Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Supporting Information

Epoxidation of Olefins Using Diaryltellurium Dicarboxylates

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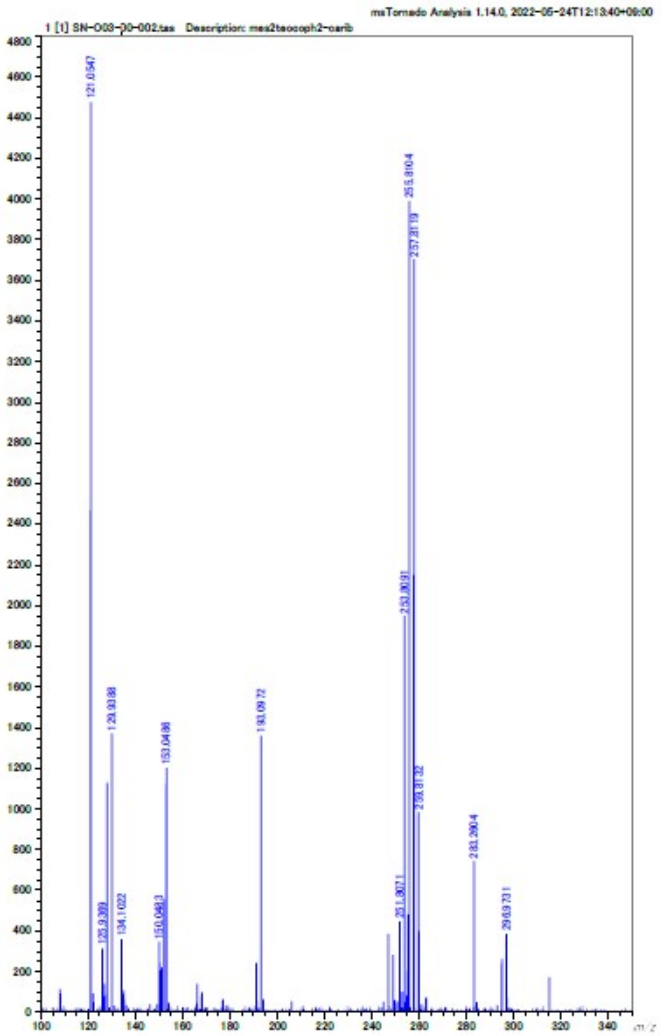
Observation of tellurium peroxide with a MALDI-TOF mass.



$Mes_2Te(OCOPh)_2$ (0.25 mmol)and UHP (1.25 mmol) were stirred in refluxing chloroform for 2 hours, and the resulting products were analyzed by MALDI-TOF mass. As a result, we observed a peak derived from tellurium peroxide including isotopic peak.

Experimental

General.

All reagents and chemicals received from commercial suppliers were of reagent grade and were used unmodified. NMR spectra were performed on Bruker Advance DRX 500 (^{1}H: 500 MHz, ^{13}C: 125 MHz,) spectrometers. Deuterated solvents used are indicated in each case. All of the chemical shifts are reported as δ values (ppm) relative to TMS (δ_H 0.00), the central peak of deuteriochloroform (δ_C 77.16 unless otherwise noted; J values are expressed in hertz. The mass analyses were performed using a JEOL JMS-S3000 SpiralTOF™ or JEOL AccuTOF LC-plus JMS-T100LP spectrometer. The courses of the reactions were monitored using TLC aluminum sheets with silica gel 60 F_{254} (Merck). The column chromatography was performed using CHROMATOREX PSQ 60B (FUJI SILYSIA CHEMICAL LTD.).

Procedure.

A solution of olefin (1.0 mmol), urea hydrogen peroxide (4.0 mmol), dimesityltellurium diacetate (0.1 mmol) in $CHCl_3$ (2 ml) were stirred for 12 hours under reflux conditions. After reaction the mixture was evaporated, and the product was isolated using column chromatography..

(±)-6, 7-epoxycitronellyl acetate (1b)

Yield: 0.2097g, (0.98 mmol, 98%); clear oil. ^{1}H NMR (500 MHz, $CDCl_3$): δ=0.93 (d, *J* =6.6, 3H), 1.27 (s, 3H), 1.31 (s, 3H), 1.36-1.73 (m, 7H), 2.05 (s, 3H), 2.70 (t, *J* =6.2, 1H), 4.06-4.16 (m, 2H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=18.7, 18.8, 19.3, 19.5, 21.1, 25.0, 26.4, 16.4, 29.8, 33.6, 35.4, 35.5, 58.3, 58.4, 62.9, 64.5, 64.6, 171.3. HRMS (ESI): m/z $[M + Na]^+$ calcd for $C_{10}H_{19}OAc$: 237.1462; found: 237.1460.

(±)-6, 7-epoxycitronellol (2b)

Yield: 0.1507 g, (0.87 mmol, 87%); clear oil. ^{1}H NMR (500 MHz, $CDCl_3$): δ=0.93 (d, *J* =6.6, 3H), 1.27 (s, 3H), 1.31 (s, 3H), 1.37-1.70 (m, 8H), 2.71 (t, *J* =6.2, 1H), 3.70 (m, 2H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=18.7, 18.8, 19.5, 19.7, 25.0, 26.3, 26.5, 29.3, 29.5, 33.8, 39.6, 39.9, 60.9, 64.8, 64.8. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_{10}H_{19}OH$: 195.1356; found: 195.1346.

1,2-epoxydodecane (3b)

Yield:0.1632g, (0.89mmol,88%); clear oil. ^{1}H NMR (500MHz, $CDCl_3$): δ=0.88 (t, *J*=6.9, 3H), 1.26-1.55 (m, 18H), 2.46 (dd, *J*=2.7, 5.0, 1H), 2.74 (m, 1H), 2.89-2.92 (m, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=14.2, 22.8, 26.1, 29.5, 29.6, 29.7, 29.7, 32.0, 32.6, 47.3, 52.5. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_{12}H_{23}O$: 207.1720; found: 207.1710.

2-methyl-hept-2-ene oxide (4b)

Yield: 0.1182g, (0.92 mmol, 92%); clear oil. ^{1}H NMR (500 MHz, $CDCl_3$): δ=0.92 (t, *J* =7.1, 3H), 1.26 (s, 3H), 1.31 (s, 3H), 1.35-1.57 (m, 6H), 2.71 (t, *J* =6.0, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=14.2, 18.9, 22.7, 25.1, 28.7, 28.8, 58.4, 64.7. HRMS

(DART): m/z $[M+H]^+$ calcd for $C_8H_{16}O$: 129.1274; found: 129.1275.

cyclohexene oxide (5b)

Yield: 0.0836g, (0.86 mmol, 86%); clear oil. ^1H NMR (500 MHz, $CDCl_3$): δ=1.20-1.27 (m, 2H), 1.39-1.46 (m, 2H), 1.78-1.85 (m, 2H), 1.92-1.98 (m, 2H), 3.12-3.13 (m, 2H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=19.5, 24.5, 52.3. HRMS (DART): m/z $[M+H]^+$ calcd for $C_6H_{10}O$: 99.0805; found: 99.0790.

cyclooctene oxide (6b)

Yield: 0.1012g, (0.80 mmol, 80%); white solid. m. p.=44-50 °C ^1H NMR (500 MHz, $CDCl_3$)：δ=1.26-1.29 (m, 2H), 1.42-1.65 (m, 8H), 2.13 (m), 2.89 (m, 2H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=25.7, 26.4, 26.6, 55.7. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_8H_{14}O$: 149.0937; found: 149.0936.

2-methyl-1-oxaspiro[2.5]octane (7b)

Yield: 0.1161g, (0.95 mmol, 95%); clear oil. ^1H NMR (500 MHz, $CDCl_3$): δ=1.29 (d, *J*=5.6, 3H), 1.28-1.57 (m, 8H), 1.70-1.75 (m, 2H), 2.84 (q, *J*=5.6, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=13.7, 25.0, 25.2, 25.9, 29.2, 35.7, 60.1, 62.8. HRMS (ESI): m/z $[M+H]^+$ calcd for $C_8H_{14}O$: 127.1118; found: 127.1113.

styrene oxide (8b)

Yield: 0.0523g, (0.44 mmol, 44%); clear oil. ^1H NMR (500 MHz, $CDCl_3$)：δ=2.79 (dd, *J* =2.6, 5.5, 1H), 3.13 (dd, *J* =4.1, 5.5, 1H), 3.85 (dd, *J*=2.6, 4.0, 1H), 7.27-7.36 (m, 5H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=51.3, 52.5, 125.6 (2 C), 128.3, 128.6 (2 C), 137.7. HRMS (ESI): m/z $[M+H]^+$ calcd for C_8H_8O: 121.0648; found: 121.0644.

