

Supporting Information 2

Development of a convenient and useful transesterification reaction using a catalytic amount of strontium alkoxide

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770-8506, JAPAN

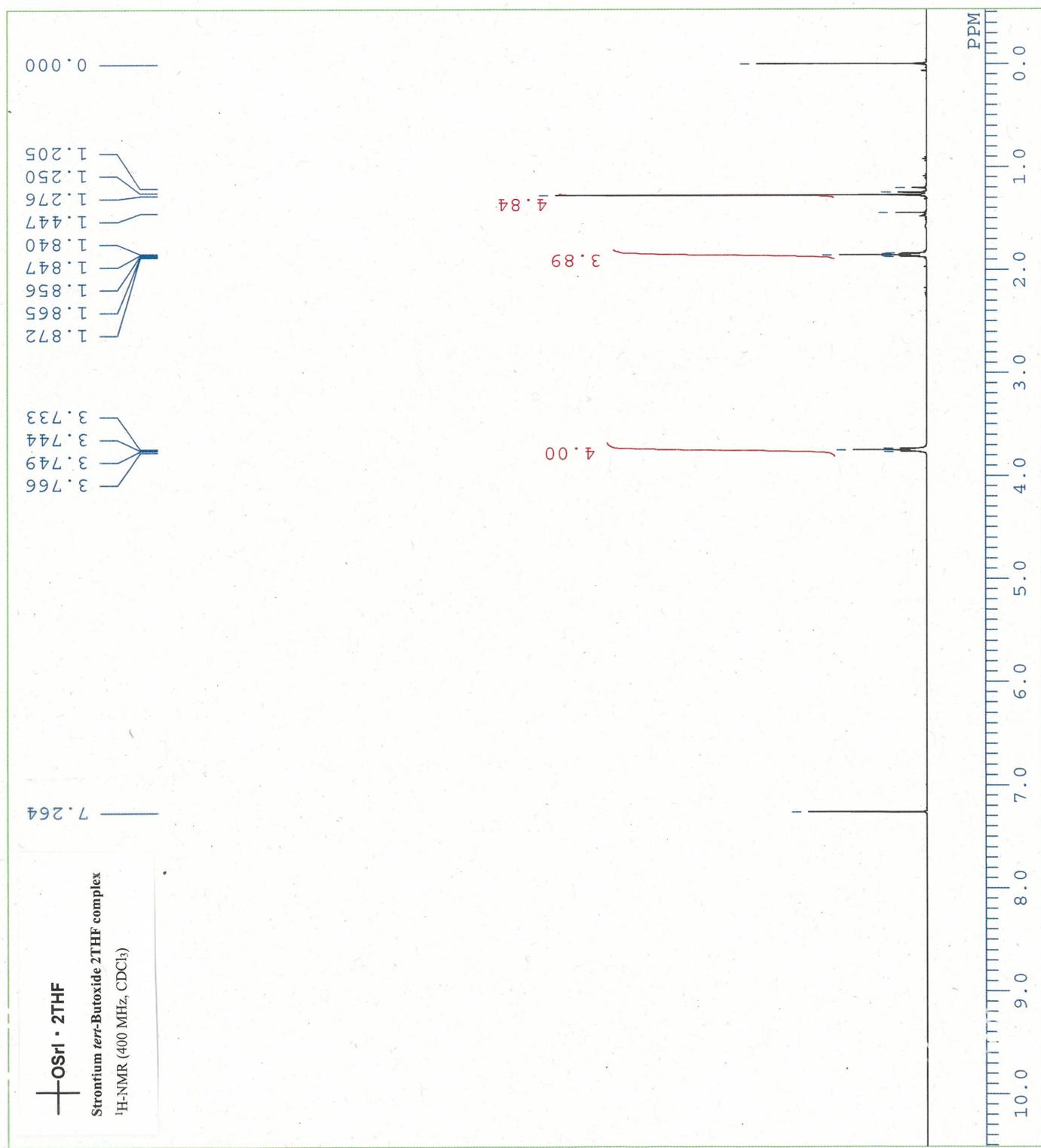
miyoshi@ias.tokushima-u.ac.jp; ueno.masaharu@tokushima-u.ac.jp

Table of Contents

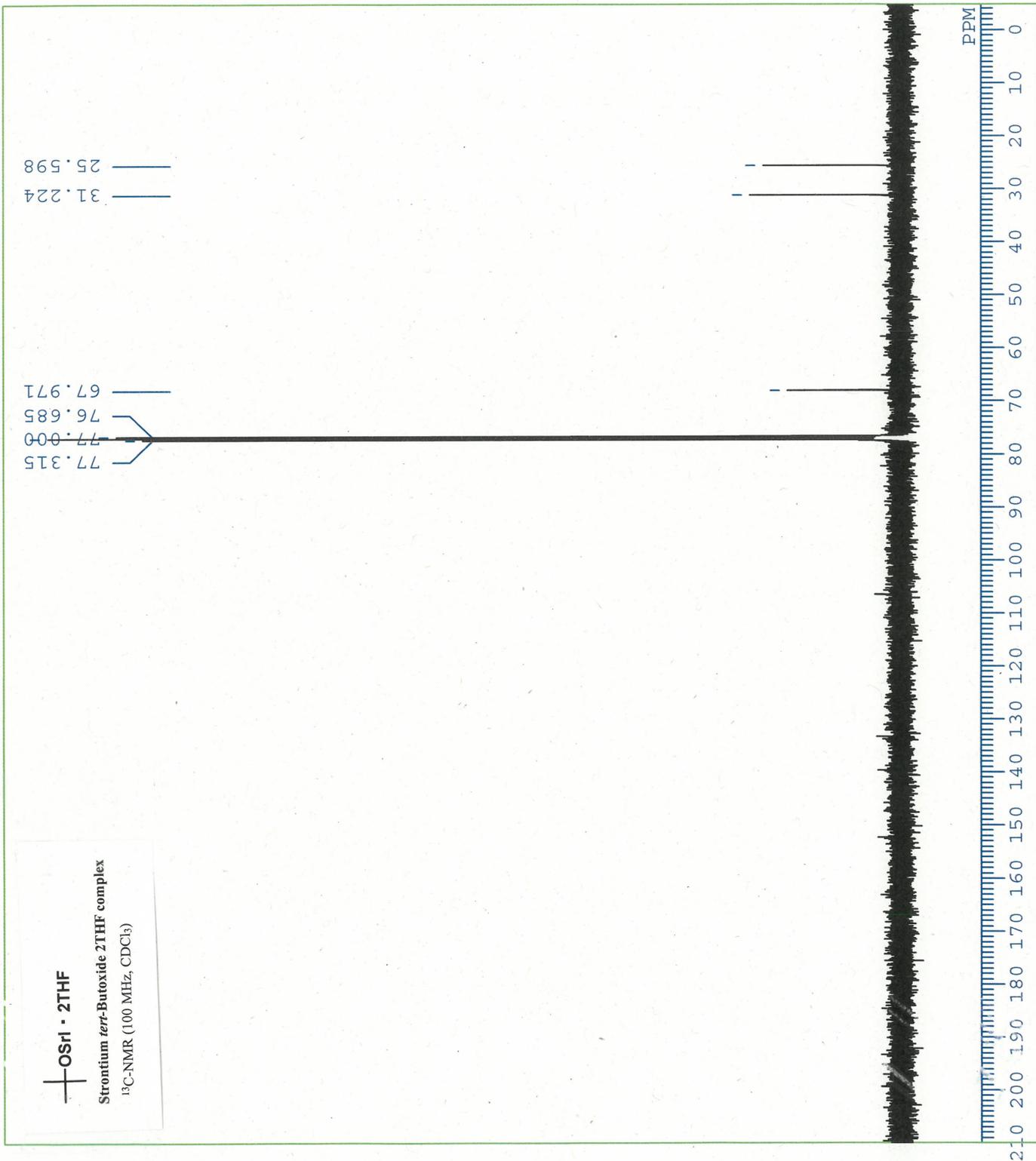
1. Copies of ^1H and ^{13}C NMR Spectra
2. References

