

APPENDIX TWO

**Spectra Relevant to Chapter Two:
Studies Directed Toward the Total Synthesis of Saudin and the
Development of a Tandem Stille-Oxa-Electrocyclization Reaction**

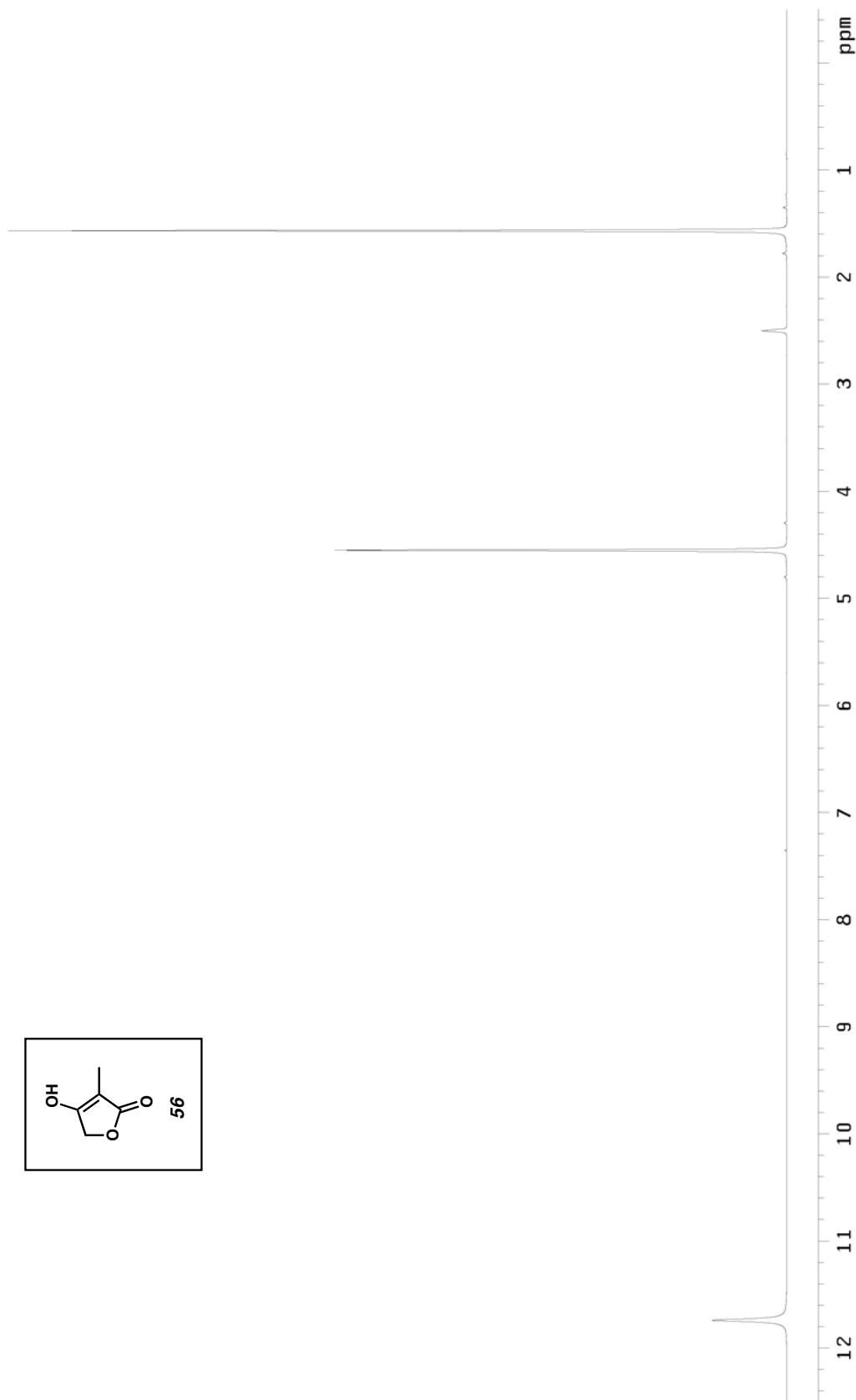


Figure A2.1 ^1H NMR (300 MHz, $\text{DMSO}-d_6$) of compound **56**.

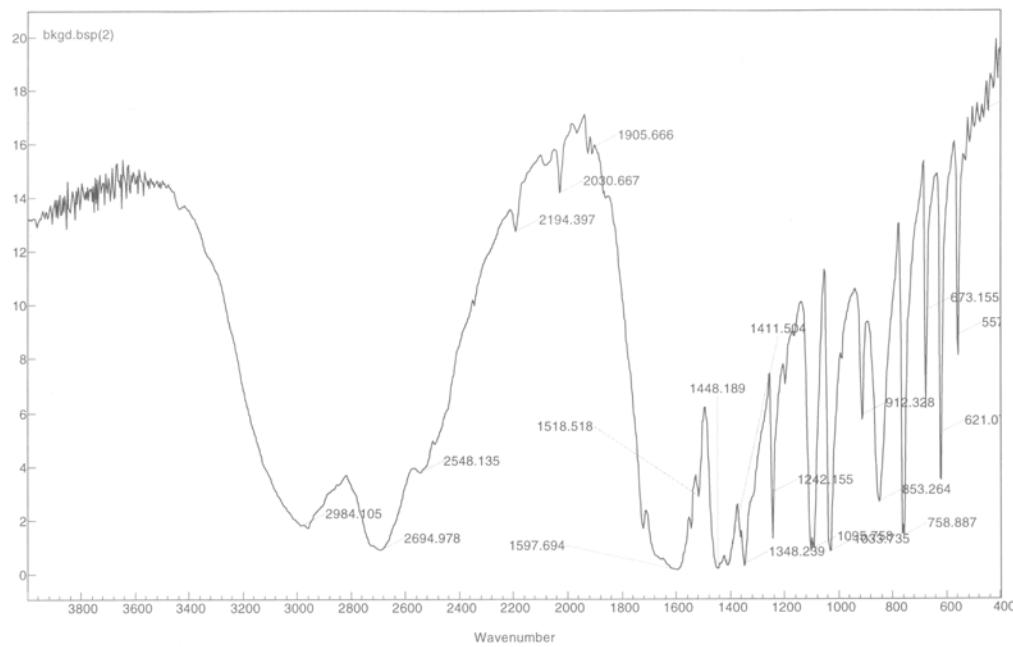


Figure A2.2 Infrared spectrum (KBr pellet) of compound **56**.

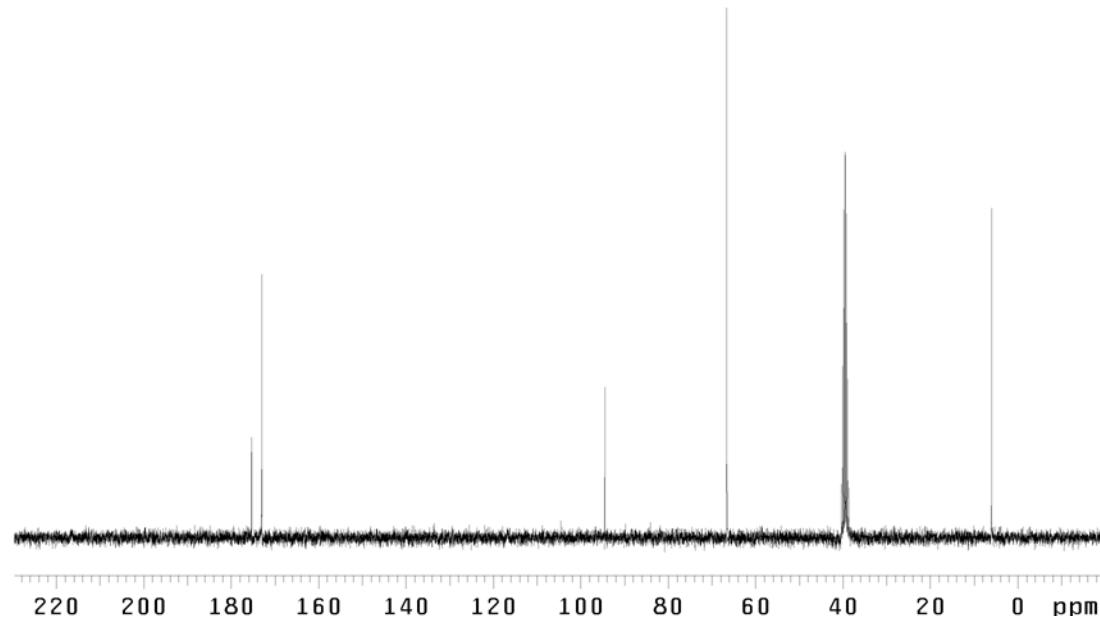


Figure A2.3 ^{13}C NMR (75 MHz, $\text{DMSO}-d_6$) of compound **56**.

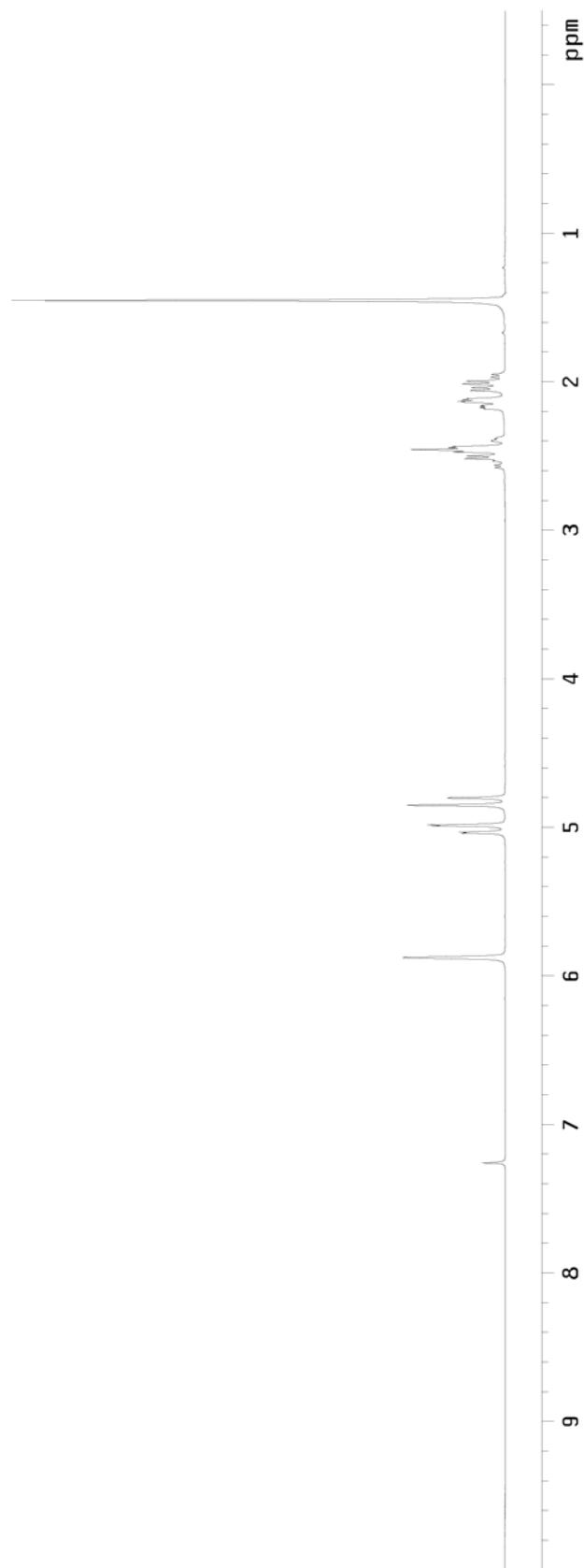
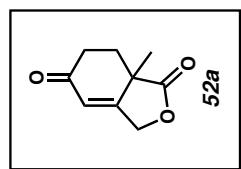


Figure A2.4 ¹H NMR (300 MHz, CDCl₃) of compound 52a.



-Rad Merlin

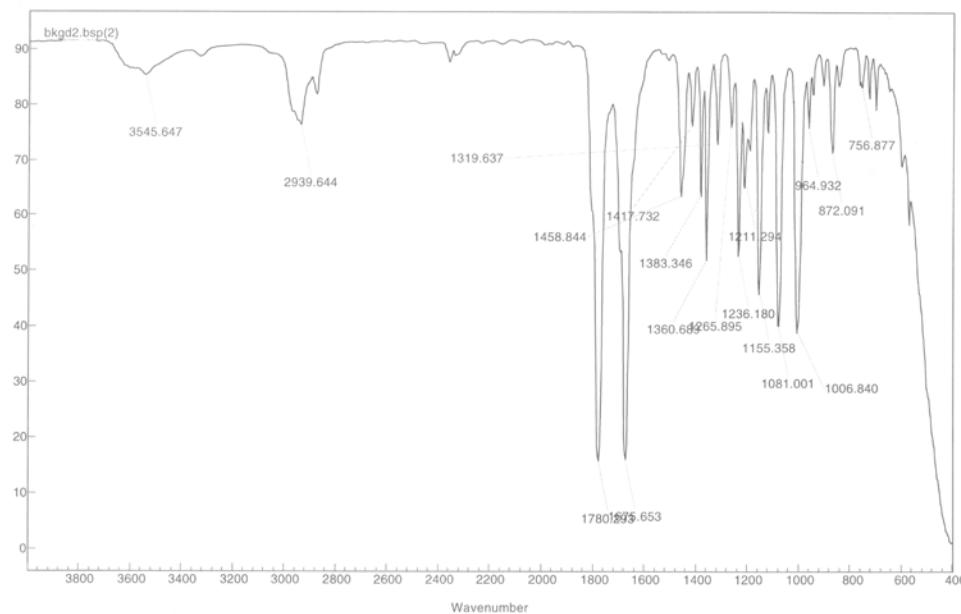


Figure A2.5 Infrared spectrum (thin film/NaCl) of compound **52a**.

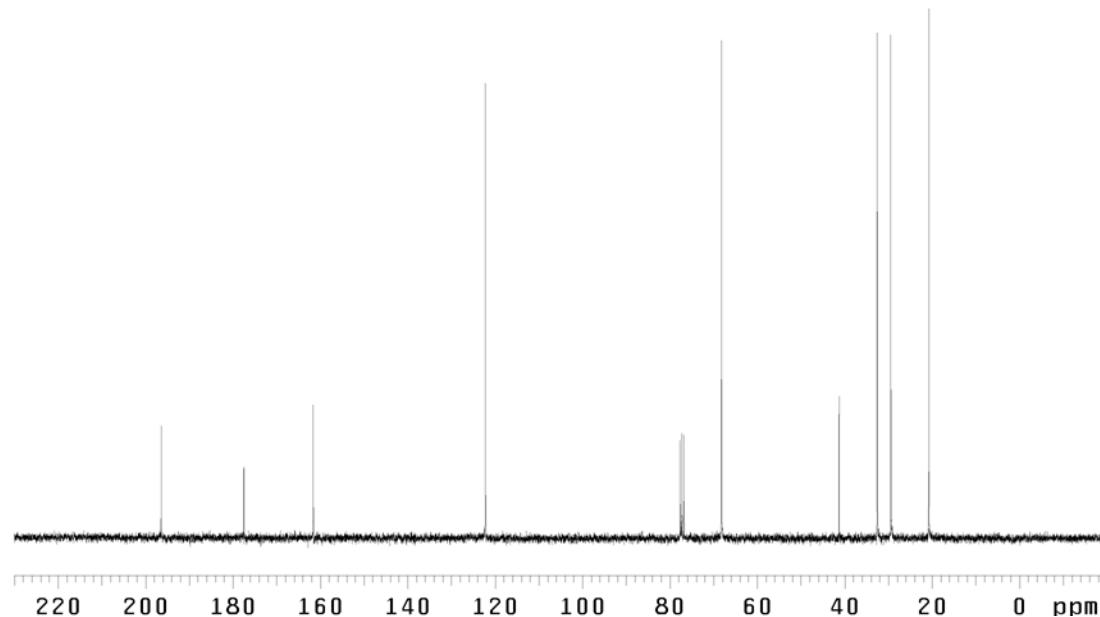


Figure A2.6 ¹³C NMR (75 MHz, CDCl₃) of compound **52a**.

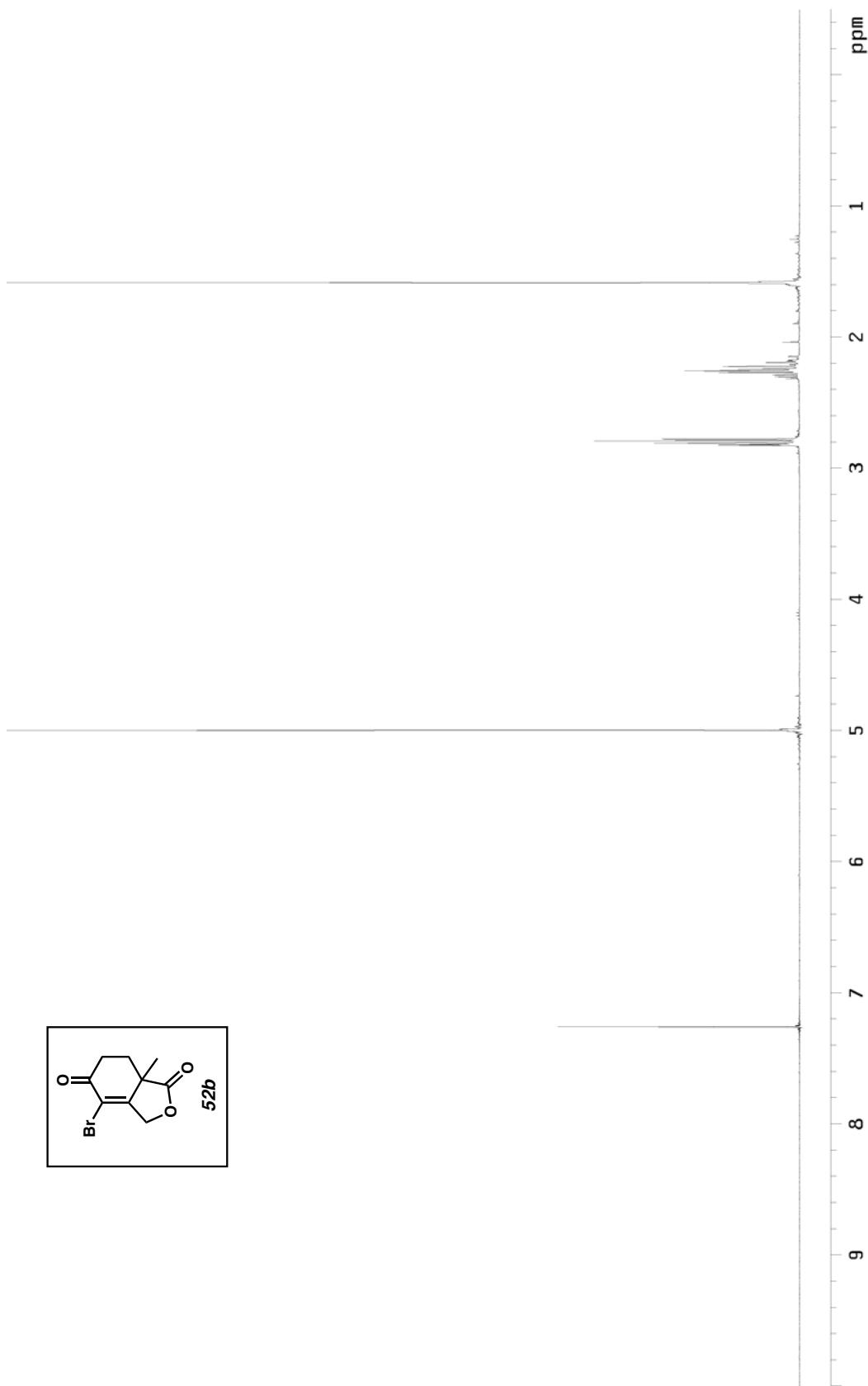


Figure A2.7 ^1H NMR (300 MHz, CDCl_3) of compound **52b**.

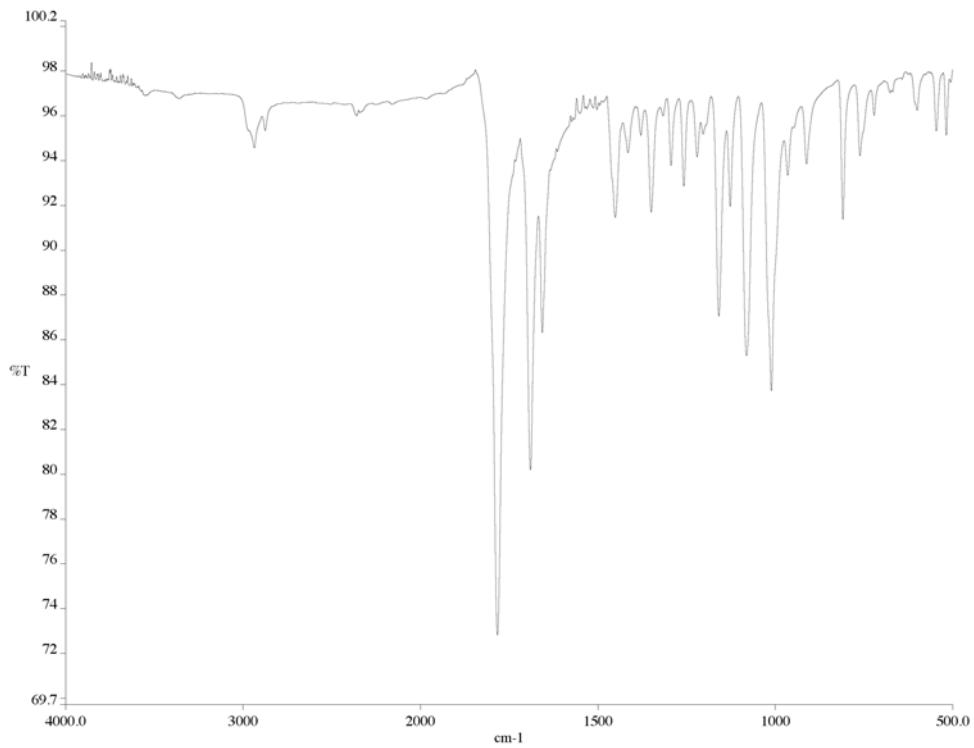


Figure A2.8 Infrared spectrum (thin film/NaCl) of compound **52b**.

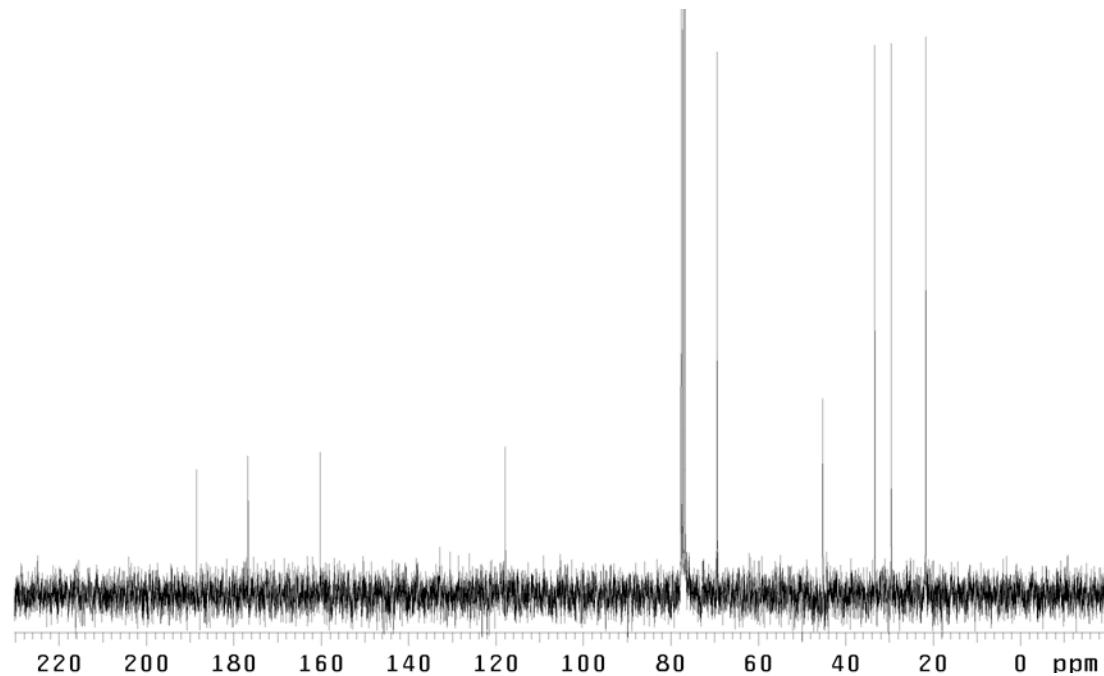


Figure A2.9 ^{13}C NMR (75 MHz, CDCl_3) of compound **52b**.

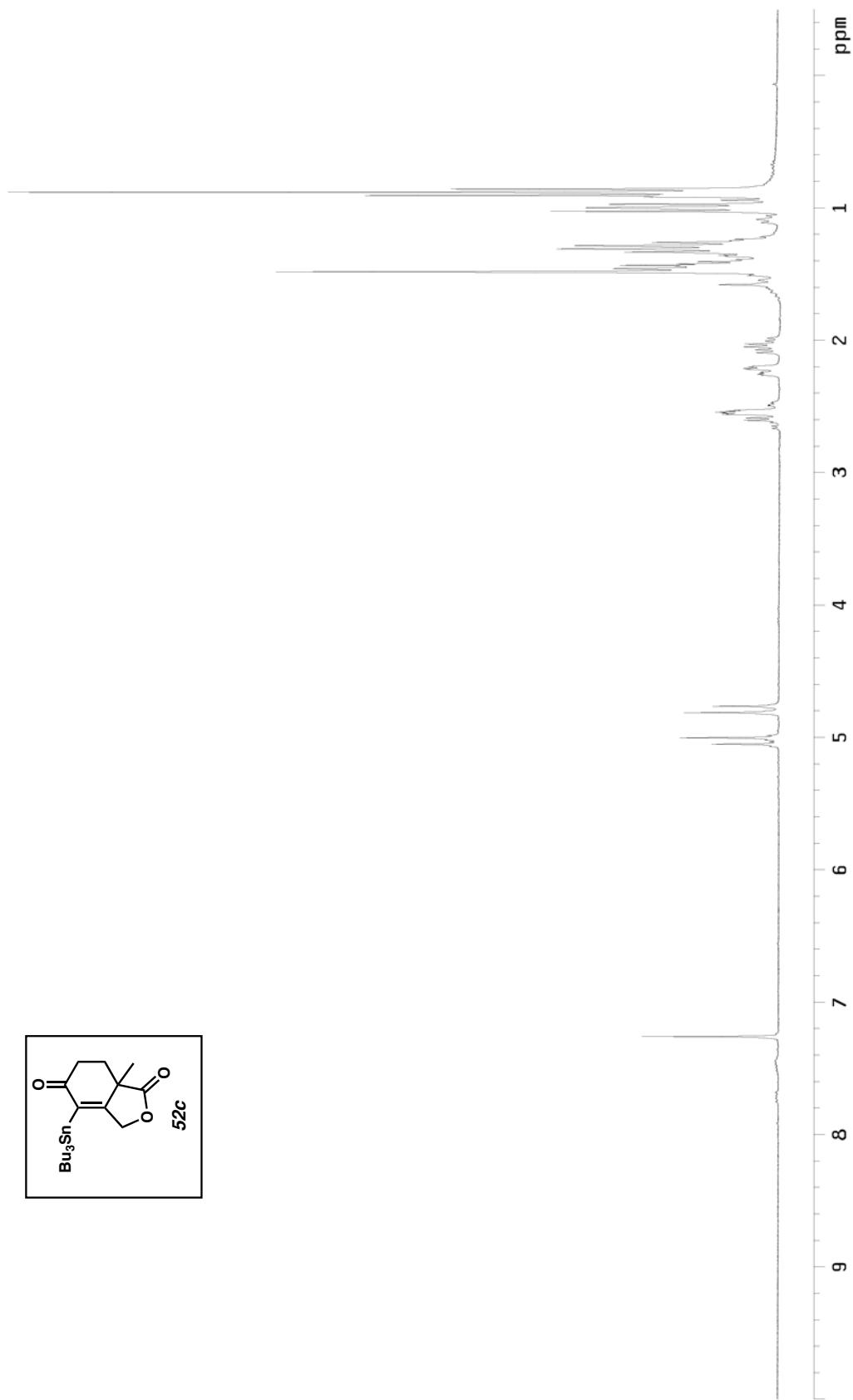


Figure A2.10 ^1H NMR (300 MHz, CDCl_3) of compound **52c**.

