Supporting Information

Benzothiazines in Synthesis. Formal Total Synthesis of Pseudopteroxazole

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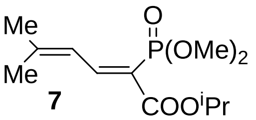
General Information:

All air and moisture sensitive reactions were carried out in flame-dried glassware under an argon or nitrogen atmosphere. Reactive liquid reagents (LHMDS, etc.) were measured and transferred by gastight syringes through rubber septa. Tetrahydrofuran (THF) was freshly distilled over sodium benzophenone kytyl. Toluene was distilled from CaH_2. The reaction mixture was concentrated by using a rotary evaporator attached to a water aspirator. Residue solvents were usually removed under reduced pressure using vacuum pump (approximately 1mm Hg).

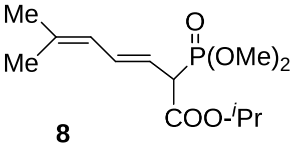
Flash chromatographic separations were carried out on silica gel (230-400 mesh) with ACS reagent grade solvents. Analytical thin layer chromatography was performed on glass–backed silica gel plates with F254 indicator. Compounds were visualized under UV light or by developing in iodine, vanillin, phosphomolybdic acid solution or with potassium permanganate solution followed by heating in a hot plate to approximately 350 ^{o}C. Melting points were determined with a melting point apparatus.

^{1}H NMR spectra were recorded in Fourier transform mode at 250, 300 or 500 MHz, respectively, as $CDCl_3$ solutions with tetramethylsilane (δ = 0 ppm) as the internal standard. ^{13}C NMR spectra were recorded on the same instruments at 62.5, 75 or 125 MHz, respectively, with $CDCl_3$ (δ = 77 ppm) as the internal reference. ^{31}P NMR spectra were recorded on the same instruments at 101 MHz, respectively, with 85% H_3PO_4 (δ = 0 ppm) as the external standard. Chemical shifts (δ) were reported in parts per million (ppm). Multiplicities were reported as s (singlet), b (broad), d (doublet), t (triplet), q (quartet), m (multiplet), and dd (doublet of doublet), etc. In ^{1}H NMR spectra of diastereomeric mixtures, the signals for individual isomers were reported when possible. Infrared spectra were recorded on an FT-IR spectrometer. Optical rotations were recorded on a polarimeter with sodium D line at the temperatures as indicated in the experimental for specific compounds. High resolution mass spectra were obtained on a magnetic sector instrument with a resolution greater than 10,000.



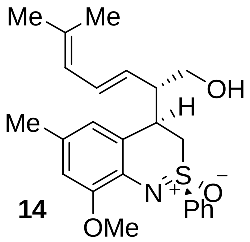
7

(E/Z)-isopropyl 2-(dimethoxyphosphoryl)-5-methylhexa-2,4-dienoate (7): A mixture of 3-methylbut-2-enal (5 mL, 0.065 mol) and trimethyl phosphonoacetate (5.26 mL, 0.033 mol) in THF (300 mL) with molecular sieves (4 Å) was placed in a 1 L round-bottom flask under an argon atmosphere. To this solution, $Ti(O^iPr)_4$ (29 mL, 0.098 mol) was added. Then TEA (17 mL, 0.13 mol) was added over 30 min, and the mixture was stirred at 0 °C for 7 h. The reaction mixture was poured into 1 N HCl and vigorously stirred at rt for 1 h. It was extracted by ethyl acetate (3x300 mL) and the extract was washed with 300 mL saturated sodium bicarbonate solution and 300 mL brine. The organic layer was dried with anhydrous sodium sulfate and the solvent was evaporated, affording the product as a mixture of *E*/*Z* (2:1) isomers (5.82 g, 92%). (*Z*)-isomer: IR (neat): 2978, 2953, 2848, 1699, 1618, 1564, 1250, 1025, 829 cm^{-1}; ^1H NMR ($CDCl_3$, 500 MHz) δ 8.20 (dd, 1 H, J = 12.5, 44.5 Hz), 7.22 (dd, 1 H, J = 1.0, 12.0 Hz), 5.12 (septet, 1 H, J = 6.5 Hz), 3.78 (s, 3 H), 3.75 (s, 3 H), 2.00 (s, 3H), 1.98 (s, 3H), 1.30 (d, 6 H, J = 6.0 Hz); ^{13}C NMR ($CDCl_3$, 125 MHz) δ 165.9 (d, J = 15.0 Hz), 155.2 (d, J = 2.5 Hz), 152.9 (d, J = 10.0 Hz), 122.4 (d, J = 5.0 Hz), 115.6 (d, J = 186.0 Hz), 68.7, 52.6 (d, J = 5.0 Hz), 27.6, 21.7 (d, J = 10.0 Hz), 19.0; HRMS calcd for $C_{12}H_{21}O_5PNa$ $[M+Na]^+$ 299.1019; Found: 299.1006; ^{31}P NMR ($CDCl_3$, 250 MHz) δ 23.4 (85% H_3PO_4 as external standard).



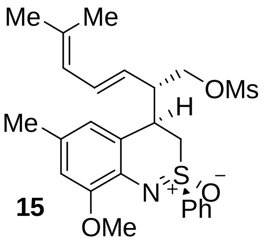
8

(*E*)-isopropyl 2-(dimethoxyphosphoryl)-6-methylhepta-3,5-dienoate (8): To a solution of **7** (4.86 g, 0.018 mol) in ether (20 mL) in a 50 mL round-bottom flask, a 0.5 M diazomethane solution in ether (0.088 mL, 0.045 mol) at 0 °C was added dropwise. The reaction was warmed to rt and stirred for 12 h. After the reaction was complete, the solvent was evaporated and the crude product was heated at 100 °C for 1 h. After flash chromatography with 50% ethyl acetate in hexanes, a colorless oil 4.54 g (84% for two steps) was obtained, the product having only an (*E*) configuration. IR (neat): 2983, 2851, 1728, 1450, 1262, 1102, 1025, 829, 796 cm^{-1}; ^{1}H NMR (CDCl$_3$, 500 MHz) δ 6.44 (ddd, 1H, J = 5.0, 11.0, 15.5 Hz), 5.85 (d, 1H, J = 11.0 Hz), 5.65 (ddd, 1H, J = 7.0, 9.5, 16.0 Hz), 5.07 (septet, 1H, J = 6.5 Hz), 3.81 (d, 3H, J = 11.0 Hz), 3.79 (d, 3H, J = 11.0 Hz), 3.75 (dd, 1H, J = 9.5, 24.0 Hz), 1.78 (s, 3H), 1.76 (s,3H), 1.28 (d, 3H, J = 4.5 Hz), 1.26 (d, 3H, J = 4.0 Hz); ^{13}C NMR (CDCl$_3$, 125 MHz) δ 167.0 (d, J = 5.0 Hz), 136.9 (d, J = 5.0 Hz), 131.9 (d, J = 12.5 Hz), 124.0 (d, J = 5.0 Hz), 118.5 (d, J = 12.5 Hz), 69.2, 53.7 (d, J = 7.5 Hz), 53.4 (d, J = 7.5 Hz), 50.6, 49.6 (d, J = 130.0 Hz), 25.8, 21.5 (d, J = 10.0 Hz), 18.2; HRMS calcd for $C_{13}H_{23}O_5PNa$ [M+Na]$^+$ 313.1175; Found: 313.1171.



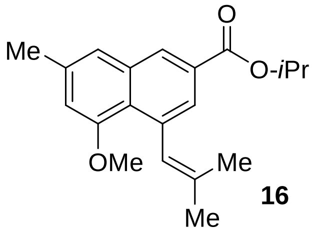
14

(2*S*,3*E*)-6-Methyl-2-[(2*R*,4*R*)-2-oxido-2-phenyl-3,4-dihydro-2l^4,1-benzothiazin-4-yl]hepta-3,5-dien-1-ol (14): To a solution of the ester **13** (383mg, 0.819 mmol) in 8 mL THF, was slowly added 8.19 mL of DIBAL (1M in THF) at 0 °C. After 2 h, it was carefully quenched with ethyl acetate and water. After filtration, followed by washing with 20 mL ethyl acetate, it was concentrated. After flash chromatography (50% ethyl acetate in hexanes), 0.285 g (88%) of **14** was obtained as a semisolid. IR (film): 3448, 2962, 2917, 1577, 1462, 1250, 1102, 1017 cm^{-1}; ^{1}H NMR (CDCl$_3$, 500 MHz) δ 8.10-8.12 (m, 2H), 7.63-7.66 (m, 1H), 7.54-7.57 (m, 2H), 6.69 (s, 1H), 6.69 (s, 1H), 6.40 (dd, 1H, J = 11.0, 15.5 Hz), 5.82 (d, 1H, J = 10.5 Hz), 5.51 (dd, 1H, J = 9.0, 15.5 Hz), 3.89 (s, 3H, CH$_3$), 3.69 (ddd, 1H, J = 4.0, 7.0, 11.0 Hz), 3.46-3.55 (m, 3H), 2.98-3.13 (m, 1H), 2.32 (s, 3H), 1.77 (s, 3H), 1.73 (s, 3H), 1.35 (dd, 1H, J = 4.5, 6.5 Hz); ^{13}C NMR (CDCl$_3$, 125 MHz) δ 152.8, 139.2, 136.1, 133.9, 132.2, 131.0, 130.2, 129.5, 128.4, 125.1, 124.7, 119.1, 111.6, 62.7, 56.2, 50.3, 45.0, 37.5, 26.2, 21.7, 18.6; HRMS calcd for $C_{24}H_{29}NO_3SNa$ $[M+Na]^+$ 434.1760; Found: 434.1751; $[\alpha]^{25}_{D}$ = -4.04 (c 3.02, $CHCl_3$).



