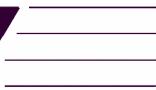


**CHEMISTRY**   
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Supporting Information

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# **Selective Formation of 2-Imidazolines and 2-Substituted Oxazoles via a Three-Component Reaction.**

Niels Elders, Frans. J. J. de Kanter, Eelco Ruijter, Marinus B. Groen, and Romano V. A.  
Orru\*

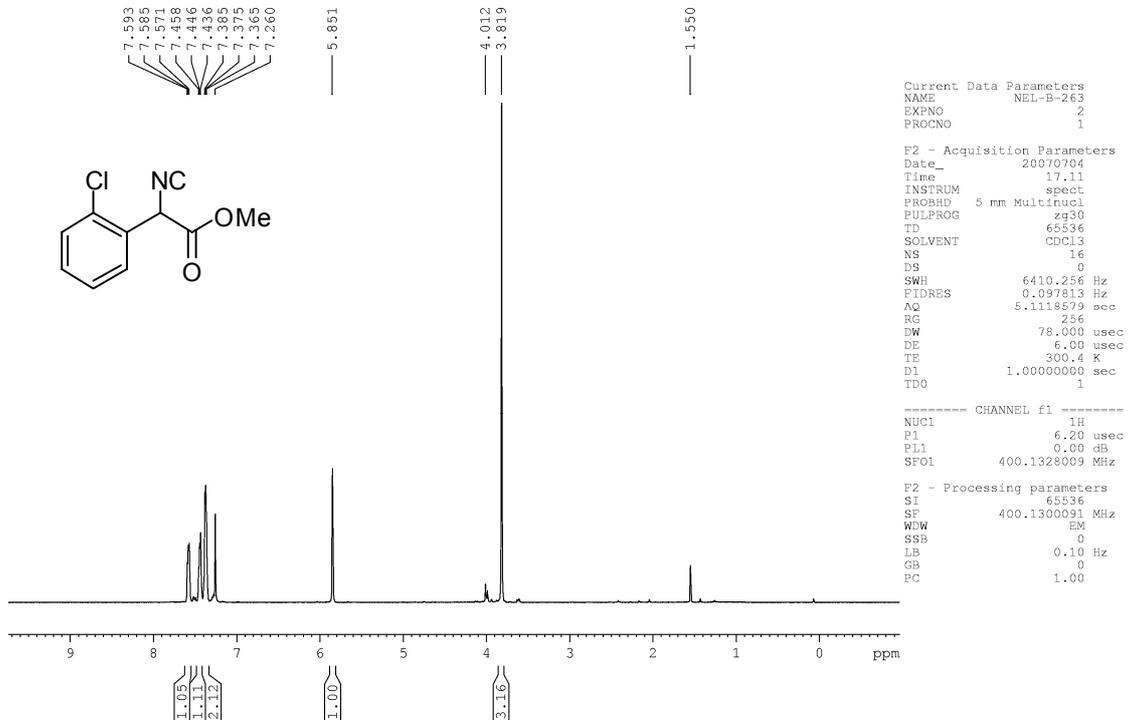
*Department of Chemistry & Pharmaceutical Sciences  
Vrije Universiteit Amsterdam  
De Boelelaan 1083, 1081 HV Amsterdam*

<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of all new compounds.

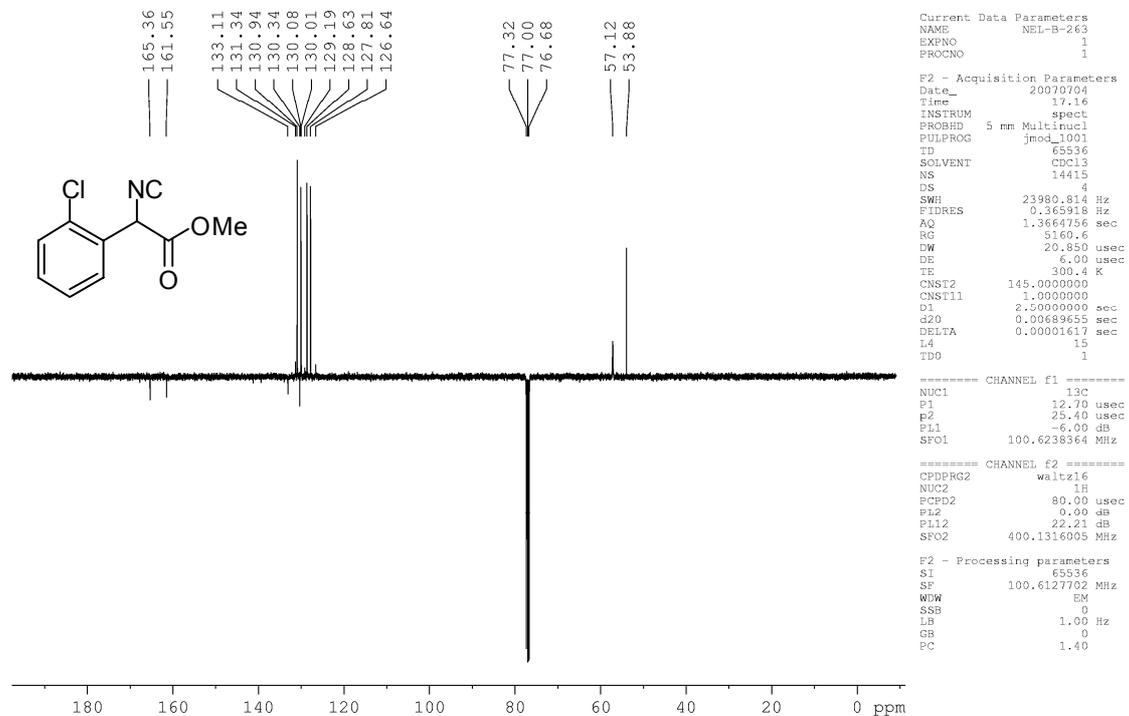
Compound	Page	Compound	Page
Isocyanide ( <b>1f</b> )	3	Oxazole ( <b>5b</b> )	20
Isocyanide ( <b>1g</b> )	4	Oxazole ( <b>5c</b> )	21
Isocyanide ( <b>1h</b> )	5	Oxazole ( <b>5d</b> )	22
Isocyanide ( <b>1i</b> )	6	Oxazole ( <b>5e</b> )	23
Isocyanide ( <b>1j</b> )	7	Oxazole ( <b>5f</b> )	24
Imidazoline ( <b>4a</b> )	8	Oxazole ( <b>5g</b> )	25
Imidazoline ( <b>4c</b> )	9	Oxazole ( <b>5h</b> )	26
Imidazoline ( <b>4e</b> )	10	Oxazole ( <b>5i</b> )	27
Imidazoline ( <b>4f</b> )	11	Oxazole ( <b>5l</b> )	28
Imidazoline ( <b>4g</b> )	12	Oxazole ( <b>5m</b> )	29
Imidazoline ( <b>4h</b> )	13	Oxazole ( <b>5n</b> )	30
Imidazoline ( <b>4i</b> )	14	Oxazole ( <b>5o</b> )	31
Imidazoline ( <b>4j</b> )	15	Oxazole ( <b>5p</b> )	32
Imidazoline ( <b>4k</b> )	16	Oxazole ( <b>5q</b> )	33
Imidazoline ( <b>4l</b> )	17	Oxazole ( <b>6</b> )	34
Imidazoline ( <b>4n</b> )	18	Oxazole ( <b>7</b> )	35
Oxazole ( <b>5a</b> )	19	Oxazole ( <b>8</b> )	36

**Methyl 2-(*o*-chlorophenyl)-2-isocyanoacetate (1f):**

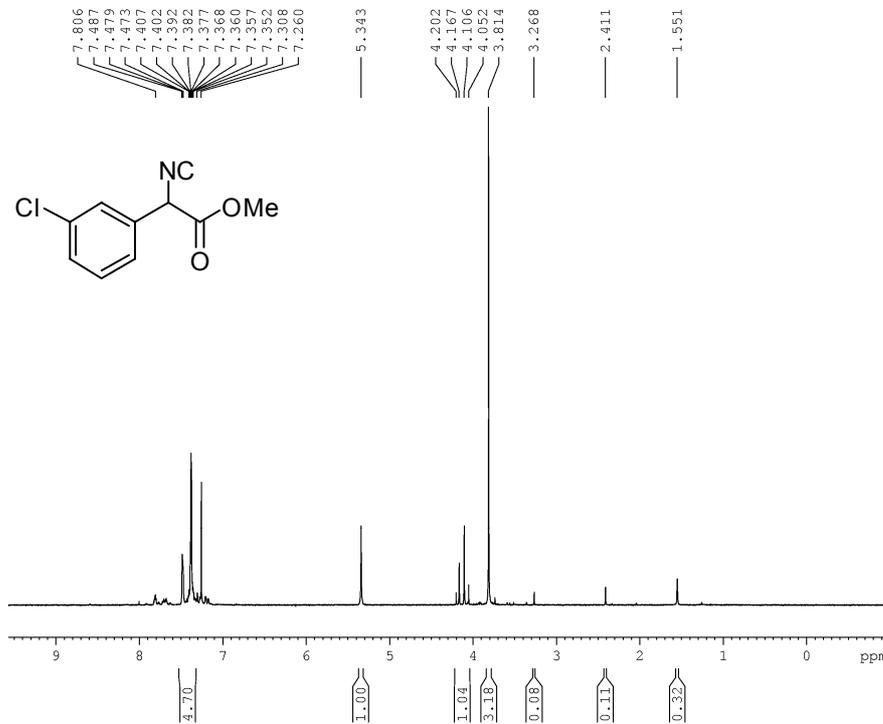
<sup>1</sup>H NMR (400.13 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



**Methyl 2-(*m*-chlorophenyl)-2-isocyanoacetate (1g):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



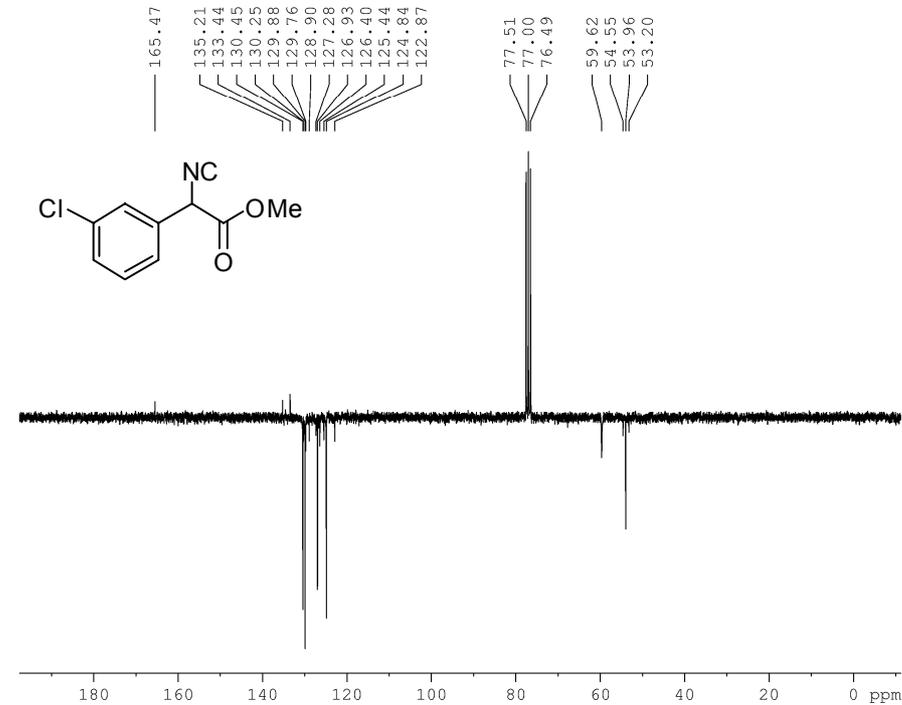
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EXPNO     4
PROCNO    1

F2 - Acquisition Parameters
Date_     20070620
Time      10.33
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PROBHD    5 mm QNP 1H/1
PULPROG   zg30
TD         32768
SOLVENT   CDCl3
NS         16
DS         2
SWH        5175.983 Hz
FIDRES     0.157958 Hz
AQ         3.1634389 sec
RG         2580.3
DW         96.600 usec
DE         6.00 usec
TE         300.2 K
D1         1.00000000 sec
TD0        1

----- CHANNEL f1 -----
NUC1       1H
P1         9.50 usec
PL1        -3.00 dB
SFO1       250.1315447 MHz

F2 - Processing parameters
SI         32768
SF         250.1300123 MHz
WDW        EM
SSB        0
LB         0.10 Hz
GB         0
PC         1.00
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<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-243
EXPNO     5
PROCNO    1

F2 - Acquisition Parameters
Date_     20070620
Time      16.10
INSTRUM   spect
PROBHD    5 mm QNP 1H/1
PULPROG   jmod_1001
TD         65536
SOLVENT   CDCl3
NS         13353
DS         4
DI         1
SWH        15060.241 Hz
FIDRES     0.229801 Hz
AQ         2.1758451 sec
RG         9195.2
DW         33.200 usec
DE         6.00 usec
TE         300.2 K
CNST2     145.0000000
CNST11    1.0000000
D1         2.00000000 sec
d20       0.00689655 sec
DELTA     0.00000859 sec
L4        15
TD0        1

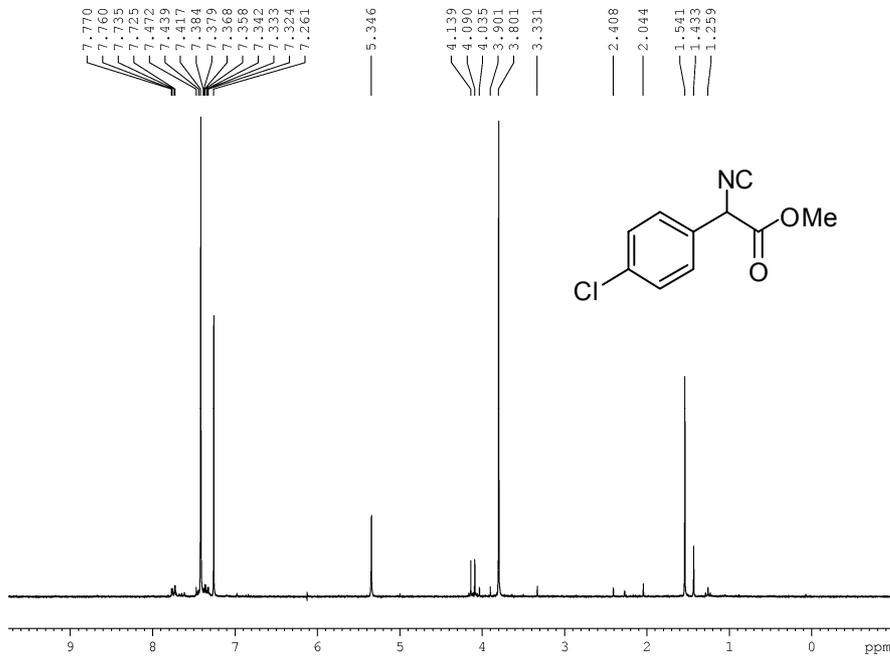
----- CHANNEL f1 -----
NUC1       13C
P1         6.75 usec
P2         13.50 usec
PL1        -3.00 dB
SFO1       62.9015280 MHz

----- CHANNEL f2 -----
CPDPRG2   waltz16
NUC2       1H
PCPD2     80.00 usec
PL2       -3.00 dB
PL12      20.00 dB
SFO2      250.1310005 MHz

F2 - Processing parameters
SI         32768
SF         62.8952408 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
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**Methyl 2-(*p*-chlorophenyl)-2-isocyanoacetate (1h):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



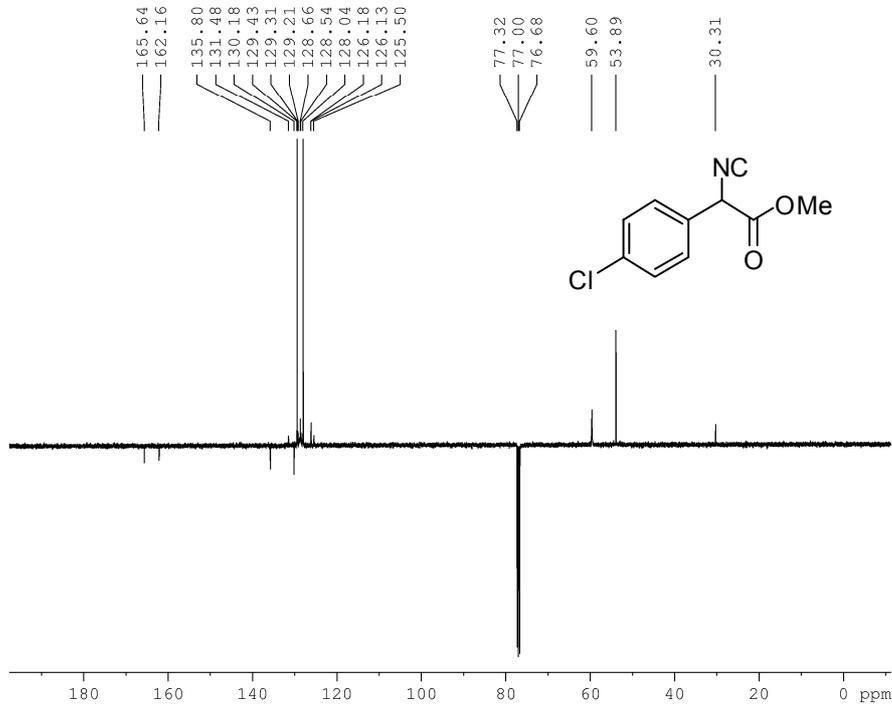
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NAME      NEL-B-242
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters
Date_    20070522
Time     16.28
INSTRUM  spect
PROBHD   5 mm QNP
PULPROG  zg30
TD        32768
SOLVENT  CDCl3
NS        16
DS        2
SWH       5175.983 Hz
FIDRES    0.157958 Hz
AQ        3.1654389 sec
RG        2580.3
DW        96.600 usec
DE        6.00 usec
TE        300.2 K
D1        1.00000000 sec
TD0       1

===== CHANNEL f1 =====
NUC1      1H
P1        9.50 usec
PL1       -3.00 dB
SFO1      250.1315447 MHz

F2 - Processing parameters
SI        32768
SF        250.1300129 MHz
WDW       EM
SSB       0
LB        0.10 Hz
GB        0
PC        1.00
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<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-242
EXPNO    2
PROCNO   1

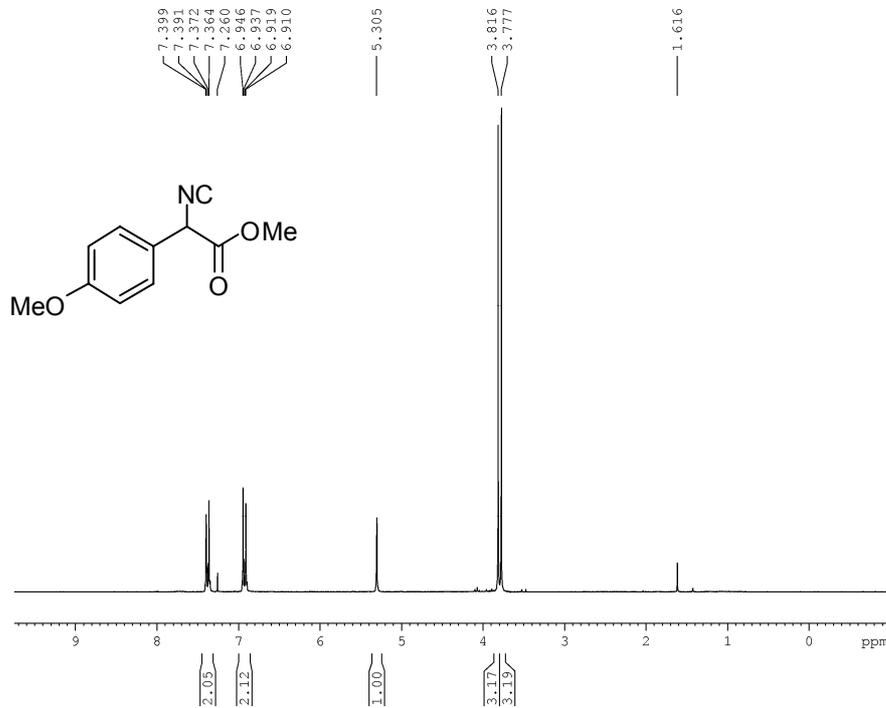
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Time     3.56
INSTRUM  spect
PROBHD   5 mm Multinucl
PULPROG  jmod1001
TD        65536
SOLVENT  CDCl3
NS        15360
DS        4
SWH       23980.814 Hz
FIDRES    0.365918 Hz
AQ        1.3684756 sec
RG        3649.1
DW        20.850 usec
DE        6.00 usec
TE        300.4 K
D1        2.59999990 sec
d20       0.00699655 sec
DELTA     0.00001617 sec
L4        15
L5        15
TD0       1

===== CHANNEL f1 =====
NUC1      13C
P1        12.70 usec
P2        25.40 usec
PL1       -6.00 dB
PL2       22.21 dB
SFO1      100.6228298 MHz

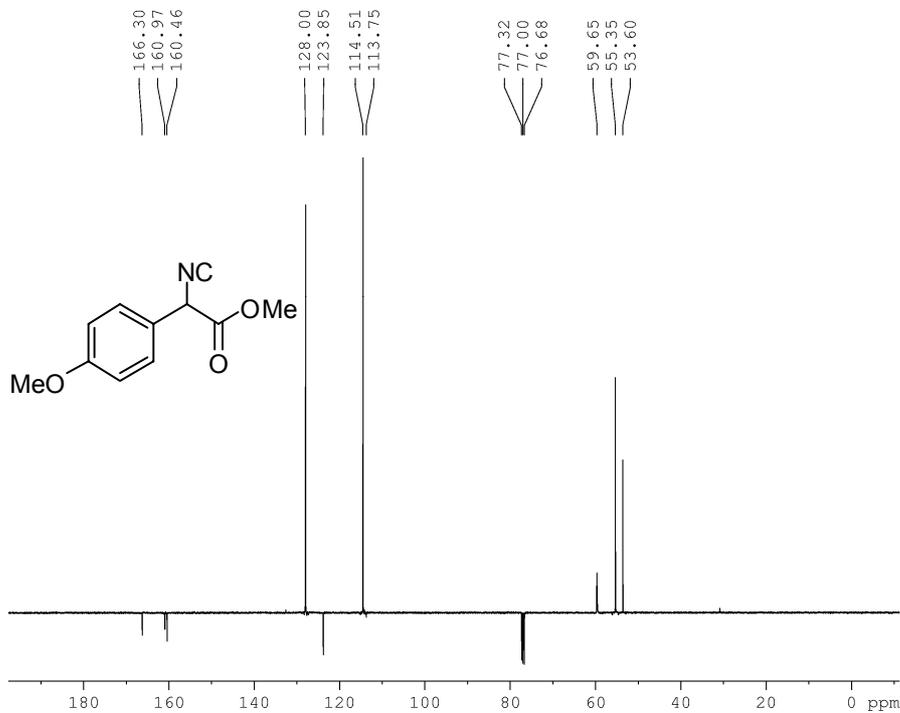
===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      1H
PCPD2     80.00 usec
PL2       9.00 dB
PL12      22.21 dB
SFO2      400.1316005 MHz

