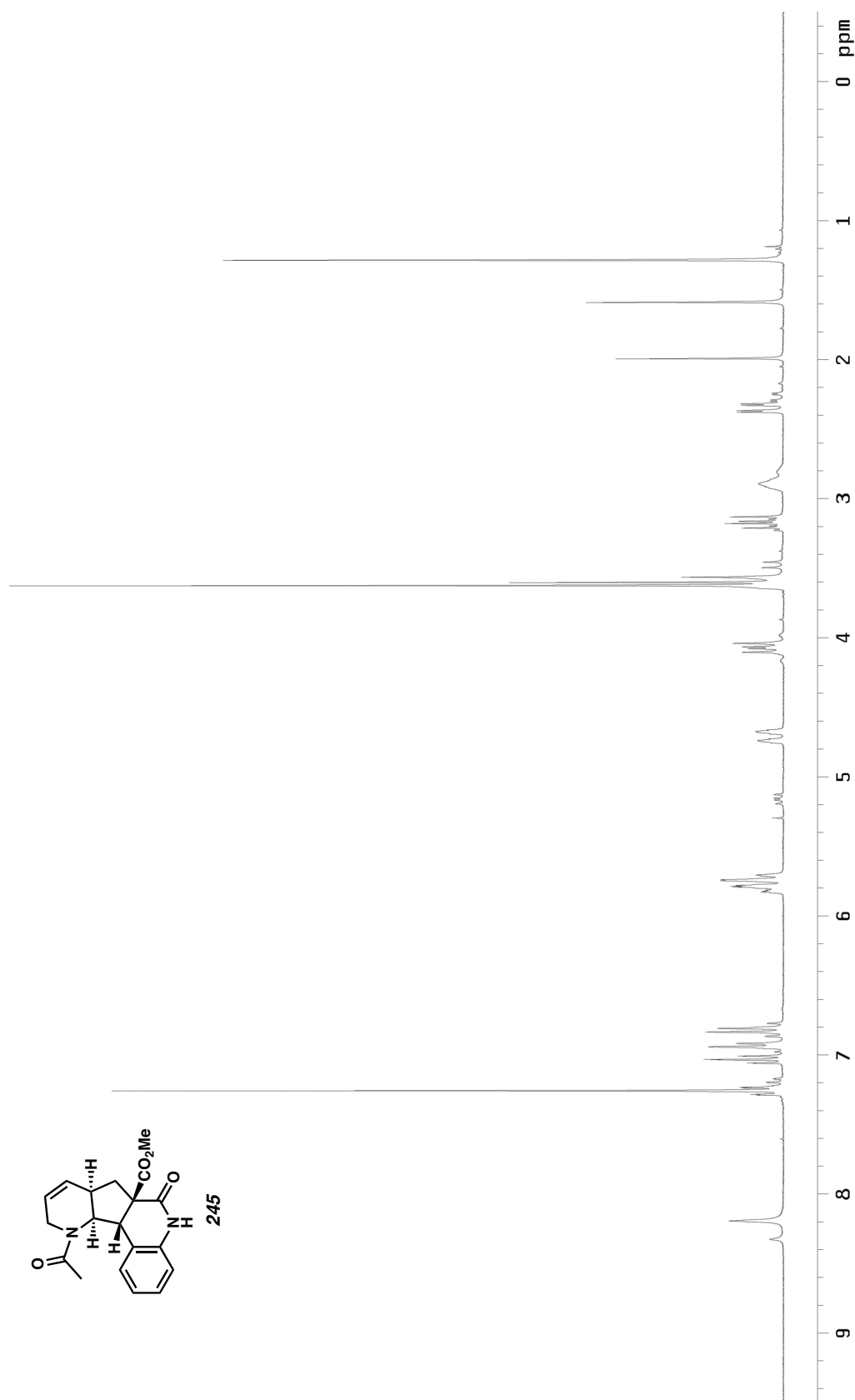


Figure A6.40 ^1H NMR (300 MHz, CDCl_3) of compound **245**

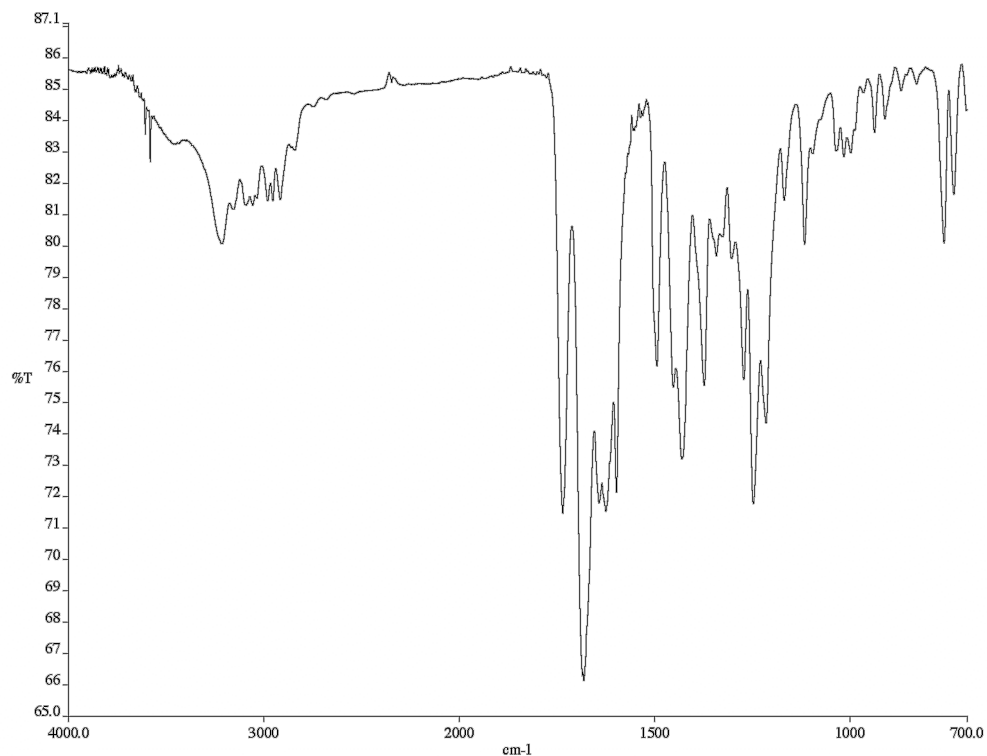


