

# The Reductive nitro-Mannich Route for the Synthesis of 1,2-Diamine Containing Indolines and Tetrahydroquinolines

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	13C.....	S192
<b>14n</b>	1H.....	S193
	13C.....	S194
<b>14o</b>	1H.....	S195
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<b>14s</b>	1H.....	S203
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## General experimental

Unless otherwise stated, all reactions were carried out under an atmosphere of nitrogen. All glassware was flame dried and allowed to cool under a stream of nitrogen before use. Cooling to 0 °C was effected using an ice-water bath. Cooling to temperatures below 0 °C was effected using dry ice-acetone mixtures. Reactions were monitored by thin layer chromatography (TLC) using Polygram<sup>®</sup> SIL G/UV<sub>254</sub> 0.25 mm silica gel precoated plastic plates with fluorescent indicator. Sheets were visualised using ultra-violet light (254 nm) and/or anisaldehyde or KMnO<sub>4</sub> solutions, as appropriate. Flash column chromatography was performed using Fluorochem silica gel 60, 35-70 μ. The liquid phase was analytical grade 40-60 petroleum ether (petrol) and ethyl acetate (EtOAc) unless otherwise noted.

## Purification of Solvents and Reagents:

Commercial solvents and reagents were used as supplied or purified in accordance with standard procedures, as described below.

Tetrahydrofuran (THF) was pre-dried over sodium wire and distilled under an atmosphere of dry nitrogen from sodium benzophenone ketal or obtained from a solvent tower, where degassed THF was passed through two columns of activated alumina and a 7 micron filter under 4 bar pressure.

Diethyl ether (Et<sub>2</sub>O) was pre-dried over sodium wire and distilled under an atmosphere of dry nitrogen from sodium benzophenone ketal or obtained from a solvent tower, where degassed Et<sub>2</sub>O was passed through two columns of activated alumina and a 7 micron filter under 4 bar pressure.

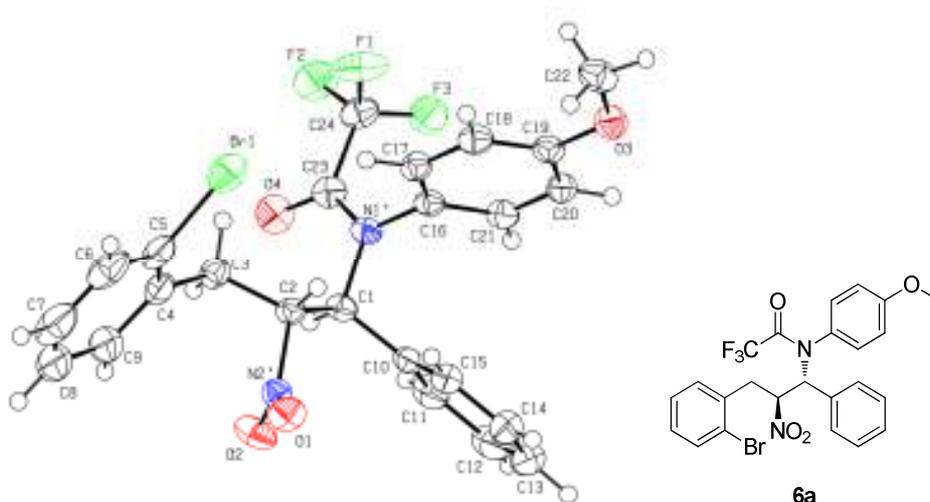
Toluene was obtained from a solvent tower, where degassed toluene was passed through two columns of activated alumina and a 7 micron filter under 4 bar pressure. Dichloromethane was distilled from calcium hydride powder or purchased as an analytical grade and stored over 4Å molecular sieves. Anhydrous MeCN was used as supplied.

## Characterization:

Melting points are uncorrected. Optical rotations were recorded at 25 °C and are reported in deg cm<sup>2</sup> g<sup>-1</sup>. Infrared spectra were recorded as a thin film on sodium chloride discs or as dilute chloroform solutions. <sup>1</sup>H and <sup>13</sup>C NMR spectra were recorded as dilute solutions in deuteriochloroform unless otherwise stated. All chemical shifts (δ) are reported in parts per million (ppm) relative to residual solvent peaks. All chemical shifts are reported relative to chloroform (δ<sub>H</sub> = 7.27 ppm, δ<sub>C</sub> = 77.1 ppm). Coupling constants (*J*) are reported in Hertz and

are recorded as observed in the spectrum without averaging. The multiplicity of an  $^1\text{H}$  signal is designated by the following abbreviations: m = multiplet, s = singlet, d = doublet, t = triplet, q = quartet and quin = quintet, br = broad signal.  $^{13}\text{C}$  multiplicities were assigned using a DEPT sequence. Where appropriate, HMQC and NOE experiments were carried out to aid assignment. For mass spectrometry, high resolution (HR) electrospray ionization ( $\text{ES}^+$ ) mass data was obtained using a time-of-flight (TOF) analyzer, and HR chemical ionization (CI) or electron impact (EI) mass data were recorded using an ion trap.

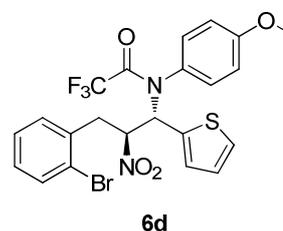
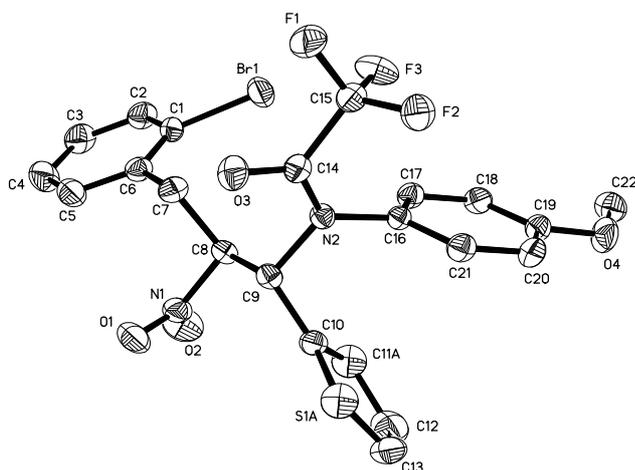
### Structures and X-ray structures:



Crystal data and structure refinement for BRNOCF at 150(2)K.

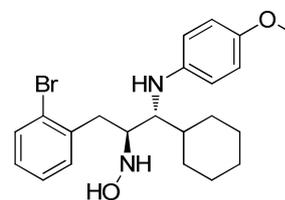
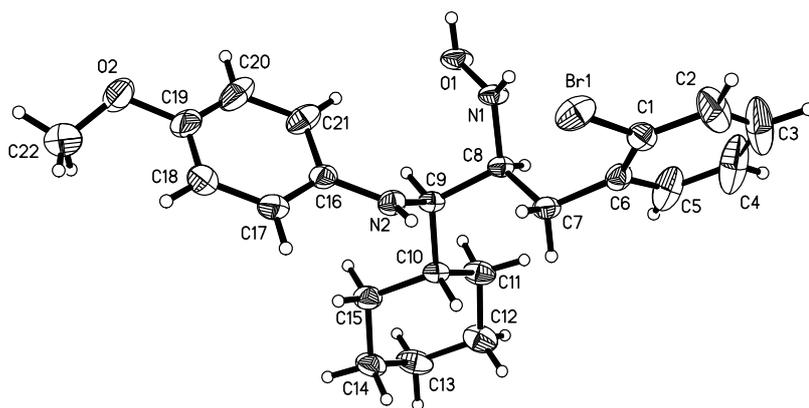
Empirical formula	$\text{C}_{24}\text{H}_{20}\text{BrF}_3\text{N}_2\text{O}_4$
Formula weight	537.33
Crystal description	colourless block
Crystal size	0.5 x 0.4 x 0.3 mm
Crystal system	monoclinic
Space group	P 21/c
Unit cell dimensions	a = 16.6075(12) Å $\alpha = 90^\circ$ b = 15.5958(11) Å $\beta = 105.497(2)^\circ$ c = 9.3671(7) Å $\gamma = 90^\circ$
Volume	2337.9(3) Å <sup>3</sup>
Reflections for cell refinement	3142
Range in $\theta$	2.5 to 23.3°
Z	4
Density (calculated)	1.527 Mg/m <sup>3</sup>
Absorption coefficient	1.816 mm <sup>-1</sup>
F(000)	1088
Diffractometer type	Bruker SMART1000 CCD area detector
Wavelength	0.71073 Å
Scan type	$\omega$
Reflections collected	14556
$\theta$ range for data collection	2.55 to 27.47°
Index ranges	-21 <math>\leq h \leq 21, -17 <math>\leq k \leq 20, -7 <math>\leq l \leq 12
Independent reflections	5234 [R(int) = 0.025]
Observed reflections	3976 [I > 2 $\sigma$ (I)]
Absorption correction	Semi-empirical from equivalents (Tmin = 0.649, Tmax = 0.746)
Decay correction	none
Structure solution by	direct methods
Hydrogen atom location	geometrically placed

Hydrogen atom treatment	riding model
Data / restraints / parameters	5234/0/307 (least-squares on F <sup>2</sup> )
Final R indices [I>2σ(I)]	R1 = 0.0487, wR2 = 0.126
Final R indices (all data)	R1 = 0.0665, wR2 = 0.134
Goodness-of-fit on F <sup>2</sup>	1.03
Final maximum delta/sigma	0.001
Weighting scheme	calc w=1/[σ <sup>2</sup> (F <sub>o</sub> <sup>2</sup> )+(0.063P) <sup>2</sup> +3.031P] where P=(F <sub>o</sub> <sup>2</sup> +2F <sub>c</sub> <sup>2</sup> )/3
Largest diff. peak and hole	1.91 and -1.08 e.Å <sup>-3</sup> (both near Br1)



Crystal data and structure refinement for str0815.

Identification code	str0815	
Chemical formula	C <sub>22</sub> H <sub>18</sub> BrF <sub>3</sub> N <sub>2</sub> O <sub>4</sub> S	
Formula weight	543.35	
Temperature	150(2) K	
Radiation, wavelength	MoKα, 0.71073 Å	
Crystal system, space group	monoclinic, P2 <sub>1</sub> /n	
Unit cell parameters	a = 14.066(2) Å b = 8.7343(13) Å c = 18.513(3) Å	α = 90° β = 93.425(2)° γ = 90°
Cell volume	2270.2(6) Å <sup>3</sup>	
Z	4	
Calculated density	1.590 g/cm <sup>3</sup>	
Absorption coefficient μ	1.959 mm <sup>-1</sup>	
F(000)	1096	
Crystal colour and size	colourless, 0.46 × 0.46 × 0.10 mm <sup>3</sup>	
Data collection method	Bruker SMART APEX diffractometer ω rotation with narrow frames	
θ range for data collection	2.58 to 28.29°	
Index ranges	h -18 to 18, k -11 to 11, l -23 to 23	
Completeness to θ = 26.00°	99.4 %	
Reflections collected	18148	
Independent reflections	5250 (R <sub>int</sub> = 0.0378)	
Reflections with F <sup>2</sup> >2σ	4218	
Absorption correction	semi-empirical from equivalents	
Min. and max. transmission	0.4660 and 0.8282	
Structure solution	direct methods	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Weighting parameters a, b	0.0810, 2.4371	
Data / restraints / parameters	5250 / 0 / 288	
Final R indices [F <sup>2</sup> >2σ]	R1 = 0.0509, wR2 = 0.1363	
R indices (all data)	R1 = 0.0637, wR2 = 0.1469	
Goodness-of-fit on F <sup>2</sup>	1.024	
Largest and mean shift/su	0.001 and 0.000	
Largest diff. peak and hole	1.300 and -1.361 e Å <sup>-3</sup>	



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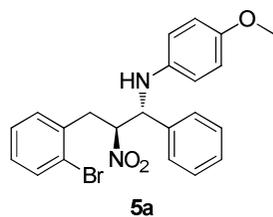
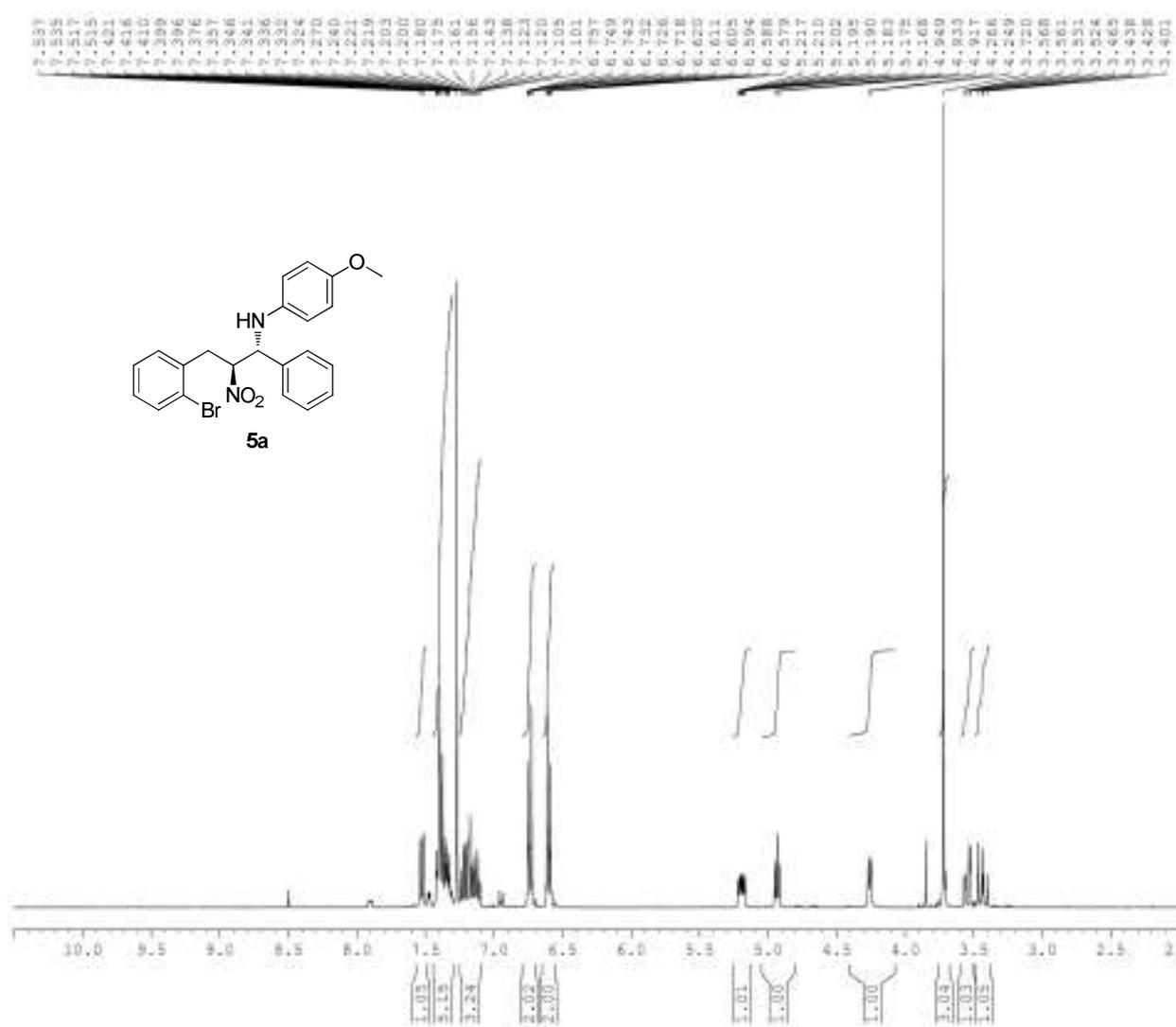
Crystal data and structure refinement for str0847.

Identification code	str0847	
Chemical formula	C <sub>22</sub> H <sub>29</sub> BrN <sub>2</sub> O <sub>2</sub>	
Formula weight	433.38	
Temperature	150(2) K	
Radiation, wavelength	MoK $\alpha$ , 0.71073 Å	
Crystal system, space group	triclinic, P $\bar{1}$	
Unit cell parameters	a = 9.6156(18) Å	$\alpha$ = 86.817(3)°
	b = 10.448(2) Å	$\beta$ = 74.115(3)°
	c = 12.197(2) Å	$\gamma$ = 62.824(3)°
Cell volume	1045.0(3) Å <sup>3</sup>	
Z	2	
Calculated density	1.377 g/cm <sup>3</sup>	
Absorption coefficient $\mu$	1.986 mm <sup>-1</sup>	
F(000)	452	
Crystal colour and size	colourless, 0.42 × 0.16 × 0.12 mm <sup>3</sup>	
Data collection method	Bruker SMART APEX diffractometer	
$\theta$ range for data collection	2.20 to 28.31°	
Index ranges	h -12 to 12, k -13 to 13, l -16 to 16	
Completeness to $\theta = 26.00^\circ$	96.7 %	
Reflections collected	8594	
Independent reflections	4589 ( $R_{\text{int}} = 0.0260$ )	
Reflections with $F^2 > 2\sigma$	3607	
Absorption correction	semi-empirical from equivalents	
Min. and max. transmission	0.4893 and 0.7966	
Structure solution	direct methods	
Refinement method	Full-matrix least-squares on $F^2$	
Weighting parameters a, b	0.1049, 1.2112	
Data / restraints / parameters	4589 / 0 / 245	
Final R indices [ $F^2 > 2\sigma$ ]	R1 = 0.0646, wR2 = 0.1738	
R indices (all data)	R1 = 0.0798, wR2 = 0.1899	
Goodness-of-fit on $F^2$	1.069	
Largest and mean shift/su	2.012 and 0.009	
Largest diff. peak and hole	1.732 and -0.994 e Å <sup>-3</sup>	

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 PULPROG: zg30  
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 SOLVENT: CDCl3  
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 FIDRES: 0.125483 Hz  
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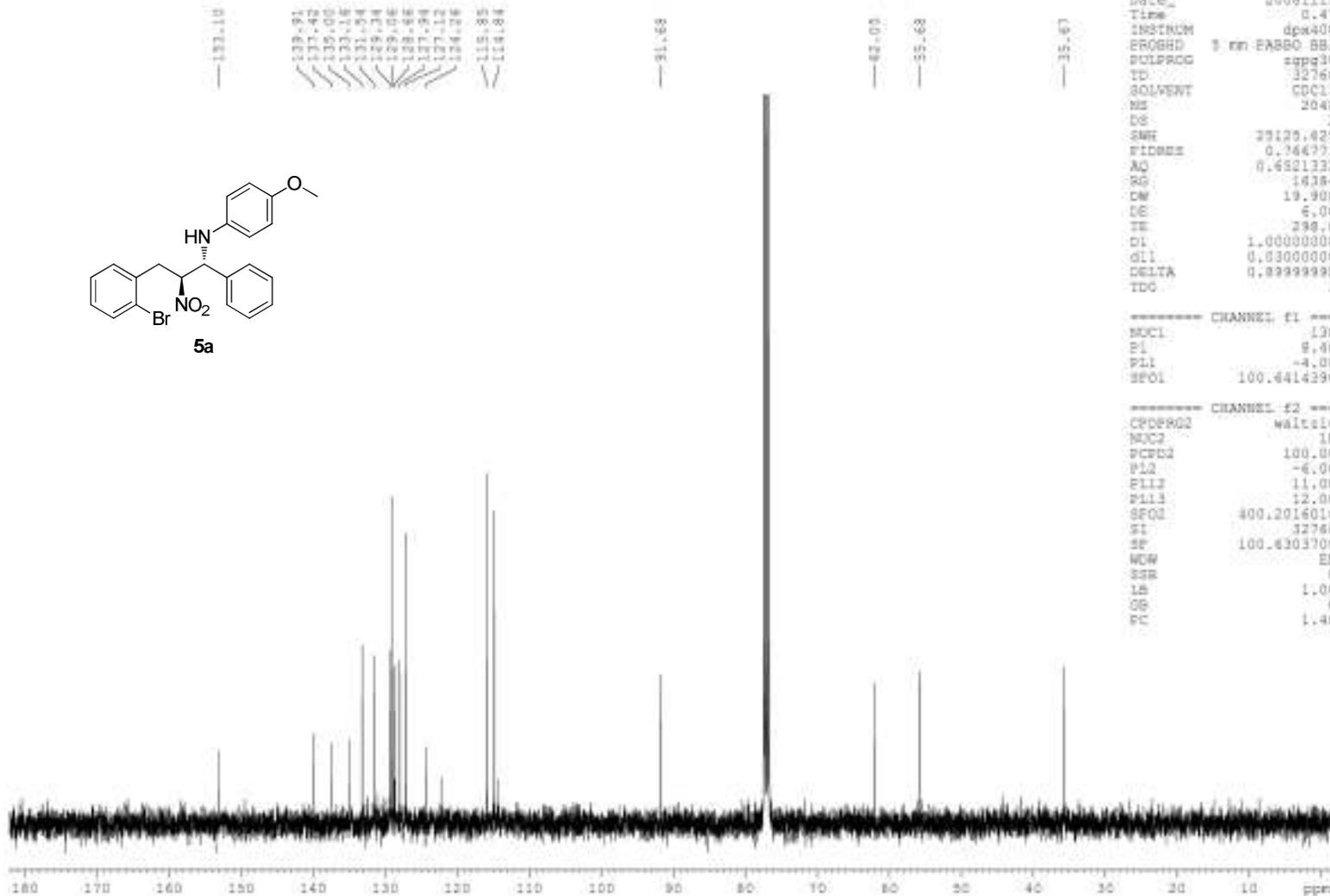
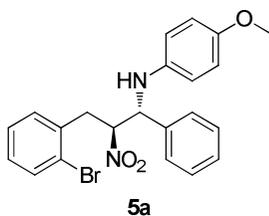
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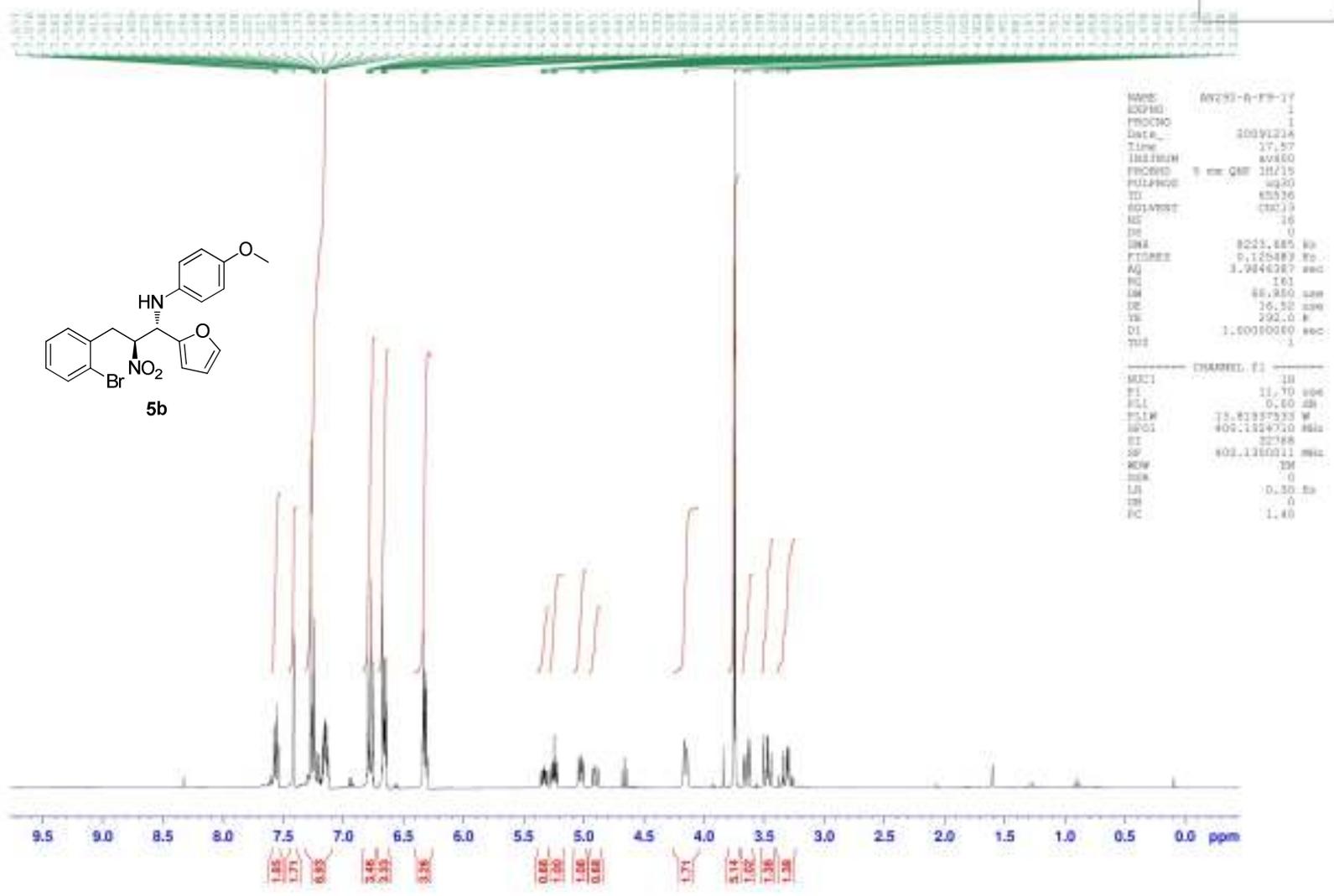
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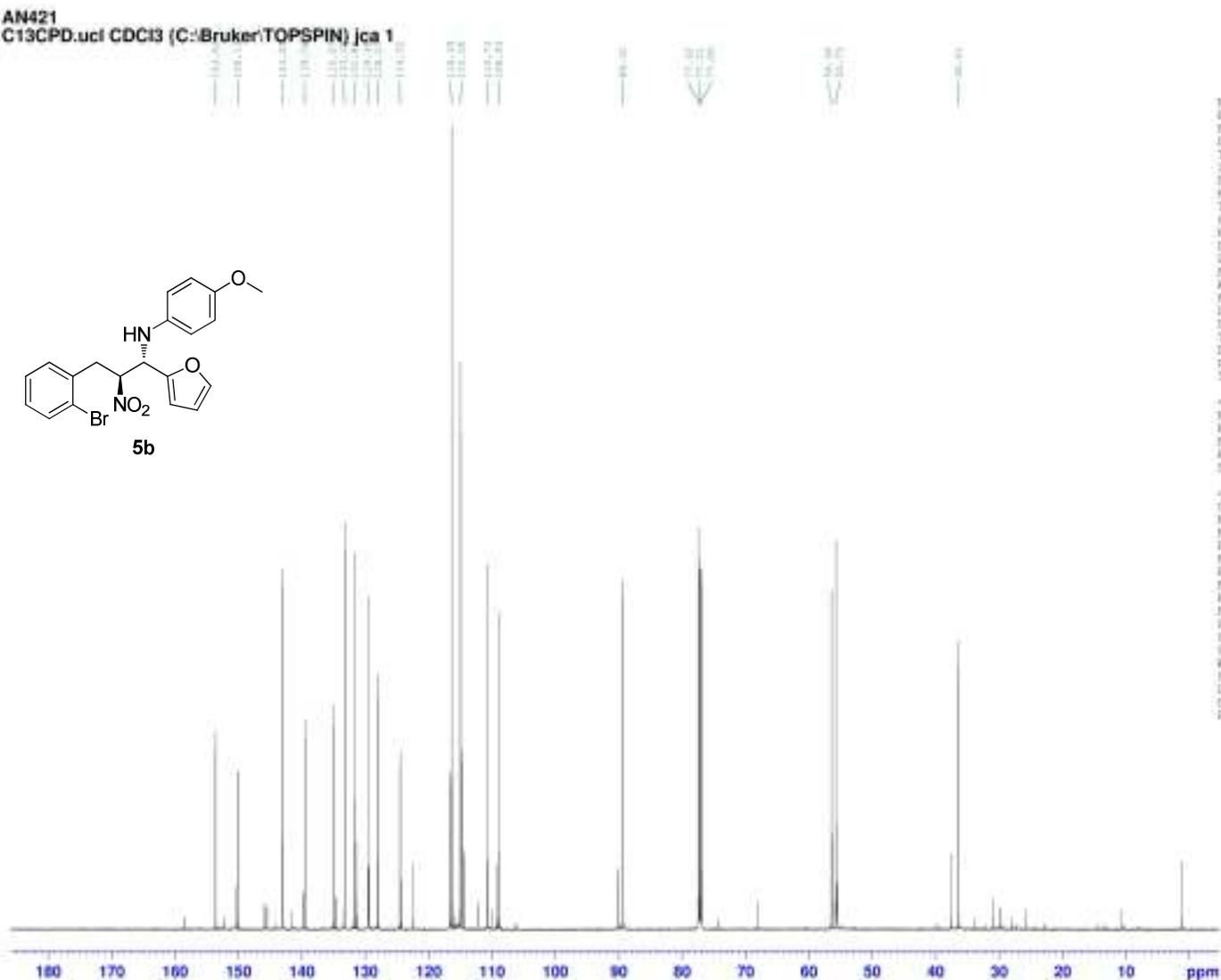
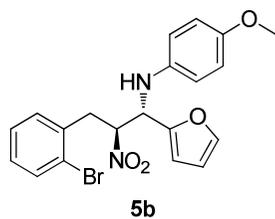
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AN292-A-F9-17



AN421  
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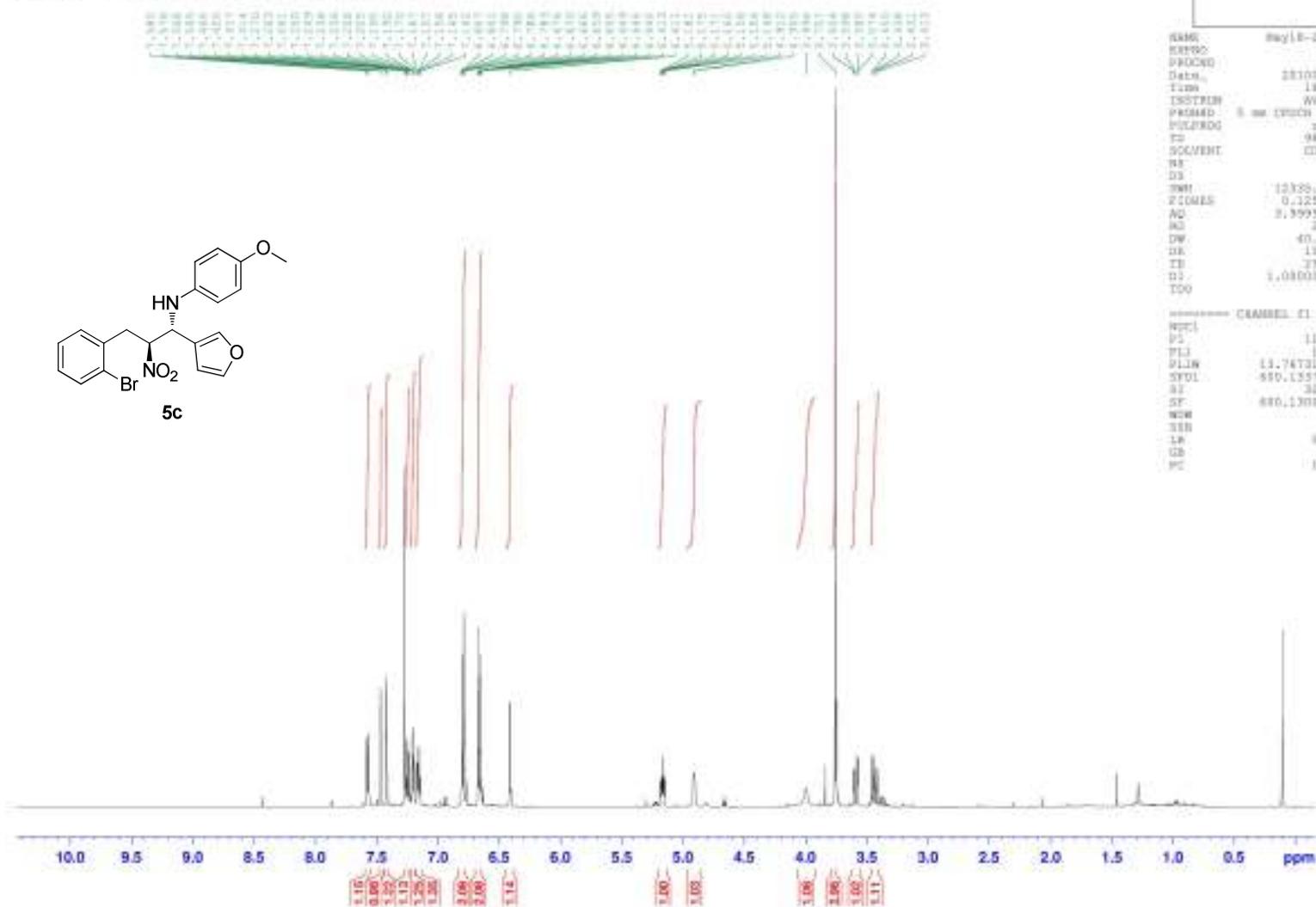
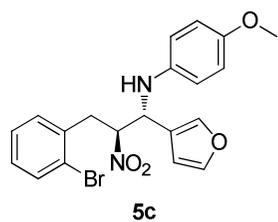


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GB	0
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TD	1

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PL13	19.00 dB
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PL15	19.00 dB
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PL35	19.00 dB
PL36	19.00 dB
PL37	19.00 dB
PL38	19.00 dB
PL39	19.00 dB
PL40	19.00 dB
PL41	19.00 dB
PL42	19.00 dB
PL43	19.00 dB
PL44	19.00 dB
PL45	19.00 dB
PL46	19.00 dB
PL47	19.00 dB
PL48	19.00 dB
PL49	19.00 dB
PL50	19.00 dB
PL51	19.00 dB
PL52	19.00 dB
PL53	19.00 dB
PL54	19.00 dB
PL55	19.00 dB
PL56	19.00 dB
PL57	19.00 dB
PL58	19.00 dB
PL59	19.00 dB
PL60	19.00 dB
PL61	19.00 dB
PL62	19.00 dB
PL63	19.00 dB
PL64	19.00 dB
PL65	19.00 dB
PL66	19.00 dB
PL67	19.00 dB
PL68	19.00 dB
PL69	19.00 dB
PL70	19.00 dB
PL71	19.00 dB
PL72	19.00 dB
PL73	19.00 dB
PL74	19.00 dB
PL75	19.00 dB
PL76	19.00 dB
PL77	19.00 dB
PL78	19.00 dB
PL79	19.00 dB
PL80	19.00 dB
PL81	19.00 dB
PL82	19.00 dB
PL83	19.00 dB
PL84	19.00 dB
PL85	19.00 dB
PL86	19.00 dB
PL87	19.00 dB
PL88	19.00 dB
PL89	19.00 dB
PL90	19.00 dB
PL91	19.00 dB
PL92	19.00 dB
PL93	19.00 dB
PL94	19.00 dB
PL95	19.00 dB
PL96	19.00 dB
PL97	19.00 dB
PL98	19.00 dB
PL99	19.00 dB
PL100	19.00 dB

AN433  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 23

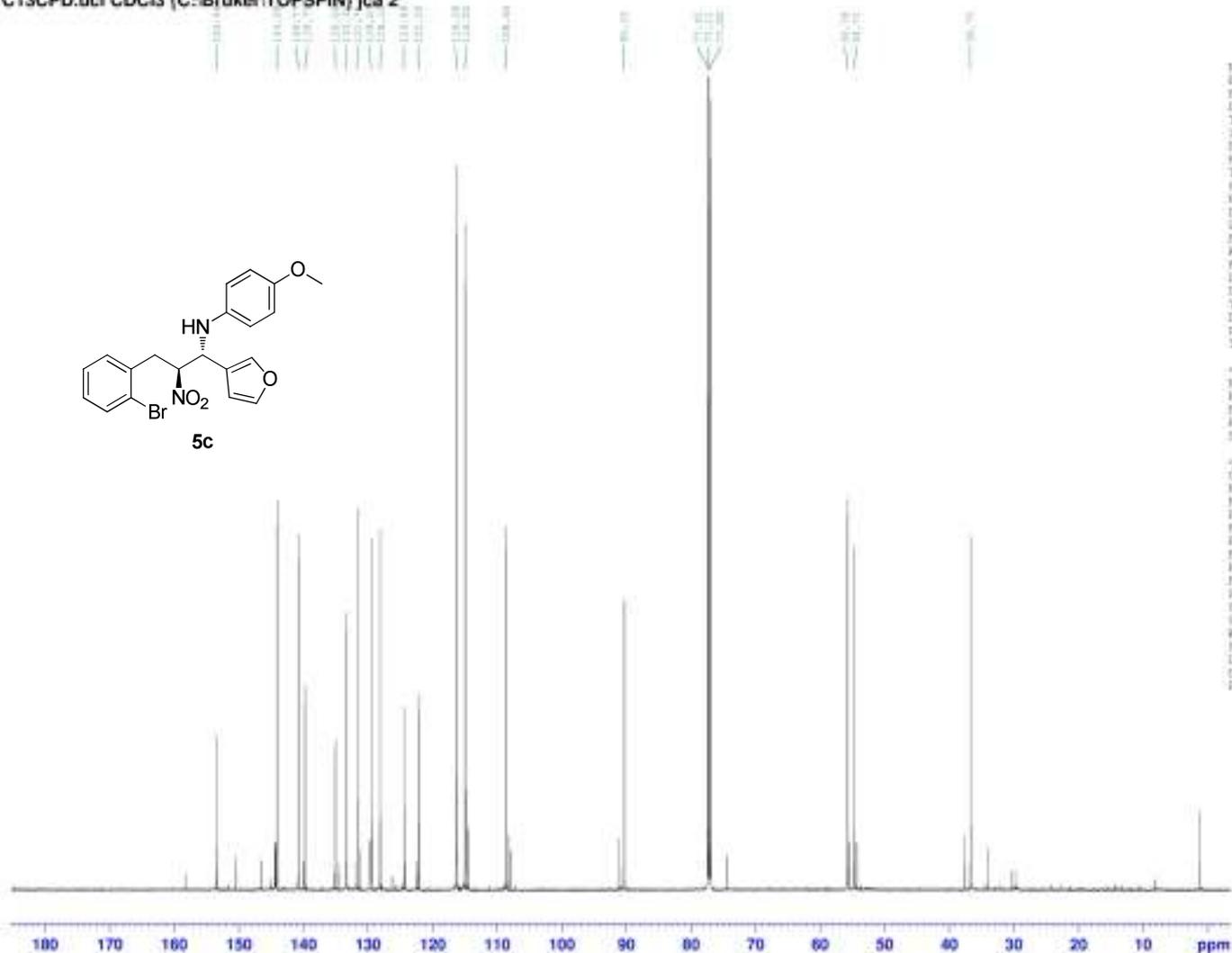
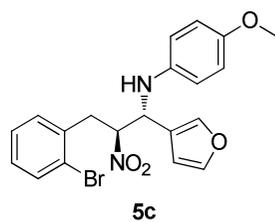


NAME	May16-2016
EXPNO	70
PROCNO	1
Date_	2010514
Time	18.18
INSTRUM	AV600
PROBHD	5 mm (BOCH 13C
PULPROG	zgpg30
TD	98492
SOLVENT	CDCl3
NS	4
DS	2
SWH	12320.524 Hz
F2IDMS	0.125001 Hz
AQ	2.3999604 sec
RG	20.2
DW	40.527 usec
DE	12.68 usec
TE	298.2 K
D1	1.0800000 sec
TD0	1

===== CHANNEL f1 =====	
NUC1	13
P1	11.60 usec
PL1	1.00 dB
PLW	11.74731014 W
NUC2	13
NUC3	13
PL2	1.00 dB
PL3	1.00 dB
PL4	1.00 dB
PL5	1.00 dB
PL6	1.00 dB
PL7	1.00 dB
PL8	1.00 dB
PL9	1.00 dB
PL10	1.00 dB
PL11	1.00 dB
PL12	1.00 dB
PL13	1.00 dB
PL14	1.00 dB
PL15	1.00 dB
PL16	1.00 dB
PL17	1.00 dB
PL18	1.00 dB
PL19	1.00 dB
PL20	1.00 dB
PL21	1.00 dB
PL22	1.00 dB
PL23	1.00 dB
PL24	1.00 dB
PL25	1.00 dB
PL26	1.00 dB
PL27	1.00 dB
PL28	1.00 dB
PL29	1.00 dB
PL30	1.00 dB
PL31	1.00 dB
PL32	1.00 dB
PL33	1.00 dB
PL34	1.00 dB
PL35	1.00 dB
PL36	1.00 dB
PL37	1.00 dB
PL38	1.00 dB
PL39	1.00 dB
PL40	1.00 dB
PL41	1.00 dB
PL42	1.00 dB
PL43	1.00 dB
PL44	1.00 dB
PL45	1.00 dB
PL46	1.00 dB
PL47	1.00 dB
PL48	1.00 dB
PL49	1.00 dB
PL50	1.00 dB
PL51	1.00 dB
PL52	1.00 dB
PL53	1.00 dB
PL54	1.00 dB
PL55	1.00 dB
PL56	1.00 dB
PL57	1.00 dB
PL58	1.00 dB
PL59	1.00 dB
PL60	1.00 dB
PL61	1.00 dB
PL62	1.00 dB
PL63	1.00 dB
PL64	1.00 dB
PL65	1.00 dB
PL66	1.00 dB
PL67	1.00 dB
PL68	1.00 dB
PL69	1.00 dB
PL70	1.00 dB
PL71	1.00 dB
PL72	1.00 dB
PL73	1.00 dB
PL74	1.00 dB
PL75	1.00 dB
PL76	1.00 dB
PL77	1.00 dB
PL78	1.00 dB
PL79	1.00 dB
PL80	1.00 dB
PL81	1.00 dB
PL82	1.00 dB
PL83	1.00 dB
PL84	1.00 dB
PL85	1.00 dB
PL86	1.00 dB
PL87	1.00 dB
PL88	1.00 dB
PL89	1.00 dB
PL90	1.00 dB
PL91	1.00 dB
PL92	1.00 dB
PL93	1.00 dB
PL94	1.00 dB
PL95	1.00 dB
PL96	1.00 dB
PL97	1.00 dB
PL98	1.00 dB
PL99	1.00 dB
PL100	1.00 dB

AN433  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2

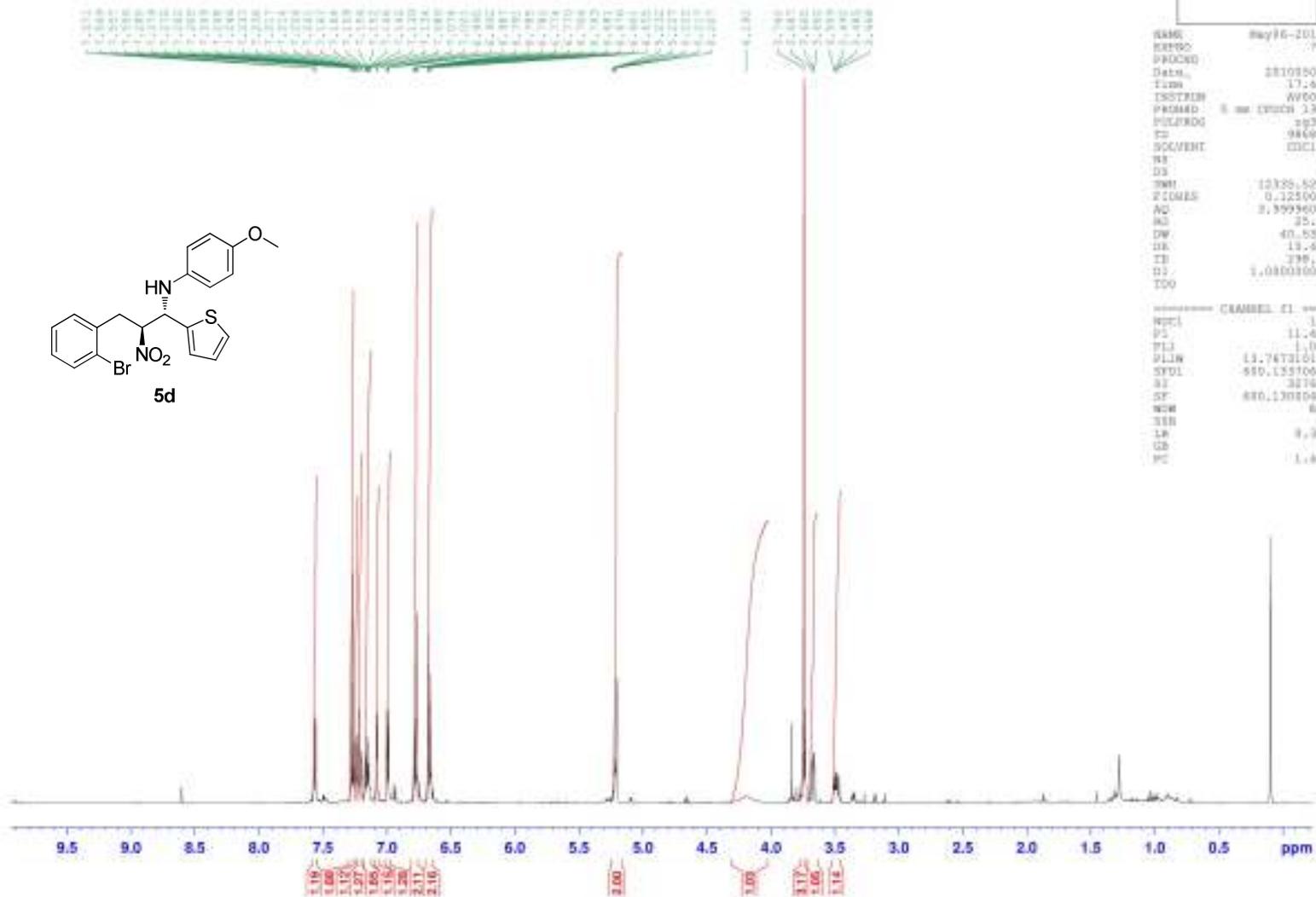


NAME	May18-2010
EXPNO	12
F2PROCNO	1
DATA_	40100319
Time	5.52
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

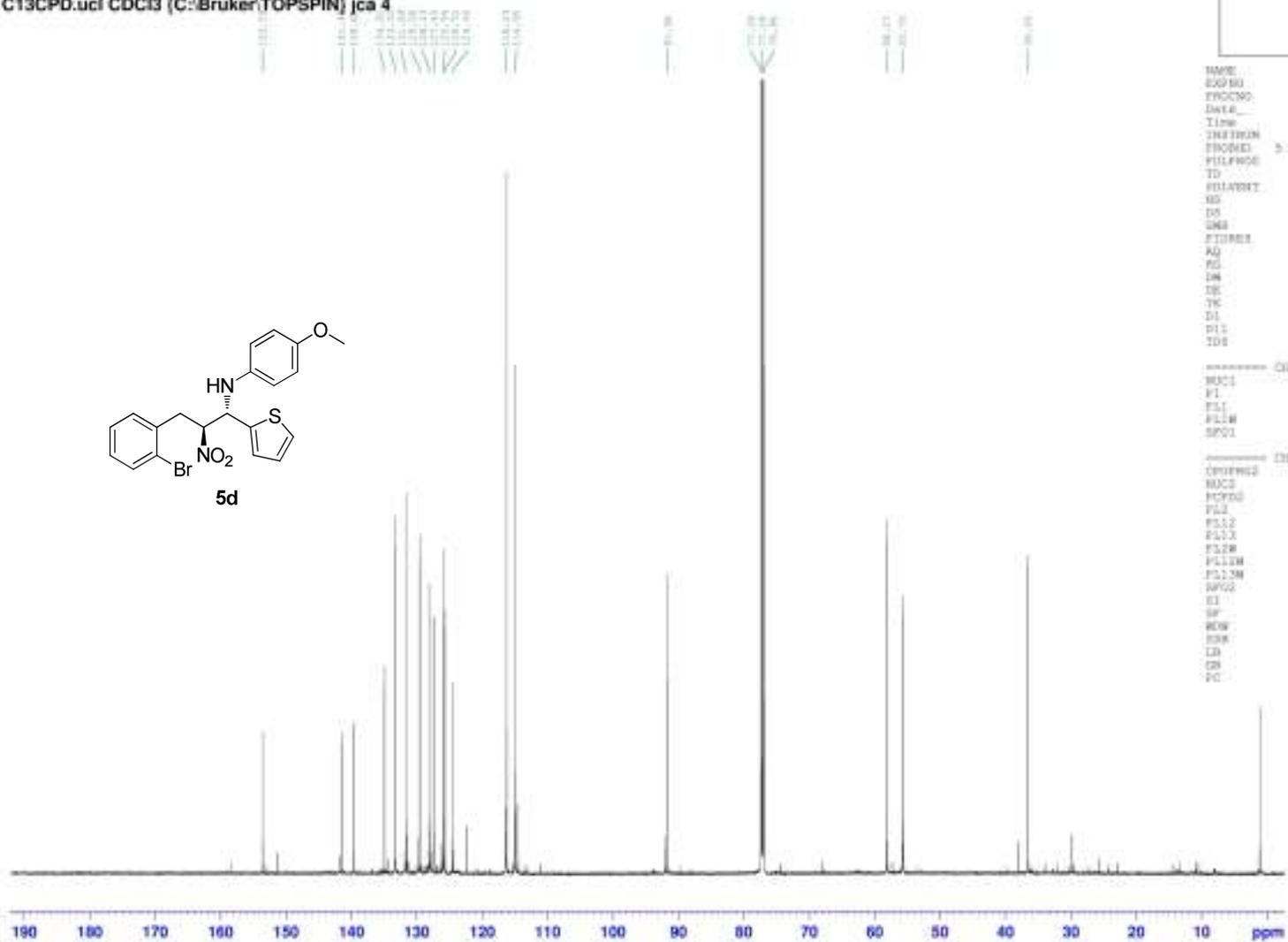
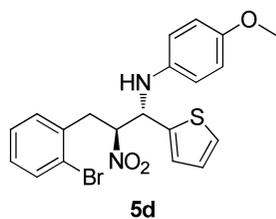
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.7686177 W
SFO1	125.7613000 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32796130 W
PL16	0.17332020 W
SFO2	601.1326020 MHz
SI	32768
SR	104.9327830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN420  
 PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 4

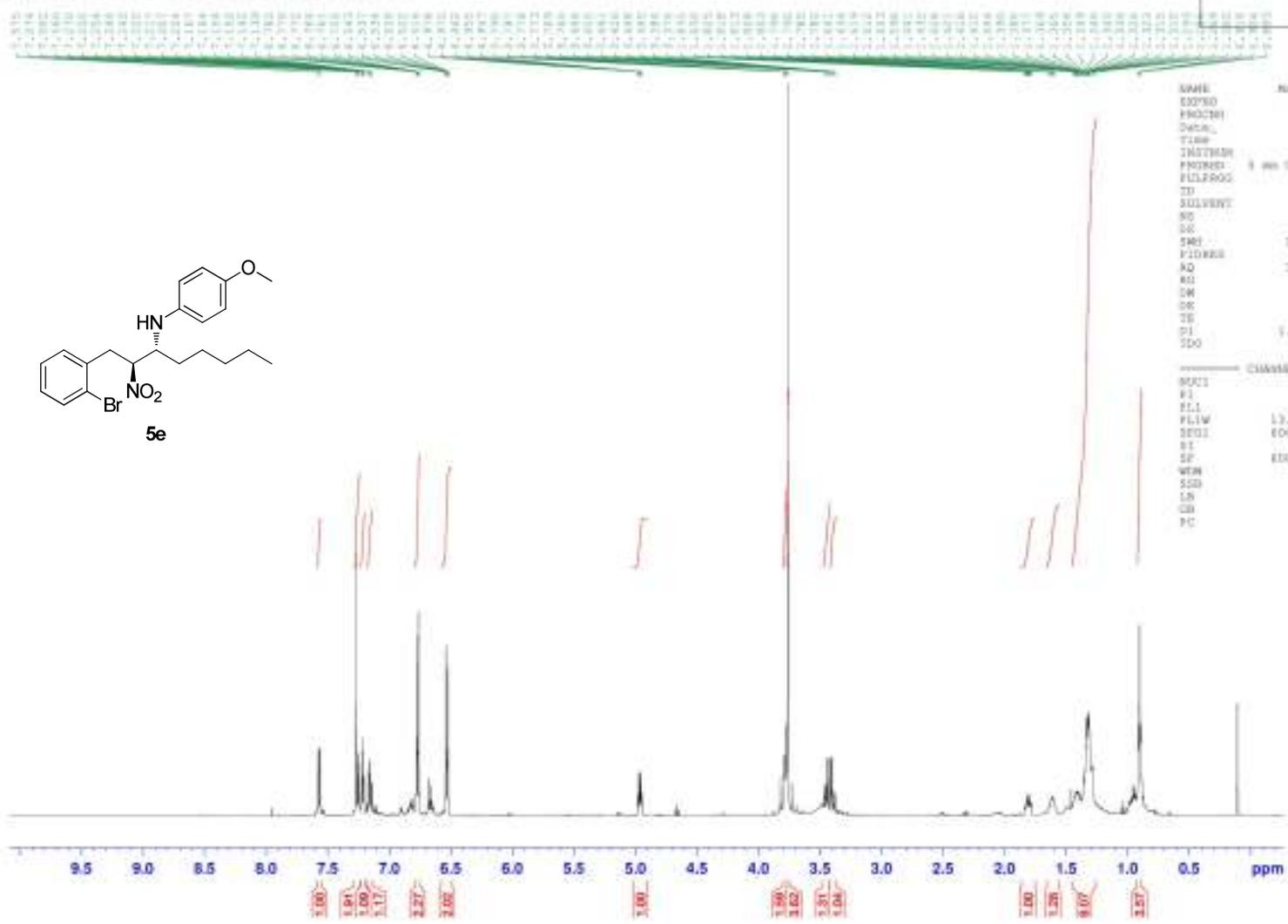


AN420  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4



NAME	May04-2010
EXPNO	12
F2PROC0	1
DATE_	20100504
TIME	17.54
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	13.067
GB	0
PC	1.00
AG	0.30000000
RG	0.30000000
RG2	0.30000000
RG3	0.30000000
RG4	0.30000000
RG5	0.30000000
RG6	0.30000000
RG7	0.30000000
RG8	0.30000000
RG9	0.30000000
RG10	0.30000000
RG11	0.30000000
RG12	0.30000000
RG13	0.30000000
RG14	0.30000000
RG15	0.30000000
RG16	0.30000000
RG17	0.30000000
RG18	0.30000000
RG19	0.30000000
RG20	0.30000000
RG21	0.30000000
RG22	0.30000000
RG23	0.30000000
RG24	0.30000000
RG25	0.30000000
RG26	0.30000000
RG27	0.30000000
RG28	0.30000000
RG29	0.30000000
RG30	0.30000000
RG31	0.30000000
RG32	0.30000000
RG33	0.30000000
RG34	0.30000000
RG35	0.30000000
RG36	0.30000000
RG37	0.30000000
RG38	0.30000000
RG39	0.30000000
RG40	0.30000000
RG41	0.30000000
RG42	0.30000000
RG43	0.30000000
RG44	0.30000000
RG45	0.30000000
RG46	0.30000000
RG47	0.30000000
RG48	0.30000000
RG49	0.30000000
RG50	0.30000000
RG51	0.30000000
RG52	0.30000000
RG53	0.30000000
RG54	0.30000000
RG55	0.30000000
RG56	0.30000000
RG57	0.30000000
RG58	0.30000000
RG59	0.30000000
RG60	0.30000000
RG61	0.30000000
RG62	0.30000000
RG63	0.30000000
RG64	0.30000000
RG65	0.30000000
RG66	0.30000000
RG67	0.30000000
RG68	0.30000000
RG69	0.30000000
RG70	0.30000000
RG71	0.30000000
RG72	0.30000000
RG73	0.30000000
RG74	0.30000000
RG75	0.30000000
RG76	0.30000000
RG77	0.30000000
RG78	0.30000000
RG79	0.30000000
RG80	0.30000000
RG81	0.30000000
RG82	0.30000000
RG83	0.30000000
RG84	0.30000000
RG85	0.30000000
RG86	0.30000000
RG87	0.30000000
RG88	0.30000000
RG89	0.30000000
RG90	0.30000000
RG91	0.30000000
RG92	0.30000000
RG93	0.30000000
RG94	0.30000000
RG95	0.30000000
RG96	0.30000000
RG97	0.30000000
RG98	0.30000000
RG99	0.30000000
RG100	0.30000000

AN447  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 13

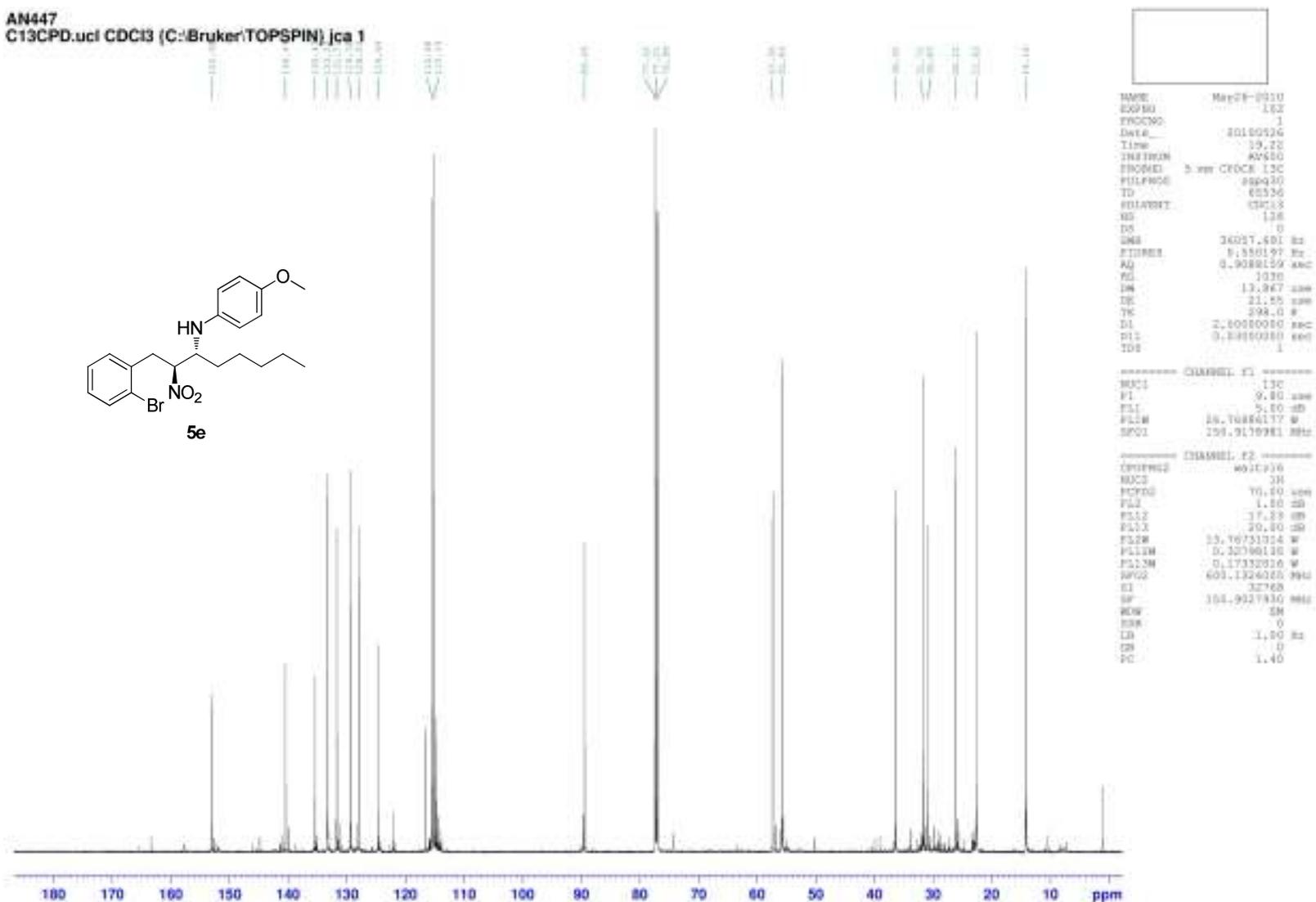
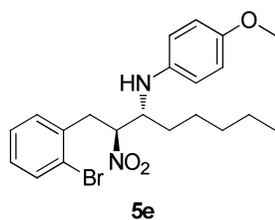


```

NAME      May26-2019
EXPNO    130
PROCNO   2
Date_    20190926
TIME     17.33
INSTRUM  AV690
PROBHD   5 mm CPDPR 140
PULPROG  zgpg30
TD        66688
SOLVENT  CDCl3
NS        8
DS        0
SWH       12335.926 Hz
FIDRES   0.120051 Hz
AQ        3.9399004 sec
RG         11.3
CW        68.535 usec
DE        10.48 usec
TE        296.0 K
D1        1.85010010 sec
SD0       1

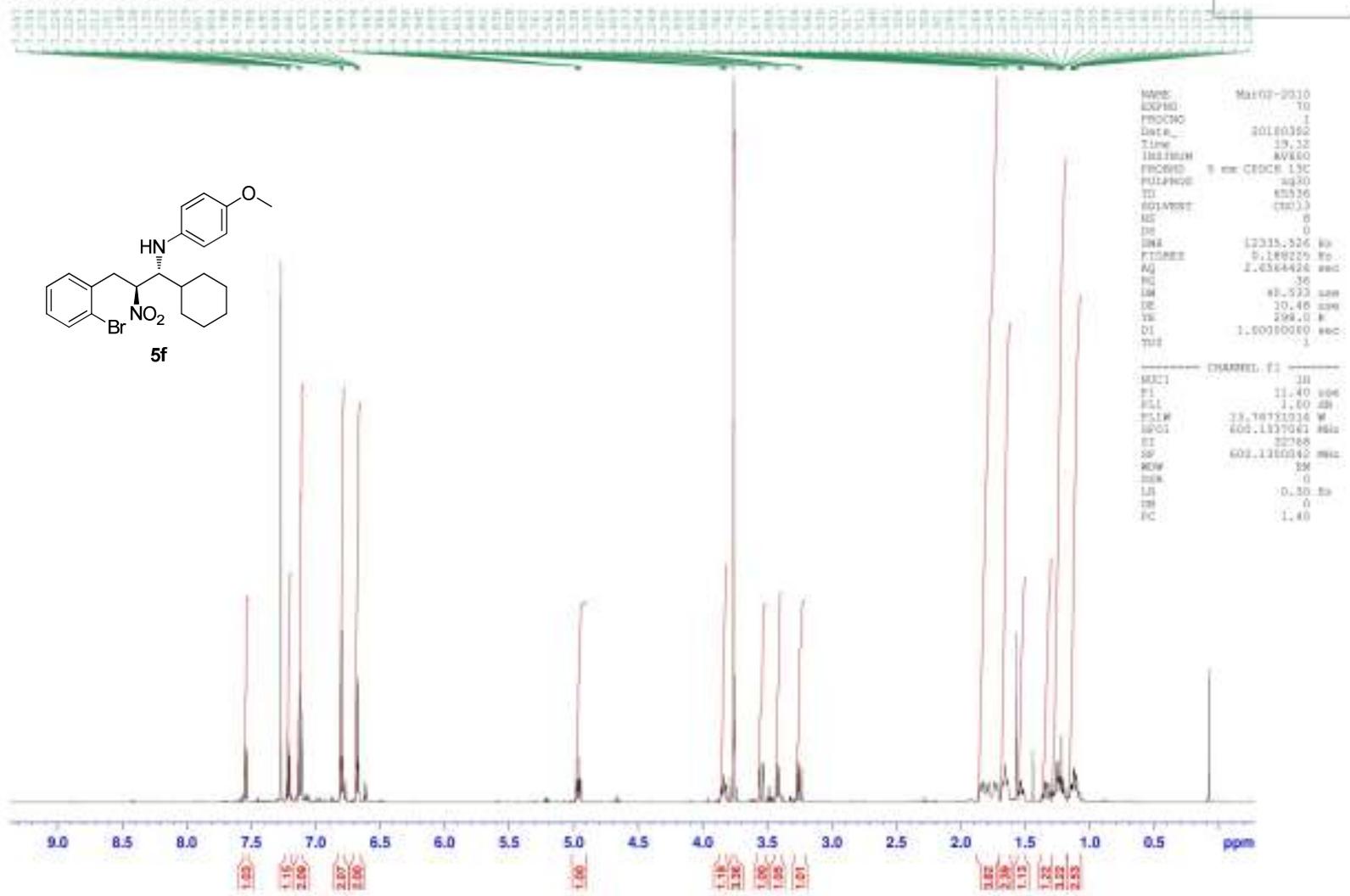
===== CHANNEL f1 =====
NUC1      1H
P1        11.40 usec
PL1       1.50 dB
PL12      13.74731014 W
SFO1      400.1337081 MHz
SI         32768
SF         400.1330040 MHz
WDW        EM
SSB        0
LB         0.30 MHz
GB         0
PC         1.40
  
```

AN447  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1

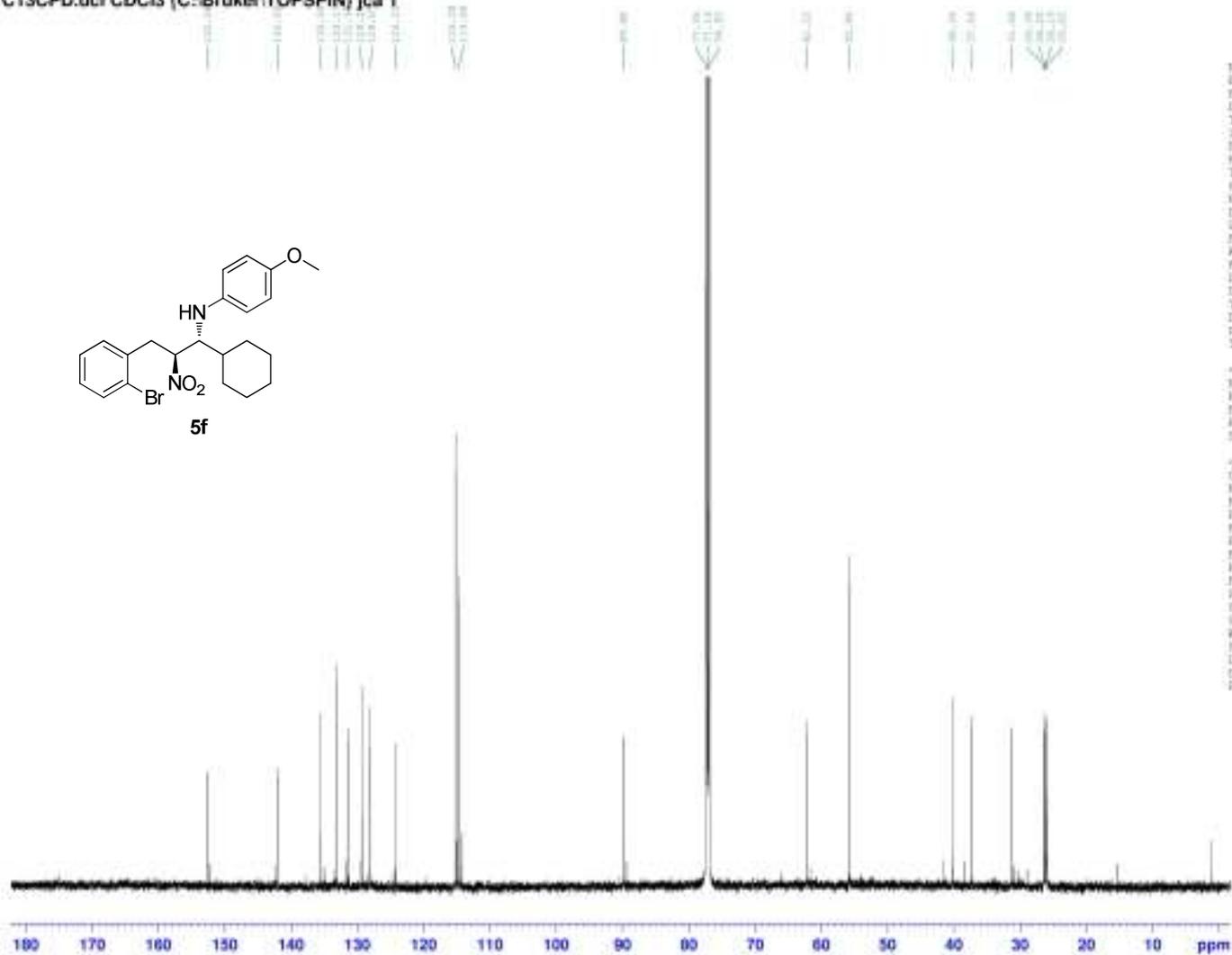
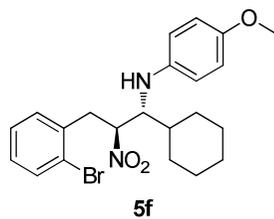


```
NAME      May28-0110
EXPNO     122
PROCNO    1
Date_     20100526
Time      15.22
INSTRUM   AV650
PROBHD    5 mm CPDCK 13C
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
AQ         0.9643
RG         128
DS         0
SHE        36017.481 Hz
F2       101.626197 Hz
AQ         0.9088159 sec
RG         1020
DS         13.847 use
DE         21.55 use
YC         298.0 #
D1         2.6000000 sec
D11        0.1000000 sec
DS         1
----- CHANNEL f1 -----
NUC1       13C
P1         9.00 use
PL1        5.00 dB
PL1H       25.7686177 W
SFO1       101.626197 MHz
----- CHANNEL f2 -----
CPDPRG2   zgpg30
NUC2       1H
PCPDG     10.00 use
PL2        1.00 dB
PL2H       17.23 dB
PL2X       20.00 dB
PL2H       25.7675124 W
PL1H       0.1000000 W
PL1HM      0.17332026 W
SFO2       400.1424010 MHz
EI         32768
SF         101.626197 MHz
RG         5M
DS         0
LB         1.00 Hz
GB         0
DC         1.40
```

AN341-A-D13-16  
 PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 11

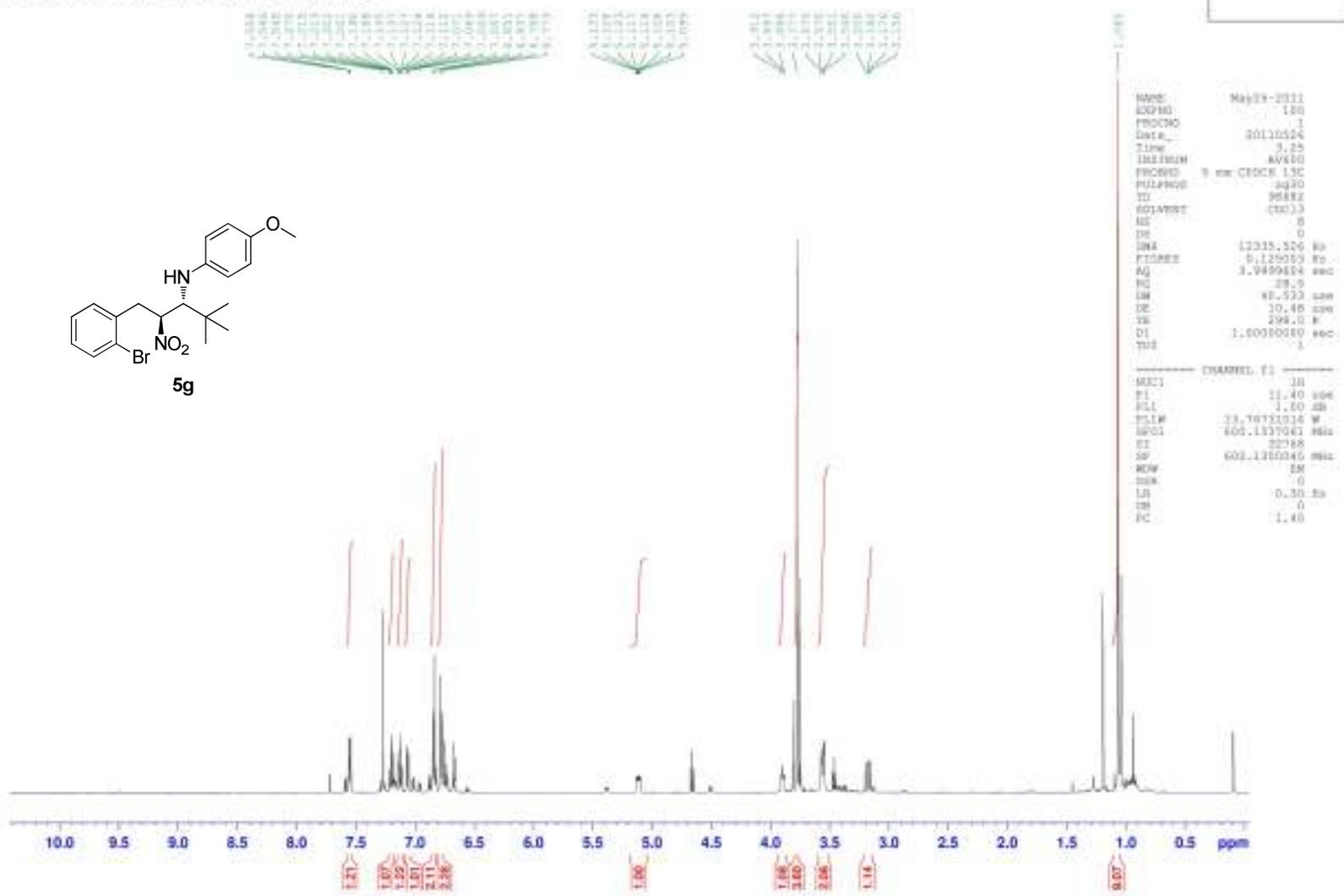
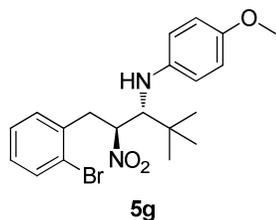


AN341-A-D13-16  
 C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



NAME	Mar02-2010
EXPNO	12
F2PROCNO	1
Date_	20100302
Time	15.30
INSTRUM	AV400
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	1H
PCPDG	10.00 use
FL1	1.00 use
FL2	30.70 use
FL3	120.40 use
FL4	55.7675314 use
FL5	0.36246774 use
FL6	0.8030020 use
RF02	600.1326165 use
SI	32768
SR	104.9327830 use
SCW	SM
SK	0
LD	1.00 use
DS	0
DC	1.40

AN794  
 PROTON.uc1 CDC13 (V:BrukerTOPSPIN) jca 2

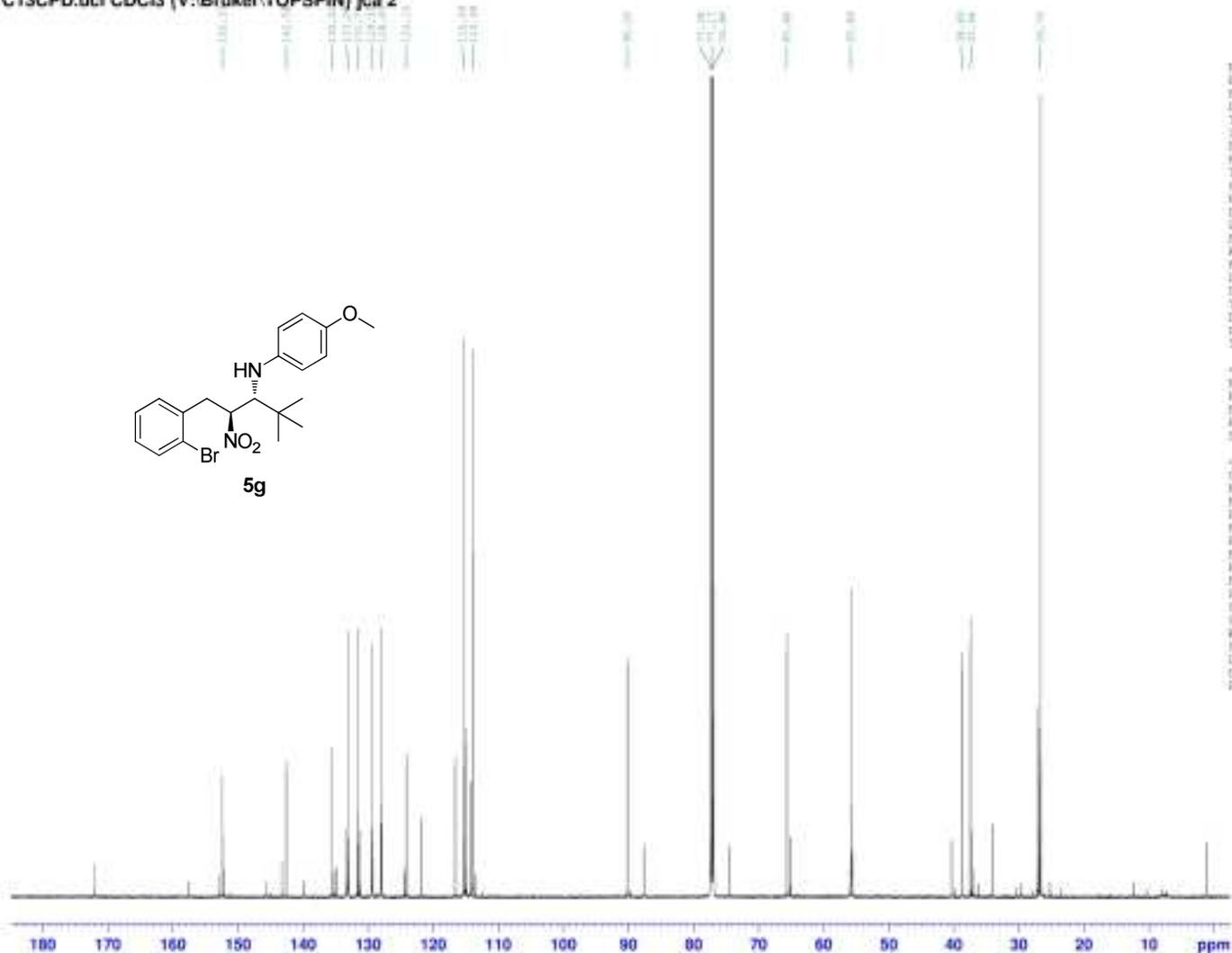
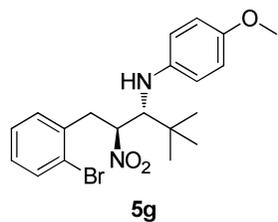


```

NAME      May29-2011
EXPNO     150
PROCNO    1
Date_     20110524
Time      3.25
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 kHz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         38.5
IM         48.533 um
DE         10.46 um
TE         298.0 K
D1         1.60000000 sec
TD0        1

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1P       23.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437046 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN794  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 2



NAME	May23-0111
EXPNO	132
F2PROCNO	1
DATE_	20110526
TIME	3.27
INSTRUM	AV450
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
SF	125.761
AQ	0.888824 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.6000000 sec
D11	0.1880000 sec
DS	1

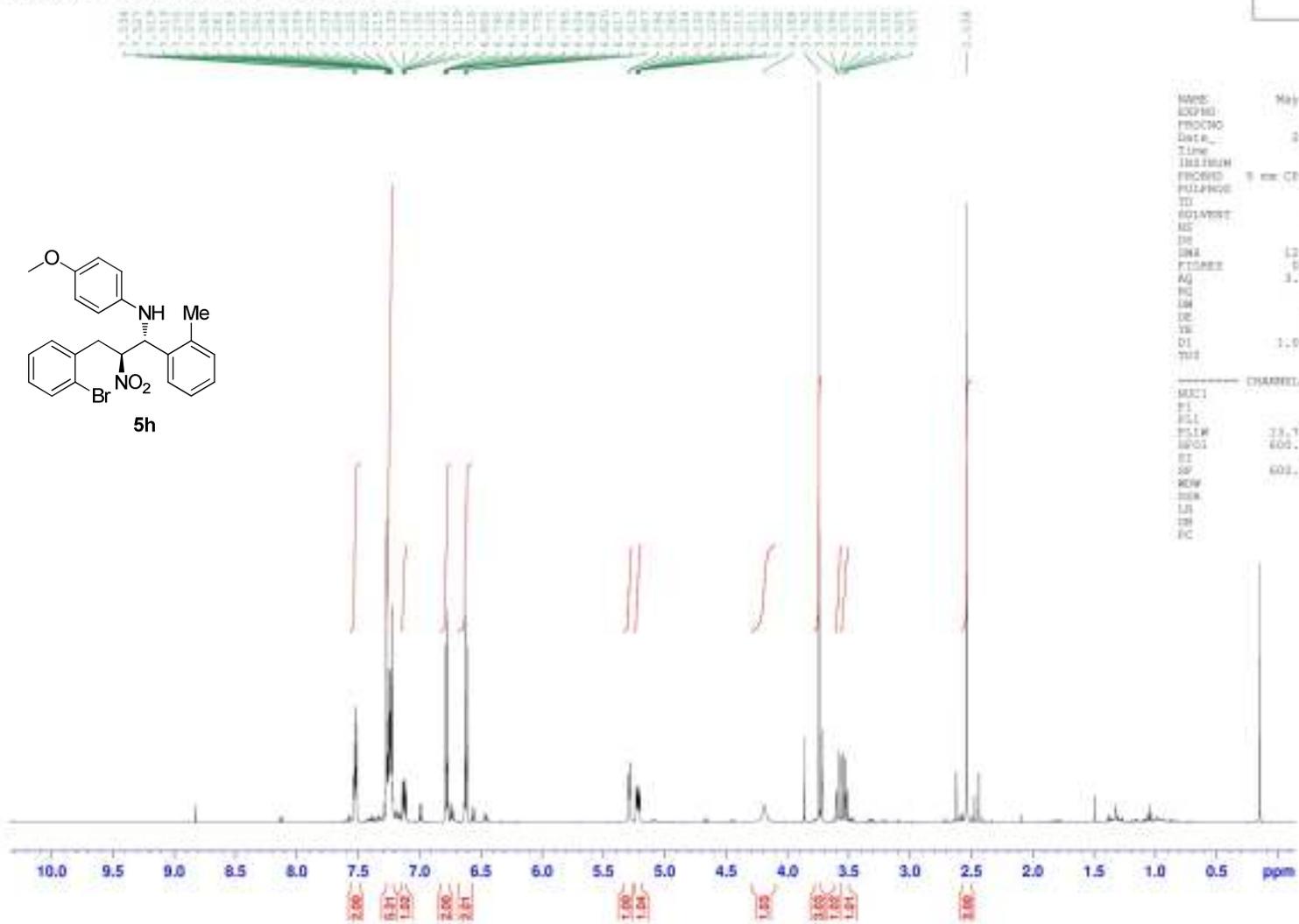
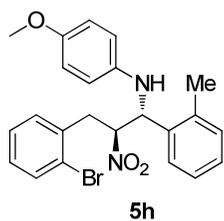
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761828 MHz

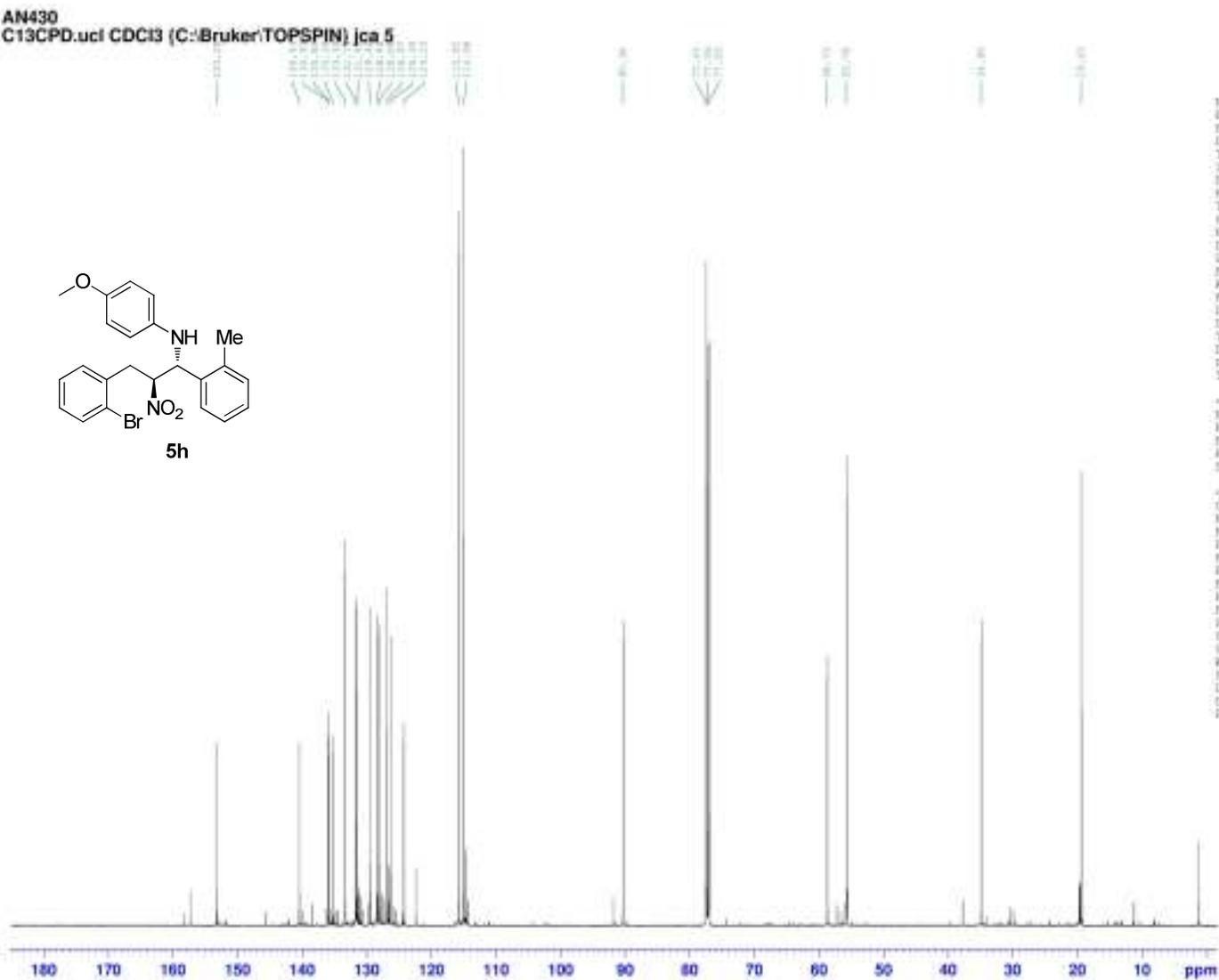
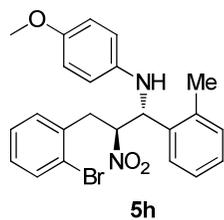
  

===== CHANNEL F2 =====	
NUC2	13C
FL2	9.80 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.7675124 W
PL16	0.32586148 W
PL17	0.17332026 W
SFO2	601.1326048 MHz
SI	65536
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN430  
PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 50



AN430  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 5



NAME	May17-2010
EXPNO	82
F2PROCNO	1
DATA_	40180517
Time	15.45
INSTRUM	AVXED
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
SNR	0
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

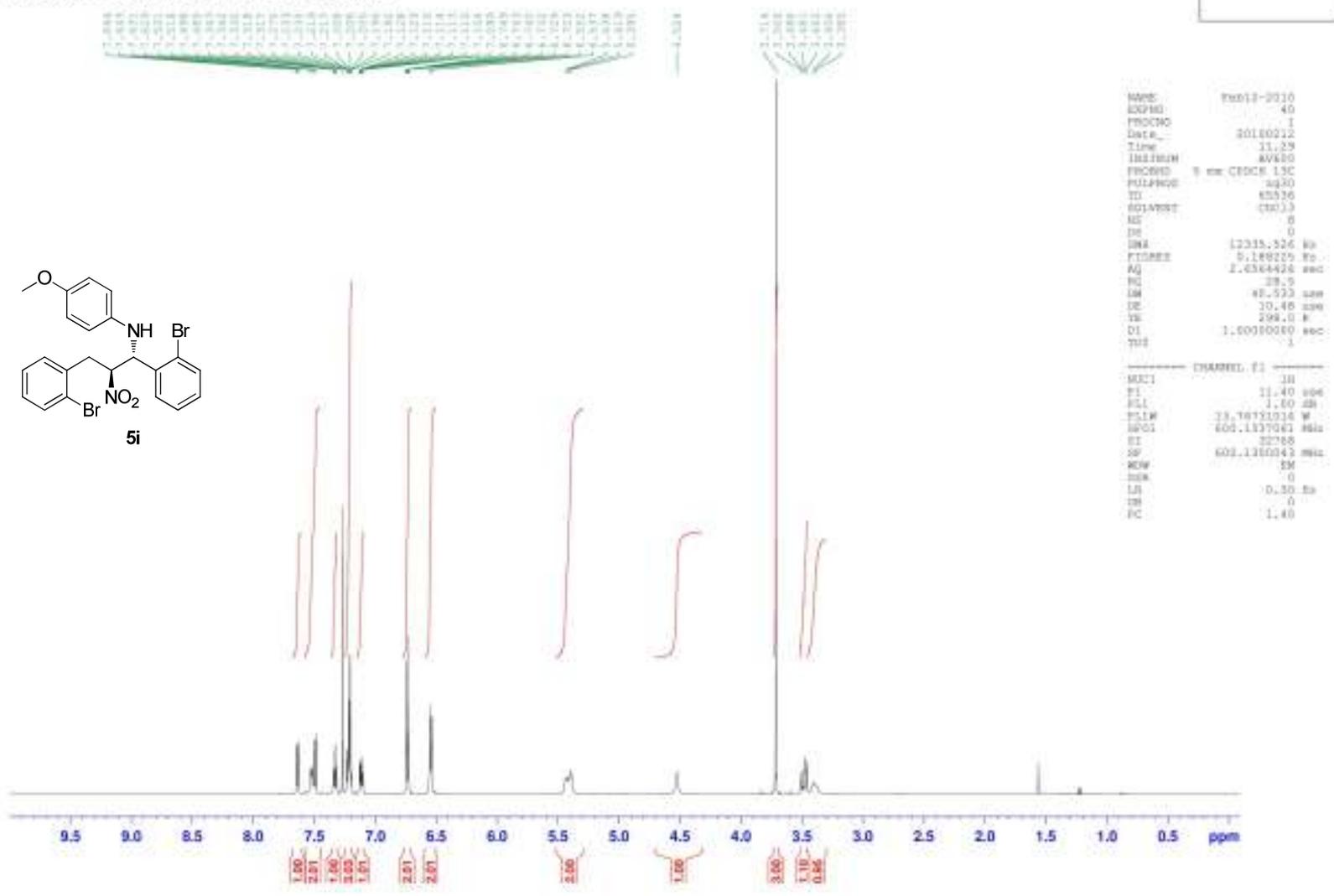
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.7686177 W
SFO1	125.761300 MHz

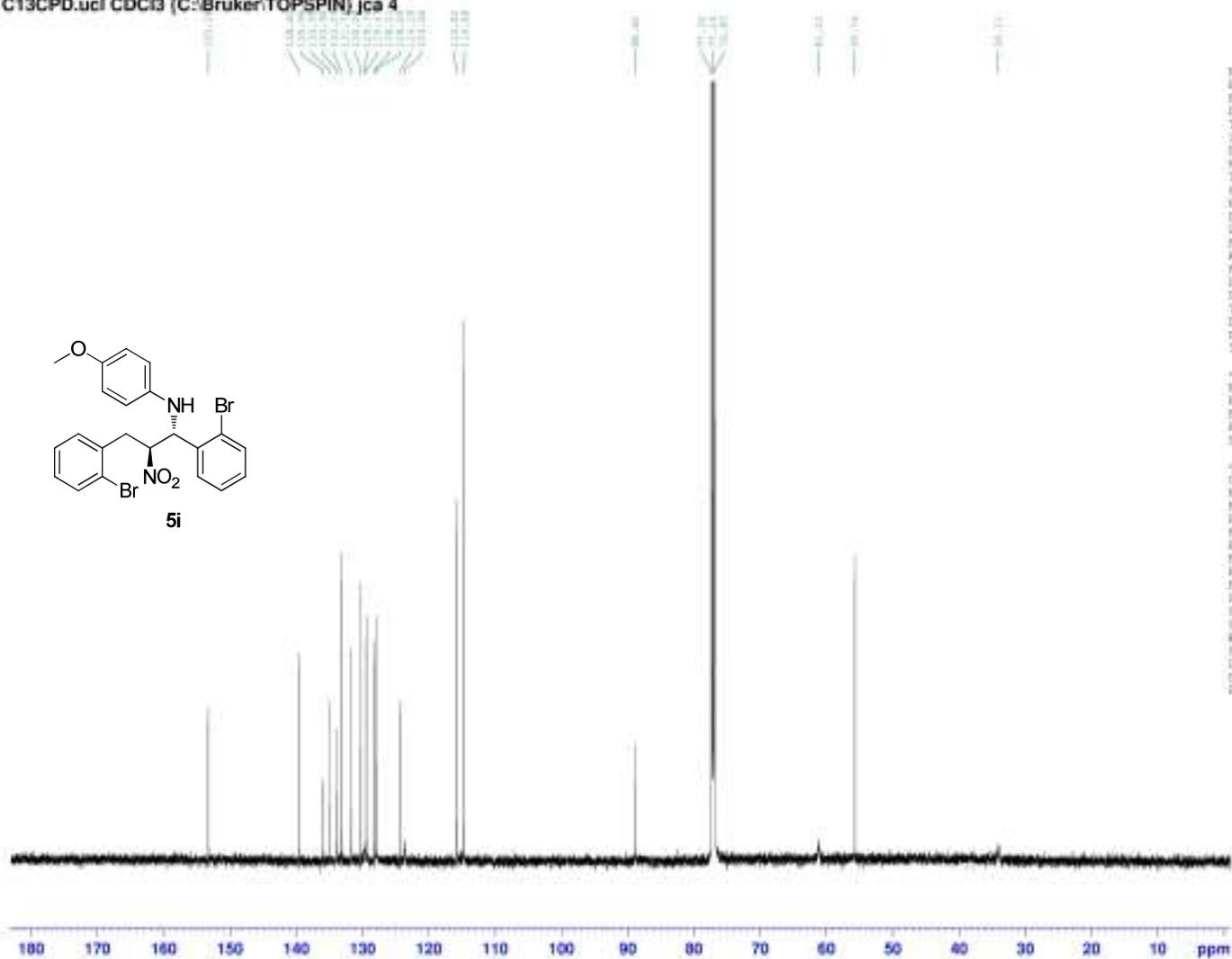
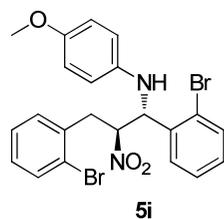
  

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32796130 W
PL16	0.17332926 W
SFO2	601.1326020 MHz
SI	32768
SN	101.9327830 MHz
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

AN323-yellow ppt  
 PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 45



AN323-yellow ppt  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) Jca 4



NAME	Feb12-2010
EXPNO	41
F2PROCNO	1
DATE_	20100212
Time	15.48
INSTRUM	AV450
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
DS	1

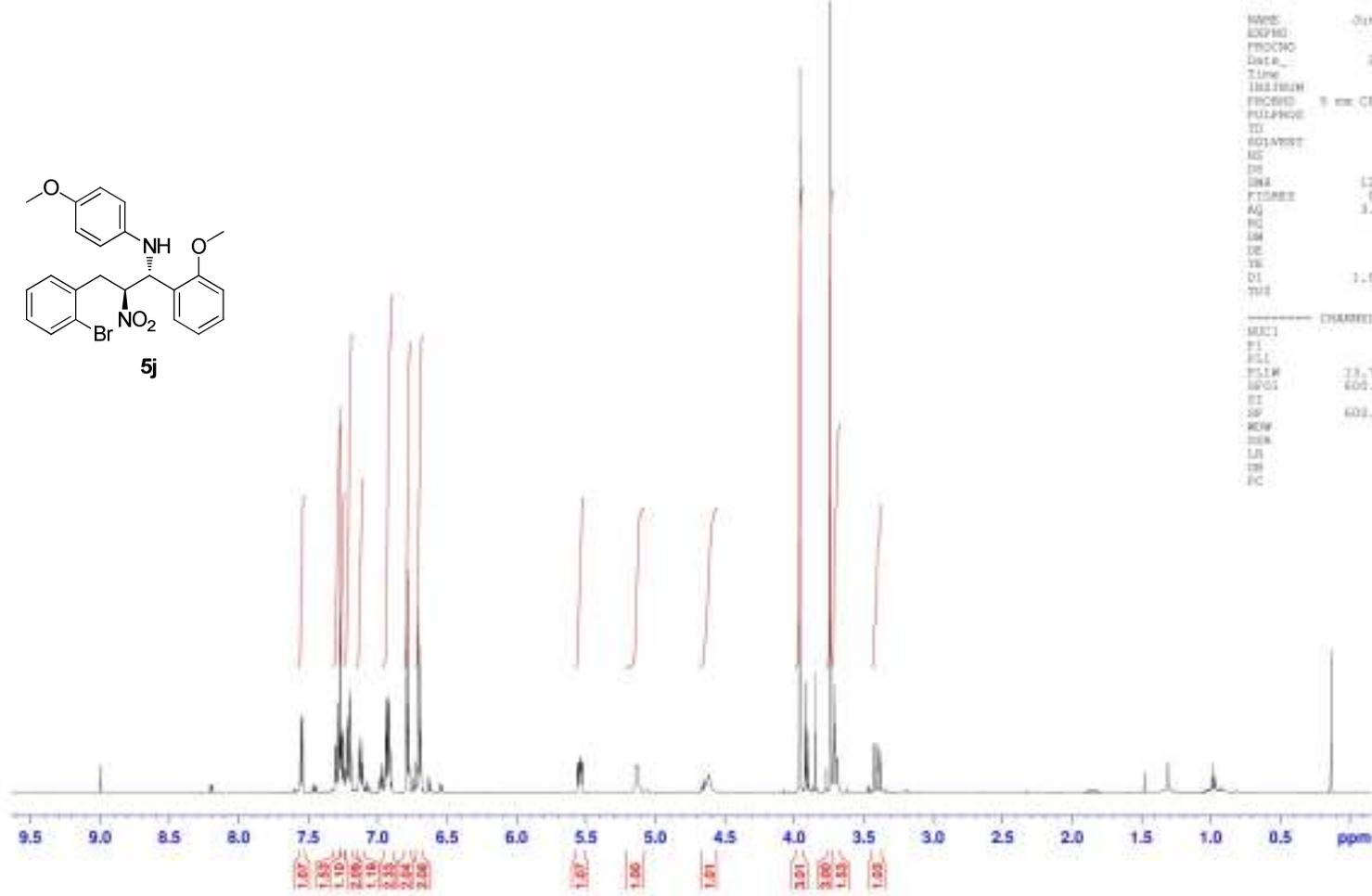
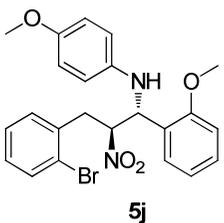
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 dB
SFO1	125.7615981 MHz

===== CHANNEL F2 =====	
NUC2	13C
FL2	9.40 um
PL2	1.00 dB
PL13	19.7686177 dB
PL14	120.40 dB
PL15	19.7686177 dB
PL16	0.16246774 dB
PL17	0.80000000 dB
SFO2	601.1326165 MHz
SI	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

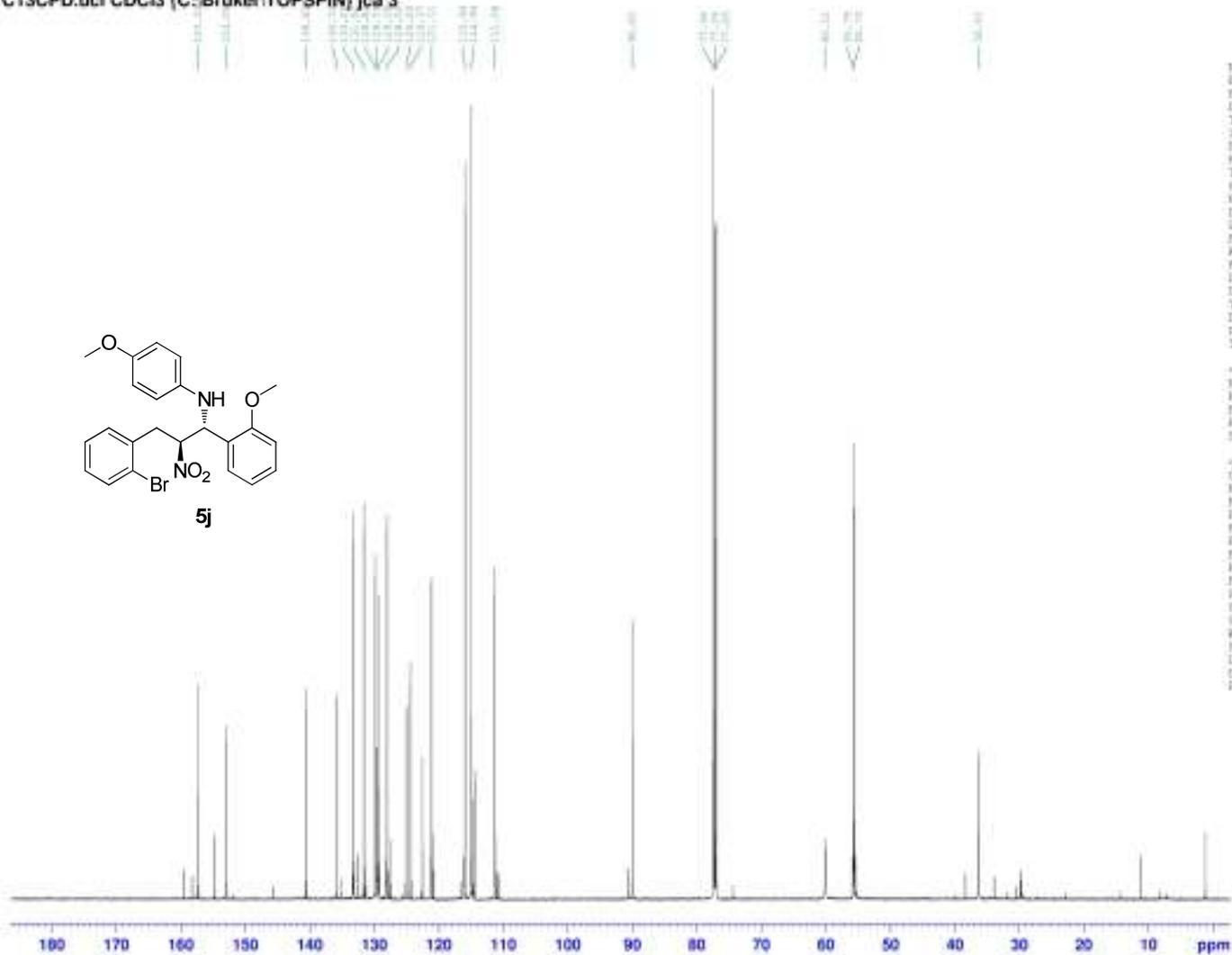
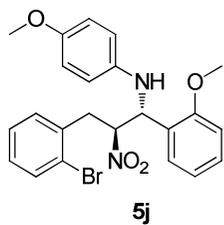
AN464  
 PROTON.ucf CDCI3 (C:Bruker:TOPSPIN) jca 3



```

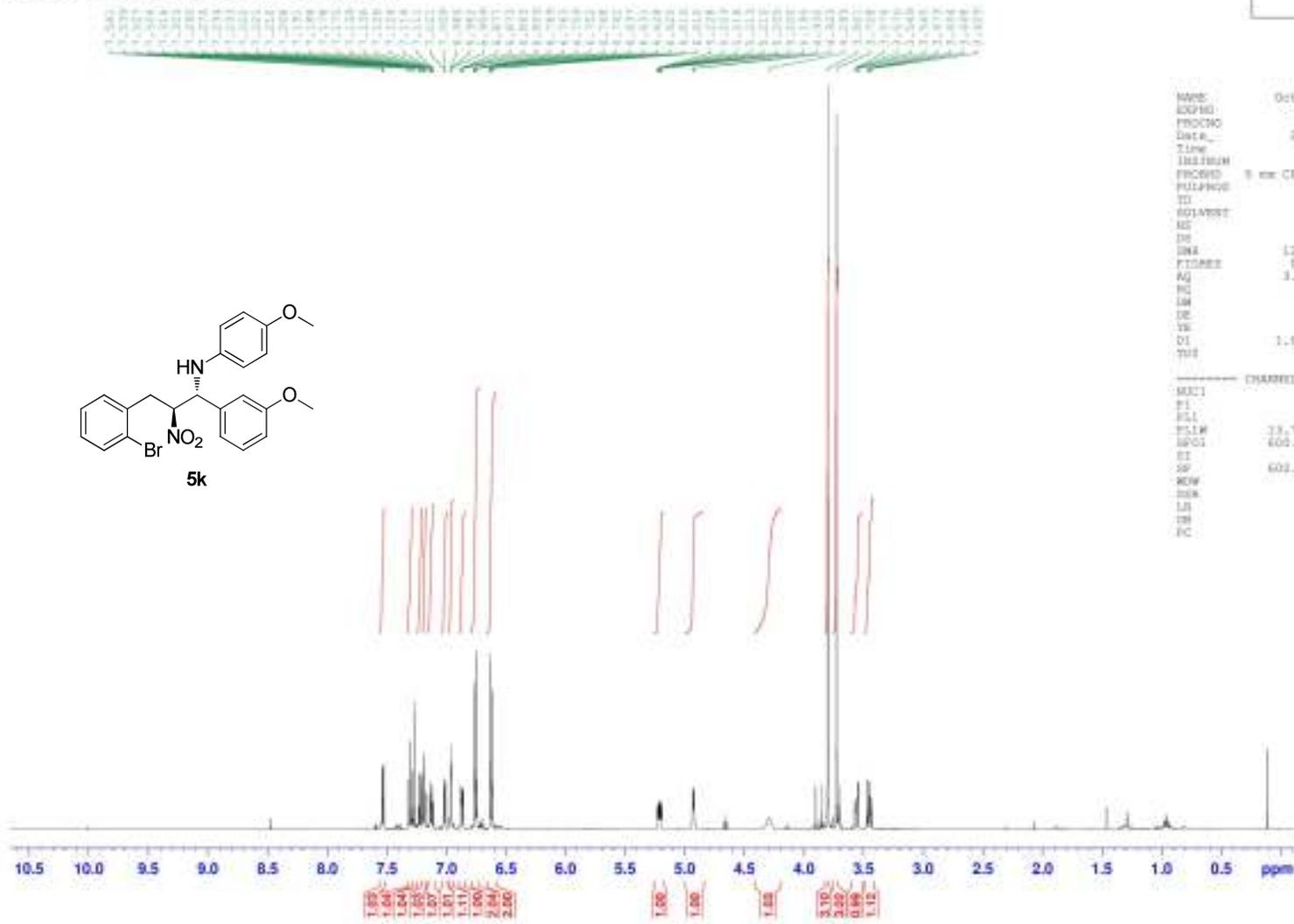
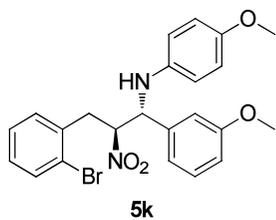
NAME      -Jun18-2010
EXPNO     30
PROCNO    1
Date_     20100416
Time      15.33
INSTRUM   AV400
PROBHD    5 mm CBOCH 15C
PULPROG   zg30
TD         65536
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499404 sec
RG         70
SQ         40.533 use
DE         10.46 use
TE         298.0 K
D1         1.0000000 sec
TMS        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 use
PL1        1.00 dB
PS1P       19.7471014 W
SFO1       602.137041 MHz
SI         32768
SF         602.137041 MHz
RGW        EM
SOL         0
DS         0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN464  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) Jca 3



