

APPENDIX

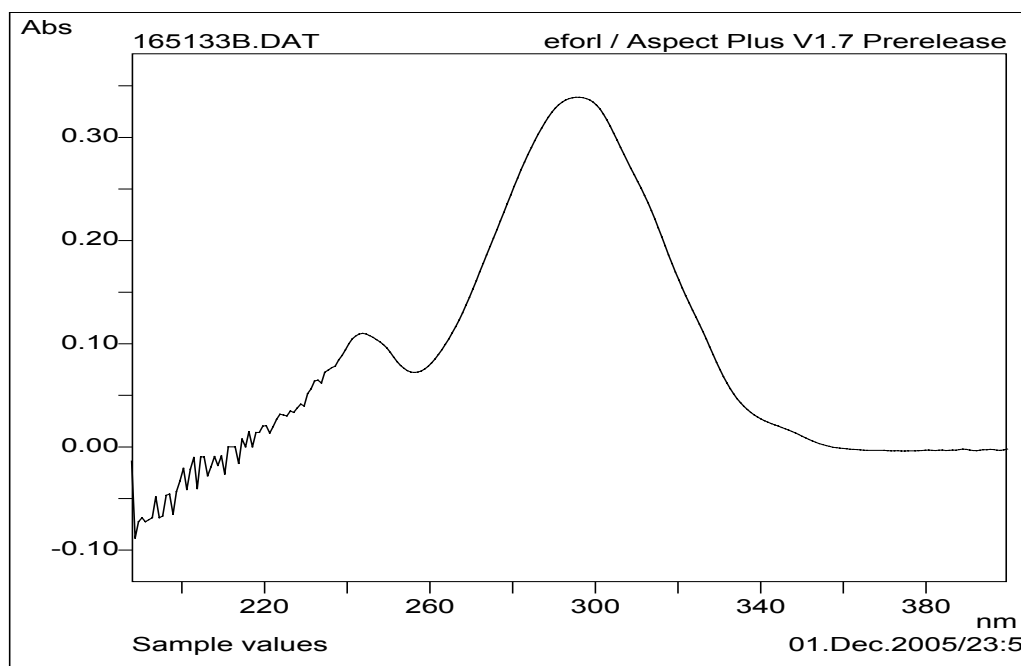


Figure 8 UV (CHCl_3) spectrum of compound **TD1**

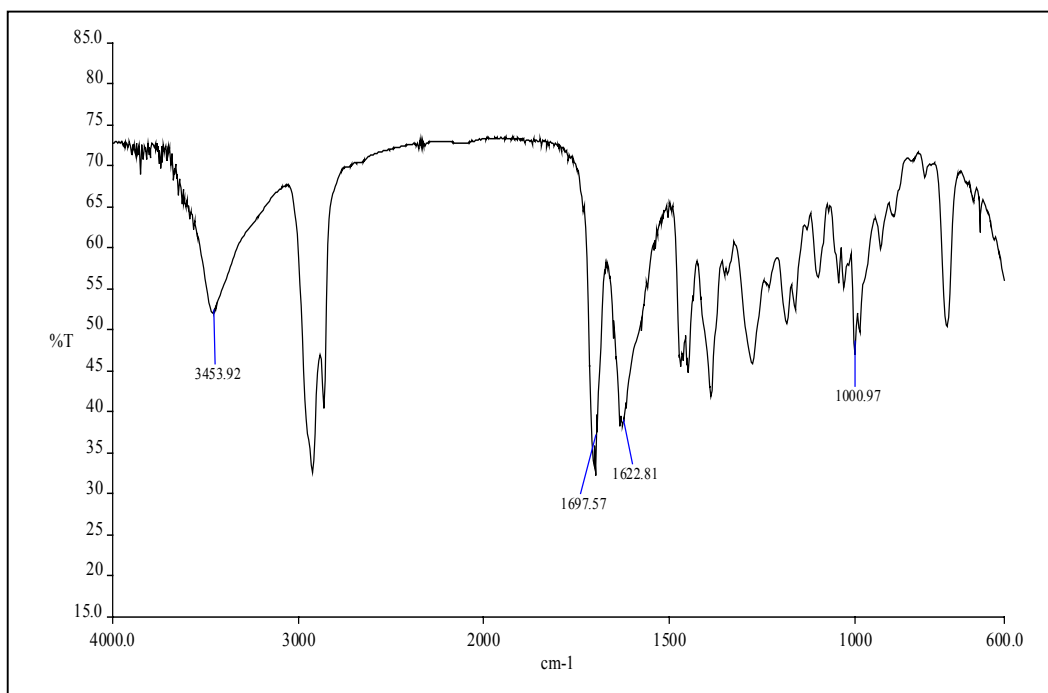


Figure 9 IR (neat) spectrum of compound **TD1**

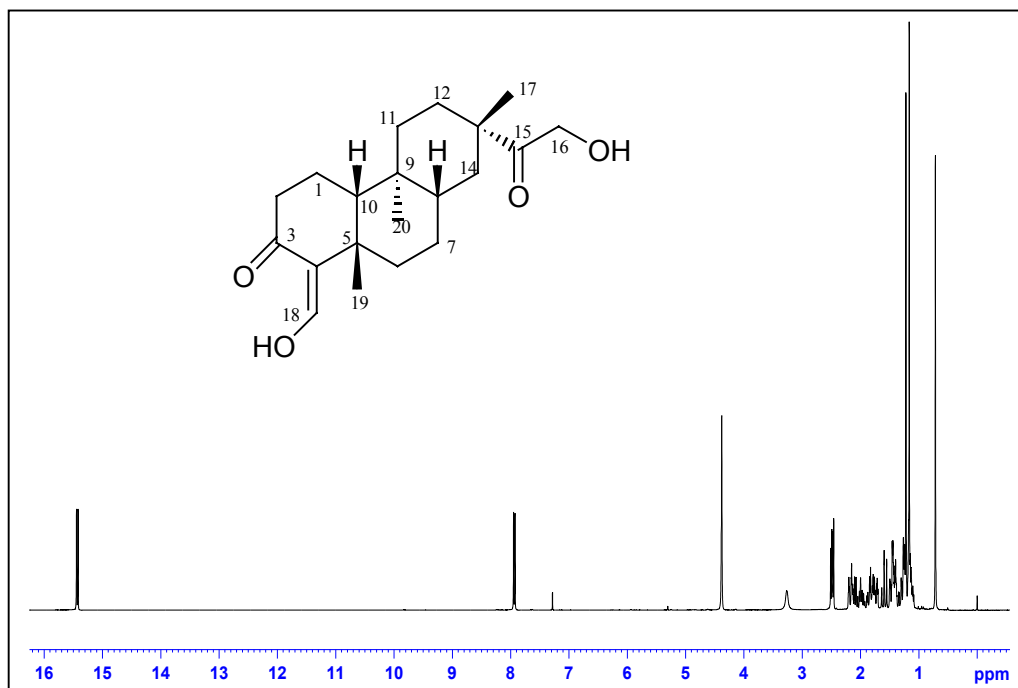


Figure 10 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD1

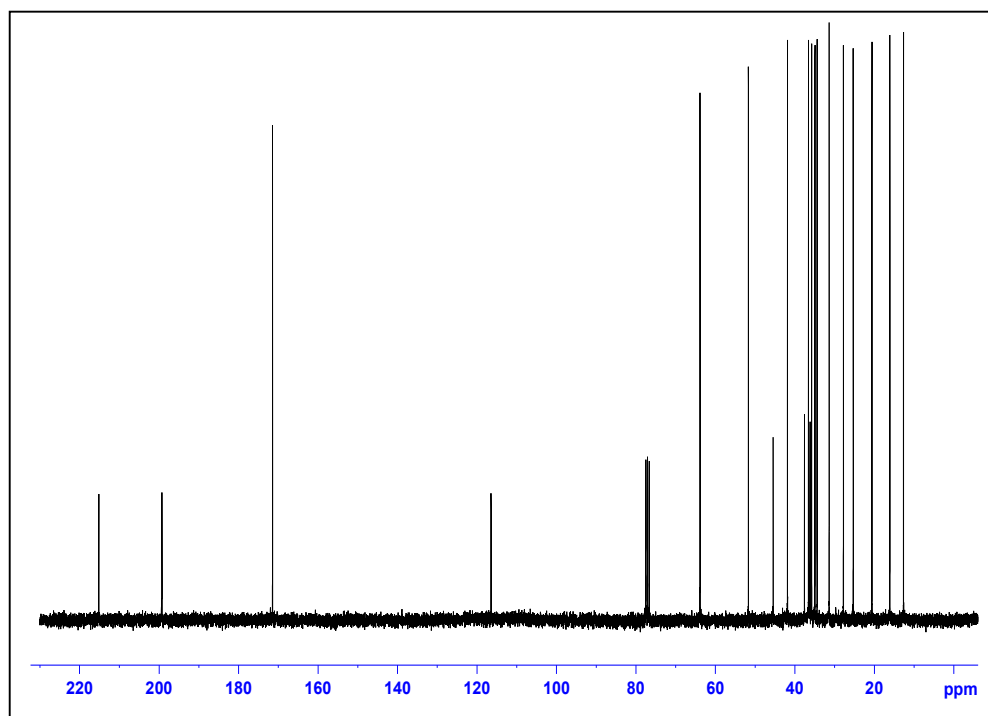


Figure 11 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD1

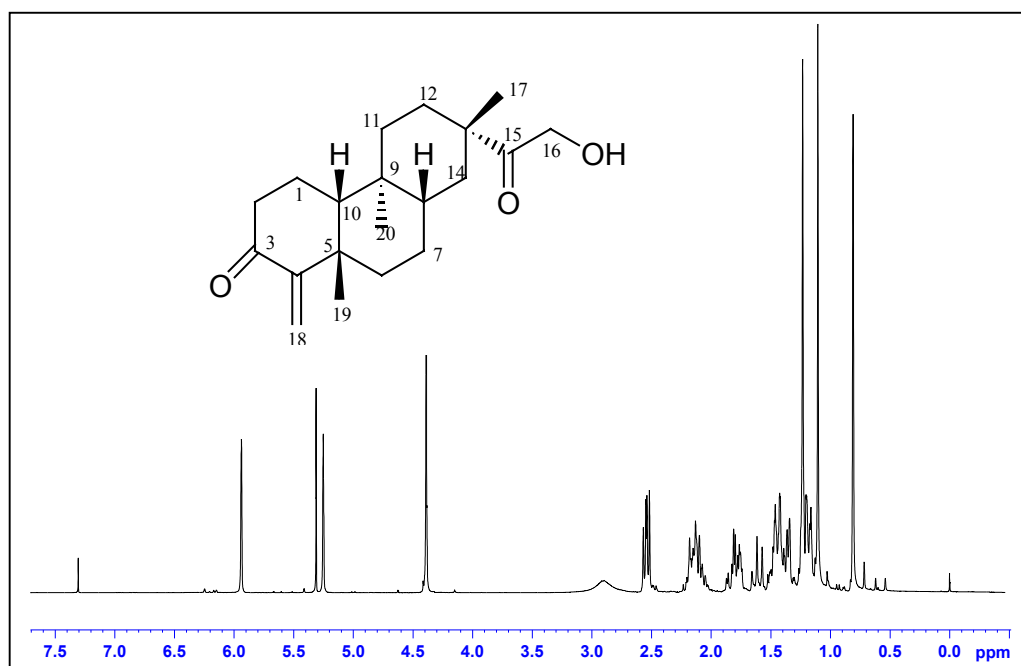


Figure 12 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD2

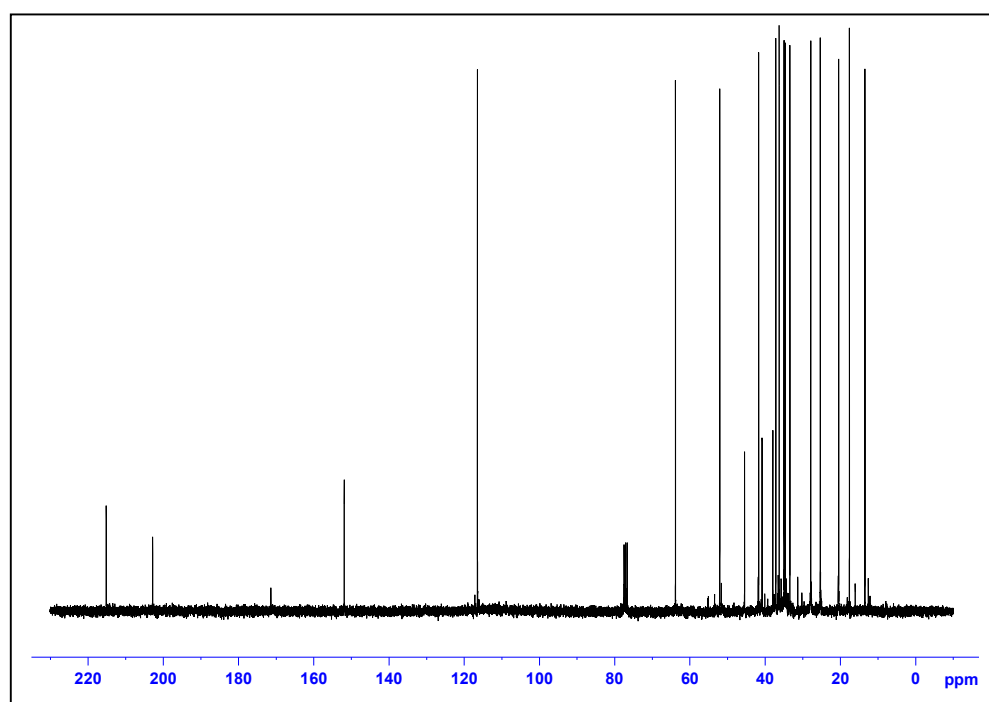


Figure 13 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD2

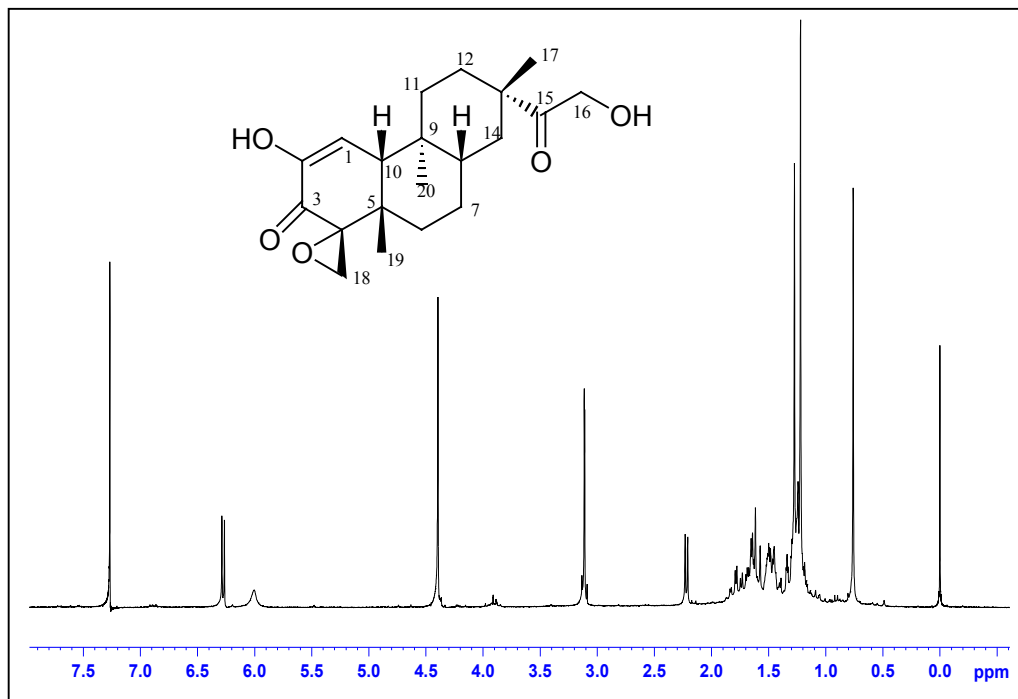


Figure 14 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD3

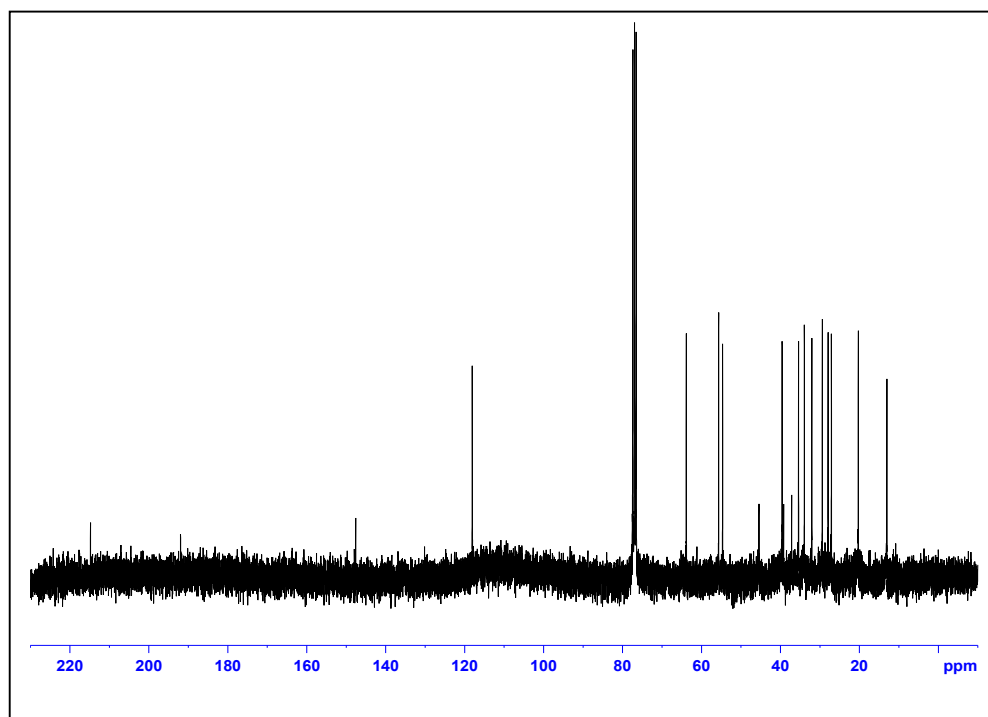


Figure 15 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD3

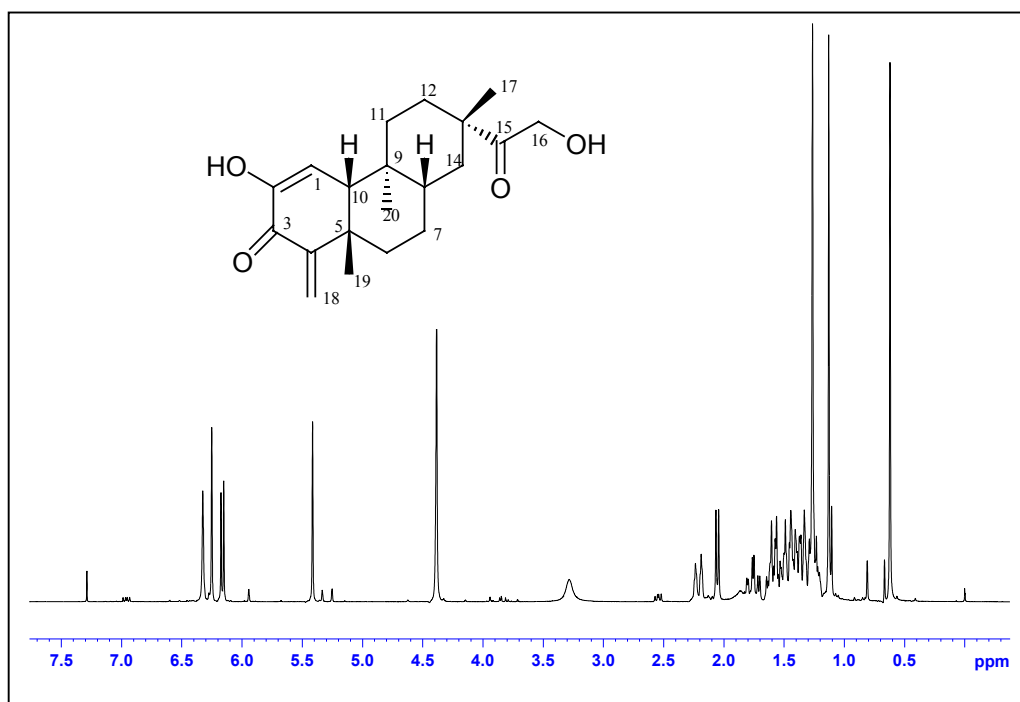


Figure 16 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD4

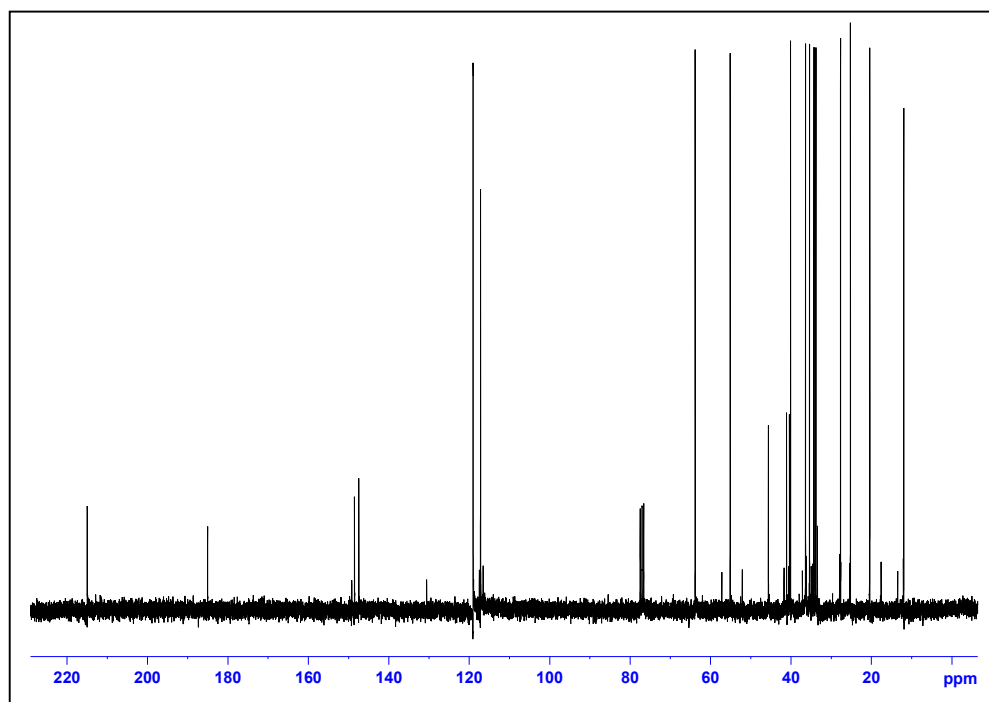


Figure 17 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD4

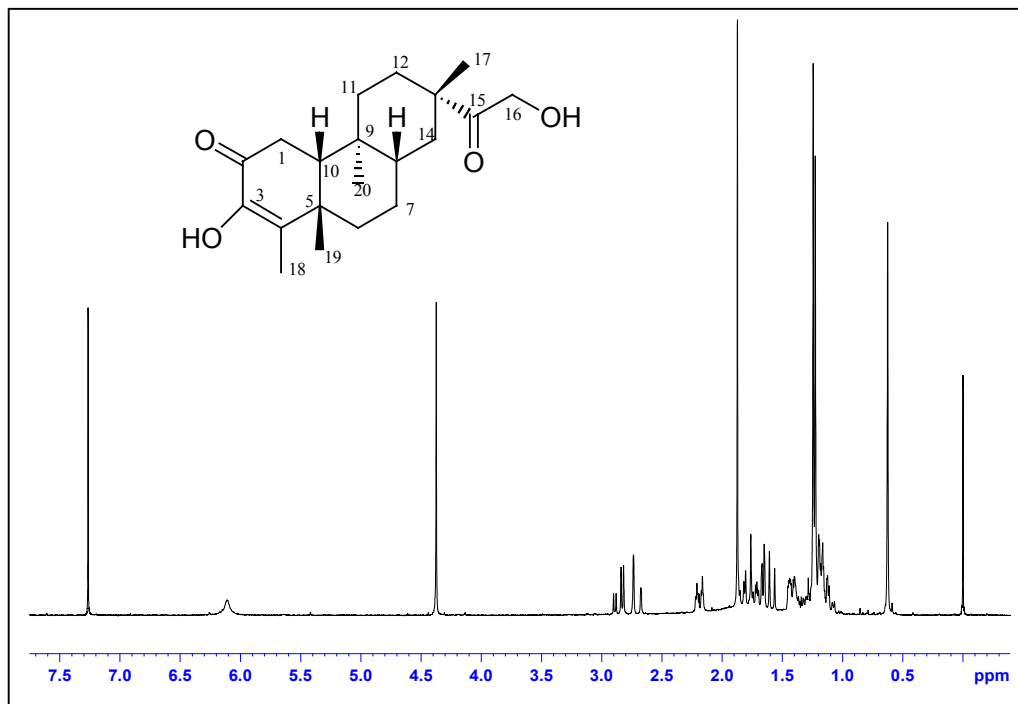


Figure 18 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD5

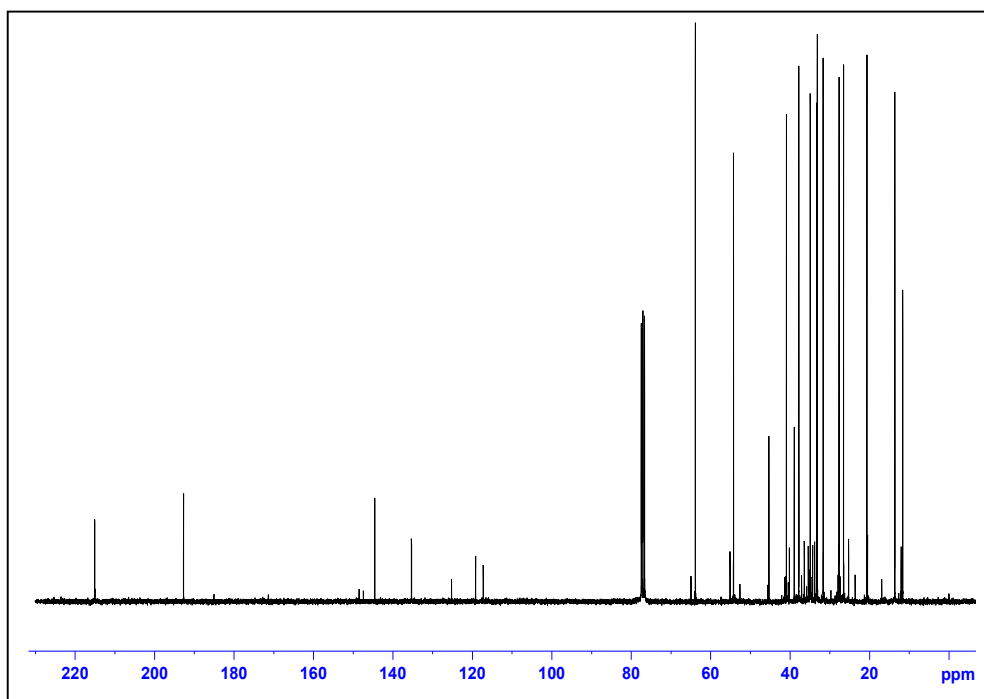


Figure 19 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD5

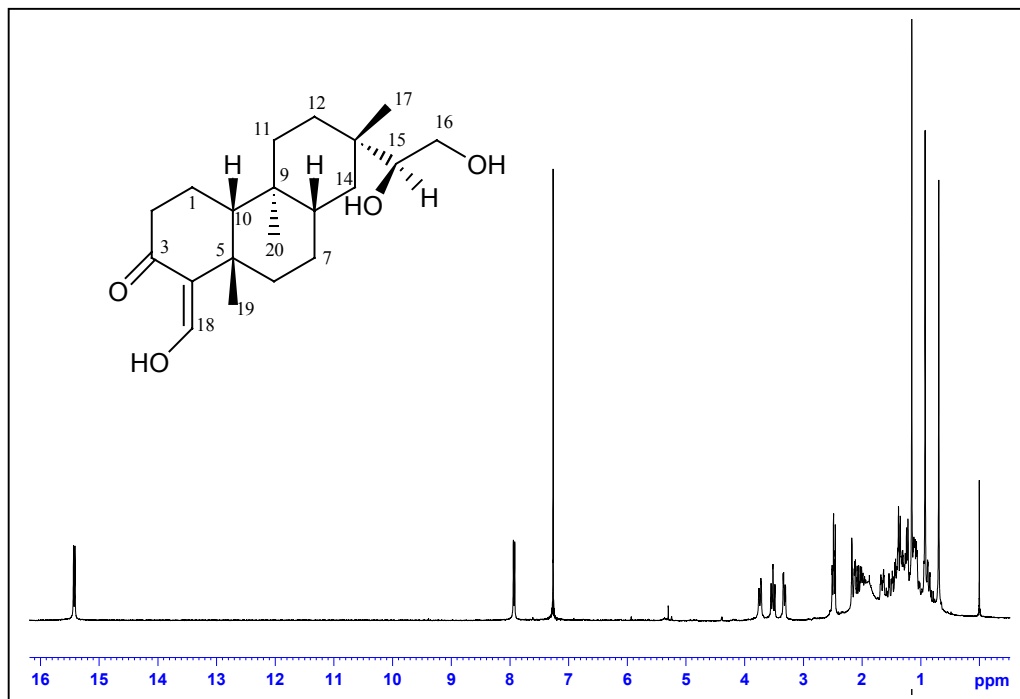


Figure 20 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD6

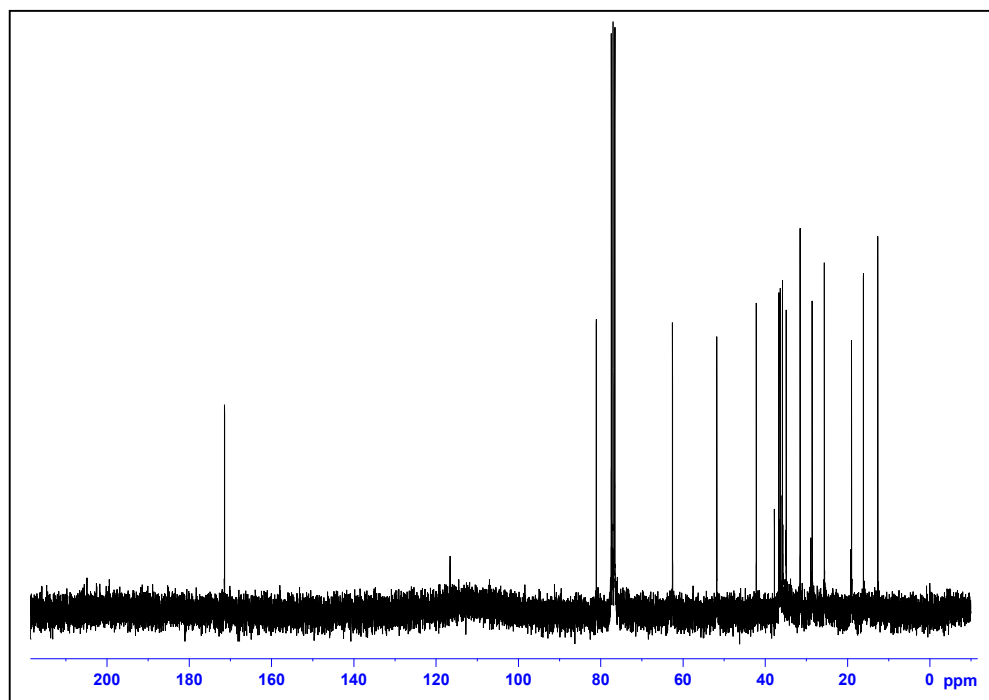


Figure 21 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD6

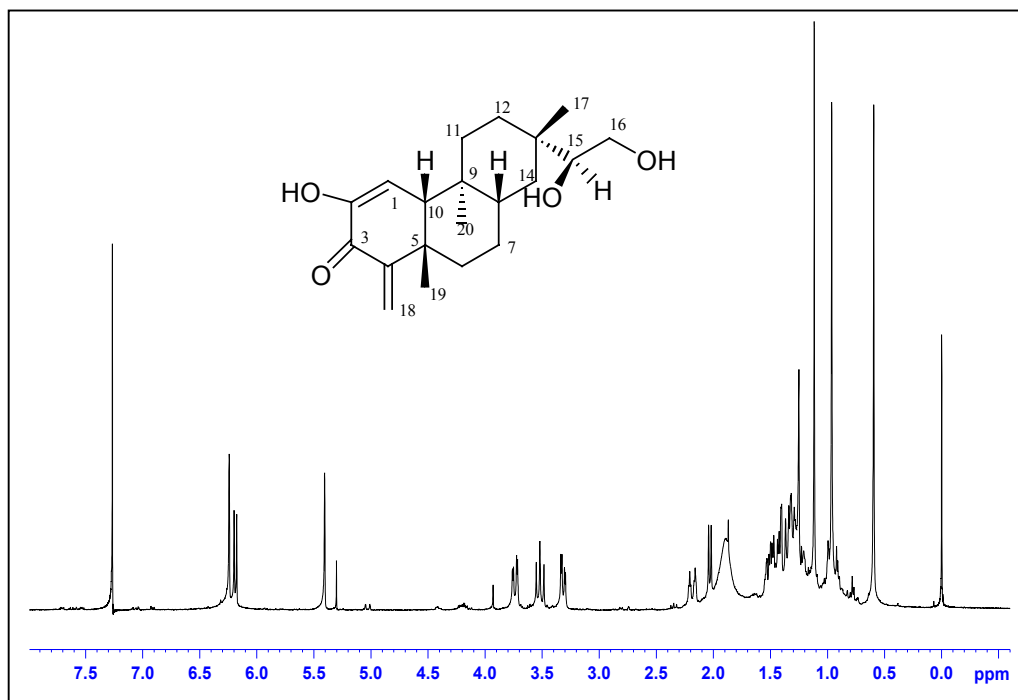