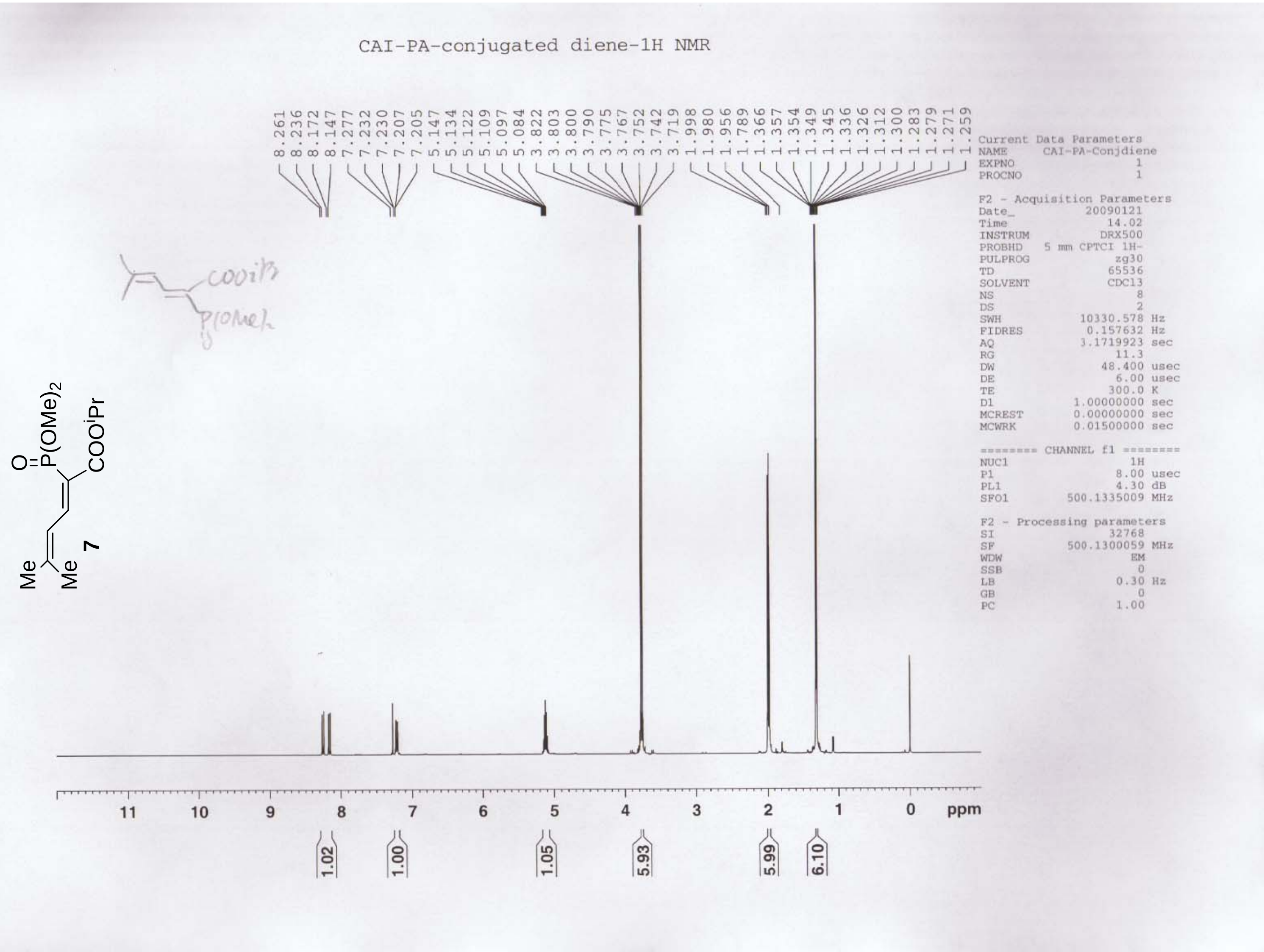
15

(2*R*,4*R*)-,4-[(1*S*,2*E*)-1-Methanesulfonyloxylmethyl-5-methyl-2,4-hexadienyl]-3,4-dihydro-8-methoxy-6-methyl-2-phenyl-2γ4-2,1-benzothiazine-2-oxide (**15**): To a solution of alcohol **14** (48 mg, 0.116 mmol) in 2 mL CH_2Cl_2 was added TEA (33 µl, 24 mg, 0.24 mmol) and mesyl chloride (14 µl, 21mg, 0.18 mmol) at 0 ^{o}C. The reaction was allowed to reach rt and was stirred for 17 h. It was quenched with 1 mL saturated NH_4Cl, extracted with 2 mL CH_2Cl_2, washed with 2 mL brine, dried with Na_2SO_4, and concentrated in vacuo. After chromatography (50% ethyl acetate in hexanes), 45 mg (79%) of **15** was obtained as a white semisolid. IR (film): 3060, 2929, 2226, 1569, 1462, 11348, 1242, 1172, 1103, 964, 833, 731, 682 cm^{-1}; ^{1}H NMR ($CDCl_3$, 500 MHz) δ 8.11 (d, 2H, J = 7.5 Hz), 7.66 (dd, 1H, J = 7.0, 8.0 Hz), 7.56 (dd, 2H, J = 8.0, 7.5 Hz), 6.70 (s, 1H), 6.67 (s, 1H), 6.37 (dd, 1H, J = 11.0, 15.5 Hz), 5.80 (d, 1H, J = 11.0 Hz), 5.47 (dd, 1H, J = 7.5, 15.0 Hz), 4.24 (dd, 1H, J = 4.5, 10.0 Hz), 4.05 (dd, 1H, J = 7.5, 10.0 Hz), 3.88 (s, 3H), 3.61 (dt, 1H, J = 11, 5 Hz), 3.51 (dd, 1H, J = 4.5, 13.0 Hz), 3.43 (m, 1H), 3.06 (dd, 1H, J = 11.5, 12.5 Hz), 2.90 (s, 3H), 2.33 (s, 3H), 1.77 (s, 3H), 1.72 (s, 3H); ^{13}C NMR ($CDCl_3$, 125 MHz) δ 152.7, 138.5, 136.6, 133.8, 131.9, 130.9, 130.2, 129.3, 129.2, 126.0, 124.2, 123.5, 118.8, 111.6, 69.0, 56.0, 49.6, 41.9, 37.3, 37.2, 25.9, 21.4, 18.3; HRMS calcd for $C_{25}H_{31}NO_5S_2Na$ $[M+Na]^+$ 512.1536; Found: 512.1526; $[\alpha]^{25}_{D}$ = -13.82 (c 0.55, $CHCl_3$).



16

The Heck coupling product **16** is a byproduct that was formed in trace amount under the Buchwald coupling condition indicated in the main text. It was isolated as a colorless oil: IR (neat): 2978, 2917, 1708, 1573, 1454, 1372, 1274, 1221, 1136, 1103 cm^{-1}; ^{1}H NMR (CDCl$_3$, 500 MHz) δ 8.28 (d, 1H, J = 1.5 Hz), 7.67 (s, 1H), 7.30 (s, 1H), 6.94 (s, 1H), 6.73 (d, 1H, J = 1.0 Hz),5.29 (septet, 1H, 6.0 Hz), 3.87 (s, 3H),1.96 (d, 3H, J = 1.0 Hz), 1.71 (d, 3H, J = 1.5 Hz), 1.40 (d, 6H, J = 6.5 Hz); ^{13}C NMR (CDCl$_3$, 125 MHz) δ 166.4, 157.3, 136.1, 135.7, 135.3, 130.9, 128.5, 128.0, 127.7, 126.8, 124.9, 121.6, 110.4, 68.3, 55.9, 26.0, 22.0, 21.7, 19.1; HRMS calcd for $C_{20}H_{24}O_3Na$ [M+Na]$^+$ 335.1618; Found: 335.1618.



7

CAI-PA-conjugated diene-1H NMR

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PROCNO                   1

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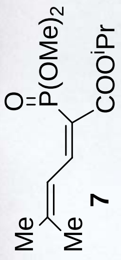
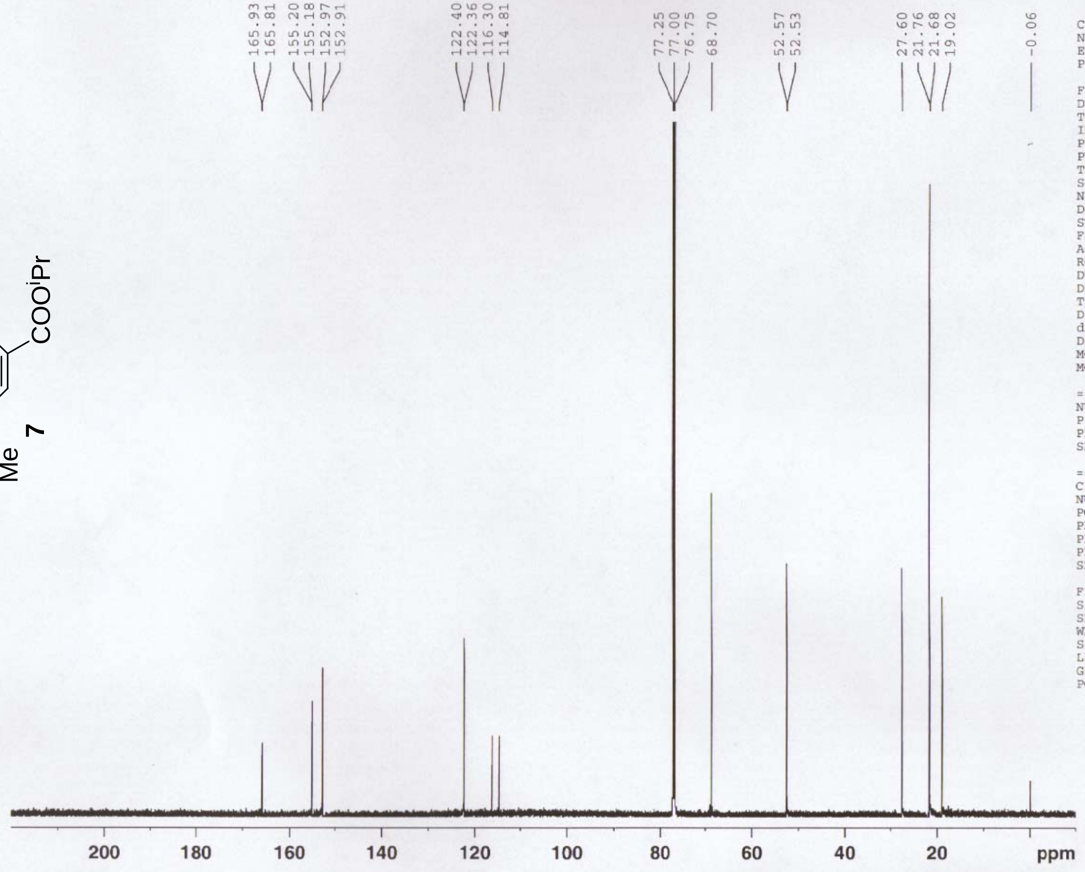