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 proton.jxp
 399.78 MHz
 4.19 KHz
 7.29 Hz
 13107
 6002.40 Hz
 8
 2.1837 sec
 5.0000 sec
 6.55 usec
 1H
 19.0 C
 CDCL3
 0.00 ppm
 0.12 Hz
 50

DFILE
 COMNT
 DATIM
 OBNUC
 EXMOD
 OBFRQ
 OBSSET
 OBFIN
 POINT
 FREQU
 SCANS
 ACQTM
 PD
 PW1
 IRNUC
 CTEMP
 SLVNT
 EXREF
 BF
 RGAIN



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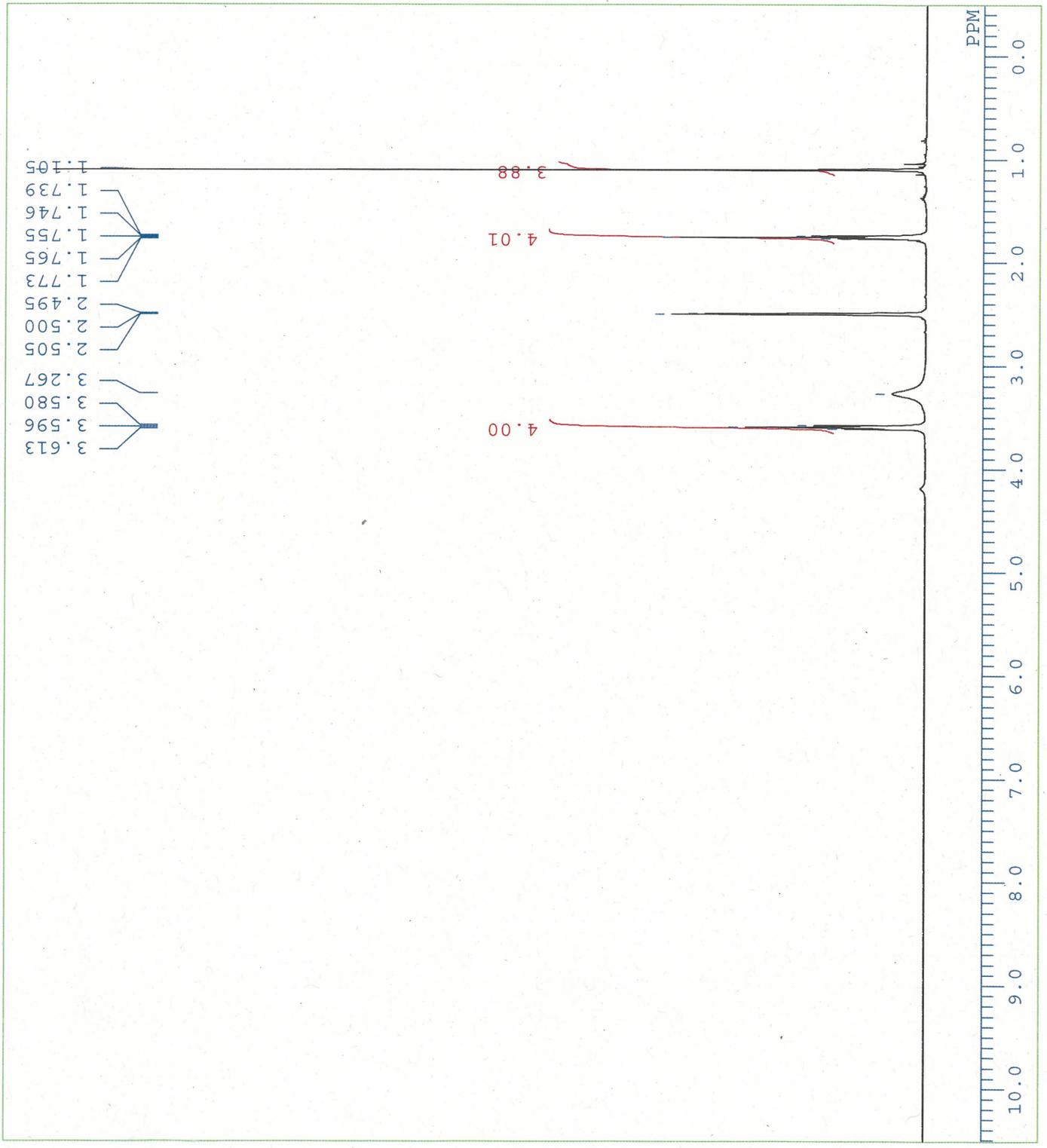


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OSrI - 2.2THF

Strontium *tert*-Butoxide 2.2THF complex
¹H-NMR (400 MHz, DMSO-*d*₆)