Figure 22 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD7

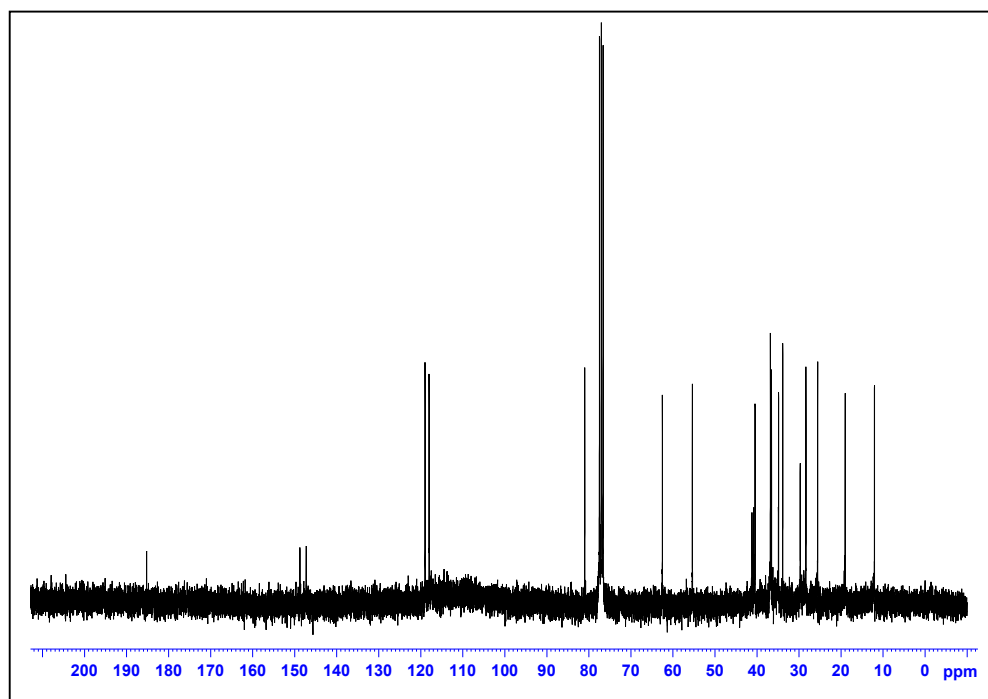


Figure 23 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD7

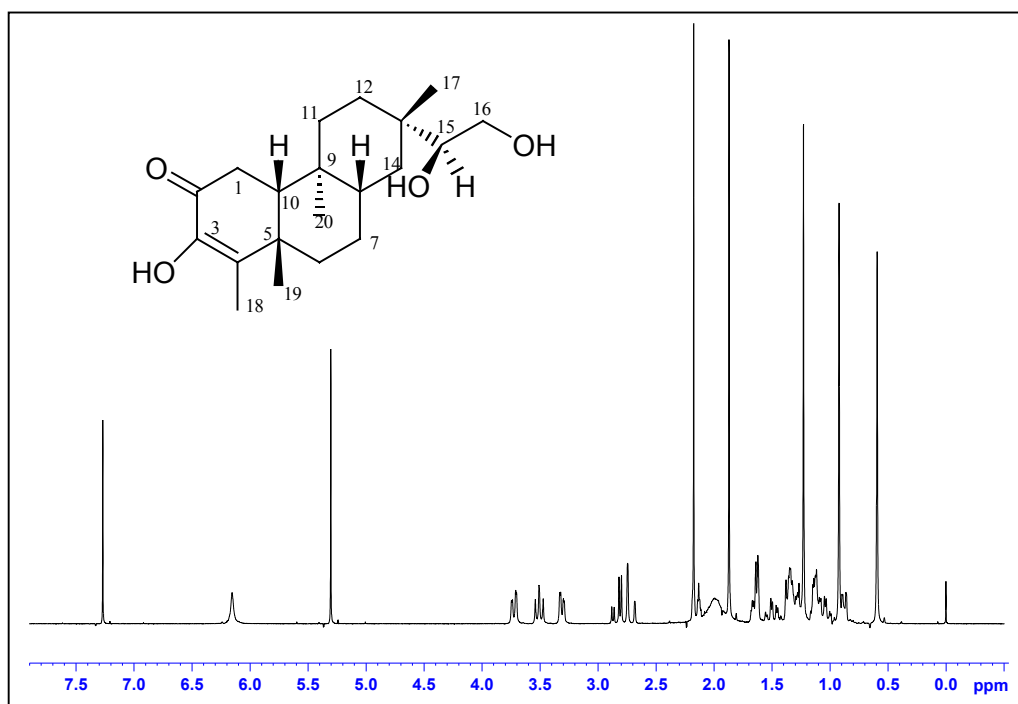


Figure 24 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD8

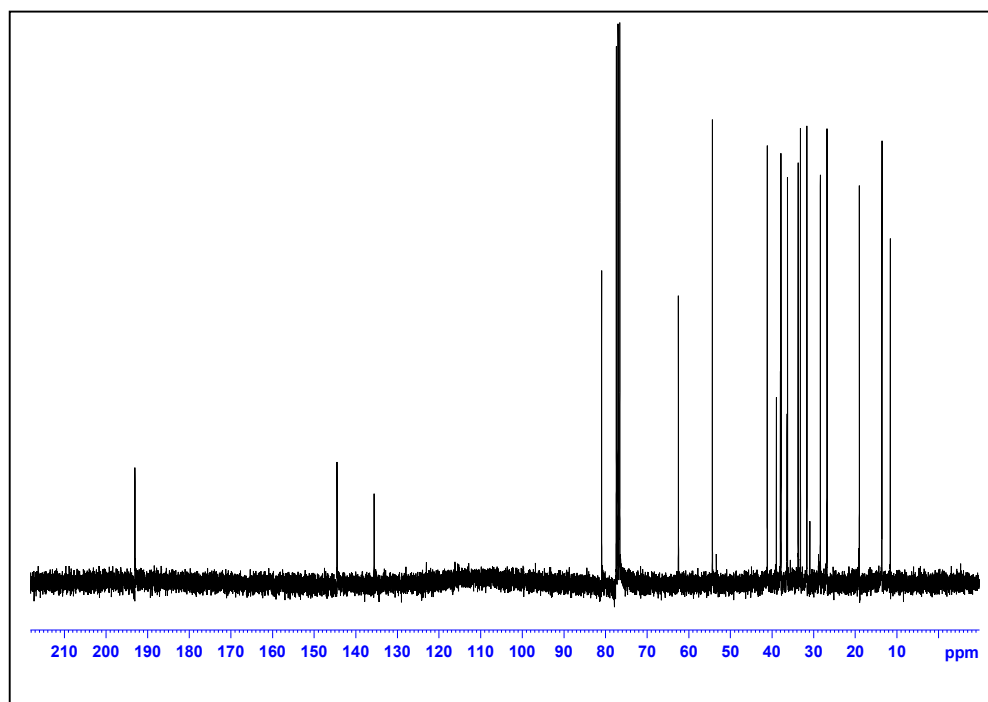


Figure 25 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD8

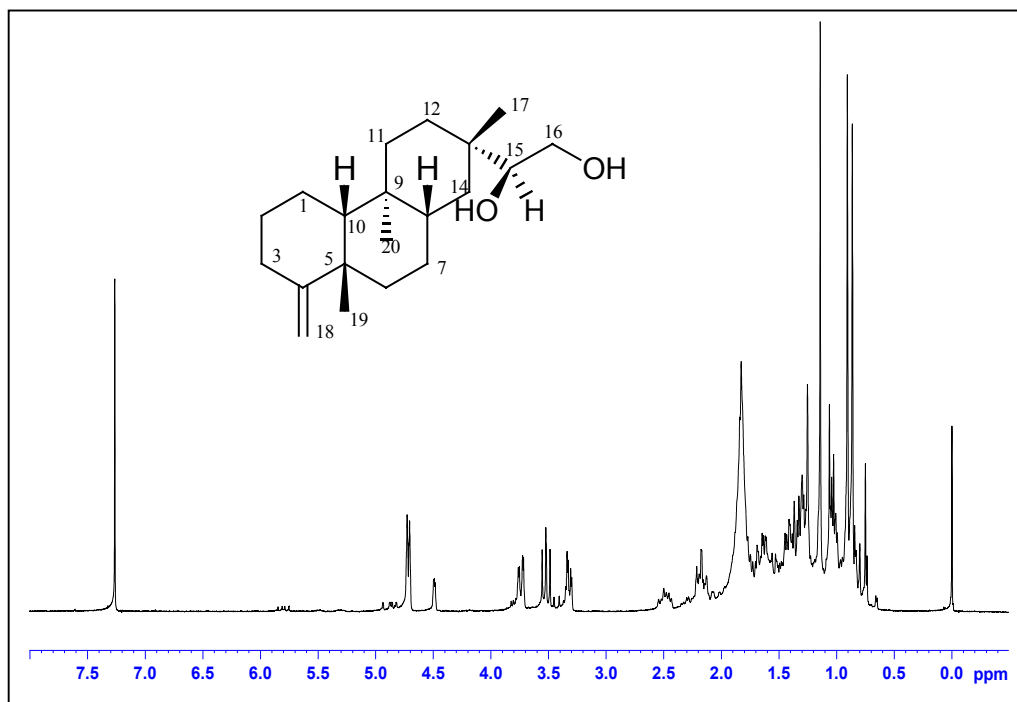


Figure 26 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD9

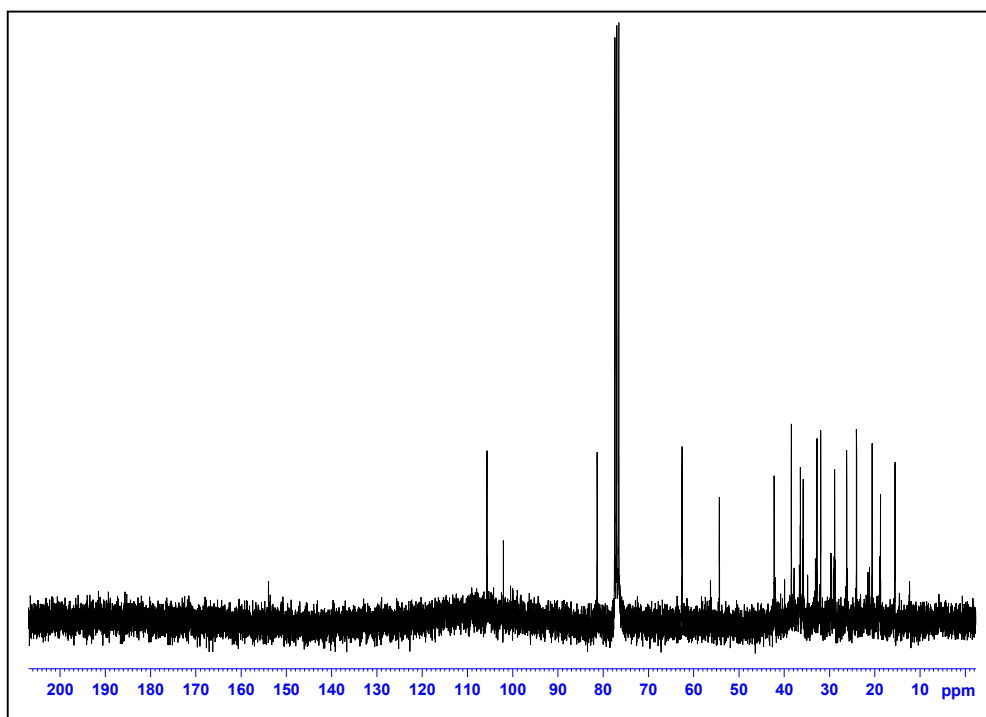


Figure 27 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD9

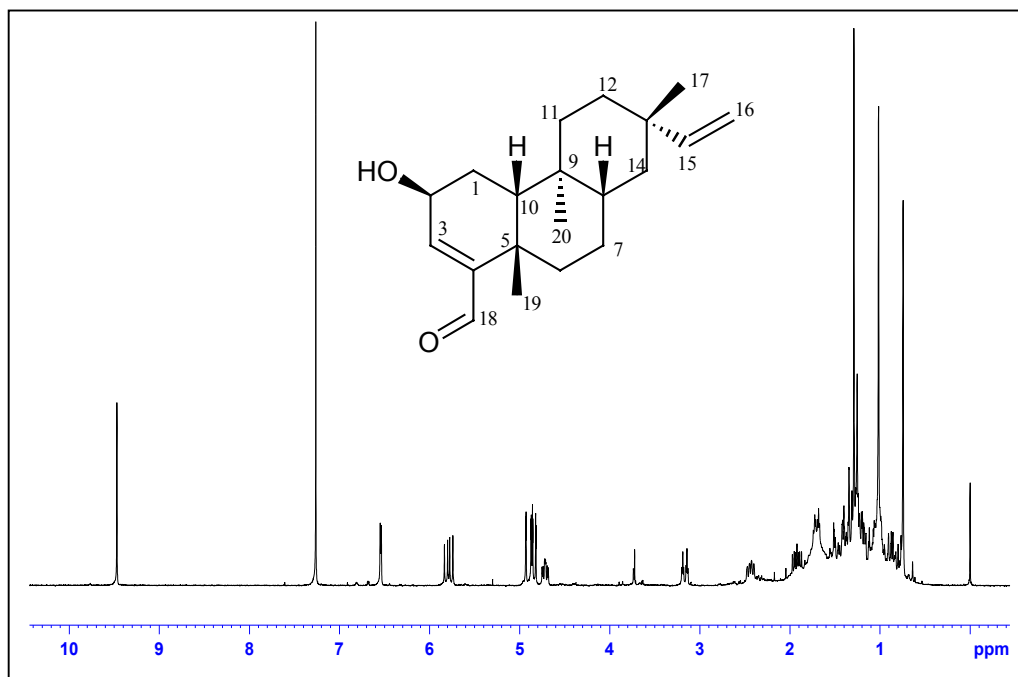


Figure 28 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD10

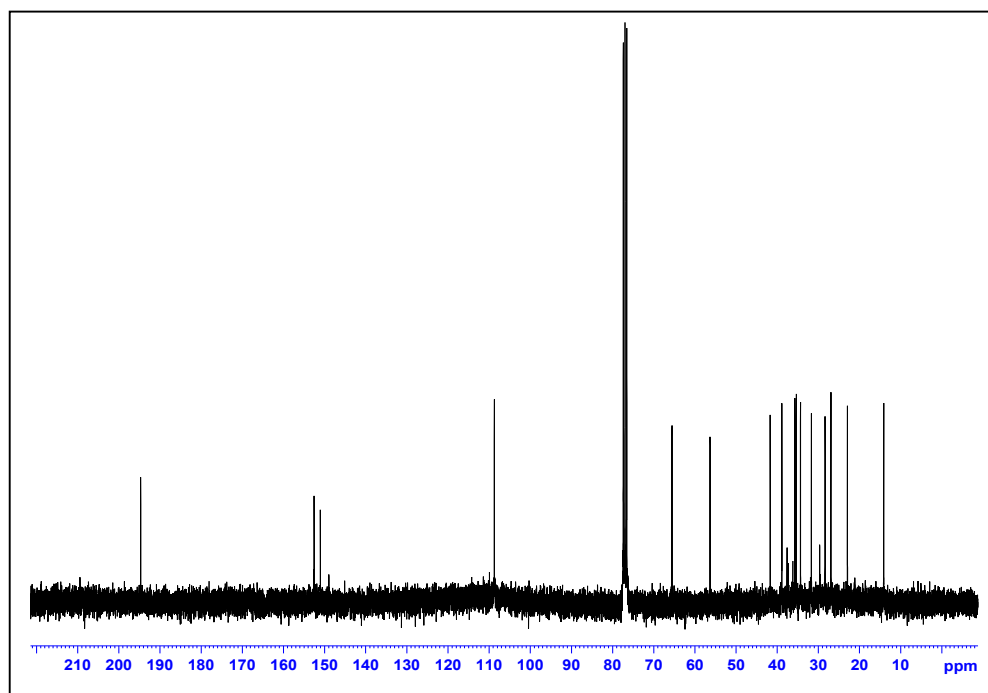


Figure 29 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD10

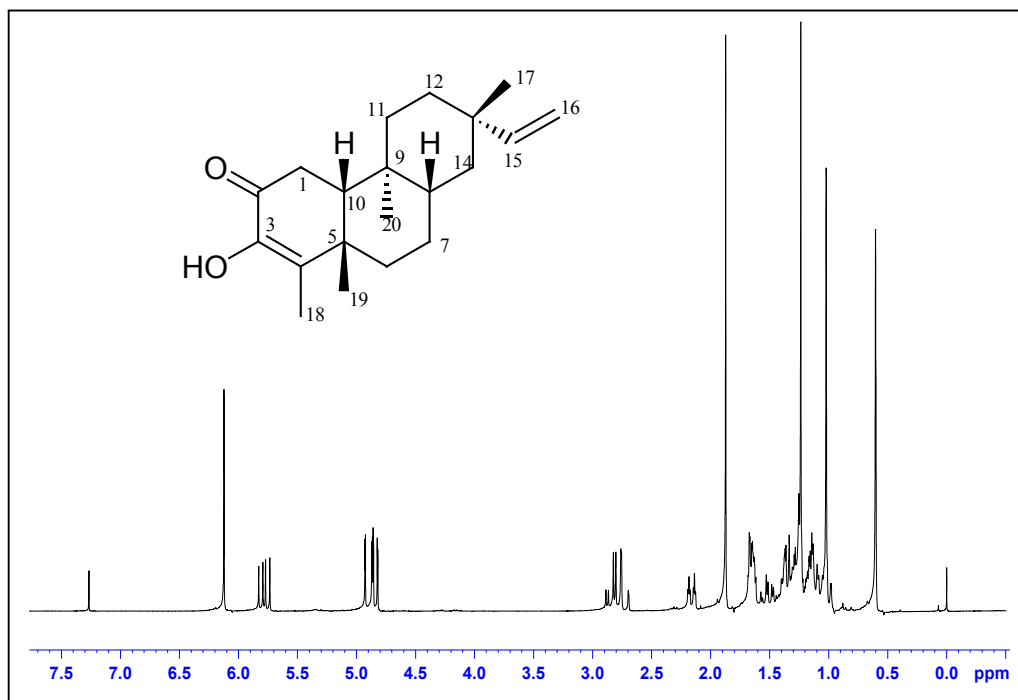


Figure 30 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD11

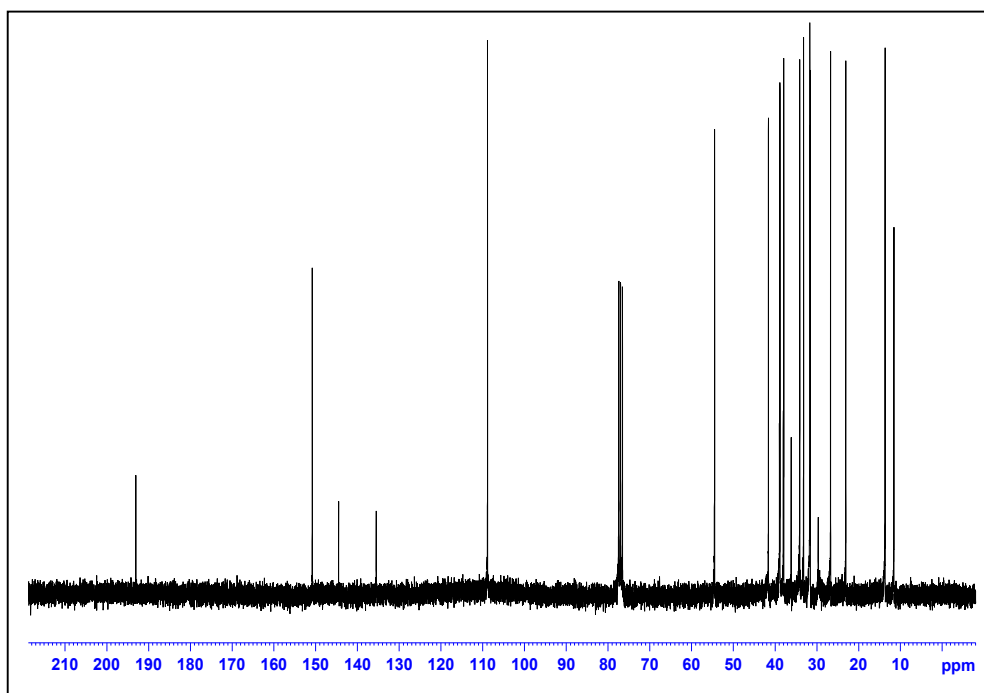


Figure 31 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD11

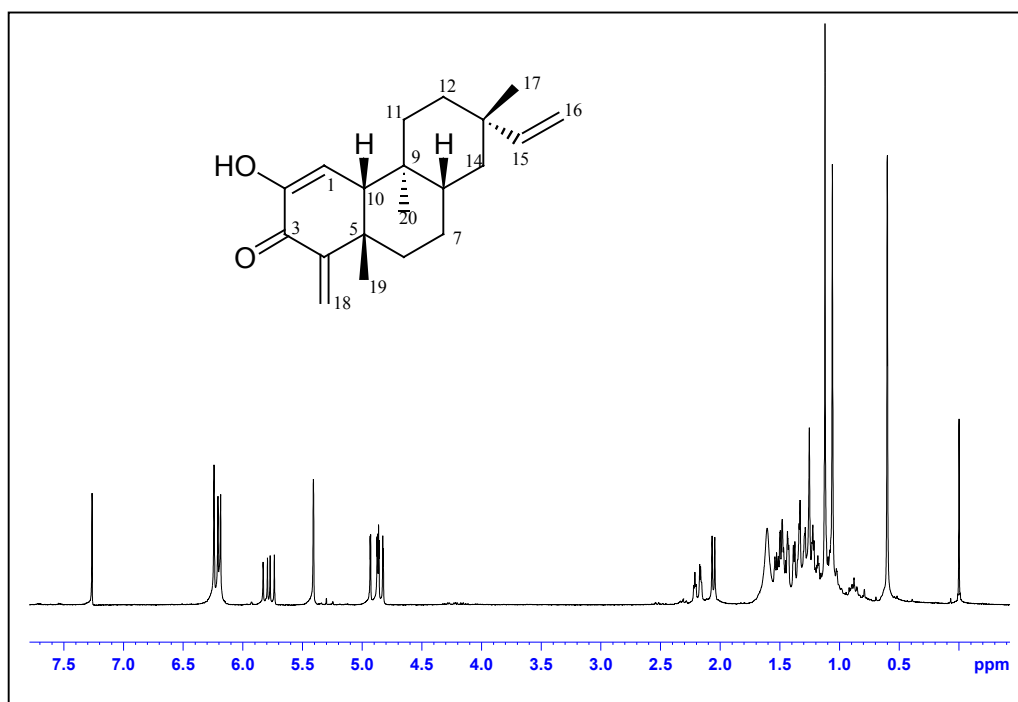


Figure 32 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD12

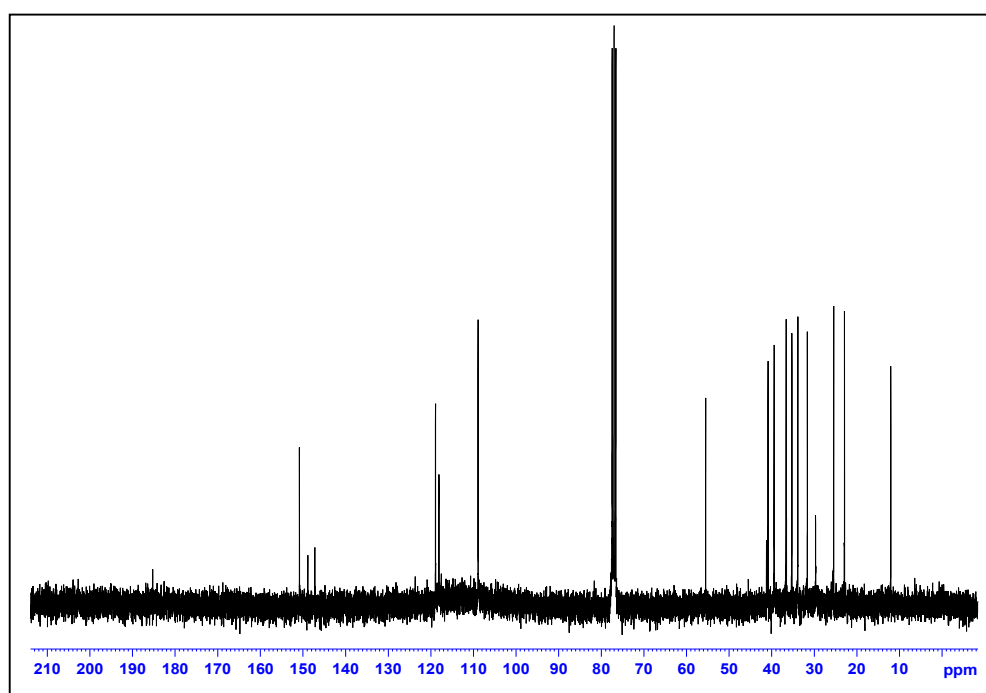


Figure 33 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD12

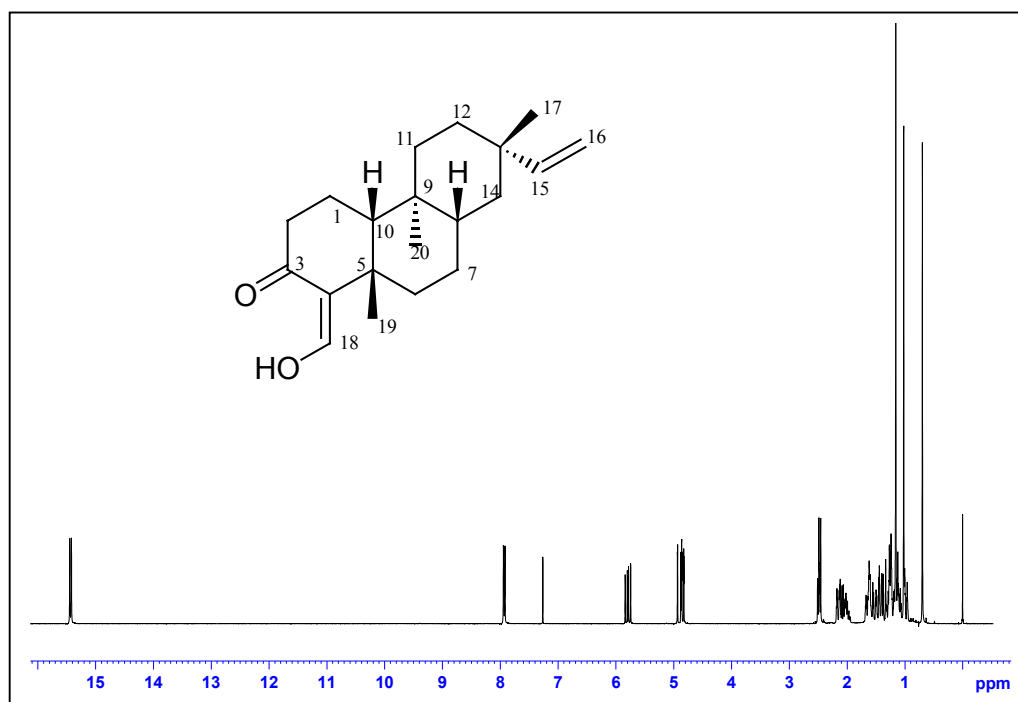


Figure 34 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TD13**

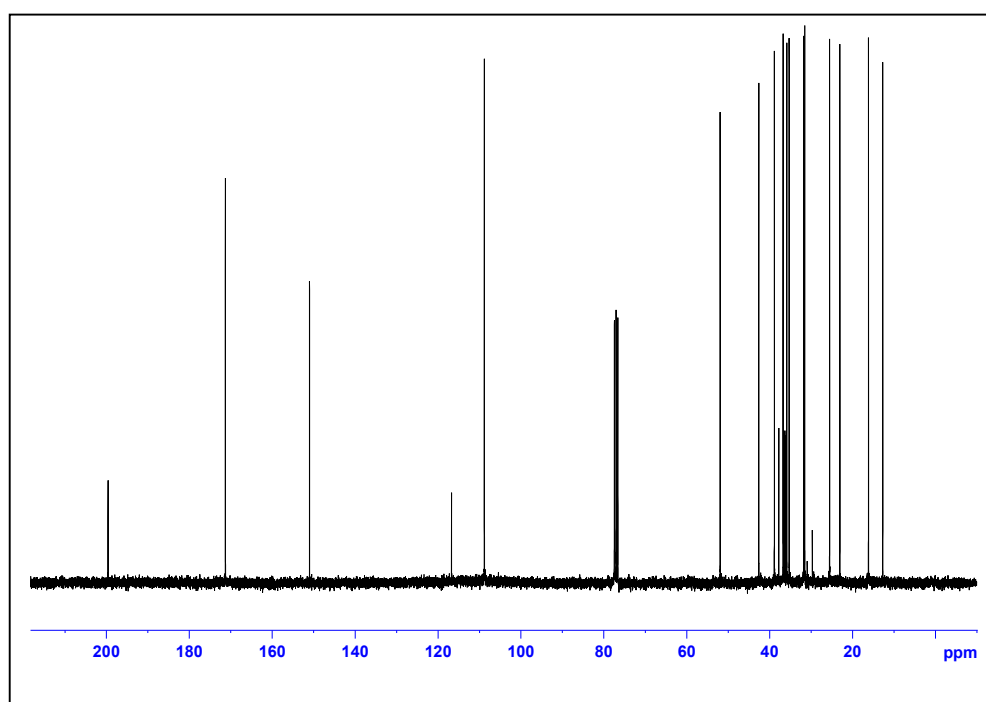


Figure 35 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TD13**

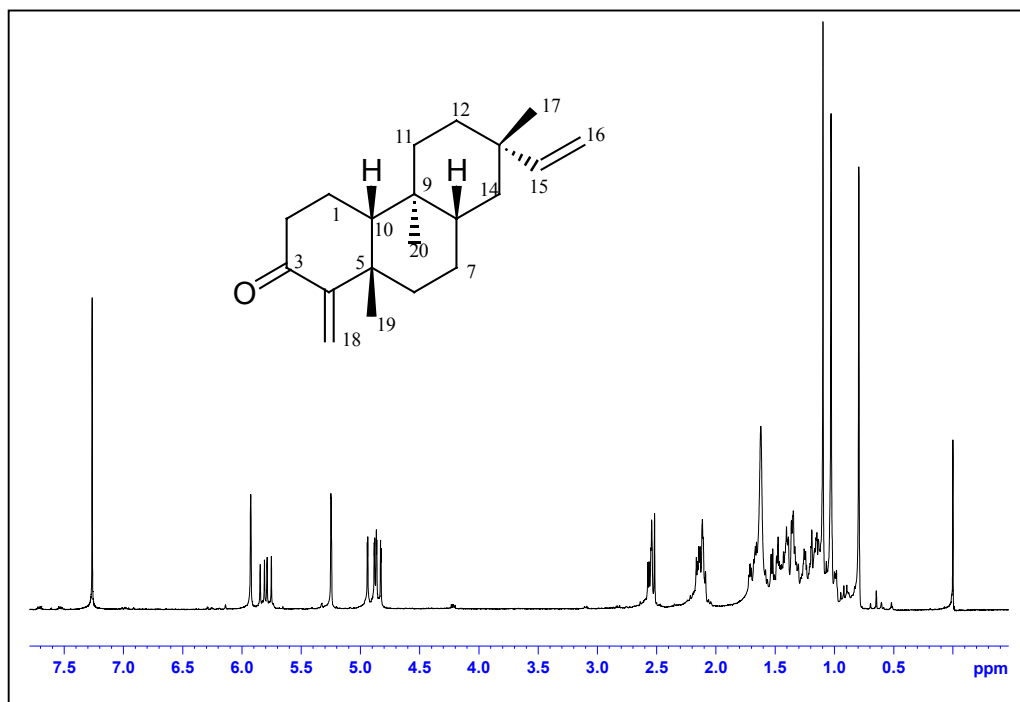


