

# **Catalytic Asymmetric Synthesis of Pyrroloindolines by a Formal [3+2] Cycloaddition Reaction**

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## **Supporting Information 2 (NMR Spectra):**

LMRIV-291-majordr-hsqc

Sample Name:

LMRIV-291-majordr-hsqc

Data Collected on:

siena.caltech.edu-vmrms400

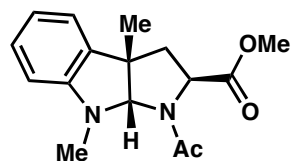
Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-291-majordr-hsqc

FidFile: PROTON01



**exo-7a**  
rotameric ratio  
1.0:1

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 1 2010

Temp. 25.0 C / 298.1 K

Sample #2, Operator: lrepka

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

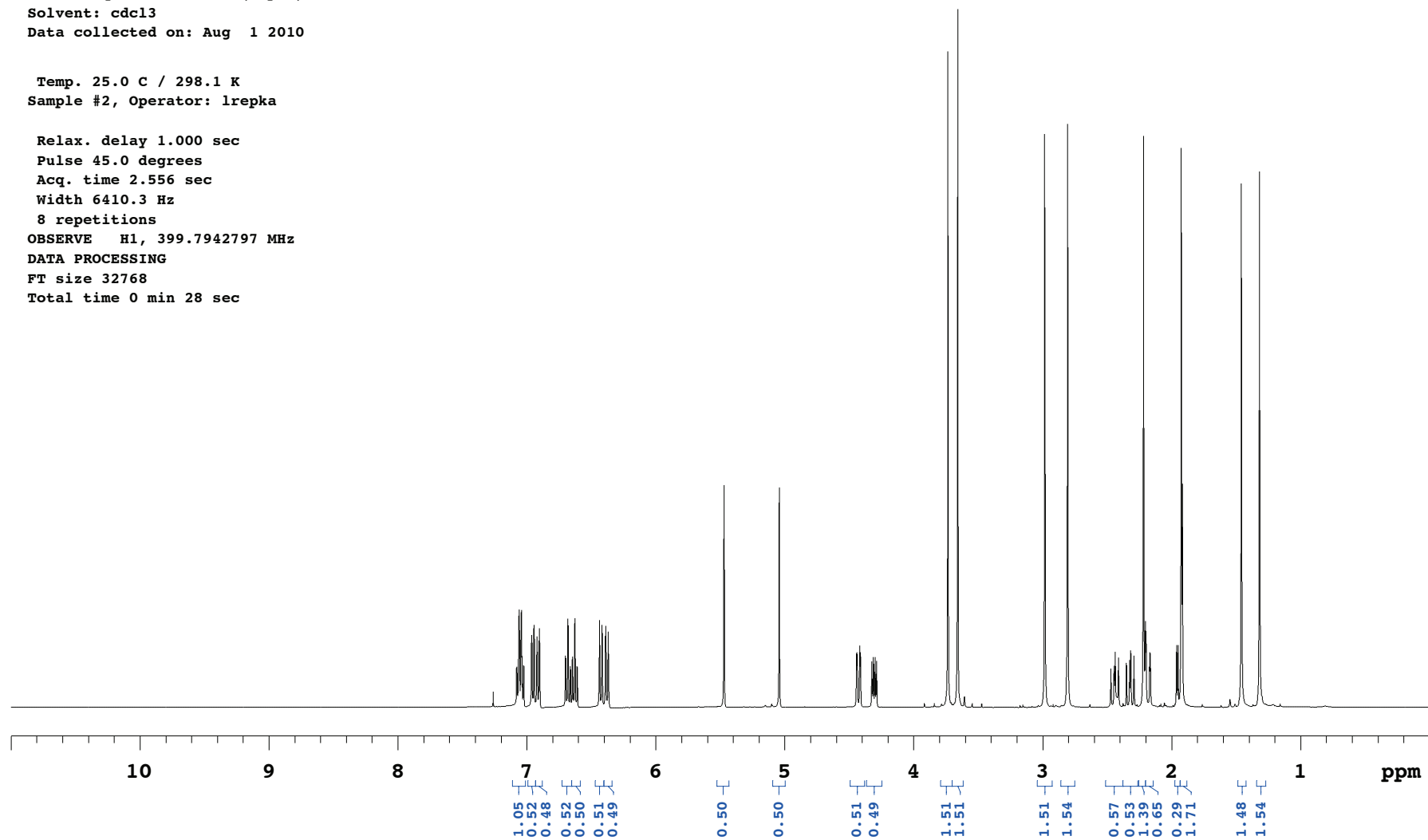
8 repetitions

OBSERVE H1, 399.7942797 MHz

DATA PROCESSING

FT size 32768

Total time 0 min 28 sec



LMRIV-291-minordr-hsqc

Sample Name:

LMRIV-291-minordr-hsqc

Data Collected on:

siena.caltech.edu-vmnrs400

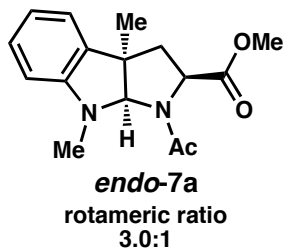
Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-291-minordr-hsqc

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 1 2010

Temp. 25.0 C / 298.1 K

Sample #3, Operator: lrepka

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

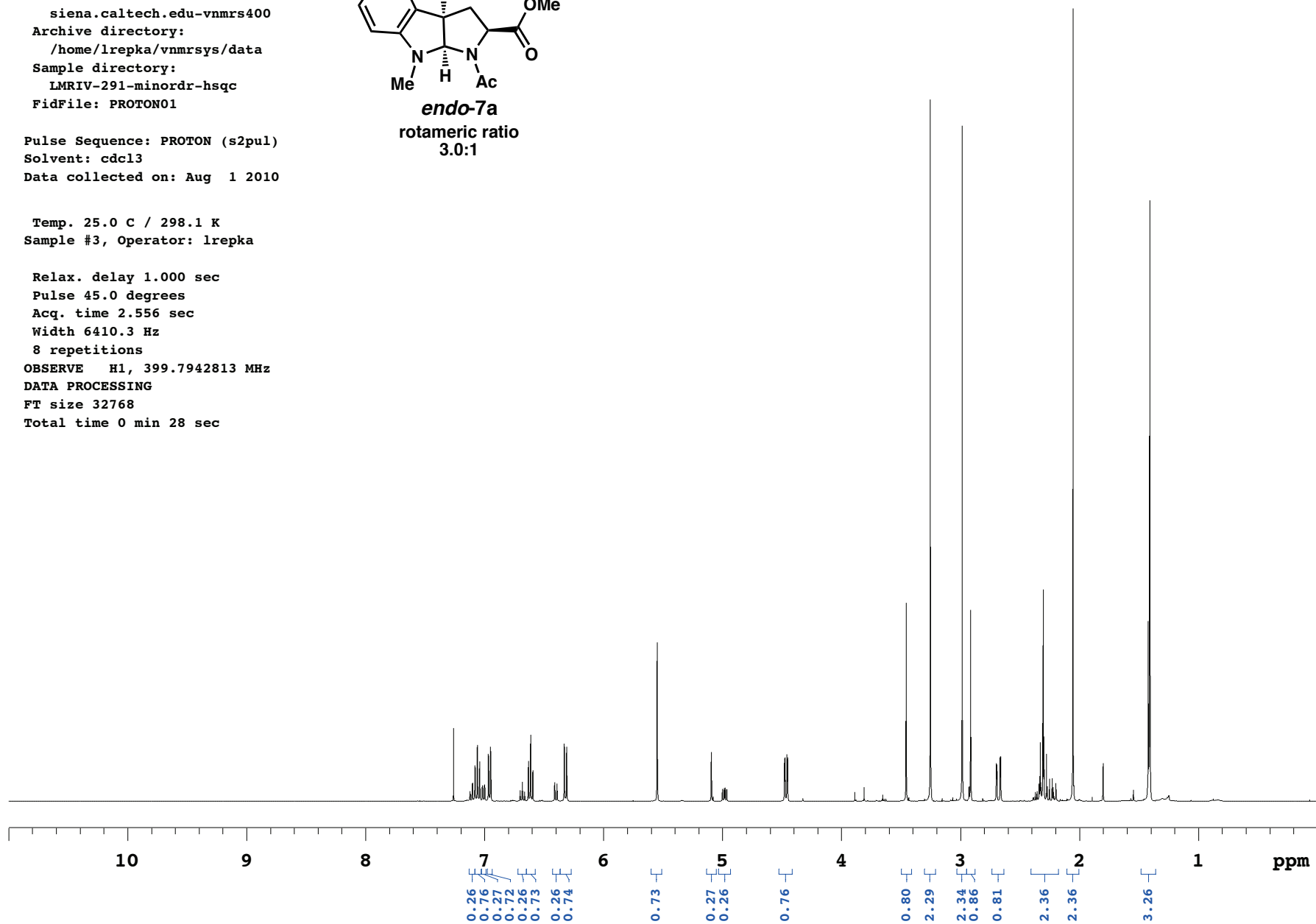
8 repetitions

OBSERVE H1, 399.7942813 MHz

DATA PROCESSING

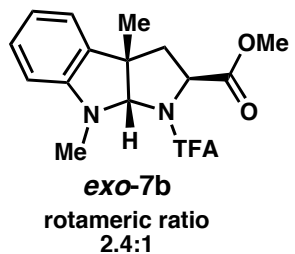
FT size 32768

Total time 0 min 28 sec



JN-1-131-majordiast

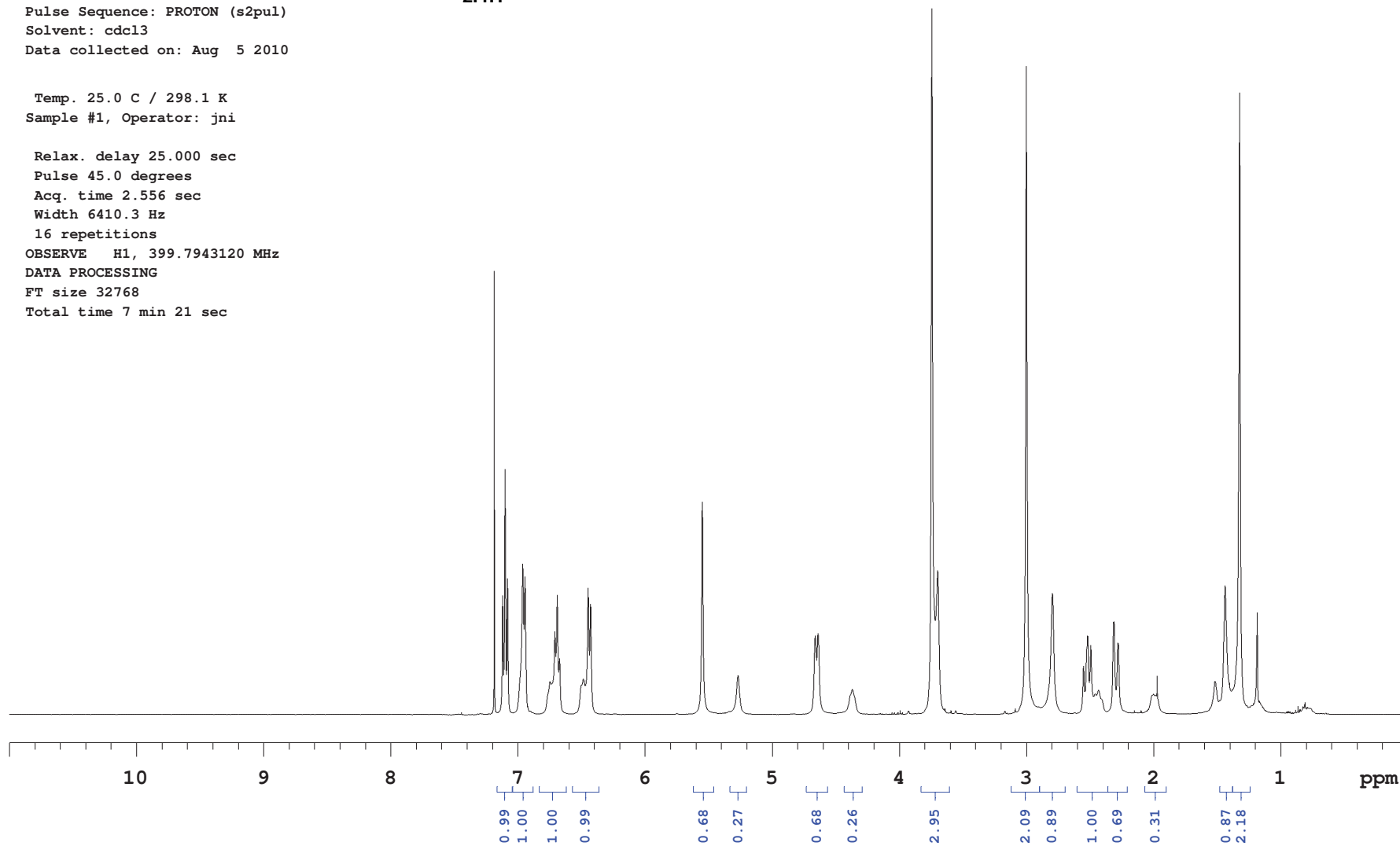
Sample Name:  
JN-1-131-majordiast  
Data Collected on:  
siena.caltech.edu-vnmrs400  
Archive directory:  
/home/jni/vnmrsys/data  
Sample directory:  
JN-1-131-majordiast  
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdc13  
Data collected on: Aug 5 2010

Temp. 25.0 C / 298.1 K  
Sample #1, Operator: jni

Relax. delay 25.000 sec  
Pulse 45.0 degrees  
Acq. time 2.556 sec  
Width 6410.3 Hz  
16 repetitions  
OBSERVE H1, 399.7943120 MHz  
DATA PROCESSING  
FT size 32768  
Total time 7 min 21 sec



JN-1-131-minordiast3

Sample Name:

JN-1-131-minordiast3

Data Collected on:

indy.caltech.edu-inova500

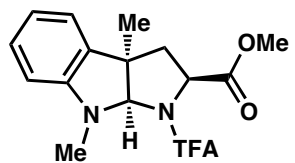
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-131-minordiast3

FidFile: PROTON01



**endo-7b**  
rotameric ratio  
9.0:1

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Aug 5 2010

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

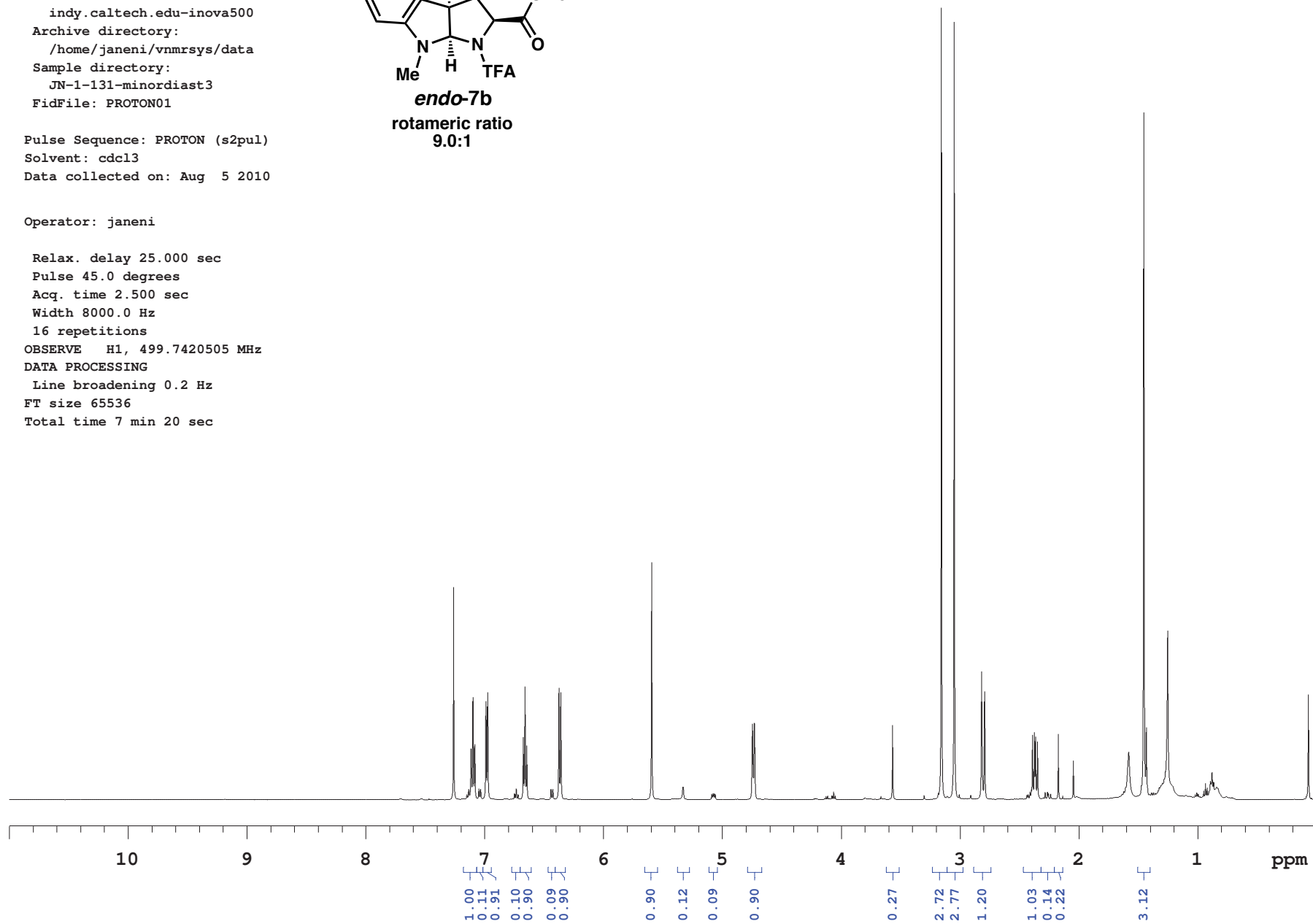
OBSERVE H1, 499.7420505 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