F2 - Processing parameters
SI        65536
SF        100.6127703 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
```

**Methyl 2-(*p*-methoxyphenyl)-2-isocyanoacetate (1i):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)

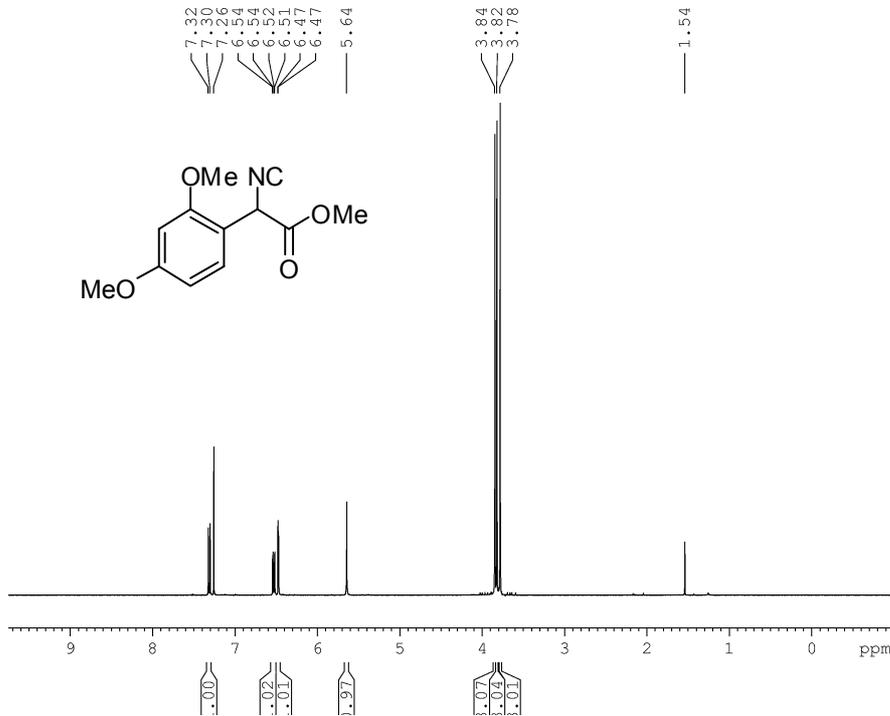


<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



**Methyl 2-(*o,p*-dimethoxyphenyl)-2-isocyanoacetate (1j):**

<sup>1</sup>H NMR (400.13 MHz, CDCl<sub>3</sub>)



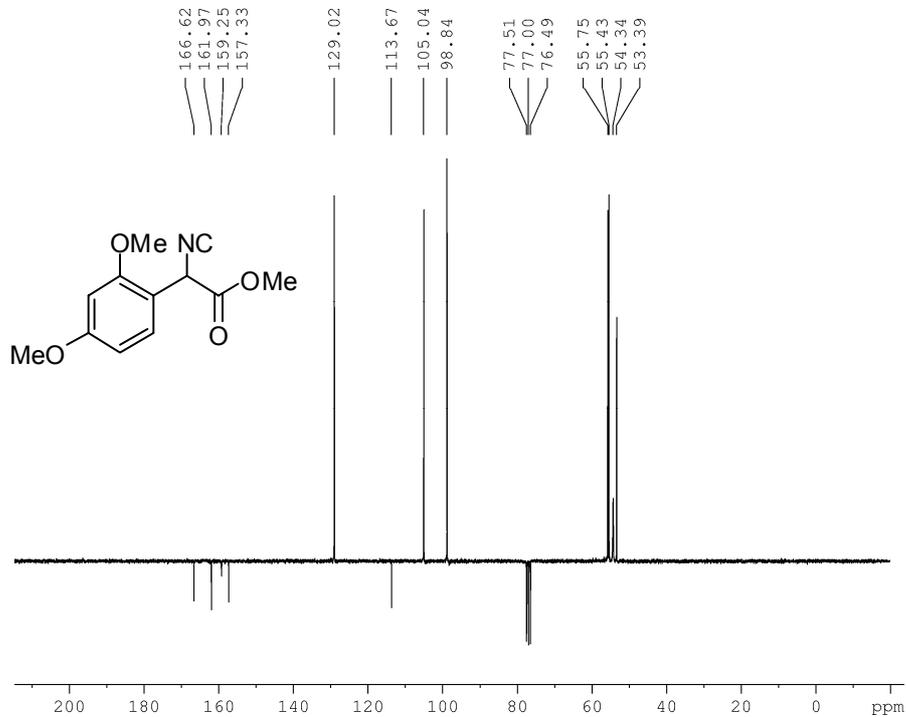
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Current Data Parameters
NAME      NEL-B-286
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20070828
Time     13.29
INSTRUM  spect
PROBHD   5 mm Multinucl
PULPROG  zg30
TD       65536
SOLVENT  CDCl3
NS       16
DS       0
SWH      6410.256 Hz
FIDRES   0.097813 Hz
AQ       5.1118579 sec
RG       322.5
DW       78.000 usec
DE       6.00 usec
TE       300.4 K
D1       1.0000000 sec
TD0      1

===== CHANNEL f1 =====
NUC1     1H
P1       6.20 usec
PL1      0.00 dB
SFO1     400.1328009 MHz

F2 - Processing parameters
SI       65536
SF       400.1300090 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-286
EXPNO    2
PROCNO   1

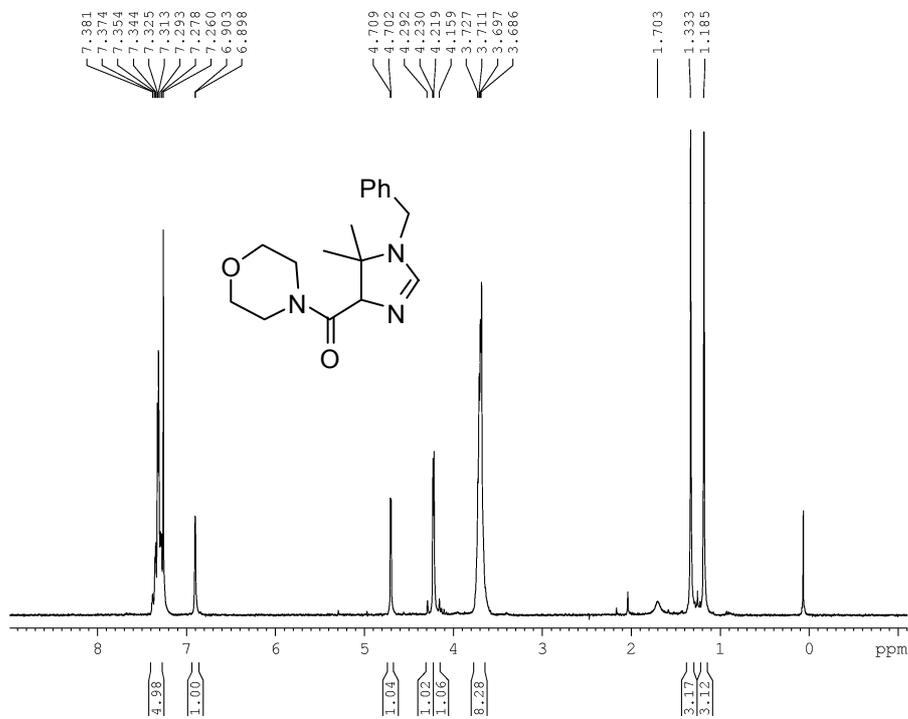
F2 - Acquisition Parameters
Date_    20070831
Time     17.21
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod_1001
TD       65536
SOLVENT  cdcl3
NS       8192
DS       4
SWH      15060.241 Hz
FIDRES   0.229801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNS12    145.0000000
CNS11    1.0000000
D1       2.31999993 sec
d20      0.0069655 sec
DELTA    0.00000859 sec
L4       8
TD0      1

===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
P2       13.50 usec
PL1      -3.00 dB
SFO1     62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
P12      -3.00 dB
P12      20.00 dB
SFO2     250.1310005 MHz

F2 - Processing parameters
SI       32768
SF       62.8952444 MHz
WDW      EM
SSB      0
LB       1.00 Hz
CB       0
PC       1.40
```

**(1-benzyl-5,5-dimethyl-4,5-dihydro-1H-imidazol-4-yl)(morpholino)methanone (4a):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



```

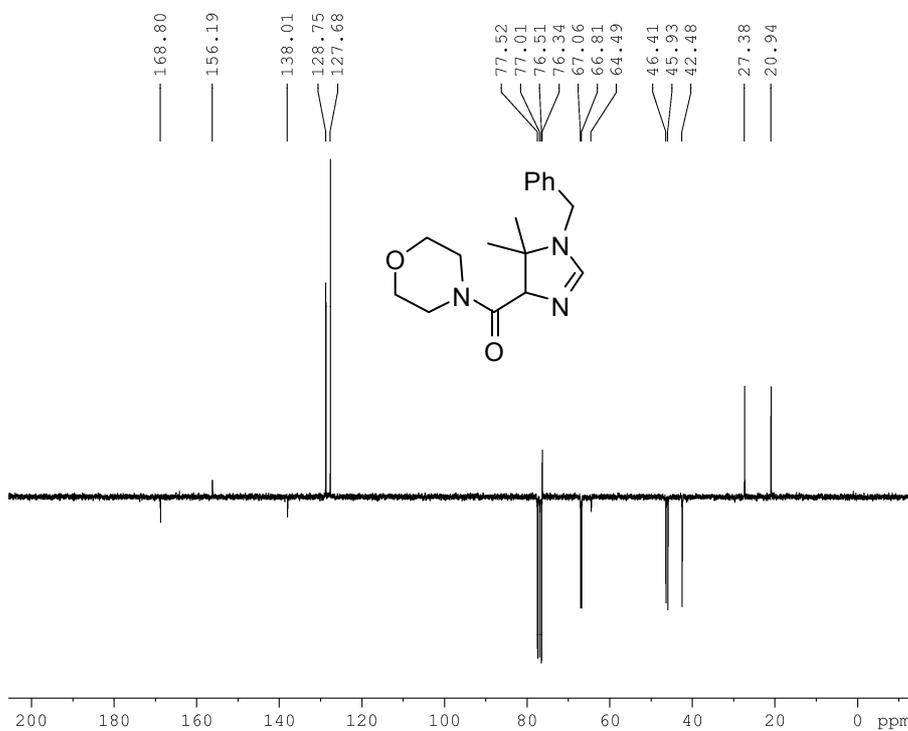
Current Data Parameters
NAME      NE1-A-160B
EXPNO    4
PROCNO   1

F2 - Acquisition Parameters
Date_    20070110
Time     13.59
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zgpg30
TD        32768
SOLVENT  CDCl3
NS        16
DS        2
SWH       4990.020 Hz
FIDRES    0.152283 Hz
AQ        3.2534336 sec
RG         1824.6
DW        100.200 usec
DE        8.00 usec
TE        300.0 K
D1        1.00000000 sec

===== CHANNEL f1 =====
NUC1      1H
P1        9.50 usec
PL1       -3.00 dB
SFO1      250.1312507 MHz

F2 - Processing parameters
SI        32768
SF        250.1300074 MHz
WDW       EM
SSB       0
LB        0.30 Hz
GB        0
PC        1.00
    
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```

Current Data Parameters
NAME      NE1-A-160B
EXPNO    5
PROCNO   1

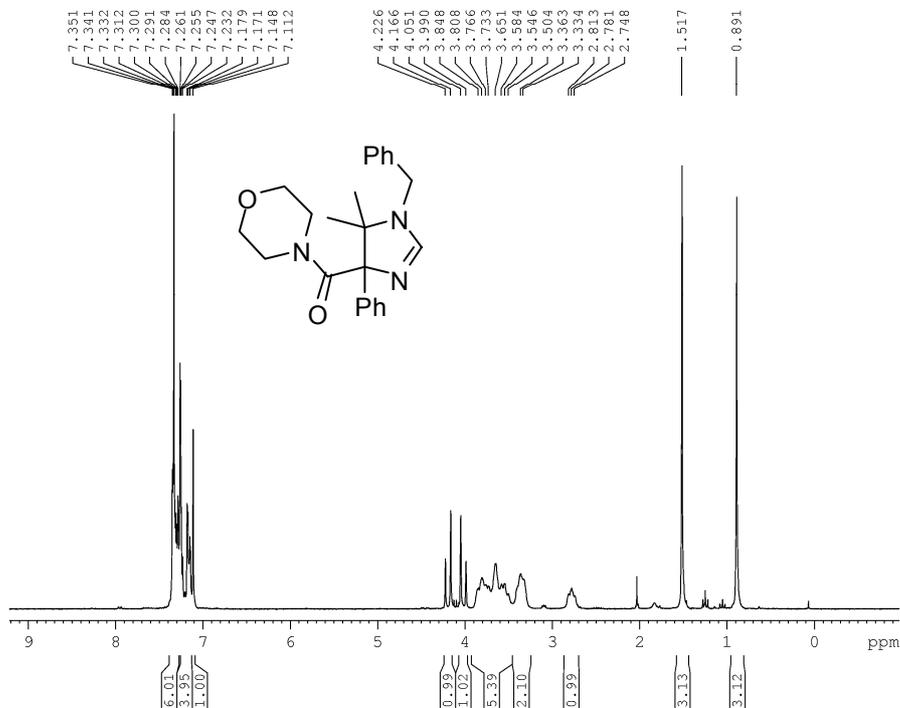
F2 - Acquisition Parameters
Date_    20070110
Time     17.32
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zgpg30
TD        65536
SOLVENT  CDCl3
NS        13007
DS        4
SWH       15723.271 Hz
FIDRES    0.239918 Hz
AQ        2.0840948 sec
RG         14396.5
DW        31.800 usec
DE        8.00 usec
TE        300.0 K
CNST1    145.0000000
CNST11   1.0000000 sec
d13       2.00000000 sec
d131      0.00000300 sec
d20       0.0068965 sec
DELTA    0.00000859 sec
LA        15

===== CHANNEL f1 =====
NUC1      13C
P1        6.75 usec
P2        13.50 usec
PL1       -3.00 dB
SFO1      62.9021320 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2      1H
PCPD2    80.00 usec
PL2      -3.00 dB
PL12     20.00 dB
SFO2     250.1310005 MHz

F2 - Processing parameters
SI        65536
SF        62.8932397 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.40
    
```

**(1-benzyl-5,5-dimethyl-4-phenyl-4,5-dihydro-1H-imidazol-4-yl)(morpholino)methanone (4c):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



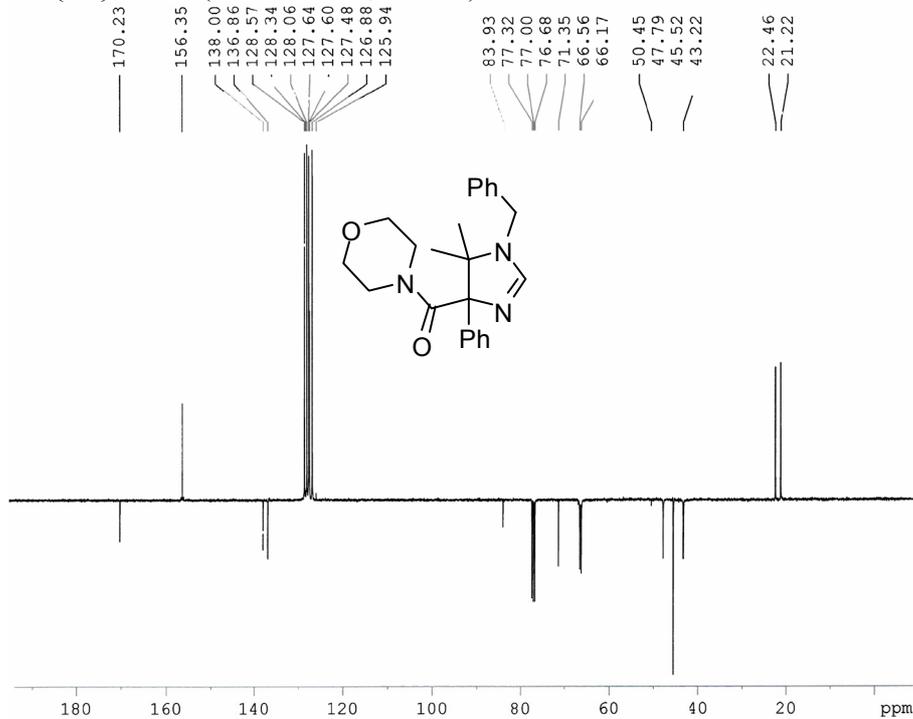
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EXPNO    4
PROCNO   1

F2 - Acquisition Parameters
Date_    20070404
Time     13.05
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       65536
SOLVENT  CDCl3
NS       16
DS       0
SWH      5175.983 Hz
FIDRES   0.078979 Hz
AQ       6.3308277 se
RG       812.7
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.0000000 se
TD0      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1      -3.00 dB
SFO1     250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300055 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-216
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20070404
Time     18.32
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod 1001
TD       65536
SOLVENT  CDCl3
NS       15529
DS       4
SWH      23980.814 Hz
FIDRES   0.365918 Hz
AQ       1.3664756 sec
RG       16384
DW       20.850 usec
DE       6.00 usec
TE       300.4 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.0000000 sec
d20      0.00689655 sec
DELTA    0.00001273 sec
L4       18
TD0      1

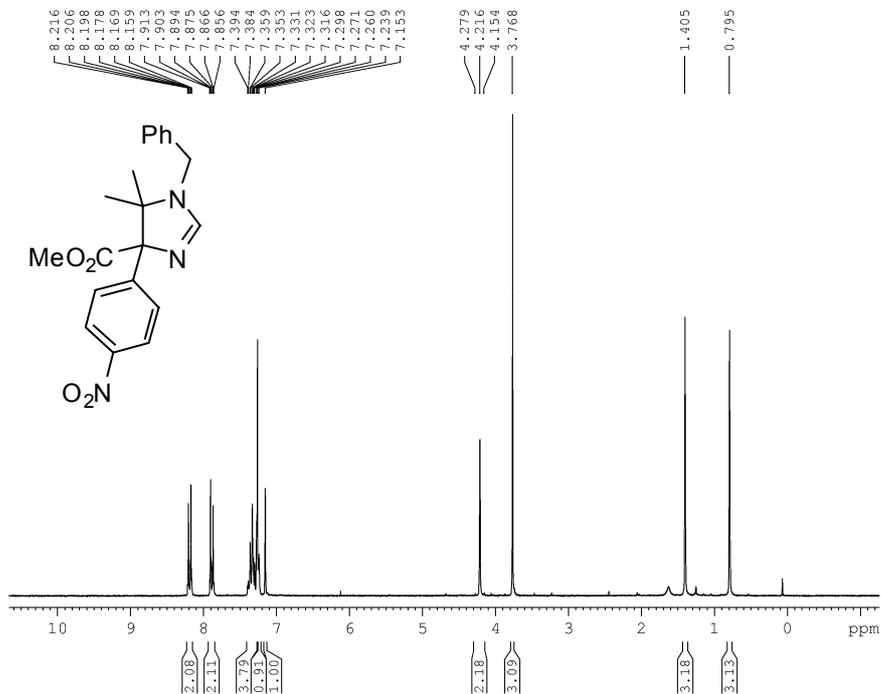
===== CHANNEL f1 =====
NUC1     13C
P1       10.00 usec
p2       20.00 usec
PL1      -3.00 dB
PL12     17.00 dB
SFO1     100.6238364 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      0.00 dB
PL12     17.00 dB
SFO2     400.1316005 MHz

F2 - Processing parameters
SI       65536
SF       100.6127731 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**Methyl 1-benzyl-5,5-dimethyl-4-(4-nitrophenyl)-4,5-dihydro-1H-imidazole-4-carboxylate (4e):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )



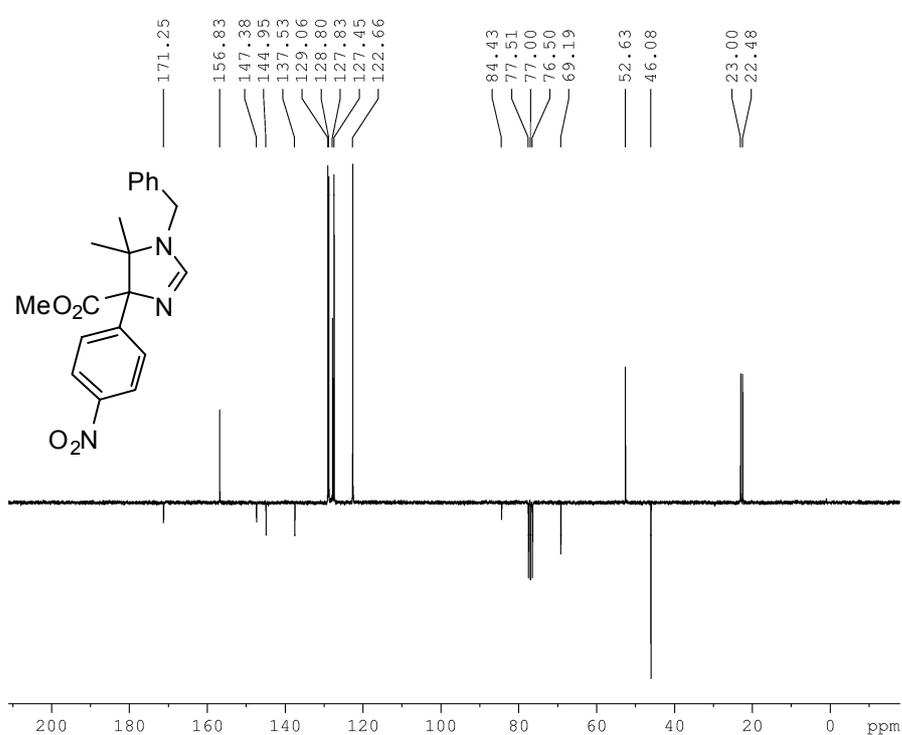
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Current Data Parameters
NAME      NEL-B-285
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters
Date_    20070823
Time     15.30
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       1824.6
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TD0      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1      -3.00 dB
SFO1     250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300123 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