2-(3,3-dimethyl-2-oxiranyl)tetrahydro-4-methyl-2H-pyran (9b)

Yield: 0.0906g, (0.53 mmol, 53%); white solid. m. p.= 235-242 °C, dec. ^1H NMR (500 MHz, CDCl3): δ=0.96 (m, 3H), 1.10-1.29 (m, 2H), 1.34 (m, 6H), 1.53-1.81 (m, 3H), 2.64 (m, 1H), 3.10 (m, 1H), 3.42 (m, 1H), 3.99 (m, 1H). ^{13}C NMR (125 MHz, CDCl3): δ=20.0, 22.4, 24.8, 29.8, 34.7, 38.3, 59.0, 65.6, 68.3, 76.0. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_9H_{16}O_2$: 193.1199; found: 193.1193.

α-3,4-epoxycarene (10b)

Yield:0.1381g, (0.91mmol, 90%); clear oil. ^1H NMR (500 MHz, $CDCl_3$)：δ=0.45 (ddd, *J*=2.2, 9.1, 9.1, 1H), 0.53 (ddd, *J*=2.3, 9.1, 9.1 ,1H), 0.72 (s, 3H), 1.01 (s, 3H), 1.26 (s, 3H), 1.47 (dd, *J*=2.3, 16.2, 1H), 1.64 (dt, *J*=2.3, 16.5, 1H), 2.12 (dd, *J*=9.2, 16.2, 1H), 2.27 (ddd, *J*=1.9, 9.1, 16.5, 1H), 2.83 (m, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=13.9, 14.7, 16.1, 19.3, 23.2, 23.4, 27.9, 56.0, 58.3. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_8H_{16}O$: 175.1094; found: 175.1088.

(R)-2-methyl-2-((R)-4-methylcyclohex-3-en-1-yl)oxirane (11b)

Yield: 0.0977g, (0.64 mmol, 64%); clear oil. ^1H NMR (500 MHz, $CDCl_3$): δ=1.11-1.33 (m, 5H), 1.44-2.09 (m, 8H), 2.9-3.0

(m, 1H), 4.60, 4.66 (m, 2H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=20.5, 21.4, 23.4, 24.6, 26.2, 28.9, 30.2, 31.0, 31.1, 36.5, 41.1, 57.7, 57.8, 59.6, 60.8, 109.4, 109.4, 149.3, 149.5. HRMS (DART): m/z $[M+H]^+$ calcd for $C_{10}H_{16}O$: 153.1274; found: 153.1275.

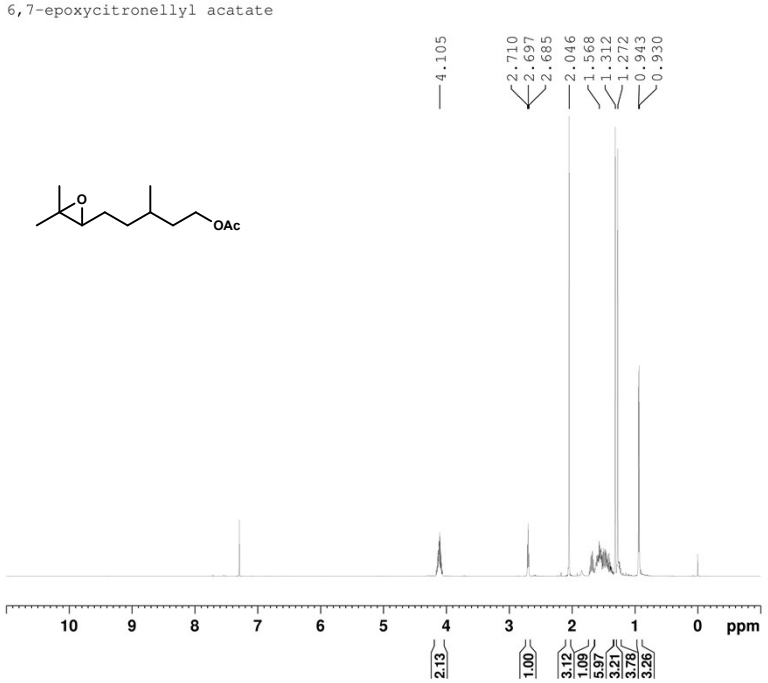
(4R)-1-methyl-4-((R)-2-methyloxiran-2-yl)-7-oxabicyclo[4.1.0]heptane (11c)

Yield: 0.0354g, (0.44 mmol, 21%); clear oil. ^{1}H NMR (500 MHz, $CDCl_3$): δ=1.0-2.2 (m, 13H), 2.50-2.63 (m, 2H), 2.97-3.06 (m, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=17.6, 18.2, 18.3, 18.9, 21.4, 21.5, 23.1, 23.5, 23.7, 24.4, 26.6, 26.7, 27.8, 28.5, 28.9, 30.2, 30.3, 34.9, 35.5, 39.4, 40.0, 52.7, 53.0, 53.2, 53.4, 57.4, 57.7, 57.8, 58.7, 58.8, 59.1, 60.1, 60.5. HRMS (ESI): m/z $[M+Na]^+$ calcd for $C_{10}H_{16}O_2$: 191.1043; found: 191.1037.

(5α,6α)-and(5β,6β)-epoxycholestan-3β-yl acetate (14b)

Yield: 0.4090g, (0.92 mmol, 92%); white solid. m. p.=102-106 ^{o}C ^{1}H NMR (500 MHz, $CDCl_3$):δ=0.61, 0.64 (s, 3H), 0.82-0.90 (m, 9H), 1.00, 1.07 (s, 3H), 2.00, 2.02 (s, 3H), 2.88, 3.07 (m, 1H), 4.73-4.79, 4.91-4.97 (m, 1H). ^{13}C NMR (125 MHz, $CDCl_3$): δ=11.8, 11.9, 15.9, 17.0, 18.7, 20.6, 21.3, 21.9, 22.6, 22.8, 23.8, 23.9, 24.1, 24.2, 27.2, 28.0, 28.2, 29.7, 29.9, 32.2, 32.5 , 35.0, 35.7, 35.8, 36.1, 36.7, 38.0, 39.4, 39.8, 39.5, 42.3, 42.4, 51.0, 55.9, 56.2, 56.8 59.1, 62.4, 63.5, 65.1, 71.3, 170.1, 170.4. HRMS (MALDI): m/z $[M+Na]^+$ calcd for $C_{29}H_{48}O_3$: 467.3496; found: 467.3448.

^{1}H NMR of **(±)-6, 7-epoxycitronellyl acetate (1b)**

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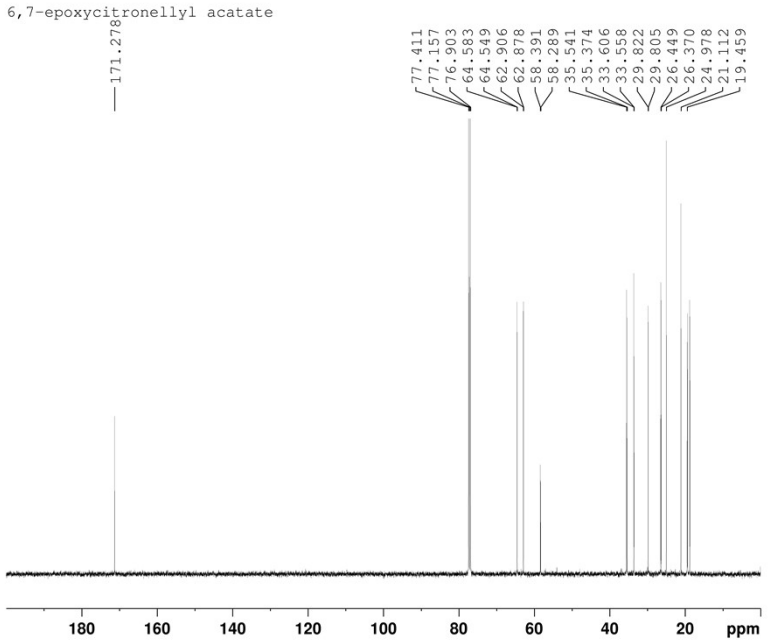
^{13}C NMR of **(±)-6, 7-epoxycitronellyl acetate (1b)**

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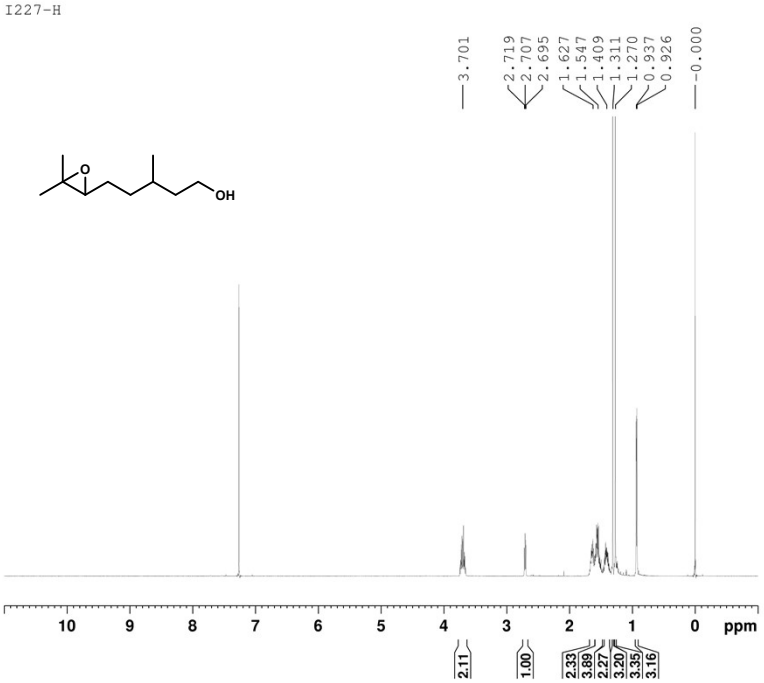
^{1}H NMR of **(±)-6, 7-epoxycitronellol (2b)**

