

Resolution of Orthogonally Protected *myo*-Inositols with Novozym 435 Providing an Enantioconvergent Pathway to Ac₂PIM₁

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Supporting Information

¹H, ¹³C and ³¹P NMR spectra

Compound (\pm)- 4a 500 MHz ¹ H NMR CDCl ₃	7
Compound (\pm)- 4a 126 MHz ¹³ C NMR CDCl ₃	8
Compound (\pm)- 5a 500 MHz ¹ H NMR CDCl ₃	9
Compound (\pm)- 5a 126 MHz ¹³ C NMR CDCl ₃	10
Compound (\pm)- 4b 500 MHz ¹ H NMR CDCl ₃	11
Compound (\pm)- 4b 126 MHz ¹³ C NMR CDCl ₃	12
Compound (\pm)- 5b 500 MHz ¹ H NMR CDCl ₃	13
Compound (\pm)- 5b 126 MHz ¹³ C NMR CDCl ₃	14
Compound (\pm)- 5c 500 MHz ¹ H NMR CDCl ₃	15
Compound (\pm)- 5c 126 MHz ¹³ C NMR CDCl ₃	16
Compound (\pm)- 5d 500 MHz ¹ H NMR CDCl ₃	17
Compound (\pm)- 5d 126 MHz ¹³ C NMR CDCl ₃	18
Compound (\pm)- 5e 500 MHz ¹ H NMR CDCl ₃	19
Compound (\pm)- 5e 126 MHz ¹³ C NMR CDCl ₃	20
Compound (\pm)- 5f 500 MHz ¹ H NMR CDCl ₃	21
Compound (\pm)- 5f 126 MHz ¹³ C NMR CDCl ₃	22
Compound (\pm)- 5g 500 MHz ¹ H NMR CDCl ₃	23
Compound (\pm)- 5g 126 MHz ¹³ C NMR CDCl ₃	24
Compound (\pm)- 5h 500 MHz ¹ H NMR CDCl ₃	25
Compound (\pm)- 5h 126 MHz ¹³ C NMR CDCl ₃	26
Compound (\pm)- 5i 500 MHz ¹ H NMR CDCl ₃	27

Compound (\pm)- 5i 126 MHz ^{13}C NMR CDCl ₃	28
Compound (\pm)- 5j 500 MHz ^1H NMR CDCl ₃	29
Compound (\pm)- 5j 126 MHz ^{13}C NMR CDCl ₃	30
Compound (\pm)- 6a 500 MHz ^1H NMR CDCl ₃	31
Compound (\pm)- 6a 126 MHz ^{13}C NMR CDCl ₃	32
Compound (\pm)- 6b 500 MHz ^1H NMR CDCl ₃	33
Compound (\pm)- 6b 126 MHz ^{13}C NMR CDCl ₃	34
Compound (\pm)- 6c 500 MHz ^1H NMR CDCl ₃	35
Compound (\pm)- 6c 126 MHz ^{13}C NMR CDCl ₃	36
Compound (\pm)- 6d 500 MHz ^1H NMR CDCl ₃	37
Compound (\pm)- 6d 126 MHz ^{13}C NMR CDCl ₃	38
Compound (\pm)- 6e 500 MHz ^1H NMR CDCl ₃	39
Compound (\pm)- 6e 126 MHz ^{13}C NMR CDCl ₃	40
Compound (\pm)- 6f 500 MHz ^1H NMR CDCl ₃	41
Compound (\pm)- 6f 126 MHz ^{13}C NMR CDCl ₃	42
Compound (\pm)- 6g 500 MHz ^1H NMR CDCl ₃	43
Compound (\pm)- 6g 126 MHz ^{13}C NMR CDCl ₃	44
Compound (\pm)- 6h 500 MHz ^1H NMR CDCl ₃	45
Compound (\pm)- 6h 126 MHz ^{13}C NMR CDCl ₃	46
Compound (\pm)- 6i 500 MHz ^1H NMR CDCl ₃	47
Compound (\pm)- 6i 126 MHz ^{13}C NMR CDCl ₃	48
Compound (\pm)- 6j 500 MHz ^1H NMR CDCl ₃	49
Compound (\pm)- 6j 126 MHz ^{13}C NMR CDCl ₃	50
Compound (-)- 7a 500 MHz ^1H NMR CDCl ₃	51
Compound (-)- 7a 126 MHz ^{13}C NMR CDCl ₃	52
Compound (+)- 6a 500 MHz ^1H NMR CDCl ₃	53
Compound (+)- 6a 126 MHz ^{13}C NMR CDCl ₃	54

Compound (-)- 7b 500 MHz ^1H NMR CDCl_3	55
Compound (-)- 7b 126 MHz ^{13}C NMR CDCl_3	56
Compound (+)- 6b 500 MHz ^1H NMR CDCl_3	57
Compound (+)- 6b 126 MHz ^{13}C NMR CDCl_3	58
Compound (-)- 7c 500 MHz ^1H NMR CDCl_3	59
Compound (-)- 7c 126 MHz ^{13}C NMR CDCl_3	60
Compound (+)- 6c 500 MHz ^1H NMR CDCl_3	61
Compound (+)- 6c 126 MHz ^{13}C NMR CDCl_3	62
Compound (-)- 7d 500 MHz ^1H NMR CDCl_3	63
Compound (-)- 7d 126 MHz ^{13}C NMR CDCl_3	64
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Compound (-)- 7e 126 MHz ^{13}C NMR CDCl_3	68
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Compound (-)- 7h 500 MHz ^1H NMR CDCl_3	79
Compound (-)- 7h 126 MHz ^{13}C NMR CDCl_3	80
Compound (+)- 6h 500 MHz ^1H NMR CDCl_3	81

Compound (+)- 6h 126 MHz ^{13}C NMR CDCl_3	82
Compound (-)- 7i 500 MHz ^1H NMR CDCl_3	83
Compound (-)- 7i 126 MHz ^{13}C NMR CDCl_3	84
Compound (+)- 6i 500 MHz ^1H NMR CDCl_3	85
Compound (+)- 6i 126 MHz ^{13}C NMR CDCl_3	86
Compound (-)- 6a 500 MHz ^1H NMR CDCl_3	87
Compound (-)- 6a 126 MHz ^{13}C NMR CDCl_3	88
Compound (-)- 6b 500 MHz ^1H NMR CDCl_3	89
Compound (-)- 6b 126 MHz ^{13}C NMR CDCl_3	90
Compound (-)- 6c 500 MHz ^1H NMR CDCl_3	91
Compound (-)- 6c 126 MHz ^{13}C NMR CDCl_3	92
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Compound (-)- 6d 126 MHz ^{13}C NMR CDCl_3	94
Compound (-)- 6e 500 MHz ^1H NMR CDCl_3	95
Compound (-)- 6e 126 MHz ^{13}C NMR CDCl_3	96
Compound (-)- 6f 500 MHz ^1H NMR CDCl_3	97
Compound (-)- 6f 126 MHz ^{13}C NMR CDCl_3	98
Compound (-)- 6g 500 MHz ^1H NMR CDCl_3	99
Compound (-)- 6g 126 MHz ^{13}C NMR CDCl_3	100
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Compound (-)- 6h 126 MHz ^{13}C NMR CDCl_3	102
Compound (-)- 6i 500 MHz ^1H NMR CDCl_3	103
Compound (-)- 6i 126 MHz ^{13}C NMR CDCl_3	104
Compound 12 500 MHz ^1H NMR CDCl_3	105
Compound 12 126 MHz ^{13}C NMR CDCl_3	106
Compound 13 500 MHz ^1H NMR CDCl_3	107
Compound 13 126 MHz ^{13}C NMR CDCl_3	108

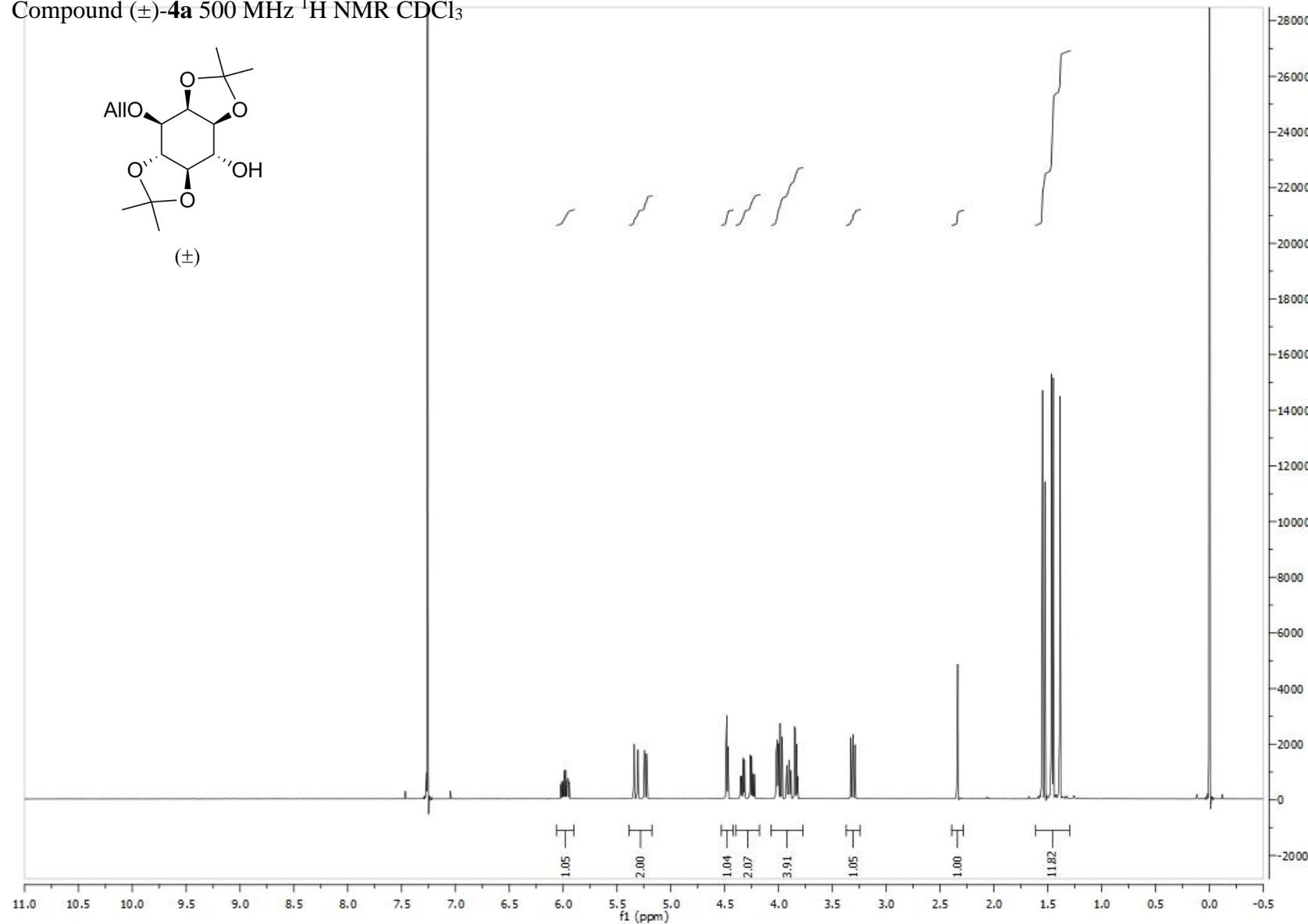
Compound 14 500 MHz ^1H NMR CDCl_3	109
Compound 14 126 MHz ^{13}C NMR CDCl_3	110
Compound 15 500 MHz ^1H NMR CDCl_3	111
Compound 16 500 MHz ^1H NMR CDCl_3	112
Compound 16 126 MHz ^{13}C NMR CDCl_3	113
Compound 17 500 MHz ^1H NMR CDCl_3	114
Compound 17 126 MHz ^{13}C NMR CDCl_3	115
Compound 18 500 MHz ^1H NMR CDCl_3	116
Compound 18 126 MHz ^{13}C NMR CDCl_3	117
Compound 19 500 MHz ^1H NMR CDCl_3	118
Compound 19 126 MHz ^{13}C NMR CDCl_3	119
Compound 20 500 MHz ^1H NMR CDCl_3	120
Compound 20 126 MHz ^{13}C NMR CDCl_3	121
Compound 21 500 MHz ^1H NMR CDCl_3	122
Compound 21 126 MHz ^{13}C NMR CDCl_3	123
Compound 22 500 MHz ^1H NMR CDCl_3	124
Compound 22 126 MHz ^{13}C NMR CDCl_3	125
Compound 11 500 MHz ^1H NMR CDCl_3	126
Compound 11 126 MHz ^{13}C NMR CDCl_3	127
Compound <i>ent</i> - 12 500 MHz ^1H NMR CDCl_3	128
Compound <i>ent</i> - 12 126 MHz ^{13}C NMR CDCl_3	129
Compound <i>ent</i> - 13 500 MHz ^1H NMR CDCl_3	130
Compound <i>ent</i> - 13 126 MHz ^{13}C NMR CDCl_3	131
Compound <i>ent</i> - 14 500 MHz ^1H NMR CDCl_3	132
Compound <i>ent</i> - 14 126 MHz ^{13}C NMR CDCl_3	133
Compound 24 500 MHz ^1H NMR CDCl_3	134
Compound 24 126 MHz ^{13}C NMR CDCl_3	135

Compound 25 500 MHz ^1H NMR CDCl_3	136
Compound 25 126 MHz ^{13}C NMR CDCl_3	137
Compound 26 500 MHz ^1H NMR CDC	138
Compound 26 126 MHz ^{13}C NMR CDCl_3	139
Compound 27 500 MHz ^1H NMR CDCl_3	140
Compound 27 126 MHz ^{13}C NMR CDCl_3	141
Compound 28 500 MHz ^1H NMR CDCl_3	142
Compound 28 126 MHz ^{13}C NMR CDCl_3	143
Compound 29 500 MHz ^1H NMR CDCl_3	144
Compound 29 126 MHz ^{13}C NMR CDCl_3	145
Compound 31 500 MHz ^1H NMR CDCl_3	146
Compound 31 126 MHz ^{13}C NMR CDCl_3	147
Compound 31 202 MHz ^{31}P NMR CDCl_3	148
Compound 9 500 MHz ^1H NMR $\text{CDCl}_3/\text{CD}_3\text{OD}/\text{D}_2\text{O}$	149
Compound 9 126 MHz ^{13}C NMR $\text{CDCl}_3/\text{CD}_3\text{OD}/\text{D}_2\text{O}$	150
Compound 9 202 MHz ^{31}P NMR $\text{CDCl}_3/\text{CD}_3\text{OD}/\text{D}_2\text{O}$	151

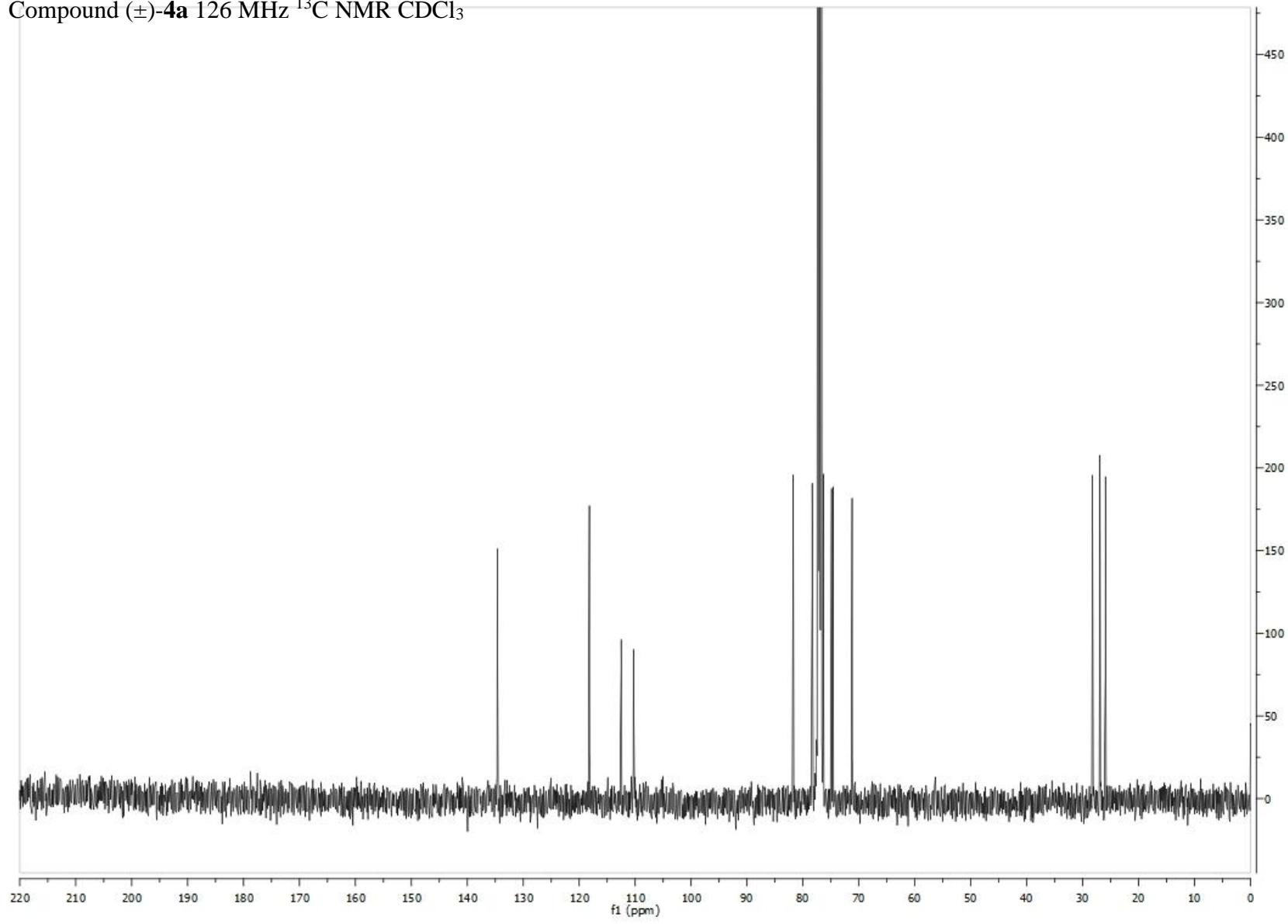
HPLC Chromatograms

Compounds (\pm) - 6a , $(+)$ - 6a and $(-)$ - 6a chiral HPLC	152
Compounds (\pm) - 6b , $(+)$ - 6b and $(-)$ - 6b chiral HPLC	153
Compounds (\pm) - 6c , $(+)$ - 6c and $(-)$ - 6c chiral HPLC	154
Compounds (\pm) - 6i , $(+)$ - 6i from $(+)$ - 6d and $(-)$ - 6i from $(-)$ - 6d chiral HPLC	155
Compounds (\pm) - 6e , $(+)$ - 6e and $(-)$ - 6e chiral HPLC	156
Compounds (\pm) - 6f , $(+)$ - 6f and $(-)$ - 6f chiral HPLC	157
Compounds (\pm) - 6g , $(+)$ - 6g and $(-)$ - 6g chiral HPLC	158
Compounds (\pm) - 6h , $(+)$ - 6h and $(-)$ - 6h chiral HPLC	159
Compounds (\pm) - 6i , $(+)$ - 6i and $(-)$ - 6i chiral HPLC	160

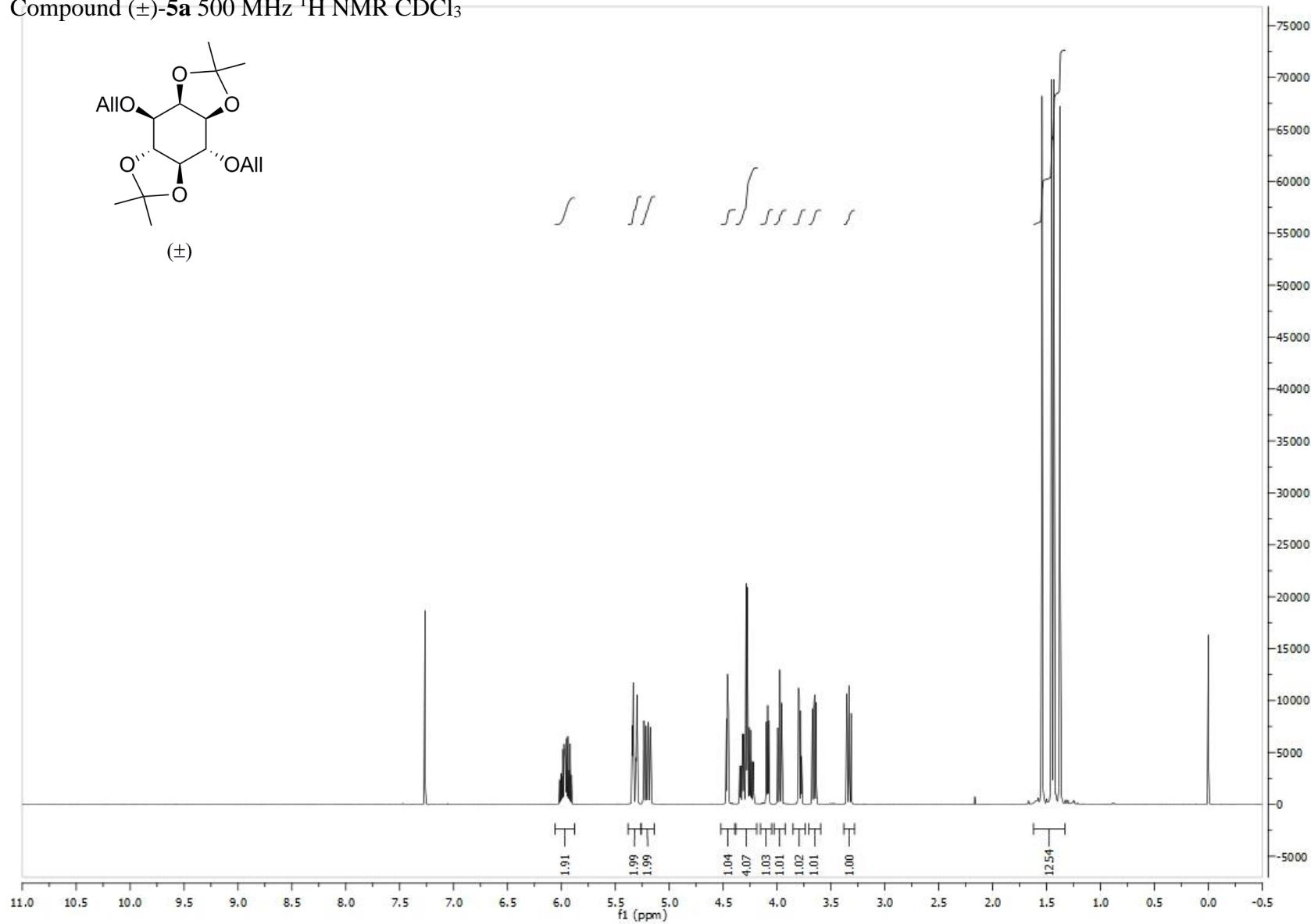
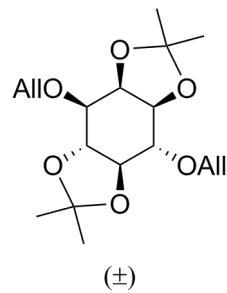
Compound (\pm)-4a 500 MHz ^1H NMR CDCl_3



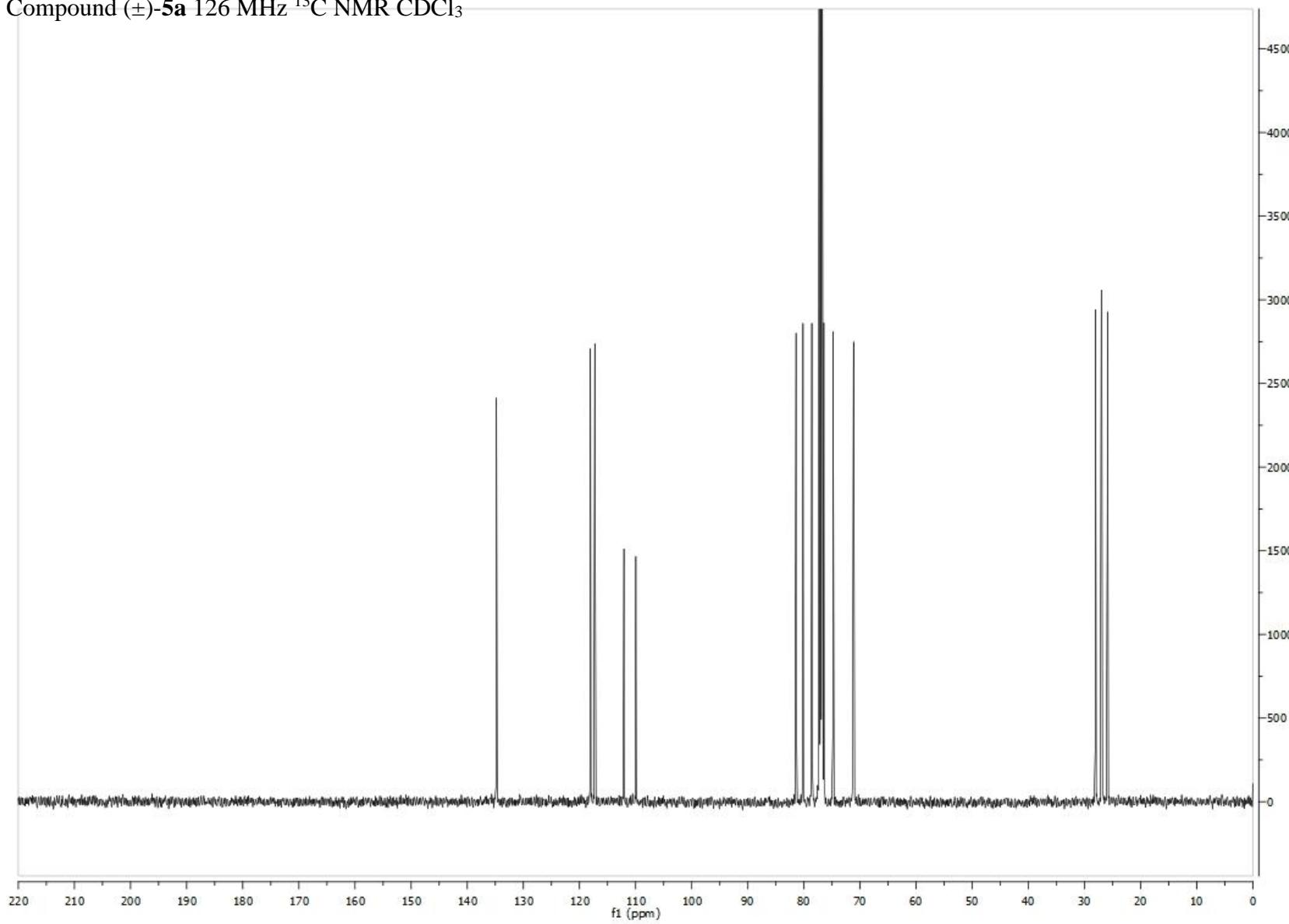
Compound (\pm)-**4a** 126 MHz ^{13}C NMR CDCl_3



Compound (\pm)-**5a** 500 MHz ^1H NMR CDCl_3

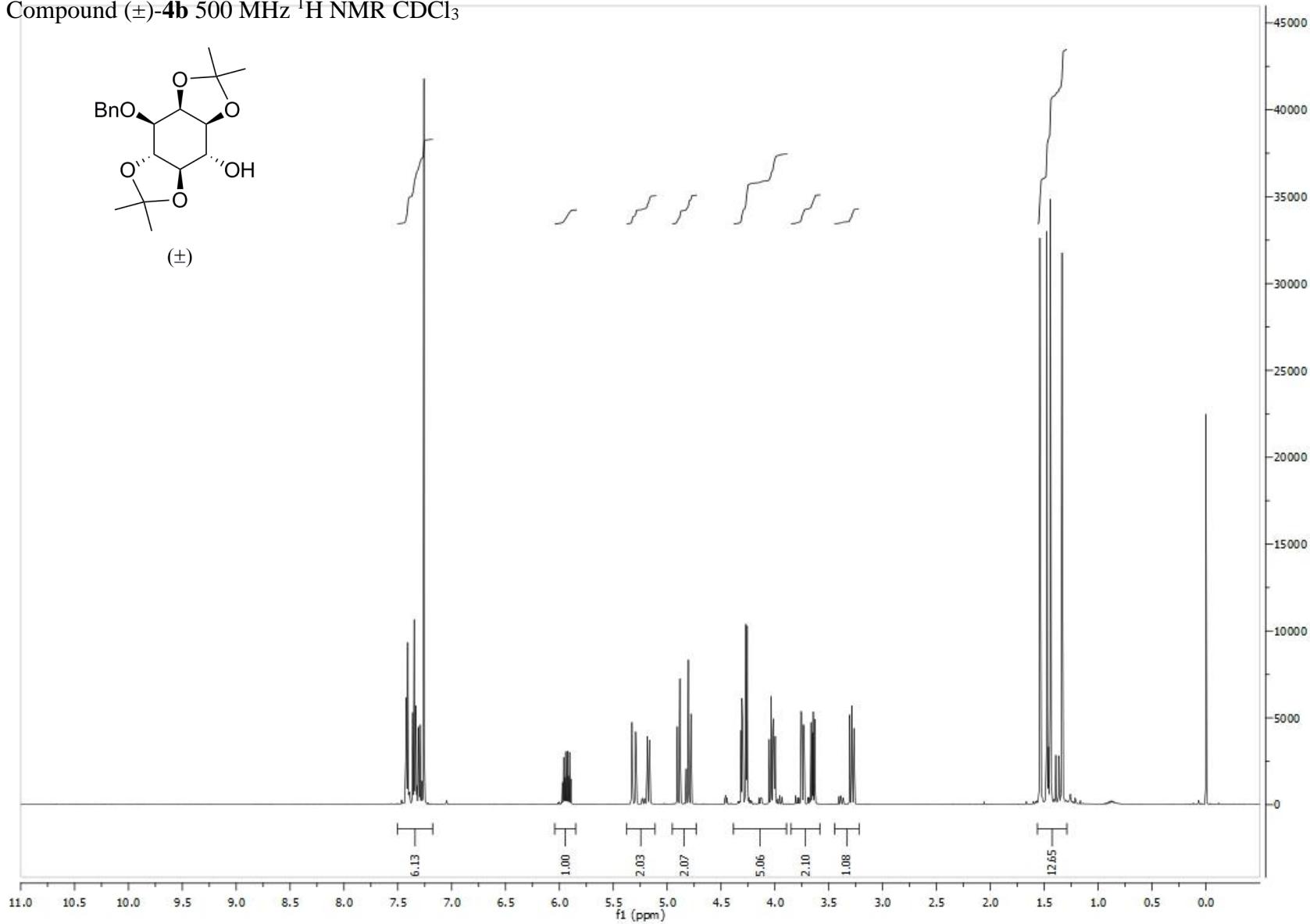


Compound (\pm)-**5a** 126 MHz ^{13}C NMR CDCl_3

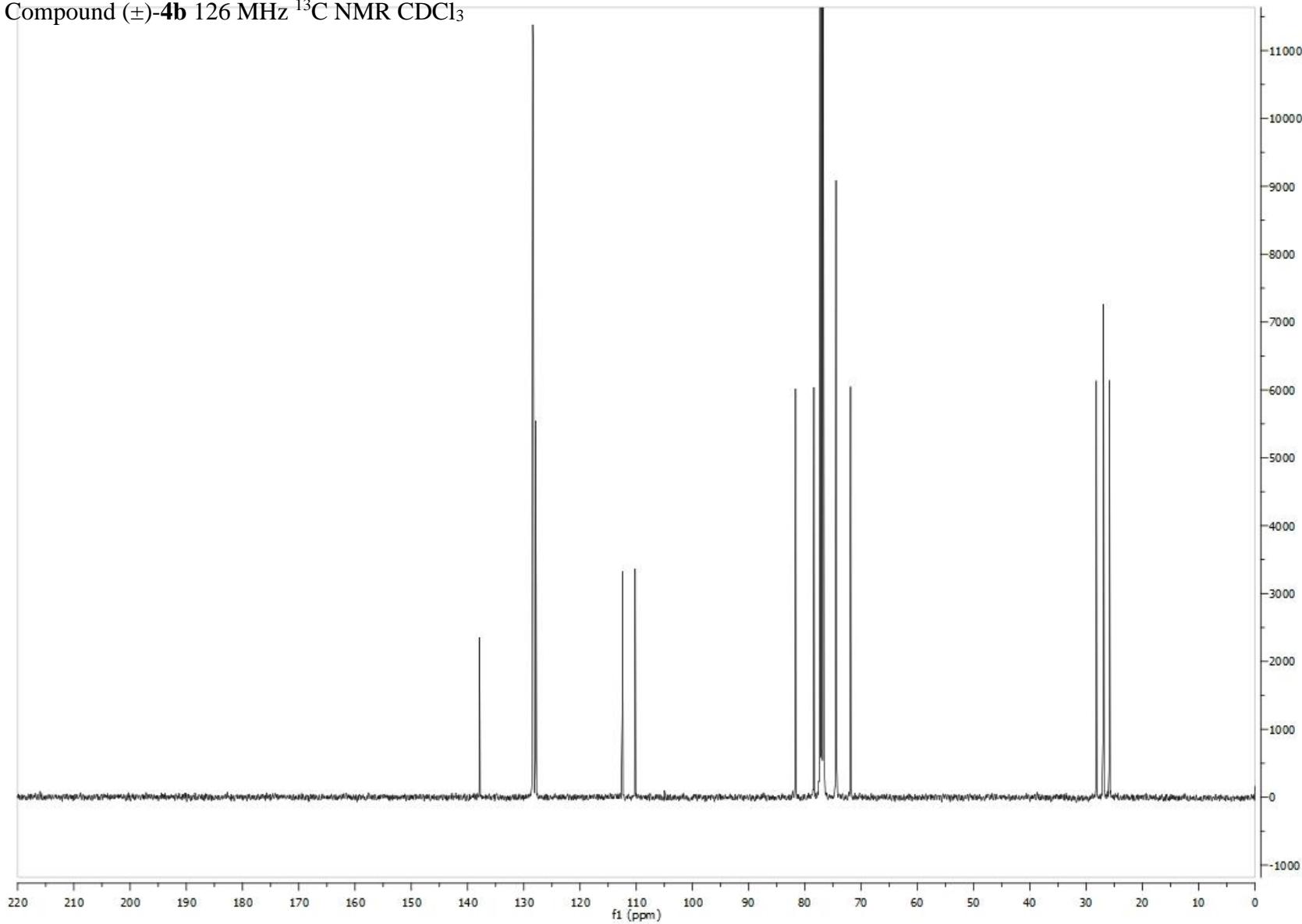


S10

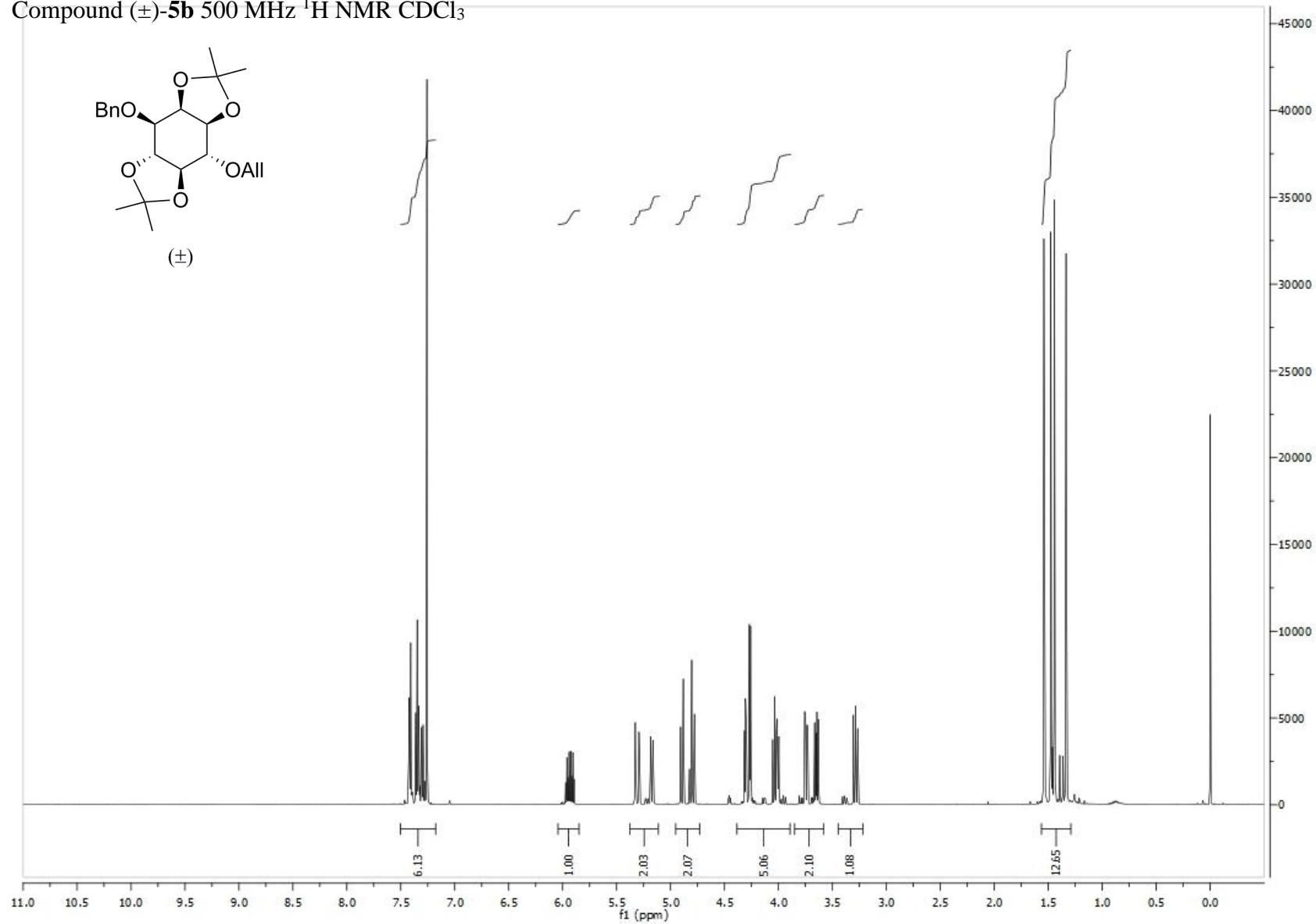
Compound (\pm)-**4b** 500 MHz ^1H NMR CDCl_3



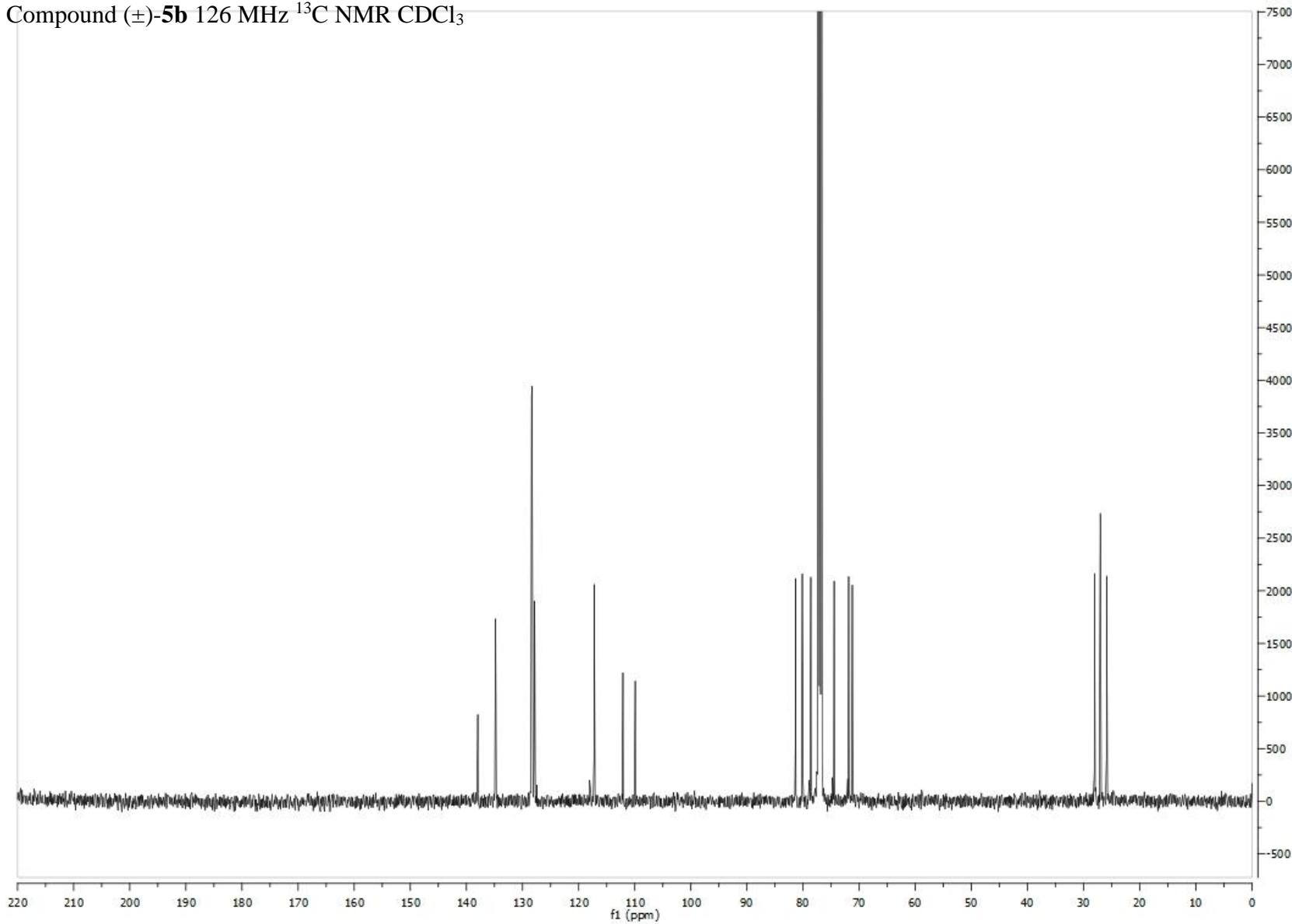
Compound (\pm)-**4b** 126 MHz ^{13}C NMR CDCl_3



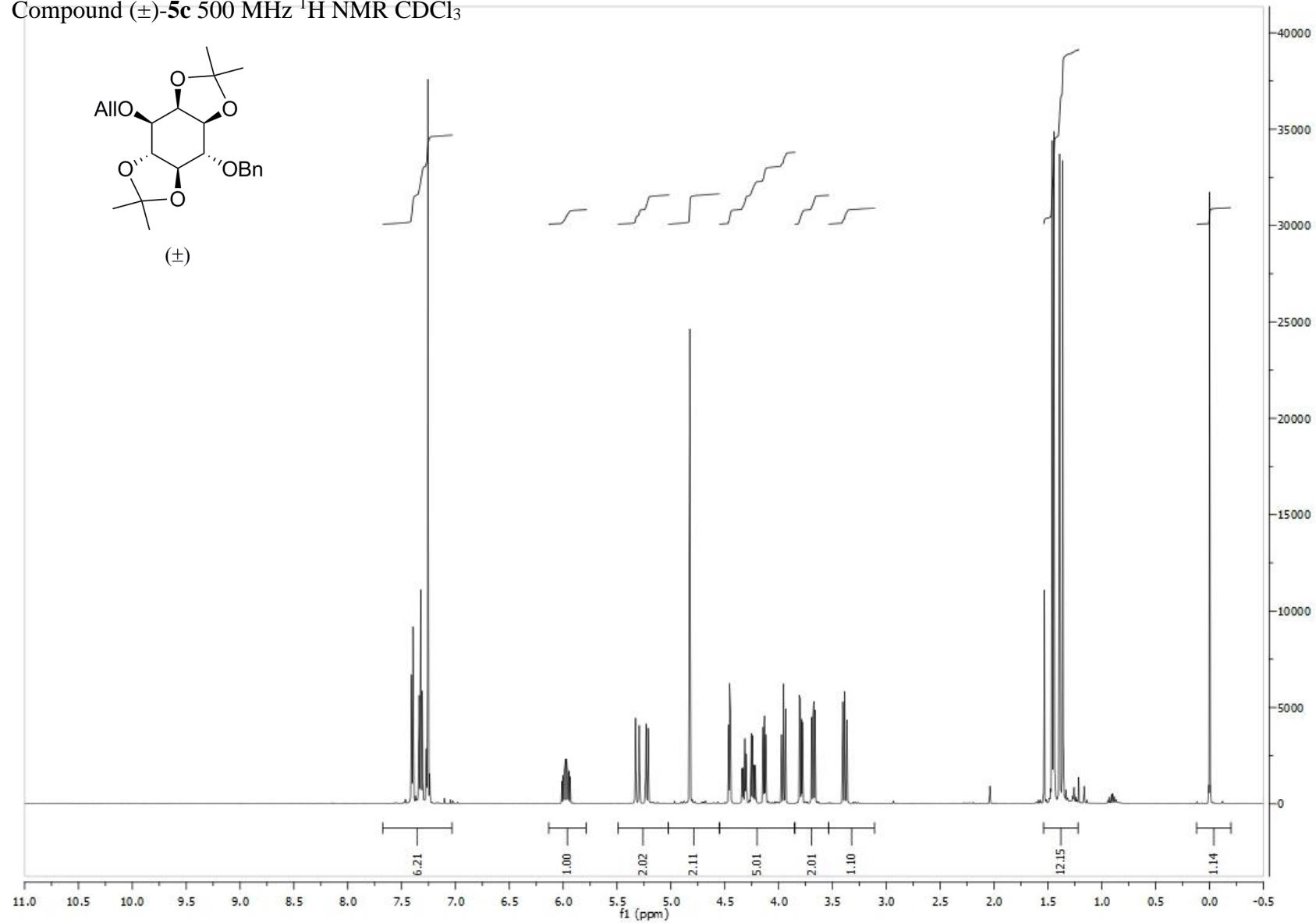
Compound (\pm)-**5b** 500 MHz ^1H NMR CDCl_3



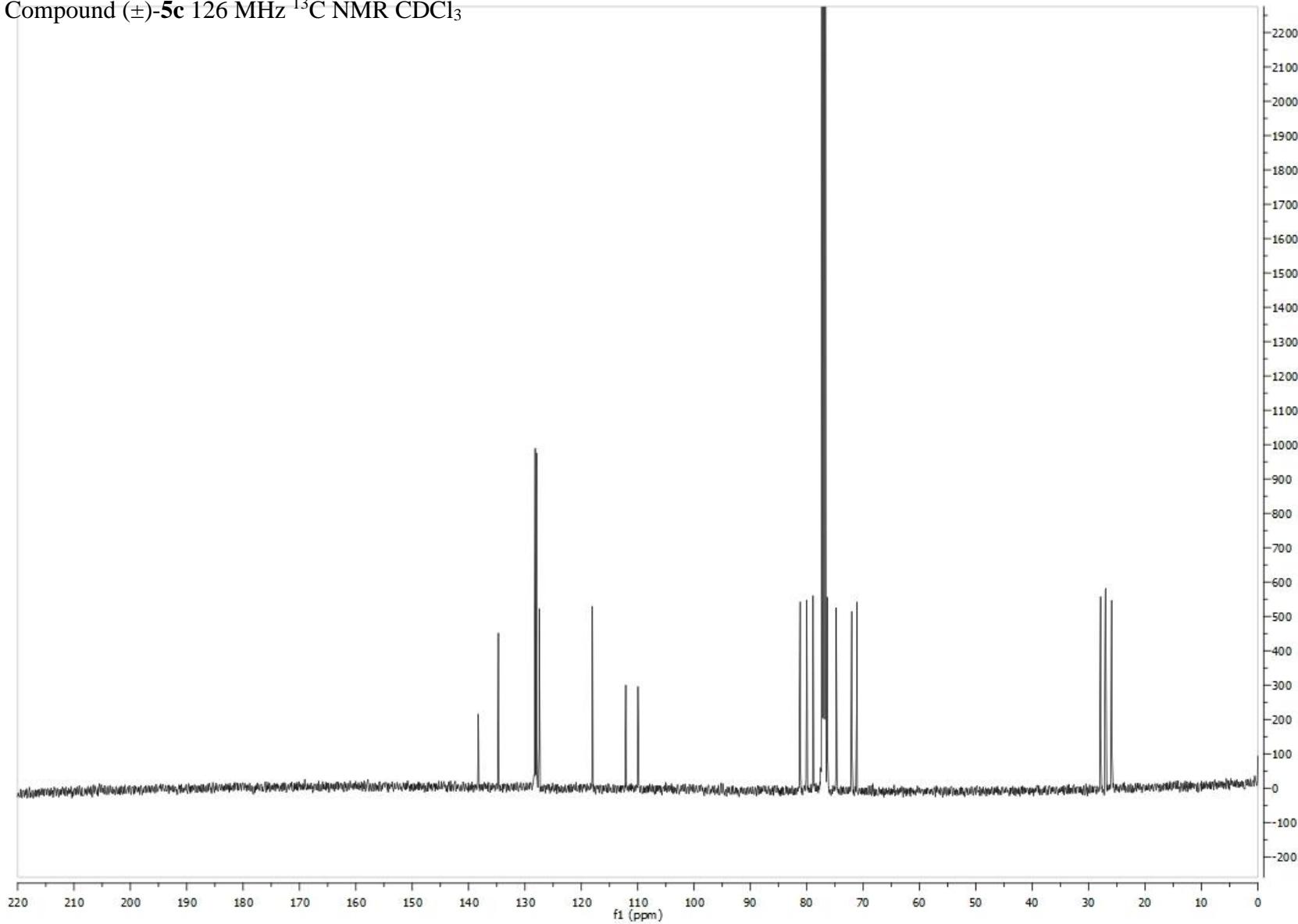
Compound (\pm)-**5b** 126 MHz ^{13}C NMR CDCl_3



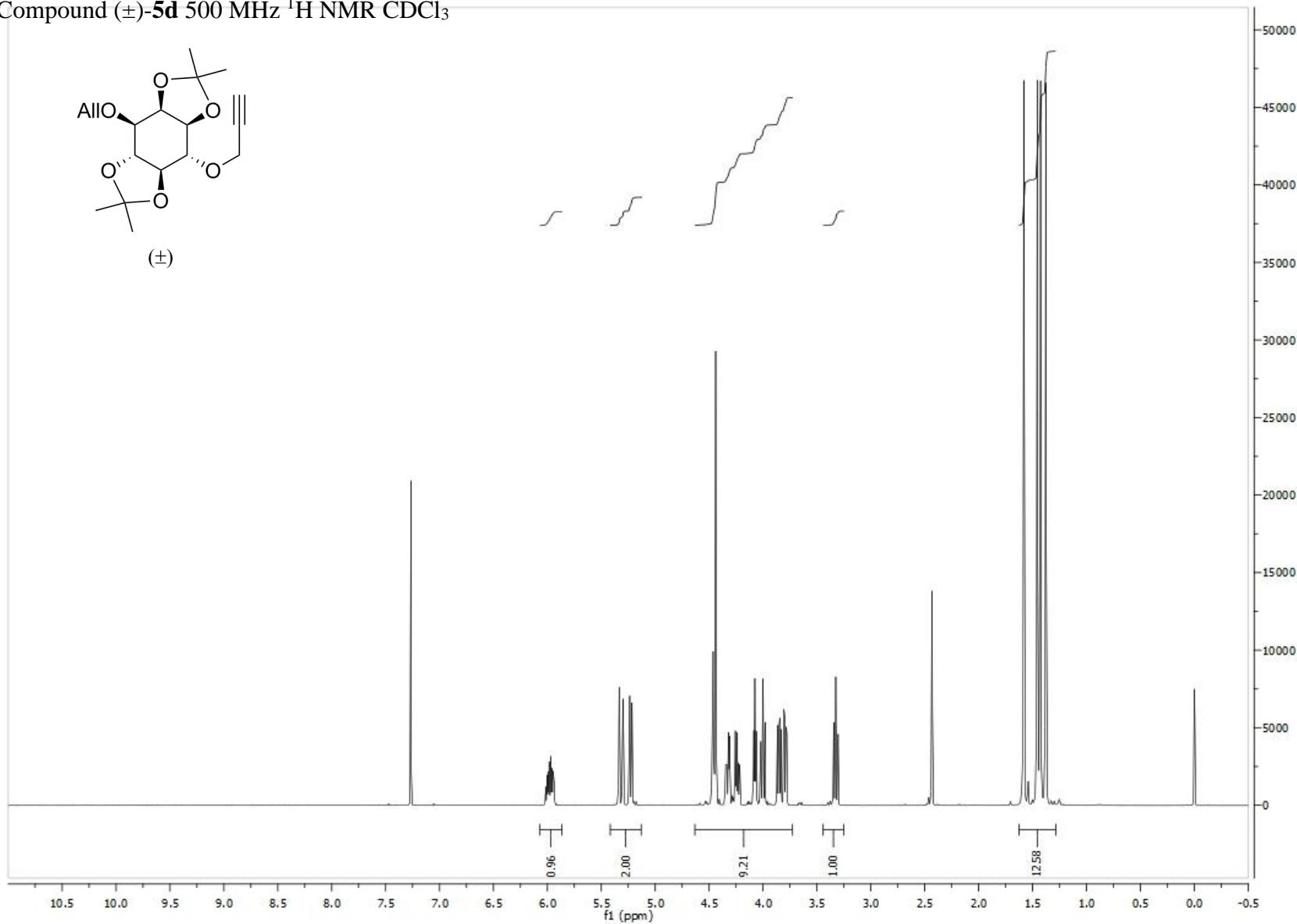
Compound (\pm)-**5c** 500 MHz ^1H NMR CDCl_3



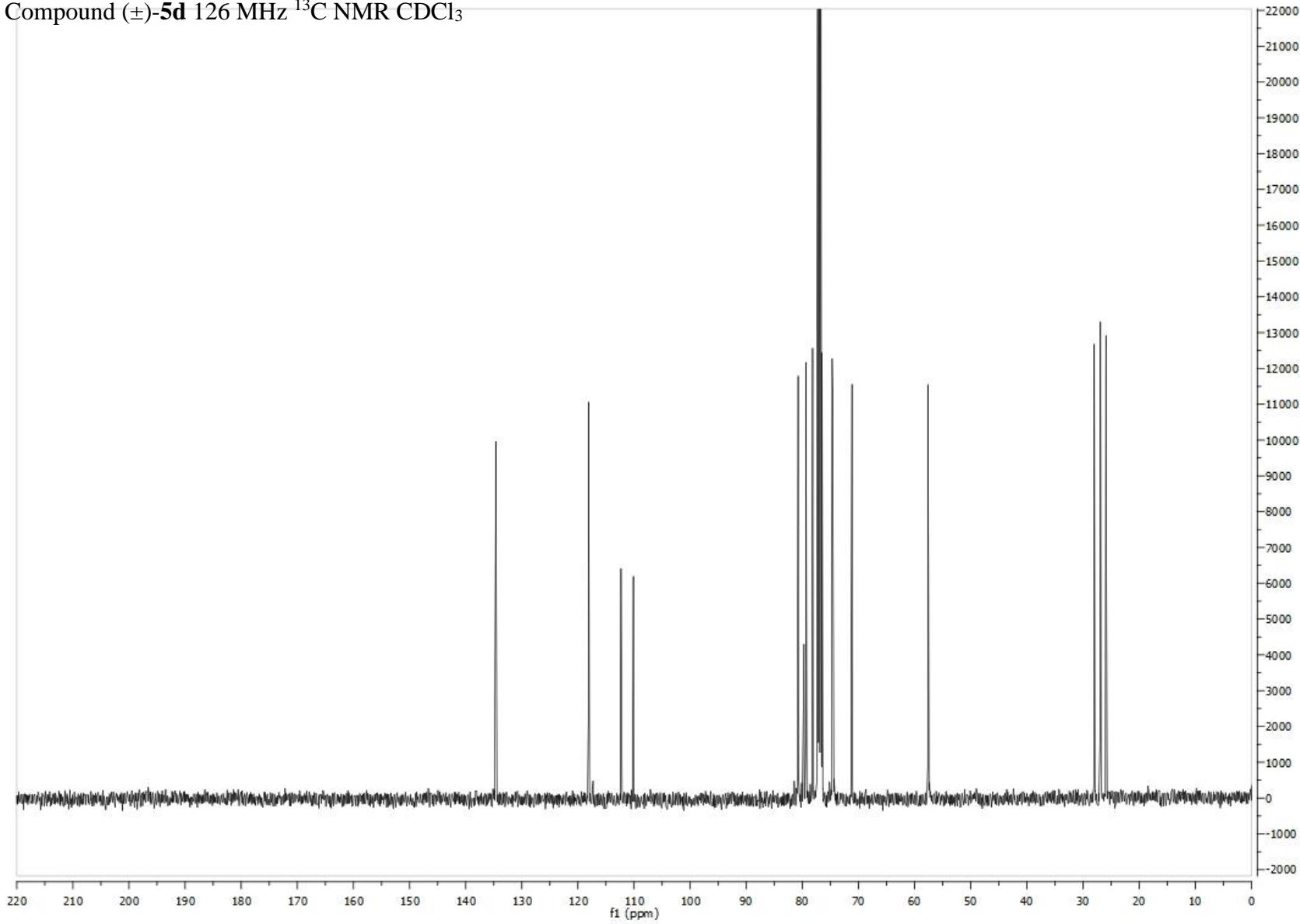
Compound (\pm)-**5c** 126 MHz ^{13}C NMR CDCl_3



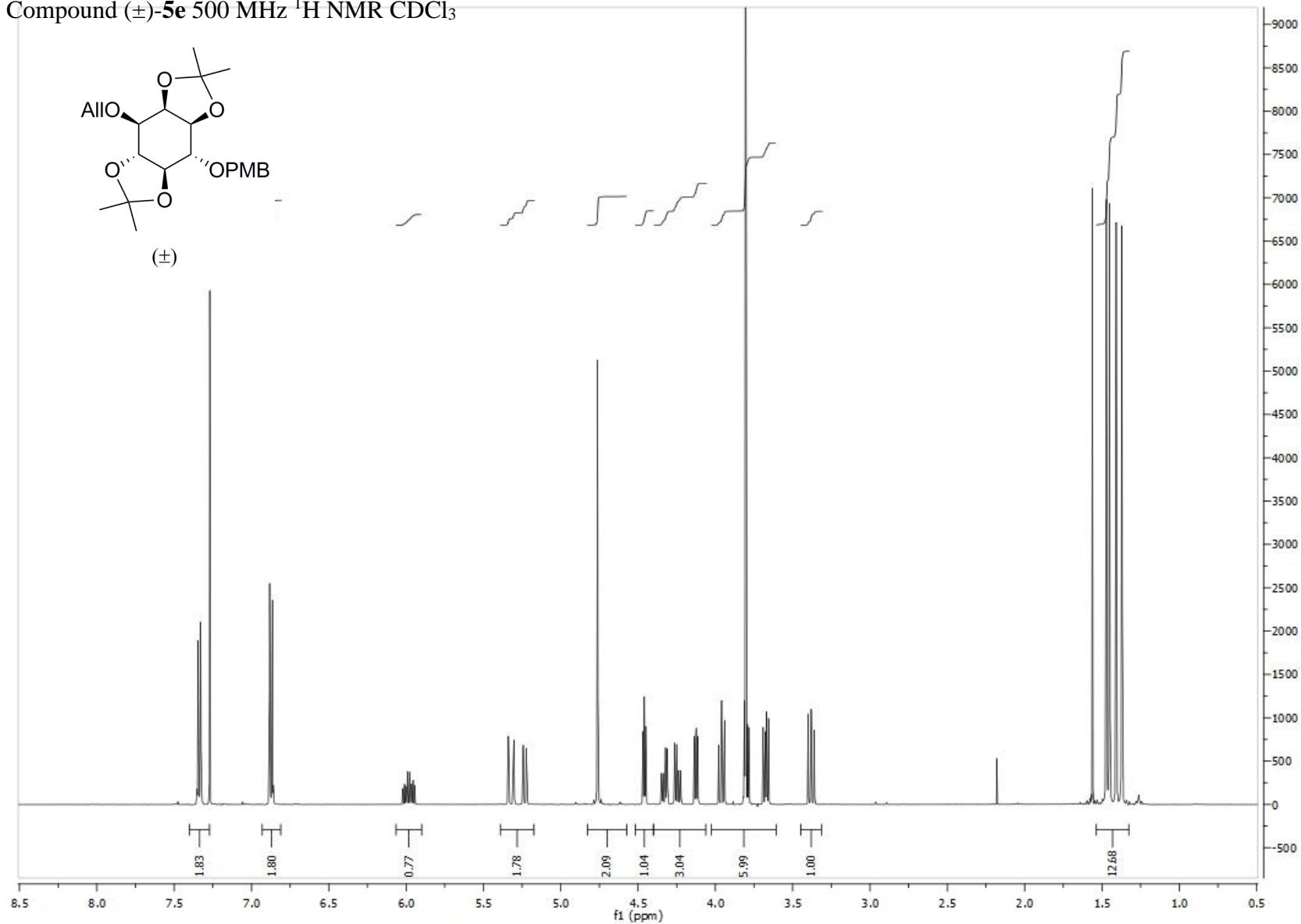
Compound (\pm)-**5d** 500 MHz ^1H NMR CDCl_3



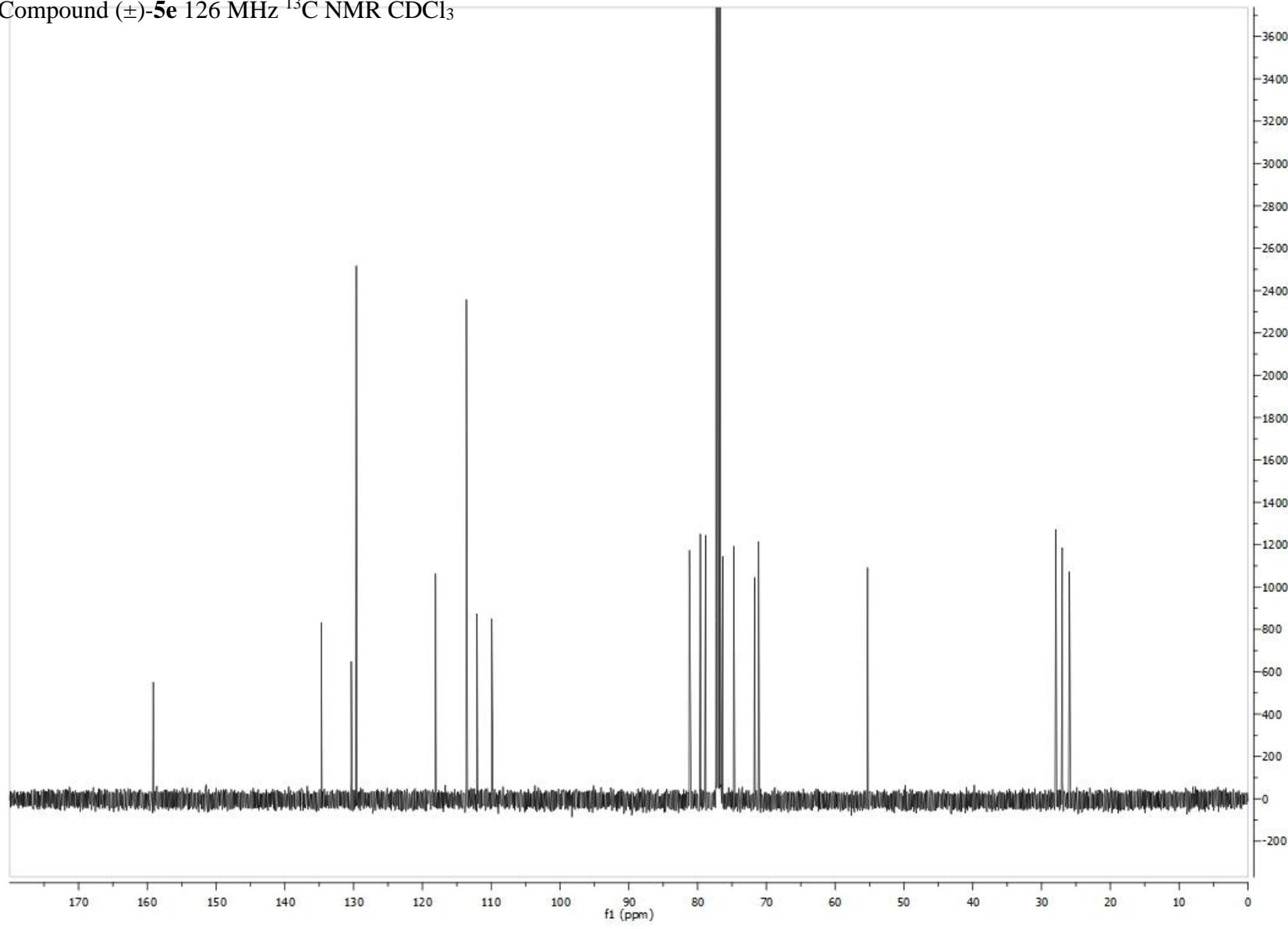
Compound (\pm)-**5d** 126 MHz ^{13}C NMR CDCl_3



Compound (\pm)-**5e** 500 MHz ^1H NMR CDCl_3

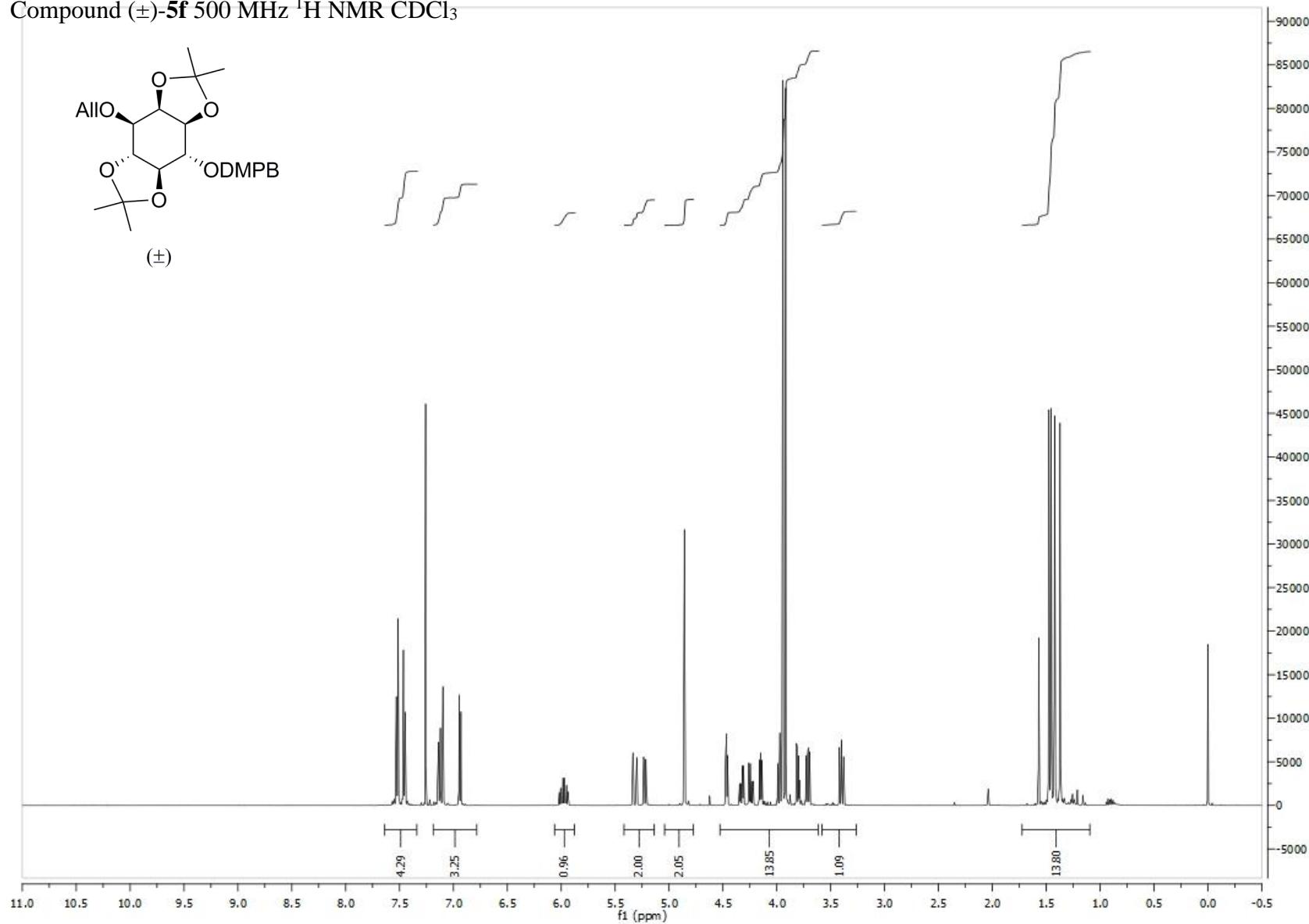


Compound (\pm)-**5e** 126 MHz ^{13}C NMR CDCl_3

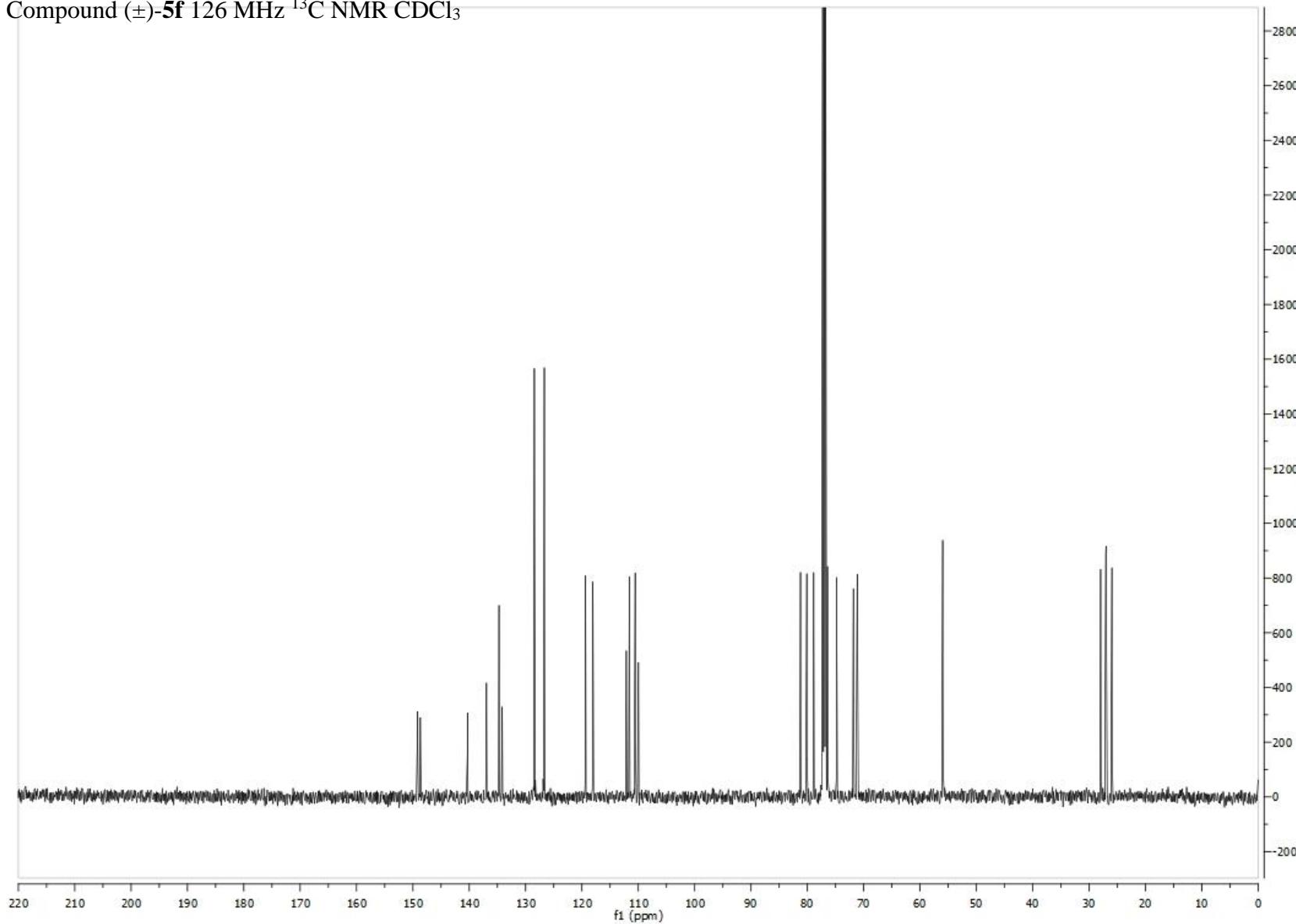


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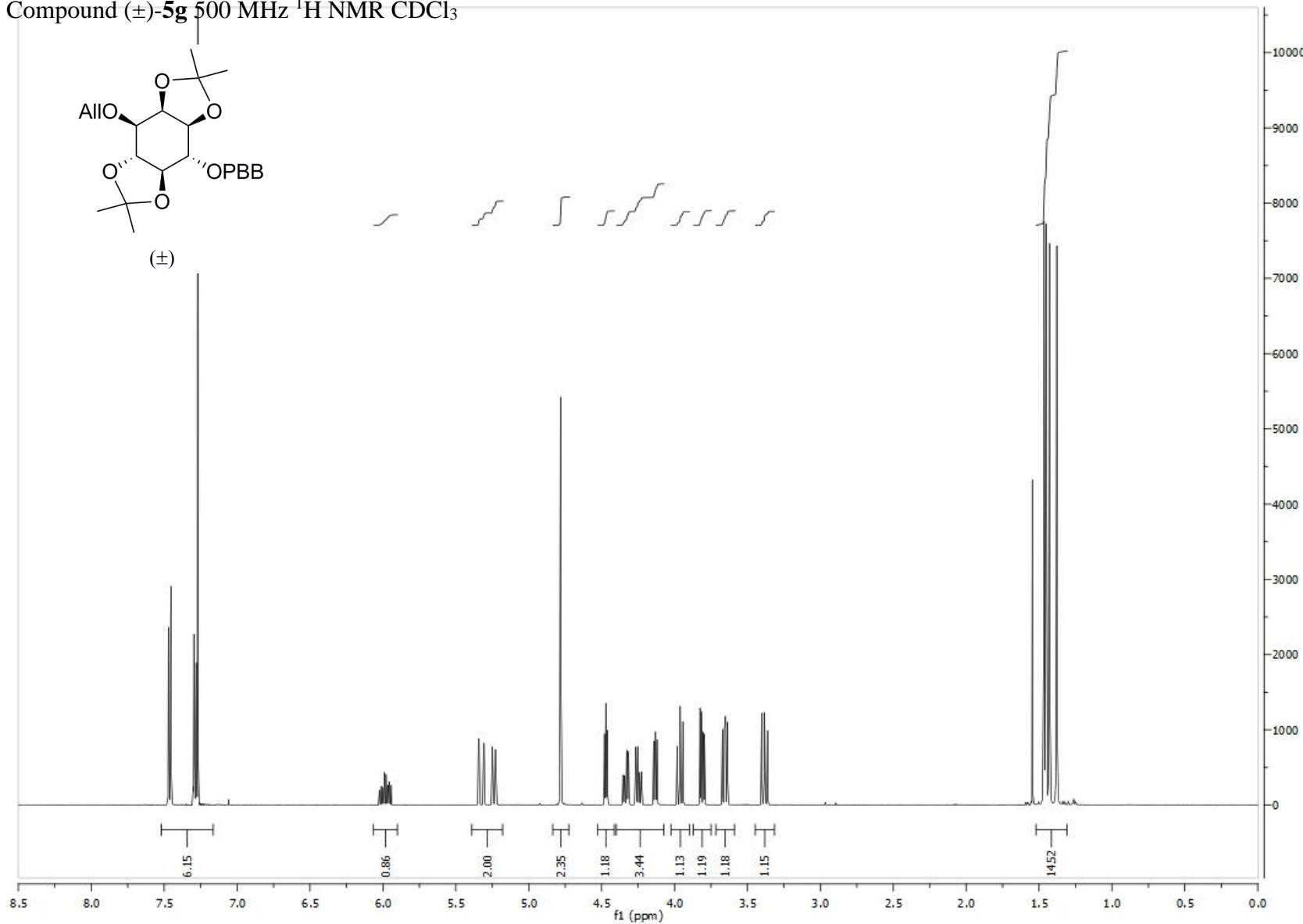
Compound (\pm)-**5f** 500 MHz ^1H NMR CDCl_3