$^{13}\text{C}\{^1\text{H}\}$  NMR (62.90 MHz,  $\text{CDCl}_3$ )



```
Current Data Parameters
NAME      NEL-B-285
EXPNO    4
PROCNO   1

F2 - Acquisition Parameters
Date_    20070824
Time     1.33
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG jmod_1001
TD       65536
SOLVENT  CDCl3
NS       6736
DS       4
SWH      15040.241 Hz
FIDRES   0.229801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.31989993 sec
d20      0.00689655 sec
DELTA    0.00000859 sec
L4       10
TD0      1

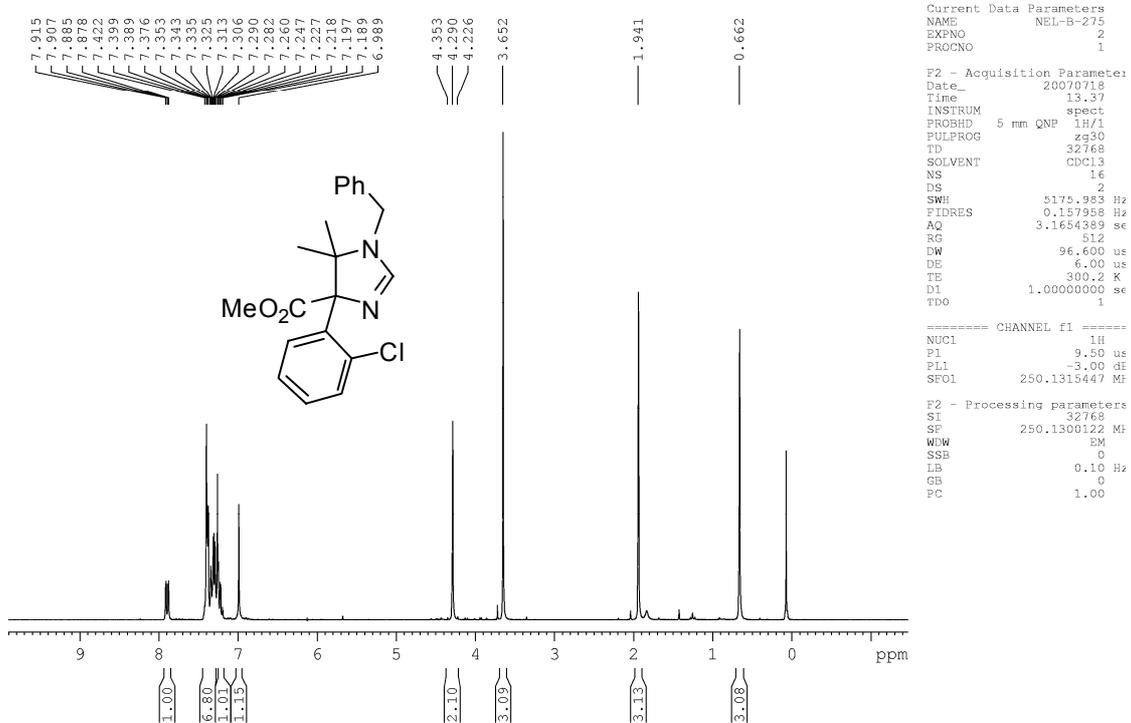
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
P2       13.50 usec
PL1      -3.00 dB
SFO1     62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      -3.00 dB
PL12     20.00 dB
SFO2     250.1310005 MHz

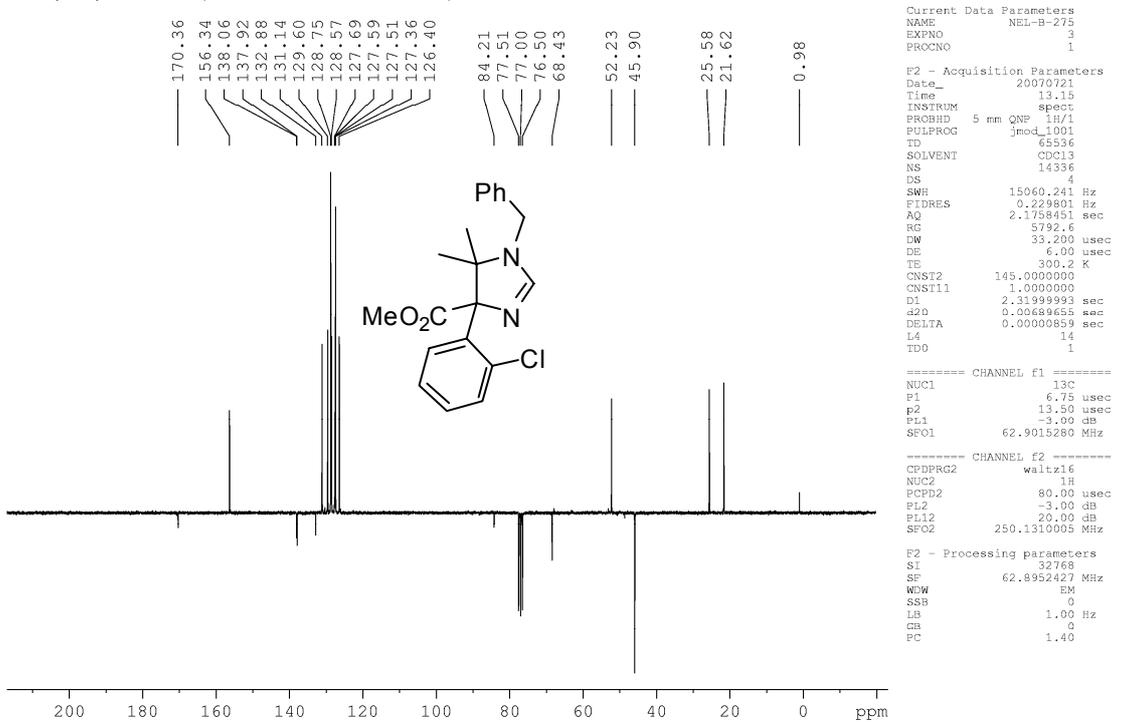
F2 - Processing parameters
SI       32768
SF       62.8952433 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**Methyl 1-benzyl-4-(2-chlorophenyl)-5,5-dimethyl-4,5-dihydro-1H-imidazole-4-carboxylate (4f):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )

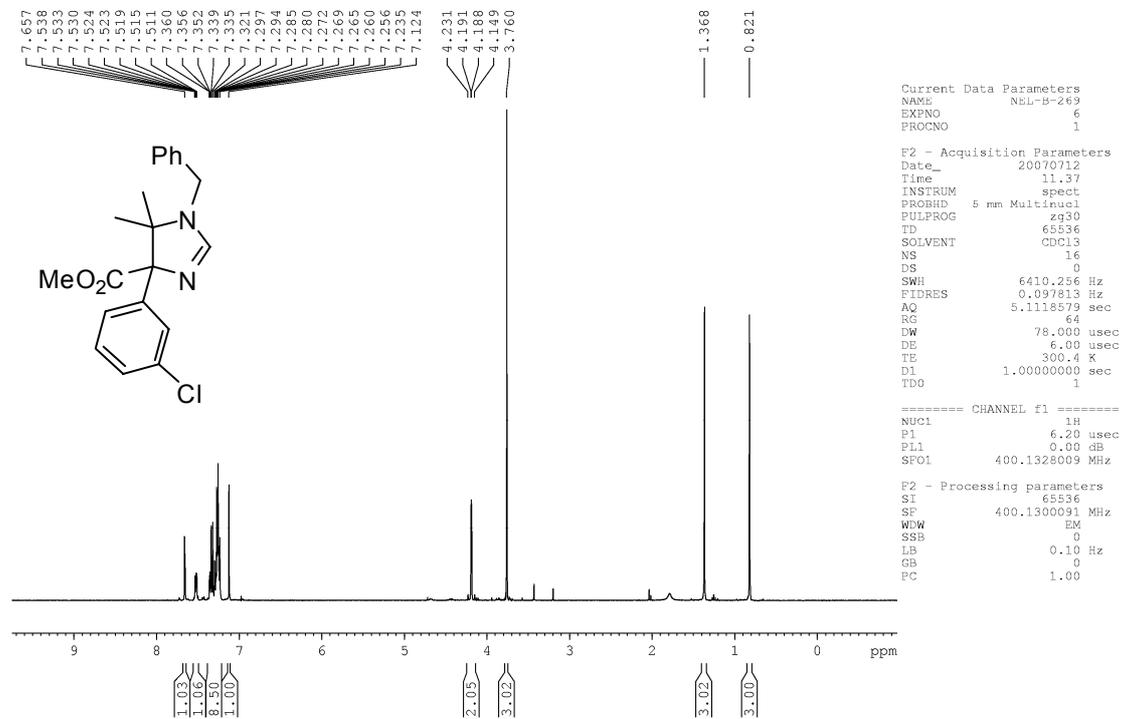


$^{13}\text{C}\{^1\text{H}\}$  NMR (62.90 MHz,  $\text{CDCl}_3$ )

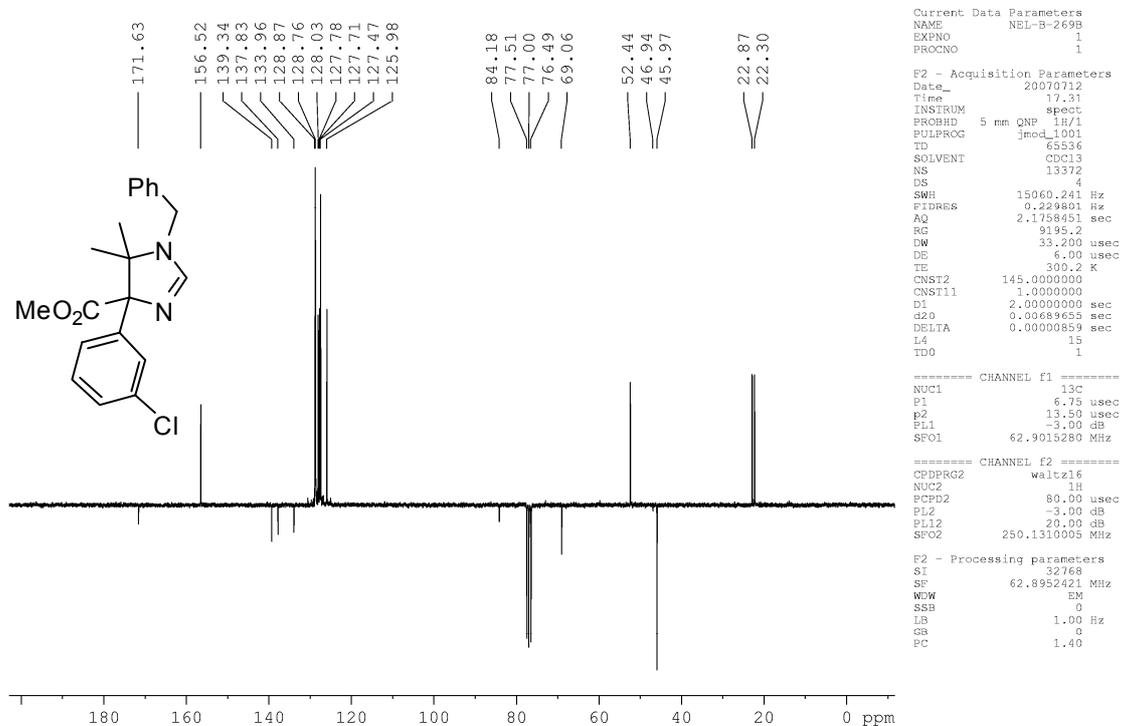


**Methyl 1-benzyl-4-(3-chlorophenyl)-5,5-dimethyl-4,5-dihydro-1H-imidazole-4-carboxylate (4g):**

$^1\text{H}$  NMR (400.13 MHz,  $\text{CDCl}_3$ )

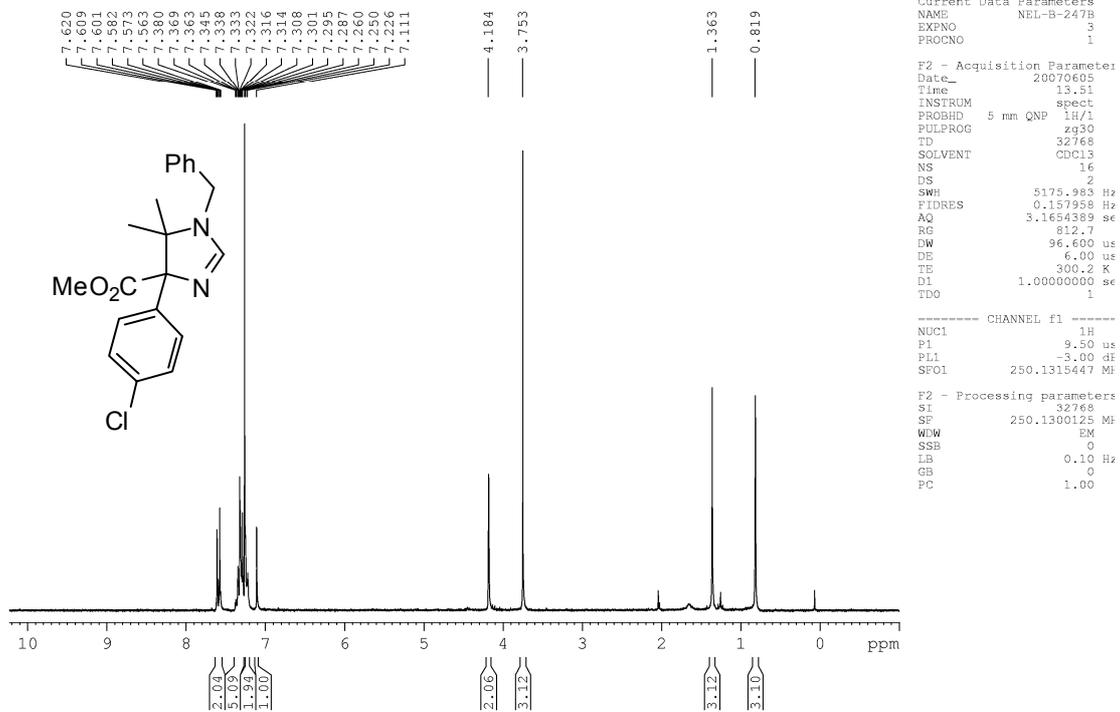


$^{13}\text{C}\{^1\text{H}\}$  NMR (62.90 MHz,  $\text{CDCl}_3$ )

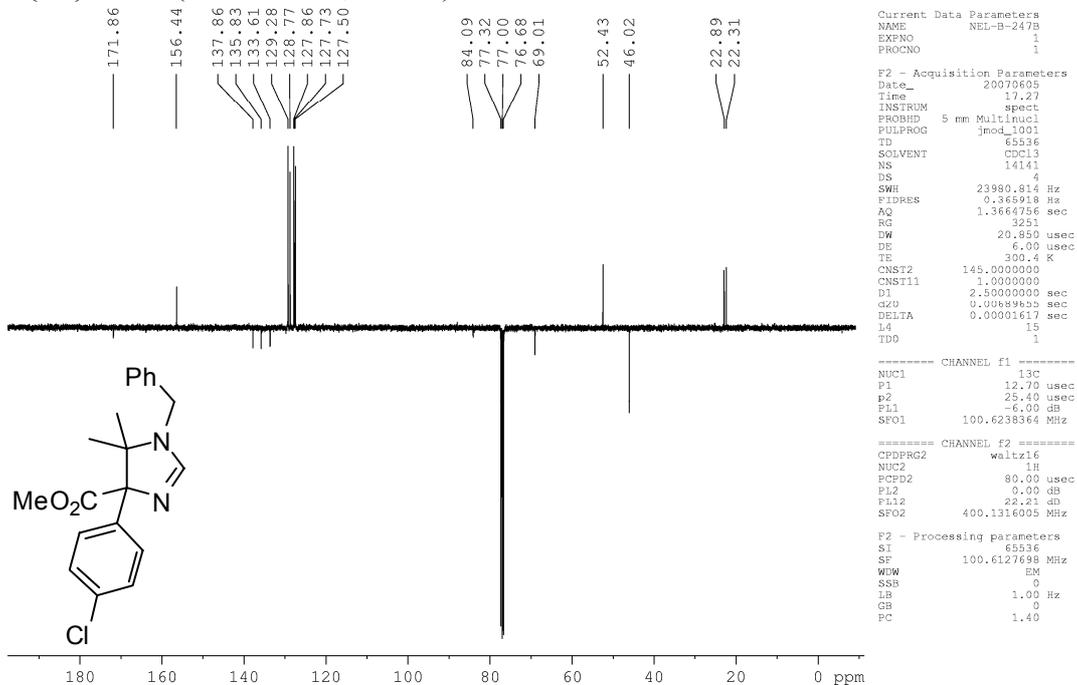


**Methyl 1-benzyl-4-(4-chlorophenyl)-5,5-dimethyl-4,5-dihydro-1H-imidazole-4-carboxylate (4h):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )

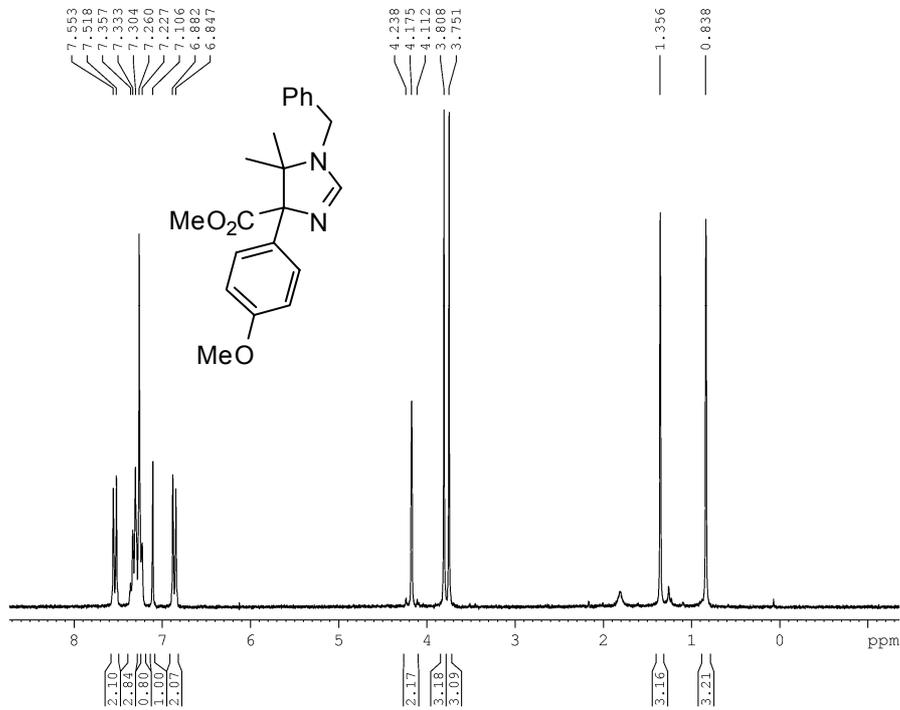


$^{13}\text{C}\{^1\text{H}\}$  NMR (100.62 MHz,  $\text{CDCl}_3$ )



**Methyl 1-benzyl-4-(4-methoxyphenyl)-5,5-dimethyl-4,5-dihydro-1H-imidazole-4-carboxylate (4i):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )



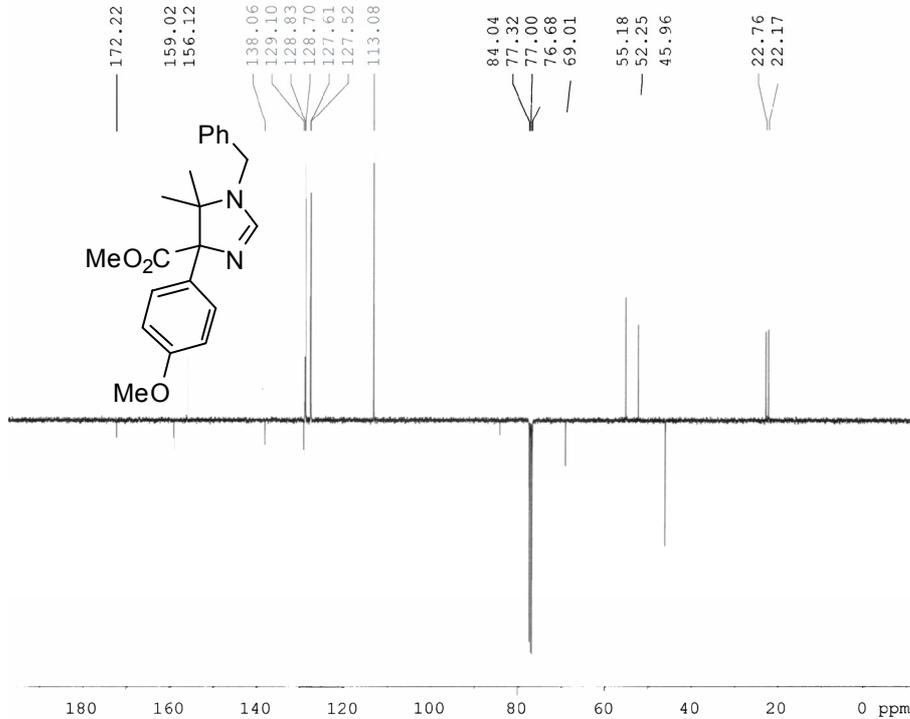
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Current Data Parameters
NAME      NEL-B-269A
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20070711
Time     17.25
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       2298.8
DW       96.600 usec
DE       6.00 usec
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 usec
PL1      -3.00 dB
SFO1     250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300122 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
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$^{13}\text{C}\{^1\text{H}\}$  NMR (100.62 MHz,  $\text{CDCl}_3$ )



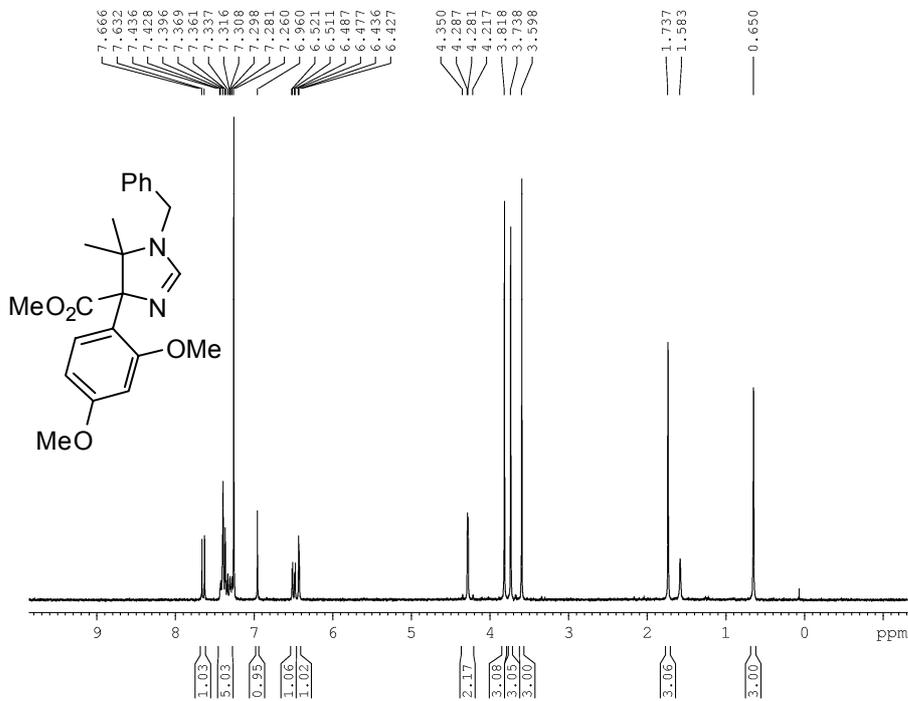
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Current Data Parameters
NAME      NEL-B-169A
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20070715
Time     3.36
INSTRUM  spect
PROBHD   5 mm Multinucl
PULPROG  jmod1001
TD       65536
SOLVENT  CDCl3
NS       15360
DS       4
SWH      23980.814 Hz
FIDRES   0.365918 Hz
AQ       1.3664756 sec
RG       16384
DW       20.850 usec
DE       6.00 usec
TE       300.4 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.59999990 sec
d20      0.00689655 sec
DELTA    0.00001617 sec
L4       15
TDO      1

===== CHANNEL f1 =====
NUC1
P1
P2
PL1
SFO1
```