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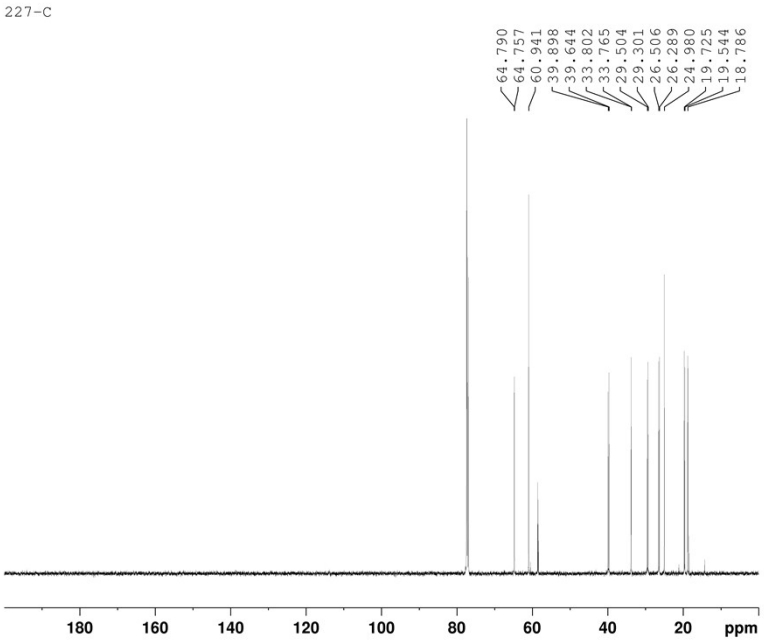
^{13}C NMR of **(±)-6, 7-epoxycitronellol (2b)**

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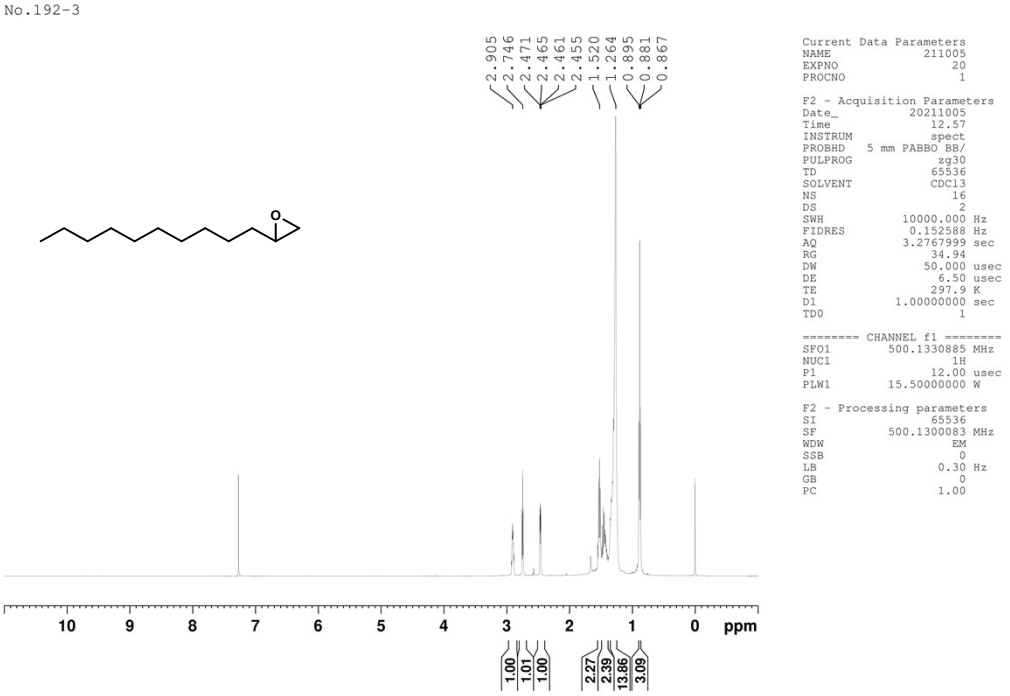
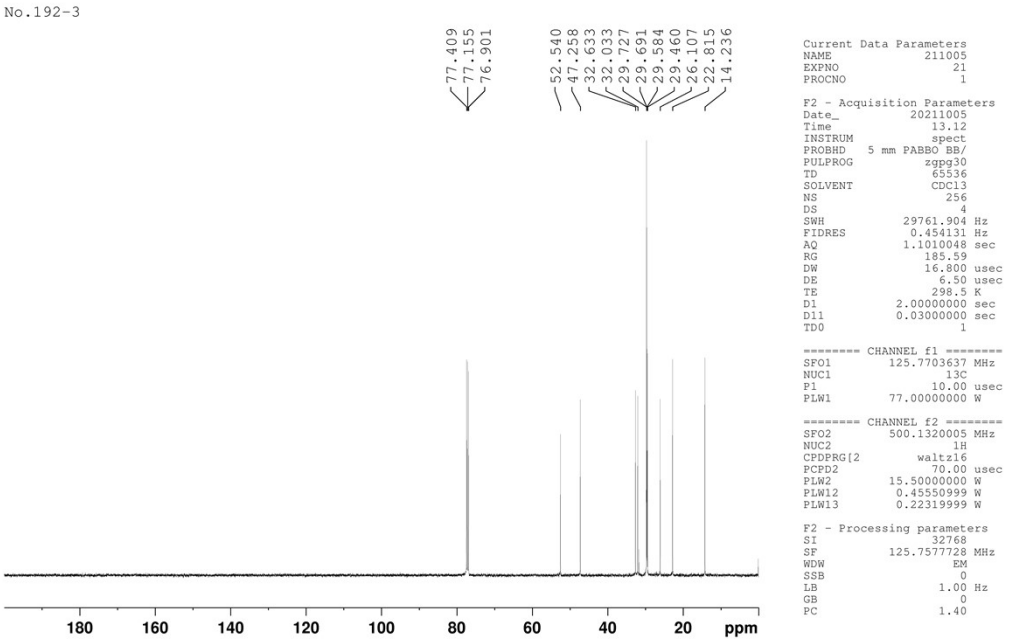
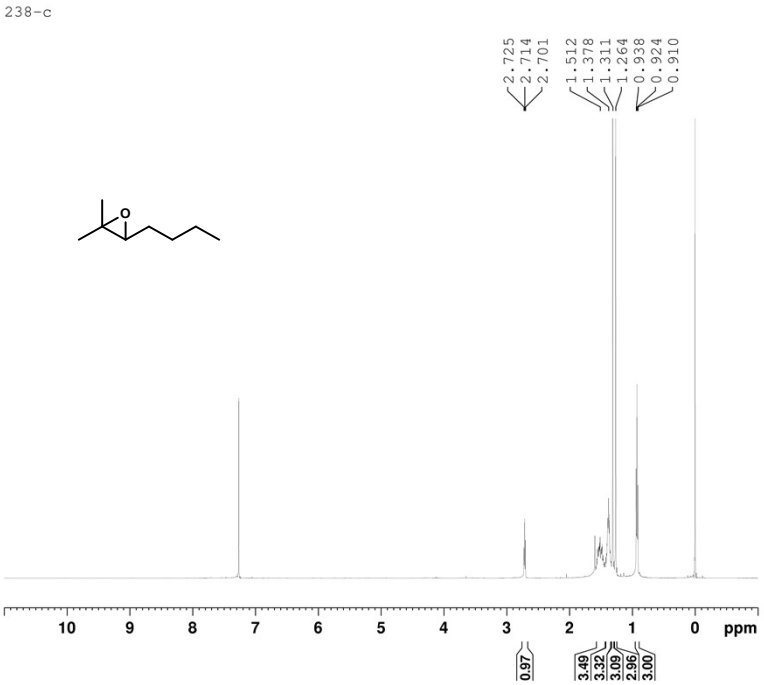
^{1}H NMR of **1,2-epoxydodecane (3b)**



