

# Supporting Information

## Studies on a Total Synthesis of the Microbial Immunosuppressive Agent FR901483

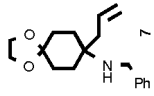
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University Park, Pennsylvania 16802*

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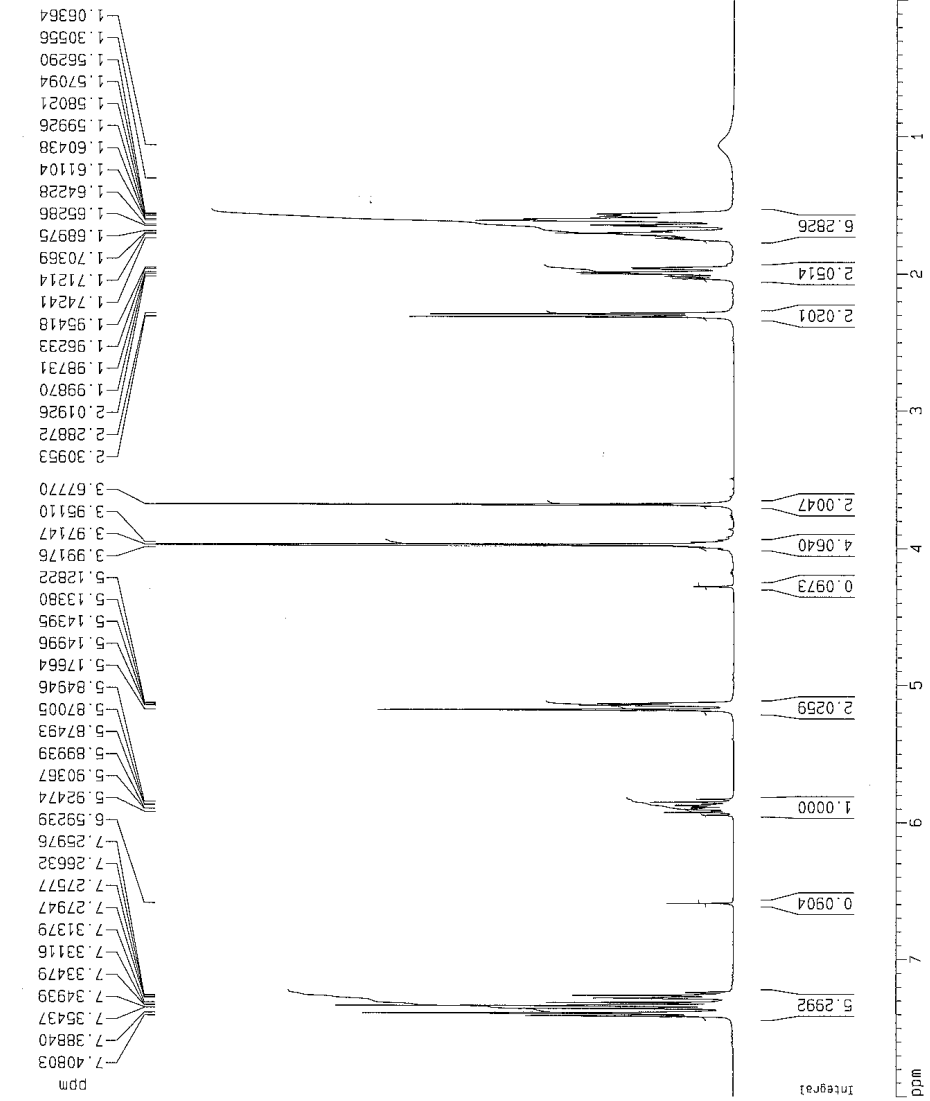


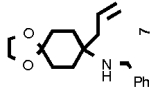
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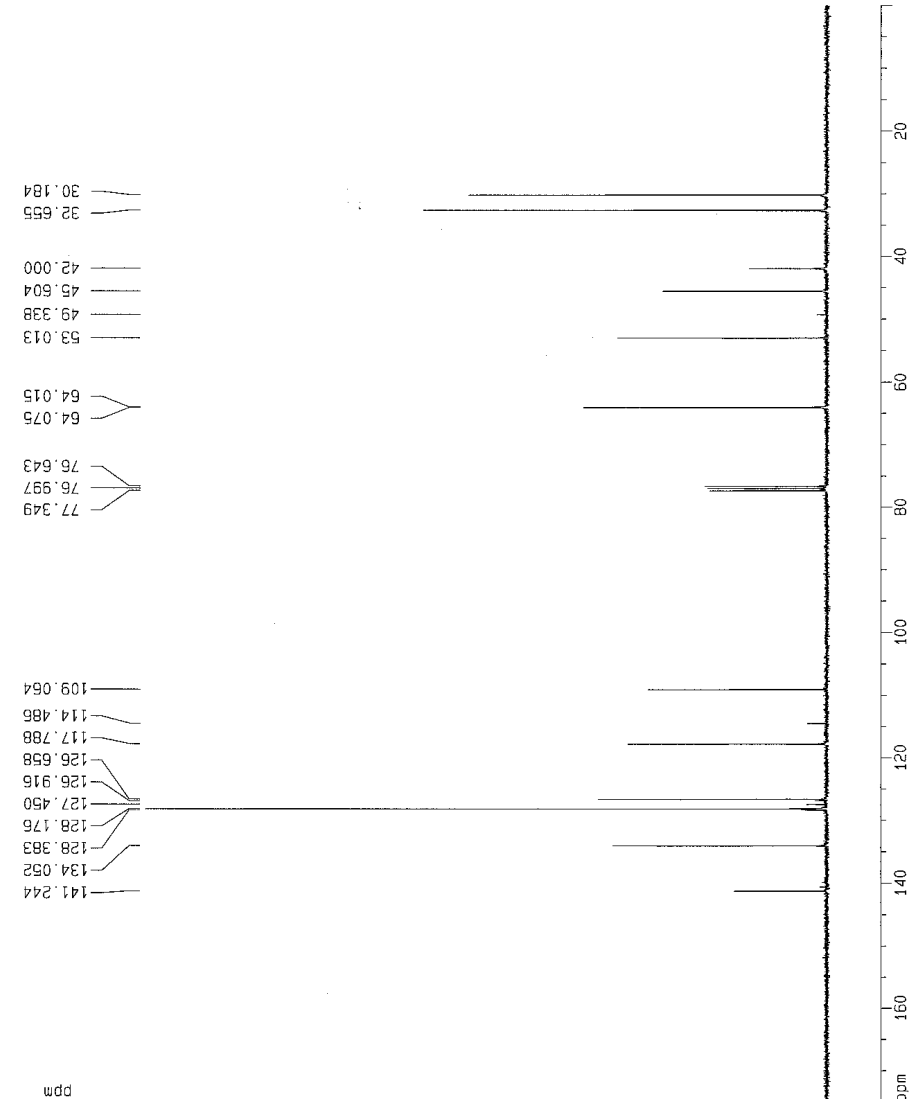


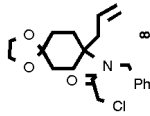
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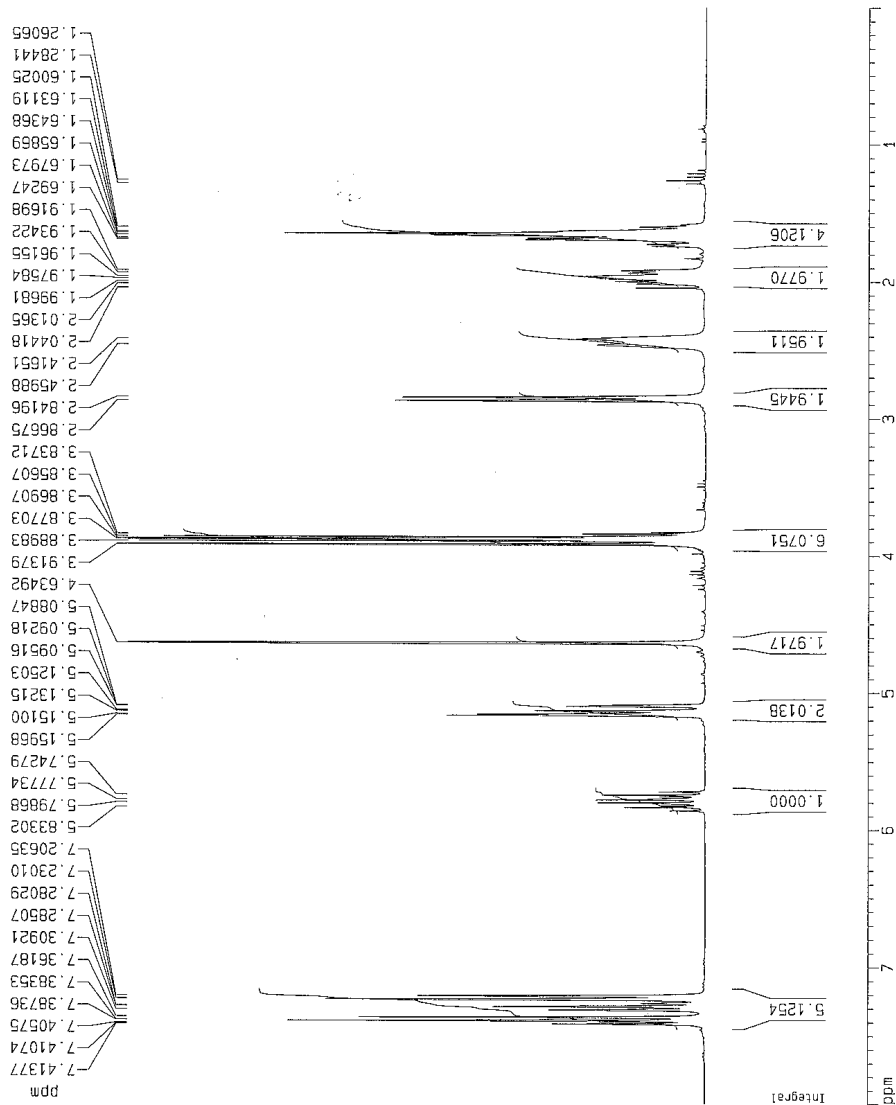
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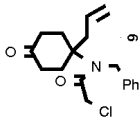
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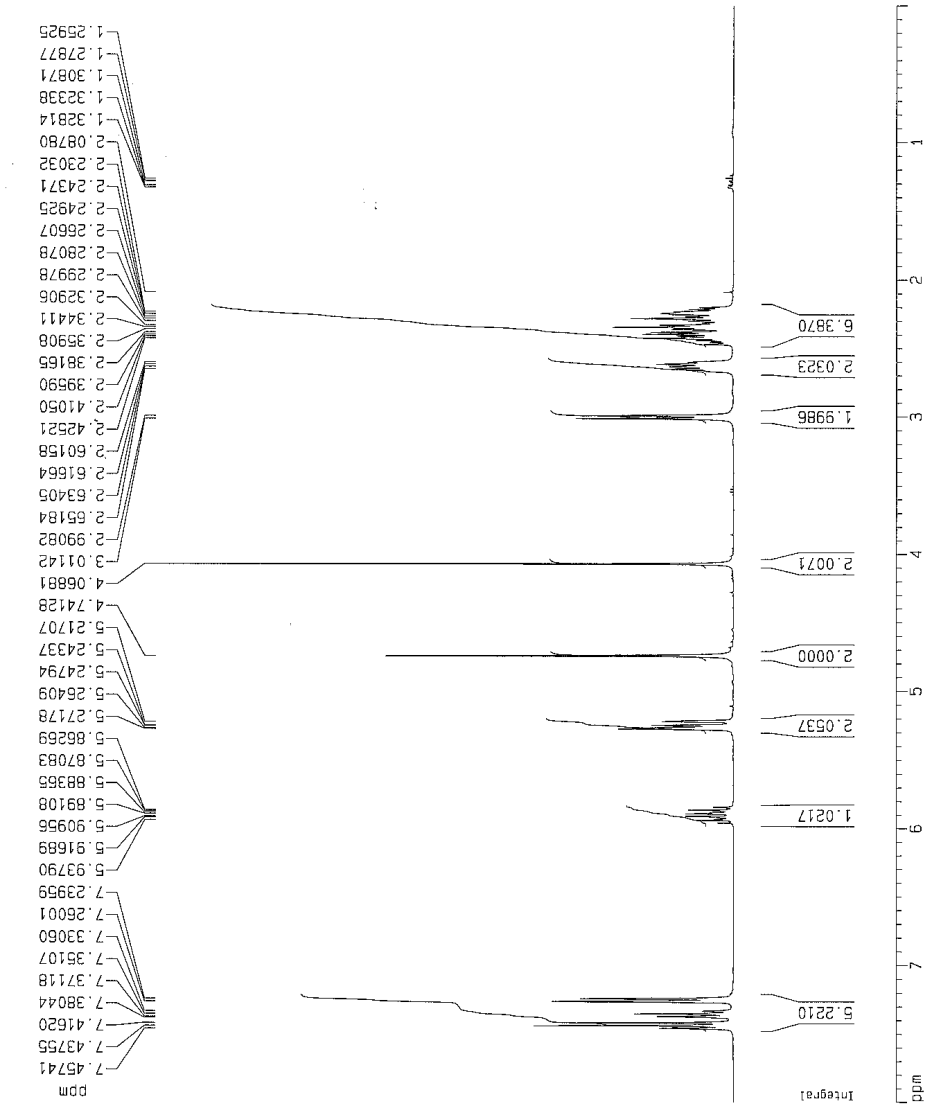


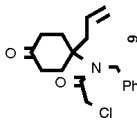
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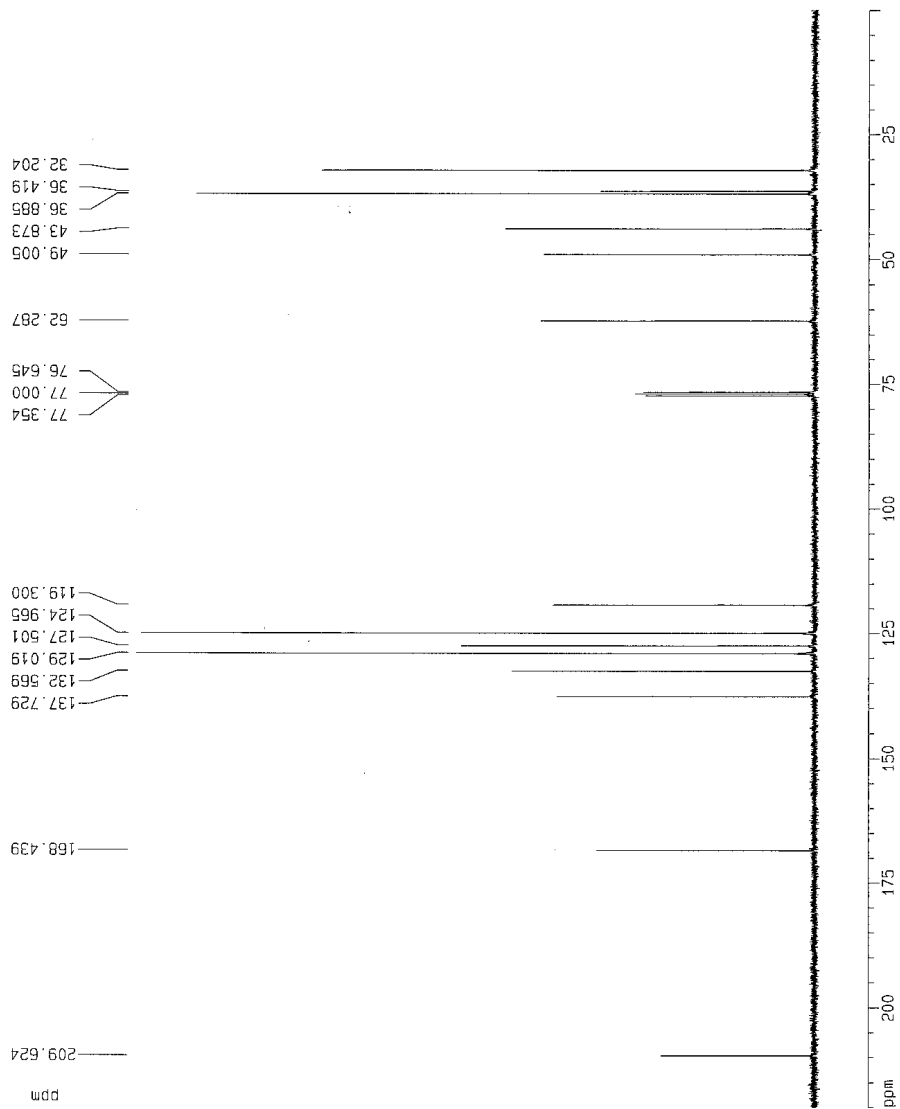


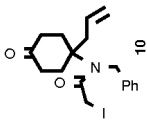
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 NUCLEUS 13C

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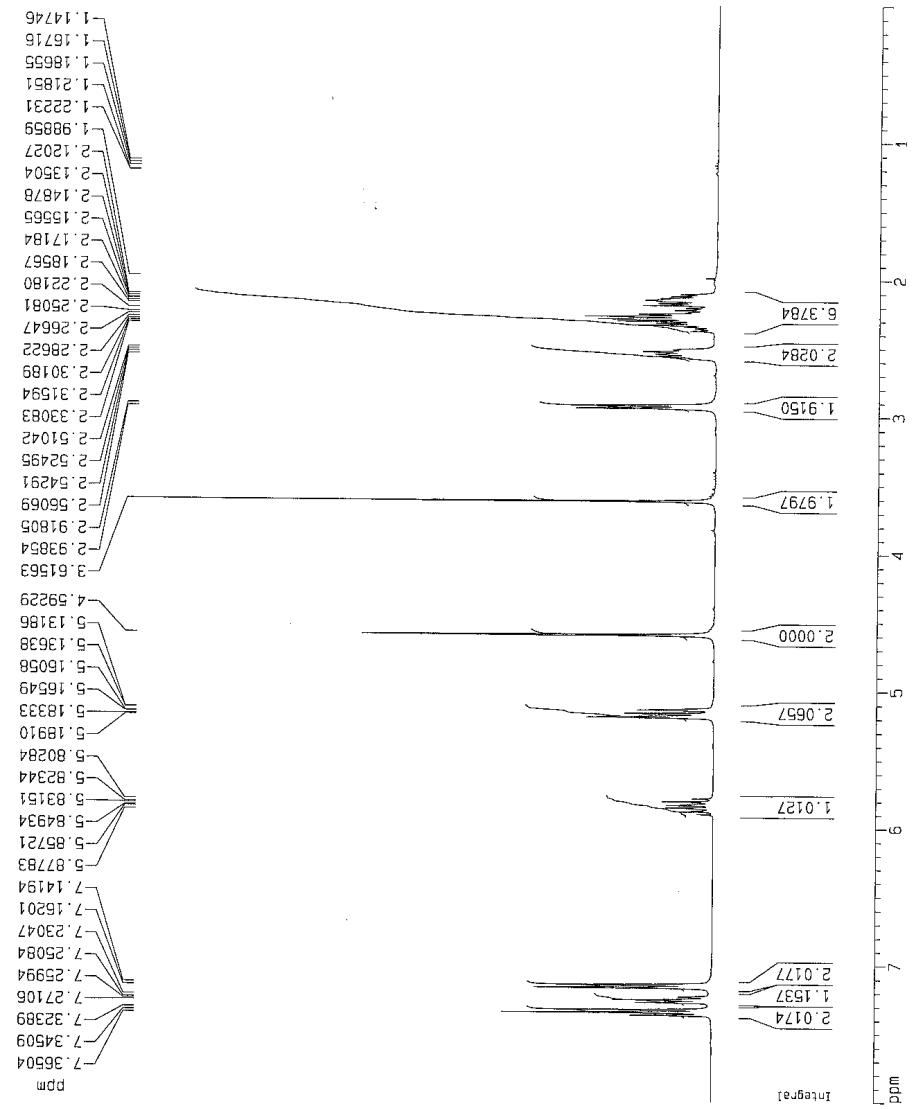


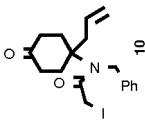
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1D NMR plot parameters  
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 F1P 8.000 ppm  
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 F2P 0.000 ppm  
 F2 0.00 Hz  
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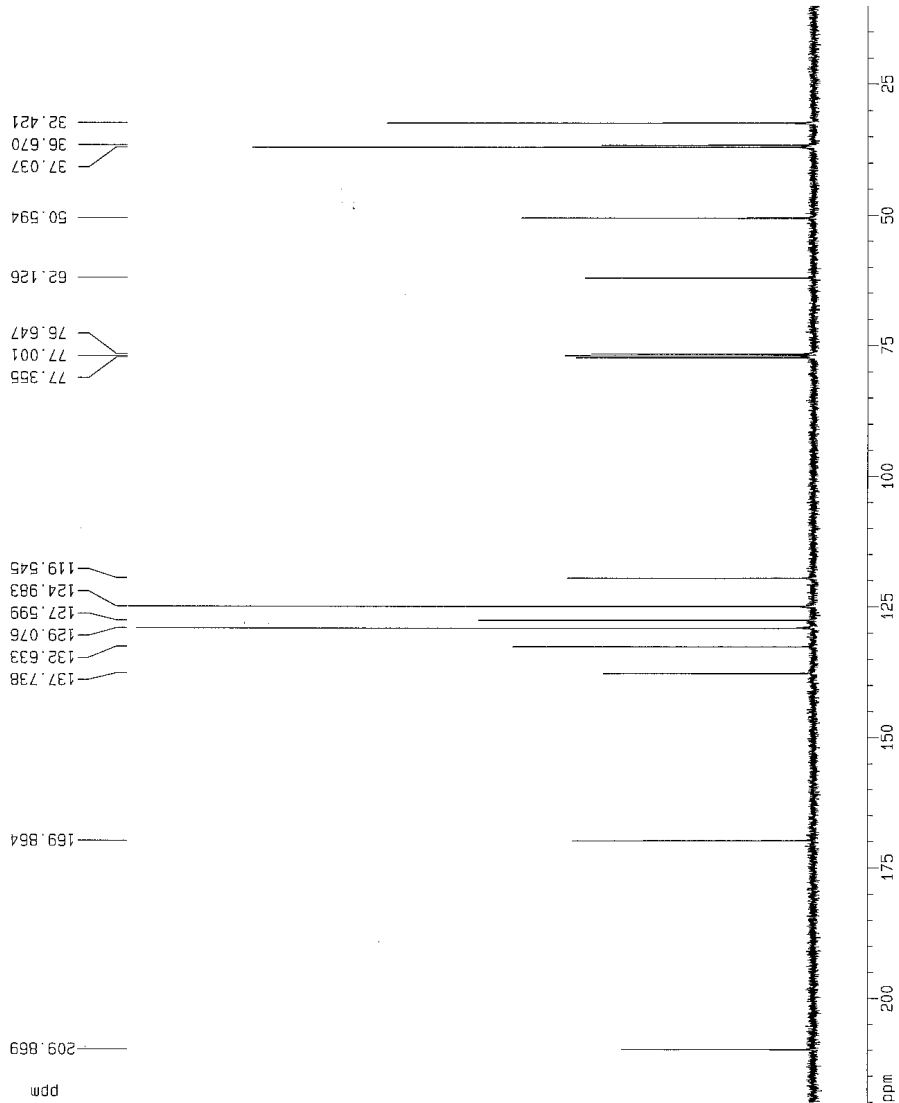


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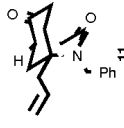
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 NUCLEUS 13C