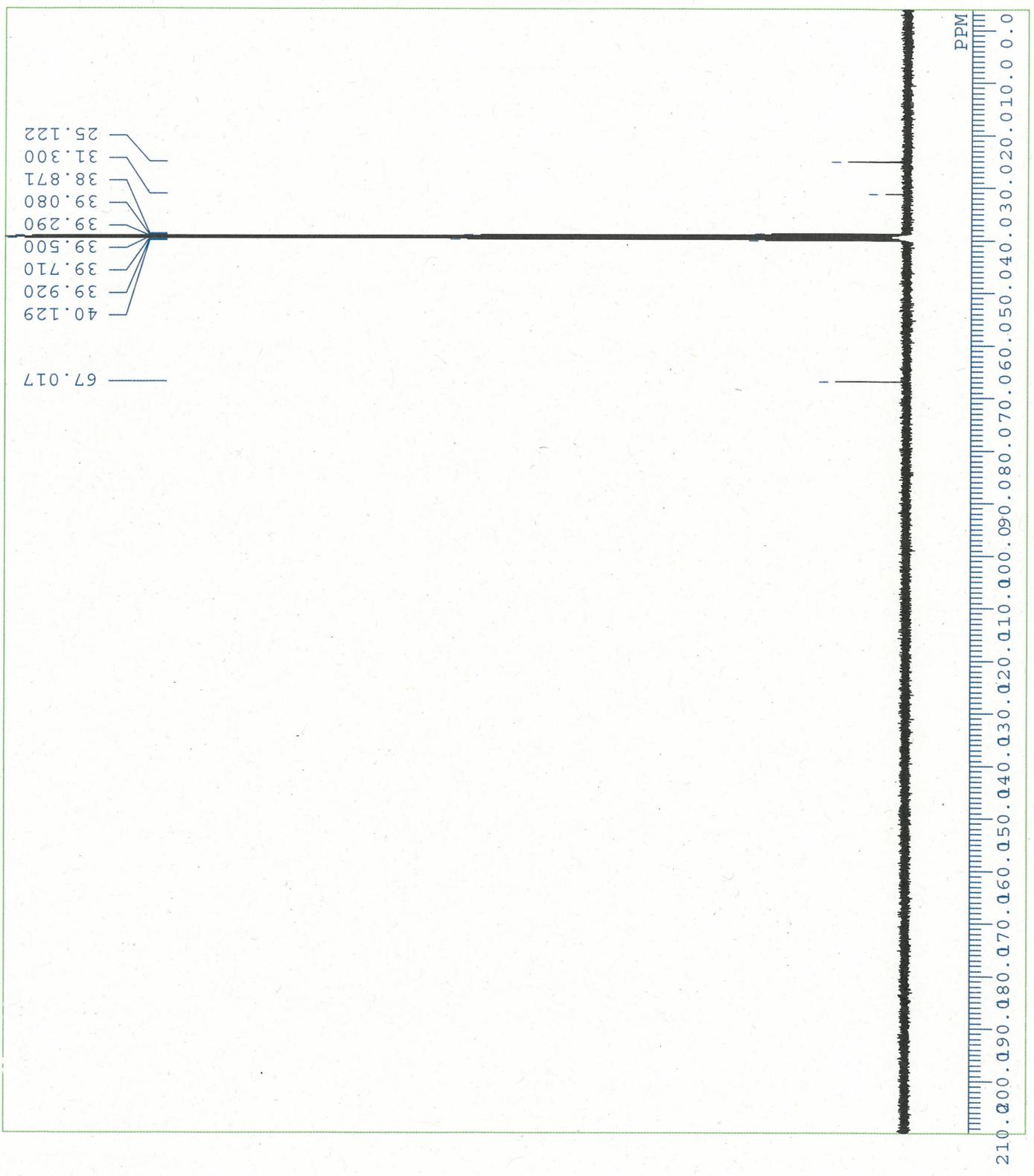


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 SLVNT DMSO
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 BF 0.12 Hz
 RGAIN 60

— OSrI • 2.2THF

Strontium *tert*-Butoxide 2.2THF complex
¹³C-NMR (100 MHz, DMSO-*d*₆)



DFILE kamada Sr DMSO... Proton-

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DATIM 2026-02-02 15:43:21

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EXMOD proton.jxp

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OBFIN 7.29 Hz

POINT 16384

FREQ 7503.00 Hz

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PD 5.0000 sec

PW1 6.55 usec

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CTEMP 21.3 C

SLVNT DMSO

EXREF 2.50 ppm

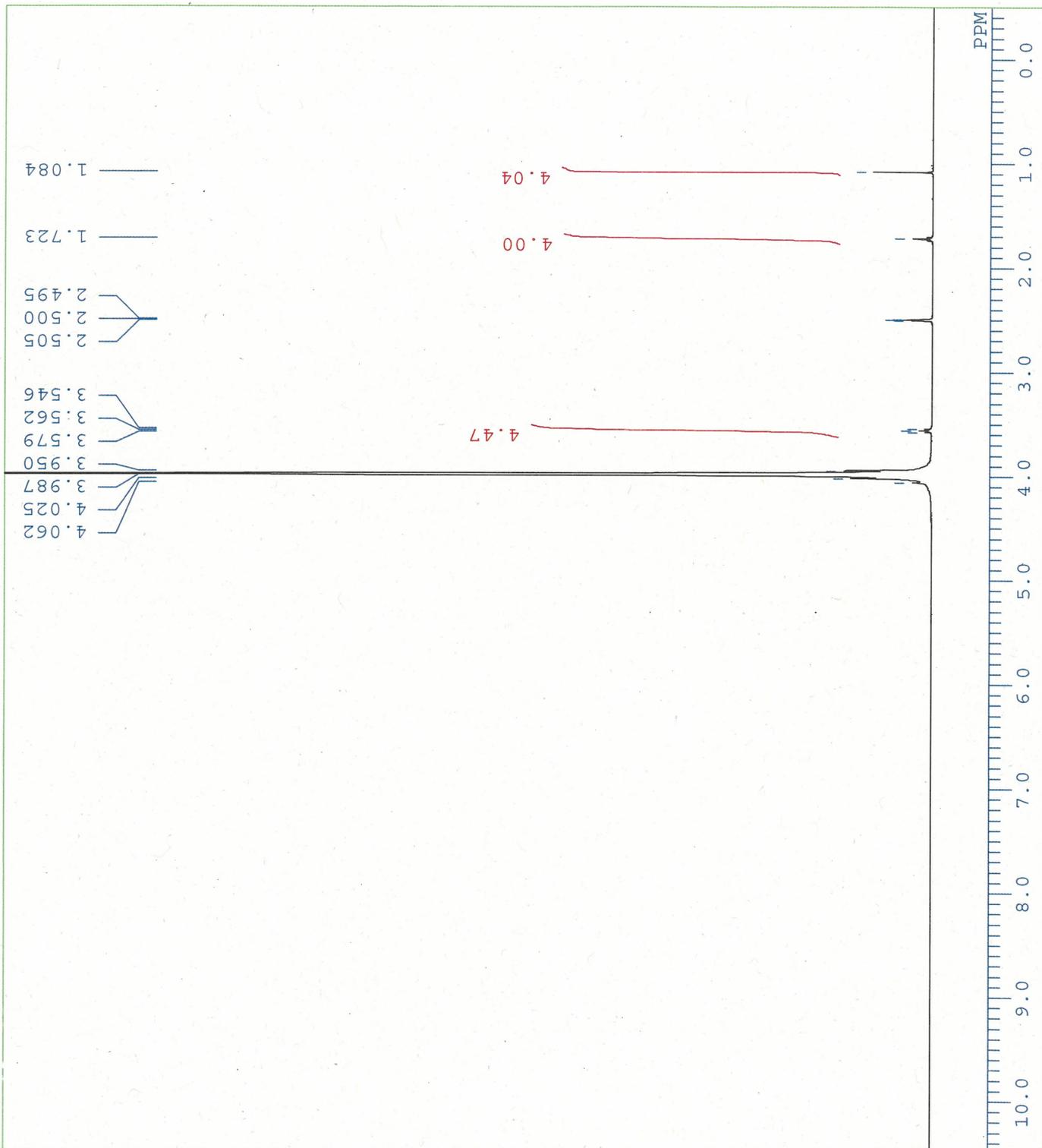
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RGAIN 18

OSI - 2.2THF

Strontium *tert*-Butoxide 2.2THF complex

¹H-NMR (400 MHz, DMSO-*d*₆+H₂O)