Figure 36 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TD14**

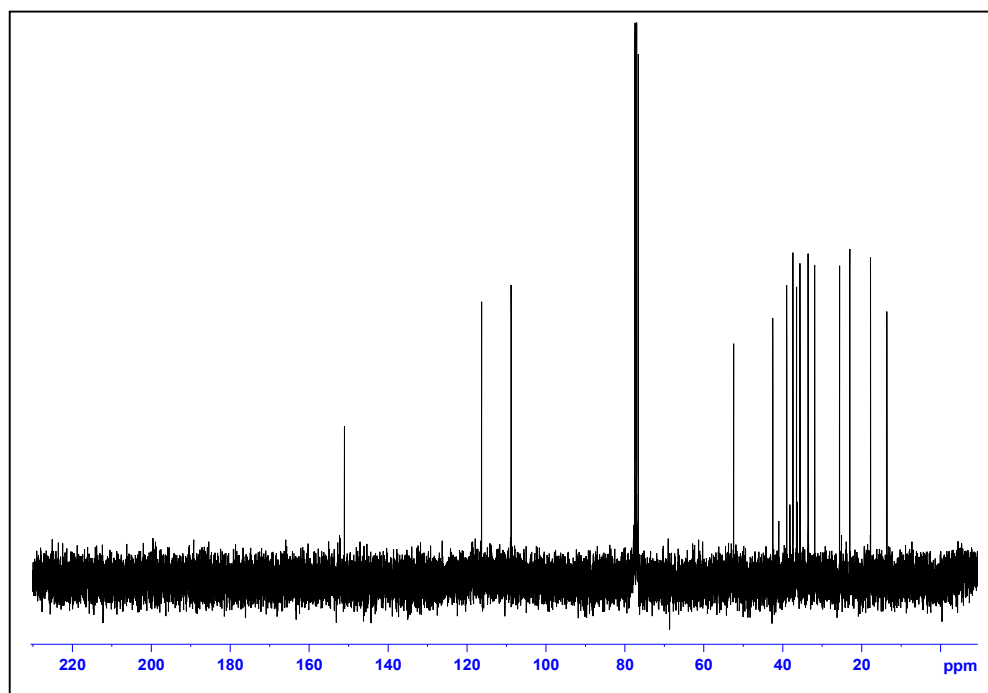


Figure 37 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TD14**

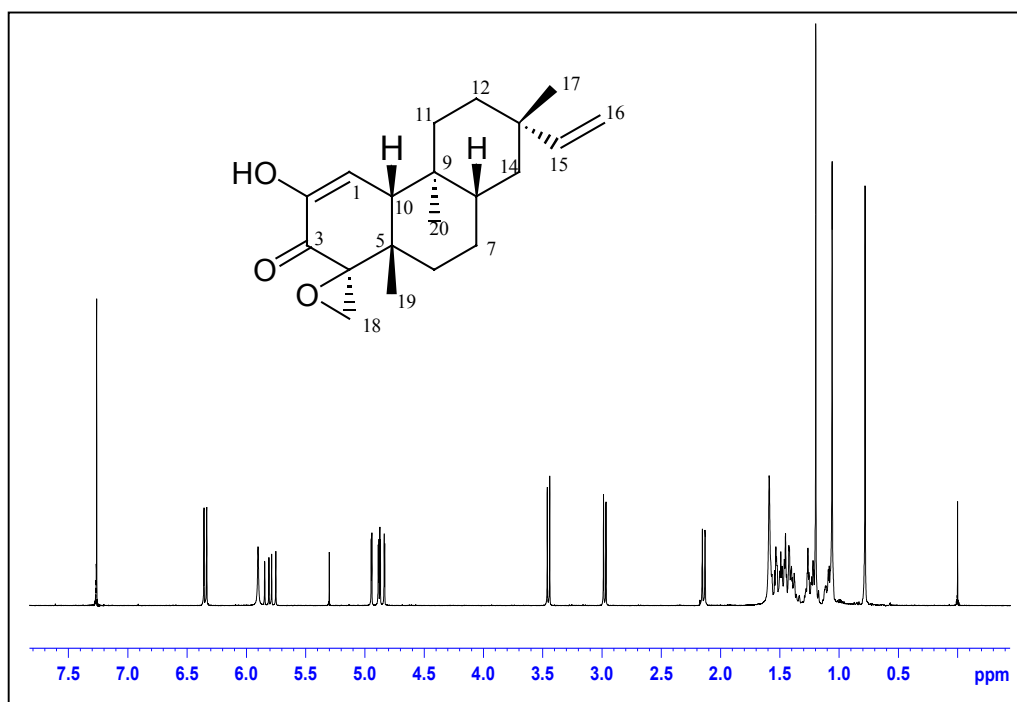


Figure 38 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD15

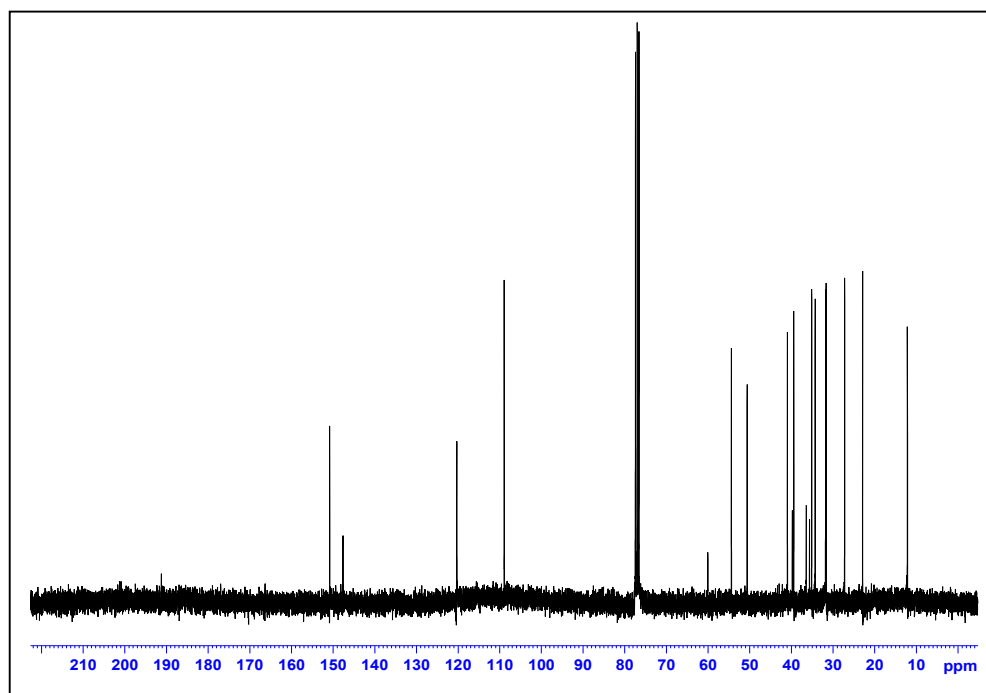


Figure 39 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD15

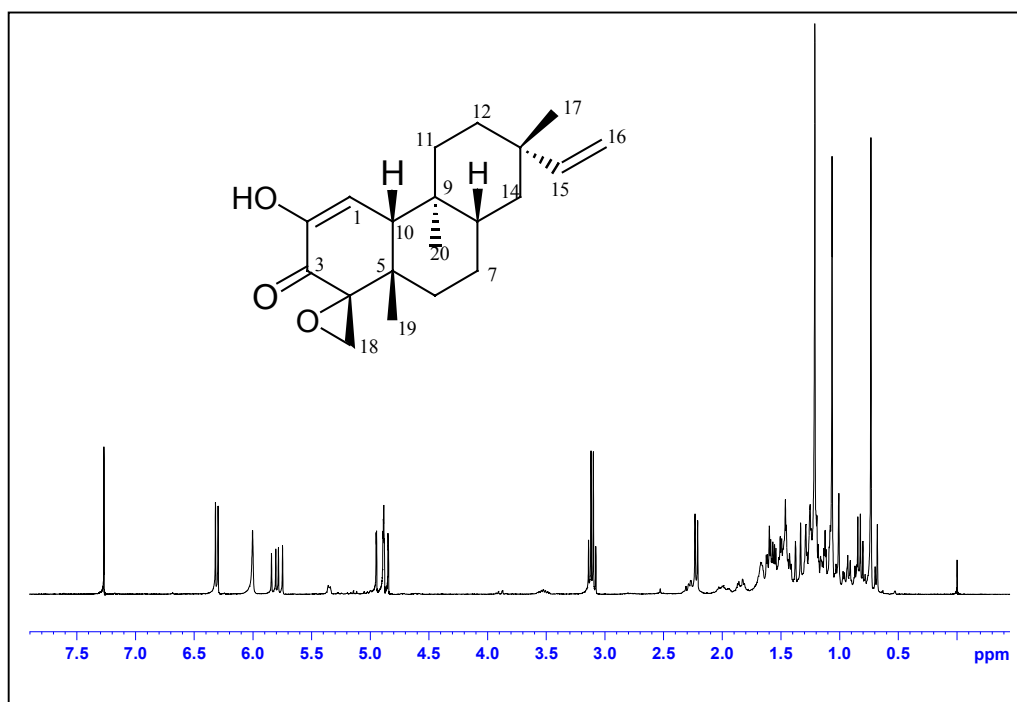


Figure 40 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TD16**

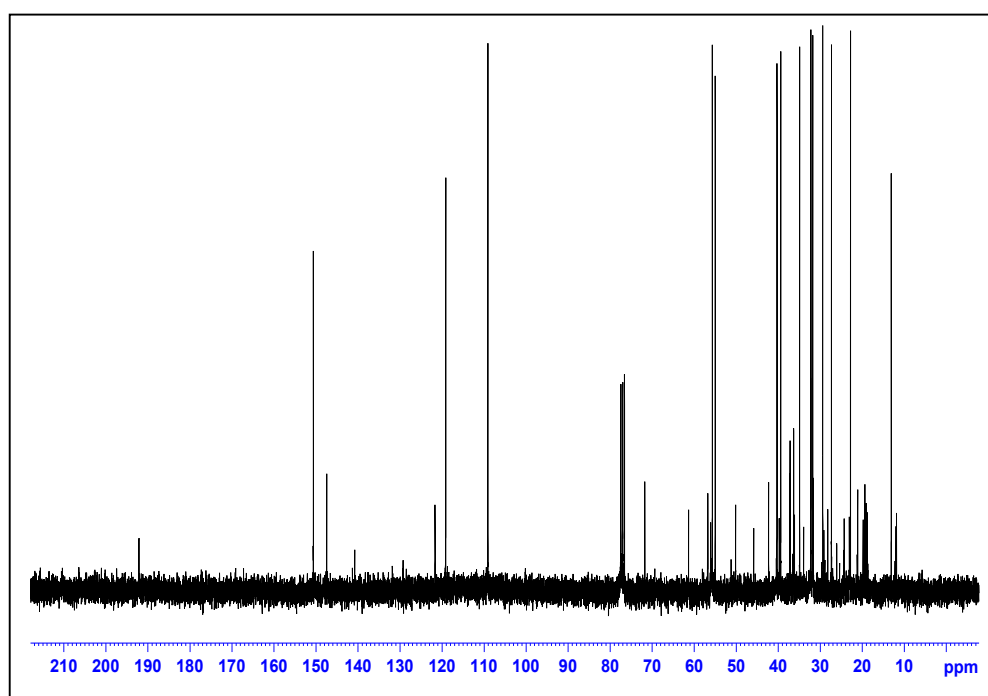


Figure 41 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TD16**

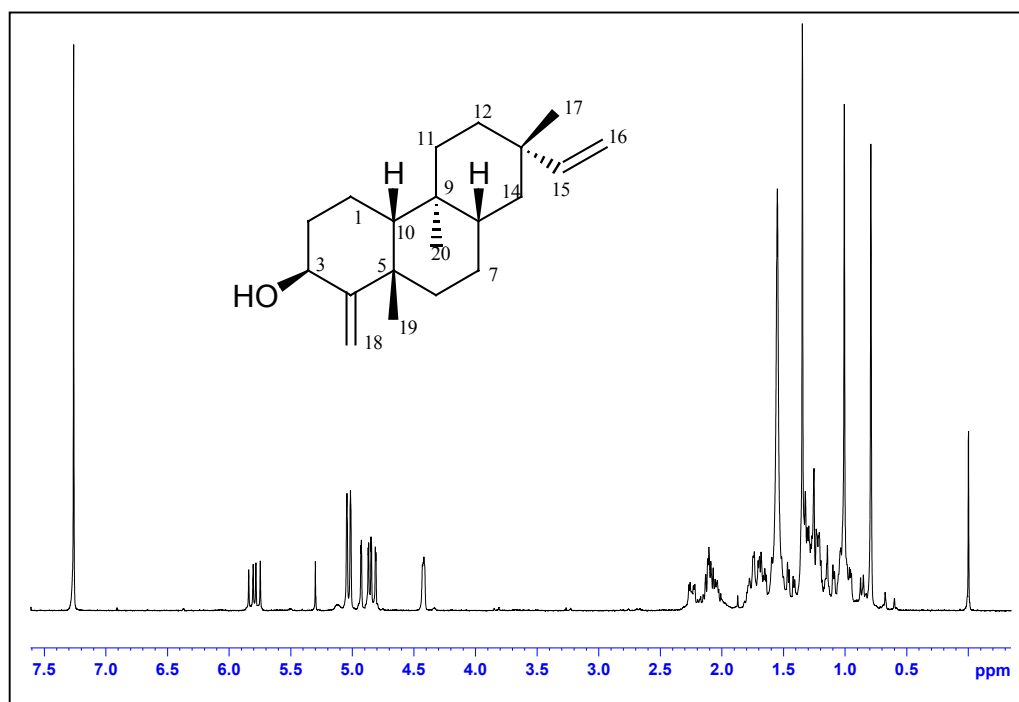


Figure 42 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD17

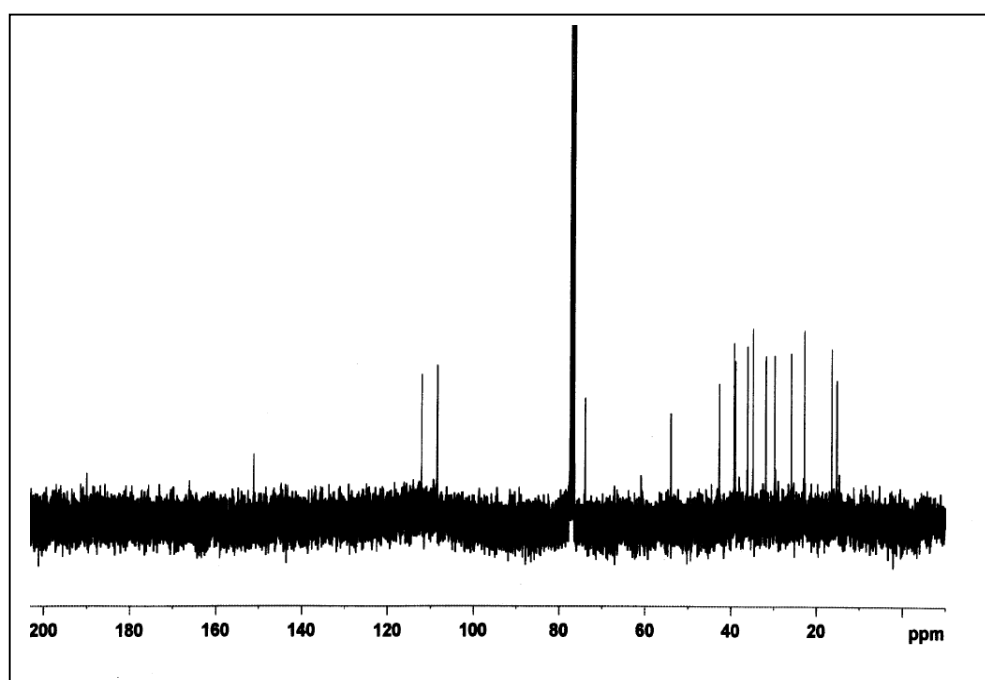


Figure 43 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD17

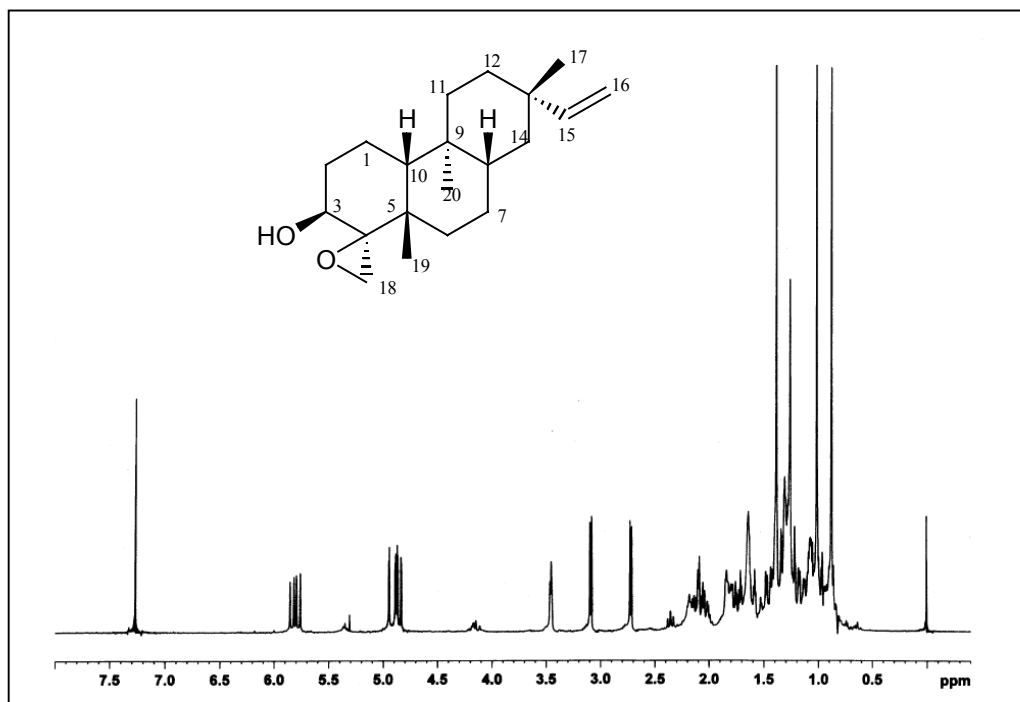


Figure 44 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD18

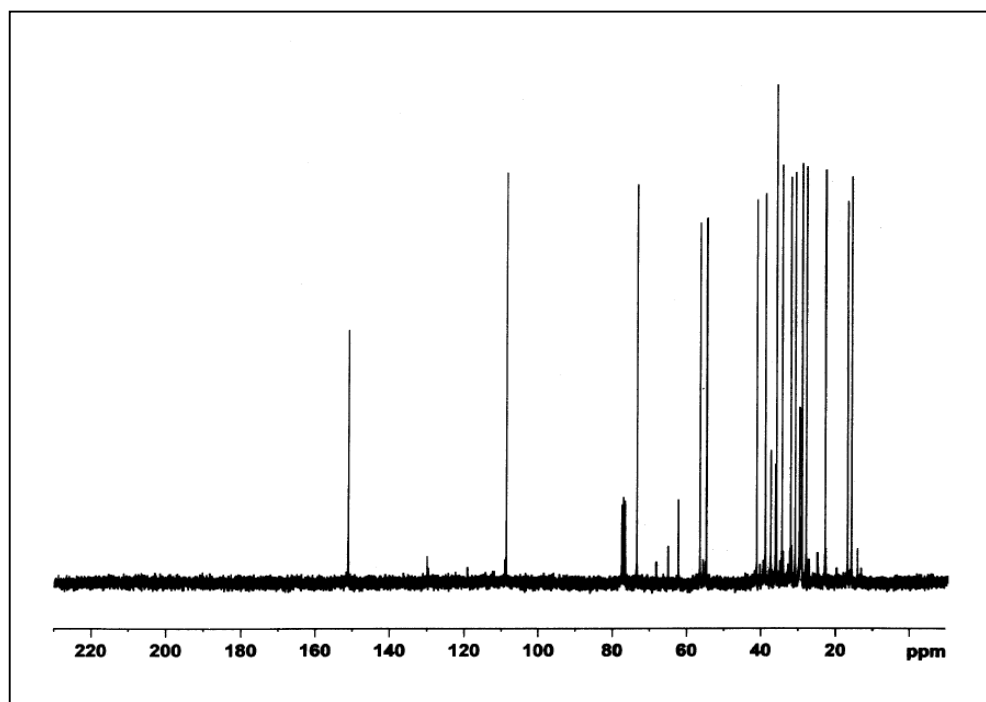


Figure 45 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD18

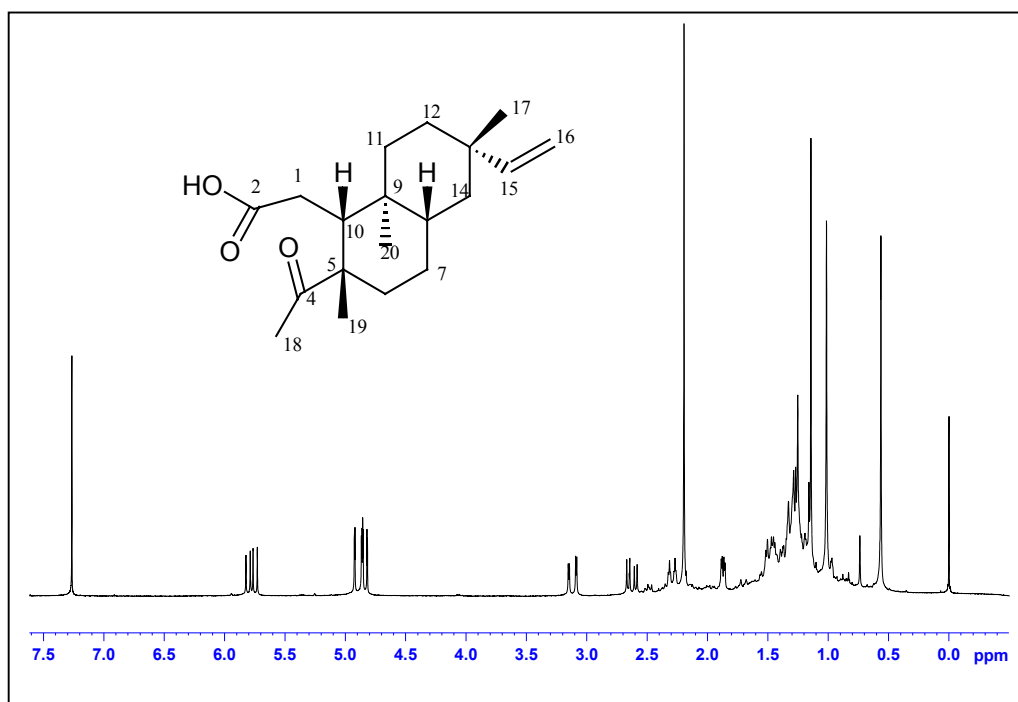


Figure 46 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD19

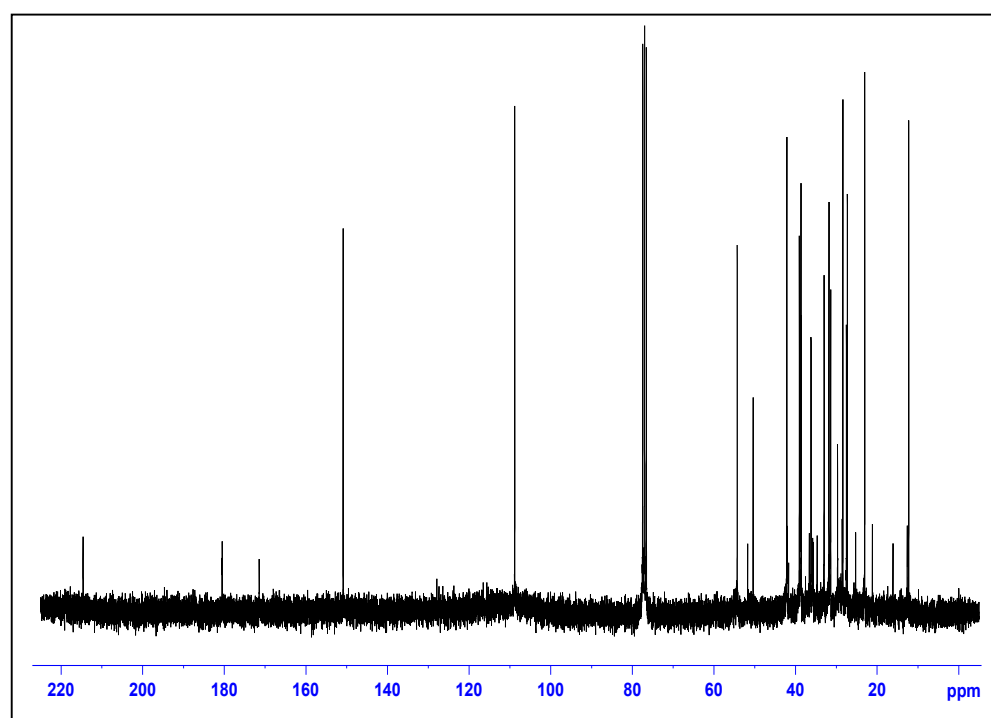


Figure 47 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD19

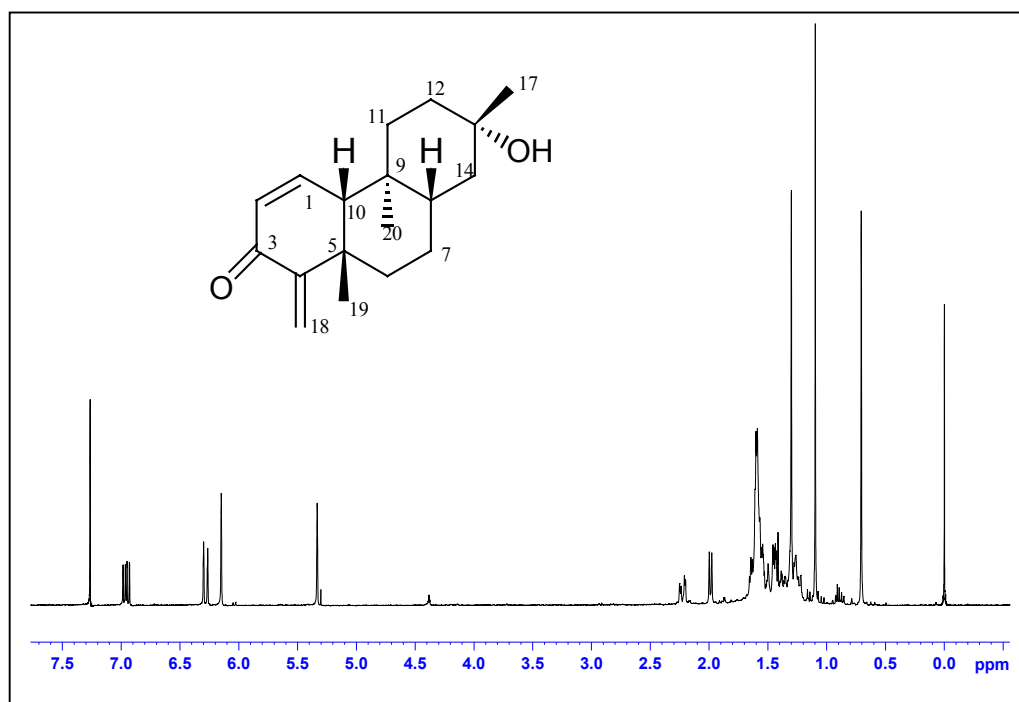


Figure 48 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD20

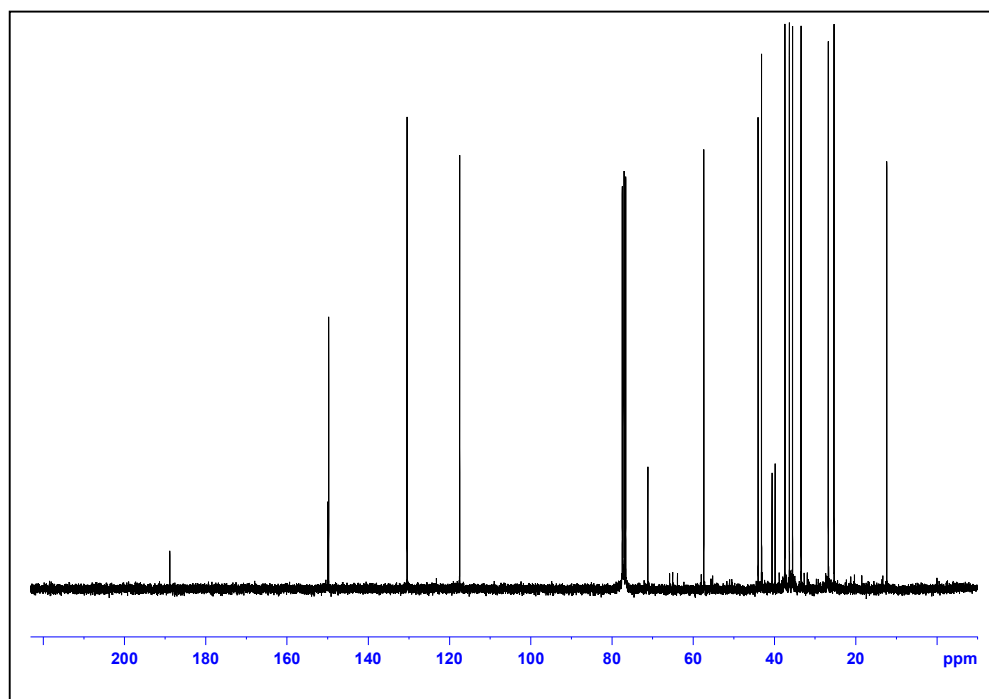


Figure 49 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD20

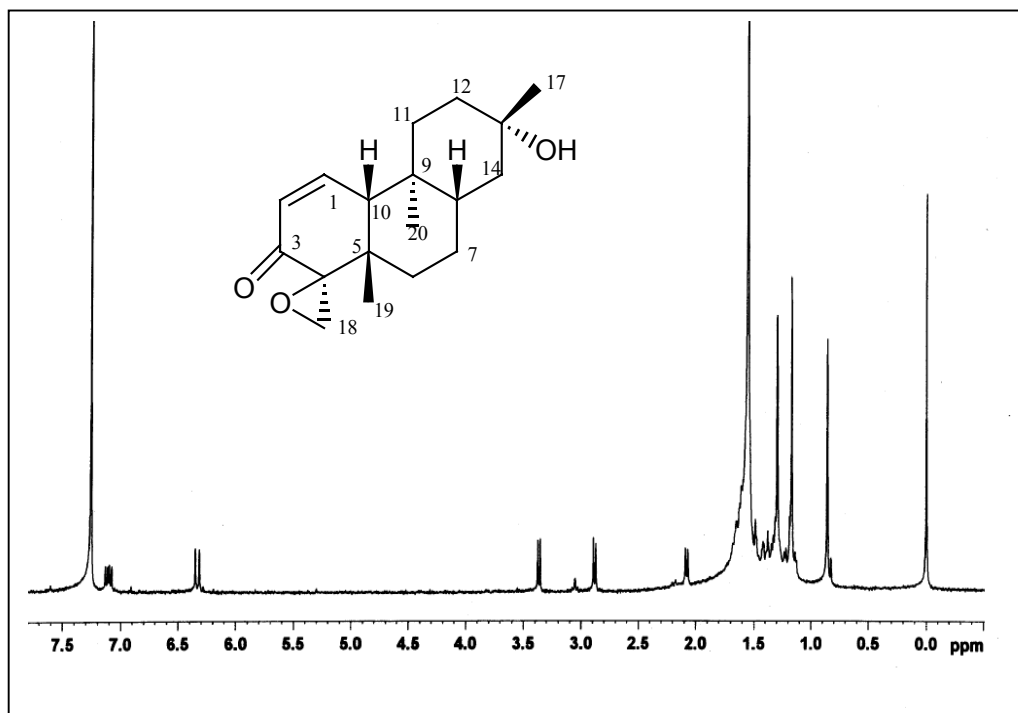


Figure 50 ^1H NMR (500 MHz, CDCl_3) spectrum of compound TD21