Figure A6.41 Infrared spectrum (thin film/NaCl) of compound **245**

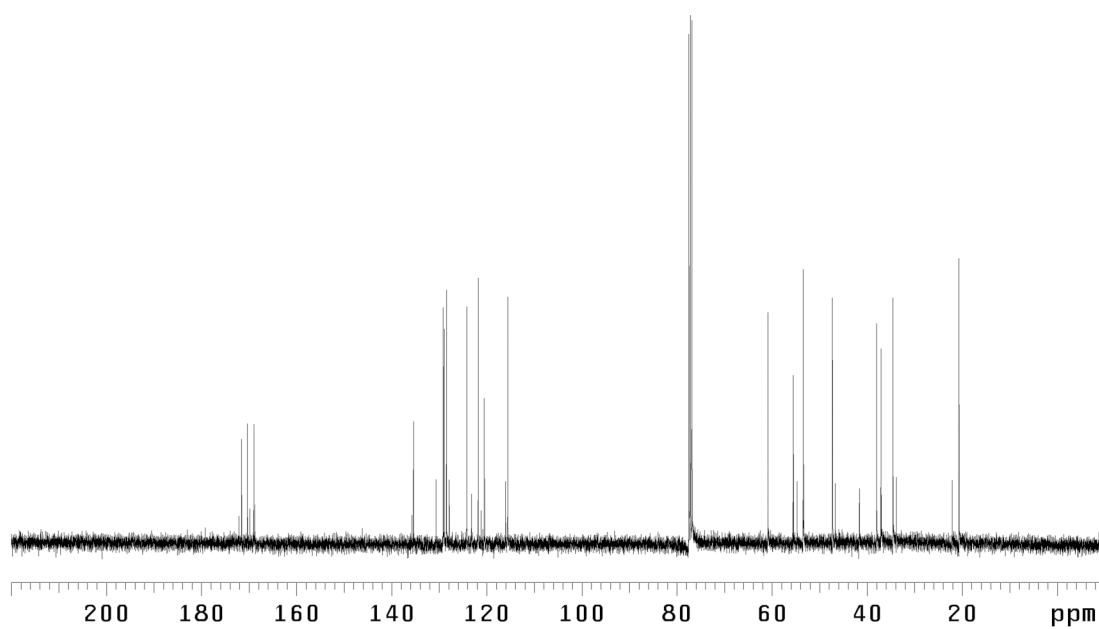


Figure A6.42 ¹³C NMR (100 MHz, CDCl₃) of compound **245**