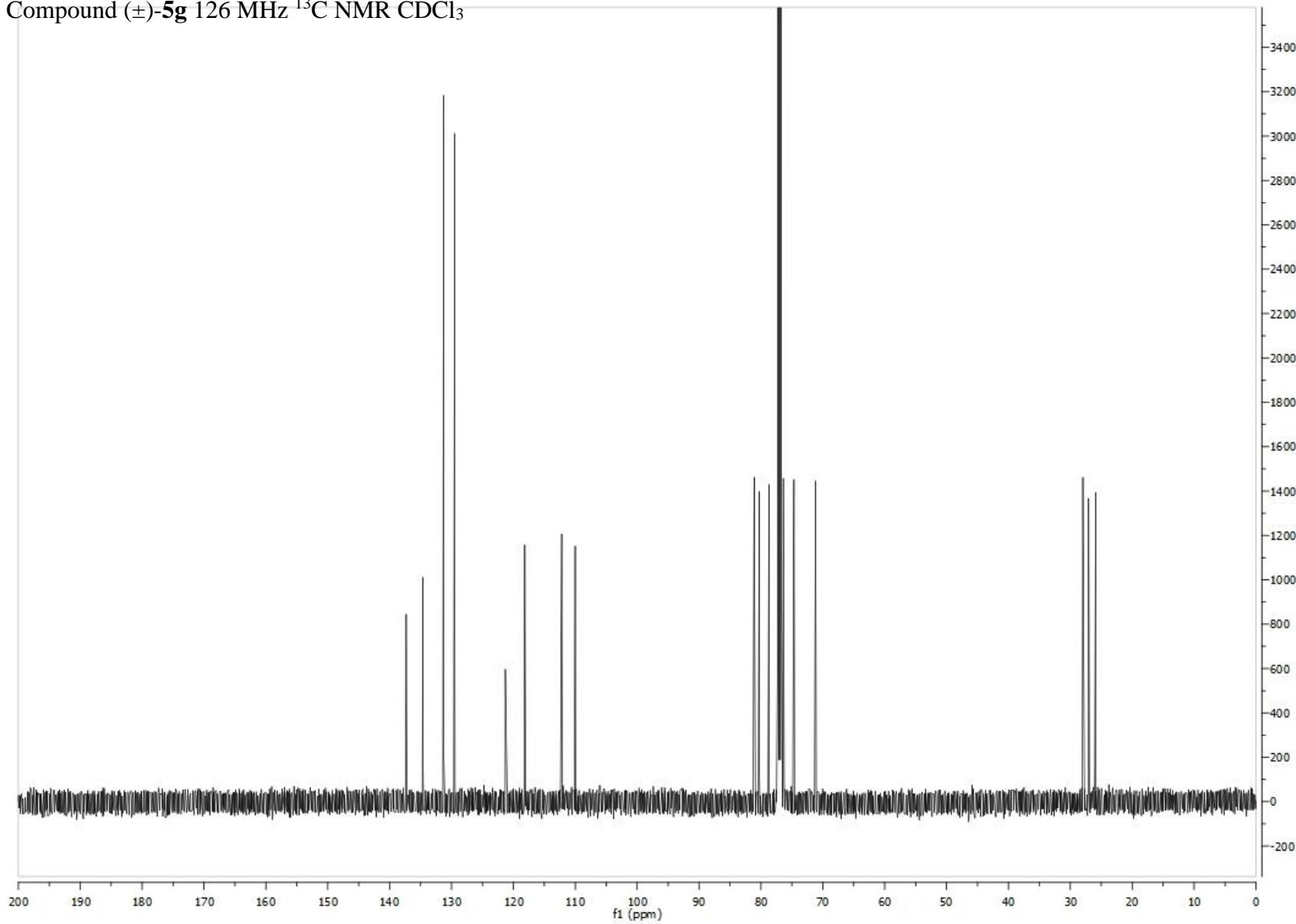
Compound (\pm)-**5f** 126 MHz ^{13}C NMR CDCl_3



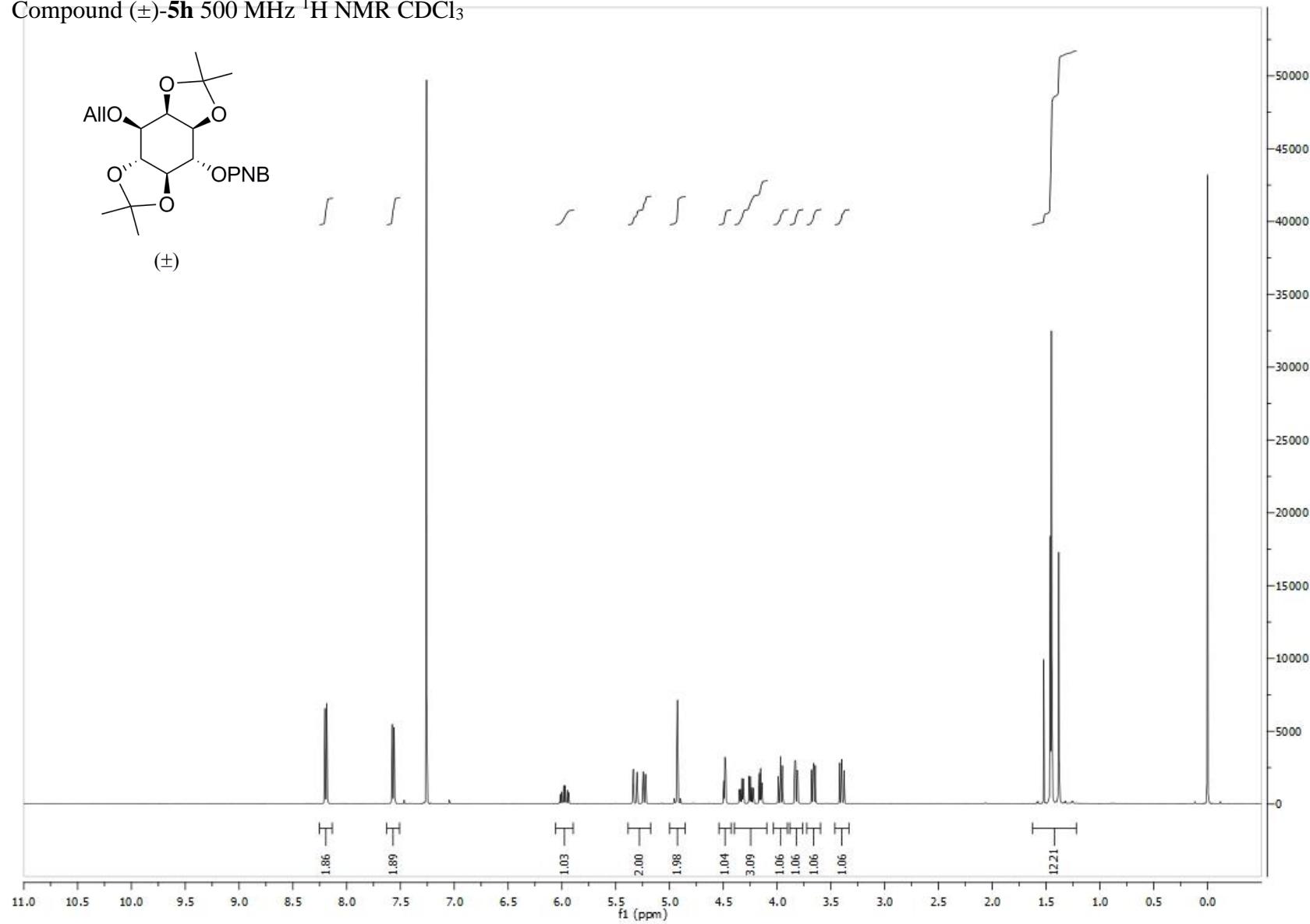
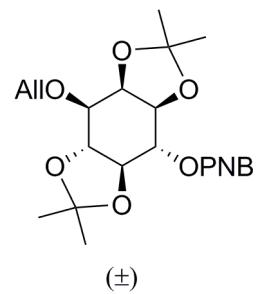
Compound (\pm)-**5g** 500 MHz ^1H NMR CDCl_3



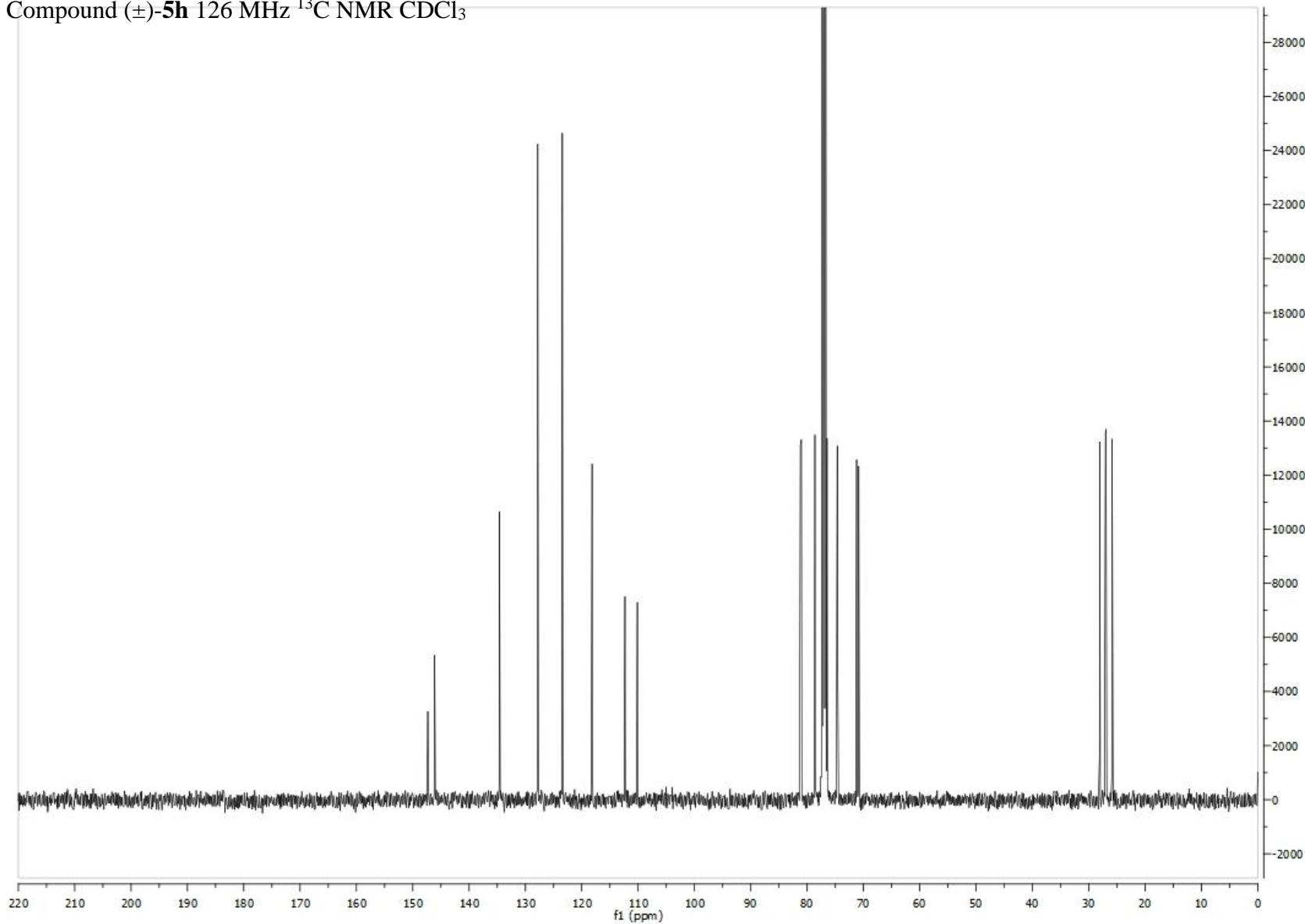
Compound (\pm)-**5g** 126 MHz ^{13}C NMR CDCl_3



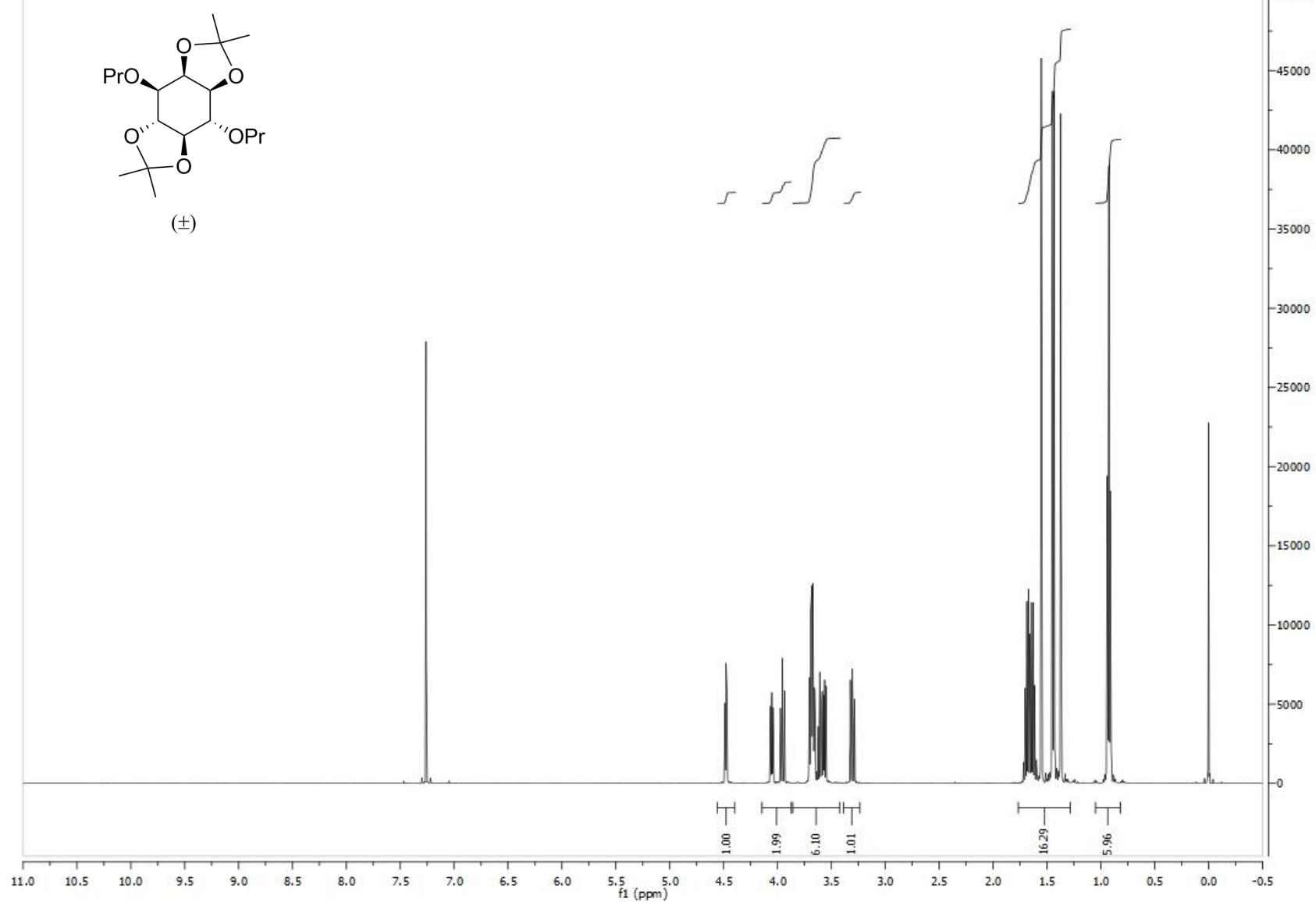
Compound (\pm)-**5h** 500 MHz ^1H NMR CDCl₃



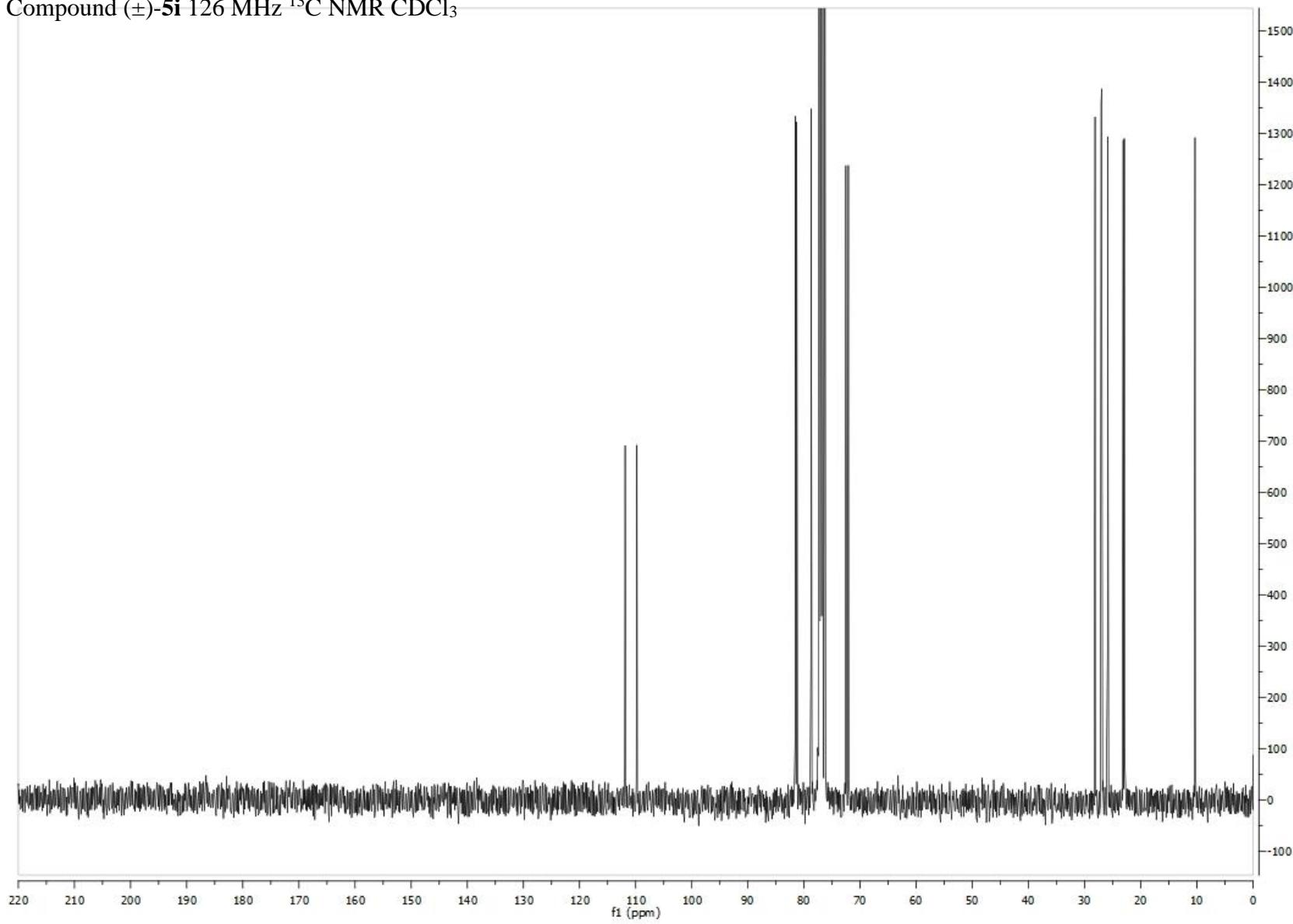
Compound (\pm)-**5h** 126 MHz ^{13}C NMR CDCl_3



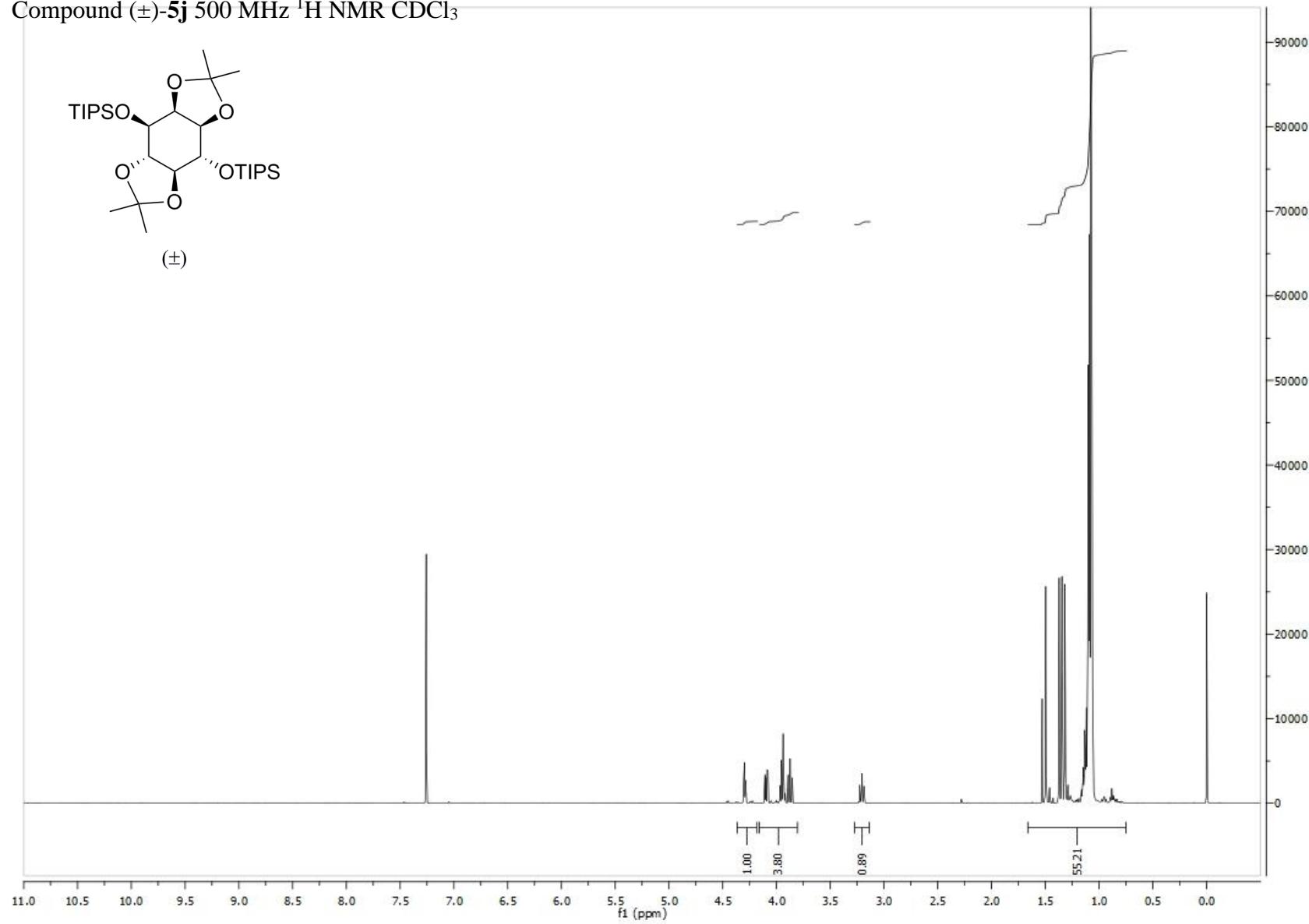
Compound (\pm)-**5i** 500 MHz ^1H NMR CDCl_3



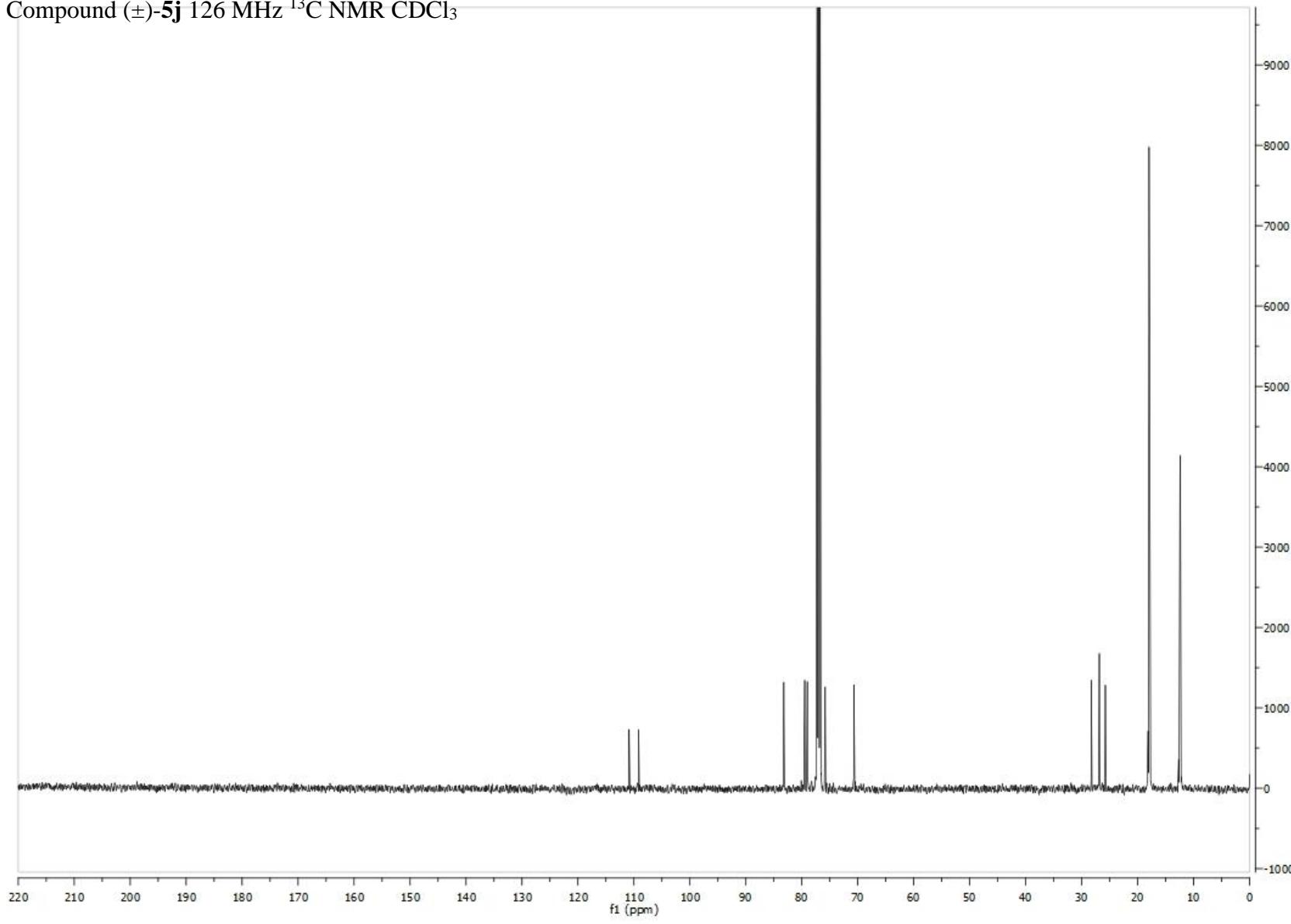
Compound (\pm)-**5i** 126 MHz ^{13}C NMR CDCl_3



Compound (\pm)-**5j** 500 MHz ^1H NMR CDCl_3

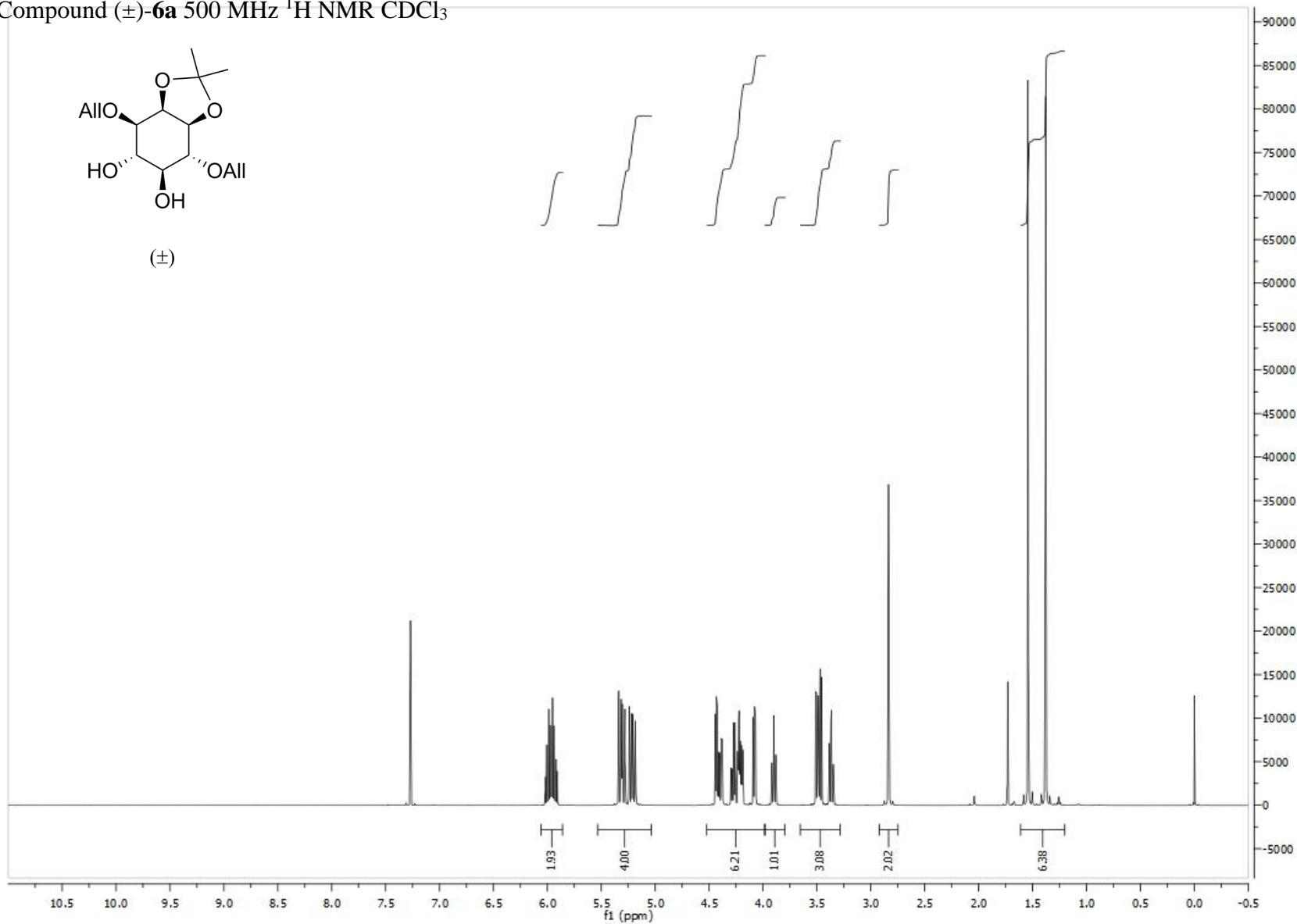


Compound (\pm)-**5j** 126 MHz ^{13}C NMR CDCl_3

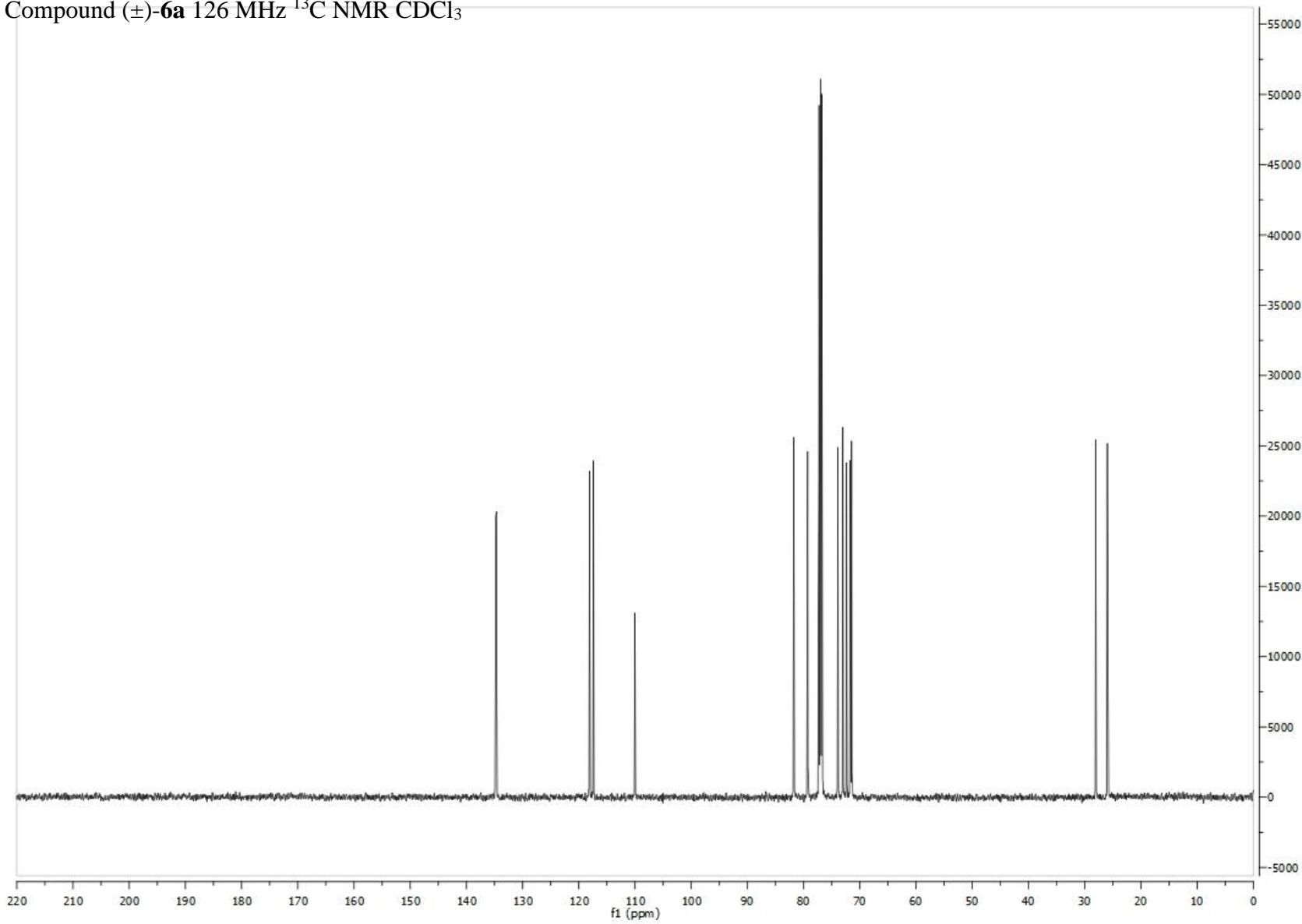


S30

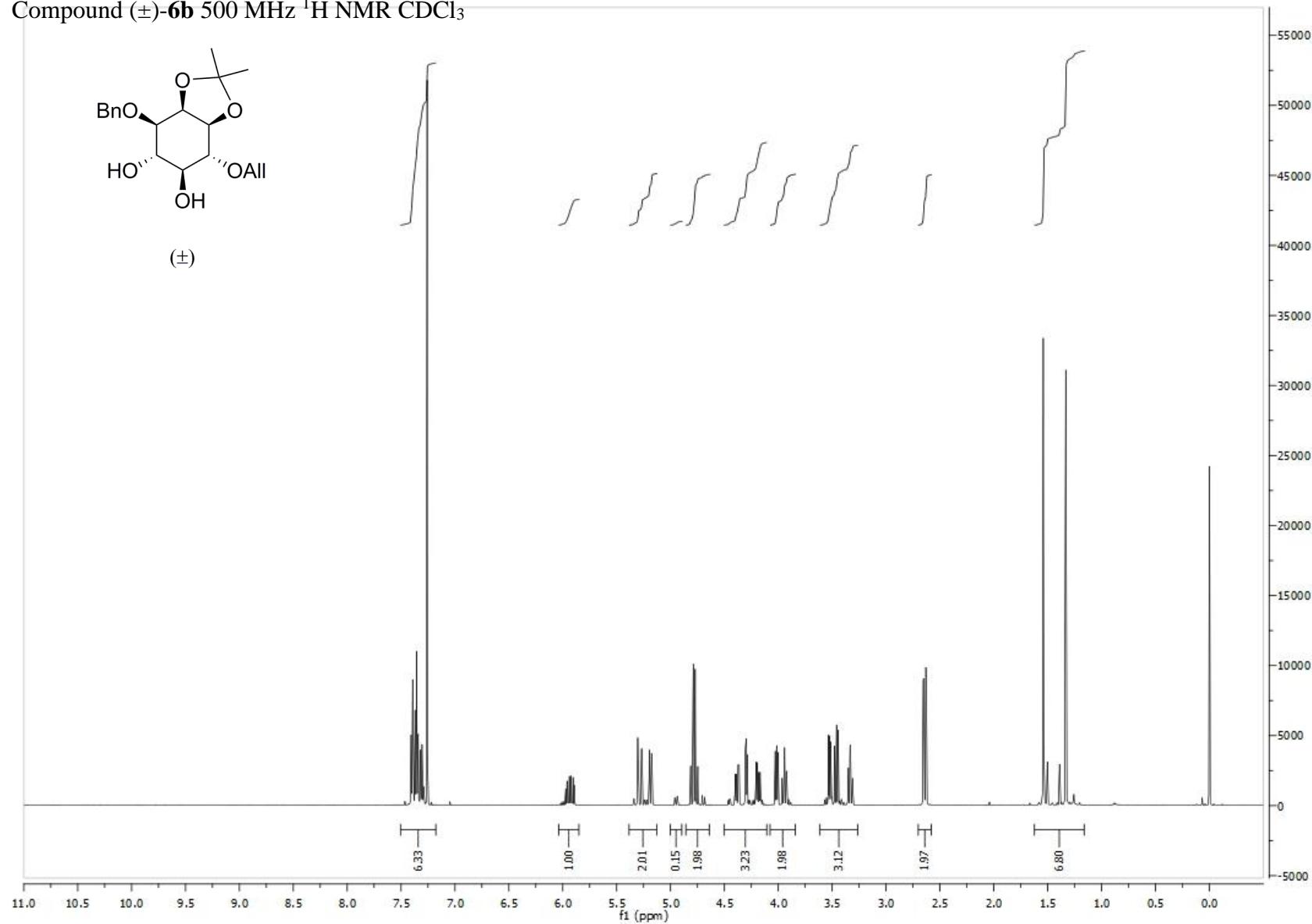
Compound (\pm)-**6a** 500 MHz ^1H NMR CDCl_3



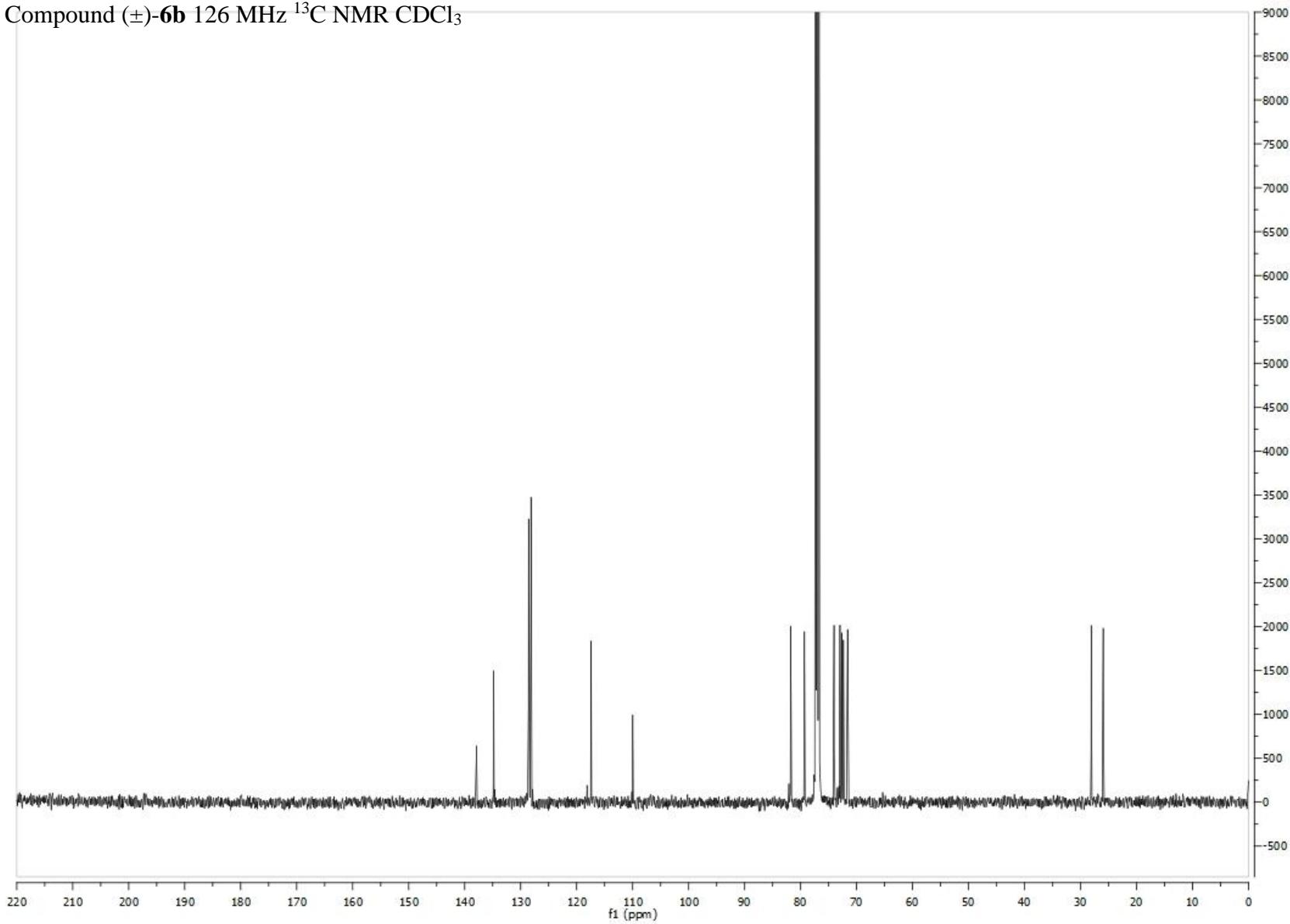
Compound (\pm)-**6a** 126 MHz ^{13}C NMR CDCl_3



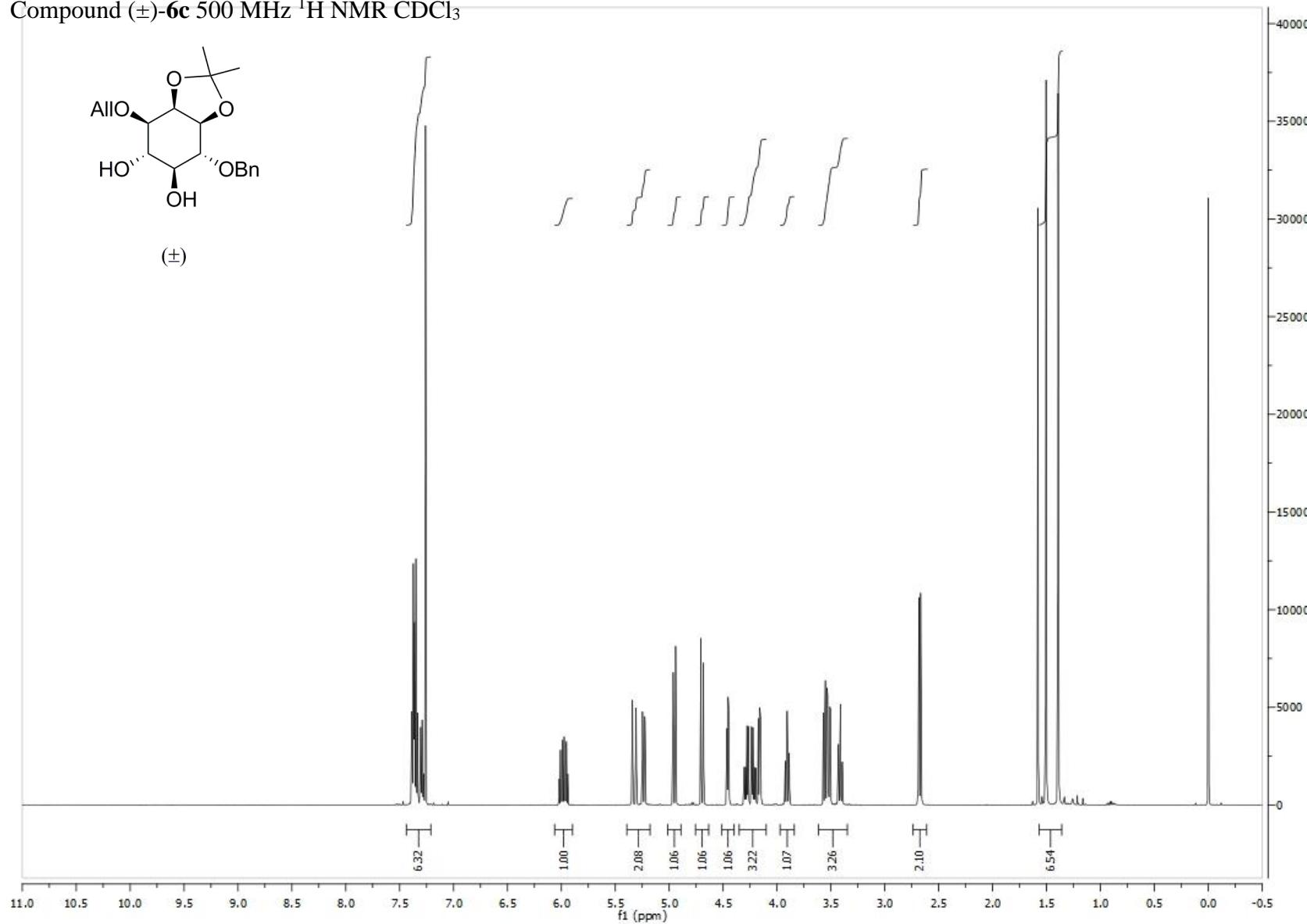
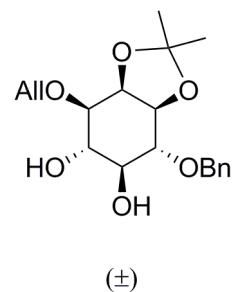
Compound (\pm)-**6b** 500 MHz ^1H NMR CDCl_3



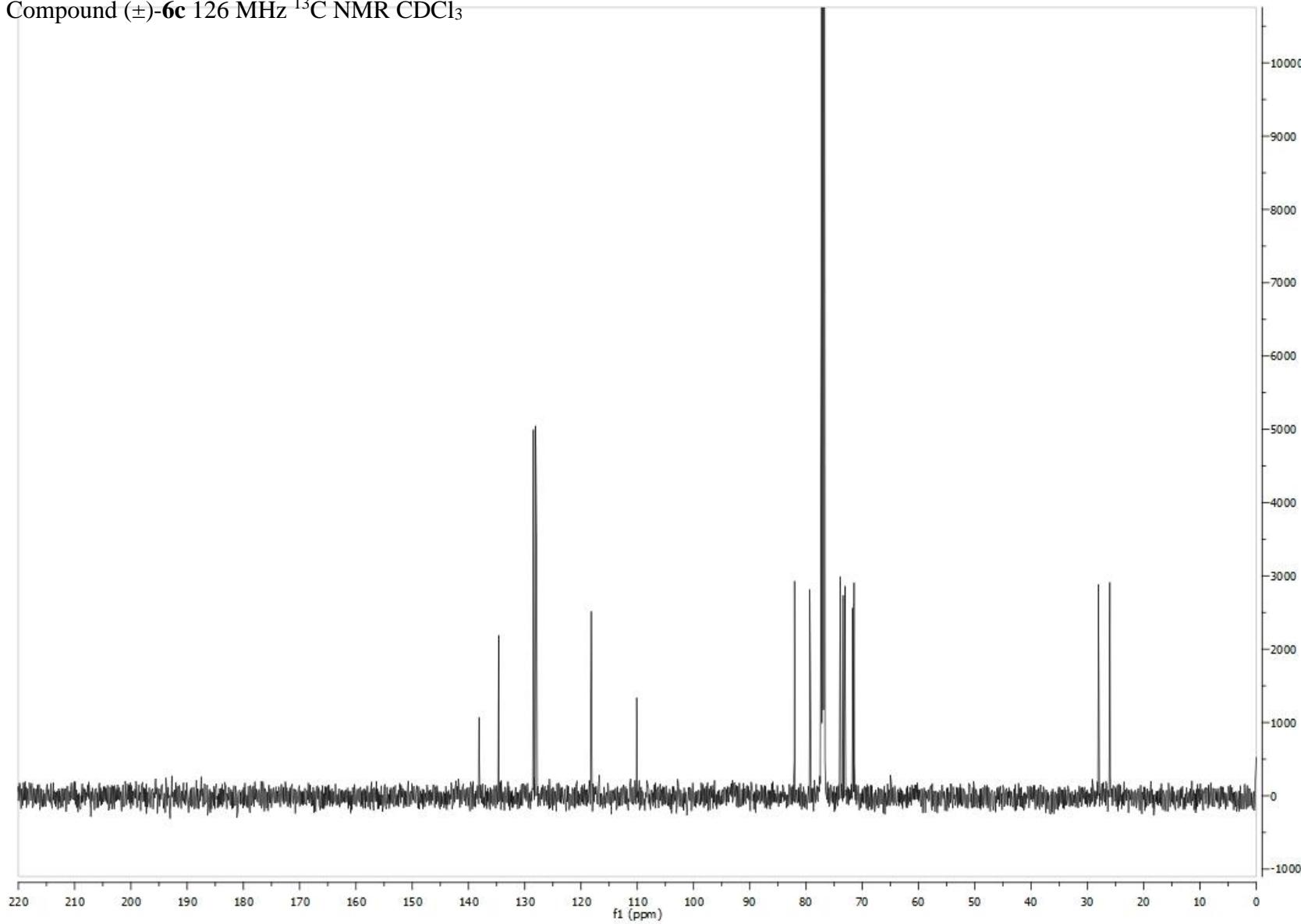
Compound (\pm)-**6b** 126 MHz ^{13}C NMR CDCl_3



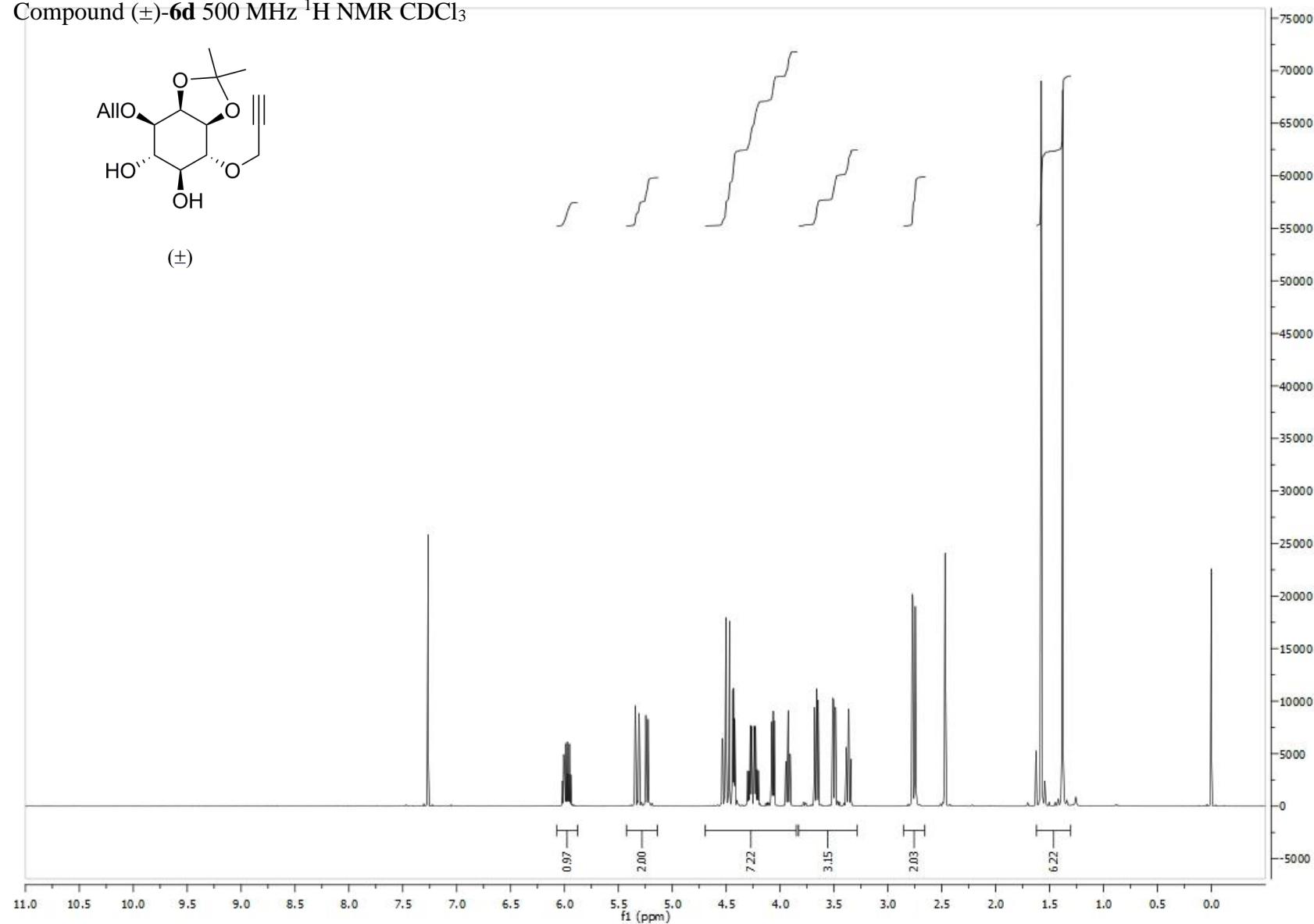
Compound (\pm)-**6c** 500 MHz ^1H NMR CDCl_3



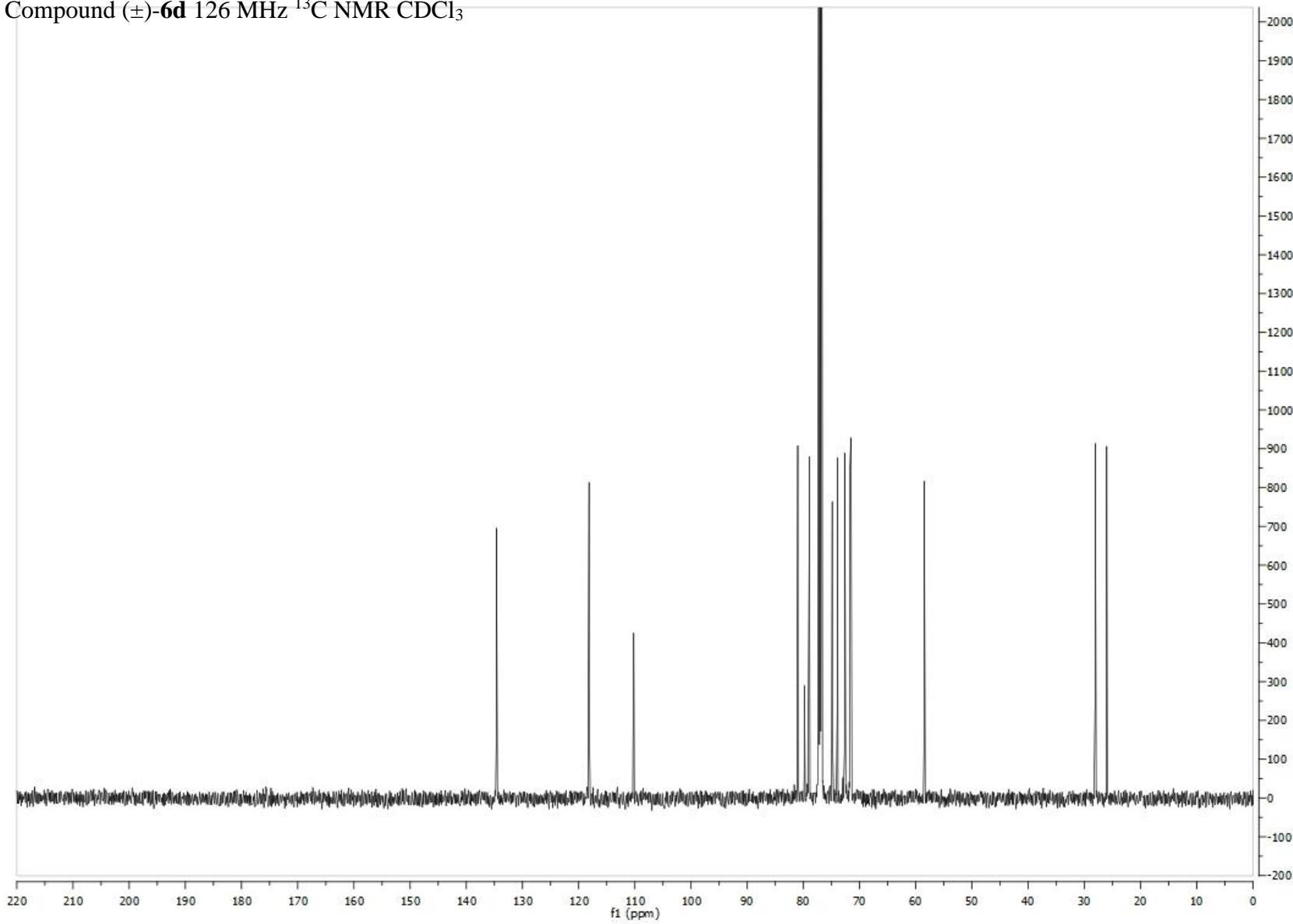
Compound (\pm)-**6c** 126 MHz ^{13}C NMR CDCl_3



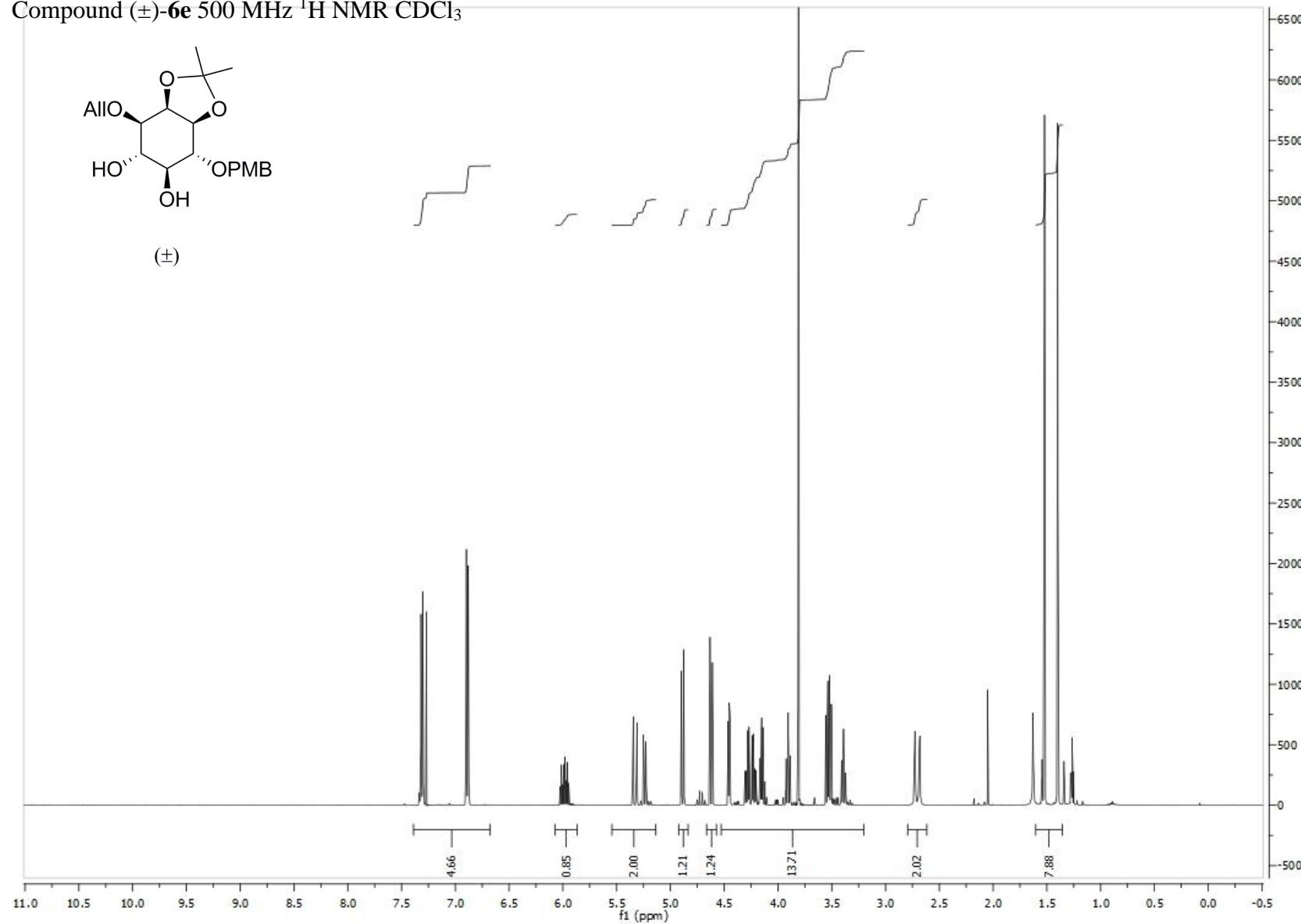
Compound (\pm)-**6d** 500 MHz ^1H NMR CDCl_3



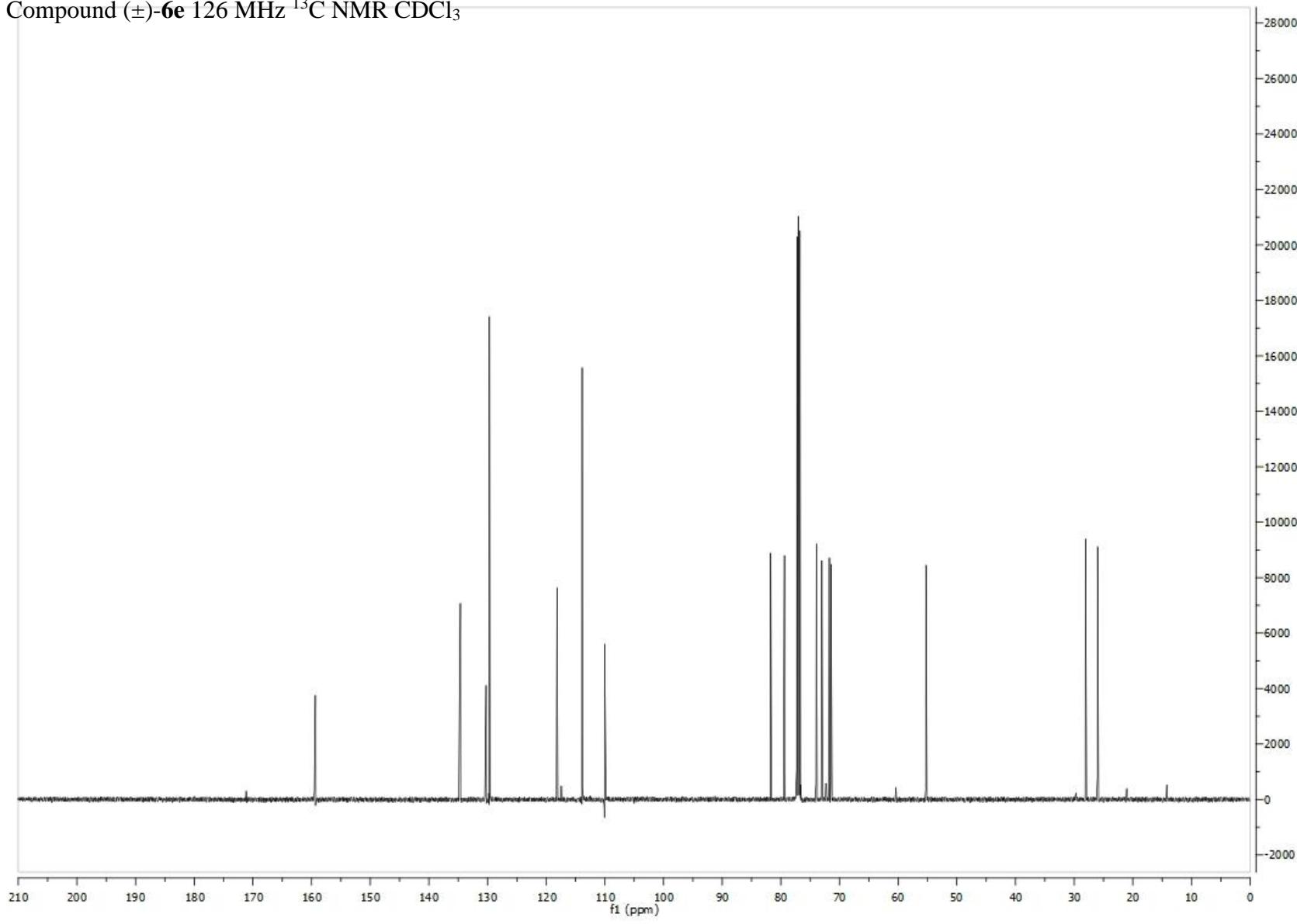
Compound (\pm)-**6d** 126 MHz ^{13}C NMR CDCl_3



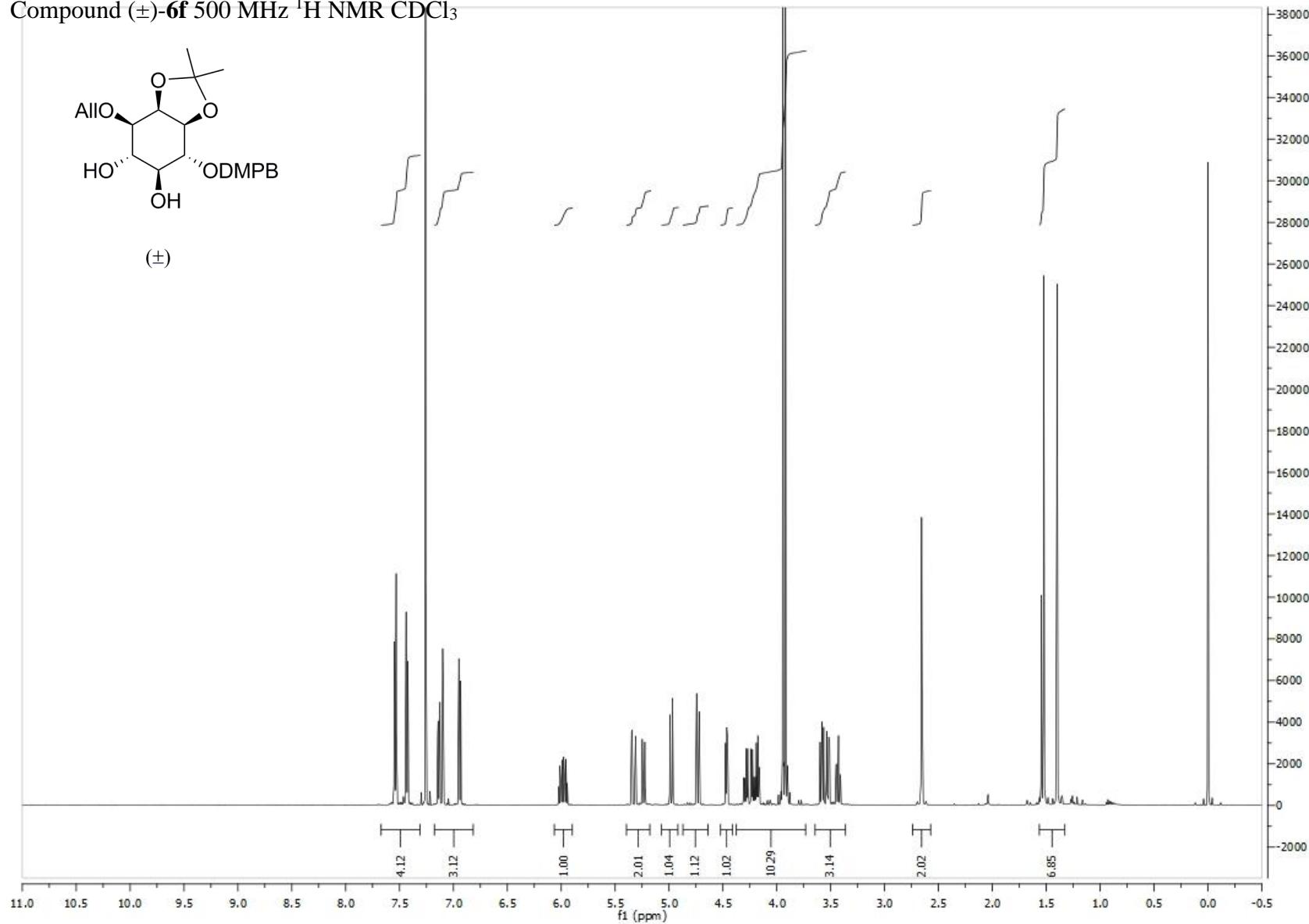
Compound (\pm)-**6e** 500 MHz ^1H NMR CDCl_3



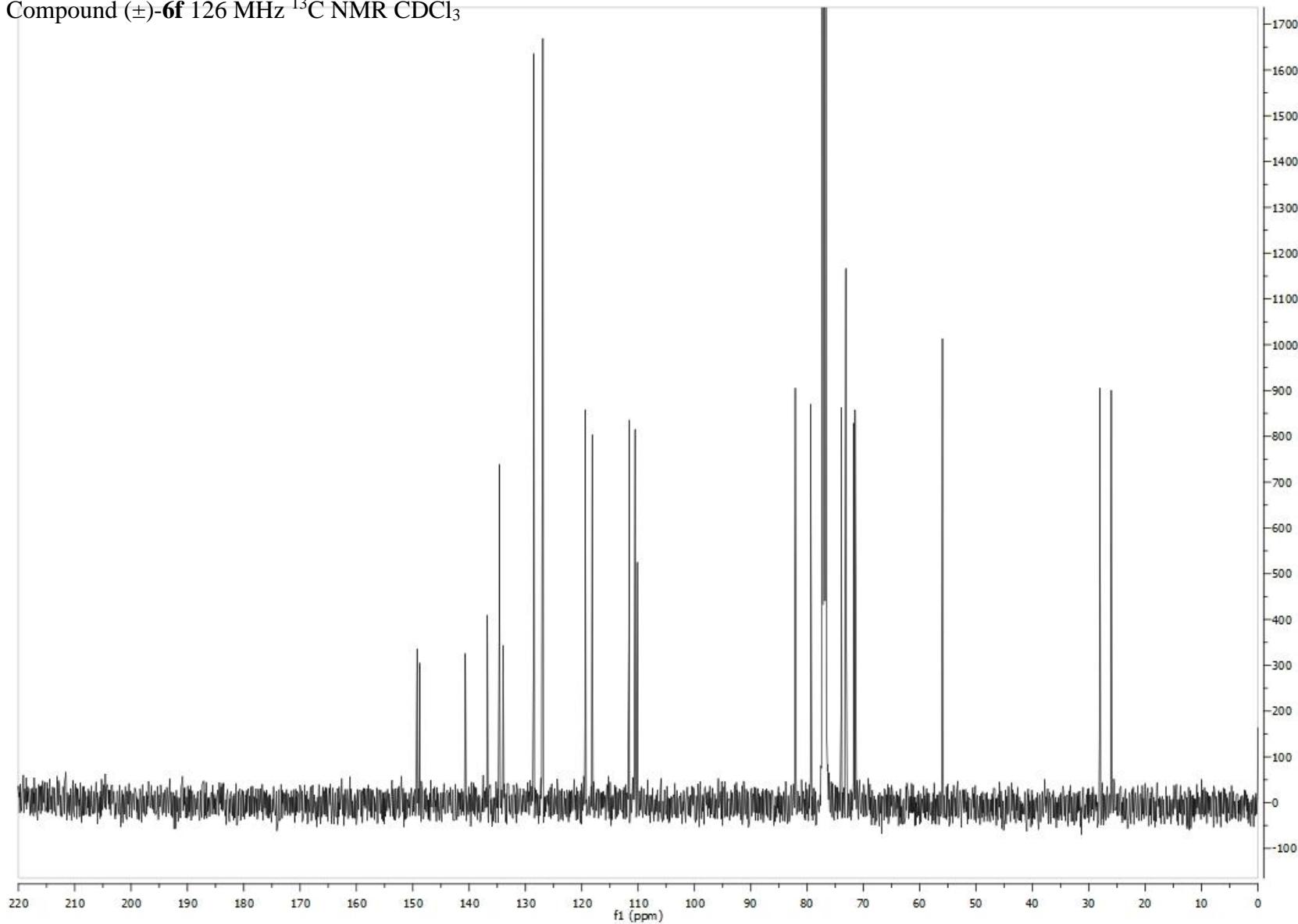
Compound (\pm)-**6e** 126 MHz ^{13}C NMR CDCl_3