**Methyl 1-benzyl-4-(2,4-dimethoxyphenyl)-5,5-dimethyl-4,5-dihydro-1H-imidazole-4-carboxylate (4j):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )



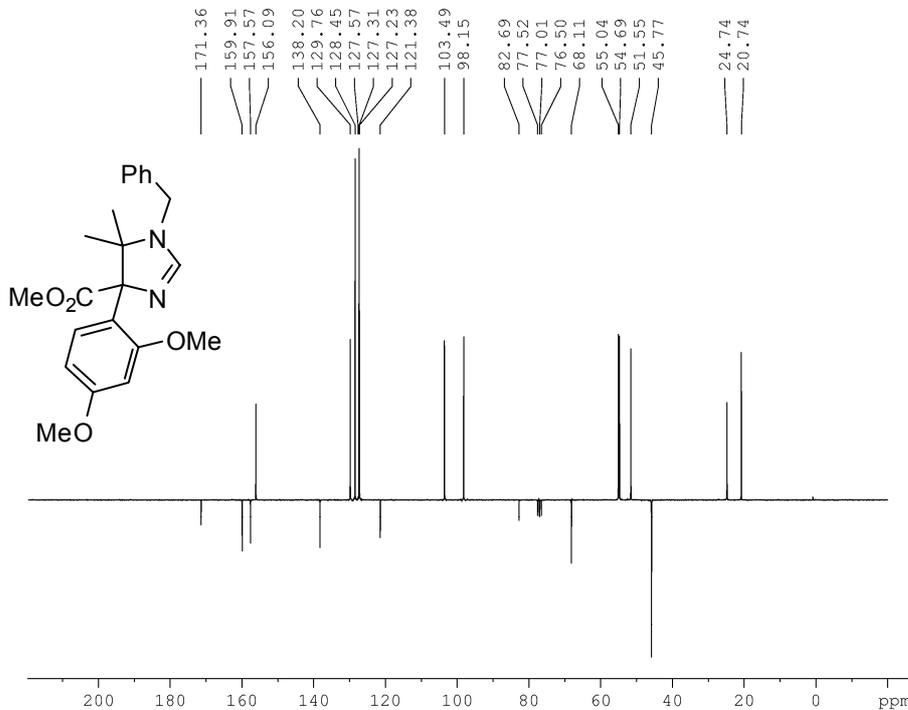
Current Data Parameters  
NAME NEL-B-289B  
EXPNO 3  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20070830  
Time 14.28  
INSTRUM spect  
PROBHD 5 mm QNP 1H/1  
PULPROG zg30  
TD 32768  
SOLVENT cdcl3  
NS 16  
DS 2  
SWH 5175.983 Hz  
FIDRES 0.157936 Hz  
AQ 3.1654389 sec  
RG 2298.8  
DW 96.600 usec  
DE 6.00 usec  
TE 300.2 K  
DL 1.00000000 sec  
TDO 1

===== CHANNEL f1 =====  
NUC1 1H  
P1 9.50 usec  
PL1 -3.00 dB  
SFO1 250.1315447 MHz

F2 - Processing parameters  
SI 32768  
SF 250.1300123 MHz  
WDW EM  
SSB 0  
LB 0.10 Hz  
GB 0  
PC 1.00

$^{13}\text{C}\{^1\text{H}\}$  NMR (62.90 MHz,  $\text{CDCl}_3$ )



Current Data Parameters  
NAME NEL-B-289B  
EXPNO 4  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20070901  
Time 5.06  
INSTRUM spect  
PROBHD 5 mm QNP 1H/1  
PULPROG jmod1001  
TD 65536  
SOLVENT cdcl3  
NS 10240  
DS 4  
SWH 15060.241 Hz  
FIDRES 0.229801 Hz  
AQ 2.1768451 sec  
RG 5160.6  
DW 33.200 usec  
DE 6.00 usec  
TE 300.2 K  
CNST2 145.0000000  
CNST11 1.0000000  
D1 2.31999993 sec  
d20 0.0089655 sec  
DELTA 0.00000859 sec  
L4 10  
TDO 1

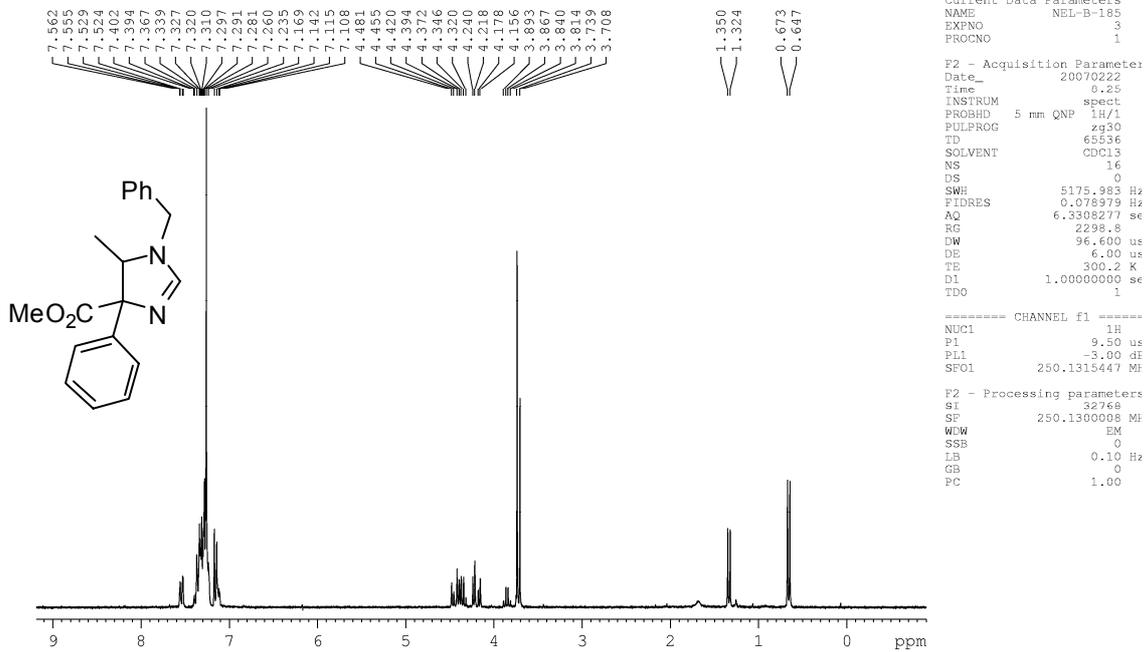
===== CHANNEL f1 =====  
NUC1 13C  
P1 6.75 usec  
P2 13.50 usec  
PL1 3.00 dB  
SFO1 62.9015280 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 80.00 usec  
PL2 -3.00 dB  
PL12 20.00 dB  
SFO2 250.1310005 MHz

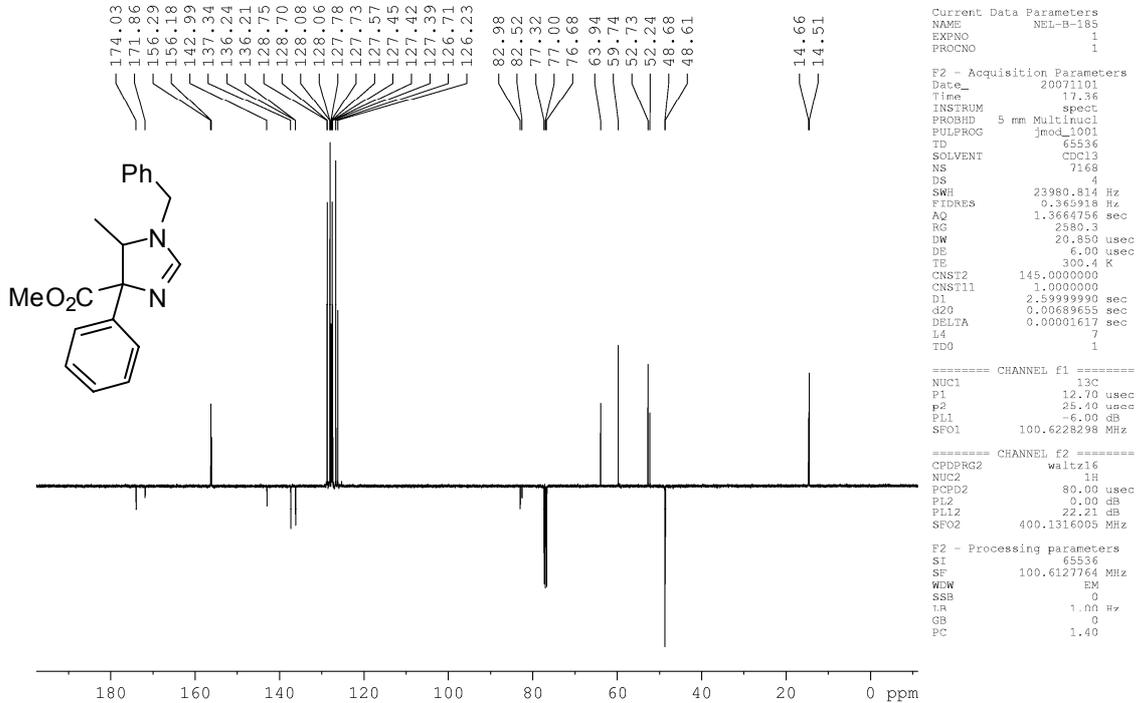
F2 - Processing parameters  
SI 32768  
SF 62.8952536 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

# Methyl 1-benzyl-5-methyl-4-phenyl-4,5-dihydro-1H-imidazole-4-carboxylate (4k):

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )



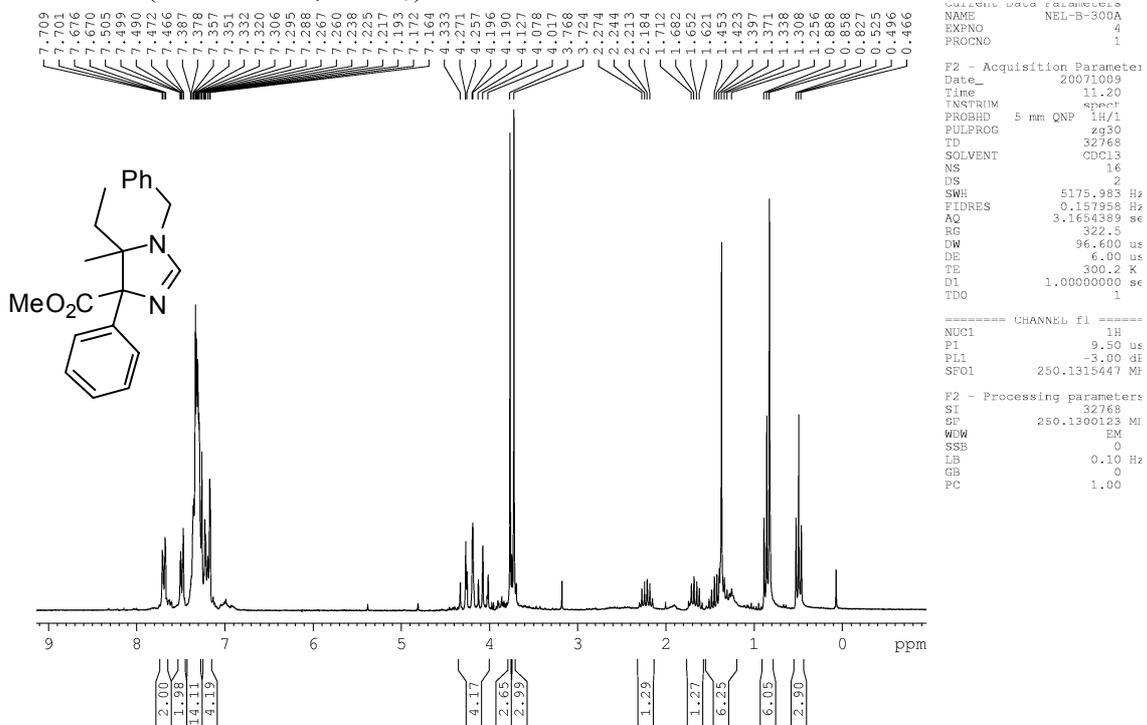
$^{13}\text{C}\{^1\text{H}\}$  NMR (100.62 MHz,  $\text{CDCl}_3$ )



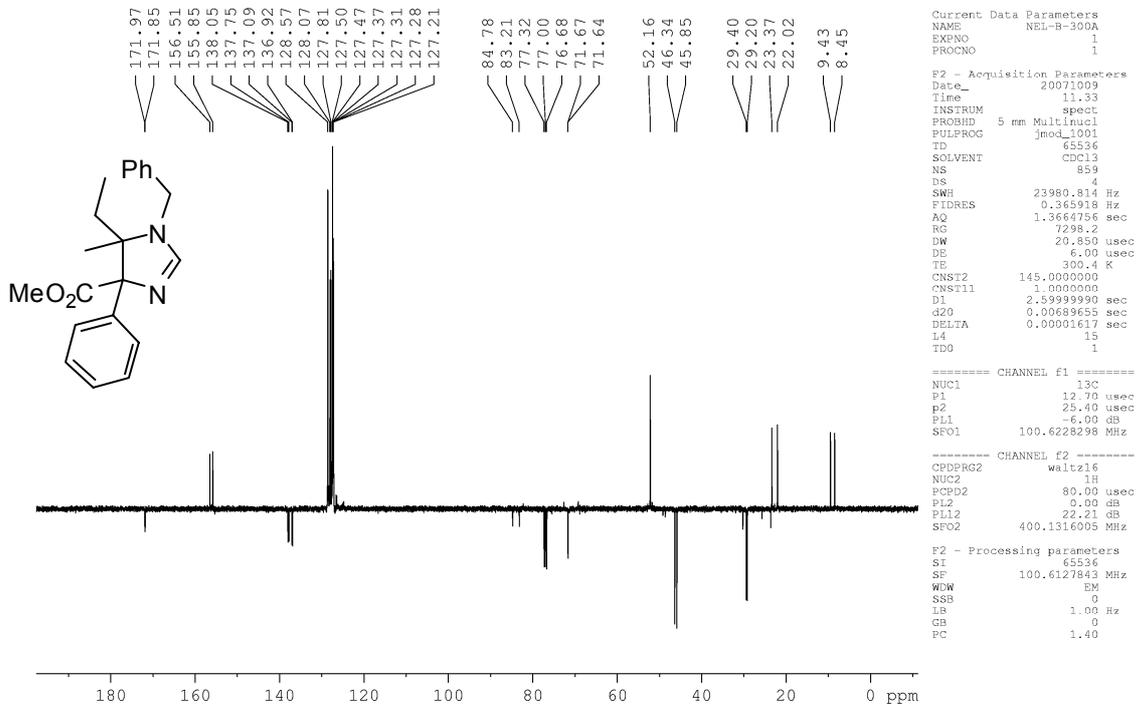
# Methyl 1-benzyl-5-ethyl-5-methyl-4-phenyl-4,5-dihydro-1H-imidazole-4-carboxylate

(4l):

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )

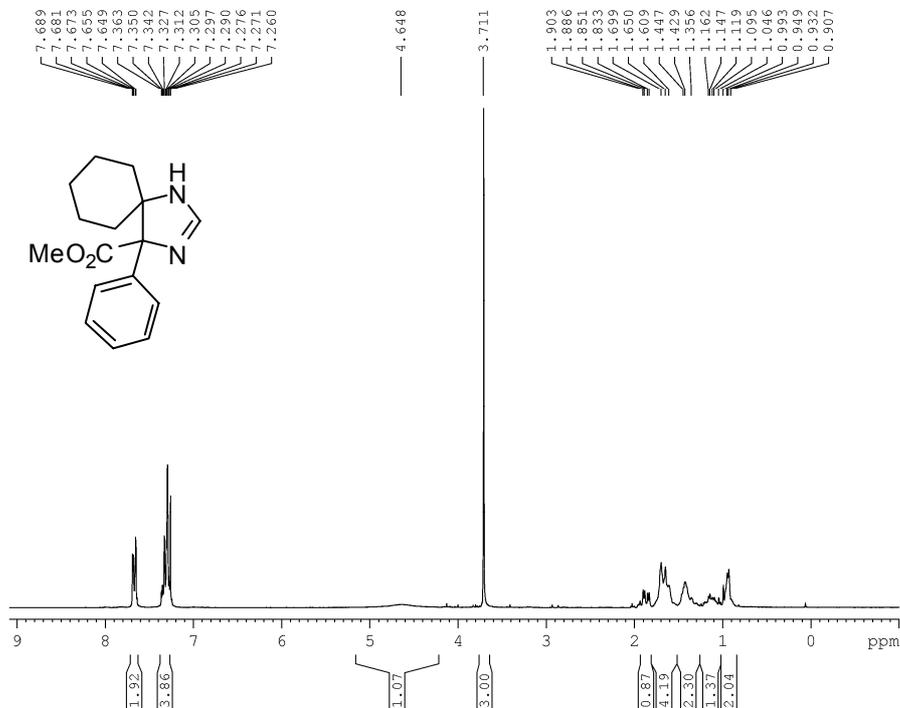


$^{13}\text{C}\{^1\text{H}\}$  NMR (100.62 MHz,  $\text{CDCl}_3$ )



**Methyl 4-phenyl-1,3-diazaspiro[4.5]dec-2-ene-4-carboxylate (4n):**

$^1\text{H}$  NMR (250.13 MHz,  $\text{CDCl}_3$ )



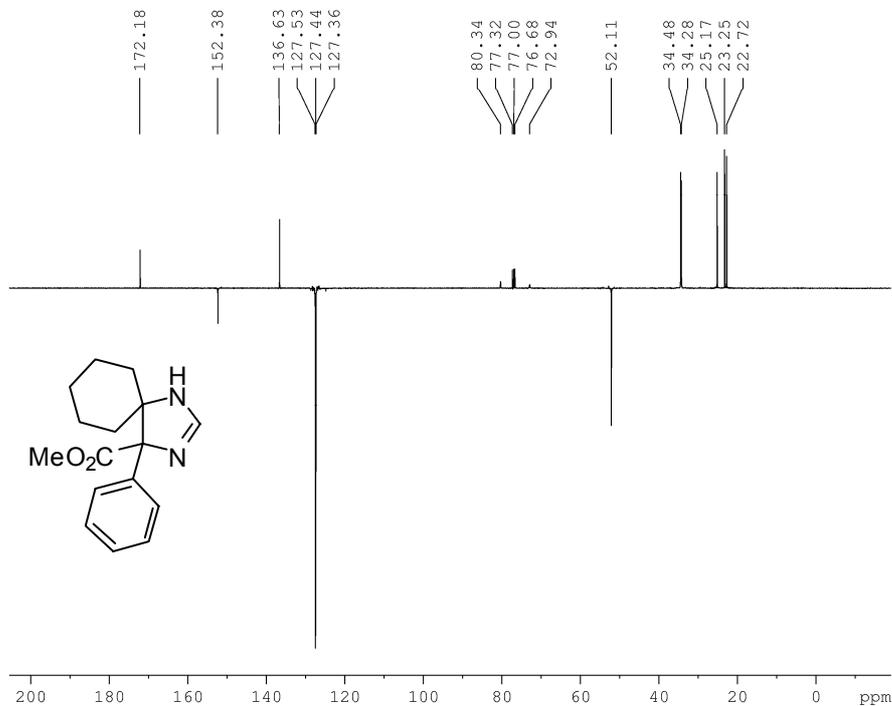
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Current Data Parameters
NAME      NEL-B-296A
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters:
Date_    20070923
Time     13.56
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.363 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       256
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters:
SI       32768
SF       250.1300123 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

