

**SUPPORTING INFORMATION**  
**Stereoselective Synthesis of Conjugated Fluoro Enynes**

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Due to volatility of some products, removal of solvent traces was difficult, therefore some spectra may contain traces of hexanes used in chromatography.

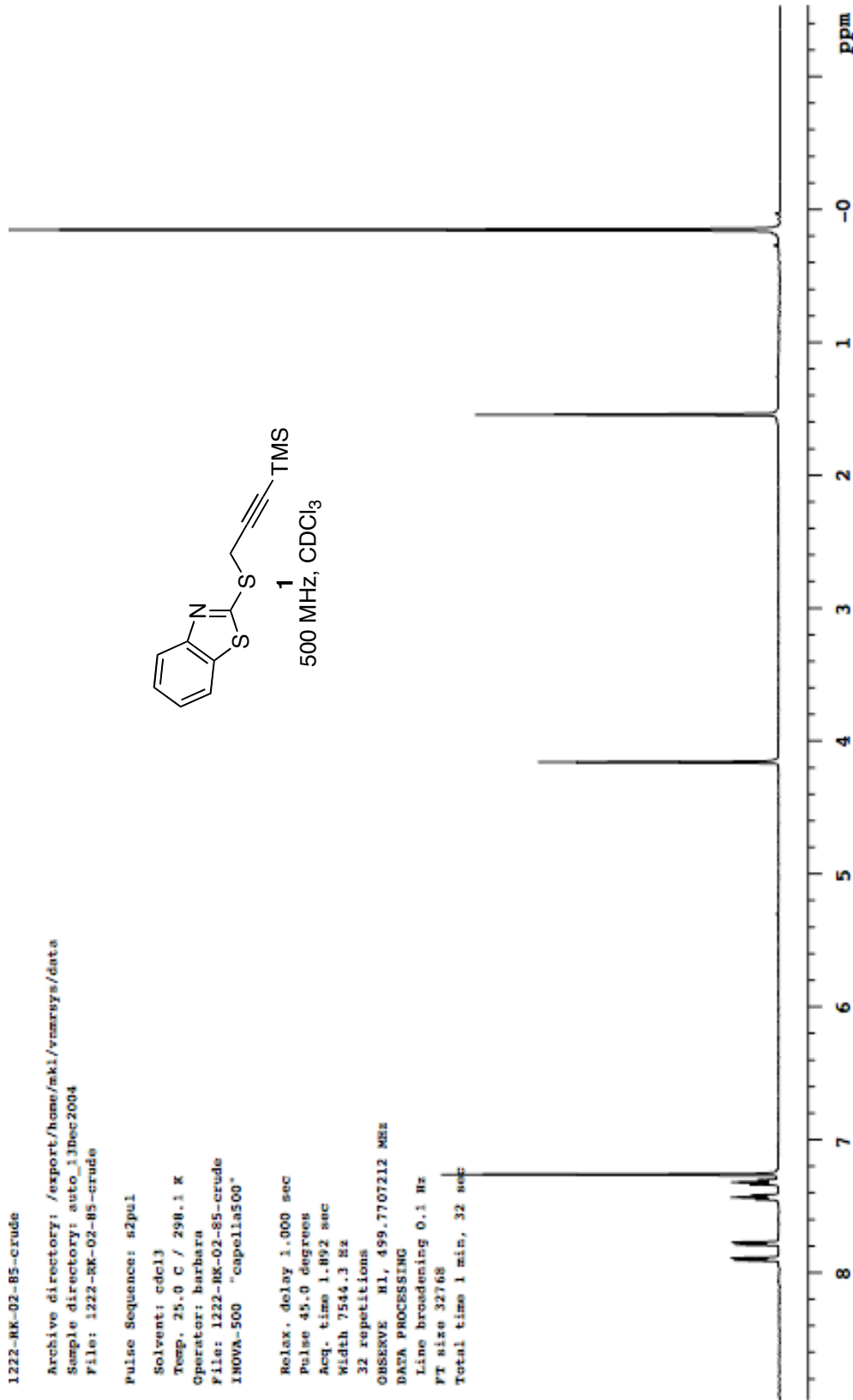
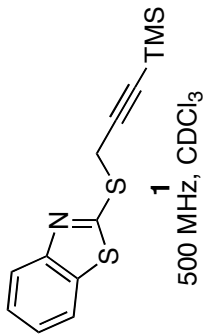
1222-MK-02-85-crude

Archive directory: /export/home/mkl/vmrsvs/data  
Sample directory: auto\_1/Dec2004  
File: 1222-MK-02-85-crude

Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1222-MK-02-85-crude  
INOVA-500 "capella500"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
32 repetitions  
OBSERVE H1, 499.7707212 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 1 min, 32 sec



1211-NK-02-85-13C

Pulse Sequence: s2pca1

Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
Operator: Maghu  
INOVA-500 "capella500"

Relax. delay 3.000 sec  
Pulse 45.0 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
270 repetitions

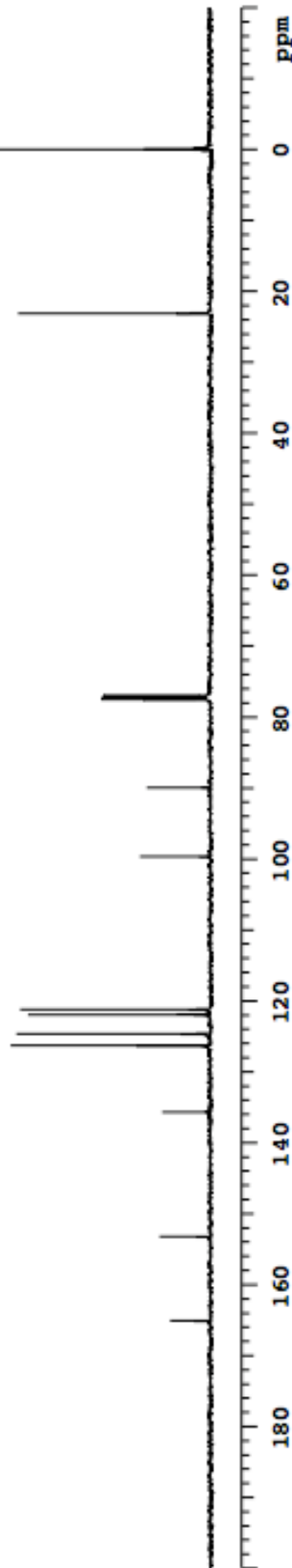
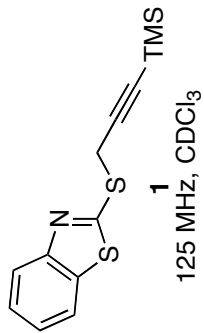
OBSERVE C13, 125.6674287 MHz  
DECOUPLE H1, 499.7730084 MHz

Power 40 dB  
continuously on  
WALTZ-16 modulated

DATA PROCESSING

Line broadening 2.0 Hz  
FT size 131072

Total time 29 hr, 55 min, 35 sec



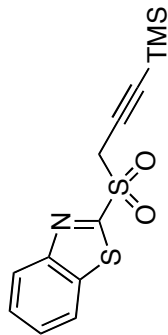
1222-RK-02-139-pure

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Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

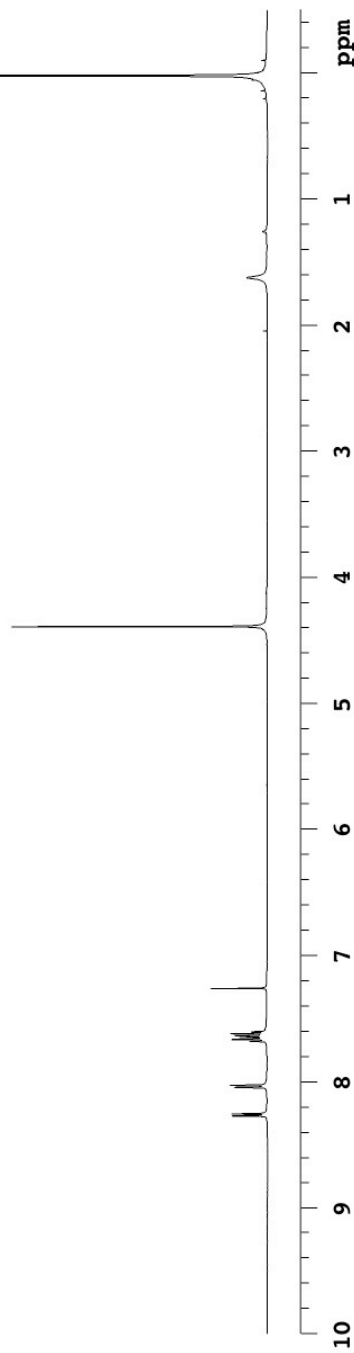
Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1222-RK-02-139-pure  
INOVA-500 "riga"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
24 repetitions  
OBSERVE H1, 499.7707221 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 3 min, 5 sec



**2**

500 MHz, CDCl<sub>3</sub>



1222-RK-02-139-13C

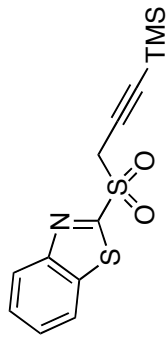
Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
INOVA-500 "capella500"

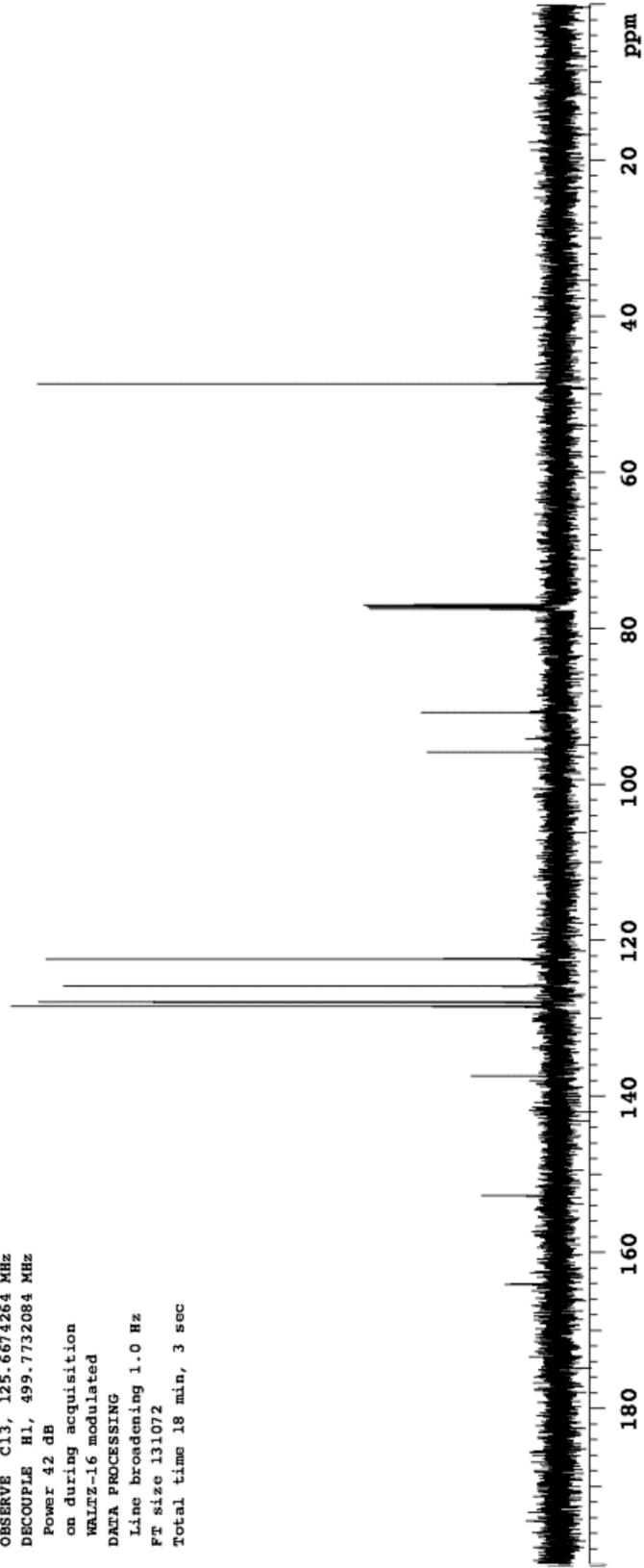
Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
52 repetitions

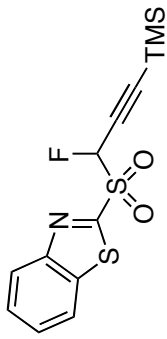
OBSERVE C13, 125.6674264 MHz  
DECOUPLE H1, 499.7732084 MHz

Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 18 min, 3 sec

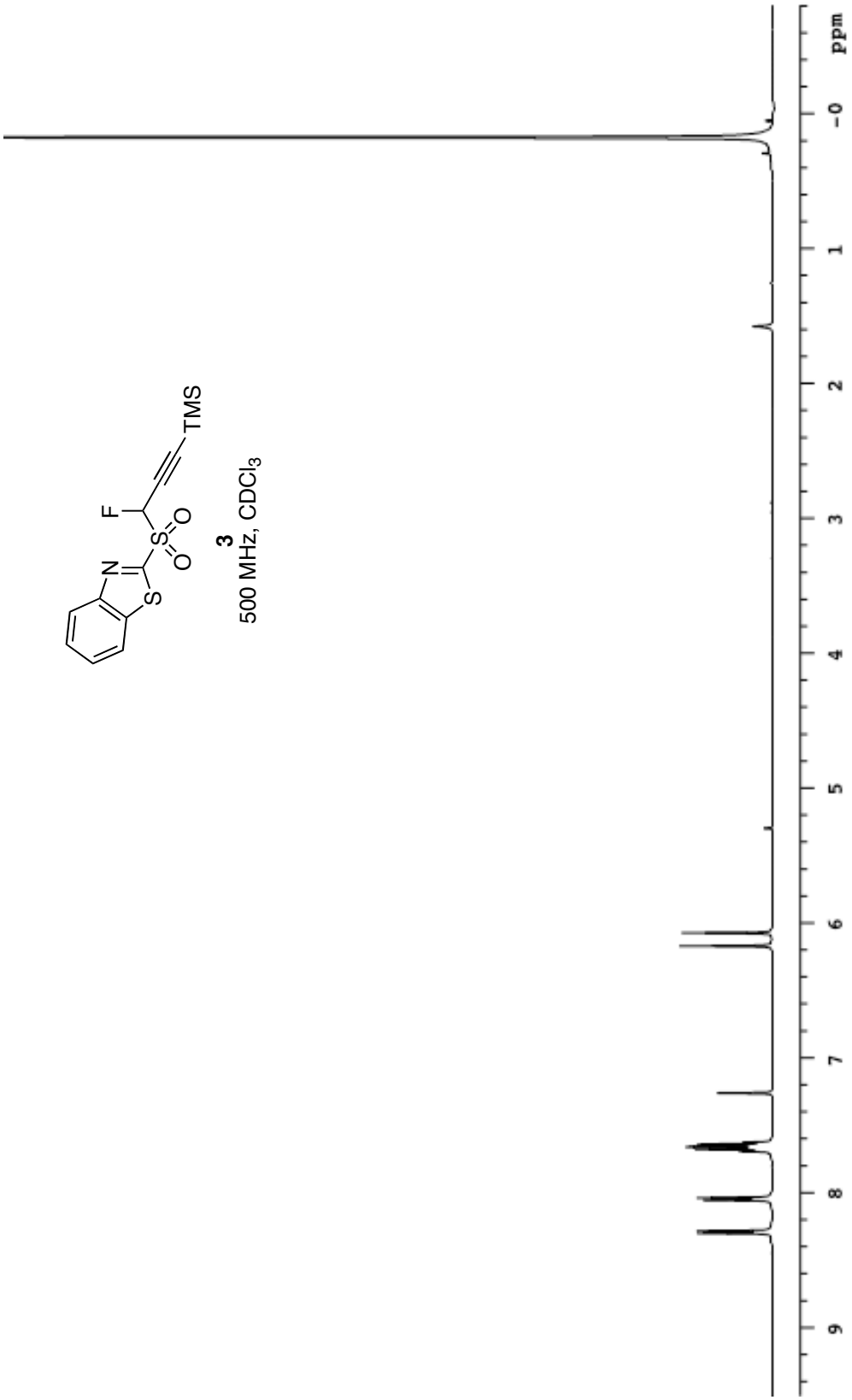


2  
125 MHz, CDCl<sub>3</sub>





**3**  
500 MHz, CDCl<sub>3</sub>

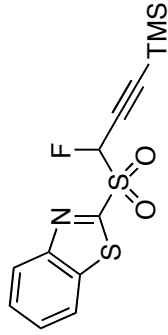


1222-RK-02-144-13C

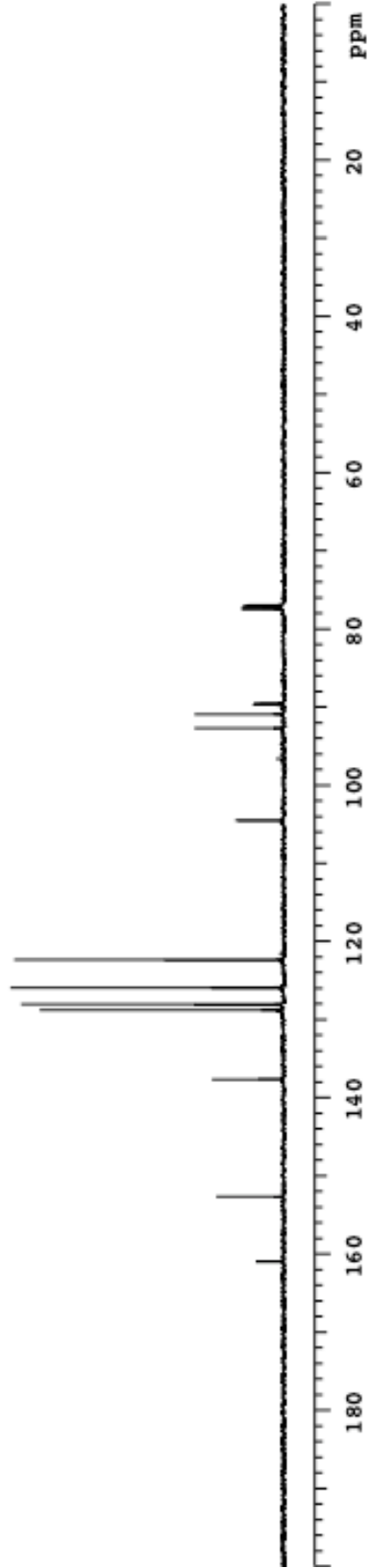
Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1222-RK-02-144-13C  
INOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
100 repetitions  
OBSERVE C13, 125.6674411 MHz  
DECOUPLE H1, 499.732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 9 min, 12 sec



**3**  
125 MHz, CDCl<sub>3</sub>





1231-RK-14-33-pure

Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-14-33-pure

INOVA-500 "riga"

Pulse 48.0 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

28 repetitions

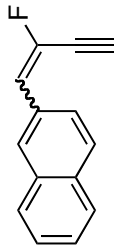
OBSERVE H1, 499.7707217 MHz

DATA PROCESSING

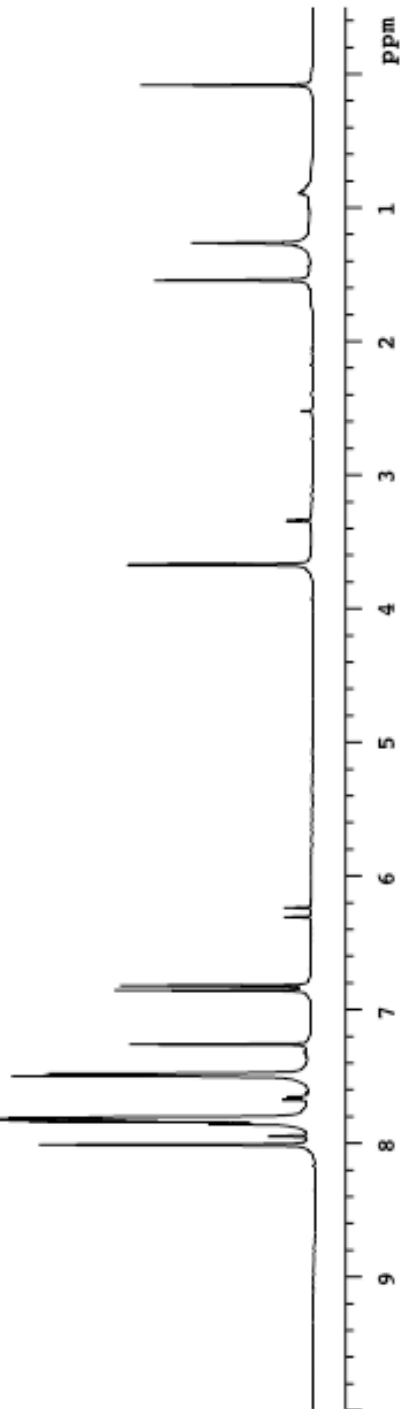
Line broadening 0.1 Hz

FT size 32768

Total time 6 min, 20 sec



4: E/Z 88/12  
500 MHz, CDCl<sub>3</sub>

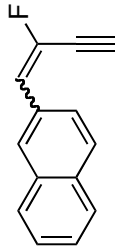


1231-NK-15-81-13C

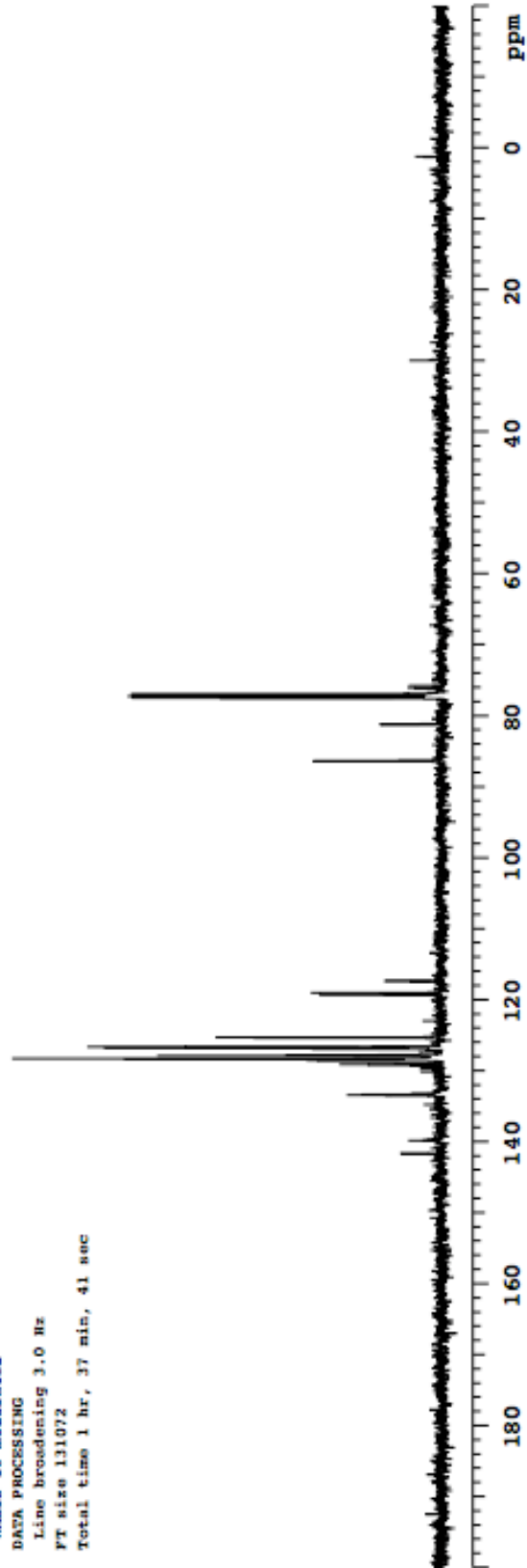
Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1231-NK-15-81-13C  
INOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
220 repetitions  
OBSERVE C13, 125.6674773 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 db  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 3.0 Hz  
FT size 131072  
Total time 1 hr, 37 min, 41 sec