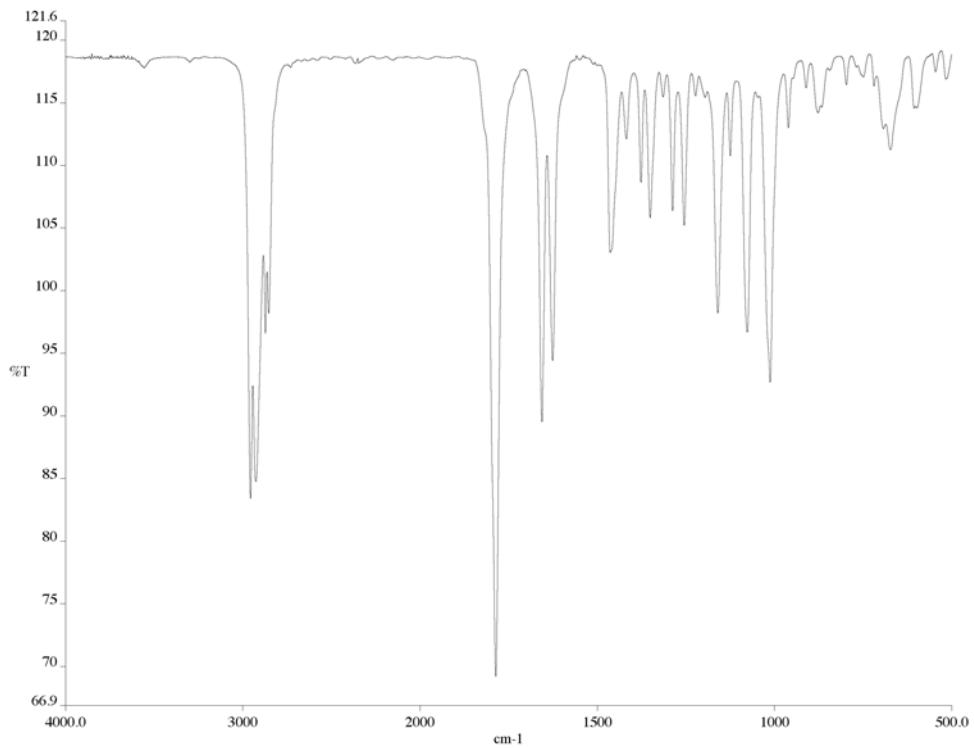


Figure A2.11 Infrared spectrum (thin film/NaCl) of compound **52c**.

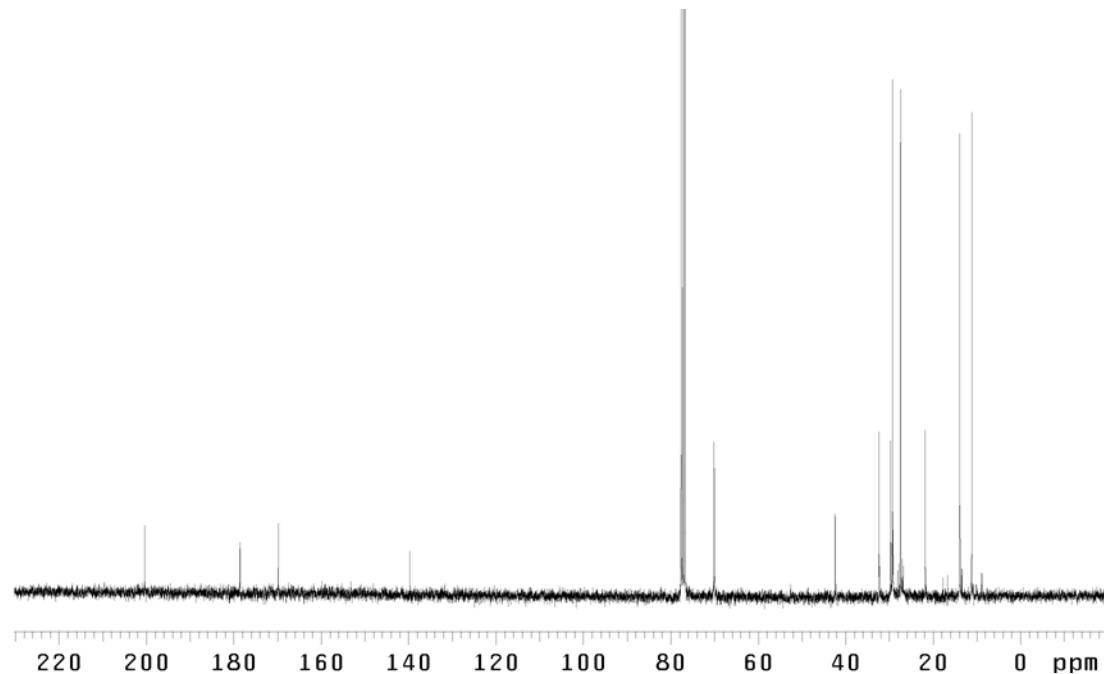


Figure A2.12 ^{13}C NMR (75 MHz, CDCl_3) of compound **52c**.

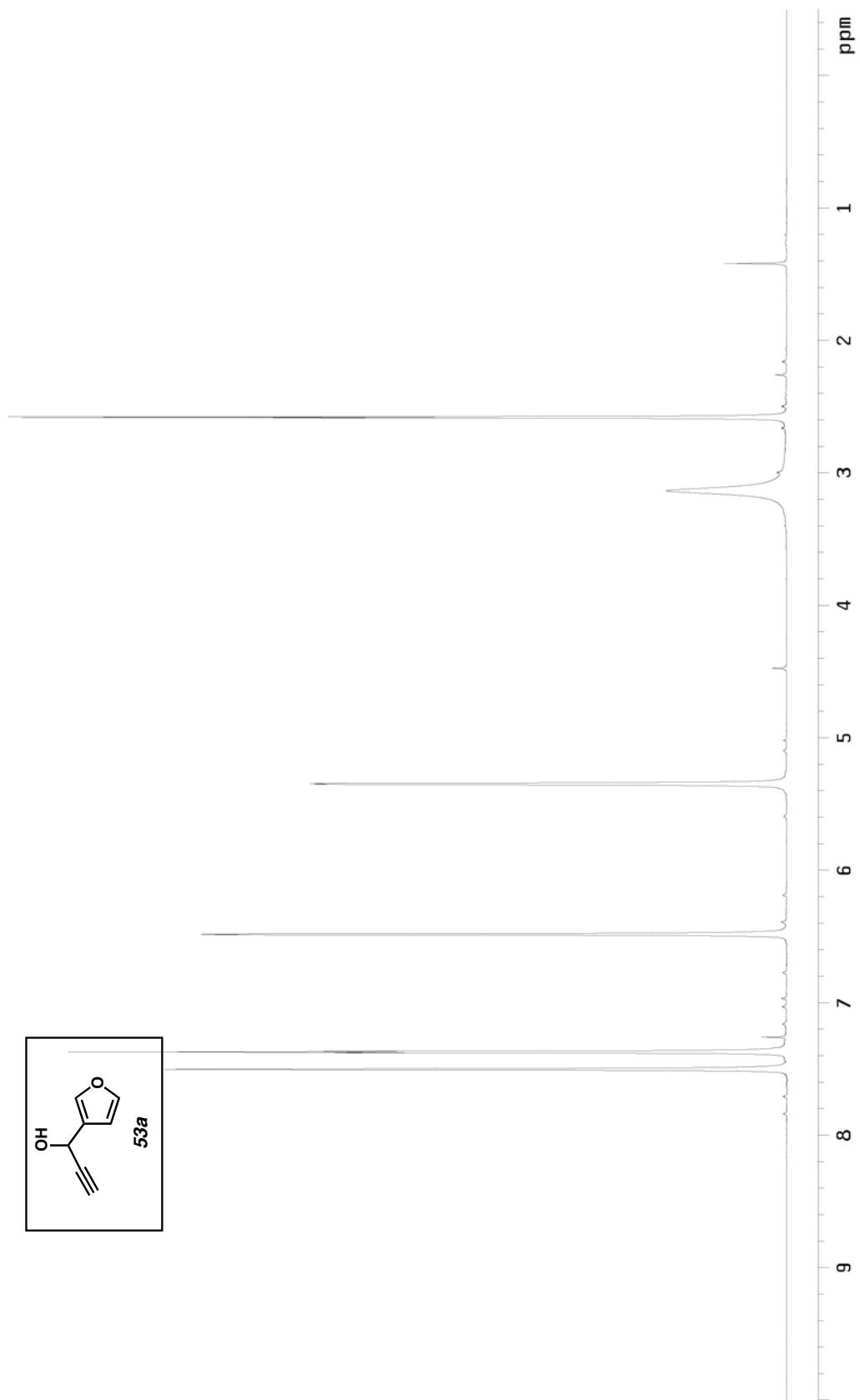


Figure A2.13 ^1H NMR (300 MHz, CDCl_3) of compound **53a**.

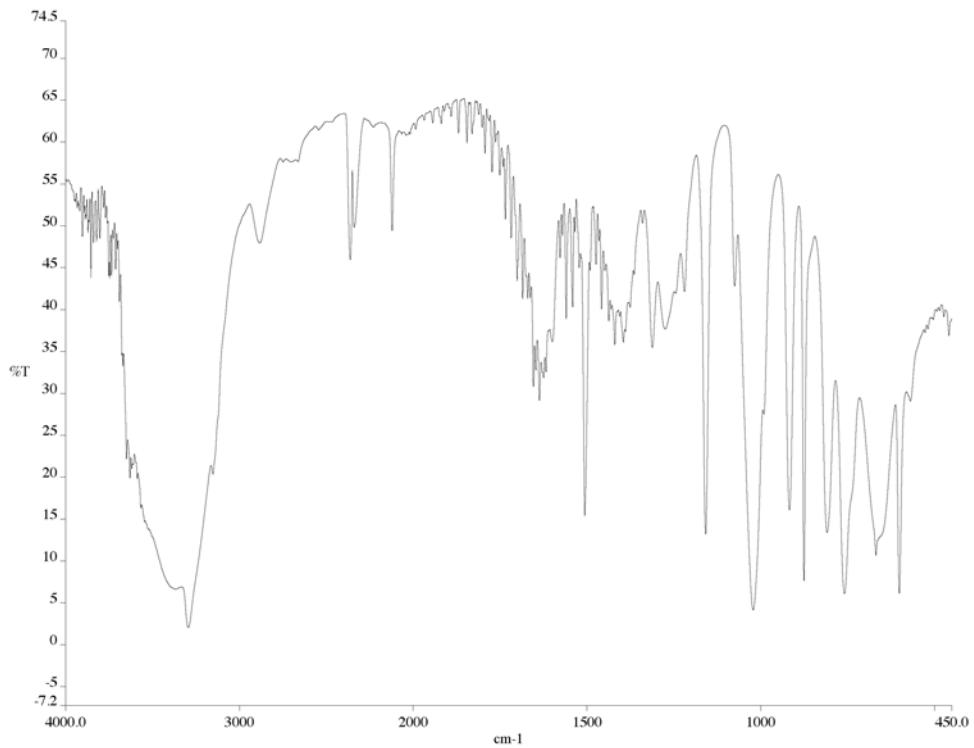


Figure A2.14 Infrared spectrum (thin film/NaCl) of compound **53a**.

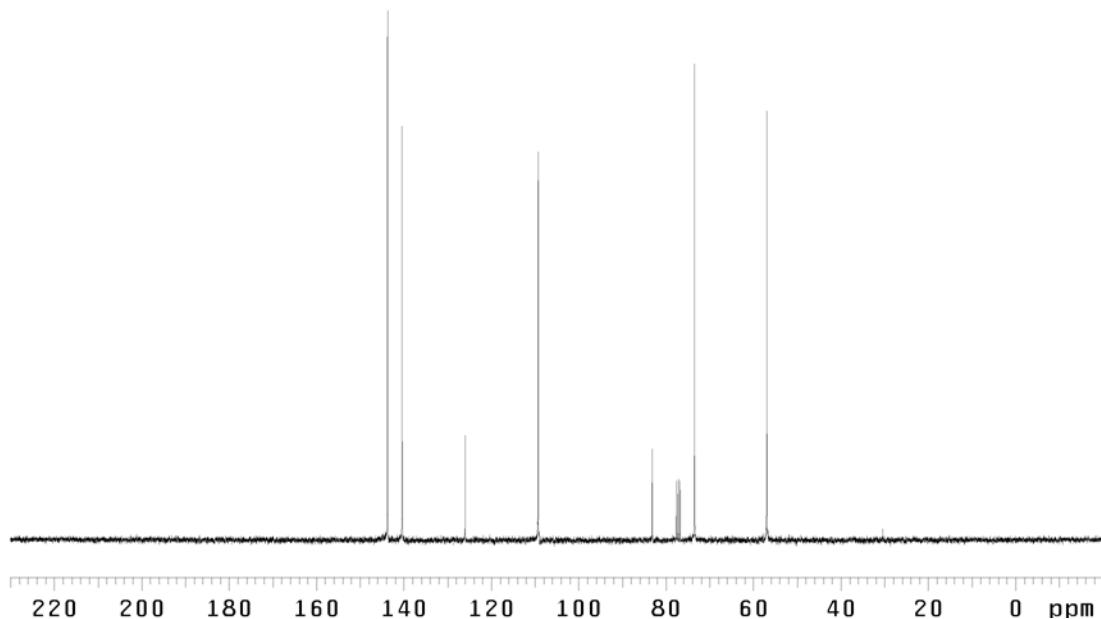


Figure A2.15 ^{13}C NMR (75 MHz, CDCl_3) of compound **53a**.

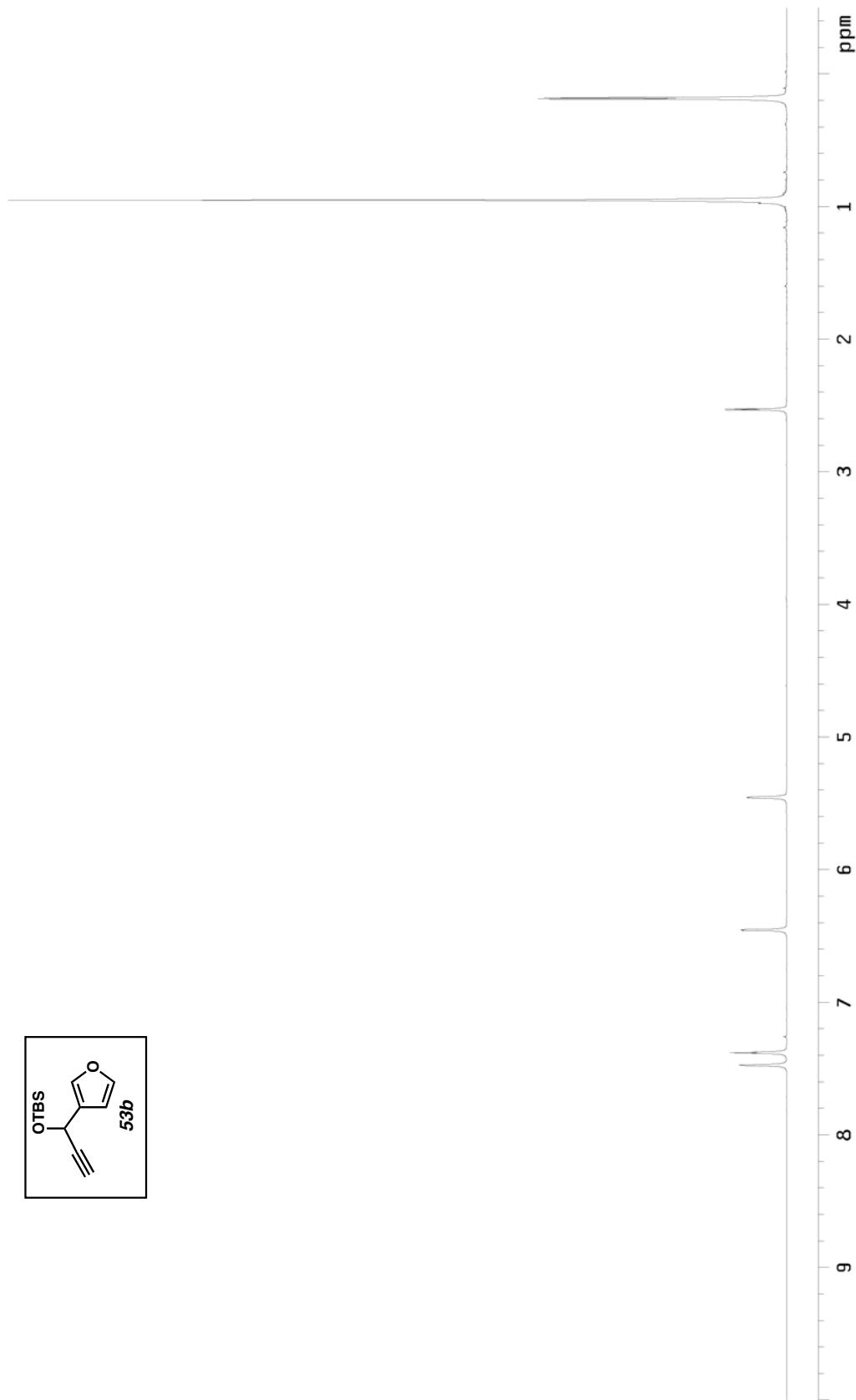


Figure A2.16 ^1H NMR (300 MHz, CDCl_3) of compound **53b**.

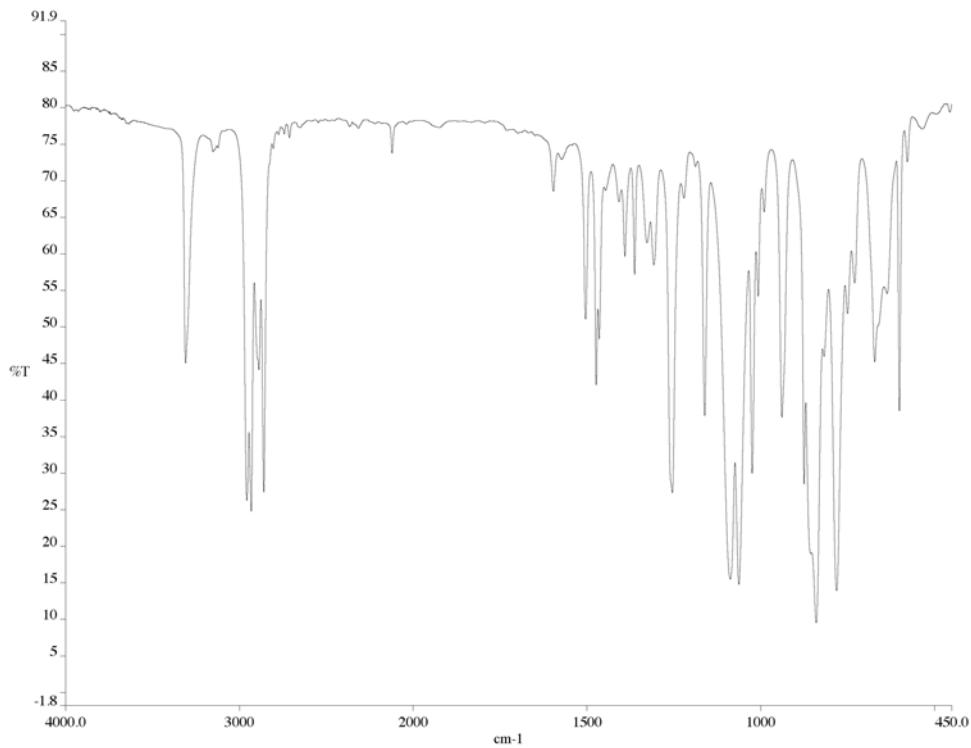


Figure A2.17 Infrared spectrum (thin film/NaCl) of compound **53b**.

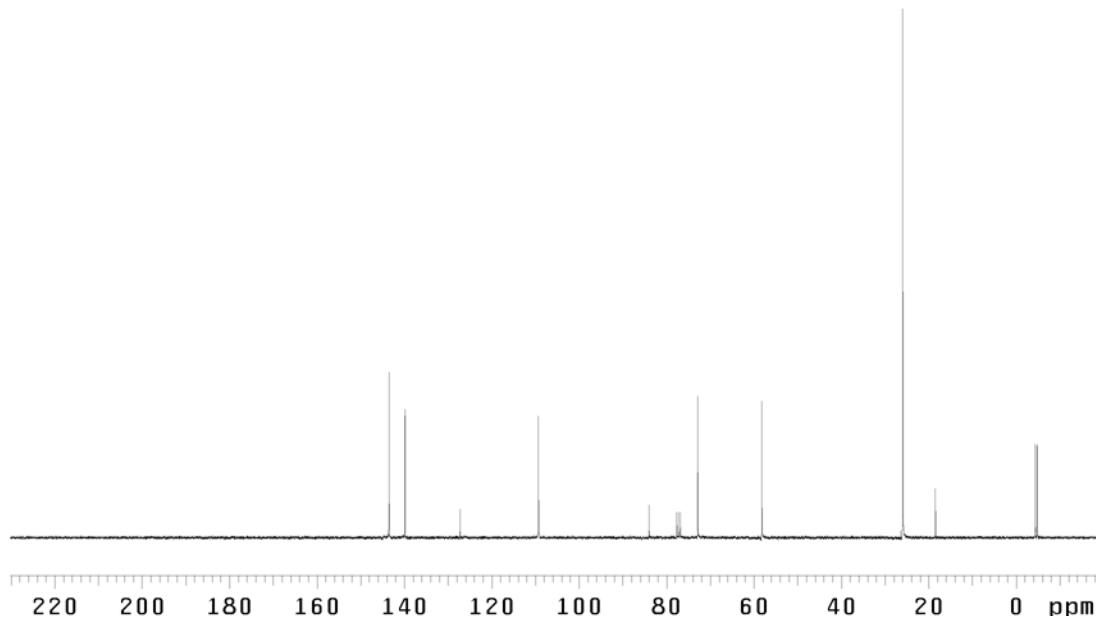


Figure A2.18 ^{13}C NMR (75 MHz, CDCl_3) of compound **53b**.

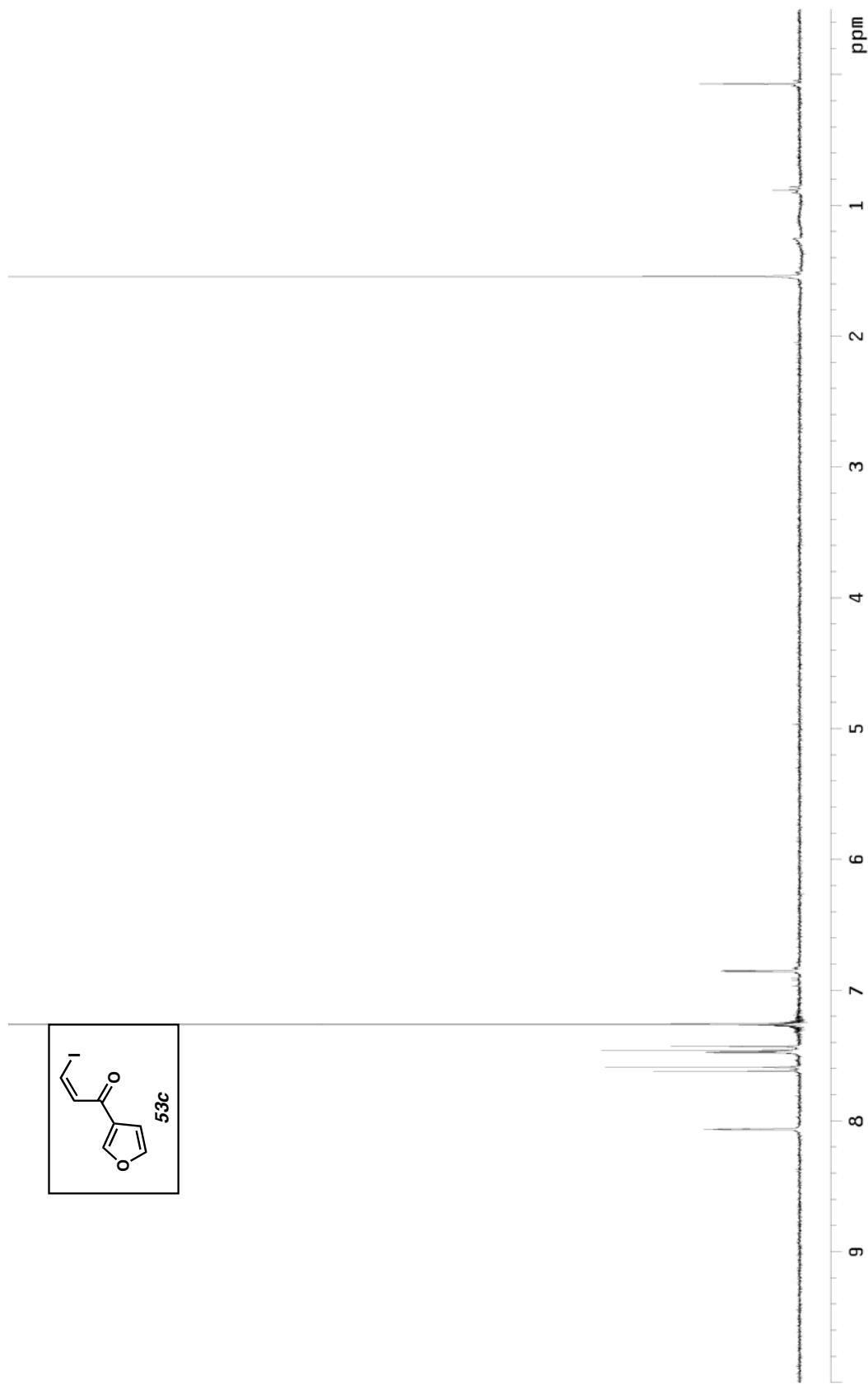


Figure A2.19 ^1H NMR (300 MHz, CDCl_3) of compound **53c**.

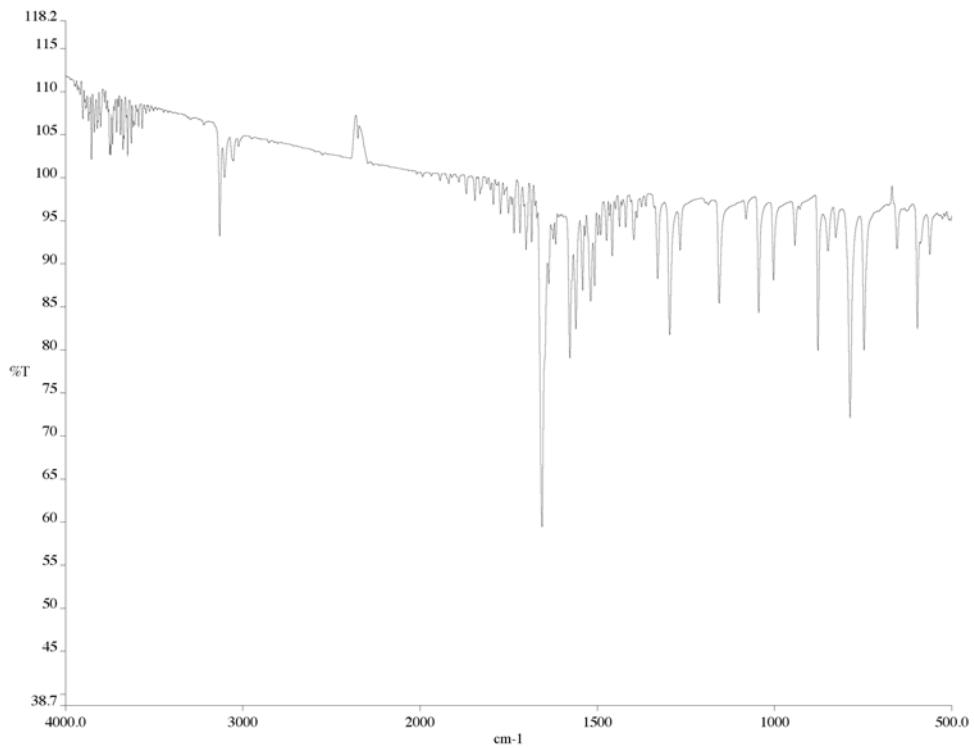


Figure A2.20 Infrared spectrum (thin film/NaCl) of compound **53c**.

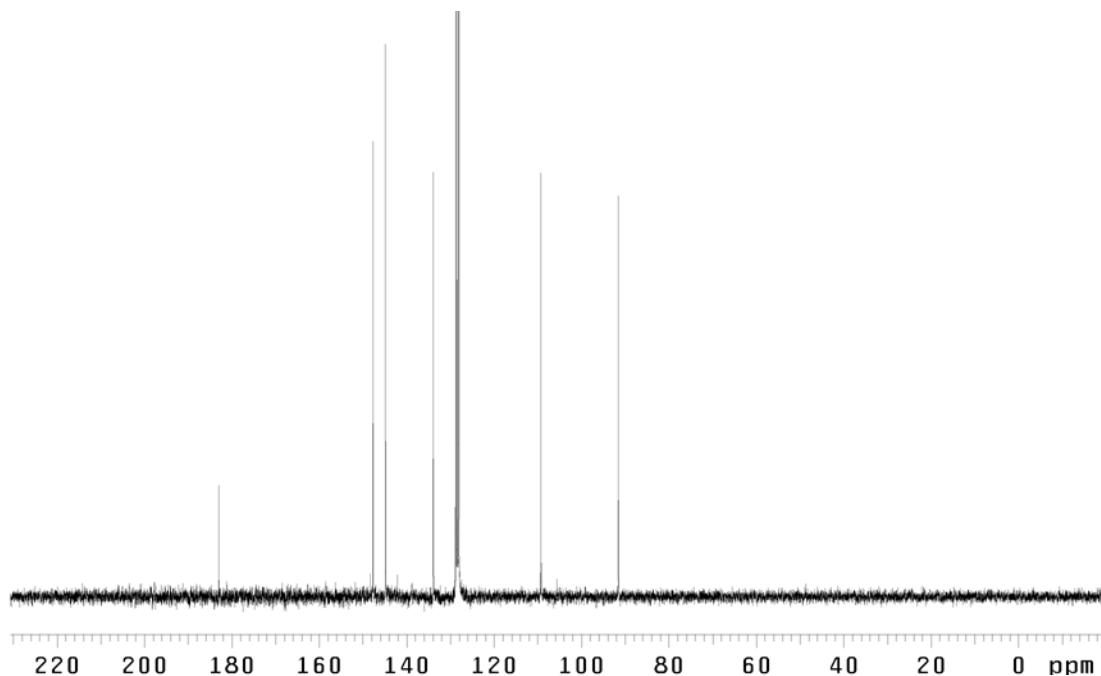


Figure A2.21 ^{13}C NMR (75 MHz, C_6D_6) of compound **53c**.