JN-1-151-major

Sample Name:

JN-1-151-major

Data Collected on:

hg3.caltech.edu-mercury300

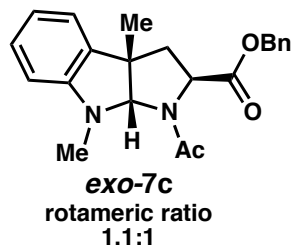
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-151-major

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jun 24 2010

Temp. 25.0 C / 298.1 K

Sample #20, Operator: jni

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 1.706 sec

Width 4810.0 Hz

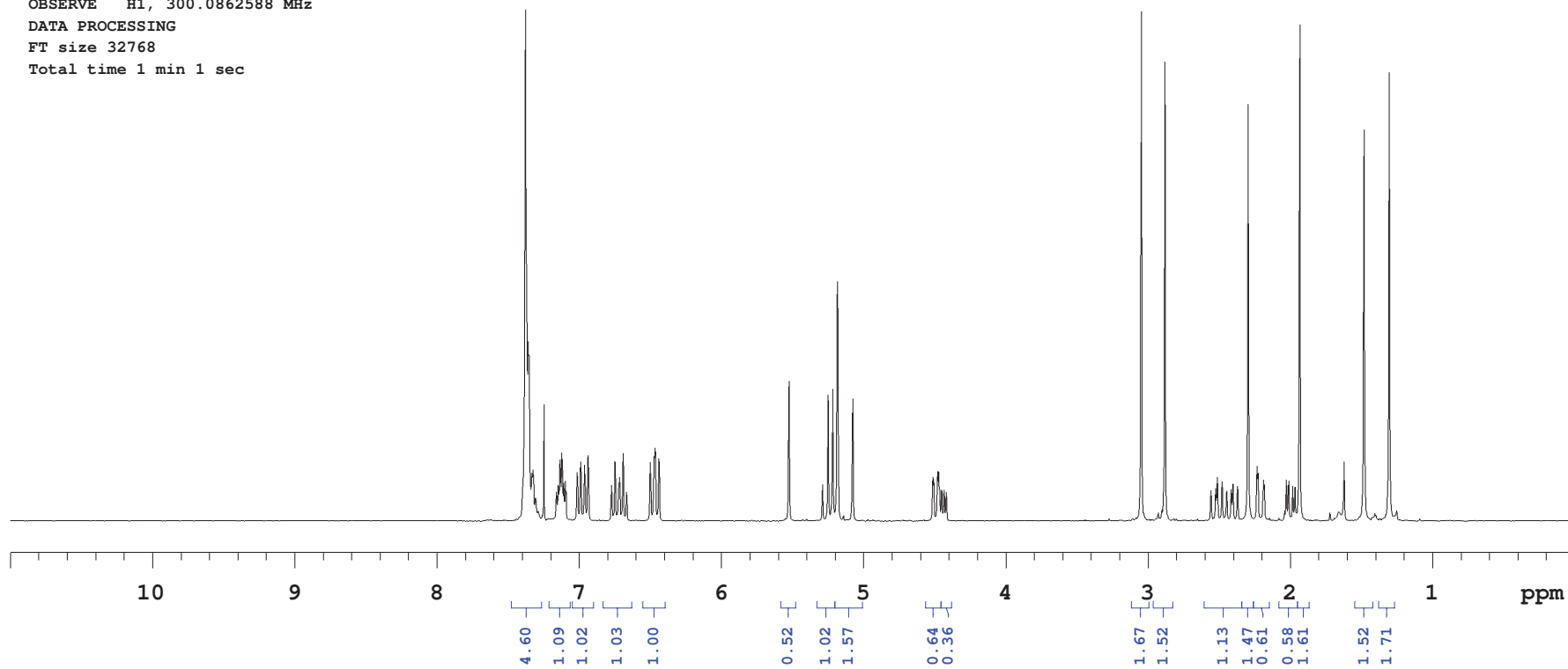
16 repetitions

OBSERVE H1, 300.0862588 MHz

DATA PROCESSING

FT size 32768

Total time 1 min 1 sec



JN-1-151-minordiast3

Sample Name:

JN-1-151-minordiast3

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-151-minordiast3

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Aug 4 2010

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

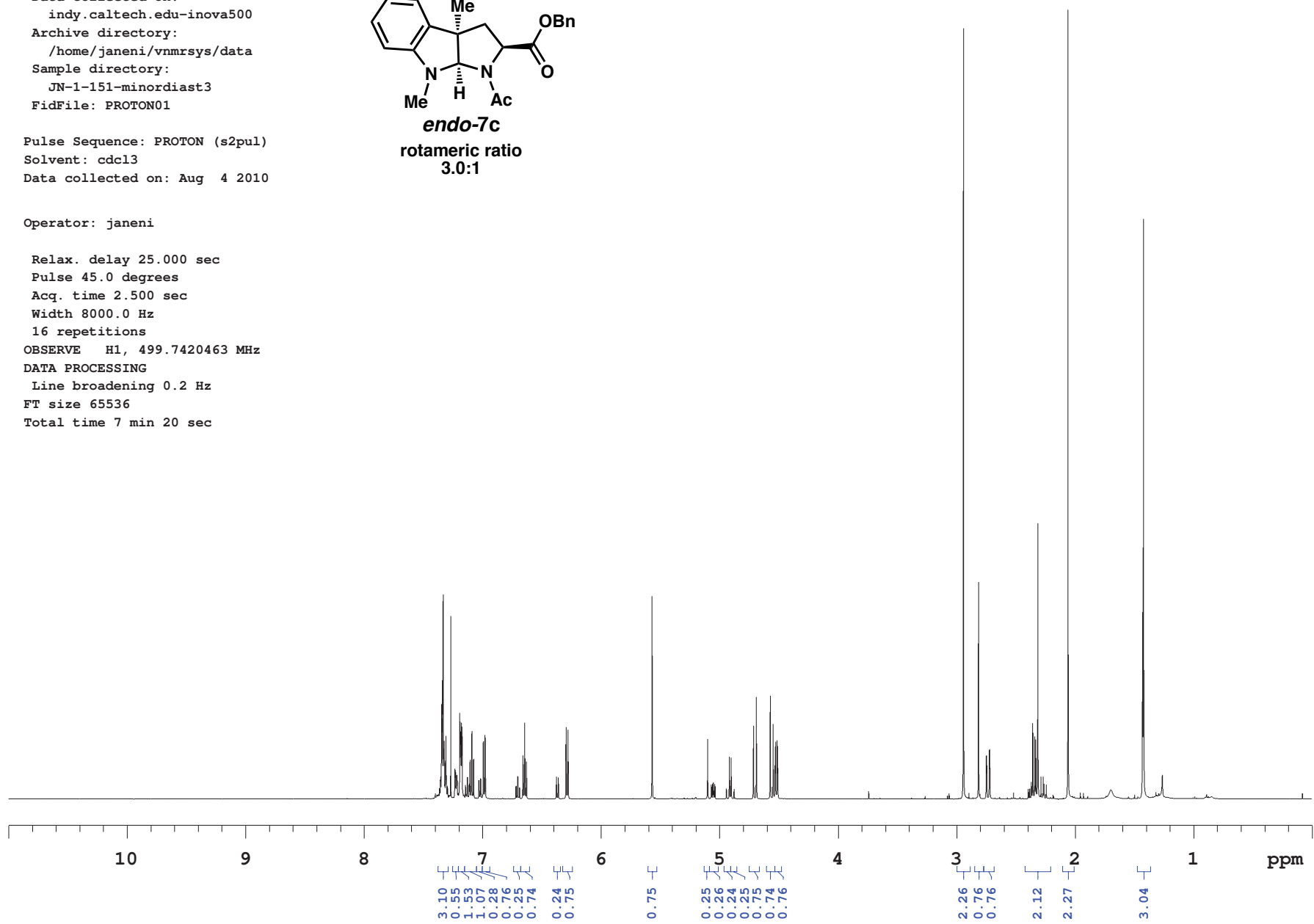
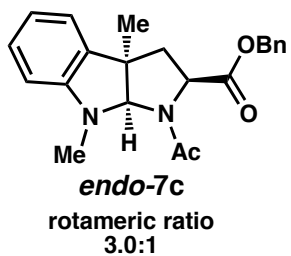
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



LMRIV-287-majordr-rd25

Sample Name:

LMRIV-287-majordr-rd25

Data Collected on:

indy.caltech.edu-inova500

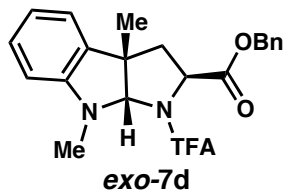
Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-287-majordr-rd25

FidFile: PROTON01

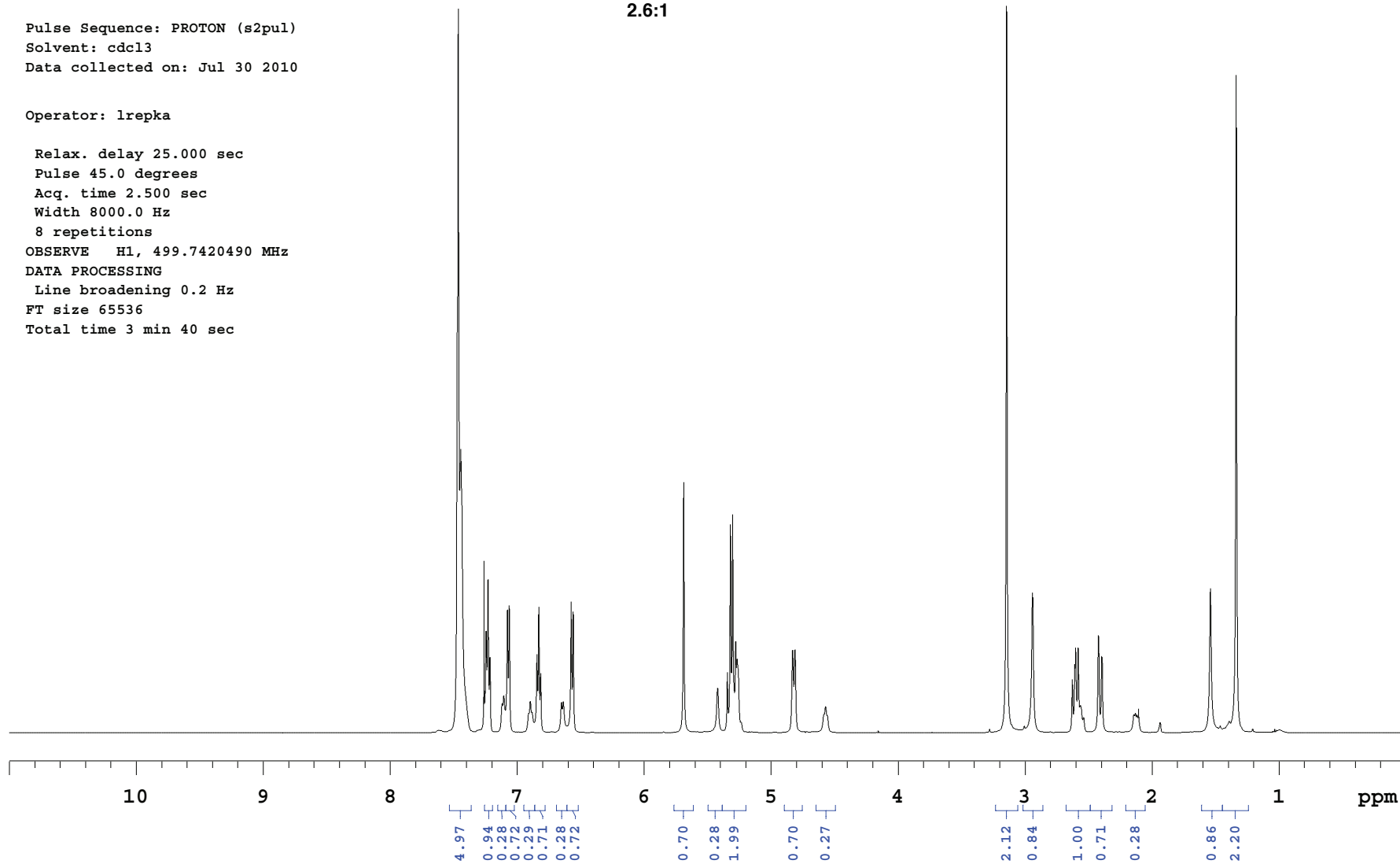


*exo-7d*  
rotameric ratio  
2.6:1

Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 30 2010

Operator: lrepka

Relax. delay 25.000 sec  
Pulse 45.0 degrees  
Acq. time 2.500 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7420490 MHz  
DATA PROCESSING  
Line broadening 0.2 Hz  
FT size 65536  
Total time 3 min 40 sec





LMRIV-287-minor-8-5-10

Sample Name:

LMRIV-287-minor-8-5-10

Data Collected on:

hg3.caltech.edu-mercury300

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-287-minor-8-5-10

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 5 2010

Temp. 25.0 C / 298.1 K

Sample #46, Operator: lrepka

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 1.706 sec

Width 4810.0 Hz

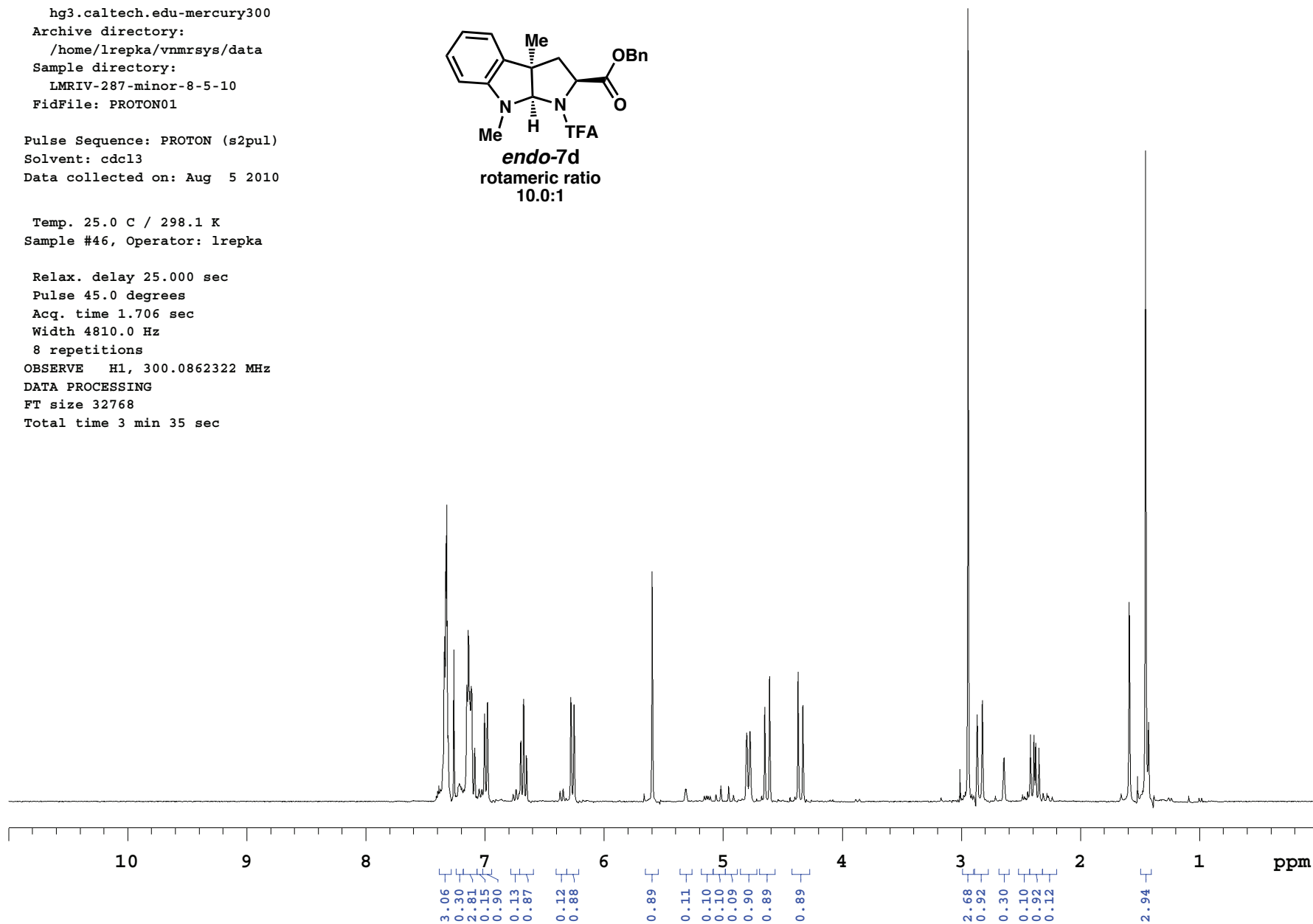
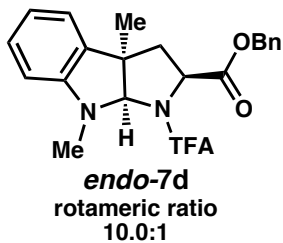
8 repetitions