^{13}C NMR of **1,2-epoxydodecane (3b)**



^{1}H NMR of **2-methyl-hept-2-ene oxide (4b)**

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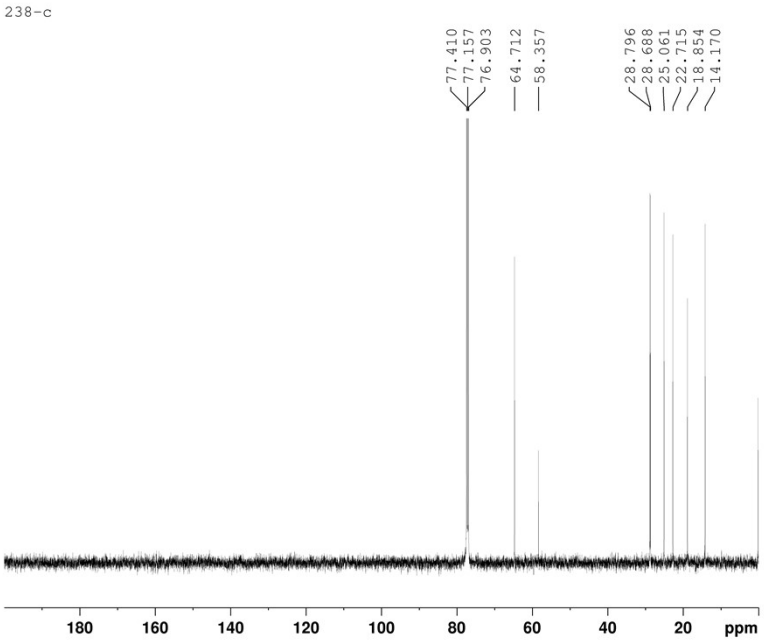
^{13}C NMR of **2-methyl-hept-2-ene oxide (4b)**

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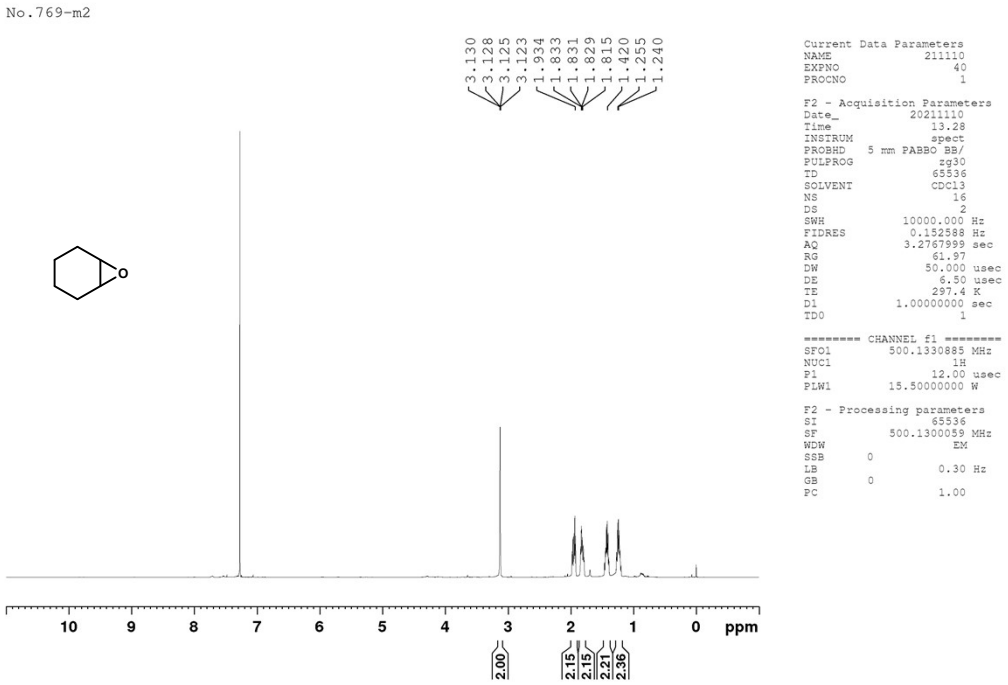
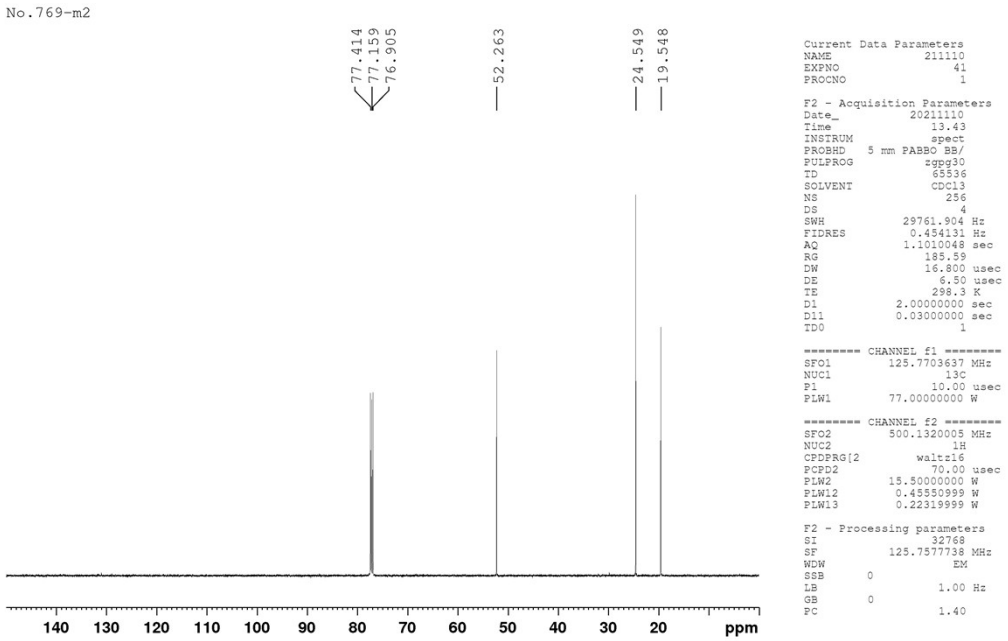
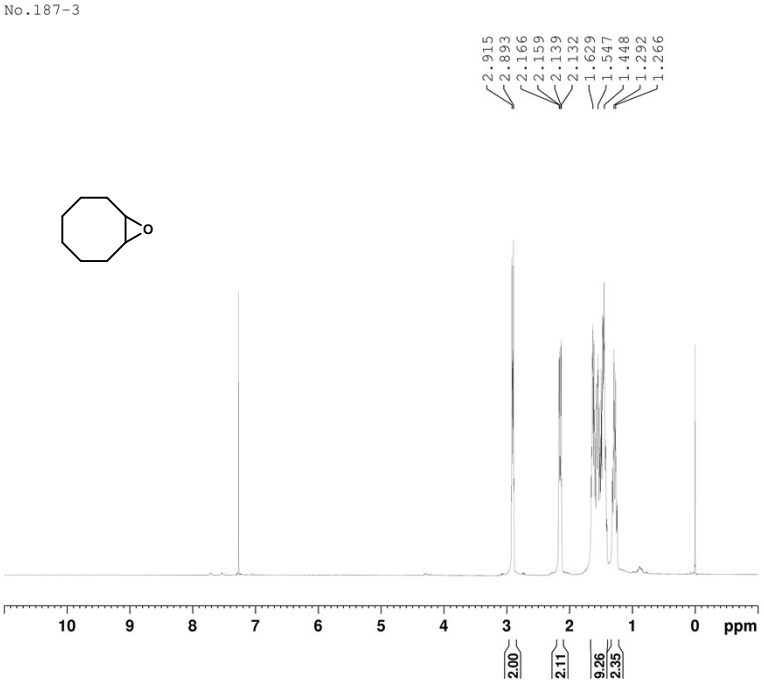
^{1}H NMR of **cyclohexene oxide (5b)**



^{13}C NMR of **cyclohexene oxide (5b)**



^{1}H NMR of **cyclooctene oxide (6b)**

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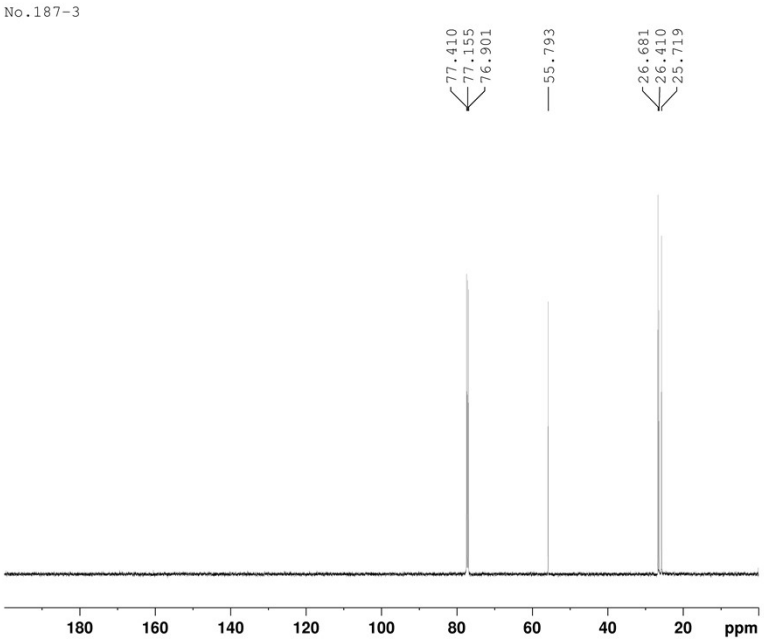
^{13}C NMR of **cyclooctene oxide (6b)**

