

Supporting Information

Syntheses of 12H-Benzo[*a*]xanthen-12-ones and Benzo[*a*]acridin- 12(7*H*)-ones through Au(I)-Catalyzed Michael Addition/6-*Endo*-Trig Cyclization/Aromatization Cascade Annulation

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Maosheng Cheng^{*a,b}

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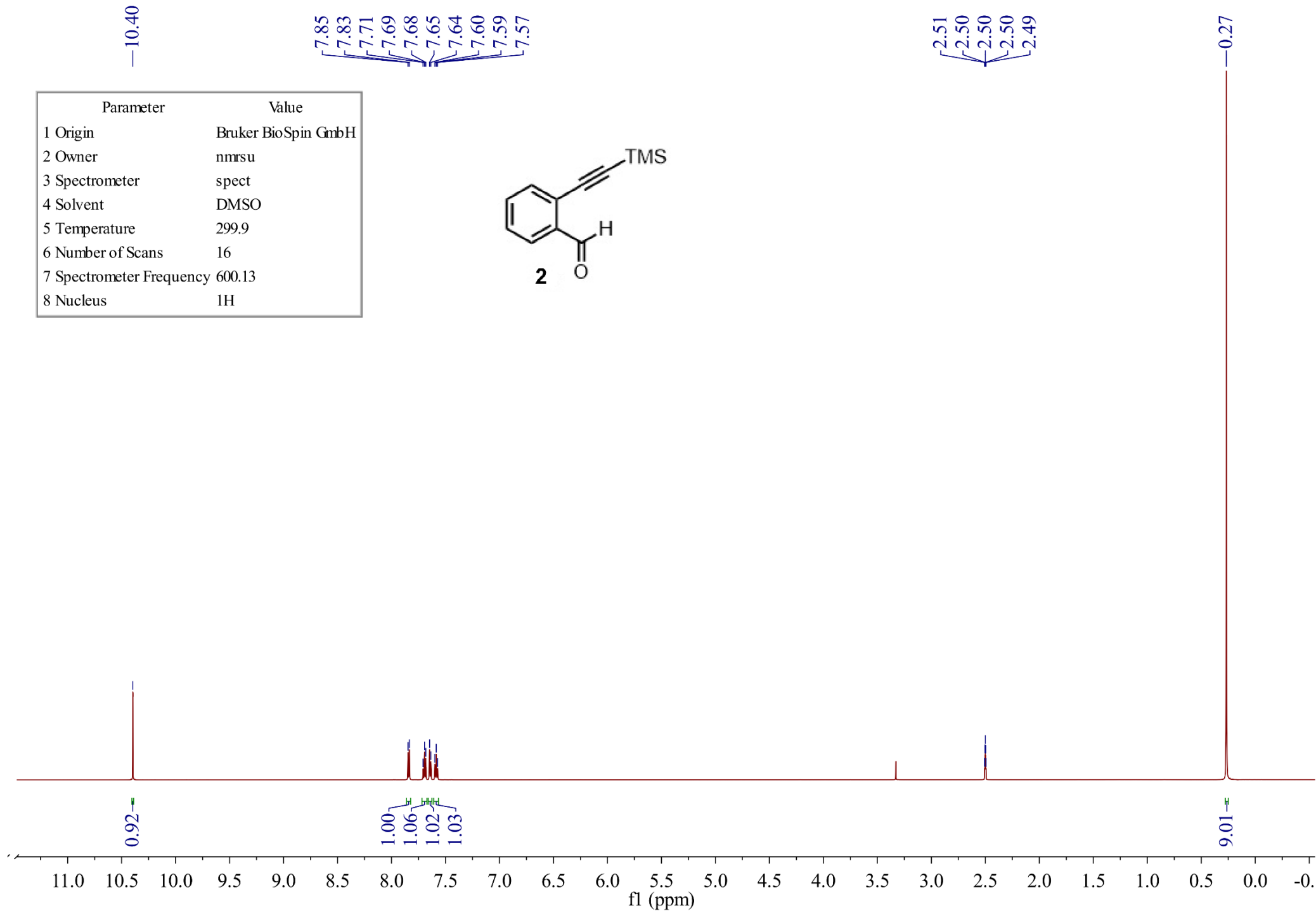
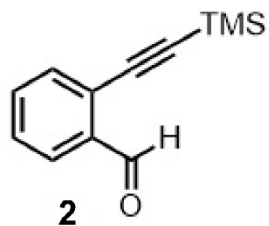
^bInstitute of Drug Research in Medicine Capital of China, Benxi, 117000, P. R. China

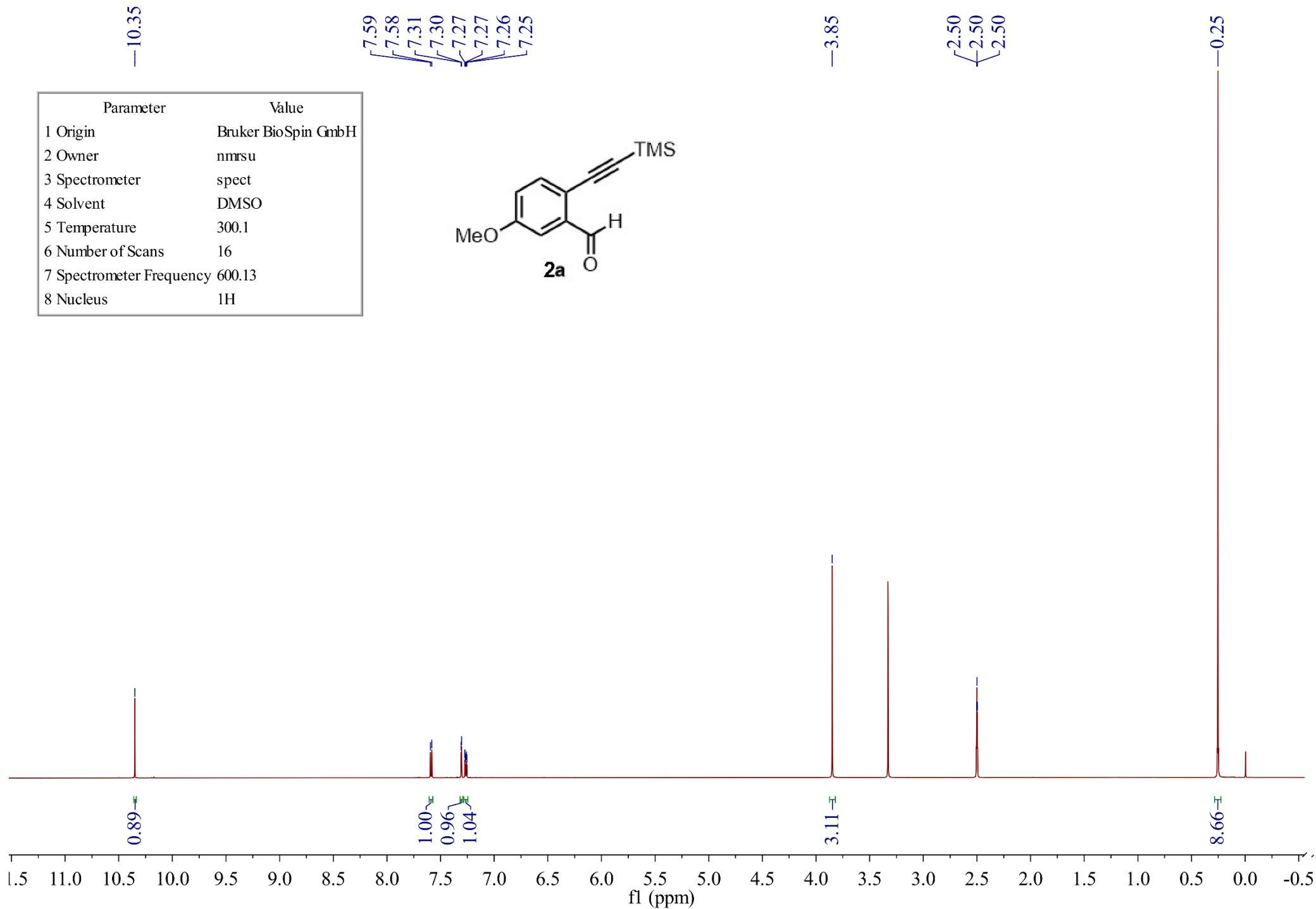
^cWuya College of Innovation, Shenyang Pharmaceutical University, Shenyang 110016, P. R. China

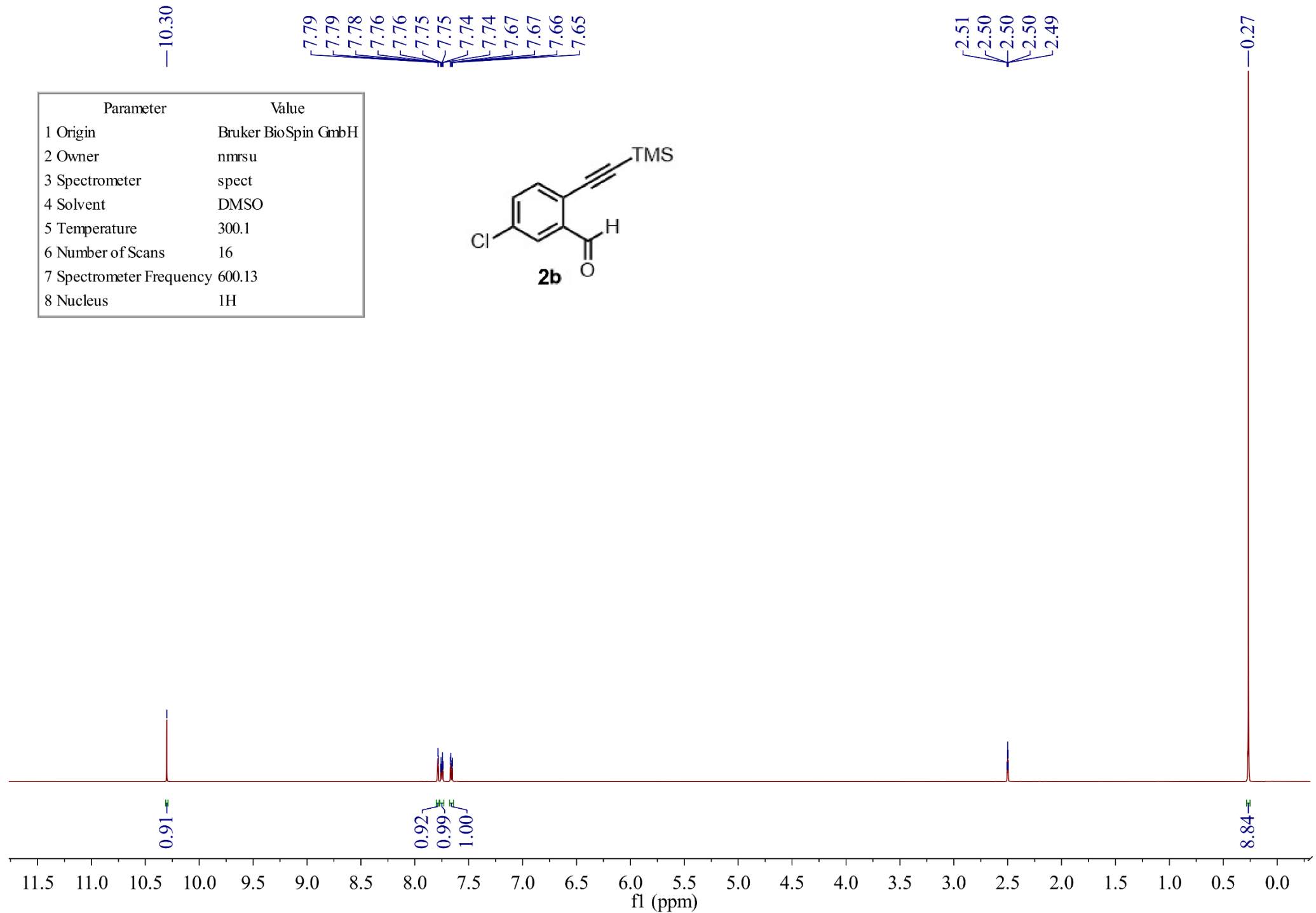
Contents

1. NMR Spectra.....	S3
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Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

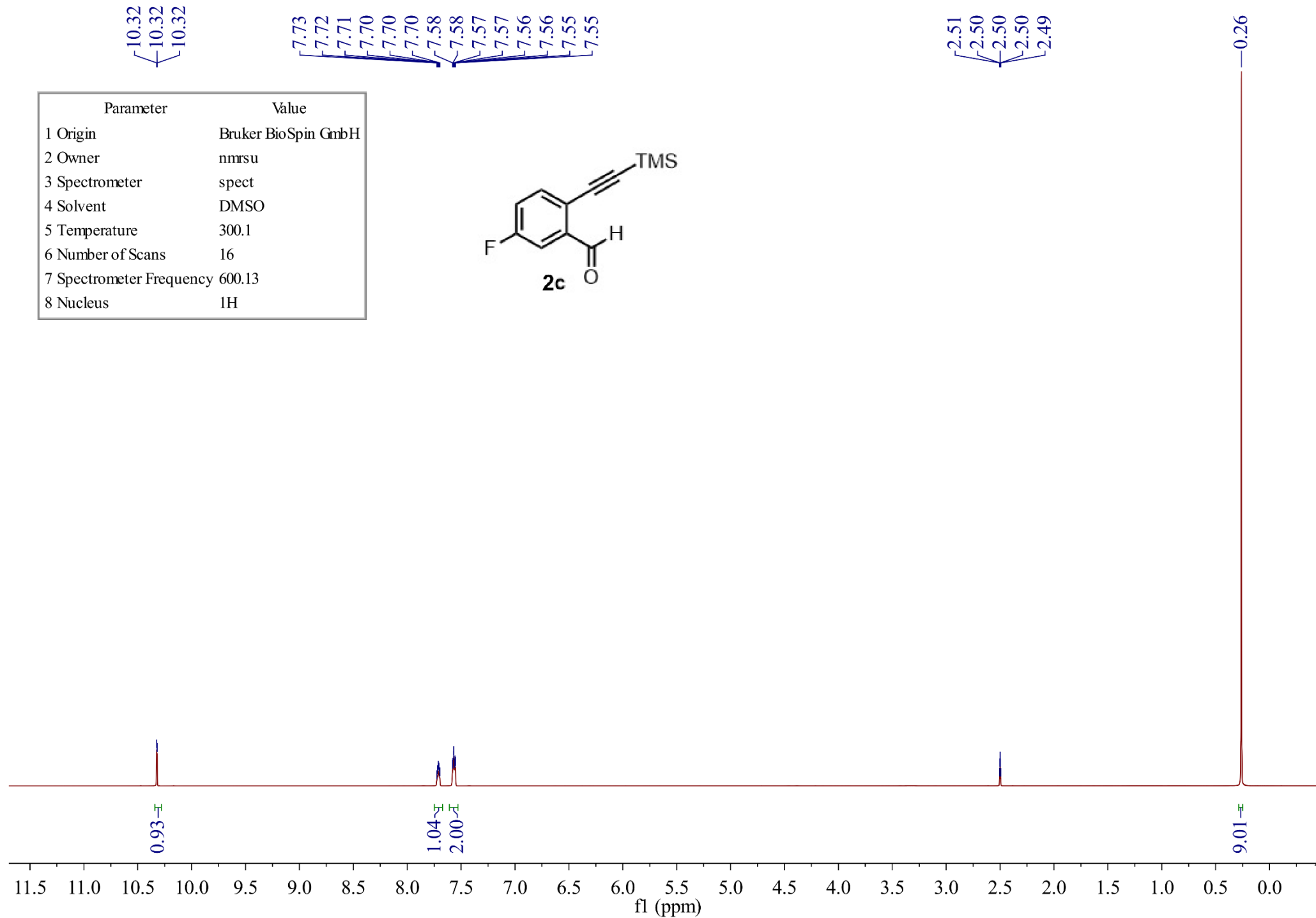
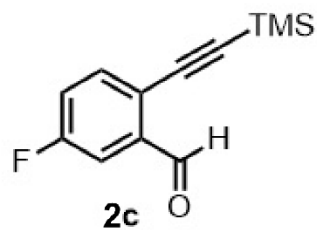




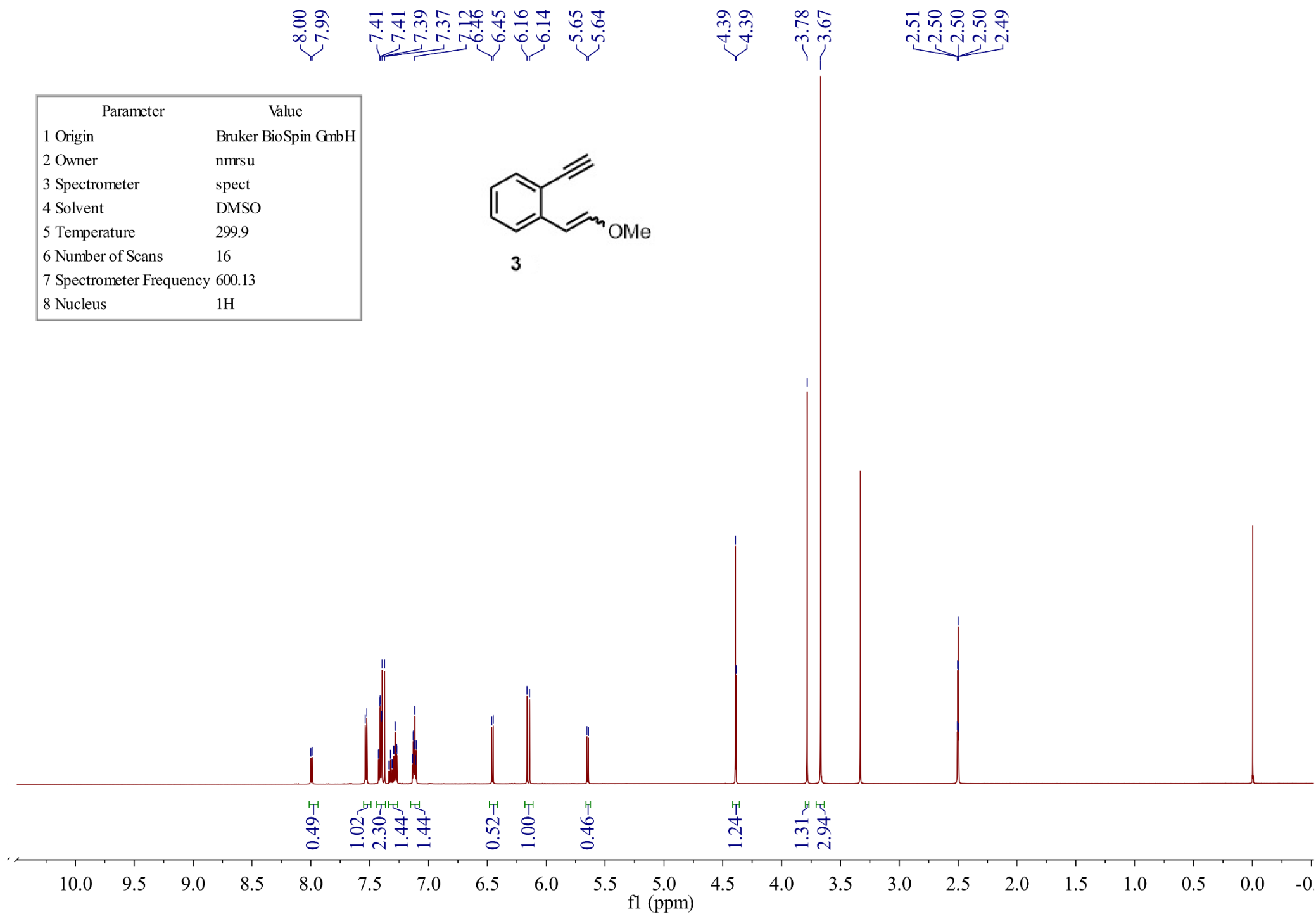
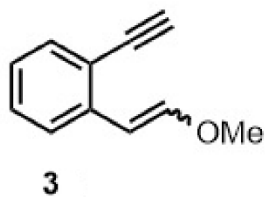


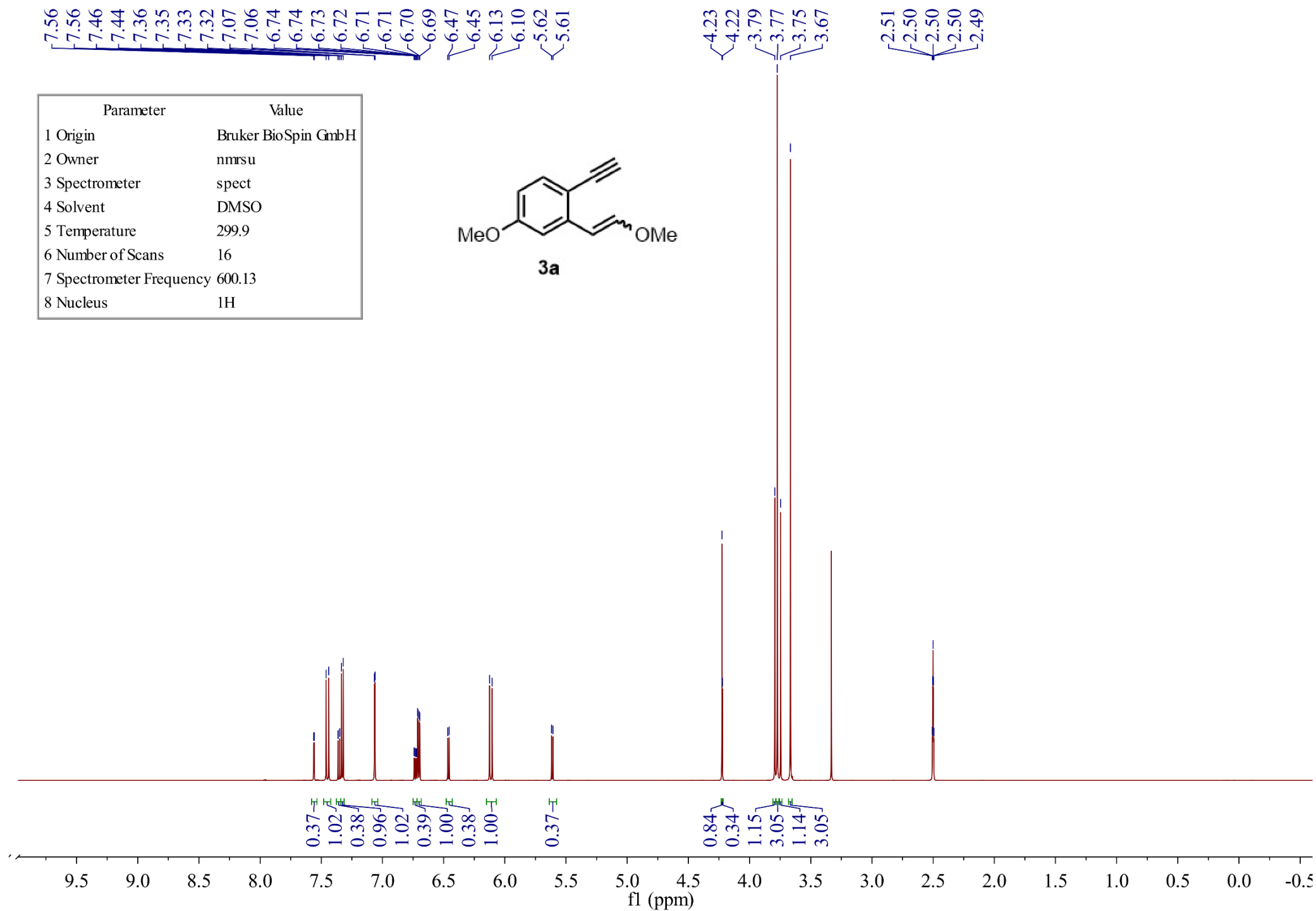
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2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

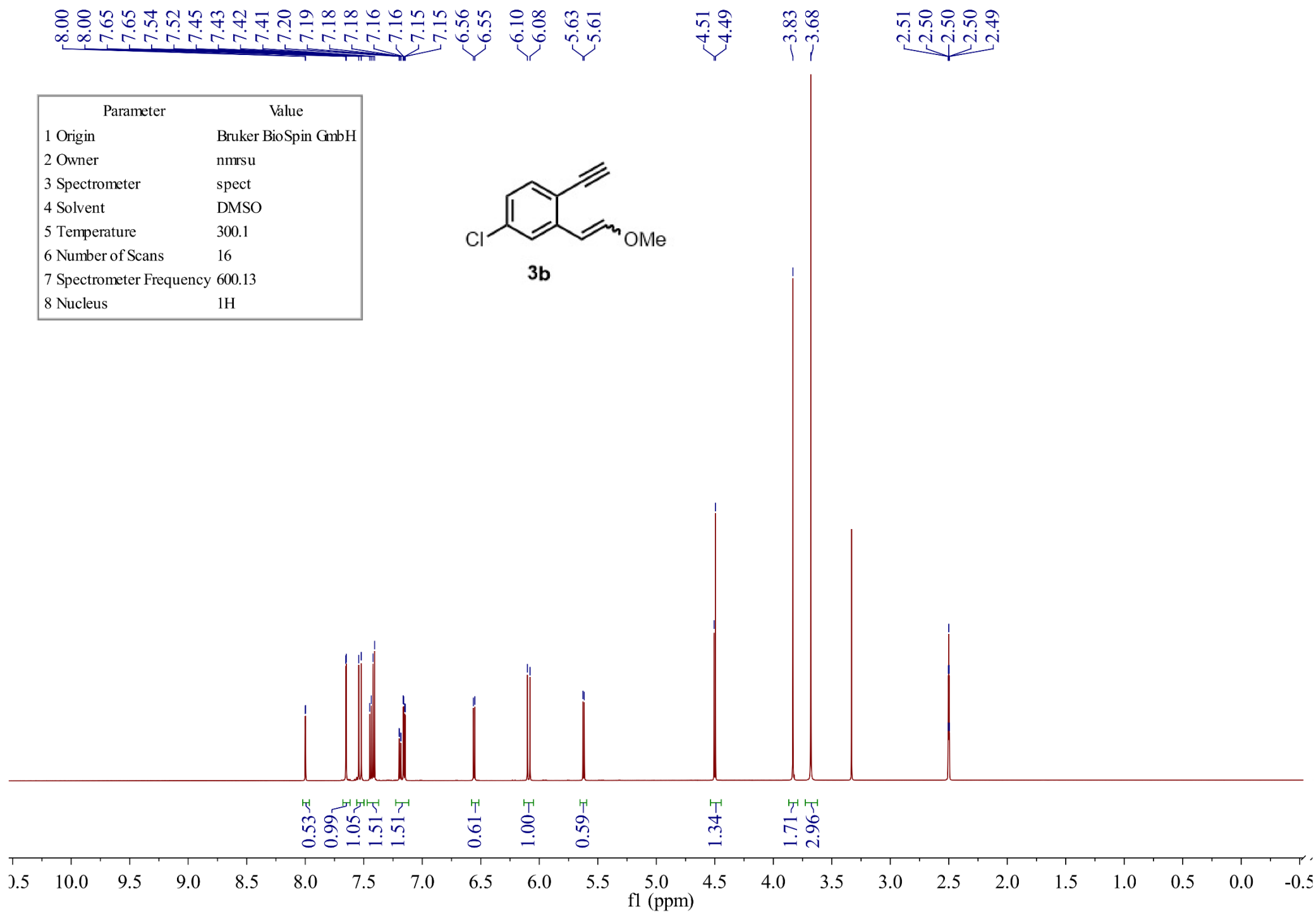
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2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



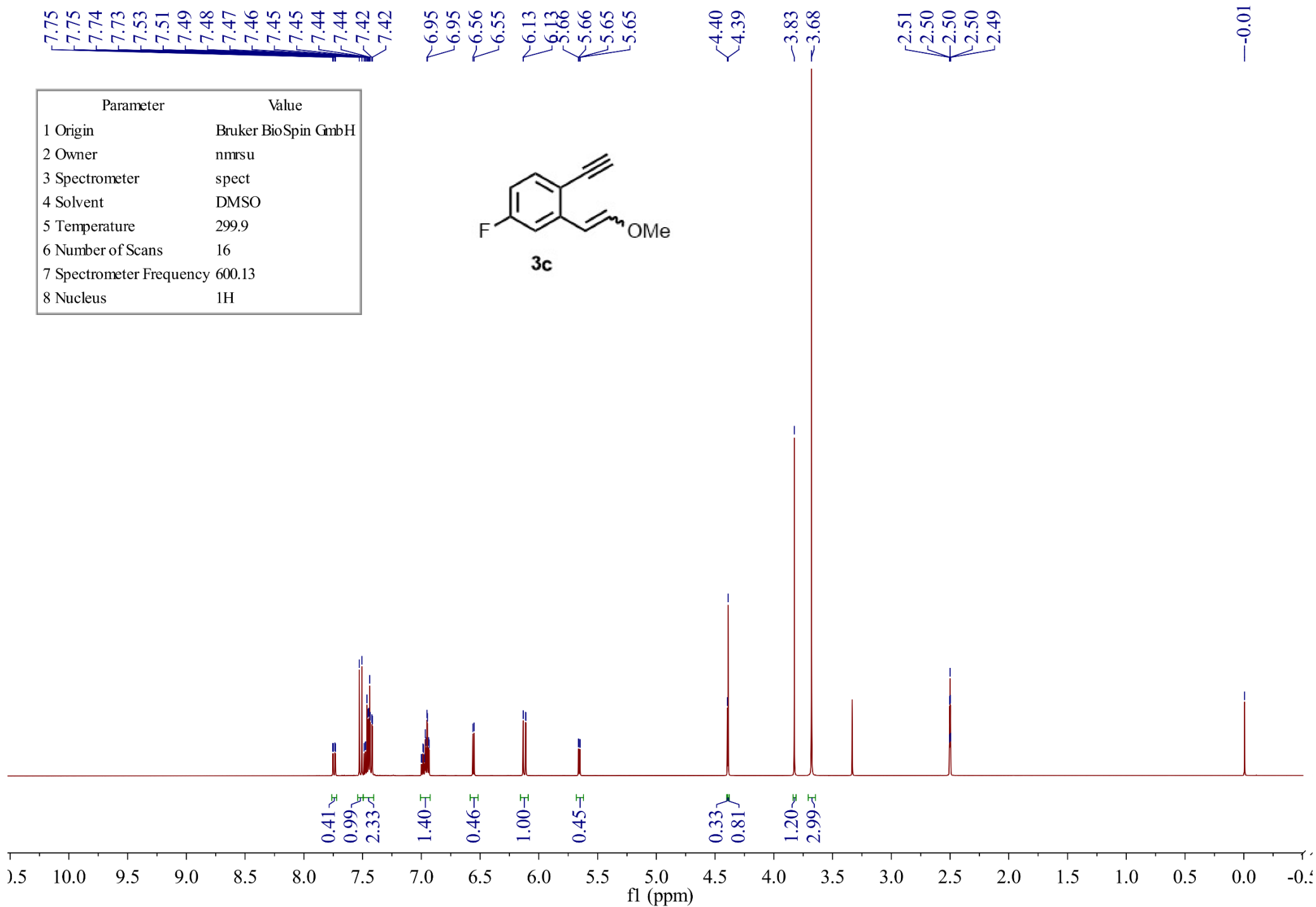
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



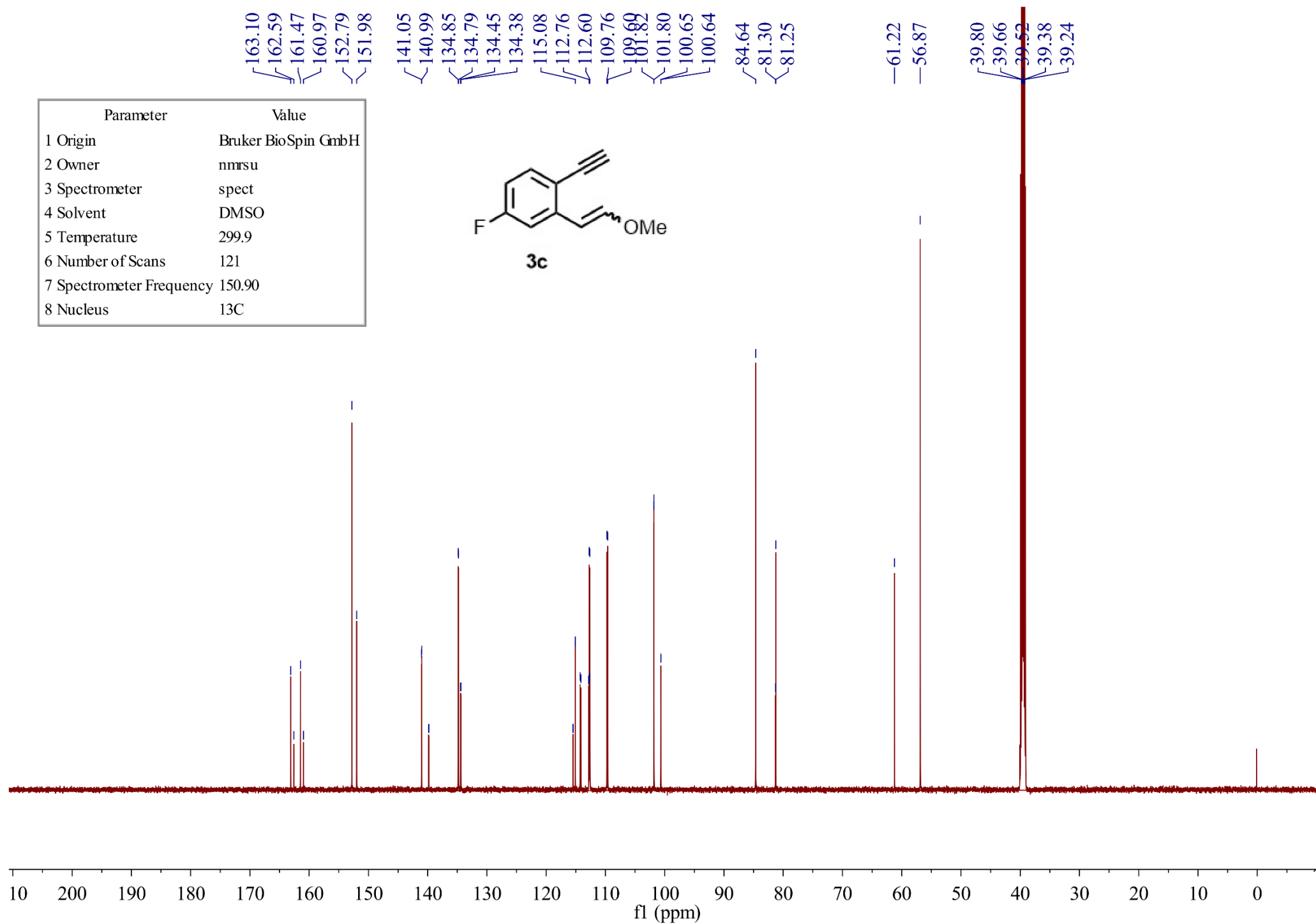
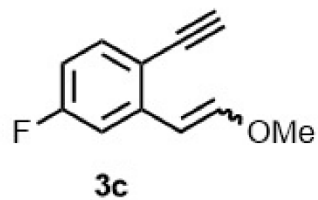


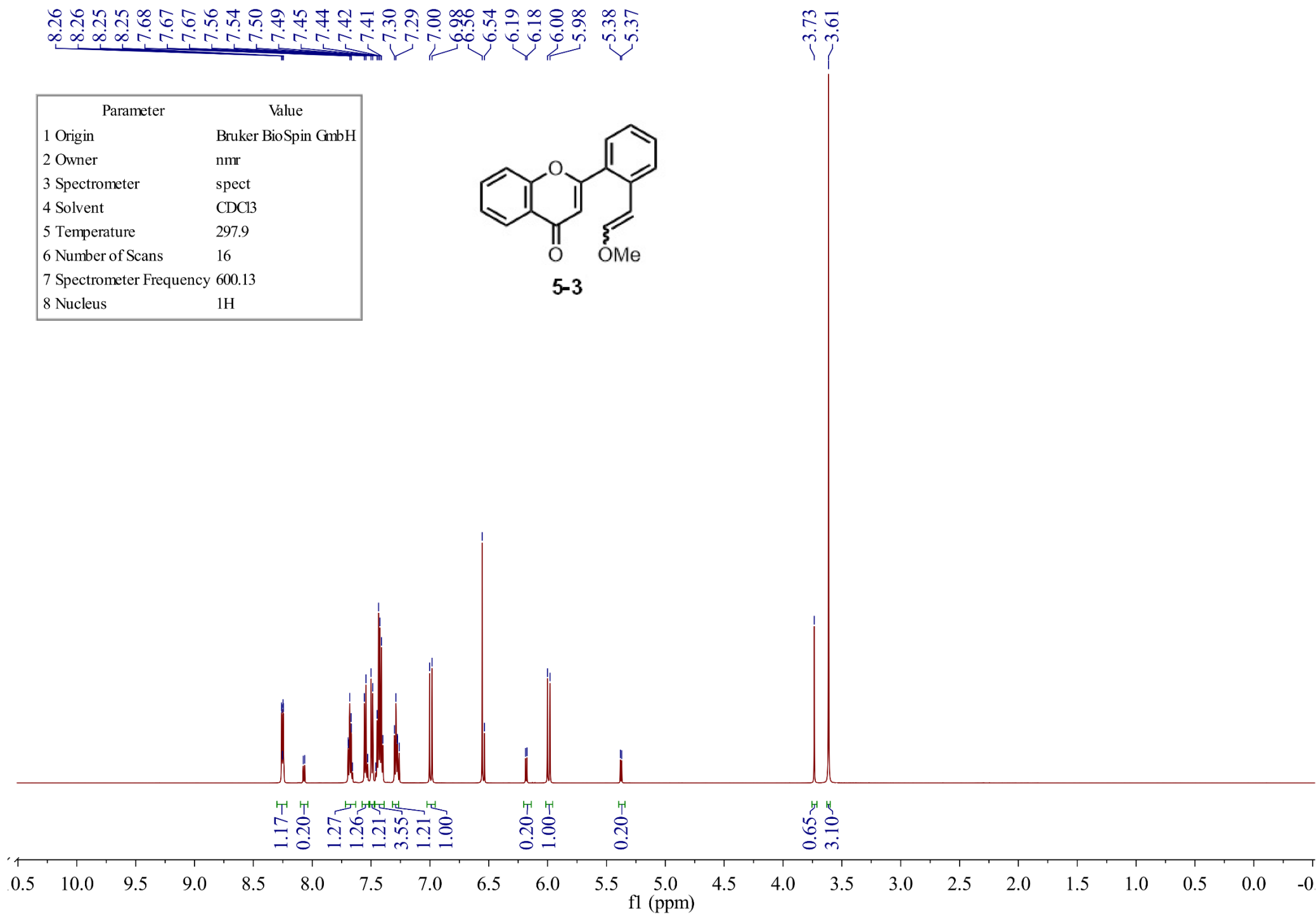


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



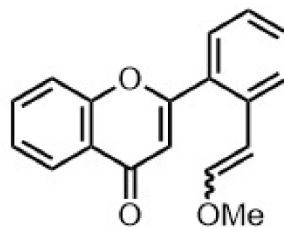
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2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	121
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



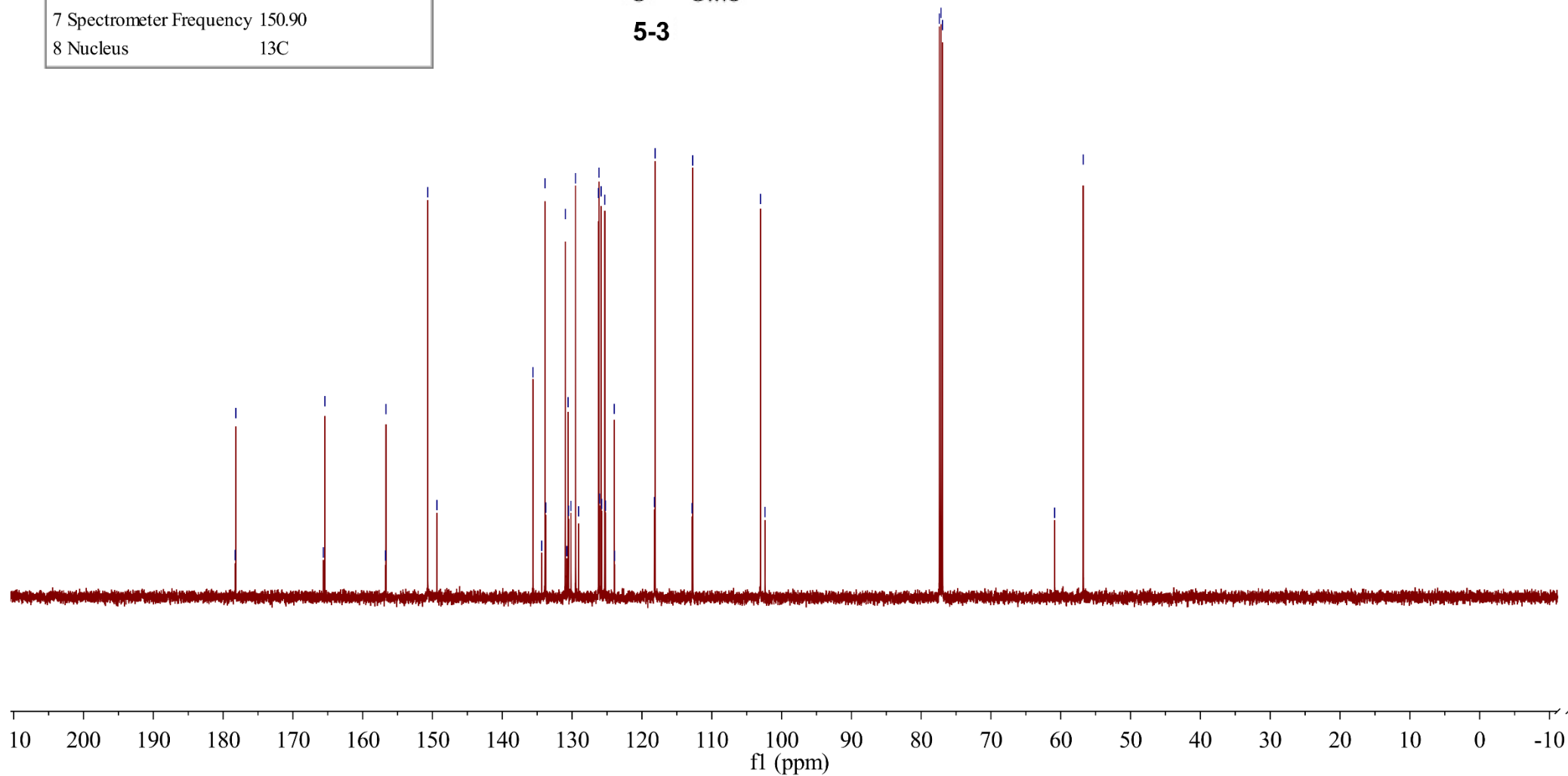


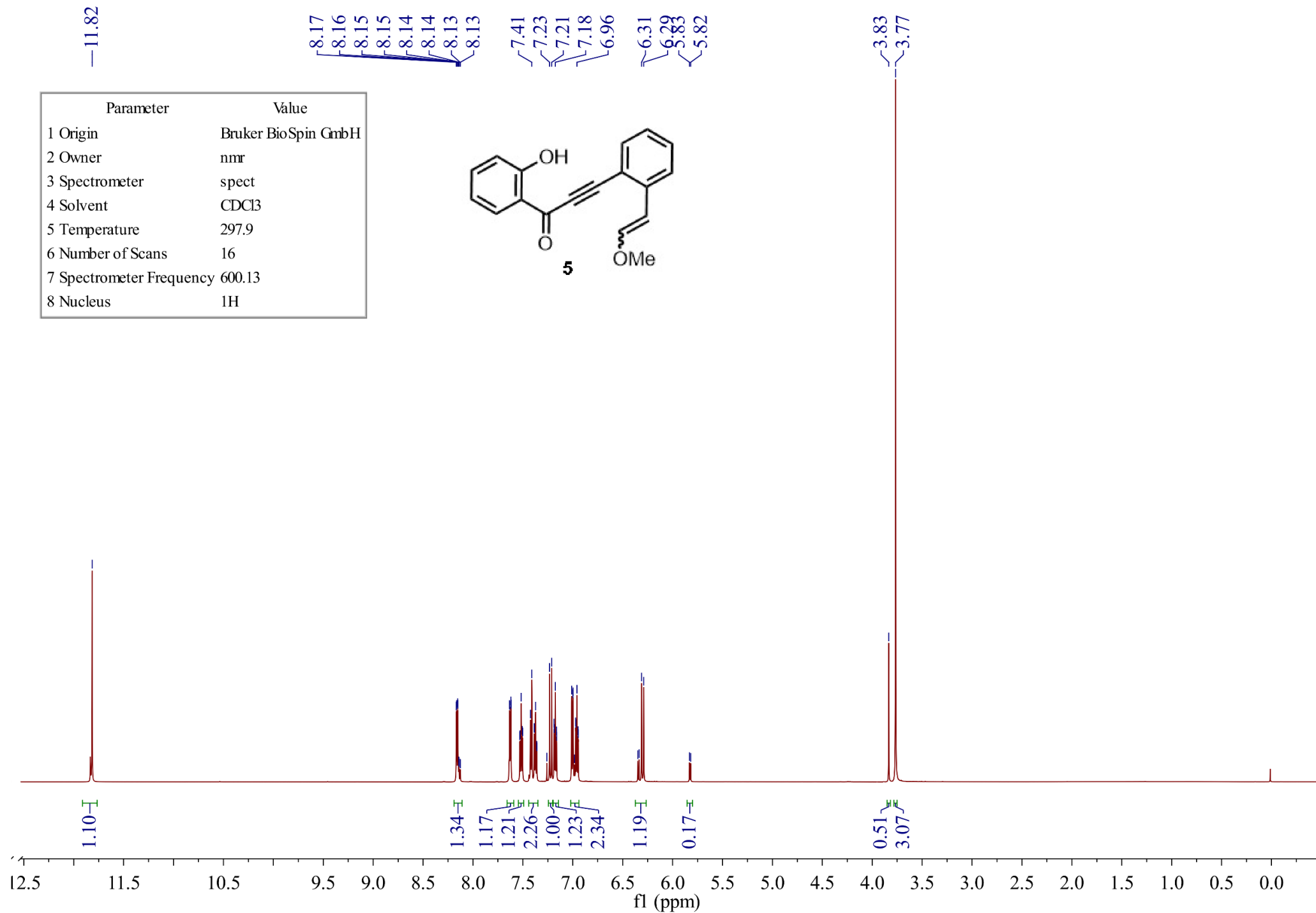
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 126.16
 125.84
 125.32
 118.10
 112.71
 103.02
 102.37
 77.37
 77.16
 76.95
 60.88
 56.78

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	298.0
6 Number of Scans	62
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



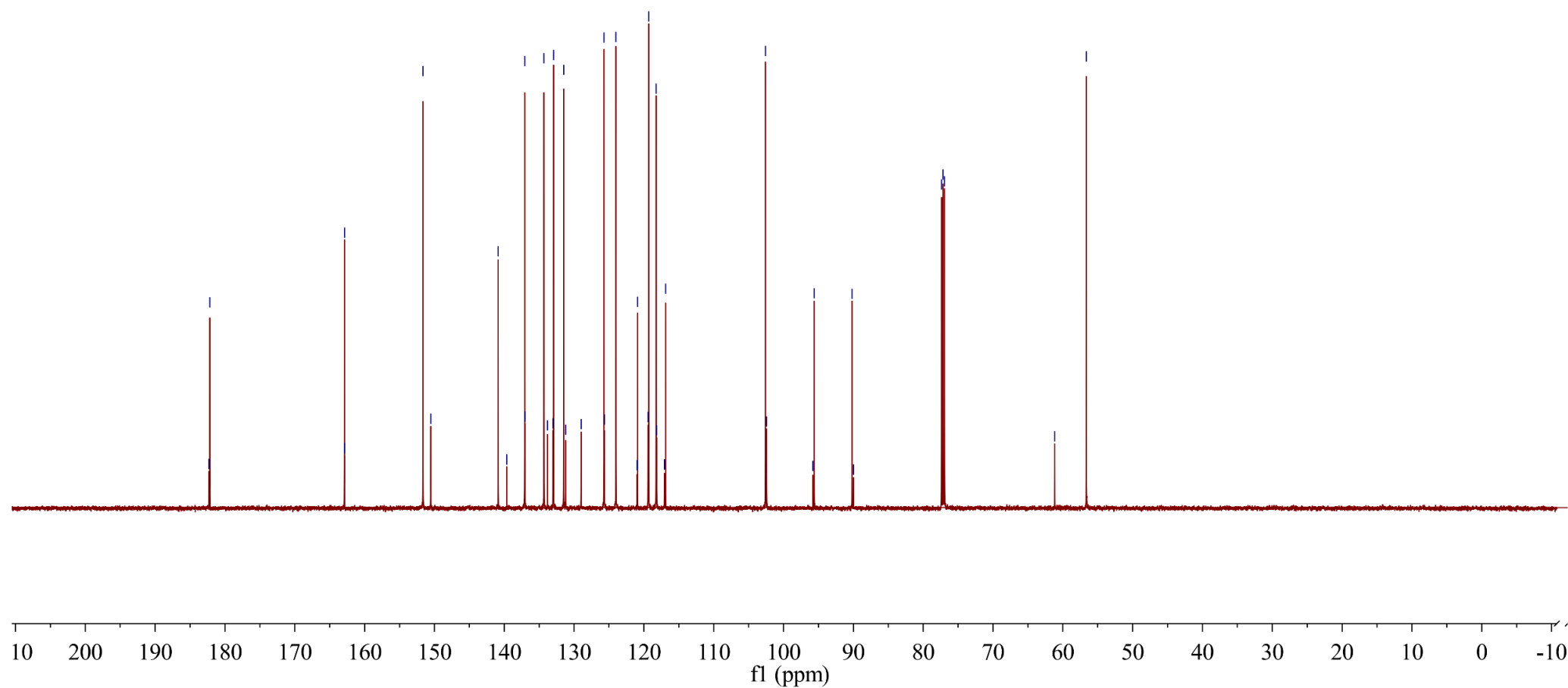
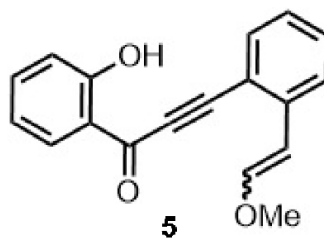
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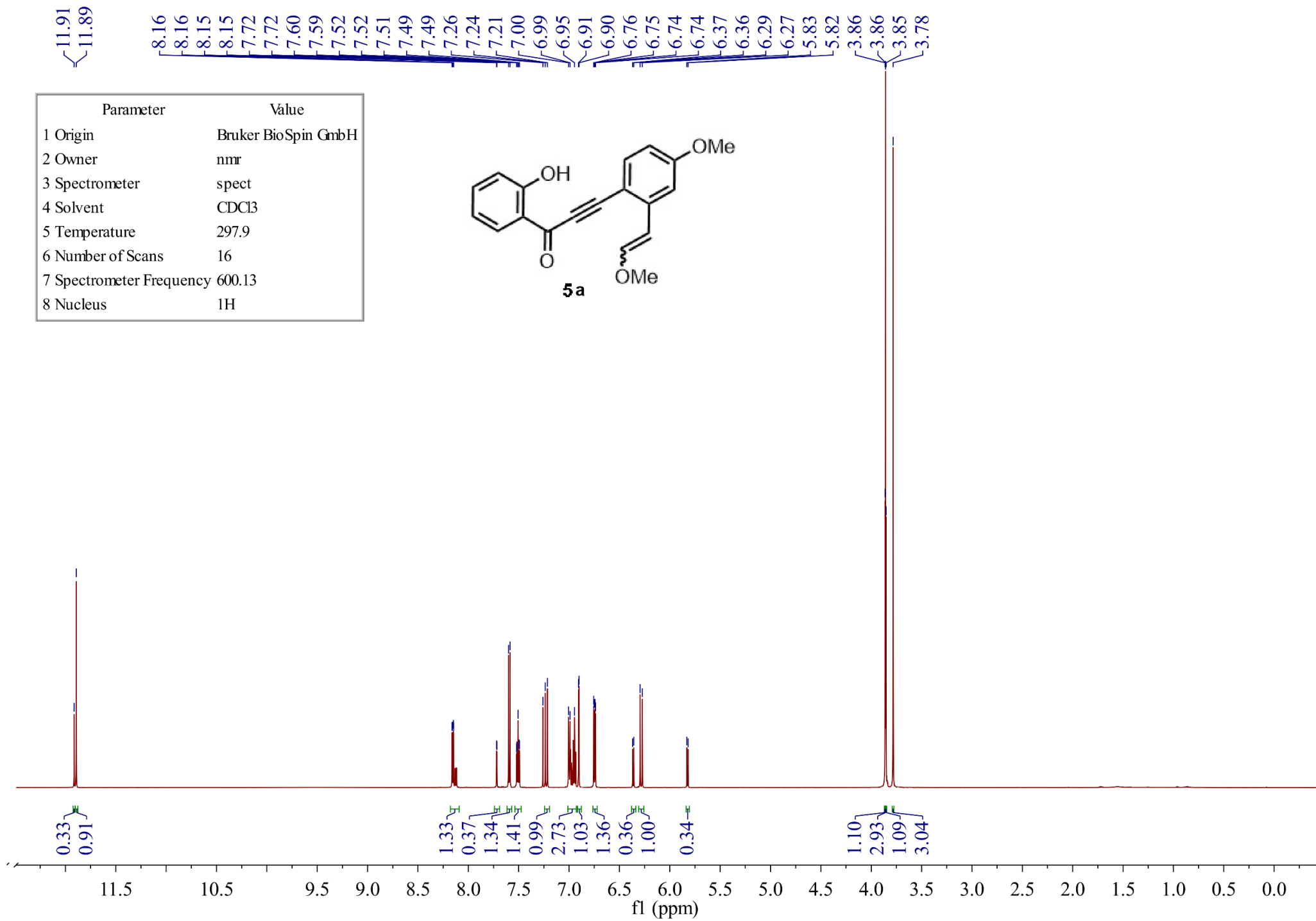




182.30
182.17
162.88
162.85
151.64
150.53
140.86
137.07
134.31
132.94
131.48
125.71
124.00
119.31
118.25
116.99
102.41
95.81
95.60
90.19
89.98
77.37
77.16
76.95
61.16
56.63

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	298.1
6 Number of Scans	195
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

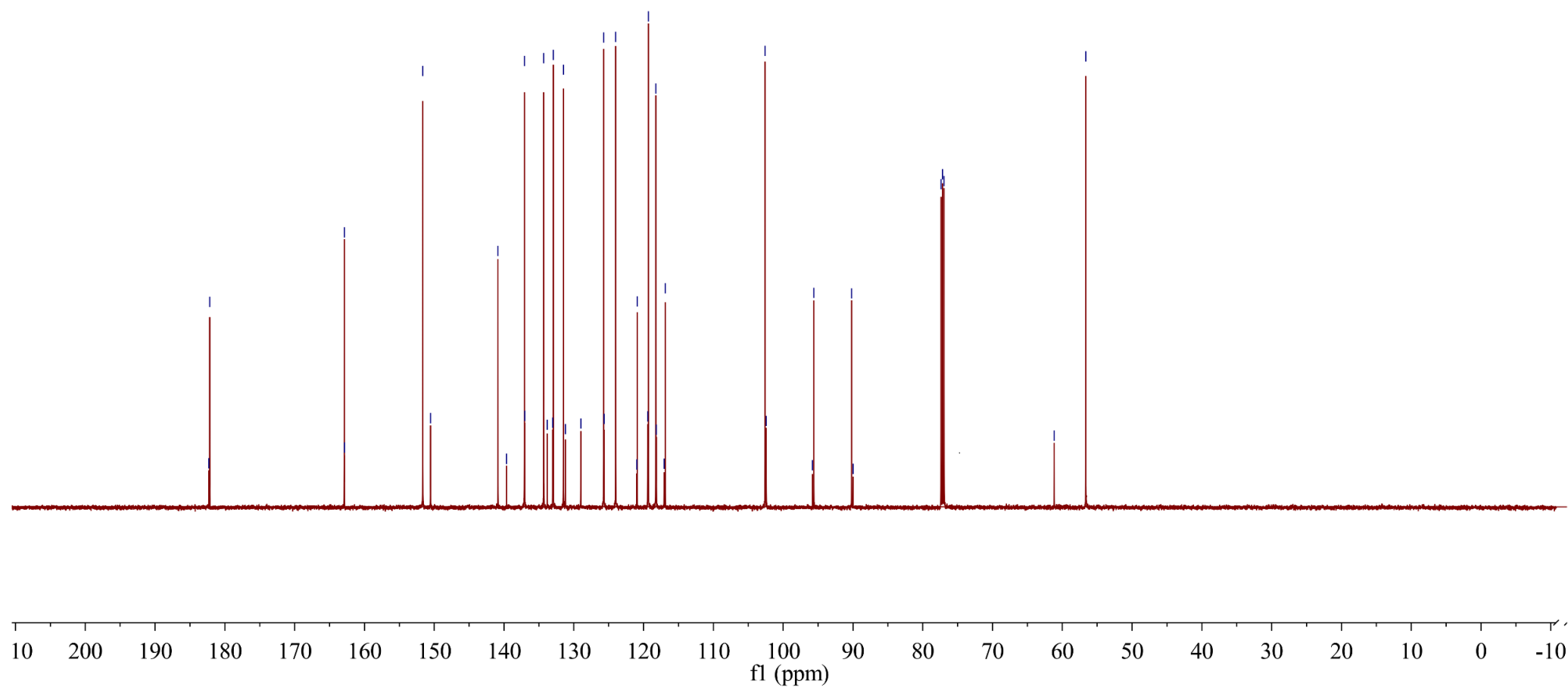
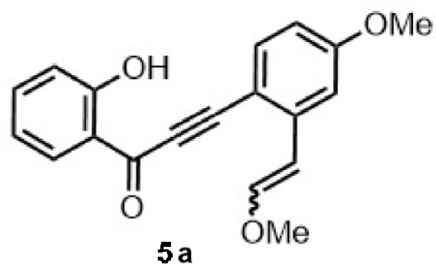


