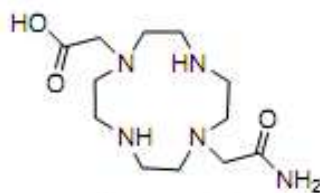
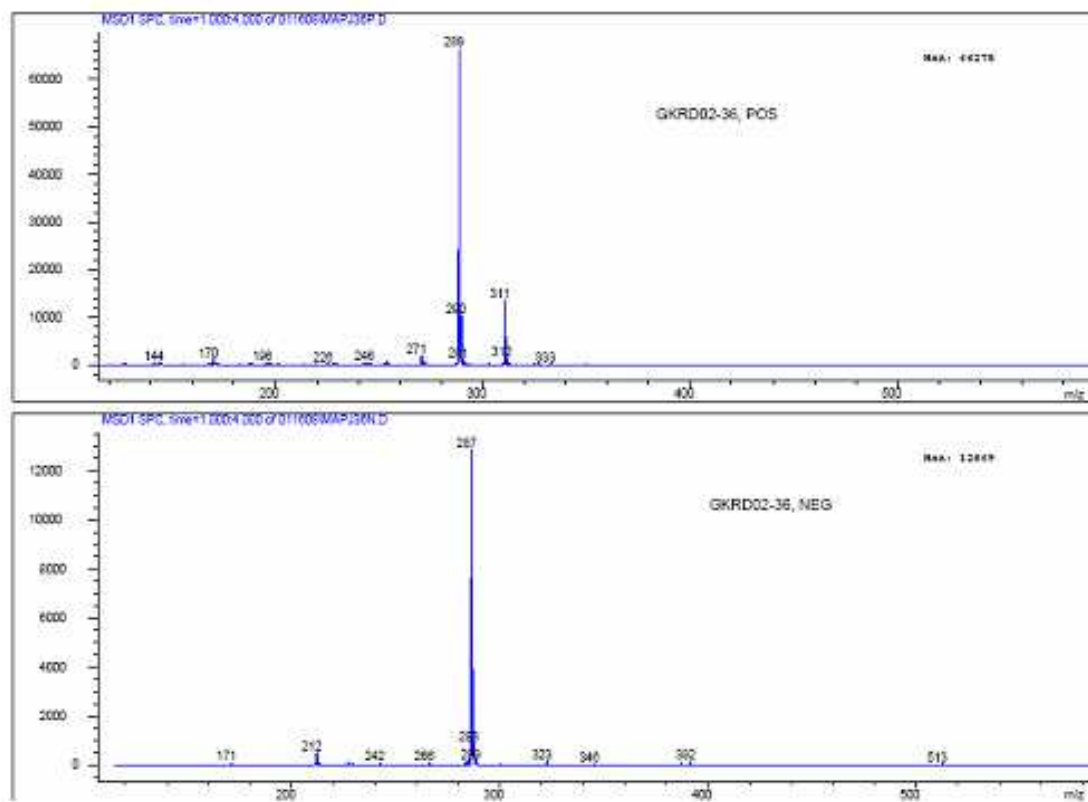


APPENDIX G

Characterization of DOAAM Ligand

DOAAM = *1,4,7,10*-tetraazacyclododecane-*1*-acetate-*7*-amide



$C_{12}H_{25}N_5O_3$
Exact Mass: 287.2

m/e: 287.20 (100.0%), 288.20 (13.4%), 288.19 (1.8%), 289.20 (1.7%)