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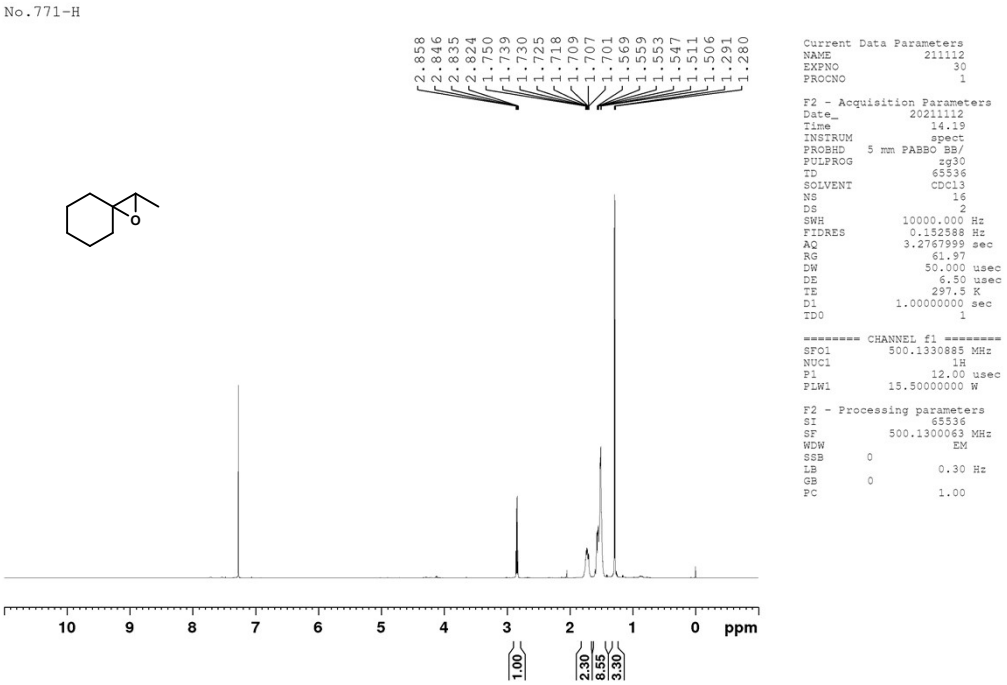
INSTRUM               spect
PROBHD    5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                   185.59
DW                   16.800 usec
DE                    6.50 usec
TE                   298.7 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                      13C
P1                    10.00 usec
PLW1             77.00000000 W

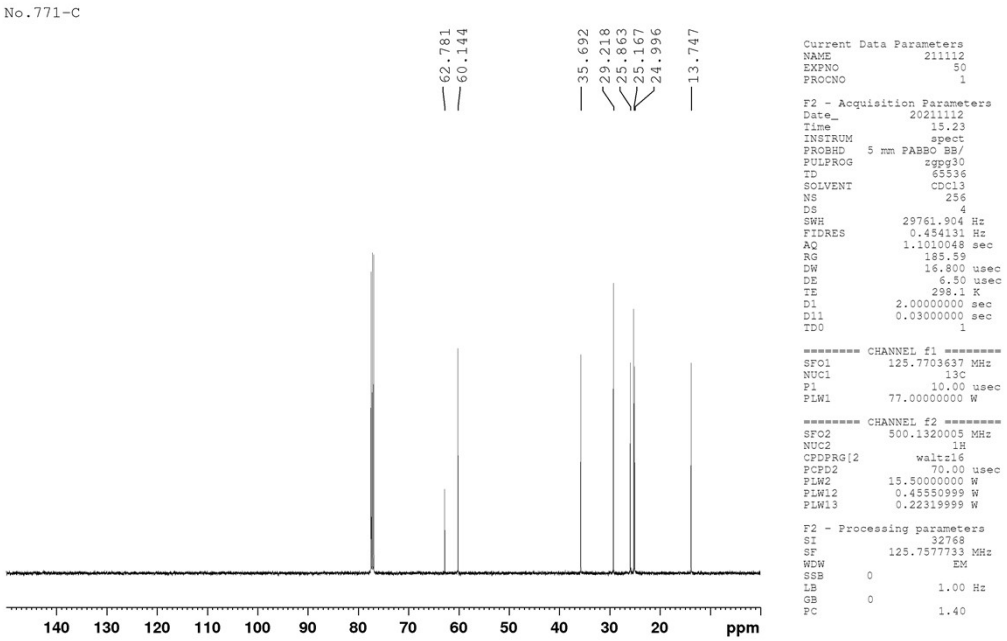
======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                       1H
CPDPRG[2              waltz16
PCPD2                 70.00 usec
PLW2             15.50000000 W
PLW12             0.45550999 W
PLW13             0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577736 MHz
WDW                       EM
SSB                        0
LB                     1.00 Hz
GB                         0
PC                      1.40
```

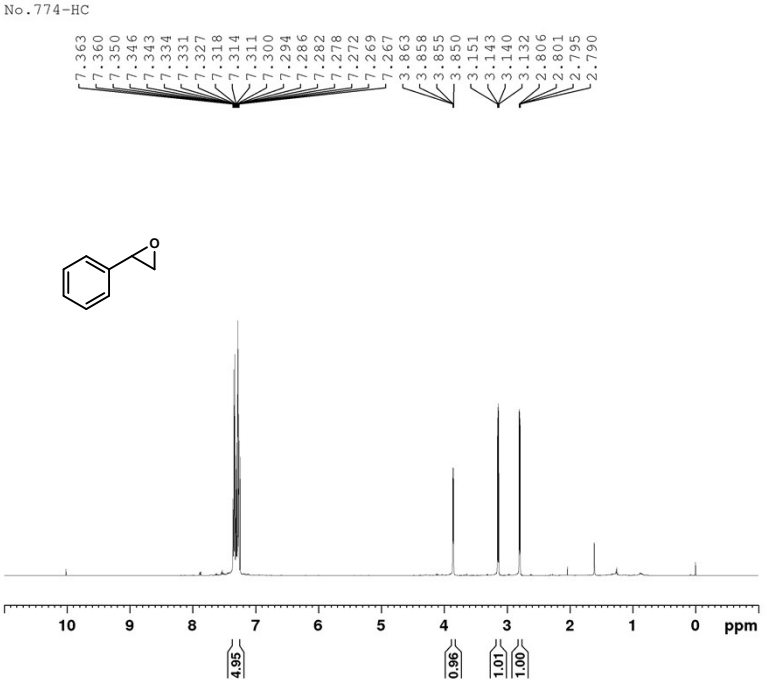
^{1}H NMR of **2-methyl-1-oxaspiro[2.5]octane (7b)**



^{13}C NMR of **2-methyl-1-oxaspiro[2.5]octane (7b)**



^{1}H NMR of **styrene oxide (8b)**



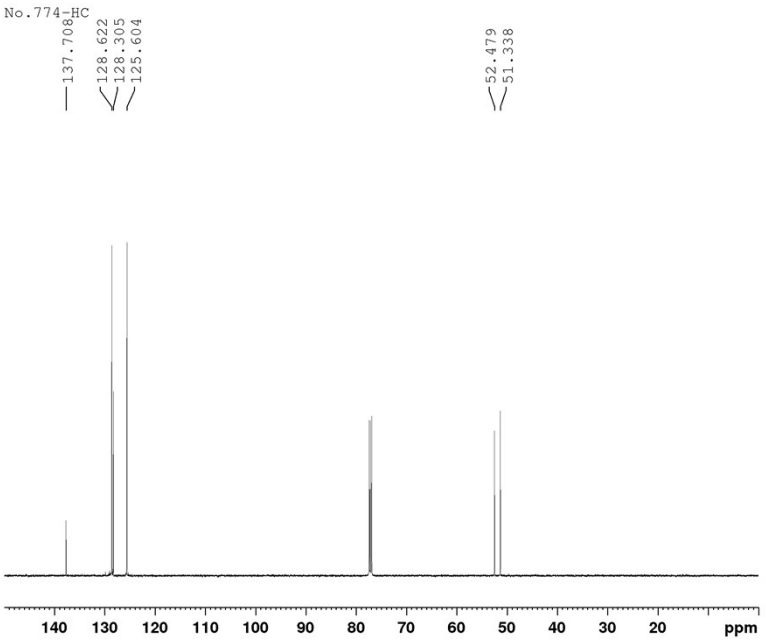

```
Current Data Parameters
NAME                  211116
EXPNO                     20
PROCNO                     1