7

13C NMR



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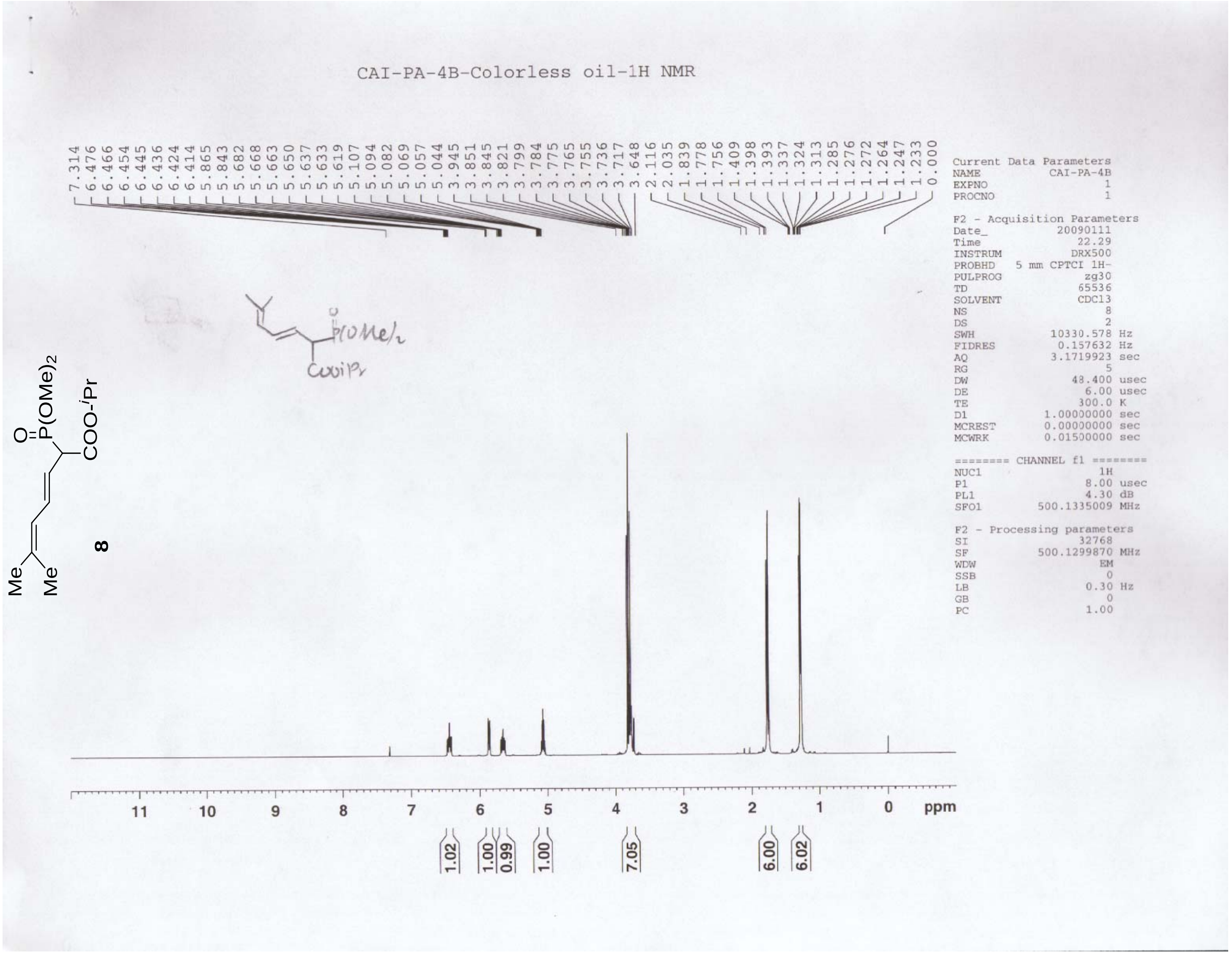
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CAI-PA-4B-Colorless oil-1H NMR
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TE 300.0 K
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7
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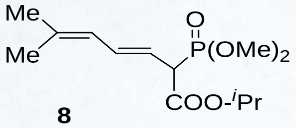
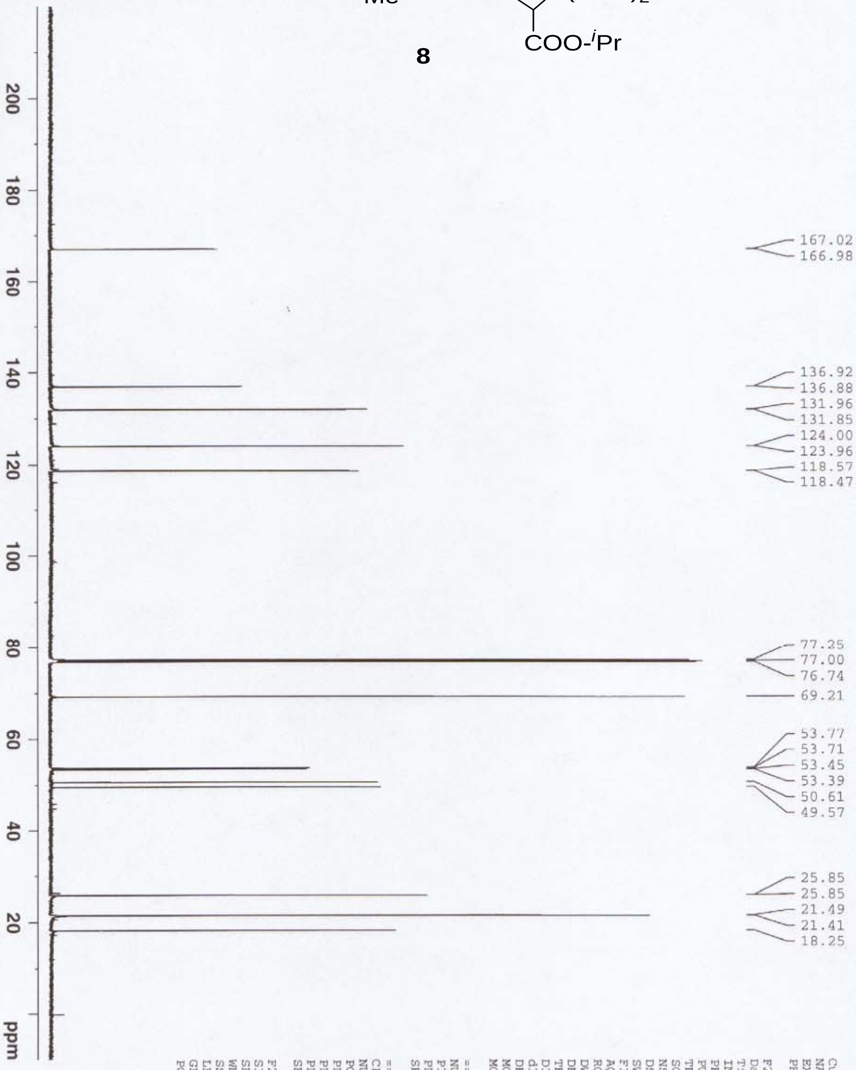
8



8

13C NMR



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TE                300.0 K
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SFO1        125.7716224 MHz

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PL13              27.90 dB
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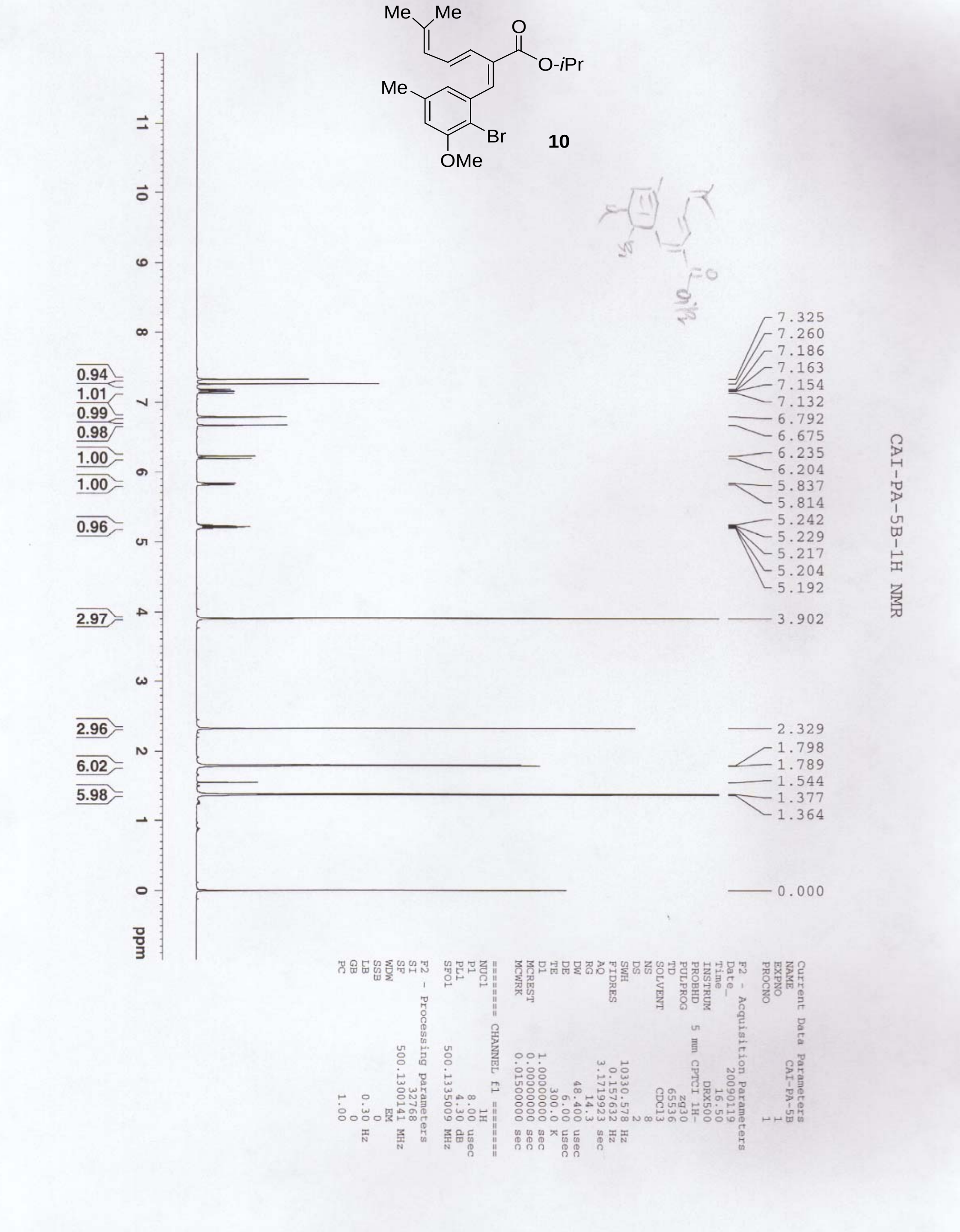