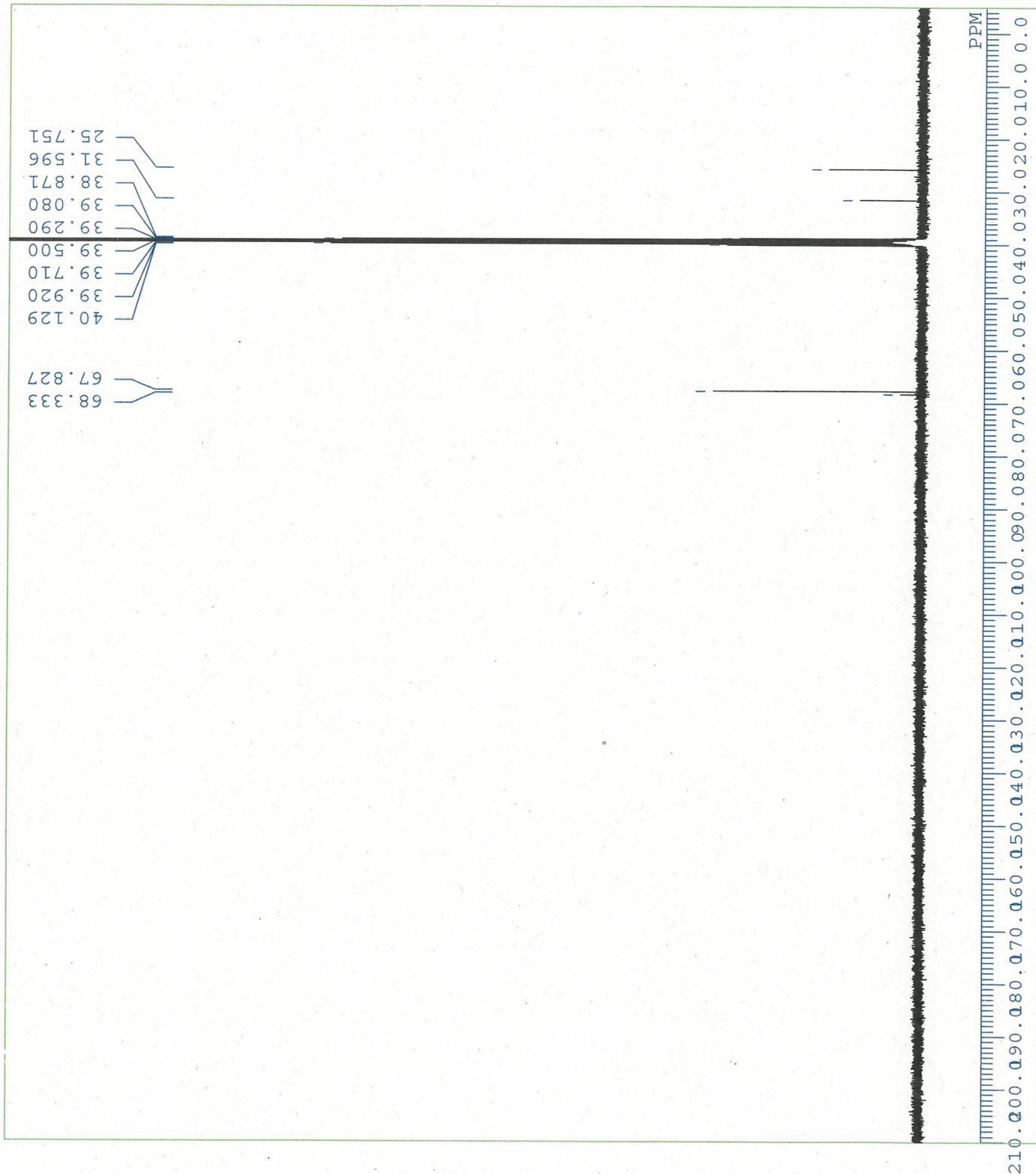
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RGAIN 60

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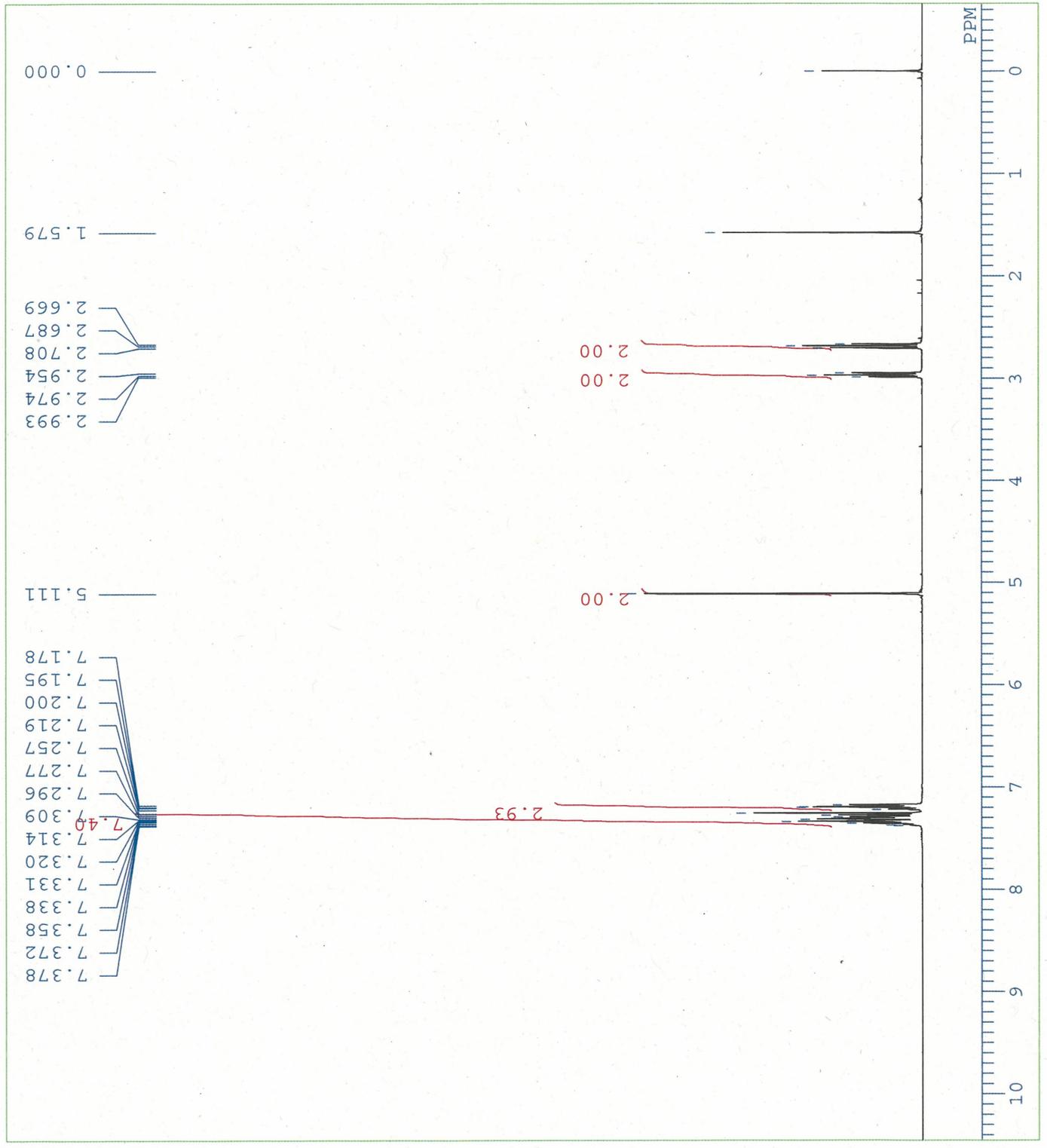
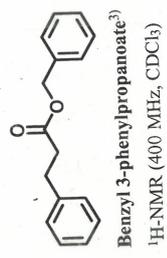
OSI - 2.2THF

Strontium *tert*-Butoxide 2.2THF complex
¹³C-NMR (100 MHz, DMSO-d₆+H₂O)