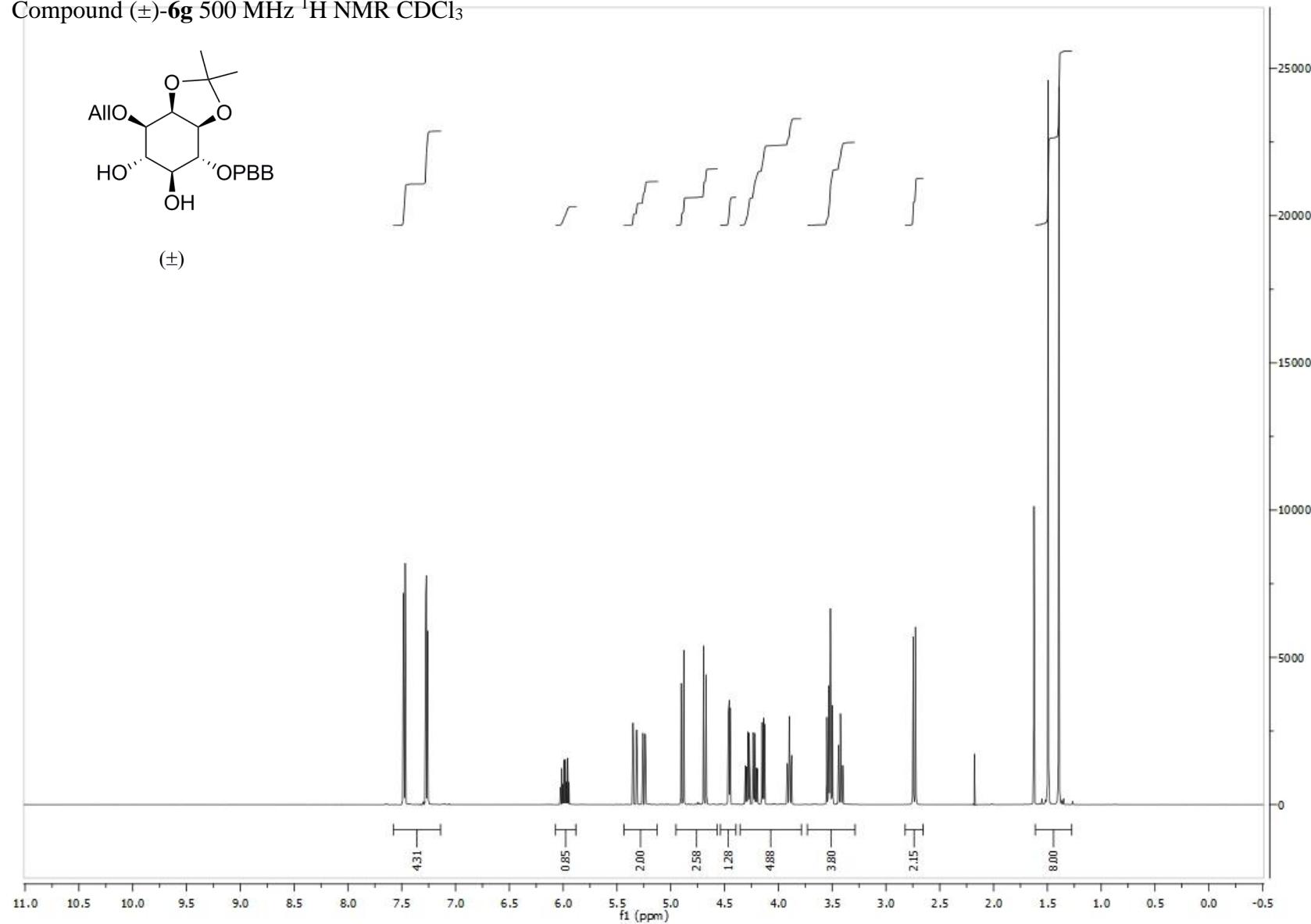
Compound (\pm)-**6f** 500 MHz ^1H NMR CDCl_3



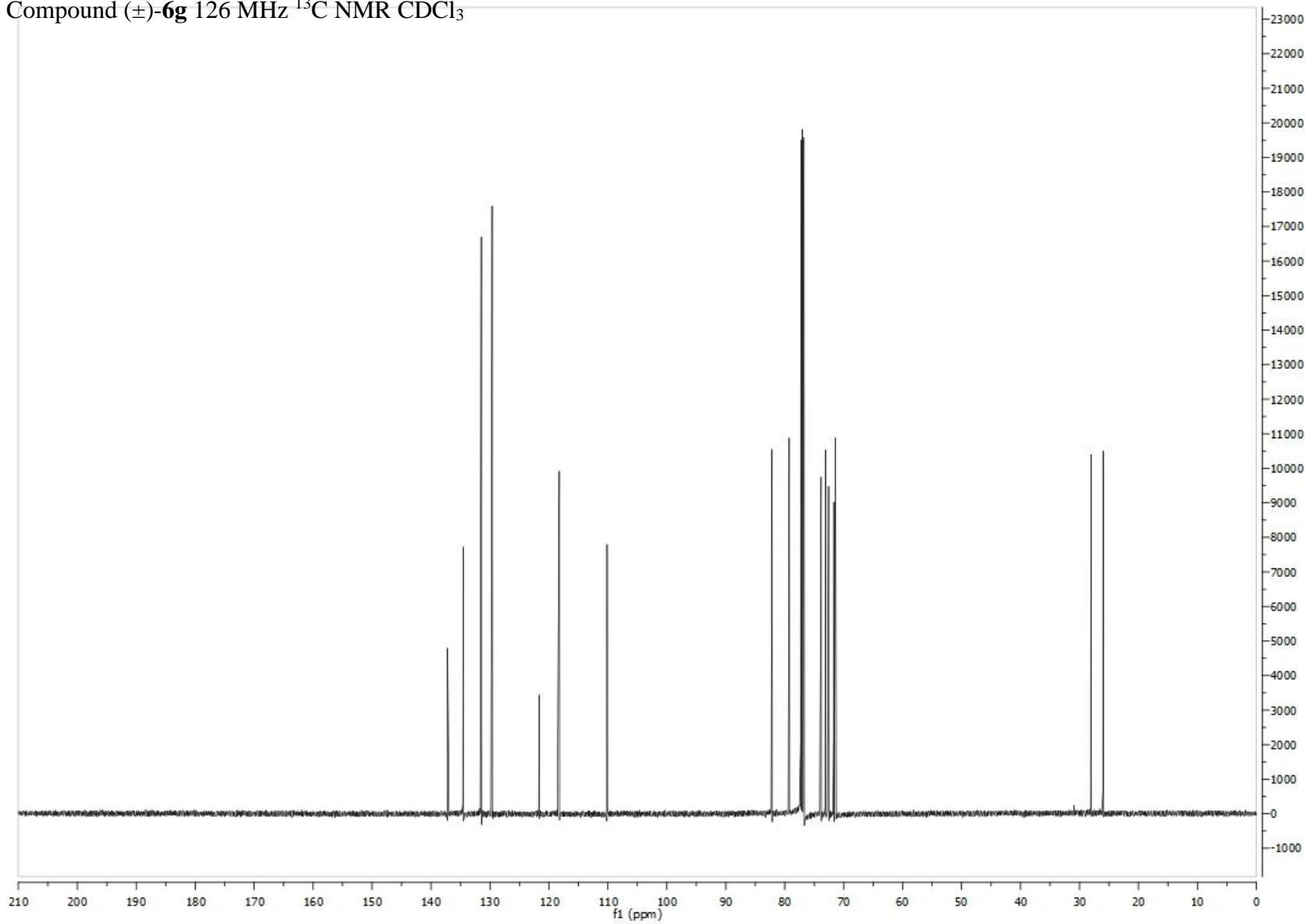
Compound (\pm)-**6f** 126 MHz ^{13}C NMR CDCl_3



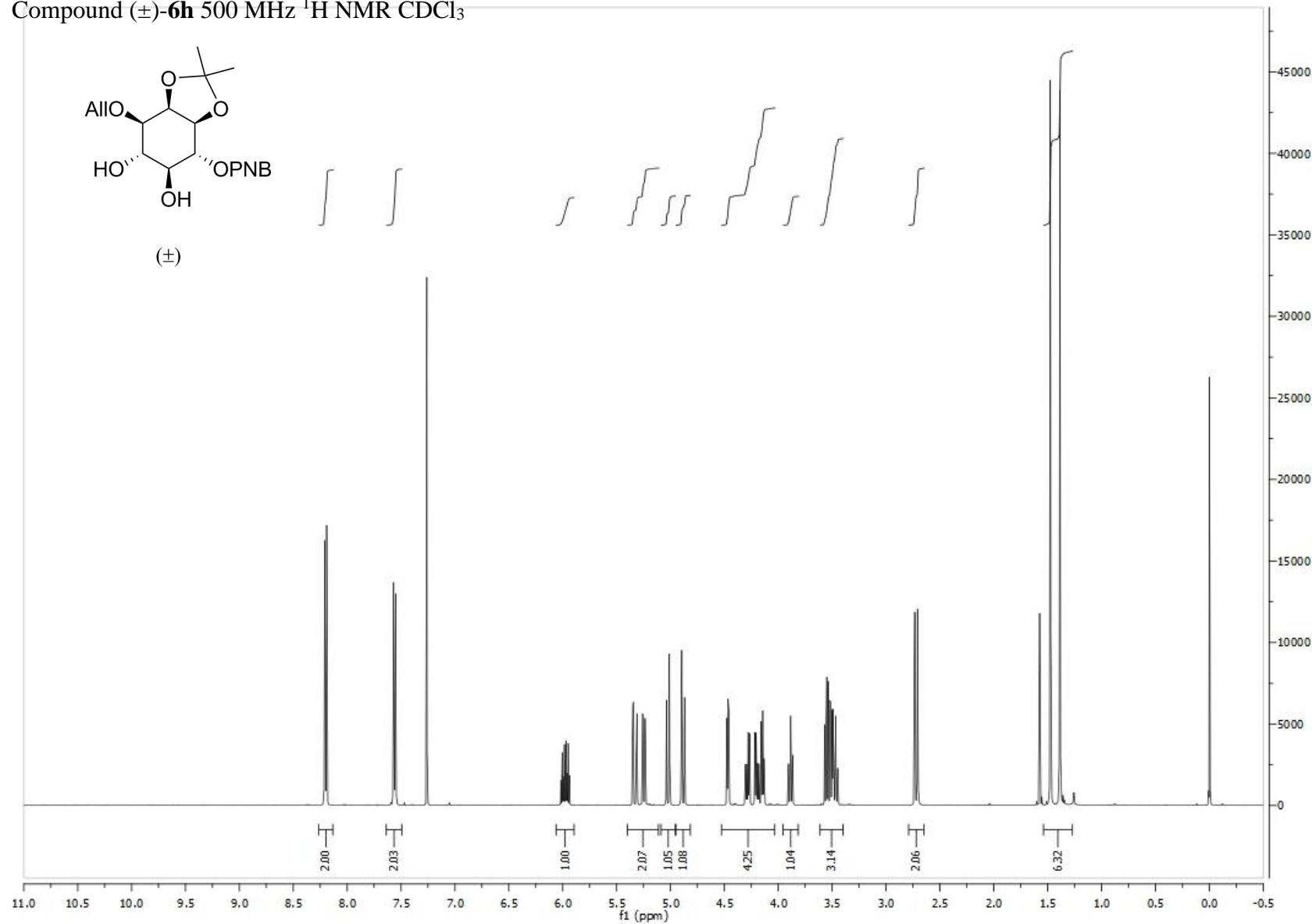
Compound (\pm)-**6g** 500 MHz ^1H NMR CDCl_3



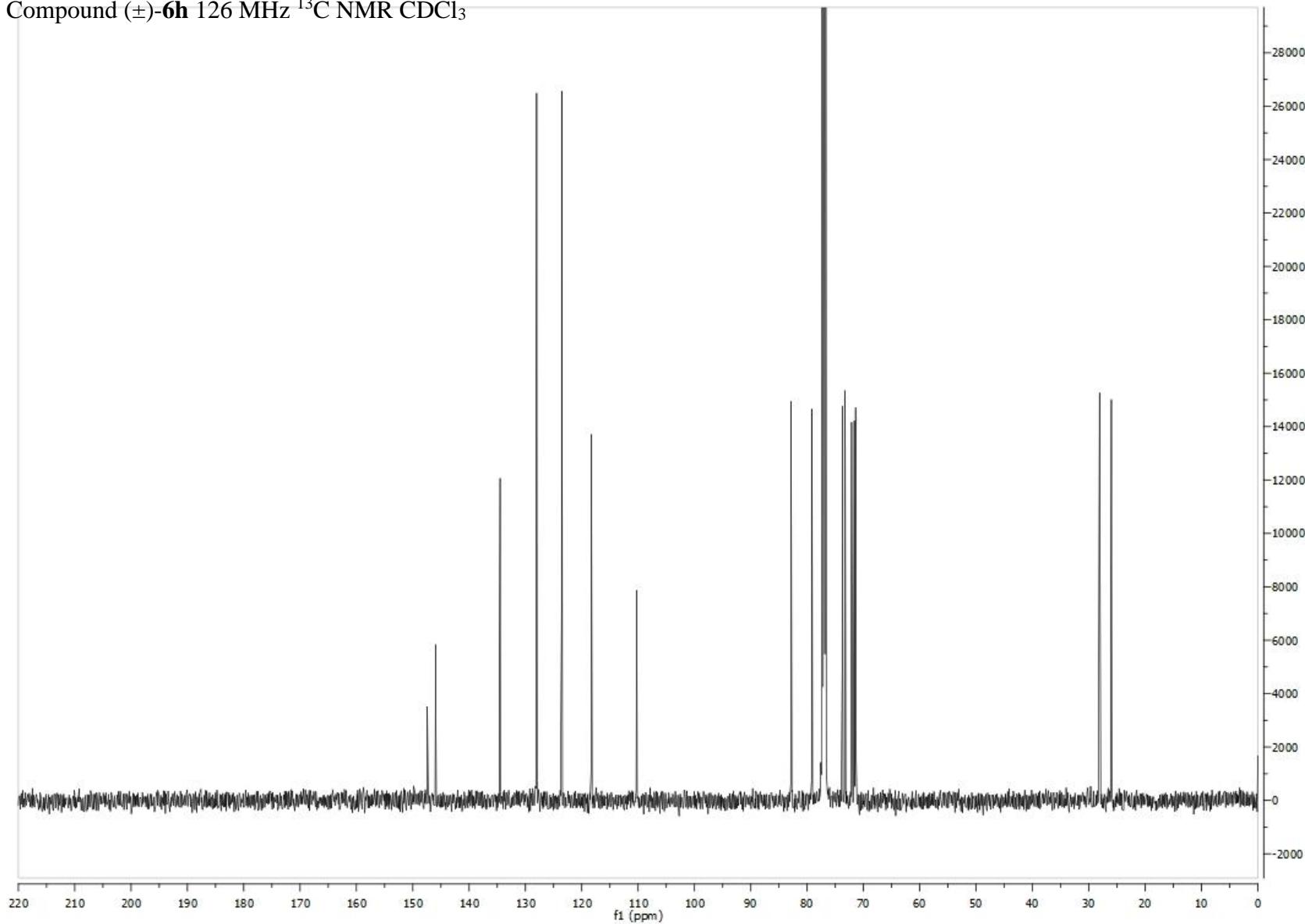
Compound (\pm)-**6g** 126 MHz ^{13}C NMR CDCl_3



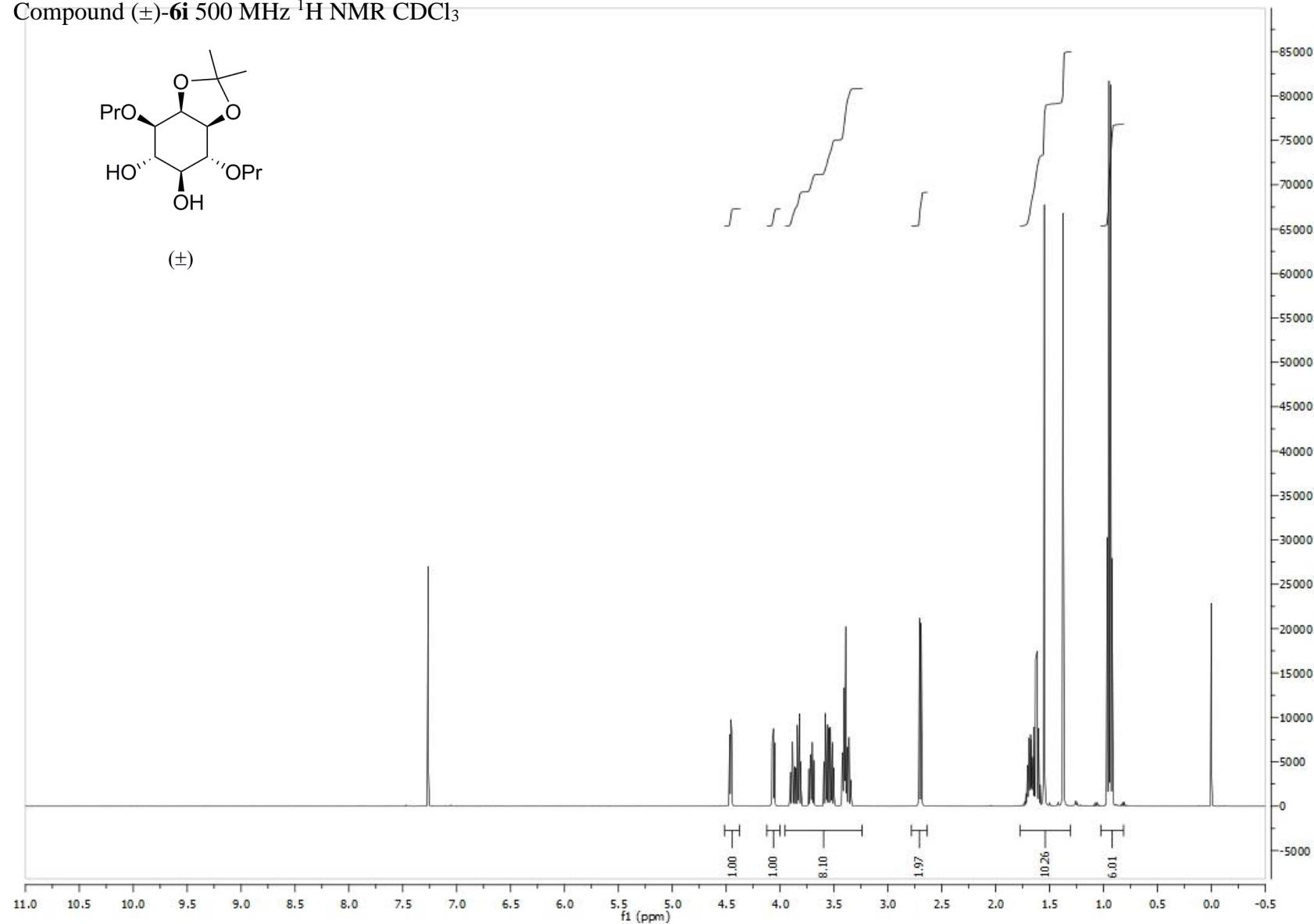
Compound (\pm)-**6h** 500 MHz ^1H NMR CDCl_3



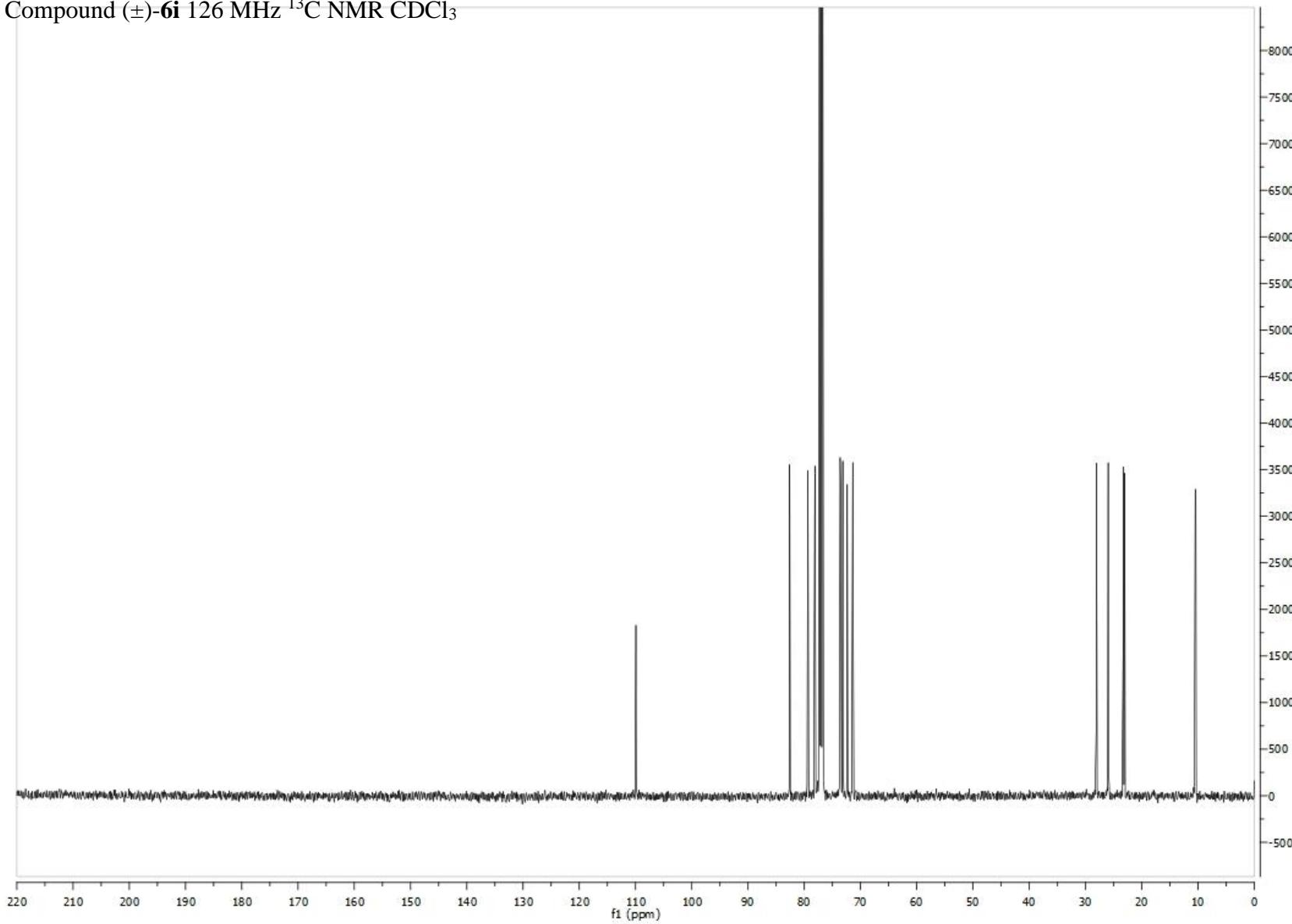
Compound (\pm)-**6h** 126 MHz ^{13}C NMR CDCl_3



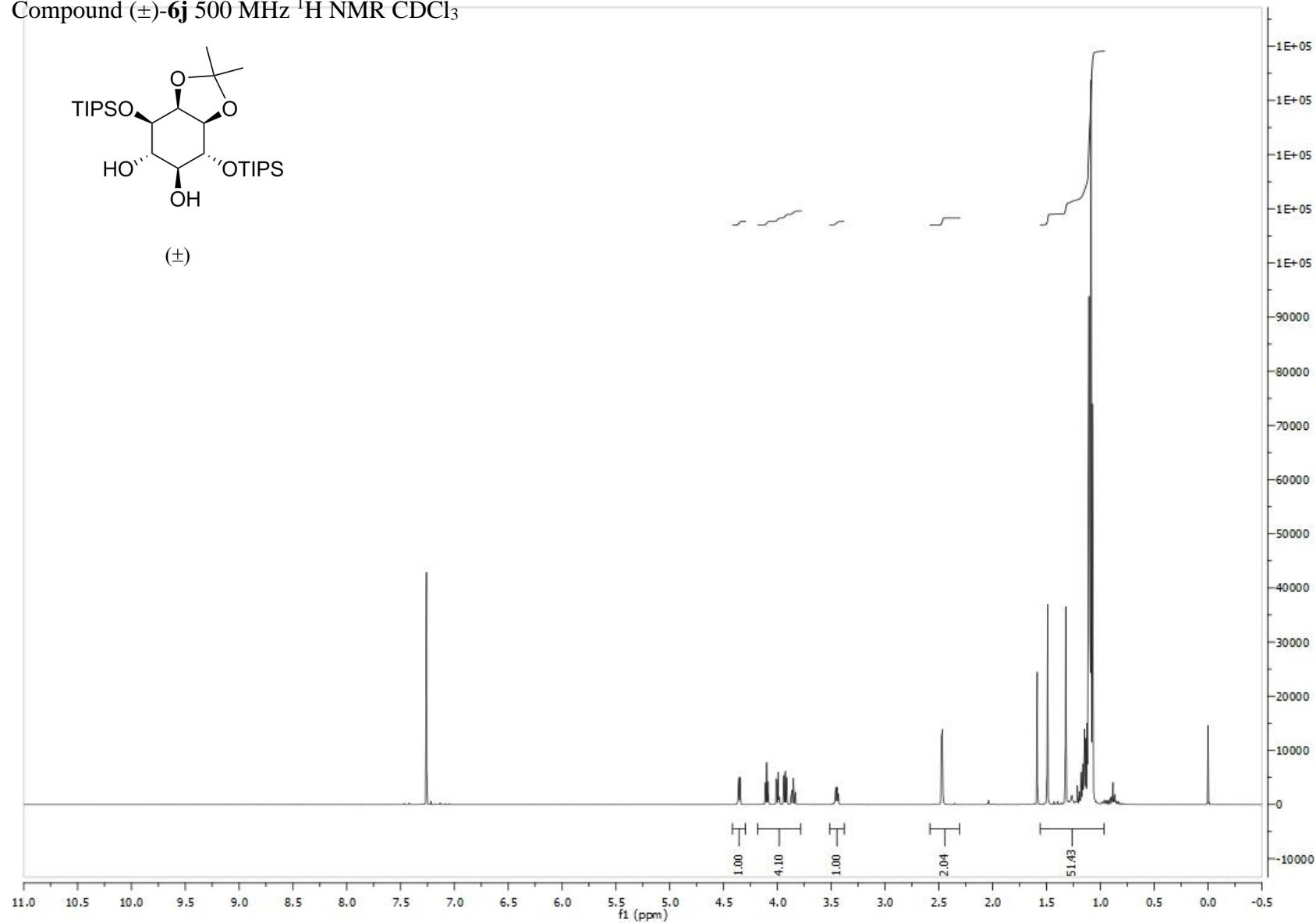
Compound (\pm)-**6i** 500 MHz ^1H NMR CDCl_3



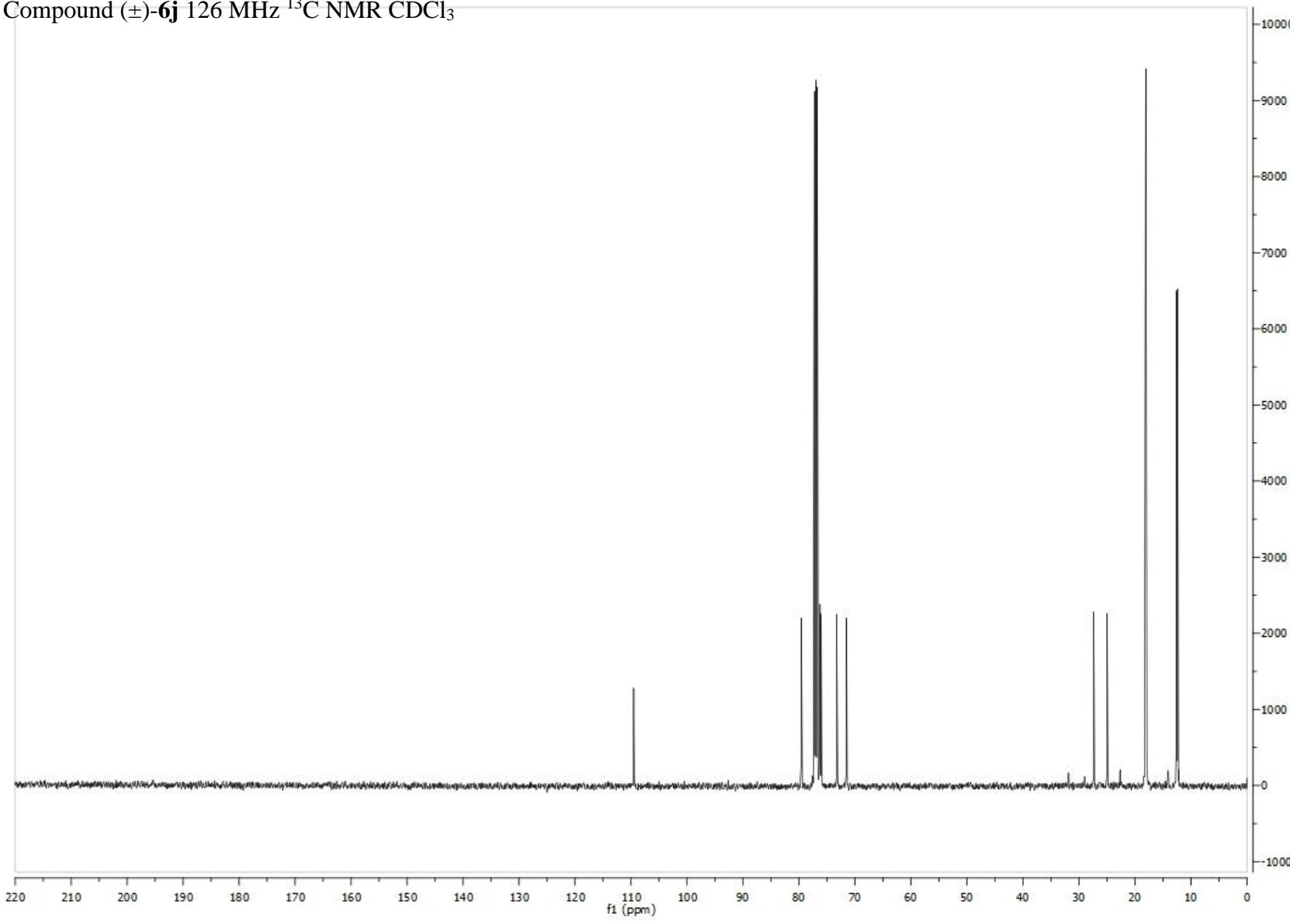
Compound (\pm)-**6i** 126 MHz ^{13}C NMR CDCl_3



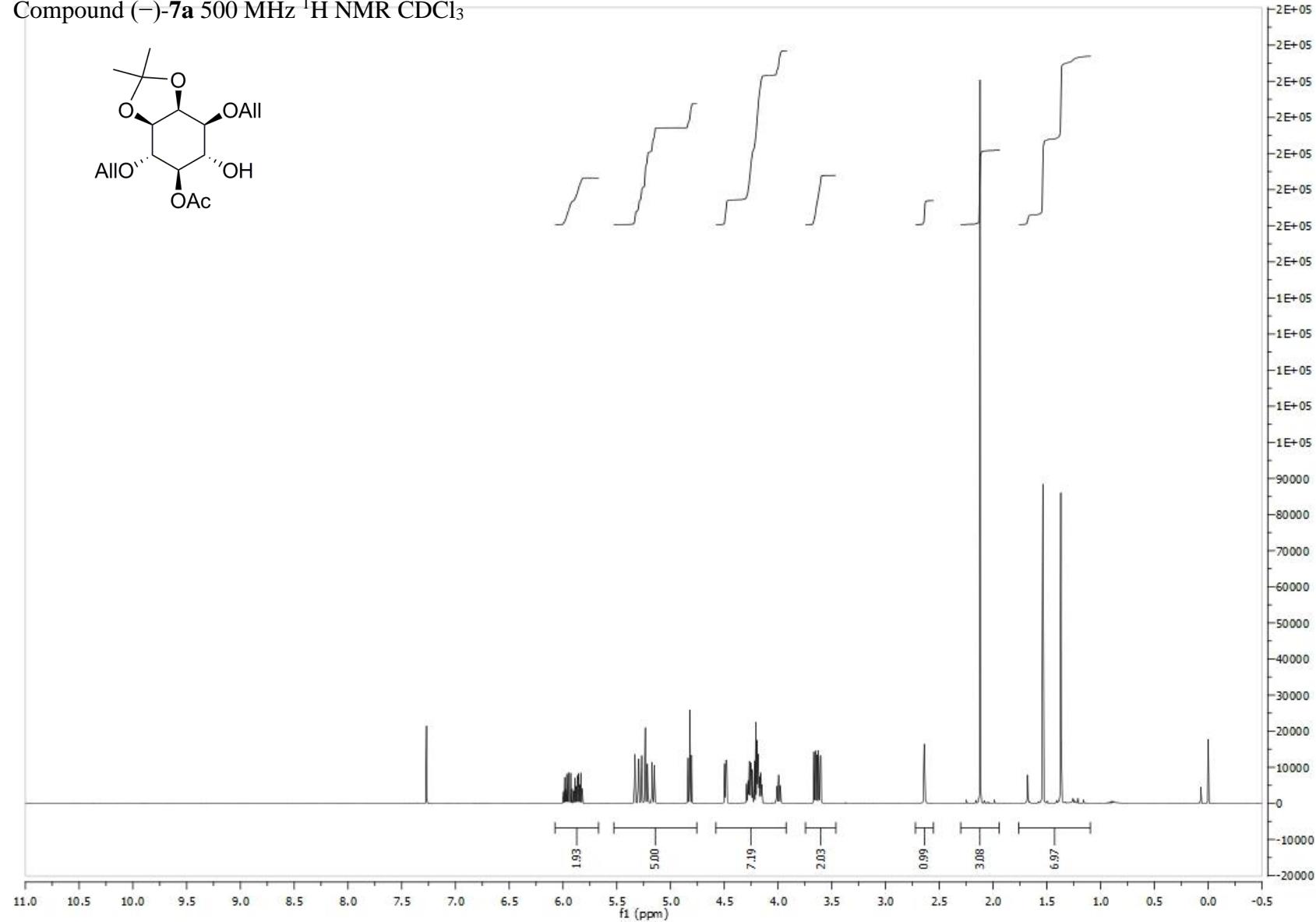
Compound (\pm)-**6j** 500 MHz ^1H NMR CDCl_3



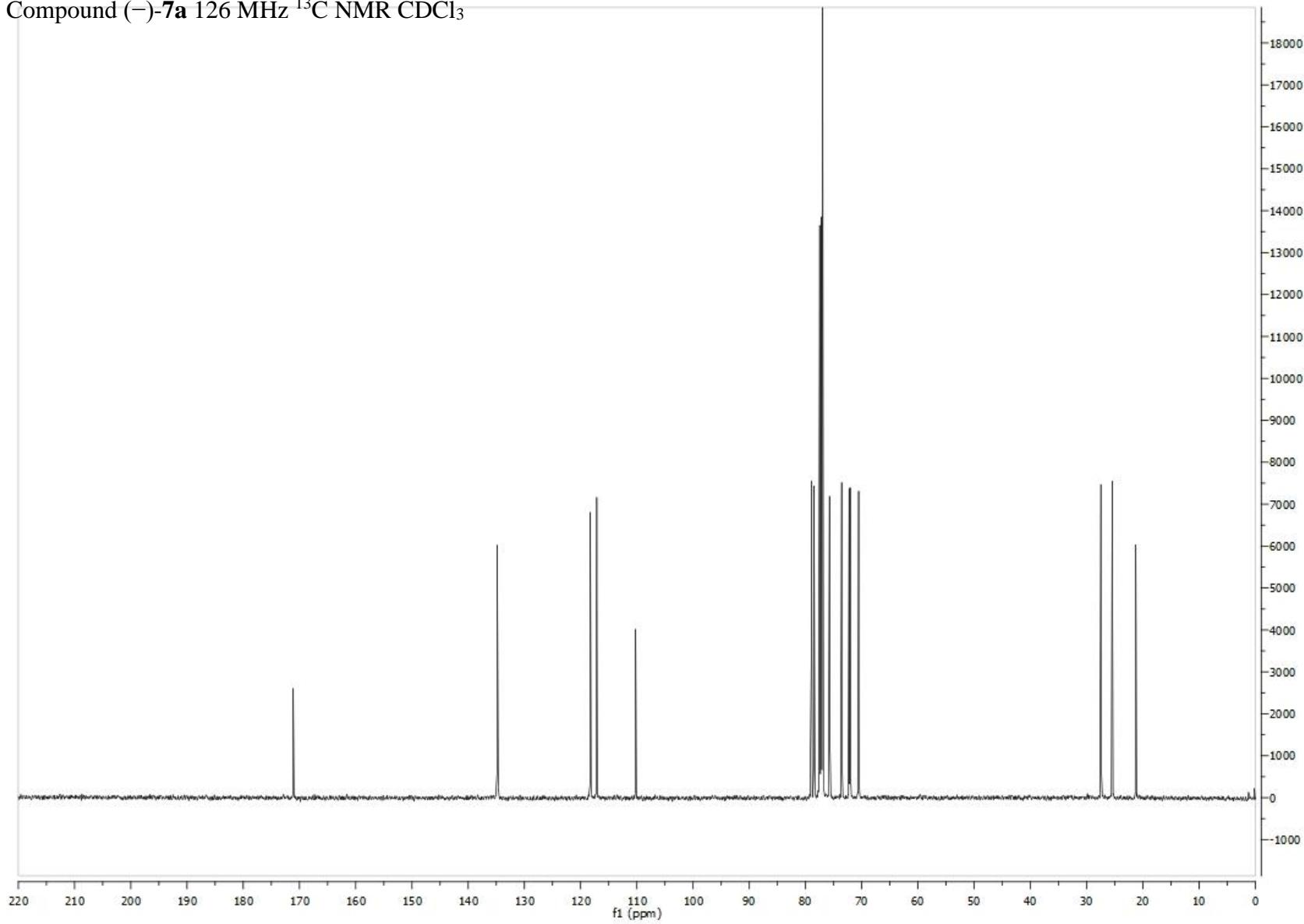
Compound (\pm)-**6j** 126 MHz ^{13}C NMR CDCl_3



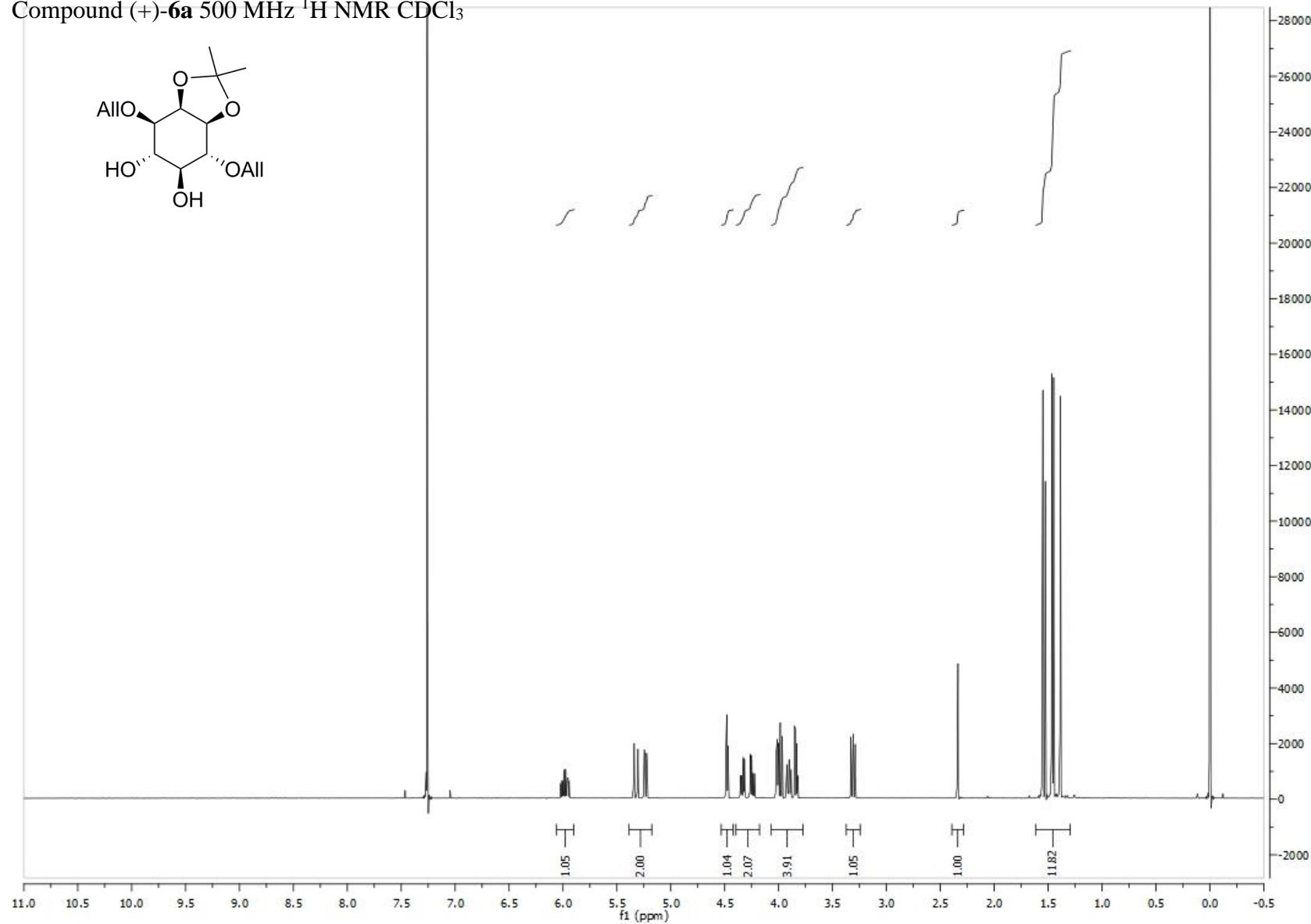
Compound (-)-7a 500 MHz ^1H NMR CDCl_3



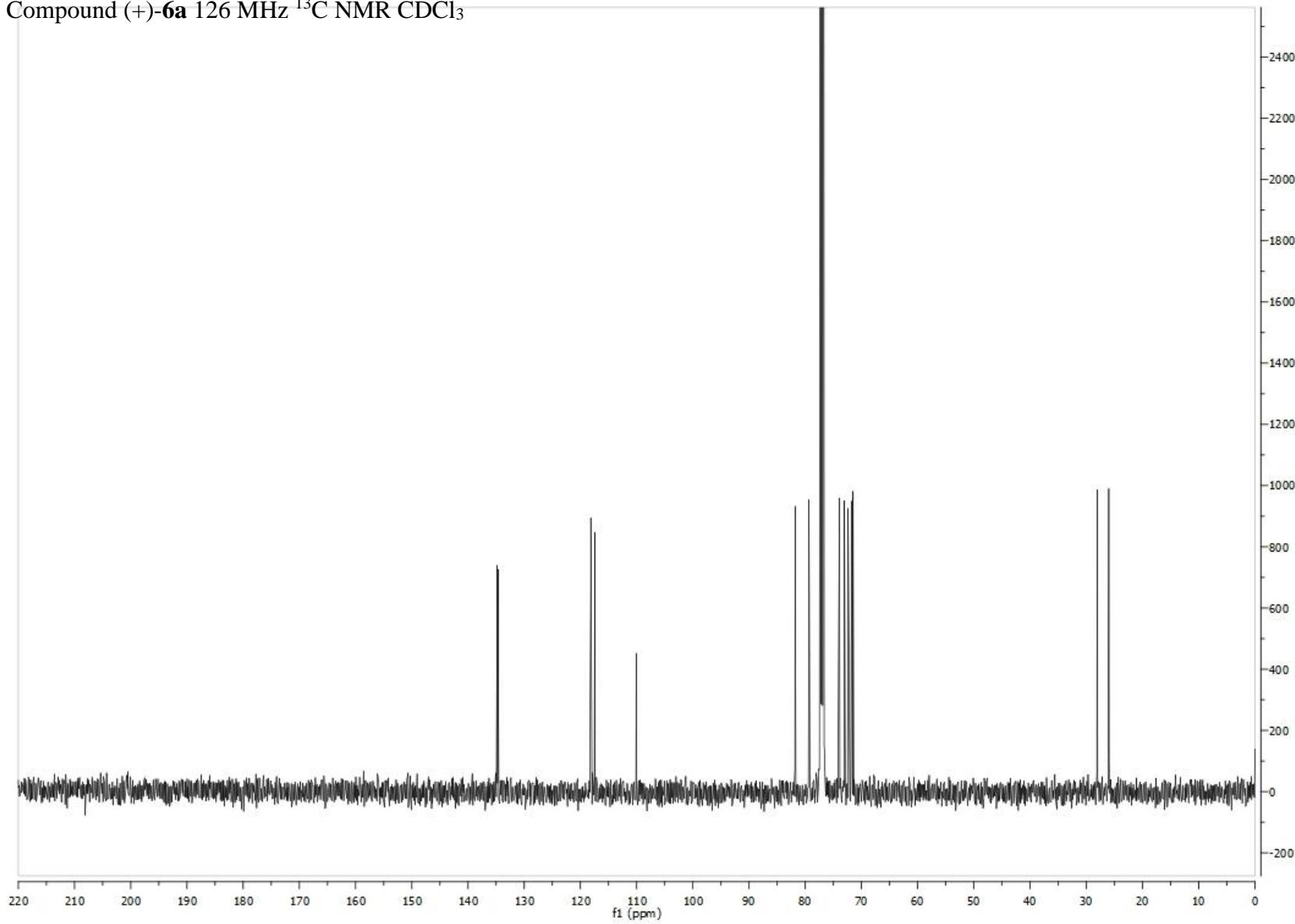
Compound (-)-7a 126 MHz ^{13}C NMR CDCl_3



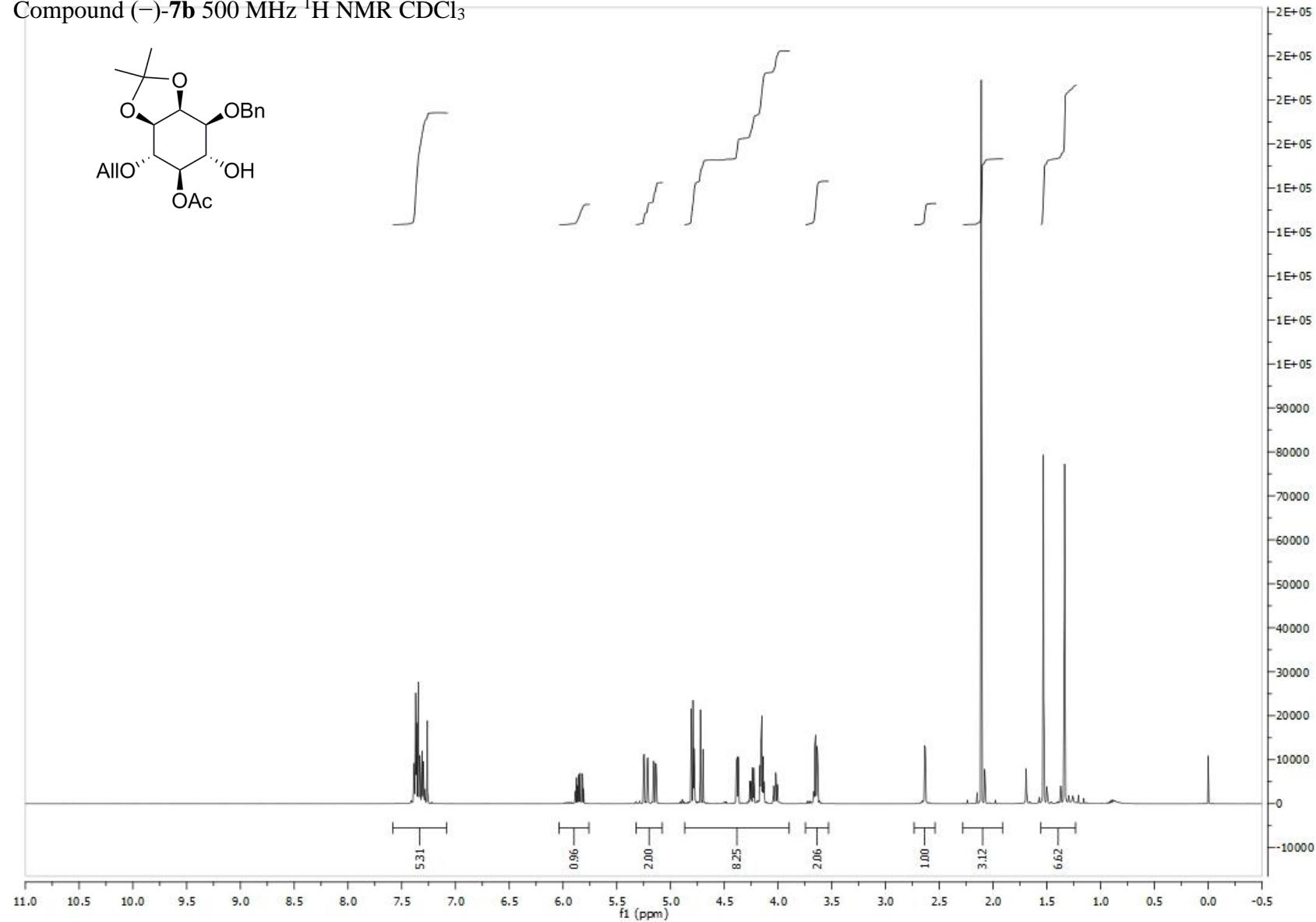
Compound (+)-**6a** 500 MHz ^1H NMR CDCl_3



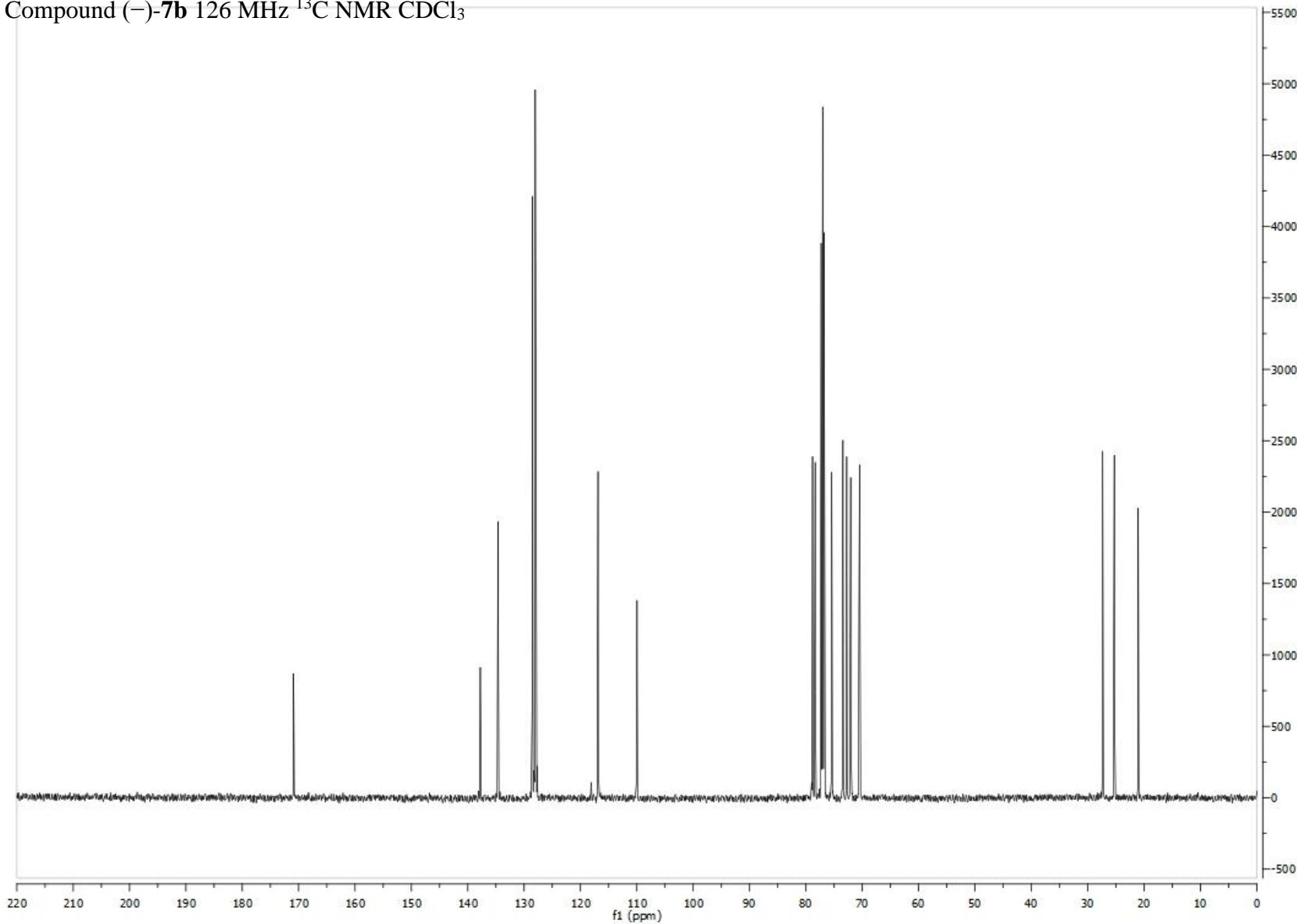
Compound (+)-**6a** 126 MHz ^{13}C NMR CDCl_3



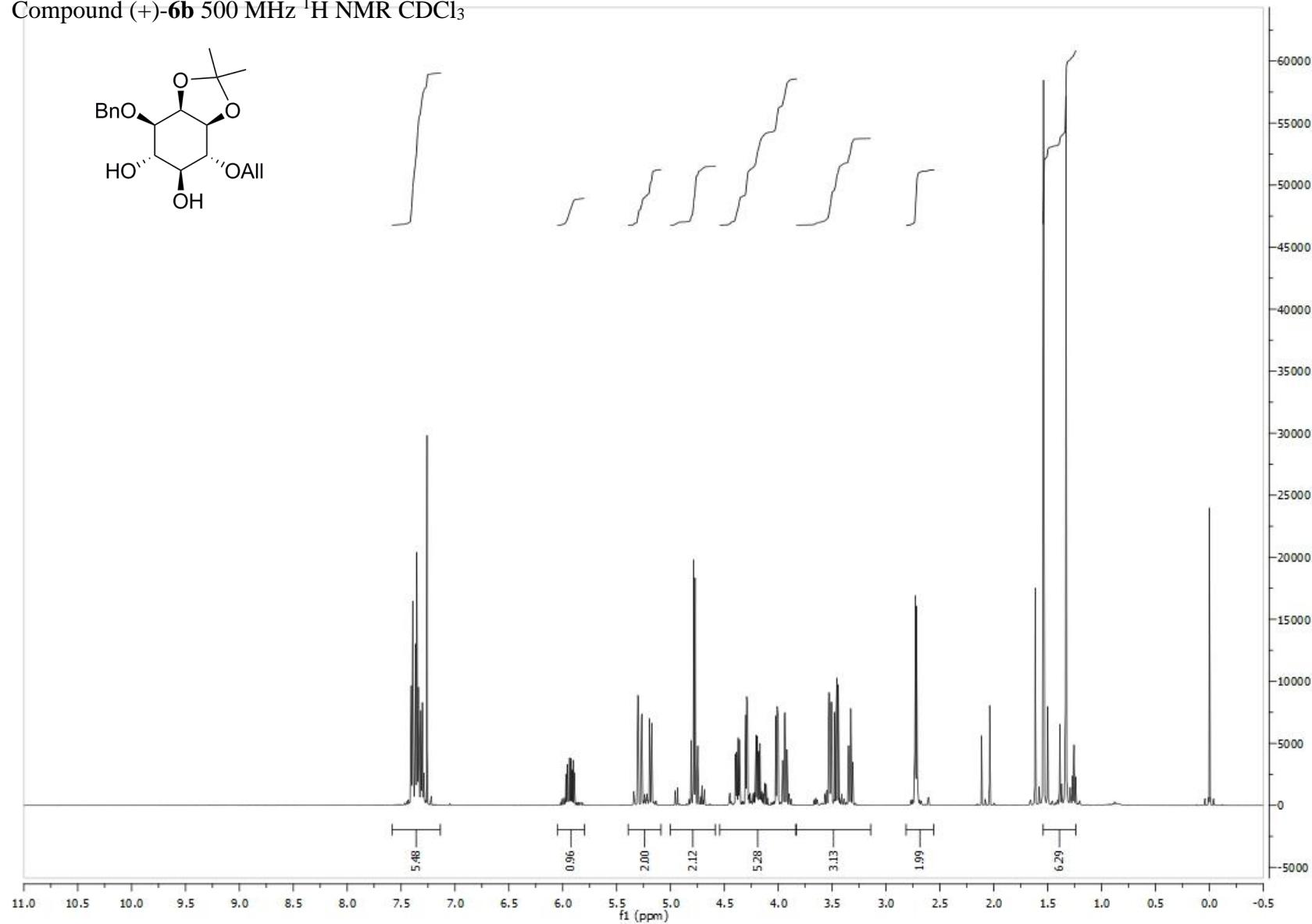
Compound (-)-**7b** 500 MHz ^1H NMR CDCl_3



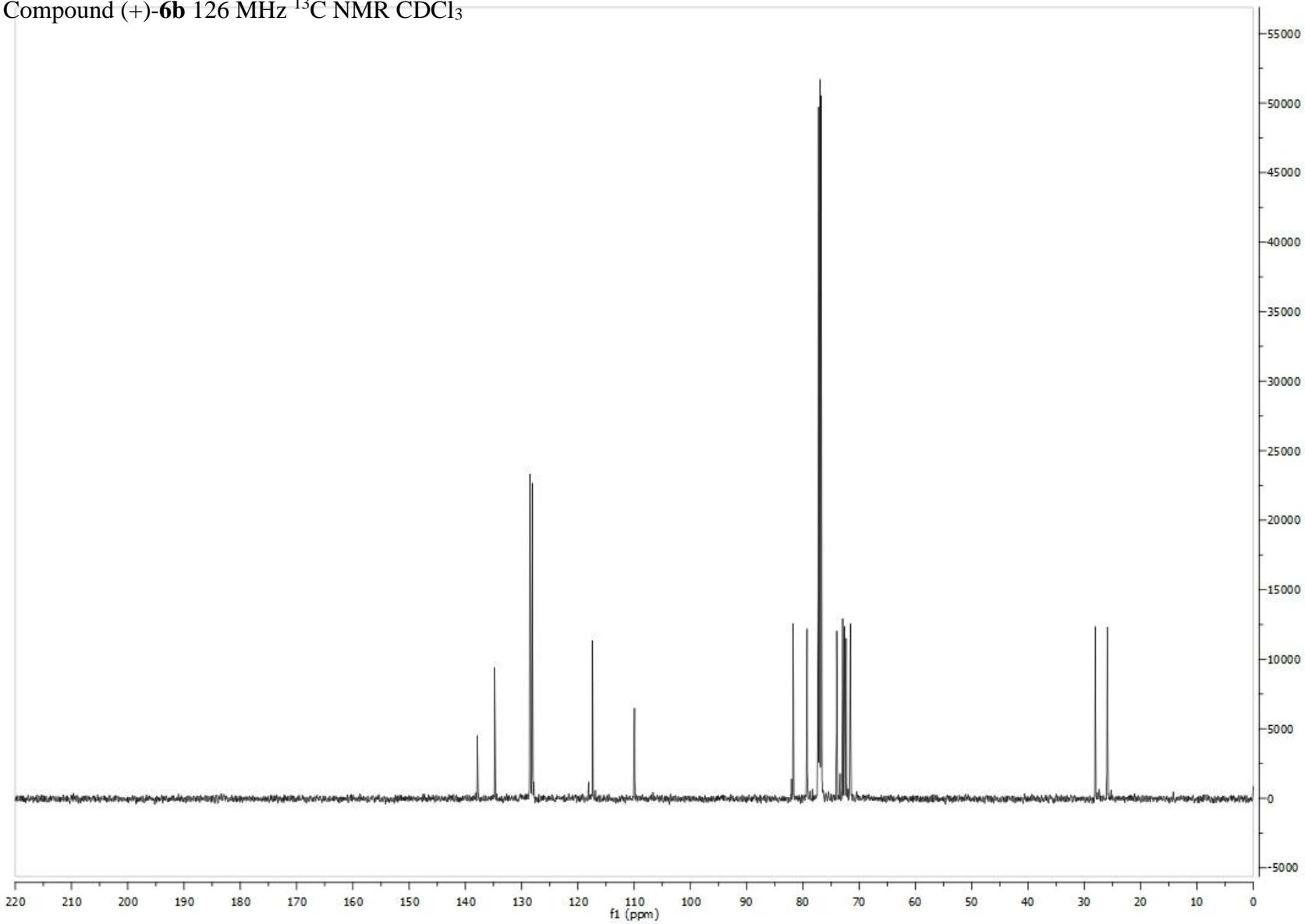
Compound (-)-**7b** 126 MHz ^{13}C NMR CDCl_3



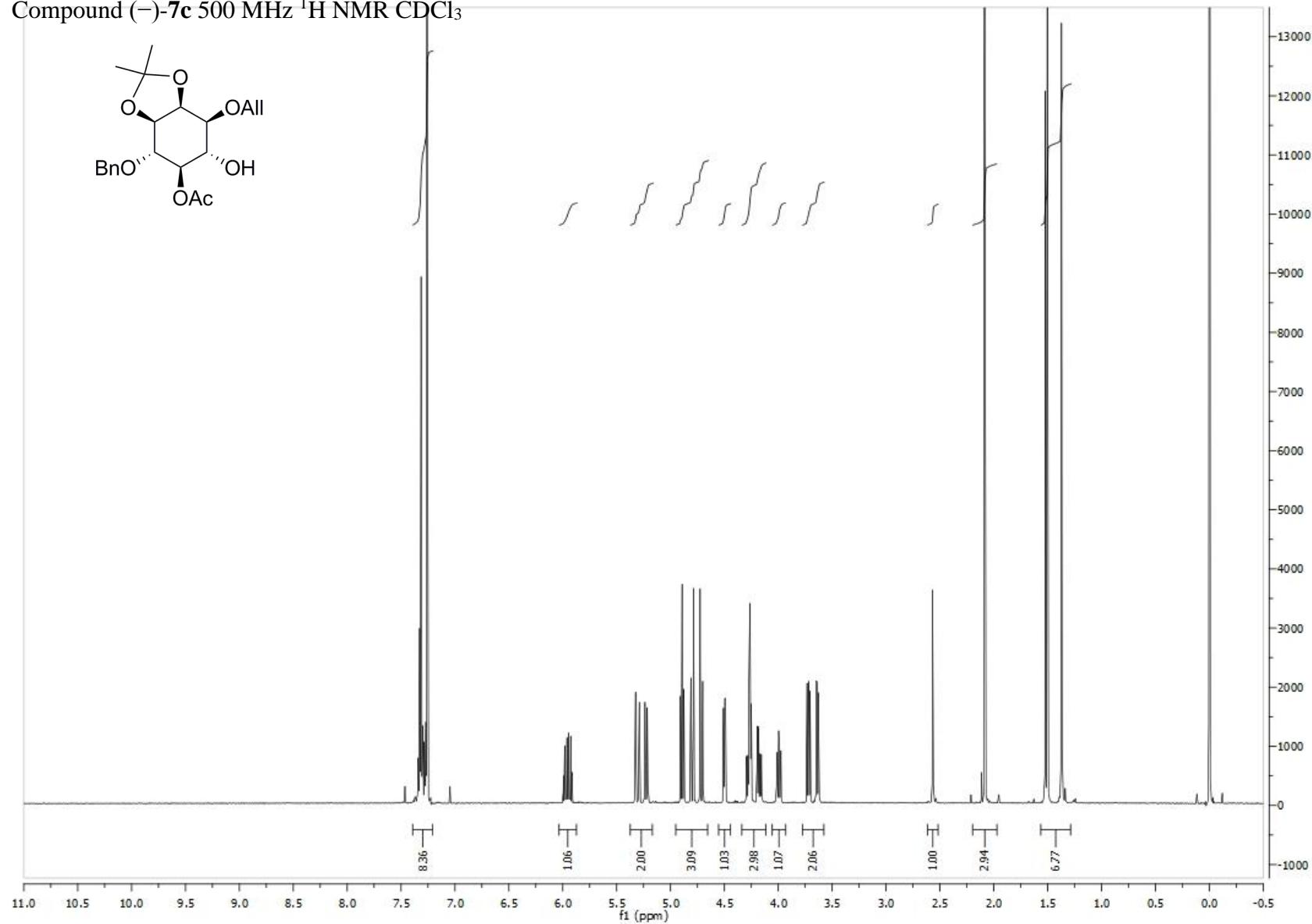
Compound (+)-**6b** 500 MHz ^1H NMR CDCl_3



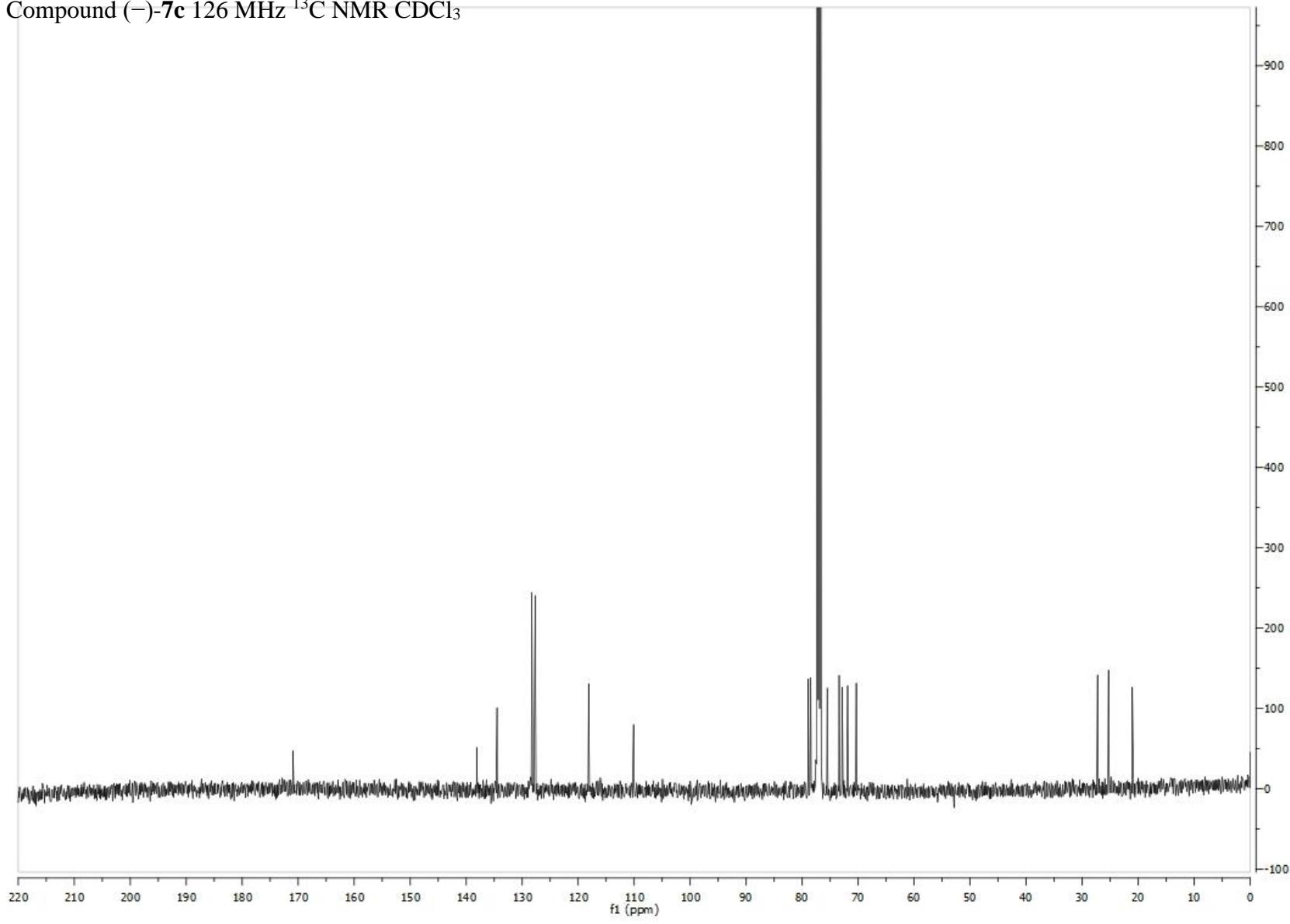
Compound (+)-**6b** 126 MHz ^{13}C NMR CDCl_3



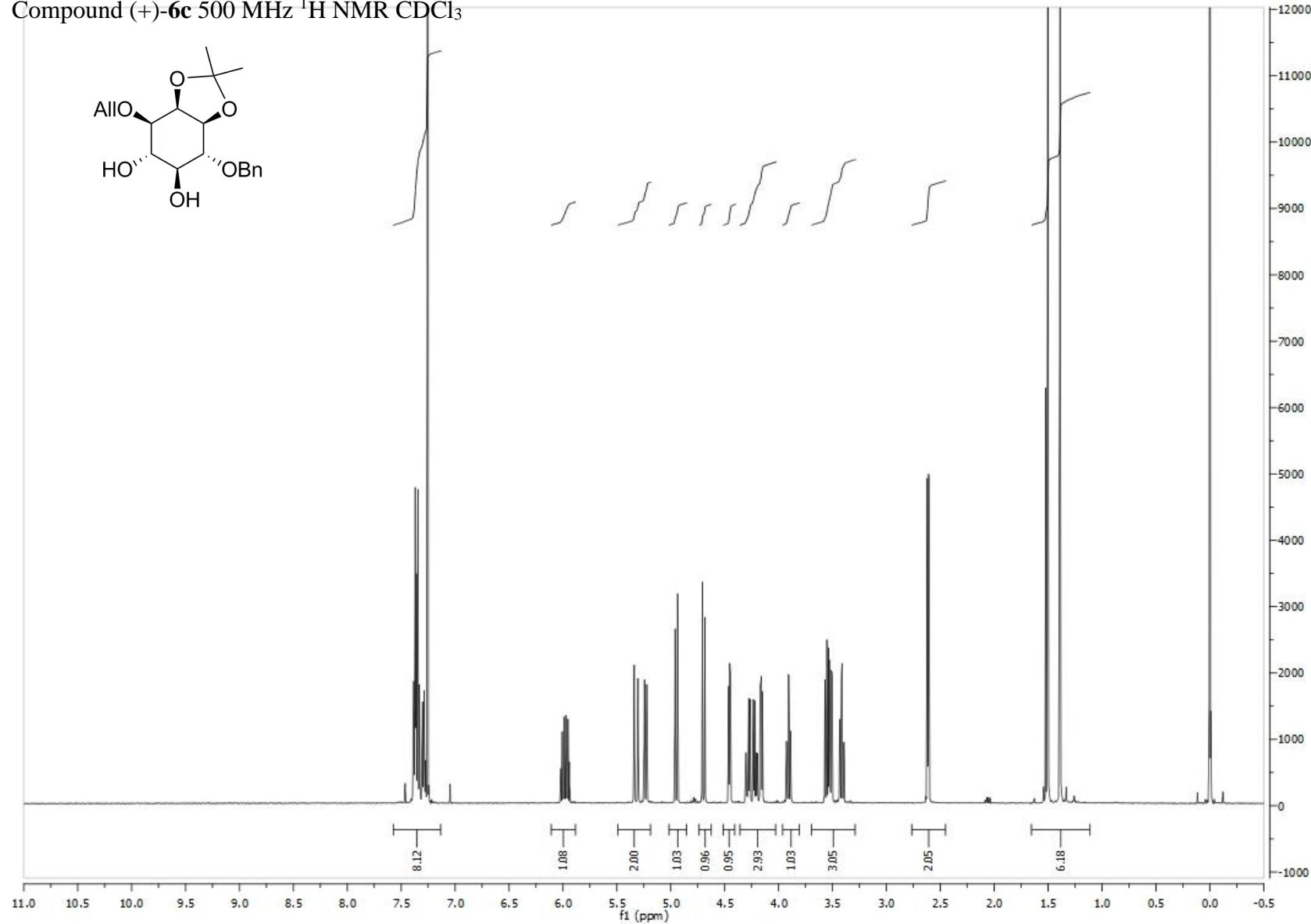
Compound (-)-7c 500 MHz ^1H NMR CDCl_3



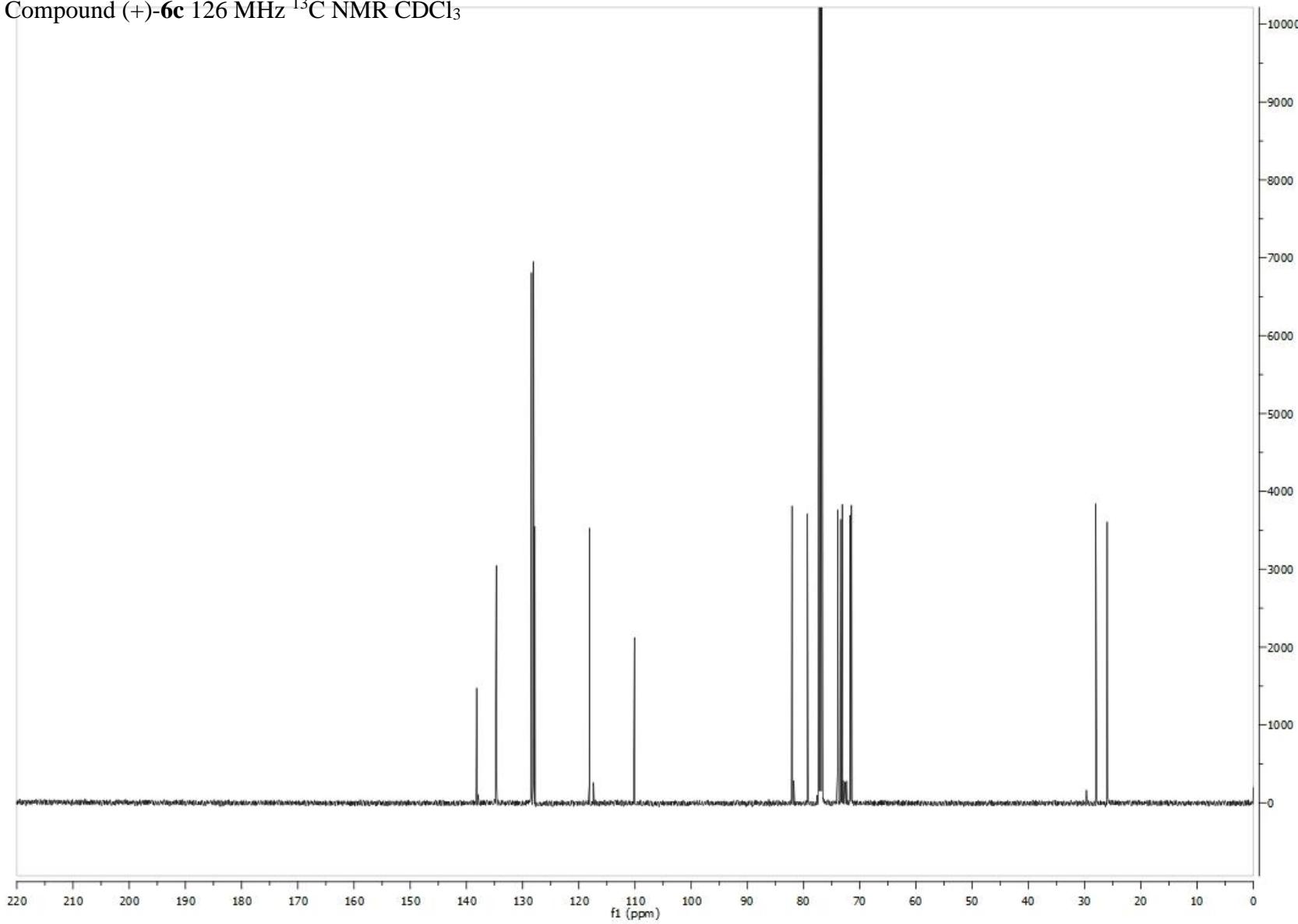
Compound (-)-7c 126 MHz ^{13}C NMR CDCl_3