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PROCNO                    1

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DS                        2
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FIDRES            0.157632 Hz
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RG                     14.3
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DE                     6.00 usec
TE                    300.0 K
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MCREST           0.00000000 sec
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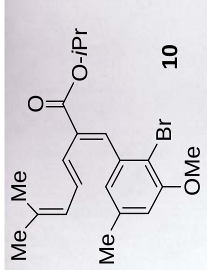
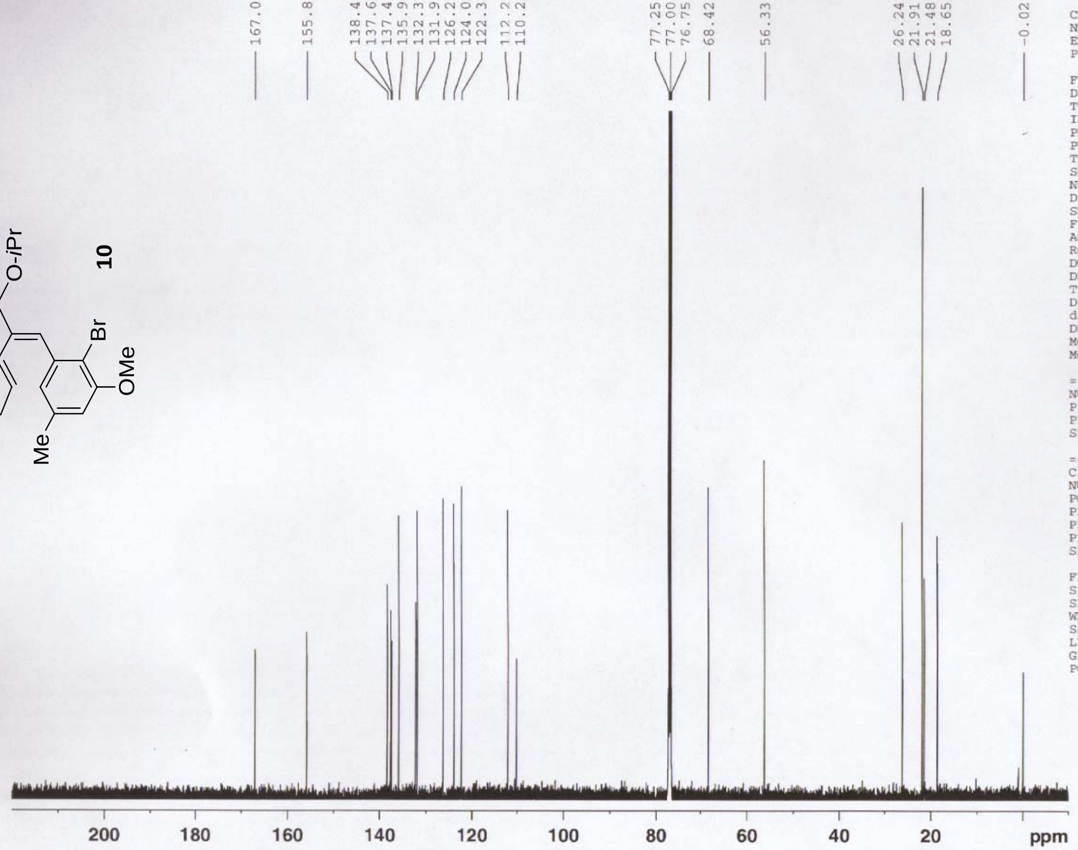


10

13C NMR



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FIDRES        0.492989 Hz
AQ           1.0142708 sec
RG                 4096
DW               14.200 usec
DE                35.00 usec
TE                300.0 K
D1          2.00000000 sec
d11         0.03000000 sec
DELTA       1.89999998 sec
MCREST      0.00000000 sec
MCWRK       0.01500000 sec

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======== CHANNEL f2 ========
CPDPRG2         waltz16
NUC2                 1H
PCPD2             80.00 usec
PL2                5.00 dB
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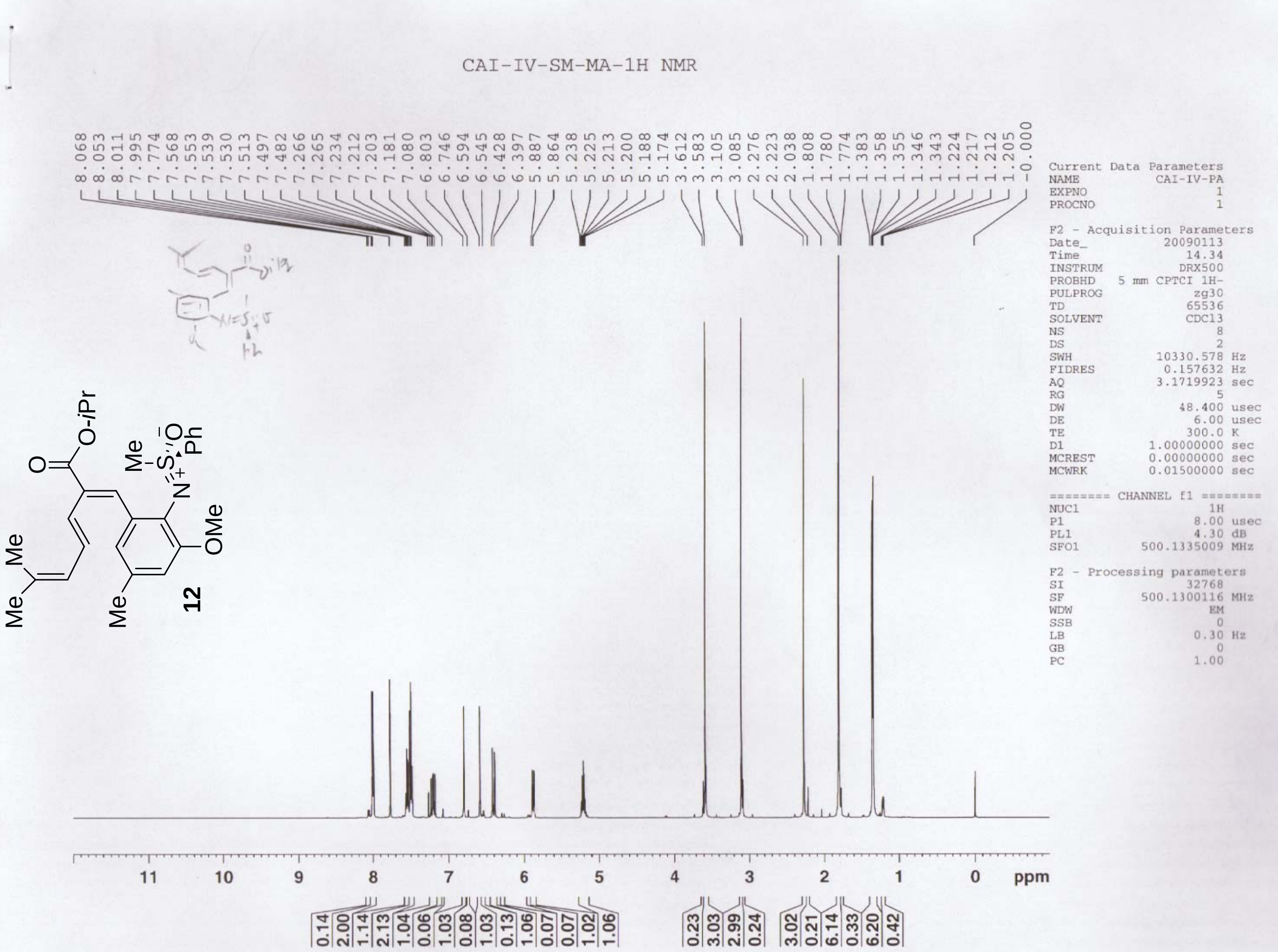

12

CAI-IV-SM-MA-1H NMR

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PROCNO                   1

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DS                       2
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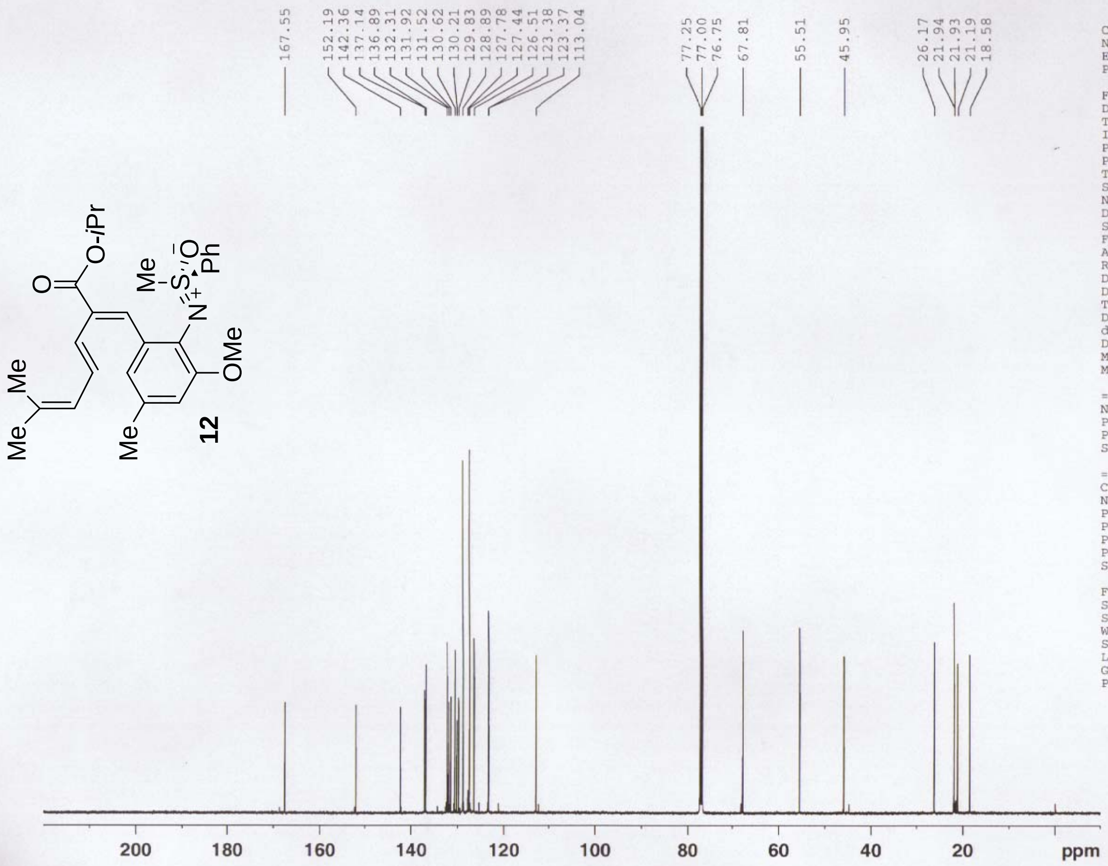
FIDRES           0.157632 Hz
AQ              3.1719923 sec
RG                       5
DW                  48.400 usec
DE                    6.00 usec
TE                   300.0 K
D1             1.00000000 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                    1H
P1                    8.00 usec
PL1                   4.30 dB
SFO1           500.1335009 MHz