NAME		Jan14-2010
EXPNO		32
PROCNO		1
Date_		20100610
Time		15.52
INSTRUM		AV400
PROBHD		5 mm CPDCK 13C
PULPROG		zgpg30
TD		65536
SOLVENT		CDCl3
NS		128
DS		0
SWH		16017.401 Hz
FIDRES		0.150197 Hz
AQ		0.9088159 sec
RG		1020
DM		13.847 um
DE		21.55 um
TE		298.0 K
D1		2.6000000 sec
D11		0.1000000 sec
D12		0.1000000 sec
D13		1
===== CHANNEL F1 =====		
NUC1		13C
P1		9.00 um
PL1		0.00 dB
PL12		19.7686177 dB
SFO1		101.317981 MHz
===== CHANNEL F2 =====		
CPDPRG2		waltz16
NUC2		1H
PCPD2		10.00 um
PL2		1.00 dB
PL13		17.23 dB
PL14		20.50 dB
PL15		15.7675124 dB
PL16		0.12796130 dB
PL17		0.17332026 dB
SFO2		400.1326020 MHz
EI		32768
SF		101.9927830 MHz
KOR		SM
EN		0
LB		1.00 Hz
GB		0
PC		1.40

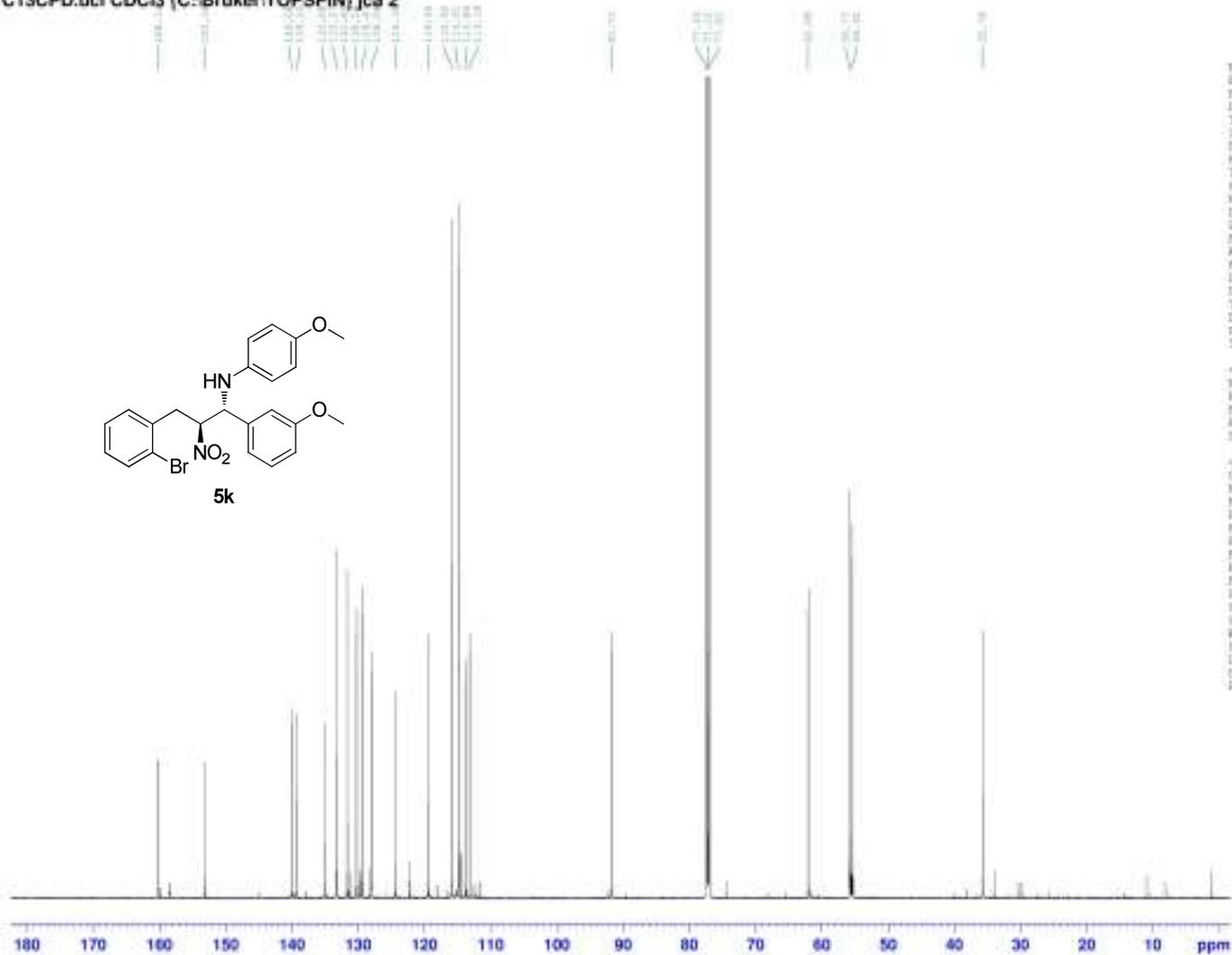
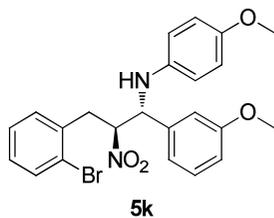
AN602  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 2



```

NAME      Oct13-2010
EXPNO     30
PROCNO    1
Date_     20111024
Time      5.33
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI        36882
SOLVENT   CDCl3
NS        6
DS        0
SWH       12315.326 kHz
FIDRES    0.125053 Hz
AQ        3.9499464 sec
RG        25.6
WDW       EM
SSB       0
GB        0
PC        41.533 usec
DE        10.46 usec
TE        298.0 K
D1        1.60000000 sec
TMS       1
----- CHANNEL f1 -----
NUC1      1H
P1        11.40 usec
PL1       0.00 dB
PS1PW     19.7671016 W
SFO1      400.1437041 MHz
SI        32768
SF        400.1437042 MHz
RG        64
WDW       EM
SSB       0
GB        0
PC        0.30 usec
TE        0
SC        1.40
  
```

AN602  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) Jca 2

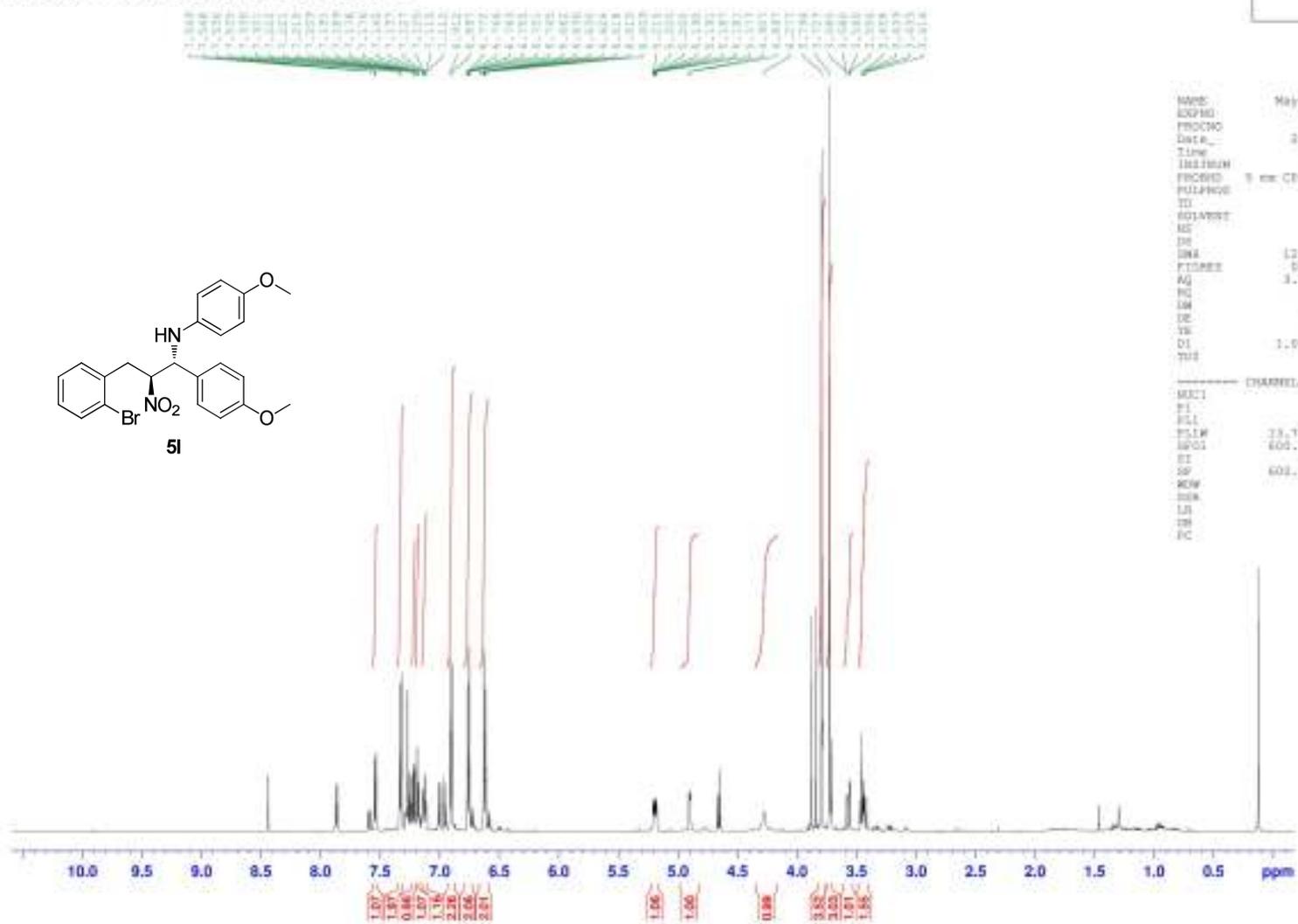
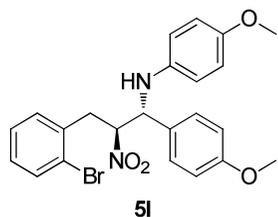


NAME	0411-0310
EXPNO	32
F2PROCNO	1
DATA__	40181814
Time	3.51
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
RF	104.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.23 dB
PL13	20.40 dB
PL14	25.76751724 W
PL15	0.32796138 W
PL16	0.17332926 W
SFO1	601.1326028 MHz
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL22	17.23 dB
PL23	20.40 dB
PL24	25.76751724 W
PL25	0.32796138 W
PL26	0.17332926 W
SFO2	601.1326028 MHz
SI	32768
RF	104.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

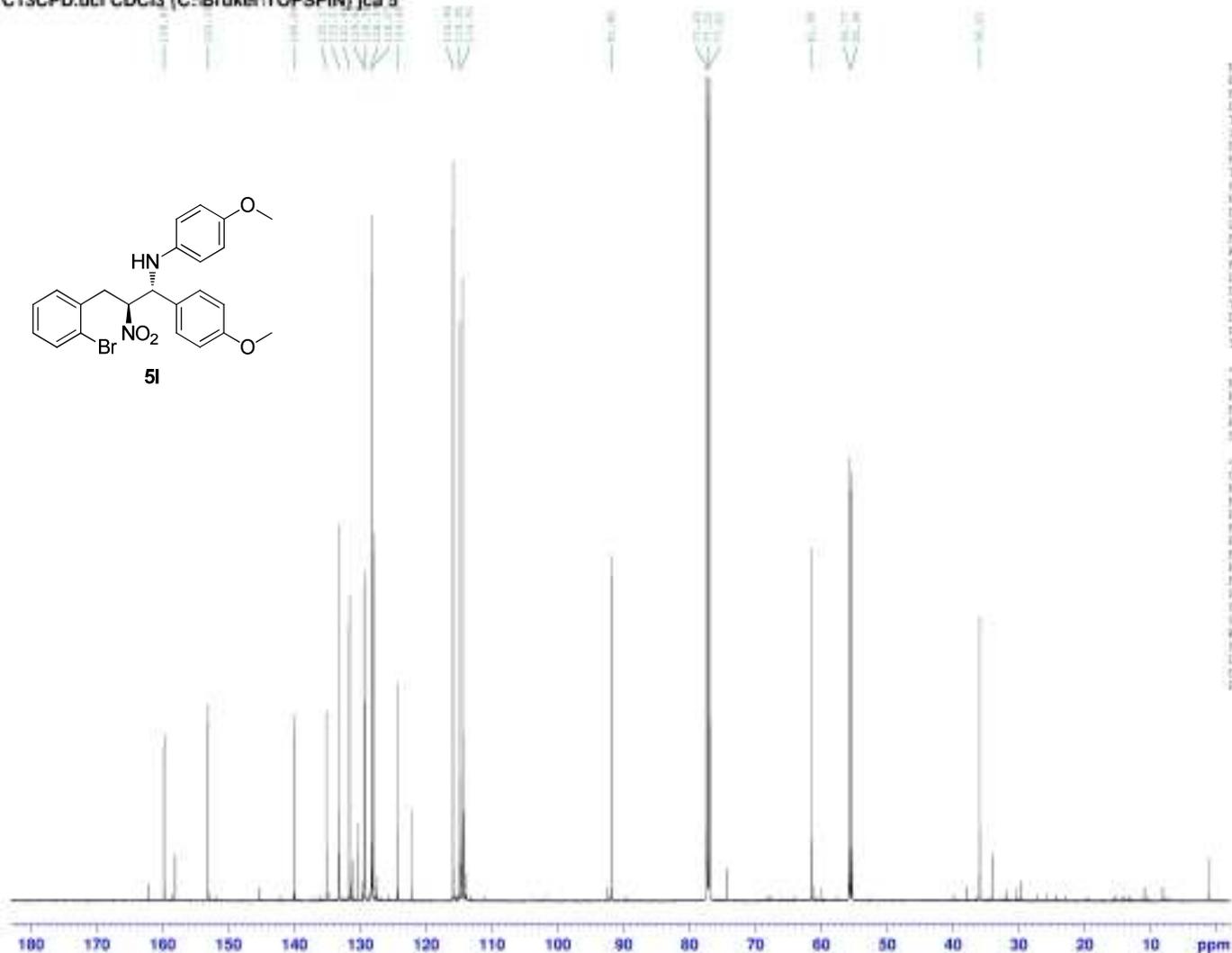
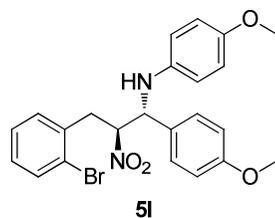
AN437  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 25



```

NAME      May21-2010
EXPNO     10
PROCNO    1
Date_     20100521
Time      17.56
INSTRUM   AV450
PROBHD    5 mm CPDCH 13C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES    0.125053 Hz
AQ         3.9499404 sec
RG         36
LW         40.533 Hz
DE         10.46 Hz
TE         298.0 K
D1         1.0000000 sec
TMS        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1W       19.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
RGW        EM
SOL         0
DS         0
LW         0.30 Hz
TE         0
PC         1.40
  
```

AN438  
C13CPD.ucl CDC13 (C:-Bruker/TOPOSPIN) jca 5



NAME	May21-2010
EXPNO	32
F2PROCNO	1
DATA__	40180521
Time	15.58
INSTRUM	AV650
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SIADJUST	0.0013
NS	128
DS	0
SWH	16017.481 Hz
F2FREQ	5.155197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

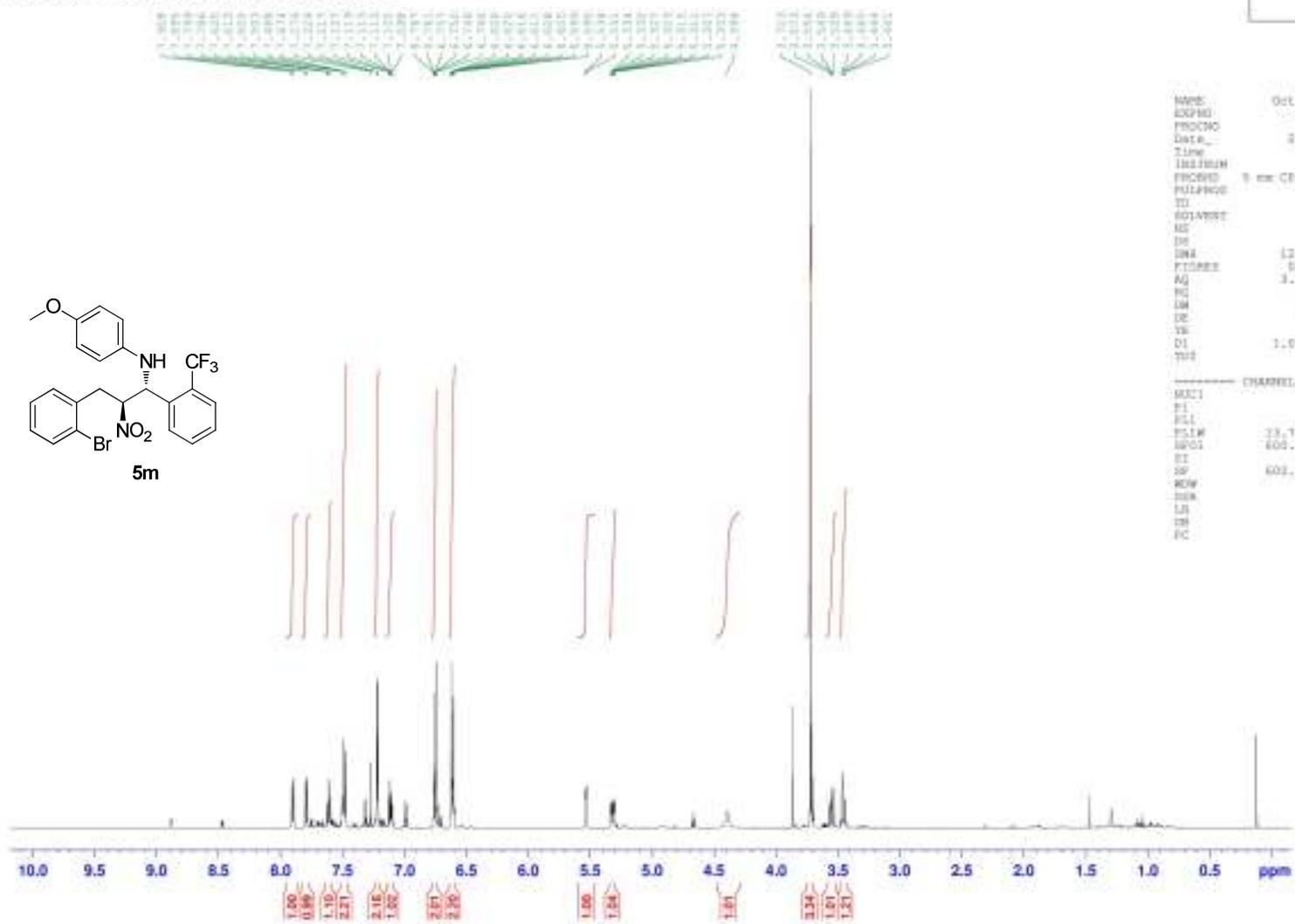
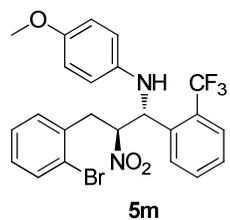
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL1W	25.7686177 W
SFO1	101.3176981 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL22	17.23 dB
PL23	20.00 dB
PL2W	25.76751724 W
PL2M	0.12796138 W
PL2N	0.17332026 W
RFQ2	603.1326028 MHz
SI	32768
SW	101.9327830 MHz
WDR	5M
SR	0
LB	1.00 Hz
GB	0
PC	1.40

AN606  
 PROTON.ucf CDCI3 (C:\Bruker\TOPSPIN) jca 6



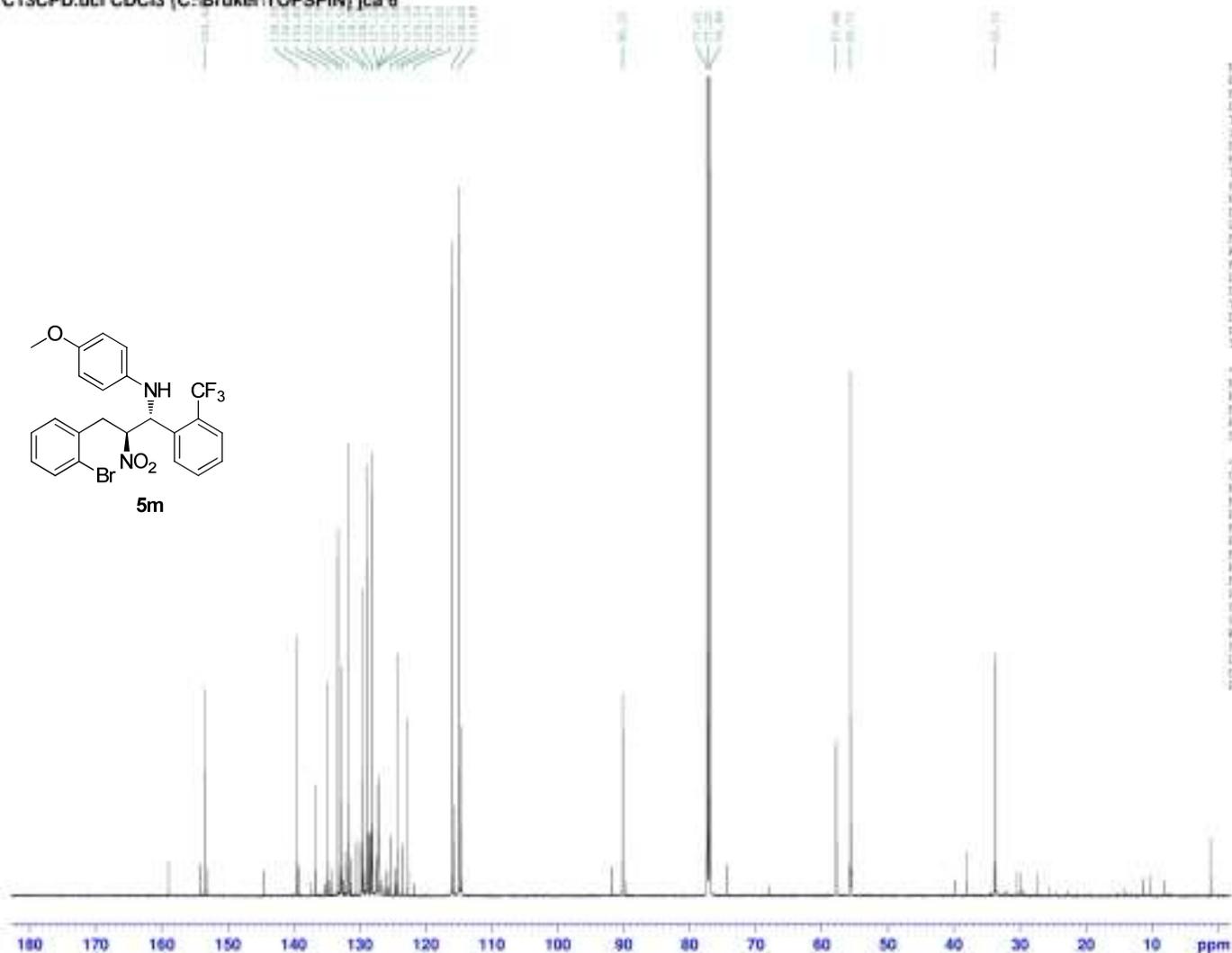
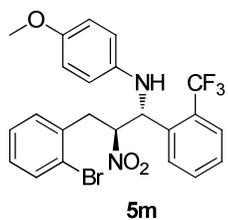
```

NAME      Oct18-2010
EXPNO     10
PROCNO    1
Date_     20111010
Time      17.52
INSTRUM   AV600
PROBHD    5 mm CPDCH 13C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         33.2
WDW        EM
SSB        0
GB         0
PC         42.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.60000000 sec
TD0        1
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PL12       19.7671014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437047 MHz
WDW        EM
SSB        0
GB         0
PC         0.30 usec
TE         0
SC         1.40
  
```

AN606  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 6



NAME	Oct18-2020
EXPNO	12
F2PROCNO	1
DATE_	20181018
TIME	17.51
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
RF	101.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DR	0
DC	1.40

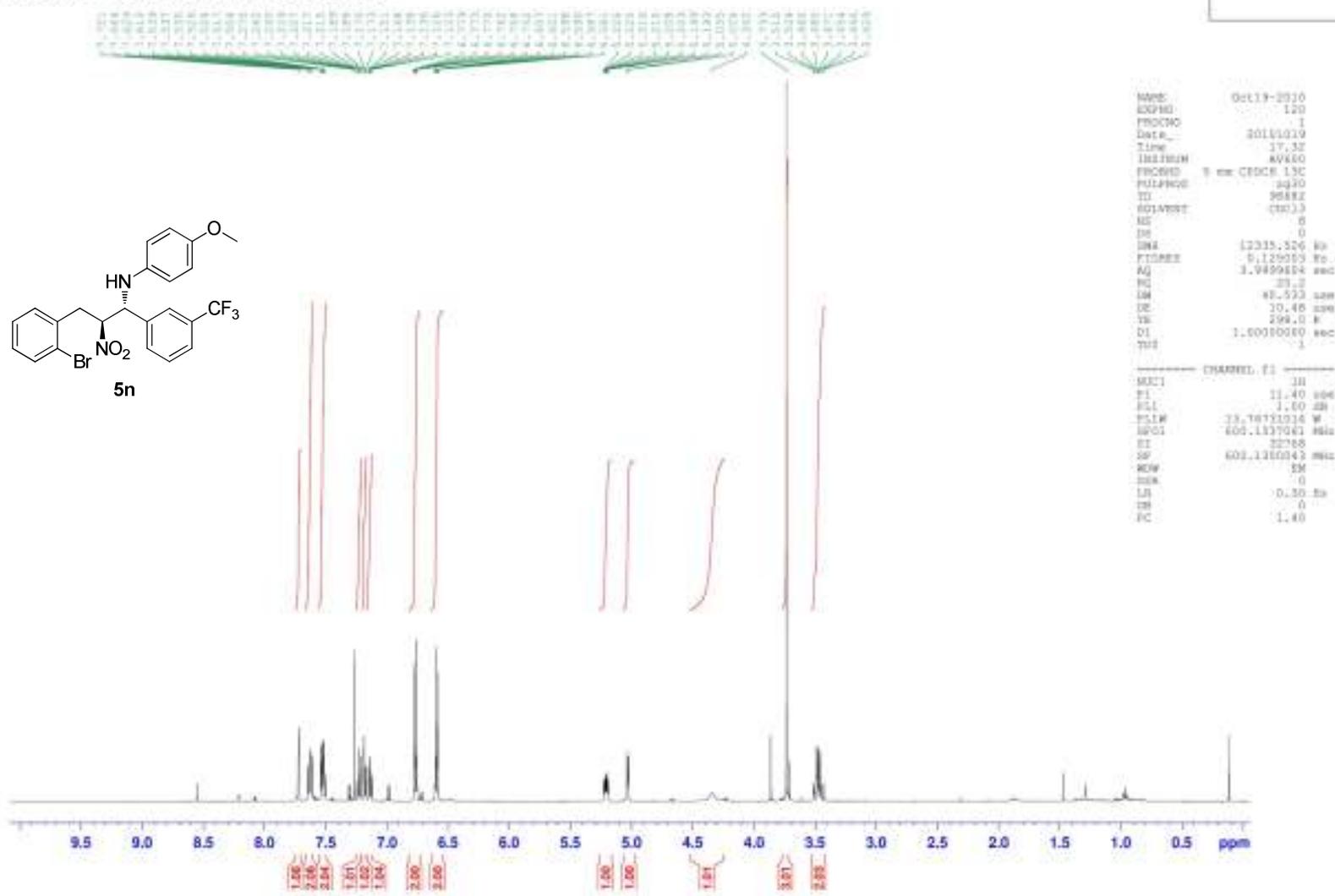
===== CHANNEL F1 =====

NUC1	13C
FL1	9.40 MHz
PL1	0.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.76751724 W
PL15	0.32786138 W
PL16	0.17332926 W
RFQ1	603.1326028 MHz
SI	32768
SF	101.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DR	0
DC	1.40

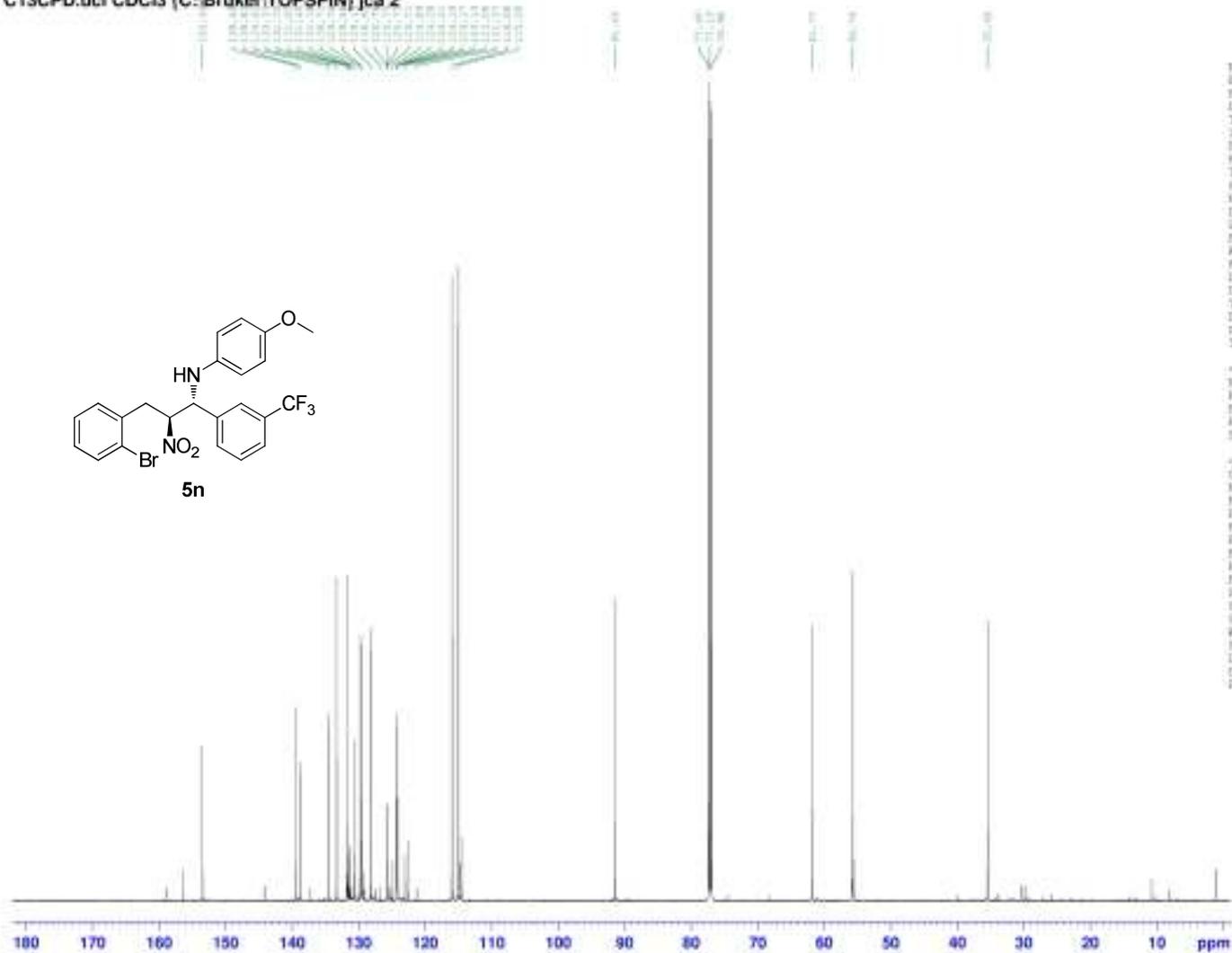
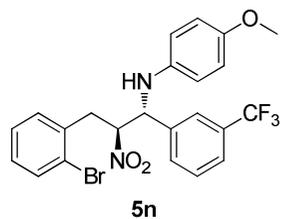
===== CHANNEL F2 =====

CPDPRG2	waltz16
NUC2	13C
FL2	9.40 MHz
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.76751724 W
PL15	0.32786138 W
PL16	0.17332926 W
RFQ2	603.1326028 MHz
SI	32768
SF	101.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DR	0
DC	1.40

AN607  
 PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 21

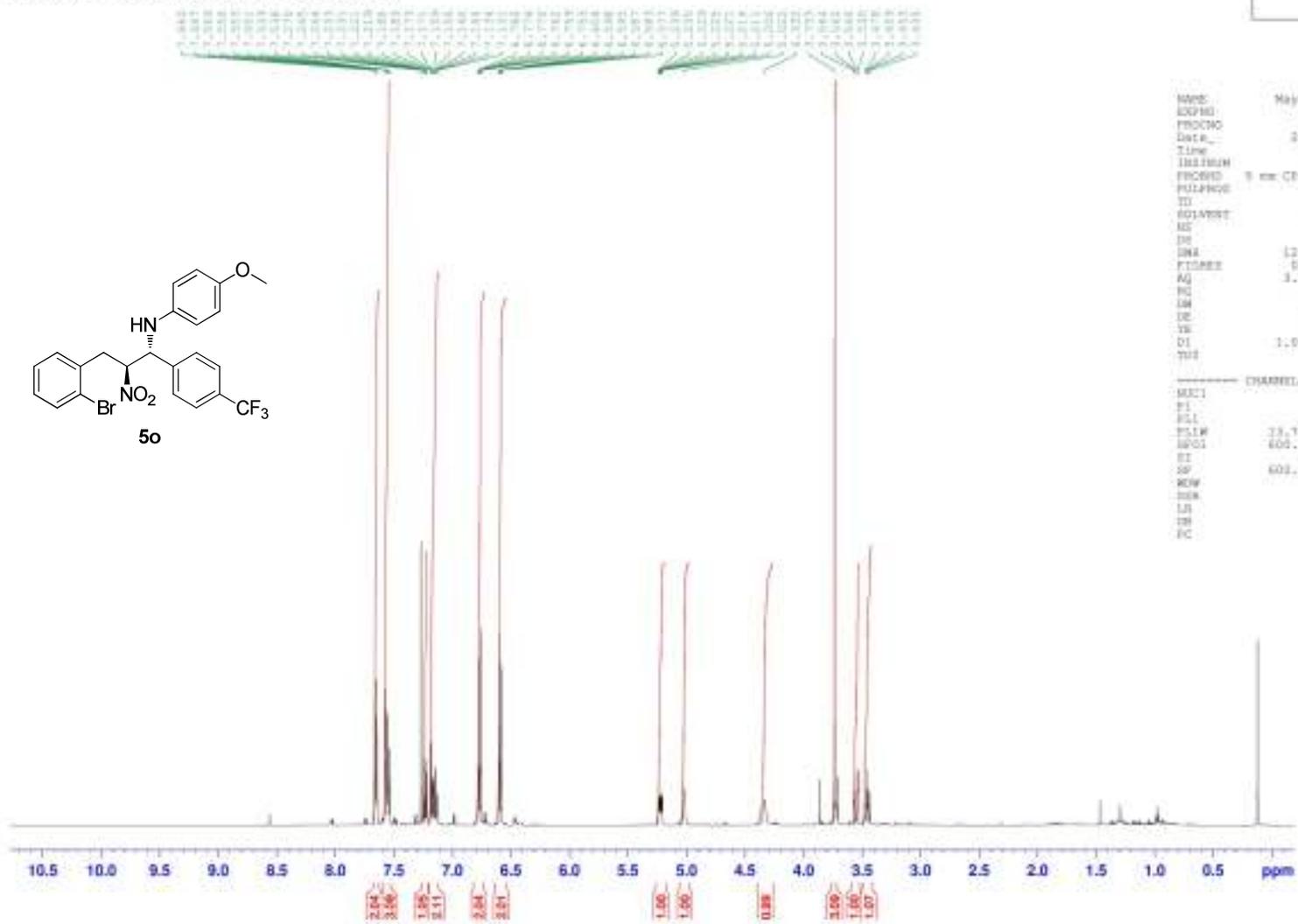
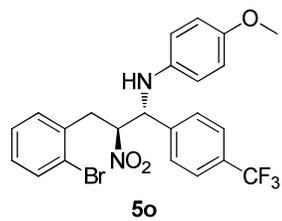


AN607  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 2



NAME	0611-0110
EXPNO	122
F2PROCNO	1
DATE_	20181019
TIME	17.51
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	13C
Q	0
RG	320
RG2	320
RG3	320
RG4	320
RG5	320
RG6	320
RG7	320
RG8	320
RG9	320
RG10	320
RG11	320
RG12	320
RG13	320
RG14	320
RG15	320
RG16	320
RG17	320
RG18	320
RG19	320
RG20	320
RG21	320
RG22	320
RG23	320
RG24	320
RG25	320
RG26	320
RG27	320
RG28	320
RG29	320
RG30	320
RG31	320
RG32	320
RG33	320
RG34	320
RG35	320
RG36	320
RG37	320
RG38	320
RG39	320
RG40	320
RG41	320
RG42	320
RG43	320
RG44	320
RG45	320
RG46	320
RG47	320
RG48	320
RG49	320
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RG54	320
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RG56	320
RG57	320
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RG61	320
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RG64	320
RG65	320
RG66	320
RG67	320
RG68	320
RG69	320
RG70	320
RG71	320
RG72	320
RG73	320
RG74	320
RG75	320
RG76	320
RG77	320
RG78	320
RG79	320
RG80	320
RG81	320
RG82	320
RG83	320
RG84	320
RG85	320
RG86	320
RG87	320
RG88	320
RG89	320
RG90	320
RG91	320
RG92	320
RG93	320
RG94	320
RG95	320
RG96	320
RG97	320
RG98	320
RG99	320
RG100	320

AN451  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 47



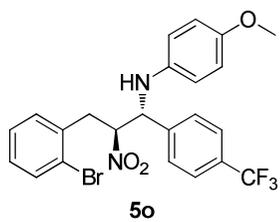
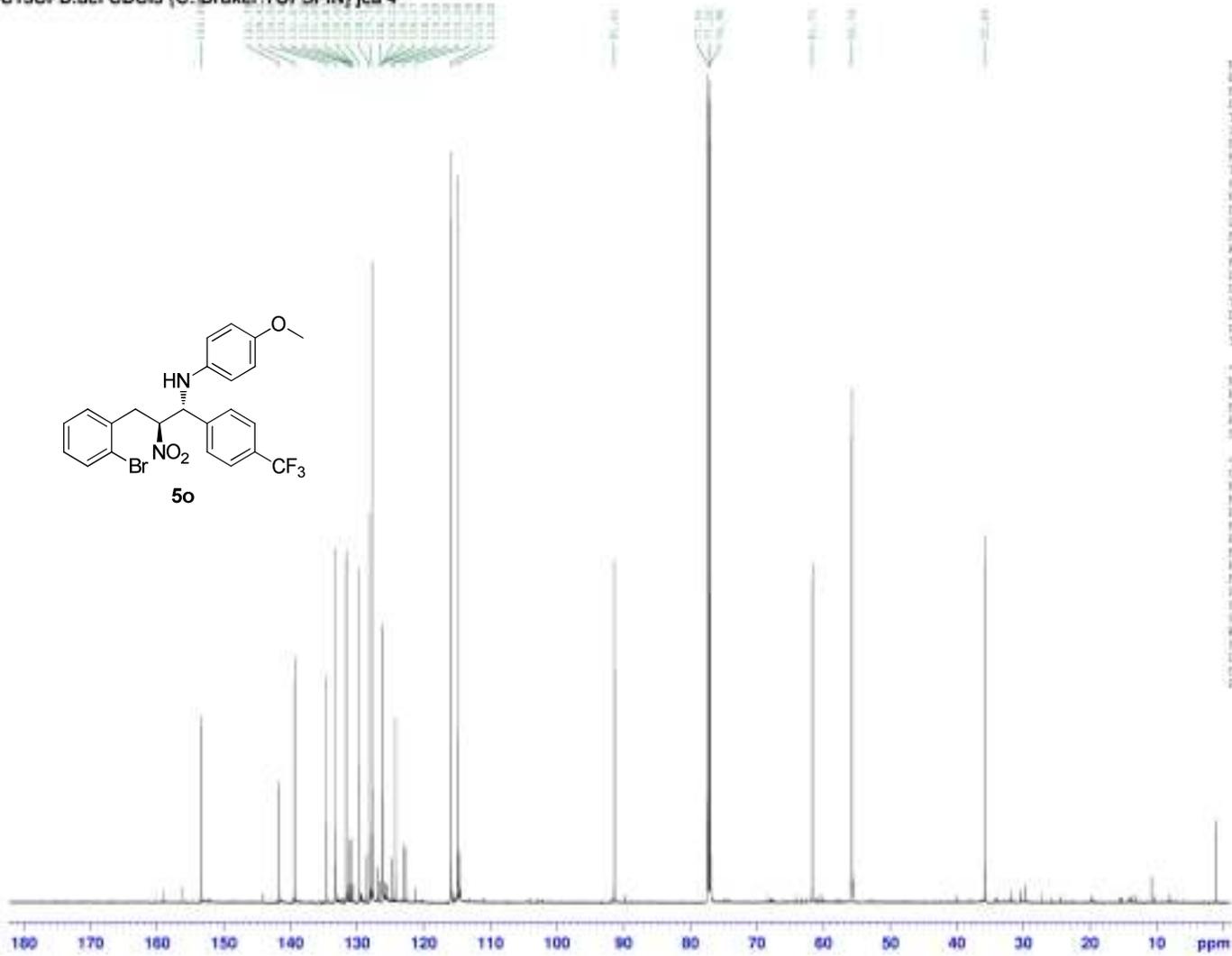
```

NAME      May07-2010
EXPNO     120
PROCNO    1
Date_     20100527
Time      18.57
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         38
DQ         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.0000000 sec
TD0        1
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PS1W       19.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
RG         38
DQ         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.0000000 sec
  
```

AN451  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 4



NAME	May07-0110
EXPNO	122
F2PROCNO	1
DATE_	20100227
TIME	15.59
INSTRUM	AVANCE
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.0013
MS	128
DS	0
SWH	16017.481 Hz
F2FREQ1	5.150197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

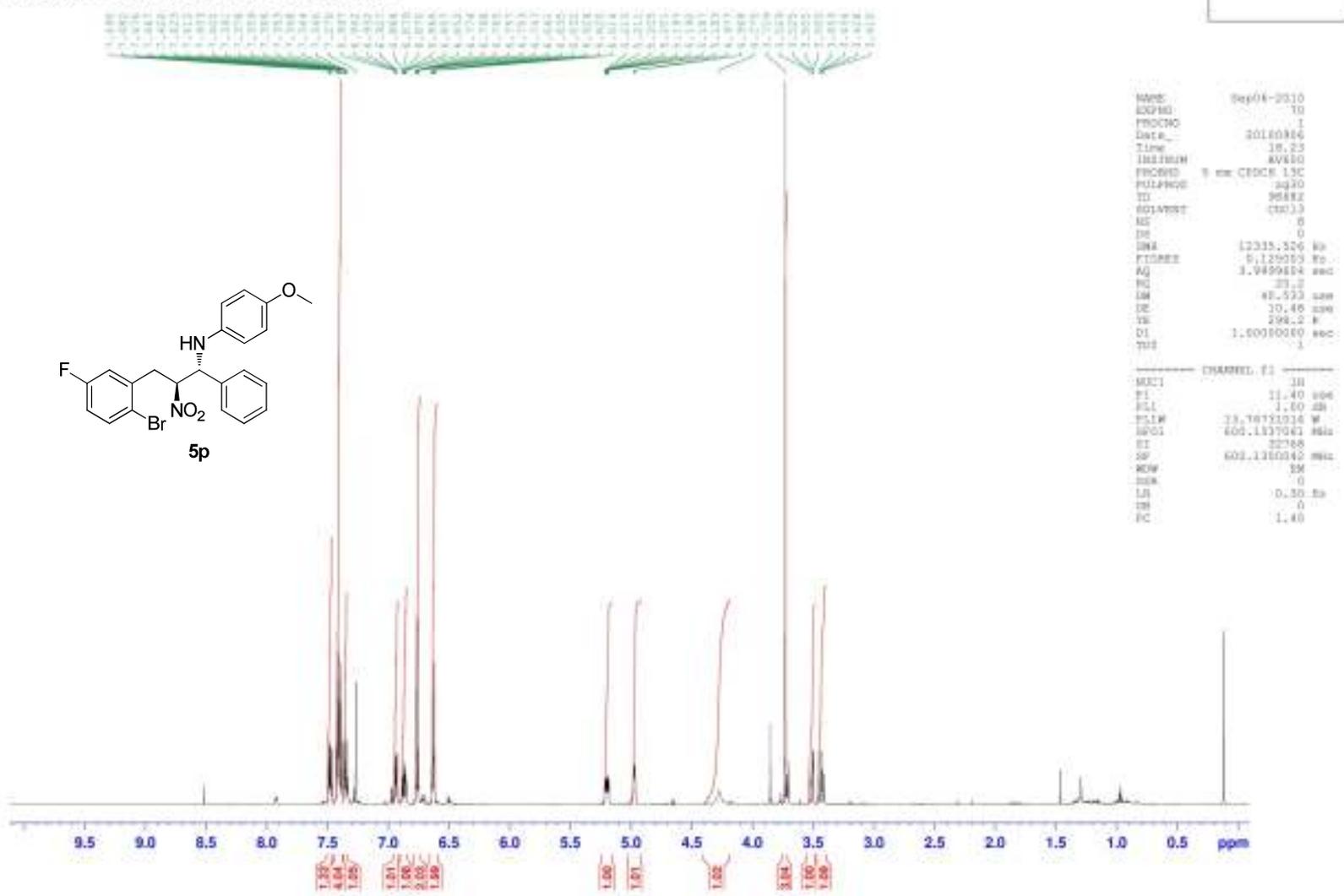
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	18.7086177 W
SFO1	101.317981 MHz

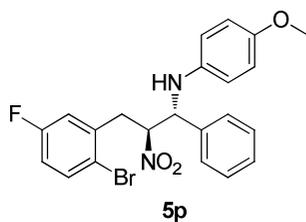
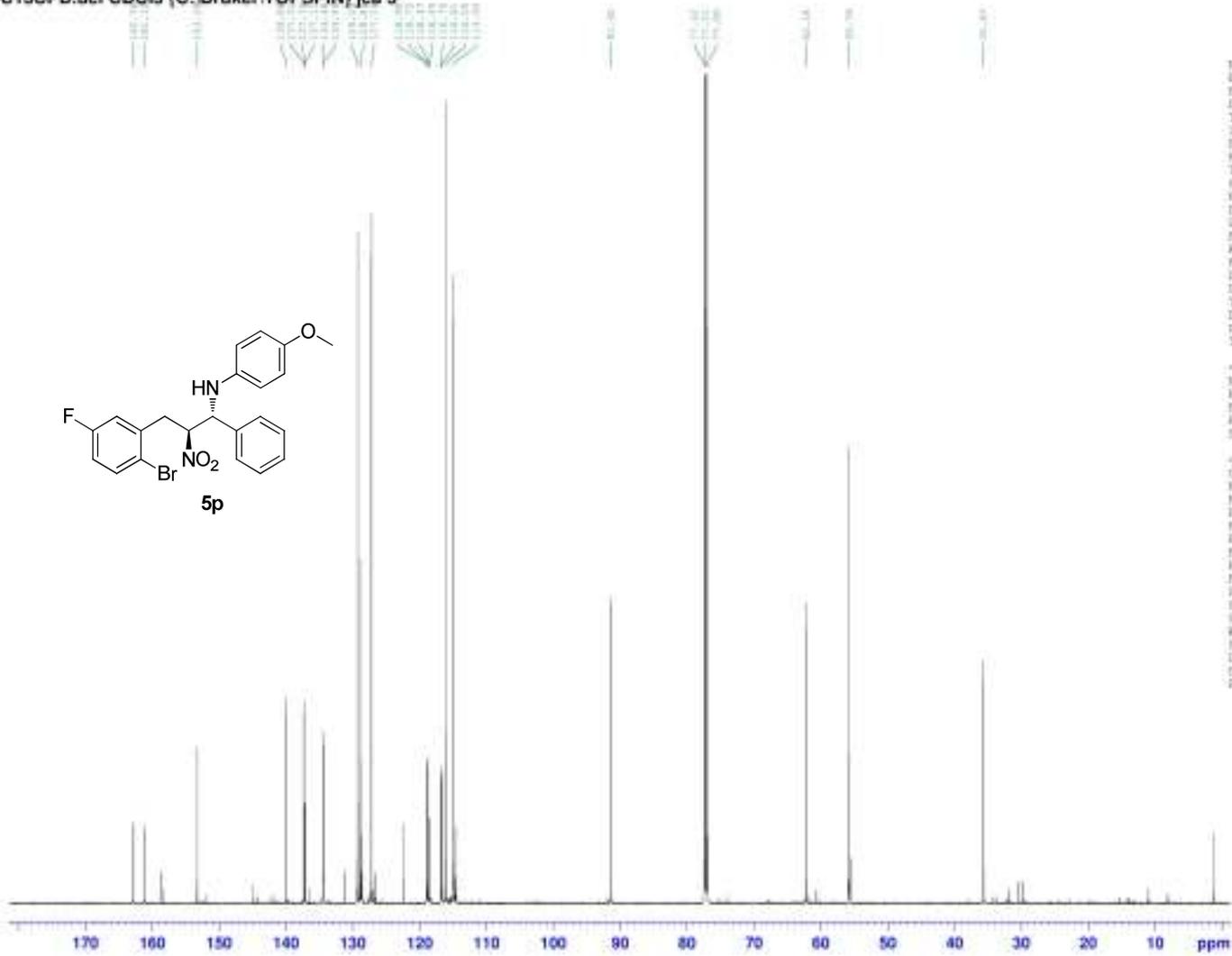
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.00 dB
PL14	15.76751714 W
PL15	0.10796130 W
PL16	0.17337020 W
RFQ2	601.1326020 MHz
SI	32768
SP	101.9927830 MHz
SCW	5M
SR	0
LD	1.00 Hz
DR	0
DC	1.40

AN552  
PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 30



AN552  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 3



NAME	Sep04-2010
EXPNO	12
F2PROCNO	1
DATE_	20100906
TIME	18.35
INSTRUM	AV400
PROBHD	5 mm CPOCR 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
RF	101.9327830 MHz
WDR	5M
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

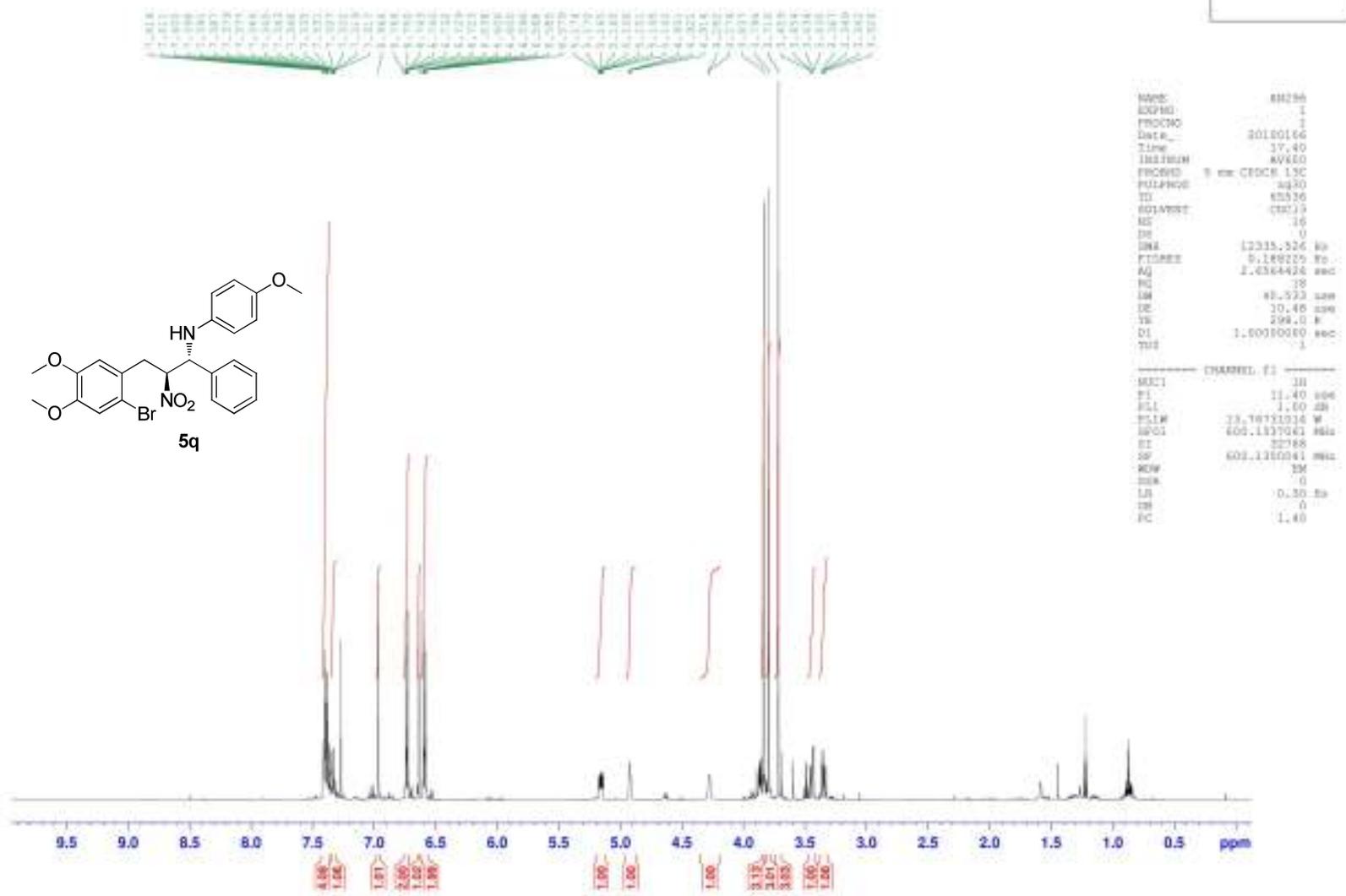
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 MHz
PL1	0.00 dB
PL12	19.23 dB
PL13	20.50 dB
PL14	25.76751724 W
PL15	0.32796130 W
PL16	0.17332926 W
SFO1	101.9327830 MHz

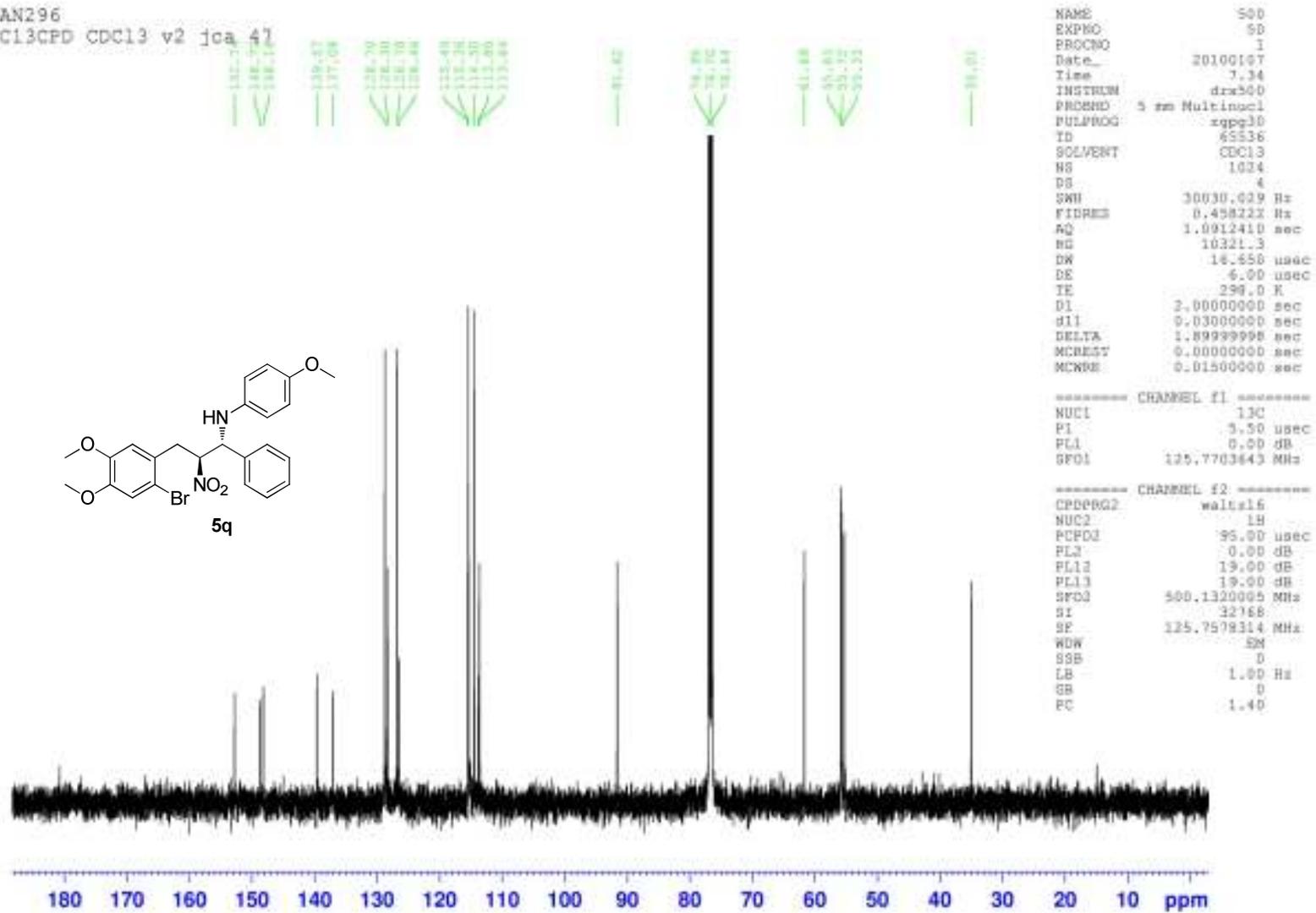
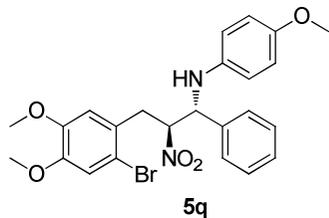
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	70.00 MHz
PL2	1.00 dB
PL22	17.23 dB
PL23	20.50 dB
PL24	25.76751724 W
PL25	0.32796130 W
PL26	0.17332926 W
SFO2	401.1326020 MHz

AN296



AN296  
Cl3CPD CDC13 v2 jca 41

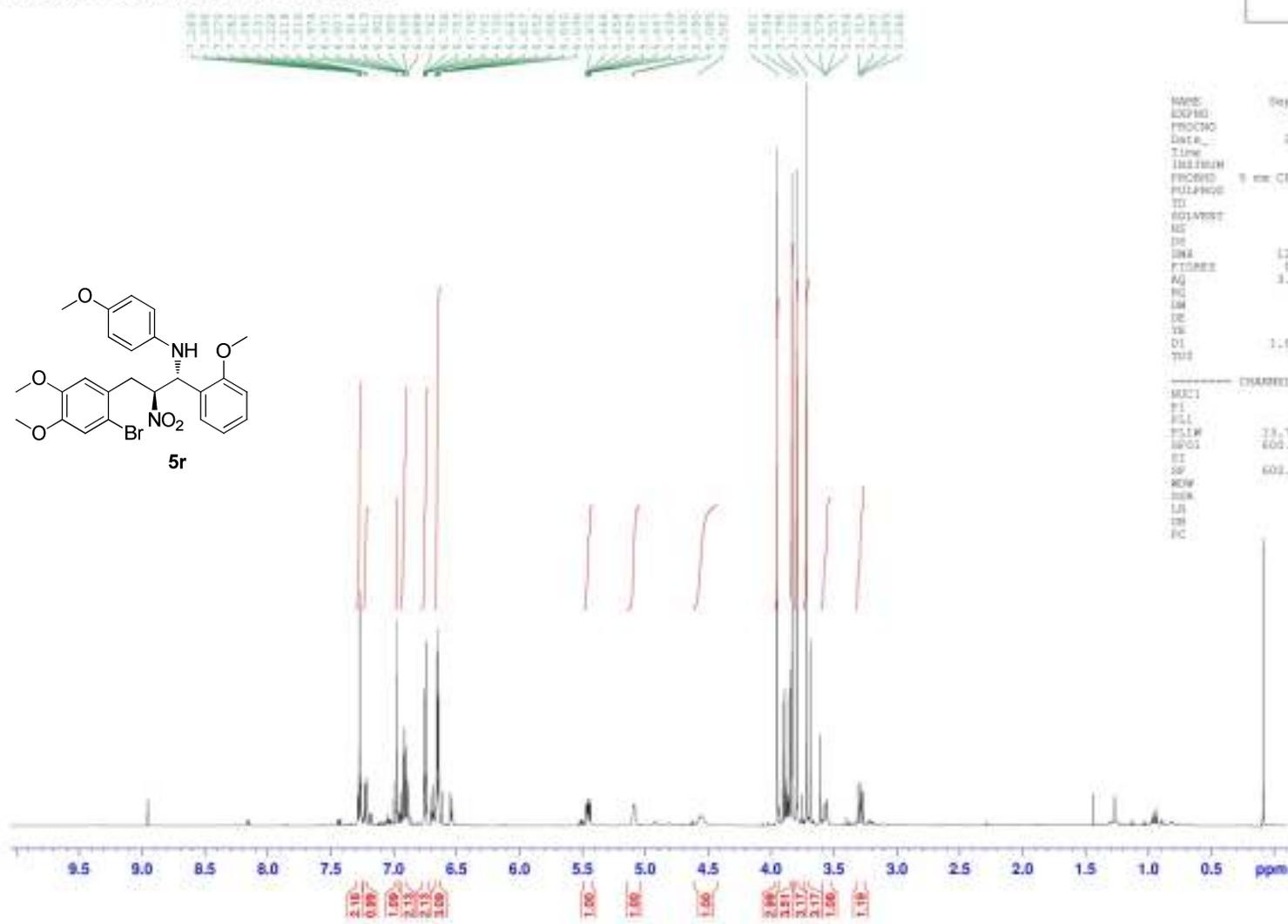


```
NAME 500
EXPNO 50
PROCNO 1
Date_ 20100107
Time 7.34
INSTRUM drx500
PROBHD 5 mm Multinoel
PULPROG zgpg30
TD 65536
SOLVENT CDCl3
NS 1024
DS 4
SWH 30030.029 Hz
FIDRES 0.458222 Hz
AQ 1.0912410 sec
RG 10321.3
DW 16.650 usec
DE 6.00 usec
TE 298.0 K
D1 2.0000000 sec
d11 0.0300000 sec
DELTA 1.89999998 sec
MCREST 0.0000000 sec
MCWDE 0.01500000 sec
```

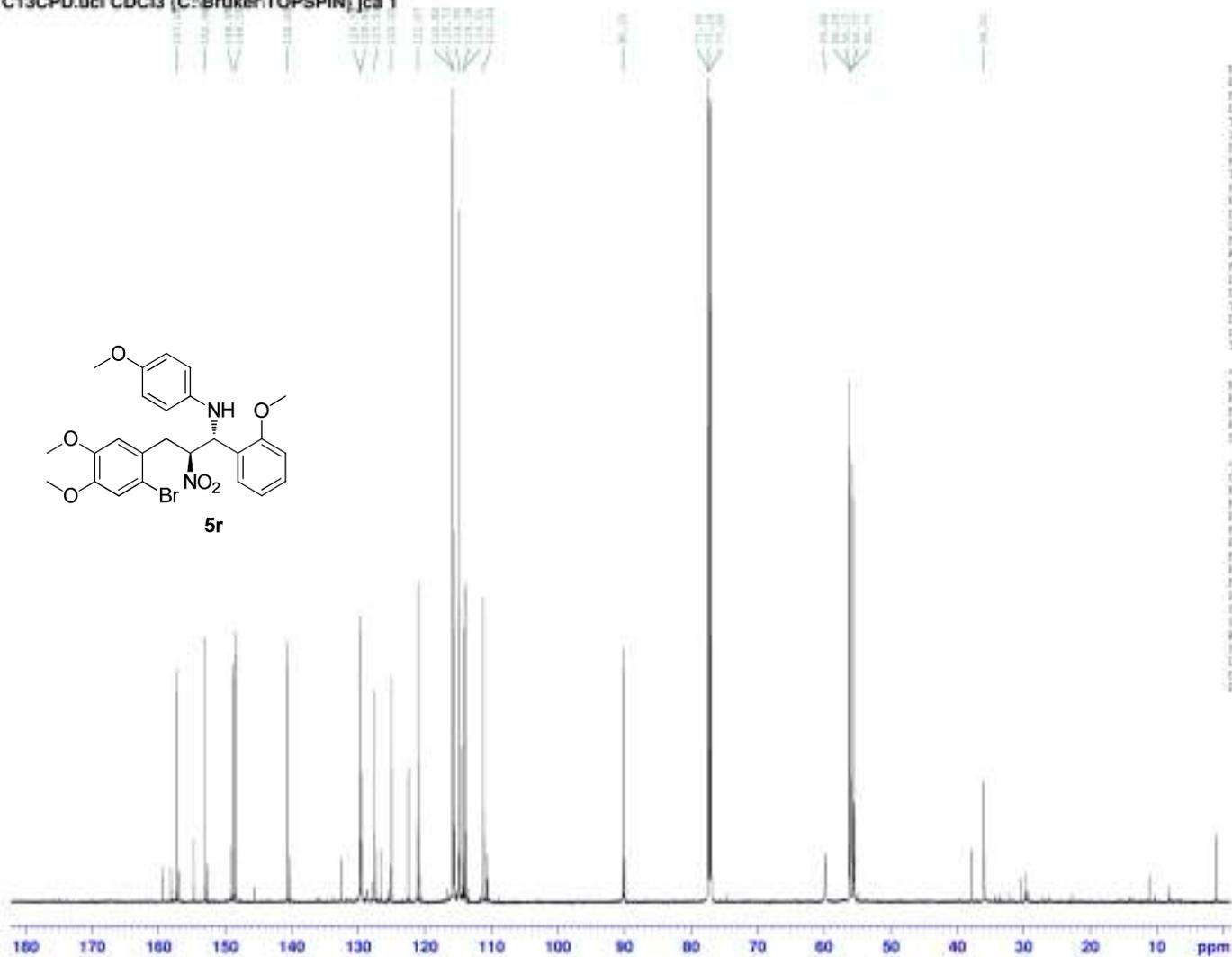
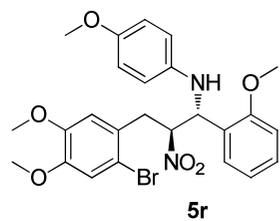
```
==== CHANNEL f1 =====
NUC1 13C
P1 3.50 usec
PL1 0.00 dB
SFO1 125.7703643 MHz
```

```
==== CHANNEL f2 =====
CPCPRG2 waltz16
NUC2 1H
PCPD1 95.00 usec
PL2 0.00 dB
PL12 19.00 dB
PL13 19.00 dB
SFO2 500.1320005 MHz
SI 32768
SF 125.7578314 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40
```

AN572  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 2



AN572  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1



NAME	Seq01-0110
EXPNO	22
F2PROCNO	1
DATE_	20180920
TIME	15.21
INSTRUM	AV400
PROBHD	5 mm CBOC1 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	3.00
GB	0
PC	1.00
AG	0.30000000
RG	0.30000000
WD	13.847
DE	21.55
TE	298.2
D1	2.80000000
D11	0.30000000
TD0	1

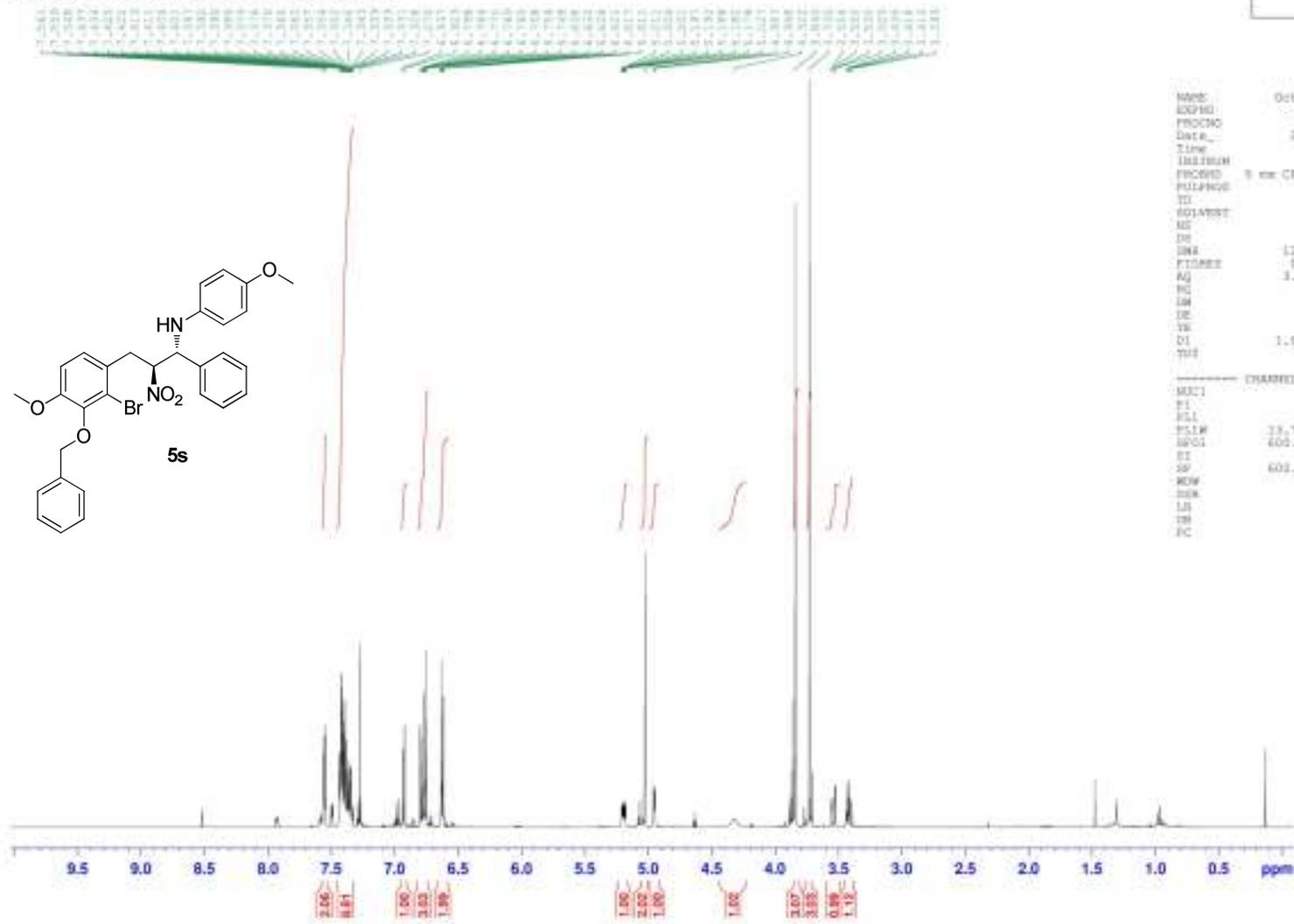
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	5.00
PL1H	20.7086177
SFO1	125.7610000

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00
PL2	1.00
PL2H	17.23
PL2I	20.00
PL2M	25.7675124
PL2N	0.32796130
PL2O	0.17332026
SFO2	400.1424000
SI	32768
SR	101.9327830
SCW	EM
SRH	0
LD	1.00
DR	0
DC	1.40

AN598  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 1

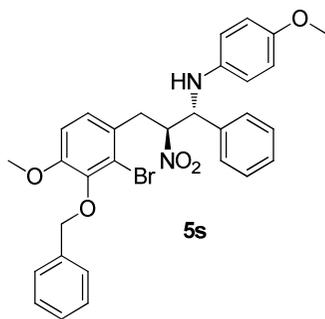
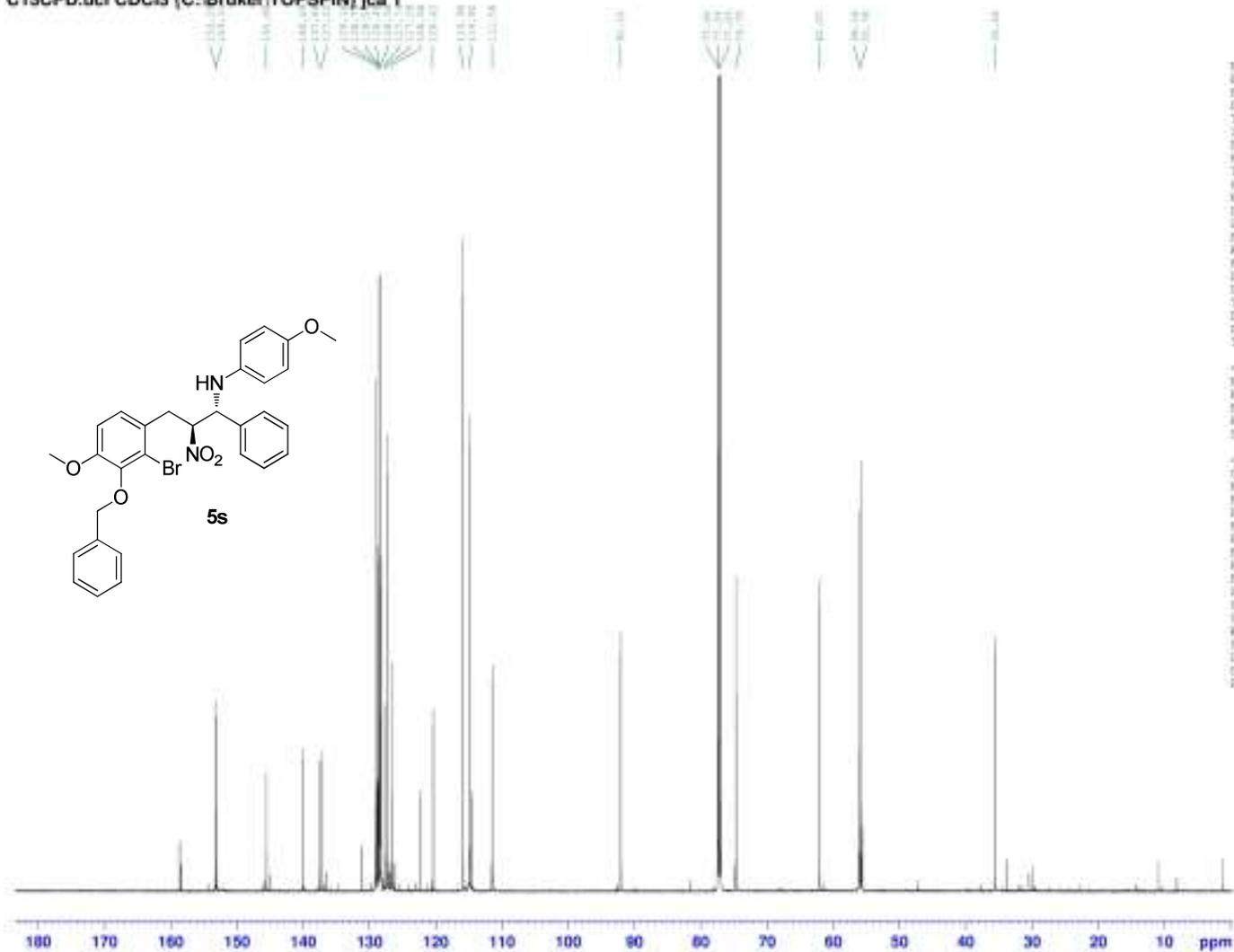


```

NAME      Oct12-2010
EXPNO     80
PROCNO    1
Date_     20101012
Time      4.11
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         38
DWDW       40.533 mm
DE         10.46 mm
TE         298.0 K
D1         1.0000000 sec
TD0        1

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PL12       19.7671014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
WDW         EM
SSB         0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN598  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



NAME	0411-0110
EXPNO	01
F2PROCNO	1
DATE_	01101013
TIME	4.20
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	327.681
RTIME	5.150197
AQ	0.9088159
RG	1020
DM	13.847
DE	21.55
YC	298.0
D1	2.6000000
D11	0.1000000
TD0	1

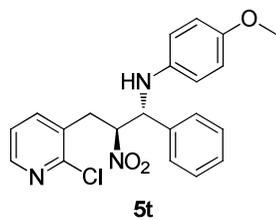
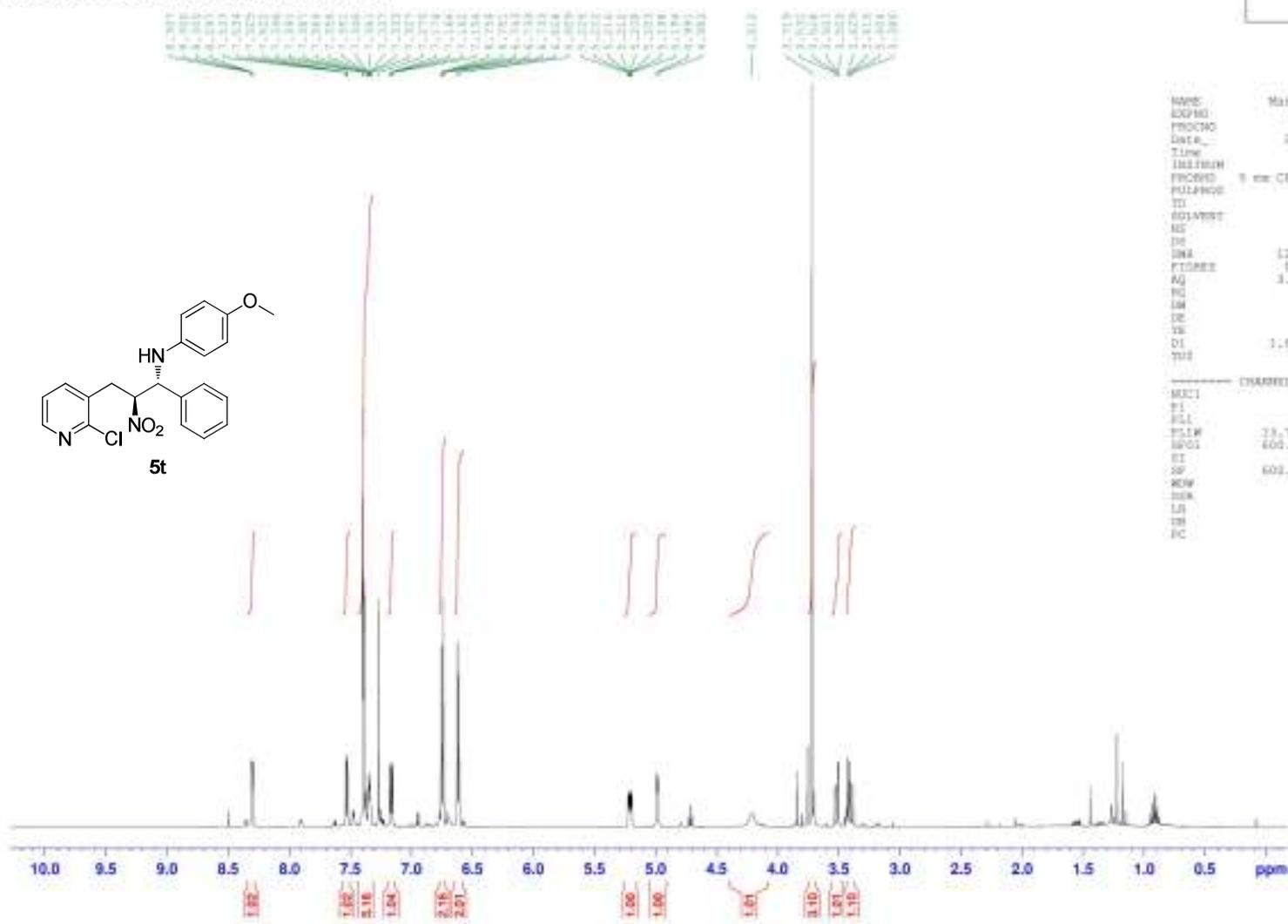
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	5.00
PL1H	18.7686177
SFO1	125.7610000

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00
PL2	1.00
PL2H	17.23
PL3	20.00
PL3H	15.7675124
PL4H	0.12596130
PL5H	0.17332026
SFO2	601.1326020
SI	327.68
SF	101.9327830
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

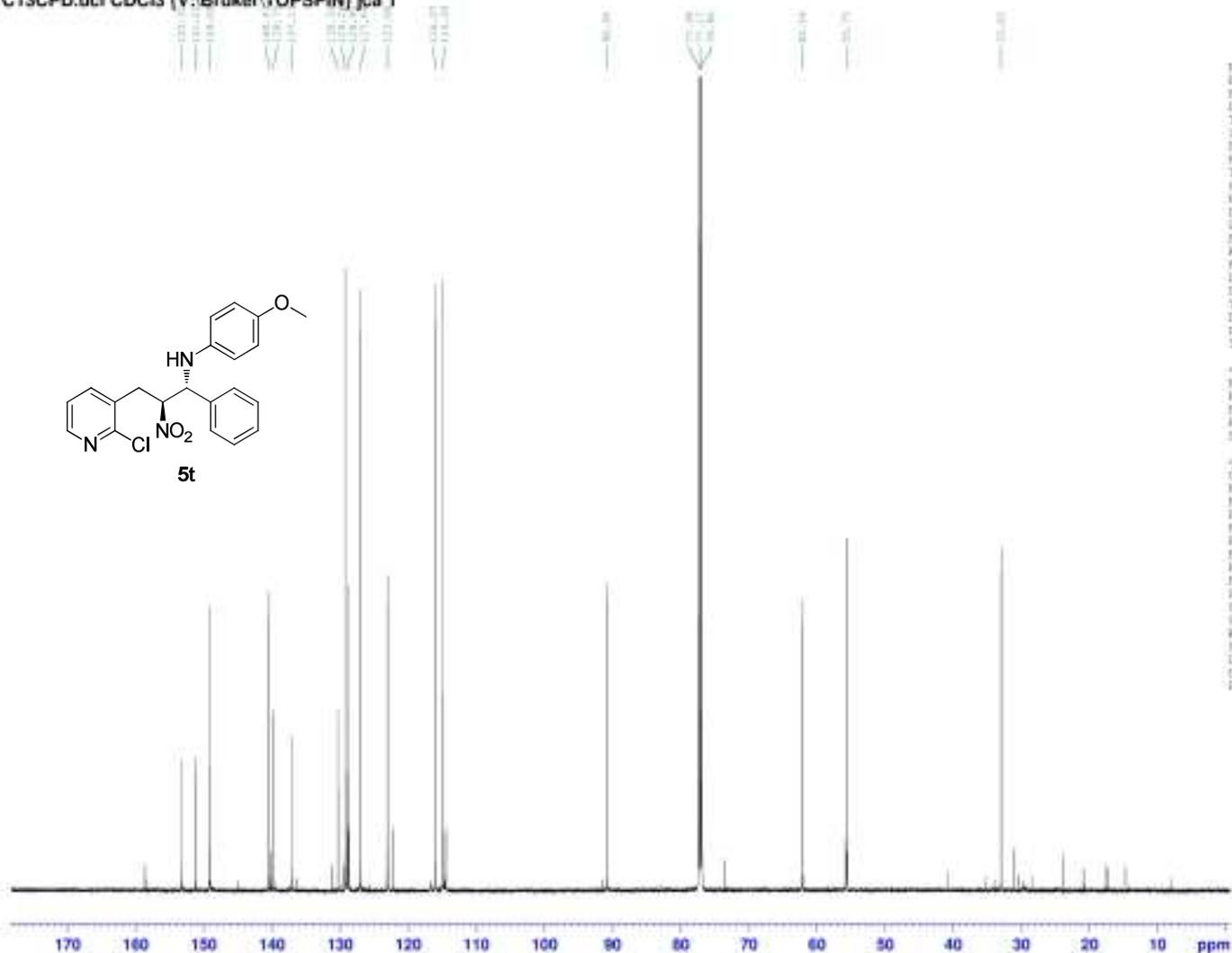
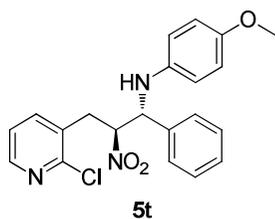
AN1007  
 PROTON.uc1 CDCI3 (V::Bruker:TOPSPIN) jca 1



```

NAME      Mar14-2012
EXPNO     40
PROCNO    1
Date_     20120314
Time      11.50
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI        36882
SOLVENT   CDCl3
NS        6
DS        0
SWH       12315.326 Hz
FIDRES    0.125053 Hz
AQ        3.9499404 sec
RG        384
WDW        EM
SSB        0
GB         0
PC        1.0000000 sec
RG2       1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PL12       19.7671014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437044 MHz
RG         65536
WDW        EM
SSB        0
GB         0
PC        1.40
  
```

AN1007  
 C13CPD.ucl CDC13 (V: Bruker TOPSPIN) jca 1



NAME	Mac14-2012
EXPNO	42
F2PROCNO	1
DATE_	20120314
TIME	15.52
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10388
SF	125.761
AQ	0.00000000 sec
RG	1020
DM	12.000 um
DE	21.30 um
TE	298.0 K
D1	2.00000000 sec
D11	0.00000000 sec
DS	1

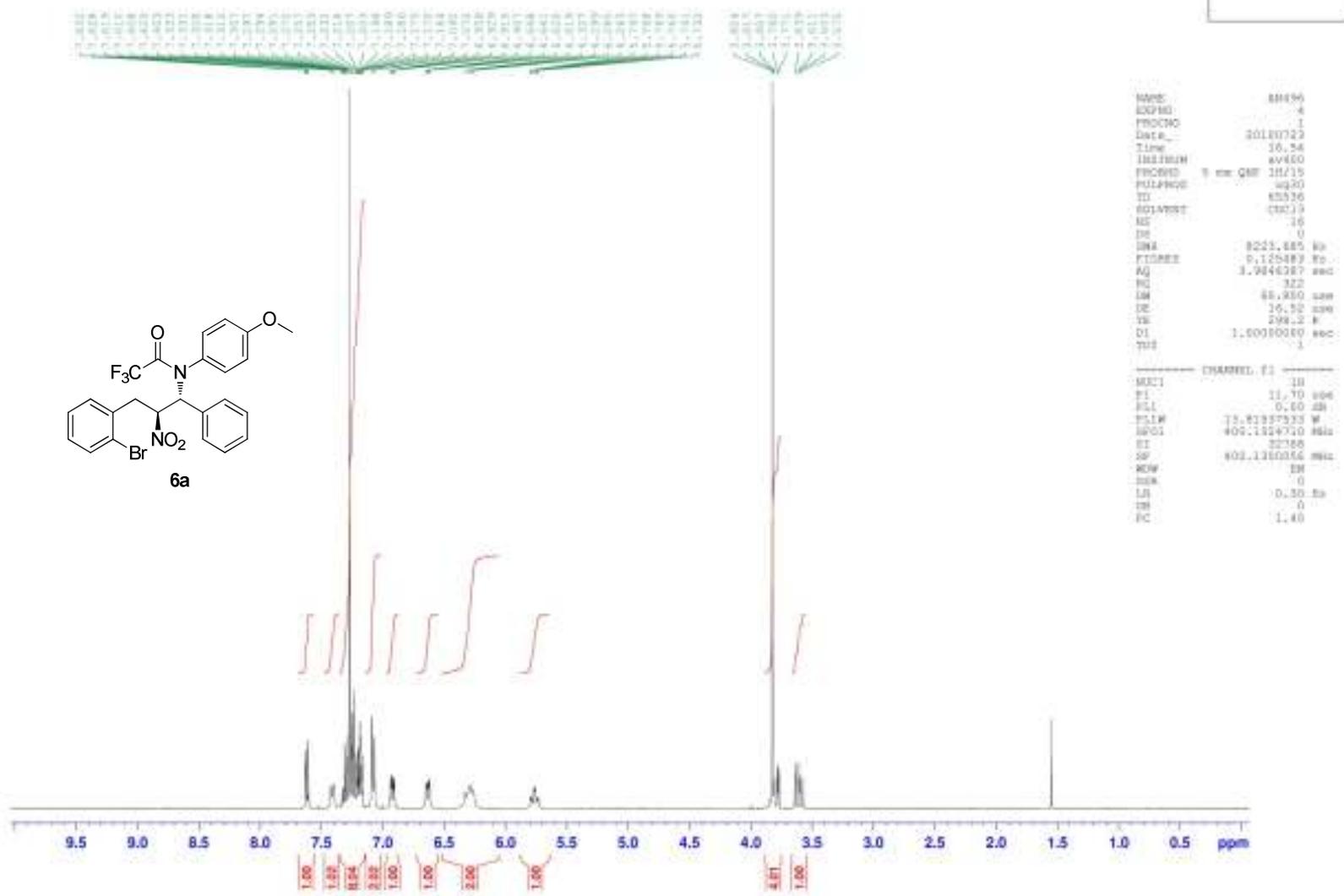
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL12	18.70886177 W
SFO1	125.761828 MHz

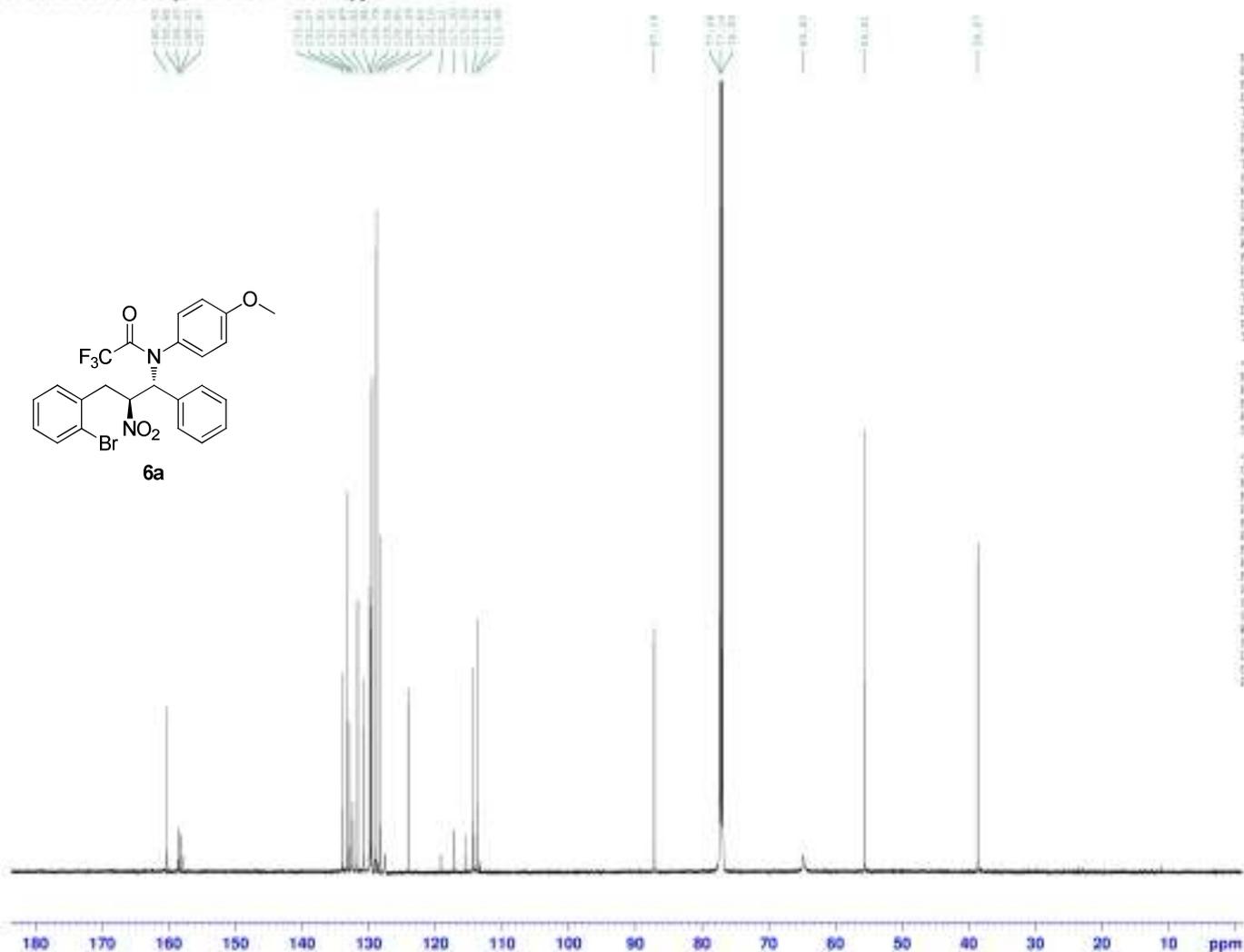
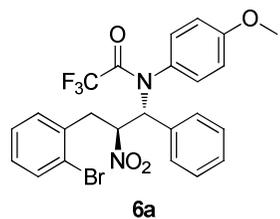
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.76751724 W
PL16	0.32796130 W
PL17	0.17332926 W
SFO2	400.1326020 MHz
SI	65536
SR	101.9327830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

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AN025  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



NAME	24123-0210
EXPNO	82
F2PROCNO	1
DATE_	20180320
TIME	15.22
INSTRUM	AV450
PROBHD	5 mm CQCE 13C
PULPROG	zgpg30
TD	65526
SF	125.761
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
DS	1

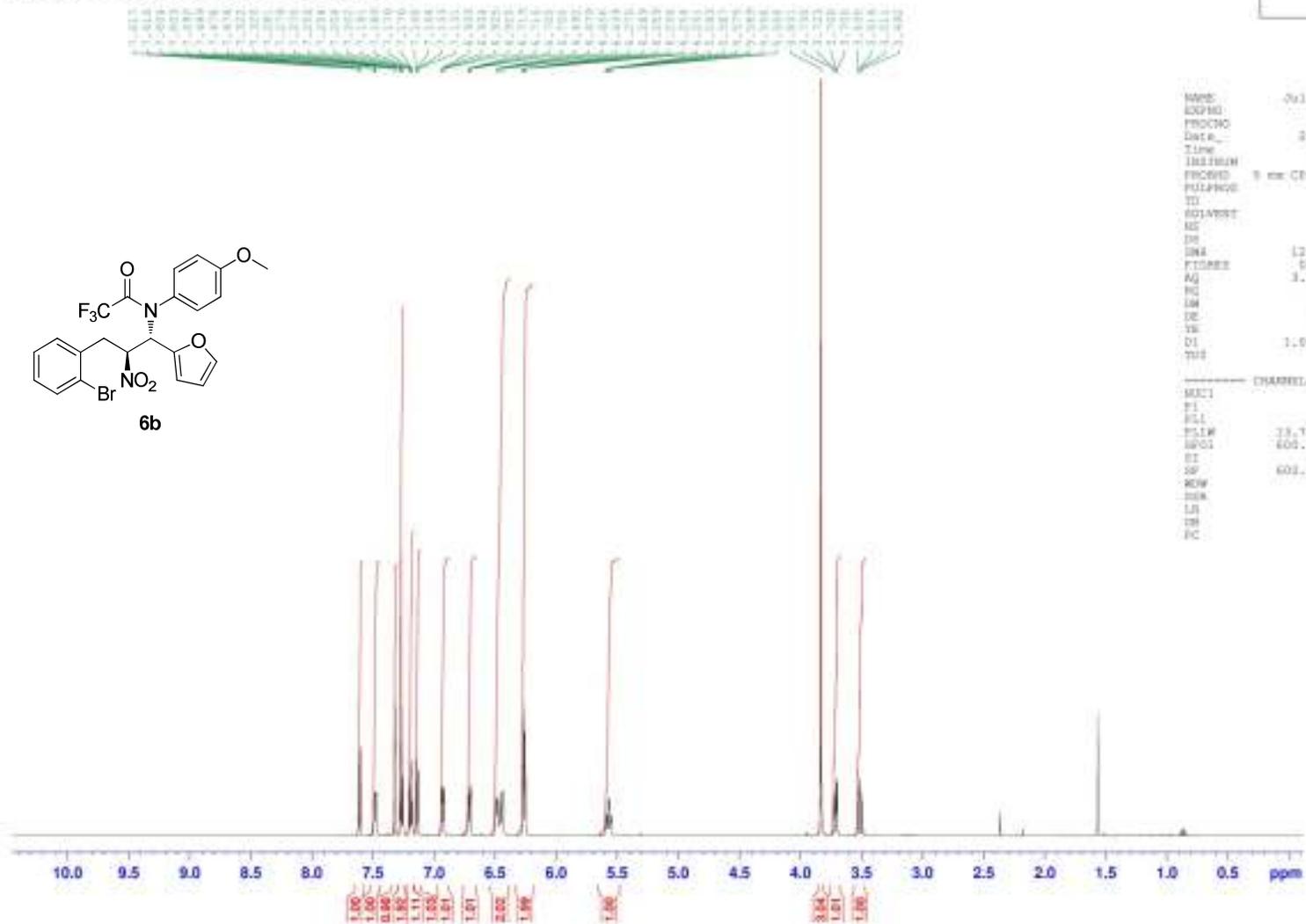
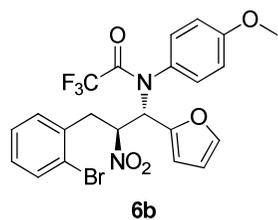
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7615981 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	15.76751714 W
PL15	0.12796130 W
PL16	0.17332926 W
SFO2	400.1326126 MHz
SI	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

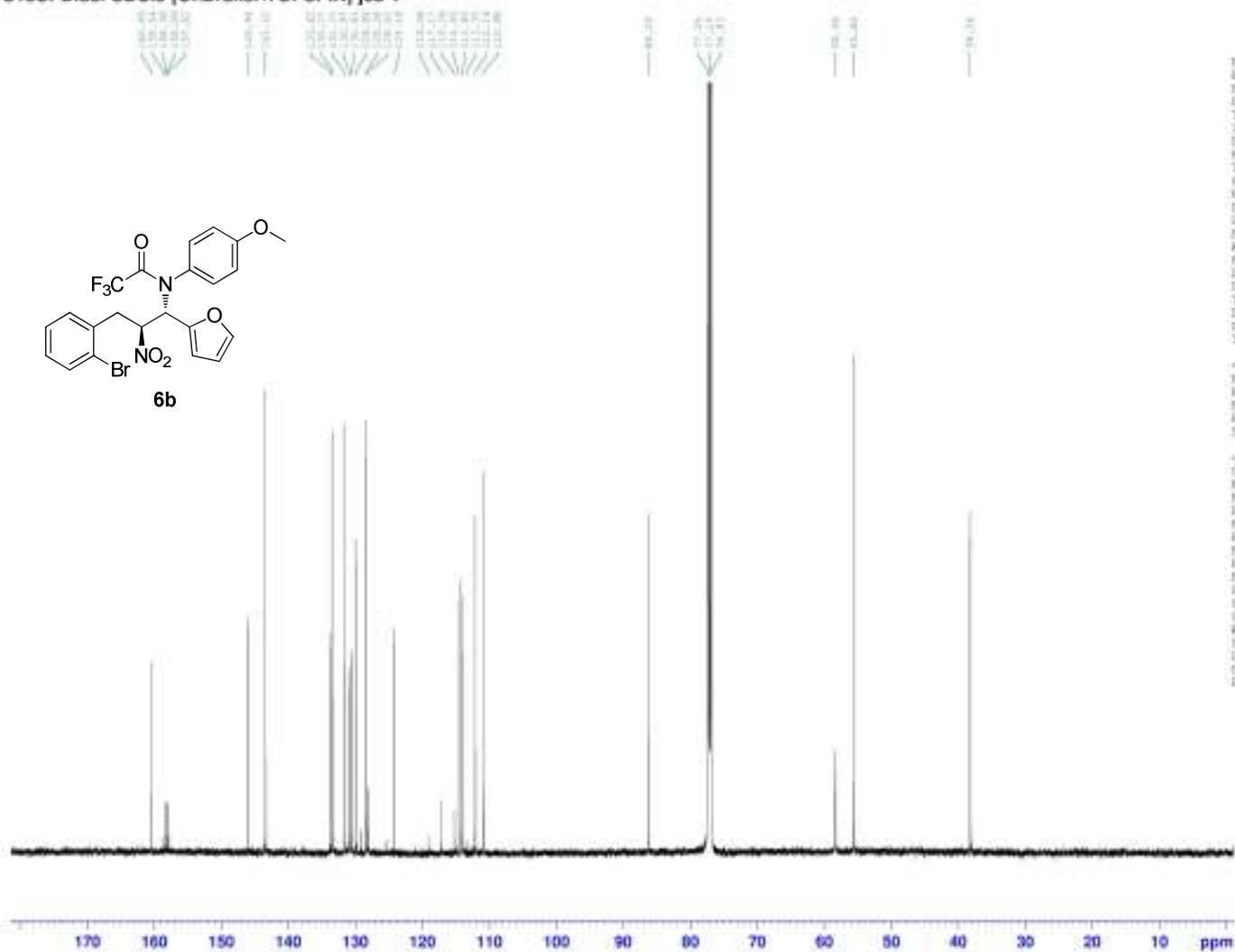
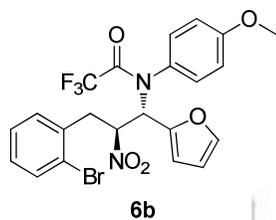
AN249-anti  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 46



