J1-17-2α-Cl-OH, 0-CH

Pulse Sequence: s2pu1
Solvent: CDC13
Ambient temperature
Mercury-400BB "rmr5"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.050 sec
Width 5582.2 Hz
8 repetitions

Observe 1H, 400.2699778 MHz
Data processing
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 41 sec
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
1000 repetitions
OBSERVE C13, 100.647/2210 MHz
DECOUPLE H1, 400.2689555 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 55536
Total time 59 min, 24 sec
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr-e"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.656 sec
Width 5602.2 Hz
0 repetitions
OBSERVE H1, 400.2669778 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 0 sec
Pulse Sequence: sdpul
Solvent: CDCl3
Ambient temperature
Mercury-400S "mar5"

Relax, delay 2.000 sec
Pulse 21.3 degrees
Acq. time 1.260 sec
Width 25188.8 Hz
112 repetitions
OBSERVE 13C, 100.6472233 MHz
DEDDUPLE HI, 400.2899935 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 19 min, 24 sec
Pulse Sequence: zg2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmrE"

Relax. delay 2.000 sec
Pulse 15.5 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
OBSERVE: H1, 400.2699784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
fi size 32768
Total time 0 min, 41 sec

0.95 1.00 1.93 1.93 1.93
1.35 1.31 1.04
2.64
8.65
J=15-53u-1Bu-OPMB/4-OH

Pulse Sequence: s2pu
Solvent: CDC13
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.080 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
576 repetitions
OBSERVE C13, 100.6472126 MHz
DECouple H1, 400.2609955 MHz
Power 38 dB
continuously on
WALTZ-15 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 85536
Total time 3 hr, 53 min, 41 sec
Pulse Sequence: e2pu1
Solvent: CDCl3
ambient temperature
Mercury-400B "nmrS"

Relax. delay 2.000 sec
Pulse 15.3 degrees
Acq. time 2.856 sec
Width 3602.2 Hz
8 repetitions

OBSERVE H1 400.2569778 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 0 sec

1.00 1.01 1.04 2.03 2.01 1.14 2.02 9.29
J1-17-7:Bu-0EtCl/0-OH
Pulse Sequence: s2pu1
Solvent: CDC13
Ambient temperature
Mercury-400BB "nme6"

Relax. delay 2.000 sec
Pulse 22.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
48 repetitions
OBSERVE C13, 100.6472226 MHz
DECOUPLE H1, 400.1669555 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING

Line broadening 1.0 Hz
FT size 65536
Total time 51 min, 24 sec
Pulse Sequence: t2pul
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulss 15.9 degrees
Aqc. time 2.858 sec
Width 5902.2 Hz
Single scan
OBSERVE H1, 400.2669779 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 8 min, 0 sec
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-600B "nmr6"

Relax. delay 2.000 sec
Pulse 22.3 degrees
Acq. time 1.280 sec
Width 2518.8 Hz
48 repetitions
OBSERVE C13, 100.647227 MHz
DECOUPLE H1, 400.2681955 MHz
Power 38 dB continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 50 min, 24 sec
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature: 27°C
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 12.9 degrees
Acq. time 2.856 sec
Width 5.802 Hz
8 repetitions
Observe: H1, 400.269784 MHz
Data Processing:
Line broadening 0.1 Hz
FT size 32768
Total time 9 min, 0 sec
J1=16.56-OMe-DPMB/O=O-OMe

Pulse Sequence: ZPul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "narr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
64 repetitions
OBSERVE C13, 100.6472210 MHz
DECOPP F1, 400.2809555 MHz
Power 34 dB
Continuous on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
RT size 4552\(x\)
Total time 59 min, 24 sec
J1-12-64-OMe/NOM
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 15.1 degrees
Acq. time 2.656 sec
Width 5602.2 Hz
16 repetitions

Observe H1, 400.2669784 MHz
Data processing
Line broadening 0.1 Hz
FT size 32768
Total time 1 hr, 23 min, 41 sec
Pulse Sequence: s2sp1
Solvent: CDC13
Ambient temperature
Mercury-400BB "nmr-

Relax. delay 2.000 sec
Pulse 25.3 degrees
Acq. time 1.280 sec
Width 25188.8 Hz
64 repetitions
OBSERVE  C13, 100.6471145 MHz
DECOUPLE H1, 400.2689955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec

ppm
J1-12-25-C1/MOM

Pulse Sequence: z2p1
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 15.3 degrees
Acq. time 2.656 sec
Width 5502.2 Hz
8 repetitions