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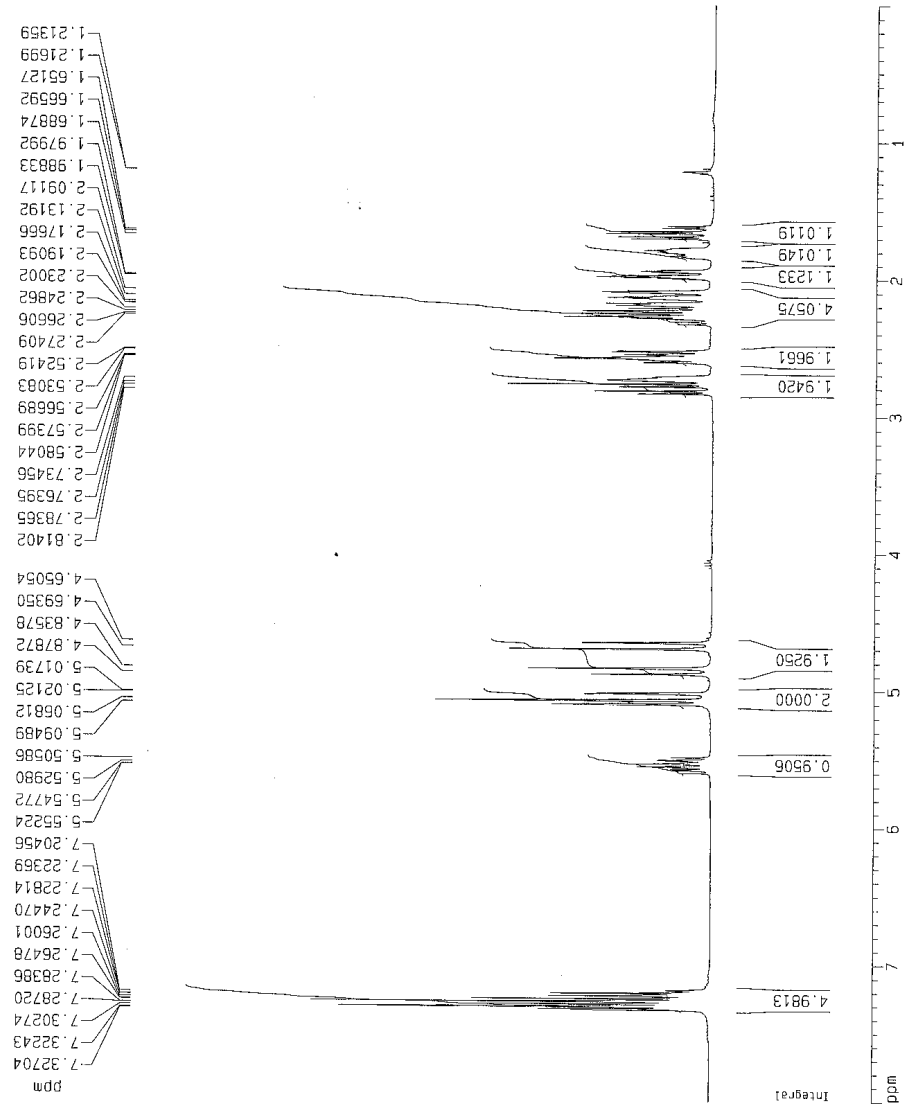
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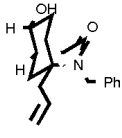
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 NUCLEUS 1H

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1D NMR plot parameters  
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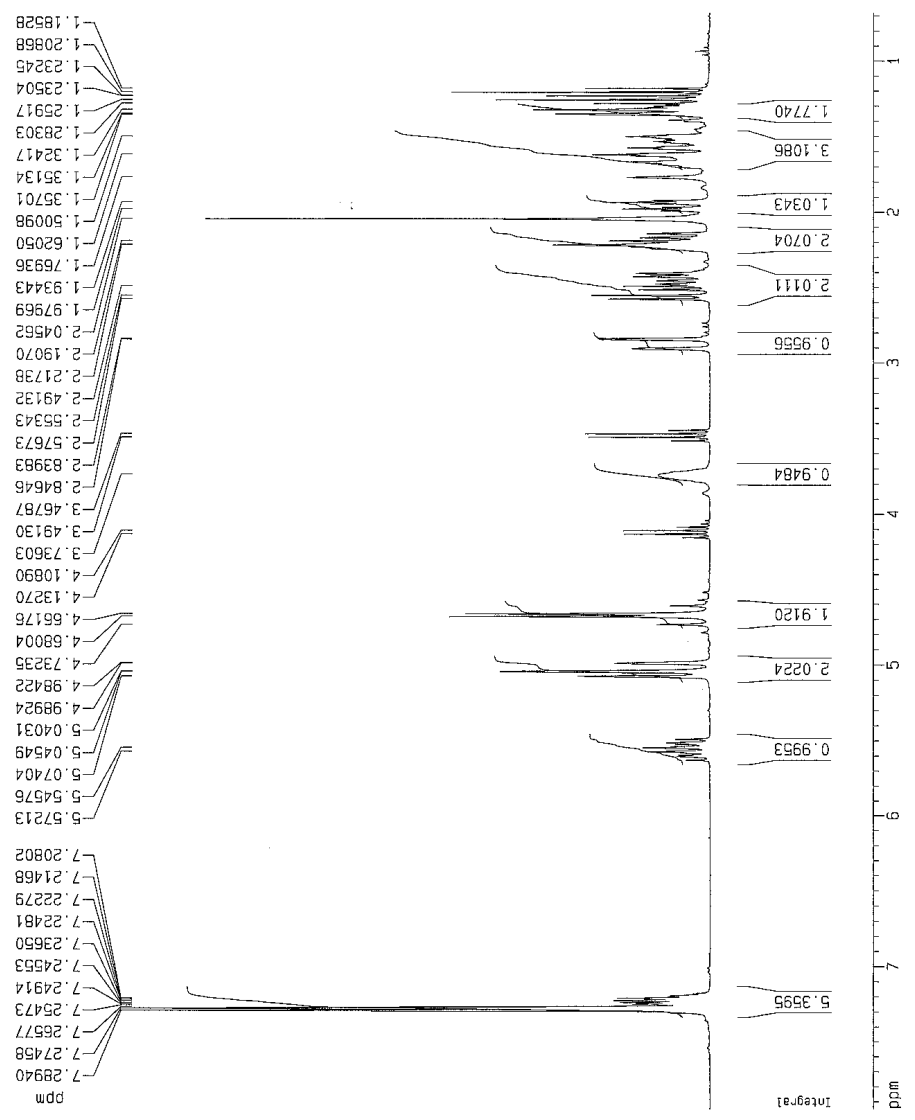
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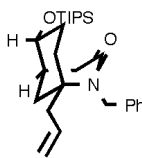
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 DS 2  
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 F1 2383.15 Hz  
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Current Data Parameters

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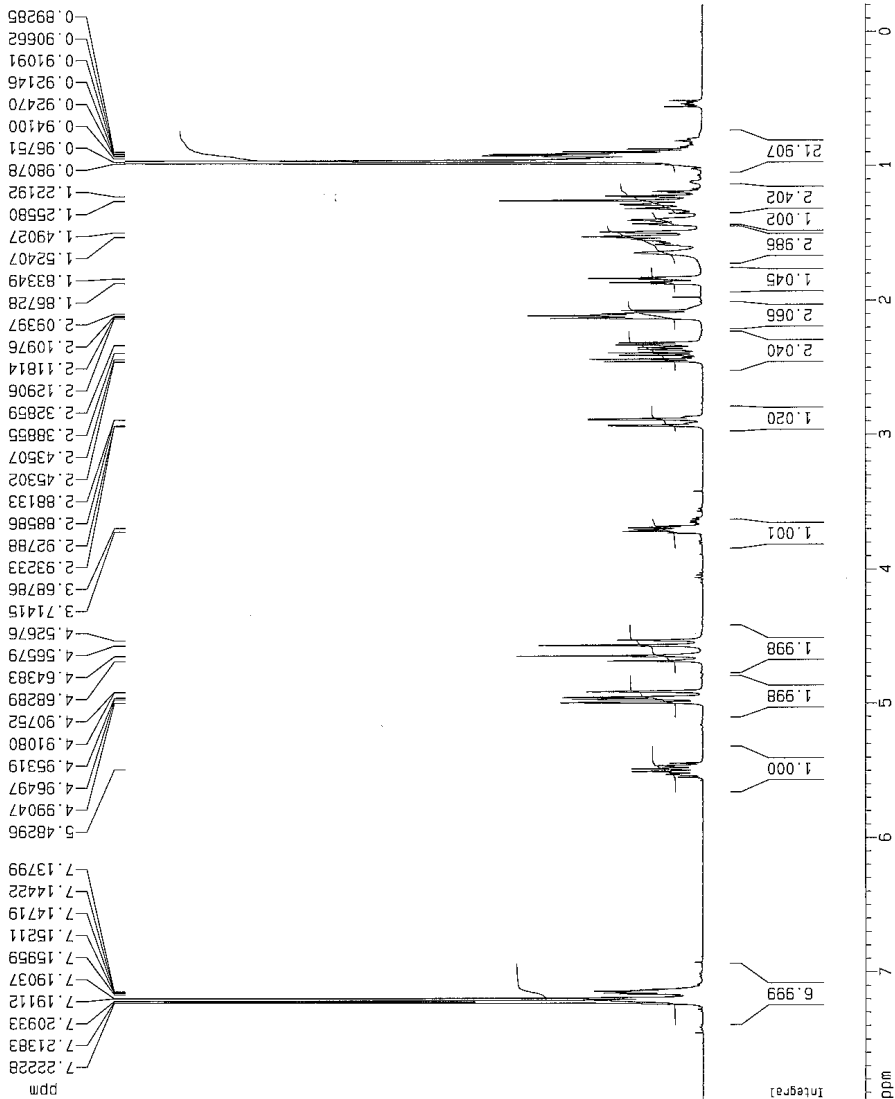
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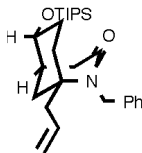
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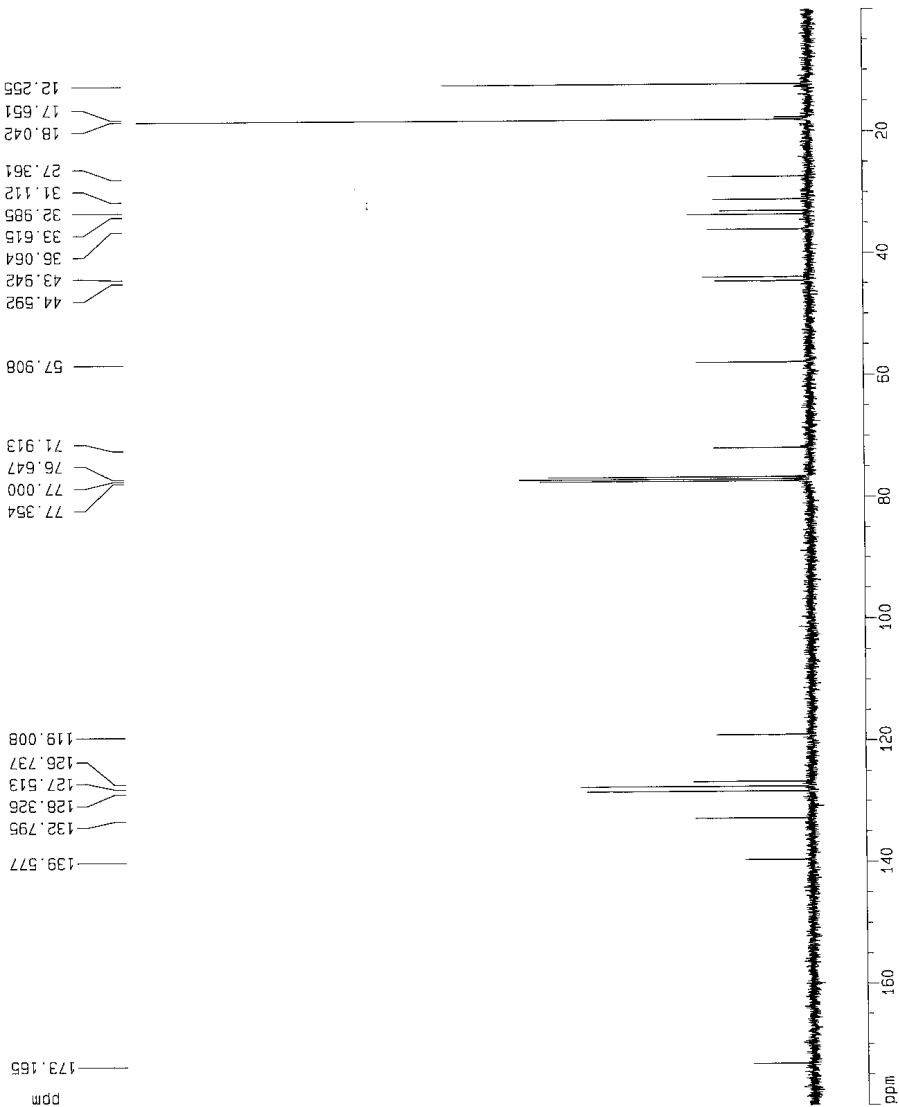
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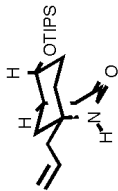
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1D NMR plot parameters

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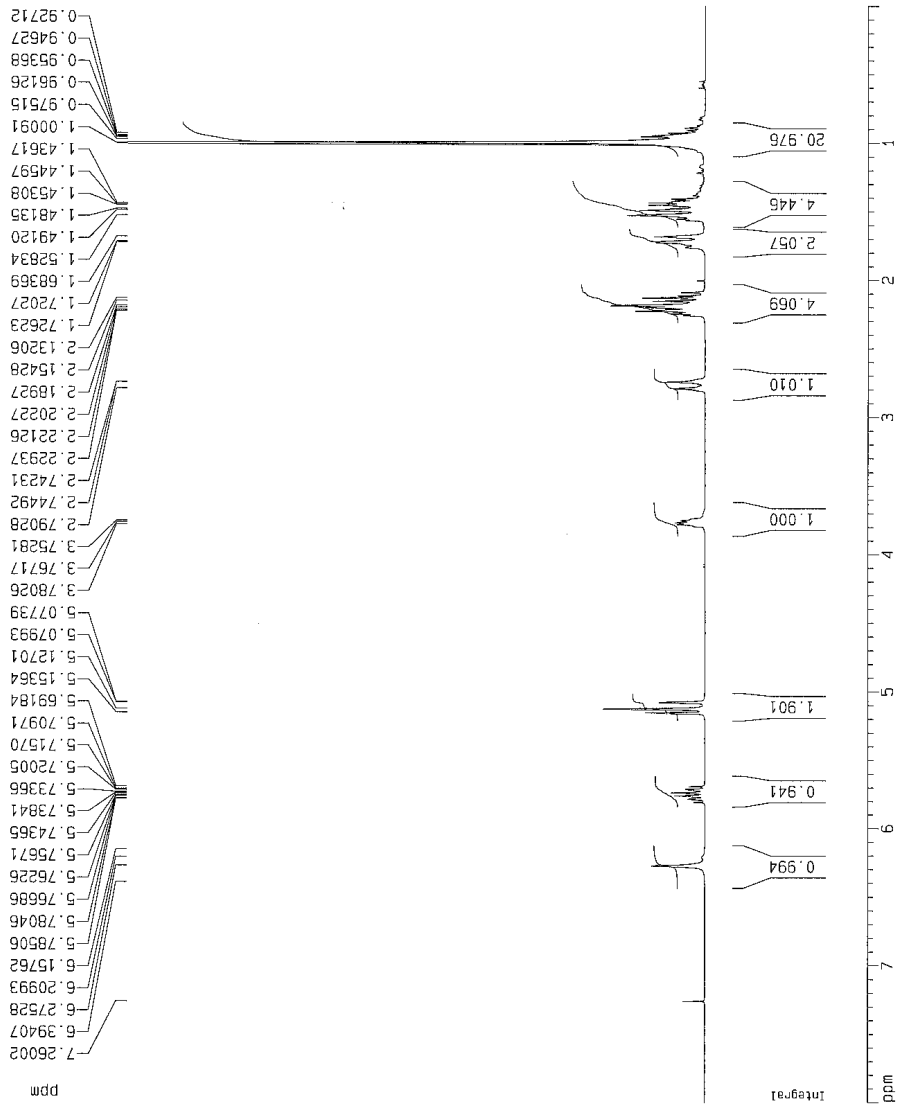
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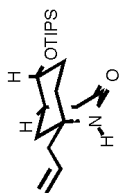
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 FIDRES 0.227743 Hz  
 AQ 2.1955051 sec  
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 DE 95.71 usec  
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1D NMR plot parameters  
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 F1P 8.000 ppm  
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 F2P 0.000 ppm  
 F2 0.00 Hz  
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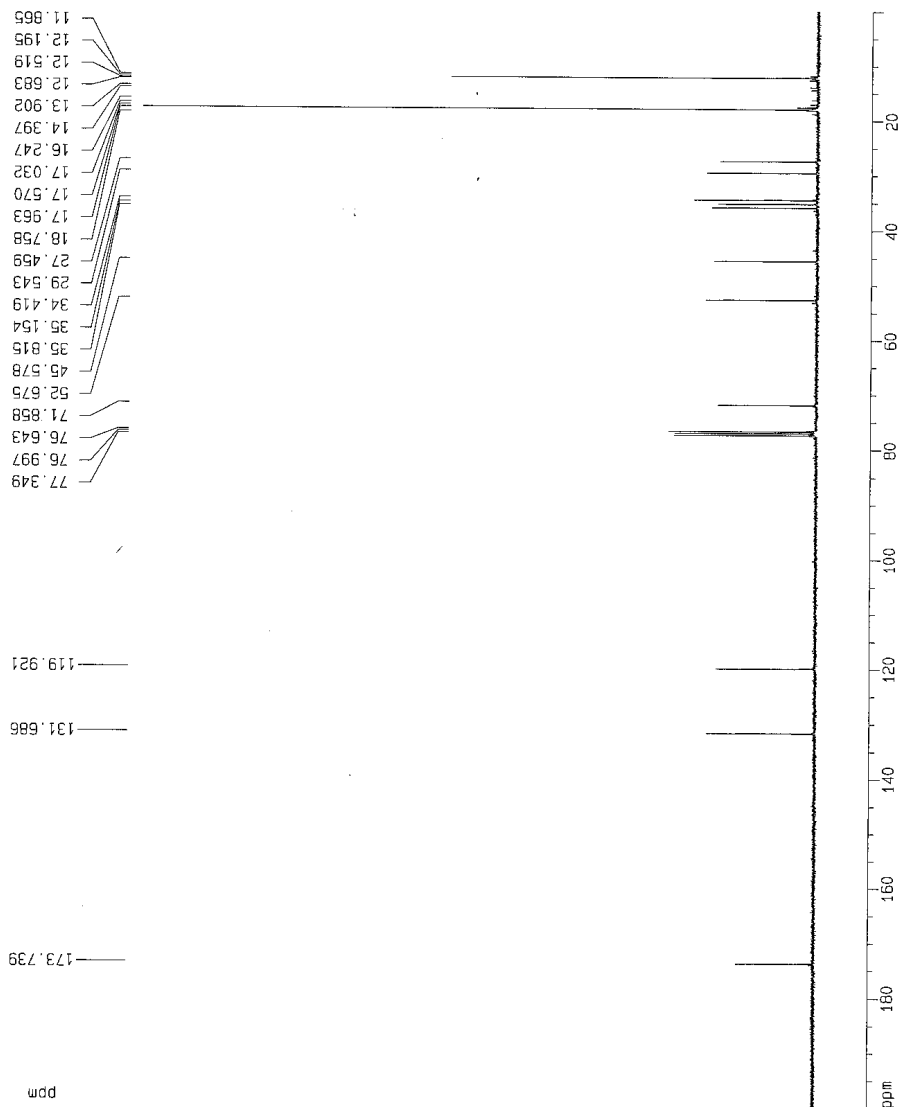
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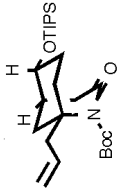
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 DE 24.29 usec  
 TE 300.0 K  
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 D11 0.0300000 sec  
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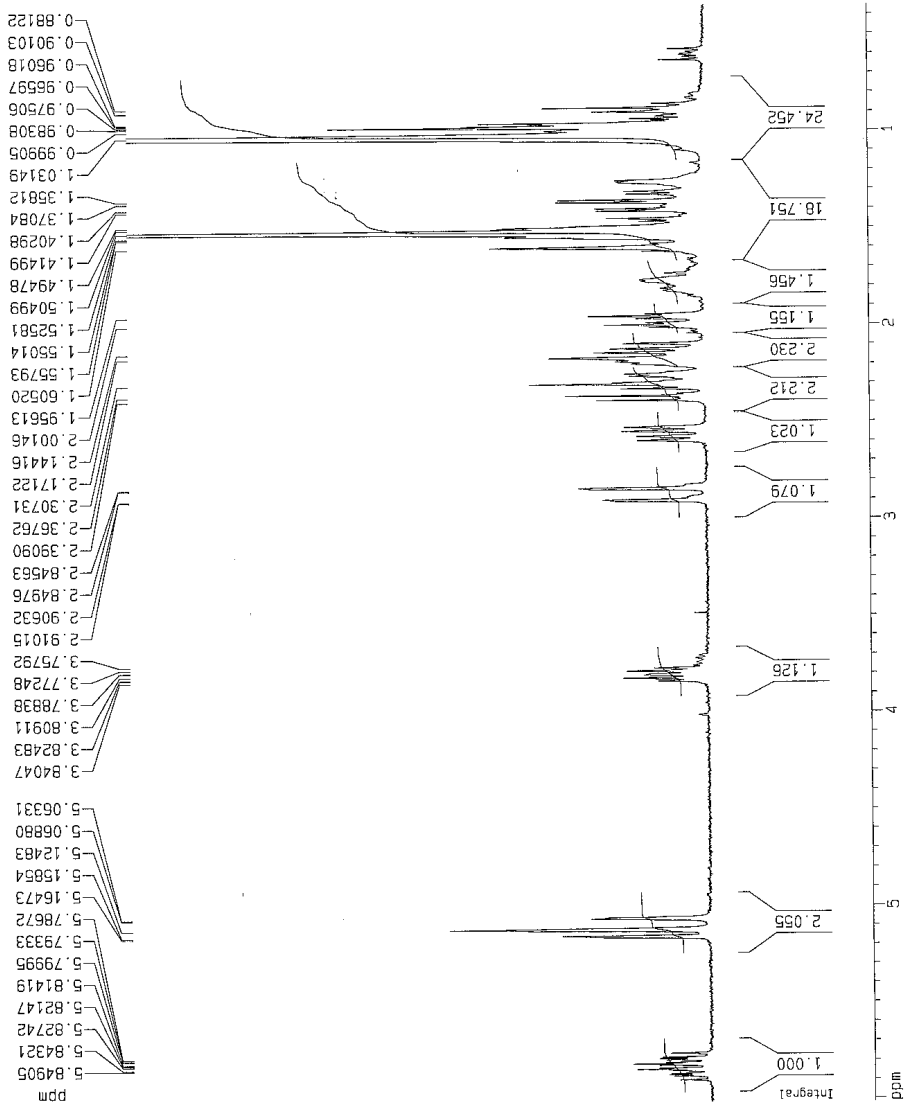
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 HZCM 905.55762 Hz/cm

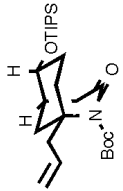




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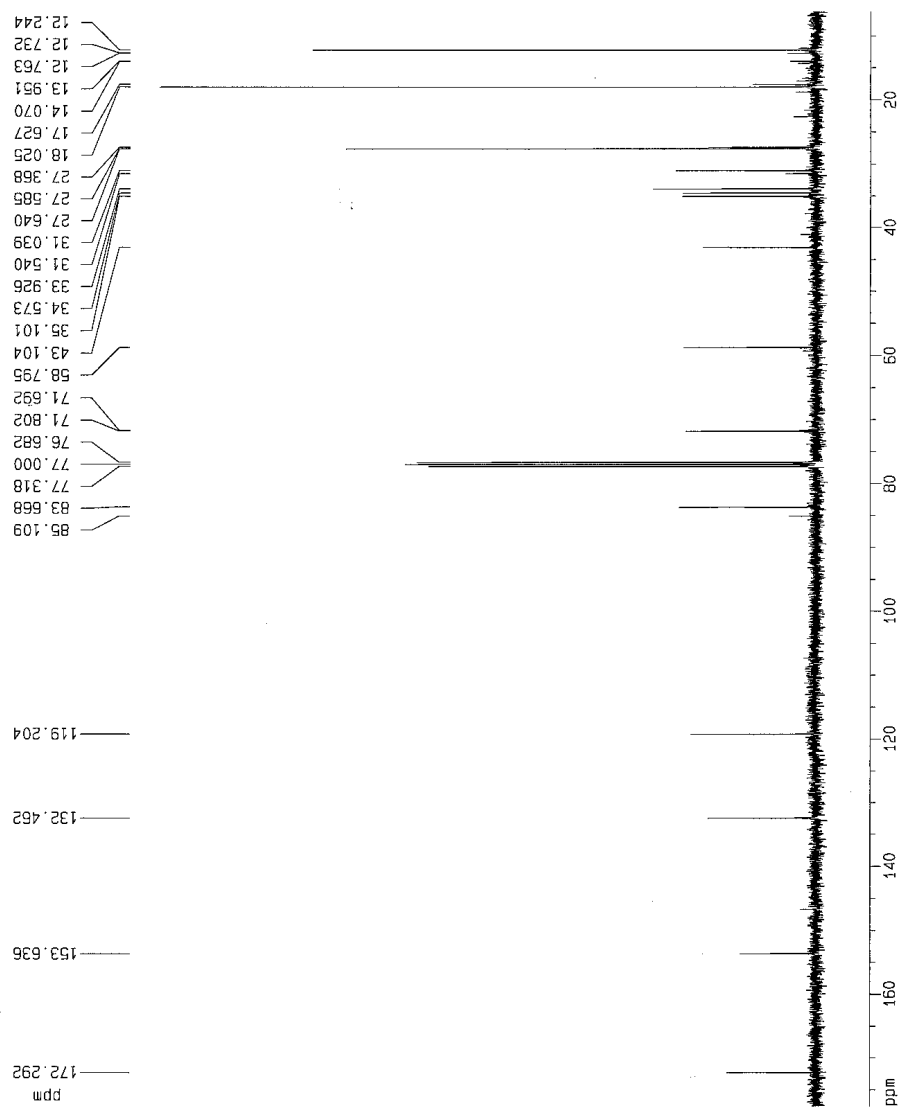
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 NS 244  
 DS 4  
 SWH 25125.629 Hz  
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 RG 3649.1  
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\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 13C  
 P1 16.15 usec  
 PL1 -6.00 dB  
 SF01 100.627717 MHz