```

NAME      -Jul18-2010
EXPNO     50
PROCNO    1
Date_     20180716
Time      15.21
INSTRUM   AV400
PROBHD    5 mm CBOCH 15C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         512
WDW        EM
SSB        0
GB         0
PC         1.0000000 sec
RG2        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PL12       19.7671016 W
SFO1       602.137041 MHz
SI         32768
SF         602.137042 MHz
WDW        EM
SSB        0
GB         0
PC         1.40
  
```

AN249-antl  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 4



NAME	24114-0120
EXPNO	51
F2PROCNO	1
DATE_	20100726
TIME	14:15
INSTRUM	AV450
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65526
SF	125.761
NUC1	13C
NUC2	13C
DE	13.847 mm
TE	21.55 mm
YC	298.0 #
D1	2.5000000 sec
D11	0.1000000 sec
DS	1

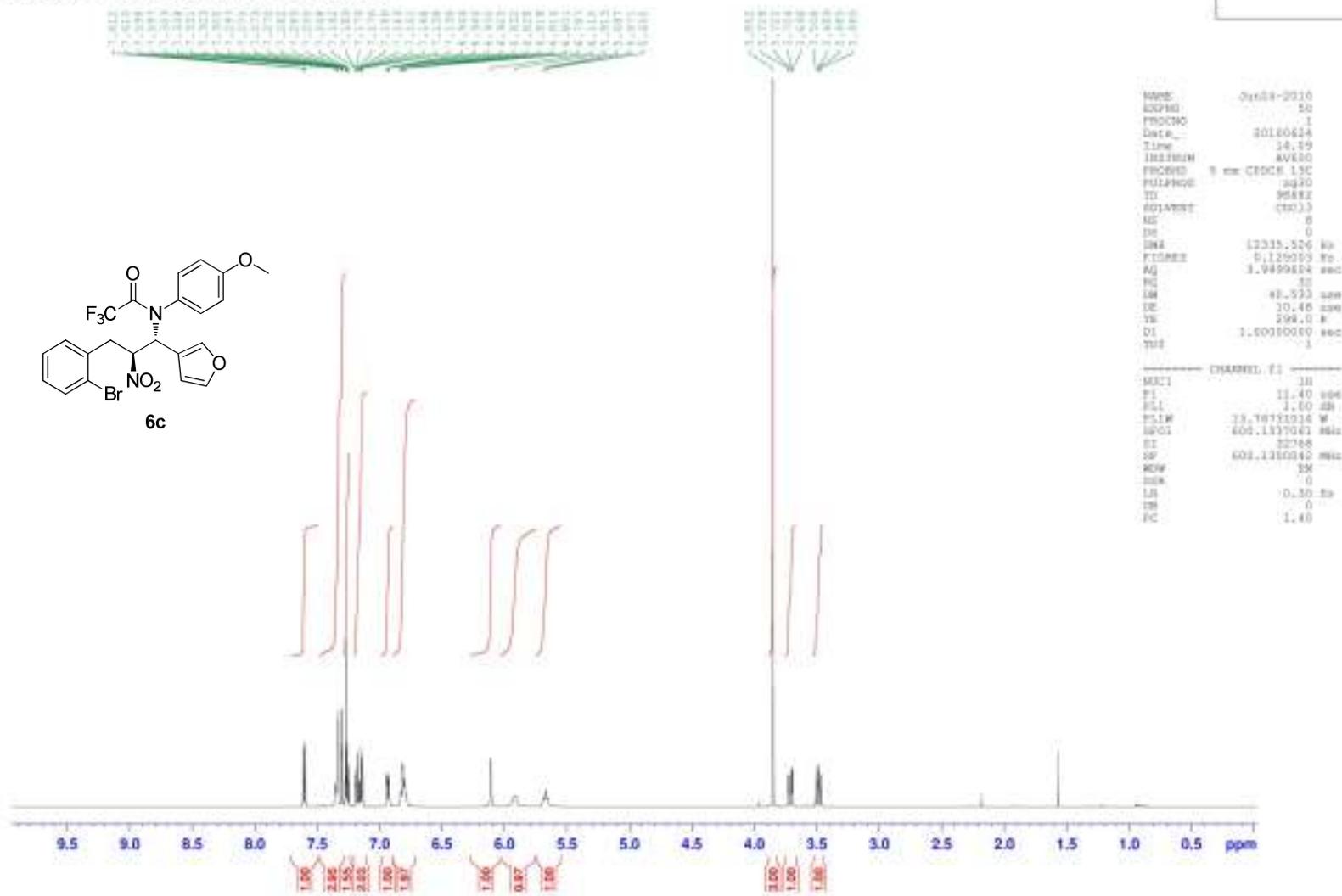
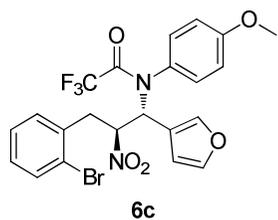
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 mm
PL1	5.00 dB
PL12	18.7086177 W
SFO1	125.761981 MHz

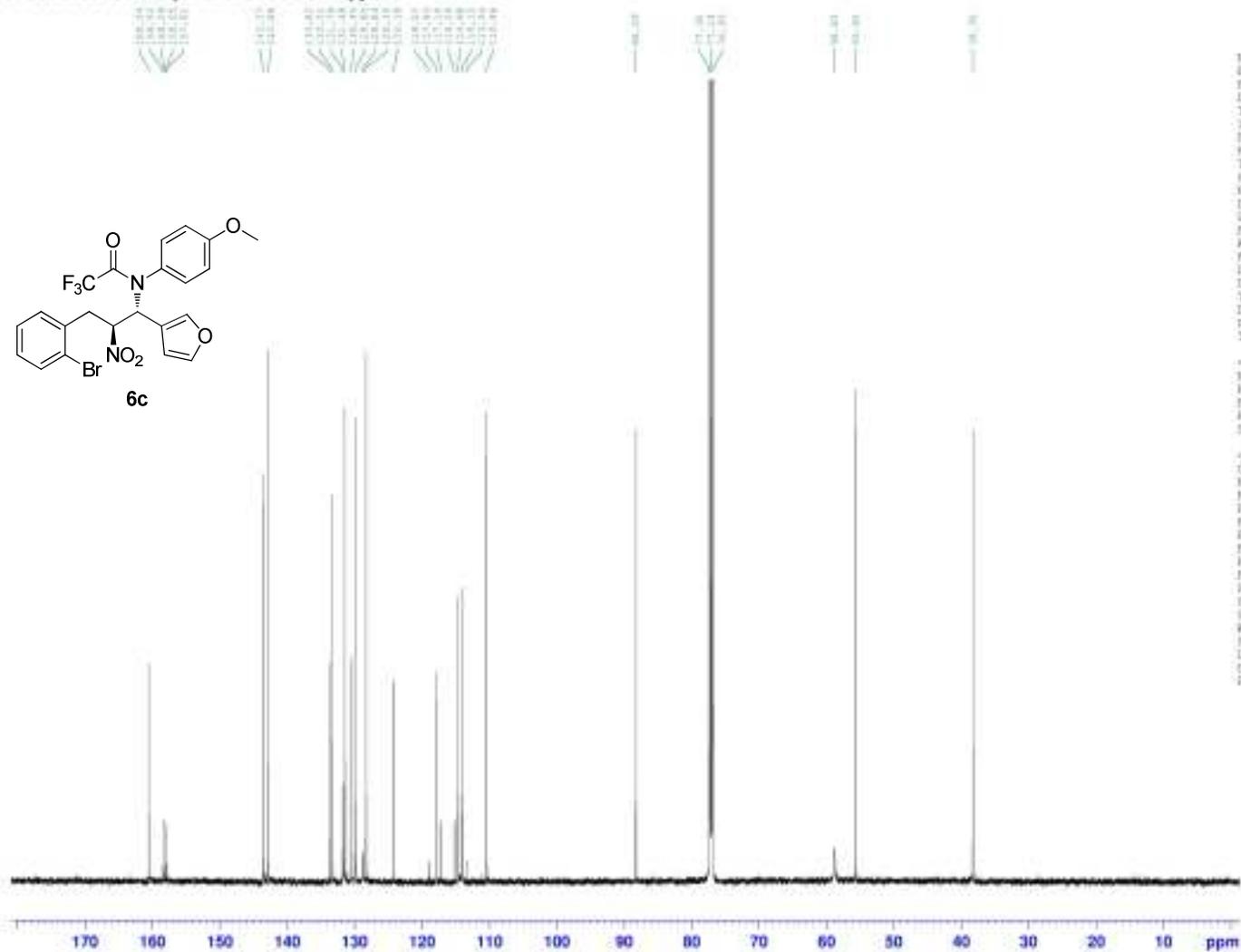
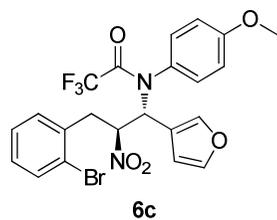
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00 mm
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.12596130 W
PL16	0.17332926 W
SFO2	601.1326020 MHz
E1	32768
SF	101.9927830 MHz
RCW	5M
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

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PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 41



AN467  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4



NAME	Jan24-2020
EXPNO	32
F2PROCNO	1
DATE_	20180424
Time	14.27
INSTRUM	AV650
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	327.681
RTIME	5.550197
AQ	0.9088159
RG	1020
DM	13.847
DE	21.55
YC	298.0
D1	2.6000000
D11	0.1000000
TD0	1

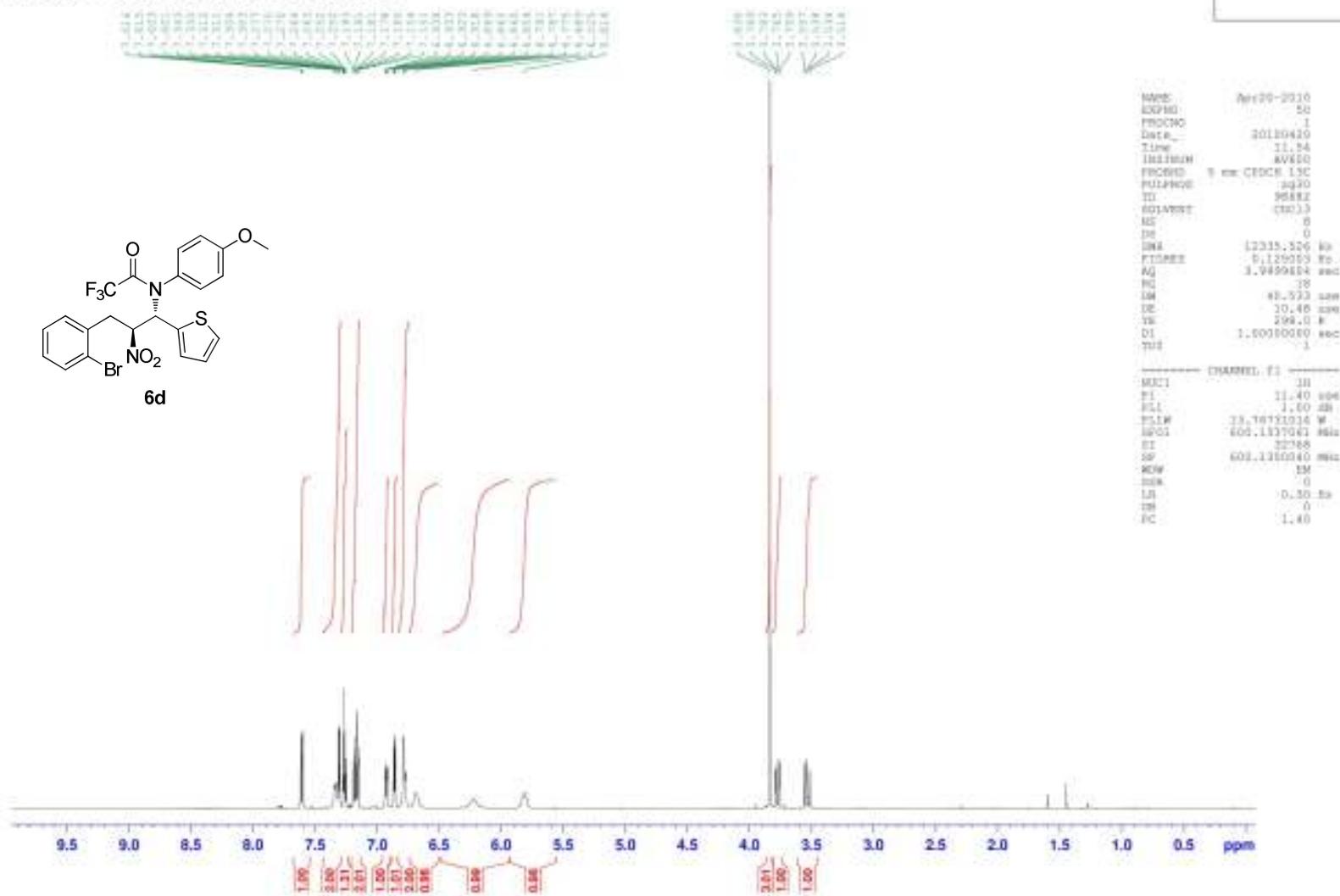
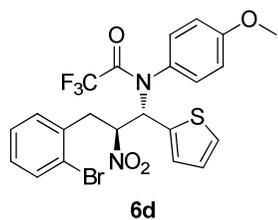
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	5.00
PL1W	25.7686177
SFO1	125.7615981

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00
PL2	1.00
PL2	17.23
PL2	20.00
PL2W	25.7675124
PL2W	0.32596130
PL2W	0.17332926
SFO2	601.1326020
E1	327.68
SF	101.9927830
RCW	EM
SR	0
LB	1.00
GB	0
PC	1.40

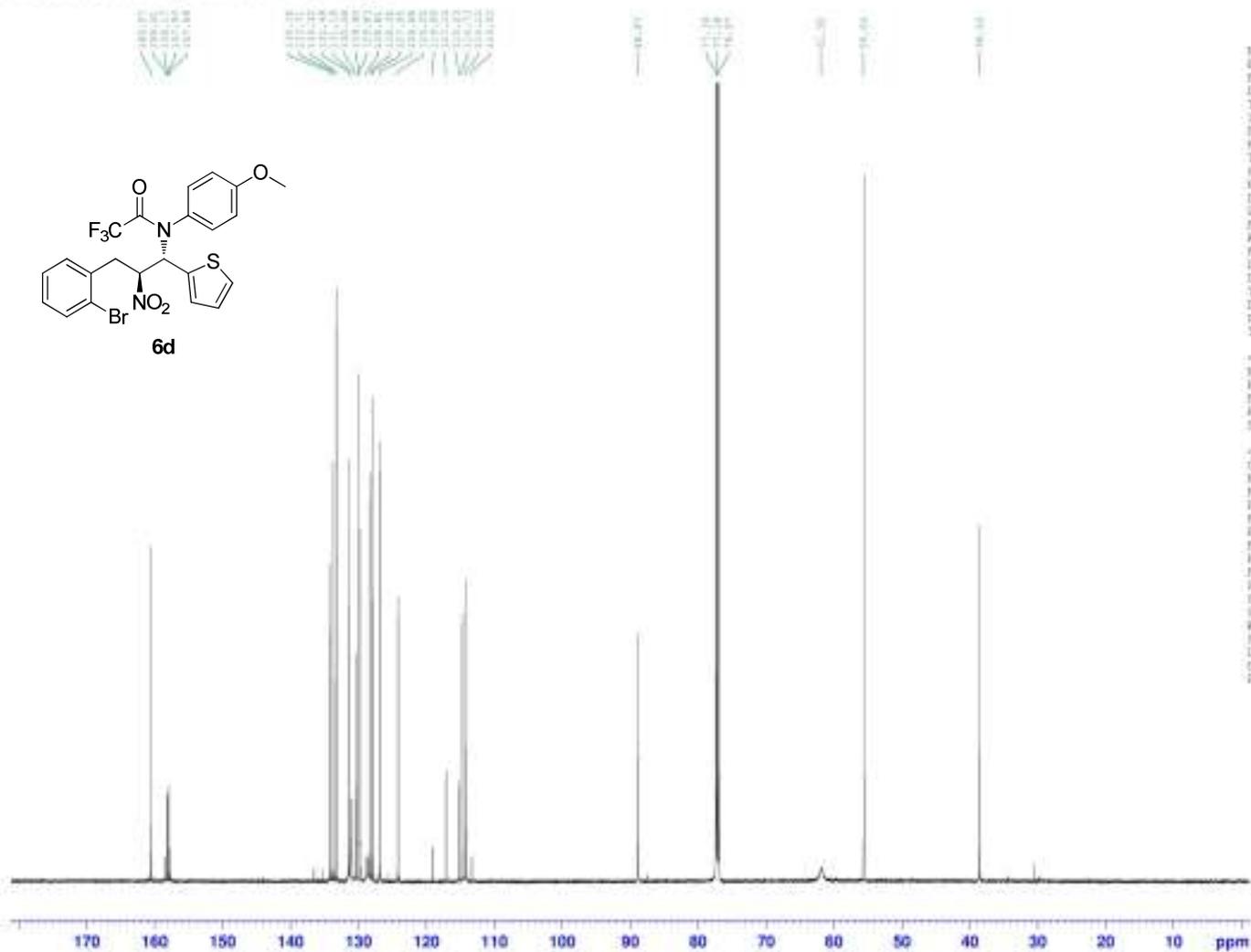
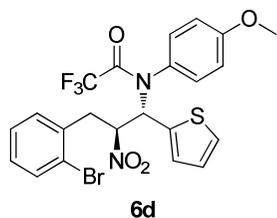
AN389  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 13



```

NAME      Apr20-2010
EXPNO     50
PROCNO    1
Date_     20100420
Time      11.54
INSTRUM   AV400
PROBHD    5 mm CBOCH 13C
PULPROG   zg30
TD         65536
SI         36882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 kHz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         38
LW         40.533 Hz
DE         10.46 Hz
TE         298.0 K
D1         1.0000000 sec
TMS        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1W       23.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN389  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1



NAME	Apr20-2020
EXPNO	32
F2PROC0	1
DATE_	20180420
TIME	12.19
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	3.00
GB	0
PC	1.00
AG	0.30000000
RG	327.681
RT	0.9388159
AC	0.9388159
RG	1020
DM	13.847
DE	21.55
YC	298.0
D1	2.80000000
D11	0.80000000
TD0	1

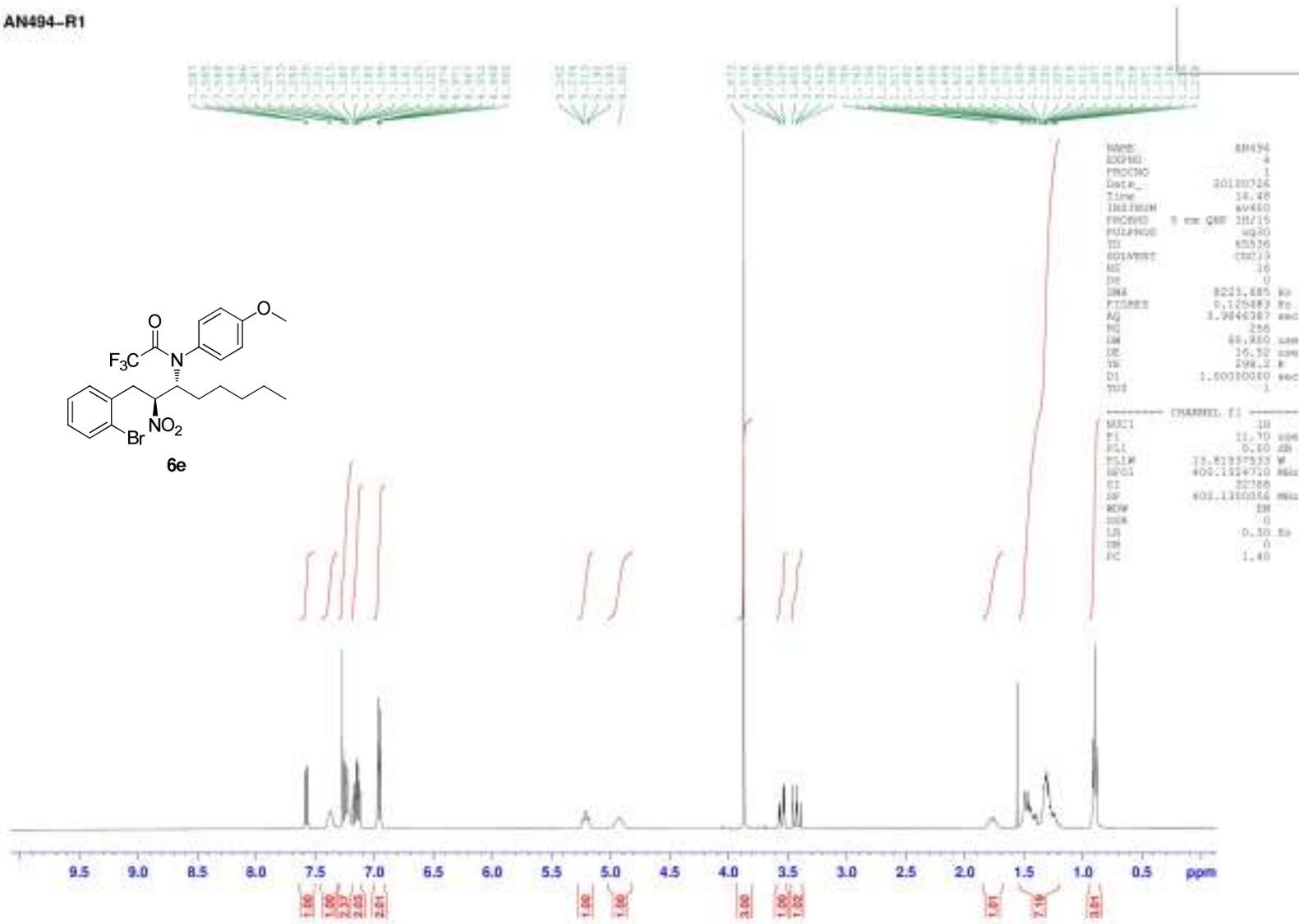
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	0.00
PL1H	18.76884177
SFO1	125.7615981

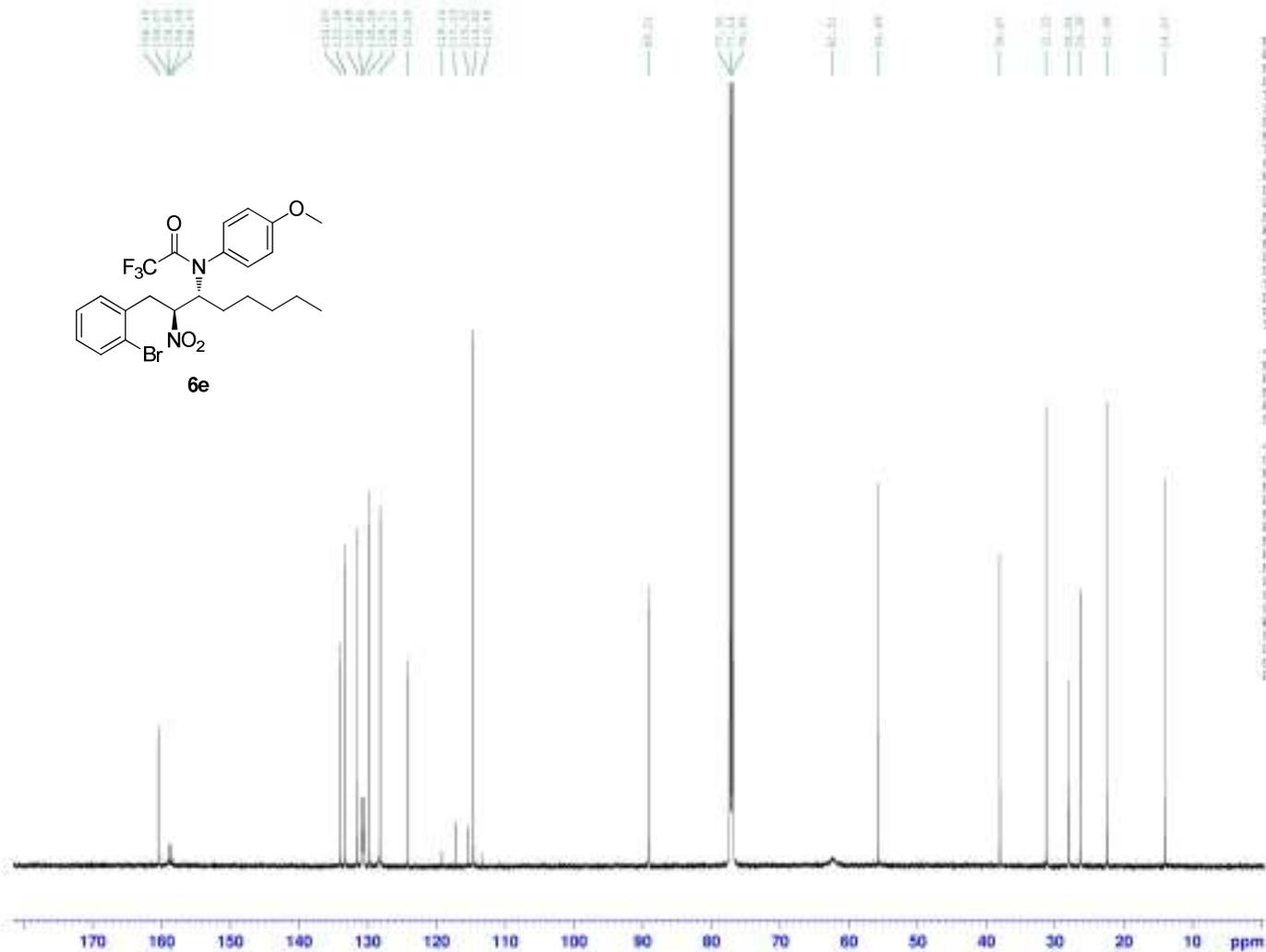
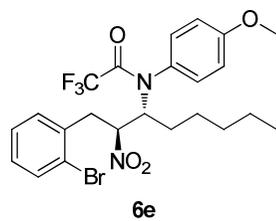
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	10.00
PL2	1.00
PL2H	30.76
PL2I	120.40
PL2M	25.76753124
PL2N	0.36246774
PL2W	0.80000000
RF02	600.1326165
SI	32768
SF	101.9927830
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

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AN493  
 C13CPD.ucl CDC13 (C:-Bruker/TOPOSPIN) jca 4

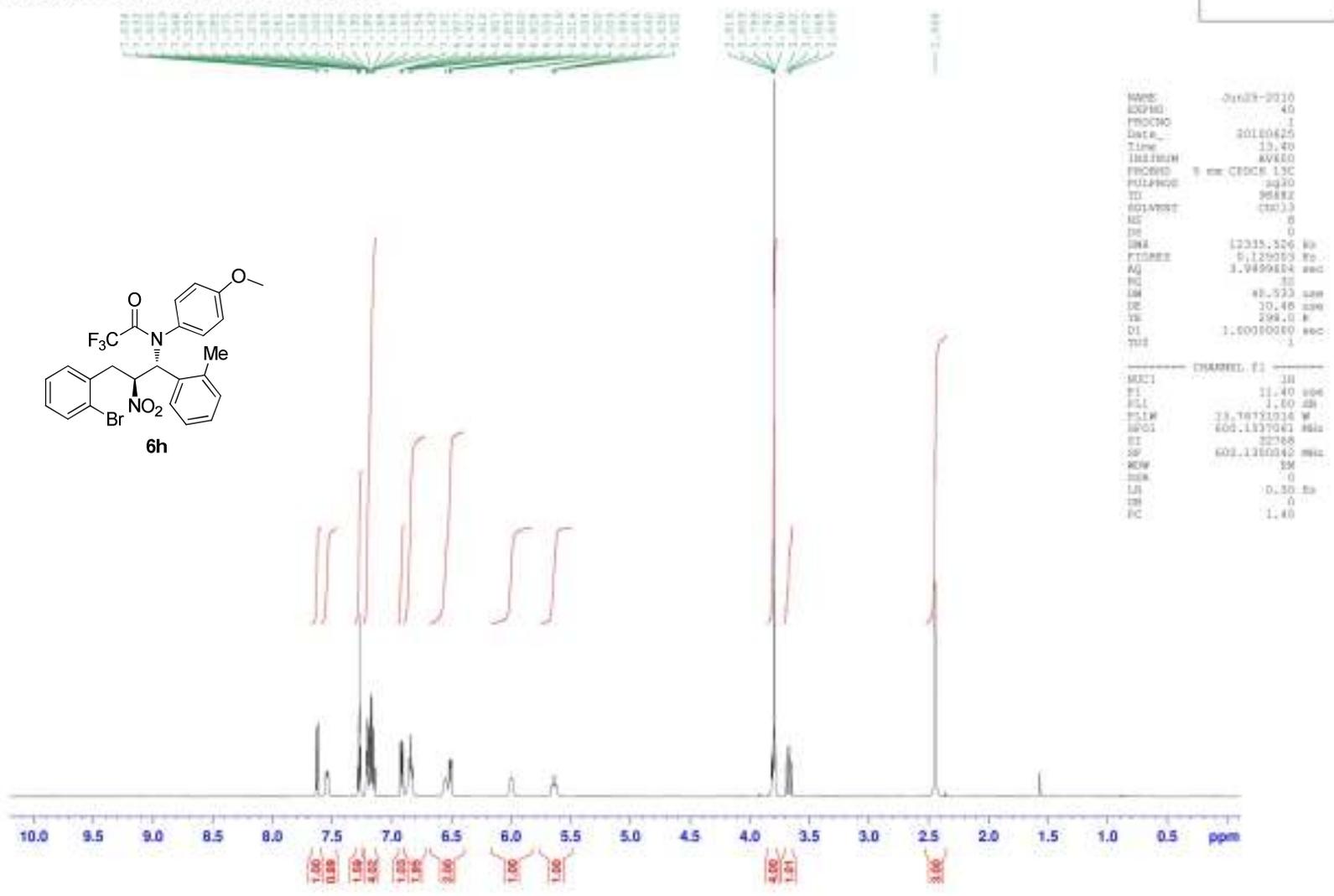


NAME	24128-0110
EXPNO	22
F2PROCNO	1
DATE_	20100726
TIME	21.48
INSTRUM	AV650
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65526
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
ACQ	0.32768130 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.20000000 sec
TD0	1

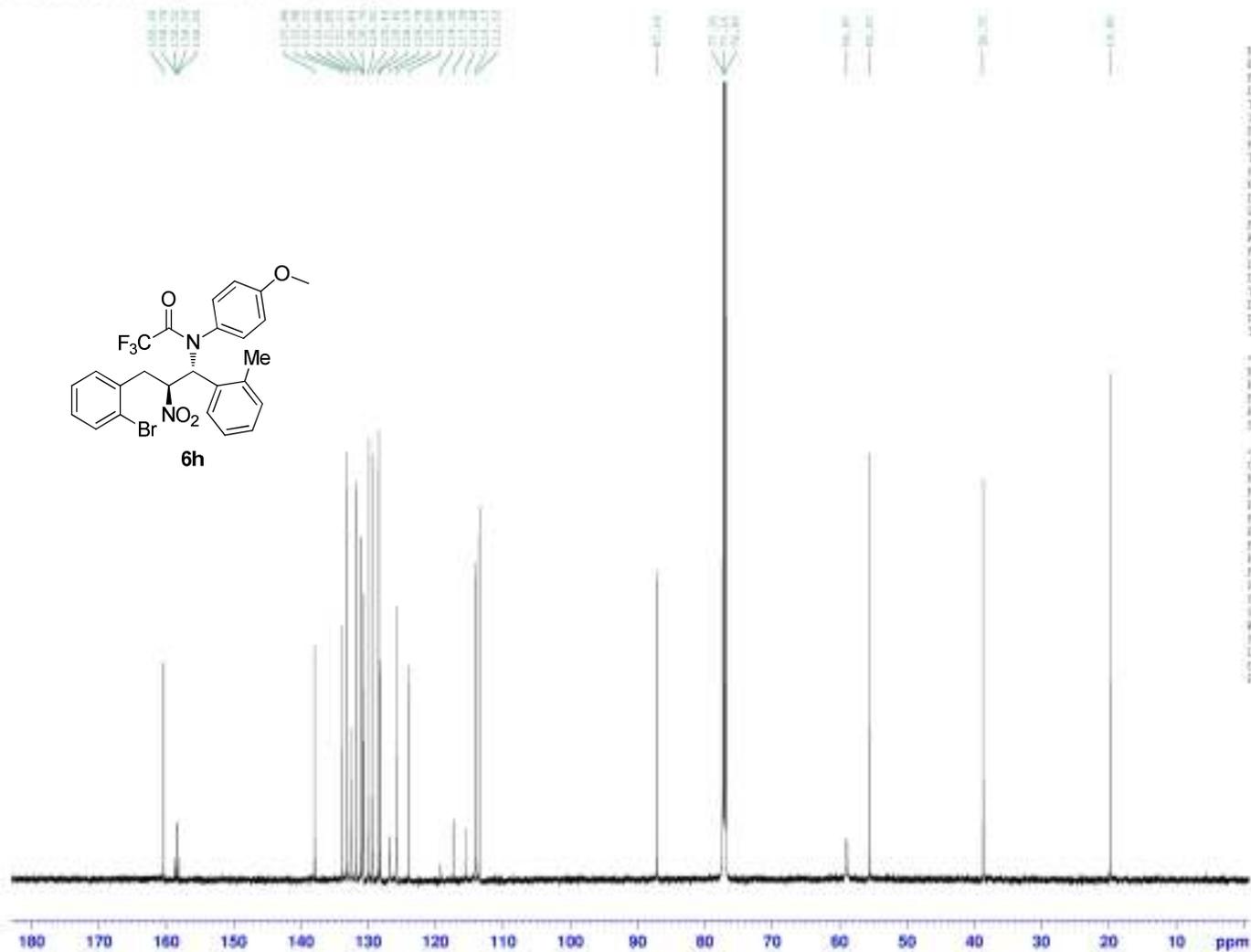
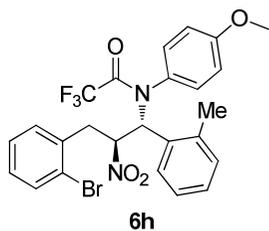
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	20.00 dB
PL13	20.00 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB

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 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 29



AN471  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



NAME	Jan29-2010
EXPNO	42
F2PROC0	1
DATE_	20100425
Time	14.17
INSTRUM	AV450
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	13.847
GB	0
PC	1.00
RG	327.681
RTONE1	5.550197
AQ	0.9088159
RG	1020
DM	13.847
DE	21.55
YC	298.0
D1	2.6000000
D11	0.0000000
TD0	1

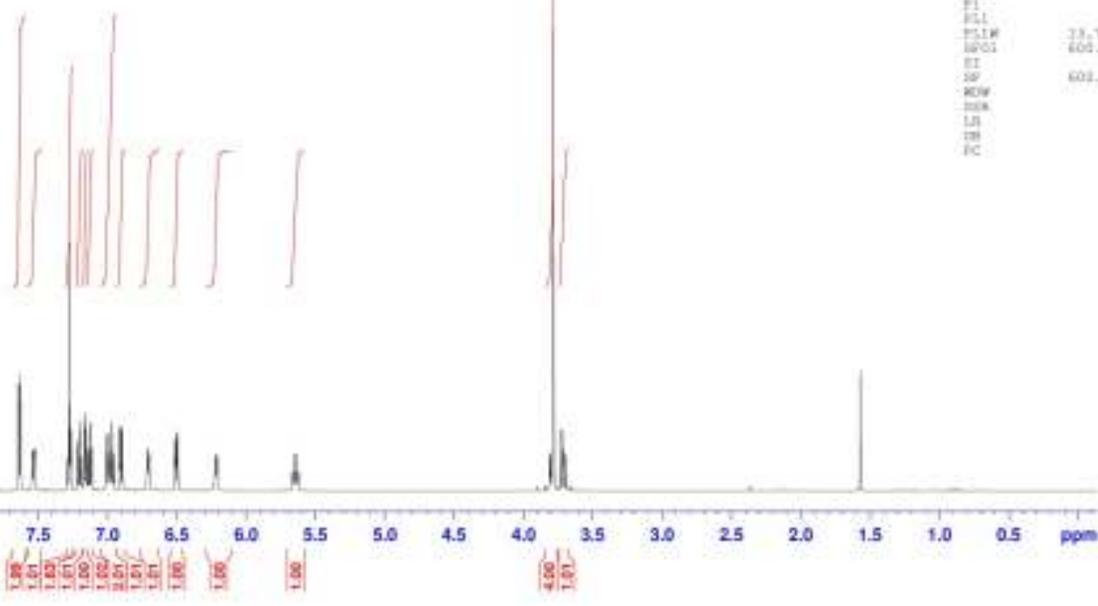
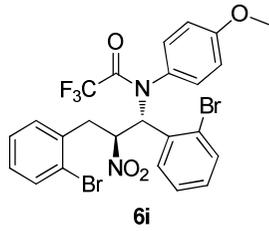
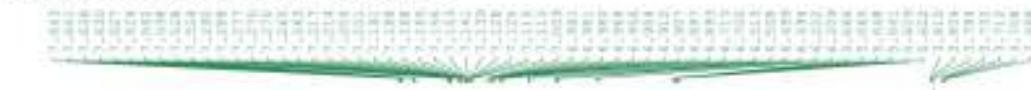
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	0.00
PL1H	18.7686177
SFO1	125.7615981

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00
PL2	1.00
PL2H	17.23
PL2I	20.00
PL2M	25.76751714
PL2N	0.32796138
PL2O	0.17332926
SFO2	601.1326028
E1	327.68
SF	101.9327830
RCW	EM
SR	0
LB	1.00
GB	0
PC	1.40

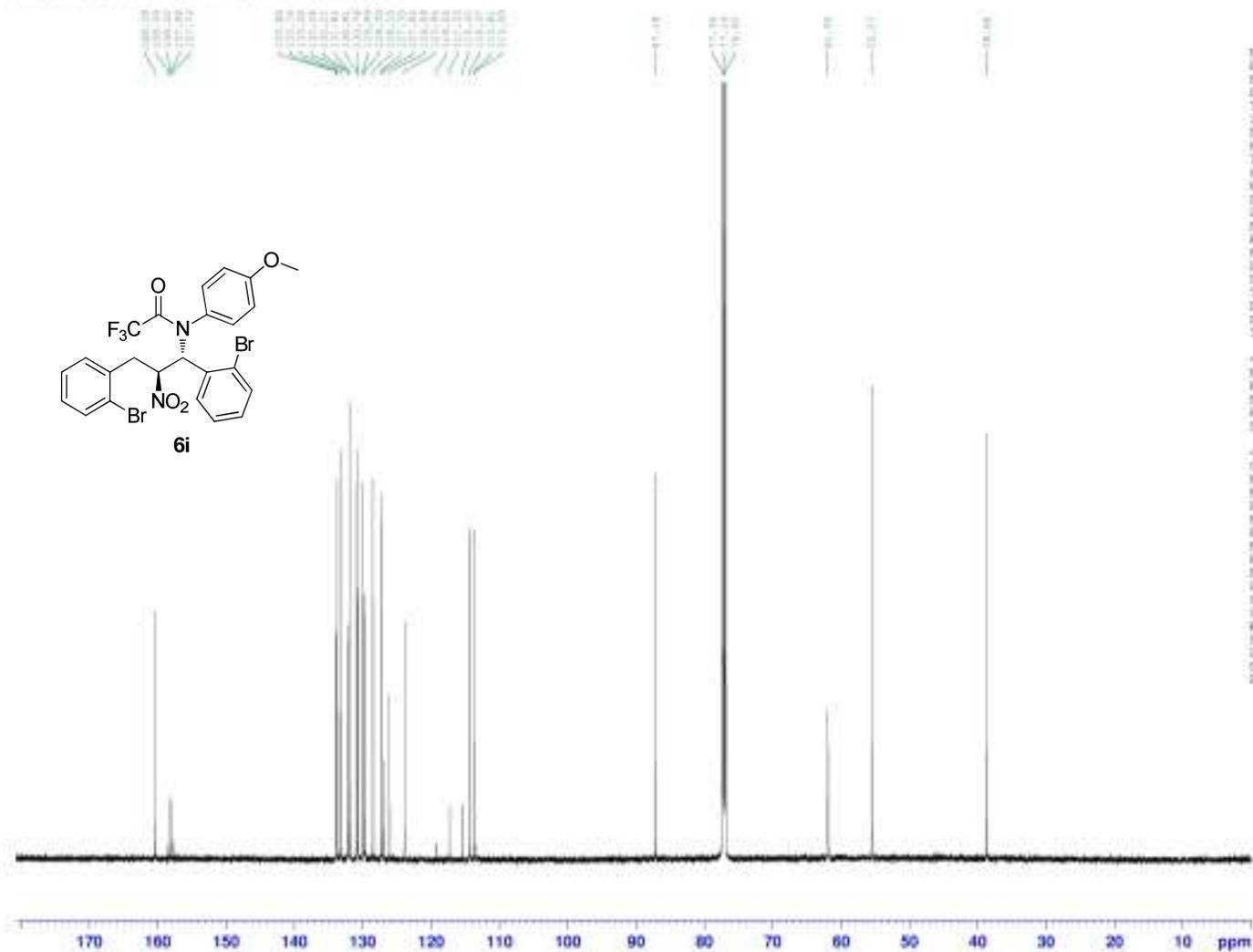
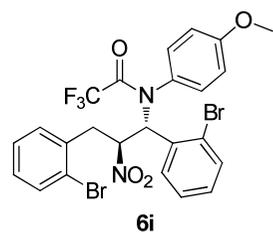
AN425  
 PROTON.ucl CDCI3 [C:Bruker:TOPSPIN] jca 9



```

NAME      May18-2010
EXPNO    20
PROCNO    1
Date_     20100318
Time      10.26
INSTRUM   AVI60
PROBHD    5 mm CDCl3 15C
PULPROG   zgpg30
TD         65536
SI         32768
SOLVENT    CDCl3
NS         6
DS         0
SWH        12335.326 kHz
FIDRES     0.125053 Hz
AQ         3.9489484 sec
RG         385
DA         40.533 sec
DE         10.46 um
TE         298.0 K
D1         1.00000000 sec
TD1        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PS1W       19.7071014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN425  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 9



NAME	May18-2010
EXPNO	22
F2PROC0	1
DATE_	20100519
TIME	11.34
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	13.067
GB	0
PC	1.00
AG	0.9088159
RG	1024
DM	13.067
DE	21.55
TE	298.0
D1	2.6000000
D11	0.1000000
TD0	1

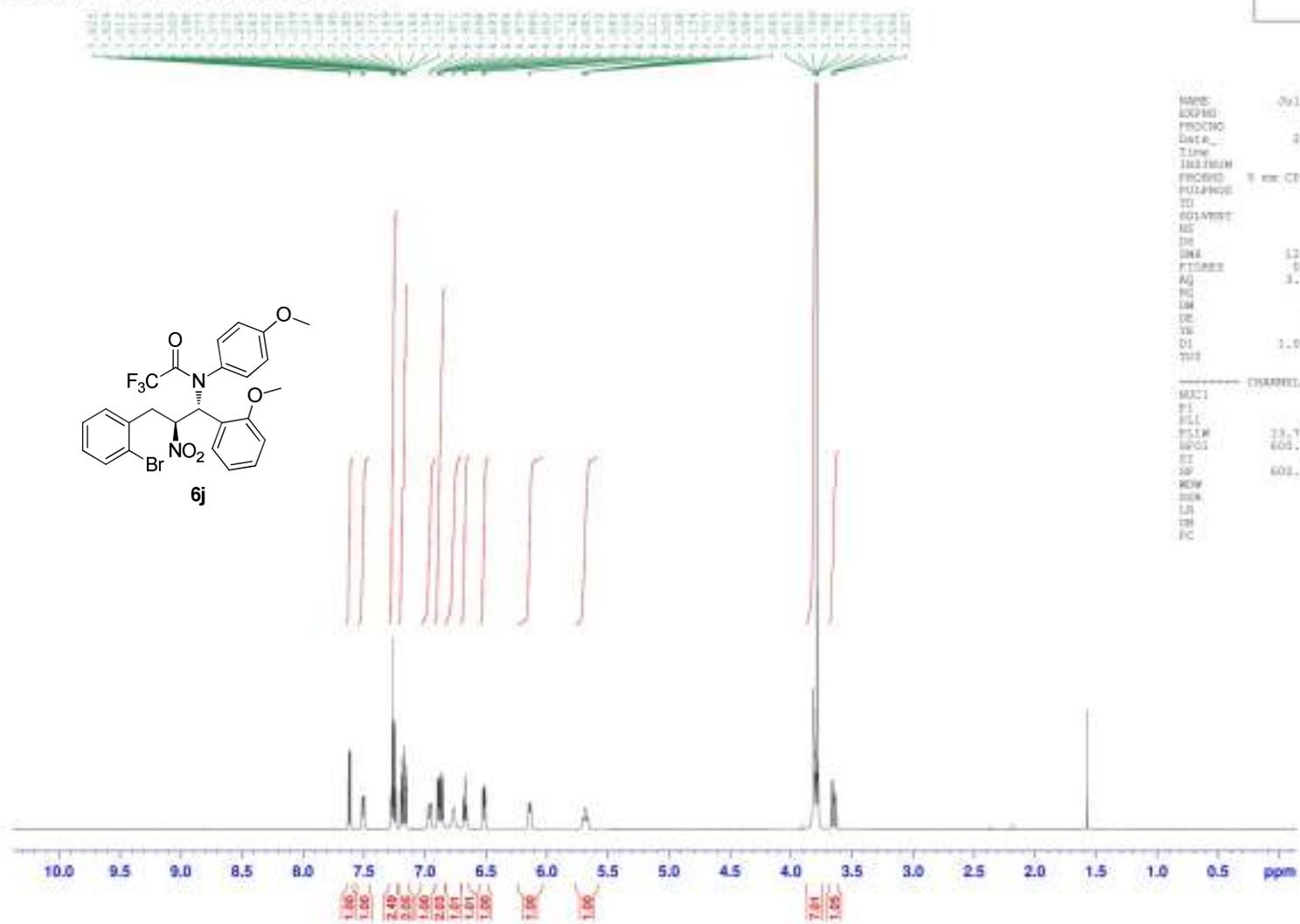
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	0.00
PL1H	18.7686177
SFO1	125.7615981

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00
PL2	1.00
PL2H	17.23
PL3	20.00
PL3H	25.7675124
PL4H	0.32796130
PL5H	0.17332926
SFO2	400.1424010
SI	32768
SF	101.9927830
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

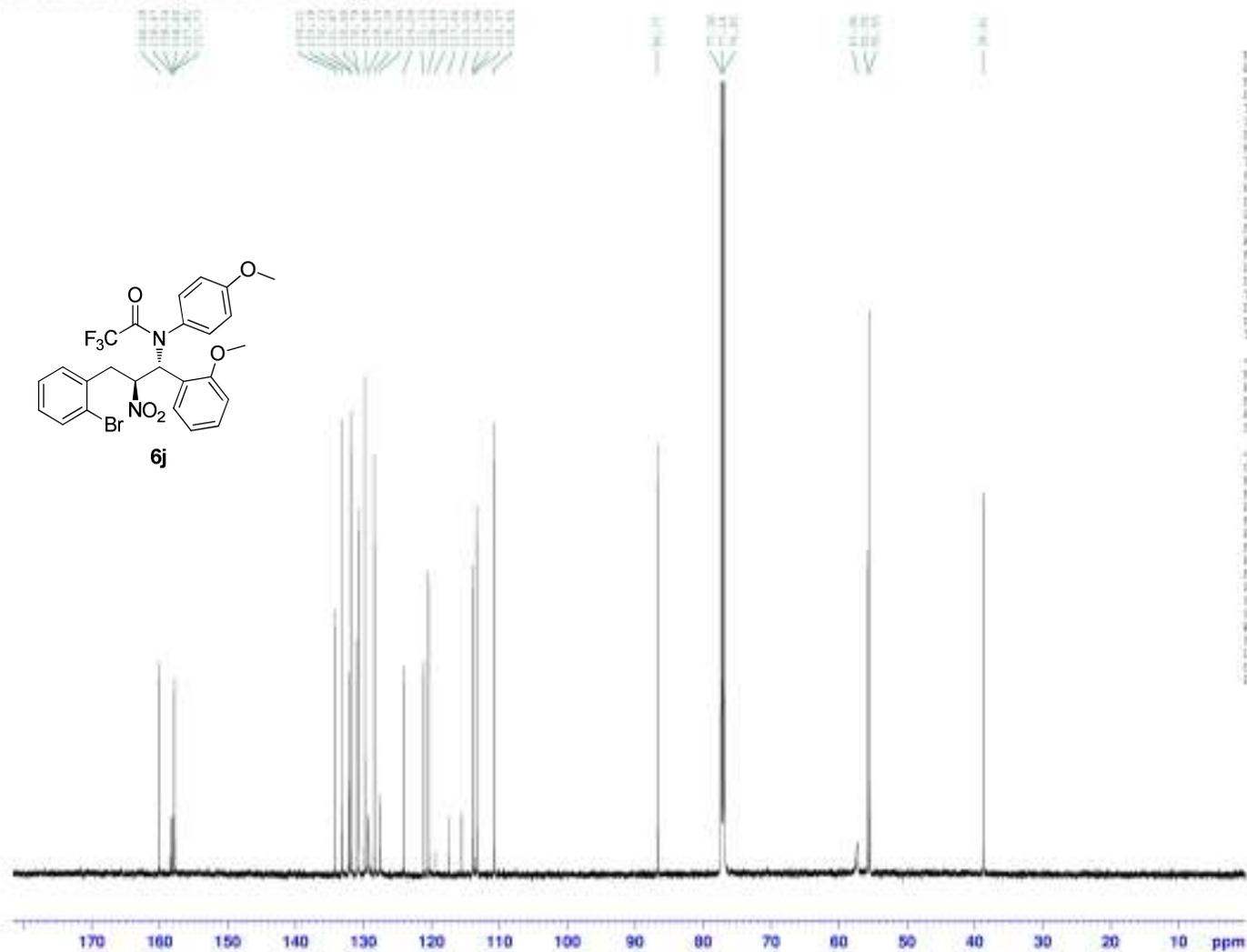
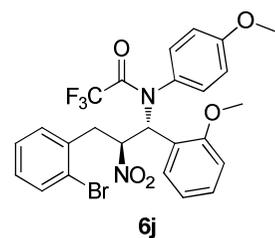
AN473  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 6



```

NAME      -jull12-2010
EXPNO     20
PROCNO    1
Date_     20100712
Time      18.43
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499404 sec
RG         384
AQ         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.60000000 sec
TD1        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PL12       19.7071014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437040 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN473  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 6



NAME	24112-0110
EXPNO	22
F2PROCNO	1
DATE_	20100513
TIME	0.56
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	327.681
RTIME	0.155197
AQ	0.9088159
RG	1020
DM	13.847
DE	21.55
YC	298.0
D1	2.6000000
D11	0.1000000
TD0	1

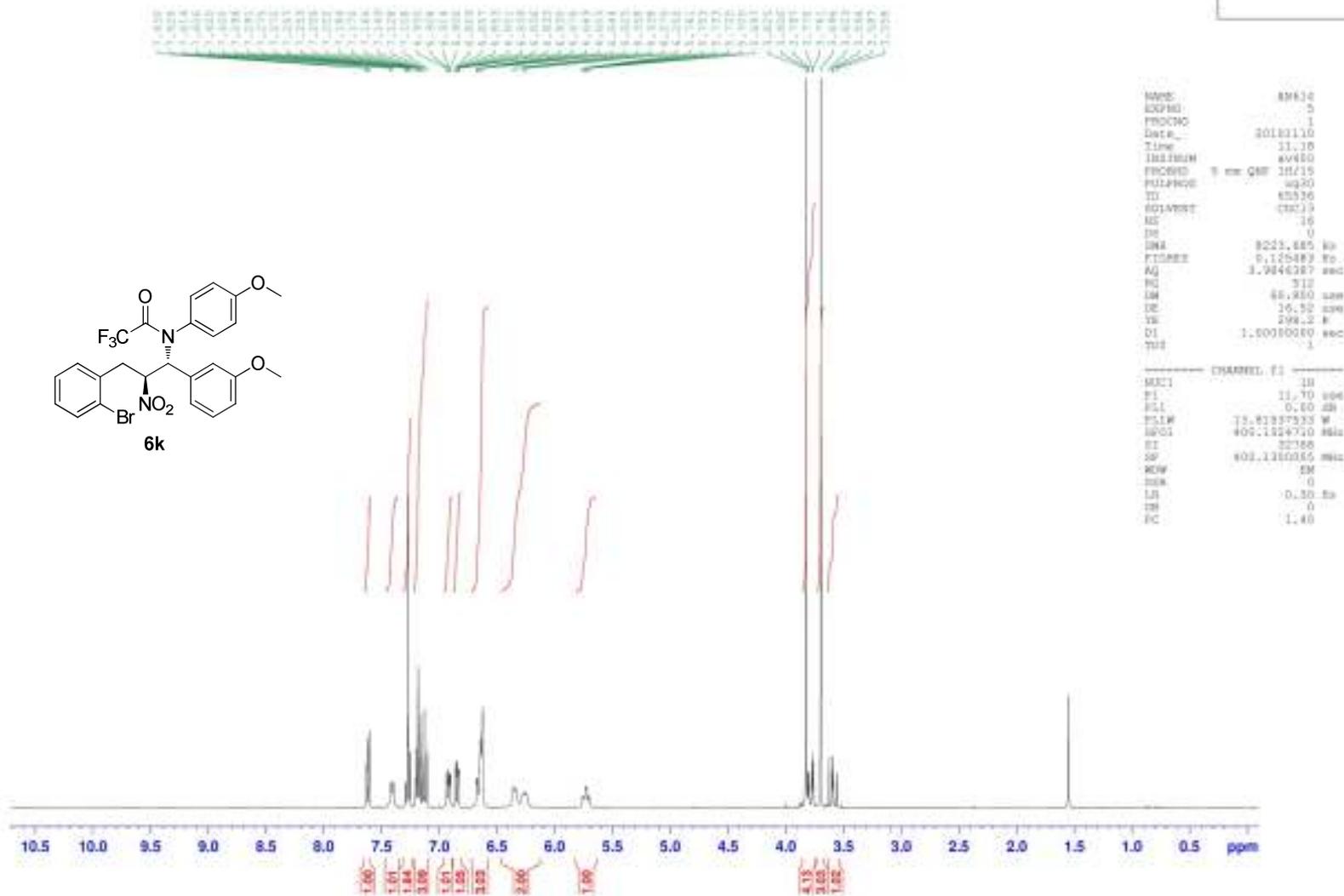
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40
PL1	0.00
PL1H	25.76751714
SFO1	125.7615910

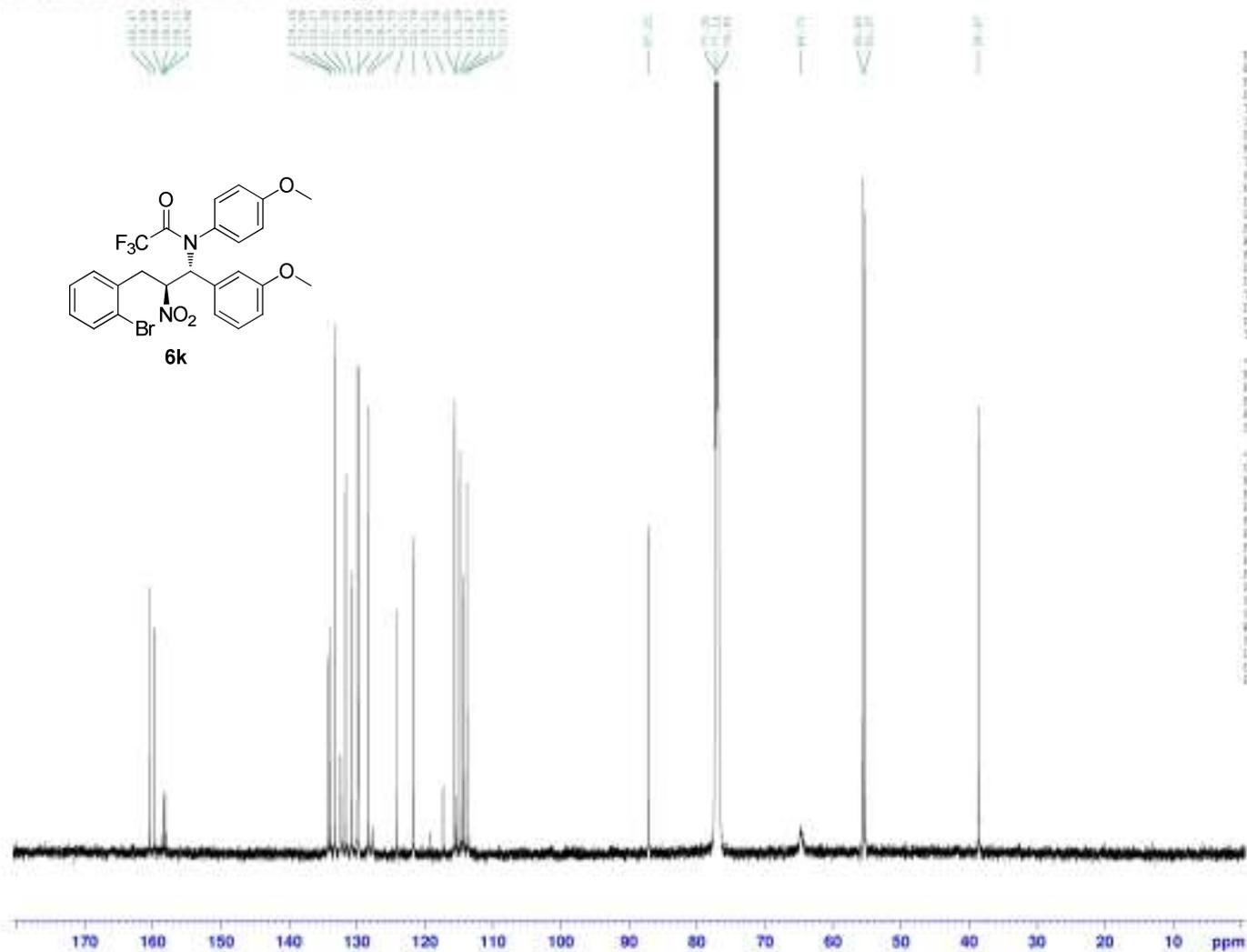
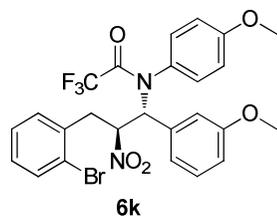
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	10.00
PL2	1.00
PL2H	17.23
PL2I	20.00
PL2M	25.76751714
PL2N	0.12596130
PL2W	0.17332026
RFQ2	601.1326125
SI	327.68
SF	101.9327830
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

AN614

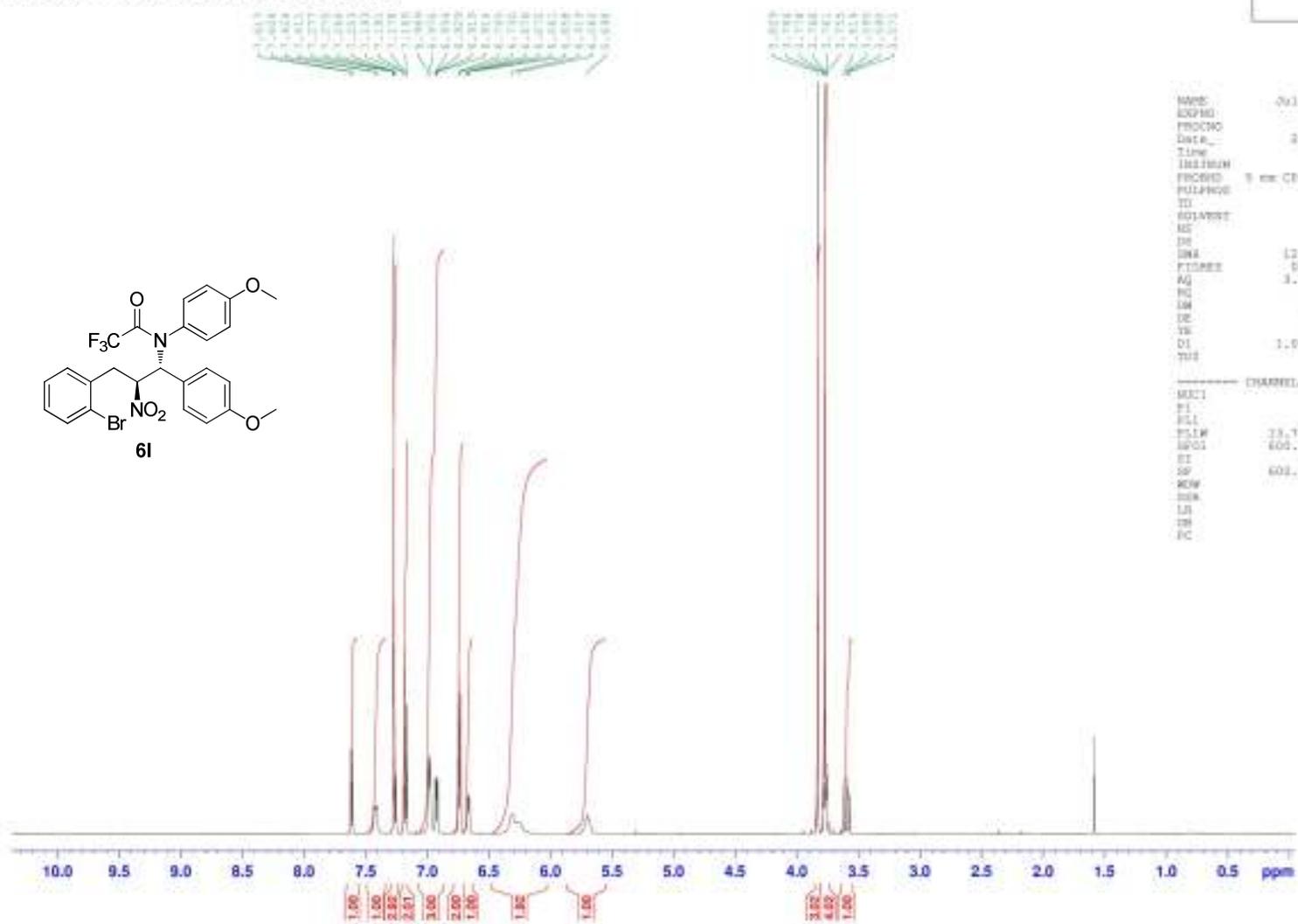
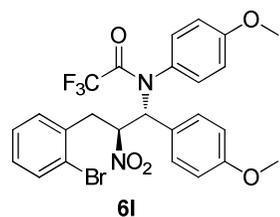


AN614  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



NAME	Nov13-2010
EXPNO	12
F2PROCNO	1
DATE_	20181110
TIME	15.23
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.760370
NUC1	13C
NUC2	1H
PCPDG	70.00 um
FL1	1.00 dB
FL2	17.23 dB
FL3	20.00 dB
FL4	25.76751714 W
FL5	0.32796130 W
FL6	0.17332926 W
RF02	603.1326020 MHz
SI	32768
SF	101.9927830 MHz
ROW	SM
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

AN475  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 47



```

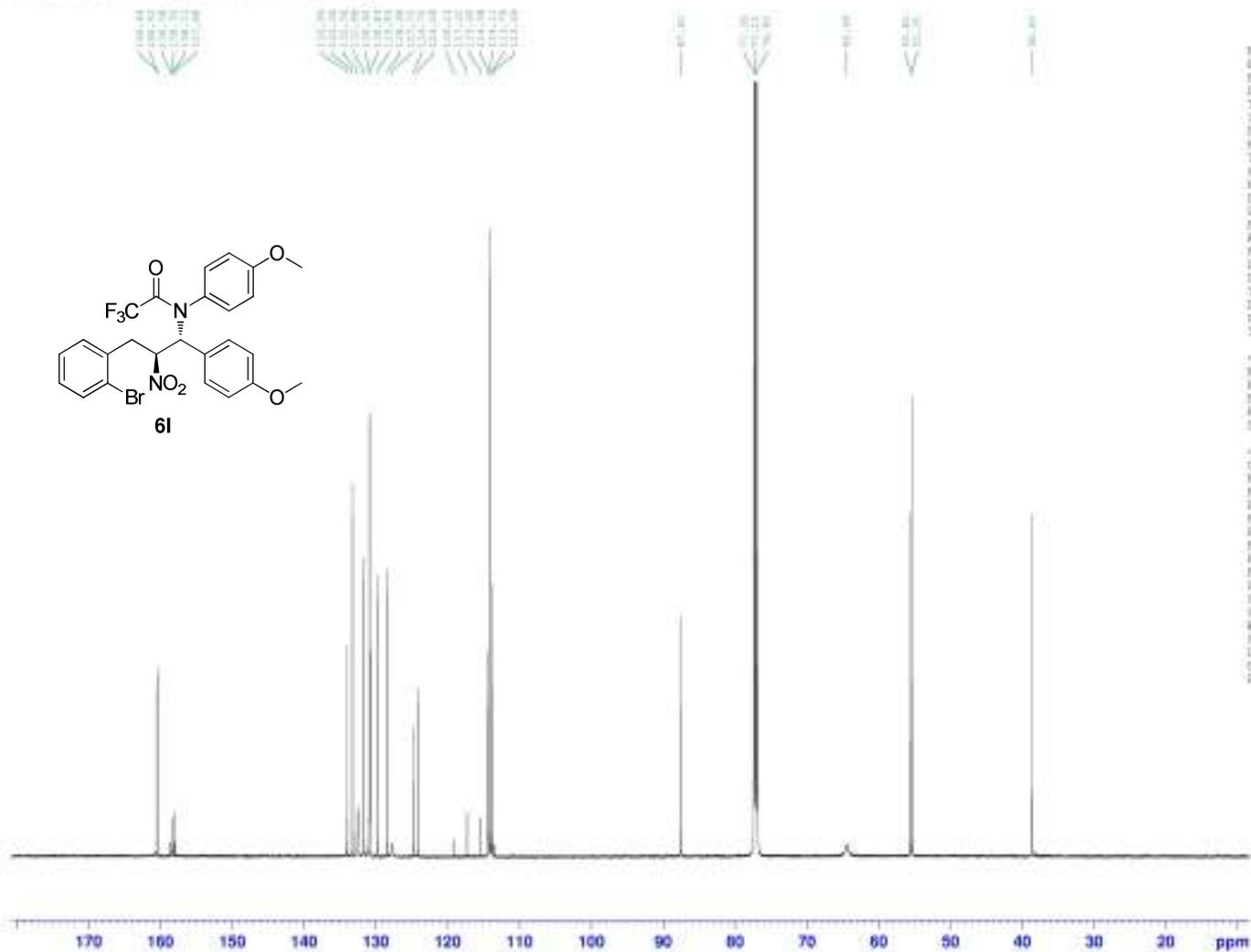
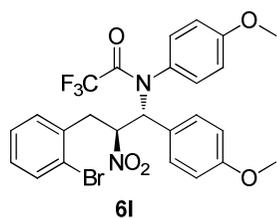
NAME      Jul13-2010
EXPNO     100
PROCNO    1
Date_     20100314
Time      0.29
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SF         400.137041
AQ         1.9499404
RG         384
WDW        EM
SSB        0
LB         0.30
GB         0
PC         1.40
  
```

---

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40
PL1        0.00
PL12       19.7671014
SFO1       400.137041
SI         32768
SF         400.137041
WDW        EM
SSB        0
LB         0.30
GB         0
PC         1.40
  
```

AN475  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4

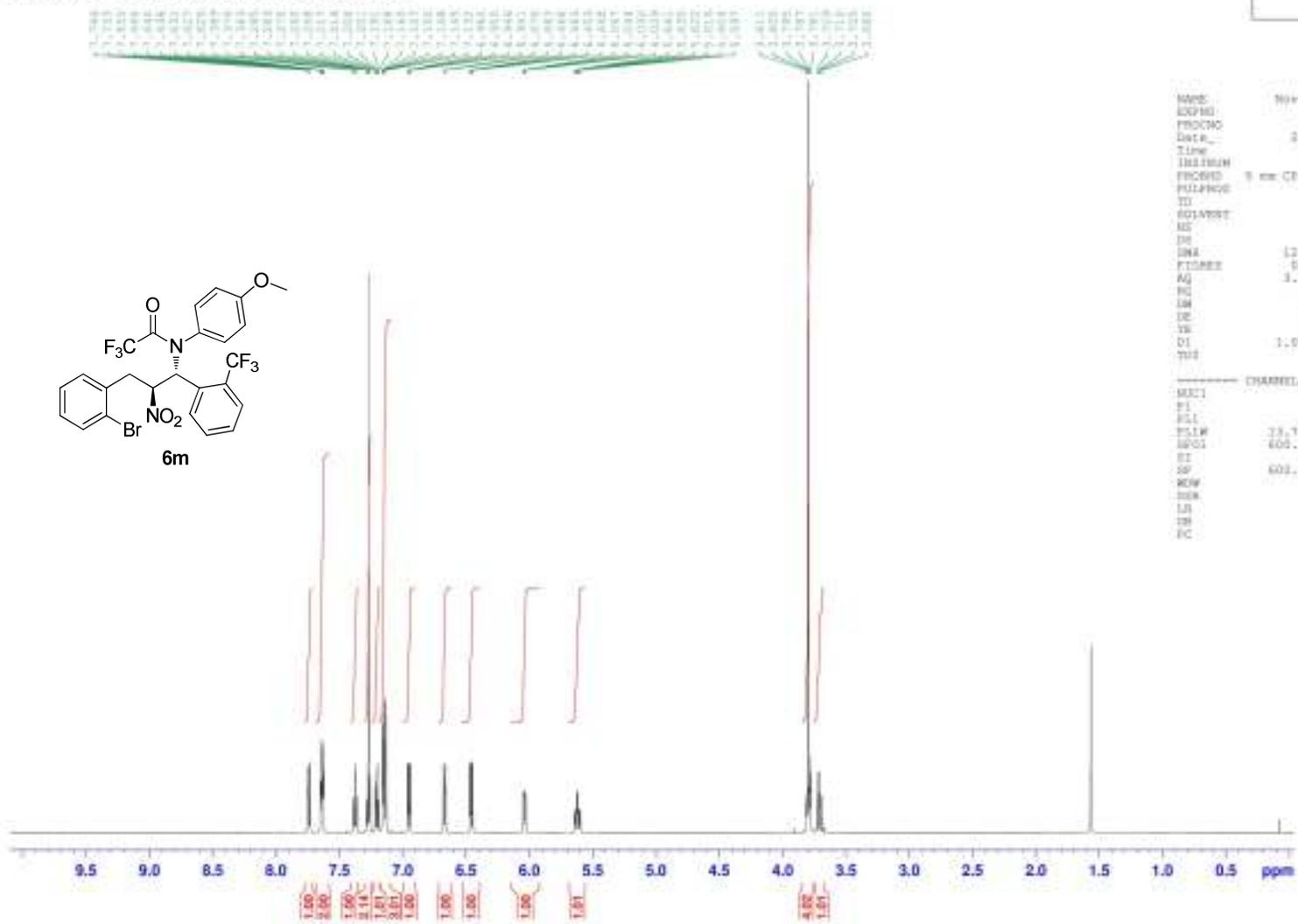


```

NAME       J4113-0110
EXPNO      162
PROCNO     1
Date_      20100514
Time       0.59
INSTRUM    AV450
PROBHD     5 mm CPDCK 13C
PULPROG    zgpg30
TD         65536
SOLVENT    CDCl3
AQ         0.9088159 sec
RG         1020
DS         0
SWH         16017.481 Hz
FIDRES     0.1550197 Hz
AQ         0.9088159 sec
RG         1020
DS         0
SWH         16.047 MHz
DE         21.55 MHz
TE         298.0 K
D1         2.6000000 sec
D11        0.1000000 sec
D12        1
D13
===== CHANNEL f1 =====
NUC1        13C
P1          9.00 MHz
PL1         0.00 dB
PL12        19.7686177 W
SFO1        101.3176981 MHz
===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2        1H
PCPD2       70.00 MHz
PL2         1.00 dB
PL12        17.23 dB
PL13        20.00 dB
PL14        19.76751714 W
PL15        0.10796138 W
PL16        0.17332026 W
RFQ2        601.1326020 MHz
EI          32768
SF          101.3176981 MHz
WDW         EM
SSB         0
LB          1.00 Hz
GB          0
PC          1.40

```

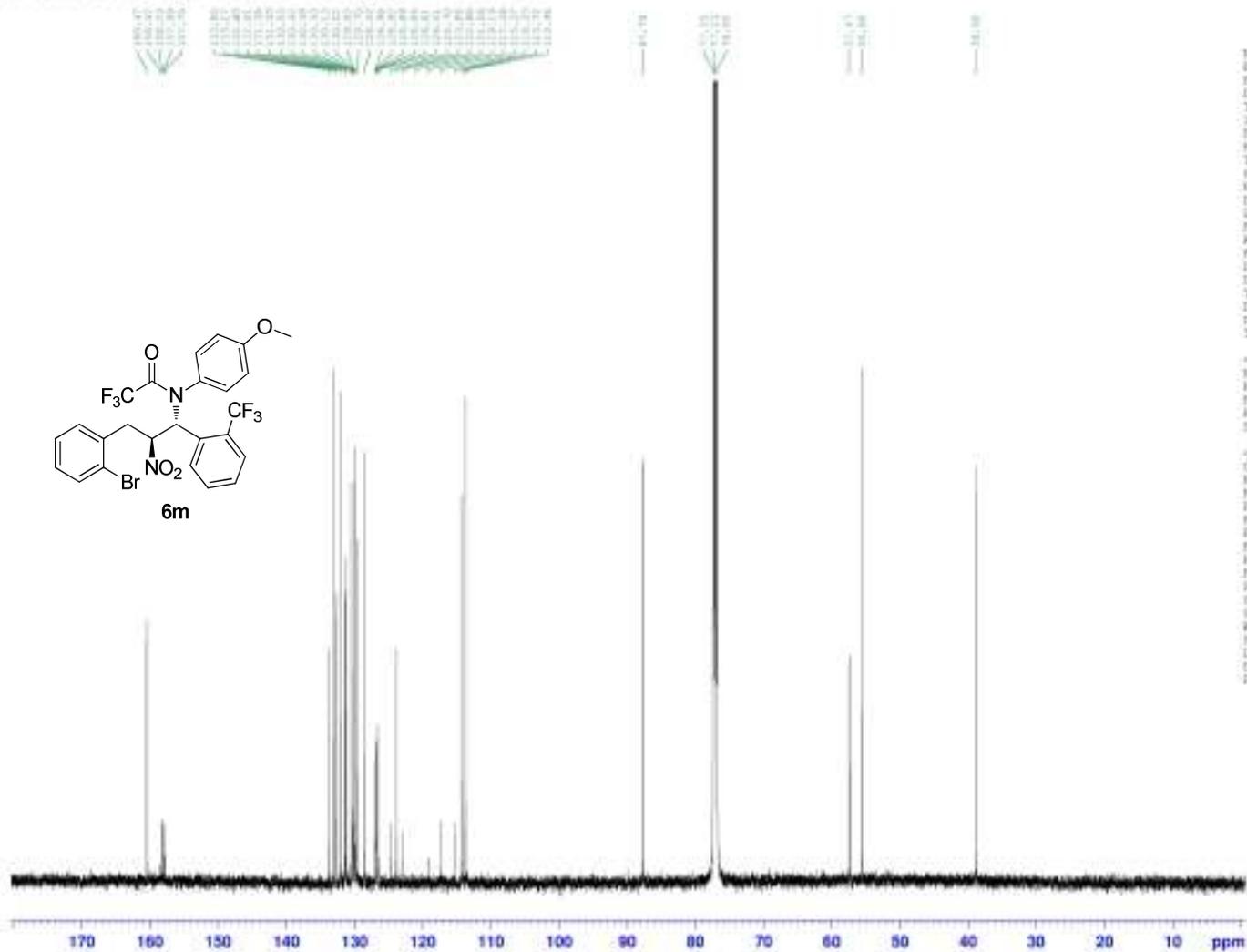
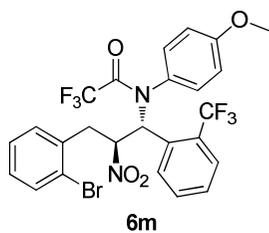
AN616  
PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 30



```
NAME: Nov10-2010
EXPNO: 20
PROCNO: 1
Date_: 20101130
Time: 11.40
INSTRUM: AV400
PROBHD: 5 mm CDCl3 15C
PULPROG: zg30
TD: 65536
SOLVENT: CDCl3
NS: 6
DS: 0
SWH: 12315.326 Hz
FIDRES: 0.125053 Hz
AQ: 1.9499464 sec
RG: 62.7
AQ: 42.533 usec
DE: 10.46 usec
TE: 298.0 K
D1: 1.60000000 sec
TMS: 1

----- CHANNEL f1 -----
NUC1: 1H
P1: 11.40 usec
PL1: 1.00 dB
PS1W: 19.7471016 W
SFO1: 400.1437041 MHz
F1: 32788
SF: 400.1437044 MHz
WDW: EM
SSB: 0
LB: 0.30 Hz
GB: 0
PC: 1.40
```

AN616  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 3



NAME	AN616-0110
EXPNO	22
F2PROCNO	1
DATE_	20101110
TIME	14.19
INSTRUM	AV450
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.9088159 sec
RG	1020
DM	13.847 mm
DE	21.55 mm
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
TD0	1

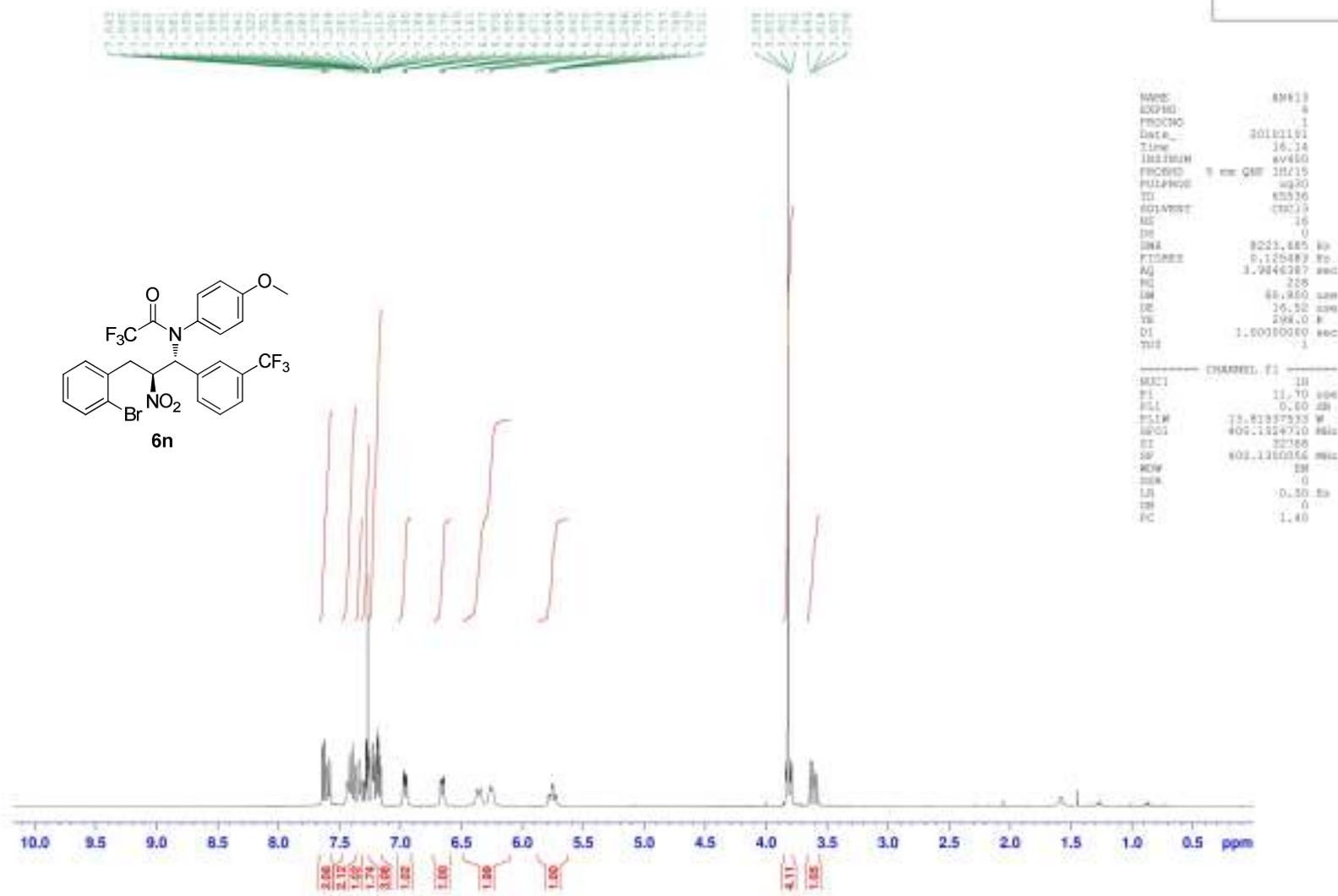
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 mm
PL1	5.00 dB
PL12	20.00 dB
SFO1	125.761574 MHz

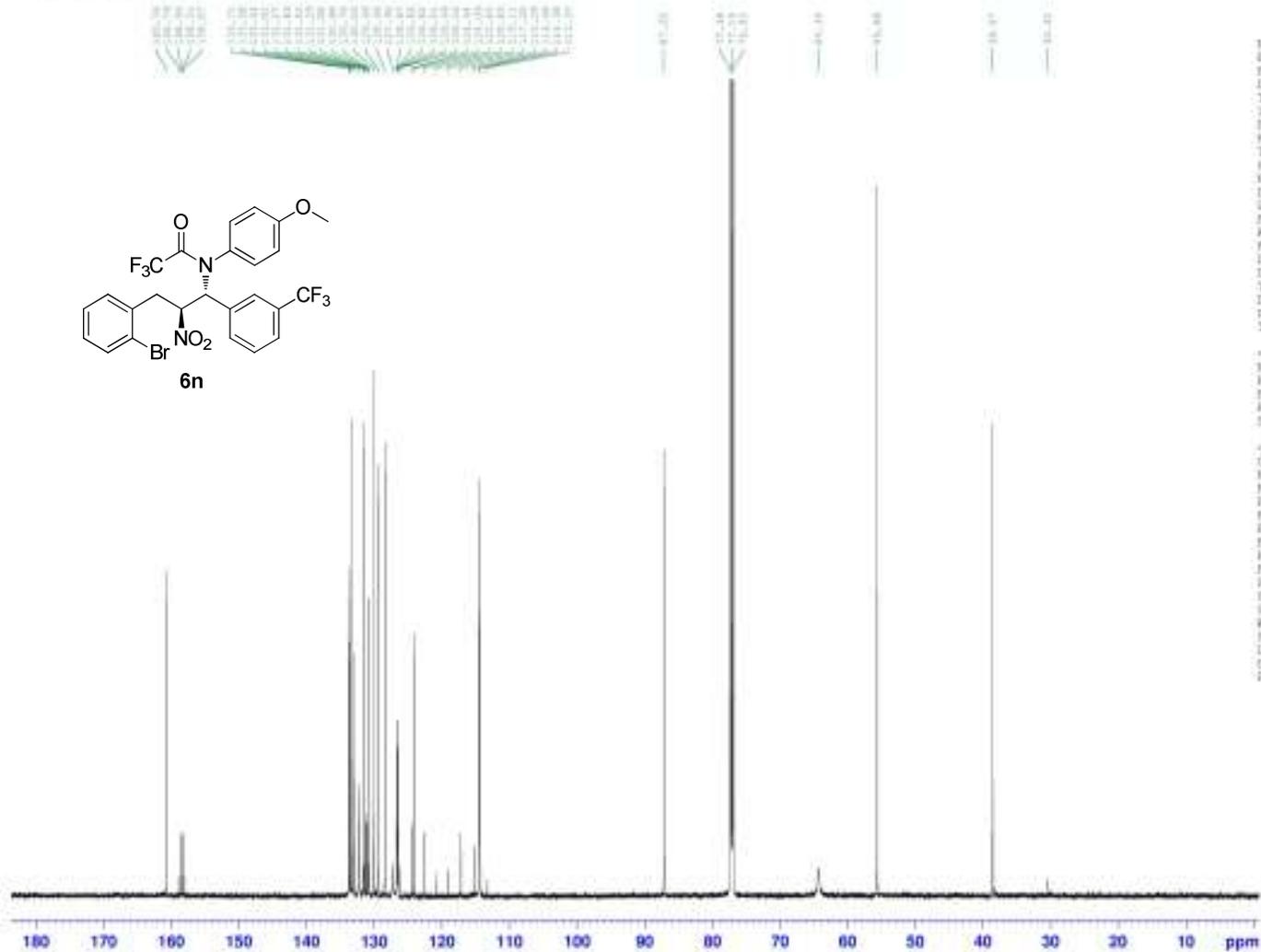
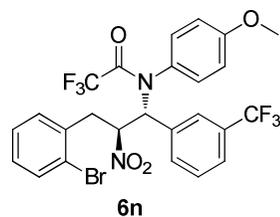
  

===== CHANNEL F2 =====	
NUC2	13C
FL2	9.80 mm
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB

AN613



AN613  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2

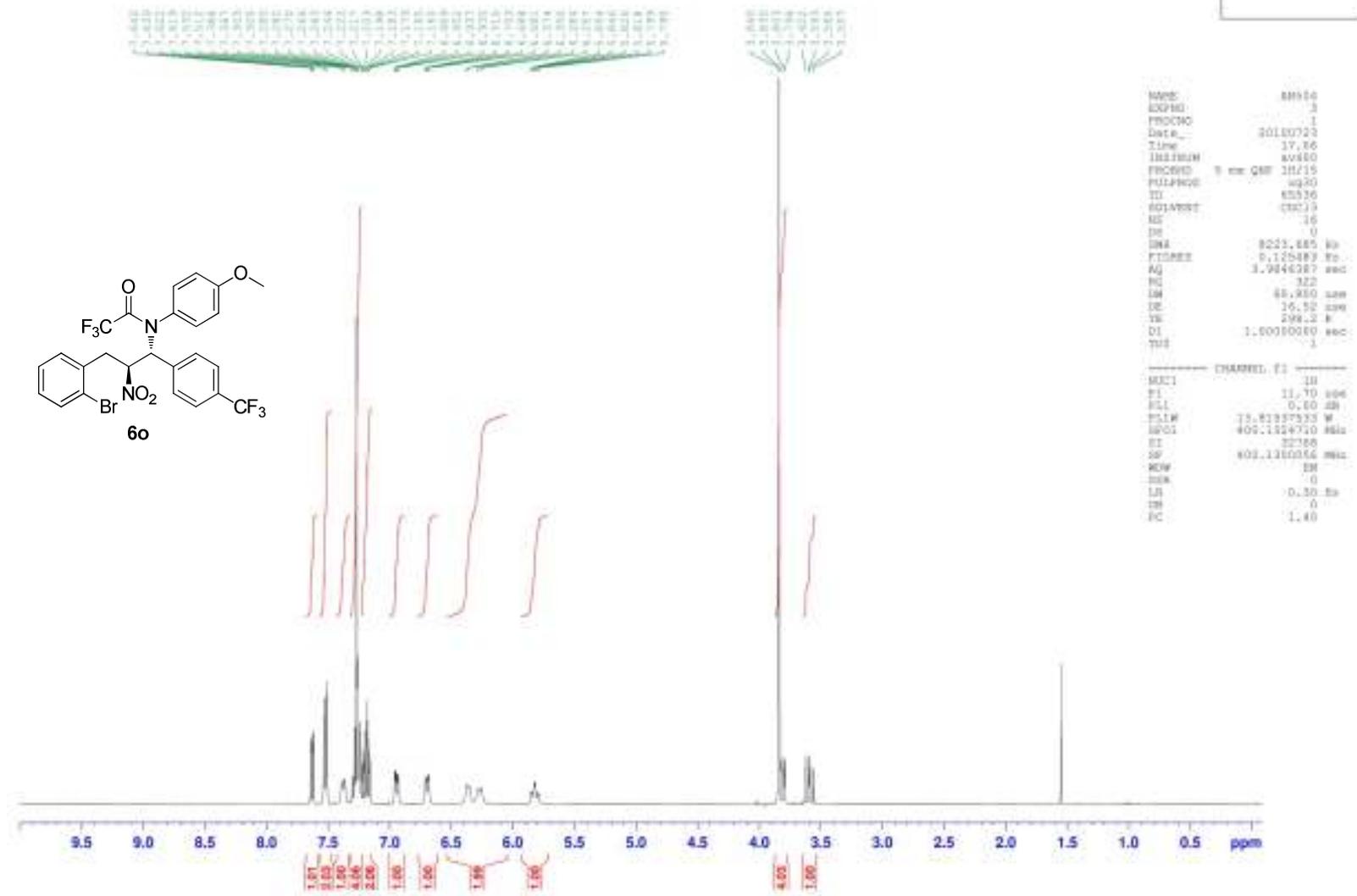


NAME	Nov01-0310
EXPNO	32
F2PROC0	1
DATE_	20101101
Time	14.25
INSTRUM	AV650
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
ACQ	0.3088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.30880000 sec
TD0	1

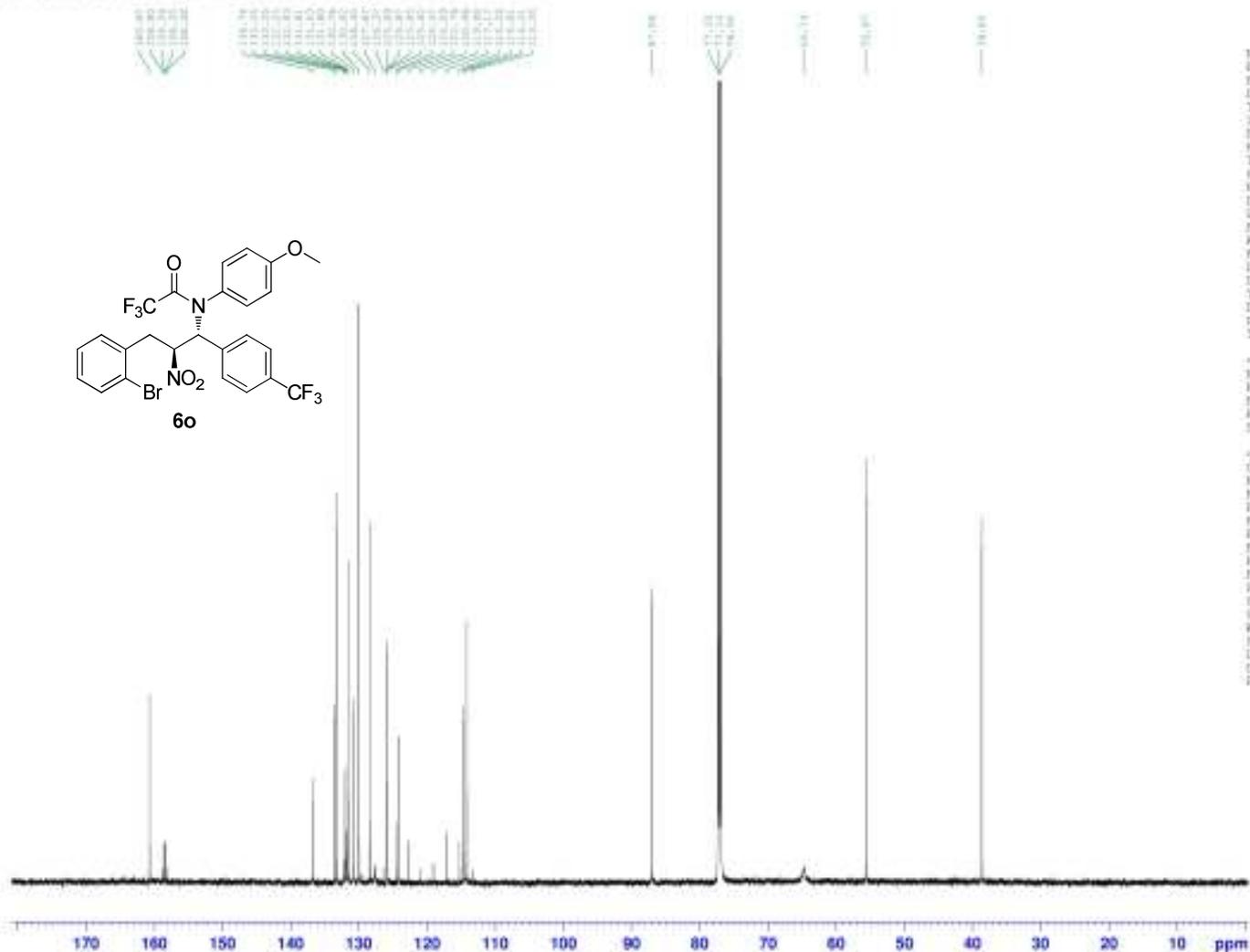
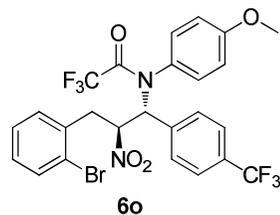
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	20.00 dB
PL13	20.00 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB

AN504-R1



AN504  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 7

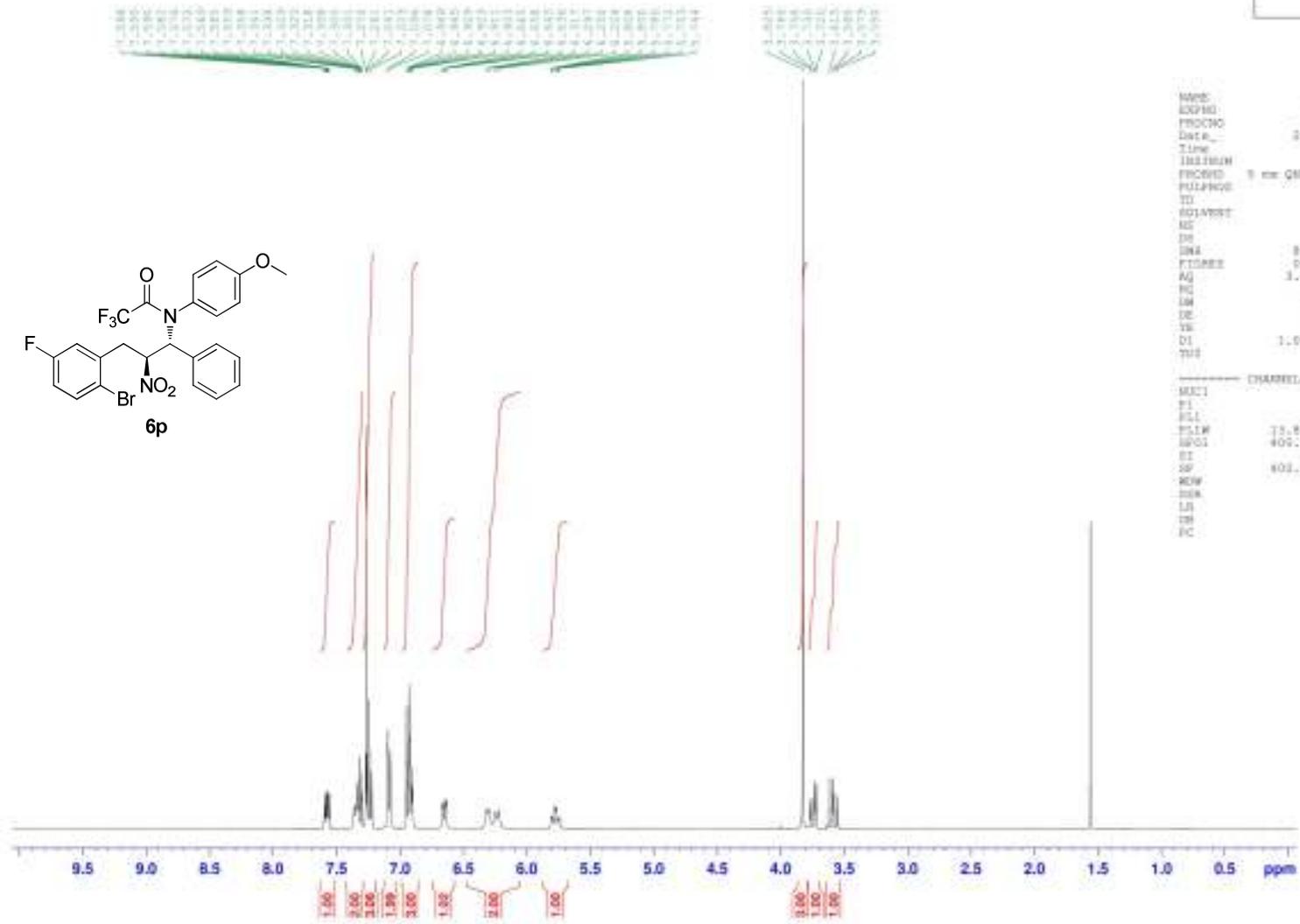
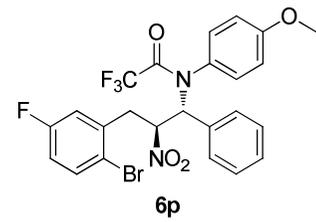


NAME	24121-0110
EXPNO	32
F2PROC0	1
DATE_	20110723
TIME	15.54
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7613000 MHz

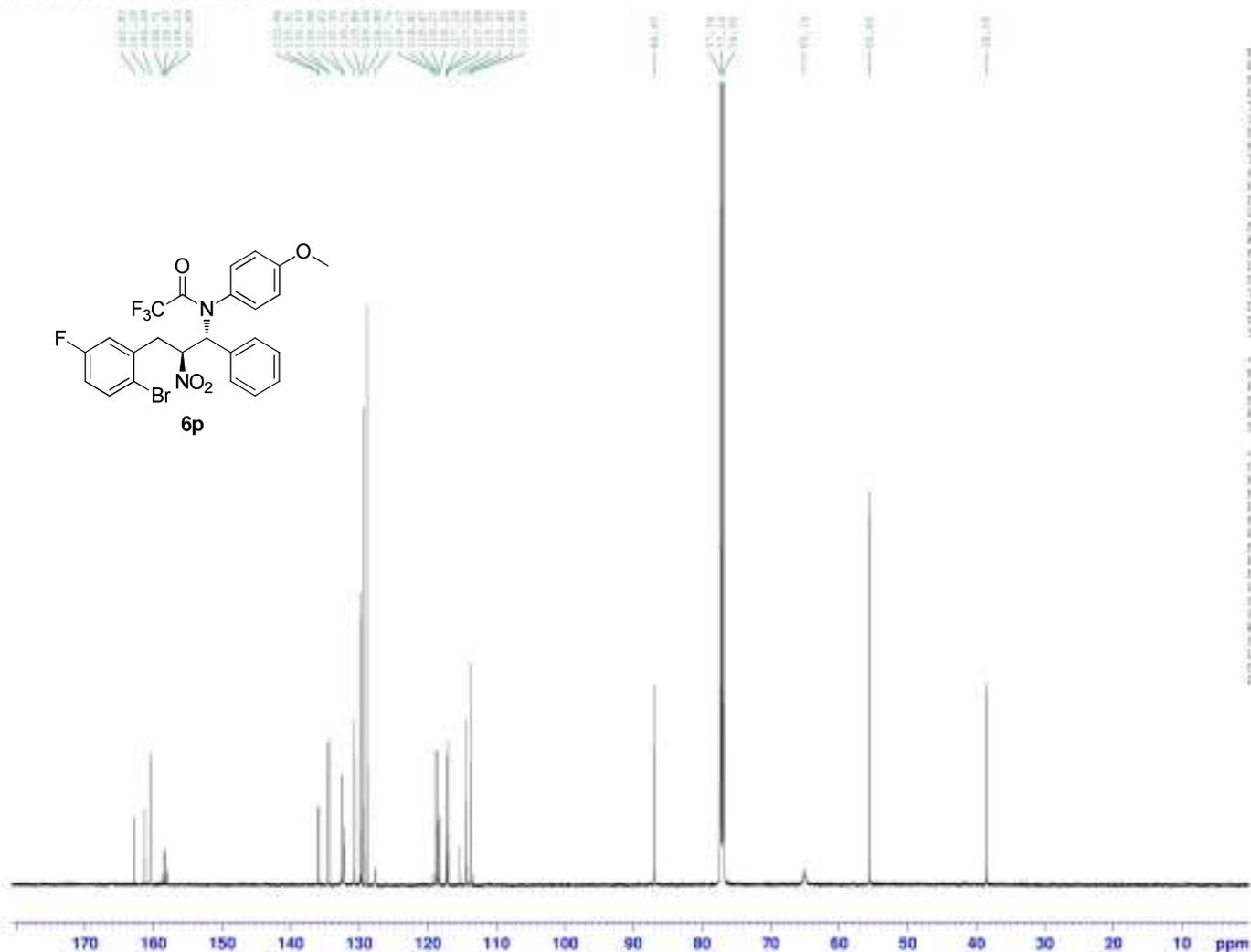
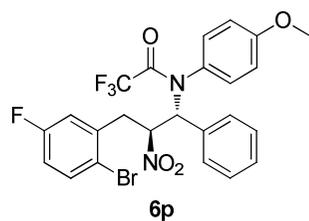
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751714 W
PL15	0.32796130 W
PL16	0.17332020 W
SFO2	400.1424000 MHz
SI	32768
SR	104.9327830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN570



