Supporting Information

Synthesis of Functionalized Thieno[2,3-*b*]indoles via One-pot Reaction of Indoline-2-thiones with Morita–Baylis–Hillman and Rauhut–Currier Adducts of Nitroalkenes

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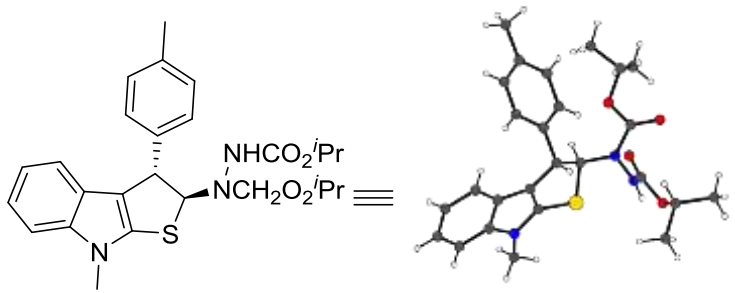
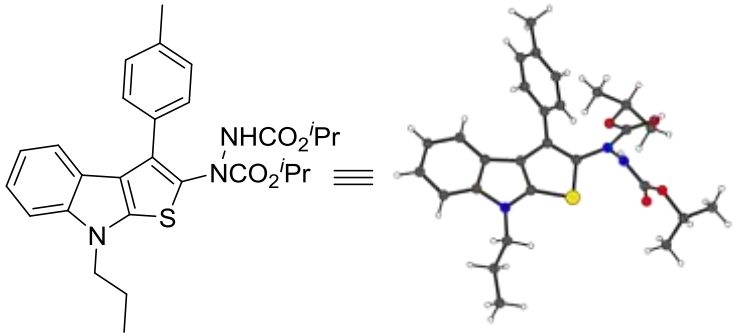
Table S1. Crystal data and structure refinement for compound **3a**



Identification code	INN-MVD-798
Empirical formula	$C_{26}H_{31}N_3O_4S$
Formula weight	482.60
Temperature	150 K
Wavelength	0.71070 Å
Crystal system,	Triclinic
space group	P -1
Unit cell dimensions	a = 11.08(2) Å α = 63.18(17)°
	b = 11.755(18) Å β = 66.29(17)°
	c = 11.961(14) Å γ = 71.29(18)°
Volume	1254(4) Å^3
Z	2
Density (Calculated)	1.278 Mg/m^3
Absorption coefficient	0.166 mm^{-1}

F (000)	514
Crystal size	0.16 × 0.16 × 0.04 mm
Theta range for data collection	3.1 to 25.0°
Index ranges	-13<=h<=13, -13<=k<=13, -14<=l<=14
Reflections collected	15311
Independent reflections	4396 [R(int) = 0.144]
Completeness to theta = 25^0	99.7 %
Absorption correction	Numerical
Max. and min. transmission	0.989 and 0.997
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	4396 / 0 / 313
Goodness-of-fit on F^2	0.870
Final R indices [I>2sigma (I)]	R1 = 0.0621, wR2 = 0.1244
R indices (all data)	R1 = 0.1060, wR2 = 0.1519
Largest diff. peak and hole	0.35 and −0.31 e.$Å^{-3}$

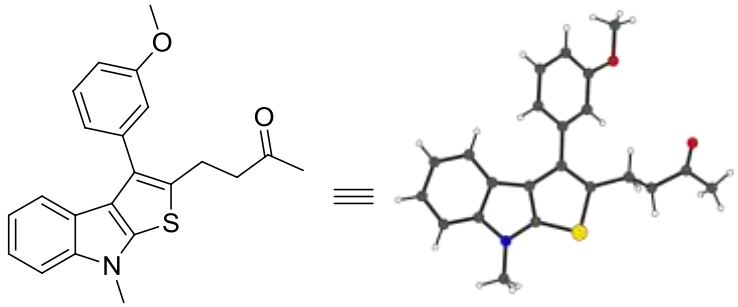
Table S2. Crystal data and structure refinement for compound **4h**



Identification code	INN-MVD-796
Empirical formula	$C_{28}\ H_{33}N_3O_4S$
Formula weight	507.63
Temperature	150 K
Wavelength	0.71070 Å
Crystal system,	Monoclinic
space group	P 21/c
Unit cell dimensions	a = 15.959(5) Å α = 90°
	b = 8.470(2) Å β = 108.034(4)°
	c = 21.482(6) Å γ = 90°
Volume	2761.1(13) Å^3
Z	4

Density (Calculated)	1.221 Mg/m^3
Absorption coefficient	0.154 mm^{-1}
F (000)	1080.0
Crystal size	0.35 × 0.24 × 0.07 mm
Theta range for data collection	3.1 to 29.2°
Index ranges	-18<=h<=21, -9<=k<=11, -29<=l<=29
Reflections collected	37563
Independent reflections	7432 [R(int) = 0.064]
Completeness to theta = 29.165^0	99.6 %
Absorption correction	Numerical
Max. and min. transmission	0.989, 0.963
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	7432 / 0 / 331
Goodness-of-fit on F^2	1.102
Final R indices [I>2sigma (I)]	R1 = 0.0545, wR2 = 0.1192
R indices (all data)	R1 = 0.0701, wR2 = 0.1290
Largest diff. peak and hole	0.40 and −0.39 $e.Å^{-3}$

Table S3. Crystal data and structure refinement for compound **6e**



Identification code	INN-MVD-611
Empirical formula	$C_{22}H_{21}NO_2S$
Formula weight	363.46
Temperature	150 K
Wavelength	0.71073 Å
Crystal system,	Monoclinic
space group	P 21/n
Unit cell dimensions	a = 11.8883(3) Å α = 90°
	b = 7.4114(3) Å β = 95.281(3)°
	c = 20.6224(7) Å γ = 90°
Volume	1809.31(11) Å^3
Z	4

Density (Calculated)	1.334 Mg/m^3
Absorption coefficient	0.195 mm^{-1}
F (000)	768
Crystal size	0.33 × 0.22 × 0.15 mm
Theta range for data collection	2.0 to 25.0°
Index ranges	-14<=h<=14, -8<=k<=8, -14<=l<=24
Reflections collected	8097
Independent reflections	3169 [R(int) = 0.032]
Completeness to theta = 25.0^0	99.6 %
Absorption correction	Numerical
Max. and min. transmission	0.960, 1.000
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	3169 / 0 / 238
Goodness-of-fit on F^2	1.061
Final R indices [I>2sigma (I)]	R1 = 0.0354, wR2 = 0.0940
R indices (all data)	R1 = 0.0431, wR2 = 0.0986
Largest diff. peak and hole	0.23 and −0.38 $e.Å^{-3}$

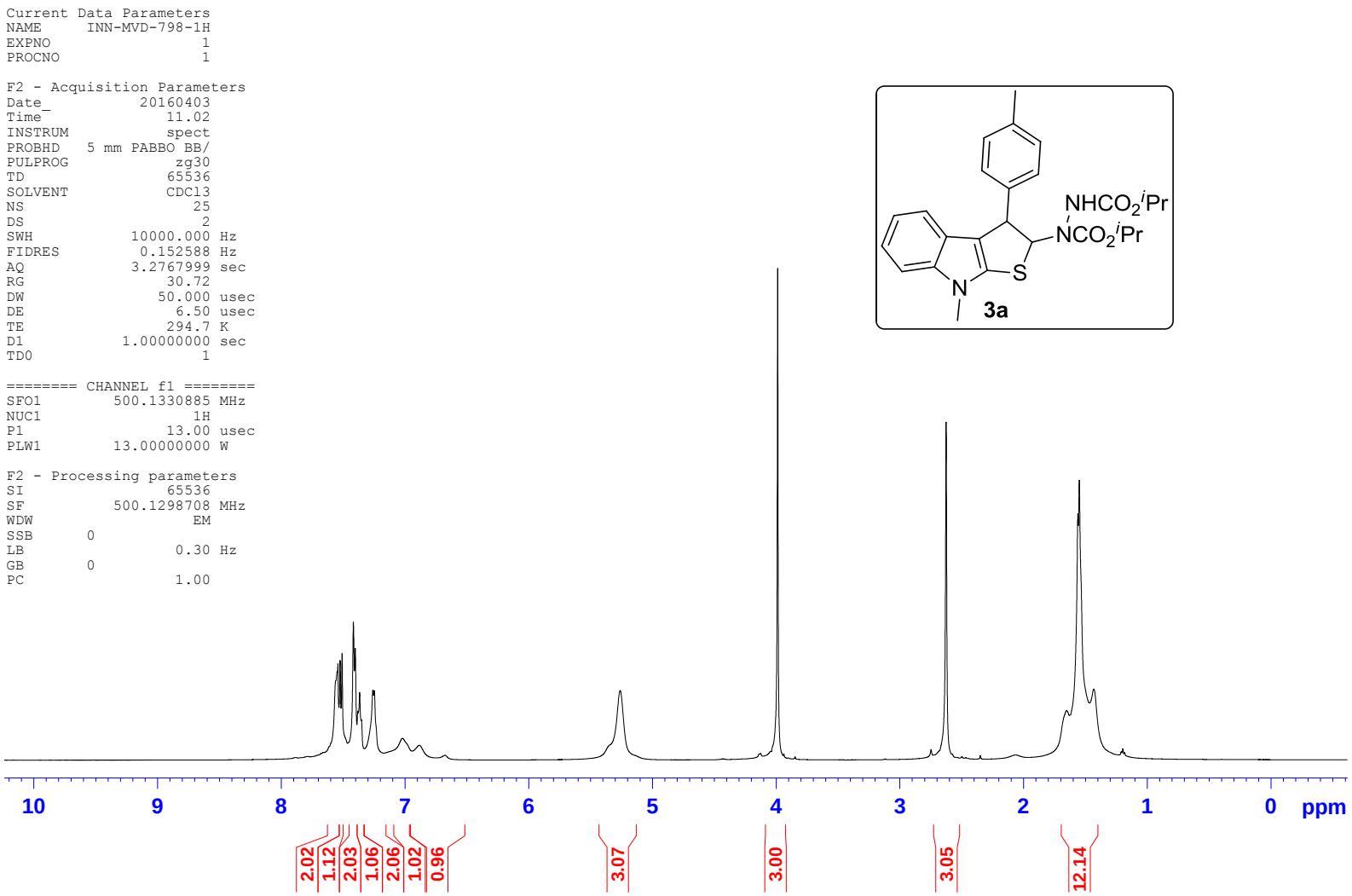


Figure S1. ^{1}H NMR Spectrum of **3a**

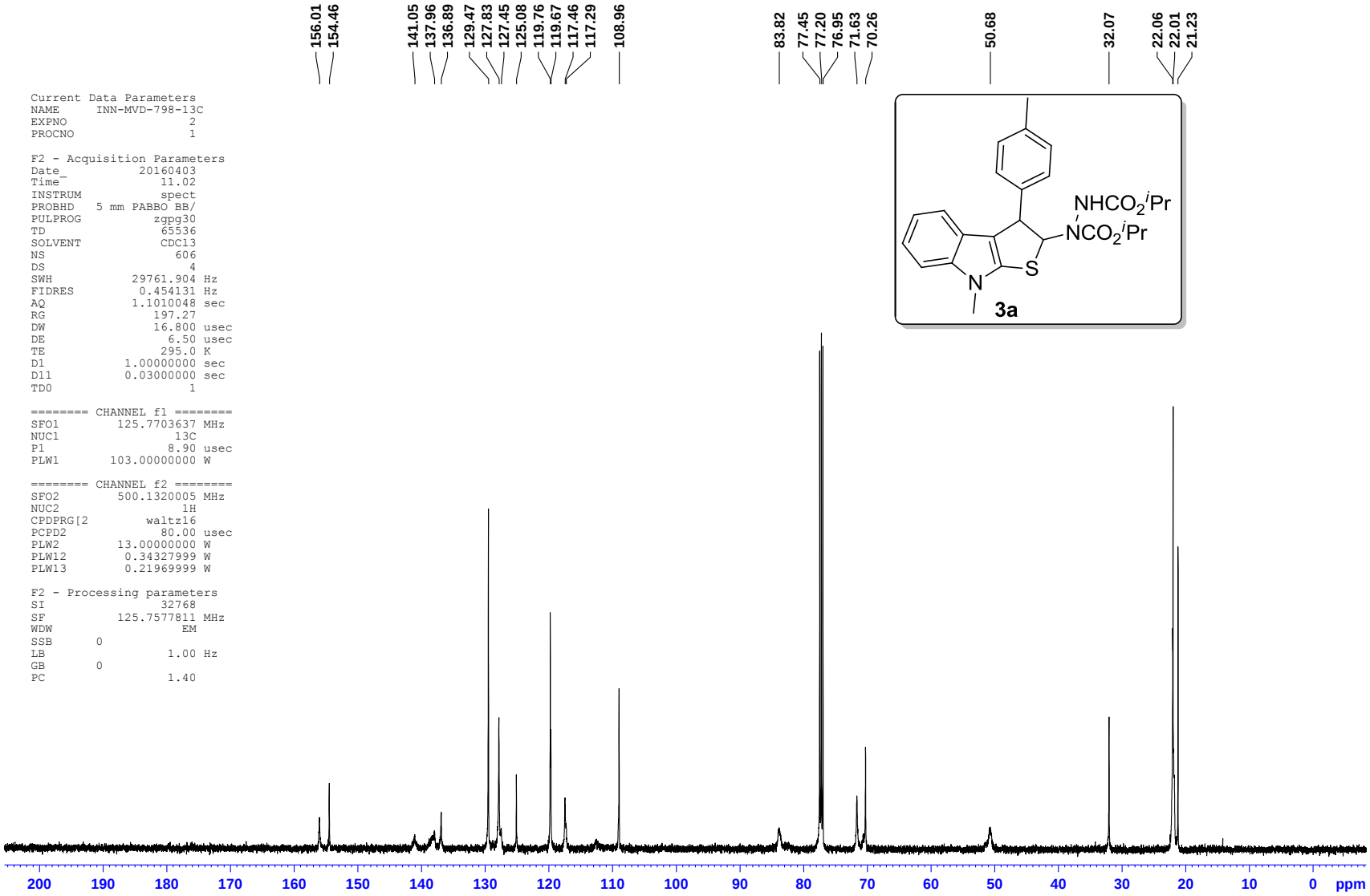


Figure S2. ^{13}C NMR Spectrum of **3a**

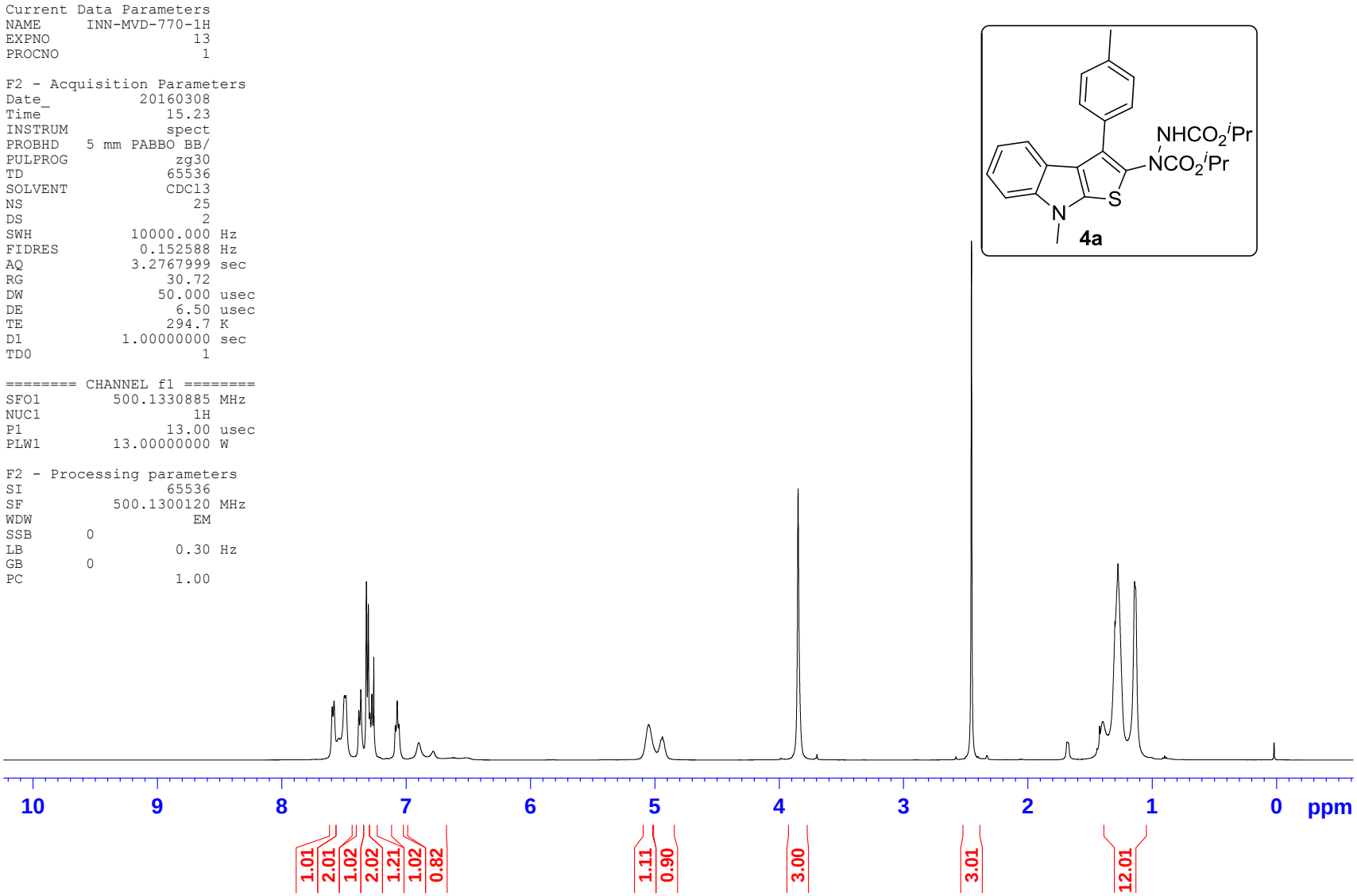


Figure S3. ^{1}H NMR Spectrum of **4a**

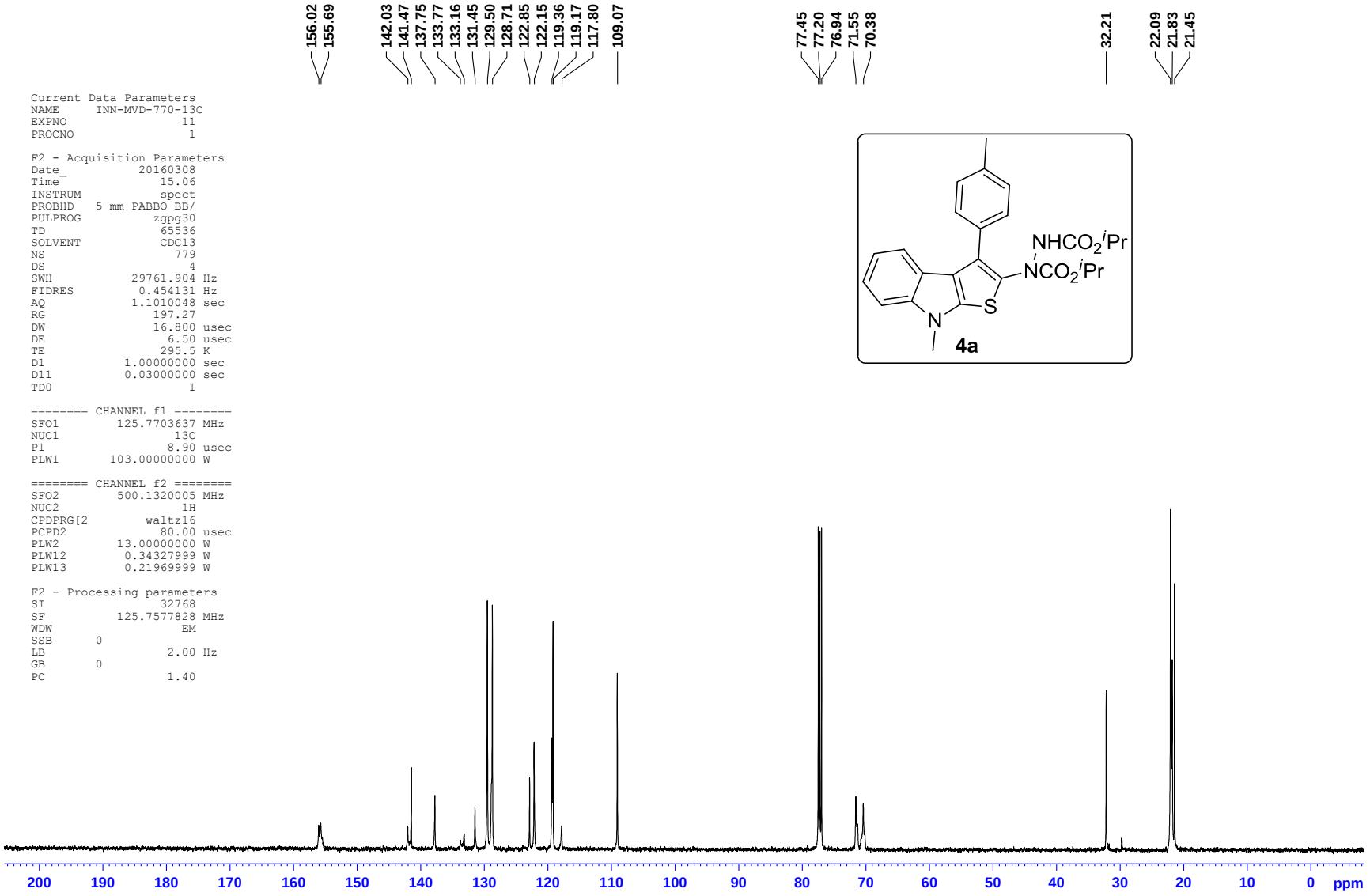


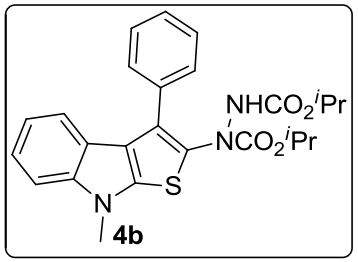
Figure S4. ^{13}C NMR Spectrum of **4a**

```
Current Data Parameters
NAME      INN-MVD-800-1H
EXPNO                  7
PROCNO                 1

F2 - Acquisition Parameters
Date_           20160408
Time              14.04
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   12
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG                13.43
DW               50.000 usec
DE                6.50 usec
TE                298.0 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1        500.1330885 MHz
NUC1                  1H
P1                13.00 usec
PLW1        13.00000000 W

F2 - Processing parameters
SI                65536
SF          500.1300117 MHz
WDW                  EM
SSB      0
LB                0.30 Hz
GB       0
PC                1.00
```