OBSERVE H1, 400.2562874 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FI size 32768
Total time 0 min, 41 sec
J1-12-25-C1/MOM

Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature: Mercury-400BB "nmr6"

Relax. delay 2.300 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25130.3 Hz
144 repetitions

OBSERVE C13, 100.645394 MHz
DECOUPLE H1, 400.255599 MHz
Power 38 dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
Pulse Sequence: z2pal
Solvent: CDC13
Ambient temperature
UNITYplus-300 "nmr2"

Relax. delay 1.000 sec
Pulse 15.0 degrees
Acq. time 3.813 sec
Width 4186.8 Hz
16 repetitions
OBSERVE: H1, 300.1390320 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 1 hr, 20 min, 23 sec
J1-12-O3n/0-OMOM

Pulse Sequence: c2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.260 sec
Width 25188.9 Hz
576 repetitions
OBSERVE C13, 100.647241 MHZ
DECOUPLE H1, 400.2689155 MHZ
Power 10 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax, delay 2.000 sec
Pulse 15.8 degrees
Acq. time 2.656 sec
Width 5601.2 Hz
3 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 41 sec

\[ \text{Chemical Shifts:} \]
\[ 1.40 \quad 1.94 \quad 1.91 \quad 1.93 \quad 1.84 \quad 2.88 \quad 2.81 \]

ppm
Pulse Sequence: s2ou1
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.3 Hz
98 repetitions
OBSERVE C13, 100.6471185 MHz
DECouple H1, 400.1681955 MHz
Power 36 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
J=17-31-C1-OMe/=O-OMOM

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.816 sec
Width 5602.2 Hz
8 repetitions
OBSERVE H1, 400.268764 MHz
DATA PROCESSING
Line broadening 9.1 Hz
FT size 32768
Total time 9 min, 41 sec
Pulse Sequence: s2puT
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
32 repetitions
OBSERVE C13, 100.6475-33 MHZ
DECOUPLE H1, 300.2689955 MHZ
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 0 min, 0 sec
PULSE SEQUENCE
Relax, delay 2.000 sec
Pulse 23.3 degrees
Acc. time 1.280 sec
Width 25188.3 Hz
48 repetitions

OBSERVE C13, 100.6472469
DECOUPLE H1, 400.2683355
Power 30 W
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
F1 size 65536
Total time 2 minutes

J1=17-31-C1-CBn/MOM
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400 "nrn6"
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "mnr8"

Relax. delay 2.000 sec
Pulse 15.5 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
OBSERVE H1, 400.2699771 MHZ
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 0 sec
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400BB "rmr6"

Relax. delay 2.000 sec
Pulse 90.0 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
16 repetitions
Observe C13, 100.6472233 MHz
Decouple H1, 400.2689955 MHz
Power 28 dB
continuously on
VAT2-16 modulated
Data Processing
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
Pulse Sequence: c2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax, delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.856 sec
Width 5802.2 Hz
8 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 6 min, 0 sec
J1-17-8-tBu-0EtCl/0-OMOM

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 23.5 degrees
Acq. time 1.280 sec
Width 25100.0 Hz
64 repetitions

OBSERVE C13, 100.6472256 MHz
DECOUPLE H1, 400.2659955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
line broadening 1.0 Hz
FT size 55536
Total time 59 min, 24 sec

220 200 180 160 140 120 100 80 60 40 20 0 ppm
Pulse Sequence: z2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nr0"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 25768
Total time 0 min, 41 sec
J1=17-18-2naphthyl-OMe=0-OMOM

Pulse Sequence: s2pq
Solvent: CDC13
Ambient temperature: 298K
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.250 sec
Width 25188.9 Hz
48 repetitions
OBSERVE C13, 100.6472402 MHz
DECOUPLE H1, 400.2689955 MHz
Power 30 dB
continuously on
WALTZ-15 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 55536
Total time 59 min, 24 sec

220 200 180 160 140 120 100 80 60 40 20 0 ppm
Pulse Sequence: si pul
Solvent: CDCl3
Ambient temperature
Mercury-400B "n.m.r."