OBSERVE H1, 300.0862322 MHz

DATA PROCESSING

FT size 32768

Total time 3 min 35 sec



JN-1-191-majordiast

Sample Name:

JN-1-191-majordiast

Data Collected on:

siena.caltech.edu-vnmrs400

Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-191-majordiast

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 19 2010

Temp. 25.0 C / 298.1 K

Sample #5, Operator: jni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

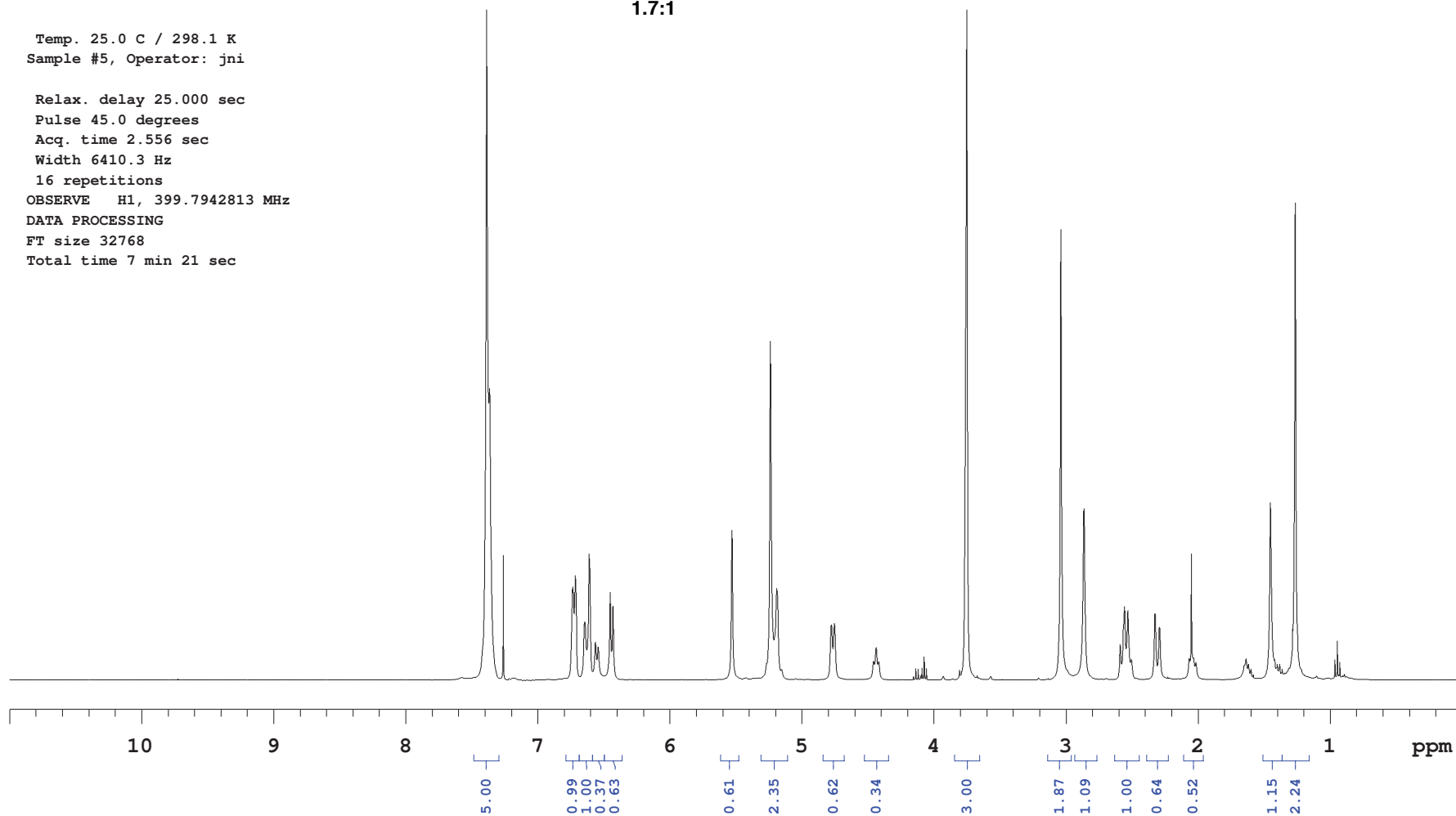
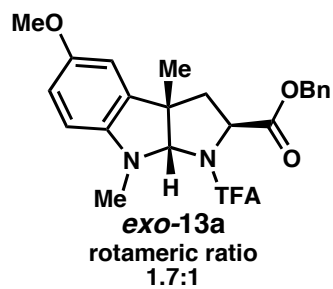
16 repetitions

OBSERVE H1, 399.7942813 MHz

DATA PROCESSING

FT size 32768

Total time 7 min 21 sec



LMRV-047-majordr

Sample Name:

LMRV-047-majordr

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRV-047-majordr

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Sep 16 2010

Temp. 25.0 C / 298.1 K

Sample #35, Operator: lrepka

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

OBSERVE H1, 499.7420497 MHz

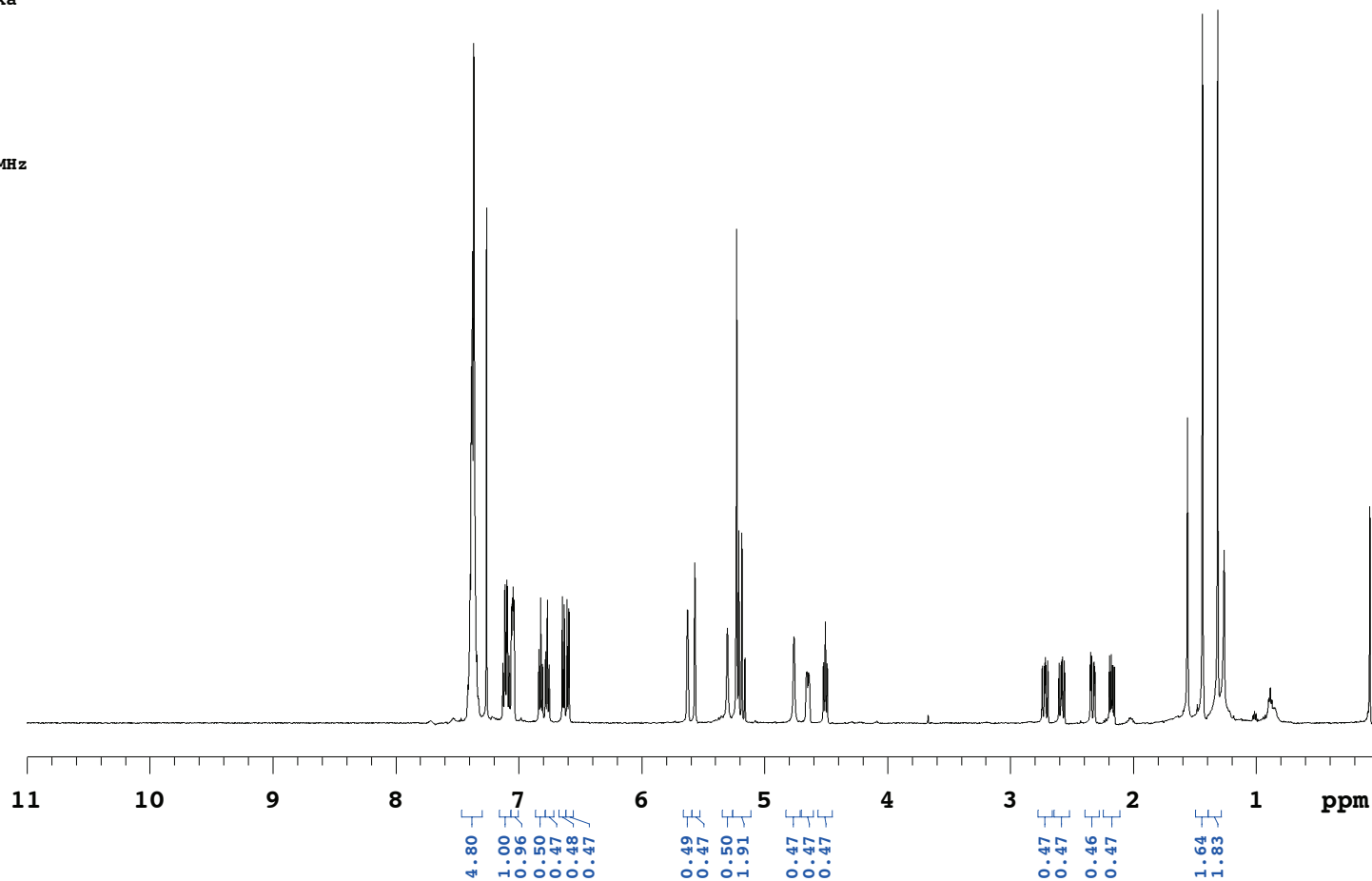
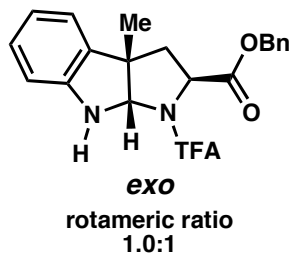
DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 3 min 40 sec

pyrroloindoline product from reaction  
with 3-methylindole



JN-1-191-minordiast

Sample Name:

JN-1-191-minordiast

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-191-minordiast

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 18 2010

Temp. 25.0 C / 298.1 K

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

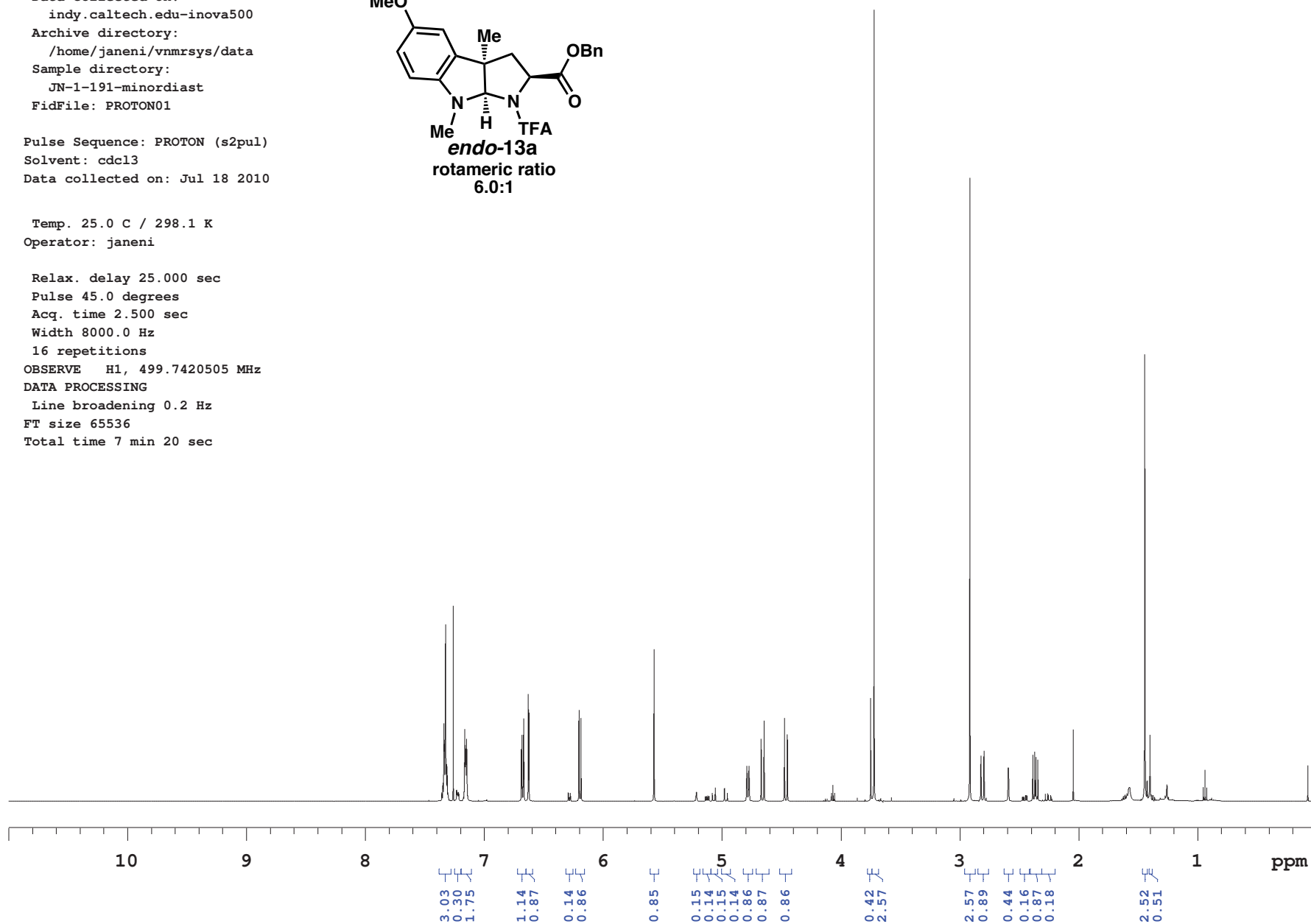
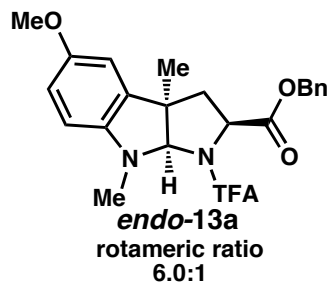
OBSERVE H1, 499.7420505 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



JN-1-195-majordiast4

Sample Name:

JN-1-195-majordiast4

Data Collected on:

indy.caltech.edu-inova500

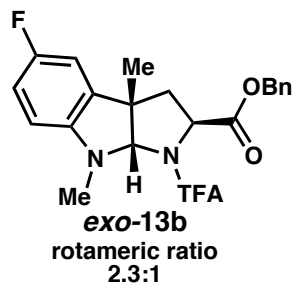
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-195-majordiast4

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 16 2010

Temp. 25.0 C / 298.1 K

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

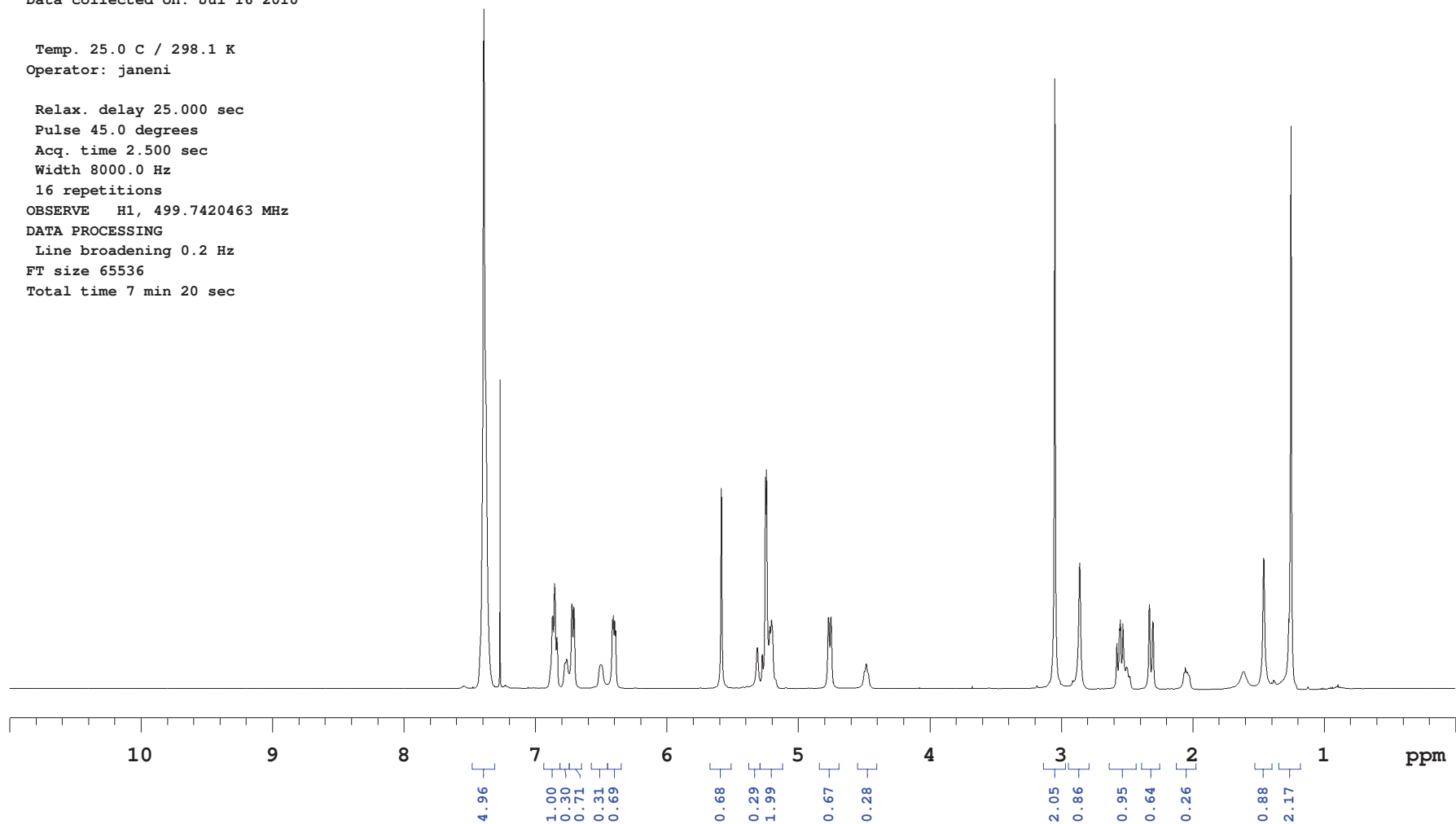
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