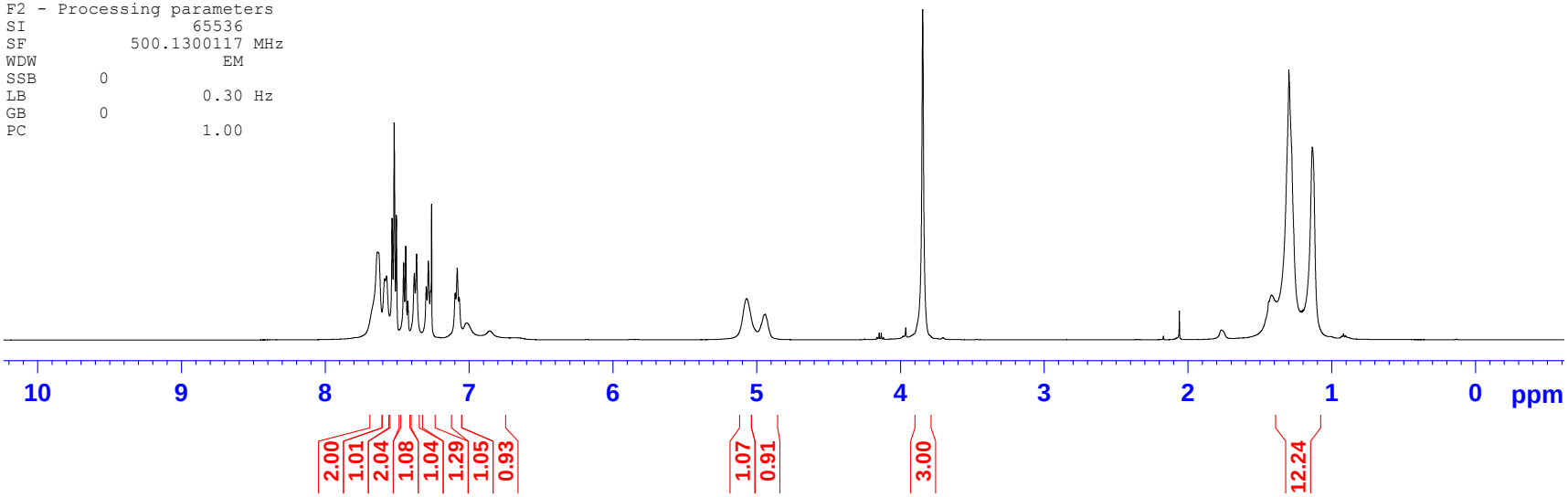


Figure S5. ^{1}H NMR Spectrum of **4b**

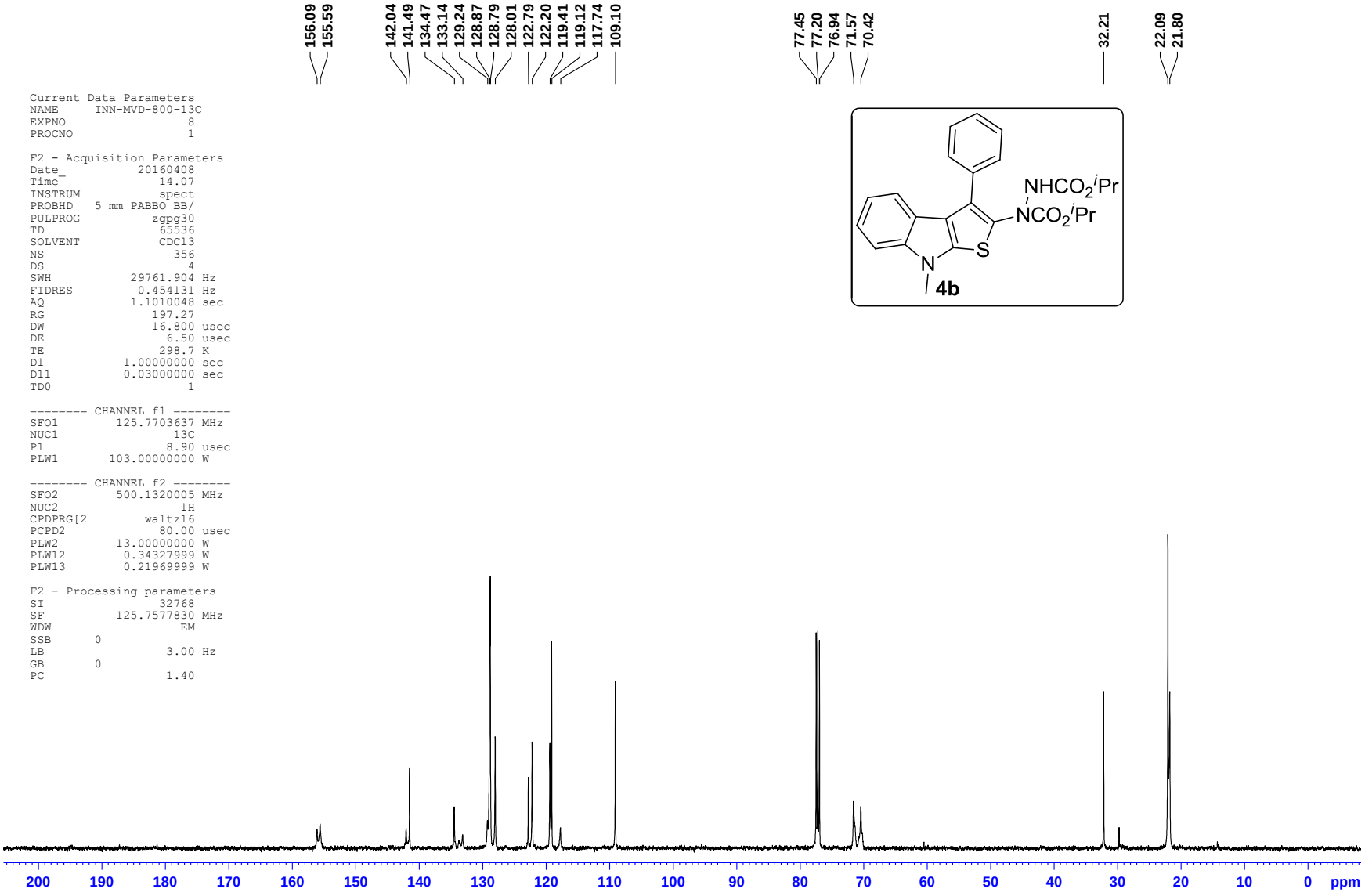


Figure S6. ^{13}C NMR Spectrum of **4b**

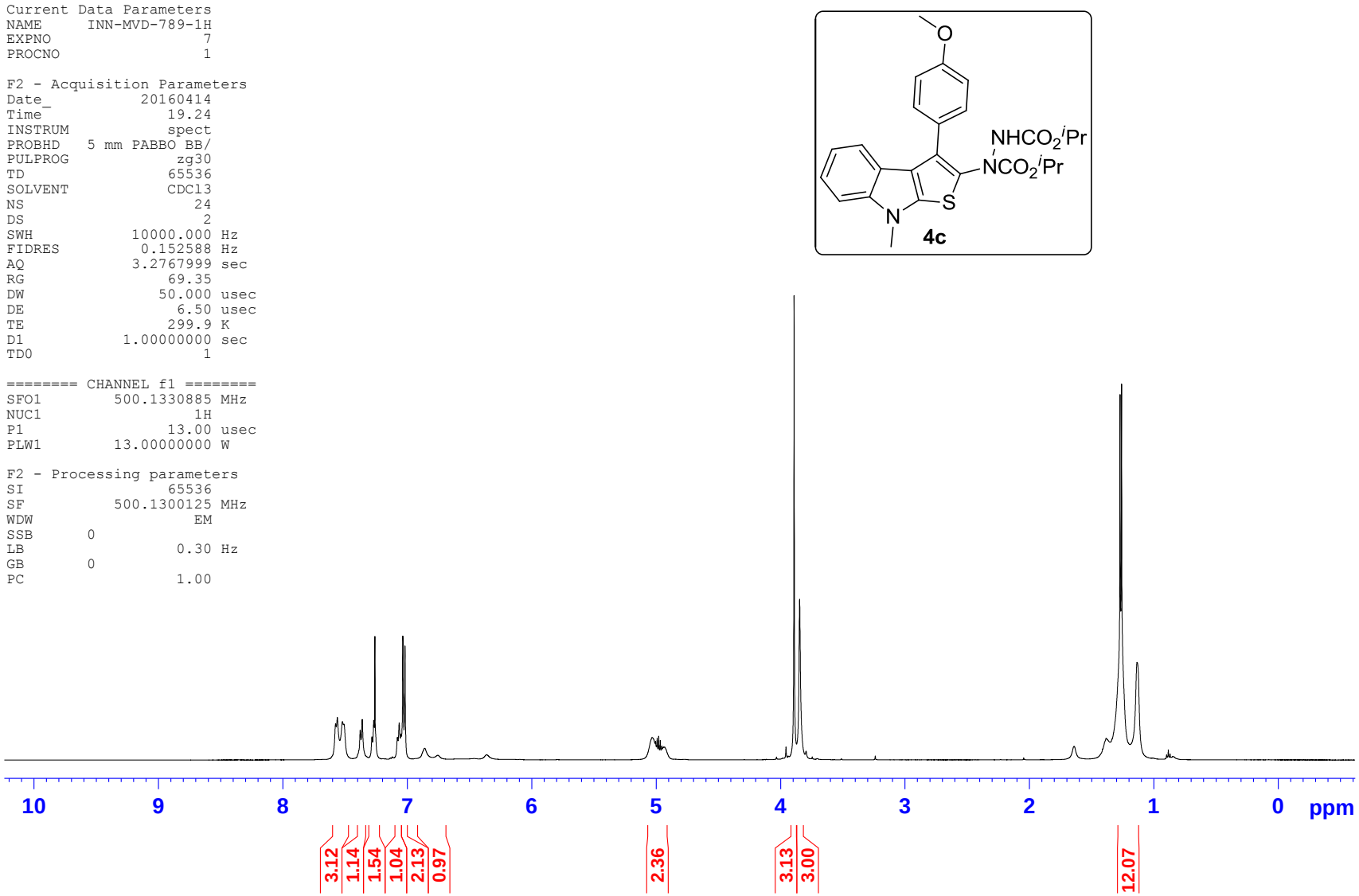


Figure S7. ^{1}H NMR Spectrum of **4c**

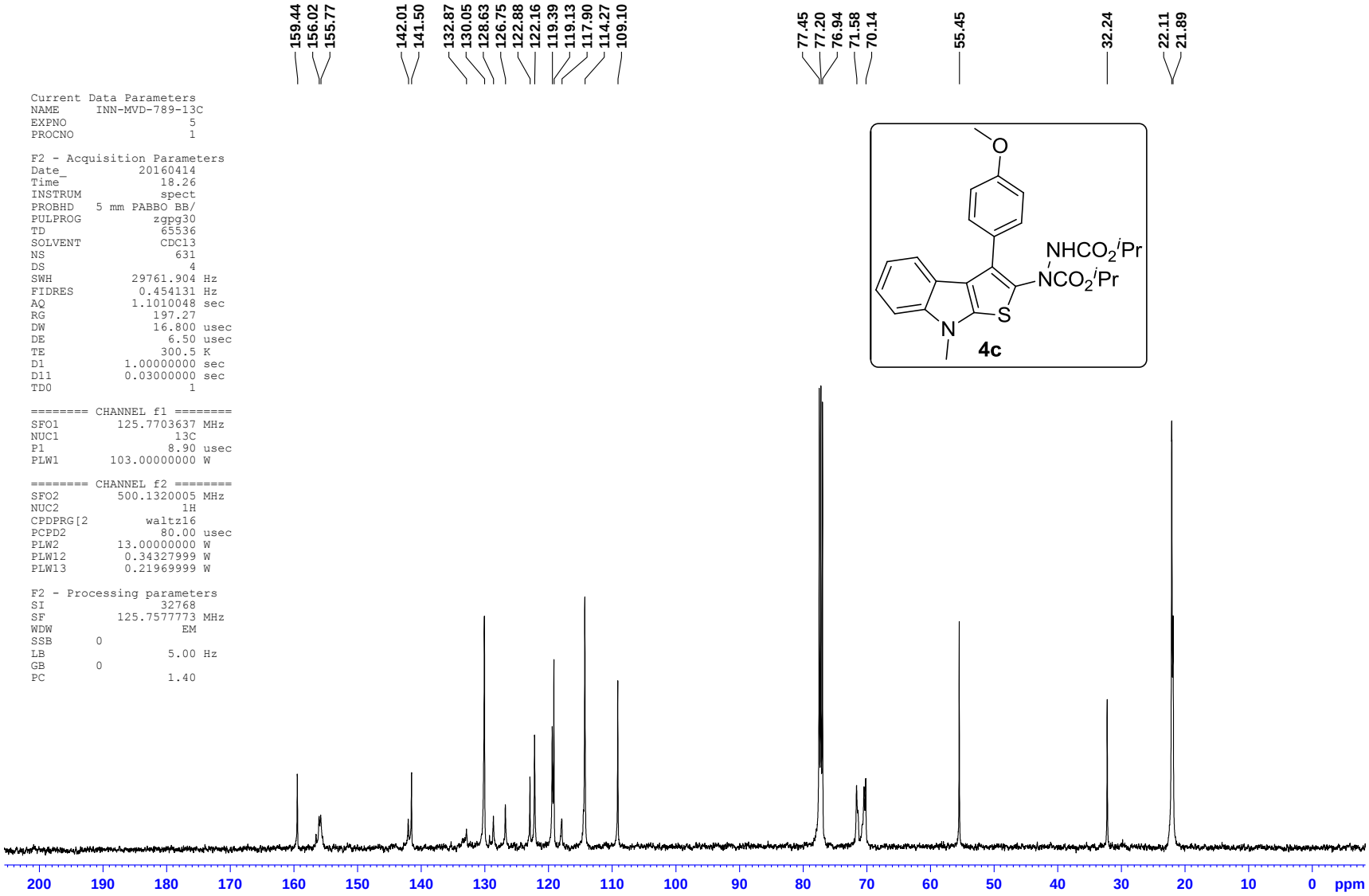


Figure S8. ^{13}C NMR Spectrum of **4c**

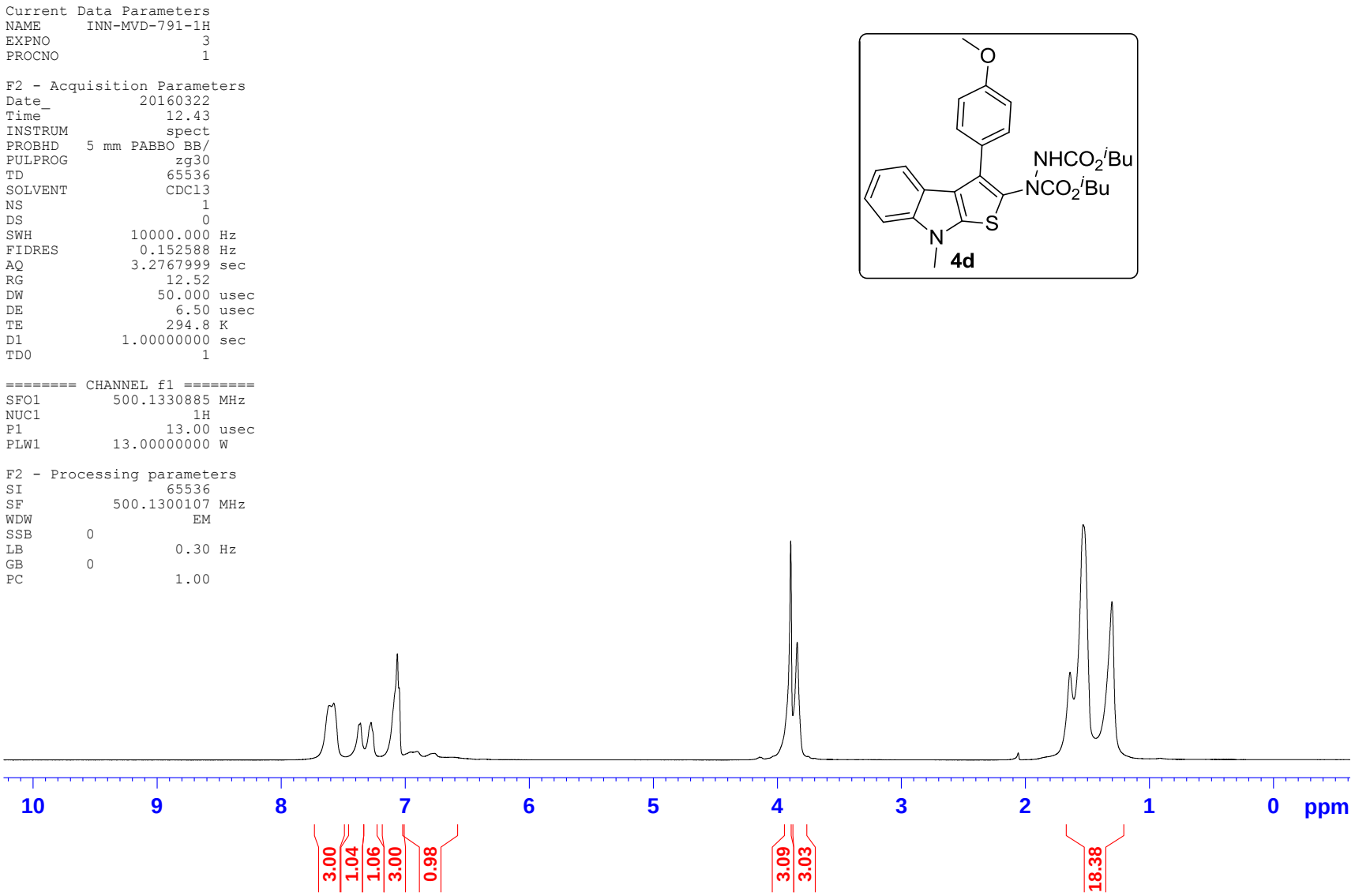


Figure S9. ^{1}H NMR Spectrum of **4d**

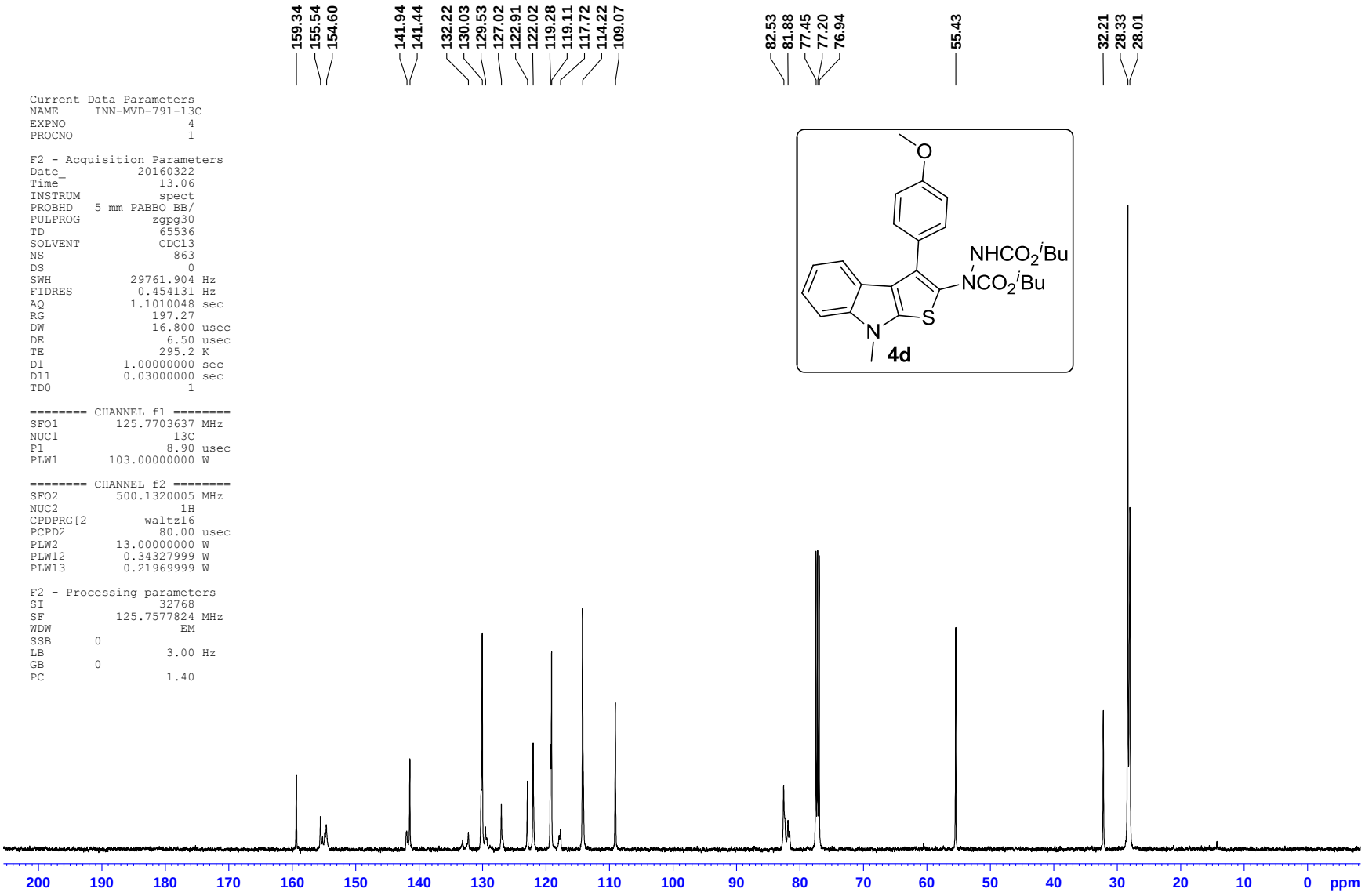


Figure S10. ^{13}C NMR Spectrum of **4d**

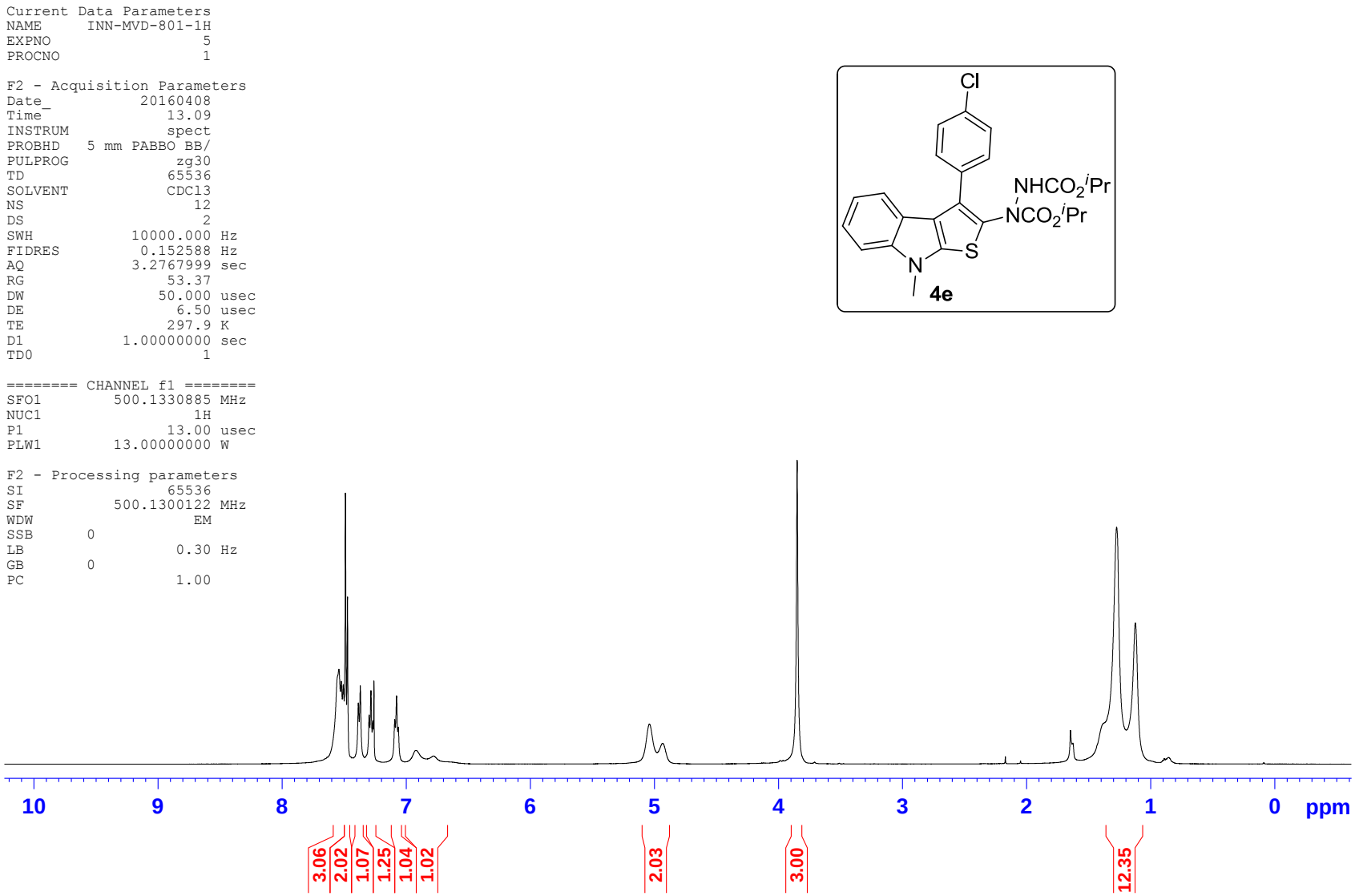


Figure S11. ^{1}H NMR Spectrum of **4e**

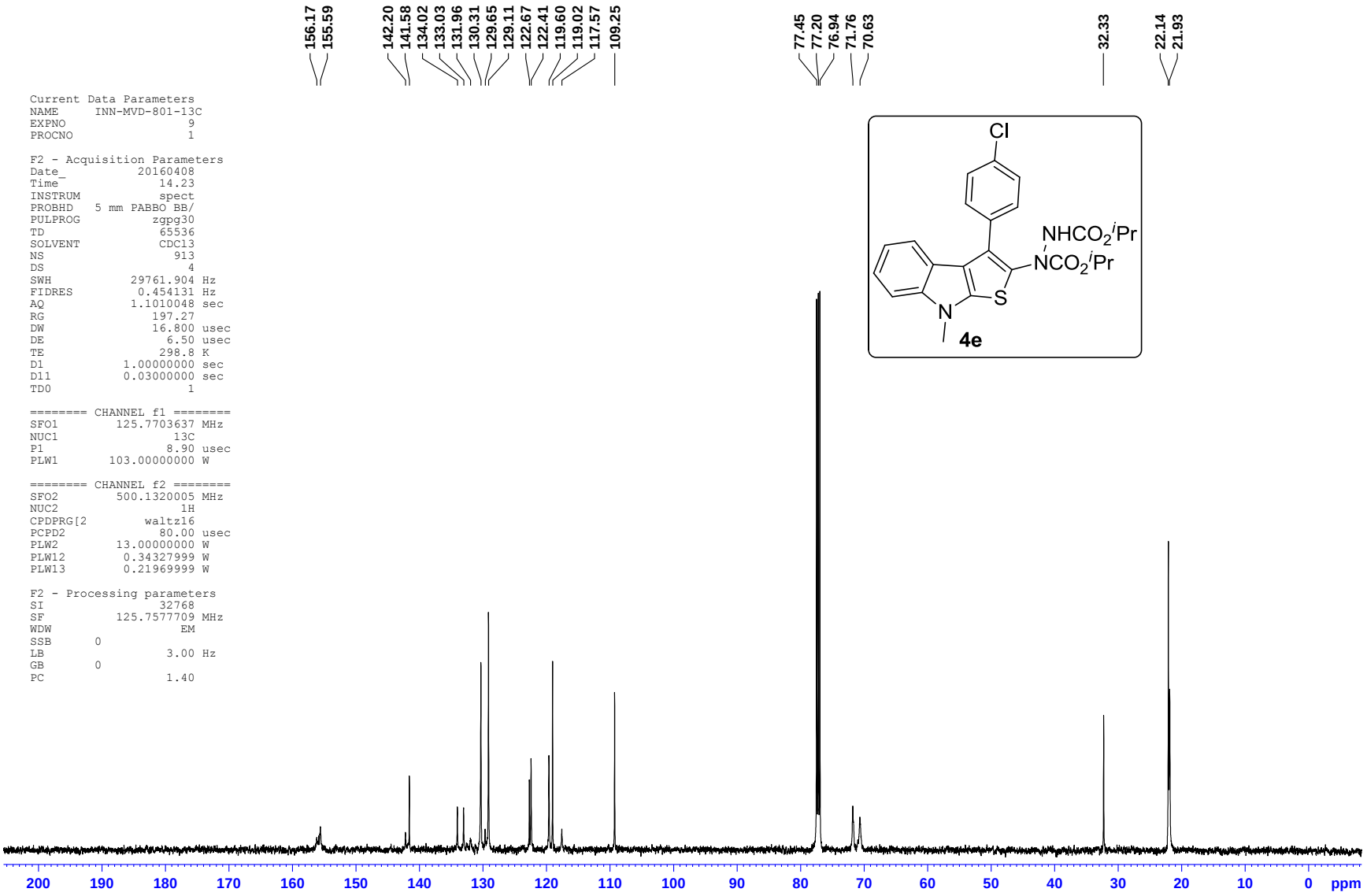


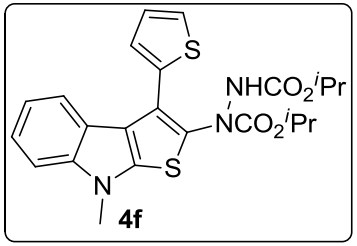
Figure S12. ^{13}C NMR Spectrum of **4e**

```
Current Data Parameters
NAME      INN-MVD-794-1H
EXPNO                  5
PROCNO                 1

F2 - Acquisition Parameters
Date_           20160322
Time              13.20
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   25
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG                30.72
DW               50.000 usec
DE                6.50 usec
TE                294.3 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                 1H
P1                13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                65536
SF           500.1300119 MHz
WDW                  EM
SSB       0
LB                0.30 Hz
GB        0
PC                1.00
```