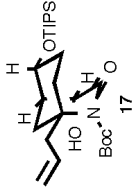
\*\*\*\*\* CHANNEL f2 \*\*\*\*\*  
 CPDPRG2 waltz16  
 NUC2 1H  
 P2 113.00 usec  
 PL2 0.00 dB  
 PL12 24.00 dB  
 PL13 24.00 dB  
 SF02 400.1316005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 100.612717 MHz  
 KDM EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

1D IMF plot parameters  
 CX 20.00 cm  
 F1P 177.585 ppm  
 F1 17868.44 Hz  
 F2P 6.227 ppm  
 F2 626.55 Hz  
 PPMCH B.56844 ppm/cm  
 HZCM 862.09491 Hz/cm







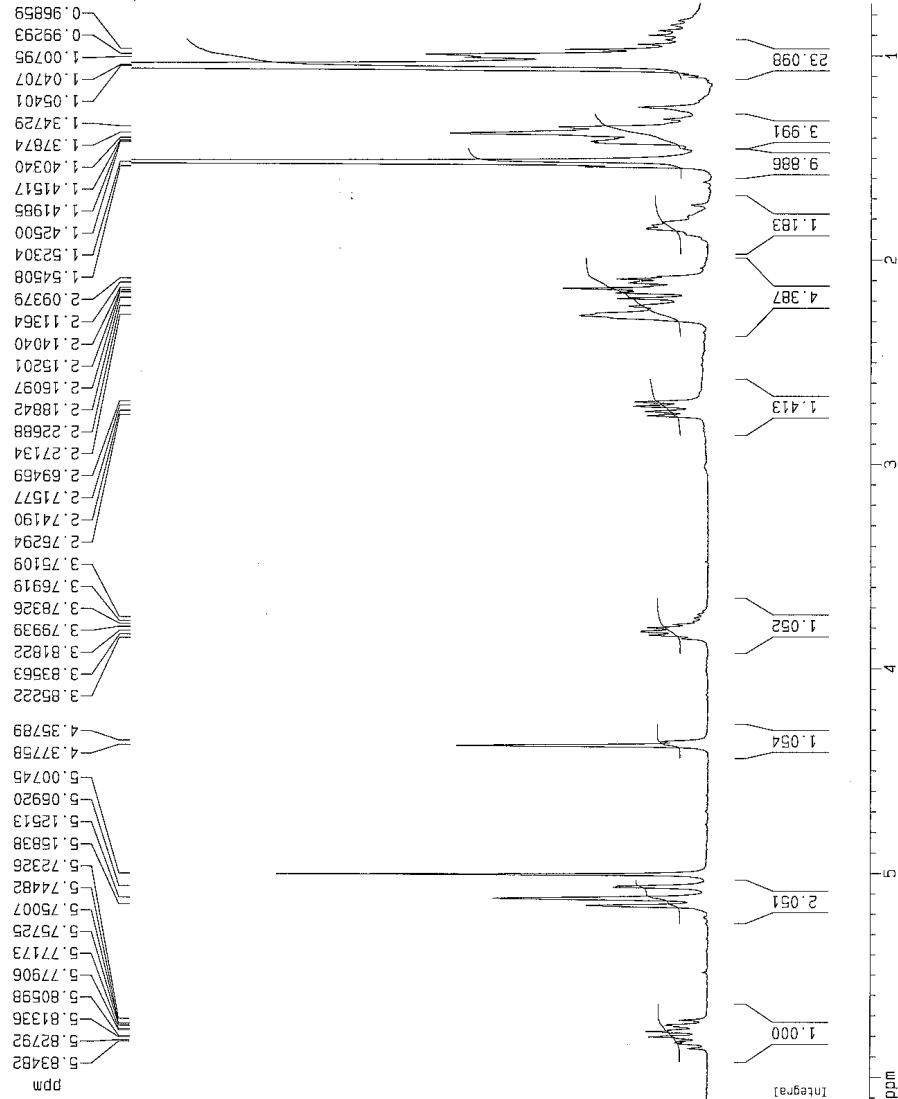
Current Data Parameters  
 NAME Jan29-2002-We.in  
 EXPNO 20  
 PROCNO 1

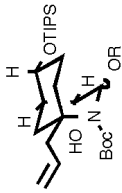
F2 - Acquisition Parameters  
 Date\_ 20020129  
 Time 15:54  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.064190 Hz  
 AQ 5.3064660 sec  
 RG 287.4  
 DM 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.80 usec  
 PL1 -6.00 dB  
 SFO1 300.1316534 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1300062 MHz  
 WDM EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 6.104 ppm  
 F1 1832.12 Hz  
 F2P 0.744 ppm  
 F2 223.24 Hz  
 PPMCM 0.26804 ppm/cm  
 HZCM 80.44561 Hz/cm





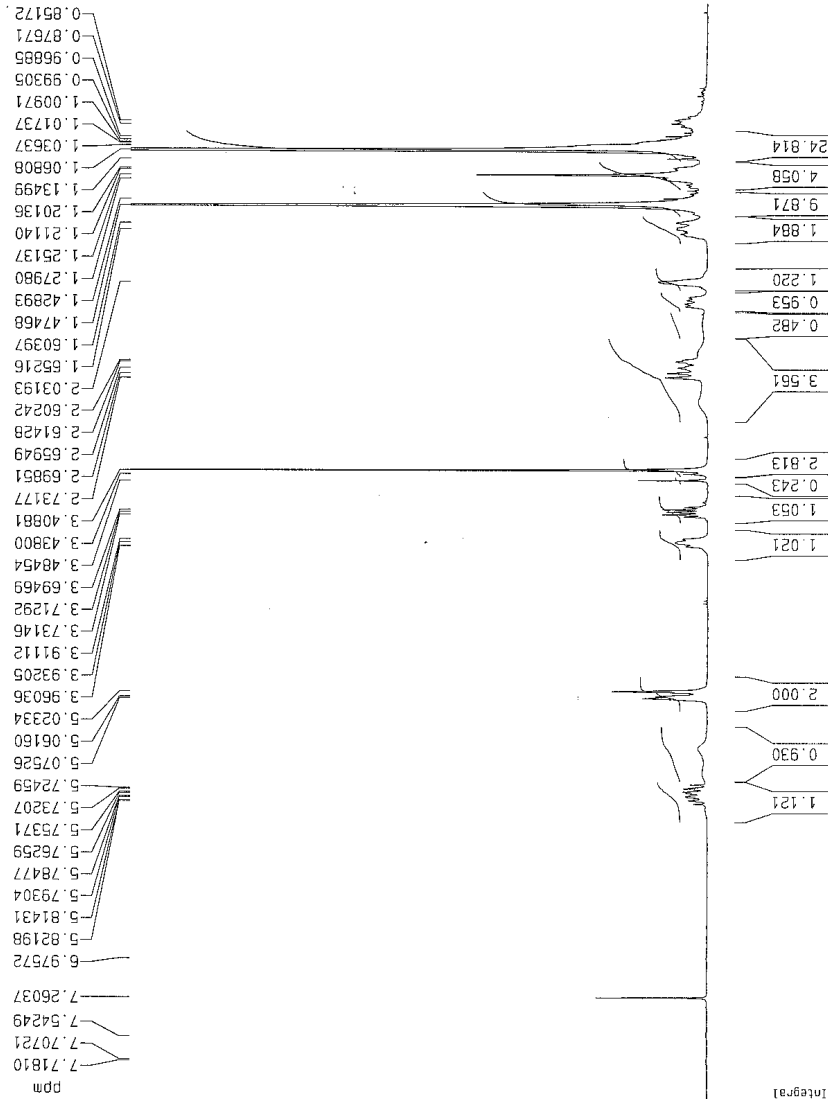
19

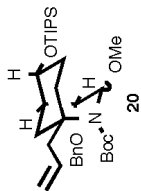
Current Data Parameters  
 NAME May31-00-WeIrrc  
 EXPNO 10  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20000531  
 Time\_ 8.56  
 INSTRUM spect  
 PROBHD 5 mm Multino  
 PULPROG zg30  
 TD 32768  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.188380 Hz  
 AQ 2.6542580 sec  
 RG 323.5  
 DW 61.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec  
 P1 9.60 usec  
 SFO1 300.1318534 MHz  
 NUC1 1H  
 PL1 -6.00 dB

F2 - Processing parameters  
 SI 16384  
 SF 300.130060 MHz  
 XDM EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 FXP 8.000 ppm  
 F1 2401.04 Hz  
 F2 0.000 ppm  
 F2 0.00 Hz  
 PPMCM 0.40000 ppm/cm  
 XZCM 120.05200 Hz/cm





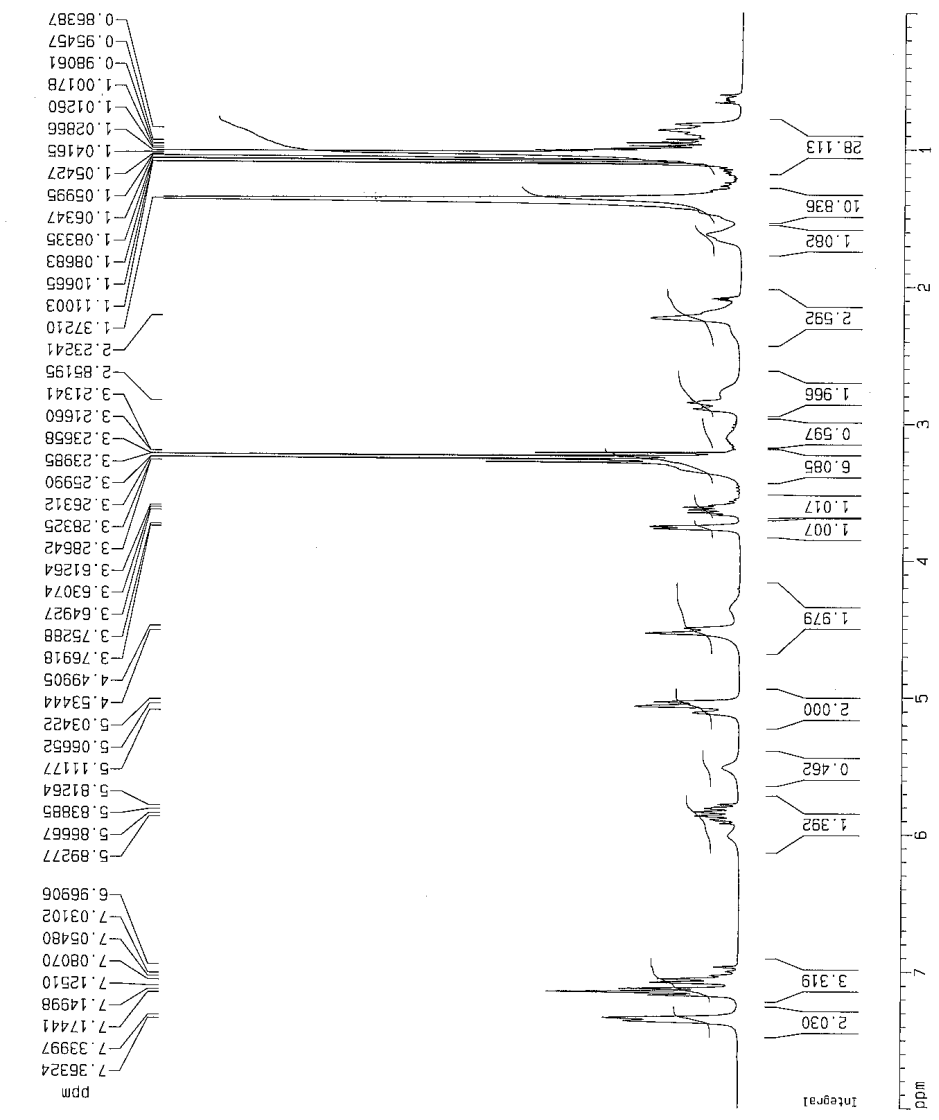
Current Data Parameters  
 NAME F8022-2001-Me1n  
 EXPNO 35  
 PROCNO 1

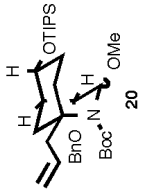
F2 - Acquisition Parameters  
 Date\_ 20010222  
 Time 15.11  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zg30  
 TD 65536  
 SOLVENT TDI  
 NS 16  
 DS 2  
 SMH 6172.614 Hz  
 FIDRES 0.094190 Hz  
 AG 5.3084874 sec  
 RG 35.9  
 DM 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 1H  
 P1 9.80 usec  
 PL1 -6.00 dB  
 SFO1 300.1306418 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1284971 MHz  
 WDW no  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 FJP 8.000 ppm  
 F1 2401.03 Hz  
 F2 0.000 ppm  
 F2 0.00 Hz  
 PPMCM 0.40000 ppm/cm  
 HZCM 120.05141 Hz/cm





Current Data Parameters  
 NAME Feb22-2001-Main  
 EXPNO 48  
 PROCNO 1

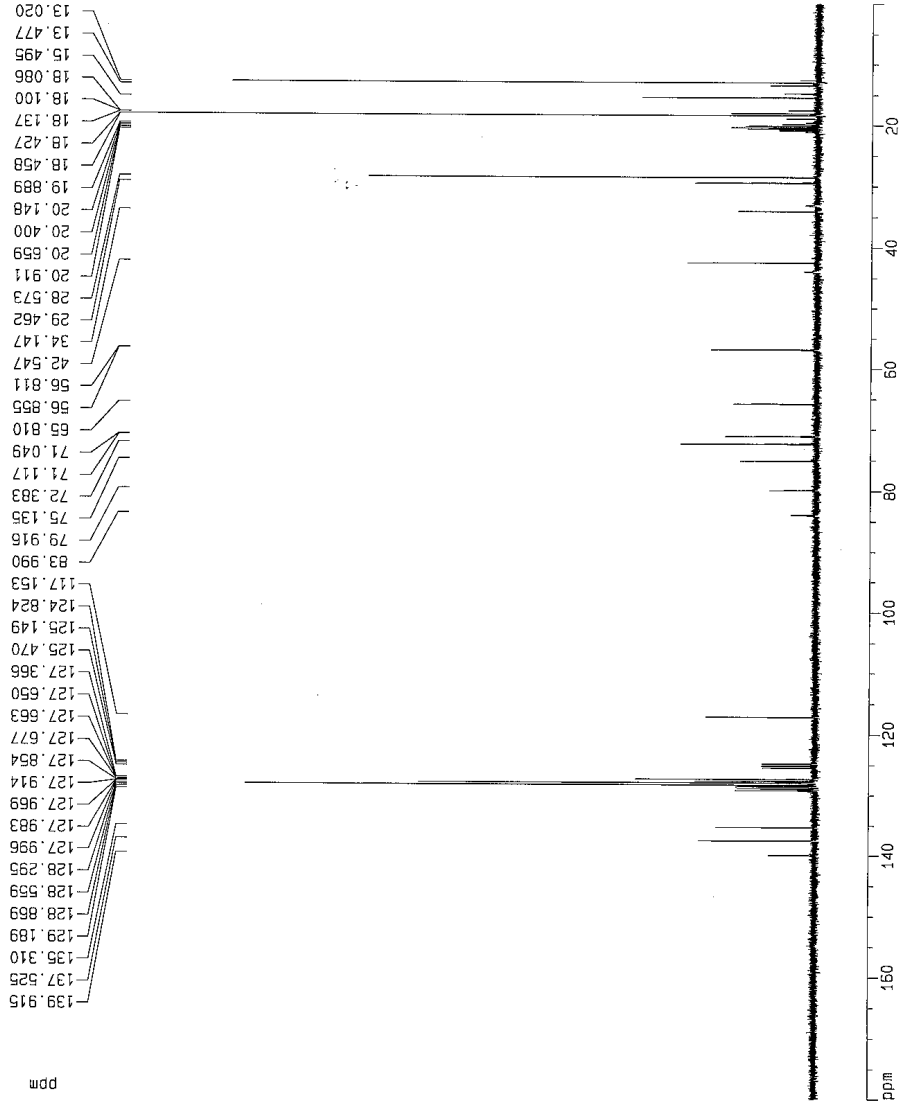
F2 - Acquisition Parameters  
 Date\_ 20010222  
 Time 16.44  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT T01  
 NS 873  
 DS 4  
 SWH 18832.383 Hz  
 FIDRES 0.287350 Hz  
 AQ 1.7400308 sec  
 RG 8132  
 DM 26.550 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 2.0000000 sec  
 d11 0.0300000 sec  
 d12 0.0000200 sec

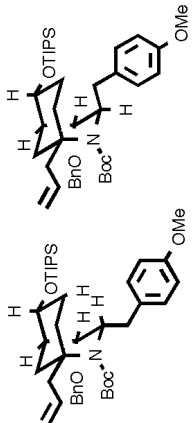
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 5.60 usec  
 PL1 -6.00 dB  
 SF01 75.4760200 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P2 11.40 usec  
 PL2 -6.00 dB  
 PL12 18.00 dB  
 PL13 18.00 dB  
 SF02 300.1312005 MHz

F2 - Processing parameters  
 SI 32768  
 SF 75.4677085 MHz  
 WDW 0  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

1D NMR Plot parameters  
 CX 20.00 cm  
 F1P 180.000 ppm  
 F1 13594.19 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPMCK 9.00000 ppm/cm  
 HZCK 819.20935 Hz/cm





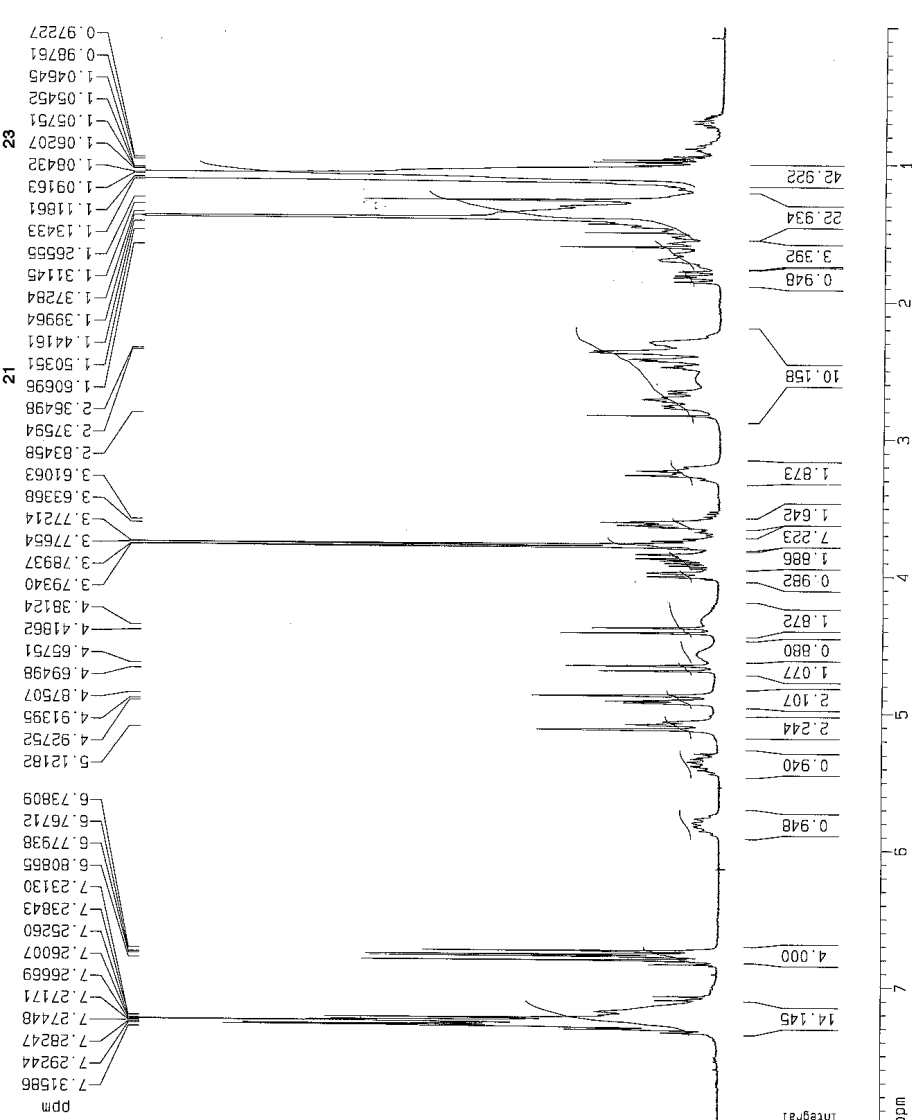
Current Data Parameters  
 NAME Metmeb-2-7-20  
 EXPNO 15  
 PROCNO 1

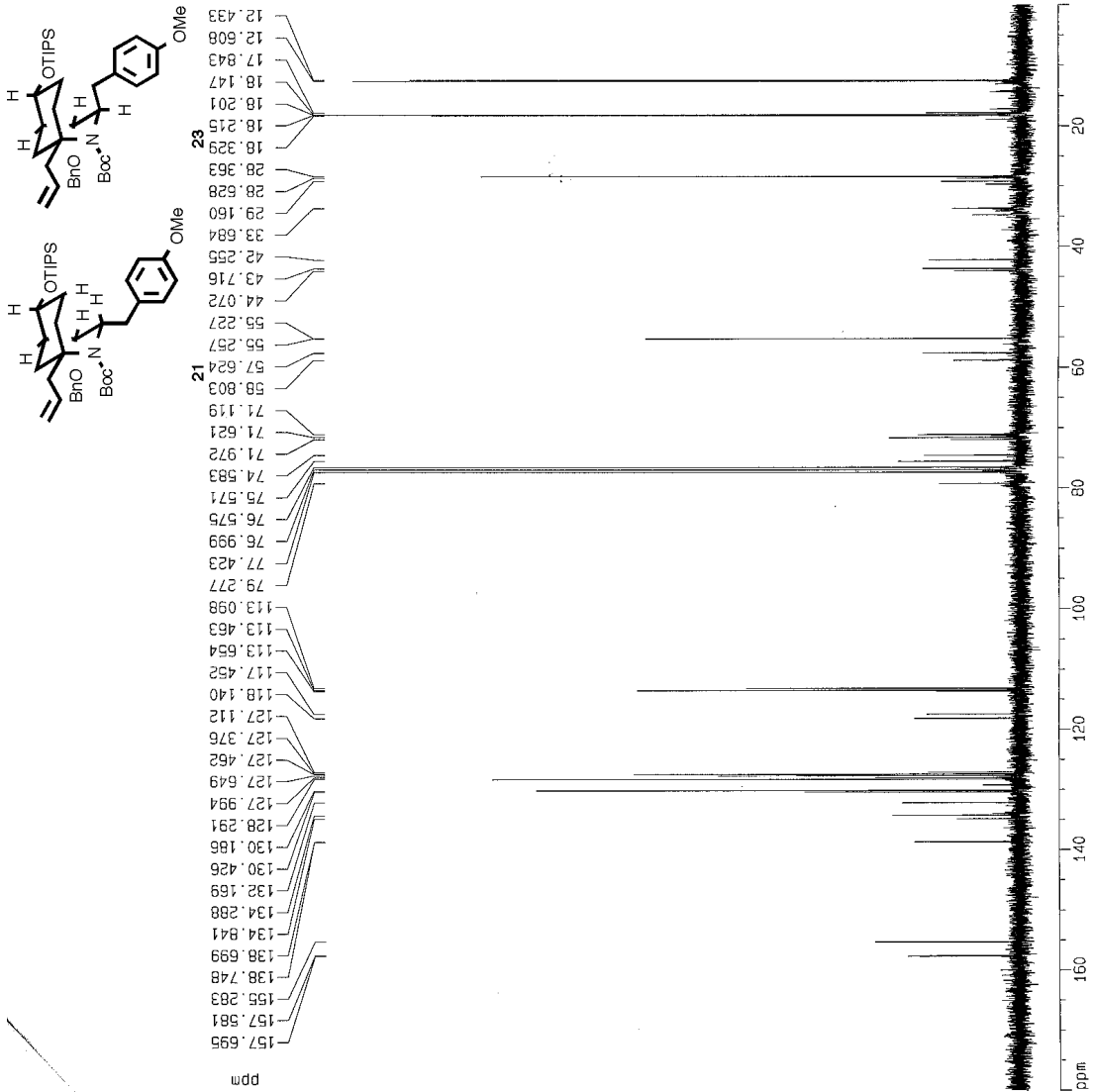
F2 - Acquisition Parameters  
 Date\_ 20010207  
 Time 14.55  
 INSTRUM spect  
 PROBHD 5 mm GNP 1H/1  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FTIDRES 0.094190 Hz  
 AQ 5.3054660 sec  
 RG 101.6  
 DM 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