JN-1-195-minordiast

Sample Name:

JN-1-195-minordiast

Data Collected on:

indy.caltech.edu-inova500

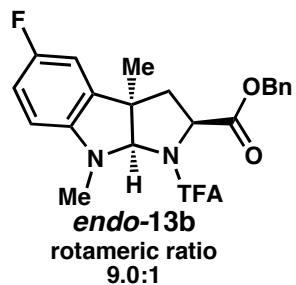
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-195-minordiast

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 15 2010

Temp. 25.0 C / 298.1 K

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

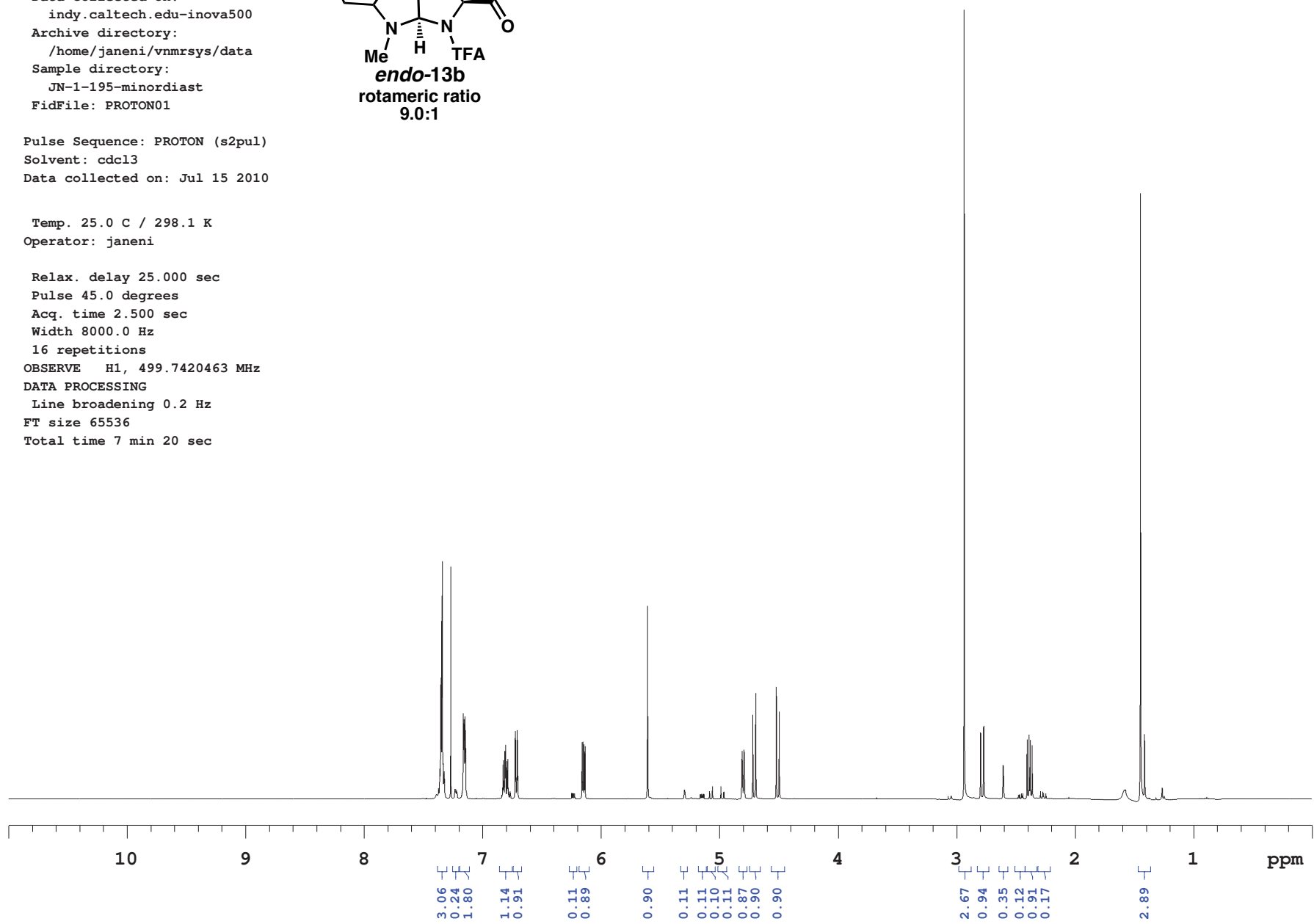
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



JN-1-171-majdiast

Sample Name:

JN-1-171-majdiast

Data Collected on:

siena.caltech.edu-vmrs400

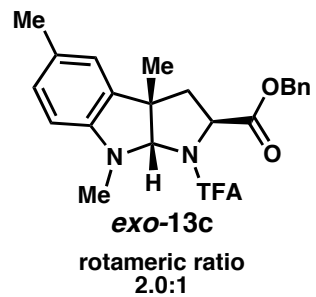
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-171-majdiast

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 14 2010

Temp. 25.0 C / 298.1 K

Sample #4, Operator: jni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

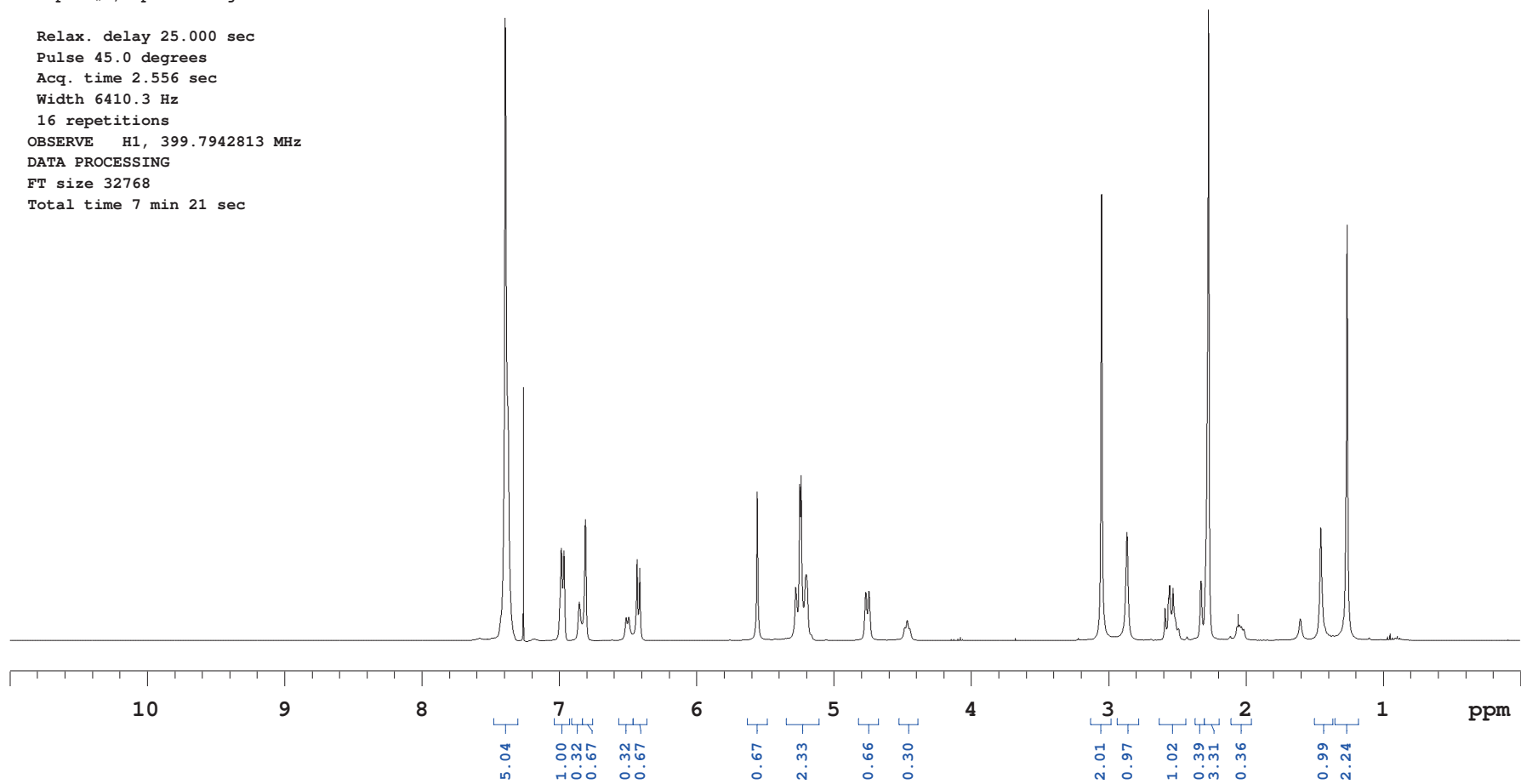
16 repetitions

OBSERVE H1, 399.7942813 MHz

DATA PROCESSING

FT size 32768

Total time 7 min 21 sec



JN-1-171-mindiast2

Sample Name:

JN-1-171-mindiast2

Data Collected on:

hg3.caltech.edu-mercury300

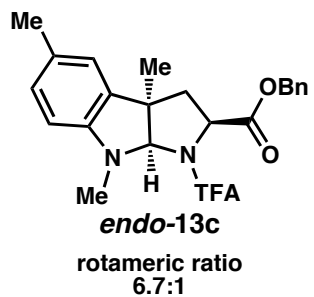
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-171-mindiast2

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 13 2010

Temp. 25.0 C / 298.1 K

Sample #17, Operator: jni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 1.706 sec

Width 4810.0 Hz

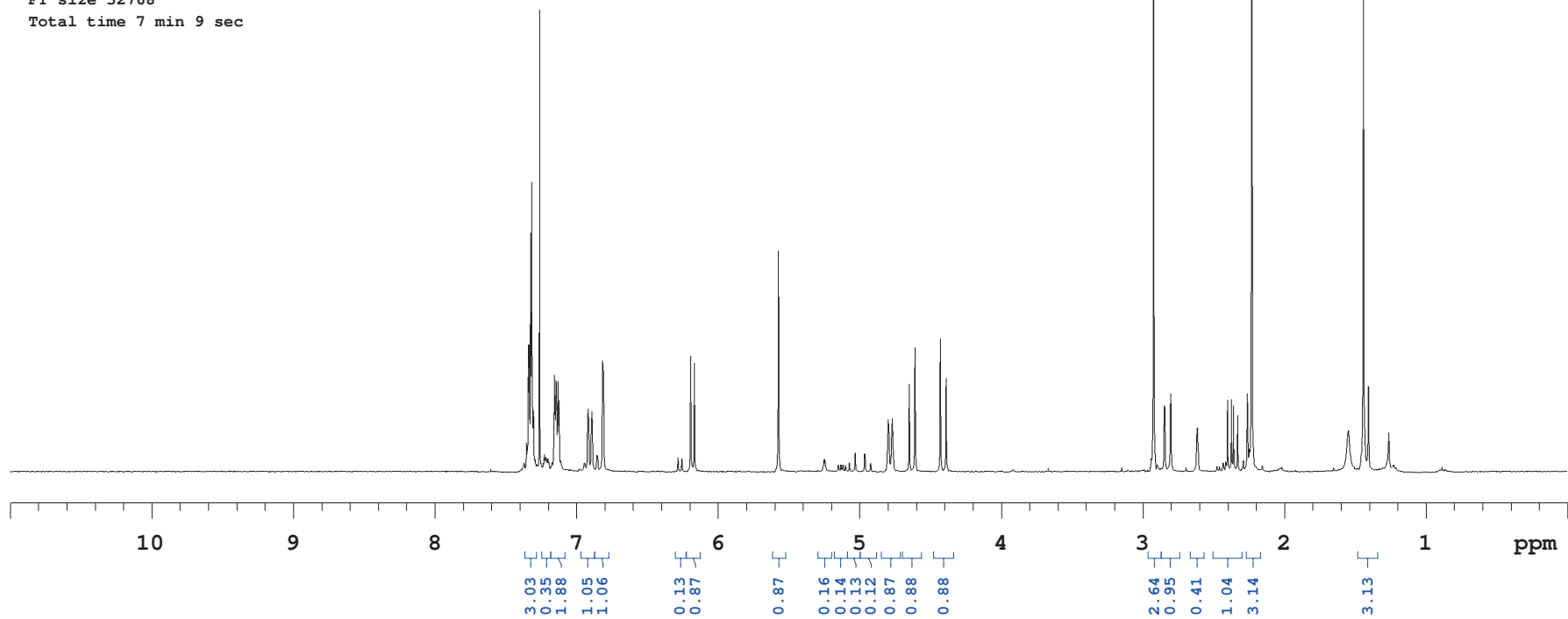
16 repetitions

OBSERVE H1, 300.0862580 MHz

DATA PROCESSING

FT size 32768

Total time 7 min 9 sec





LMRIV-177-majordr-hs qc2

Sample Name:

LMRIV-177-majordr-hs qc2

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/lrepka/vnmr sys/data

Sample directory:

LMRIV-177-majordr-hs qc2

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 31 2010

Operator: lrepka

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

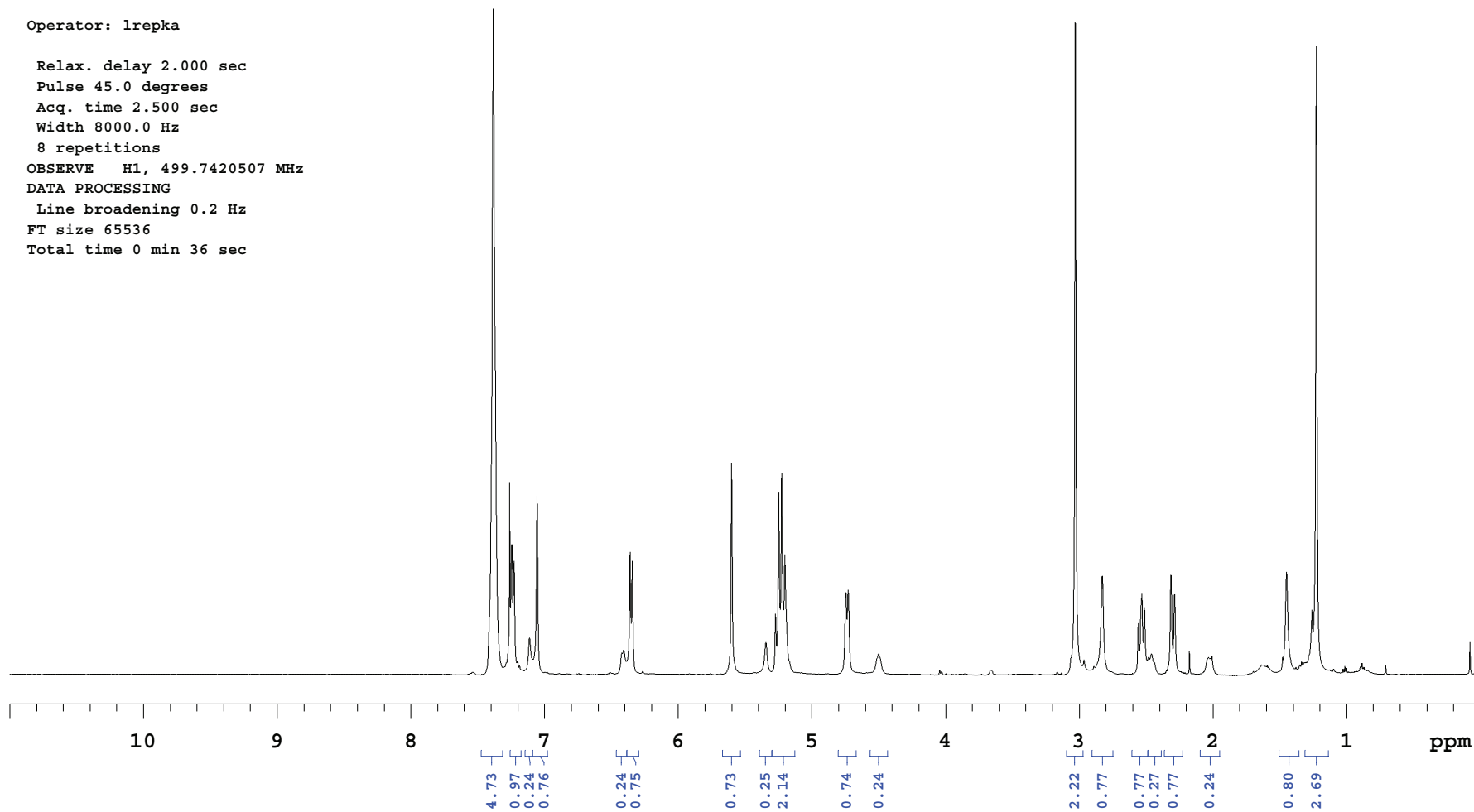
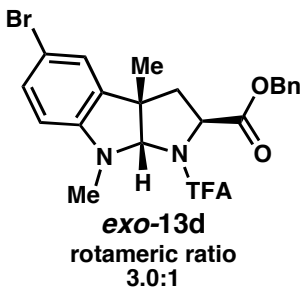
OBSERVE H1, 499.7420507 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 36 sec



LMRIV-177-minordr-hs qc

Sample Name:

LMRIV-177-minordr-hs qc

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-177-minordr-hs qc

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 1 2010

Operator: lrepka

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

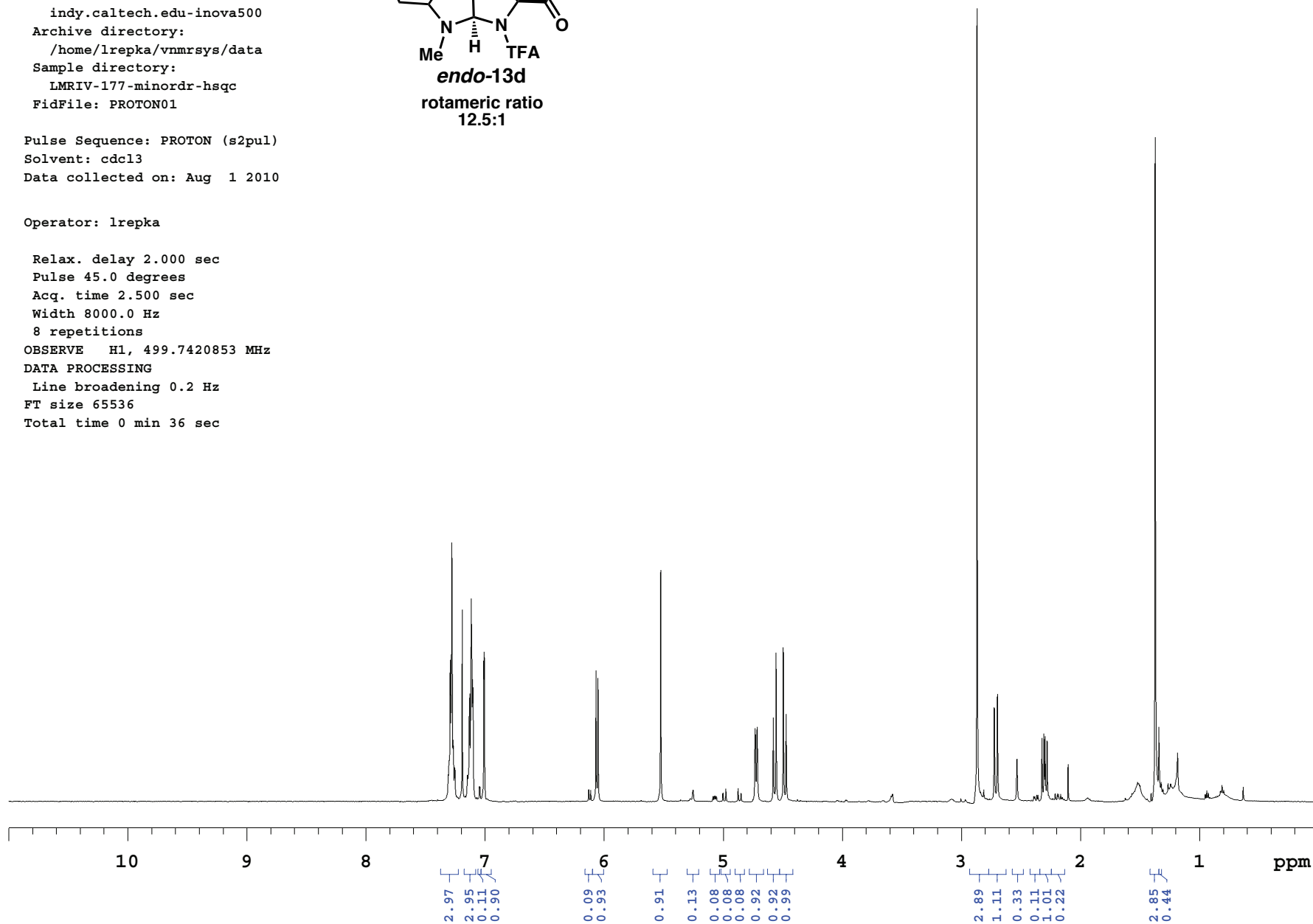
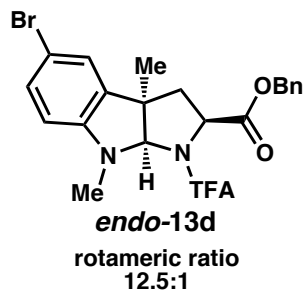
OBSERVE H1, 499.7420853 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 0 min 36 sec



JN-1-215-majordiast2

Sample Name:

JN-1-215-majordiast2

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-215-majordiast2

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Aug 3 2010

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

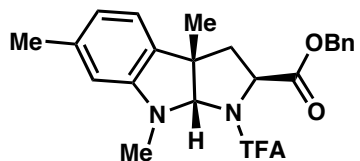
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

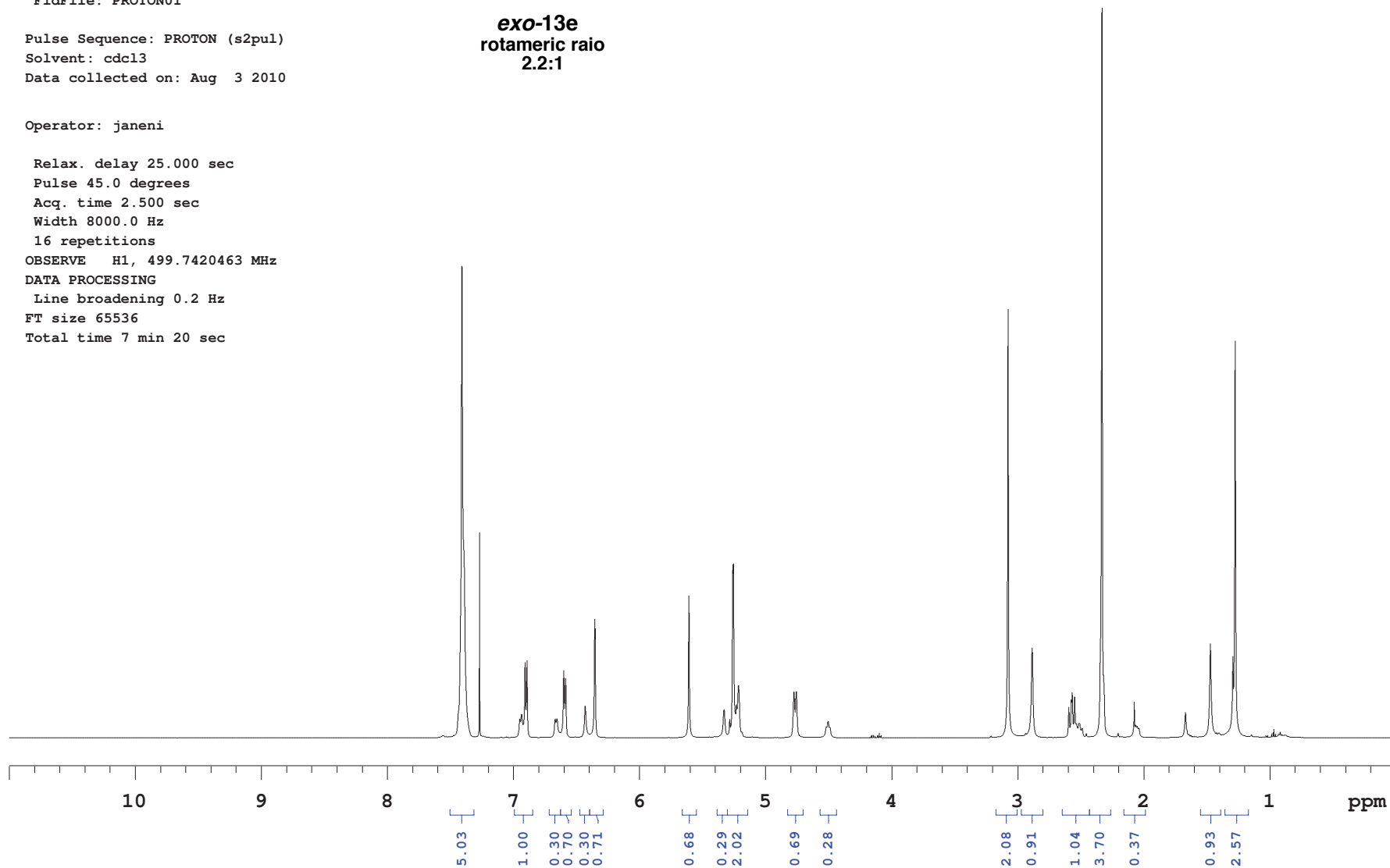
Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



**exo-13e**  
**rotameric ratio**  
**2.2:1**



JN-1-215-minordiast2

Sample Name:

JN-1-215-minordiast2

Data Collected on:

indy.caltech.edu-inova500

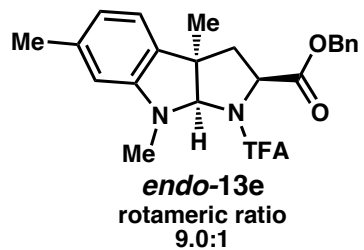
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-215-minordiast2

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Aug 2 2010

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

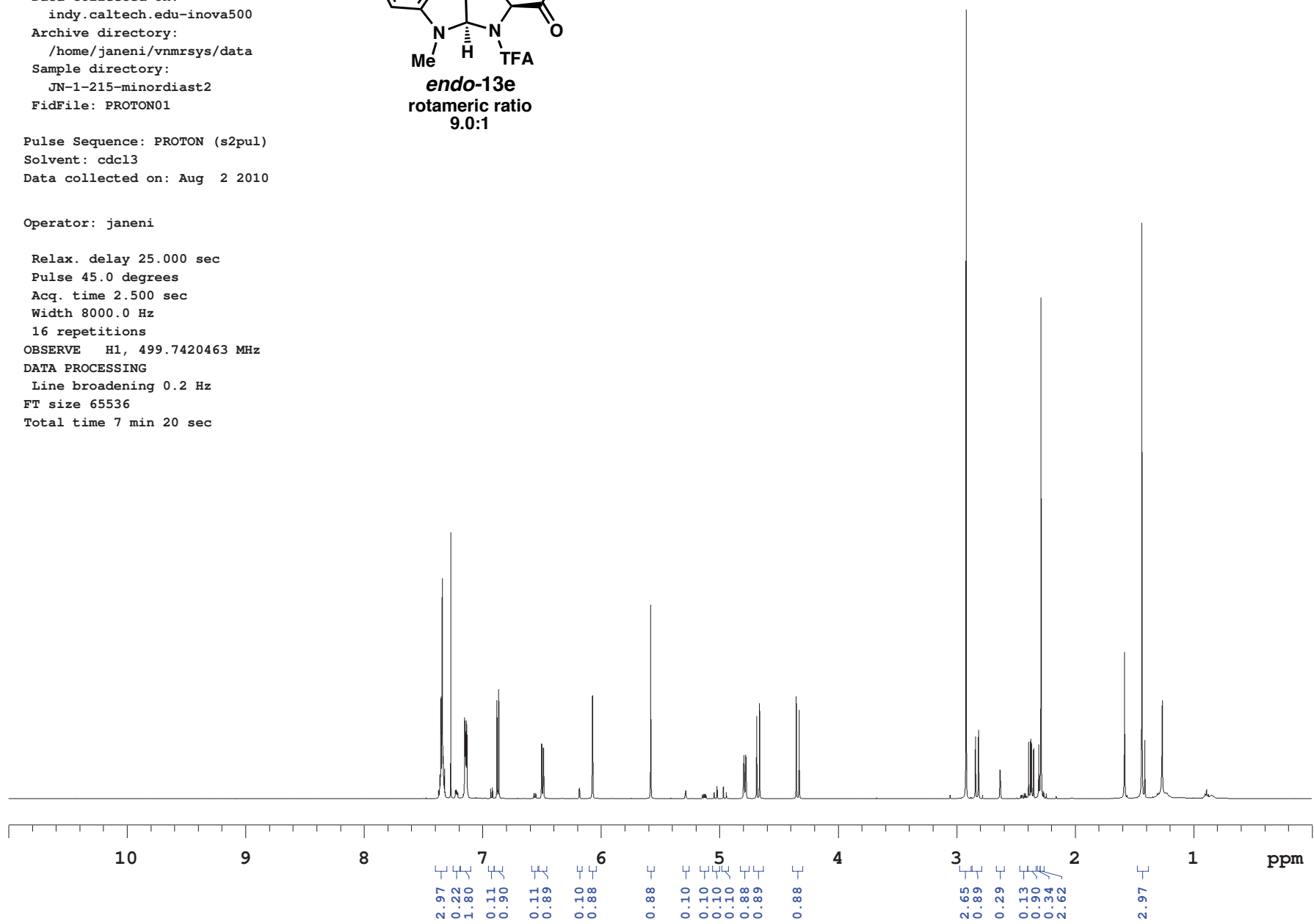
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 7 min 20 sec



LMRIV-285-major-rd25

Sample Name:

LMRIV-285-major-rd25

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-285-major-rd25

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 30 2010

Operator: lrepka

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

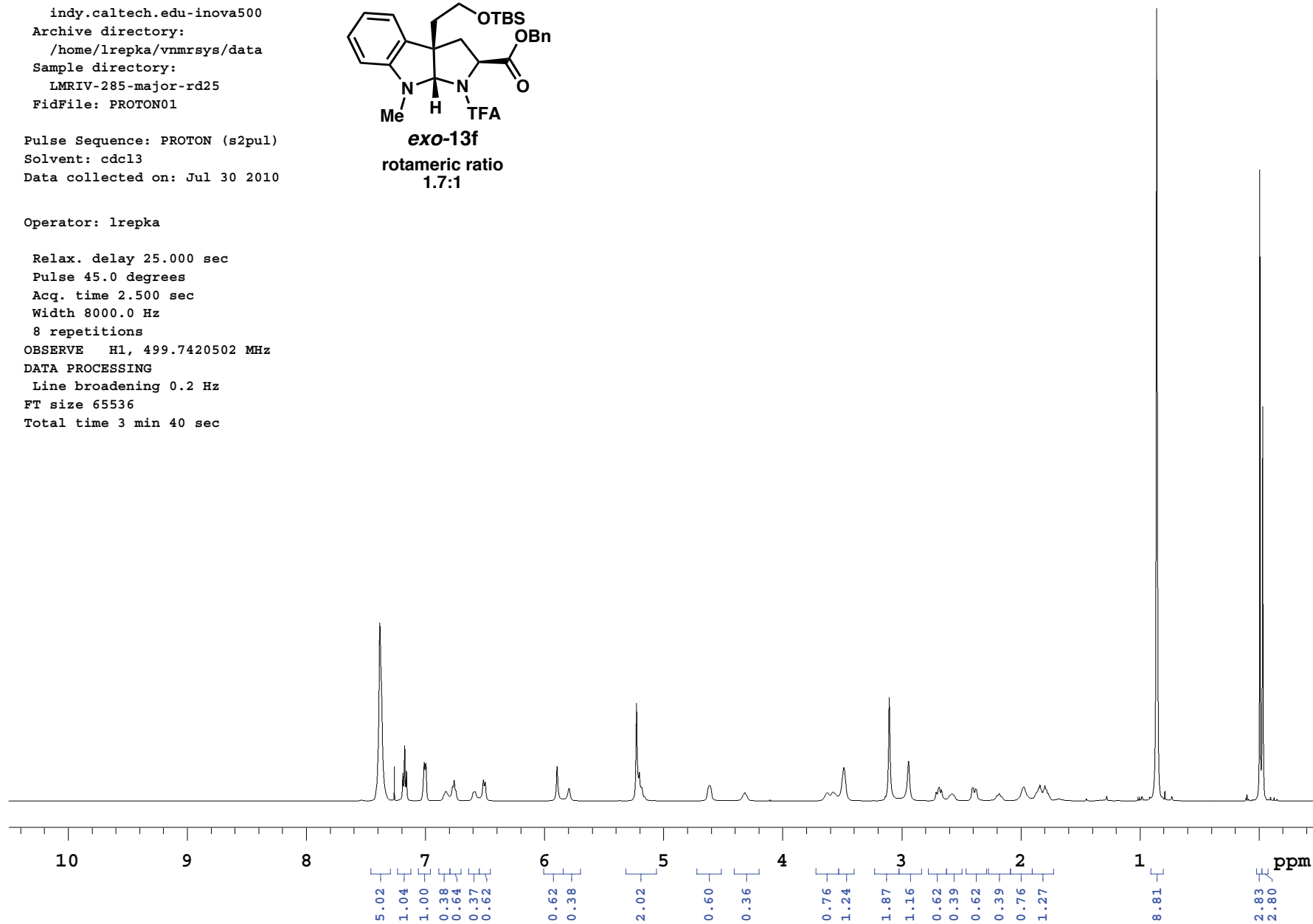
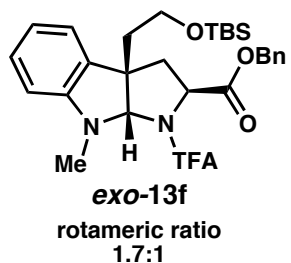
OBSERVE H1, 499.7420502 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 3 min 40 sec



LMRIV-285-minor-rd25

Sample Name:

LMRIV-285-minor-rd25

Data Collected on:

indy.caltech.edu-inova500

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-285-minor-rd25

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 30 2010

Operator: lrepka

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

8 repetitions

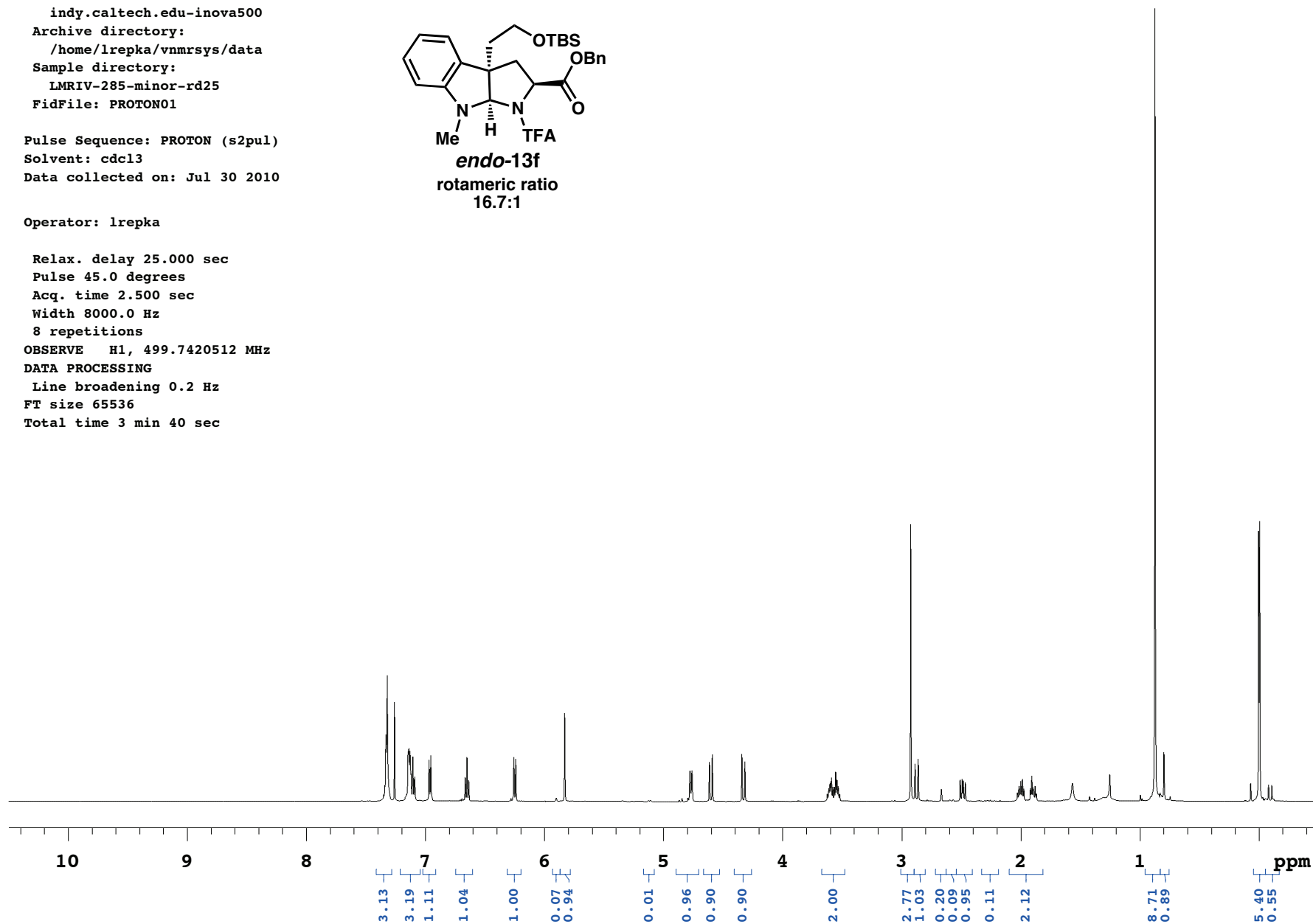
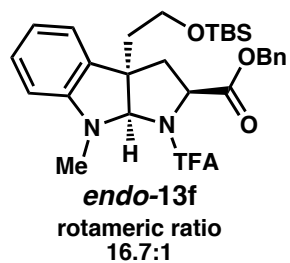
OBSERVE H1, 499.7420512 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

Total time 3 min 40 sec



LMRIV-275-pentanewash

Sample Name:

LMRIV-275-pentanewash

Data Collected on:

hg3.caltech.edu-mercury300

Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-275-pentanewash

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 14 2010

Temp. 25.0 C / 298.1 K

Sample #33, Operator: lrepka

Relax. delay 2.000 sec

Pulse 45.0 degrees

Acq. time 1.706 sec

Width 4810.0 Hz

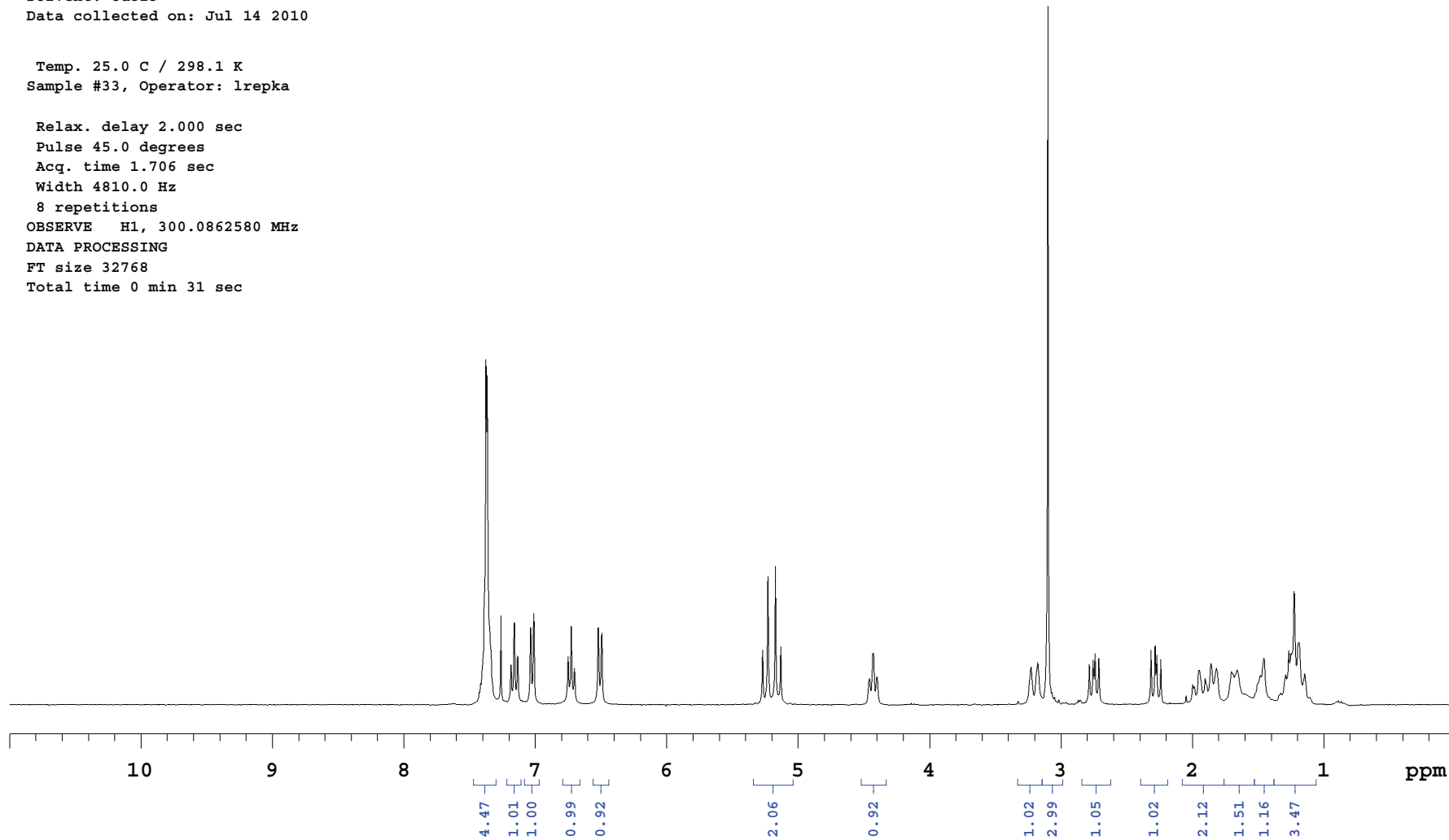
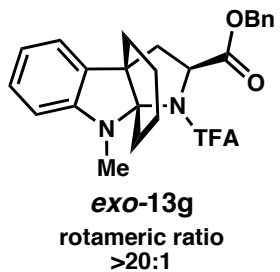
8 repetitions

OBSERVE H1, 300.0862580 MHz

DATA PROCESSING

FT size 32768

Total time 0 min 31 sec



LMRIV-267-major diastereomer

Sample Name:

LMRIV-267-majordr

Data Collected on:

indy.caltech.edu-inova500

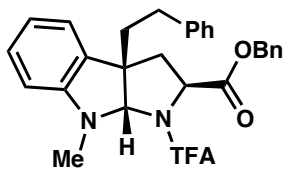
Archive directory:

/home/lrepka/vnmrSYS/data

Sample directory:

LMRIV-267-majordr

FidFile: PROTON01



**exo-13h**  
**rotameric ratio**  
**2.6:1**

Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 19 2010

Temp. 25.0 C / 298.1 K

Operator: lrepka

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

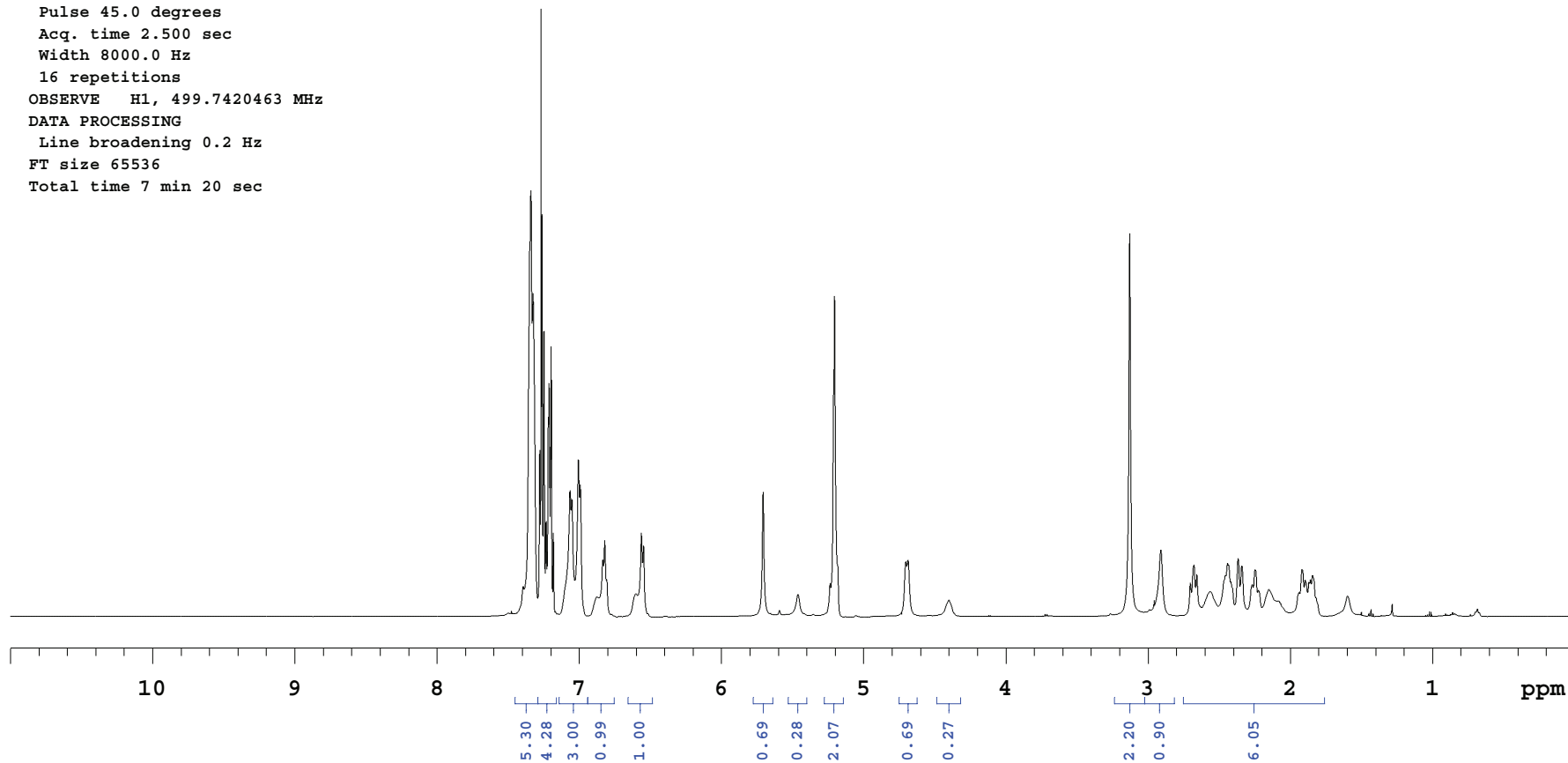
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

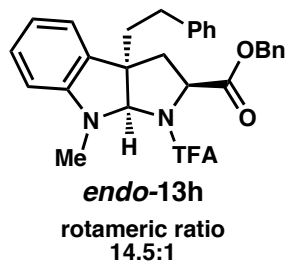
Total time 7 min 20 sec





LMRIV-267-minor3

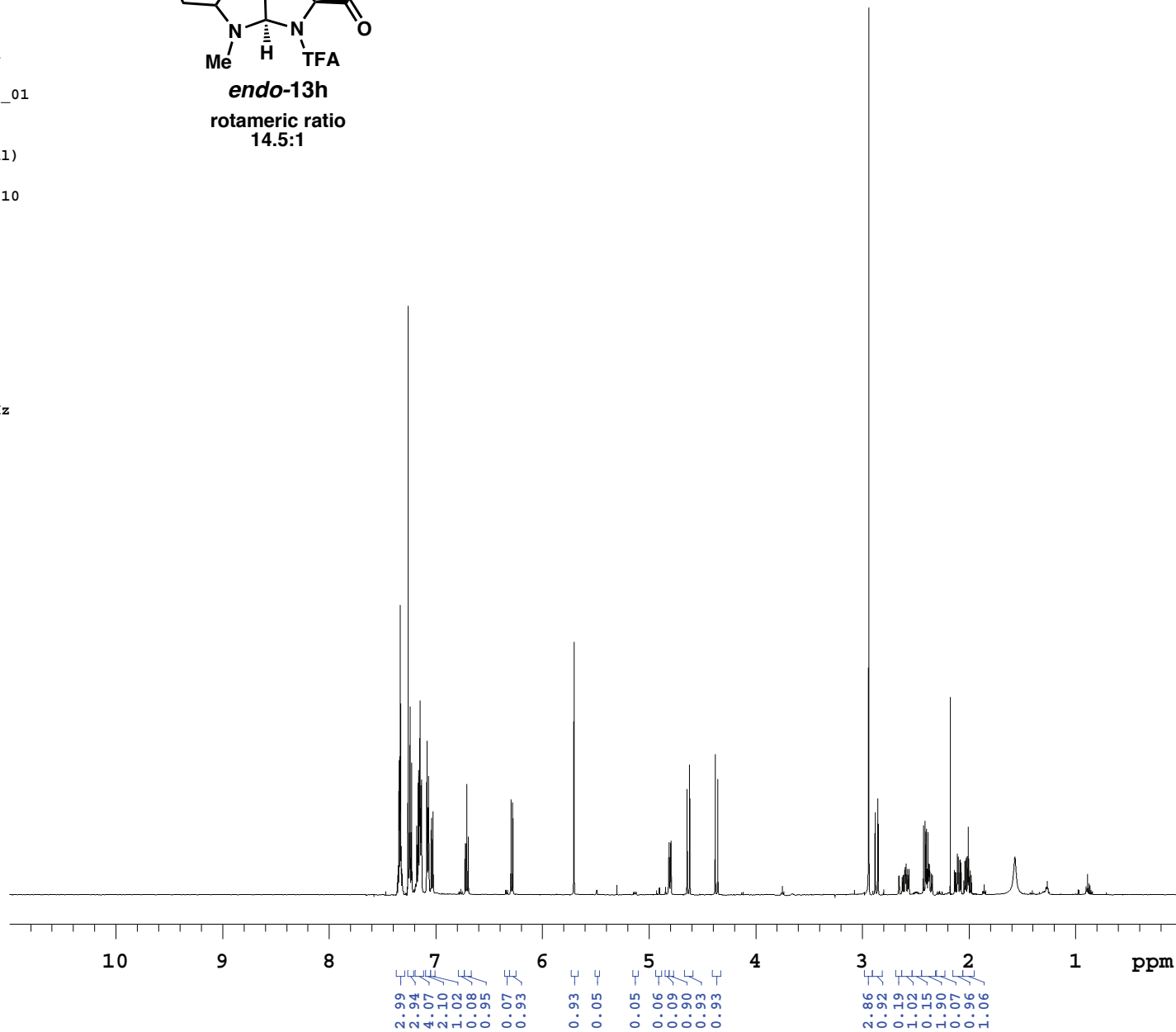
Sample Name:  
LMRIV-267-minor3  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/lrepka/vnmrsys/data  
Sample directory:  
LMRIV-267-minor3\_20100717\_01  
FidFile: data\_s2pul\_001



Pulse Sequence: PROTON (s2pul)  
Solvent: CDCl3  
Data collected on: Jul 17 2010

Temp. 25.0 C / 298.1 K  
Operator: lrepka

Relax. delay 25.000 sec  
Pulse 45.0 degrees  
Acq. time 2.049 sec  
Width 7996.0 Hz  
8 repetitions  
OBSERVE H1, 499.7420487 MHz  
DATA PROCESSING  
FT size 32768  
Total time 3 min 36 sec



JN-1-211-majordiast

Sample Name:

JN-1-211-majordiast

Data Collected on:

siena.caltech.edu-vnmrs400

Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-211-majordiast

FidFile: PROTON01

Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 28 2010

Temp. 25.0 C / 298.1 K

Sample #6, Operator: jni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

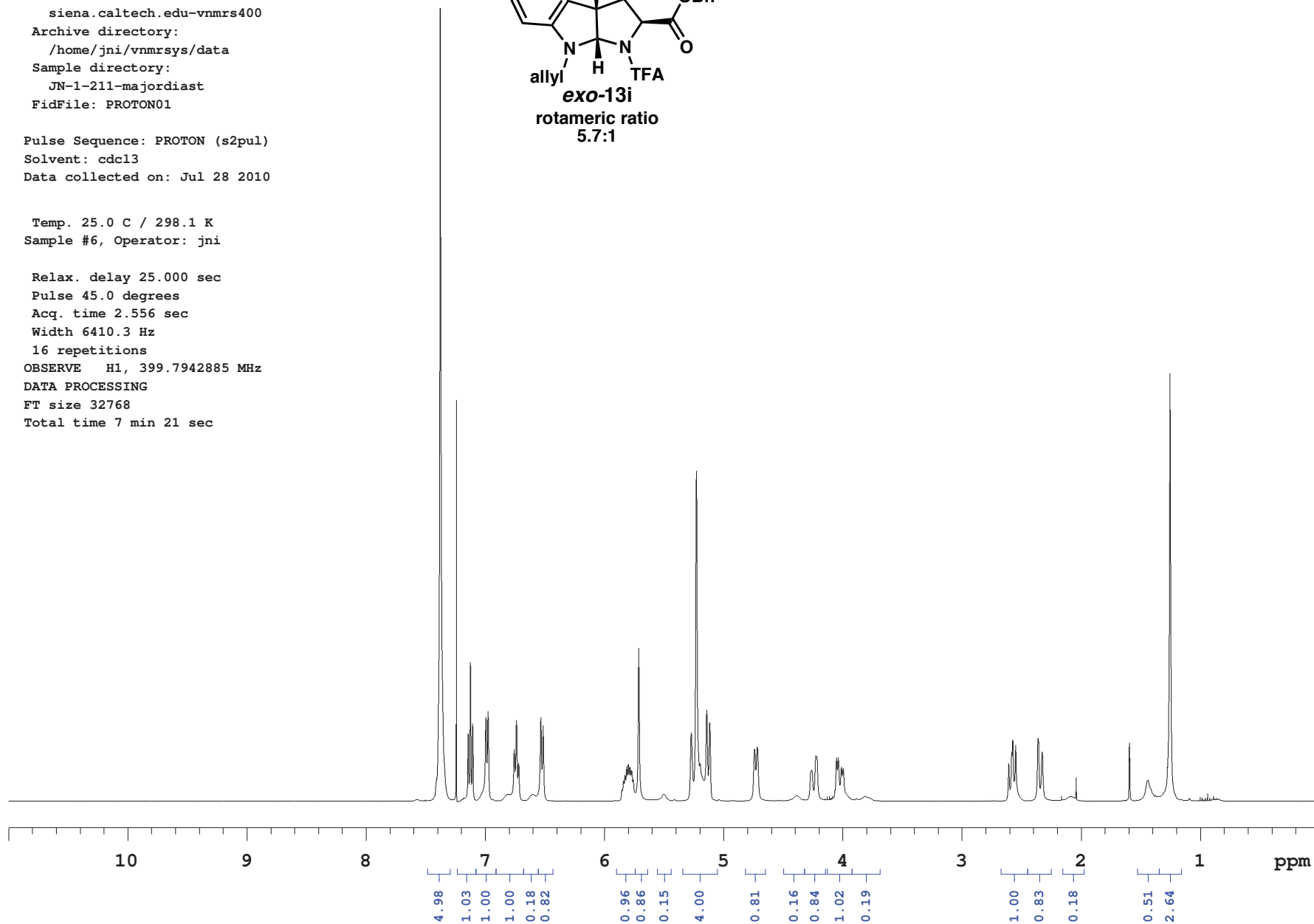
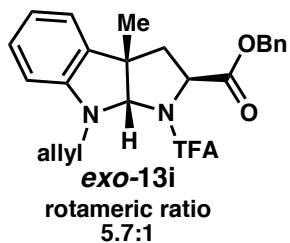
16 repetitions

OBSERVE H1, 399.7942885 MHz

DATA PROCESSING

FT size 32768

Total time 7 min 21 sec



JN-1-211-minordiast

Sample Name:

JN-1-211-minordiast

Data Collected on:

indy.caltech.edu-inova500

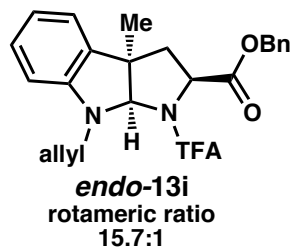
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-211-minordiast

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 28 2010

Operator: janeni

Relax. delay 25.000 sec

Pulse 45.0 degrees

Acq. time 2.500 sec

Width 8000.0 Hz

16 repetitions

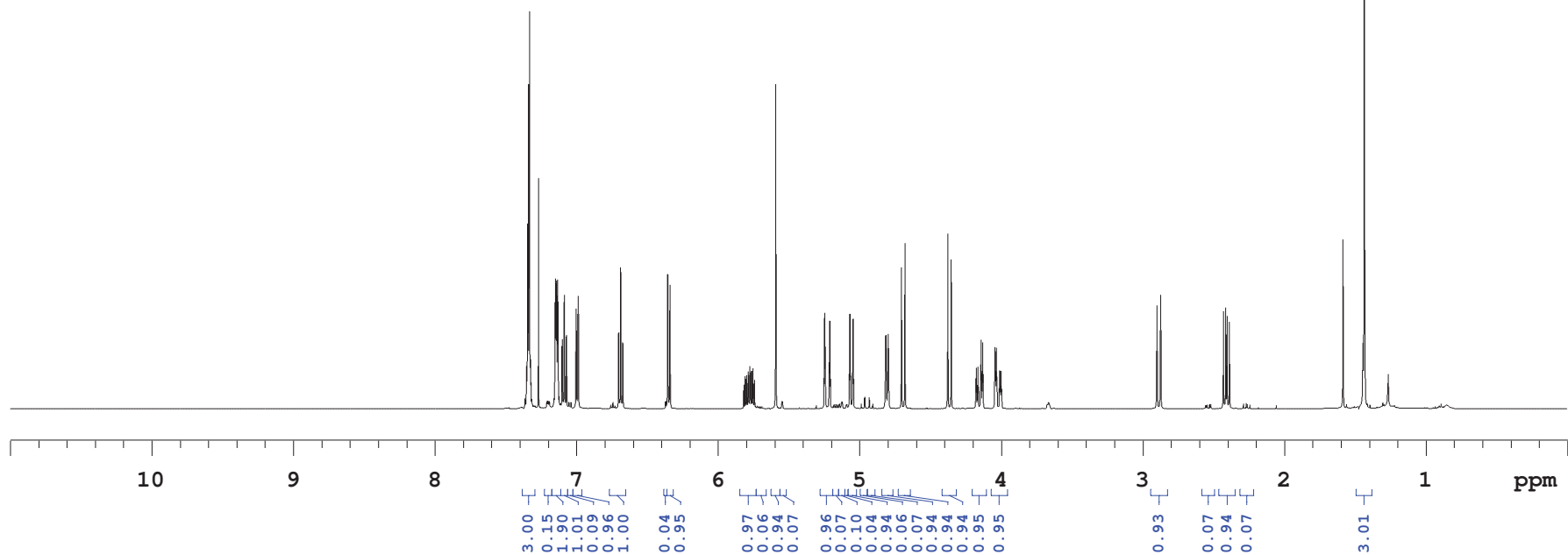
OBSERVE H1, 499.7420463 MHz

DATA PROCESSING

Line broadening 0.2 Hz

FT size 65536

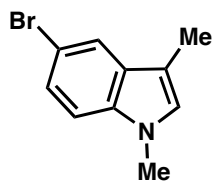
Total time 7 min 20 sec



# Indole Substrates and Intermediates:

JN-1-181-col

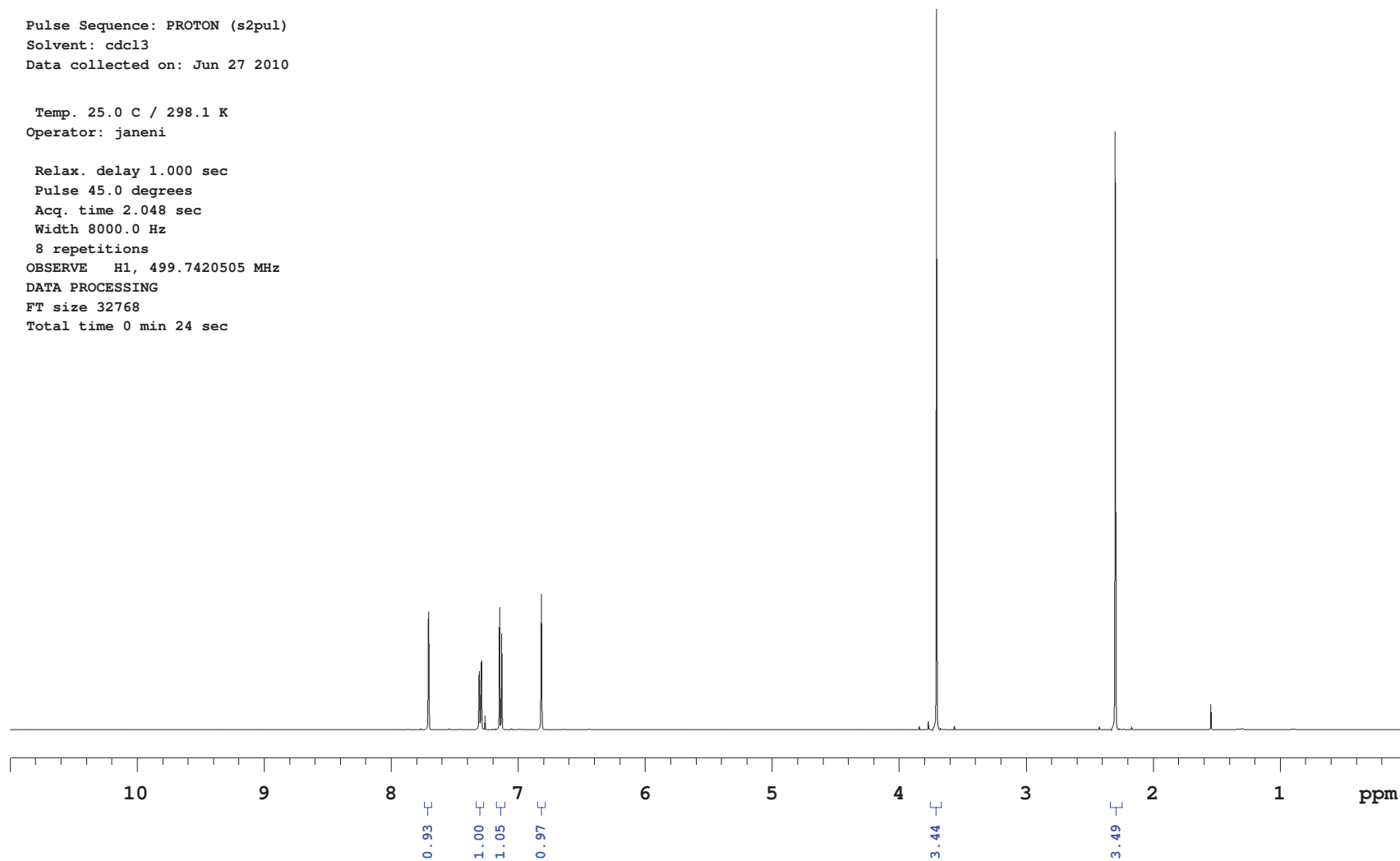
Sample Name:  
JN-1-181-col  
Data Collected on:  
indy.caltech.edu-inova500  
Archive directory:  
/home/janeni/vnmrsys/data  
Sample directory:  
JN-1-181-col  
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdc13  
Data collected on: Jun 27 2010

Temp. 25.0 C / 298.1 K  
Operator: janeni

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 2.048 sec  
Width 8000.0 Hz  
8 repetitions  
OBSERVE H1, 499.7420505 MHz  
DATA PROCESSING  
FT size 32768  
Total time 0 min 24 sec



JN-1-183-col2

Sample Name:

JN-1-183-col2

Data Collected on:

indy.caltech.edu-inova500

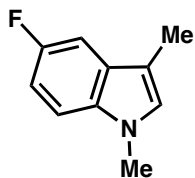
Archive directory:

/home/janeni/vnmrsys/data

Sample directory:

JN-1-183-col2

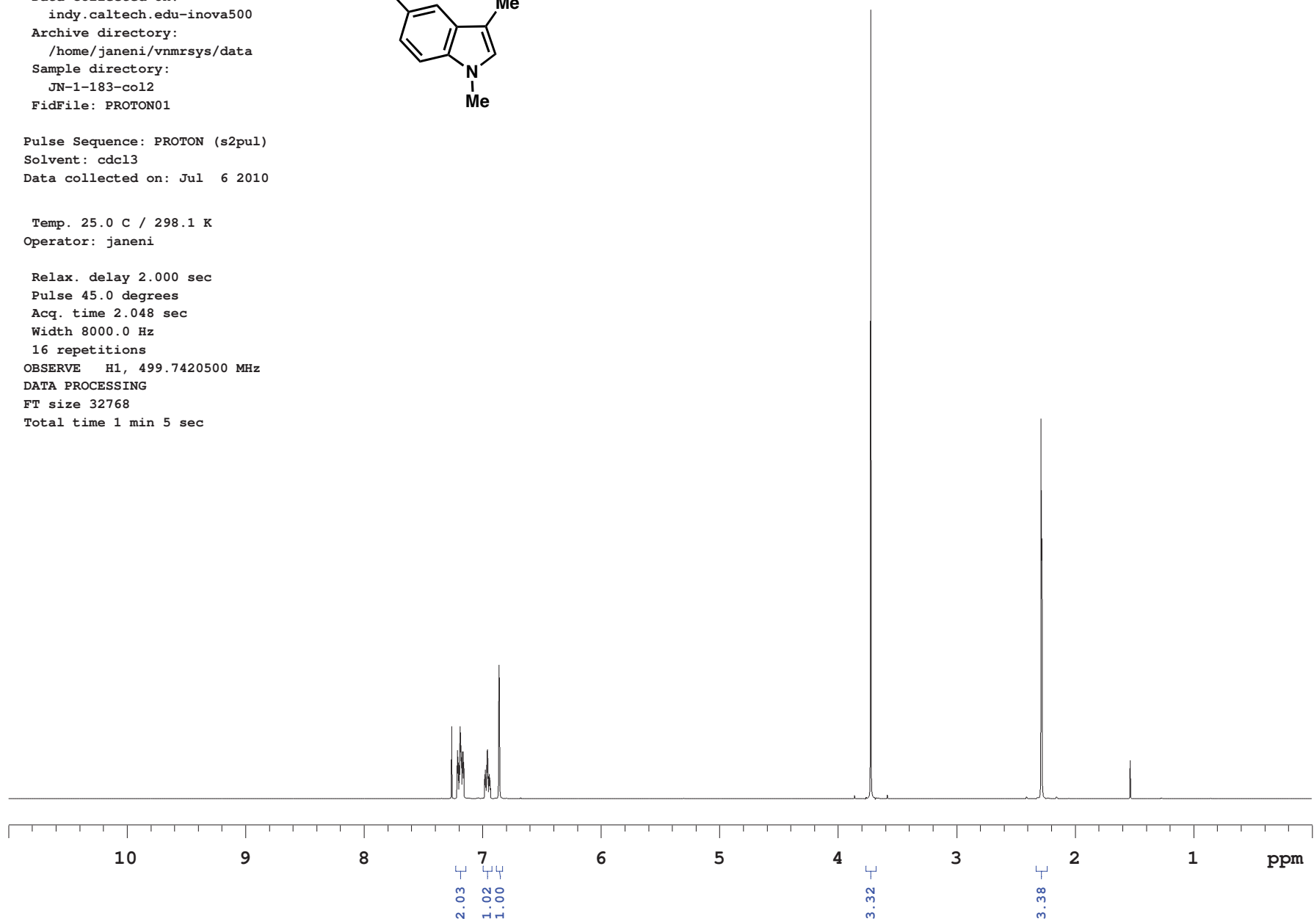
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 6 2010

Temp. 25.0 C / 298.1 K  
Operator: janeni

Relax. delay 2.000 sec  
Pulse 45.0 degrees  
Acq. time 2.048 sec  
Width 8000.0 Hz  
16 repetitions  
OBSERVE H1, 499.7420500 MHz  
DATA PROCESSING  
FT size 32768  
Total time 1 min 5 sec



JN-1-197-col

Sample Name:

JN-1-197-col

Data Collected on:

hg3.caltech.edu-mercury300

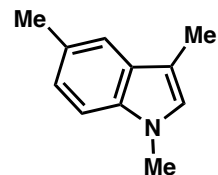
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-197-col