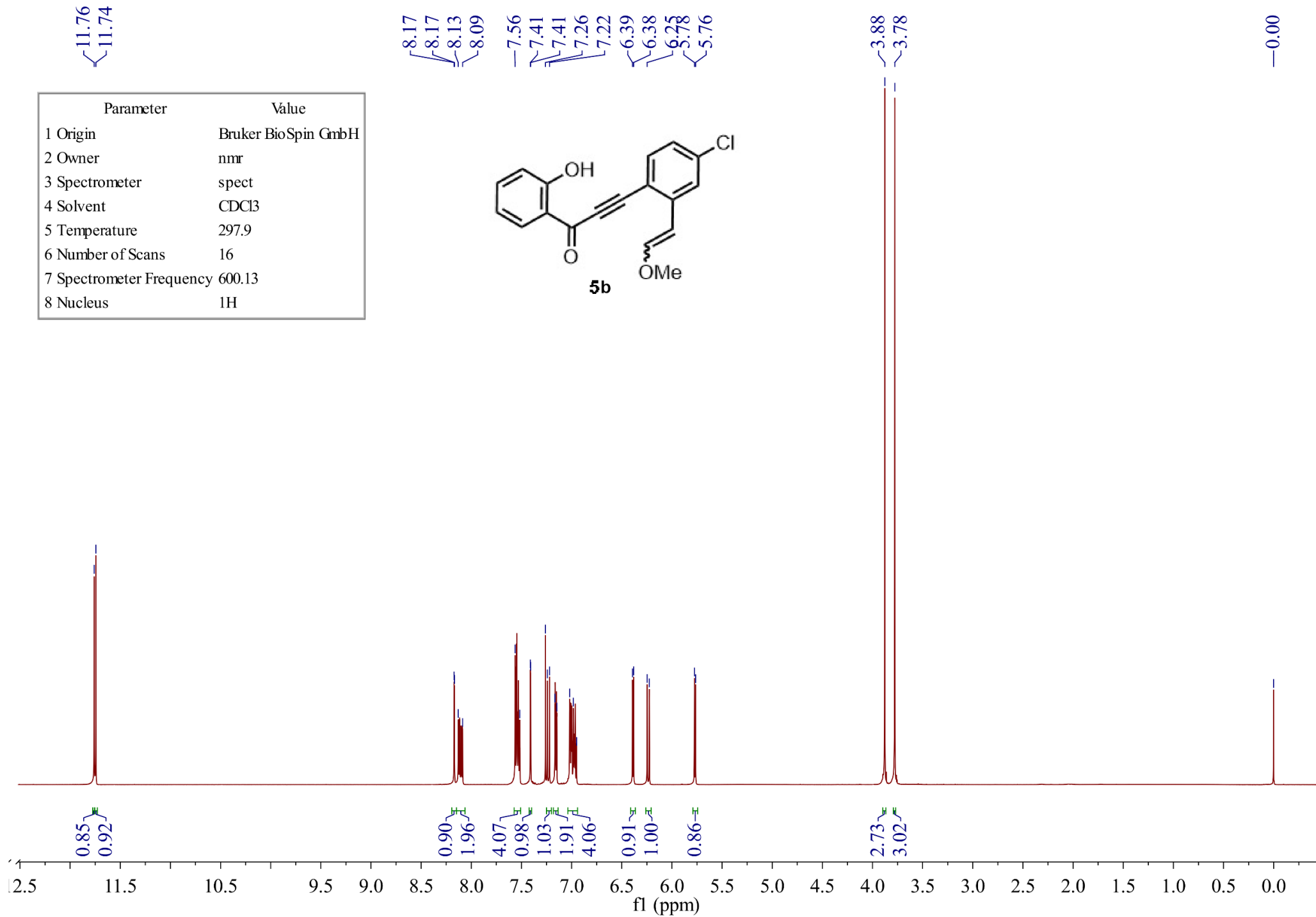


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

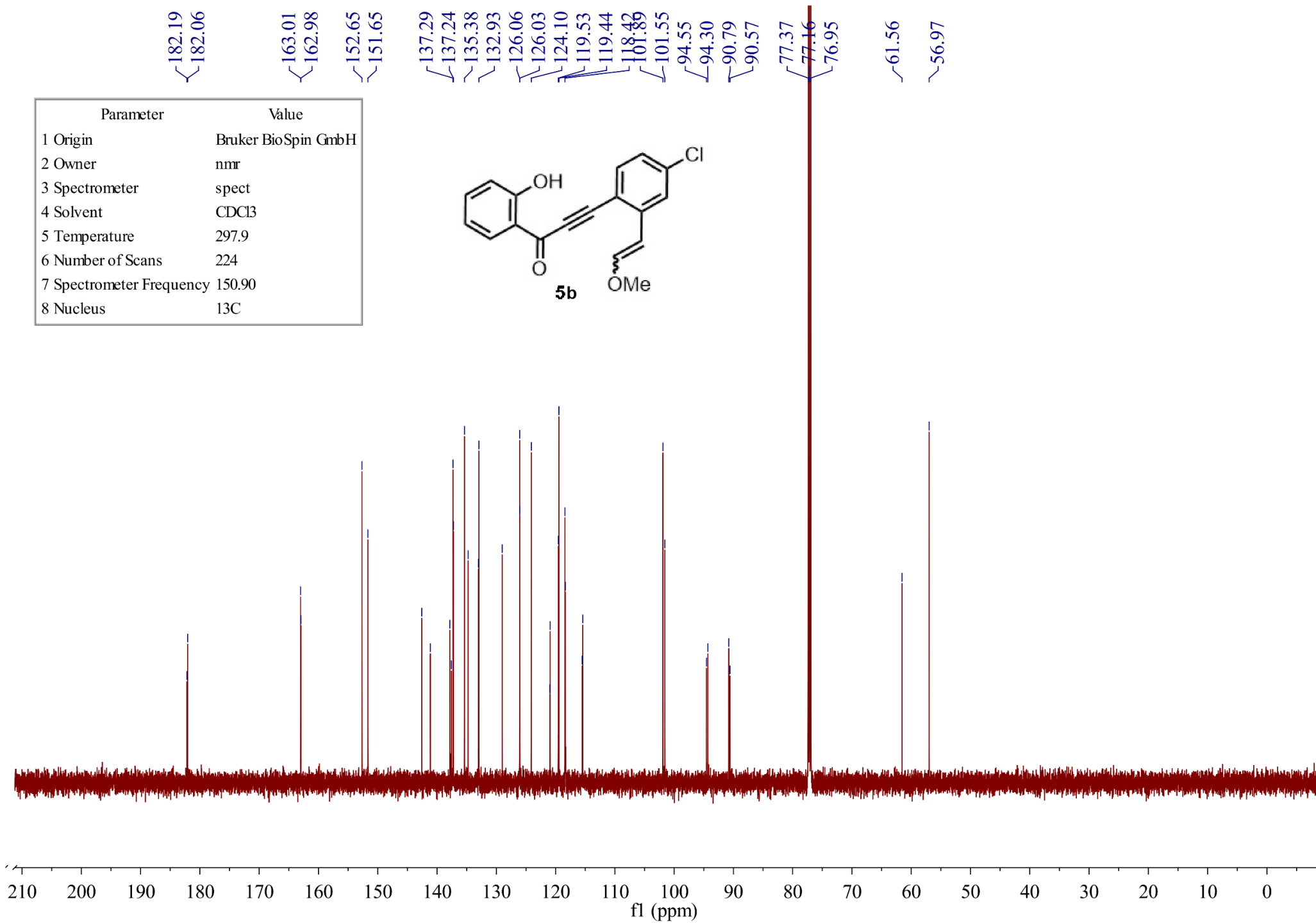
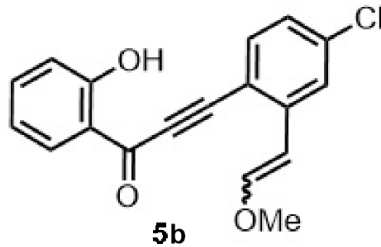
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151.64
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134.31
132.94
131.48
125.71
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119.31
118.25
116.99
102.41
95.81
95.60
90.19
89.98
77.37
77.16
76.95
61.16
56.63

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	195
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Brucker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	224
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

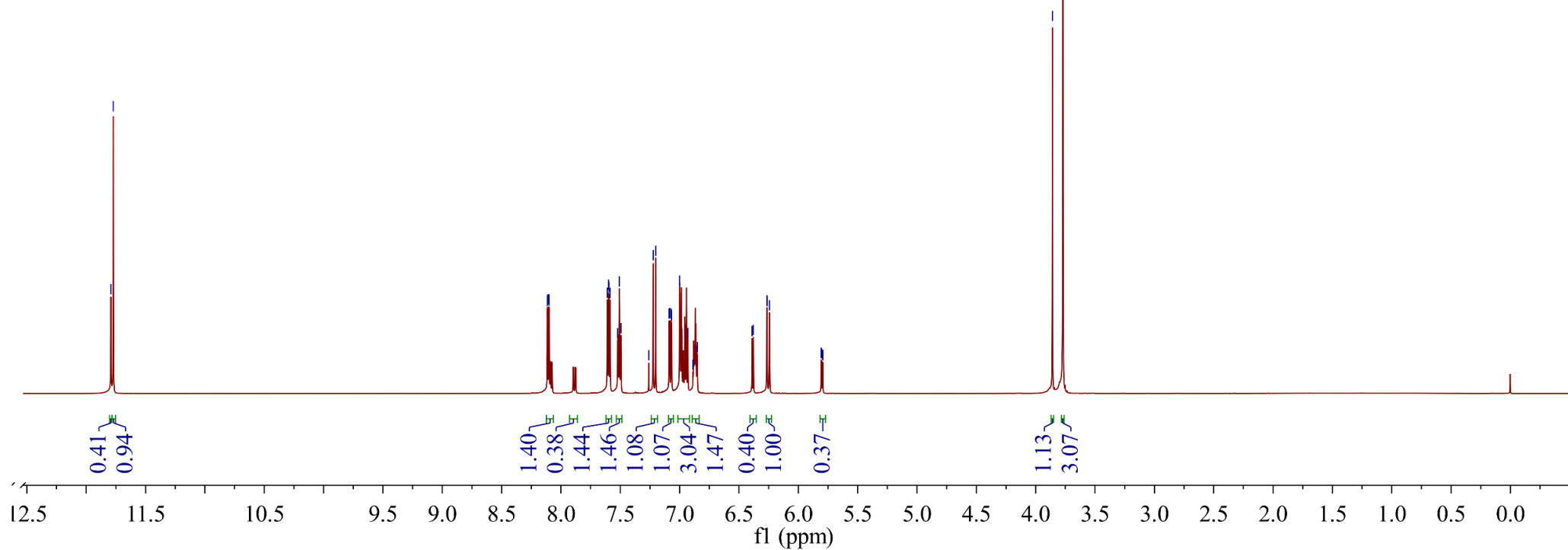
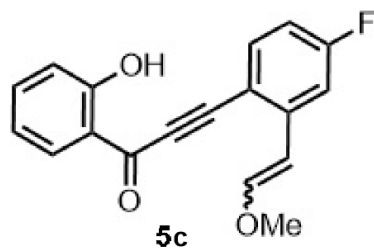


11.79
11.77

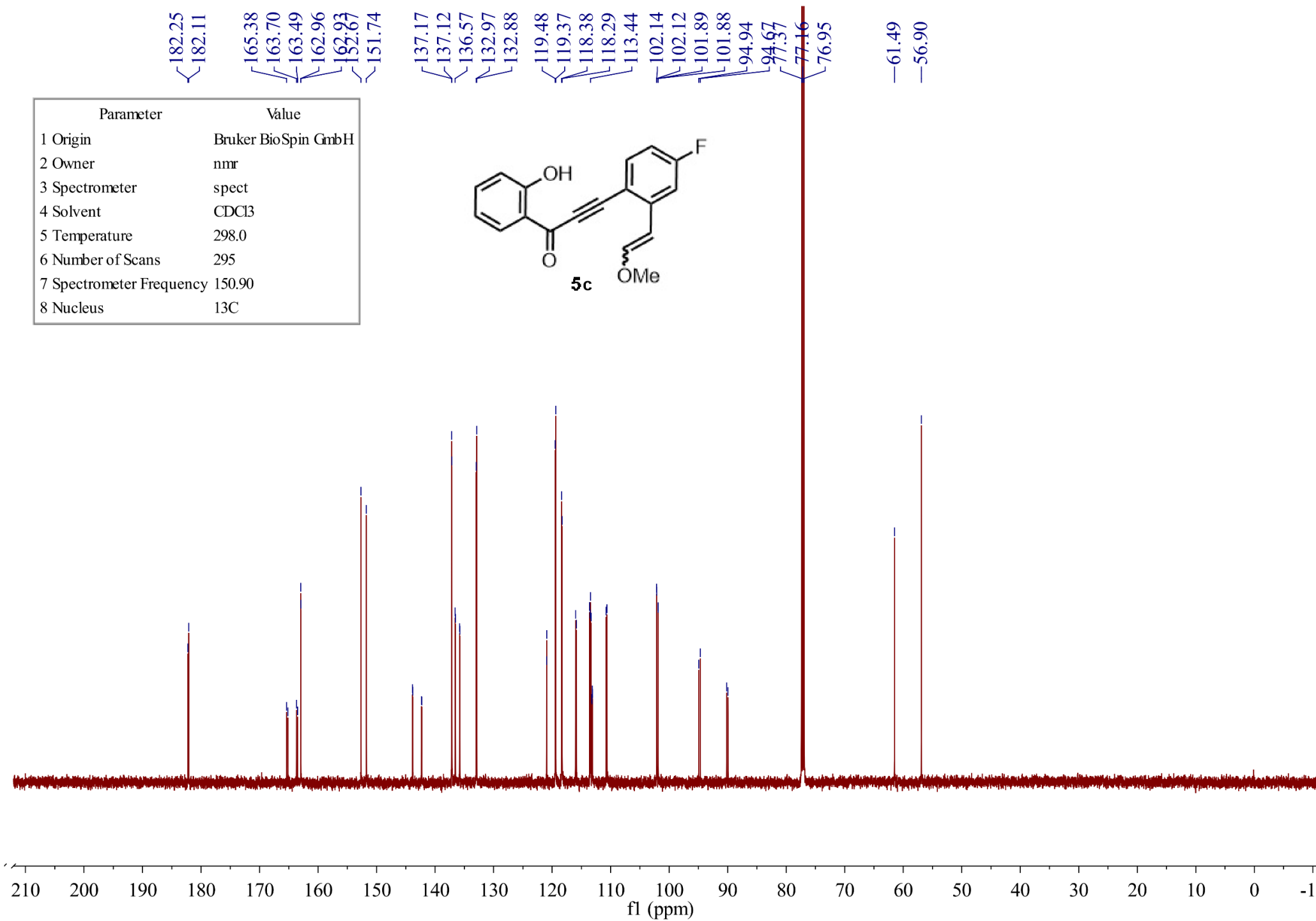
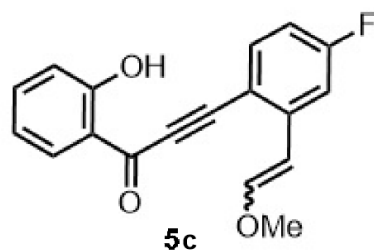
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8.10
8.10
7.60
7.51
7.22
7.20
7.09
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6.26
6.26
6.24
5.81
5.81
5.80
5.79

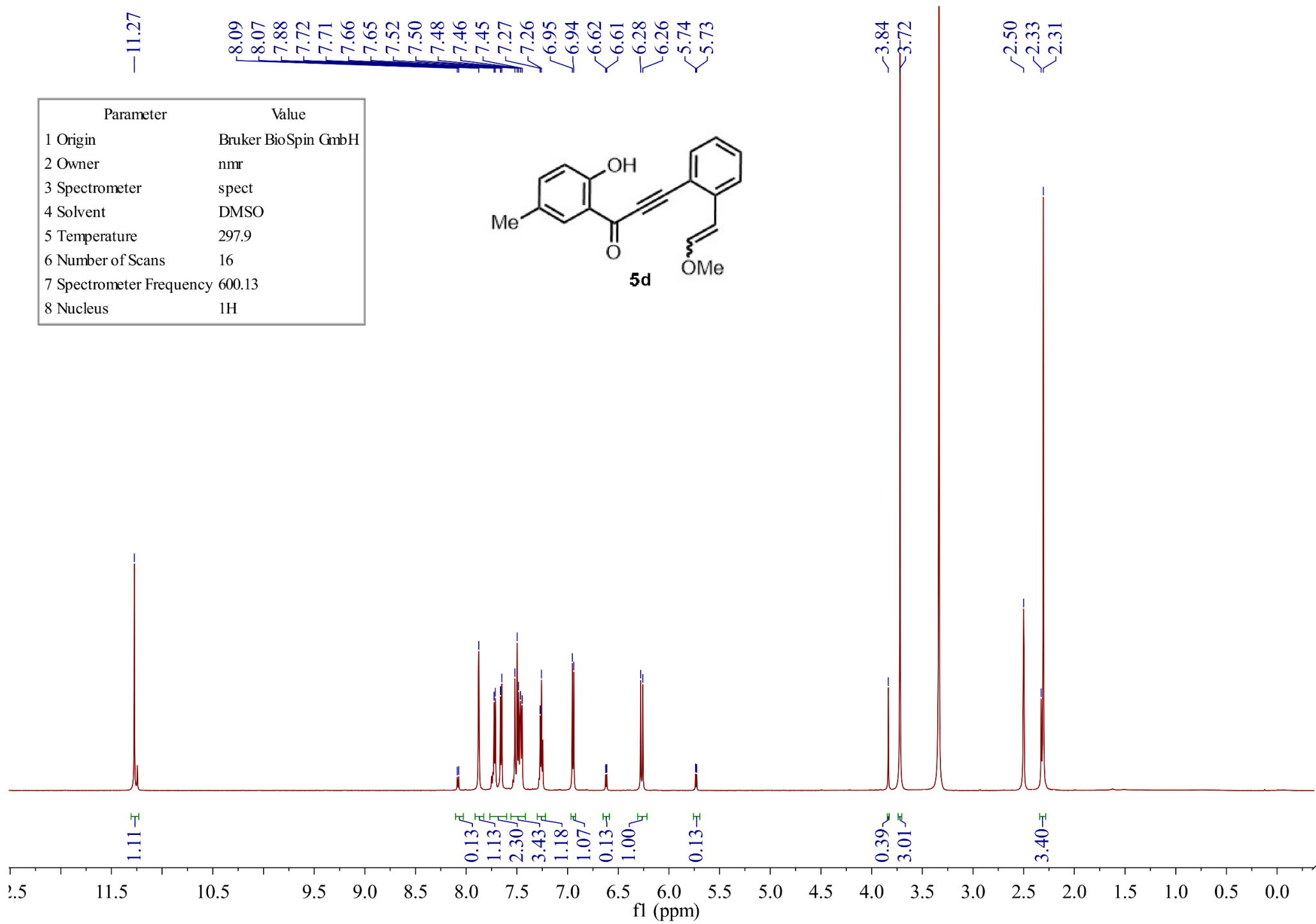
3.86
3.77

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

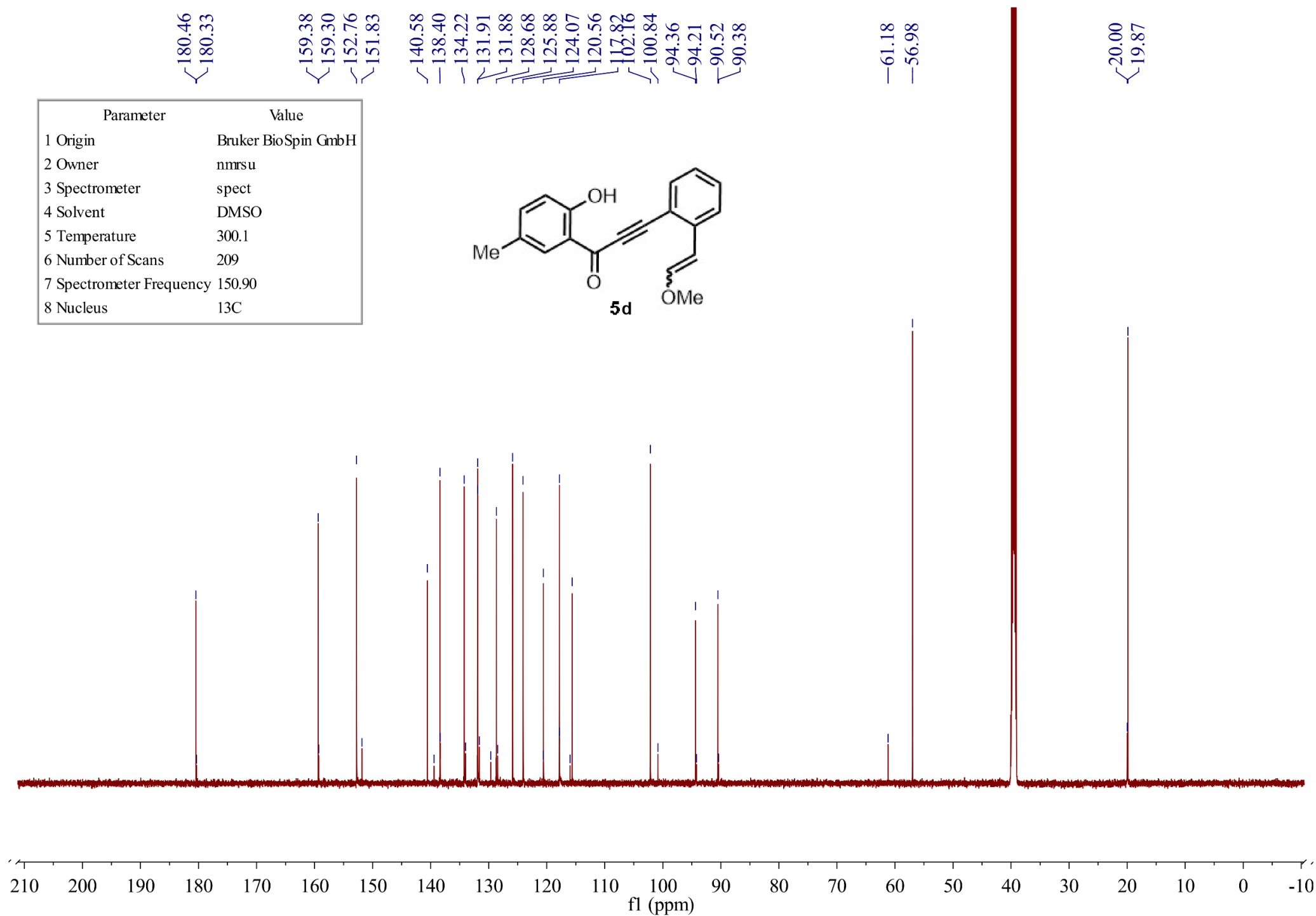
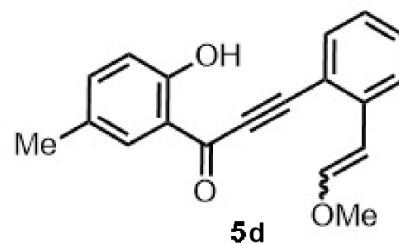


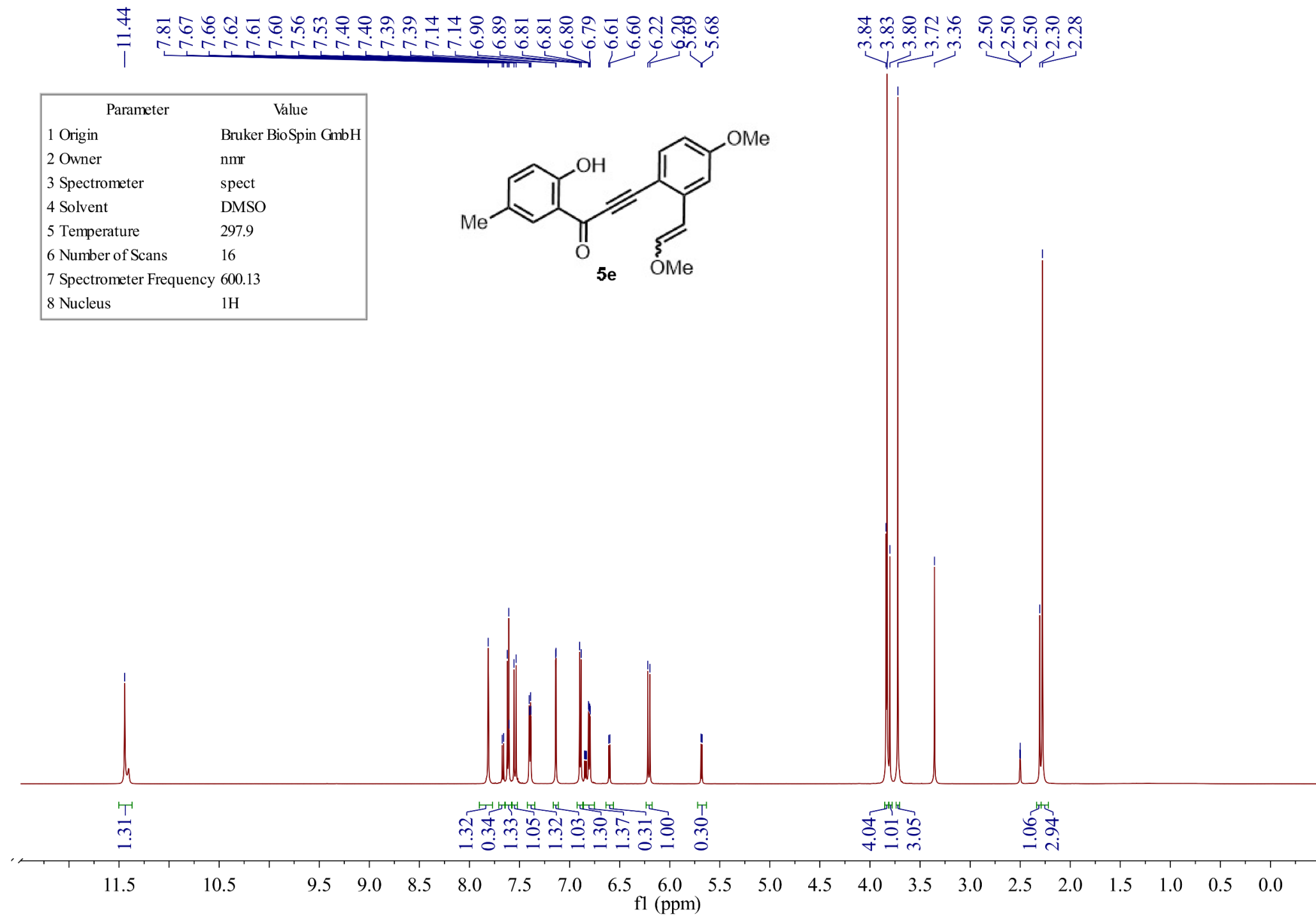
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2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.0
6 Number of Scans	295
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



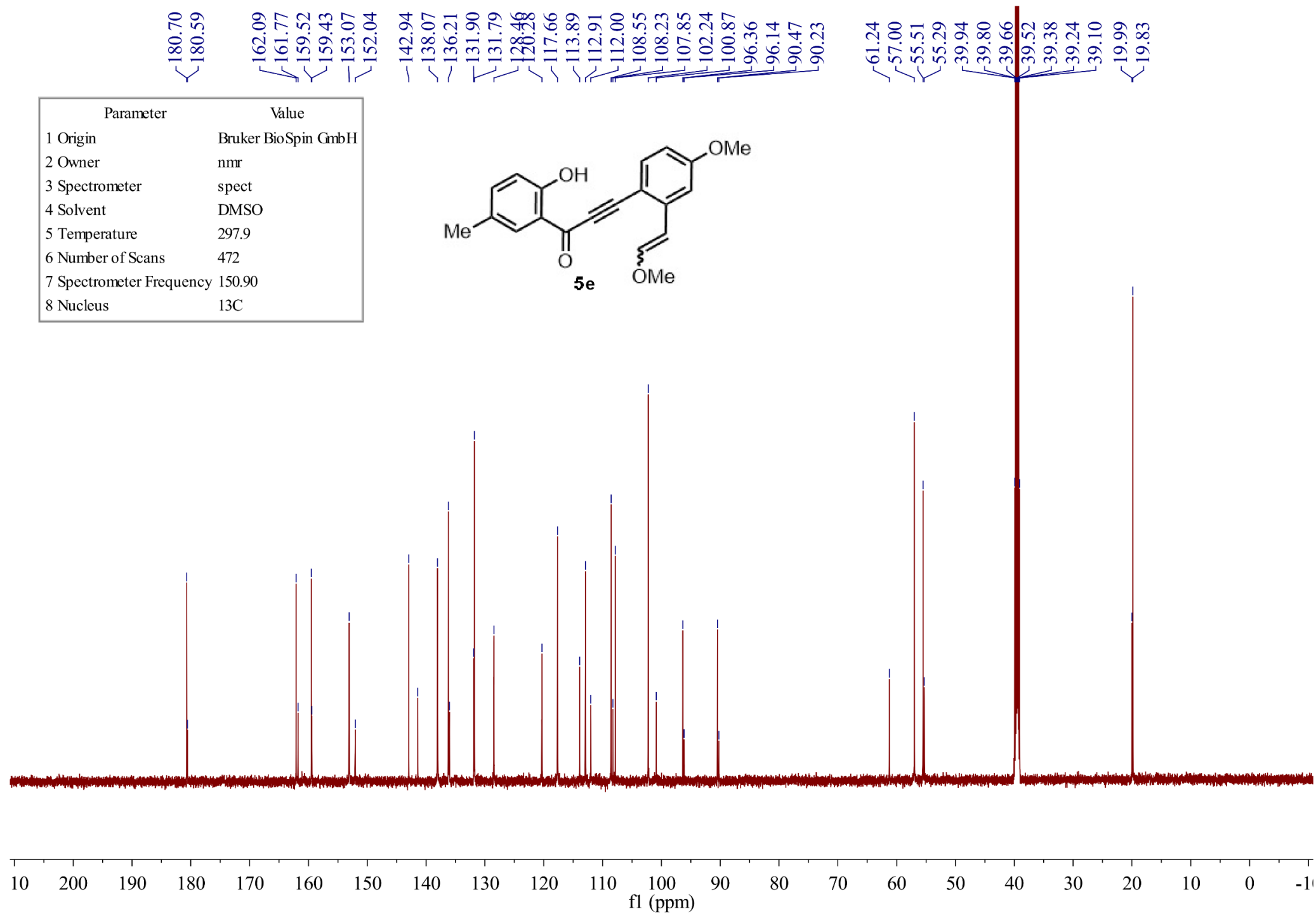
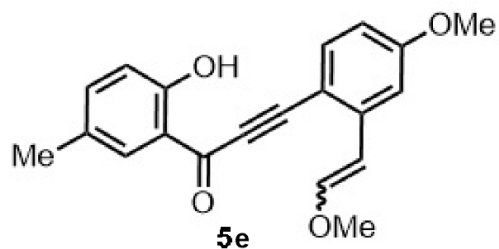


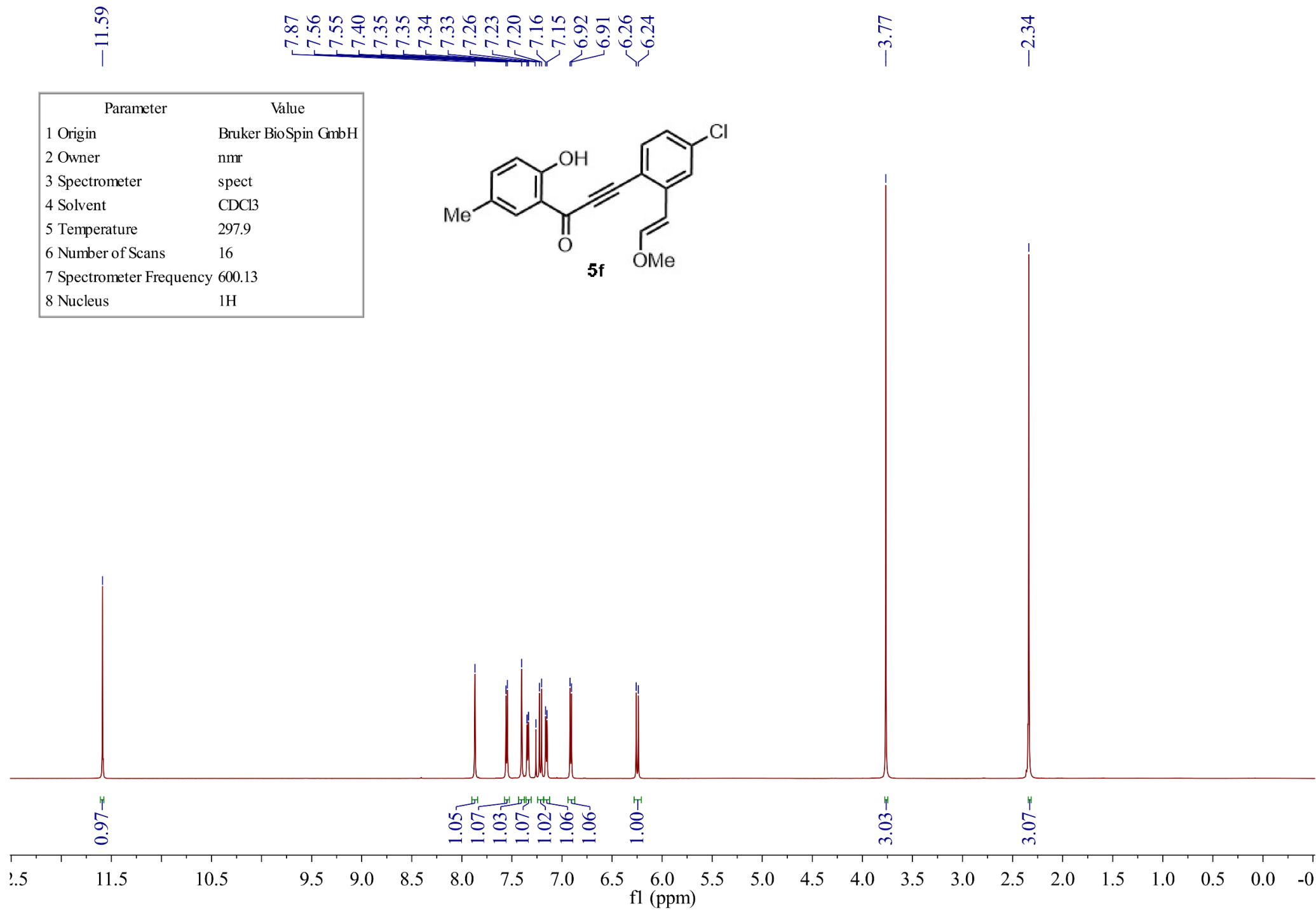
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	209
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





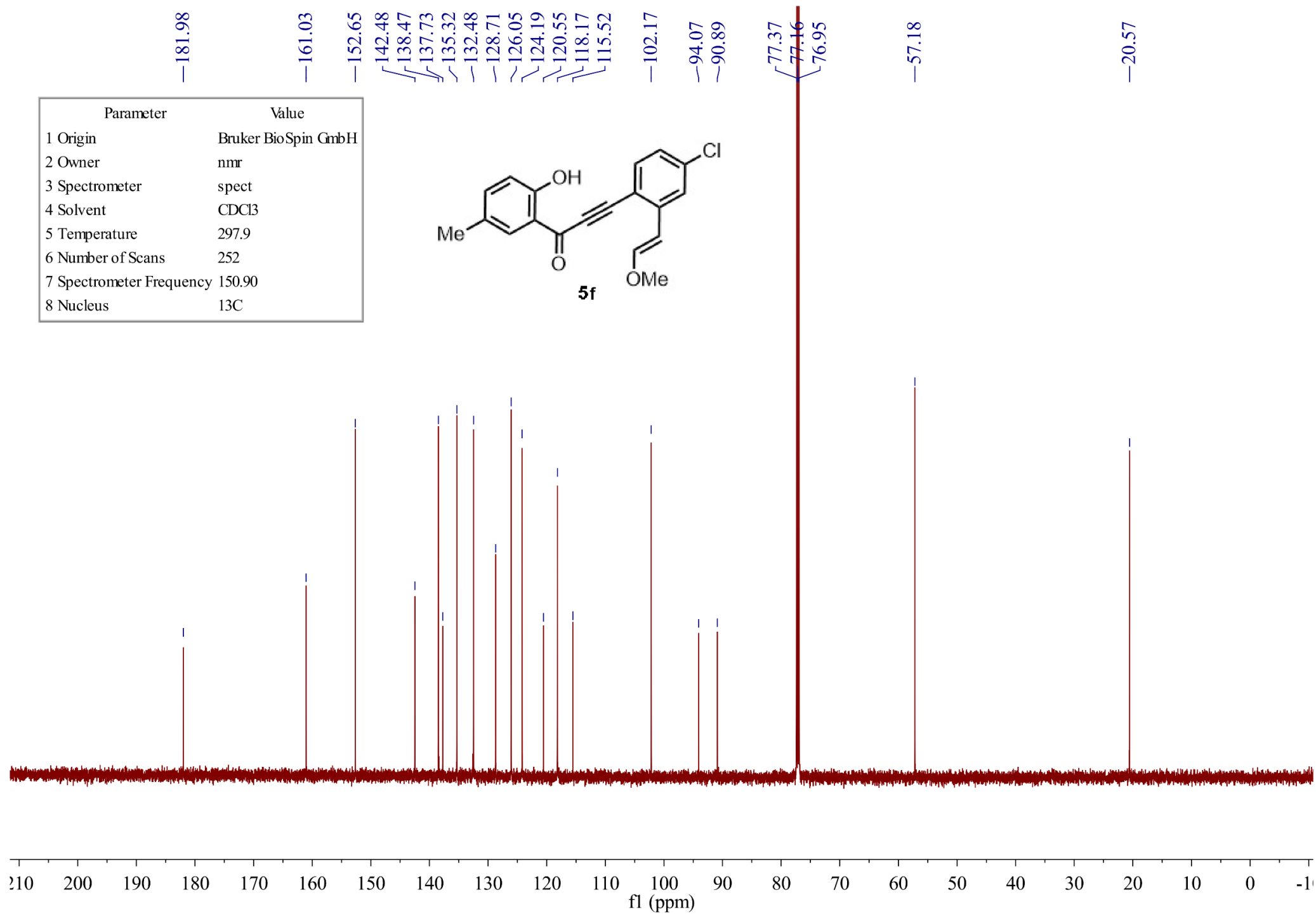
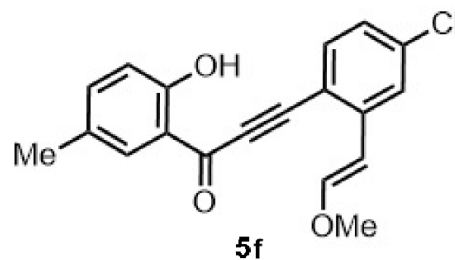
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2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	472
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

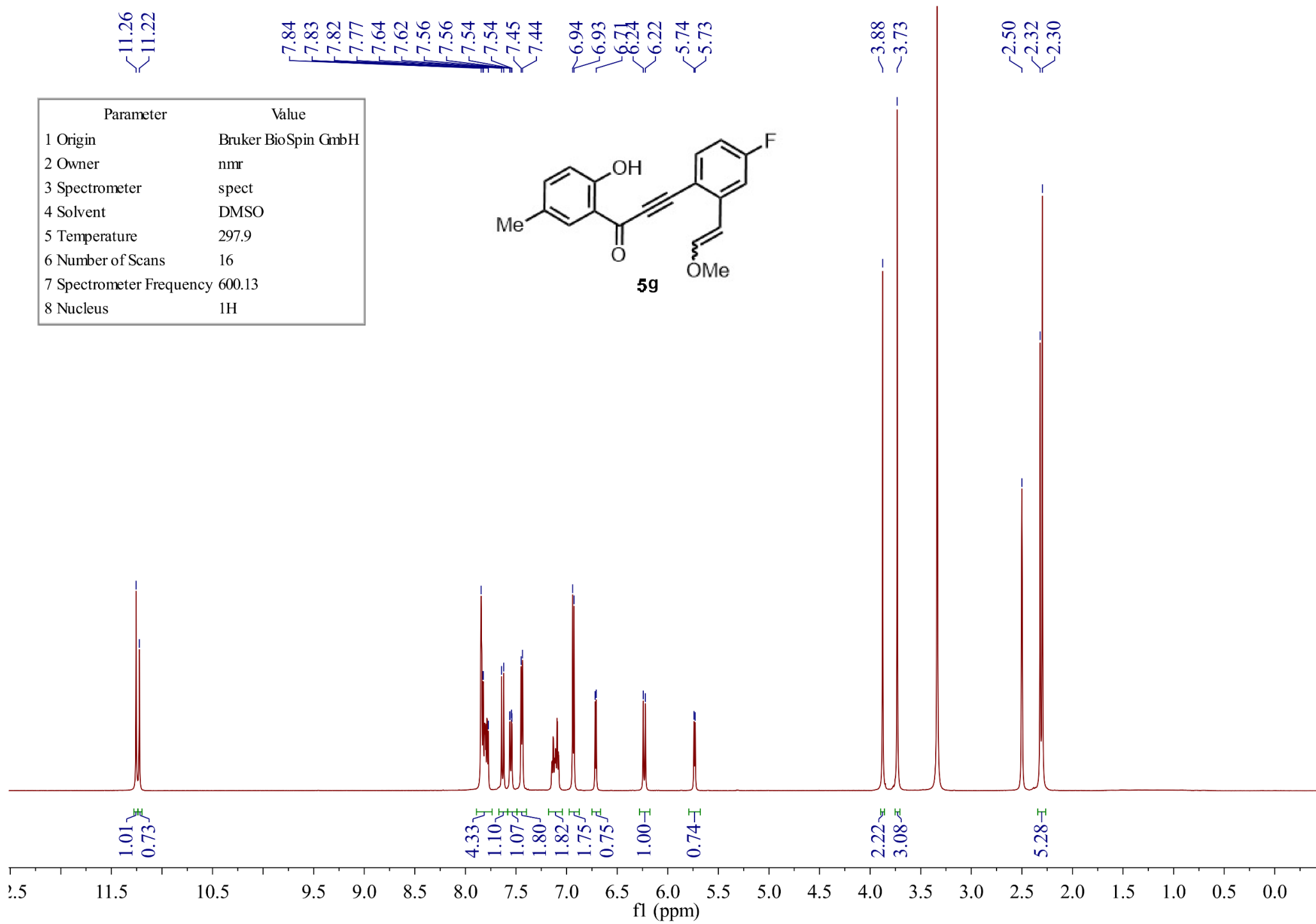




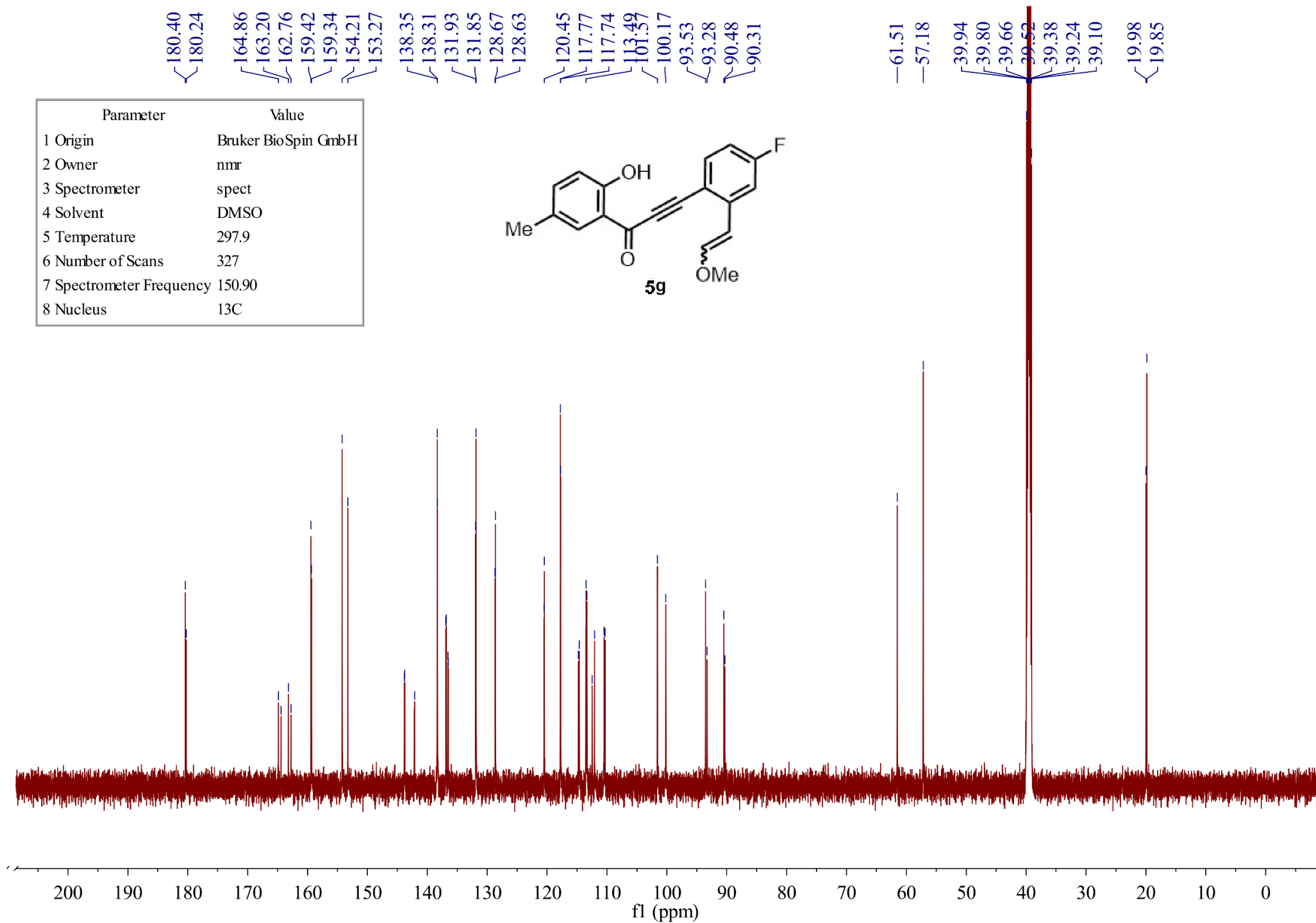
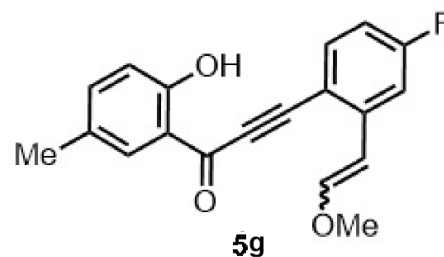
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	252
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	327
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



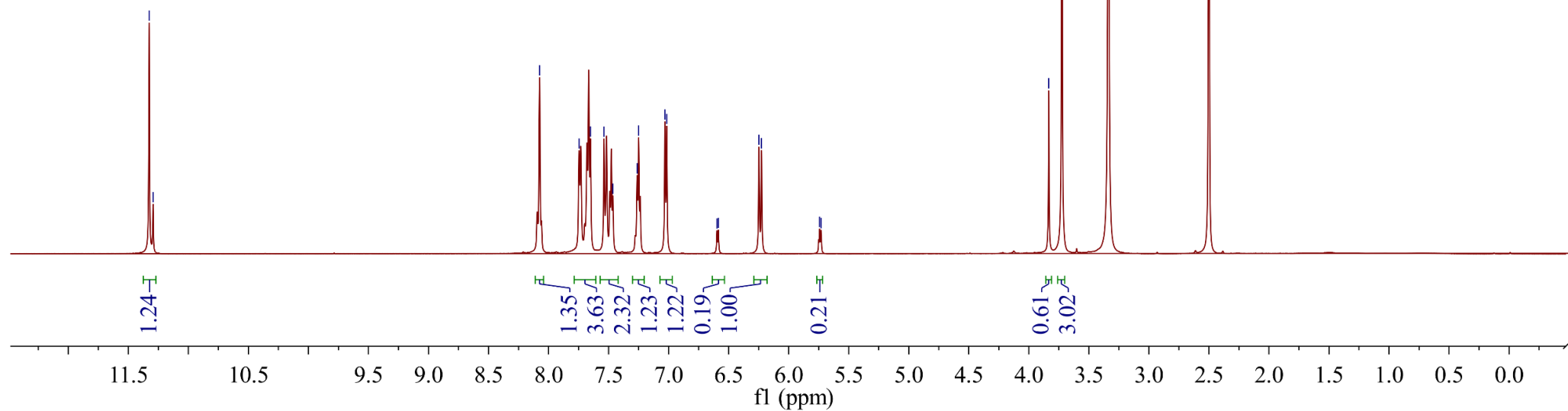
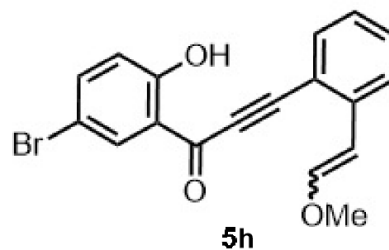
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5.73

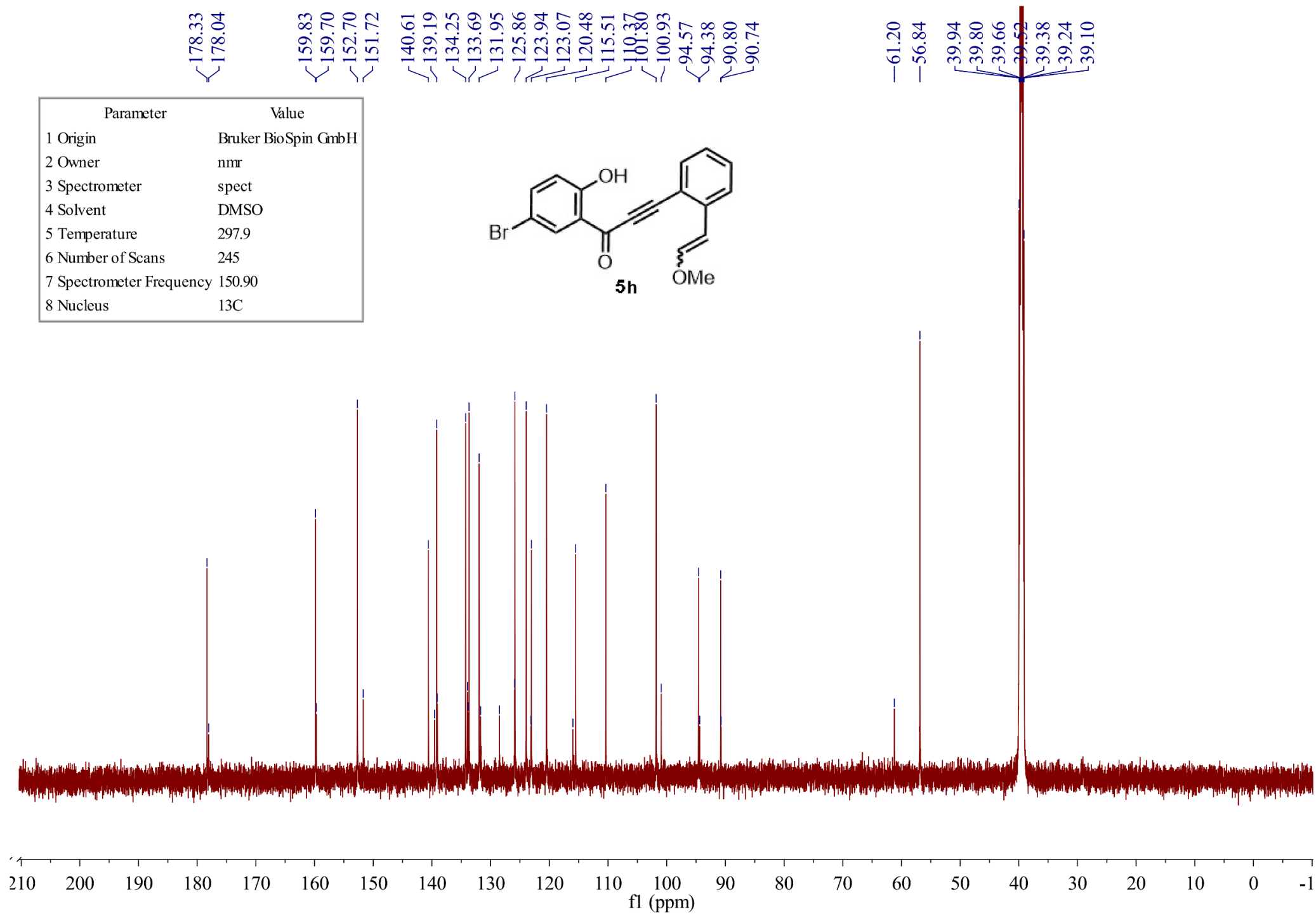
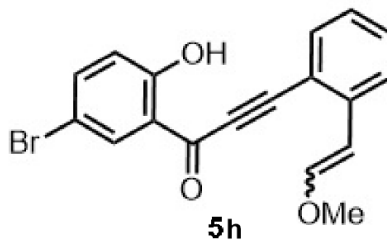
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3.72

2.50

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

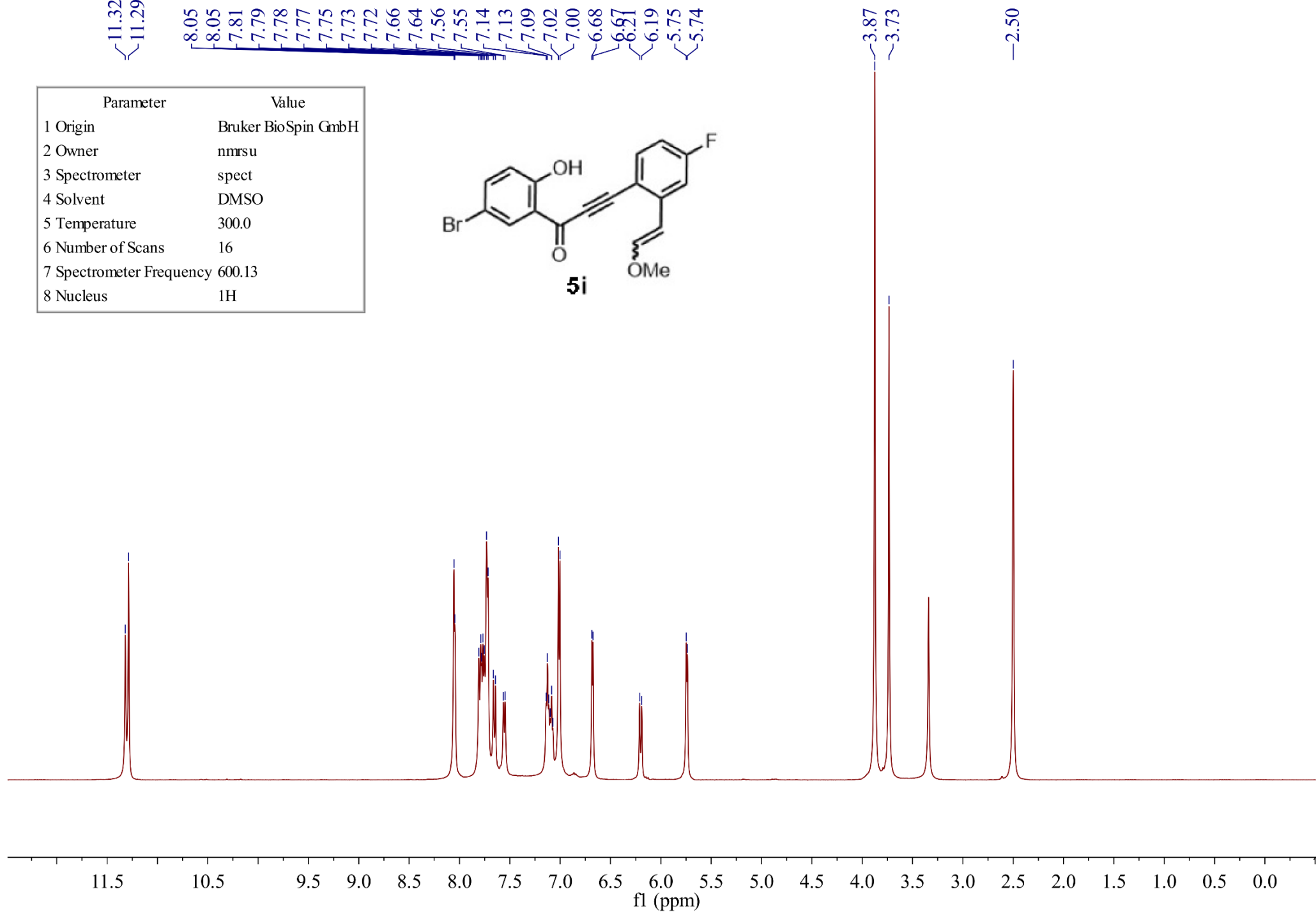
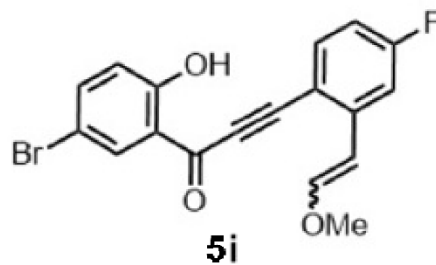


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	245
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

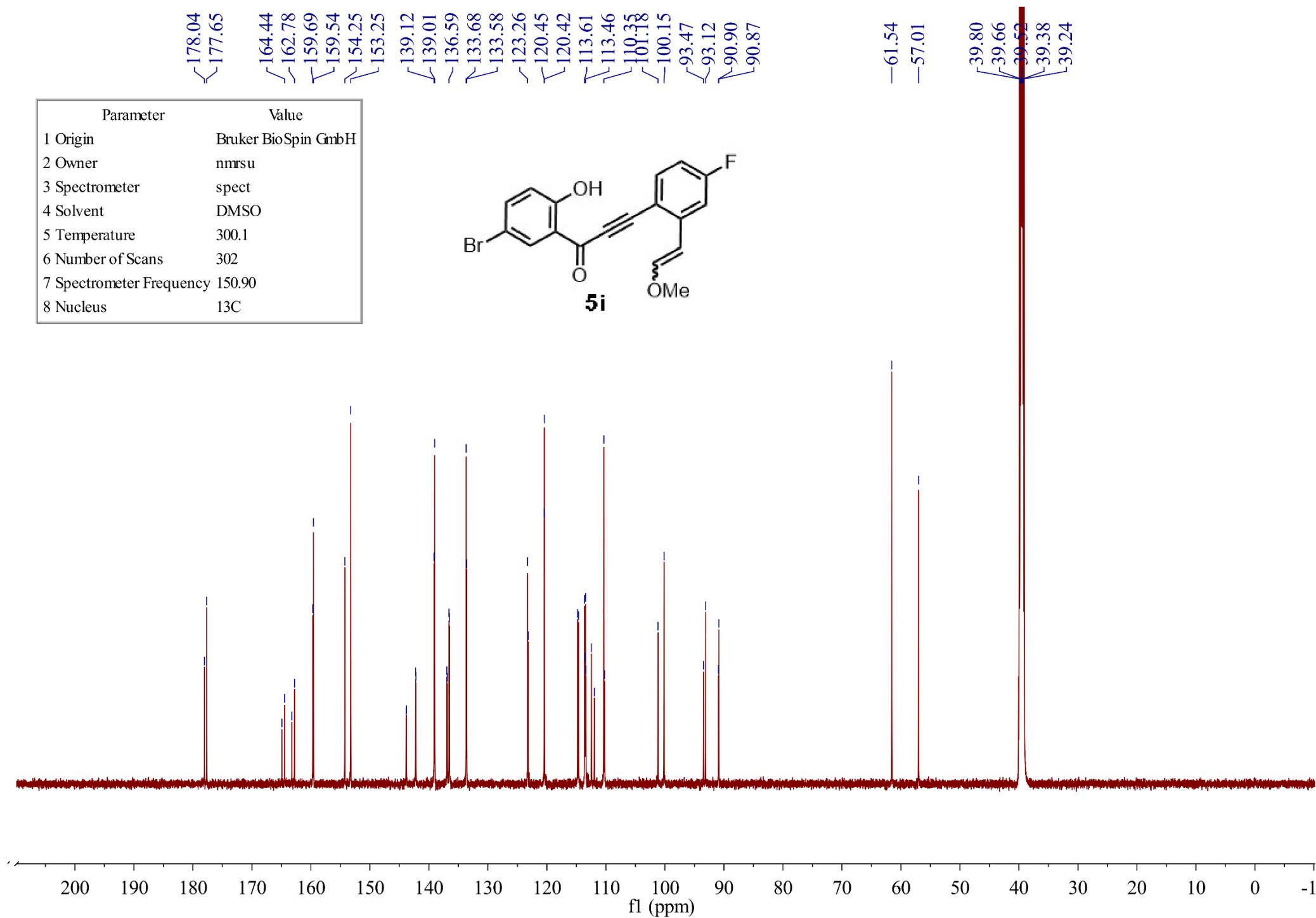
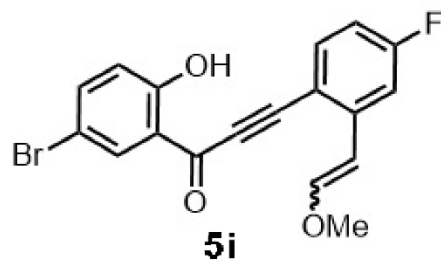