F2 - Acquisition Parameters
Date_              20211116
Time                  12.12
INSTRUM               spect
PROBHD    5 mm PABBO BB/
PULPROG                zg30
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        2
SWH               10000.000 Hz
FIDRES                0.152588 Hz
AQ                3.2767999 sec
RG                    69.85
DW                   50.000 usec
DE                    6.50 usec
TE                   297.4 K
D1                1.00000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             500.1330885 MHz
NUC1                       1H
P1                      12.00 usec
PLW1             15.50000000 W

F2 - Processing parameters
SI                        65536
SF               500.1300209 MHz
WDW                       EM
SSB          0
LB                     0.30 Hz
GB           0
PC                     1.00
```

^{13}C NMR of **styrene oxide (8b)**




```
Current Data Parameters
NAME                  211116
EXPNO                     21
PROCNO                     1

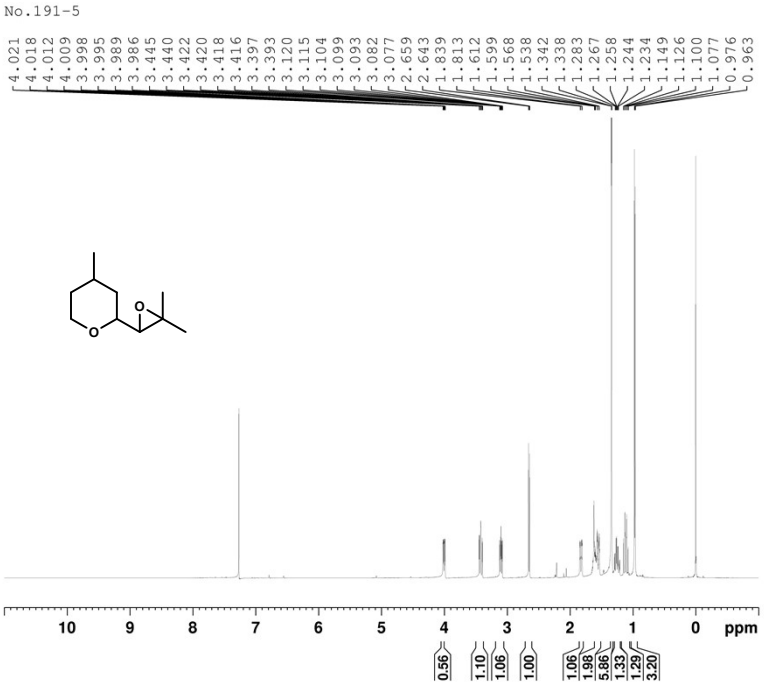
F2 - Acquisition Parameters
Date_              20211116
Time                  12.26
INSTRUM               spect
PROBHD    5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                   185.59
DW                   16.800 usec
DE                    6.50 usec
TE                   298.5 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                      13C
P1                      10.00 usec
PLW1             77.00000000 W

======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                       1H
CPDPRG[2          waltz16
PCPD2                   70.00 usec
PLW2             15.50000000 W
PLW12             0.45550999 W
PLW13             0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577774 MHz
WDW                       EM
SSB          0
LB                     1.00 Hz
GB           0
PC                     1.40
```

^{1}H NMR of **2-(3,3-dimethyl-2-oxiranyl)tetrahydro-4-methyl-2H-pyran (9b)**



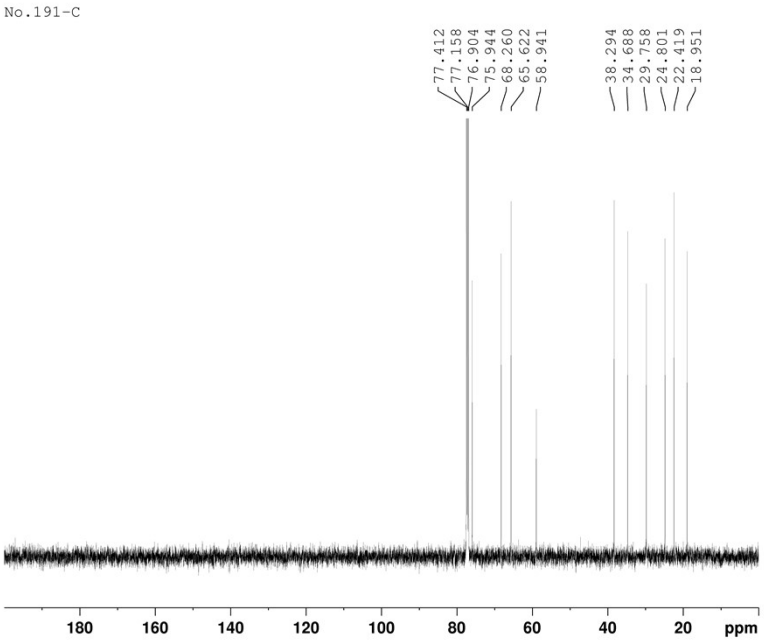

```
Current Data Parameters
NAME                  210930
EXPNO                     50
PROCNO                     1

F2 - Acquisition Parameters
Date_              20210930
Time                  18.30
INSTRUM               spect
PROBHD   5 mm PABBO BB/
PULPROG                zg30
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        2
SWH               10000.000 Hz
FIDRES                0.152588 Hz
AQ                3.2767999 sec
RG                    76.61
DW                    50.000 usec
DE                     6.50 usec
TE                   297.9 K
D1                1.00000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             500.1330885 MHz
NUC1                     1H
P1                    12.00 usec
PLW1             15.50000000 W

F2 - Processing parameters
SI                        65536
SF               500.1300102 MHz
WDW                      EM
SSB                       0
LB                     0.30 Hz
GB                        0
PC                     1.00
```

^{13}C NMR of **2-(3,3-dimethyl-2-oxiranyl)tetrahydro-4-methyl-2H-pyran (9b)**




```
Current Data Parameters
NAME                  211210
EXPNO                     60
PROCNO                     1

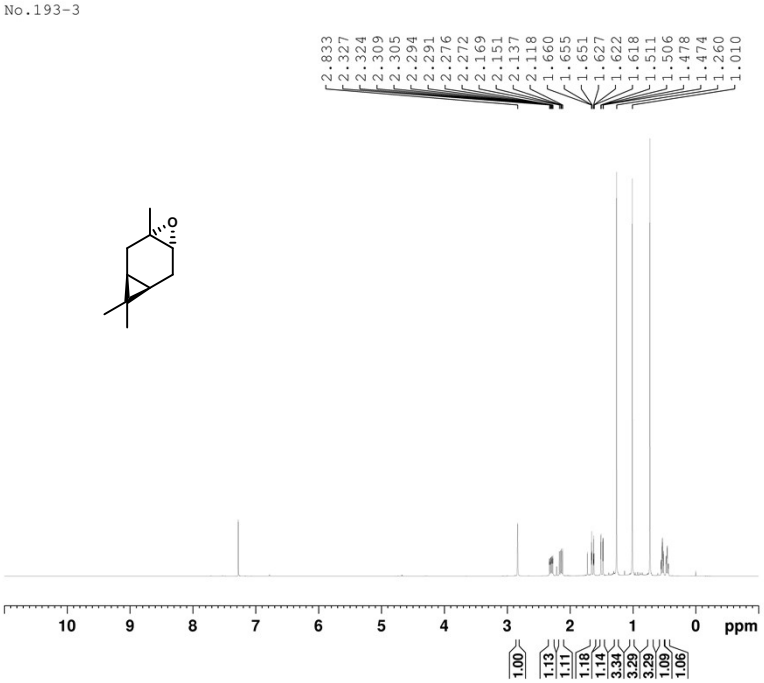
F2 - Acquisition Parameters
Date_              20211210
Time                  18.24
INSTRUM               spect
PROBHD   5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                   185.59
DW                    16.800 usec
DE                     6.50 usec
TE                   298.3 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                     13C
P1                    10.00 usec
PLW1             77.00000000 W

======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                     1H
CPDPRG[2          waltz16
PCPD2                 70.00 usec
PLW2             15.50000000 W
PLW12             0.45550999 W
PLW13             0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577720 MHz
WDW                      EM
SSB                       0
LB                     1.00 Hz
GB                        0
PC                     1.40
```

^{1}H NMR of **α-3,4-epoxycarene (10b)**



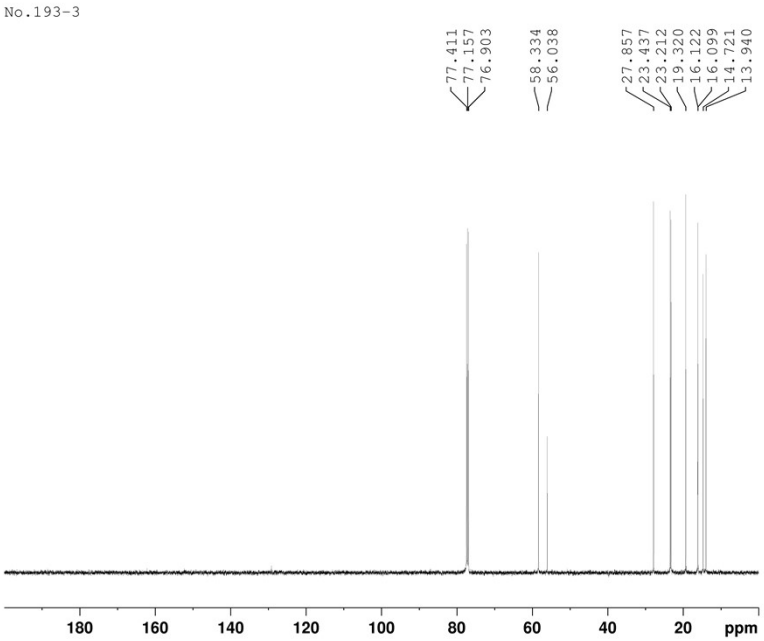