$^{13}\text{C}\{^1\text{H}\}$  NMR (100.62 MHz,  $\text{CDCl}_3$ )



```
Current Data Parameters
NAME      NEL-B-296A
EXPNO    1
PROCNO   1

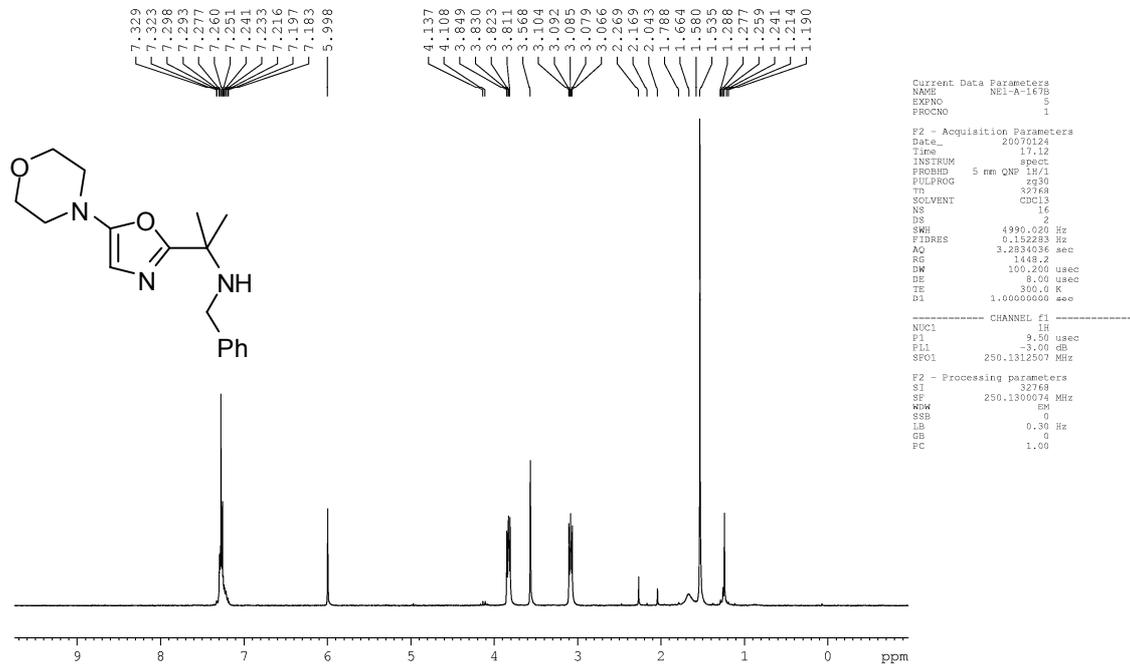
F2 - Acquisition Parameters:
Date_    20070928
Time     16.30
INSTRUM  spect
PROBHD   5 mm Multinucl
PULPROG  jmod_1001
TD       65536
SOLVENT  CDCl3
NS       15360
DS       4
SWH      23980.814 Hz
FIDRES   0.365918 Hz
AQ       1.3664756 sec
RG       7298.2
DW       26.850 usec
DE       6.00 usec
TE       300.4 K
CNS12    145.0000000
CNS111   1.0000000
D1       2.59999990 sec
d20      0.00689655 sec
DELTA    0.00001617 sec
L4       15
TDO      1

===== CHANNEL f1 =====
NUC1     13C
P1       12.70 usec
P2       25.40 usec
PL1      -6.00 dB
SFO1    100.6228298 MHz

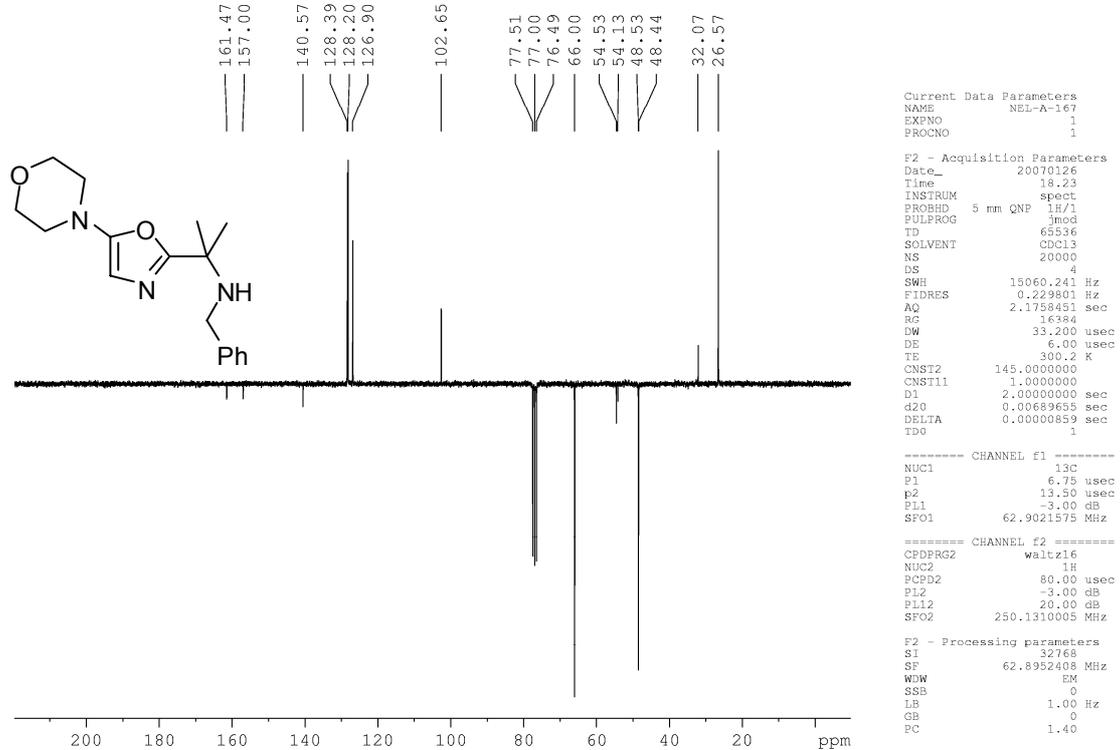
===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      0.00 dB
PL12     22.21 dB
SFO2    400.1316005 MHz

F2 - Processing parameters:
SI       65536
SF       100.6127880 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**N-benzyl-2-(5-morpholinooxazol-2-yl)propan-2-amine (5a):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)

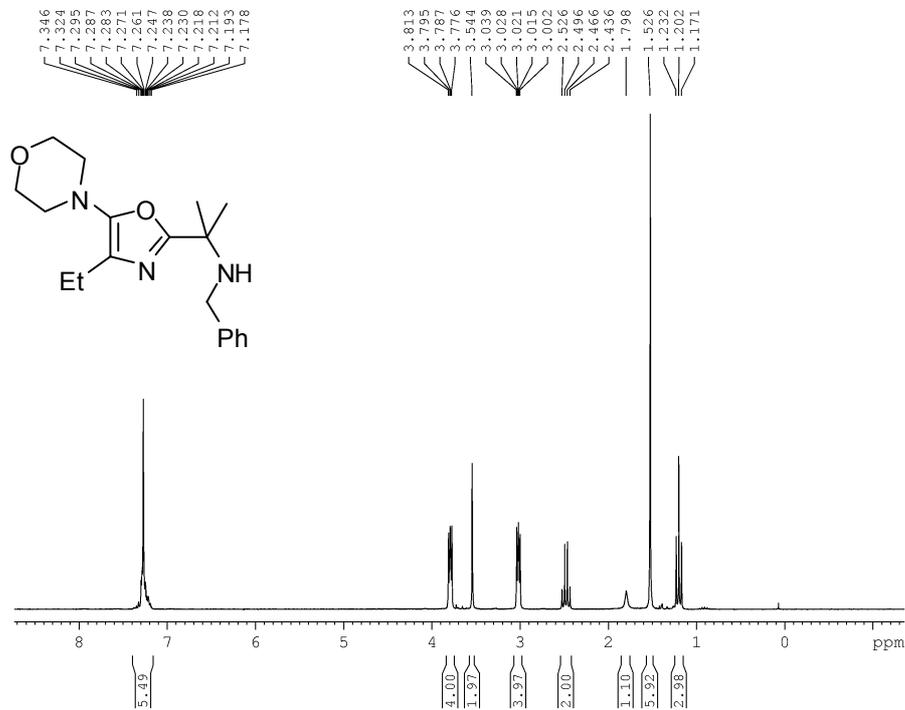


<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



**N-benzyl-2-(4-ethyl-5-morpholinooxazol-2-yl)propan-2-amine (5b):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



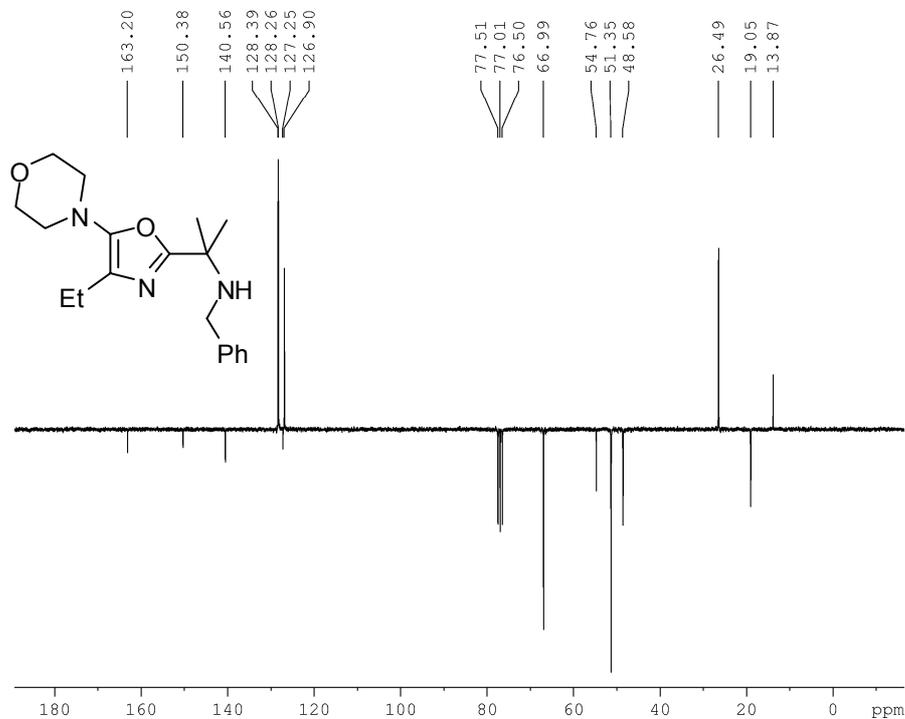
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Current Data Parameters
NAME      NEL-B-280B
EXPNO    2
PROCNO   1

F2 - Acquisition Parameters
Date_    20070726
Time     10.13
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       812.7
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300122 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-280B
EXPNO    3
PROCNO   1

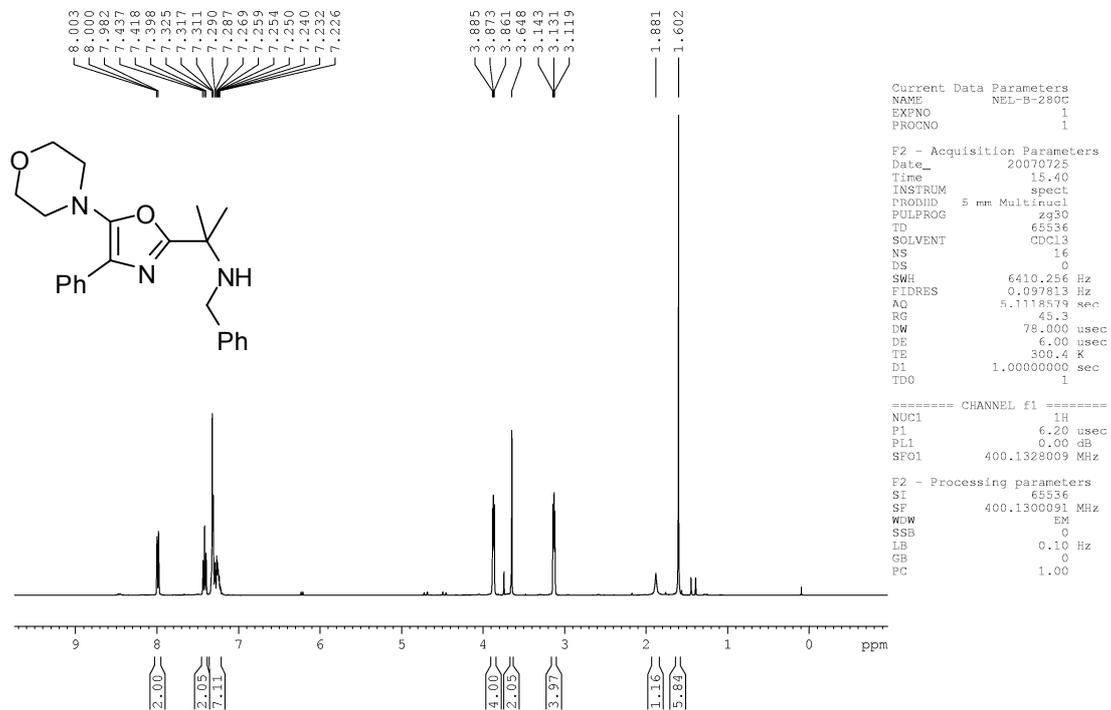
F2 - Acquisition Parameters
Date_    20070726
Time     17.22
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod1001
TD       65536
SOLVENT  CDCl3
NS       7168
DS       4
SWH      15060.241 Hz
FIDRES   0.229801 Hz
AQ       2.1758451 sec
RG       5160.6
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.31999993 sec
d20     0.00609655 sec
DELTA    0.00000859 sec
L4       7
TDO      1

===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2      13.50 usec
PL1     -3.00 dB
SFO1    62.9015260 MHz

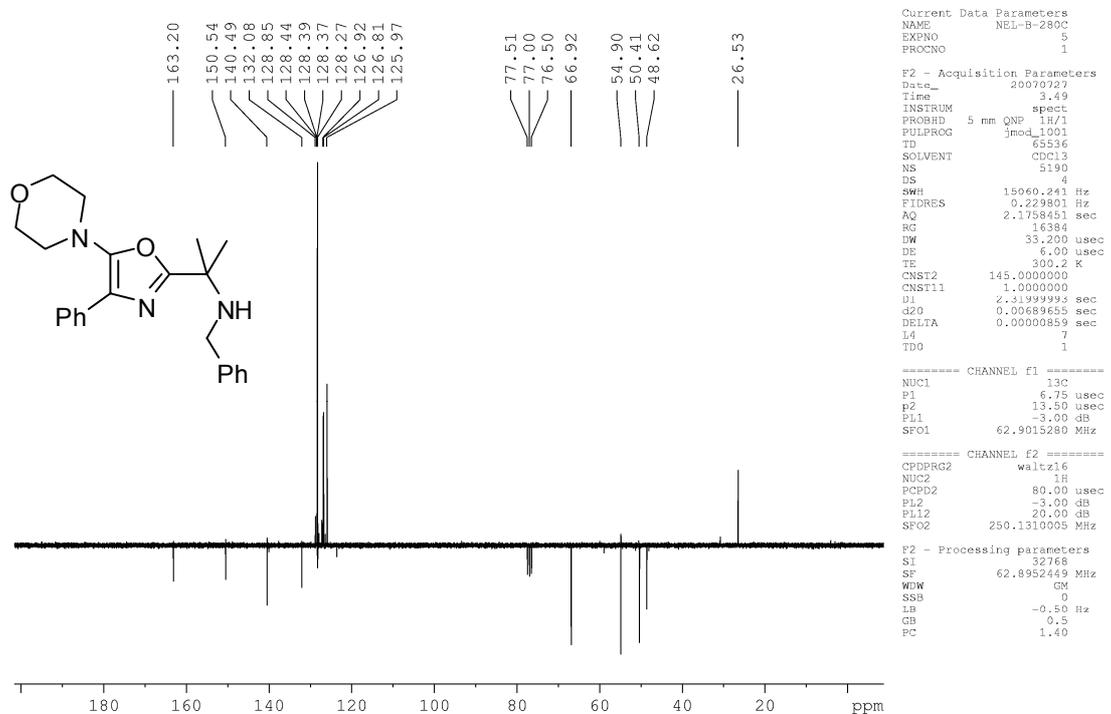
===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     -3.00 dB
PL12    20.00 dB
SFO2    250.1310005 MHz

F2 - Processing parameters
SI       32768
SF       62.8952420 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**N-benzyl-2-(5-morpholino-4-phenyloxazol-2-yl)propan-2-amine (5c):**  
<sup>1</sup>H NMR (400.13 MHz, CDCl<sub>3</sub>)

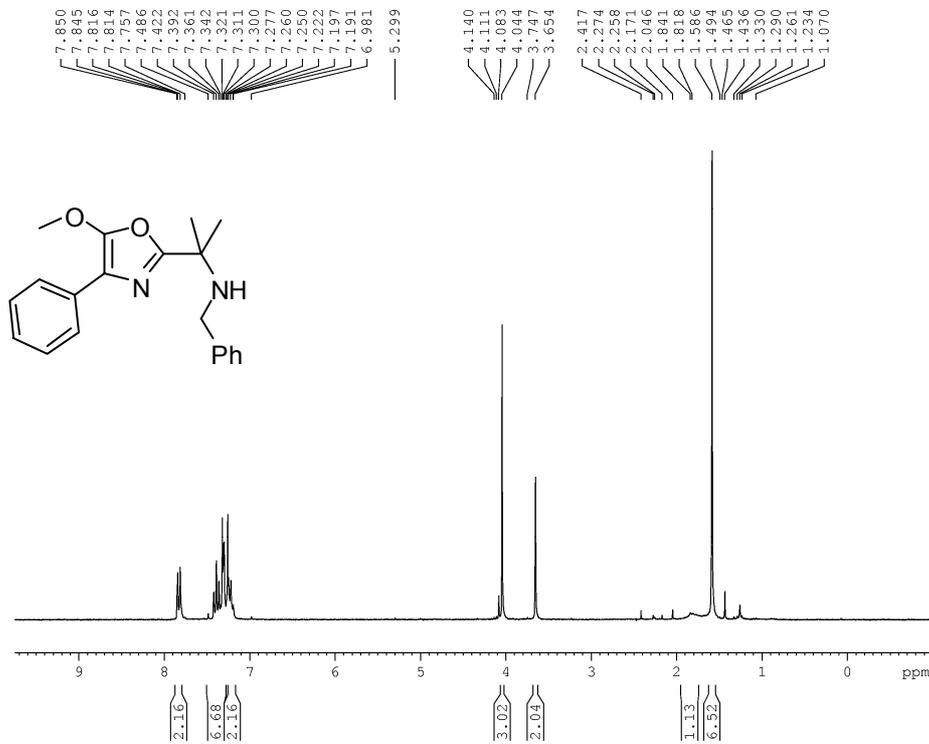


<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



**N-benzyl-2-(5-methoxy-4-phenyloxazol-2-yl)propan-2-amine (5d):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



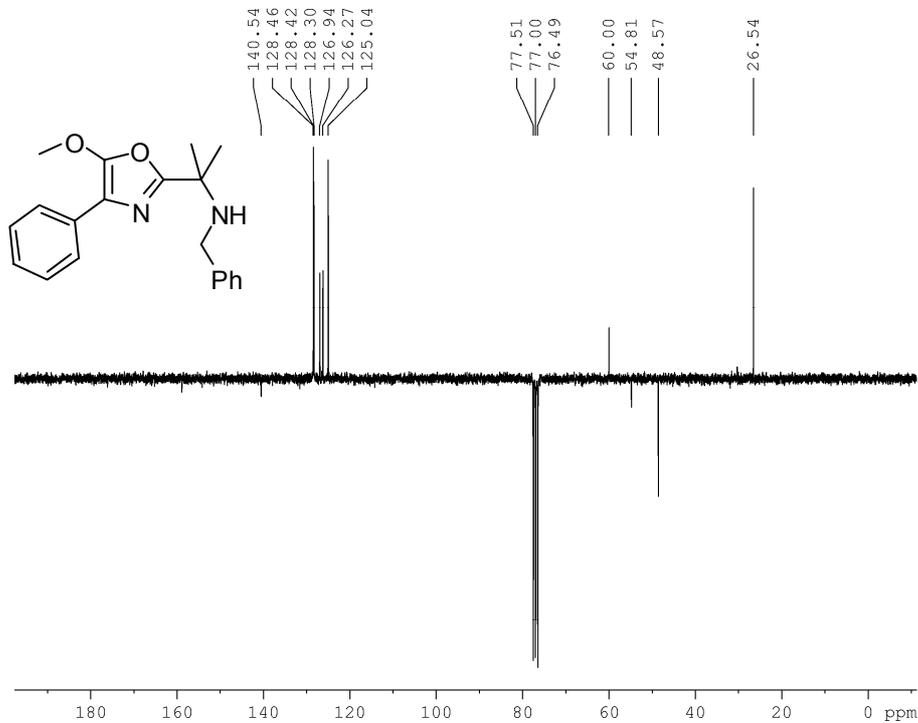
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Current Data Parameters
NAME      NEL-A-149A
EXPNO    6
PROCNO   1

F2 - Acquisition Parameters
Date_    20061108
Time     12.59
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      4990.020 Hz
FIDRES   0.152283 Hz
AQ       3.2834036 sec
RG       1625.5
DW       100.200 usec
DE       8.00 usec
TE       300.0 K
D1       1.0000000 sec

----- CHANNEL f1 -----
NUC1     1H
P1       9.50 usec
PL1     -1.00 dB
SFO1    250.1312507 MHz

F2 - Processing parameters
SI       32768
SF       250.1300074 MHz
WDW      EM
SSB      0