```
NAME          AN570
EXPNO         6
PROCNO        1
Date_         20100924
Time          15.53
INSTRUM       av400
PROBHD        5 mm QNP 1H/13
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            0
SWH           8021.885 kHz
FIDRES        0.125483 Hz
AQ            3.9846287 sec
RG            362
SQ            66.850 mm
DE            16.50 mm
TE            298.2 K
D1            1.60000000 sec
DELTA         1
----- CHANNEL f1 -----
NUC1          13C
P1            11.70 usec
PL1           0.60 dB
PL12         15.8133733 W
SFO1          400.1324710 MHz
SI            32768
SF           400.1300005 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.40
```

AN470  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



NAME	Seq01-0110
EXPNO	82
F2PROCNO	1
DATE_	20180922
TIME	15.53
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.13
MS	256
DS	0
SWH	16017.481 Hz
F2FREQ	101.625197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.2 #
D1	2.8000000 sec
D11	0.1000000 sec
TD0	1

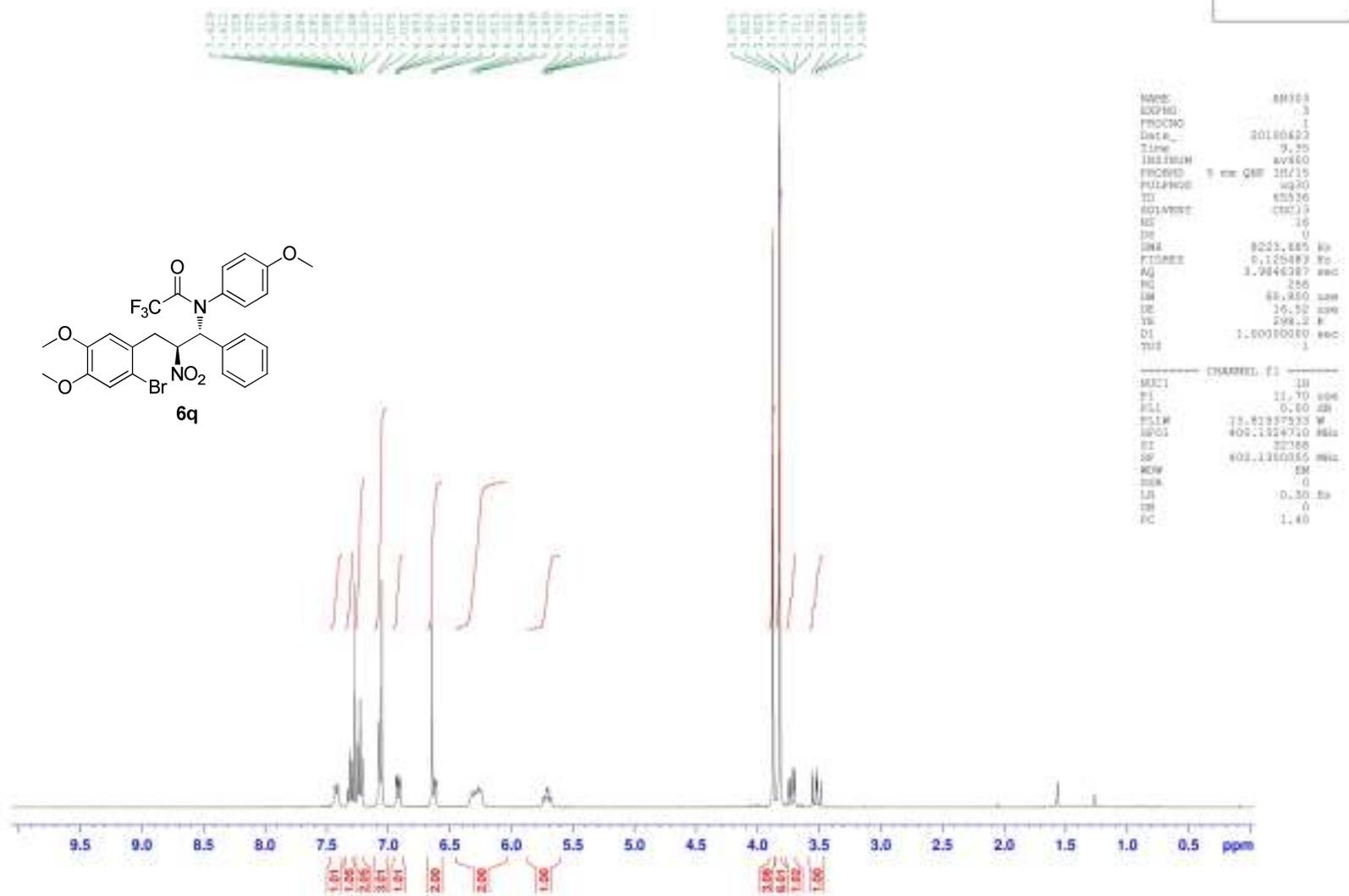
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.768617 dB
SFO1	101.625197 MHz

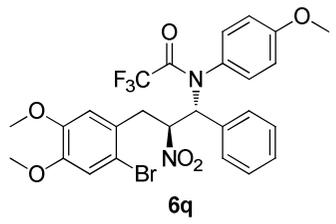
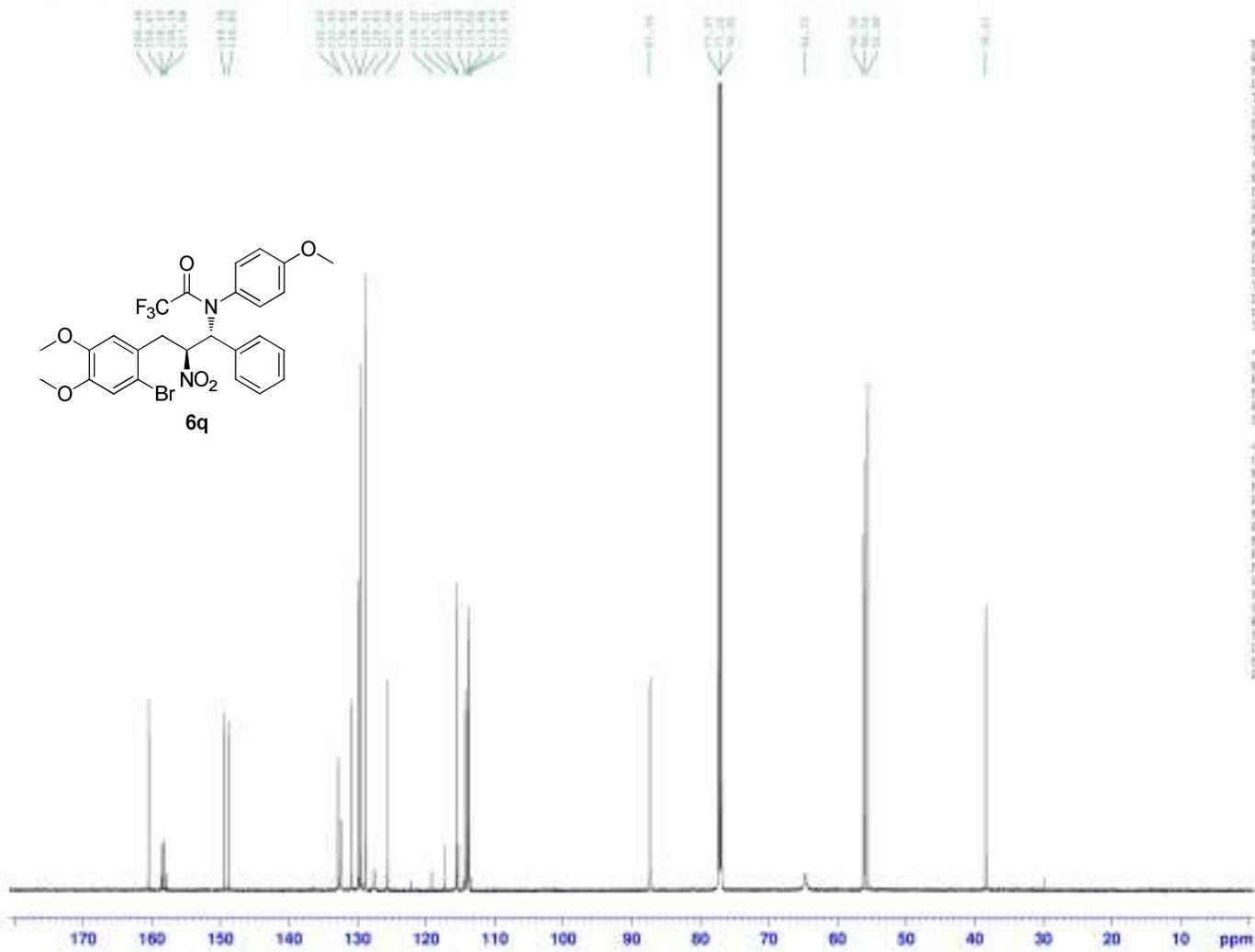
  

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 dB
PL15	0.12596138 dB
PL16	0.17332926 dB
SFO2	601.1326126 MHz
SI	32768
SR	101.9927830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

AN303



AN303  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 3

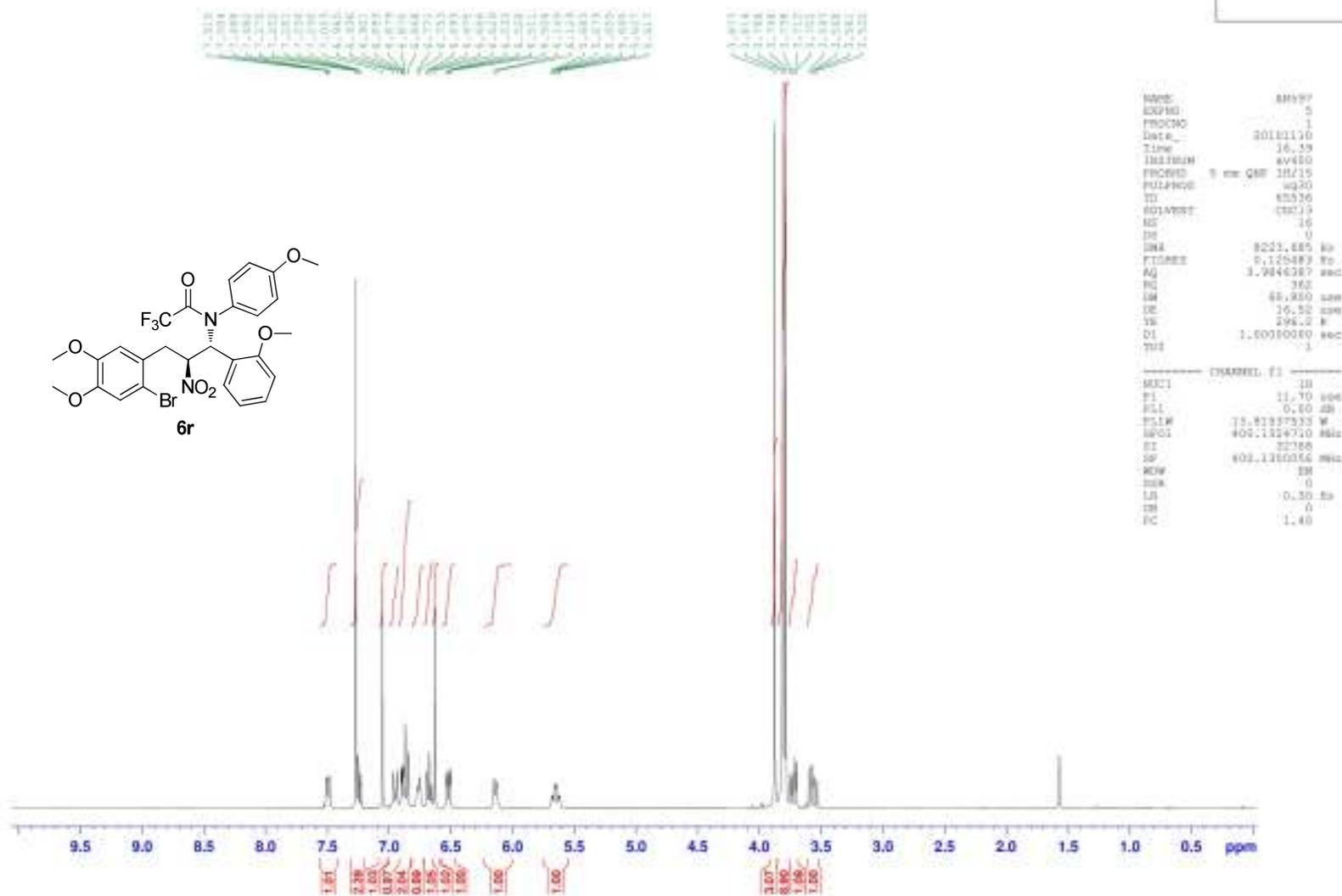


NAME	Jan18-2010
EXPNO	82
F2PROCNO	1
DATE_	20100419
TIME	17.34
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	3.00
GB	0
PC	1.40
RG	327.68
ACQ	0.32768130 sec
RG	327.68
WDW	EM
SSB	0
LB	3.00 Hz
GB	0
PC	1.40

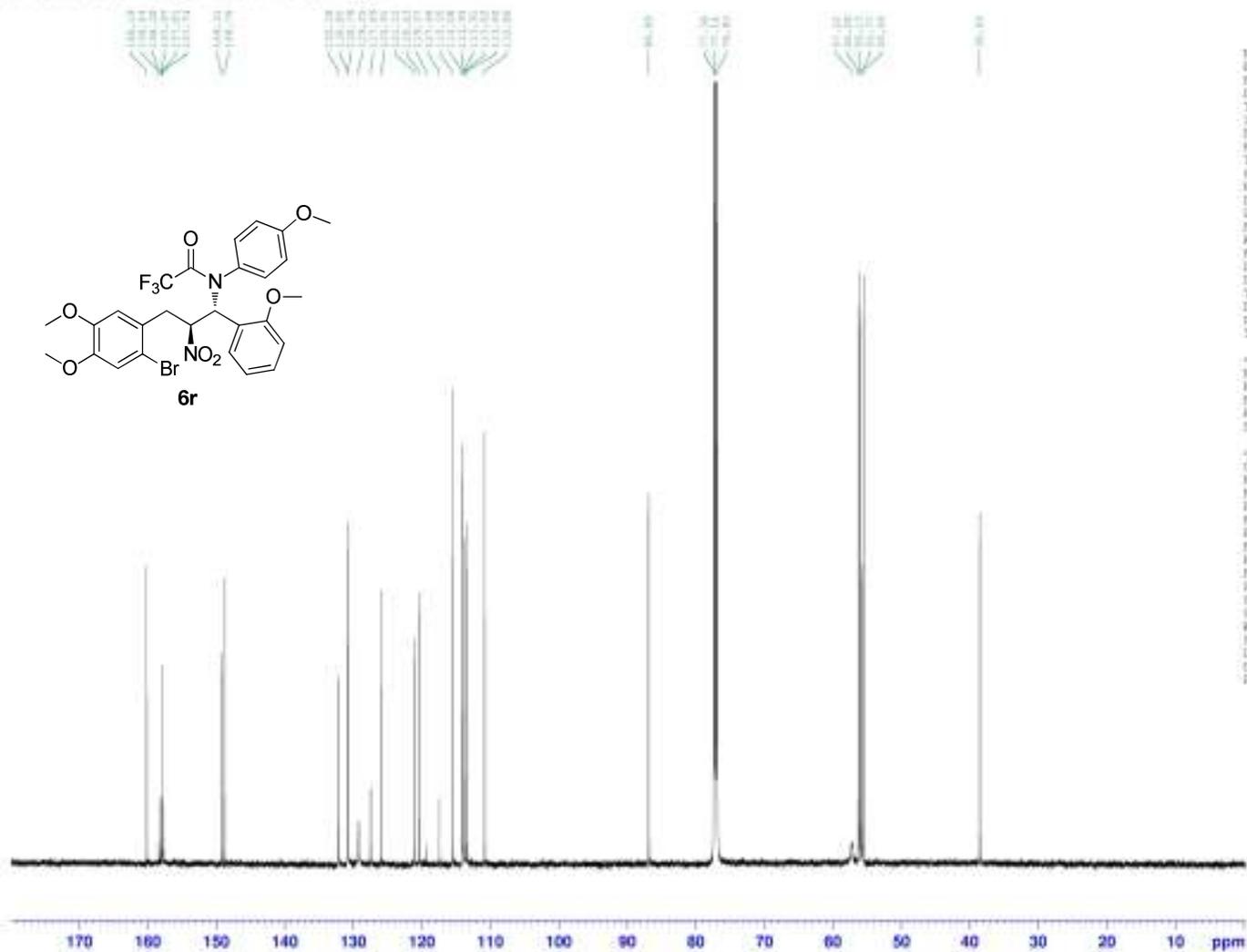
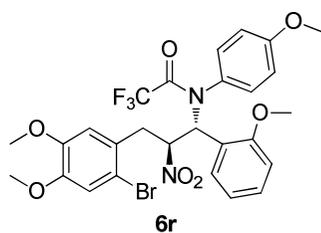
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761300 MHz
===== CHANNEL f2 =====	
CPDPRG2	zgpg30
NUC2	13C
FL2	9.40 um
PL2	1.00 dB
PL12	19.7686177 W
PL13	19.7686177 W
PL14	19.7686177 W
PL15	19.7686177 W
PL16	19.7686177 W
PL17	19.7686177 W
PL18	19.7686177 W
PL19	19.7686177 W
PL20	19.7686177 W
PL21	19.7686177 W
PL22	19.7686177 W
PL23	19.7686177 W
PL24	19.7686177 W
PL25	19.7686177 W
PL26	19.7686177 W
PL27	19.7686177 W
PL28	19.7686177 W
PL29	19.7686177 W
PL30	19.7686177 W
PL31	19.7686177 W
PL32	19.7686177 W
PL33	19.7686177 W
PL34	19.7686177 W
PL35	19.7686177 W
PL36	19.7686177 W
PL37	19.7686177 W
PL38	19.7686177 W
PL39	19.7686177 W
PL40	19.7686177 W
PL41	19.7686177 W
PL42	19.7686177 W
PL43	19.7686177 W
PL44	19.7686177 W
PL45	19.7686177 W
PL46	19.7686177 W
PL47	19.7686177 W
PL48	19.7686177 W
PL49	19.7686177 W
PL50	19.7686177 W
PL51	19.7686177 W
PL52	19.7686177 W
PL53	19.7686177 W
PL54	19.7686177 W
PL55	19.7686177 W
PL56	19.7686177 W
PL57	19.7686177 W
PL58	19.7686177 W
PL59	19.7686177 W
PL60	19.7686177 W
PL61	19.7686177 W
PL62	19.7686177 W
PL63	19.7686177 W
PL64	19.7686177 W
PL65	19.7686177 W
PL66	19.7686177 W
PL67	19.7686177 W
PL68	19.7686177 W
PL69	19.7686177 W
PL70	19.7686177 W
PL71	19.7686177 W
PL72	19.7686177 W
PL73	19.7686177 W
PL74	19.7686177 W
PL75	19.7686177 W
PL76	19.7686177 W
PL77	19.7686177 W
PL78	19.7686177 W
PL79	19.7686177 W
PL80	19.7686177 W
PL81	19.7686177 W
PL82	19.7686177 W
PL83	19.7686177 W
PL84	19.7686177 W
PL85	19.7686177 W
PL86	19.7686177 W
PL87	19.7686177 W
PL88	19.7686177 W
PL89	19.7686177 W
PL90	19.7686177 W
PL91	19.7686177 W
PL92	19.7686177 W
PL93	19.7686177 W
PL94	19.7686177 W
PL95	19.7686177 W
PL96	19.7686177 W
PL97	19.7686177 W
PL98	19.7686177 W
PL99	19.7686177 W
PL100	19.7686177 W

AN597



AN597  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4

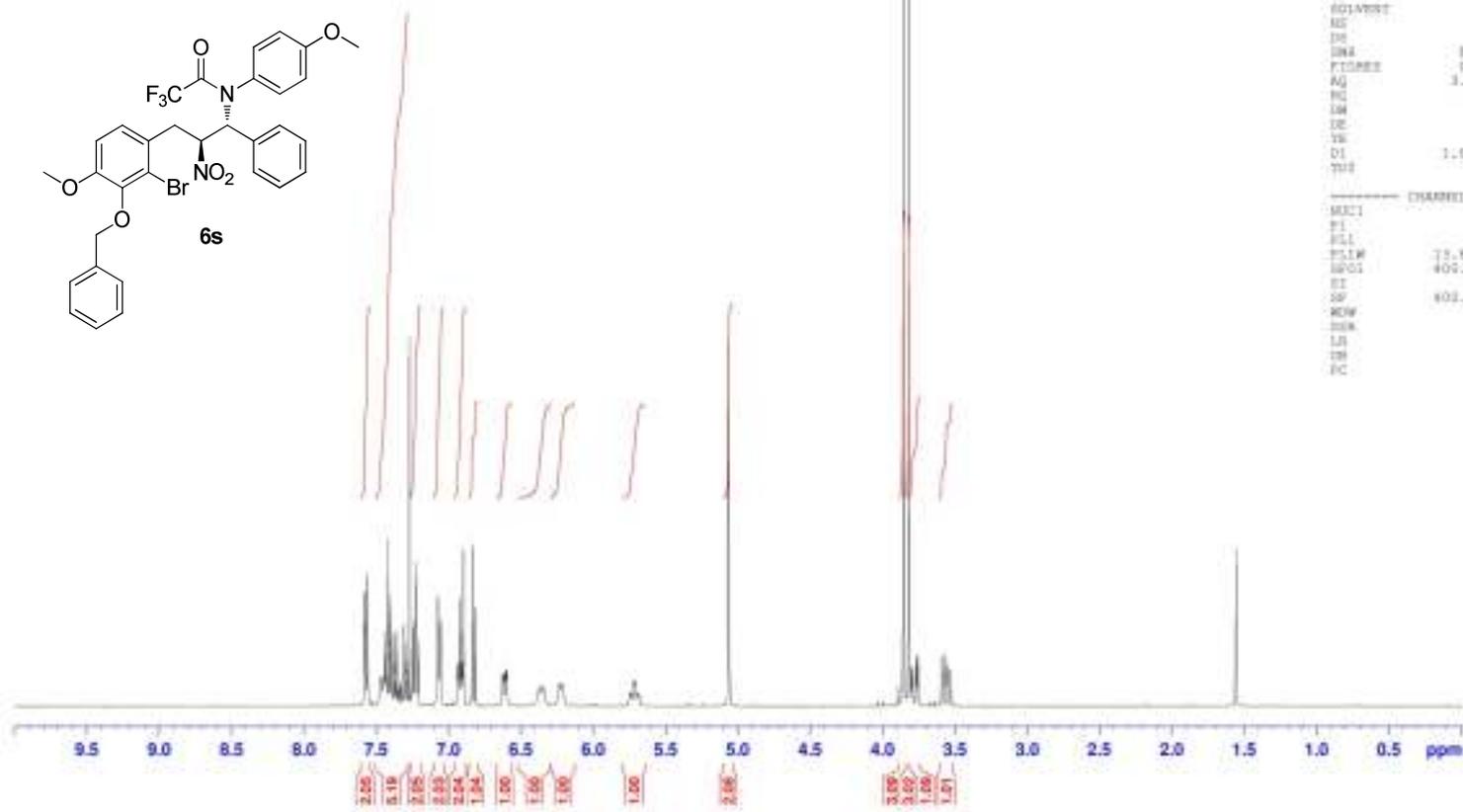
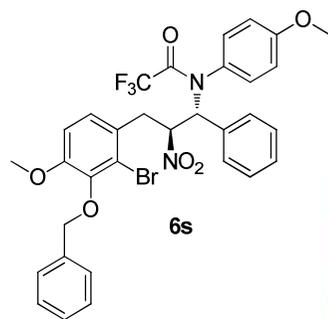


NAME	Me+13-2310
EXPNO	62
F2PROCNO	1
DATE_	20181110
TIME	18.51
INSTRUM	AV450
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	13C
DE	13.047 mm
TE	300.2 K
TD	65536
SI	1
DF	1
DS	1
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 mm
PL1	0.00 dB
PL12	19.00 dB
PL13	19.00 dB
PL14	19.00 dB
PL15	19.00 dB
PL16	19.00 dB
PL17	19.00 dB
PL18	19.00 dB
PL19	19.00 dB
PL20	19.00 dB
PL21	19.00 dB
PL22	19.00 dB
PL23	19.00 dB
PL24	19.00 dB
PL25	19.00 dB
PL26	19.00 dB
PL27	19.00 dB
PL28	19.00 dB
PL29	19.00 dB
PL30	19.00 dB
PL31	19.00 dB
PL32	19.00 dB
PL33	19.00 dB
PL34	19.00 dB
PL35	19.00 dB
PL36	19.00 dB
PL37	19.00 dB
PL38	19.00 dB
PL39	19.00 dB
PL40	19.00 dB
PL41	19.00 dB
PL42	19.00 dB
PL43	19.00 dB
PL44	19.00 dB
PL45	19.00 dB
PL46	19.00 dB
PL47	19.00 dB
PL48	19.00 dB
PL49	19.00 dB
PL50	19.00 dB
PL51	19.00 dB
PL52	19.00 dB
PL53	19.00 dB
PL54	19.00 dB
PL55	19.00 dB
PL56	19.00 dB
PL57	19.00 dB
PL58	19.00 dB
PL59	19.00 dB
PL60	19.00 dB
PL61	19.00 dB
PL62	19.00 dB
PL63	19.00 dB
PL64	19.00 dB
PL65	19.00 dB
PL66	19.00 dB
PL67	19.00 dB
PL68	19.00 dB
PL69	19.00 dB
PL70	19.00 dB
PL71	19.00 dB
PL72	19.00 dB
PL73	19.00 dB
PL74	19.00 dB
PL75	19.00 dB
PL76	19.00 dB
PL77	19.00 dB
PL78	19.00 dB
PL79	19.00 dB
PL80	19.00 dB
PL81	19.00 dB
PL82	19.00 dB
PL83	19.00 dB
PL84	19.00 dB
PL85	19.00 dB
PL86	19.00 dB
PL87	19.00 dB
PL88	19.00 dB
PL89	19.00 dB
PL90	19.00 dB
PL91	19.00 dB
PL92	19.00 dB
PL93	19.00 dB
PL94	19.00 dB
PL95	19.00 dB
PL96	19.00 dB
PL97	19.00 dB
PL98	19.00 dB
PL99	19.00 dB
PL100	19.00 dB

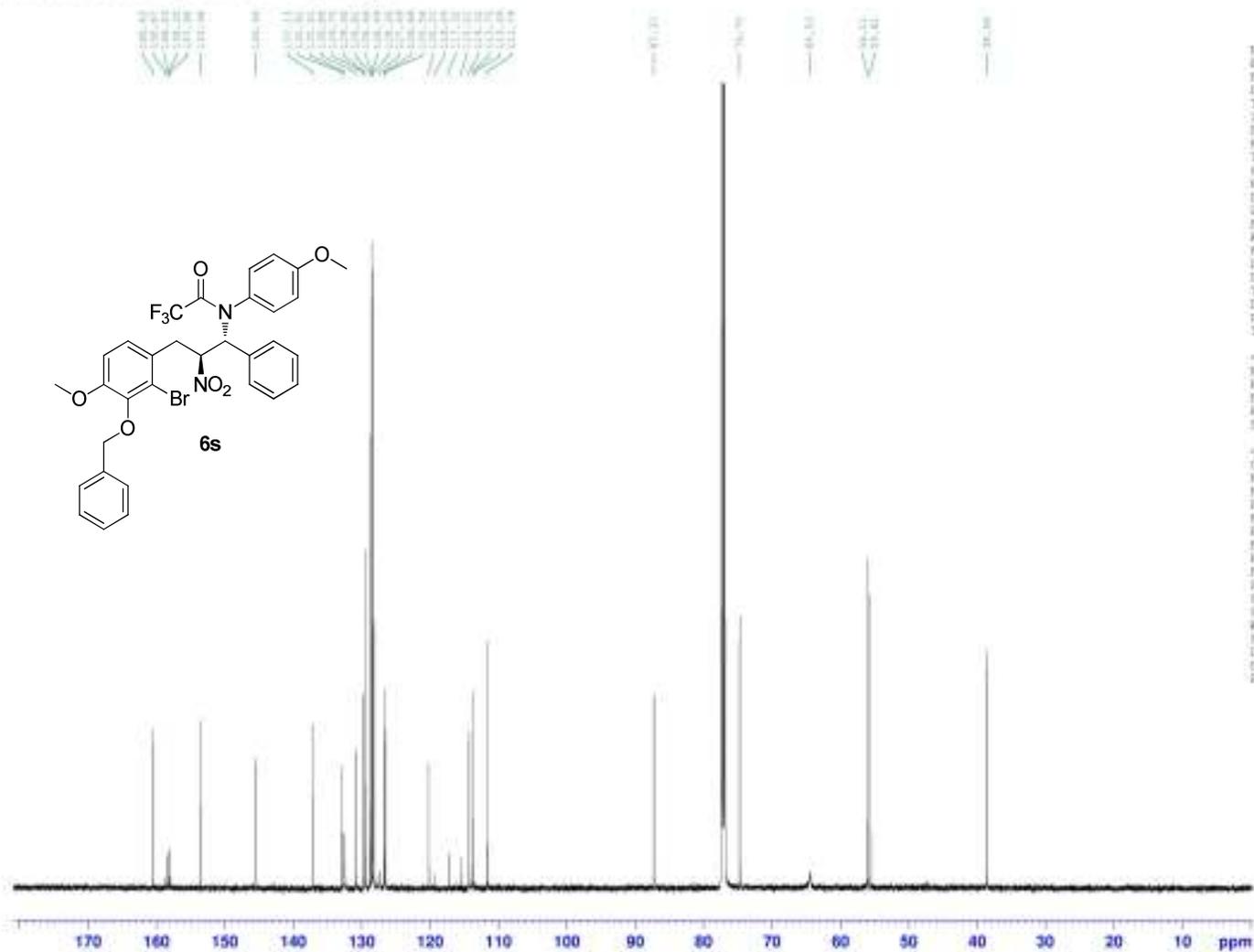
AN601



NAME AN601  
EXPNO 4  
PROCNO 1  
Date\_ 20101103  
Time 16.07  
INSTRUM av400  
PROBHD 5 mm QNP 1H/13  
PULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 0  
SWH 8021.885 khz  
FIDRES 0.125489 Hz  
AQ 1.9846287 sec  
RG 360  
DQ 66.850 um  
DE 16.50 um  
TE 298.0 K  
D1 1.60000000 sec  
TD0 1

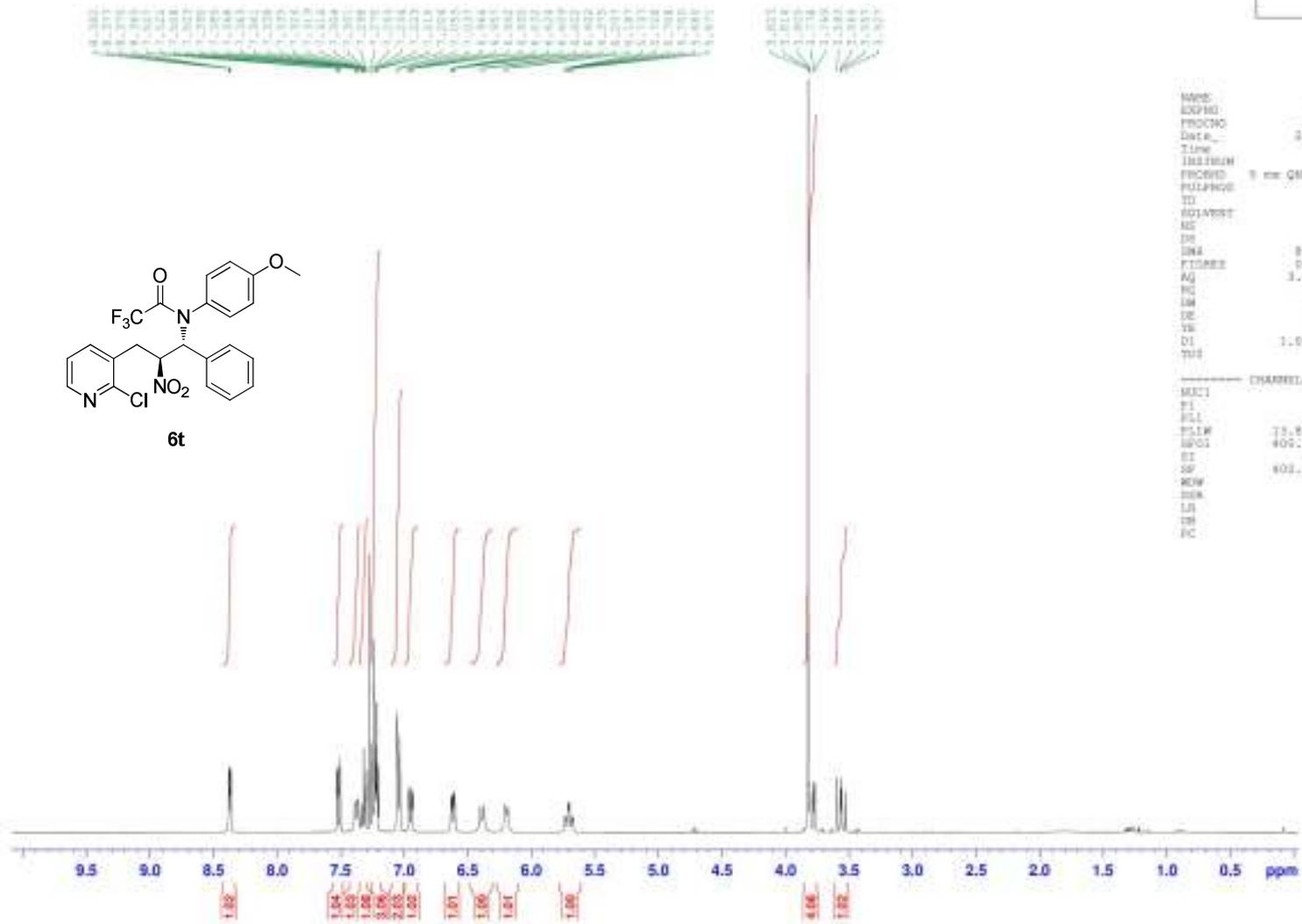
----- CHANNEL f1 -----  
NUC1 13  
P1 11.70 usec  
PL1 0.60 dB  
PL1P 15.81337333 W  
SFO1 400.1324700 MHz  
SI 32768  
SF 402.1300356 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40

AN601  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1

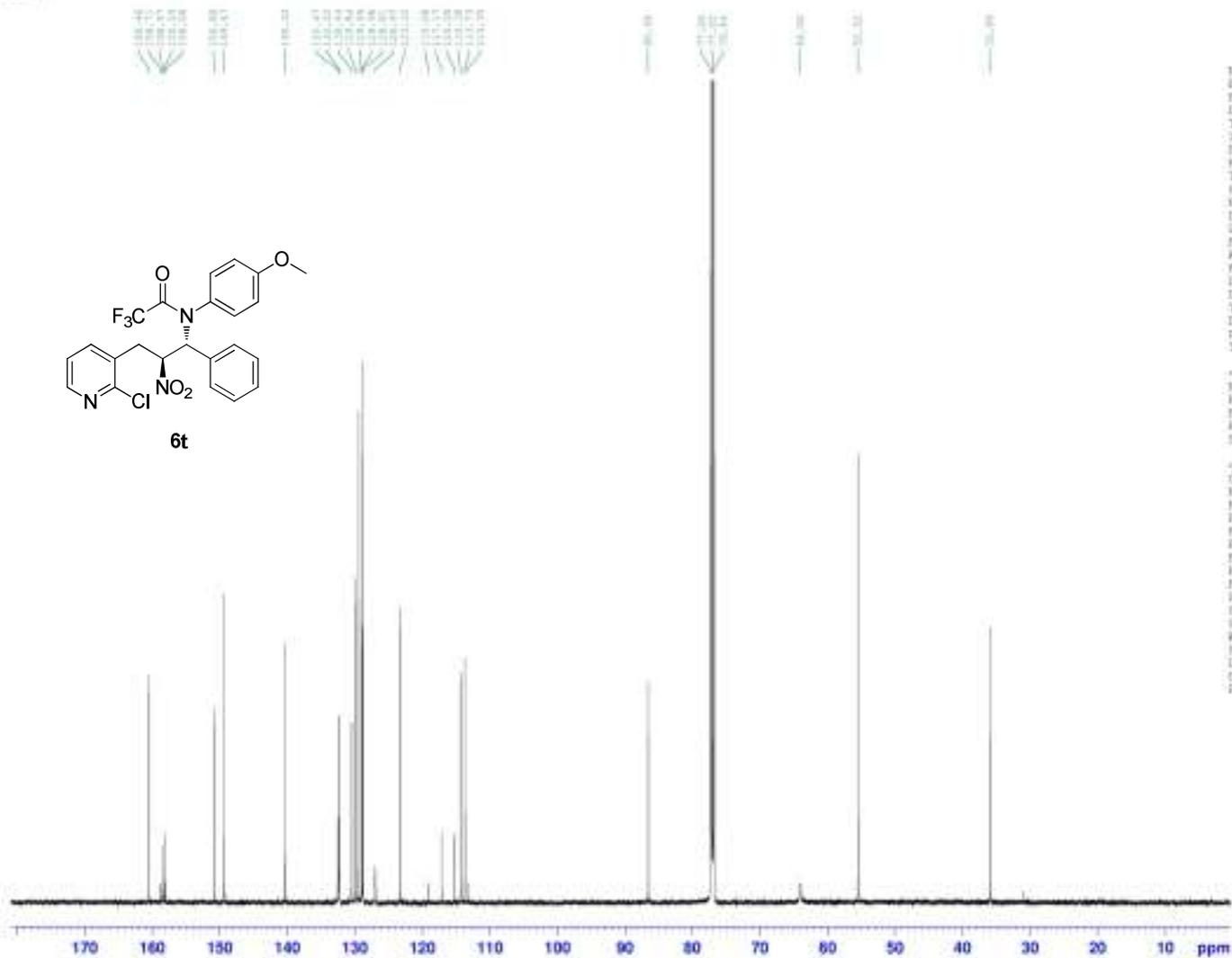
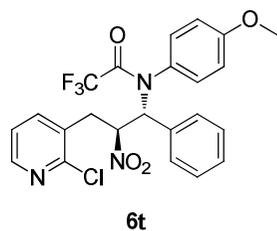


NAME	Nov01-0310
EXPNO	22
F2PROCNO	1
DATE_	20181101
TIME	15.55
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
AF	101.9327830
PCPDG	70.00
PL1	1.00
PL2	17.23
PL3	20.00
PL4	20.00
PL5	20.00
PL6	20.00
PL7	20.00
PL8	20.00
PL9	20.00
PL10	20.00
PL11	20.00
PL12	20.00
PL13	20.00
PL14	20.00
PL15	20.00
PL16	20.00
PL17	20.00
PL18	20.00
PL19	20.00
PL20	20.00
PL21	20.00
PL22	20.00
PL23	20.00
PL24	20.00
PL25	20.00
PL26	20.00
PL27	20.00
PL28	20.00
PL29	20.00
PL30	20.00
PL31	20.00
PL32	20.00
PL33	20.00
PL34	20.00
PL35	20.00
PL36	20.00
PL37	20.00
PL38	20.00
PL39	20.00
PL40	20.00
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PL44	20.00
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PL72	20.00
PL73	20.00
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PL79	20.00
PL80	20.00
PL81	20.00
PL82	20.00
PL83	20.00
PL84	20.00
PL85	20.00
PL86	20.00
PL87	20.00
PL88	20.00
PL89	20.00
PL90	20.00
PL91	20.00
PL92	20.00
PL93	20.00
PL94	20.00
PL95	20.00
PL96	20.00
PL97	20.00
PL98	20.00
PL99	20.00
PL100	20.00

AN217



AN217



NAME	AN217
EXPNO	1
F2PROCNO	1
DATE_	20081130
Time	21.36
INSTRUM	AV650
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.00000000
RG	1024
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.80000000 sec
D11	0.00000000 sec
DS	1

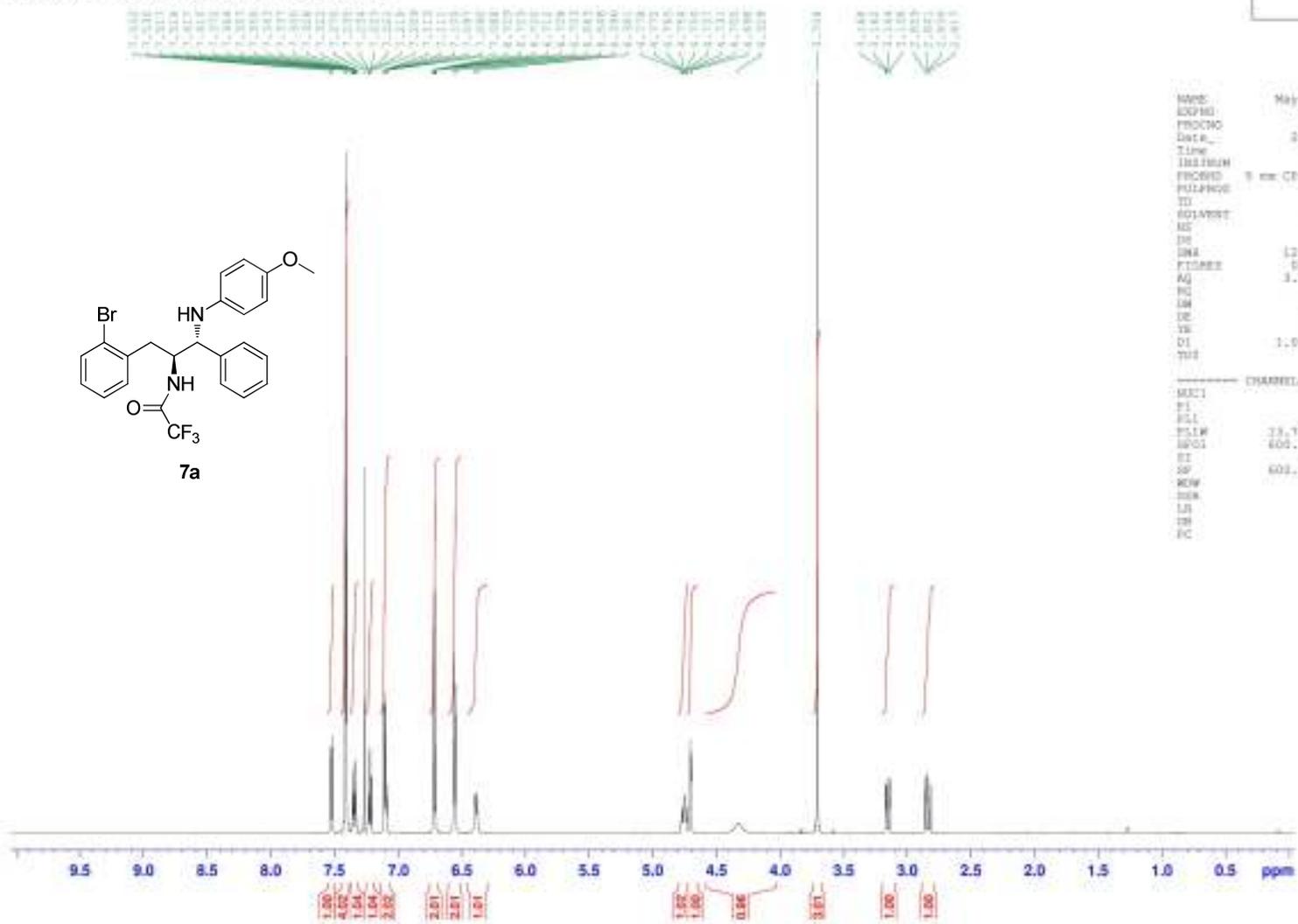
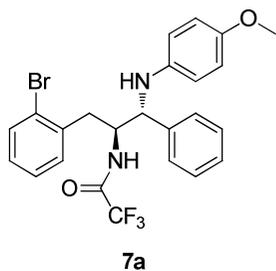
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	5.00 dB
PL12	19.7686177 dB
SFO1	125.7610000 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	19.7686177 dB
PL13	120.40 dB
PL14	19.7686177 dB
PL15	0.36246774 dB
PL16	0.80000000 dB
SFO2	400.1326100 MHz
SI	32768
SF	101.9928000 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN124  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 5



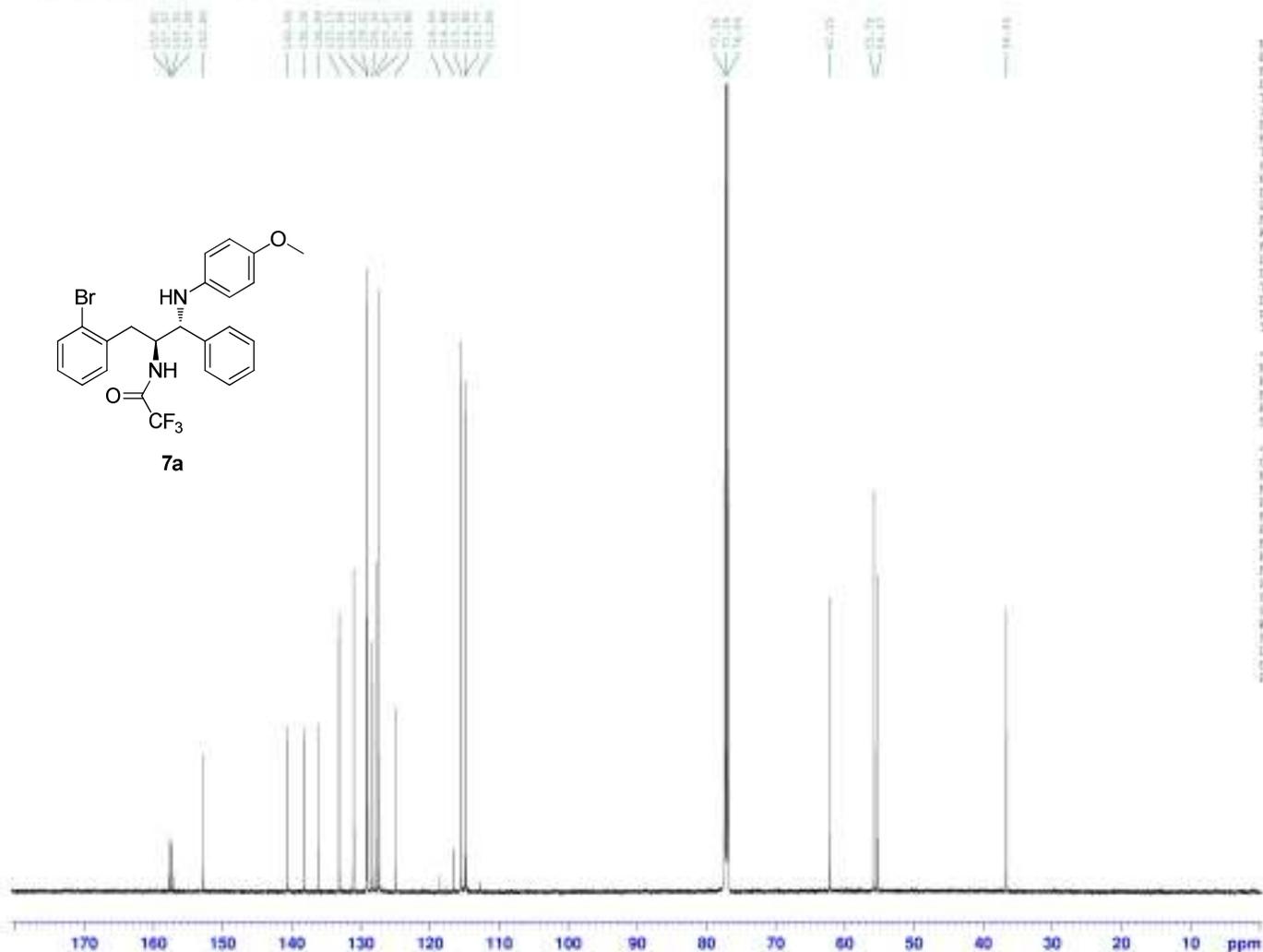
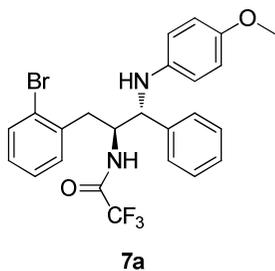
```

NAME      May21-2010
EXPNO    10
PROCNO    1
Date_     20100521
Time      13.48
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 kHz
FIDRES    0.125053 Hz
AQ         3.9499404 sec
RG         320
WDW        EM
SSB        0
GB         0
PC         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.0000000 sec
TMS       1
  
```

```

----- CHANNEL f1 -----
NUC1      1H
P1        11.40 usec
PL1       0.00 dB
PS1PW    19.7671016 W
SFO1      602.1317041 MHz
F1        327.68
SF        602.1310342 MHz
WDW       EM
SSB       0
GB        0
PC        0.30 usec
TE        0
RG        1.40
  
```

AN124  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 6



NAME	May03-0110
EXPNO	142
F2PROCNO	1
DATA__	40160920
Time	15.20
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.0043
MS	128
DS	0
SF	125760.401 Hz
F2FREQ1	5.155197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	300.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

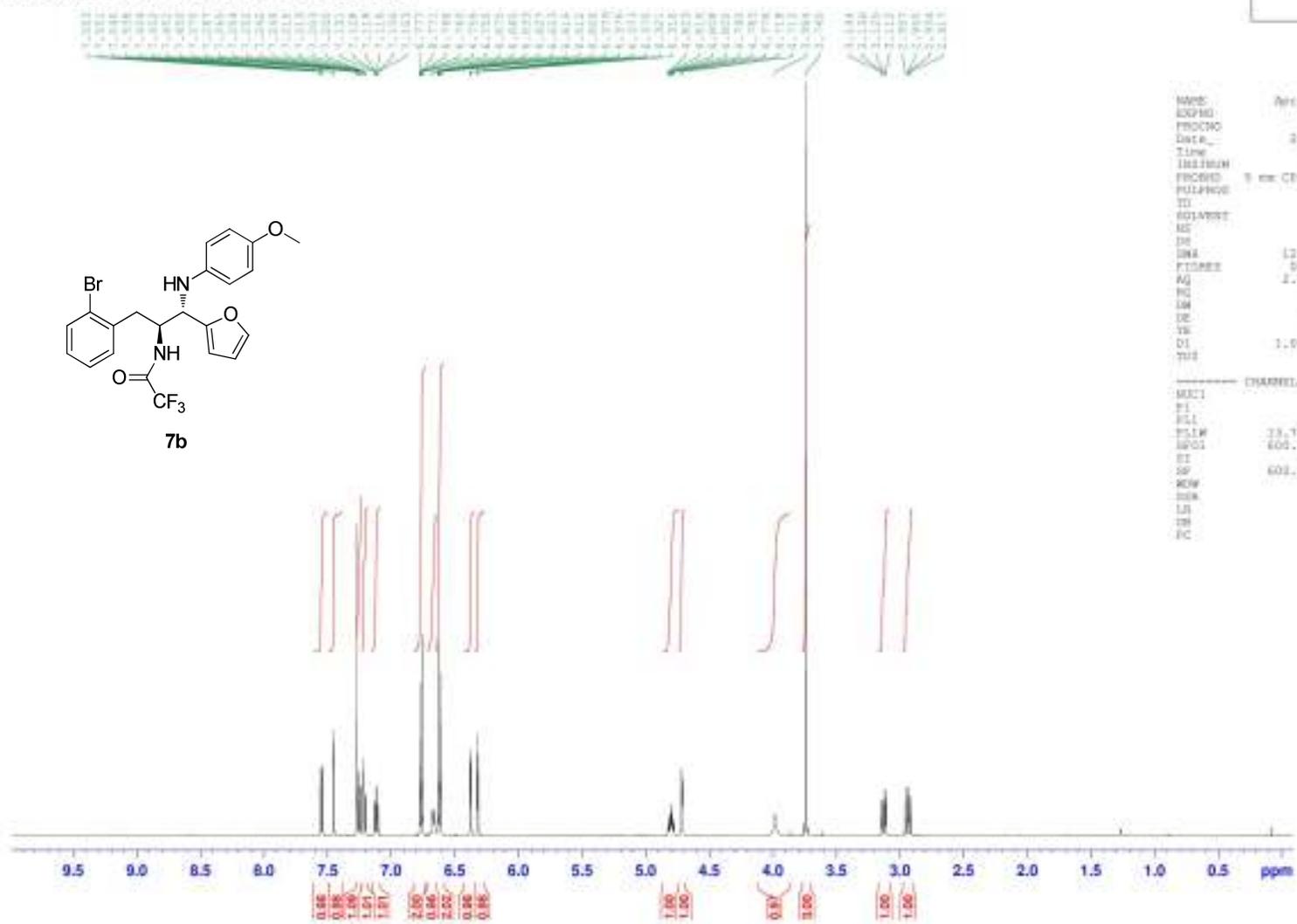
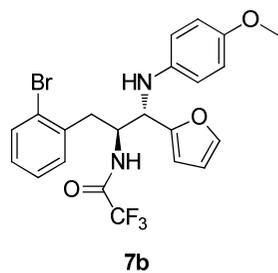
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL1W	26.7686177 W
SFO1	125.9176981 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL2	17.23 dB
PL2	20.00 dB
PL2W	25.76751714 W
PL2W	0.32596130 W
PL2W	0.17332026 W
SFO2	400.1424010 MHz
SI	32768
SF	101.9927830 MHz
RCW	5M
EN	0
LD	1.00 Hz
DS	0
DC	1.40

AN324  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 12



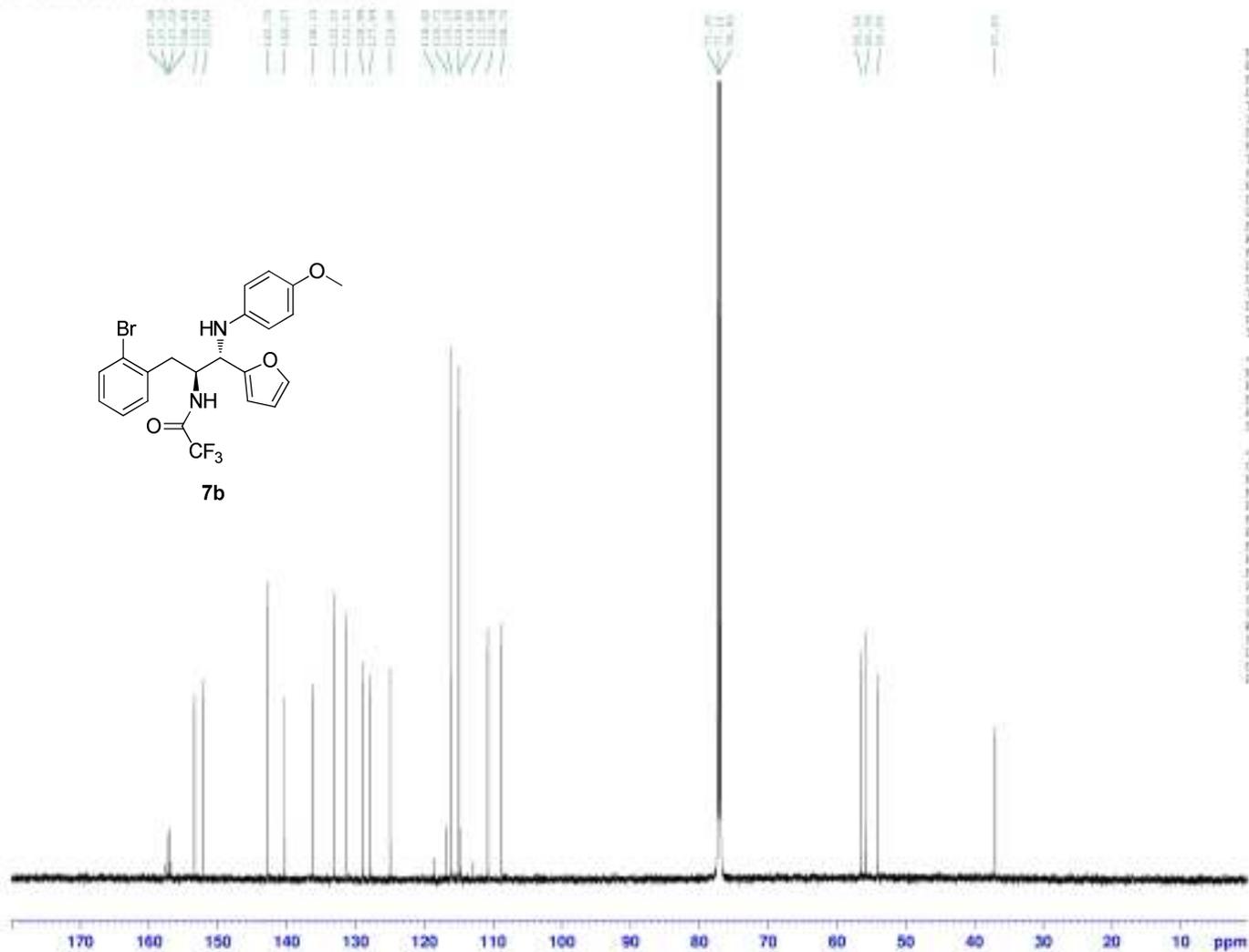
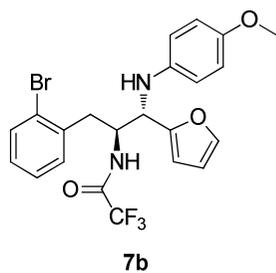
```

NAME      Apr12-2010
EXPNO    10
PROCNO    1
Date_     20120412
Time      16.38
INSTRUM   AV600
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.189275 Hz
AQ         1.4364428 sec
RG         38.5
DQ         40.523 usec
DE         10.46 usec
TE         298.0 K
D1         1.60000000 sec
TD0        1
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1W       23.74712124 W
SFO1       602.137041 MHz
F1         327.68
SF         602.137042 MHz
RGW        EM
SOL         0
DS         0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN324  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



NAME	Apr12-2010
EXPNO	12
F2PROCNO	1
DATA	40160412
Time	16.50
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

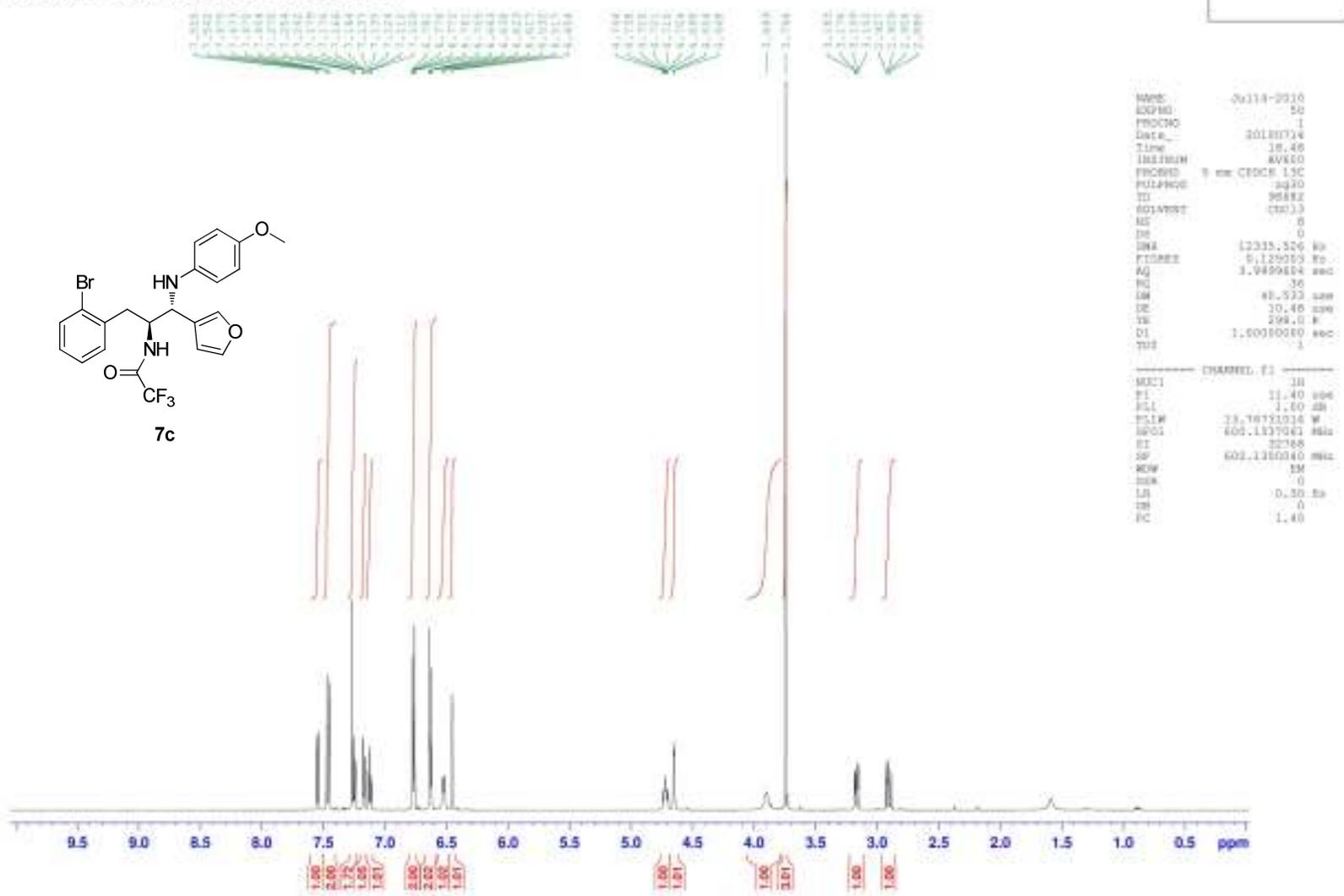
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.7686177 dB
SFO1	125.761761 MHz

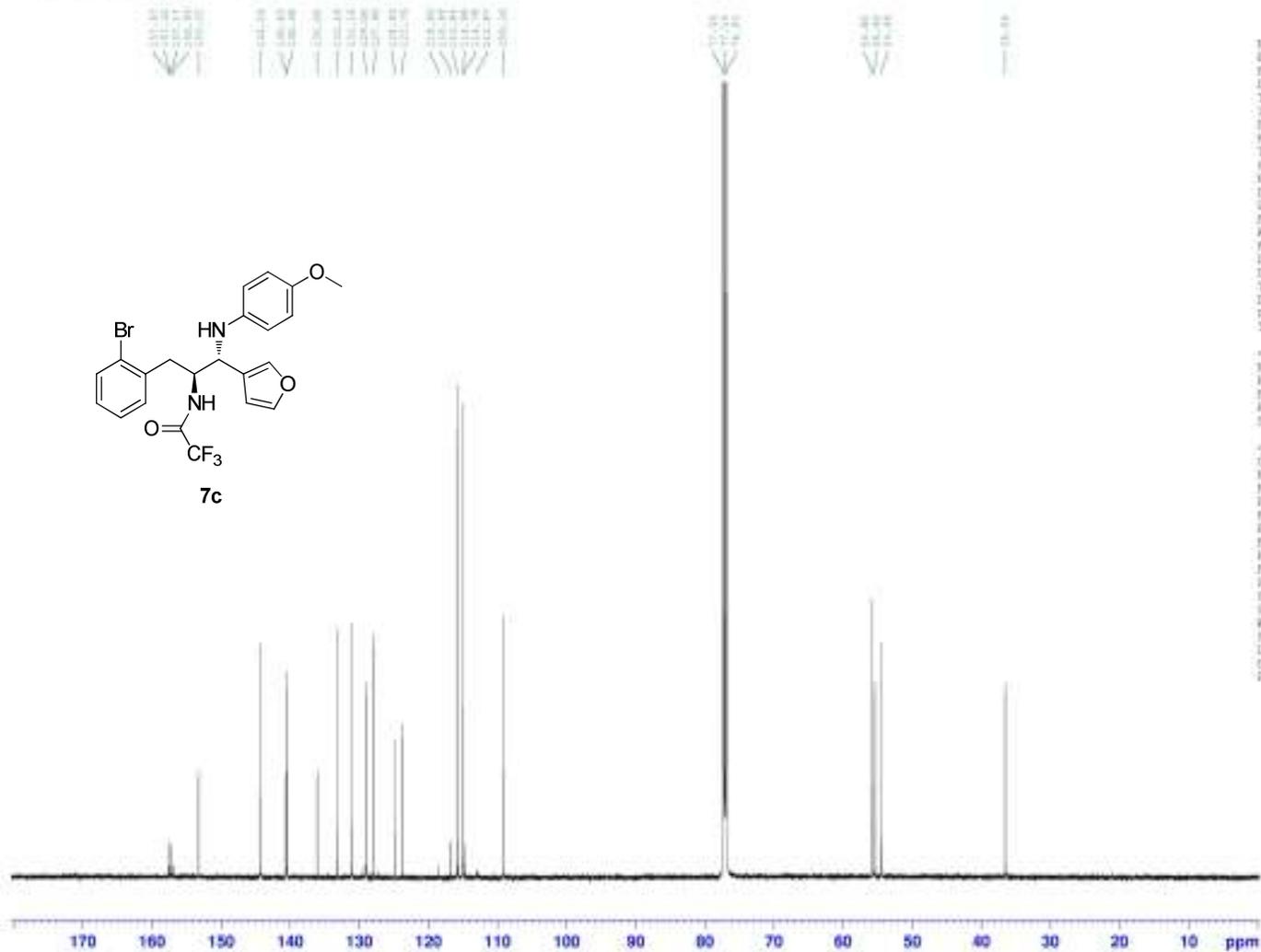
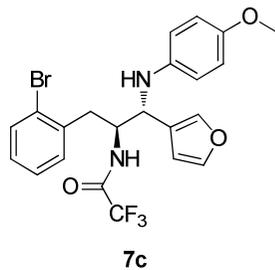
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	19.76 dB
PL14	120.40 dB
PL15	19.76751714 dB
PL16	0.36246774 dB
PL17	0.60300120 dB
SFO2	400.1326165 MHz
SI	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN489  
PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 32



AN489  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 3



NAME	24114-0920
EXPNO	32
F2PROCNO	1
DATA__	40100314
Time	19.50
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	13C
QPC	13027.481 Hz
F2FREQ1	5.155197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

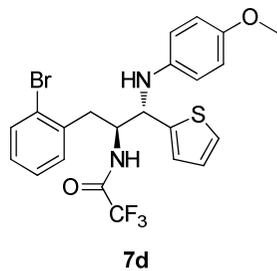
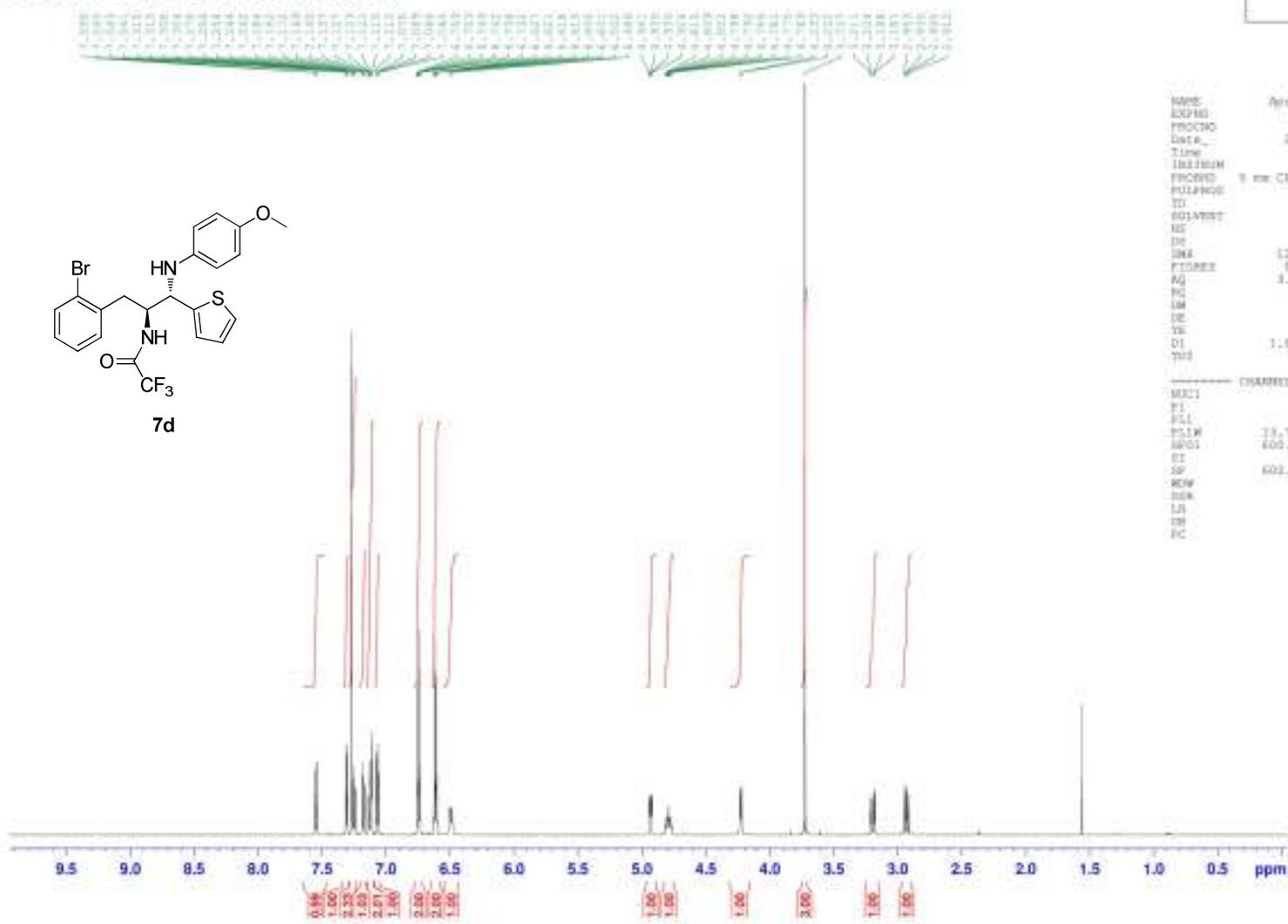
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	18.7686177 W
SFO1	125.7615981 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.12796138 W
PL16	0.17332926 W
SFO2	601.1326028 MHz
E1	32768
SF	101.9927830 MHz
RCW	5M
ENH	0
LD	1.00 Hz
DS	0
DC	1.40

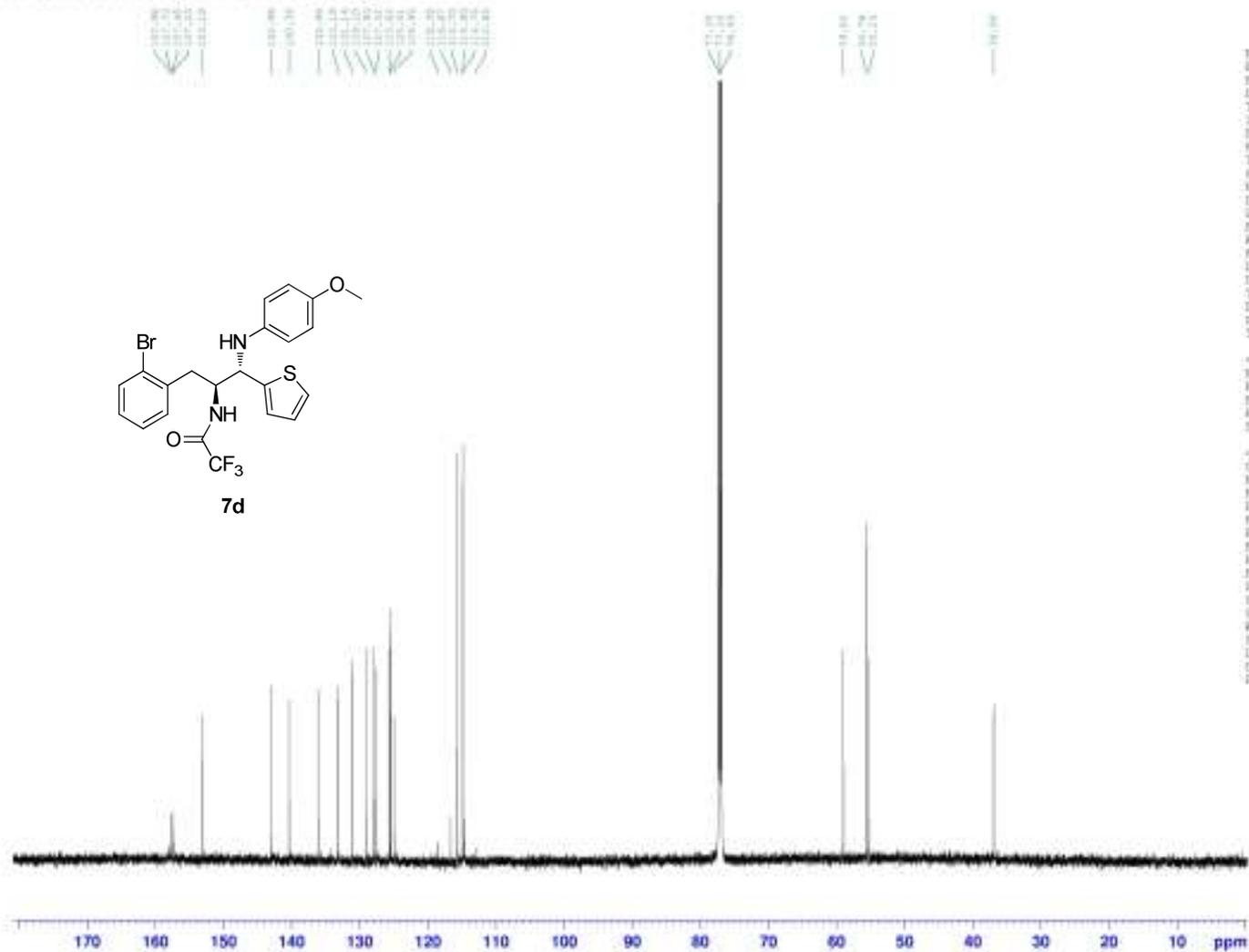
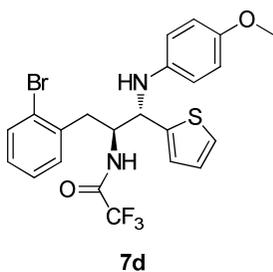
AN404-R1  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 47



```

NAME      Apr04-2010
EXPNO     20
PROCNO    1
Date_     20100420
Time      9.39
INSTRUM   AV600
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI        36882
SOLVENT   CDCl3
NS        6
DS        0
SWH       12315.326 Hz
FIDRES    0.125053 Hz
AQ        3.9499464 sec
RG        38.9
WDW       EM
SSB       0
GB        0
PC        1.0000000 sec
RG2       1
----- CHANNEL f1 -----
NUC1      1H
P1        11.40 usec
PL1       1.00 dB
PL12      19.7671014 W
SFO1      602.137041 MHz
F1        327.68
SF        602.137041 MHz
WDW       EM
SSB       0
GB        0
PC        0.30 usec
RG2       0
RG3       1.40
  
```

AN404-R1  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4



NAME	Apr28-2010
EXPNO	22
F2PROCNO	1
DATE_	20100426
TIME	10:26
INSTRUM	AV400
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	13C
DE	13.847 mm
TE	21.55 mm
YC	298.0 #
D1	2.8000000 sec
D11	0.1000000 sec
DS	1

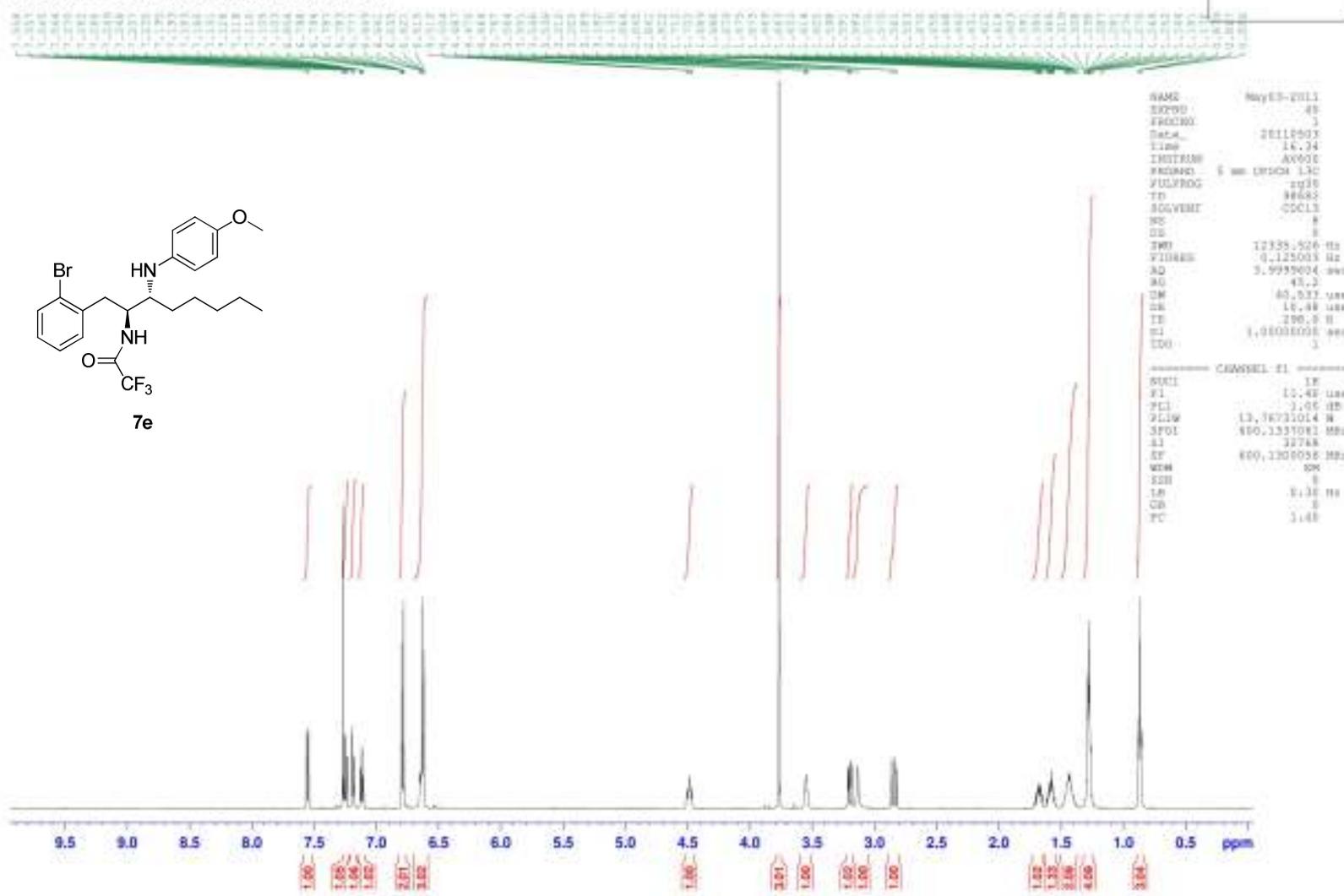
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 mm
PL1	5.00 dB
PL12	18.7086177 dB
SFO1	125.7617617 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	70.00 mm
PL2	1.00 dB
PL12	10.76 dB
PL13	120.40 dB
PL14	15.76751714 dB
PL15	0.36246774 dB
PL16	0.80000000 dB
SFO2	601.1326165 MHz
SI	32768
SF	101.9327830 MHz
SCW	5M
SR	0
LD	1.00 Hz
DR	0
DC	1.40

AN672  
 PROTON.ucl CDCI3 (V:\Bruker\TOPSPIN) jca 30

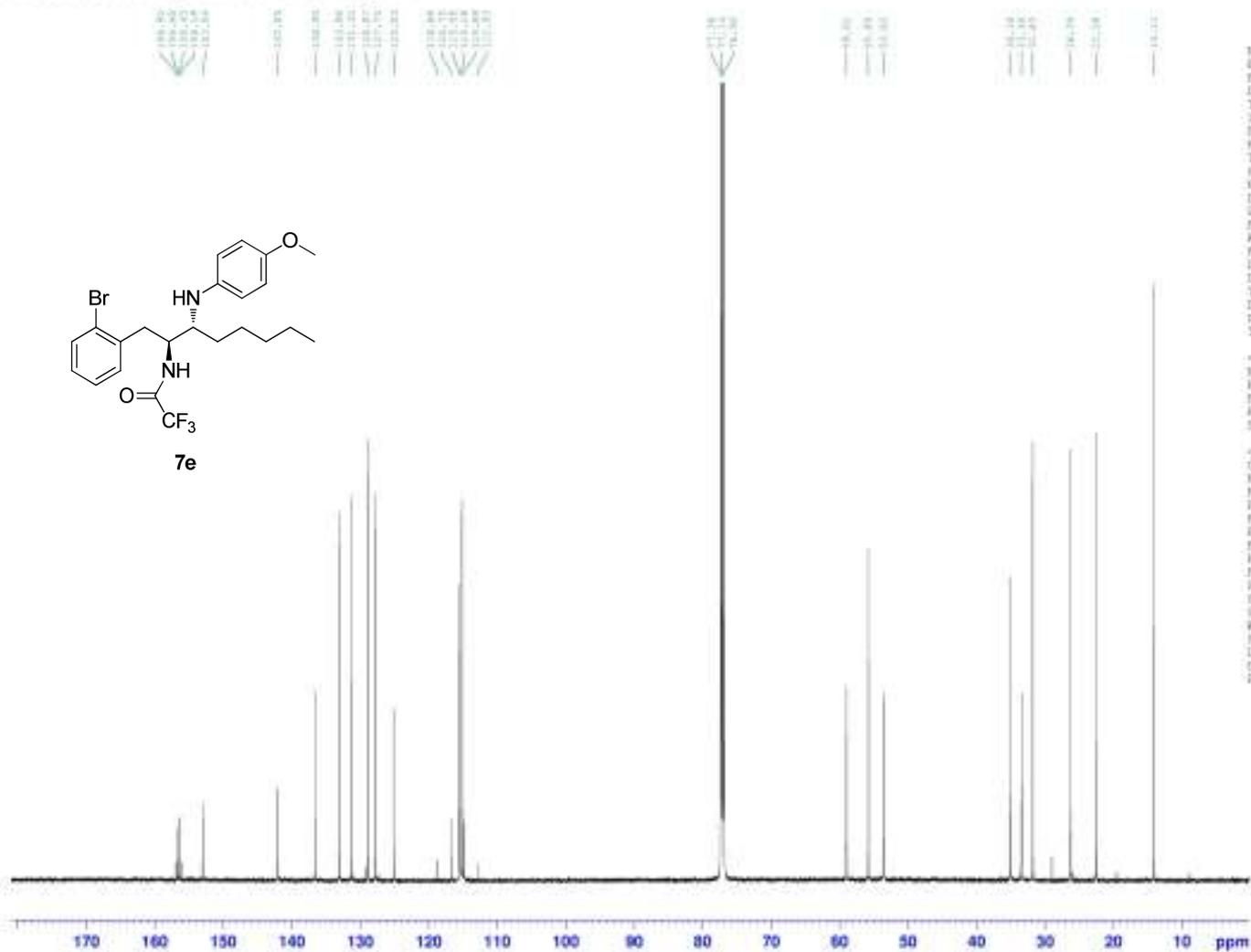
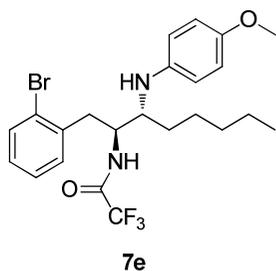


```

NAME      May13-2011
EXPNO     48
PROCNO    3
Date_     20110603
Time      16.34
INSTRUM   AV001
PROBHD1   5 mm QNP1H 13C
PULPROG   zg30
TD         66862
SOLVENT   CDCl3
NS         8
DS         8
SWH        12335.926 Hz
FIDRES     0.125003 Hz
AQ         3.9999004 sec
RG         43.2
DM         60.032 usec
DE         16.49 usec
TE         298.2 K
SI         1.0000000 sec
DO         1

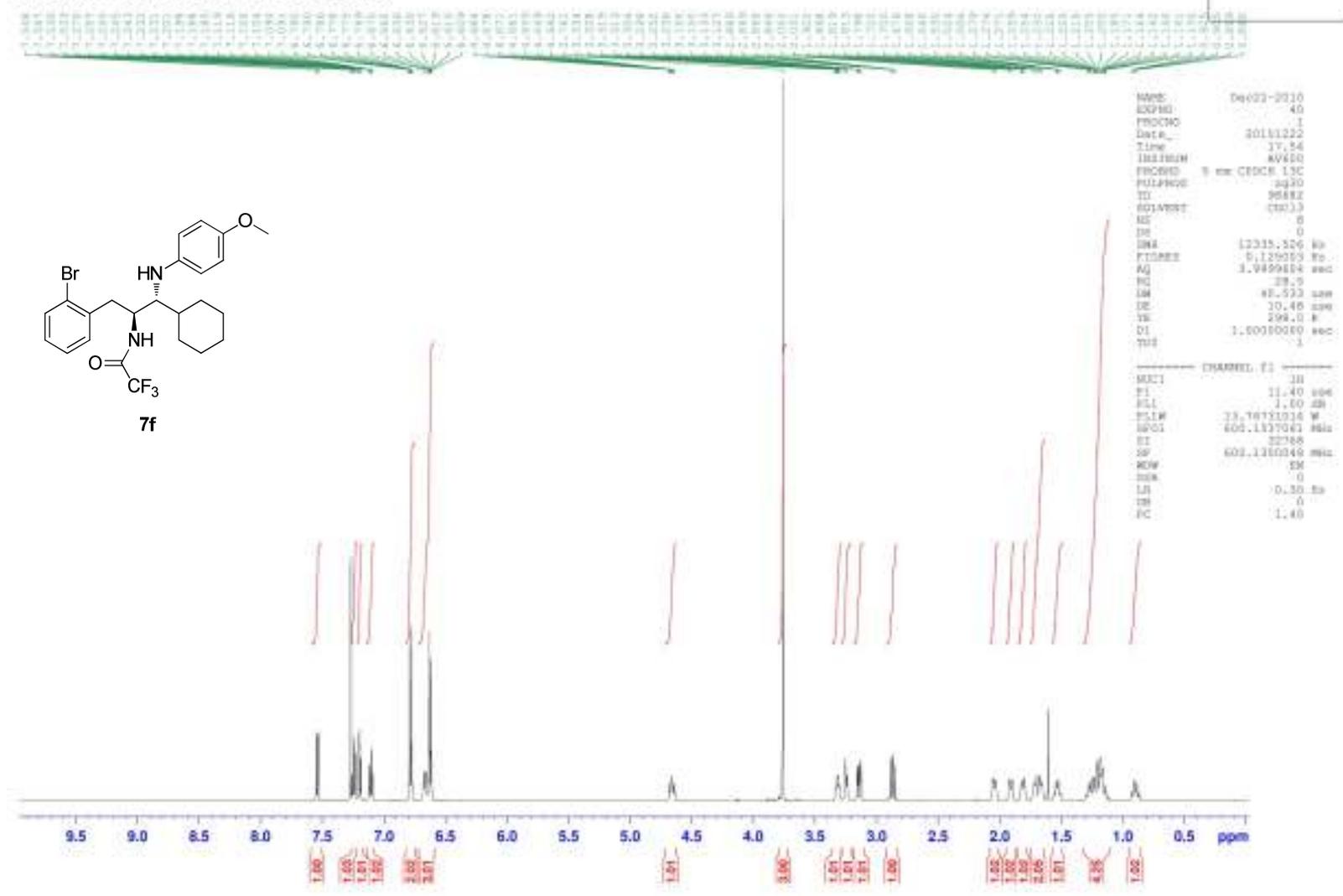
===== CHANNEL f1 =====
NUC1       1H
P1         15.48 usec
PC1        2.05 dB
PL1W       13.96731014 W
SFO1       400.14337081 MHz
A1         32748
ZF         400.1430056 MHz
WDW        EM
SSB        0
LB         0.33 Hz
GB         0
PC         1.48
  
```

AN672-R1  
 C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 4

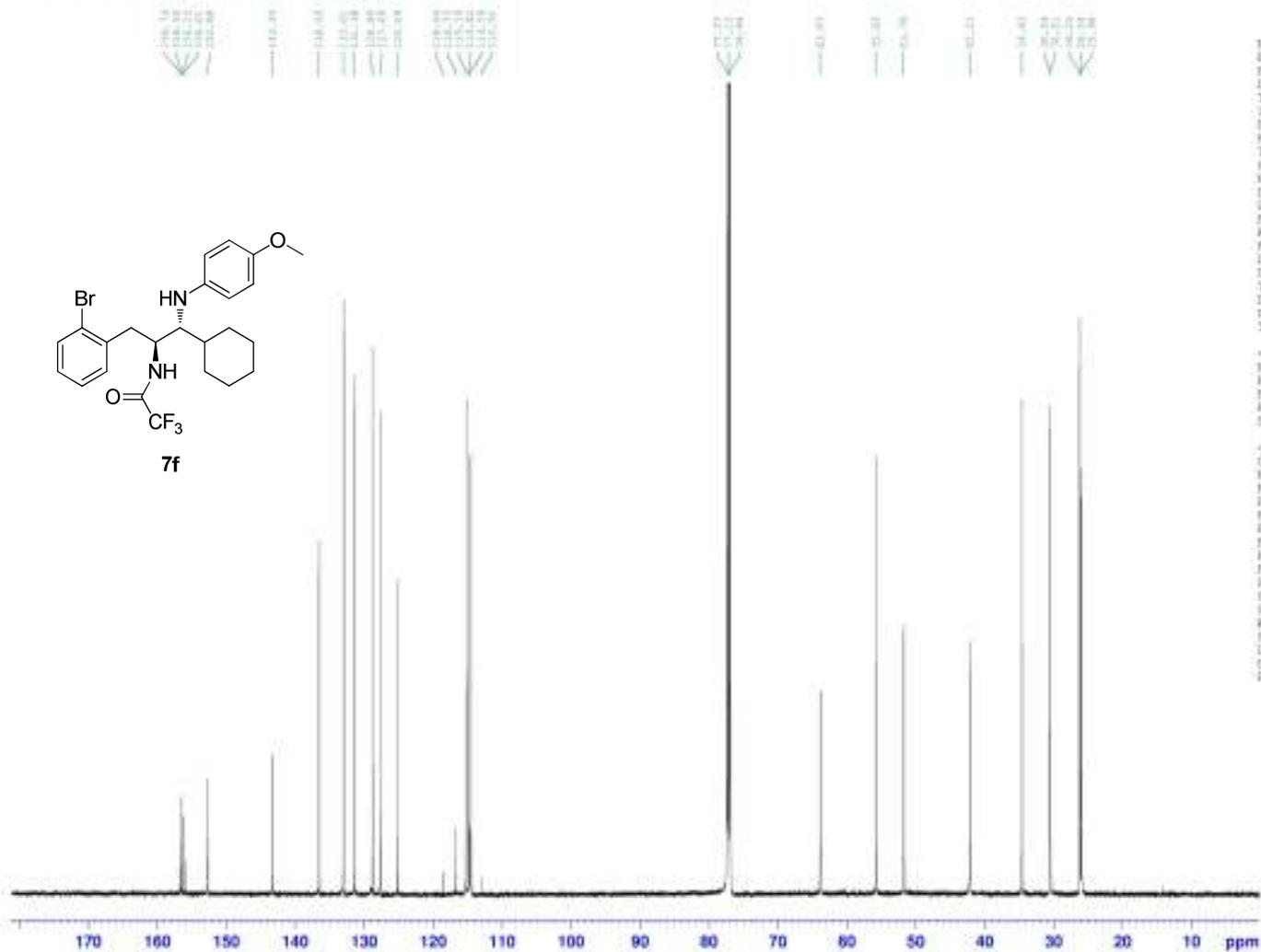
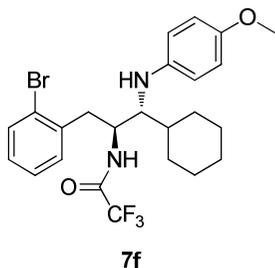


NAME	Dec01-0310
EXPNO	42
F2PROCNO	1
DATE_	20101201
TIME	20.29
INSTRUM	AV650
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65526
SF	125.761
NUC1	13C
NUC2	13C
PCPDG	70.00 um
FL1	1.00 dB
FL2	17.23 dB
FL3	20.00 dB
FL4	20.00 dB
FL5	20.00 dB
FL6	20.00 dB
FL7	20.00 dB
FL8	20.00 dB
FL9	20.00 dB
FL10	20.00 dB
FL11	20.00 dB
FL12	20.00 dB
FL13	20.00 dB
FL14	20.00 dB
FL15	20.00 dB
FL16	20.00 dB
FL17	20.00 dB
FL18	20.00 dB
FL19	20.00 dB
FL20	20.00 dB
FL21	20.00 dB
FL22	20.00 dB
FL23	20.00 dB
FL24	20.00 dB
FL25	20.00 dB
FL26	20.00 dB
FL27	20.00 dB
FL28	20.00 dB
FL29	20.00 dB
FL30	20.00 dB
FL31	20.00 dB
FL32	20.00 dB
FL33	20.00 dB
FL34	20.00 dB
FL35	20.00 dB
FL36	20.00 dB
FL37	20.00 dB
FL38	20.00 dB
FL39	20.00 dB
FL40	20.00 dB
FL41	20.00 dB
FL42	20.00 dB
FL43	20.00 dB
FL44	20.00 dB
FL45	20.00 dB
FL46	20.00 dB
FL47	20.00 dB
FL48	20.00 dB
FL49	20.00 dB
FL50	20.00 dB
FL51	20.00 dB
FL52	20.00 dB
FL53	20.00 dB
FL54	20.00 dB
FL55	20.00 dB
FL56	20.00 dB
FL57	20.00 dB
FL58	20.00 dB
FL59	20.00 dB
FL60	20.00 dB
FL61	20.00 dB
FL62	20.00 dB
FL63	20.00 dB
FL64	20.00 dB
FL65	20.00 dB
FL66	20.00 dB
FL67	20.00 dB
FL68	20.00 dB
FL69	20.00 dB
FL70	20.00 dB
FL71	20.00 dB
FL72	20.00 dB
FL73	20.00 dB
FL74	20.00 dB
FL75	20.00 dB
FL76	20.00 dB
FL77	20.00 dB
FL78	20.00 dB
FL79	20.00 dB
FL80	20.00 dB
FL81	20.00 dB
FL82	20.00 dB
FL83	20.00 dB
FL84	20.00 dB
FL85	20.00 dB
FL86	20.00 dB
FL87	20.00 dB
FL88	20.00 dB
FL89	20.00 dB
FL90	20.00 dB
FL91	20.00 dB
FL92	20.00 dB
FL93	20.00 dB
FL94	20.00 dB
FL95	20.00 dB
FL96	20.00 dB
FL97	20.00 dB
FL98	20.00 dB
FL99	20.00 dB
FL100	20.00 dB

AN700  
 PROTON.ucf CDCI3 (C:\Bruker\TOPSPIN) jca 47



AN700  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 4



NAME	Dec21-0920
EXPNO	32
F2PROCNO	1
DATE_	20181221
TIME	23:51
INSTRUM	AV400
PROBHD	5 mm CQCPX 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
DS	1

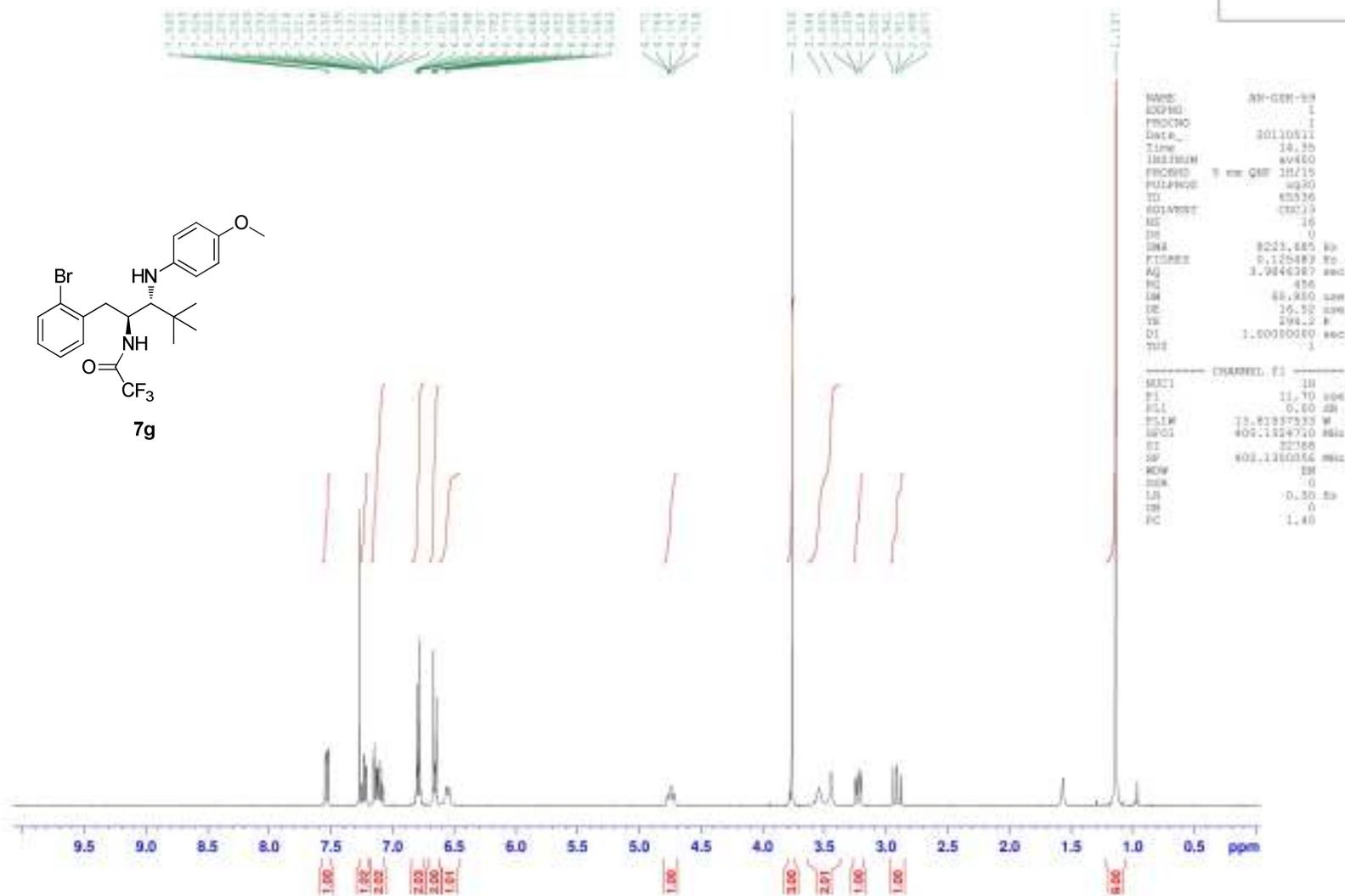
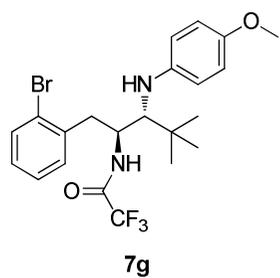
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.768617 dB
SFO1	125.761591 MHz

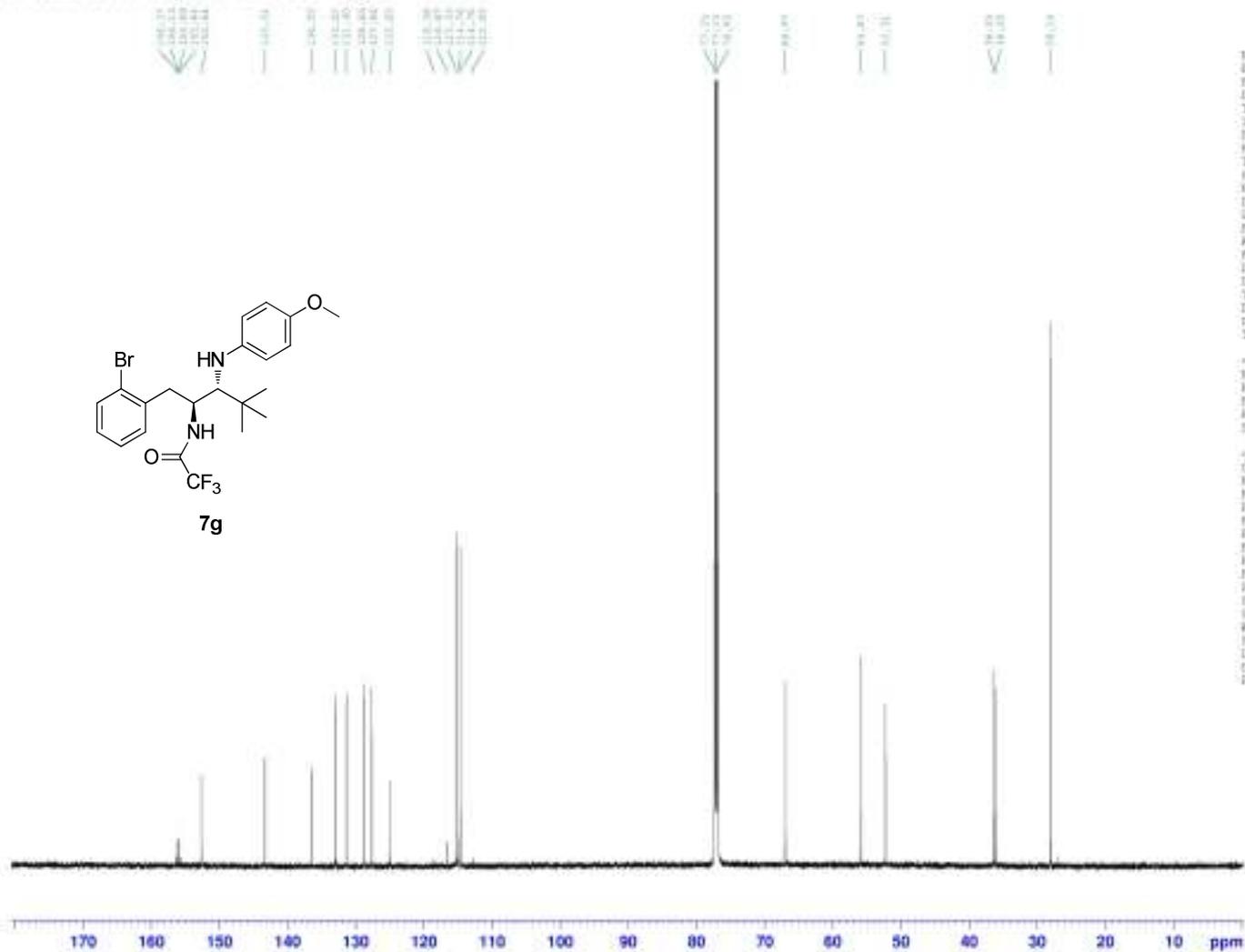
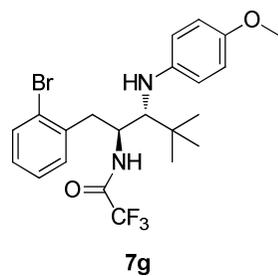
  

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.7675124 dB
PL16	0.32596138 dB
PL17	0.17332926 dB
SFO2	400.1326126 MHz
SI	32768
SR	104.9927830 MHz
SCW	5M
SRH	0
LD	1.00 Hz
DR	0
DC	1.40

AN-GSK-59



AN-GSK-59  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 3



NAME	May11-2011
EXPNO	32
F2PROCNO	1
DATE_	20110511
TIME	15:19
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

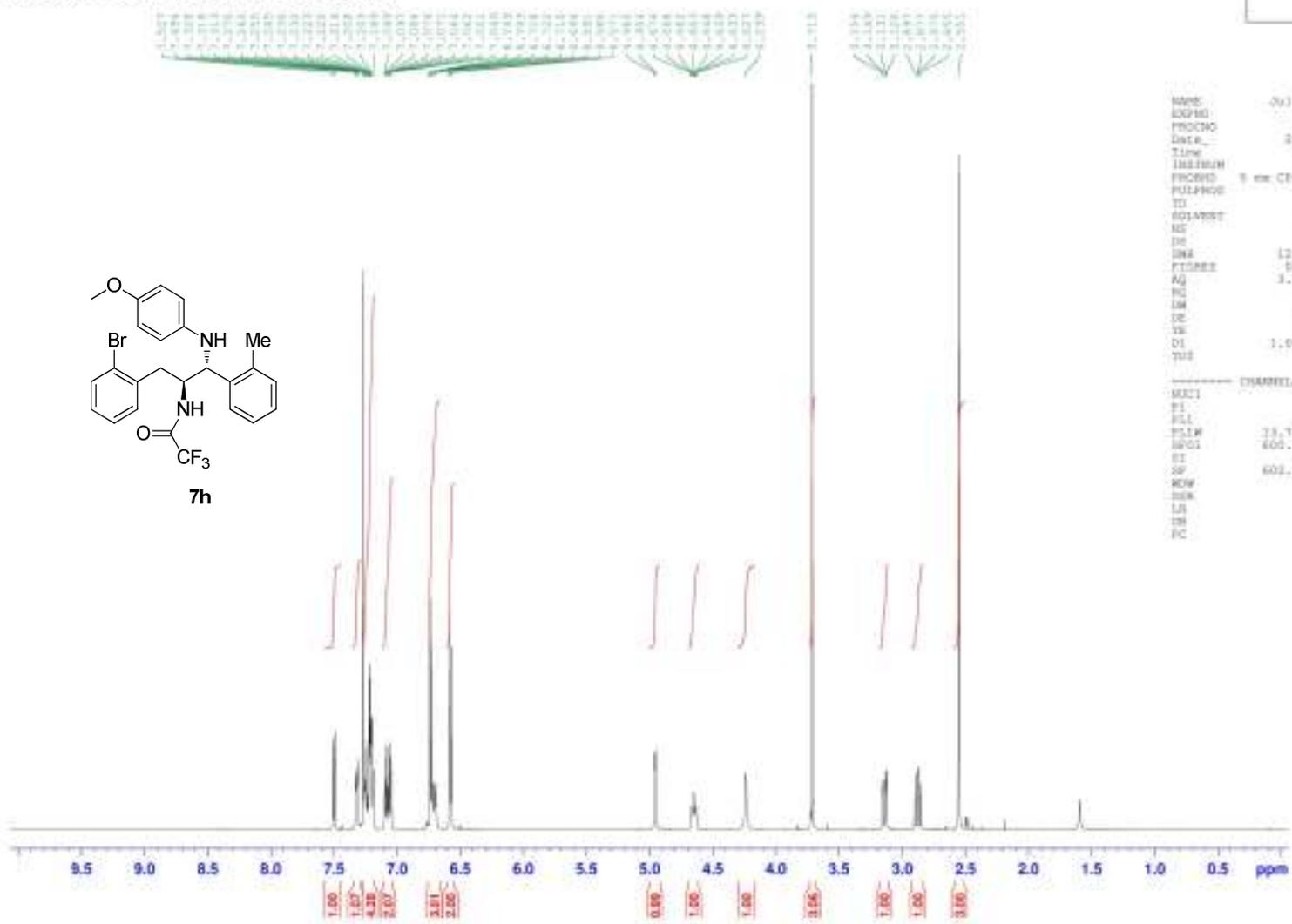
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL10	20.7086177 W
SFO1	101.6251828 MHz

===== CHANNEL F2 =====	
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL10	25.76751724 W
PL110	0.32796130 W
PL11M	0.17332026 W
SFO2	400.1424040 MHz
SI	65536
SR	101.9927830 MHz
SCW	5M
SK0	0
LD	1.00 Hz
DS	0
DC	1.40

AN493  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 37

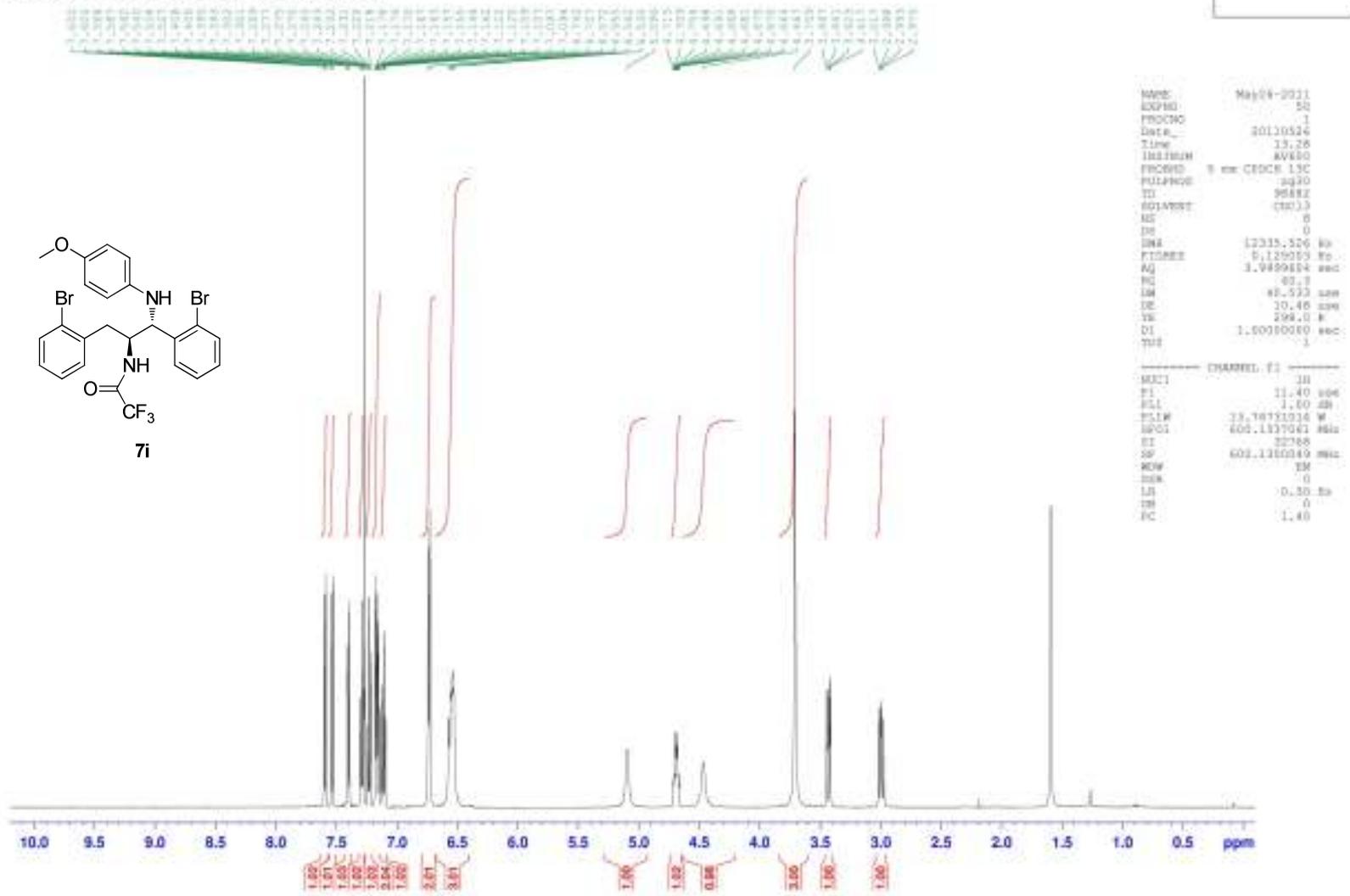


NAME - 0120-2010  
 EXPNO 100  
 PROCNO 1  
 Date\_ 20180720  
 Time 19:37  
 INSTRUM AV400  
 PROBRD 5 mm CPDCH 15C  
 PULPROG zg30  
 IT 96881  
 SOLVENT CDCl3  
 NS 6  
 DS 0  
 SFA 12315.326 Hz  
 FIDRES 0.125053 Hz  
 AQ 1.9499464 sec  
 RG 62.7  
 SQ 42.533 usec  
 DE 10.46 usec  
 VE 294.0 Hz  
 DI 1.0000000 sec  
 TD 1

----- CHANNEL f1 -----  
 NUC1 1H  
 P1 11.40 usec  
 PL1 1.00 dB  
 PL1P 19.7671014 W  
 SFO1 400.1437041 MHz  
 F1 327.88  
 ZF 602.1435043 MHz  
 MCW 0  
 MCK 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40

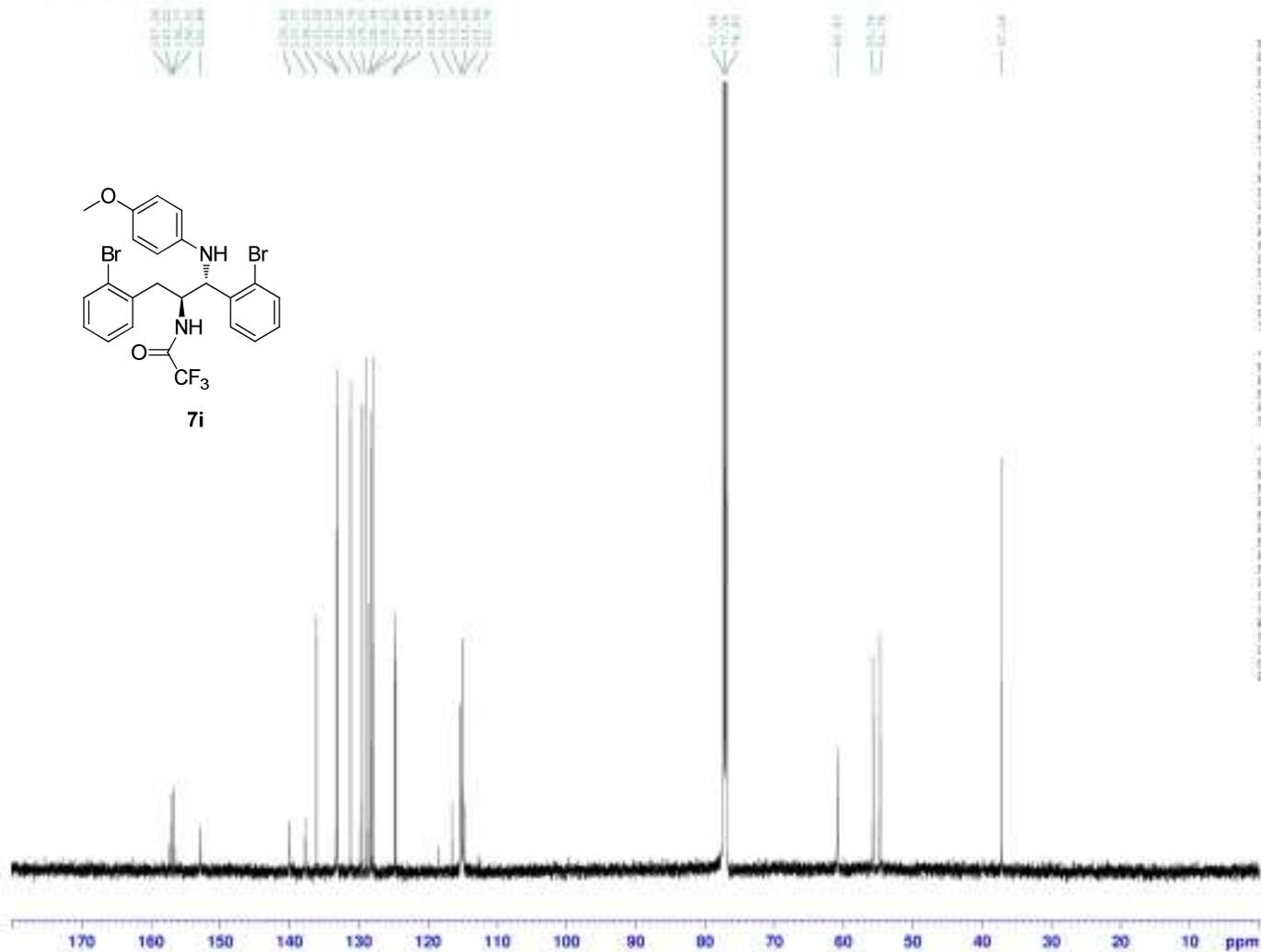
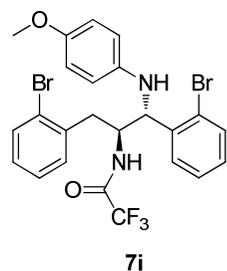


AN-GSK-22  
PROTON.ucl CDCI3 [V:\Bruker\TOPSPIN] jca 1



NAME May04-2021  
EXPNO 50  
PROCNO 1  
Date\_ 20110524  
Time 13:28  
INSTRUM AV400  
PROBHD 5 mm CPDCH 15C  
PULPROG zgpg30  
TD 96882  
SOLVENT CDCl3  
NS 6  
DS 0  
SWH 12315.326 khz  
FIDRES 0.125053 Hz  
AQ 3.9499484 sec  
RG 60.7  
DM 40.533 um  
DE 10.46 um  
TE 298.0 K  
D1 1.6000000 sec  
TD1 1  
----- CHANNEL f1 -----  
NUC1 1H  
P1 11.40 usec  
PL1 1.00 dB  
PL1P 13.7671014 W  
SFO1 400.1437041 MHz  
SI 32768  
SF 400.1437040 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.40

AN-GSK-22  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	May28-2011
EXPNO	51
F2PROC0	1
DATE_	20110326
Time	15.34
INSTRUM	AV450
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10328
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320
ACQ	0.8888824 sec
RG	320
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.8000000 sec
D11	0.1880000 sec
TD0	1

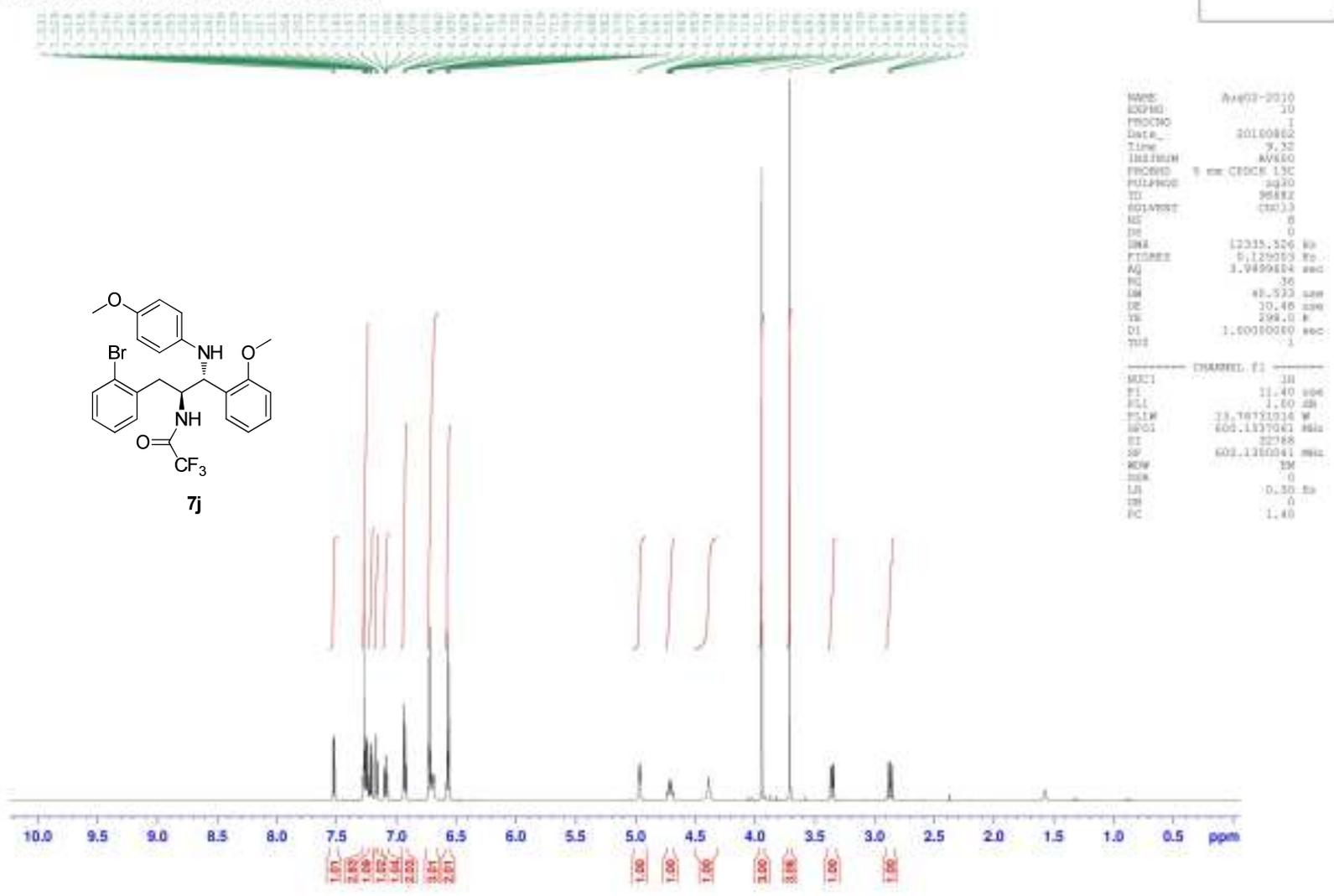
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	18.7686177 W
SFO1	125.761828 MHz