4: E/Z 74/26  
125 MHz, CDCl<sub>3</sub>



1222-RK-10-755-pure

Pulse Sequence: s2pul

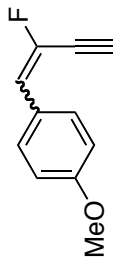
Solvent: CDCl3

Ambient temperature

Operator: barbara

File: 1222-RK-10-755-pure

INOVA-500 "riga"



5: E/Z 95/5

500 MHz, CDCl<sub>3</sub>

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

24 repetitions

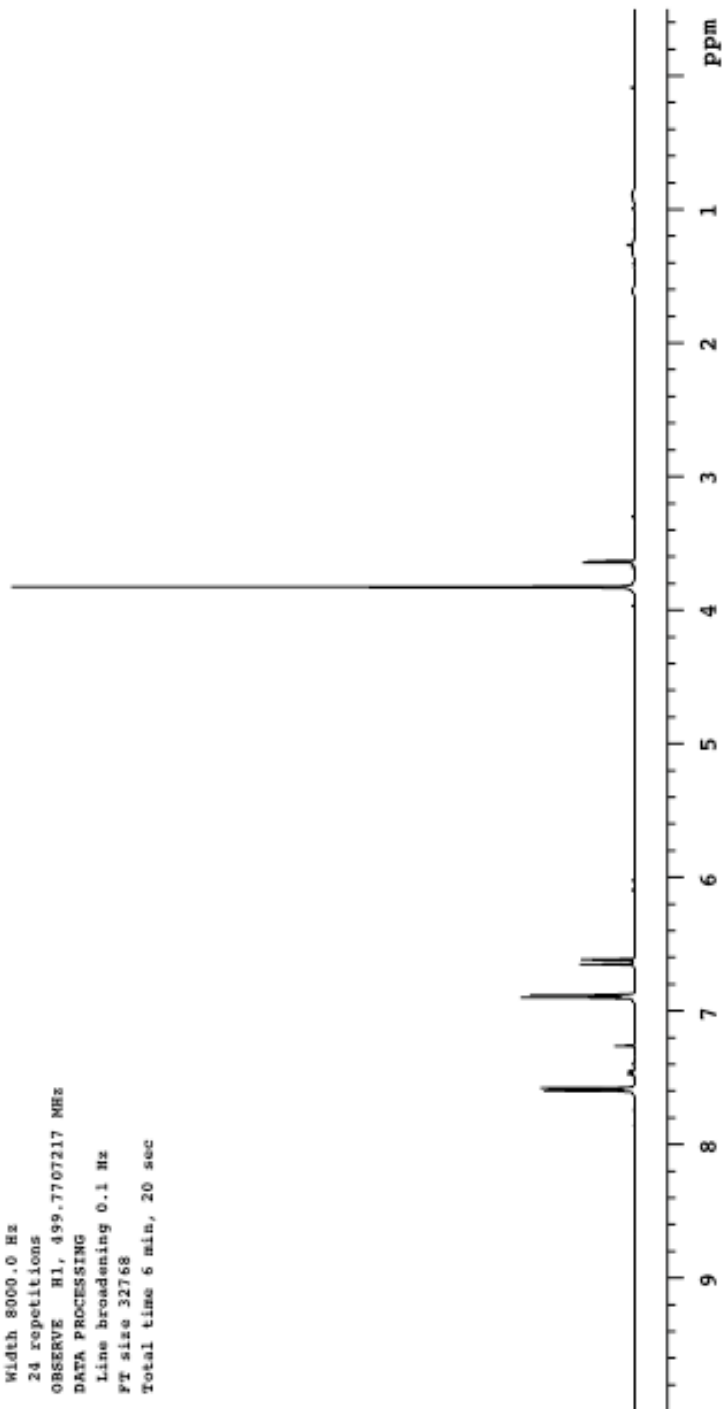
OBSERVE H1, 499.7707217 MHz

DATA PROCESSING

Line broadening 0.1 Hz

FT size 32768

Total time 6 min, 20 sec



1231-MK-15-92-13C

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1231-MK-15-92-13C

INOVA-500 "riga"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

940 repetitions

OBSERVE C13, 125.6674200 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

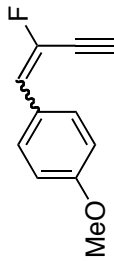
WALTZ-16 modulated

DATA PROCESSING

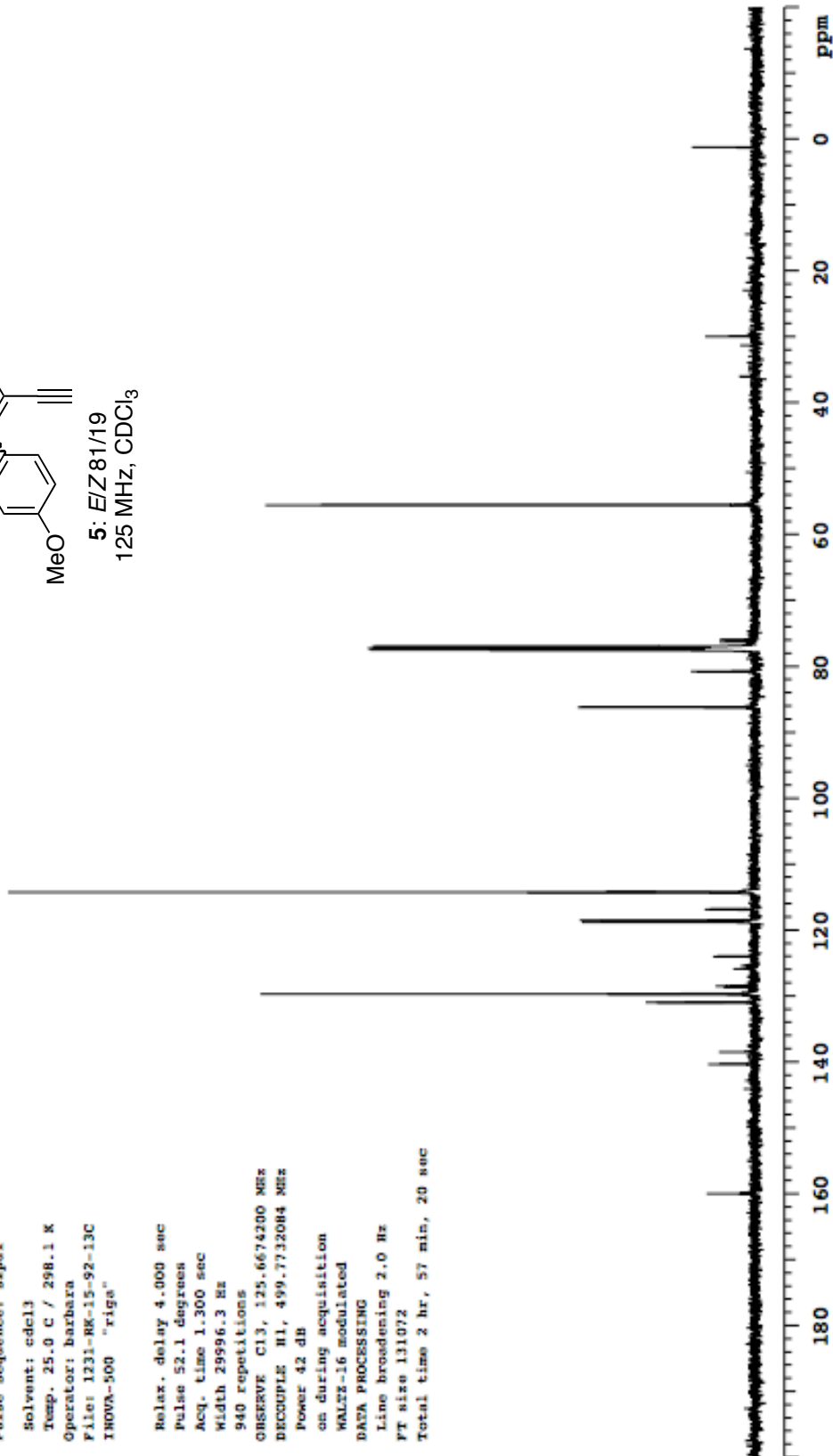
Line broadening 2.0 Hz

FT size 131072

Total time 3 hr, 57 min, 20 sec



5: E/Z 81/19  
125 MHz, CDCl<sub>3</sub>



1222-RK-03-187-pure

Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1222-RK-03-187-pure

INOVA-500 "riga"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.892 sec

Width 7544.3 Hz

32 repetitions

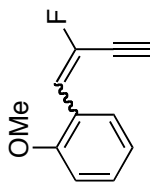
OBSERVE H1, 499.7707212 MHz

DATA PROCESSING

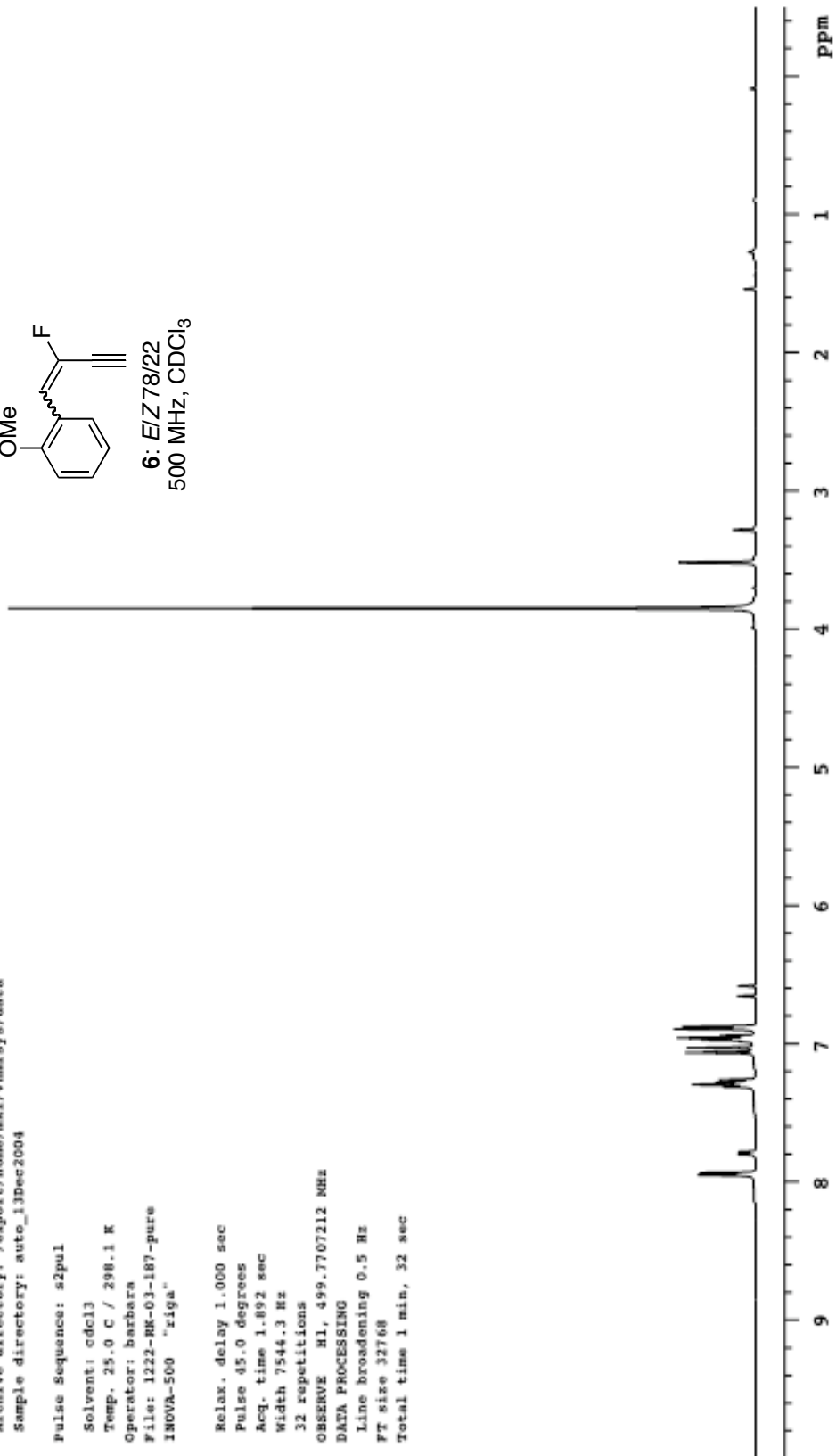
Line broadening 0.5 Hz

FT size 32768

Total time 1 min, 32 sec



**6: E/Z 78/22**  
500 MHz, CDCl<sub>3</sub>

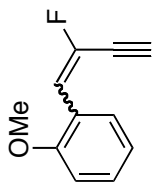


1231-RK-15-89-13C

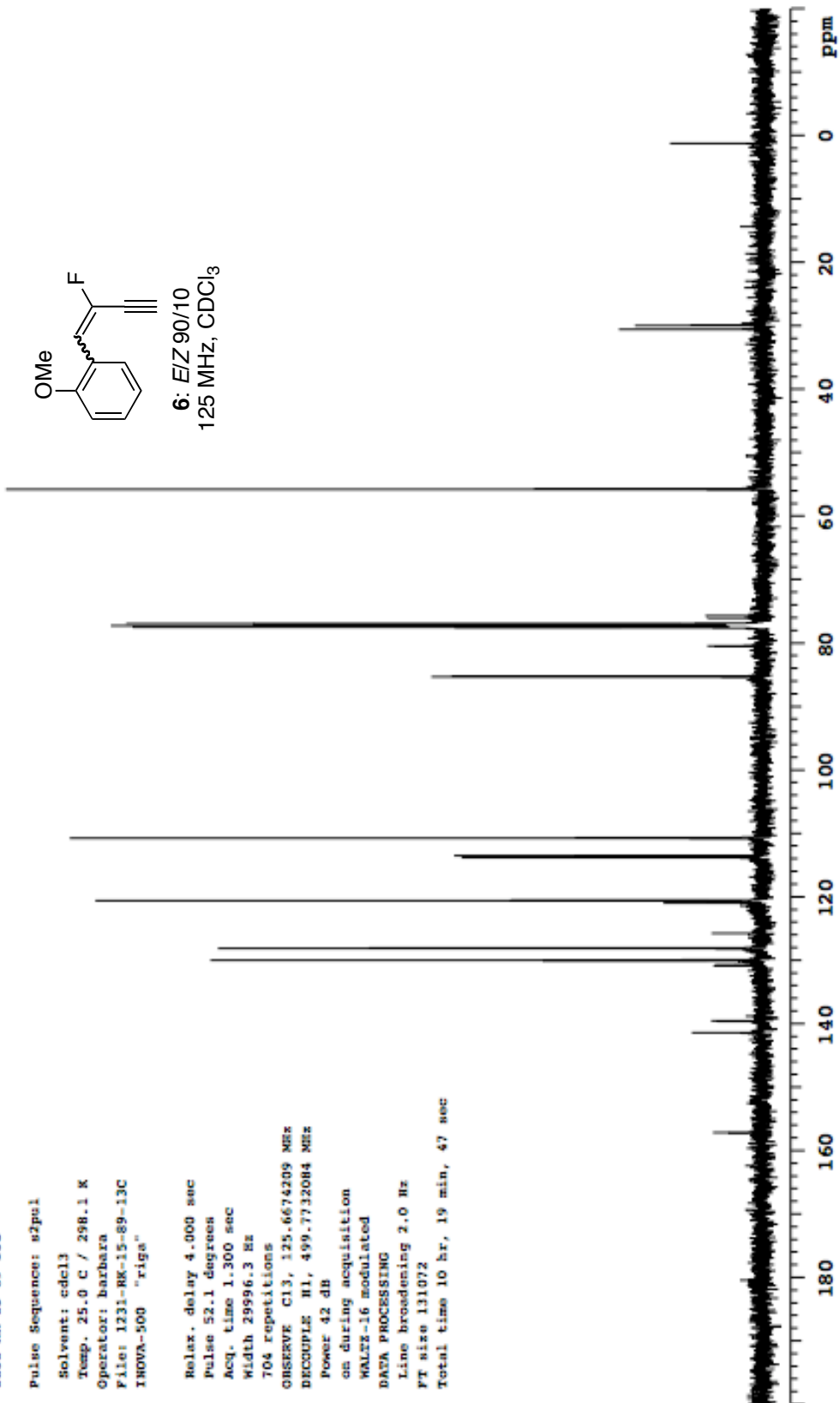
Pulse Sequence: #2ps1

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-89-13C  
INOVA-500 "rigs"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
704 repetitions  
OBSERVE C13, 125.6674209 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 db  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 2.0 Hz  
FT size 131072  
Total time 10 hr, 19 min, 47 sec



**6:** *E/Z* 90/10  
125 MHz, CDCl<sub>3</sub>

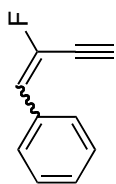


1222-RK-03-198-pure

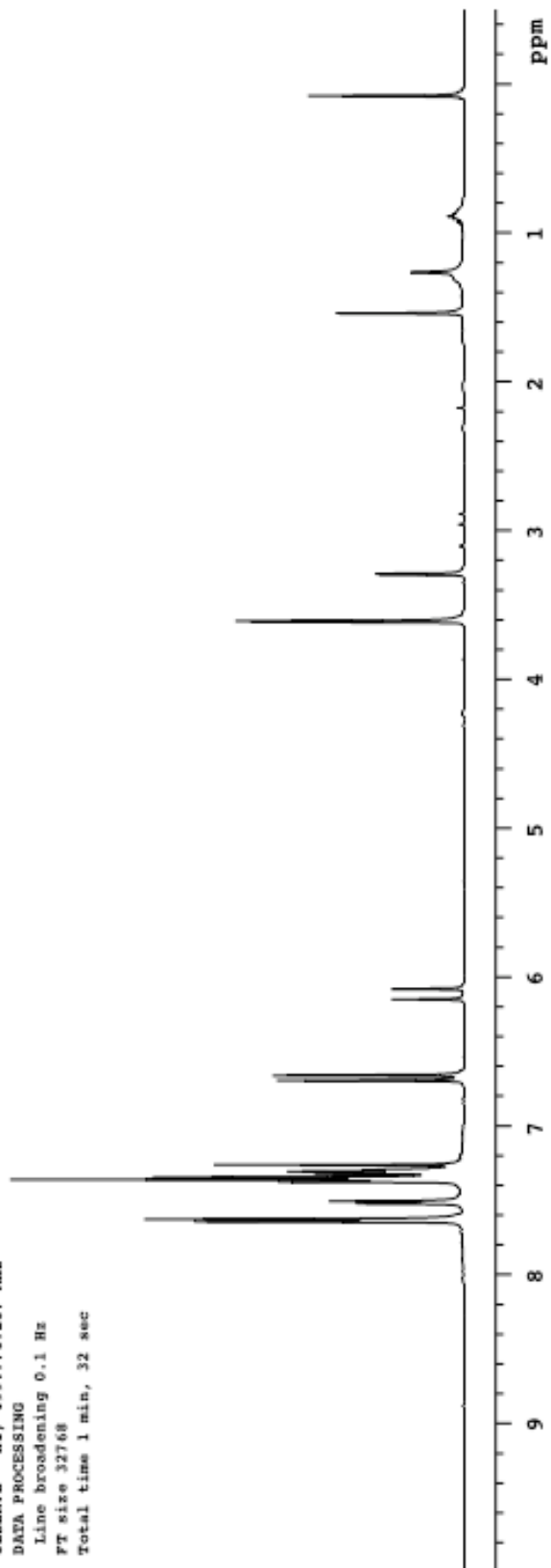
Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul  
Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1222-RK-03-198-pure  
INOVA-500 "ziga"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
32 repetitions  
OBSERVE H1, 499.7707207 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 1 min, 32 sec



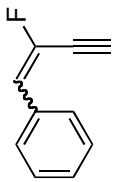
7: E/Z 76/24  
500 MHz, CDCl<sub>3</sub>



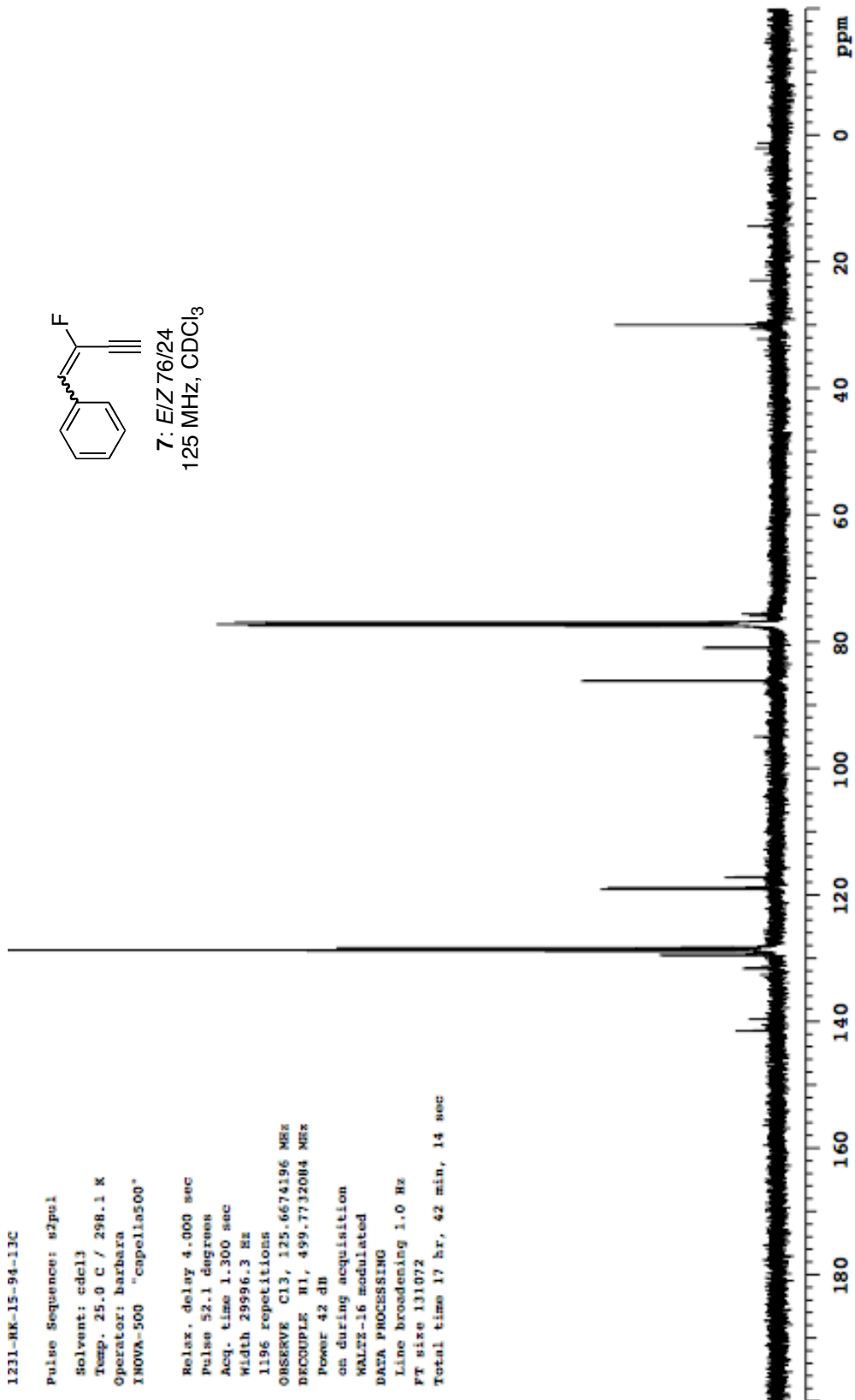
1231-MK-15-94-13C

Pulse Sequence: #2ps1  
Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
INOVA-500 "capella500"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
1196 repetitions  
OBSERVE C13, 125.6674196 MHz  
DECUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 17 hr, 42 min, 14 sec