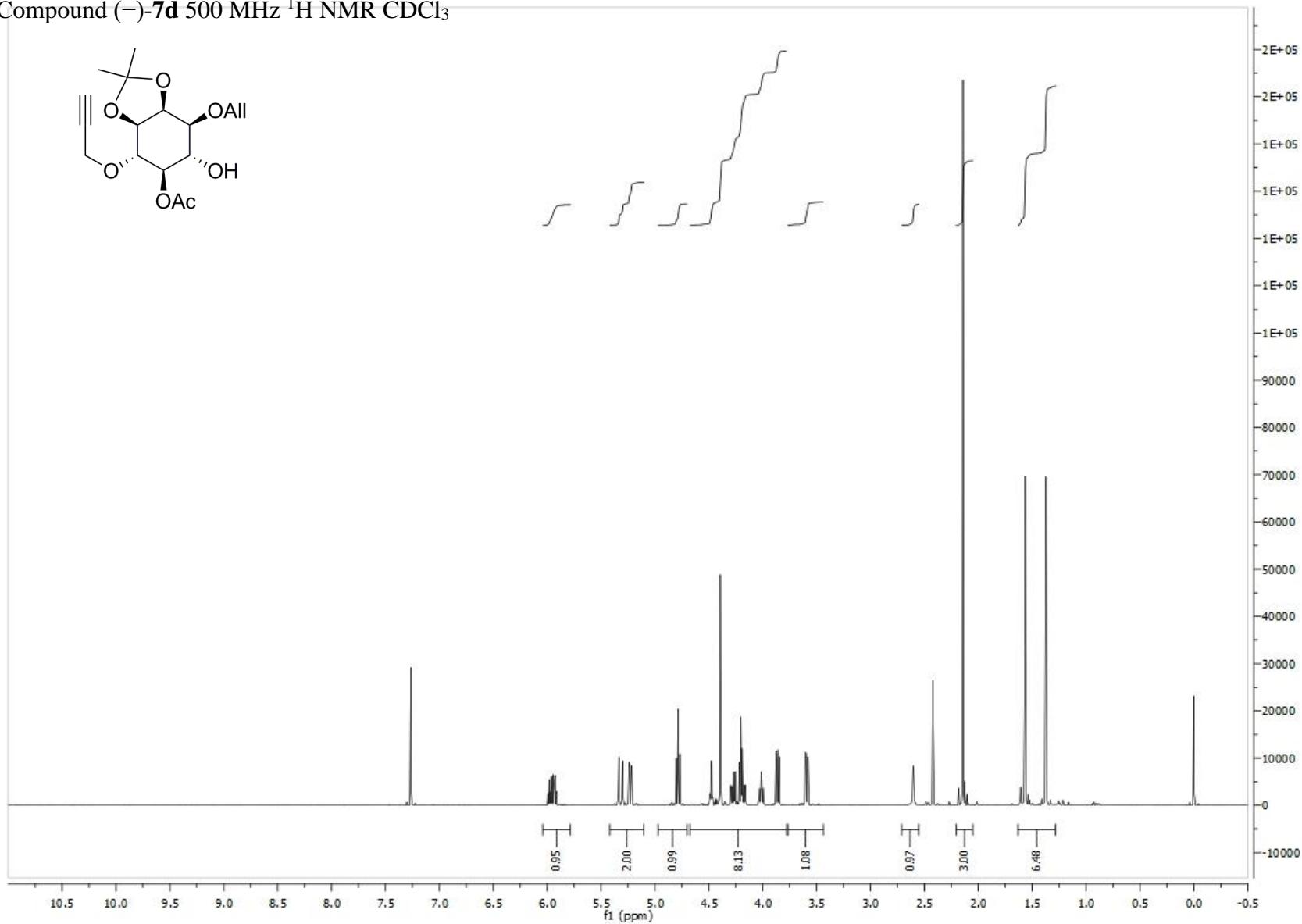
Compound (+)-**6c** 500 MHz ^1H NMR CDCl_3



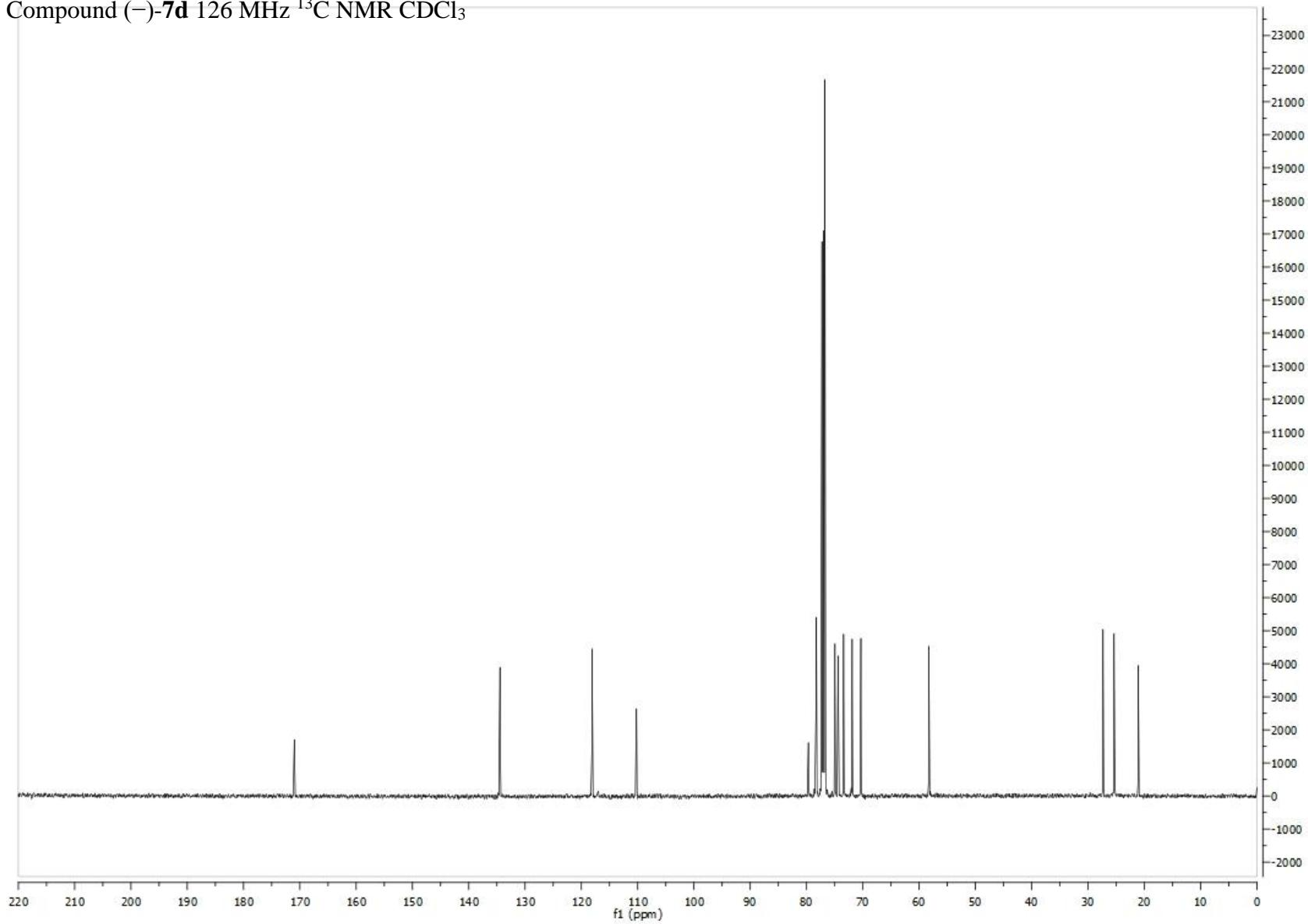
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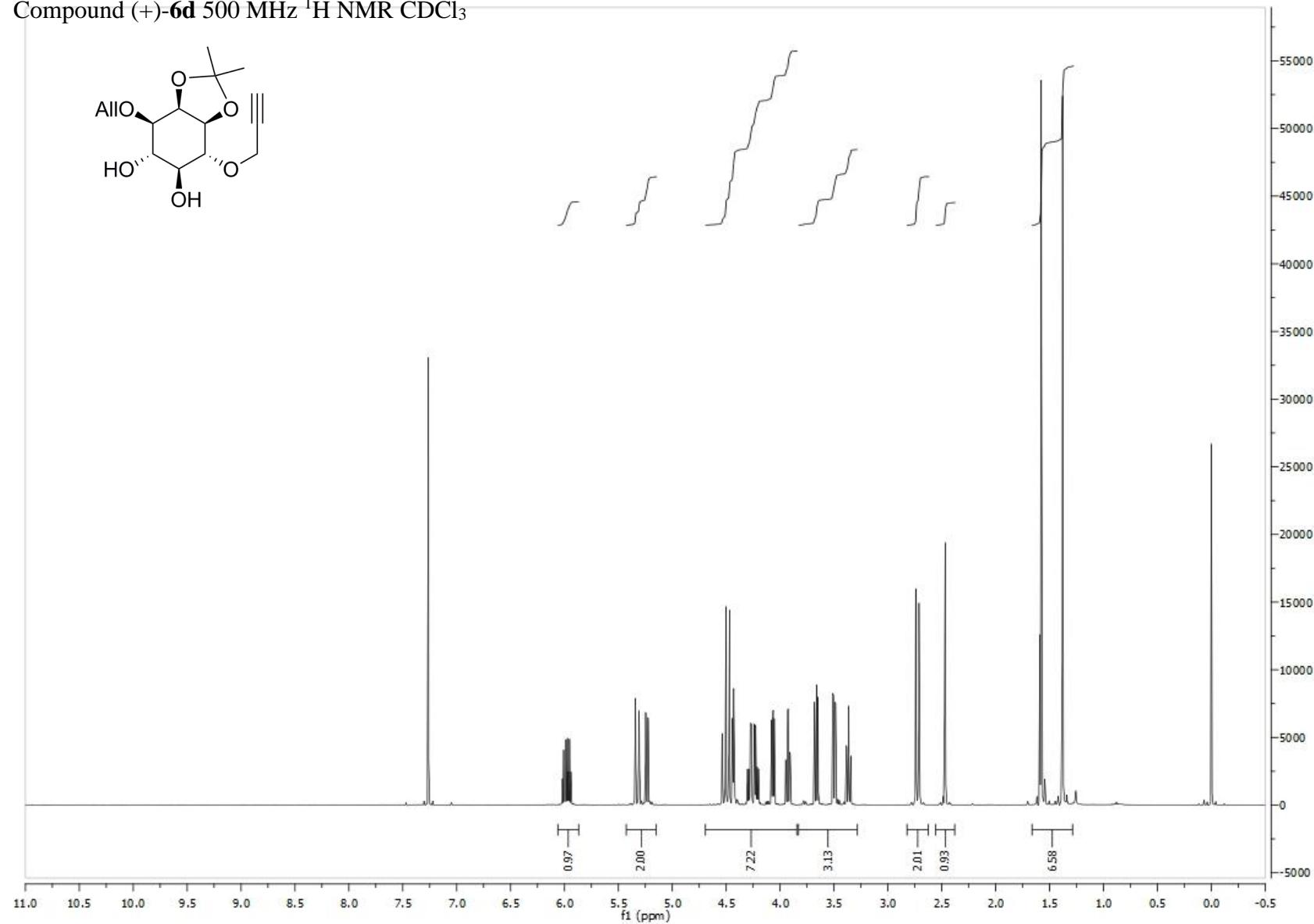
Compound (-)-**7d** 500 MHz ^1H NMR CDCl_3



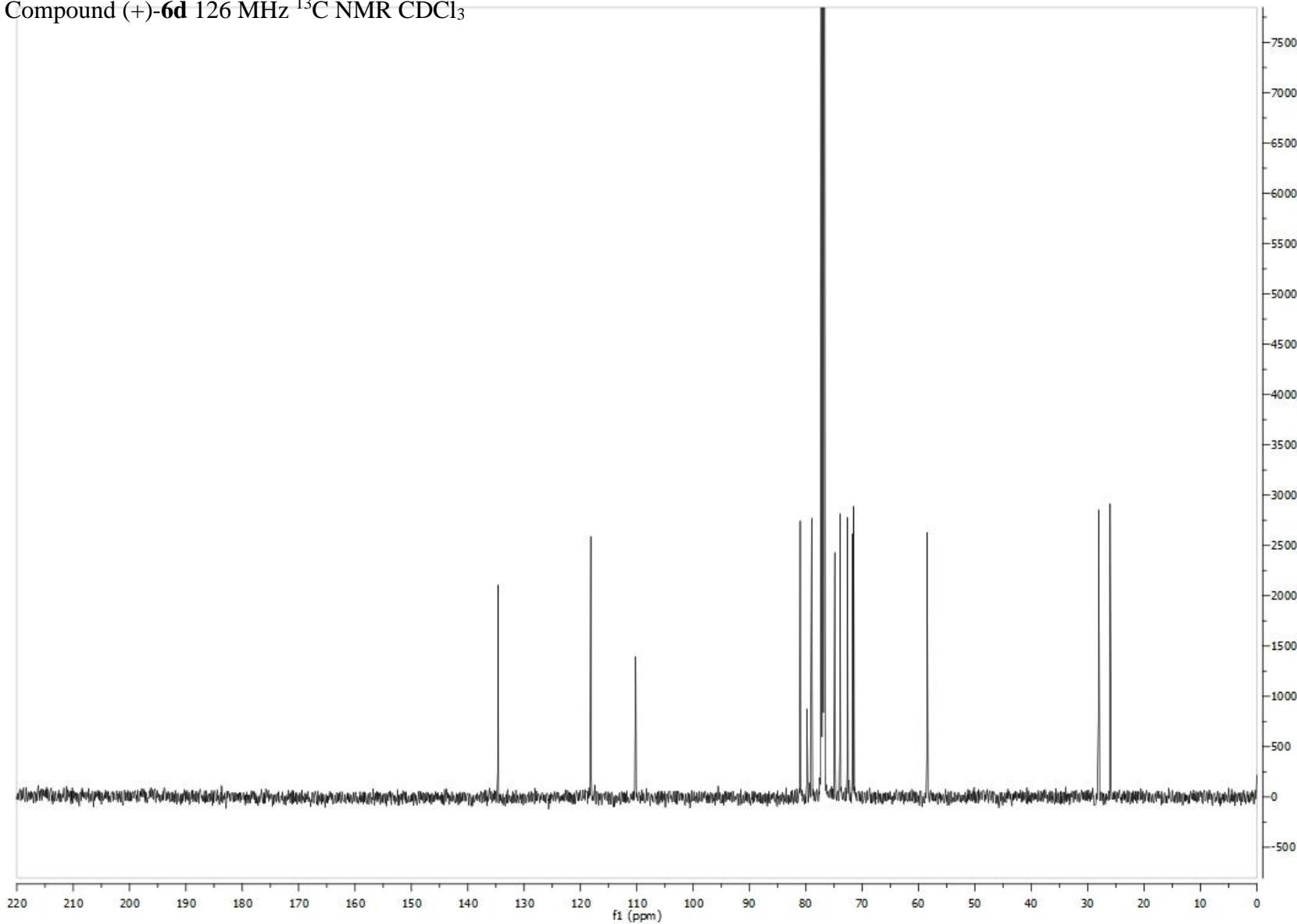
Compound (-)-**7d** 126 MHz ^{13}C NMR CDCl_3



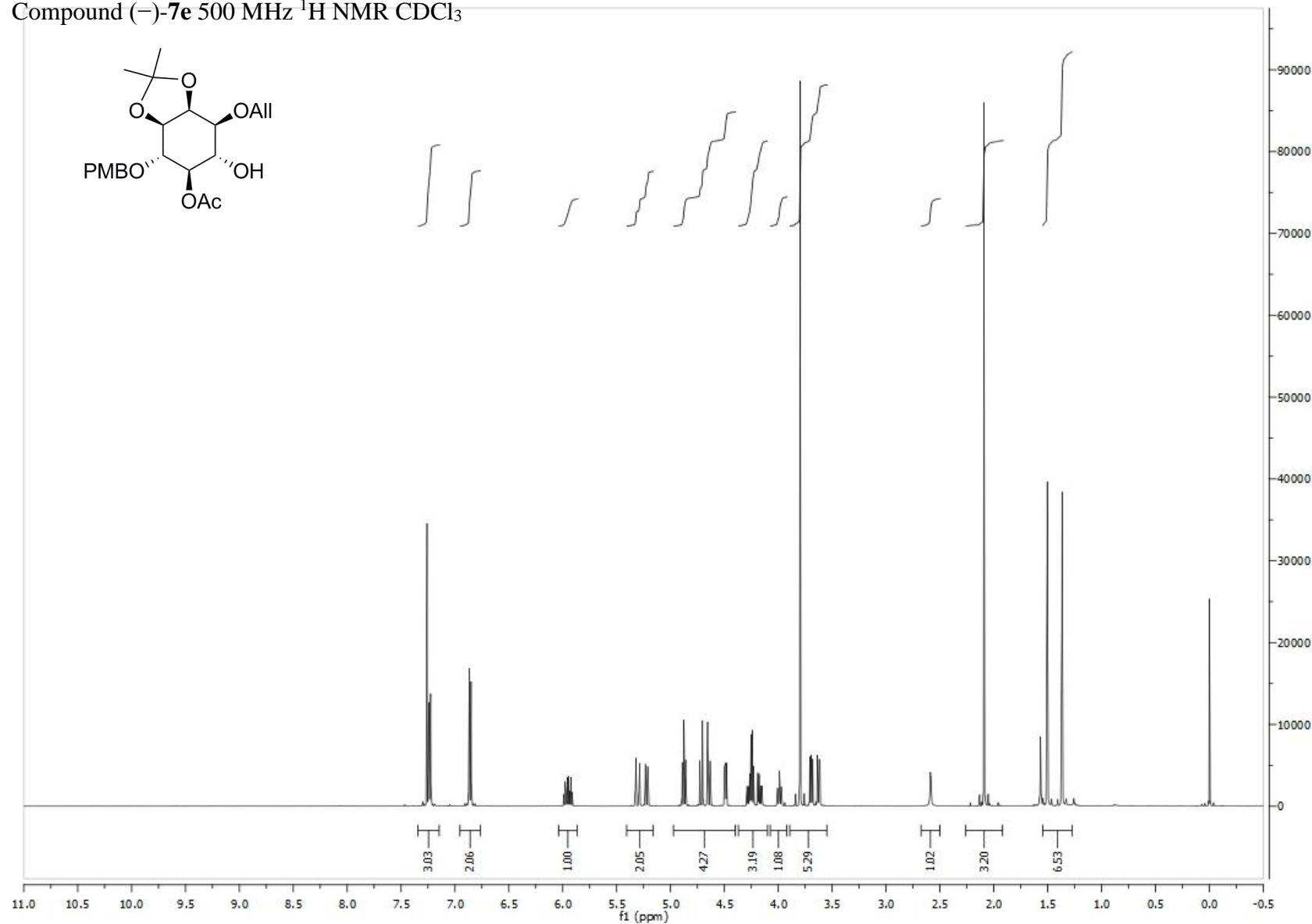
Compound (+)-**6d** 500 MHz ^1H NMR CDCl_3



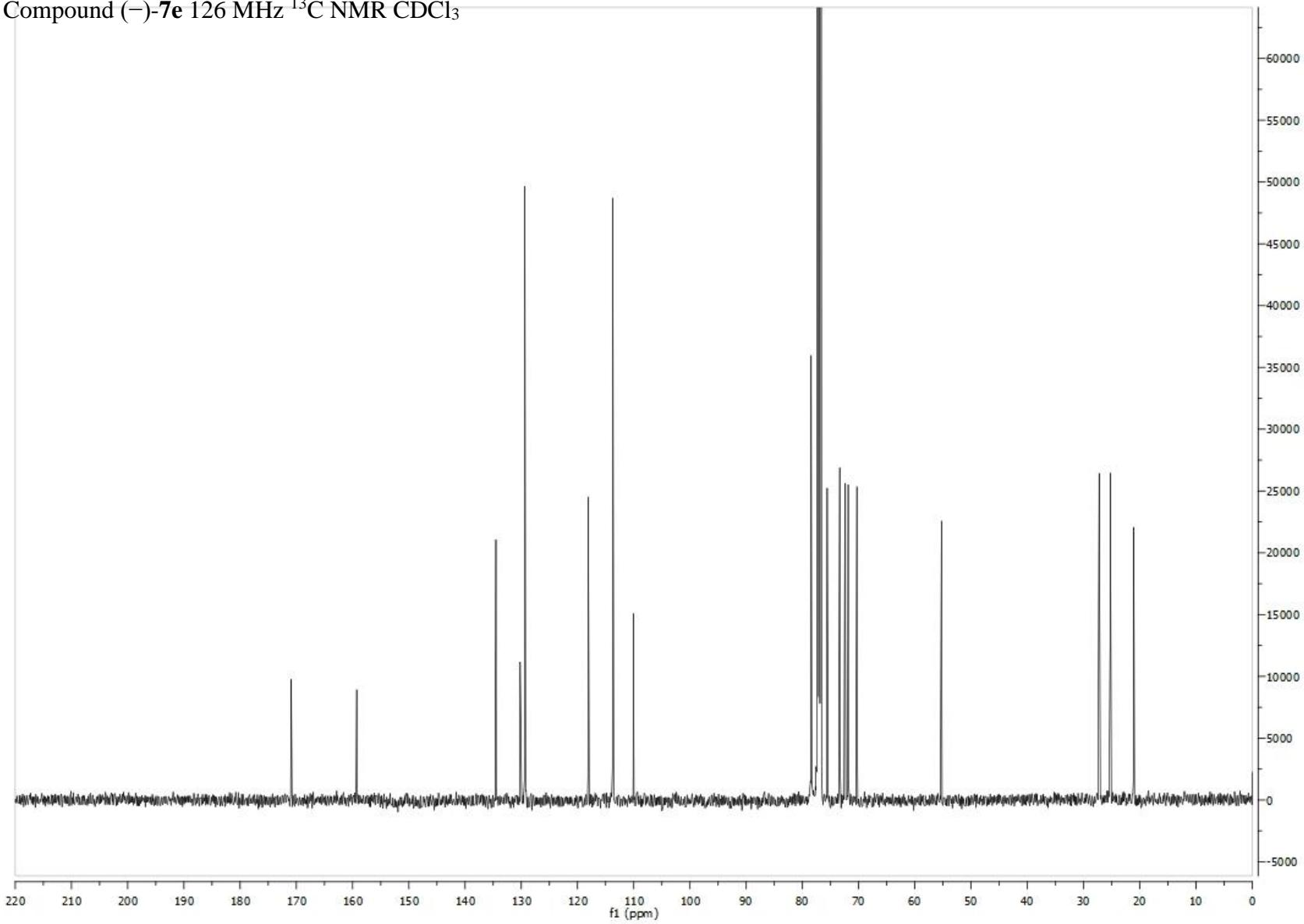
Compound (+)-**6d** 126 MHz ^{13}C NMR CDCl_3



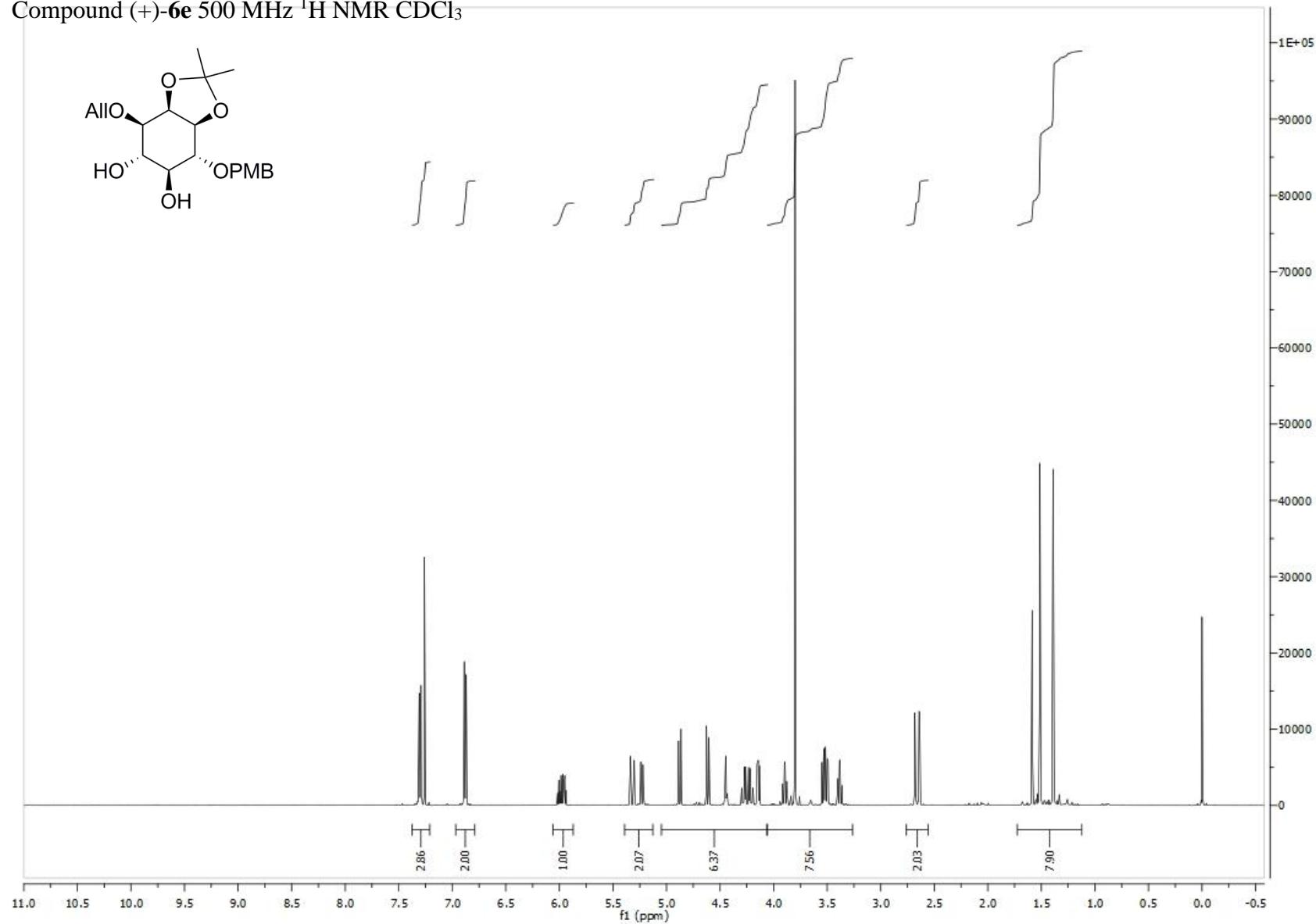
Compound (-)-7e 500 MHz ^1H NMR CDCl_3



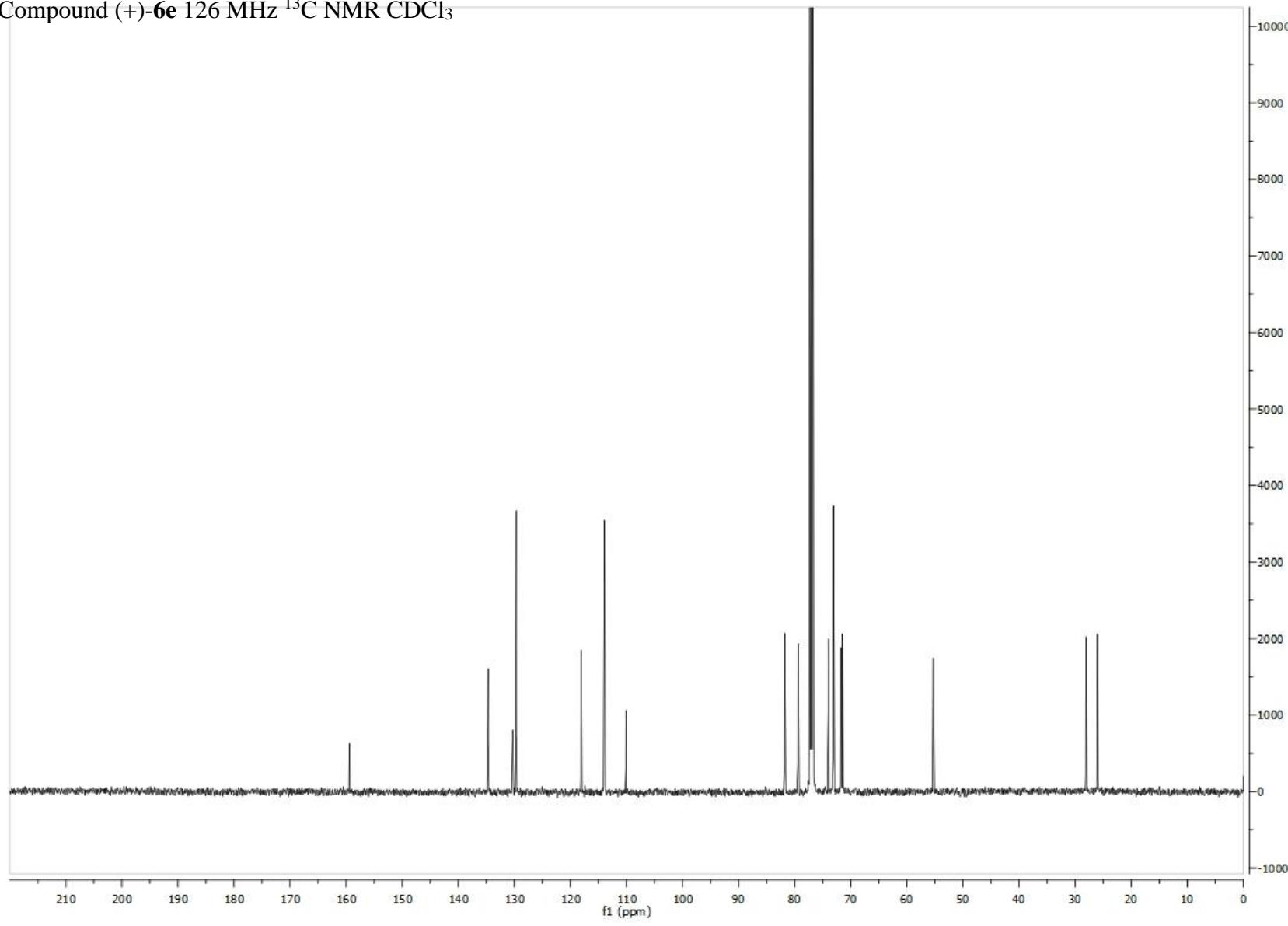
Compound (-)-7e 126 MHz ^{13}C NMR CDCl_3



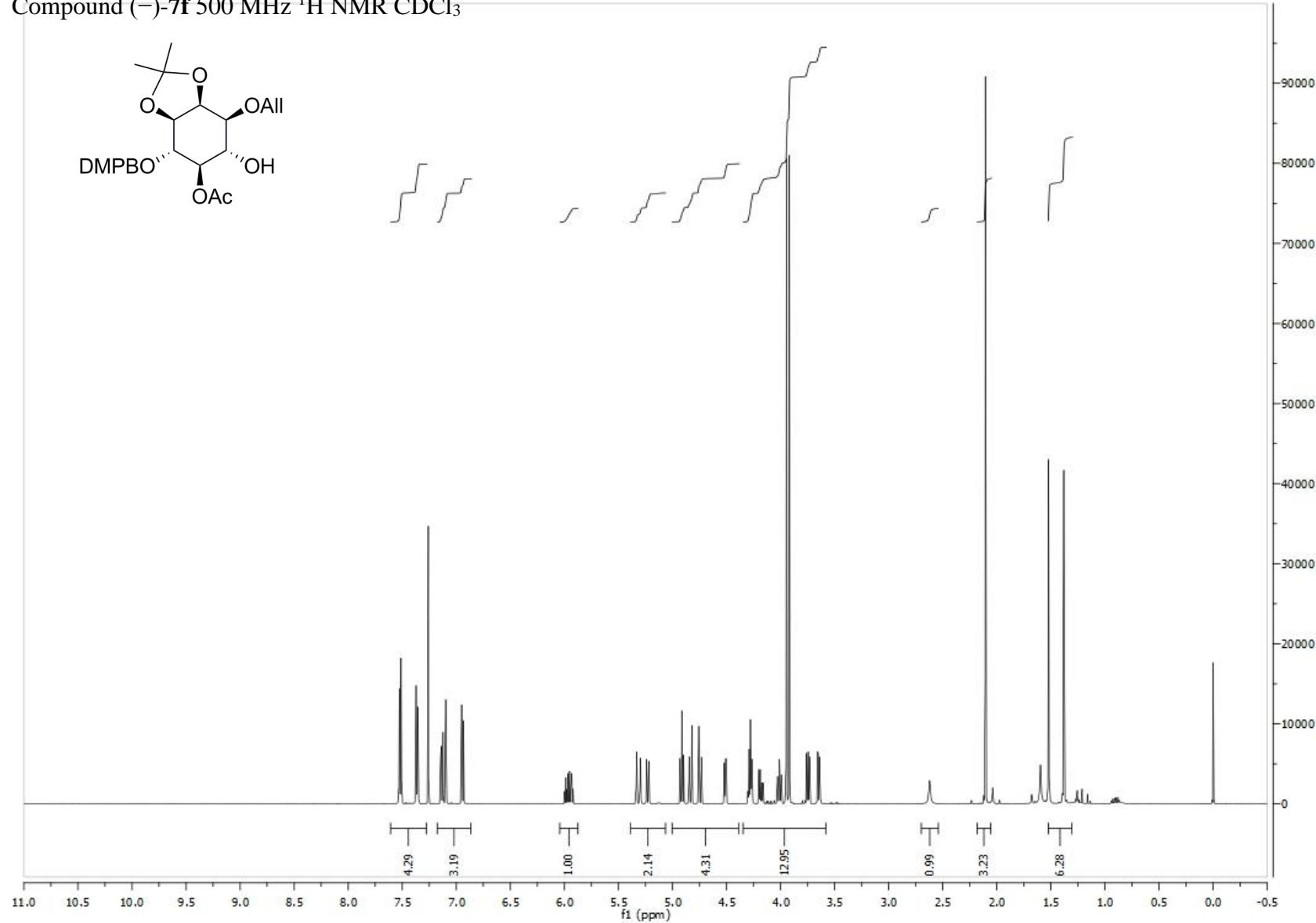
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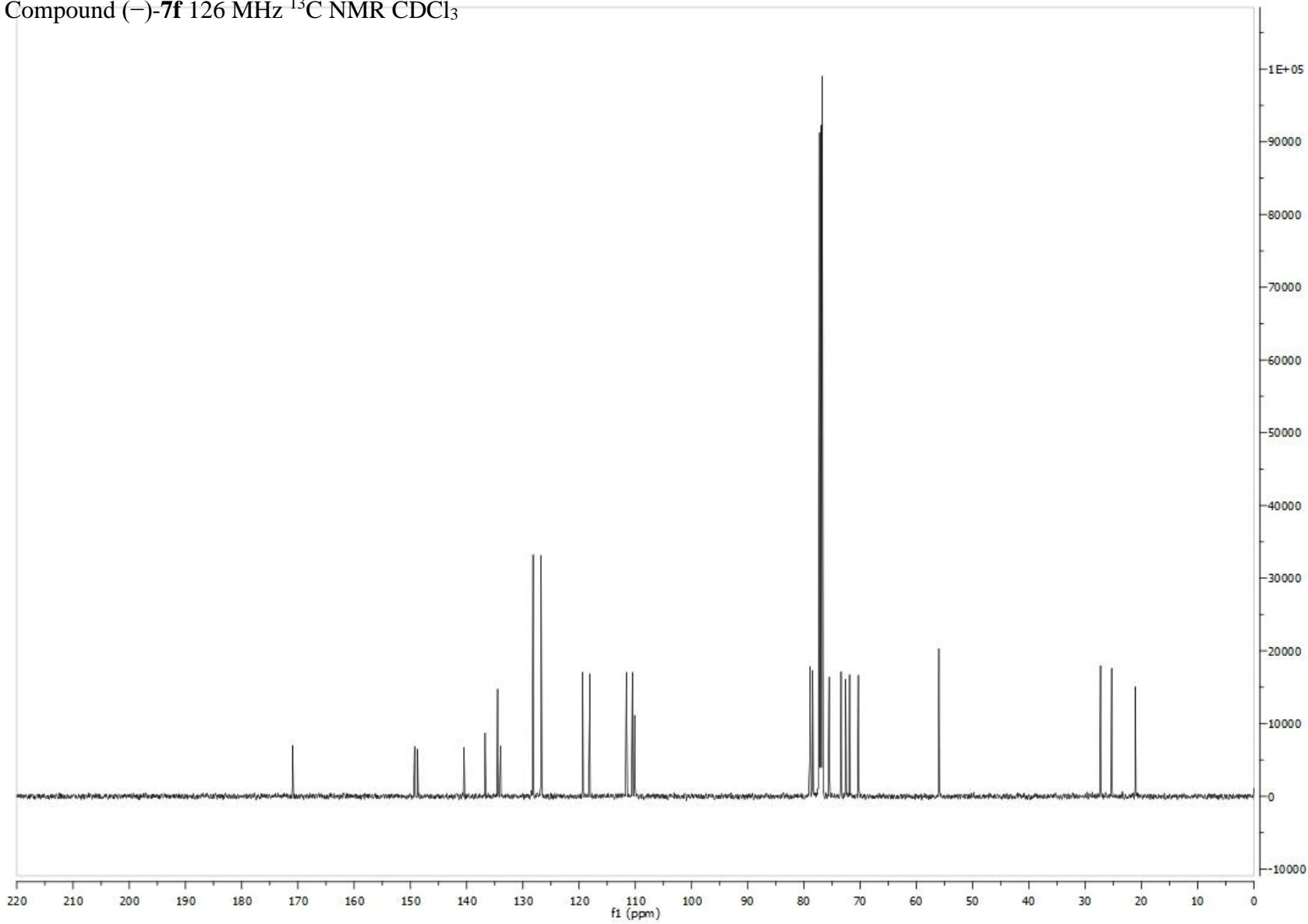
Compound (+)-**6e** 126 MHz ^{13}C NMR CDCl_3



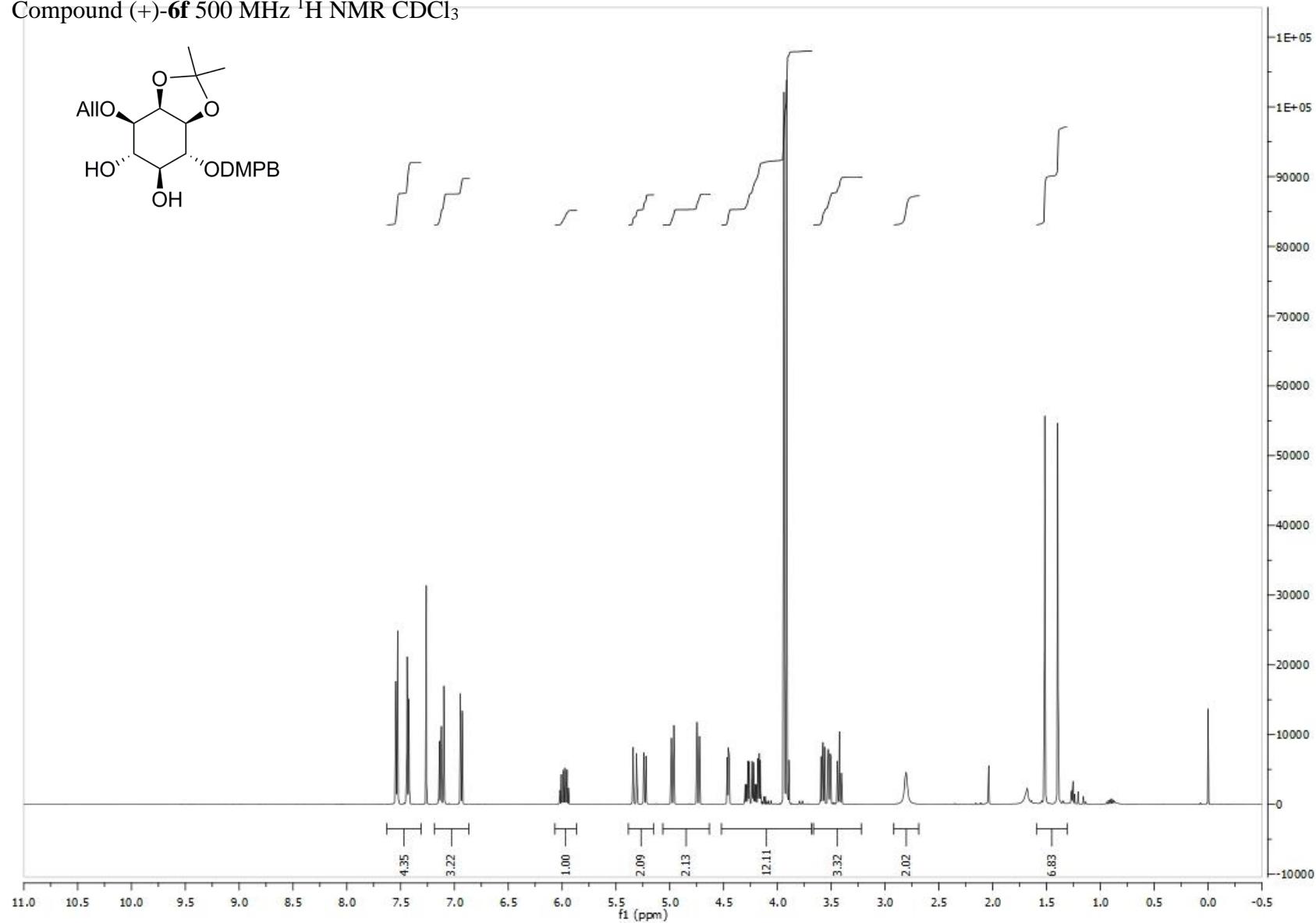
Compound (-)-**7f** 500 MHz ^1H NMR CDCl_3



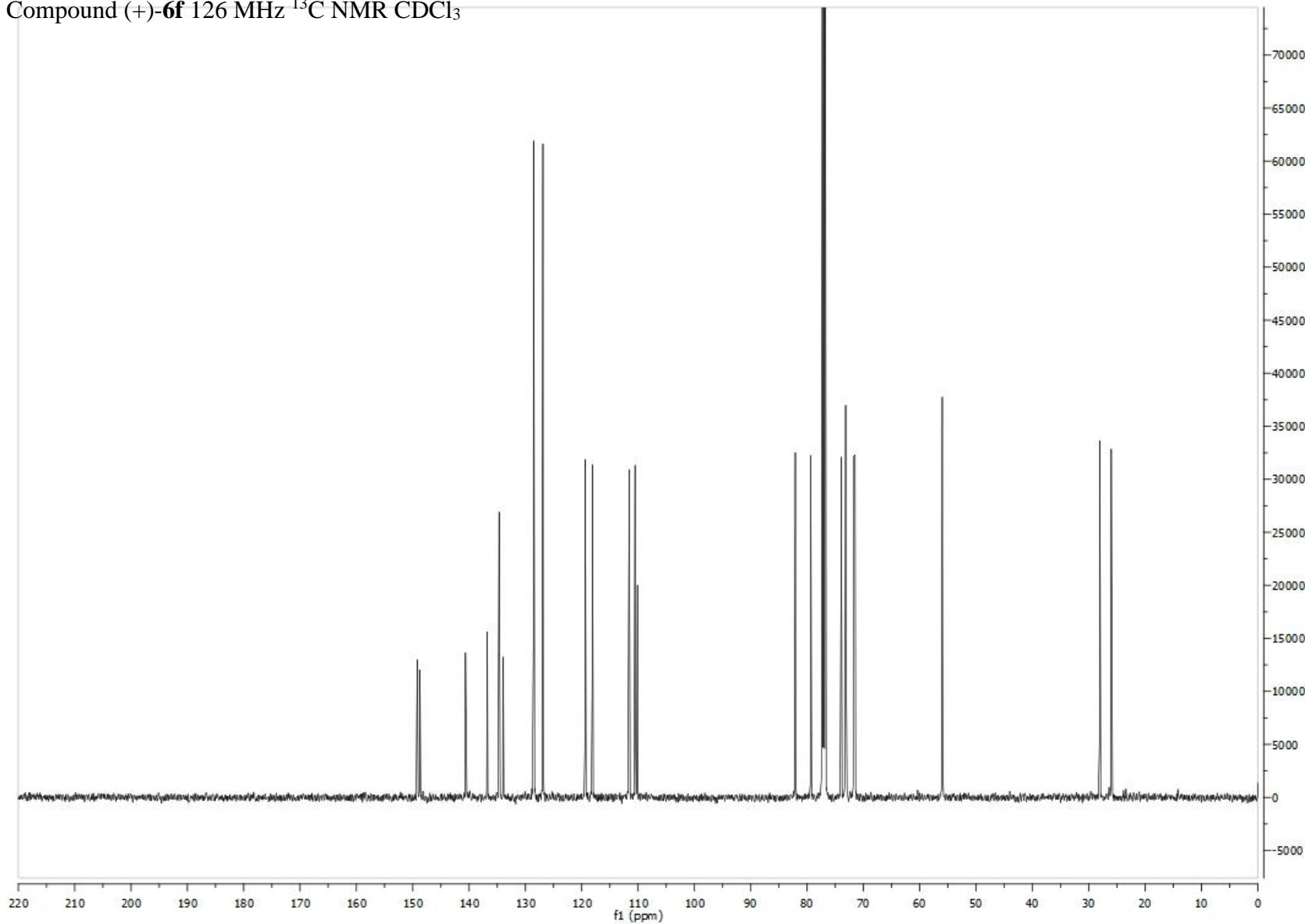
Compound (-)-**7f** 126 MHz ^{13}C NMR CDCl_3



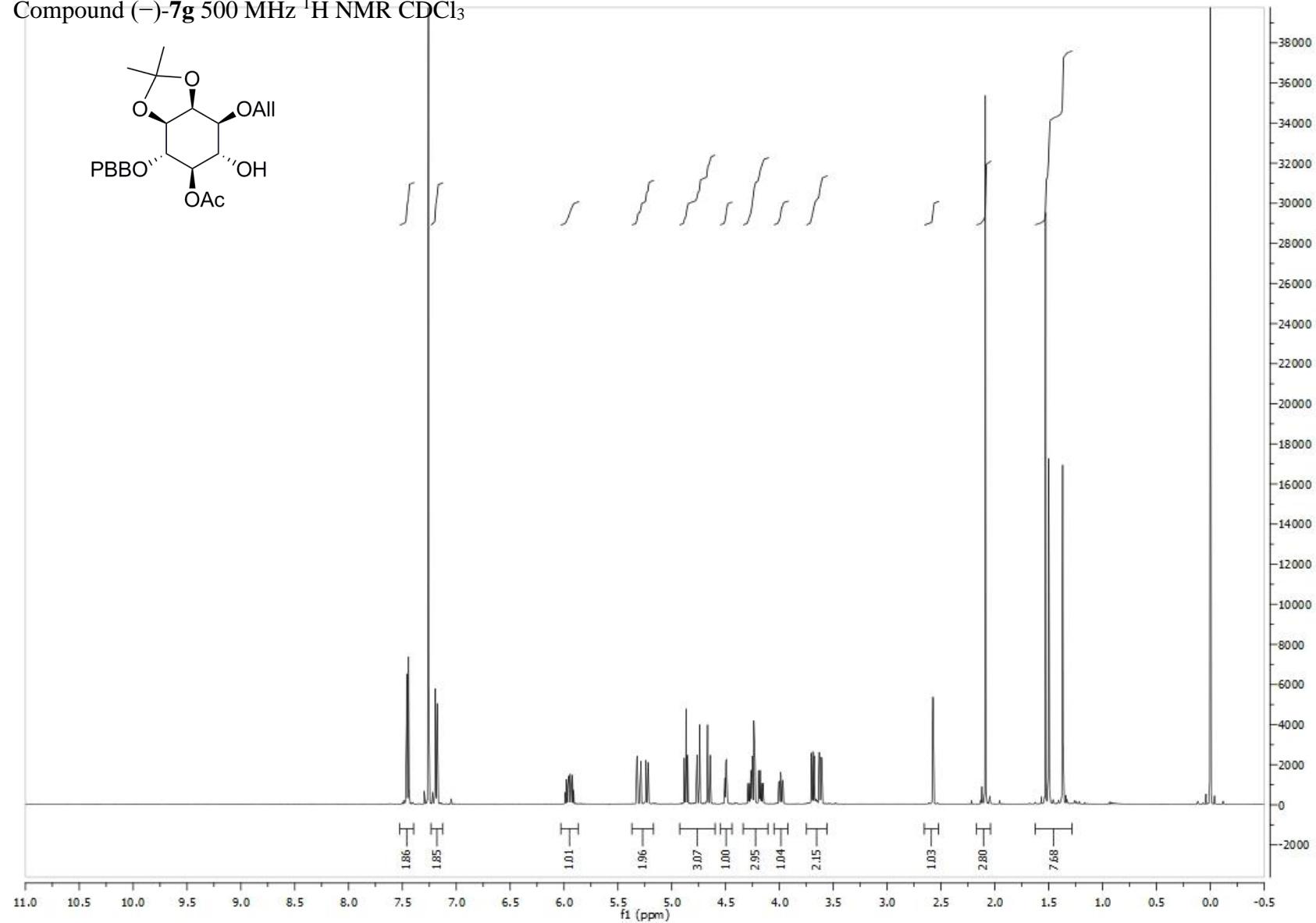
Compound (+)-**6f** 500 MHz ^1H NMR CDCl_3



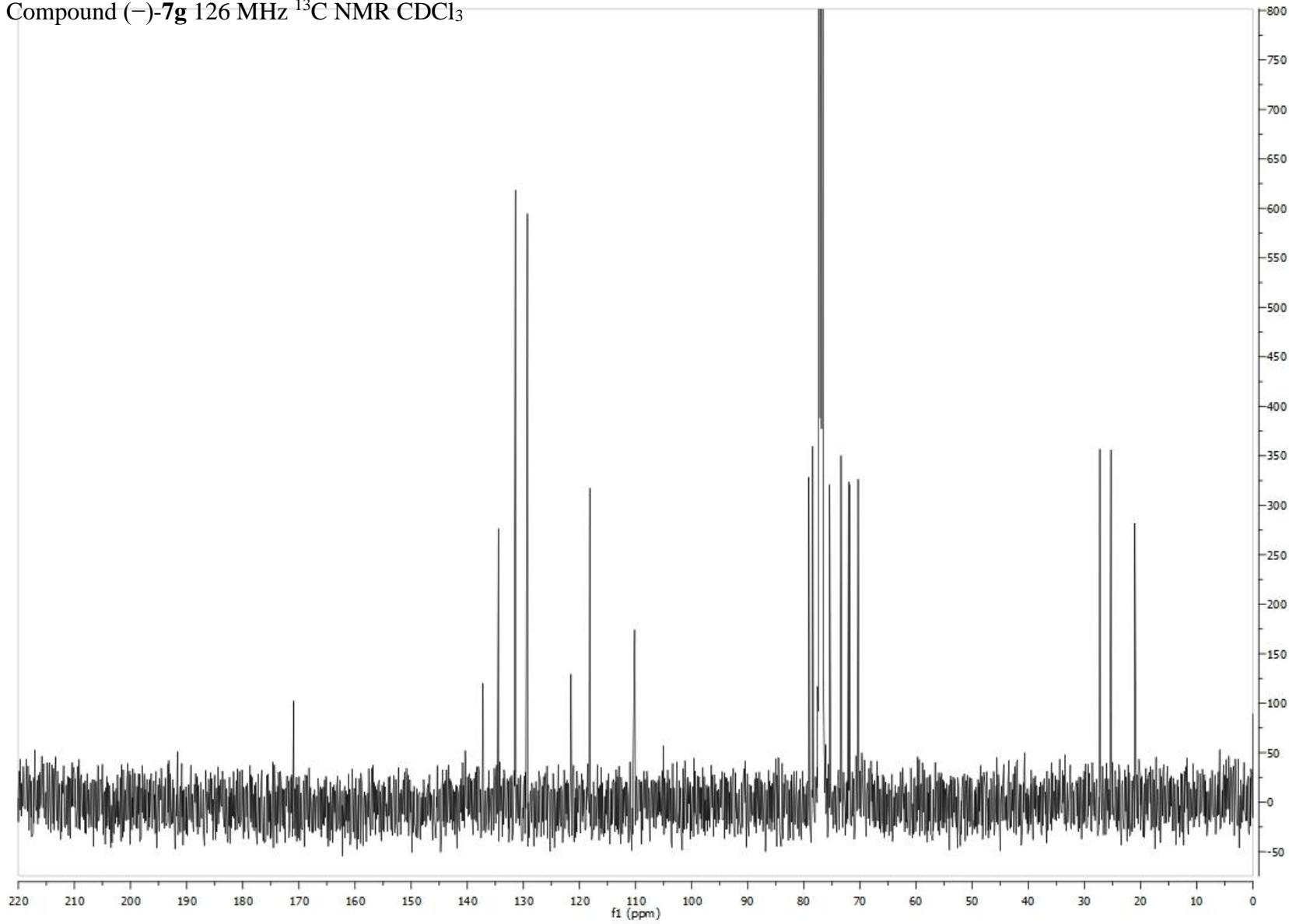
Compound (+)-**6f** 126 MHz ^{13}C NMR CDCl_3



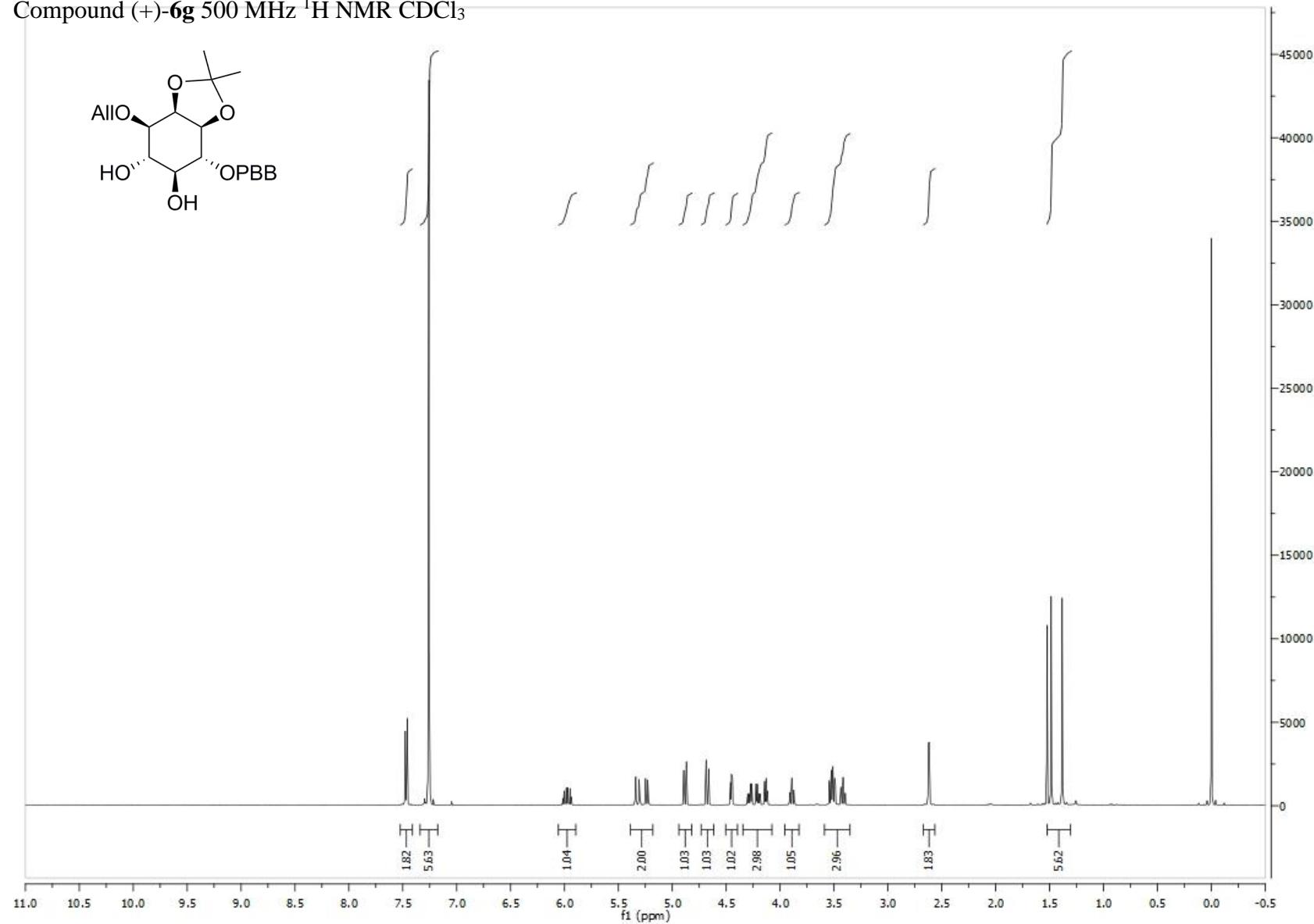
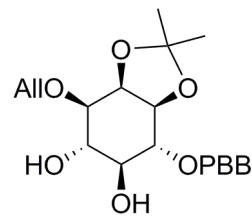
Compound (-)-7g 500 MHz ^1H NMR CDCl_3



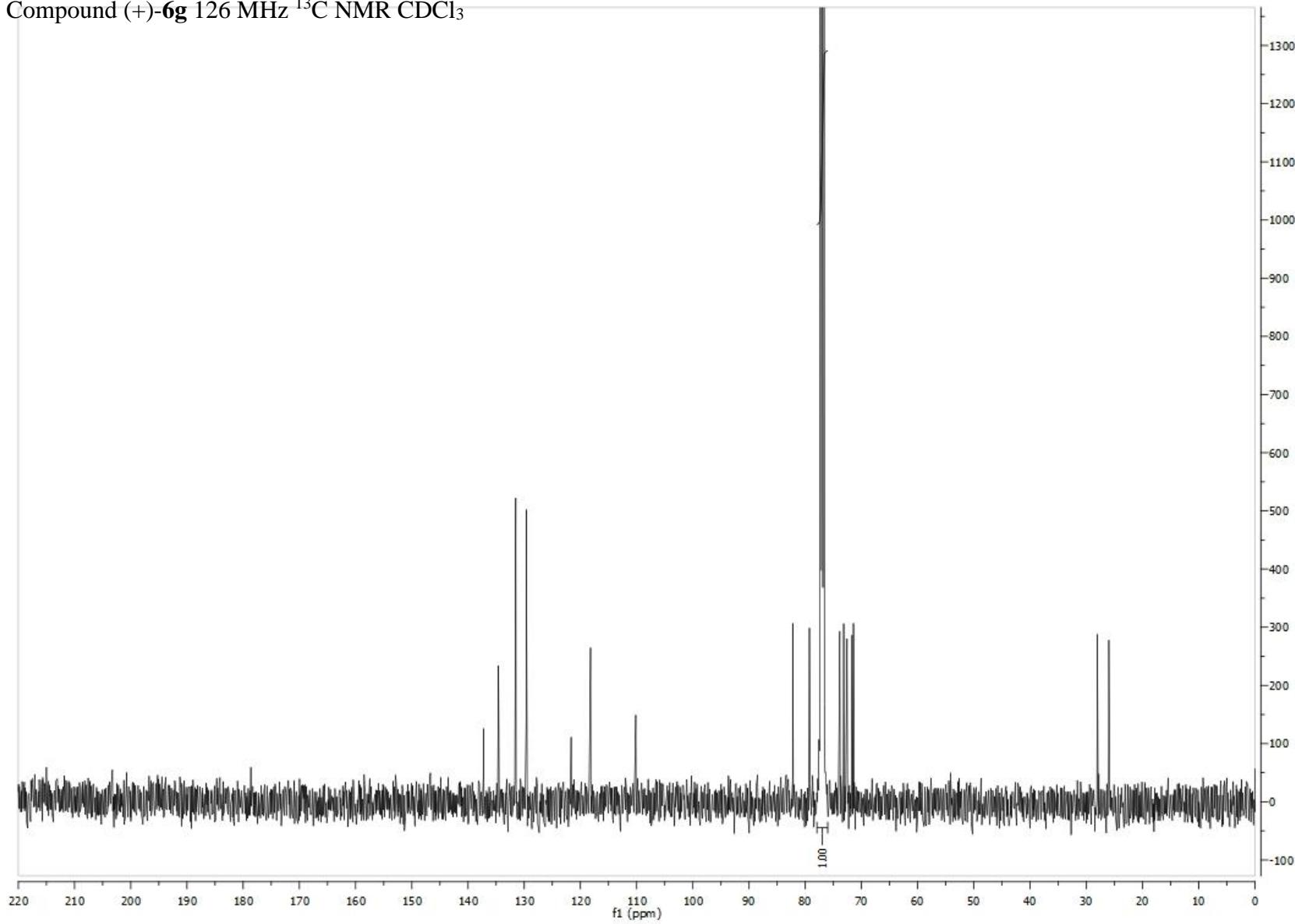
Compound (-)-7g 126 MHz ^{13}C NMR CDCl_3



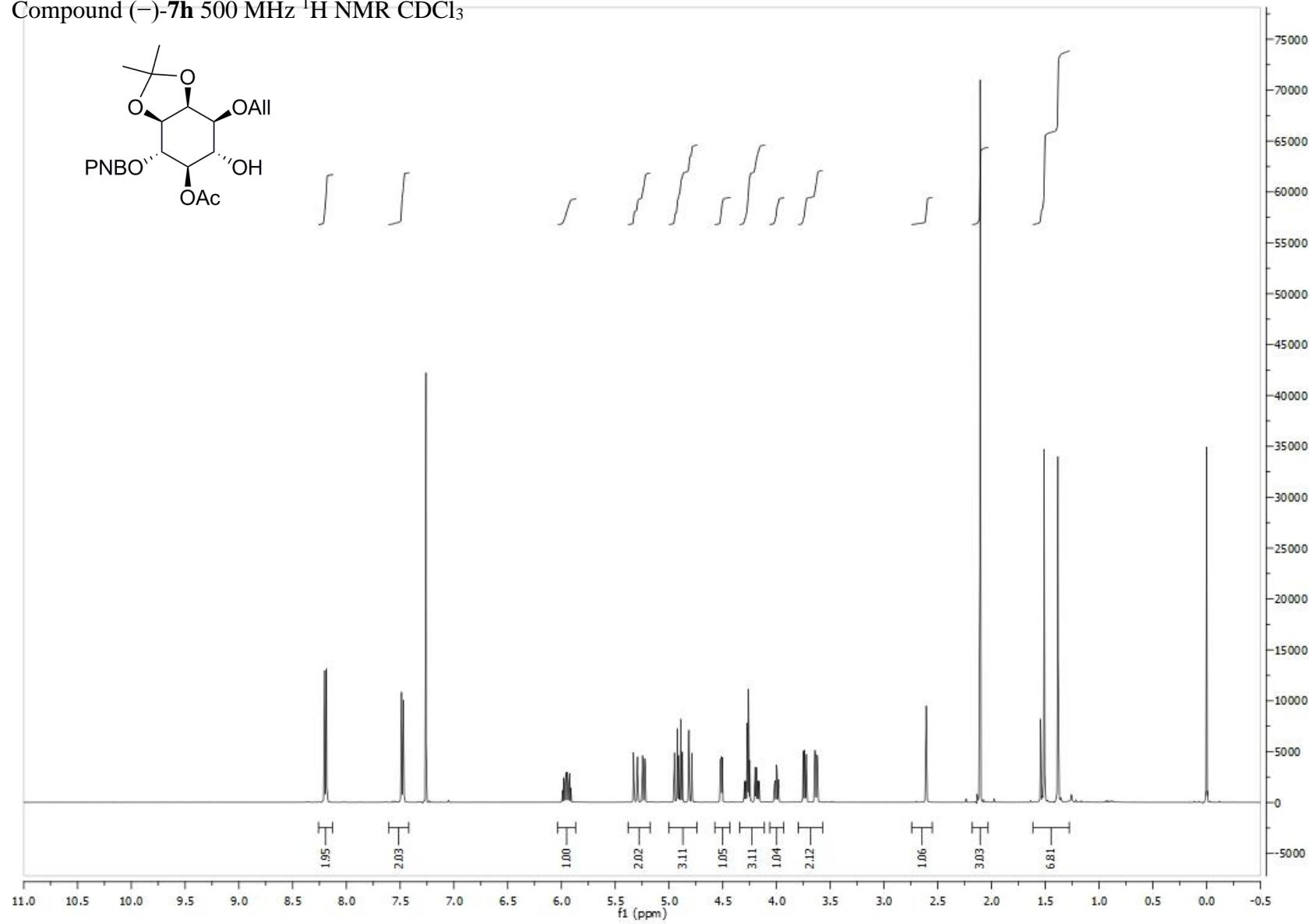
Compound (+)-**6g** 500 MHz ^1H NMR CDCl_3



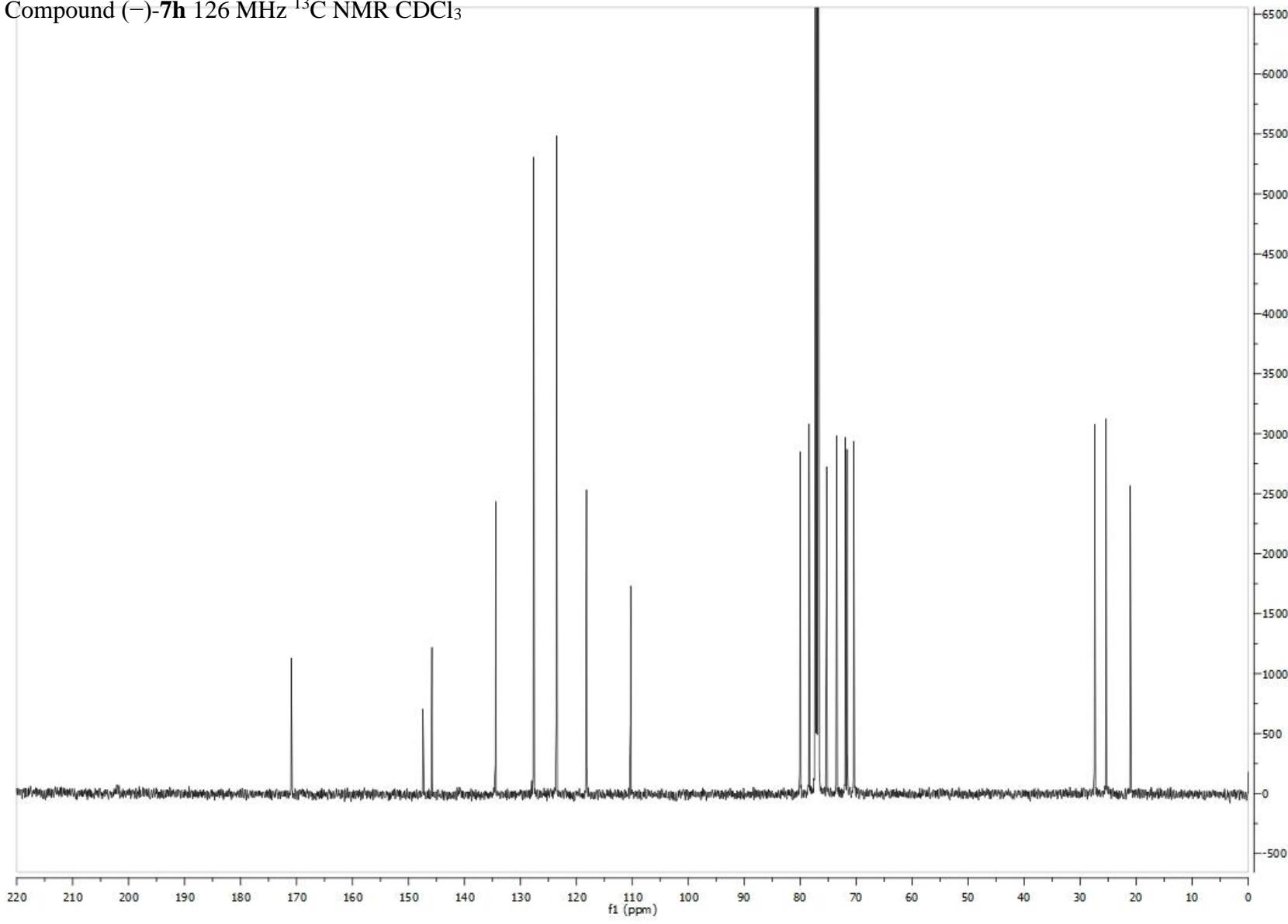
Compound (+)-**6g** 126 MHz ^{13}C NMR CDCl_3



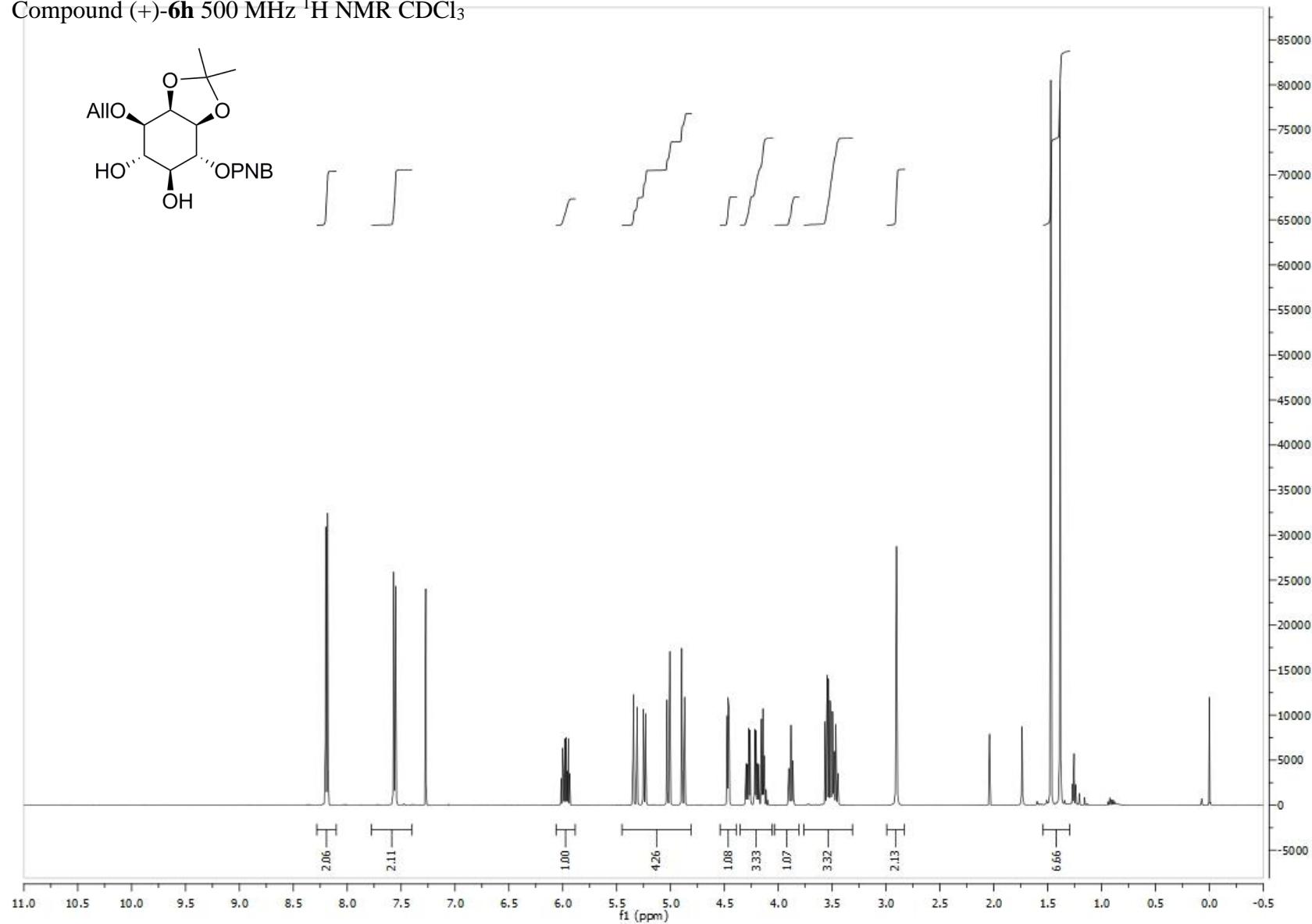
Compound (-)-**7h** 500 MHz ^1H NMR CDCl_3