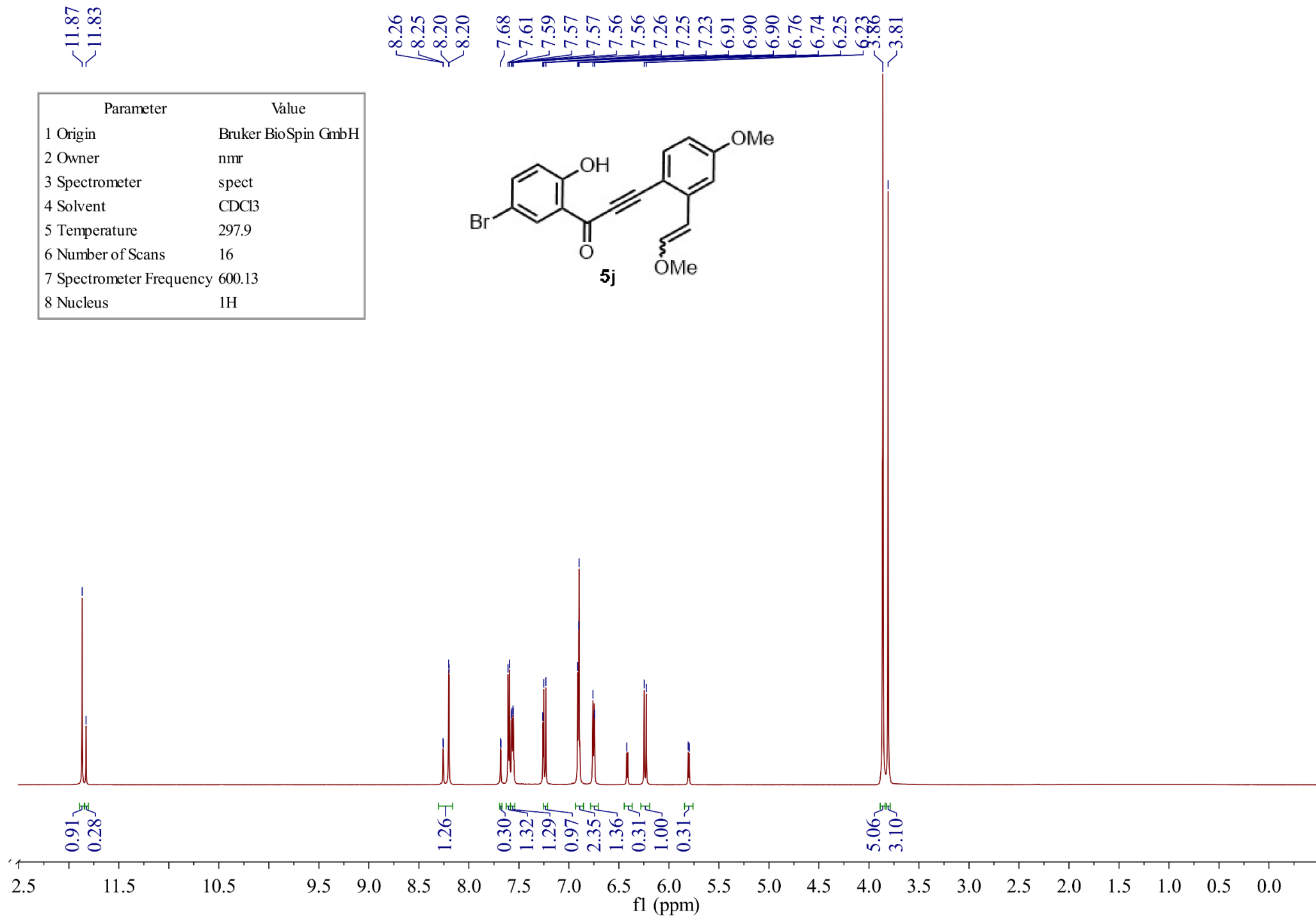
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7.78
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7.75
7.73
7.72
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7.56
7.55
7.14
7.13
7.09
7.02
7.00
6.68
6.67
6.19
5.75
5.74

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	302
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





181.07
181.01

162.53
162.39
161.82
161.67
152.13
151.10

143.35
139.42
136.74
135.05
134.67

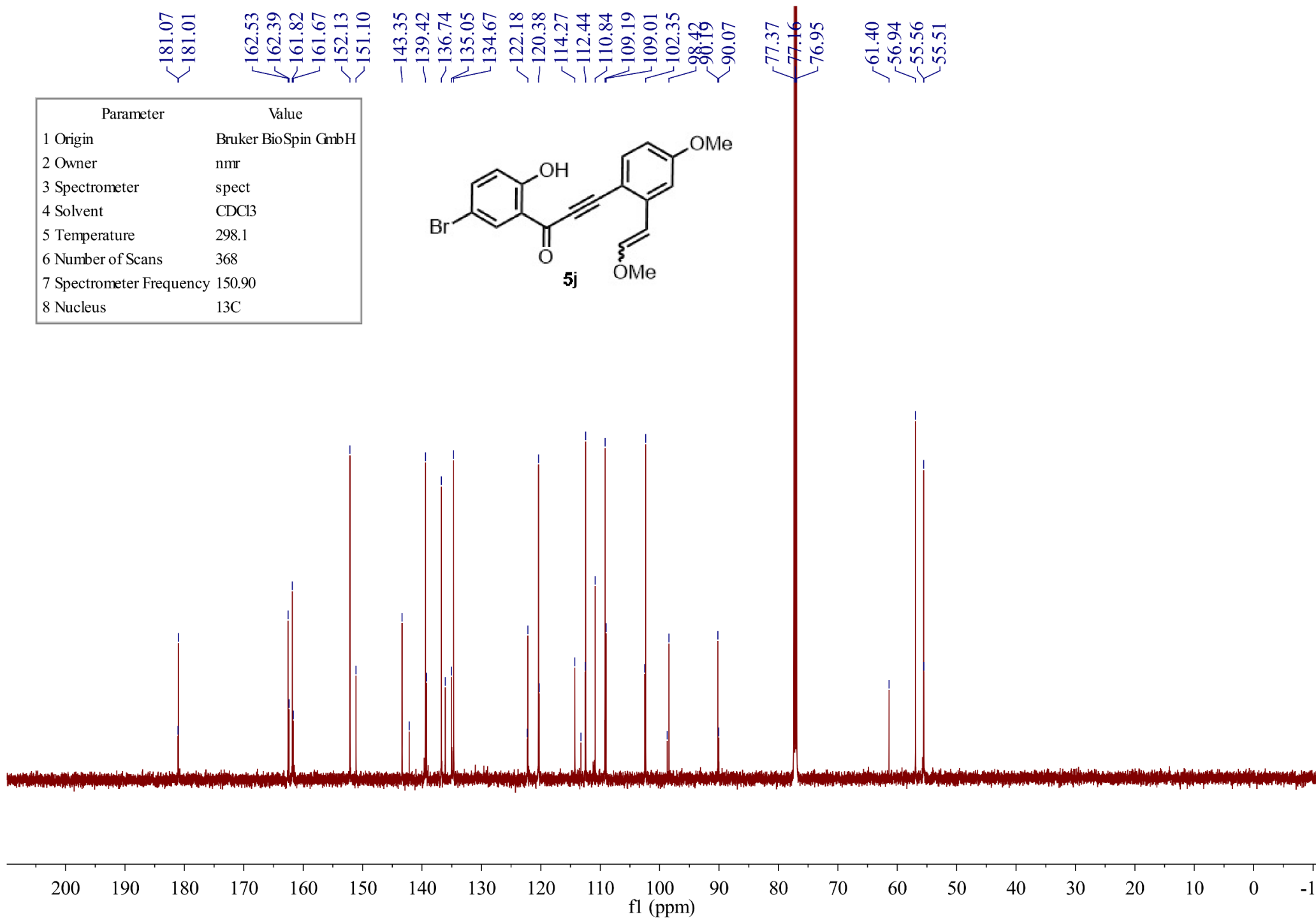
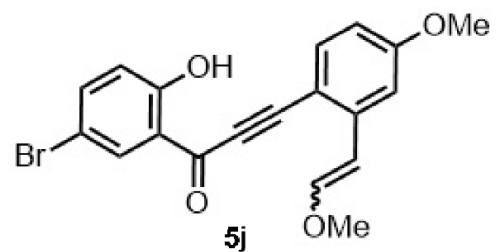
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120.38
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112.44
110.84

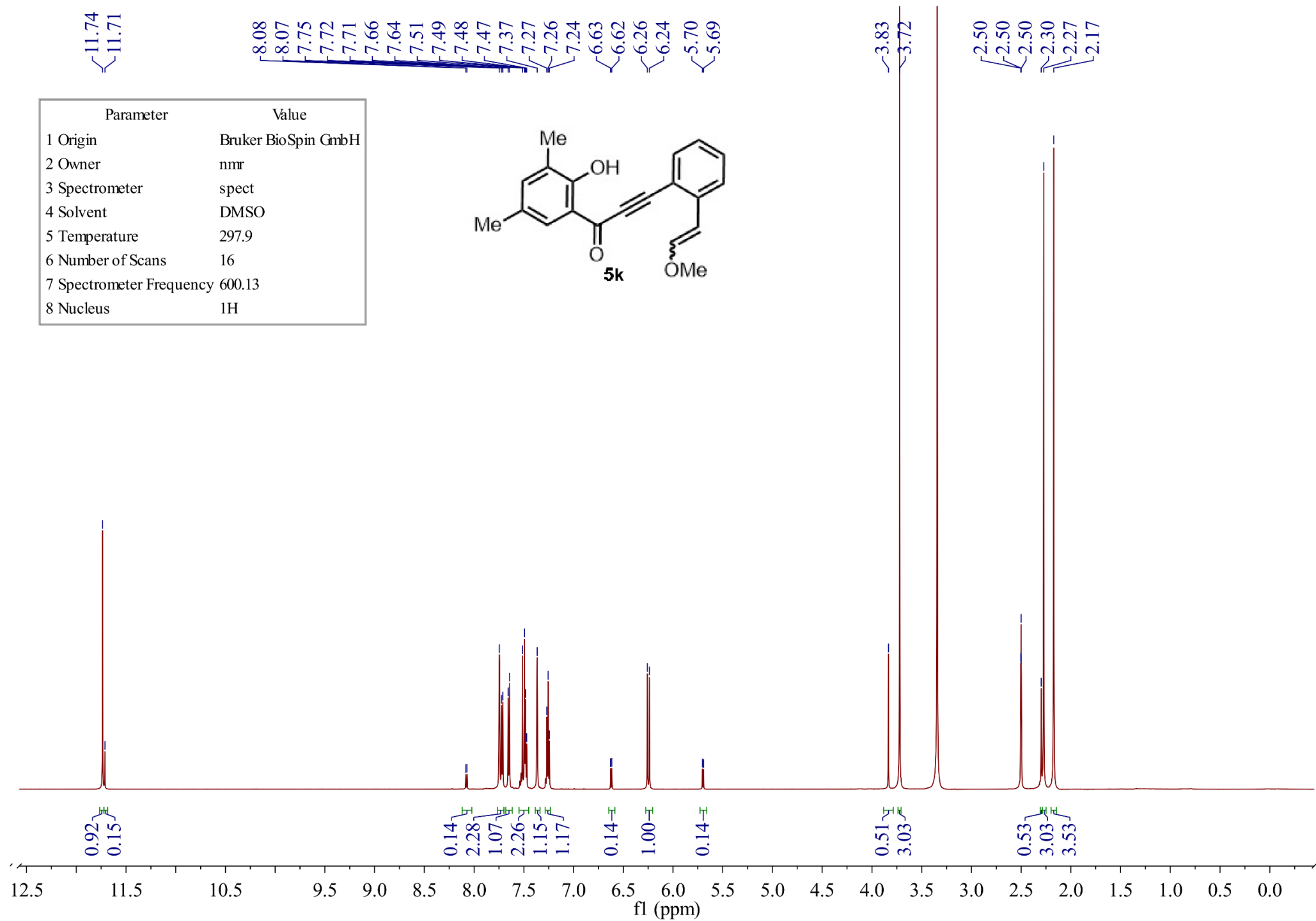
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109.01
102.35
98.42
90.19
90.07

77.37
77.16
76.95

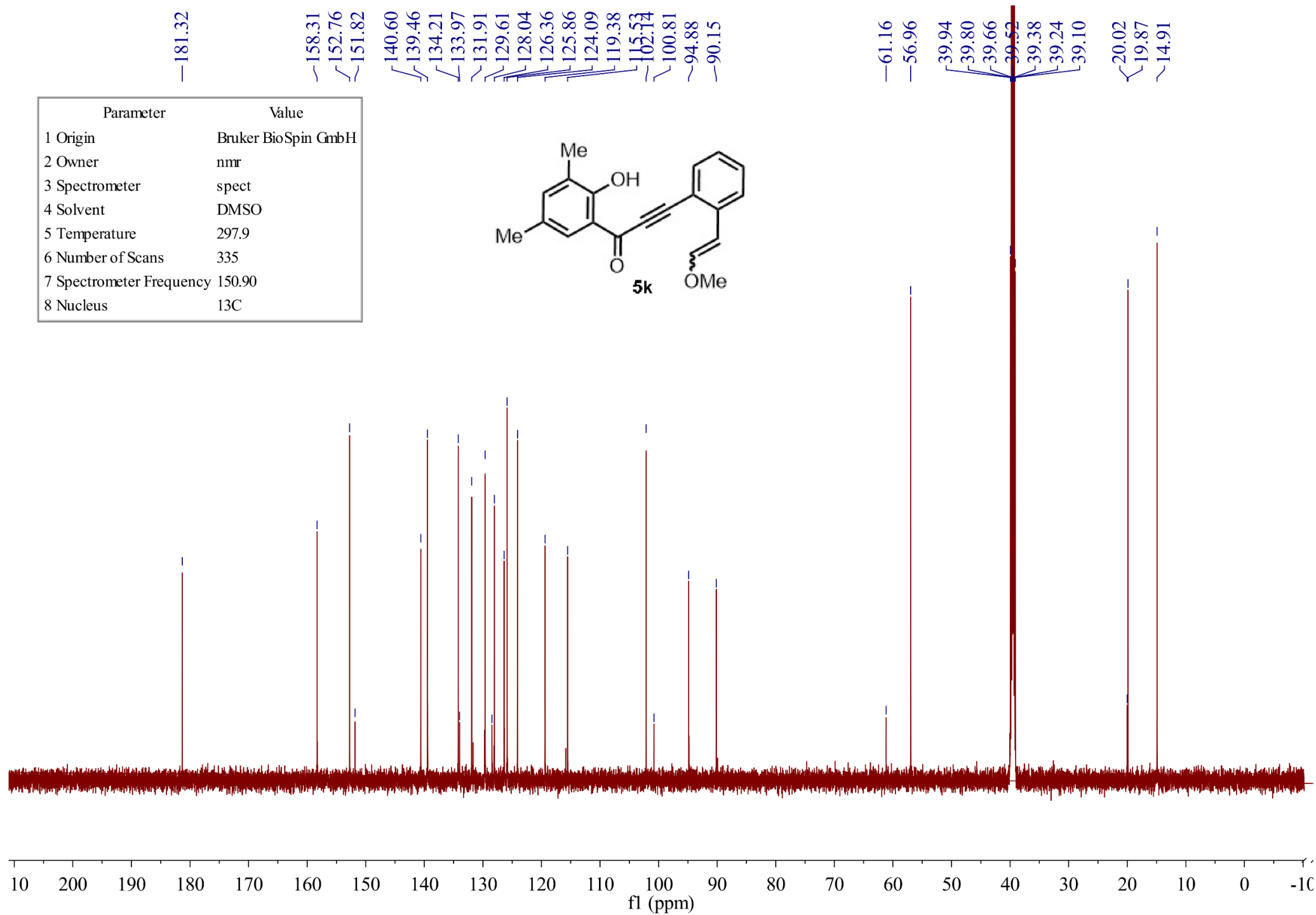
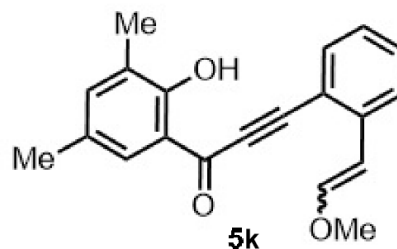
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55.56
55.51

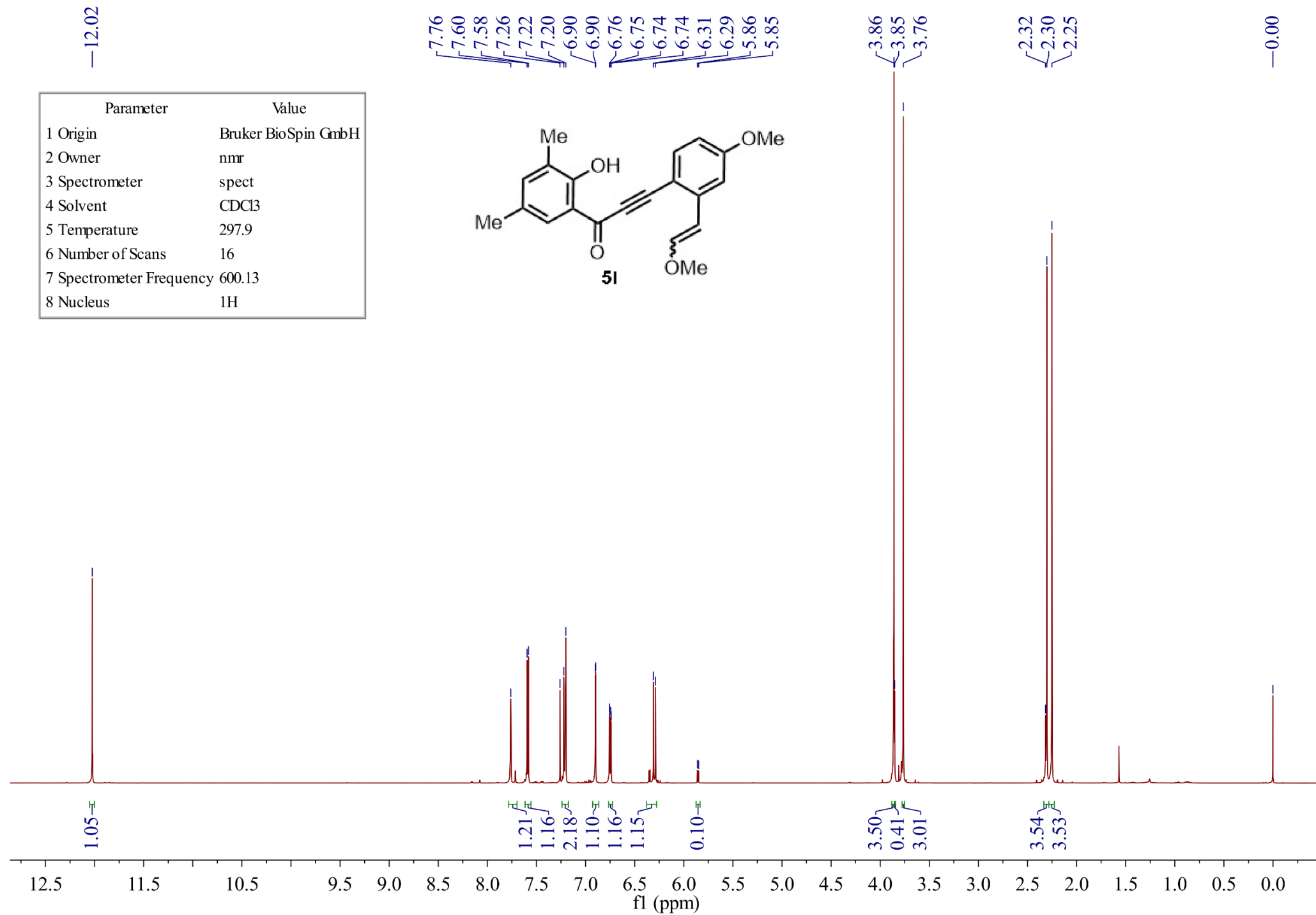
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	368
7 Spectrometer Frequency	150.90
8 Nucleus	13C



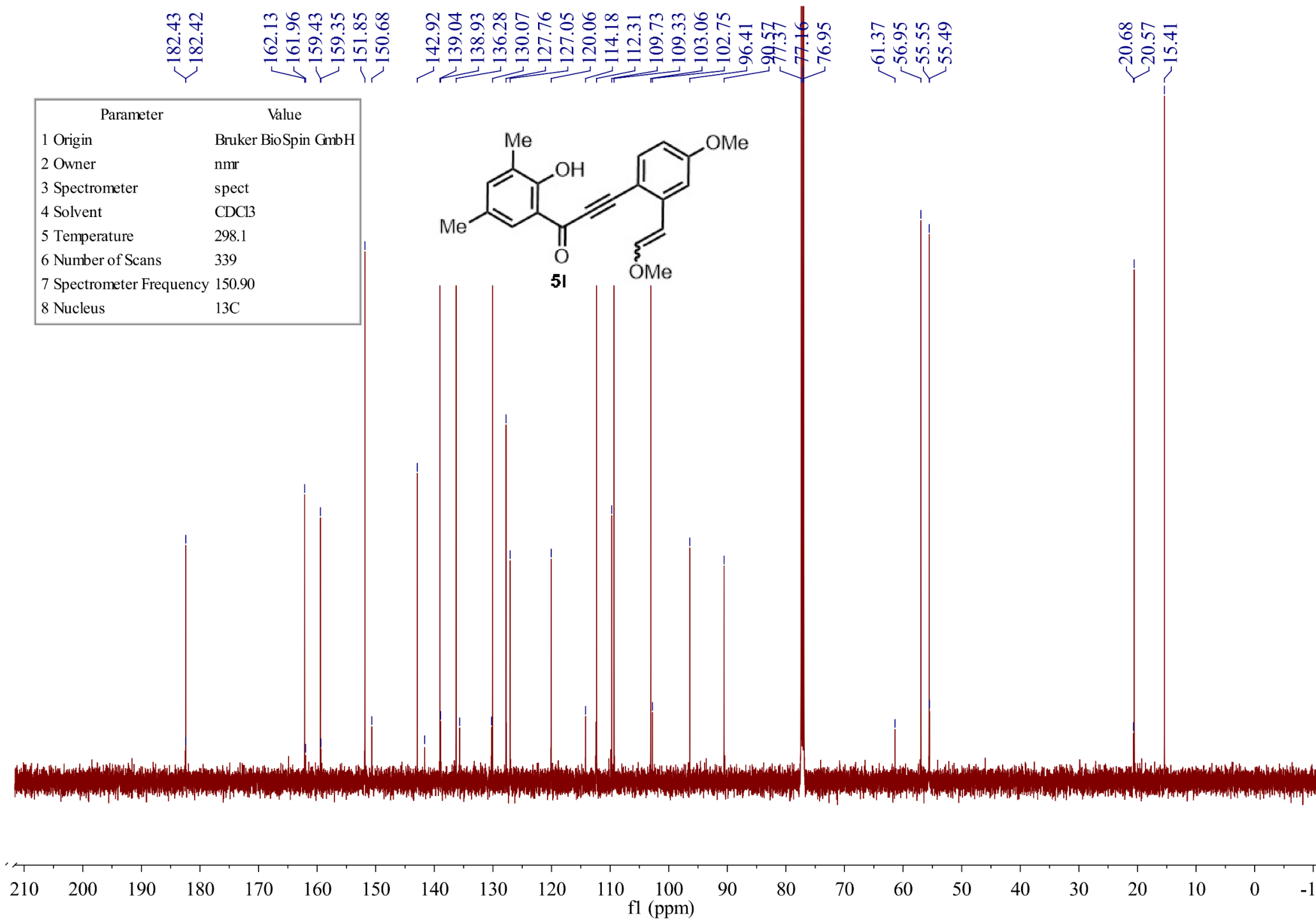
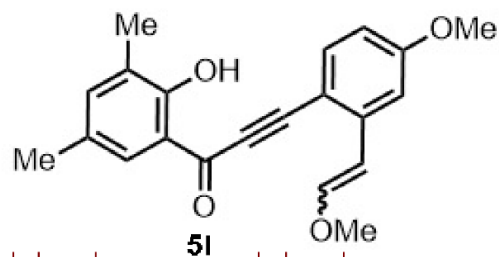


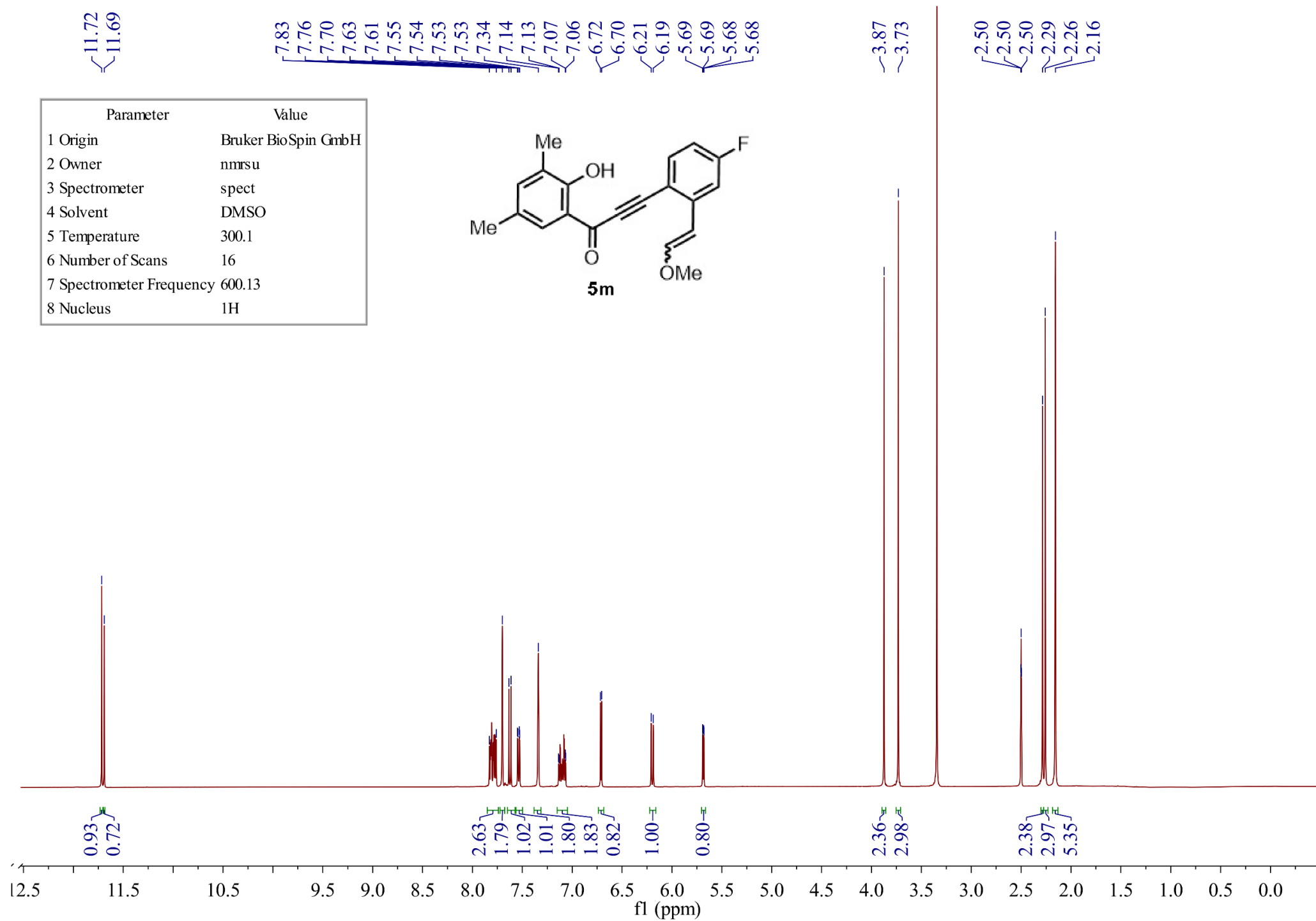
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	335
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





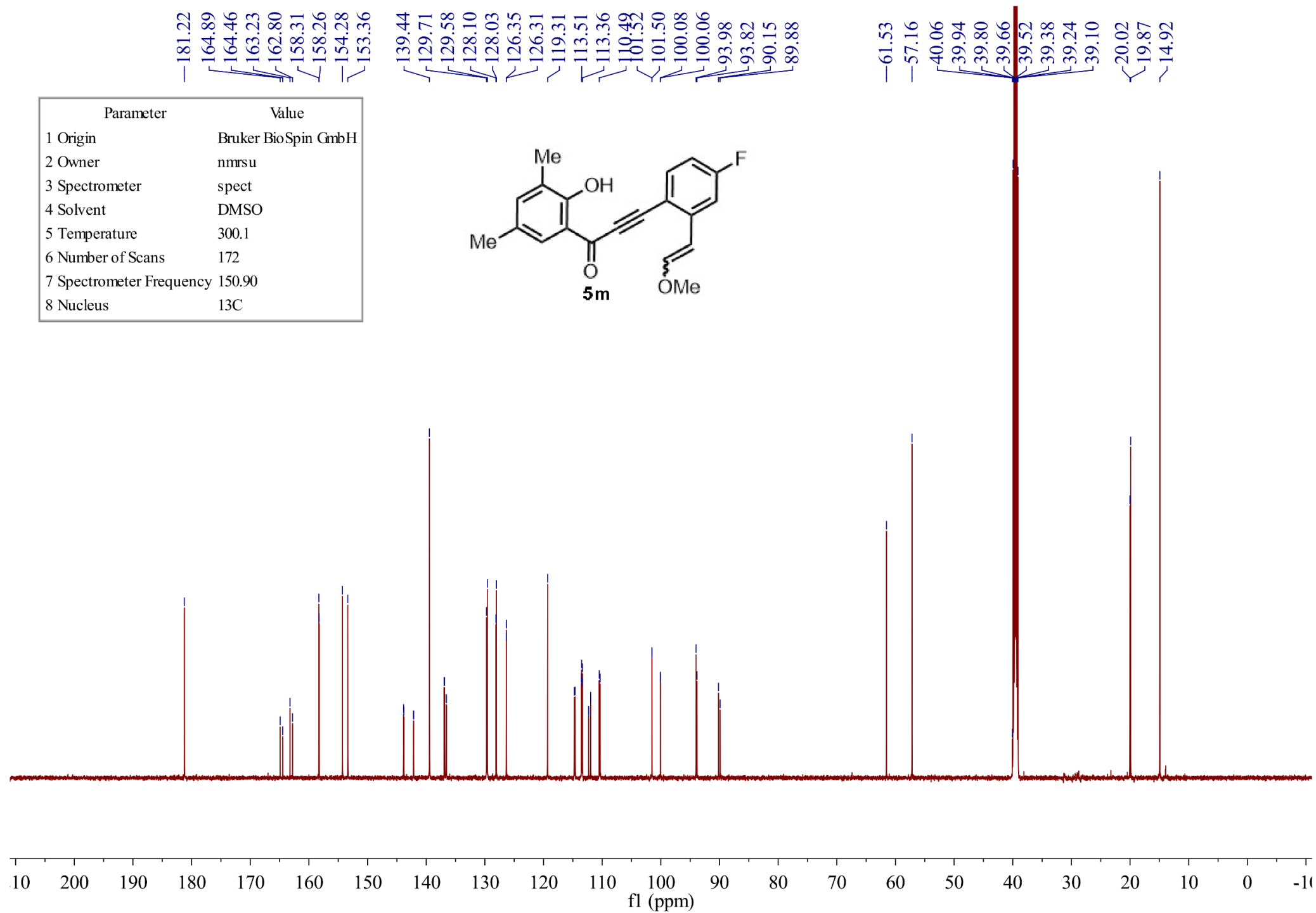
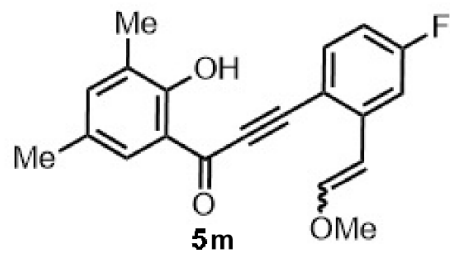
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	339
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

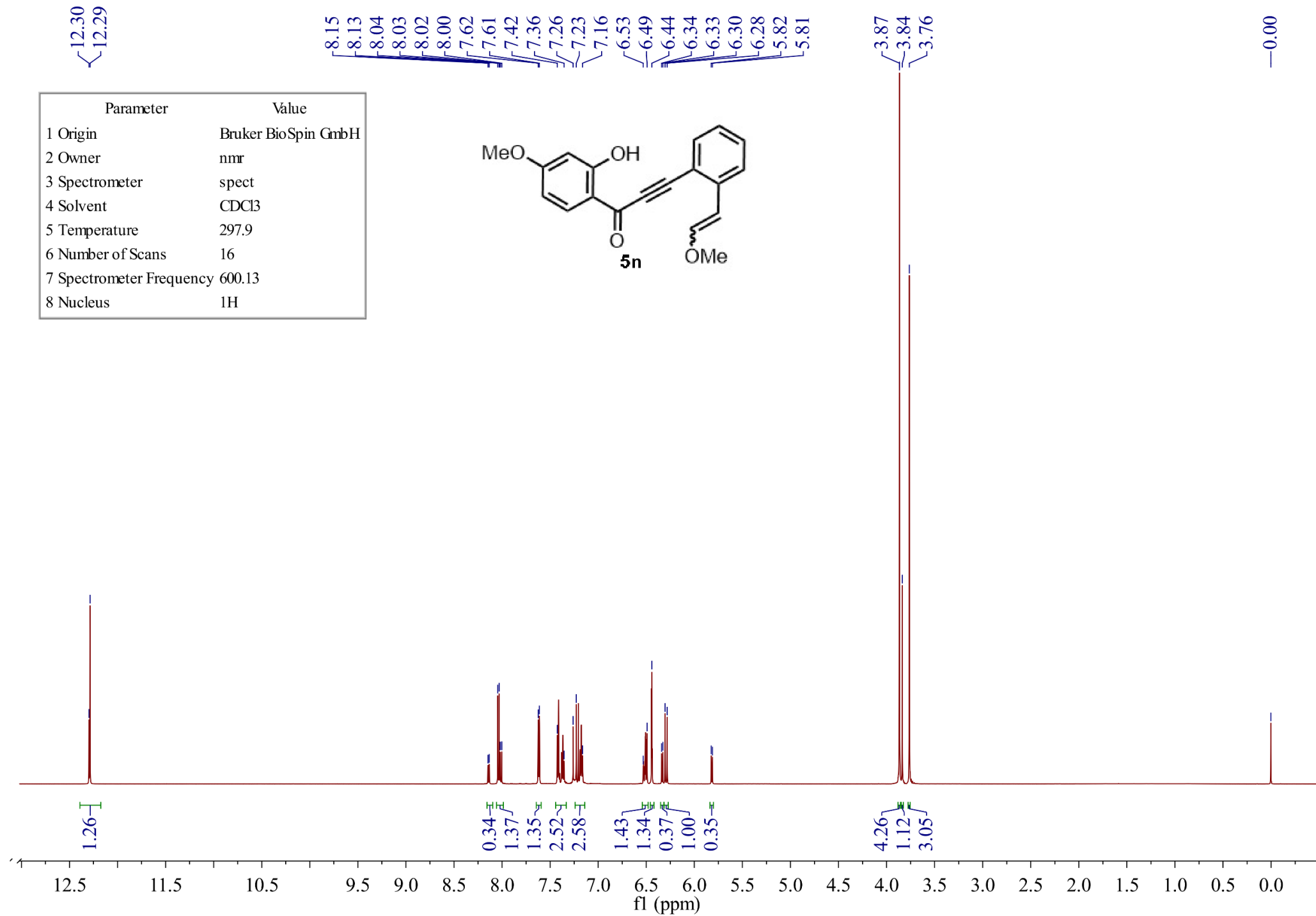




Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	172
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

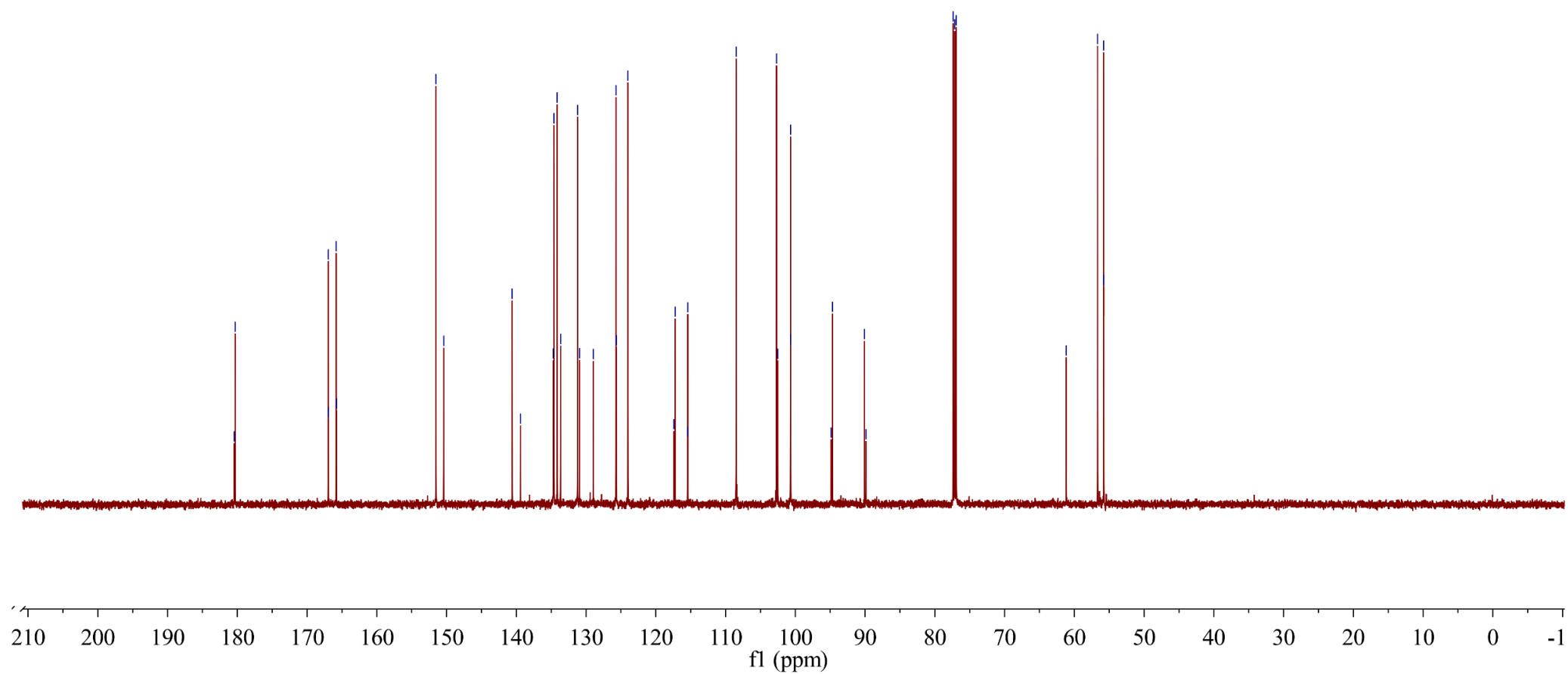
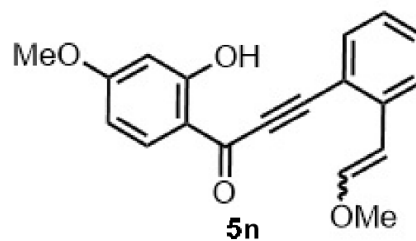


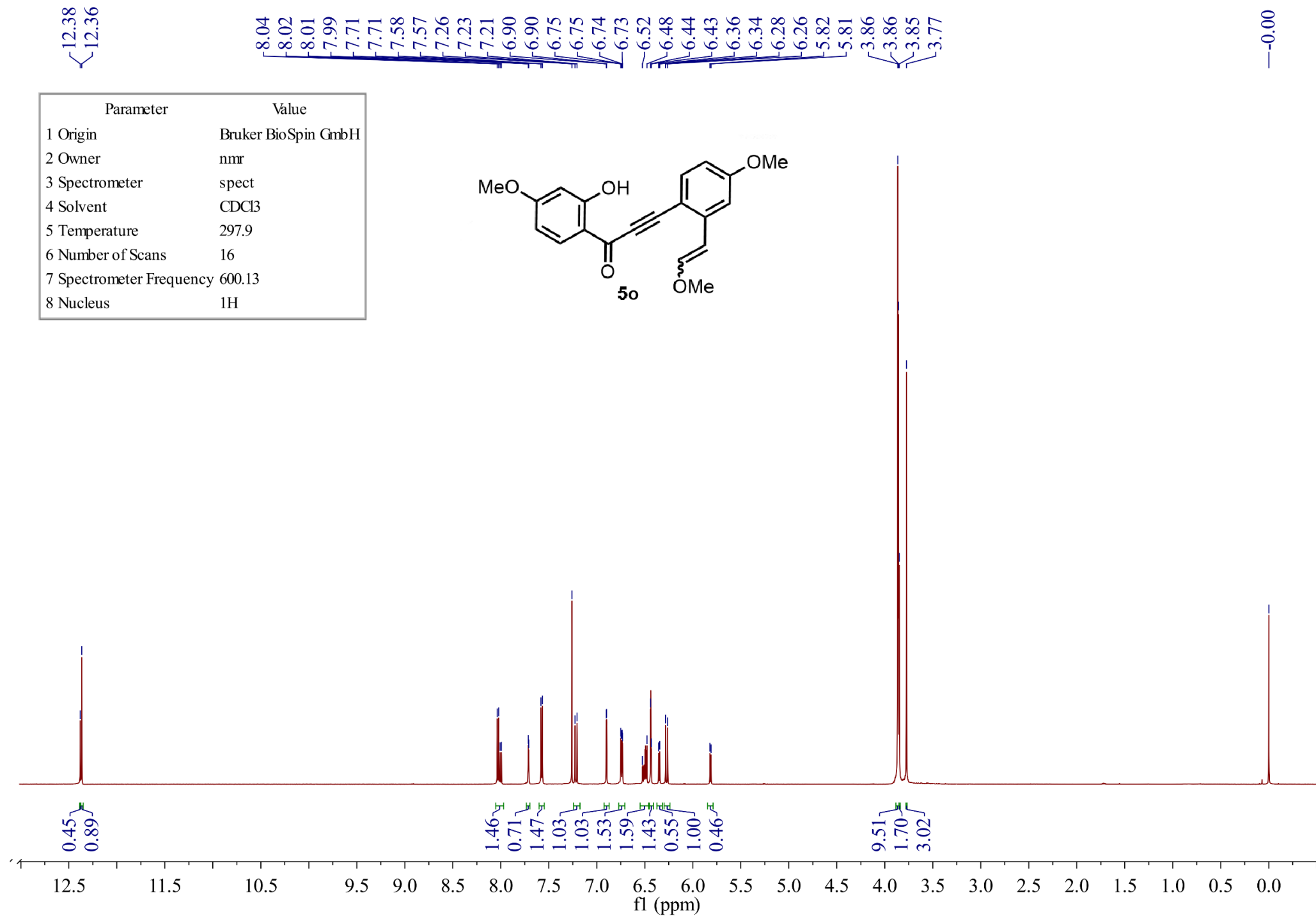


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

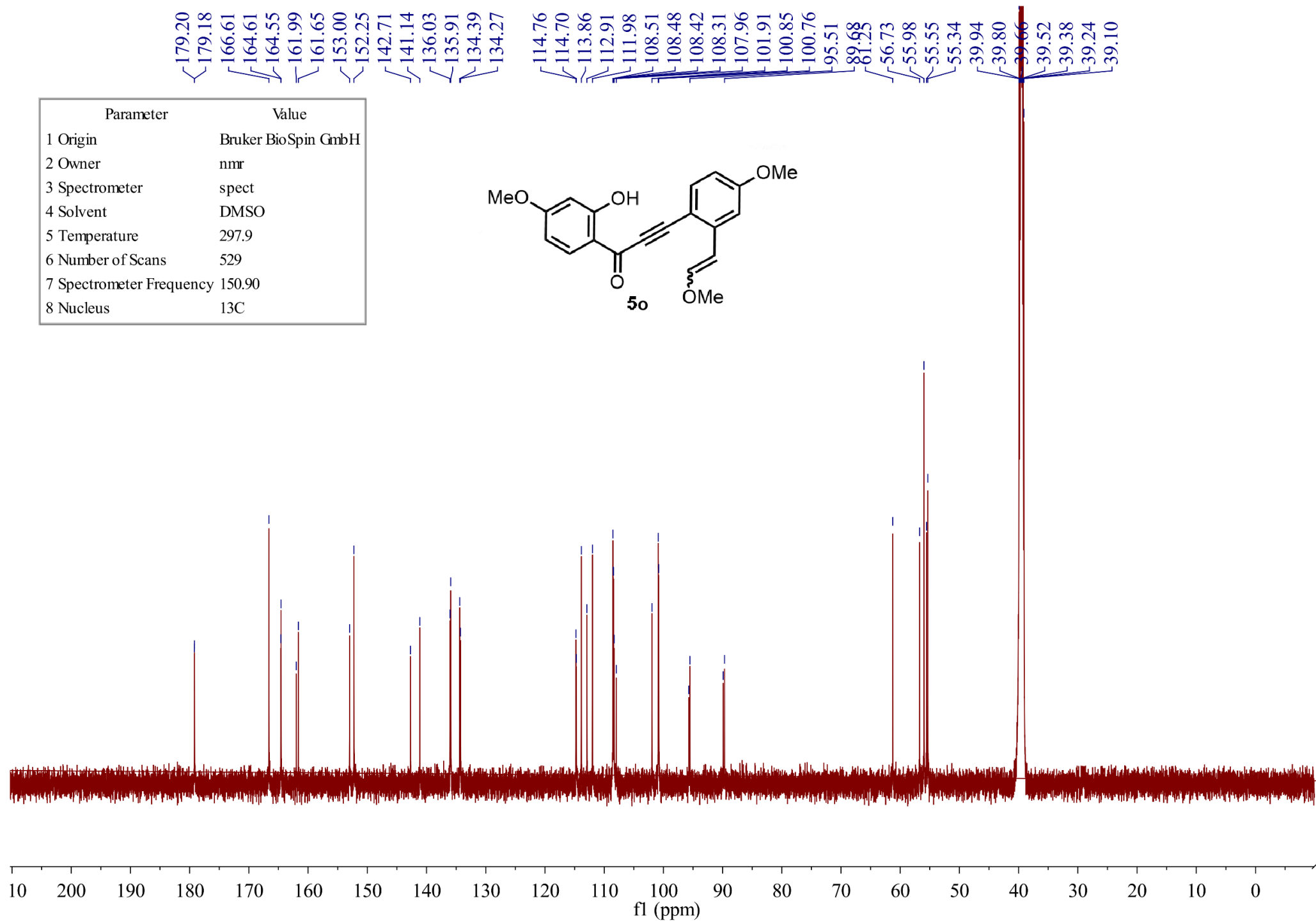
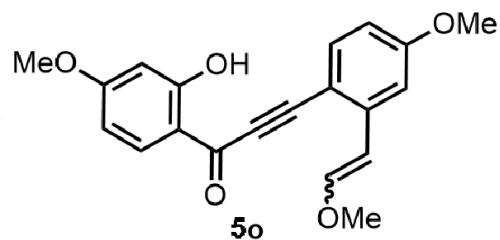
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166.94
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165.77
151.53
150.41
140.60
134.60
134.15
133.66
131.22
125.71
125.66
124.00
117.22
115.42
108.48
102.69
100.70
100.68
94.68
90.98
90.37
77.16
76.95
61.16
56.66
55.80
55.79

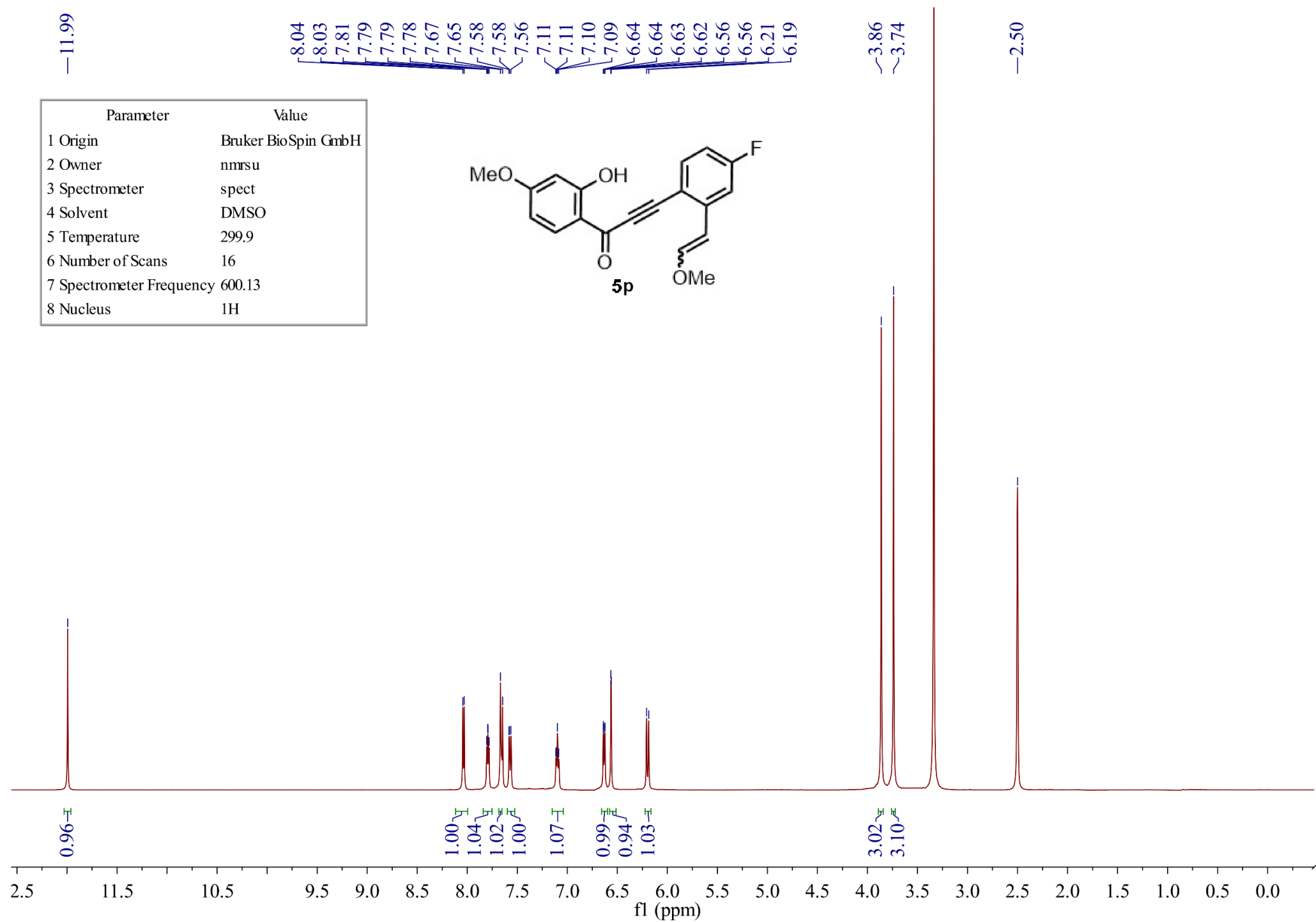
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	210
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



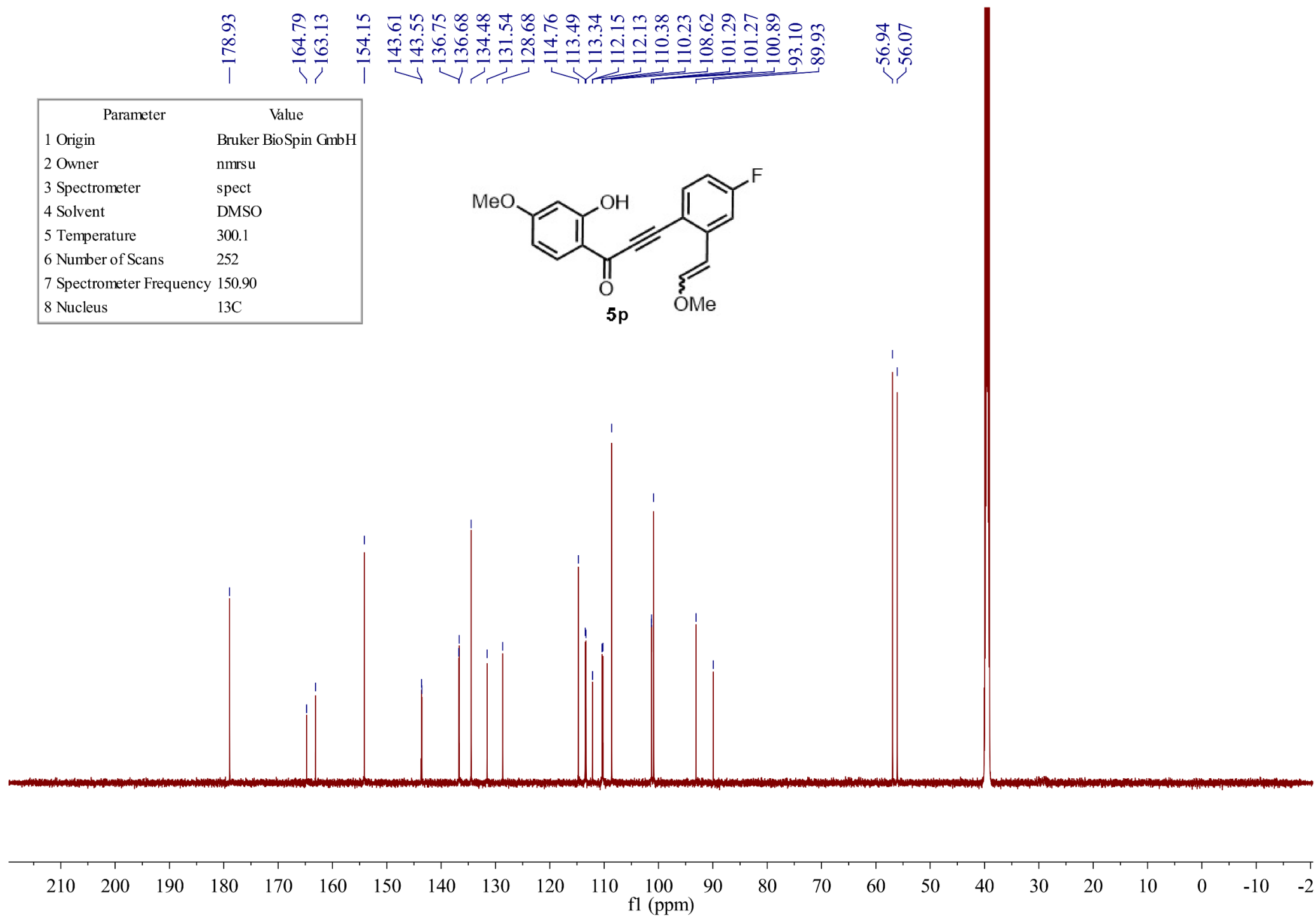
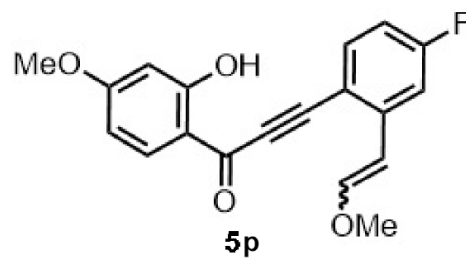


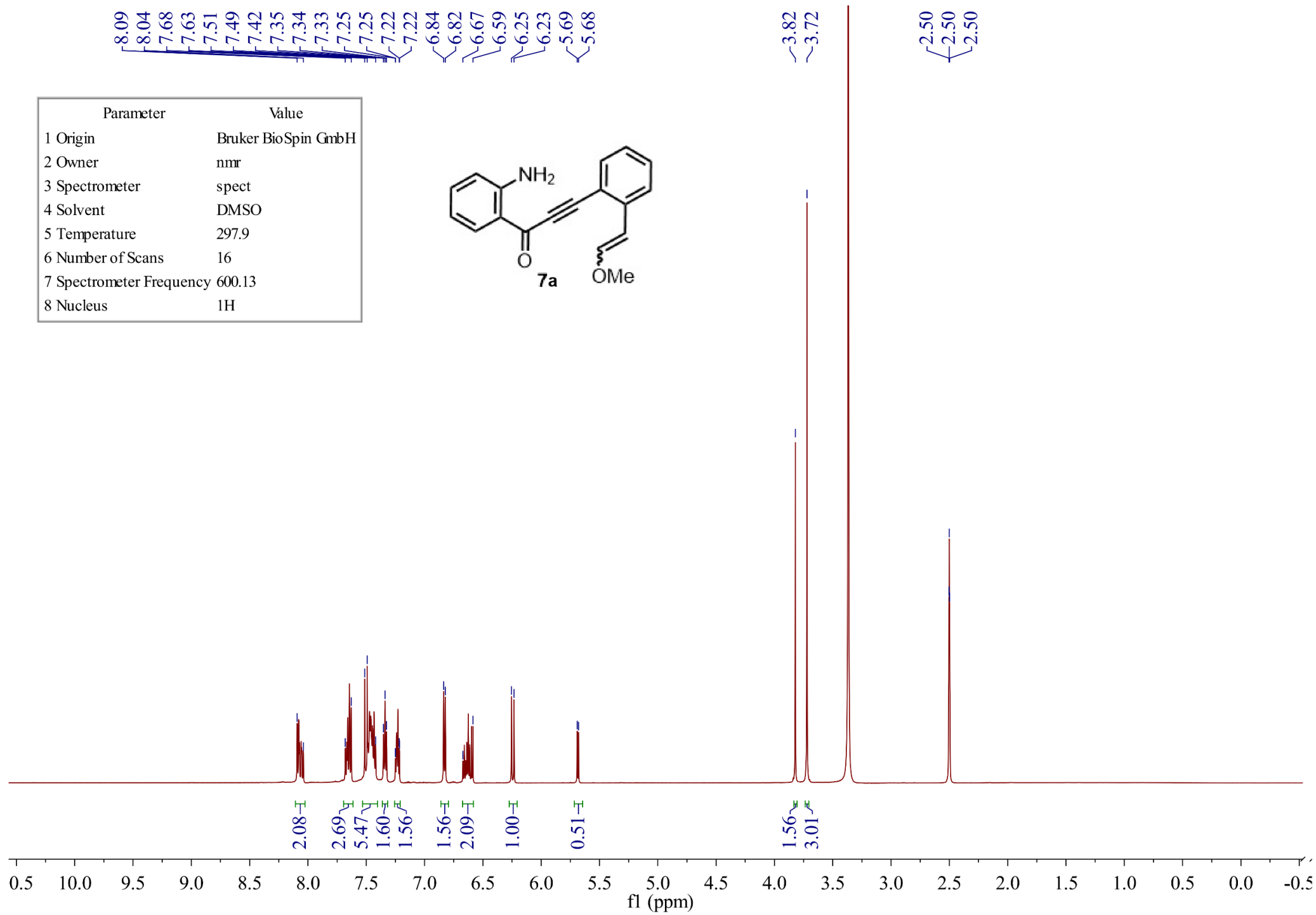
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	529
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