7: E/Z 76/24  
125 MHz, CDCl<sub>3</sub>





1222-RK-03-196-pure

Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1222-RK-03-196-pure

INOVA-500 "riga"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.892 sec

Width 7544.3 Hz

28 repetitions

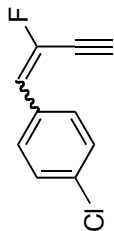
OBSERVE H1, 499.7707212 MHz

DATA PROCESSING

Line broadening 0.1 Hz

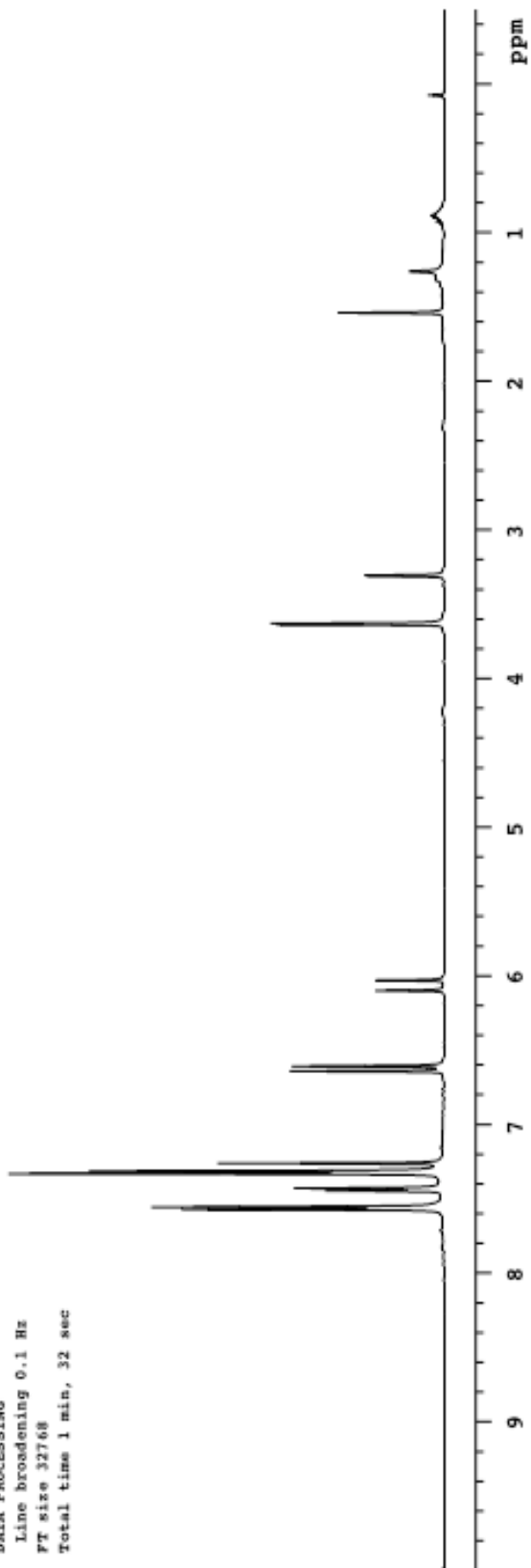
FT size 32768

Total time 1 min, 32 sec



**8: E/Z 70/30**

500 MHz, CDCl<sub>3</sub>



1231-RK-15-91-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-15-91-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

596 repetitions

OBSERVE C13, 125.6674191 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

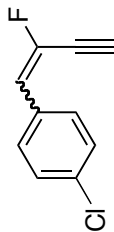
WALTZ-16 modulated

DATA PROCESSING

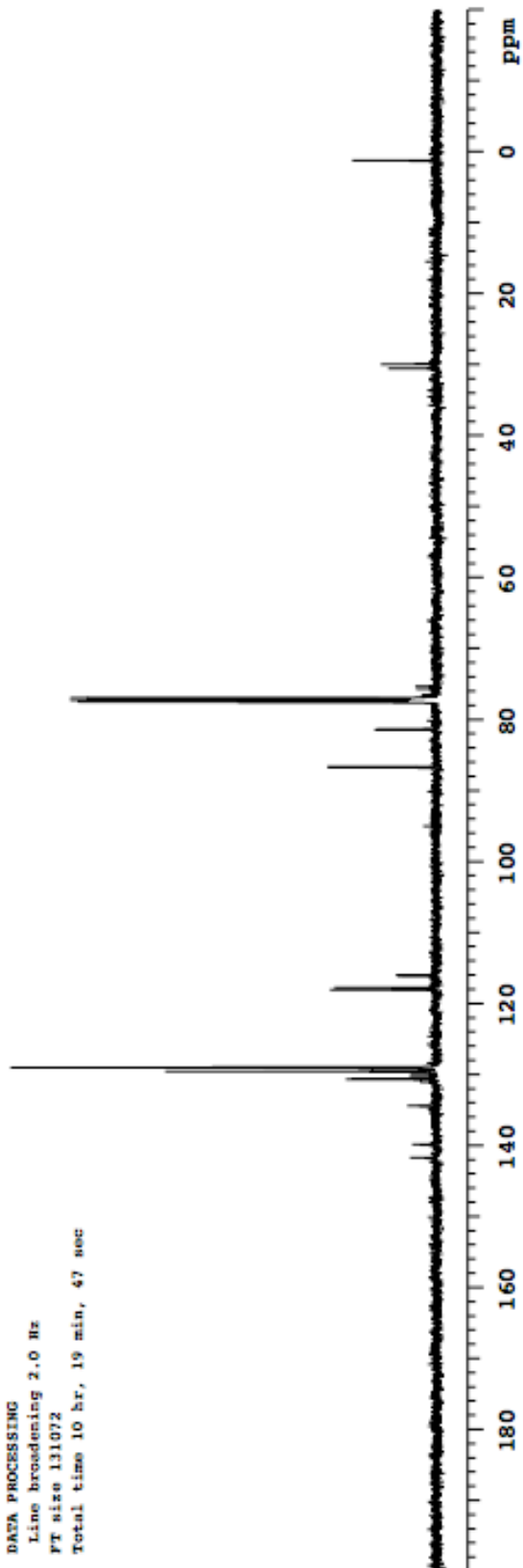
Line broadening 2.0 Hz

FT size 131072

Total time 10 hr, 19 min, 47 sec



8: *E/Z* 70/30  
125 MHz, CDCl<sub>3</sub>



1222-RK-03-223-pure

Archive directory: /export/home/mkl/vmrssys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1222-RK-03-223-pure

INOVA-500 "riga"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.892 sec

Width 7544.3 Hz

20 repetitions

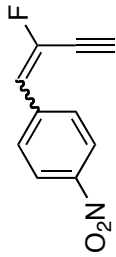
OBSERVE H1, 499.7707207 MHz

DATA PROCESSING

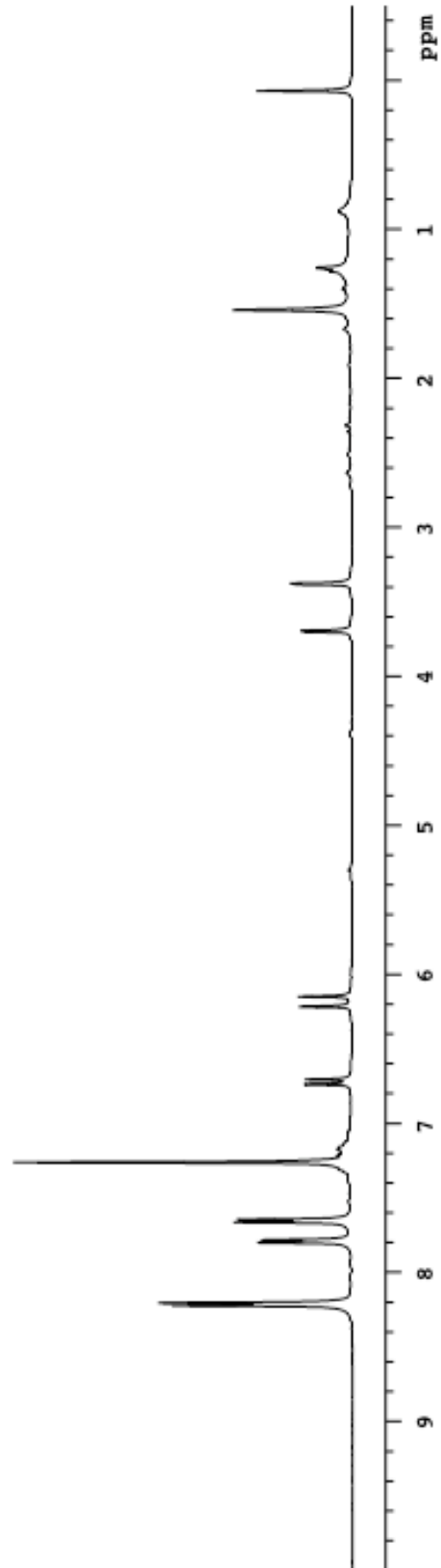
Line broadening 2.0 Hz

FT size 32768

Total time 1 min, 32 sec



9: E/Z 51/49  
500 MHz, CDCl<sub>3</sub>



1231-RK-10-729-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Ambient temperature

Operator: Barbara

File: 1231-RK-10-729-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

1580 repetitions

OBSERVE C13, 125.6674214 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

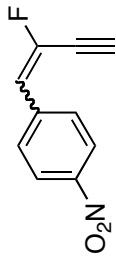
WALTZ-16 modulated

DATA PROCESSING

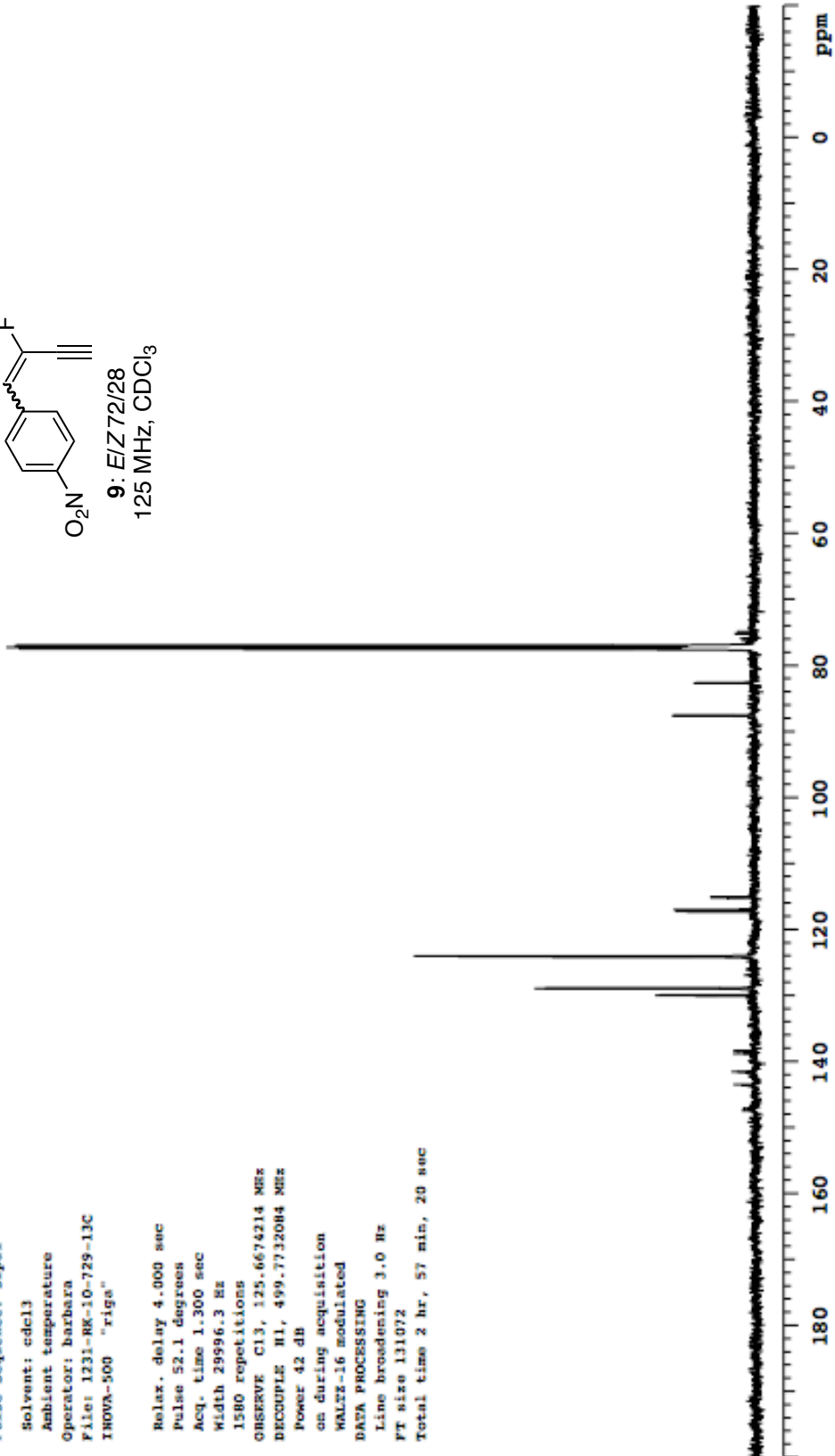
Line broadening 3.0 Hz

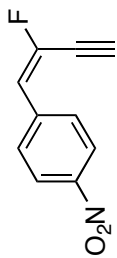
FT size 131072

Total time 2 hr, 57 min, 20 sec



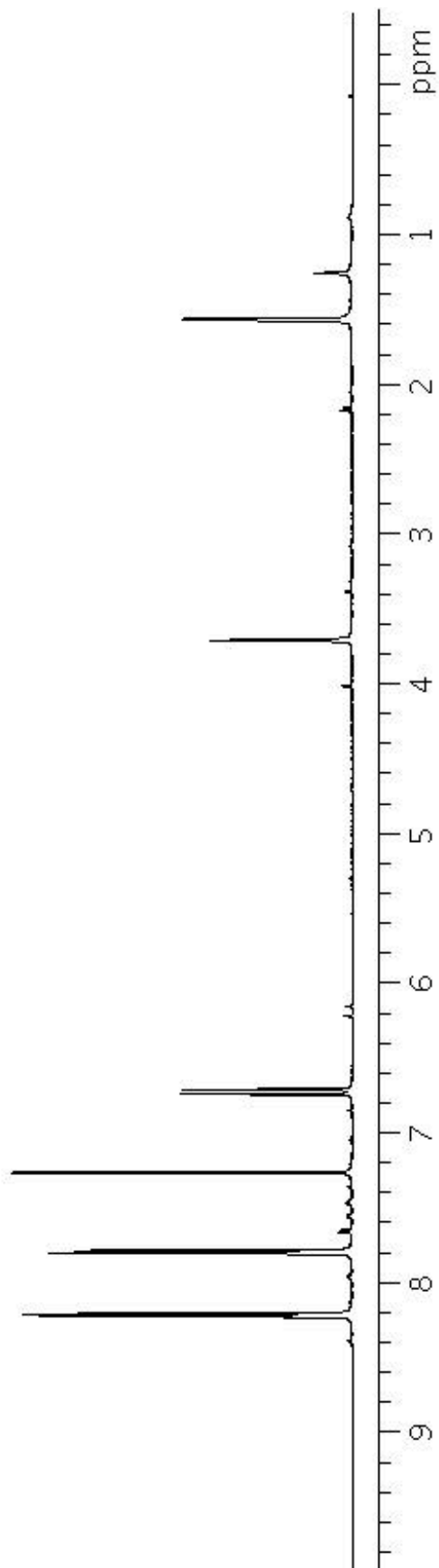
9: E/Z 72/28  
125 MHz, CDCl<sub>3</sub>

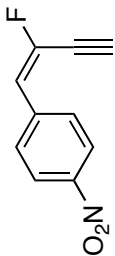




*E*-9

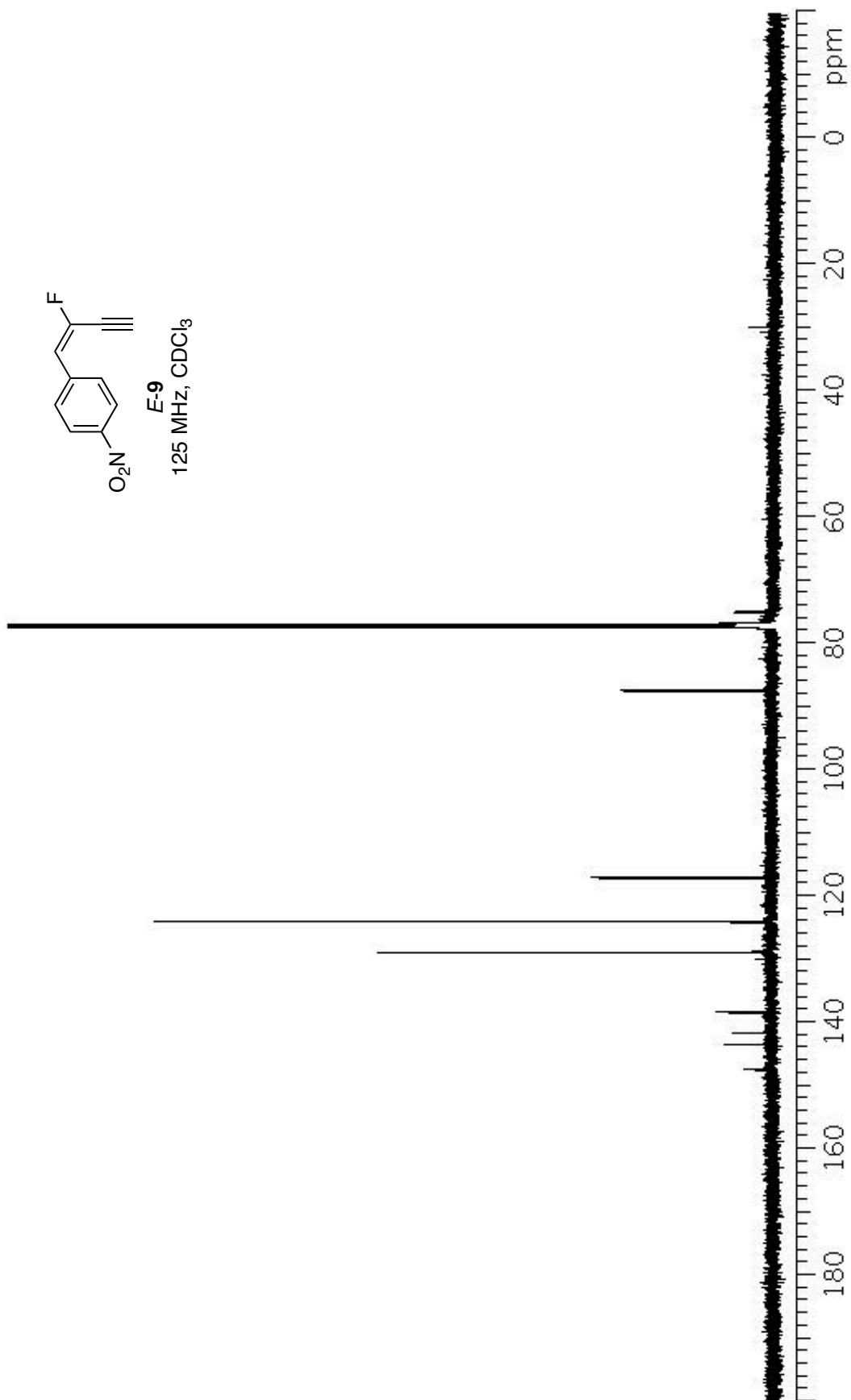
500 MHz, CDCl<sub>3</sub>





*E*-9

125 MHz, CDCl<sub>3</sub>



1222-RK-10-759-pure

Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

Operator: Barbara

File: 1222-RK-10-759-pure

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 10000.0 Hz

16 repetitions

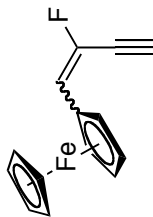
OBSERVE H1, 499.7707214 MHz

DATA PROCESSING

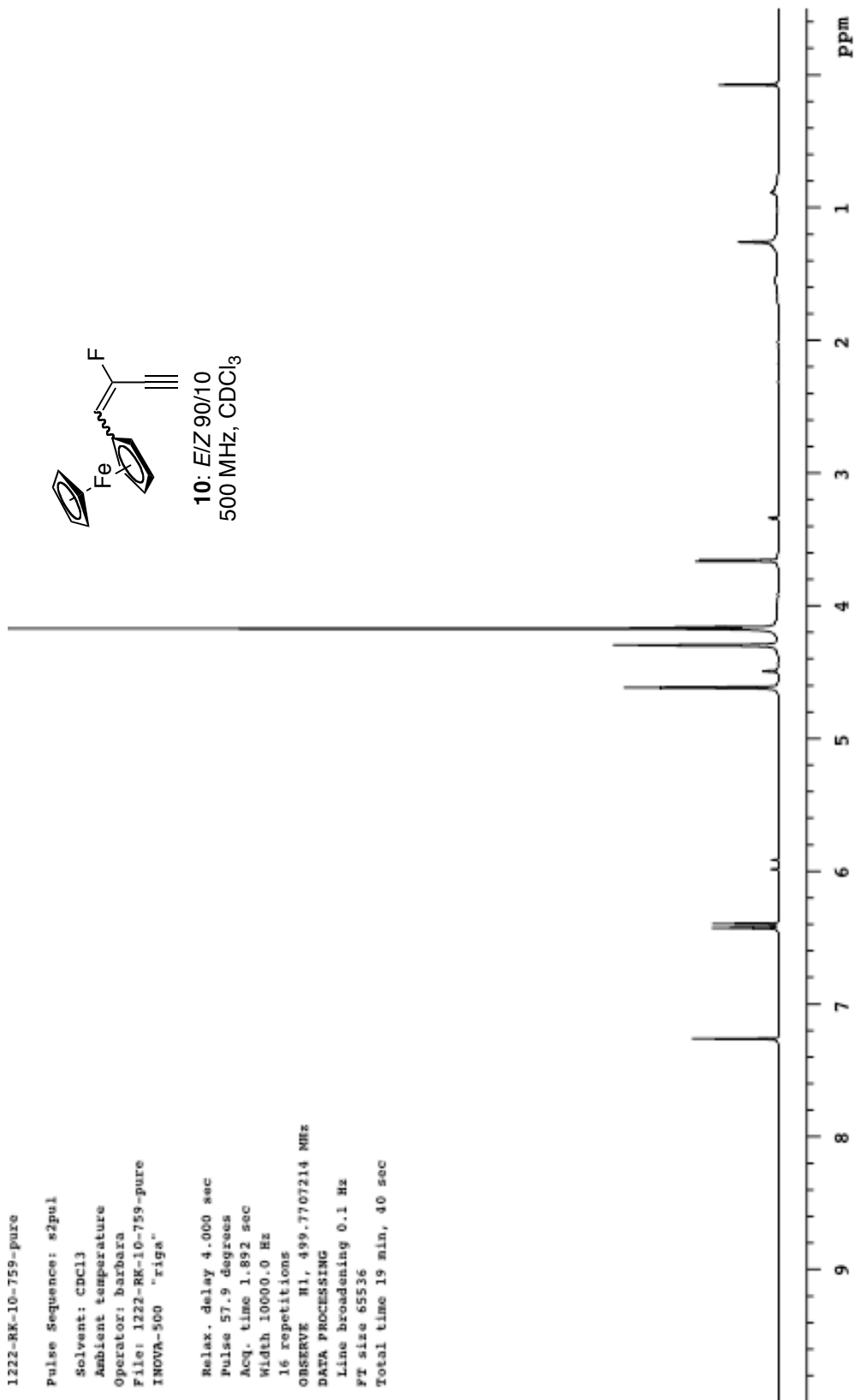
Line broadening 0.1 Hz

FT size 65536

Total time 19 min, 40 sec



10: E/Z 90/10  
500 MHz, CDCl<sub>3</sub>



1231-RK-10-759-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-10-759-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