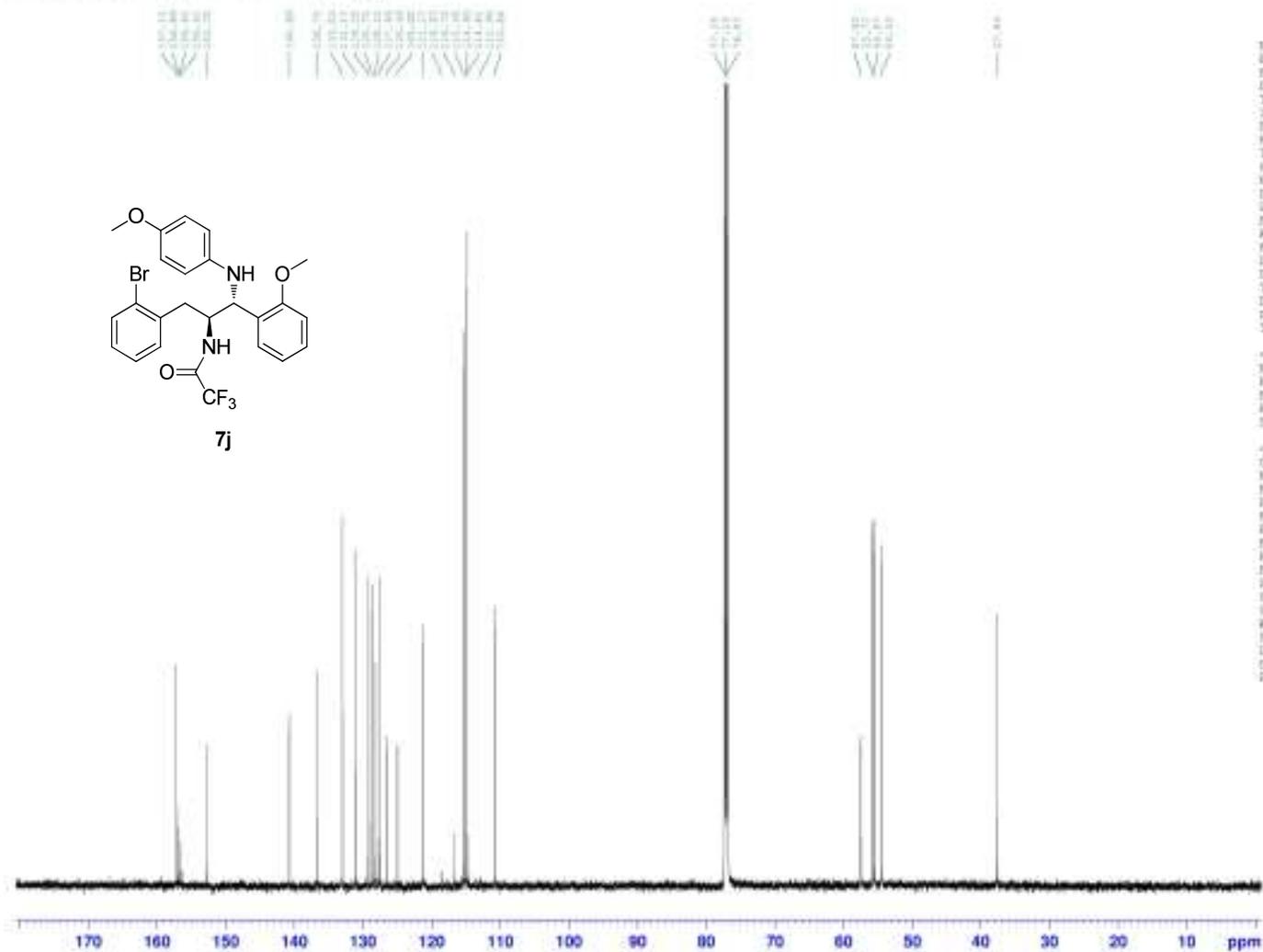
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.76751724 W
PL15	0.32786130 W
PL16	0.17332026 W
SFO2	400.1326020 MHz
SI	65536
SR	101.9327830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN510  
PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 1



AN510  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



NAME	Asp02-0110
EXPNO	32
F2PROCNO	1
DATE_	20110822
TIME	3.43
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.00000000
RG	1024
DM	13.047 um
DE	21.55 um
TE	298.0 K
D1	2.60000000 sec
D11	0.00000000 sec
TD0	1

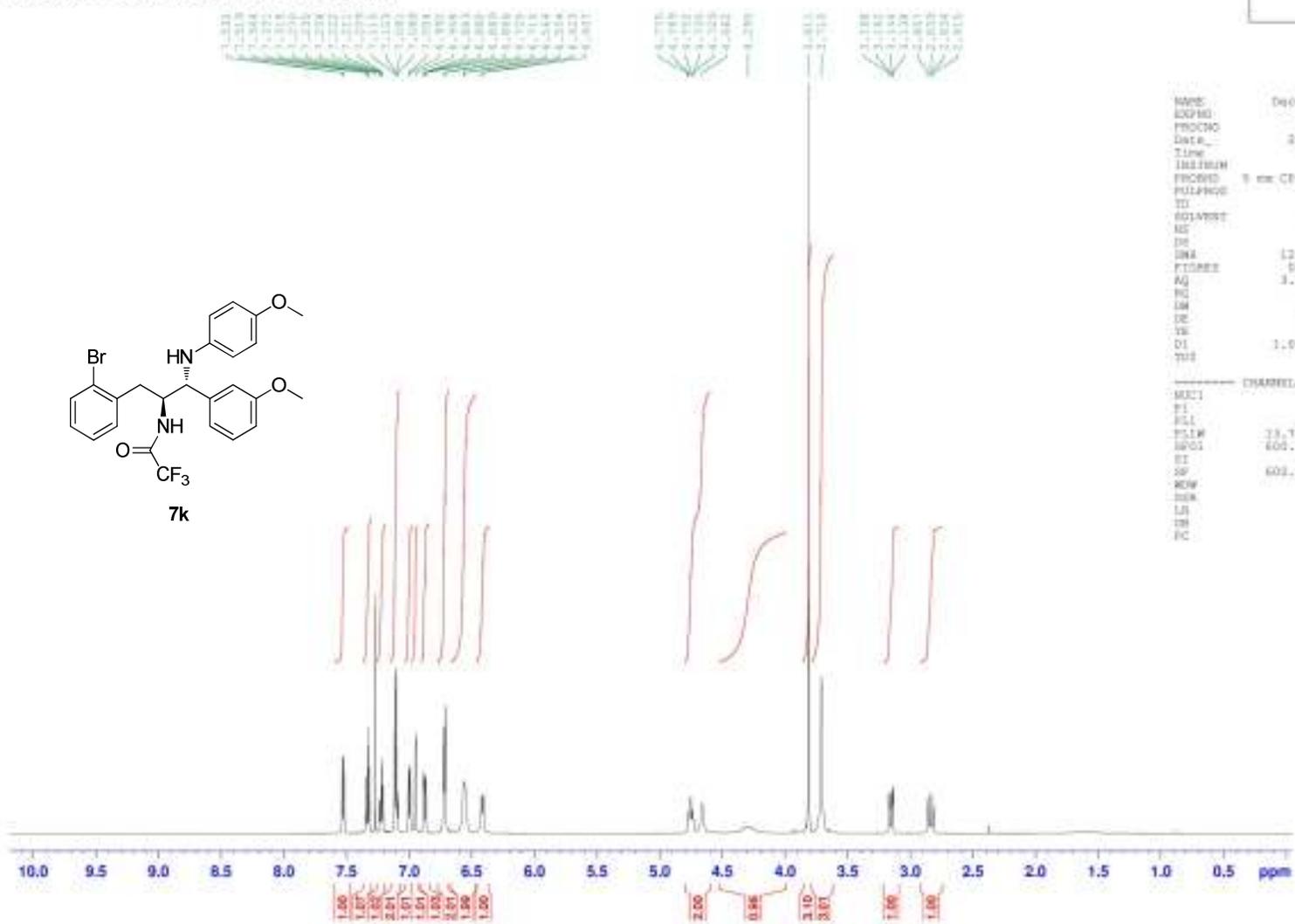
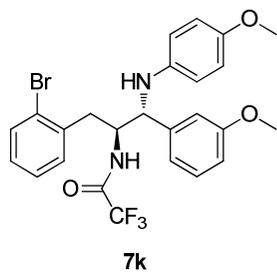
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7610000 MHz

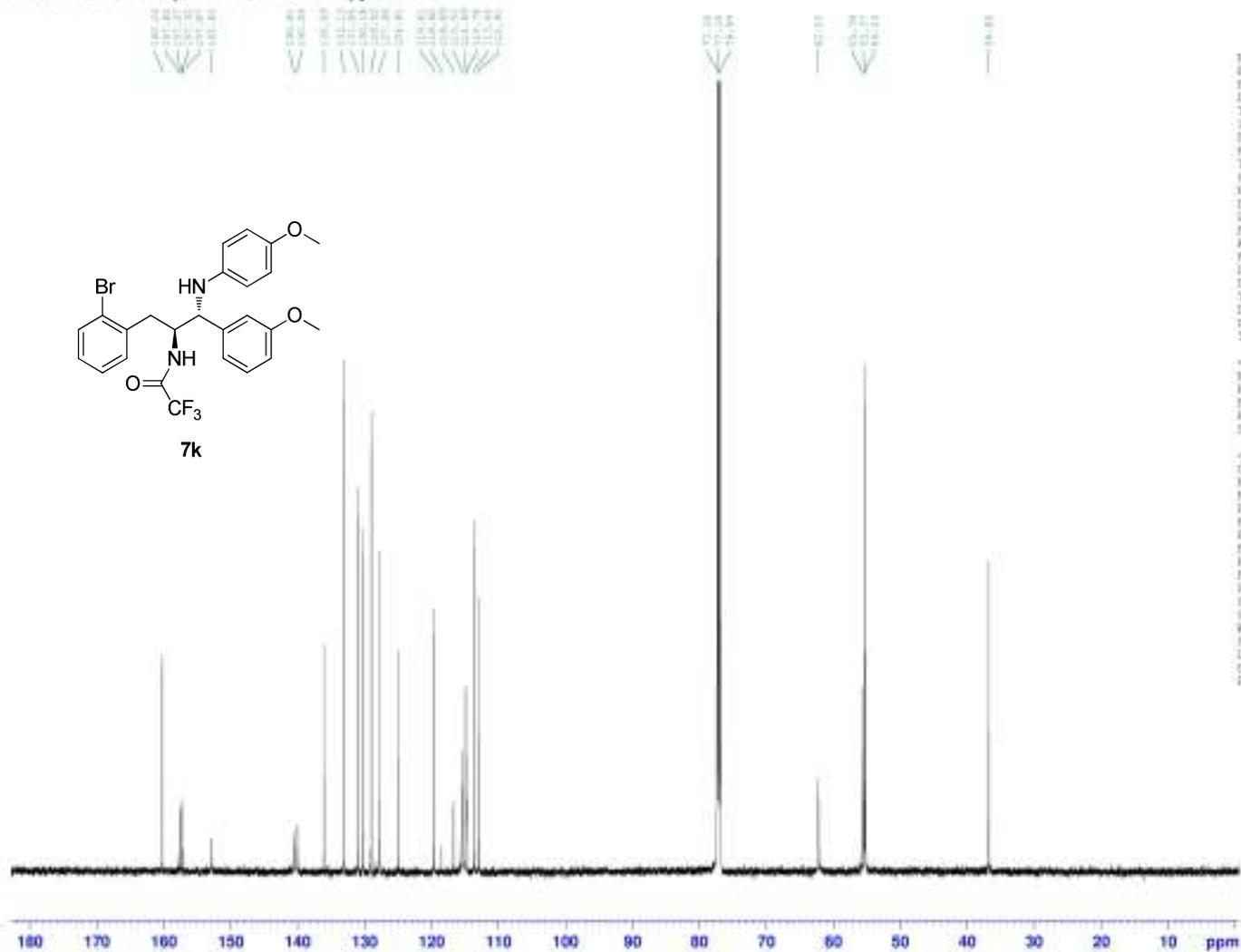
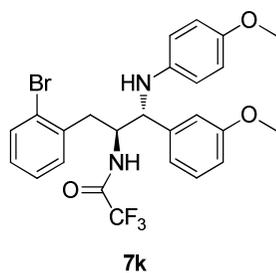
  

===== CHANNEL f2 =====	
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.7675724 W
PL15	0.32796130 W
PL16	0.17332926 W
SFO2	400.1424000 MHz
SI	32768
SF	101.9927830 MHz
RGW	SM
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

AN668  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 1



AN668  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



NAME	Das07-0120
EXPNO	32
F2PROCNO	1
DATE_	20181228
TIME	5.19
INSTRUM	AVANCE
PROBHD	5 mm CBOC1 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.0013
MS	128
DS	0
SWH	16017.481 Hz
F2FREQ	101.625197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

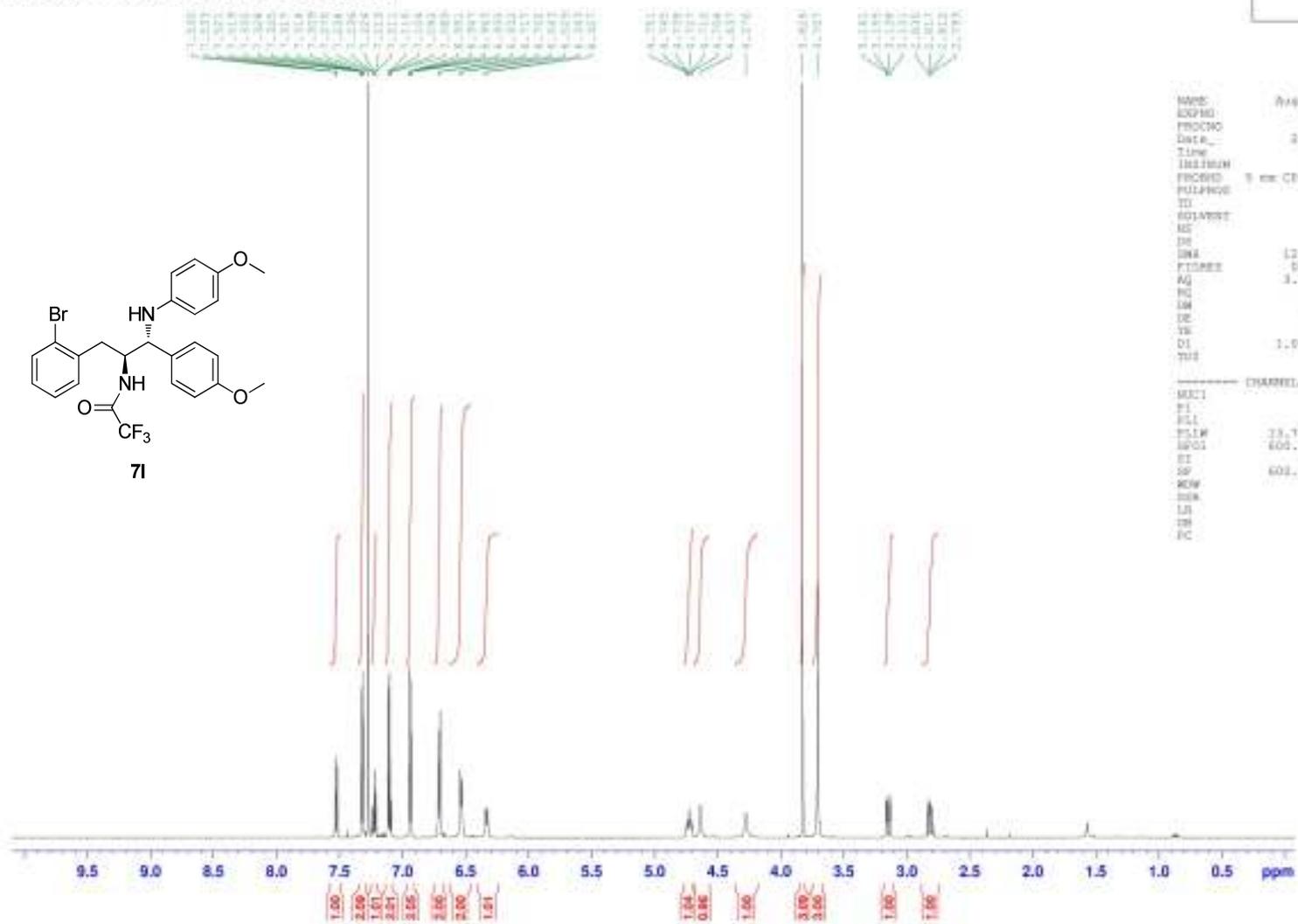
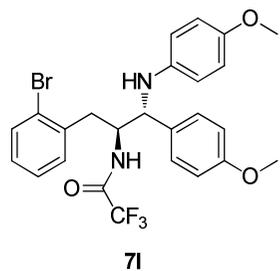
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.625197 MHz

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	15.76751724 W
PL15	0.10796130 W
PL16	0.17332926 W
SFO2	601.1326120 MHz
SI	32768
SR	101.9927830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

AN520  
 PROTON.ucl CDCI3 [C:Bruker:TOPSPIN] jca 27

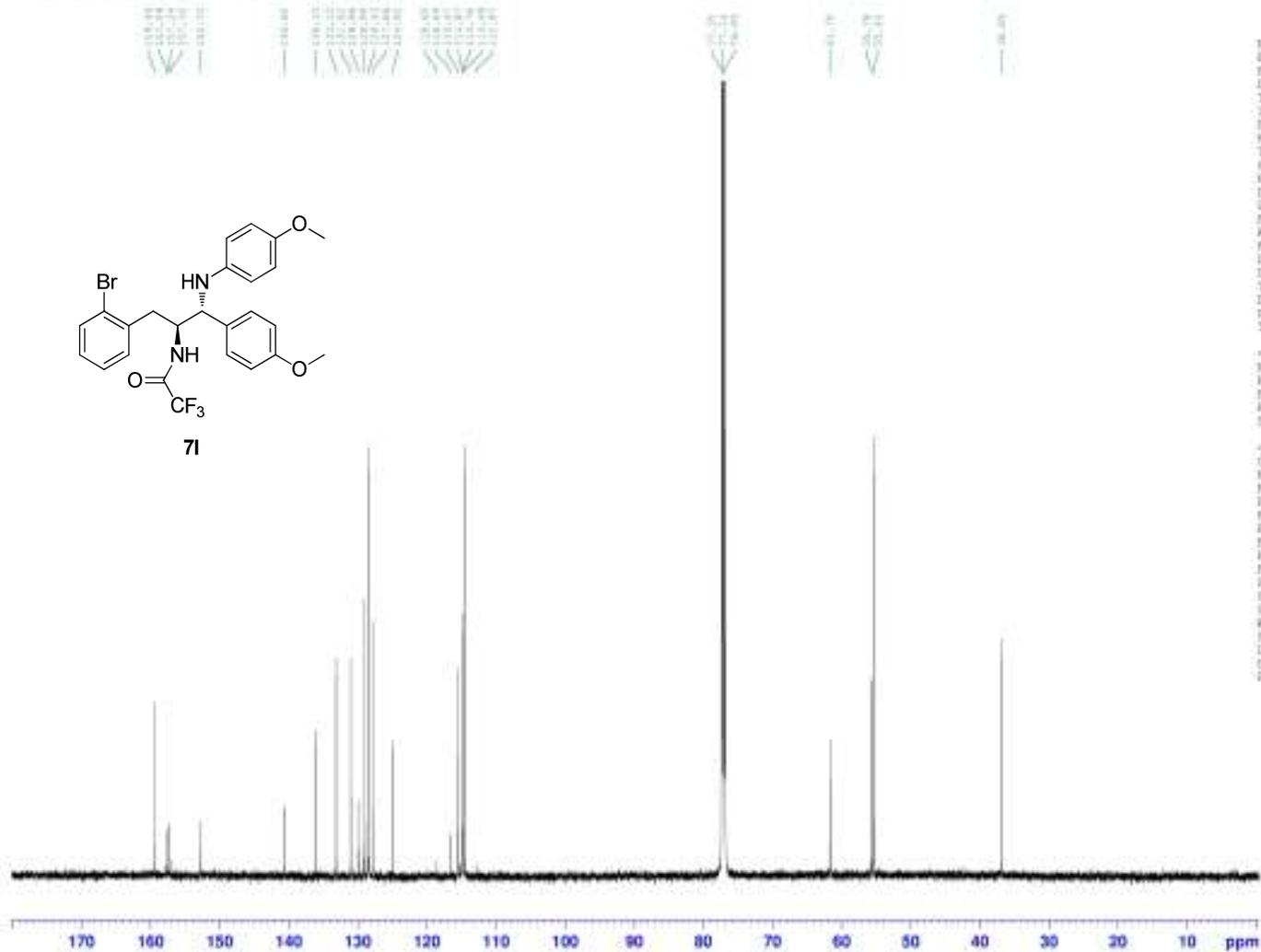
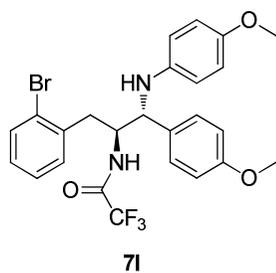


NAME	Aug09-2010
EXPNO	60
PROCNO	1
Date_	20100809
Time	18.50
INSTRUM	AV400
PROBHD	5 mm CPDCH 13C
PULPROG	zg30
TD	96882
SOLVENT	CDCl3
NS	6
DS	0
SWH	12315.326 kHz
FIDRES	0.125053 Hz
AQ	1.9499404 sec
RG	36
Ww	40.533 ssw
DE	10.46 ssw
WE	294.0 Hz
D1	1.0000000 sec
TD2	1

----- CHANNEL f1 -----	
MU1	1H
F1	11.40 MHz
SL1	1.00 dB
PL1W	13.7671014 W
RFQ1	602.1317041 MHz
F1	327.88
OP	602.1310041 MHz
MCW	EM
MSK	0
LS	0.30 Hz
TR	0
PC	1.40

AN520  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 2



NAME	Asp07-0110
EXPNO	62
F2PROCNO	1
DATE_	20100809
TIME	15.52
INSTRUM	AV610
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.00000000
RG	1024
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.60000000 sec
D11	0.00000000 sec
DS	1

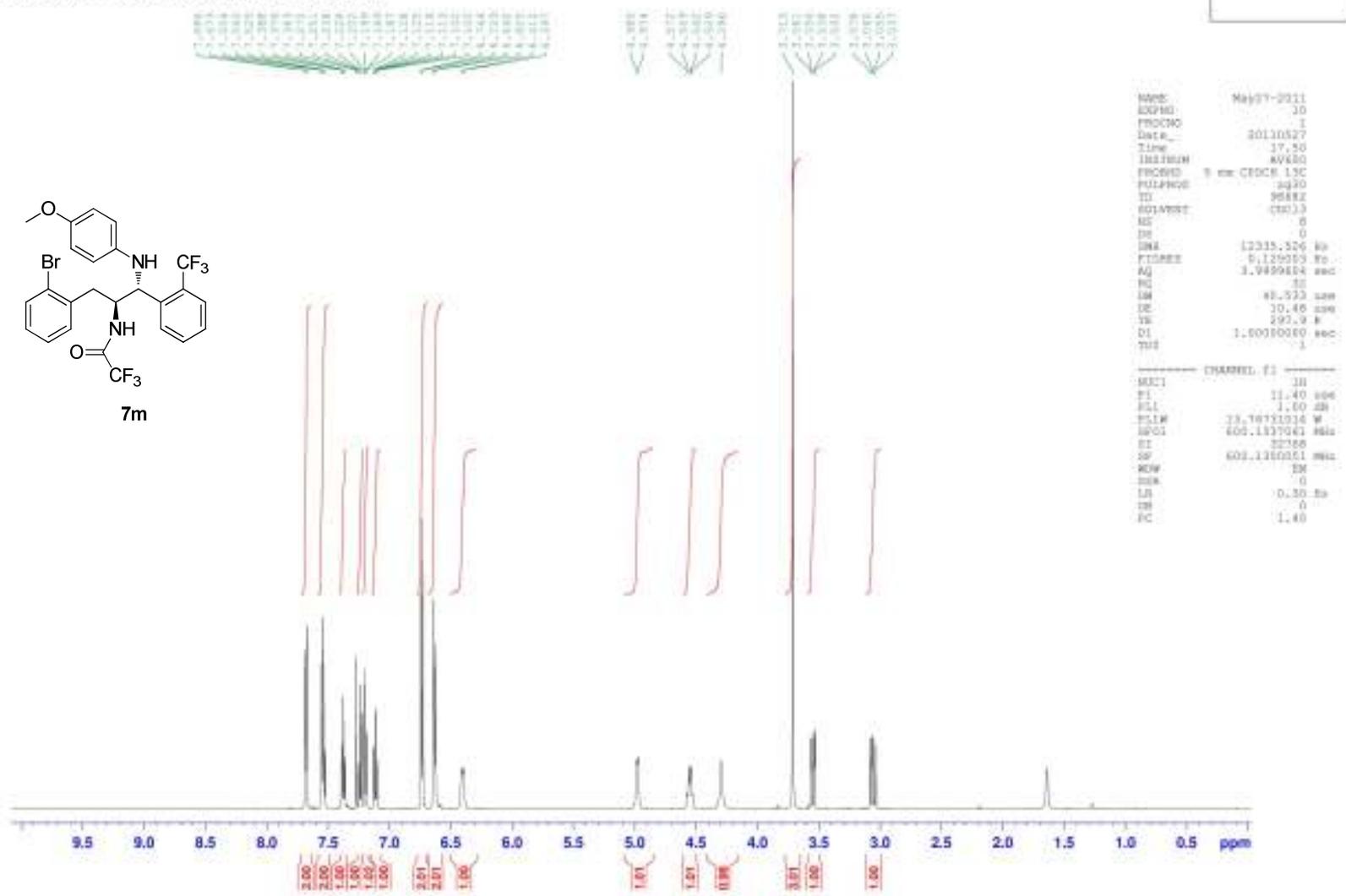
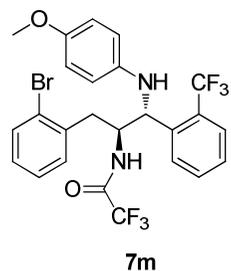
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	18.7686177 W
SFO1	125.7610000 MHz

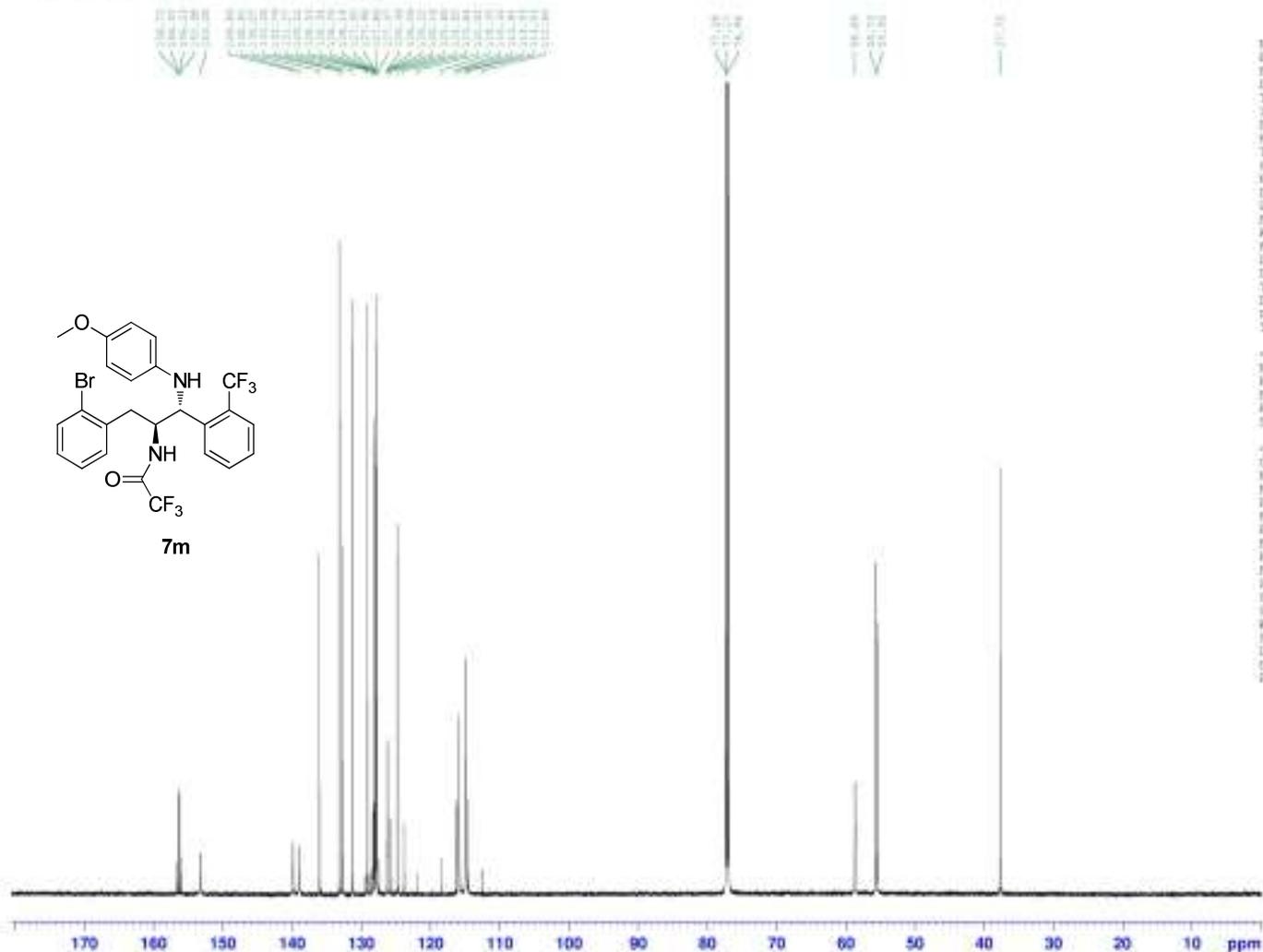
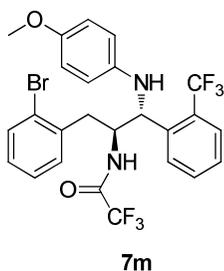
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32796138 W
PL16	0.17332926 W
SFO2	601.1326020 MHz
SI	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN690  
 PROTON.ucl CDCI3 (V.:Bruker:TOPSPIN) jca 11



AN690  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	May28-2011
EXPNO	42
F2PROC0	1
DATE_	20110326
TIME	15.50
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
DELTA	0.00000000
DE	1.28
DS	0
SWH	30012.500 Hz
F2FREQ1	6.555991 Hz
AQ	0.00000000 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 K
D1	2.00000000 sec
D11	0.00000000 sec
TD0	1

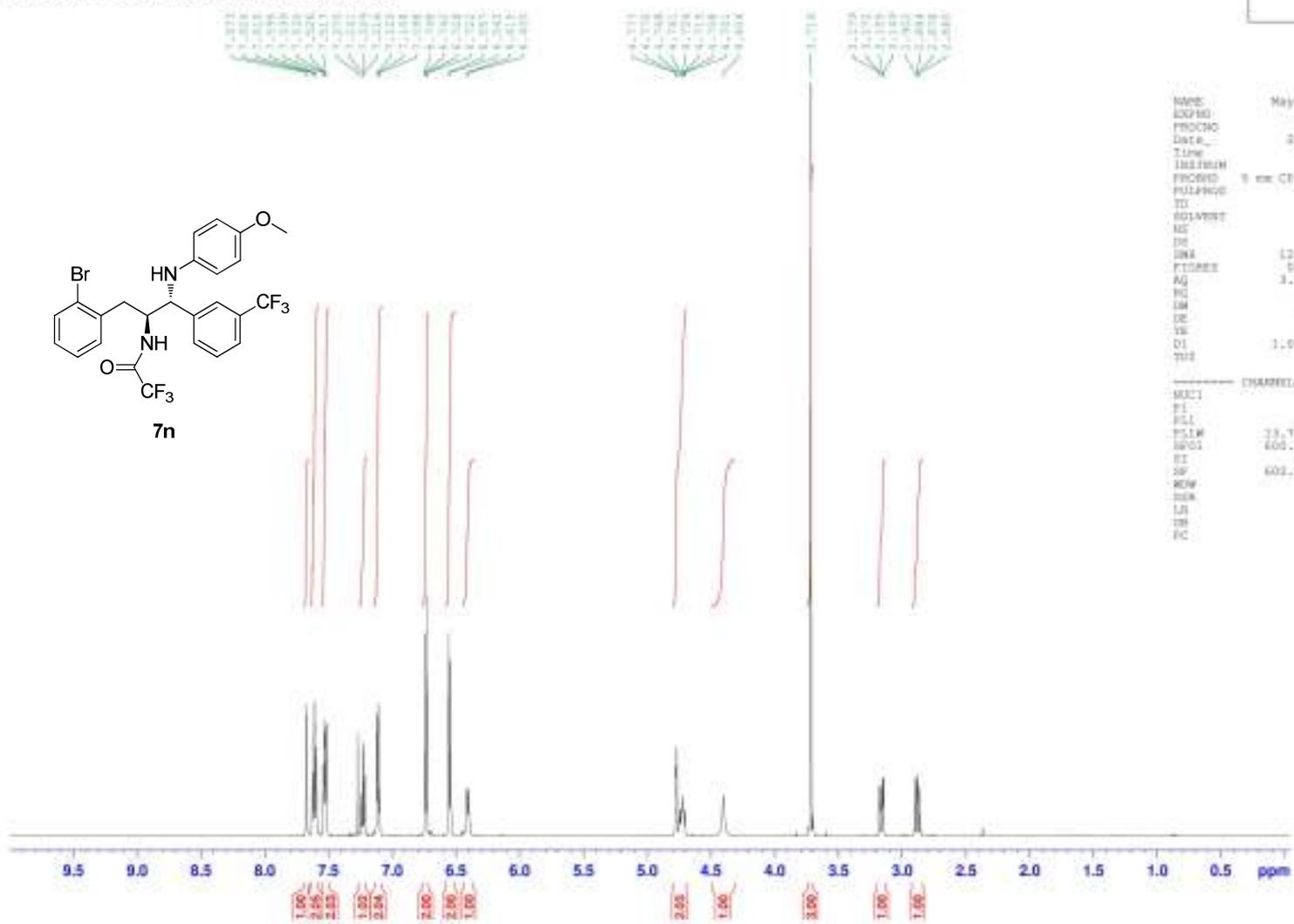
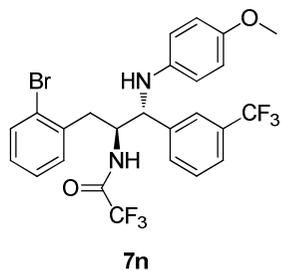
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	20.00 dB
SFO1	101.626126 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.32596130 W
PL16	0.17332020 W
SFO2	601.1326040 MHz
SI	65336
SR	101.9927830 MHz
SCW	5M
SRH	0
LD	1.00 Hz
DR	0
DC	1.40

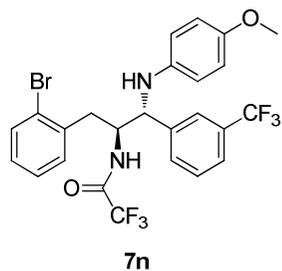
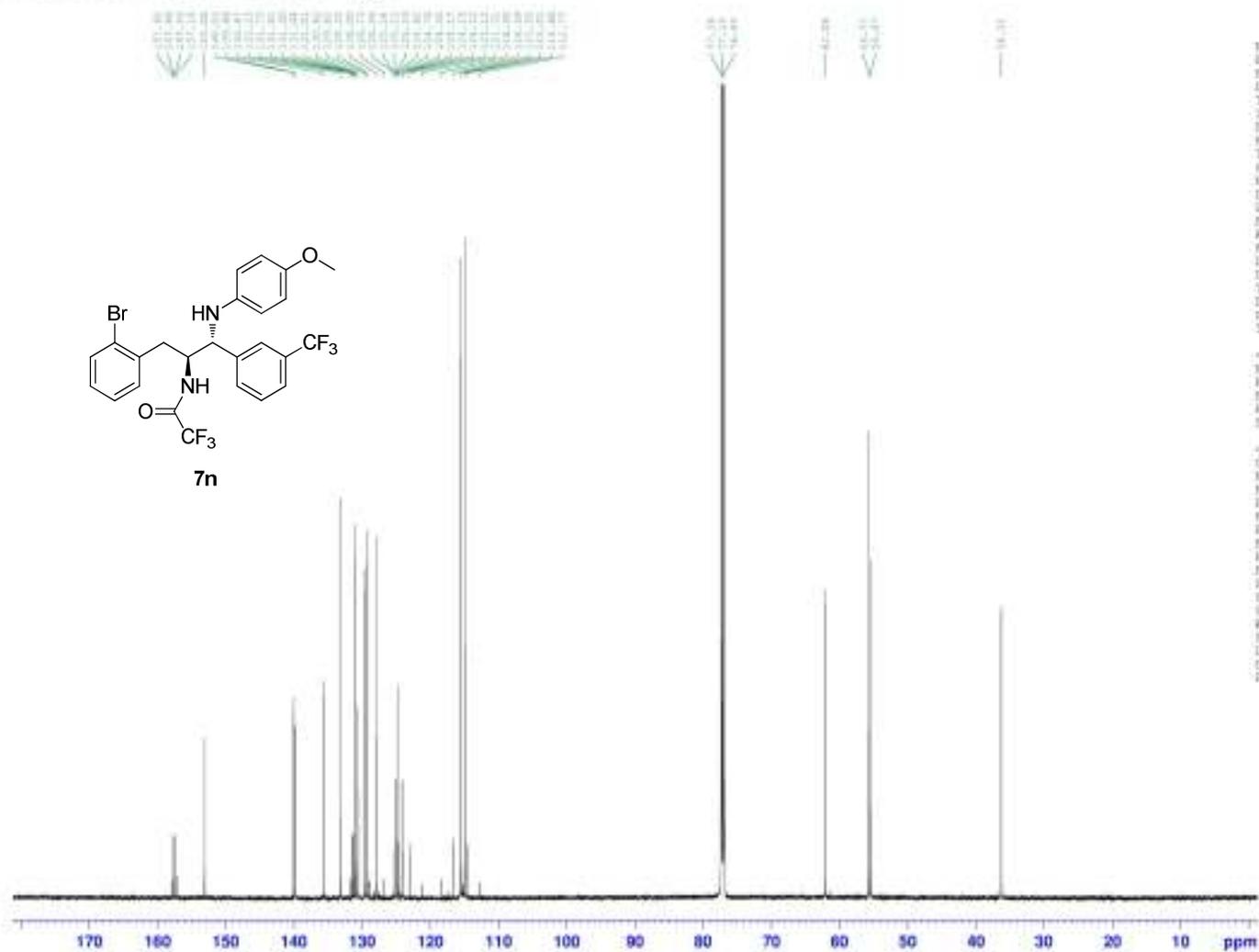
AN679  
 PROTON.ucf CDCI3 [V:\Bruker\TOPSPIN] jca 31



```

NAME      May07-2011
EXPNO     60
PROCNO    1
Date_     20110502
Time      16.38
INSTRUM   AV600
PROBHD    5 mm CPDCH 13C
PULPROG   zg30
TD         65536
SI         36882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 kHz
FIDRES     0.125053 Hz
AQ         3.9499404 sec
RG         320
SQ         40.533 use
DE         10.46 use
TE         298.0 K
D1         1.0000000 sec
DELTA     1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 use
PL1        1.00 dB
PS1W       19.7671014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437041 MHz
RGW        SM
MSK        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN679  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 3



NAME	May01-2011
EXPNO	01
F2PROC0	1
DATA_	20110501
Time	15.56
INSTRUM	AV450
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	10388
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320
ACQ	0.8888824 sec
RG	1020
DS	12.860 um
DE	21.32 um
YC	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

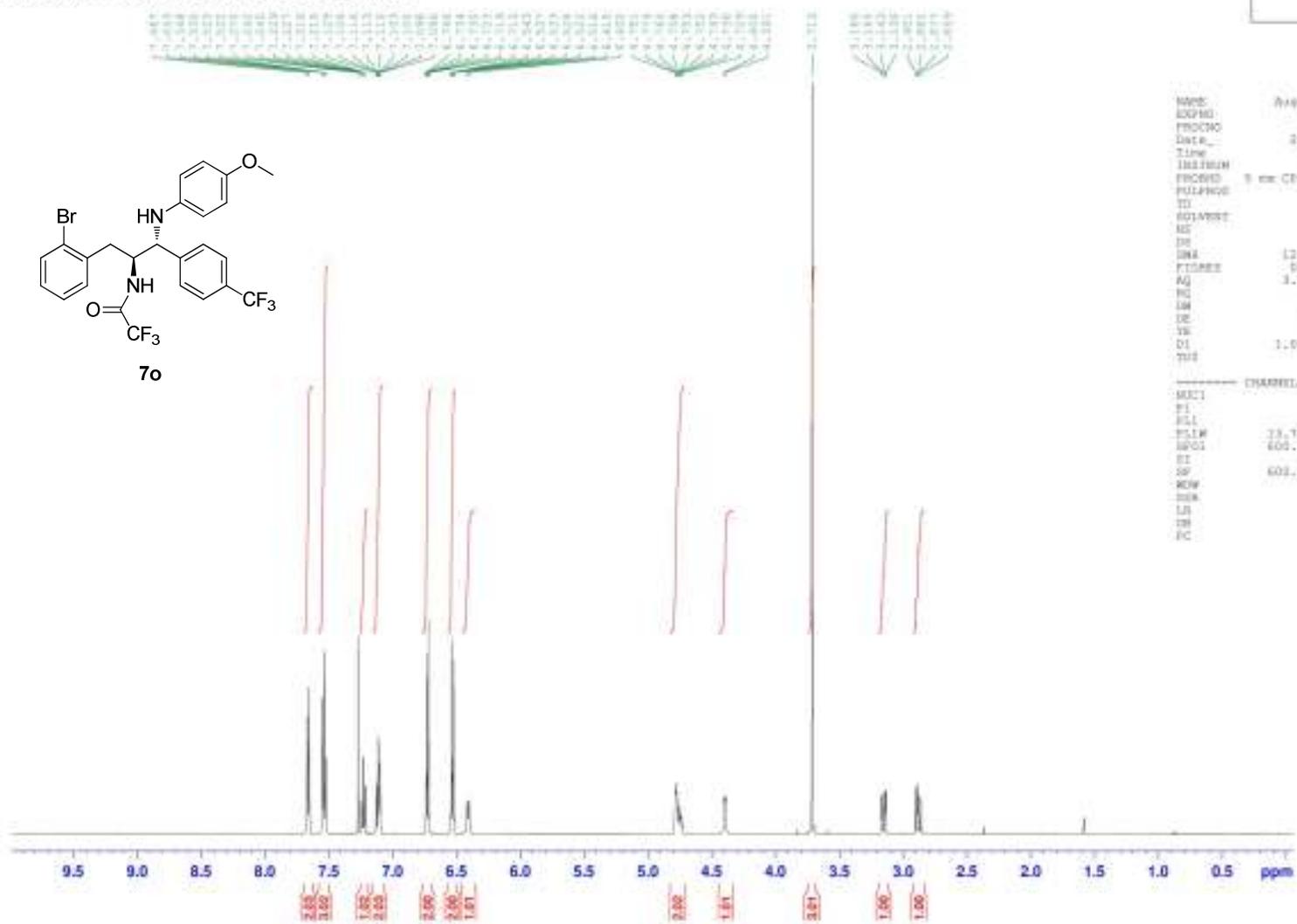
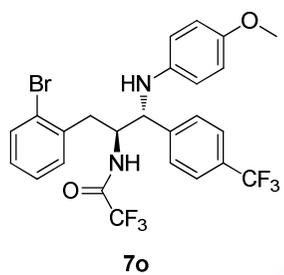
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	18.70886177 W
SFO1	101.921828 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32596138 W
PL16	0.17332926 W
SFO2	400.1326020 MHz
SI	65536
SR	101.9217830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

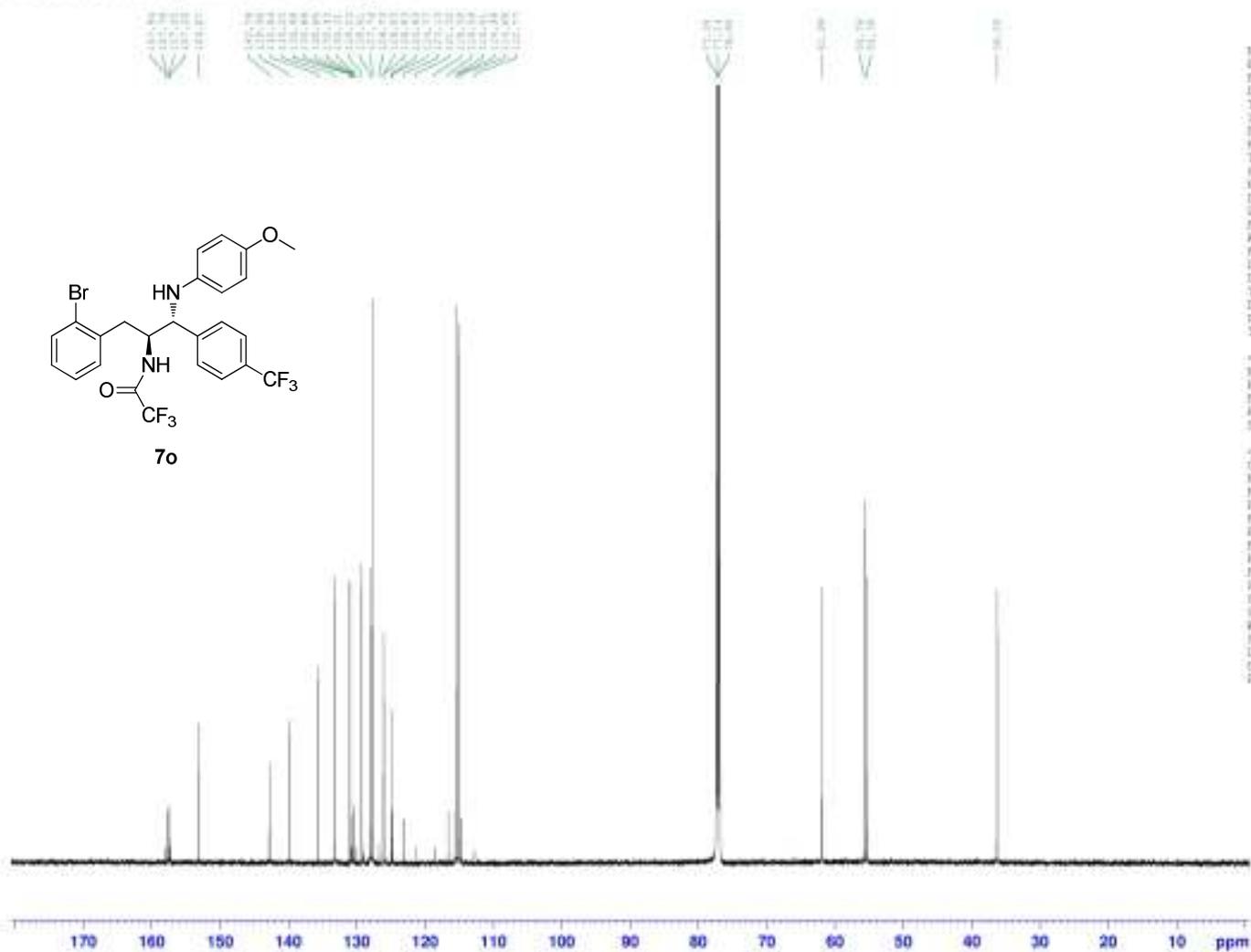
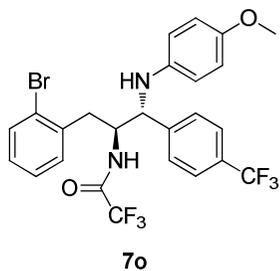
AN521  
 PROTON.ucf CDCI3 [C:Bruker:TOPSPIN] jca 43



NAME Aug09-2010  
 EXPNO 50  
 PROCNO 1  
 Date\_ 20100805  
 Time 14.14  
 INSTRUM AV600  
 PROBRD 5 mm CBOCH 15C  
 PULPROG zg30  
 IT 96881  
 SOLVENT CDCl3  
 NS 6  
 DS 0  
 SFA 12315.326 Hz  
 FIDRES 0.125053 Hz  
 AQ 1.9499404 sec  
 RG 36  
 IQR 40.533 usec  
 DE 10.46 usec  
 VE 294.0 Hz  
 DI 1.0000000 sec  
 TD 1

----- CHANNEL f1 -----  
 NUC1 1H  
 P1 11.40 usec  
 PL1 1.00 dB  
 PL1P 13.7671014 W  
 SFO1 400.1437041 MHz  
 F1 327.68  
 CP 602.1437041 MHz  
 KW EM  
 SW 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40

AN521  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 4



NAME	Asp05-0120
EXPNO	32
F2PROCNO	1
DATA__	40100885
Time	15.12
INSTRUM	AV450
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
DC	0
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
DC	0

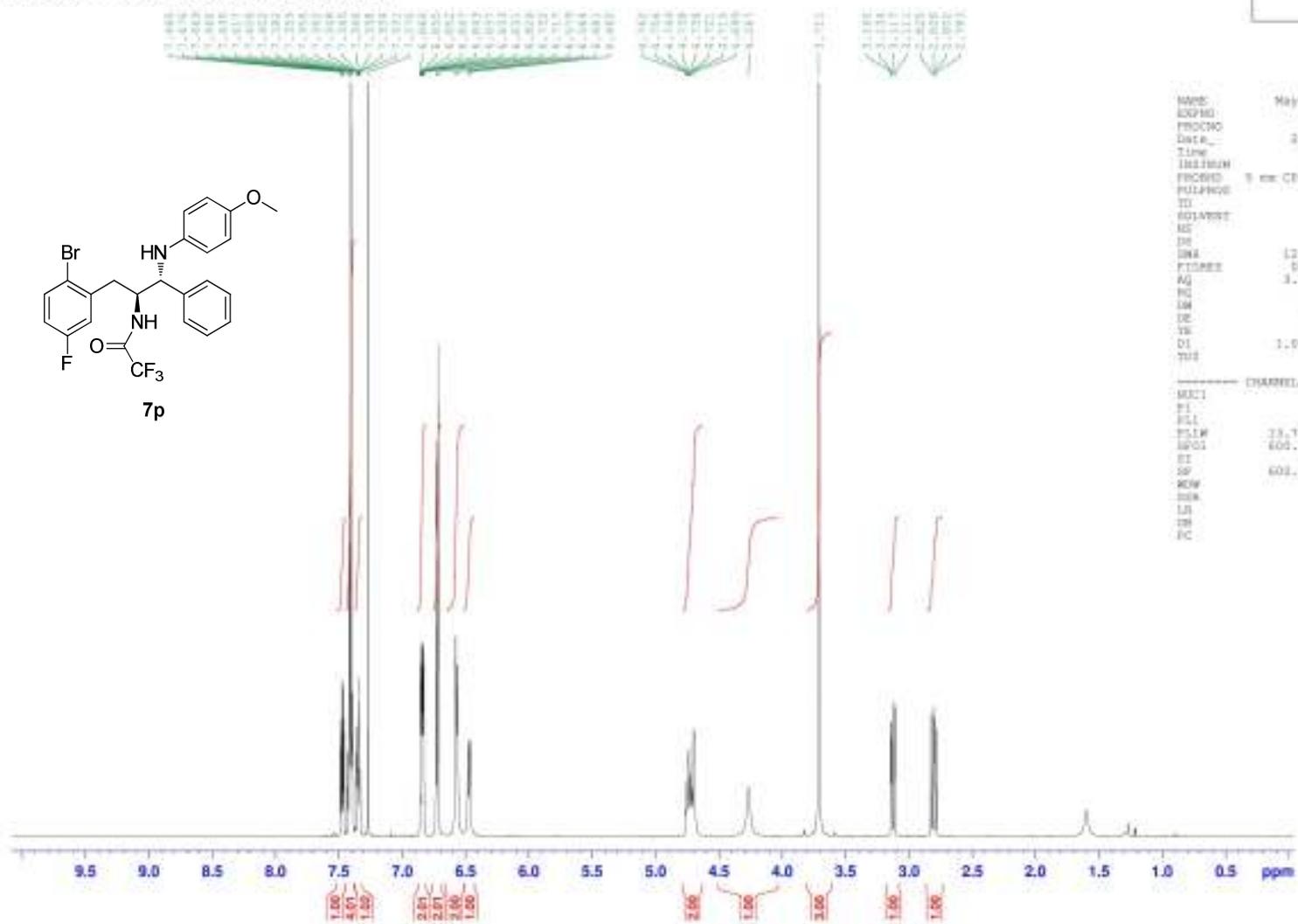
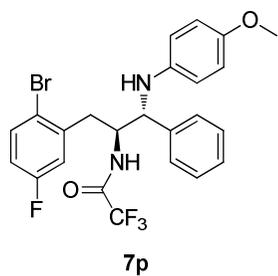
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.7686177 W
SFO1	125.7613000 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	15.76751714 W
PL15	0.32796130 W
PL16	0.17332926 W
SFO2	601.1326020 MHz
E1	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
DC	0

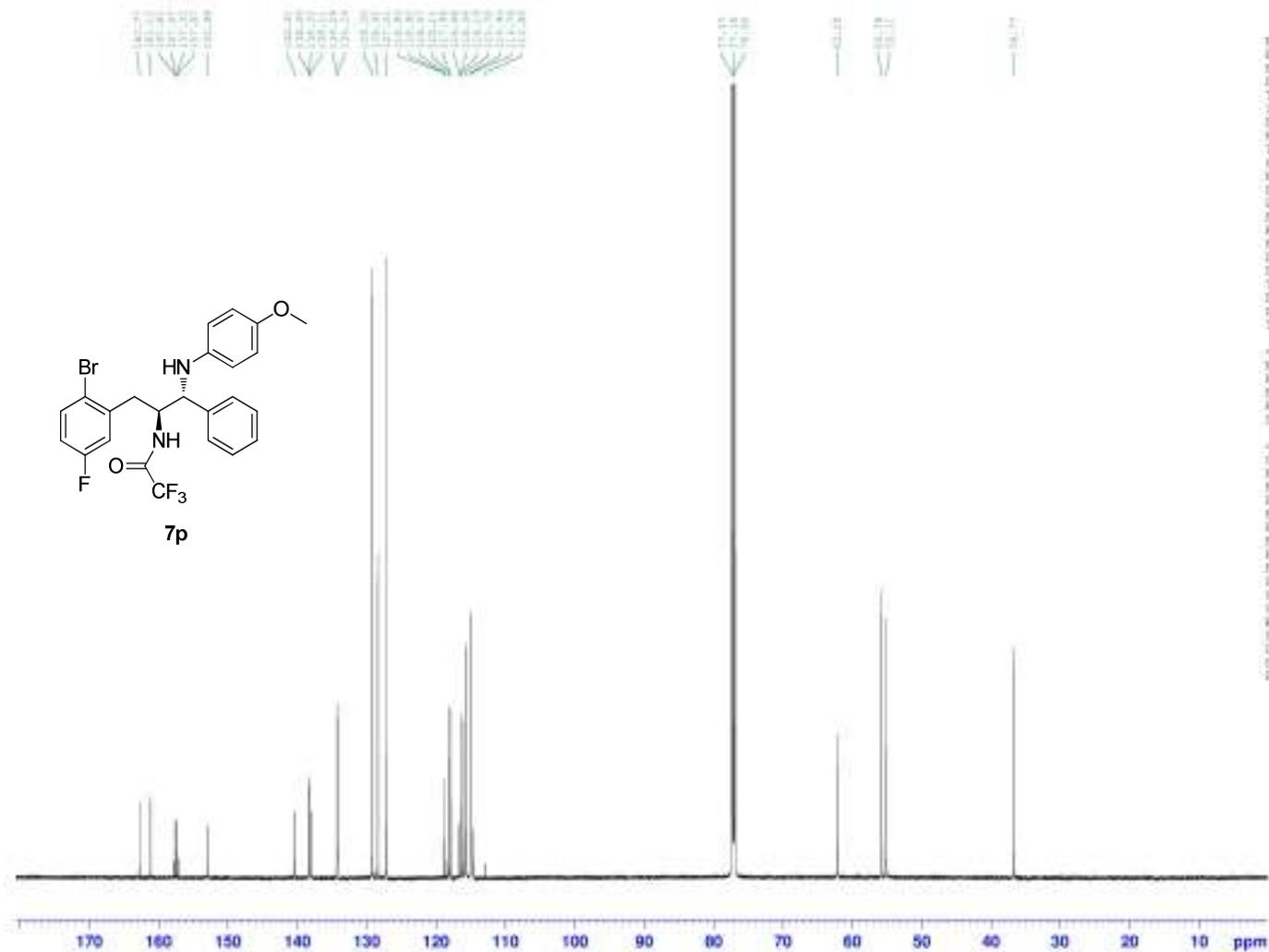
AN689  
 PROTON.ucf CDCI3 [V:\Bruker\TOPSPIN] jca 1



NAME	May07-2011
EXPNO	80
PROCNO	1
Date_	20110563
Time	20.19
INSTRUM	AV400
PROBHD	5 mm CDCl3 15C
PULPROG	zg30
TD	96882
SOLVENT	CDCl3
NS	6
DS	0
SWH	12315.326 Hz
FIDRES	0.125053 Hz
AQ	3.9499404 sec
RG	36
Ww	40.533 ssw
DE	10.46 ssw
WE	294.0 Hz
D1	1.0000000 sec
TD0	1

----- CHANNEL f1 -----	
MU1	0H
F1	11.40 MHz
SL1	1.00 dB
PL1W	19.7471014 W
RF01	602.1337041 MHz
F1	327.68
RF	602.1337051 MHz
MCW	EM
MSK	0
LS	0.30 Hz
TR	0
SC	1.40

AN689  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1

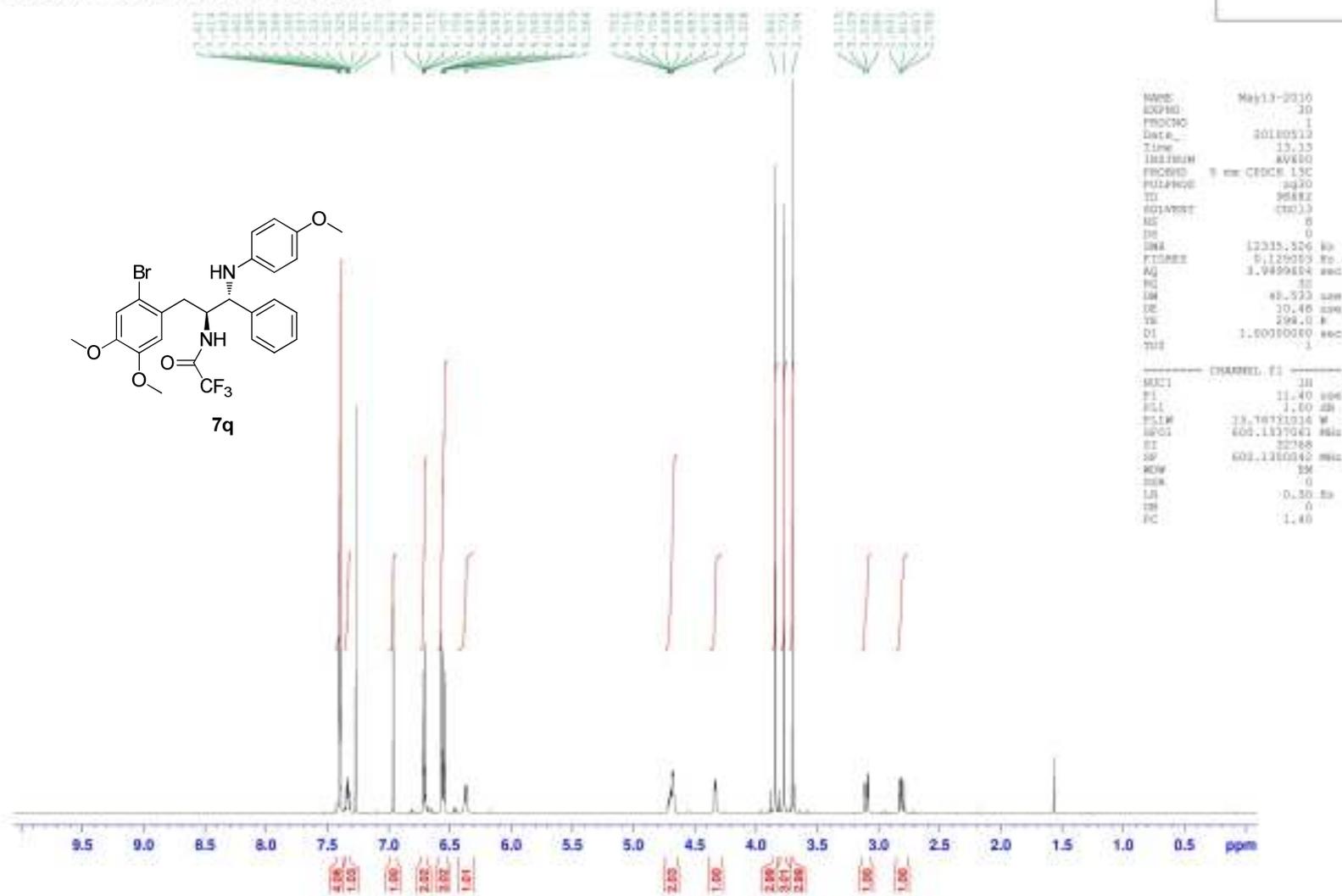
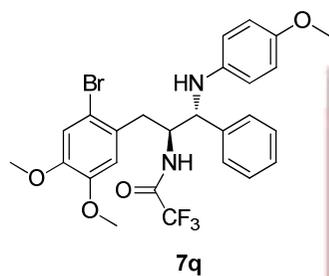


NAME	May01-2011
EXPNO	02
F2PROCNO	1
DATA_	00110902
Time	20.51
INSTRUM	AV600
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
SF	125.761
DELTA	0.0000000
DS	0
SWH	32002.560 Hz
F2FREQ1	6.555991 Hz
AQ	0.00000000 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 K
D1	2.00000000 sec
D11	0.00000000 sec
TD0	1

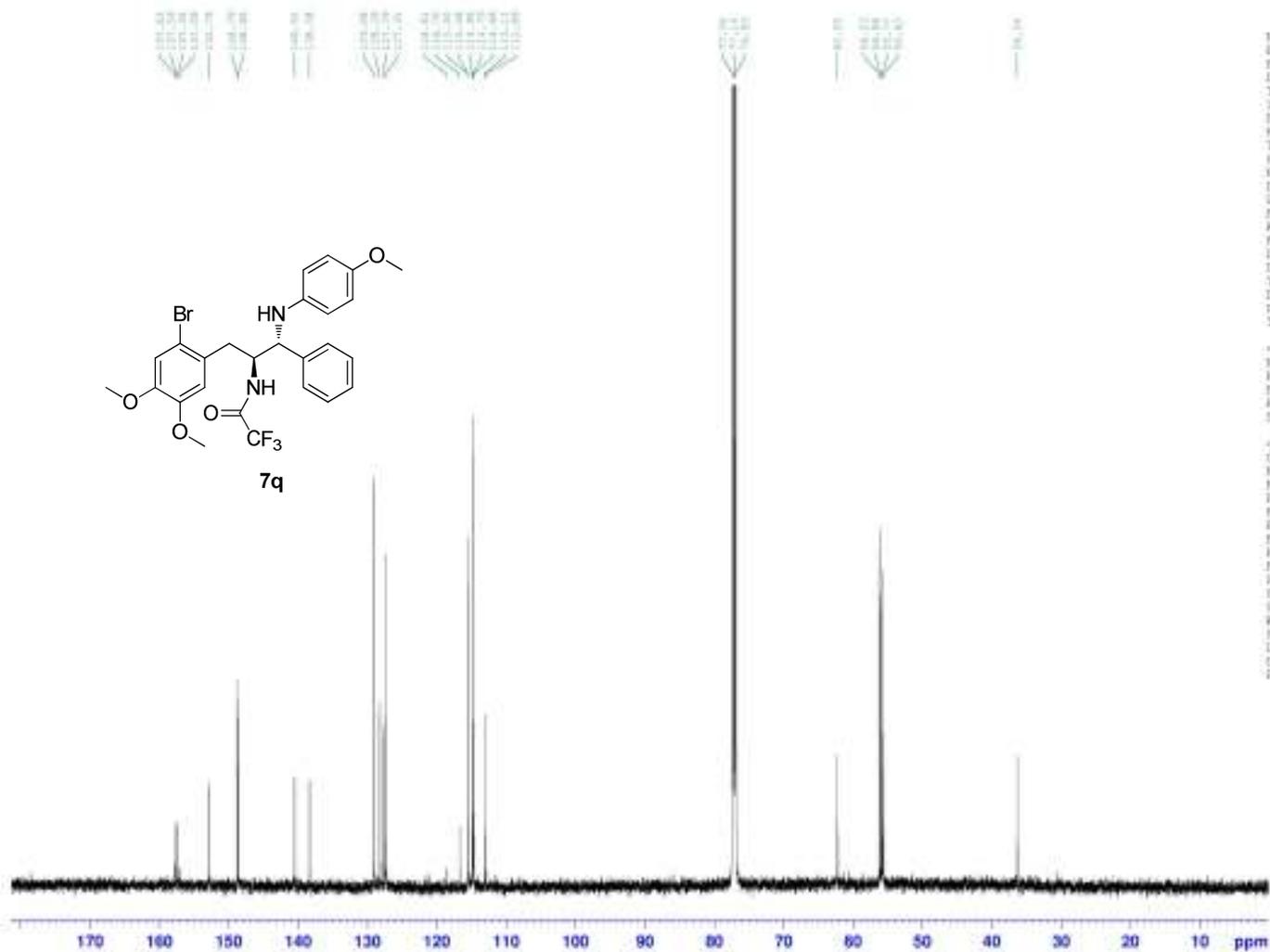
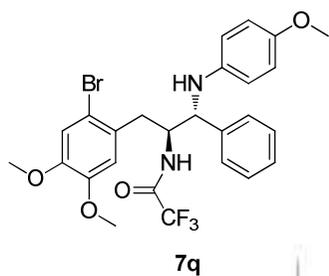
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	20.00 dB
PL13	20.00 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB

AN327  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 3



AN327  
 C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 2



NAME	Mar27-2010
EXPNO	32
F2PROCNO	1
DATA_	40180329
TIME	15.51
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	32768
ACQ	0.3088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

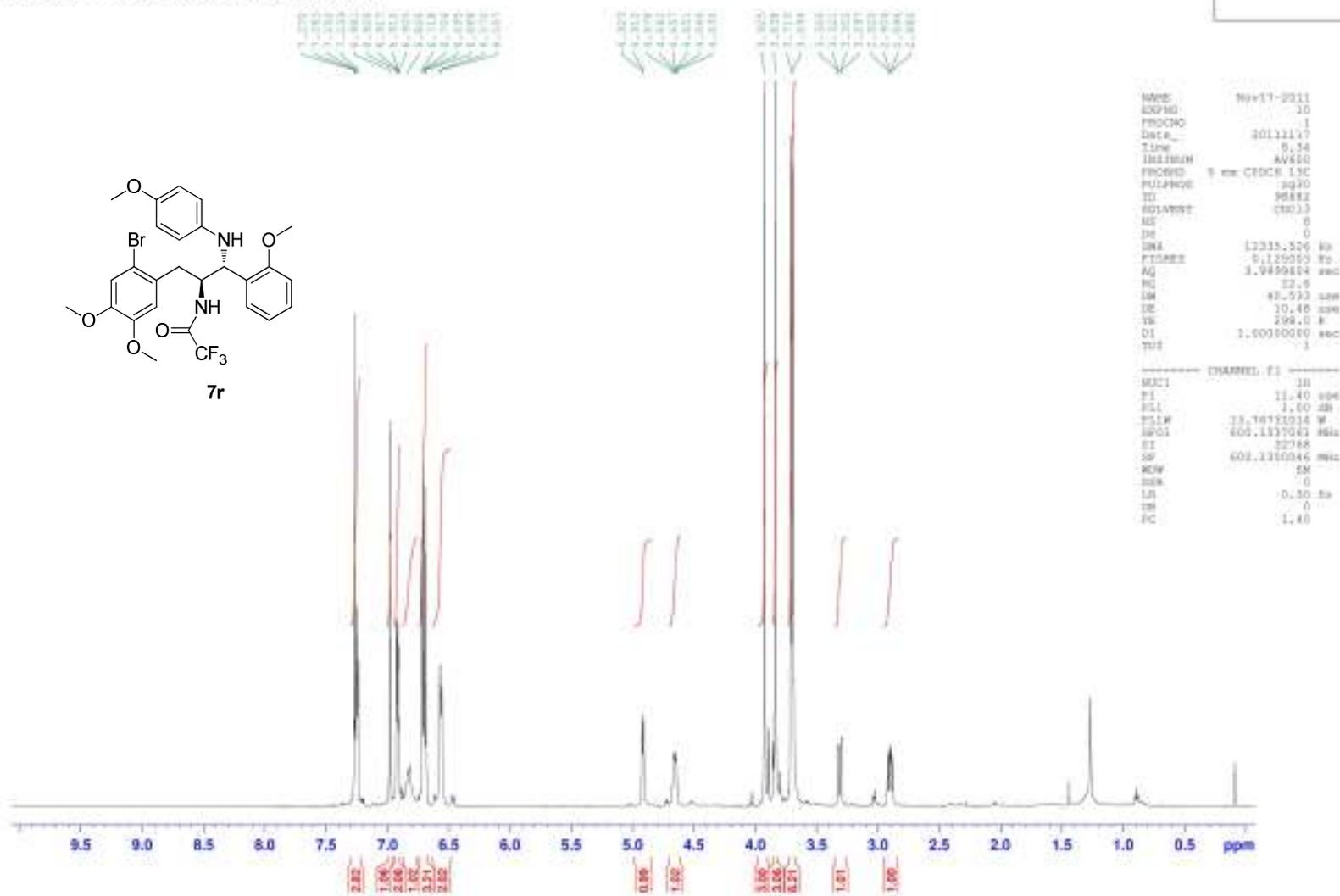
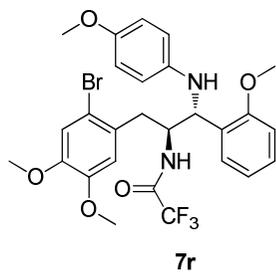
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	18.7686177 dB
SFO1	125.761591 MHz

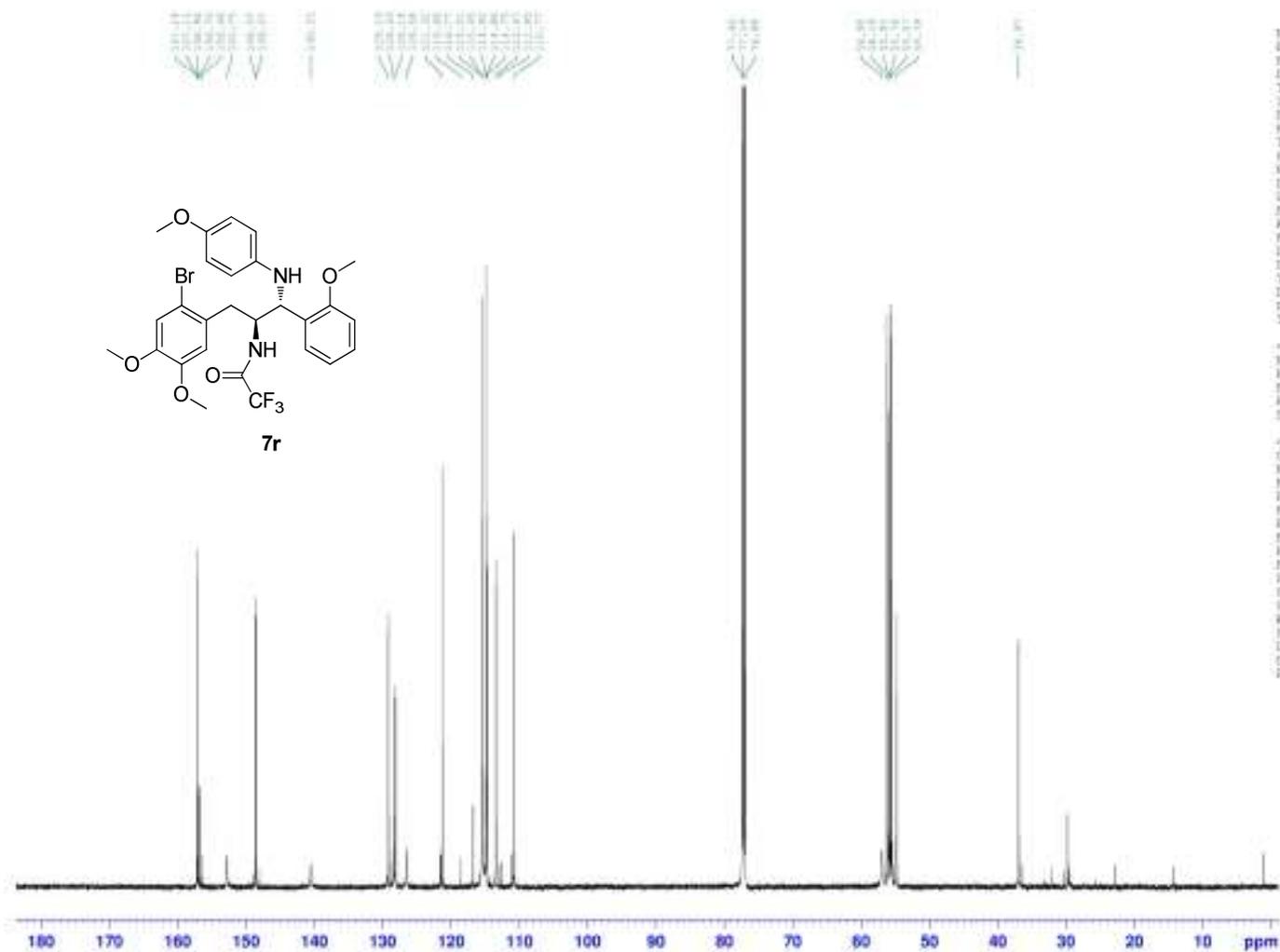
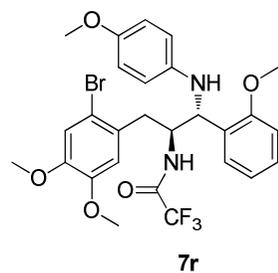
  

===== CHANNEL F2 =====	
NUC2	13C
FL2	9.40 um
PL2	1.00 dB
PL13	16.76 dB
PL14	120.40 dB
PL15	15.7675314 dB
PL16	0.36246774 dB
PL17	0.60000000 dB
SFO2	601.1326165 MHz
SI	32768
RF	101.9327830 MHz
CON	EM
EN	0
LD	1.00 Hz
GB	0
PC	1.40

AN949  
PROTON.ucl CDCI3 (V::Bruker:TOPSPIN) jca 1



AN949  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Nov17-2011
EXPNO	32
F2PROC0	1
DATE_	20111117
Time	8.45
INSTRUM	AVANCE
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
SF	125.761
NUC1	13C
NUC2	13C
QPCPDG	0.00000000
RG	320
SI	128
DS	4
SWH	32012.500 Hz
FIDRES	0.555991 Hz
AQ	0.00000000 sec
RG	320
DM	12.860 um
DE	21.30 um
YC	298.0 K
D1	2.00000000 sec
D11	0.00000000 sec
TD0	1

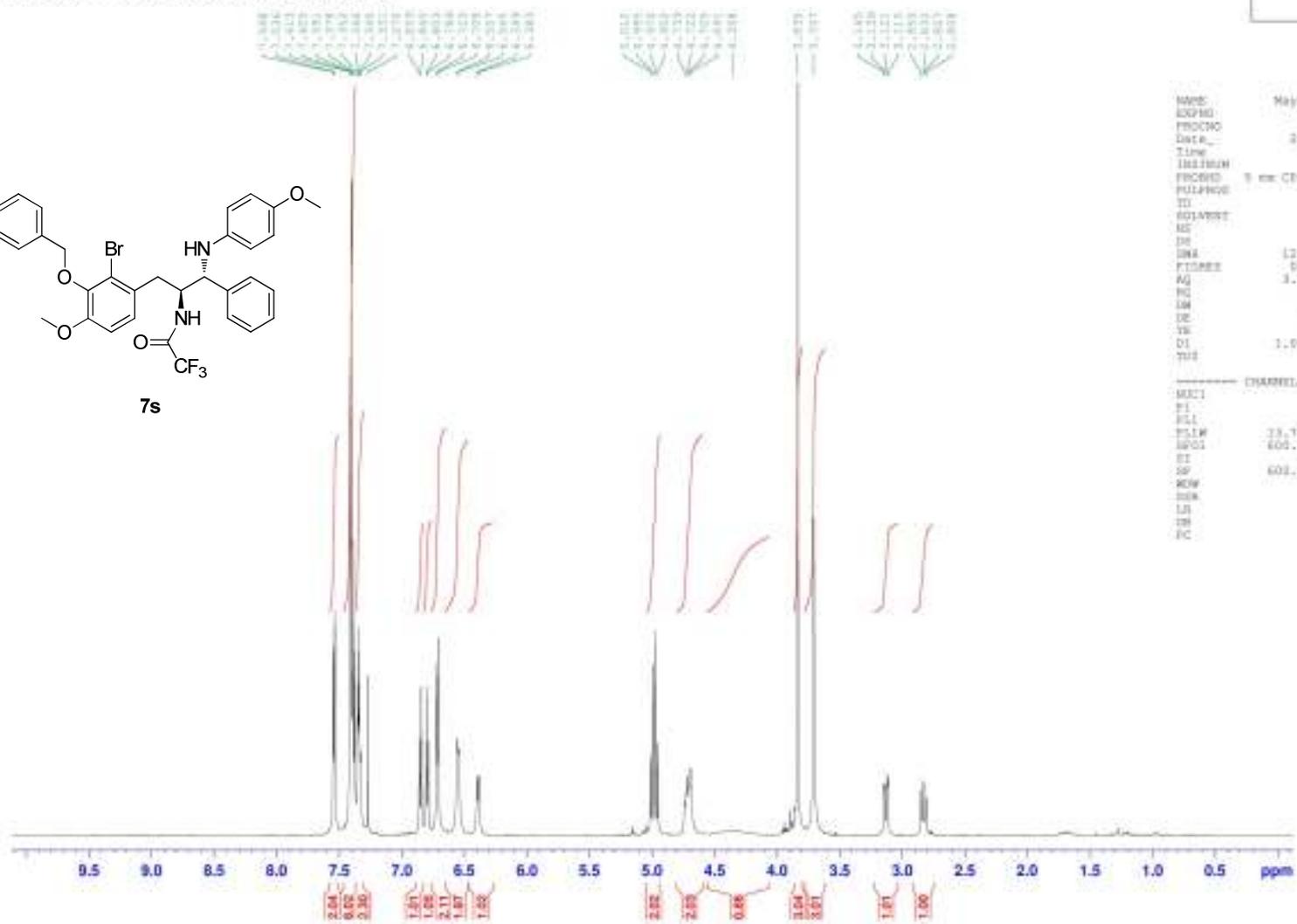
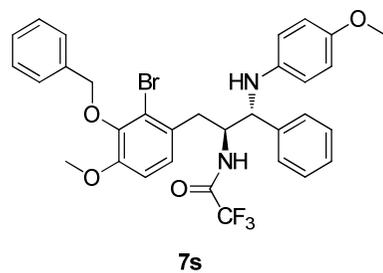
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 dB
SFO1	101.6261828 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPDG	0.00000000
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.7675724 dB
PL15	0.32796130 dB
PL16	0.17332926 dB
SFO2	601.1326020 MHz
SI	65536
DF	101.9327830 MHz
RGW	320
DS	4
LB	1.00 Hz
GB	0
PC	1.40

AN-GSK-63  
 PROTON.ucf CDC13 [V:\Bruker\TOPSPIN] jca 3

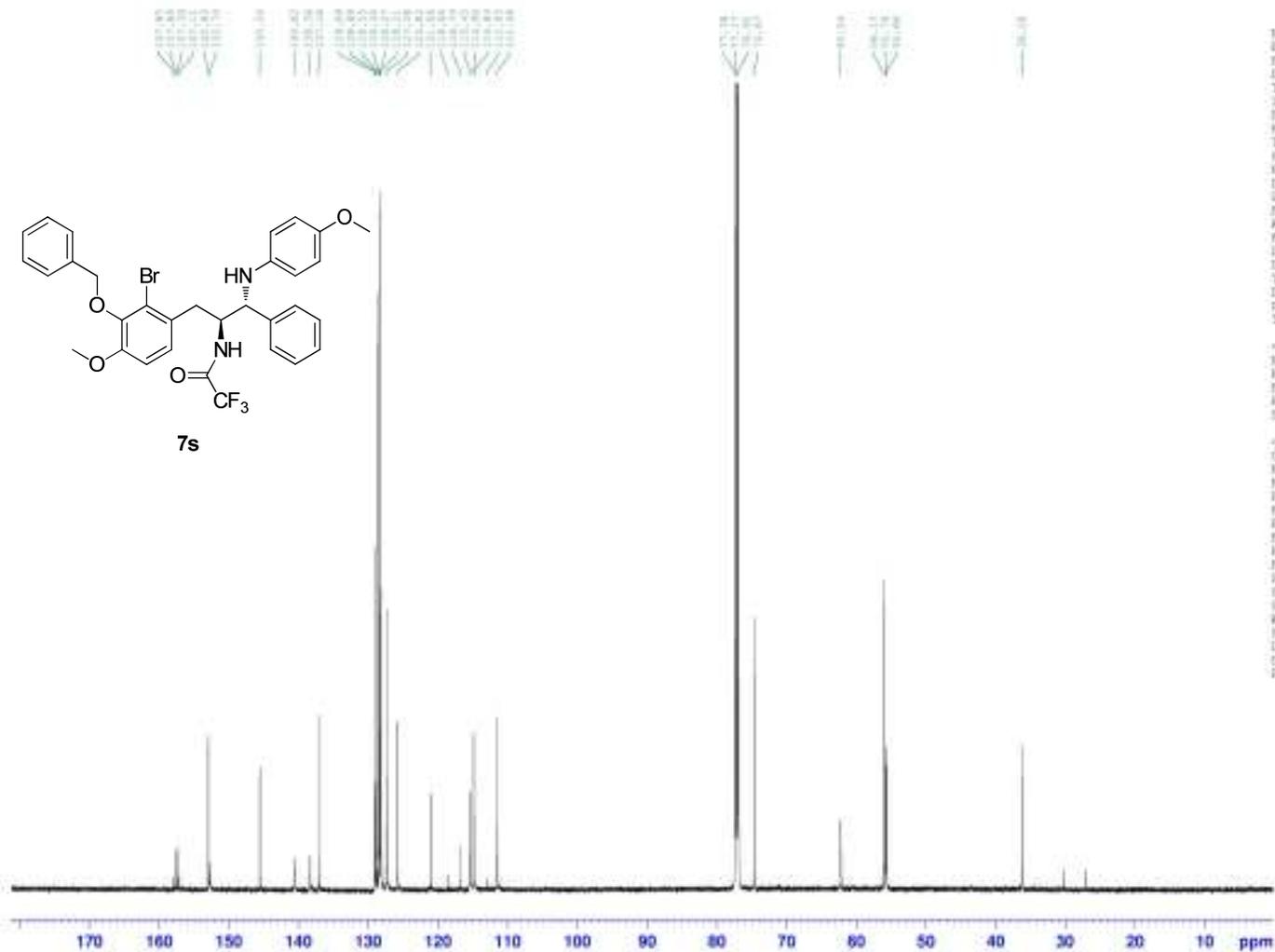
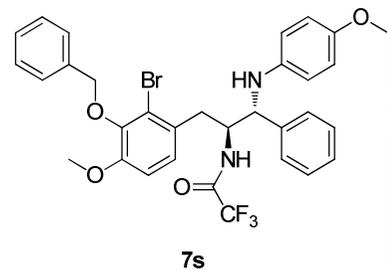


NAME	May29-2011
EXPNO	130
PROCNO	1
Date_	20110524
Time	6.05
INSTRUM	AV400
PROBHD	5 mm CDCl3 15C
PULPROG	zg30
TD	96882
SOLVENT	CDCl3
NS	6
DS	0
SWH	12315.326 kHz
FIDRES	0.125053 Hz
AQ	3.9499404 sec
RG	36
WV	40.533 cm <sup>-1</sup>
DE	10.46 mm
TE	298.0 K
D1	1.0000000 sec
TD1	1

----- CHANNEL f1 -----	
MU1	0H
F1	11.40 MHz
SL1	1.00 dB
PL1W	19.7471014 W
RF01	602.1337041 MHz
F1	327.68
CP	602.1335045 MHz
MCW	EM
NUC	0
LN	0.30 Hz
TR	0
PC	1.40

AN-GSK-63  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 3



NAME	May23-0111
EXPNO	132
F2PROCNO	1
DATE_	20110520
TIME	5.27
INSTRUM	AV450
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	6.555991 Hz
AQ	0.8999824 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

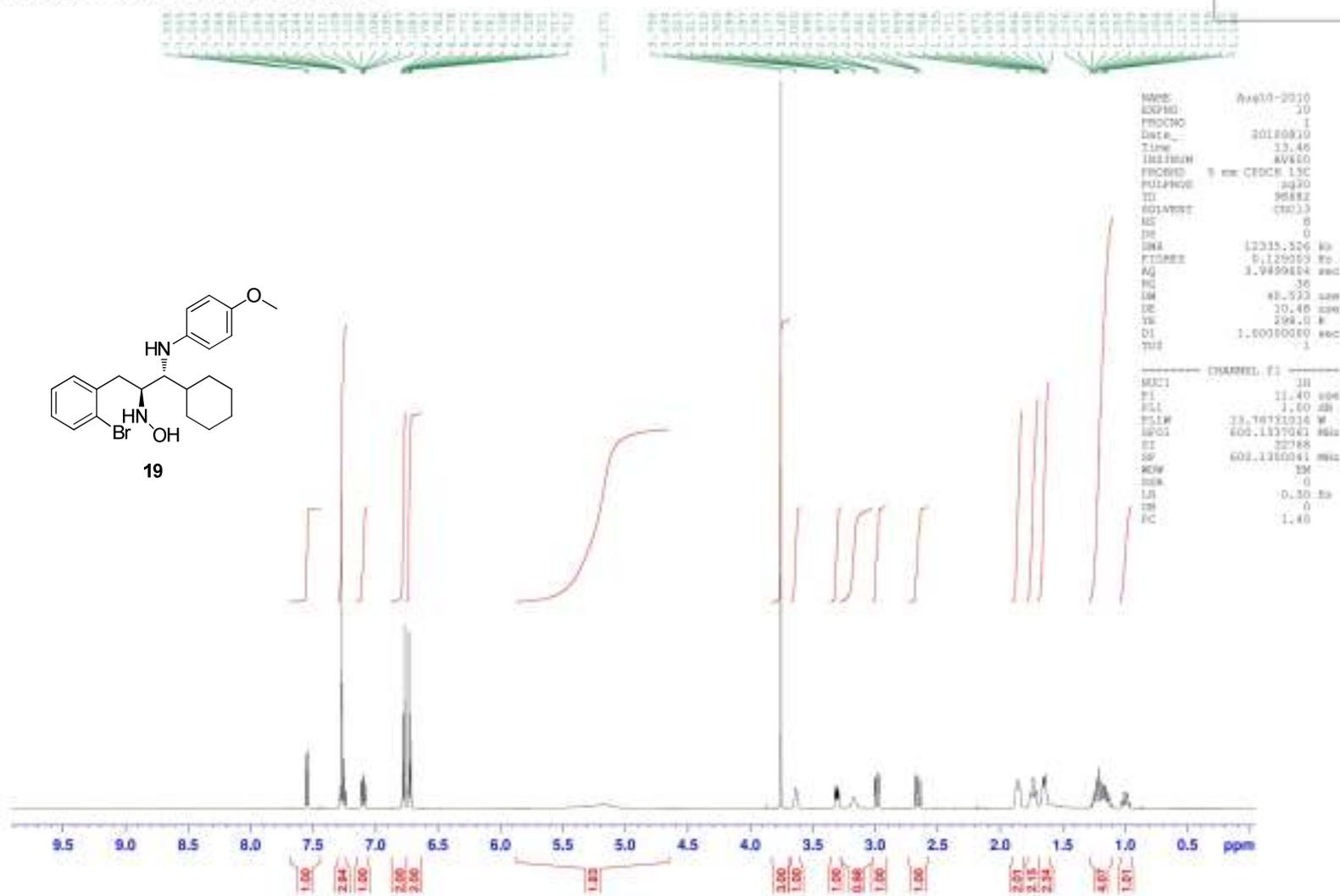
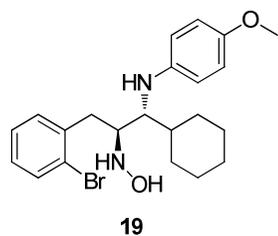
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.921828 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	-17.23 dB
PL14	20.40 dB
PL15	25.7675124 W
PL16	0.32596148 W
PL17	0.17332026 W
SFO2	601.1326048 MHz
SI	65336
SR	101.9217830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

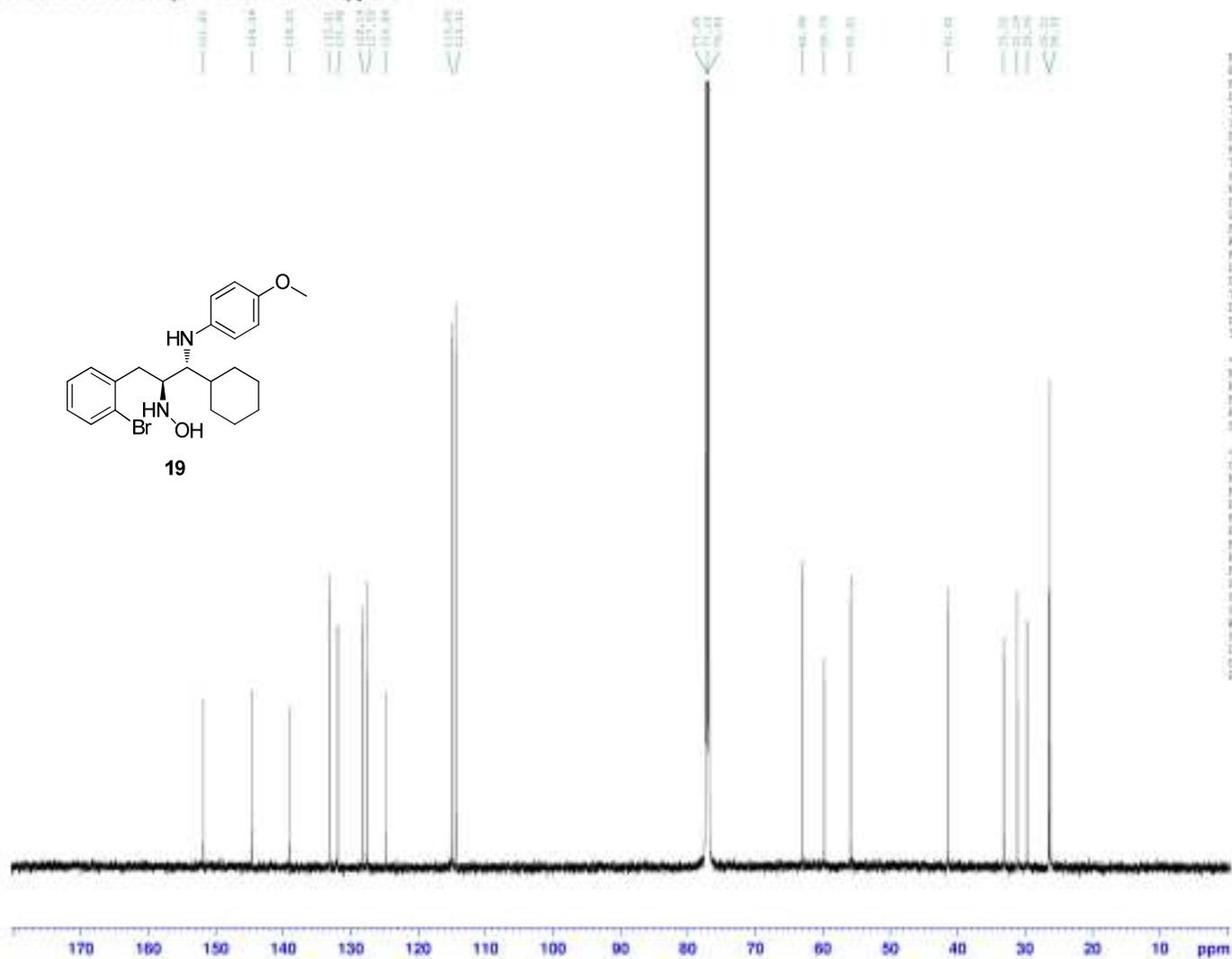
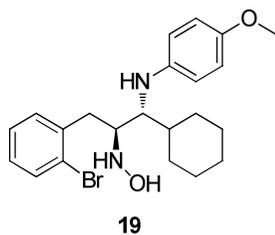
AN506  
 PROTON.ucf CDCI3 (C:Bruker:TOPSPIN) jca 6



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NAME      Aug10-2010
EXPNO     10
PROCNO    1
Date_     20180810
Time      13.46
INSTRUM   AV400
PROBHD    5 mm CBOCH 15C
PULPROG   zg30
TD         65536
SI         36882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9489684 sec
RG         36
WDW        EM
SSB        0
GB         0
PC         1.0000000 sec
RG2        1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1PW      19.7671014 W
SFO1       602.137041 MHz
SI         32768
SF         602.137041 MHz
RGW        EM
RG2        0
L3         0.30 Hz
GB         0
PC         1.40
  
```

AN506  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 6



NAME	Asp13-0320
EXPNO	21
F2PROCNO	1
DATE_	20180811
TIME	0.42
INSTRUM	AVANCE
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	32768
ACQ	0.3088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.6000000 sec
D11	0.3000000 sec
DS	1

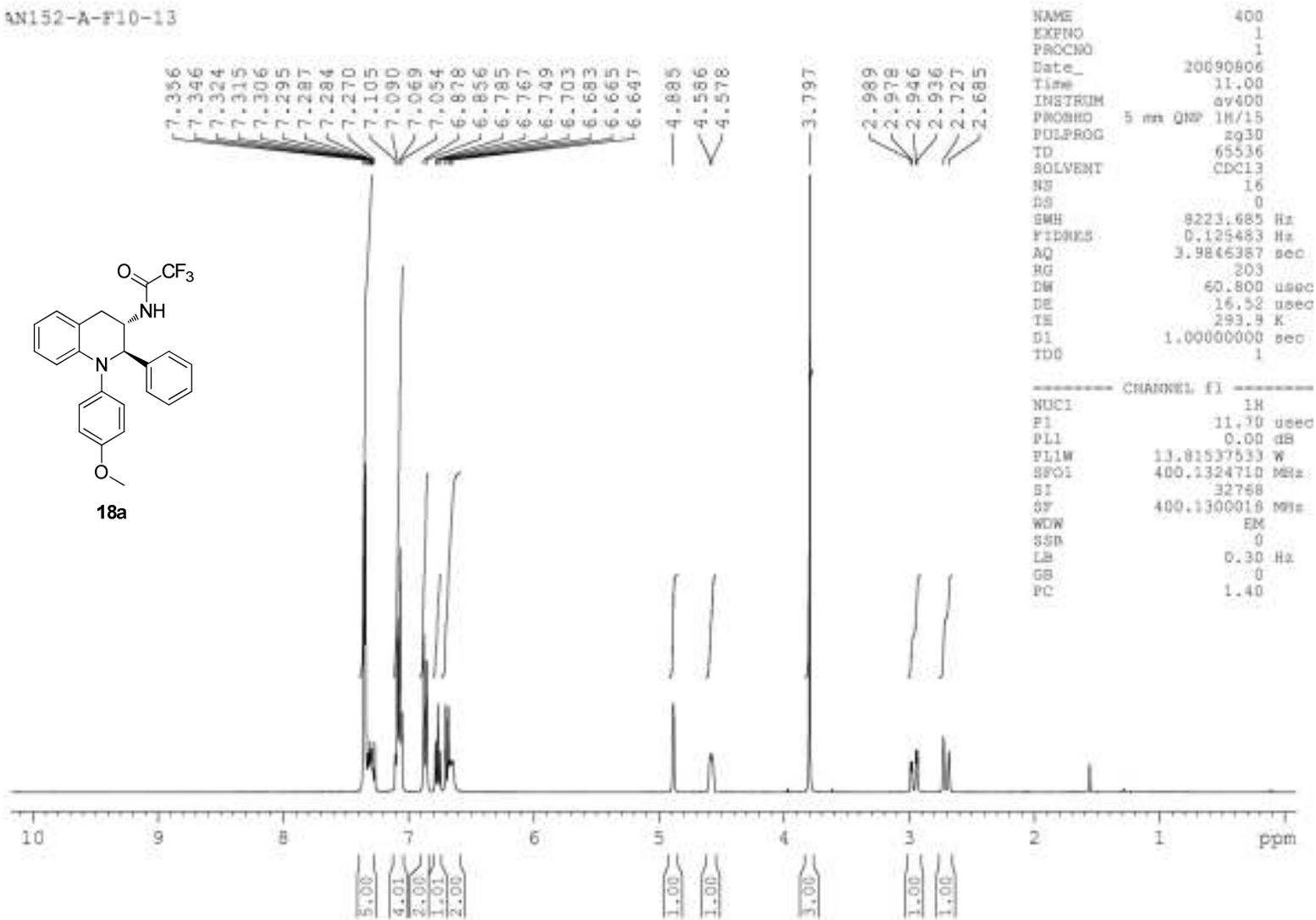
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	18.7686177 W
SFO1	125.7615981 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.7675124 W
PL16	0.32796130 W
PL17	0.17332926 W
SFO2	400.1326126 MHz
SI	32768
RF	301.9327830 MHz
CON	EM
SR	0
LB	1.00 Hz
GB	0
PC	1.40

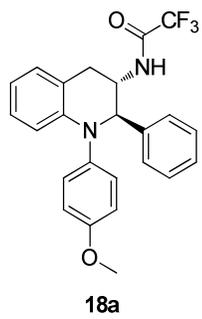
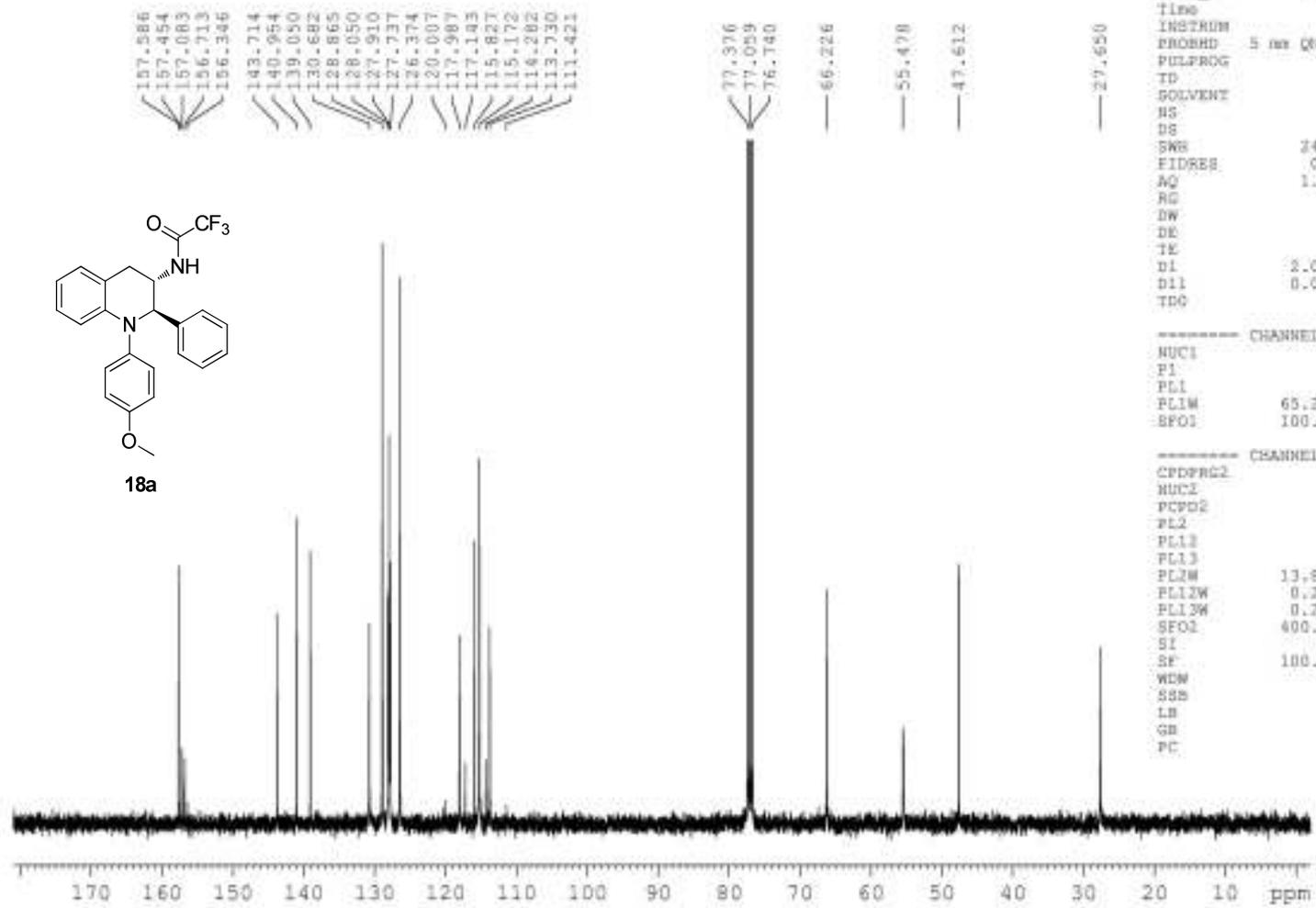
AN152-A-F10-13



```

NAME          400
EXPNO         1
PROCNO        1
Date_         20090806
Time          11.00
INSTRUM       av400
PROBHD        5 mm QNP 1H/15
PULPROG       zg30
TD            65536
SOLVENT       CDCl3
NS            16
DS            0
SMB           8223.685 Hz
FIDRES        0.125483 Hz
AQ            3.9846387 sec
RG            203
DW            60.800 usec
DE            16.52 usec
TE            293.9 K
D1            1.00000000 sec
TDO           1
----- CHANNEL f1 -----
NUC1          1H
P1            11.70 usec
PL1           0.00 dB
PL1W          13.81537533 W
SFO1          400.1324710 MHz
SI            32768
SF            400.1300018 MHz
WDW           EM
SSB           0
LB            0.30 Hz
GB            0
PC            1.40
  
```

AN152-A-F10-13



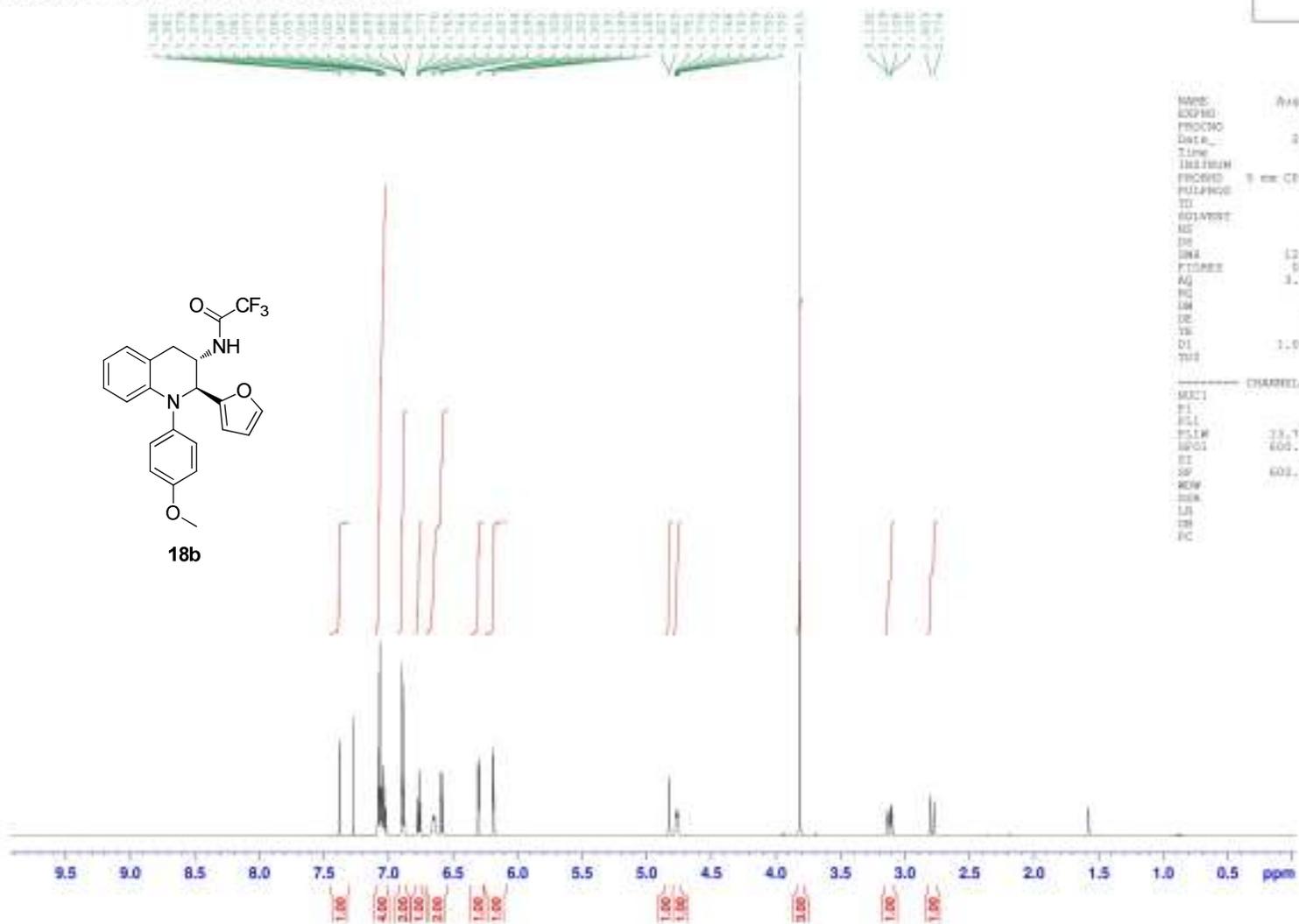
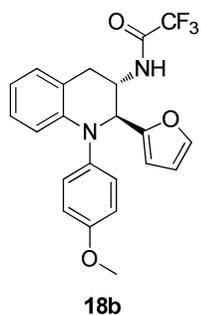
```

NAME          400
EXPNO         2
PROCNO        1
Date_         20090808
Time          11.18
INSTRUM       av400
PROBHD        5 mm QNP 1H/13
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            356
DS            0
SWH           24038.461 Hz
FIDRES        0.366798 Hz
AQ            1.3631988 sec
RG            256
DW            20.800 us
DE            9.78 us
TE            293.2 K
D1            2.00000000 sec
D11           0.03000000 sec
TDC           1

----- CHANNEL f1 -----
NUC1          13C
P1            9.00 us
PL1           -2.00 dB
PL1W          65.28957367 W
SFO1          100.6228298 MHz

----- CHANNEL f2 -----
CPDPRG2       waltz16
NUC2          1H
PCPD2         90.00 us
PL2           0.00 dB
PL12          17.72 dB
PL13          18.00 dB
PL1W          13.81537533 W
PL12W         0.13354880 W
PL13W         0.21855894 W
SFO2          400.1316005 MHz
SI            32768
SF            100.6127690 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40
    
```