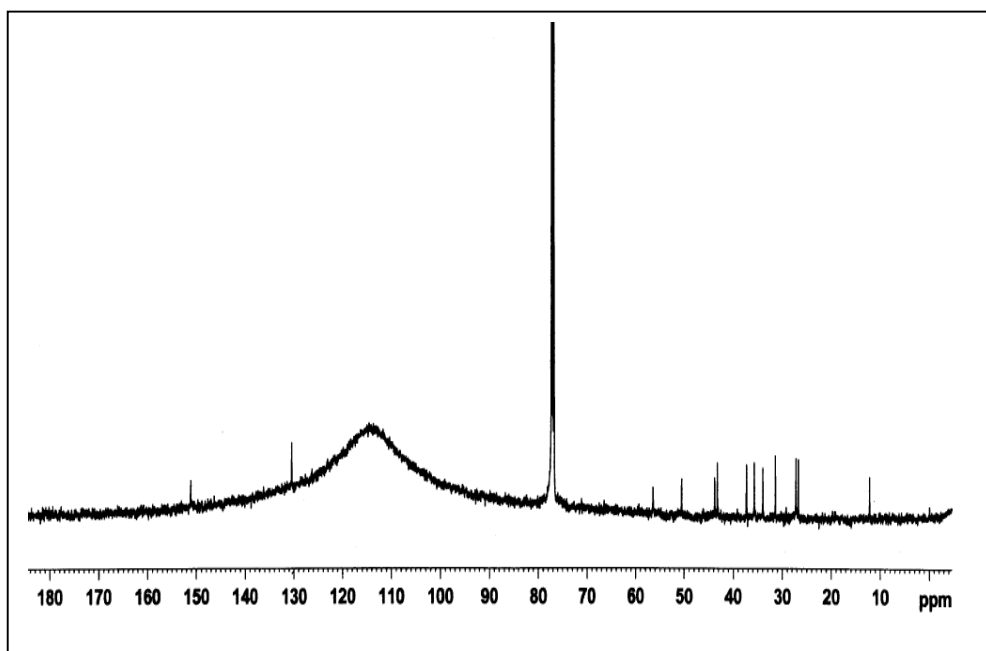


Figure 51 ^{13}C NMR (125 MHz, CDCl_3) spectrum of compound TD21

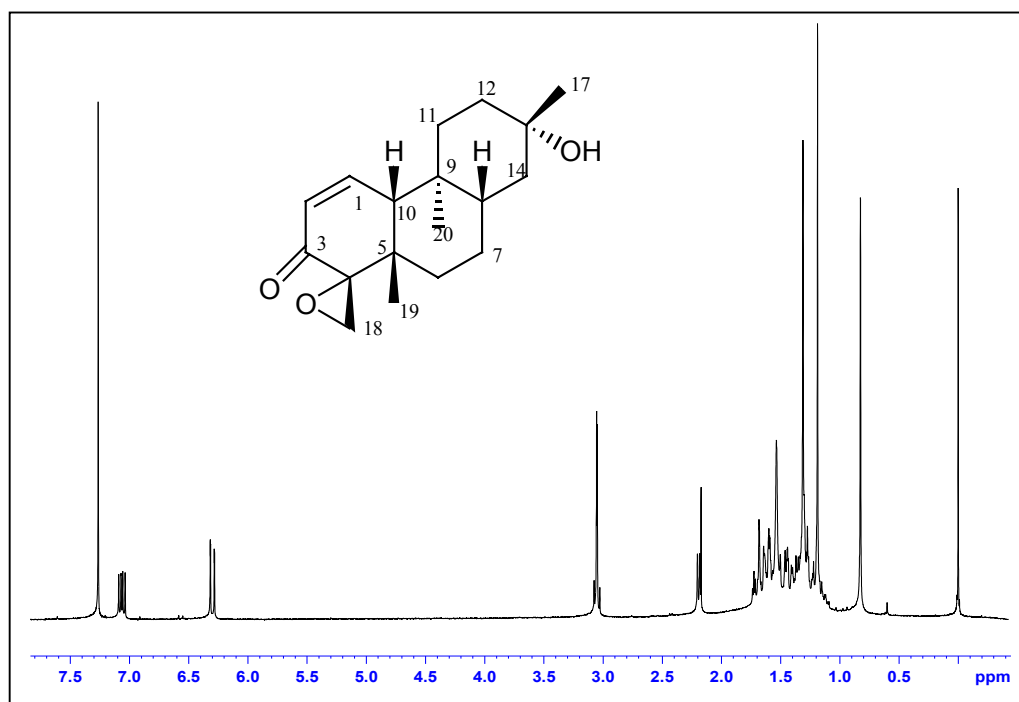


Figure 52 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD22

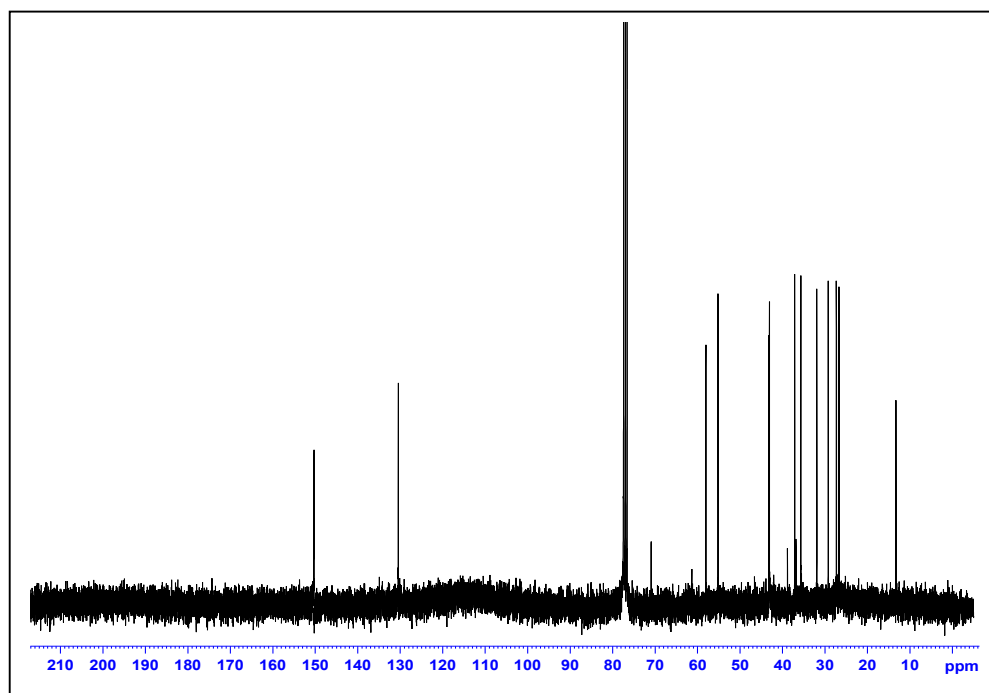


Figure 53 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD22

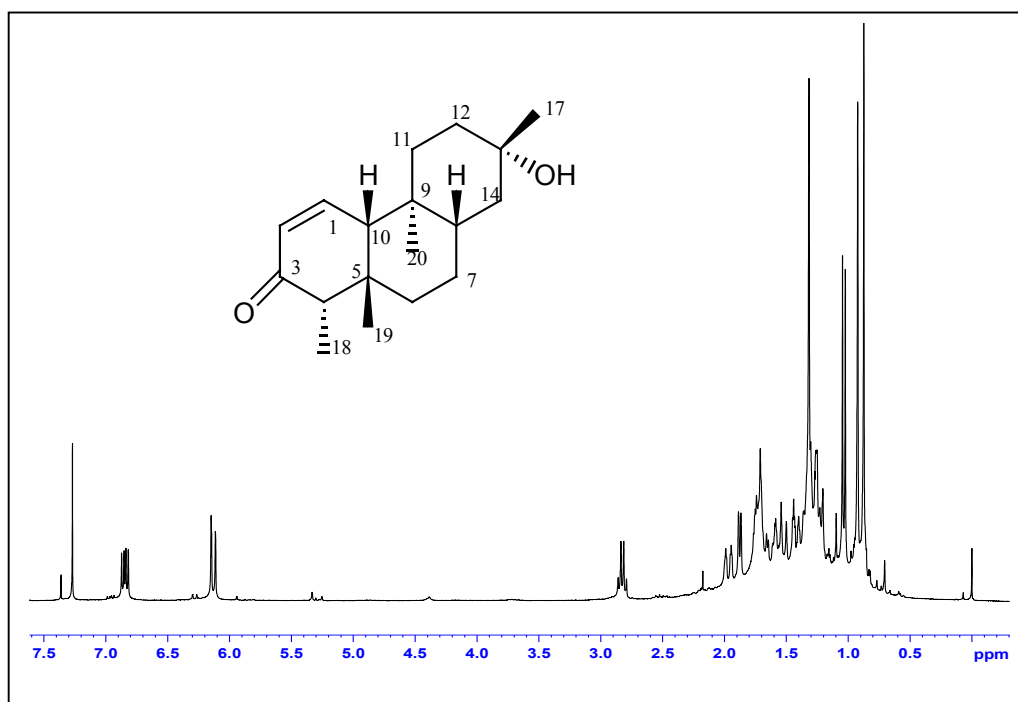


Figure 54 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD23

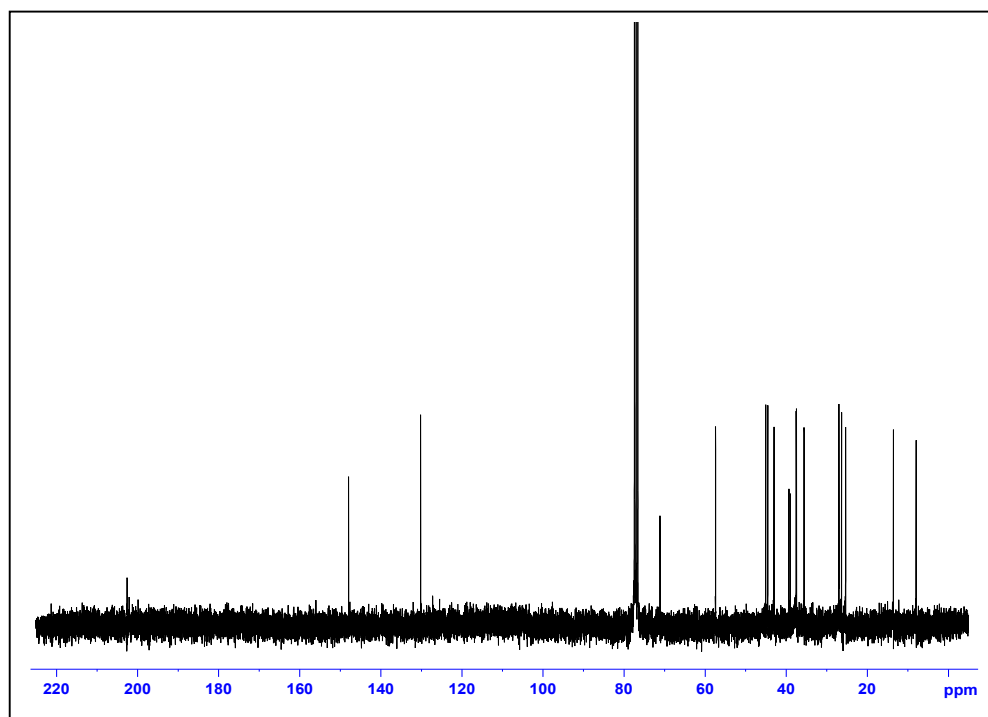


Figure 55 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD23

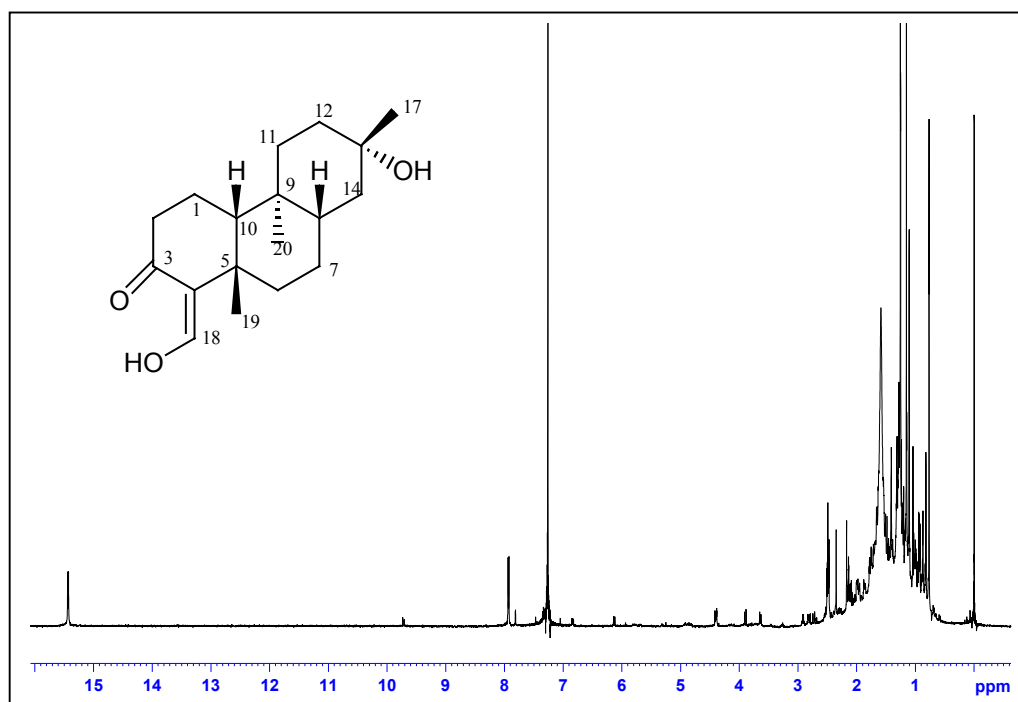


Figure 56 ^1H NMR (500 MHz, CDCl_3) spectrum of compound TD24

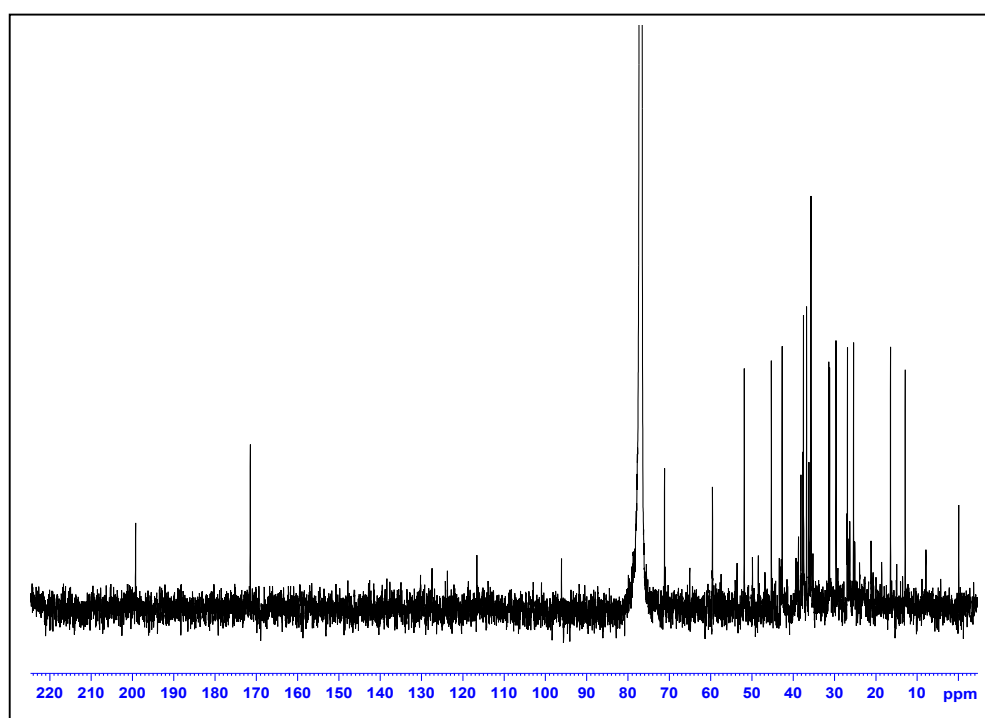


Figure 57 ^{13}C NMR (125 MHz, CDCl_3) spectrum of compound TD24

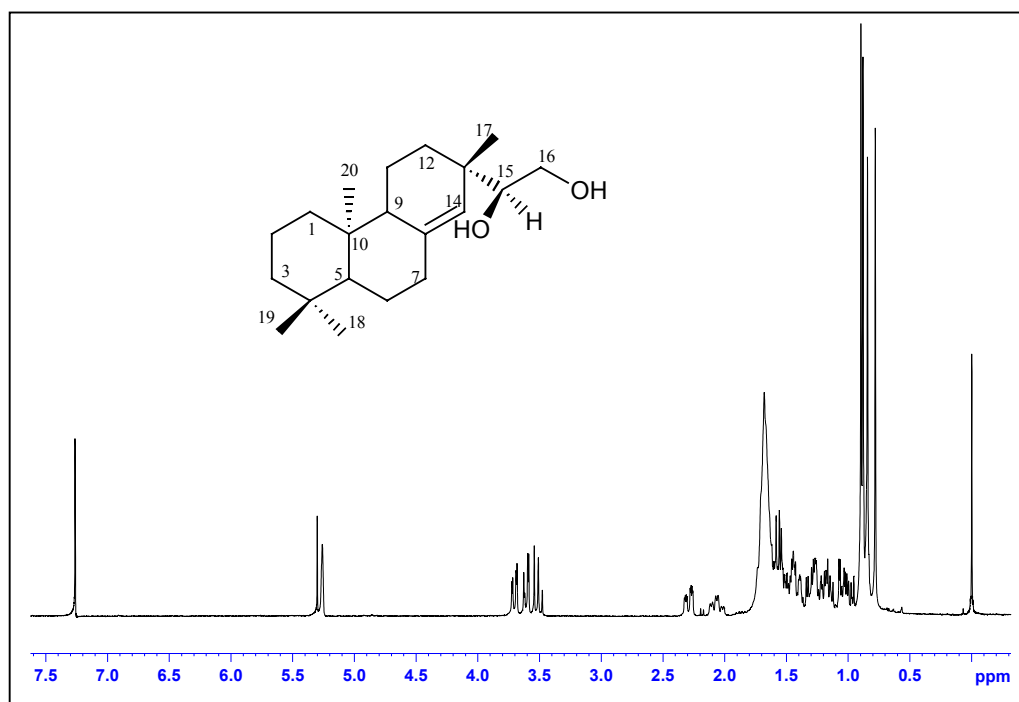


Figure 58 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TD25

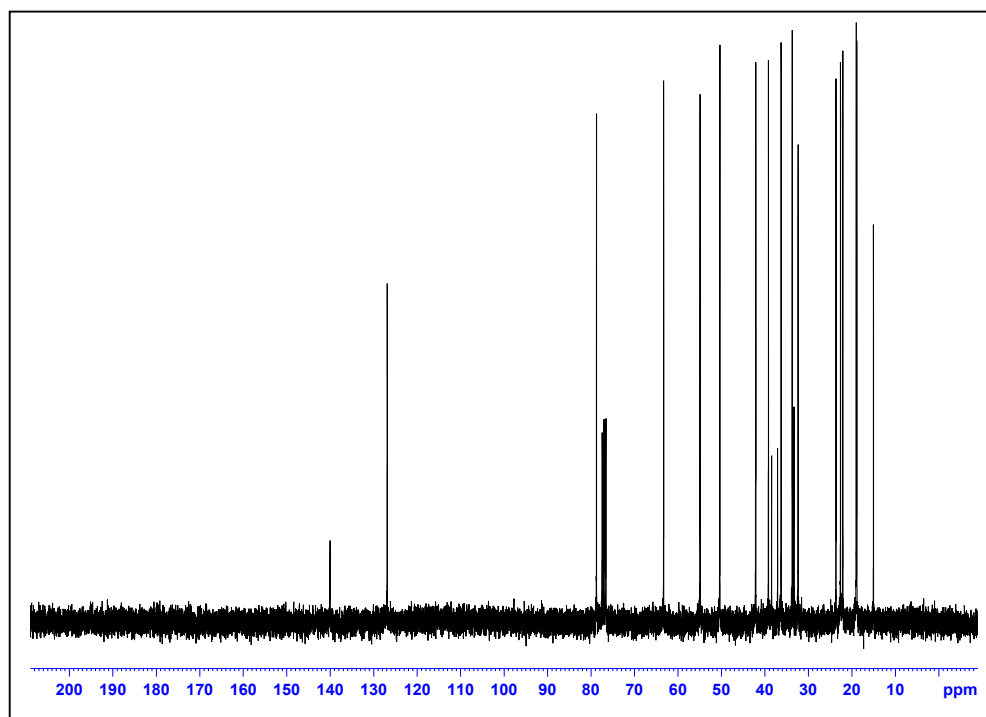


Figure 59 ¹³C NMR (75 MHz, CDCl₃) spectrum of compound TD25

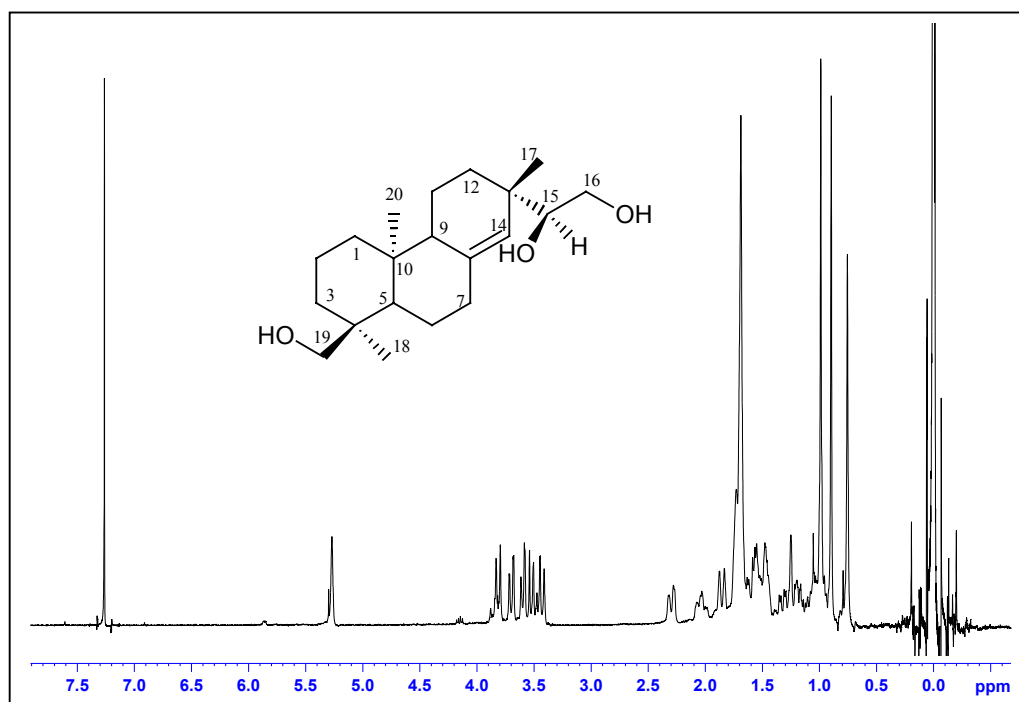


Figure 60 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD26

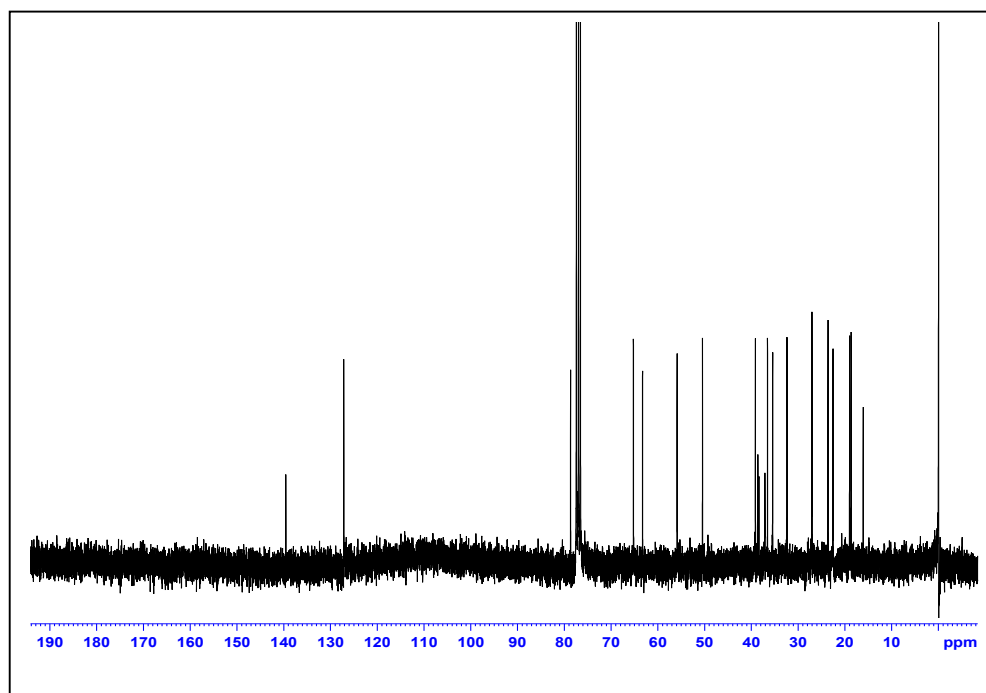


Figure 61 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD26

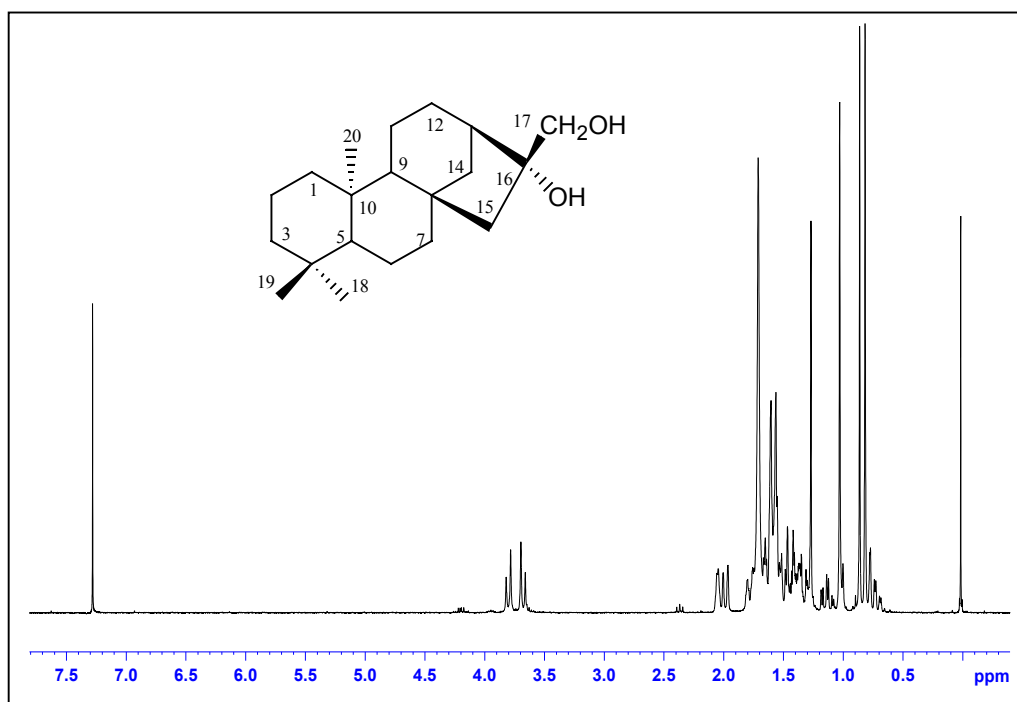


Figure 62 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TD27

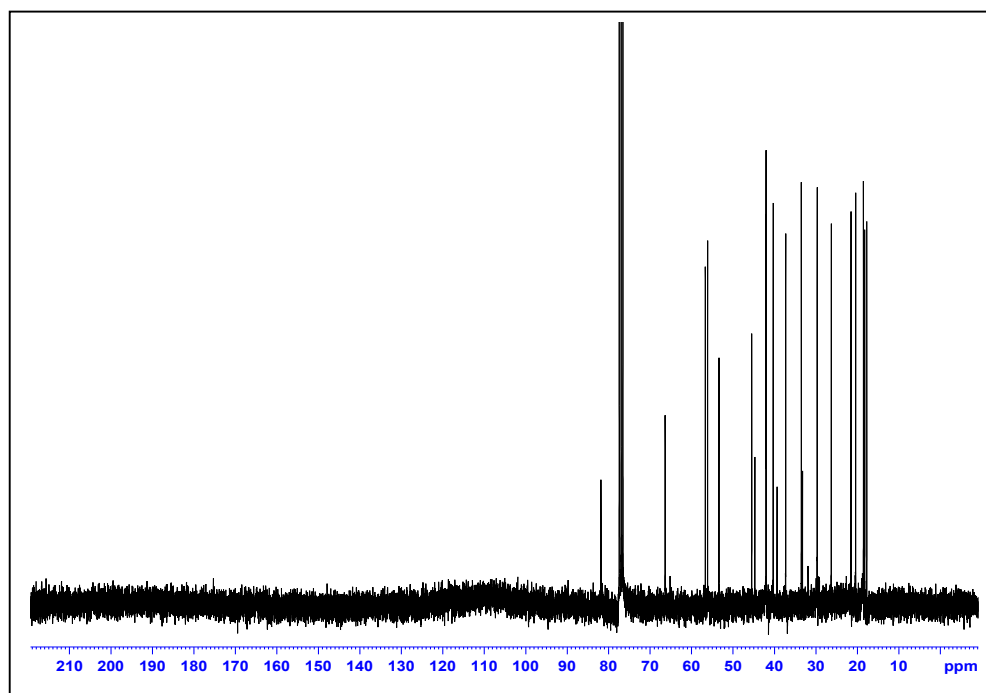


Figure 63 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD27

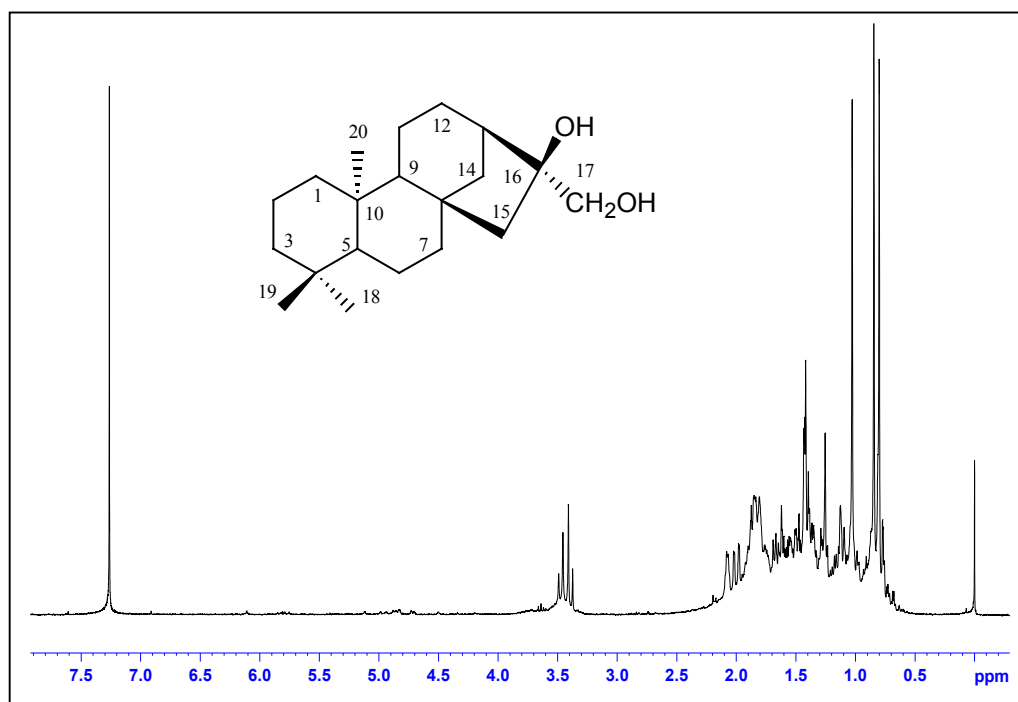


Figure 64 ^1H NMR (300 MHz, $\text{CDCl}_3/\text{MeOH}$) spectrum of compound TD28