F2 - Processing parameters
SI                   32768
SF             500.1300116 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.00
```

13C NMR



12

```
Current Data Parameters
NAME             CAI-IV-PA
EXPNO                    2
PROCNO                   1

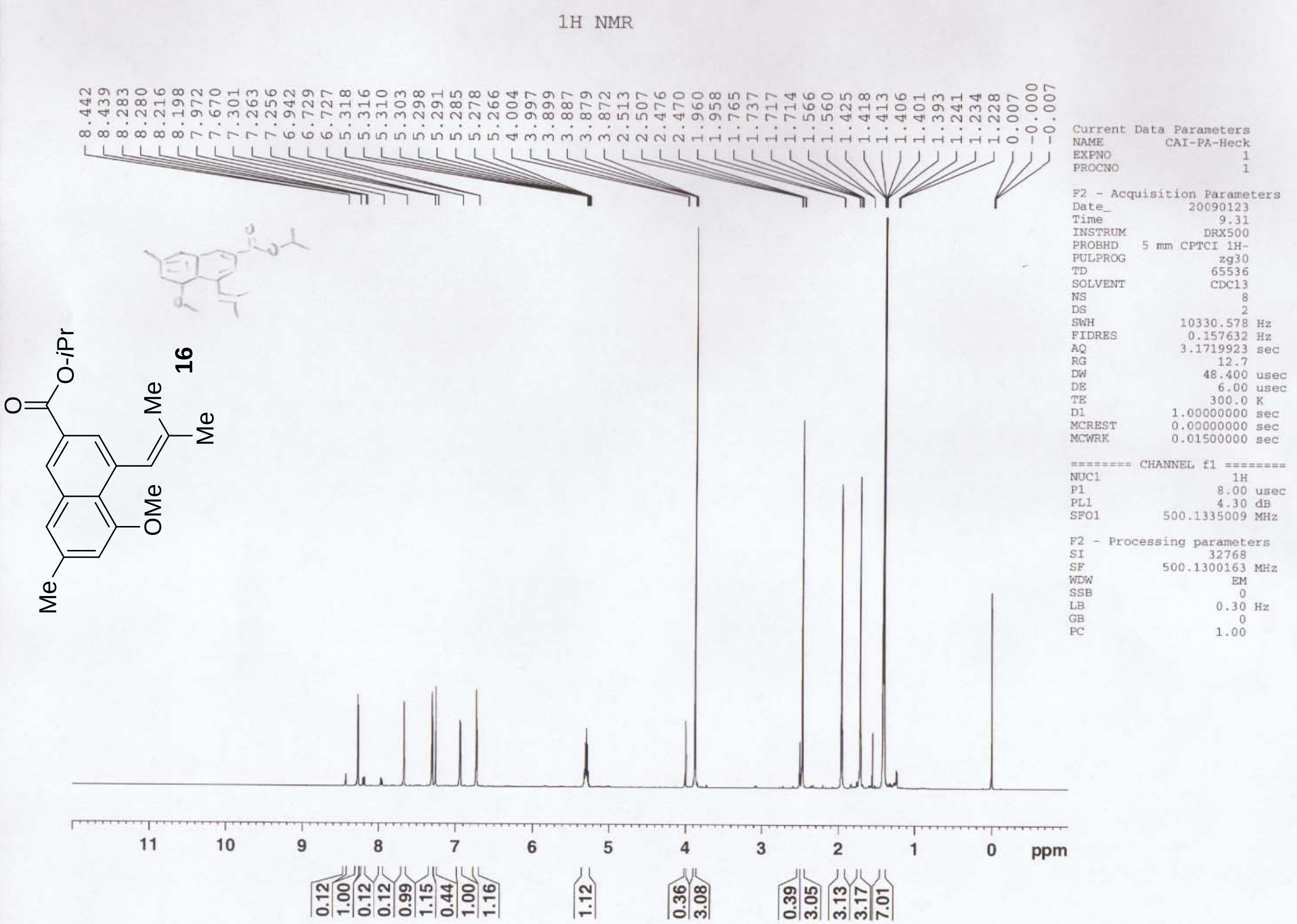
F2 - Acquisition Parameters
Date_             20090113
Time                 14.41
INSTRUM             DRX500
PROBHD   5 mm CPTCI 1H-
PULPROG            zgpg30
TD                   71424
SOLVENT              CDCl3
NS                     129
DS                       4
SWH              35211.270 Hz
FIDRES            0.492989 Hz
AQ               1.0142708 sec
RG                    4096
DW                  14.200 usec
DE                   35.00 usec
TE                   300.0 K
D1              2.00000000 sec
d11             0.03000000 sec
DELTA           1.89999998 sec
MCREST          0.00000000 sec
MCWRK           0.01500000 sec

======== CHANNEL f1 ========
NUC1                   13C
P1                   12.00 usec
PL1                   0.30 dB
SFO1           125.7716224 MHz

======== CHANNEL f2 ========
CPDPRG2            waltz16
NUC2                    1H
PCPD2                80.00 usec
PL2                   5.00 dB
PL12                 22.00 dB
PL13                 27.90 dB
SFO2           500.1320005 MHz

F2 - Processing parameters
SI                   65536
SF             125.7578009 MHz
WDW                     EM
SSB                      0
LB                    1.00 Hz
GB                       0
PC                    1.00
```

1H NMR



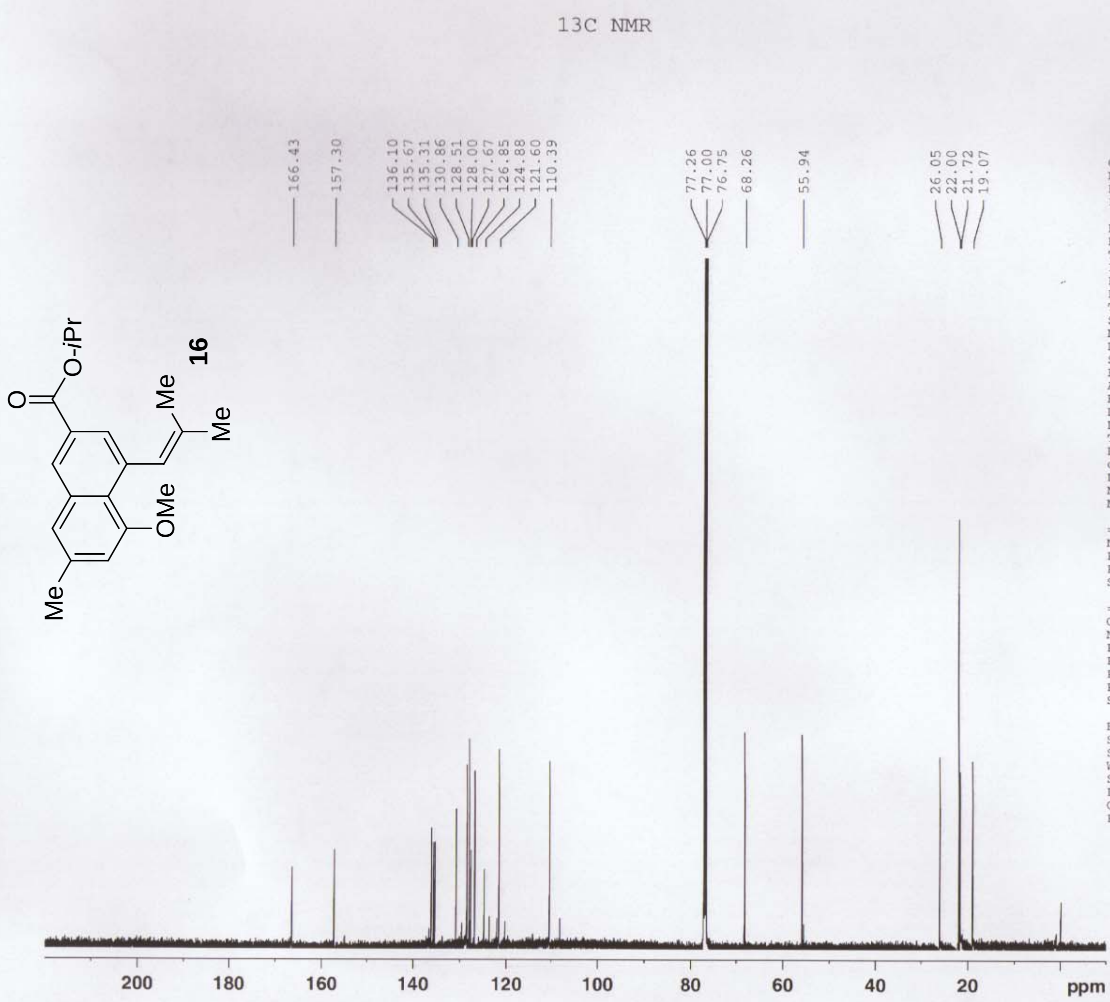
16

```
Current Data Parameters
NAME          CAI-PA-Heck
EXPNO                   1
PROCNO                  1

F2 - Acquisition Parameters
Date_            20090123
Time                 9.31
INSTRUM            DRX500
PROBHD   5 mm CPTCI 1H-
PULPROG              zg30
TD                  65536
SOLVENT              CDCl3
NS                      8
DS                      2
SWH            10330.578 Hz
FIDRES          0.157632 Hz
AQ             3.1719923 sec
RG                   12.7
DW                 48.400 usec
DE                   6.00 usec
TE                  300.0 K
D1            1.00000000 sec
MCREST        0.00000000 sec
MCWRK         0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                   8.00 usec
PL1                  4.30 dB
SFO1          500.1335009 MHz

F2 - Processing parameters
SI                  32768
SF            500.1300163 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