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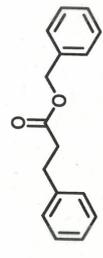
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 EXREF 0.00 ppm
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 RGAIN 46



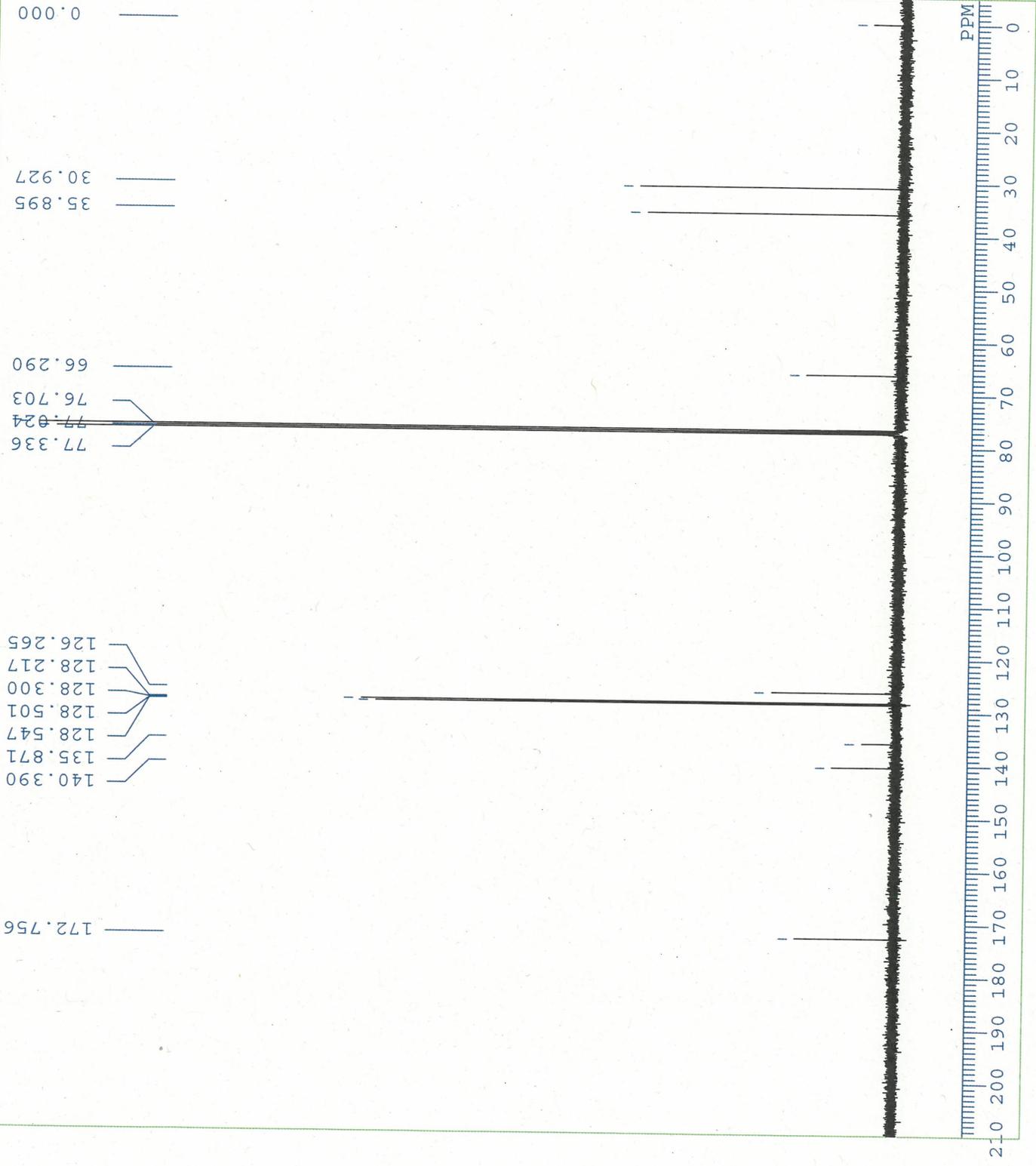
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 CTEMP 19.5 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 60

100.53 MHz
 5.35 KHz
 5.86 Hz
 26214
 24154.59 Hz
 1024
 1.0853 sec
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 3.23 usec
 1H
 19.5 C
 CDCL3
 0.00 ppm
 0.10 Hz
 60

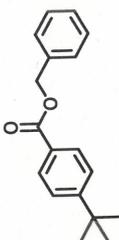


Benzyl 3-phenylpropanoate³
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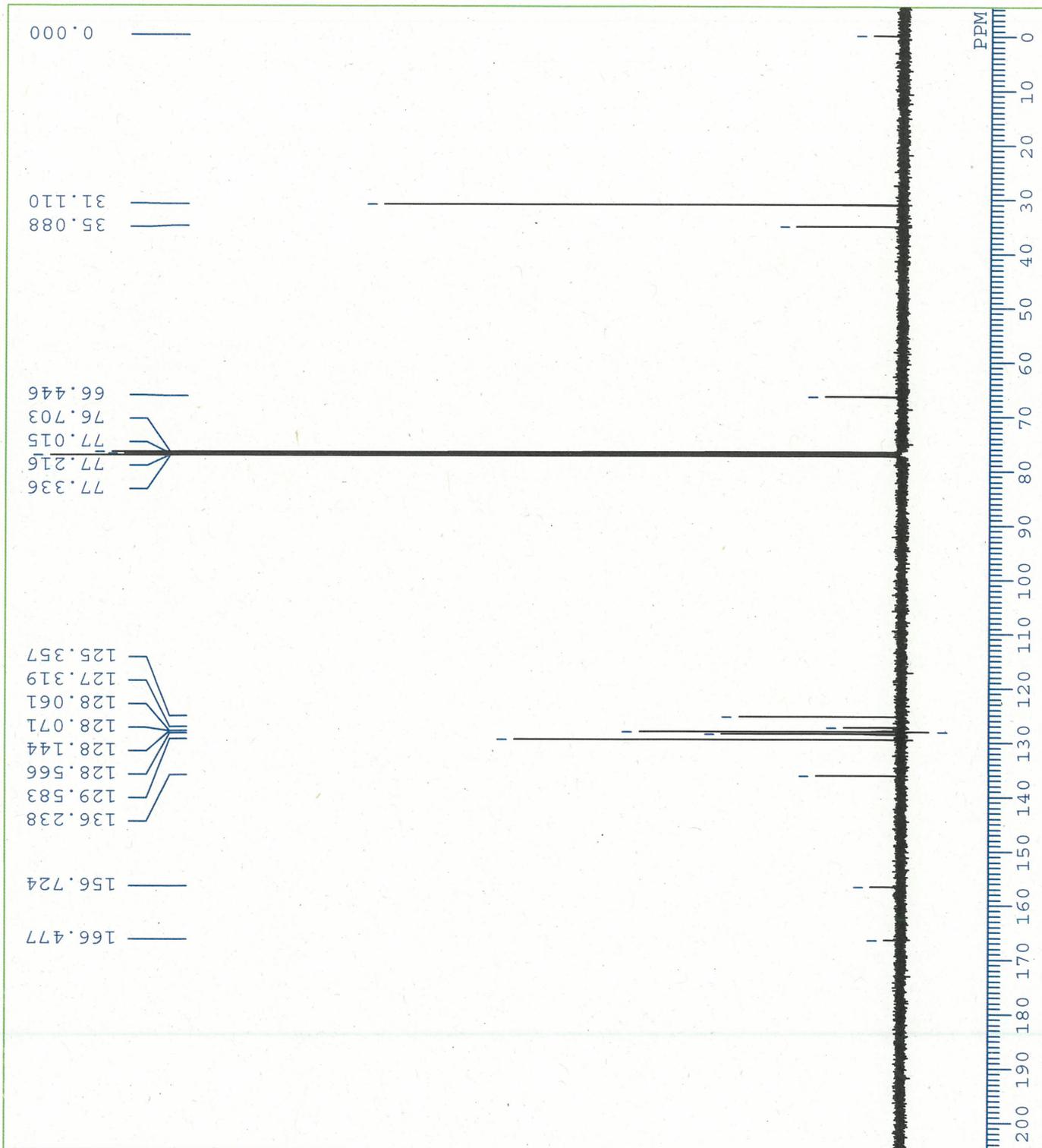