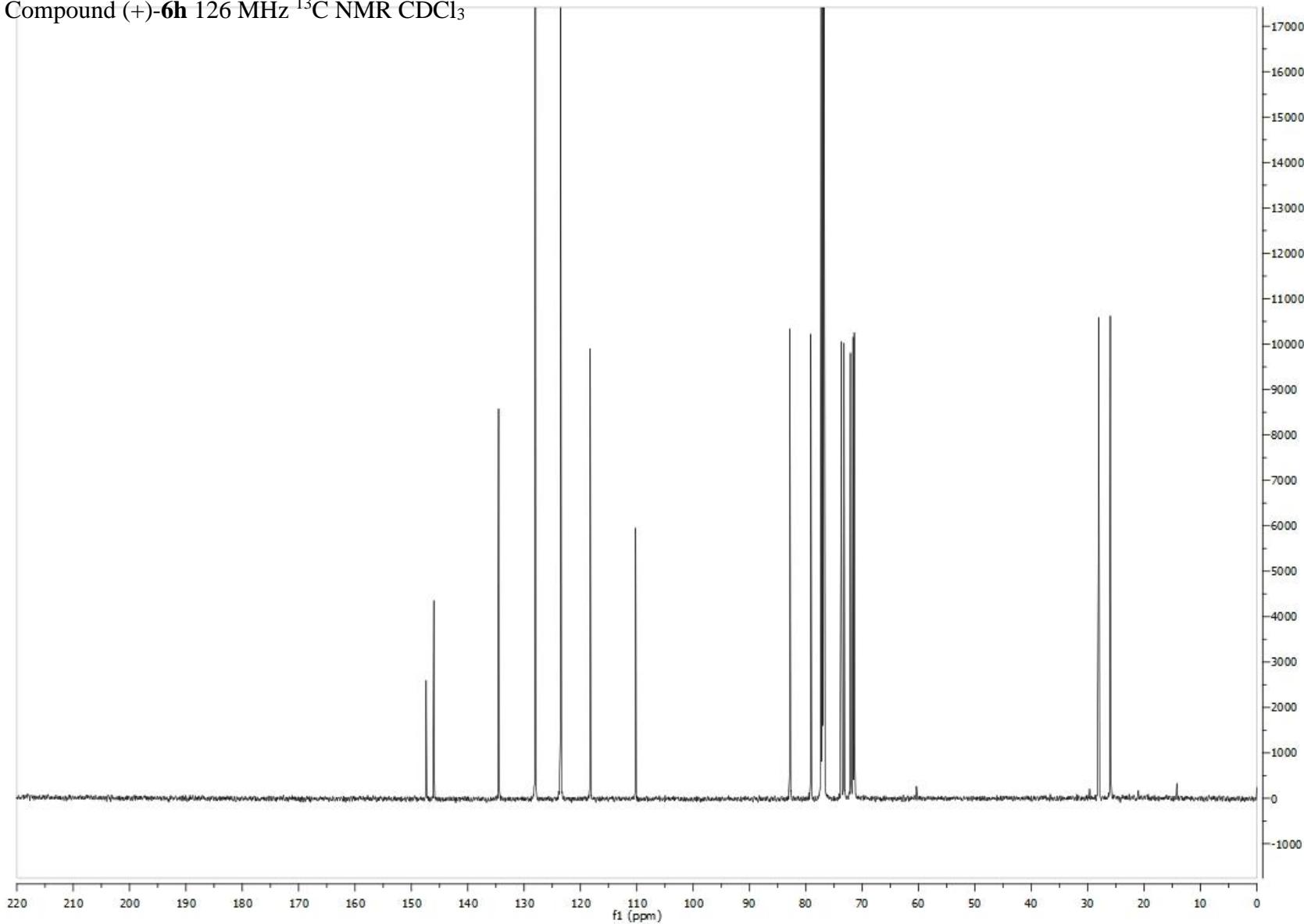
Compound (-)-**7h** 126 MHz ^{13}C NMR CDCl_3



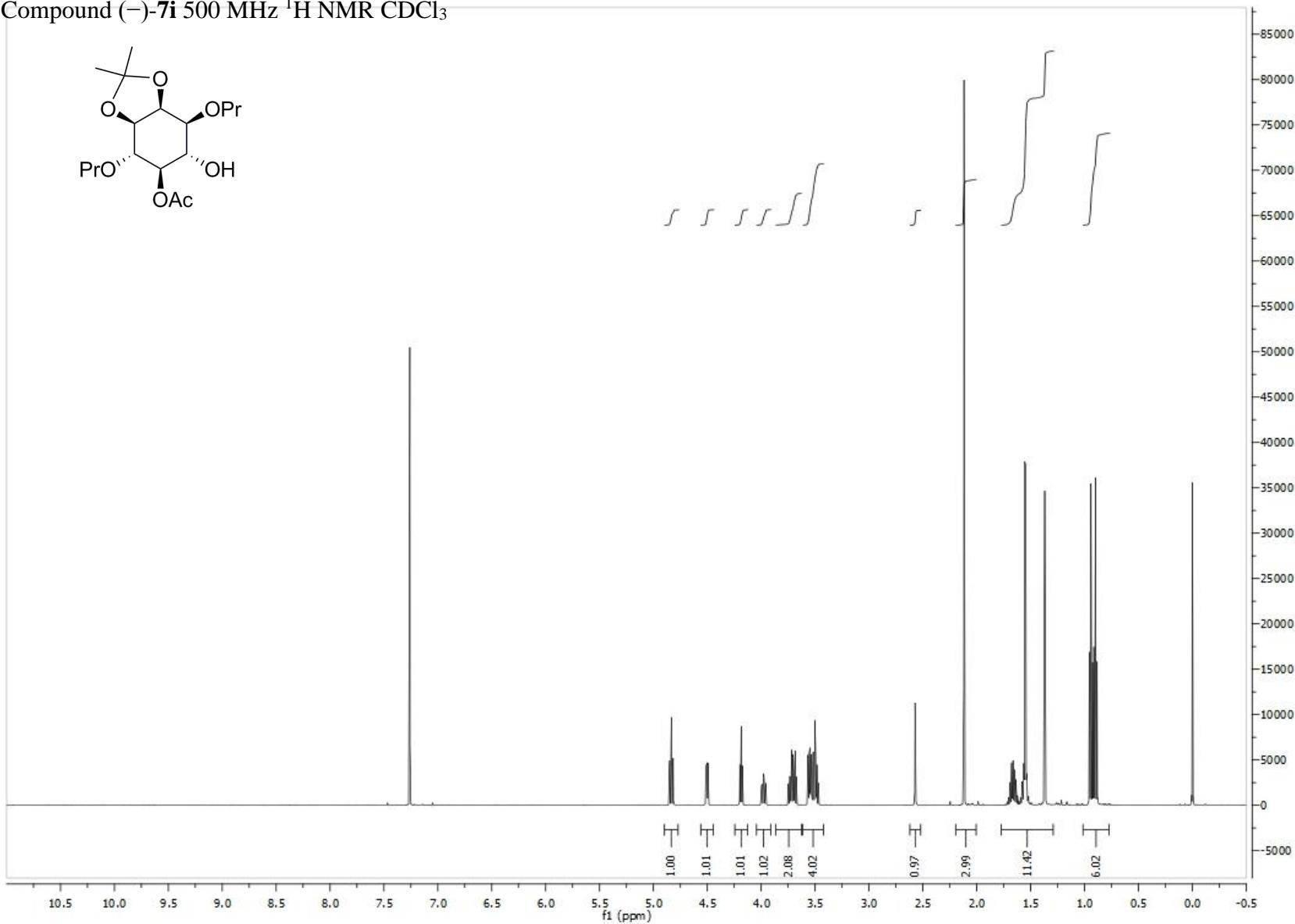
Compound (+)-**6h** 500 MHz ^1H NMR CDCl_3



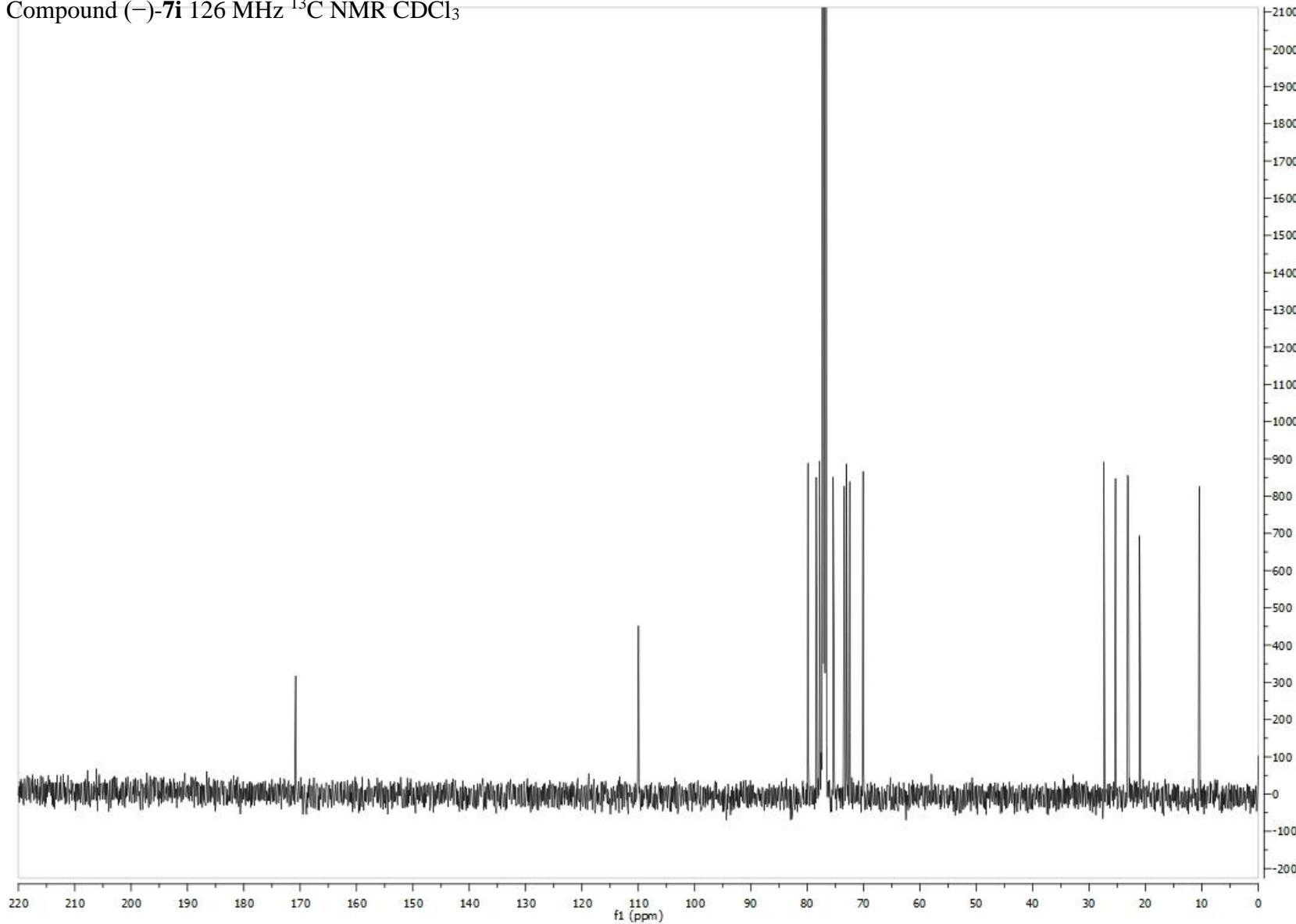
Compound (+)-**6h** 126 MHz ^{13}C NMR CDCl_3



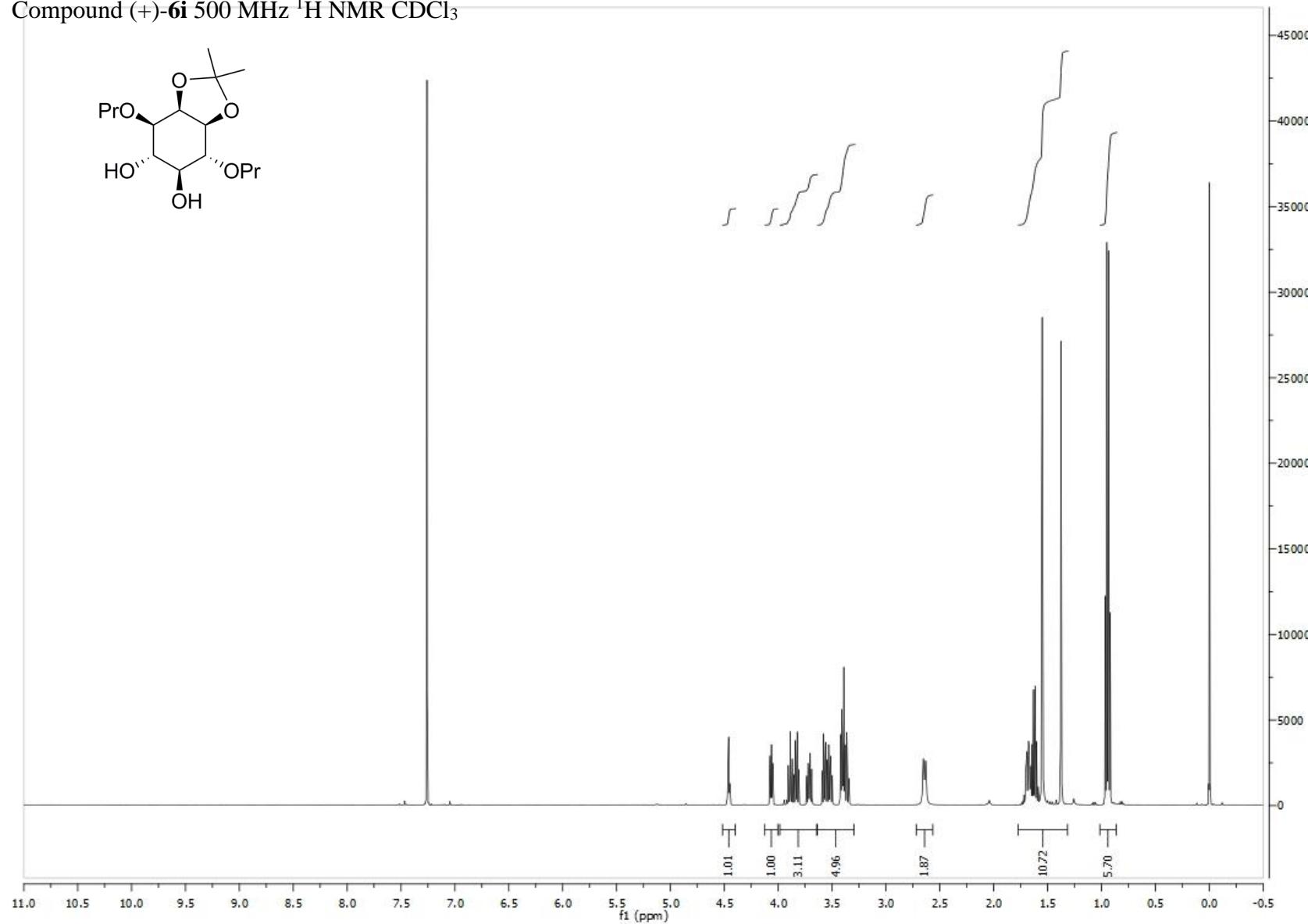
Compound (-)-7i 500 MHz ^1H NMR CDCl_3



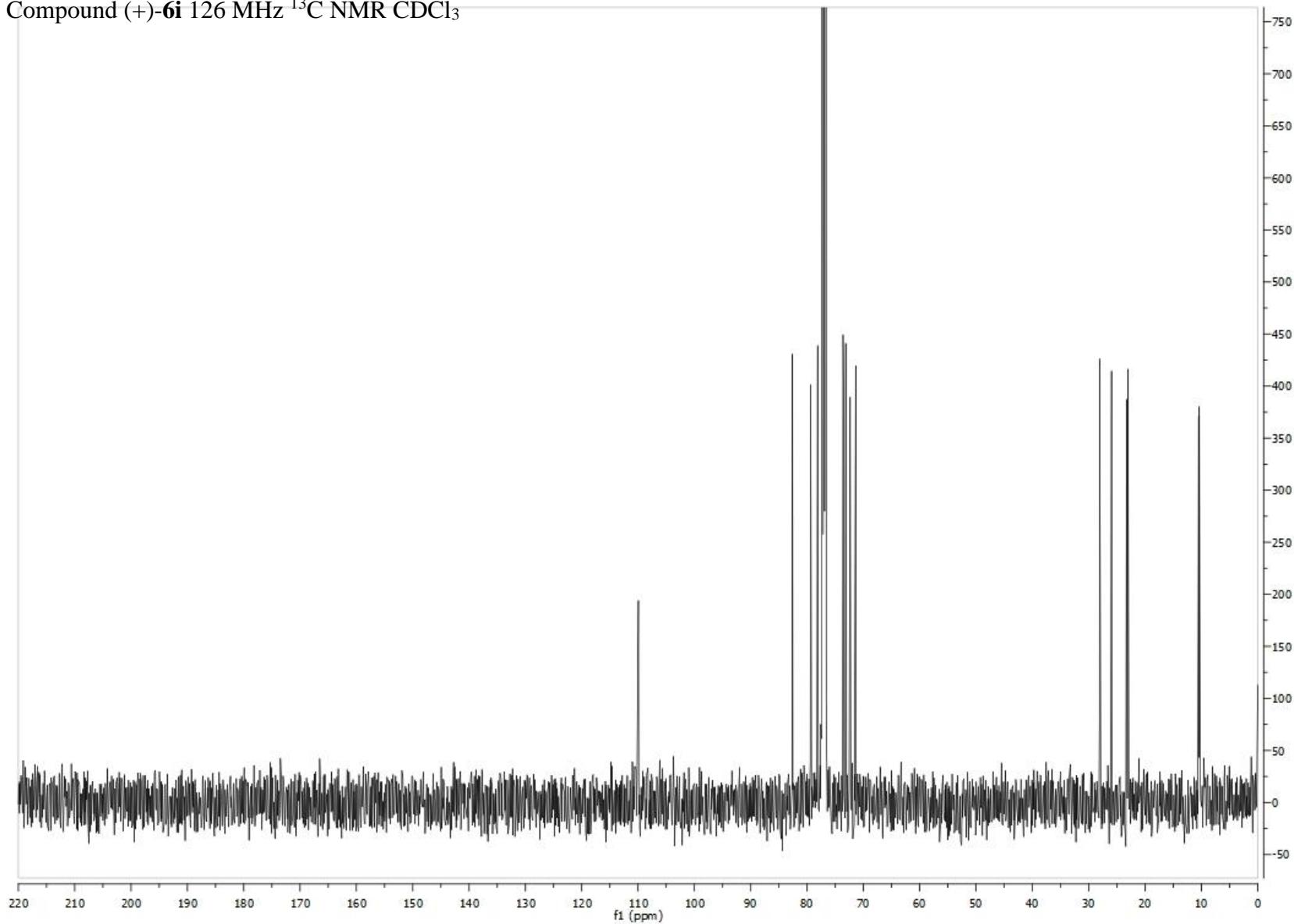
Compound (-)-**7i** 126 MHz ^{13}C NMR CDCl_3



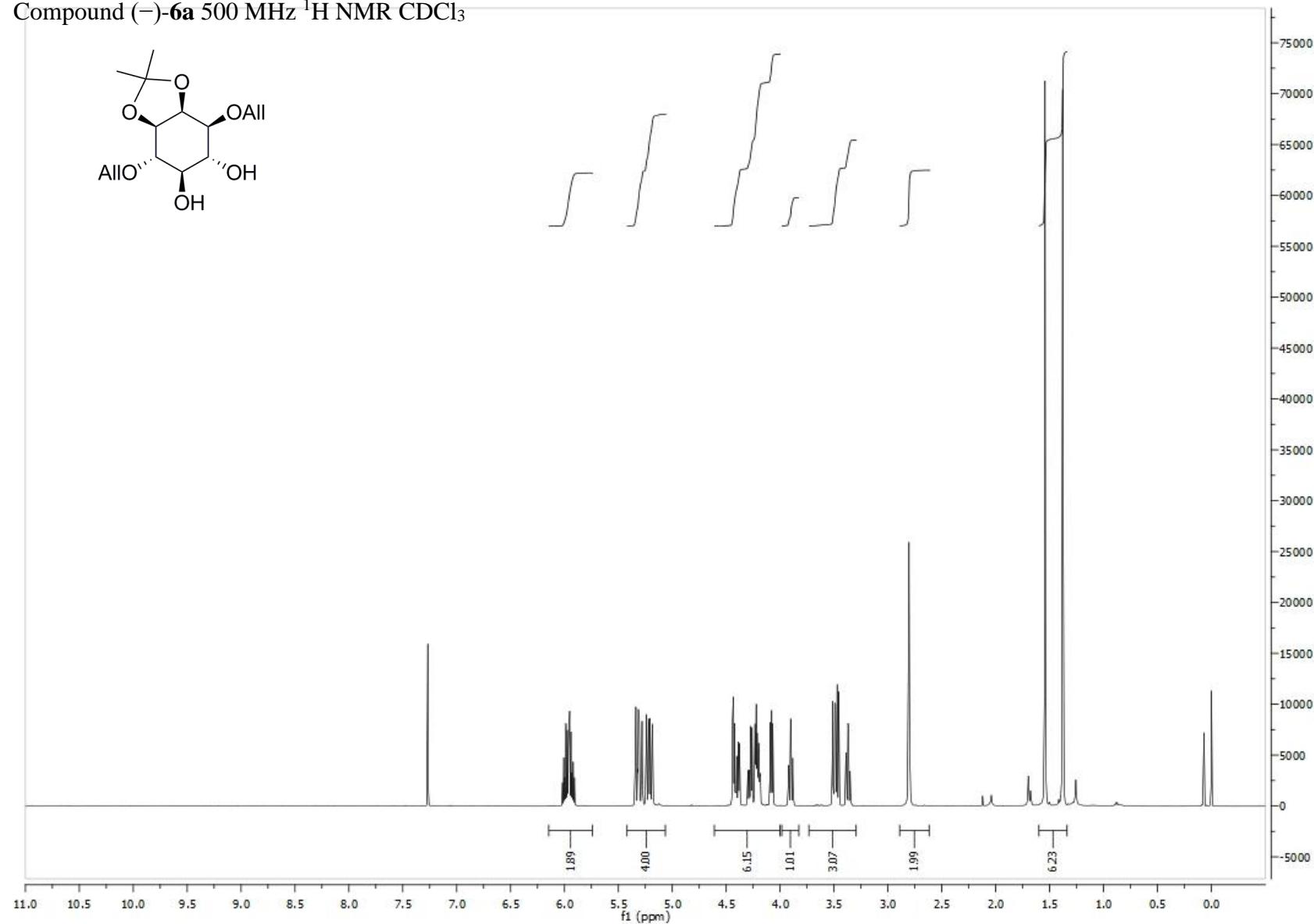
Compound (+)-**6i** 500 MHz ^1H NMR CDCl_3



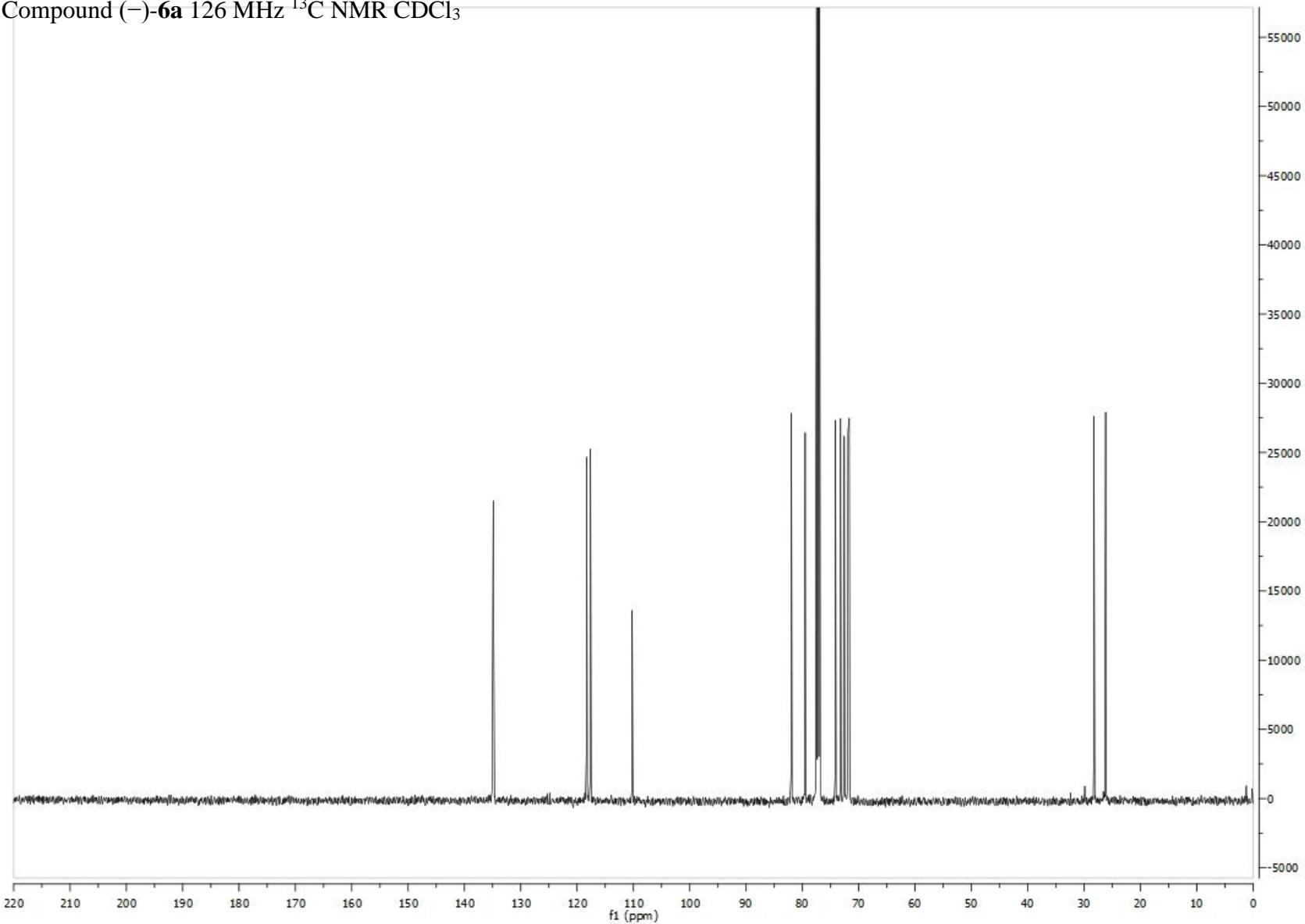
Compound (+)-**6i** 126 MHz ^{13}C NMR CDCl_3



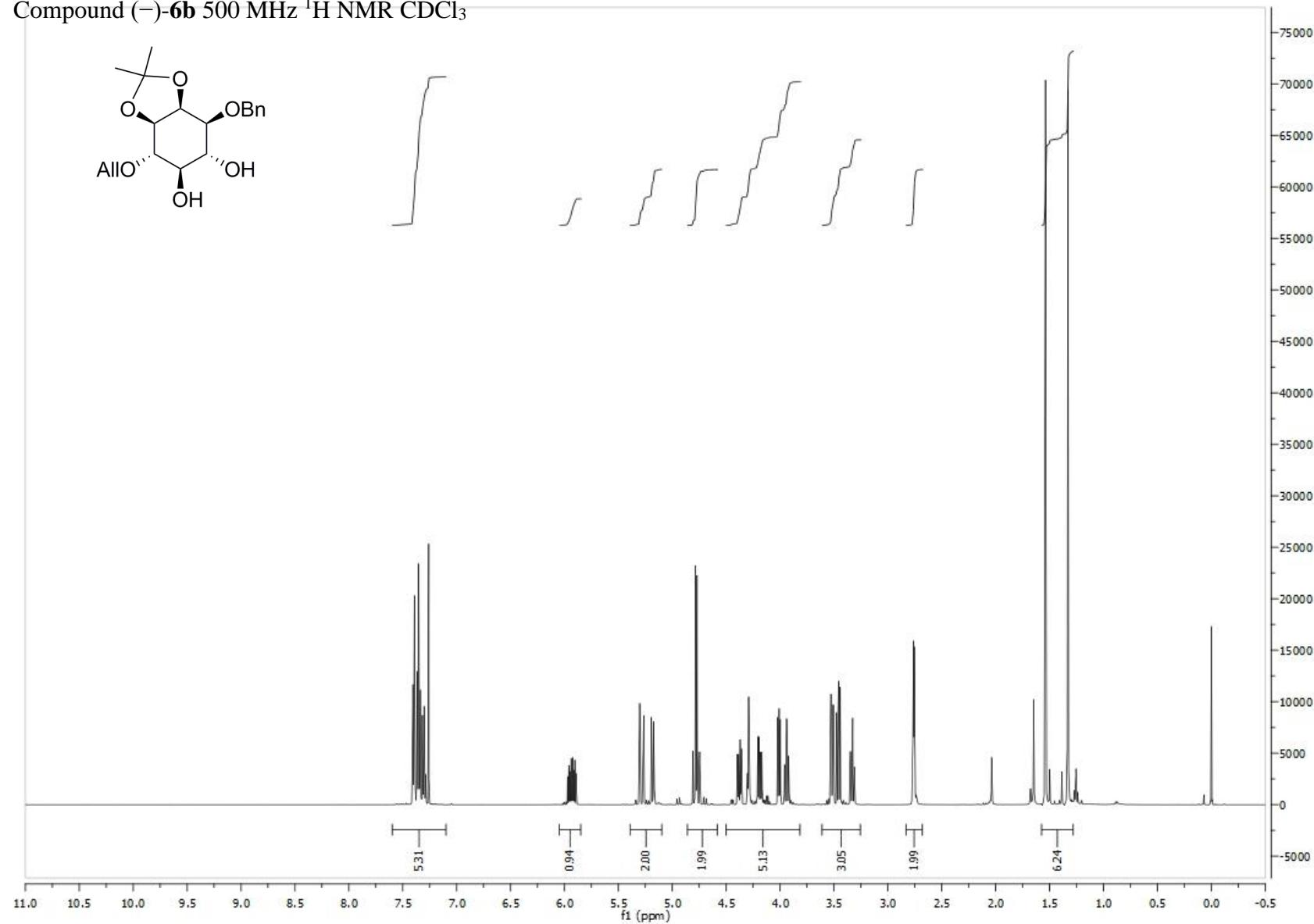
Compound (-)-**6a** 500 MHz ^1H NMR CDCl_3



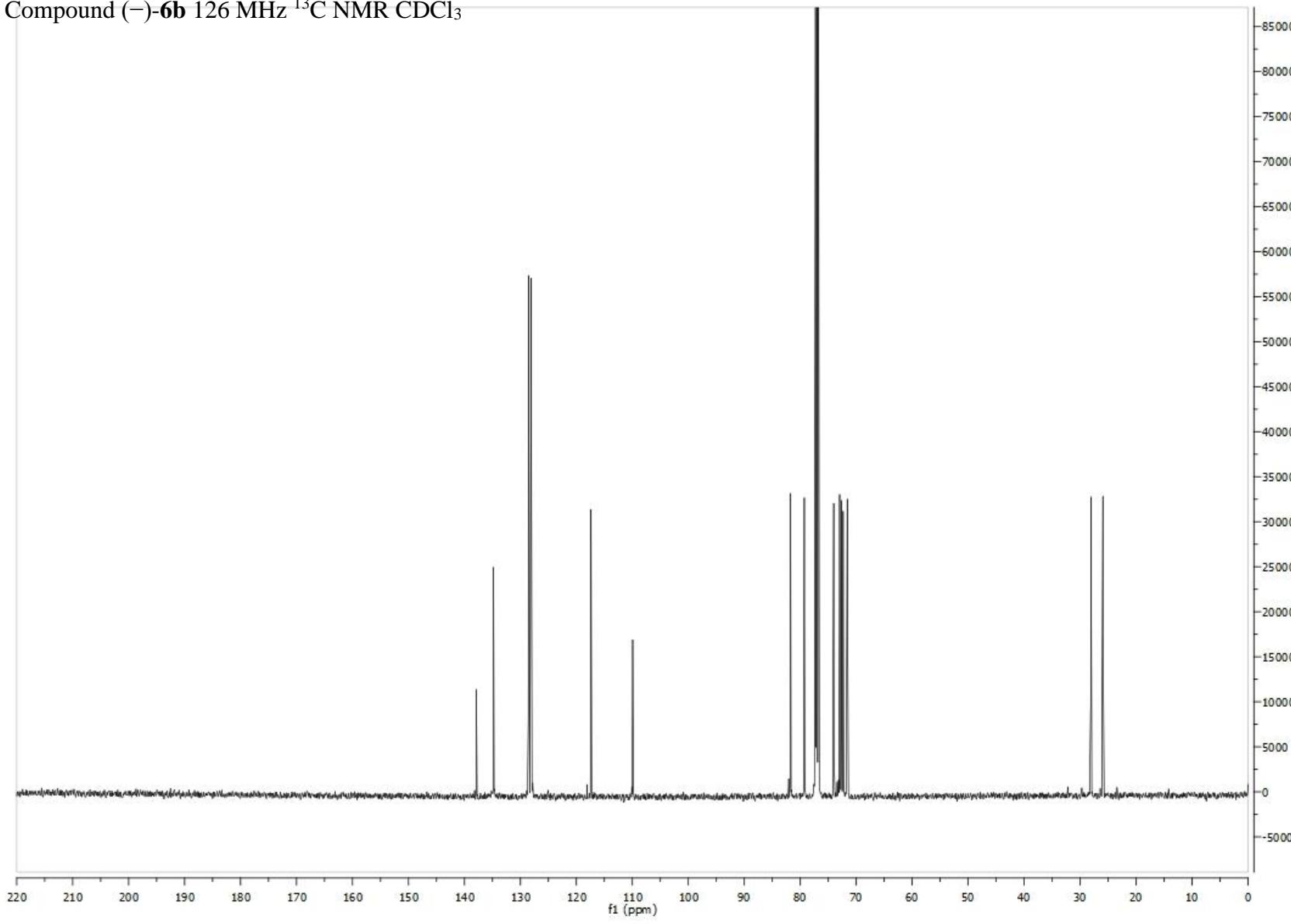
Compound (-)-**6a** 126 MHz ^{13}C NMR CDCl_3



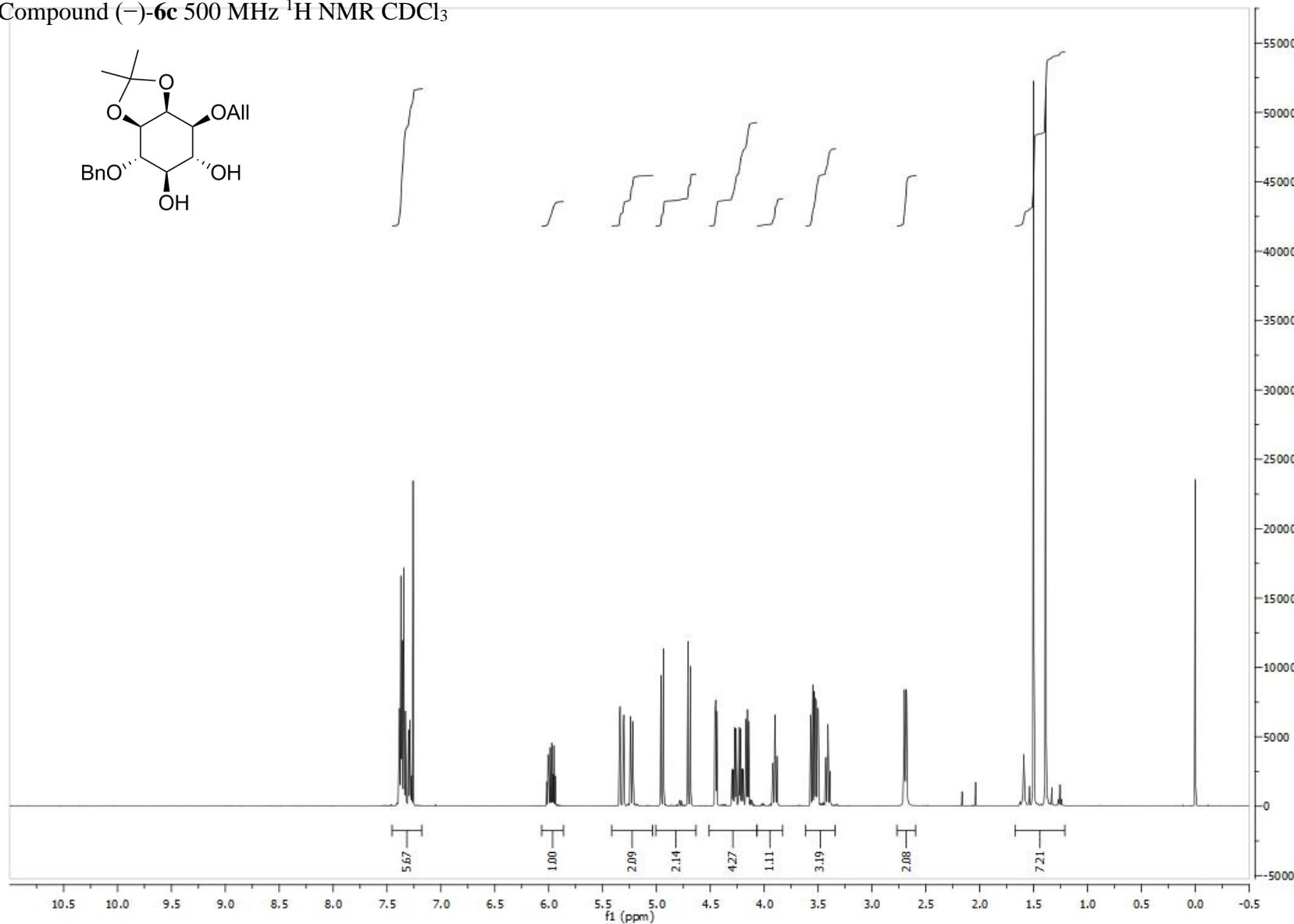
Compound (-)-**6b** 500 MHz ^1H NMR CDCl_3



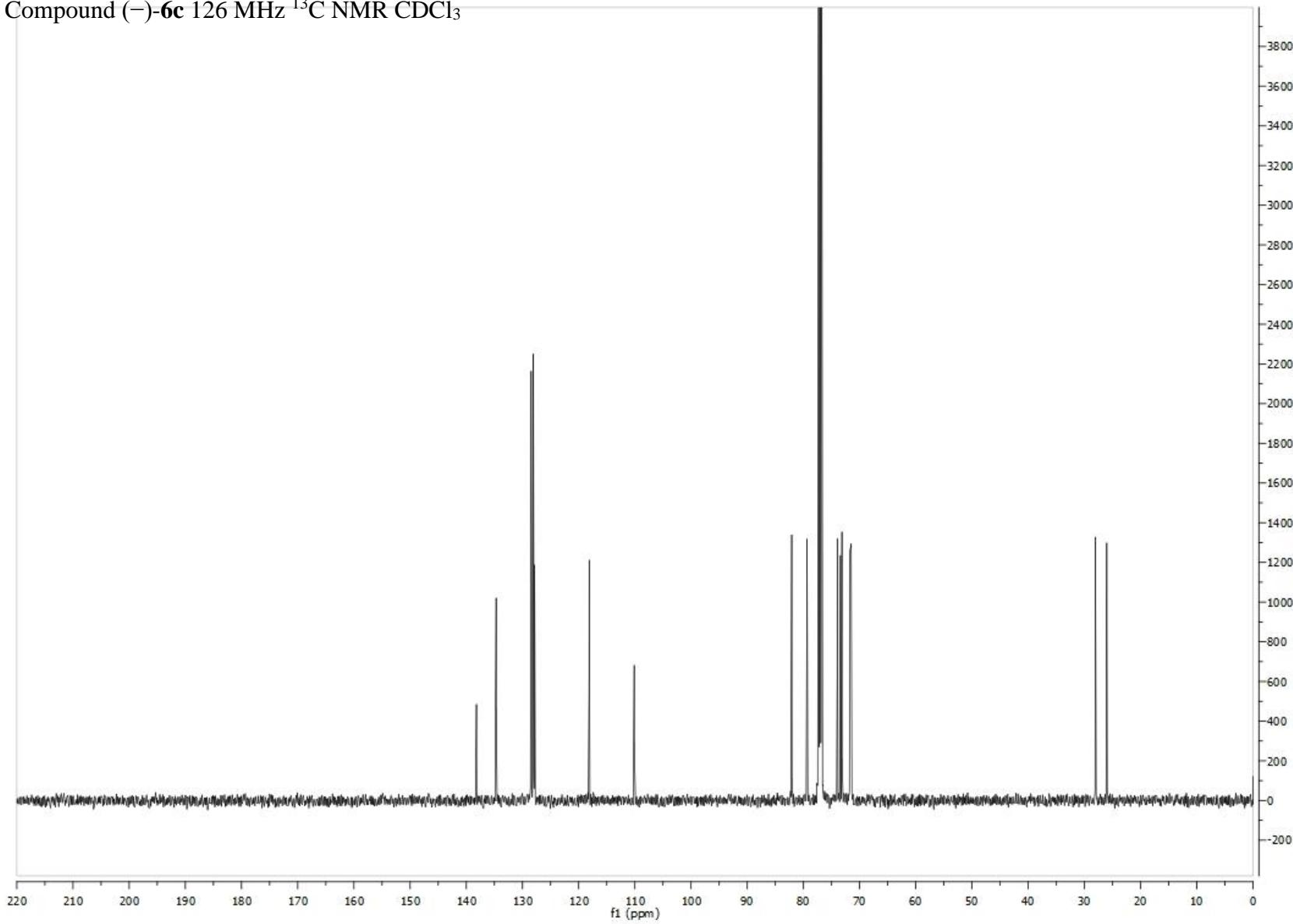
Compound (-)-**6b** 126 MHz ^{13}C NMR CDCl_3



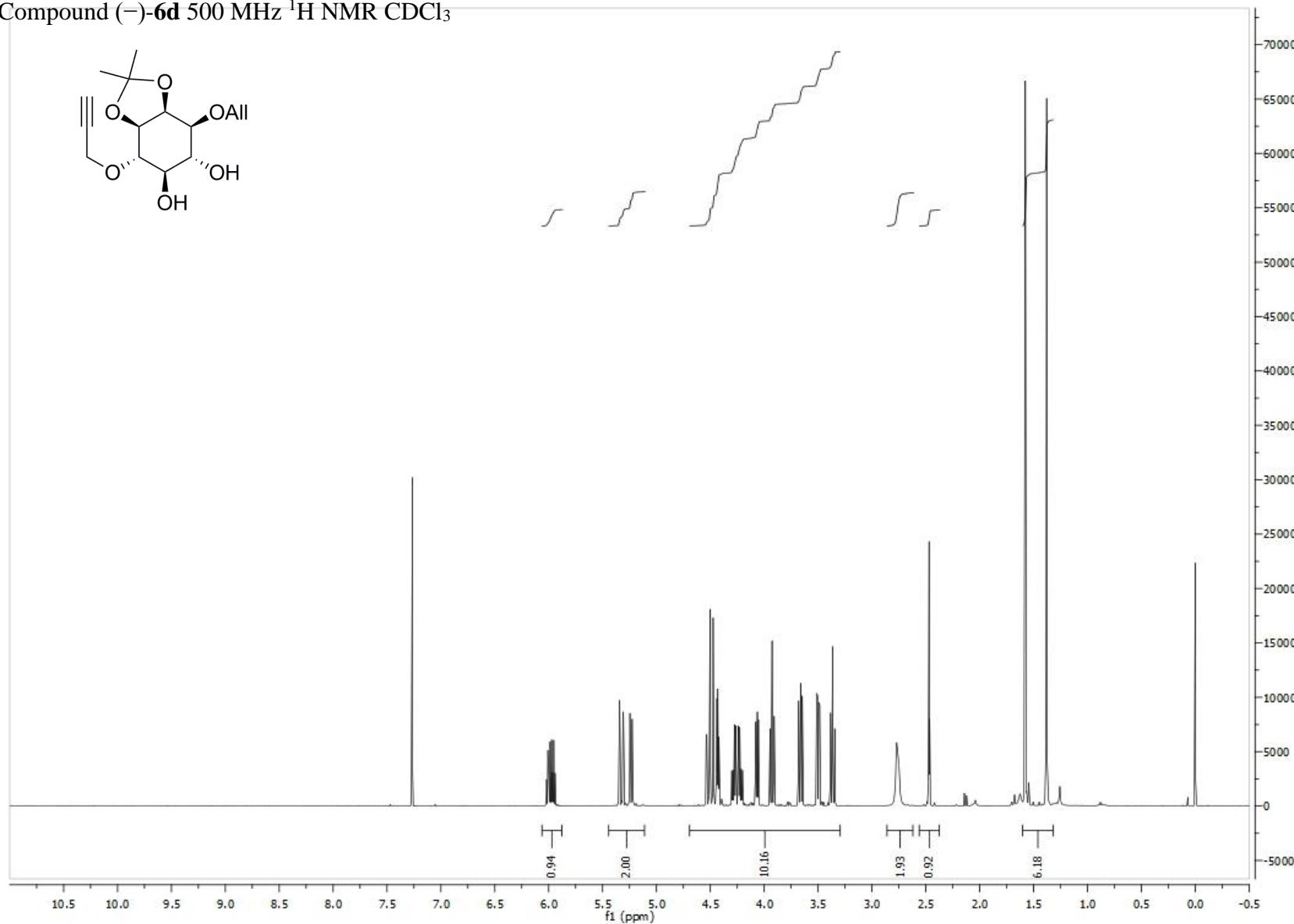
Compound (-)-**6c** 500 MHz ^1H NMR CDCl_3



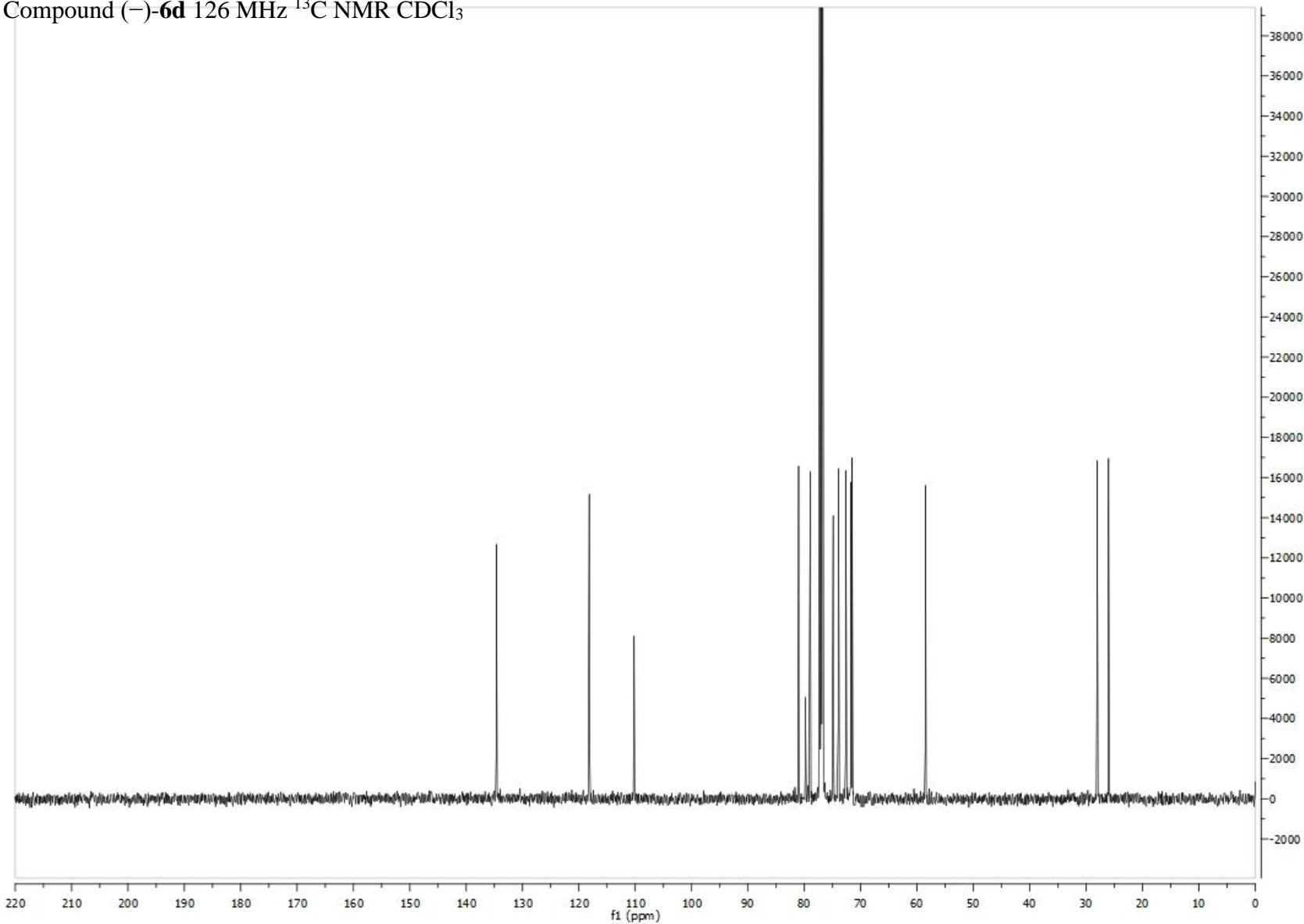
Compound (-)-**6c** 126 MHz ^{13}C NMR CDCl_3



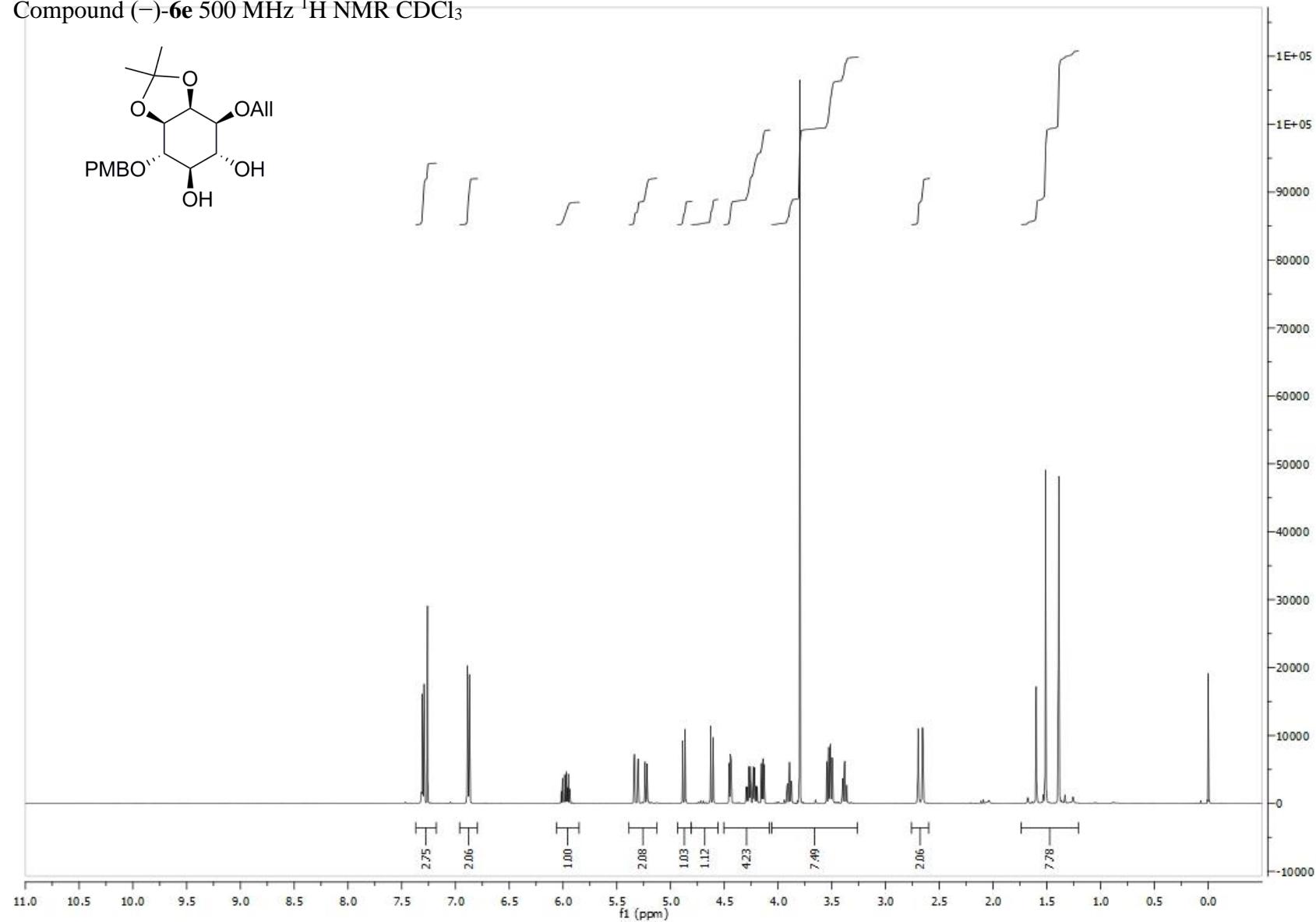
Compound (-)-**6d** 500 MHz ^1H NMR CDCl_3



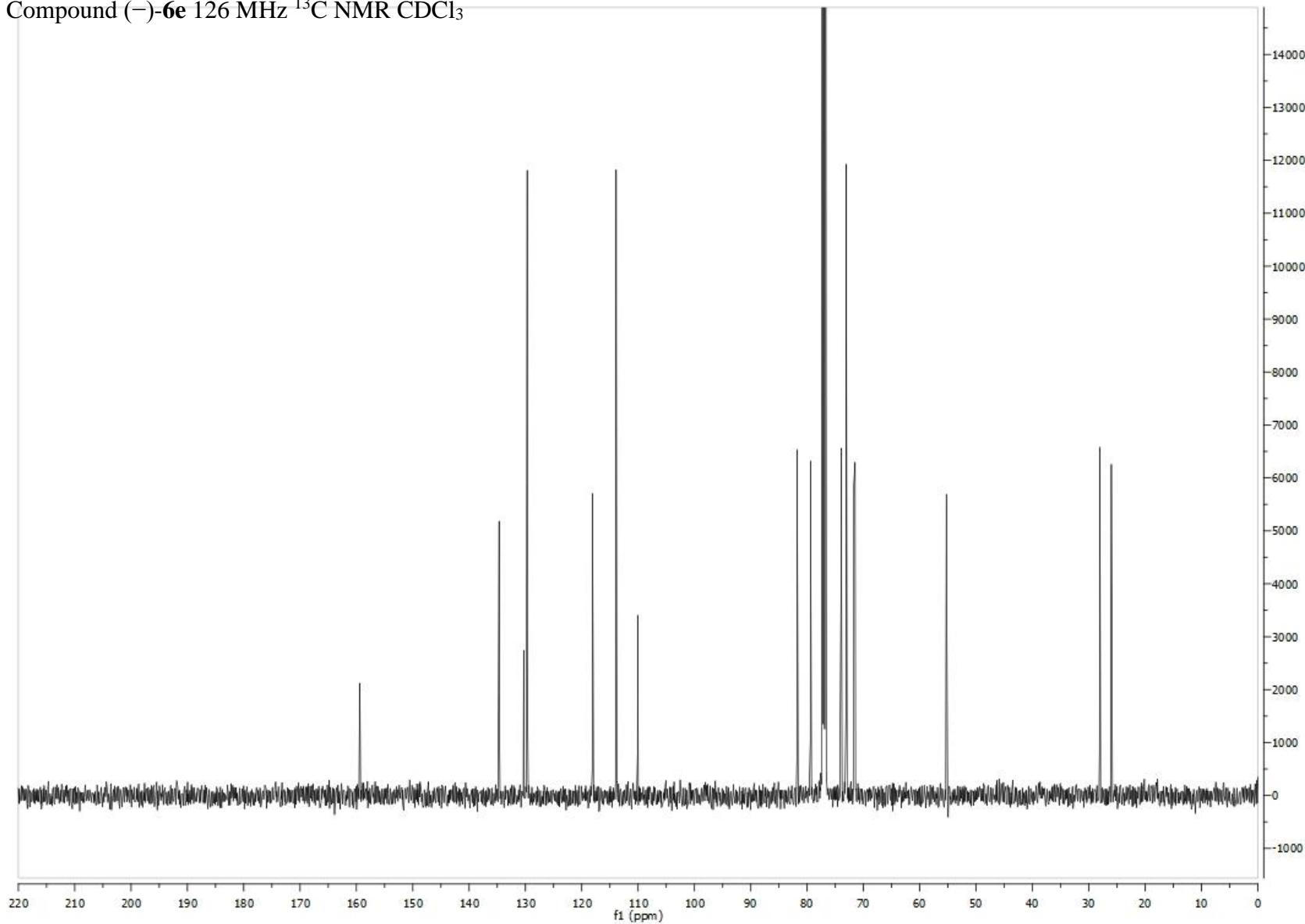
Compound (-)-**6d** 126 MHz ^{13}C NMR CDCl_3



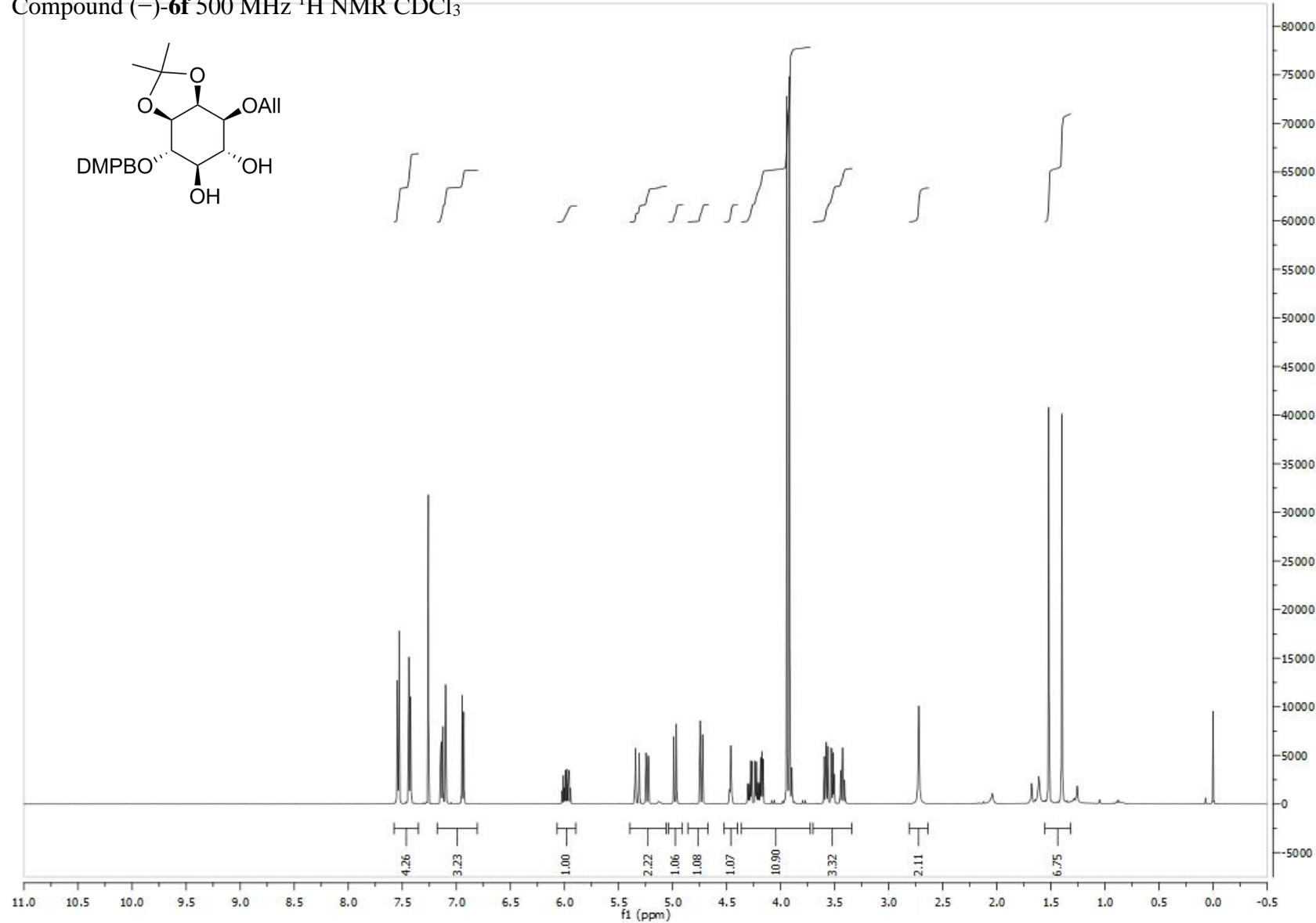
Compound (-)-**6e** 500 MHz ^1H NMR CDCl_3



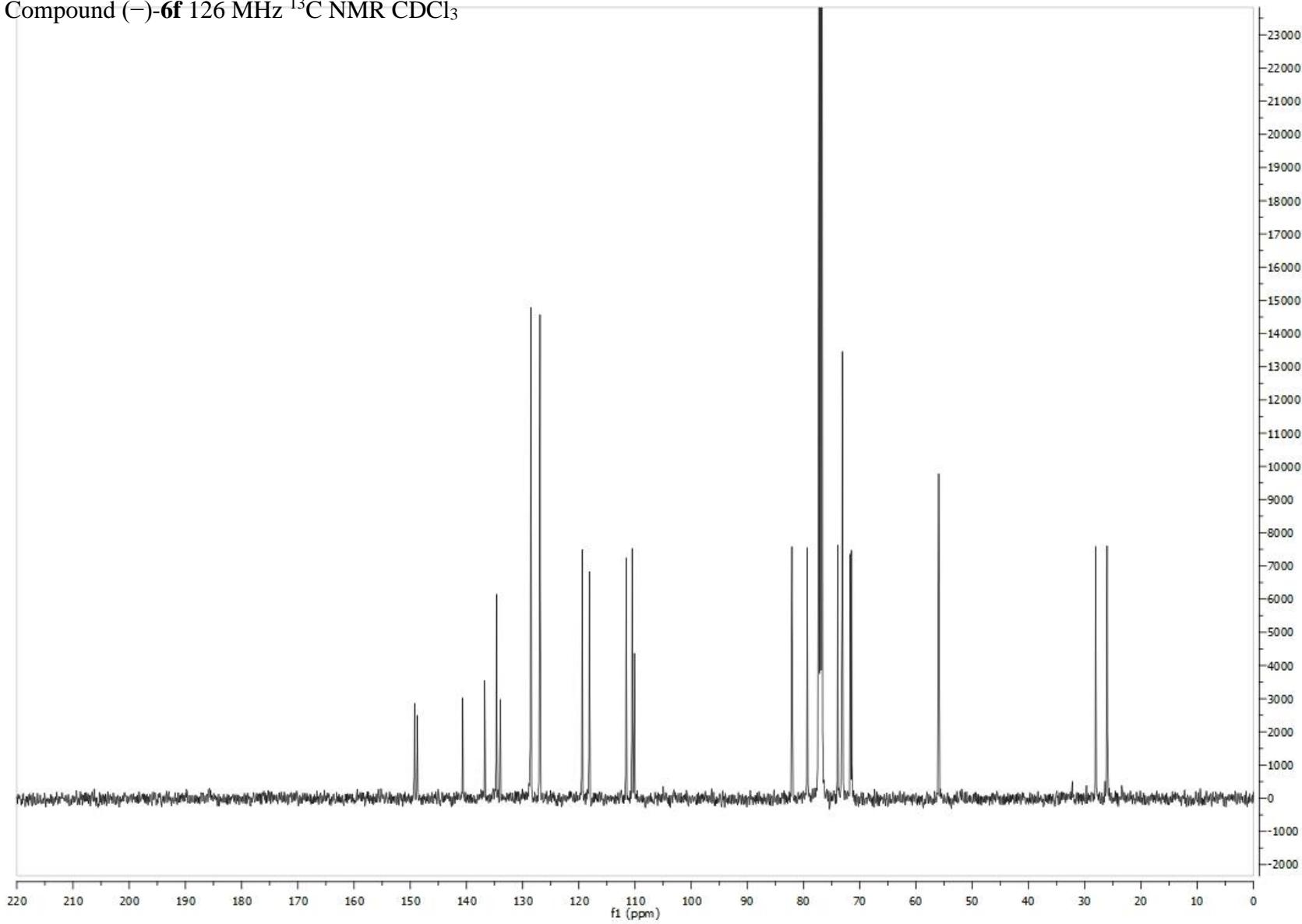
Compound (-)-**6e** 126 MHz ^{13}C NMR CDCl_3



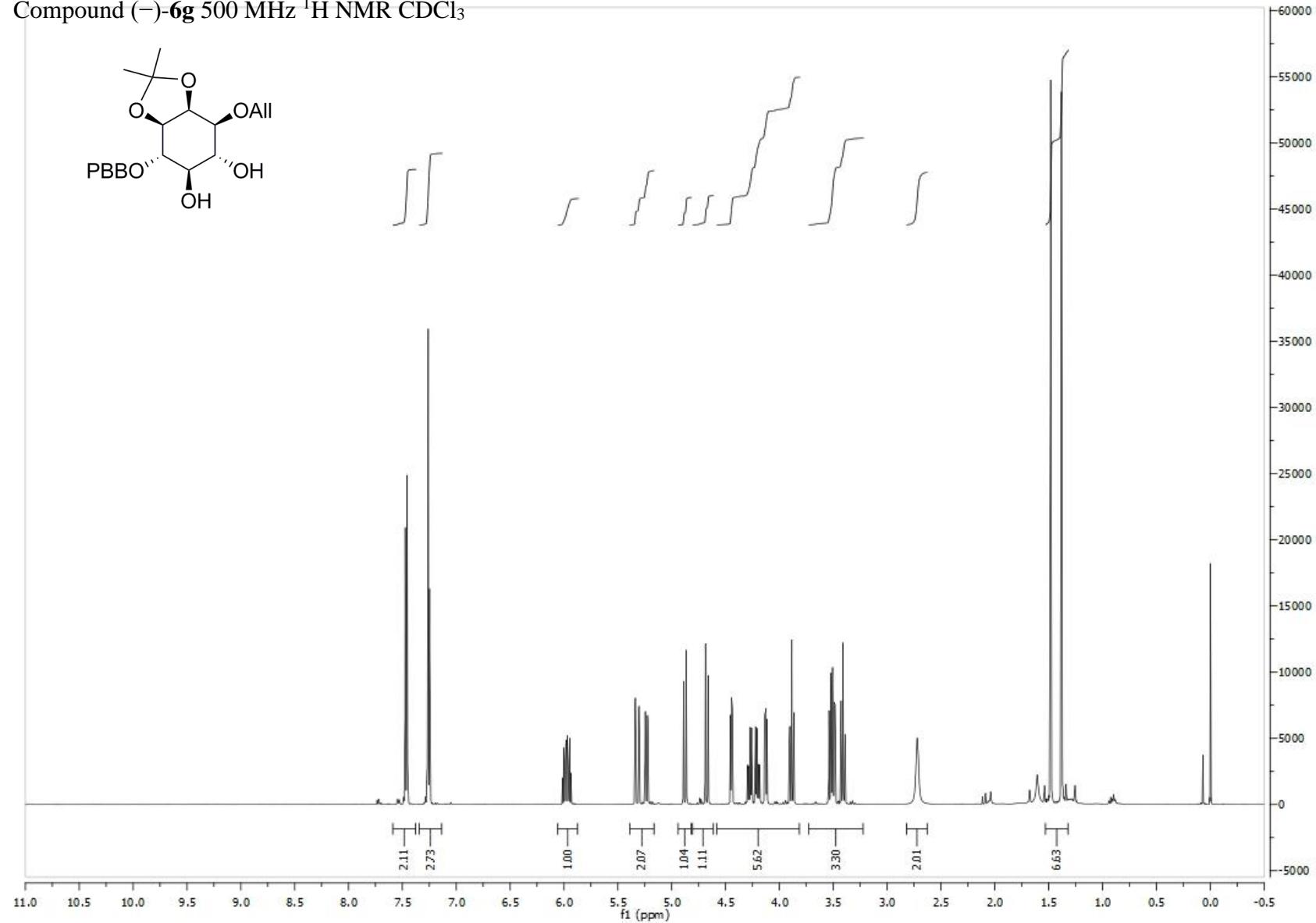
Compound (-)-**6f** 500 MHz ^1H NMR CDCl_3



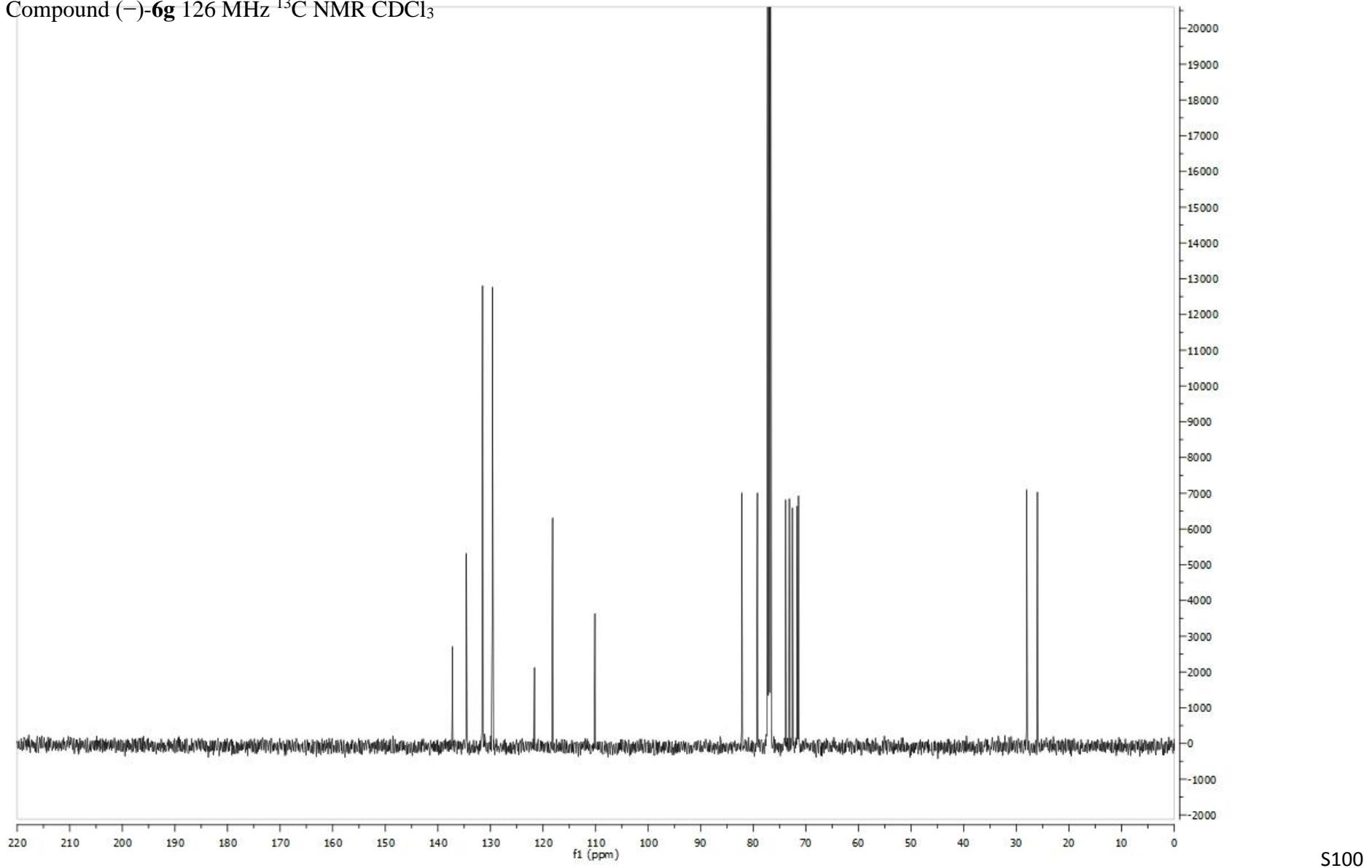
Compound (-)-**6f** 126 MHz ^{13}C NMR CDCl_3



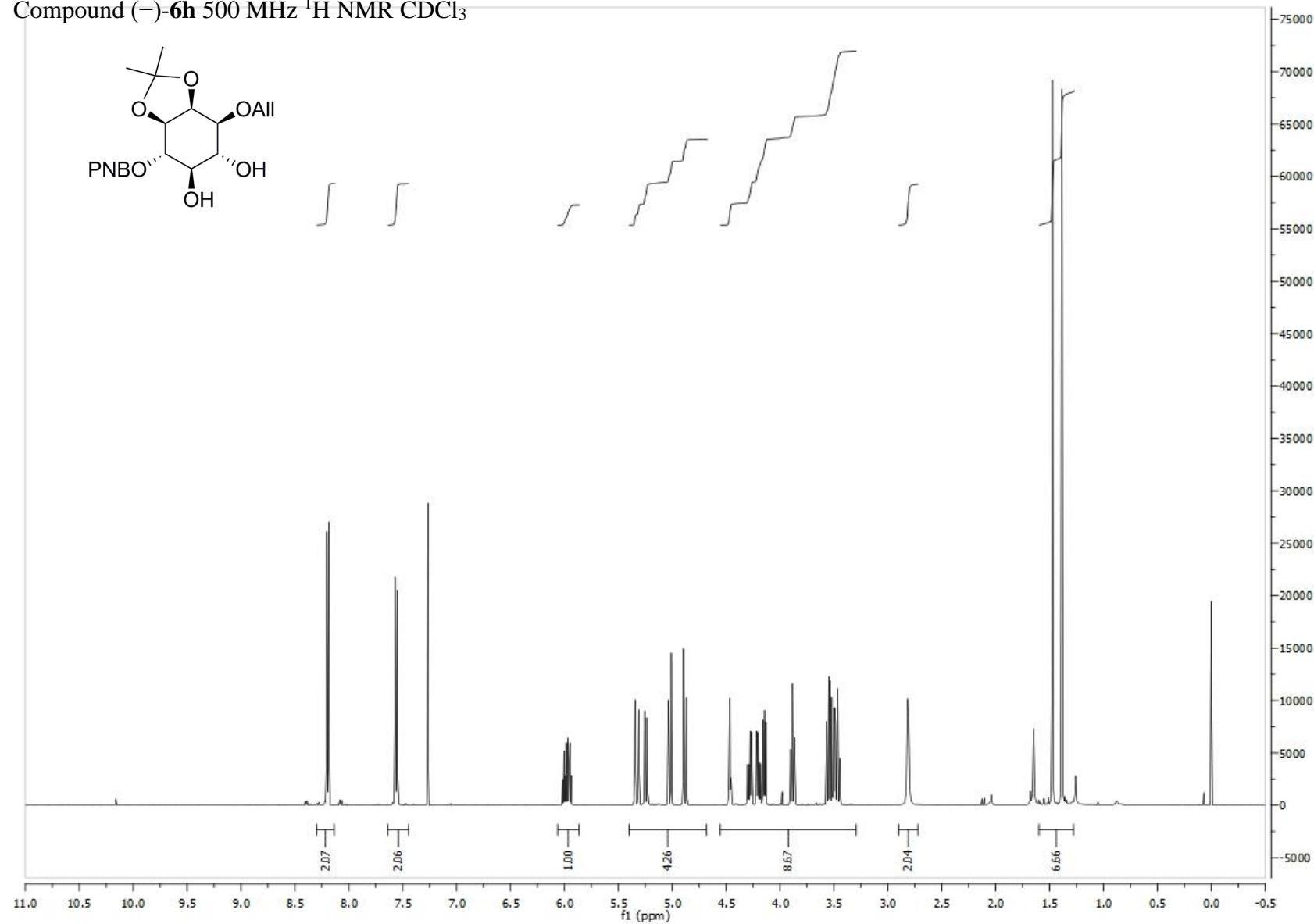
Compound (-)-**6g** 500 MHz ^1H NMR CDCl_3