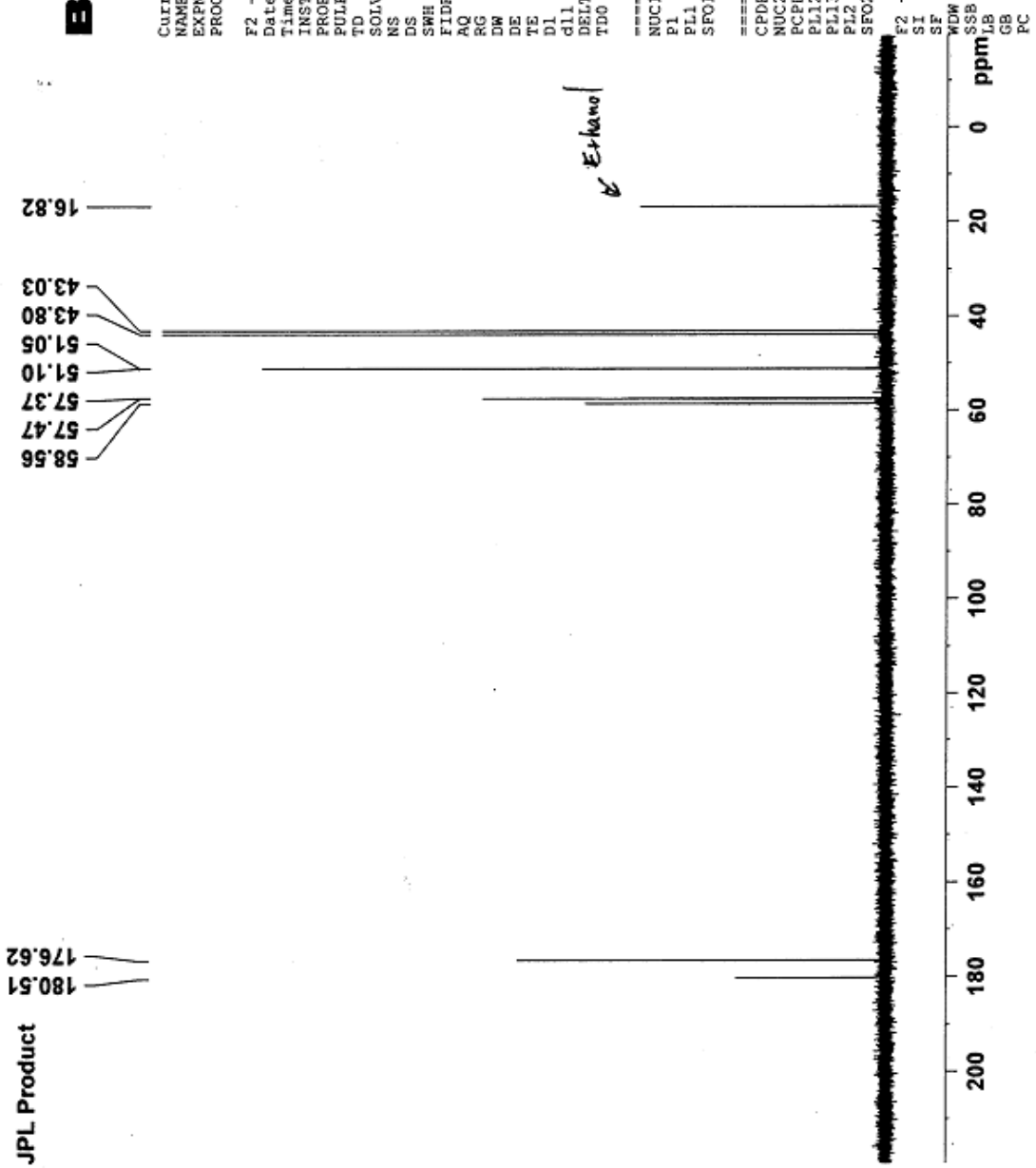
Current Data Parameters
NAME JEL-Product
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080123
Time 20.36
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT D2O
NS 277
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 2050
DM 20.800 usec
DE 6.50 usec
TE 300.1 K
d1 2.0000000 sec
d11 0.0300000 sec
DELTA 1.89999998 sec
TDO 1