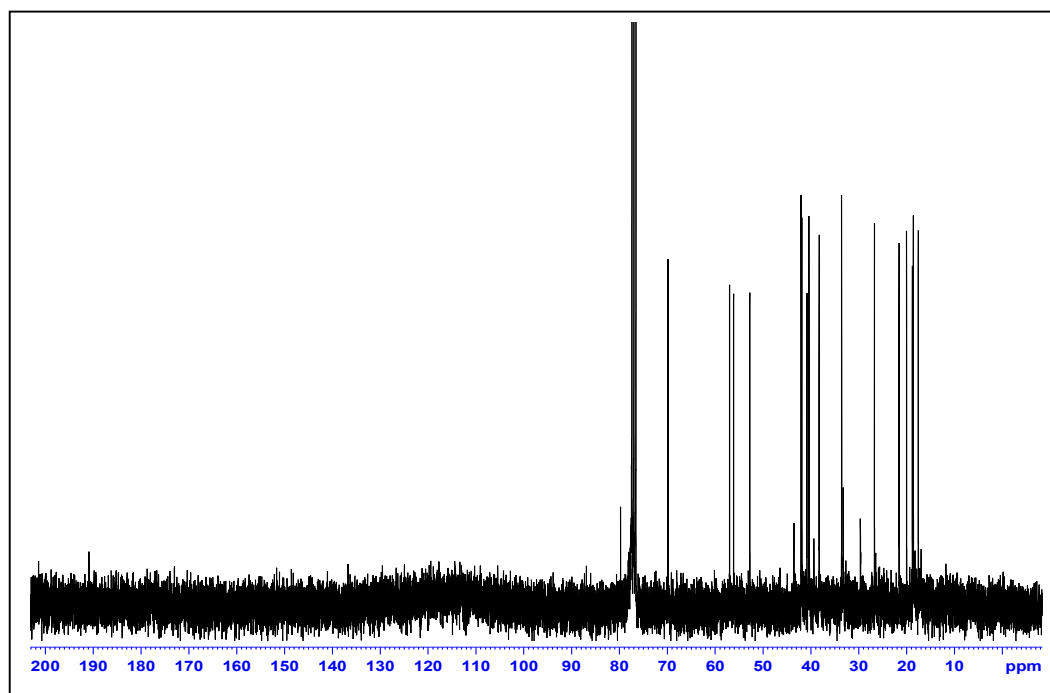


Figure 65 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TD28

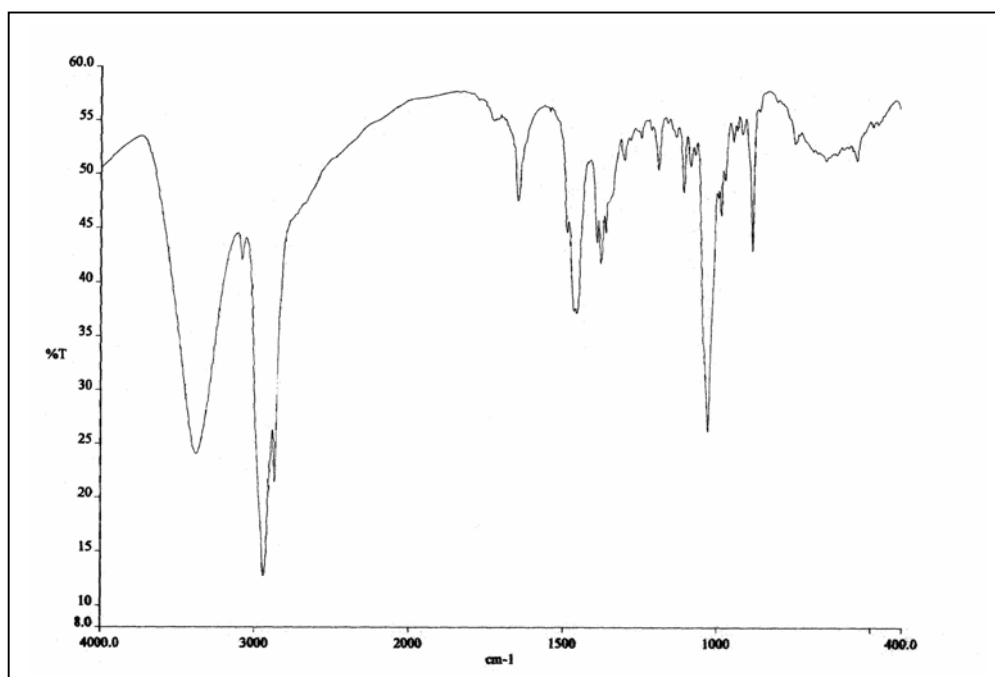


Figure 66 IR (KBr) spectrum of compound TL1

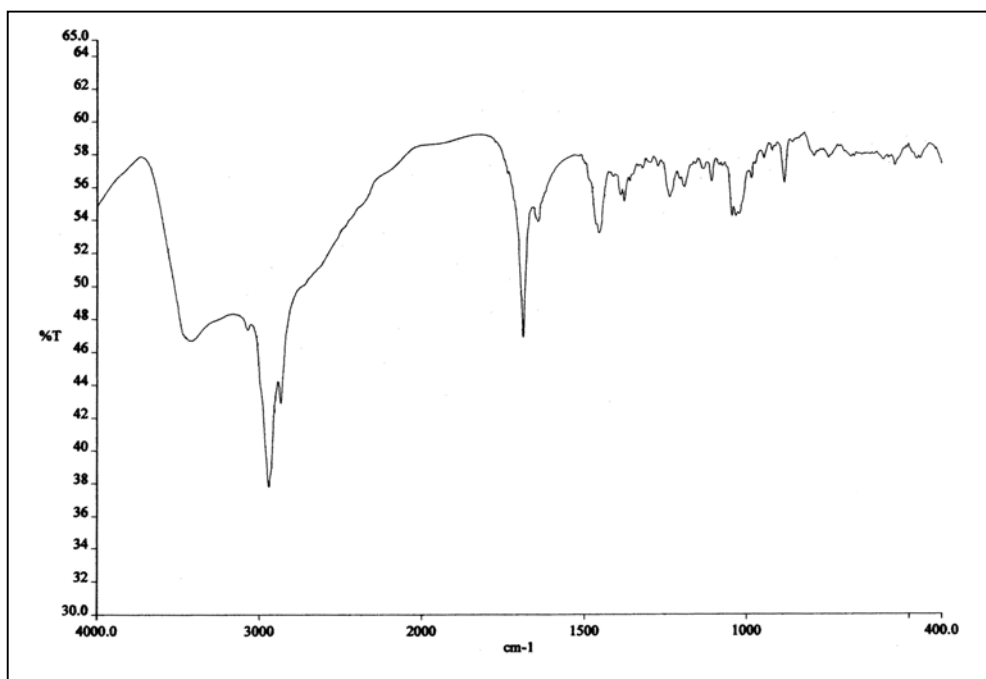


Figure 67 IR (KBr) spectrum of compound TL3

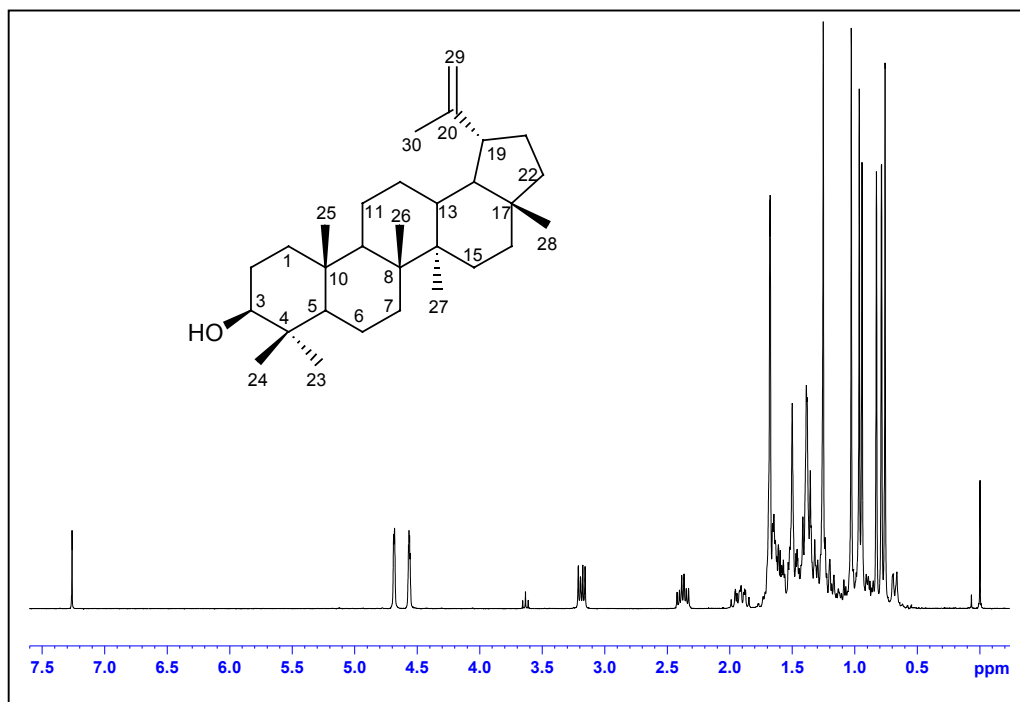


Figure 68 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL1

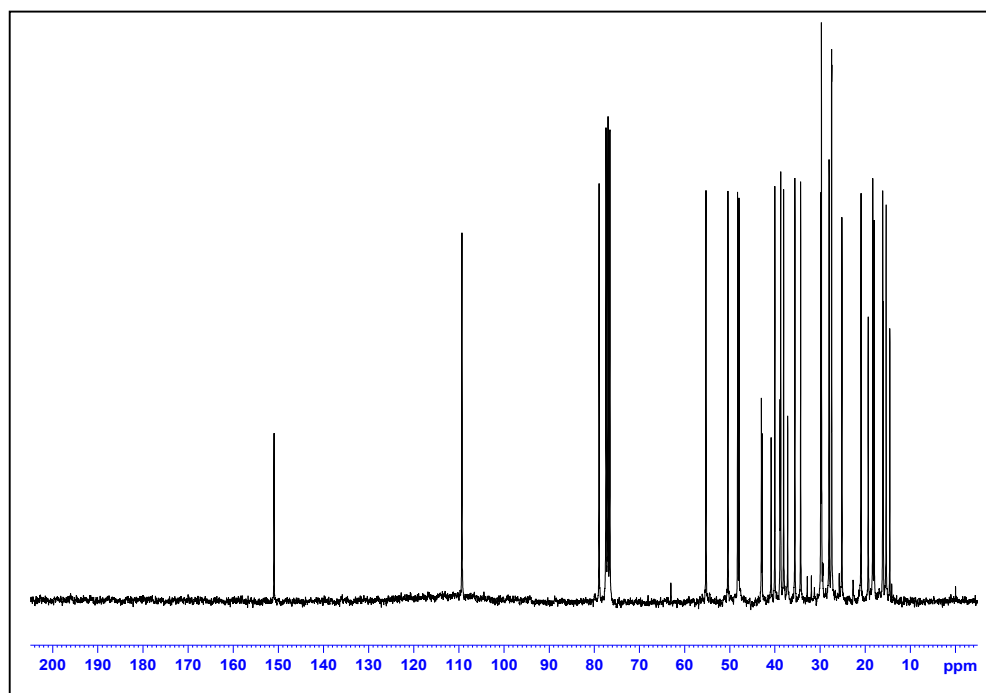


Figure 69 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL1

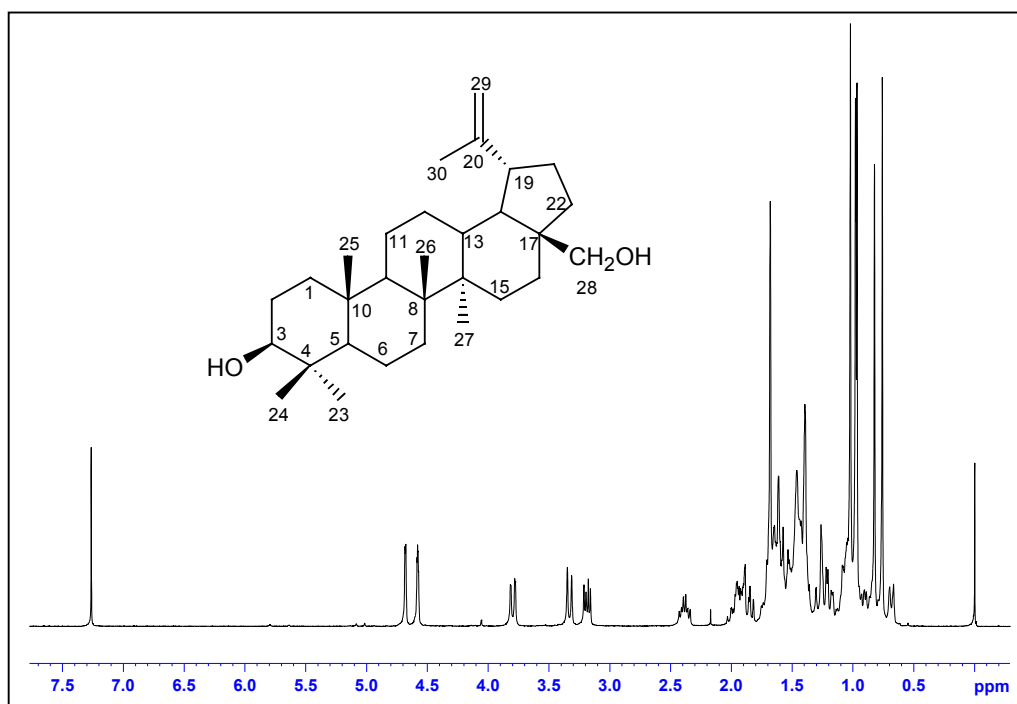


Figure 70 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL2

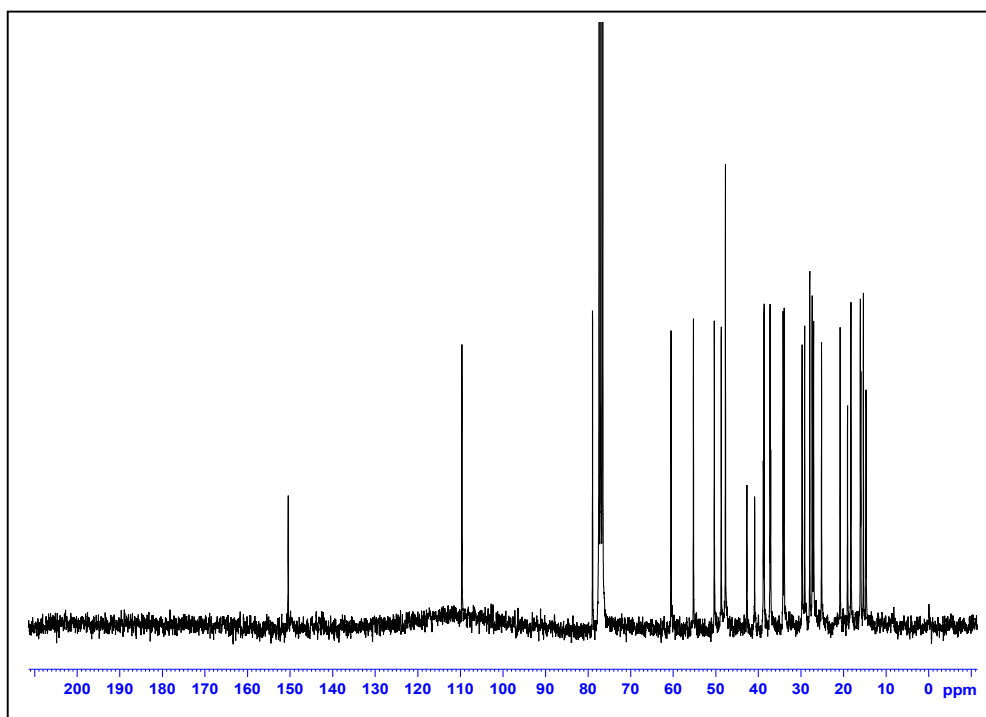


Figure 71 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL2

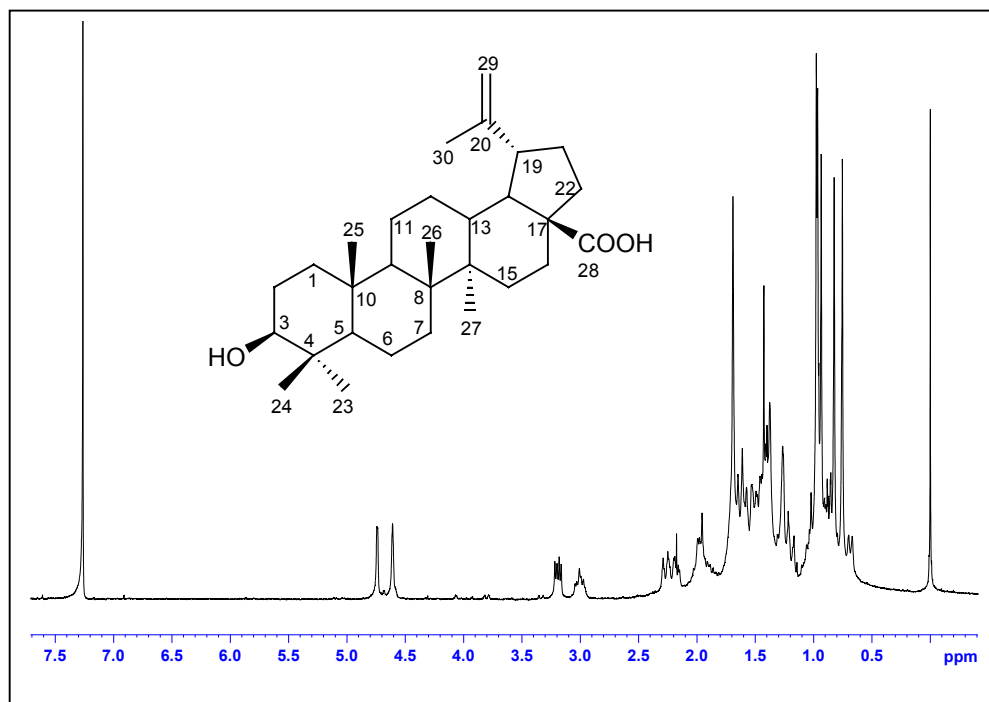


Figure 72 ^1H NMR (300 MHz, $\text{CDCl}_3/\text{MeOH}$) spectrum of compound TL3

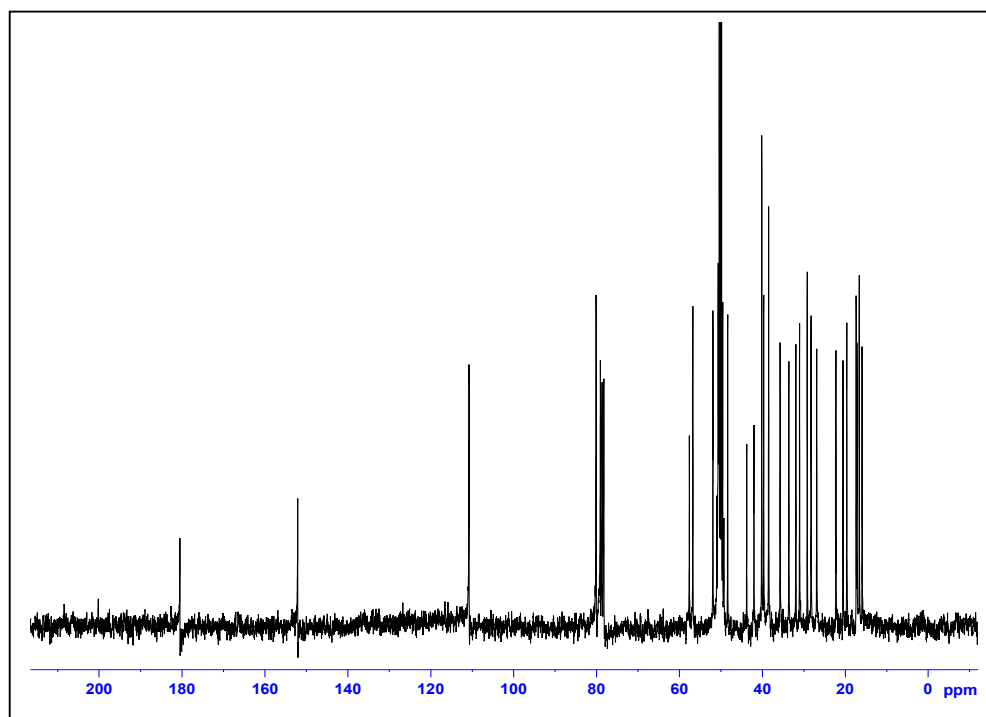


Figure 73 ^{13}C NMR (75 MHz, $\text{CDCl}_3/\text{MeOH}$) spectrum of compound TL3