```
Current Data Parameters
NAME                  211116
EXPNO                     40
PROCNO                     1

F2 - Acquisition Parameters
Date_              20211116
Time                  16.40
INSTRUM               spect
PROBHD    5 mm PABBO BB/
PULPROG                zg30
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        2
SWH               10000.000 Hz
FIDRES                0.152588 Hz
AQ                3.2767999 sec
RG                    43.28
DW                    50.000 usec
DE                     6.50 usec
TE                    297.7 K
D1                1.00000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             500.1330885 MHz
NUC1                       1H
P1                     12.00 usec
PLW1            15.50000000 W

F2 - Processing parameters
SI                        65536
SF               500.1300044 MHz
WDW                       EM
SSB                        0
LB                      0.30 Hz
GB                         0
PC                      1.00
```

^{13}C NMR of **α-3,4-epoxycarene (10b)**




```
Current Data Parameters
NAME                  211116
EXPNO                     41
PROCNO                     1

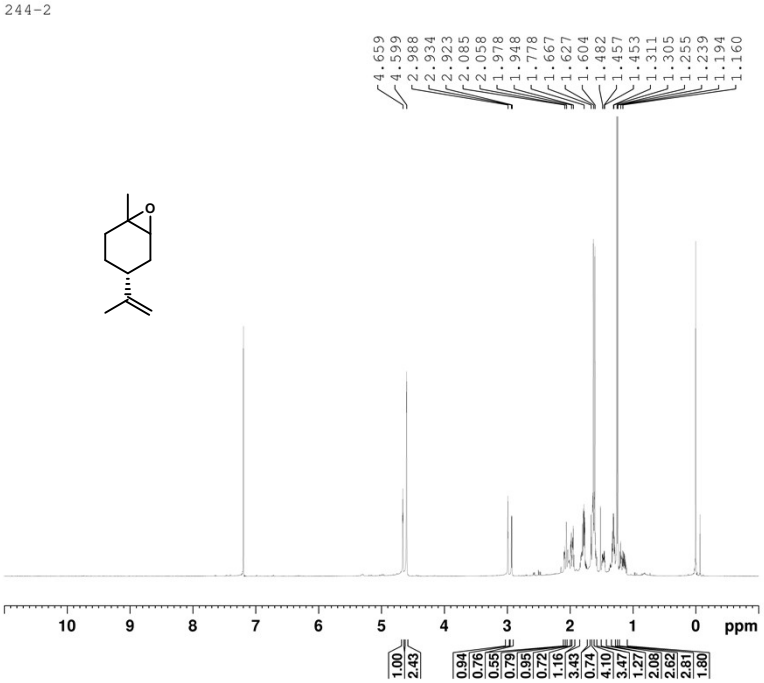
F2 - Acquisition Parameters
Date_              20211116
Time                  16.55
INSTRUM               spect
PROBHD    5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                    185.59
DW                    16.800 usec
DE                     6.50 usec
TE                    298.3 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                      13C
P1                     10.00 usec
PLW1            77.00000000 W

======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                       1H
CPDPRG[2             waltz16
PCPD2                  70.00 usec
PLW2            15.50000000 W
PLW12            0.45550999 W
PLW13            0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577747 MHz
WDW                       EM
SSB                        0
LB                      1.00 Hz
GB                         0
PC                      1.40
```

^{1}H NMR of **(R)-2-methyl-2-((R)-4-methylcyclohex-3-en-1-yl)oxirane (11b)**



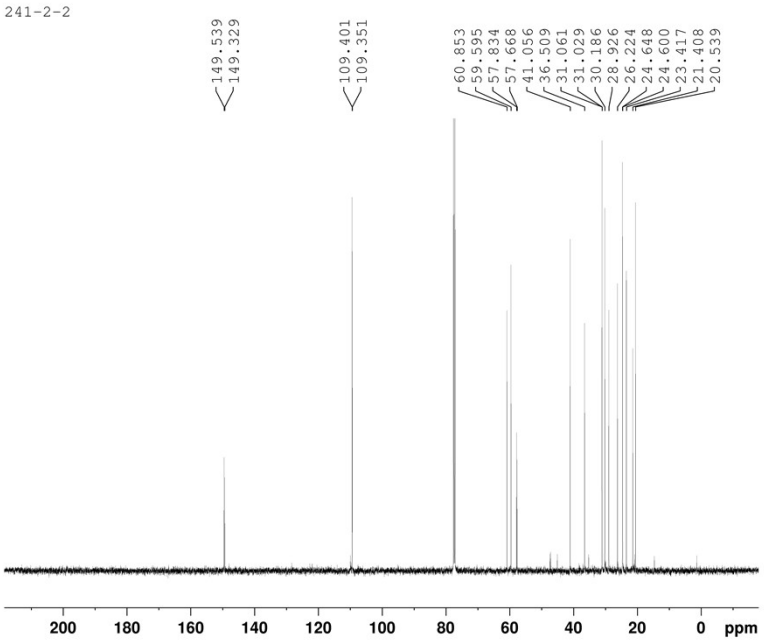

```
Current Data Parameters
NAME                  211215
EXPNO                     50
PROCNO                     1

F2 - Acquisition Parameters
Date_               20211215
Time                   19.23
INSTRUM                spect
PROBHD    5 mm PABBO BB/
PULPROG                zg30
TD                    65536
SOLVENT               CDCl3
NS                       16
DS                        2
SWH               10000.000 Hz
FIDRES                0.152588 Hz
AQ                3.2767999 sec
RG                     87.45
DW                    50.000 usec
DE                     6.50 usec
TE                    297.8 K
D1                1.00000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             500.1330885 MHz
NUC1                       1H
P1                    12.00 usec
PLW1             15.50000000 W

F2 - Processing parameters
SI                        65536
SF               500.1300457 MHz
WDW                       EM
SSB                        0
LB                      0.30 Hz
GB                         0
PC                      1.00
```

^{13}C NMR of **(R)-2-methyl-2-((R)-4-methylcyclohex-3-en-1-yl)oxirane (11b)**




```
Current Data Parameters
NAME                  211209
EXPNO                     50
PROCNO                     1

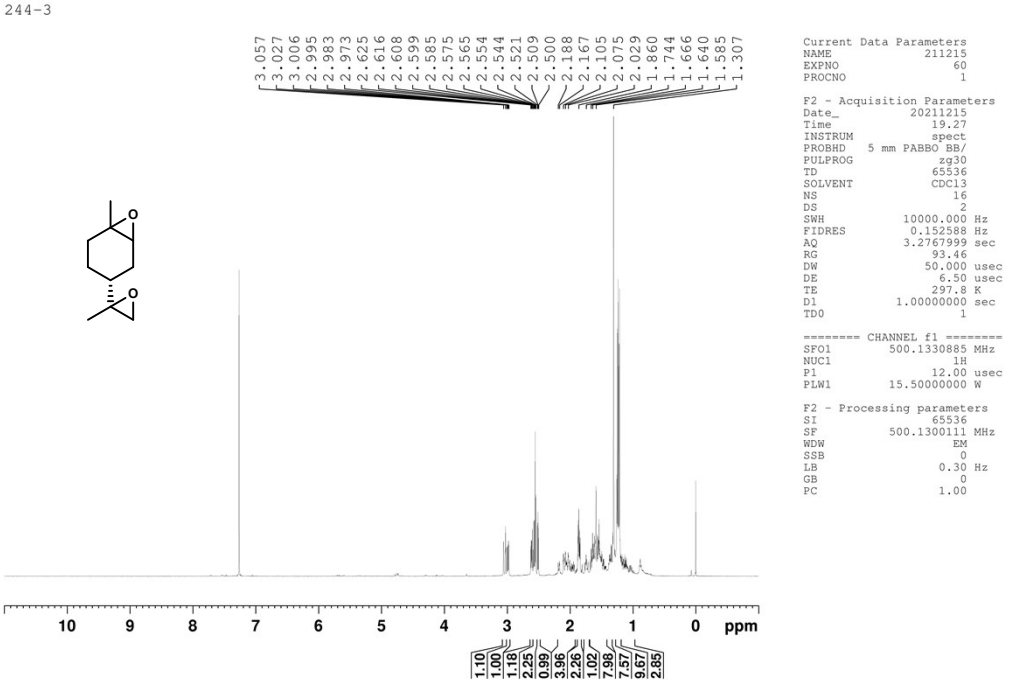
F2 - Acquisition Parameters
Date_               20211209
Time                   17.49
INSTRUM                spect
PROBHD    5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDCl3
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                    185.59
DW                    16.800 usec
DE                     6.50 usec
TE                    298.5 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                      13C
P1                    10.00 usec
PLW1             77.00000000 W