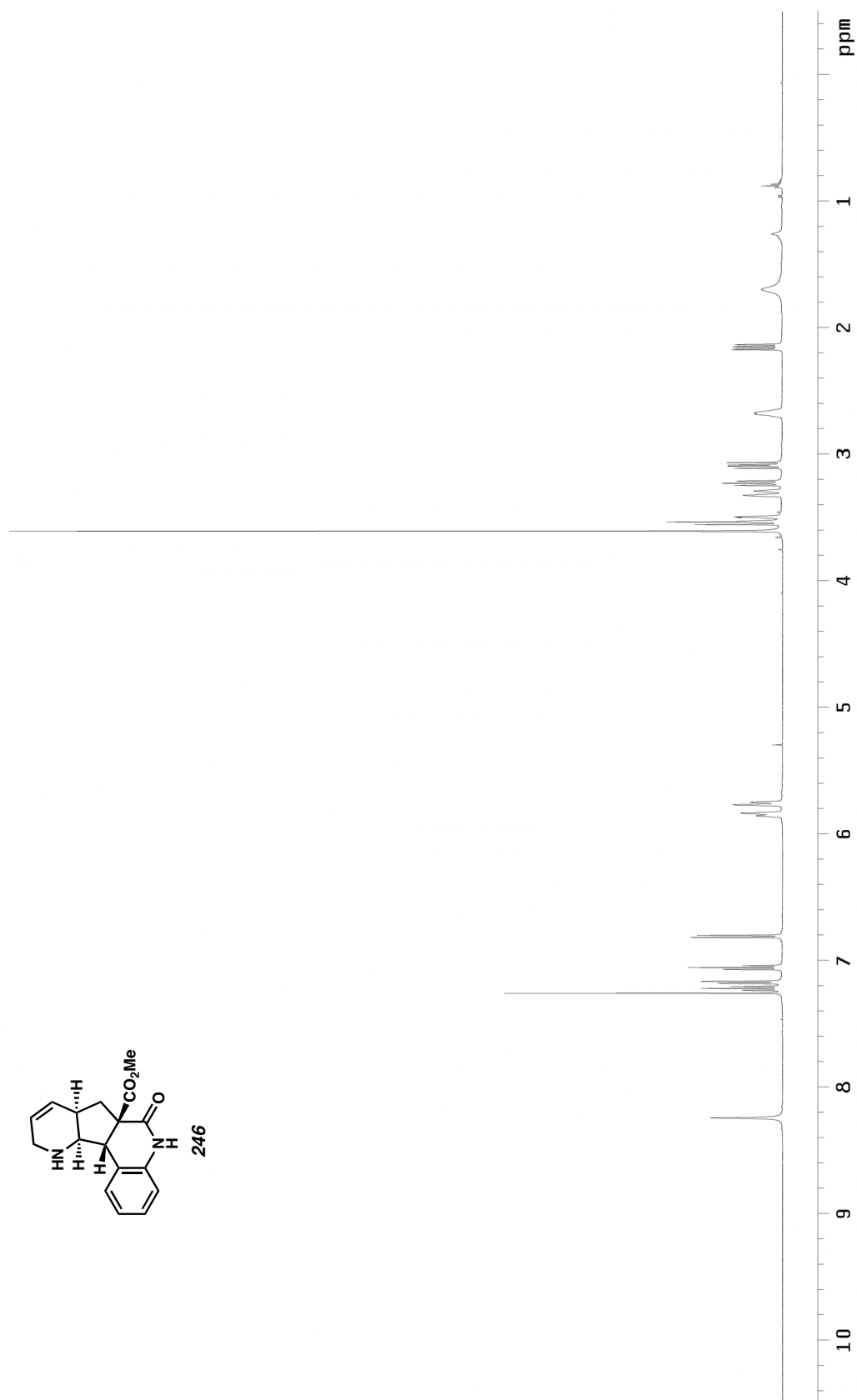


Figure A6.43 ^1H NMR (500 MHz, CDCl_3) of compound **246**

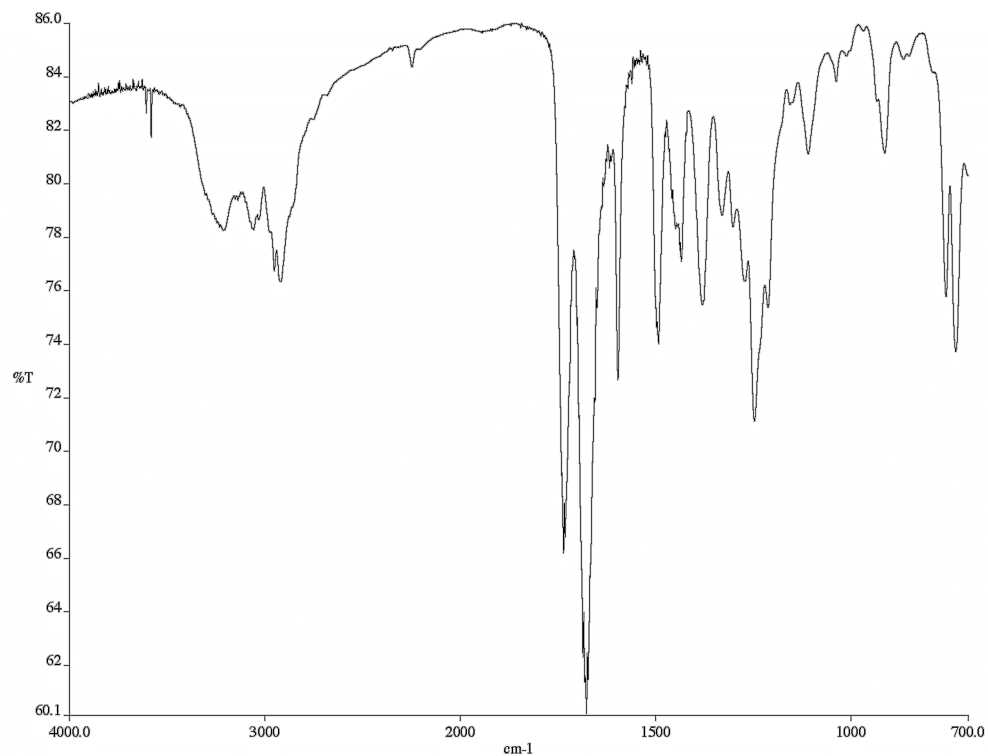