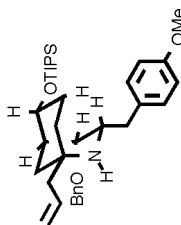
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 11.70 usec  
 PL1 0.00 dB  
 SF01 299.8718518 MHz

F2 - Processing parameters  
 SI 32768  
 SF 299.8700899 MHz  
 WDW nd  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 8.000 ppm  
 F1 2399.96 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPKM 0.40000 ppm/cm  
 HZCM 119.94800 Hz/cm







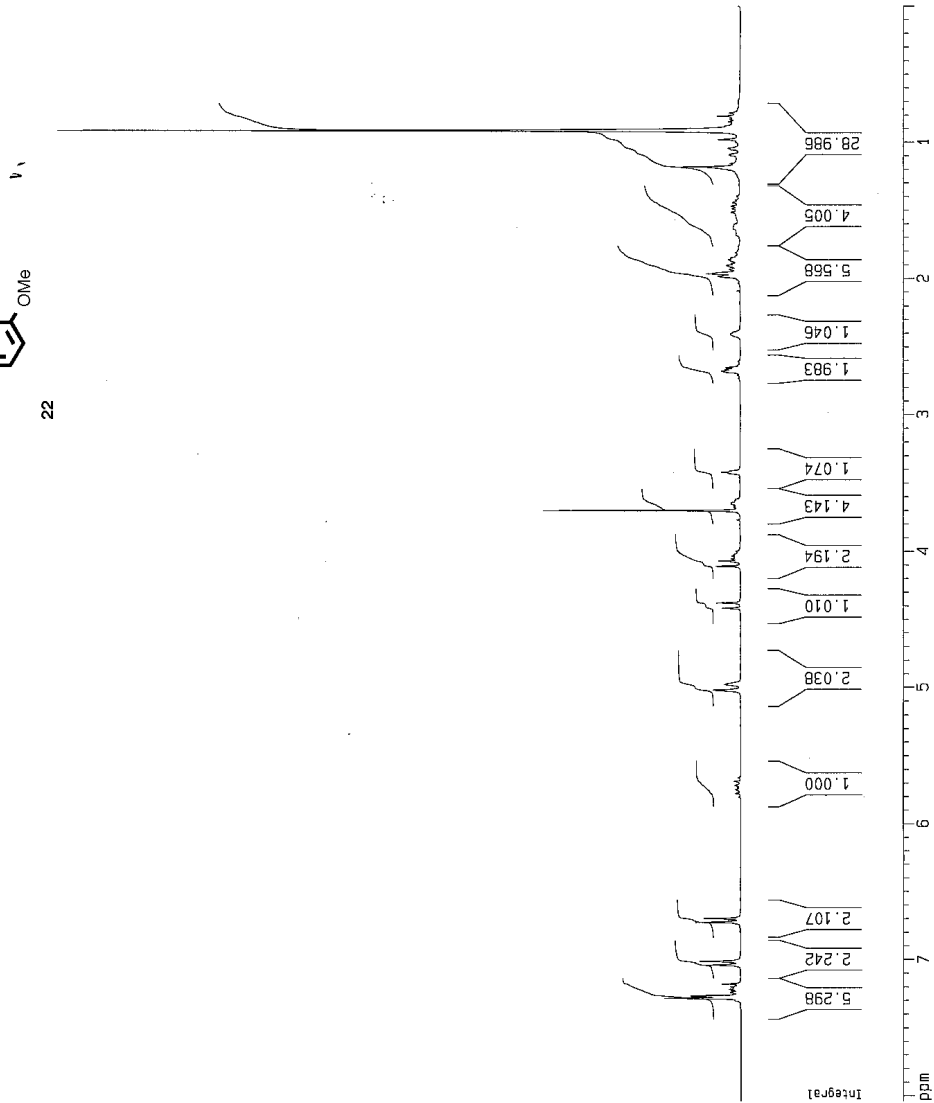
Current Data Parameters  
 NAME Sep16-2004-Me1n  
 EXPNO 40  
 PROCNO 1

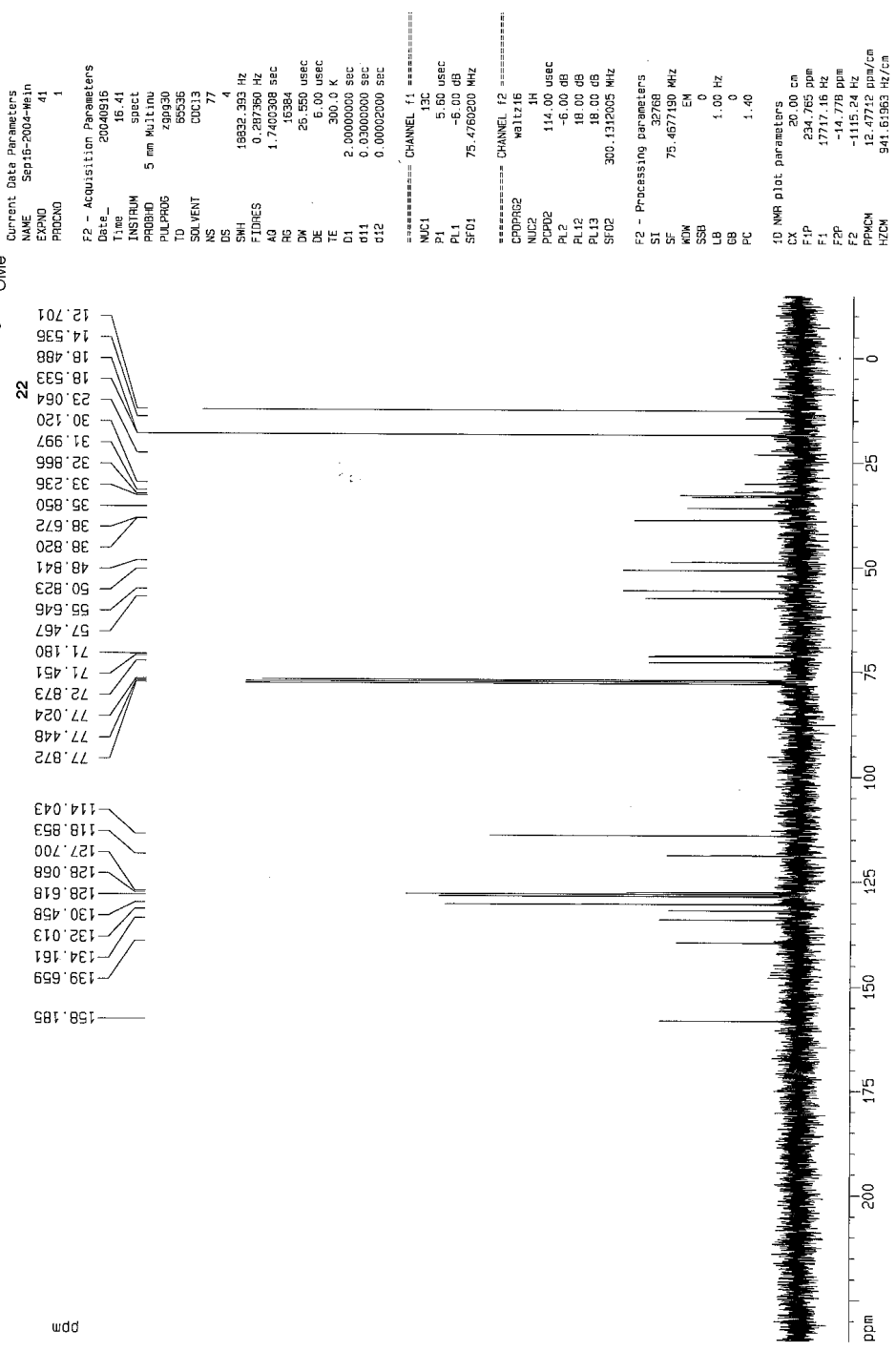
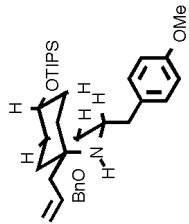
F2 - Acquisition Parameters  
 Date\_ 20040816  
 Time 16:37  
 INSTRUM spect  
 PROBRD 5 mm Multinu  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.838 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084860 sec  
 RG 143.7  
 DM 61.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.60 usec  
 PL1 -6.00 dB  
 SFO1 300.1310554 MHz

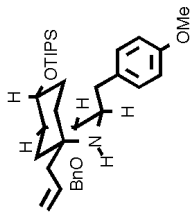
F2 - Processing parameters  
 SI 32768  
 SF 300.1300308 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 5.039 ppm  
 F1 2442.76 Hz  
 F2P -0.002 ppm  
 F2 -0.72 Hz  
 PPMCM 0.40208 ppm/cm  
 HZCM 120.67487 Hz/cm









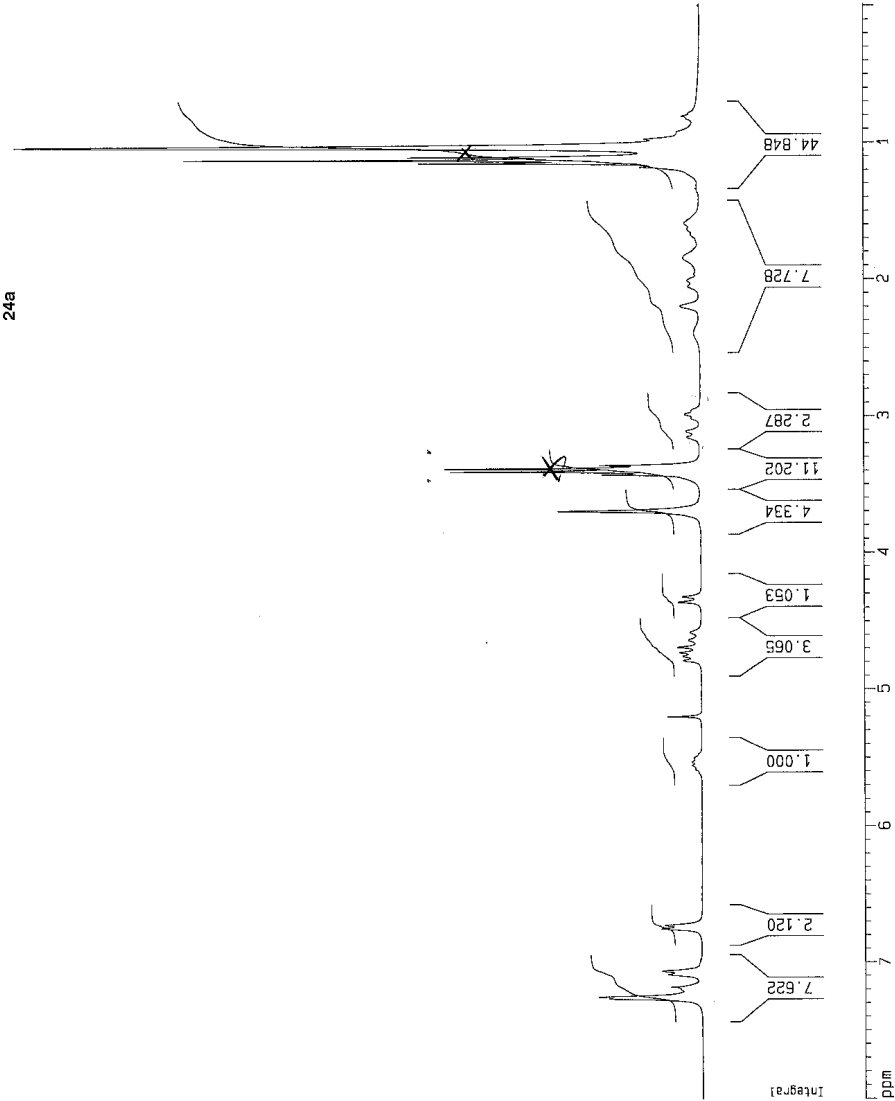
Current Data Parameters  
 NAME Sep18-2004-wein  
 EXPNO 30  
 PROCNO 1

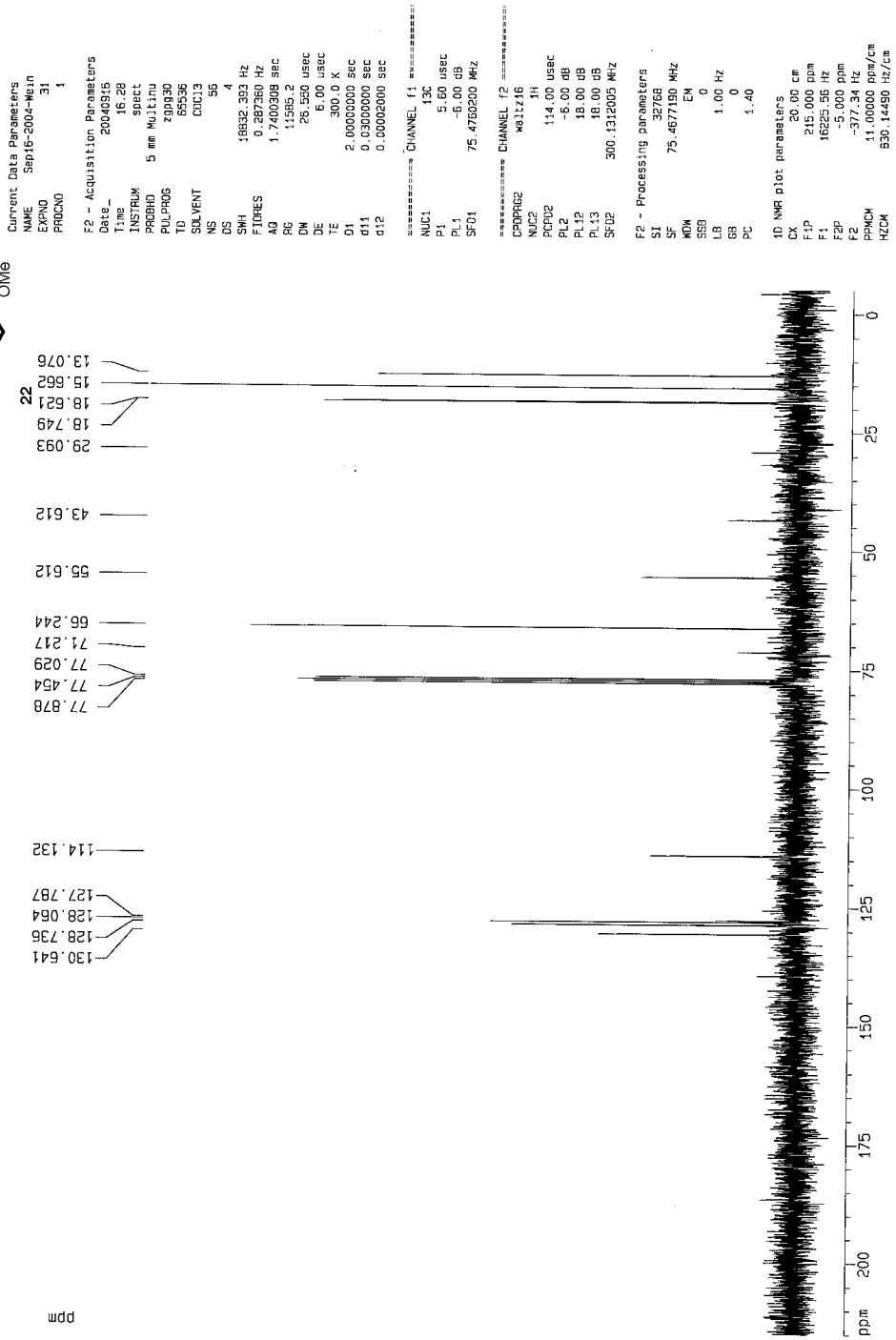
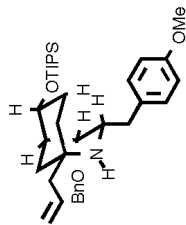
F2 - Acquisition Parameters  
 Date\_ 20040816  
 Time 15.22  
 INSTRUM spect  
 PROBHD 5 mm Multino  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 15  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.084190 Hz  
 AQ 5.3084660 sec  
 RG 90.5  
 DW 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

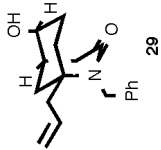
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.60 usec  
 PL1 -6.00 dB  
 SF01 300.1318534 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1300293 MHz  
 MDN EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 FIP 8.001 ppm  
 F1 2401.34 Hz  
 F2P -0.015 ppm  
 F2 -4.64 Hz  
 PPMCM 0.40082 ppm/cm  
 HZCM 120.29896 Hz/cm







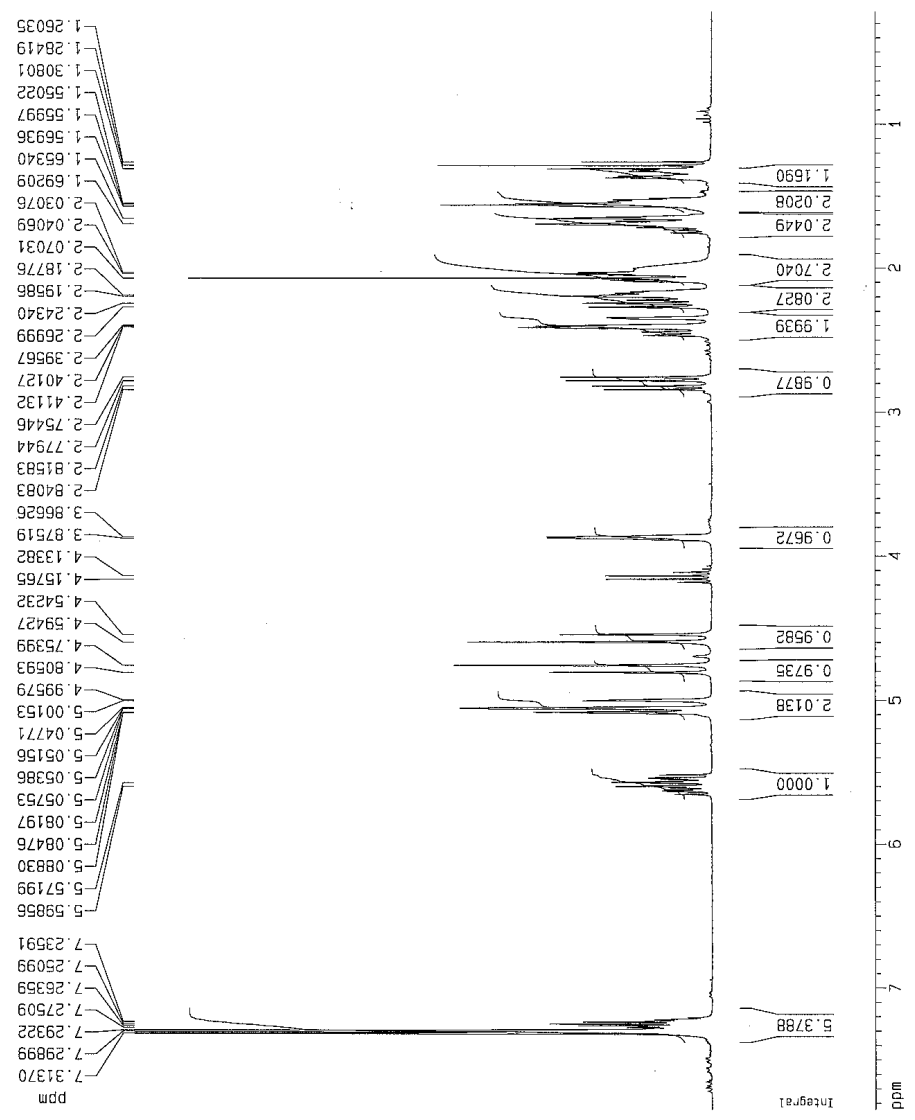
Current Data Parameters  
 NAME Dec07-2001-MeIn  
 EXPNO 10  
 PROCNO 1

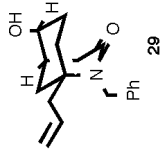
F2 - Acquisition Parameters  
 Date\_ 20011207  
 Time 13.26  
 INSTRUM spect  
 PROBHD 5 mm QNP 1H/1  
 PULPROG zg30  
 TO 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.064190 Hz  
 AQ 5.3084660 sec  
 RG 362  
 DM 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 1H  
 P1 11.70 usec  
 PL1 0.00 dB  
 SF01 299.8718518 MHz

F2 - Processing parameters  
 SI 32768  
 SF 299.8700000 MHz  
 MDK EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 7.844 ppm  
 F1 2352.30 Hz  
 F2P 0.218 ppm  
 F2 65.29 Hz  
 PPMCM 0.38133 ppm/cm  
 HZCM 114.36046 Hz/cm





Current Data Parameters  
 NAME NOV28-2001-WBJN  
 EXPNO 30  
 PROCNO 1

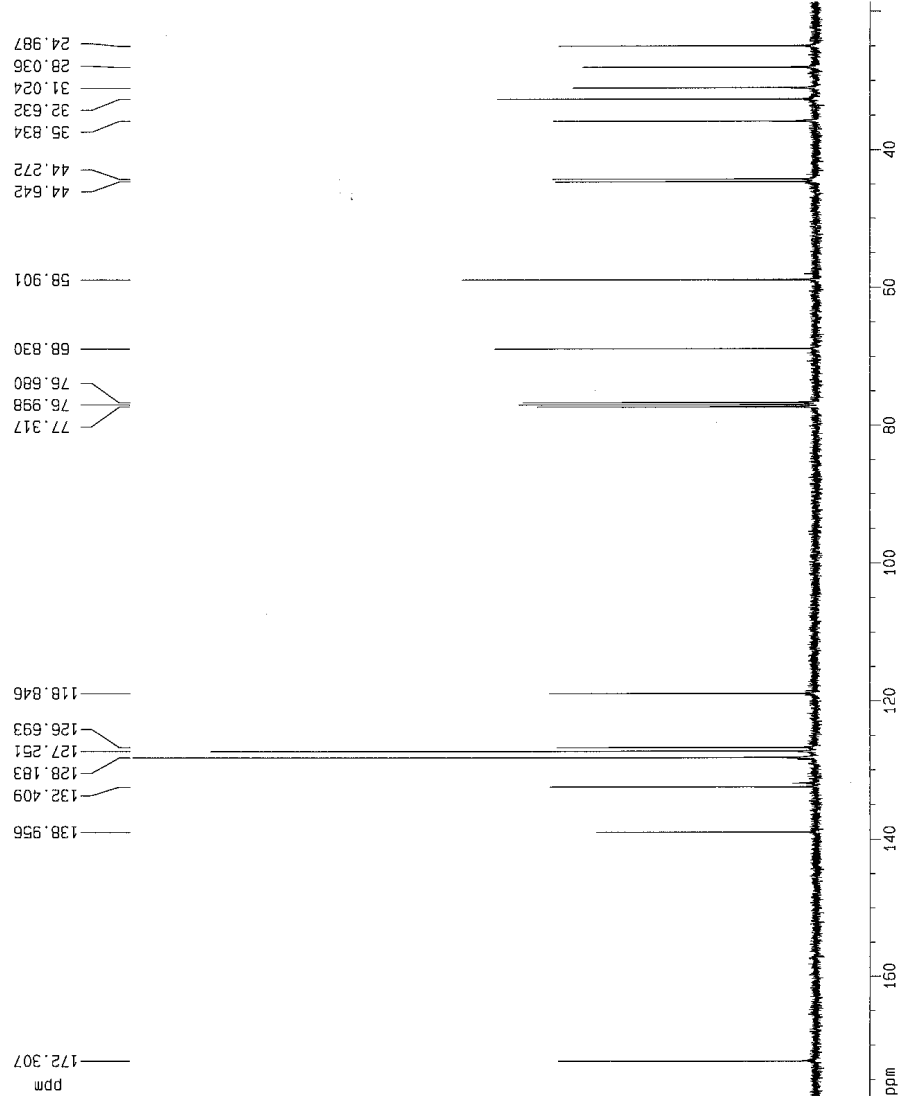
F2 - Acquisition Parameters  
 Date\_ 20011128  
 Time 9:28  
 INSTRUM spect  
 PULPROG 5 mm BBI 1H-3  
 TD 259930  
 ID B5536  
 SOLVENT CUC13  
 NS 214  
 DS 4  
 SWH 25125.859 Hz  
 FIDRES 0.383987 Hz  
 AQ 1.3042164 sec  
 RG 8192  
 DW 19.300 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00002000 sec