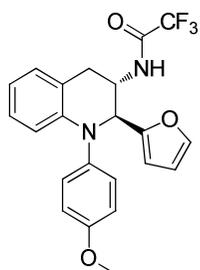
AN519  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 26



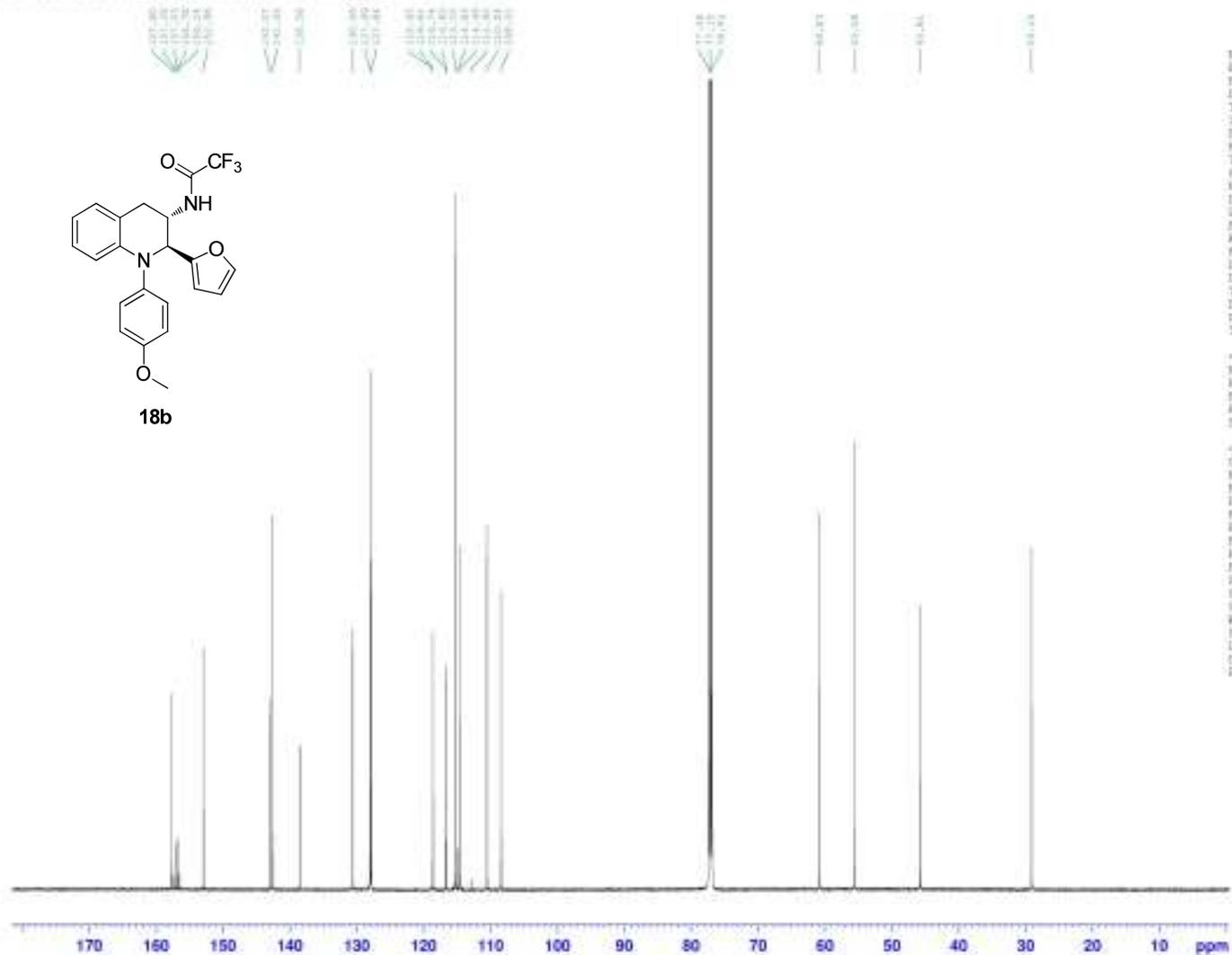
```

NAME      Aug09-2010
EXPNO    3D
PROCNO    1
Date_     20100809
Time      17.59
INSTRUM   AV400
PROBHD    5 mm CPDCH 13C
PULPROG   zg30
TD        65536
SI        96882
SOLVENT   CDCl3
NS        6
DS        0
SWH        12315.326 kHz
FIDRES    0.125053 Hz
AQ        3.9499604 sec
RG        62.7
IM        40.533 um
DE        10.46 um
TE        298.0 K
D1        1.60000000 sec
TMS       1
----- CHANNEL f1 -----
NUC1      1H
P1        11.40 usec
PL1       1.00 dB
PS1P      19.7671014 W
SFO1      602.137041 MHz
SI        32768
SF        602.137040 MHz
RGW       EM
RGW       0
DSB       0
LB        0.30 Hz
GB        0
PC        1.40
  
```

AN519  
 C13CPD.ucl CDC13 (C:Bruker/TopSpin) jca 2

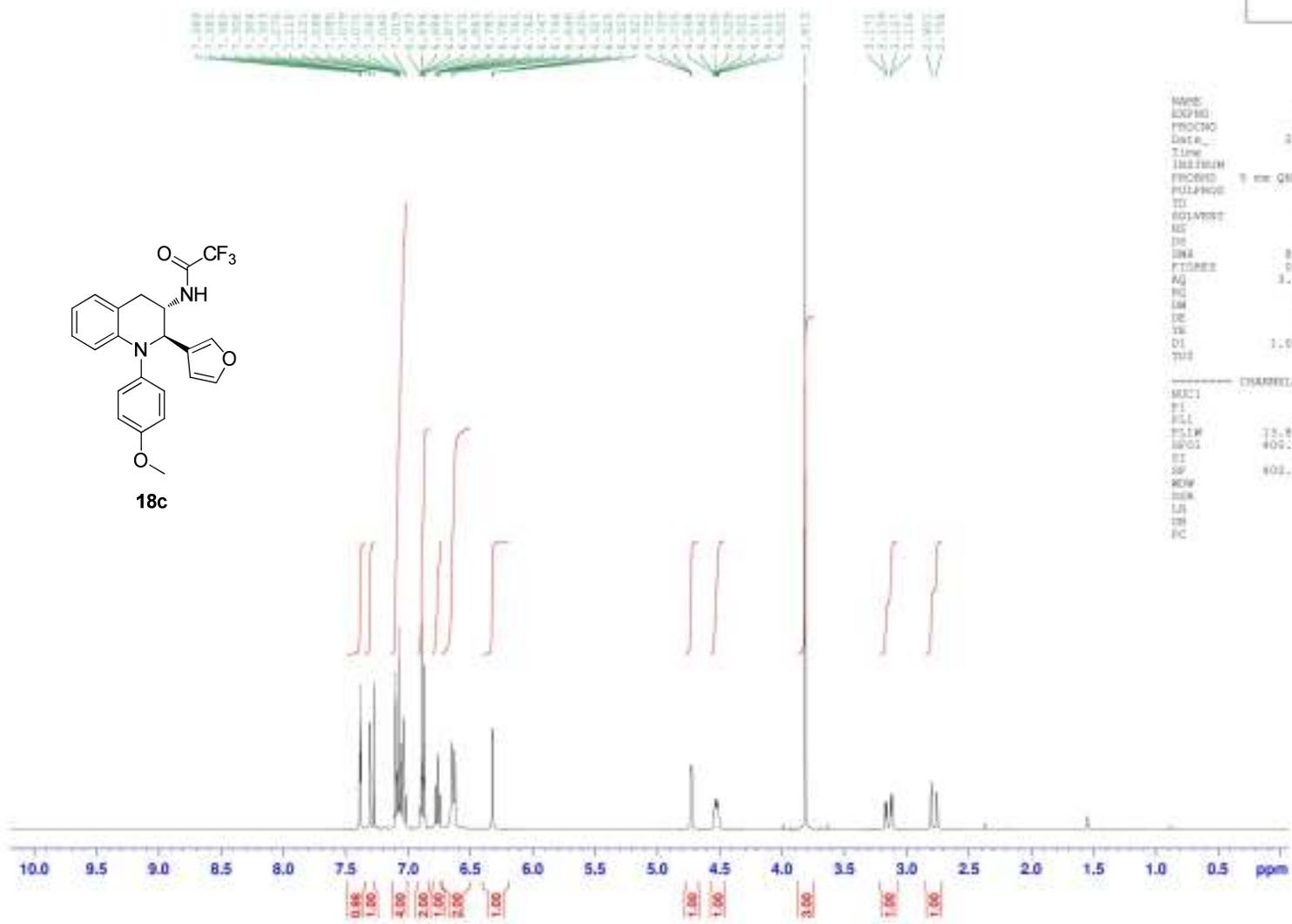
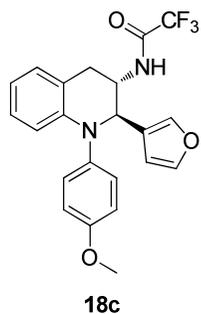


18b



NAME		Asp07-0110
EXPNO		32
PROCNO		1
Date_		20100829
Time		17:57
INSTRUM		AV600
PROBHD		5 mm CPDCK 13C
PULPROG		zgpg30
TD		65536
SOLVENT		CDCl3
NS		250
DS		0
SWH		34017.481 Hz
FIDRES		0.1550197 Hz
AQ		0.9088159 sec
RG		1020
DM		13.847 um
DE		21.55 um
TE		298.0 K
D1		2.6000000 sec
D11		0.1000000 sec
D12		0.1000000 sec
D13		1
----- CHANNEL f1 -----		
NUC1		13C
P1		9.00 um
PL1		0.00 dB
PL12		19.7686177 dB
SFO1		101.626126 MHz
----- CHANNEL f2 -----		
CPDPRG2		waltz16
NUC2		1H
PCPD2		10.00 um
PL2		1.00 dB
PL13		17.23 dB
PL14		20.40 dB
PL15		15.7675124 dB
PL16		0.10796148 dB
PL17		0.17332926 dB
SFO2		601.1326126 MHz
SI		32768
SF		101.9927830 MHz
WDW		EM
SSB		0
LB		1.00 Hz
GB		0
PC		1.40

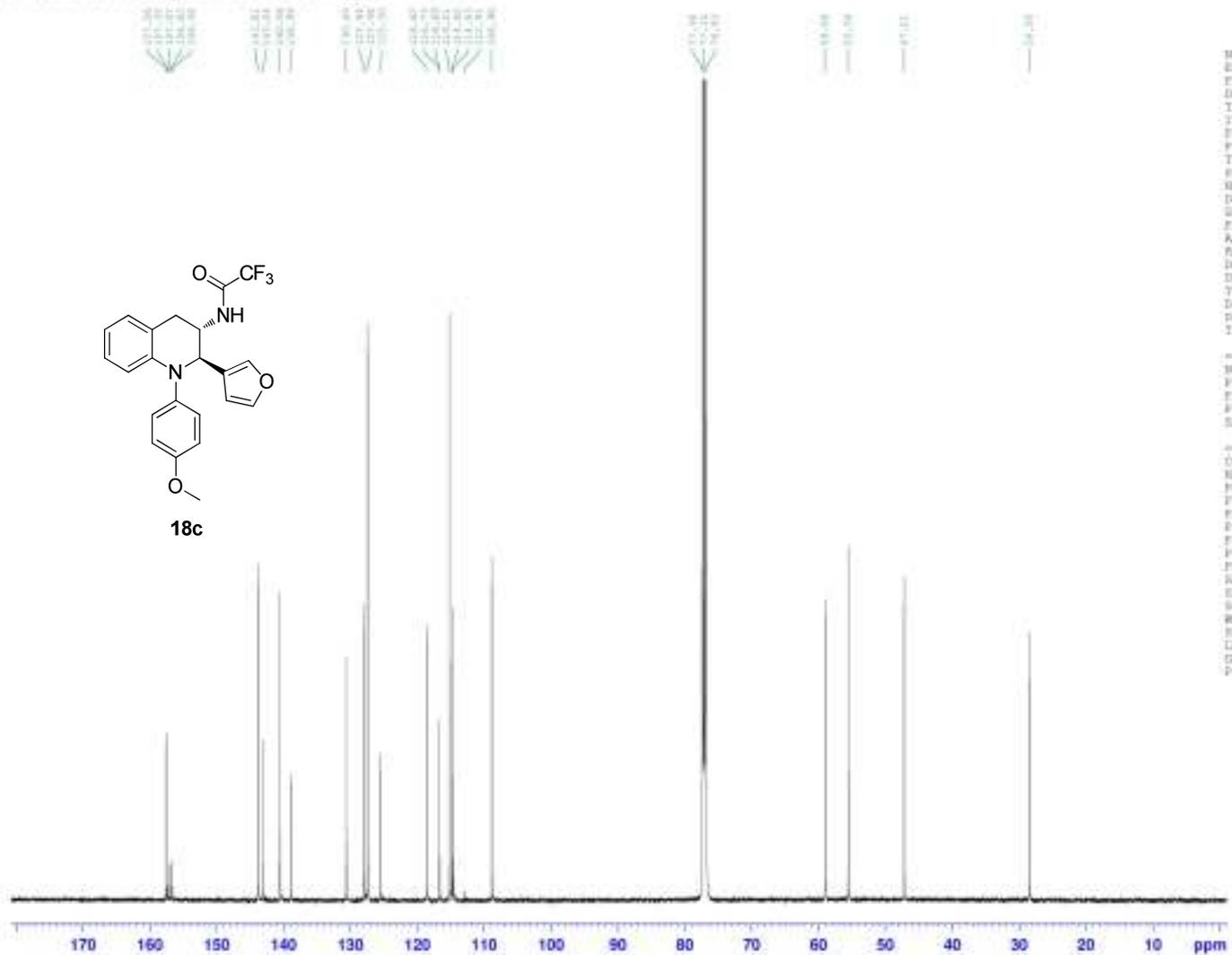
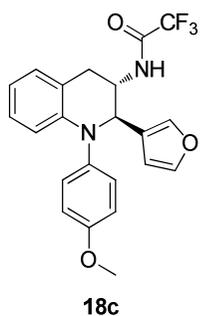
AN509-R1



```

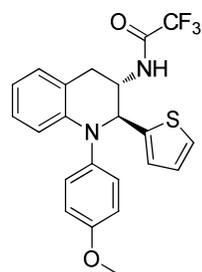
NAME      AN509
EXPNO     2
PROCNO    1
Date_     20180327
Time      9.51
INSTRUM   av400
PROBHD    5 mm QNP 1H/1
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
NS         16
DS         0
SWH        8221.885 Hz
FIDRES     0.125483 Hz
AQ         3.9846287 sec
RG         287
DQ         66.860 usec
DE         16.50 usec
TE         298.2 K
D1         1.60000000 sec
TMS       1
----- CHANNEL f1 -----
NUC1       1H
P1         11.70 usec
PL1        0.60 dB
PL12       15.81337333 W
SFO1       400.1324710 MHz
SI         32768
SF         400.1324710 MHz
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
    
```

AN509  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4

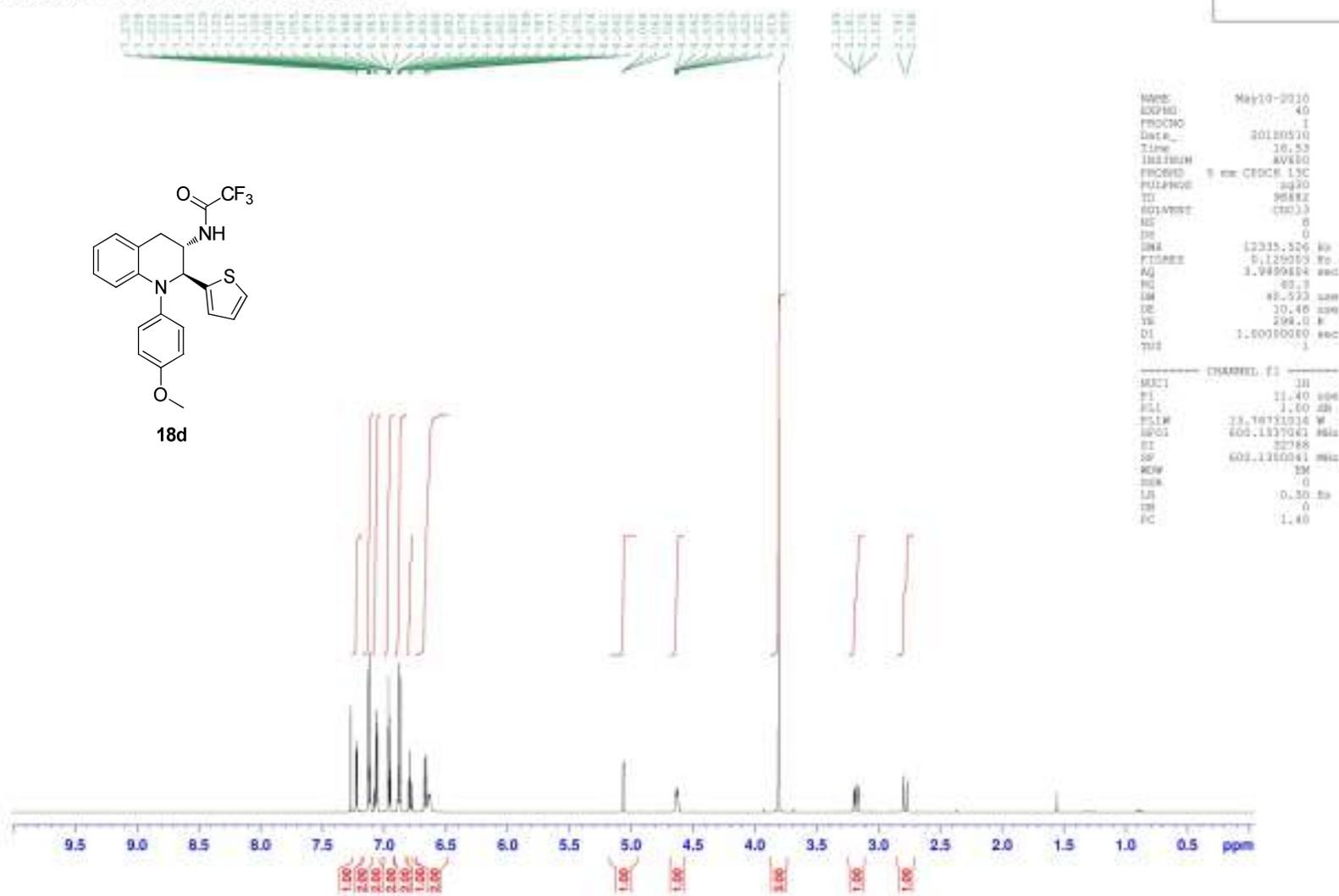


NAME	24127-0310
EXPNO	32
F2PROCNO	1
DATE_	20100327
TIME	25.12
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65526
FIDRES	0.0043
MS	128
DS	0
SWH	24027.481 Hz
F2FREQ	5.155197 Hz
AQ	0.3088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1
----- CHANNEL f1 -----	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	20.00 dB
SFO1	101.3176981 MHz
----- CHANNEL f2 -----	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.7675124 W
PL16	0.32586138 W
PL17	0.17332926 W
SFO2	601.1326020 MHz
SI	32768
SR	104.9327830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

AN416  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 28



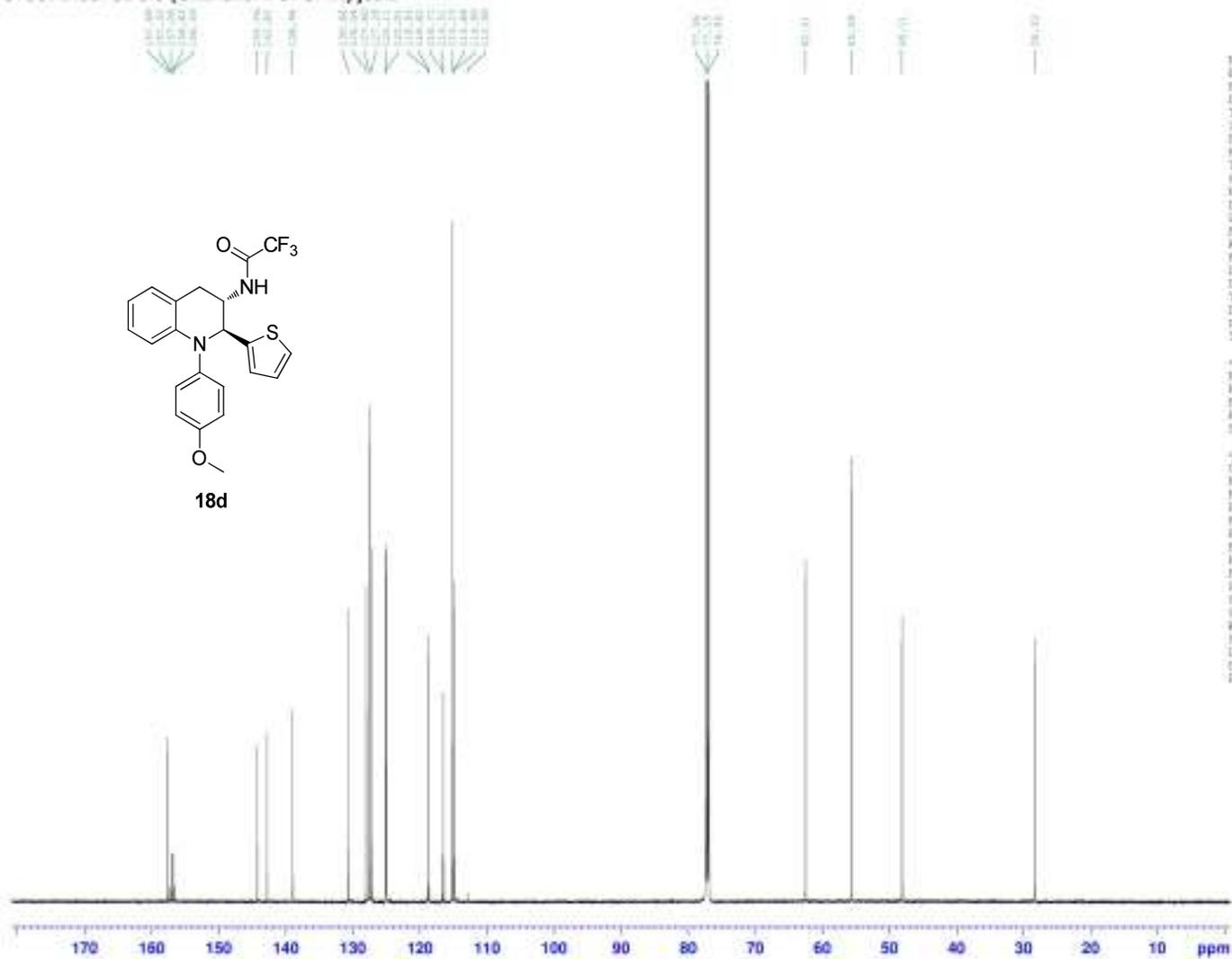
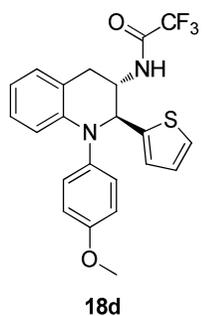
18d



NAME May10-2010  
 EXPNO 40  
 PROCNO 1  
 Date\_ 20120510  
 Time 16.53  
 INSTRUM AV400  
 PROBRD 5 mm CPDCH 15C  
 PULPROG zgpg30  
 IT 96881  
 SOLVENT CDCl3  
 NS 6  
 DS 0  
 SWH 12315.526 khz  
 FIDRES 0.125053 Hz  
 AQ 3.9499654 sec  
 RG 63.7  
 SQ 42.533 um  
 DE 10.46 um  
 VE 294.0 Hz  
 DI 1.0000000 sec  
 TD 1

----- CHANNEL f1 -----  
 NUC1 1H  
 P1 11.40 usec  
 PL1 1.00 dB  
 PSW 13.7671014 W  
 SFO1 602.137041 MHz  
 EI 22788  
 SF 602.137041 MHz  
 MW 5M  
 DS 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.40

AN416  
C13CPD.ucl CDC13 (C:-Bruker/TOPOSPIN) jca 2

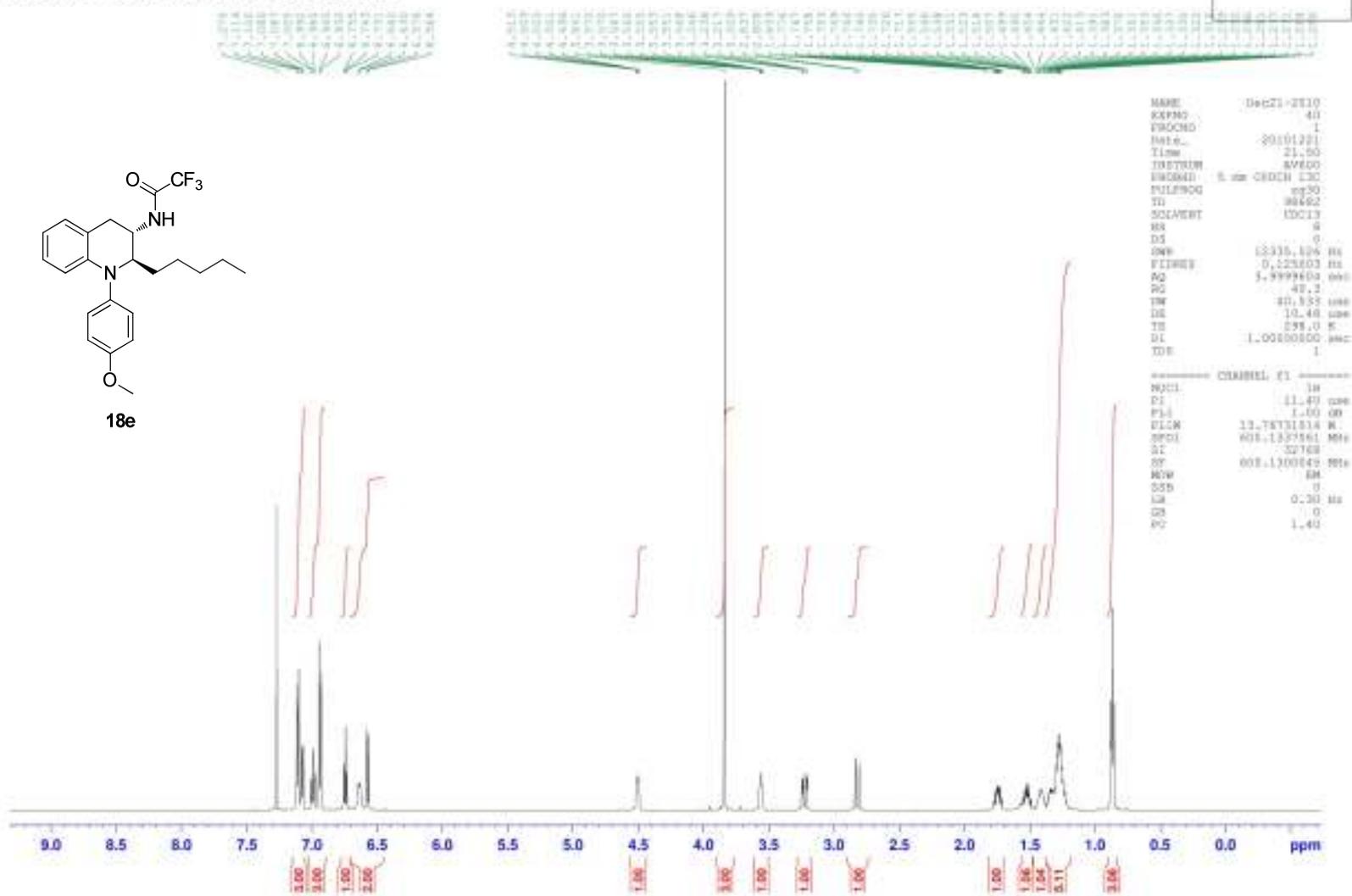
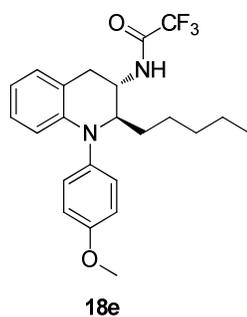


NAME	May13-2010
EXPNO	42
F2PROCNO	1
DATE_	20100510
TIME	17.55
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	32768
RF	101.9327830 MHz
REX	0
LD	1.00 Hz
DS	0
DC	1.40

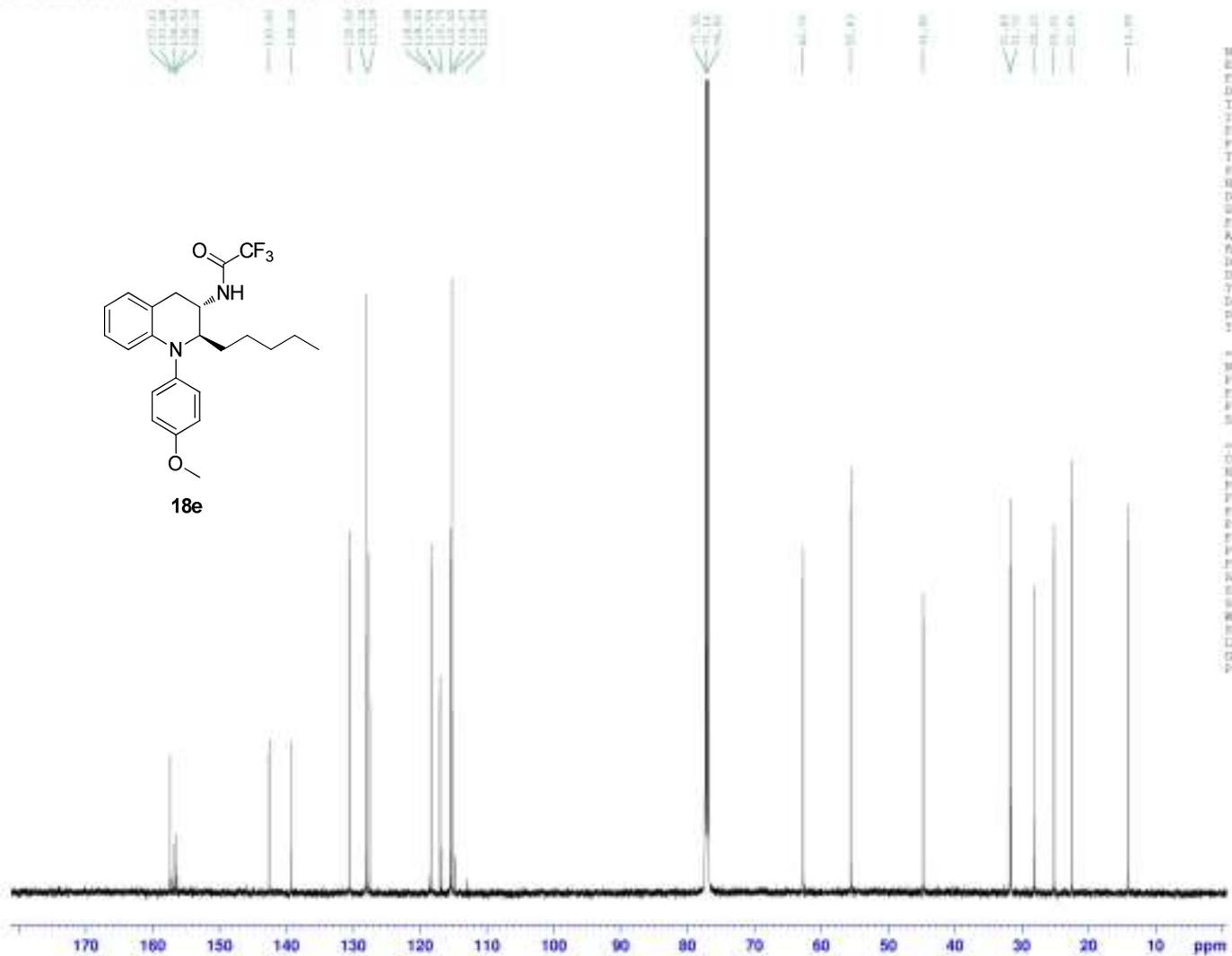
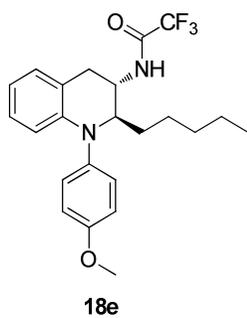
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 MHz
PL1	0.00 dB
PL12	19.7686177 dB
SFO1	125.7617830 MHz
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 MHz
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 dB
PL15	0.20796130 dB
PL16	0.17332926 dB
SFO2	400.1424080 MHz

AN692  
 PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 45



AN692  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4



NAME	Dec21-2010
EXPNO	42
F2PROCNO	1
DATE_	20101221
TIME	23:52
INSTRUM	AV400
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40

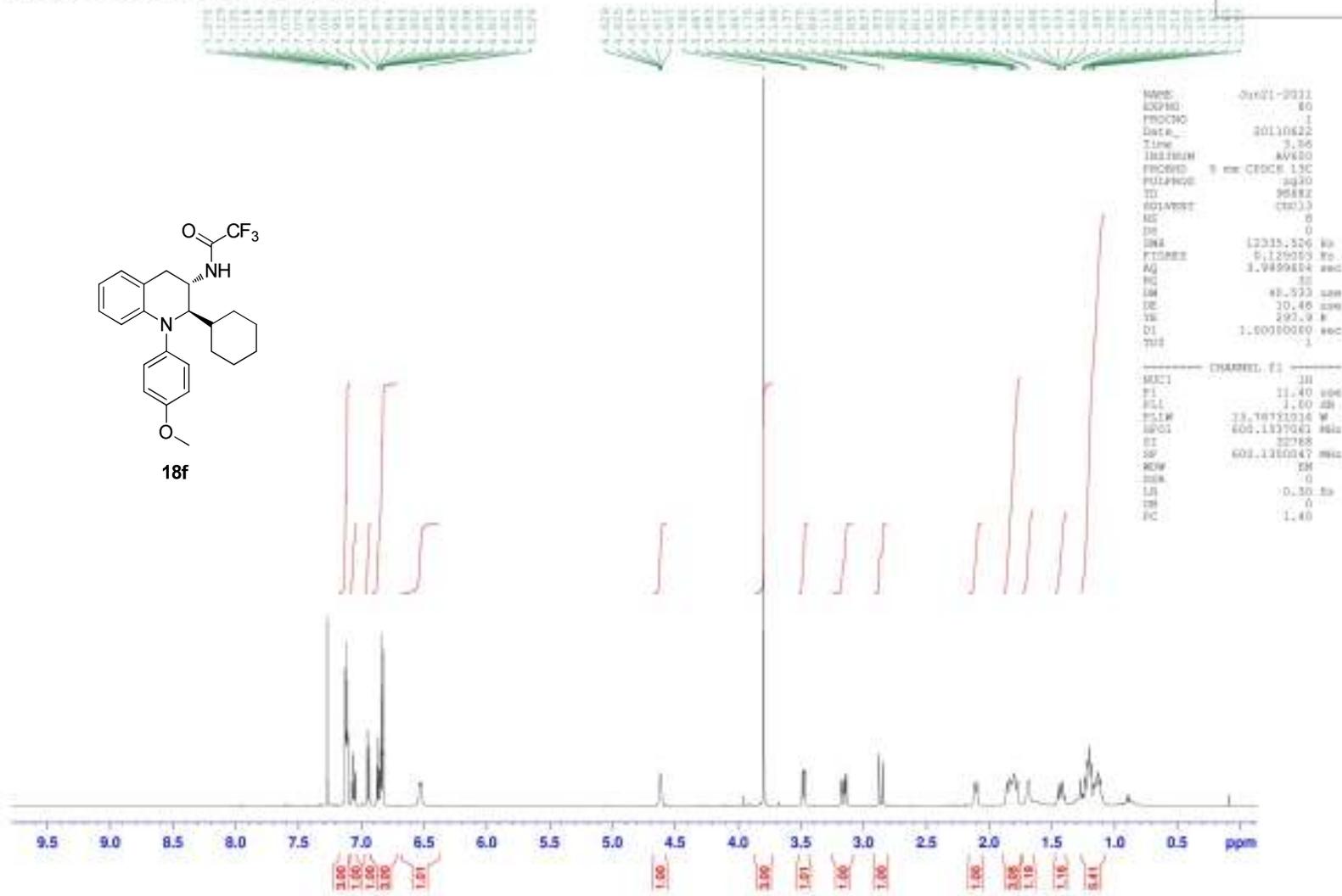
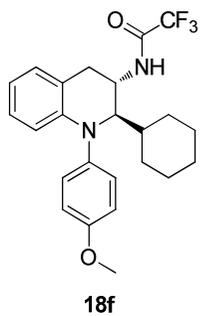
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	5.00 dB
PL12	19.7686177 W
SFO1	125.7610000 MHz

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PL14	25.76751724 W
PL15	0.32796138 W
PL16	0.17332926 W
SFO2	400.1424000 MHz
SI	32768
WF	104.9327830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN-GSK-87  
 PROTON.ucl CDCI3 (V:Bruker:TOPSPIN) jca 1

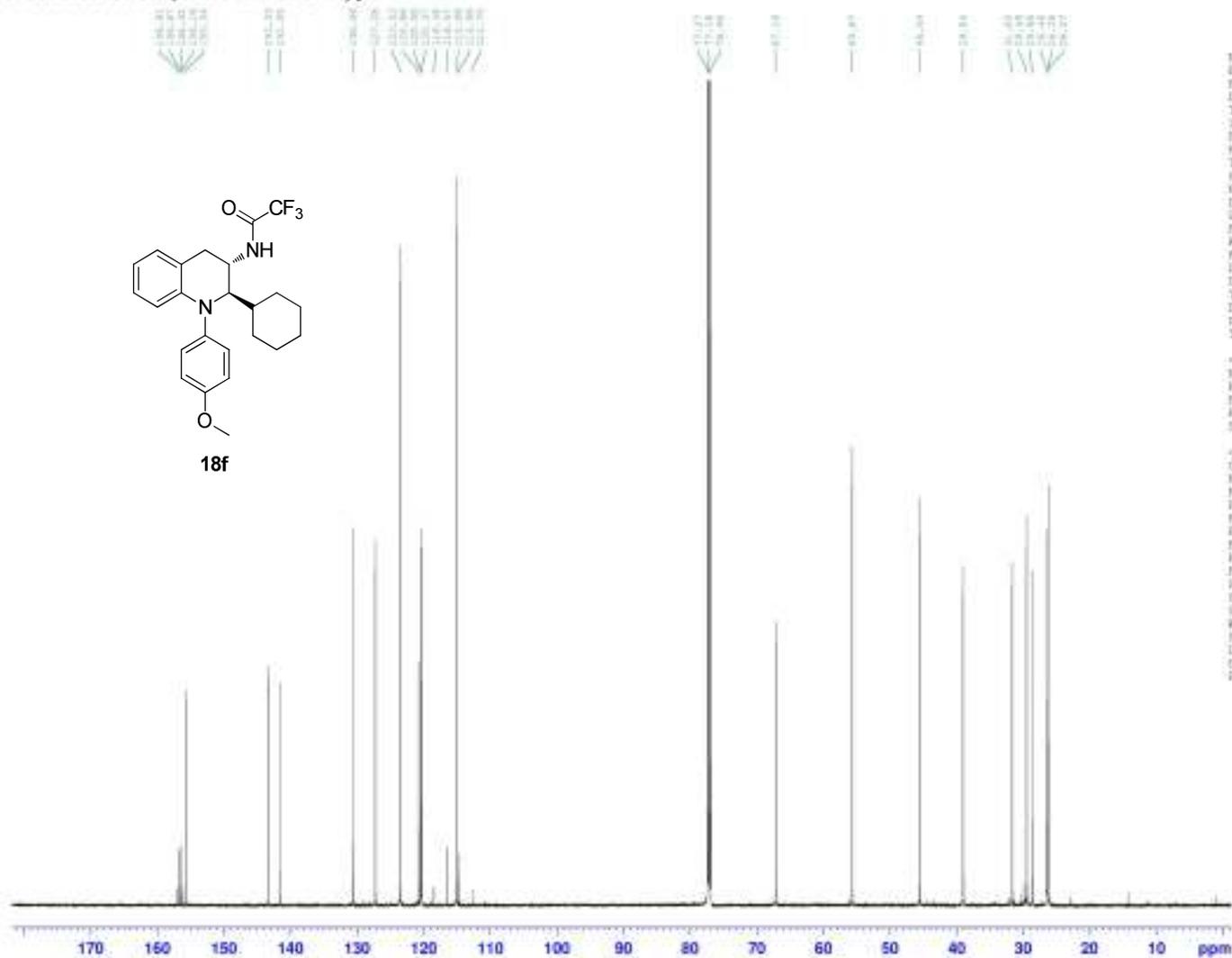
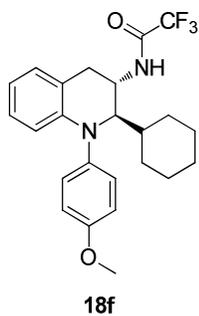


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NAME      Jca01-0011
EXPNO     80
PROCNO    1
Date_     20110622
Time      3.36
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES    0.125053 Hz
AQ         3.9499404 sec
RG         32
SQ         40.533 cm
DE         10.46 cm
TE         297.2 K
D1         1.0000000 sec
TMS       1
----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1W       19.7071014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437047 MHz
RG         65536
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40

```

AN-GSK-87  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Jan21-2011
EXPNO	82
F2PROCNO	1
DATE_	20110422
TIME	3.18
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ1	6.555991 Hz
AQ	0.8989824 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.8000000 sec
D11	0.1880000 sec
TD0	1

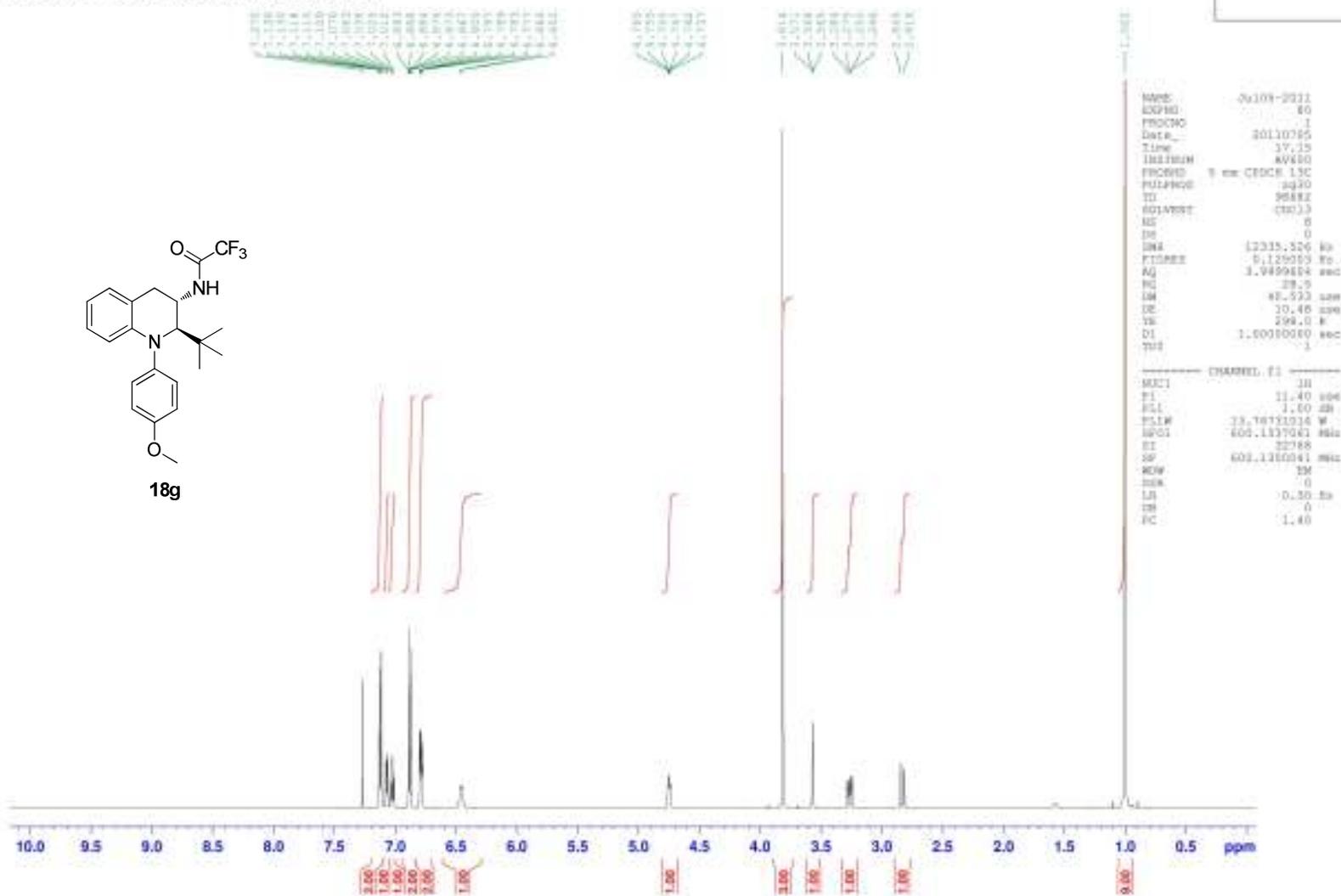
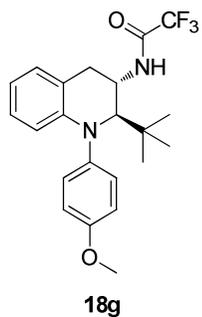
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	18.7686177 W
SFO1	101.921828 MHz

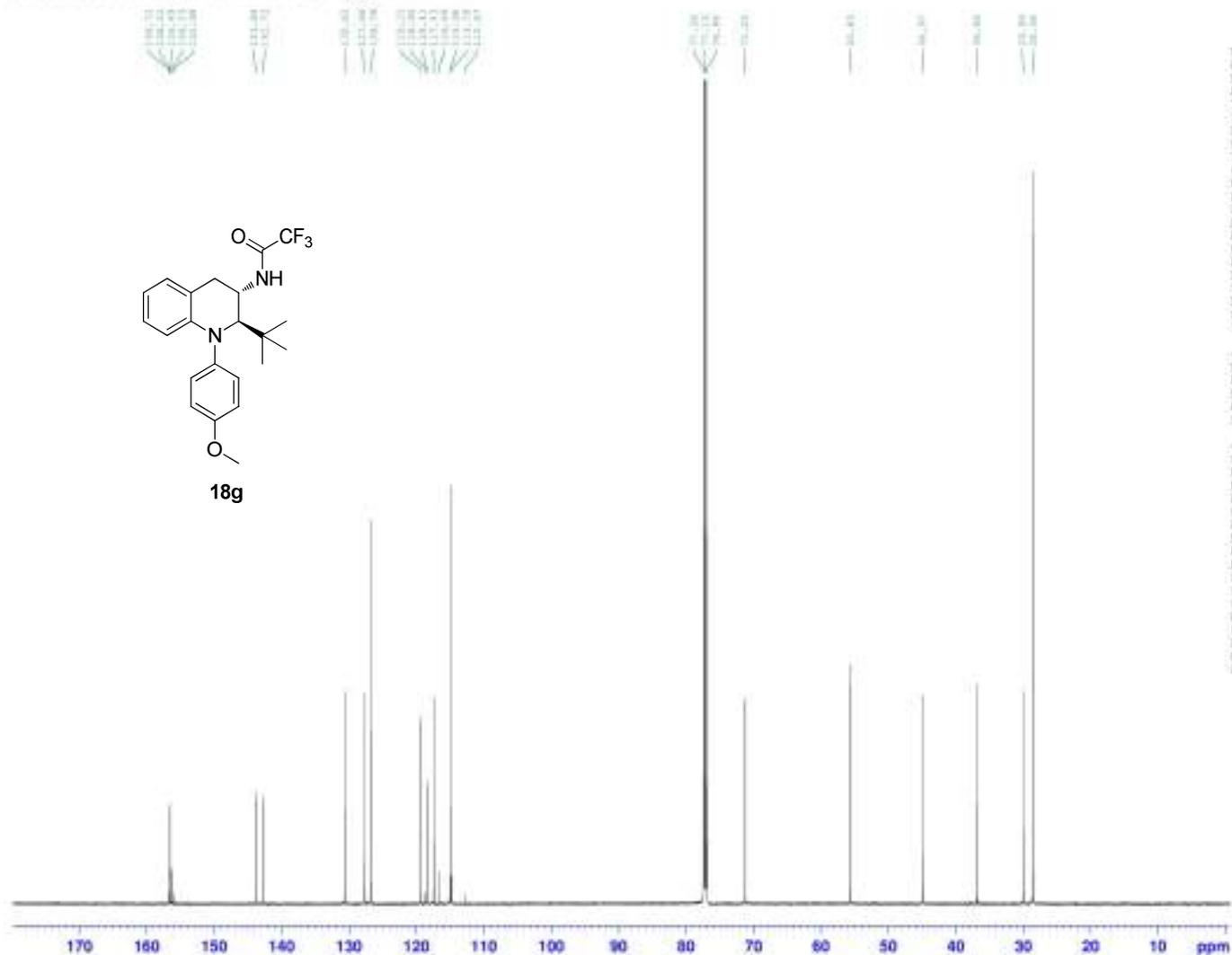
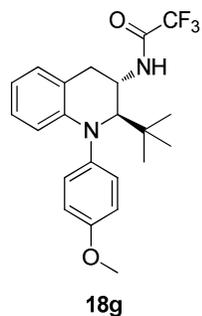
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.32786130 W
PL16	0.17332026 W
SFO2	601.1326040 MHz
SI	65336
RF	101.9217830 MHz
ROW	SM
ENR	0
LD	1.00 Hz
DR	0
DC	1.40

AN-GSK-66  
 PROTON.ucl CDCI3 (V.:Bruker:TOPSPIN) jca 1



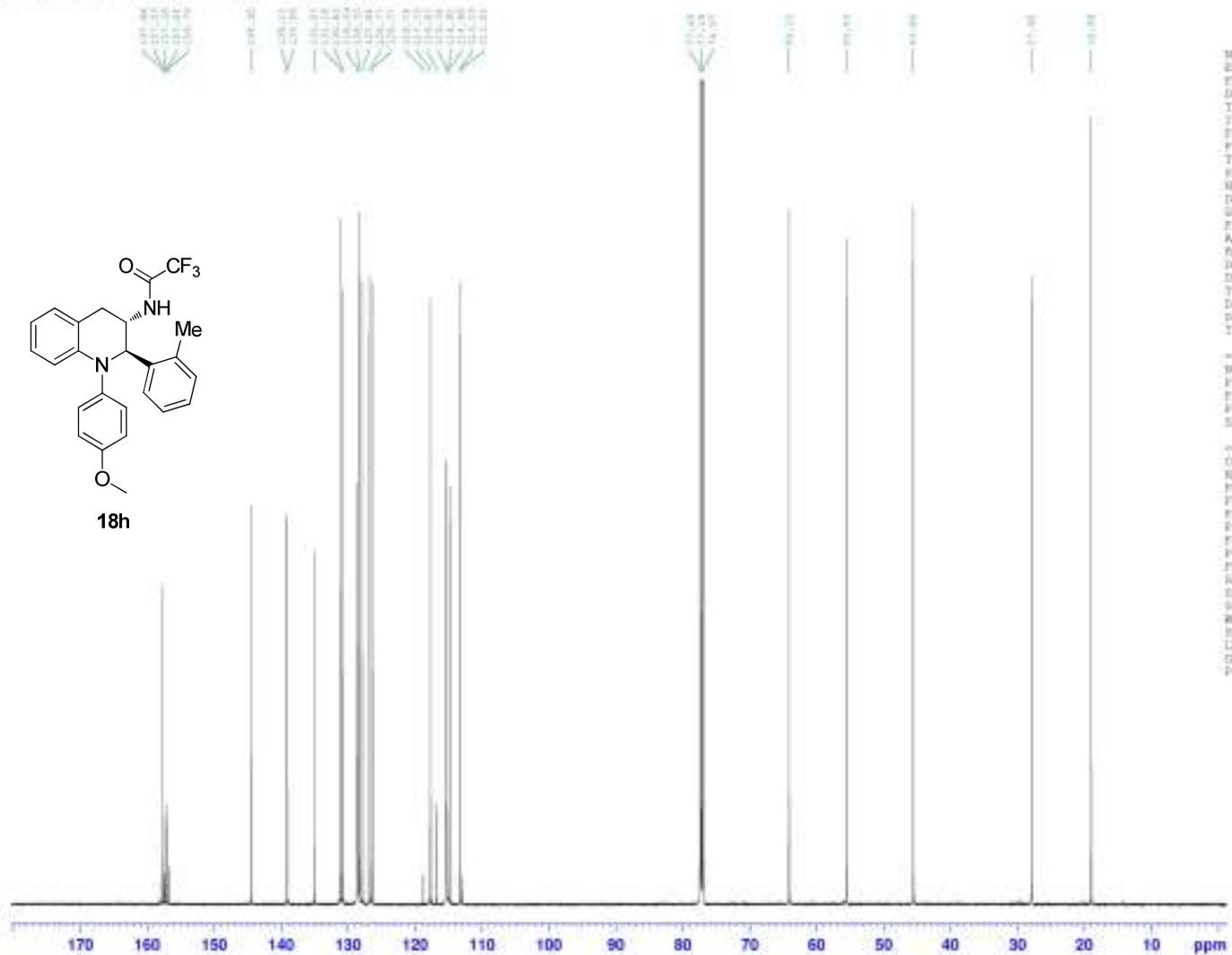
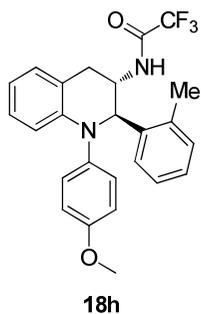
AN-GSK-66  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	24109-0111
EXPNO	02
F2PROCNO	1
DATE_	20110705
TIME	17.34
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10386
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625391 Hz
AQ	0.0000024 sec
RG	3270
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1
----- CHANNEL f1 -----	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
FLM1	26.7686177 W
SFO1	101.6253910 MHz
----- CHANNEL f2 -----	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.40 dB
PLM2	25.76751214 W
PLM1	0.32796130 W
PLM3	0.17332026 W
RFQ2	603.1326040 MHz
FI	65330
RF	304.9327830 MHz
ROW	SM
ENH	0
LD	1.00 Hz
DS	0
DC	1.40



AN522  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 5

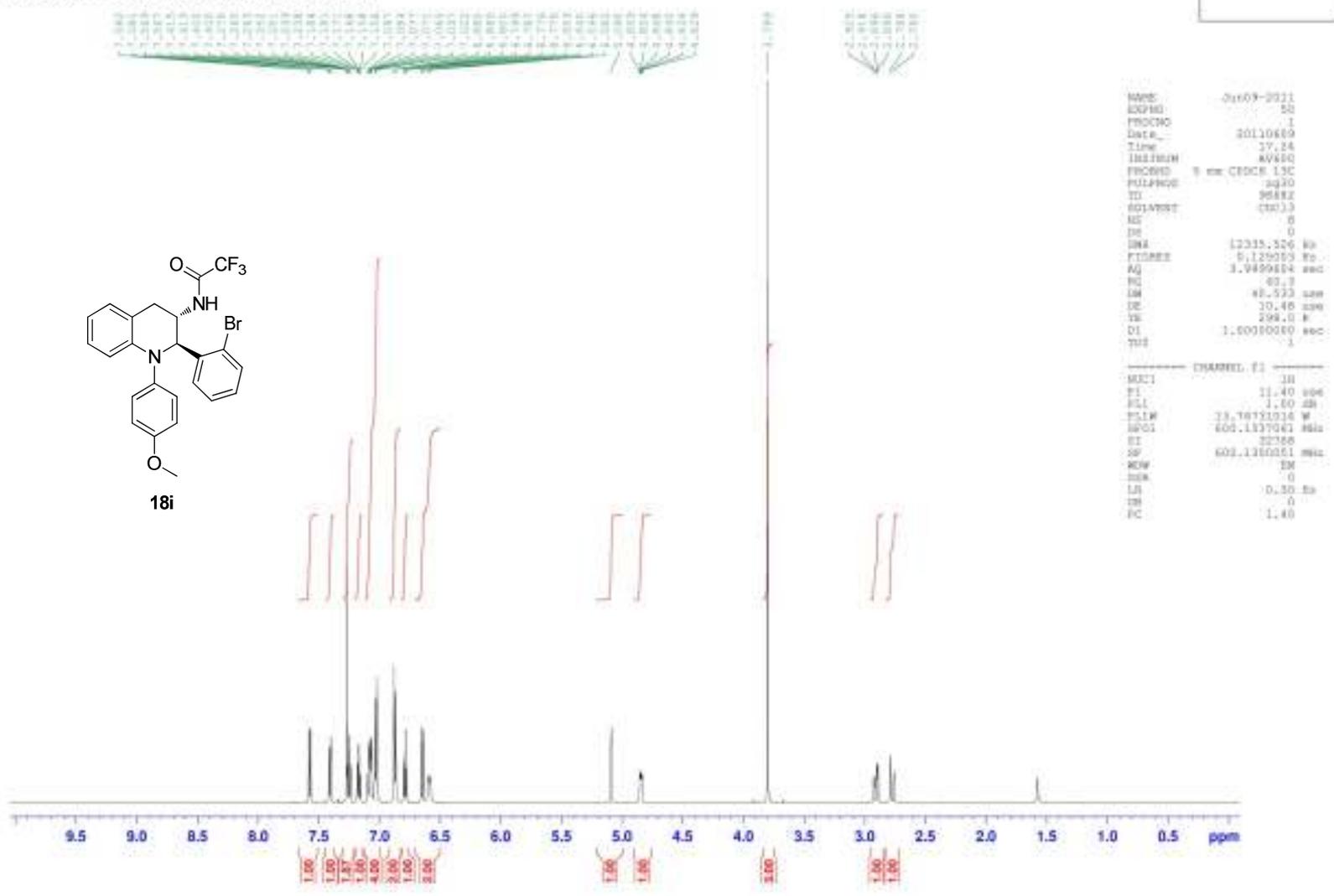


NAME	Asp18-0310
EXPNO	32
F2PROCNO	1
DATA_	40100818
Time	15.25
INSTRUM	AV650
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
SF	125.761
NUC1	13C
NUC2	13C
NUC3	13C
PCPDG	70.00 use
FL1	1.00 dB
FL2	17.23 dB
FL3	20.40 dB
FL4	25.76751724 W
FL5	0.32786138 W
FL6	0.17332926 W
RFQ2	603.1326028 994
E1	32768
SF	101.9327830 MHz
RCW	SM
ERF	0
LD	1.00 Hz
DS	0
DC	1.40

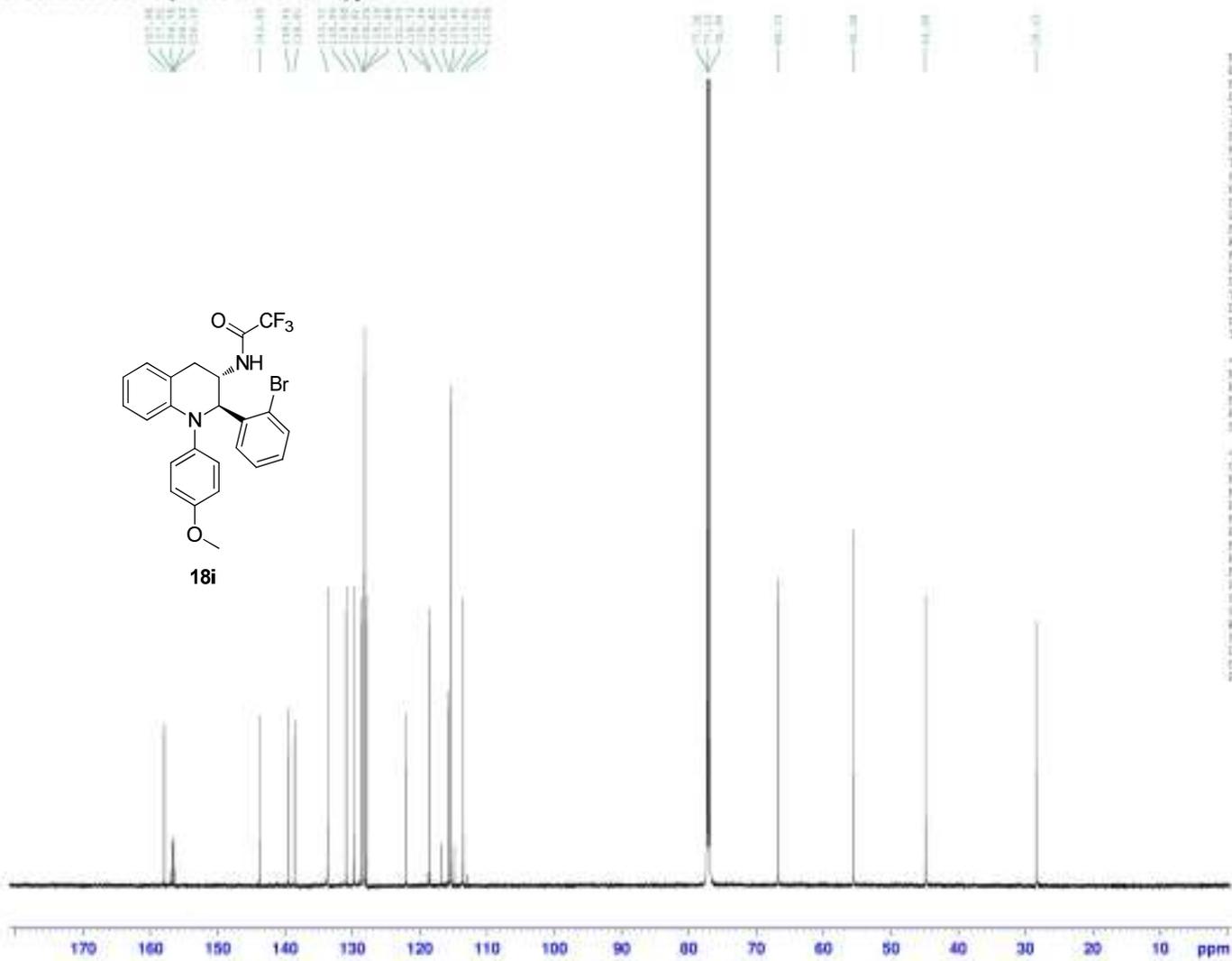
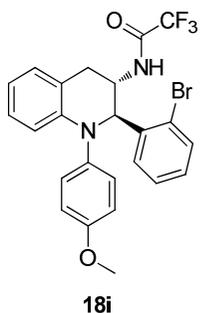
  

===== CHANNEL F1 =====	
NUC1	13C
FL	9.00 use
FL1	5.00 dB
FL2	26.76864177 W
SFO1	125.76176981 MHz
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPDG	70.00 use
FL2	1.00 dB
FL3	17.23 dB
FL4	20.40 dB
FL5	25.76751724 W
FL6	0.32786138 W
FL7	0.17332926 W
RFQ2	603.1326028 994
E1	32768
SF	101.9327830 MHz
RCW	SM
ERF	0
LD	1.00 Hz
DS	0
DC	1.40

AN-GSK-64  
 PROTON.ucl CDCI3 [V::Bruker:TOPSPIN] jca 1



AN-GSK-64  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Jca09-0121
EXPNO	52
F2PROCNO	1
DATE_	20110609
TIME	17.38
INSTRUM	AV650
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10356
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320
RT	0.999999999
ACQ	0.888888888 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 K
D1	2.80000000 sec
D11	0.888888888 sec
TD0	1

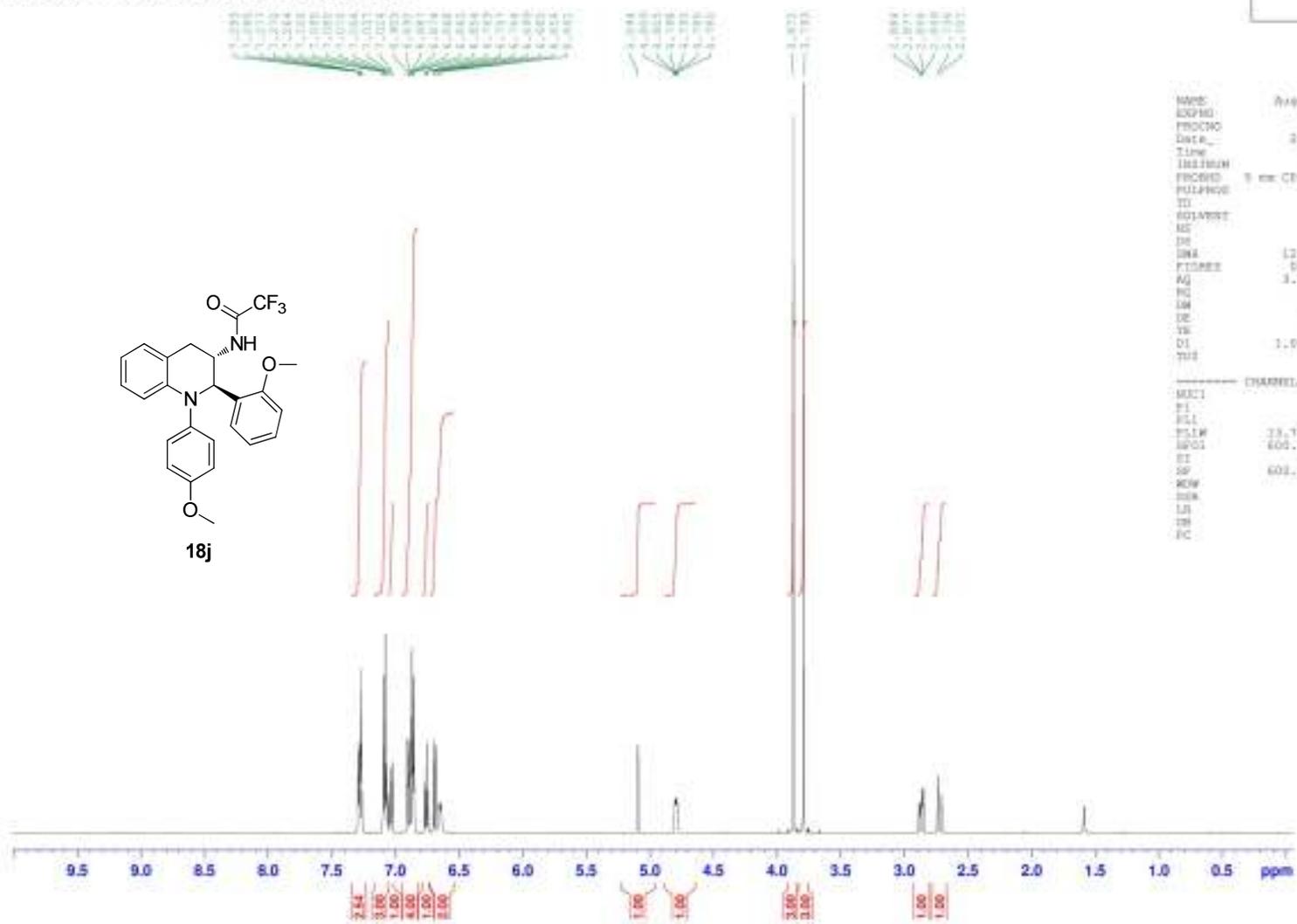
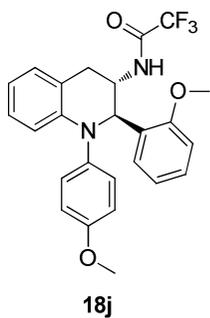
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.921828 MHz

===== CHANNEL F2 =====	
NUC2	13C
FL2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.7675124 W
PL16	0.32586138 W
PL17	0.17332926 W
SFO2	601.1326268 MHz
SI	65336
SF	101.9217830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN524  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 36



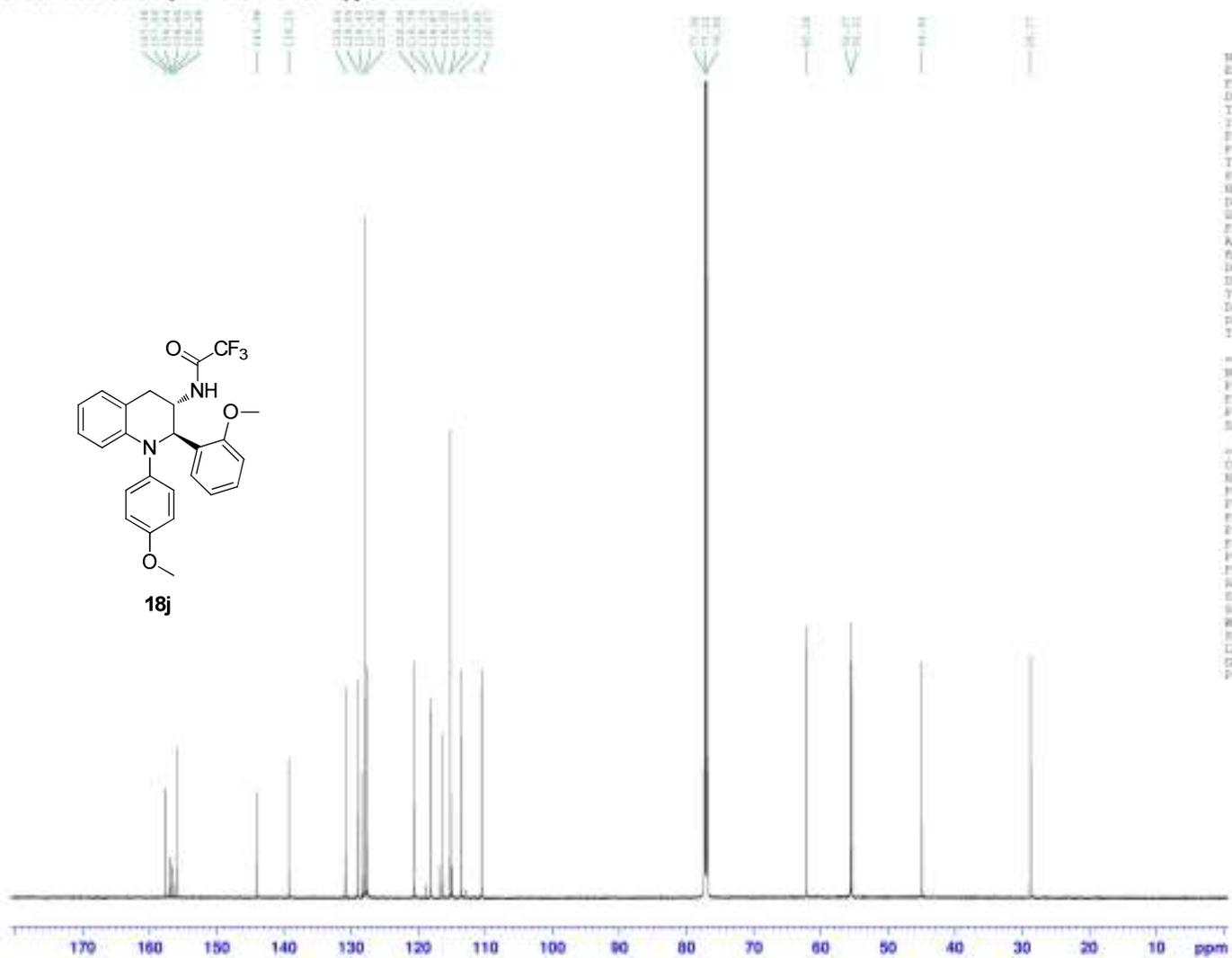
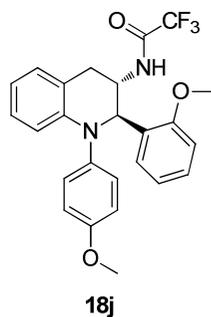
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NAME      Ave17-2010
EXPNO     30
PROCNO    1
Date_     20160817
Time      19.00
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         36882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         32
DQ         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.60000000 sec
TMS        1
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1P       19.7671014 W
SFO1       602.137041 MHz
F1         327.68
SF         602.137044 MHz
RGW        EM
SOL         0
DS         0.30 usec
TE         0
PC         1.40
  
```

AN524  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 3



NAME	Asp17-2010
EXPNO	21
F2PROCNO	1
DATE_	20110818
TIME	1.20
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.143
MS	256
DS	0
SWH	16017.401 Hz
F2FREQ	101.625197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

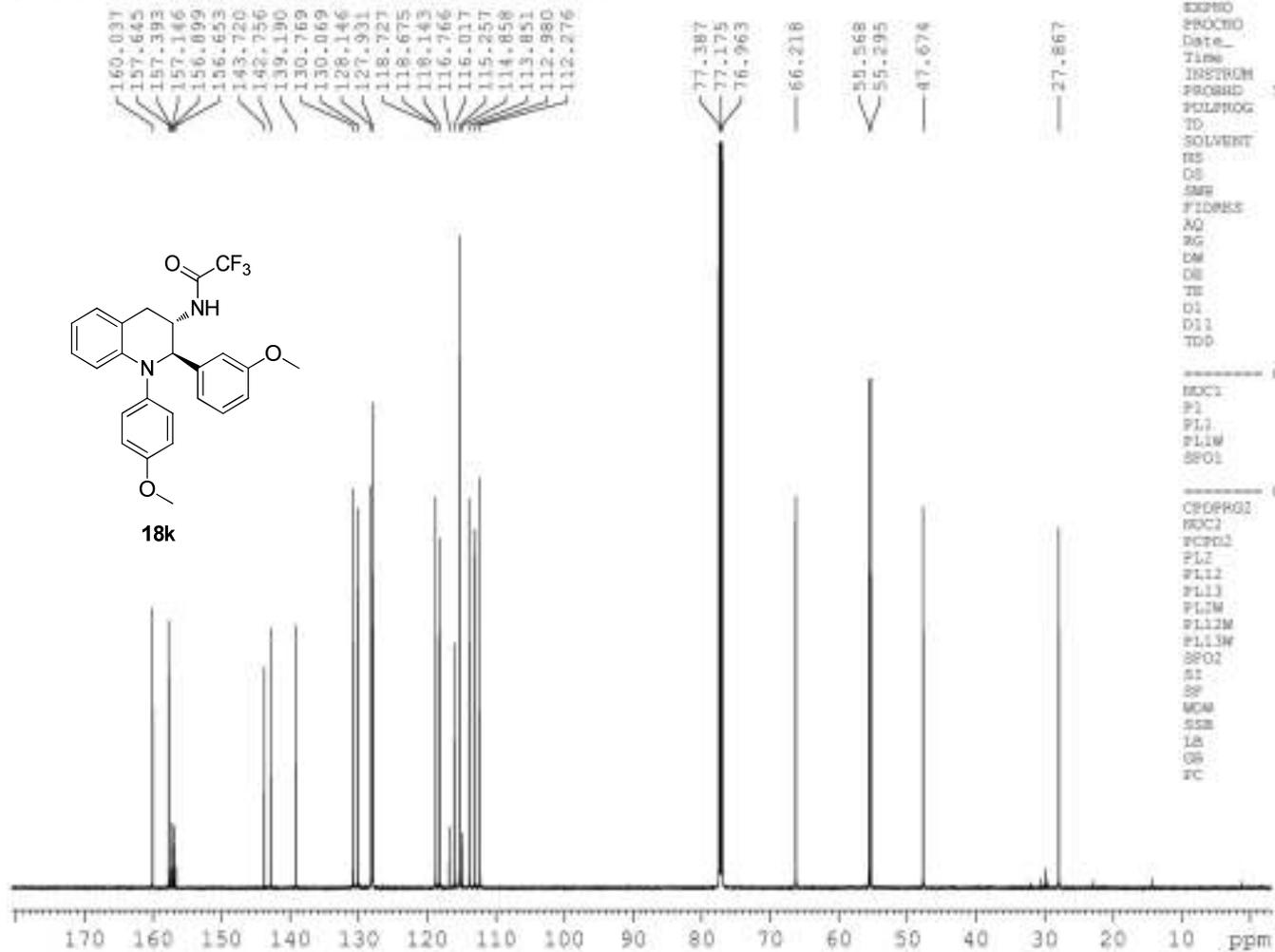
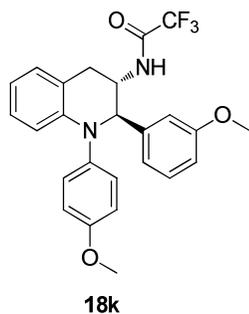
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	20.00 dB
SFO1	101.625197 MHz

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB



AN697  
 C13CPD.ucl CDC13 (V:\Bruker\TOPSPIN) jca 25



NAME	400
EXPNO	12
PROCNO	1
Date_	20110421
Time	14.20
INSTRUM	AV500
PROBHD	5 mm CPDCH 13C
PULPROG	zgpg30
TD	70308
SOLVENT	CDC13
NS	64
DS	0
SWH	33042.500 Hz
FIDRES	0.555591 Hz
AQ	0.8999924 sec
RG	1030
DM	12.800 usec
DE	21.12 usec
TE	298.0 K
D1	2.00000000 sec
D11	0.03000000 sec
TDD	1

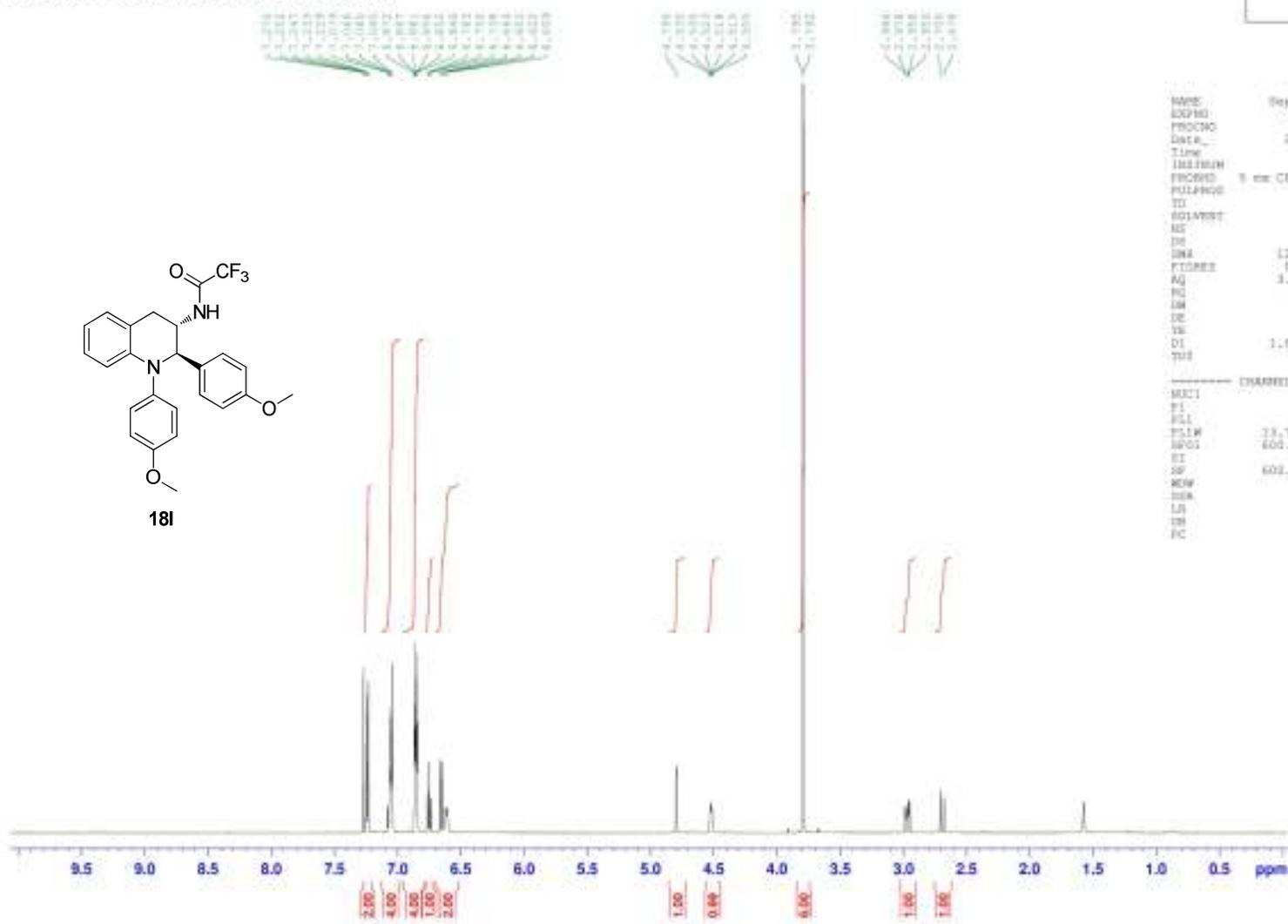
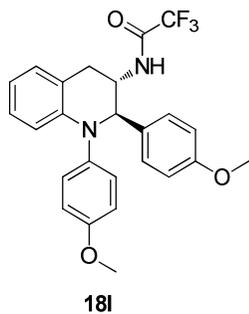
  

----- CHANNEL F1 -----	
NUC1	13C
P1	3.80 usec
PL1	3.00 dB
PLW	26.76886177 W
SFO1	150.9201628 MHz

----- CHANNEL F2 -----	
CPDPRG2	waltz16
NUC2	1H
PCPD2	30.00 usec
PL2	1.00 dB
PL12	17.21 dB
PL13	20.00 dB
PL1W	13.78731014 W
PL12W	0.32798135 W
PL13W	0.17332016 W
SFO2	400.1324003 MHz
SI	65536
SF	150.9017930 MHz
WCM	EM
SSB	0
LB	1.00 Hz
GB	0
TC	1.40

AN542  
 PROTON.ucf CDCI3 [C:\Bruker\TOPSPIN] jca 1

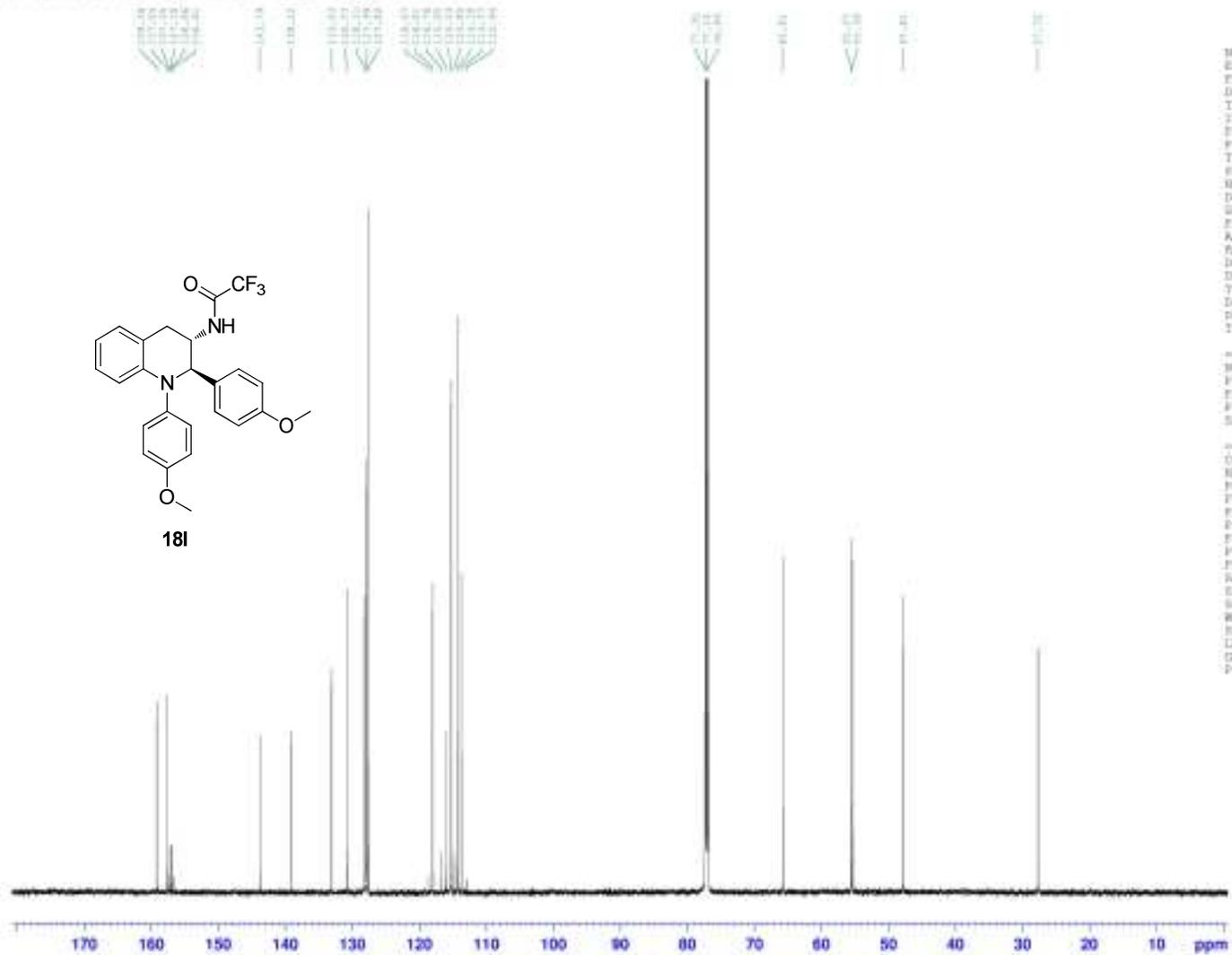
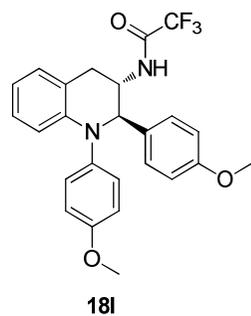


```

NAME      Sep01-2010
EXPNO     30
PROCNO    1
Date_     20100902
Time      14.18
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499404 sec
RG         32
DQ         40.533 usec
DE         10.46 usec
TE         298.2 K
D1         1.6000000 sec
TD0        1

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1PW     18.7671014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437041 MHz
RGW        EM
RGW        0
RGW        0
L1         0.30 Hz
RG         0
PC         1.40
  
```

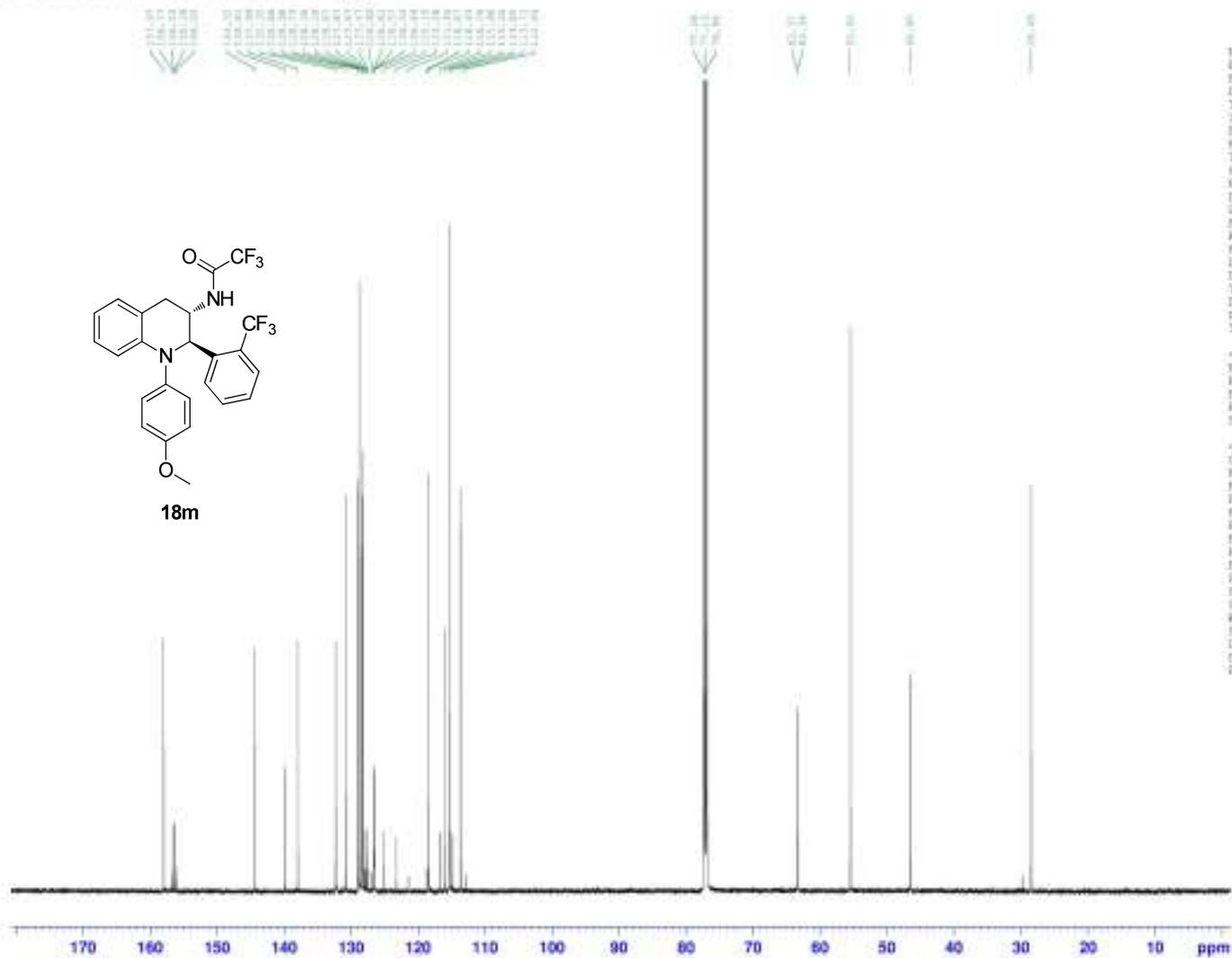
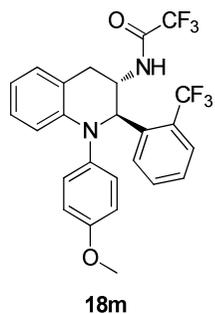
AN542  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1



NAME	Seq02-0310
EXPNO	32
F2PROCNO	1
DATA_	40100982
Time	14.30
INSTRUM	AV650
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
DC	0
SCALED	1
RES	0.00000000
RES2	0.00000000
RES3	0.00000000
RES4	0.00000000
RES5	0.00000000
RES6	0.00000000
RES7	0.00000000
RES8	0.00000000
RES9	0.00000000
RES10	0.00000000
RES11	0.00000000
RES12	0.00000000
RES13	0.00000000
RES14	0.00000000
RES15	0.00000000
RES16	0.00000000
RES17	0.00000000
RES18	0.00000000
RES19	0.00000000
RES20	0.00000000
RES21	0.00000000
RES22	0.00000000
RES23	0.00000000
RES24	0.00000000
RES25	0.00000000
RES26	0.00000000
RES27	0.00000000
RES28	0.00000000
RES29	0.00000000
RES30	0.00000000
RES31	0.00000000
RES32	0.00000000
RES33	0.00000000
RES34	0.00000000
RES35	0.00000000
RES36	0.00000000
RES37	0.00000000
RES38	0.00000000
RES39	0.00000000
RES40	0.00000000
RES41	0.00000000
RES42	0.00000000
RES43	0.00000000
RES44	0.00000000
RES45	0.00000000
RES46	0.00000000
RES47	0.00000000
RES48	0.00000000
RES49	0.00000000
RES50	0.00000000
RES51	0.00000000
RES52	0.00000000
RES53	0.00000000
RES54	0.00000000
RES55	0.00000000
RES56	0.00000000
RES57	0.00000000
RES58	0.00000000
RES59	0.00000000
RES60	0.00000000
RES61	0.00000000
RES62	0.00000000
RES63	0.00000000
RES64	0.00000000
RES65	0.00000000
RES66	0.00000000
RES67	0.00000000
RES68	0.00000000
RES69	0.00000000
RES70	0.00000000
RES71	0.00000000
RES72	0.00000000
RES73	0.00000000
RES74	0.00000000
RES75	0.00000000
RES76	0.00000000
RES77	0.00000000
RES78	0.00000000
RES79	0.00000000
RES80	0.00000000
RES81	0.00000000
RES82	0.00000000
RES83	0.00000000
RES84	0.00000000
RES85	0.00000000
RES86	0.00000000
RES87	0.00000000
RES88	0.00000000
RES89	0.00000000
RES90	0.00000000
RES91	0.00000000
RES92	0.00000000
RES93	0.00000000
RES94	0.00000000
RES95	0.00000000
RES96	0.00000000
RES97	0.00000000
RES98	0.00000000
RES99	0.00000000
RES100	0.00000000



AN-GSK-62  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Jan18-2021
EXPNO	52
F2PROCNO	1
DATE_	20110420
Time	14.34
INSTRUM	AV650
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	10388
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320
RT	0.00000000
ACQ	0.00000000 sec
RG	1024
DM	12.860 um
DE	21.30 um
YC	298.0 K
D1	2.00000000 sec
D11	0.00000000 sec
TD0	1

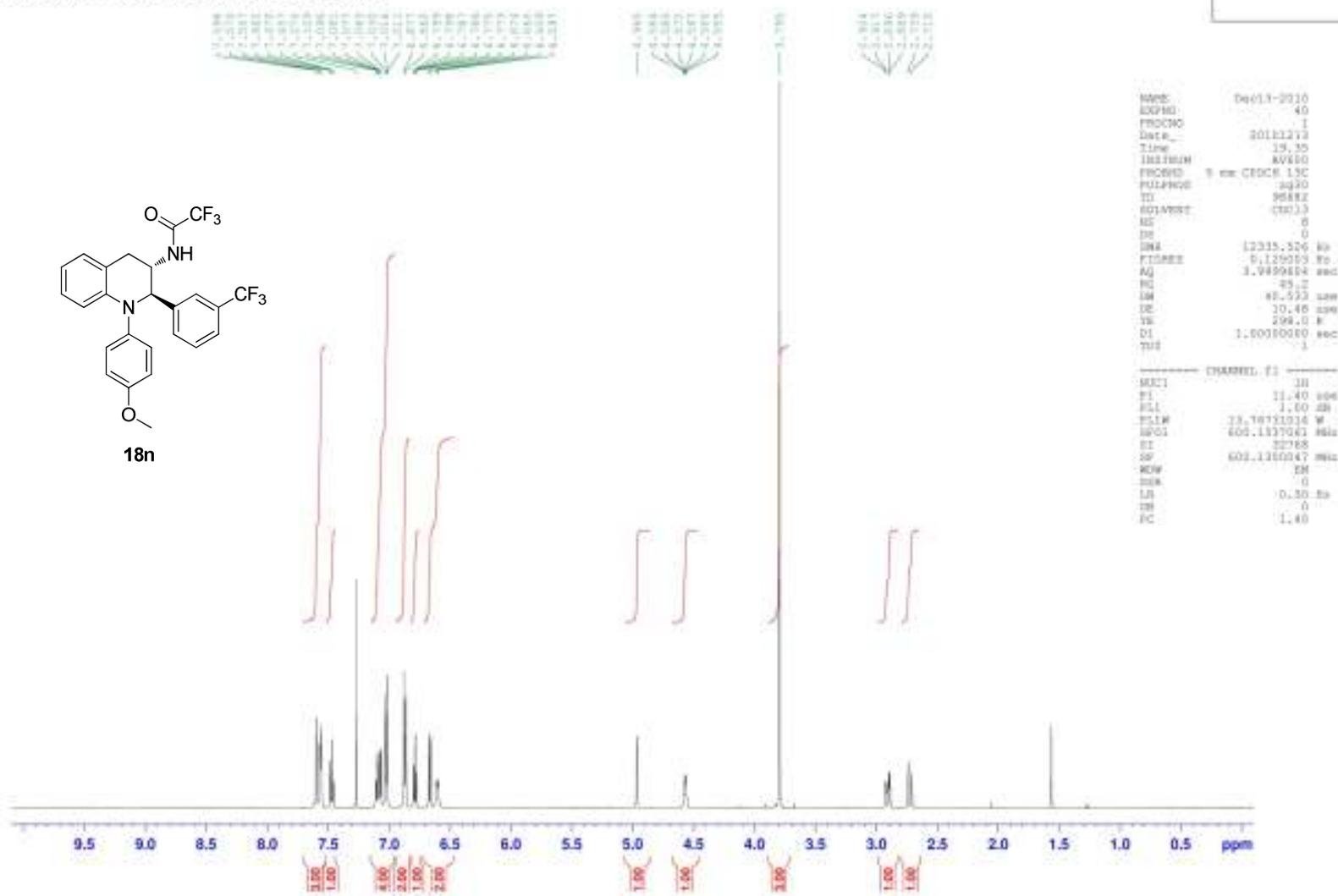
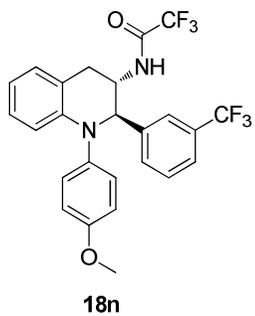
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761828 MHz

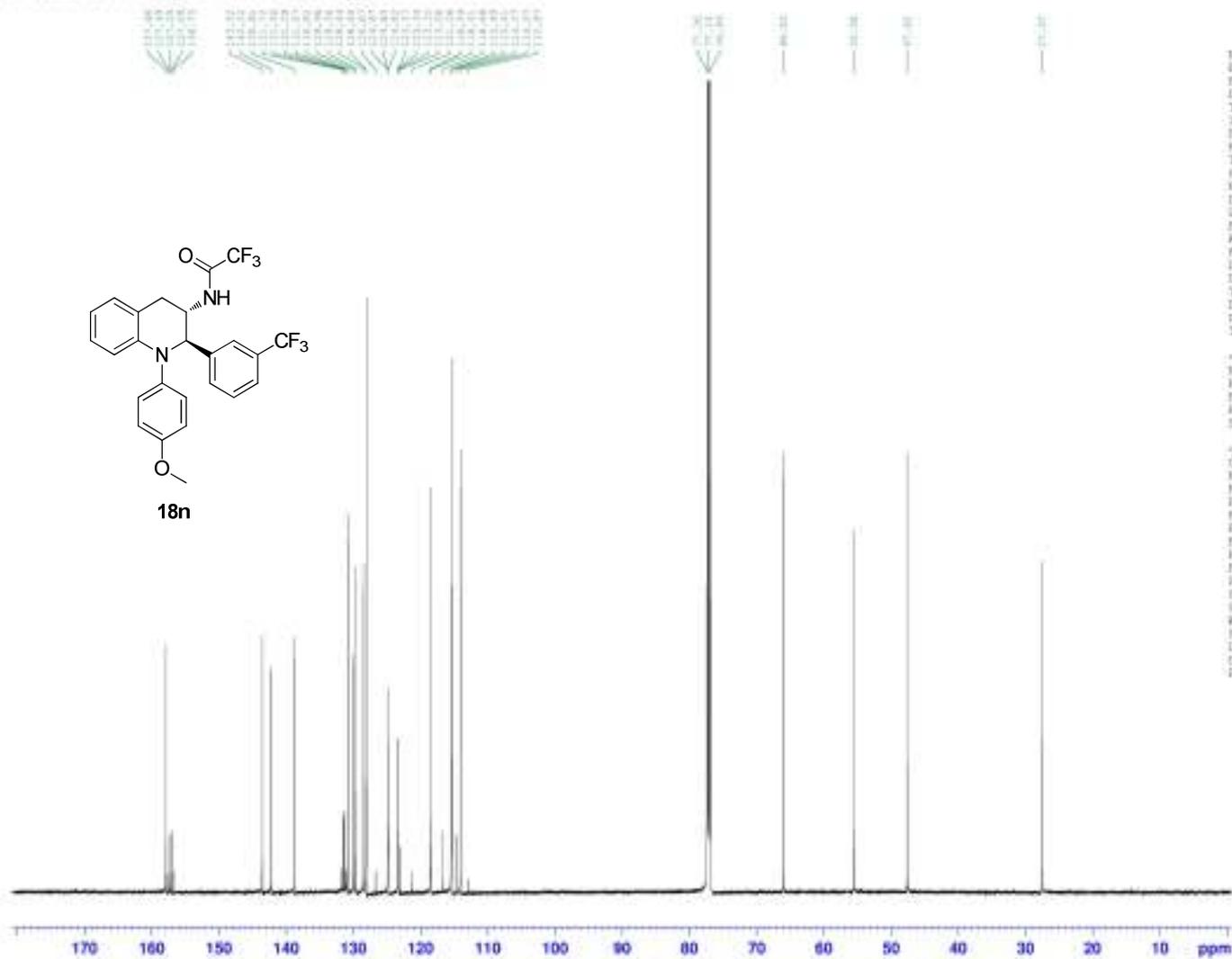
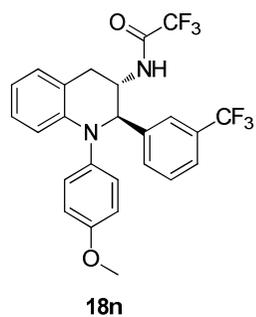
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.00000000 W
PL16	0.17332026 W
SFO2	400.1326020 MHz
SI	65536
SF	101.9027830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN691  
PROTON.ucl CDCI3 (C:\Bruker\TOPSPIN) jca 2



AN691  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2

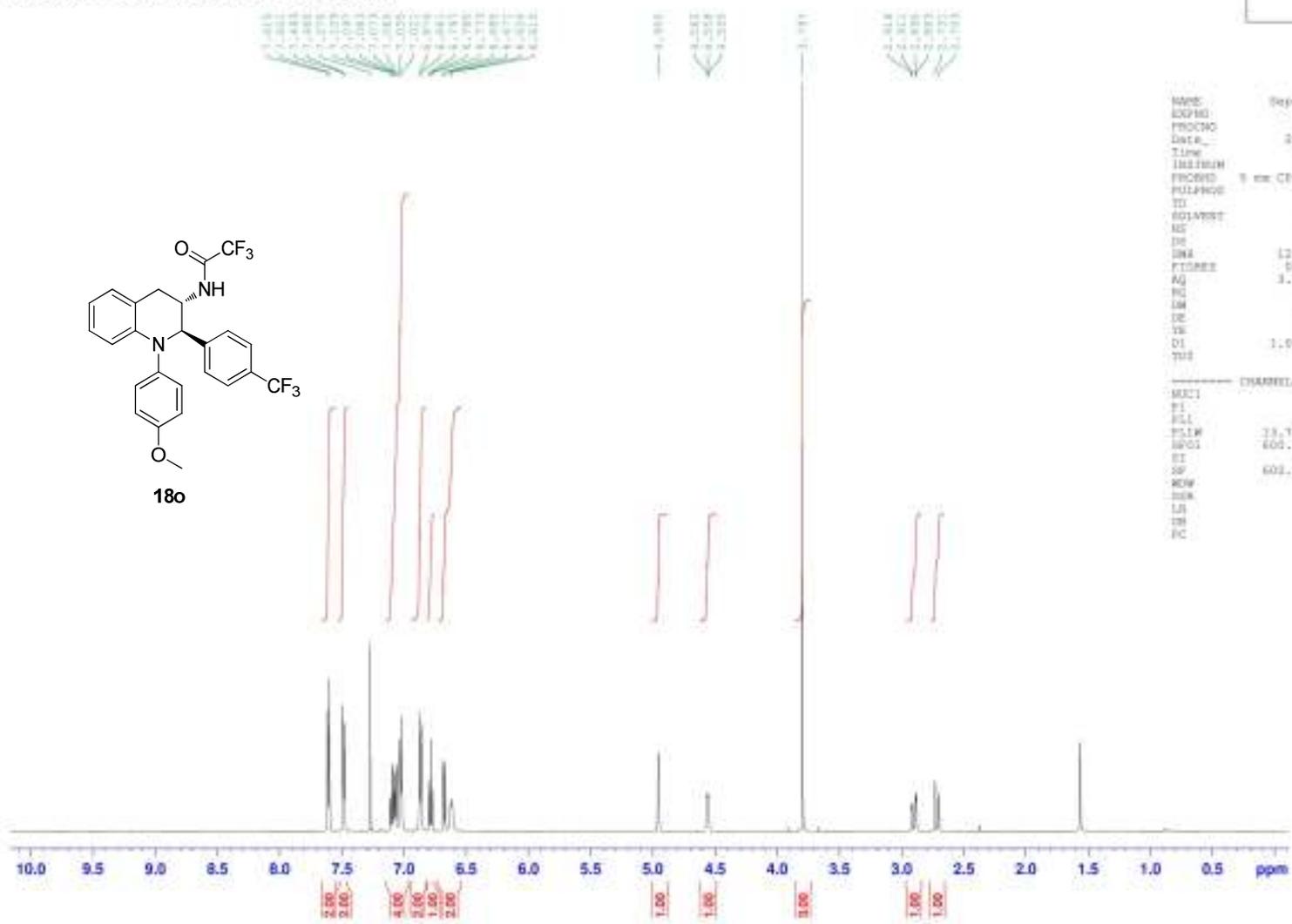
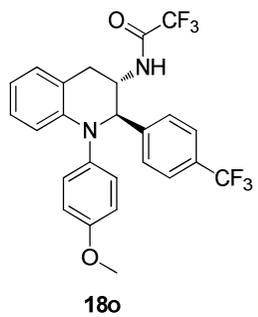


NAME	Dacl3-0310
EXPNO	42
F2PROCNO	1
DATE_	20181223
TIME	15.54
INSTRUM	AV650
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65526
SF	125.761
WDW	EM
SSB	0
LB	3.00
GB	0
PC	1.40
RG	32768
RF	104.9327830 MHz
REC	EM
ERR	0
LD	1.00 Hz
DS	0
DC	1.40