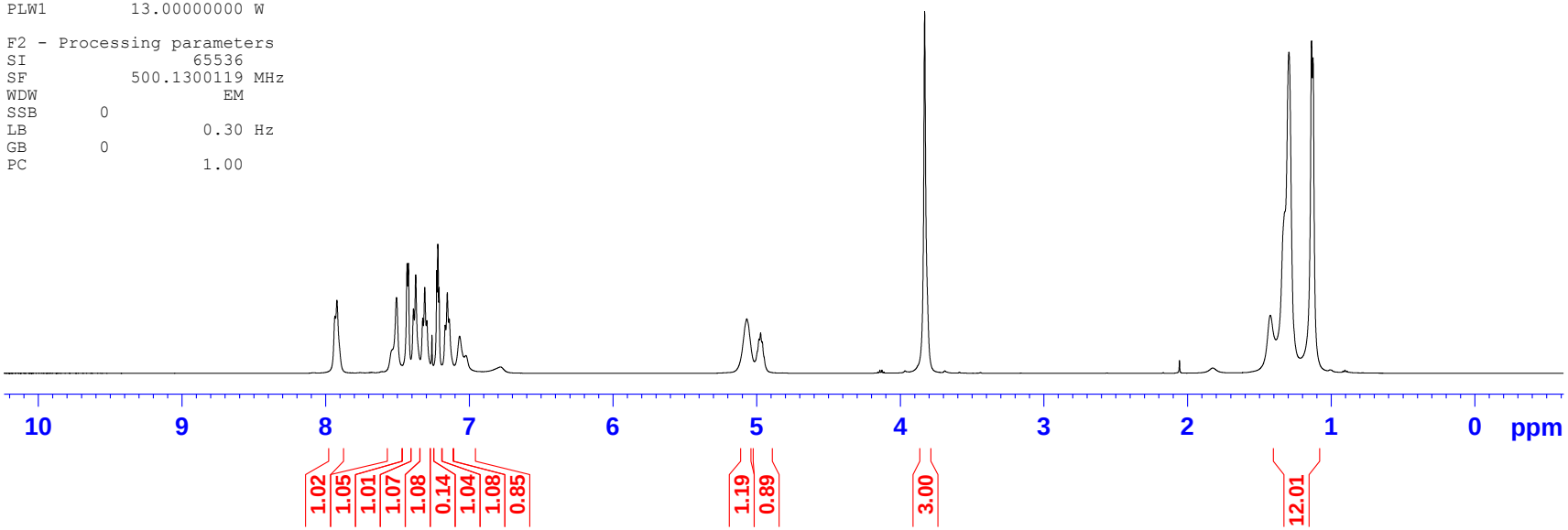


Figure S13. ^{1}H NMR Spectrum of **4f**

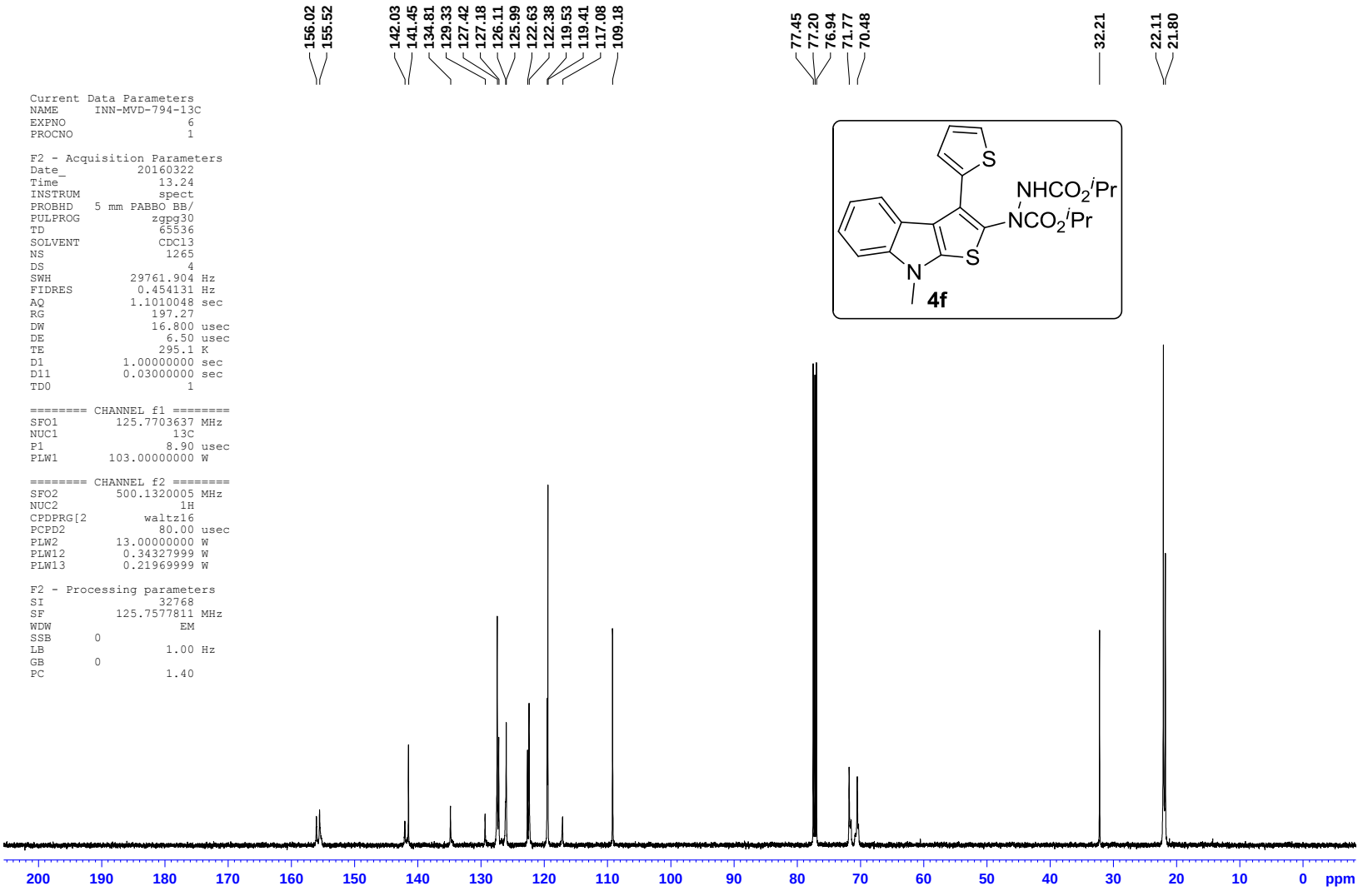


Figure S14. ^{13}C NMR Spectrum of **4f**

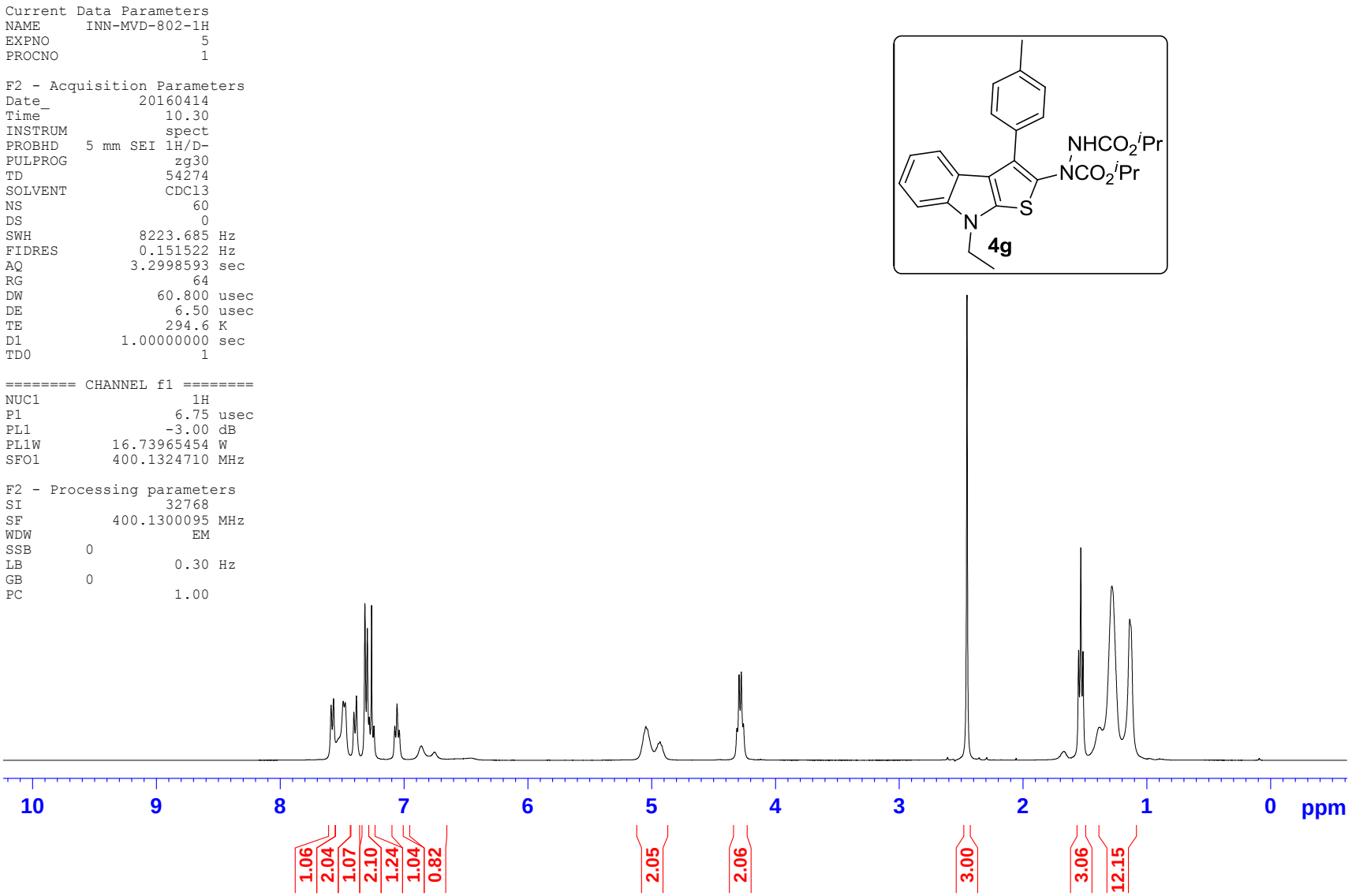


Figure S15. ^{1}H NMR Spectrum of **4g**

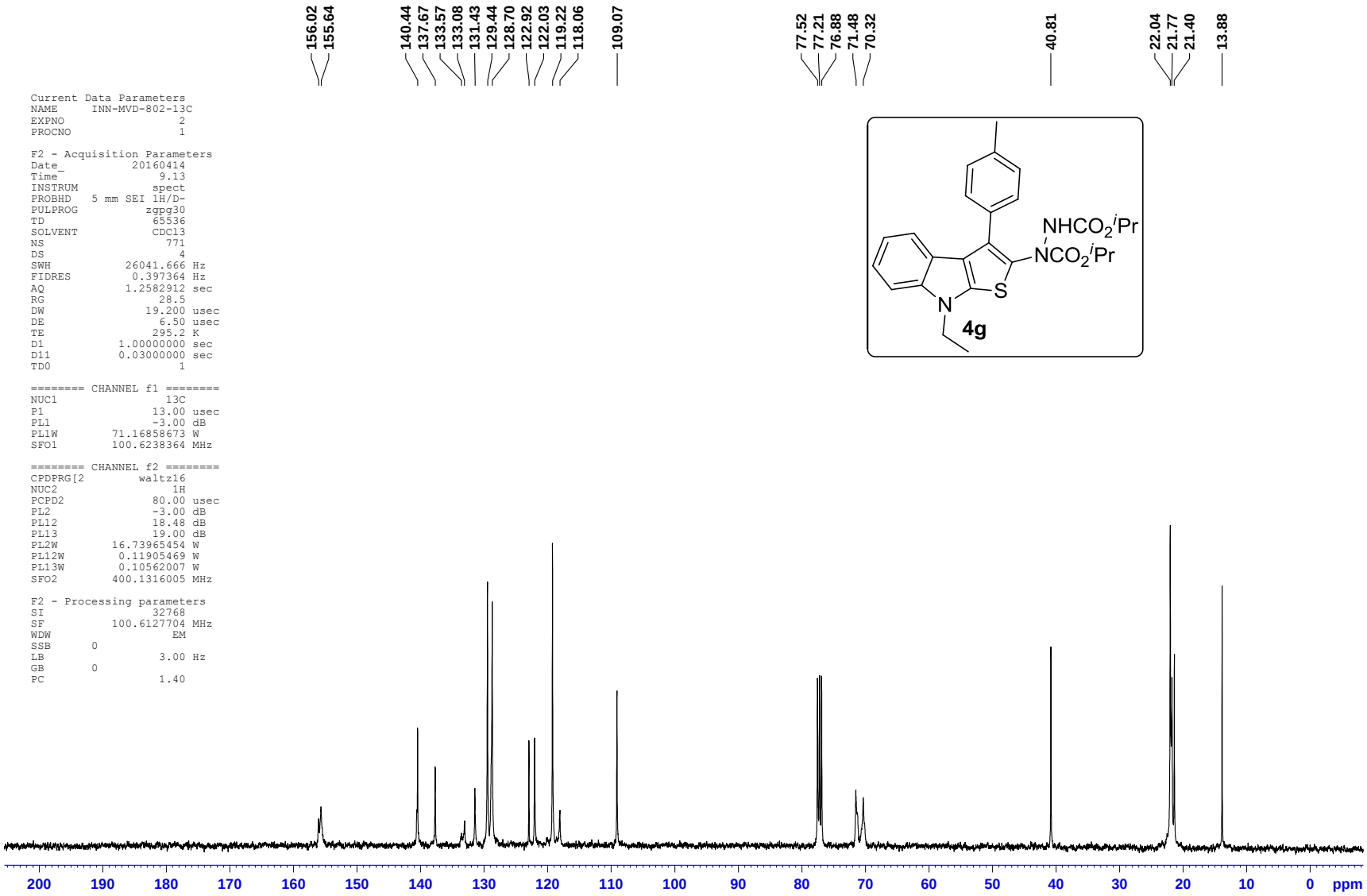


Figure S16. ^{13}C NMR Spectrum of **4g**

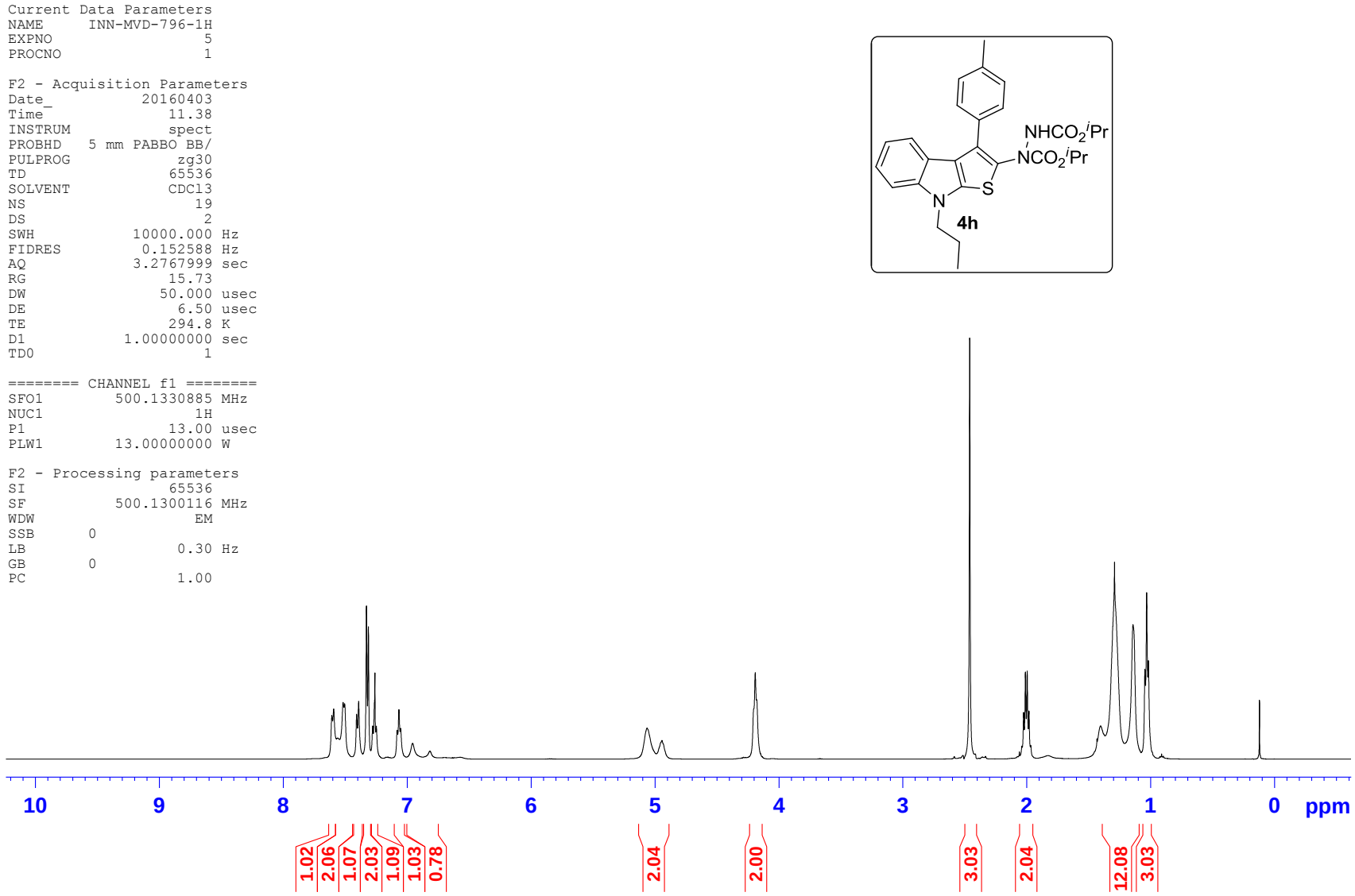


Figure S17. ^{1}H NMR Spectrum of **4h**

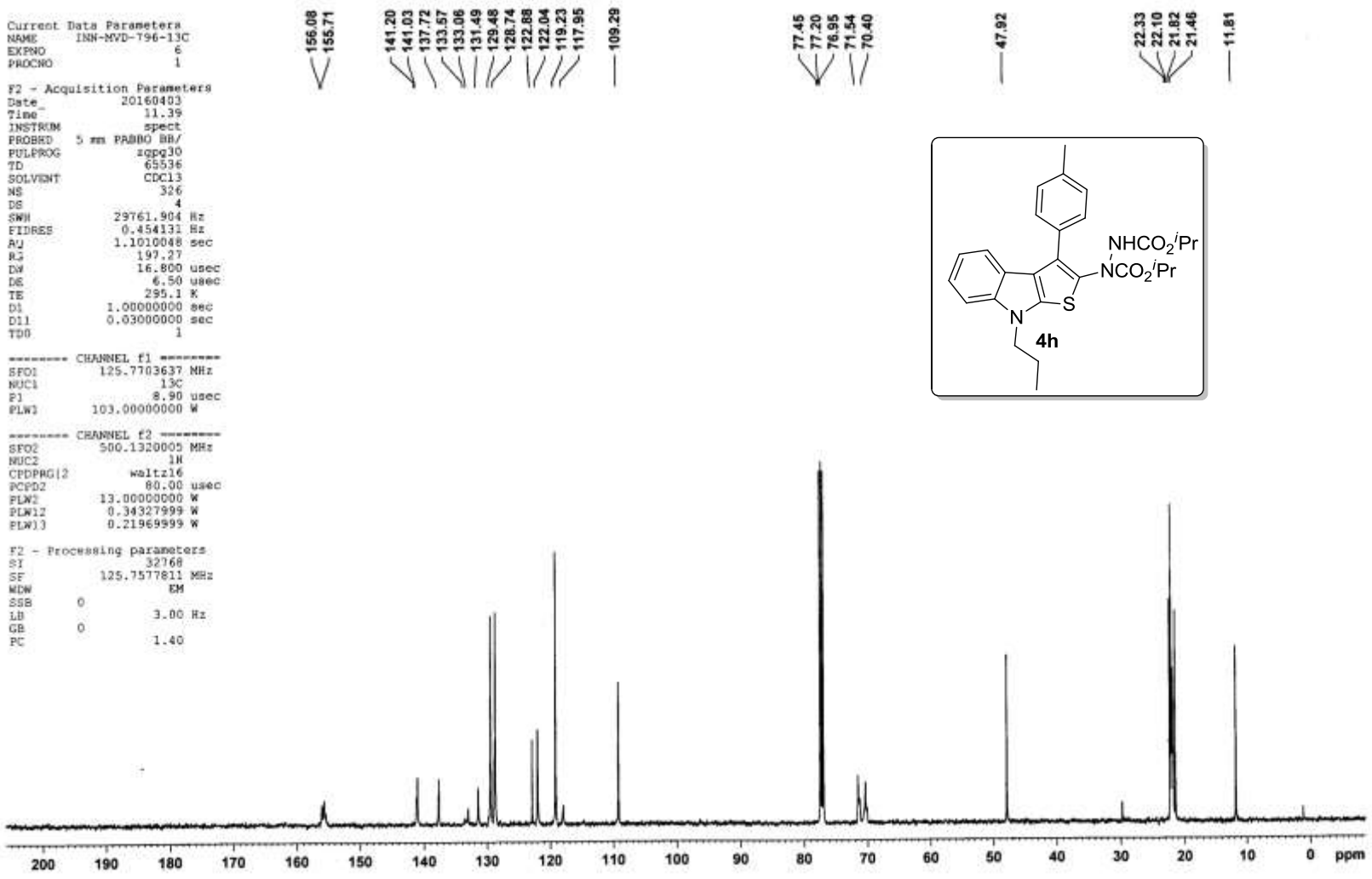


Figure S18. ^{13}C NMR Spectrum of **4h**

```
Current Data Parameters
NAME      INN-MVD-803-1H
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20160417
Time               8.39
INSTRUM           spect
PROBHD   5 mm SEI 1H/D-
PULPROG             zg30
TD                 54274
SOLVENT            CDCl3
NS                    18
DS                     0
SWH             8223.685 Hz
FIDRES          0.151522 Hz
AQ             3.2998593 sec
RG                  12.7
DW                60.800 usec
DE                 6.50 usec
TE                293.9 K
D1           1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
NUC1                  1H
P1                14.75 usec
PL1               -1.00 dB
PL1W        10.56200695 W
SFO1        400.1324710 MHz

F2 - Processing parameters
SI                 32768
SF          400.1300103 MHz
WDW                   EM
SSB      0
LB                0.30 Hz
GB       0
PC                1.00
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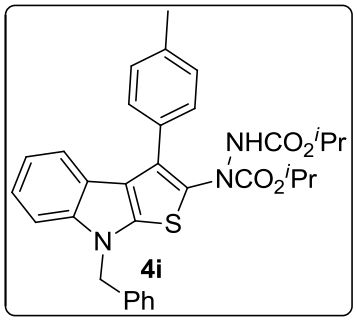

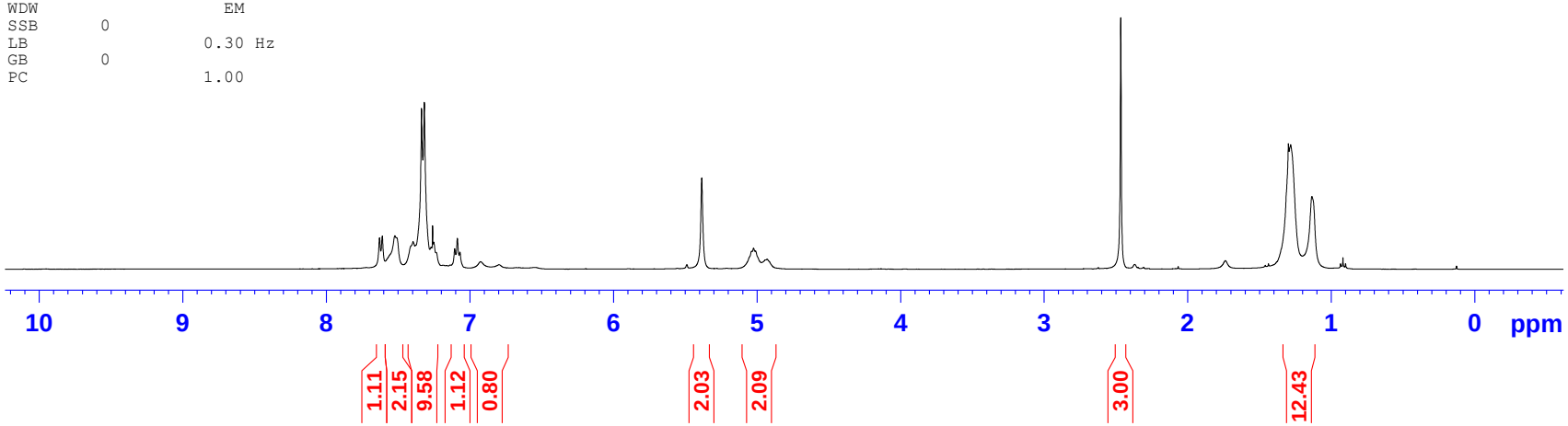