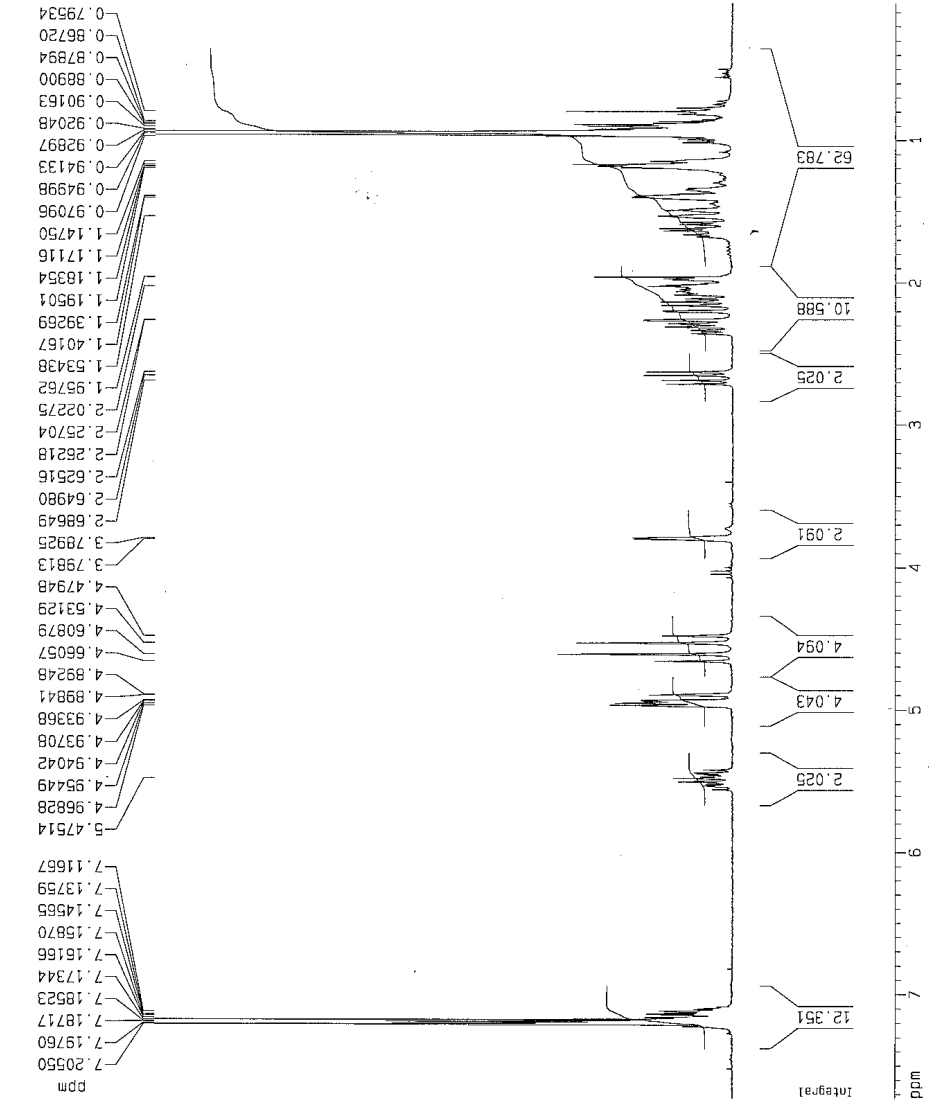
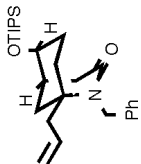
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 15.60 usec  
 PL1 -6.00 dB  
 SFO1 100.627959 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 111.00 usec  
 PL2 0.00 dB  
 PL12 24.00 dB  
 PL13 24.00 dB  
 SFO2 400.1315005 MHz

F2 - Processing parameters  
 SI 32758  
 SF 100.6127870 MHz  
 WDW EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 177.323 ppm  
 F1 17840.96 Hz  
 F2P 18.649 ppm  
 F2 1876.34 Hz  
 PPMCM 7.93370 ppm/cm  
 HZCM 799.23120 Hz/cm





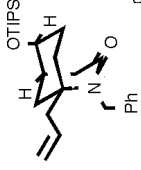
Current Data Parameters  
 NAME Dec12-2001-Wg1n  
 EXPNO 10  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20011212  
 Time 15.00  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zg30  
 TO 65536  
 SOLVENT CCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AG 5.3084660 sec  
 RG 405.4  
 DW 61.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 1H  
 P1 9.00 usec  
 PL1 -6.00 dB  
 SF01 300.1318534 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1300321 MHz  
 MDN EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F4P 7.729 ppm  
 F1 2319.80 Hz  
 F2P 0.035 ppm  
 F2 10.48 Hz  
 PPMCM 0.38472 ppm/cm  
 HZCM 115.46584 Hz/cm

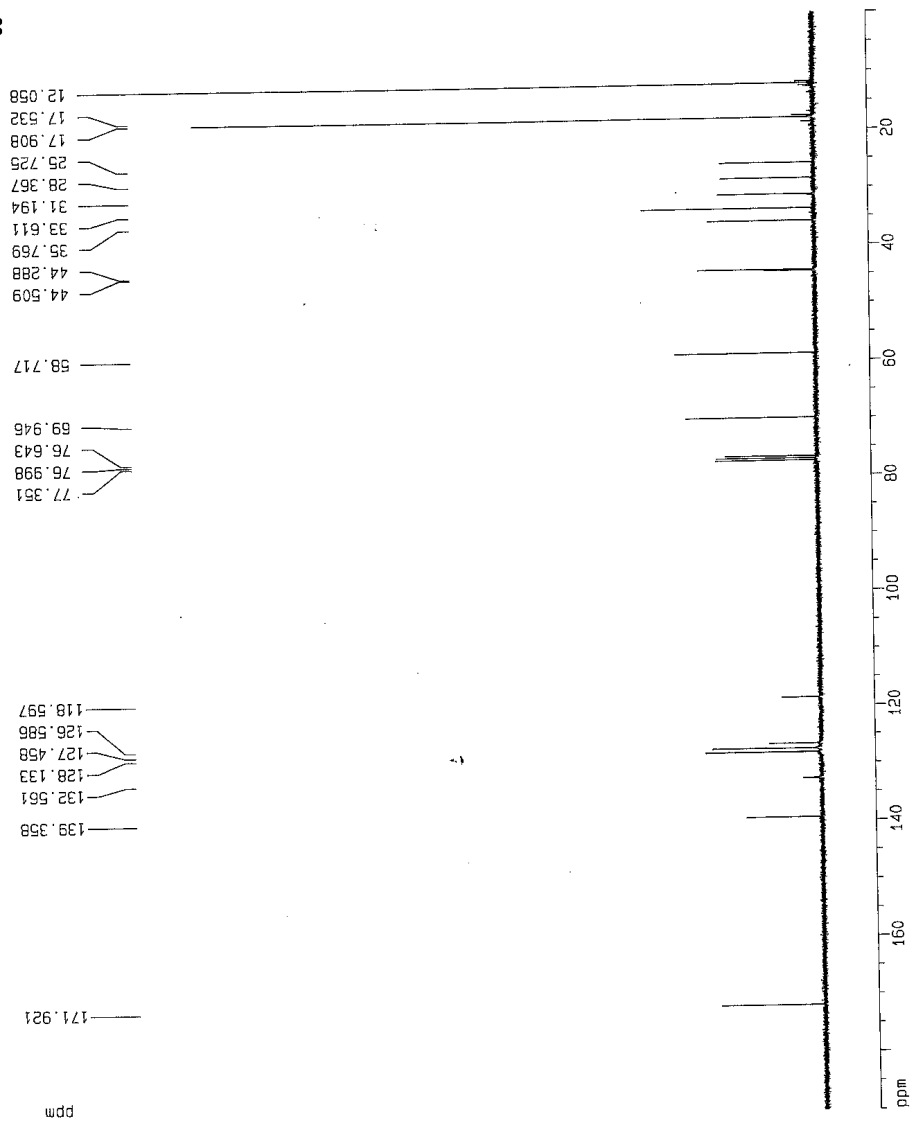


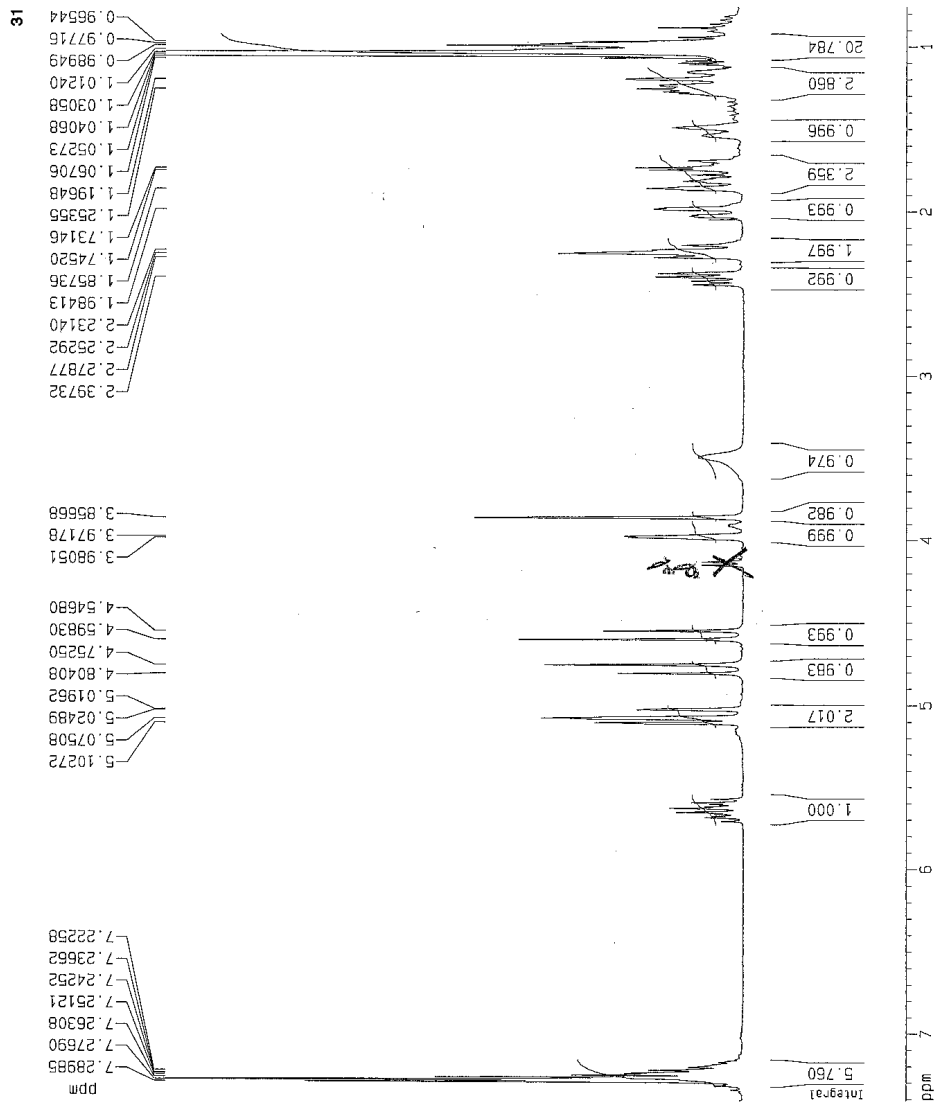
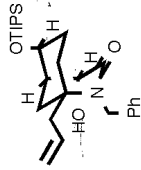
Current Data Parameters  
 NAME Oct11-2001-Ne1  
 EXPNO 20  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20011011  
 Time 3.25  
 INSTRUM Spect  
 PROBO 5 mm QNP 1H  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl<sub>3</sub>  
 NS 215  
 DS 4  
 SWH 22727.273 Hz  
 FIDRES 0.346791 Hz  
 AQ 1.4418420 sec  
 RG 32768  
 DW 22.000 usec  
 DE 31.43 usec  
 TE 300.0 K  
 HL1 0 dB  
 CPDPRG waitz16  
 P31 105.00 usec  
 S4 30 dB  
 D11 0.03000000 sec  
 S2 30 dB  
 P1 7.50 usec  
 SFO1 90.5658969 MHz  
 NUCLEUS 13C

F2 - Processing parameters  
 SI 32768  
 SF 90.5657773 MHz  
 WDW no  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

ID NMR plot parameters  
 CX 20.00 cm  
 F1P 150.000 ppm  
 F1 17205.60 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPRCM 9.50000 ppm/cm  
 HZCM 860.27991 Hz/cm





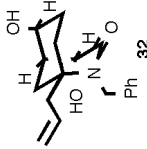
Current Data Parameters  
 NAME Mar29-2002-Wein  
 EXPNO 10  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20020329  
 Time 15:01  
 INSTRUM spect  
 PROBRD 5 mm Nu-Itin  
 PULPROG zg30  
 TO 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084660 sec  
 RG 256  
 DW 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.80 usec  
 PL1 -6.00 dB  
 SF01 300.1318534 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1300052 MHz  
 MDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 7.410 ppm  
 F1 2223.89 Hz  
 F2P 0.755 ppm  
 F2 226.48 Hz  
 PPMCM 0.33276 ppm/cm  
 HZCM 95.87049 Hz/cm



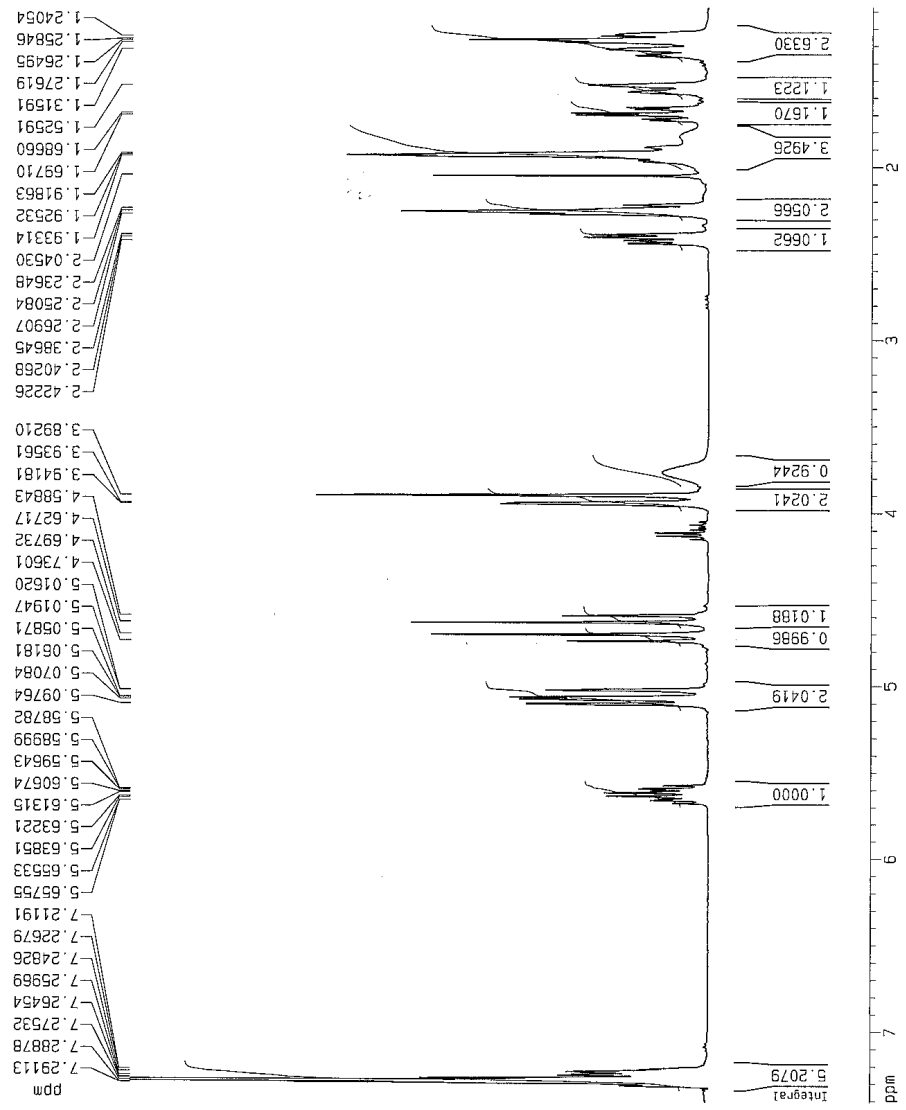
Current Data Parameters  
 NAME Apr30-2002-Wein  
 EXPNO 10  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20020430  
 Time 14.46  
 INSTRUM spect  
 PROBRD 5 mm BBI 1H-B  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6278.146 Hz  
 FIDRES 0.126314 Hz  
 AQ 3.9564243 sec  
 RG 90.5  
 DM 60.400 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

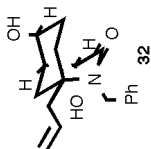
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 6.28 usec  
 PL1 0.00 dB  
 SFO1 400.1324710 MHz

F2 - Processing parameters  
 SI 32768  
 SF 400.1300076 MHz  
 WDW EN  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 7.408 ppm  
 F1 2954.27 Hz  
 F2P 1.076 ppm  
 F2 430.66 Hz  
 PPMCM 0.31660 ppm/cm  
 HZCM 126.68047 Hz/cm







Current Data Parameters  
 NAME Apr30-2002-Main  
 EXPNO 11  
 PROCNO 1

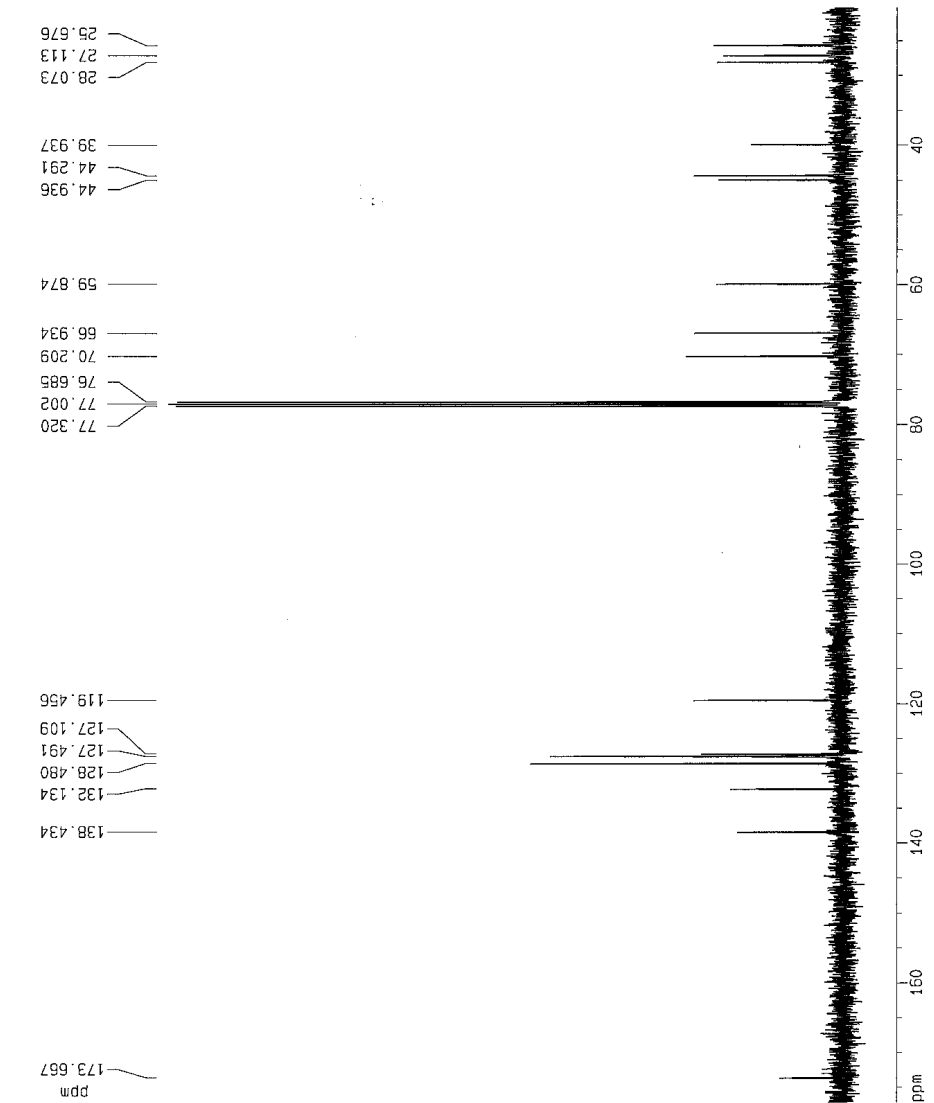
F2 - Acquisition Parameters  
 Date\_ 20020430  
 Time 15.01  
 INSTRUM spect  
 PROBHD 5 mm BBI 1H-8  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 308  
 DS 4  
 SWH 25125.625 Hz  
 FIDRES 0.383387 Hz  
 AQ 1.3042164 sec  
 RG 8192  
 DN 19.500 USEC  
 DE 6.00 USEC  
 TE 300.0 K  
 D1 2.00000000 sec  
 d11 0.03000000 sec  
 d12 0.00020000 sec

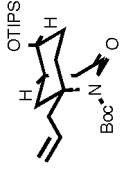
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 16.15 USEC  
 PL1 -6.00 dB  
 SFO1 100.6237959 MHz

===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 PCPD2 113.00 USEC  
 PL2 0.00 dB  
 PL12 24.00 dB  
 PL13 24.00 dB  
 SFO2 400.1315005 MHz

F2 - Processing parameters  
 SI 32758  
 SF 100.612717 MHz  
 WOK EM  
 SSB 0  
 LB 1.00 Hz  
 GB 0  
 PC 1.40

1D NMR plot parameters  
 CX 20.00 cm  
 F1p 177.157 ppm  
 F1 17828.28 Hz  
 F2p 20.250 ppm  
 F2 2037.42 Hz  
 PRMCM 7.84734 ppm/cm  
 HZCM 789.54279 Hz/cm





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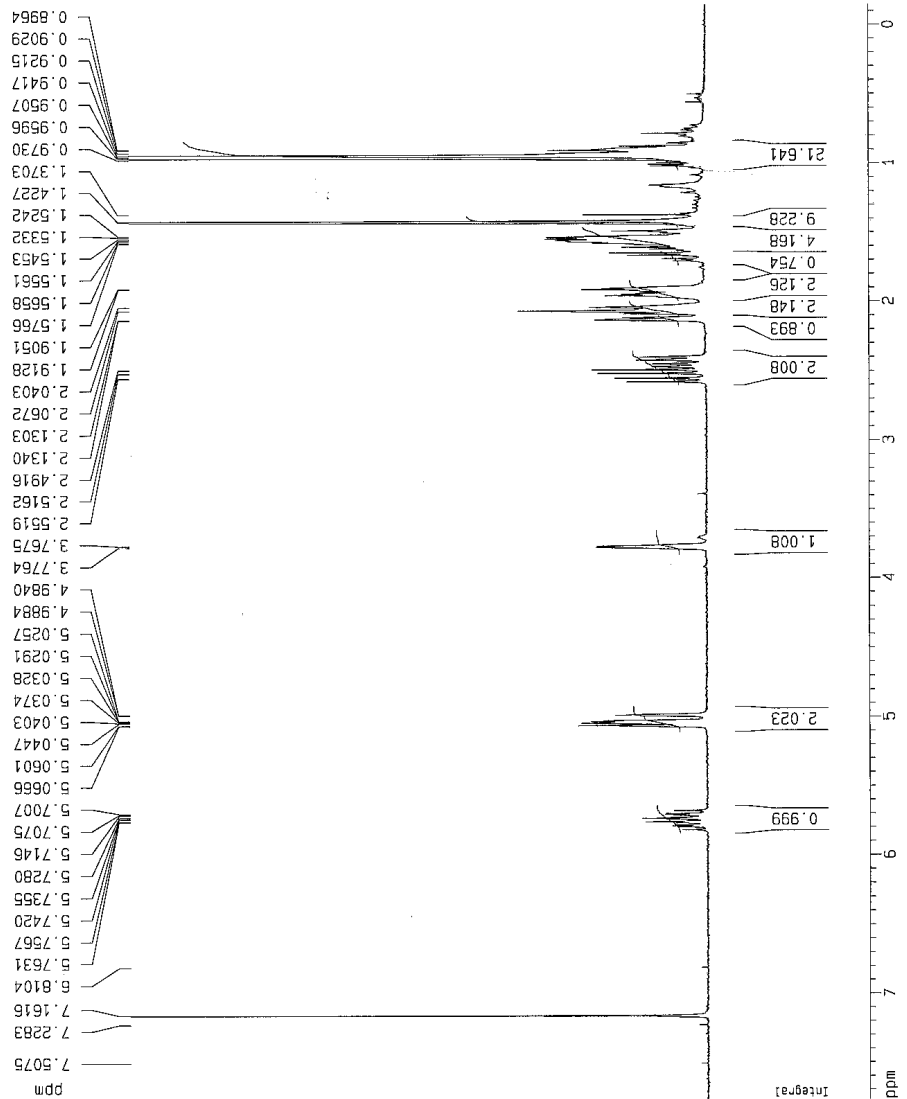
Current Data Parameters  
 NAME Dec12-2001-Mein  
 EXPNO 20  
 PROCNO 1