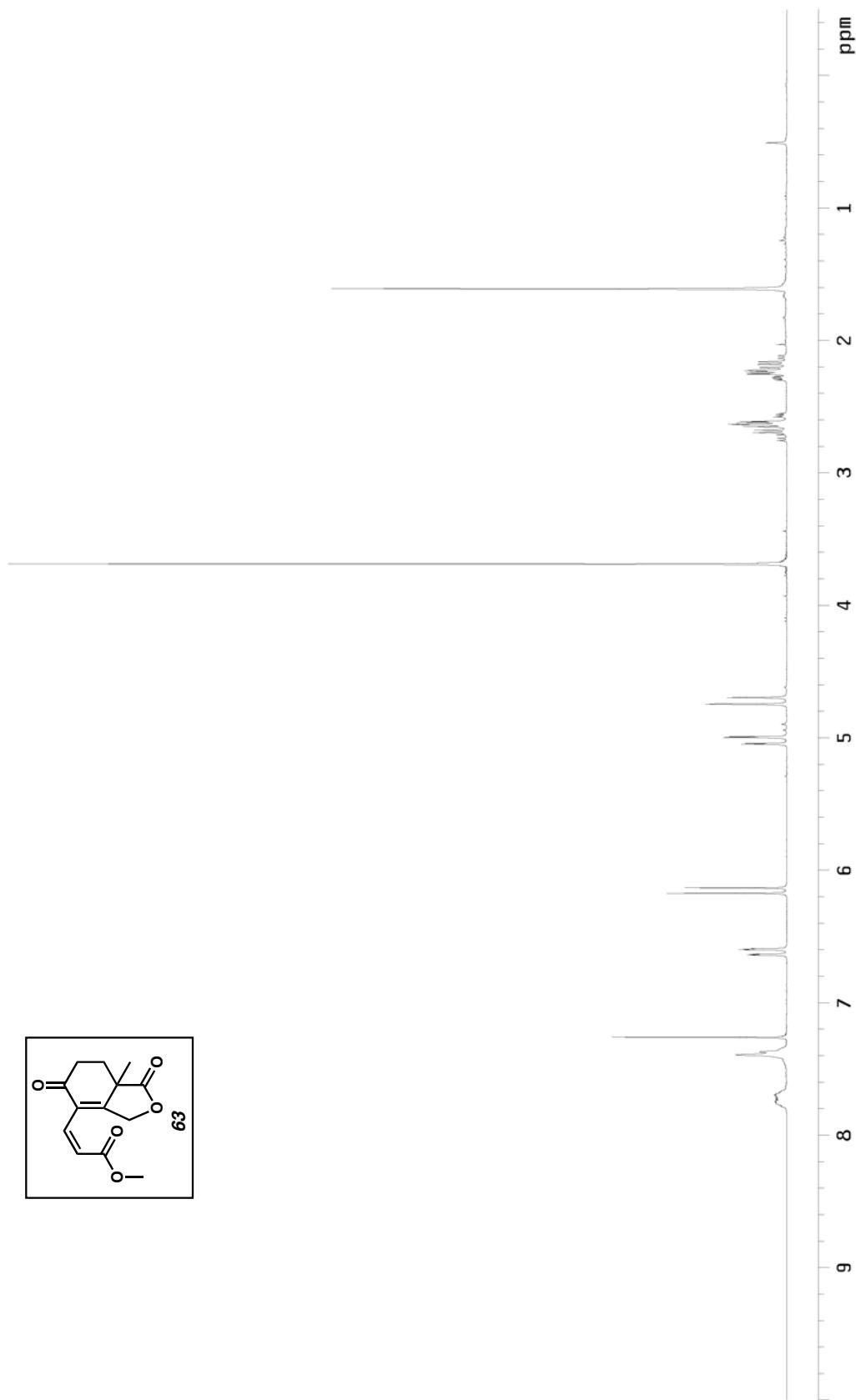


Figure A2.22 ^1H NMR (300 MHz, CDCl_3) of compound 63.

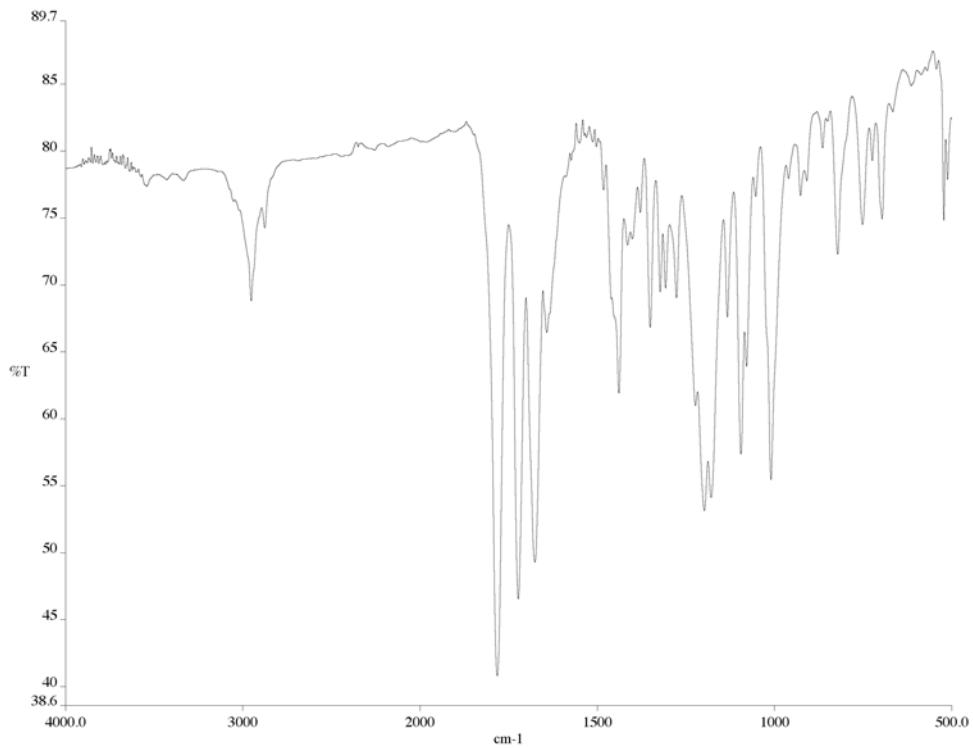


Figure A2.23 Infrared spectrum (thin film/NaCl) of compound **63**.

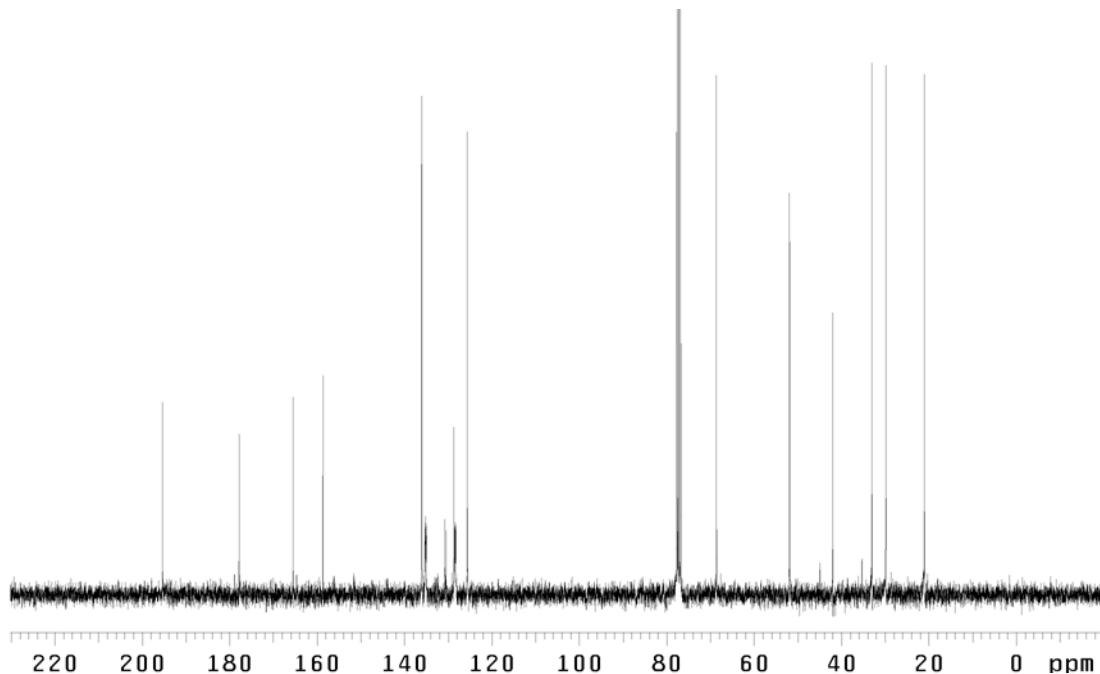


Figure A2.24 ^{13}C NMR (75 MHz, CDCl_3) of compound **63**.

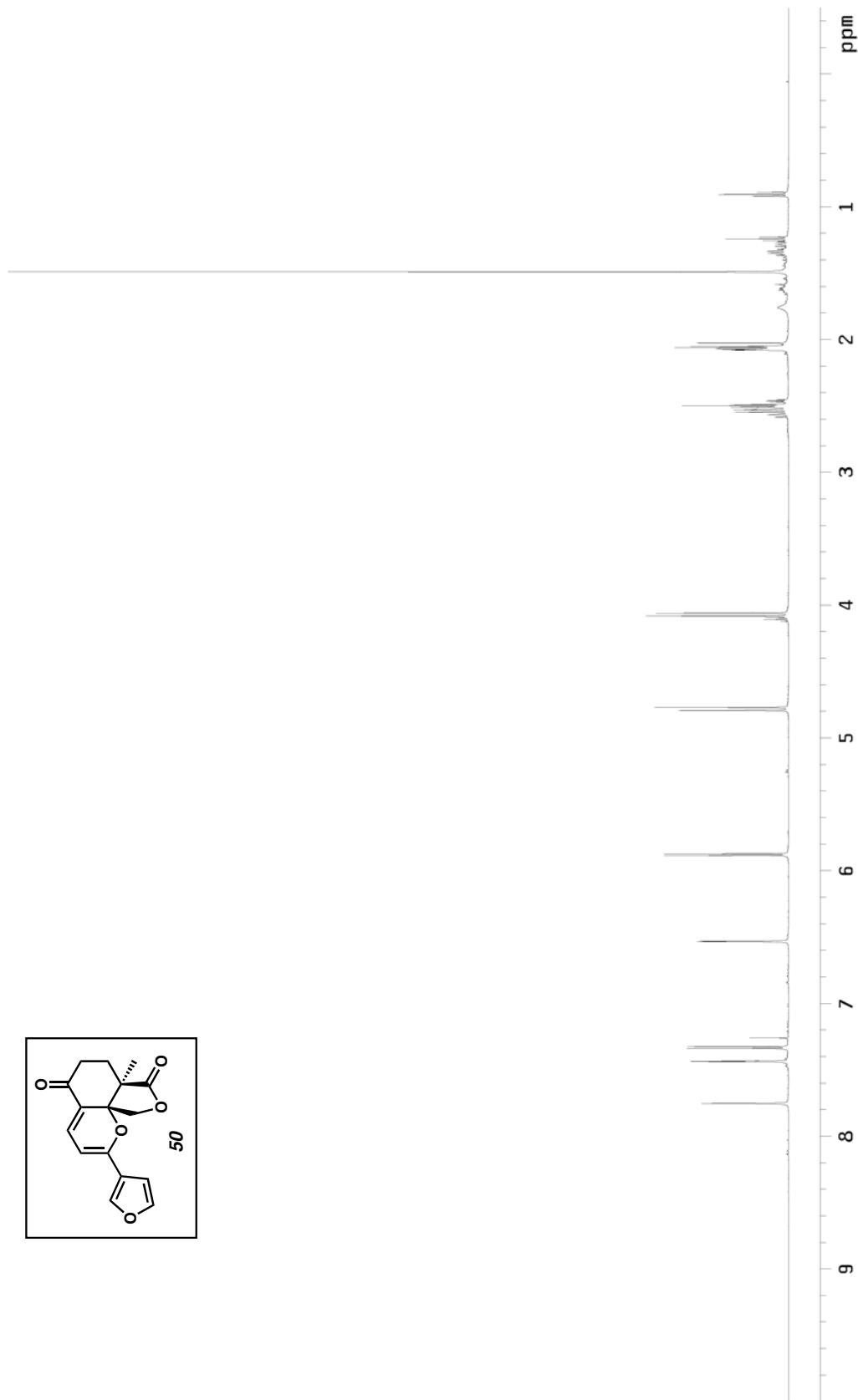


Figure A2.25 ^1H NMR (300 MHz, CDCl_3) of compound **50**.

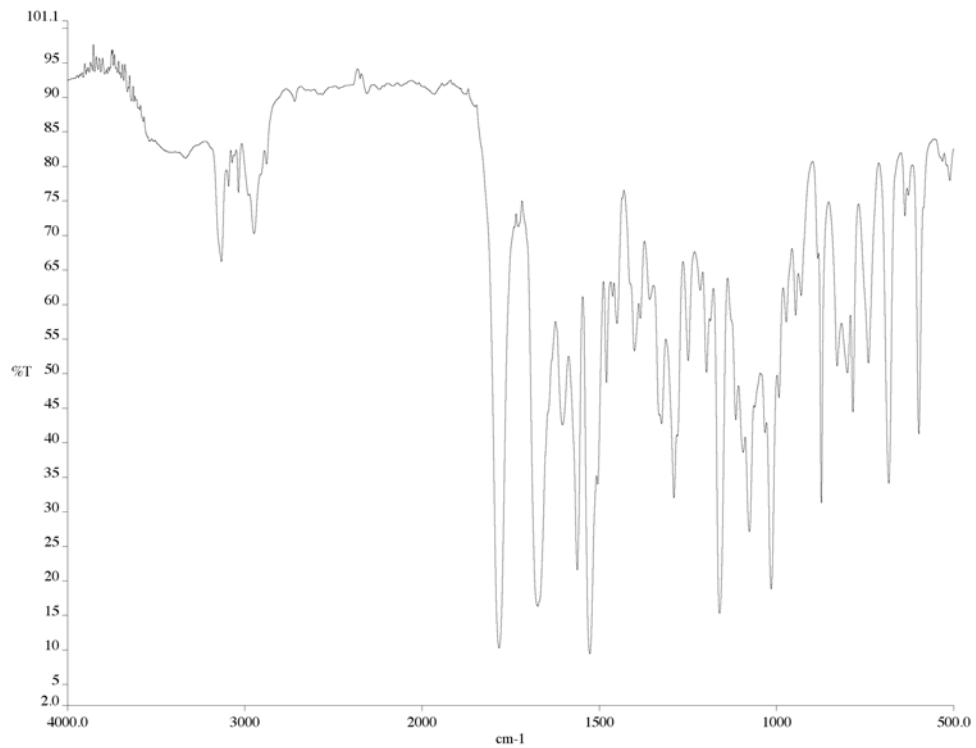


Figure A2.26 Infrared spectrum (thin film/NaCl) of compound **50**.

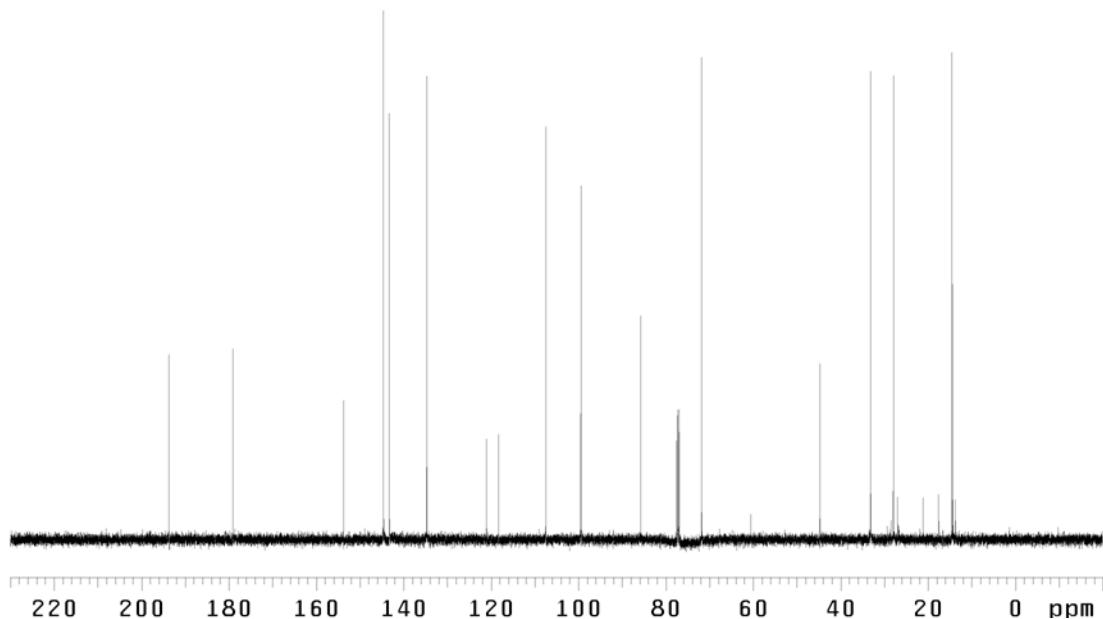


Figure A2.27 ^{13}C NMR (75 MHz, CDCl_3) of compound **50**.

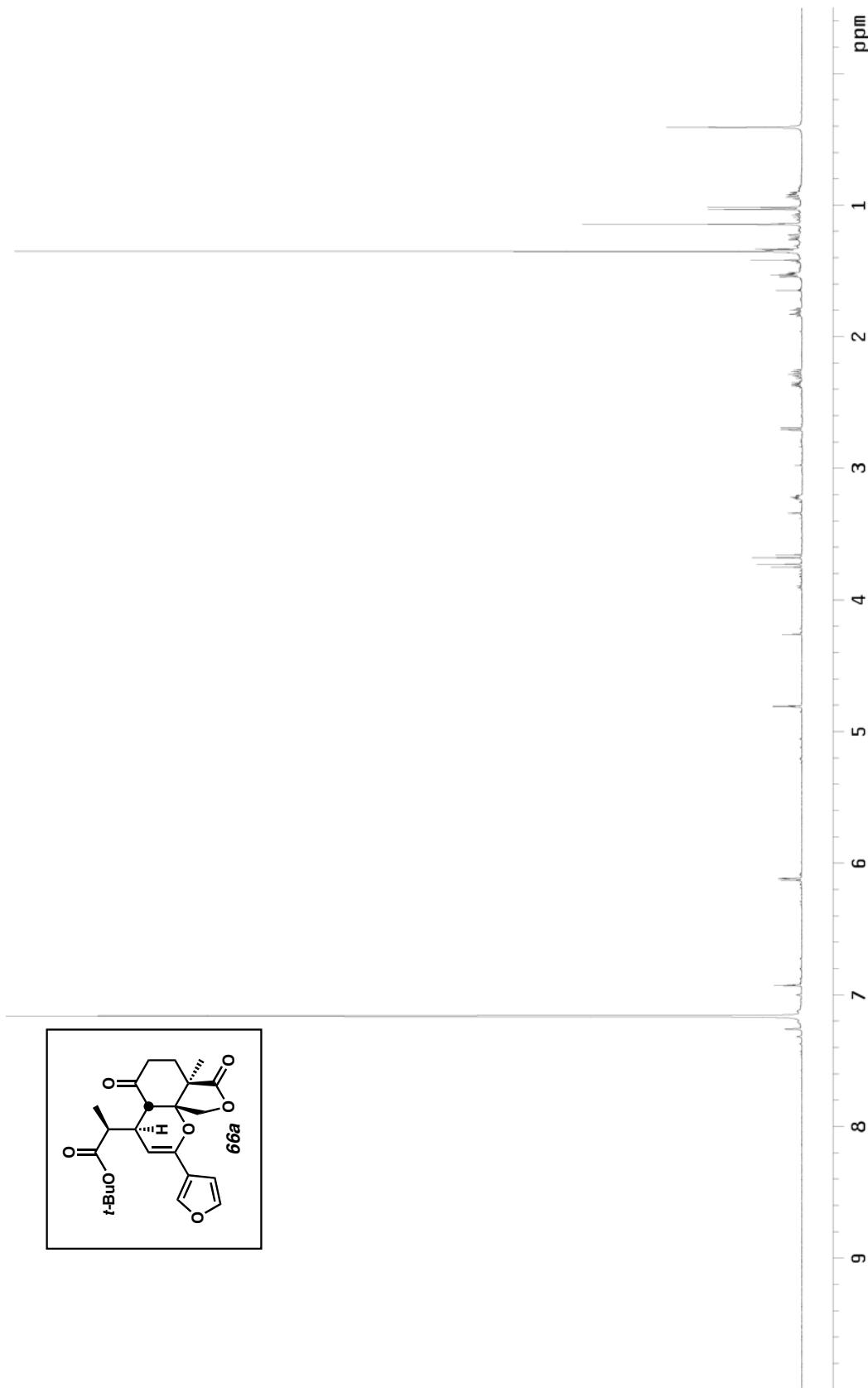


Figure A2.28 ^1H NMR (500 MHz, C_6D_6) of compound **66a**.

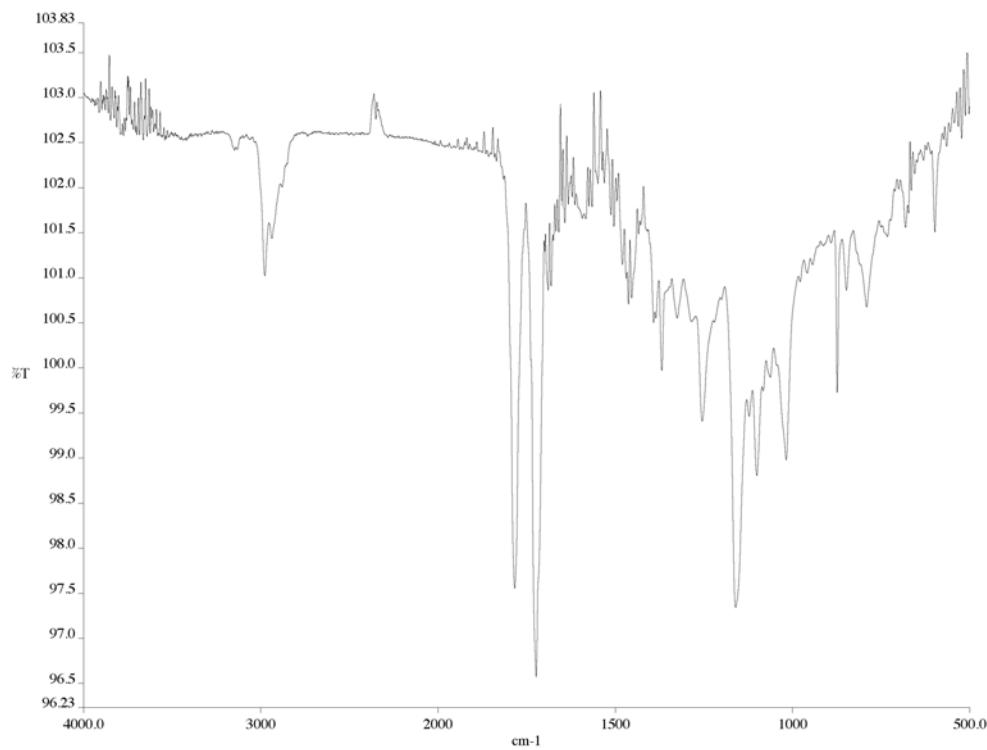


Figure A2.29 Infrared spectrum (thin film/NaCl) of compound **66a**.

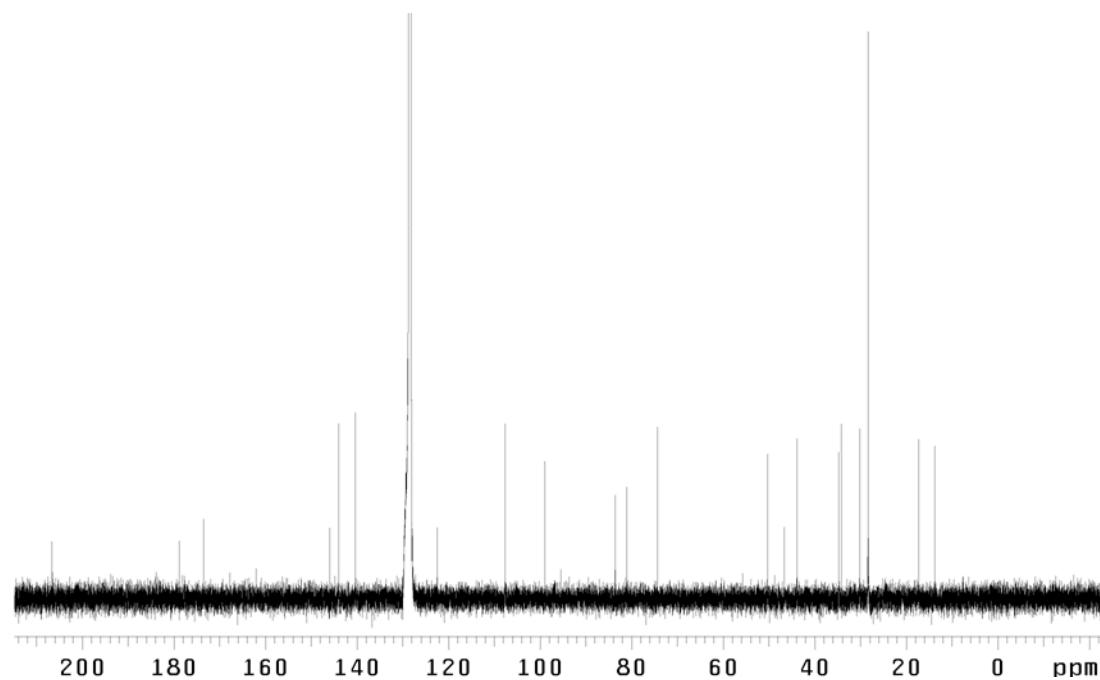


Figure A2.30 ¹³C NMR (125 MHz, C₆D₆) of compound **66a**.

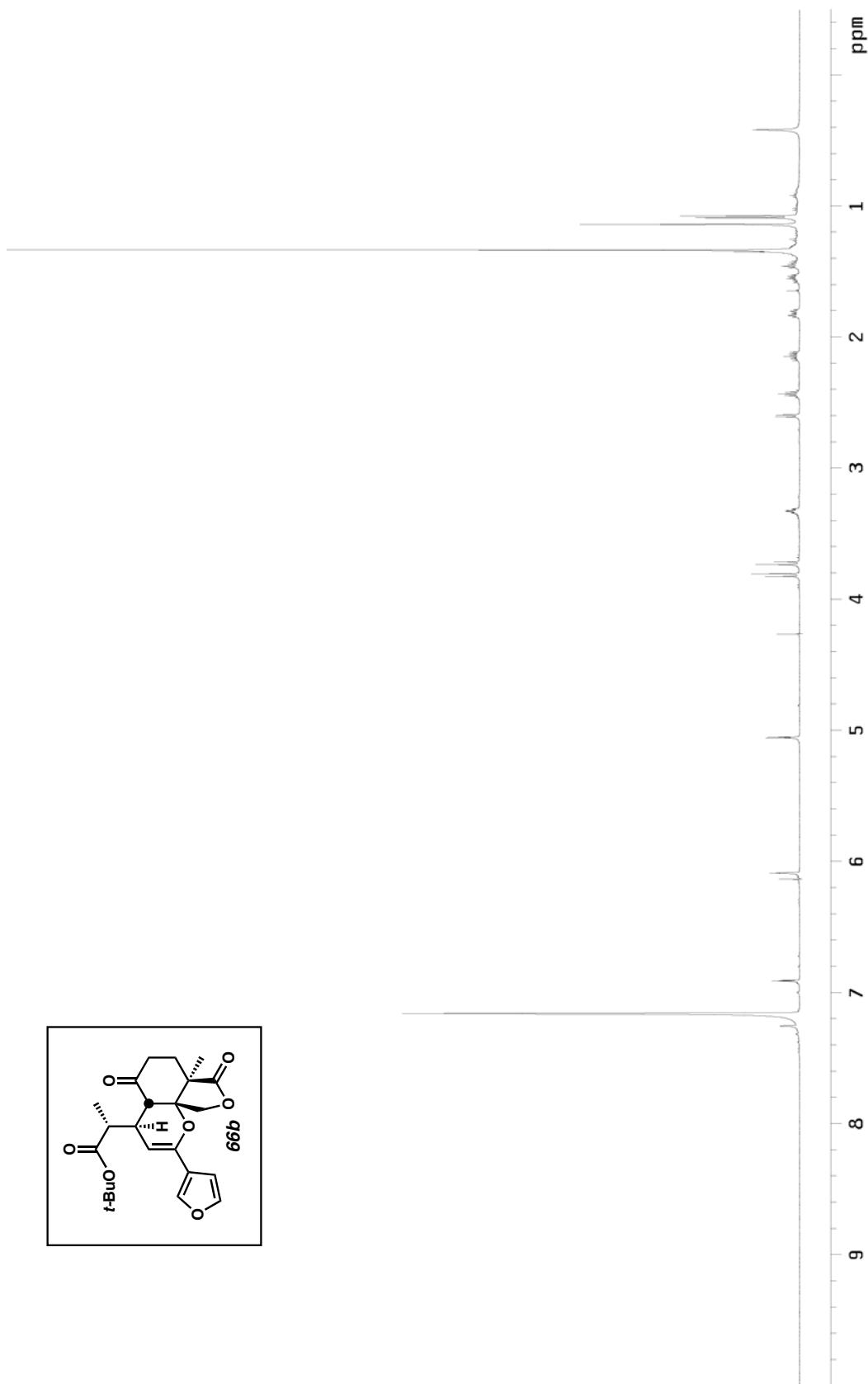


Figure A2.31 ^1H NMR (500 MHz, C_6D_6) of compound **66b**.