LB       0.30 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-A-149A
EXPNO    7
PROCNO   1

F2 - Acquisition Parameters
Date_    20061108
Time     18.33
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod1001
TD       65536
SOLVENT  CDCl3
NS       13049
DS       4
SWH      15723.271 Hz
FIDRES   0.233918 Hz
AQ       2.0840348 sec
RG       14596.5
DW       31.800 usec
DE       8.00 usec
TE       300.0 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.0000000 sec
d13      0.0000300 sec
d20      0.0068965 sec
DELTA    0.0000859 sec
L4       15

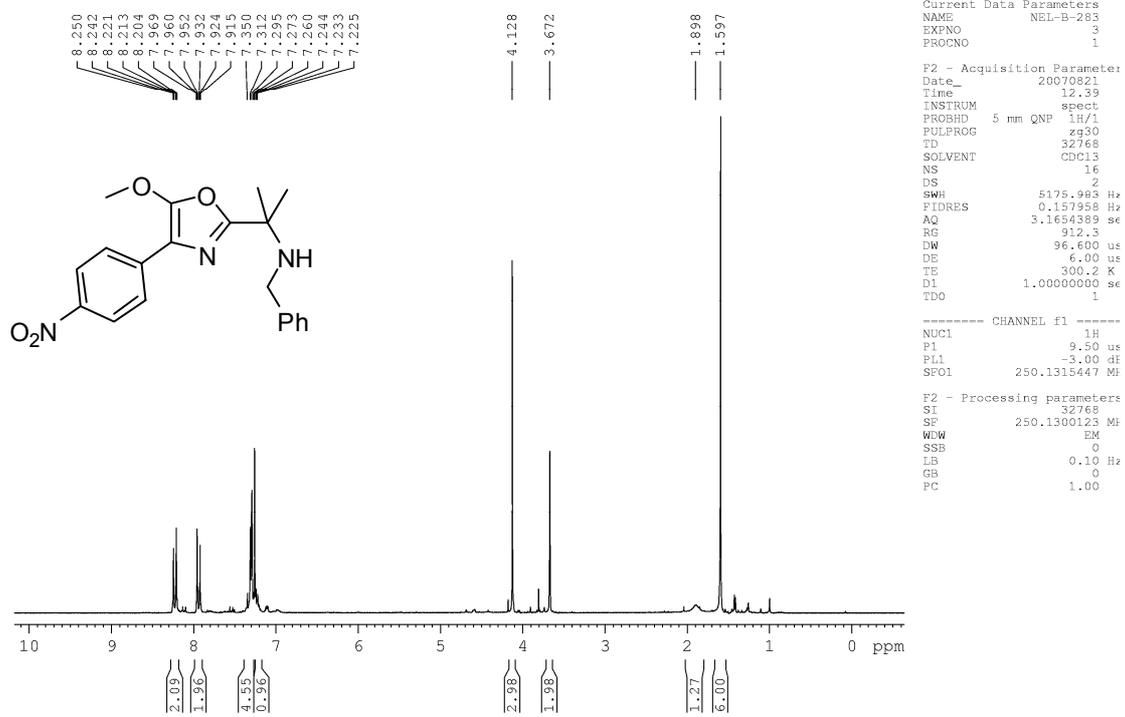
----- CHANNEL f1 -----
NUC1     13C
P1       6.75 usec
P2      13.50 usec
PL1     -1.00 dB
SFO1    62.9021320 MHz

----- CHANNEL f2 -----
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     -1.00 dB
PL12     20.00 dB
SFO2    250.1310005 MHz

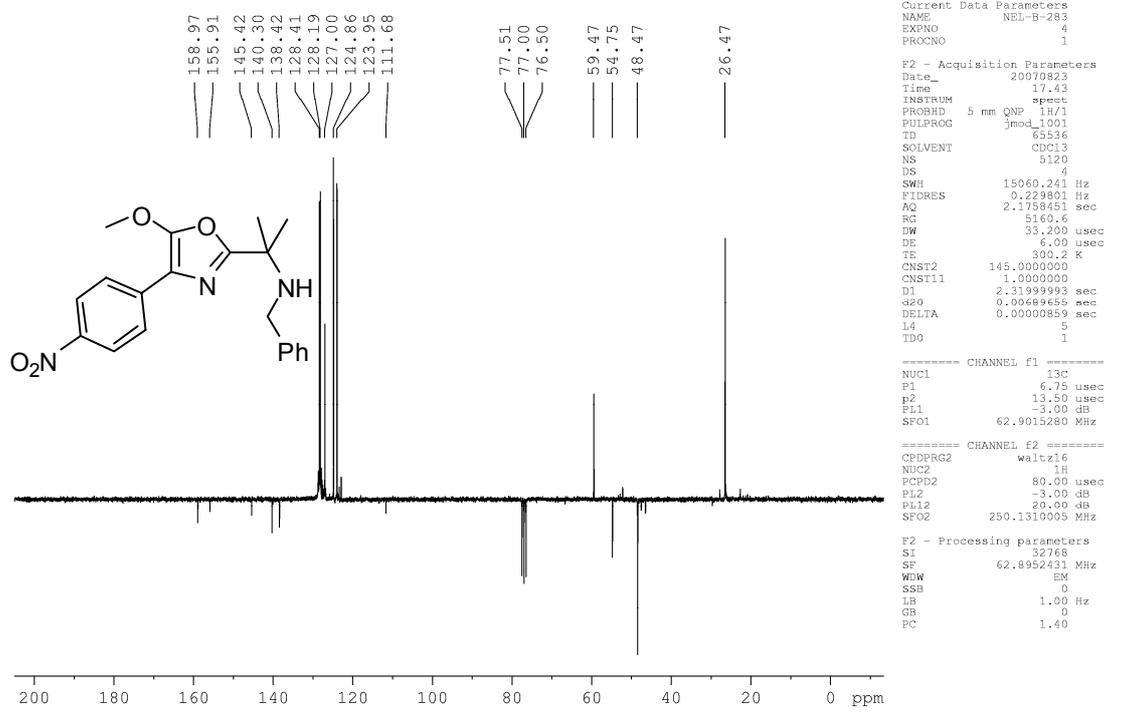
F2 - Processing parameters
SI       65536
SF       62.8952397 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**N-benzyl-2-(5-methoxy-4-(4-nitrophenyl)oxazol-2-yl)propan-2-amine (5e):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



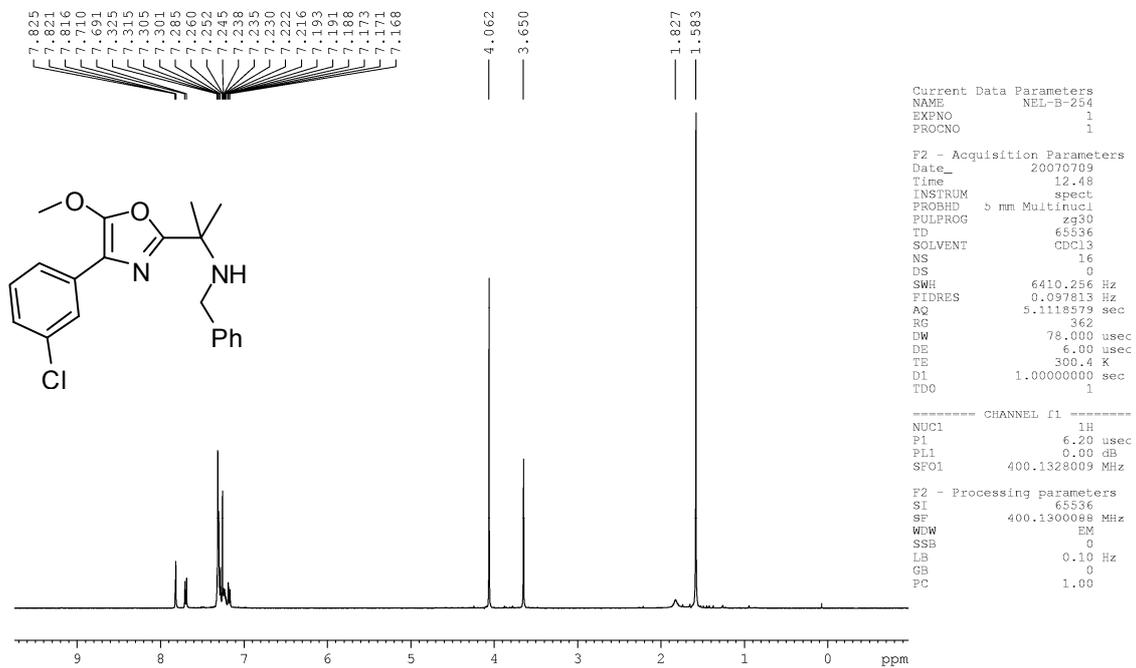
<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



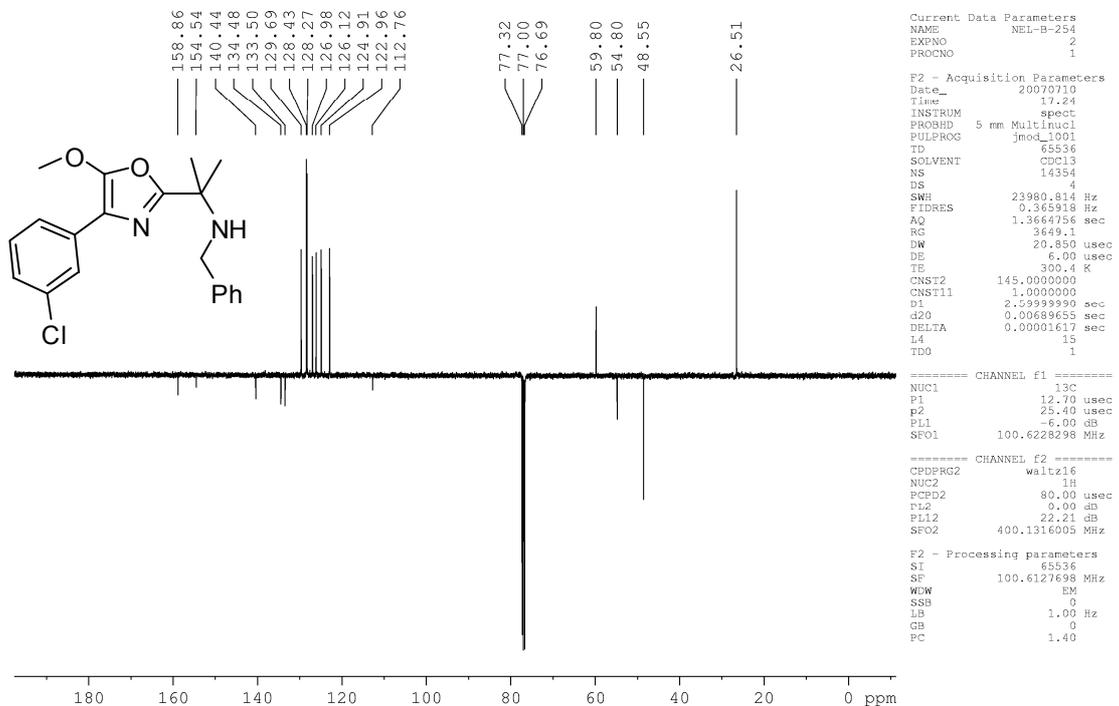


**N-benzyl-2-(4-(3-chlorophenyl)-5-methoxyoxazol-2-yl)propan-2-amine (5g):**

<sup>1</sup>H NMR (400.13 MHz, CDCl<sub>3</sub>)

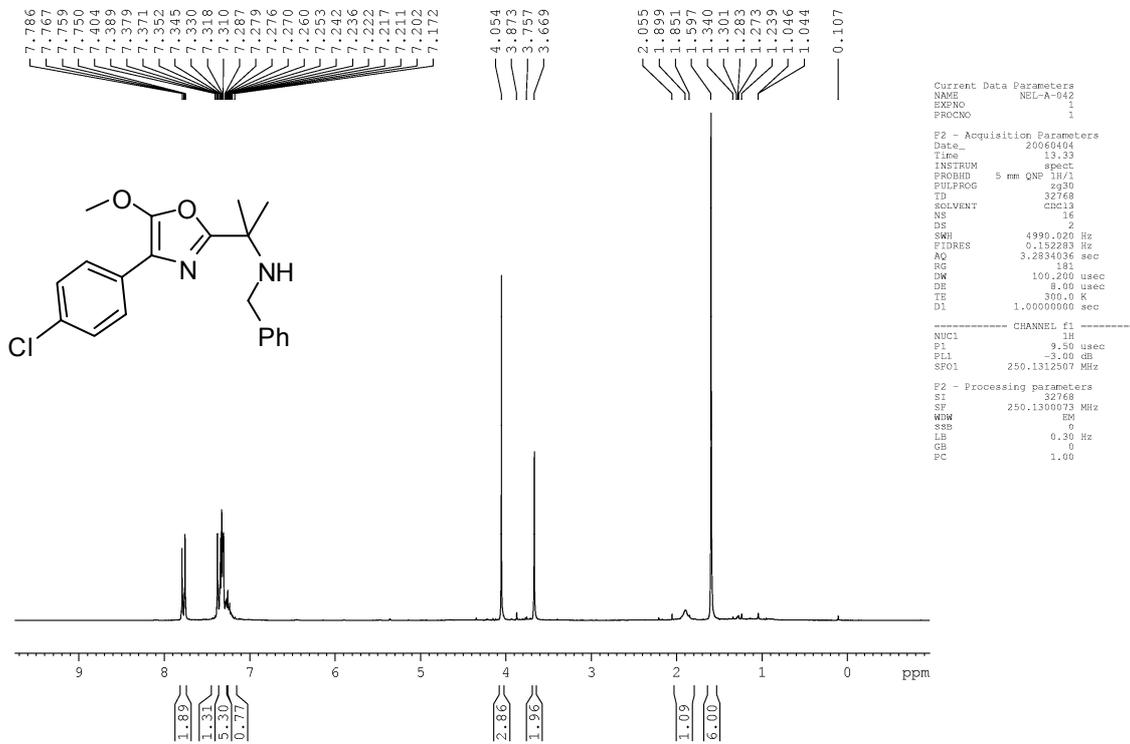


<sup>13</sup>C{<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)

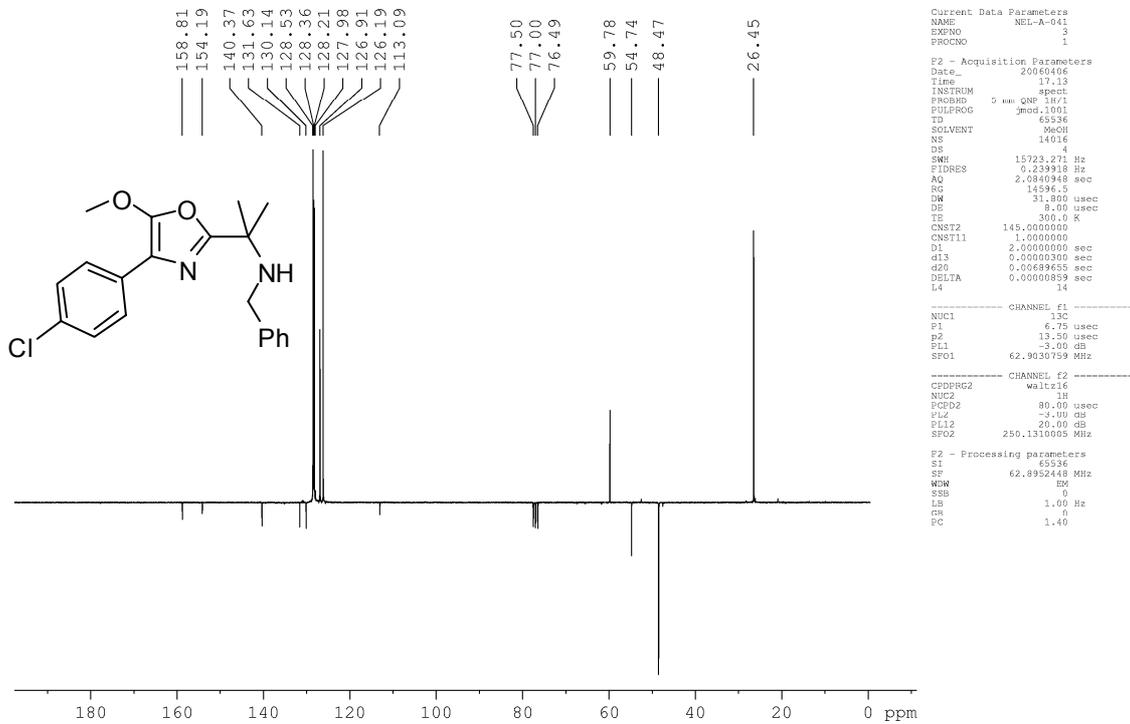


**N-benzyl-2-(4-(4-chlorophenyl)-5-methoxyoxazol-2-yl)propan-2-amine (5h):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)

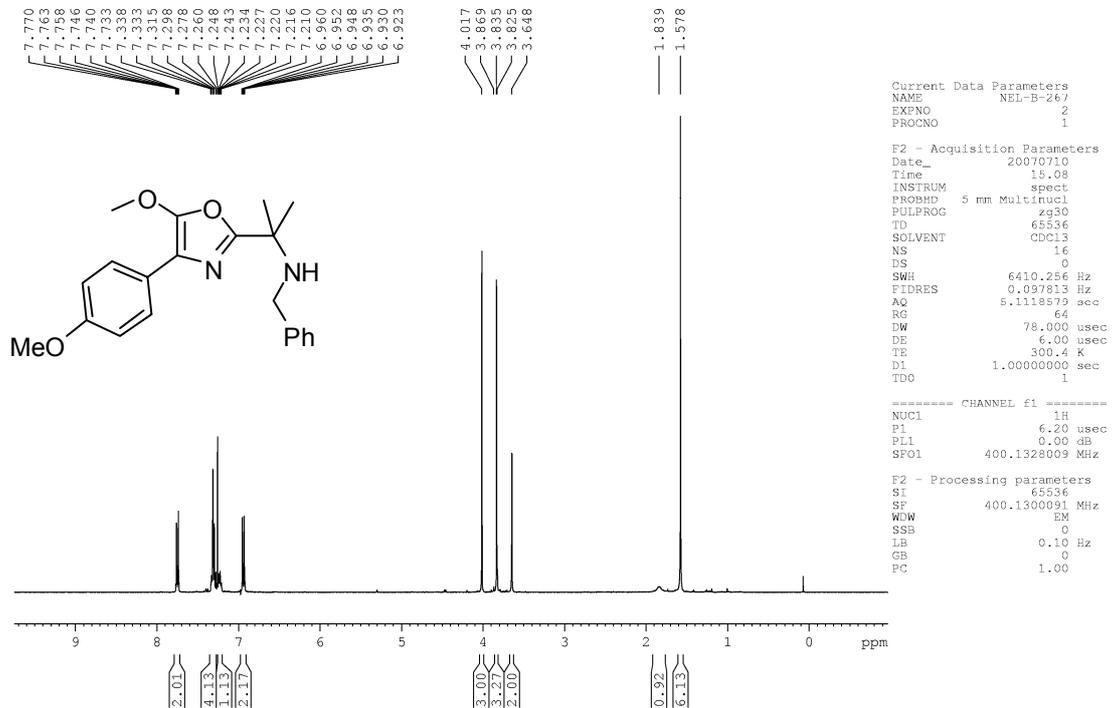


<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)

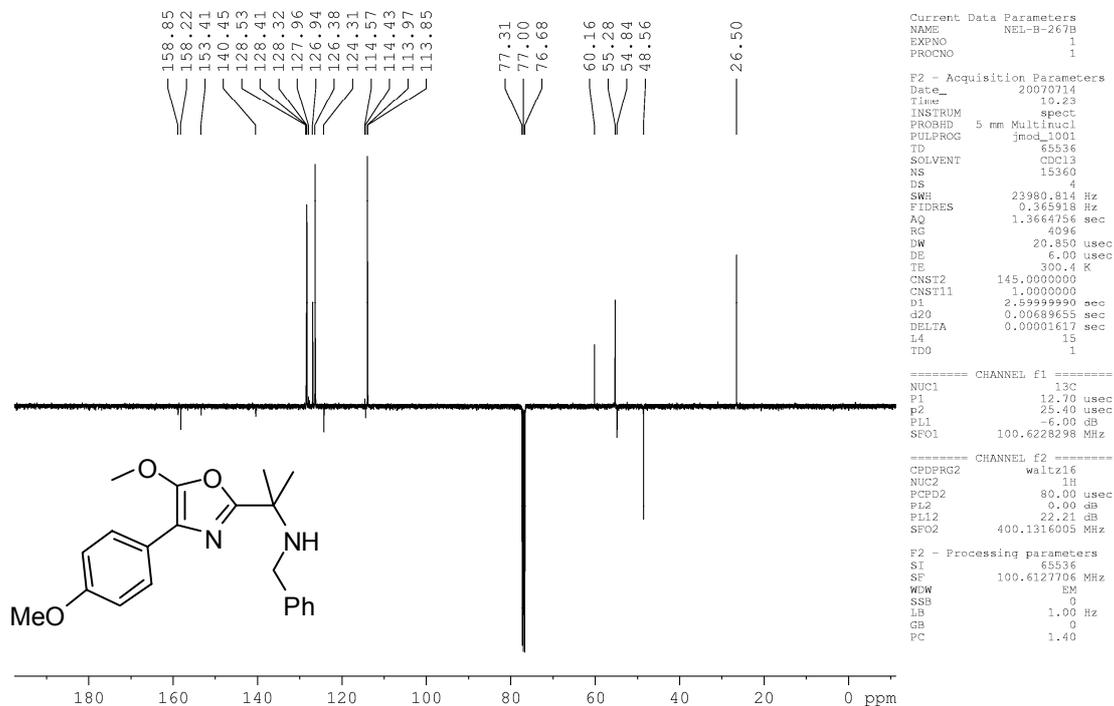


**N-benzyl-2-(4-(4-methoxyphenyl)-5-methoxyoxazol-2-yl)propan-2-amine (5i):**

<sup>1</sup>H NMR (400.13 MHz, CDCl<sub>3</sub>)

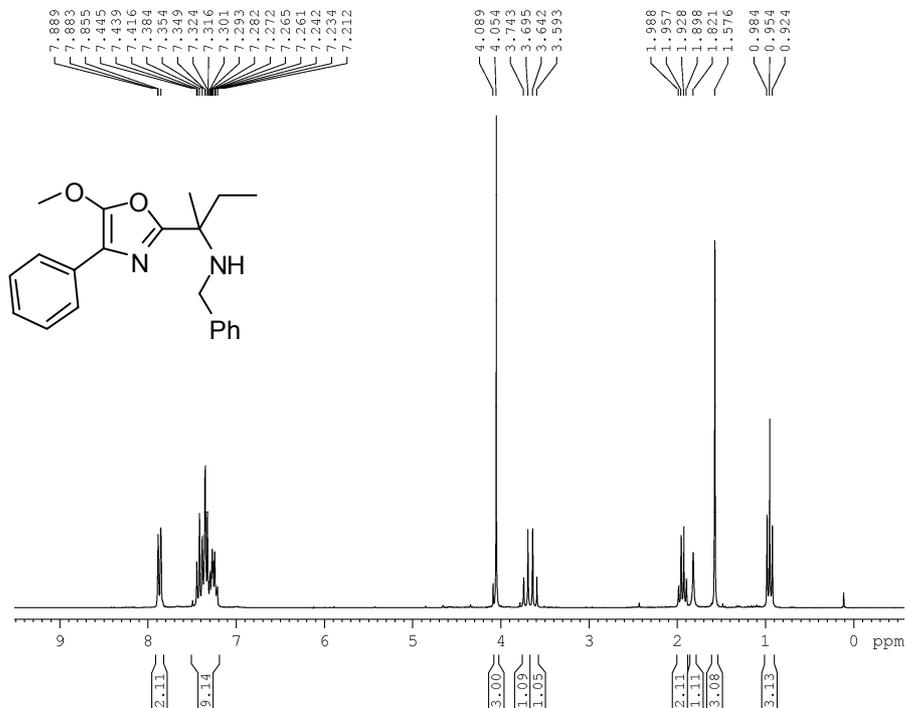


<sup>13</sup>C {<sup>1</sup>H} NMR (100.62 MHz, CDCl<sub>3</sub>)



**N-benzyl-2-(5-methoxy-4-phenyloxazol-2-yl)butan-2-amine (5l):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



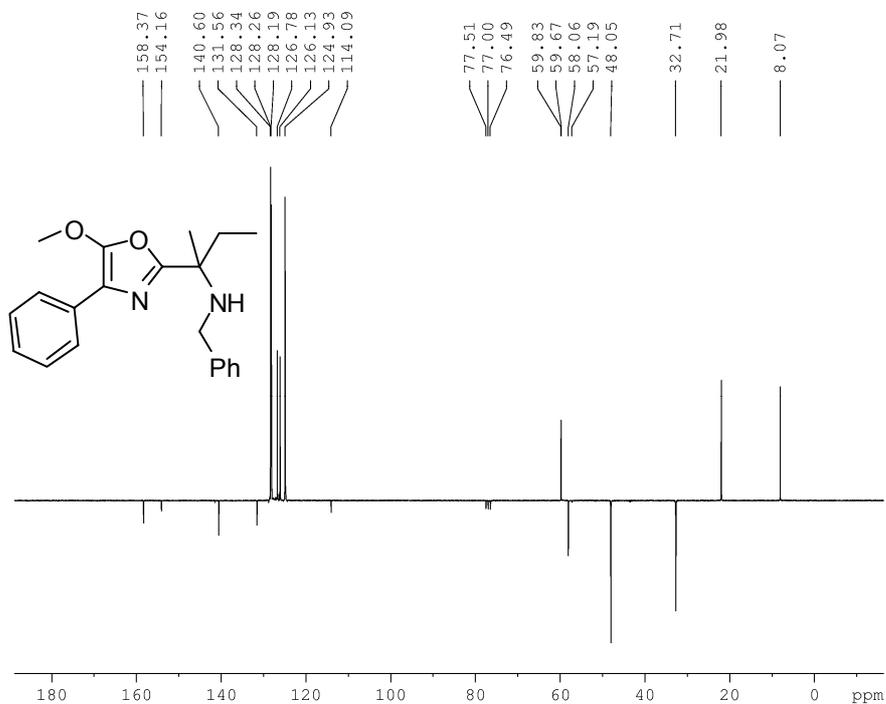
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Current Data Parameters
NAME      NEL-B-296A
EXPNO    2
PROCNO   1

F2 - Acquisition Parameters:
Date_    20071002
Time     13.01
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       203.2
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters:
SI       32768
SF       250.1300123 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-298A
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters:
Date_    20071003
Time     23.31
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG jmod_1001
TD       65536
SOLVENT  CDCl3
NS       3072
DS       4
SWH      15060.241 Hz
FIDRES   0.223801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.31999993 sec
g20      0.00689655 sec
DELTA    0.00000859 sec
L4       3
TDO      1

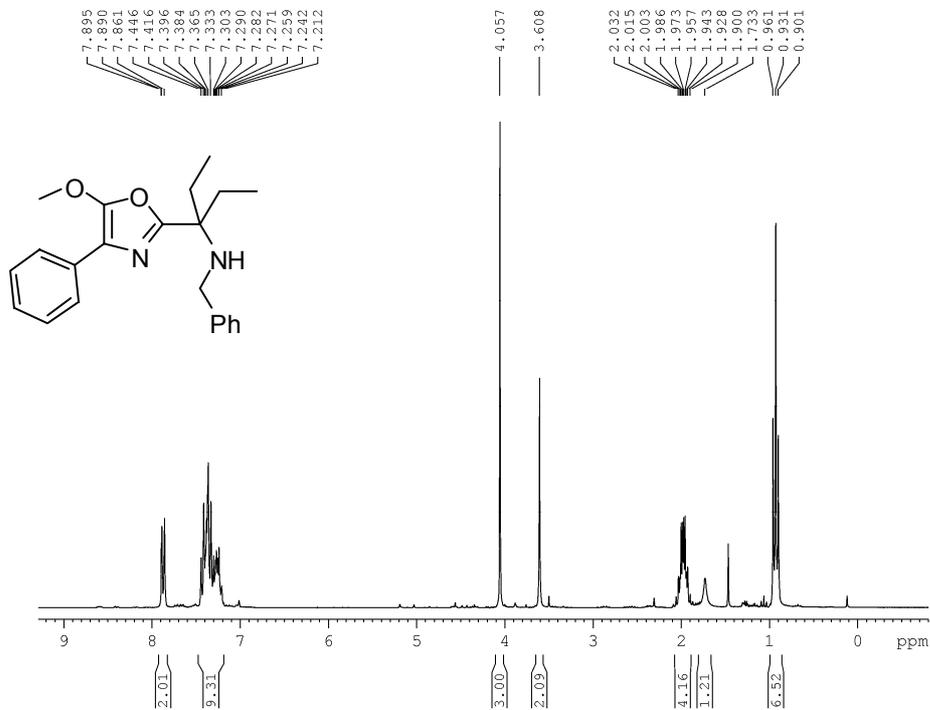
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2      13.50 usec
PL1     -3.00 dB
PL12    20.00 dB
SFO1    62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz216
NUC2     1H
PCPD2    80.00 usec
PL2     -3.00 dB
PL12    20.00 dB
SFO2    250.1310005 MHz

F2 - Processing parameters:
SI       32768
SF       62.8952537 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**N-benzyl-3-(5-methoxy-4-phenyloxazol-2-yl)pentan-3-amine (5m):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