===== CHANNEL f1 =====
NUC1 13C
P1 10.00 usec
PL1 -0.20 dB
SFO1 100.6228298 MHz

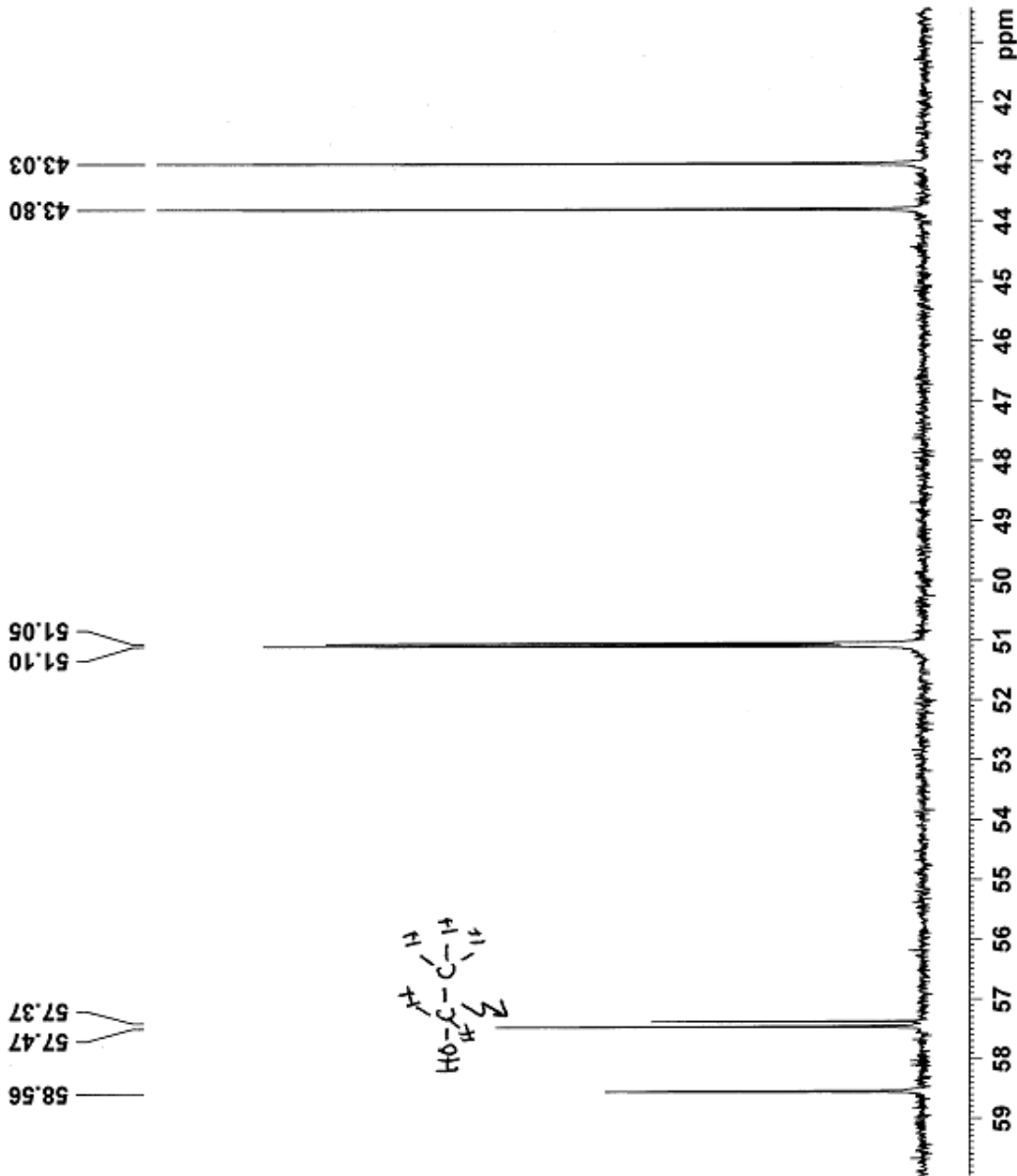
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 60.00 usec
PL12 12.12 dB
PL13 12.12 dB
PL2 -6.00 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.40





JPL Product



Current Data Parameters
NAME JPL-Product
EXNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080123
Time_ 20.36
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT D2O
NS 277
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 2050
DW 20.800 usec
DE 6.50 usec
TE 300.1 K
D1 2.0000000 sec
d11 0.0300000 sec
DELTA 1.8999999 sec
TDO 1

==== CHANNEL f1 =====
NUC1 13C
P1 10.00 usec
PL1 -0.20 dB
SFO1 100.6228298 MHz

==== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 60.00 usec
PL12 12.12 dB
PL13 12.12 dB
PL2 -6.00 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.40



JPL Product

180.51
176.62

58.56
57.47
57.37
51.10
51.05
43.80
43.03
16.82

Etano

Current Data Parameters
NAME JPL-Product
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080123
Time 20.36
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zgpg30
TD 65536
SOLVENT D2O
NS 277
DS 4
SWH 24038.461 Hz
FIDRES 0.366798 Hz
AQ 1.3631988 sec
RG 2050
DW 20.800 usec
DE 6.50 usec
TE 300.1 K
D1 2.0000000 sec
d11 0.0300000 sec
DELTA 1.89999998 sec
TDO 1

==== CHANNEL f1 =====
NUC1 13C
P1 10.00 usec
PL1 -0.20 dB
SFO1 100.6228298 MHz

==== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 60.00 usec
PL12 12.12 dB
PL13 12.12 dB
PL2 -6.00 dB
SFO2 400.1316005 MHz

F2 - Processing parameters
SI 32768
SF 100.6127690 MHz
MDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.40

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



Current Data Parameters
NAME JPL-Product
EXPNO 4
PROCNO 1

F2 - Acquisition Parameters
Date_ 20080123
Time_ 21:31
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 16
DS 2
SWH 8223.685 Hz
FIDRES 0.125483 Hz
AQ 3.9846387 sec
RG 144
DW 60.800 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
TDO 1

***** CHANNEL f1 *****
NUC1 LH
P1 7.69 usec
PL1 -6.00 dB
SFO1 400.1324710 MHz

F2 - Processing parameters
SI 32768
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