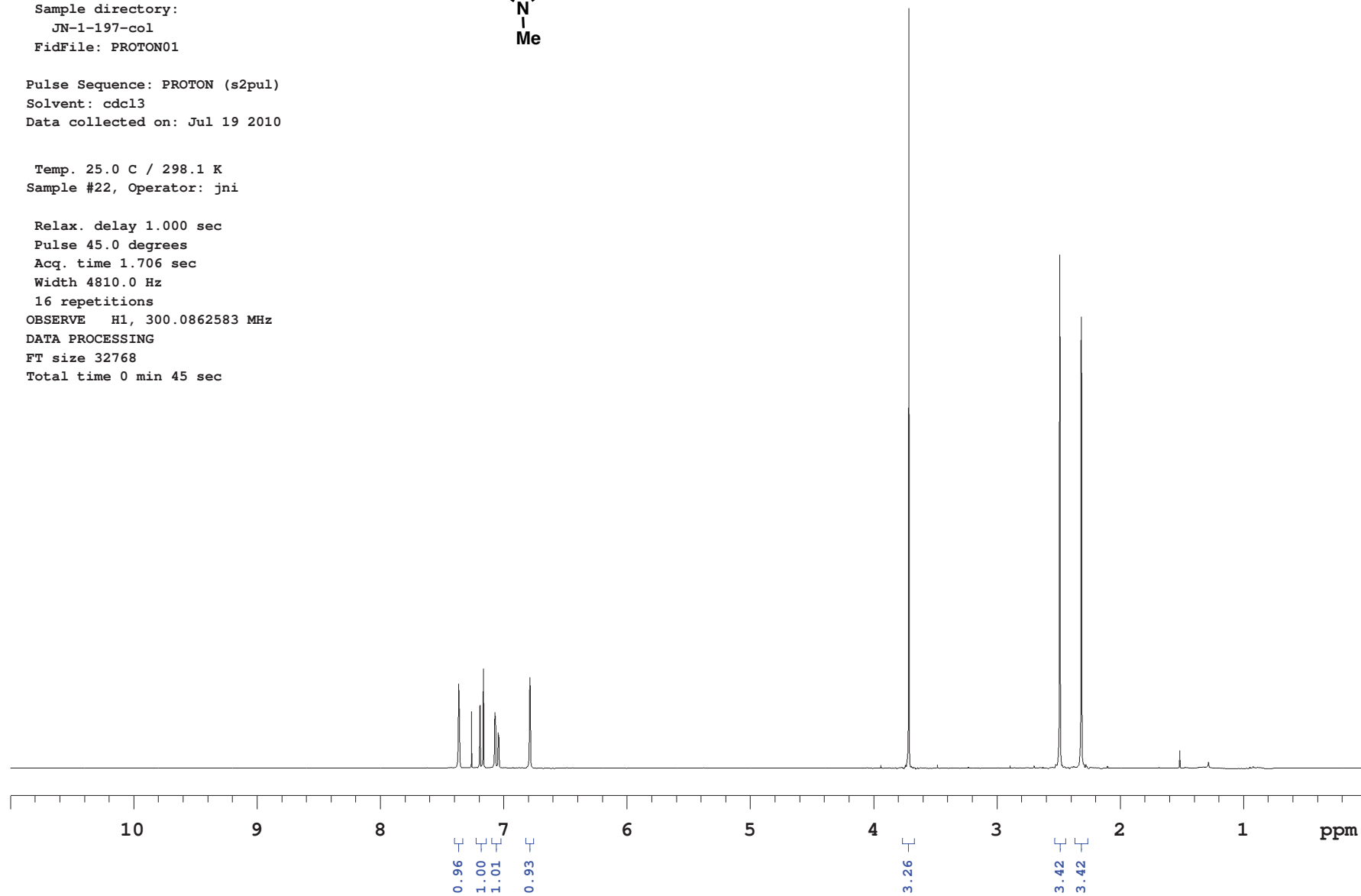
FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)  
Solvent: cdcl3  
Data collected on: Jul 19 2010

Temp. 25.0 C / 298.1 K  
Sample #22, Operator: jni

Relax. delay 1.000 sec  
Pulse 45.0 degrees  
Acq. time 1.706 sec  
Width 4810.0 Hz  
16 repetitions  
OBSERVE H1, 300.0862583 MHz  
DATA PROCESSING  
FT size 32768  
Total time 0 min 45 sec



JN-1-199-col

Sample Name:

JN-1-199-col

Data Collected on:

siena.caltech.edu-vmrms400

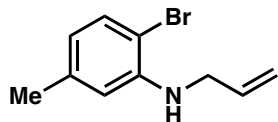
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-199-col

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 24 2010

Temp. 26.0 C / 299.1 K

Sample #11, Operator: jni

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

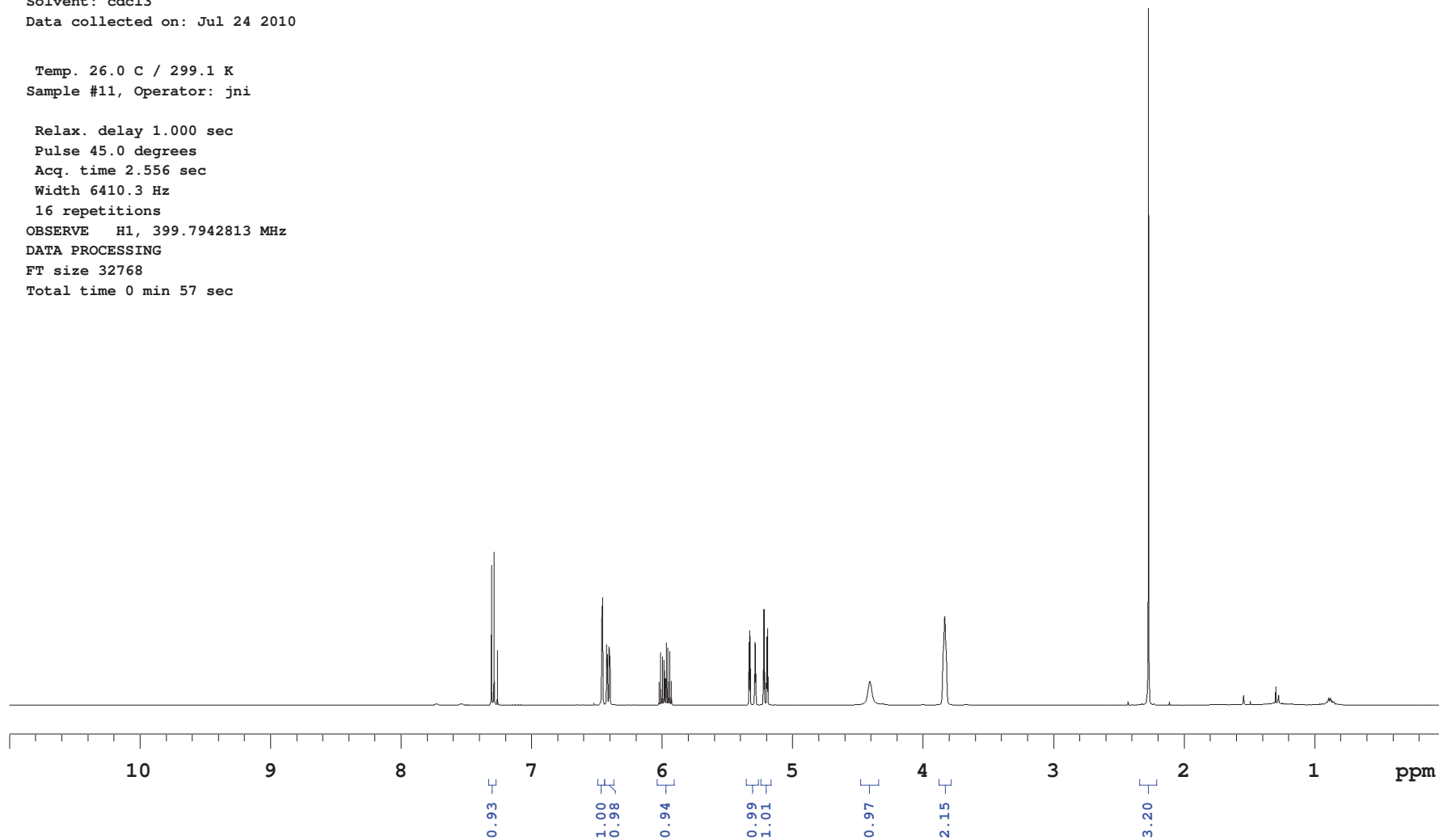
16 repetitions

OBSERVE H1, 399.7942813 MHz

DATA PROCESSING

FT size 32768

Total time 0 min 57 sec



JN-1-201-col

Sample Name:

JN-1-201-col

Data Collected on:

siena.caltech.edu-vnmrs400

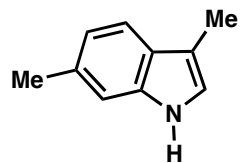
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-201-col

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 24 2010

Temp. 26.0 C / 299.1 K

Sample #12, Operator: jni

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 2.556 sec

Width 6410.3 Hz

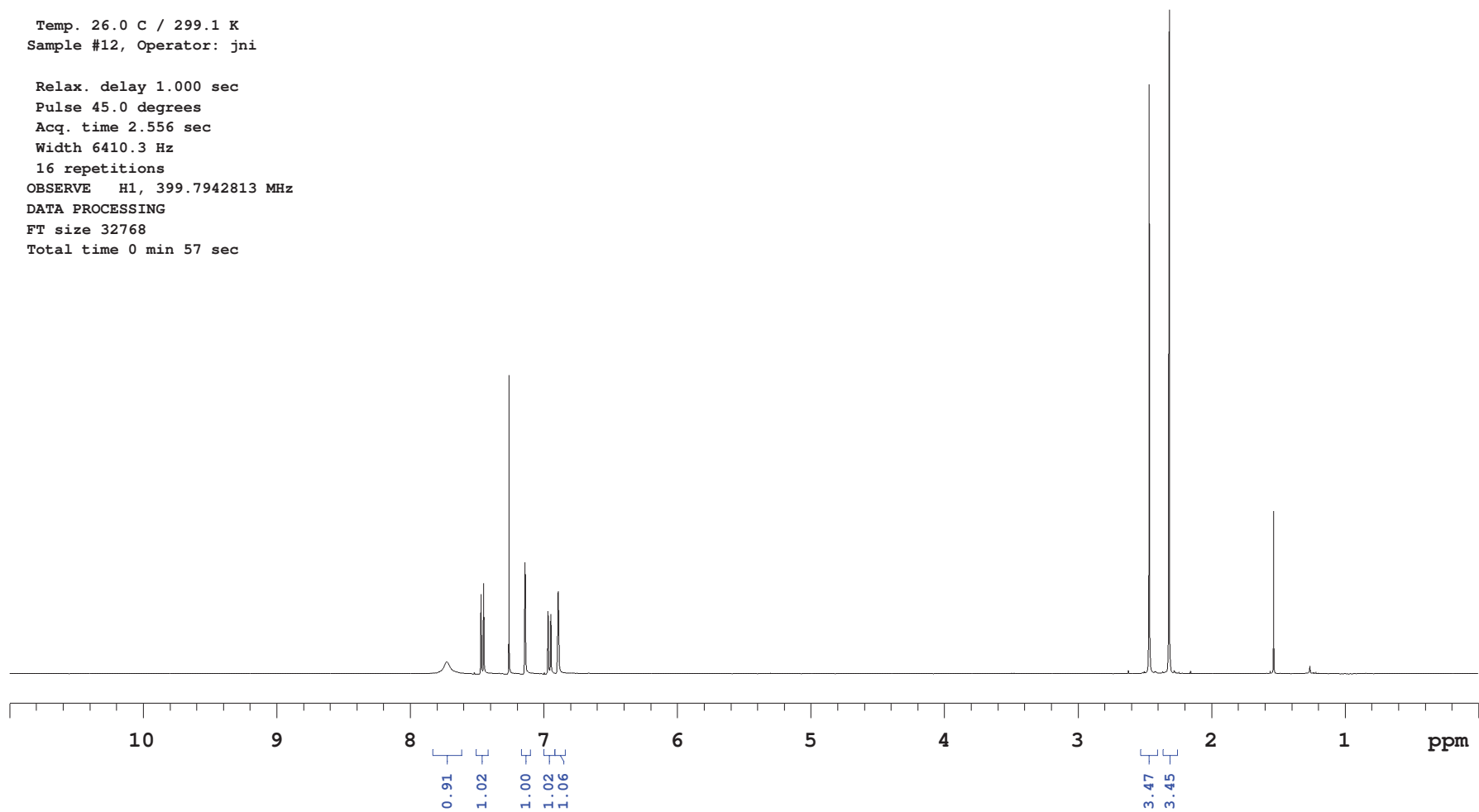
16 repetitions

OBSERVE H1, 399.7942813 MHz

DATA PROCESSING

FT size 32768

Total time 0 min 57 sec





JN-1-203-col

Sample Name:

JN-1-203-col

Data Collected on:

hg3.caltech.edu-mercury300

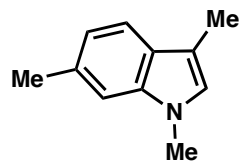
Archive directory:

/home/jni/vnmrsys/data

Sample directory:

JN-1-203-col

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdc13

Data collected on: Jul 19 2010

Temp. 25.0 C / 298.1 K

Sample #21, Operator: jni

Relax. delay 1.000 sec

Pulse 45.0 degrees

Acq. time 1.706 sec

Width 4810.0 Hz

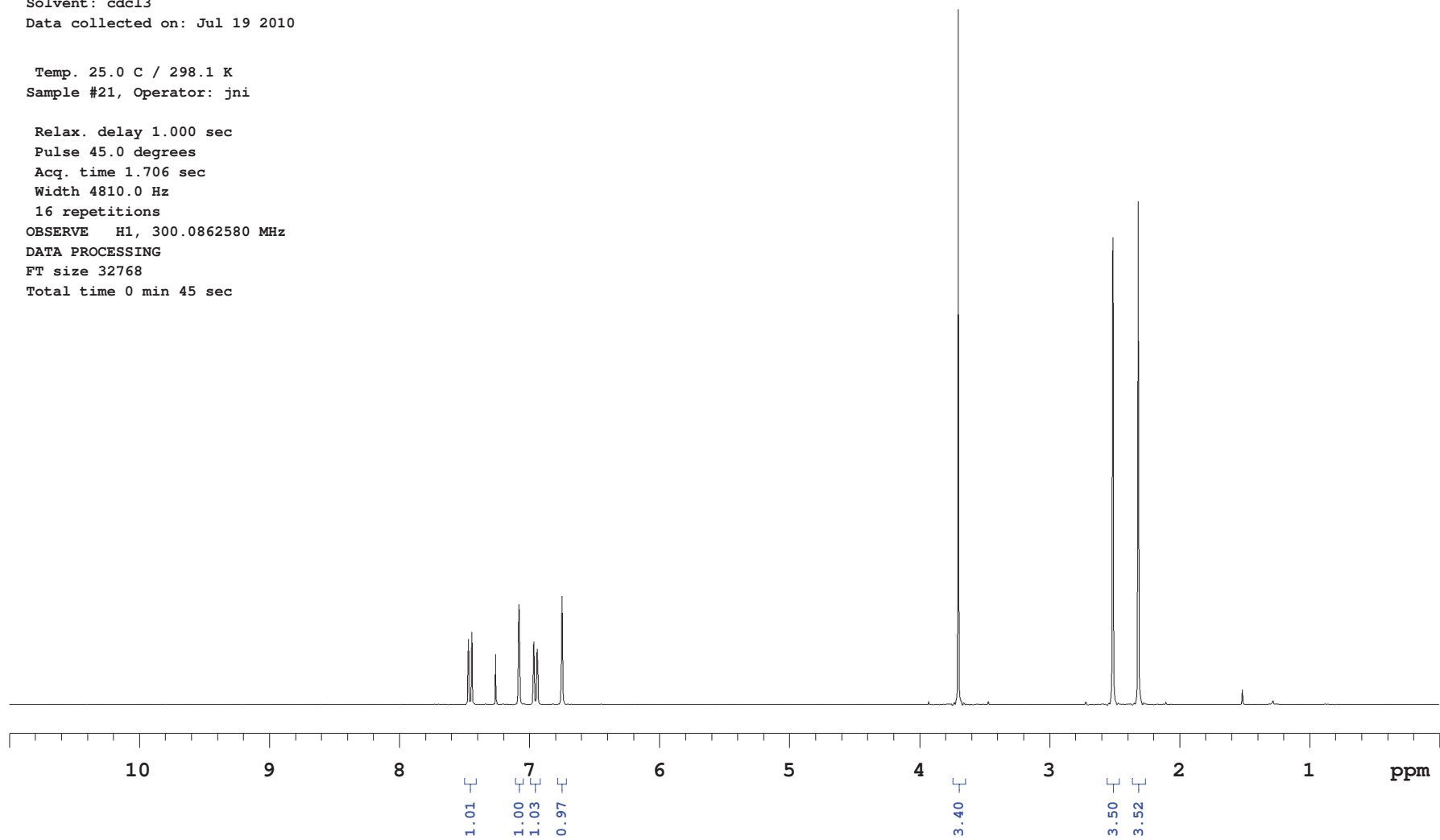
16 repetitions

OBSERVE H1, 300.0862580 MHz

DATA PROCESSING

FT size 32768

Total time 0 min 45 sec



LMRIV-N-me-TBstryptophol

Sample Name:

LMRIV-N-me-TBstryptophol

Data Collected on:

indy.caltech.edu-inova500

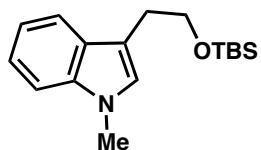
Archive directory:

/home/lrepka/vnmrsys/data

Sample directory:

LMRIV-N-me-TBstryptophol

FidFile: PROTON01



Pulse Sequence: PROTON (s2pul)

Solvent: cdcl3

Data collected on: Jul 10 2010

Temp. 25.0 C / 298.1 K

Operator: lrepka

Relax. delay 5.000 sec

Pulse 45.0 degrees

Acq. time 2.048 sec

Width 8000.0 Hz

16 repetitions

OBSERVE H1, 499.7420500 MHz

DATA PROCESSING

FT size 32768

Total time 1 min 53 sec