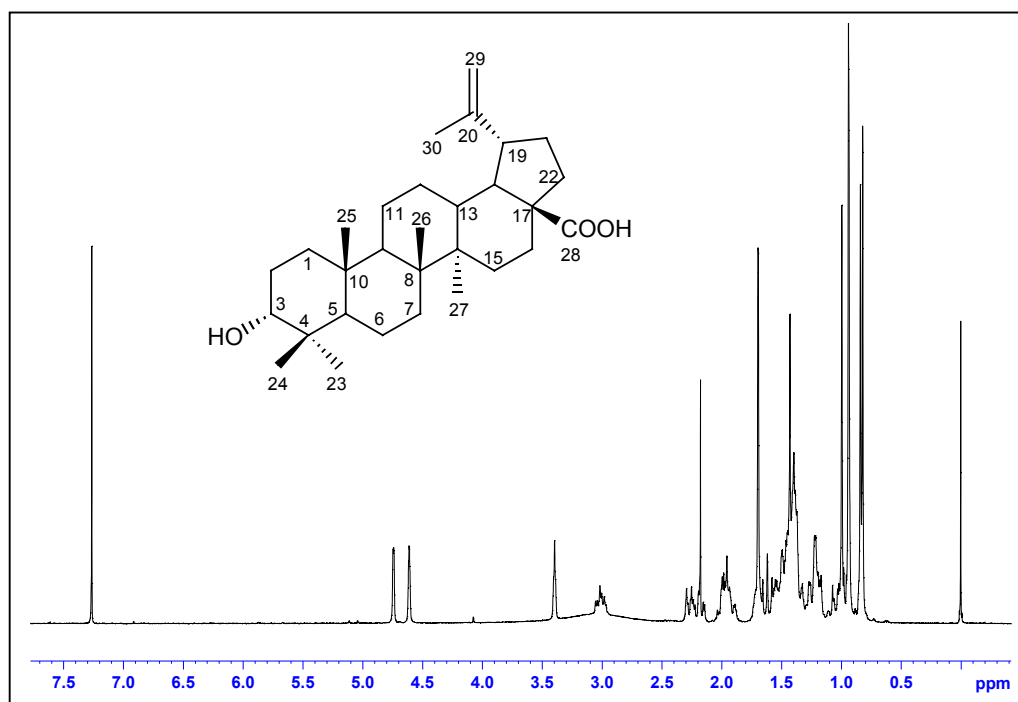


Figure 74 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL4

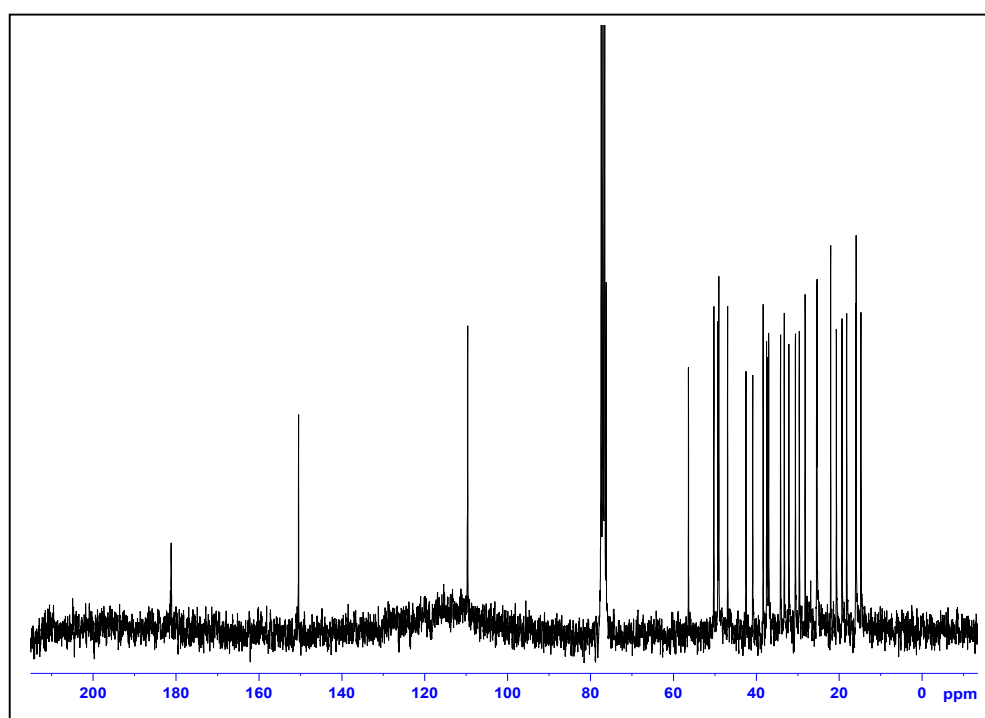


Figure 75 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL4

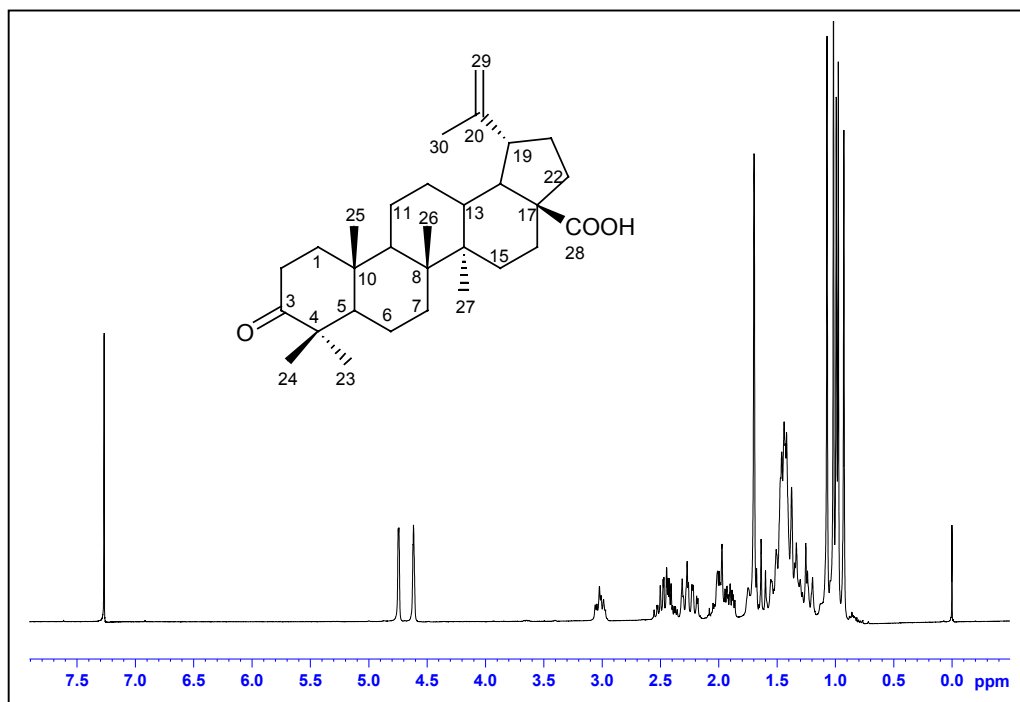


Figure 76 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL5

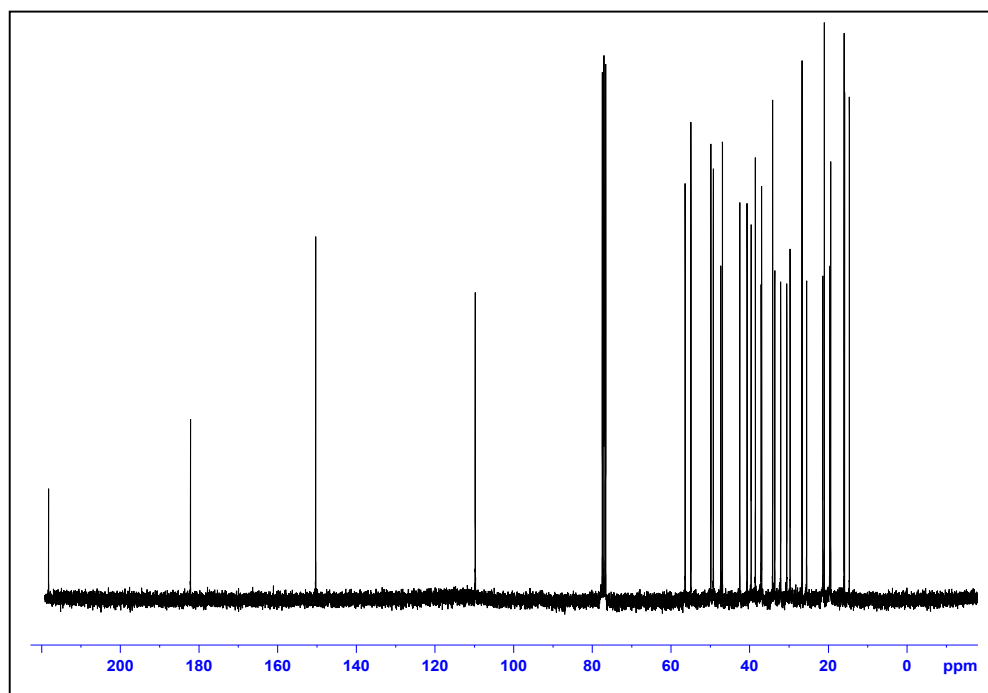


Figure 77 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL5

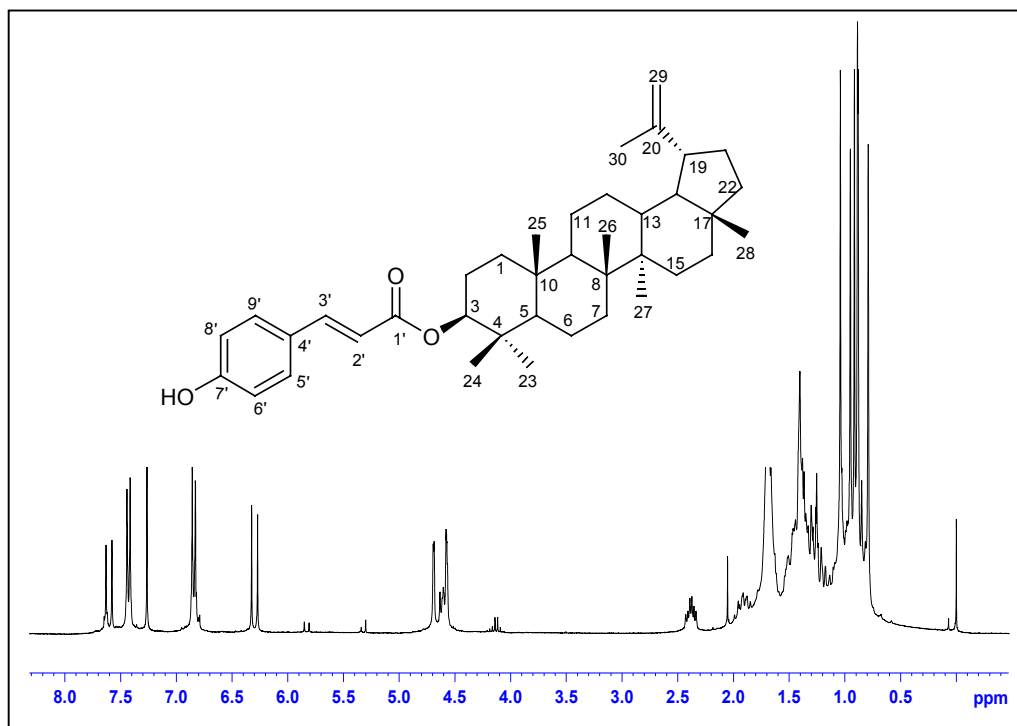


Figure 78 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL6

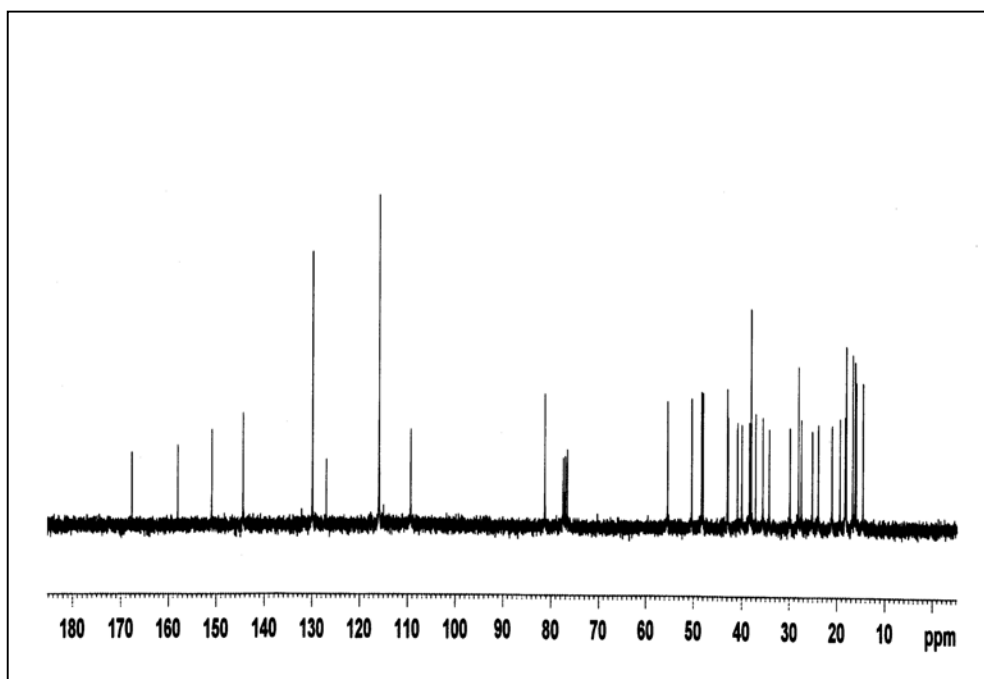


Figure 79 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL6

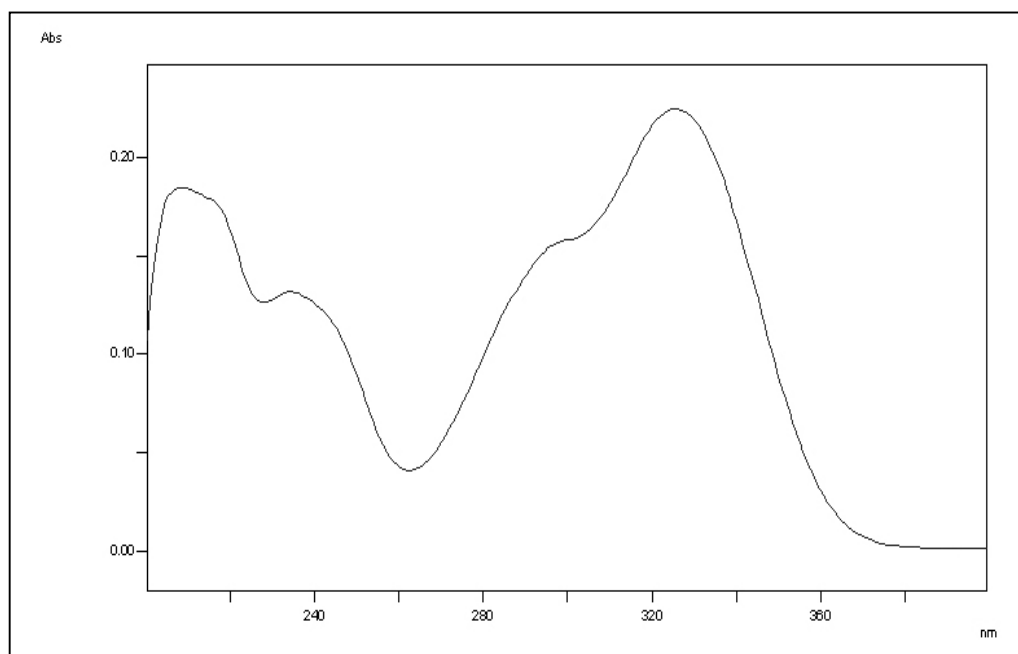


Figure 80 UV (MeOH) spectrum of compound **TL7**

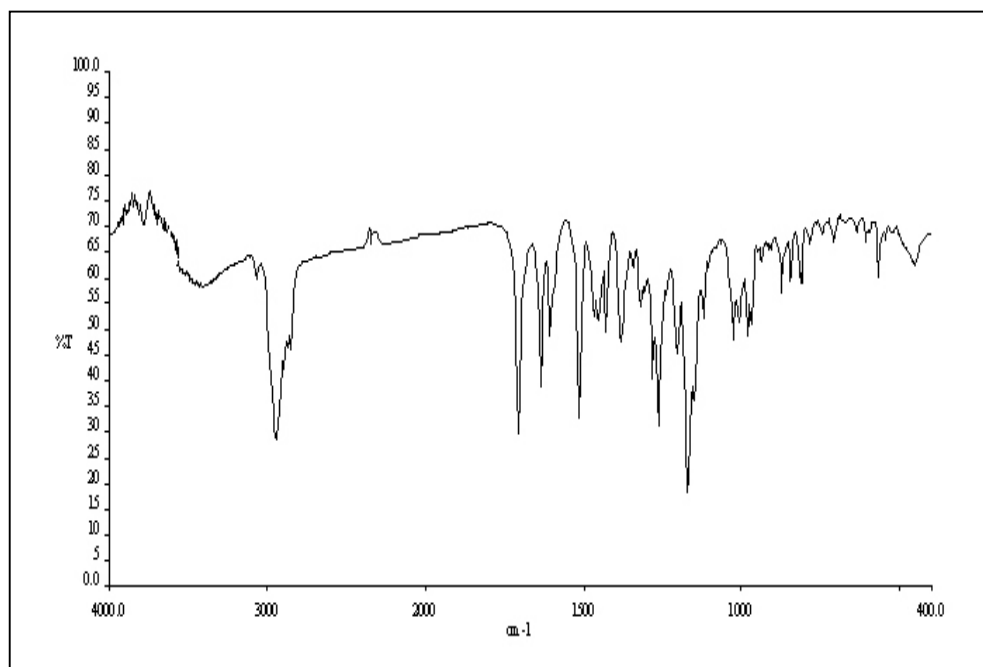


Figure 81 IR (KBr) spectrum of compound **TL7**

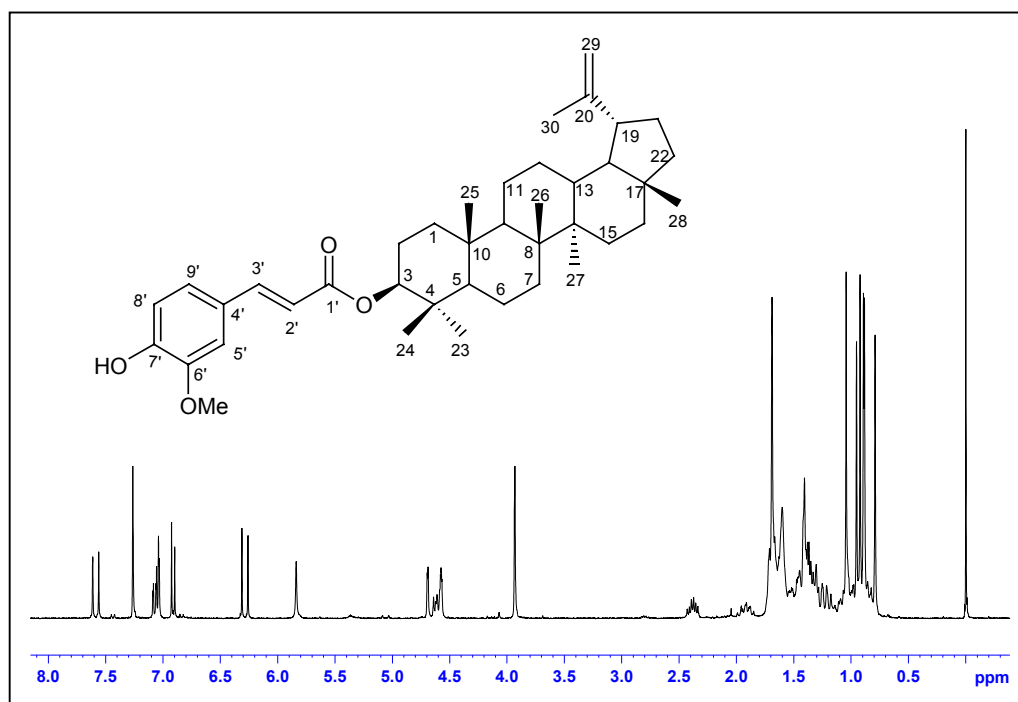


Figure 82 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL7

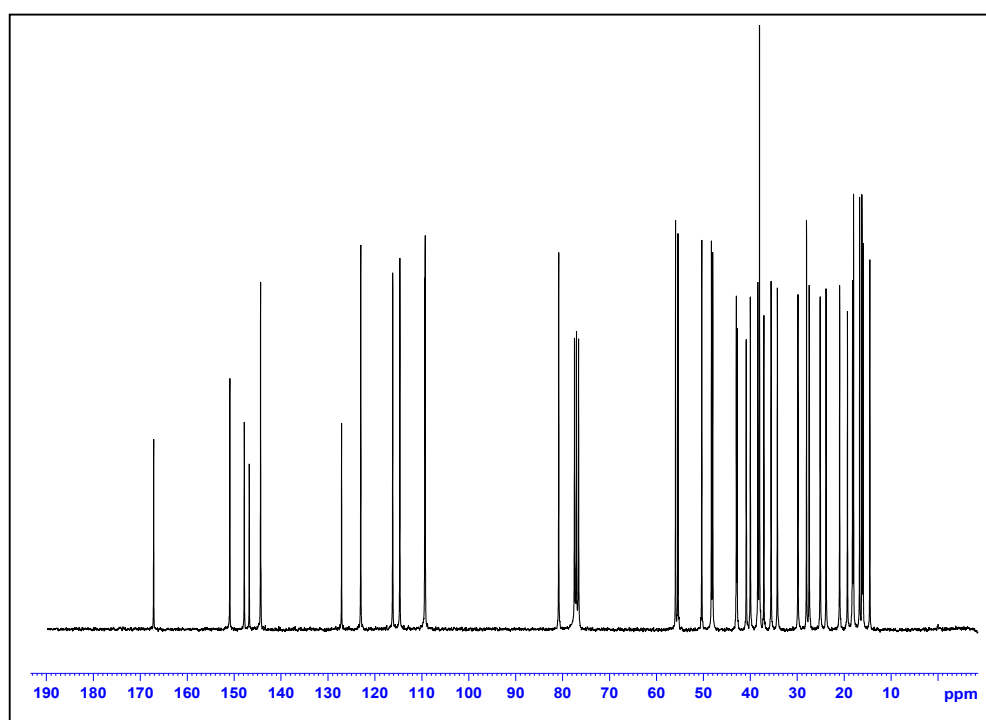


Figure 83 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL7

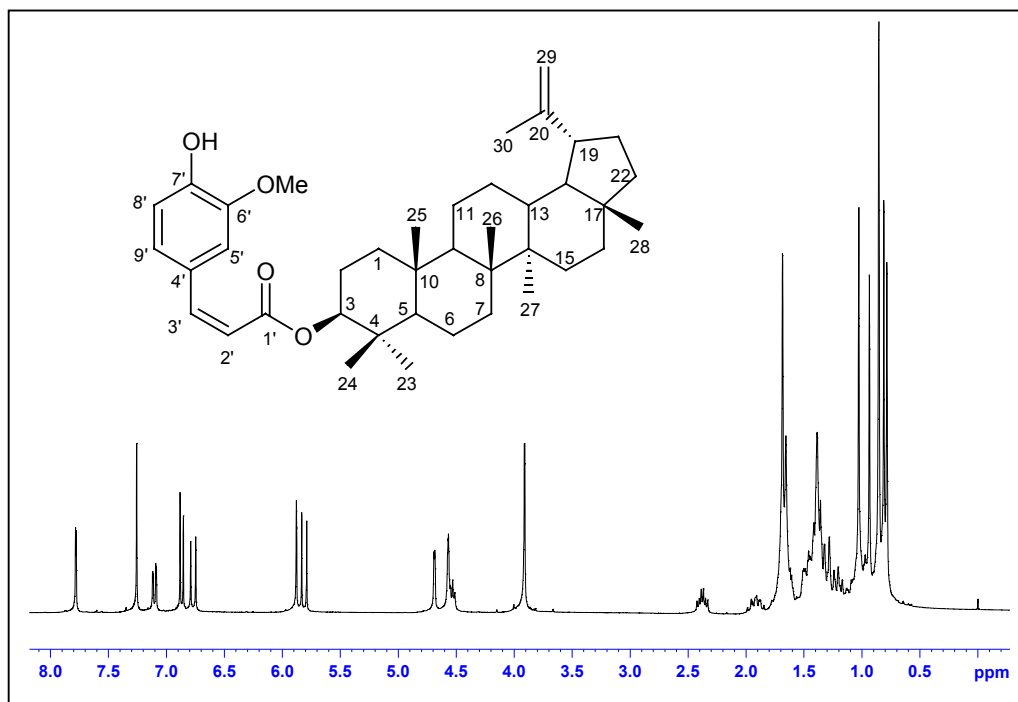


Figure 84 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TL8

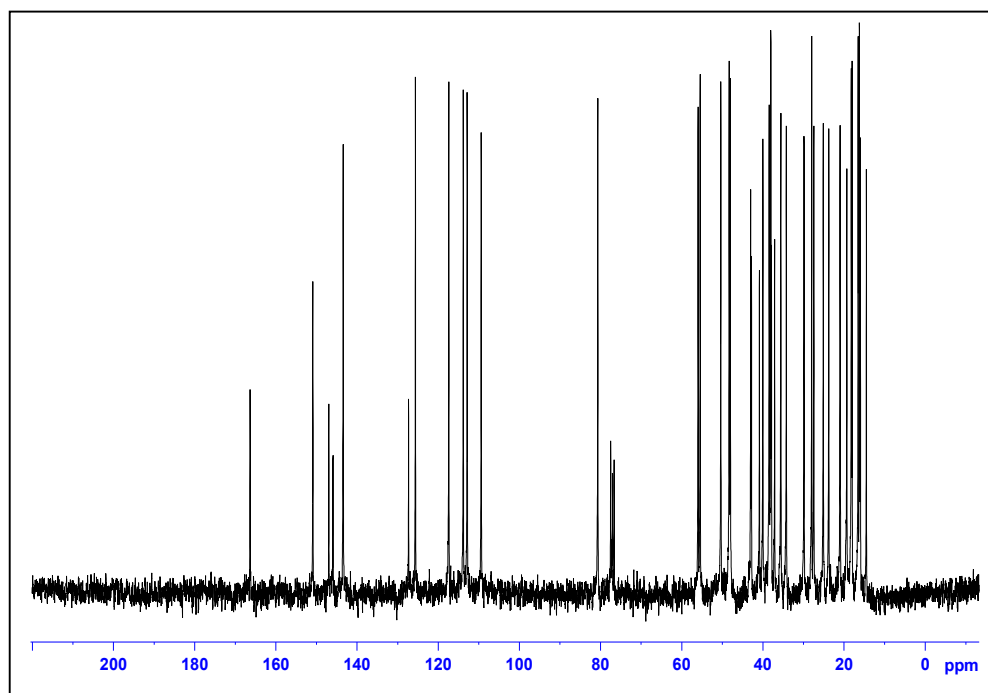


Figure 85 ¹³C NMR (75 MHz, CDCl₃) spectrum of compound TL8

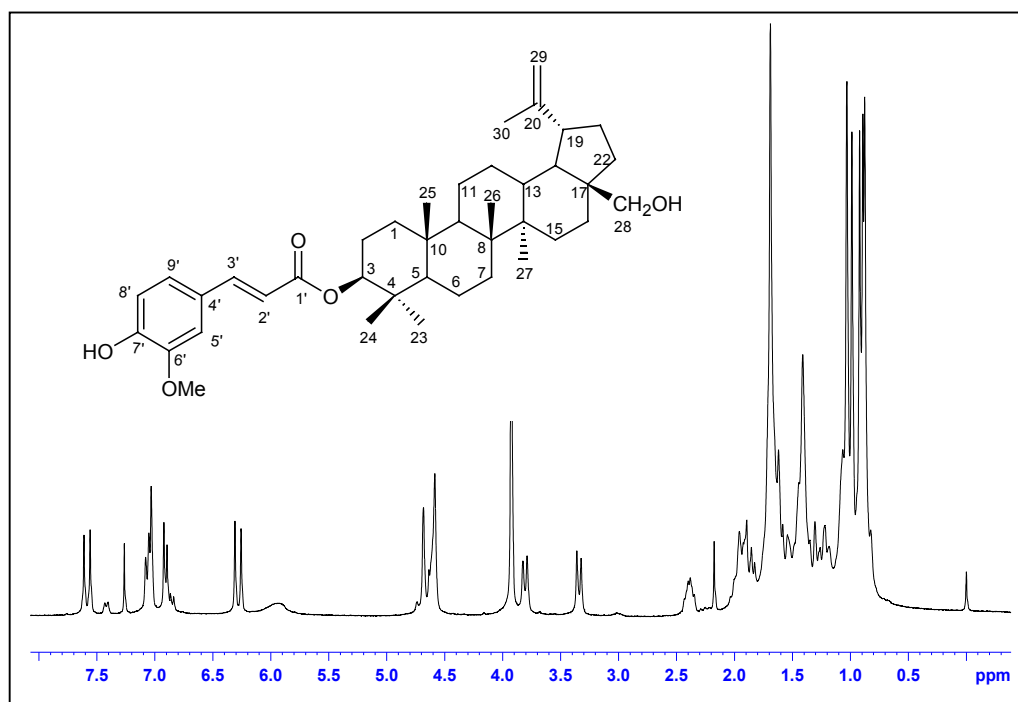


Figure 86 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL9

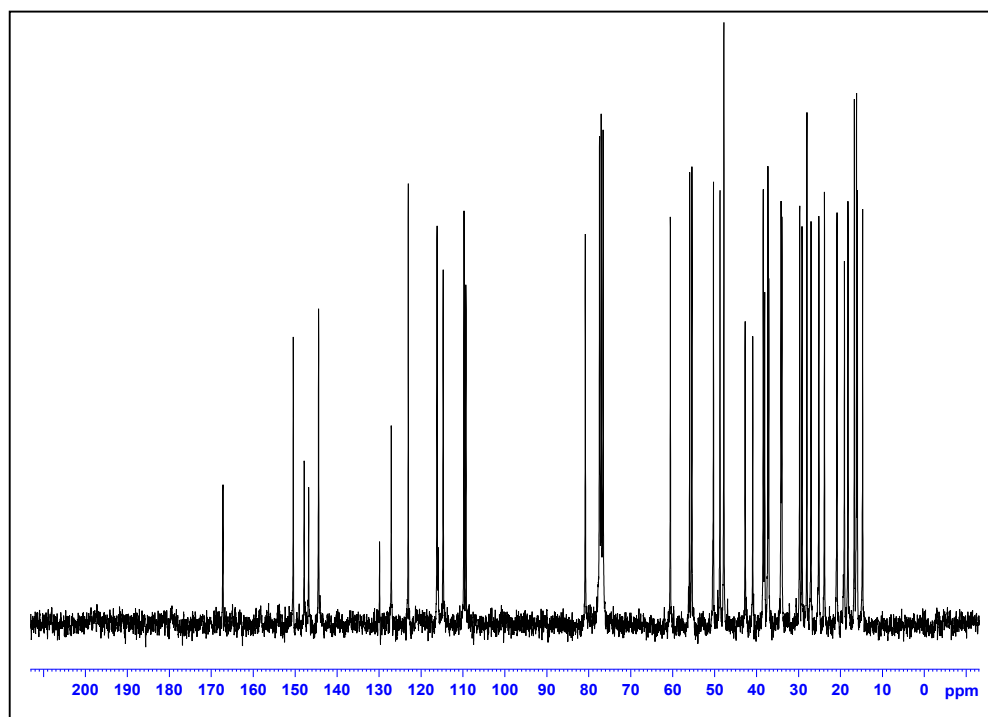


Figure 87 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL9

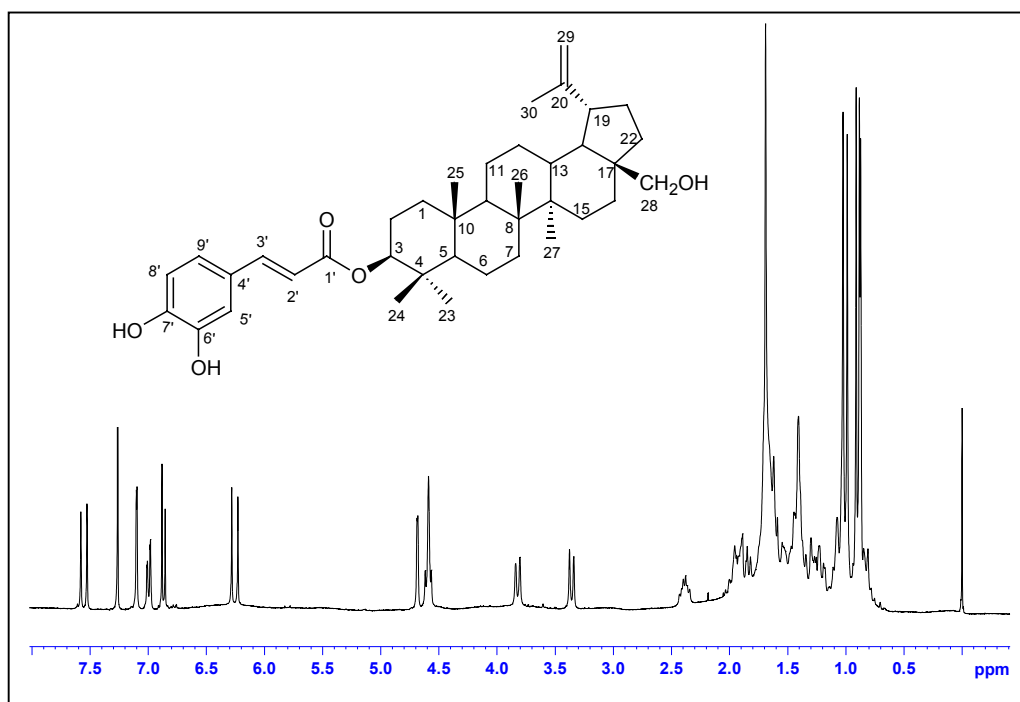