Figure S19. ^{1}H NMR Spectrum of **4i**

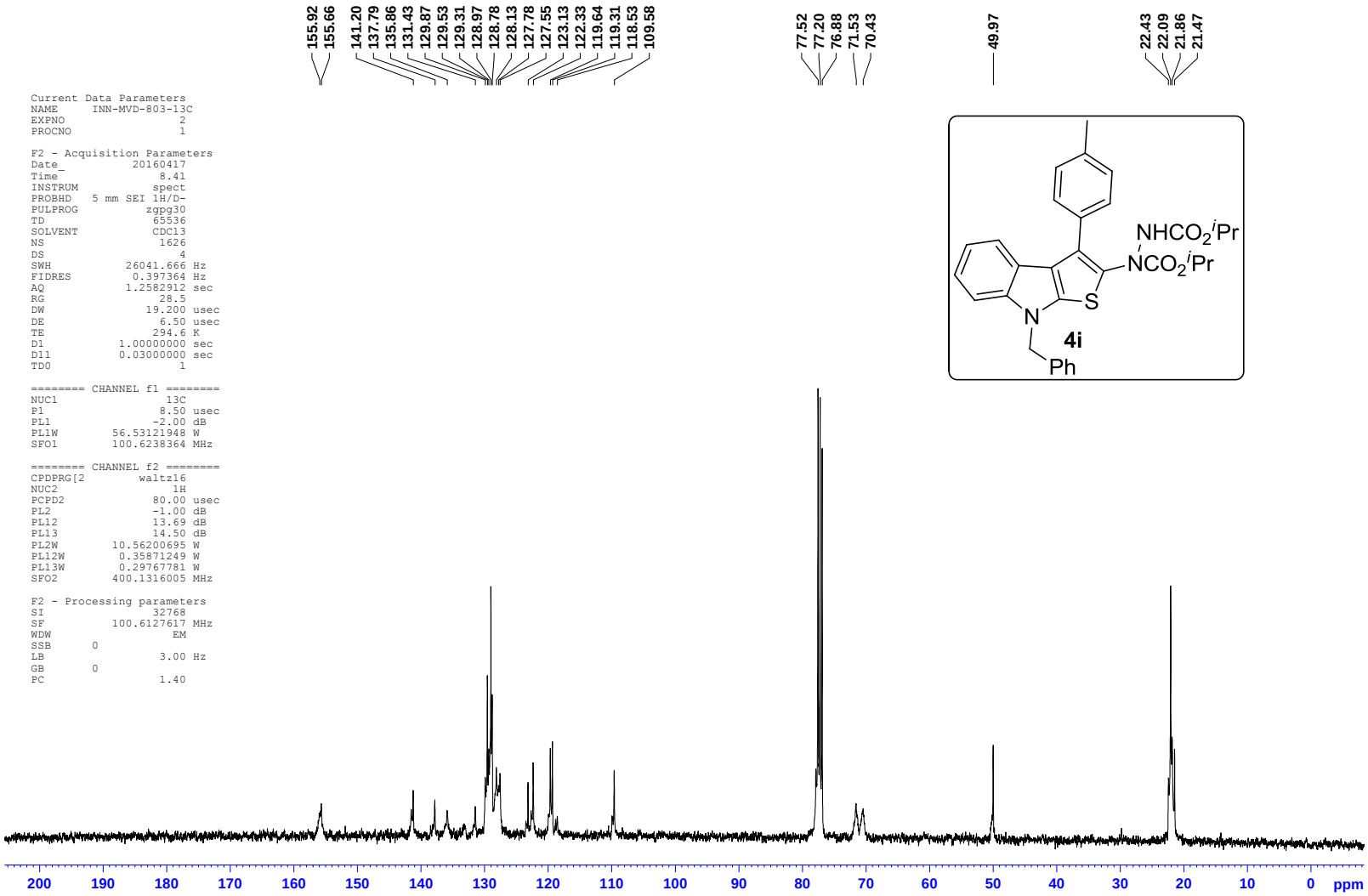

Figure S20. ^{13}C NMR Spectrum of **4i**

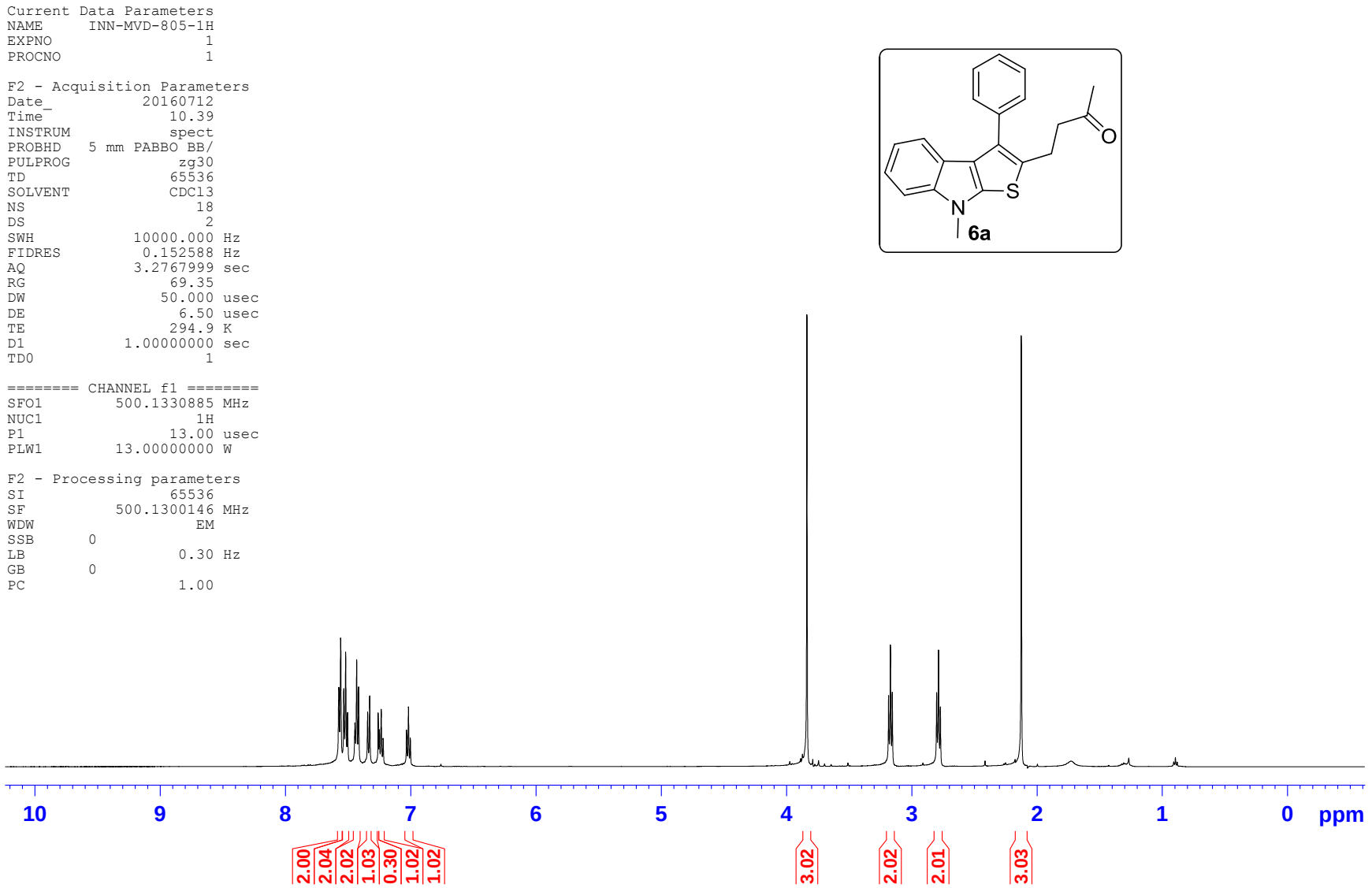

Figure S21. ^{1}H NMR Spectrum of **6a**

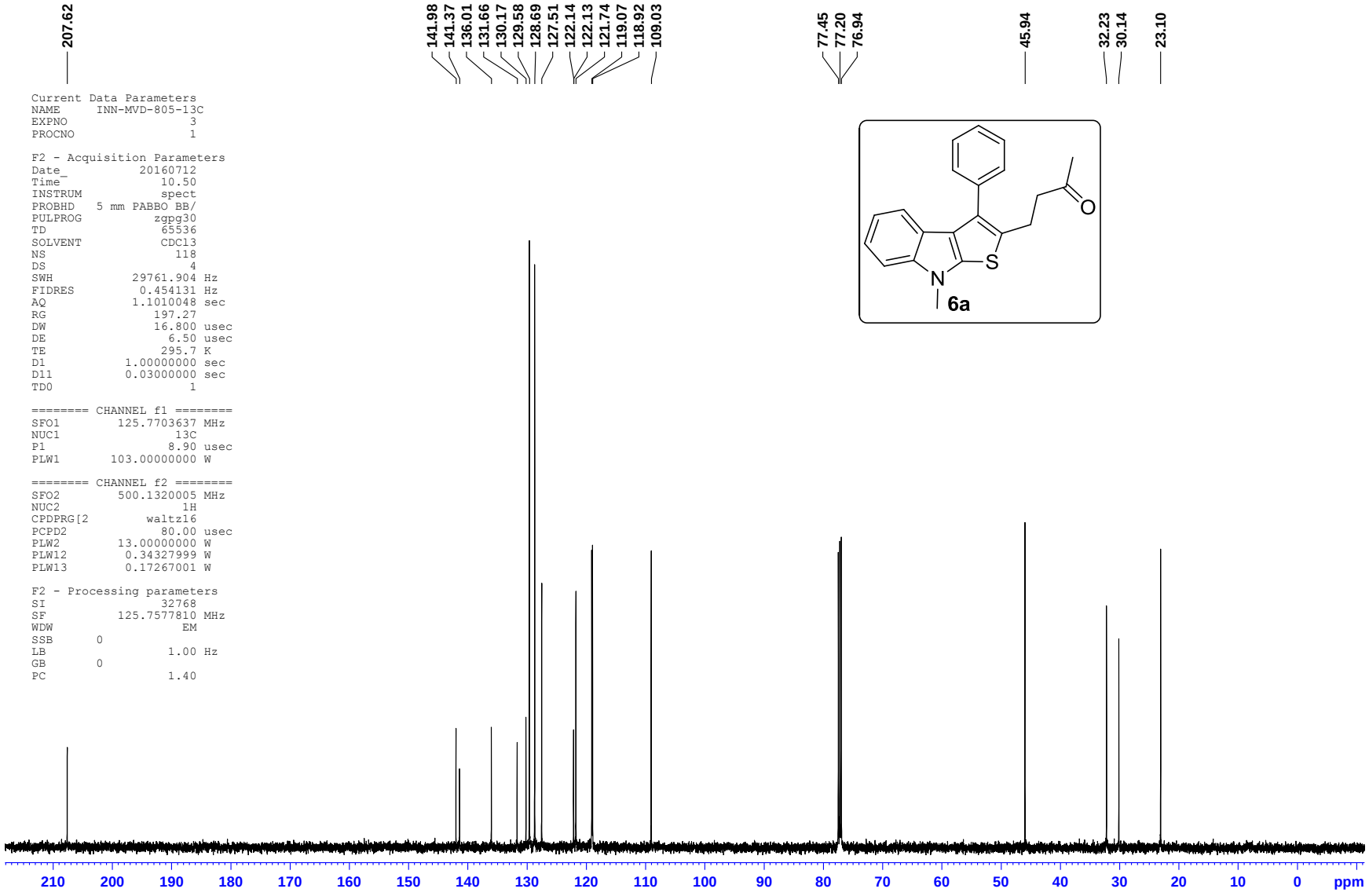

Figure S22. ^{13}C NMR Spectrum of **6a**

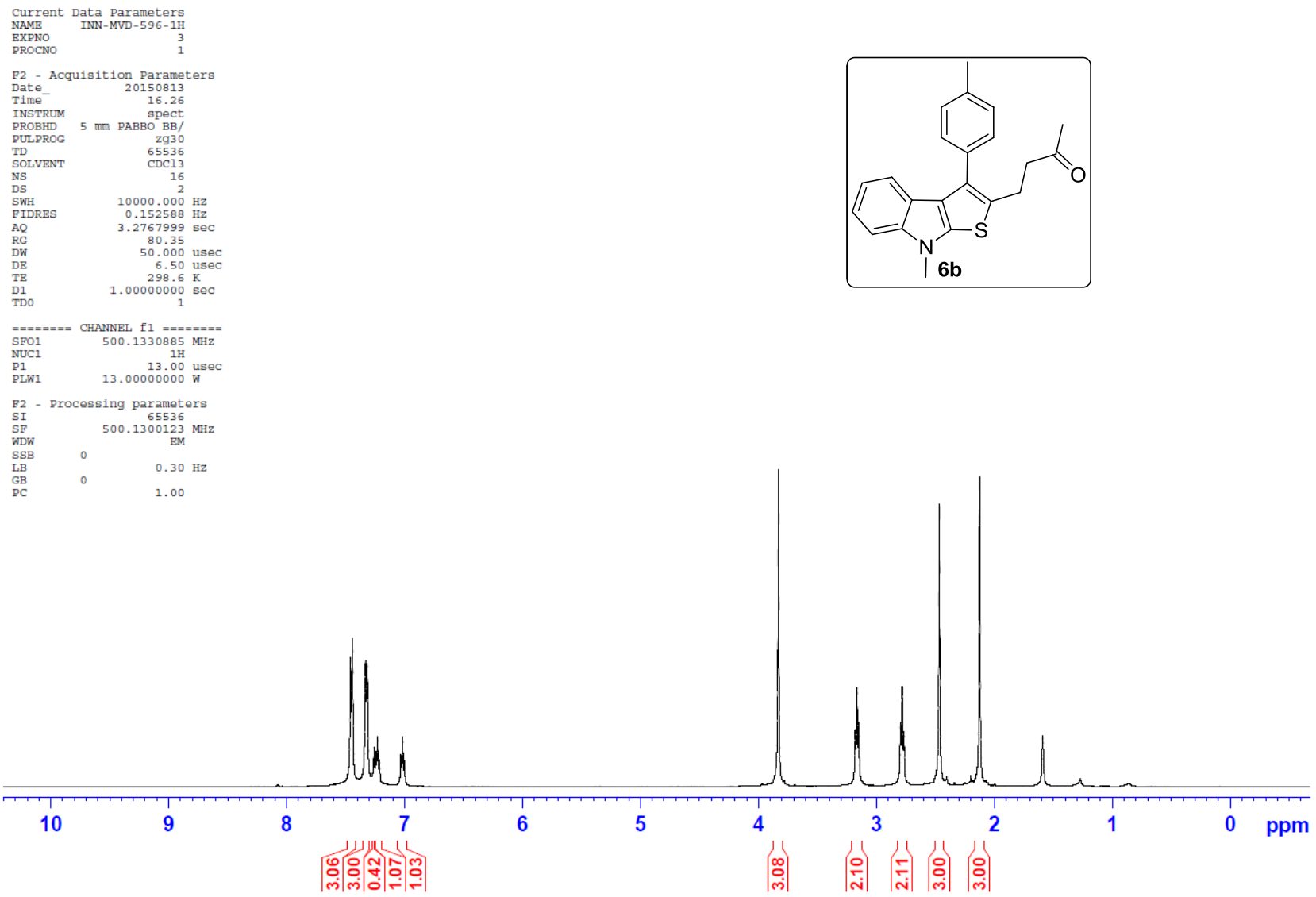

Figure S23. ^{1}H NMR Spectrum of **6b**

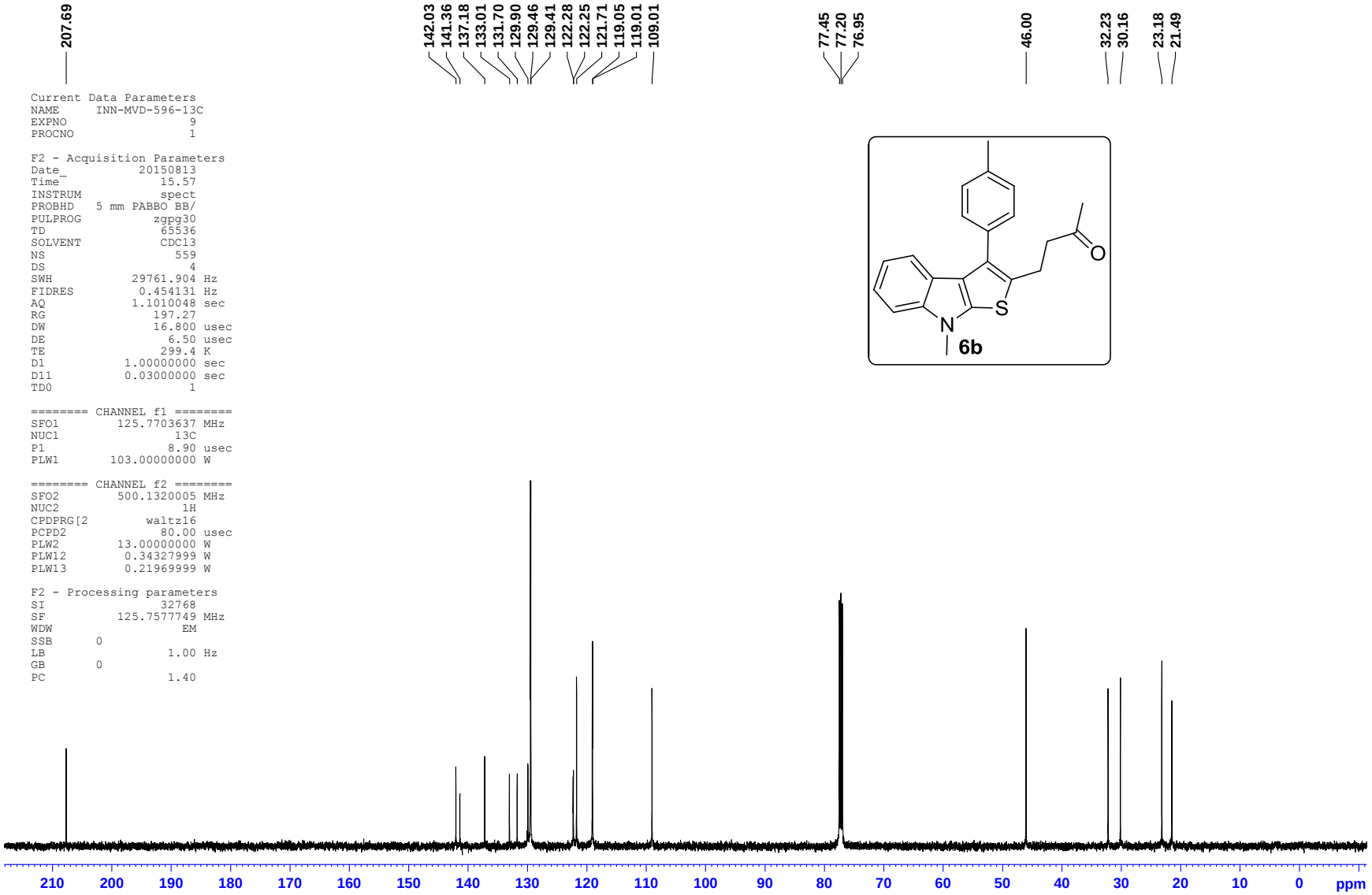

Figure S24. ^{13}C NMR Spectrum of **6b**

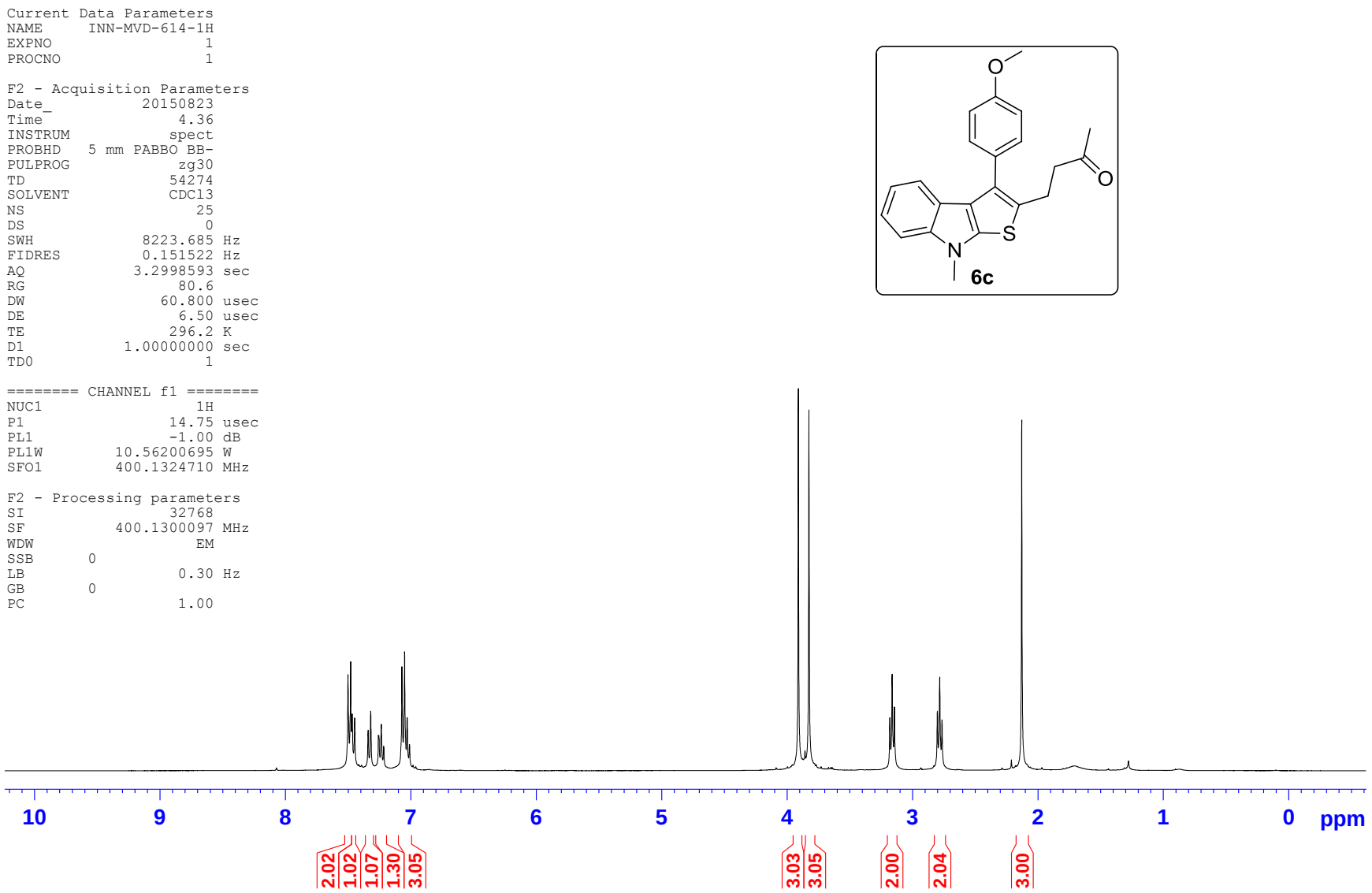

Figure S25. ^{1}H NMR Spectrum of **6c**

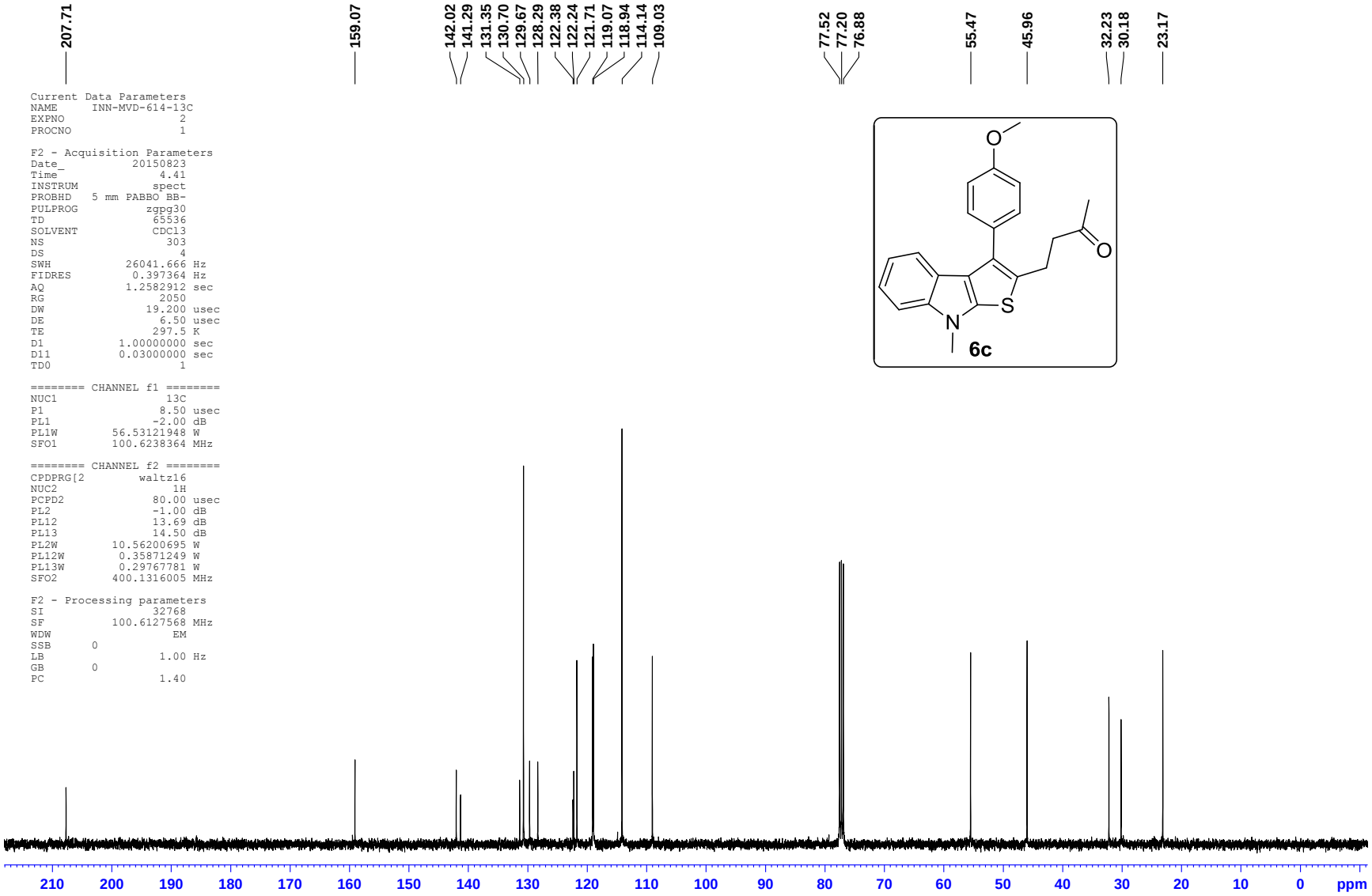

Figure S26. ^{13}C NMR Spectrum of **6c**

```
Current Data Parameters
NAME      INN-MVD-641-1H
EXPNO                  3
PROCNO                 1

F2 - Acquisition Parameters
Date_           20150917
Time               19.31
INSTRUM            spect
PROBHD   5 mm PABBO BB/
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    25
DS                     2
SWH            10000.000 Hz
FIDRES         0.152588 Hz
AQ             3.2767999 sec
RG                 30.72
DW                50.000 usec
DE                 6.50 usec
TE                293.9 K
D1            1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                   1H
P1                 13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300118 MHz
WDW                   EM
SSB       0
LB                 0.30 Hz
GB        0
PC                 1.00
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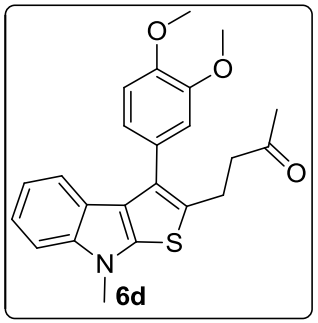