10000 repetitions

OBSERVE C13, 125.6674420 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

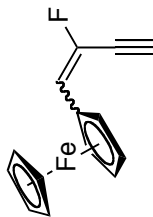
WALTZ-16 modulated

DATA PROCESSING

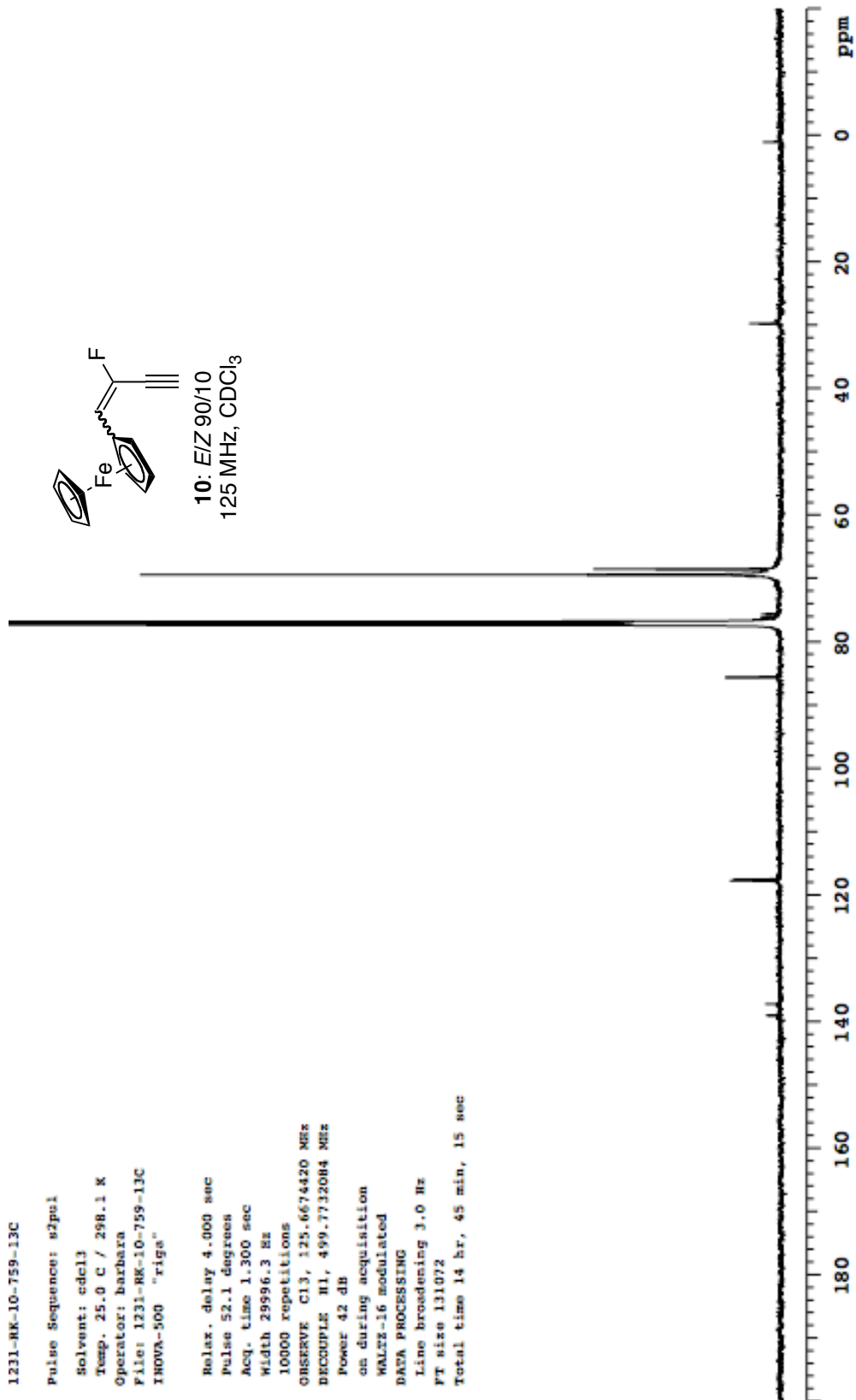
Line broadening 3.0 Hz

FT size 131072

Total time 14 hr, 45 min, 15 sec



10: E/Z 90/10  
125 MHz, CDCl<sub>3</sub>





1222-RK-10-750

Pulse Sequence: s2pul

Solvent: CDCl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1222-RK-10-750

INOVA-500 "riga"

Relax. delay 3.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

16 repetitions

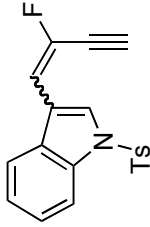
OBSERVE H1, 499.7707212 MHz

DATA PROCESSING

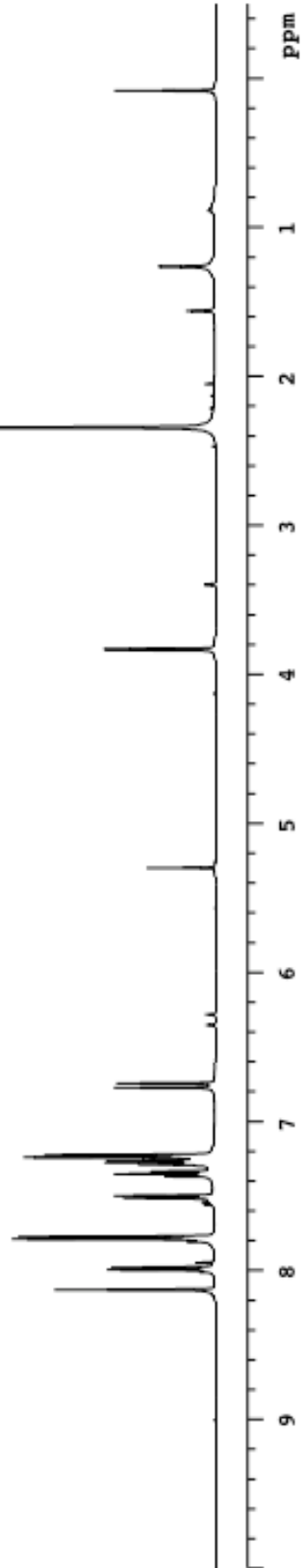
Line broadening 0.1 Hz

FT size 32768

Total time 16 min, 20 sec



11: E/Z 91/9  
500 MHz, CDCl<sub>3</sub>



1231-RK-10-750-13C

Pulse Sequence: e2pel

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-10-750-13C

INOVA-500 "riga"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

1152 repetitions

OBSERVE C13, 125.6674223 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 dB

on during acquisition

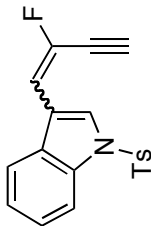
WALTZ-16 modulated

DATA PROCESSING

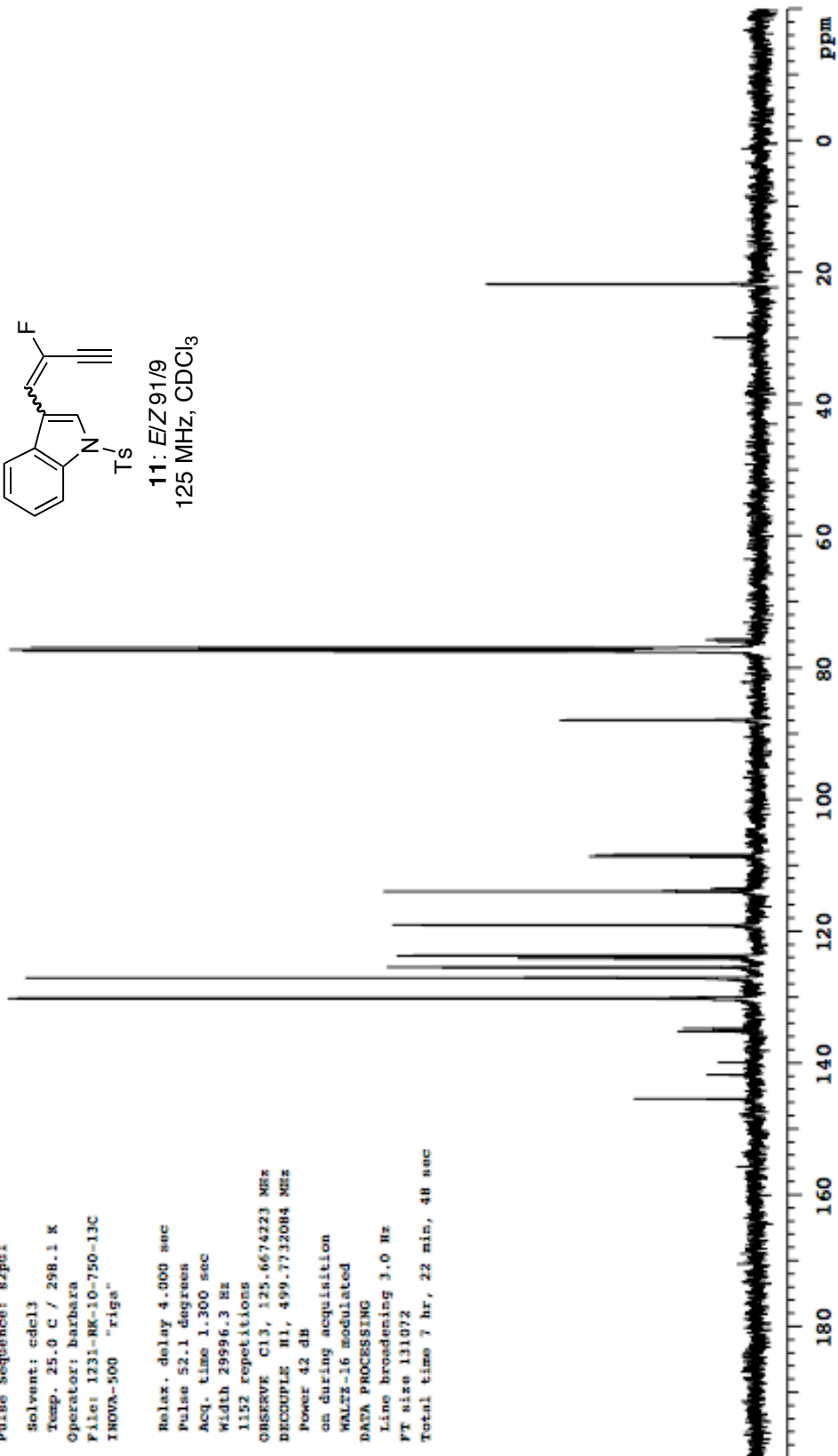
Line broadening 3.0 Hz

FT size 131072

Total time 7 hr, 22 min, 48 sec



11: E/Z 91/9  
125 MHz, CDCl<sub>3</sub>





1231-RK-15-93-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-15-93-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

904 repetitions

OBSERVE C13, 125.6674209 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

WALTZ-16 modulated

DATA PROCESSING

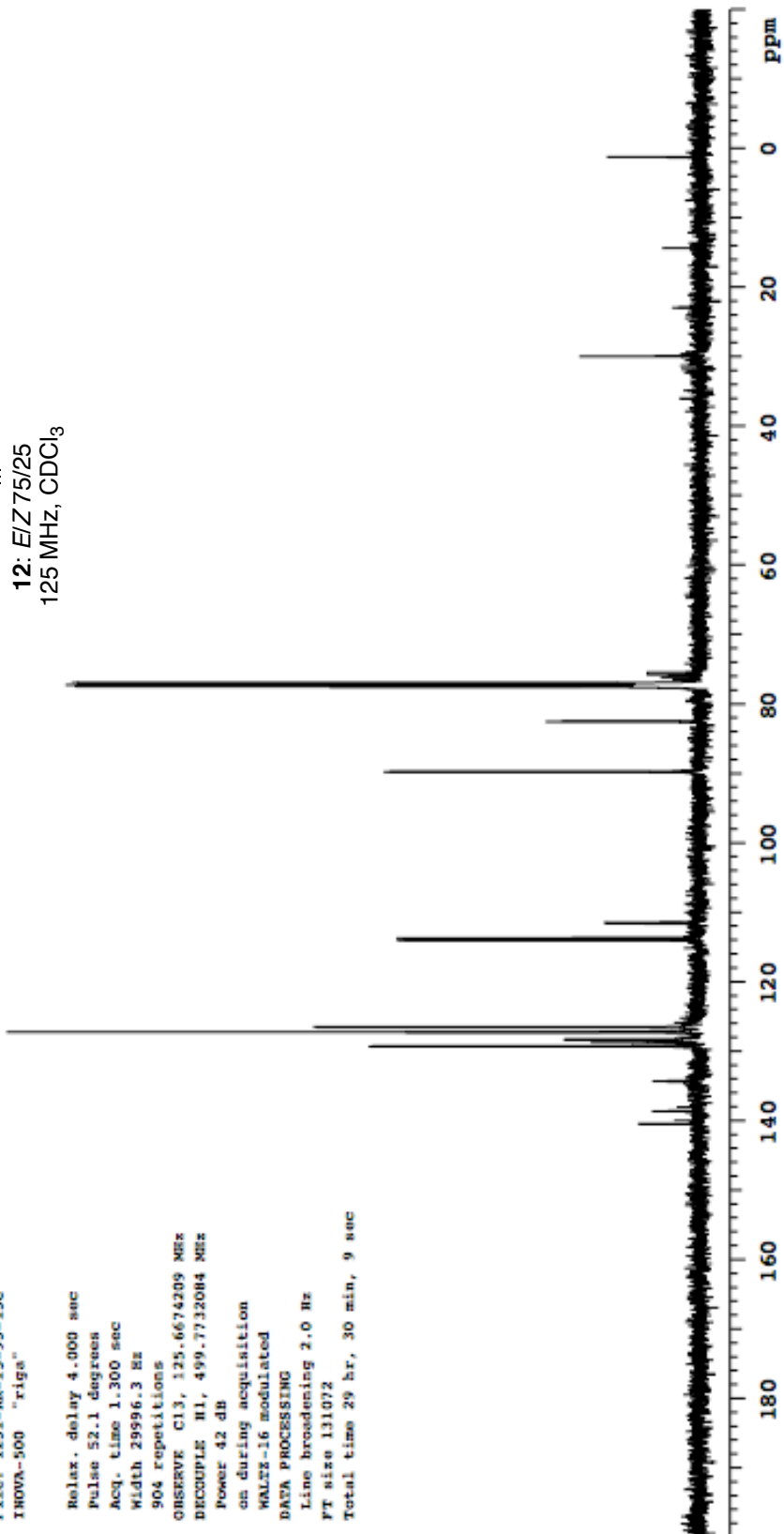
Line broadening 2.0 Hz

FT size 131072

Total time 29 hr, 30 min, 9 sec



12: E/Z 75/25  
125 MHz, CDCl<sub>3</sub>



1222-RK-03-199-pure

Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1222-RK-03-199-pure

INOVA-500 "ziga"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.892 sec

Width 7544.3 Hz

16 repetitions

OBSERVE H1, 499.7707212 MHz

DATA PROCESSING

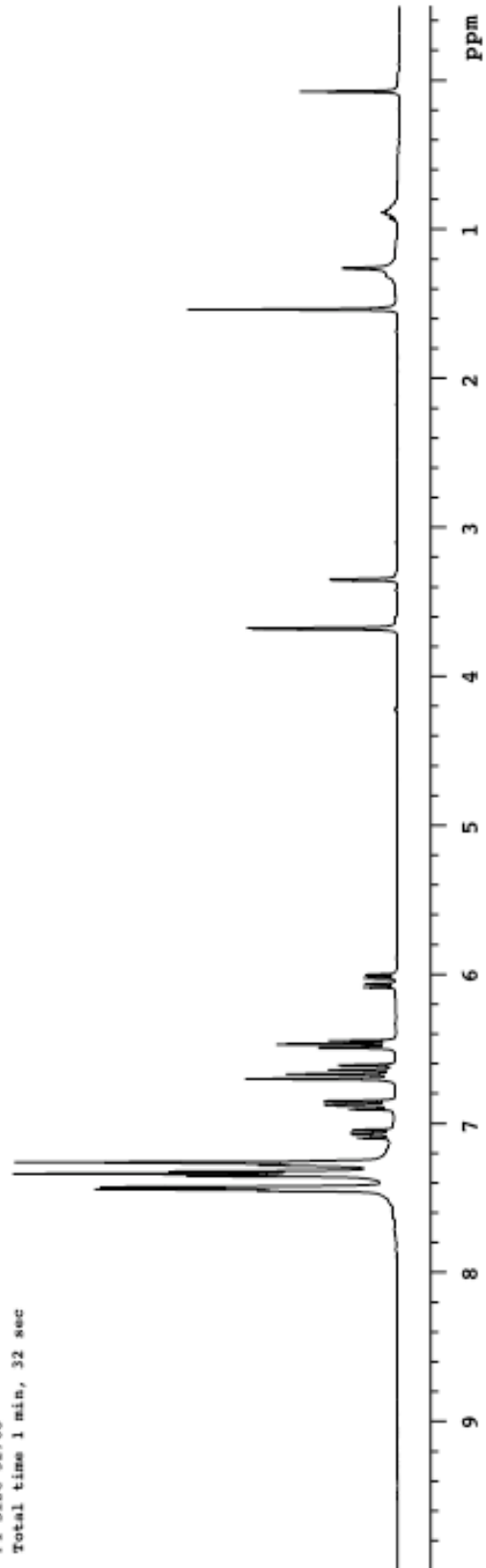
Line broadening 1.0 Hz

FT size 32768

Total time 1 min, 32 sec



13: E/Z 72/28  
500 MHz, CDCl<sub>3</sub>



1231-RK-15-90-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-15-90-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

488 repetitions

OBSERVE C13, 125.6674205 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 dB

on during acquisition

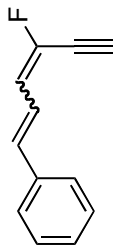
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

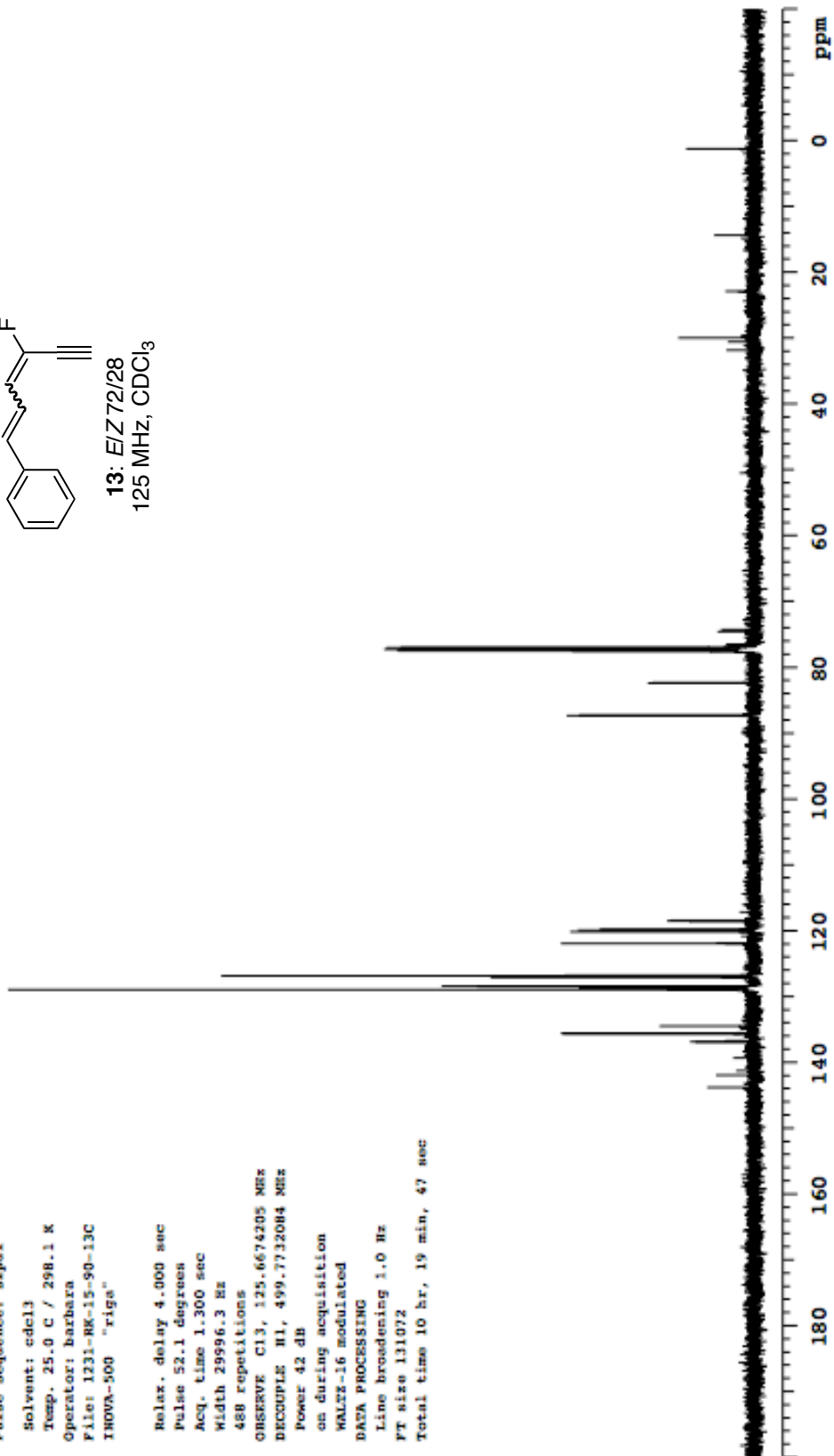
FT size 131072

Total time 10 hr, 19 min, 47 sec



13: E/Z 72/28

125 MHz, CDCl<sub>3</sub>



1222-RK-03-207

Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: barbara

File: 1222-RK-03-207

INOVA-500 "riga"