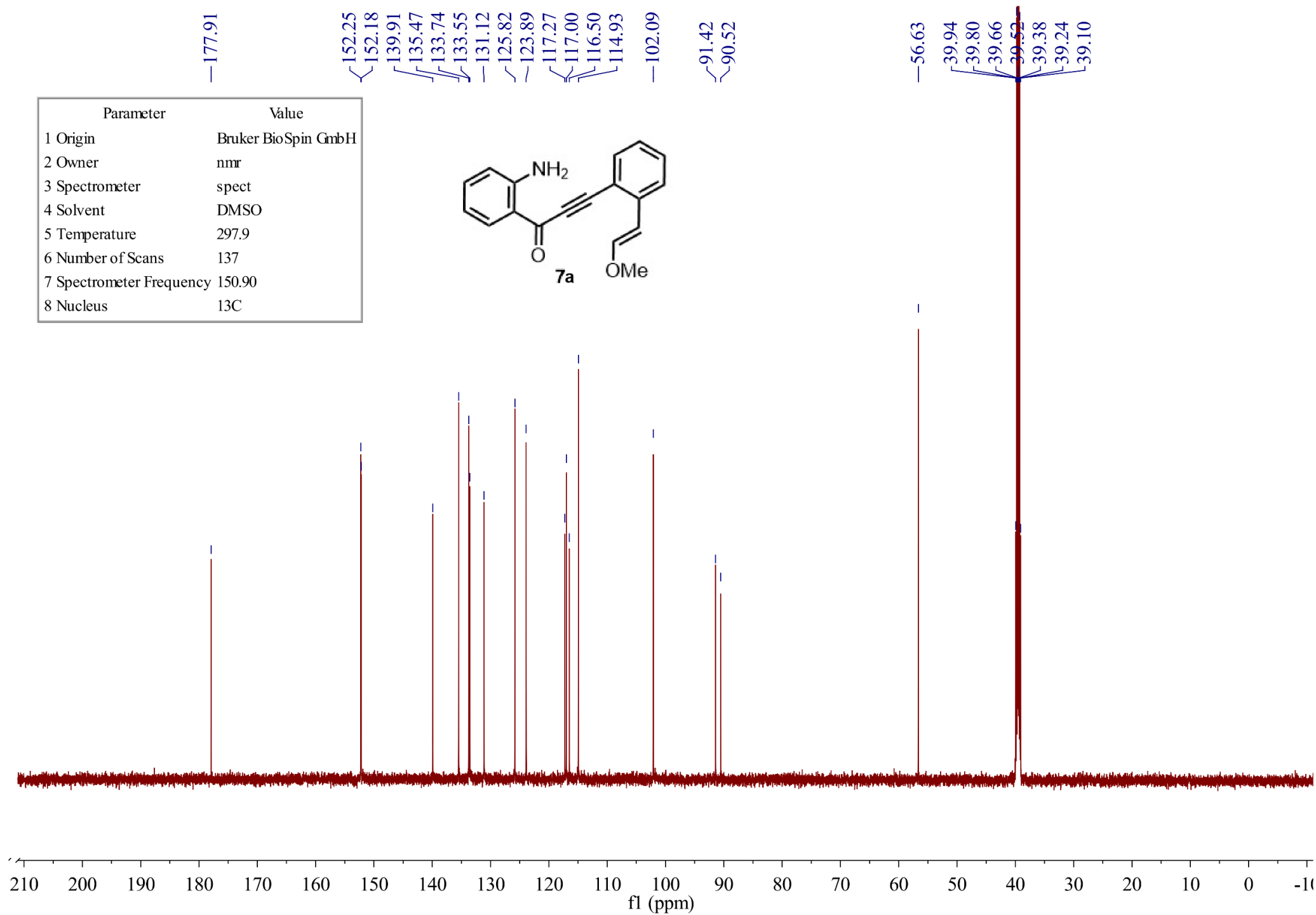
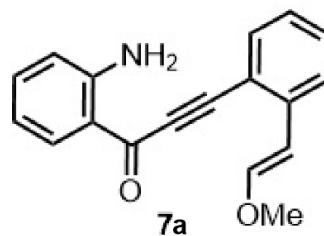


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	252
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	137
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

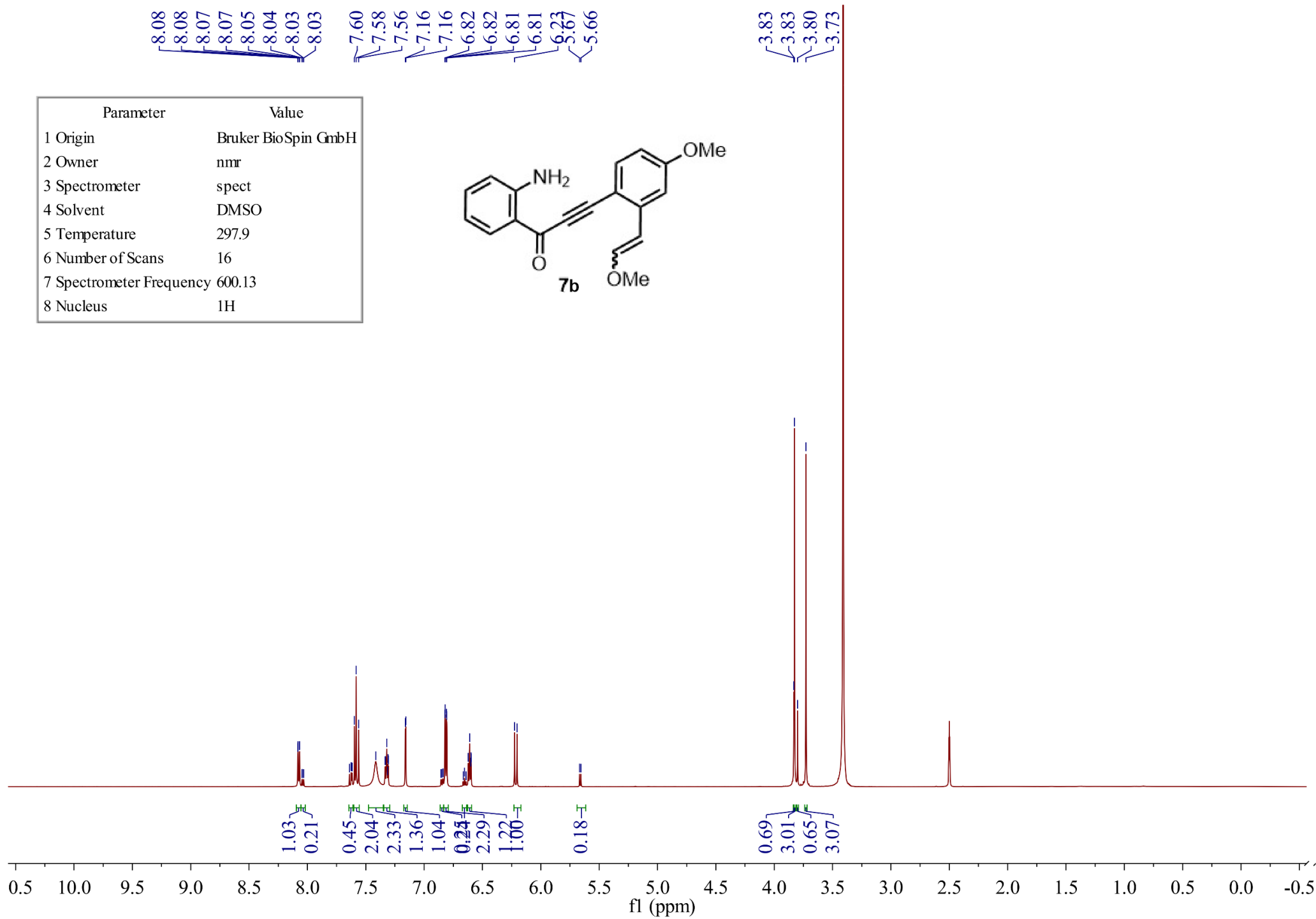
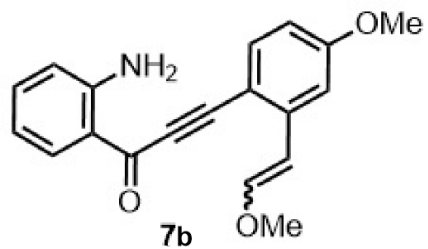


8.08
8.08
8.07
8.07
8.05
8.04
8.03
8.03

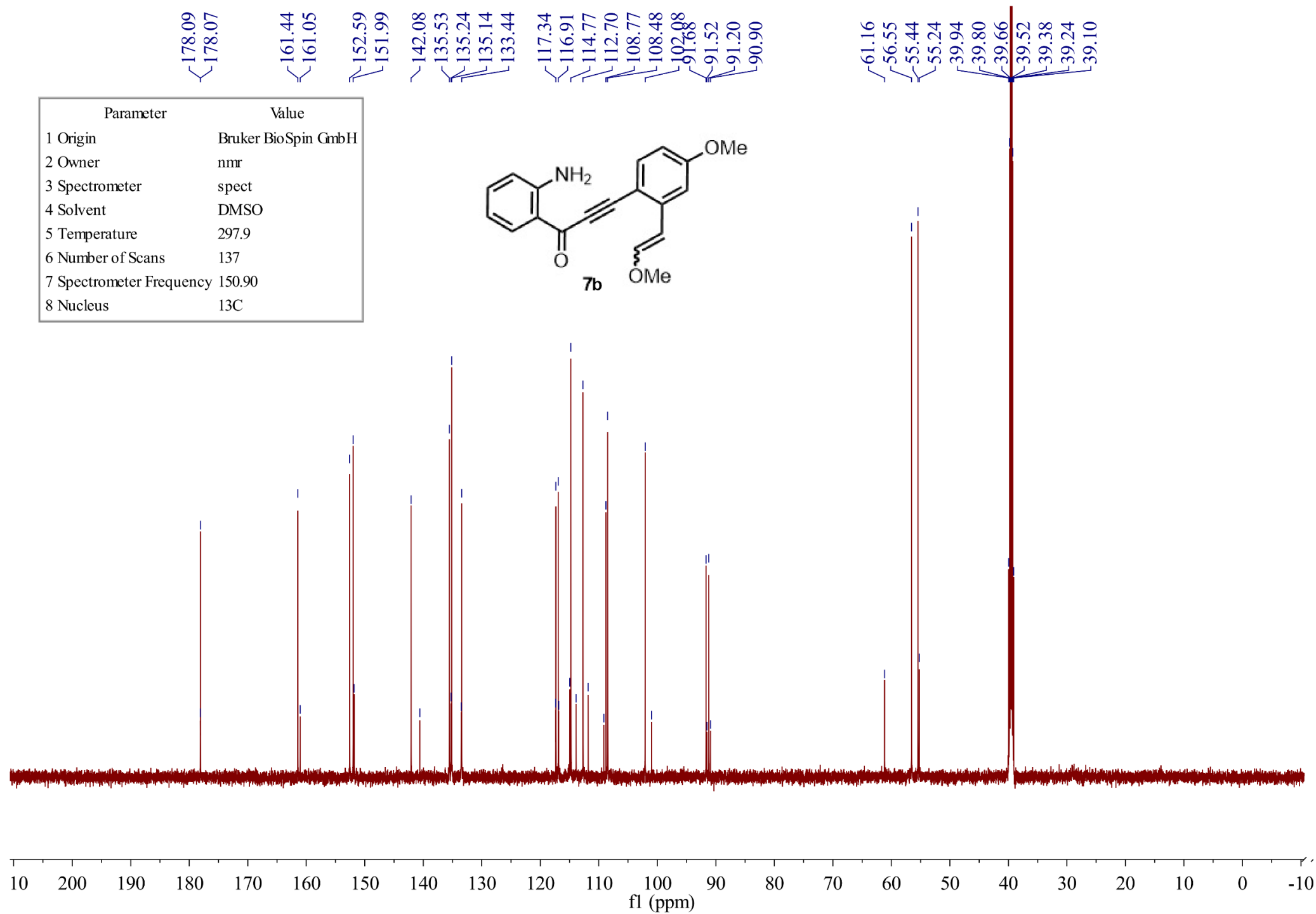
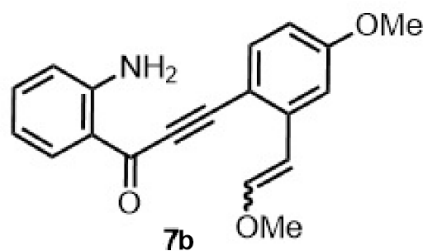
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7.58
7.56
7.16
7.16
6.82
6.82
6.81
6.81
5.67
5.66

3.83
3.83
3.80
3.73

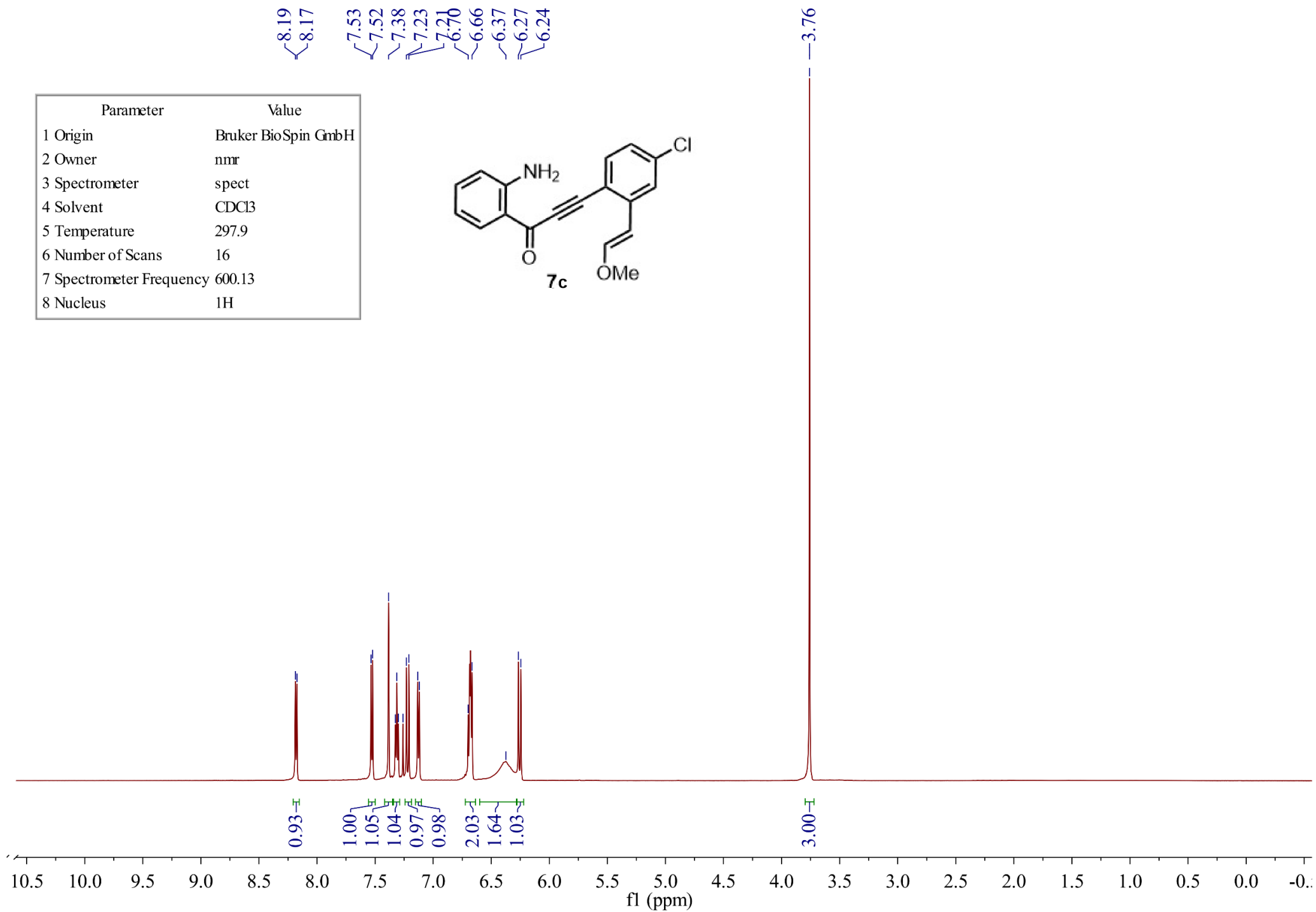
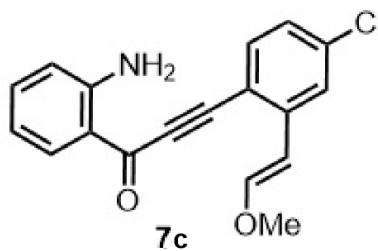
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



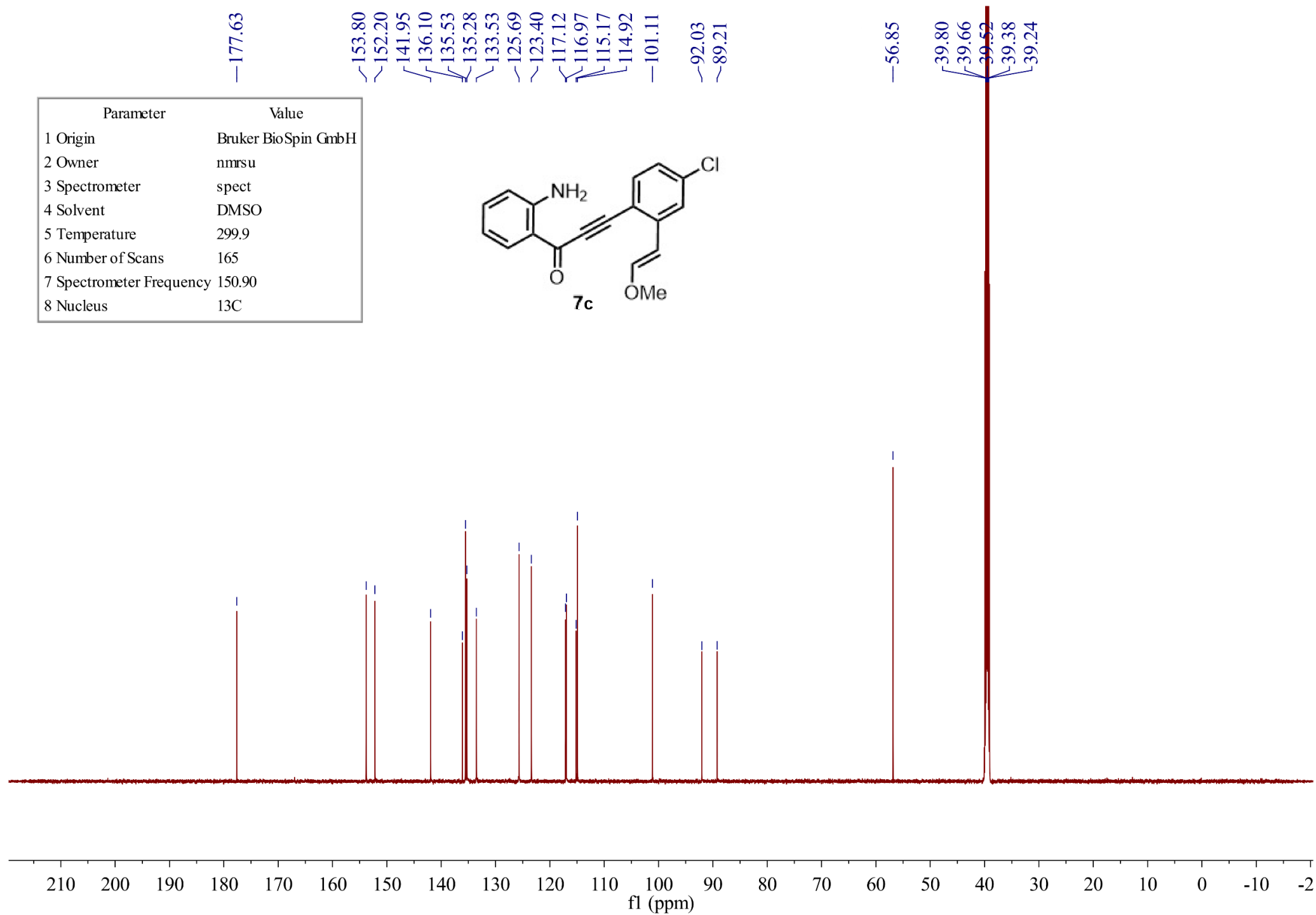
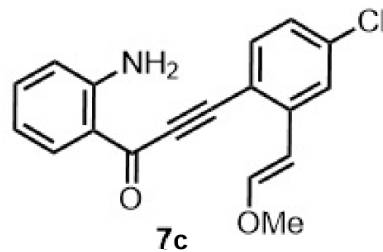
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	137
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

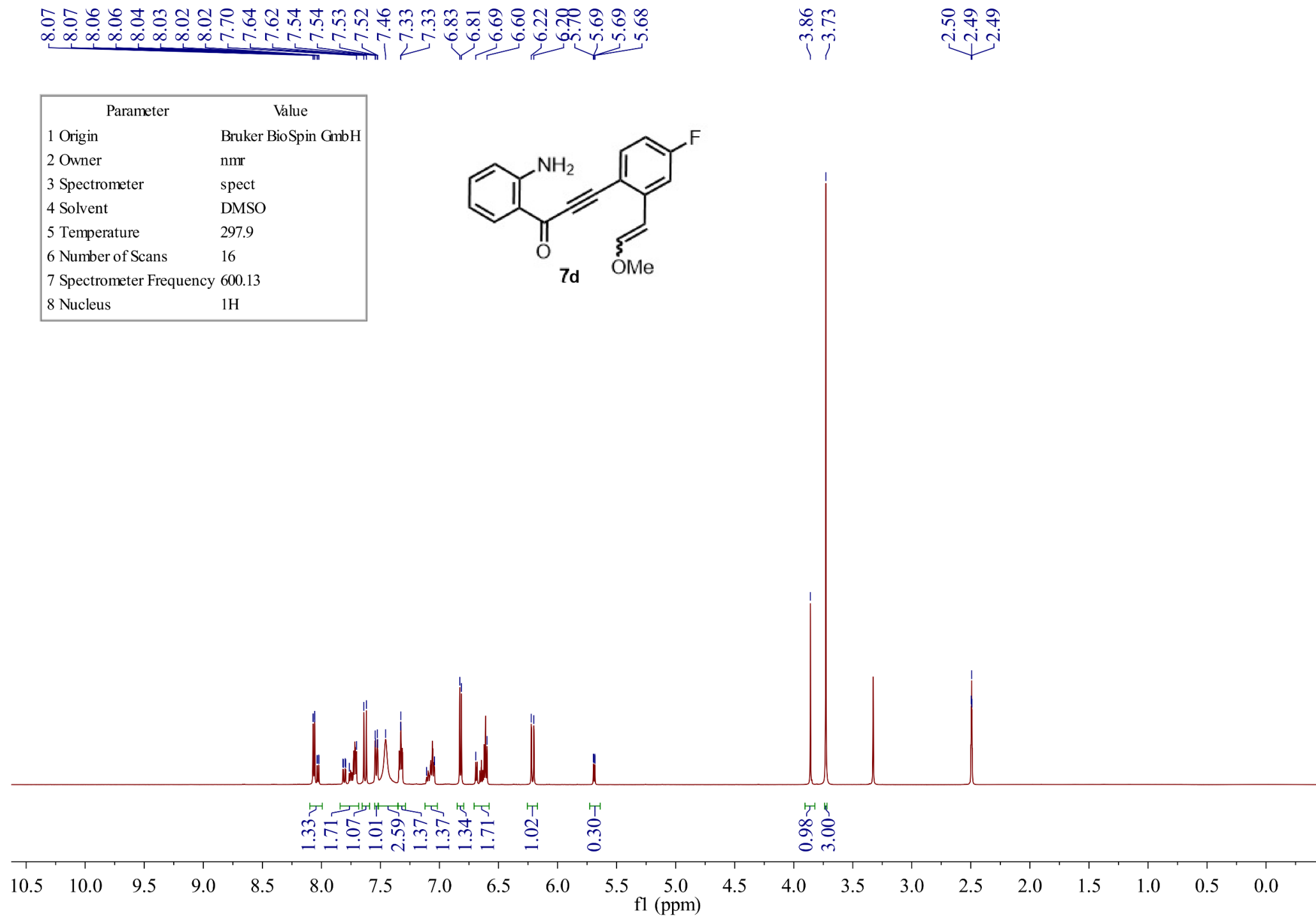


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



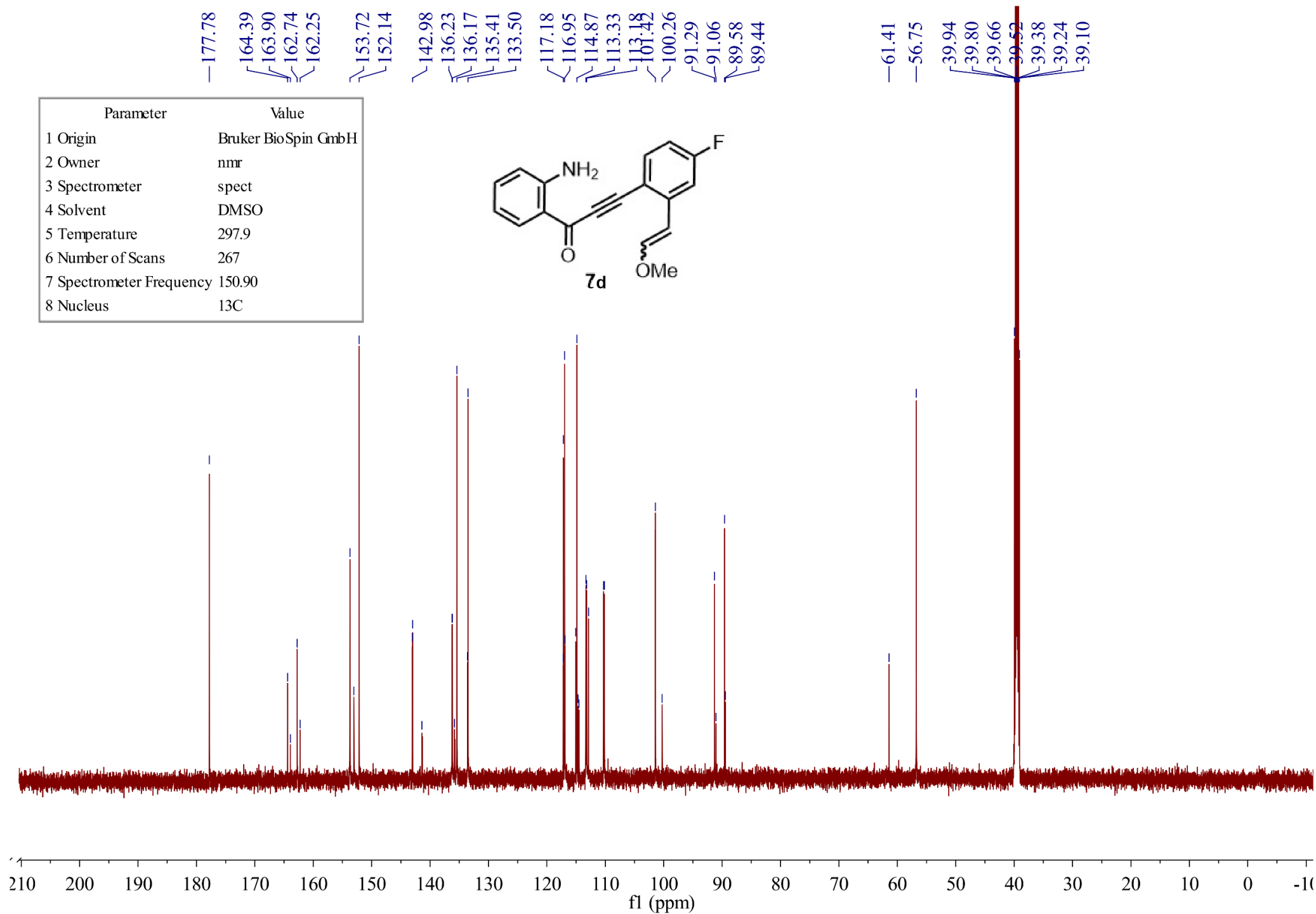
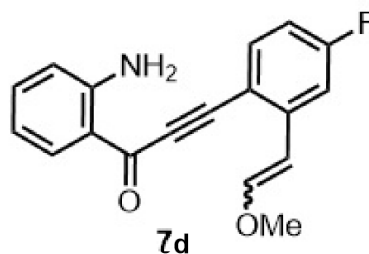
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	165
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	267
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



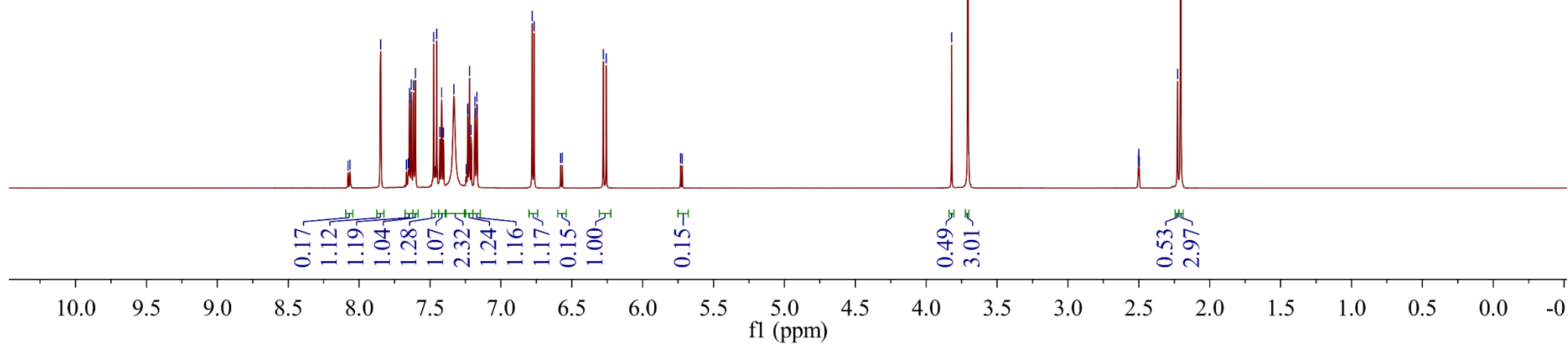
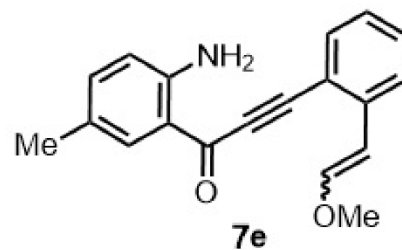
7.85
7.64
7.64
7.63
7.62
7.60
7.47
7.45
7.42
7.33
7.23
7.23
7.22
7.21
7.18
7.18
7.17
7.17

6.78
6.77
6.57
6.28
5.75
5.72

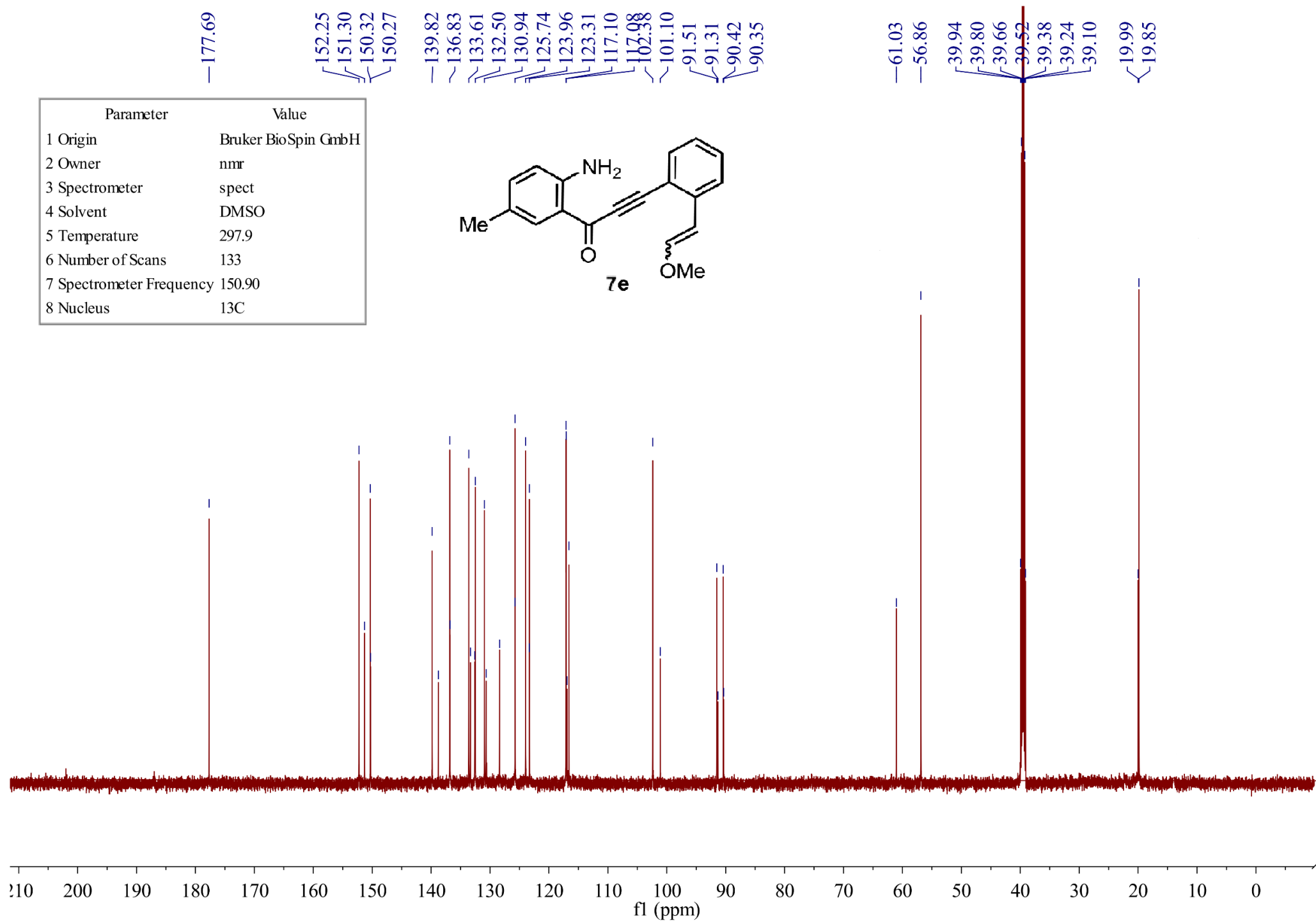
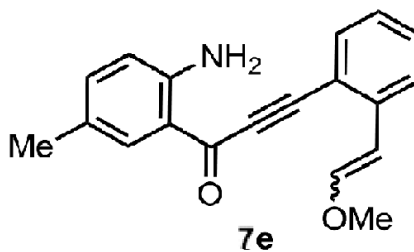
3.82
3.71

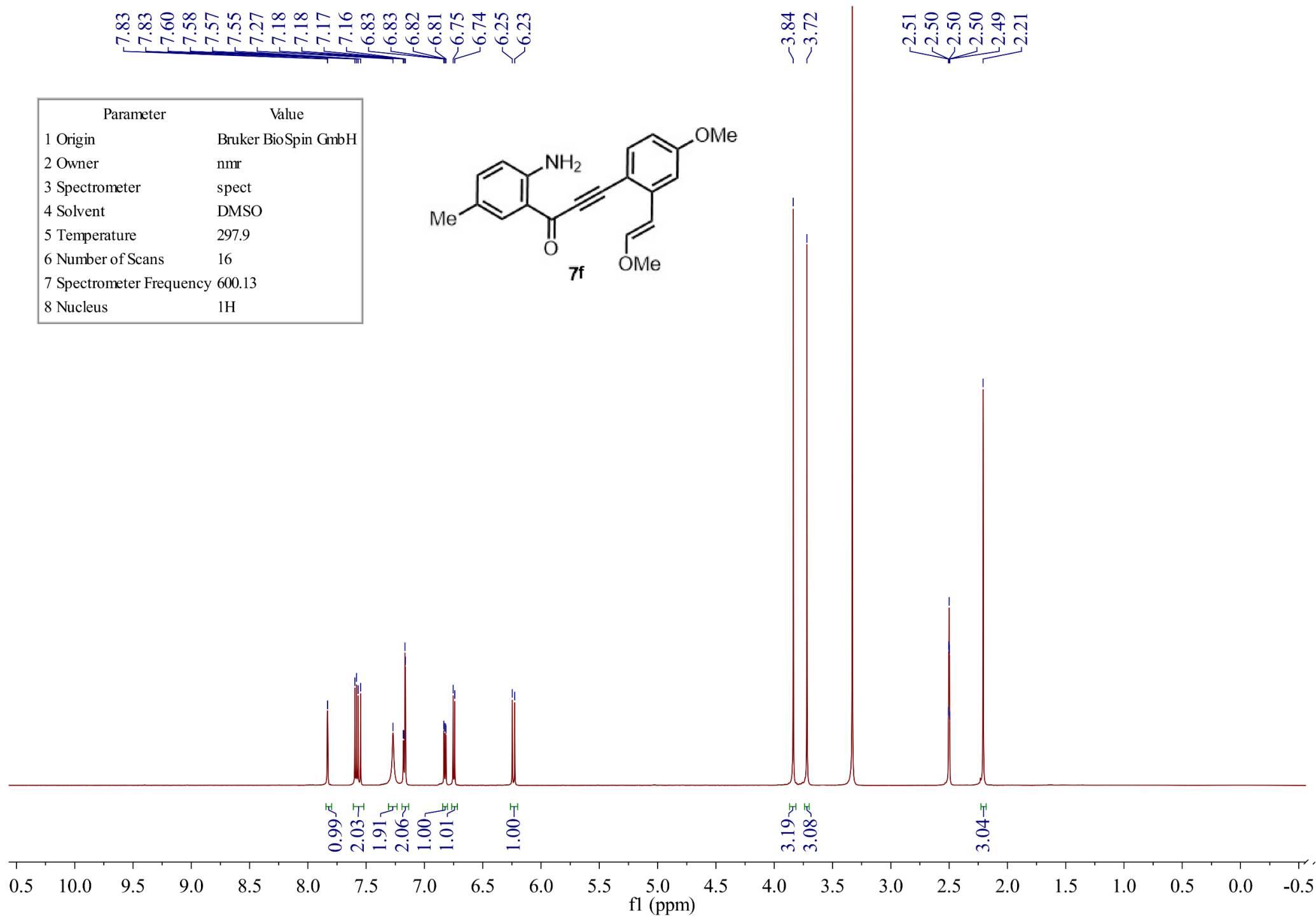
2.50
2.50
2.50
2.23
2.21

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



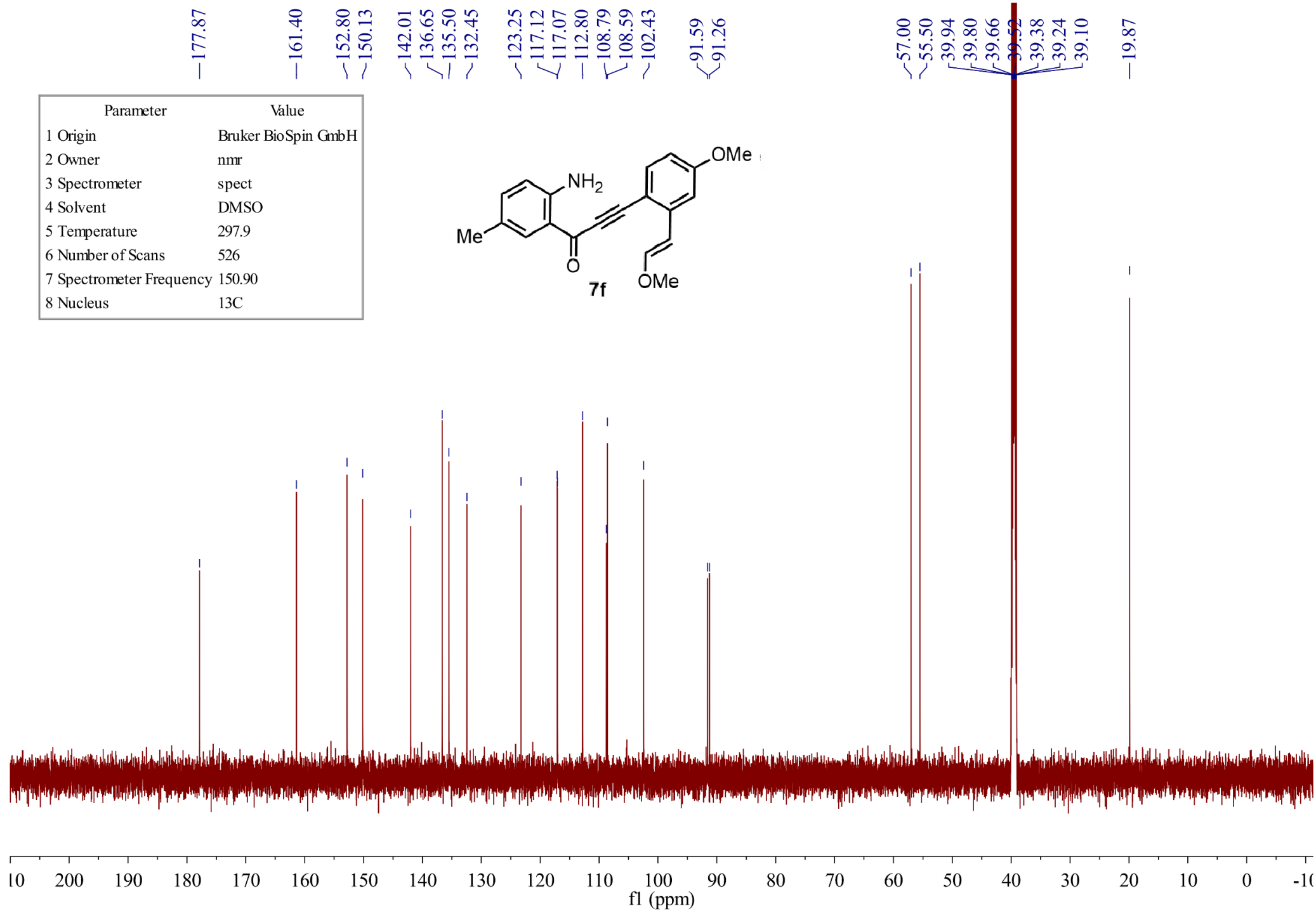
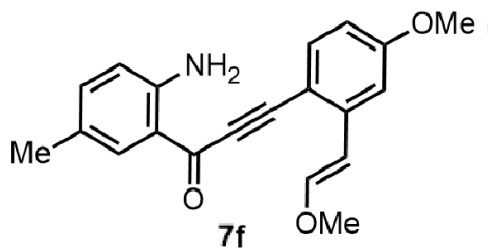
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	133
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

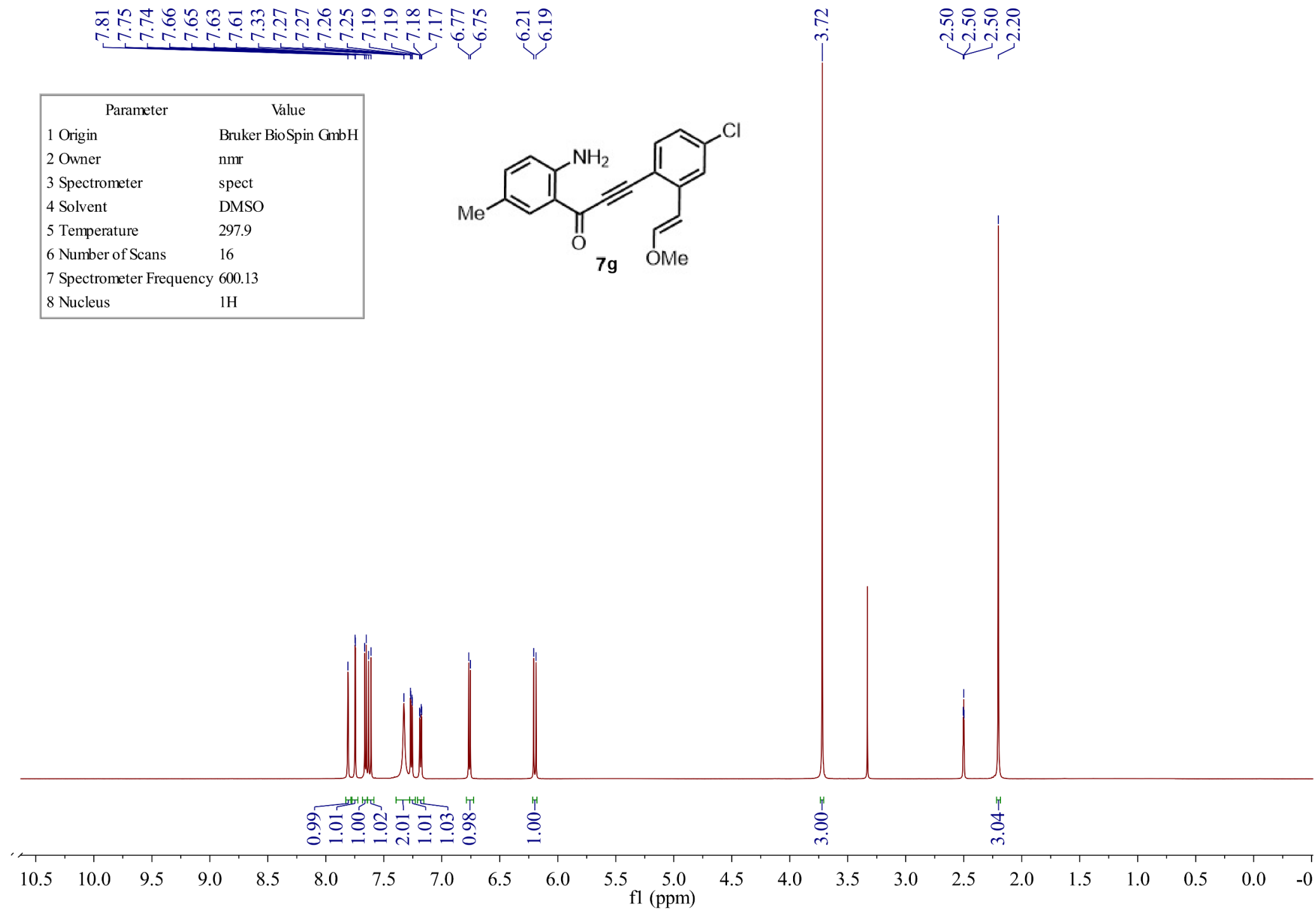




Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

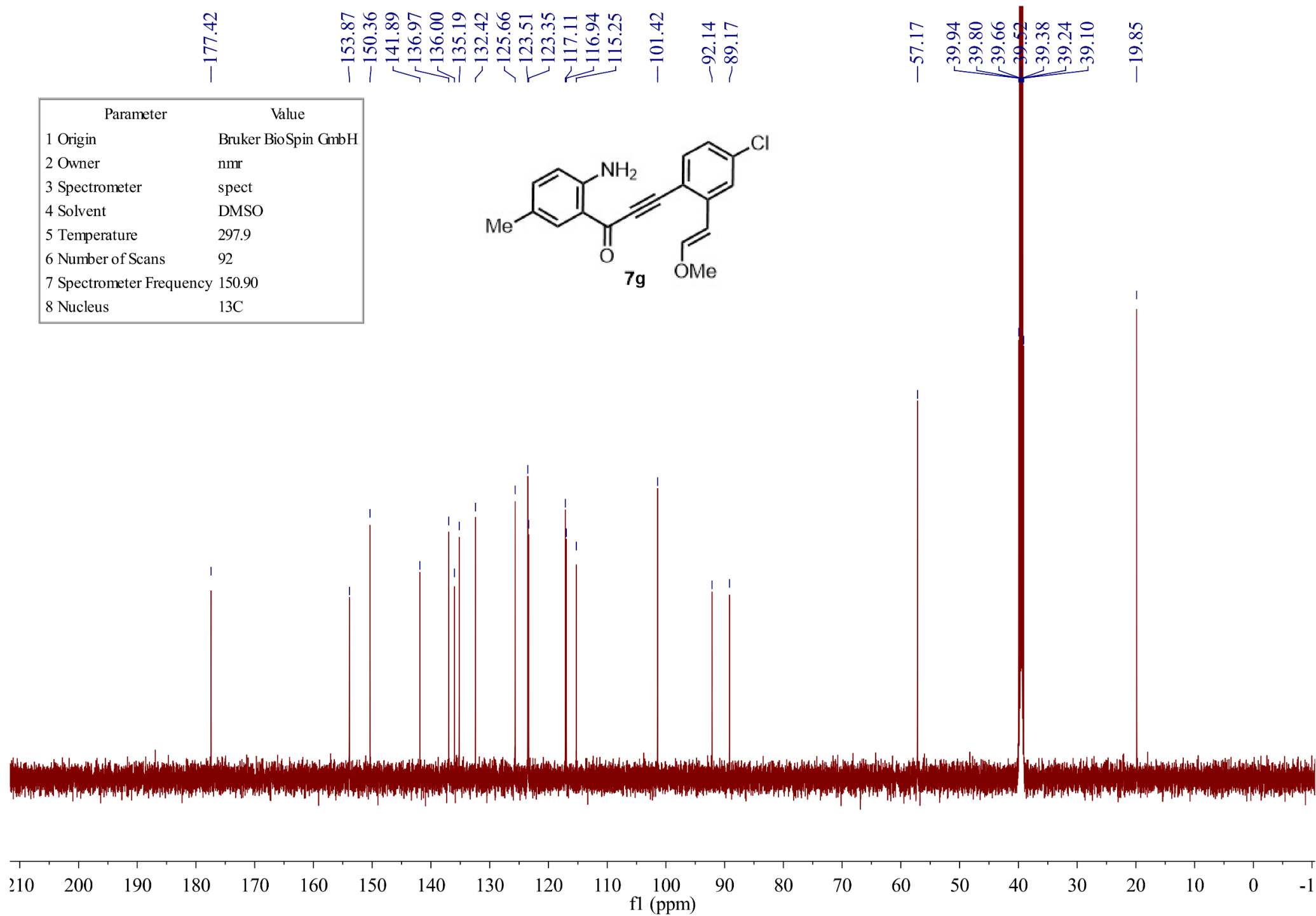
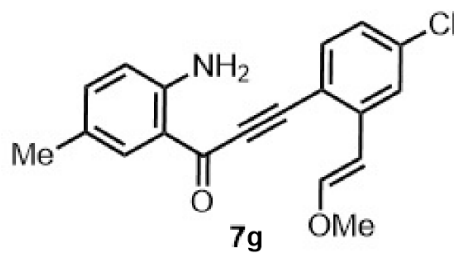
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	526
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	92
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

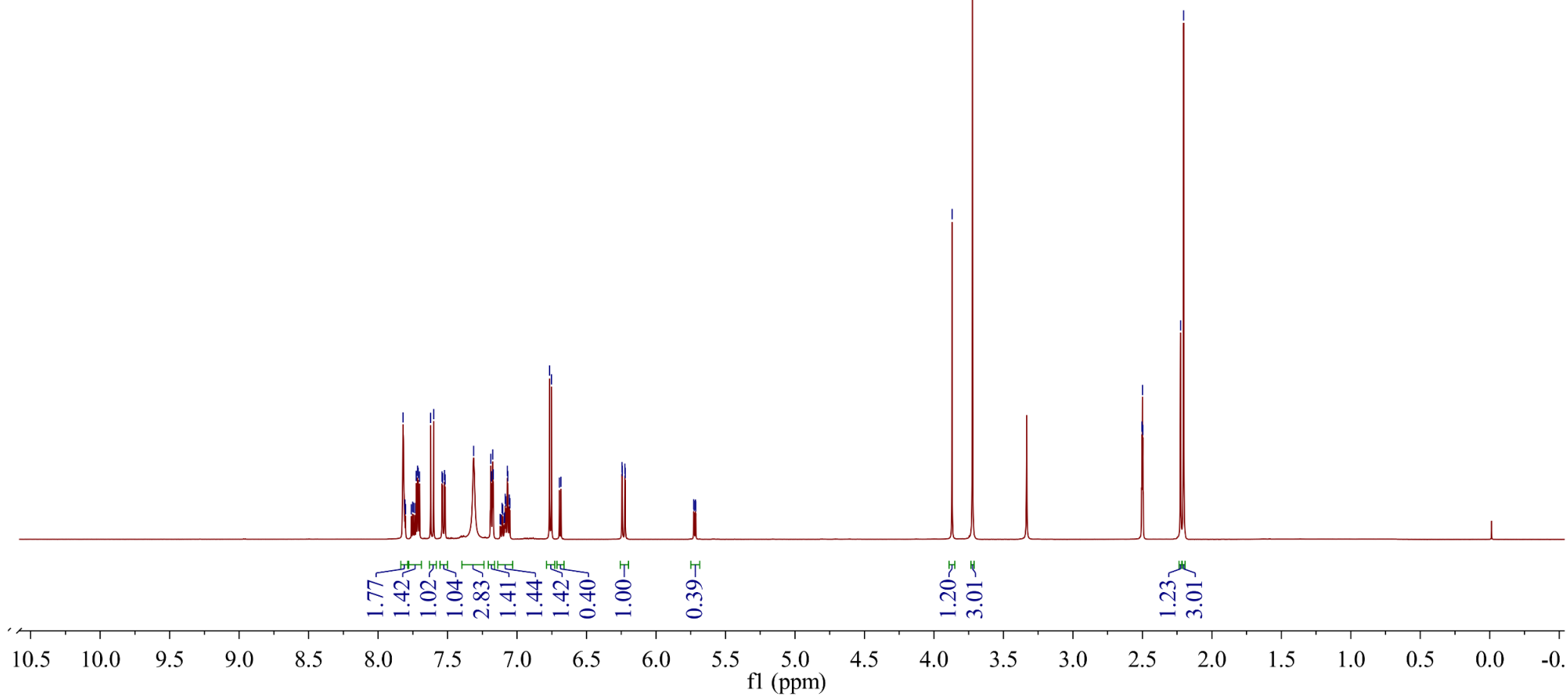
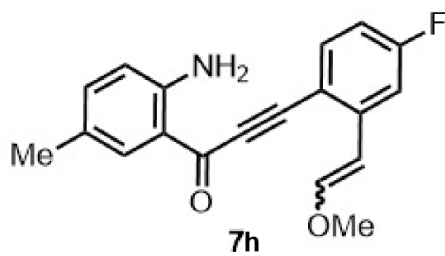


7.82
7.73
7.72
7.71
7.70
7.62
7.60
7.54
7.54
7.52
7.52
7.31
7.19
7.19
7.17
7.17
7.07
7.07
6.77
6.75
6.68
6.24
6.22
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5.73
5.72
5.71

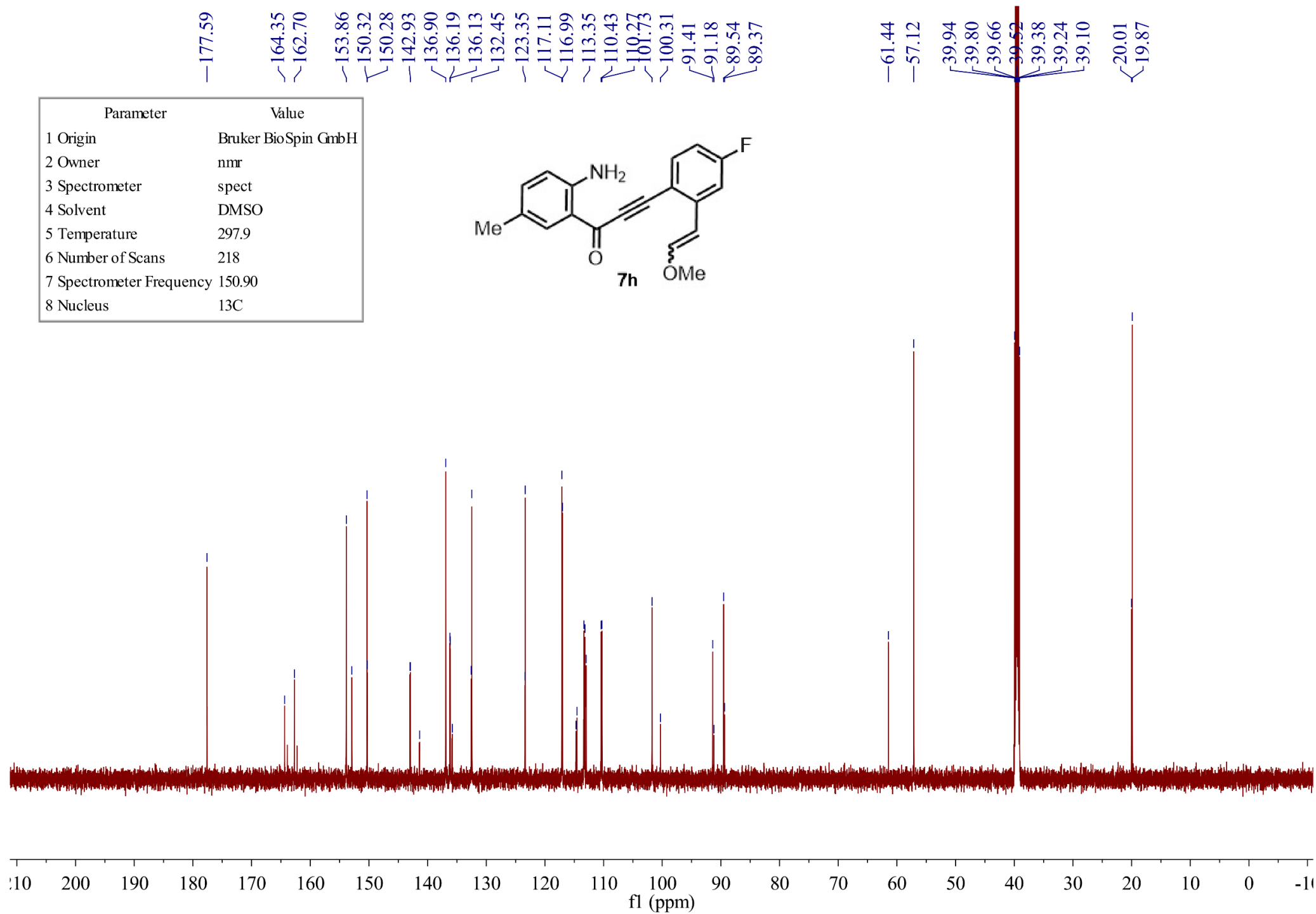
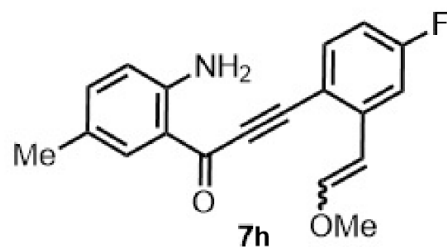
3.87
3.72