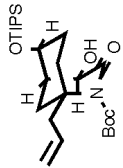
F2 - Acquisition Parameters  
 Date\_ 20011212  
 Time 15:11  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zg30  
 TO 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094130 Hz  
 AQ 5.3084690 sec  
 RG 456.1  
 DW 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

===== CHANNEL f1 =====  
 NUC1 <sup>1</sup>H  
 P1 9.80 usec  
 PL1 -5.00 dB  
 SF01 300.1318534 MHz

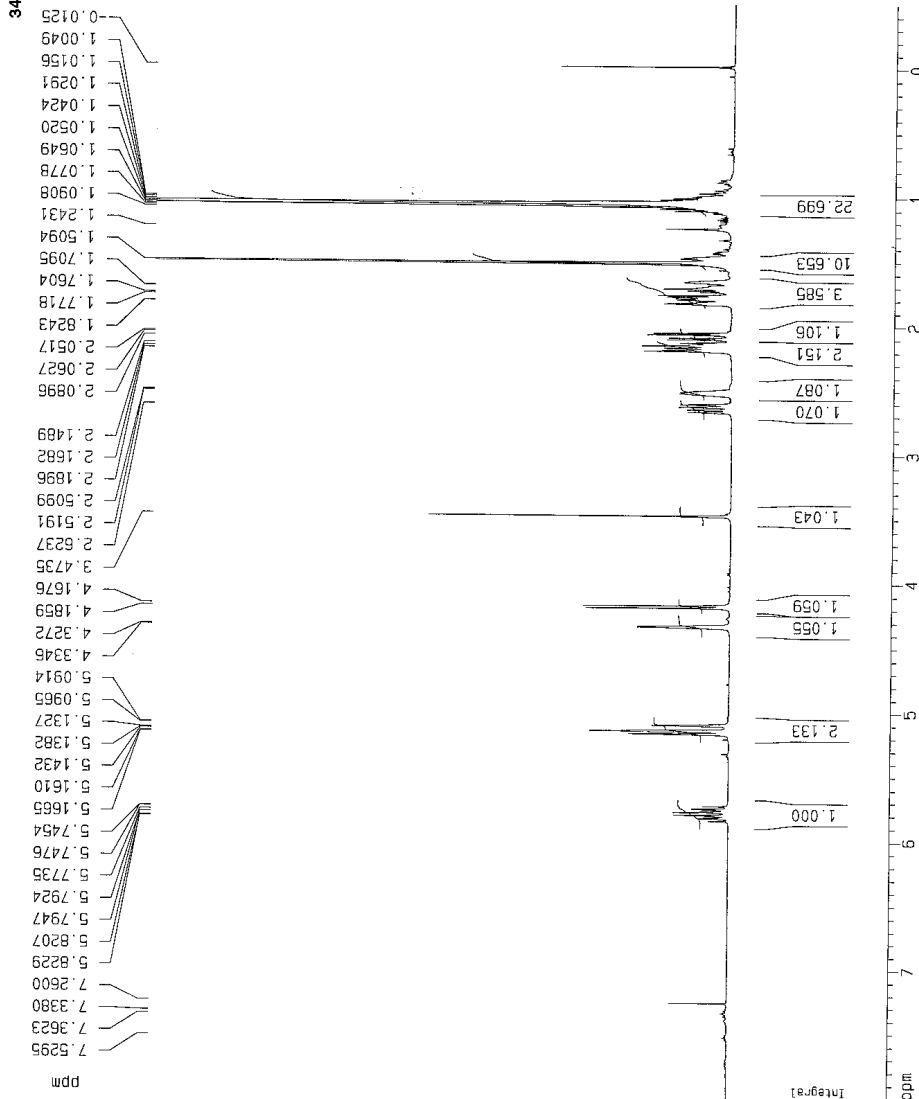
F2 - Processing parameters  
 SI 32768  
 SF 300.1300357 MHz  
 MDM EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 7.766 ppm  
 F2P -0.148 ppm  
 F2 -44.39 Hz  
 PRGM 0.99571 ppm/cm  
 HZCM 118.76586 Hz/cm





94

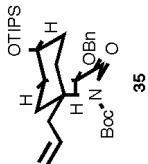


Current Data Parameters  
 NAME Oct23-2001-Me1  
 EXPNO 10  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20011022  
 Time 22:36  
 INSTRUM spect  
 PROBD 5 mm QNP 1H  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 7462.657 Hz  
 FIDRES 0.113672 Hz  
 AQ 4.3909621 sec  
 RG 128  
 DW 67.000 usec  
 DE 95.71 usec  
 TE 300.0 K  
 HL1 0 dB  
 P1 1.0000000 sec  
 P1 12.00 usec  
 SF01 360.1361620 MHz  
 NUCLEUS 1H

F2 - Processing parameters  
 SI 32768  
 SF 360.1359540 MHz  
 MDW no  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 5.000 ppm  
 F1 2881.07 Hz  
 F2P -0.500 ppm  
 F2 -180.07 Hz  
 PPMCM 0.482500 ppm/cm  
 HZCM 153.06695 Hz/cm



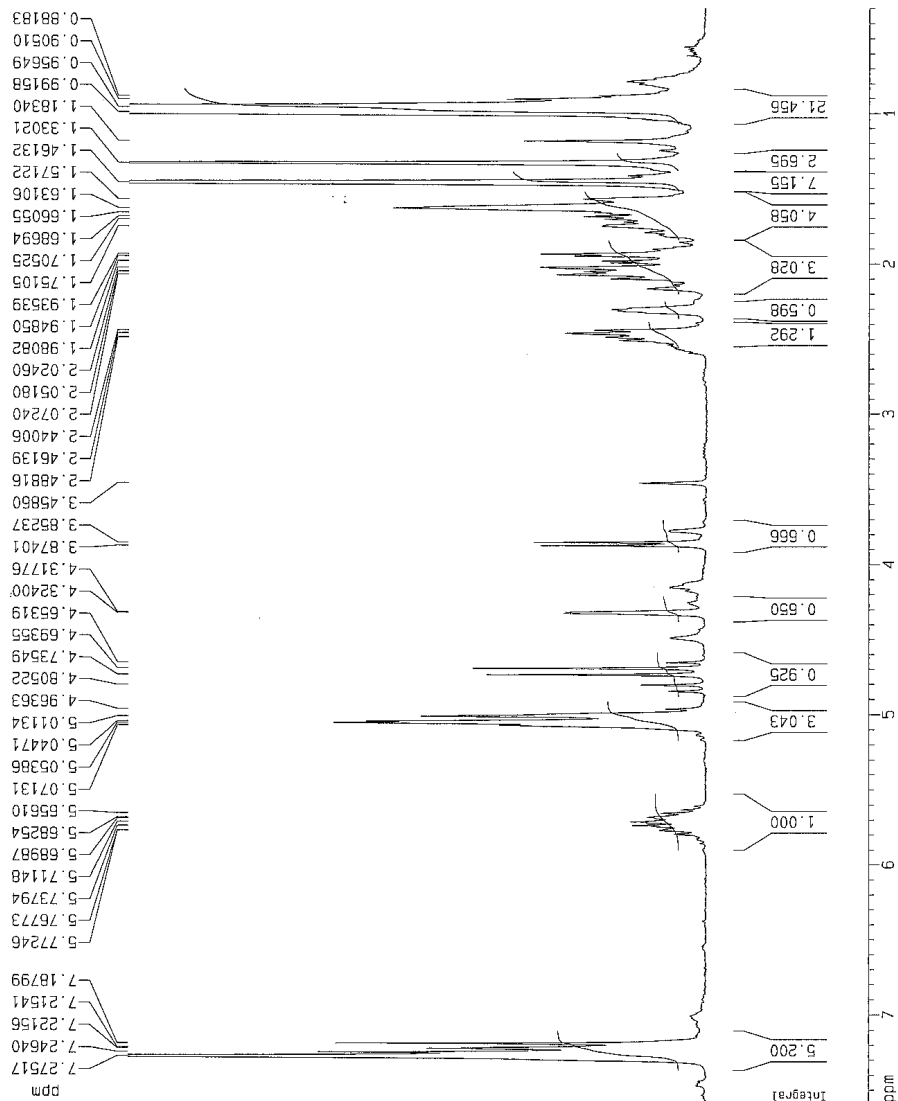
Current Data Parameters  
 NAME Feb04-2002-Wein  
 EXPNO 30  
 PROCNO 1

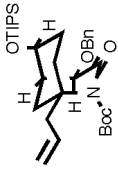
F2 - Acquisition Parameters  
 Date\_ 20020204  
 Time 9.18  
 INSTRUM spect  
 PROBHD 5 mm Multinu  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3024660 sec  
 RG 181  
 DM B1.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 9.80 usec  
 PL1 -6.00 dB  
 SF01 300.1318534 MHz

F2 - Processing parameters  
 SI 32768  
 SF 300.1300277 MHz  
 NDM FM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 FIP 7.583 ppm  
 F1 2275.81 Hz  
 F2 0.298 ppm  
 F3 69.69 Hz  
 PPMCM 0.36421 ppm/cm  
 HZCM 109.31071 Hz/cm





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Current Data Parameters

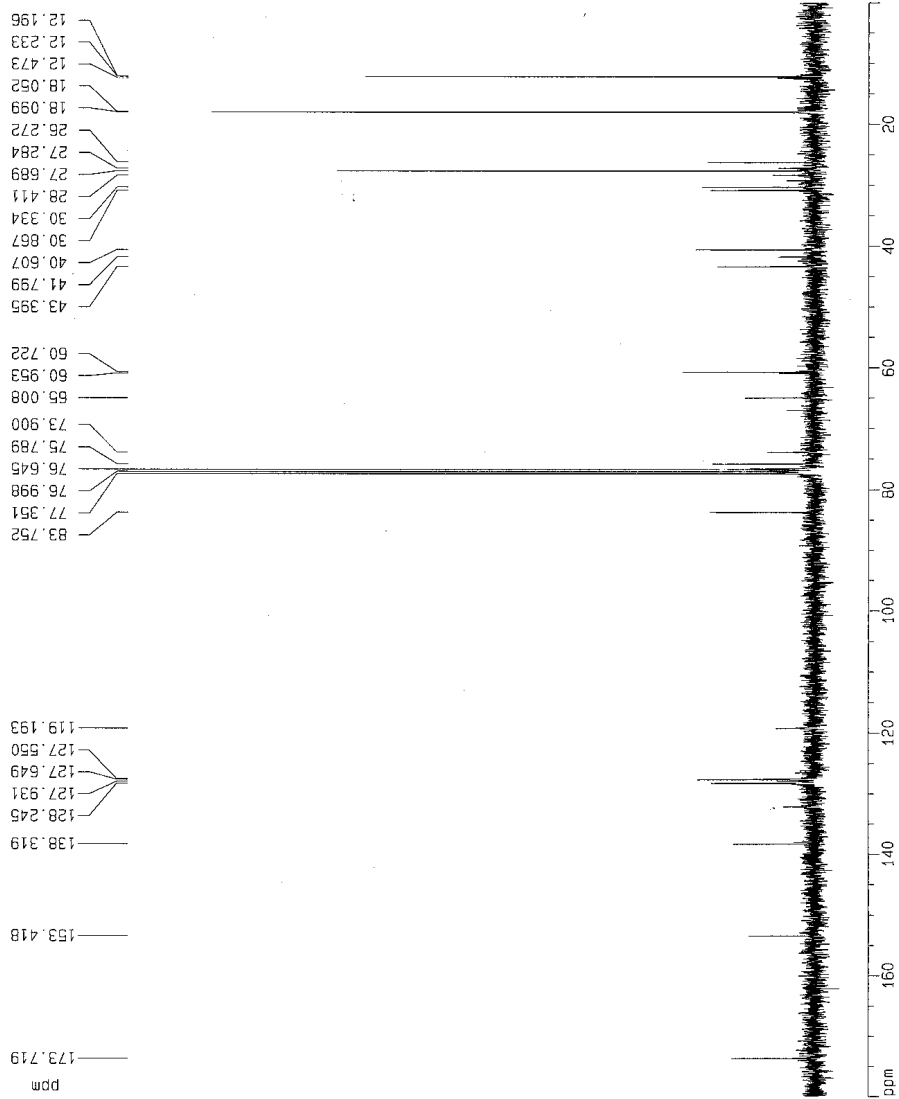
NAME Nov17-2001-161  
EXPNO 30  
PROCNO 1

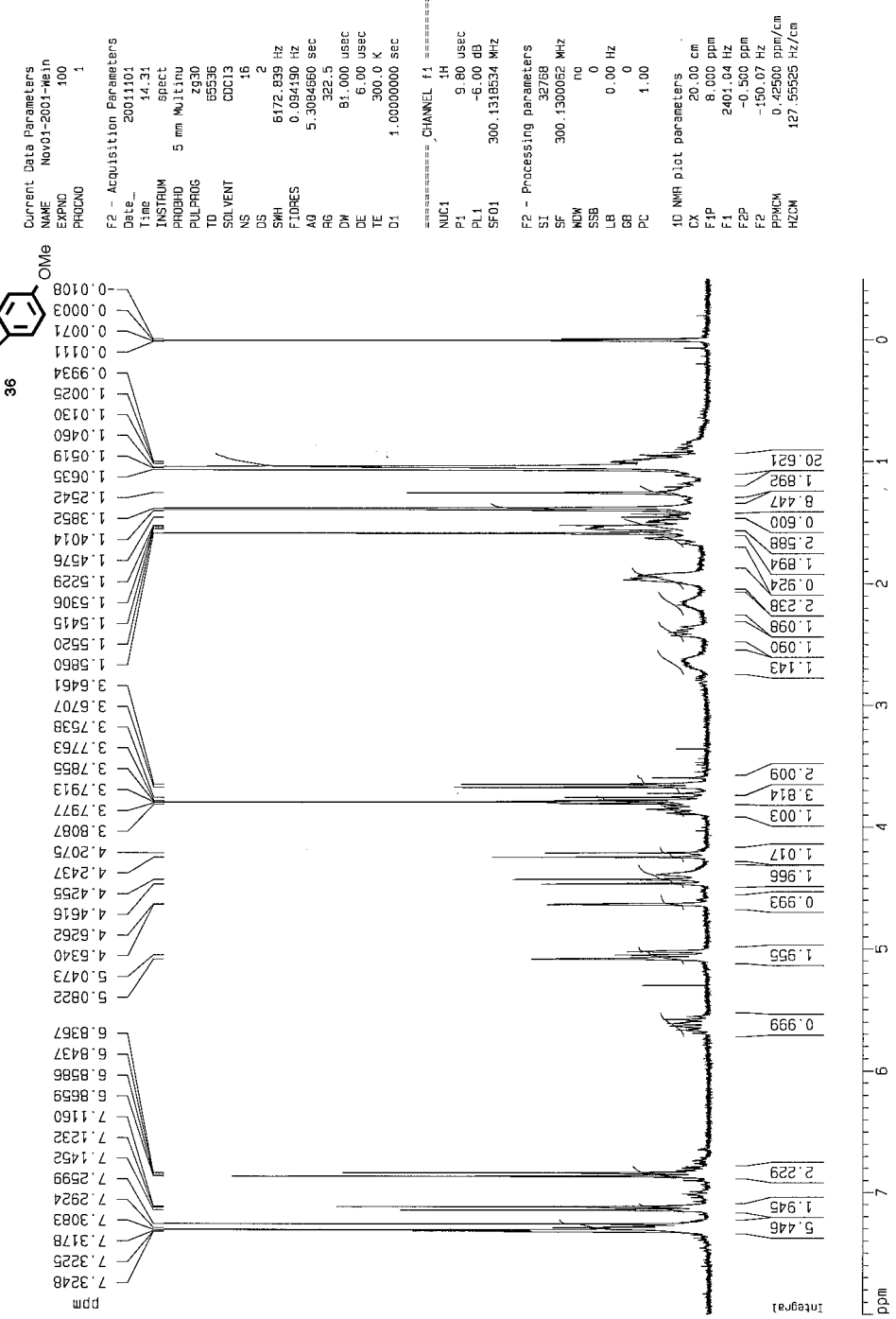
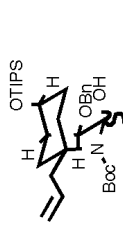
F2 - Acquisition Parameters

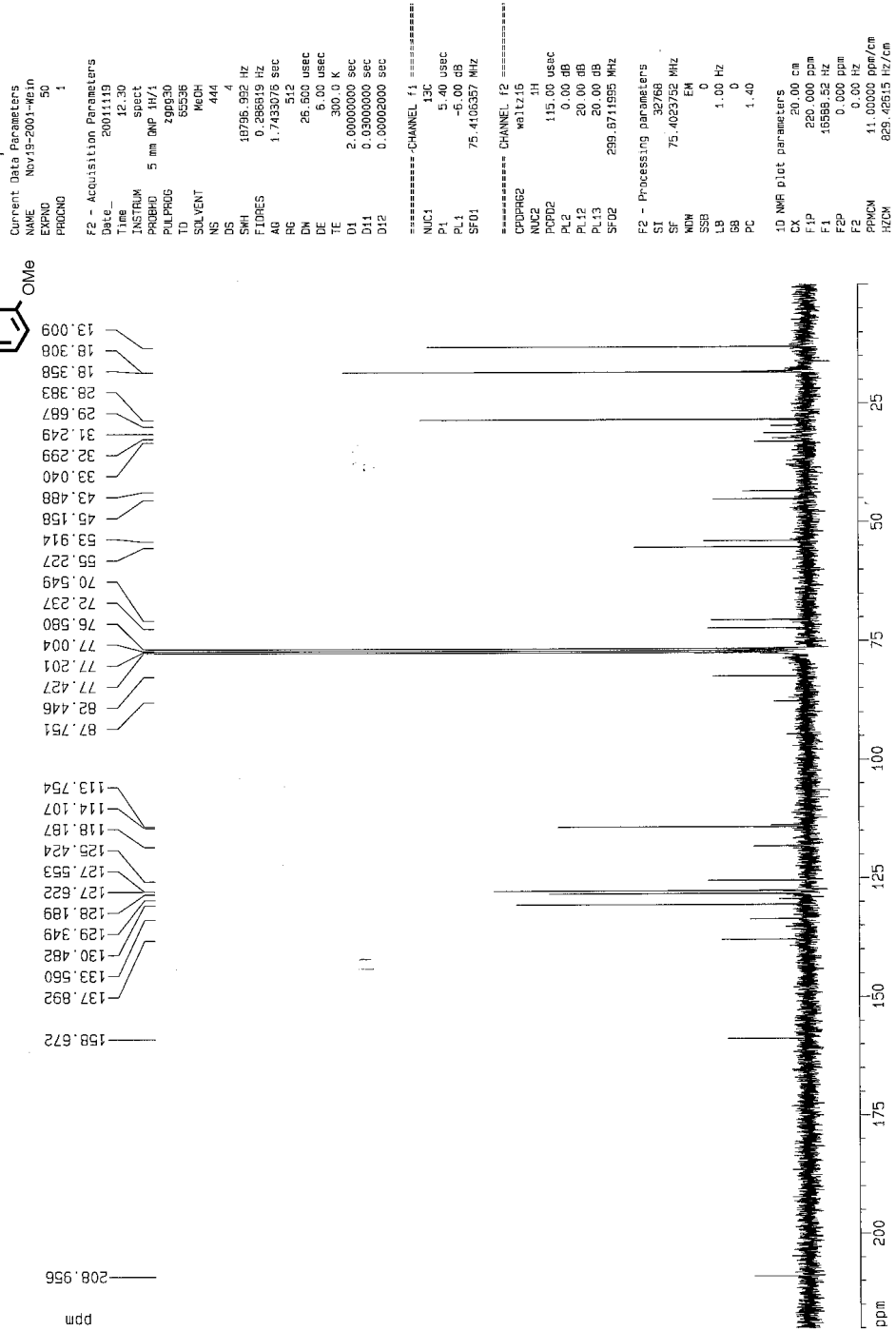
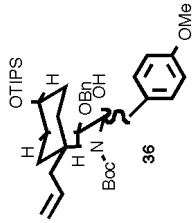
Date\_ 20011116  
Time 23.41  
INSTRUM spect  
PROBHD 5 mm QNP 1H  
PULPROG zgpg30  
TD 65536  
SOLVENT CUC13  
NS 344  
DS 4  
SWH 22727.273 Hz  
FIDRES 0.346791 Hz  
AQ 1.4418420 sec  
RG 32768  
DM 22.000 usec  
DE 31.43 usec  
TE 300.0 K  
HL1 0 dB  
D1 2.0000000 sec  
CPDPRG waltz16  
P31 106.00 usec  
S4 30 dB  
D11 0.0300000 sec  
S2 30 dB  
P1 7.90 usec  
SFO1 90.5659669 MHz  
NUCLEUS 13C

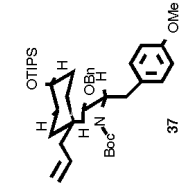
F2 - Processing parameters

SI 32768  
SF 90.5557628 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40  
ID NMR plot parameters  
CX 20.00 cm  
F1P 160.000 ppm  
F1 16300.04 Hz  
F2P 0.000 ppm  
F2 0.00 Hz  
PPMCM 9.00000 ppm/cm  
HZCM 815.00189 Hz/cm









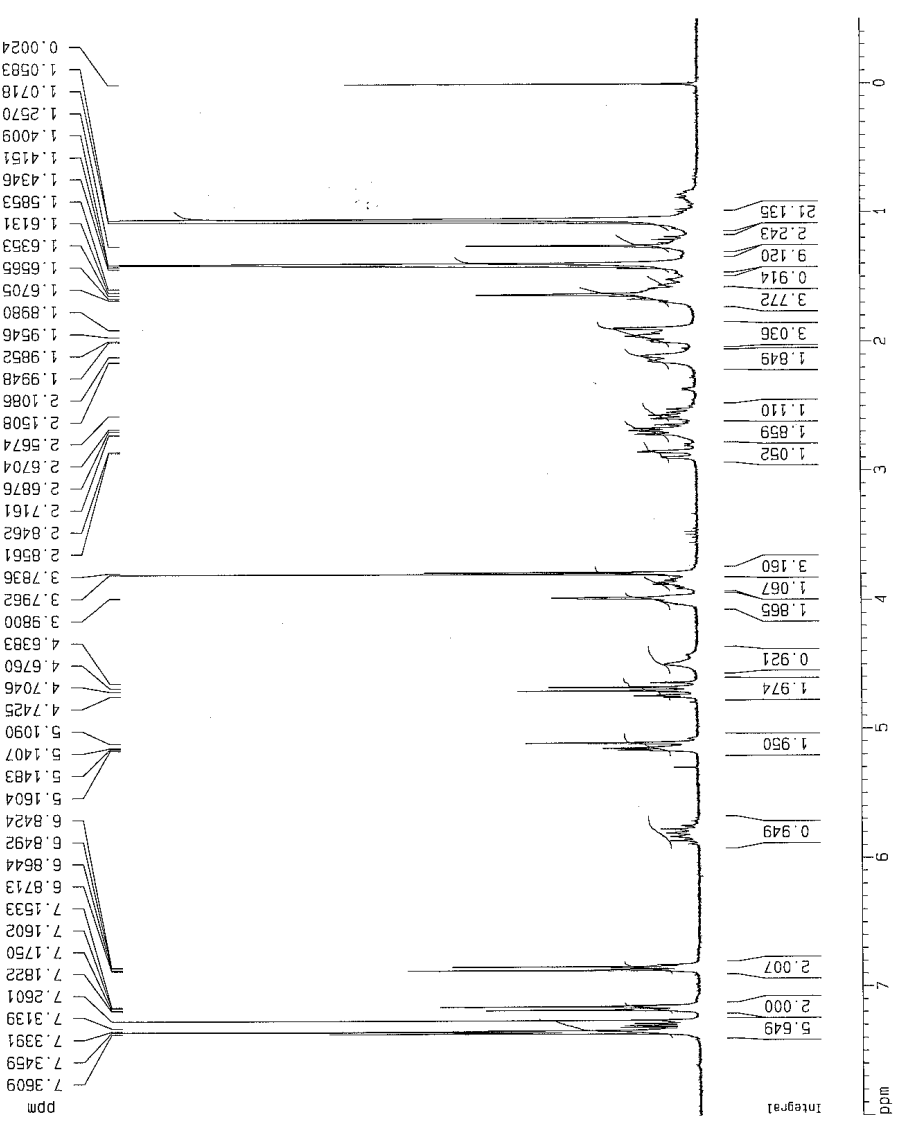
Current Data Parameters  
 NAME Nov27-2001-wein  
 EXPNO 20  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20011127  
 Time 20.15  
 INSTRUM spect  
 PROBHD 5 mm GNP 1H/1  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6472.839 Hz  
 FIDRES 0.094180 Hz  
 AQ 5.3084660 sec  
 RG 322.5  
 DN 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