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POINT 26214
FREQU 24154.59 Hz
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PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 21.0 C
SLVNT CDCL3
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BF 0.10 Hz
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Benzyl 4-(*tert*-butyl)benzoate²⁾
¹³C-NMR (100 MHz, CDCl₃)

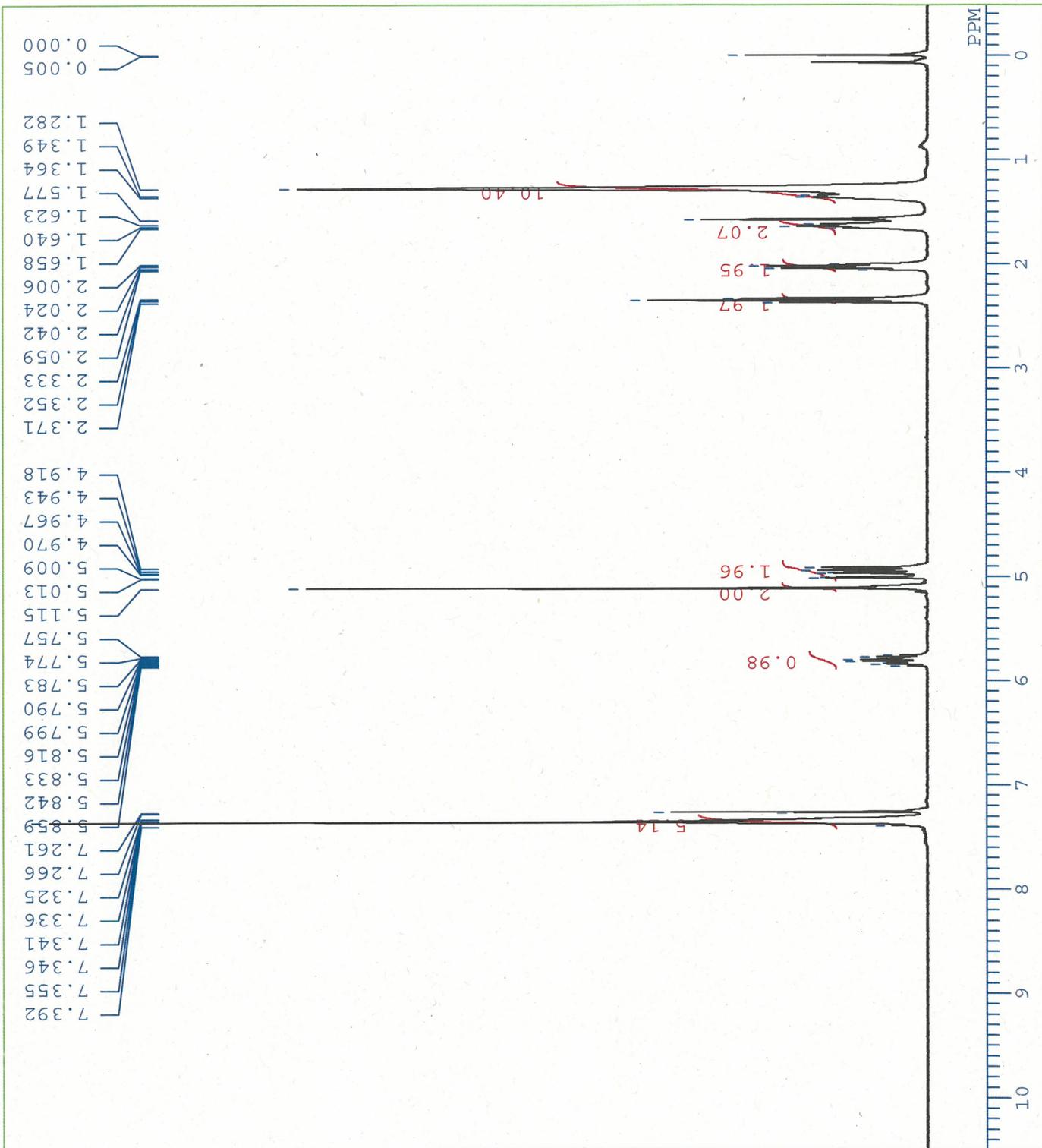


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 EXMOD proton.jxp

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Benzyl undec-10-enoate^d
¹H-NMR (400 MHz, CDCl₃)