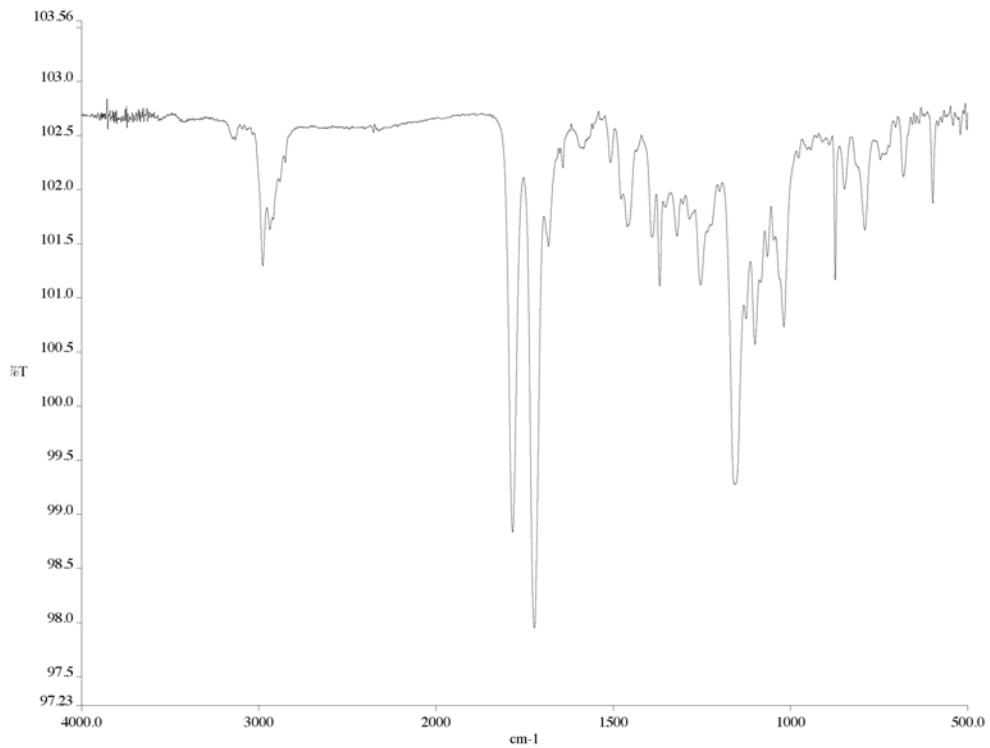


Figure A2.32 Infrared spectrum (thin film/NaCl) of compound **66b**.

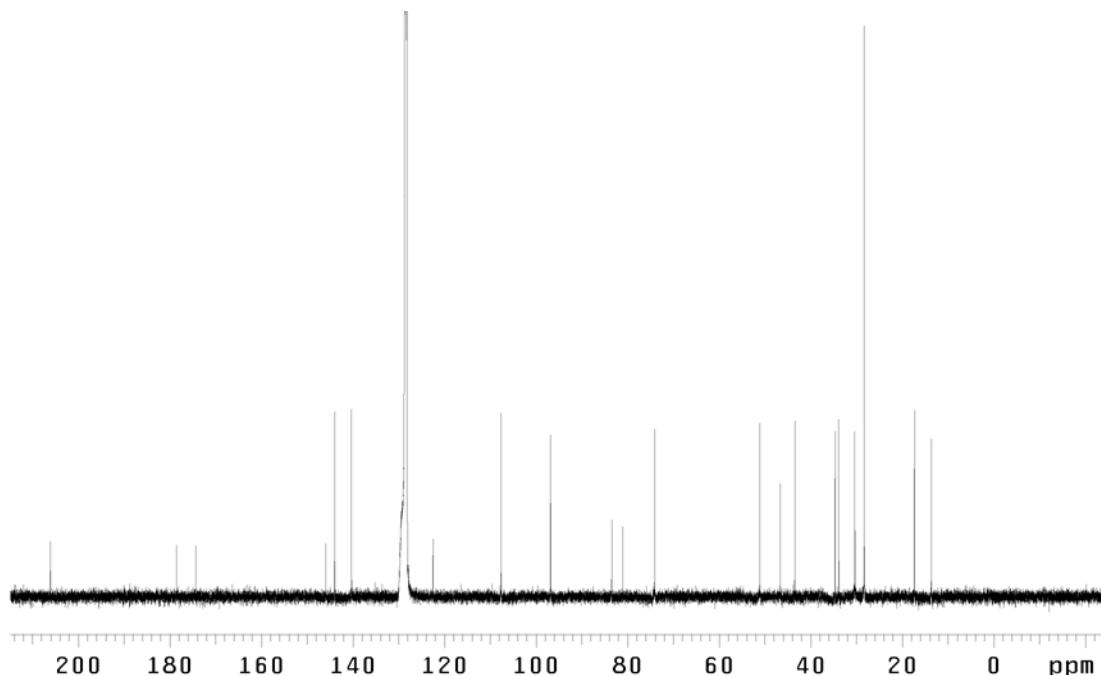


Figure A2.33 ^{13}C NMR (125 MHz, C₆D₆) of compound **66b**.

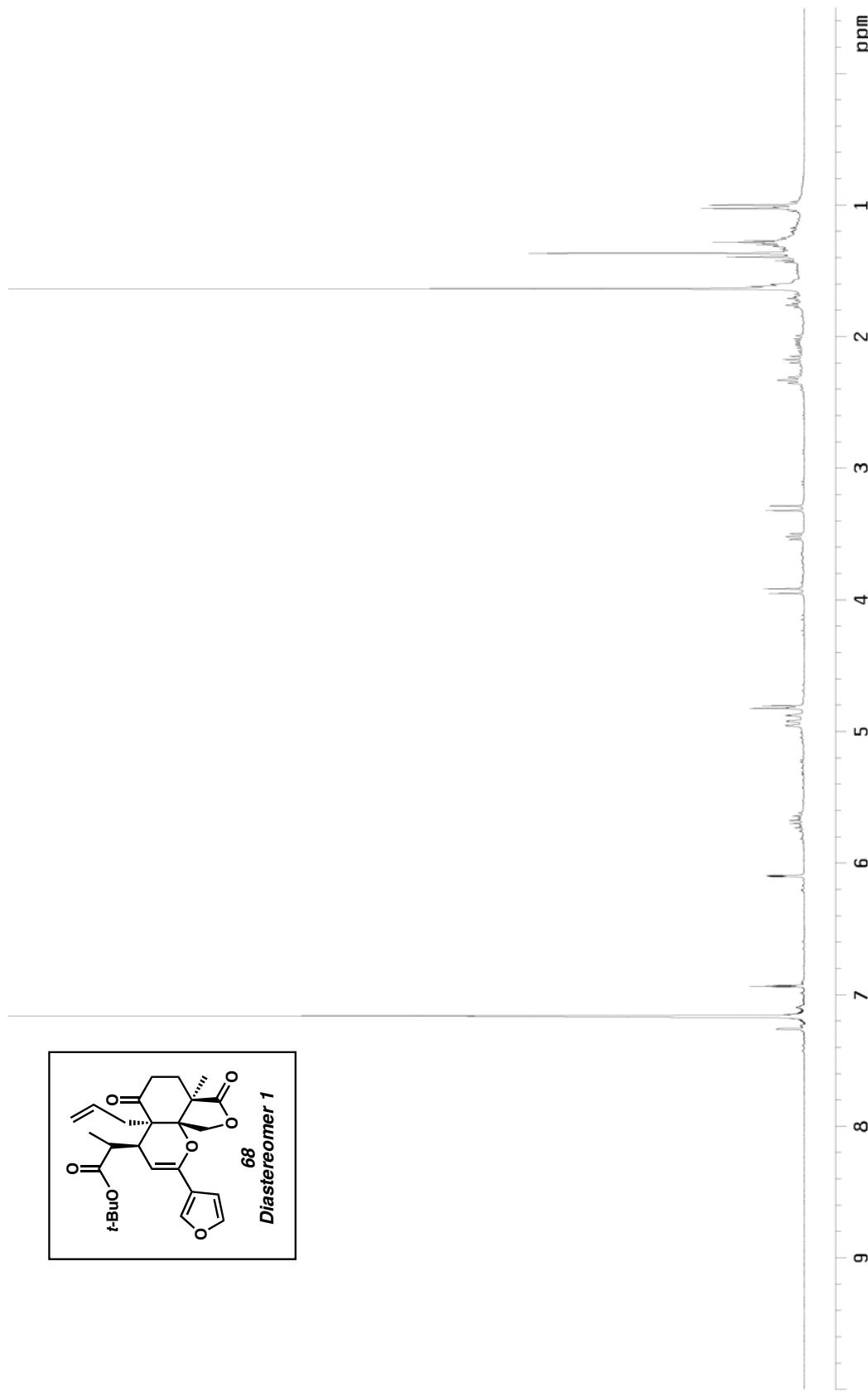


Figure A2.34 ¹H NMR (300 MHz, C_6D_6) of compound **68(1)**.

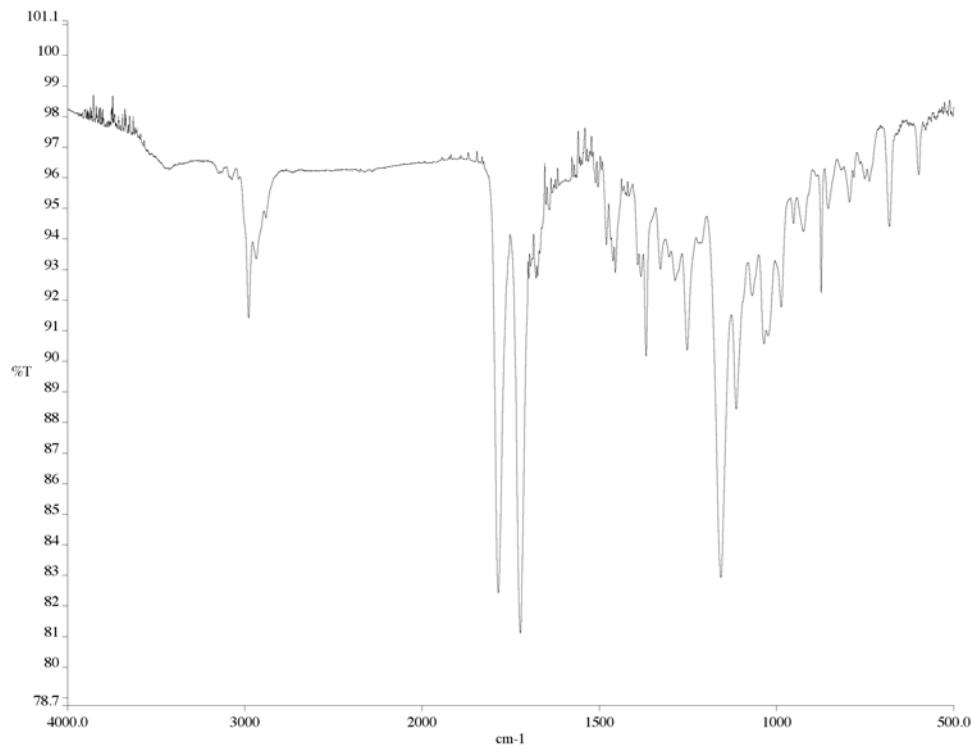


Figure A2.35 Infrared spectrum (thin film/NaCl) of compound **68(1)**.

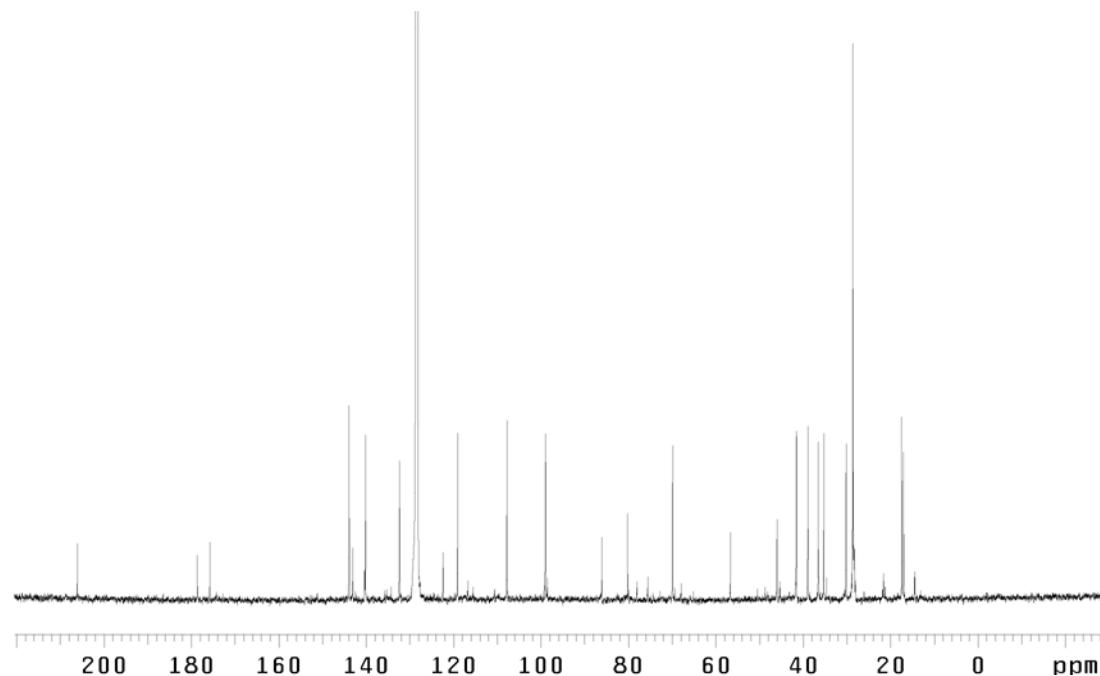


Figure A2.36 ^{13}C NMR (125 MHz, C_6D_6) of compound **68(1)**.

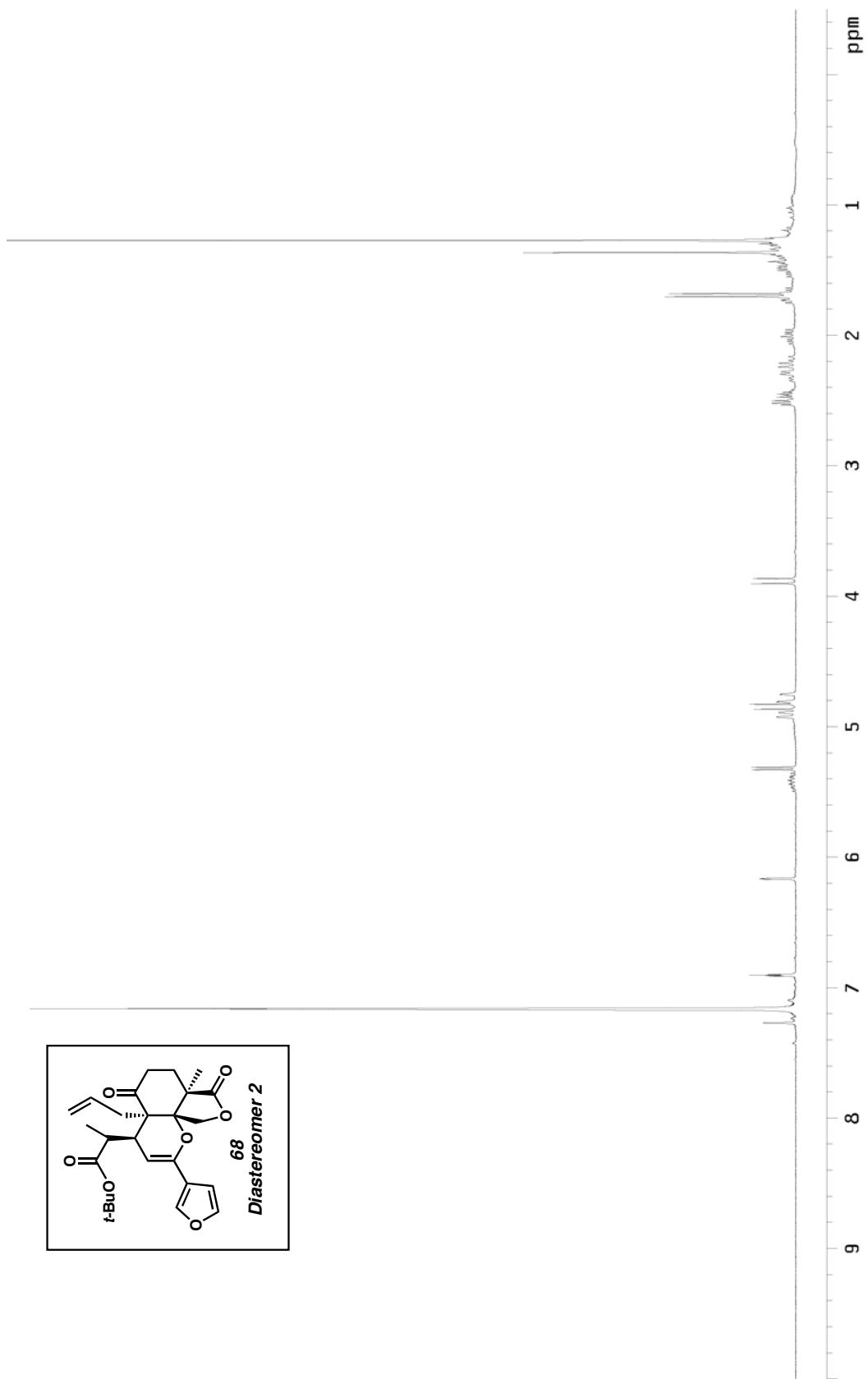


Figure A2.37 ^1H NMR (300 MHz, C_6D_6) of compound **68(2)**.

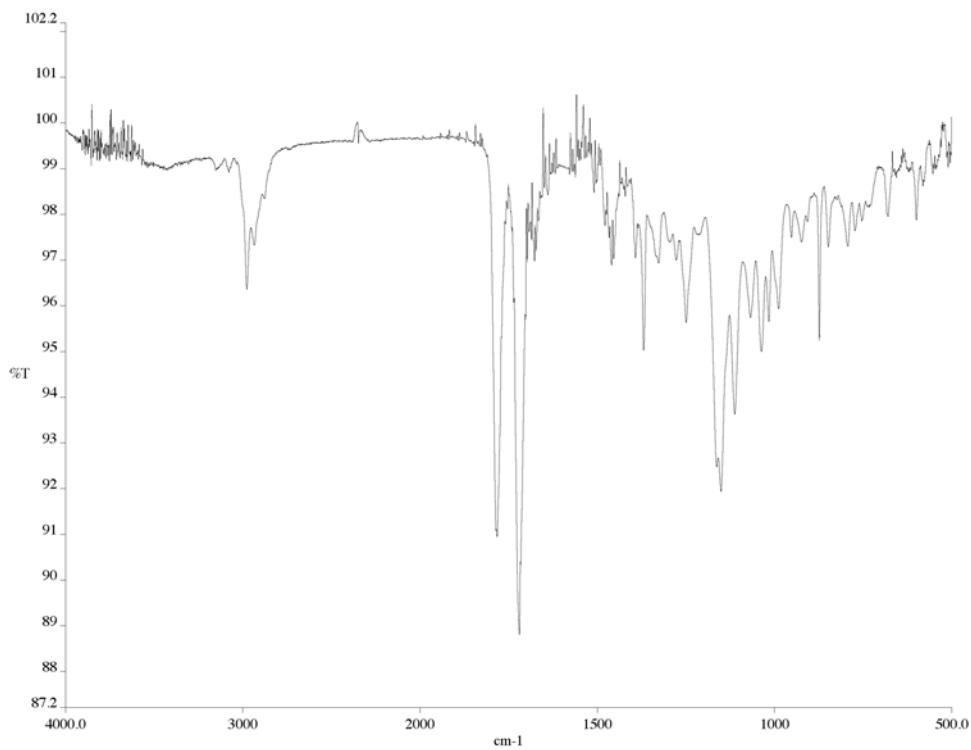


Figure A2.38 Infrared spectrum (thin film/NaCl) of compound **68(2)**.

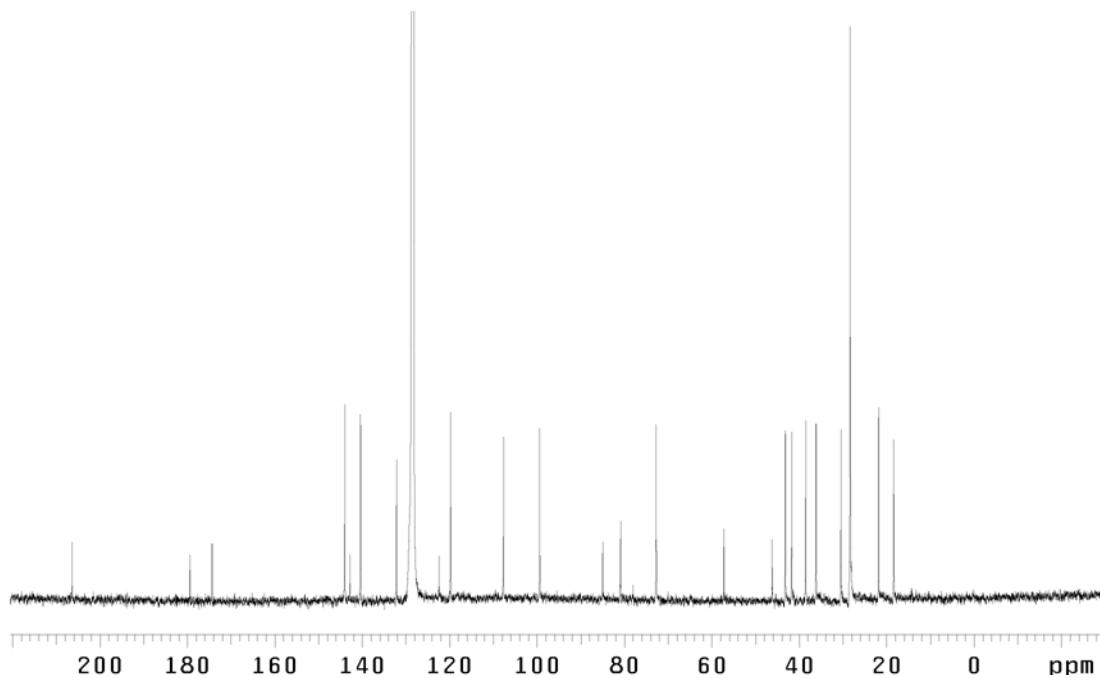


Figure A2.39 ^{13}C NMR (125 MHz, C_6D_6) of compound **68(2)**.

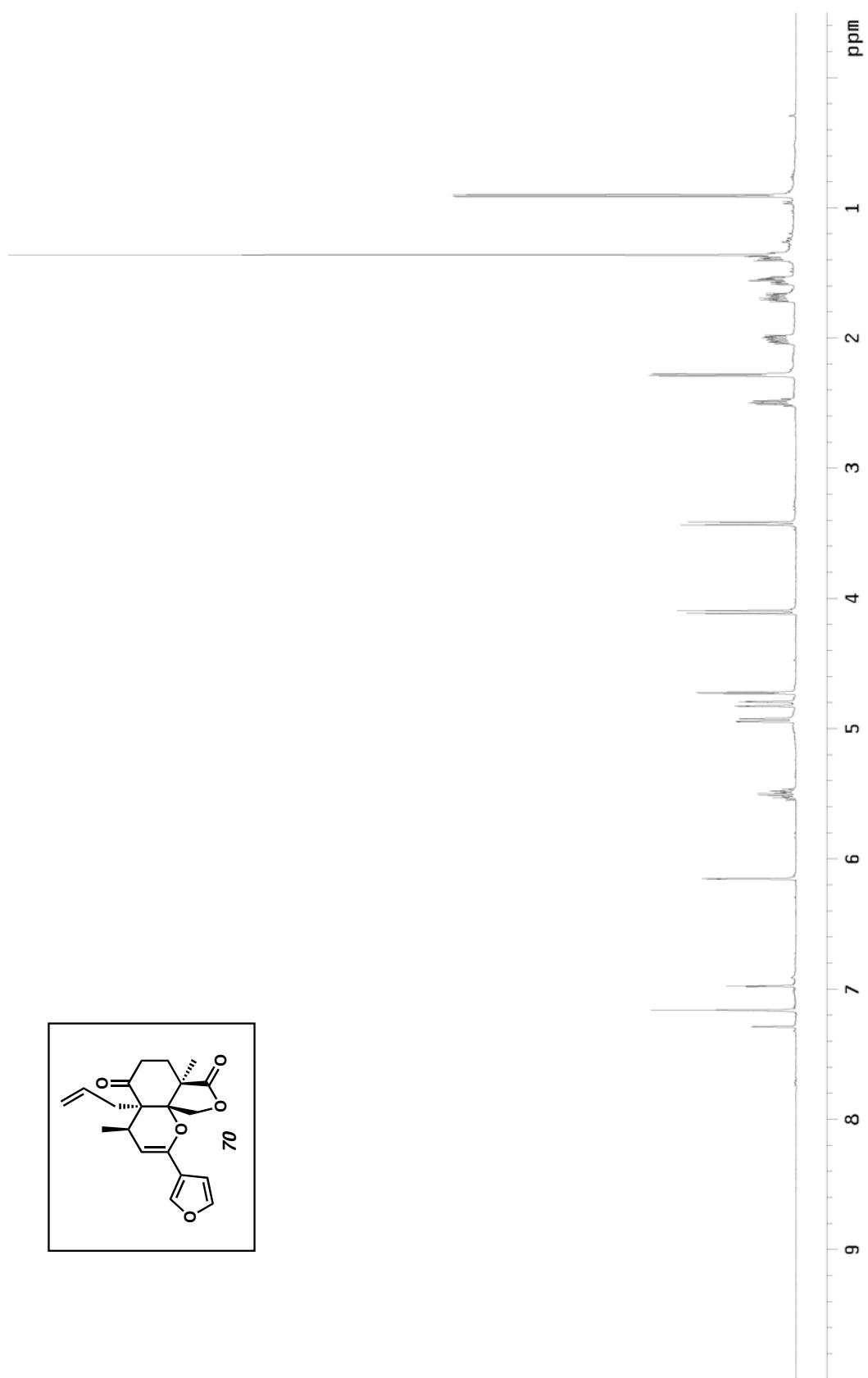


Figure A2.40 ^1H NMR (500 MHz, C_6D_6) of compound 70.

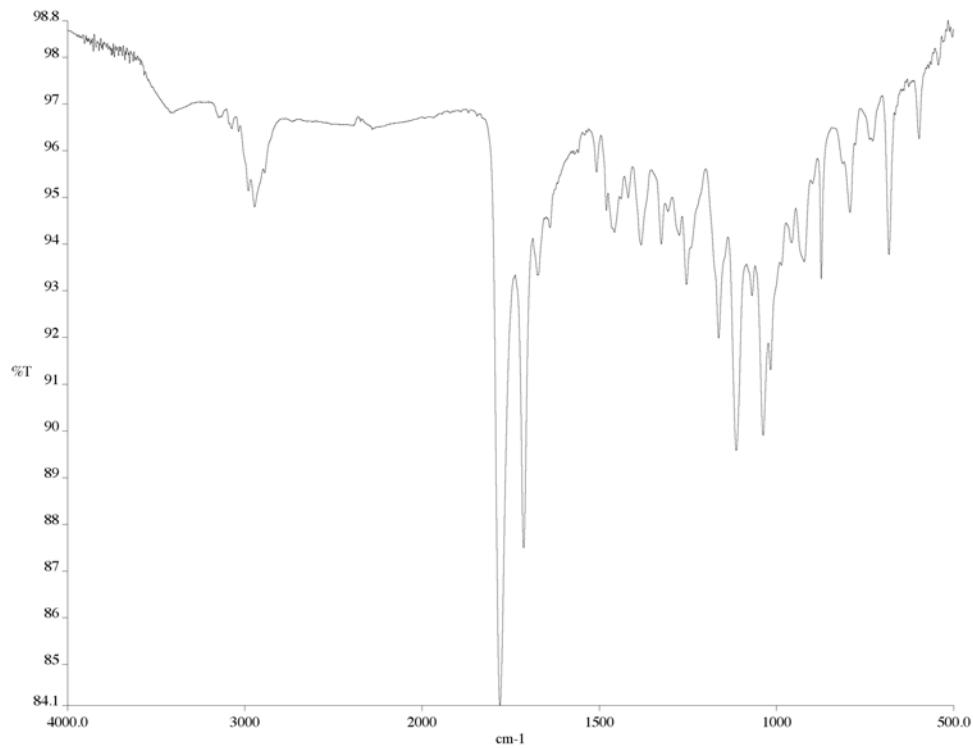


Figure A2.41 Infrared spectrum (thin film/NaCl) of compound **70**.