2.50
2.50
2.50
2.23
2.20

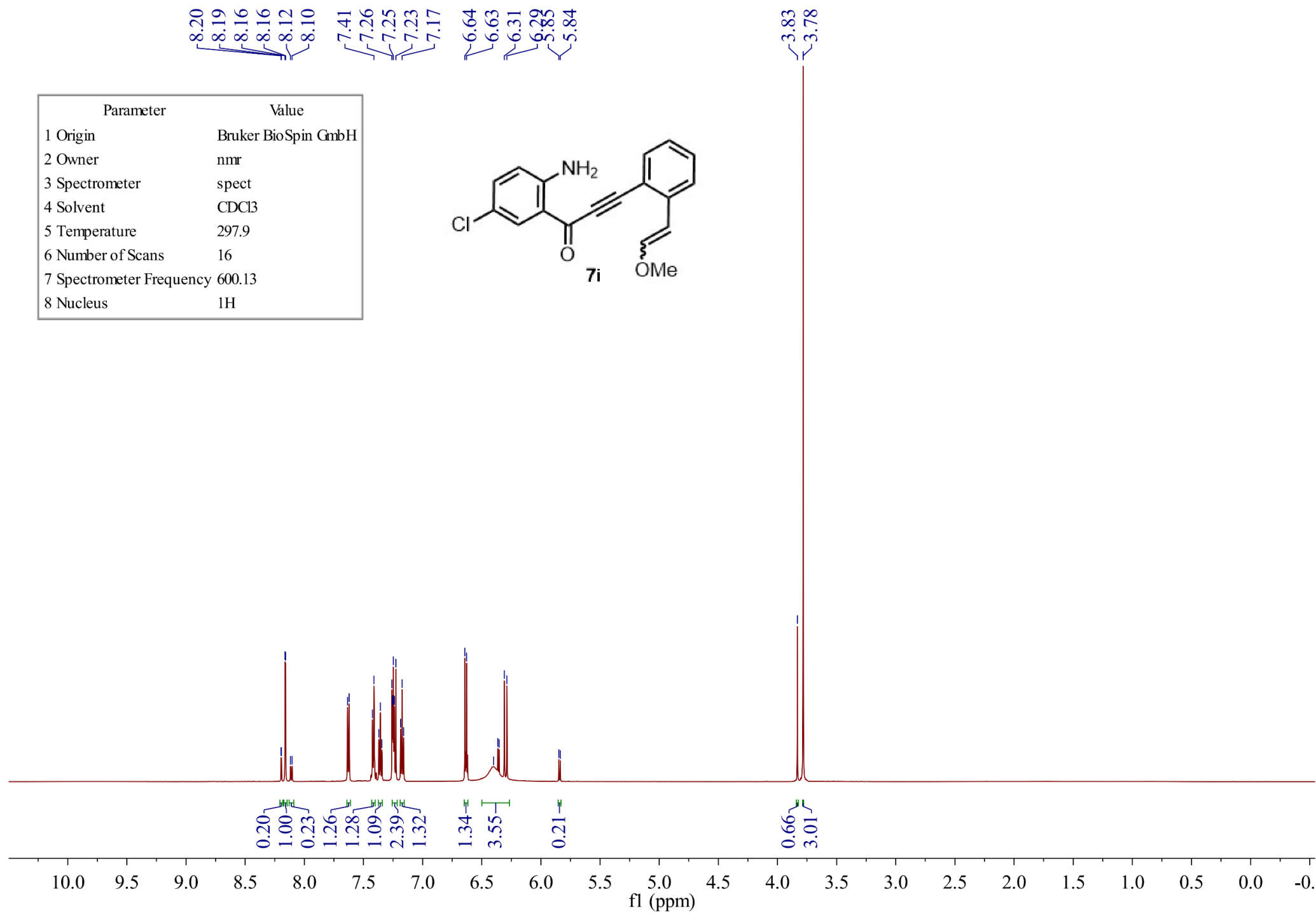
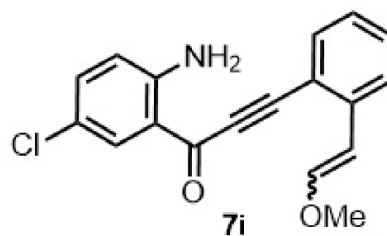
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



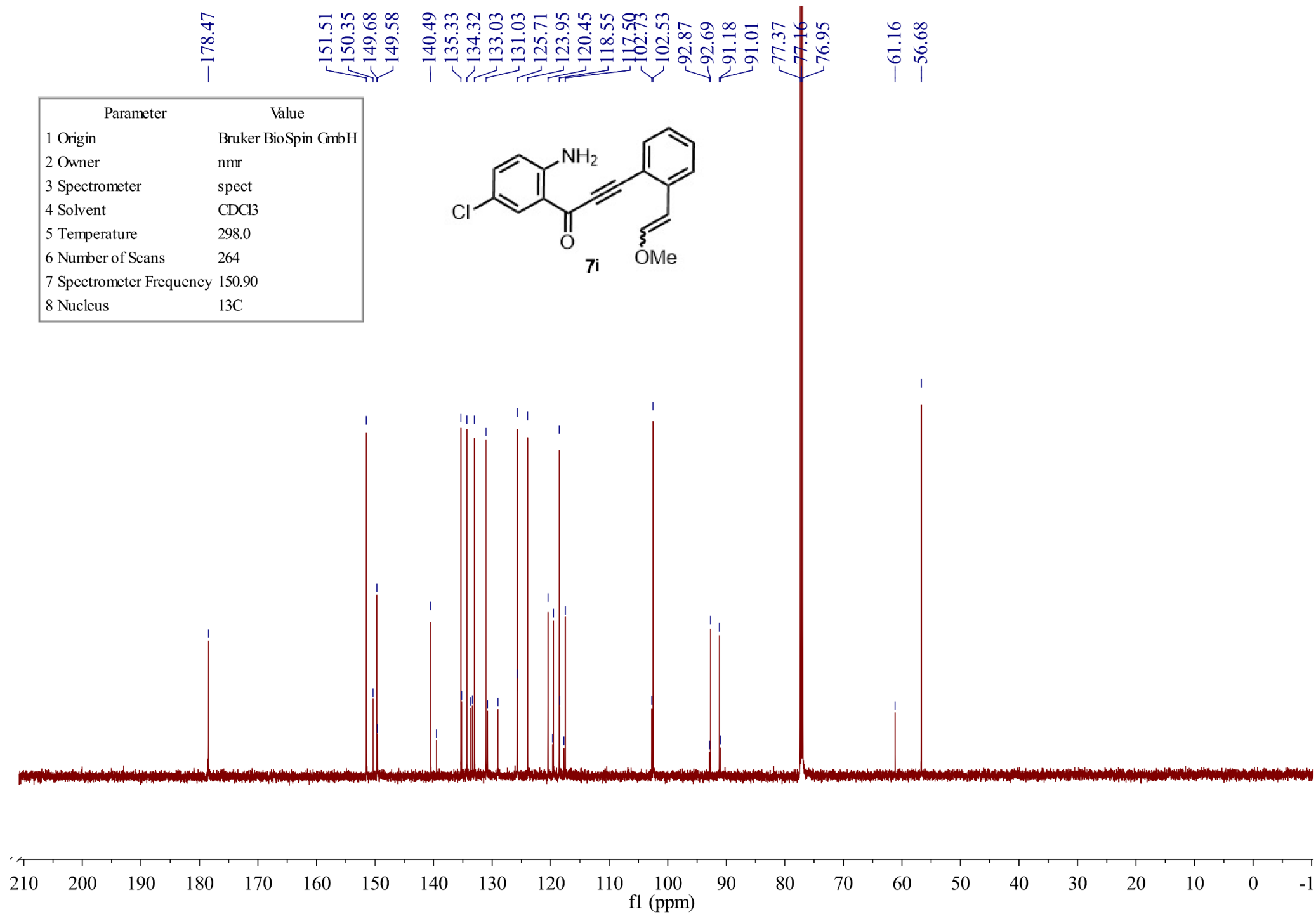
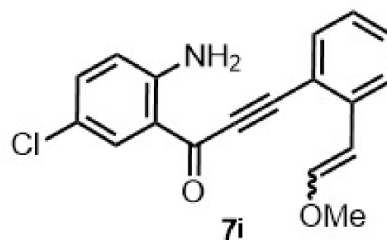
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	218
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

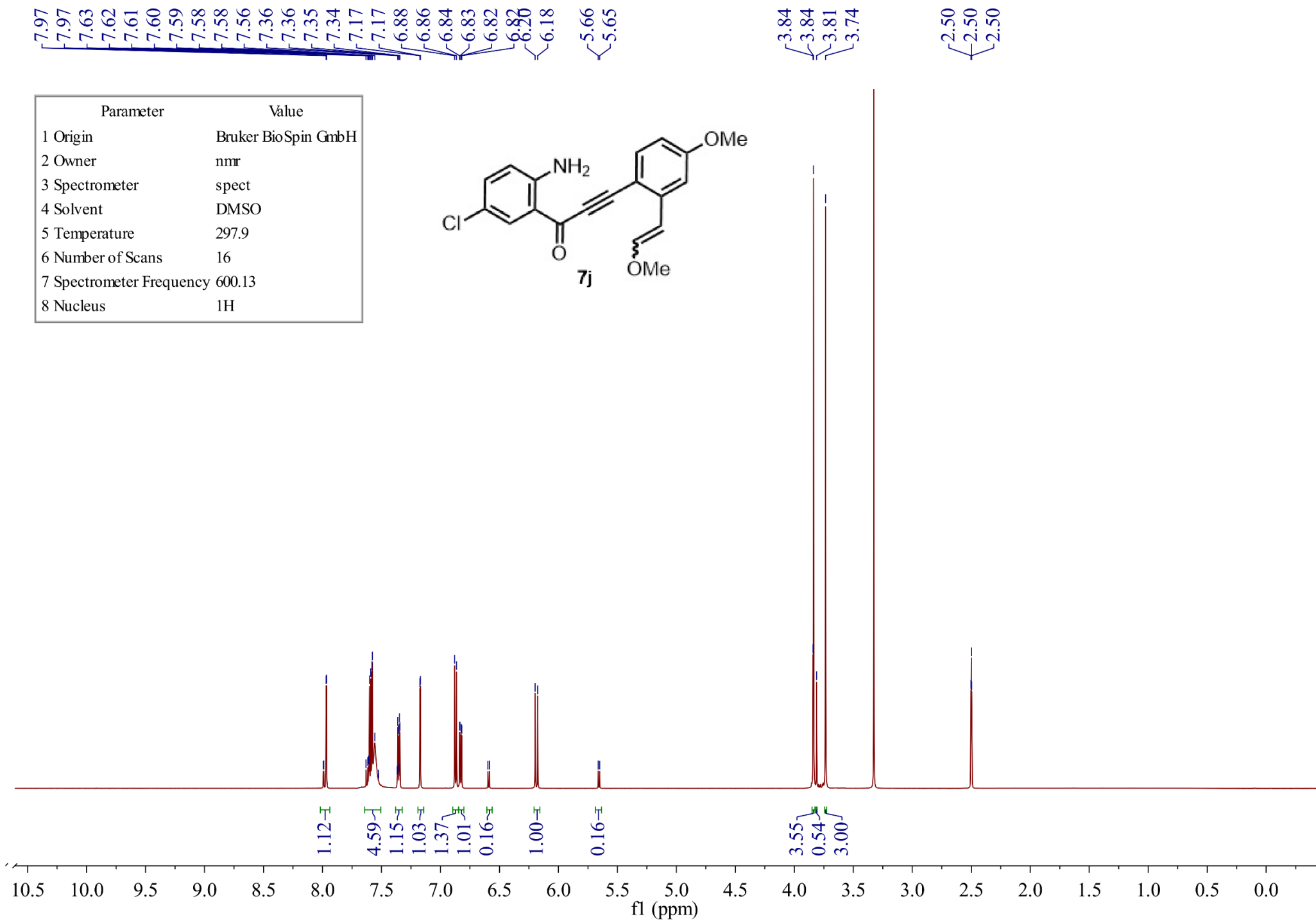


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

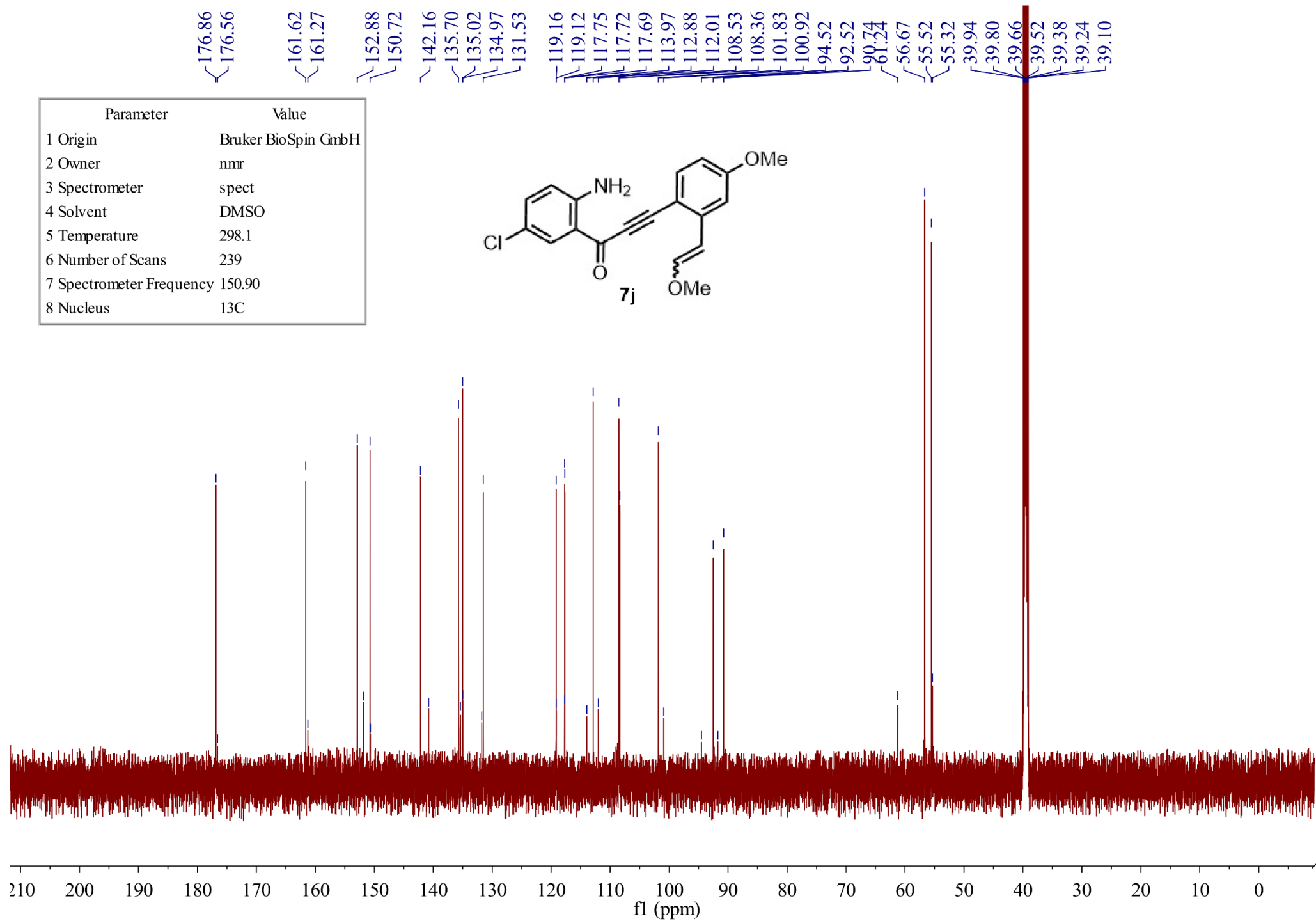


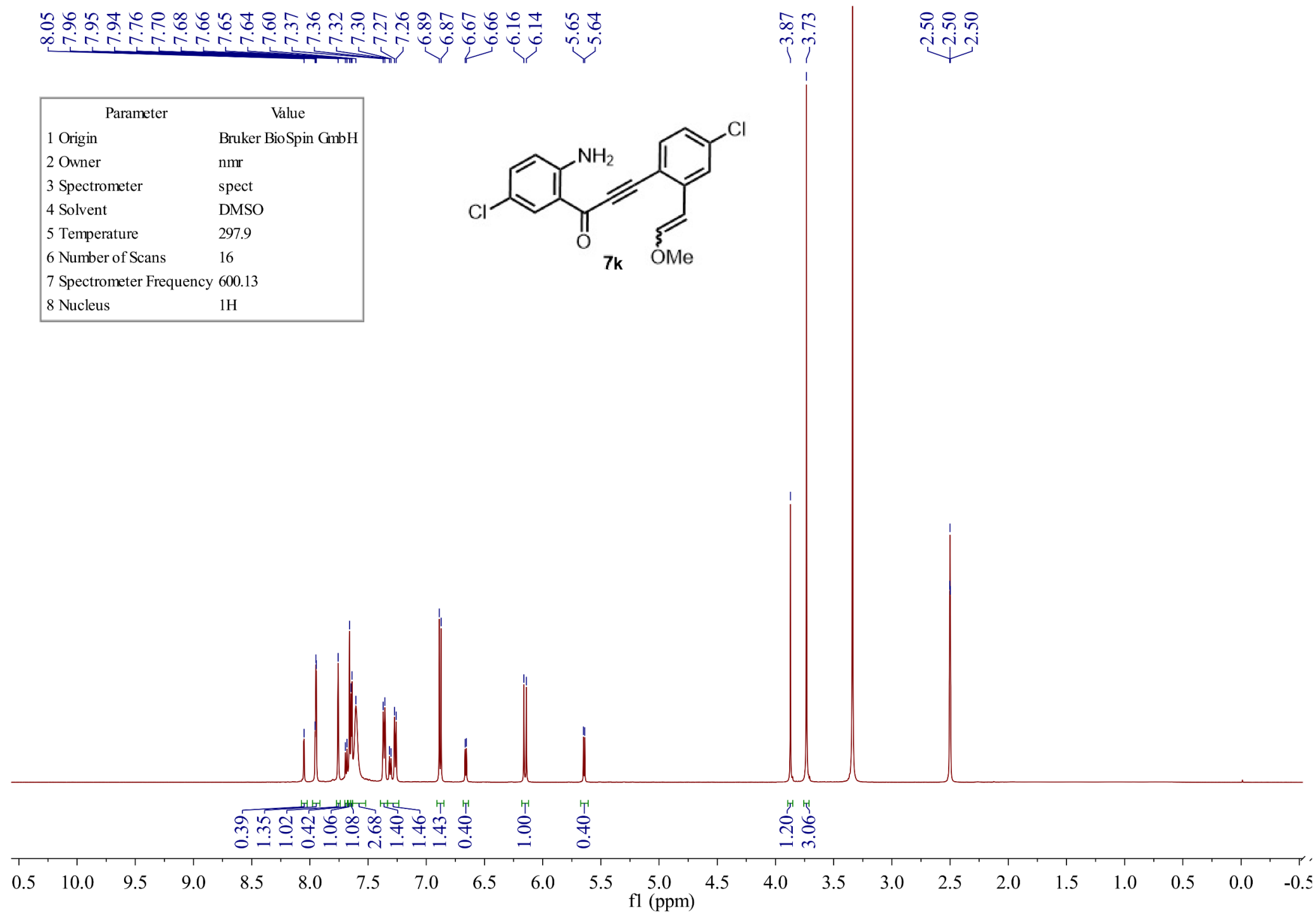
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.0
6 Number of Scans	264
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





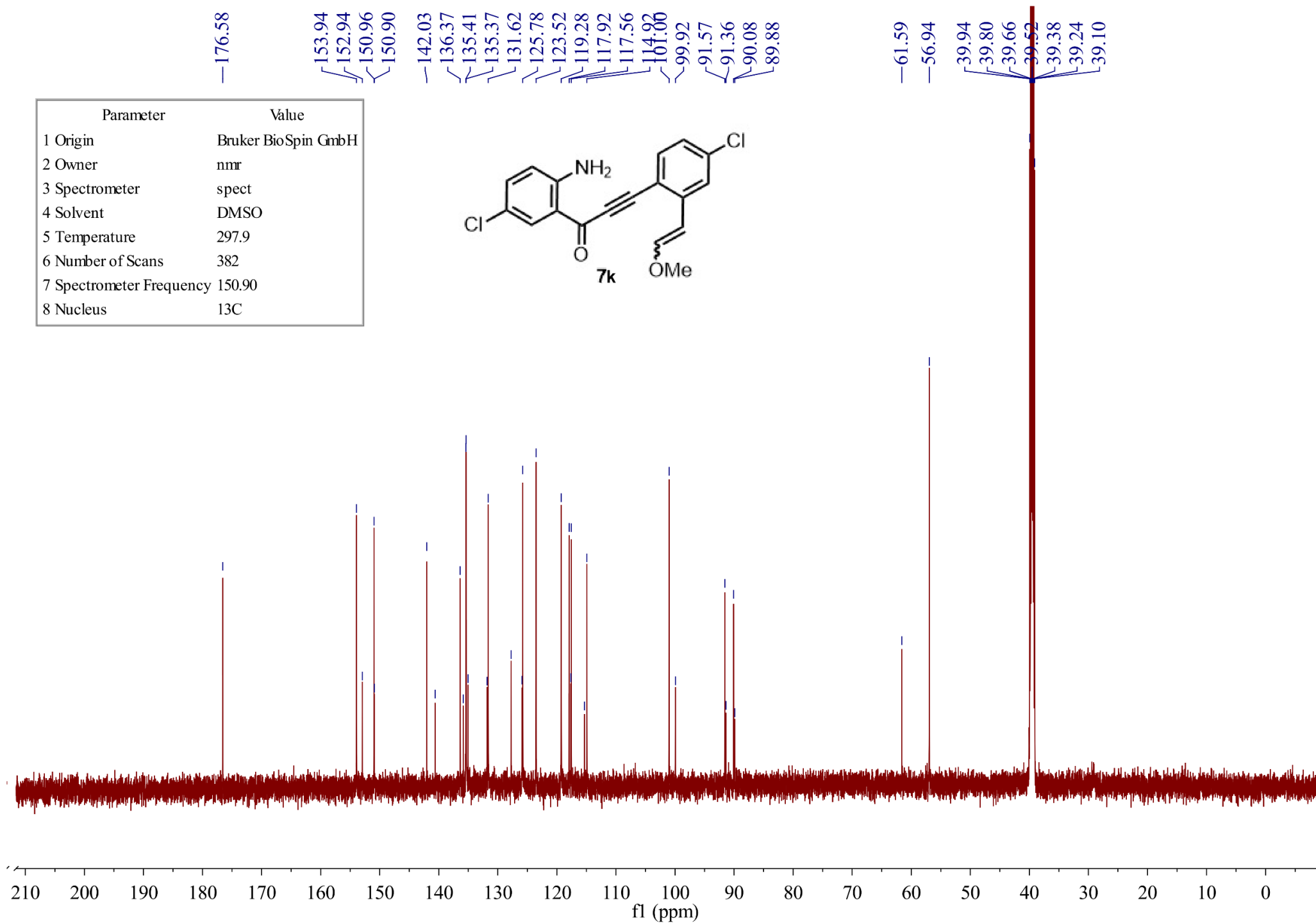
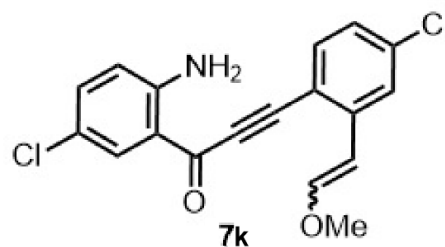
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

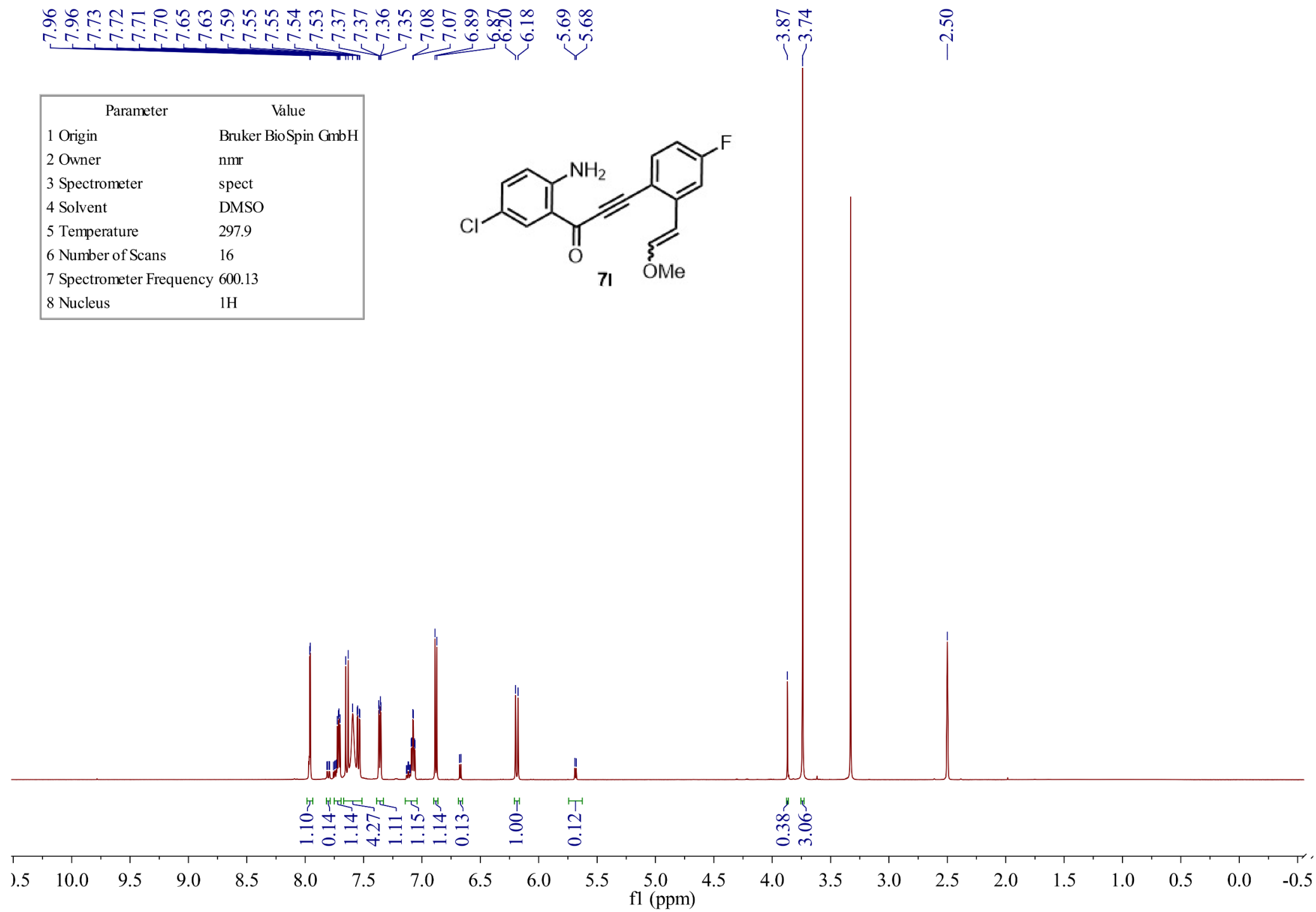




Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

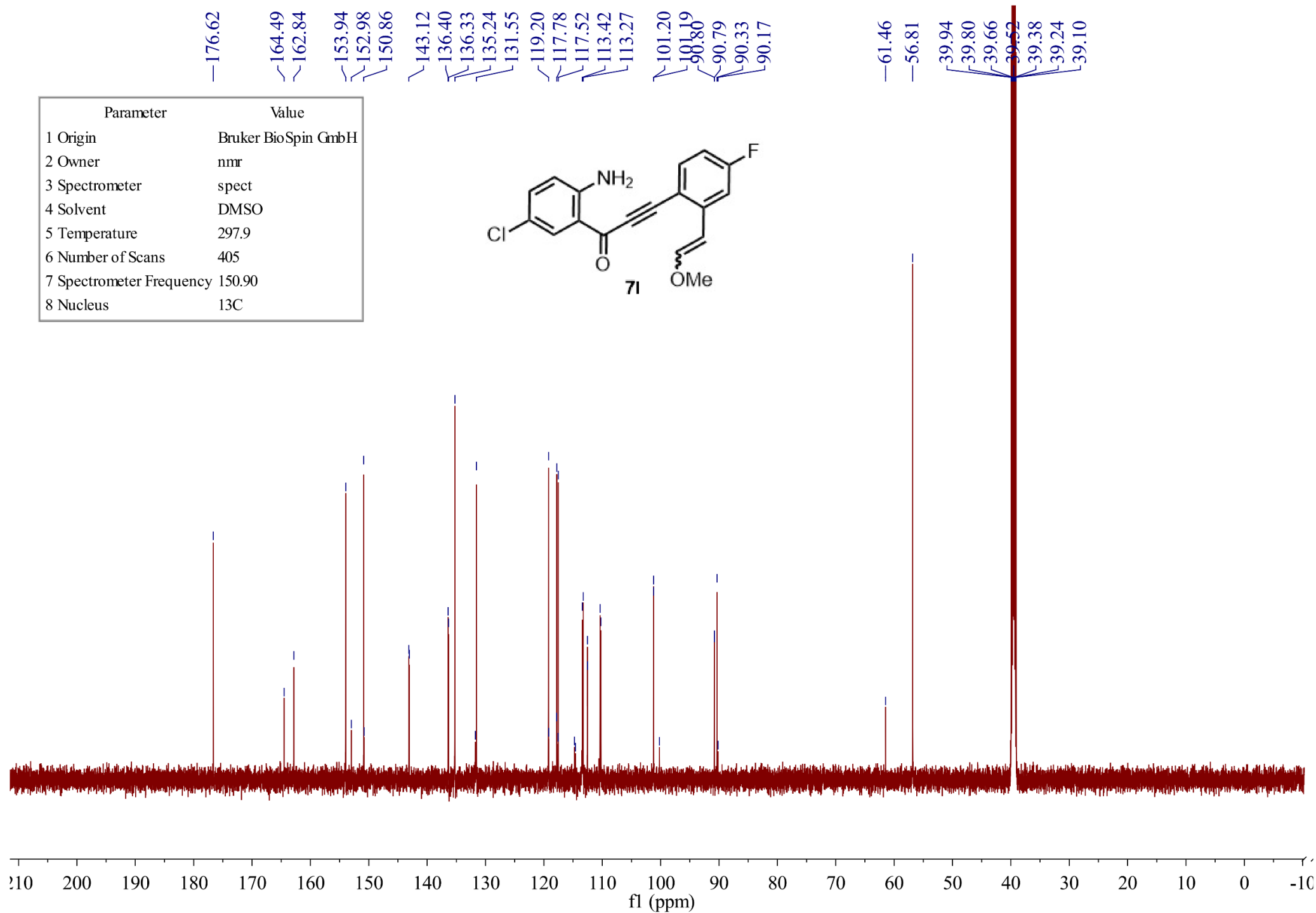
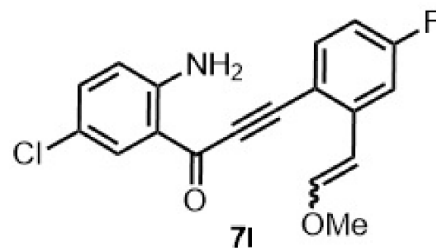
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	382
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

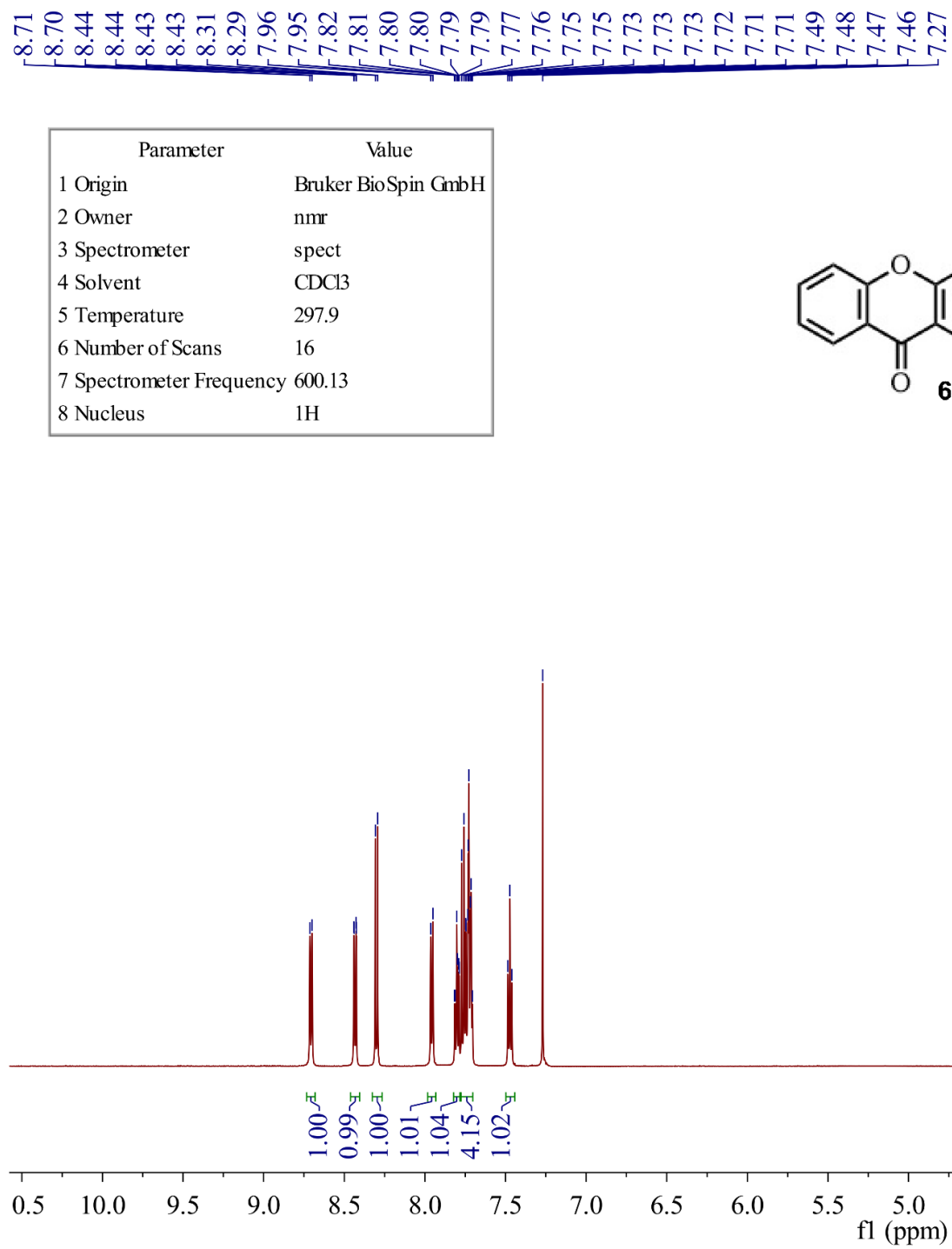


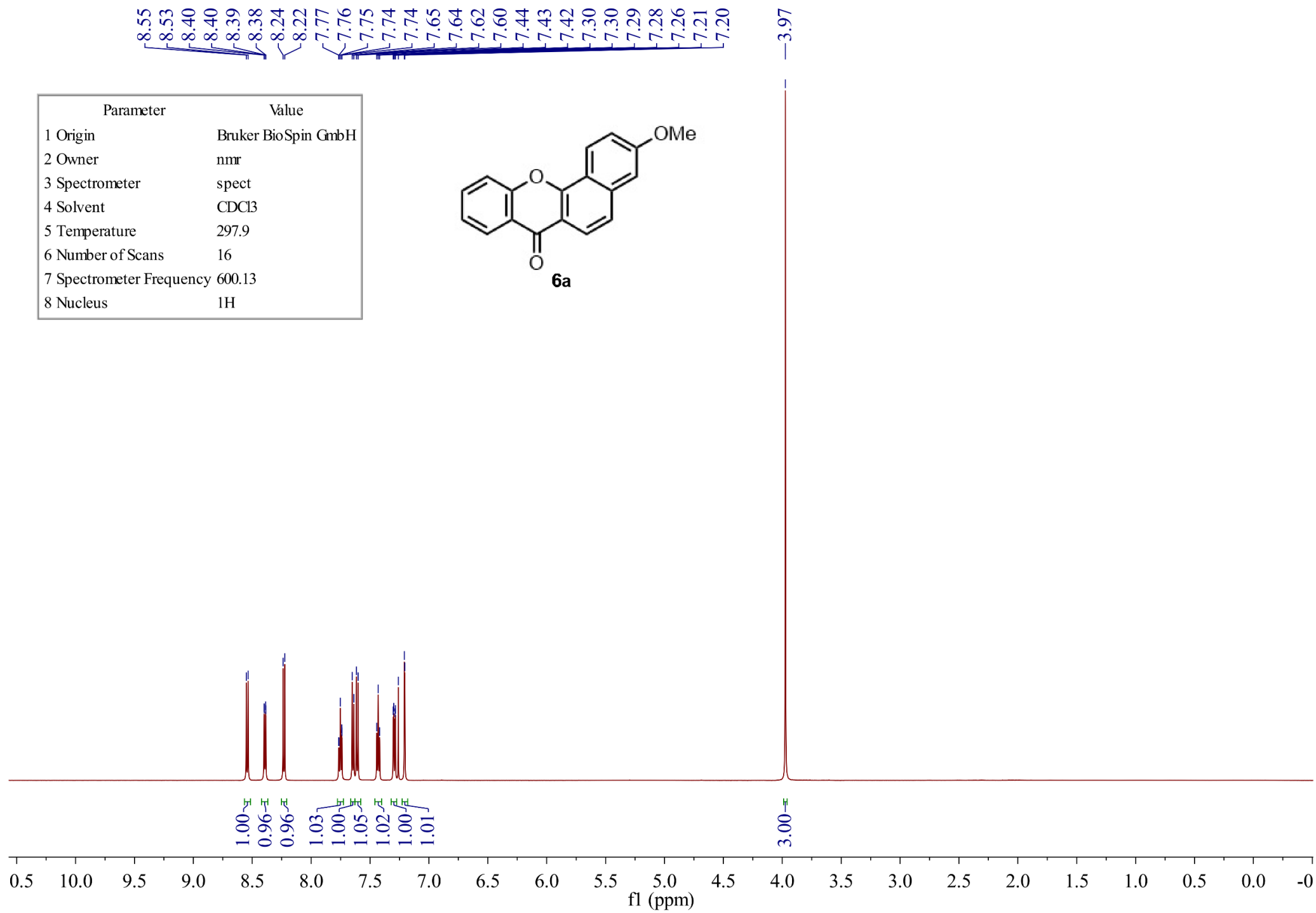


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	405
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

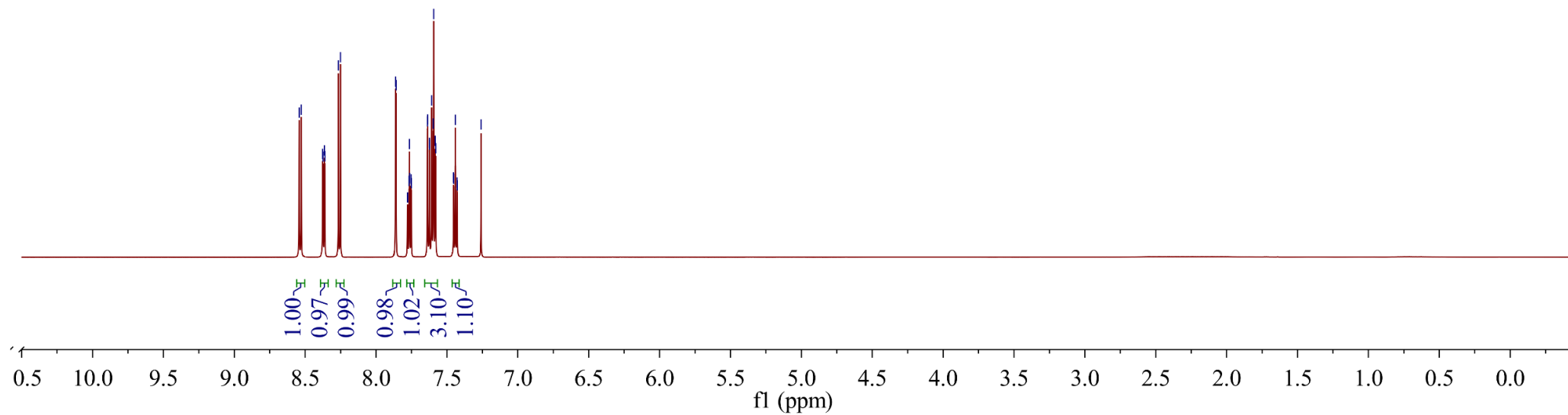
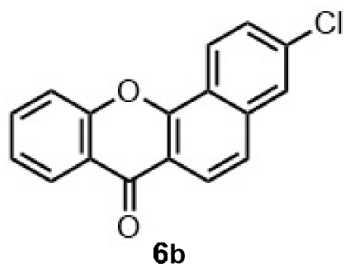




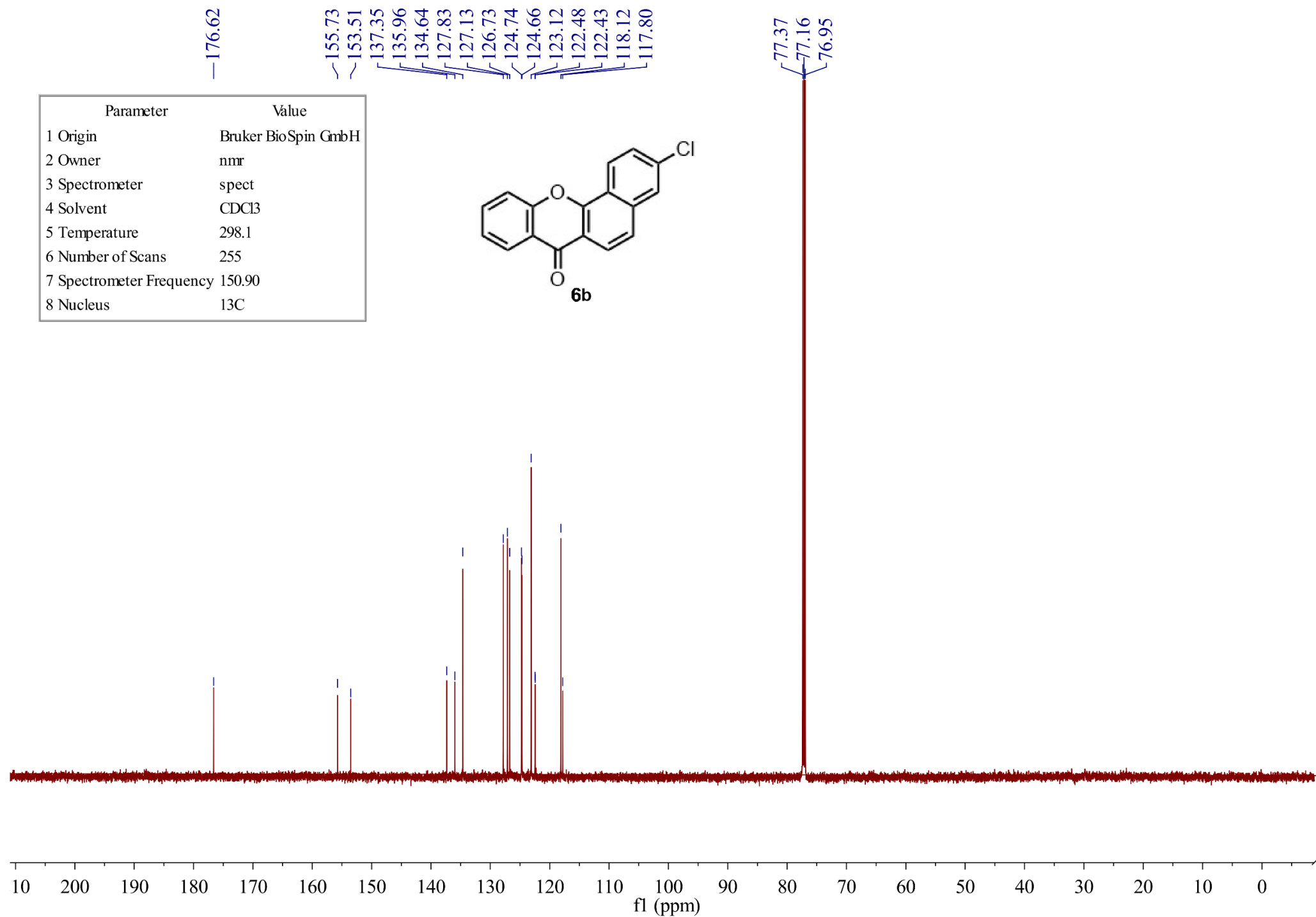
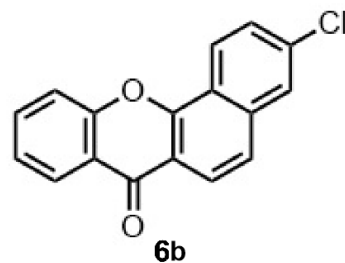


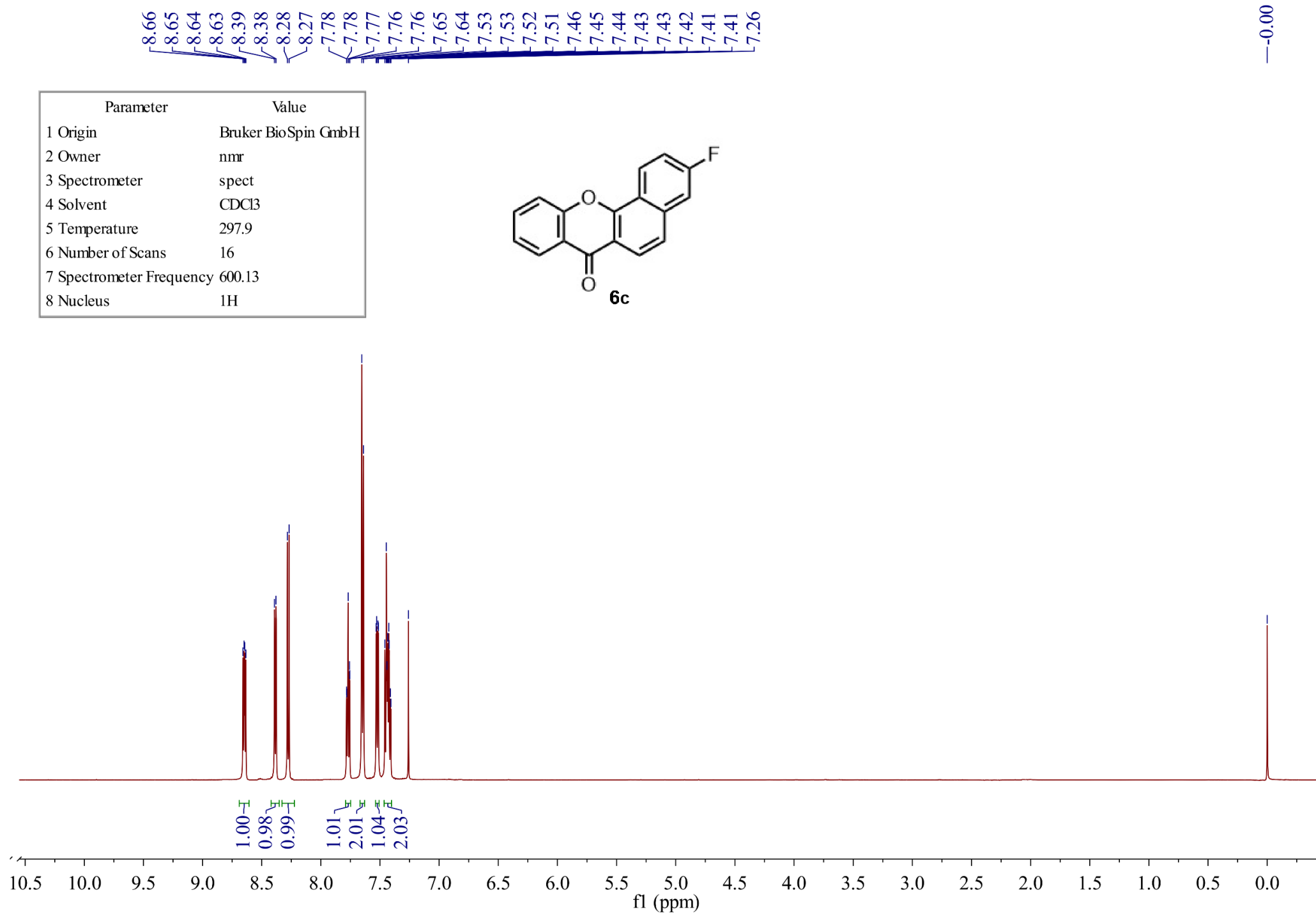
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7.75
7.75
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7.64
7.62
7.62
7.61
7.60
7.59
7.58
7.58
7.45
7.45
7.44
7.43
7.43
7.26

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

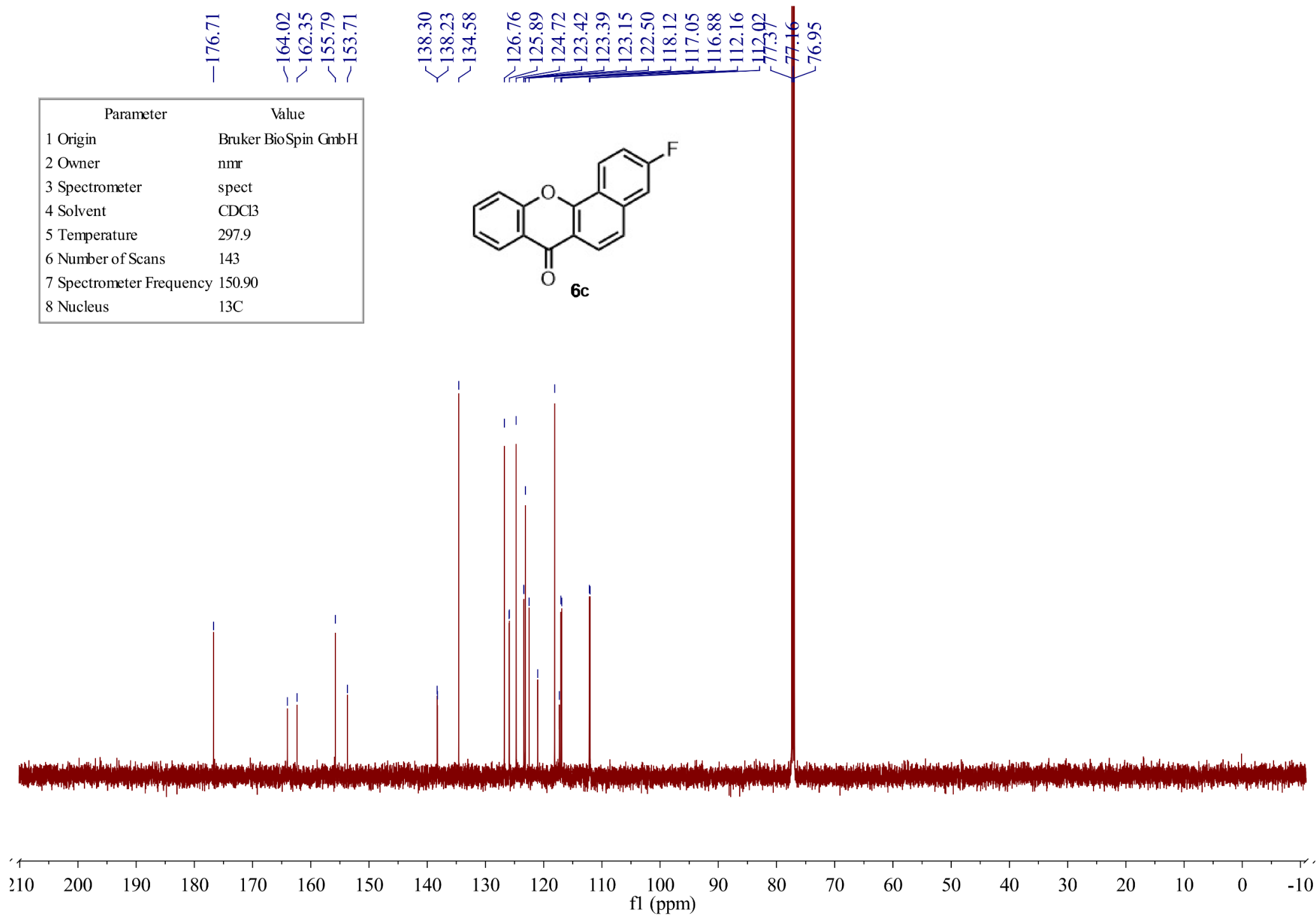
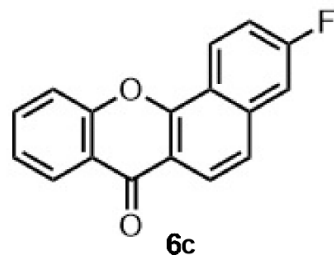


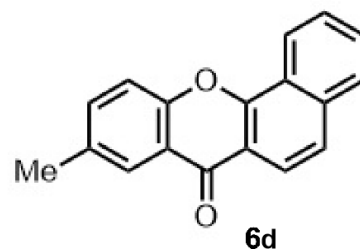
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	255
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



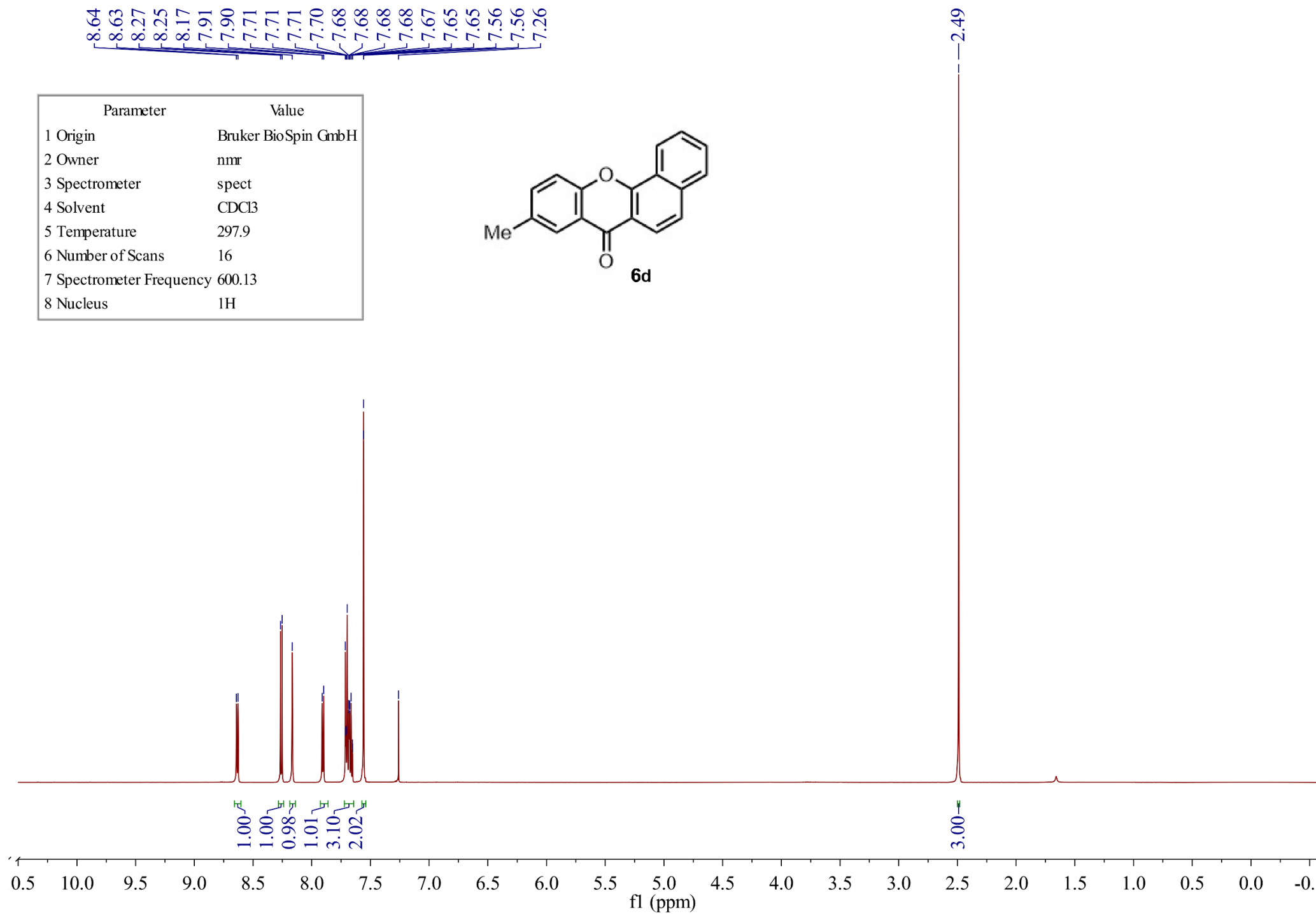


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	143
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

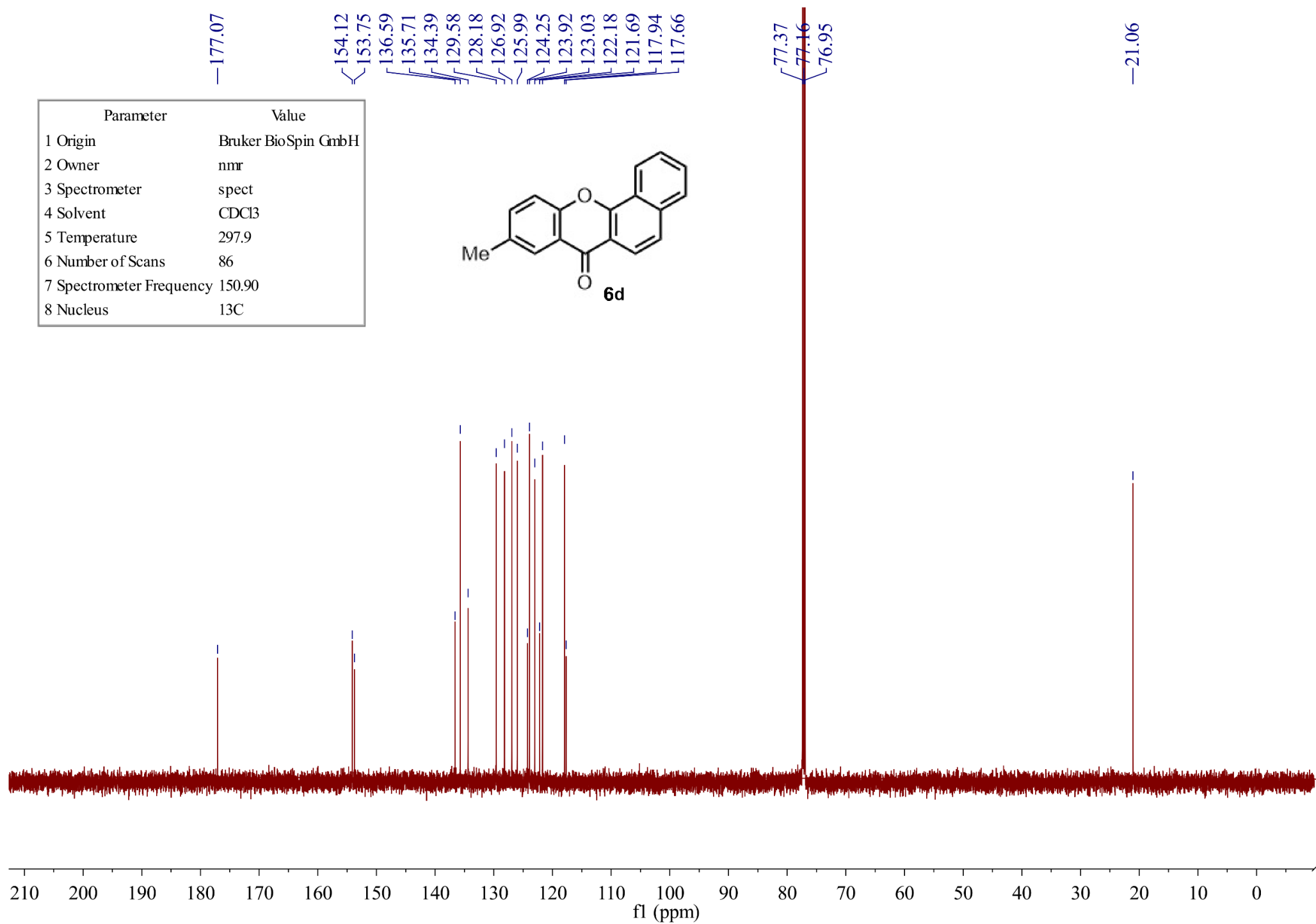
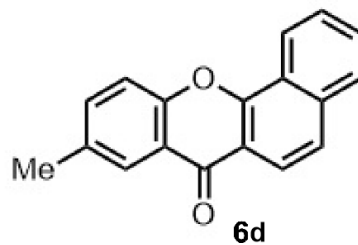