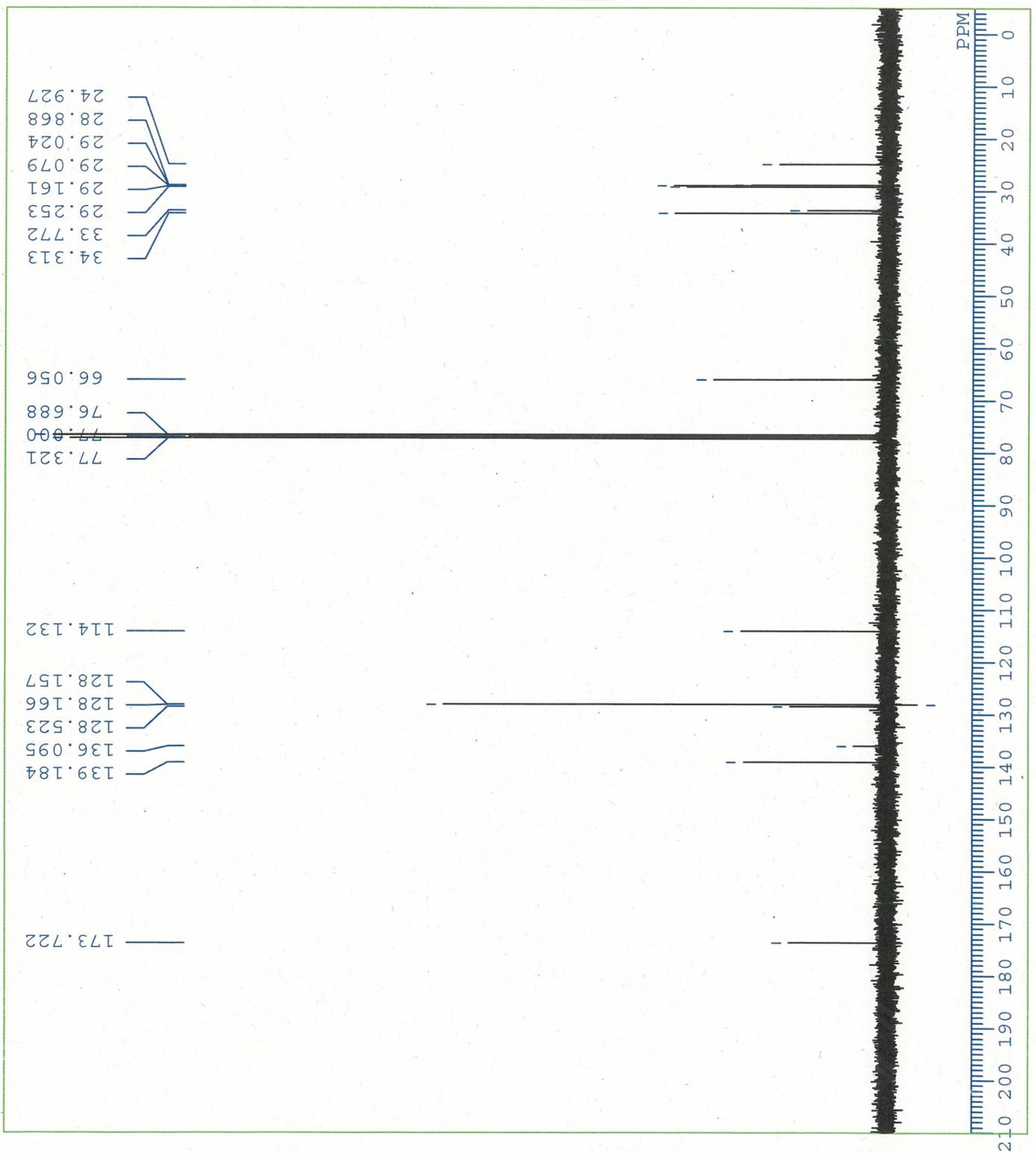


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 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 60

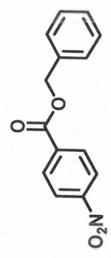


Benzyl undec-10-enoate^d
¹³C-NMR (100 MHz, CDCl₃)