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.892 sec

Width 7544.3 Hz

32 repetitions

OBSERVE H1, 499.7707212 MHz

DATA PROCESSING

Line broadening 0.1 Hz

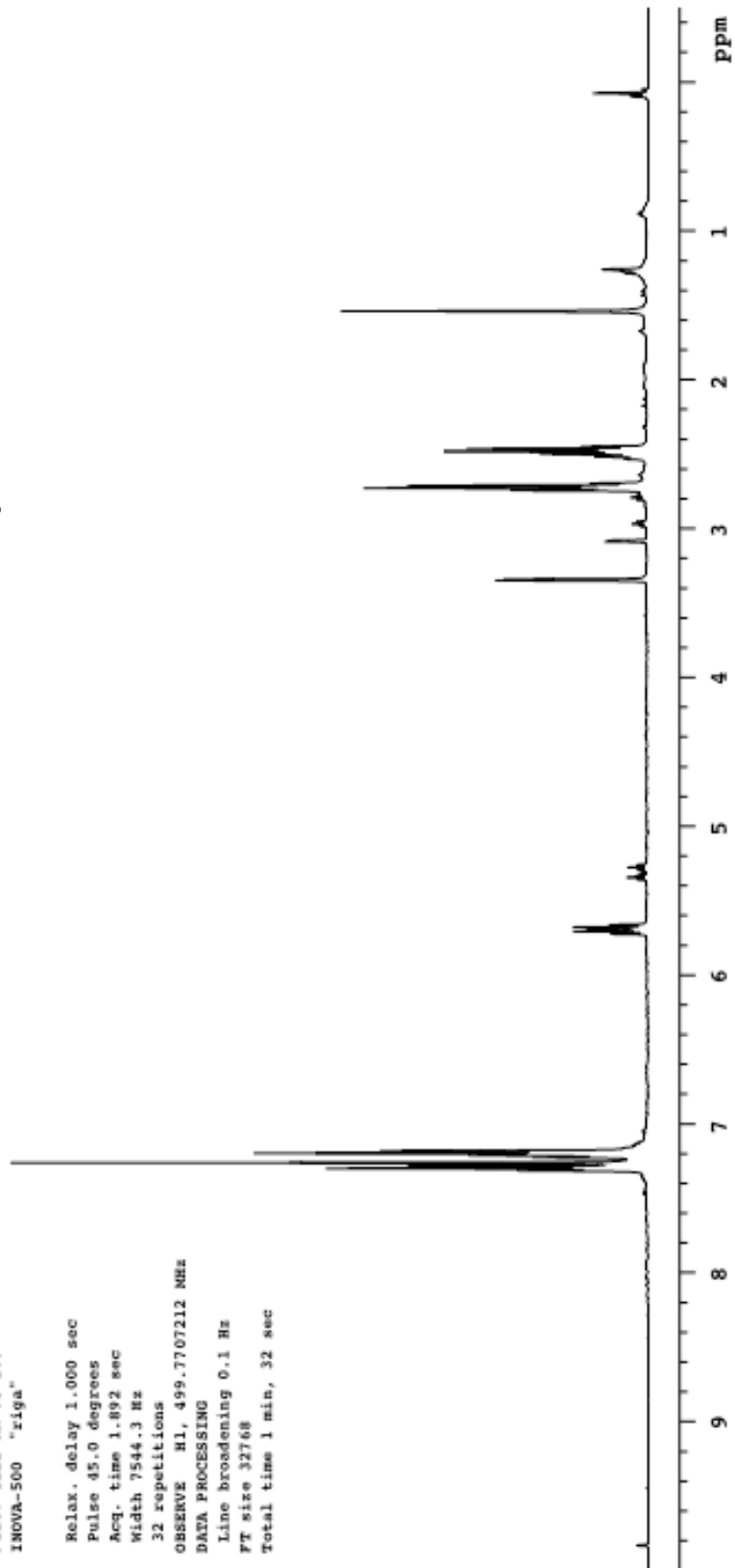
FT size 32768

Total time 1 min, 32 sec



14: E/Z 80/20

500 MHz, CDCl<sub>3</sub>



1231-RK-10-754-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-10-754-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

10000 repetitions

OBSERVE C13, 125.6674186 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

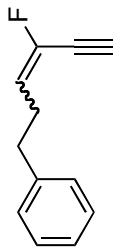
WALTZ-16 modulated

DATA PROCESSING

Line broadening 3.0 Hz

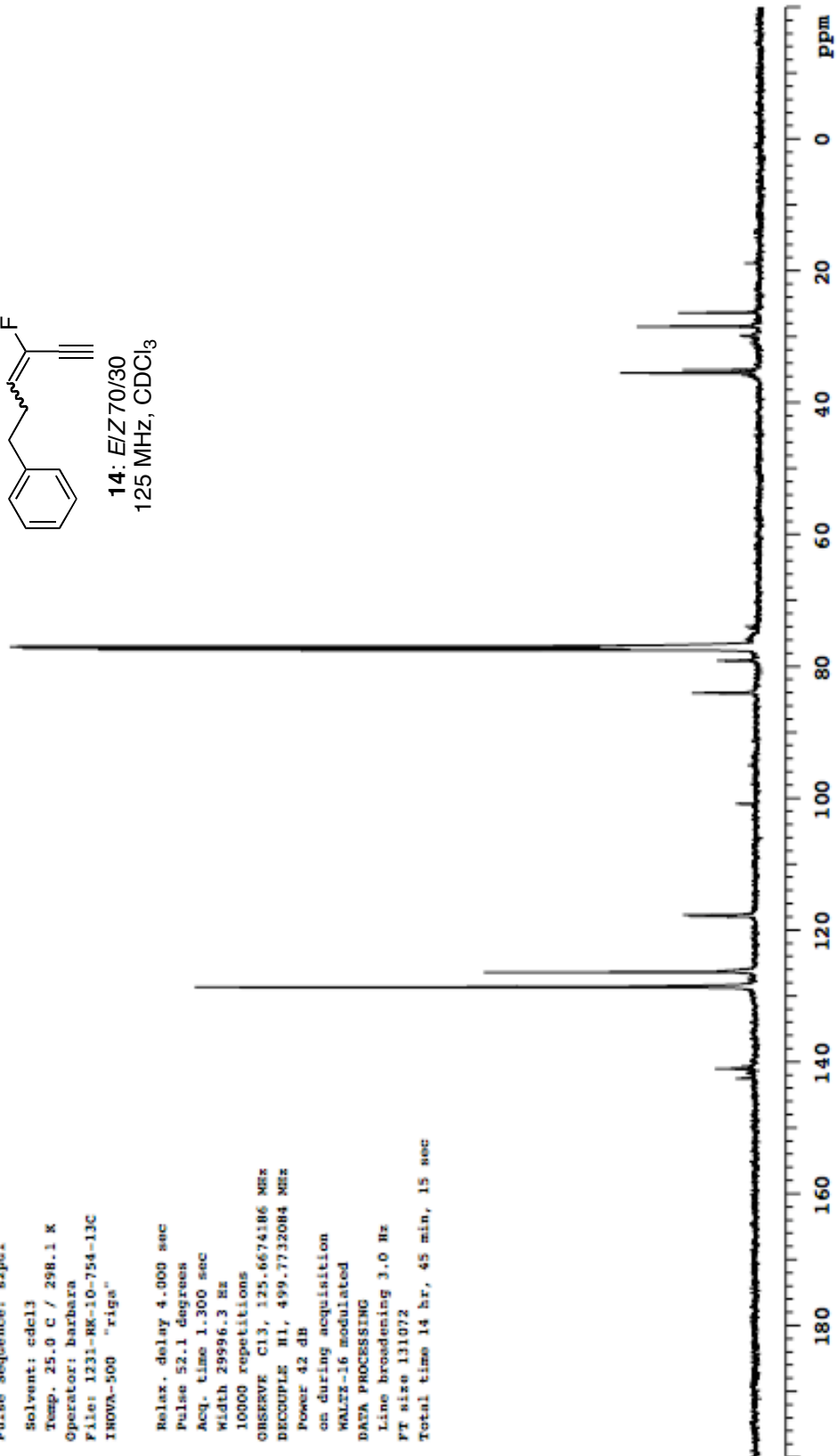
FT size 131072

Total time 14 hr, 45 min, 15 sec



14: E/Z 70/30

125 MHz, CDCl<sub>3</sub>



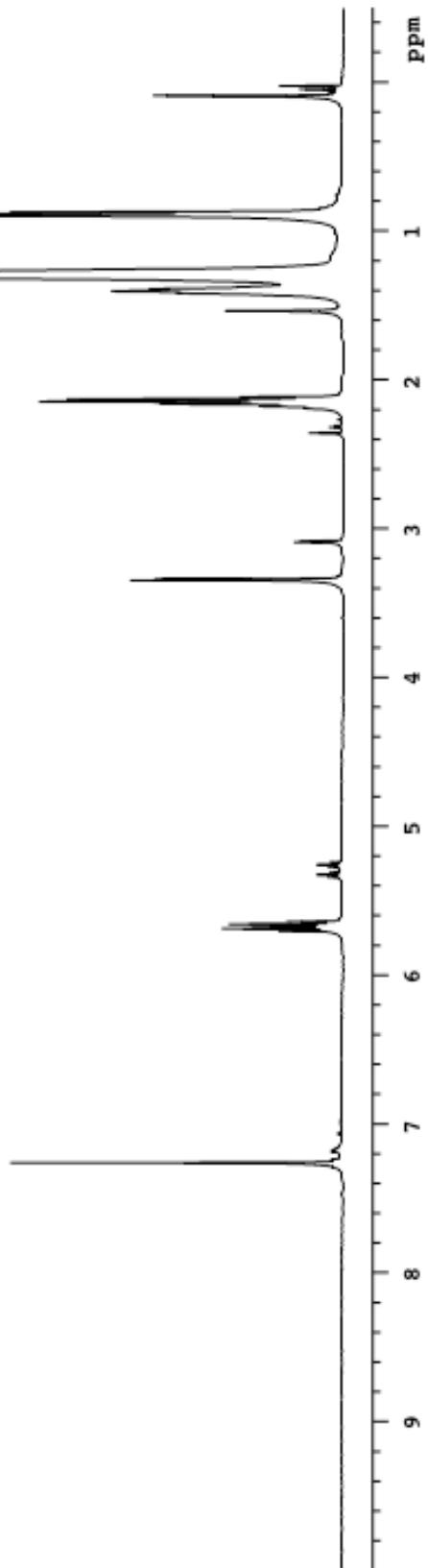


1222-RK-03-212-pure

Archive directory: /export/home/mkl/vmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul  
Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1222-RK-03-212-pure  
INOVA-500 "riga"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
16 repetitions  
OBSERVE H1, 499.7707207 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 1 min, 32 sec



1231-RK-03-212-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-03-212-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

1072 repetitions

OBSERVE C13, 125.6674090 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 dB

on during acquisition

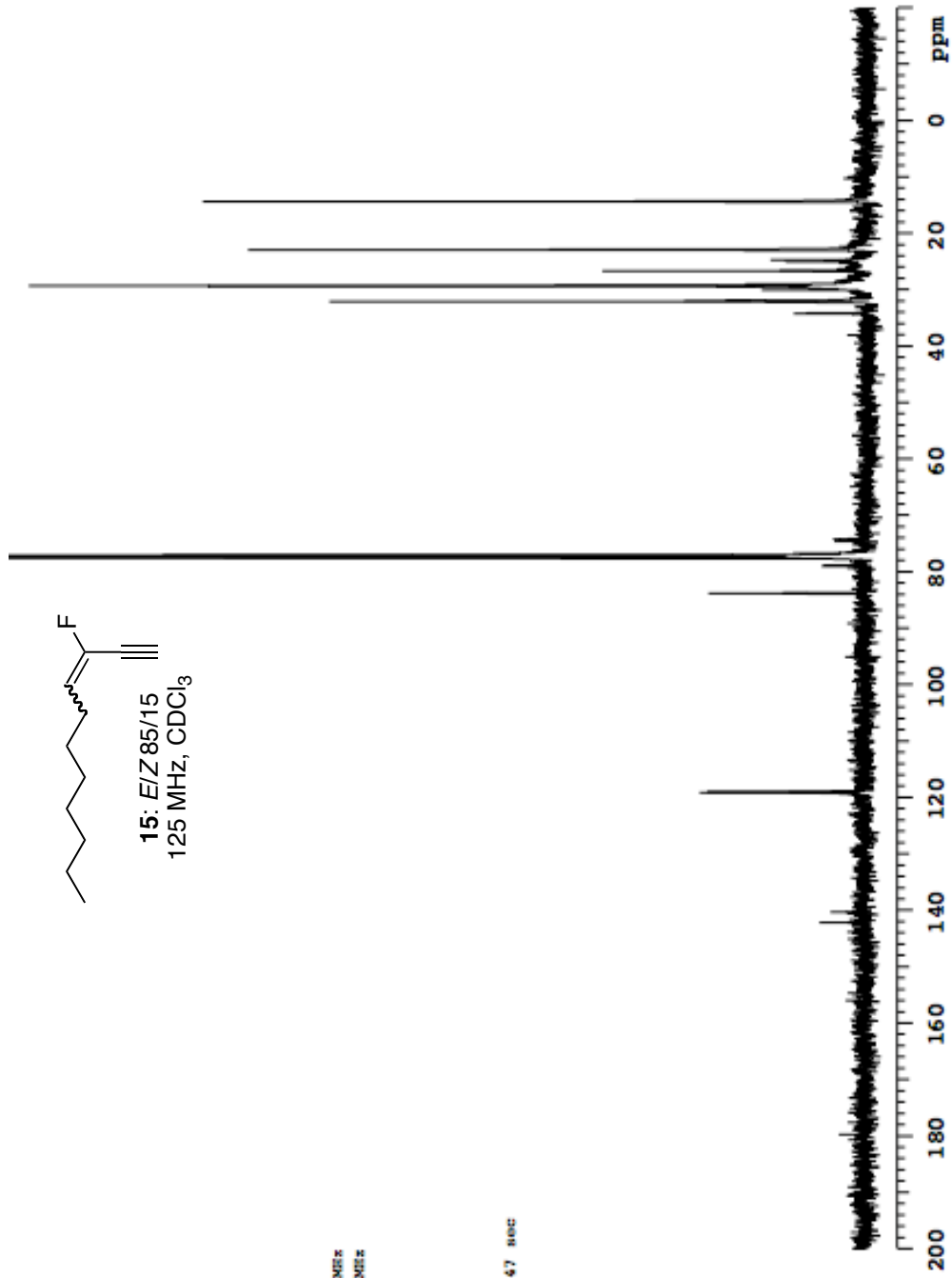
WALTZ-16 modulated

DATA PROCESSING

Line broadening 3.0 Hz

FT size 131072

Total time 10 hr, 19 min, 47 sec



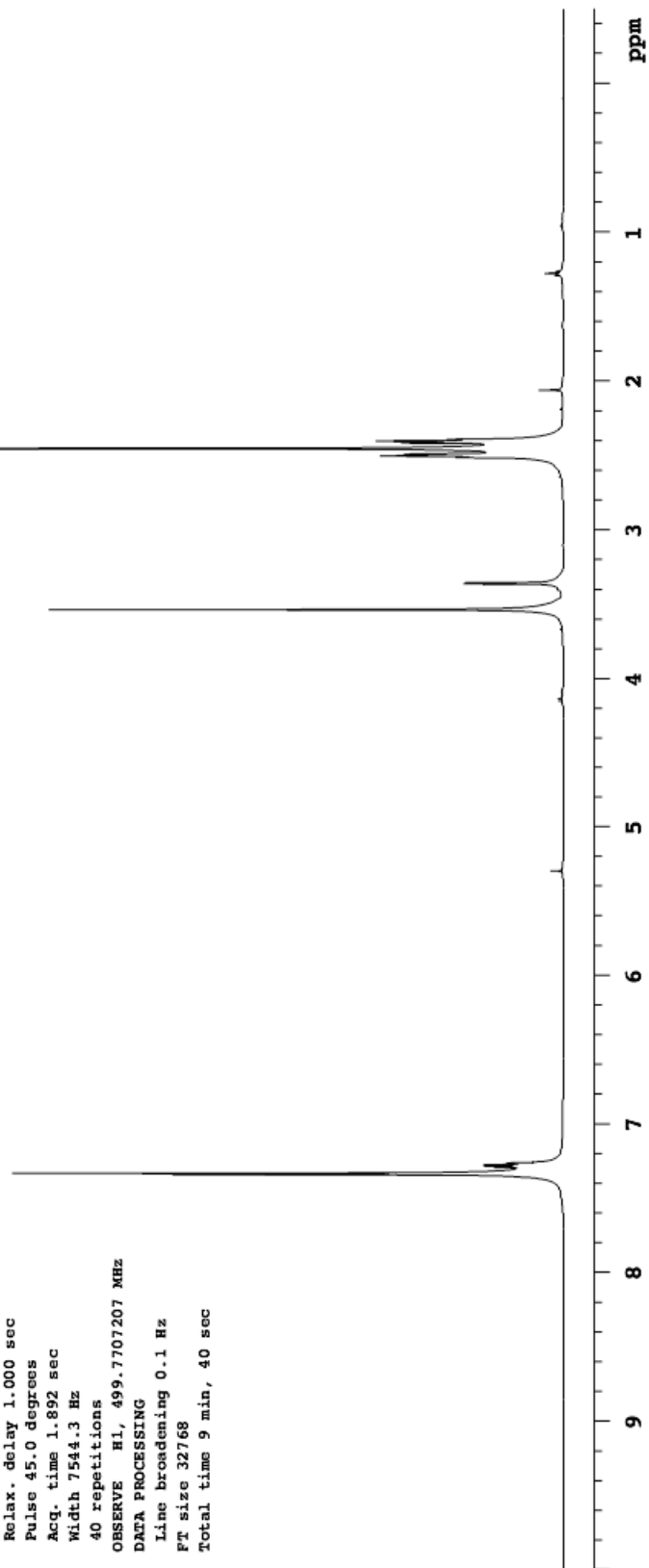
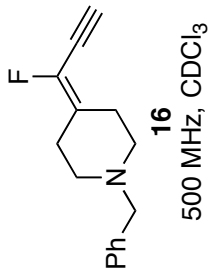
1231-RK-15-35-fraction1

Archive directory: /export/home/mkl/vnmrSYS/data  
Sample directory: auto\_13Dec2004  
File: 1231-RK-15-35-fraction1

Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-35-fraction1  
INOVA-500 "capella500"

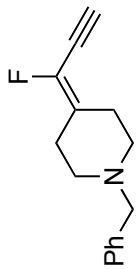
Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
40 repetitions  
OBSERVE H1, 499.7707207 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 9 min, 40 sec



1231-RK-15-35-fraction1-13C

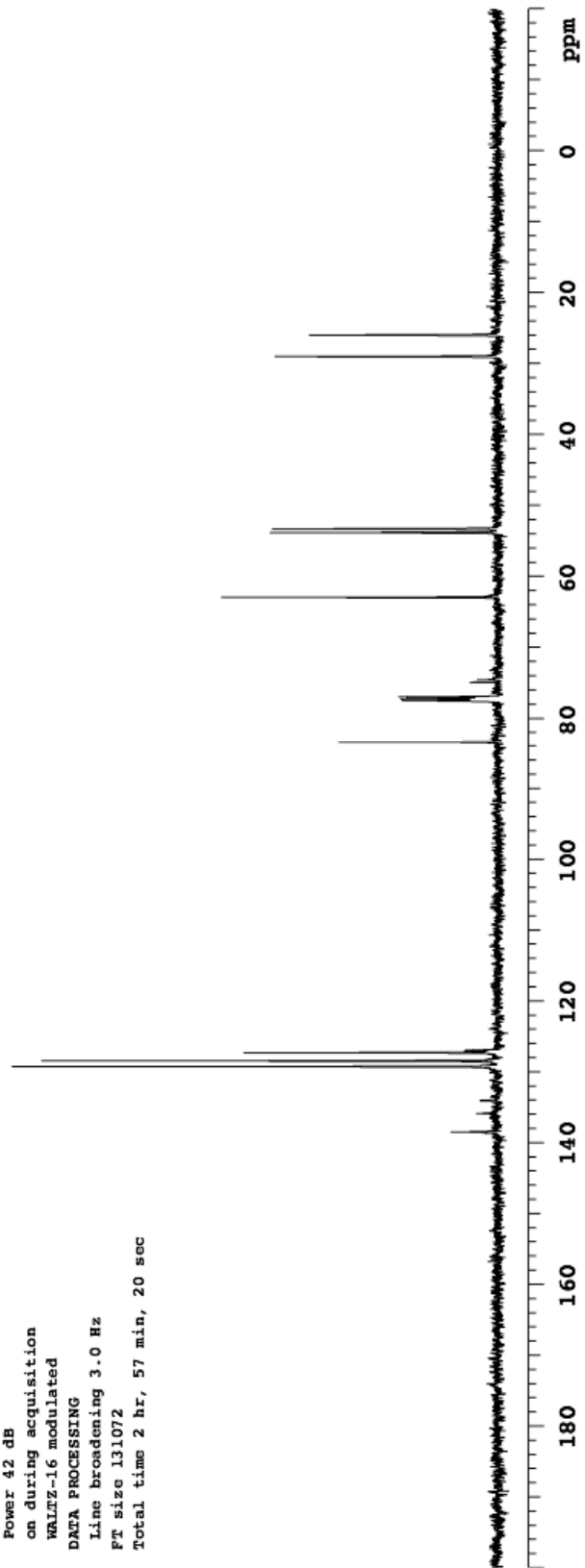
Pulse Sequence: s2pul  
Solvent: cdc13  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-35-fraction1-13C  
INOVA-500 "capella500"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
132 repetitions  
OBSERVE C13, 125.6674241 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 3.0 Hz  
FT size 131072  
Total time 2 hr, 57 min, 20 sec