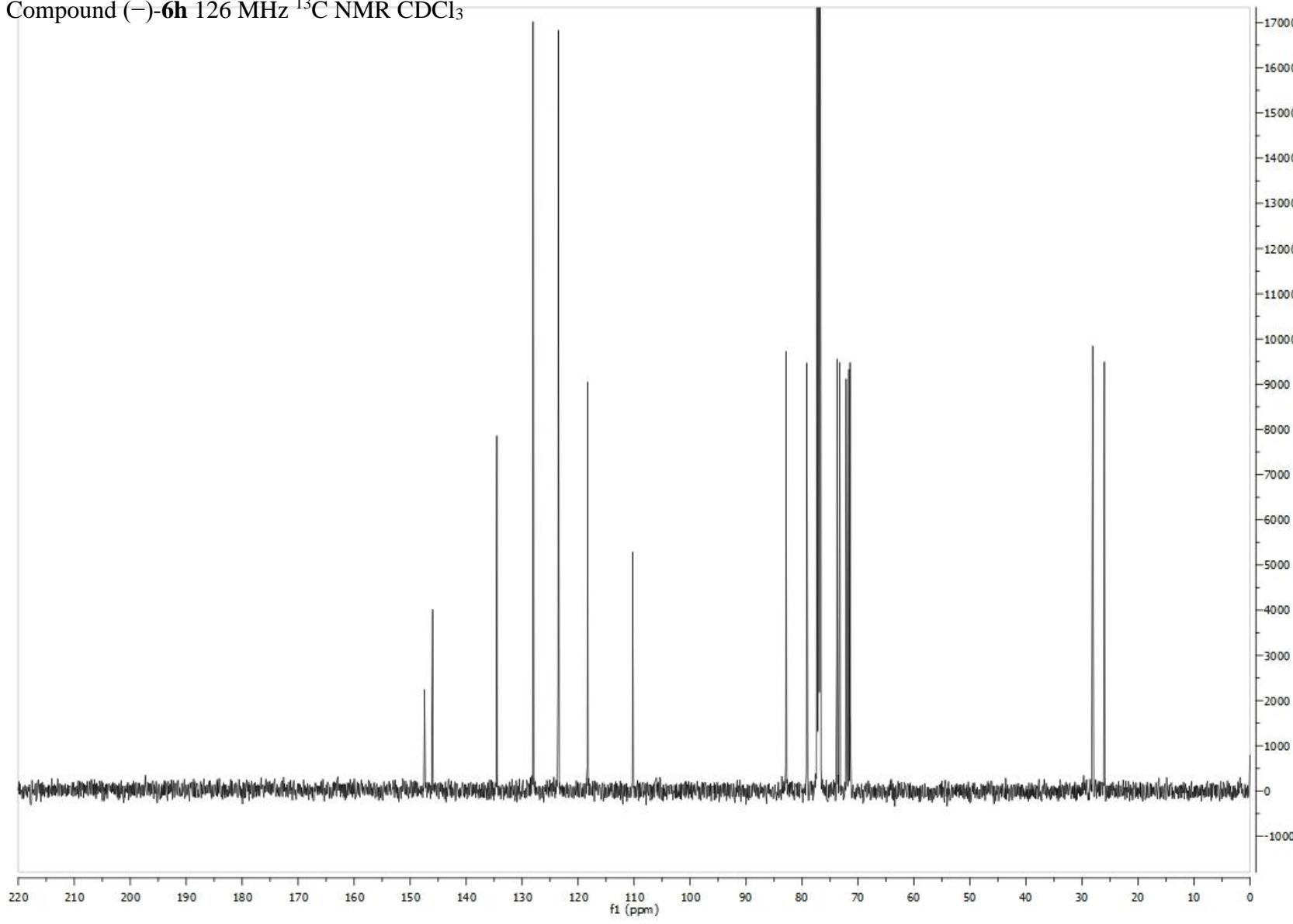
Compound (-)-**6g** 126 MHz ^{13}C NMR CDCl_3



Compound (-)-**6h** 500 MHz ^1H NMR CDCl_3

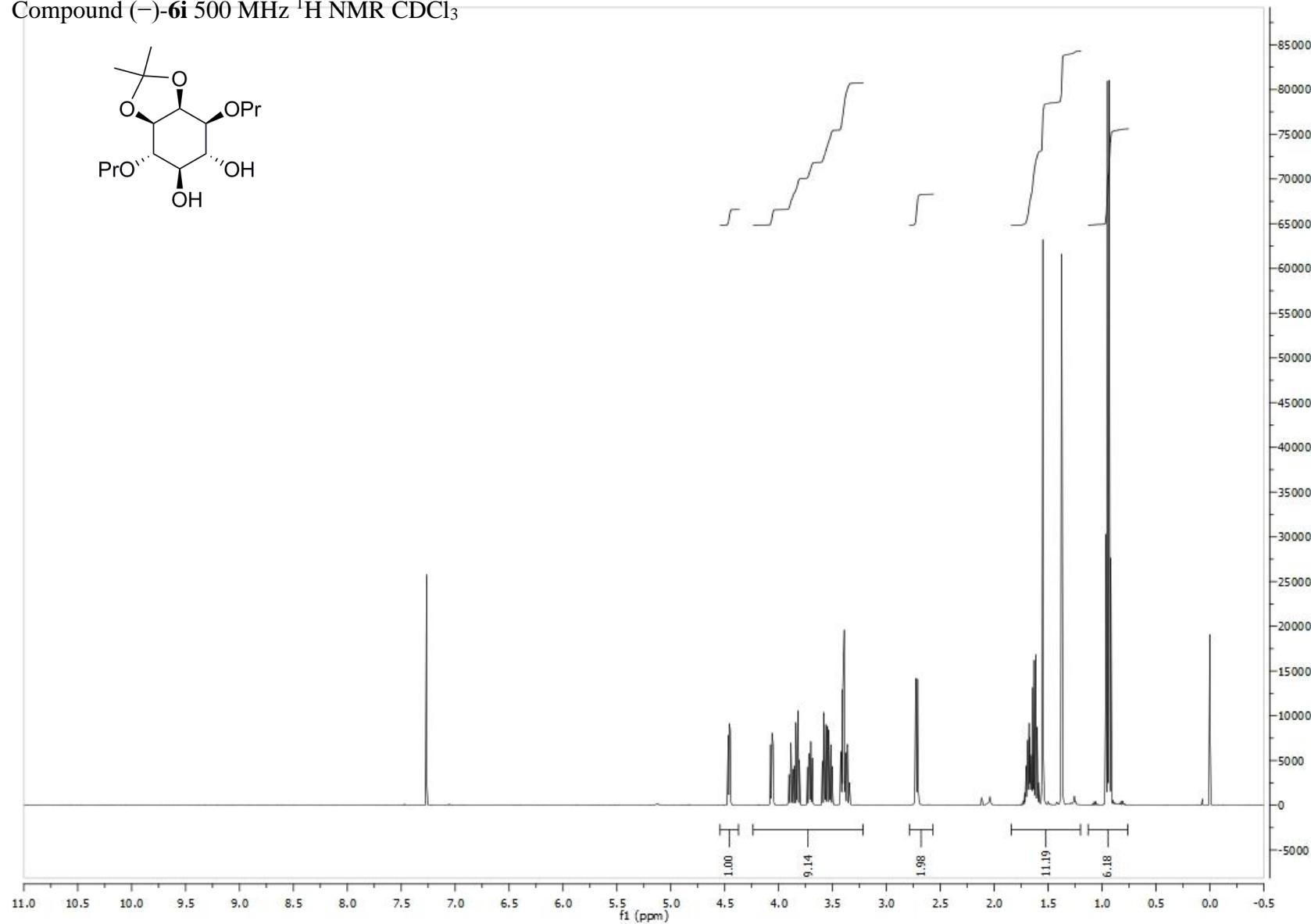


Compound (-)-**6h** 126 MHz ^{13}C NMR CDCl_3

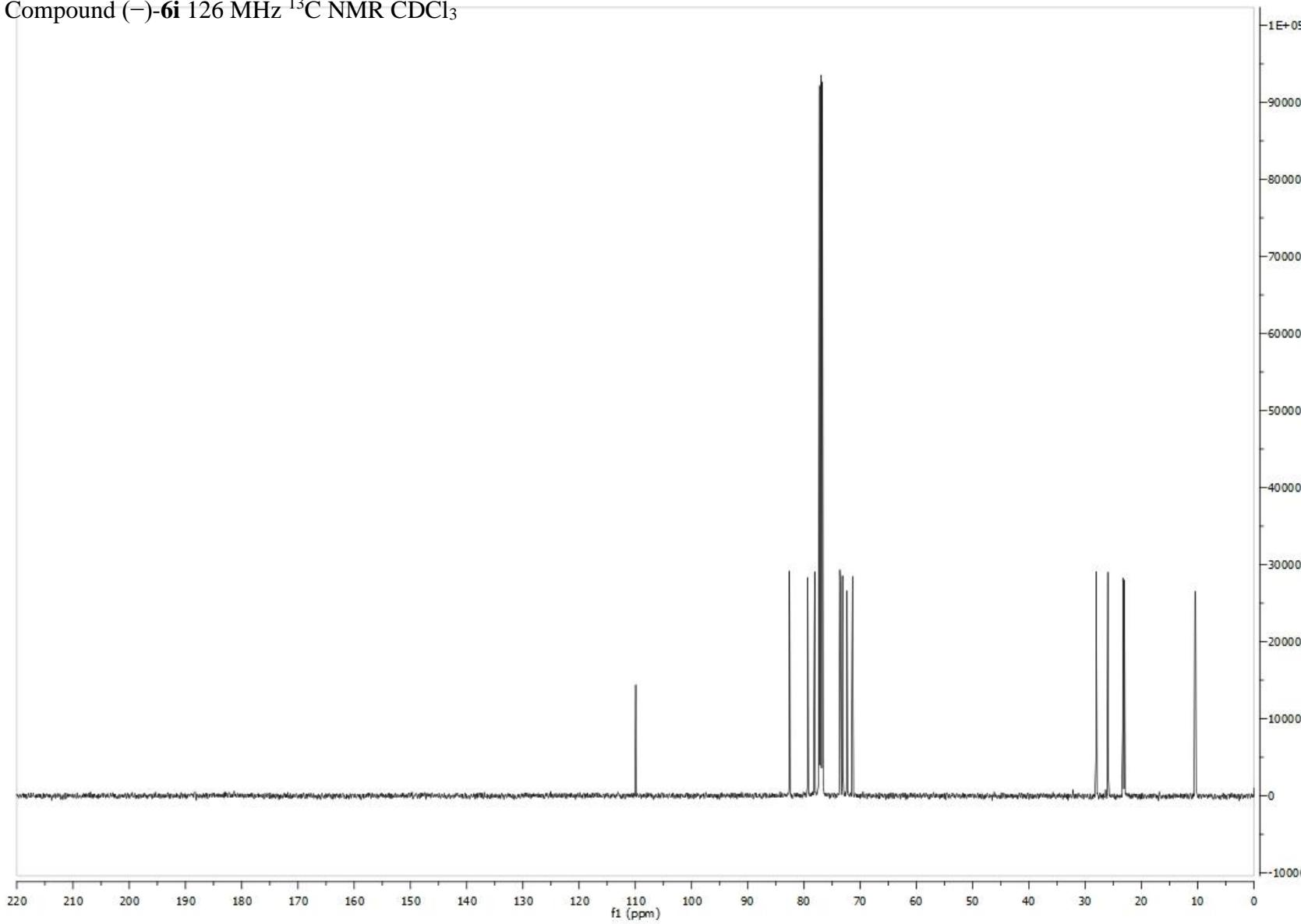


S102

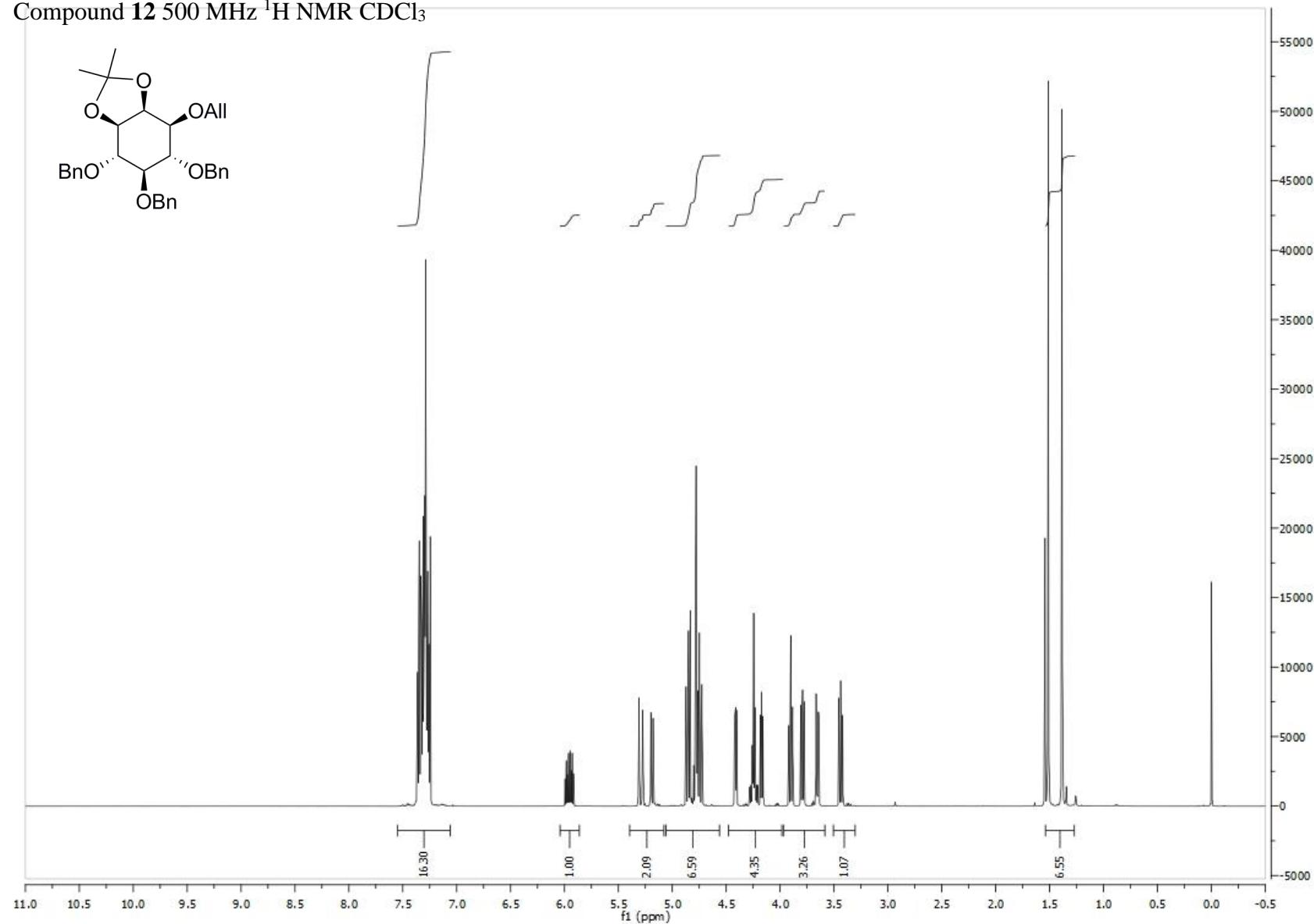
Compound (-)-**6i** 500 MHz ^1H NMR CDCl_3



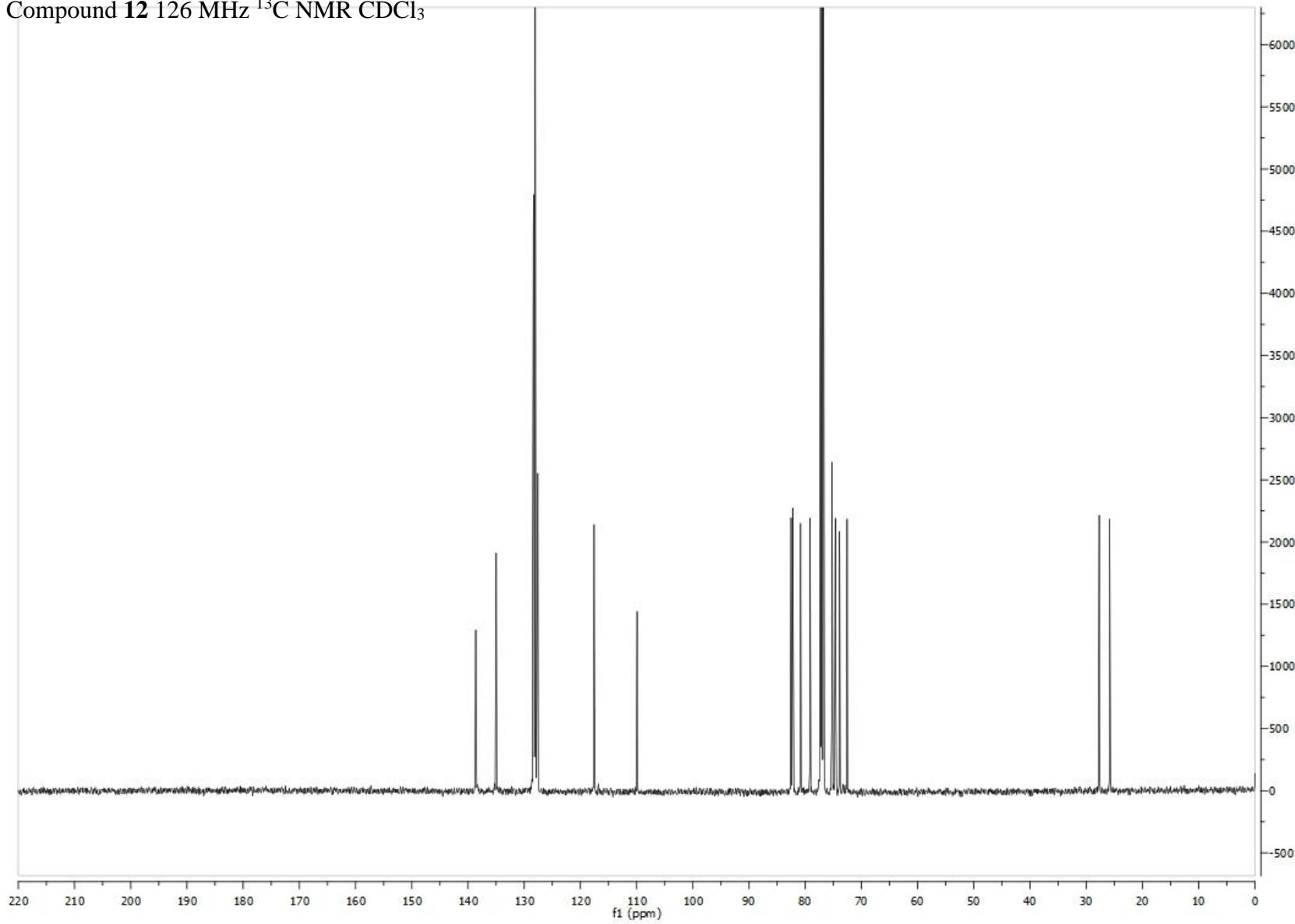
Compound (-)-**6i** 126 MHz ^{13}C NMR CDCl_3



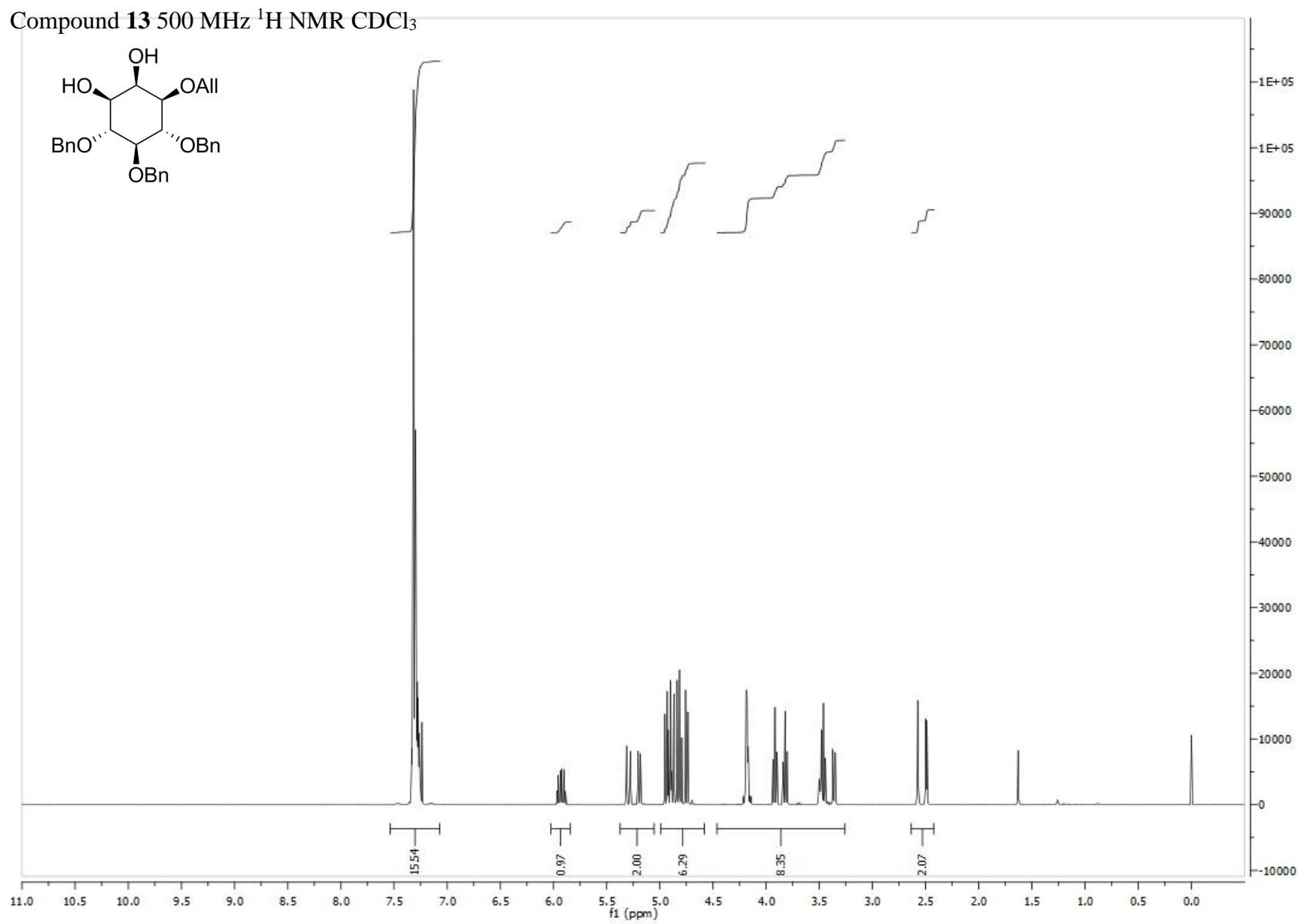
Compound **12** 500 MHz ^1H NMR CDCl_3



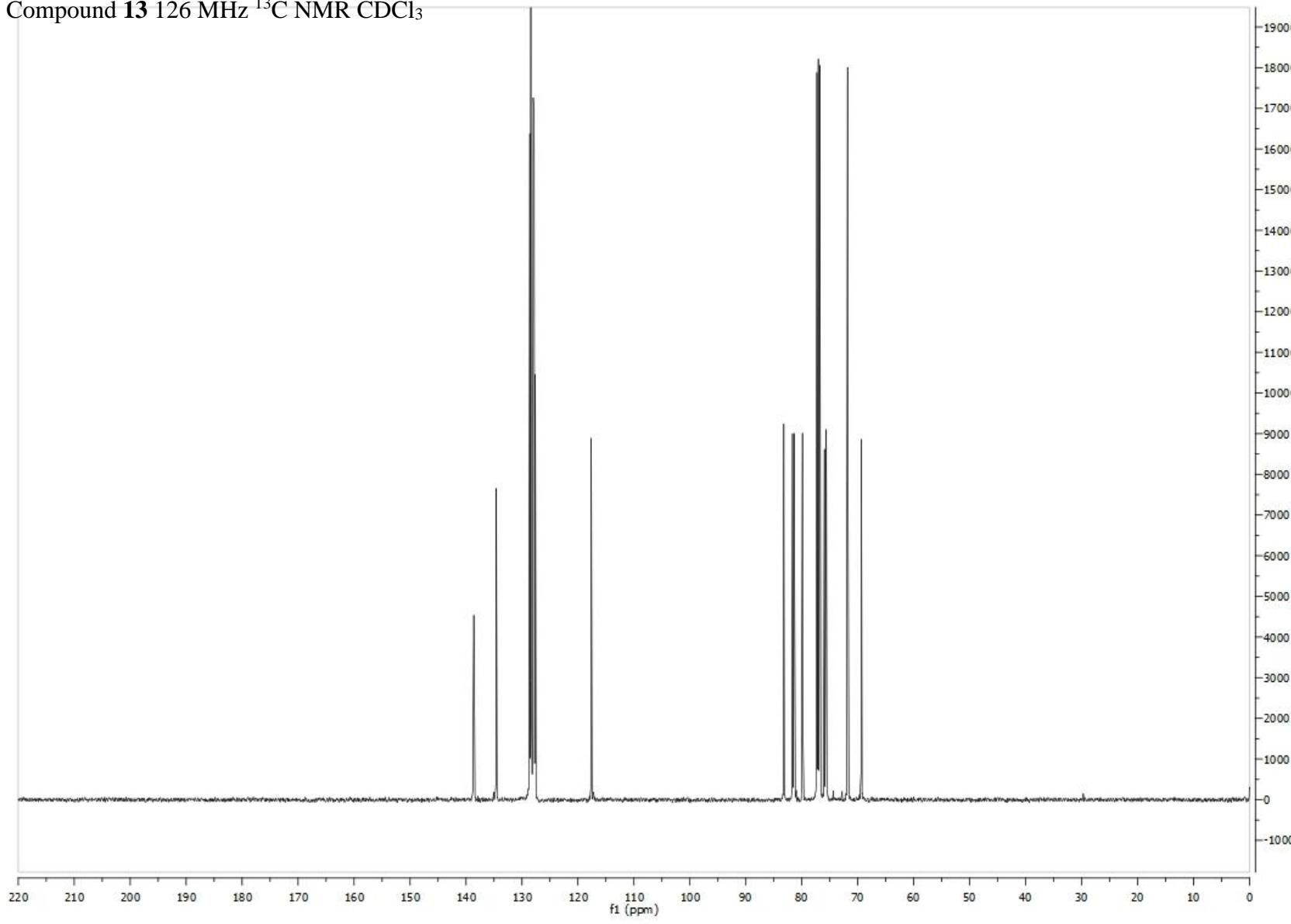
Compound **12** 126 MHz ^{13}C NMR CDCl_3



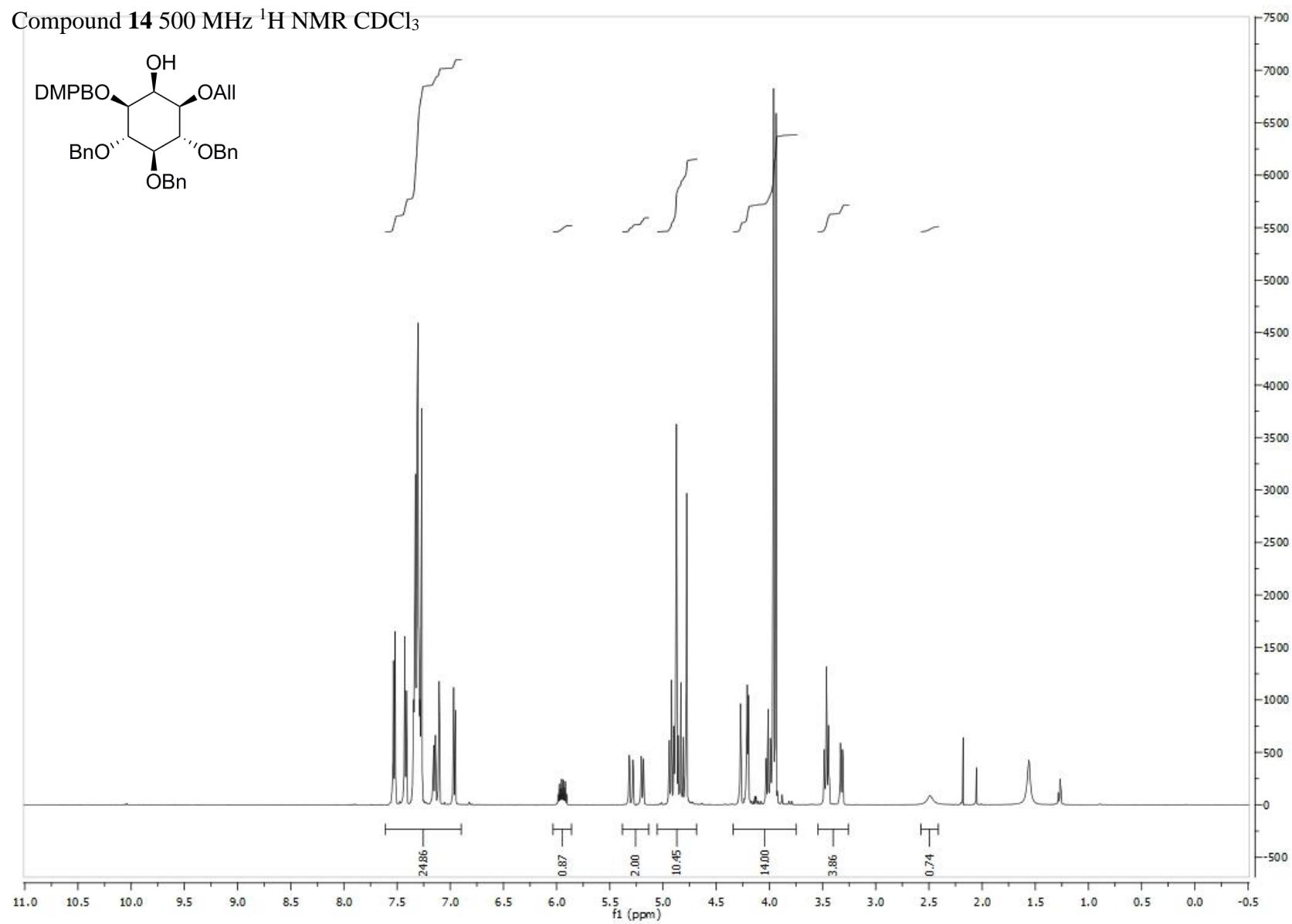
Compound **13** 500 MHz ^1H NMR CDCl_3



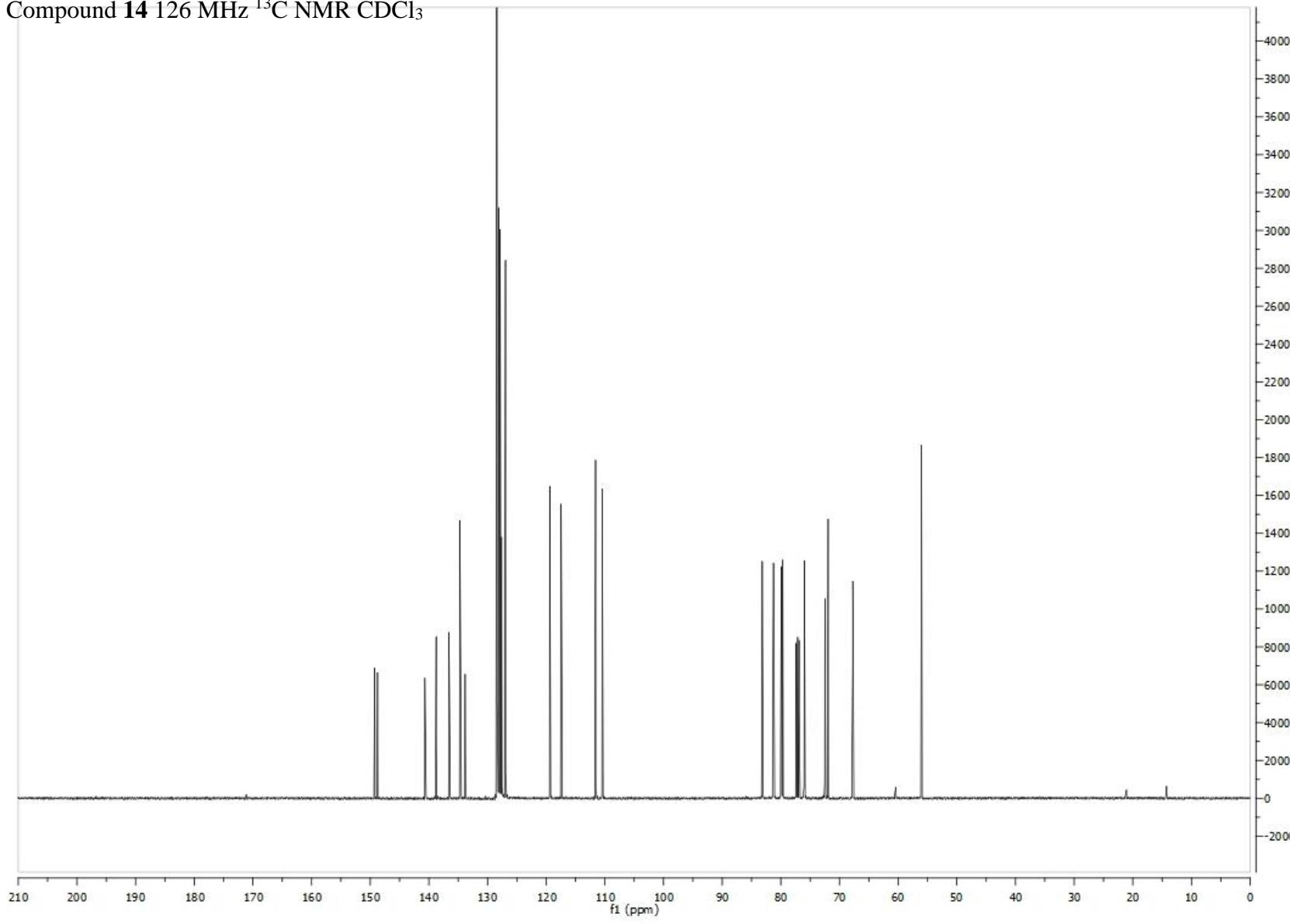
Compound **13** 126 MHz ^{13}C NMR CDCl_3



Compound **14** 500 MHz ^1H NMR CDCl_3

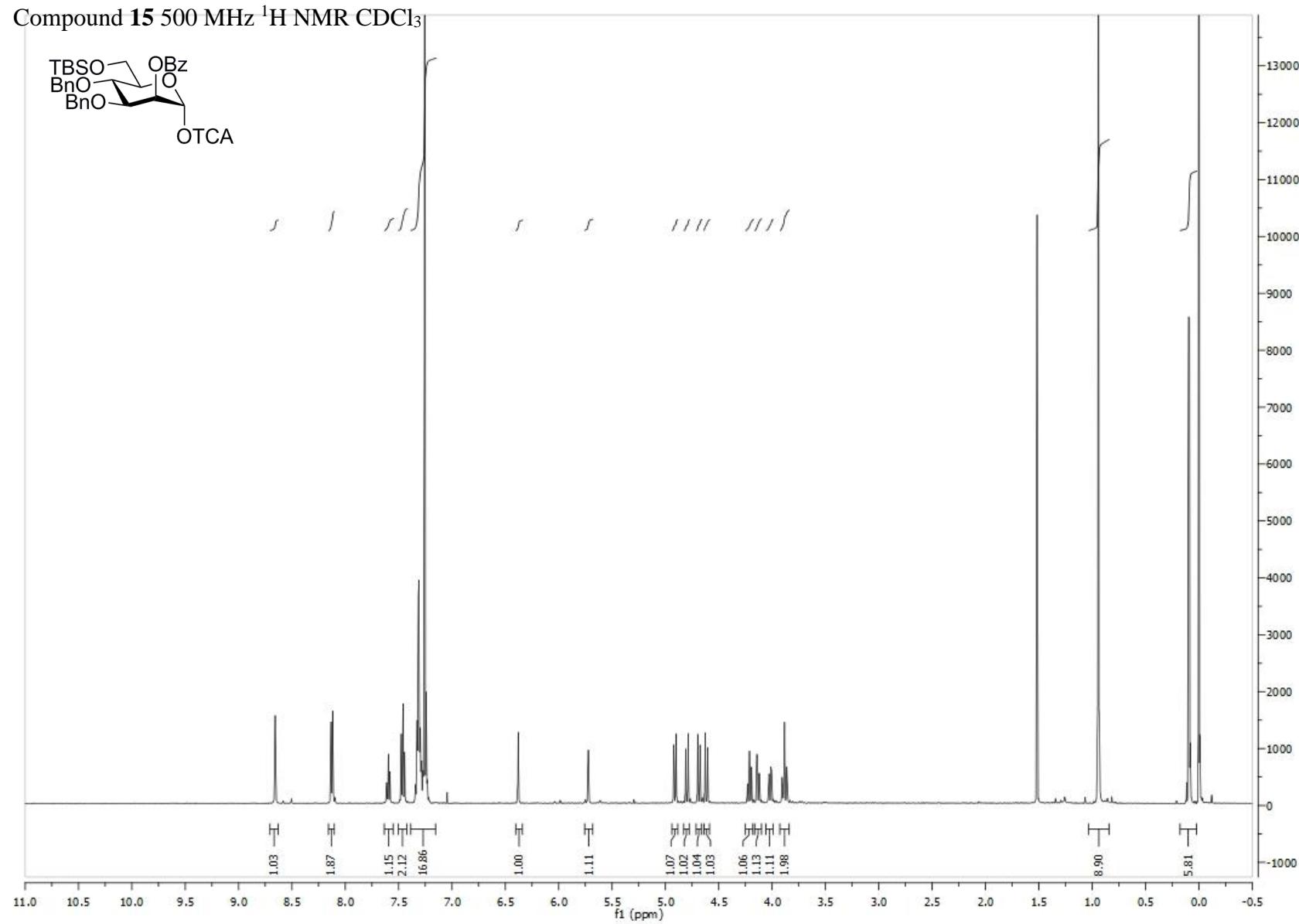


Compound **14** 126 MHz ^{13}C NMR CDCl_3

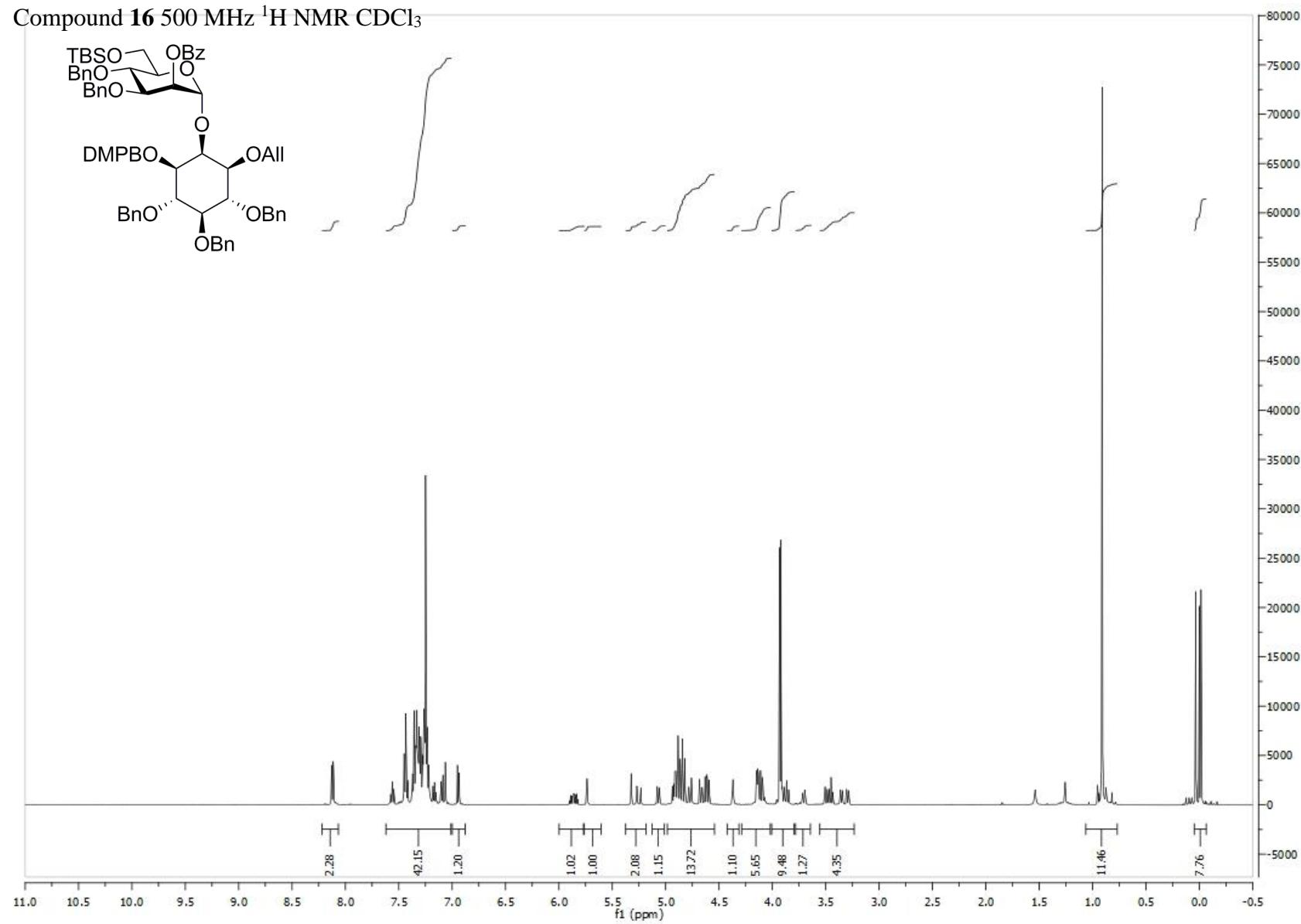


S110

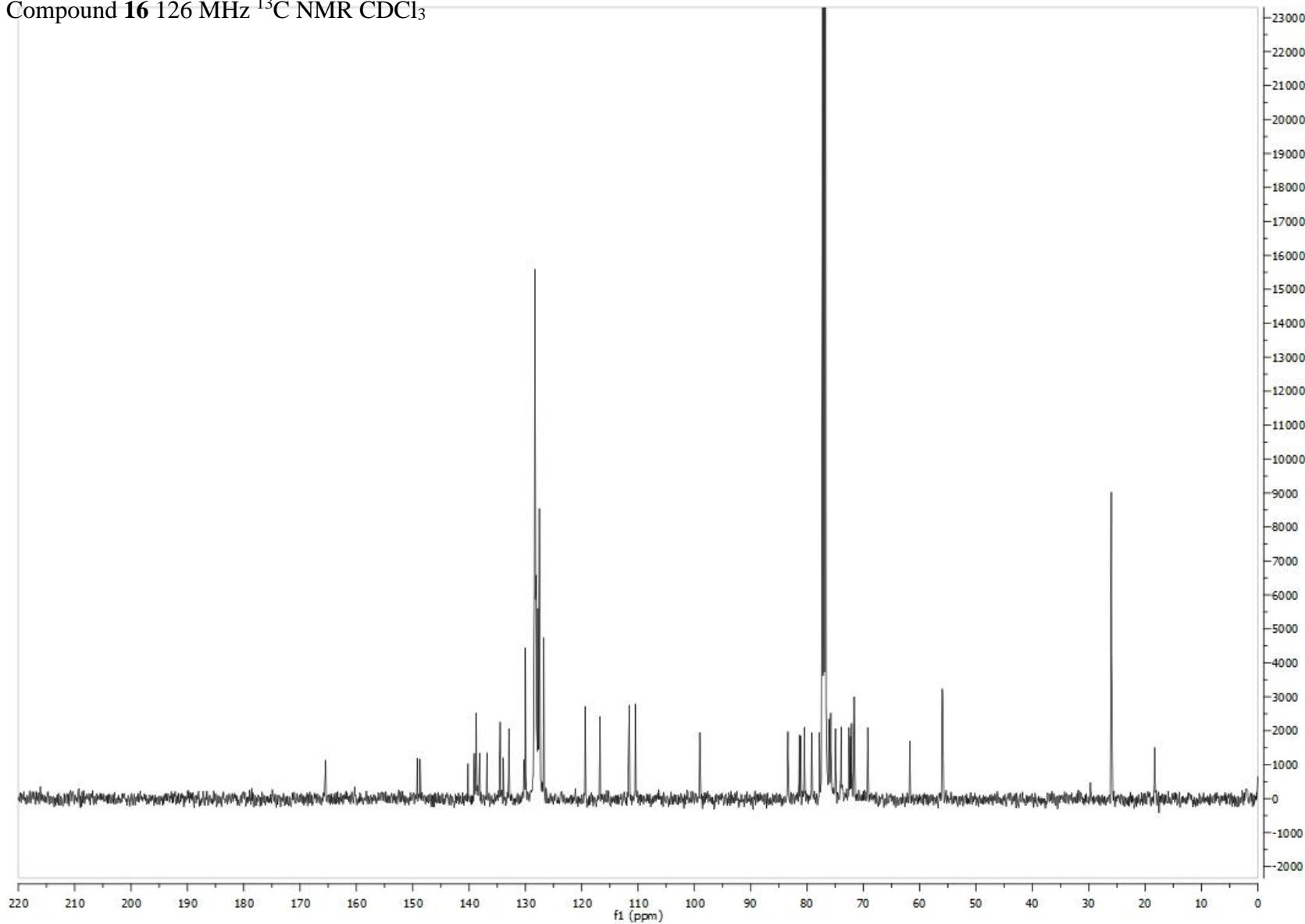
Compound **15** 500 MHz ^1H NMR CDCl_3



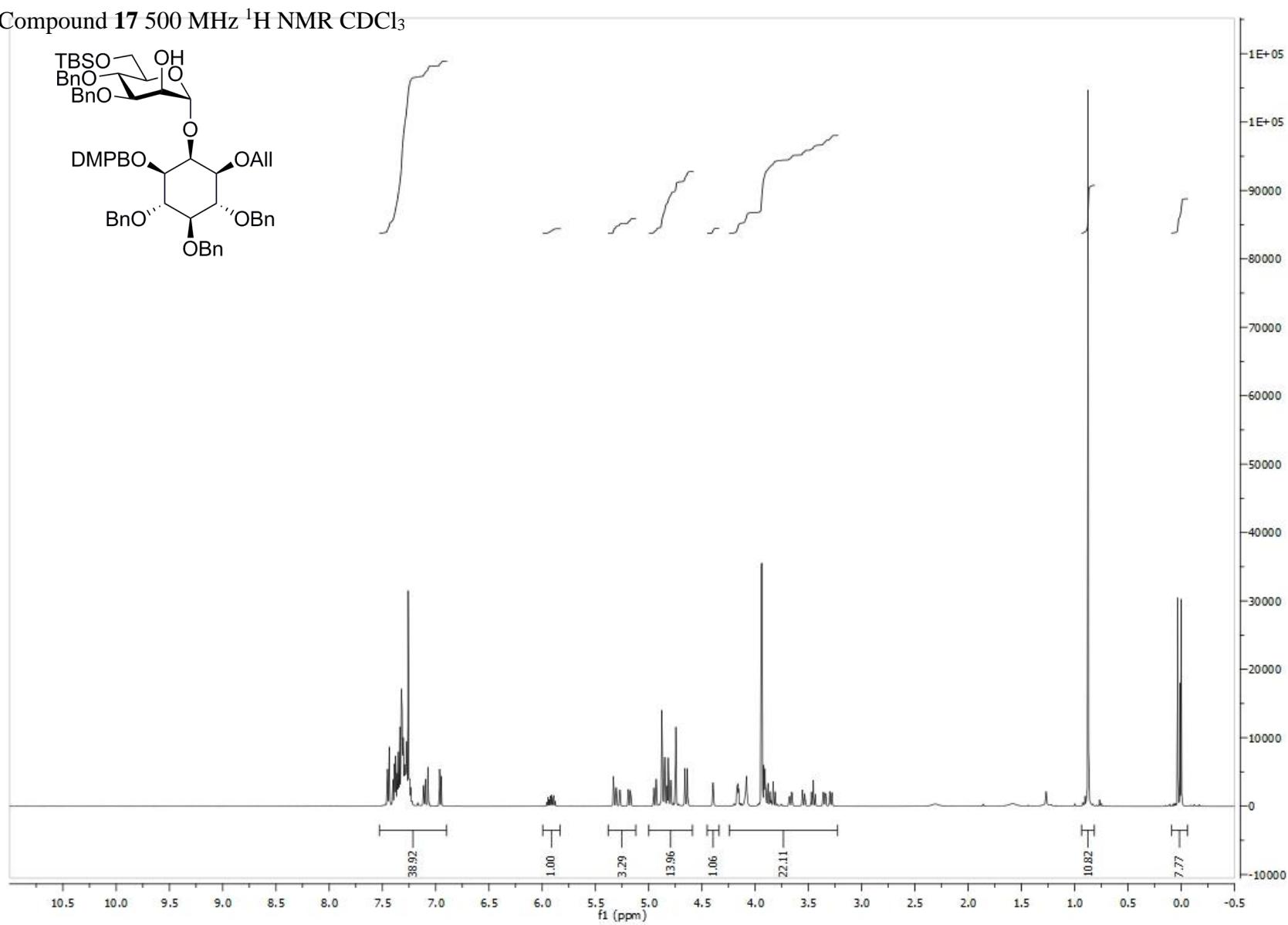
Compound **16** 500 MHz ^1H NMR CDCl_3



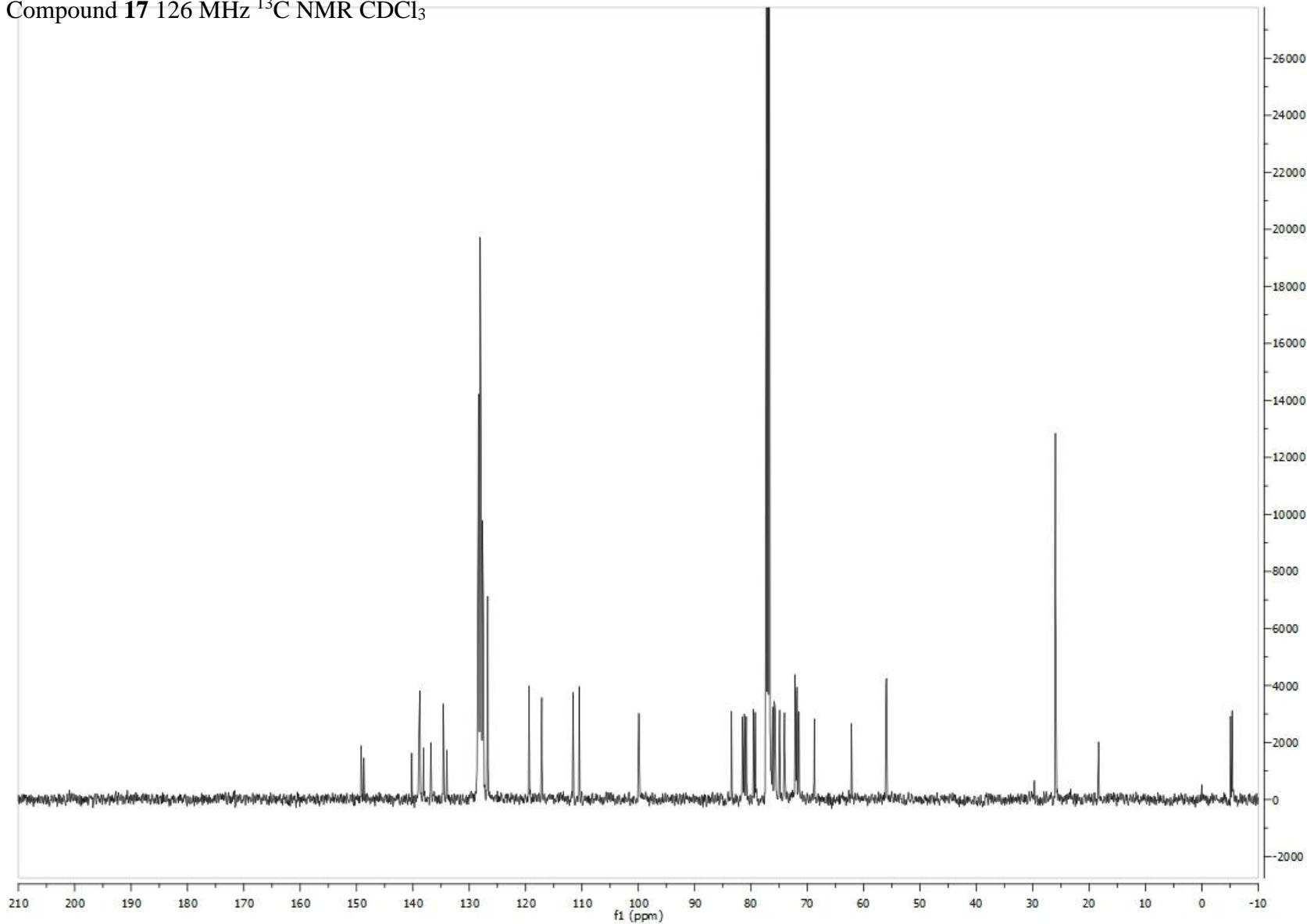
Compound **16** 126 MHz ^{13}C NMR CDCl_3



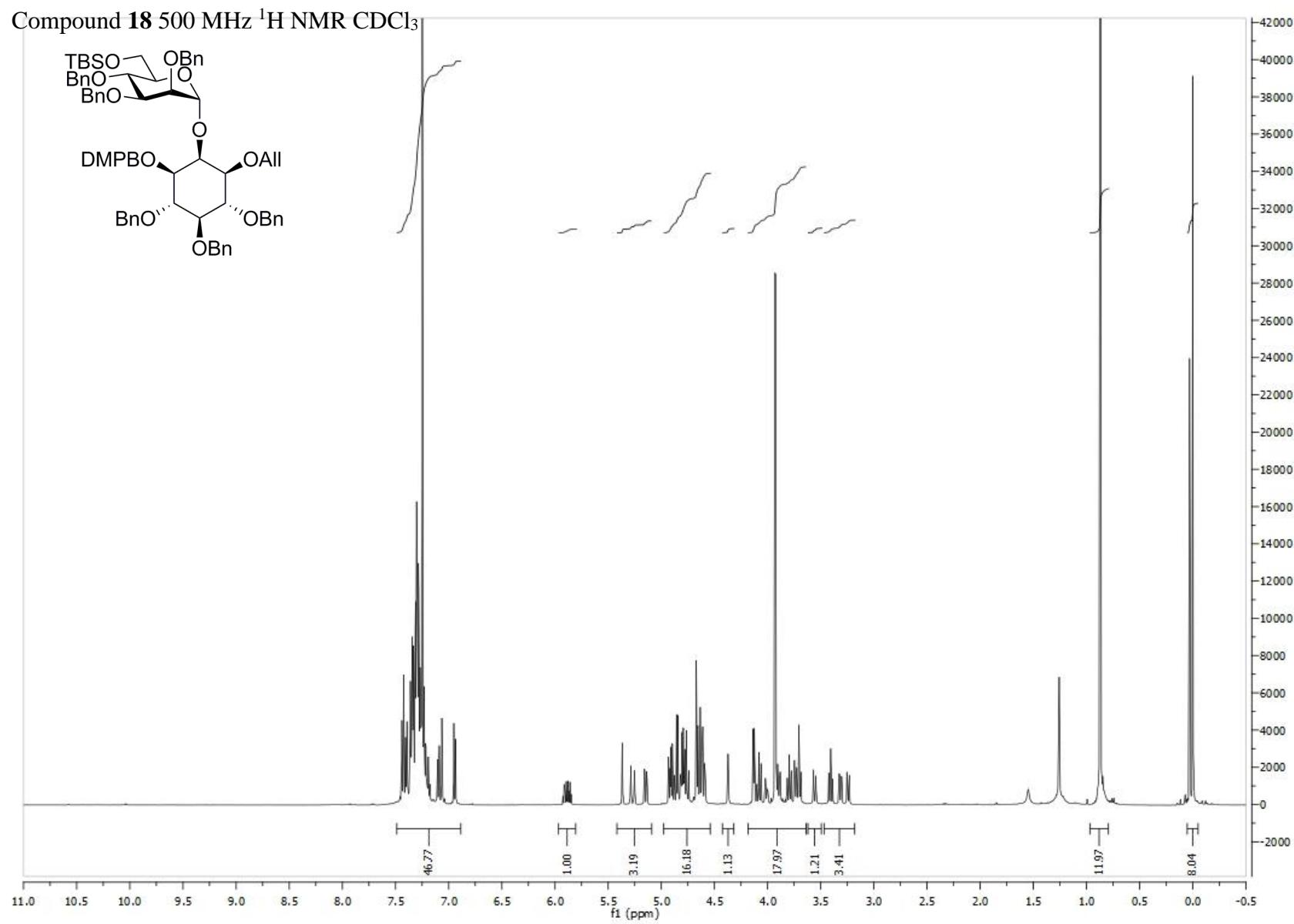
Compound **17** 500 MHz ^1H NMR CDCl_3



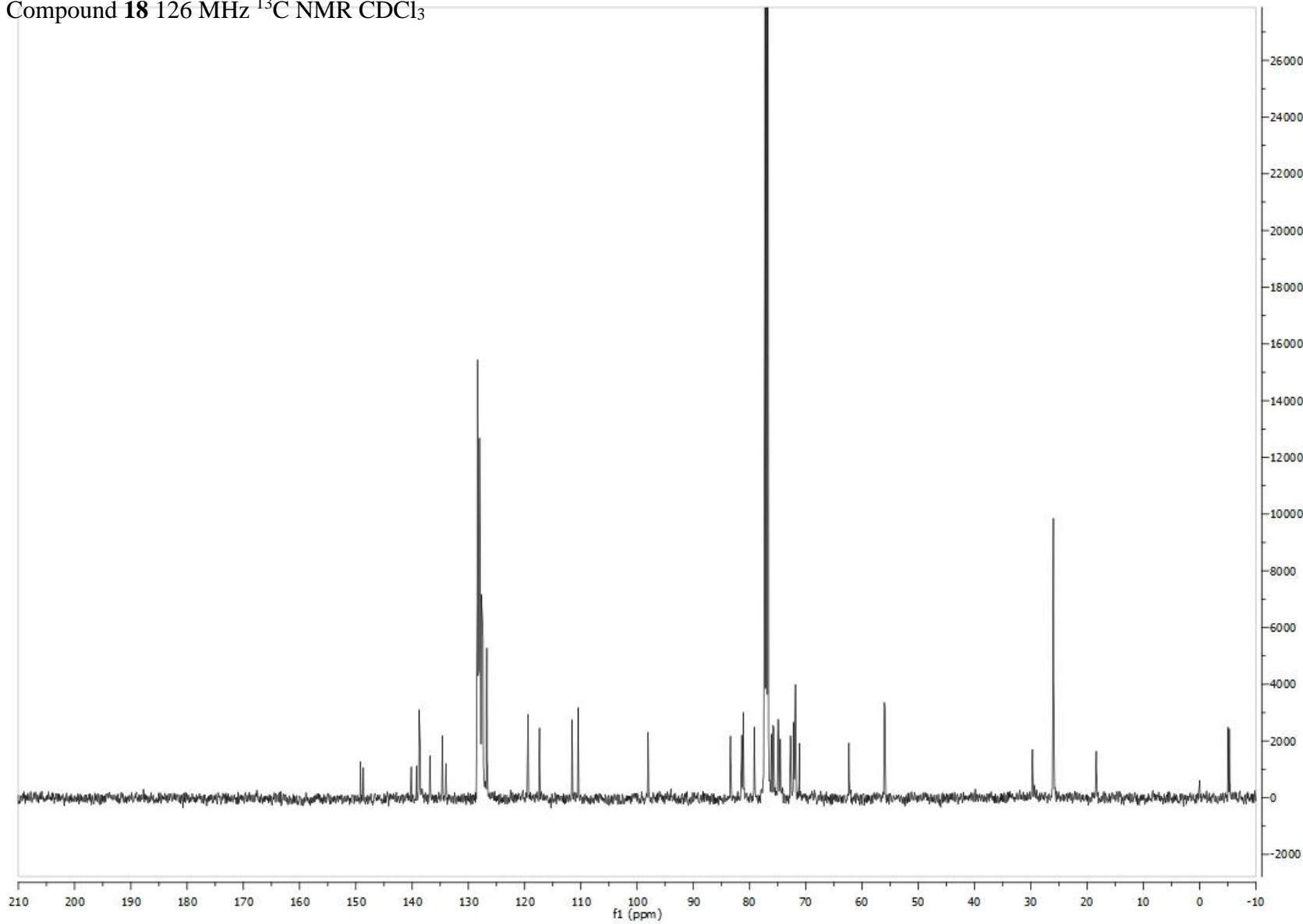
Compound **17** 126 MHz ^{13}C NMR CDCl_3



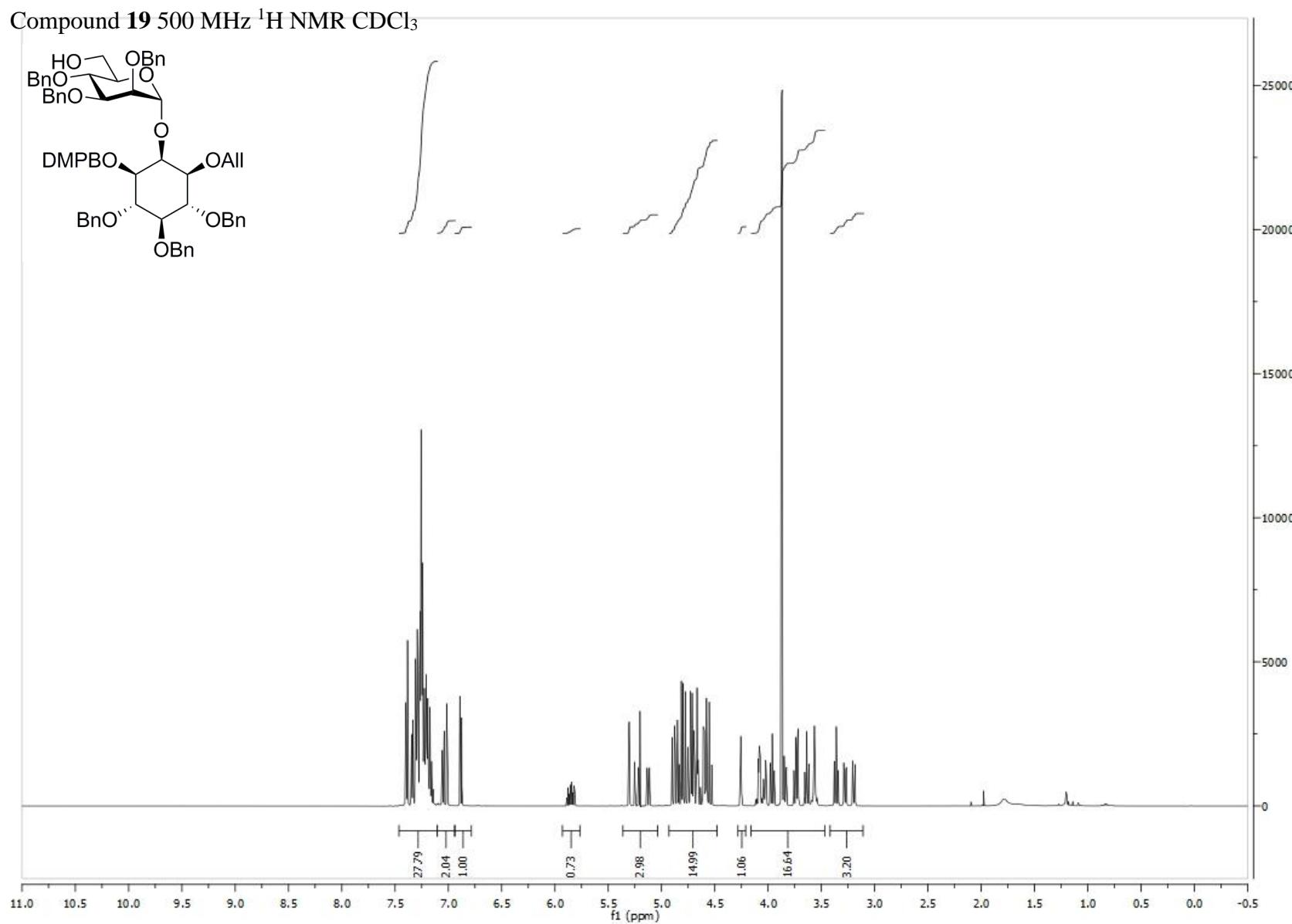
Compound **18** 500 MHz ^1H NMR CDCl_3



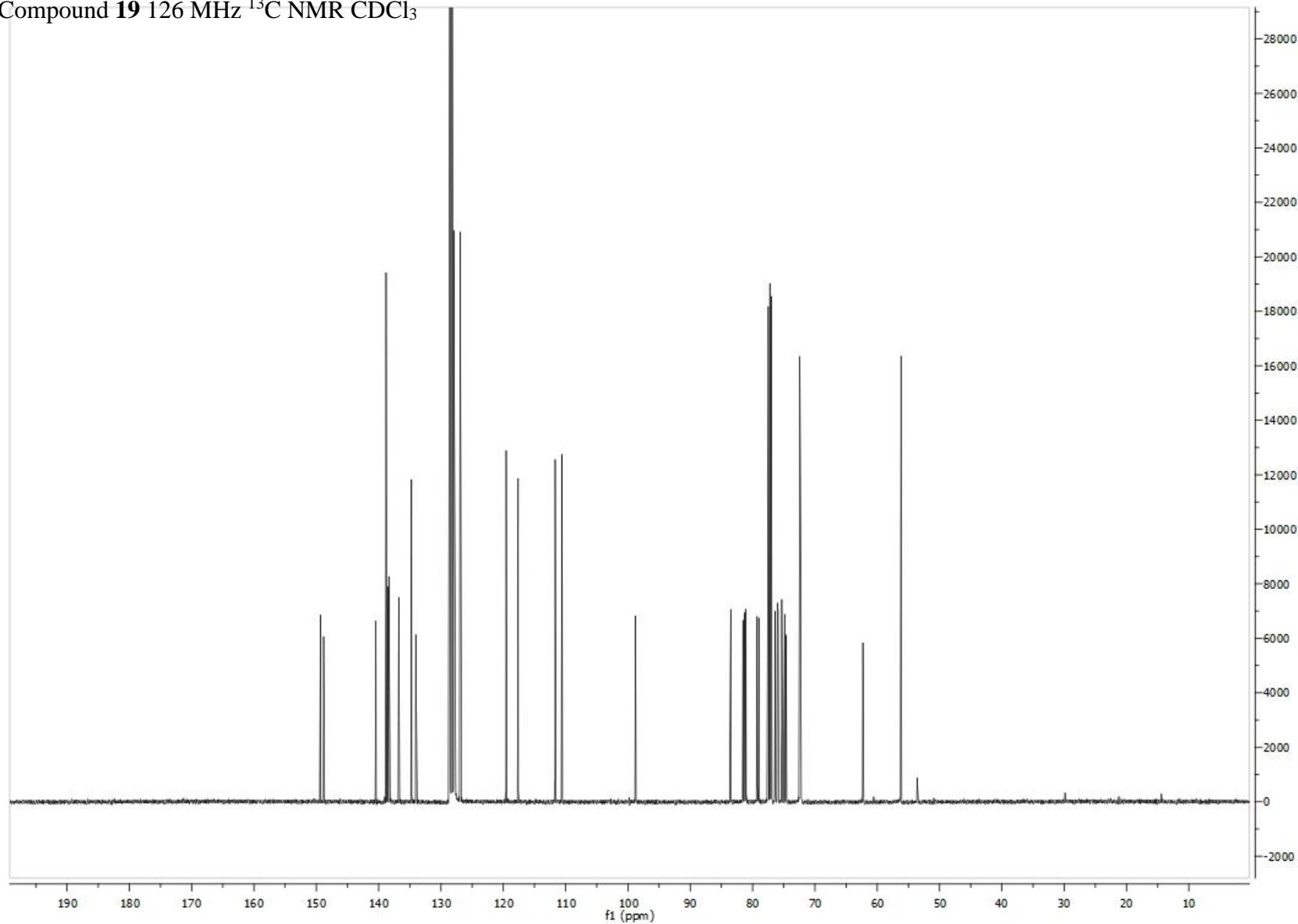
Compound **18** 126 MHz ^{13}C NMR CDCl_3