Figure A6.44 Infrared spectrum (thin film/NaCl) of compound **246**

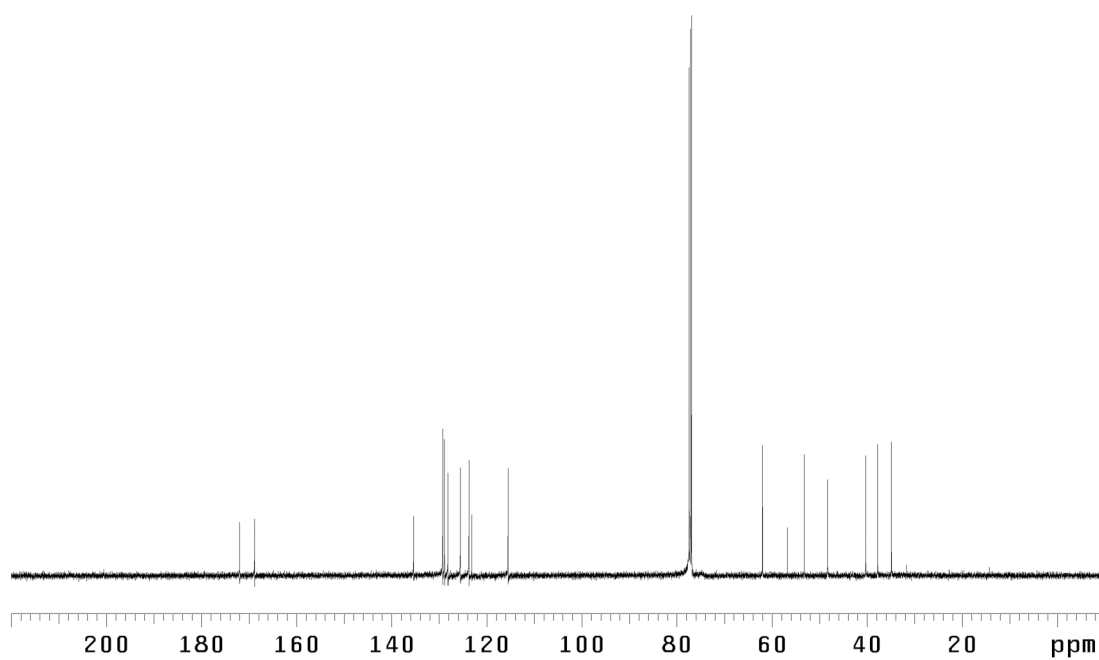


Figure A6.45 ¹³C NMR (126 MHz, CDCl₃) of compound **246**