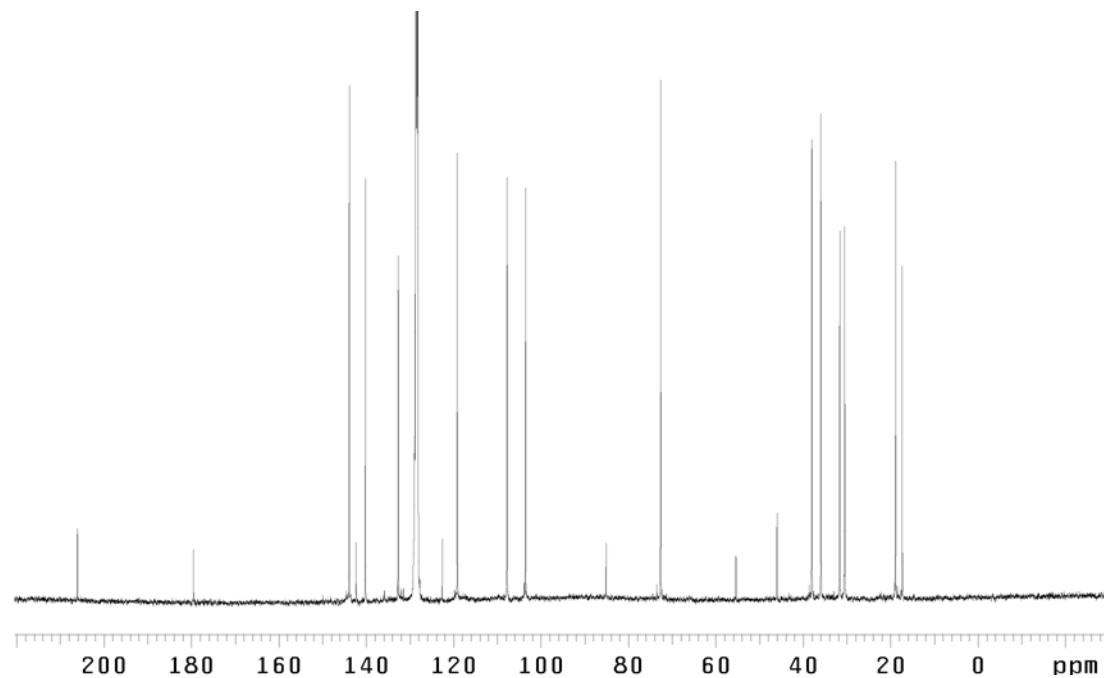


Figure A2.42 ^{13}C NMR (125 MHz, C_6D_6) of compound **70**.

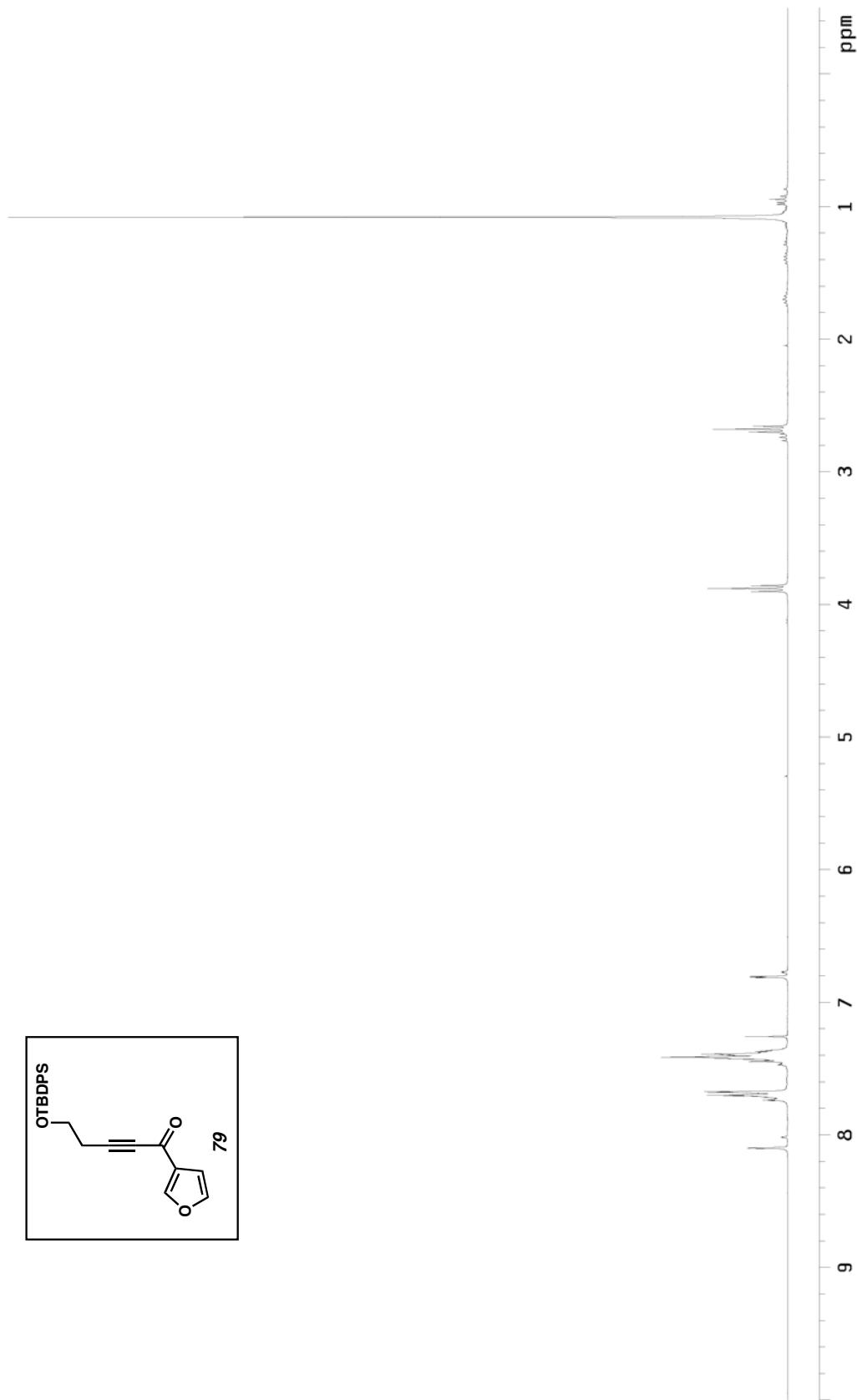


Figure A2.43 ^1H NMR (300 MHz, CDCl_3) of compound 79.

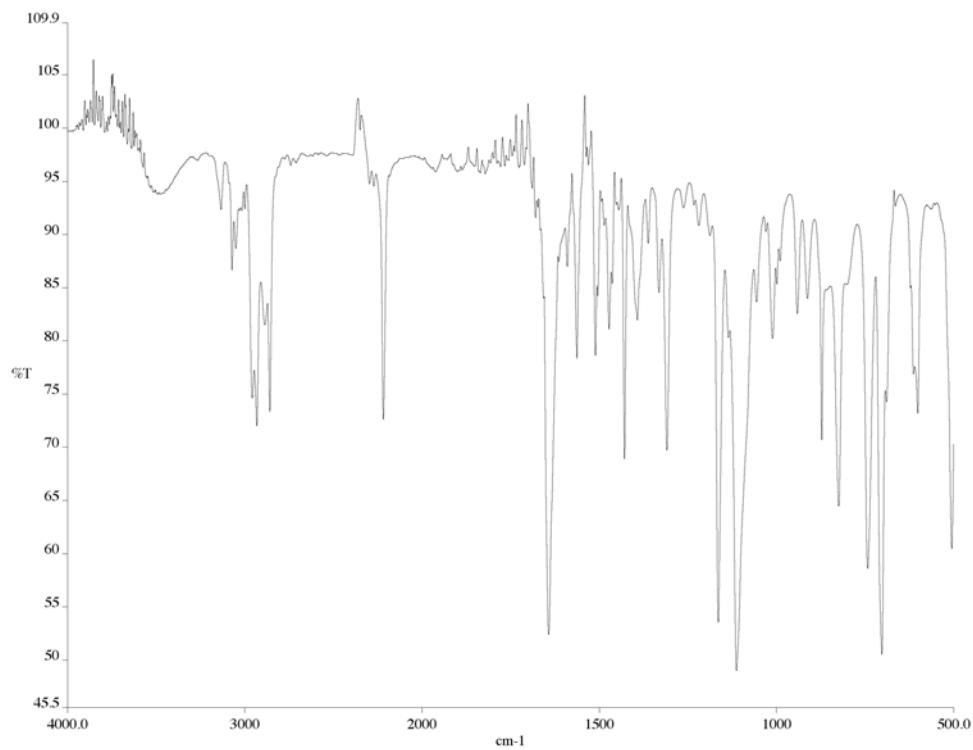


Figure A2.44 Infrared spectrum (thin film/NaCl) of compound **79**.

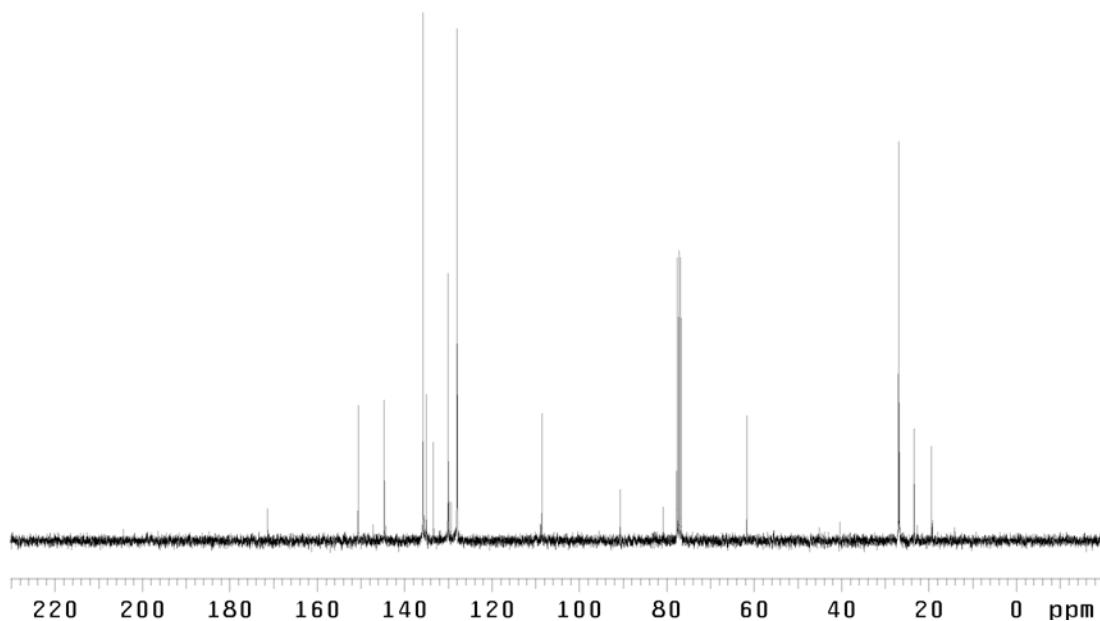


Figure A2.45 ^{13}C NMR (75 MHz, CDCl_3) of compound **79**.

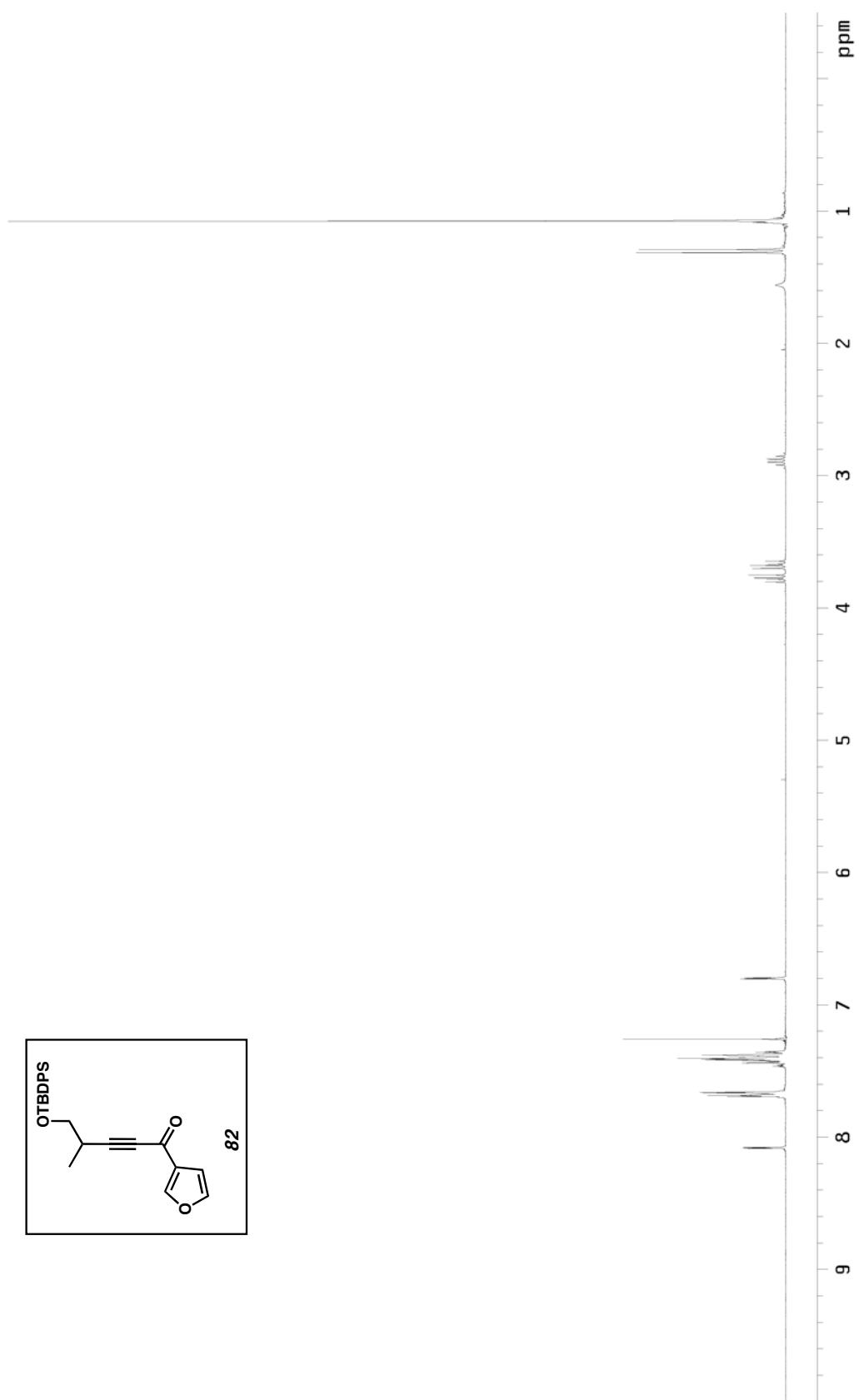


Figure A2.46 ^1H NMR (300 MHz, CDCl_3) of compound 82.

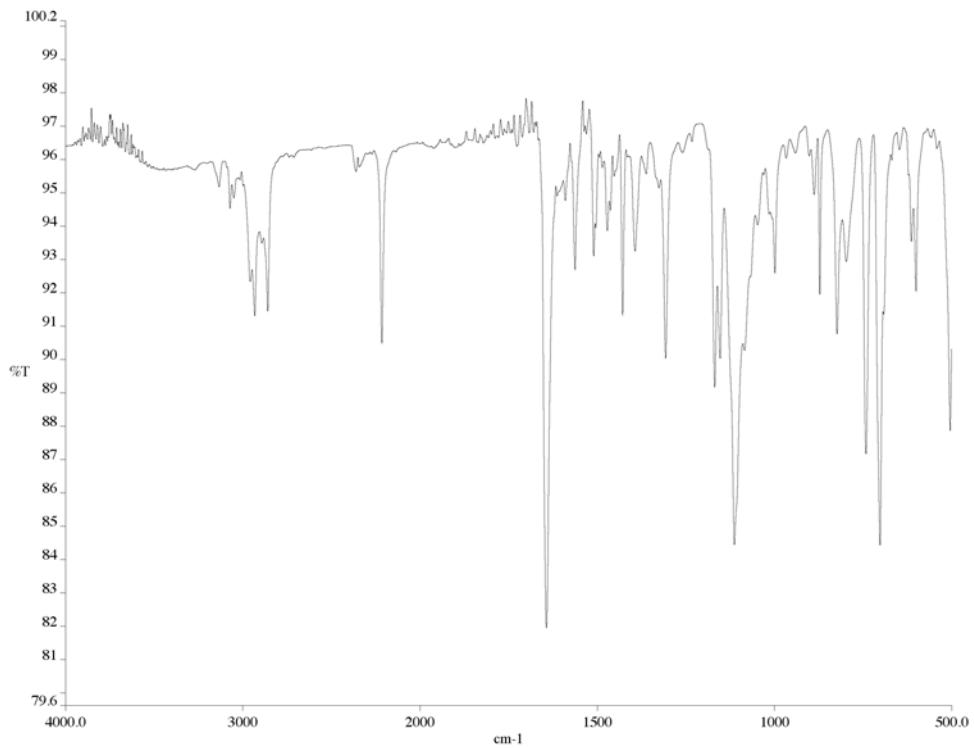


Figure A2.47 Infrared spectrum (thin film/NaCl) of compound **82**.

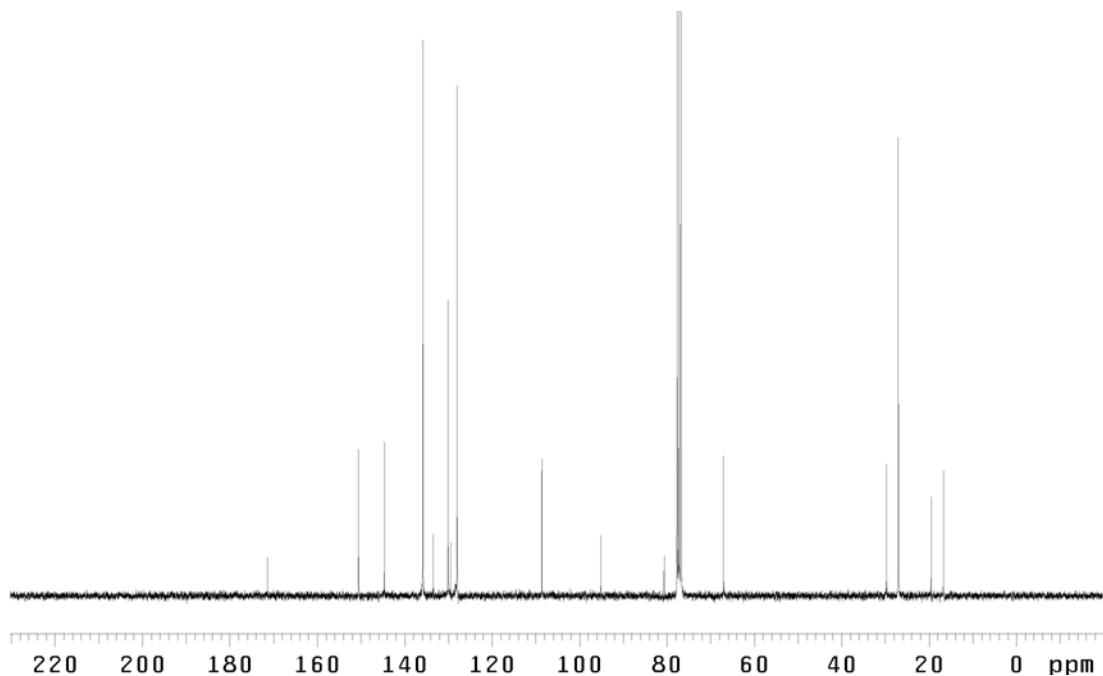


Figure A2.48 ^{13}C NMR (75 MHz, CDCl_3) of compound **82**.

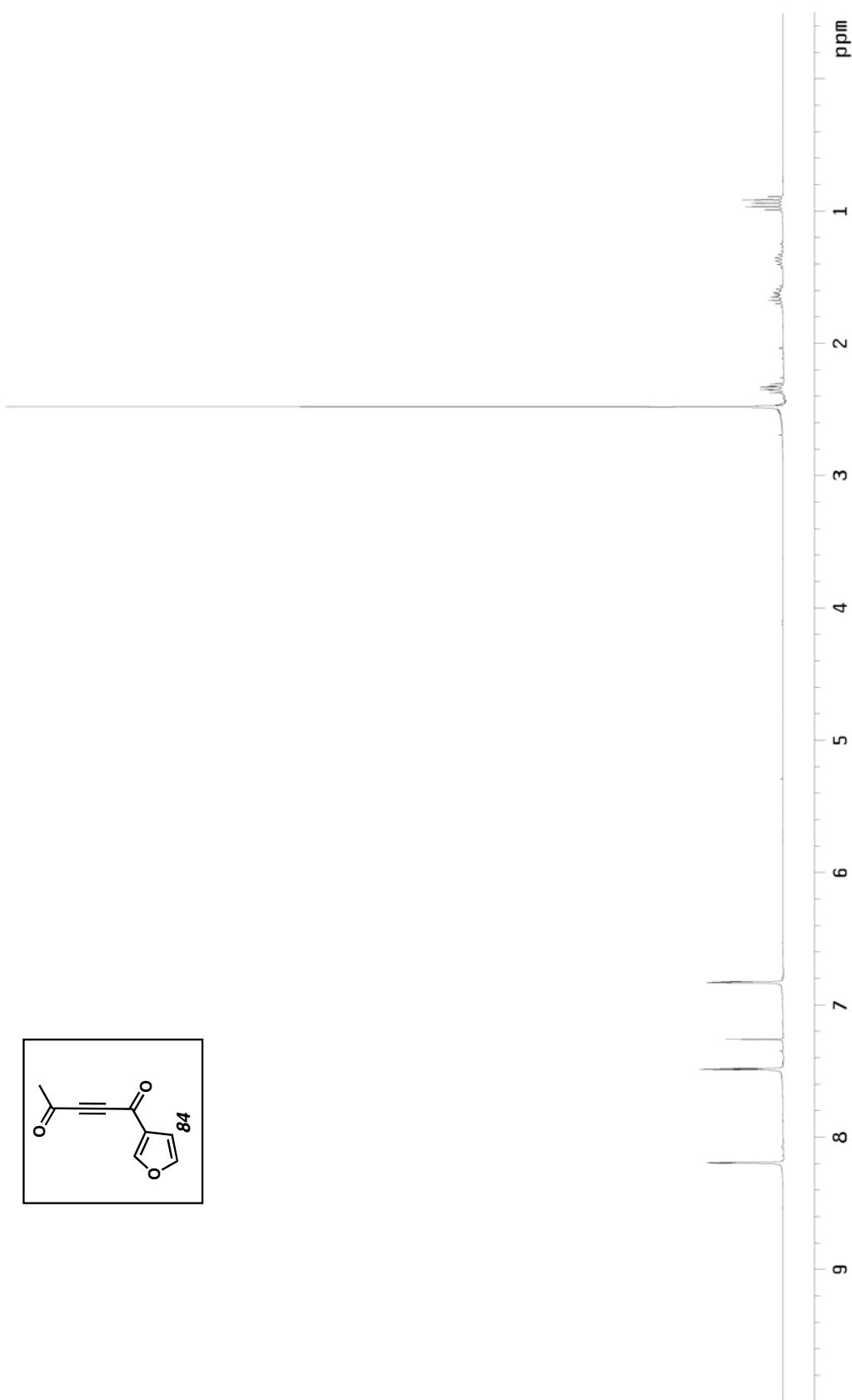


Figure A2.49 ^1H NMR (300 MHz, CDCl_3) of compound 84.

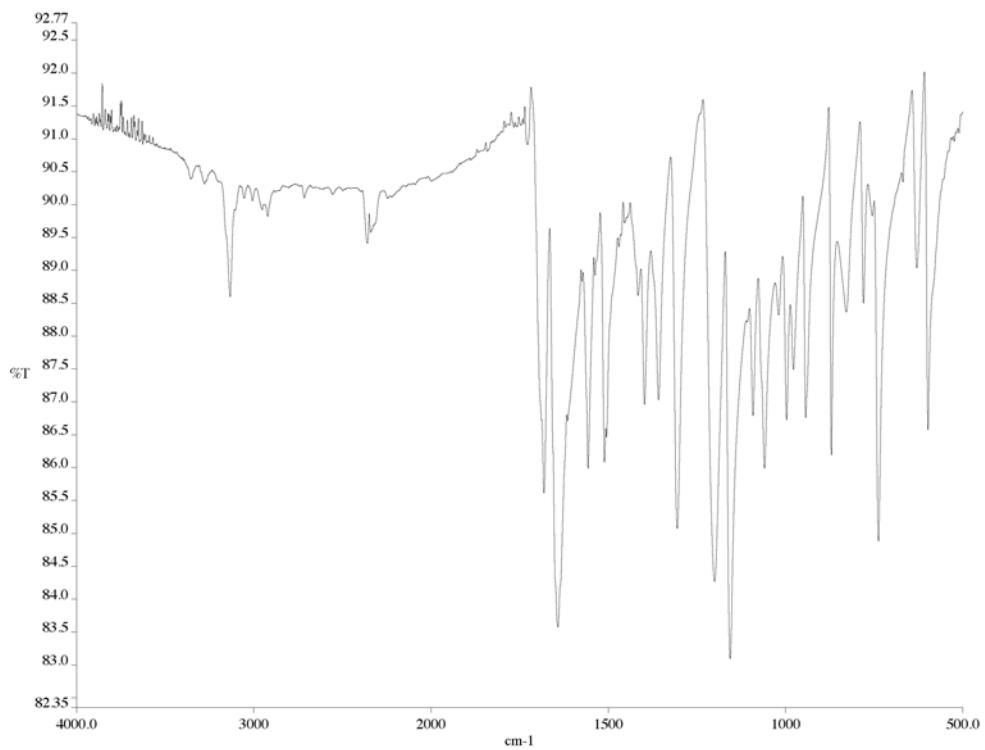


Figure A2.50 Infrared spectrum (thin film/NaCl) of compound **84**.

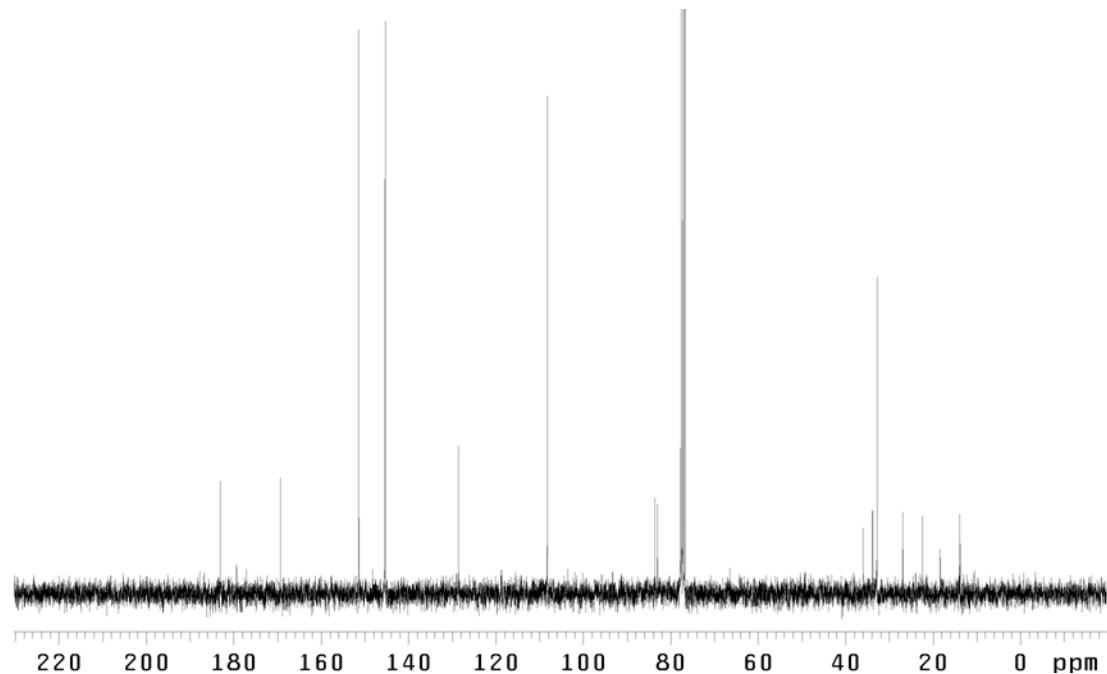


Figure A2.51 ^{13}C NMR (75 MHz, CDCl_3) of compound **84**.