```

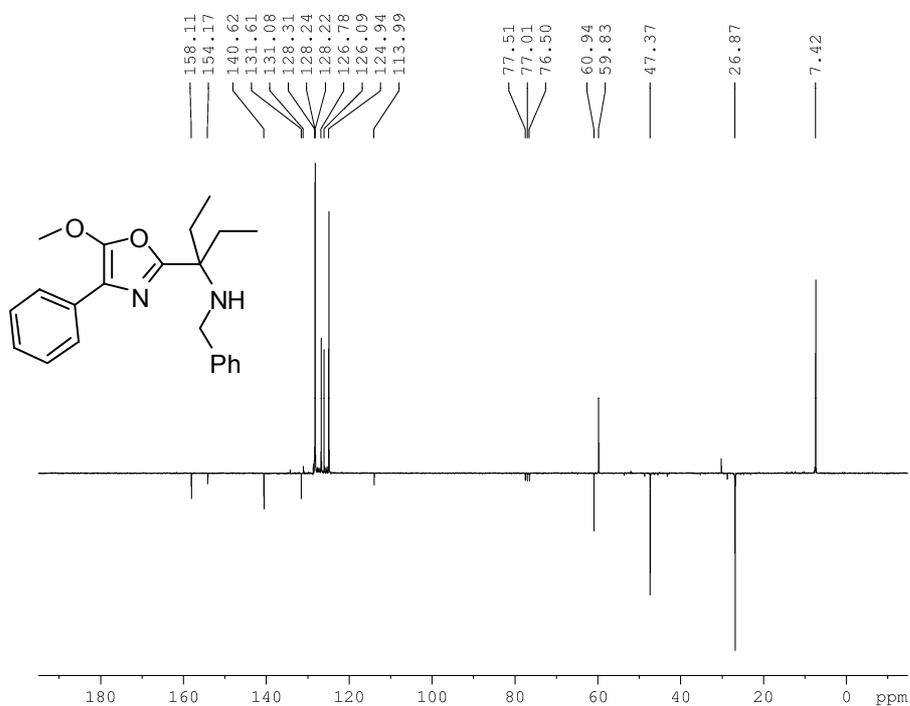
Current Data Parameters
NAME      NEL-B-298B
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters:
Date_    20071002
Time     14.51
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       181
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SF01    250.1315447 MHz

F2 - Processing parameters:
SI       32768
SF       250.1300123 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
    
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```

Current Data Parameters
NAME      NEL-B-298B
EXPNO    4
PROCNO   1

F2 - Acquisition Parameters:
Date_    20071004
Time     3.31
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod_1001
TD       65536
SOLVENT  CDCl3
NS       3072
DS       4
SWH      15060.241 Hz
FIDRES   0.229801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.31999993 sec
g20      0.00689655 sec
DELTA    0.00000859 sec
L4       3
TDO      1

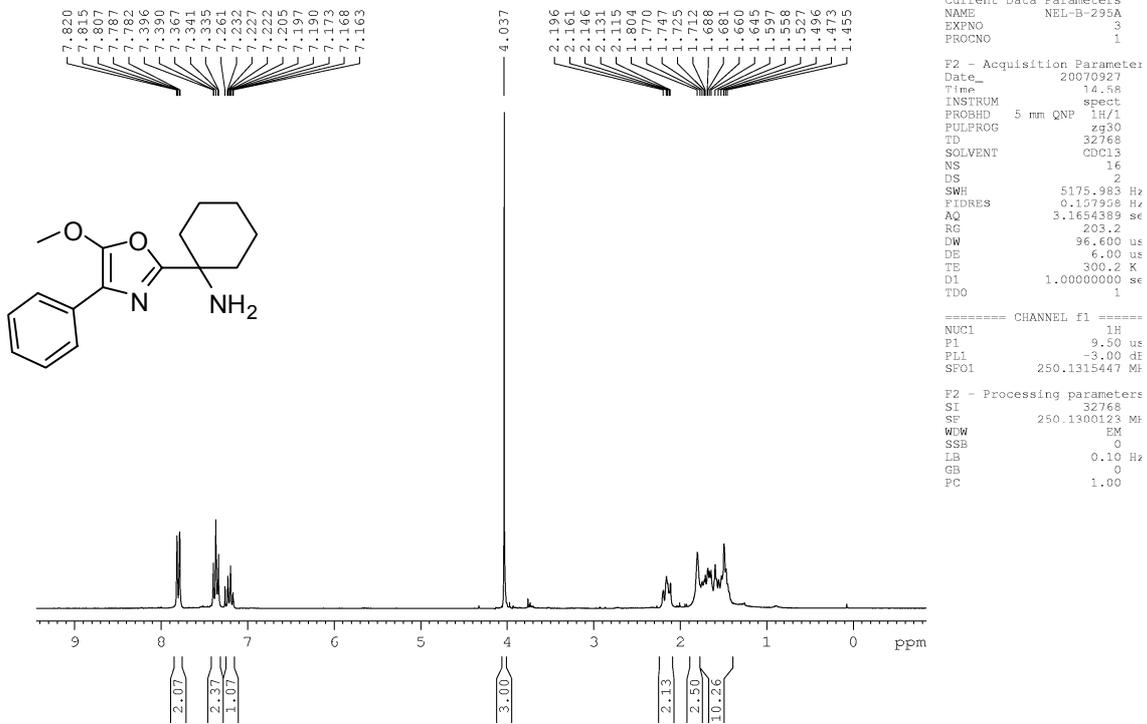
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2       13.50 usec
PL1     -3.00 dB
PL12    20.00 dB
SF01    62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     -3.00 dB
PL12    20.00 dB
SF02    250.1310005 MHz

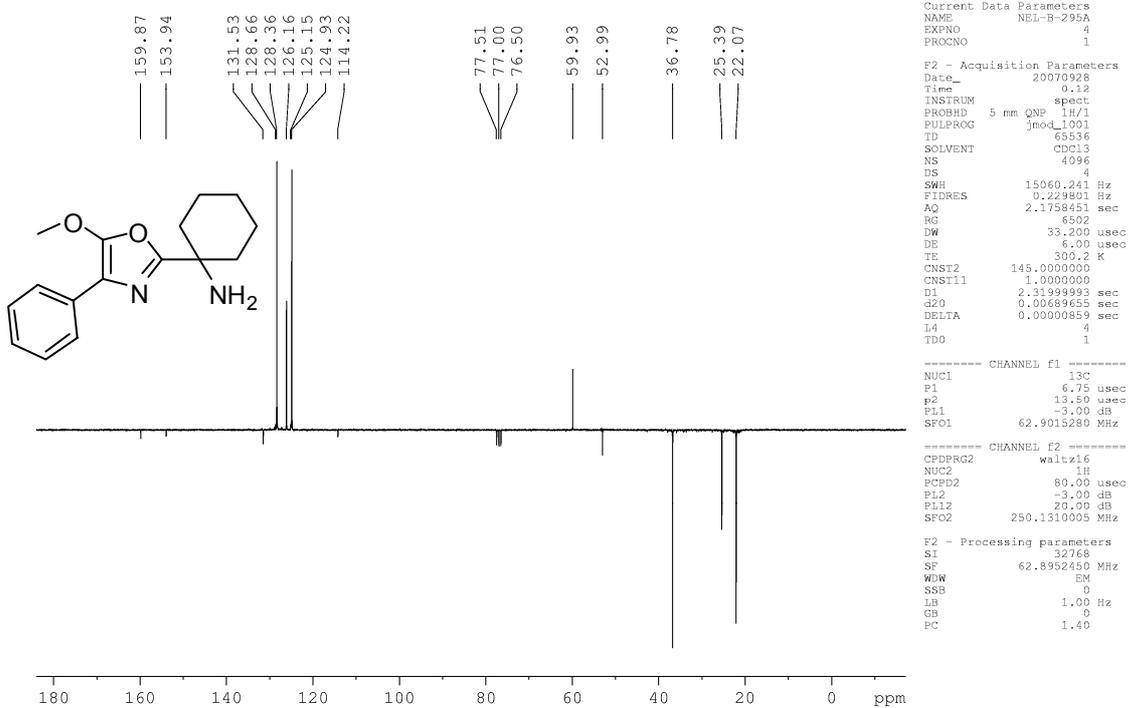
F2 - Processing parameters:
SI       32768
SF       62.8952549 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
```

**1-(5-methoxy-4-phenyloxazol-2-yl)cyclohexanamine (5n):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)

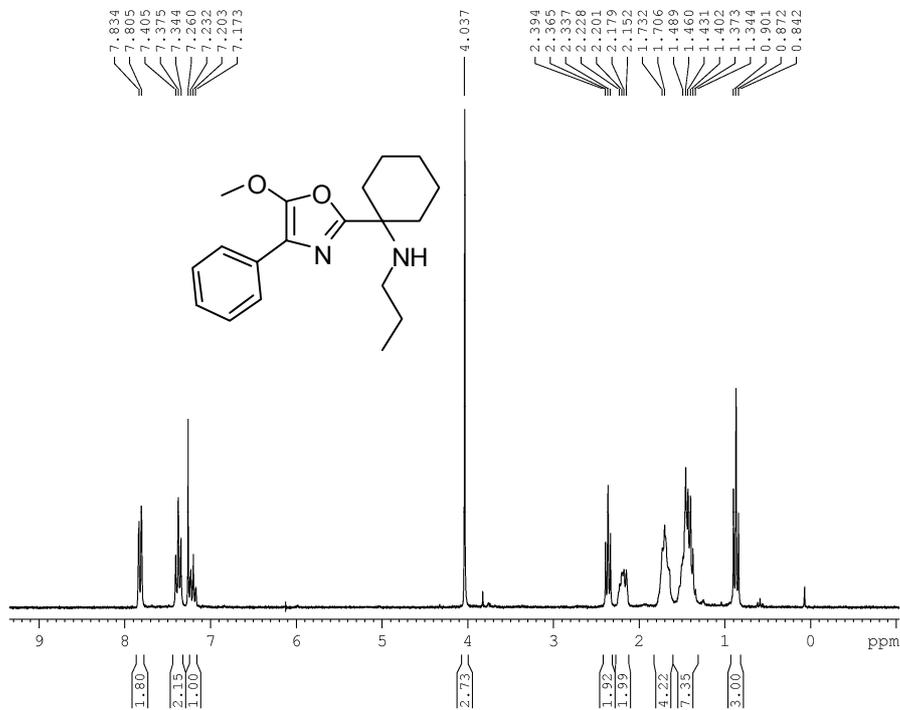


<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



**1-(5-methoxy-4-phenyloxazol-2-yl)-N-propylcyclohexanamine (5o):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



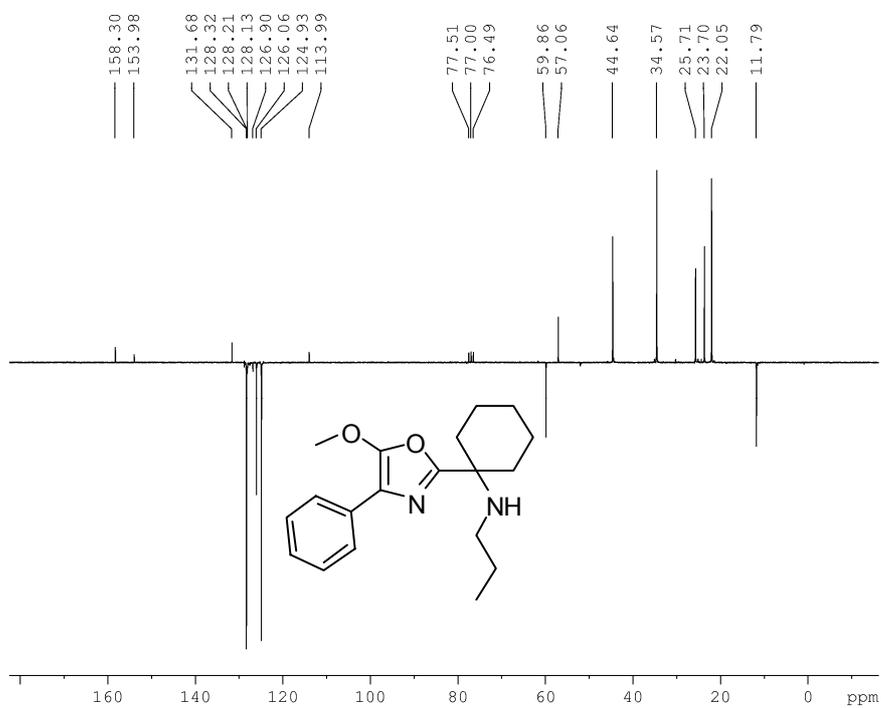
```
Current Data Parameters
NAME      NEL-B-295A
EXPNO    2
PROCNO   1

F2 - Acquisition Parameters:
Date_    20070926
Time     13.01
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.383 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       1448.2
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters:
SI       32768
SF       250.1300122 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-295A
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters:
Date_    20070927
Time     17.39
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  jmod1001
TD       65536
SOLVENT  CDCl3
NS       4096
DS       4
SWH      15060.241 Hz
FIDRES   0.223801 Hz
AQ       2.1758451 sec
RG       11585.2
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.3199993 sec
g20      0.00689655 sec
DELTA    0.00000859 sec
L4       4
TDO      1

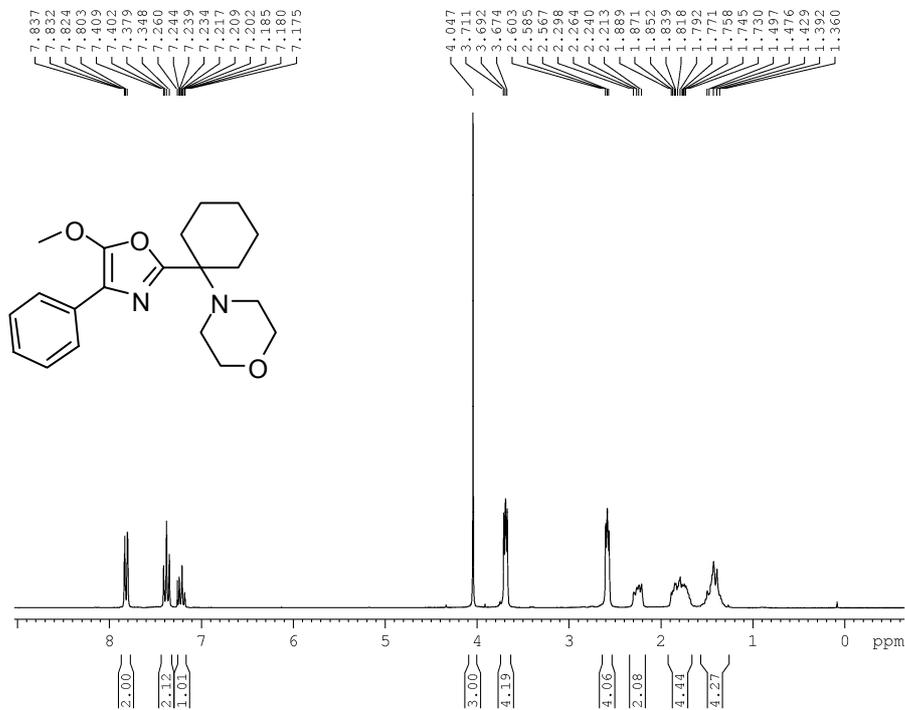
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2       13.50 usec
PL1     -3.00 dB
PL12    20.00 dB
SFO1    62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz216
NUC2     1H
PCPD2    80.00 usec
PL2     -3.00 dB
PL12    20.00 dB
SFO2    250.1310005 MHz