16

125 MHz, CDCl<sub>3</sub>



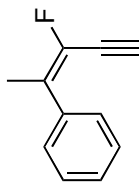
1231-RK-15-21-pure

Archive directory: /export/home/mkl/vnmrSYS/data  
Sample directory: auto\_13Dec2004  
File: 1231-RK-15-21-pure

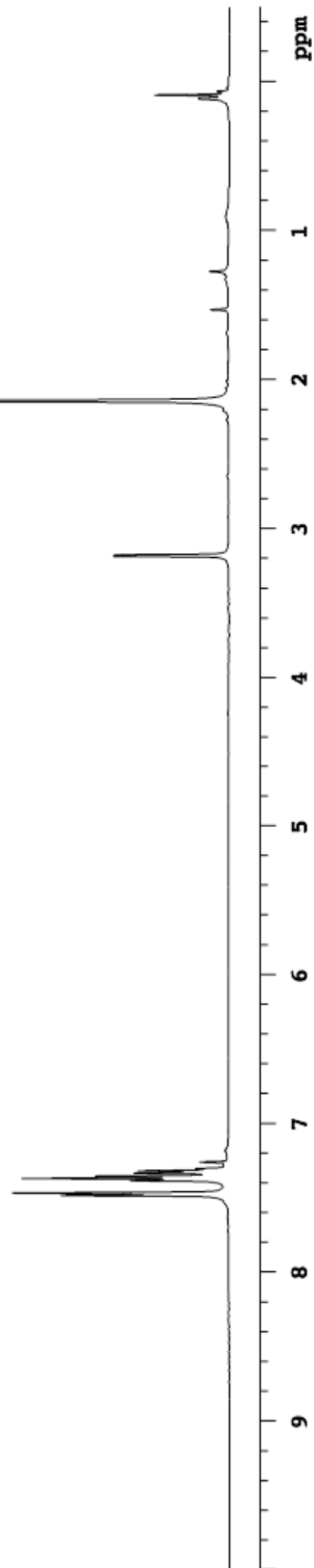
Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-21-pure  
INOVA-500 "capella500"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
24 repetitions  
OBSERVE H1, 499.7707216 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 9 min, 40 sec



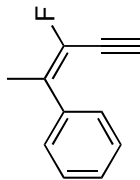
*E*-17  
500 MHz, CDCl<sub>3</sub>



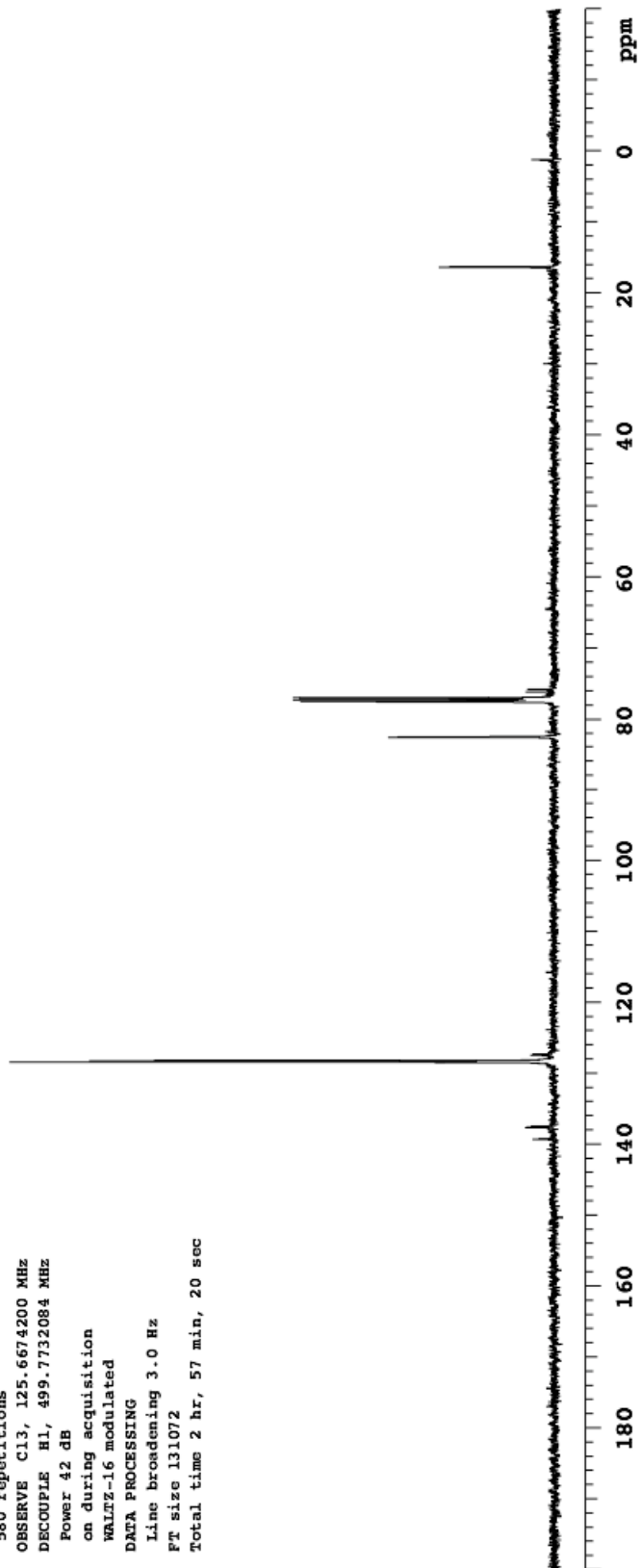
1231-RK-15-21-13C

Pulse Sequence: s2pul  
Solvent: cdc13  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-21-13C  
INOVA-500 "capella500"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
580 repetitions  
OBSERVE C13, 125.6674200 MHZ  
DECOUPLE H1, 499.7732084 MHZ  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 3.0 Hz  
FT size 131072  
Total time 2 hr, 57 min, 20 sec



*E*-17  
125 MHz, CDCl<sub>3</sub>



1222-RK-10-743-pure

Pulse Sequence: s2pul

Solvent: CDCl3

Temp. 24.0 C / 297.1 K

Operator: Barbara

File: 1222-RK-10-743-pure

INOVA-500 "riga"

Relax. delay 3.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

12 repetitions

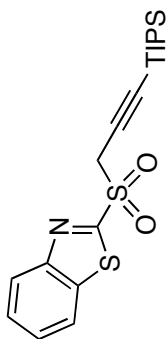
OBSERVE H1, 499.7707217 MHz

DATA PROCESSING

Line broadening 0.0 Hz

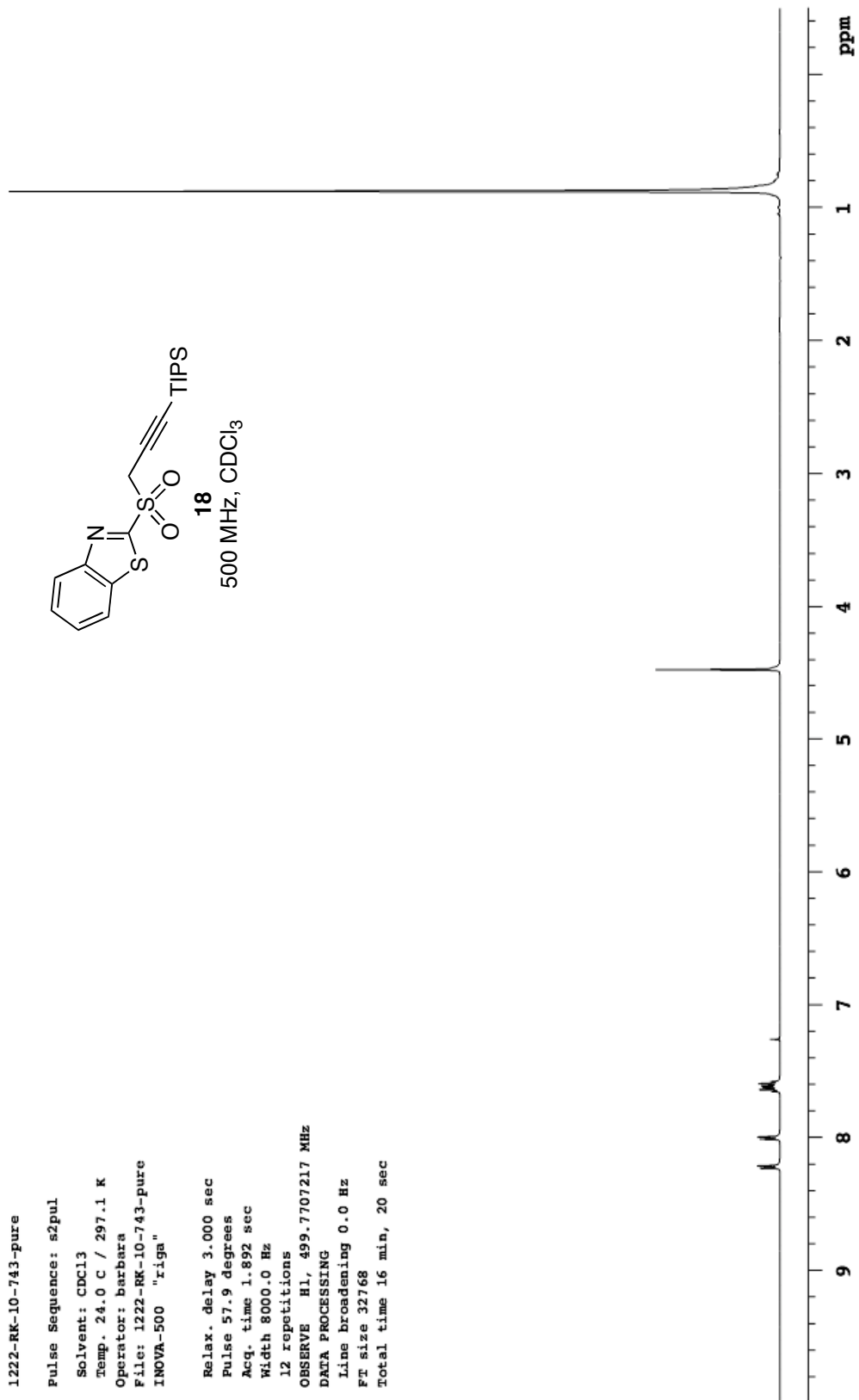
FT size 32768

Total time 16 min, 20 sec



18

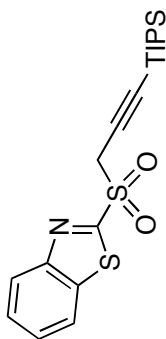
500 MHz, CDCl<sub>3</sub>



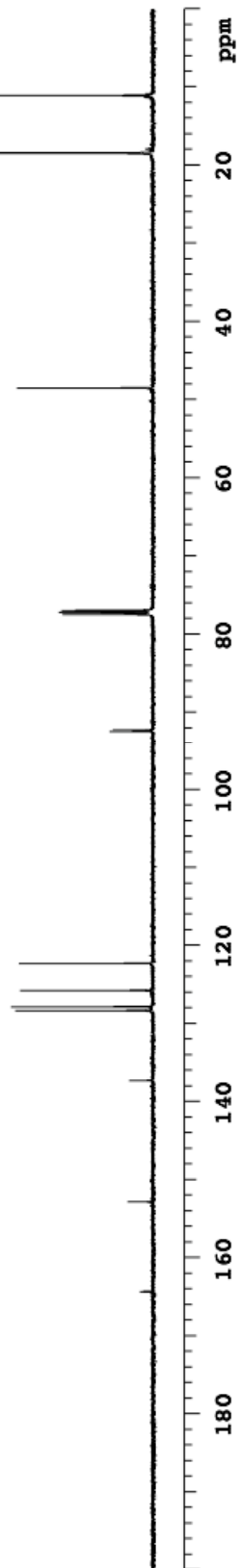
1222-RK-10-743-13C

Pulse Sequence: s2pul  
Solvent: CDCl<sub>3</sub>  
Temp. 24.0 C / 297.1 K  
Operator: Barbara  
File: 1222-RK-10-743-13C  
INNOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
540 repetitions  
OBSERVE C13, 125.6674218 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 2 hr, 57 min, 20 sec



**18**  
125 MHz, CDCl<sub>3</sub>





1222-RK-10-756-pure

Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>

Ambient temperature

Operator: Barbara

File: 1222-RK-10-756-pure

INOVA-500 "riga"

Relax. delay 4.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 10000.0 Hz

12 repetitions

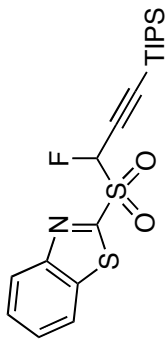
OBSERVE H1, 499.7707211 MHz

DATA PROCESSING

Line broadening 0.1 Hz

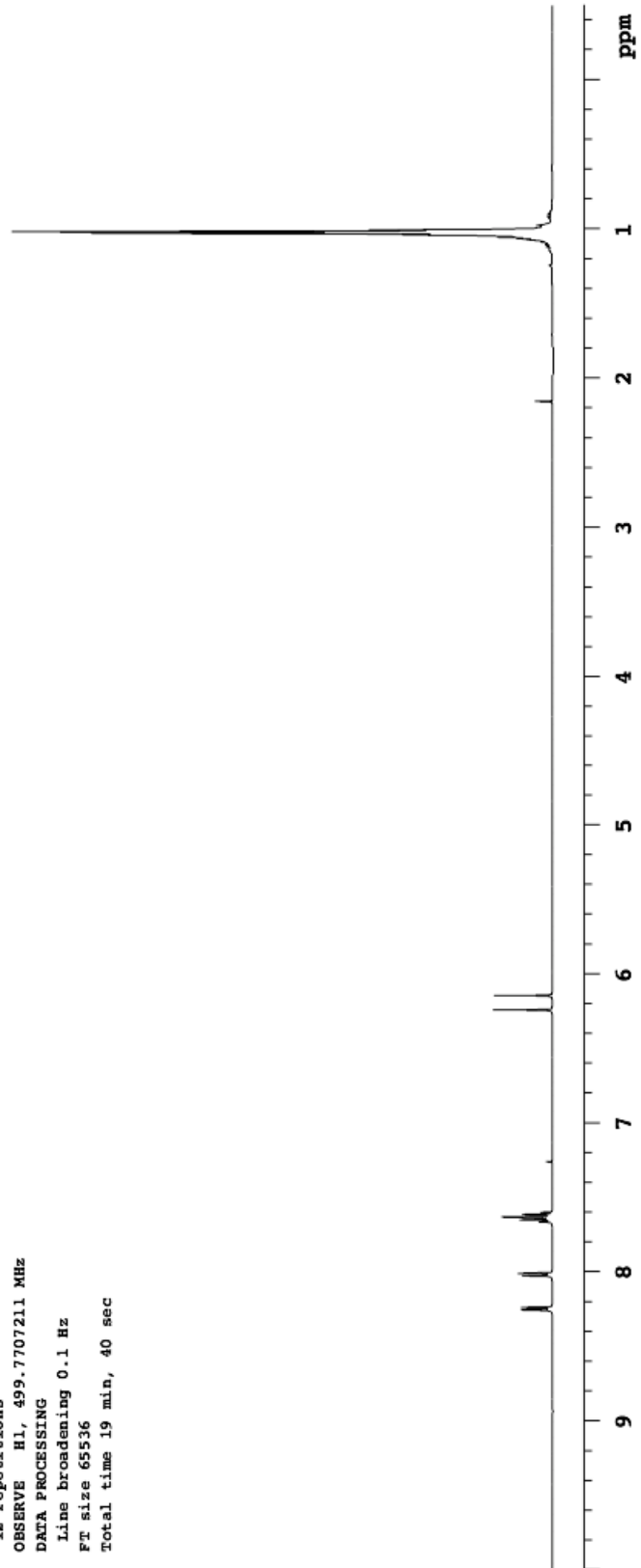
FT size 65536

Total time 19 min, 40 sec



19

500 MHz, CDCl<sub>3</sub>



1222-RK-10-756-13C

Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1222-RK-10-756-13C

INNOVA-500 "riga"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

40 repetitions

OBSERVE C13, 125.6674205 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 dB

on during acquisition

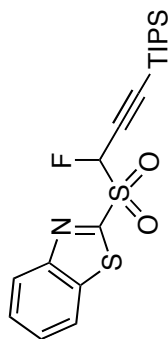
WALTZ-16 modulated

DATA PROCESSING

Line broadening 1.0 Hz

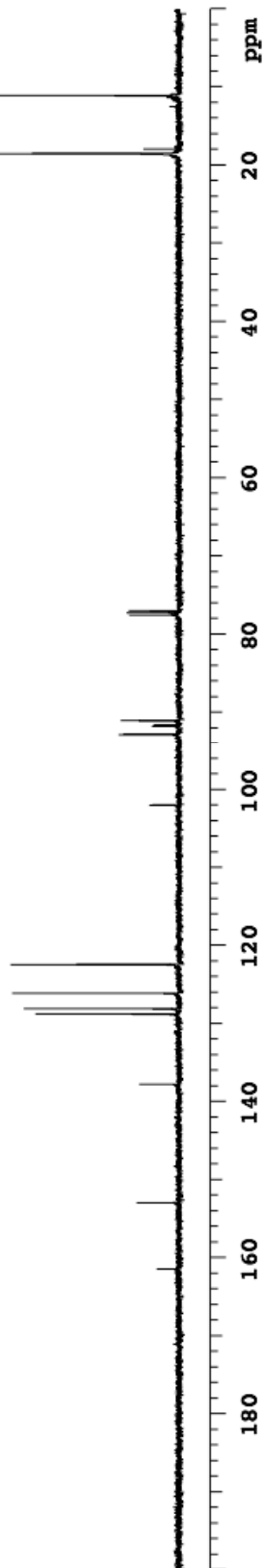
FT size 131072

Total time 1 hr, 28 min, 50 sec



19

125 MHz, CDCl<sub>3</sub>



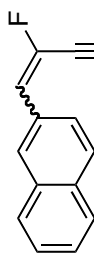
1222-RK-11-836-pure

Archive directory: /export/home/mkl/vnmrSYS/data  
Sample directory: auto\_13Dec2004

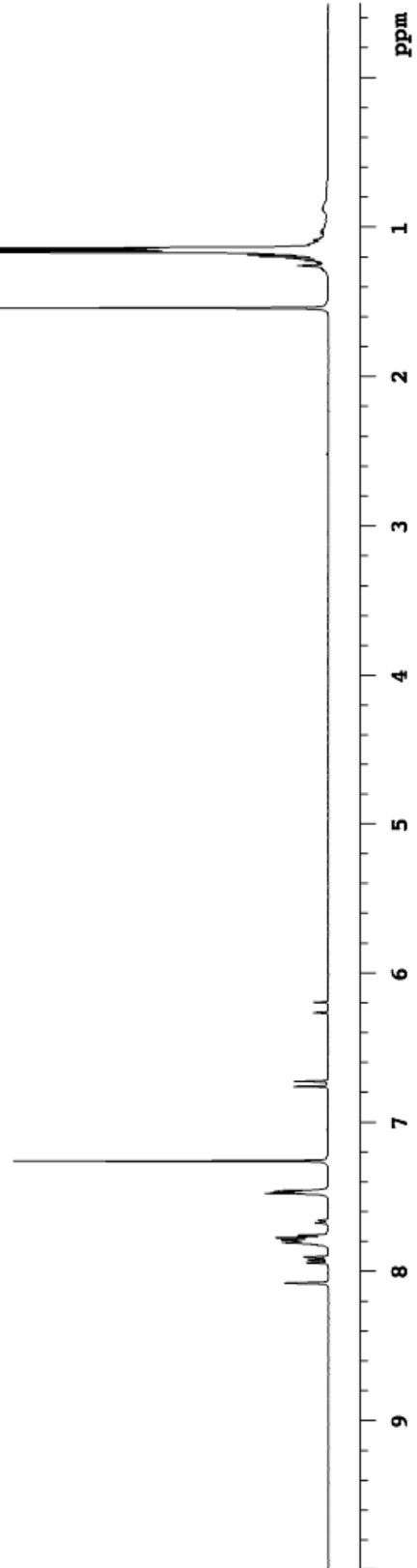
Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1222-RK-11-836-pure  
INOVA-500 "riga"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 10000.0 Hz  
20 repetitions  
OBSERVE H1, 499.7707218 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 65536  
Total time 9 min, 40 sec



20: E/Z 71/29 TIPS  
500 MHz, CDC13



1231-RK-11-836-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Ambient temperature

Operator: Barbara

File: 1231-RK-11-836-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

8000 repetitions

OBSERVE C13, 125.6674228 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

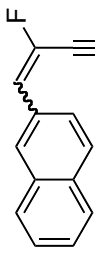
WALTZ-16 modulated

DATA PROCESSING

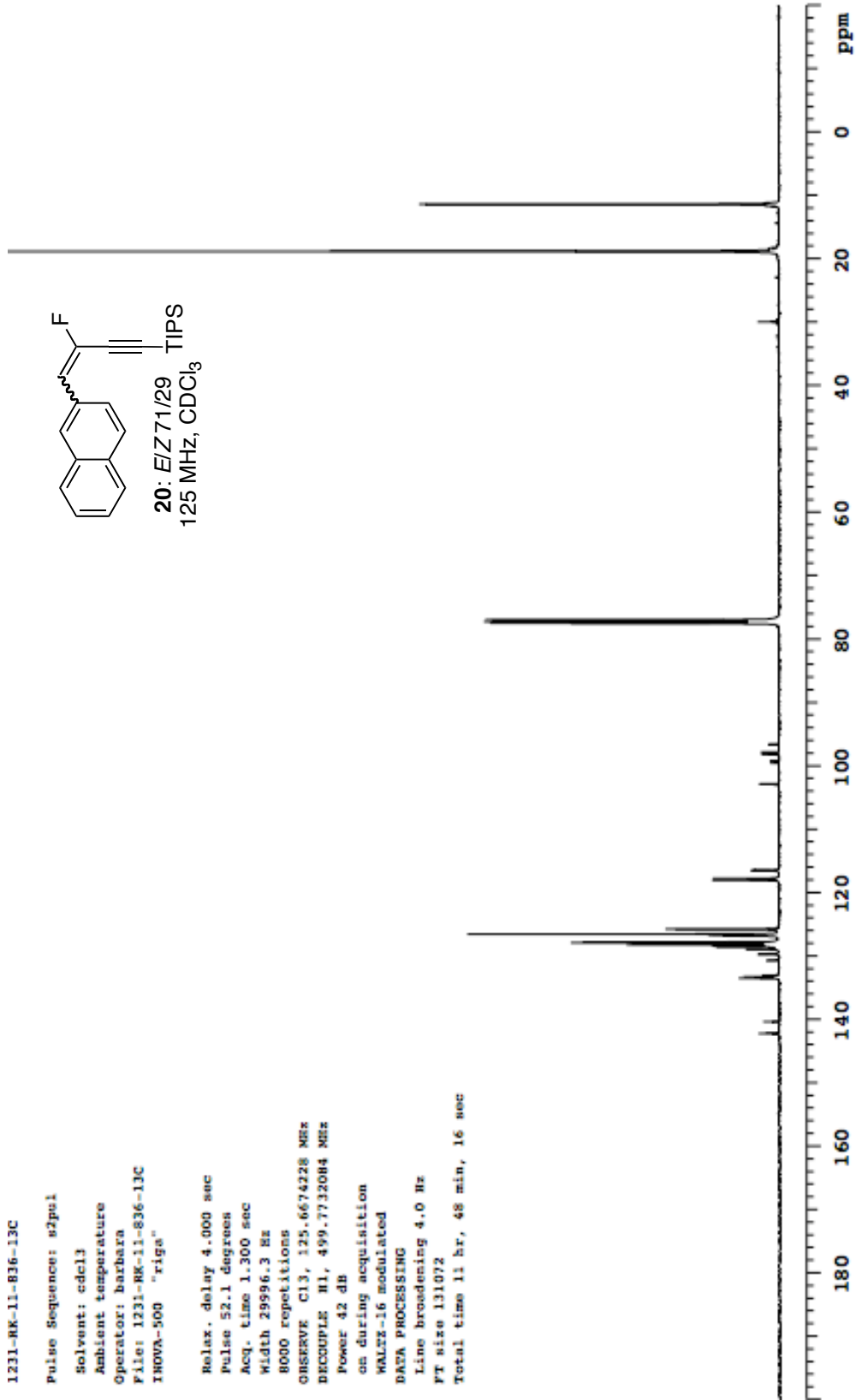
Line broadening 4.0 Hz

FT size 131072

Total time 11 hr, 48 min, 16 sec



20: E/Z 71/29 TIPS  
125 MHz, CDCl<sub>3</sub>



1222-RK-10-799-pure

Pulse Sequence: s2pul

Solvent: CDCl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1222-RK-10-799-pure