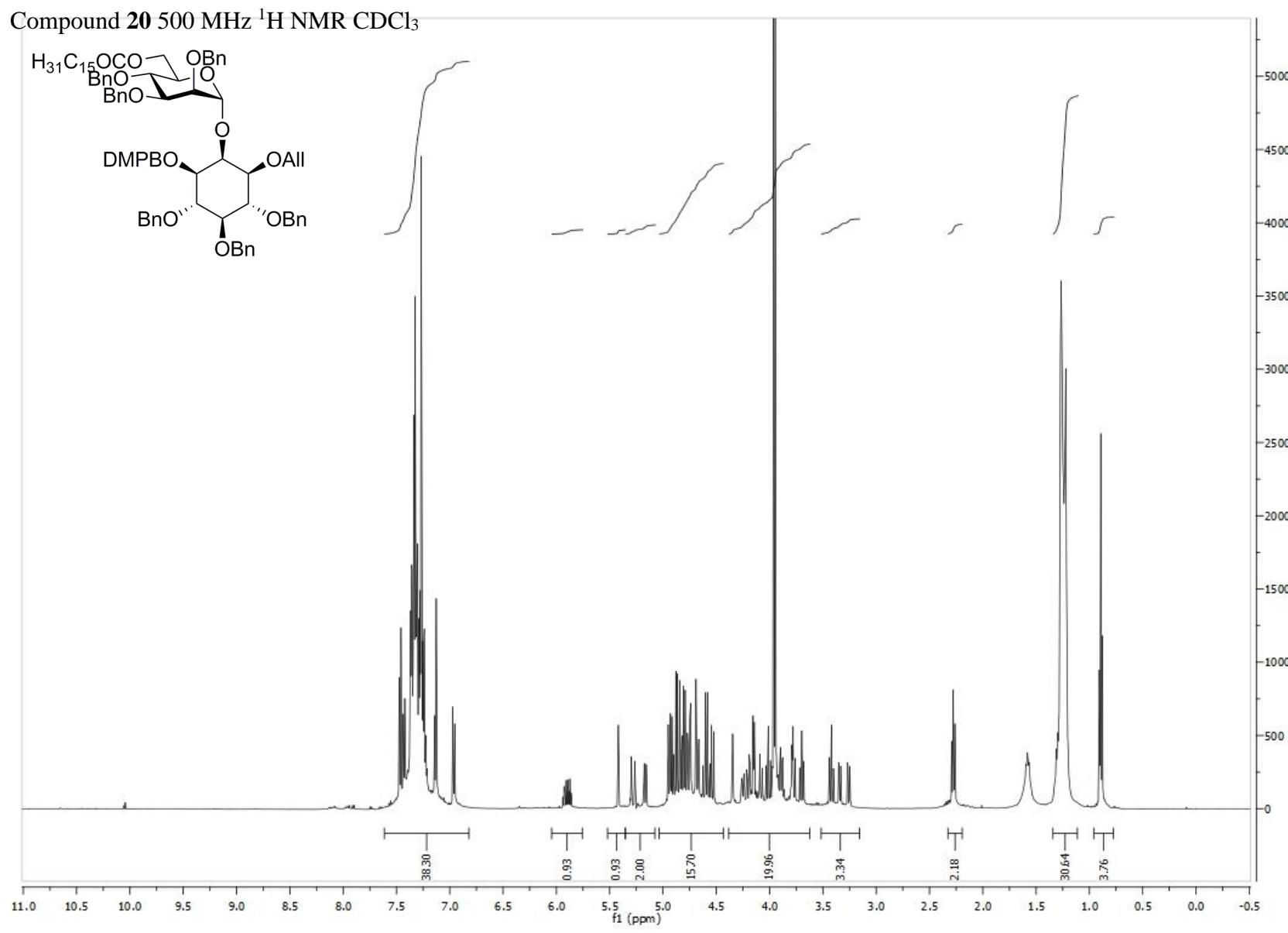
Compound **19** 500 MHz ^1H NMR CDCl_3



Compound **19** 126 MHz ^{13}C NMR CDCl_3

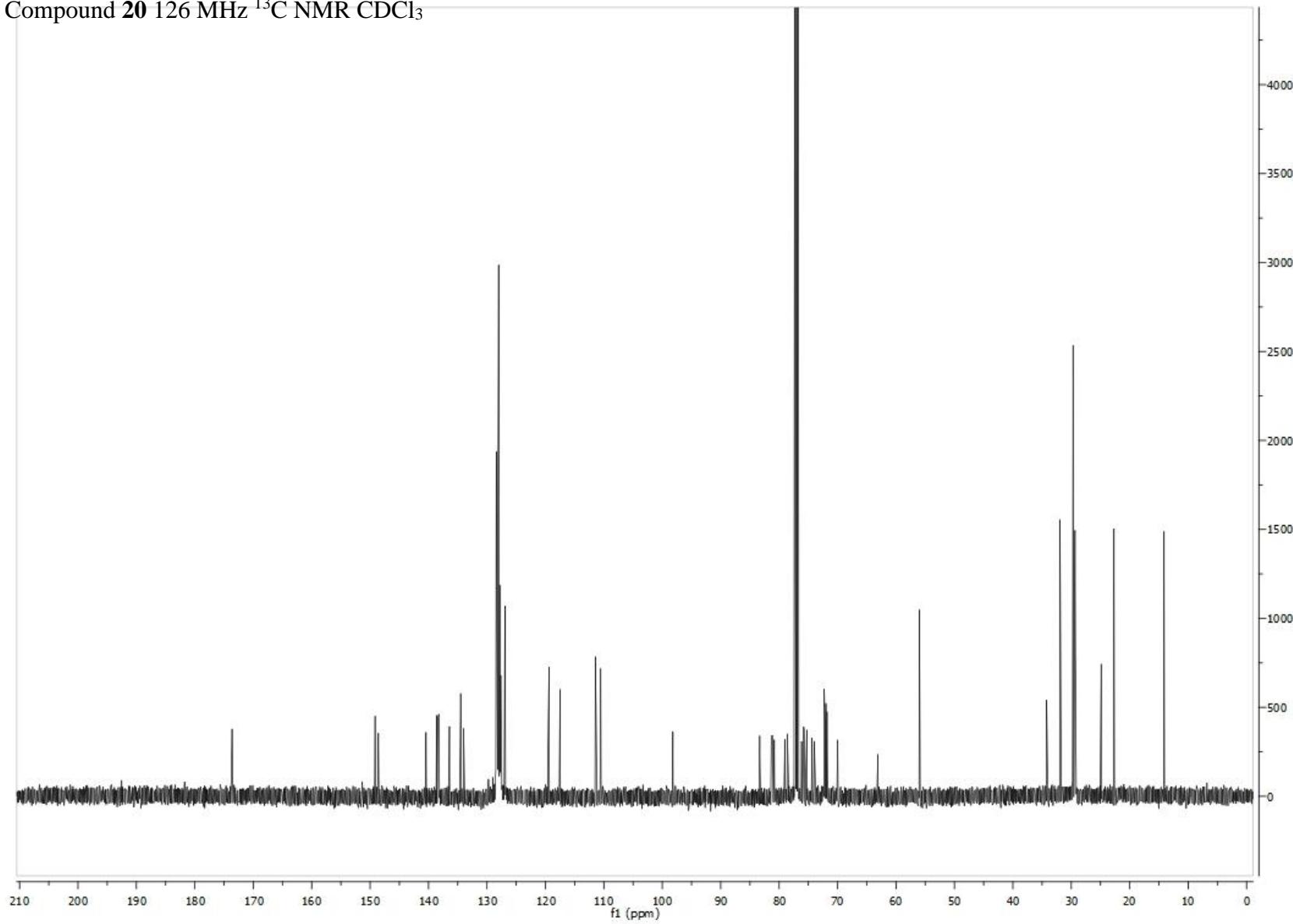


Compound **20** 500 MHz ^1H NMR CDCl_3

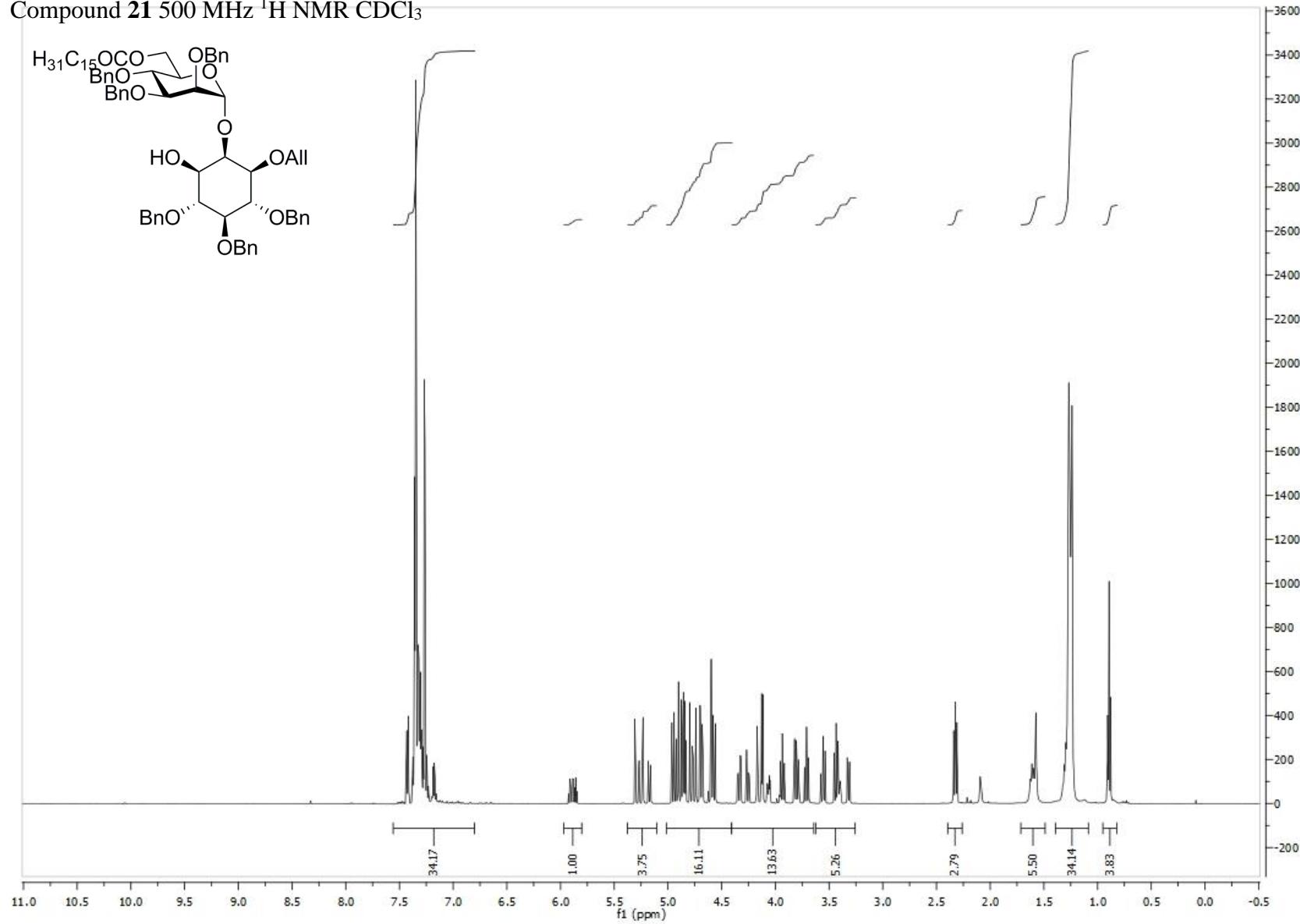
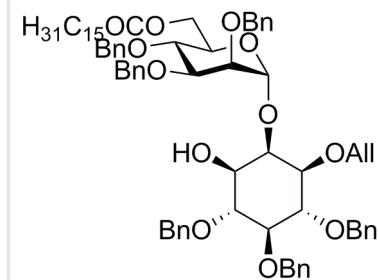


S120

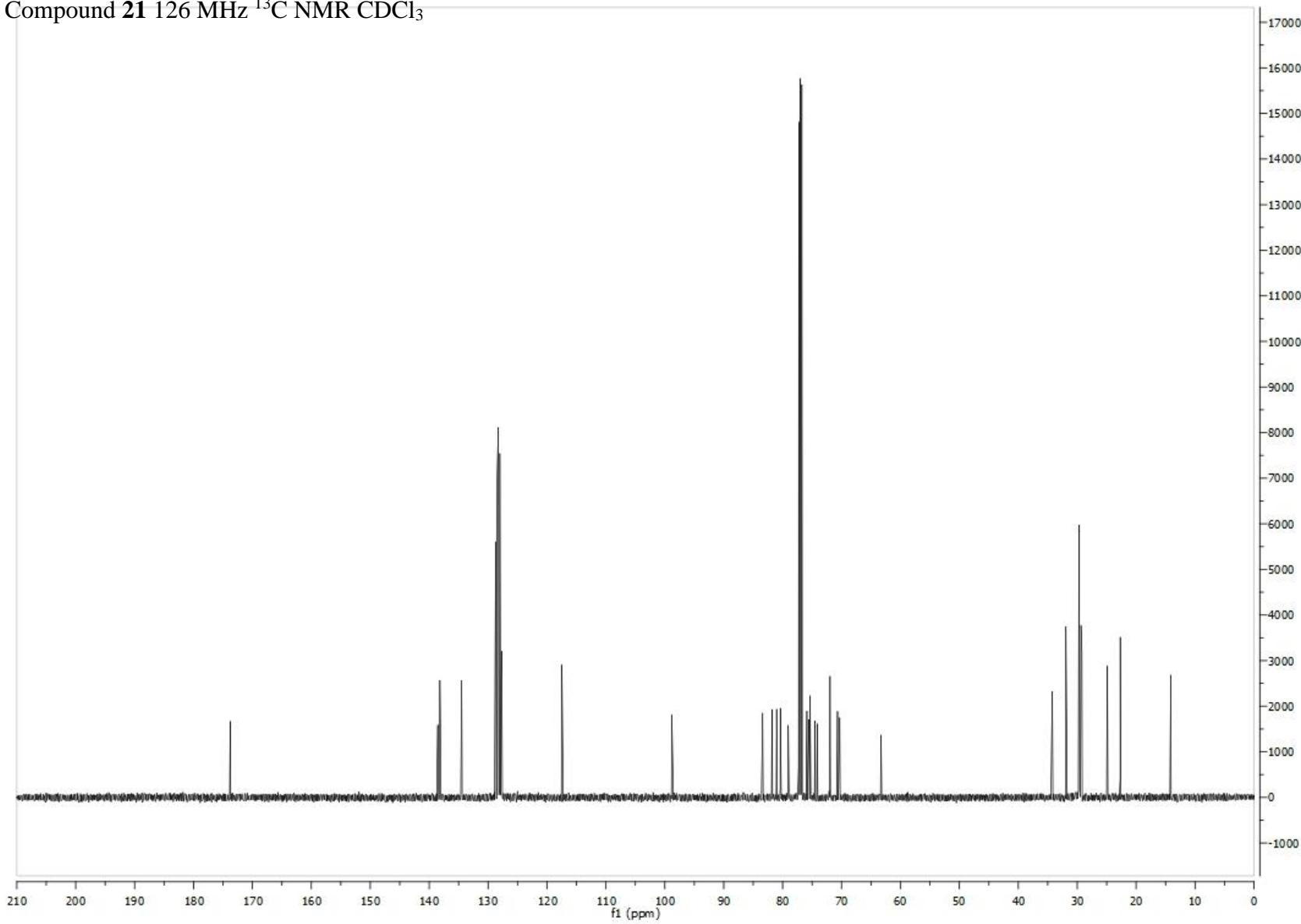
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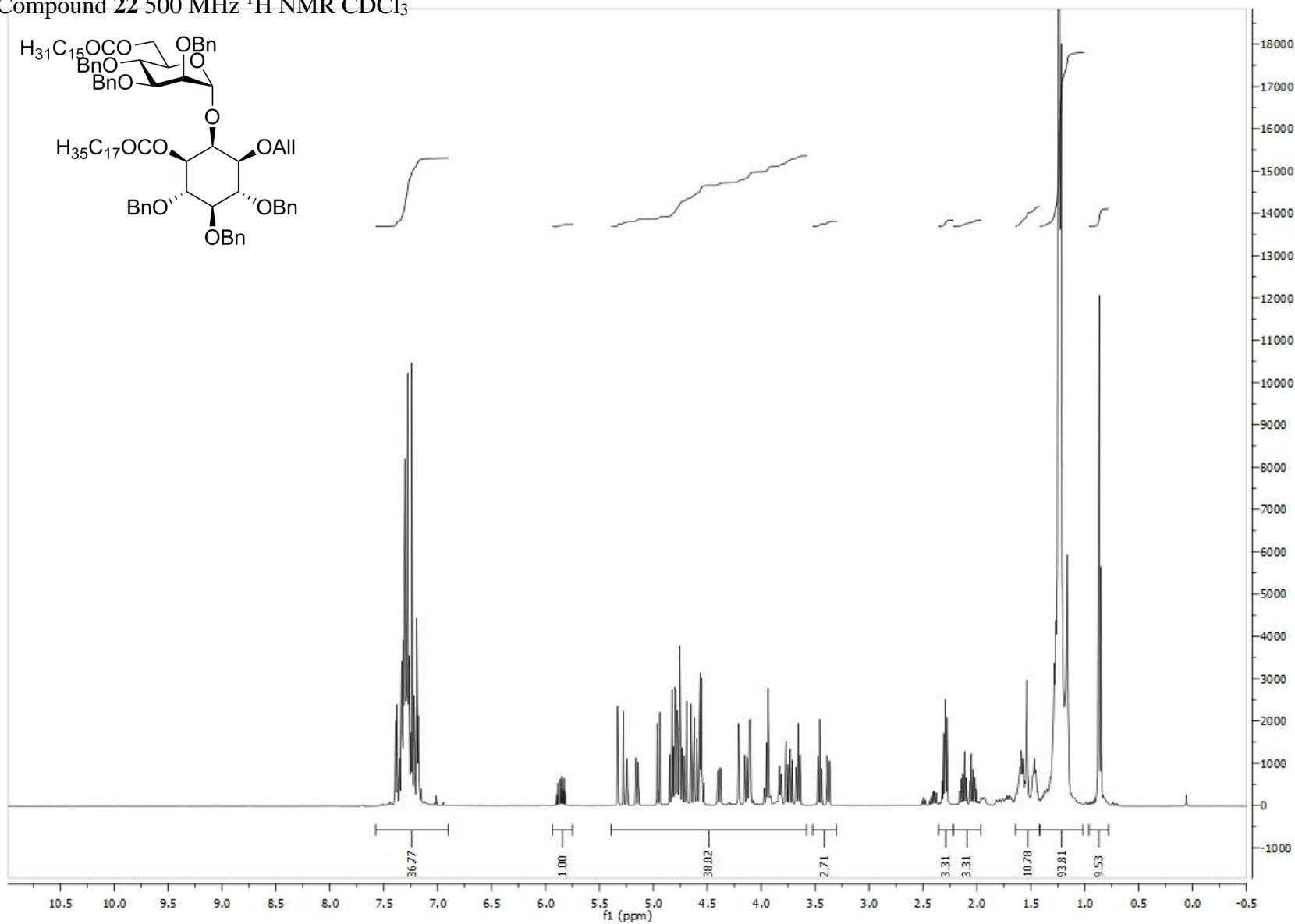
Compound **21** 500 MHz ^1H NMR CDCl₃



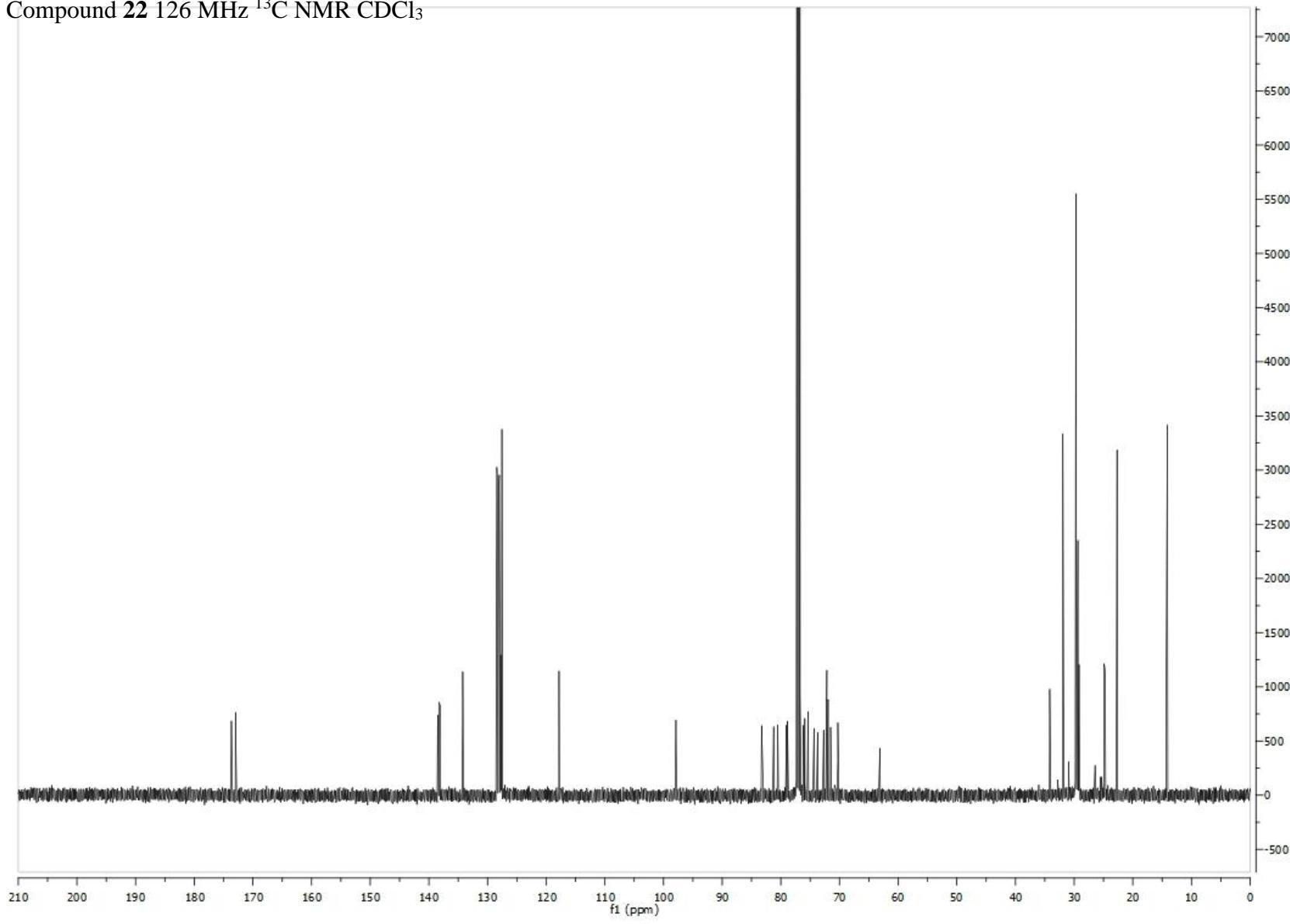
Compound **21** 126 MHz ^{13}C NMR CDCl_3



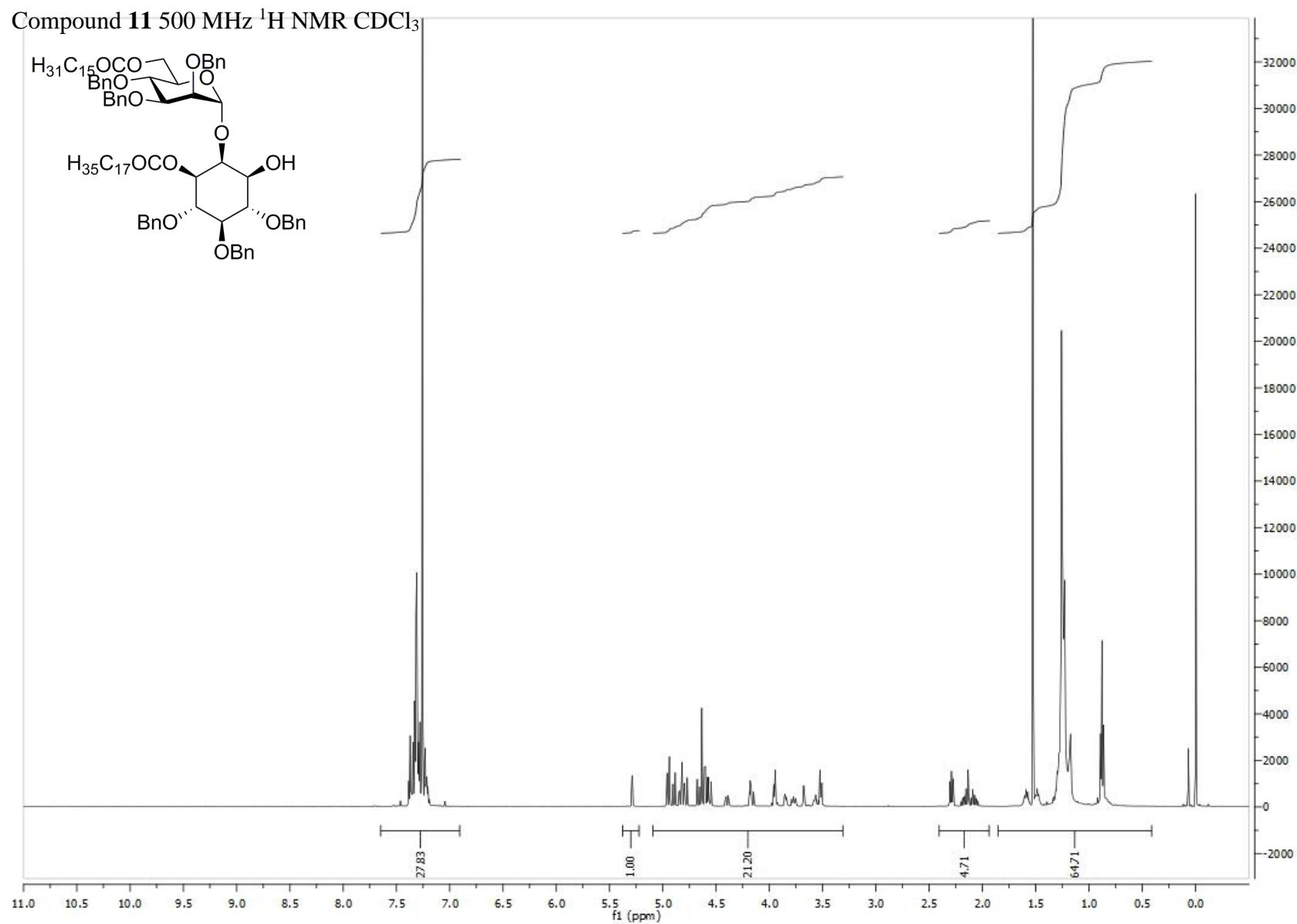
Compound 22 500 MHz ^1H NMR CDCl_3



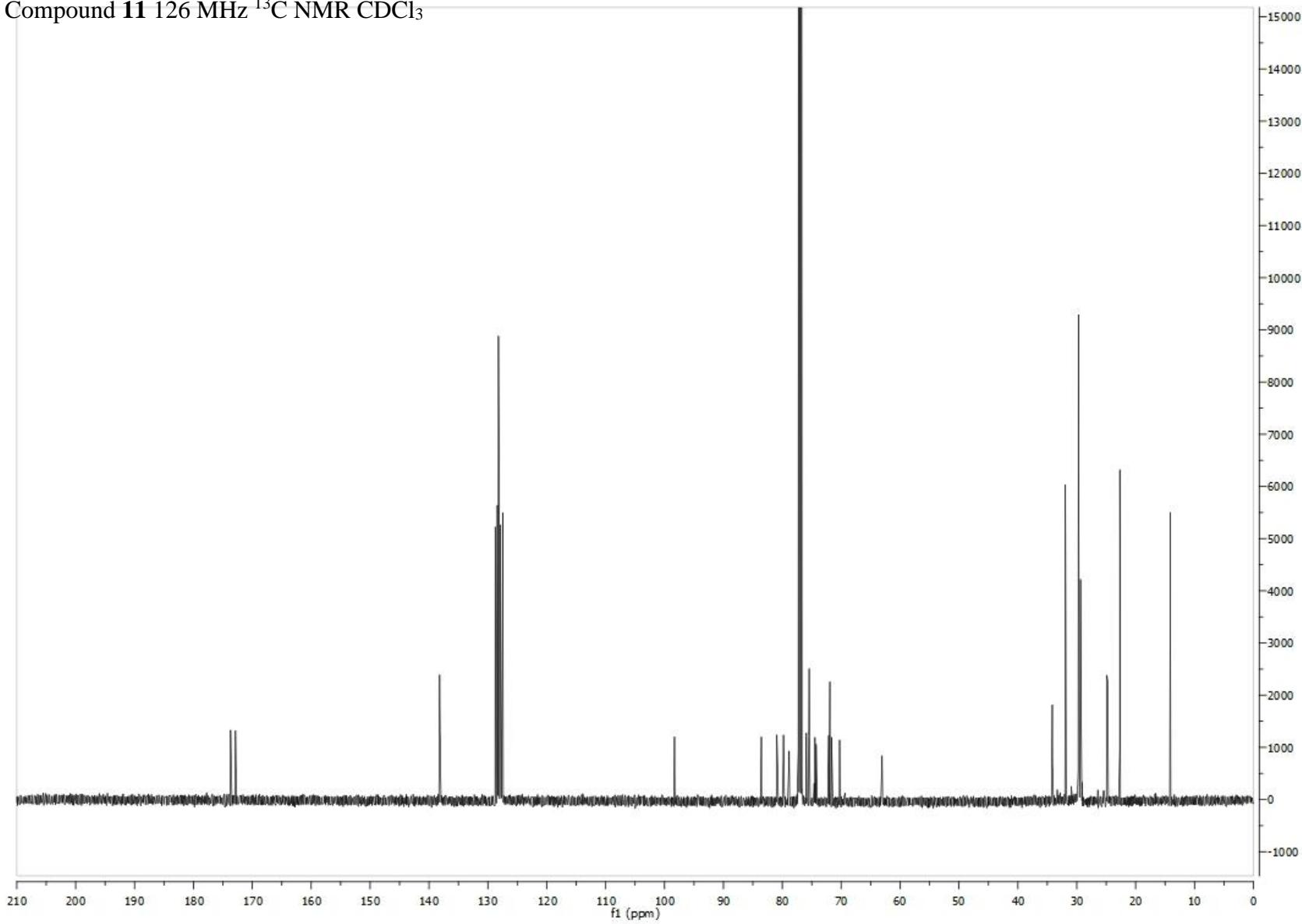
Compound **22** 126 MHz ^{13}C NMR CDCl_3



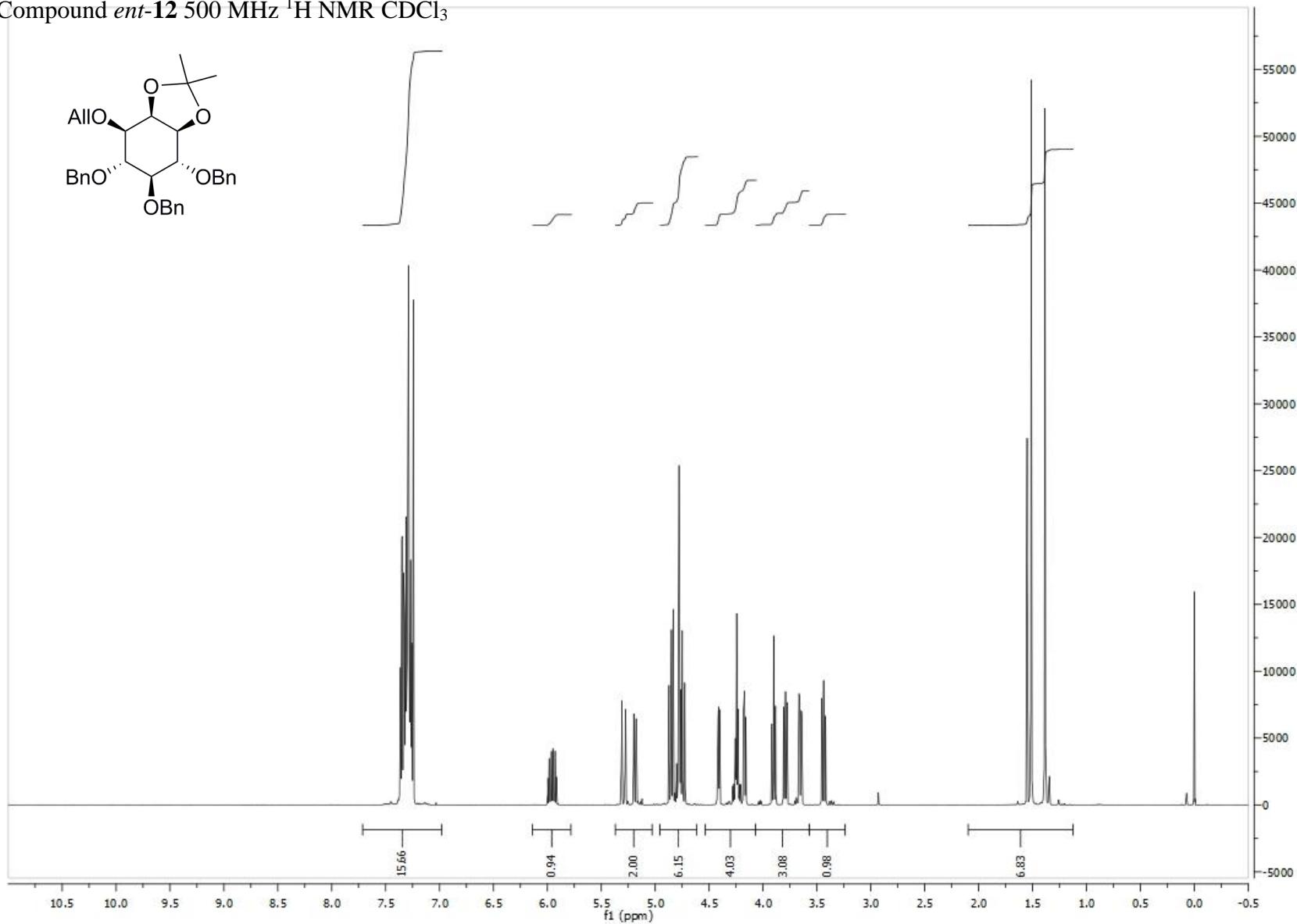
Compound **11** 500 MHz ^1H NMR CDCl_3



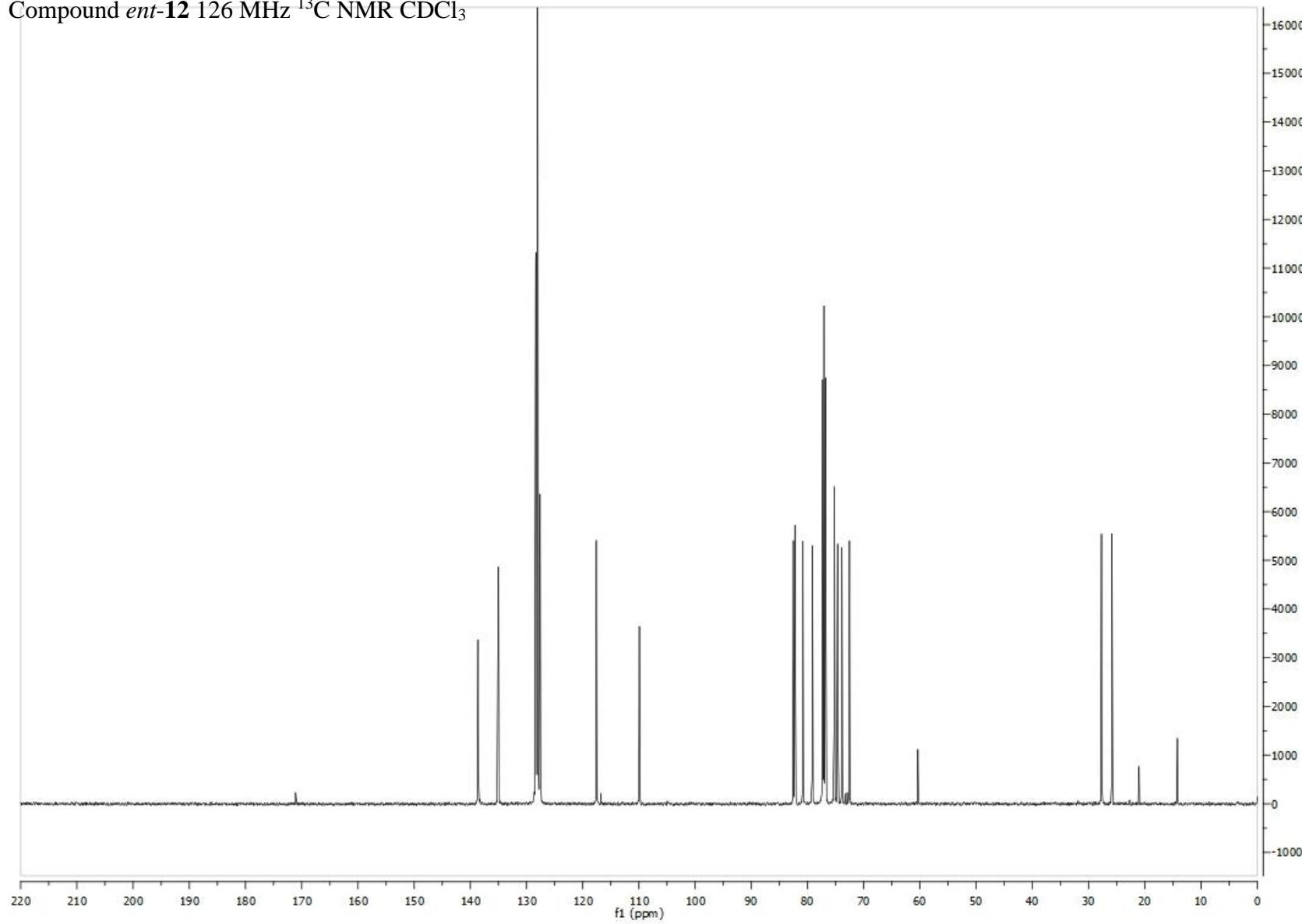
Compound **11** 126 MHz ^{13}C NMR CDCl_3



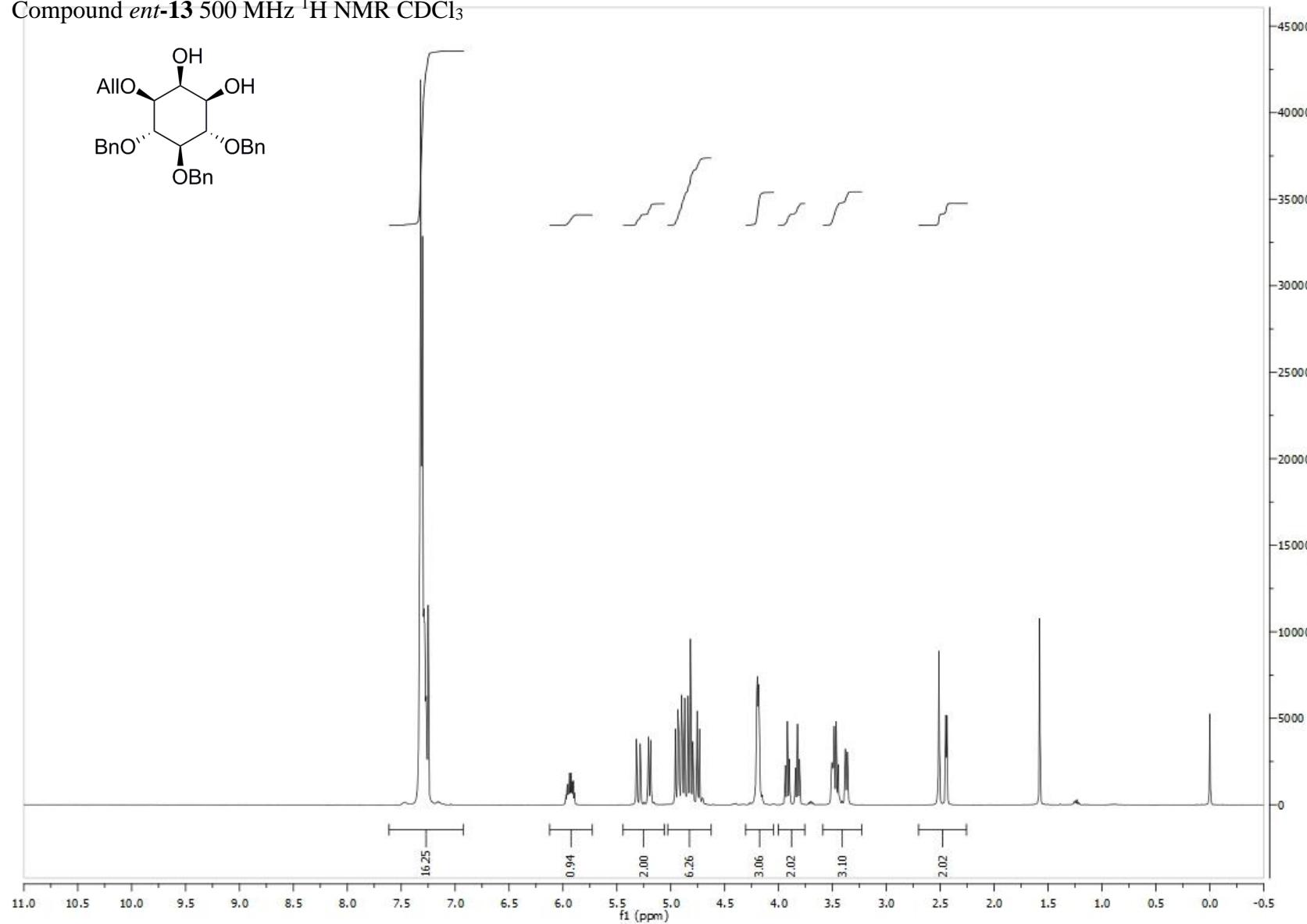
Compound *ent*-**12** 500 MHz ^1H NMR CDCl_3



Compound *ent*-**12** 126 MHz ^{13}C NMR CDCl_3

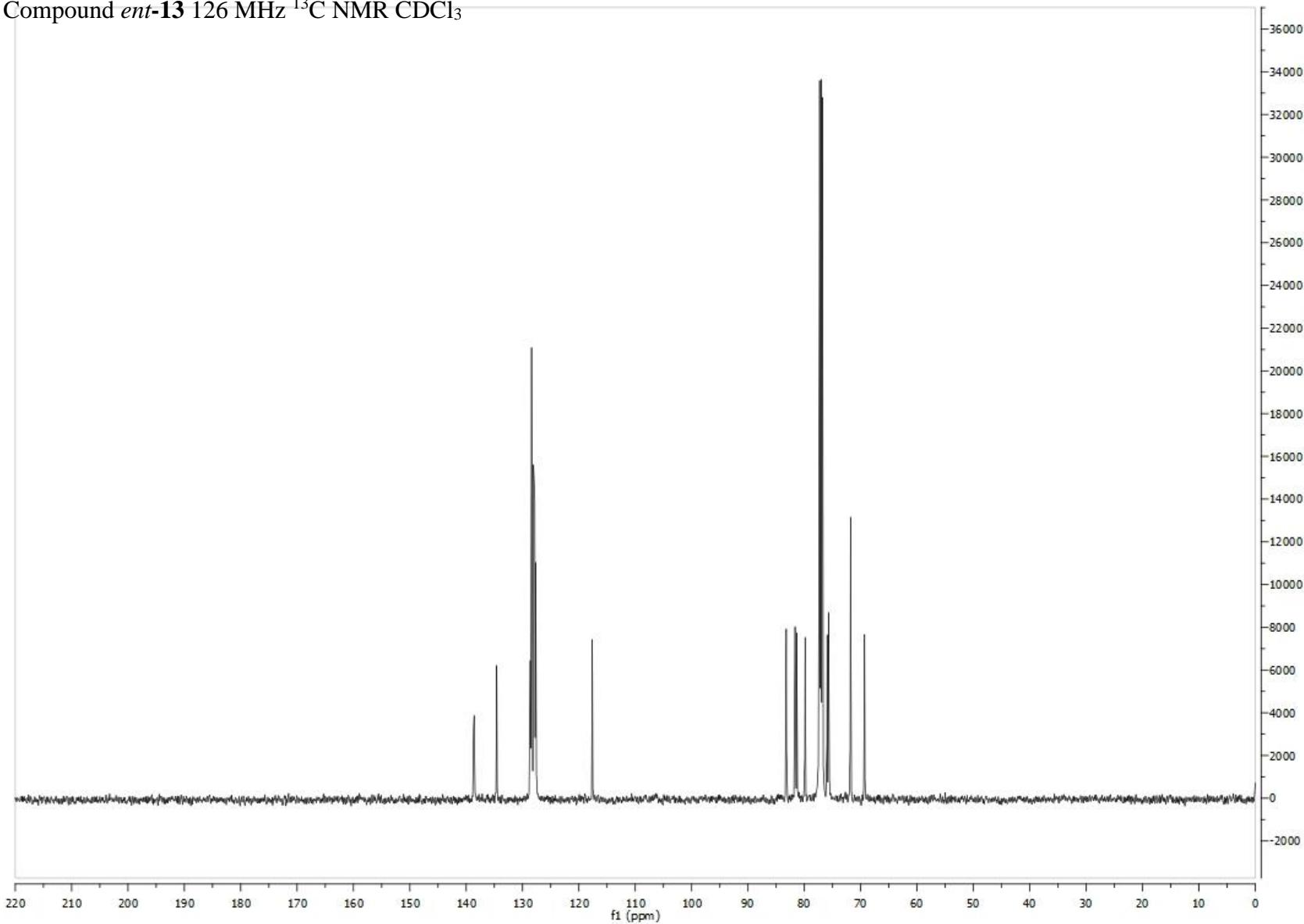


Compound *ent*-**13** 500 MHz ^1H NMR CDCl_3

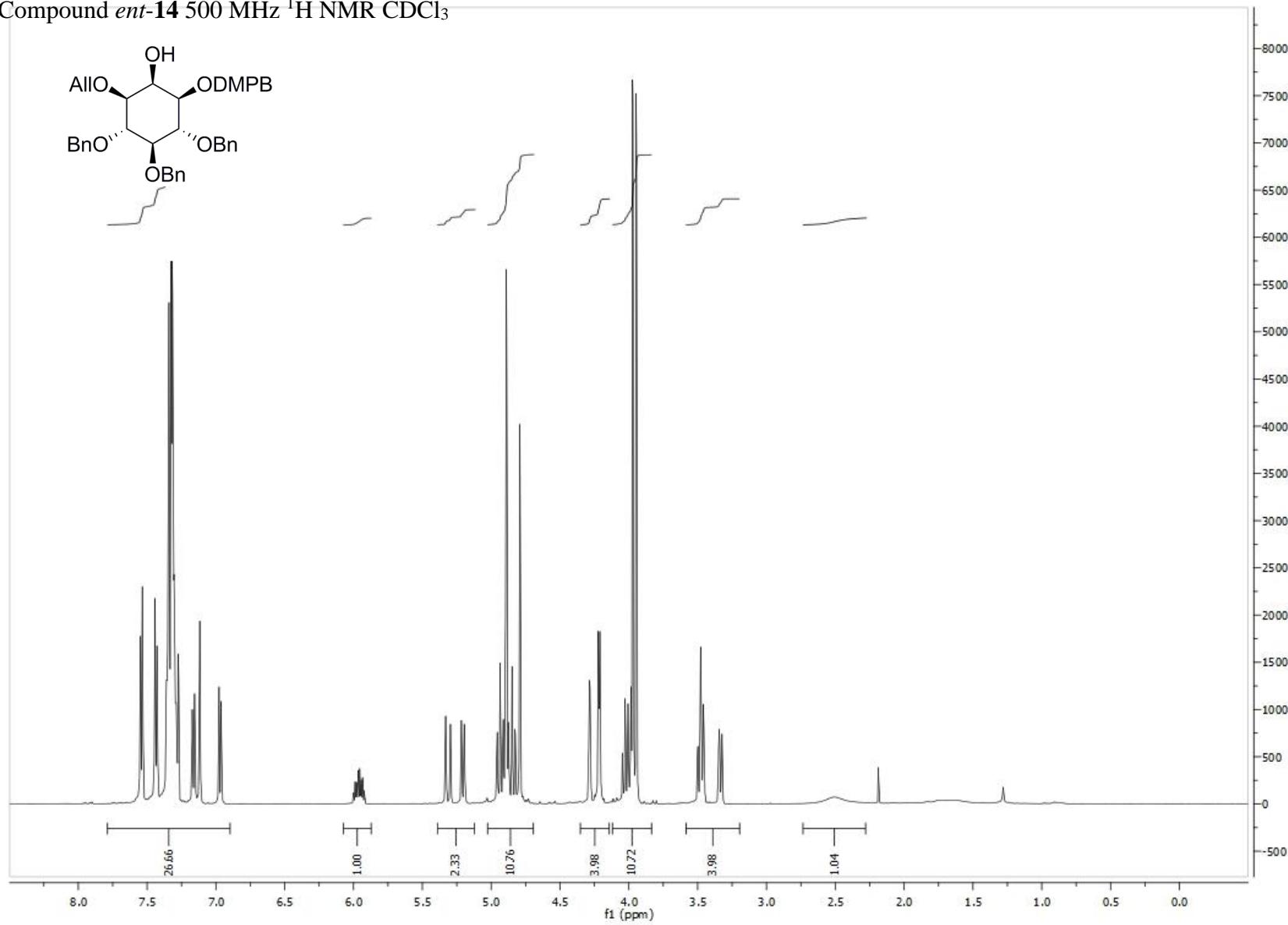


S130

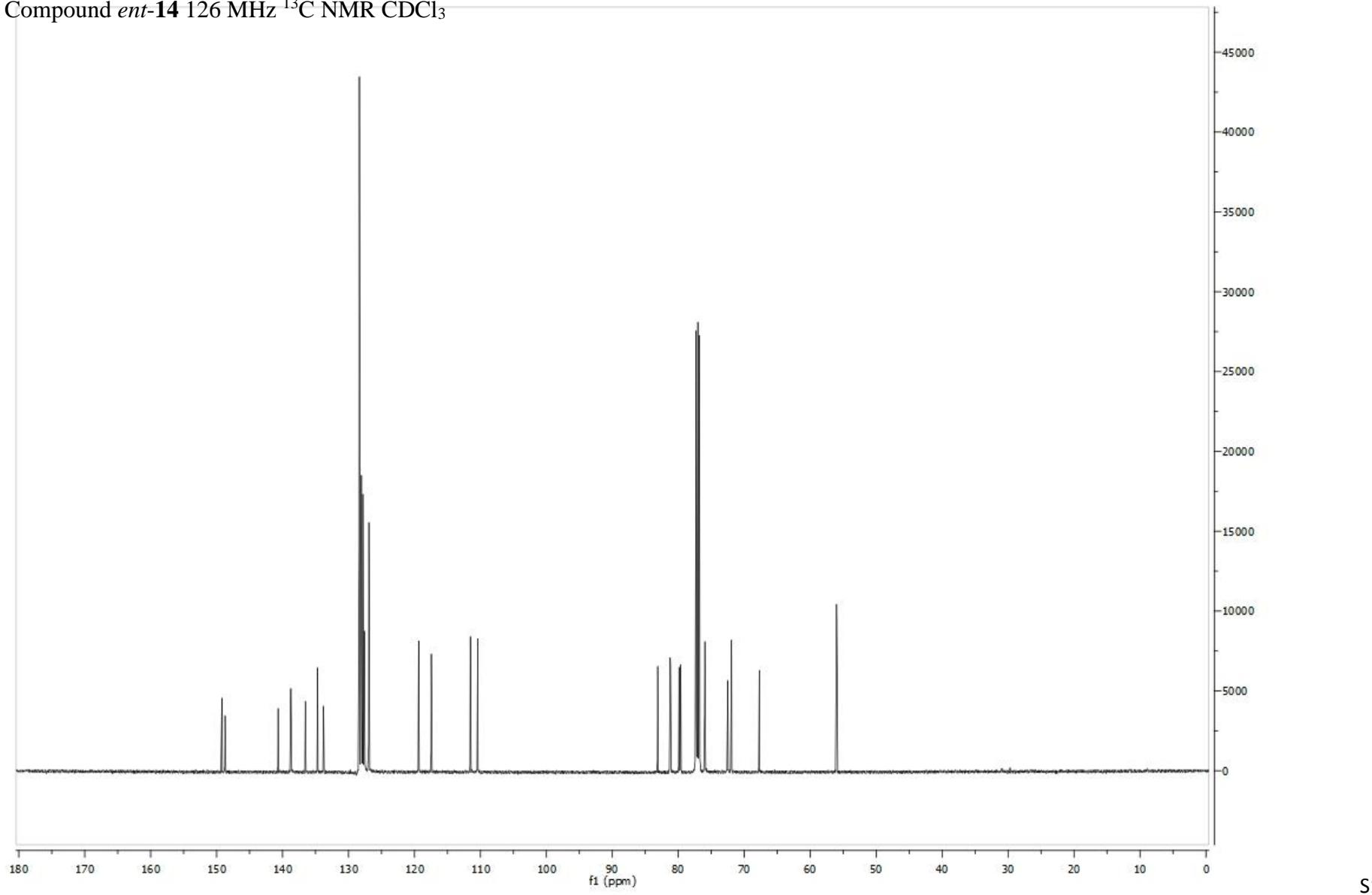
Compound *ent*-**13** 126 MHz ^{13}C NMR CDCl_3



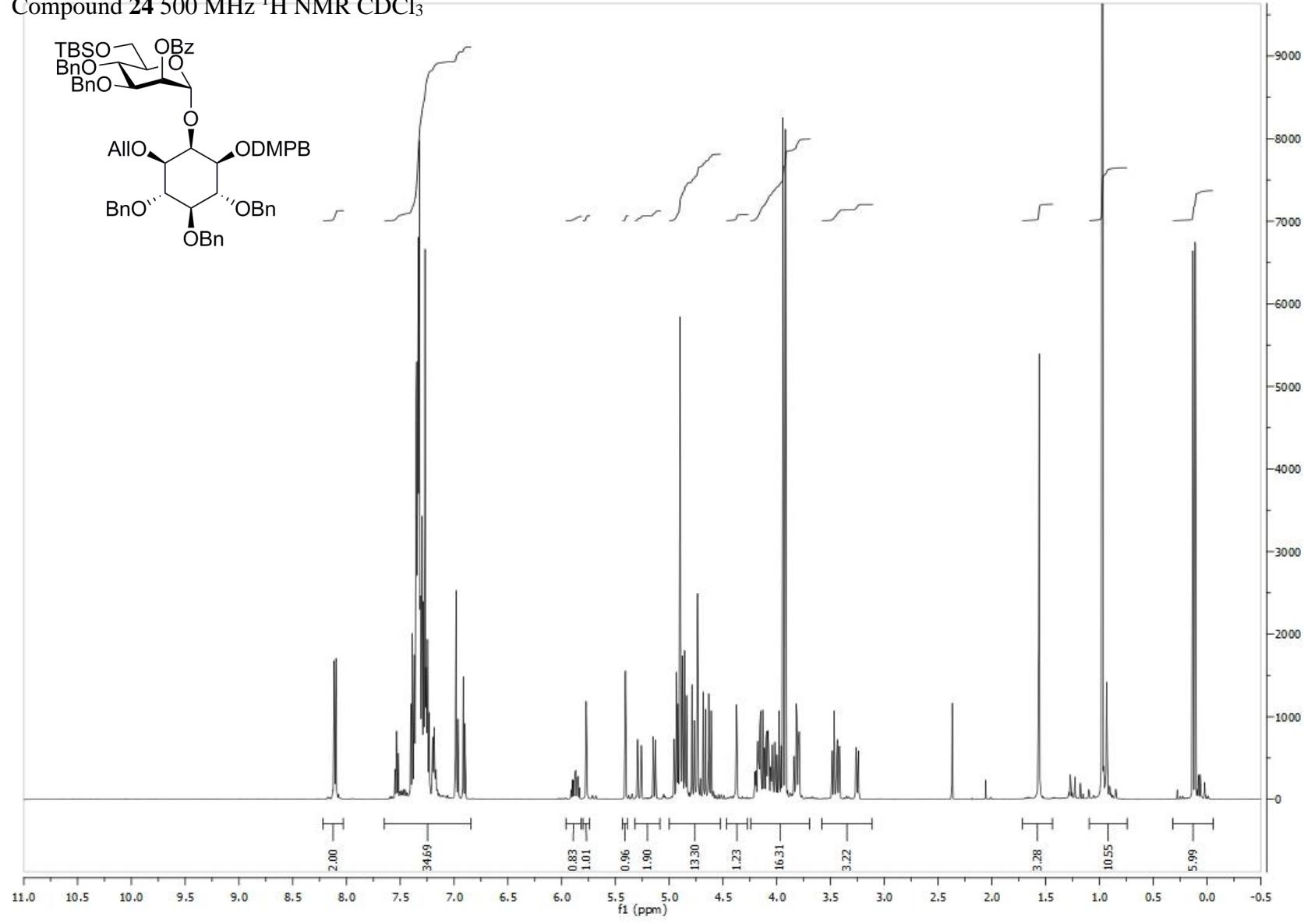
Compound *ent*-**14** 500 MHz ^1H NMR CDCl_3



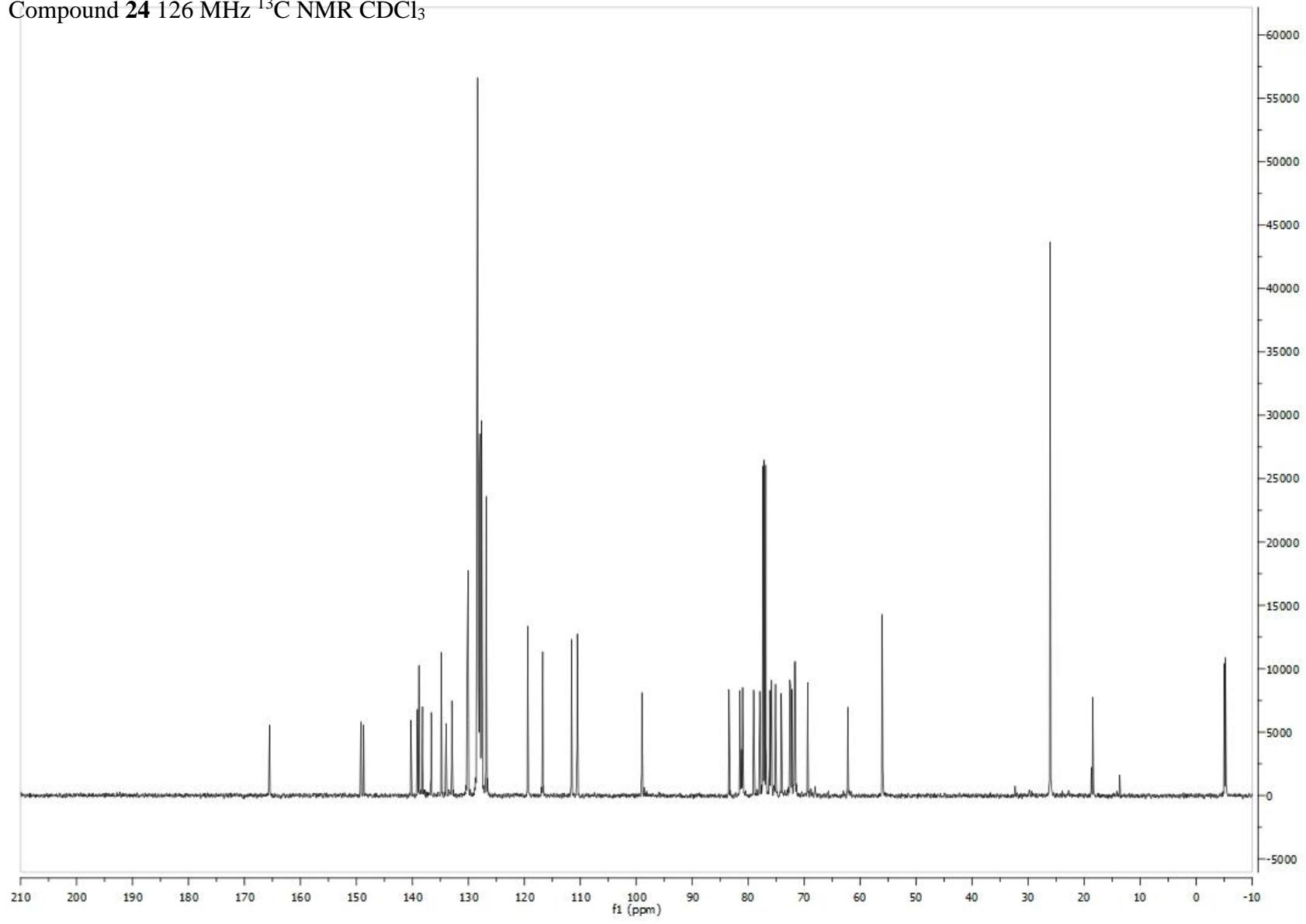
Compound *ent*-**14** 126 MHz ^{13}C NMR CDCl_3



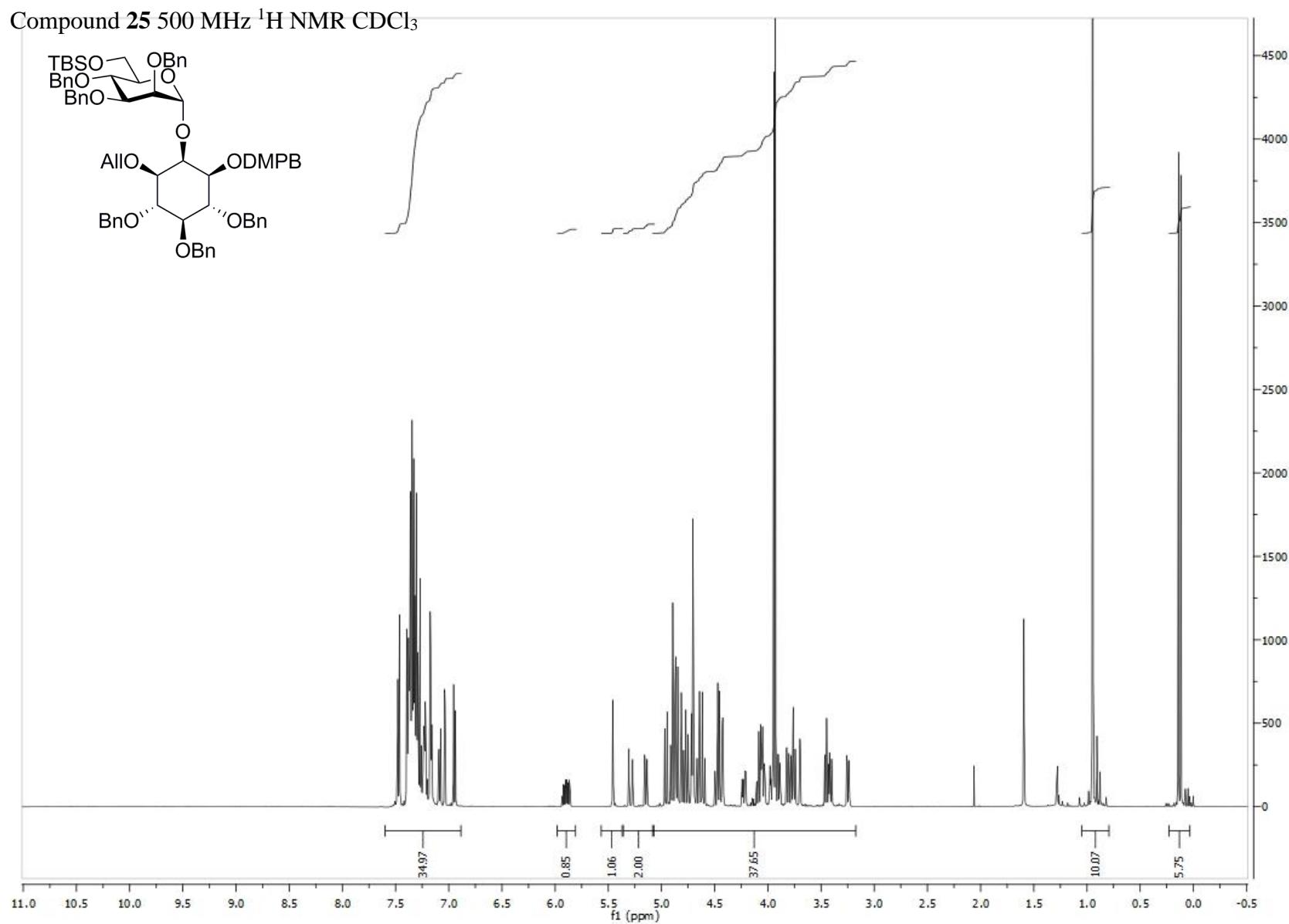
Compound 24 500 MHz ^1H NMR CDCl_3



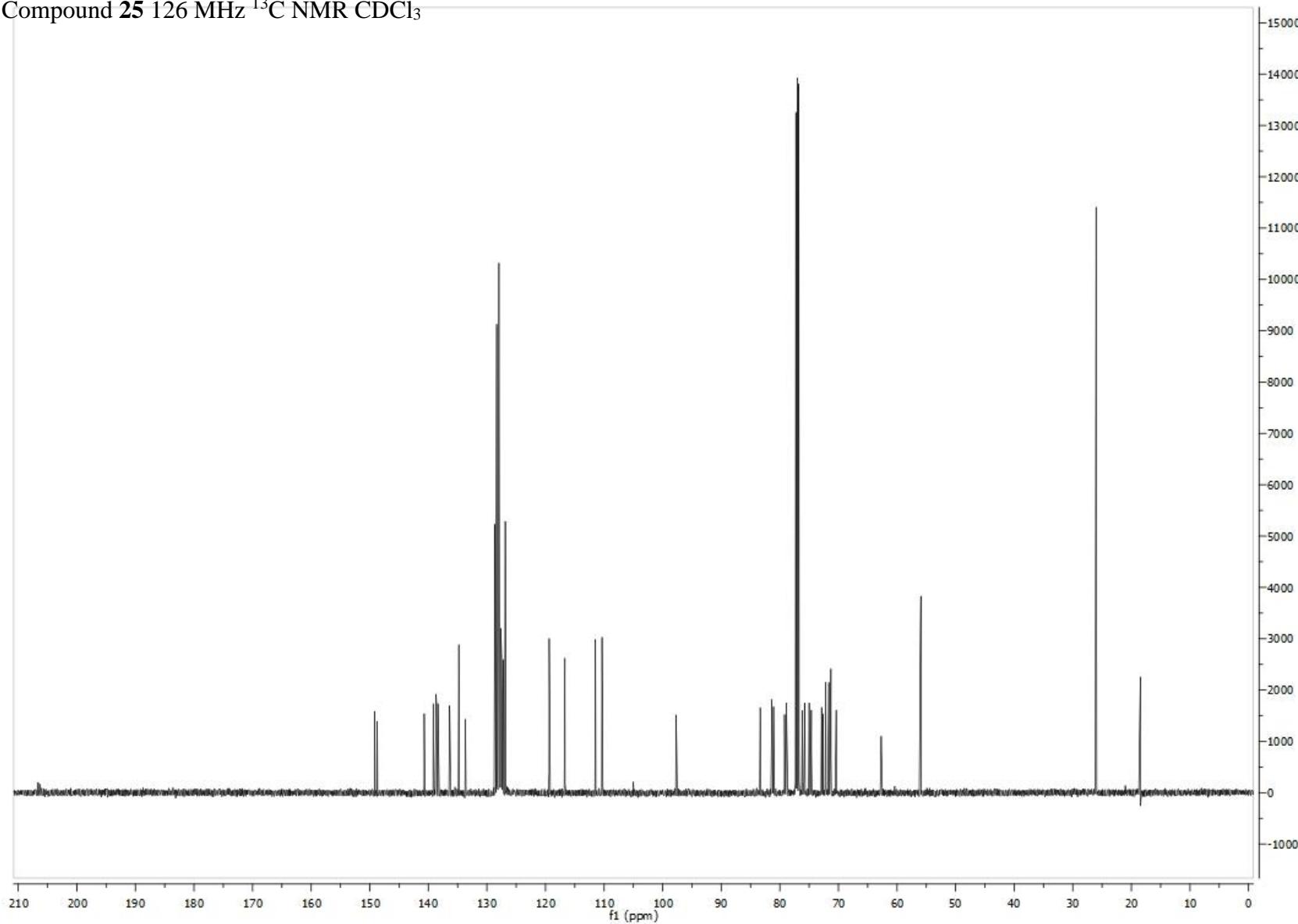
Compound **24** 126 MHz ^{13}C NMR CDCl_3



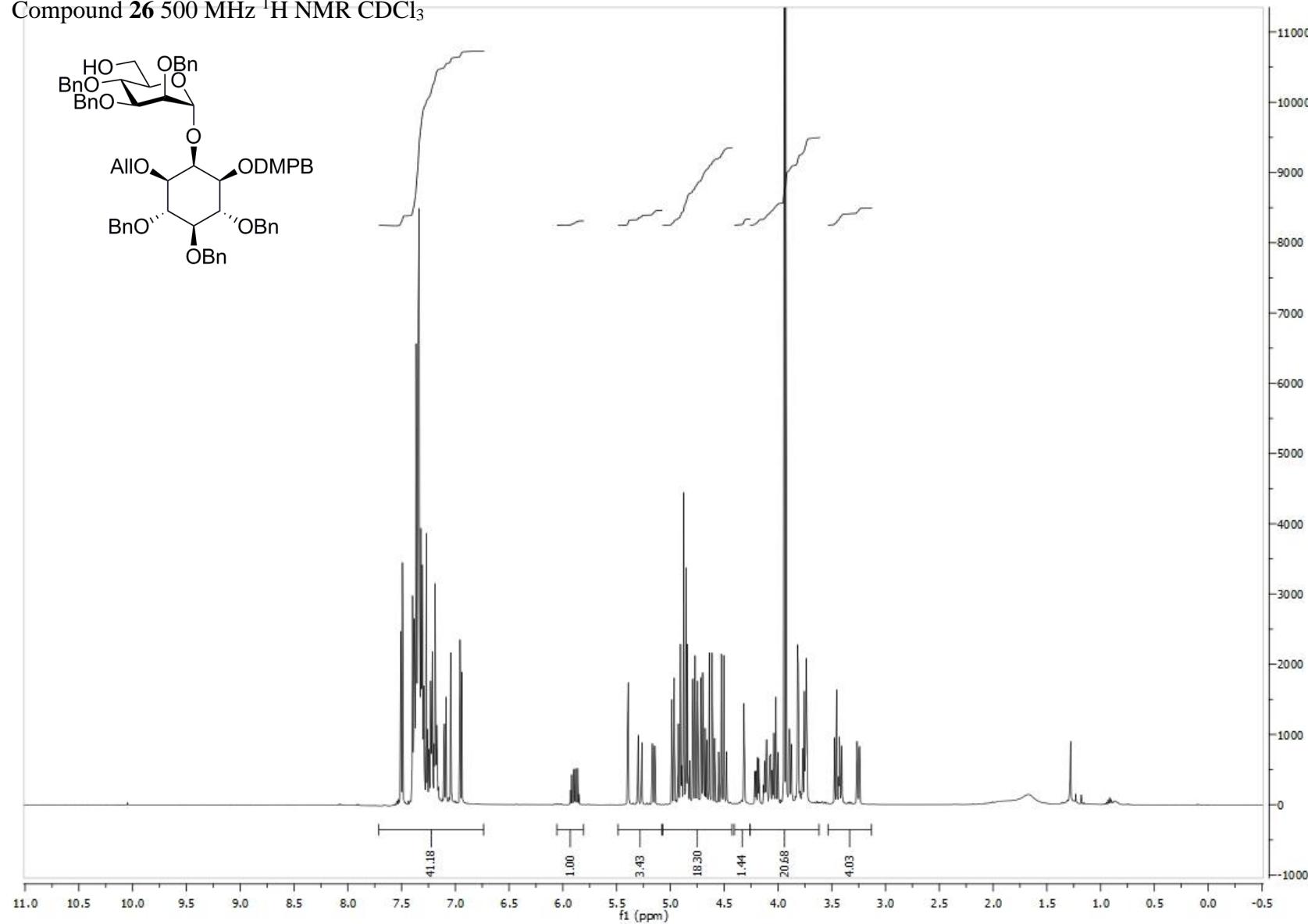
Compound 25 500 MHz ^1H NMR CDCl_3



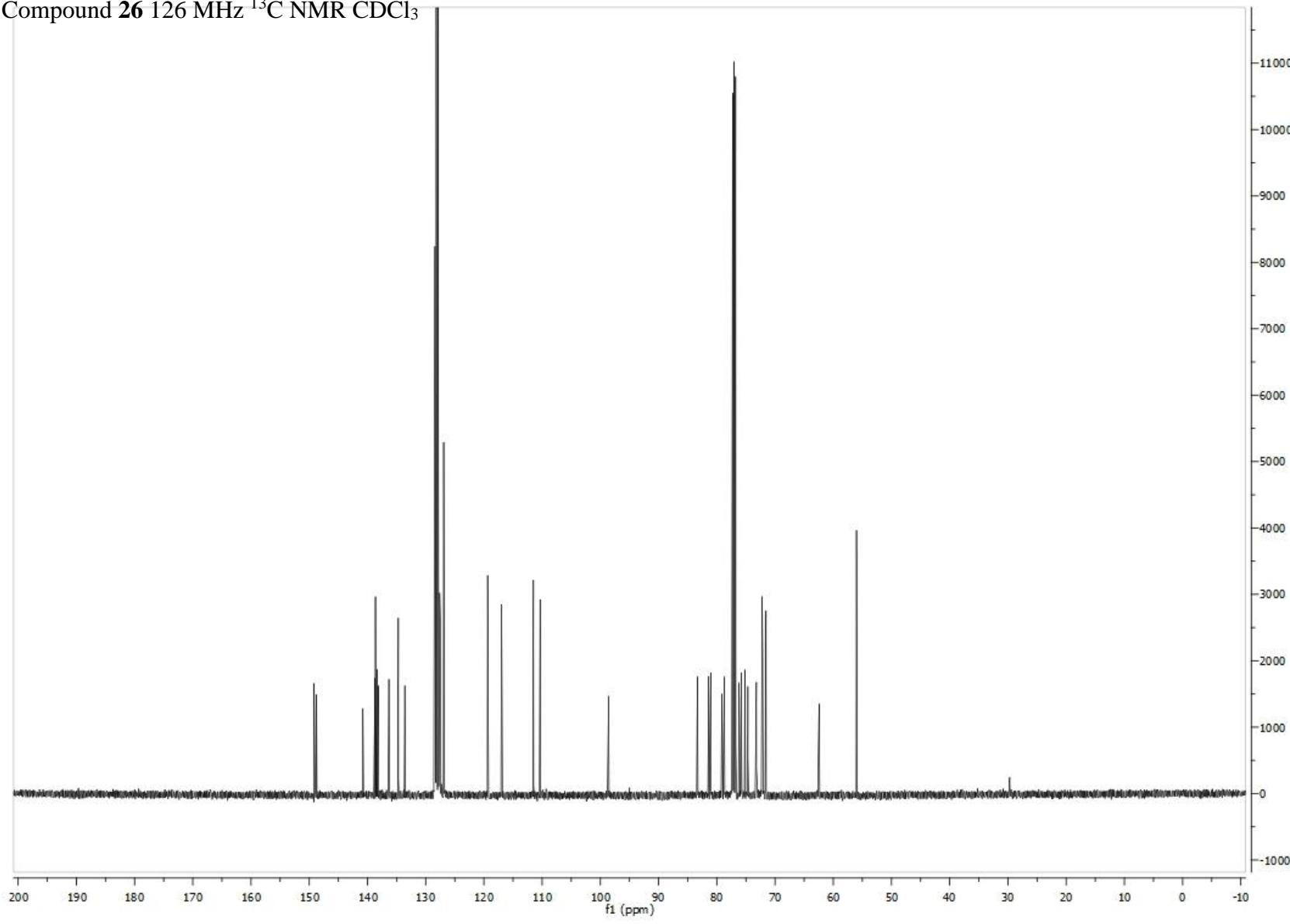
Compound **25** 126 MHz ^{13}C NMR CDCl_3



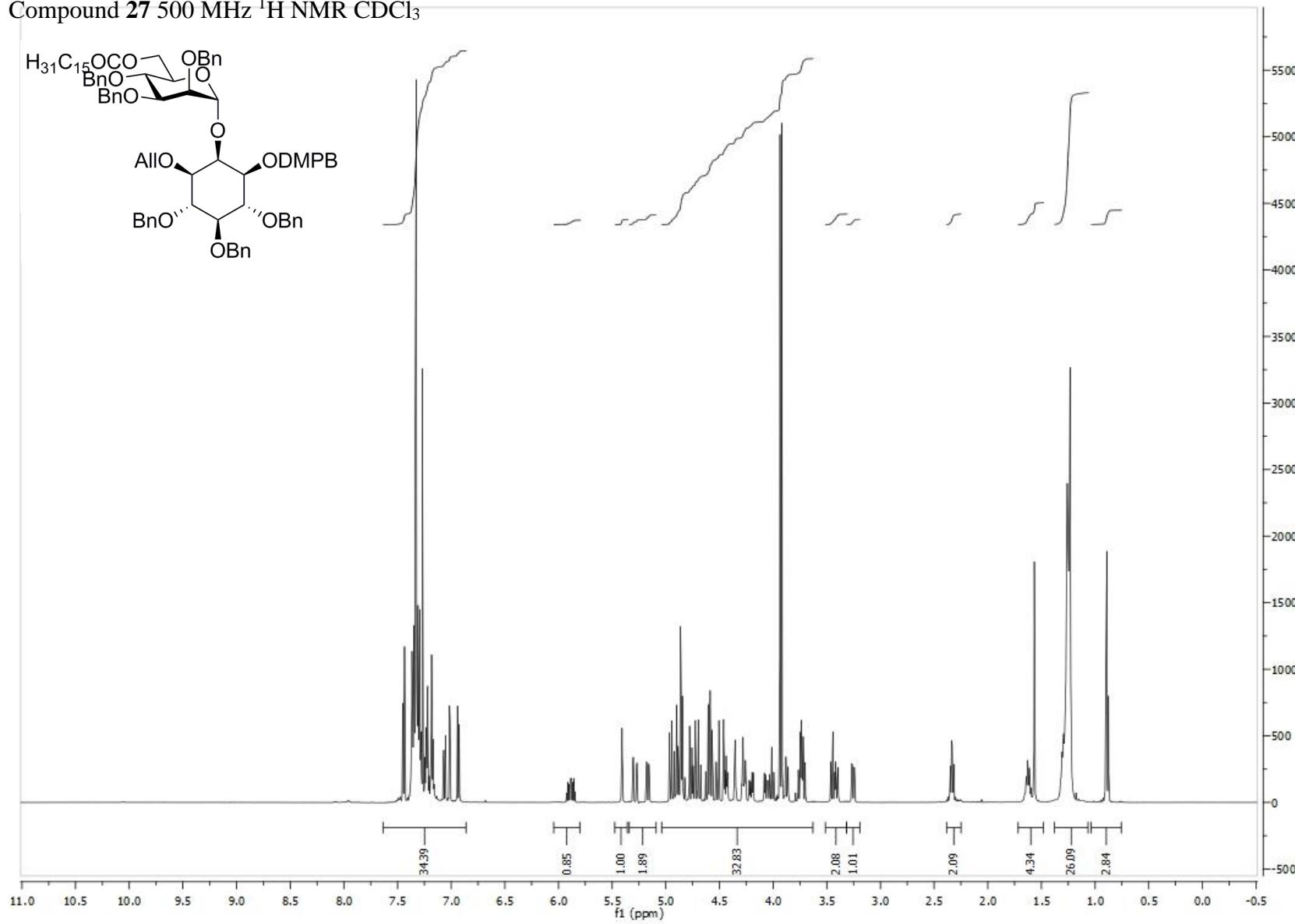
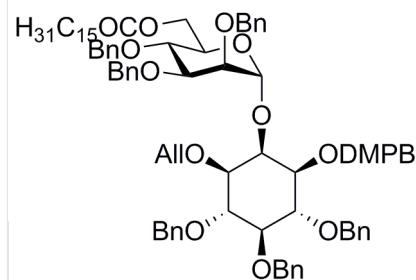
Compound **26** 500 MHz ^1H NMR CDCl_3