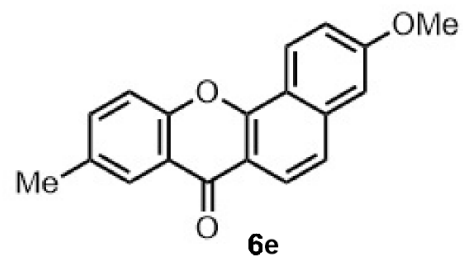


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

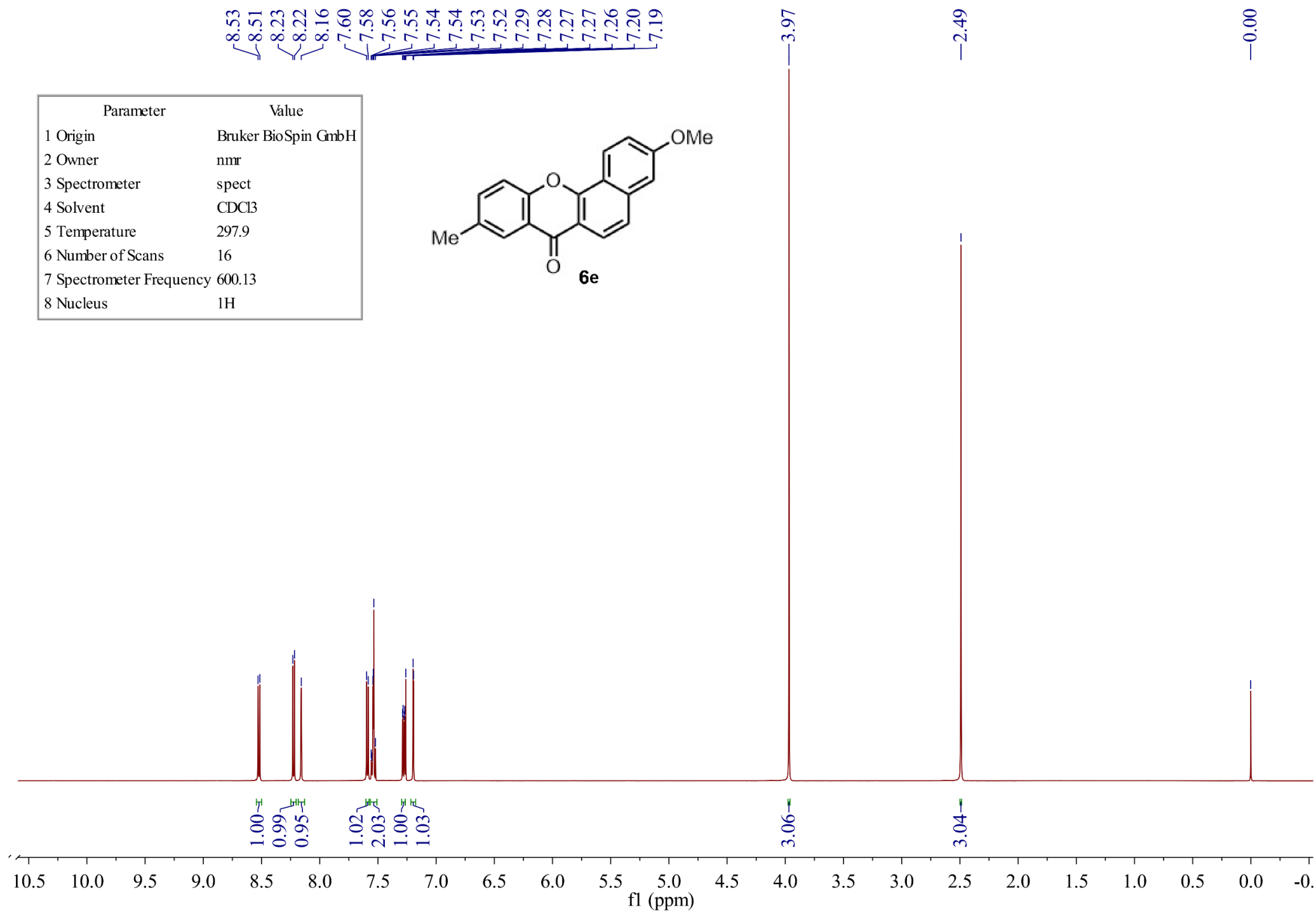


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	86
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

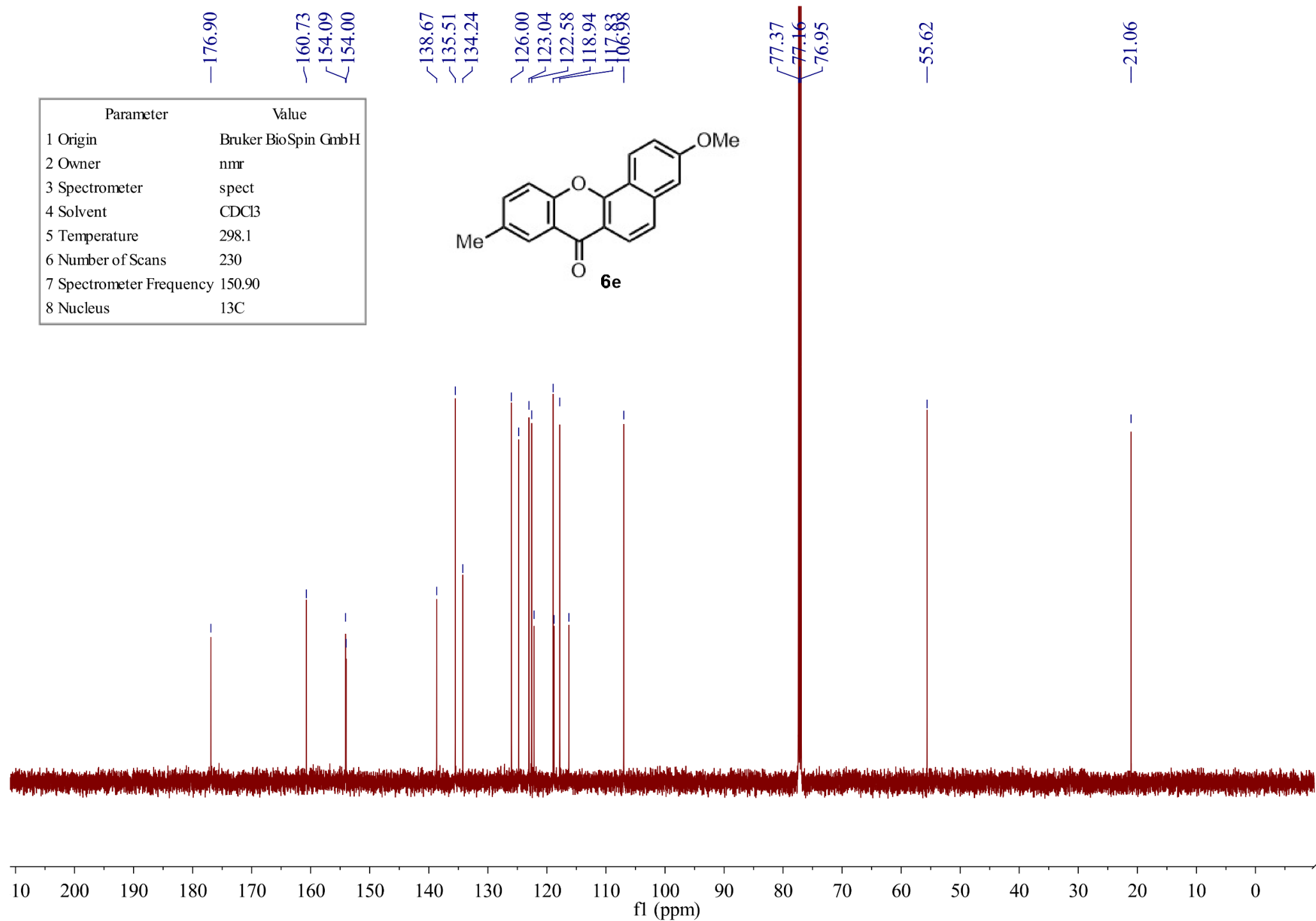
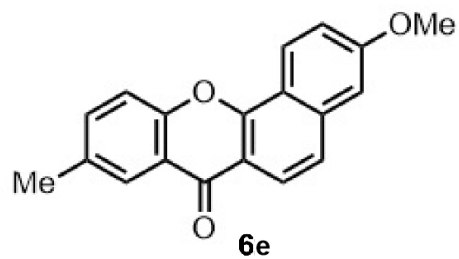




Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

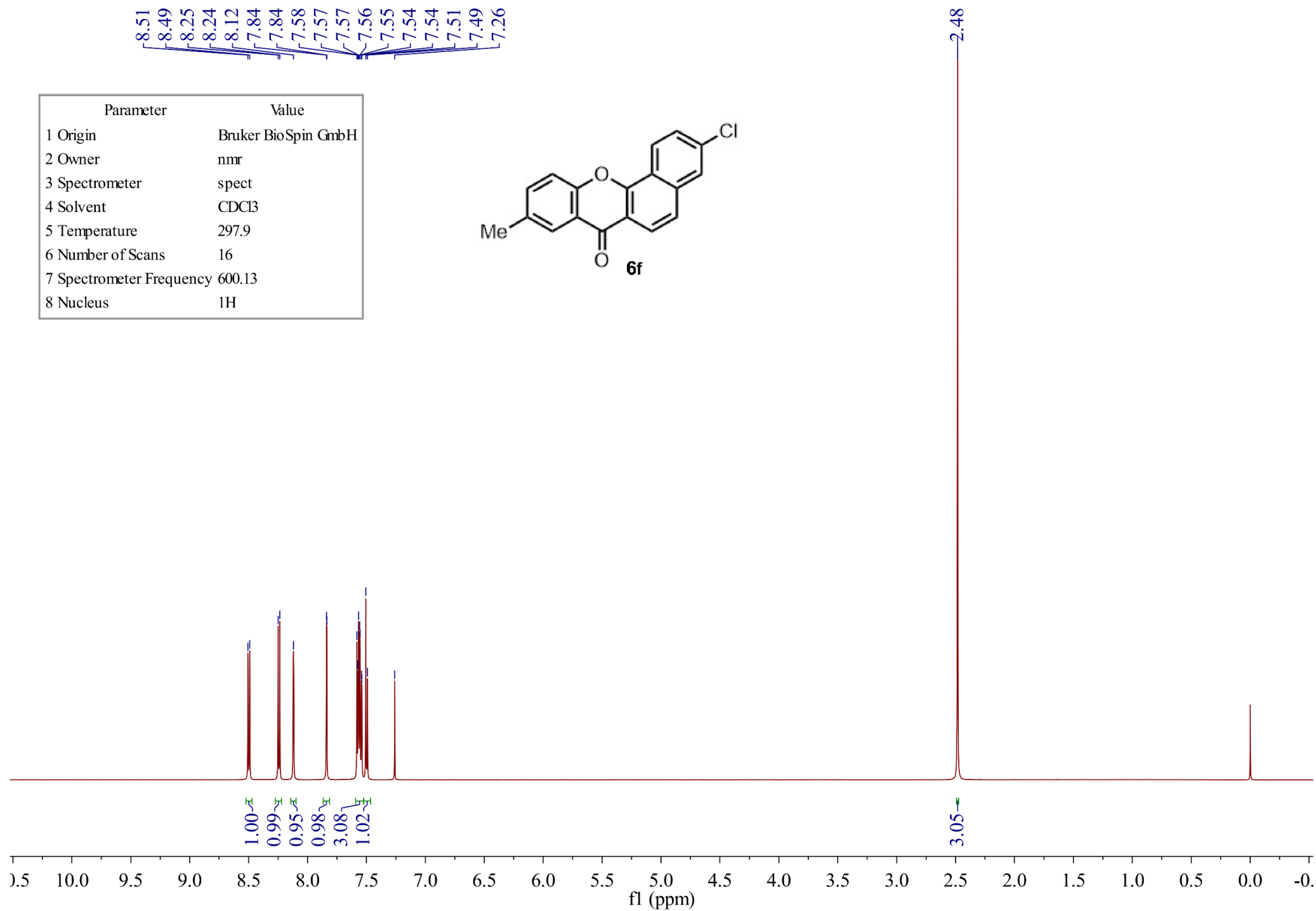
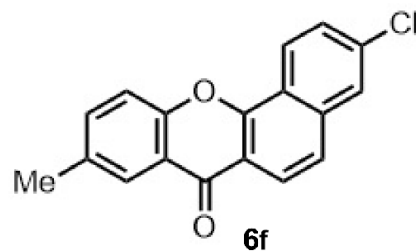


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	230
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

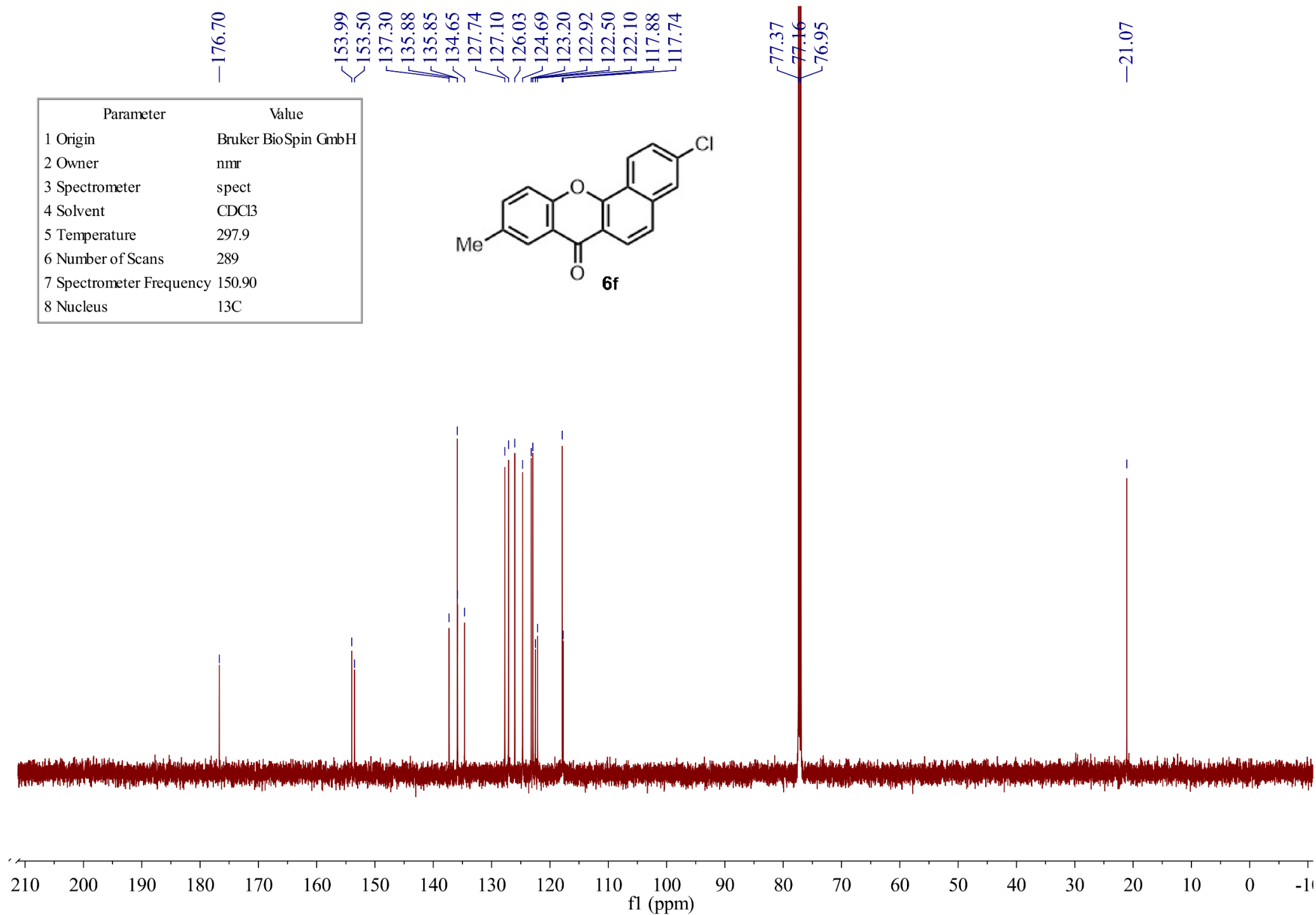
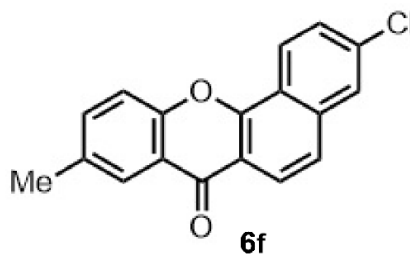


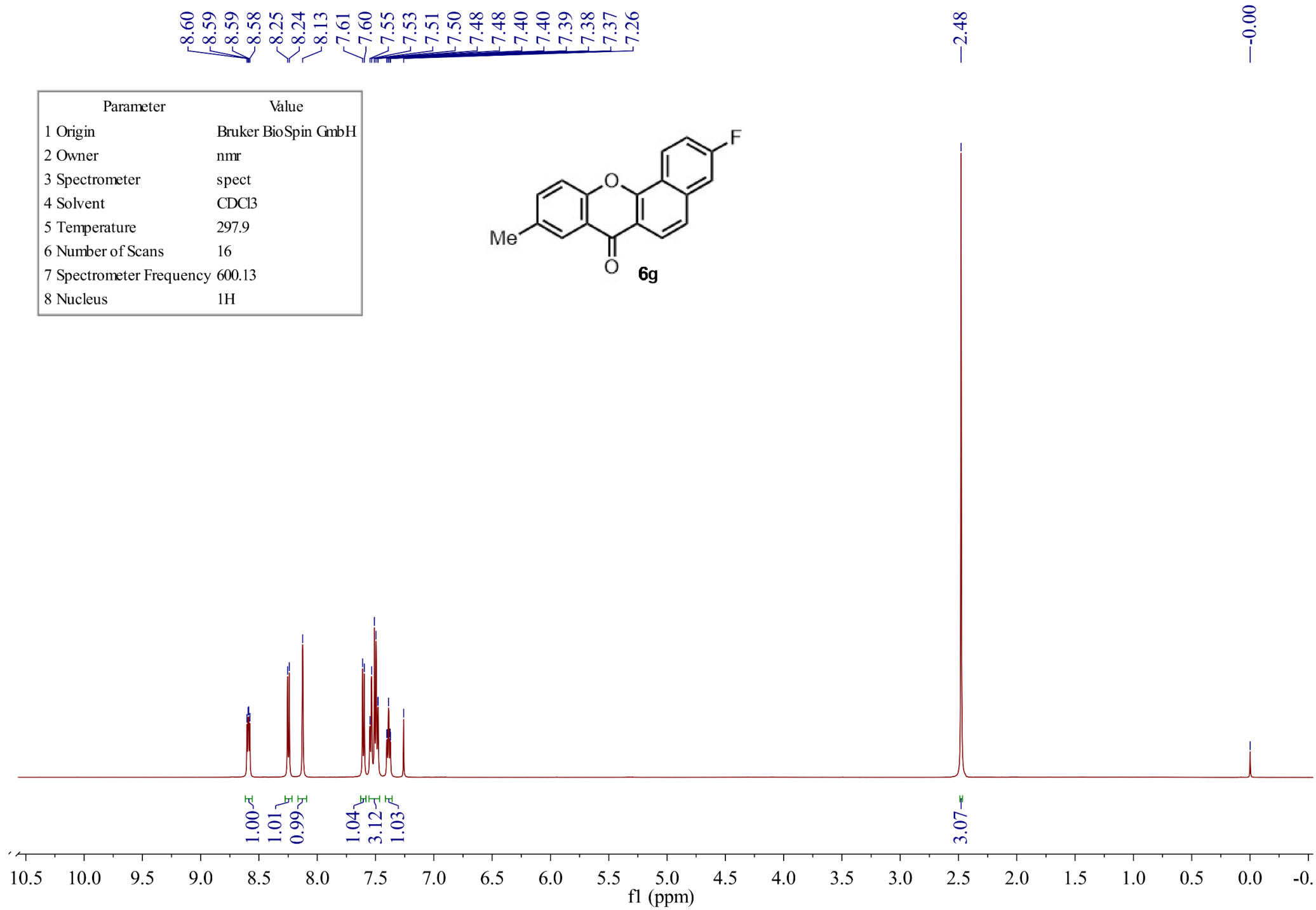
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7.84
7.58
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7.57
7.56
7.55
7.54
7.54
7.51
7.49
7.26

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

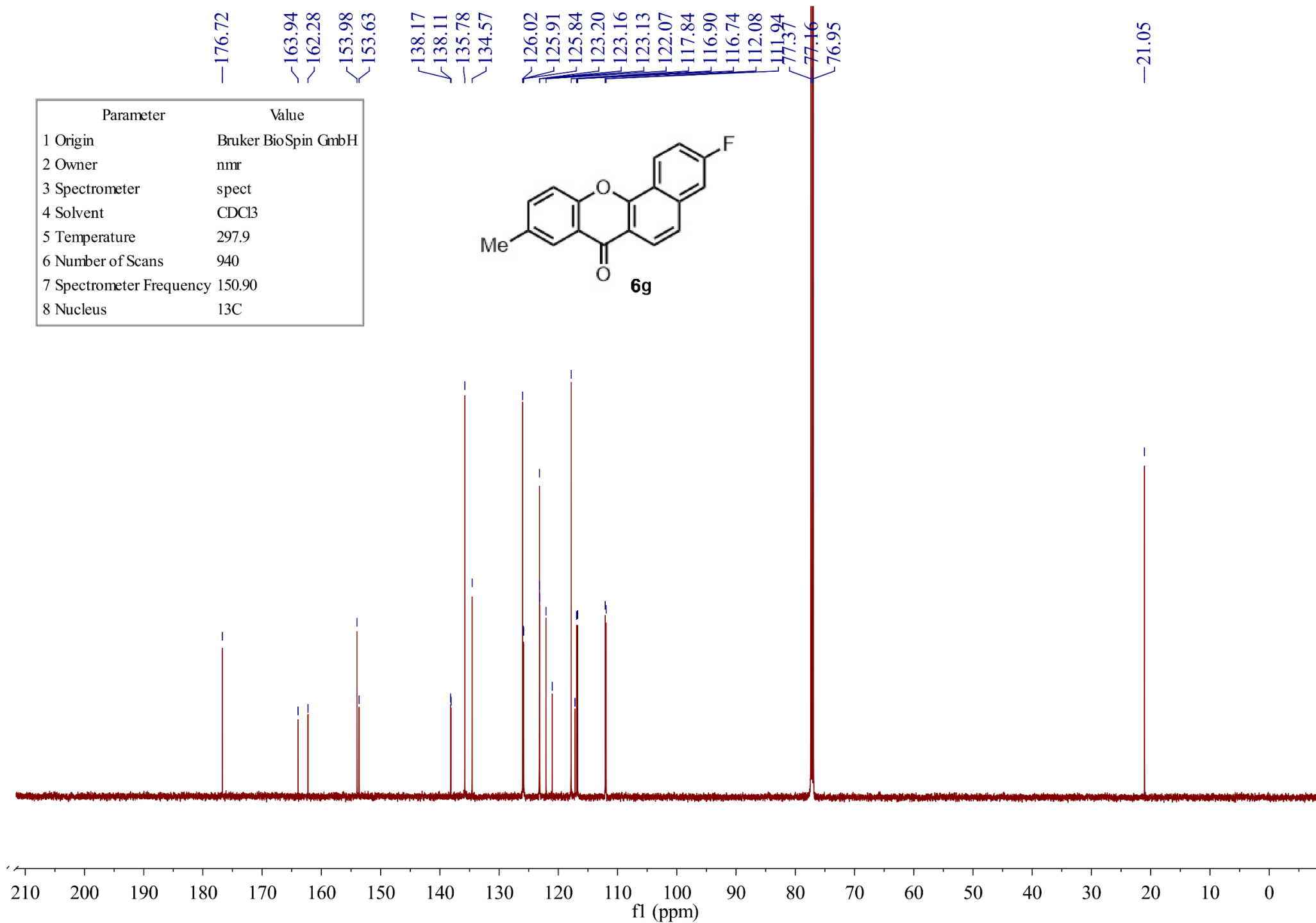
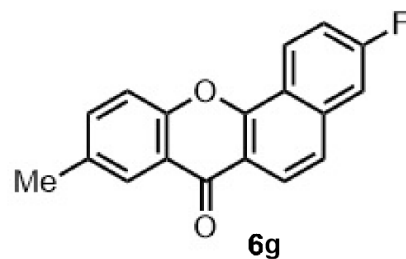


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	289
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



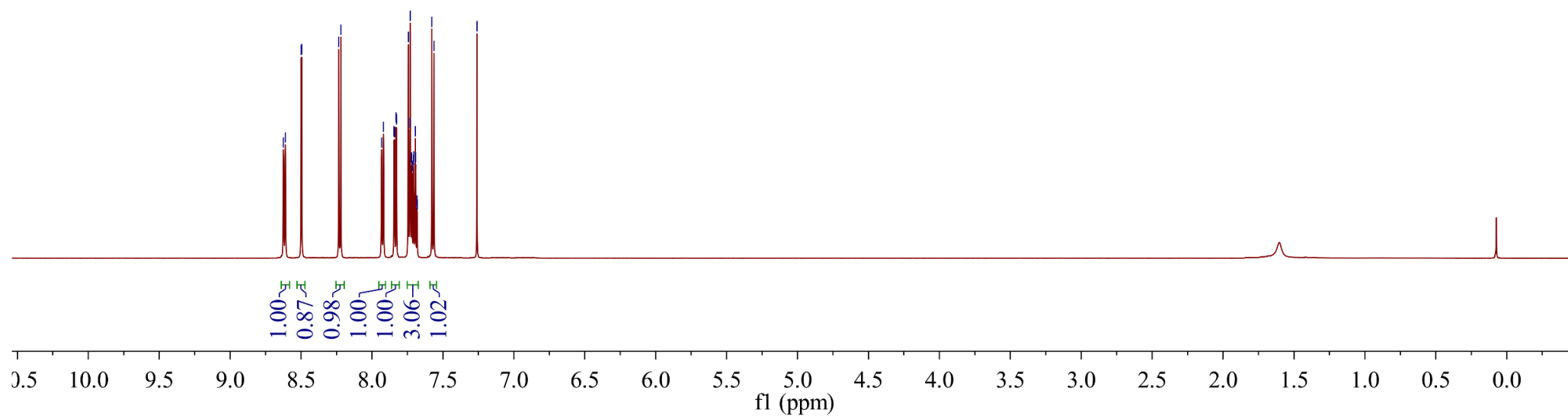
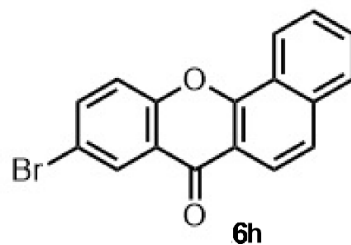


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	940
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

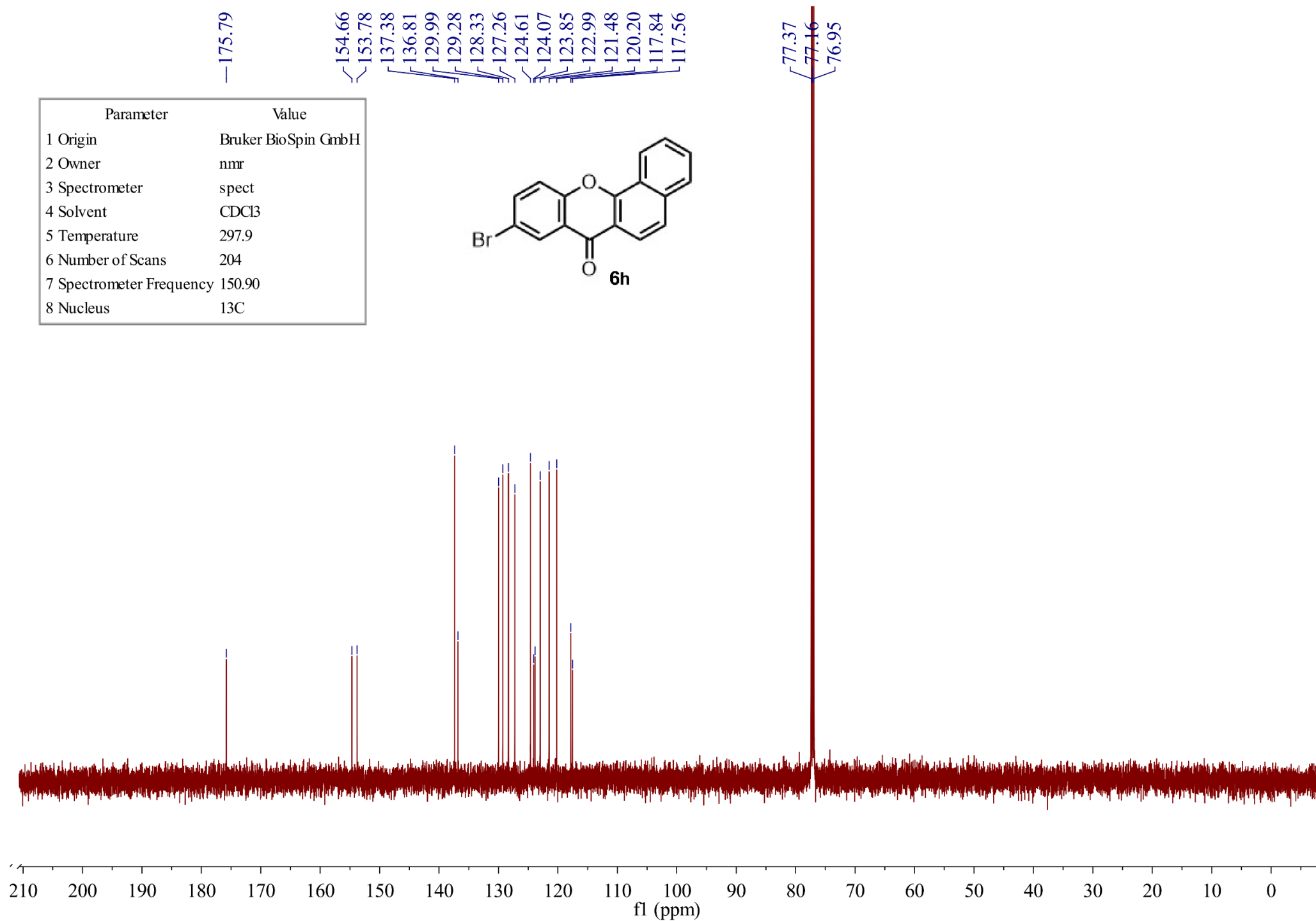
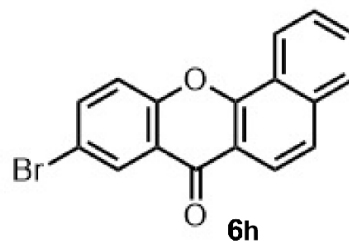


8.62
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8.50
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8.22
7.93
7.92
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7.84
7.83
7.83
7.74
7.73
7.73
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7.68
7.58
7.56
7.26

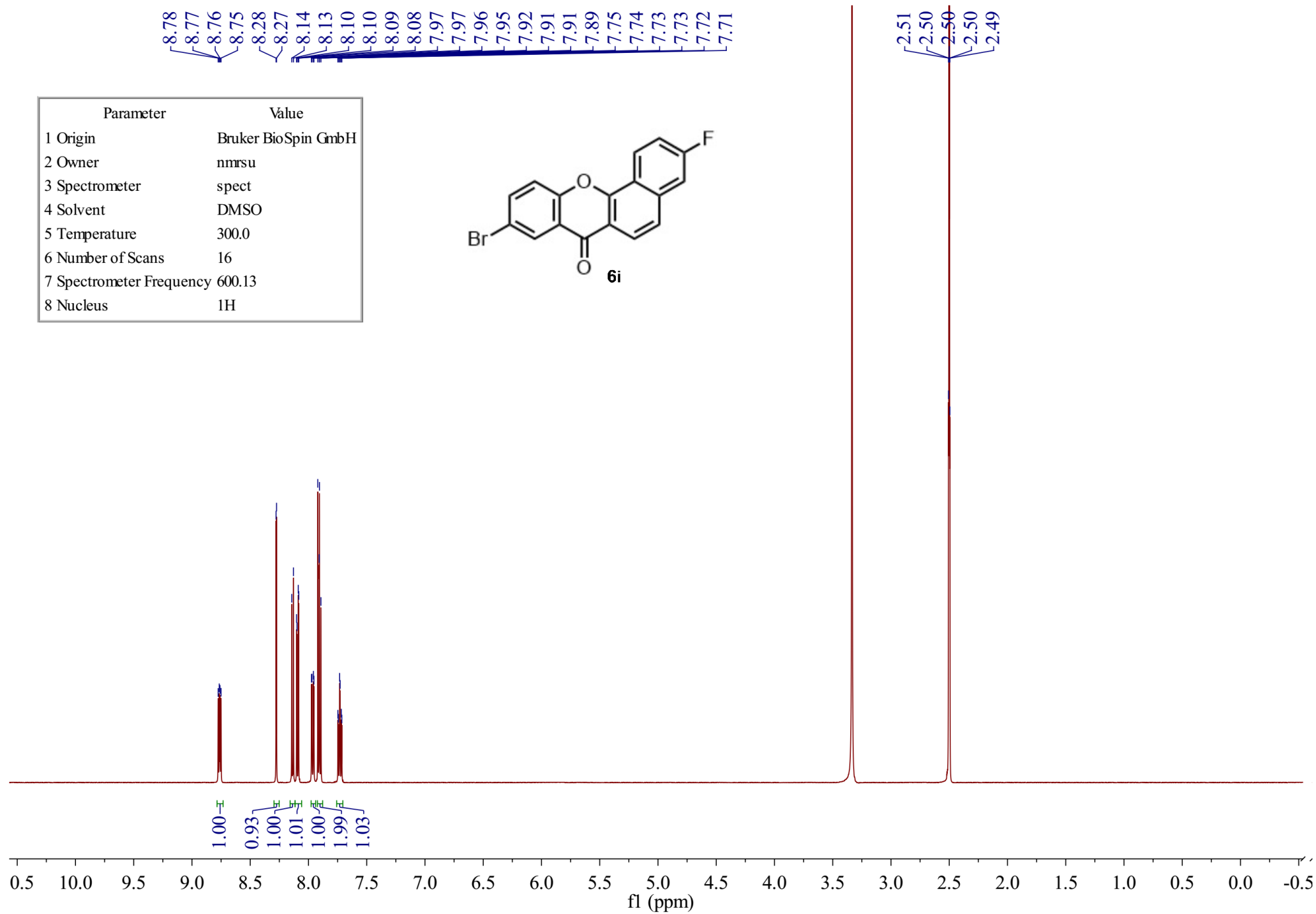
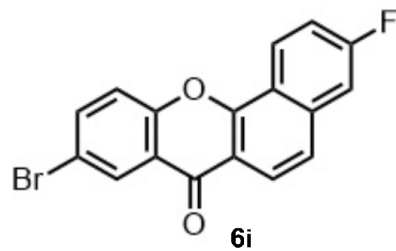
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



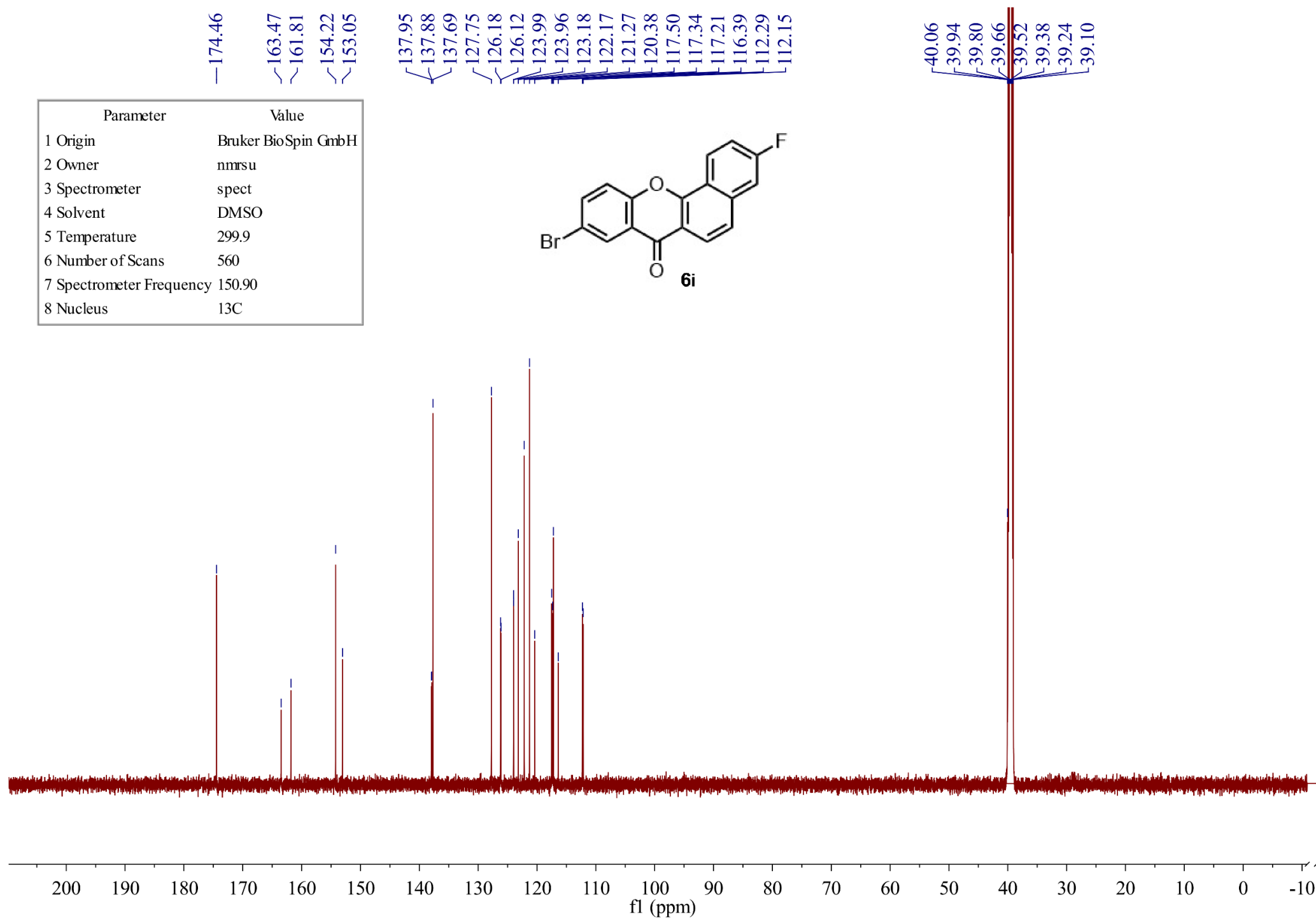
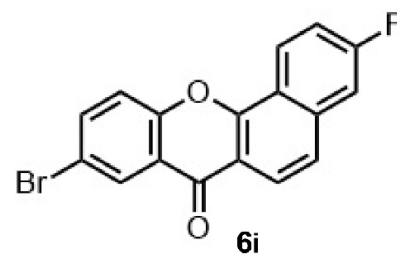
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	204
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	560
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

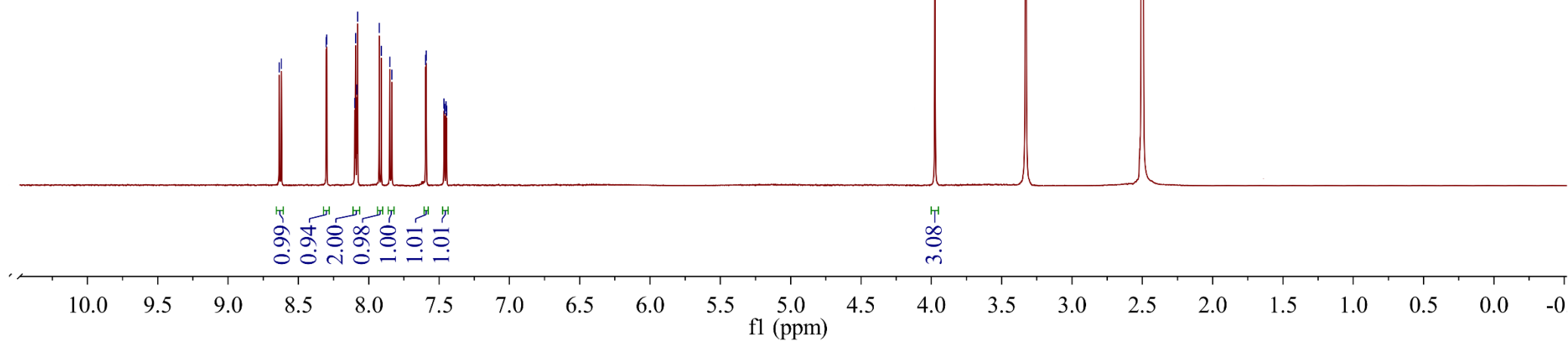
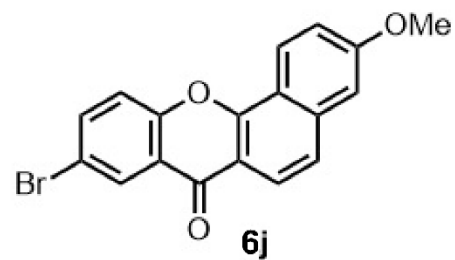


8.64
8.62
8.30
8.30
8.10
8.09
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8.08
7.93
7.91
7.85
7.84
7.60
7.59
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7.46
7.45
7.45

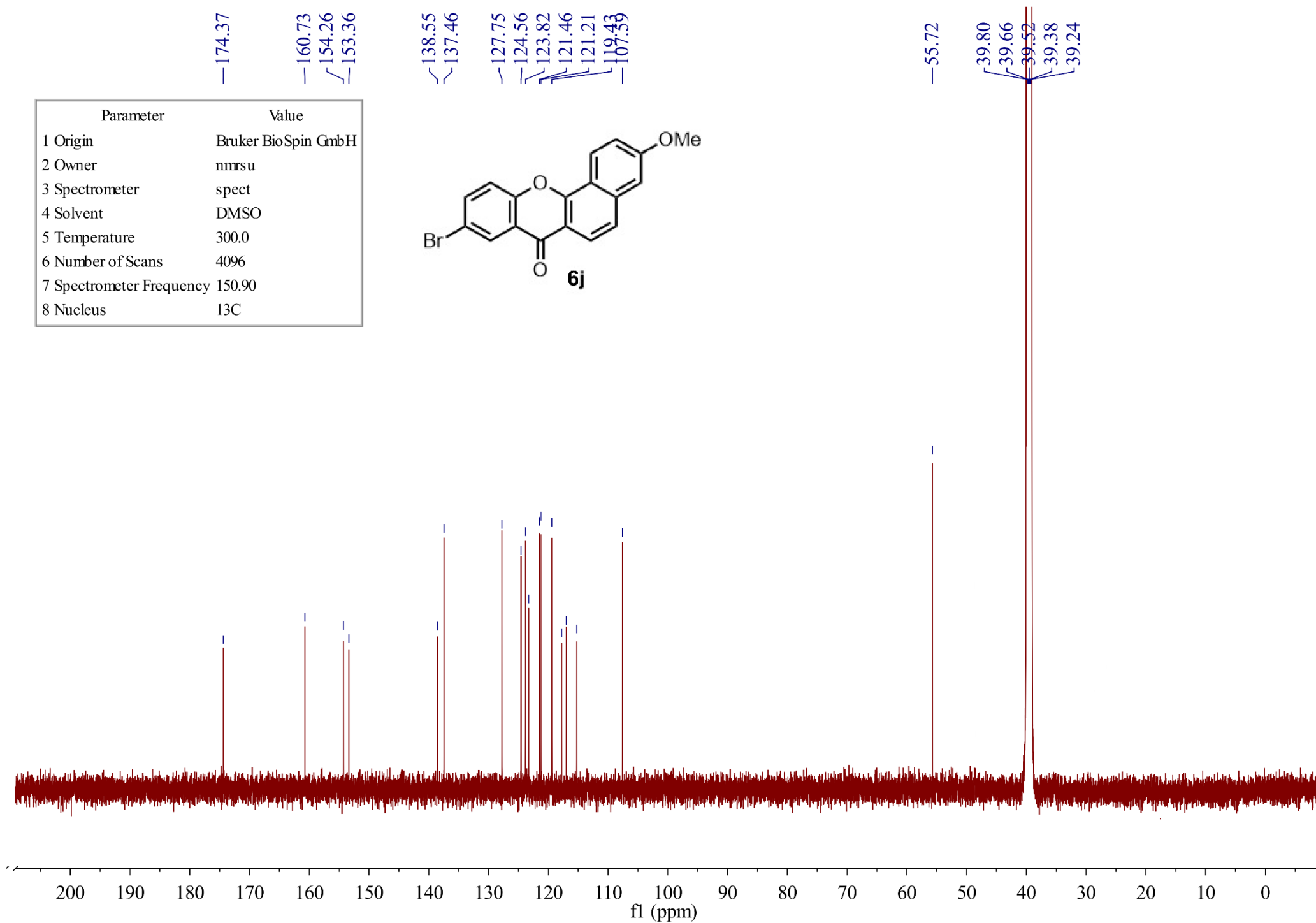
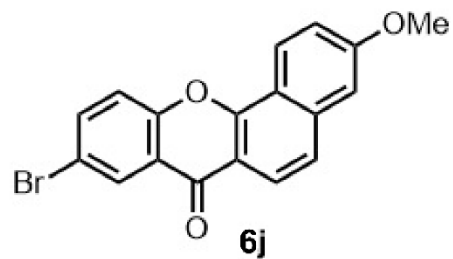
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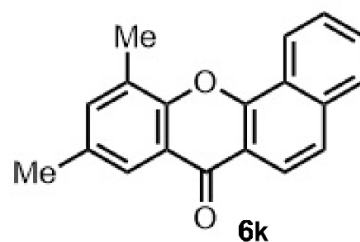
2.50
2.50
2.50

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

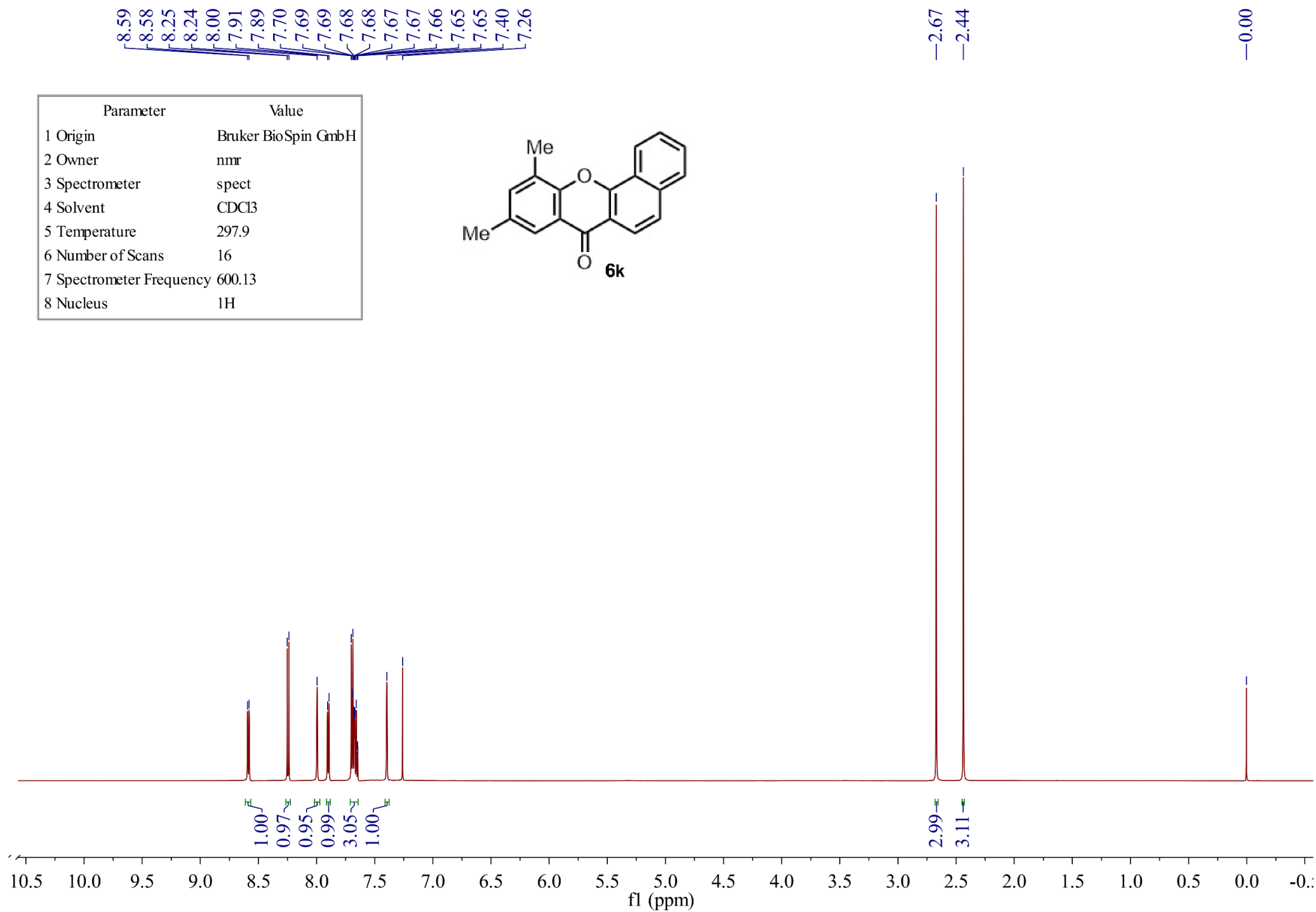


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	4096
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

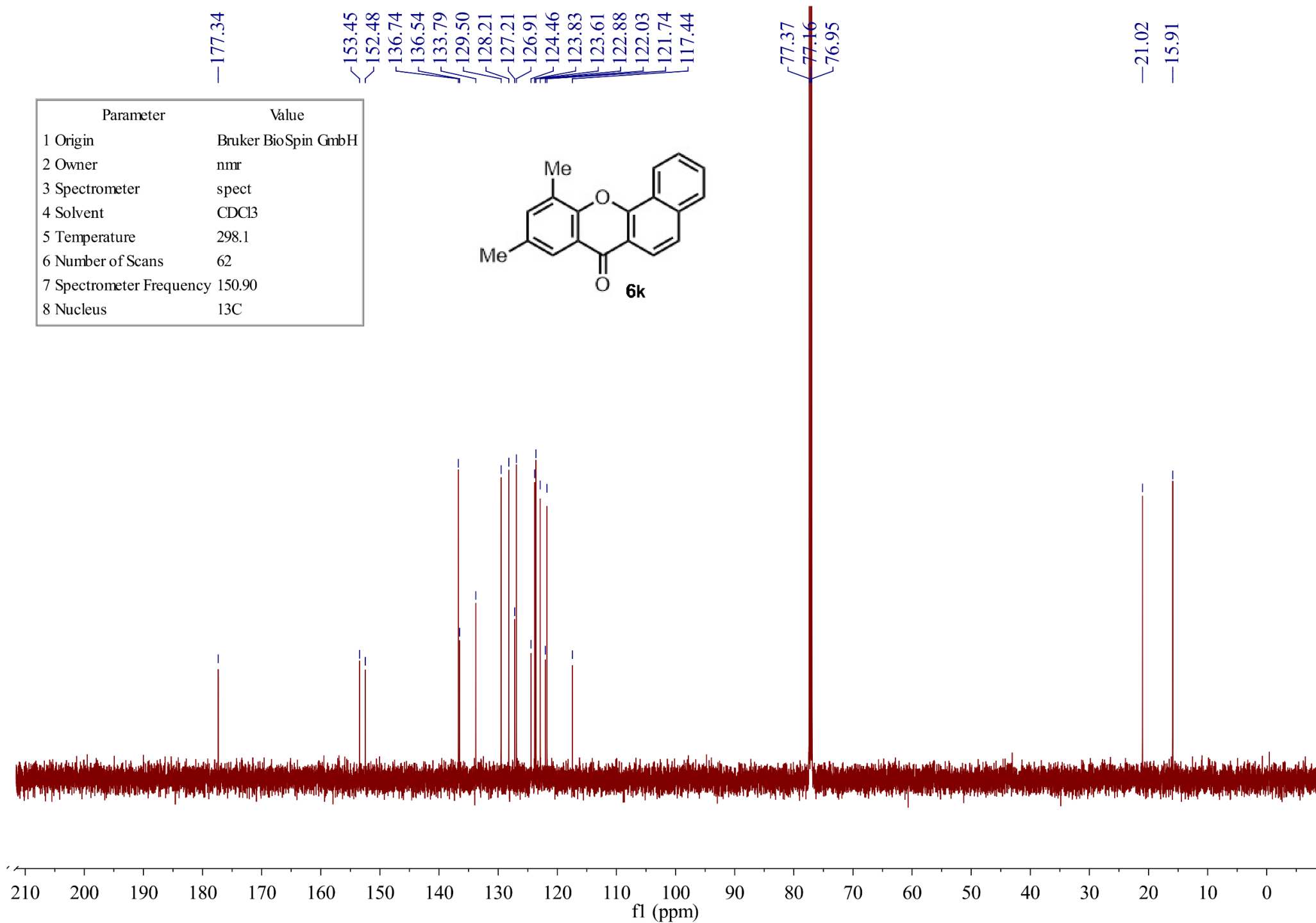
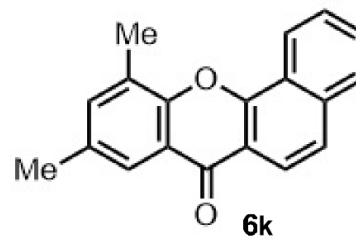




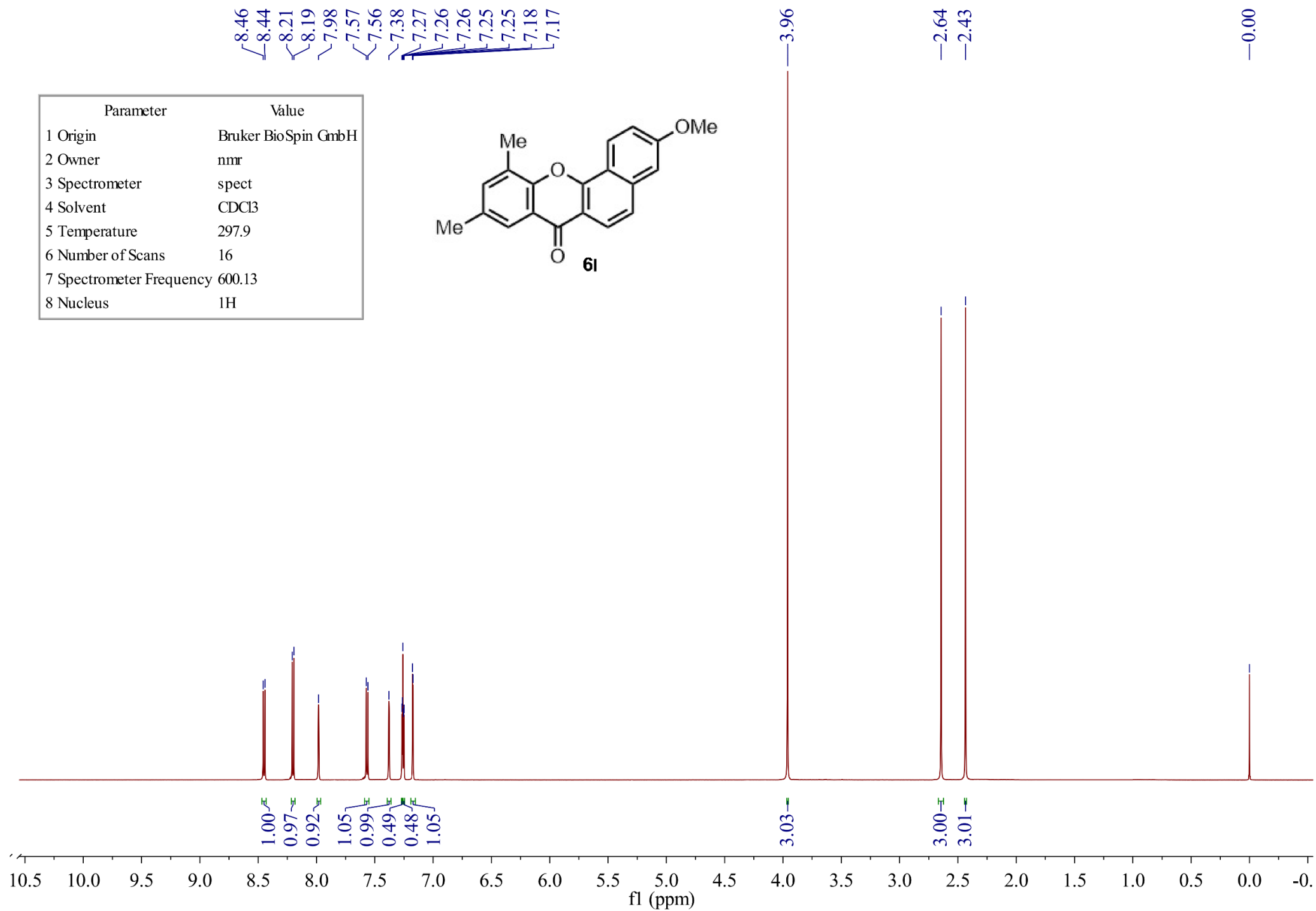
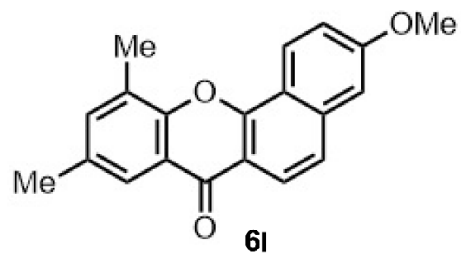
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