INOVA-500 "riga"

Relax. delay 3.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

8 repetitions

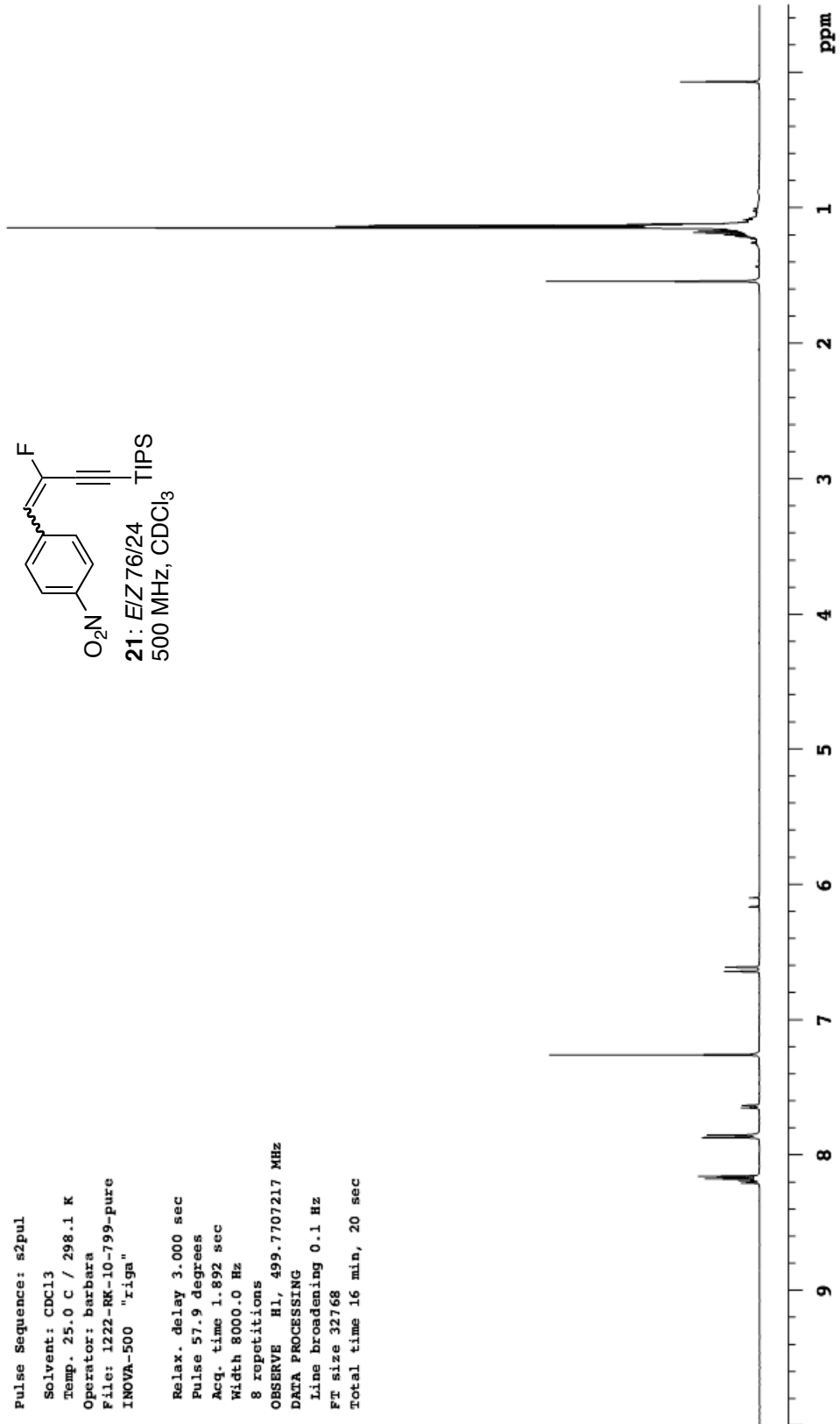
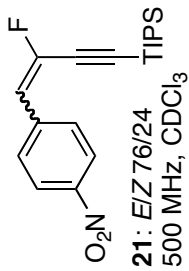
OBSERVE H1, 499.7707217 MHz

DATA PROCESSING

Line broadening 0.1 Hz

FT size 32768

Total time 16 min, 20 sec



1231-RK-10-799-13C

Pulse Sequence: #2pul

Solvent: cdcl3

Ambient temperature

Operator: Barbara

File: 1231-RK-10-799-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

492 repetitions

OBSERVE C13, 125.6674223 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 db

on during acquisition

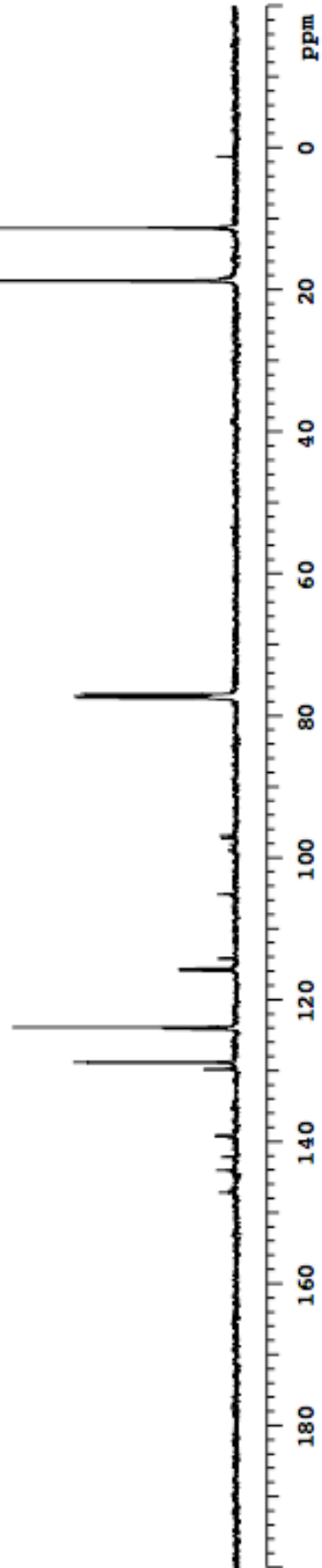
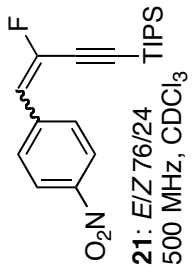
WALTZ-16 modulated

DATA PROCESSING

Line broadening 3.0 Hz

FT size 131072

Total time 2 hr, 57 min, 20 sec



1222-RK-10-760-pure

Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>

Ambient temperature

Operator: Barbara

File: 1222-RK-10-760-pure

INOVA-500 "riga"

Relax. delay 4.000 sec

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 10000.0 Hz

8 repetitions

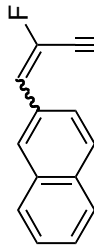
OBSERVE H1, 499.7707214 MHz

DATA PROCESSING

Line broadening 0.1 Hz

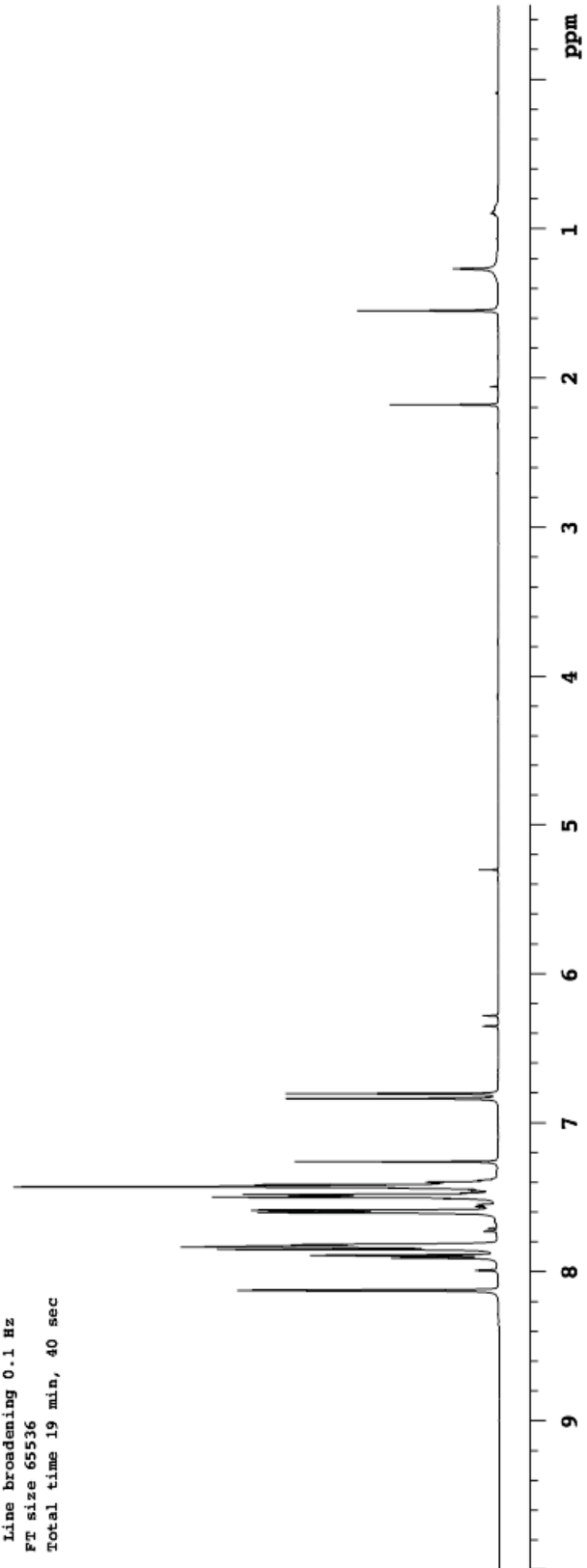
FT size 65536

Total time 19 min, 40 sec



22: E/Z 93/7

500 MHz, CDCl<sub>3</sub>



1231-RK-10-760-13C

Pulse Sequence: #2ps1

Solvent: cdcl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-10-760-13C

INOVA-500 "rigs"

Relax. delay 4.000 sec

Pulse 52.1 degrees

Acq. time 1.300 sec

Width 29996.3 Hz

10000 repetitions

OBSERVE C13, 125.6674223 MHz

DECOUPLE H1, 499.7732084 MHz

Power 42 dB

on during acquisition

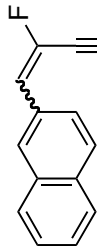
WALTZ-16 modulated

DATA PROCESSING

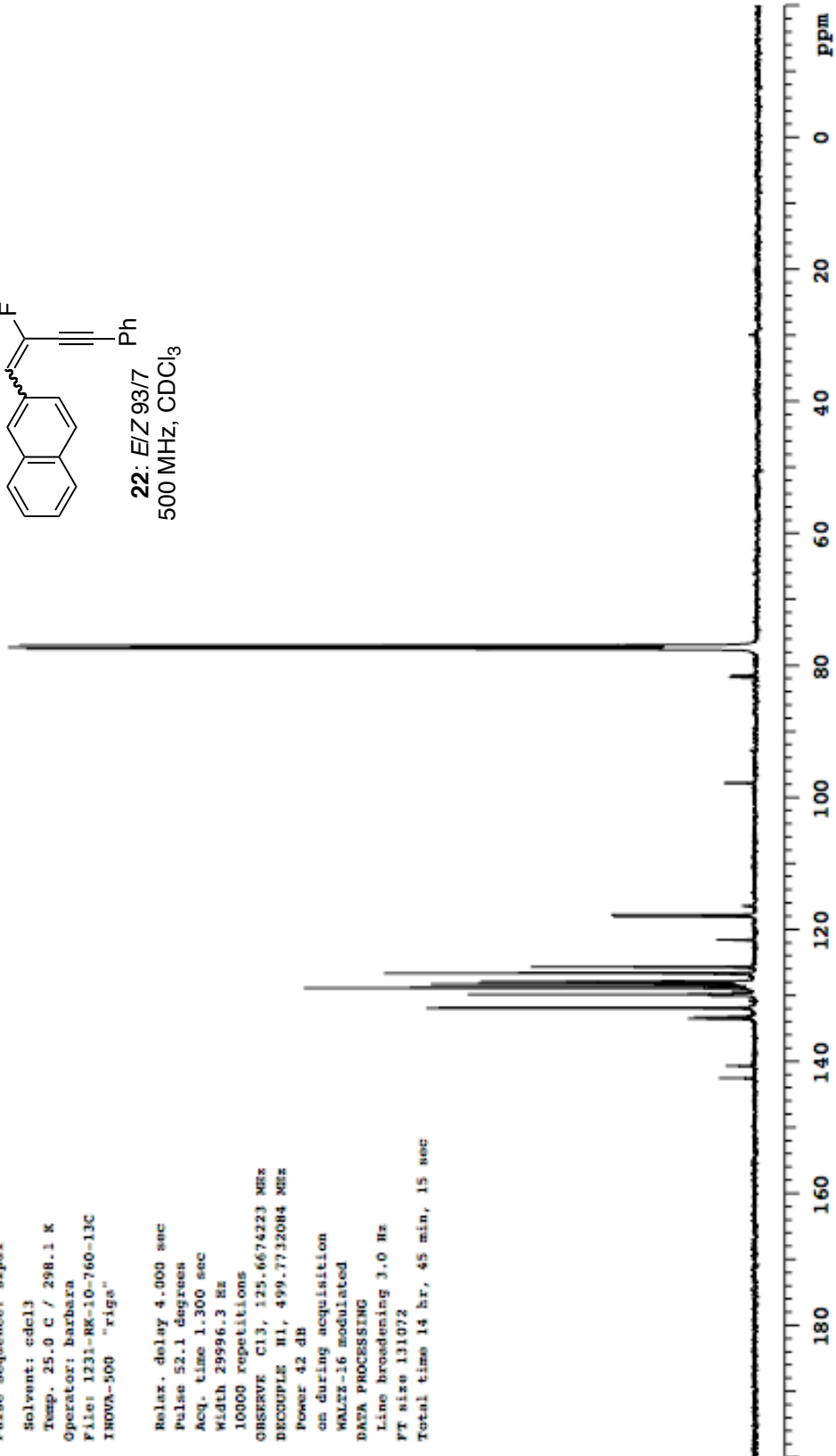
Line broadening 3.0 Hz

FT size 131072

Total time 14 hr, 45 min, 15 sec



22: EIZ 93/7  
500 MHz, CDCl<sub>3</sub>





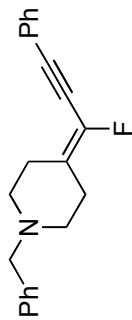
1231-RK-15-57-pure

Archive directory: /export/home/mkl/vnmrsys/data  
Sample directory: auto\_13Dec2004

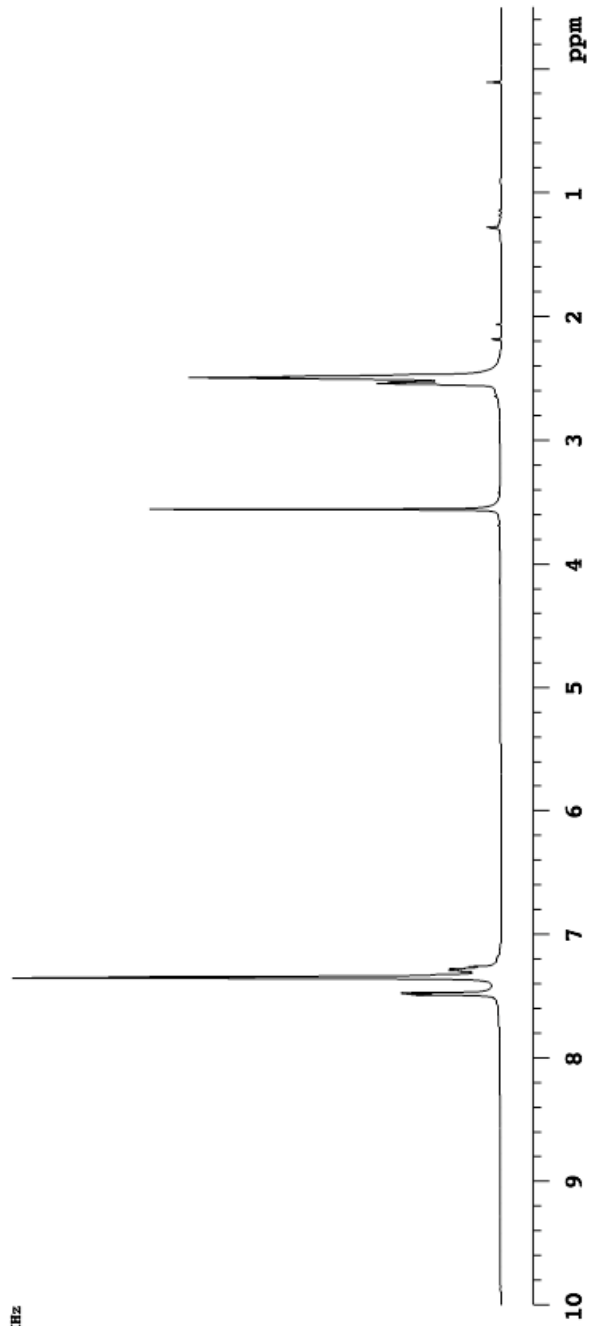
Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 24.0 C / 297.1 K  
Operator: barbara  
File: 1231-RK-15-57-pure  
INOVA-500 "riga"

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
76 repetitions  
OBSERVE H1, 499.7707216 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 9 min, 40 sec



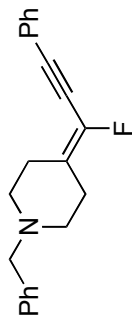
23  
500 MHz, CDCl<sub>3</sub>



1231-RK-15-57-13C

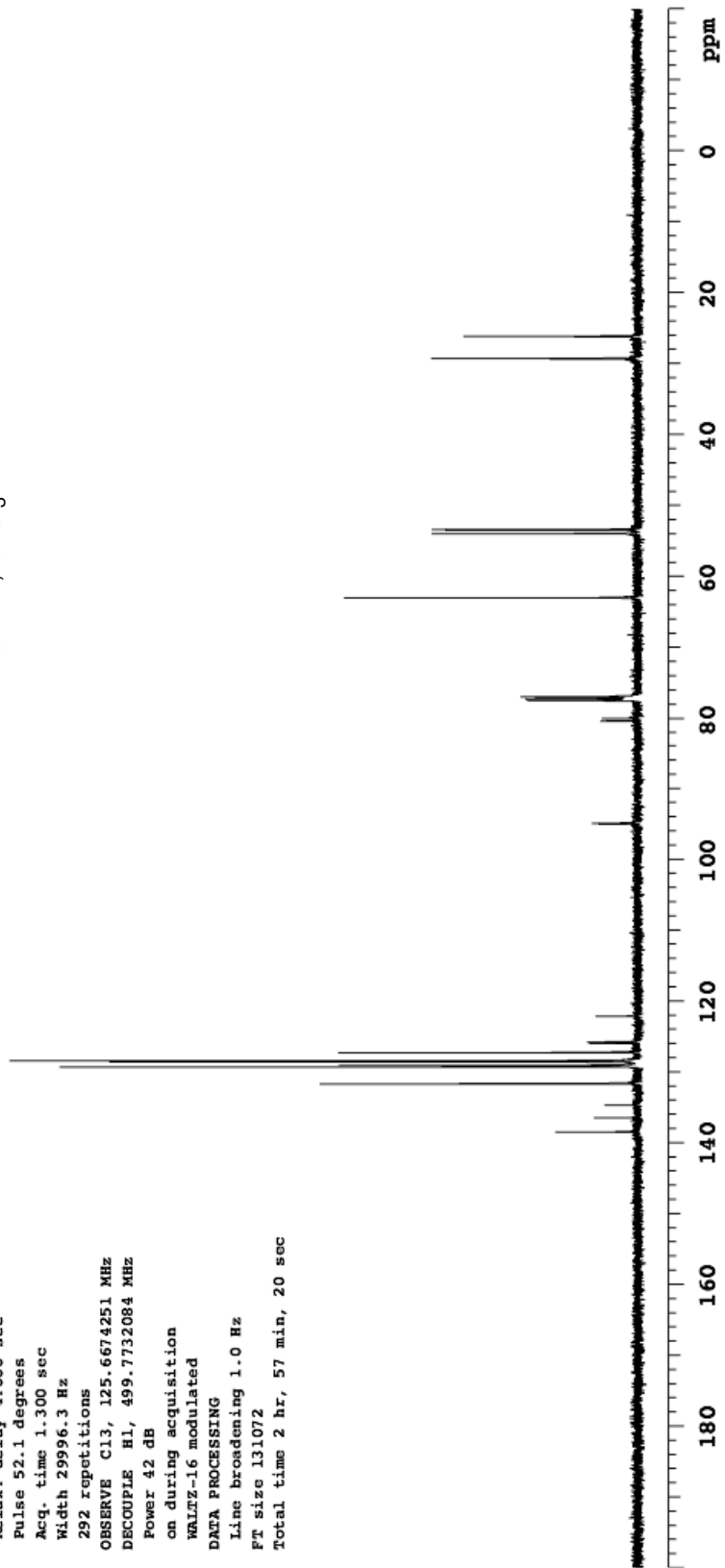
Pulse Sequence: s2pul  
Solvent: cdc13  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-57-13C  
INNOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
292 repetitions  
OBSERVE C13, 125.6674251 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 2 hr, 57 min, 20 sec