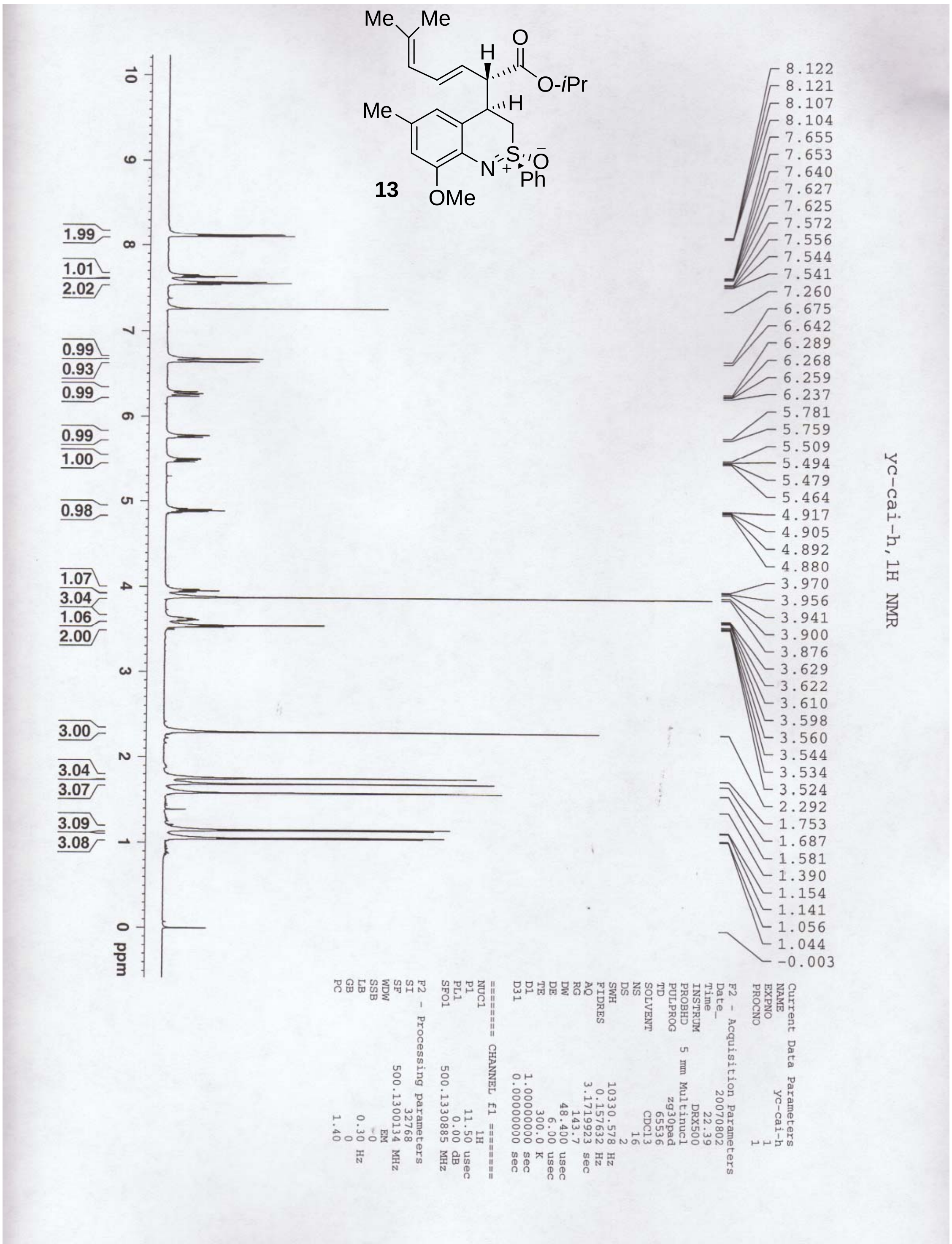
```
Current Data Parameters
NAME          CAI-PA-Heck
EXPNO                   2
PROCNO                  1

F2 - Acquisition Parameters
Date_            20090123
Time                 9.35
INSTRUM            DRX500
PROBHD   5 mm CPTCI 1H-
PULPROG           zgpg30
TD                  71424
SOLVENT             CDC13
NS                    111
DS                      4
SWH             35211.270 Hz
FIDRES           0.492989 Hz
AQ              1.0142708 sec
RG                   4096
DW                 14.200 usec
DE                  35.00 usec
TE                  300.0 K
D1             2.00000000 sec
d11            0.03000000 sec
DELTA          1.89999998 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  13C
P1                  12.00 usec
PL1                  0.30 dB
SFO1          125.7716224 MHz

======== CHANNEL f2 ========
CPDPRG2           waltz16
NUC2                   1H
PCPD2               80.00 usec
PL2                  5.00 dB
PL12                22.00 dB
PL13                27.90 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                  65536
SF            125.7577928 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.00
```



13

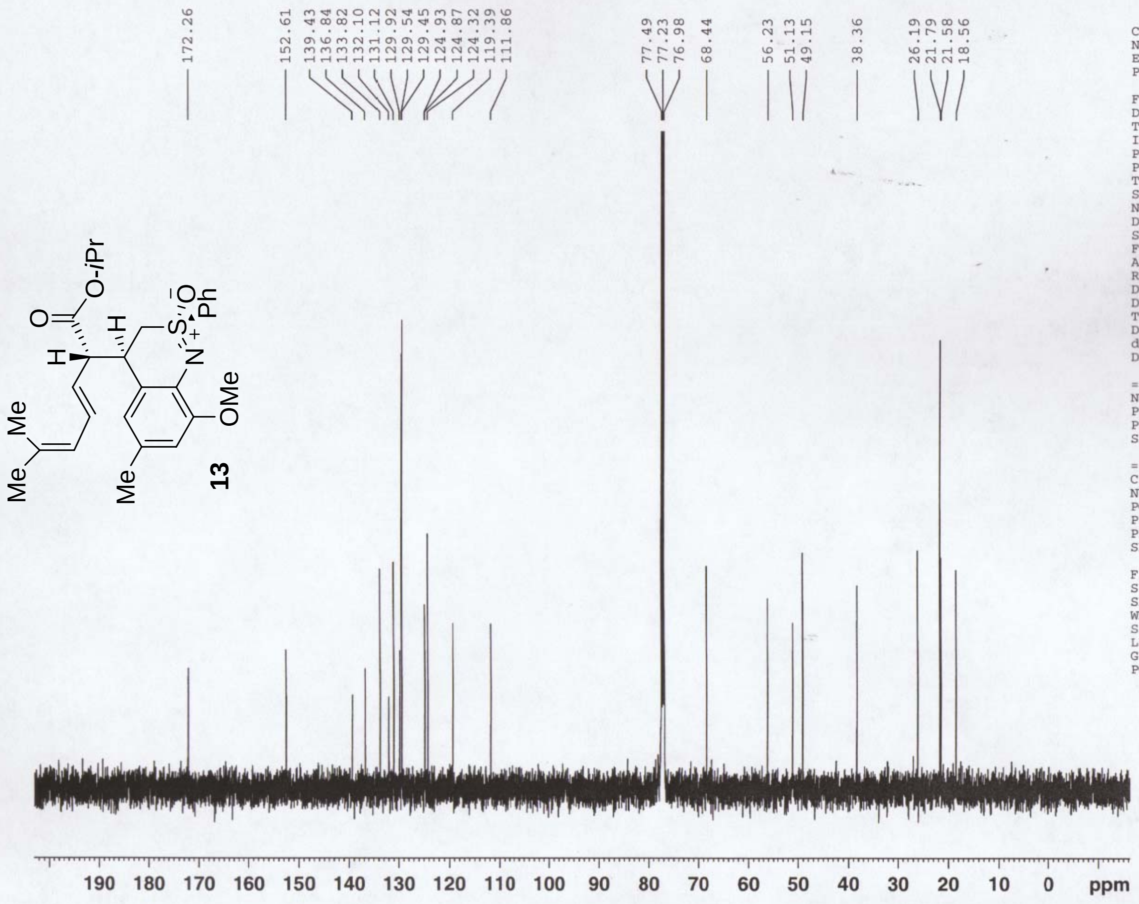
```
Current Data Parameters
NAME             yc-cai-h
EXPNO                   1
PROCNO                  1

F2 - Acquisition Parameters
Date_            20070802
Time                22.39
INSTRUM            DRX500
PROBHD   5 mm Multinucl
PULPROG           zg30pad
TD                  65536
SOLVENT             CDCl3
NS                     16
DS                      2
SWH             10330.578 Hz
FIDRES           0.157632 Hz
AQ              3.1719923 sec
RG                  143.7
DW                 48.400 usec
DE                   6.00 usec
TE                  300.0 K
D1             1.00000000 sec
D31            0.00000000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                  11.50 usec
PL1                  0.00 dB
SFO1          500.1330885 MHz

F2 - Processing parameters
SI                  32768
SF            500.1300134 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.40
```

13C NMR



```
Current Data Parameters
NAME             yc-cai-c
EXPNO                   1
PROCNO                  1

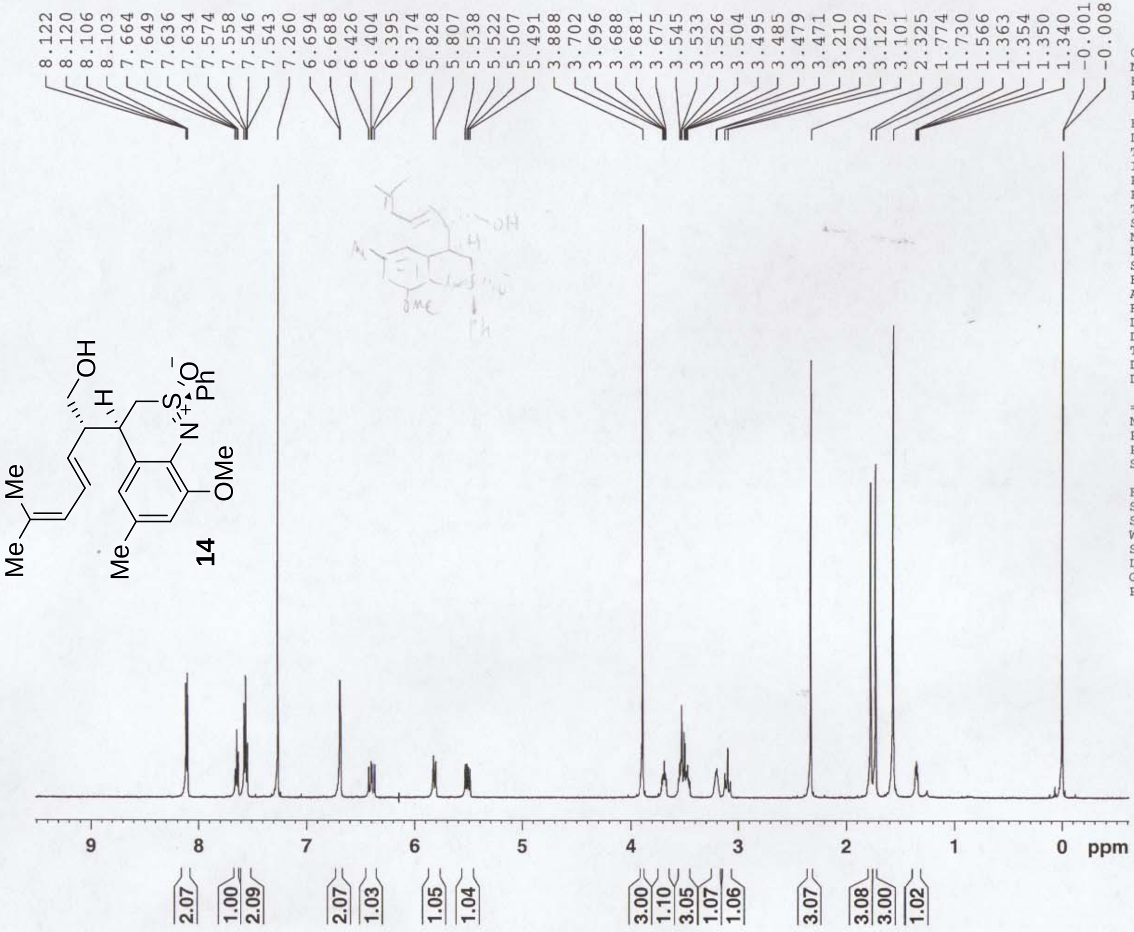
F2 - Acquisition Parameters
Date_            20070802
Time                22.48
INSTRUM            DRX500
PROBHD   5 mm Multinucl
PULPROG           zgdc30
TD                  65536
SOLVENT             CDCl3
NS                   1315
DS                      4
SWH             34013.605 Hz
FIDRES           0.519006 Hz
AQ              0.9634292 sec
RG                  32768
DW                 14.700 usec
DE                   6.00 usec
TE                  300.0 K
D1             2.00000000 sec
d11            0.03000000 sec
D31            0.00000000 sec

======== CHANNEL f1 ========
NUC1                  13C
P1                   8.10 usec
PL1                  3.00 dB
SFO1          125.7723786 MHz

======== CHANNEL f2 ========
CPDPRG2           waltz16
NUC2                   1H
PCPD2               88.00 usec
PL2                  0.00 dB
PL12                21.00 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                  32768
SF            125.7577638 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.40
```