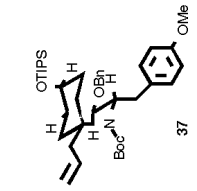
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 11.70 usec  
 PL1 0.00 dB  
 SF01 299.9718516 MHz

F2 - Processing parameters  
 SI 32768  
 SF 299.8700099 MHz  
 MDW nc  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 8.000 ppm  
 F1 2398.36 Hz  
 F2P -0.500 ppm  
 F2 -149.93 Hz  
 PRMCM 0.42500 ppm/cm  
 HZCM 127.44475 Hz/cm







Current Data Parameters  
 NAME Nov27-2001-Hein  
 EXPNO 31  
 PROCNO 1

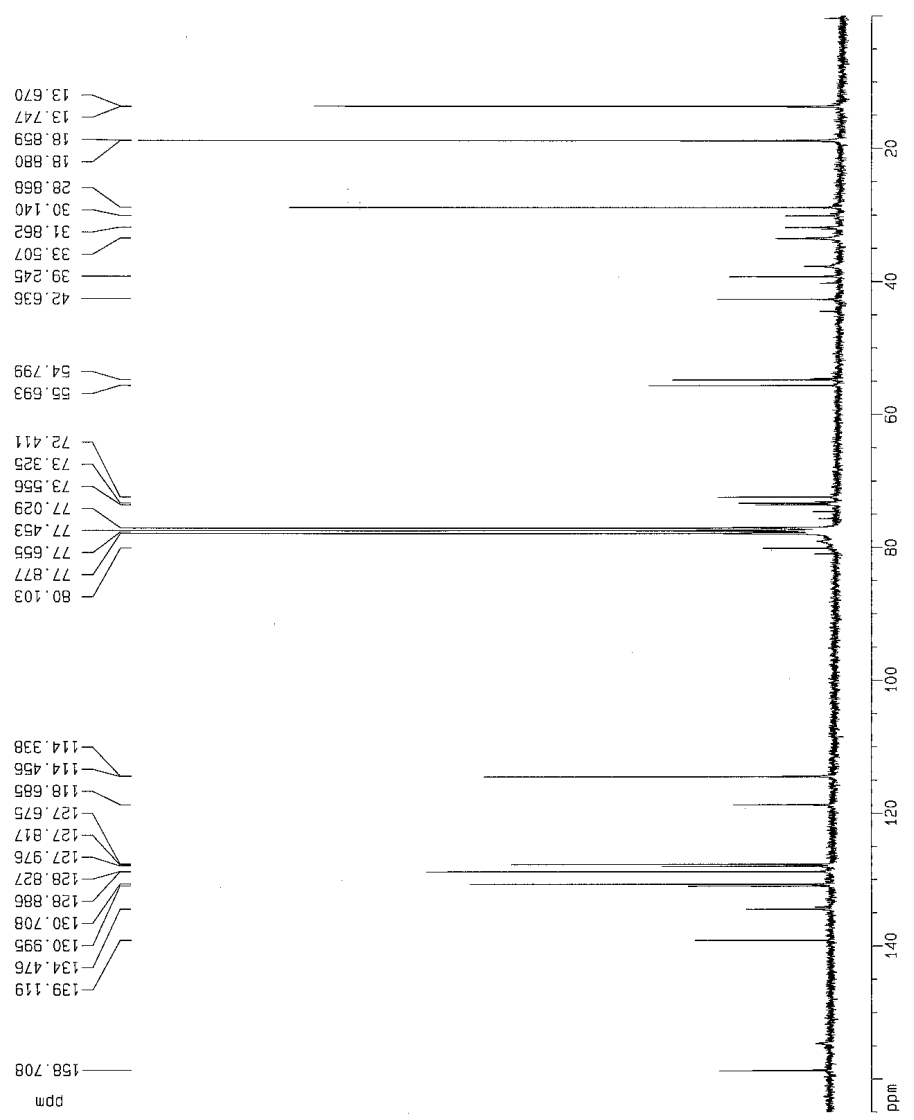
F2 - Acquisition Parameters  
 Date\_ 20011128  
 Time 7.57  
 INSTRUM spect  
 PROBHD 5 mm QNP 1H/1  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 800  
 DS 4  
 SWH 18795.992 HZ  
 FIDRES 0.286819 HZ  
 AQ 1.7433076 sec  
 RG 8192  
 DW 26.600 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 2.00000000 sec  
 D11 0.03000000 sec  
 D12 0.00020000 sec

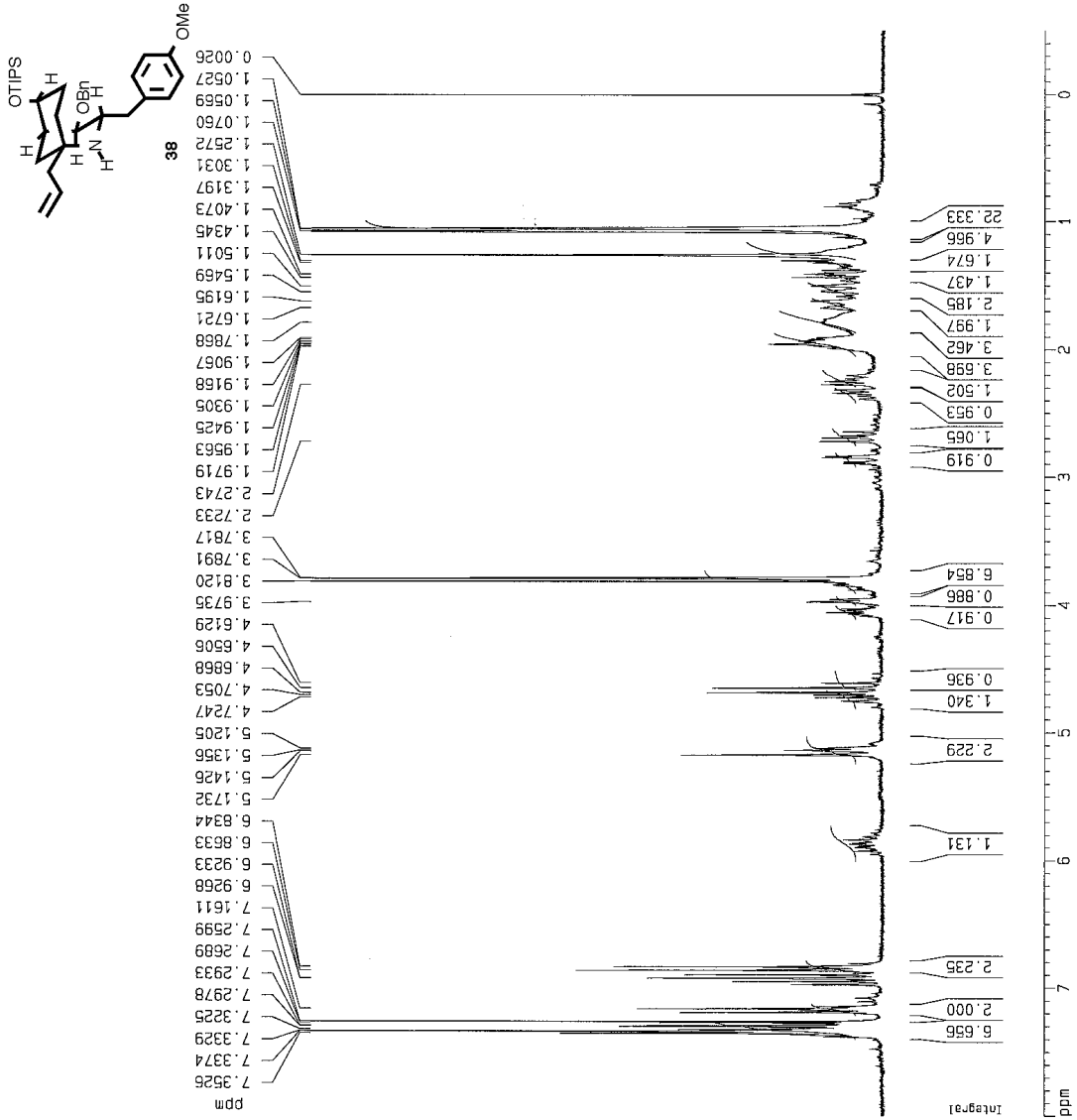
===== CHANNEL f1 =====  
 NUC1 13C  
 P1 5.40 usec  
 PL1 -6.00 dB  
 SF01 75.4106357 MHz

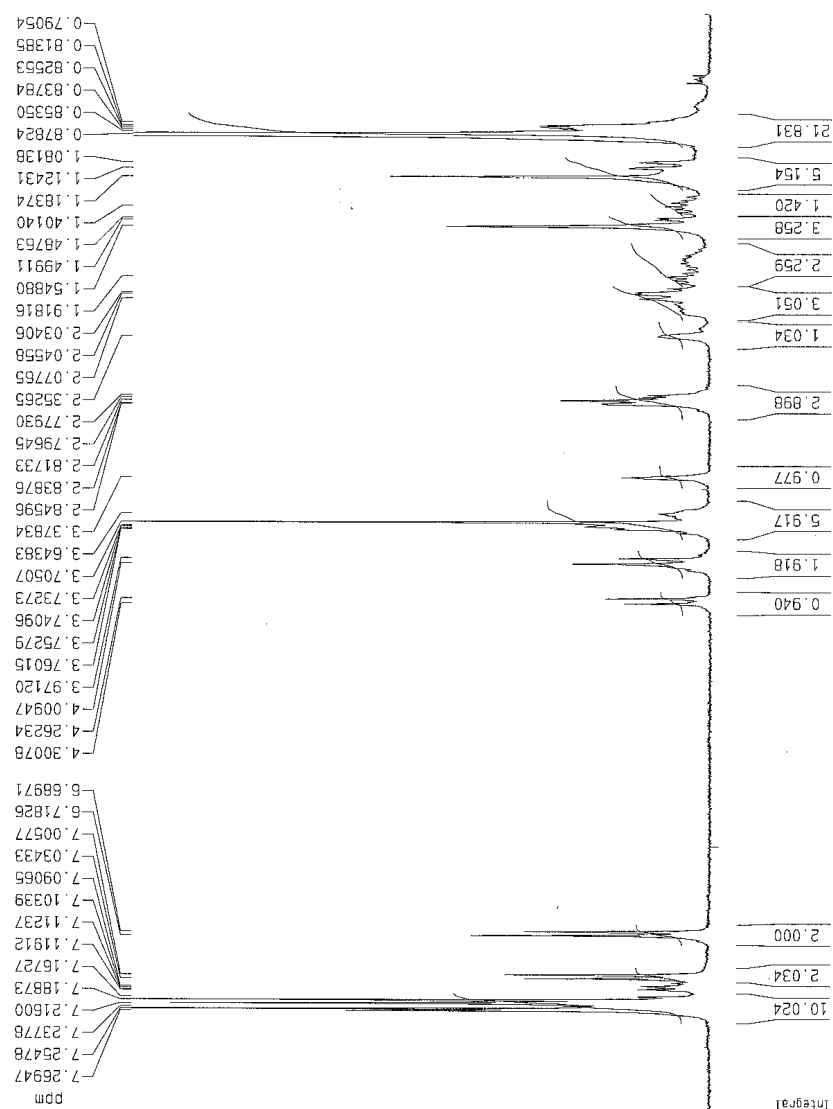
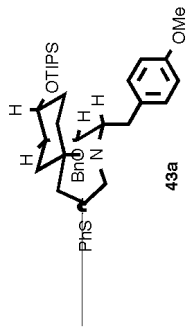
===== CHANNEL f2 =====  
 CPDPRG2 waltz16  
 NUC2 1H  
 P2 115.00 usec  
 PL2 0.00 dB  
 PL12 20.00 dB  
 PL13 20.00 dB  
 SF02 299.8711595 MHz

F2 - Processing parameters  
 SI 32768  
 SF 75.4023410 MHz  
 KW 6  
 SSB 0  
 LB 0  
 GB 0  
 PC 1.40

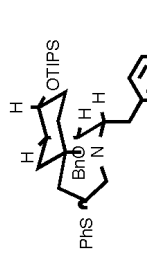
1D NMR plot parameters  
 CX 20.00 cm  
 F1P 165.000 ppm  
 F1 12441.38 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PRGM 8.25000 ppm/cm  
 HZCM 622.06934 Hz/cm







Current Data Parameters  
 NAME May14-2001-MeIn  
 EXPNO 20  
 PROCNO 1  
 F2 - Acquisition Parameters  
 Date\_ 20010514  
 Time 9.03  
 INSTRUM spect  
 PROBHD 5 mm QNP 1H/1  
 PULPROG zg30  
 TO 65636  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.638 Hz  
 FIDRES 0.084190 Hz  
 AQ 5.3084660 sec  
 RG 645.1  
 DM 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.0000000 sec  
 ===== CHANNEL f1 =====  
 NUC1 1H  
 P1 11.70 usec  
 PL1 0.00 dB  
 SF01 299.8718518 MHz  
 F2 - Processing parameters  
 SI 32768  
 SF 299.8700311 MHz  
 WDM EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00  
 ID NMR plot parameters  
 CX 20.00 cm  
 F1P 8.000 ppm  
 F1 2388.96 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPMCM 0.40000 ppm/cm  
 HZCM 119.94801 Hz/cm



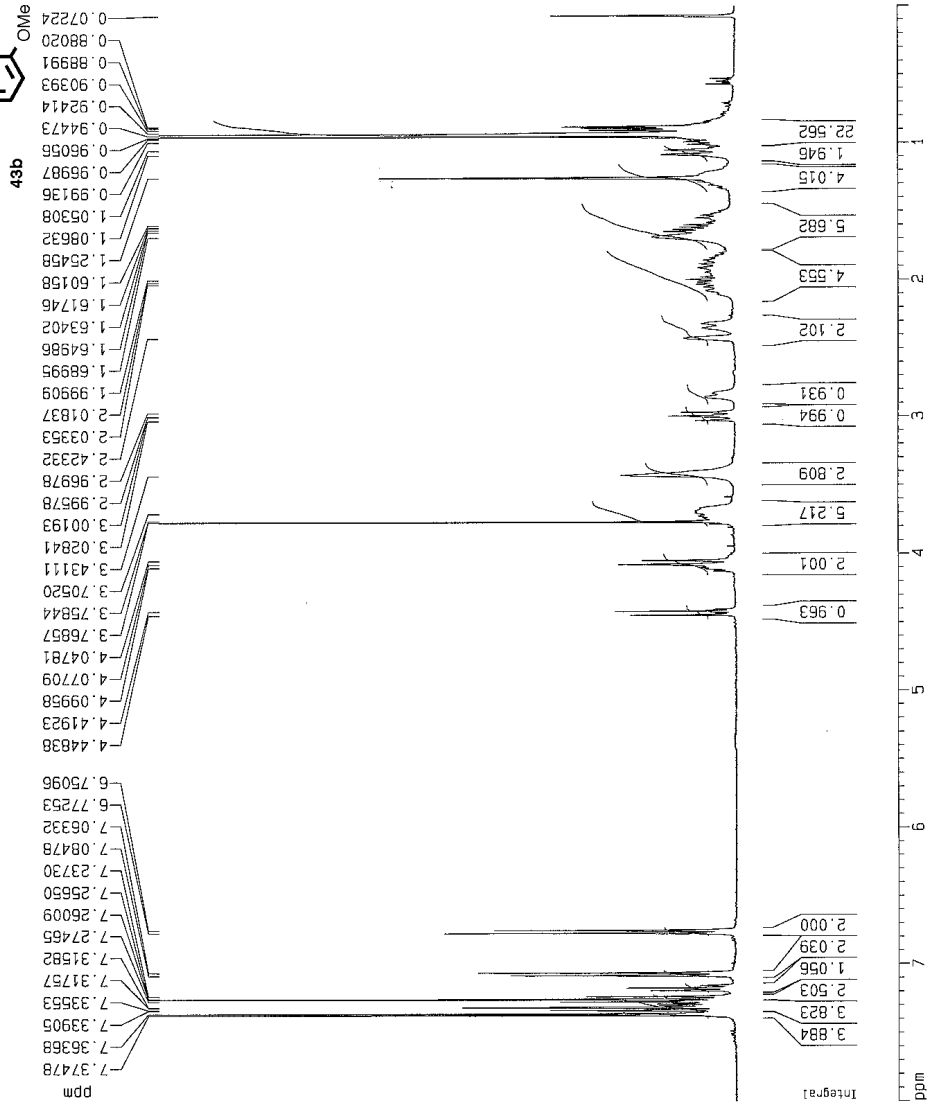
Current Data Parameters  
 NAME May20-2001-we1  
 EXPNO 11  
 PROCNO 1

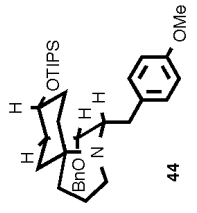
F2 - Acquisition Parameters  
 Date\_ 20010520  
 Time 16.15  
 INSTRUM spect  
 PROBHD 5 mm BBI 1H-B  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 8278.146 Hz  
 FIDRES 0.126314 Hz  
 AQ 3.9584293 sec  
 RG 161.3  
 DW 60.400 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

===== CHANNEL f1 =====  
 NUC1 1H  
 P1 6.38 usec  
 PL1 0.00 dB  
 SF01 400.1324710 MHz

F2 - Processing parameters  
 SI 32768  
 SF 400.1300894 MHz  
 WDW nd  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 8.000 ppm  
 F1 3201.04 Hz  
 F2 0.000 ppm  
 F2 0.00 Hz  
 PPMCM 0.40000 ppm/cm  
 HZCM 160.05200 Hz/cm





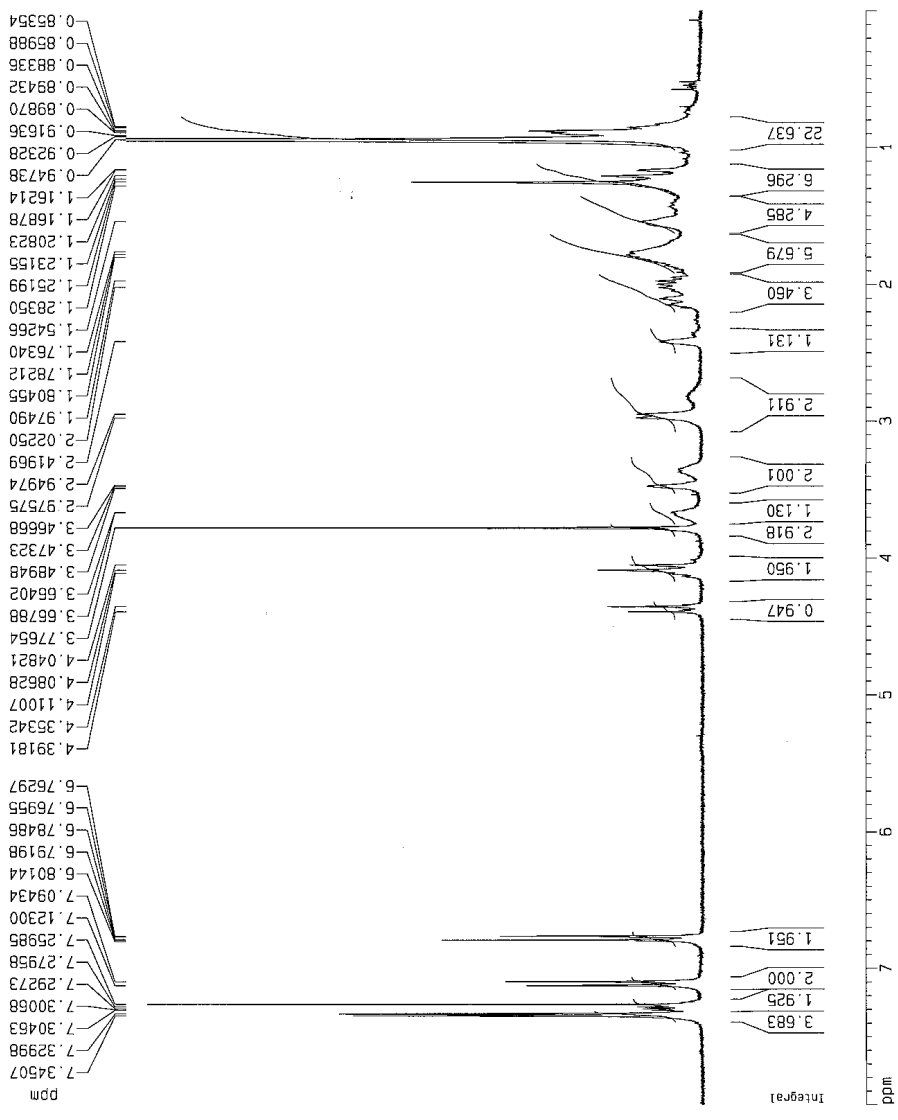
Current Data Parameters  
 NAME May29-2001-Rel  
 EXPNO 10  
 PROCNO 1

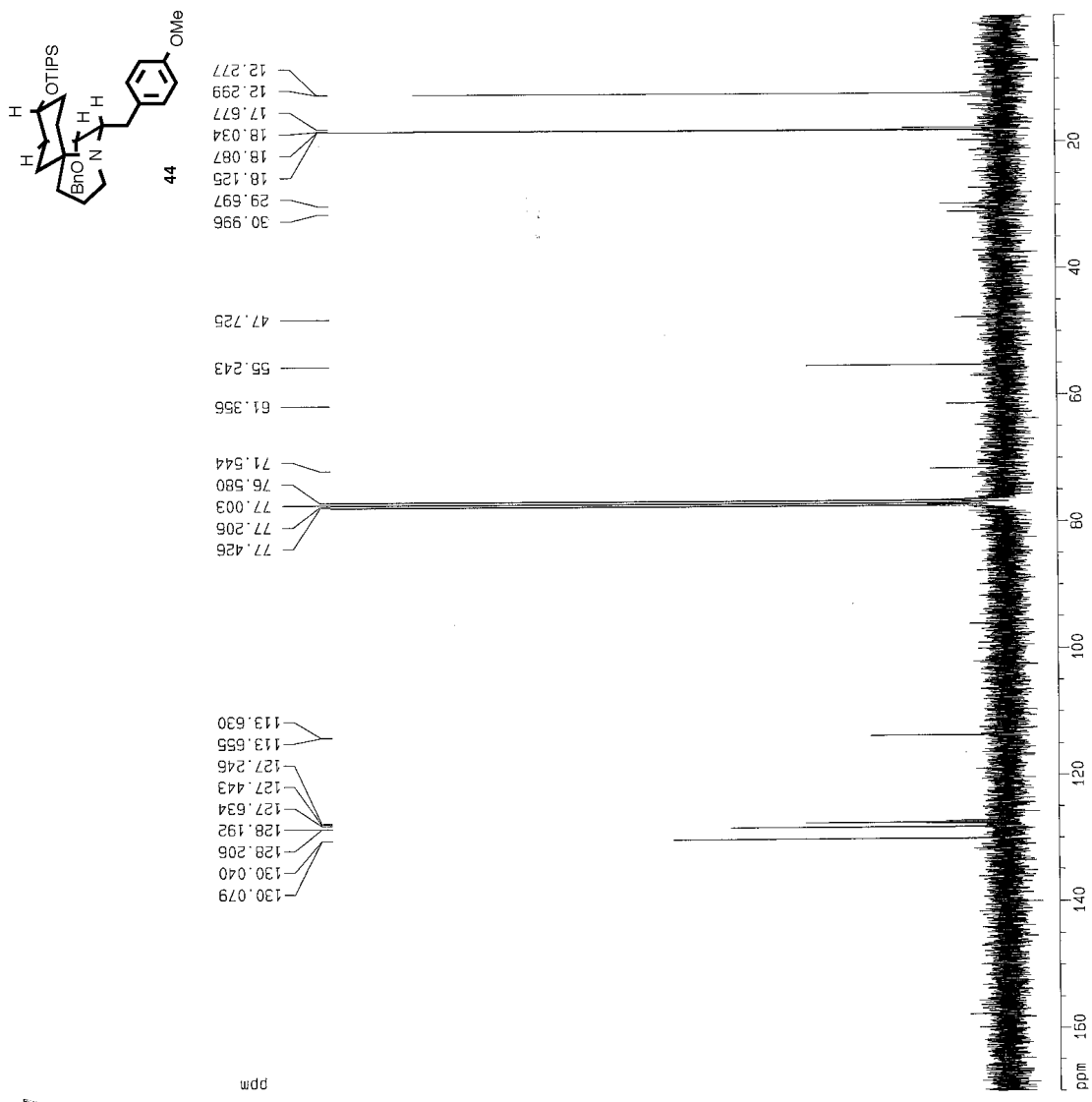
F2 - Acquisition Parameters  
 Date\_ 20010529  
 Time 20.20  
 INSTRUM spect  
 PROBHD 5 mm GNP 4H/1  
 PULPROG zg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 16  
 DS 2  
 SWH 6172.839 Hz  
 FIDRES 0.094190 Hz  
 AQ 5.3084650 sec  
 RG 362  
 DW 81.000 usec  
 DE 6.00 usec  
 TE 300.0 K  
 D1 1.00000000 sec