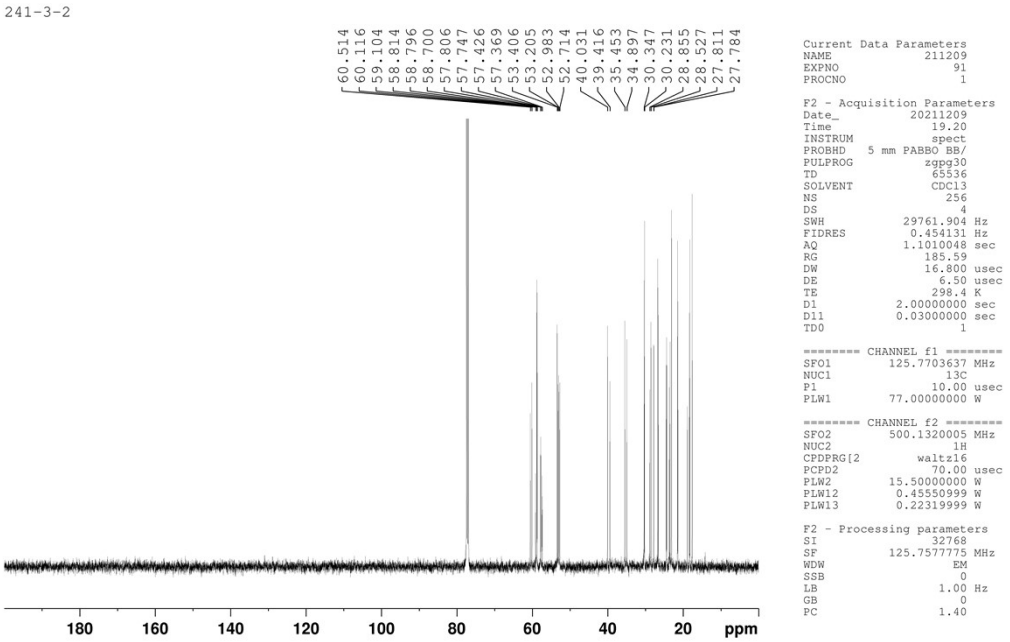
======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                       1H
CPDPRG[2             waltz16
PCPD2                 70.00 usec
PLW2             15.50000000 W
PLW12             0.45550999 W
PLW13             0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577495 MHz
WDW                       EM
SSB                        0
LB                      1.00 Hz
GB                         0
PC                      1.40
```

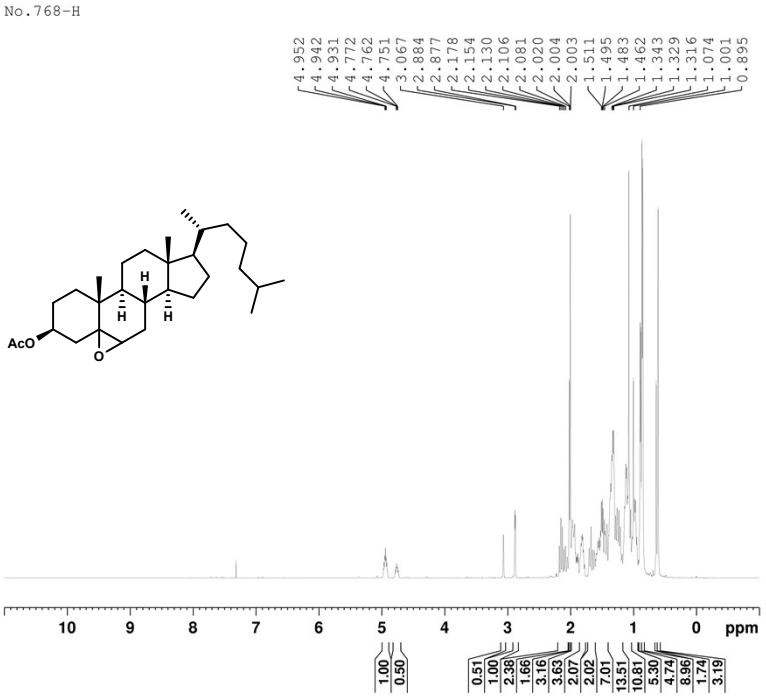
^{1}H NMR of **(4R)-1-methyl-4-((R)-2-methyloxiran-2-yl)-7-oxabicyclo[4.1.0]heptane (11c)**



^{13}C NMR of **(4R)-1-methyl-4-((R)-2-methyloxiran-2-yl)-7-oxabicyclo[4.1.0]heptane (11c)**



^{1}H NMR of **(5α,6α)-and(5β,6β)-epoxycholestan-3β-yl acetate (14b)**



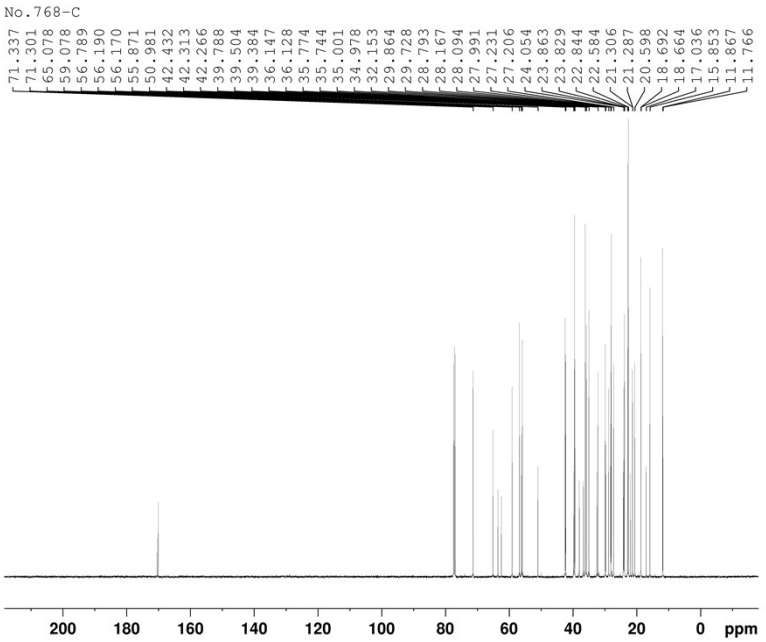

```
Current Data Parameters
NAME                  211111
EXPNO                     30
PROCNO                     1

F2 - Acquisition Parameters
Date_              20211111
Time                  17.09
INSTRUM                spect
PROBHD    5 mm PABBO BB/
PULPROG                zg30
TD                    65536
SOLVENT               CDC13
NS                       16
DS                        2
SWH               10000.000 Hz
FIDRES                0.152588 Hz
AQ                3.2767999 sec
RG                     7.17
DW                    50.000 usec
DE                     6.50 usec
TE                   297.3 K
D1                1.00000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             500.1330885 MHz
NUC1                       1H
P1                      12.00 usec
PLW1             15.50000000 W

F2 - Processing parameters
SI                        65536
SF               500.1299841 MHz
WDW                       EM
SSB                        0
LB                      0.30 Hz
GB                         0
PC                      1.00
```

^{13}C NMR of **(5α,6α)-and(5β,6β)-epoxycholestan-3β-yl acetate (14b)**




```
Current Data Parameters
NAME                  211111
EXPNO                     31
PROCNO                     1

F2 - Acquisition Parameters
Date_              20211111
Time                  17.24
INSTRUM                spect
PROBHD    5 mm PABBO BB/
PULPROG             zgpg30
TD                    65536
SOLVENT               CDC13
NS                      256
DS                        4
SWH               29761.904 Hz
FIDRES                0.454131 Hz
AQ                1.1010048 sec
RG                   185.59
DW                    16.800 usec
DE                     6.50 usec
TE                   298.3 K
D1                2.00000000 sec
D11               0.03000000 sec
TD0                        1

======== CHANNEL f1 ========
SFO1             125.7703637 MHz
NUC1                      13C
P1                      10.00 usec
PLW1             77.00000000 W

======== CHANNEL f2 ========
SFO2             500.1320005 MHz
NUC2                       1H
CPDPRG[2              waltz16
PCPD2                   70.00 usec
PLW2             15.50000000 W
PLW12             0.45550999 W
PLW13             0.22319999 W

F2 - Processing parameters
SI                        32768
SF               125.7577846 MHz
WDW                       EM
SSB                        0
LB                      1.00 Hz
GB                         0
PC                      1.40
```