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.856 sec
Width 5502.2 Hz
0 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FI size 32768
Total time 6 min, 0 sec
J-16-56-OMs-OPMB/="OMCM

Pulse Sequence: sFpu1
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 0.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.8 Hz
112 repetitions
OBSERVE C13, 100.6472218 MHz
DECOUPLE H1, 400.2609455 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 45526
Total time 59 min, 24 sec
E/Z mixture

NHAc
O
OMOM

Solvent: CDC13
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.656 sec
Width 5602.2 Hz
18 repetitions
OBSERVE: H1, 400.2669738 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 1 hr, 23 min, 41 sec
E/Z mixture
E/Z mixture
J1-13-5-OBn/NAC=OMOM
Pulse Sequence: 5Zpu
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.818 sec
Width 5002.2 Hz
8 repetitions
OBSERVE $H_1$, 400.2669701 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 6 min, 41 sec
E/Z mixture

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400B "nrm6"

Relax, delay 2,000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
768 repetitions
OBSERVE C13, 190.6472195 MHz
DECUPLE H1, 400.2689955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec
E/Z mixture

J1 = 14.2 Hz

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr6"

Relax. delay 2.000 sec
Pulse: 12.0 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
Observe: H1, 400.2669714 MHz
Data Processing
Line broadening 0.1 Hz
FI size 32758
Total time 3 min. 41 sec
JT-13-530-0PMB/NHAc-OMOM

Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-200SB "nmr"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 2188.9 Hz
192 repetitions
OBSERVE C13, 100.6472279 MHz
DECOUPLE H1, 400.2683955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
E/Z mixture
E/Z mixture
E/Z mixture
E/Z mixture

PULSE SEQUENCE
Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. 1.280 sec
width 2588.3 Hz
896 repetitions

OBSERVE C13, 100.6472164
NCP NAPLE - H1, 400.2609965
Power 3A dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
PT size 65136
Total time 49 minutes

J1-17-34-Cl-O3n/1-3nide
Pulse Sequence: 12pul
Solvent: CDC13
Ambient temperature
Mercury-400 "nmr6"
E/Z mixture
E/Z mixture
E/Z mixture

**Chemical Information:**
- **Pulse Sequence:** s2pul
- **Solvent:** CDCl3
- **Ambient temperature:**
- **Mercury-400B "nmr6"**

**Parameters:**
- **Relax. delay:** 2.000 sec
- **Pulse:** 15.9 degrees
- **Acq. time:** 2.856 sec
- **Width:** 5602.2 Hz
- **8 repetitions**

**Observation:**
- **H1:** 400.2661784 MHz

**Data Processing:**
- **Line broadening:** 0.1 Hz
- **FT size:** 32768
- **Total time:** 6 min, 41 sec

**NMR Chart:**
- **Resonance Peaks:**
  - 8.00 ppm: 4.31, 1.01
  - 7.25 ppm: 0.25, 0.67
  - 5.81 ppm: 1.81
  - 4.00 ppm: 2.00, 2.40, 2.73
  - 2.09 ppm: 2.09, 0.77
  - 1.27 ppm: 1.27
E/Z mixture

PULSE SEQUENCE
Relax. delay 2.000 sec
Pulse 23.9 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
256 repetitions

OBSERVE C13, 1H, 106.6471877
ECCOUPLE H1, 406.2809955
Power 30 dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
FT Sizen bbb56
Total time 14 minutes

J1-17-12-tBu-0EtC1/enamide
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400 "nMr8"
E/Z mixture

N\text{HAc} \hspace{1cm} \text{OMOM} \hspace{1cm} \text{OMe}

Pulse sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400 "nmr8"
E/Z mixture

- J1 = 16-60-OMe-DPMB/N Ac=ODM
- Pulse Sequence: c2pul
- Solvent: C6D6
- Ambient temperature
- Mercury-400BB "nmr6"

- Relax. delay 2.000 sec
- Pulse 15.9 degrees
- Acq. time 2.816 sec
- Width 5002.2 Hz
- 8 repetitions
- OBSERVE: H1, 400.2666784 MHz

- DATA PROCESSING
  - Line broadening 0.1 Hz
  - FT size 22740
  - Total time 0 min, 41 sec

- Peaks:
  - 2.01 2.07 0.99 0.51 3.63
  - 1.98 1.91
  - 6.15 2.82
  - 1.89 1.14

- ppm
E/Z mixture

NHAc

MeO

OPMB

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.260 sec
Width 25188.9 Hz
544 repetitions
OBSERVE C15, 100.6472110 MHz
DECOUPLE H1, 400.2683955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec
J1-13-2-OMe/NAc-OMOM

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr8"

Relax. delay 2.000 sec
Pulse 15.8 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
32 repetitions
OBSERVE - H1, 400.2569775 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 92768
Total time 1 hr, 23 min, 41 sec