yc-cai-hh,1H NMR



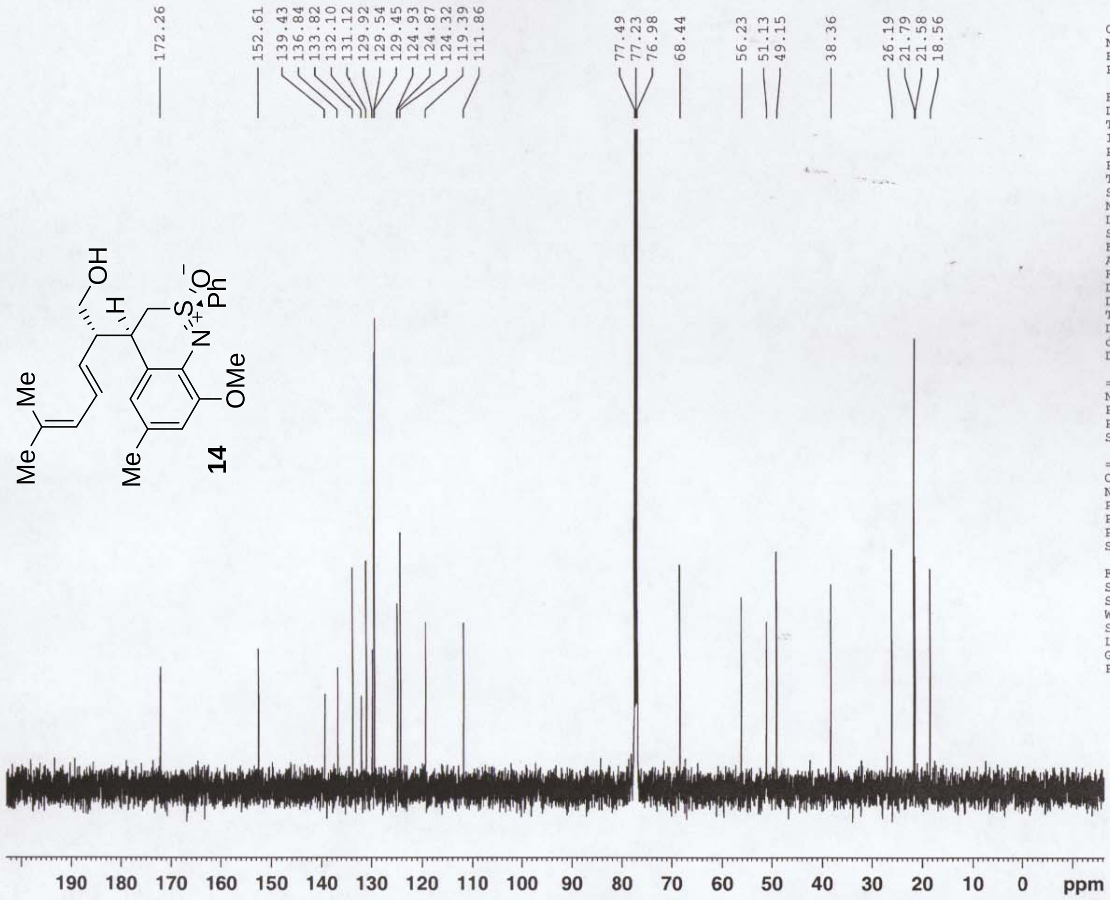
```
Current Data Parameters
NAME             yc-cai-hh
EXPNO                    1
PROCNO                   1

F2 - Acquisition Parameters
Date_             20070818
Time                 10.41
INSTRUM             DRX500
PROBHD   5 mm Multinucl
PULPROG            zg30pad
TD                   65536
SOLVENT              CDCl3
NS                      16
DS                       2
SWH            10330.578 Hz
FIDRES          0.157632 Hz
AQ             3.1719923 sec
RG                   161.3
DW                  48.400 usec
DE                    6.00 usec
TE                   300.0 K
D1            1.00000000 sec
D31           0.00000000 sec

======== CHANNEL f1 ========
NUC1                    1H
P1                   11.50 usec
PL1                   0.00 dB
SFO1           500.1330885 MHz

F2 - Processing parameters
SI                   32768
SF             500.1300134 MHz
WDW                     EM
SSB                      0
LB                    0.30 Hz
GB                       0
PC                    1.40
```

13C NMR



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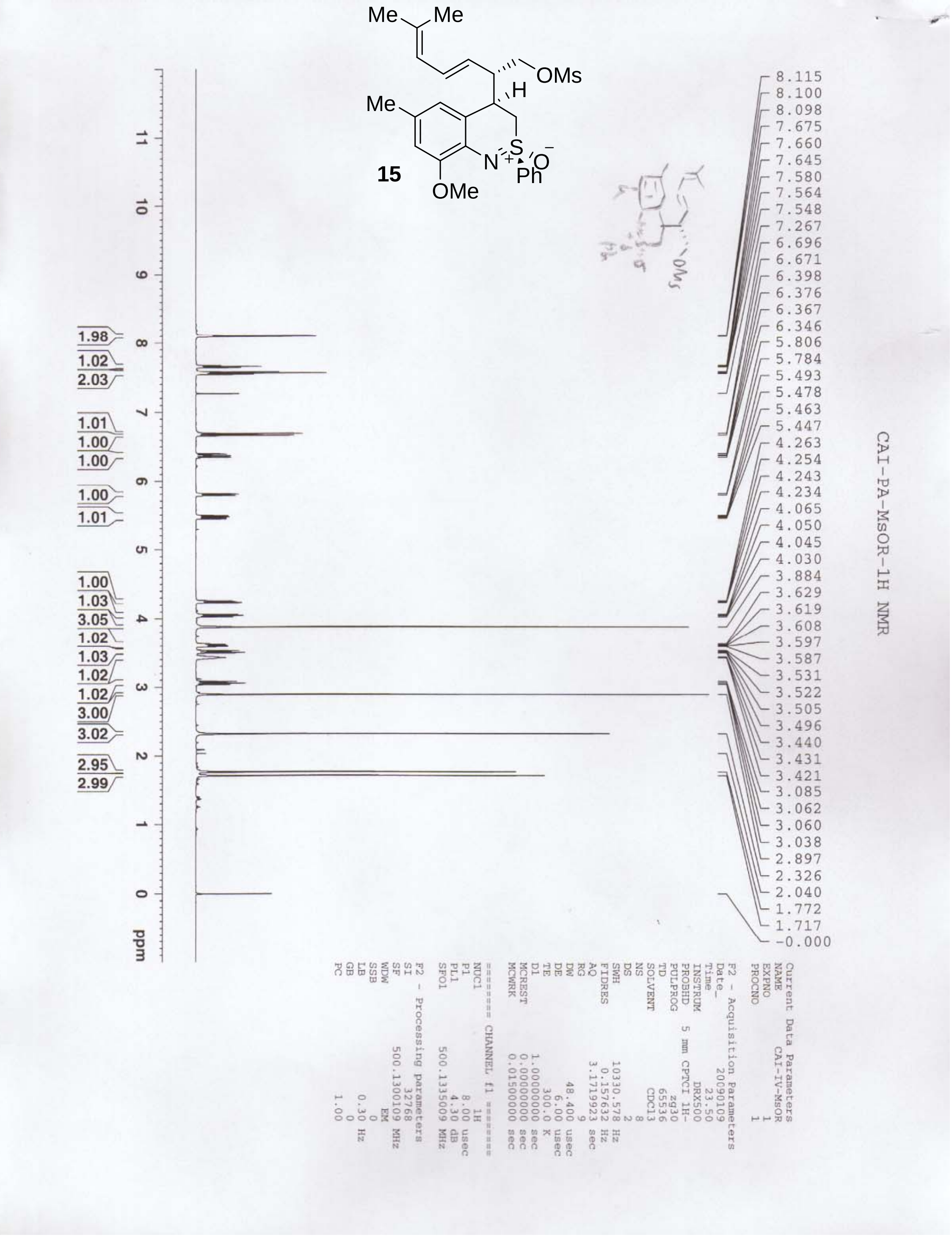
```
Current Data Parameters
NAME               yc-cai-c
EXPNO                     1
PROCNO                    1

F2 - Acquisition Parameters
Date_              20070802
Time                  22.48
INSTRUM              DRX500
PROBHD   5 mm Multinucl
PULPROG             zgdc30
TD                    65536
SOLVENT               CDCl3
NS                     1315
DS                        4
SWH               34013.605 Hz
FIDRES             0.519006 Hz
AQ                0.9634292 sec
RG                    32768
DW                   14.700 usec
DE                     6.00 usec
TE                    300.0 K
D1               2.00000000 sec
d11              0.03000000 sec
D31              0.00000000 sec

======== CHANNEL f1 ========
NUC1                    13C
P1                     8.10 usec
PL1                    3.00 dB
SFO1            125.7723786 MHz

======== CHANNEL f2 ========
CPDPRG2             waltz16
NUC2                     1H
PCPD2                 88.00 usec
PL2                    0.00 dB
PL12                  21.00 dB
SFO2            500.1320005 MHz

F2 - Processing parameters
SI                    32768
SF              125.7577638 MHz
WDW                      EM
SSB                       0
LB                     1.00 Hz
GB                        0
PC                     1.40
```