F2 - Processing parameters:
SI       32768
SF       62.8952468 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**4-(1-(5-methoxy-4-phenyloxazol-2-yl)cyclohexyl)morpholine (5p):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



```

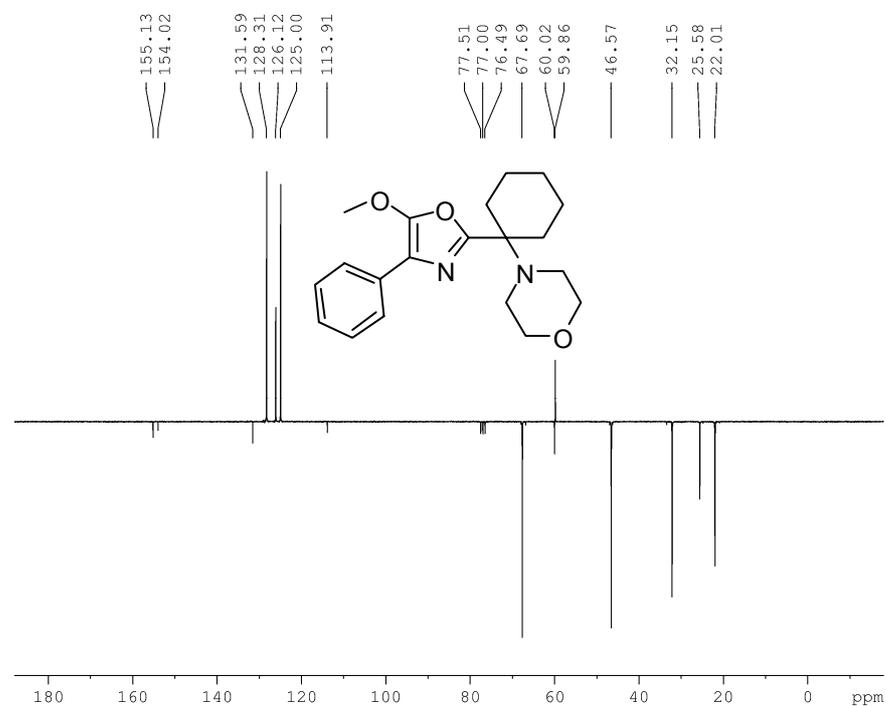
Current Data Parameters
NAME      NEL-B-295D
EXPNO    2
PROCNO   1

F2 - Acquisition Parameters:
Date_    20070927
Time     11.12
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.383 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       203.2
DW       96.600 us
DE       6.00 us
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 us
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters:
SI       32768
SF       250.1300123 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
    
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```

Current Data Parameters
NAME      NEL-B-295D
EXPNO    3
PROCNO   1

F2 - Acquisition Parameters:
Date_    20070928
Time     5.29
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG jmod_1001
TD       65536
SOLVENT  CDCl3
NS       3072
DS       4
SWH      15060.241 Hz
FIDRES   0.223801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.3199993 sec
g20      0.00689655 sec
DELTA    0.00000859 sec
L4       6
TDO      1

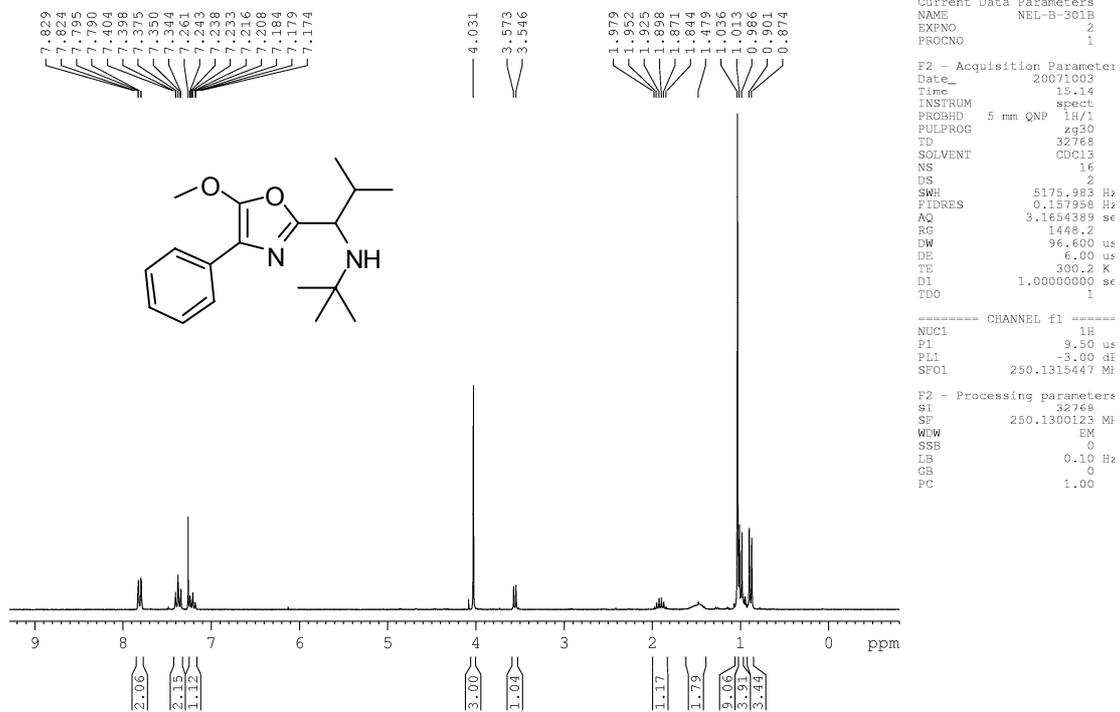
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2       13.50 usec
PL1     -3.00 dB
PL12    20.00 dB
SFO1    62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     -3.00 dB
PL12    20.00 dB
SFO2    250.1310005 MHz

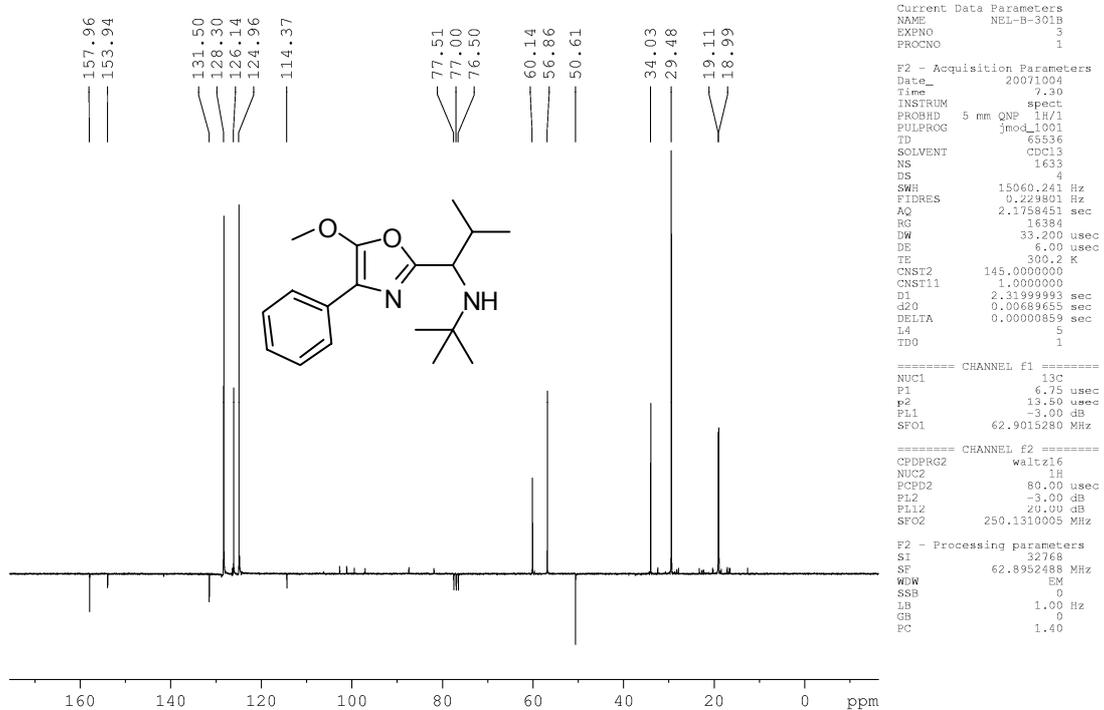
F2 - Processing parameters:
SI       32768
SF       62.8952484 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
    
```

**N-tert-butyl-1-(5-methoxy-4-phenyloxazol-2-yl)-2-methylpropan-1-amine (5q):**

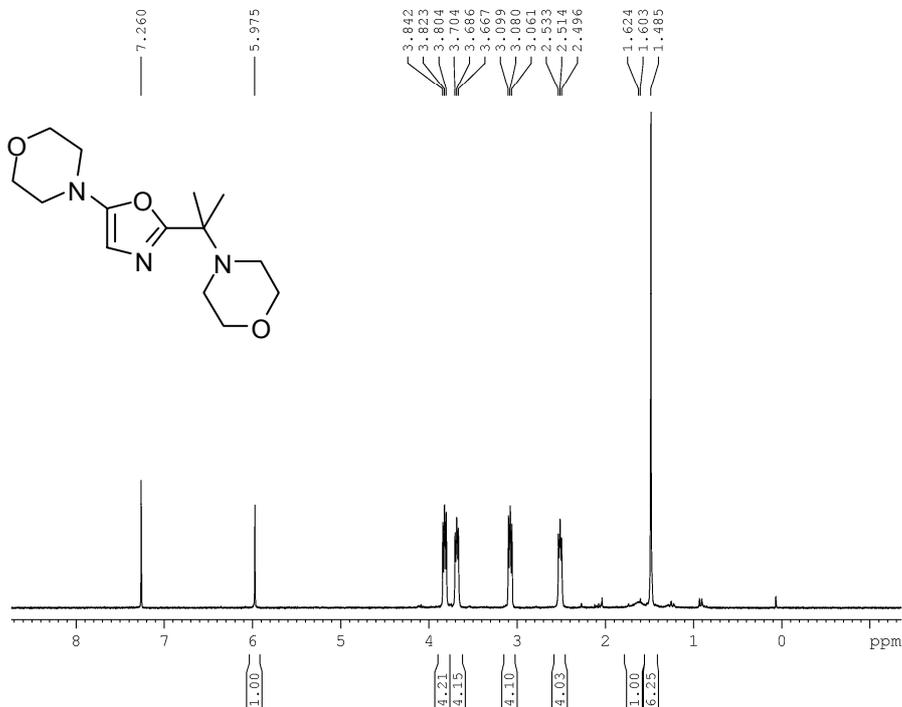
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



**4-(2-(5-morpholinooxazol-2-yl)propan-2-yl)morpholine (6):**  
<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



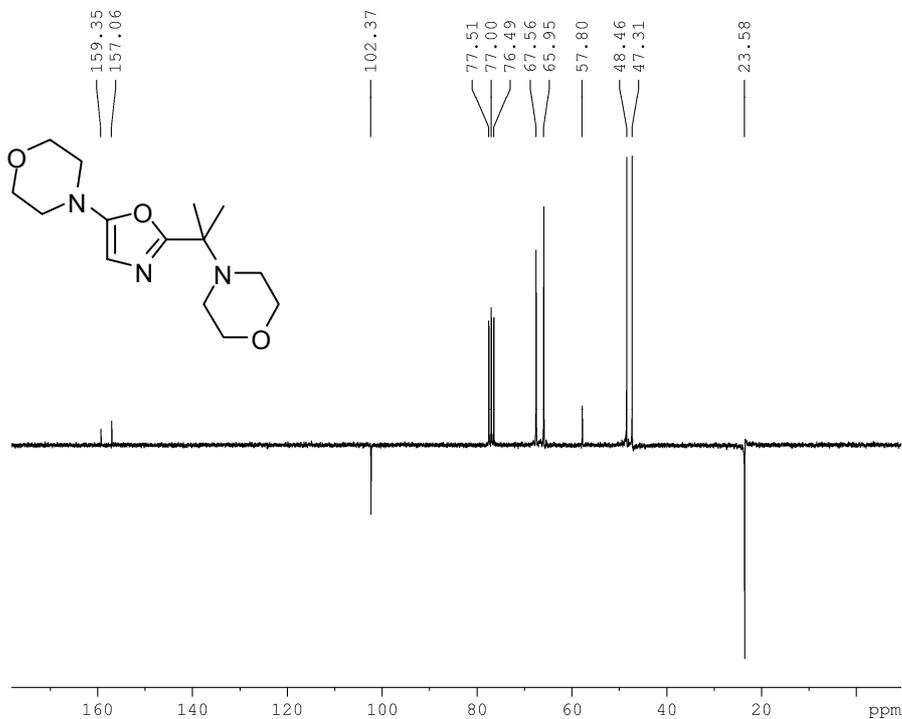
```
Current Data Parameters
NAME      NEL-B-279
EXPNO    2
PROCNO   1

F2 - Acquisition Parameters
Date_    20070719
Time     15.48
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157958 Hz
AQ       3.1654389 sec
RG       4096
DW       96.600 usec
DE       6.00 usec
TE       300.2 K
D1       1.00000000 sec
TDO      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 usec
PL1      -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300124 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-279
EXPNO    5
PROCNO   1

F2 - Acquisition Parameters
Date_    20070724
Time     17.31
INSTRUM spect
PROBHD   5 mm QNP 1H/1
PULPROG jmod_1001
TD       65536
SOLVENT  CDCl3
NS       12275
DS       4
SWH      15060.241 Hz
FIDRES   0.229801 Hz
AQ       2.1758451 sec
RG       16384
DW       33.200 usec
DE       6.00 usec
TE       300.2 K
CNST2    145.0000000
CNST11   1.0000000
D1       2.31999993 sec
d20      0.00609655 sec
DELTA    0.00000859 sec
L4       14
TDO      1

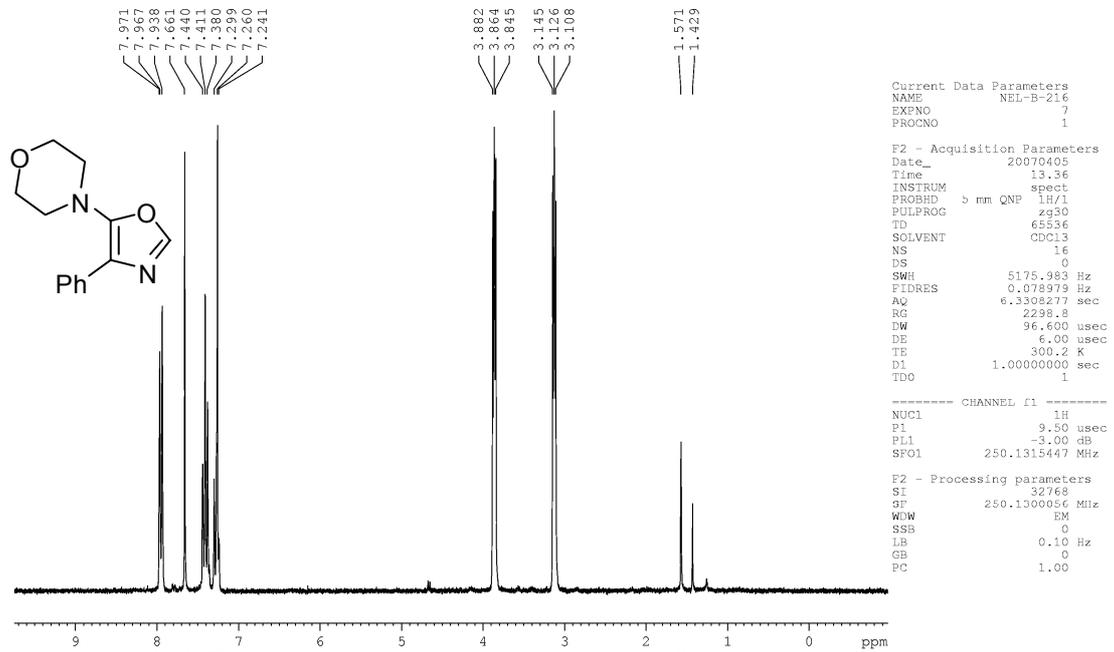
===== CHANNEL f1 =====
NUC1     13C
P1       6.75 usec
p2       13.50 usec
PL1      -3.00 dB
SFO1    62.9015280 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      -3.00 dB
PL12     20.00 dB
SFO2    250.1310005 MHz

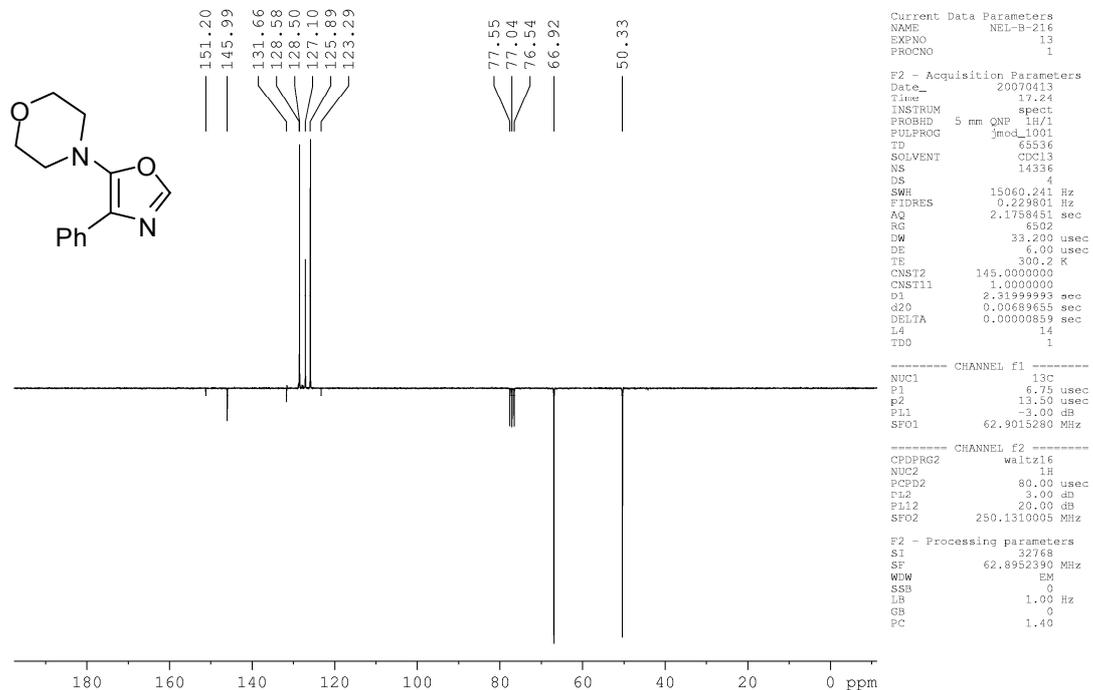
F2 - Processing parameters
SI       32768
SF       62.8952418 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```

**4-(4-phenyloxazol-5-yl)morpholine (7):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)

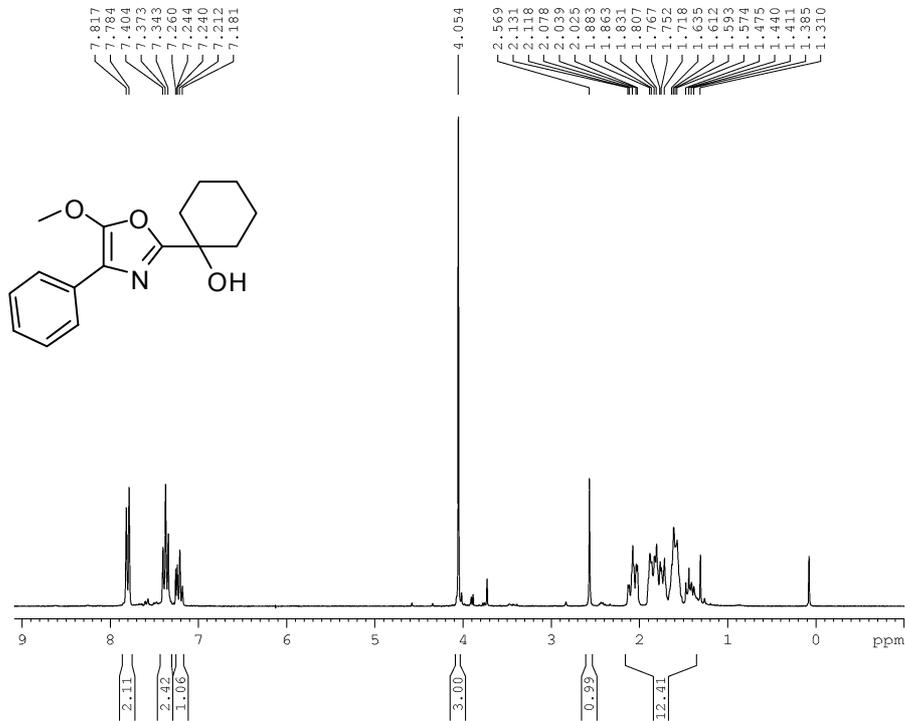


<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



**1-(5-methoxy-4-phenyloxazol-2-yl)cyclohexanol (8):**

<sup>1</sup>H NMR (250.13 MHz, CDCl<sub>3</sub>)



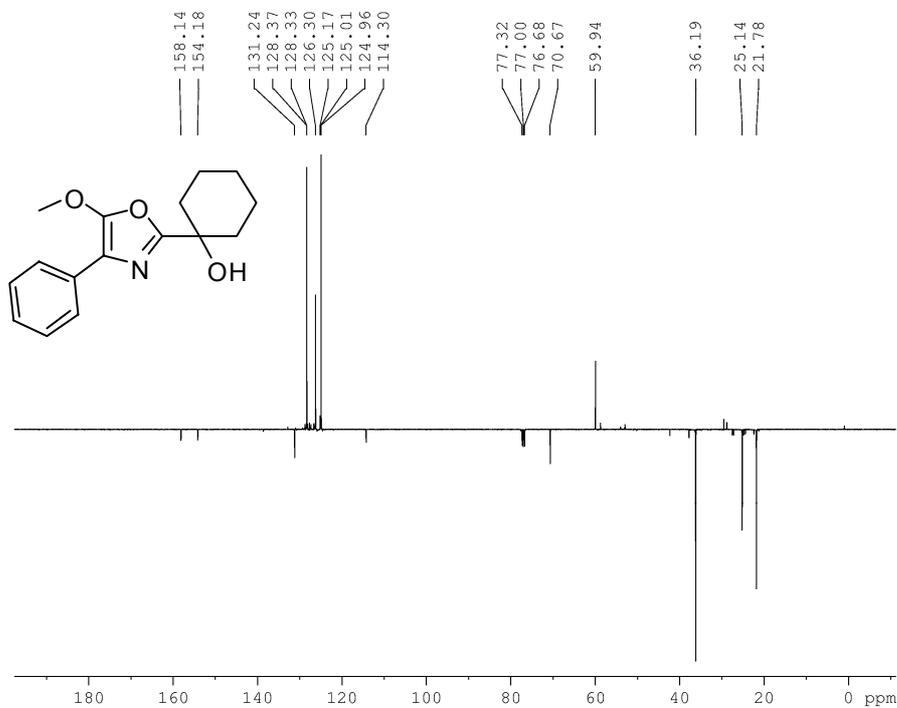
```
Current Data Parameters
NAME      NEL-B-295C
EXPNO    5
PROCNO   1

F2 - Acquisition Parameters
Date_    20071001
Time     13.20
INSTRUM  spect
PROBHD   5 mm QNP 1H/1
PULPROG  zg30
TD       32768
SOLVENT  CDCl3
NS       16
DS       2
SWH      5175.983 Hz
FIDRES   0.157458 Hz
AQ       3.1654389 sec
RG       362
DW       96.600 usec
DE       6.00 usec
TE       300.2 K
D1       1.00000000 sec
TDC      1

===== CHANNEL f1 =====
NUC1     1H
P1       9.50 usec
PL1     -3.00 dB
SFO1    250.1315447 MHz

F2 - Processing parameters
SI       32768
SF       250.1300122 MHz
WDW      EM
SSB      0
LB       0.10 Hz
GB       0
PC       1.00
```

<sup>13</sup>C{<sup>1</sup>H} NMR (62.90 MHz, CDCl<sub>3</sub>)



```
Current Data Parameters
NAME      NEL-B-295C
EXPNO    1
PROCNO   1

F2 - Acquisition Parameters
Date_    20071001
Time     16.16
INSTRUM  spect
PROBHD   5 mm Multinuc1
PULPROG  jmod_1001
TD       65536
SOLVENT  CDCl3
NS       15360
DS       4
SWH      23980.814 Hz
FIDRES   0.365918 Hz
AQ       1.3664756 sec
RG       7298.2
DW       20.850 usec
DE       6.00 usec
TE       300.4 K
CNST2    145.0000000
CNST11    1.0000000
D1       2.599999990 sec
a20      0.00689655 sec
DELTA    0.00001617 sec
L4       15
TDC      1

===== CHANNEL f1 =====
NUC1     13C
P1       12.70 usec
p2       25.40 usec
PL1     -6.00 dB
SFO1    100.6228298 MHz

===== CHANNEL f2 =====
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2     0.00 dB
PL12    22.21 dB
SFO2    400.1316005 MHz

F2 - Processing parameters
SI       65536
SF       100.6127766 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
```