![NMR Spectrum](image)
J1-13-2-Oms/Nac-0OM

Pulse Sequence: 62pul
Solvent: CDC13
Ambient temperature: Mercury-409BB "mmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25168.9 Hz
180 Repetitions
OBSERVE C13, 100.6472187 MHz
DECOUPLE H1, 400.2699855 MHz
Power 30 dB
continuously on
VALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
f1 size 65536
Total time 5 hr, 53 min, 41 sec
J=12-40-EtCl/HNAC/-DIOP

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "narrow"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.056 sec
Width 5002.2 Hz
10 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT alias 32768
Total time 1 hr, 23 min, 41 sec
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400B "nmr6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.200 sec
Width 25106.8 Hz
160 repetitions
OBSERVE C13, 100.6472210 MHz
DECOUPLE H1, 400.2009355 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec

220 200 180 160 140 120 100 80 60 40 20 0 ppm

-16.349 155.540 129.701 111.286 16.349 51.016 23.349
-127.241 121.399 111.286 111.286 111.286 111.286 111.286
115.791 77.321 77.321 76.679 76.679
55.072 51.016 42.714 42.714
Pulse Sequence: e2pulse
Solvent: CDCl3
Ambient temperature
Mercury-400BB "imr6"

Relax. delay 2.000 sec
Pulse 15.1 degrees
Acq. time 2.656 sec
Width 5502.2 Hz
16 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 1 min, 20 sec
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400B "nrr6"

Relax, delay 2.00 sec
Pulse 25.9 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
128 repetitions
OBSERVE C19, 100.6445325 MHz
DECOUPLE H1, 400.2583999 MHz
Power 38 dB
Continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.9 Hz
FT size 85538
Total time 9 hr, 53 min, 41 sec
J1-13-55-OPMB/NAe-OMOM

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
File: J1-13-55-H
Mercury-400B5 "nmr6"

Relax. delay 2.000 sec
Pulse 15.4 degrees
Acq. time 2.659 sec
Width 5601.2 Hz
9 repetitions
OBSERVE H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 41 sec

1.03 4.04 0.11
2.17

1.60 2.03 1.8b 1.82 3.16 2.71
2.82
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400E "nmr"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25186.8 Hz
394 repetitions
OBSERVE C13, 100.6472141 MHz
DECcouple H1, 400.2689555 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec
PULSE SEQUENCE
Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.200 sec
Width 25184.9 Hz
112 repetitions

OBSERVE C13, 100.6472156
DECOUPLE H1, 400.2003955
Power 38 dB
continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 6 minutes

Pulse Sequence: s2p1
Solvent: CDC13
Ambient temperature
Mercury-430 "naro"
J1-17-40-Cl-0Me/NAc-MOMO-DIOP

Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
M...
Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25180.9 Hz
128 repetitions
OBSERVE C13, 100.6472255 MHz
DECOUPLE H1, 400.2689955 MHz
Power 26 dB continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 9 hr, 53 min, 41 sec
Pulse Sequence: zpiul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nrr6"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
OBSERVE - H1, 400.2669764 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 20768
Total time 9 min, 41 sec
Pulse Sequence: s2pul
Solvent: CDC13
Ambient temperature
Mercury-400B B "nmrB"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.856 sec
Width 5602.2 Hz
8 repetitions
OBSERVE H1, 400.2009704 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 9 min, 41 sec

8
7
6
5
4
3
2
1
0
ppm

1.03 2.60 0.37
1.04 1.88 1.94
4.61 2.45
2.72 8.44
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmr"
J1-17-t5u-0EtCl/HAc-OMOM/+DIOP

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "rnr6"

Relax. delay 2.000 sec
Pulse 15.1 degrees
Acq. time 2.856 sec
Width 5601.2 Hz
64 repetitions
OBSERVE H1, 400.2689784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
f1 size 32768
Total time 1 hr. 23 min. 41 sec
J1-17-29-naphthyl-OMe/HAc-OMOM/BPE

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nrm8"

Relax. delay 2.000 sec
Pulse 15.3 degrees
Acq. time 2.956 sec
Width 5001.2 Hz
3 repetitions

Observe: 61, 400.2459776 MHz

Data Processing
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 41 sec

1.02  1.01  4.17  0.97  1.00  2.11  3.14  3.06  3.57

ppm
 Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
 Mercury-400B "nms"