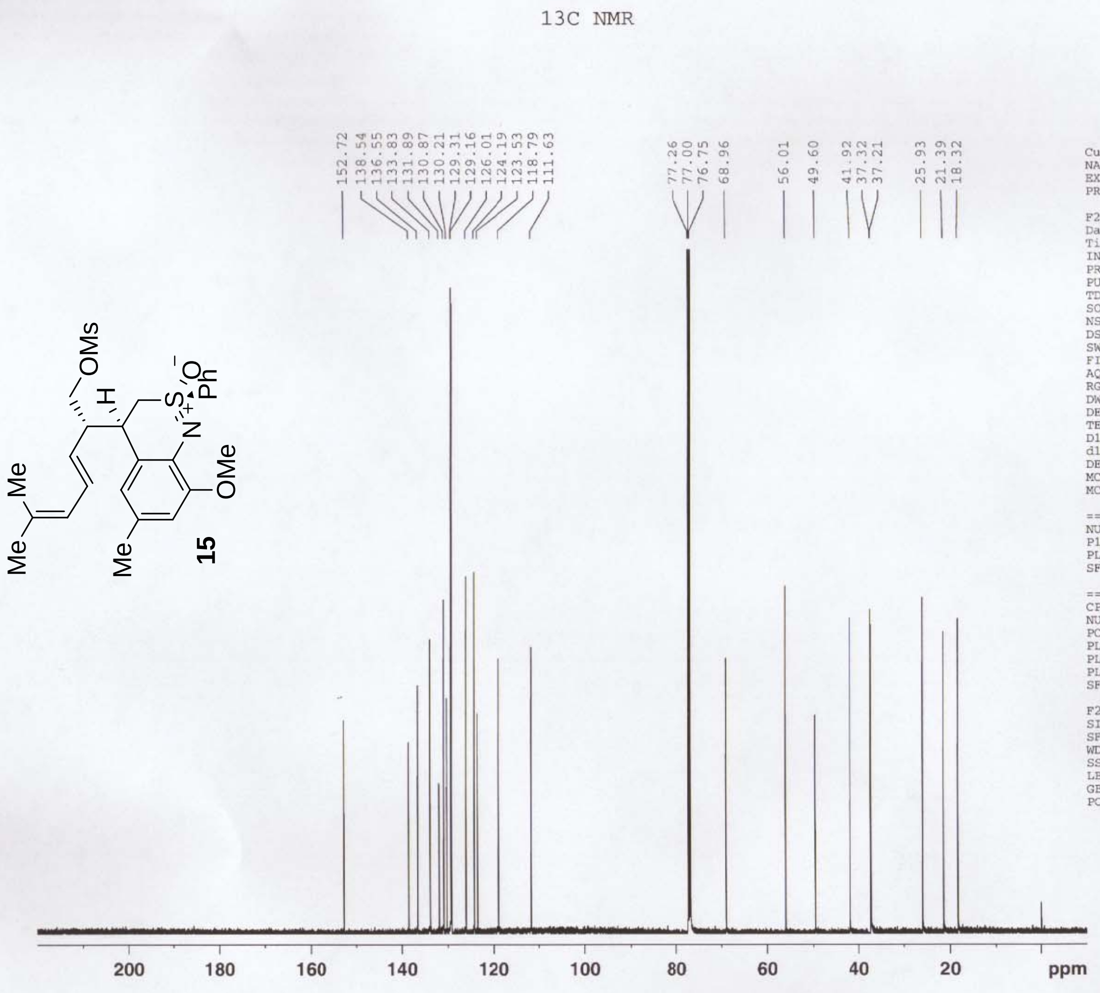


```
Current Data Parameters
NAME          CAI-IV-MsOR
EXPNO                   1
PROCNO                  1

F2 - Acquisition Parameters
Date_            20090109
Time                23.50
INSTRUM            DRX500
PROBHD   5 mm CPTCI 1H-
PULPROG              zg30
TD                  65536
SOLVENT             CDCl3
NS                      8
DS                      2
SWH             10330.578 Hz
FIDRES           0.157632 Hz
AQ              3.1719923 sec
RG                      9
DW                 48.400 usec
DE                   6.00 usec
TE                  300.0 K
D1             1.00000000 sec
MCREST         0.00000000 sec
MCWORK         0.01500000 sec

======== CHANNEL f1 ========
NUC1                   1H
P1                   8.00 usec
PL1                  4.30 dB
SFO1          500.1335009 MHz

F2 - Processing parameters
SI                  32768
SF            500.1300109 MHz
WDW                    EM
SSB                     0
LB                   0.30 Hz
GB                      0
PC                   1.00
```



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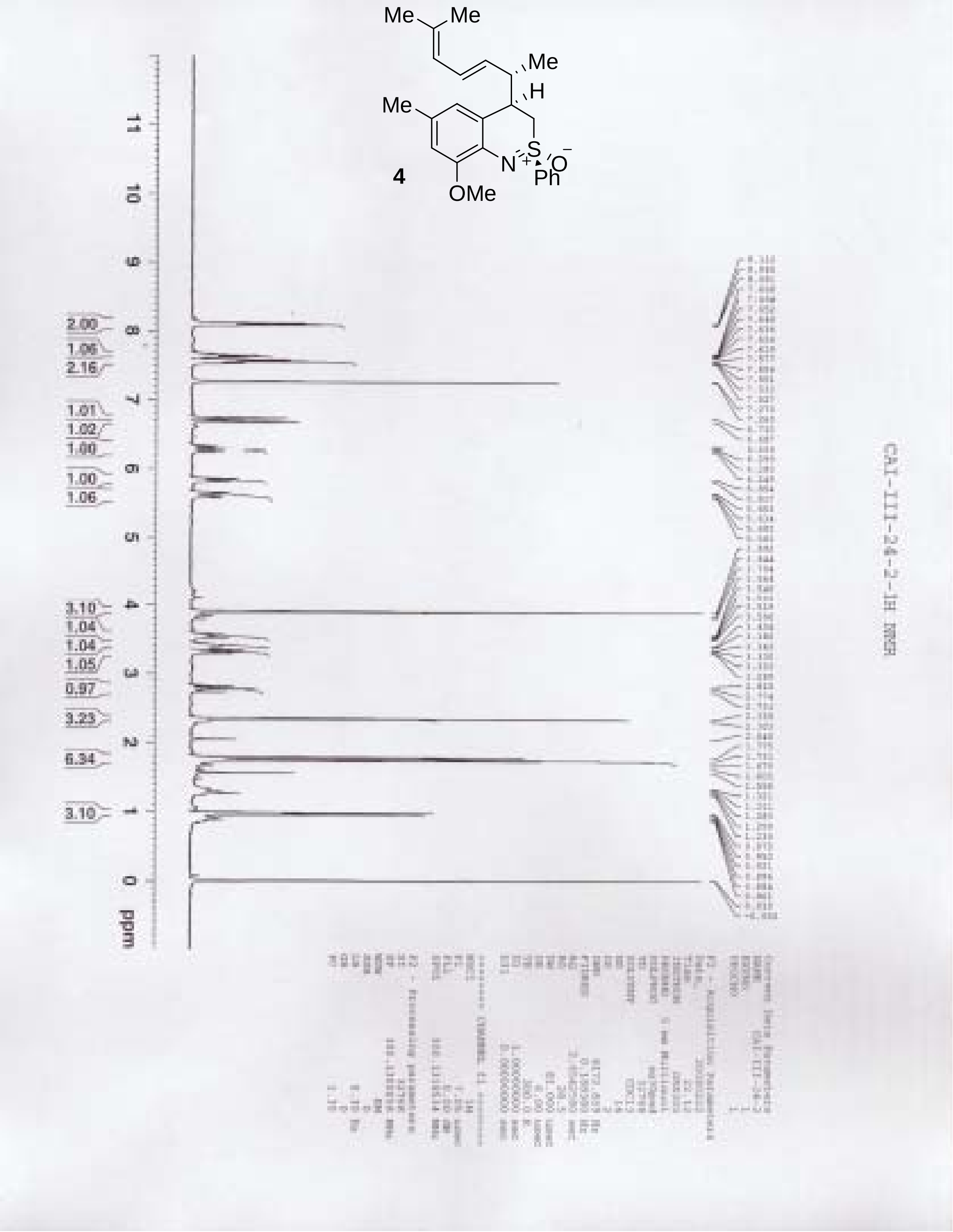
```
Current Data Parameters
NAME          CAI-IV-MsOR
EXPNO                   2
PROCNO                  1

F2 - Acquisition Parameters
Date_            20090109
Time                23.58
INSTRUM            DRX500
PROBHD   5 mm CPTCI 1H-
PULPROG           zgpg30
TD                  71424
SOLVENT             CDCl3
NS                    140
DS                      4
SWH             35211.270 Hz
FIDRES           0.492989 Hz
AQ              1.0142708 sec
RG                   4096
DW                 14.200 usec
DE                  35.00 usec
TE                  300.0 K
D1             2.00000000 sec
d11            0.03000000 sec
DELTA          1.89999998 sec
MCREST         0.00000000 sec
MCWRK          0.01500000 sec

======== CHANNEL f1 ========
NUC1                  13C
P1                  12.00 usec
PL1                  0.30 dB
SFO1          125.7716224 MHz

======== CHANNEL f2 ========
CPDPRG2           waltz16
NUC2                   1H
PCPD2               80.00 usec
PL2                  5.00 dB
PL12                22.00 dB
PL13                27.90 dB
SFO2          500.1320005 MHz

F2 - Processing parameters
SI                  65536
SF            125.7577993 MHz
WDW                    EM
SSB                     0
LB                   1.00 Hz
GB                      0
PC                   1.00
```


Me
Me
Me
H
Me
S
O
N
Ph
OMe
4
CAI-III-24-2-1H NMR
11
10
9
8
7
6
5
4
3
2
1
0
ppm
2.00
1.06
2.16
1.01
1.02
1.00
1.00
1.06
3.10
1.04
1.04
1.05
0.97
3.23
6.34
3.10