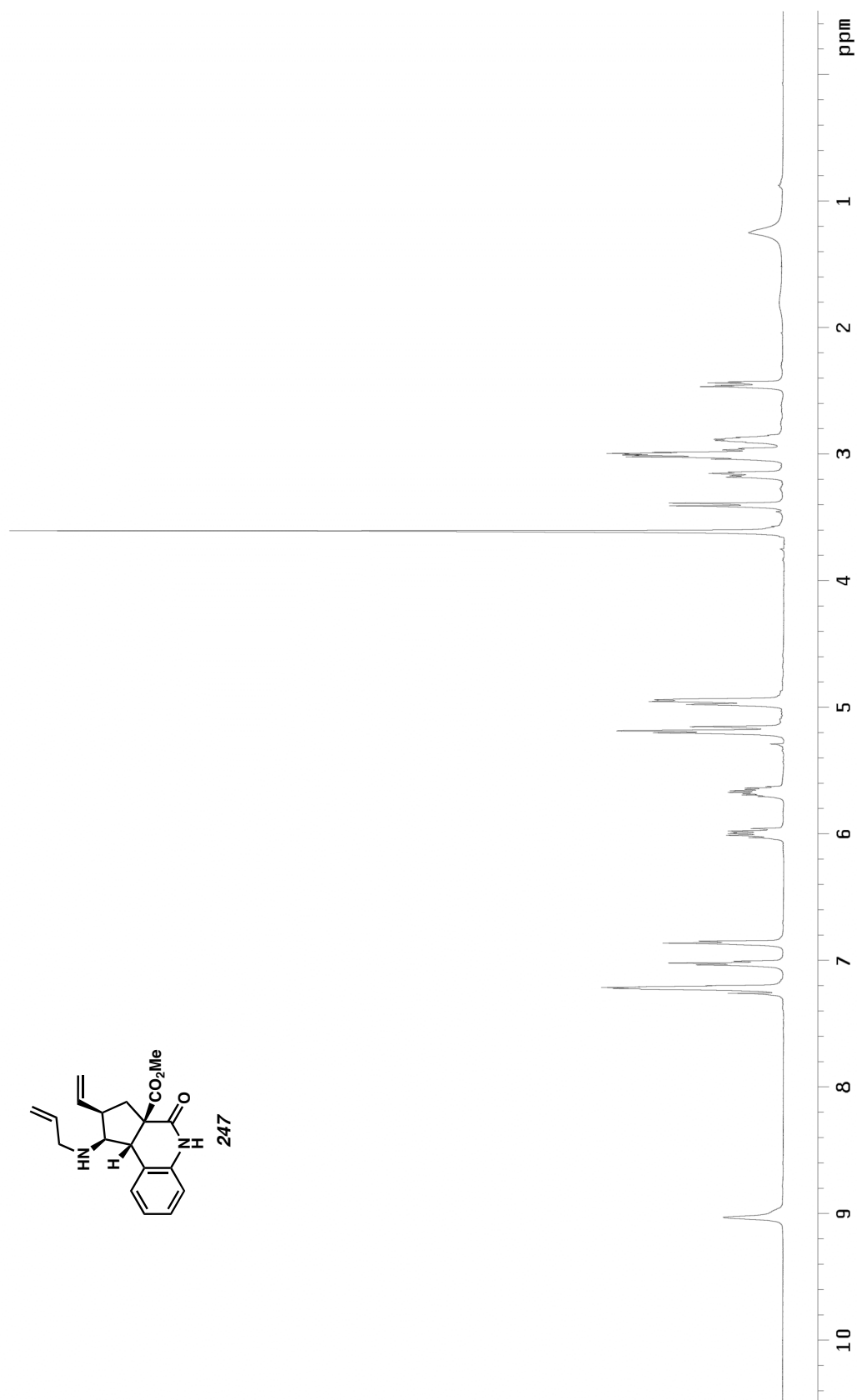


Figure A6.46 ¹H NMR (500 MHz, CDCl₃) of compound **247**

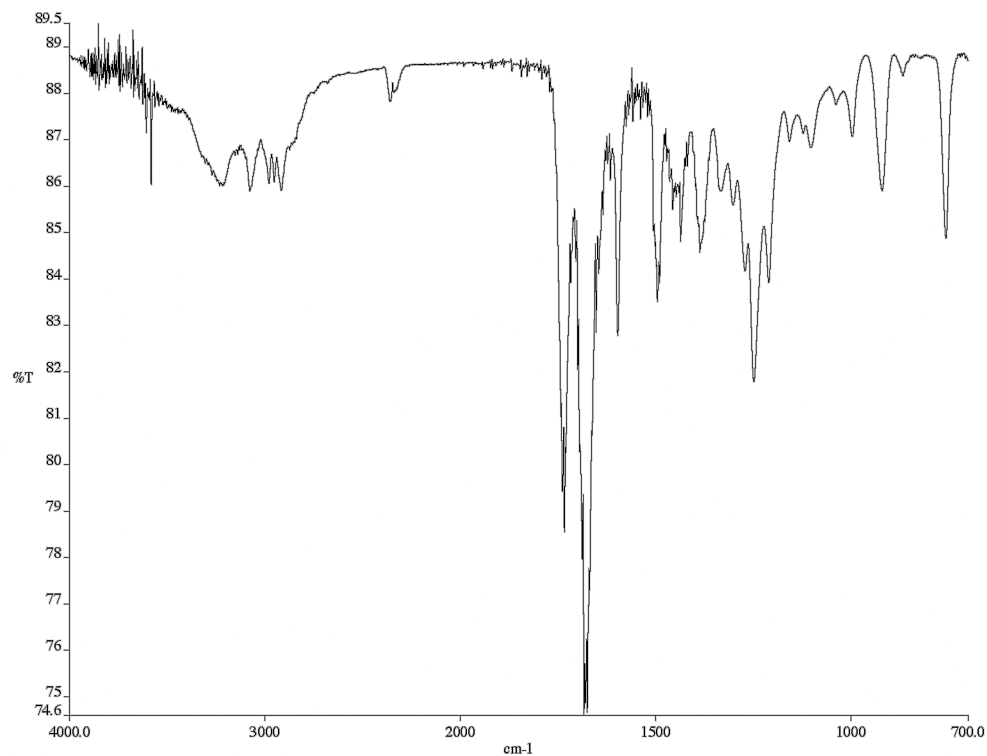