 Relax. delay 2.000 sec
 Pulse 15.8 degrees
 Acq. time 2.856 sec
 Width 5652.2 Hz
 8 repetitions
 OBSERVE  H1, 400.5669771 MHz
 DATA PROCESSING
 Line broadening 0.1 Hz
 fT size 32768
 Total time 0 min, 0 sec
Pulse Sequence: s2pu1

Solvent: C6D6

Ambient temperature

Mercury-4000B "nmr6"

Relax, delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.230 sec
Width 25186.3 Hz
80 repetitions

Observe C13, 100.6472210 MHz

Decouple H1, 400.2889955 MHz

Power 36 dB

Continuously on WALIT-15 modulated

Data Processing:
Line broadening 1.0 Hz
FT size 55536
Total time 59 min, 24 sec
JL-17-29-naphthyl-OMe/NAc-OMOM/BPE

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400D "nme6"

Relax. delay 2.000 sec
Pulse 15.9 degrees
Acq. time 2.858 sec
Width 580.2 Hz
8 repetitions
OBSERVE: H1, 400.2669773 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 6 min, 41 sec
J1-17-29-naphthyl-OMe/NAC-OMON-BPE

Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400B "nr6"

Relax. delay 2,000 sec
Pulse 29.3 degrees
Acq. time 1,280 sec
Width 25188.9 Hz
240 repetitions
OBSERVE C13, 100.6472137 MHz
DECOUPLE H1, 400.2689355 MHz
Power 39 mW
continuously on
WALTZ-16 modulated
DATA PROCESSING
line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
Pulse Sequence: cs2m1
Solvent: C6D6
Ambient temperature
Mercury-400B "mmr6"
Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.280 sec
Width 25188.9 Hz
160 repetitions
OBSERVE C13, 140.6472149 MHz
DECOUPLE H1, 400.2609955 MHz
Power 38 dB
continuously on
WAITE-18 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
UNITYplus-300 "nmr"

Relax. delay 1.000 sec
Pulse 15.0 degree
Acq. time 3.813 sec
Width 4196.4 Hz
8 repetitions
OBSERVE H1, 300.1390320 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 0 min, 38 sec

8  7  6  5  4  3  2  1  0  ppm
0.97 0.98 0.99 1.98 1.97 1.96 1.00
Pulse Sequence: 62pul
Solvent: CDC13
Ambient temperature
UNITYplus-300 "nmr2"

Relax. delay 2.000 sec
Pulse 30.0 degrees
Acq. time 1.777 sec
Width 18009.9 Hz
160 repetitions
OBSERVE C13, 75.4768211 MHz
DECOUPLE H1, 360.1408258 MHz
Power 40 dB
continuously on
WALTZ-16 modulated
Single precision data
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 1 hr, 3 min, 7 sec
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "mmr6"

Relax. delay 2.000 sec
Pulse 15.3 degrees
Acq. time 2.856 sec
Width 5002.2 Hz
16 repetitions

OBSERVES H1, 400.2669784 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 32768
Total time 1 min, 20 sec
Pulse Sequence: s2pul
Solvent: CDCl3
Ambient temperature
Mercury-400BB "nmm6"

Relax. delay 2.000 sec
Pulse 23.3 degrees
Acq. time 1.281 sec
Width 25168.8 Hz
336 repetitions

OBSERVE C13, 100.6472202 MHz
DECOUPLE H1, 400.2689955 MHz
Power 38 dB
Continuously on
WALTZ-16 modulated

DATA PROCESSING
Line broadening 1.0 Hz
FT size 85536
Total time 0 min, 0 sec

220 200 180 160 140 120 100 80 60 40 20 0 ppm

199.007
151.321
121.322
70.118
77.307
77.300
76.987
70.118
102.608
128.088
128.729
121.116
123.217
123.217
131.129
135.277
135.277
Pulse Sequence: s2p1
Solvent: CDC13
Ambient temperature
Mercury-400BB "nms"

Relax. delay 2.000 sec
Pulse 15.3 degrees
Acq. time 2.856 sec
Width 5601.2 Hz
16 repetitions

OBSERVE: H1, 400.2669784 MHz
DATA PROCESSING
Lines broadening 0.1 Hz
FT size 32768
Total time 0 min, 0 sec
Pulse Sequence: s2pu1
Solvent: CDCl3
Ambient temperature
Mercury-400BB "rmr5"

Relax. delay 2,000 sec
Pulse 23.5 degrees
Acq. time 1,280 sec
Width 25188.9 Hz
80 repetitions
OBSERVE CI3, 100.6472202 MHz
DECouple H1, 400.2699955 MHz
Power 38 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 59 min, 24 sec