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 MHz
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7617830 MHz
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 MHz
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32796130 W
PL16	0.17332926 W
SFO2	400.1326126 MHz

AN560  
 PROTON.ucf CDCI3 (C:Bruker:TOPSPIN) jca 1

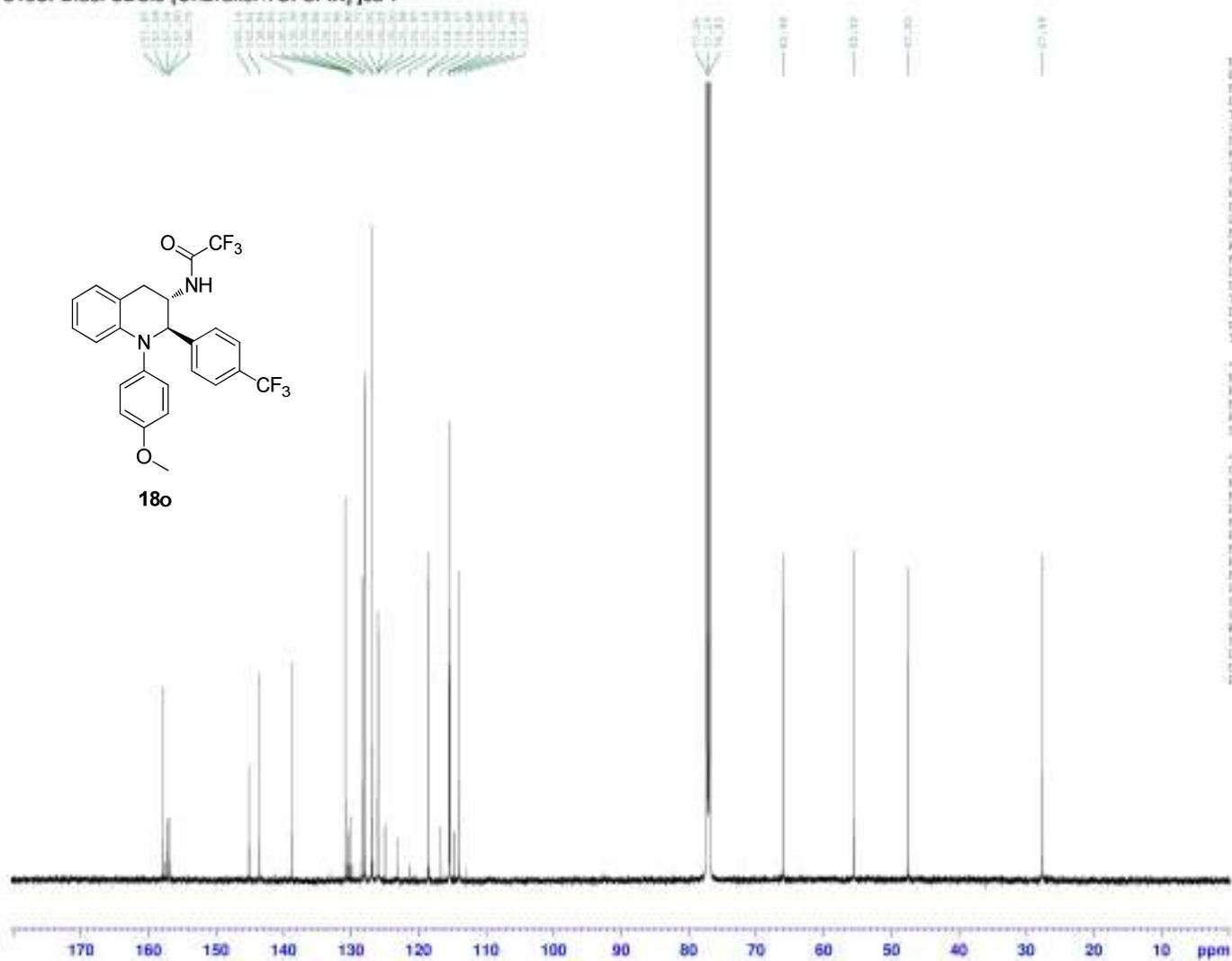
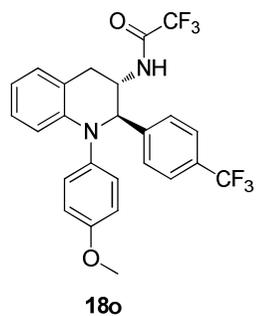


NAME	09p00-0010
EXPNO	50
PROCNO	1
Date_	20160330
Time	18.05
INSTRUM	AV400
PROBHD	5 mm CBOCH 13C
PULPROG	zg30
TD	96882
SOLVENT	CDCl3
NS	6
DS	0
SWH	12315.326 kHz
FIDRES	0.125053 Hz
AQ	3.9499464 sec
RG	49.2
Ww	42.533 ssw
DE	10.46 ssw
WE	294.2 Hz
D1	1.60000000 sec
TD0	1

----- CHANNEL f1 -----	
MU1	3H
F1	11.40 MHz
SL1	1.00 dB
PL1W	23.7471014 W
RFQ1	602.1337041 MHz
FI	227.68
OP	602.1330046 MHz
MCW	EM
MSK	0
LS	0.30 Hz
TR	0
PC	1.40

AN560  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1

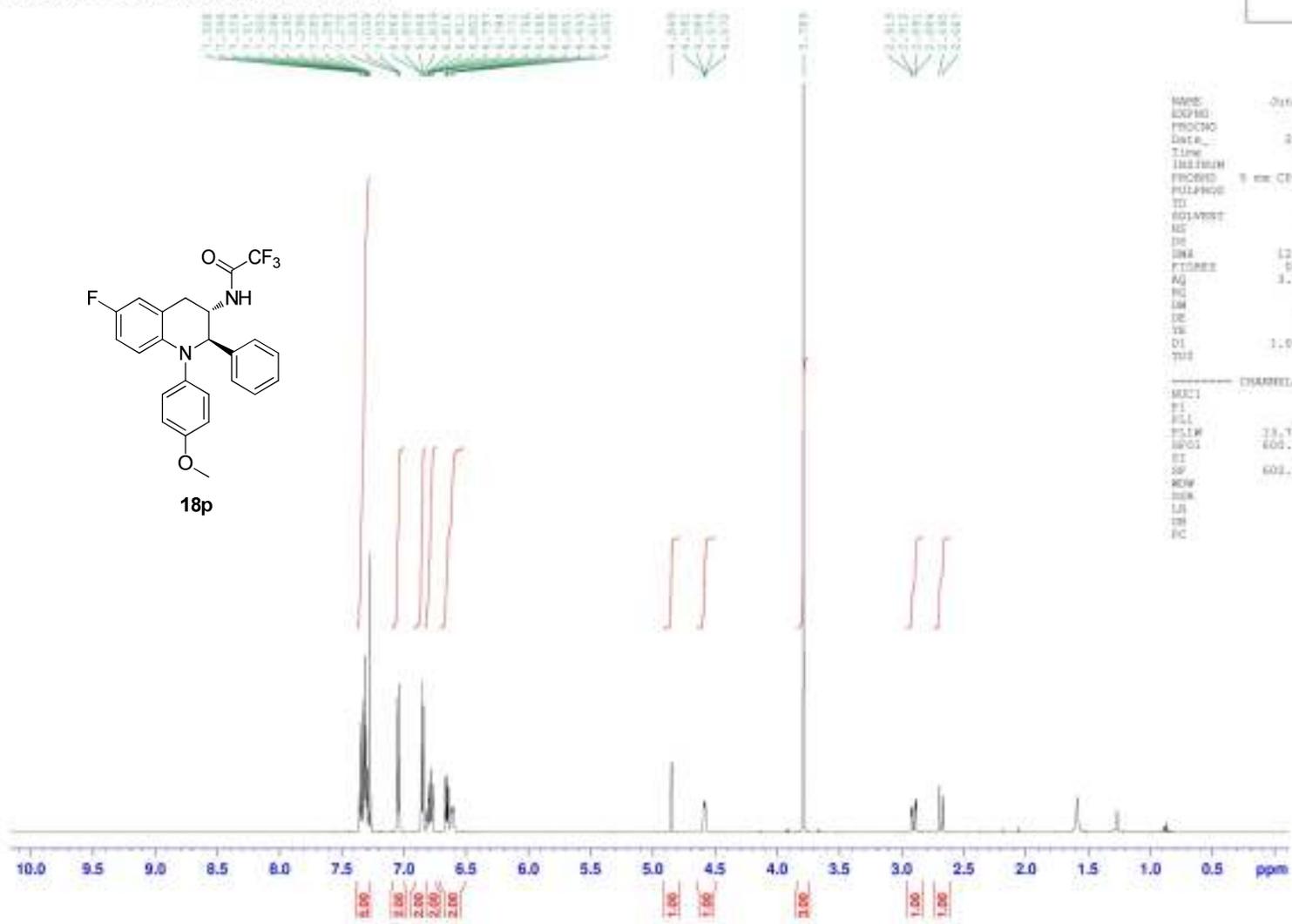
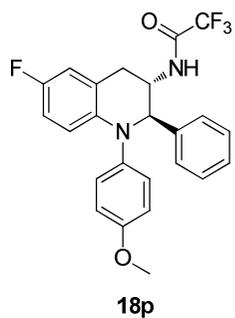


NAME	Seq01-0120
EXPNO	32
F2PROCNO	1
DATE_	20180320
TIME	15.24
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00
GB	0
PC	1.40
RG	32768
RF	101.9327830 MHz
REX	0
LD	1.00 Hz
DS	0
DC	1.40

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 MHz
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7617830 MHz
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 MHz
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.76751724 W
PL16	0.32786138 W
PL17	0.17332926 W
SFO2	400.1326126 MHz
SI	32768
SF	101.9327830 MHz
REX	0
LD	1.00 Hz
DS	0
DC	1.40

AN696  
 PROTON.ucf CDCI3 [V.:Bruker:TOPSPIN] jca 1



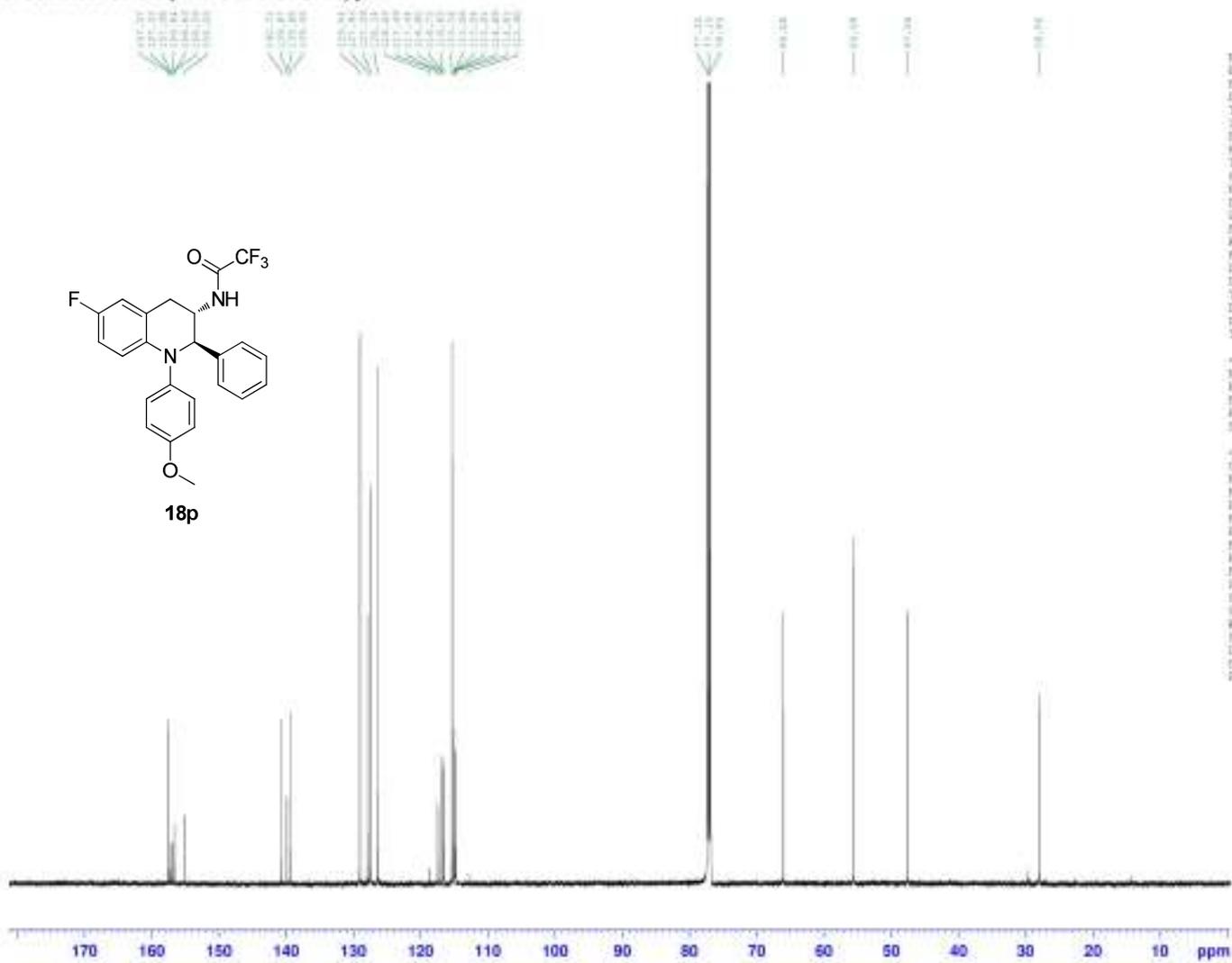
```

NAME      -Jca01-2011
EXPNO     130
PROCNO    1
Date_     20110422
Time      26.39
INSTRUM   AV600
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI        36882
SOLVENT   CDCl3
NS        6
DS        0
SWH       12315.326 Hz
FIDRES    0.125053 Hz
AQ        3.9499464 sec
RG        49.2
WDW       EM
SSB       0
GB        0
PC        10.46 use
SC        294.0 K
D1        1.60000000 sec
TD1       1
  
```

```

----- CHANNEL f1 -----
NUC1      1H
P1        11.40 use
PL1       1.00 dB
PS1W      23.7471014 W
SFO1      602.137041 MHz
SI        32768
SF        602.136040 MHz
RGW       EM
SOLVENT   0
NS        0
DS        0
PC        0.30 use
SC        1.40
  
```

AN696  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Jan22-0111
EXPNO	132
F2PROCNO	1
DATE_	20110622
TIME	17.27
INSTRUM	AV640
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
DELTA	0.0043
DS	1.28
DSB	0
SWH	30012.560 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	3070
DM	12.000 um
DE	21.30 um
YC	298.0 #
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

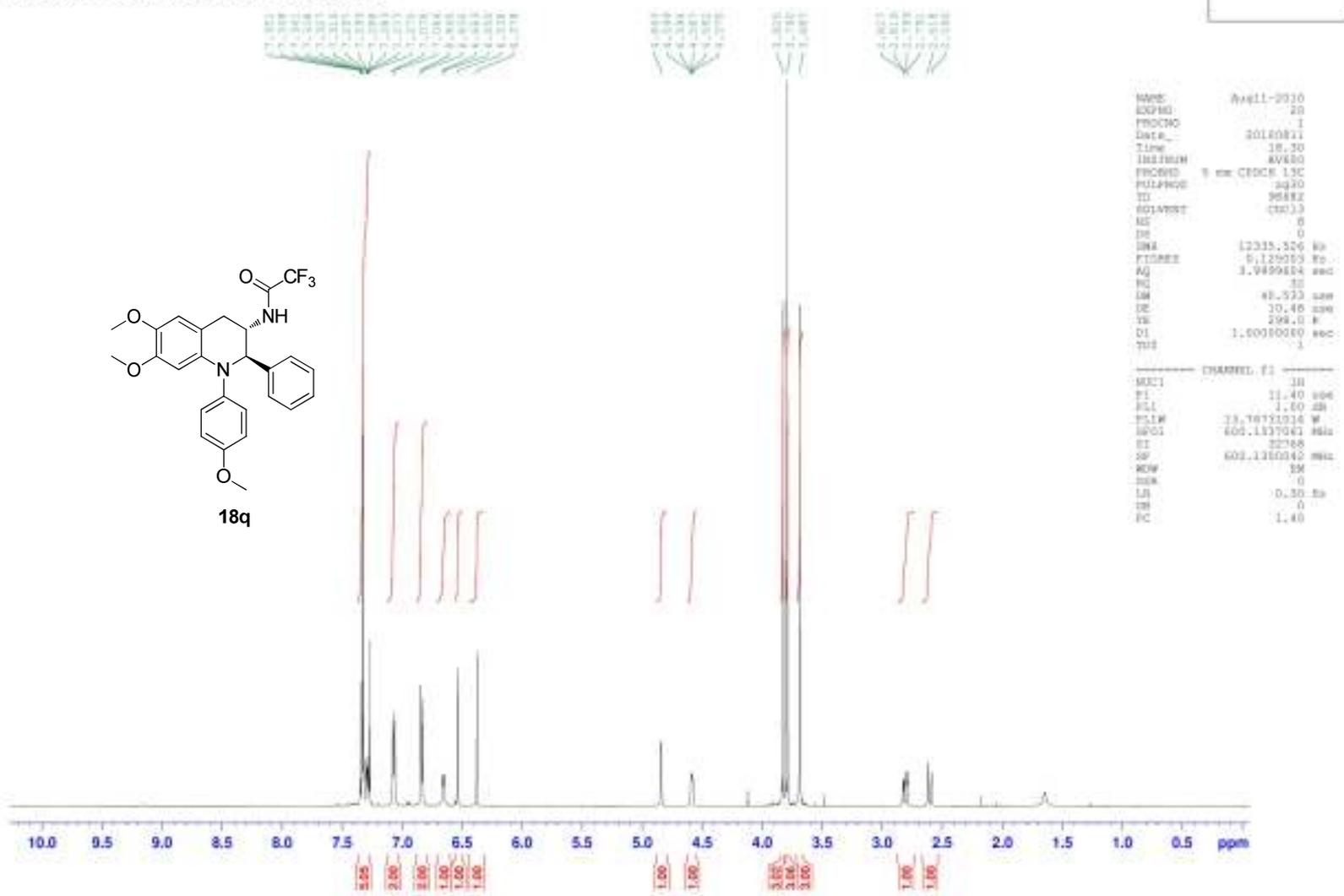
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL12	18.70886177 W
SFO1	101.6251828 MHz

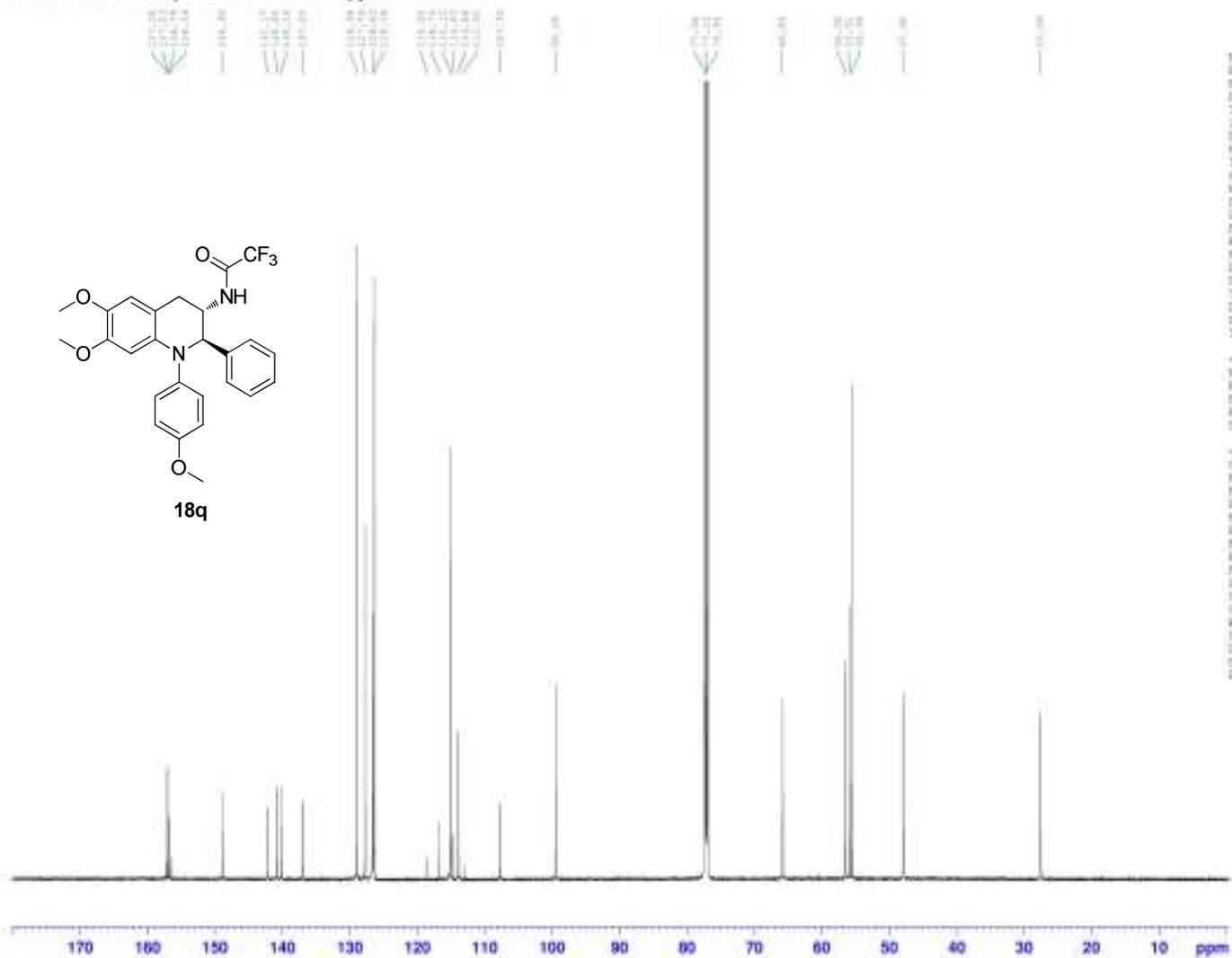
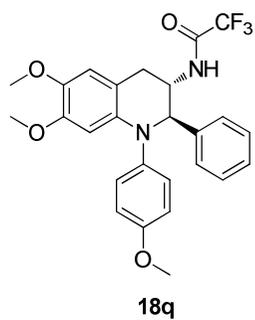
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.76751724 W
PL16	0.32796130 W
PL17	0.17332926 W
RFQ2	603.1326040 MHz
SI	65336
RF	301.9327830 MHz
RCW	EM
RR	0
LD	1.00 Hz
DR	0
DC	1.40

AN518  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 21



AN518  
C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



NAME	Asp07-0110
EXPNO	22
F2PROCNO	1
DATE_	20100909
TIME	17.12
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

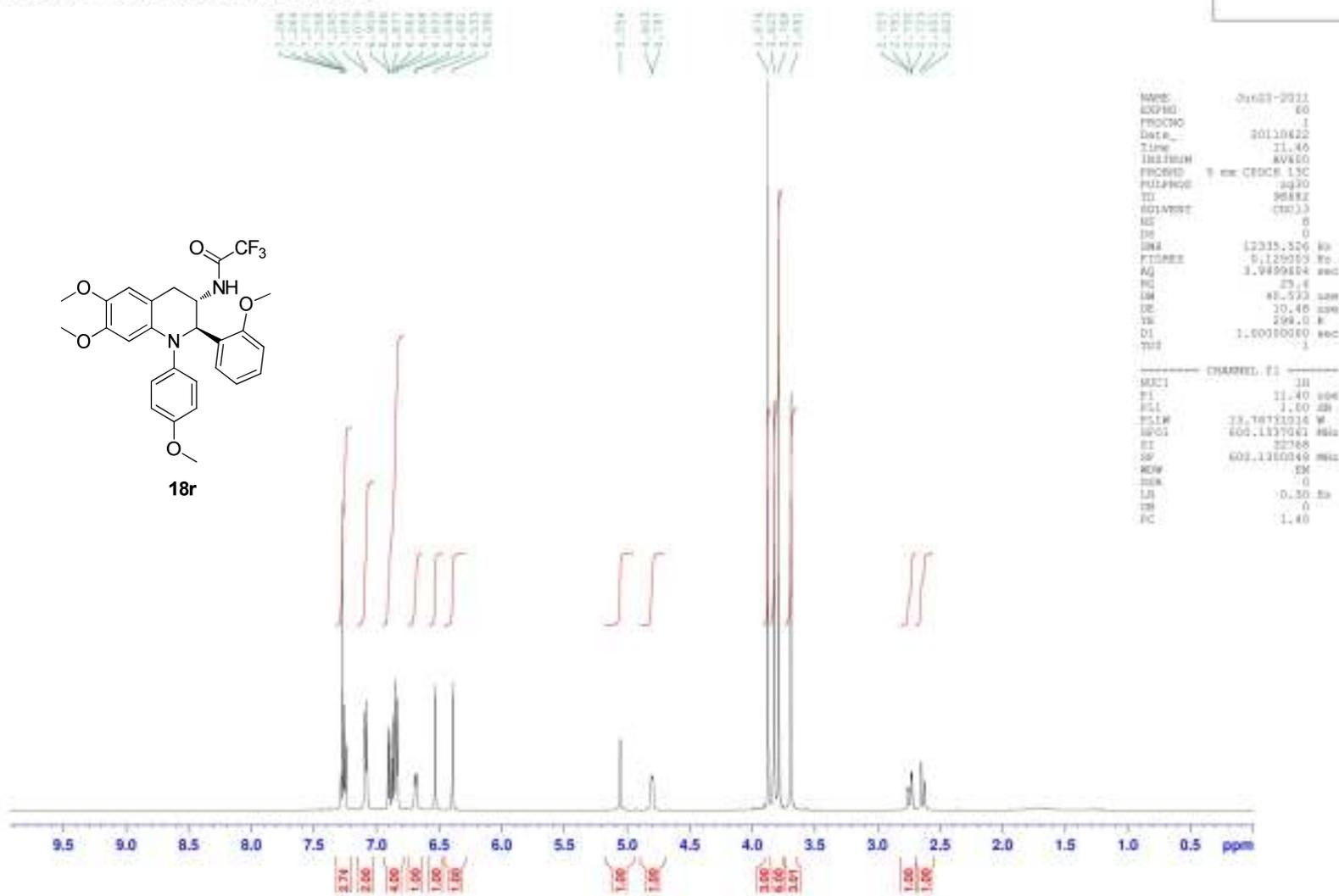
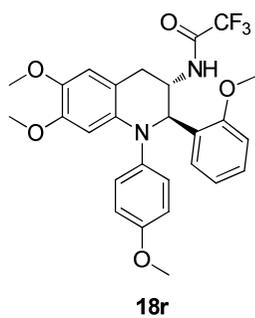
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.7610000 MHz

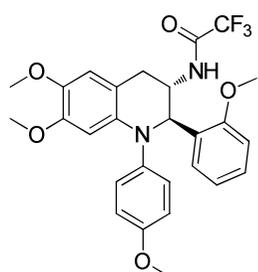
  

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 um
PL14	20.00 um
PL15	25.7675124 W
PL16	0.32796130 W
PL17	0.17332926 W
SFO2	400.1326100 MHz
SI	32768
SF	101.9027830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

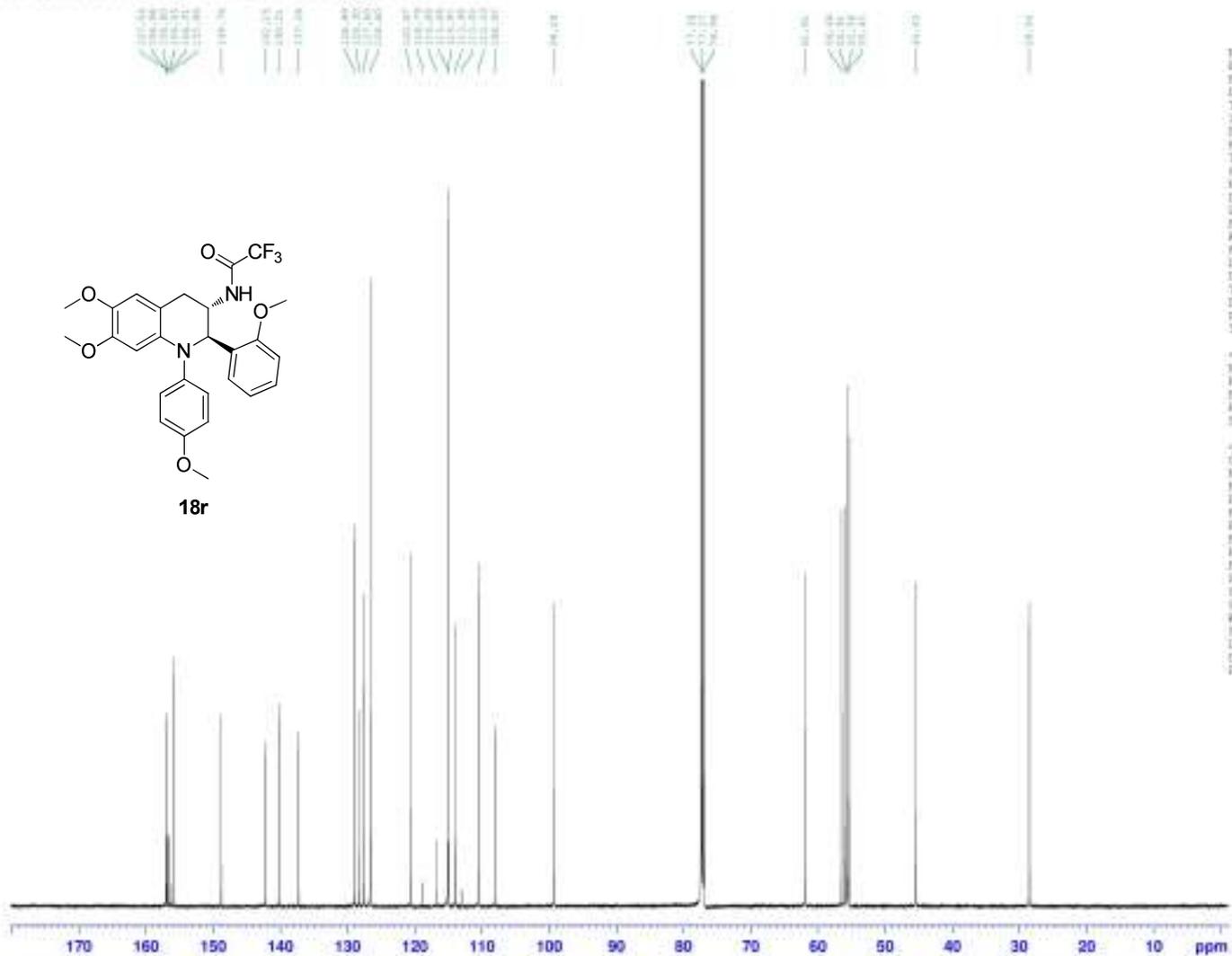
AN714  
 PROTON.ucl CDCI3 (V.:Bruker:TOPSPIN) jca 2



AN714  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 2

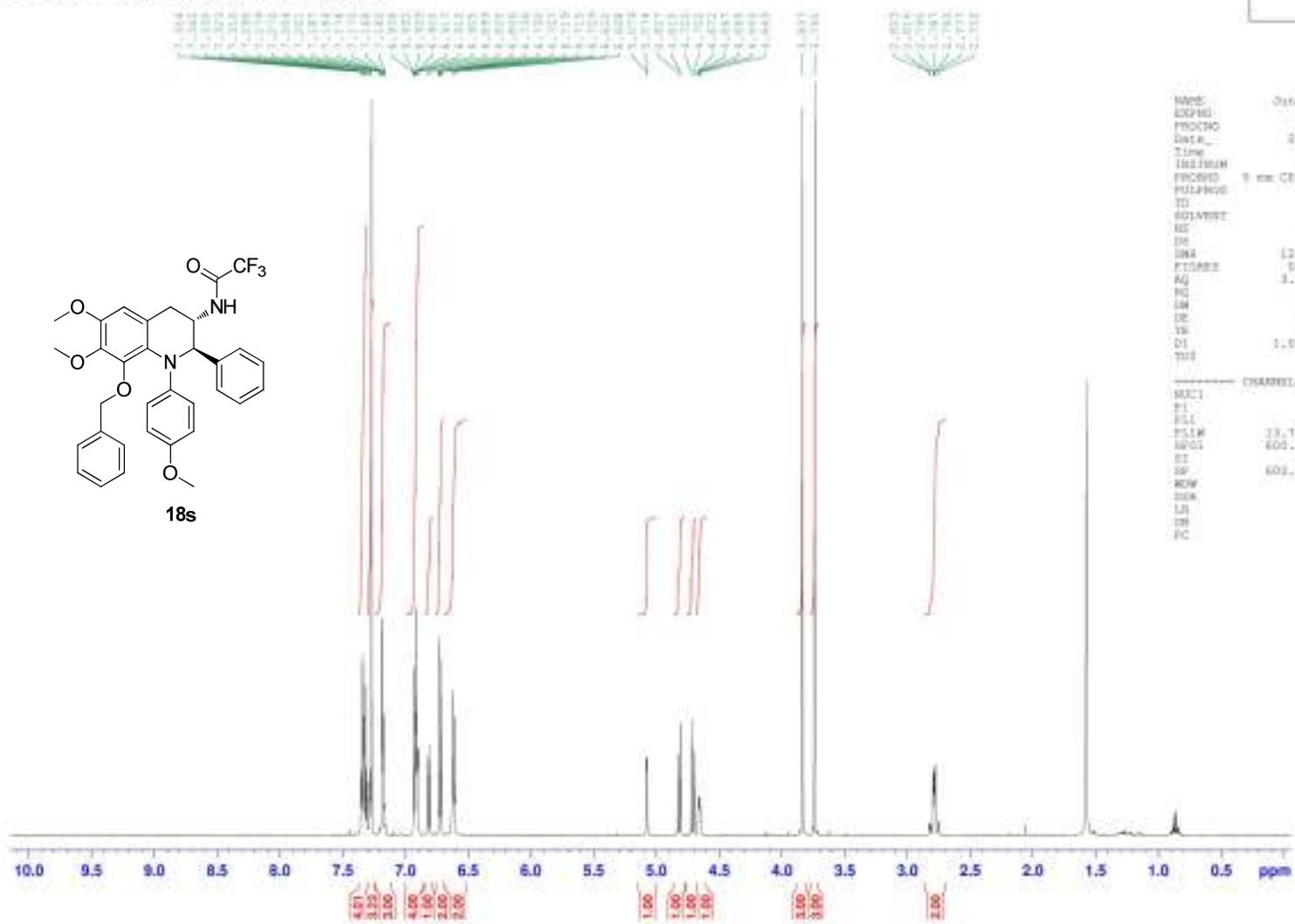
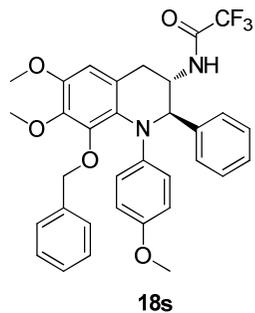


18r



NAME	Jan22-0111
EXPNO	42
F2PROCNO	1
DATE_	20110622
TIME	12.59
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
DELTA	0.00000000
DELTA2	0.00000000
DE	0
DM	30012.500 Hz
F2FREQ	101.625391 Hz
AQ	0.00000000 sec
RG	3270
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.00000000 sec
D11	0.00000000 sec
DS	1
----- CHANNEL f1 -----	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.625391 MHz
----- CHANNEL f2 -----	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.00000000 W
PL16	0.00000000 W
SFO2	400.1424000 MHz
SI	65536
SR	101.625391 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN-GSK-69  
 PROTON.ucl CDCI3 (V::Bruker:TOPSPIN) jca 1



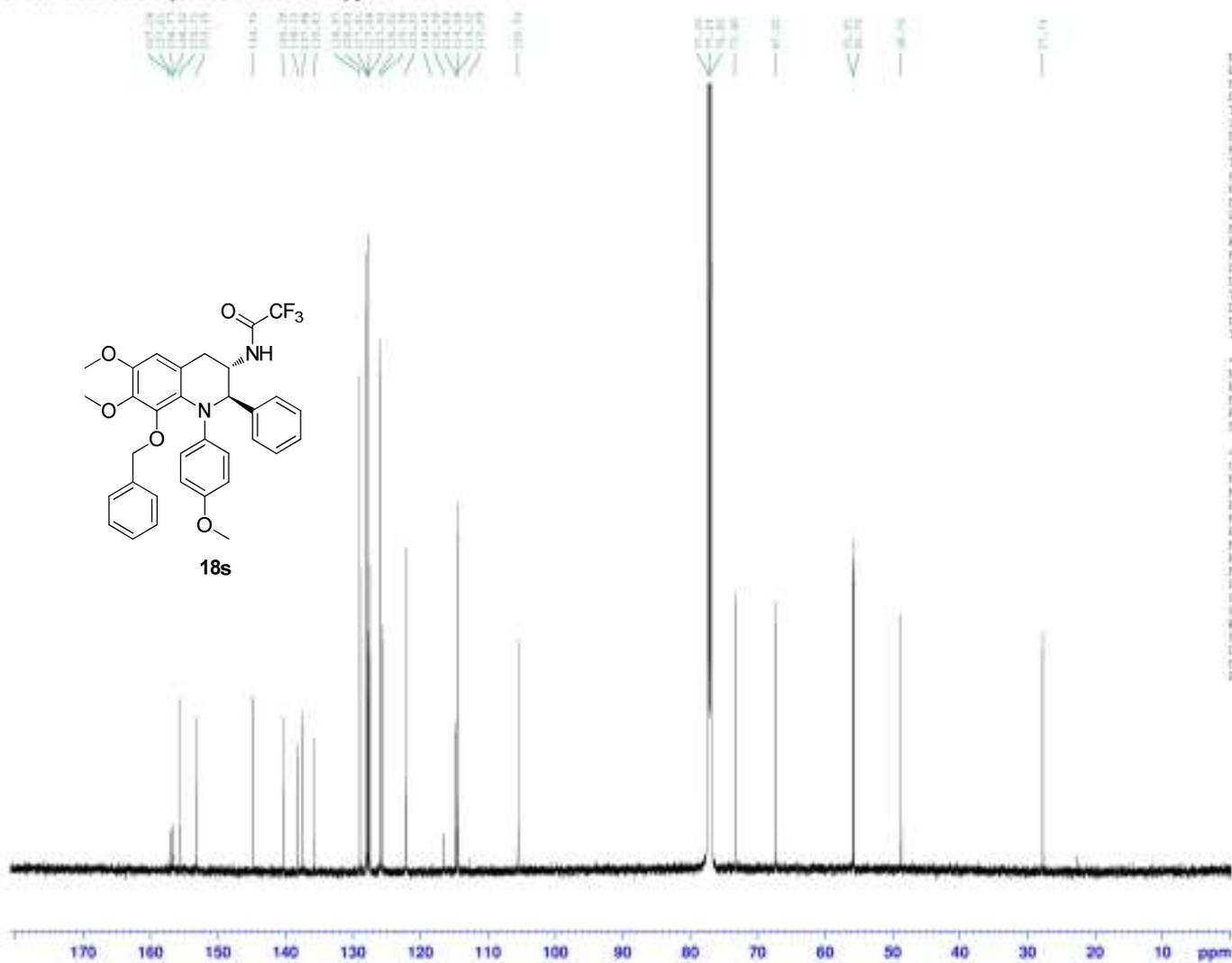
```

NAME      Jun27-2011
EXPNO     10
PROCNO    1
Date_     20110627
Time      13:54
INSTRUM   AV400
PROBHD    5 mm CPDCH 15C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         512
SQ         48.533 cm
DE         10.46 cm
TE         298.0 K
D1         1.6000000 sec
SFO        400.1418010 MHz
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1P       19.7671014 W
SFO1       400.1418010 MHz
SI         32768
SF         400.1418010 MHz
RG         512
WDW        EM
SSB        0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN-GSK-69  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Jan27-2011
EXPNO	32
F2PROCNO	1
DATE_	20110627
TIME	13.34
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10328
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

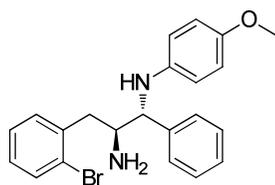
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761828 MHz

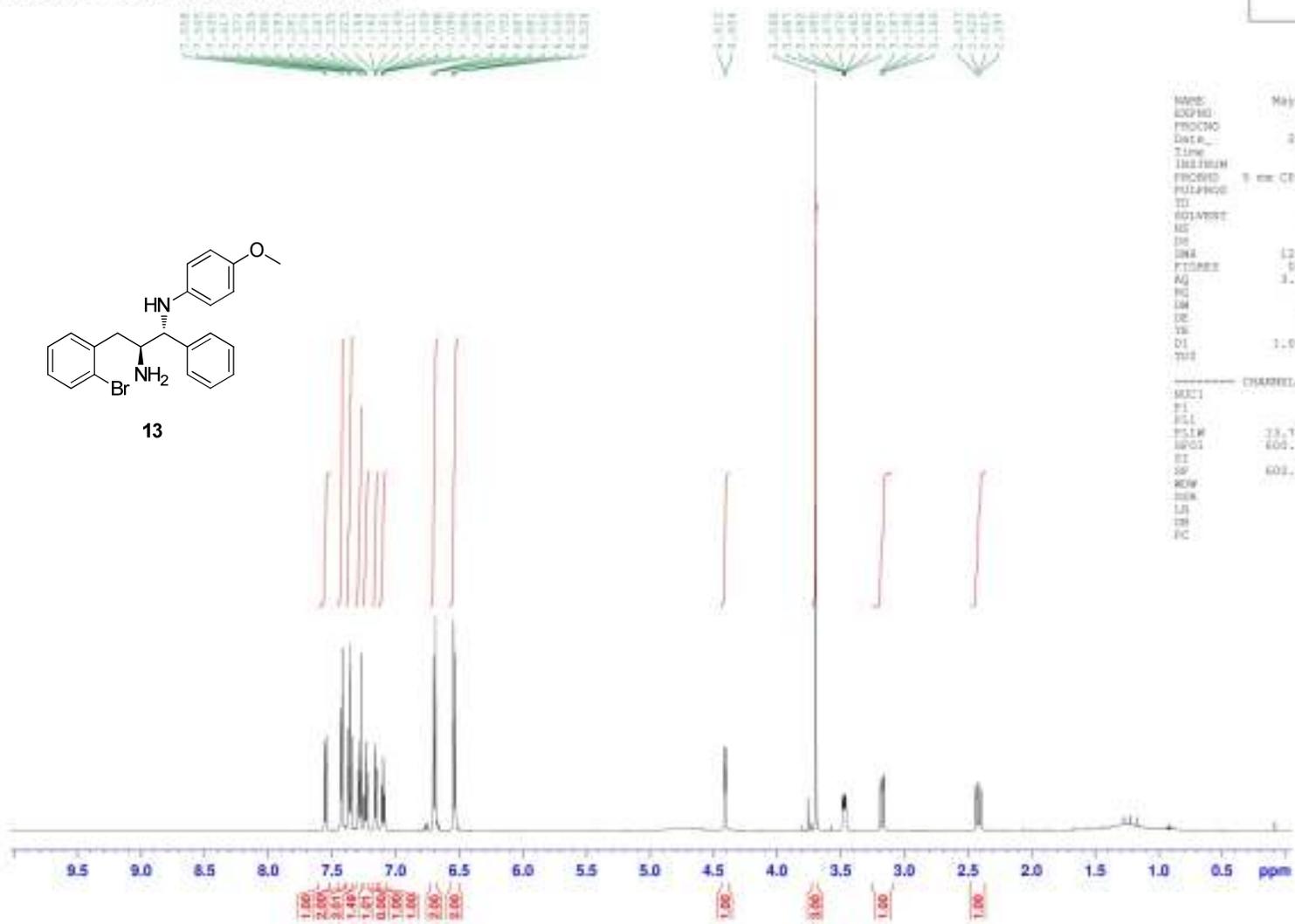
  

===== CHANNEL f2 =====	
NUC2	13H
FL2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.7675124 W
PL16	0.32796148 W
PL17	0.17332926 W
SFO2	400.1424040 MHz
SI	65536
RF	400.1424040 MHz
CON	EM
SR	0
LB	1.00 Hz
GB	0
PC	1.40

AN758  
 PROTON.ucf CDC13 (V::Bruker:TOPSPIN) jca 54



13



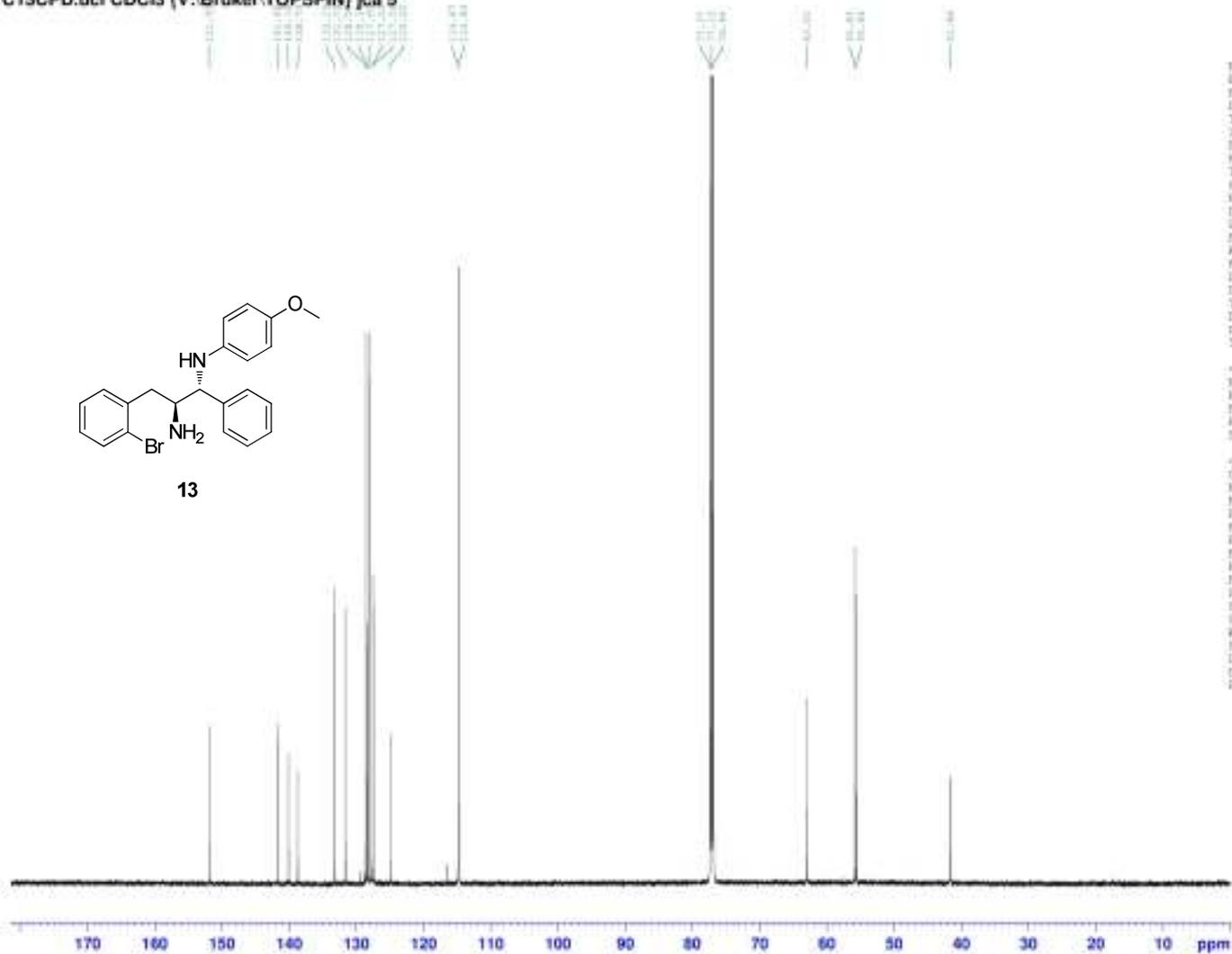
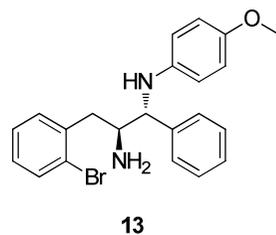
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NAME      May09-2011
EXPNO     10
PROCNO    1
Date_     20110509
Time      11.20
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         32768
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499404 sec
RG         384
AQ         40.533 usec
DE         10.46 usec
TE         298.0 K
D1         1.60000000 sec
TMS        1
  
```

```

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        0.00 dB
PS1W       19.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437041 MHz
RG         384
WDW         EM
SSB         0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN758  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 5



NAME	May07-2011
EXPNO	21
F2PROCNO	1
DATE_	20110509
TIME	11.27
INSTRUM	AV640
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.560 Hz
F2FREQ	101.625991 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

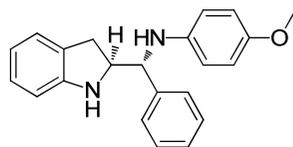
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL10	18.7686177 W
SFO1	101.6259910 MHz

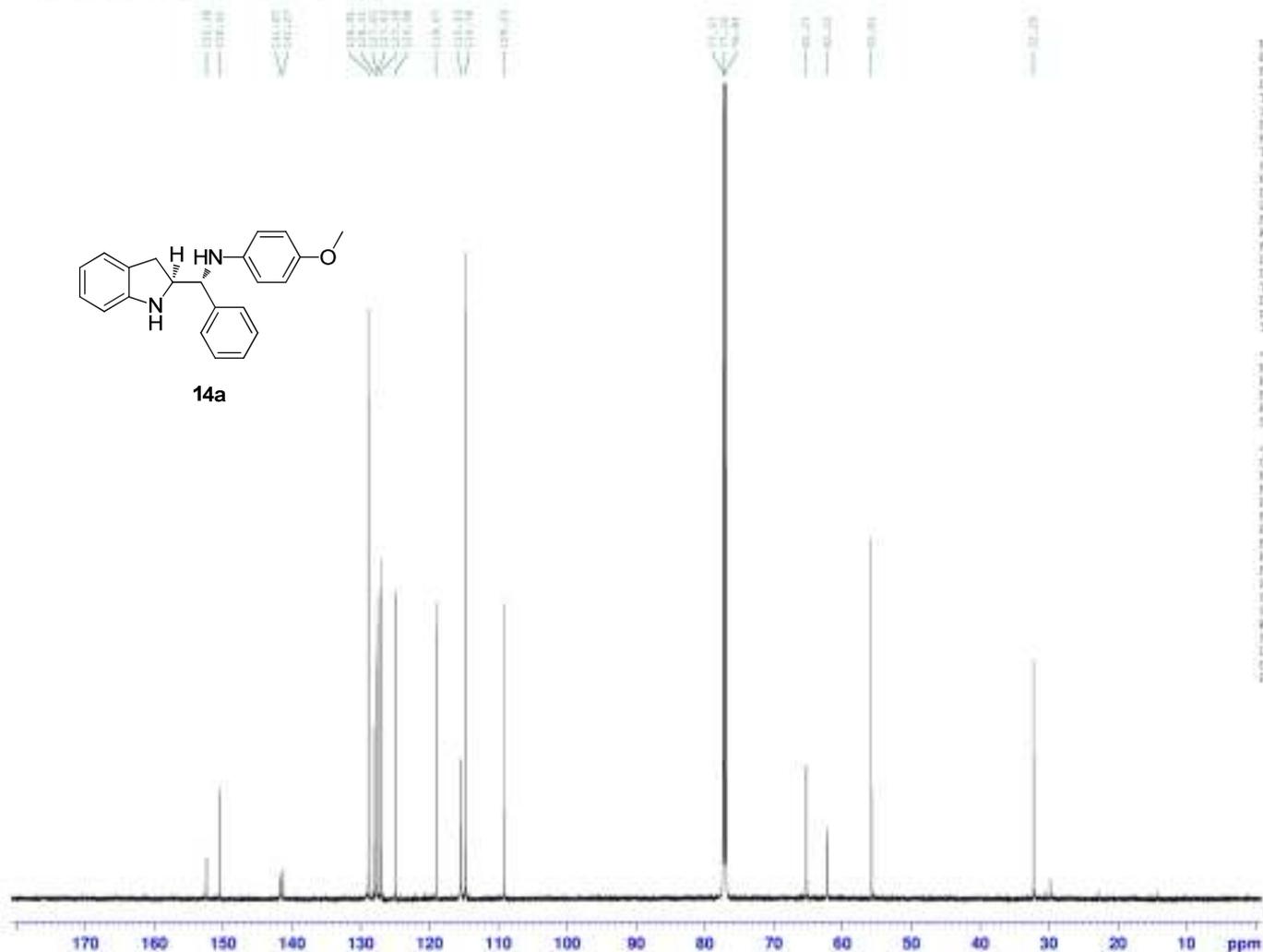
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL10	15.7675124 W
PL11	0.32786130 W
PL1M	0.17332026 W
SFO2	400.1424000 MHz
SI	65336
RF	304.9927830 MHz
CON	SM
EN	0
LD	1.00 Hz
DR	0
DC	1.40



AN117  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



14a

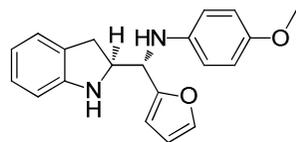


NAME	24109-0311
EXPNO	32
F2PROCNO	1
DATE_	20110715
Time	5.37
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10356
FIDRES	0.0043
MS	128
DS	0
SWH	30012.560 Hz
F2FREQ	6.555191 Hz
AQ	0.0300024 sec
RG	1020
DW	12.860 usec
DE	21.32 usec
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

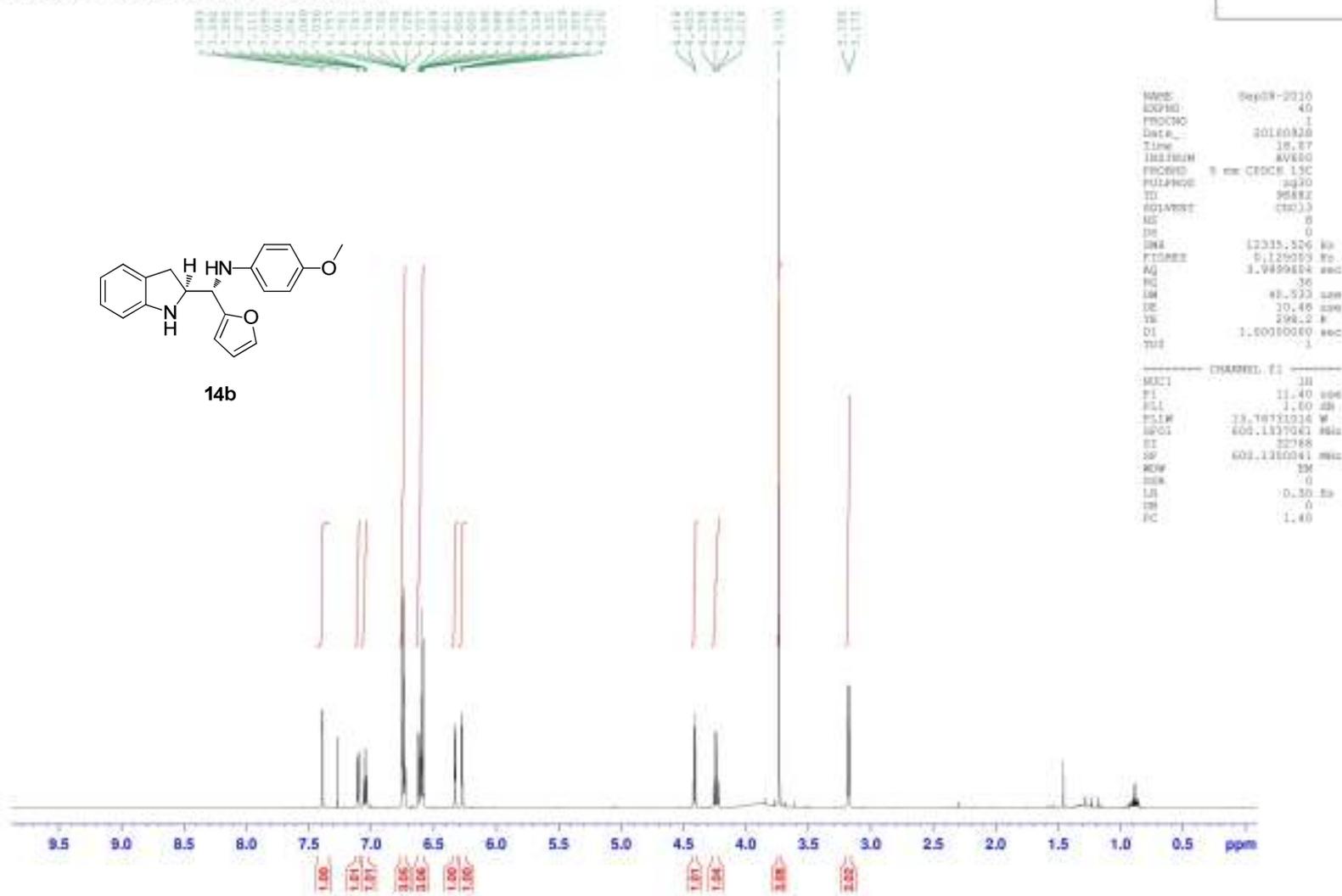
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 usec
PL1	0.00 dB
PL12	19.00 dB
PL13	19.00 dB
PL14	19.00 dB
PL15	19.00 dB
PL16	19.00 dB
PL17	19.00 dB
PL18	19.00 dB
PL19	19.00 dB
PL20	19.00 dB
PL21	19.00 dB
PL22	19.00 dB
PL23	19.00 dB
PL24	19.00 dB
PL25	19.00 dB
PL26	19.00 dB
PL27	19.00 dB
PL28	19.00 dB
PL29	19.00 dB
PL30	19.00 dB
PL31	19.00 dB
PL32	19.00 dB
PL33	19.00 dB
PL34	19.00 dB
PL35	19.00 dB
PL36	19.00 dB
PL37	19.00 dB
PL38	19.00 dB
PL39	19.00 dB
PL40	19.00 dB
PL41	19.00 dB
PL42	19.00 dB
PL43	19.00 dB
PL44	19.00 dB
PL45	19.00 dB
PL46	19.00 dB
PL47	19.00 dB
PL48	19.00 dB
PL49	19.00 dB
PL50	19.00 dB
PL51	19.00 dB
PL52	19.00 dB
PL53	19.00 dB
PL54	19.00 dB
PL55	19.00 dB
PL56	19.00 dB
PL57	19.00 dB
PL58	19.00 dB
PL59	19.00 dB
PL60	19.00 dB
PL61	19.00 dB
PL62	19.00 dB
PL63	19.00 dB
PL64	19.00 dB
PL65	19.00 dB
PL66	19.00 dB
PL67	19.00 dB
PL68	19.00 dB
PL69	19.00 dB
PL70	19.00 dB
PL71	19.00 dB
PL72	19.00 dB
PL73	19.00 dB
PL74	19.00 dB
PL75	19.00 dB
PL76	19.00 dB
PL77	19.00 dB
PL78	19.00 dB
PL79	19.00 dB
PL80	19.00 dB
PL81	19.00 dB
PL82	19.00 dB
PL83	19.00 dB
PL84	19.00 dB
PL85	19.00 dB
PL86	19.00 dB
PL87	19.00 dB
PL88	19.00 dB
PL89	19.00 dB
PL90	19.00 dB
PL91	19.00 dB
PL92	19.00 dB
PL93	19.00 dB
PL94	19.00 dB
PL95	19.00 dB
PL96	19.00 dB
PL97	19.00 dB
PL98	19.00 dB
PL99	19.00 dB
PL100	19.00 dB

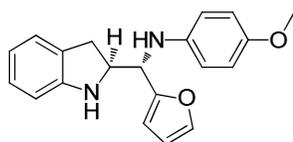
AN577  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 1



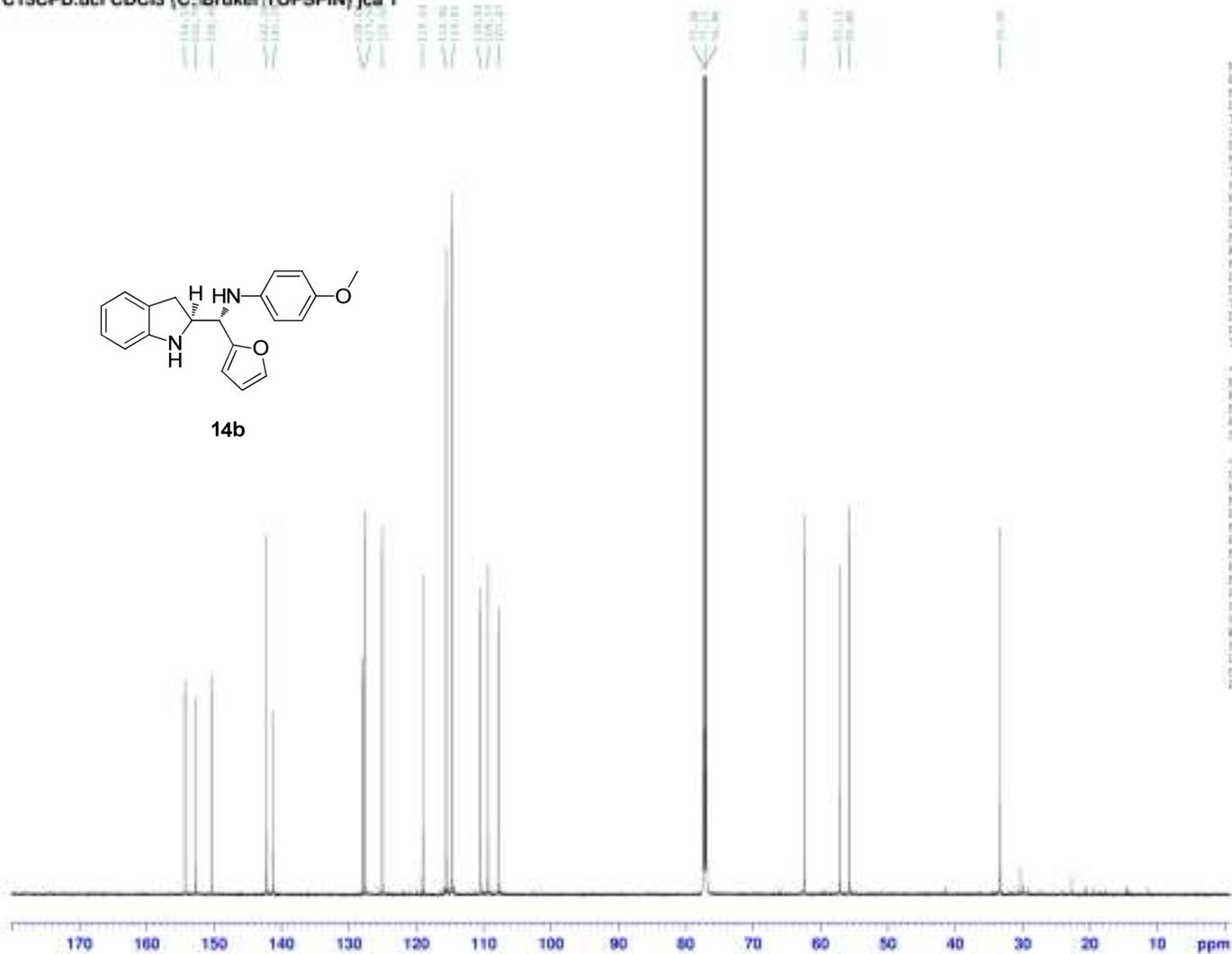
14b



AN577  
C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 1



14b



NAME	Seq28-2310
EXPNO	42
F2PROCNO	1
DATE_	20180328
TIME	18.18
INSTRUM	AV400
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.000159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.2 K
D1	2.8000000 sec
D11	0.0000000 sec
TD0	1

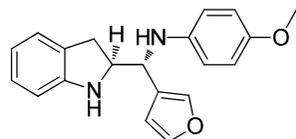
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	18.768617 W
SFO1	125.761000 MHz

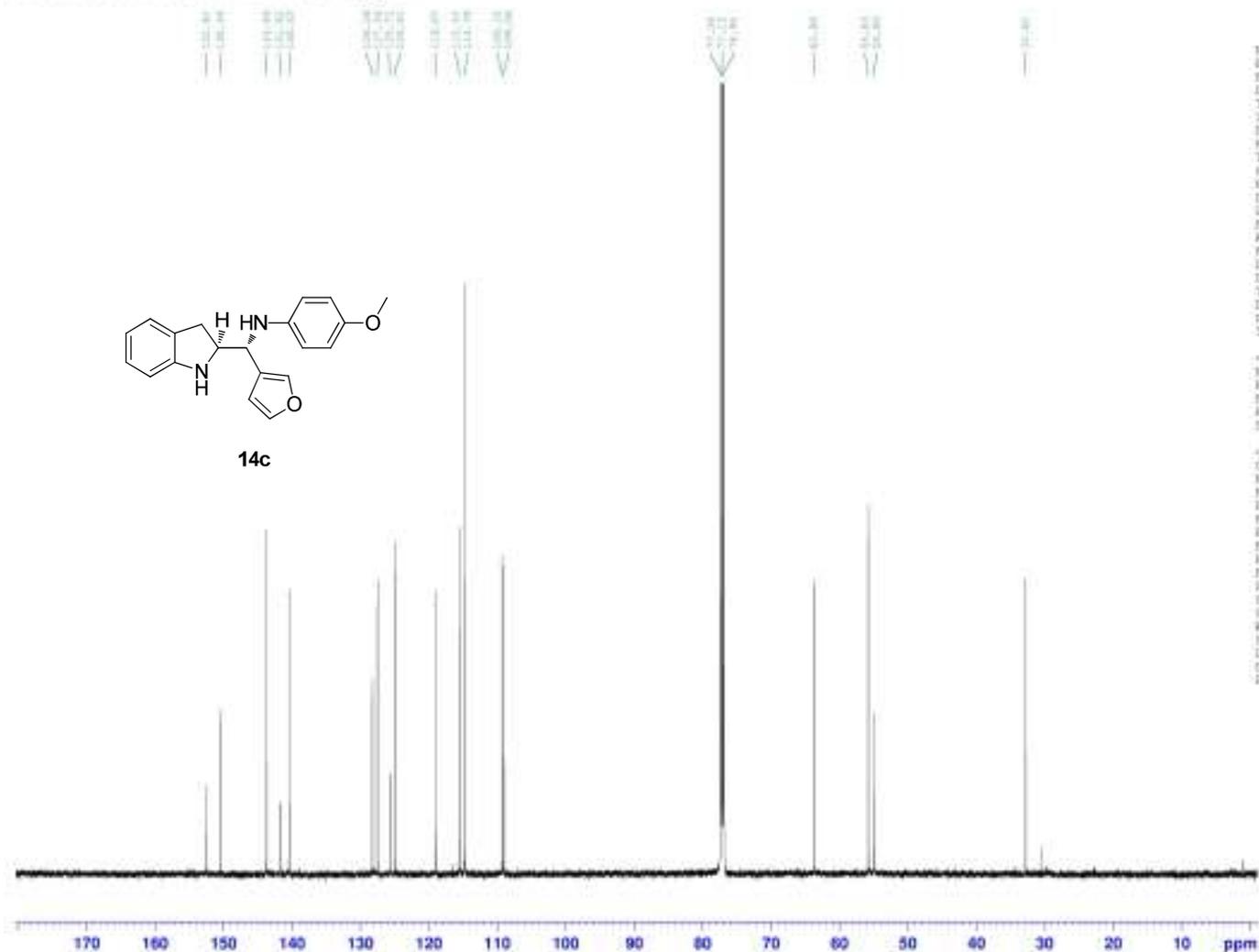
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13C
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.7675124 W
PL15	0.0000000 W
PL16	0.17332026 W
SFO2	601.1326026 MHz
SI	32768
SR	101.9327830 MHz
SCN	58
ENH	0
LD	1.00 Hz
DS	0
DC	1.40



AN705  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 4



14c

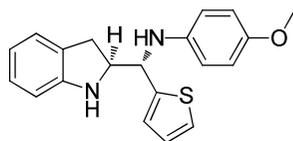


NAME	Jan28-2011
EXPNO	42
F2PROCNO	1
DATE_	20110428
Time	14.36
INSTRUM	AV650
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	10388
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320 320
SHAPE	RECT
SI	65536
AF	0.00000000
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

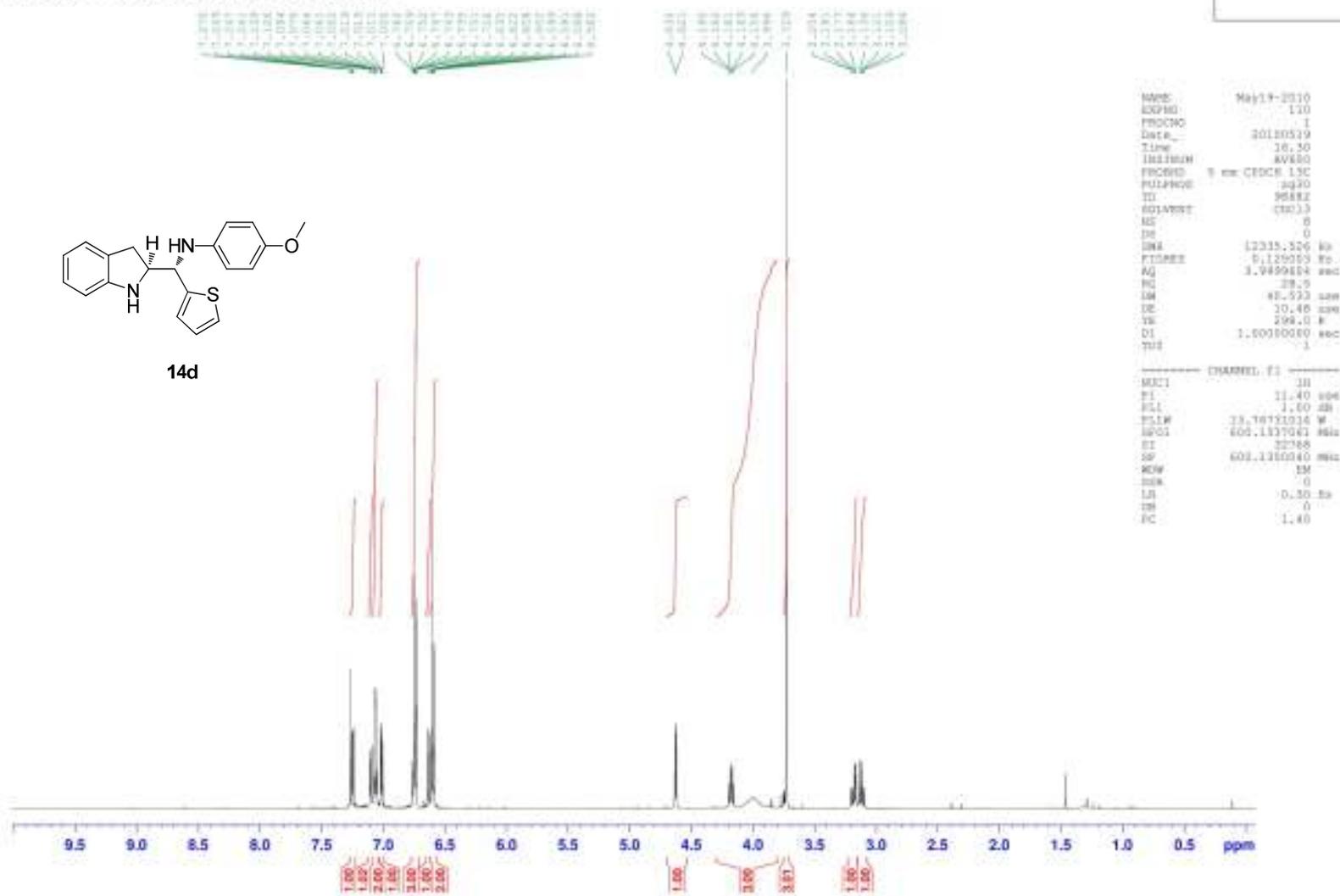
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761828 MHz
===== CHANNEL f2 =====	
NUC2	13C
FL2	9.40 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.76751724 W
PL16	0.32796138 W
PL17	0.17332926 W
SFO2	601.1326048 MHz
SI	65536
AF	101.9327830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

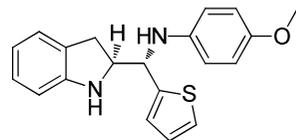
AN419-B-F7-11  
 PROTON.ucl CDCI3 [C:\Bruker\TOPSPIN] jca 29



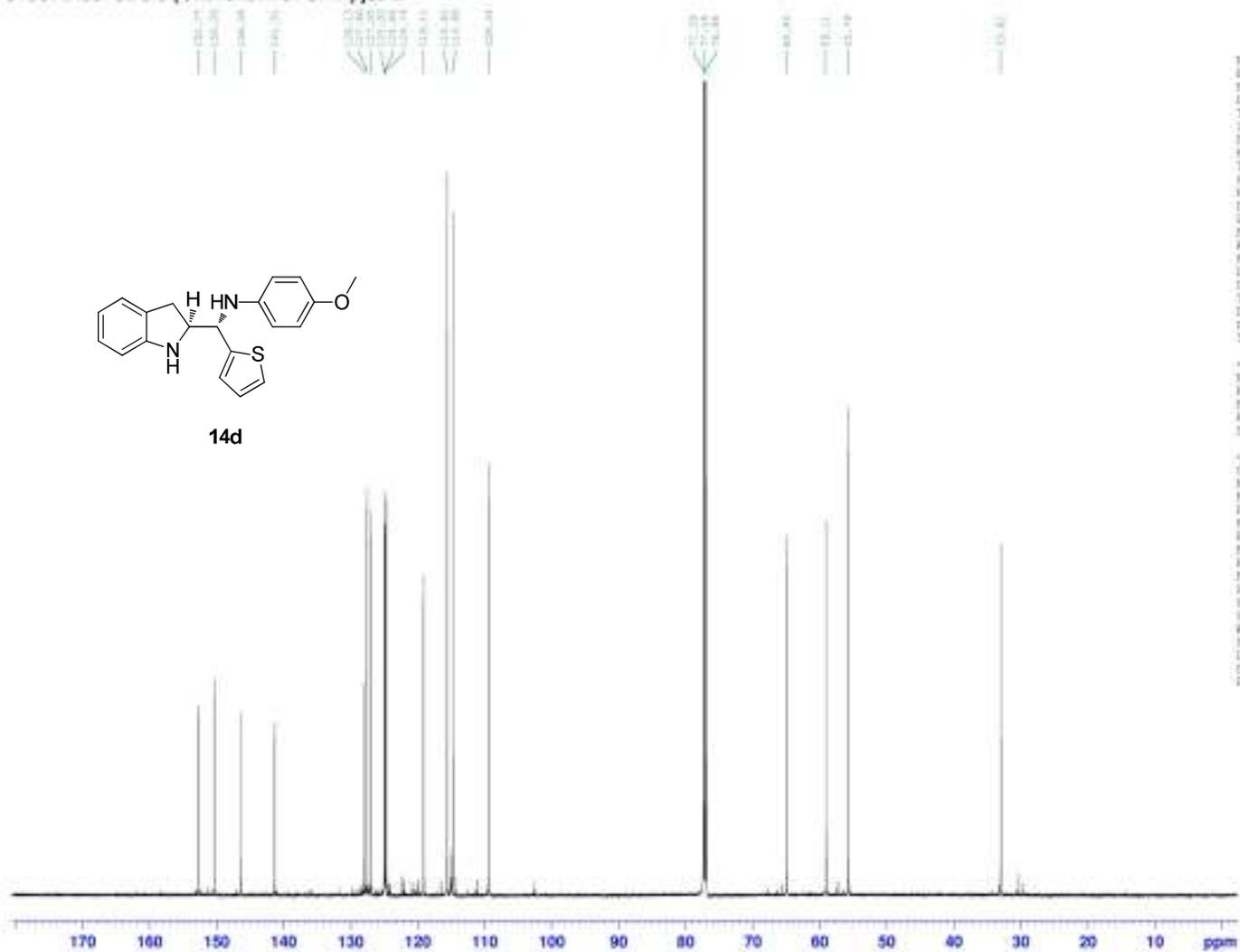
14d



AN419-B-F7-11  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 2



14d



NAME	May14-0110
EXPNO	132
F2PROCNO	1
DATE_	20180319
Time	15.59
INSTRUM	AV450
PROBHD	5 mm CPOCE 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.0043
MS	128
DS	0
SWH	16017.481 Hz
F2FREQ	101.625197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
TD0	1

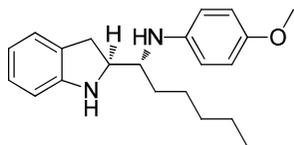
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL18	18.76886177 W
SFO1	101.625197 MHz

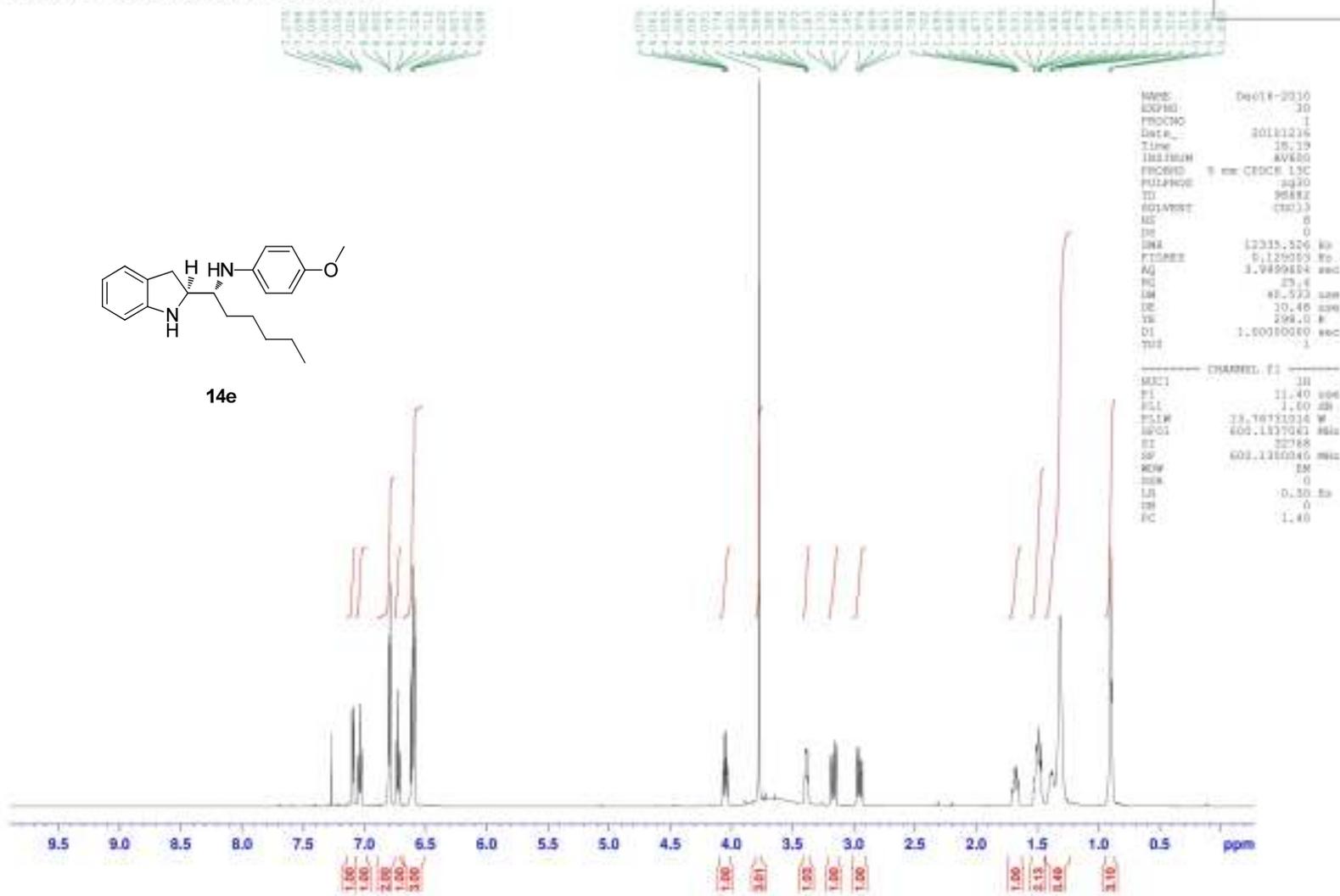
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.40 dB
PL18	15.76751714 W
PL19	0.10796148 W
PL17M	0.17332026 W
SFO2	400.1426020 MHz
SI	32768
SR	101.9927830 MHz
SCW	5M
SKW	0
LB	1.00 Hz
GB	0
PC	1.40

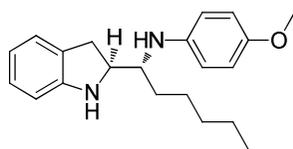
AN709  
 PROTON.ucl CDCI3 (C:Bruker:TOPSPIN) jca 51



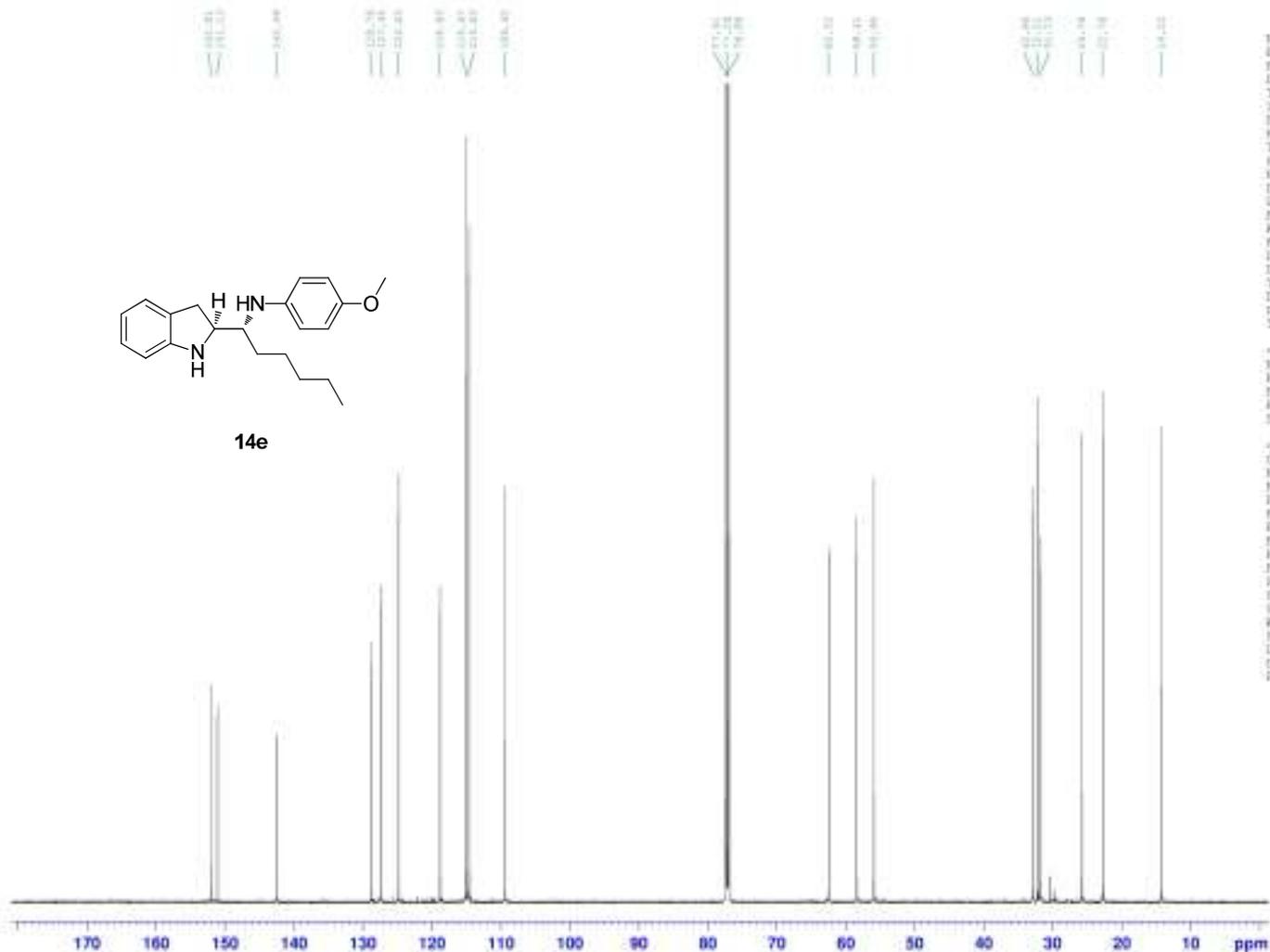
14e



AN709  
 C13CPD.ucl CDC13 (C:BrukerTOPSPIN) jca 5



14e



NAME	Dec14-2010
EXPNO	32
F2PROCNO	1
DATE_	20101226
TIME	18.31
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
DS	1

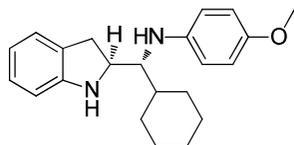
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	18.7086177 W
SFO1	125.7615981 MHz

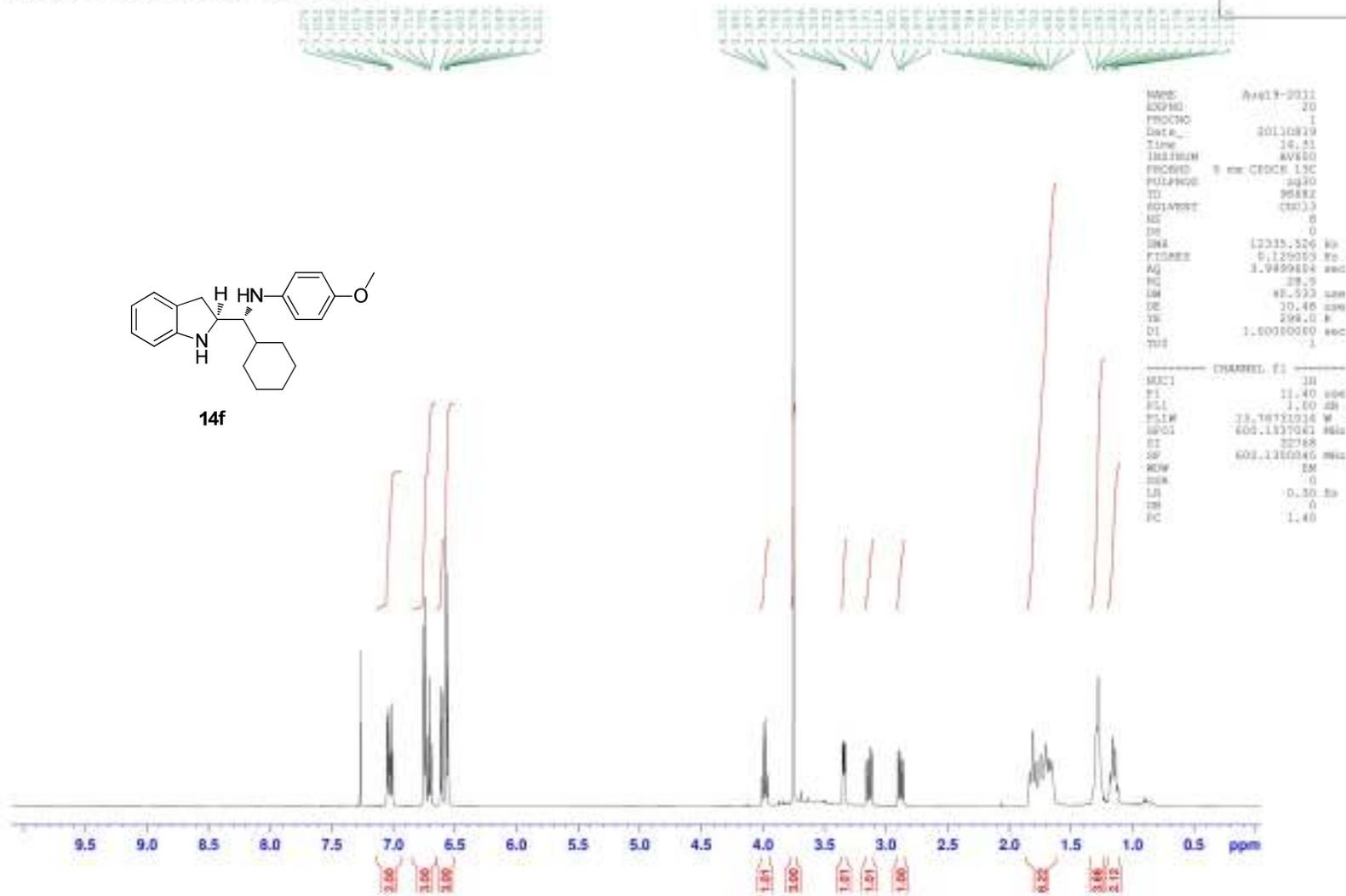
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.50 dB
PL14	25.76751724 W
PL15	0.32796130 W
PL16	0.17332026 W
SFO2	400.1326020 MHz
SI	32768
SR	101.9927830 MHz
SCW	5M
SRH	0
LD	1.00 Hz
DR	0
DC	1.40

AN-GSK-77  
 PROTON.ucl CDCI3 (V:\Bruker\TOPSPIN) jca 1



14f

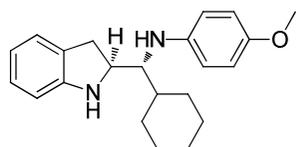


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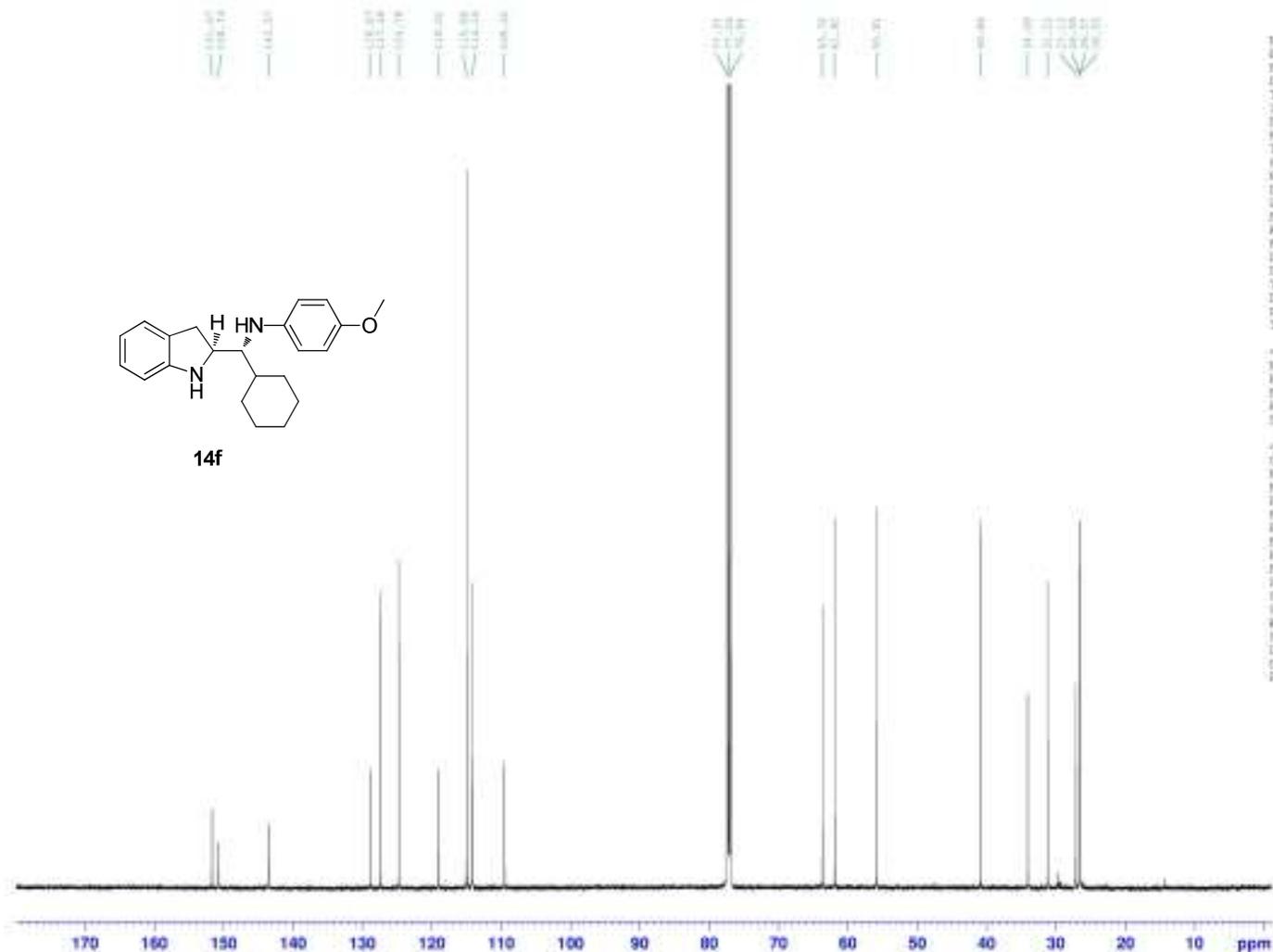
NAME      Apr19-2011
EXPNO     20
PROCNO    1
Date_     20110819
Time      16.51
INSTRUM   AV600
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD        65536
SI        36882
SOLVENT   CDCl3
NS        6
DS        0
SWH       12315.326 Hz
FIDRES    0.125053 Hz
AQ        3.9499464 sec
RG         38.5
DQ        48.533 usec
DE        10.46 usec
TE        298.0 K
D1        1.0000000 sec
TD0       1

----- CHANNEL f1 -----
NUC1      1H
P1        11.40 usec
PL1       0.00 dB
PS1P      23.7471014 W
SFO1      400.1437041 MHz
SI        32768
SF        400.1437046 MHz
RG        655
PC        0.30 usec
DC        0
TS        0
SC        1.40
  
```

AN-GSK-77  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



14f



NAME	Aspl1-0111
EXPNO	22
F2PROCNO	1
DATE_	20110819
TIME	14.43
INSTRUM	AV600
PROBHD	5 mm CPOCR 13C
PULPROG	zgpg30
TD	10388
SF	125.761
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320
ACQ	0.88888888 sec
RG	1024
DS	12.860 mm
DE	21.30 mm
TE	298.0 K
D1	2.80000000 sec
D11	0.10000000 sec
TD0	1

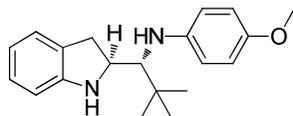
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 mm
PL1	0.00 dB
PL12	19.7686177 W
SFO1	125.761828 MHz

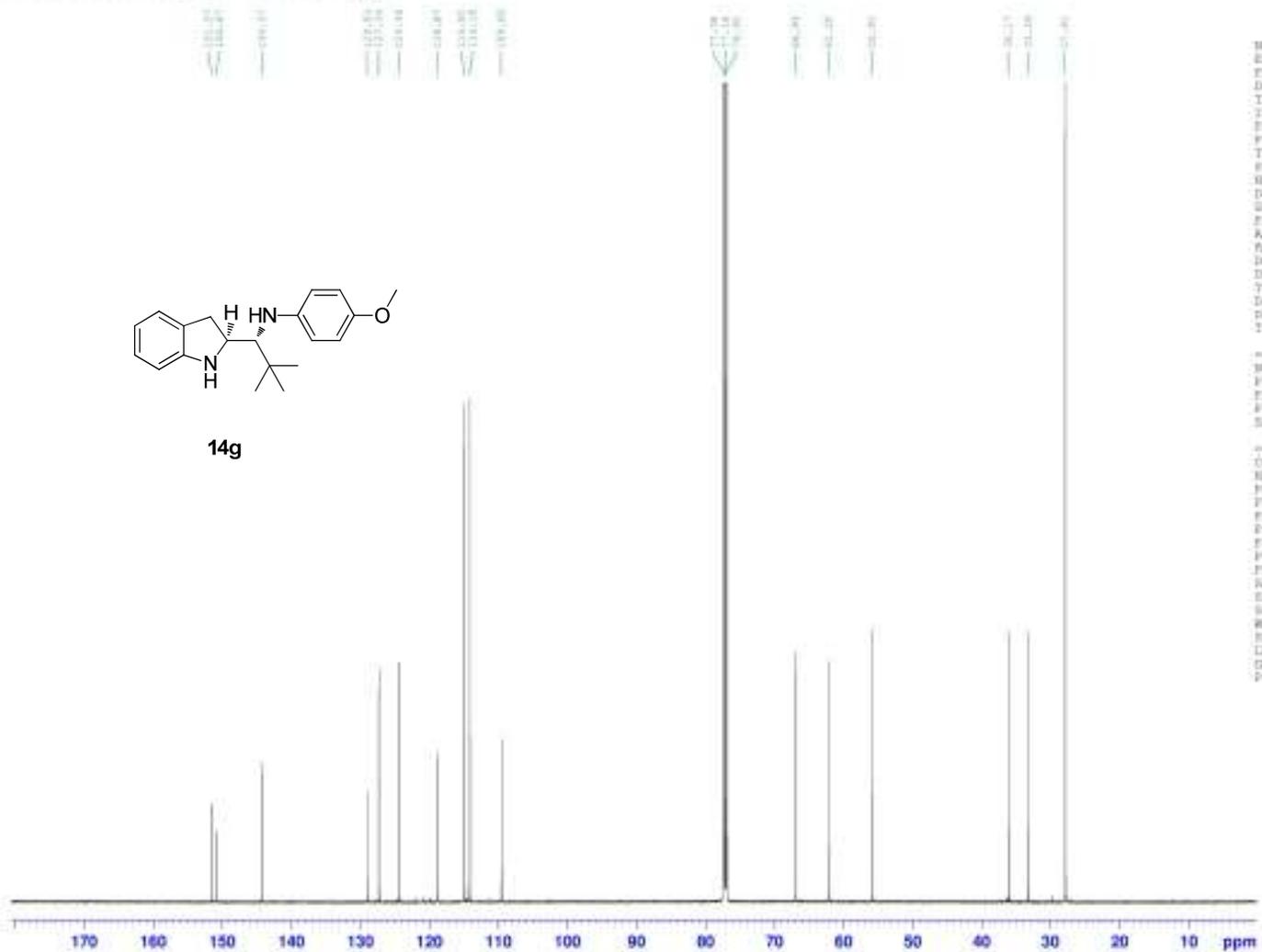
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 mm
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.76751724 W
PL16	0.10796130 W
PL17	0.17332026 W
SFO2	400.1424080 MHz
SI	65536
RF	400.1424080 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40



AN-GSK-80  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



14g



NAME	Asp02-0111
EXPNO	132
F2PROCNO	1
DATE_	20110822
TIME	17:55
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.560 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	3230
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

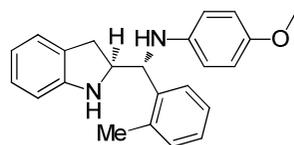
===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.6251828 MHz

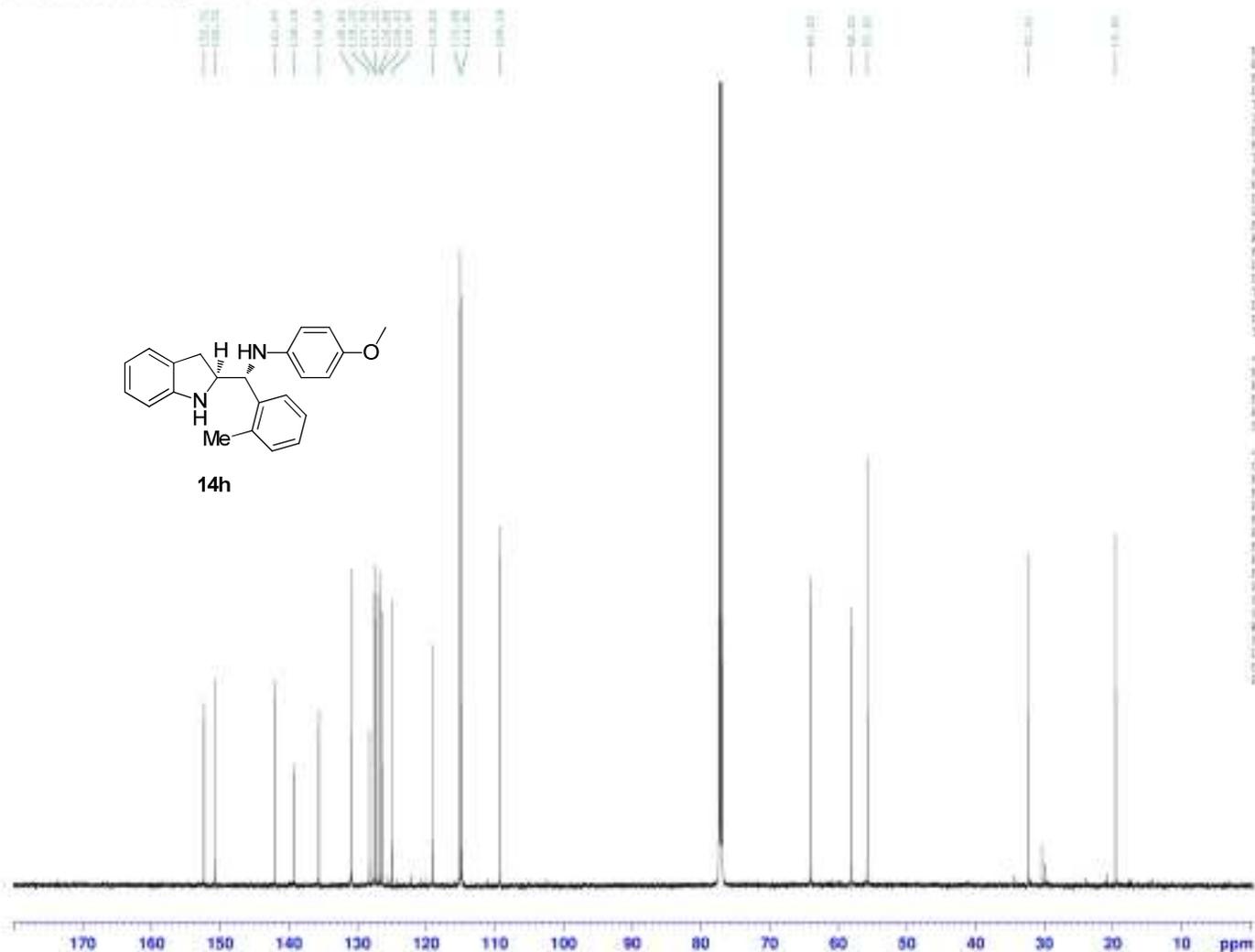
===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.7675124 W
PL16	0.32596130 W
PL17	0.17332026 W
SFO2	400.1424000 MHz
SI	65536
RF	304.9927830 MHz
SCN	58
DSH	0
LD	1.00 Hz
DR	0
DC	1.40



AN587  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 4



14h



NAME	2005-0311
EXPNO	32
F2PROCNO	1
DATE_	20110115
TIME	15.37
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	65536
SF	125.761
WDW	EM
SSB	0
LB	3.00
GB	0
PC	1.40
RG	327.481 Hz
RTIME	5.550197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

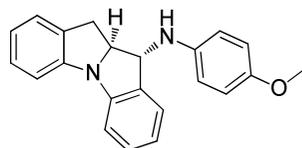
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	18.7686177 W
SFO1	125.761591 MHz

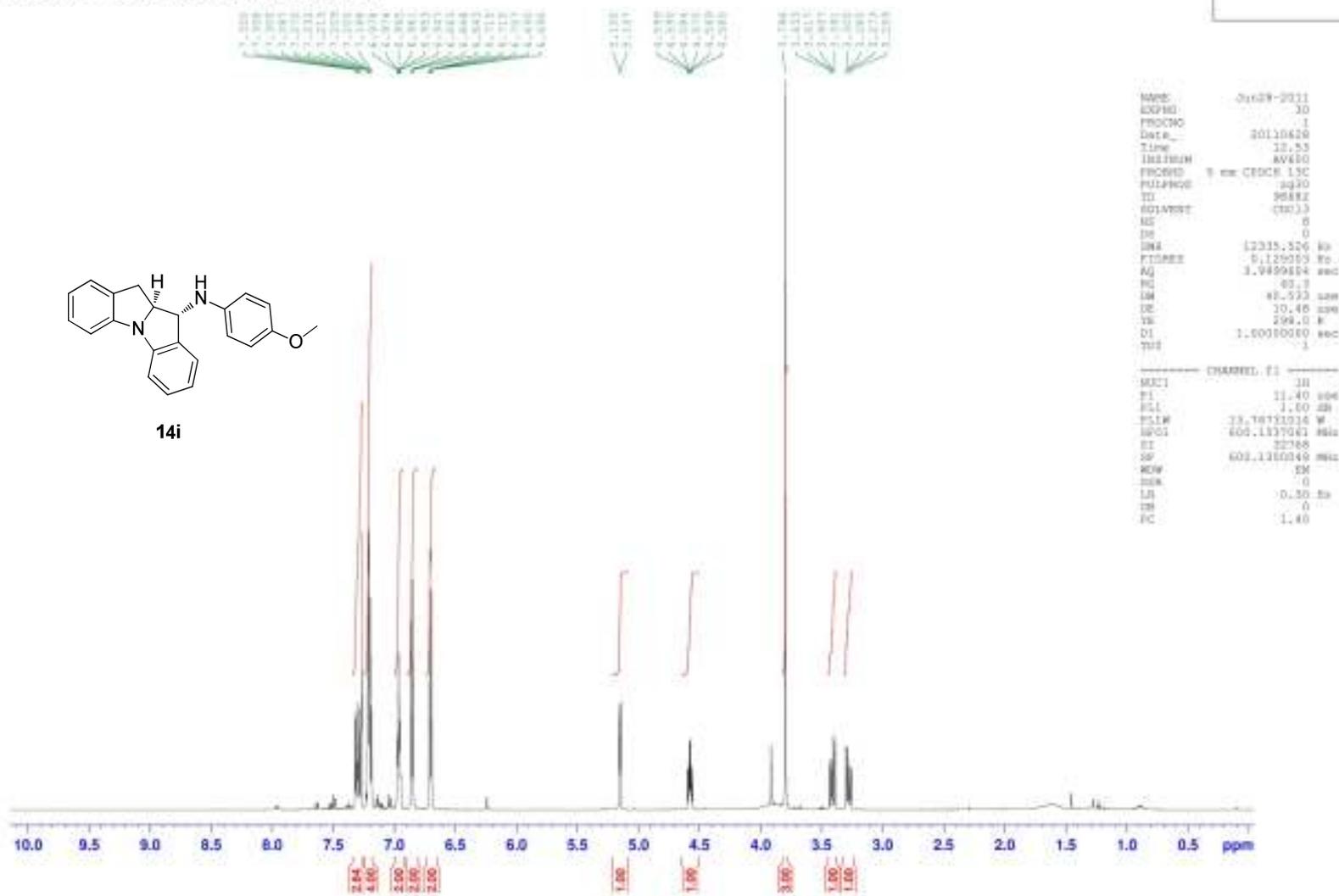
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.10796138 W
PL16	0.17332926 W
SFO2	400.1326126 MHz
SI	32768
SF	101.9927830 MHz
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN-GSK-87  
 PROTON.ucl CDCI3 (V.:Bruker:TOPSPIN) jca 1