Figure A6.47 Infrared spectrum (thin film/NaCl) of compound **247**

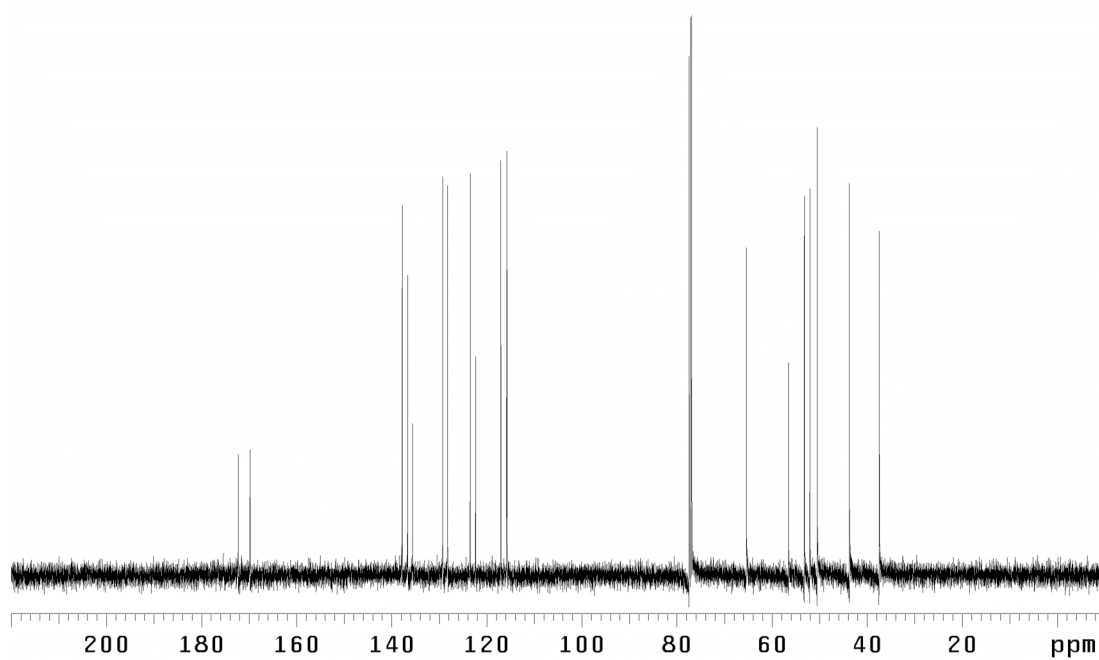


Figure A6.48 ¹³C NMR (126 