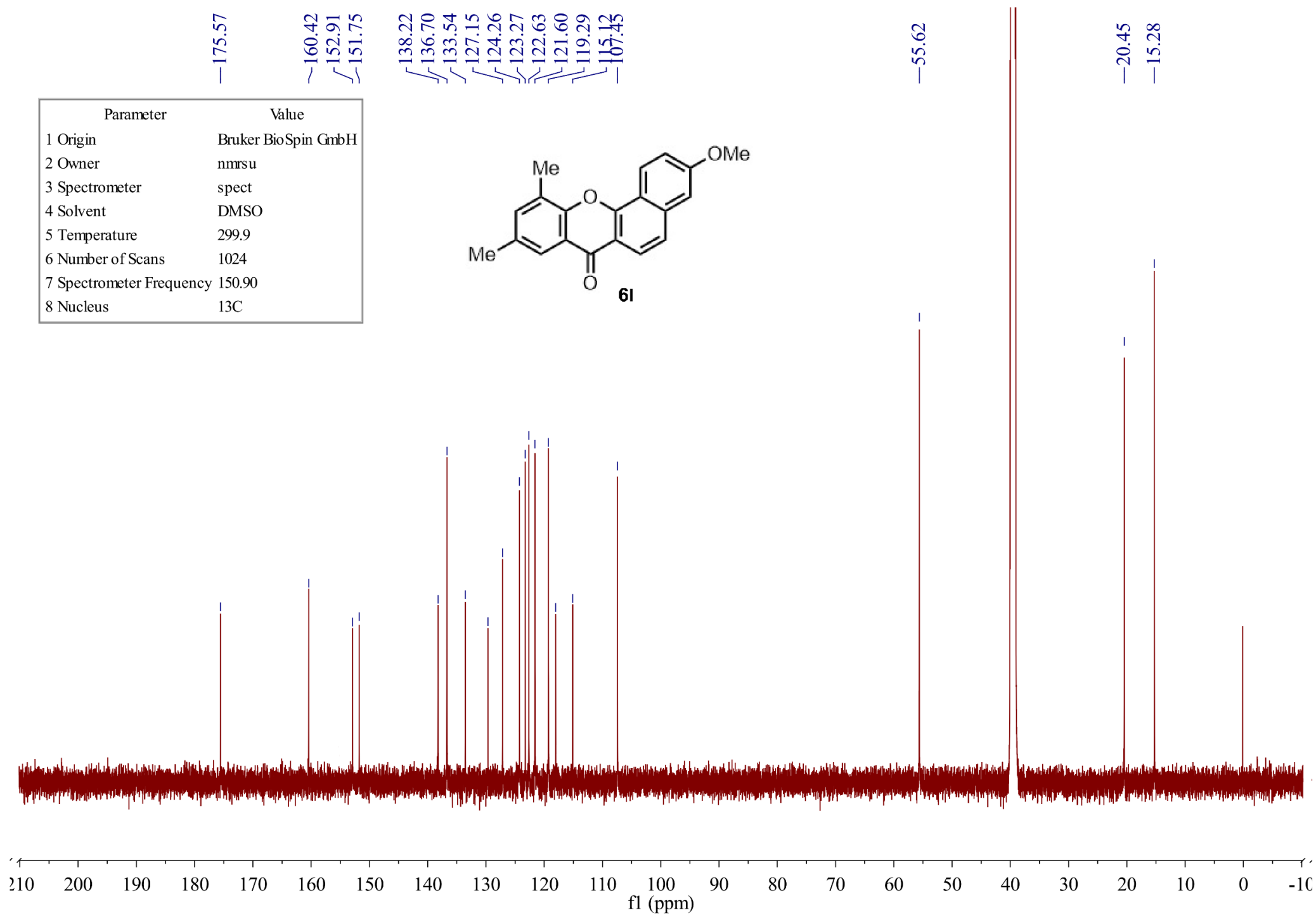
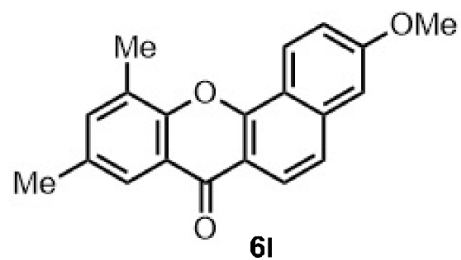
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	298.1
6 Number of Scans	62
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



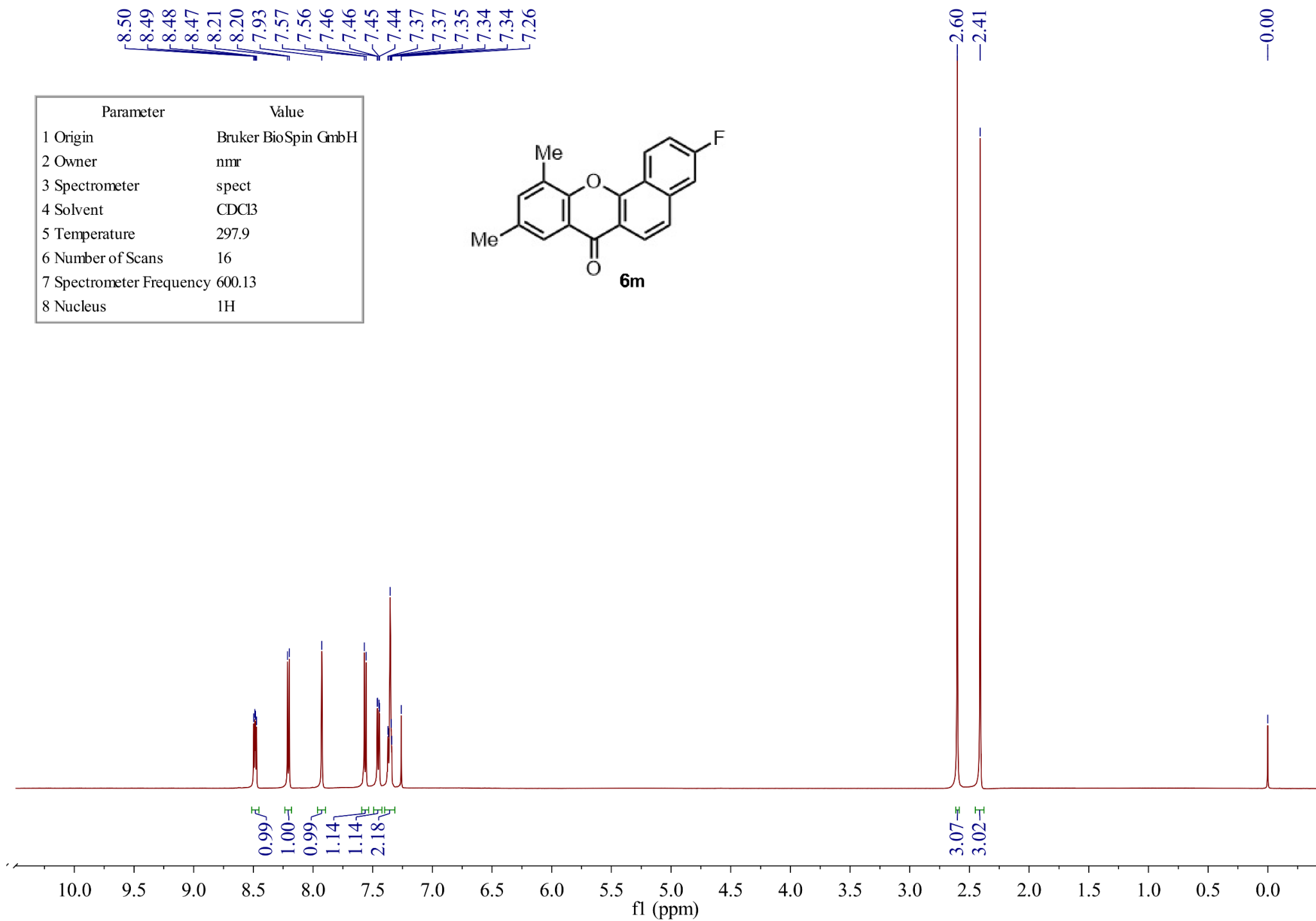
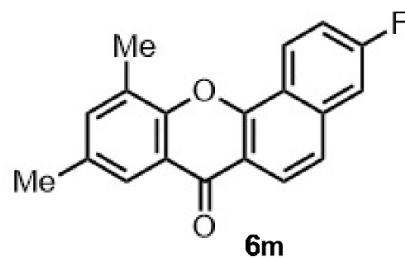
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



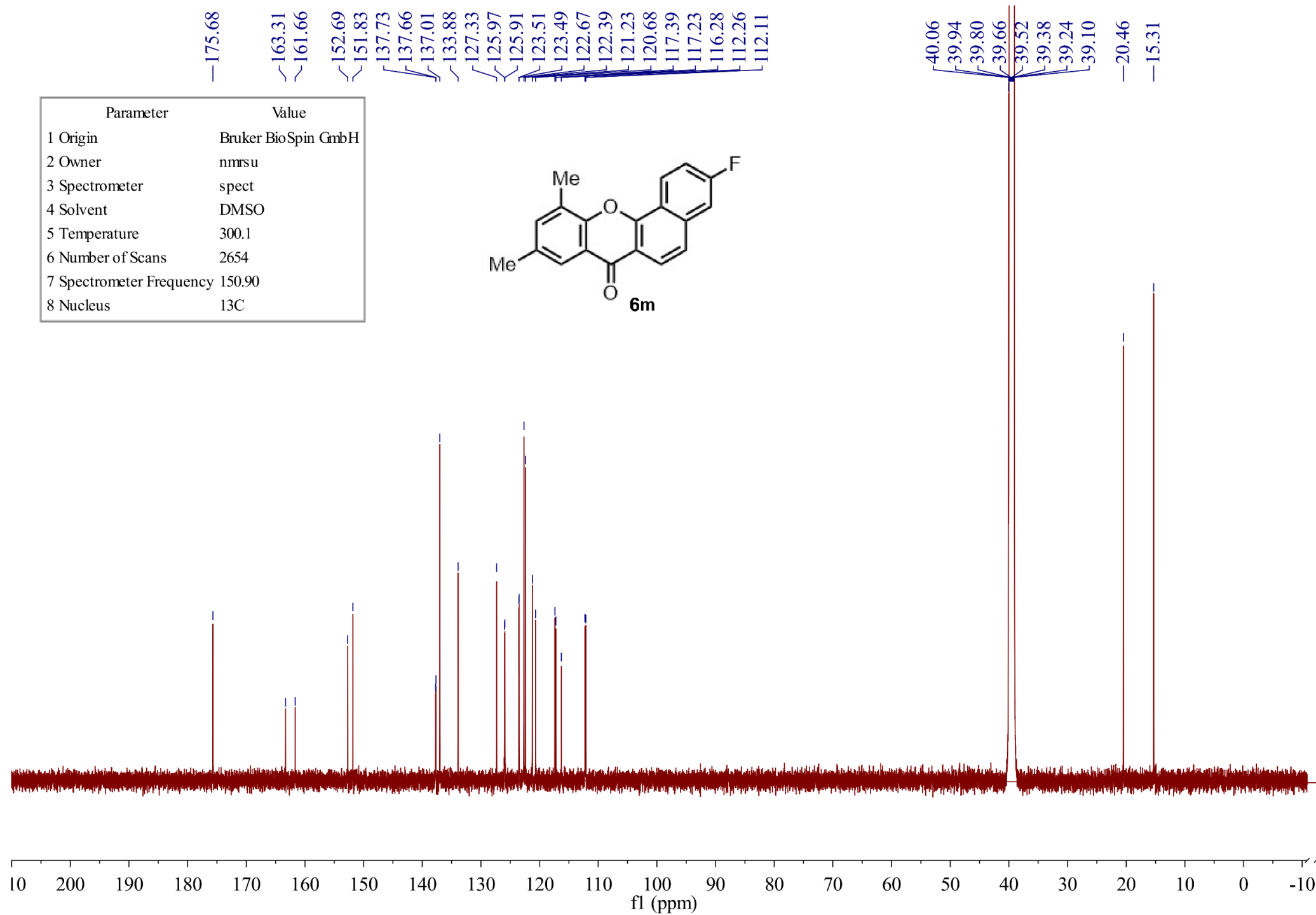
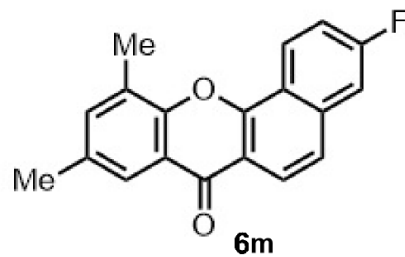
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	1024
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

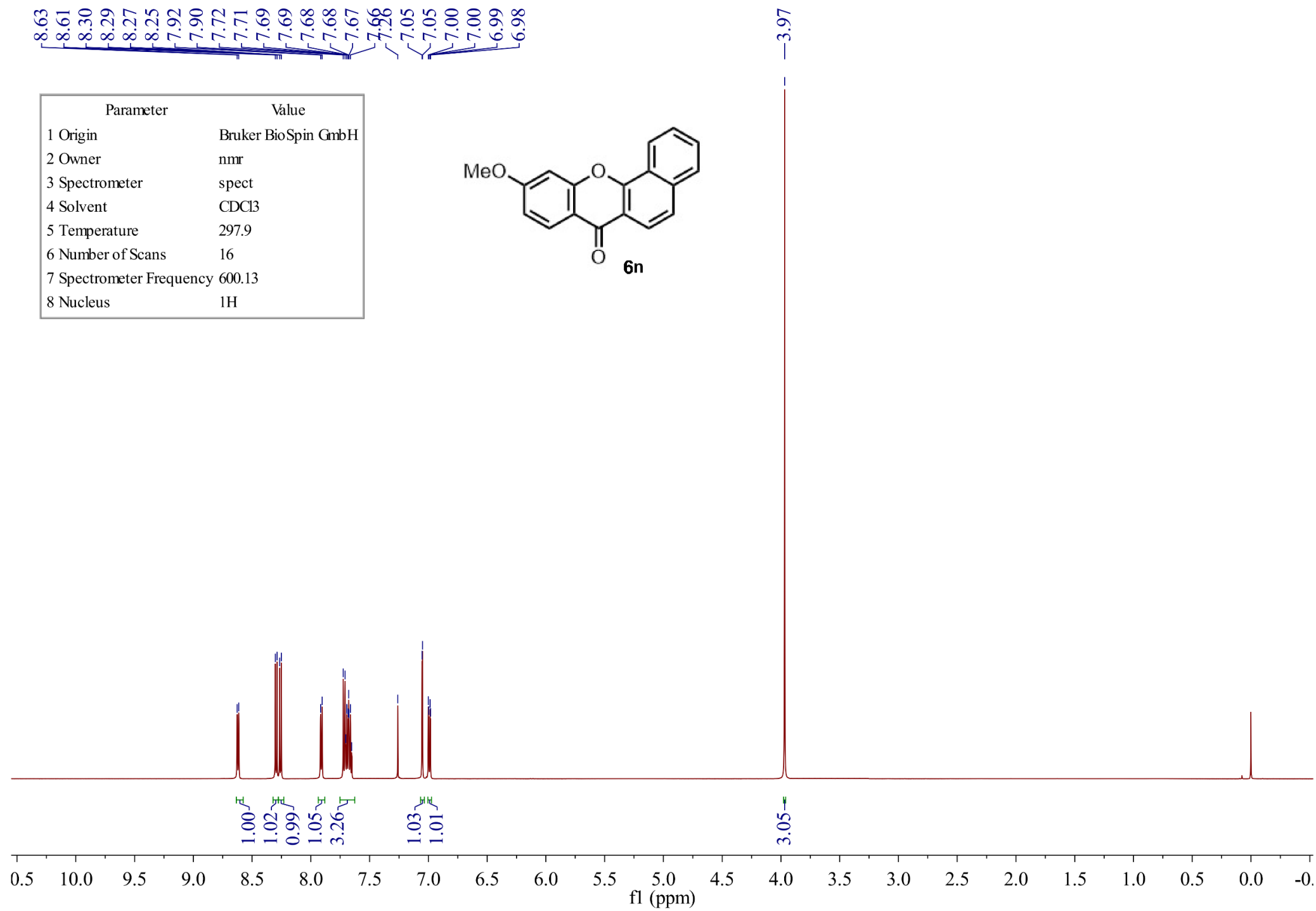


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

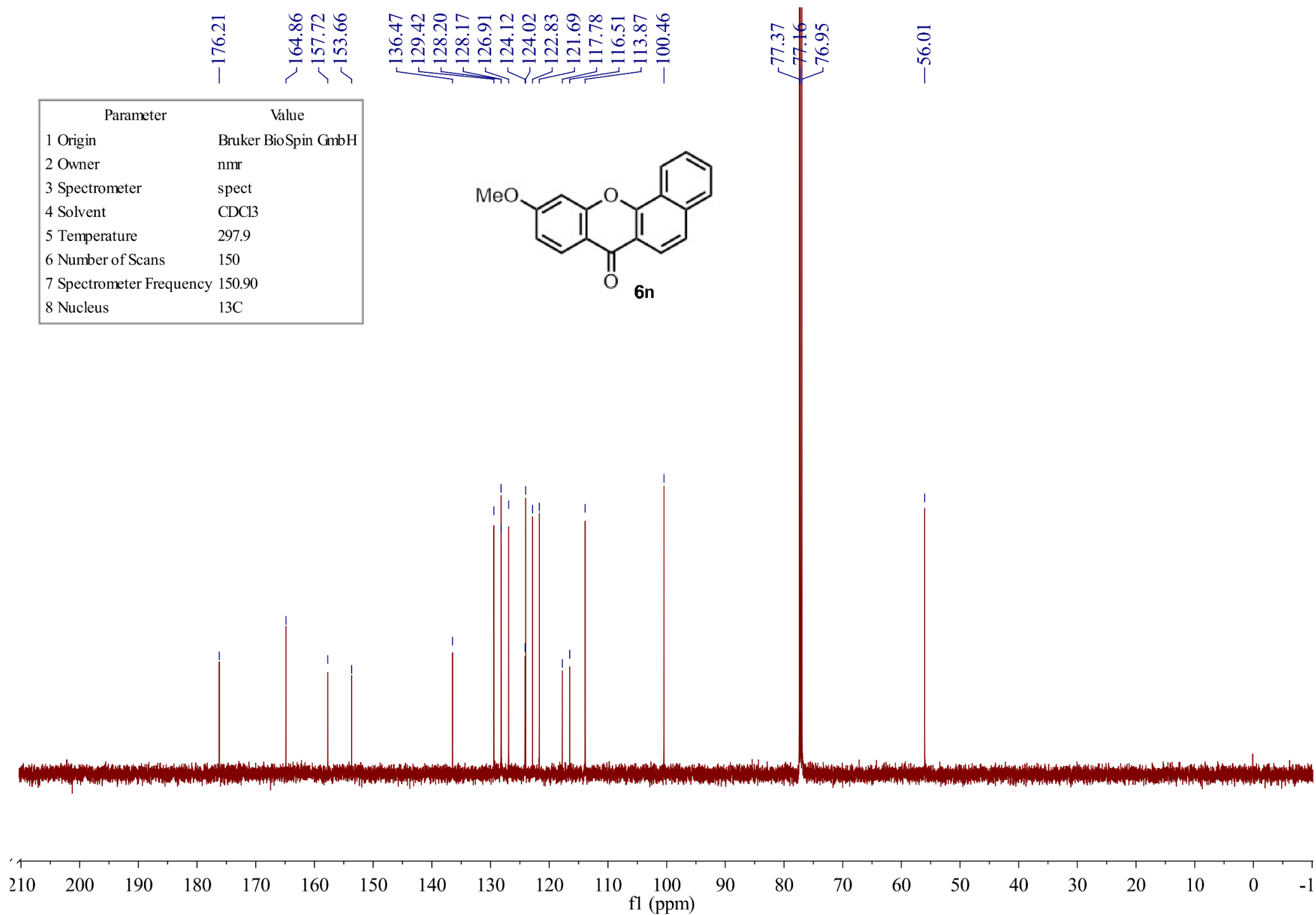
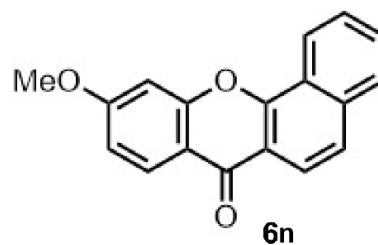


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	2654
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

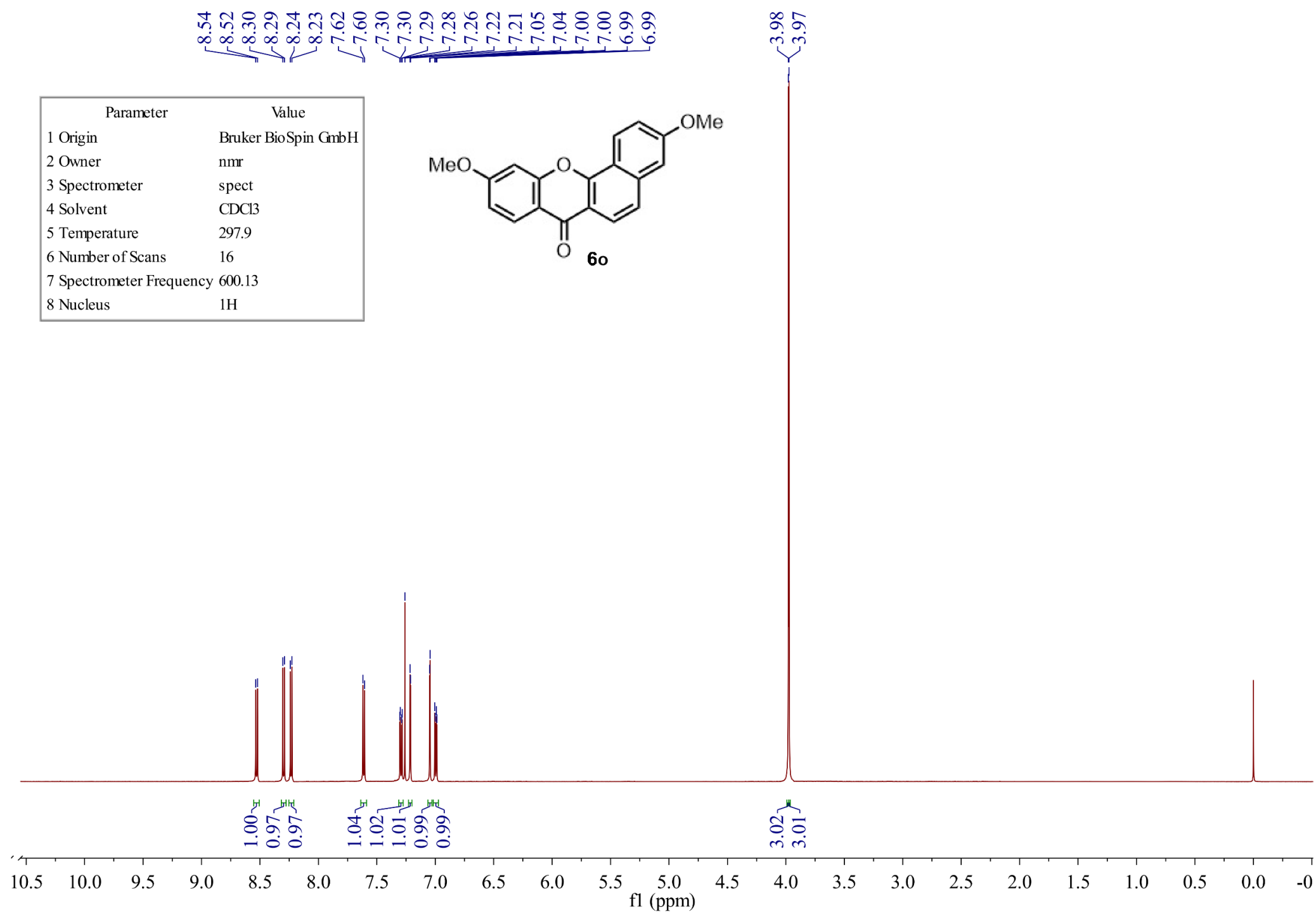
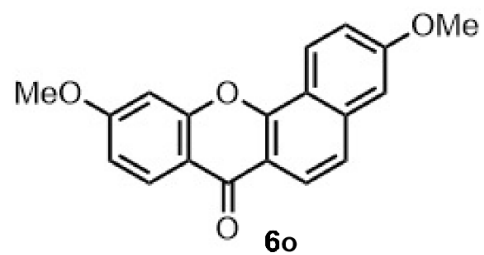




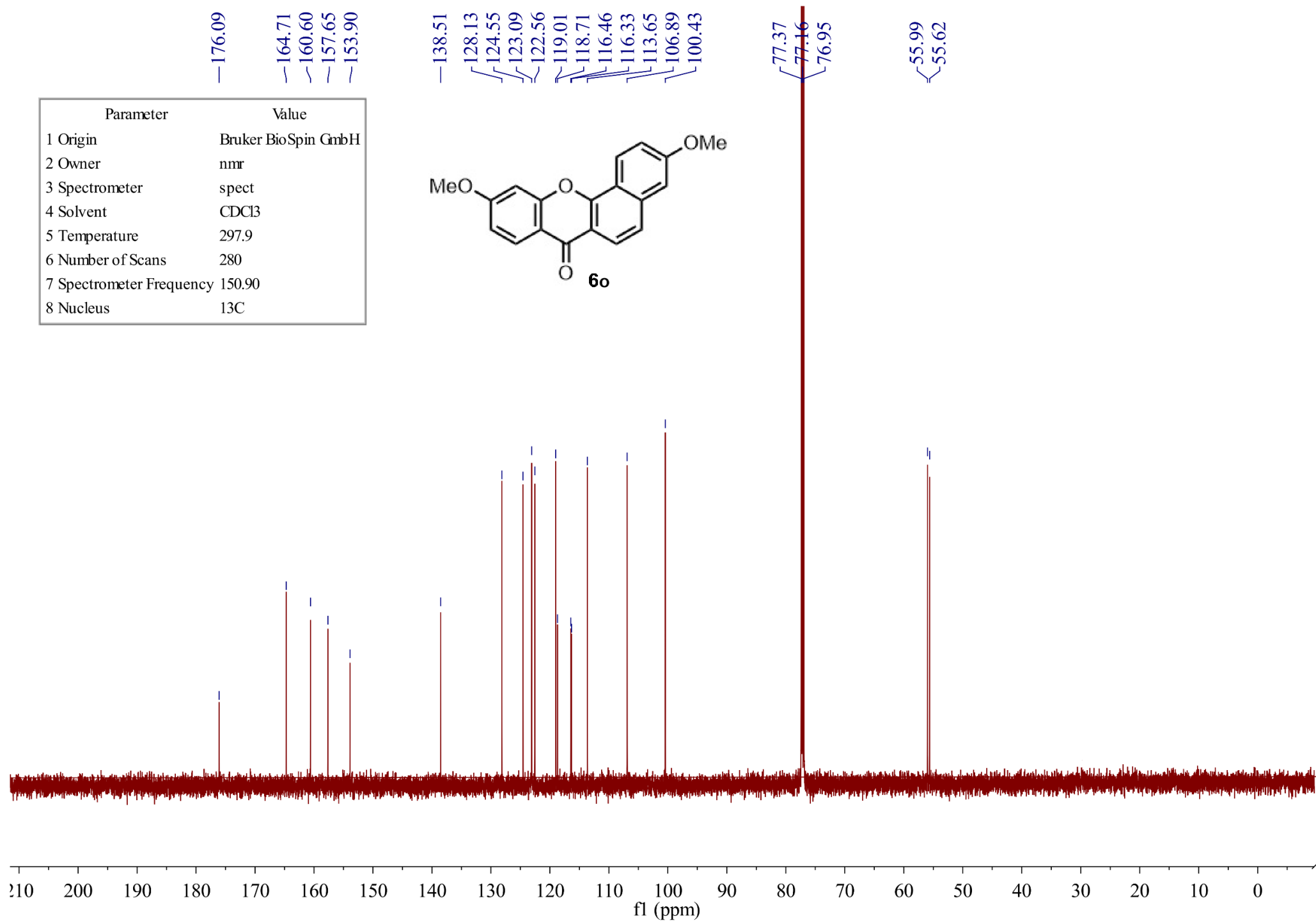
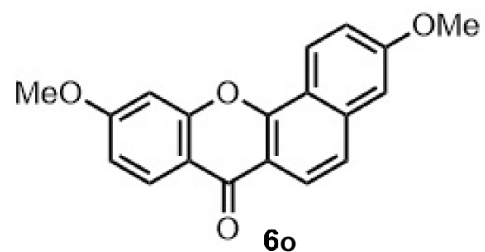
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	150
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



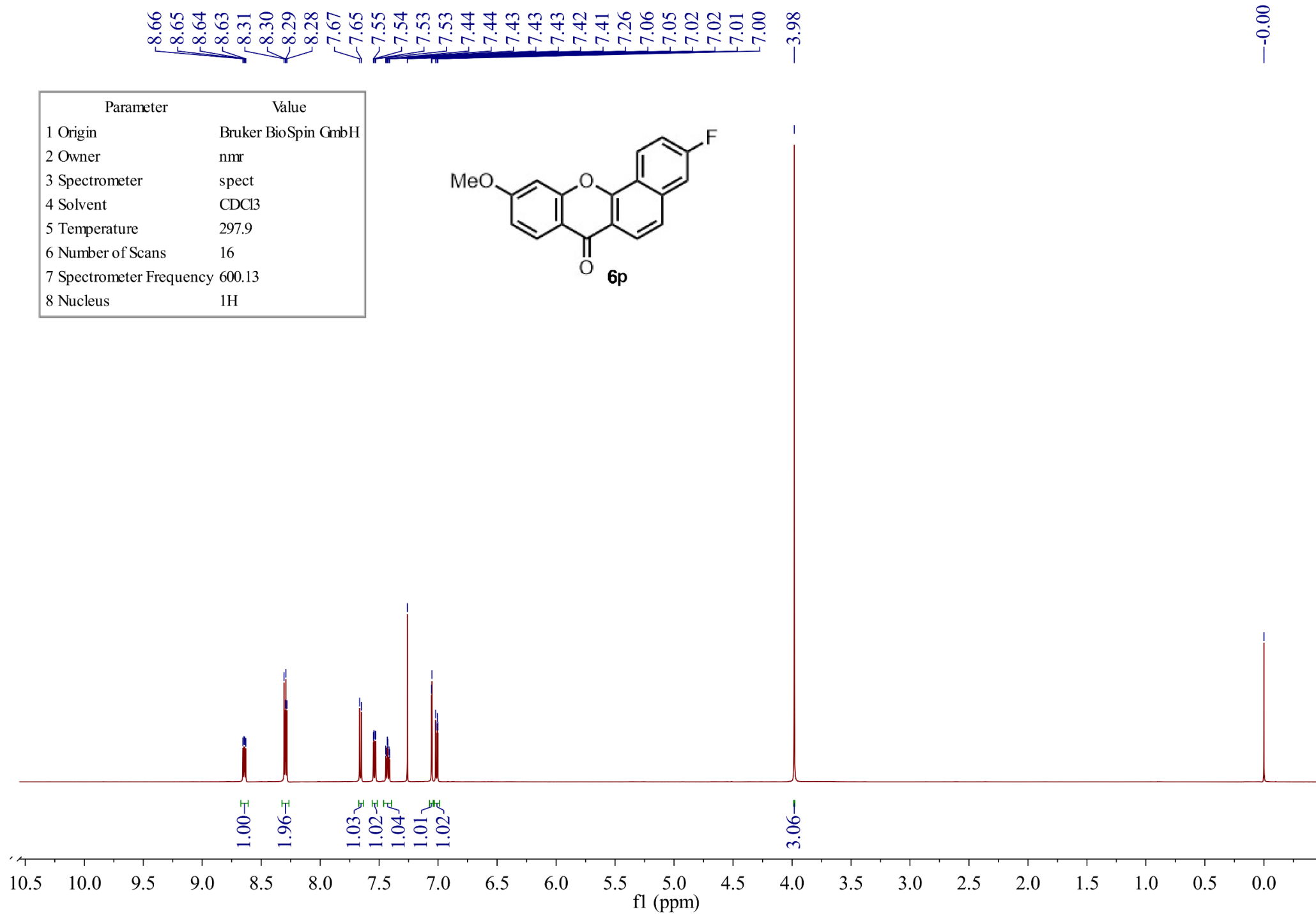
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	297.9
6 Number of Scans	280
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

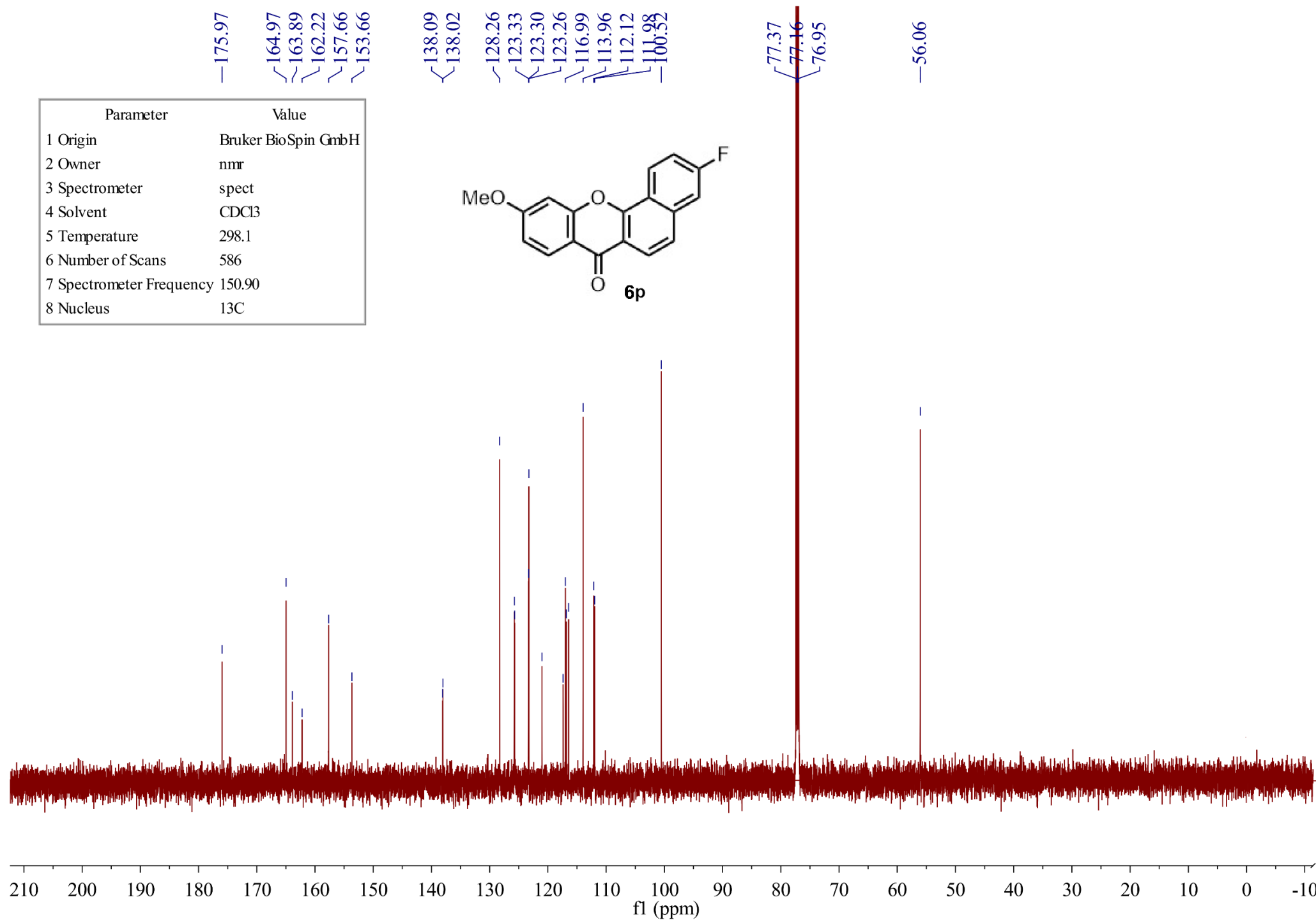
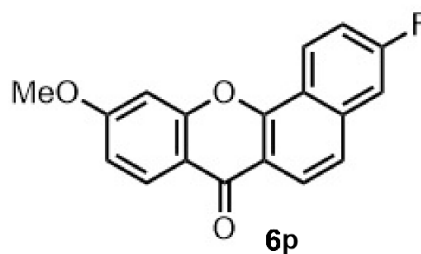


S101



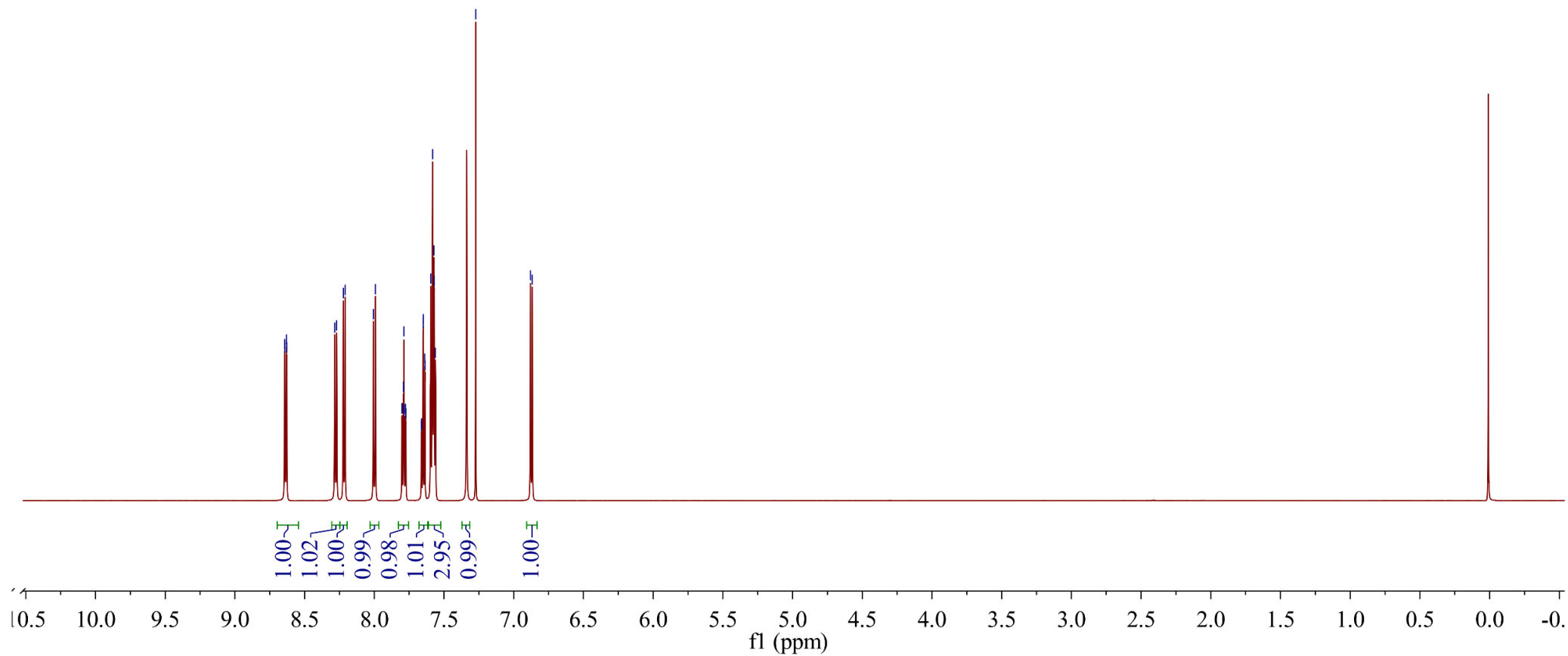
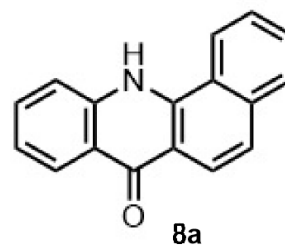
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

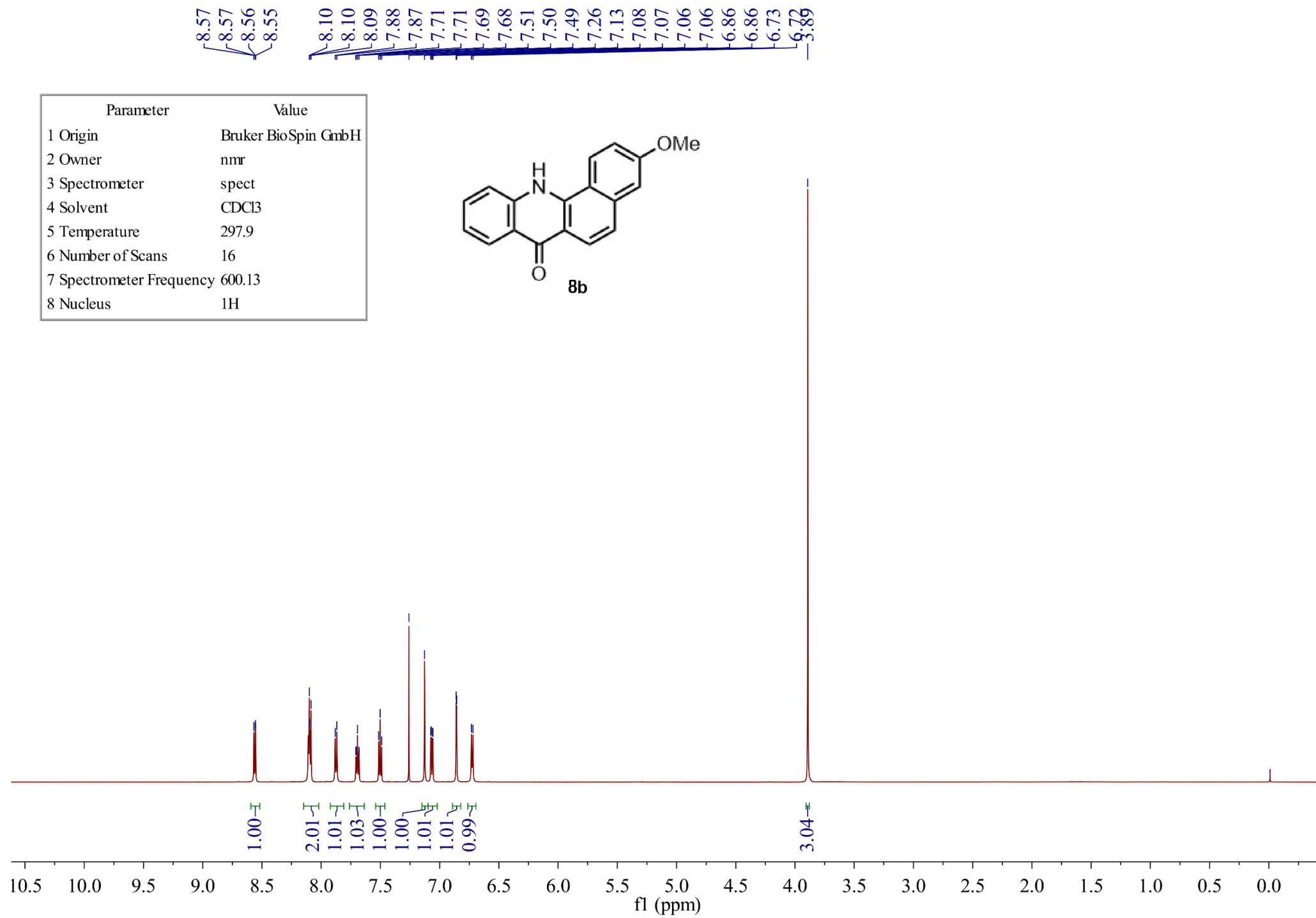
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	298.1
6 Number of Scans	586
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



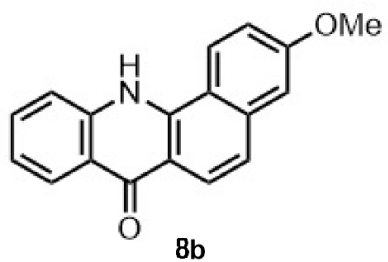
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7.60
7.58
7.57
7.57
7.27
6.88
6.87

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

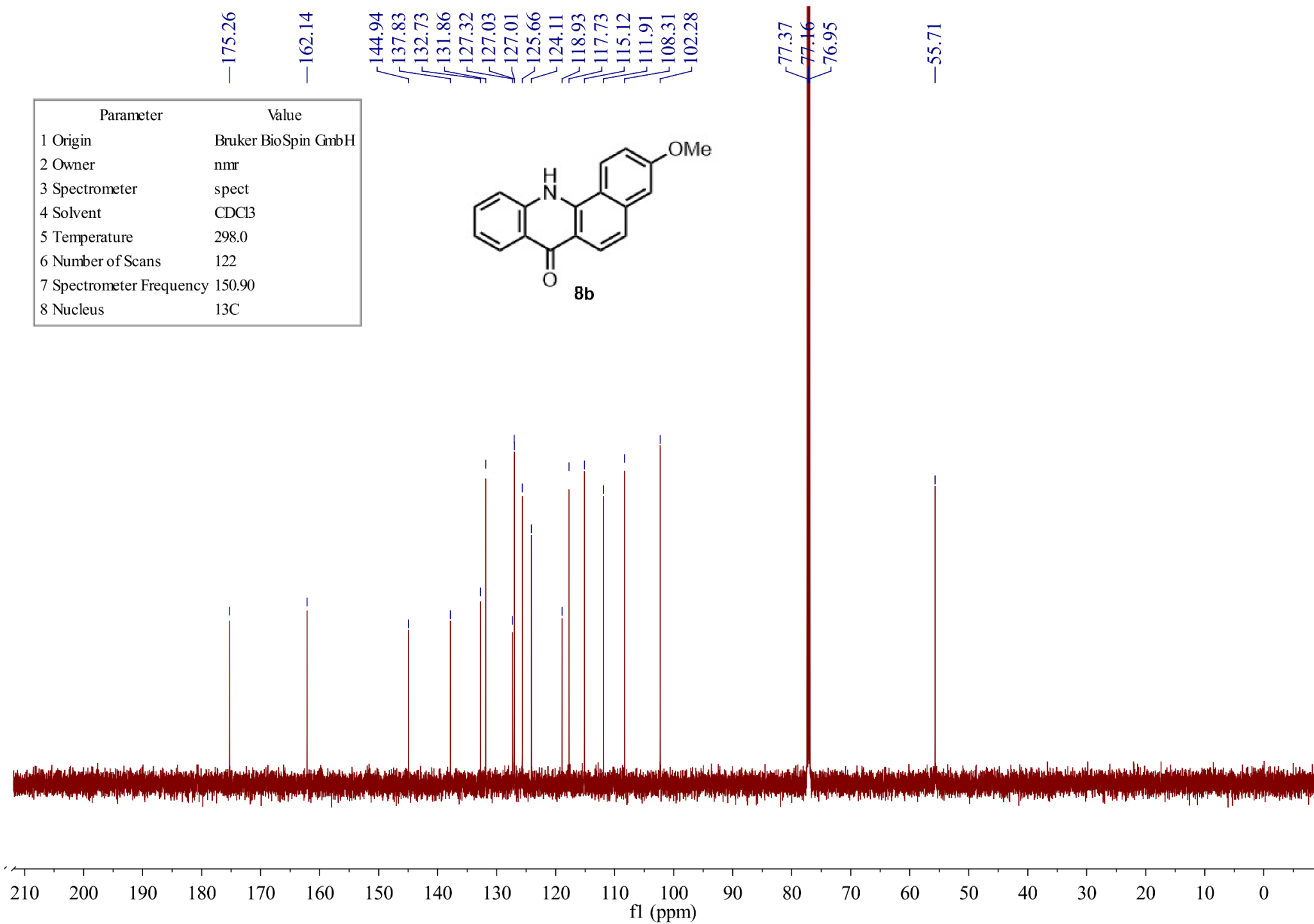
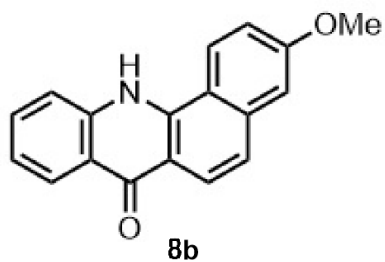


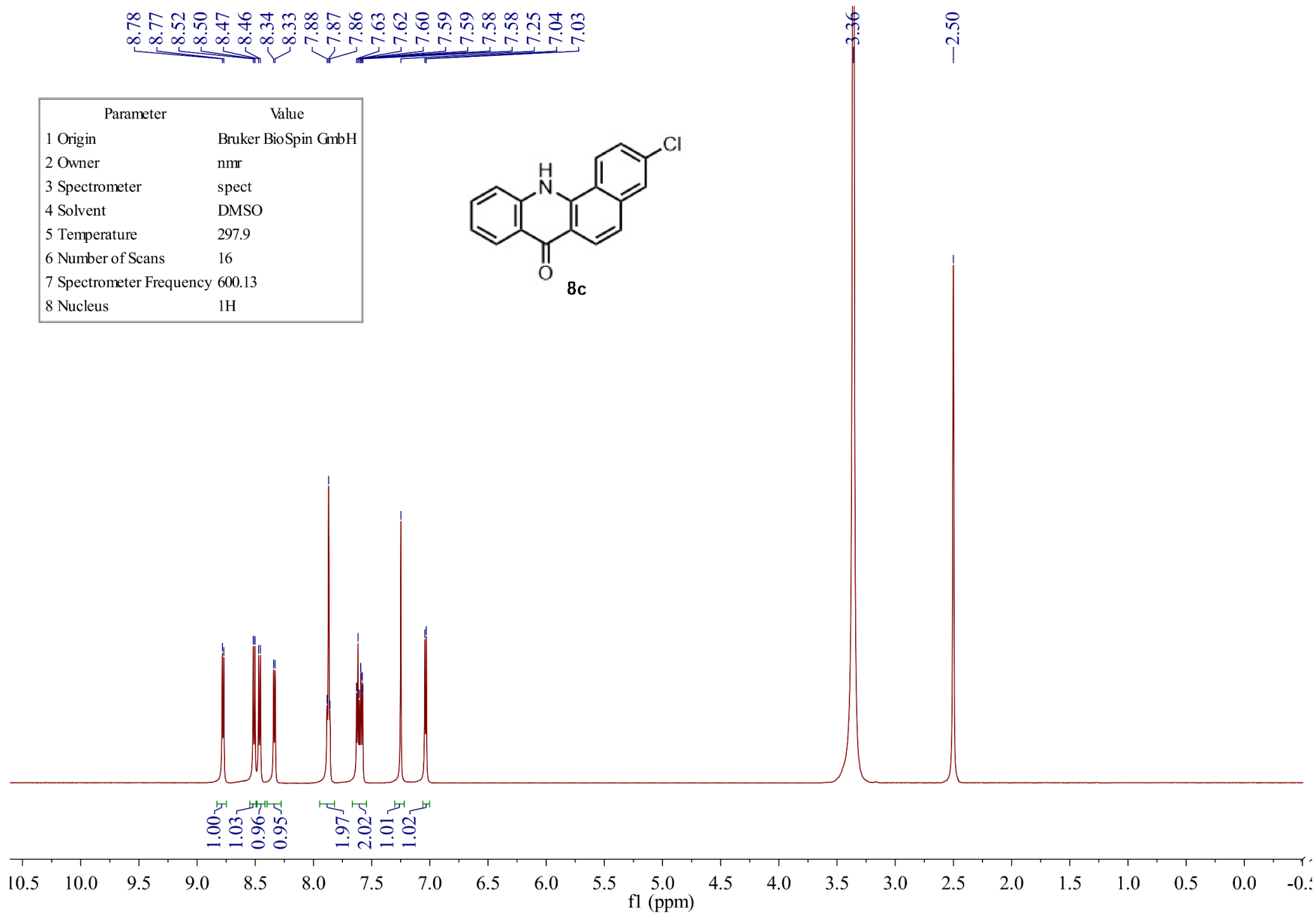


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H



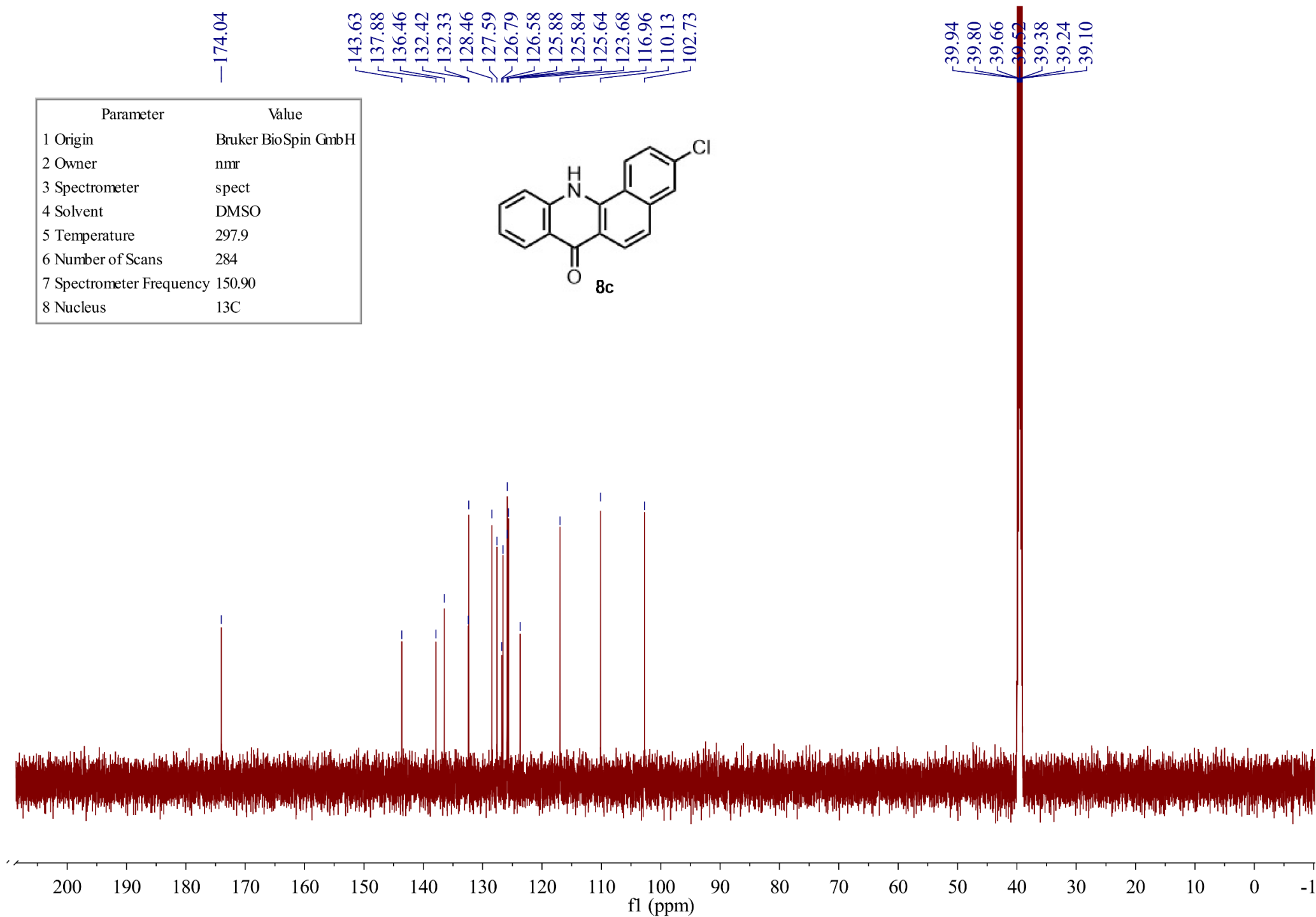
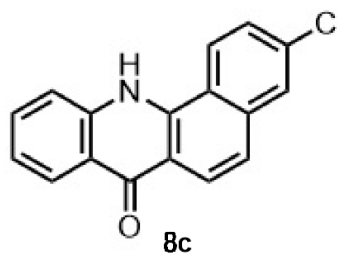
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl ₃
5 Temperature	298.0
6 Number of Scans	122
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