\*\*\*\*\* CHANNEL f1 \*\*\*\*\*  
 NUC1 1H  
 P1 11.70 usec  
 PL1 0.00 dB  
 SF01 299.8718518 MHz

F2 - Processing parameters  
 SI 32768  
 SF 299.8700101 MHz  
 WDW no  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.00

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 8.000 ppm  
 F1 2398.96 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPMCM 0.40000 ppm/cm  
 HZCM 119.94800 Hz/cm





Current Data Parameters  
 NAME JUN09-2001-Wein  
 EXPNO 30  
 PROCNO 1

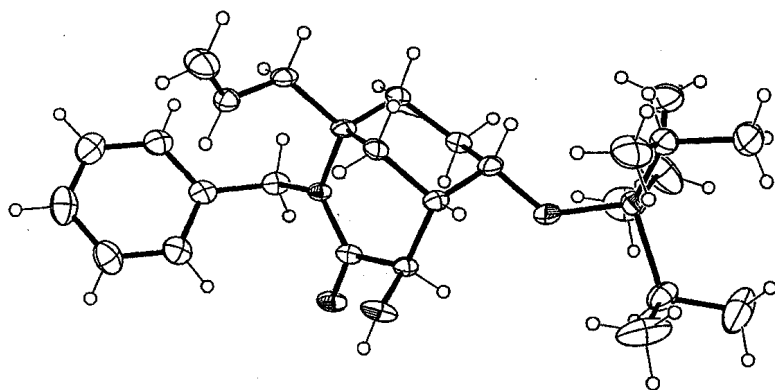
F2 - Acquisition Parameters  
 Date\_ 20010609  
 Time 4.03  
 INSTRUM spect  
 PROBHD 5 mm Mjltinu  
 PULPROG zgpg30  
 TD 65536  
 SOLVENT CDCl3  
 NS 10000  
 DS 4  
 SWH 18632.383 Hz  
 FIDRES 0.287360 Hz  
 AQ 1.7400308 sec  
 RG 13004  
 DK 26.550 USEC  
 DE 5.00 USEC  
 TE 300.0 K  
 D1 2.0000000 sec  
 d11 0.0300000 sec  
 d12 0.0000200 sec

===== CHANNEL f1 =====  
 NUC1 13C  
 P1 5.60 USEC  
 PL1 -6.00 dB  
 SF01 75.4760200 MHz

===== CHANNEL f2 =====  
 CROPRG2 wa1lz15  
 NUC2 1H  
 P2 114.00 USEC  
 PL2 -6.00 dB  
 PL12 18.00 dB  
 PL13 18.00 dB  
 SF02 300.1312005 MHz

F2 - Processing parameters  
 S1 32768  
 SF 75.467503 MHz  
 MDW 0  
 SSB 0  
 LB 0.00 Hz  
 GB 0  
 PC 1.40

1D NMR plot parameters  
 CX 20.00 cm  
 F1P 170.000 ppm  
 F1 12869.56 Hz  
 F2P 0.000 ppm  
 F2 0.00 Hz  
 PPMCM B.50000 ppm/cm  
 HZCM 641.47569 Hz/cm



X-Ray Crystal Structure Data for  $\alpha$ -Hydroxylactam 14

Table 1. Crystal Data and Structure Refinement for  $\alpha$ -Hydroxylactam 14

Empirical formula	C <sub>27</sub> H <sub>43</sub> N O <sub>3</sub> Si
Formula weight	457.71
Crystal system	Triclinic
Space group	P-1
Unit cell dimensions	a = 13.4402(13) Å $\alpha$ = 91.911(2)° b = 14.3073(13) Å $\beta$ = 91.864(2)° c = 14.3705(14) Å $\gamma$ = 106.914(2)°
Volume	2639.8(4) Å <sup>3</sup>
Z	4
Density (calculated)	1.152 Mg/m <sup>3</sup>
Wavelength	0.71073 Å
Temperature	133(2) K
<i>F</i> (000)	1000
Absorption coefficient	0.116 mm <sup>-1</sup>
Absorption correction	Empirical
Max. and min. transmission	0.962 and 0.651
Theta range for data collection	1.59 to 25.00°
Reflections collected	29009
Independent reflections	9077 [R(int) = 0.0648]
Data / restraints / parameters	9077 / 10 / 587
wR( <i>F</i> <sup>2</sup> all data)	wR = 0.1373
R( <i>F</i> obsd data)	R = 0.0511
Goodness-of-fit on <i>F</i> <sup>2</sup>	1.046
Observed data [I > 2 $\sigma$ (I)]	6065
Largest and mean shift / s.u.	0.000 and 0.000
Largest diff. Peak and hole	0.506 and -0.554 e/Å <sup>3</sup>



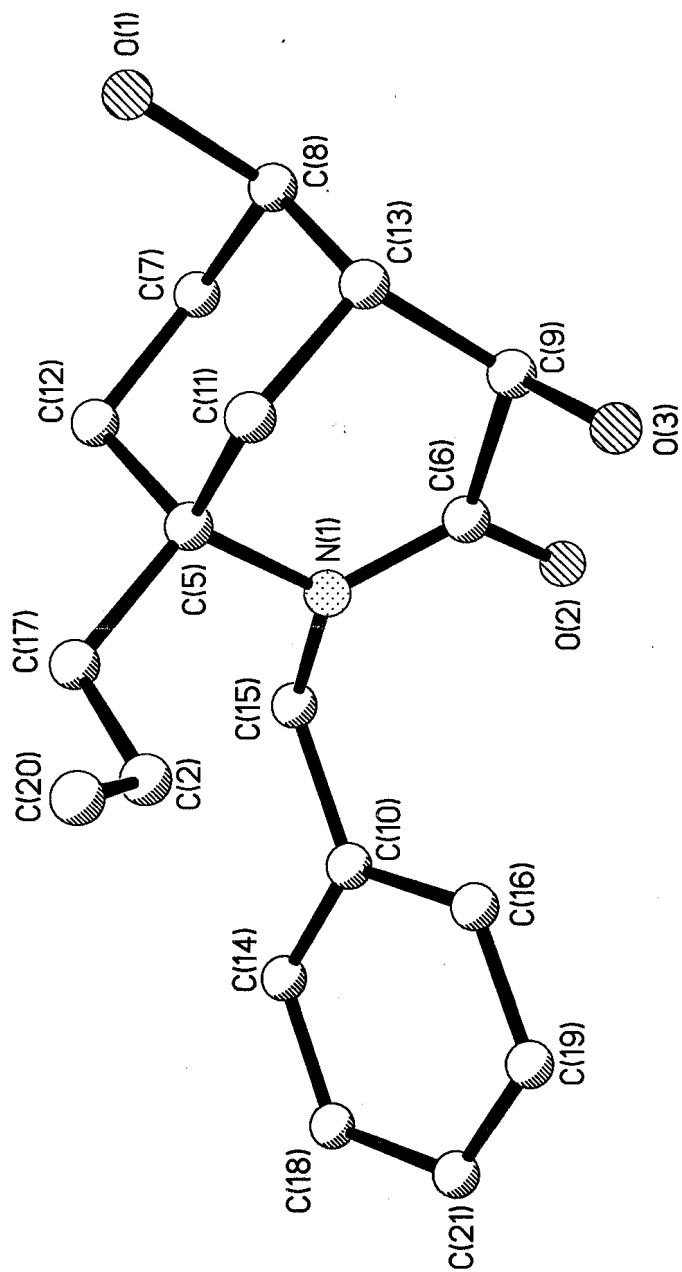
Table 2. Bond lengths [Å] for  $\alpha$ -Hydroxylactam · 14

Si(1A)-O(1A)	1.6433(18)	Si(1A)-C(23A)	1.879(3)
Si(1A)-C(26A)	1.864(3)	Si(1A)-C(29A)	1.883(3)
O(1A)-C(2A)	1.431(3)	Si(1B)-C(29B)	1.883(3)
C(2A)-C(9A)	1.518(3)	Si(1B)-C(26B)	1.888(3)
C(2A)-C(3A)	1.522(3)	O(1B)-C(2B)	1.436(3)
C(3A)-C(4A)	1.519(3)	C(2B)-C(9B)	1.517(3)
C(3A)-C(12A)	1.525(3)	C(2B)-C(3B)	1.531(3)
C(4A)-O(10A)	1.416(3)	C(3B)-C(12B)	1.522(3)
C(4A)-C(5A)	1.524(3)	C(3B)-C(4B)	1.526(3)
C(5A)-O(11A)	1.239(3)	C(4B)-O(10B)	1.421(3)
C(5A)-N(6A)	1.355(3)	C(4B)-C(5B)	1.520(3)
N(6A)-C(13A)	1.478(3)	C(5B)-O(11B)	1.239(3)
N(6A)-C(7A)	1.498(3)	C(5B)-N(6B)	1.356(3)
C(7A)-C(12A)	1.529(3)	N(6B)-C(13B)	1.475(3)
C(7A)-C(20A)	1.535(3)	N(6B)-C(7B)	1.496(3)
C(7A)-C(8A)	1.540(3)	C(7B)-C(12B)	1.529(3)
C(8A)-C(9A)	1.528(3)	C(7B)-C(8B)	1.541(3)
C(13A)-C(14A)	1.509(4)	C(7B)-C(20B)	1.544(3)
C(14A)-C(15A)	1.385(4)	C(8B)-C(9B)	1.530(3)
C(14A)-C(19A)	1.392(4)	C(13B)-C(14B)	1.510(3)
C(15A)-C(16A)	1.384(4)	C(14B)-C(15B)	1.392(4)
C(16A)-C(17A)	1.380(4)	C(14B)-C(19B)	1.393(4)
C(17A)-C(18A)	1.376(4)	C(15B)-C(16B)	1.386(4)
C(18A)-C(19A)	1.380(4)	C(16B)-C(17B)	1.378(4)
C(20A)-C(21A)	1.499(4)	C(17B)-C(18B)	1.379(4)
C(21A)-C(22A)	1.306(4)	C(18B)-C(19B)	1.387(4)
C(23A)-C(25A)	1.525(4)	C(20B)-C(21B)	1.503(3)
C(23A)-C(24A)	1.533(4)	C(21B)-C(22B)	1.306(4)
C(26A)-C(28 <sup>†</sup> )	1.484(4)	C(23B)-C(25B)	1.527(4)
C(26A)-C(27A)	1.501(4)	C(23B)-C(24B)	1.533(4)
C(26A)-C(28A)	1.505(3)	C(26B)-C(27B)	1.518(4)
C(29A)-C(31A)	1.523(4)	C(26B)-C(28B)	1.563(4)
C(29A)-C(30A)	1.553(4)	C(29B)-C(31B)	1.531(4)
Si(1B)-O(1B)	1.6519(18)	C(29B)-C(30B)	1.536(3)
Si(1B)-C(23B)	1.882(3)		

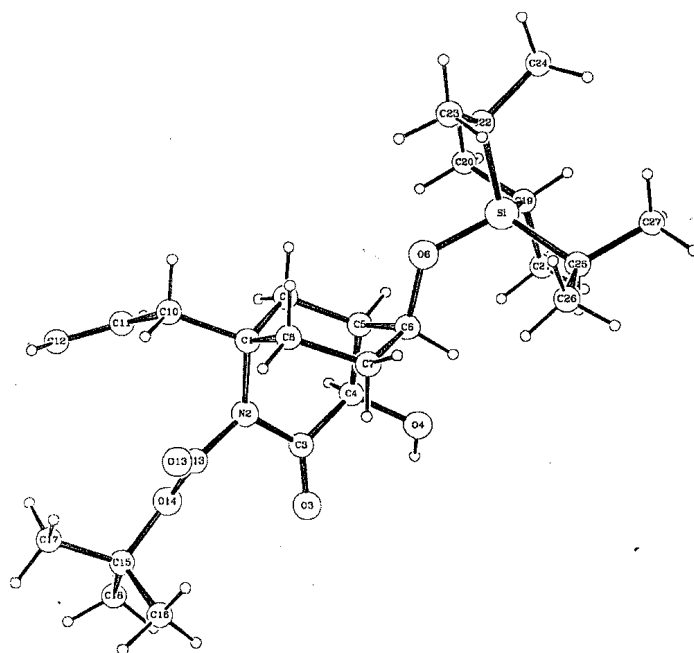
Table 3. Bond angles [Å] for  $\alpha$ -Hydroxylactan 14

O(1A)-Si(1A)-C(26A)	110.57(14)	C(23A)-Si(1A)-C(29A)	115.69(13)
O(1A)-Si(1A)-C(23A)	100.41(11)	C(2A)-O(1A)-Si(1A)	130.28(16)
C(26A)-Si(1A)-C(23A)	107.90(16)	O(1A)-C(2A)-C(9A)	111.0(2)
O(1A)-Si(1A)-C(29A)	111.19(11)	O(1A)-C(2A)-C(3A)	108.32(19)
C(26A)-Si(1A)-C(29A)	110.64(14)	C(9A)-C(2A)-C(3A)	111.8(2)
C(4A)-C(3A)-C(2A)	113.5(2)	C(27A)-C(26A)-Si(1A)	113.7(2)
C(4A)-C(3A)-C(12A)	108.2(2)	C(28A)-C(26A)-Si(1A)	118.0(3)
C(2A)-C(3A)-C(12A)	110.0(2)	C(31A)-C(29A)-C(30A)	109.7(3)
O(10A)-C(4A)-C(3A)	107.78(19)	C(31A)-C(29A)-Si(1A)	116.5(2)
O(10A)-C(4A)-C(5A)	108.12(19)	C(30A)-C(29A)-Si(1A)	112.0(2)
C(3A)-C(4A)-C(5A)	115.4(2)	O(1B)-Si(1B)-C(23B)	103.14(10)
O(11A)-C(5A)-N(6A)	121.2(2)	O(1B)-Si(1B)-C(29B)	109.98(10)
O(11A)-C(5A)-C(4A)	118.0(2)	C(23B)-Si(1B)-C(29B)	111.33(12)
N(6A)-C(5A)-C(4A)	120.8(2)	O(1B)-Si(1B)-C(26B)	111.56(11)
C(5A)-N(6A)-C(13A)	116.6(2)	C(23B)-Si(1B)-C(26B)	112.60(12)
C(5A)-N(6A)-C(7A)	123.0(2)	C(29B)-Si(1B)-C(26B)	108.21(12)
C(13A)-N(6A)-C(7A)	118.39(18)	C(2B)-O(1B)-Si(1B)	125.65(16)
N(6A)-C(7A)-C(12A)	108.14(18)	O(1B)-C(2B)-C(9B)	110.4(2)
N(6A)-C(7A)-C(20A)	111.16(19)	O(1B)-C(2B)-C(3B)	109.65(19)
C(12A)-C(7A)-C(20A)	109.53(19)	C(9B)-C(2B)-C(3B)	111.5(2)
N(6A)-C(7A)-C(8A)	108.45(19)	C(12B)-C(3B)-C(4B)	108.2(2)
C(12A)-C(7A)-C(8A)	109.1(2)	C(12B)-C(3B)-C(2B)	109.5(2)
C(20A)-C(7A)-C(8A)	110.4(2)	C(4B)-C(3B)-C(2B)	113.4(2)
C(9A)-C(8A)-C(7A)	112.4(2)	O(10B)-C(4B)-C(5B)	108.99(19)
C(2A)-C(9A)-C(8A)	110.4(2)	O(10B)-C(4B)-C(3B)	106.88(19)
C(3A)-C(12A)-C(7A)	110.16(19)	C(5B)-C(4B)-C(3B)	116.1(2)
N(6A)-C(13A)-C(14A)	113.9(2)	O(11B)-C(5B)-N(6B)	121.4(2)
C(15A)-C(14A)-C(19A)	118.3(3)	O(11B)-C(5B)-C(4B)	117.8(2)
C(15A)-C(14A)-C(13A)	121.2(2)	N(6B)-C(5B)-C(4B)	120.8(2)
C(19A)-C(14A)-C(13A)	120.4(2)	C(5B)-N(6B)-C(13B)	116.7(2)
C(16A)-C(15A)-C(14A)	120.6(3)	C(5B)-N(6B)-C(7B)	122.9(2)
C(17A)-C(16A)-C(15A)	120.4(3)	C(13B)-N(6B)-C(7B)	118.83(19)
C(18A)-C(17A)-C(16A)	119.7(3)	N(6B)-C(7B)-C(12B)	108.30(19)
C(17A)-C(18A)-C(19A)	120.0(3)	N(6B)-C(7B)-C(8B)	108.60(19)
C(18A)-C(19A)-C(14A)	121.1(3)	C(12B)-C(7B)-C(8B)	109.6(2)
C(21A)-C(20A)-C(7A)	115.6(2)	N(6B)-C(7B)-C(20B)	111.09(19)
C(22A)-C(21A)-C(20A)	125.3(3)	C(12B)-C(7B)-C(20B)	109.3(2)
C(25A)-C(23A)-C(24A)	110.6(3)	C(8B)-C(7B)-C(20B)	109.9(2)
C(25A)-C(23A)-Si(1A)	116.3(2)	C(9B)-C(8B)-C(7B)	112.2(2)
C(24A)-C(23A)-Si(1A)	112.5(2)	C(2B)-C(9B)-C(8B)	110.0(2)
C(28)-C(26A)-C(27A)	122.5(5)	C(3B)-C(12B)-C(7B)	110.0(2)

C(28')-C(26A)-C(28A)	36.6(5)	N(6B)-C(13B)-C(14B)	114.7(2)
C(27A)-C(26A)-C(28A)	111.0(3)	C(15B)-C(14B)-C(19B)	118.6(2)
C(28')-C(26A)-Si(1A)	123.6(4)	C(15B)-C(14B)-C(13B)	121.2(2)
C(19B)-C(14B)-C(13B)	120.2(2)	C(25B)-C(23B)-Si(1B)	112.98(18)
C(16B)-C(15B)-C(14B)	120.3(3)	C(24B)-C(23B)-Si(1B)	114.14(18)
C(17B)-C(16B)-C(15B)	120.6(3)	C(27B)-C(26B)-C(28B)	109.4(2)
C(16B)-C(17B)-C(18B)	119.8(3)	C(27B)-C(26B)-Si(1B)	114.5(2)
C(17B)-C(18B)-C(19B)	120.0(3)	C(28B)-C(26B)-Si(1B)	113.22(19)
C(18B)-C(19B)-C(14B)	120.7(3)	C(31B)-C(29B)-C(30B)	109.7(2)
C(21B)-C(20B)-C(7B)	115.6(2)	C(31B)-C(29B)-Si(1B)	112.66(18)
C(22B)-C(21B)-C(20B)	125.1(3)	C(30B)-C(29B)-Si(1B)	114.78(18)
C(25B)-C(23B)-C(24B)	111.0(2)		



X-Ray Crystal Structure of Diol 32



X-Ray Crystal Structure Data for  $\alpha$ -Hydroxyimide 34

Table 1. X-ray Data for  $\alpha$ -Hydroxyimide **34** at 295 K.

Formula	C <sub>25</sub> H <sub>45</sub> NO <sub>5</sub> Si
Formula weight	467.727
Crystal size (mm)	0.16 x 0.32 x 0.60
Crystal system	monoclinic
Space group	<i>P</i> 2 <sub>1</sub> / <i>c</i>
<i>a</i> (Å)	16.643(4)
<i>b</i> (Å)	11.474(1)
<i>c</i> (Å)	14.896(3)
$\beta$ (°)	95.07(2)
<i>V</i> (Å <sup>3</sup> )	2833.4(10)
<i>Z</i>	4
<i>d</i> <sub>calc</sub> (g cm <sup>-3</sup> )	1.096
$\mu$ (Mo <i>K</i> $\alpha$ ) (cm <sup>-1</sup> )	1.087
Absorption correction	none
Maximum $\theta$ (°)	25
Unique reflections	4973
Observed reflections [ <i>I</i> > 3.0 $\sigma$ ( <i>I</i> )]	1014
Number of variables	290
<i>R</i>	0.055
<i>R</i> <sub>w</sub>	0.054
( $\Delta\rho$ ) <sub>max</sub> (e Å <sup>-3</sup> )	0.18
( $\Delta\rho$ ) <sub>min</sub> (e Å <sup>-3</sup> )	-0.20

Table 2. Bond lengths (Å) for  $\alpha$ -Hydroxyimide 34.

<u>Atom 1</u>	<u>Atom 2</u>	<u>Distance</u>	<u>Atom 1</u>	<u>Atom 2</u>	<u>Distance</u>
Si	O6	1.634(5)	C4	C5	1.51(1)
Si	C19	1.88(1)	C5	C6	1.54(1)
Si	C22	1.86(1)	C5	C9	1.51(1)
Si	C25	1.87(1)	C6	C7	1.53(1)
O3	C3	1.18(1)	C7	C8	1.53(1)
O4	C4	1.41(1)	C10	C11	1.53(1)
O6	C6	1.441(9)	C11	C12	1.28(1)
O13	C13	1.19(1)	C15	C16	1.50(2)
O14	C13	1.33(1)	C15	C17	1.50(2)
O14	C15	1.47(1)	C15	C18	1.52(1)
N2	C1	1.50(1)	C19	C20	1.57(2)
N2	C3	1.41(1)	C19	C21	1.53(2)
N2	C13	1.41(1)	C22	C23	1.32(2)
C1	C8	1.51(1)	C22	C24	1.53(1)
C1	C9	1.50(1)	C25	C26	1.42(2)
C1	C10	1.56(1)	C25	C27	1.56(2)
C3	C4	1.54(1)			

Standard deviations are in parentheses.

Table 3. Bond angles (deg) for  $\alpha$ -Hydroxyimide 34.

<u>Atom 1</u>	<u>Atom 2</u>	<u>Atom 3</u>	<u>Angle</u>	<u>Atom 1</u>	<u>Atom 2</u>	<u>Atom 3</u>	<u>Angle</u>
O6	Si	C19	112.4(4)	O6	C6	C5	107.2(6)
O6	Si	C22	102.2(4)	O6	C6	C7	108.5(6)
O6	Si	C25	109.8(4)	C5	C6	C7	111.4(6)
C19	Si	C22	107.3(5)	C6	C7	C8	113.7(7)
C19	Si	C25	110.1(5)	C1	C8	C7	110.9(7)
C22	Si	C25	115.0(5)	C1	C9	C5	110.1(7)
Si	O6	C6	127.0(5)	C1	C10	C11	115.6(7)
C13	O14	C15	121.6(6)	C10	C11	C12	124(1)
C1	N2	C3	124.2(6)	O13	C13	O14	124.8(7)
C1	N2	C13	116.7(6)	O13	C13	N2	125.3(8)
C3	N2	C13	115.0(6)	O14	C13	N2	109.8(7)
N2	C1	C8	111.2(7)	O14	C15	C16	110.9(7)
N2	C1	C9	107.3(6)	O14	C15	C17	110.9(8)
N2	C1	C10	109.1(6)	O14	C15	C18	102.9(7)
C8	C1	C9	110.0(6)	C16	C15	C17	112.2(9)
C8	C1	C10	110.7(7)	C16	C15	C18	109.5(9)
C9	C1	C10	108.5(6)	C17	C15	C18	110.1(9)
O3	C3	N2	123.6(7)	Si	C19	C20	112.4(7)
O3	C3	C4	122.5(7)	Si	C19	C21	115.0(7)
N2	C3	C4	113.8(6)	C20	C19	C21	109.4(8)
O4	C4	C3	108.2(6)	Si	C22	C23	120.9(9)
O4	C4	C5	110.4(6)	Si	C22	C24	117.6(8)
C3	C4	C5	116.0(7)	C23	C22	C24	111.6(9)
C4	C5	C6	112.2(7)	Si	C25	C26	120.6(9)
C4	C	C9	106.8(6)	Si	C25	C27	109.8(8)
C6	C5	C9	113.0(7)	C26	C25	C27	115(1)

Standard deviations are in parentheses.