MHz, CDCl₃) of compound **247**

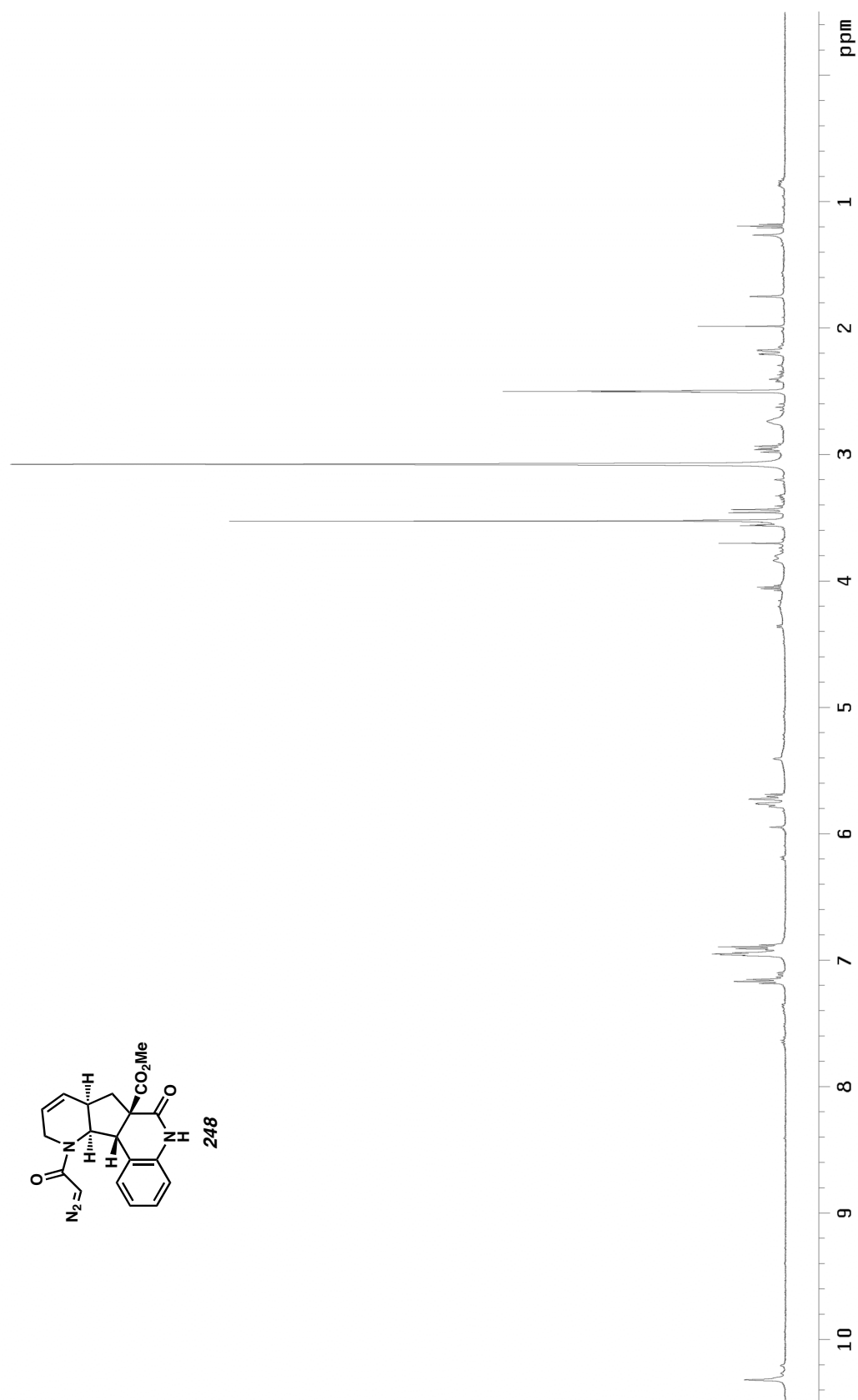


Figure 6.49 ^1H NMR (500 MHz, $\text{d}_6\text{-DMSO}$, 80°C) of compound **248**