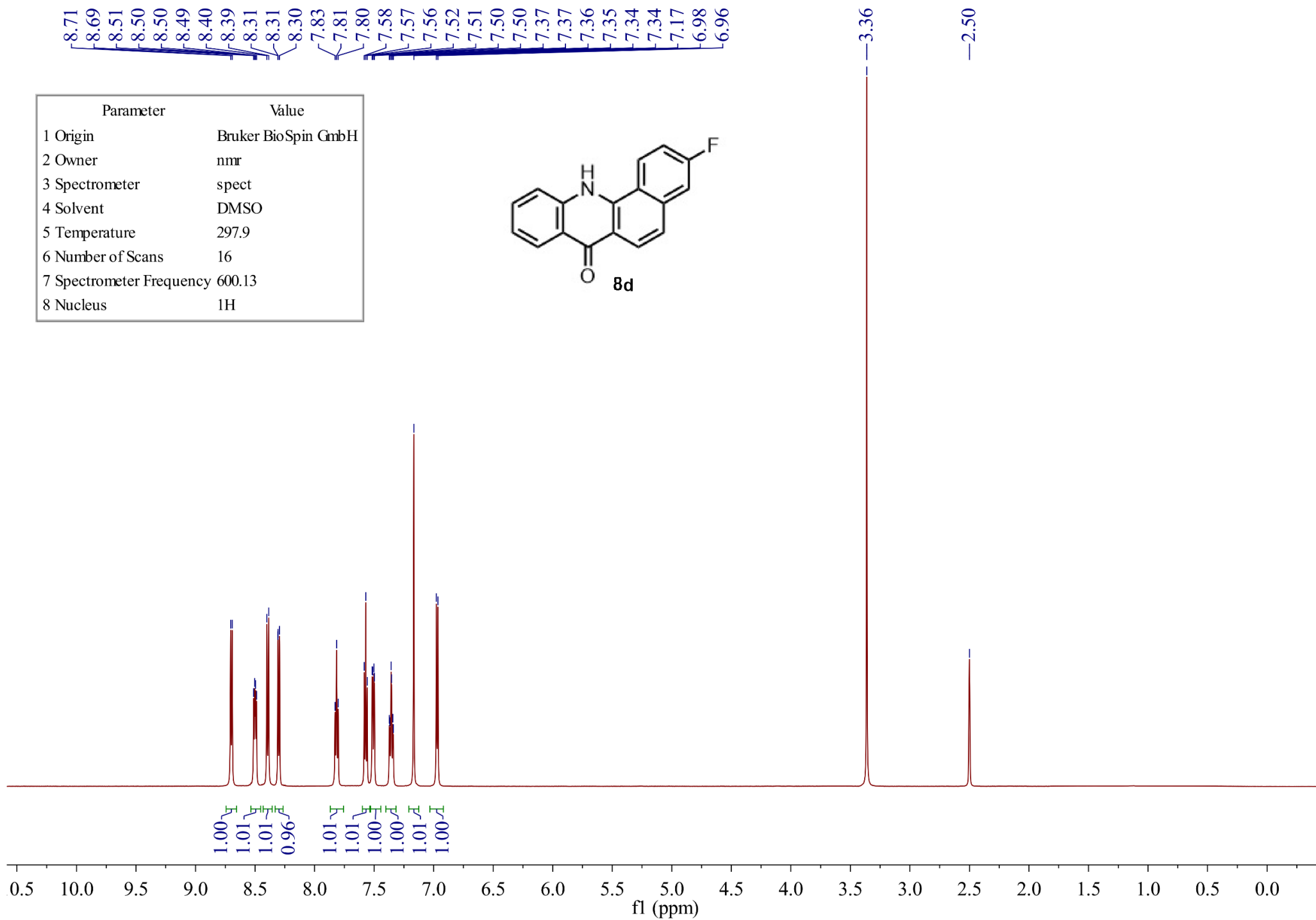




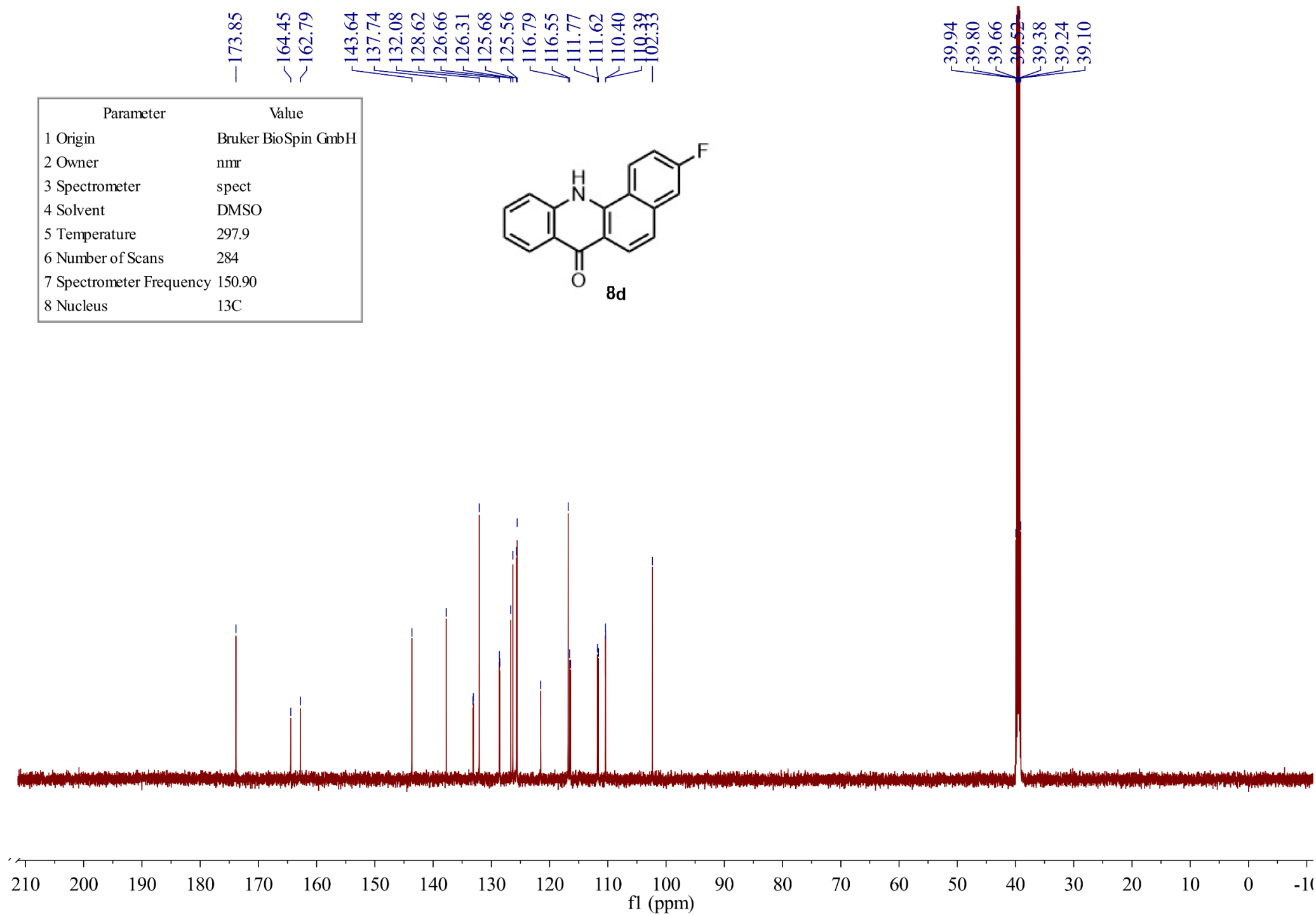
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	284
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

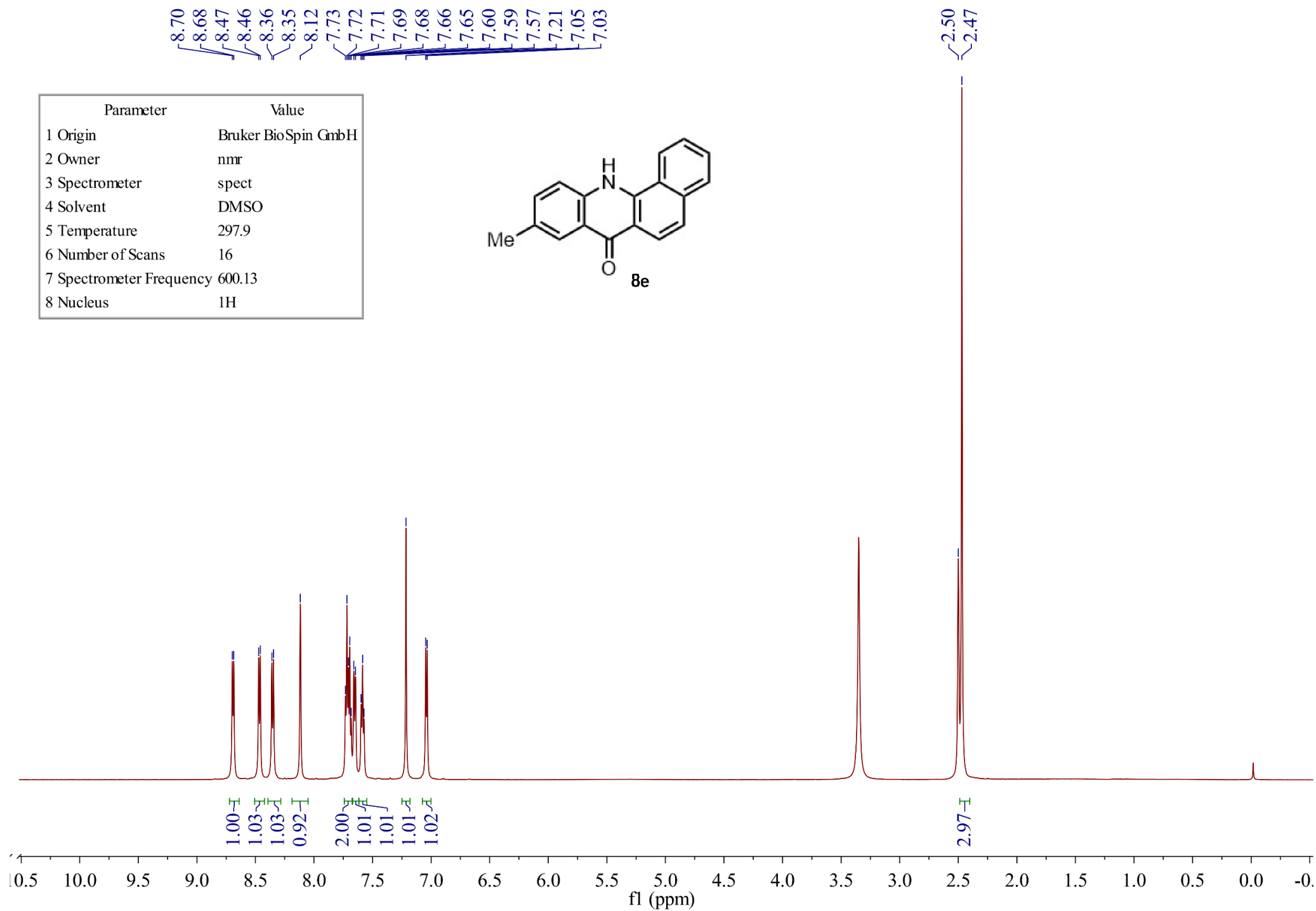
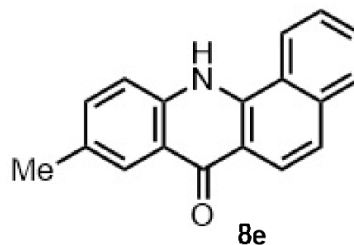




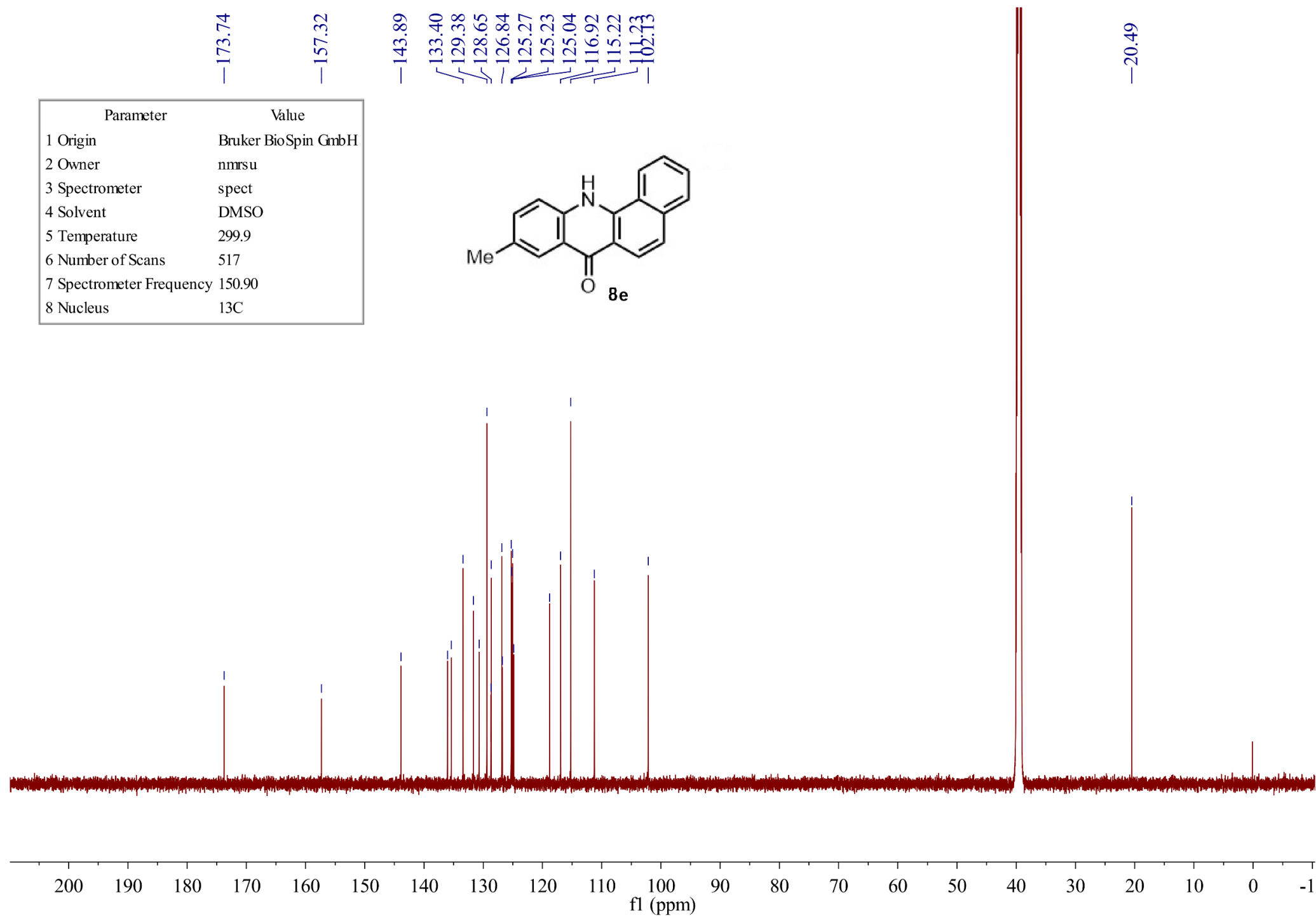
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	284
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



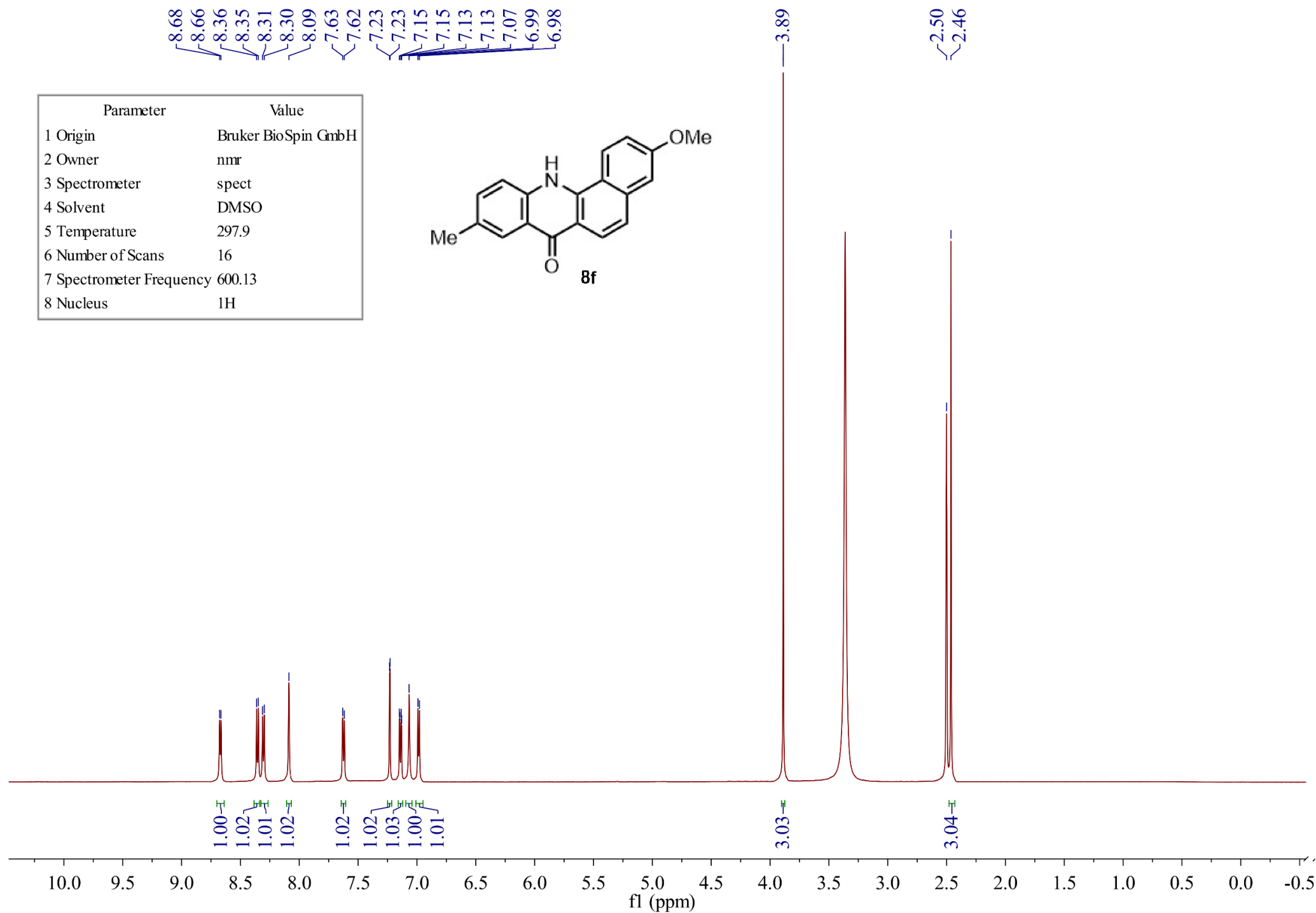
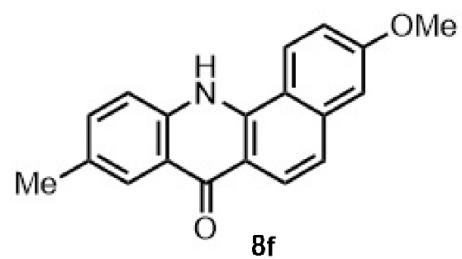
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



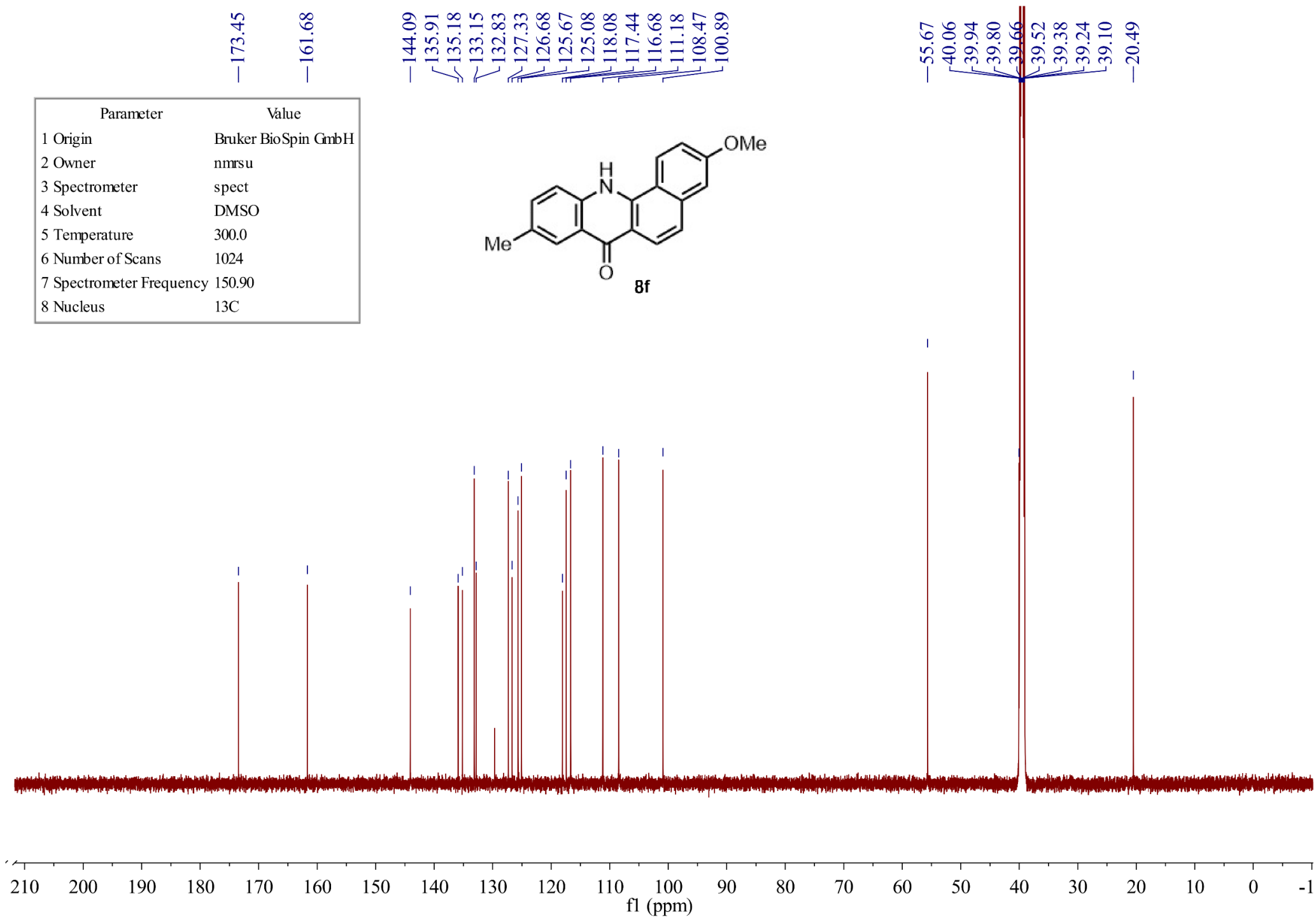
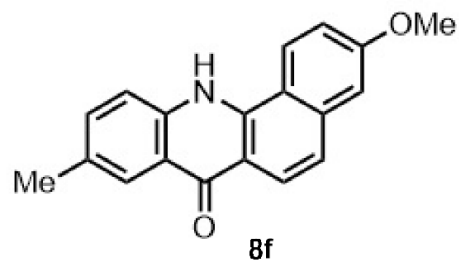
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	517
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



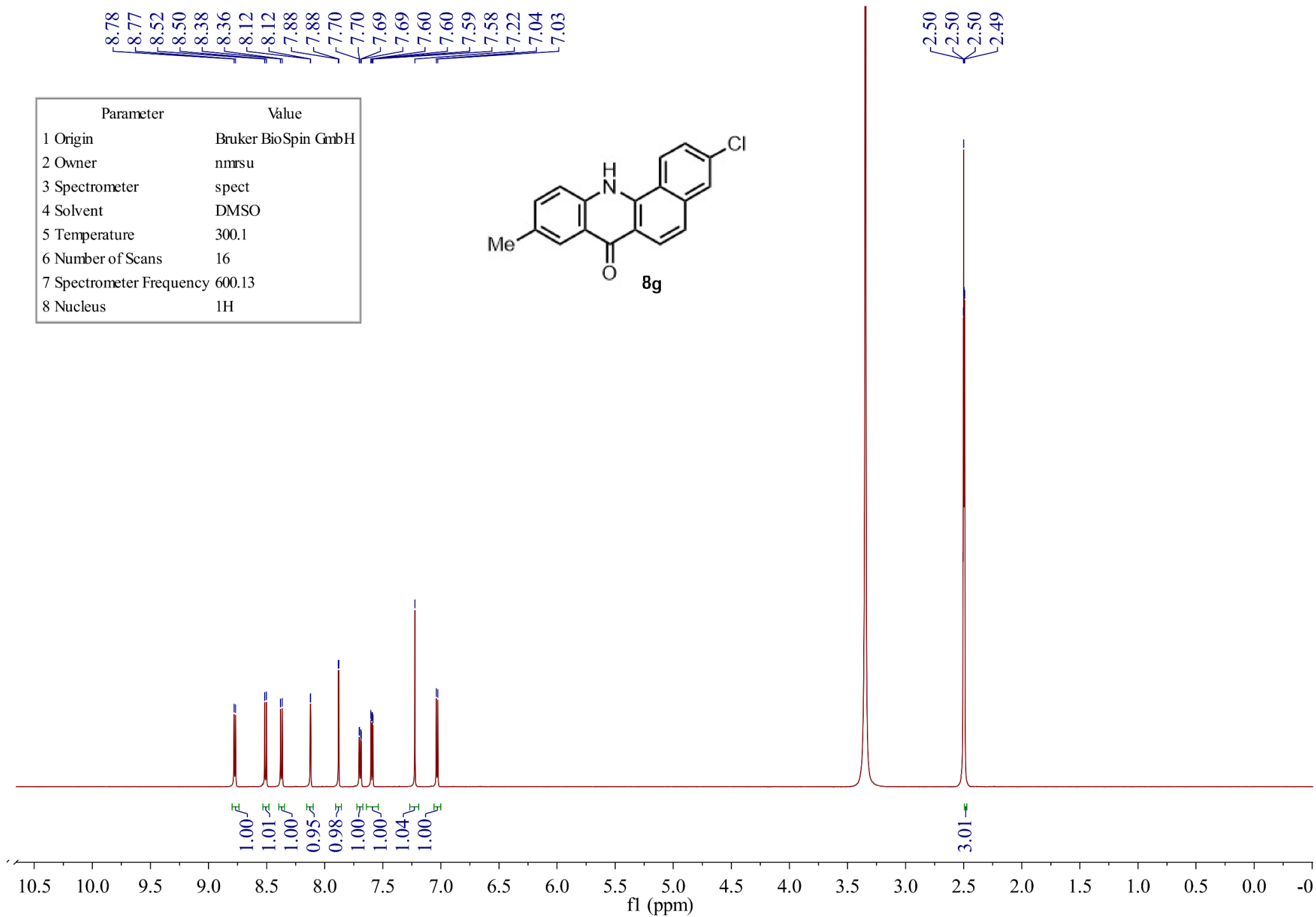
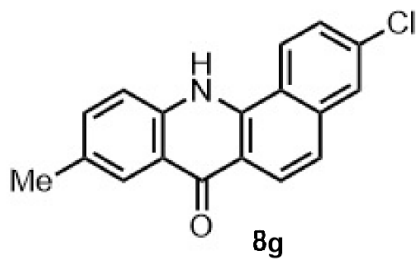
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	1024
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



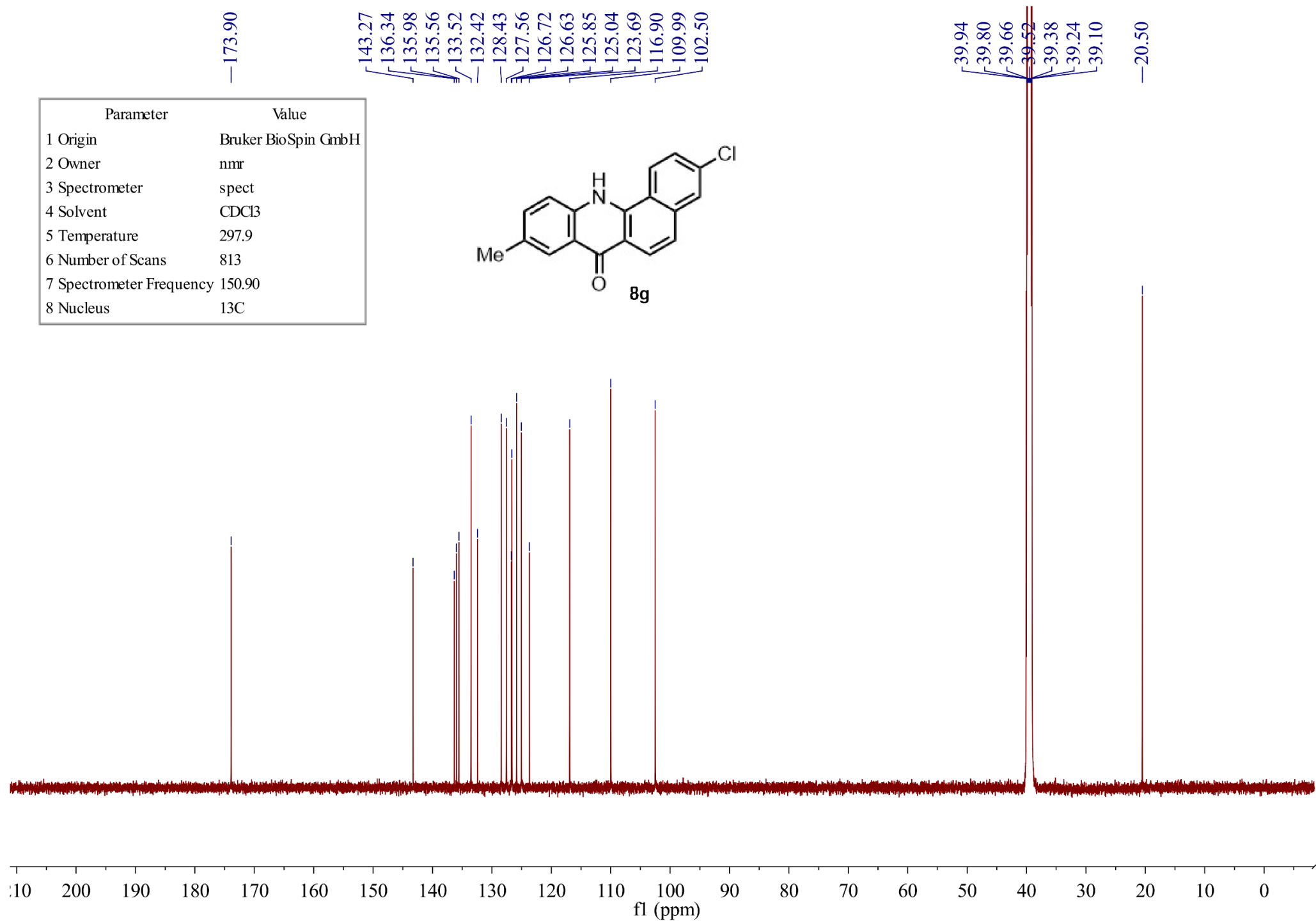
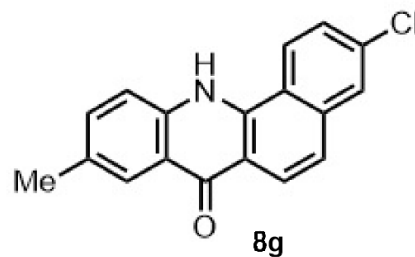
8.78
8.77
8.52
8.50
8.38
8.36
8.12
8.12
7.88
7.88
7.70
7.70
7.69
7.69
7.60
7.60
7.59
7.58
7.22
7.04
7.03

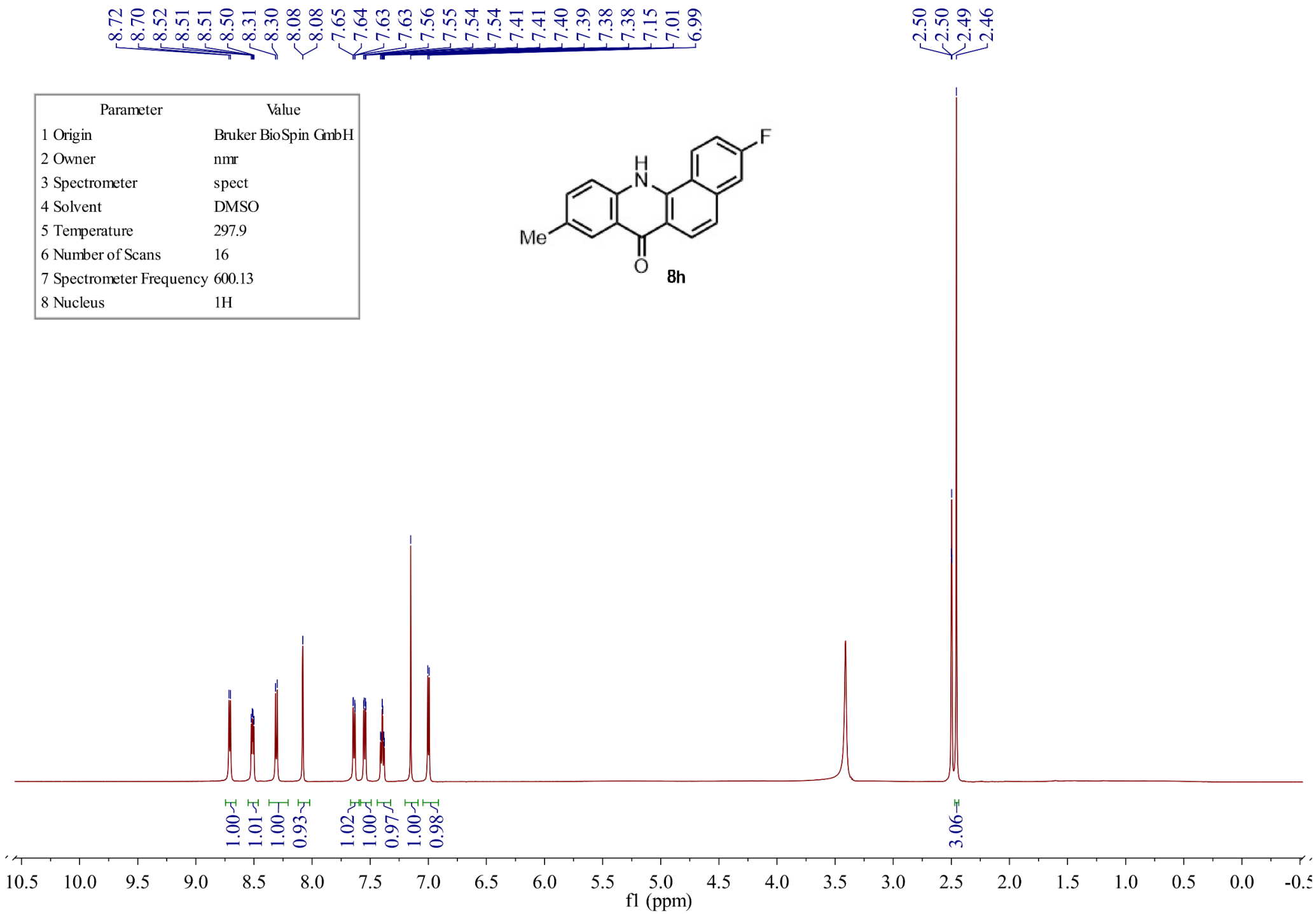
2.50
2.50
2.50
2.49

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



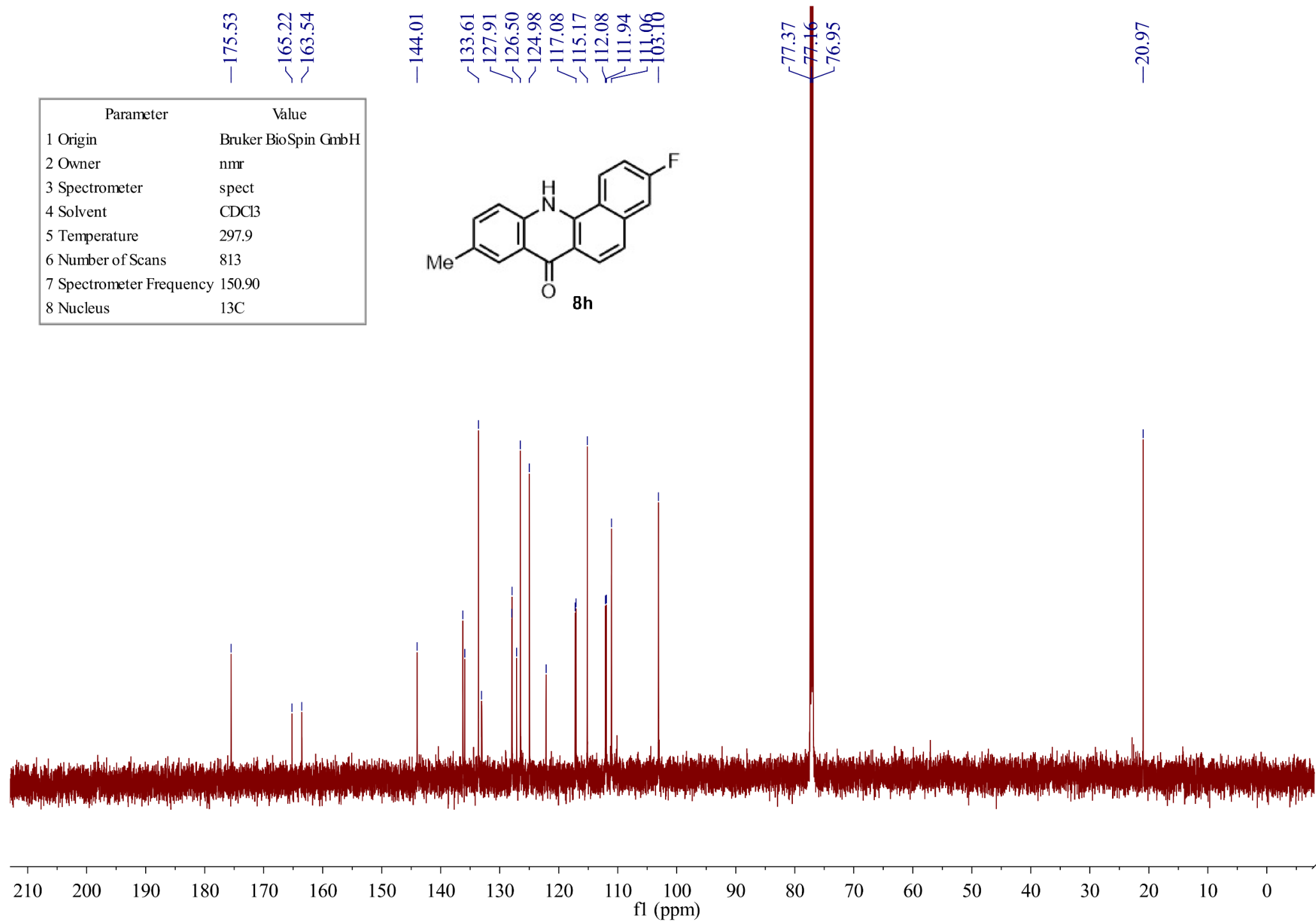
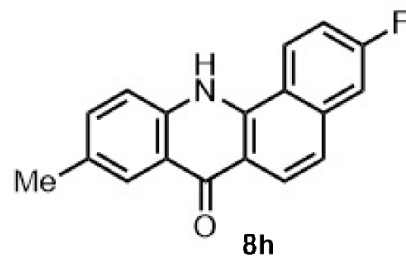
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	813
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	297.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

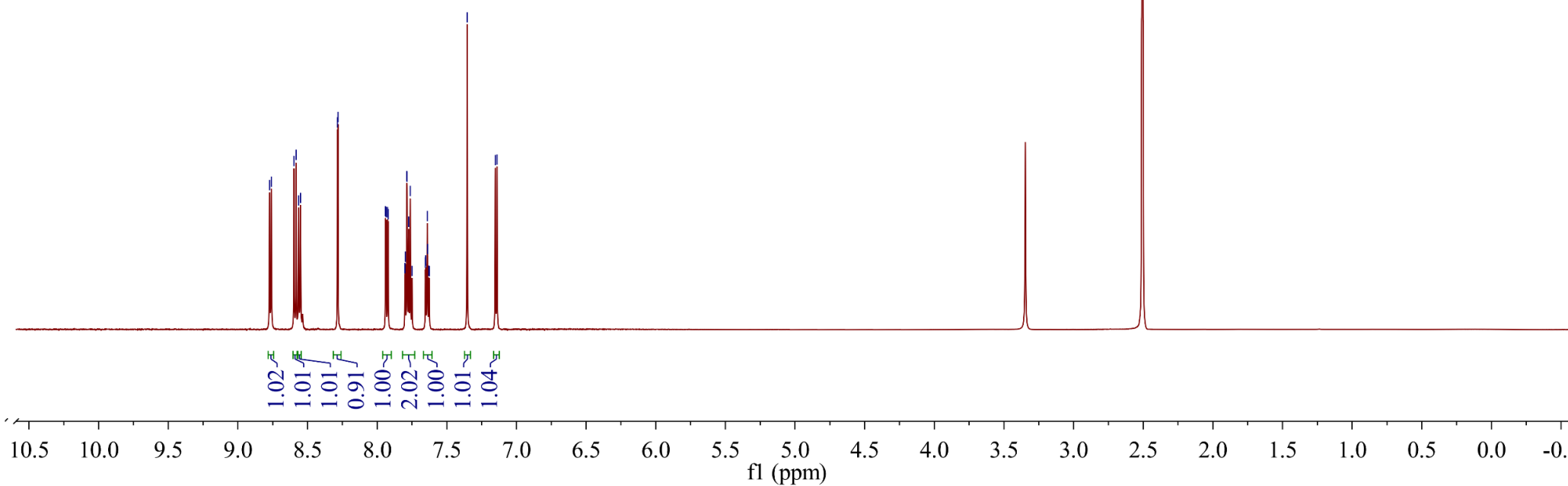
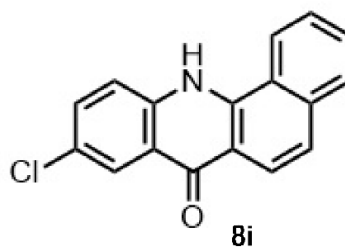
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmr
3 Spectrometer	spect
4 Solvent	CDCl3
5 Temperature	297.9
6 Number of Scans	813
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



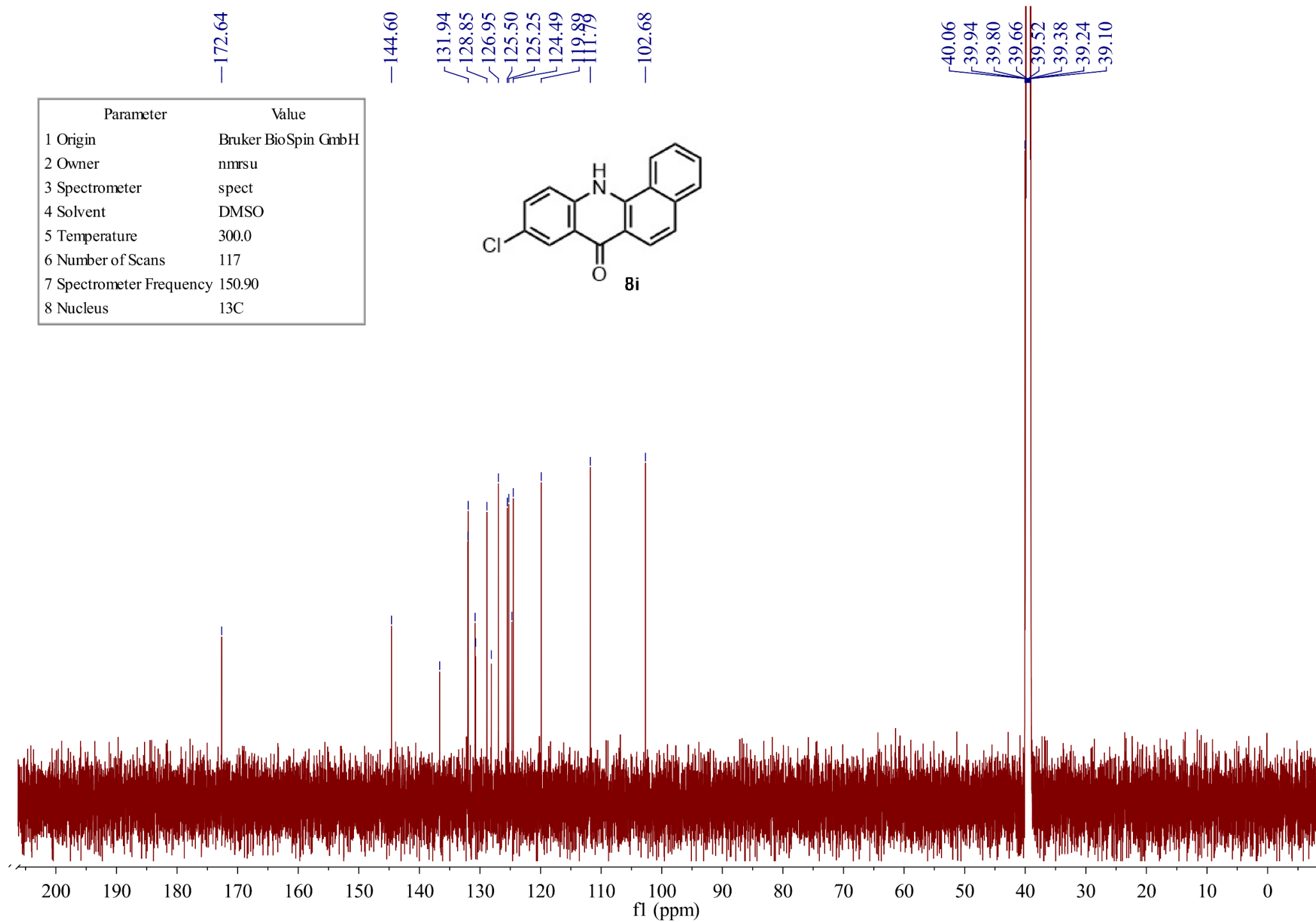
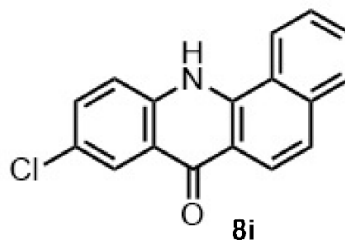
8.77
8.76
8.60
8.58
8.56
8.55
8.29
8.28
7.94
7.94
7.93
7.92
7.80
7.80
7.79
7.79
7.77
7.76
7.75
7.65
7.65
7.64
7.64
7.63
7.63
7.35
7.15
7.14

2.51
2.51
2.50

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

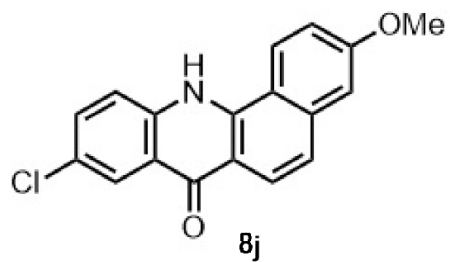


Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	117
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



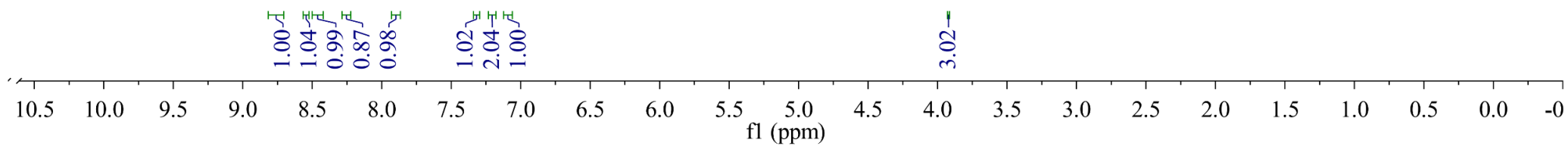
8.76
8.75
8.55
8.53
8.48
8.46
8.26
8.25
7.90
7.90
7.89
7.88
7.32
7.32
7.21
7.20
7.19
7.10
7.08

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H

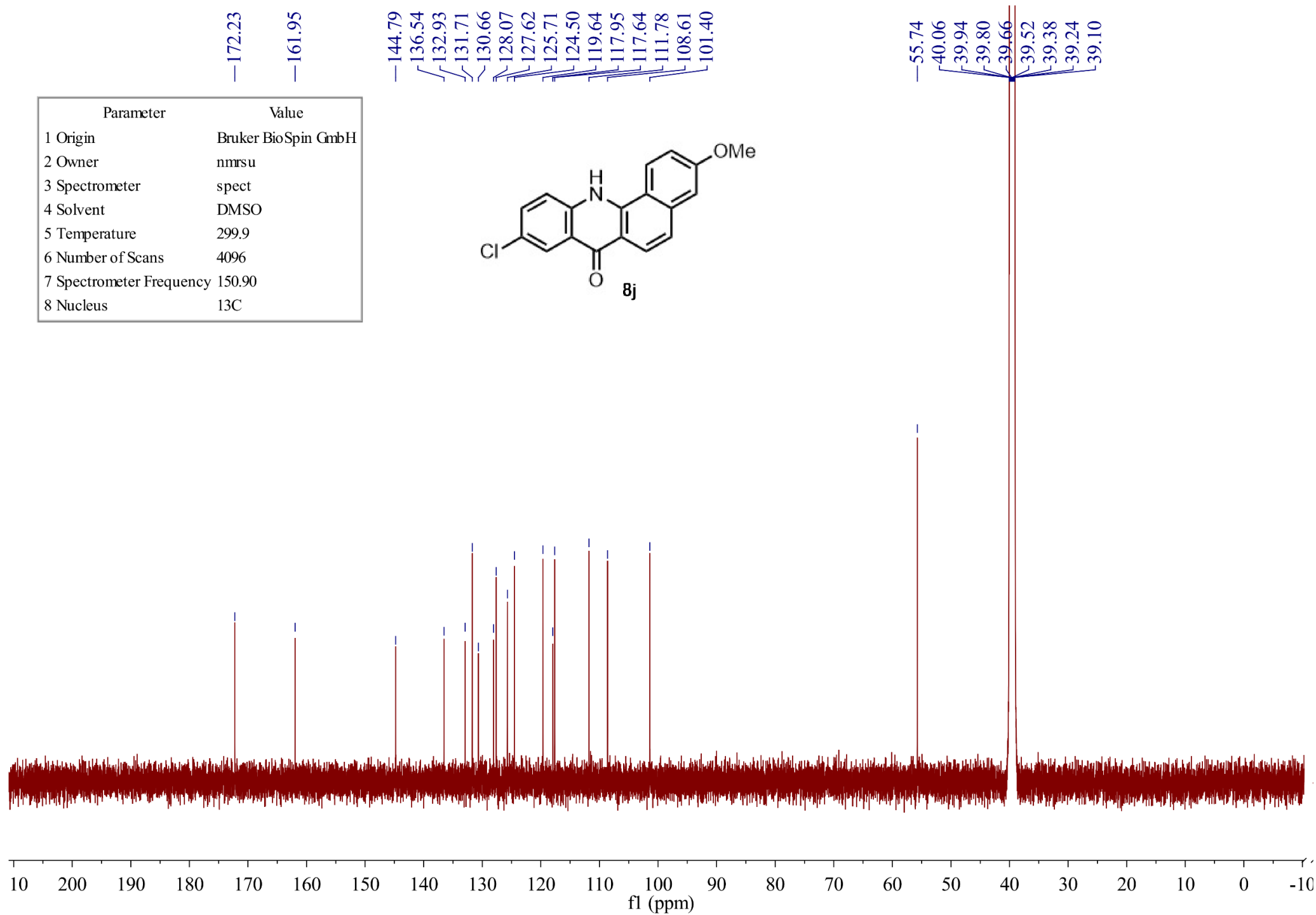
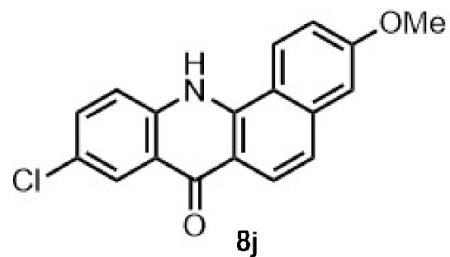


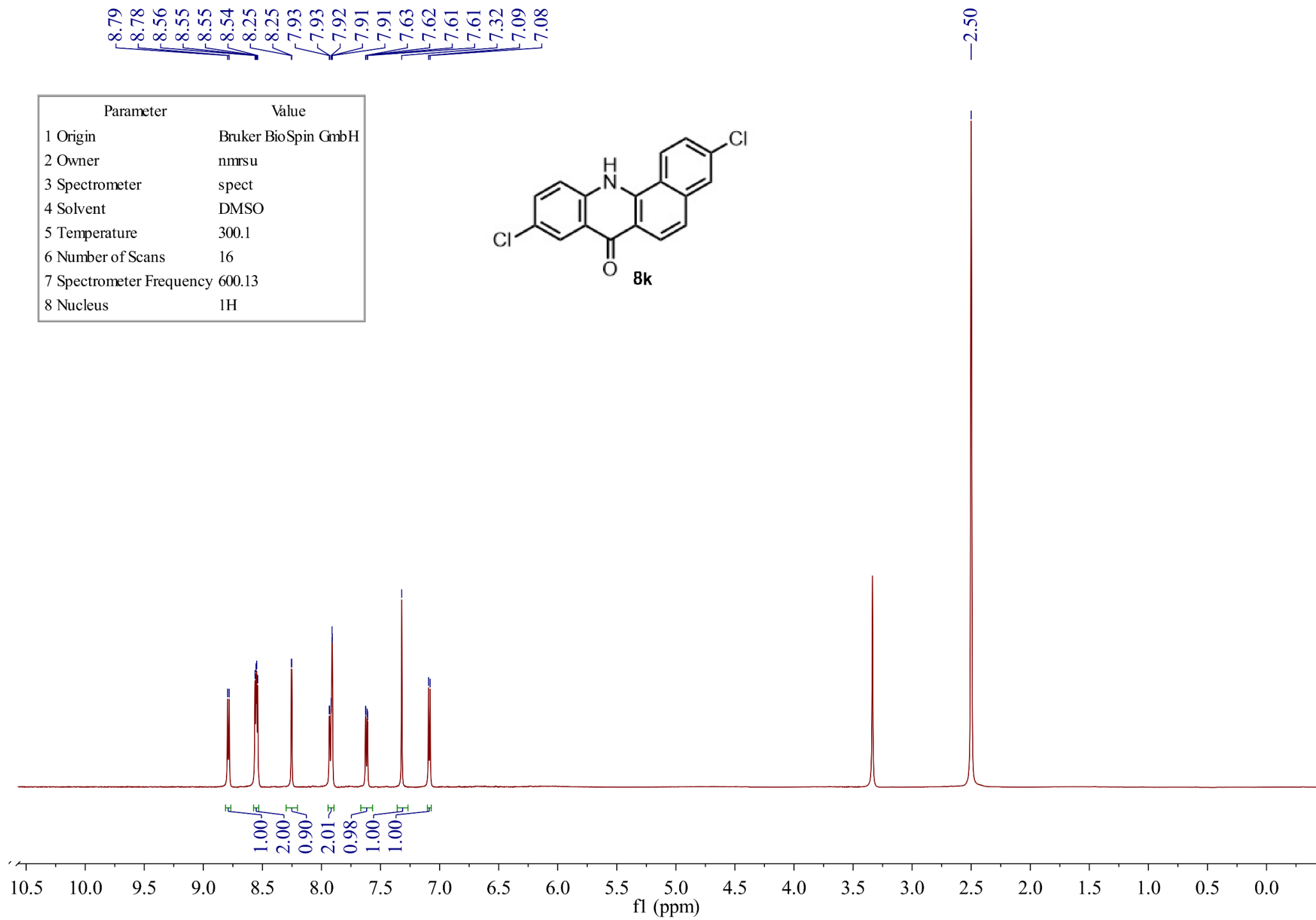
3.92

2.51
2.50
2.50
2.50
2.49



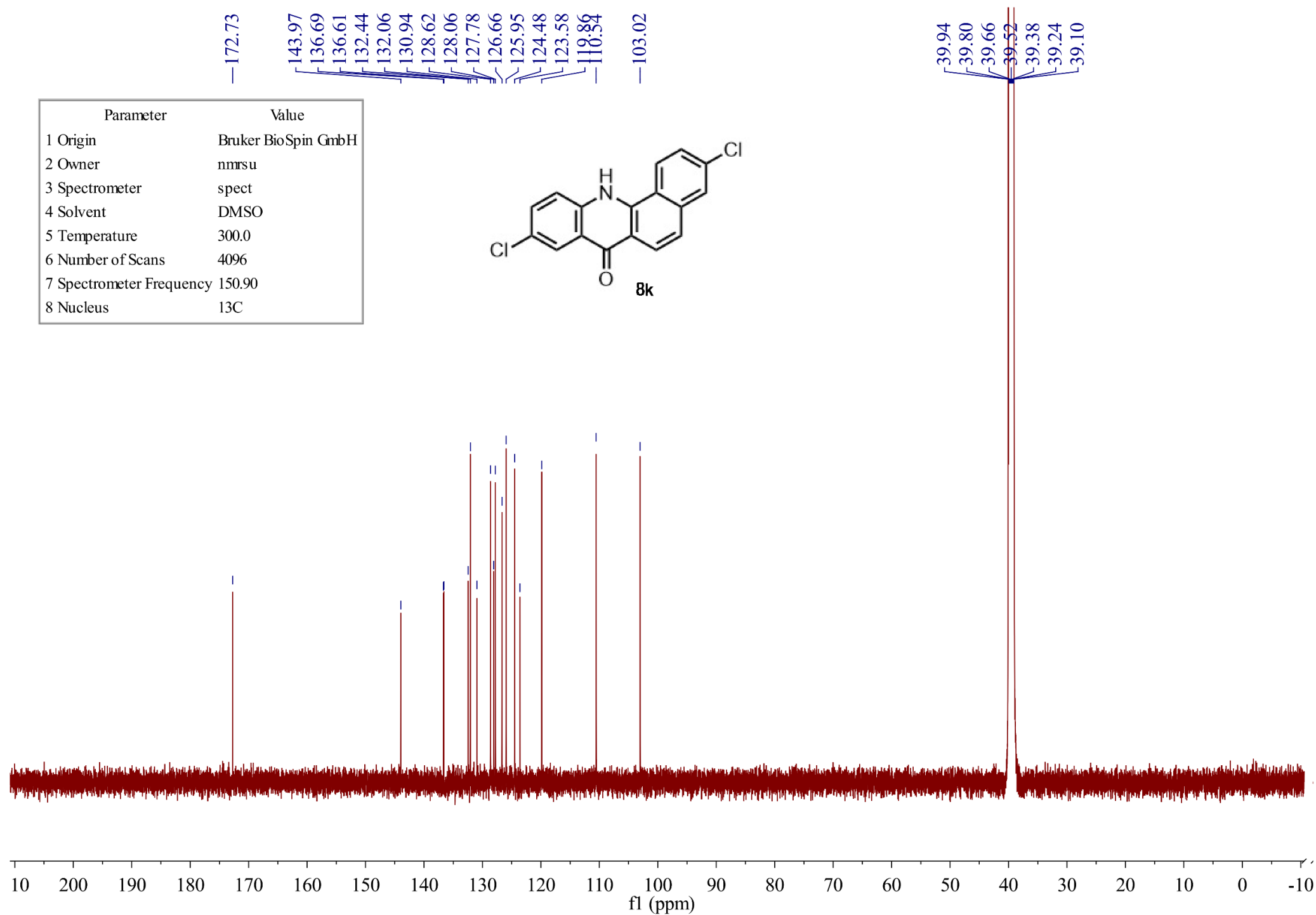
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	299.9
6 Number of Scans	4096
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C





Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	1H

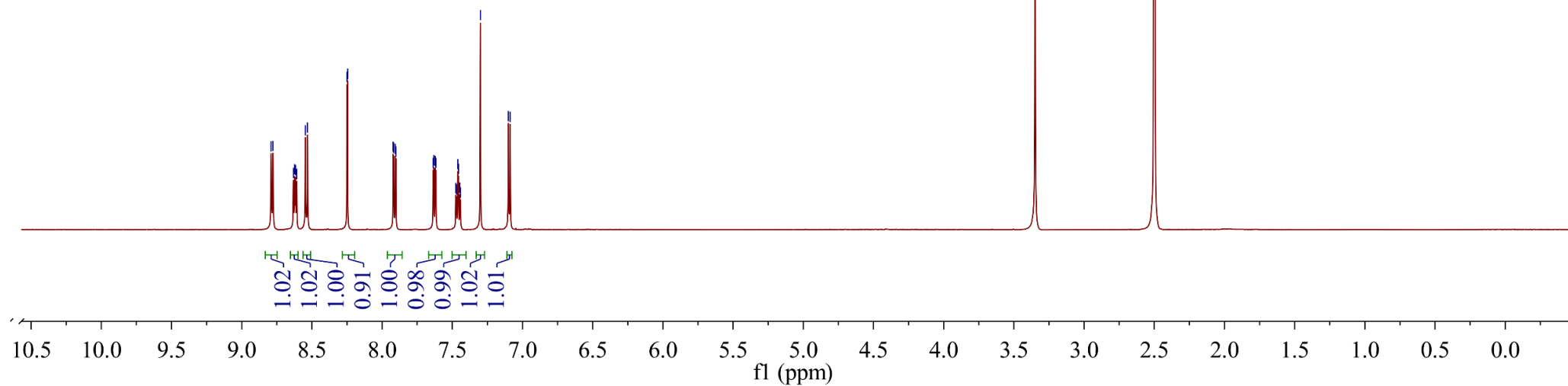
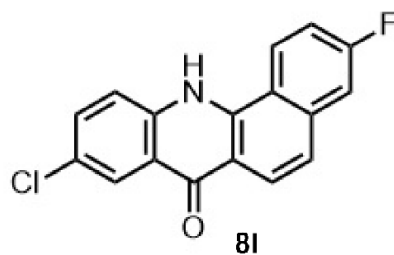
Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.0
6 Number of Scans	4096
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C



8.79
8.78
8.63
8.62
8.62
8.61
8.55
8.53
8.25
8.25
7.92
7.92
7.91
7.90
7.64
7.63
7.62
7.62
7.48
7.47
7.46
7.46
7.45
7.44
7.30
7.10
7.09

2.50
2.50
2.50

Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	16
7 Spectrometer Frequency	600.13
8 Nucleus	¹ H



Parameter	Value
1 Origin	Bruker BioSpin GmbH
2 Owner	nmrsu
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	300.1
6 Number of Scans	4096
7 Spectrometer Frequency	150.90
8 Nucleus	¹³ C