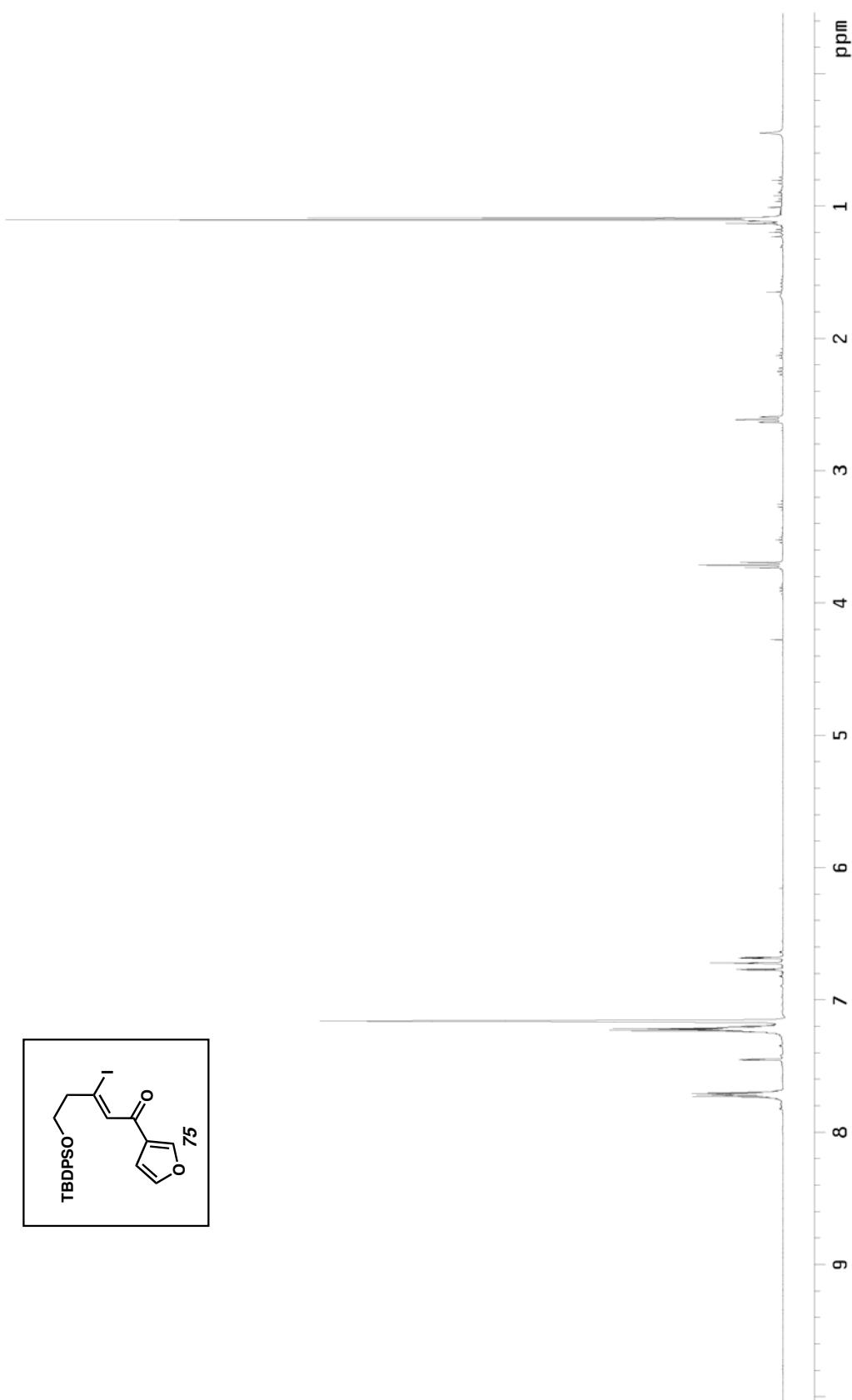


Figure A2.52 ^1H NMR (300 MHz, C_6D_6) of compound **75**.

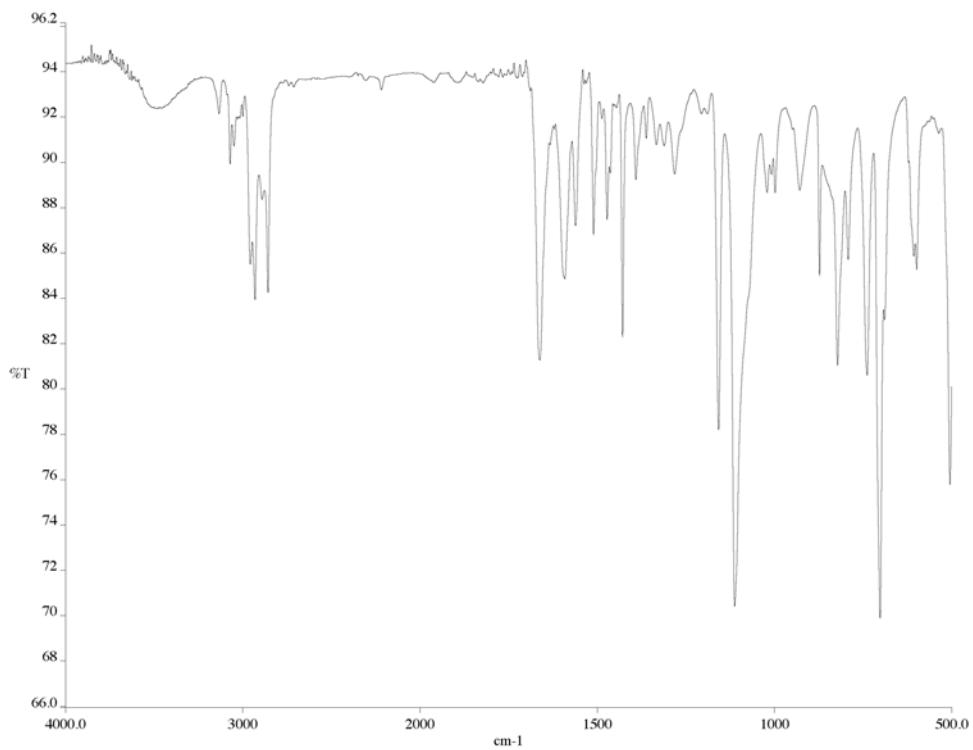


Figure A2.53 Infrared spectrum (thin film/NaCl) of compound **75**.

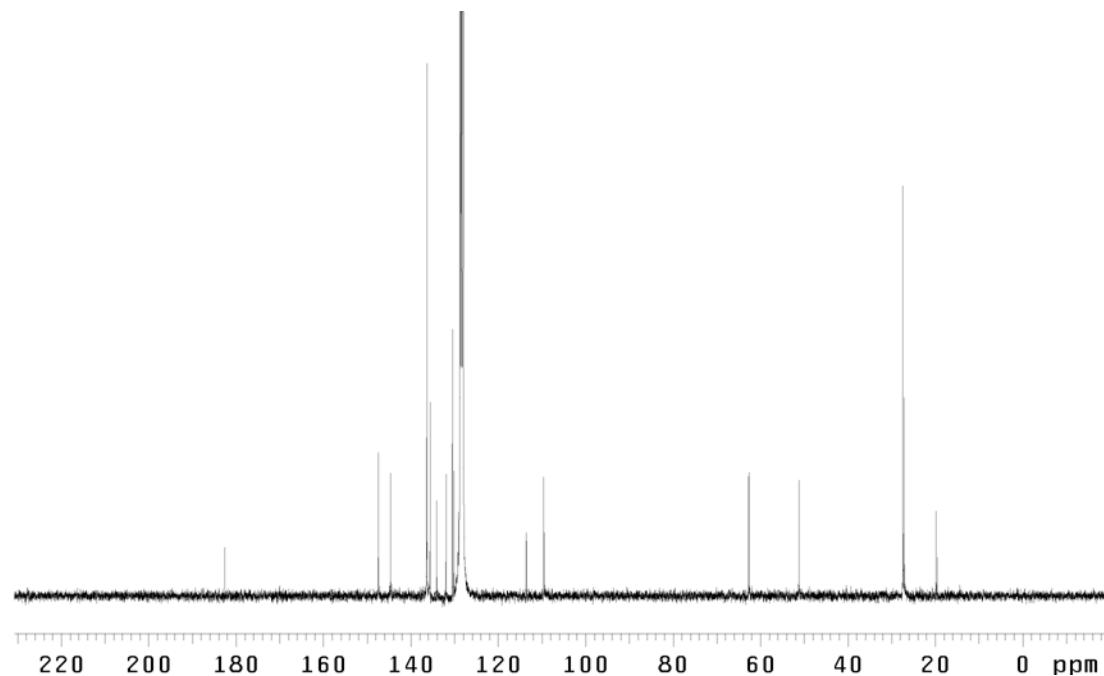


Figure A2.54 ^{13}C NMR (75 MHz, C_6D_6) of compound **75**.

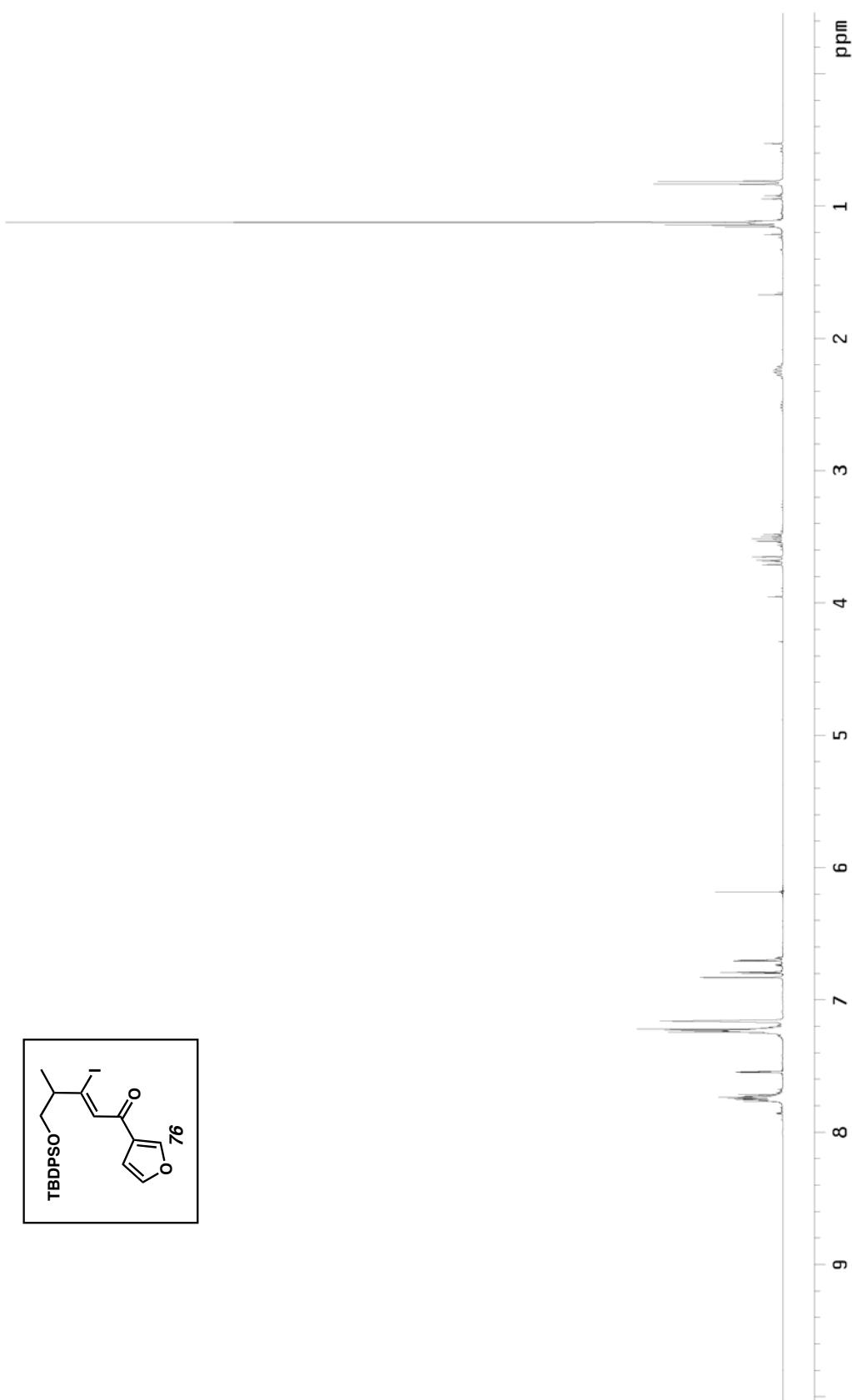


Figure A2.55 ^1H NMR (300 MHz, C_6D_6) of compound 76.

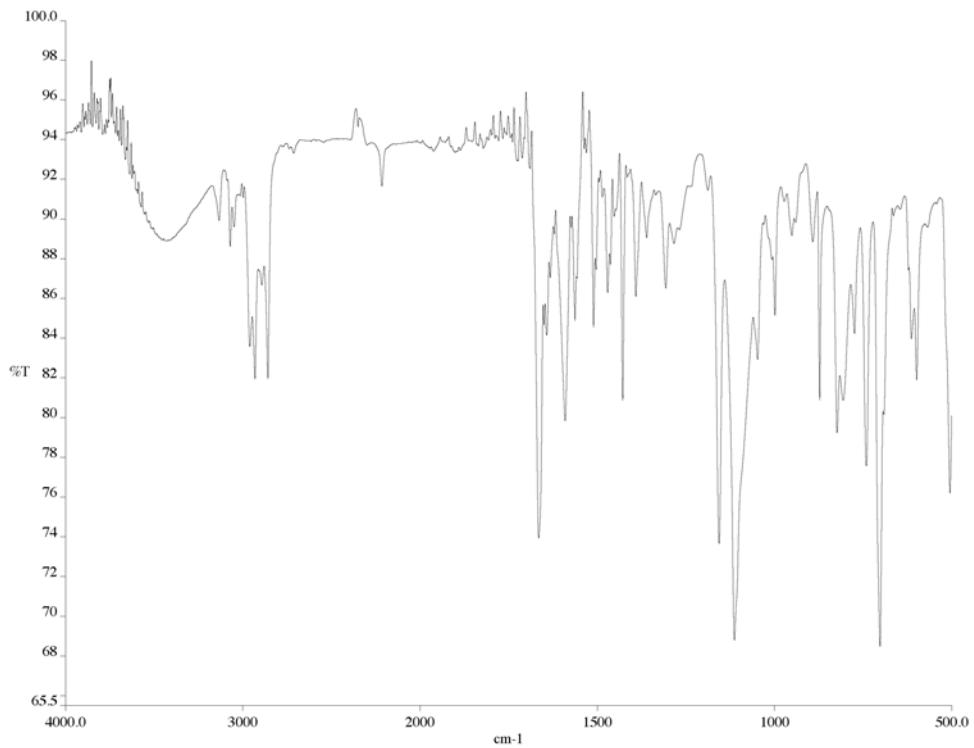


Figure A2.56 Infrared spectrum (thin film/NaCl) of compound **76**.

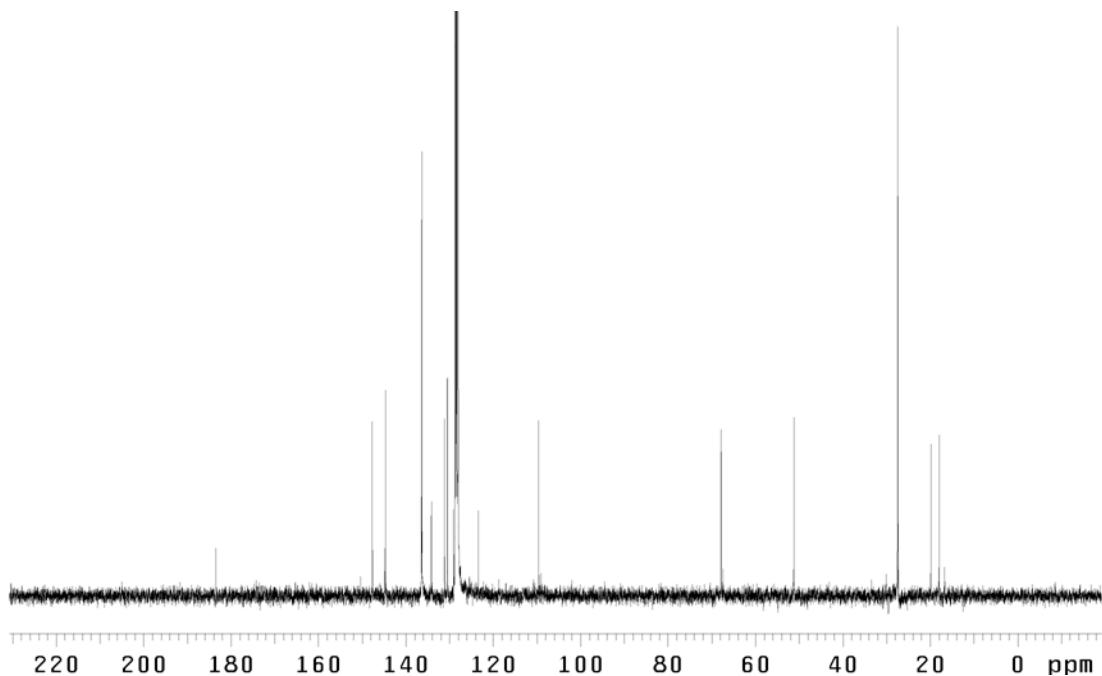


Figure A2.57 ^{13}C NMR (75 MHz, C_6D_6) of compound **76**.

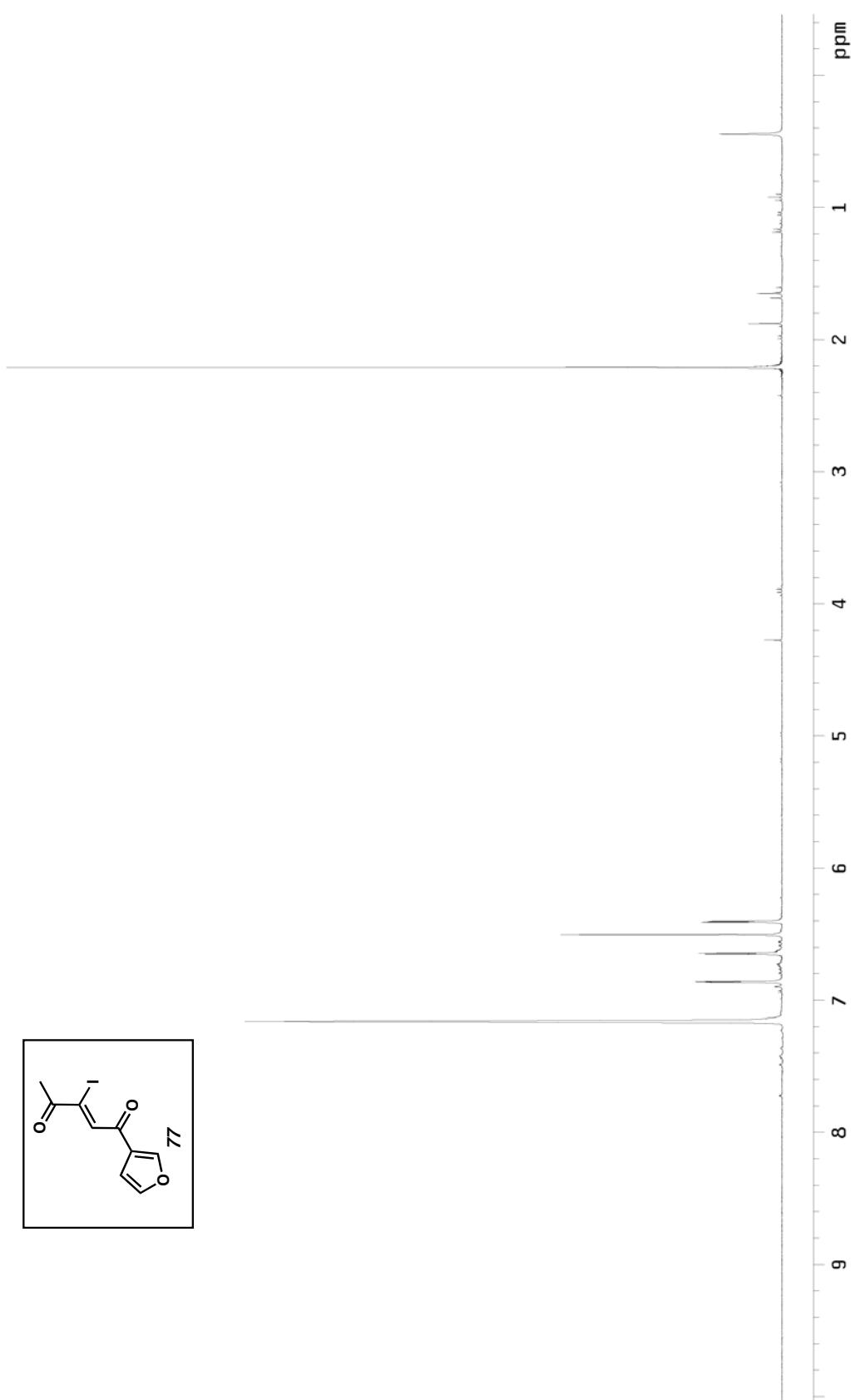


Figure A2.58 ^1H NMR (300 MHz, C_6D_6) of compound 77.

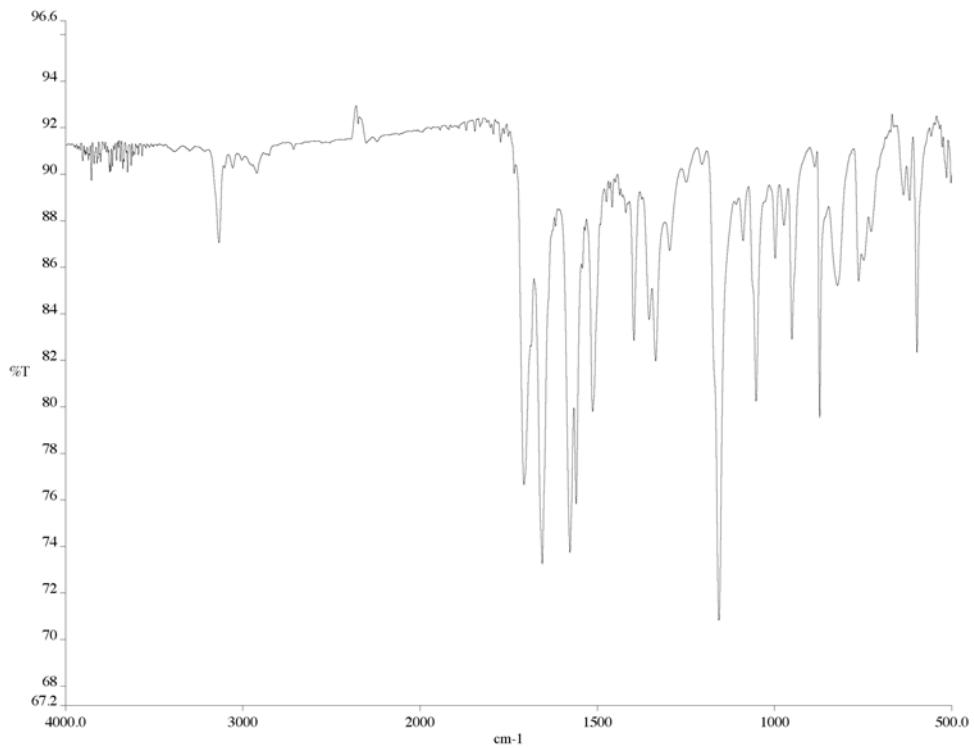


Figure A2.59 Infrared spectrum (thin film/NaCl) of compound 77.

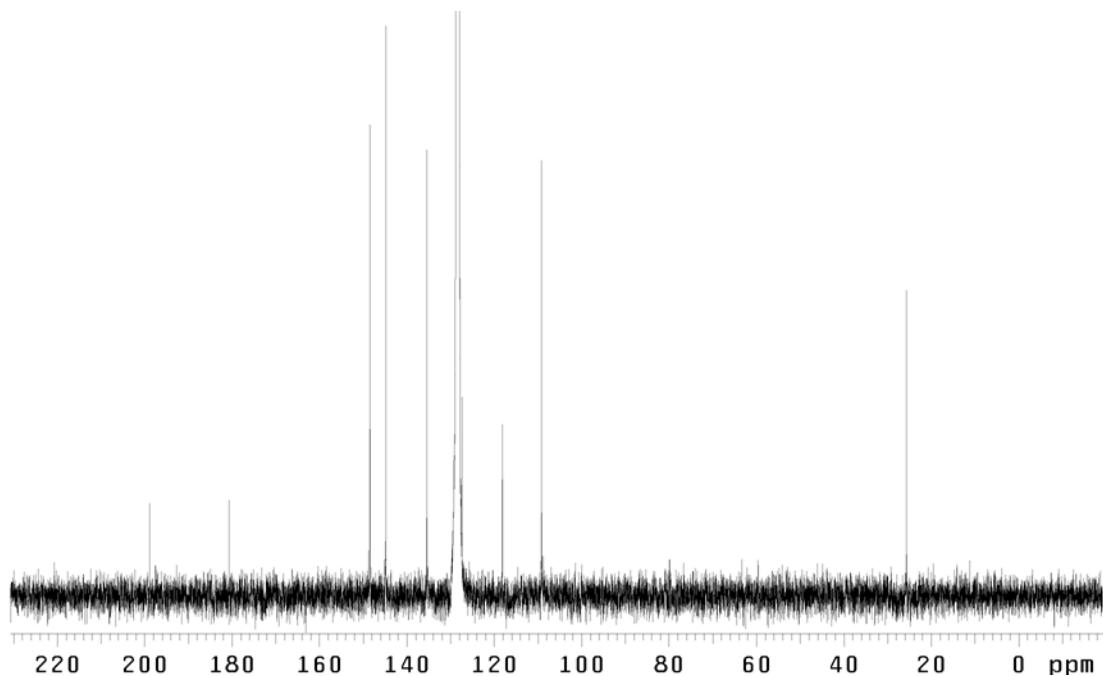


Figure A2.60 ^{13}C NMR (75 MHz, C_6D_6) of compound 77.

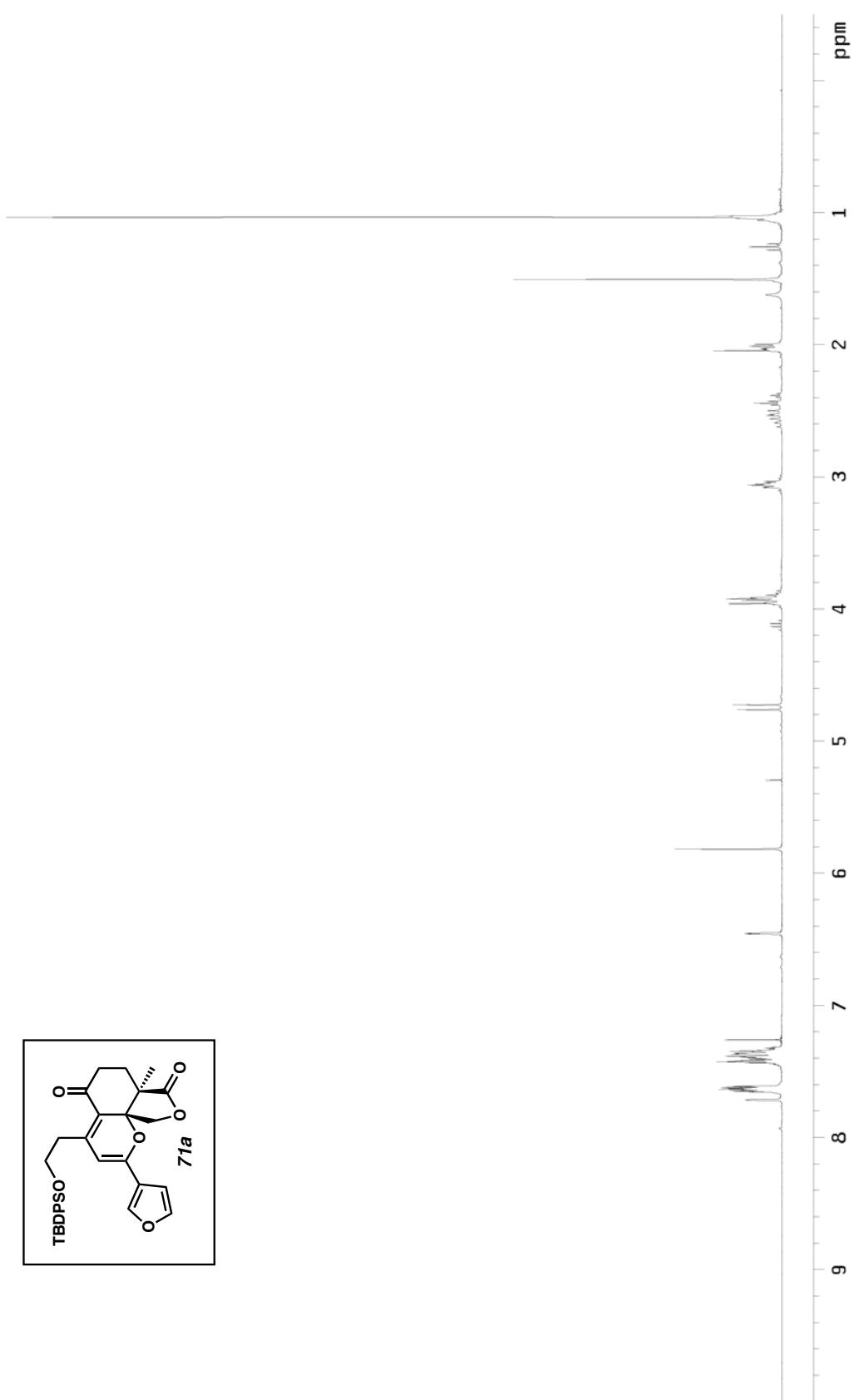


Figure A2.61 ^1H NMR (300 MHz, CDCl_3) of compound 71a.