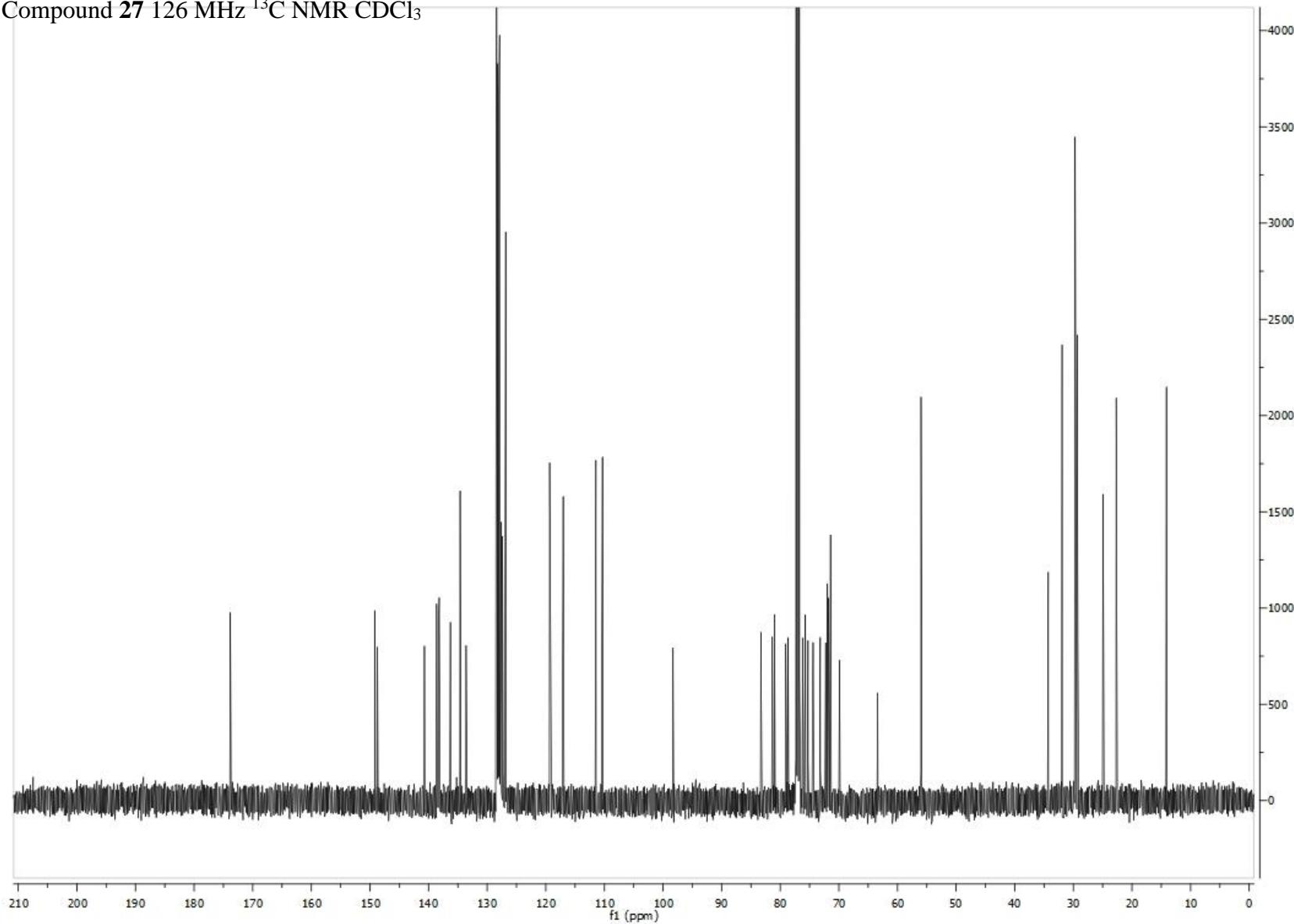
Compound **26** 126 MHz ^{13}C NMR CDCl_3



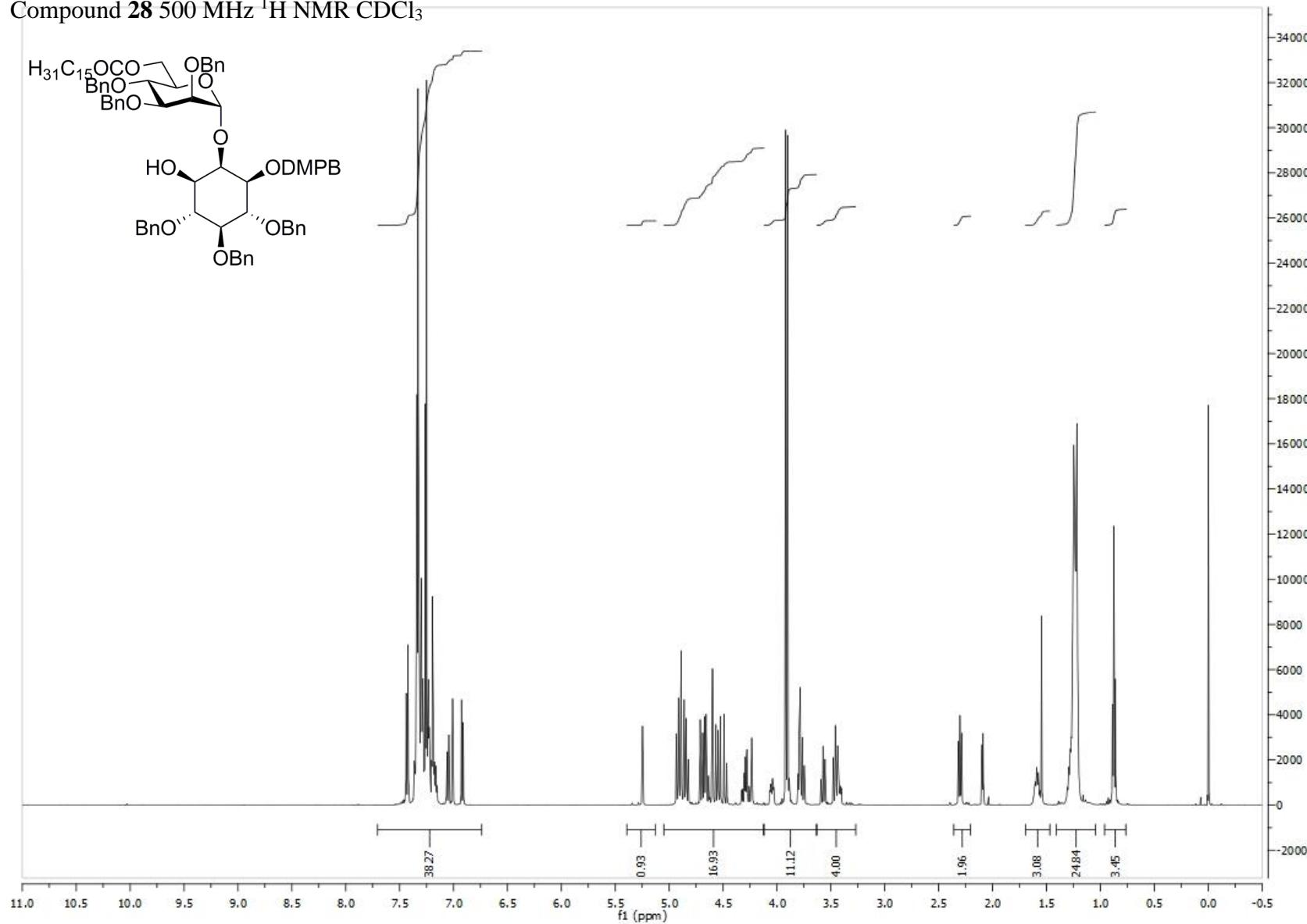
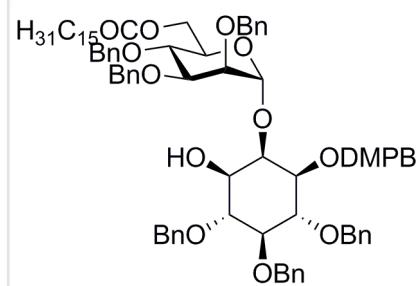
Compound 27 500 MHz ^1H NMR CDCl₃



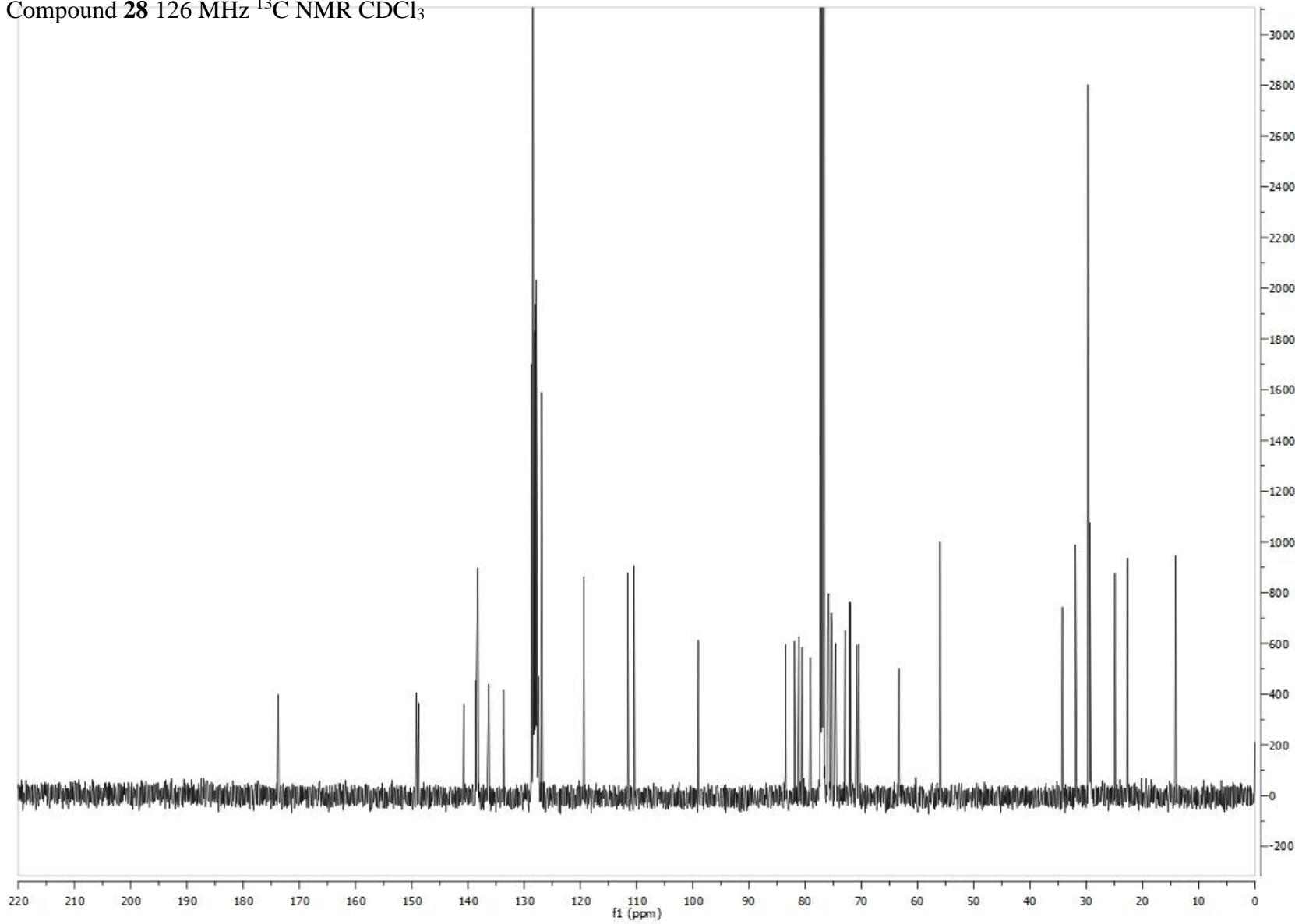
Compound 27 126 MHz ^{13}C NMR CDCl_3



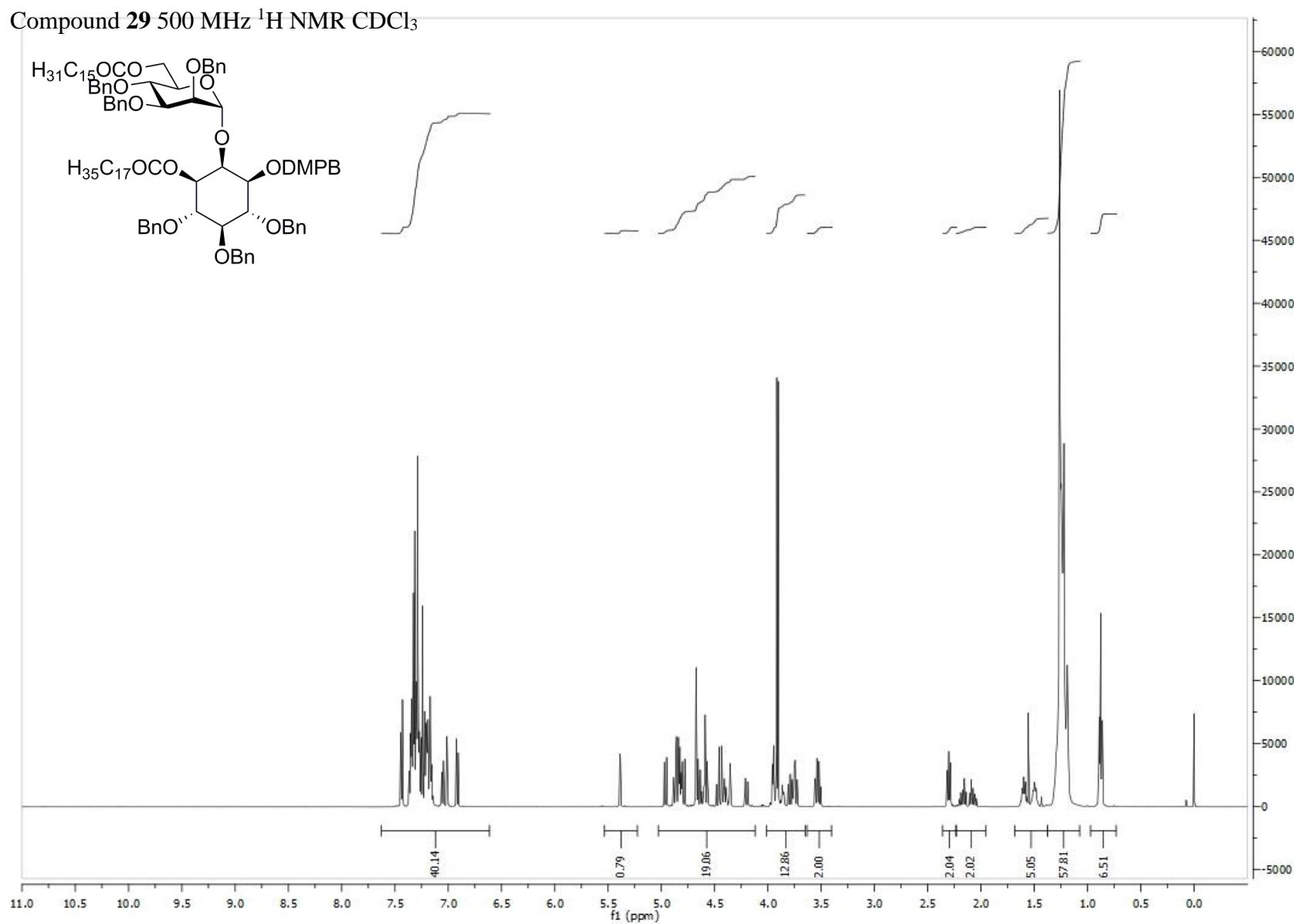
Compound **28** 500 MHz ^1H NMR CDCl₃



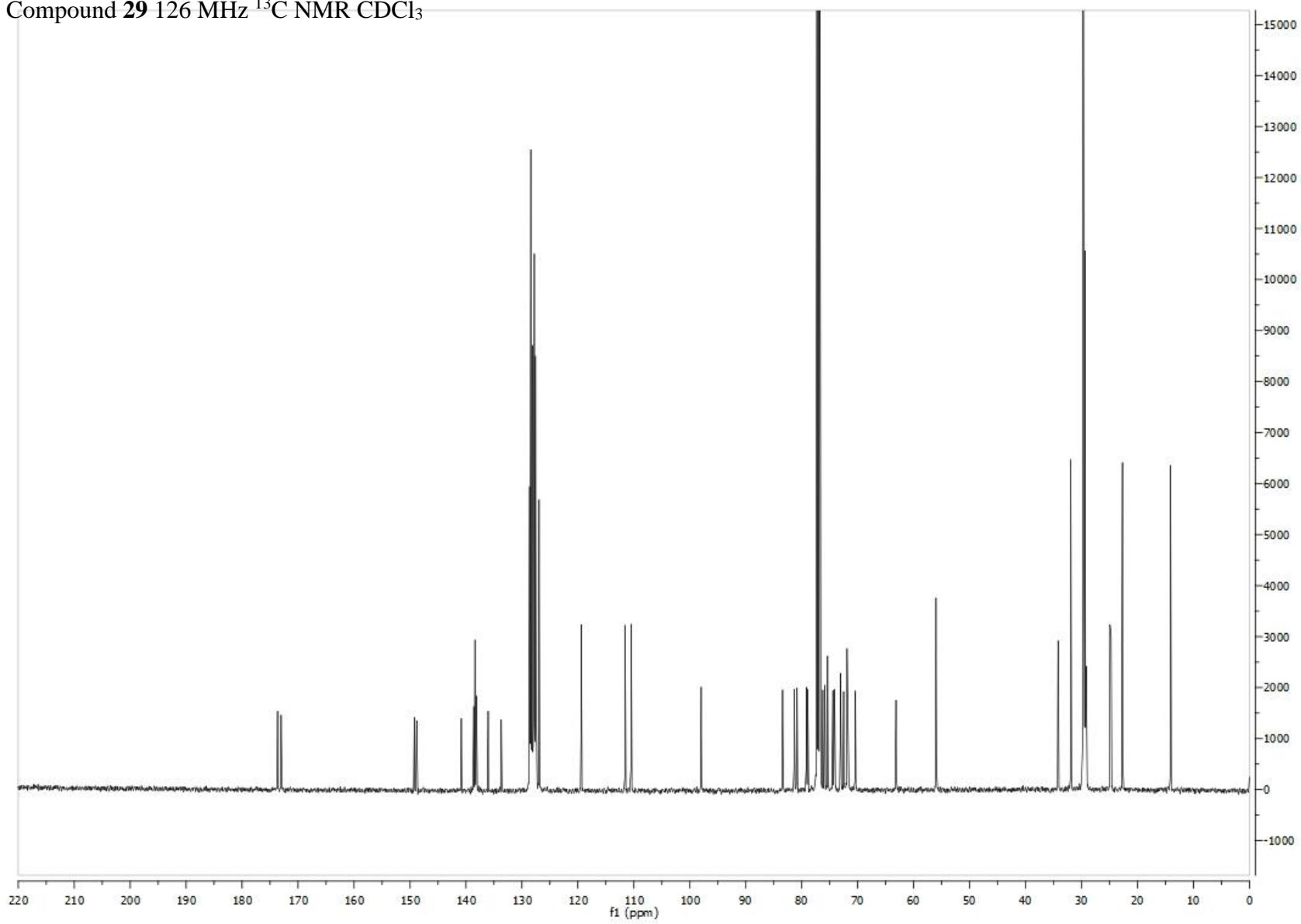
Compound 28 126 MHz ^{13}C NMR CDCl_3



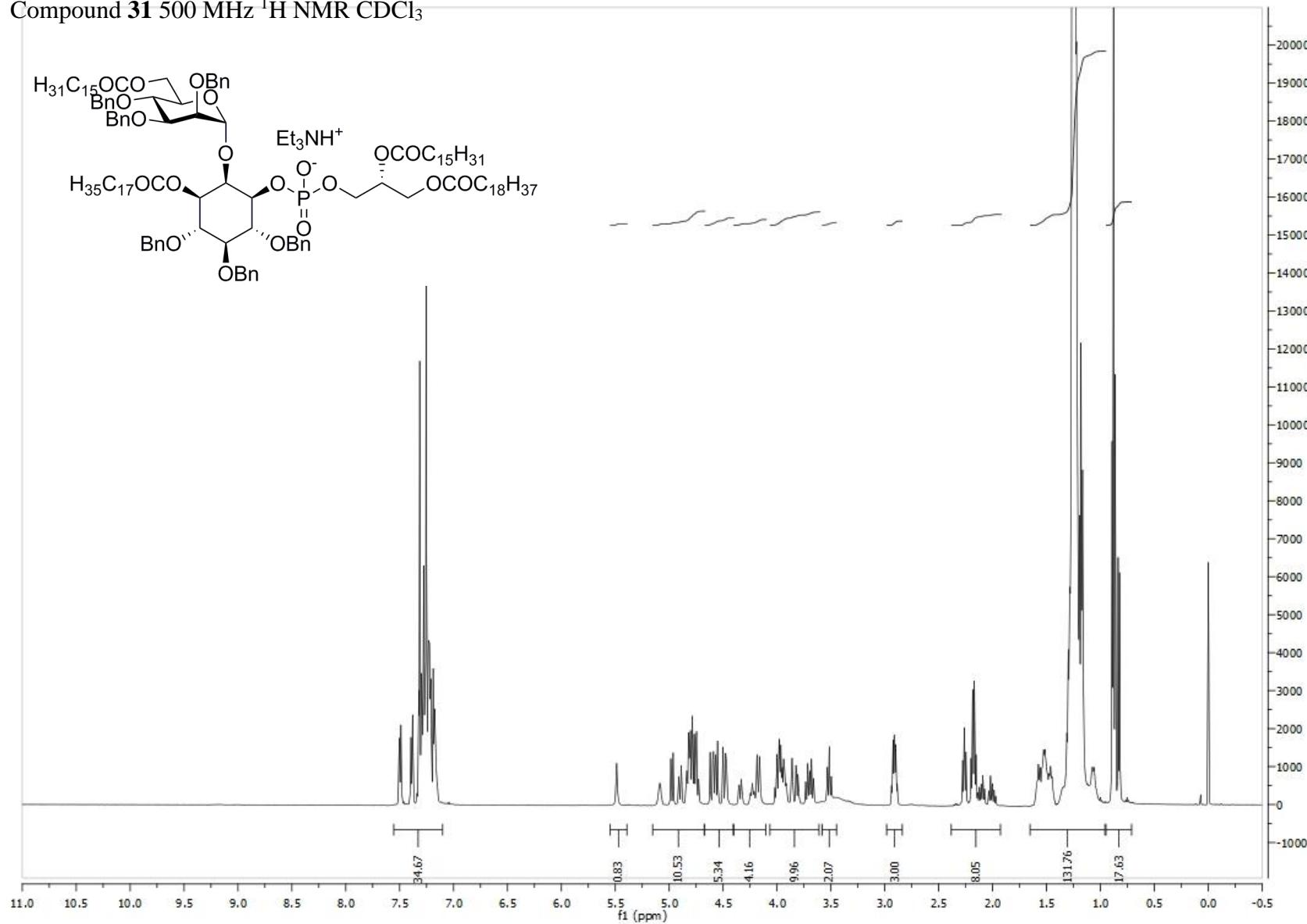
Compound **29** 500 MHz ^1H NMR CDCl_3



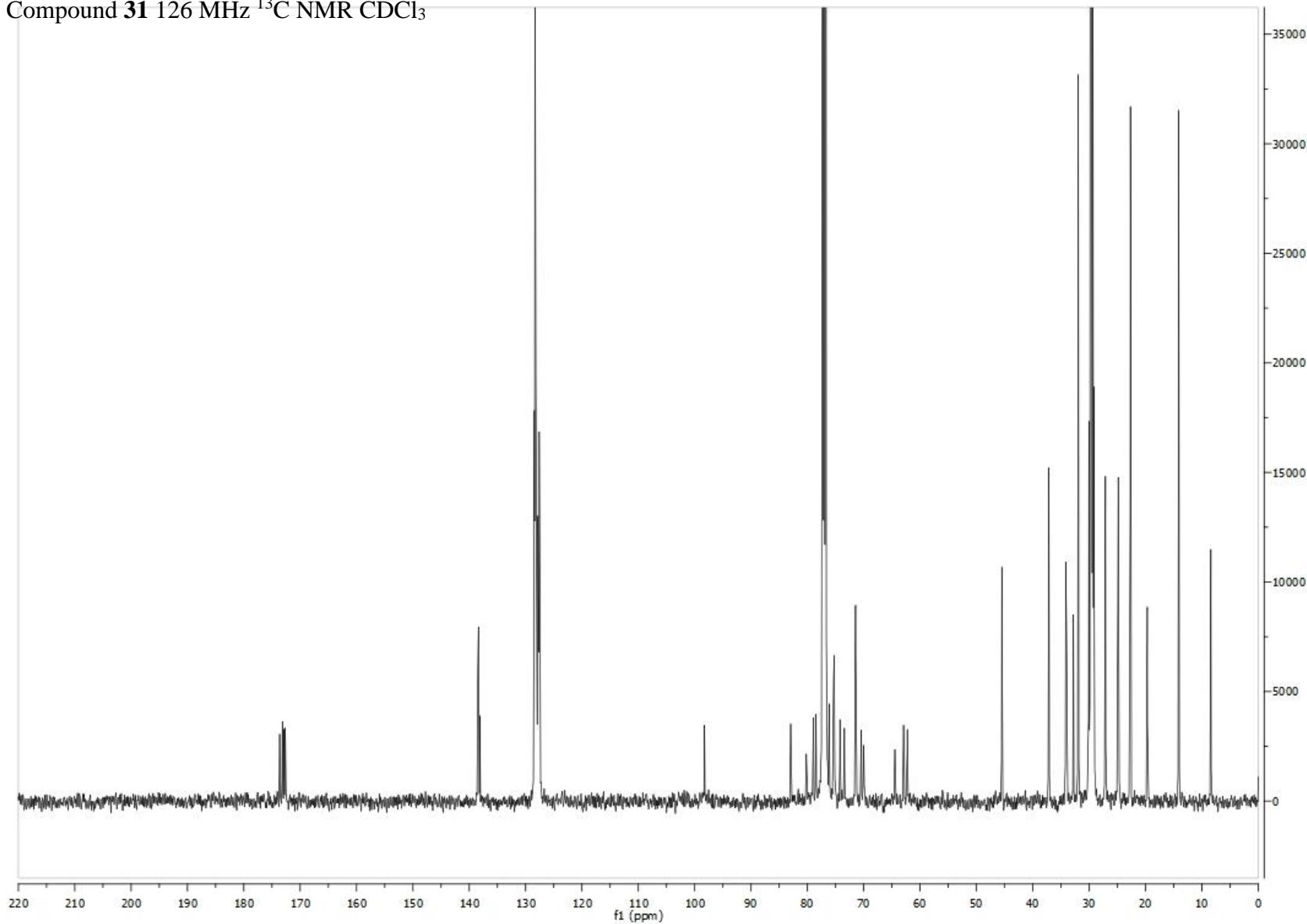
Compound 29 126 MHz ^{13}C NMR CDCl_3



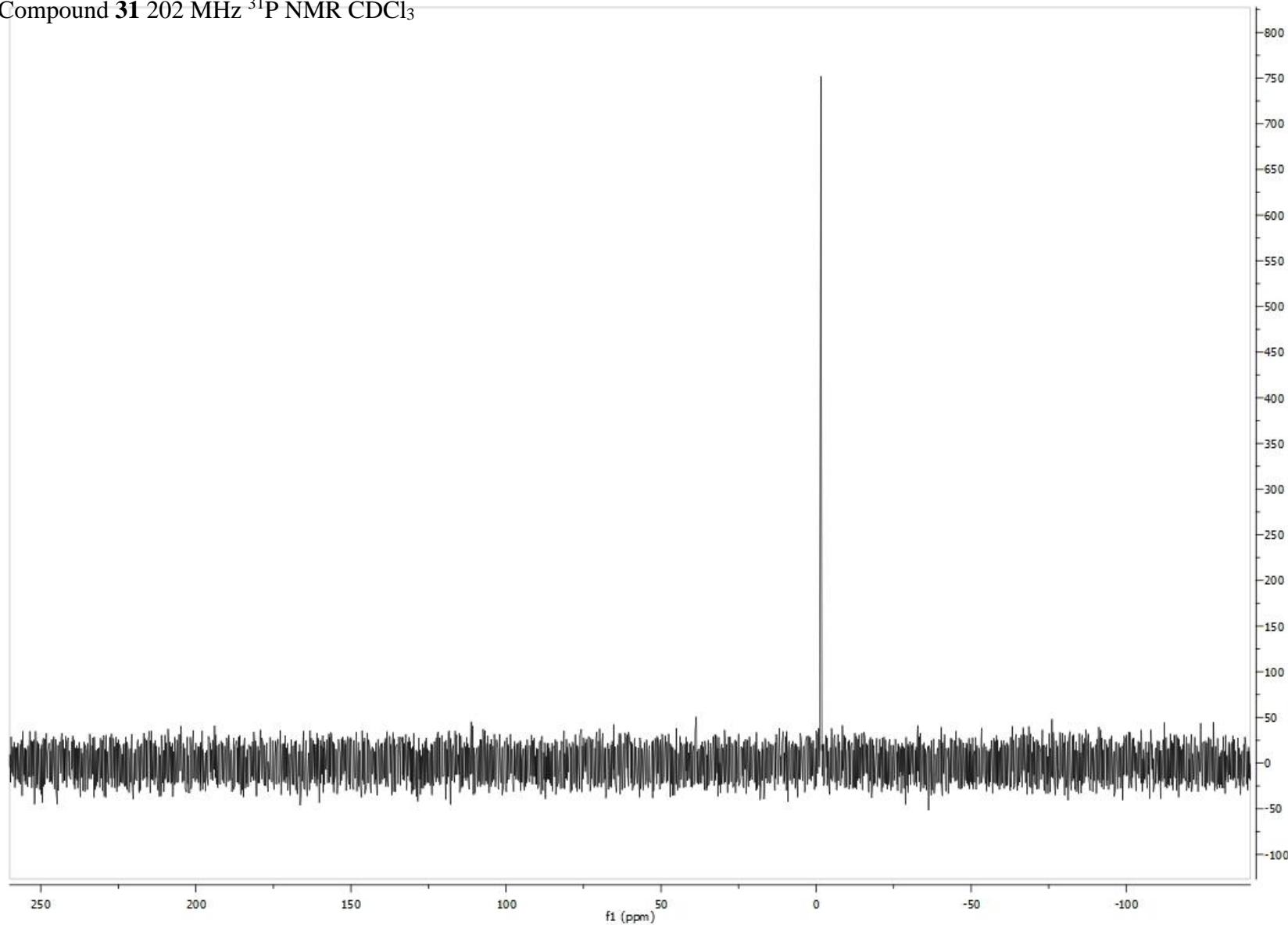
Compound **31** 500 MHz ^1H NMR CDCl_3



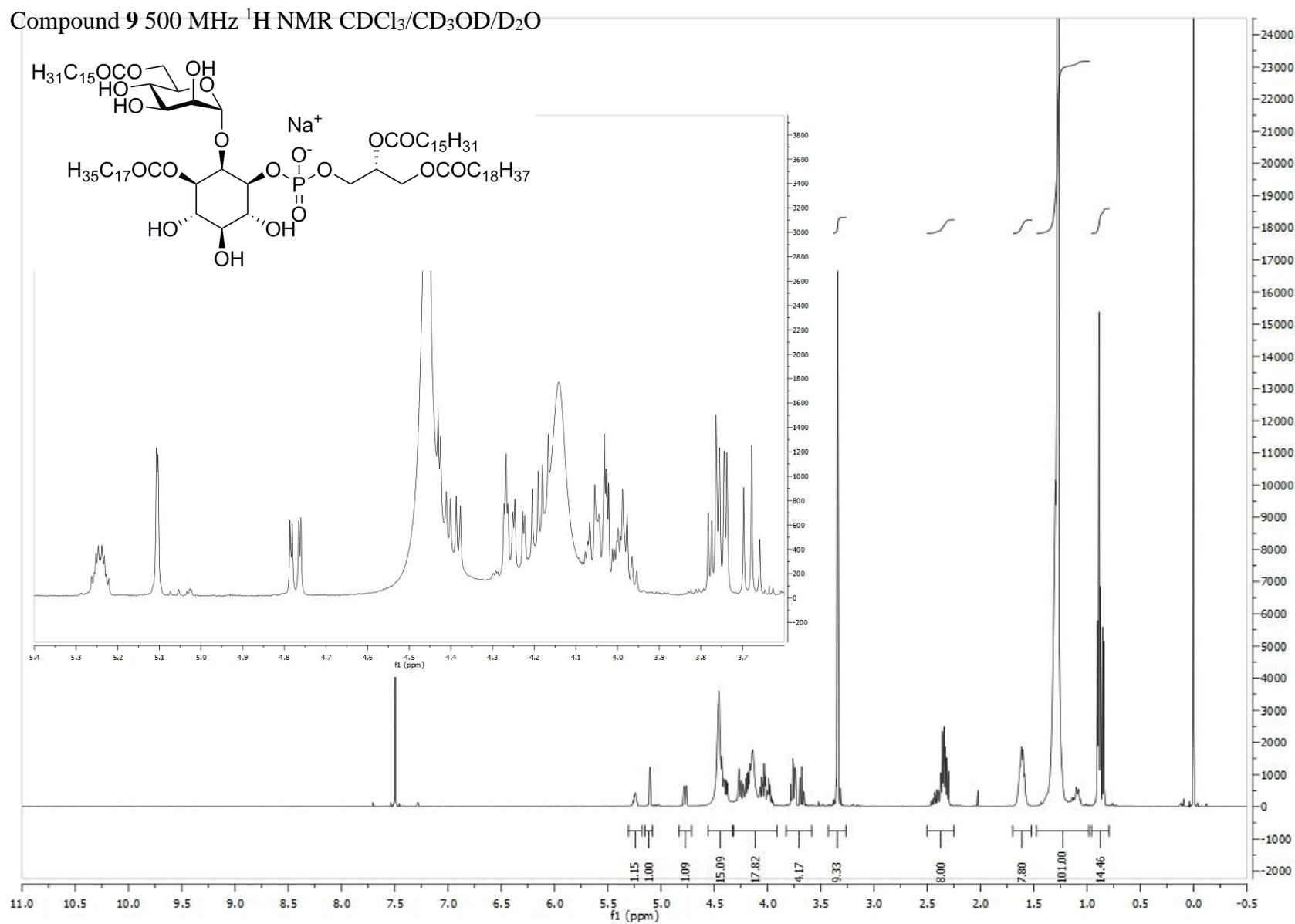
Compound 31 126 MHz ^{13}C NMR CDCl_3



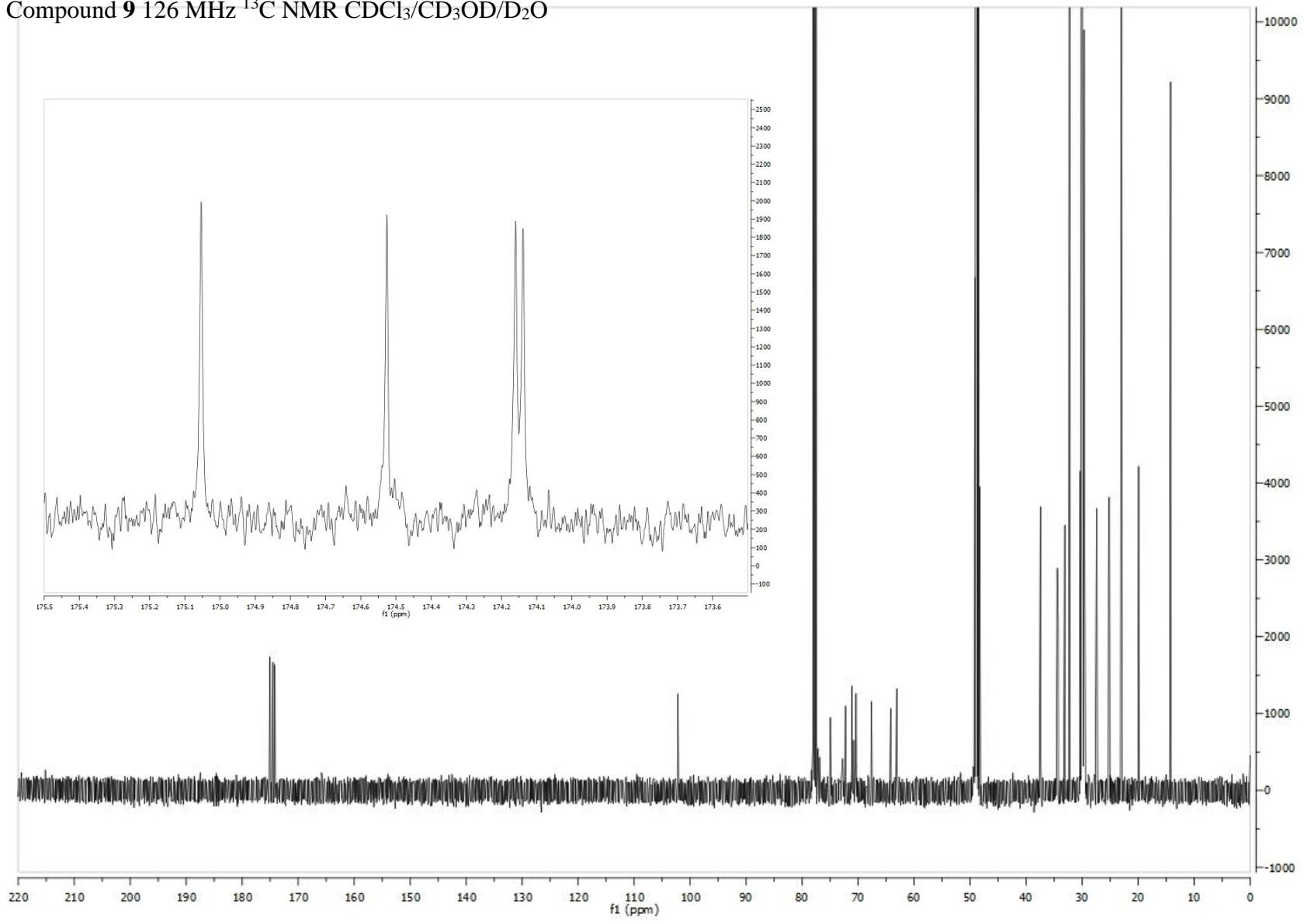
Compound **31** 202 MHz ^{31}P NMR CDCl_3



Compound **9** 500 MHz ^1H NMR CDCl₃/CD₃OD/D₂O

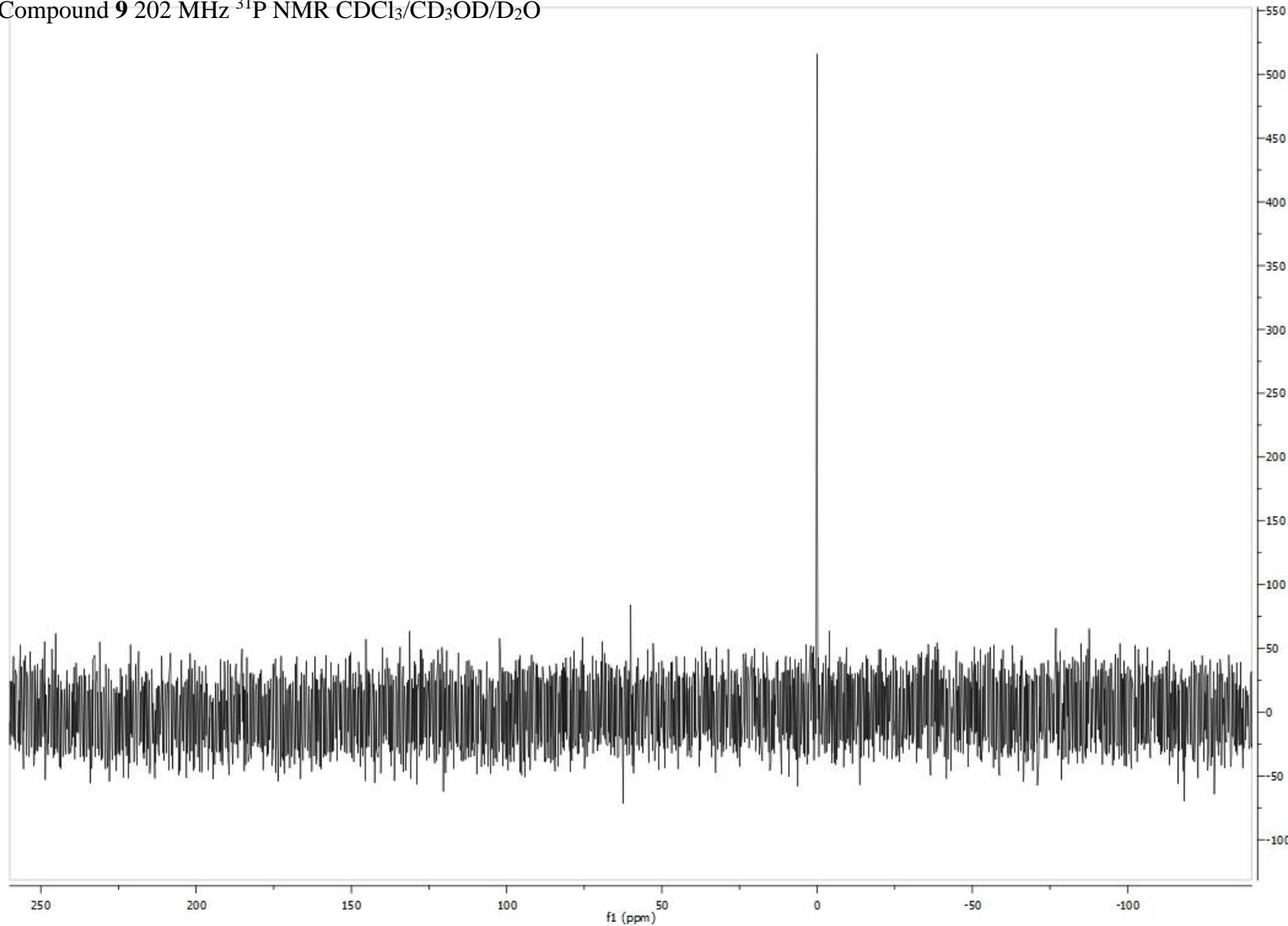


Compound **9** 126 MHz ^{13}C NMR $\text{CDCl}_3/\text{CD}_3\text{OD}/\text{D}_2\text{O}$

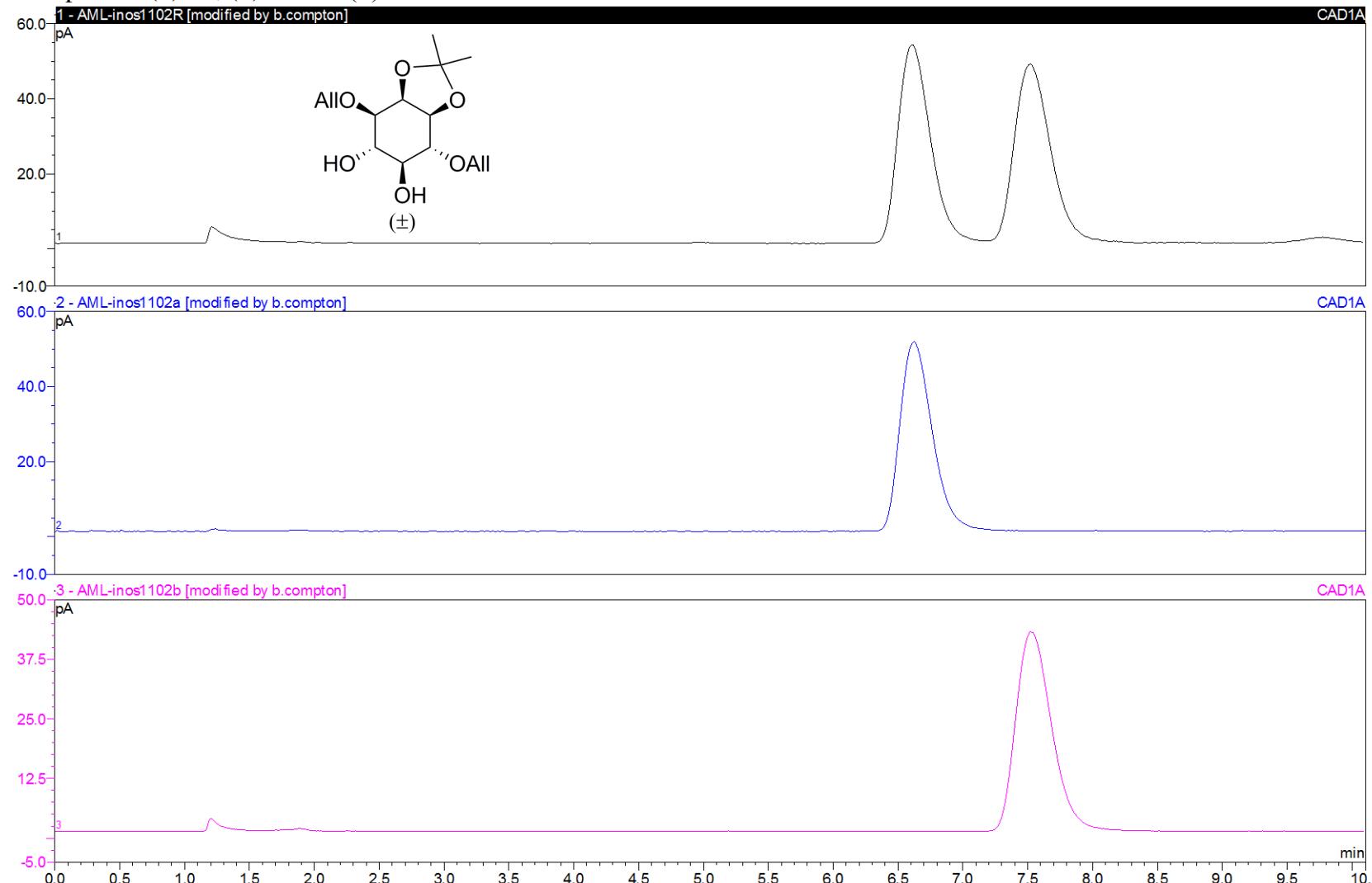


S150

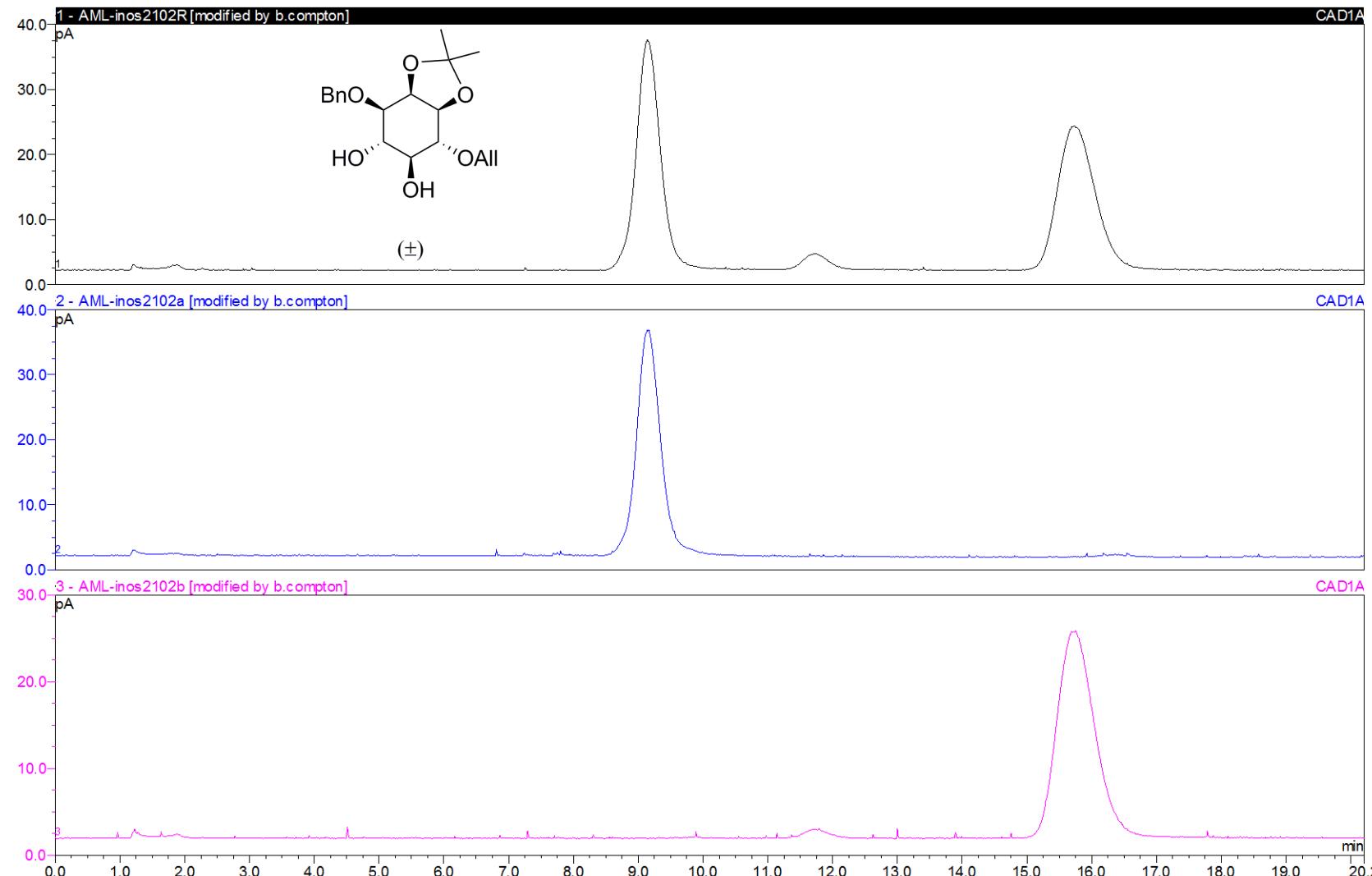
Compound **9** 202 MHz ^{31}P NMR $\text{CDCl}_3/\text{CD}_3\text{OD}/\text{D}_2\text{O}$



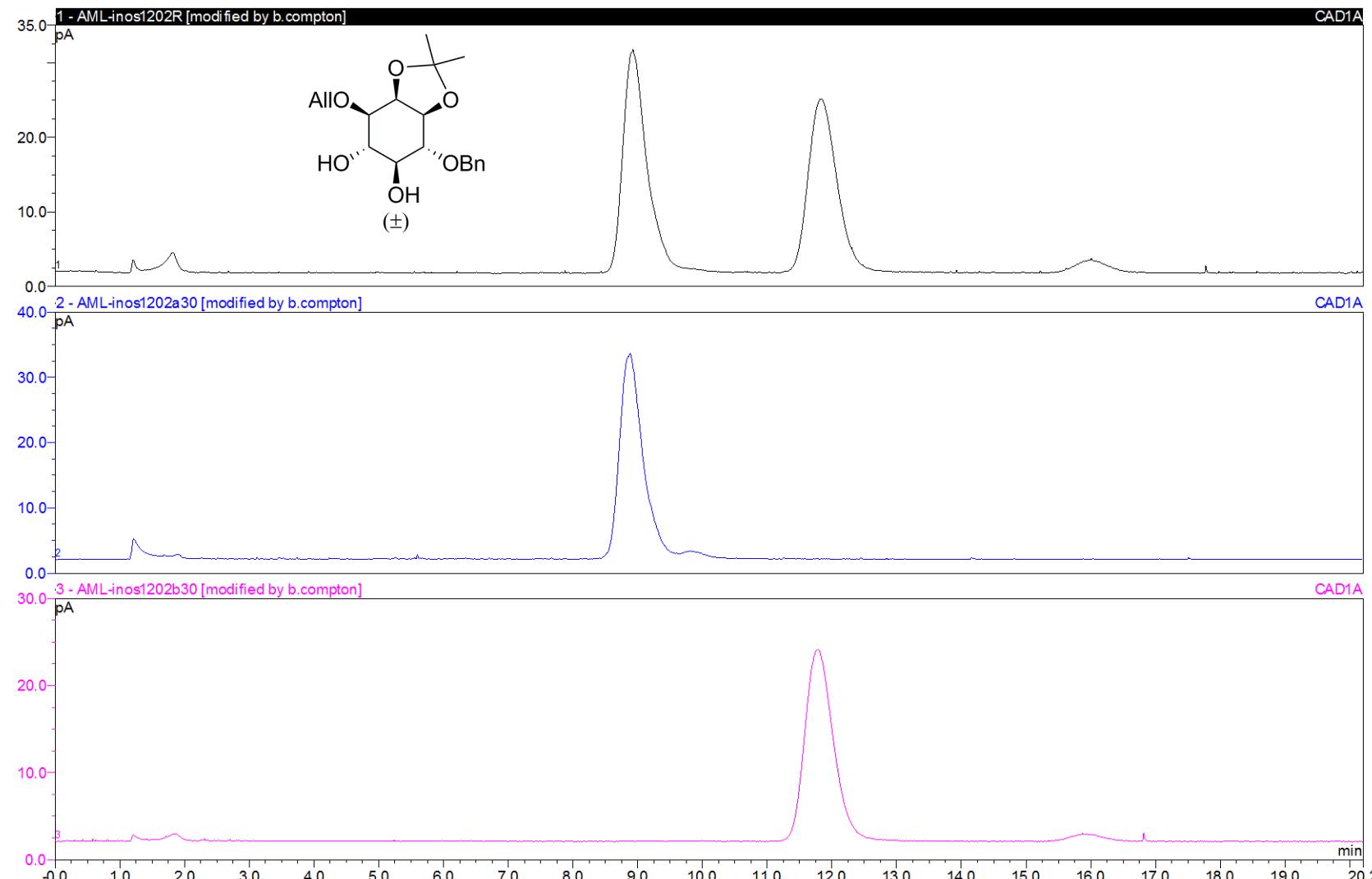
Compounds (\pm) -**6a**, $(+)$ -**6a** and $(-)$ -**6a** chiral HPLC



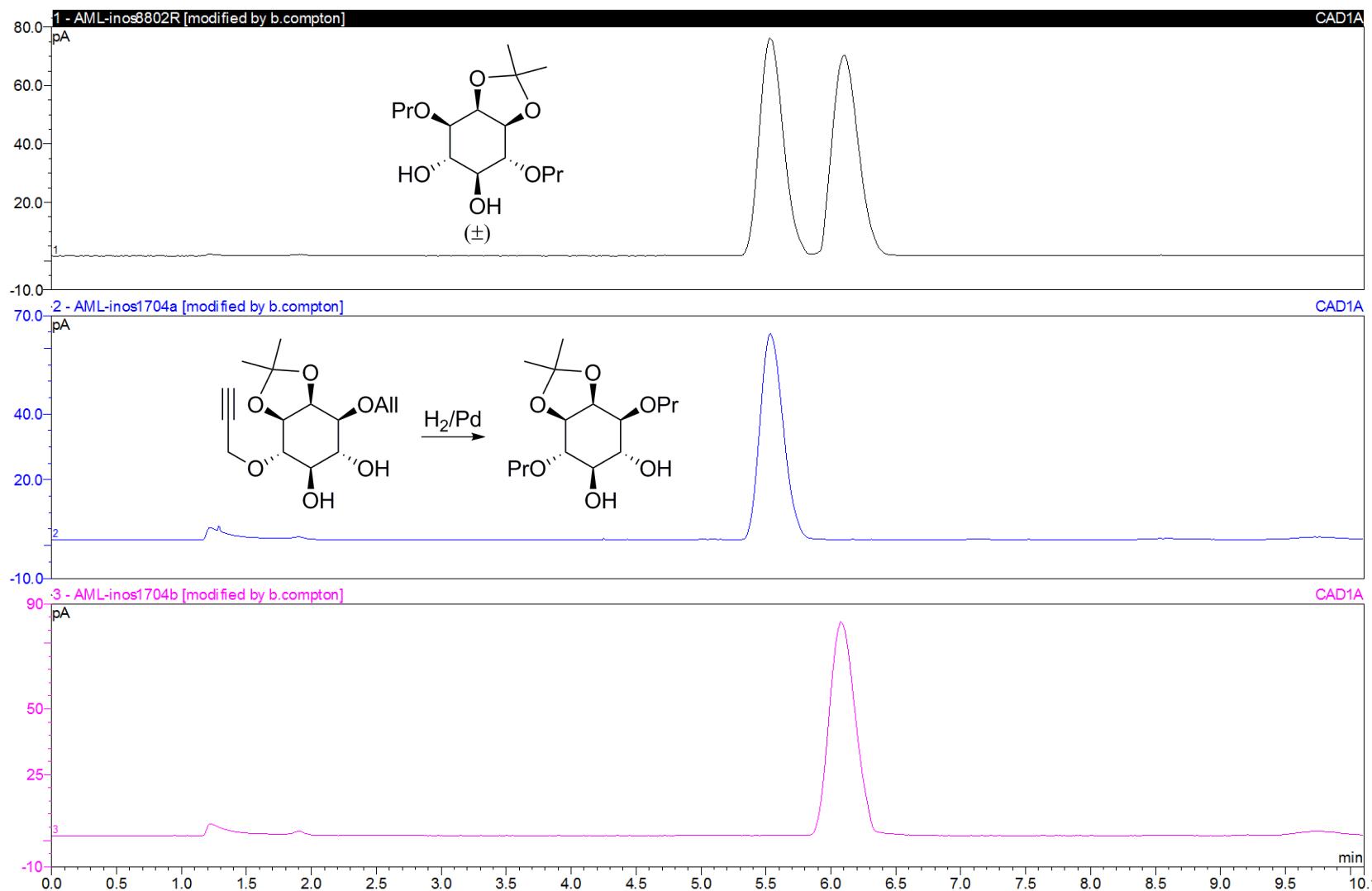
Compounds (\pm) -**6b**, $(+)$ -**6b** and $(-)$ -**6b** chiral HPLC



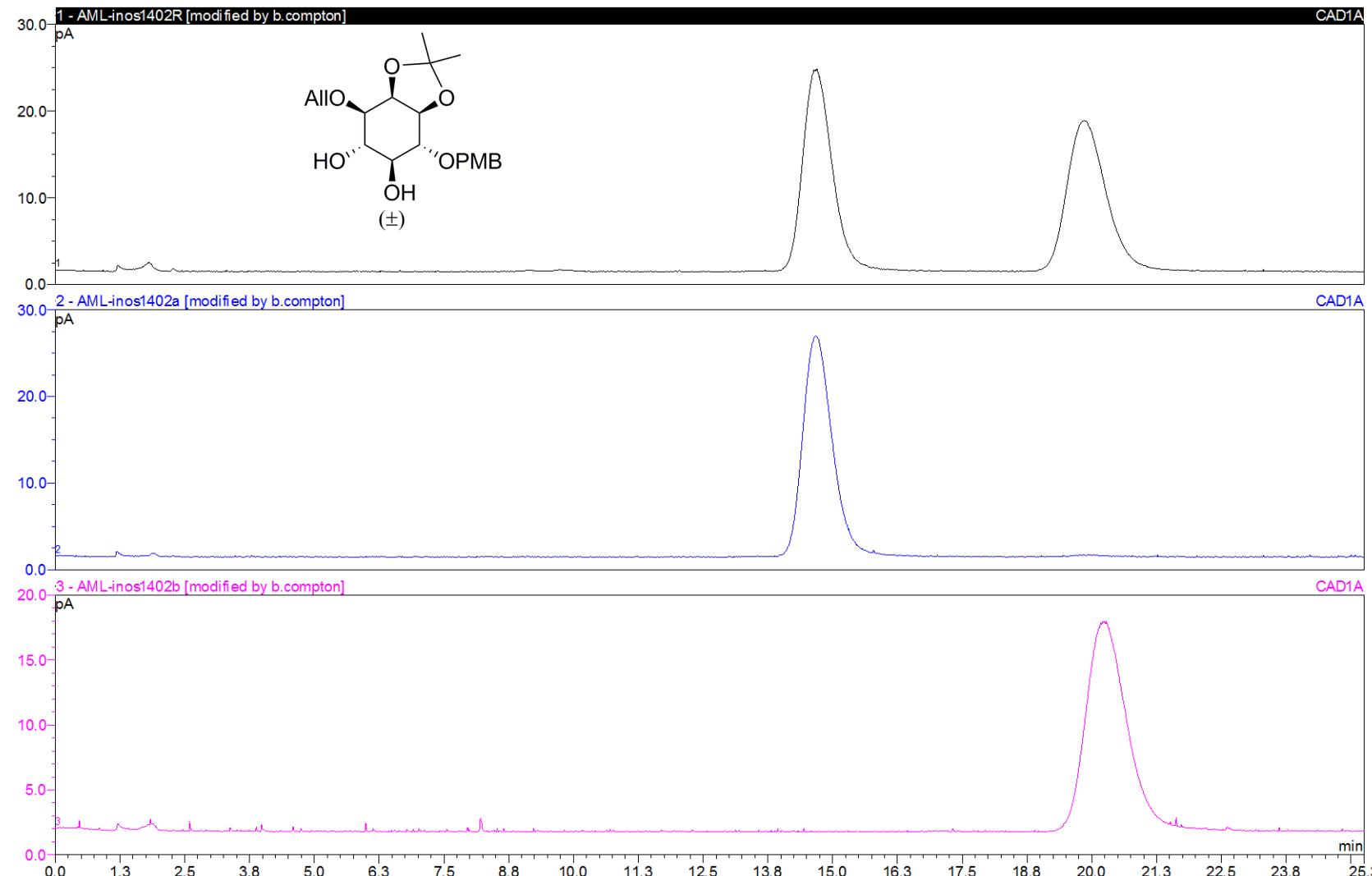
Compounds (\pm) -**6c**, $(+)$ -**6c** and $(-)$ -**6c** chiral HPLC



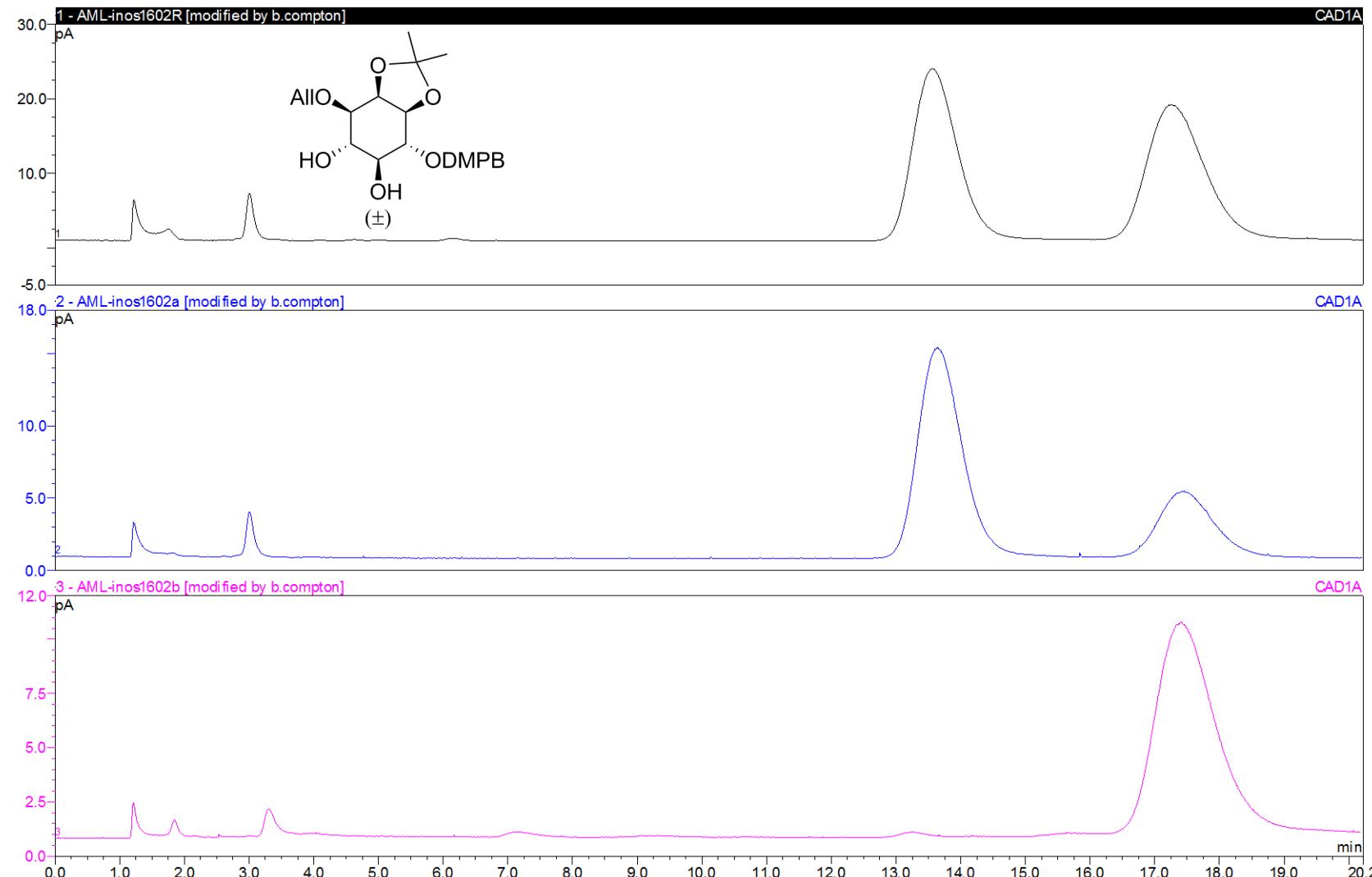
Compounds (\pm) -**6i**, $(+)$ -**6i** from $(+)$ -**6d** and $(-)$ -**6i** from $(-)$ -**6d** chiral HPLC



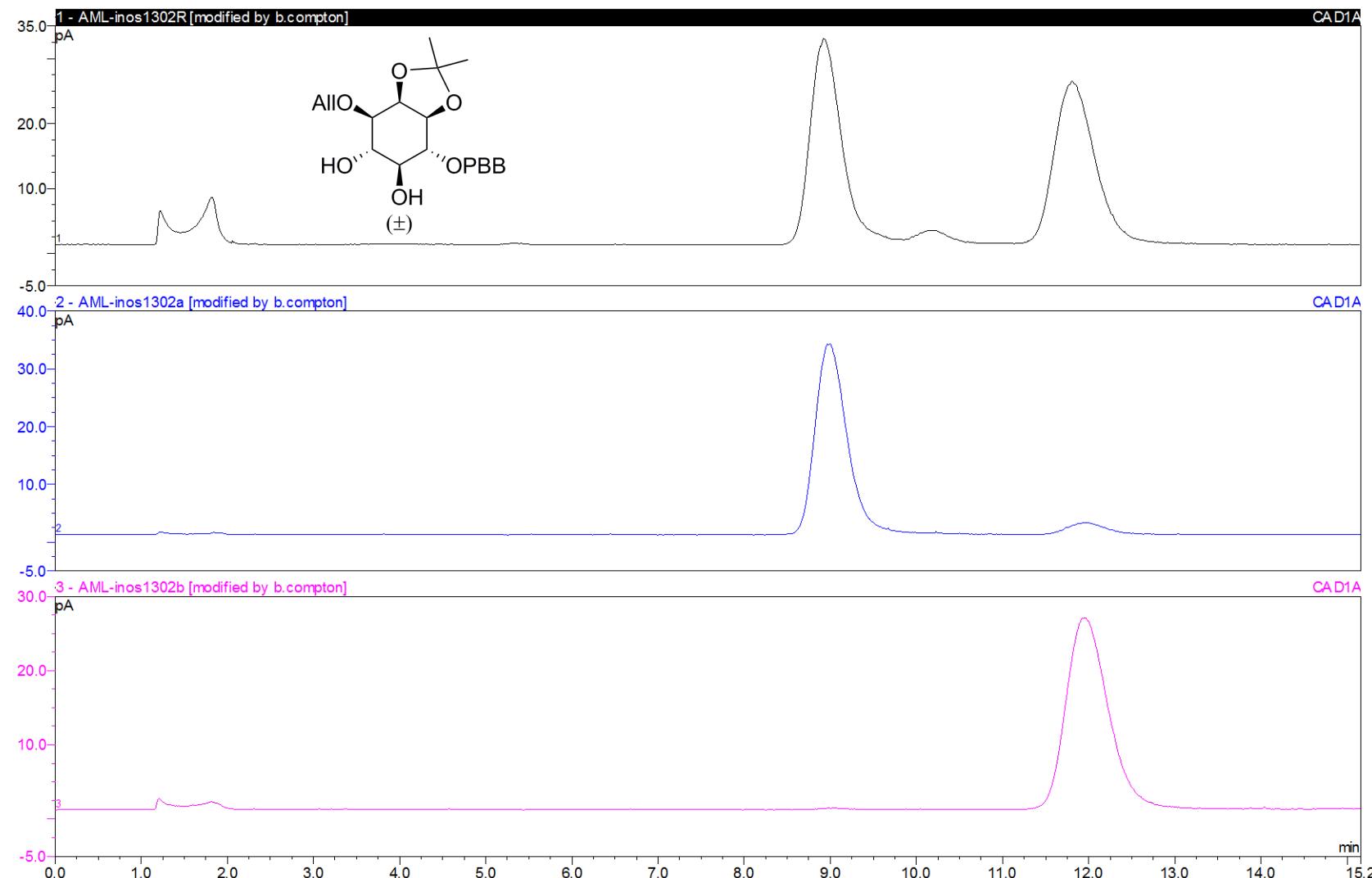
Compounds (\pm) -**6e**, $(+)$ -**6e** and $(-)$ -**6e** chiral HPLC



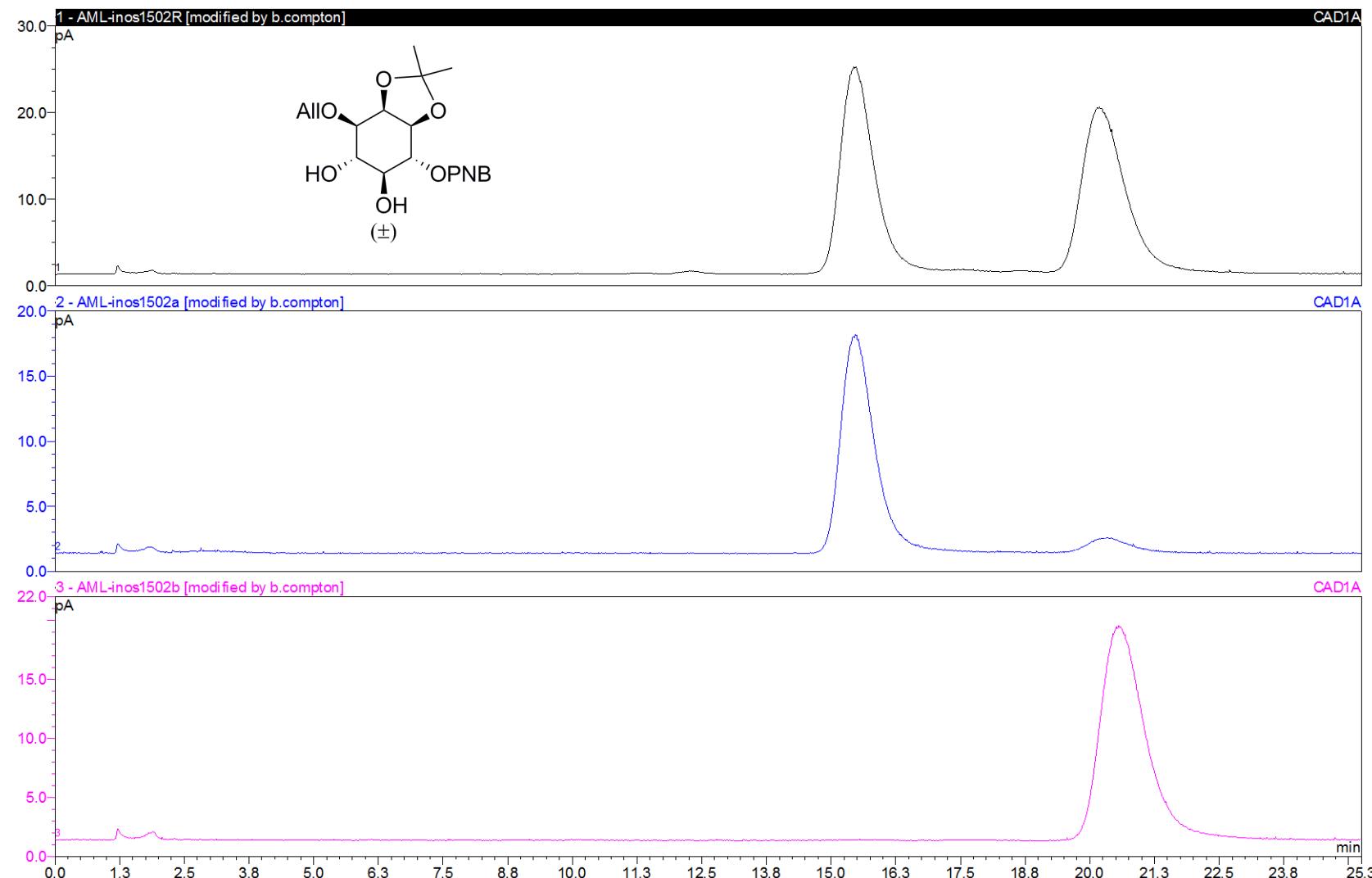
Compounds (\pm) -**6f**, $(+)$ -**6f** and $(-)$ -**6f** chiral HPLC



Compounds (\pm) -**6g**, $(+)$ -**6g** and $(-)$ -**6g** chiral HPLC



Compounds (\pm) -**6h**, $(+)$ -**6h** and $(-)$ -**6h** chiral HPLC



Compounds (\pm) -**6i**, $(+)$ -**6i** and $(-)$ -**6i** chiral HPLC