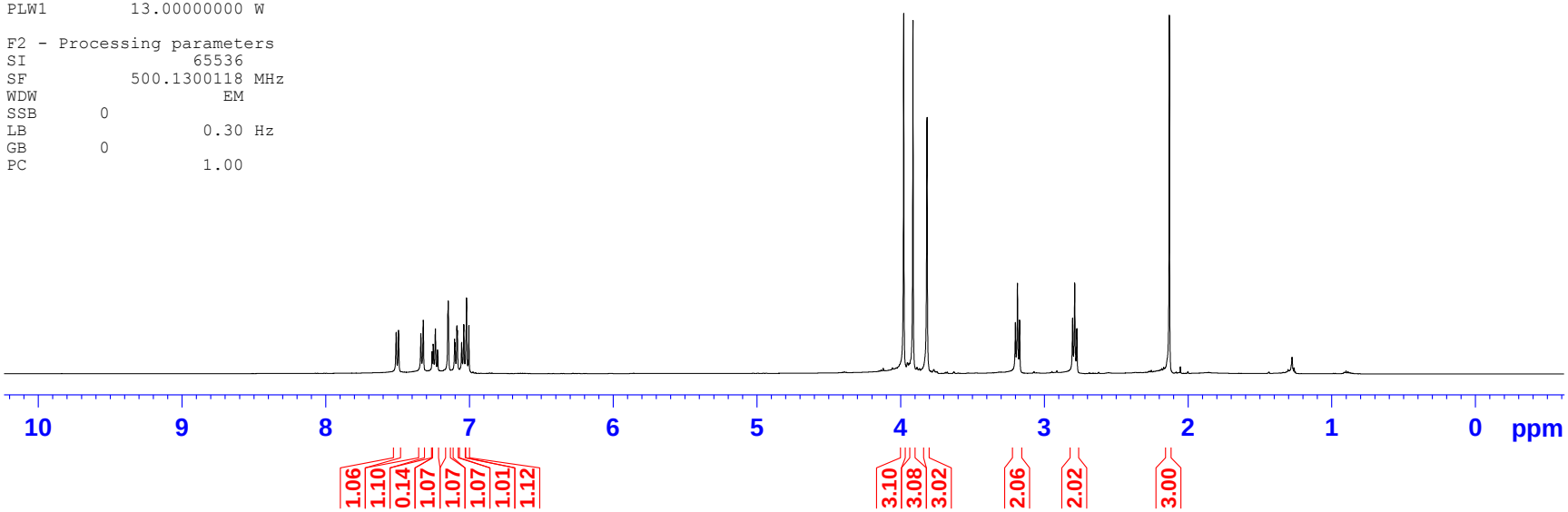


Figure S27. ^{1}H NMR Spectrum of **6d**

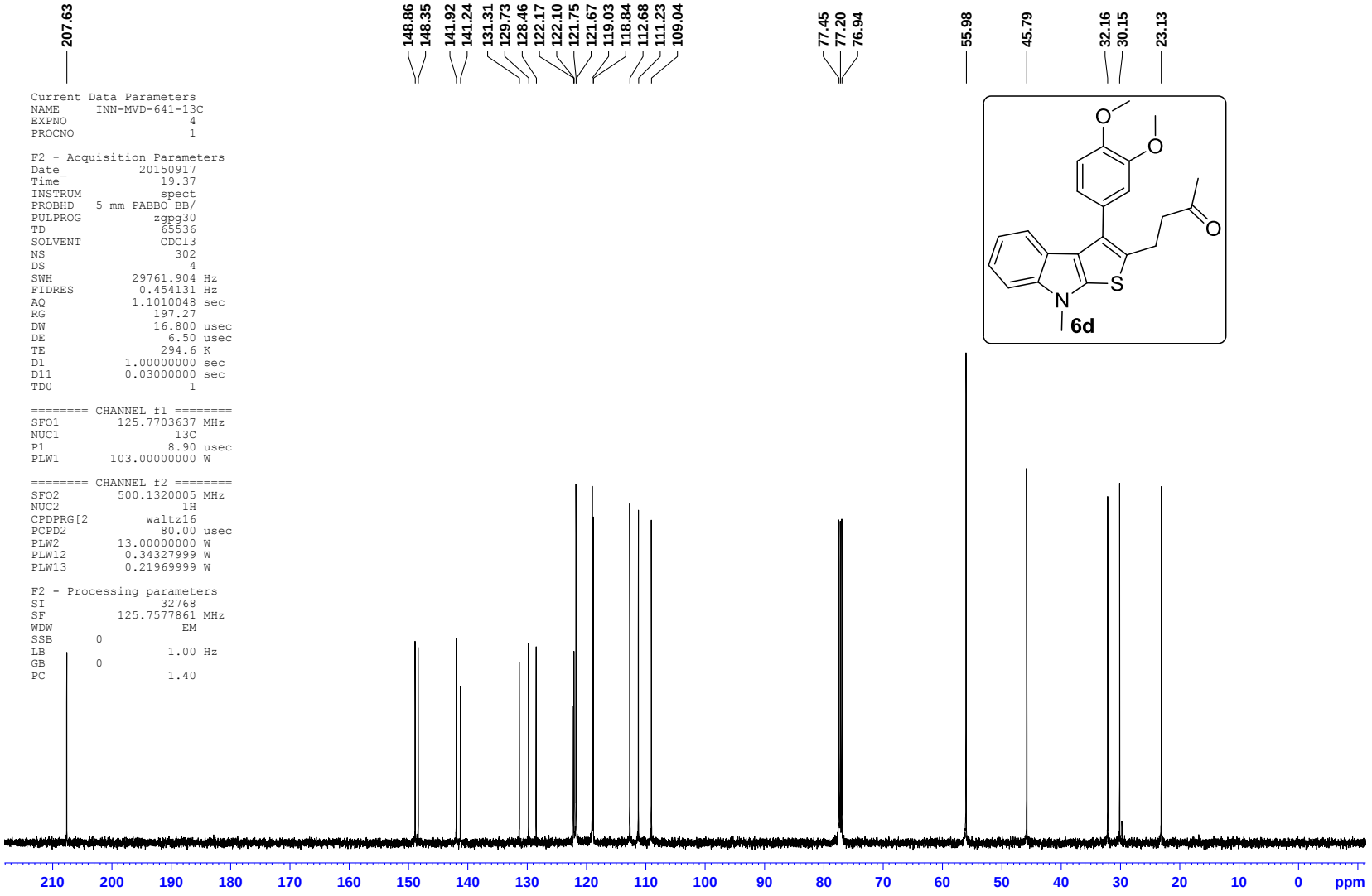


Figure S28. ^{13}C NMR Spectrum of **6d**

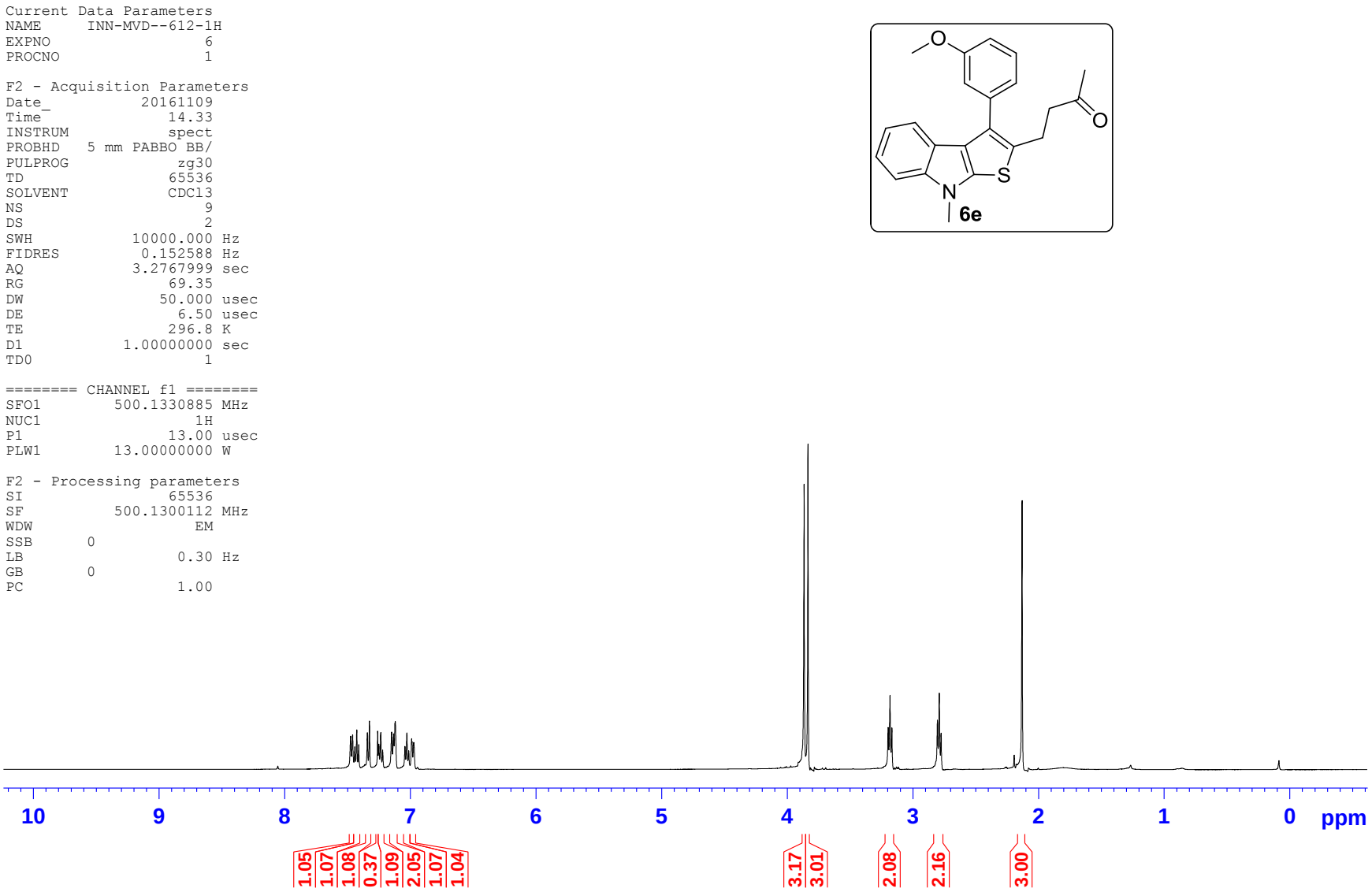


Figure S29. ^{1}H NMR Spectrum of **6e**

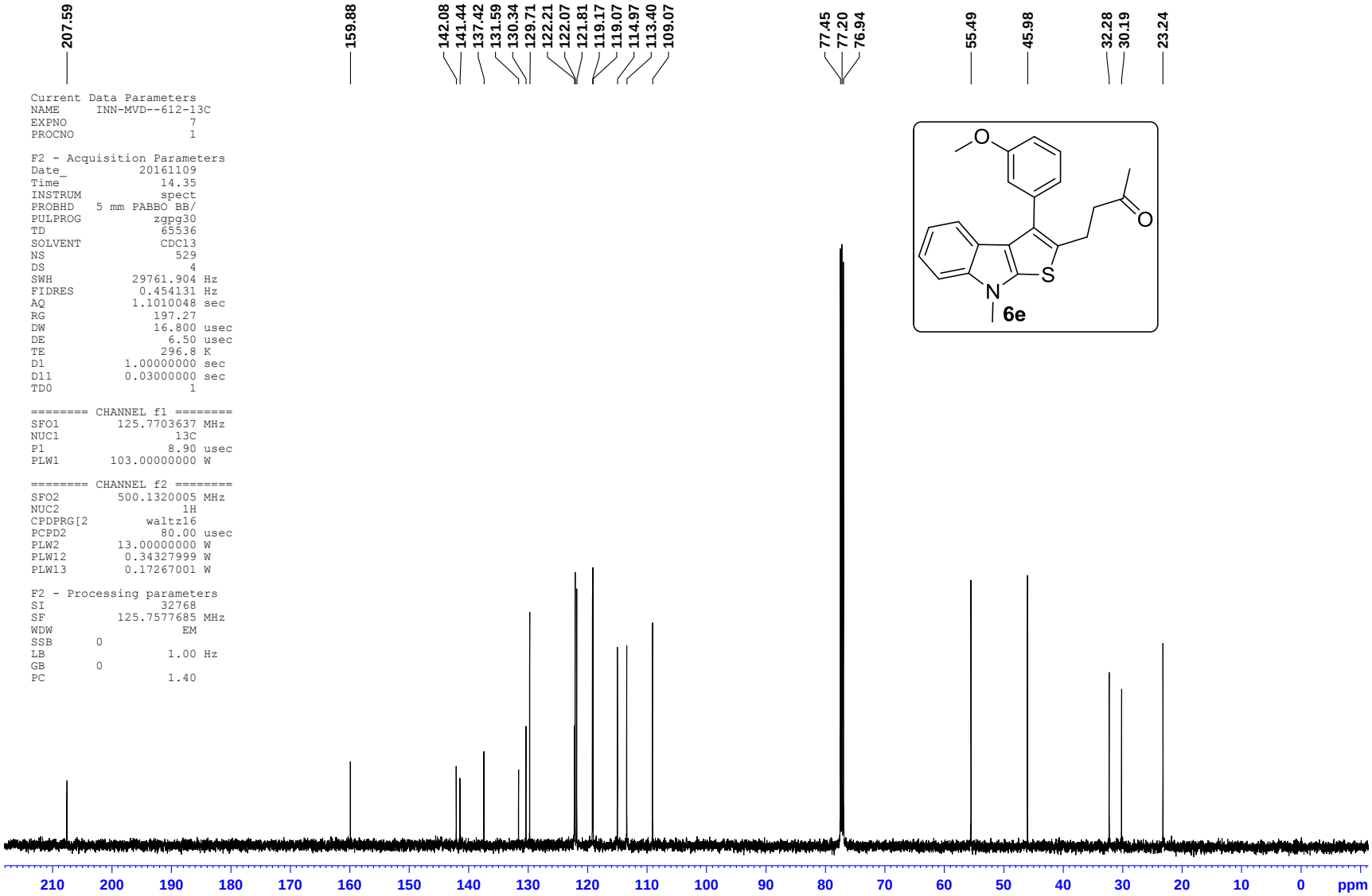


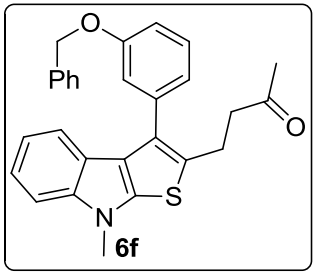
Figure S30. ^{13}C NMR Spectrum of **6e**

```
Current Data Parameters
NAME      INN-MVD-638-1H
EXPNO                  7
PROCNO                 1

F2 - Acquisition Parameters
Date_           20150918
Time              18.24
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   25
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG               15.73
DW               50.000 usec
DE                6.50 usec
TE               296.7 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1        500.1330885 MHz
NUC1                1H
P1                13.00 usec
PLW1        13.00000000 W

F2 - Processing parameters
SI                65536
SF          500.1300116 MHz
WDW                 EM
SSB       0
LB                0.30 Hz
GB        0
PC                1.00
```



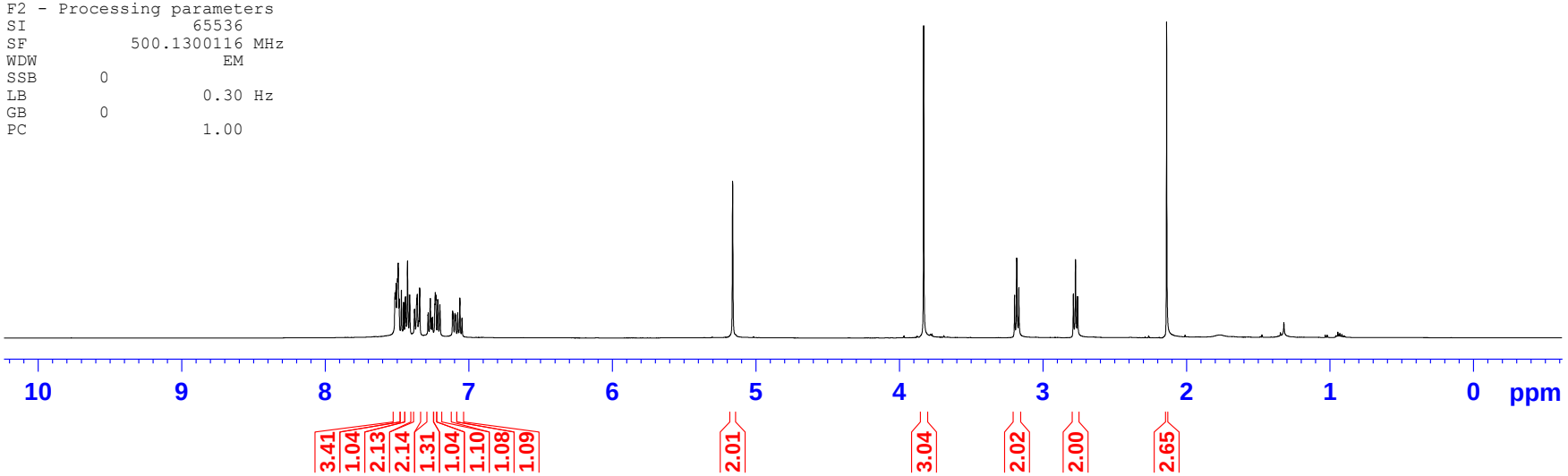


Figure S31. ^{1}H NMR Spectrum of **6f**

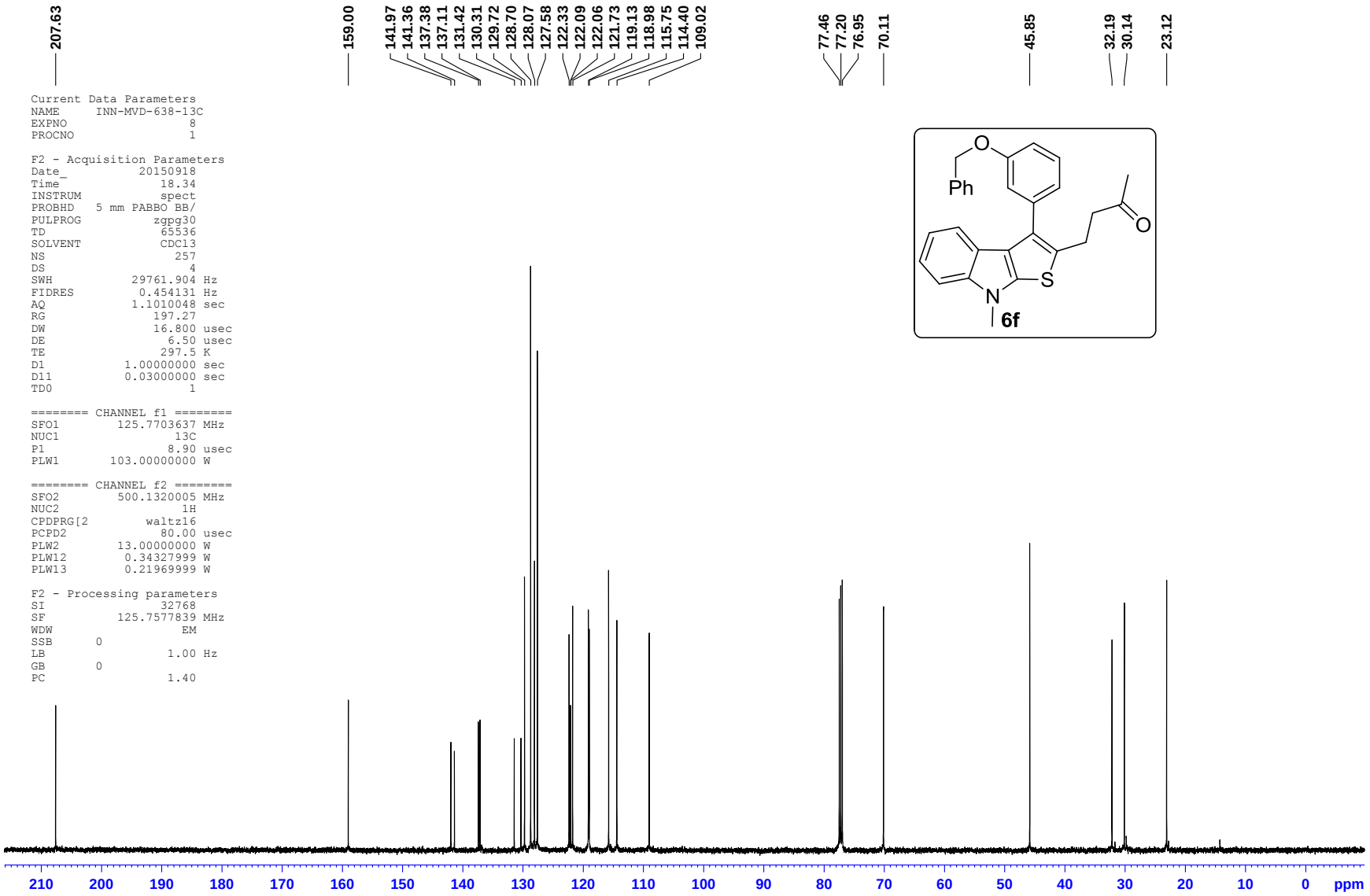


Figure S32. ^{13}C NMR Spectrum of **6f**

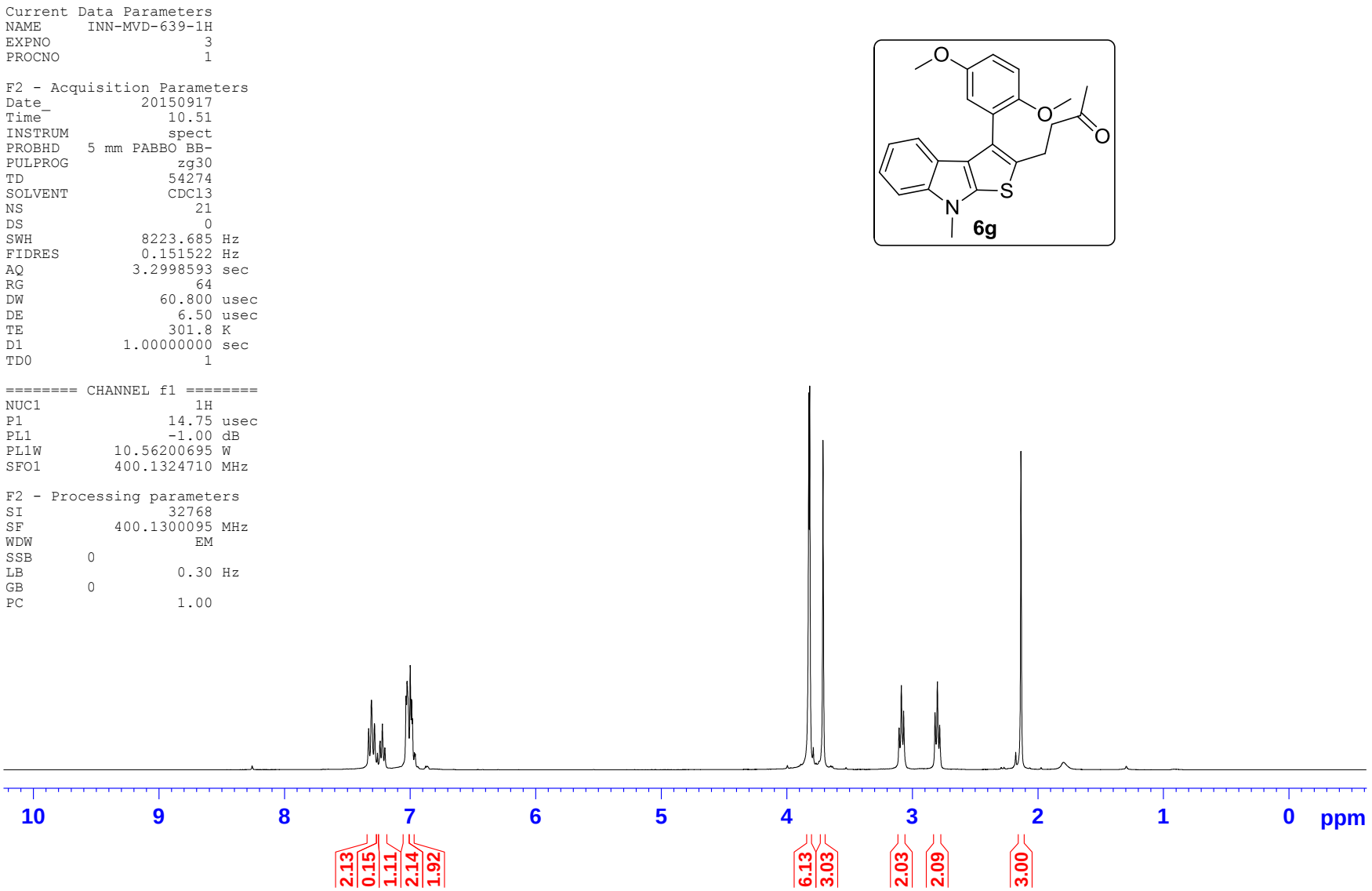


Figure S33. ^{1}H NMR Spectrum of **6g**

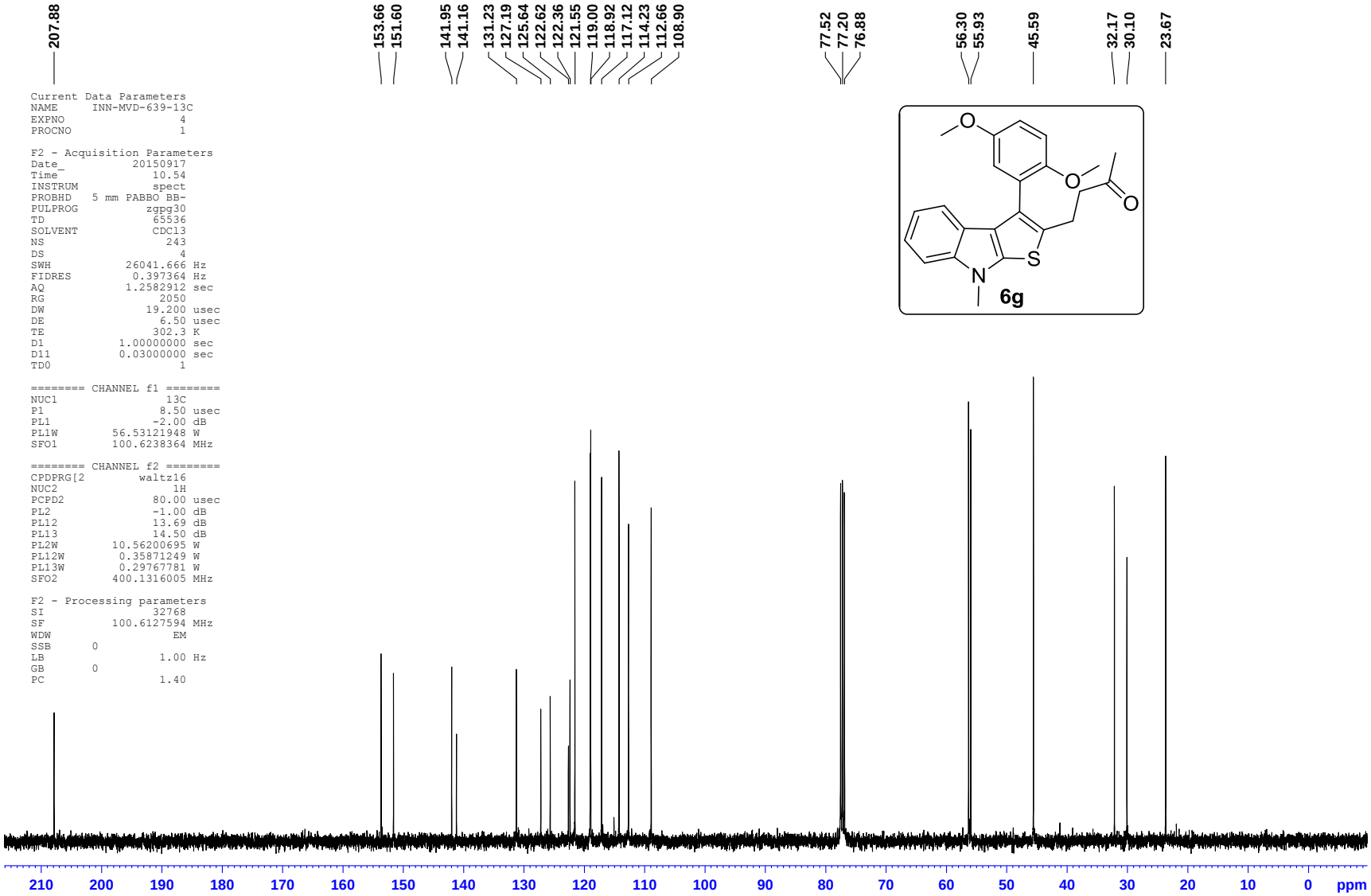


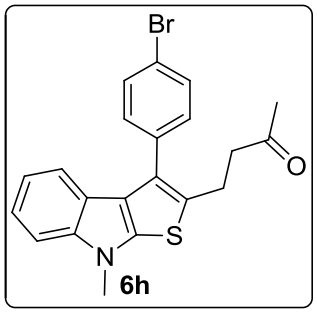
Figure S34. ^{13}C NMR Spectrum of **6g**

```
Current Data Parameters
NAME      INN-MVD-611-1H
EXPNO                  5
PROCNO                 1

F2 - Acquisition Parameters
Date_           20161109
Time              14.23
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                    6
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG                30.72
DW               50.000 usec
DE                6.50 usec
TE                297.5 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                 1H
P1                13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                65536
SF           500.1300208 MHz
WDW                  EM
SSB       0
LB                0.30 Hz
GB        0
PC                1.00
```



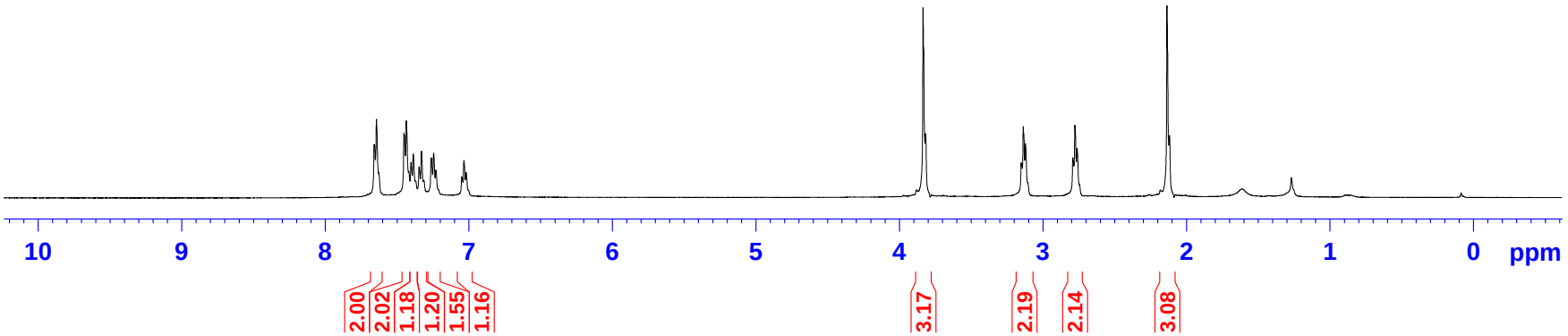
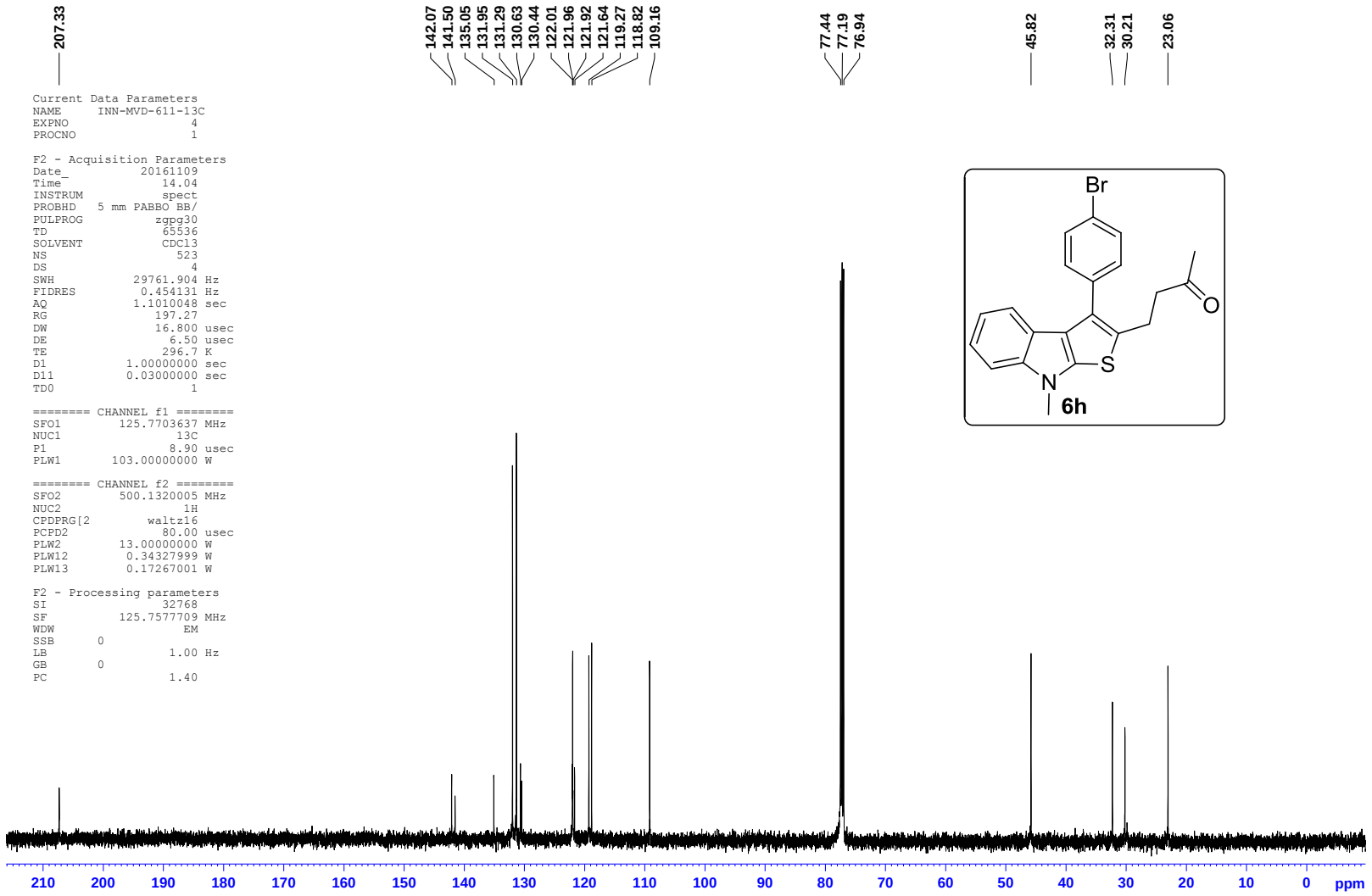


Figure S35. ^{1}H NMR Spectrum of **6h**




```
Current Data Parameters
NAME      INN-MVD-611-13C
EXPNO                   4
PROCNO                  1

F2 - Acquisition Parameters
Date_             20161109
Time                 14.04
INSTRUM              spect
PROBHD   5 mm PABBO BB/
PULPROG             zgpg30
TD                   65536
SOLVENT              CDCl3
NS                     523
DS                       4
SWH              29761.904 Hz
FIDRES            0.454131 Hz
AQ               1.1010048 sec
RG                  197.27
DW                 16.800 usec
DE                  6.50 usec
TE                  296.7 K
D1              1.00000000 sec
D11             0.03000000 sec
TD0                      1

======== CHANNEL f1 ========
SFO1            125.7703637 MHz
NUC1                    13C
P1                   8.90 usec
PLW1          103.00000000 W

======== CHANNEL f2 ========
SFO2            500.1320005 MHz
NUC2                    1H
CPDPRG[2           waltz16
PCPD2                80.00 usec
PLW2           13.00000000 W
PLW12           0.34327999 W
PLW13           0.17267001 W

F2 - Processing parameters
SI                   32768
SF              125.7577709 MHz
WDW                     EM
SSB       0
LB                    1.00 Hz
GB        0
PC                    1.40
```