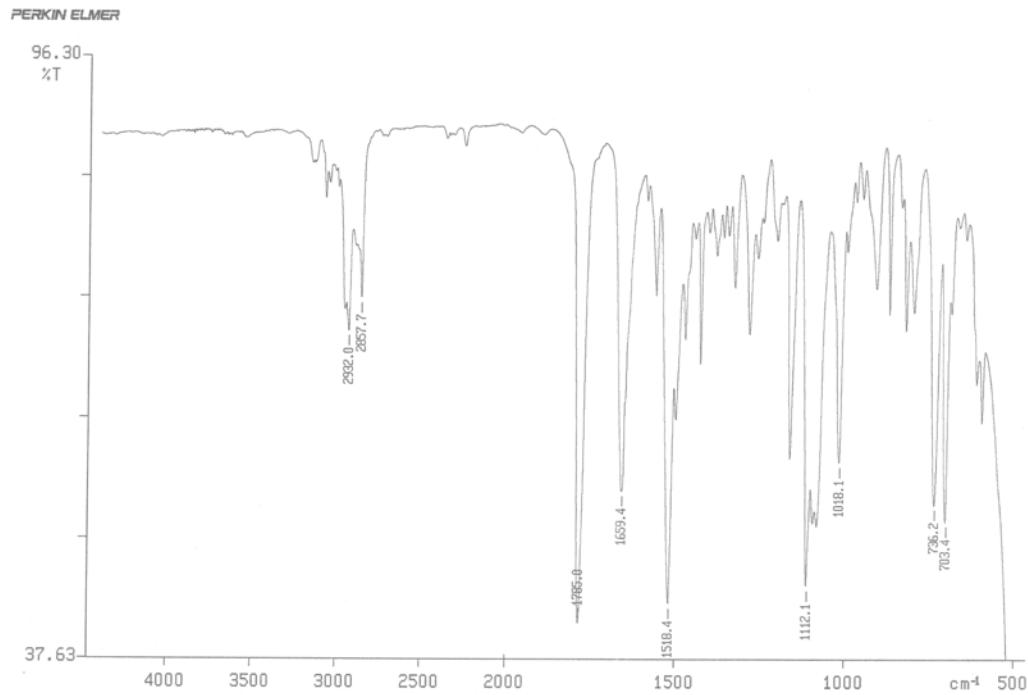


Figure A2.62 Infrared spectrum (thin film/NaCl) of compound **71a**.

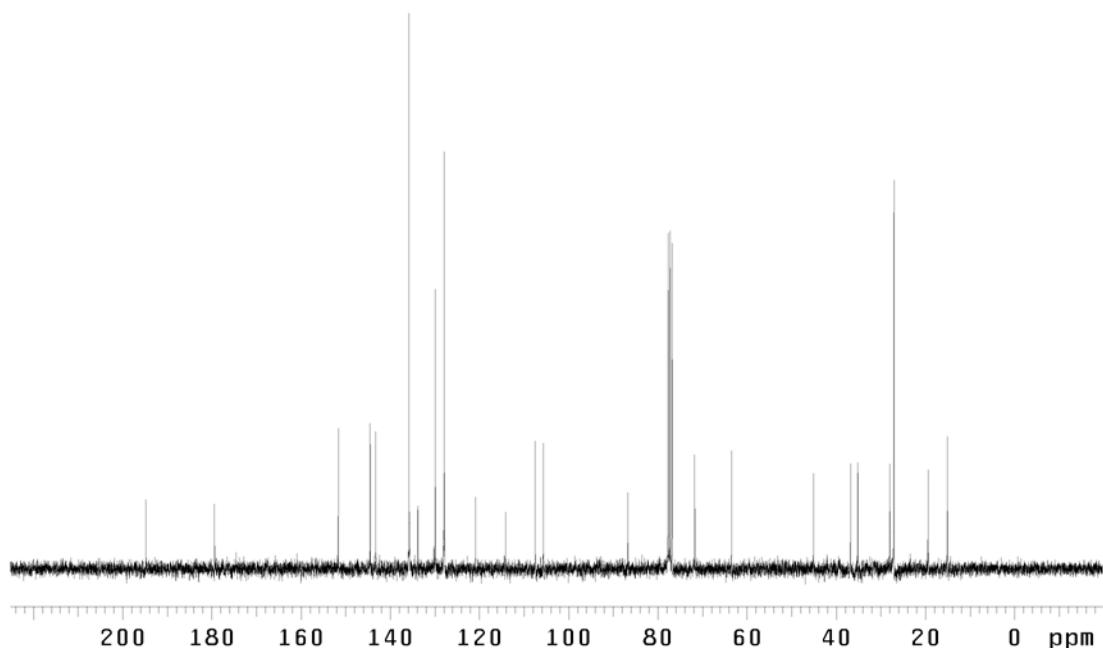
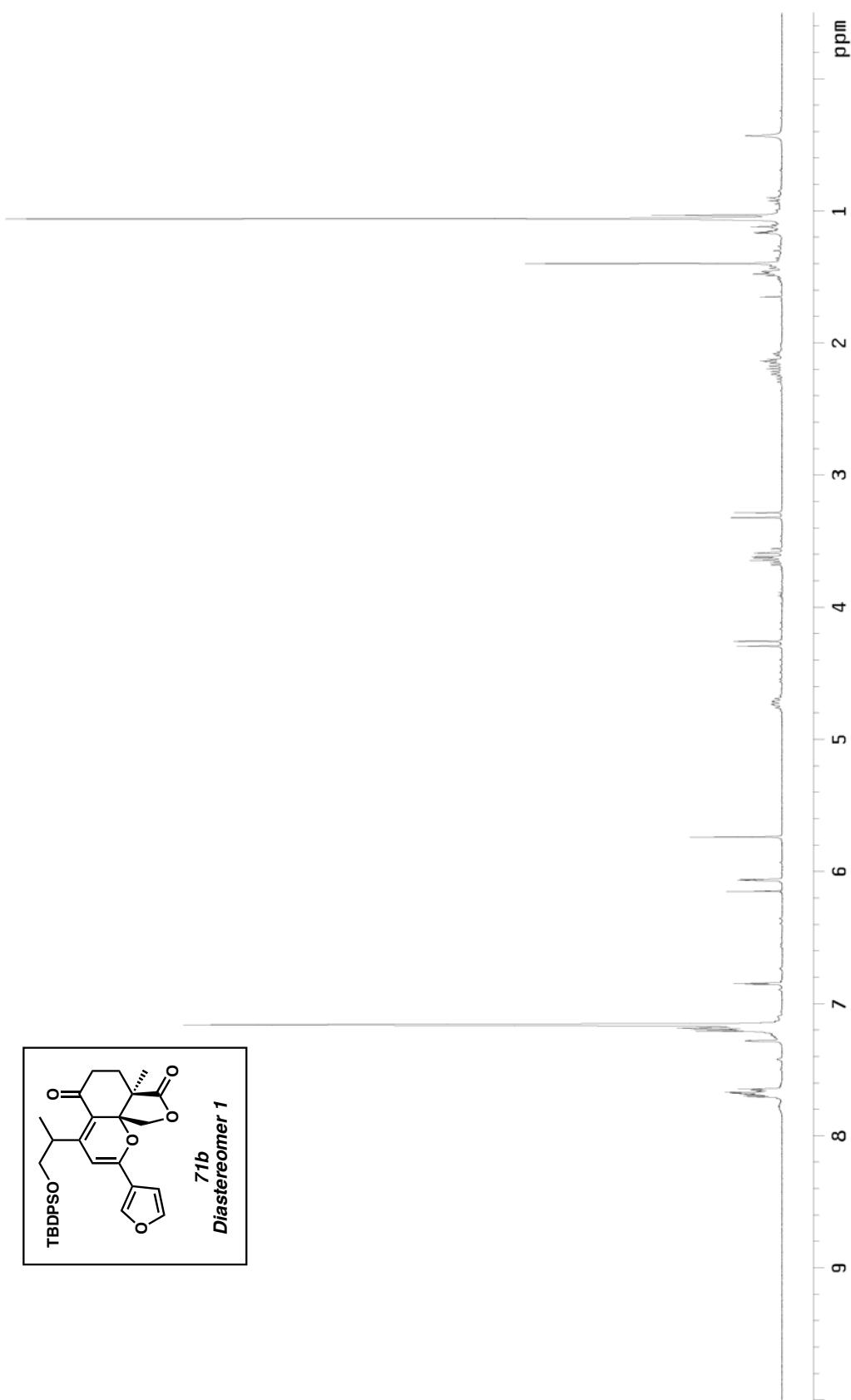


Figure A2.63 ^{13}C NMR (75 MHz, CDCl_3) of compound **71a**.



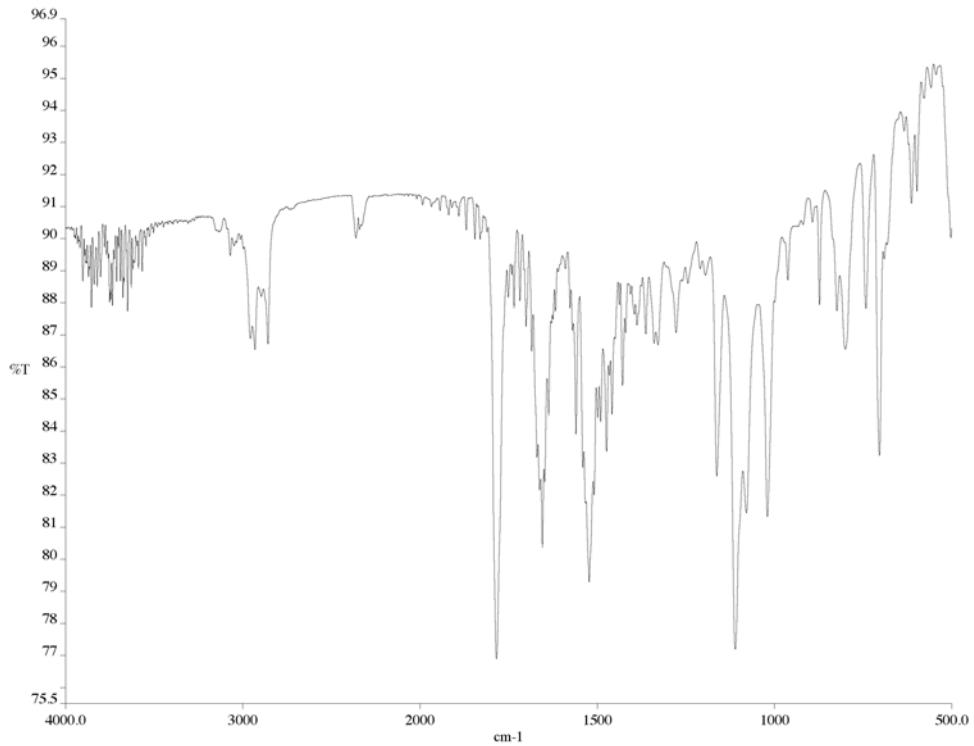


Figure A2.65 Infrared spectrum (thinfilm/NaCl) of compound **71b(1)**.

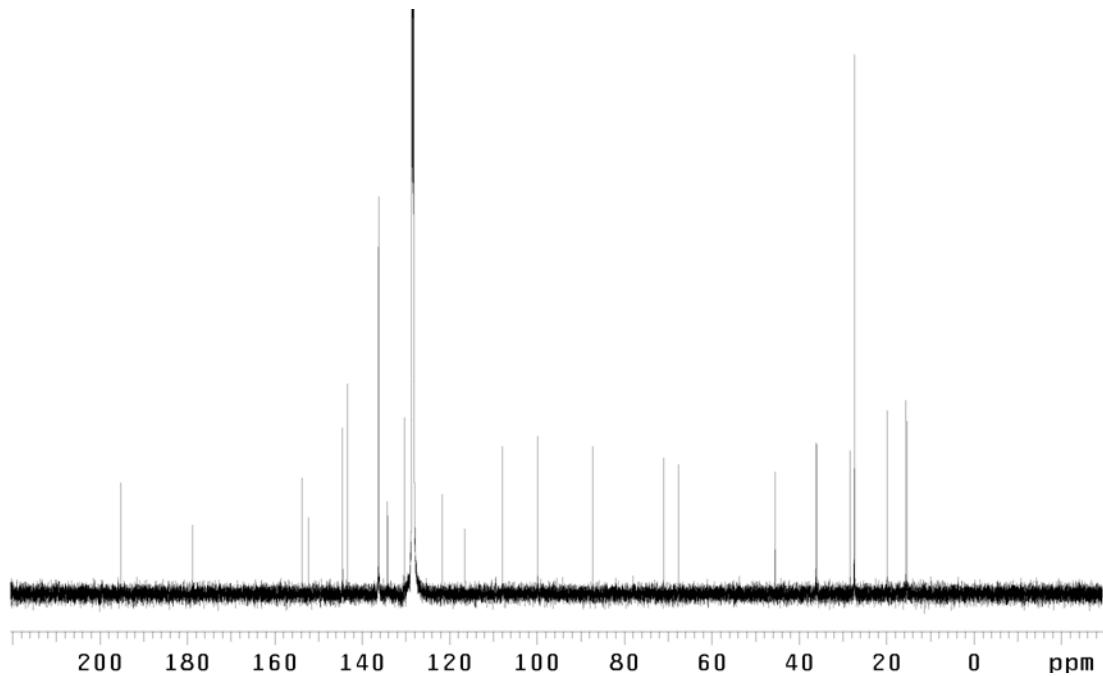


Figure A2.66 ^{13}C NMR (125 MHz, C_6D_6) of compound **71b(1)**.

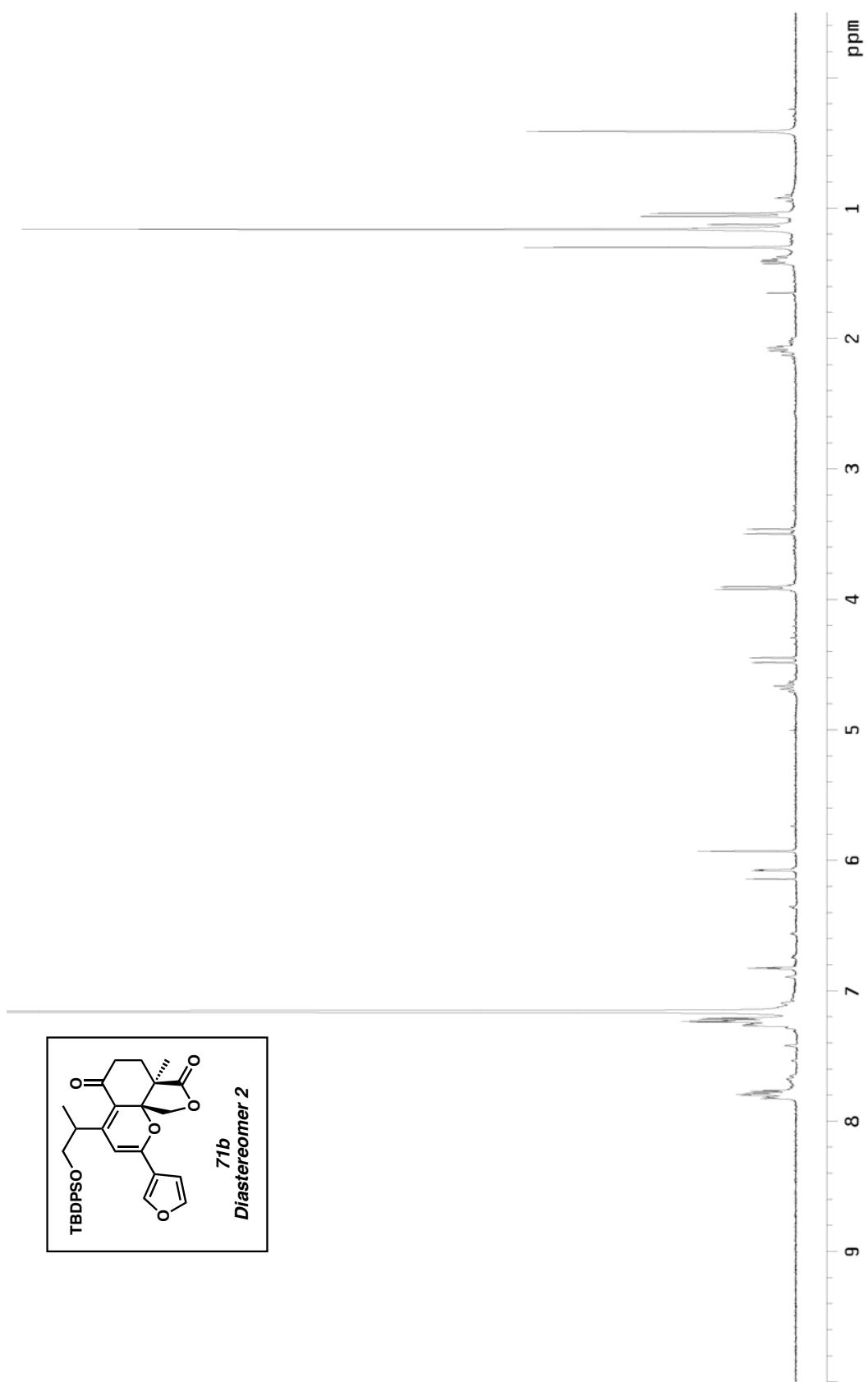


Figure A2.67 ¹H NMR (300 MHz, C₆D₆) of compound 71b(2).

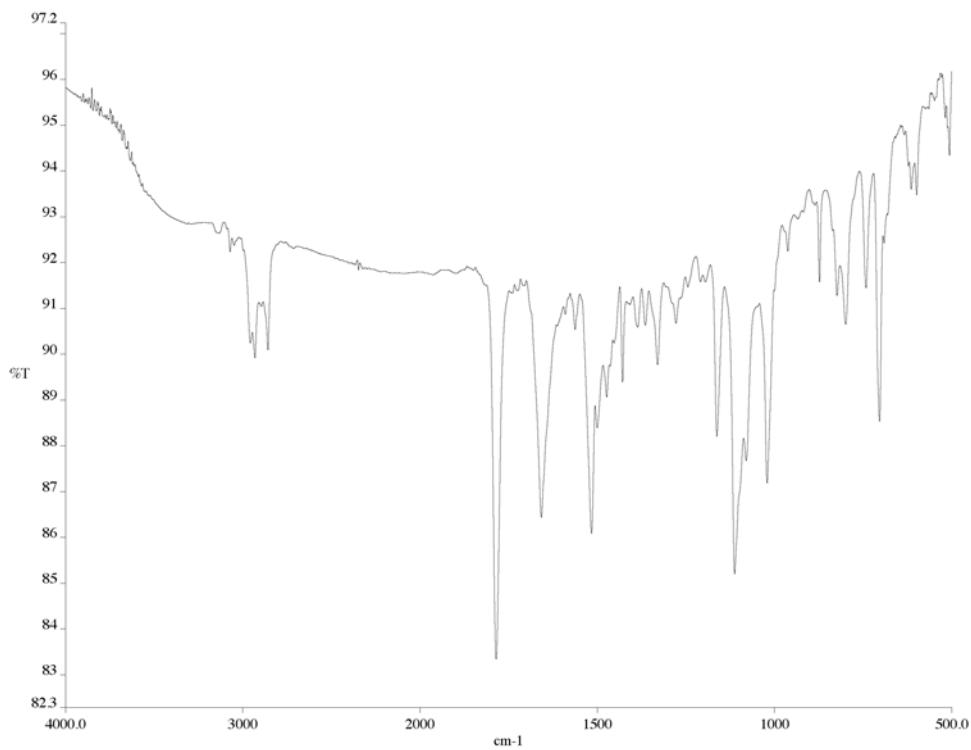


Figure A2.68 Infrared spectrum (thinfilm/NaCl) of compound **71b(2)**.

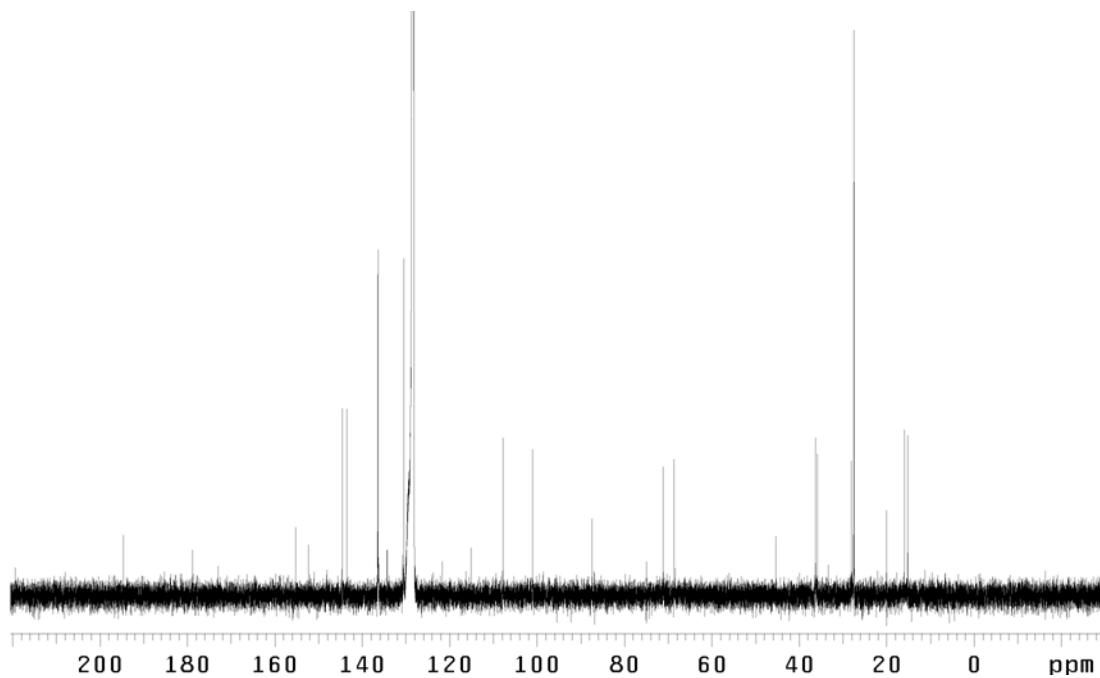


Figure A2.69 ^{13}C NMR (125 MHz, C_6D_6) of compound **71b(2)**.

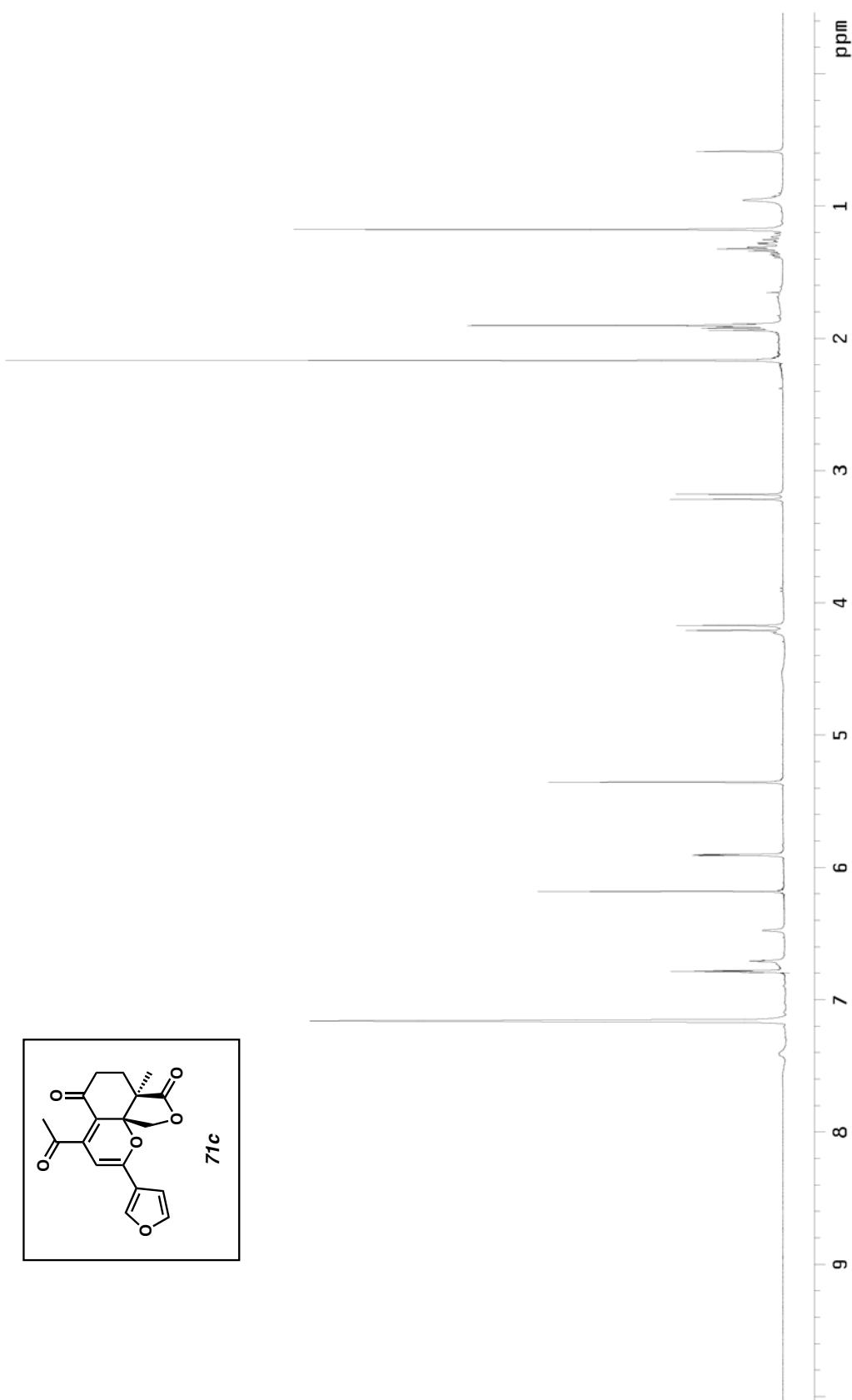


Figure A2.70 ^1H NMR (300 MHz, C_6D_6) of compound 71c.

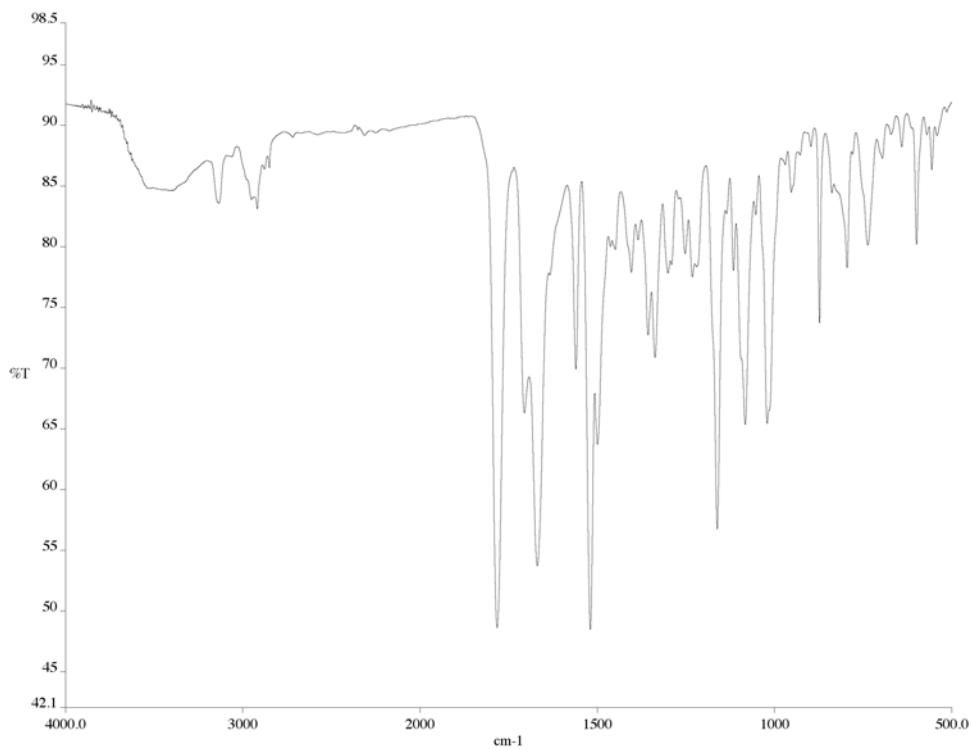


Figure A2.71 Infrared spectrum (thin film/NaCl) of compound **71c**.

