Compound 1  H-NMR  IN CD$_3$Cl$_3$
Compound 1  H-NMR  IN CD$_3$COCD$_3$
Compound 1  C-NMR  IN CD$_3$Cl$_3$

INNOVA-500  1H-NMR  HD-16  IN CDCl$_3$  2007.08.28
Compound 1 DEPT-NMR IN CD$_3$Cl$_3$

INOVIA-500 DEPT-NMR 90-16 IN CDCl$_3$ 2007.06.27
Compound 1  gCOSY IN CDCl₃

Solvent: CDCl₃
Temp. 25.0 °C / 788.1 K
INOVA-500  "IMP-500"

Relax. delay 1.000 sec
Seq. time 0.120 sec
Width 4070.8 Hz
BW Width 4070.8 Hz
5 repetitions

Data Processing
Time bell 0.063 sec
F1 DATA PROCESSING
3 Time bell 0.051 sec
Total time 10 min, 17 sec
Compound 1  gCOSY  IN CD<sub>3</sub>COCDC
Compound 1  gHMOC  IN CD$_3$Cl$_3$
Compound 1  gHMBC  IN CD$_2$Cl$_3$

SOLVENT: CDC13
Temp. 25.0 C / 298.1 K
Uses: 1H5, - 1HM-501

Relax. delay 1.000 sec
Acq. time 6.213 sec
Width 694.6 Hz
2D Width 15411.4 Hz
F1 Size 2048 increments
F2 Size 1024 increments
Accept R1, 698.7782000 MHz
DATA PROCESSING
Sine bell 0.048 sec
F1 0.050 sec
F2 0.050 sec
Total time 3 hr, 14 min, 25 sec
Compound 1  NOESY  IN CD$_3$Cl$_3$

Solvent: CDCl$_3$

TOCSY 125.0 250.1 K
INDIA 500 "IAW-501"

Relev. delay 1.800 sec
Mixing 0.800 sec
Acq. time 3.533 sec
Ref. field 1.000.0 Hz
Freq. range 300.0-5 Hz
6 repetitions
5.000 increments
S.1.1500 increments
Sensitivity 399.710283 MHz
DATA PROCESSING
Quant. application 0.001 sec
F1 DATA PROCESSING
Gauss. application 0.008 sec
F2 DATA PROCESSING
Total time 2 hr, 18 min, 26 sec
Compound 1  NOESY  IN CD$_3$COCD$_3$
Compound 1   CD

![CD spectrum graph with wavelength on the x-axis and CD[mdeg] on the y-axis. The graph shows multiple peaks and troughs indicating the CD values at different wavelengths.](image-url)
Compound 2  H-NMR IN CD$_3$Cl$_3$
Compound 2 C-NMR IN CD$_3$Cl$_3$
Compound 2  gHMBC  IN CD$_2$Cl$_3$
Compound 2  NOESY  IN CD$_3$Cl$_3$
Compound 2  CD
Compound 3  H-NMR IN CD$_3$Cl$_3$
Compound 3  C-NMR IN CD$_3$Cl$_3$
Compound 3  gHMBC  IN CD$_3$Cl$_3$

Solvent: CDC$_3$
Temp. 29.0°C / 298.1 K
User: 1.14-07
INDA-500 "INM-501"

Relax. delay 1,000 sec
Acq. time 1,078.8 sec
Data acquisition delay 5.36 sec
Data set 64
2D Width 28411.4 Hz
25 repetitions
256 increments
Obs. freq. 500.13 MHz
Resolution 0.012 ppm
F1: Linear 0.045 sec
F2: Linear 0.098 sec
F1 size 2048 w 4096
Total time 2 hr, 14 min, 25 sec
Compound 3  NOESY  IN CD$_3$Cl$_3$
Compound 3 CD IN CD$_3$Cl$_3$