Figure S36. ^{13}C NMR Spectrum of **6h**

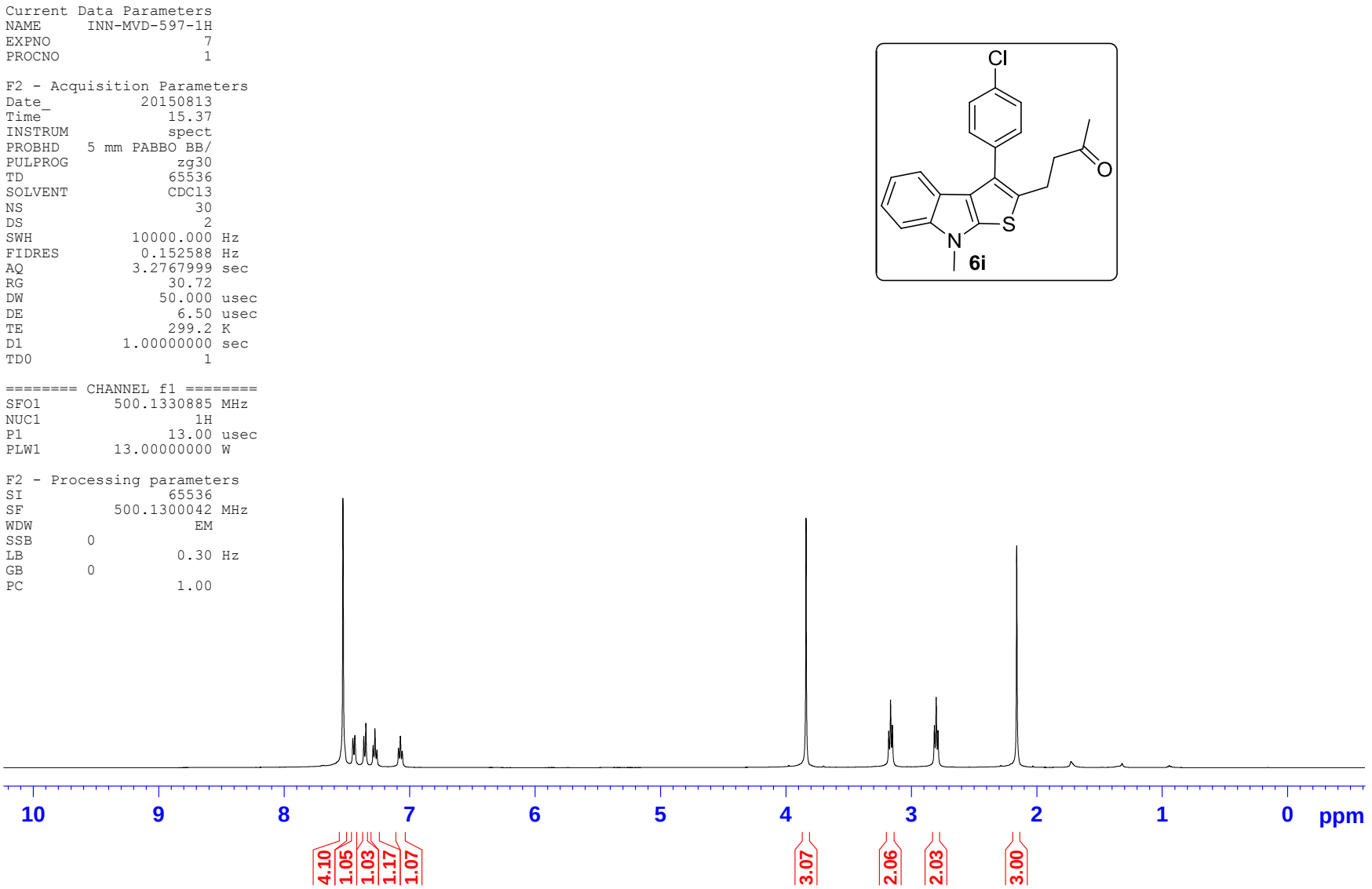


Figure S37. ^{1}H NMR Spectrum of **6i**

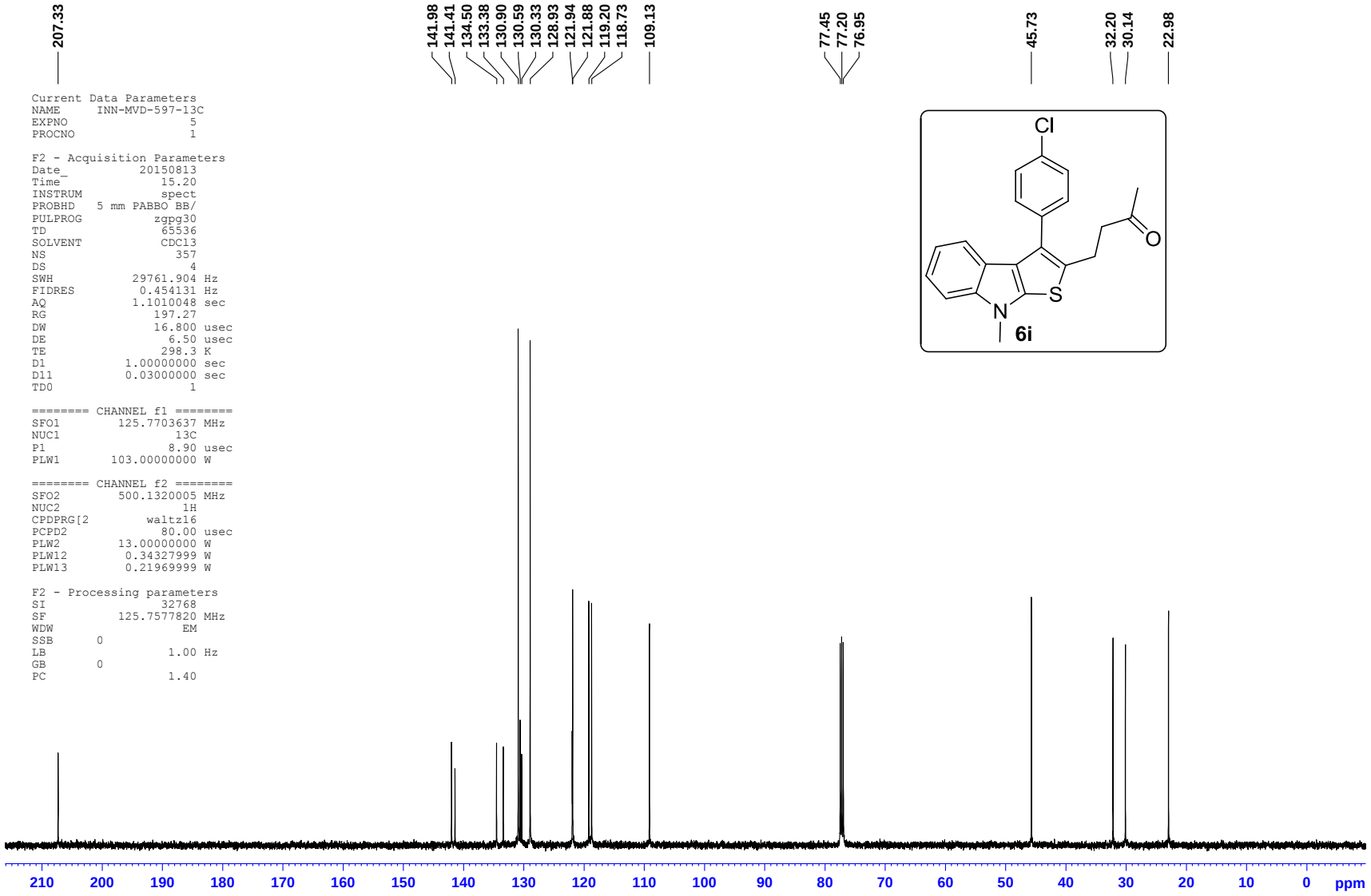


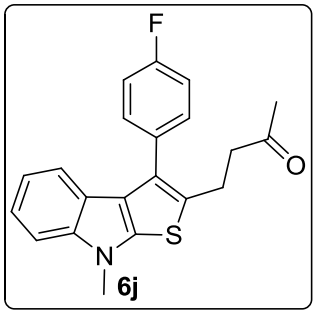
Figure S38. ^{13}C NMR Spectrum of **6i**

```
Current Data Parameters
NAME      INN-MVD-606-1H
EXPNO                  9
PROCNO                 1

F2 - Acquisition Parameters
Date_           20150814
Time                20.17
INSTRUM             spect
PROBHD   5 mm PABBO BB/
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                     25
DS                      2
SWH             10000.000 Hz
FIDRES          0.152588 Hz
AQ              3.2767999 sec
RG                  30.72
DW                 50.000 usec
DE                  6.50 usec
TE                 297.1 K
D1             1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                   1H
P1                  13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                  65536
SF            500.1300016 MHz
WDW                    EM
SSB       0
LB                  0.30 Hz
GB        0
PC                  1.00
```



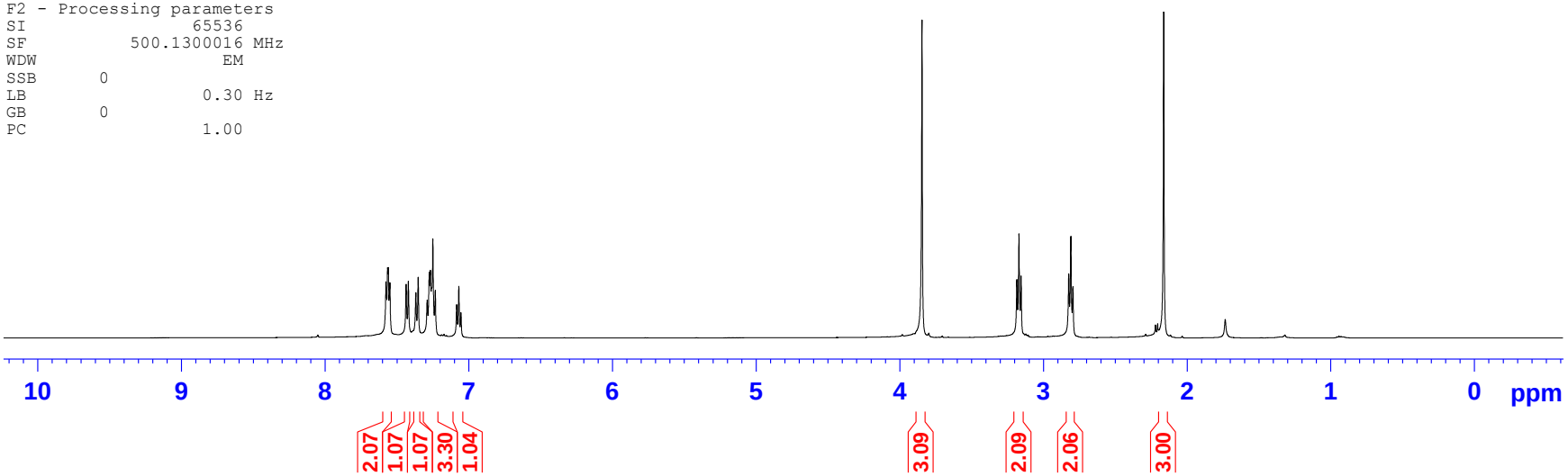


Figure S39. ^{1}H NMR Spectrum of **6j**

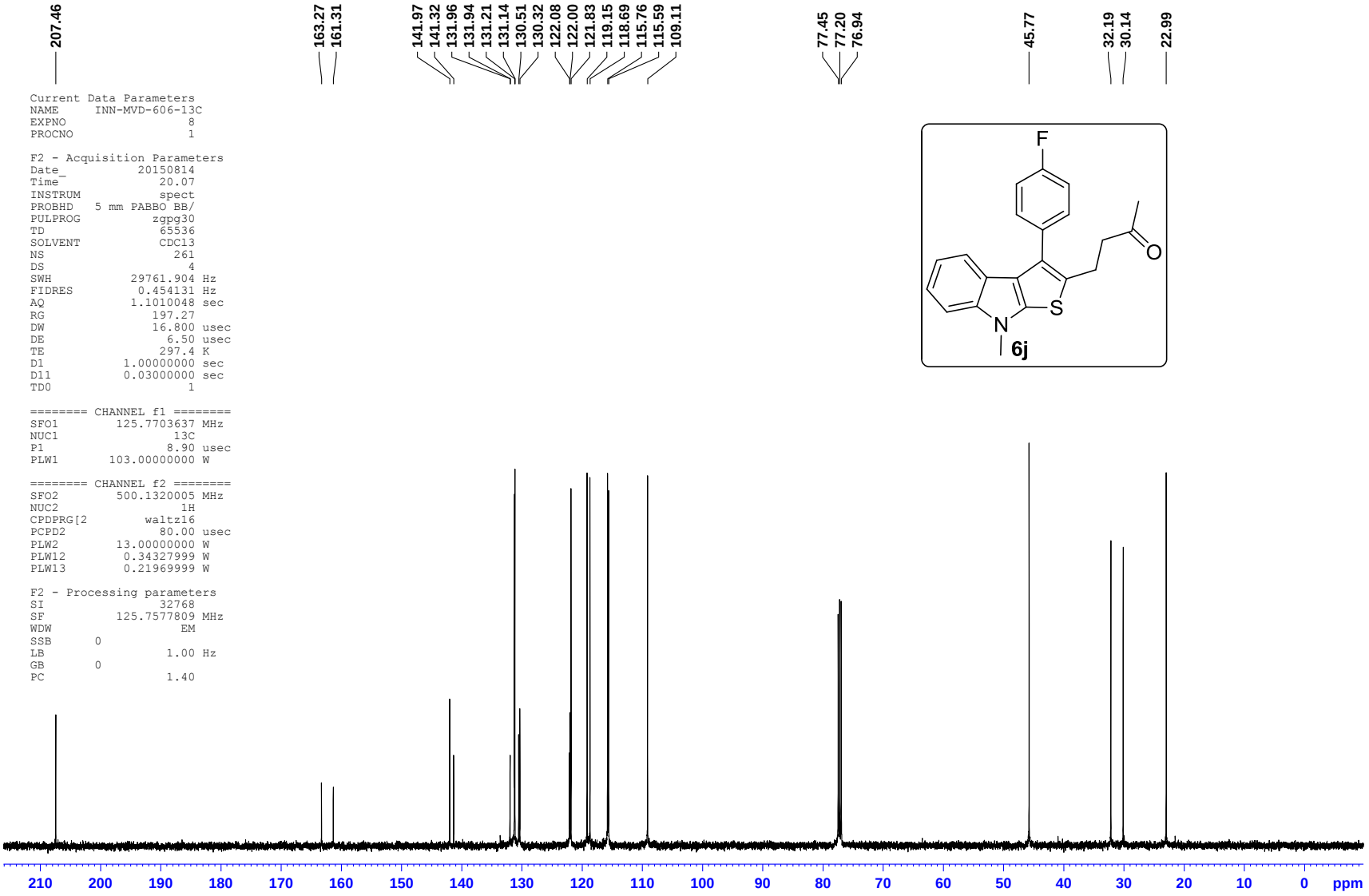


Figure S40. ^{13}C NMR Spectrum of **6j**

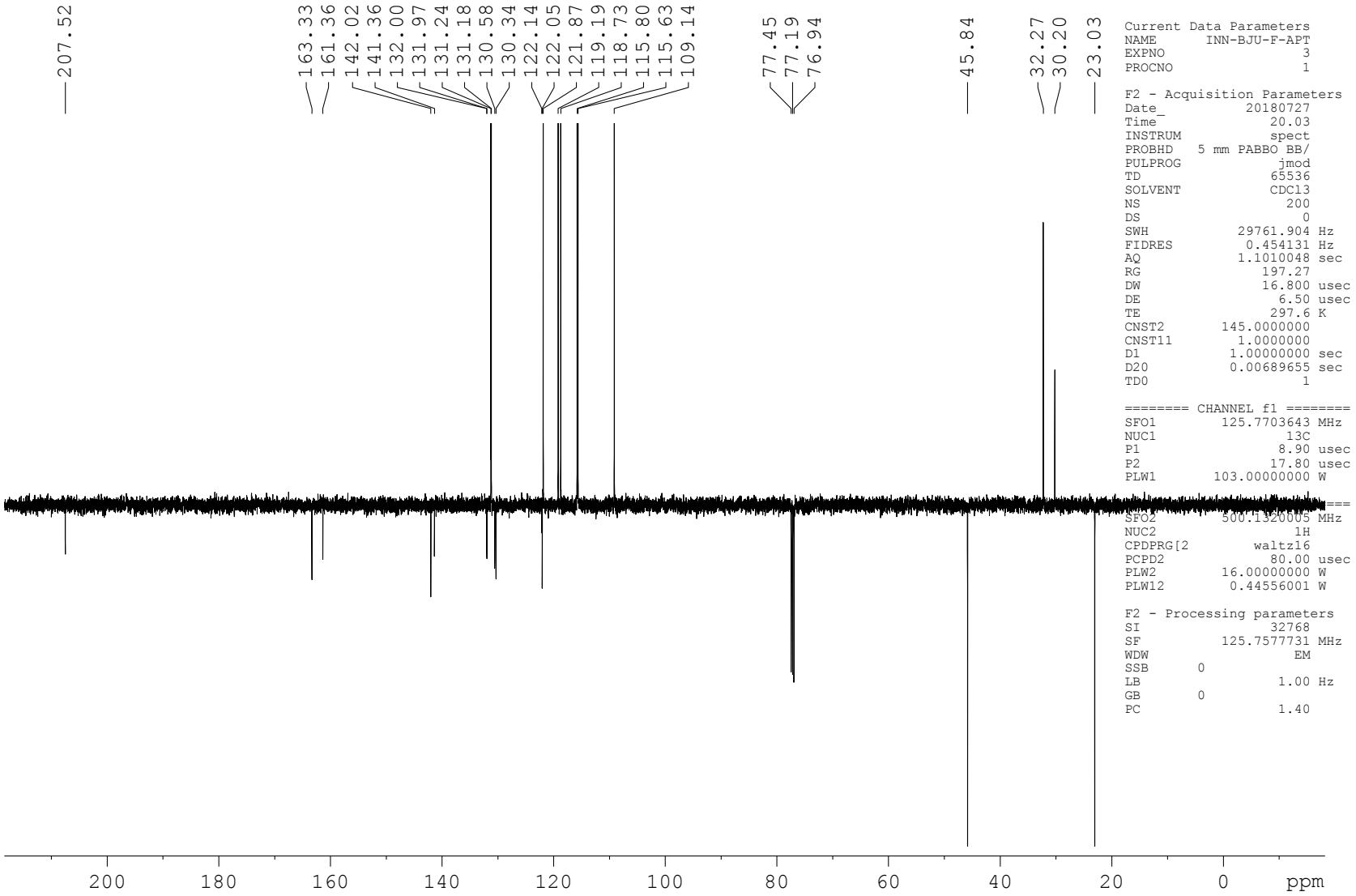


Figure S41. ^{13}C-APT Spectrum of **6j**

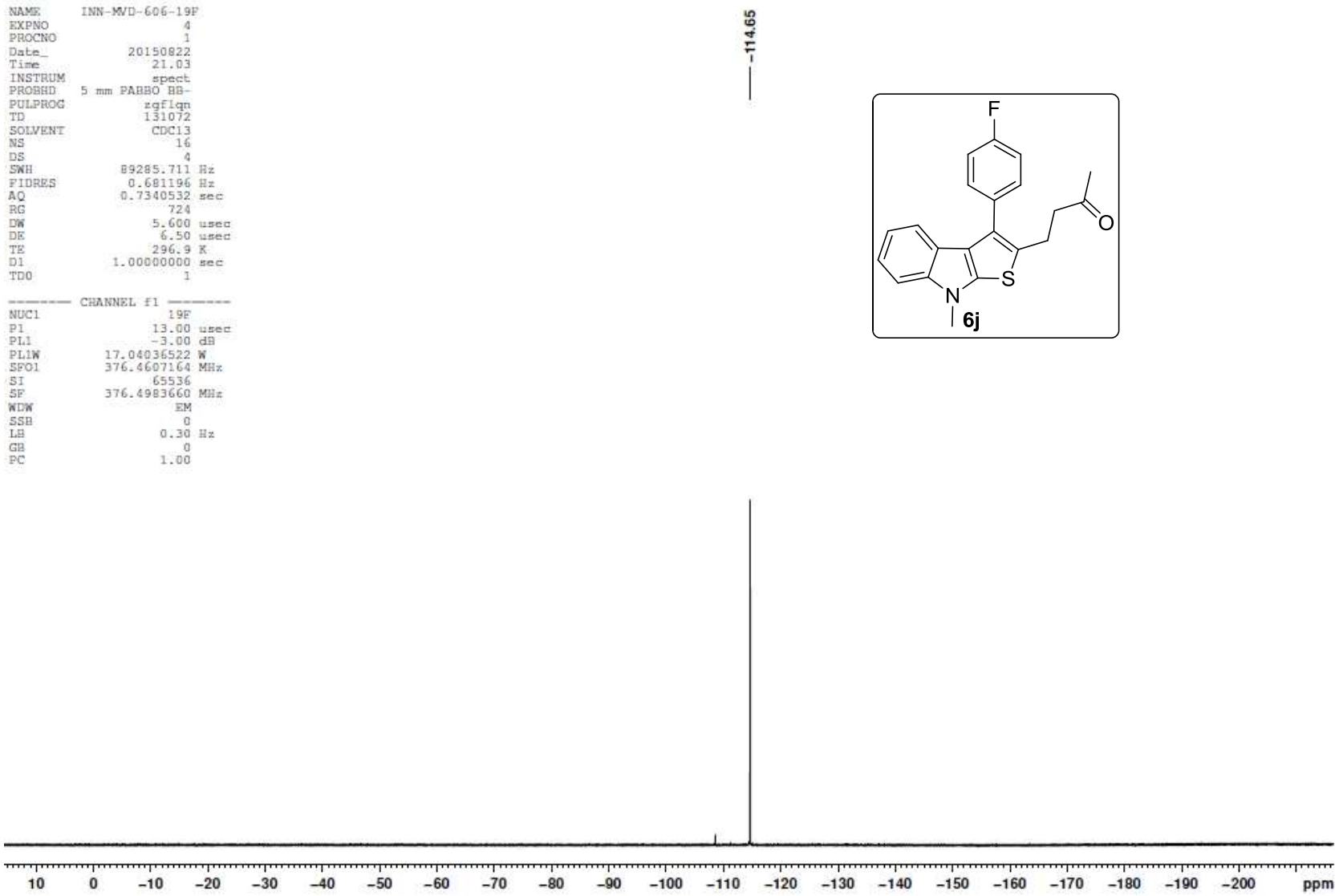


Figure S42. ^{19}F NMR Spectrum of **6j**

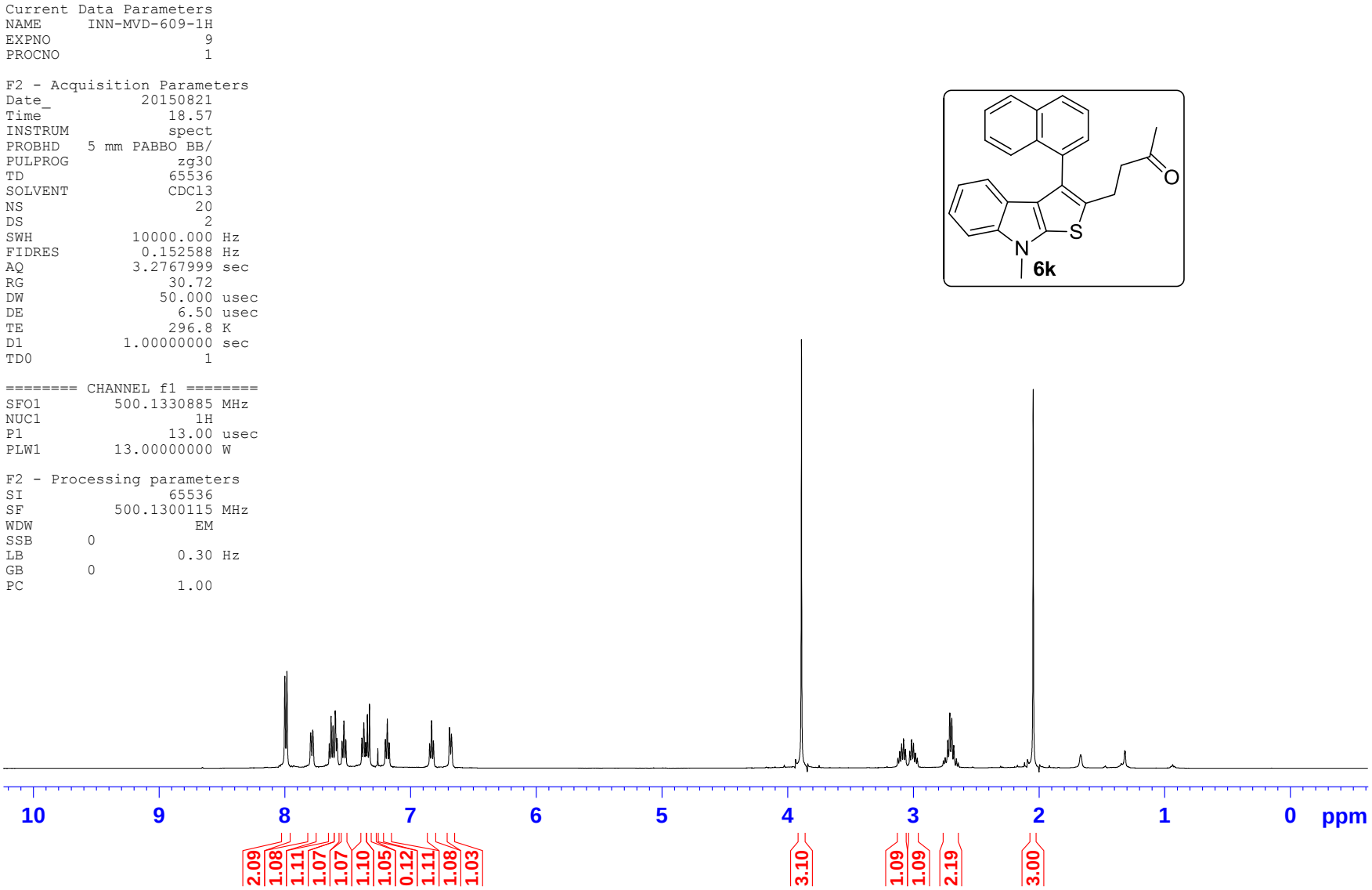


Figure S43. ^{1}H NMR Spectrum of **6k**

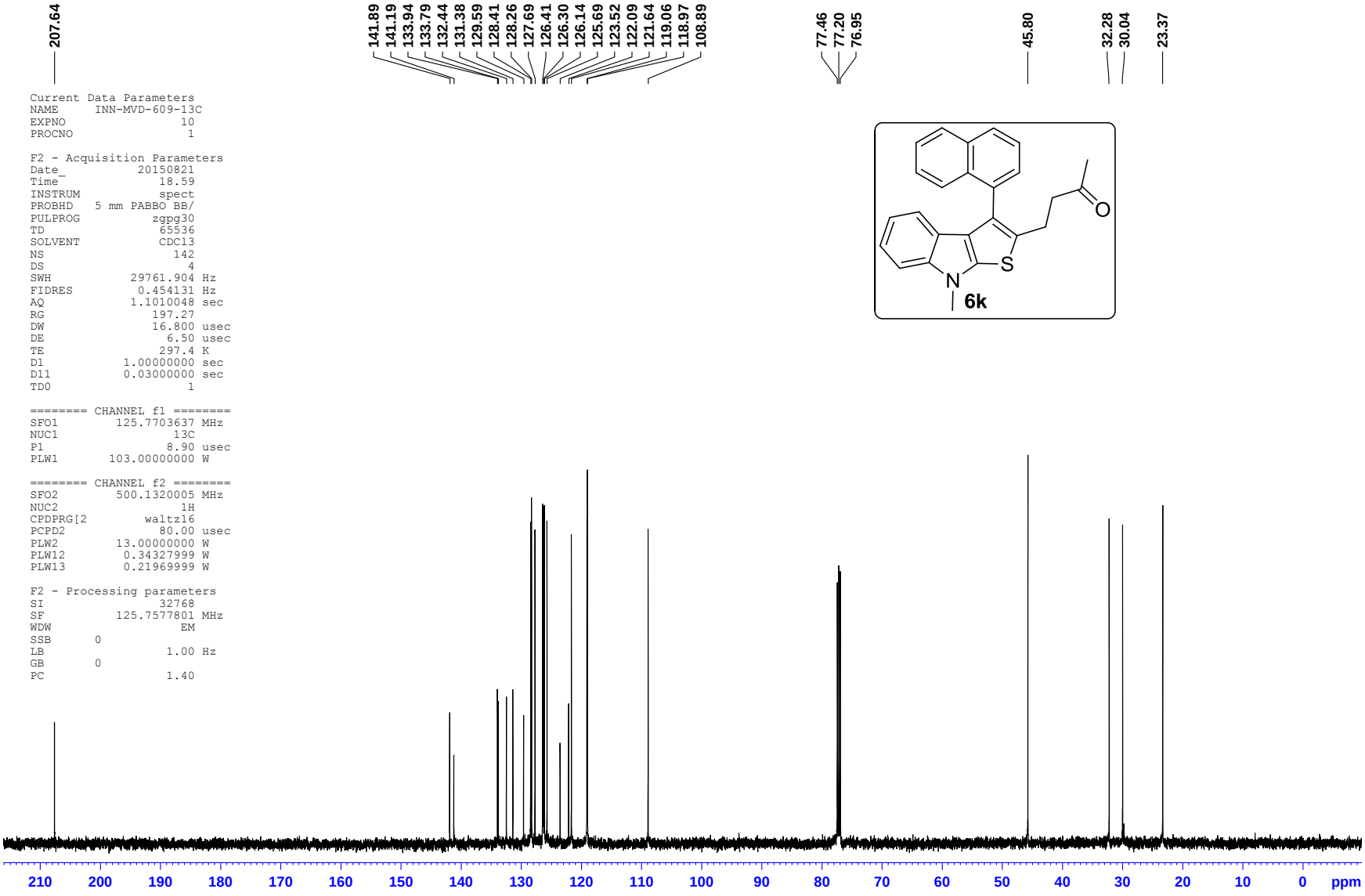
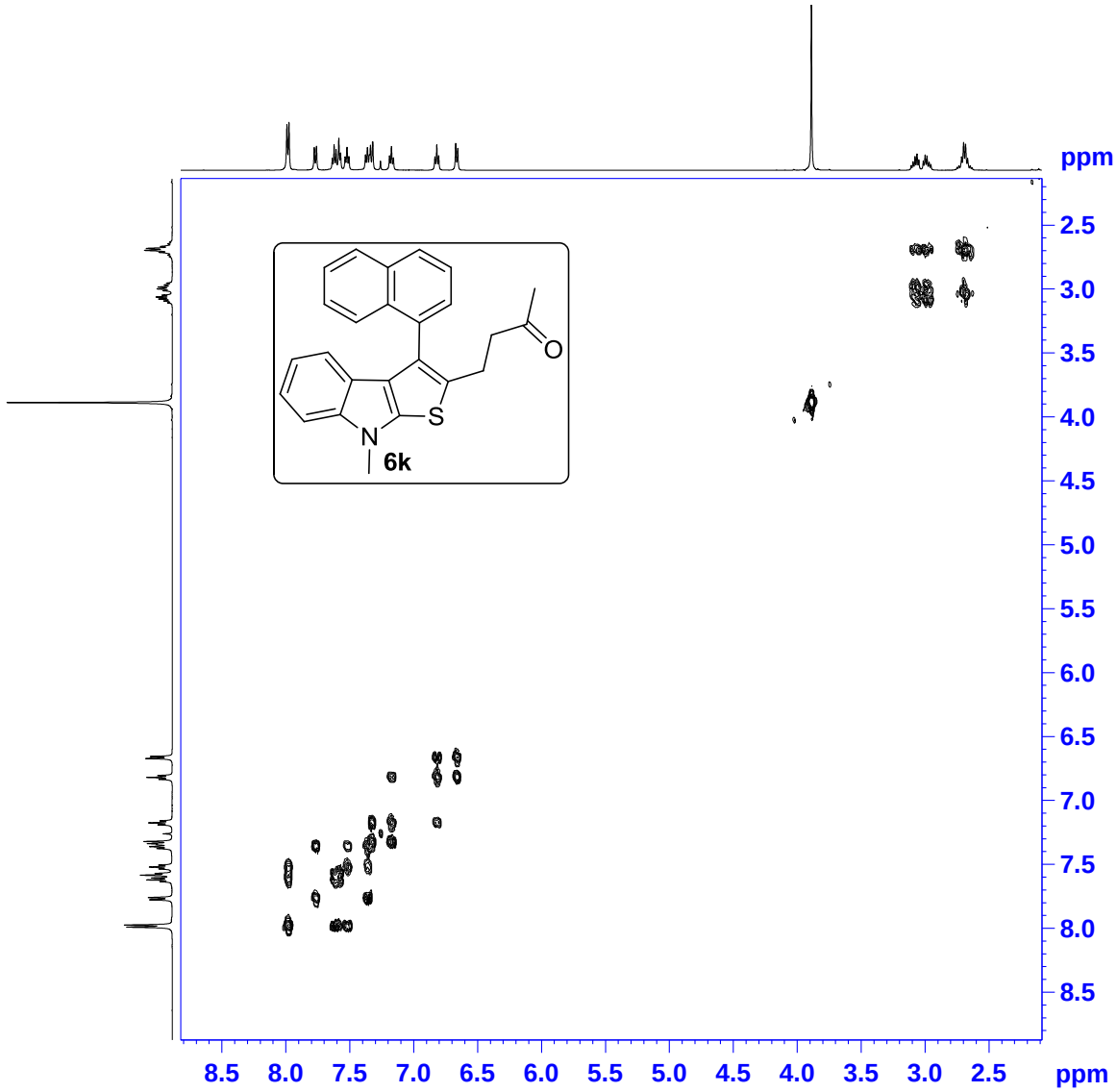