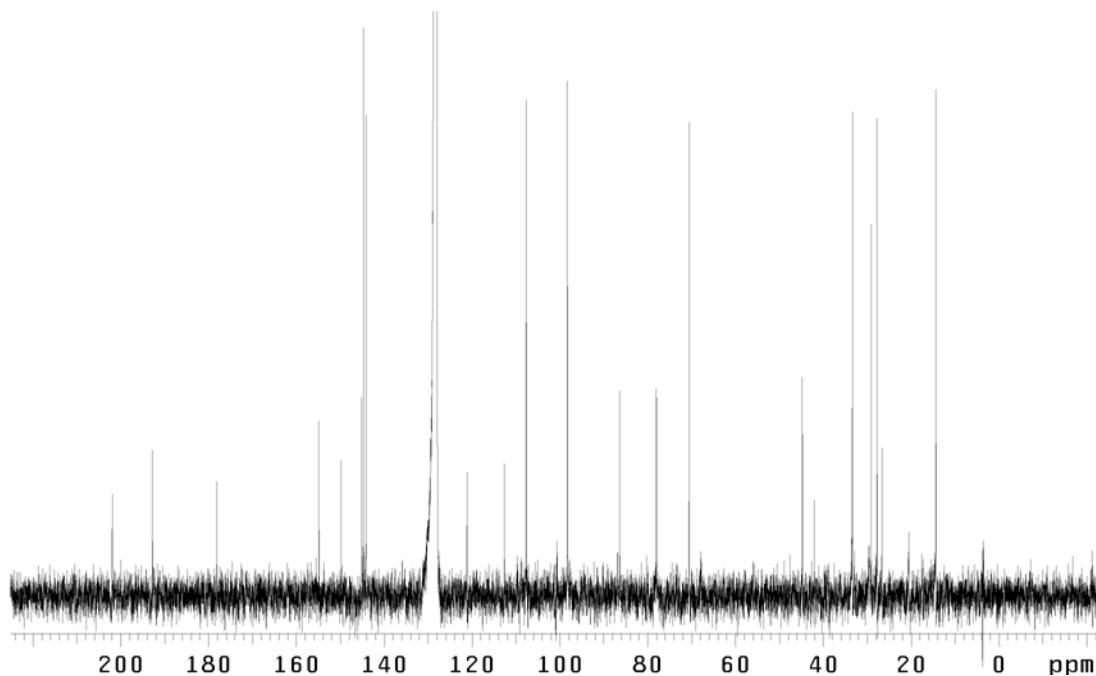


Figure A2.72 ^{13}C NMR (75 MHz, C_6D_6) of compound **71c**.

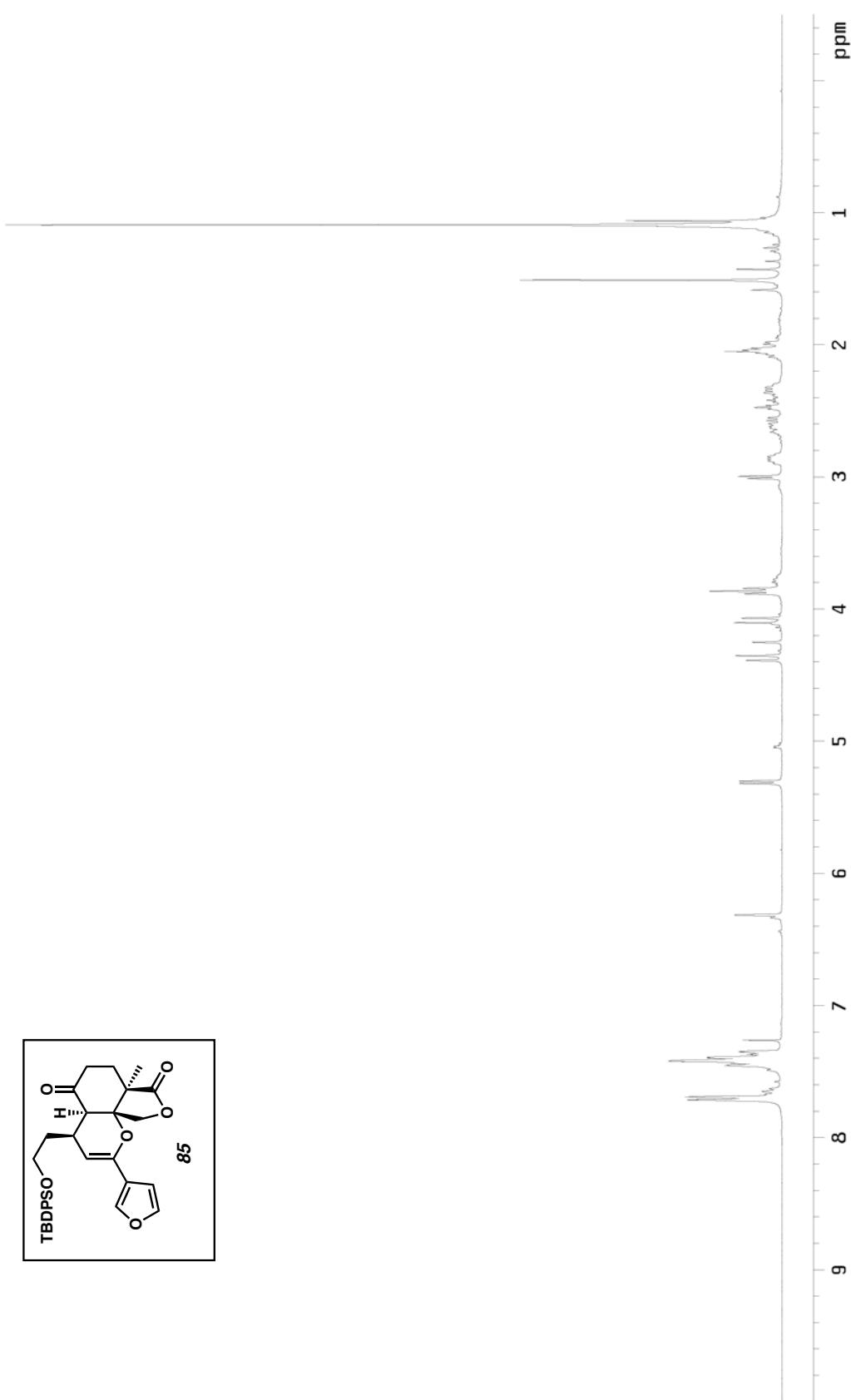


Figure A2.73 ^1H NMR (300 MHz, CDCl_3) of compound **85**.

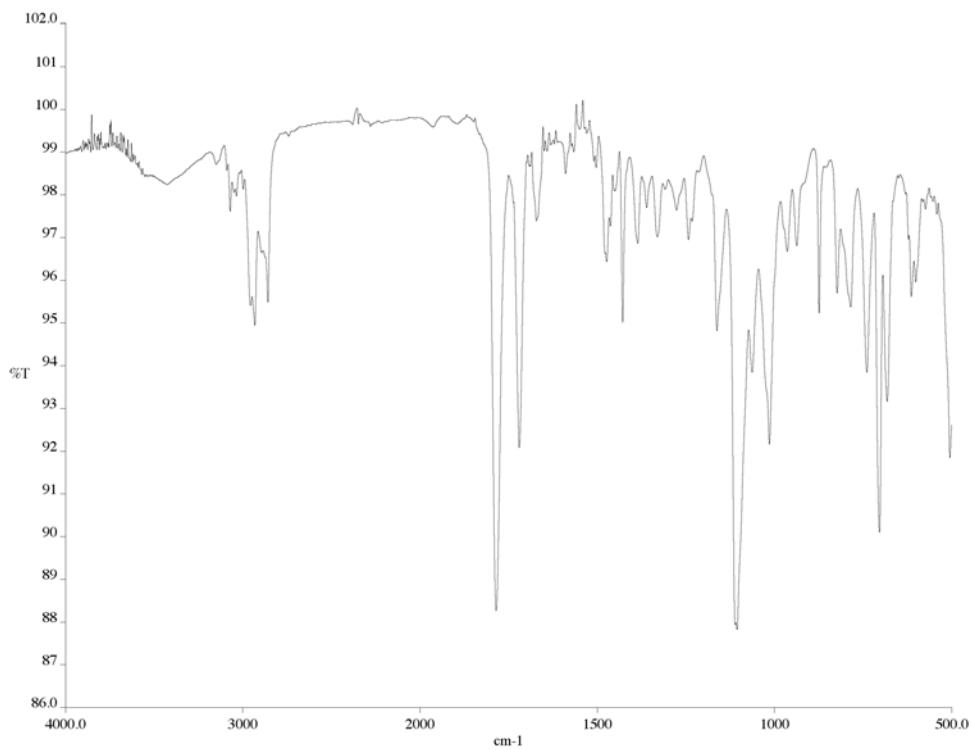


Figure A2.74 Infrared spectrum (thin film/NaCl) of compound **85**.

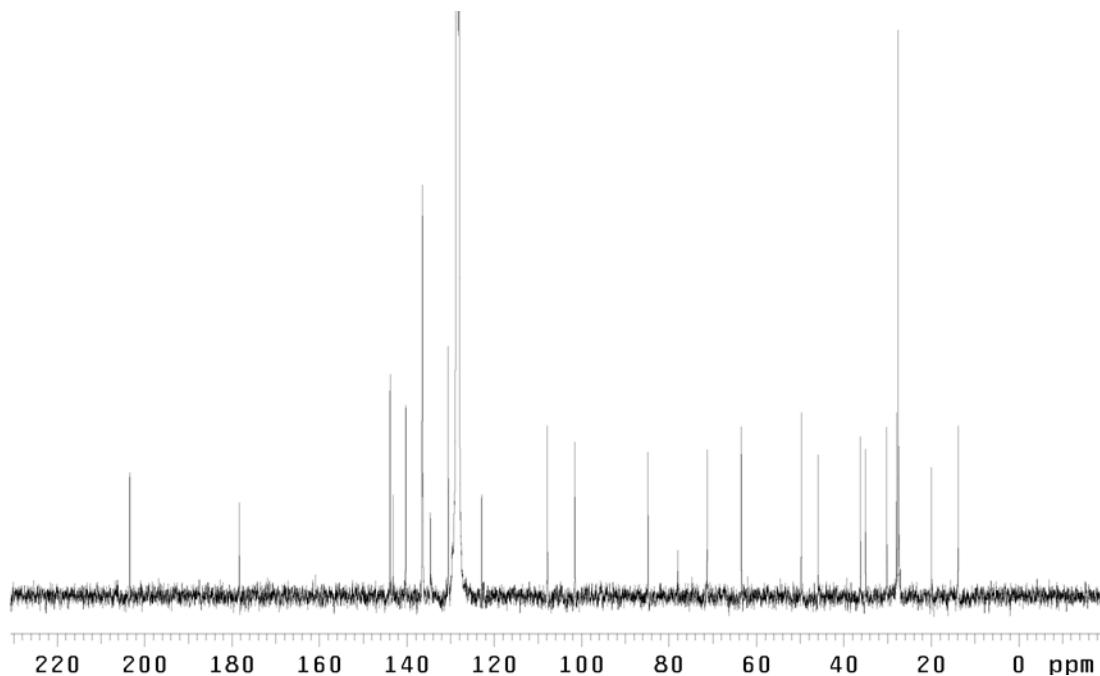


Figure A2.75 ^{13}C NMR (75 MHz, C_6D_6) of compound **85**.

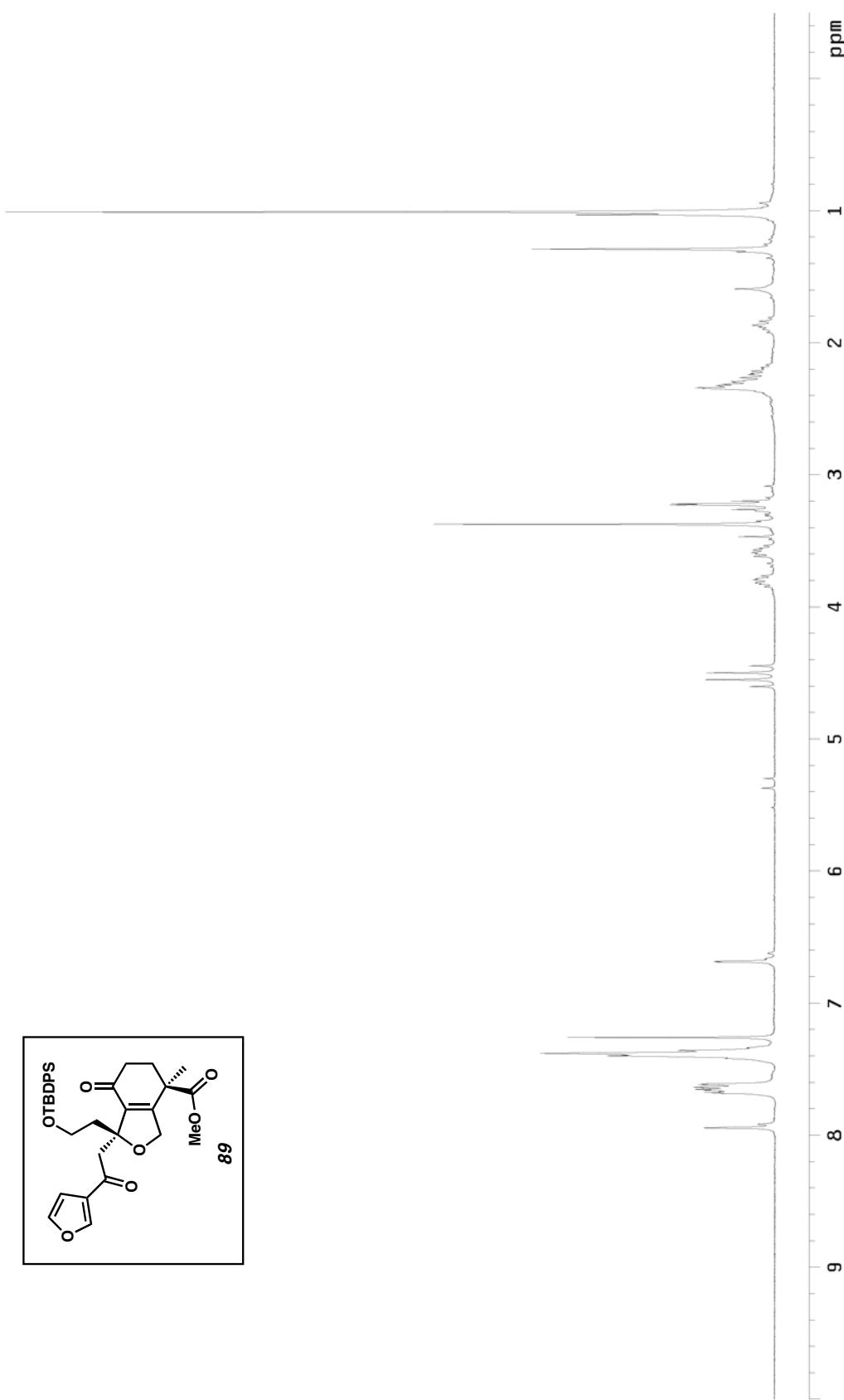


Figure A2.76 ^1H NMR (300 MHz, CDCl_3) of compound 89.

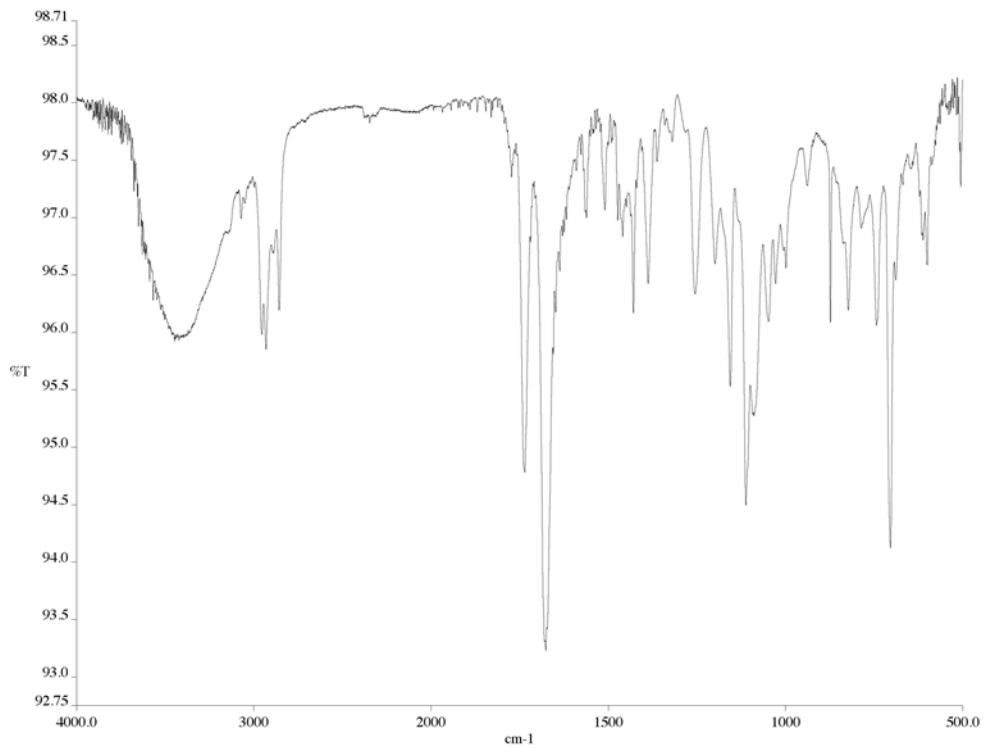


Figure A2.77 Infrared spectrum (thin film/NaCl) of compound **89**.

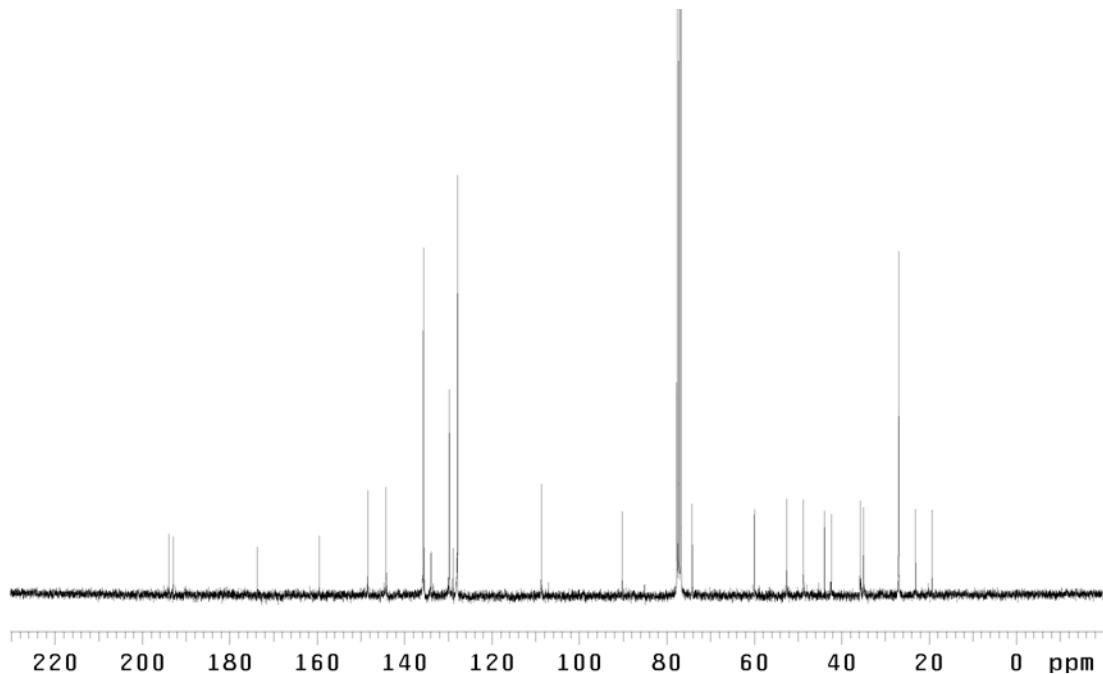


Figure A2.78 ^{13}C NMR (125 MHz, CDCl_3) of compound **89**.

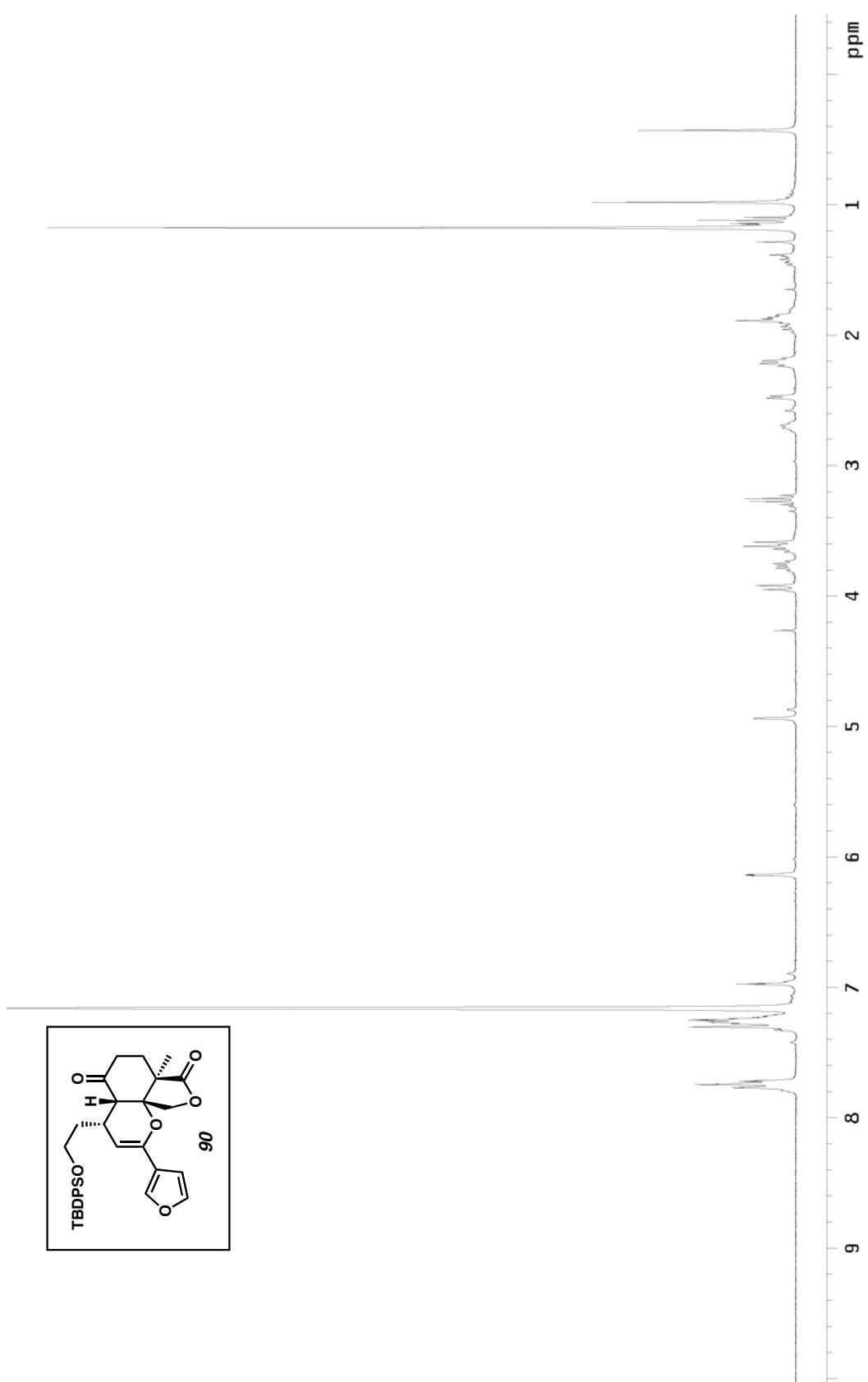


Figure A2.79 ^1H NMR (300 MHz, C_6D_6) of compound 90.

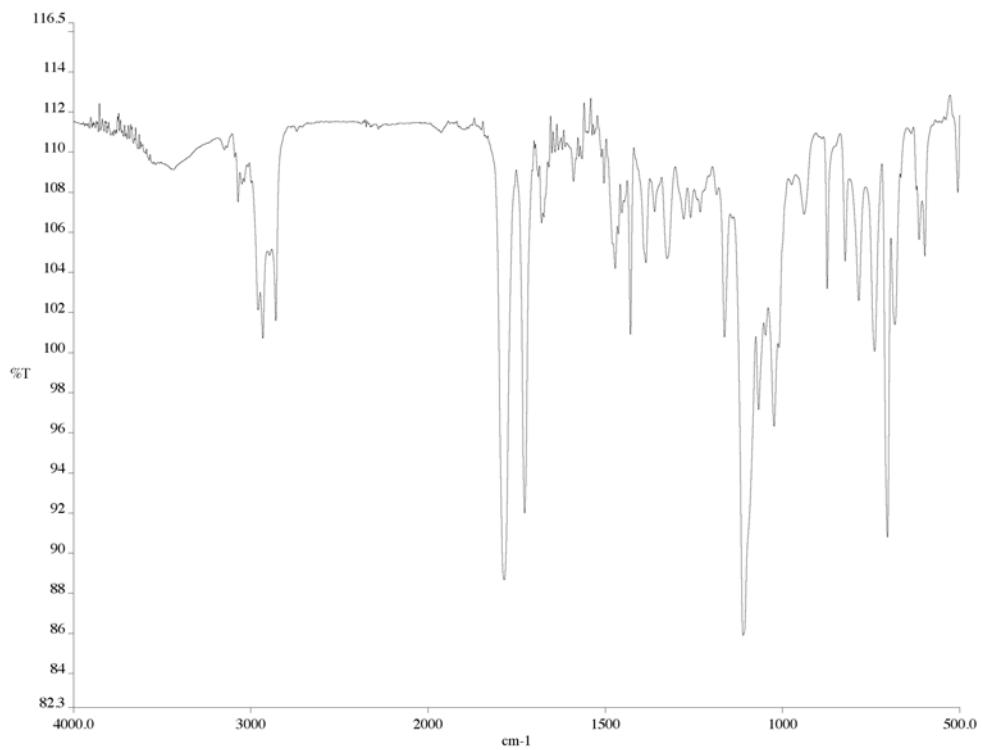


Figure A2.80 Infrared spectrum (film) of compound **90**.

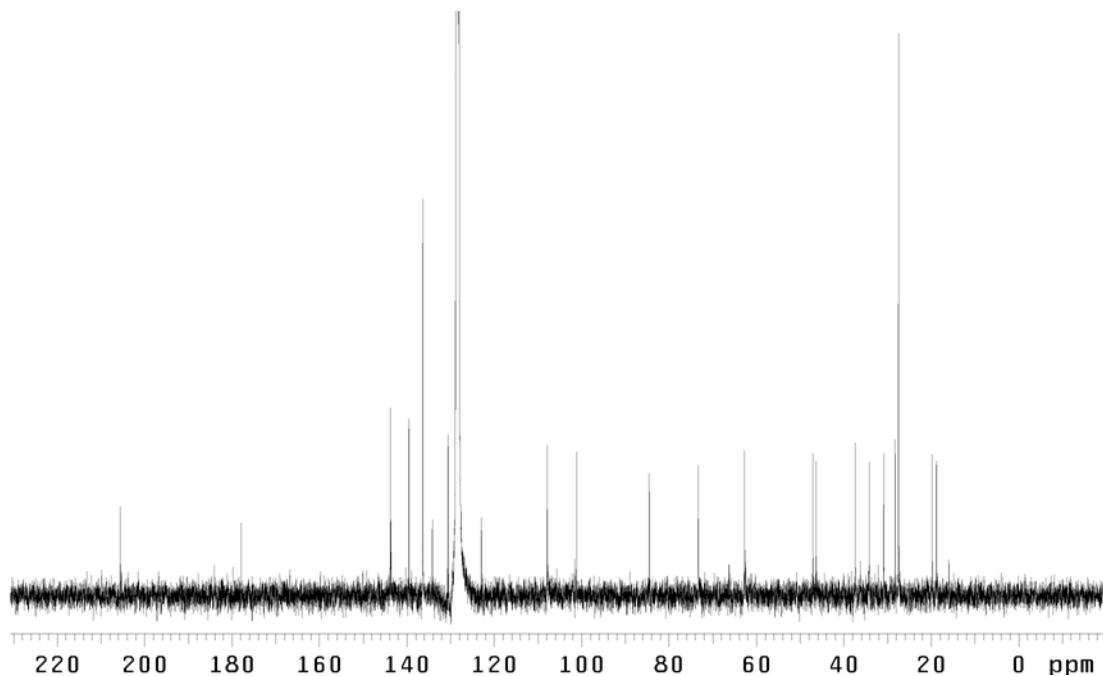


Figure A2.81 ¹³C NMR (75 MHz, C₆D₆) of compound **90**.