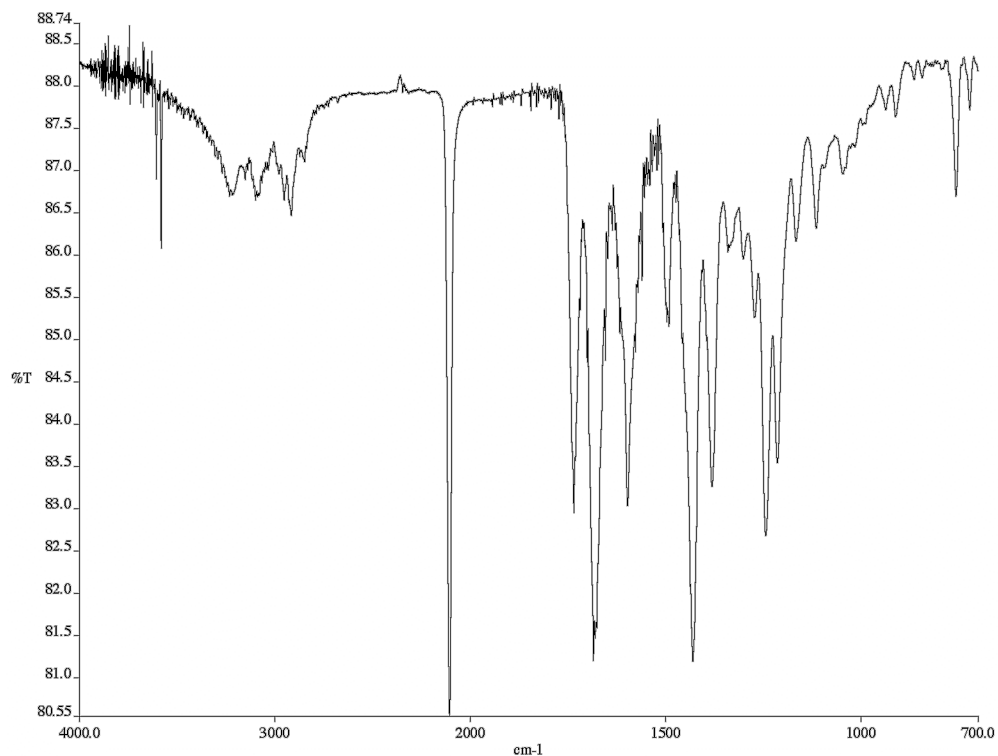


Figure 6.50 Infrared spectrum (thin film/NaCl) of compound **248**

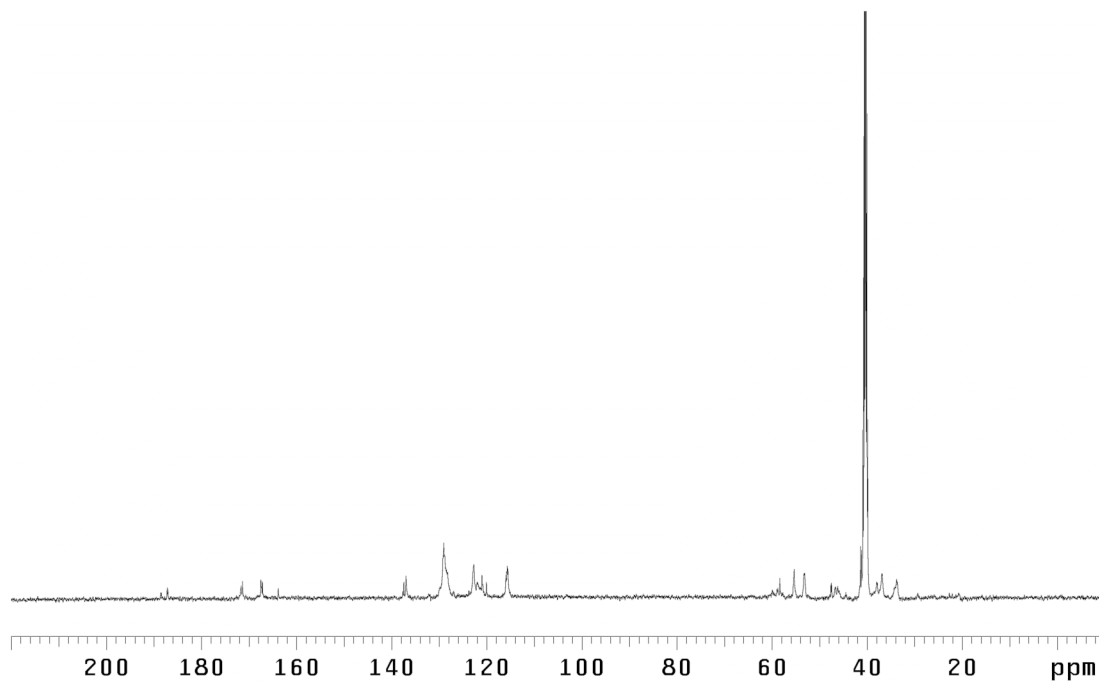


Figure 6.51 ¹³C NMR (126 MHz, d₆-DMSO, 80 °C) of compound **248**