Figure S44. ^{13}C NMR Spectrum of **6k**




```
Current Data Parameters
NAME      INN-MVD-609-COSY
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20161110
Time               2.40
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG      cosygpppqf
TD                 2048
SOLVENT            CDCl3
NS                   100
DS                     0
SWH             3846.154 Hz
FIDRES          1.878005 Hz
AQ              0.2662400 sec
RG                 119.07
DW                 130.000 usec
DE                   6.50 usec
TE                 297.9 K
D0              0.00000300 sec
D1              1.00000000 sec
D11             0.03000000 sec
D12             0.00002000 sec
D13             0.00000400 sec
D16             0.00020000 sec
IN0             0.00026000 sec

======== CHANNEL f1 ========
SFO1         500.1326096 MHz
NUC1                   1H
P0                  13.00 usec
P1                  13.00 usec
P17               2500.00 usec
PLW1         13.00000000 W
PLW10         2.44109988 W

====== GRADIENT CHANNEL =====
GPNAM[1]      SMSQ10.100
GPZ1               10.00 %
P16              1000.00 usec

F1 - Acquisition parameters
TD                   160
SFO1            500.1326 MHz
FIDRES         48.076923 Hz
SW                 7.690 ppm
FnMODE                QF

F2 - Processing parameters
SI                  1024
SF           500.1300123 MHz
WDW                 QSINE
SSB       0
LB        0 Hz
GB        0
PC                  1.40

F1 - Processing parameters
SI                  1024
MC2                   QF
SF           500.1300123 MHz
WDW                 QSINE
SSB       0
LB        0 Hz
GB        0
```

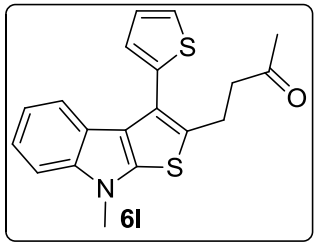
Figure S45. ^{1}H-^{1}H-COSY Spectrum of **6k**

```
Current Data Parameters
NAME      INN-MVD-640-1H
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20150917
Time              19.10
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   25
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG                53.37
DW               50.000 usec
DE                6.50 usec
TE               293.7 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1        500.1330885 MHz
NUC1                  1H
P1                13.00 usec
PLW1        13.00000000 W

F2 - Processing parameters
SI                65536
SF          500.1300081 MHz
WDW                  EM
SSB      0
LB                0.30 Hz
GB       0
PC                1.00
```



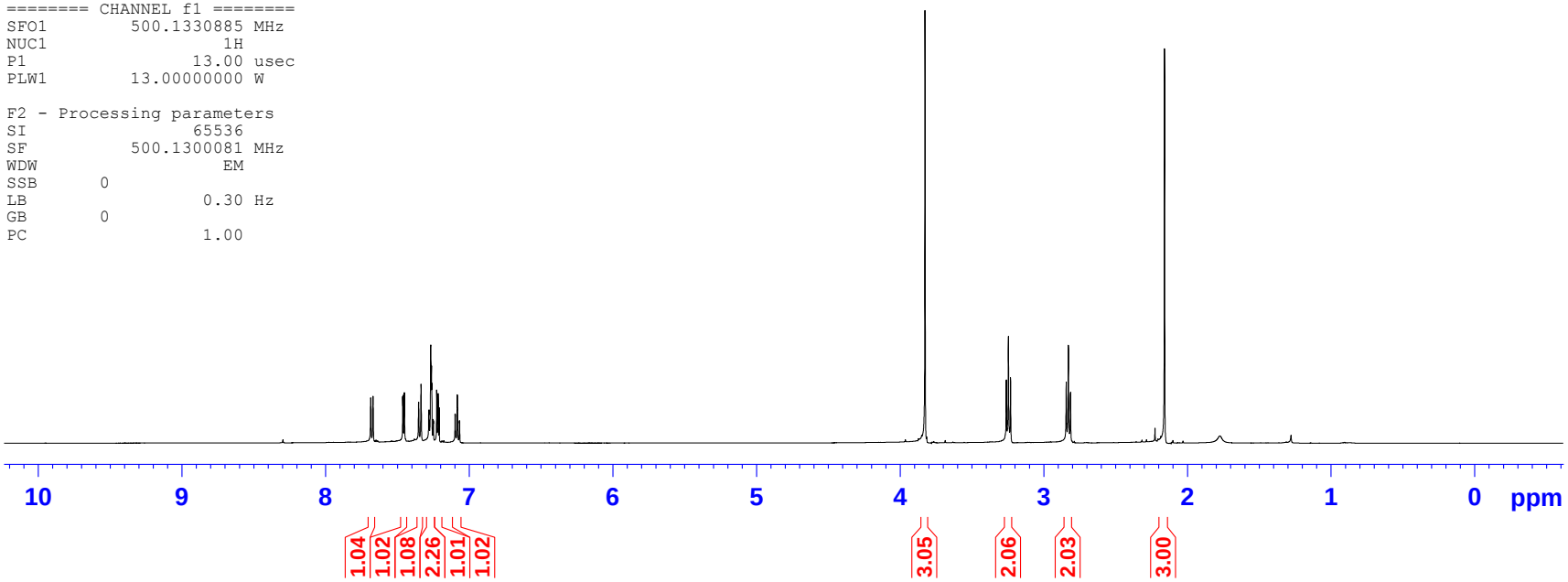


Figure S46. ^{1}H NMR Spectrum of **6l**

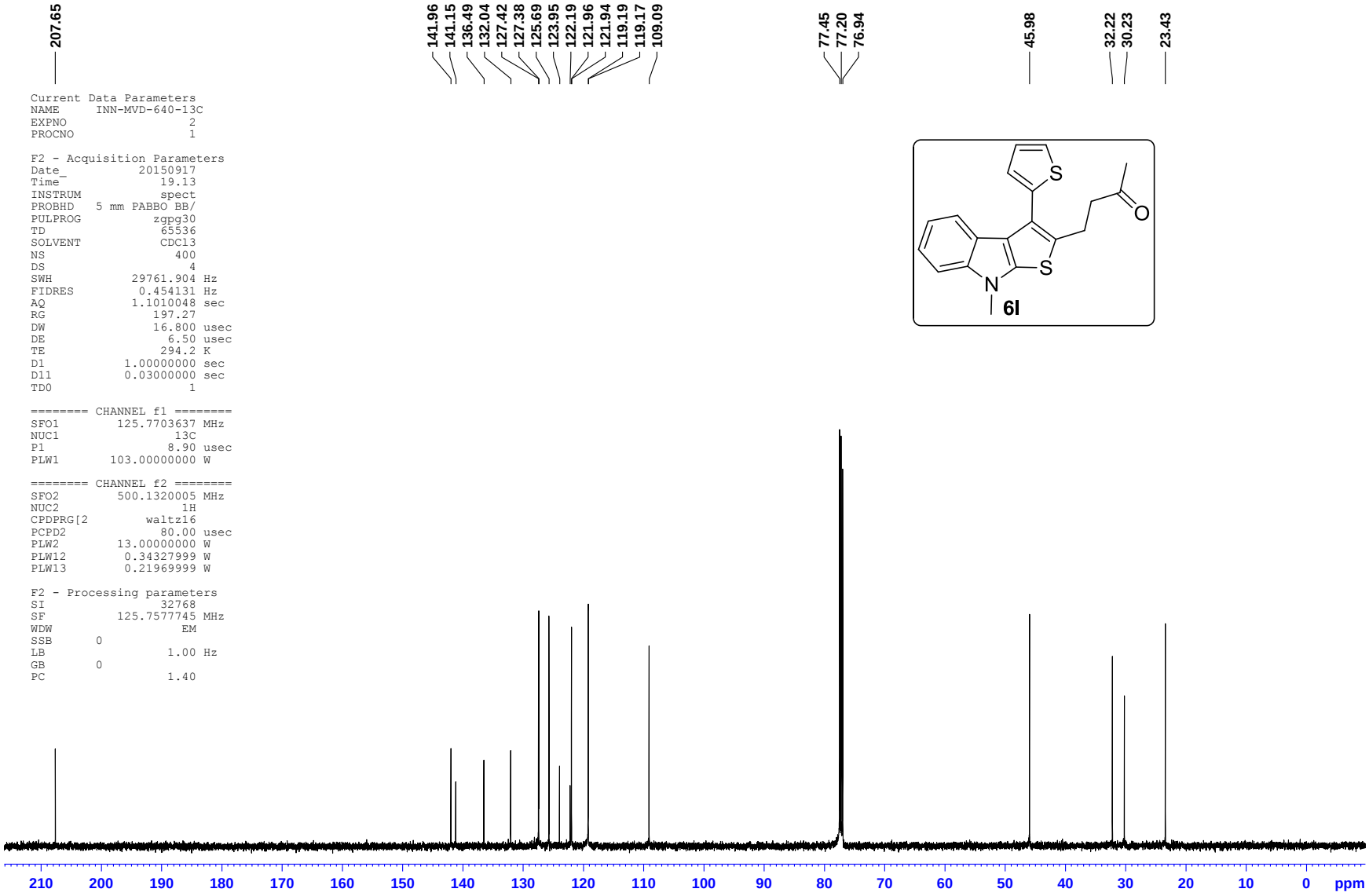


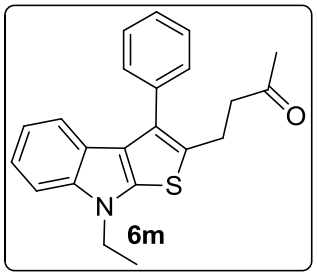
Figure S47. ^{13}C NMR Spectrum of **6l**

```
Current Data Parameters
NAME      INN-MVD-661-1H
EXPNO                 13
PROCNO                 1

F2 - Acquisition Parameters
Date_           20151002
Time               19.32
INSTRUM            spect
PROBHD   5 mm PABBO BB/
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    24
DS                     2
SWH            10000.000 Hz
FIDRES         0.152588 Hz
AQ             3.2767999 sec
RG                 80.35
DW                50.000 usec
DE                 6.50 usec
TE                295.6 K
D1            1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                   1H
P1                 13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300124 MHz
WDW                   EM
SSB       0
LB                 0.30 Hz
GB        0
PC                 1.00
```



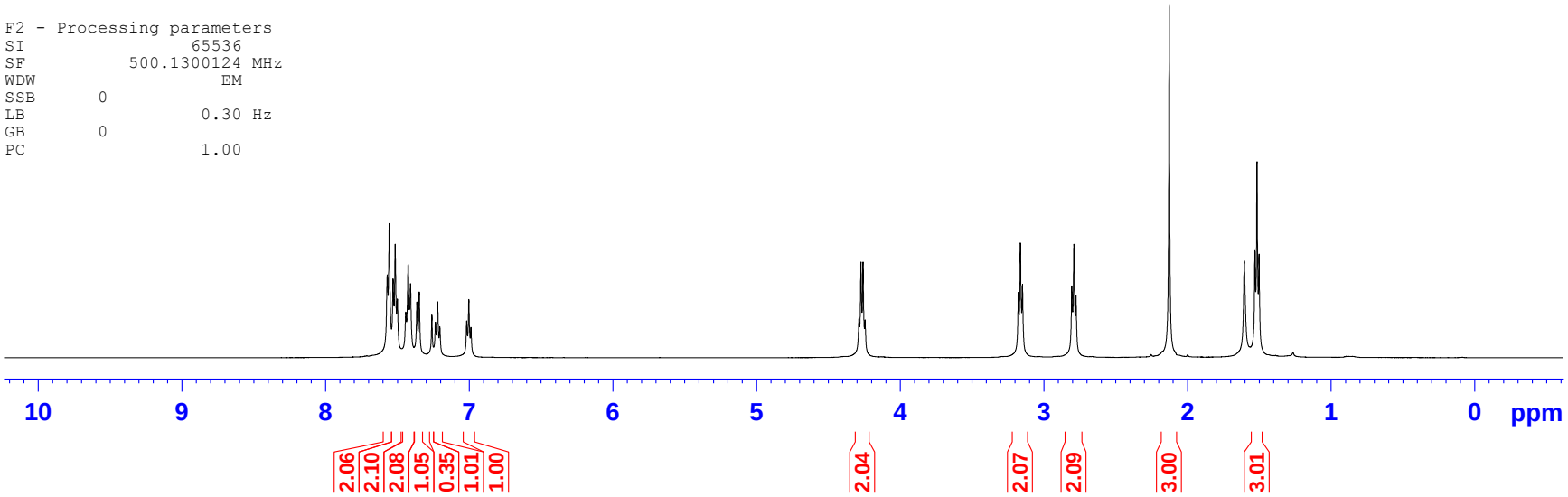


Figure S48. ^{1}H NMR Spectrum of **6m**

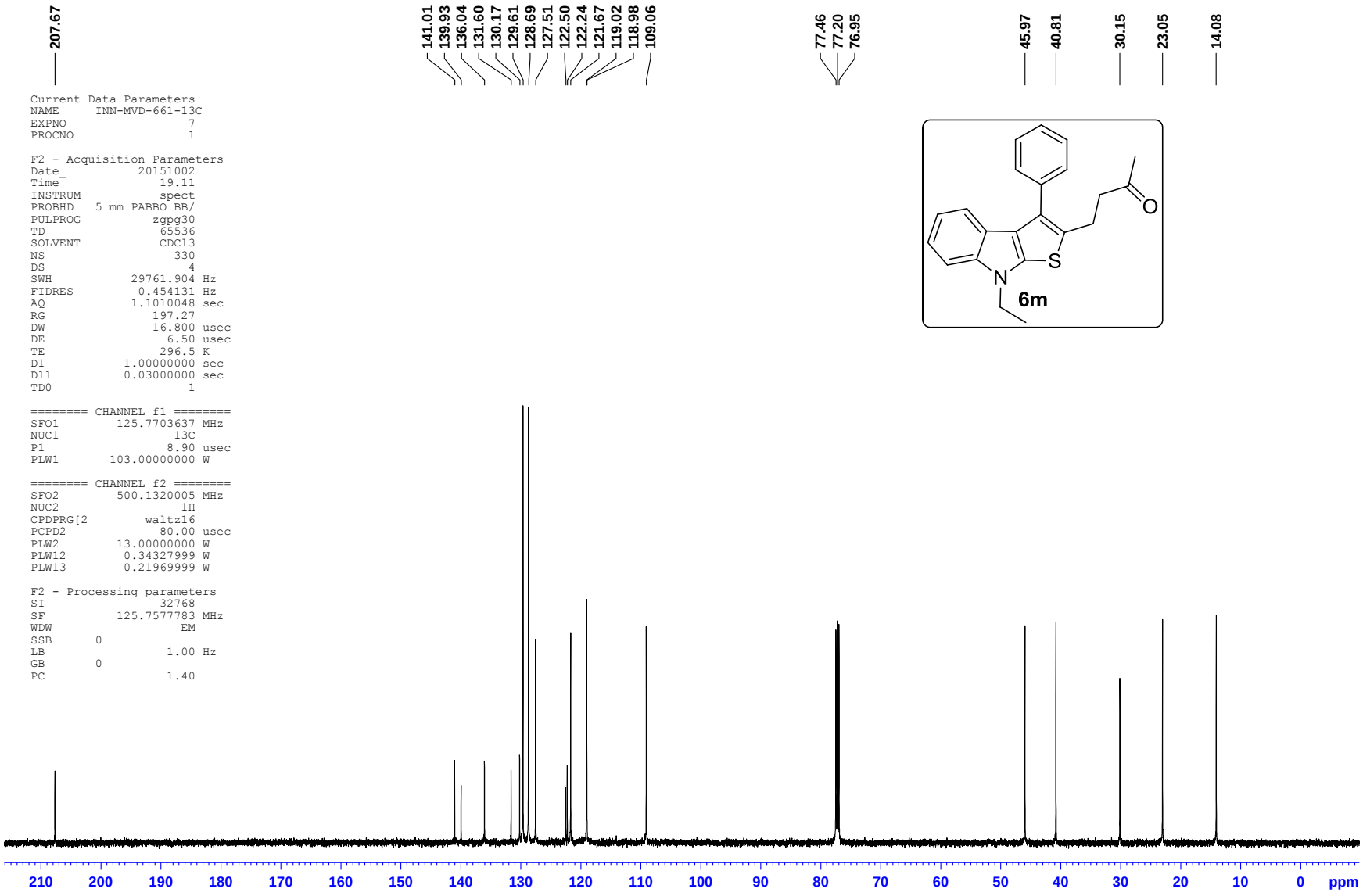


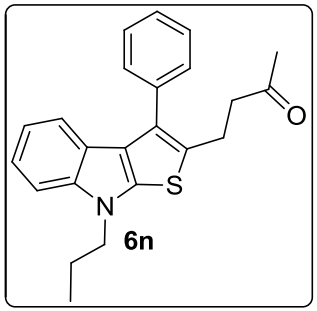
Figure S49. ^{13}C NMR Spectrum of **6m**

```
Current Data Parameters
NAME      INN-MVD-662-1H
EXPNO                  4
PROCNO                 1

F2 - Acquisition Parameters
Date_           20151002
Time               18.29
INSTRUM            spect
PROBHD   5 mm PABBO BB/
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    18
DS                     2
SWH            10000.000 Hz
FIDRES          0.152588 Hz
AQ             3.2767999 sec
RG                 30.72
DW                50.000 usec
DE                 6.50 usec
TE                295.6 K
D1           1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                1H
P1                 13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300118 MHz
WDW                   EM
SSB       0
LB                 0.30 Hz
GB        0
PC                 1.00
```



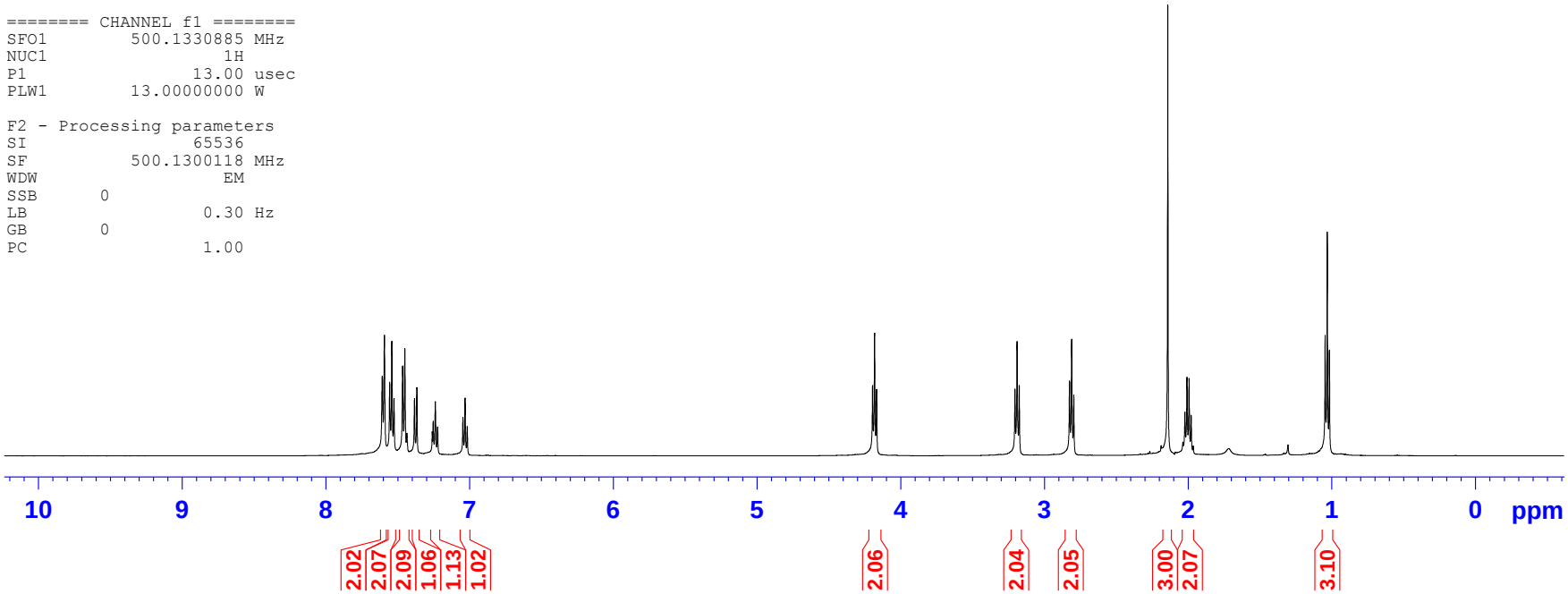


Figure S50. ^{1}H NMR Spectrum of **6n**

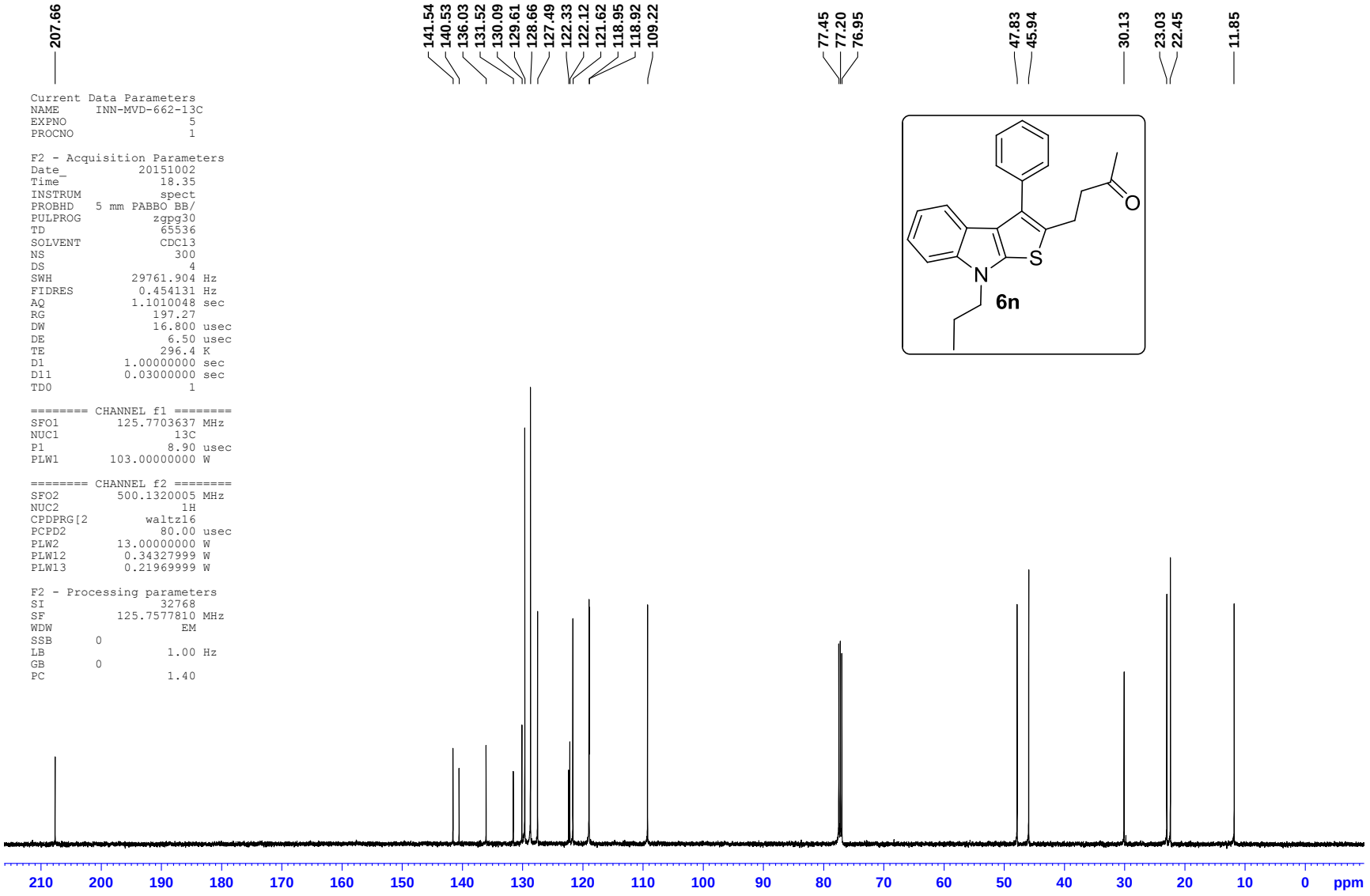


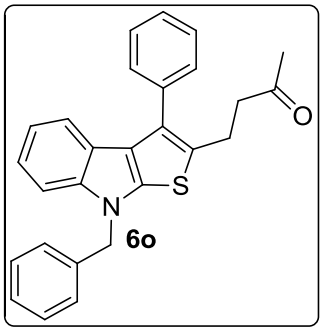
Figure S51. ^{13}C NMR Spectrum of **6n**

```
Current Data Parameters
NAME      INN-MVD-660-1H
EXPNO                  6
PROCNO                 1

F2 - Acquisition Parameters
Date_           20151002
Time               18.46
INSTRUM            spect
PROBHD   5 mm PABBO BB/
PULPROG             zg30
TD                 65536
SOLVENT            CDCl3
NS                    23
DS                     2
SWH            10000.000 Hz
FIDRES             0.152588 Hz
AQ             3.2767999 sec
RG                 30.72
DW                50.000 usec
DE                 6.50 usec
TE                 295.6 K
D1             1.00000000 sec
TD0                    1

======== CHANNEL f1 ========
SFO1         500.1330885 MHz
NUC1                   1H
P1                 13.00 usec
PLW1         13.00000000 W

F2 - Processing parameters
SI                 65536
SF           500.1300117 MHz
WDW                   EM
SSB       0
LB                 0.30 Hz
GB        0
PC                 1.00
```