Figure 88 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TL10

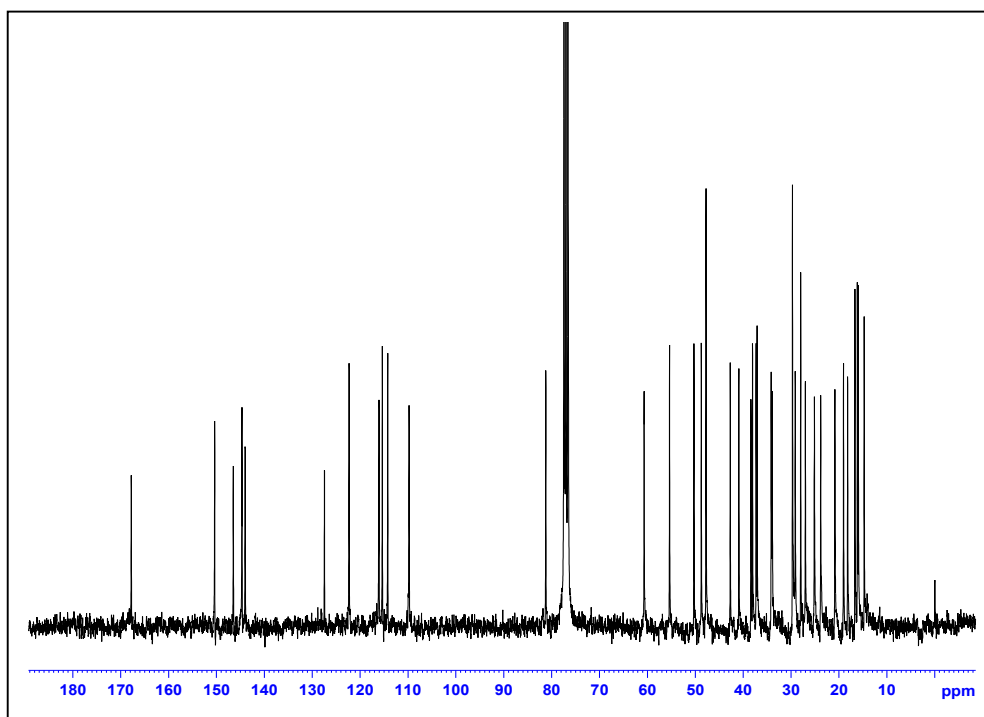


Figure 89 ¹³C NMR (75 MHz, CDCl₃) spectrum of compound TL10

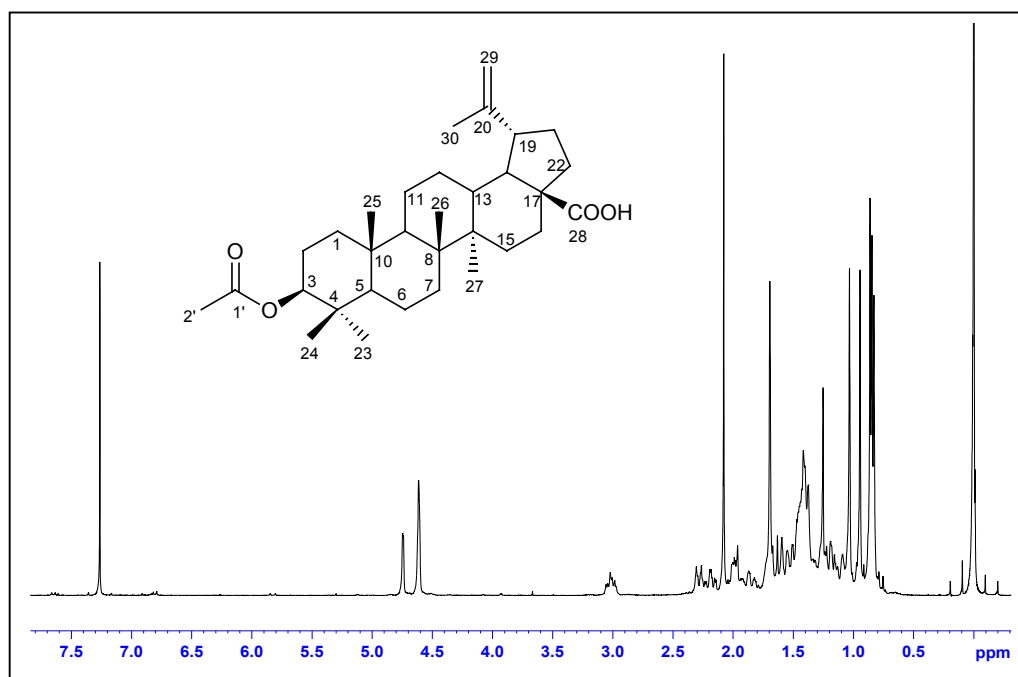


Figure 90 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TL11

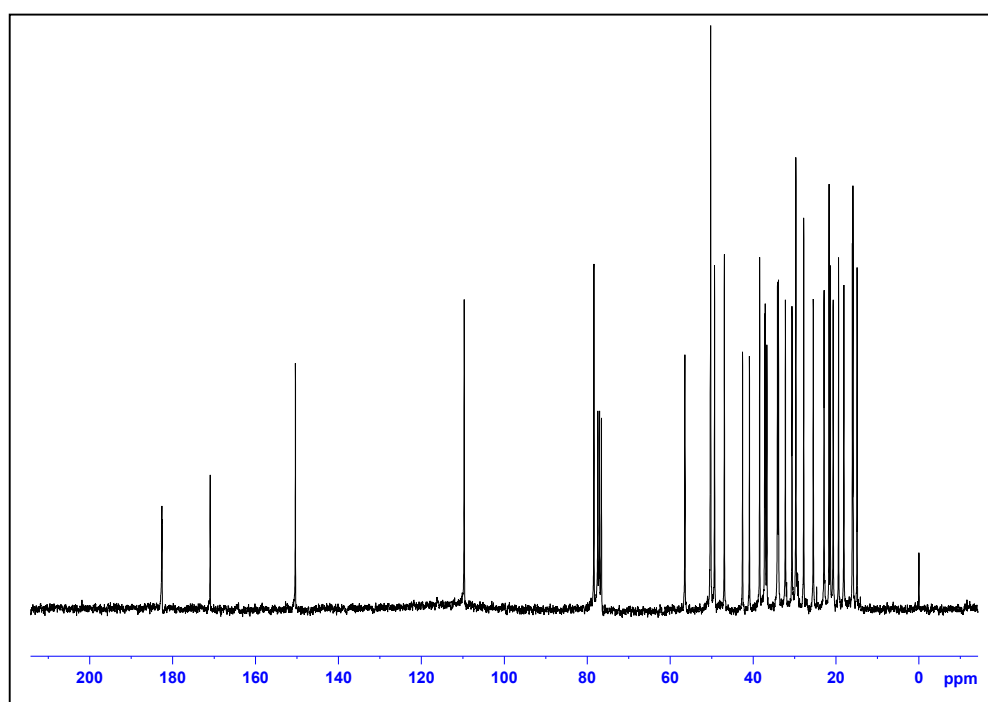


Figure 91 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TL11

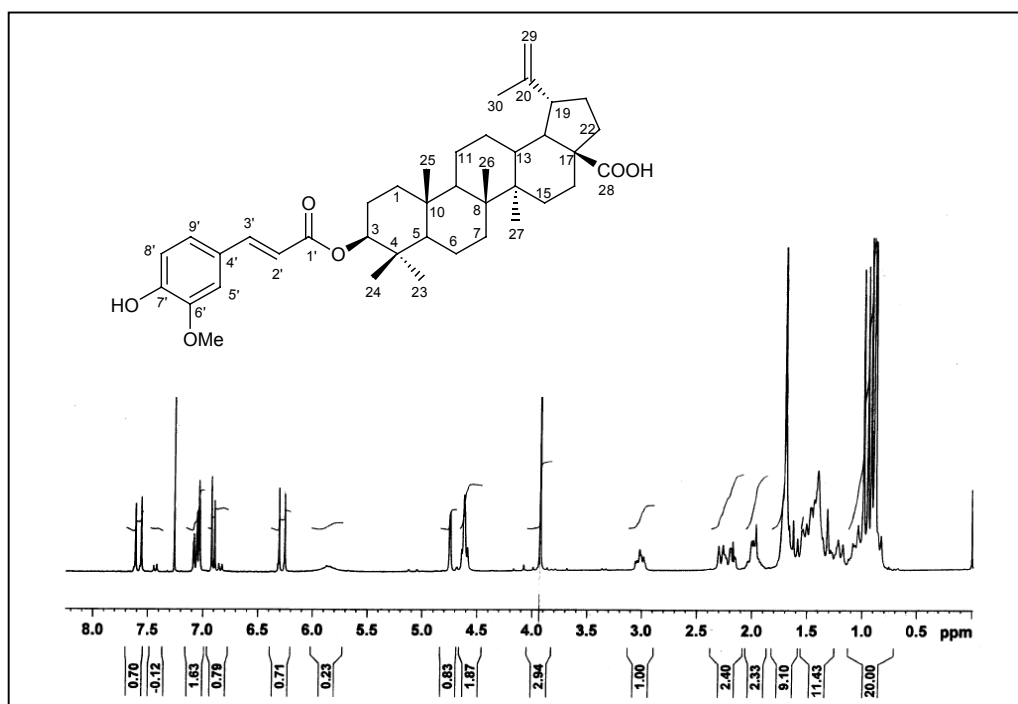


Figure 92 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TL12

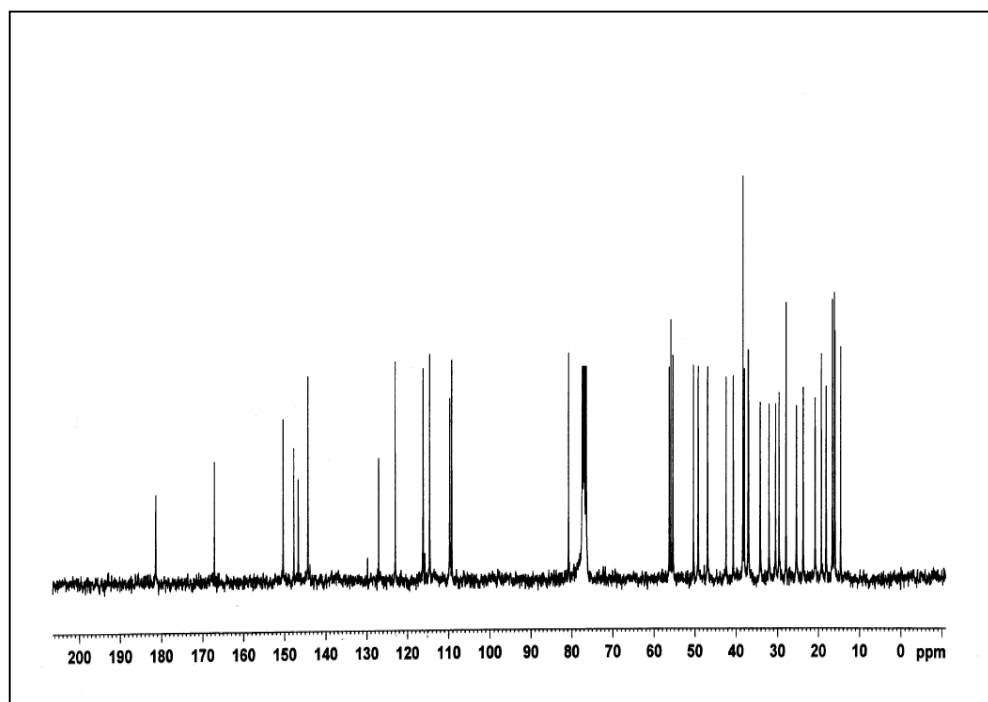


Figure 93 ¹³C NMR (75 MHz, CDCl₃) spectrum of compound TL12

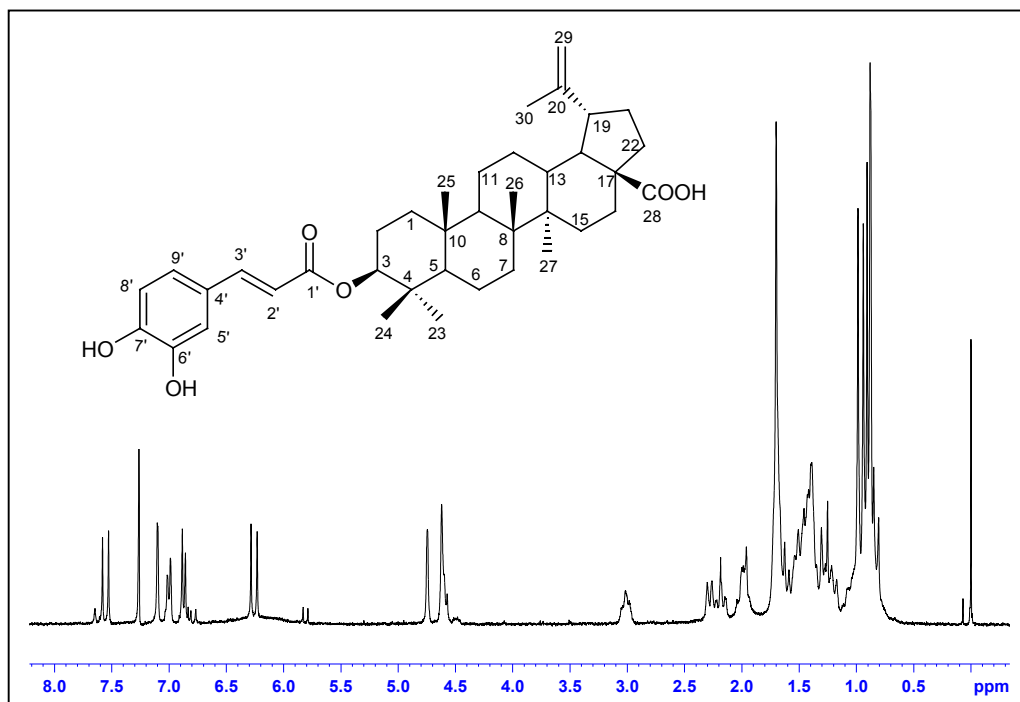


Figure 94 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TL13

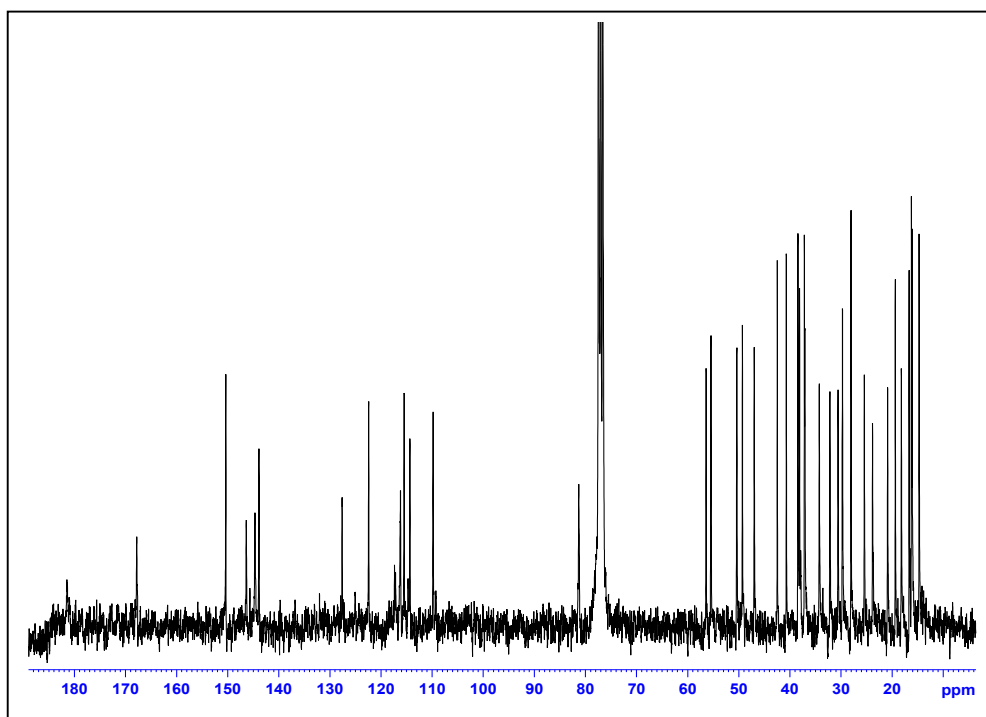


Figure 95 ¹³C NMR (75 MHz, CDCl₃) spectrum of compound TL13

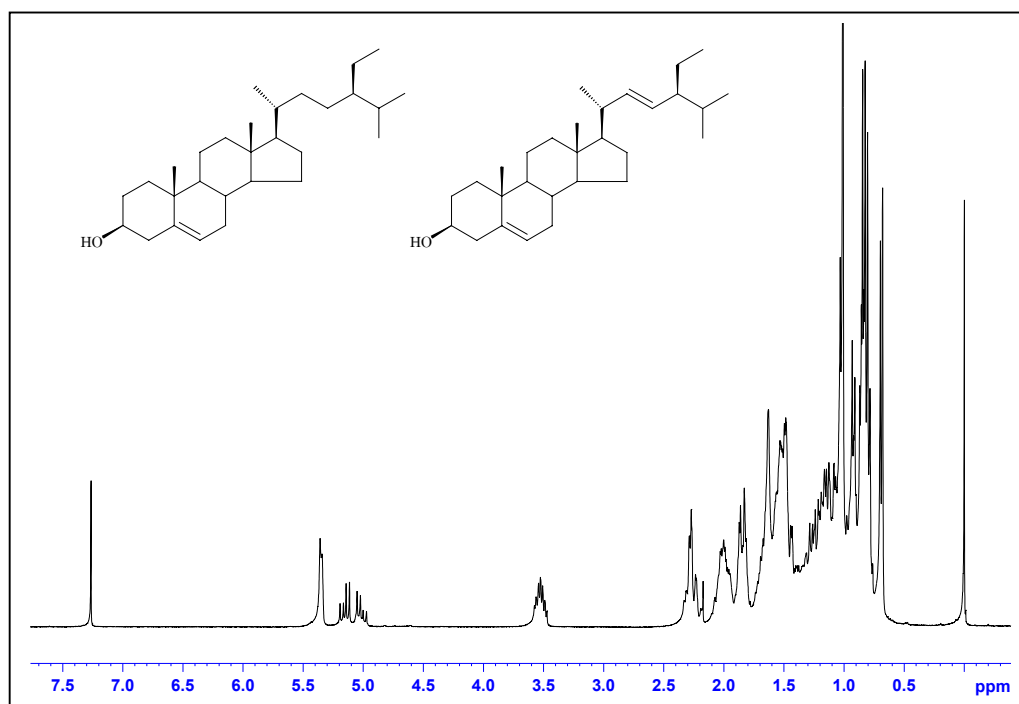


Figure 96 ¹H NMR (300 MHz, CDCl₃) spectrum of compound TS1 and TS2

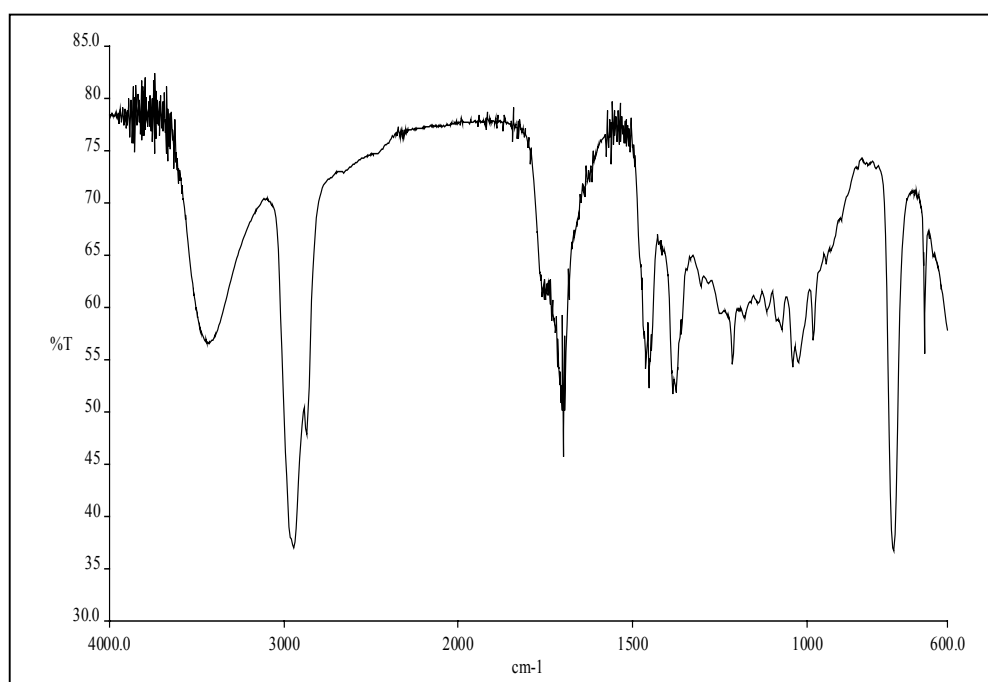


Figure 97 IR(neat) spectrum of compound TM1

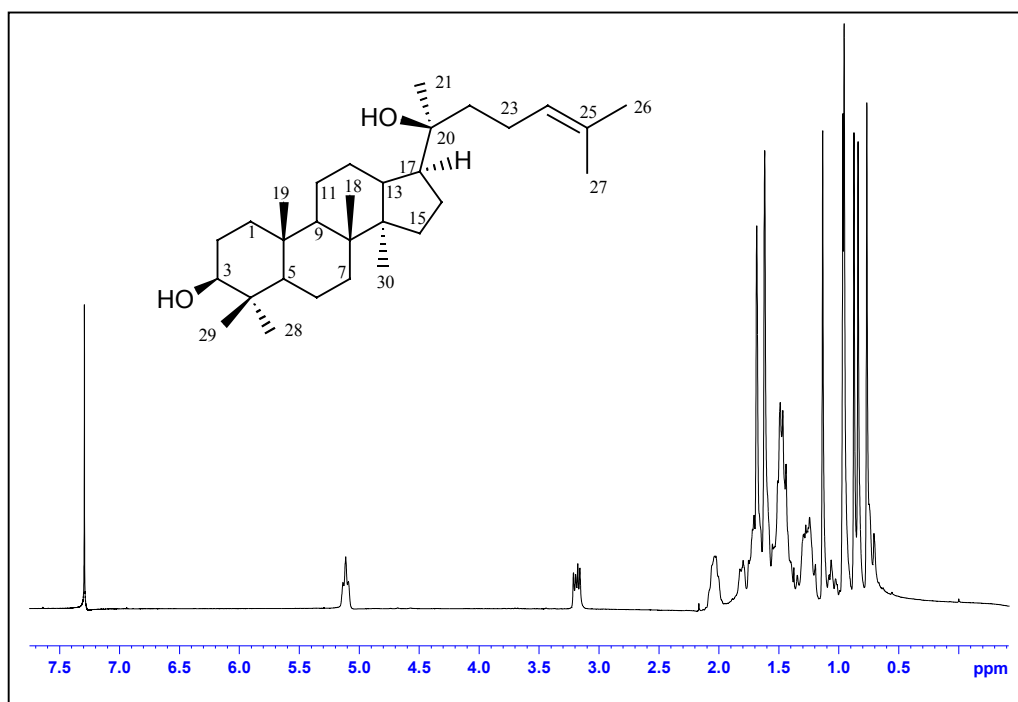


Figure 98 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TM1**

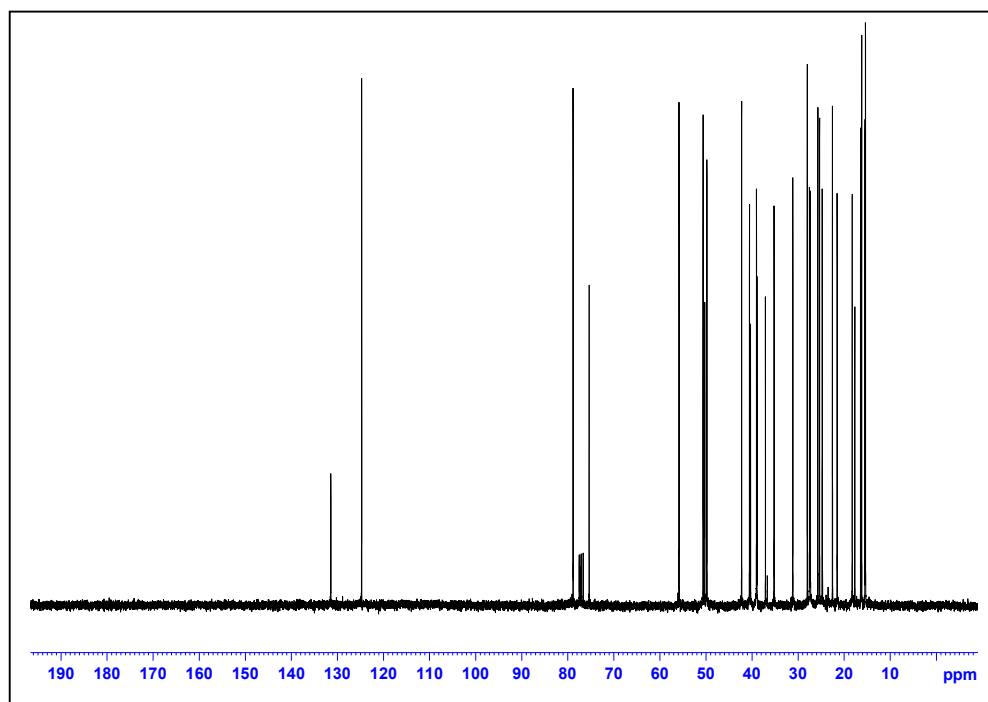


Figure 99 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TM1**

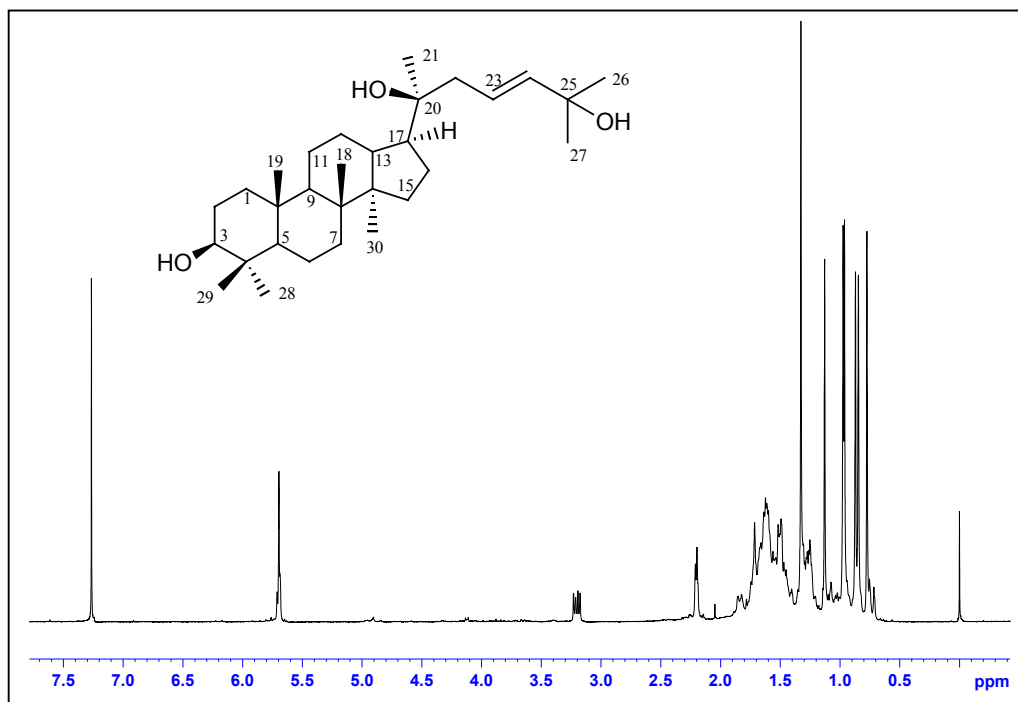


Figure 100 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TM2**

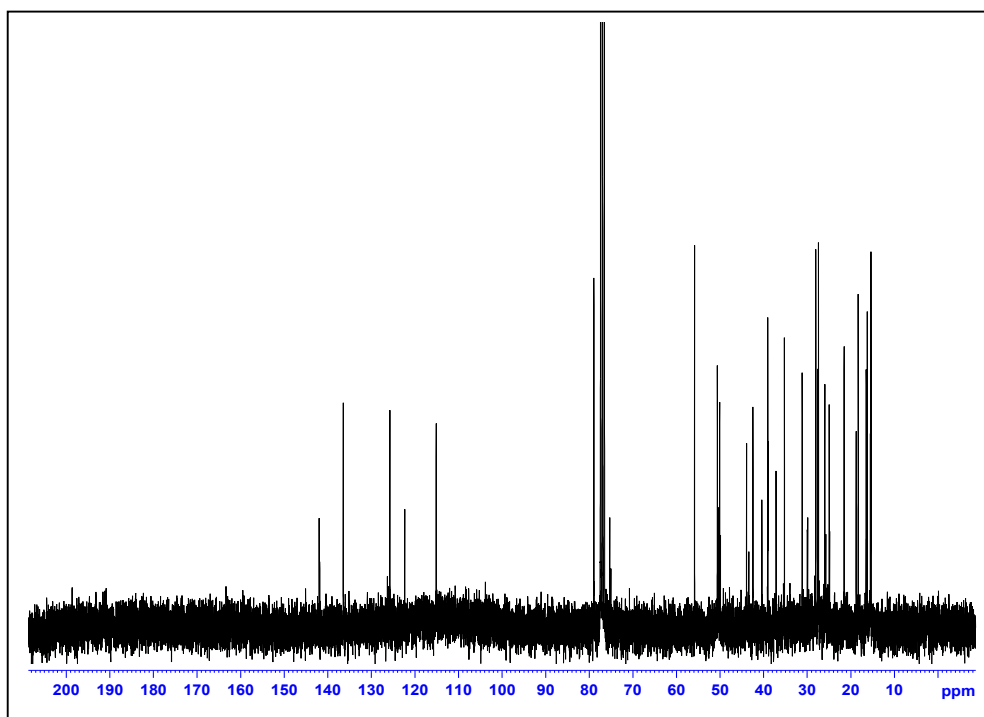


Figure 101 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compounds **TM2** and **TM6**