14i



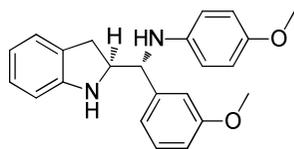




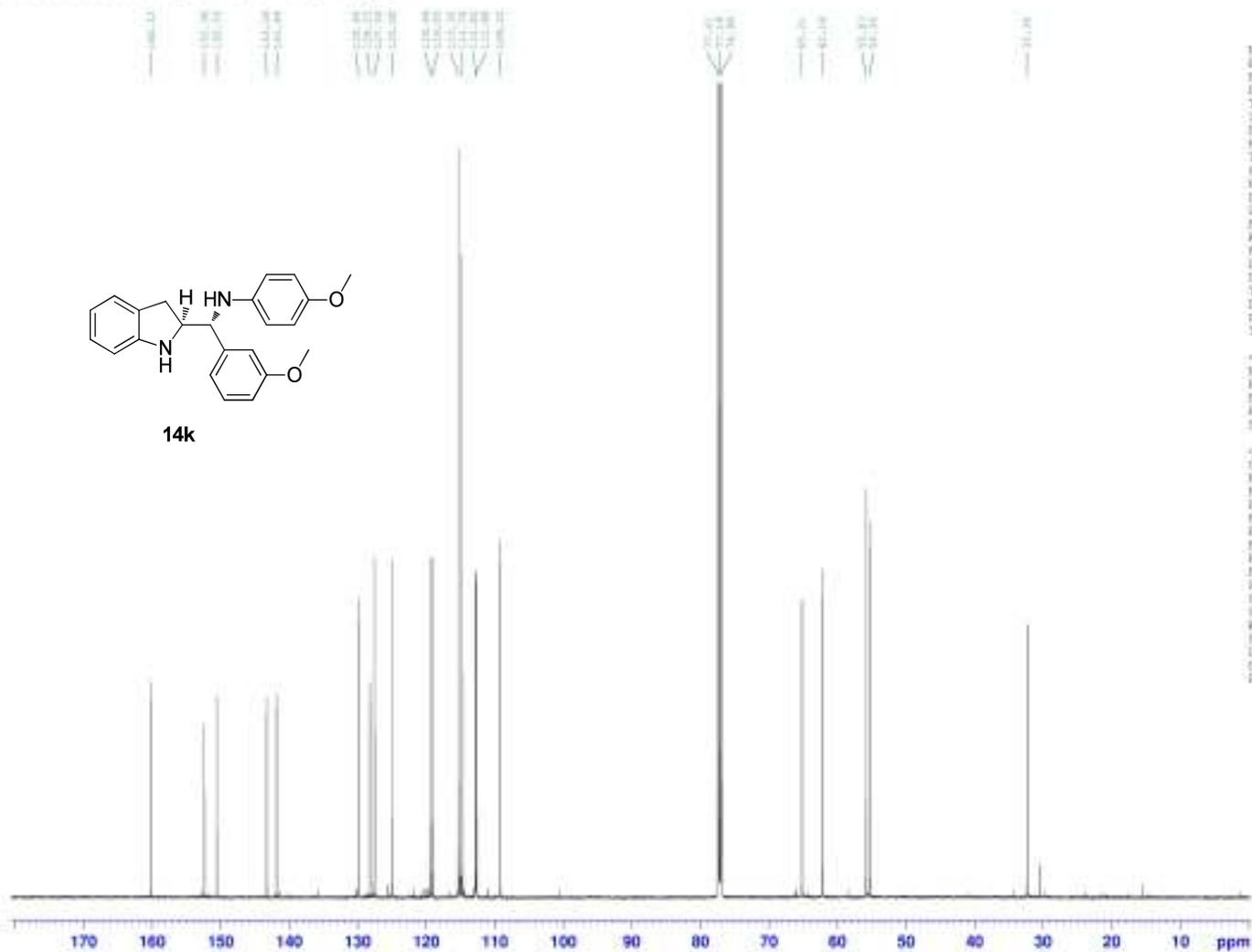




AN719  
 C13CPD.ucl CDC13 (C:Bruker/TOPOSPIN) jca 1



14k



NAME	Jan04-2011
EXPNO	32
F2PROCNO	1
DATE_	20110126
Time	15.55
INSTRUM	AVANCE
PROBHD	5 mm CPDCE 13C
PULPROG	zgpg30
TD	65536
FIDRES	0.0013
MS	128
DS	0
SWH	16017.481 Hz
F2FREQ	101.625197 Hz
AQ	0.9088159 sec
RG	1020
DM	13.847 um
DE	21.55 um
TE	298.0 K
D1	2.8000000 sec
D11	0.1000000 sec
TD0	1

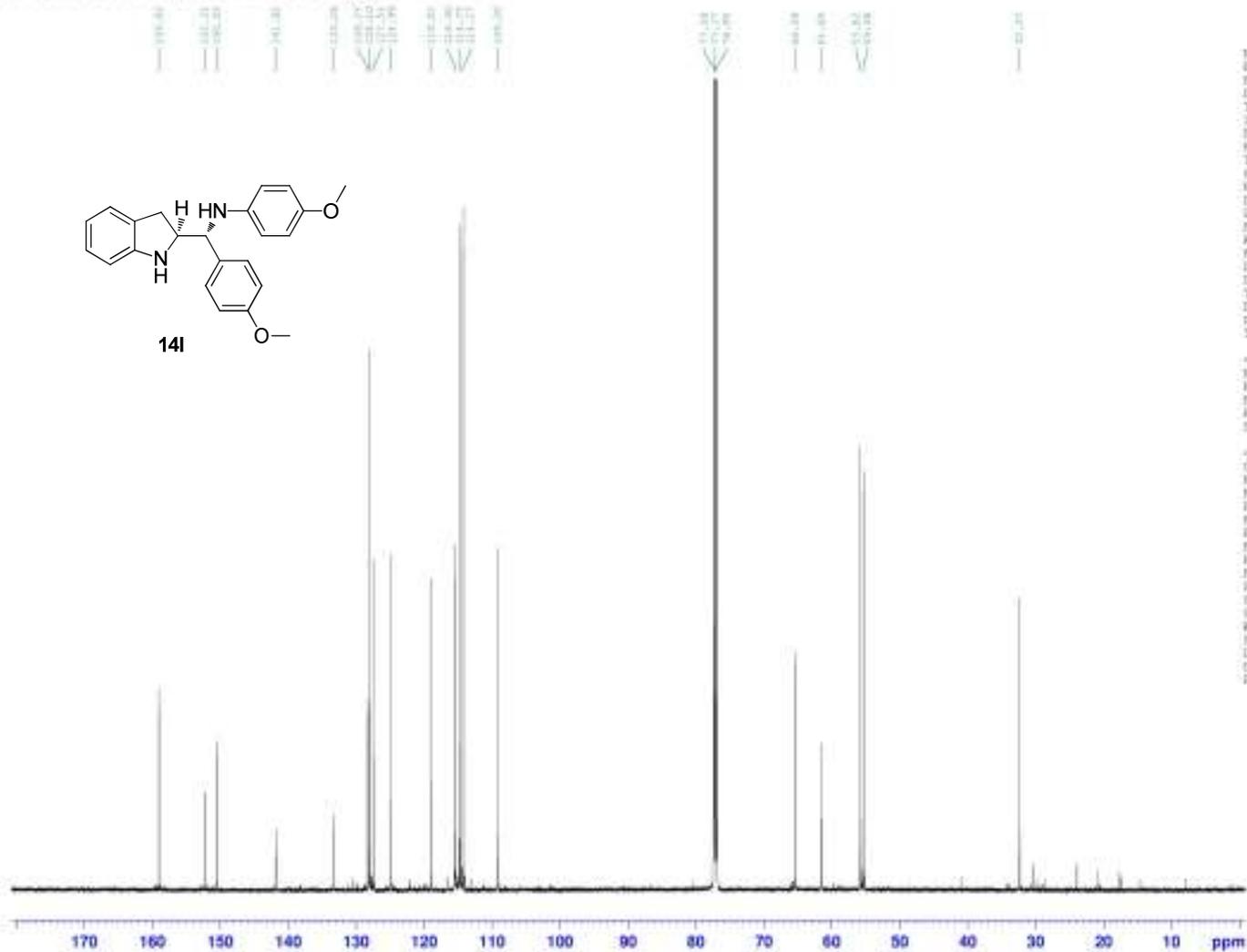
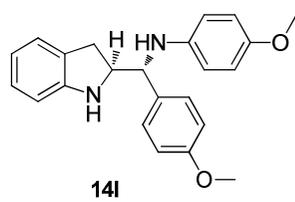
===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.768617 dB
SFO1	101.625197 MHz

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.76751724 dB
PL16	0.10796130 dB
PL17	0.17332026 dB
SFO2	400.1424010 MHz
SI	32768
SR	101.9927830 MHz
SCN	58
ENH	0
LB	1.00 Hz
GB	0
PC	1.40



AN860  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Acq23-0311
EXPNO	22
F2PROCNO	1
DATE_	20110825
Time	5.18
INSTRUM	AV400
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10388
SIADJUST	0.00000000
NS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625391 Hz
AQ	0.8989824 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.60000000 sec
D11	0.10000000 sec
TD0	1

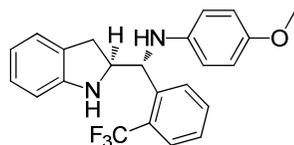
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL1H	26.76886177 W
SFO1	101.62539100 MHz

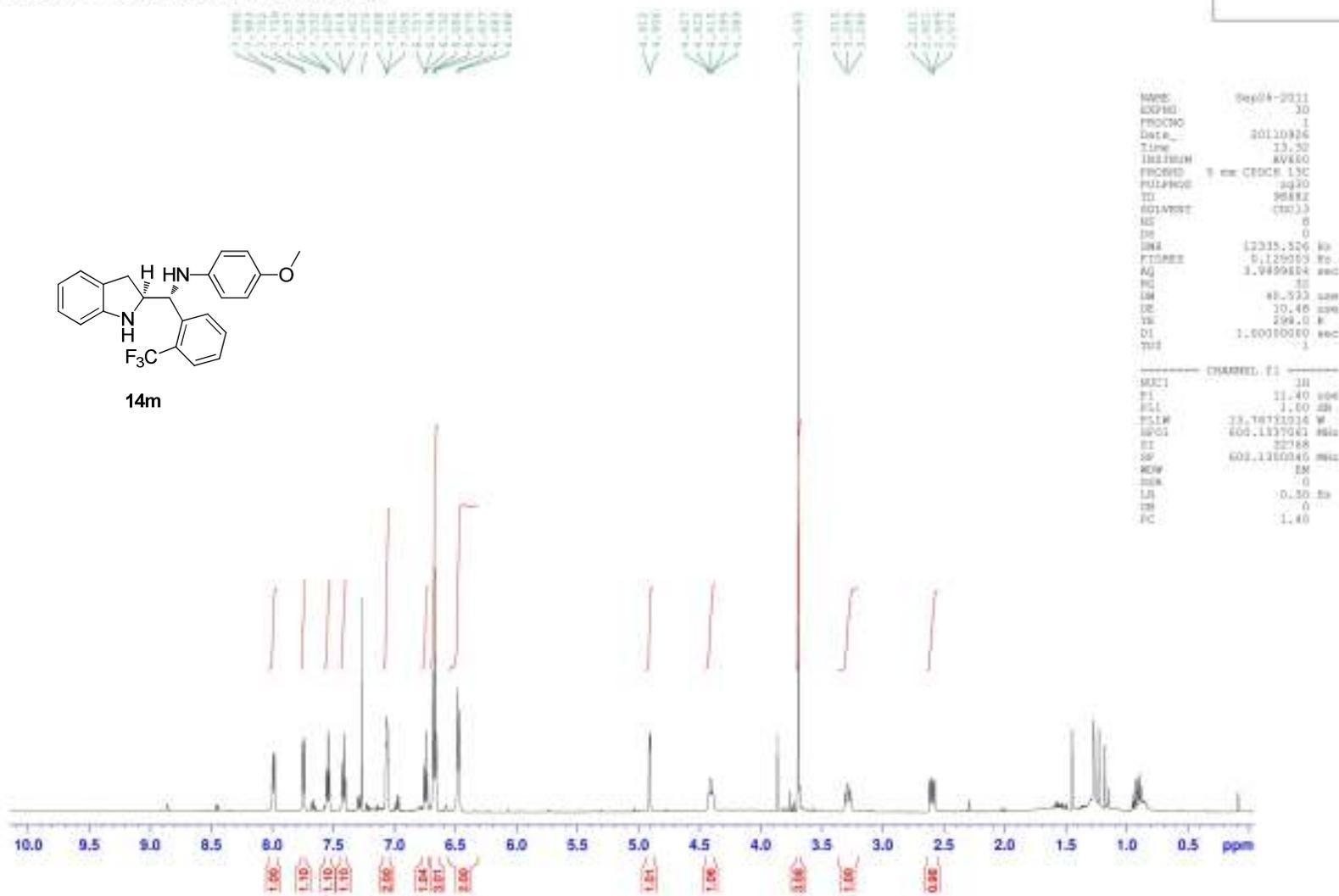
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL2H	17.23 dB
PL2X	20.00 dB
PL2W	25.76751724 W
PL2H	0.32596130 W
PL2M	0.17332026 W
SFO2	400.14240000 MHz
SI	0.5530
RF	301.9927830 MHz
CON	SM
EN	0
LD	1.00 Hz
DR	0
DC	1.40

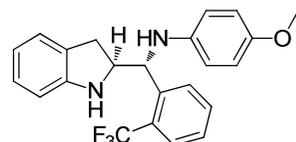
AN888  
 PROTON.ucf CDCI3 (V.:Bruker:TOPSPIN) jca 47



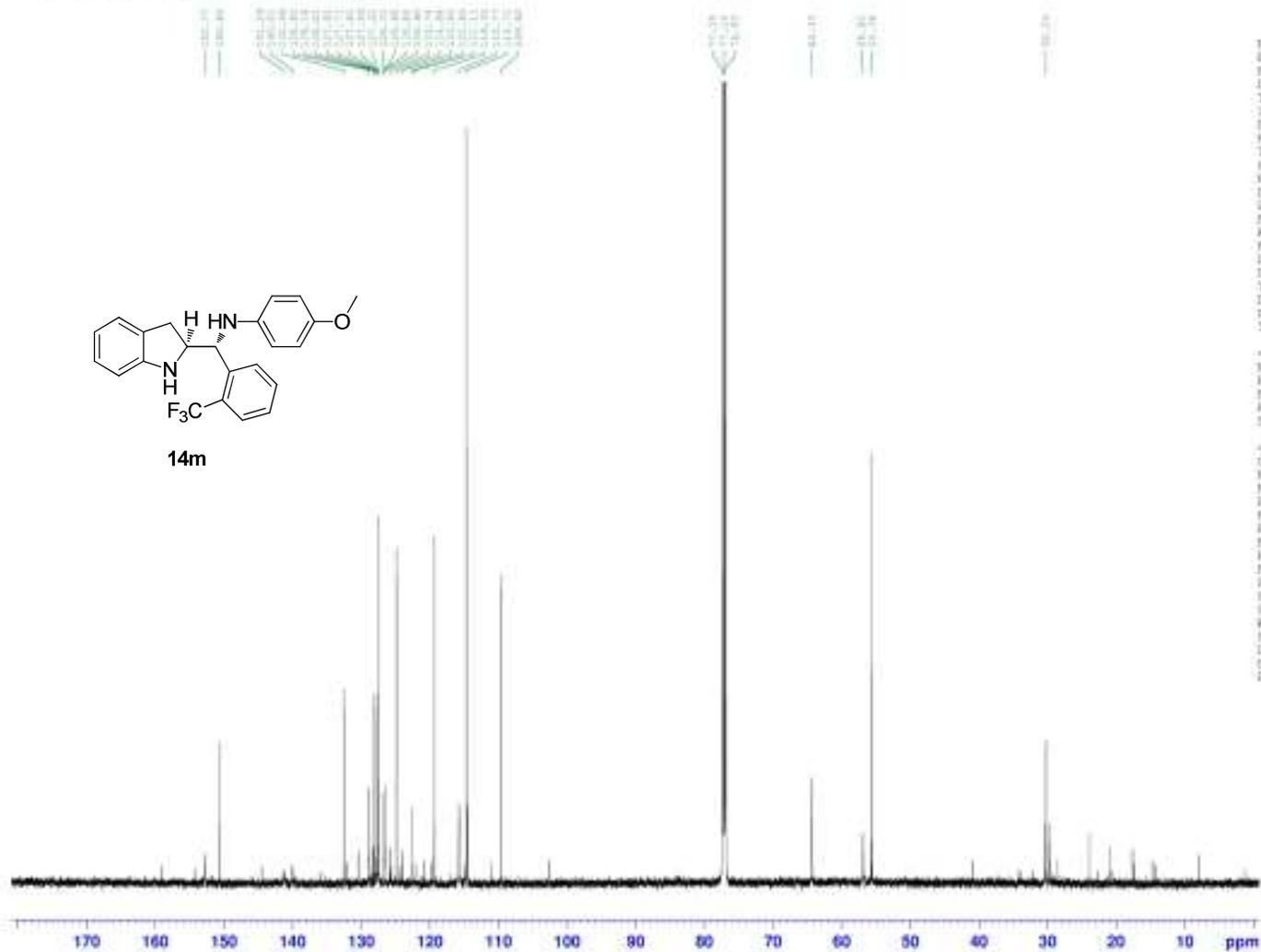
14m



AN868  
 C13CPD.ucl CDC13 (V:Bruker/TOPOSPIN) jca 4



14m



NAME	Seq28-0211
EXPNO	31
F2PROCNO	1
DATE_	20110826
Time	15.39
INSTRUM	AV450
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.560 Hz
F2FREQ	6.555191 Hz
AQ	0.8989824 sec
RG	1020
DM	12.860 um
DE	21.32 um
YC	298.0 #
D1	2.6000000 sec
D11	0.1880000 sec
TD8	1

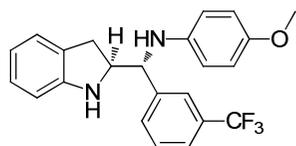
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL18	18.7686177 W
SFO1	101.921828 MHz

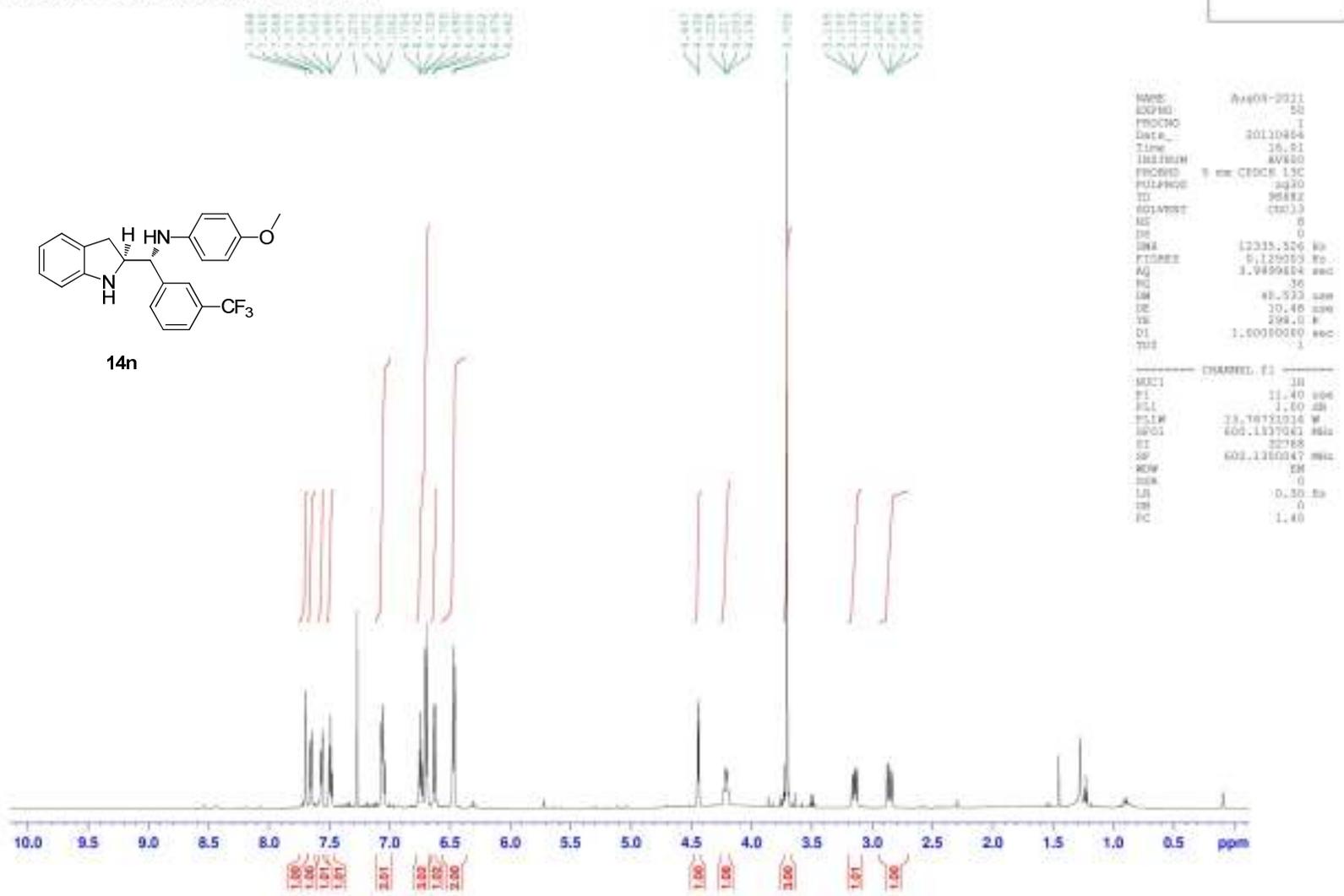
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL18	15.76751724 W
PL19	0.32796138 W
PL17M	0.17332926 W
RFQ2	603.1326048 MHz
SI	65336
RF	301.9317830 MHz
RCW	5M
RR	0
LD	1.00 Hz
DR	0
DC	1.40

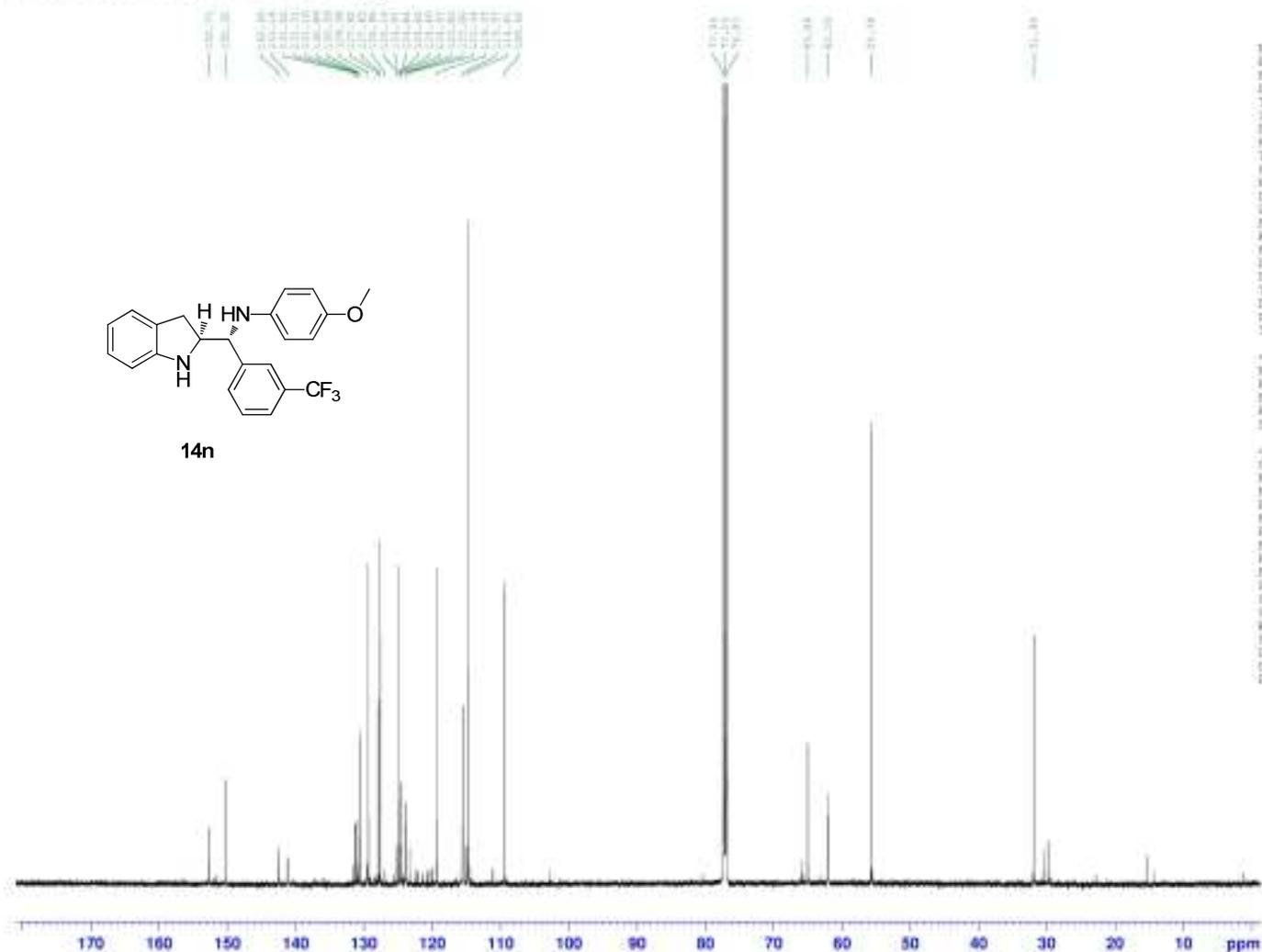
AN-GSK-74  
 PROTON.ucl CDCI3 [V.:Bruker:TOPSPIN] jca 1



14n



AN-GSK-74  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 1



NAME	Asp04-0111
EXPNO	53
F2PROCNO	1
DATE_	20110824
TIME	15.25
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10328
SF	125.76
WDW	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40
RG	320/128/64
RTIME	5.555191 Hz
AQ	0.8989824 sec
RG	1020
DM	12.860 um
DE	21.32 um
YC	298.0 K
D1	2.6000000 sec
D11	0.1000000 sec
TD0	1

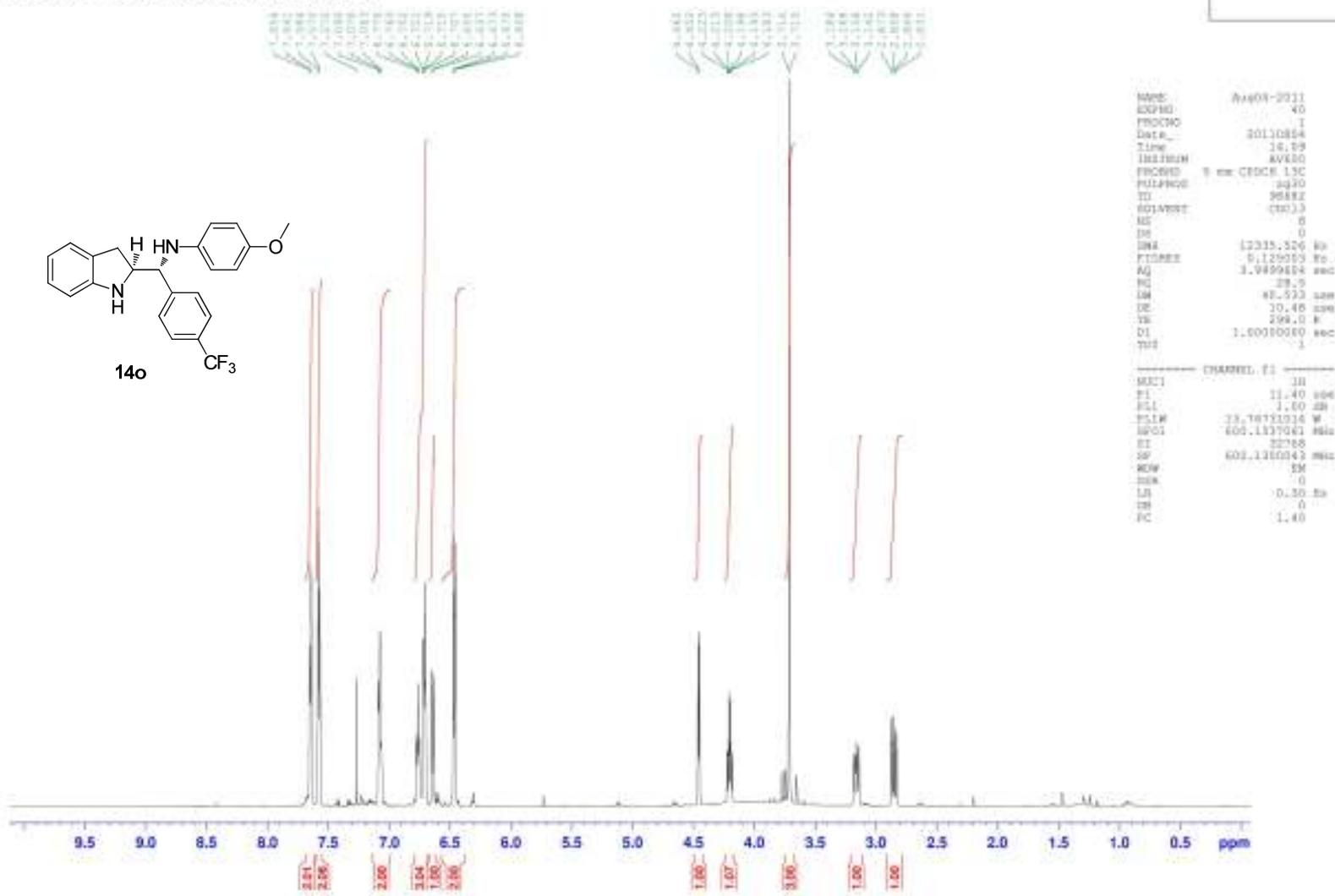
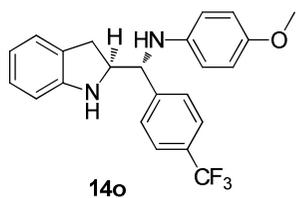
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	18.7686177 W
SFO1	101.921828 MHz

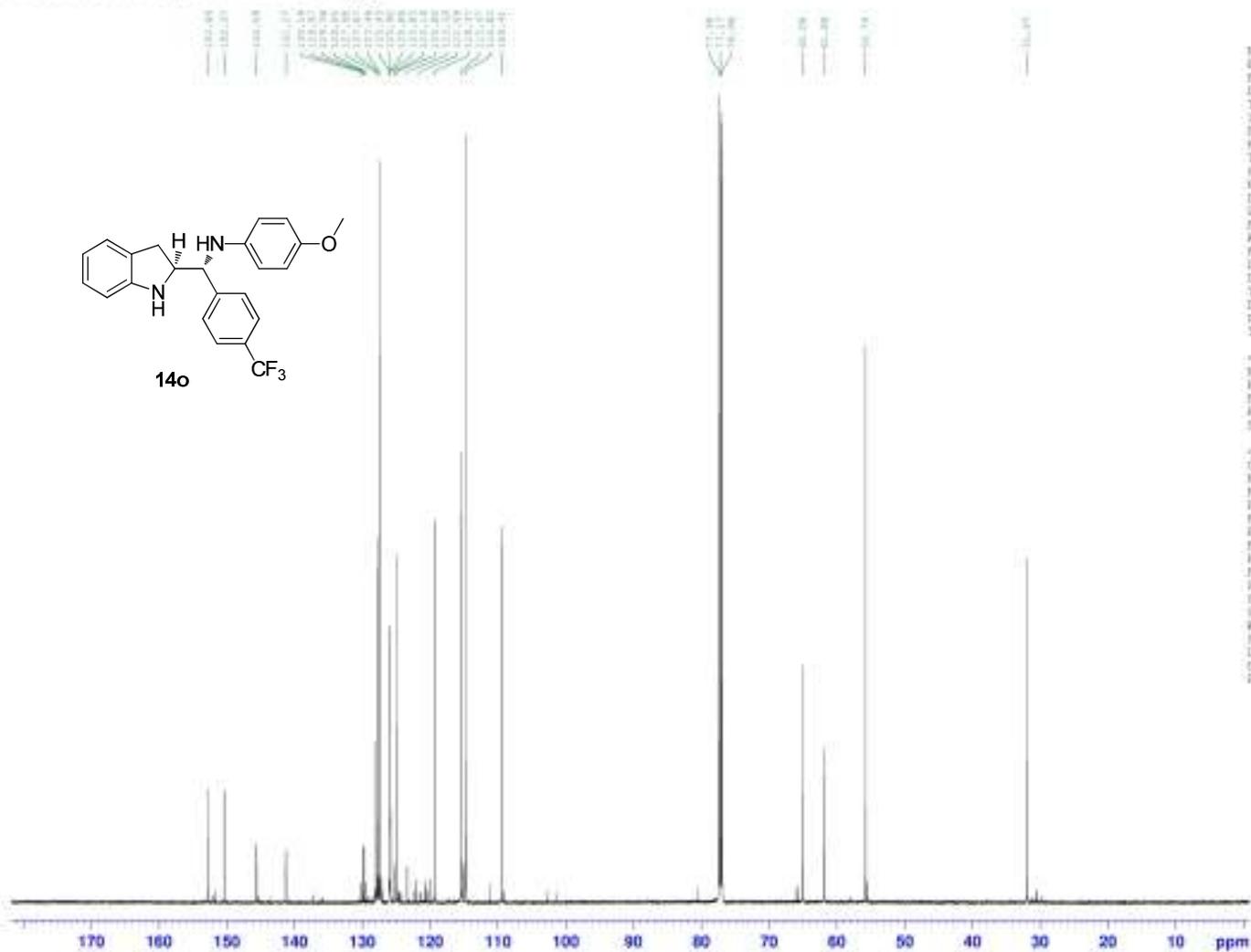
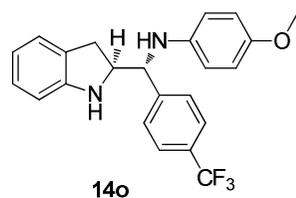
  

===== CHANNEL F2 =====	
NUC2	13H
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	25.76751724 W
PL15	0.32596138 W
PL16	0.17332926 W
SFO2	400.1424040 MHz
SI	65536
RF	101.9217830 MHz
WDR	EM
SSB	0
LB	1.00 Hz
GB	0
PC	1.40

AN722  
 PROTON.ucf CDCI3 [V.:Bruker:TOPSPIN] jca 1



AN722  
 C13CPD.ucl CDC13 (V:Bruker/TOPOSPIN) jca 1



NAME	Asp04-0111
EXPNO	42
F2PROCNO	1
DATE_	20110804
Time	14.51
INSTRUM	AV600
PROBHD	5 mm CPOCK 13C
PULPROG	zgpg30
TD	10328
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ1	6.555191 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

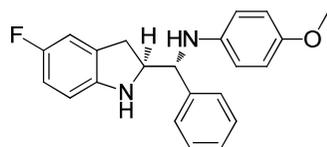
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL10	18.7686177 W
SFO1	101.9021828 MHz

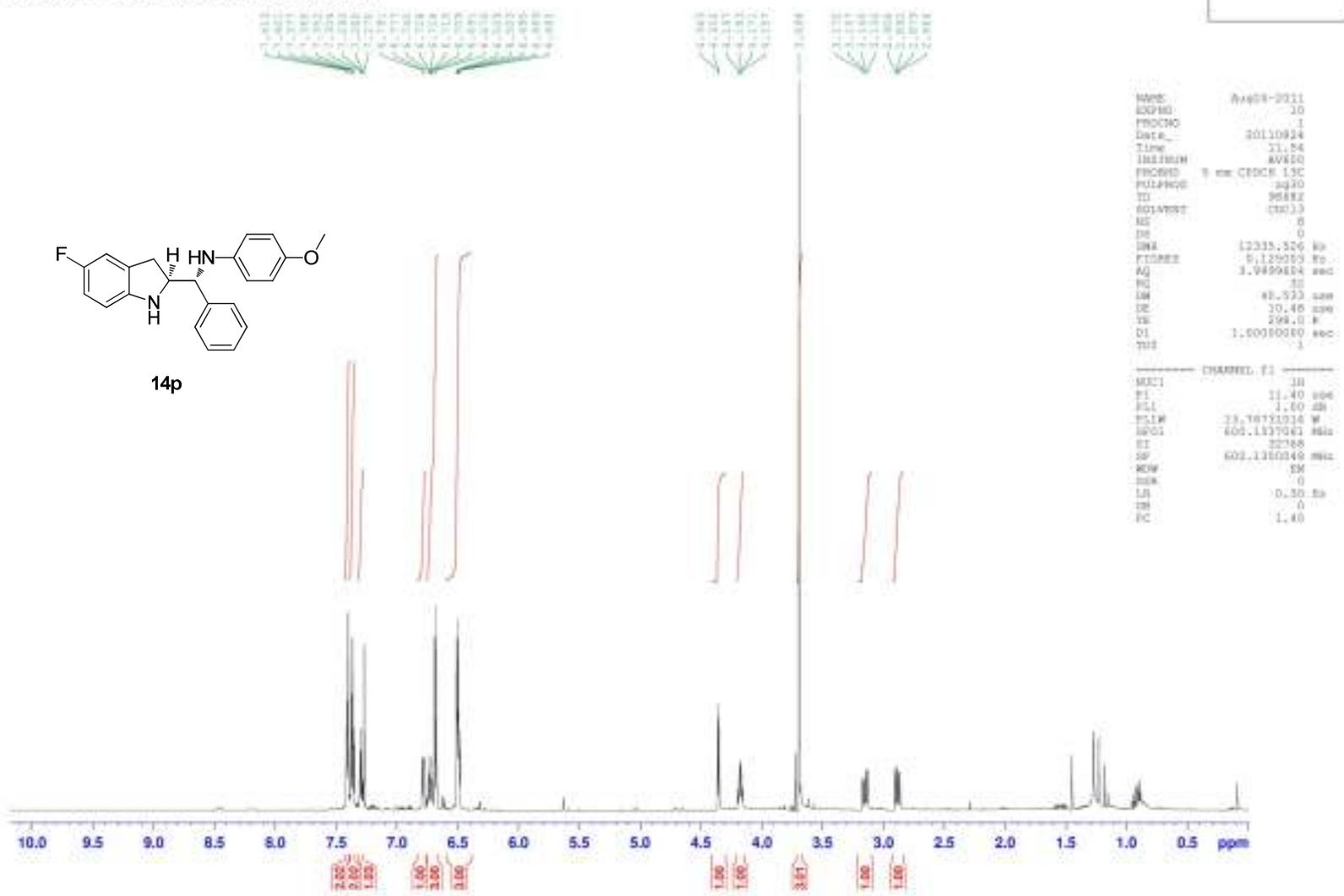
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	13H
PCPD2	70.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.00 dB
PL10	25.76751724 W
PL11	0.32796130 W
PL14	0.17332020 W
RFQ2	603.1326040 MHz
SI	65330
RF	101.9021830 MHz
RCW	EM
RR	0
LD	1.00 Hz
DR	0
DC	1.40

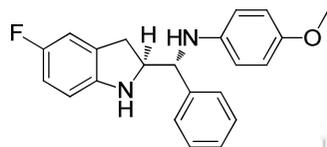
AN883  
 PROTON.ucf CDCI3 [V::Bruker:TOPSPIN] jca 1



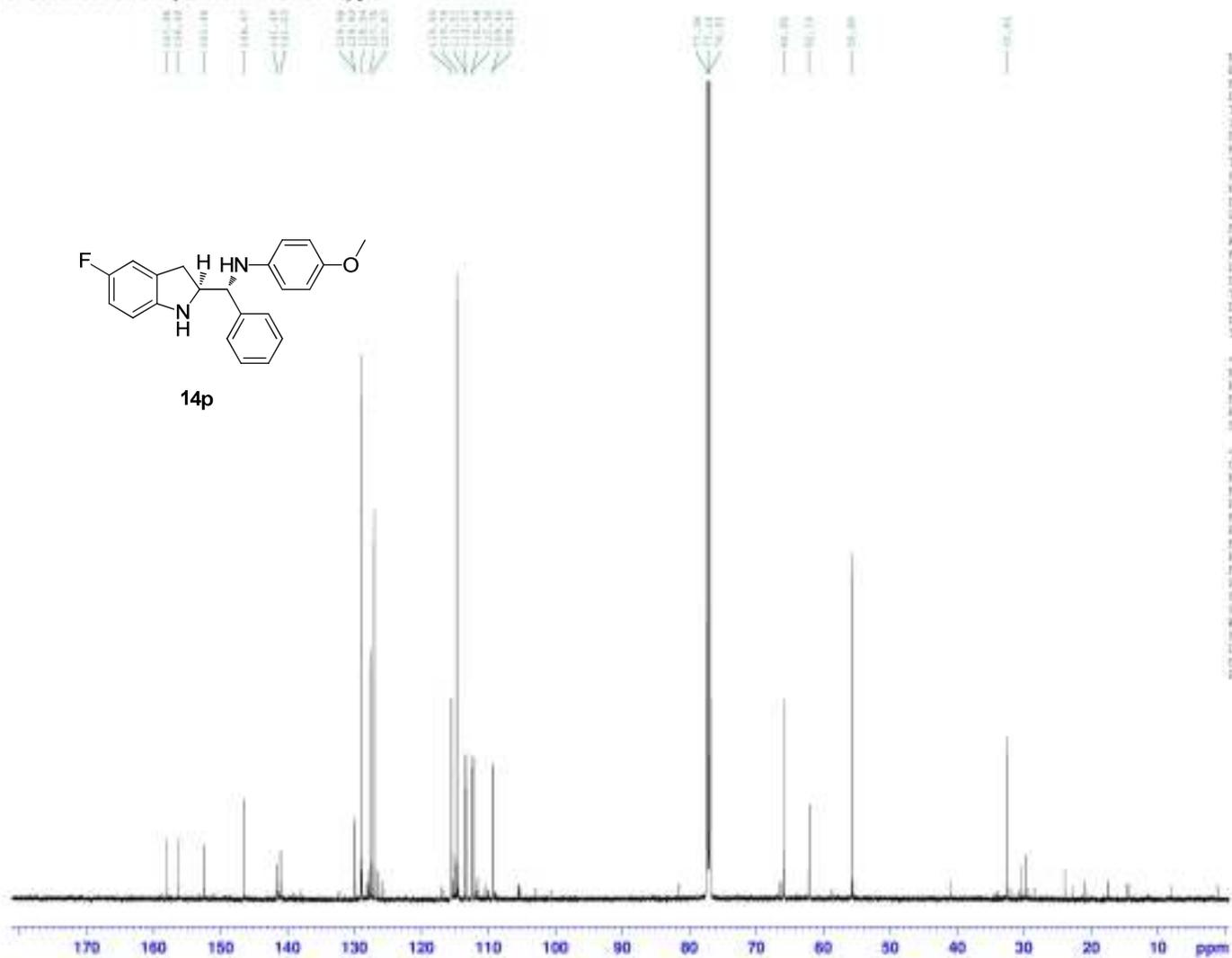
14p



AN863  
C13CPD.ucl CDC13 (V:Bruker/TOPOSPIN) jca 1



14p



NAME	Asp21-0311
EXPNO	32
F2PROCNO	1
DATE_	20110828
TIME	12:58
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

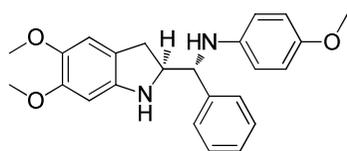
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	18.7686177 W
SFO1	101.6251828 MHz

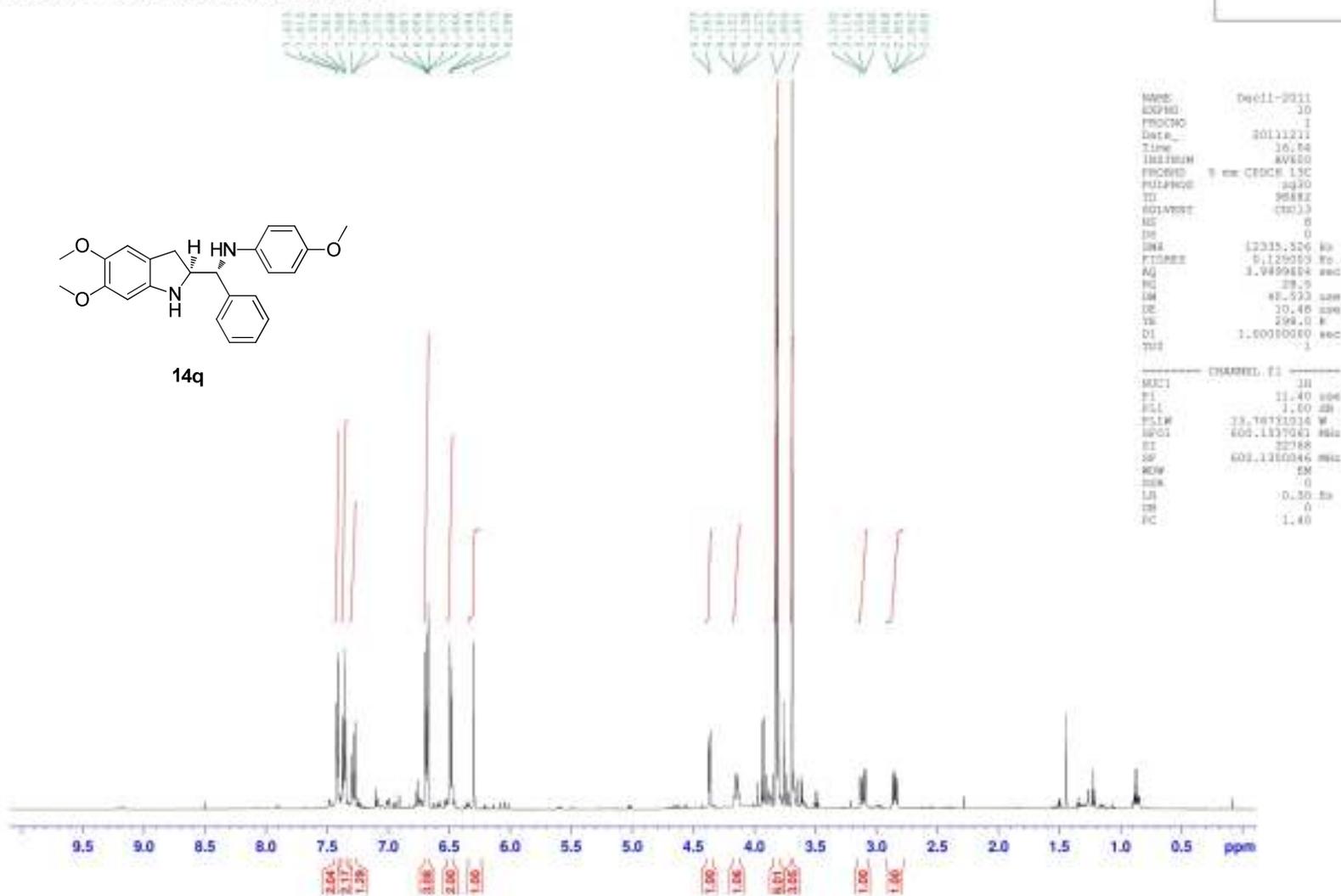
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.00 dB
PL15	25.76751724 W
PL16	0.32786130 W
PL17	0.17332026 W
SFO2	400.1424040 MHz
SI	65336
RF	301.9927830 MHz
CON	SM
EN	0
LD	1.00 Hz
DR	0
DC	1.40

AN974  
 PROTON.ucf CDCI3 (V::Bruker:TOPSPIN) jca 40



14q

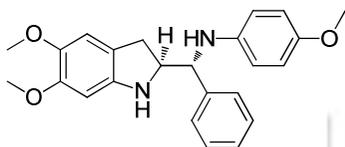


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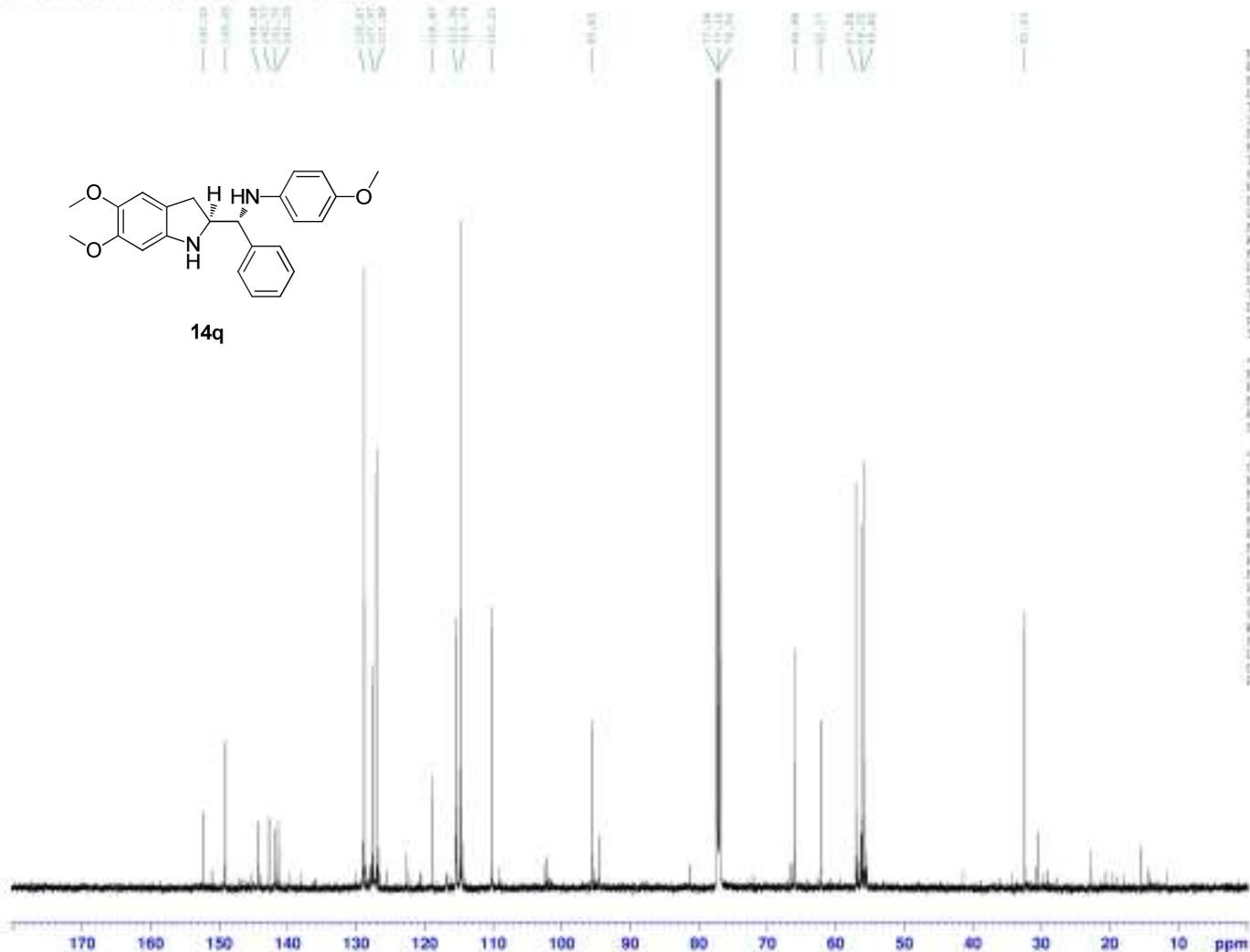
NAME      Dec11-2011
EXPNO     10
PROCNO    1
Date_     20111211
Time      16.54
INSTRUM   AV400
PROBHD    5 mm CDCl3 15C
PULPROG   zg30
TD         65536
SI         96882
SOLVENT   CDCl3
NS         6
DS         0
SWH        12315.326 Hz
FIDRES     0.125053 Hz
AQ         3.9499464 sec
RG         38.5
DA         42.523 sec
DE         10.46 cm
TE         298.0 K
D1         1.60000000 sec
TD0        1

----- CHANNEL f1 -----
NUC1       1H
P1         11.40 usec
PL1        1.00 dB
PS1P       19.7471014 W
SFO1       400.1437041 MHz
SI         32768
SF         400.1437046 MHz
RGW        EM
SOL         0
DS         0
LB         0.30 Hz
GB         0
PC         1.40
  
```

AN974  
 C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 4



14q



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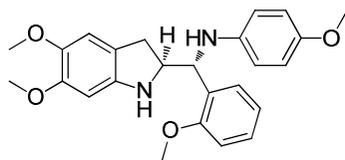
NAME      Dec11-0811
EXPNO    32
PROCNO    1
Date_     20111211
Time      15.15
INSTRUM   AV400
PROBHD    5 mm CPOCK 13C
PULPROG   zgpg30
TD         65536
SOLVENT   CDCl3
AQ         0.8999824 sec
RG         1024
DS         0
SWH        30012.560 Hz
F2       101.626131 MHz
AQ         0.8999824 sec
RG         1024
DS         0
SWH        12.860 MHz
DE         21.32 MHz
YC         298.0 K
D1         2.6000000 sec
D11        0.1000000 sec
D12        1
D13        1

===== CHANNEL f1 =====
NUC1       13C
P1         9.00 MHz
PL1        0.00 dB
PL12       20.00 dB
SFO1       101.626131 MHz

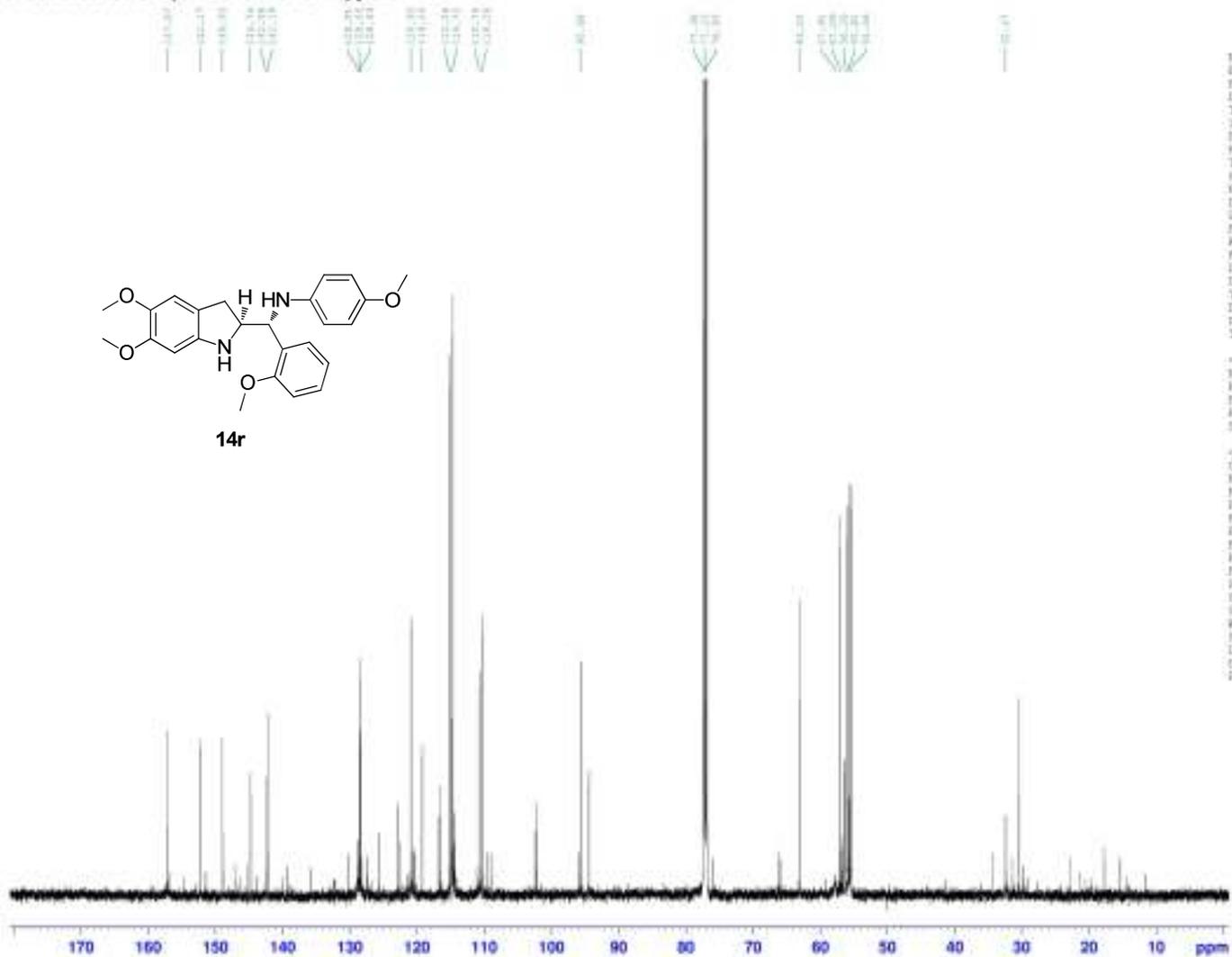
===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2       1H
PCPD2      70.00 MHz
PL2        1.00 dB
PL12       17.23 dB
PL13       20.00 dB
PL14       20.00 dB
PL15       20.00 dB
PL16       20.00 dB
PL17       20.00 dB
PL18       20.00 dB
PL19       20.00 dB
PL20       20.00 dB
PL21       20.00 dB
PL22       20.00 dB
PL23       20.00 dB
PL24       20.00 dB
PL25       20.00 dB
PL26       20.00 dB
PL27       20.00 dB
PL28       20.00 dB
PL29       20.00 dB
PL30       20.00 dB
PL31       20.00 dB
PL32       20.00 dB
PL33       20.00 dB
PL34       20.00 dB
PL35       20.00 dB
PL36       20.00 dB
PL37       20.00 dB
PL38       20.00 dB
PL39       20.00 dB
PL40       20.00 dB
PL41       20.00 dB
PL42       20.00 dB
PL43       20.00 dB
PL44       20.00 dB
PL45       20.00 dB
PL46       20.00 dB
PL47       20.00 dB
PL48       20.00 dB
PL49       20.00 dB
PL50       20.00 dB
PL51       20.00 dB
PL52       20.00 dB
PL53       20.00 dB
PL54       20.00 dB
PL55       20.00 dB
PL56       20.00 dB
PL57       20.00 dB
PL58       20.00 dB
PL59       20.00 dB
PL60       20.00 dB
PL61       20.00 dB
PL62       20.00 dB
PL63       20.00 dB
PL64       20.00 dB
PL65       20.00 dB
PL66       20.00 dB
PL67       20.00 dB
PL68       20.00 dB
PL69       20.00 dB
PL70       20.00 dB
PL71       20.00 dB
PL72       20.00 dB
PL73       20.00 dB
PL74       20.00 dB
PL75       20.00 dB
PL76       20.00 dB
PL77       20.00 dB
PL78       20.00 dB
PL79       20.00 dB
PL80       20.00 dB
PL81       20.00 dB
PL82       20.00 dB
PL83       20.00 dB
PL84       20.00 dB
PL85       20.00 dB
PL86       20.00 dB
PL87       20.00 dB
PL88       20.00 dB
PL89       20.00 dB
PL90       20.00 dB
PL91       20.00 dB
PL92       20.00 dB
PL93       20.00 dB
PL94       20.00 dB
PL95       20.00 dB
PL96       20.00 dB
PL97       20.00 dB
PL98       20.00 dB
PL99       20.00 dB
PL100      20.00 dB
SFO2       400.146200 MHz
SI         65536
SF         400.146200 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
  
```



AN958  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 2



14r



NAME	Nov21-2011
EXPNO	22
F2PROCNO	1
DATE_	20111124
TIME	10.25
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10386
SI	0
DELTA	0.00000000
DE	1.28
DS	0
SWH	30012.500 Hz
F2FREQ	101.625391 Hz
AQ	0.00000000 sec
RG	3270
DM	12.860 um
DE	21.30 um
YC	298.0 #
D1	2.00000000 sec
D11	0.00000000 sec
TD0	1

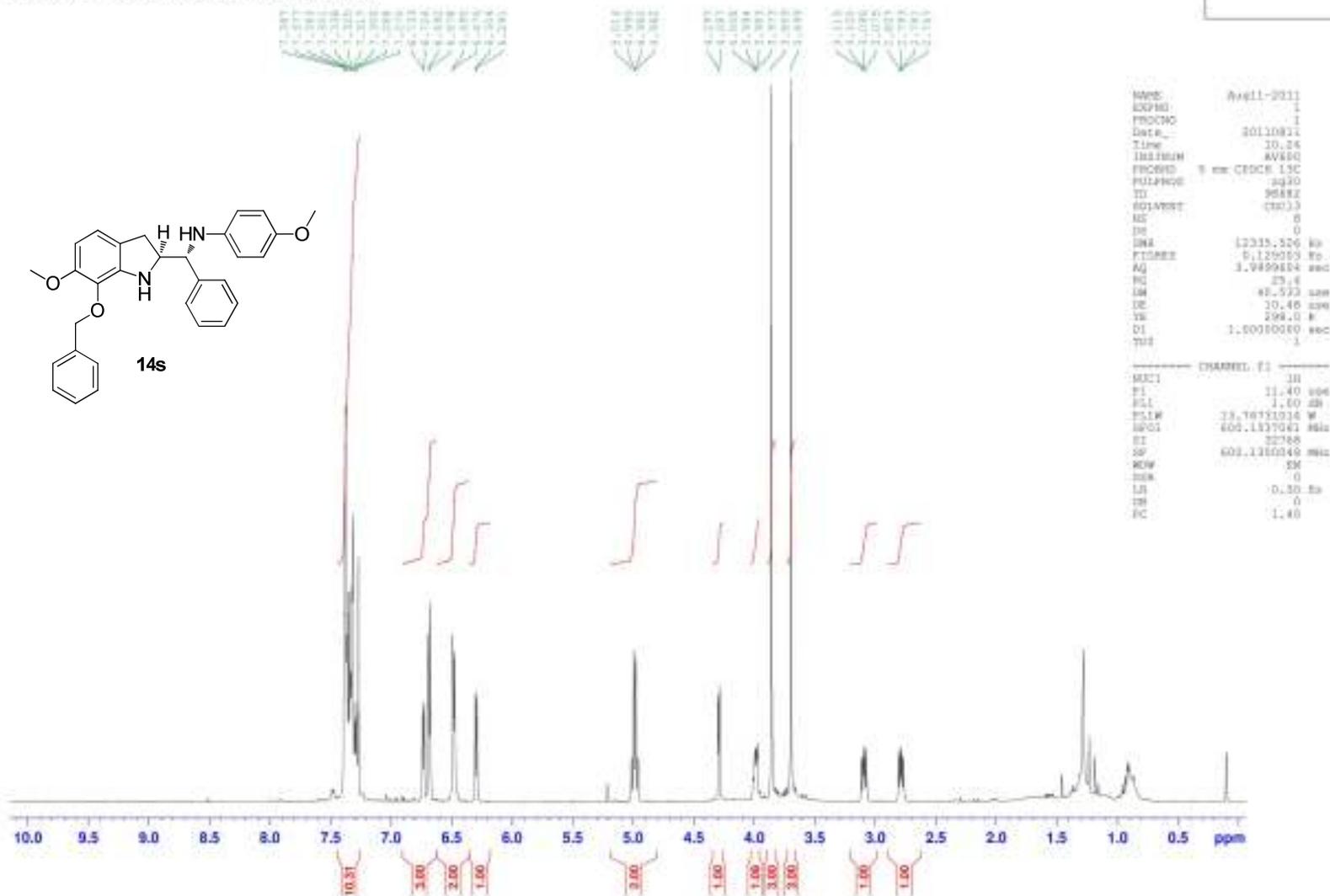
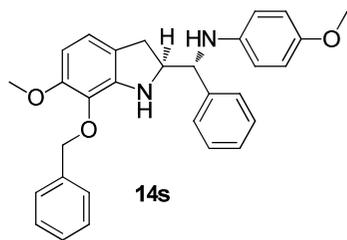
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.80 um
PL1	0.00 dB
PL12	20.00 dB
SFO1	101.625391 MHz

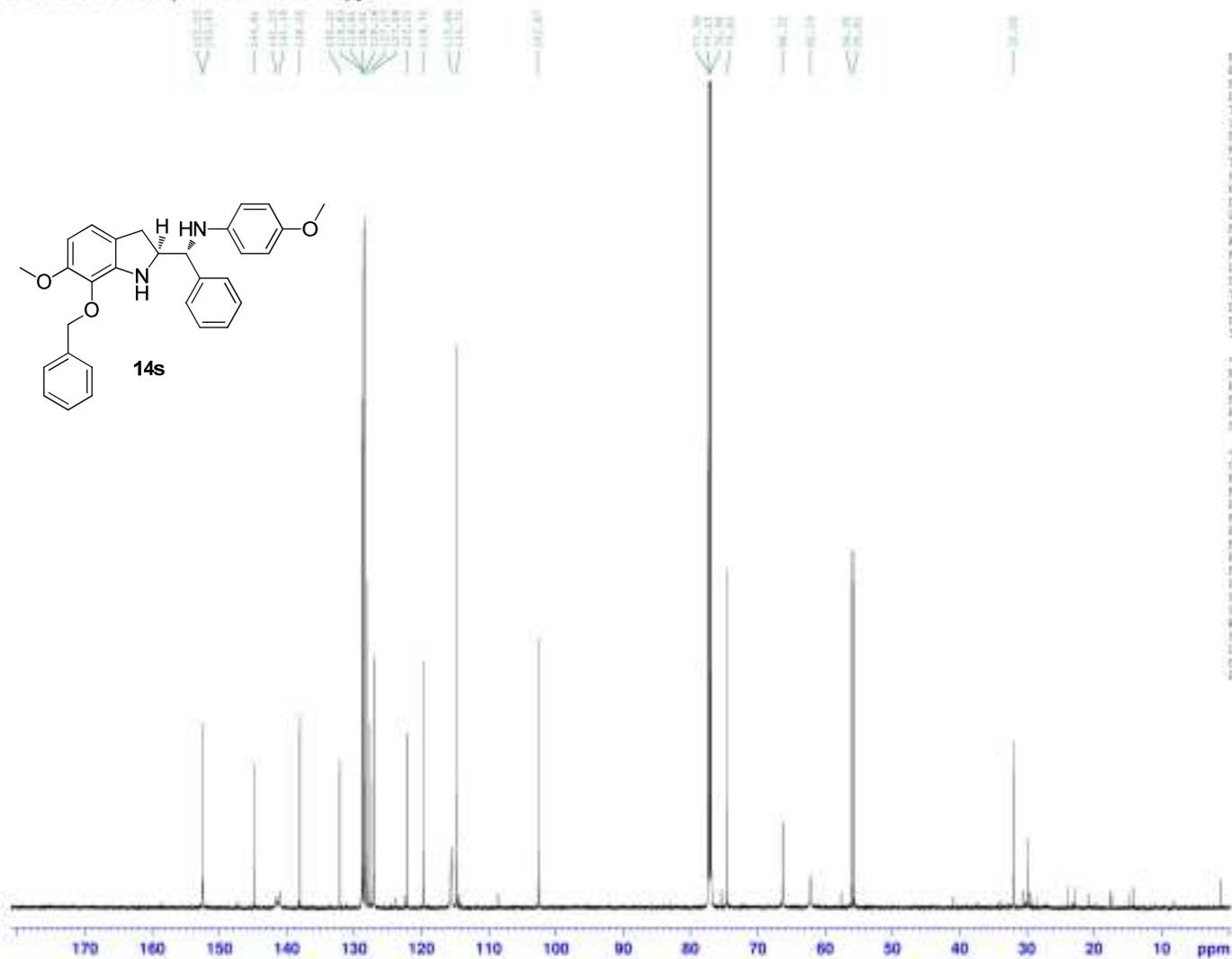
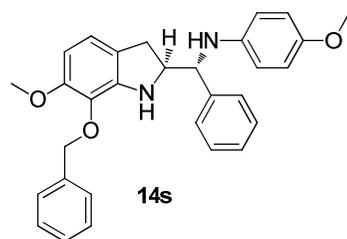
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL14	20.00 dB
PL15	20.00 dB
PL16	20.00 dB
PL17	20.00 dB
PL18	20.00 dB
PL19	20.00 dB
PL20	20.00 dB
PL21	20.00 dB
PL22	20.00 dB
PL23	20.00 dB
PL24	20.00 dB
PL25	20.00 dB
PL26	20.00 dB
PL27	20.00 dB
PL28	20.00 dB
PL29	20.00 dB
PL30	20.00 dB
PL31	20.00 dB
PL32	20.00 dB
PL33	20.00 dB
PL34	20.00 dB
PL35	20.00 dB
PL36	20.00 dB
PL37	20.00 dB
PL38	20.00 dB
PL39	20.00 dB
PL40	20.00 dB
PL41	20.00 dB
PL42	20.00 dB
PL43	20.00 dB
PL44	20.00 dB
PL45	20.00 dB
PL46	20.00 dB
PL47	20.00 dB
PL48	20.00 dB
PL49	20.00 dB
PL50	20.00 dB
PL51	20.00 dB
PL52	20.00 dB
PL53	20.00 dB
PL54	20.00 dB
PL55	20.00 dB
PL56	20.00 dB
PL57	20.00 dB
PL58	20.00 dB
PL59	20.00 dB
PL60	20.00 dB
PL61	20.00 dB
PL62	20.00 dB
PL63	20.00 dB
PL64	20.00 dB
PL65	20.00 dB
PL66	20.00 dB
PL67	20.00 dB
PL68	20.00 dB
PL69	20.00 dB
PL70	20.00 dB
PL71	20.00 dB
PL72	20.00 dB
PL73	20.00 dB
PL74	20.00 dB
PL75	20.00 dB
PL76	20.00 dB
PL77	20.00 dB
PL78	20.00 dB
PL79	20.00 dB
PL80	20.00 dB
PL81	20.00 dB
PL82	20.00 dB
PL83	20.00 dB
PL84	20.00 dB
PL85	20.00 dB
PL86	20.00 dB
PL87	20.00 dB
PL88	20.00 dB
PL89	20.00 dB
PL90	20.00 dB
PL91	20.00 dB
PL92	20.00 dB
PL93	20.00 dB
PL94	20.00 dB
PL95	20.00 dB
PL96	20.00 dB
PL97	20.00 dB
PL98	20.00 dB
PL99	20.00 dB
PL100	20.00 dB

AN-GSK-79  
 PROTON.ucf CDCI3 [V::Bruker:TOPSPIN] jca 1



AN-GSK-79  
 C13CPD.ucl CDC13 (V:Bruker/TOPOSPIN) jca 1



NAME	Asp11-0311
EXPNO	1
F2PROCNO	1
DATE_	20110821
TIME	10:35
INSTRUM	AV400
PROBHD	5 mm CPOCX 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

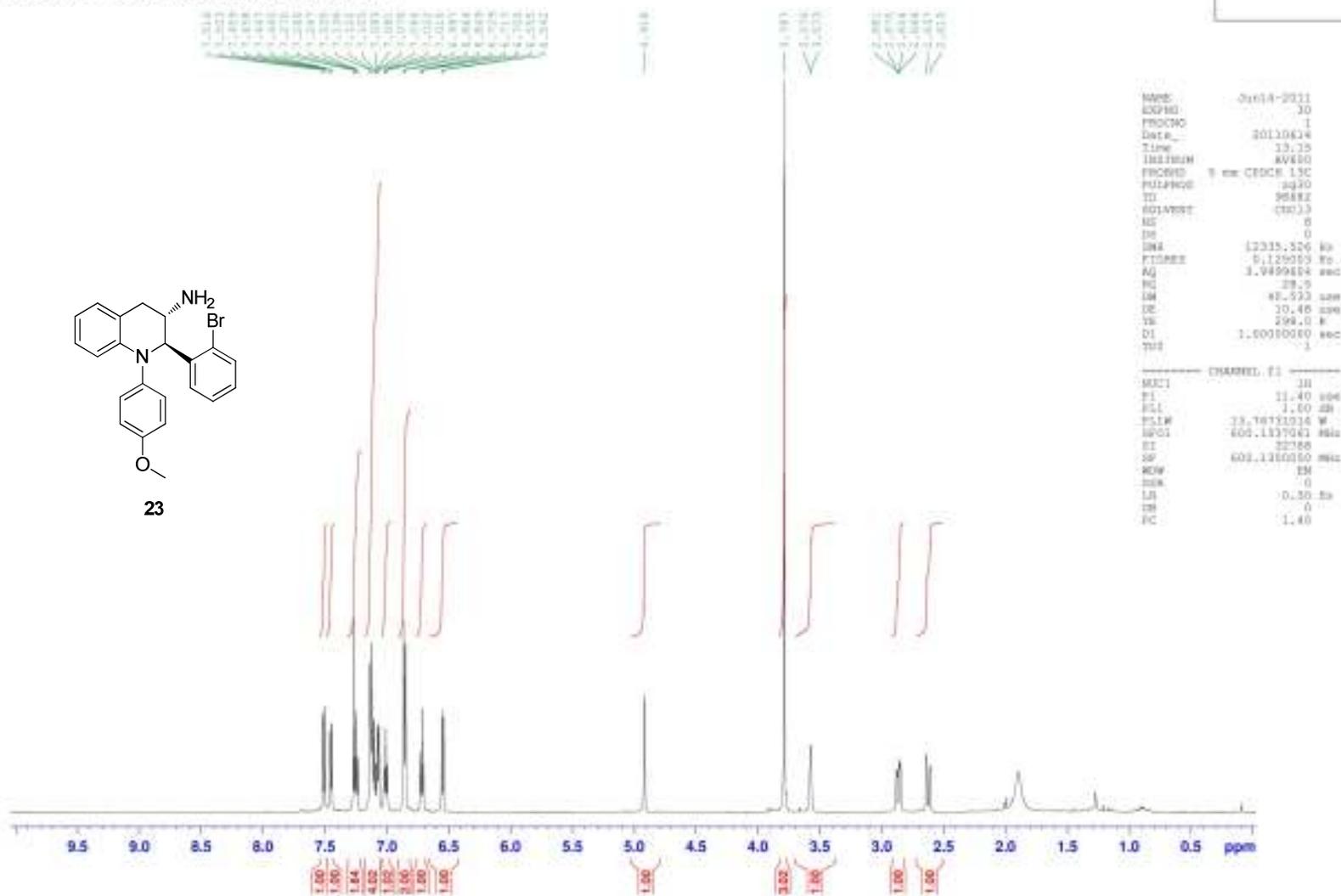
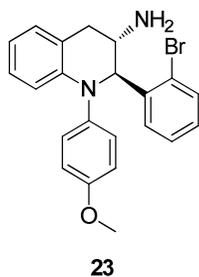
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL10	20.7086177 W
SFO1	101.6251828 MHz

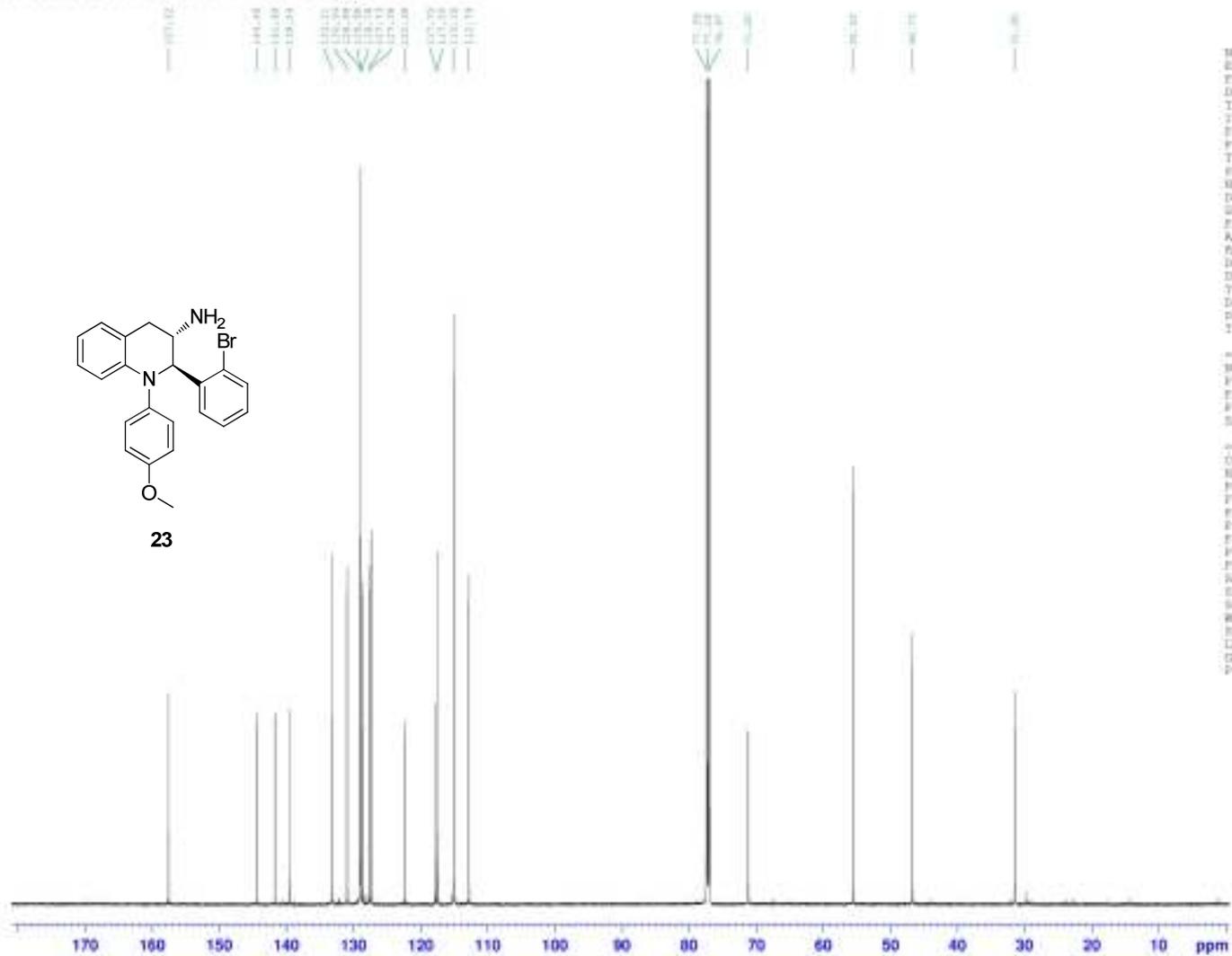
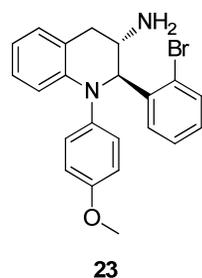
  

===== CHANNEL F2 =====	
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	-17.23 dB
PL13	20.00 dB
PL10	25.7675124 W
PL11	0.32706130 W
PL1M	0.17332026 W
SFO2	400.1424040 MHz
SI	65536
RF	304.9927830 MHz
ROW	SM
ENR	0
LD	1.00 Hz
DS	0
DC	1.40

AN817  
 PROTON.ucf CDCI3 (V:\Bruker\TOPSPIN) jca 26



AN817  
C13CPD.ucl CDC13 (V:BrukerTOPSPIN) jca 2



NAME	Jan14-2011
EXPNO	31
F2PROCNO	1
DATE_	20110614
TIME	15:29
INSTRUM	AV450
PROBHD	5 mm CPDCK 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.500 Hz
F2FREQ	101.625391 Hz
AQ	0.0000024 sec
RG	1020
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

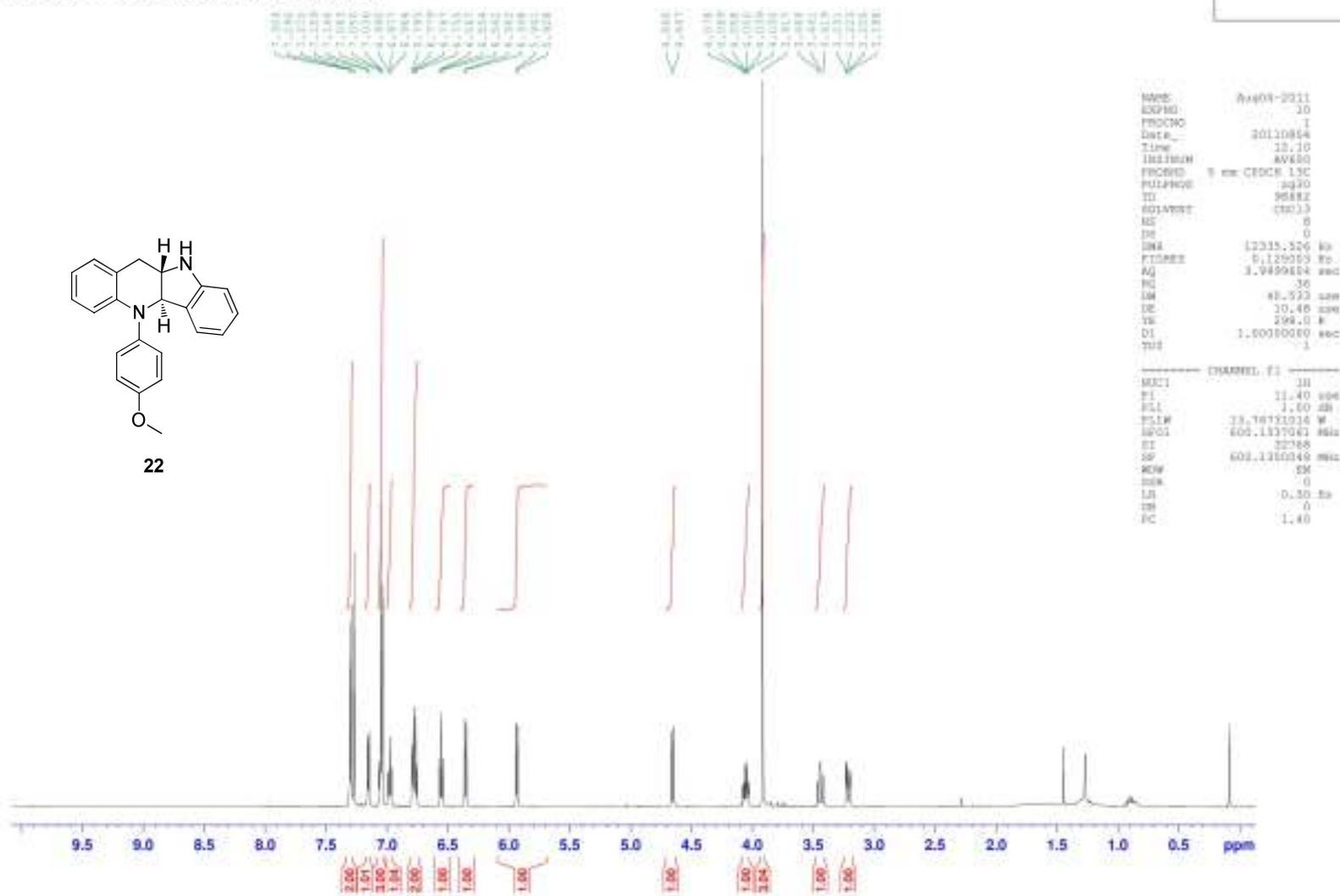
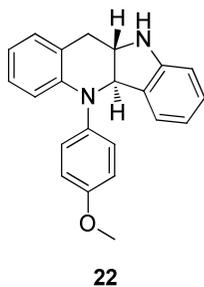
  

===== CHANNEL F1 =====	
NUC1	13C
FL1	9.00 um
PL1	0.00 dB
PL10	18.7686177 W
SFO1	101.6253910 MHz

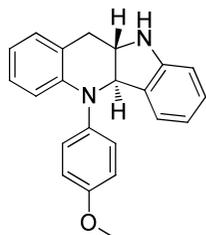
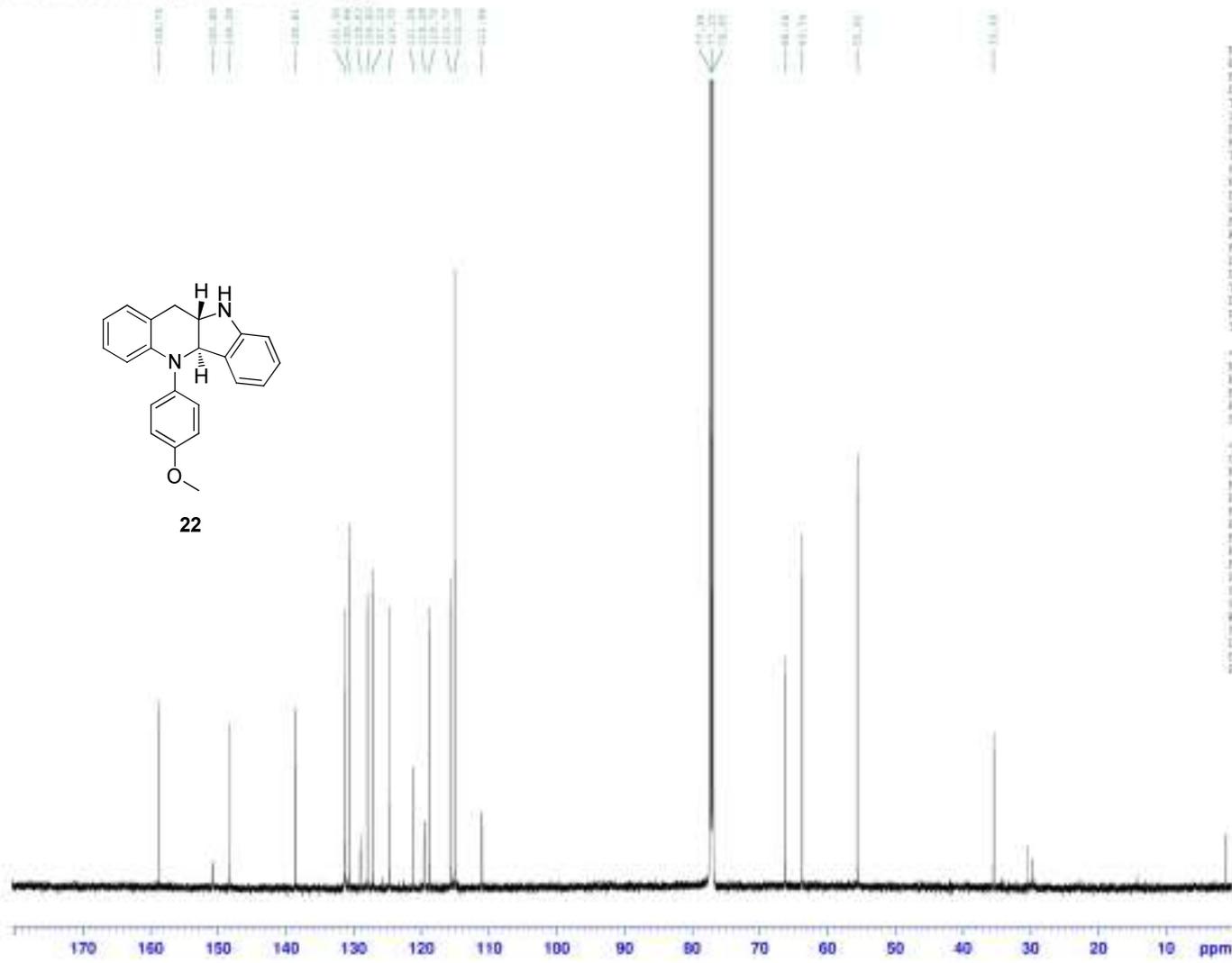
  

===== CHANNEL F2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	70.00 um
PL2	1.00 dB
PL12	17.23 dB
PL13	20.00 dB
PL10	15.7675124 W
PL110	0.32596130 W
PL11M	0.17332026 W
SFO2	400.1424000 MHz
SI	65536
RF	101.9927830 MHz
RCW	5M
ENH	0
LB	1.00 Hz
GB	0
PC	1.40

AN820  
 PROTON.ucf CDCI3 (V:\Bruker\TOPSPIN) jca 1



AN820  
C13CPD.ucl CDC13 (V:Bruker/TOPOSPIN) jca 1



22

NAME	Asp04-2311
EXPNO	32
F2PROCNO	1
DATE_	20110824
Time	12:33
INSTRUM	AV400
PROBHD	5 mm CQCP 13C
PULPROG	zgpg30
TD	10388
FIDRES	0.0043
MS	128
DS	0
SWH	30012.560 Hz
F2FREQ	101.625191 Hz
AQ	0.0000024 sec
RG	3270
DM	12.860 um
DE	21.30 um
TE	298.0 K
D1	2.0000000 sec
D11	0.0000000 sec
TD0	1

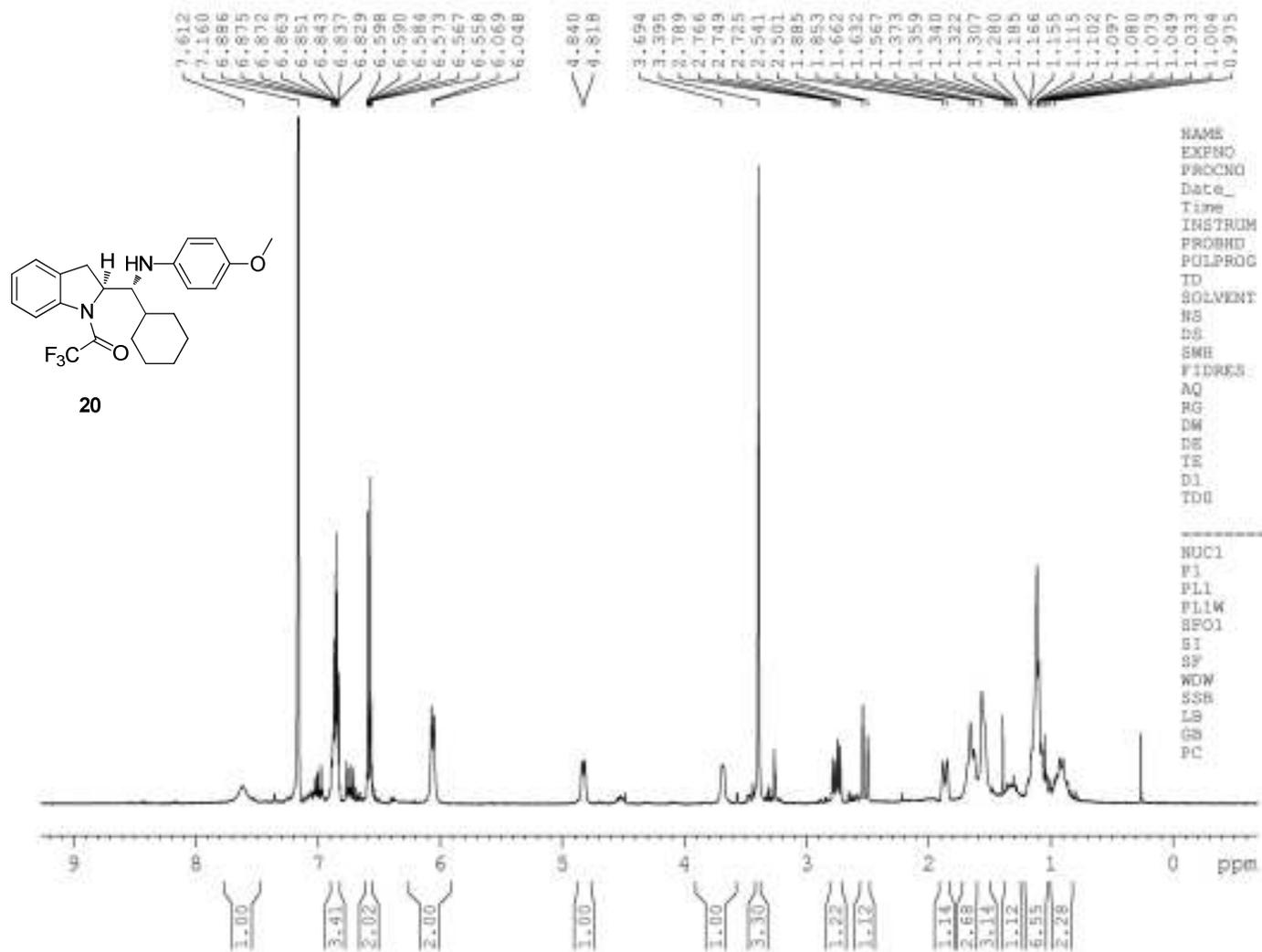
  

===== CHANNEL f1 =====	
NUC1	13C
FL1	9.40 um
PL1	0.00 dB
PL12	19.7686177 W
SFO1	101.6251828 MHz

===== CHANNEL f2 =====	
CPDPRG2	waltz16
NUC2	1H
PCPD2	10.00 um
PL2	1.00 dB
PL13	17.23 dB
PL14	20.40 dB
PL15	25.76751724 W
PL16	0.32796130 W
PL17	0.17332926 W
SFO2	400.1424040 MHz
SI	65336
RF	304.9927830 MHz
CON	SM
EN	0
LD	1.00 Hz
DR	0
DC	1.40

AN987-VT-C6D6-90 deg

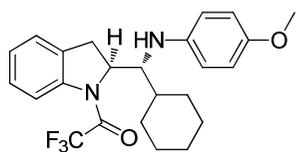


NAME	AN987-VT
EXPNO	1
PROCNO	1
Date_	20120215
Time	18.39
INSTRUM	av400
PROBHD	5 mm QNP 1H/15
PULPROG	zg30
TD	65536
SOLVENT	C6D6
NS	16
DS	0
SF	8223.685 H
FIDRES	0.125483 H
AQ	3.9846387 s
RG	575
DW	60.800 us
DE	16.52 us
TE	363.2 K
D1	1.00000000 s
TDS	1

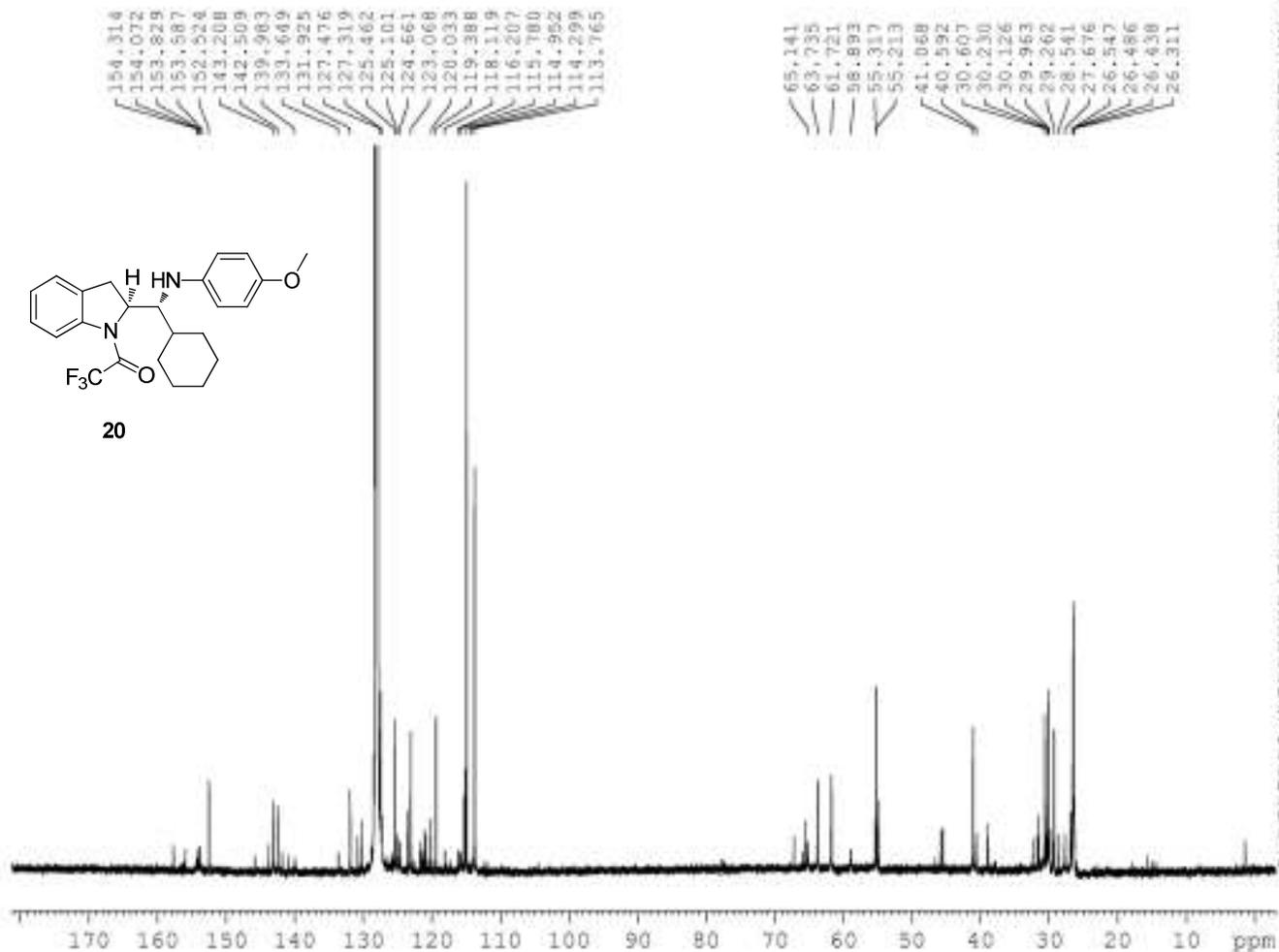
  

----- CHANNEL f1 -----	
NUC1	1H
F1	11.70 us
PL1	0.00 dB
PL1W	13.01537533 W
SFO1	400.1324710 MHz
SF	400.1300429 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.40

AN987  
 C13CPD.ucl C6D6 (V:\Bruker\TOPSPIN) jca 3



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NAME          600
EXPNO         32
PROCNO        1
Date_         20100218
Time          3.03
INSTRUM       AV600
PROBHD        5 mm CQCP13C
PULPROG       zgpg30
ID            79304
SOLVENT       CDCl3
DS            512
SS            0
SMH           39042.500
FIDRES       0.551591
AQ           2.4998924
RG           5038
SM          12.860
GB           21.12
TK           248.0
SI           2.0000000
D11          0.0100000
TD           1

----- CHANNEL f1 -----
NUC1          13C
P1            3.00
PL1           1.00
PL1W         26.76884177
SFO1         150.9201818

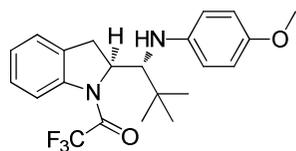
----- CHANNEL f2 -----
CPDPRG2      waltz16
NUC2          1H
PCPD2        70.00
PL2           1.00
PL12         17.23
PL13         20.00
PL1W         13.74721014
PL1W         6.327948135
PL1W         6.13321014
SFO2         400.1324003
WDW          2
GB           128
SFO1         680.1323
FIDRES       39.062500
SM           8.131
PROBDE       QF
SI           65526
SF           150.9027351
WDW          0
SS           0
LB           1.00
GB           0
PC           1.40
SI           1024
NUC2         QF
SF           400.1300093
WDW          0
SS           0
LB           0.00
GB           0
  
```

AN988-VT-C6D6-90 deg

7.447  
7.160  
6.854  
6.851  
6.806  
6.804  
6.822  
6.817  
6.804  
6.799  
6.780  
6.782  
6.776  
6.763  
6.758  
6.550  
6.541  
6.535  
6.524  
6.519  
6.510  
6.006  
5.000  
0.979

3.774  
3.384  
2.841  
2.816  
2.800  
2.778  
2.714  
2.710  
2.673  
2.670

0.917



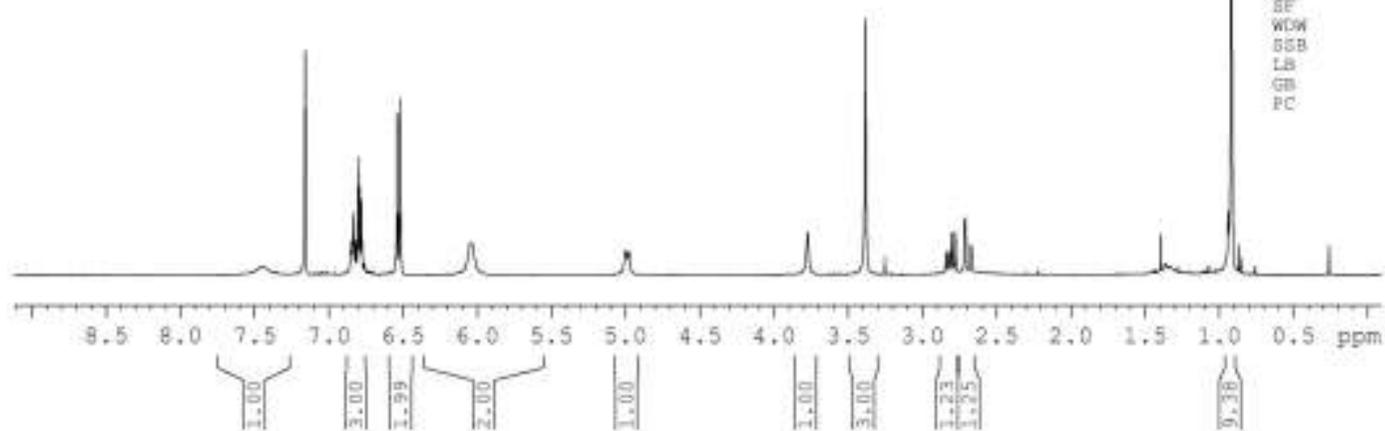
21

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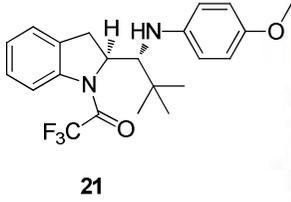
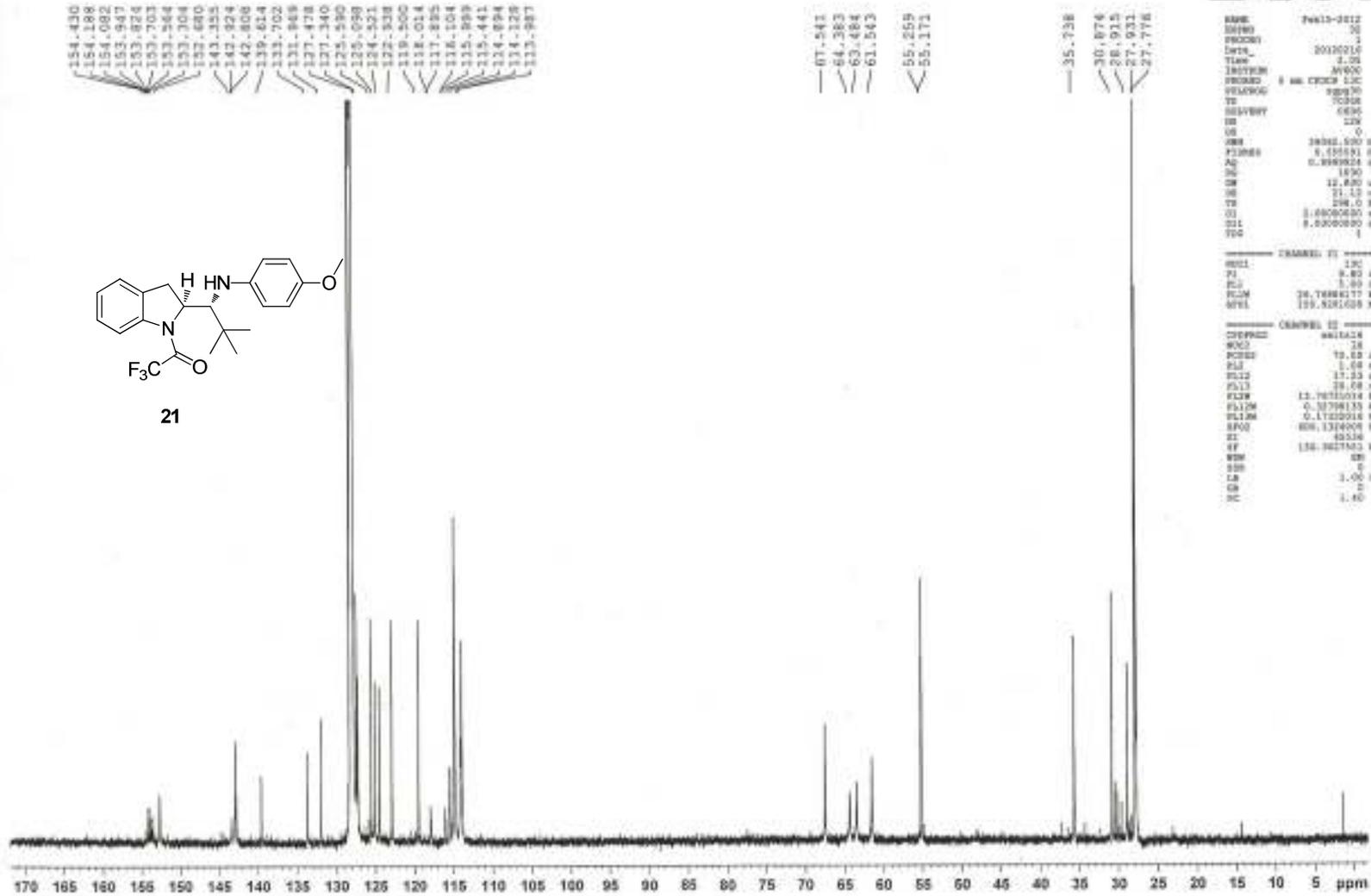
NAME          AN988-VT-1
EXPNO         1
PROCNO       1
Date_        20120215
Time         17.36
INSTRUM      av400
PROBHD       5 mm QNP 1H/15
PULPROG      zg30
ID           65536
SOLVENT      C6D6
NS           16
DS           0
SMH          8223.685 H
FIDRES       0.125483 H
AQ           3.9666387 s
RG           322
DM           60.800 u
DE           16.52 u
TE           363.2 K
D1           1.00000000 s
TD0          1
    
```

```

----- CHANNEL f1 -----
NUC1         1H
P1           11.70 u
PL1          0.00 d
PL1W        13.81537533 W
SFO1         400.1324710 M
SI           32768
SF           400.1300428 M
WDW          SM
SSB          0
LB           0.30 H
GB           0
PC           1.40
    
```



AN988  
C-13CPD.ucl C6D6 (V:\Bruker\TOPSPIN) jrb 1



NAME	FW415-0112
EXPNO	30
PROCNO	1
DATA	20120216
TIME	2.05
INSTRUM	MVCOX
PROBHD	5 mm CPDPR 13C
PULPROG	zgpg30
TD	70528
SF	6250
WDW	EM
SSB	0
GB	0
PC	10242.500 Hz
RG	6.50551 Hz
AD	0.898824 Hz
DE	1830
DM	12.800 MHz
DO	21.12 MHz
TE	296.2 K
TD1	1.0000000 Hz
TD2	1.0000000 Hz
TD3	1

===== CHANNEL F1 =====	
NUC1	13C
PL1	9.80 MHz
PL2	1.00 MHz
PL3	24.7886177 MHz
NUC2	129.6281628 MHz

===== CHANNEL F2 =====	
CPDPRG2	zgpg30
NUC2	13C
PCPD2	12.800 MHz
PL2	1.00 MHz
PL3	17.25 MHz
PL4	28.08 MHz
PL5	12.7812014 MHz
PL6	0.50798135 MHz
PL7	0.17220214 MHz
RF02	800.1314000 MHz
ZF	800.1314 MHz
ZF2	129.6281628 MHz
WDW	EM
SSB	0
GB	0
PC	1.40