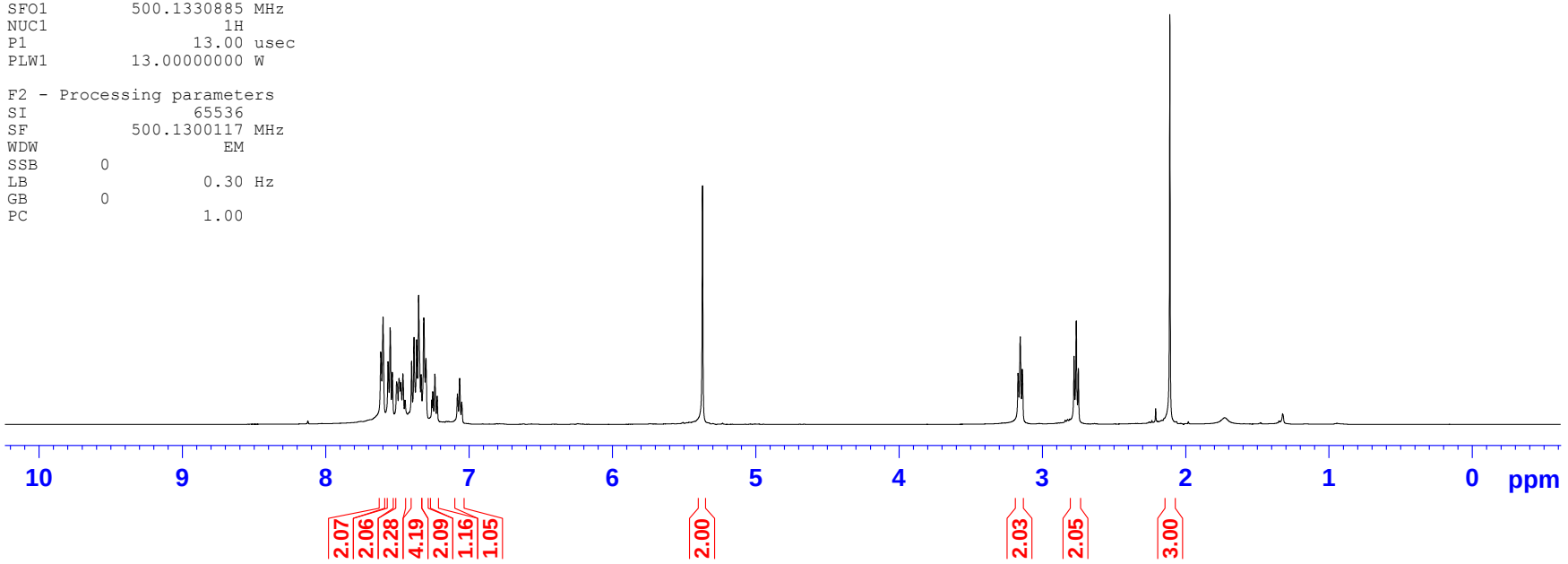


Figure S52. ^{1}H NMR Spectrum of **6o**

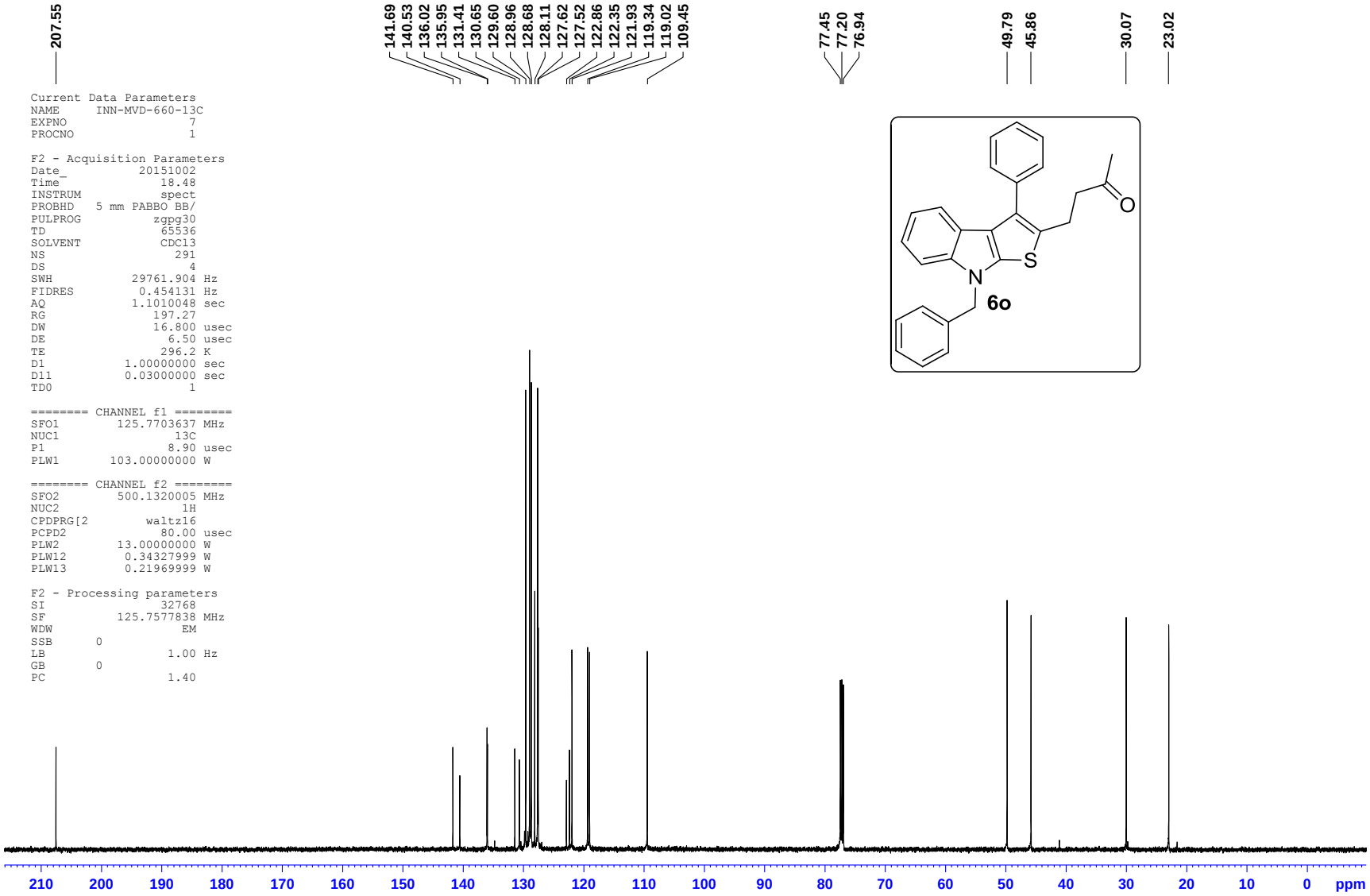


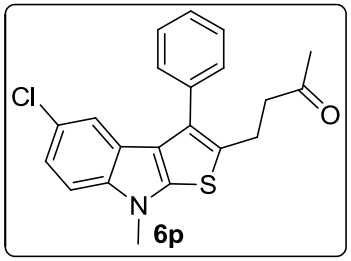
Figure S53. ^{13}C NMR Spectrum of **6o**

```
Current Data Parameters
NAME      INN-MVD-675-1H
EXPNO                  1
PROCNO                 1

F2 - Acquisition Parameters
Date_           20151106
Time              13.34
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   25
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG                48.36
DW               50.000 usec
DE                6.50 usec
TE               295.6 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1        500.1330885 MHz
NUC1                1H
P1                13.00 usec
PLW1        13.00000000 W

F2 - Processing parameters
SI                65536
SF          500.1300119 MHz
WDW                  EM
SSB       0
LB                0.30 Hz
GB        0
PC                1.00
```



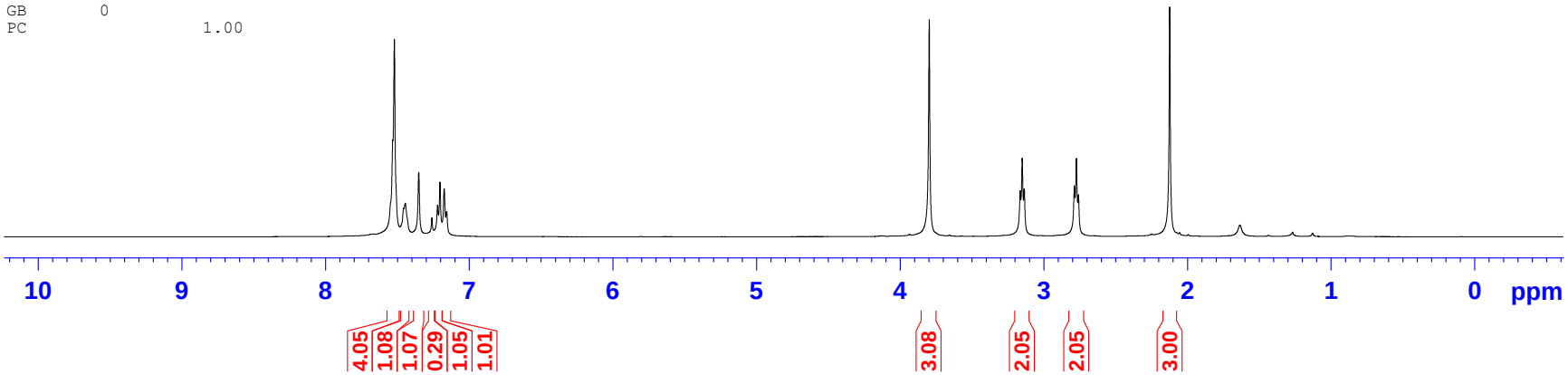


Figure S54. ^{1}H NMR Spectrum of **6p**

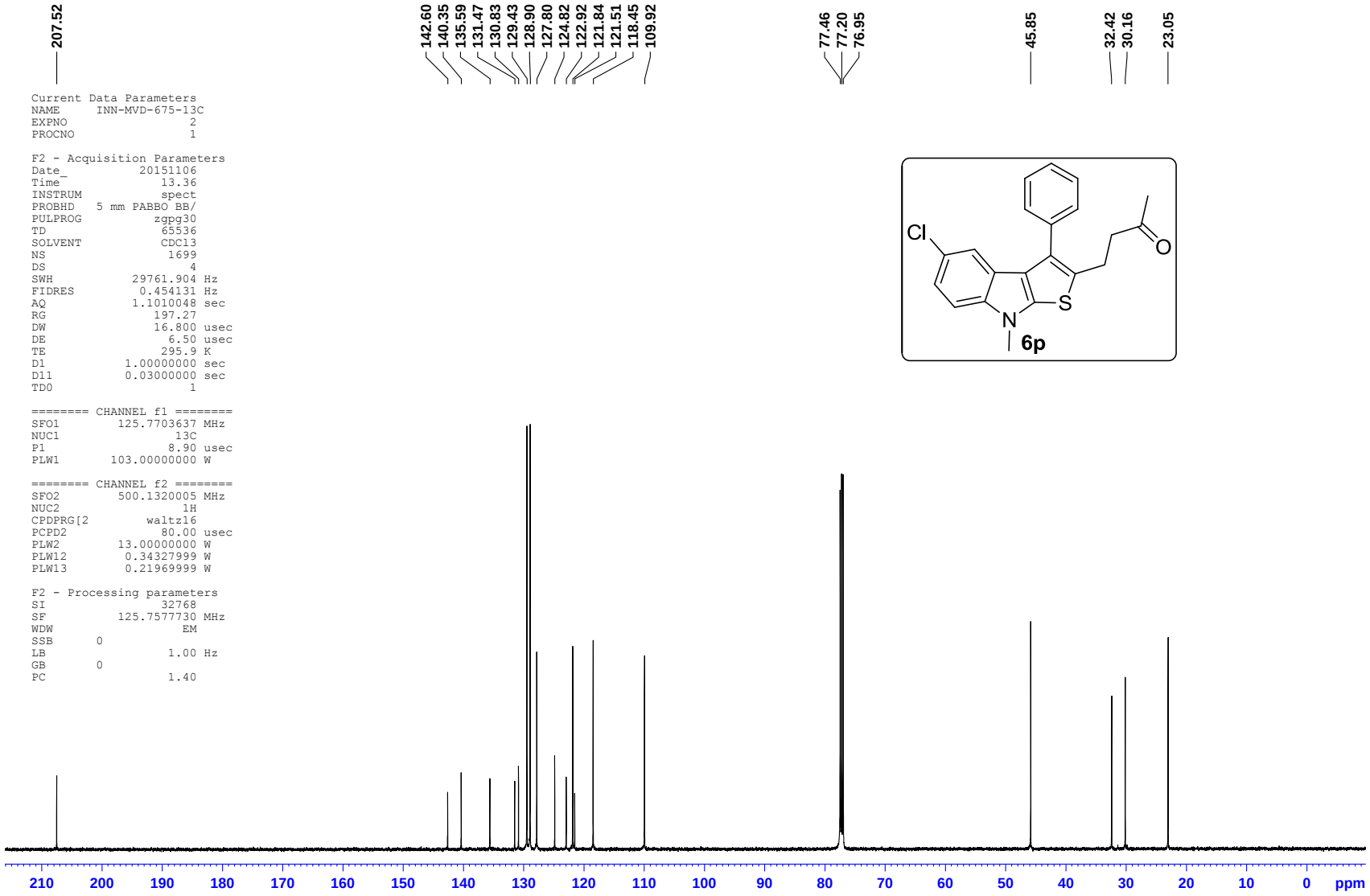


Figure S55. ^{13}C NMR Spectrum of **6p**

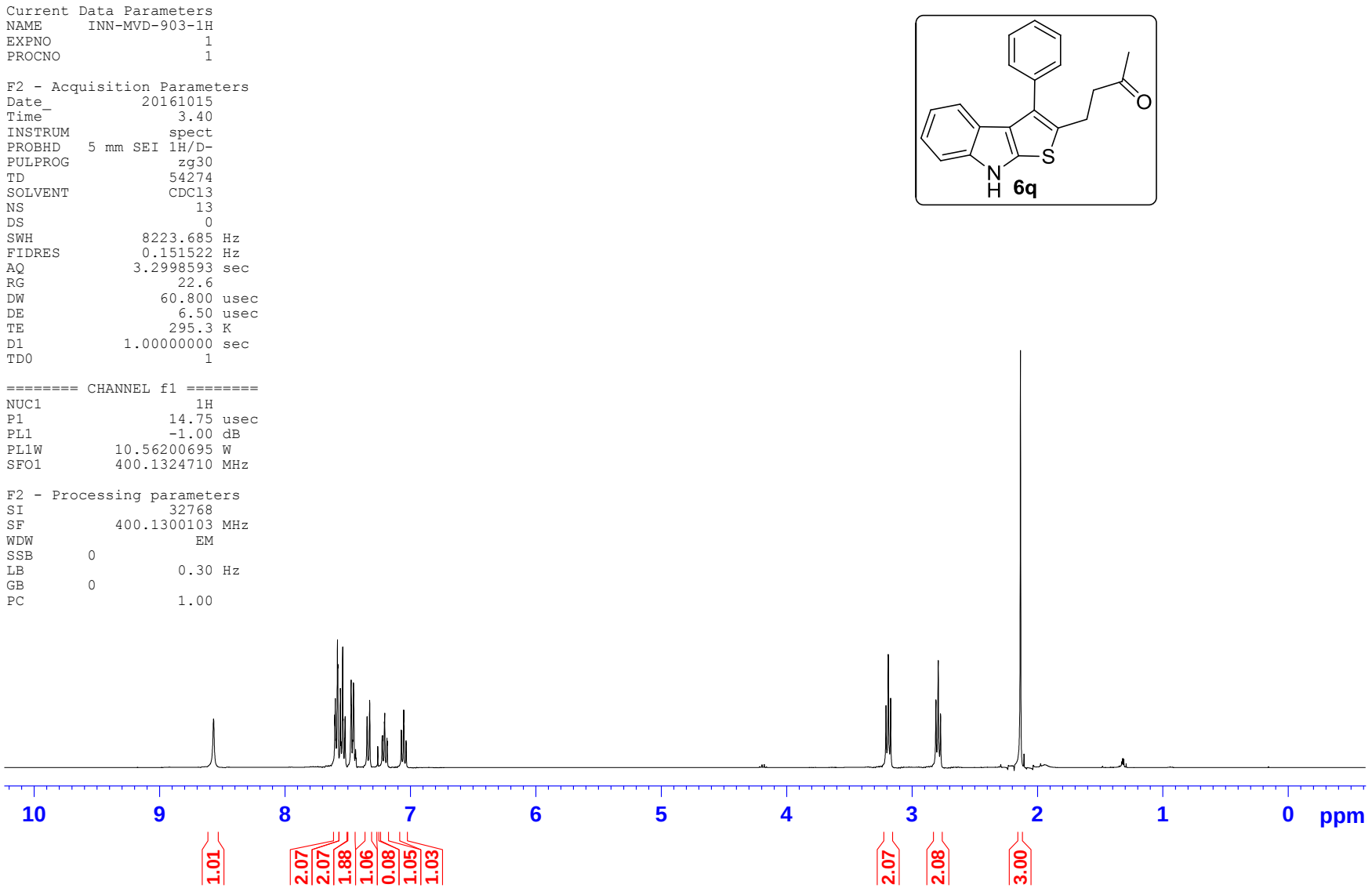


Figure S56. ^{1}H NMR Spectrum of **6q**

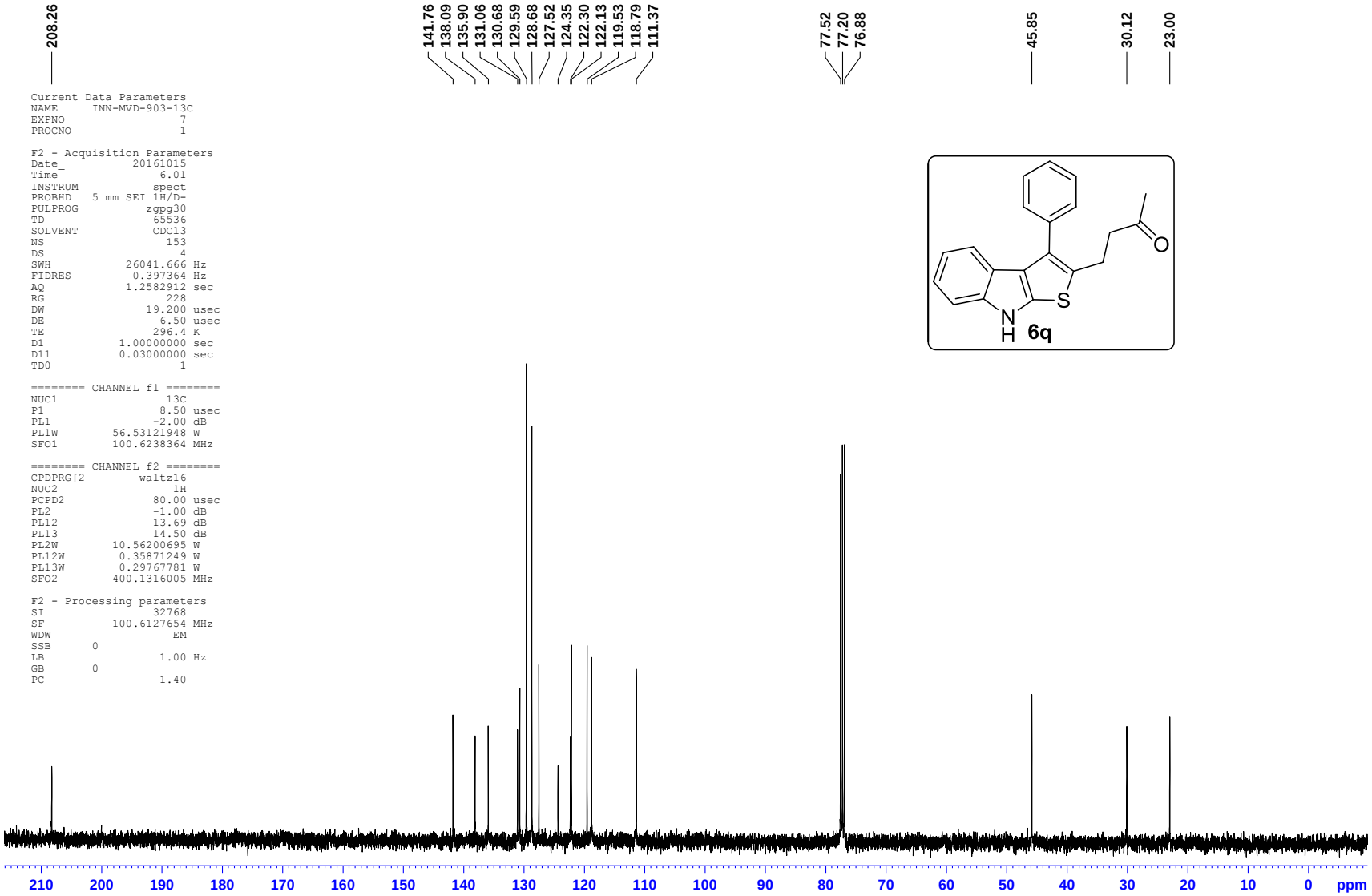


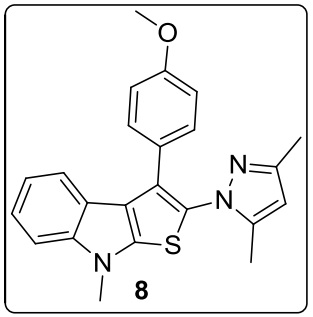
Figure S57. ^{13}C NMR Spectrum of **6q**

```
Current Data Parameters
NAME      INN-MVD-889-1H
EXPNO                  6
PROCNO                 1

F2 - Acquisition Parameters
Date_           20161003
Time              16.11
INSTRUM           spect
PROBHD   5 mm PABBO BB/
PULPROG            zg30
TD                65536
SOLVENT           CDCl3
NS                   11
DS                    2
SWH           10000.000 Hz
FIDRES         0.152588 Hz
AQ            3.2767999 sec
RG               106.54
DW               50.000 usec
DE                6.50 usec
TE               297.5 K
D1           1.00000000 sec
TD0                   1

======== CHANNEL f1 ========
SFO1        500.1330885 MHz
NUC1                1H
P1                13.00 usec
PLW1        13.00000000 W

F2 - Processing parameters
SI                65536
SF          500.1300151 MHz
WDW                  EM
SSB      0
LB                0.30 Hz
GB       0
PC                1.00
```



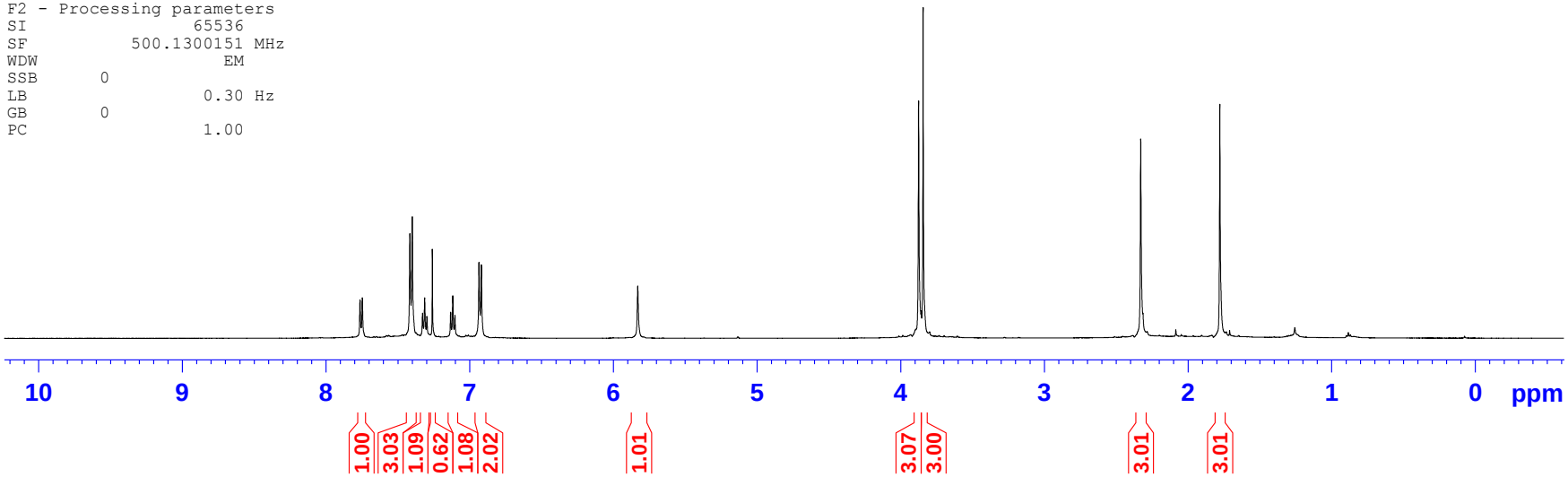


Figure S58. ^{1}H NMR Spectrum of **8**

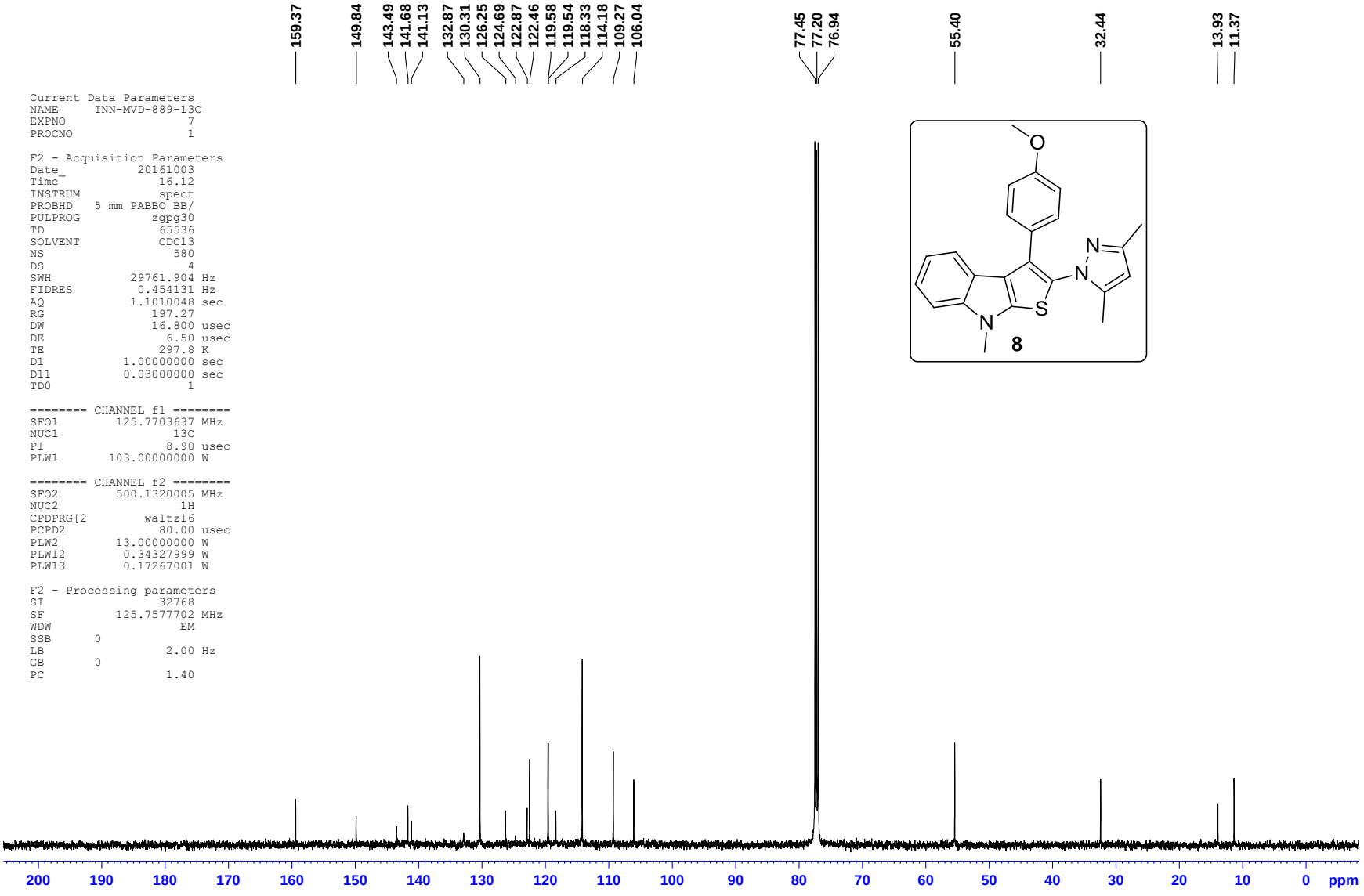


Figure S59. ^{13}C NMR Spectrum of **8**