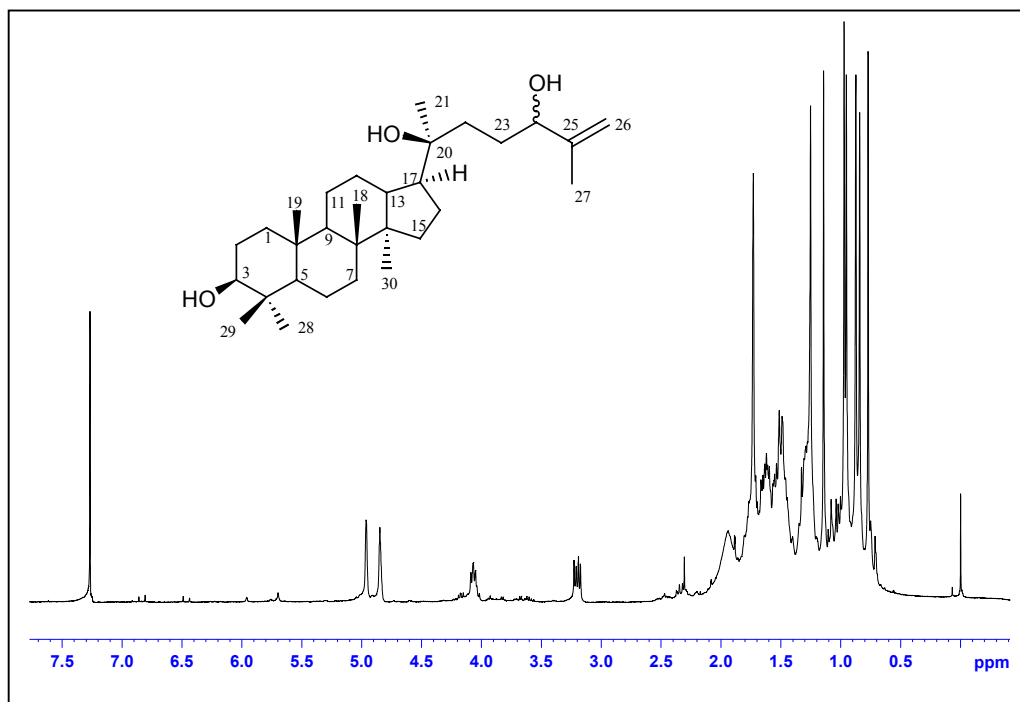


Figure 102 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TM3

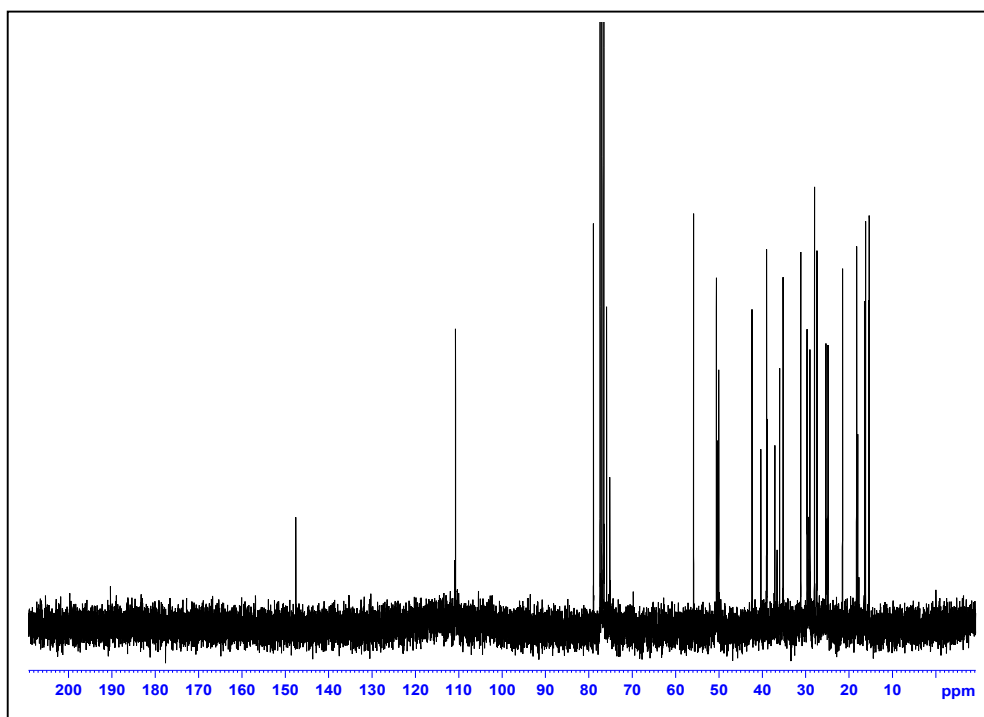


Figure 103 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TM3

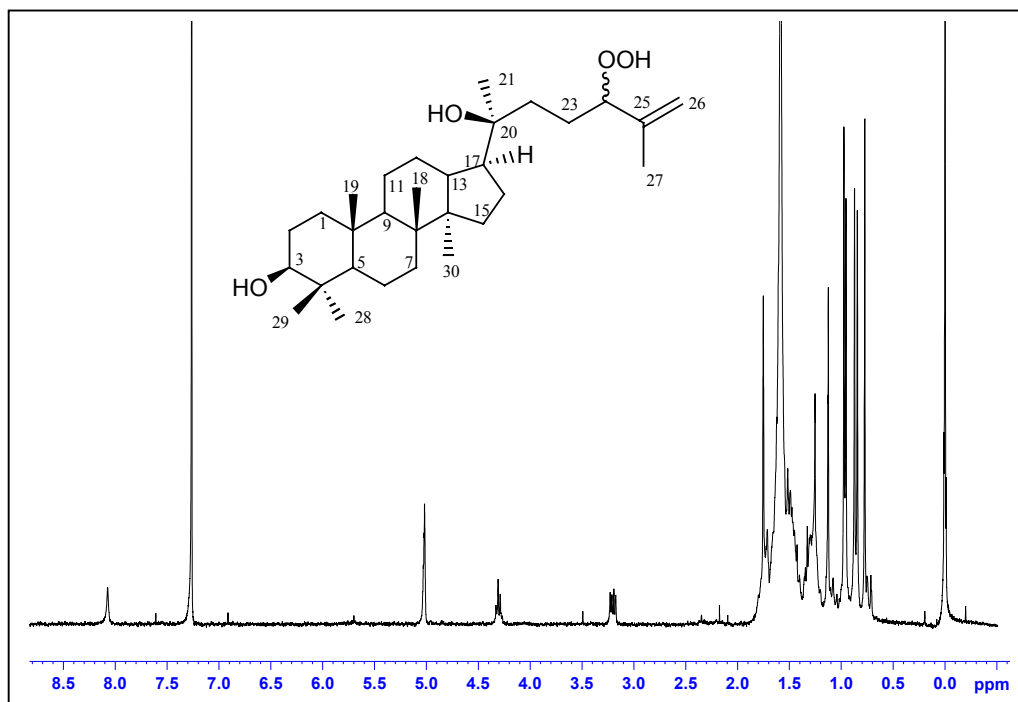


Figure 104 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TM4

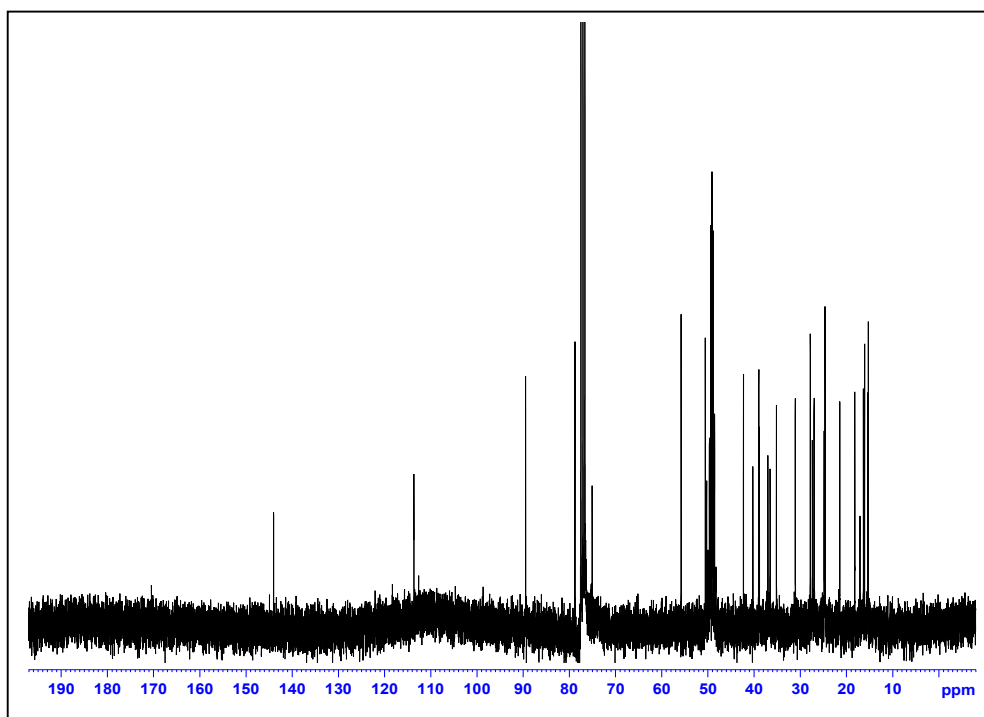


Figure 105 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TM4

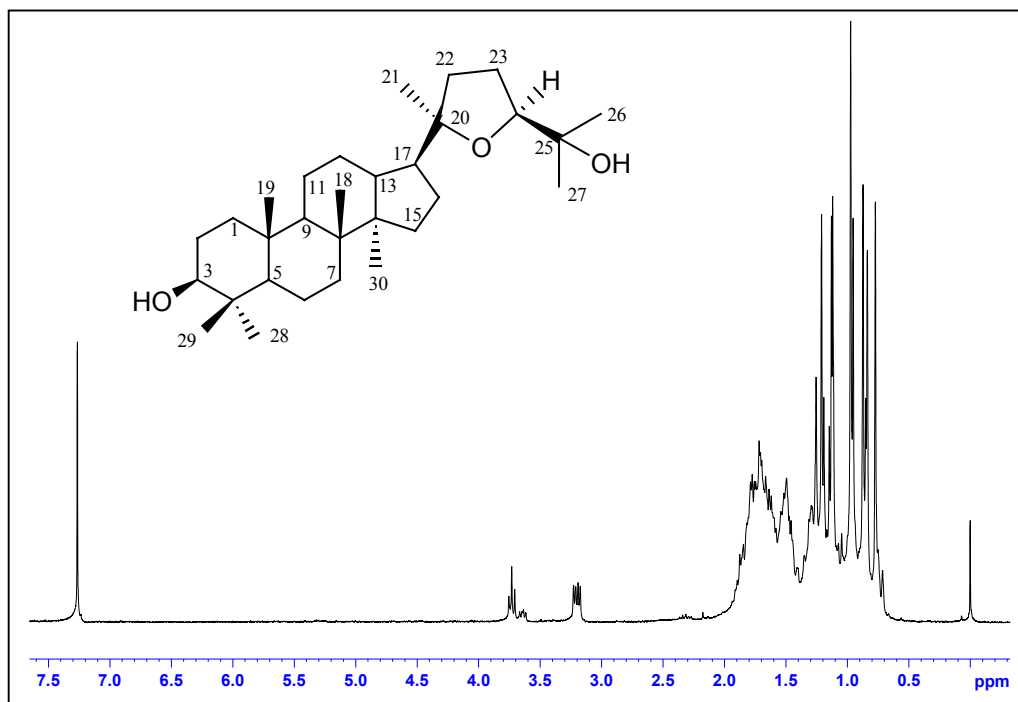


Figure 106 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TM5**

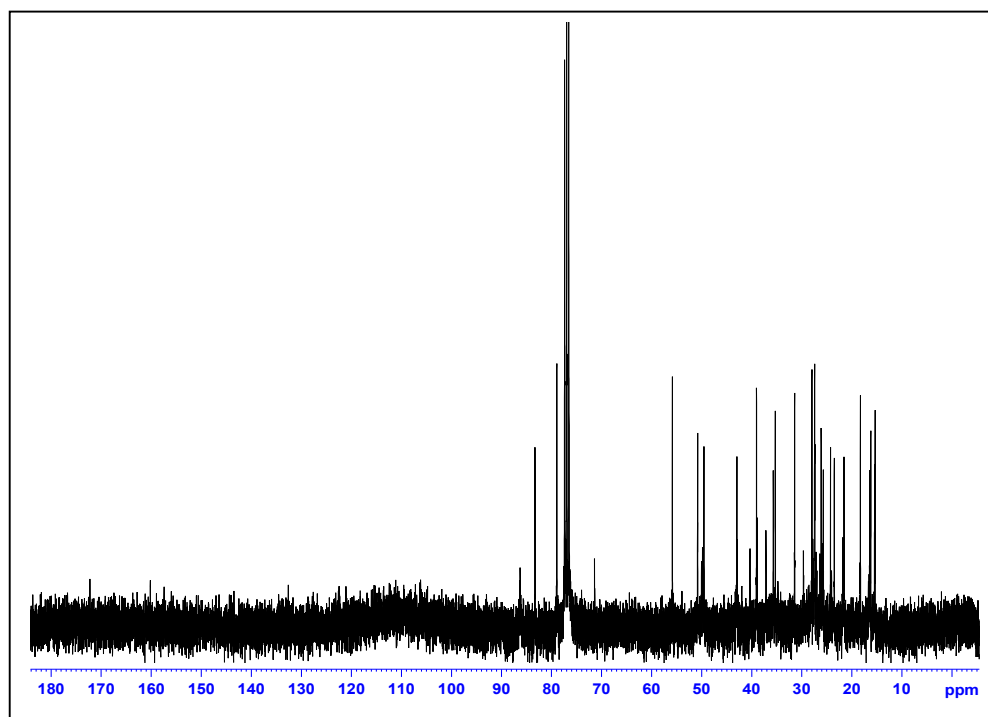


Figure 107 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TM5**

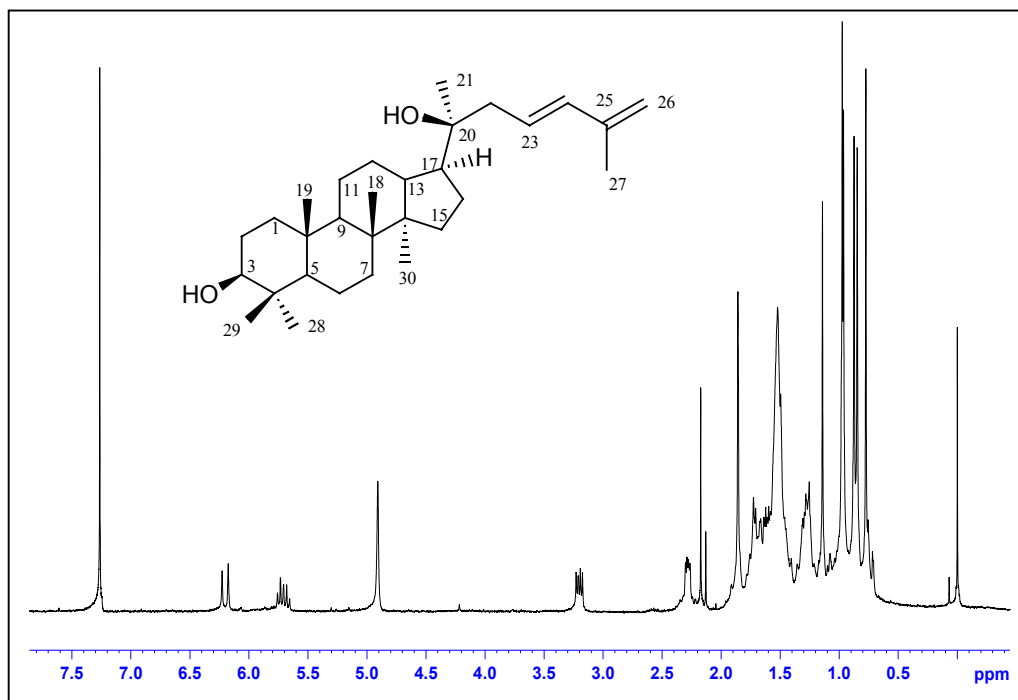


Figure 108 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TM6**

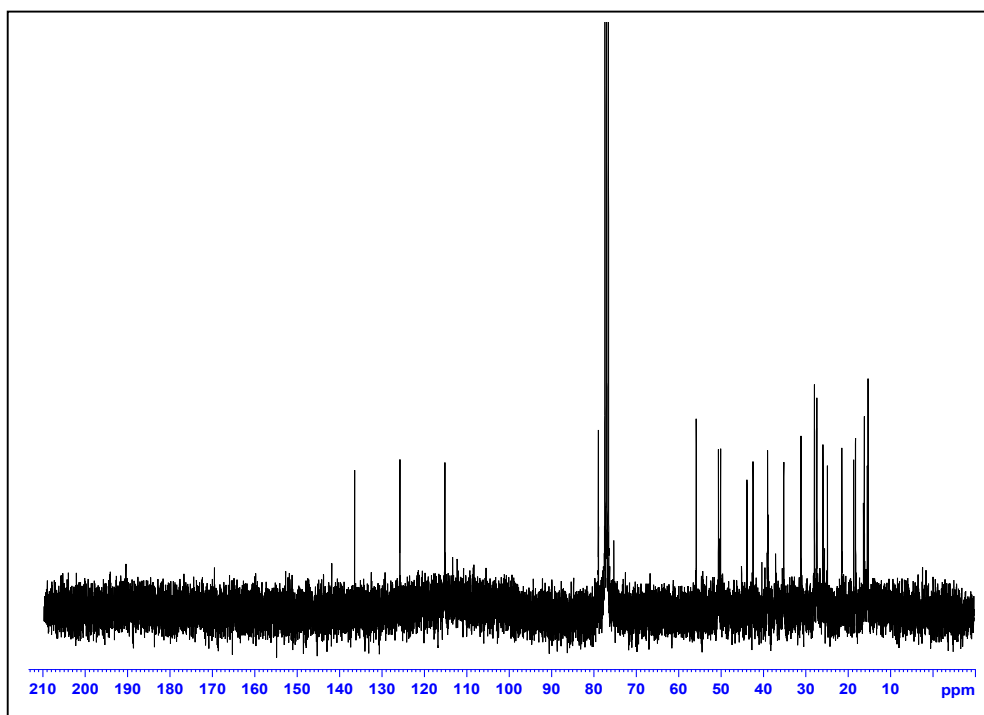


Figure 109 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TM6**

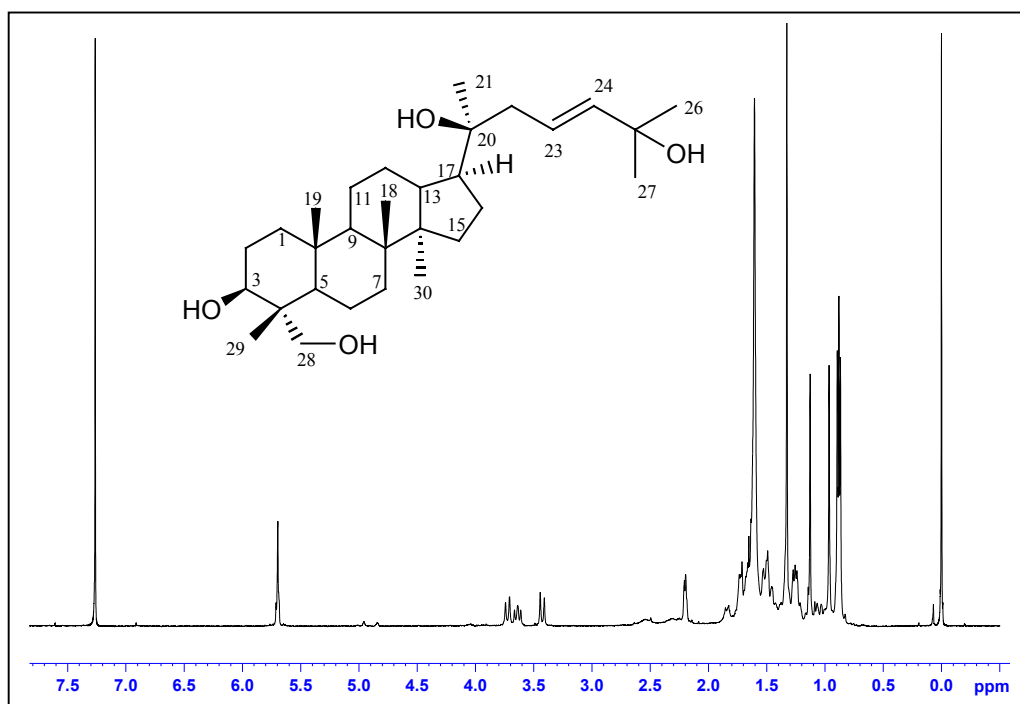


Figure 110 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TM7

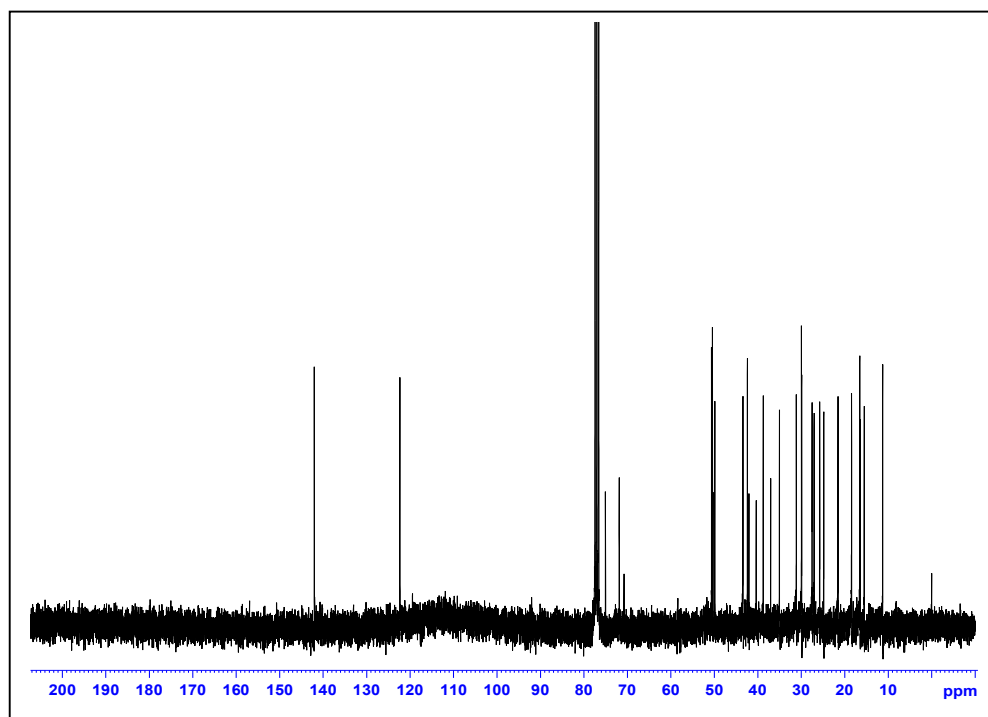


Figure 111 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TM7

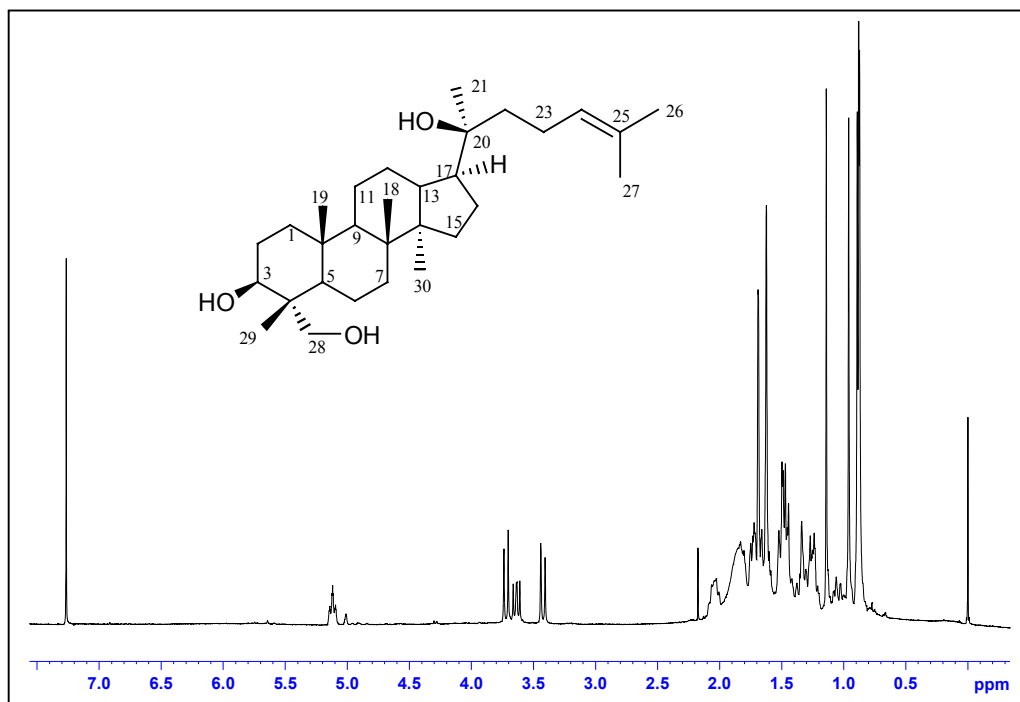


Figure 112 ^1H NMR (300 MHz, CDCl_3) spectrum of compound **TM8**

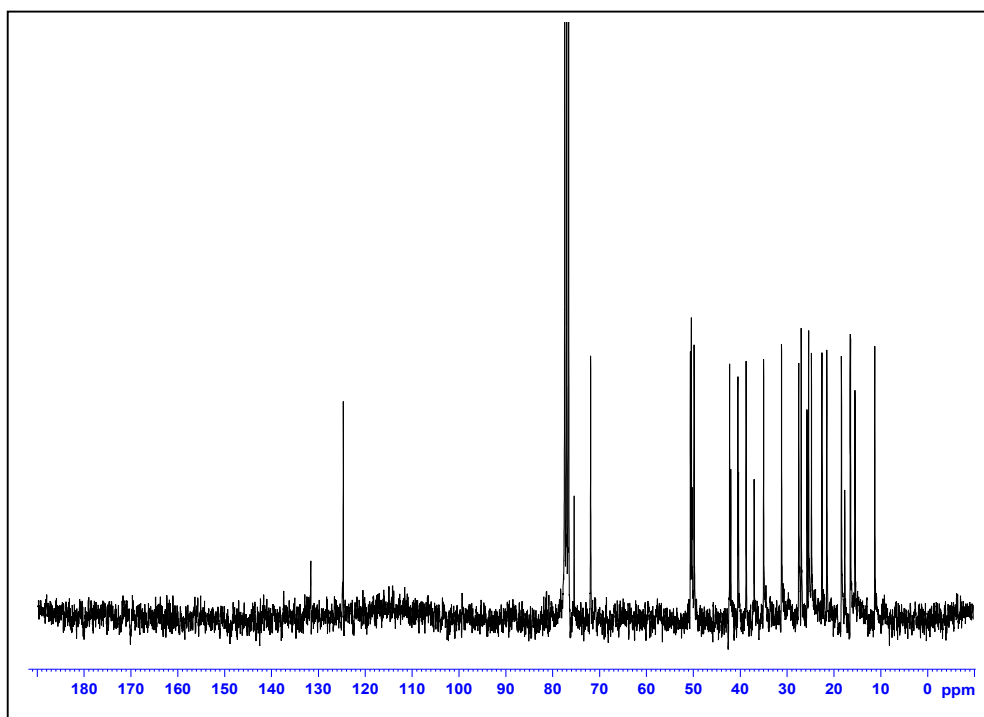


Figure 113 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound **TM8**

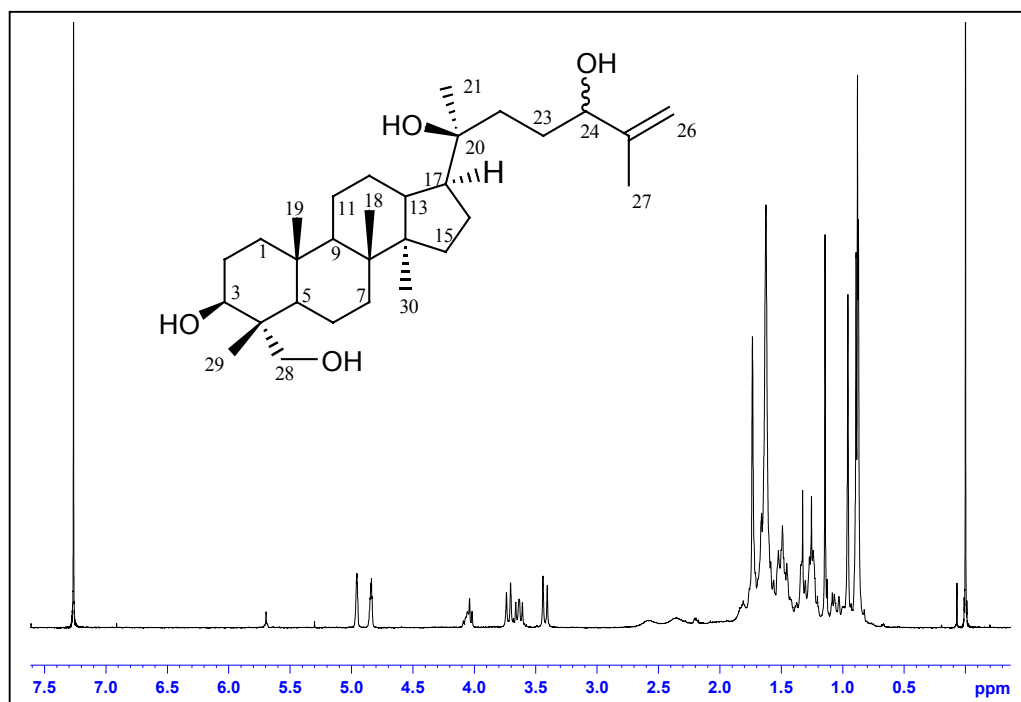


Figure 114 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TM9

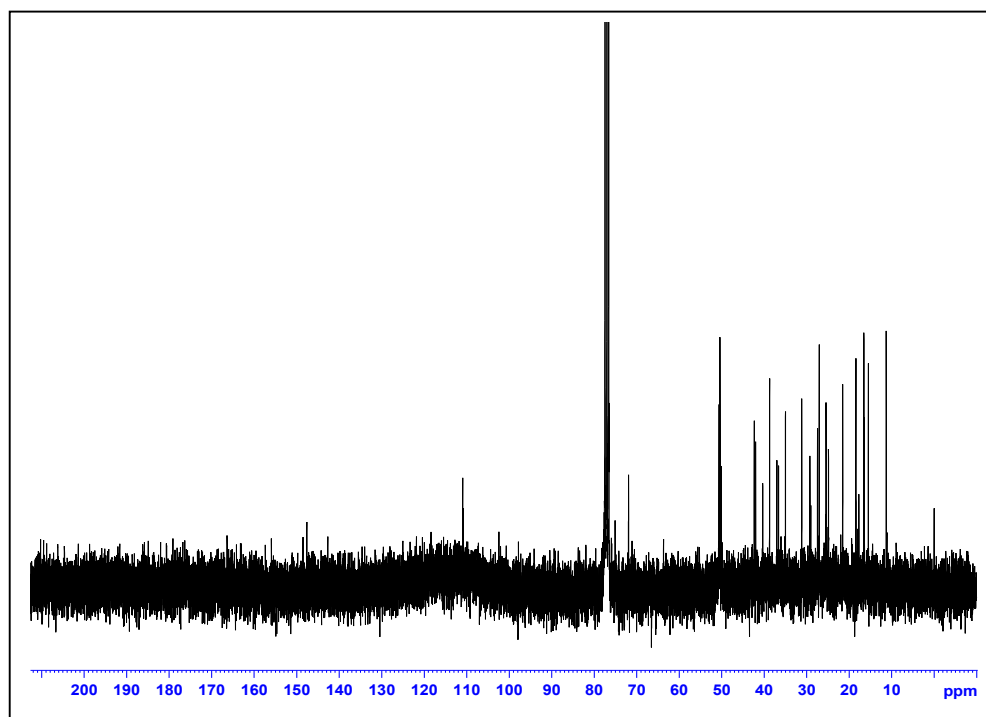


Figure 115 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TM9

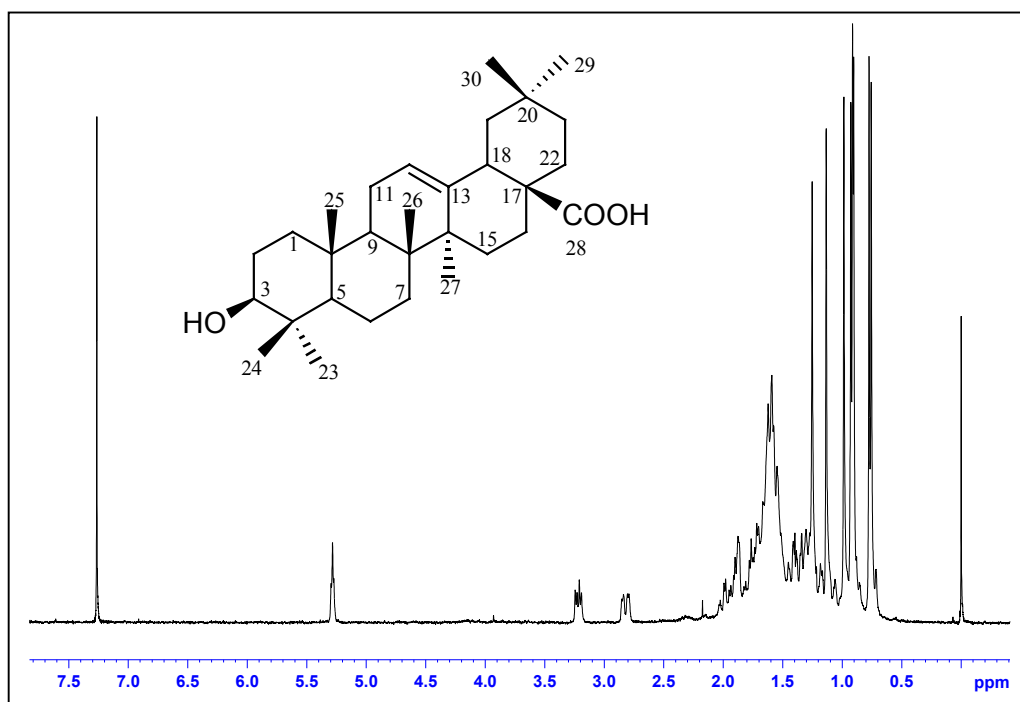


Figure 116 ^1H NMR (300 MHz, CDCl_3) spectrum of compound TO1

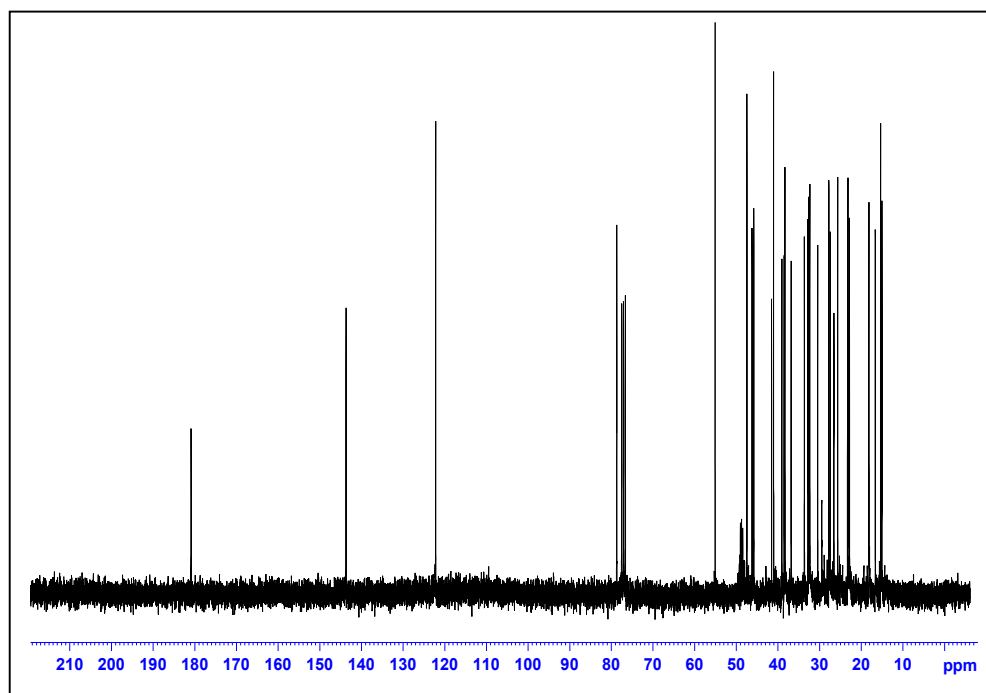


Figure 117 ^{13}C NMR (75 MHz, CDCl_3) spectrum of compound TO1