23

125 MHz, CDCl<sub>3</sub>



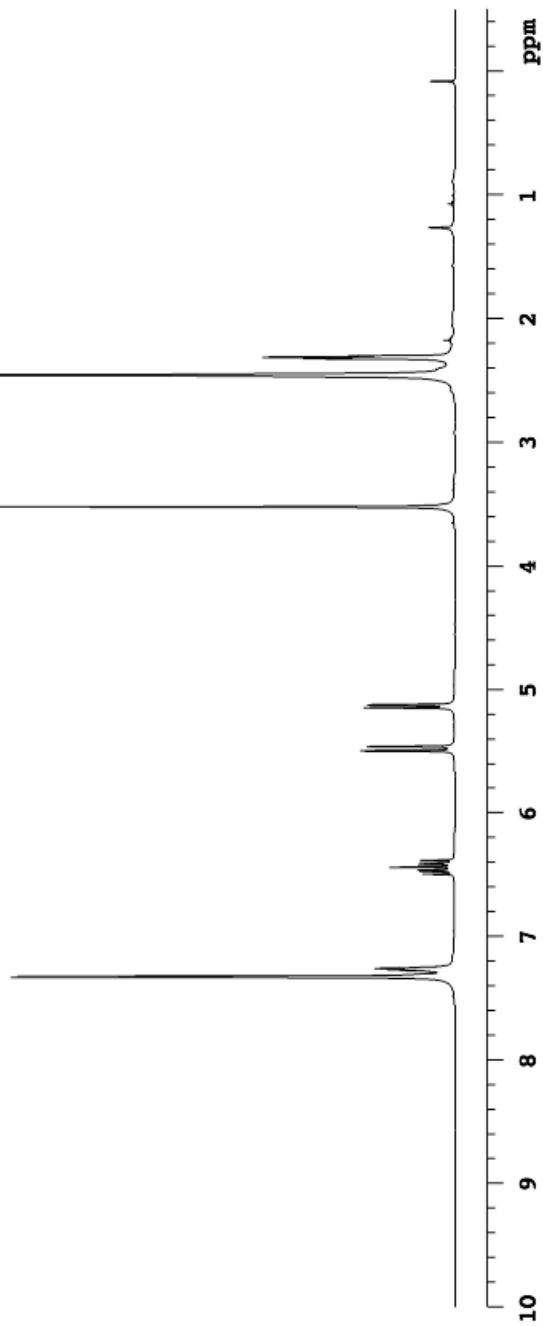
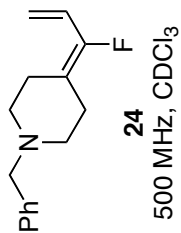
1231-RK-15-27-pure

Archive directory: /export/home/mkl/vnmrsys/data  
Sample directory: auto\_13Dec2004

Pulse Sequence: s2pul

Solvent: cdcl3  
Temp. 25.0 C / 298.1 K  
Operator: barbara  
File: 1231-RK-15-27-pure  
INOVA-500 "riga"

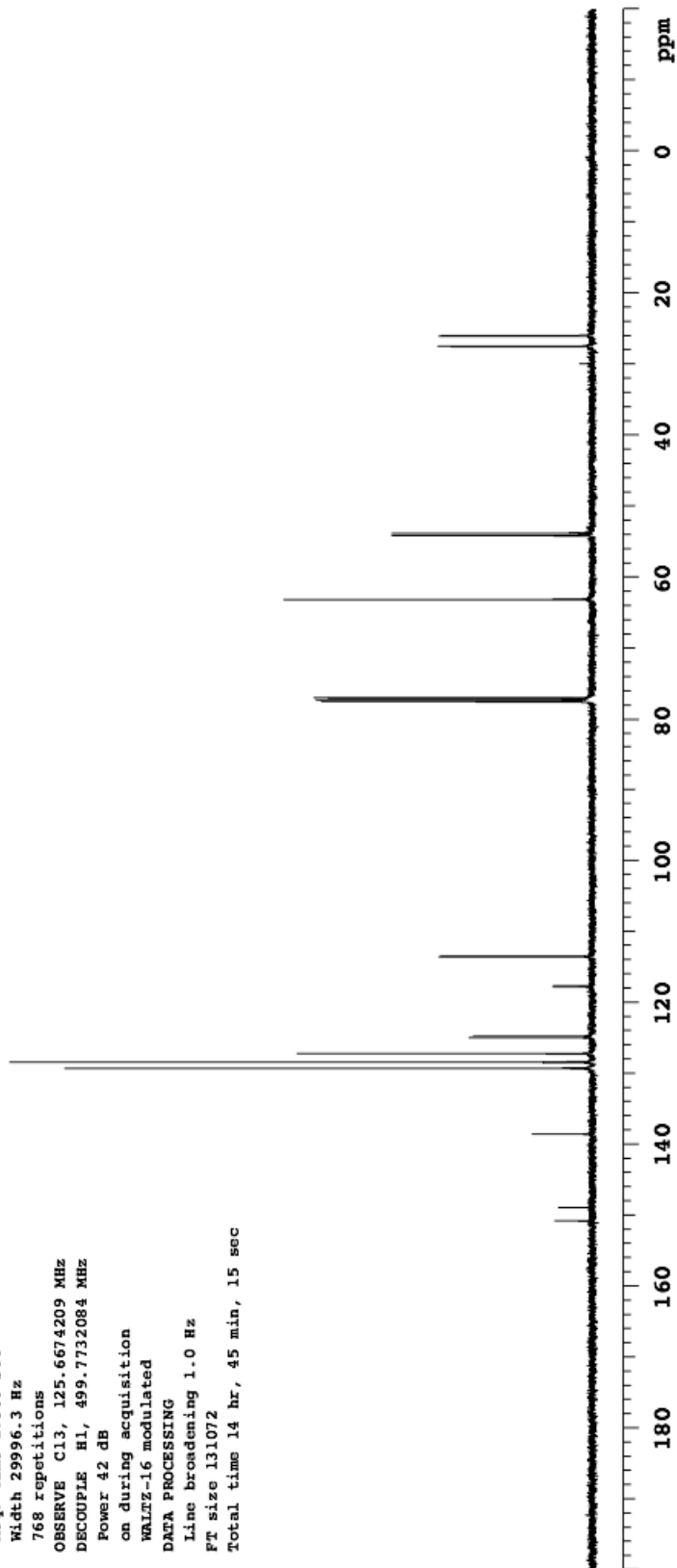
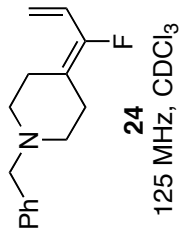
Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.892 sec  
Width 7544.3 Hz  
20 repetitions  
OBSERVE H1, 499.7707226 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 9 min, 40 sec



1231-RK-15-27-13C

Pulse Sequence: s2pul  
Solvent: cdc13  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-27-13C  
INOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
768 repetitions  
OBSERVE C13, 125.6674209 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.0 Hz  
FT size 131072  
Total time 14 hr, 45 min, 15 sec



1231-RK-15-65-pure

Pulse Sequence: s2pul

Solvent: CDCl<sub>3</sub>

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-15-65-pure

INNOVA-500 "riga"

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

108 repetitions

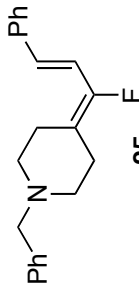
OBSERVE H1, 499.7707222 MHz

DATA PROCESSING

Line broadening 0.1 Hz

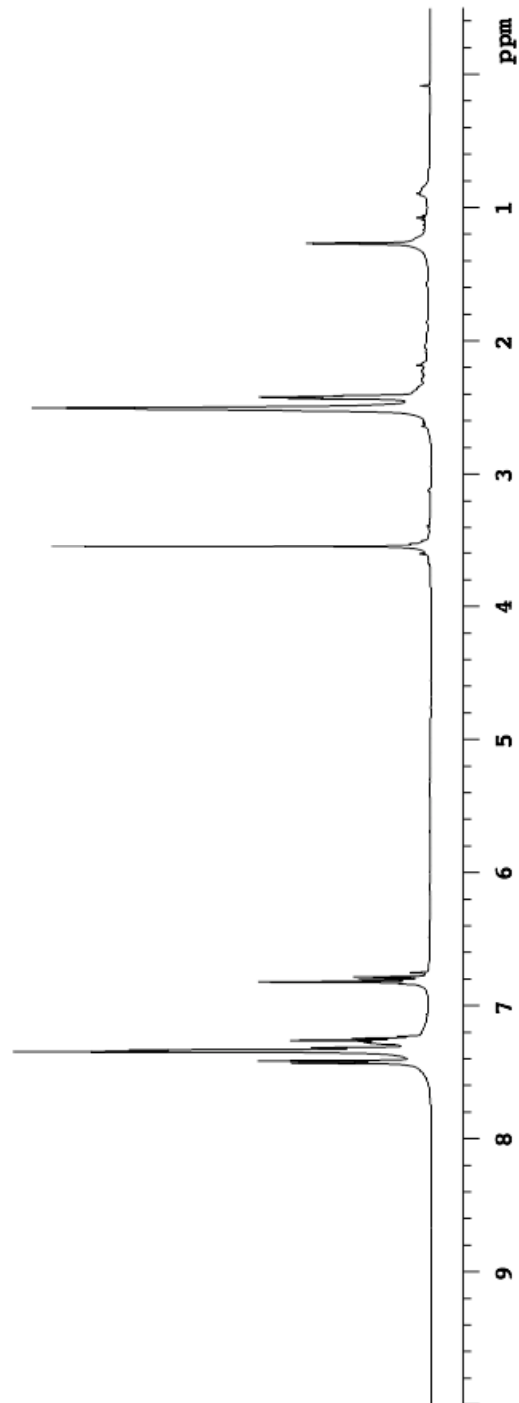
FT size 32768

Total time 6 min, 20 sec



25

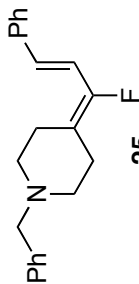
500 MHz, CDCl<sub>3</sub>



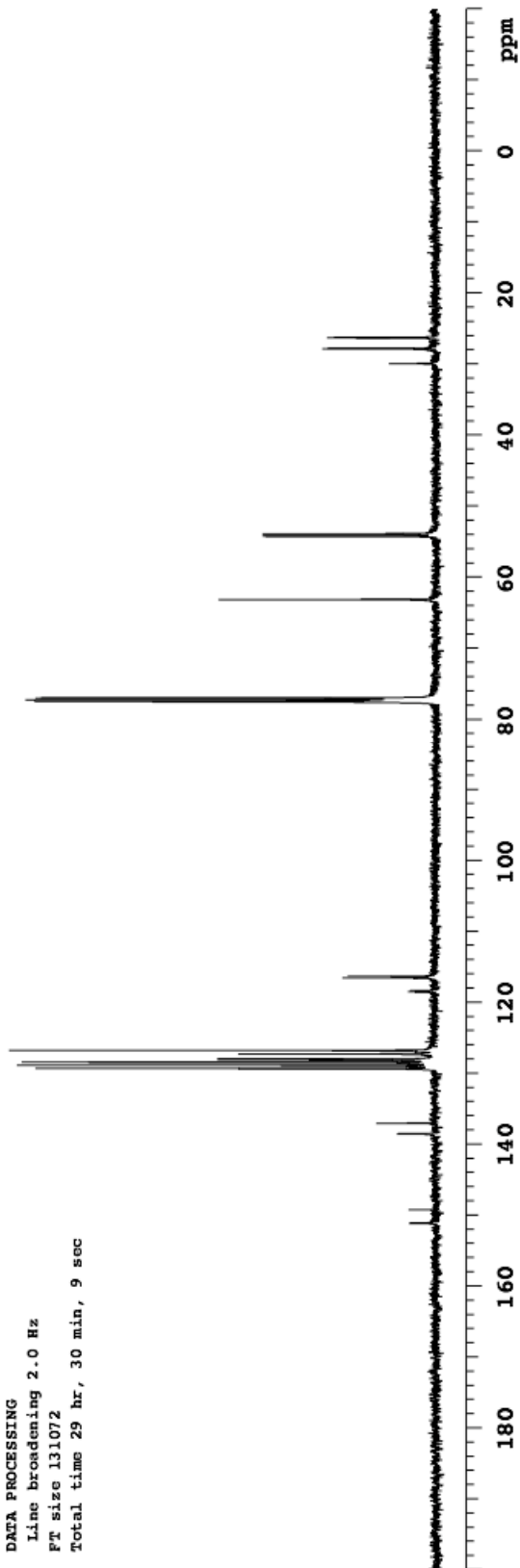
1231-RK-15-65-13C

Pulse Sequence: s2pul  
Solvent: cdc13  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-15-65-13C  
INNOVA-500 "riga"

Relax. delay 4.000 sec  
Pulse 52.1 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
2120 repetitions  
OBSERVE C13, 125.6674200 MHz  
DECOUPLE H1, 499.7732084 MHz  
Power 42 dB  
on during acquisition  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 2.0 Hz  
FT size 131072  
Total time 29 hr, 30 min, 9 sec



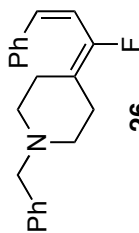
25  
125 MHz, CDCl<sub>3</sub>



1231-RK-16-68-pure

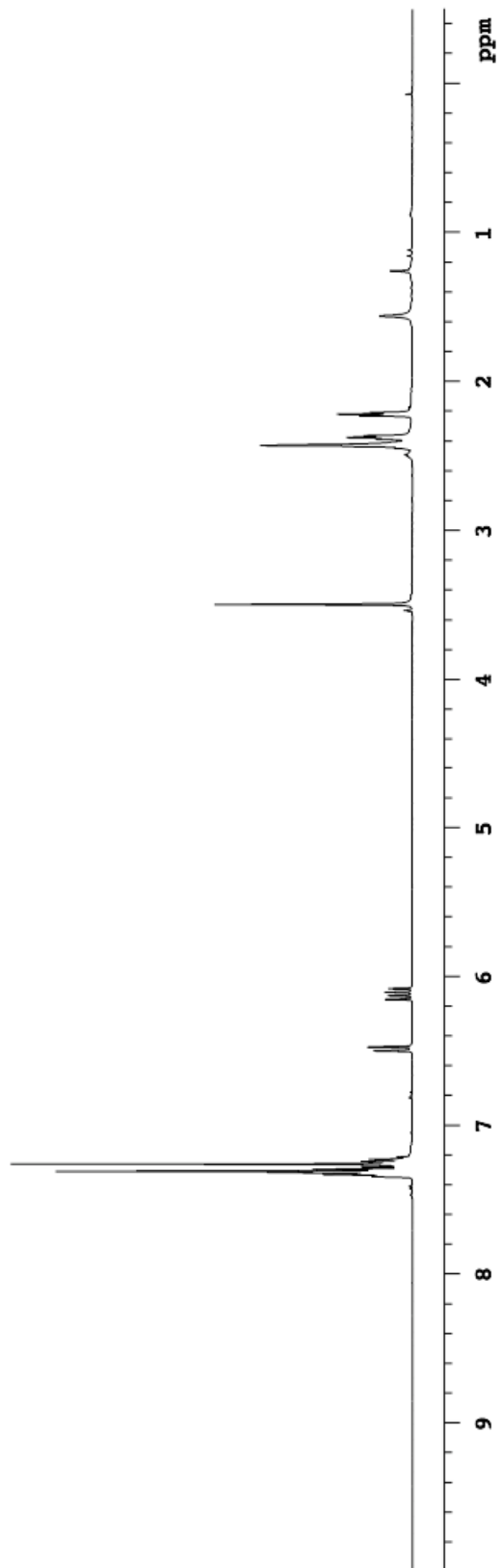
Pulse Sequence: s2pul  
Solvent: CDCl<sub>3</sub>  
Temp. 25.0 C / 298.1 K  
Operator: Barbara  
File: 1231-RK-16-68-pure  
INOVA-500 "riga"

Relax. delay 2.500 sec  
Pulse 38.6 degrees  
Acq. time 1.892 sec  
Width 8000.0 Hz  
16 repetitions  
OBSERVE H1, 499.7707212 MHz  
DATA PROCESSING  
Line broadening 0.1 Hz  
FT size 32768  
Total time 14 min, 40 sec



26

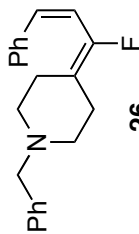
500 MHz, CDCl<sub>3</sub>



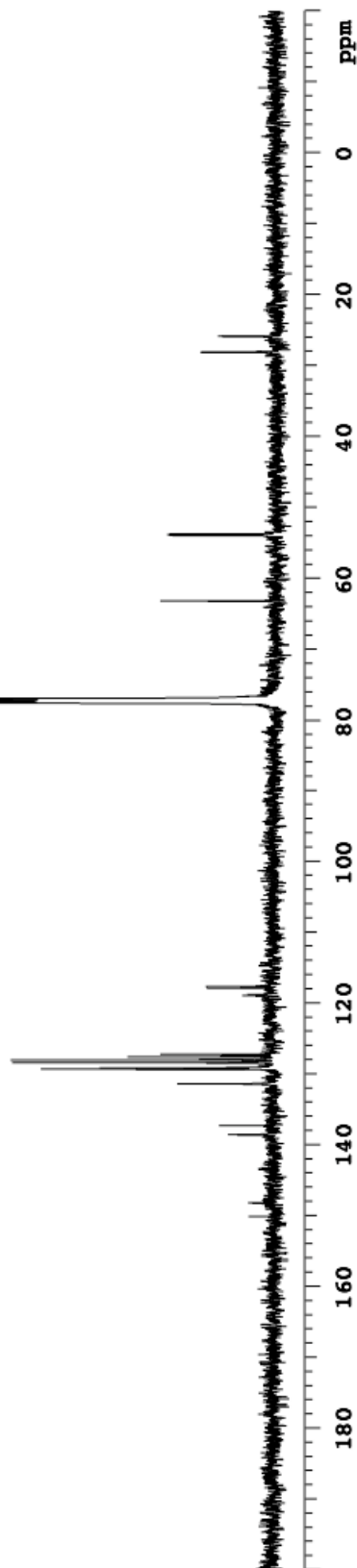
1231-RK-15-68-13C

Pulse Sequence: s2pul  
Solvent: CDCl<sub>3</sub>  
Temp. 24.0 C / 297.1 K  
Operator: mkl  
INOVA-500 "capella500"

Relax. delay 3.000 sec  
Pulse 45.0 degrees  
Acq. time 1.300 sec  
Width 29996.3 Hz  
1132 repetitions  
OBSERVE C13, 125.6674177 MHz  
DECOUPLE H1, 499.7730084 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 3.0 Hz  
FT size 131072  
Total time 191 hr, 31 min, 44 sec



125 MHz, CDCl<sub>3</sub>





1231-RK-15-80-pure

Pulse Sequence: #2pul

Solvent: CDCl3

Temp. 25.0 C / 298.1 K

Operator: Barbara

File: 1231-RK-15-80-pure

INOVA-500 "riga"

Pulse 57.9 degrees

Acq. time 1.892 sec

Width 8000.0 Hz

24 repetitions

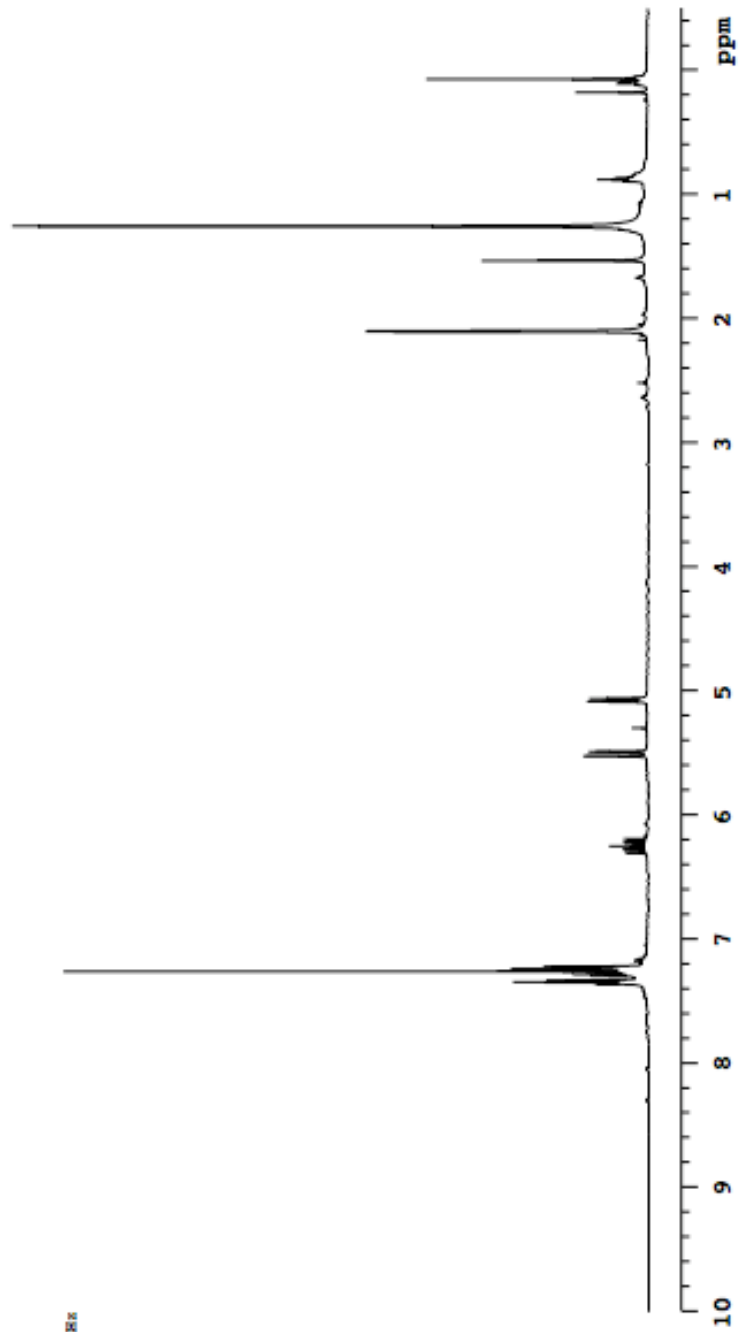
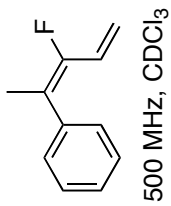
OBSERVE M1, 499.7707217 MHz

DATA PROCESSING

Line Broadening 0.1 Hz

FT size 32768

Total time 6 min, 20 sec



1221-RK-15-00-NOESY  
 Pulse Sequence: NOESY  
 Solvent: CDCl3  
 Temp: 25.8 C / 280.1 K  
 Operator: Barbara  
 File: 1221-RK-15-00-NOESY  
 ENDVA=SEE "capella50p"  
  
 Relax. delay 1.200 sec  
 Mixing 8.500 sec  
 WQW time 0.274 sec  
 WQW 5479.1 Hz  
 2D Width 5479.1 Hz  
 24 repetitions  
 F 4 512 increments  
 OBSERVE H1 459.778728 MHz  
 DATA PROCESSING  
 Gauss normalization 6.113 sec  
 F Gauss processing 8.024 sec  
 FT size 8396 x 2848  
 Total time 15 hr, 17 min, 50 sec