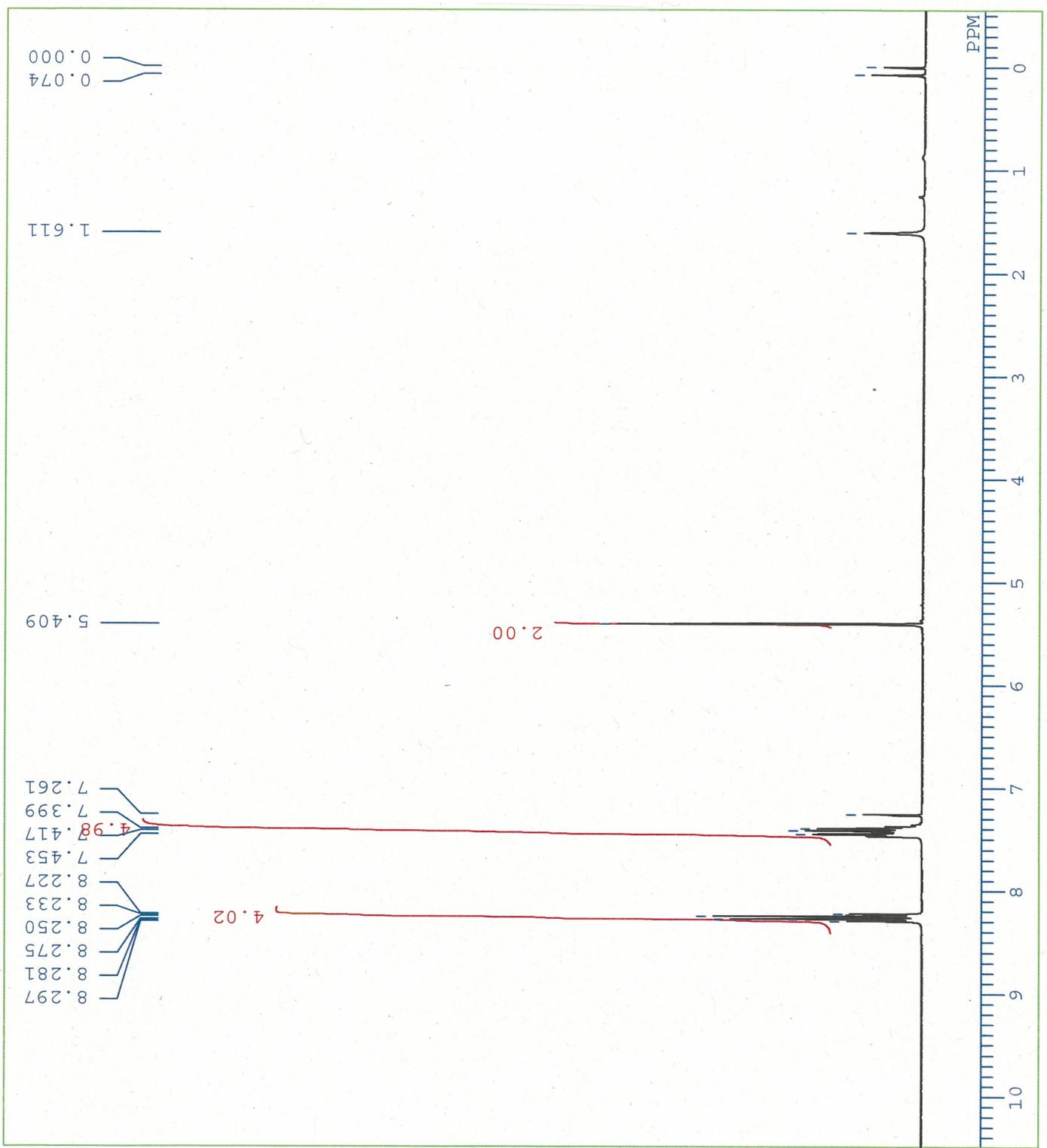


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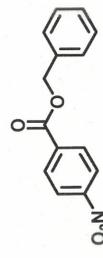
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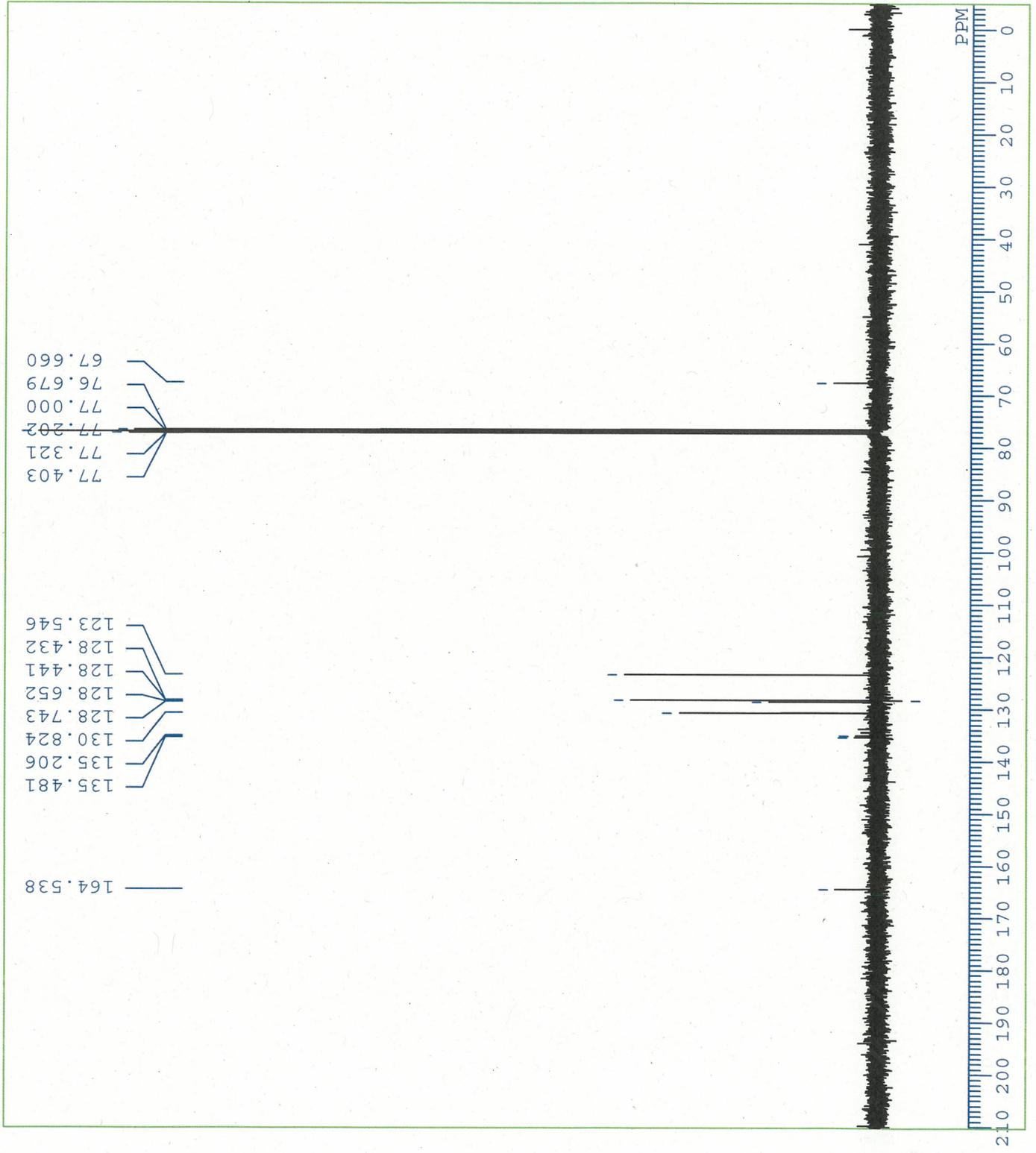
Benzyl 4-nitrobenzoate^{2,9}
 1H-NMR (400 MHz, CDCl₃)



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 13C
 carbon.jxp
 100.53 MHz
 5.35 KHZ
 5.86 Hz
 26214
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 256
 1.0853 sec
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 21.5 c
 CDCL3
 77.00 ppm
 0.10 Hz
 60

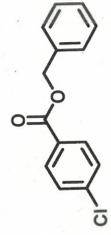


Benzyl 4-nitrobenzoate^{2,9}
¹³C-NMR (100 MHz, CDCl₃)

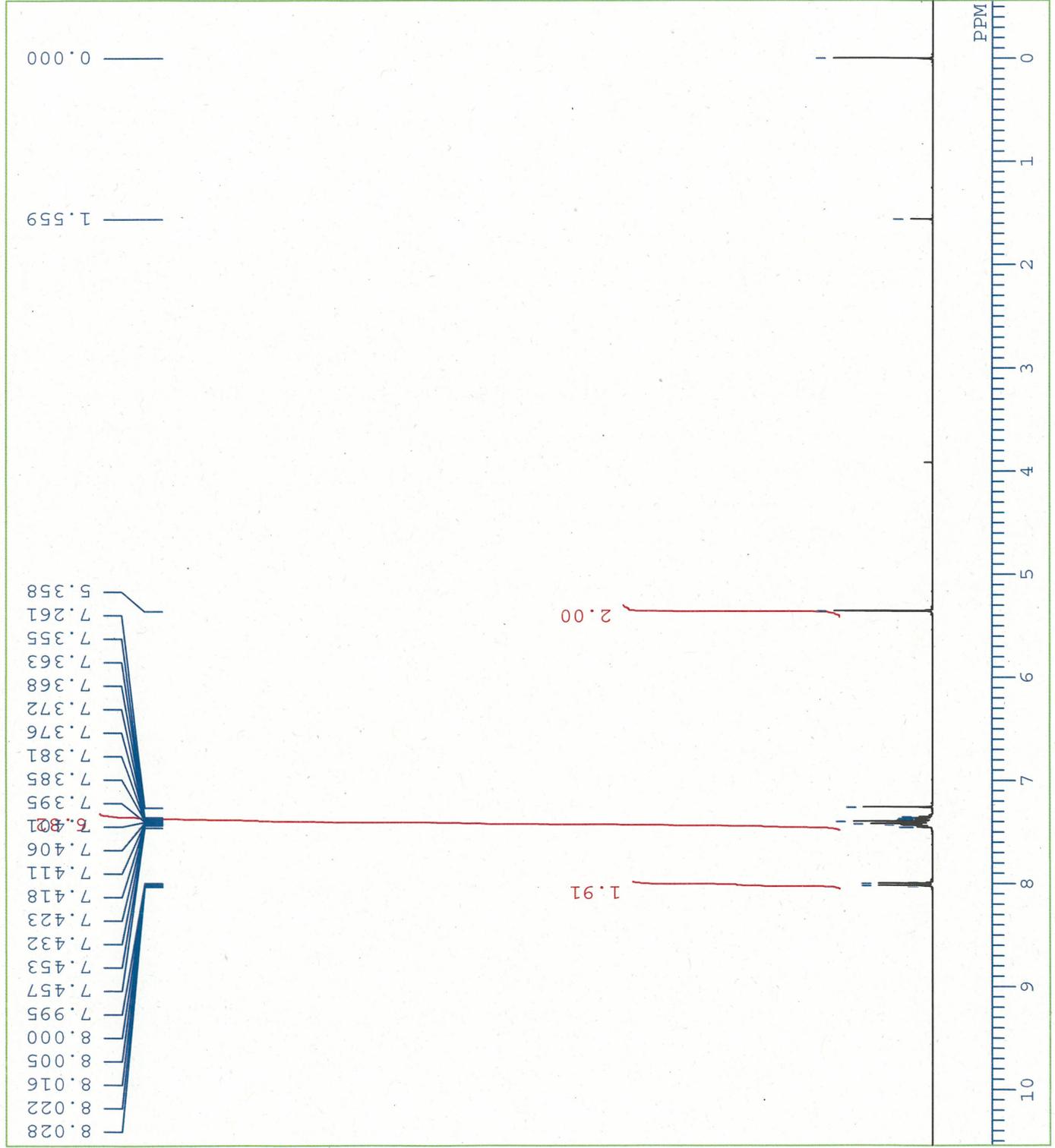


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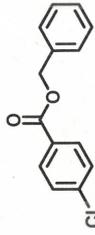


Benzyl 4-chlorobenzoate²⁾
¹H-NMR (400 MHz, CDCl₃)

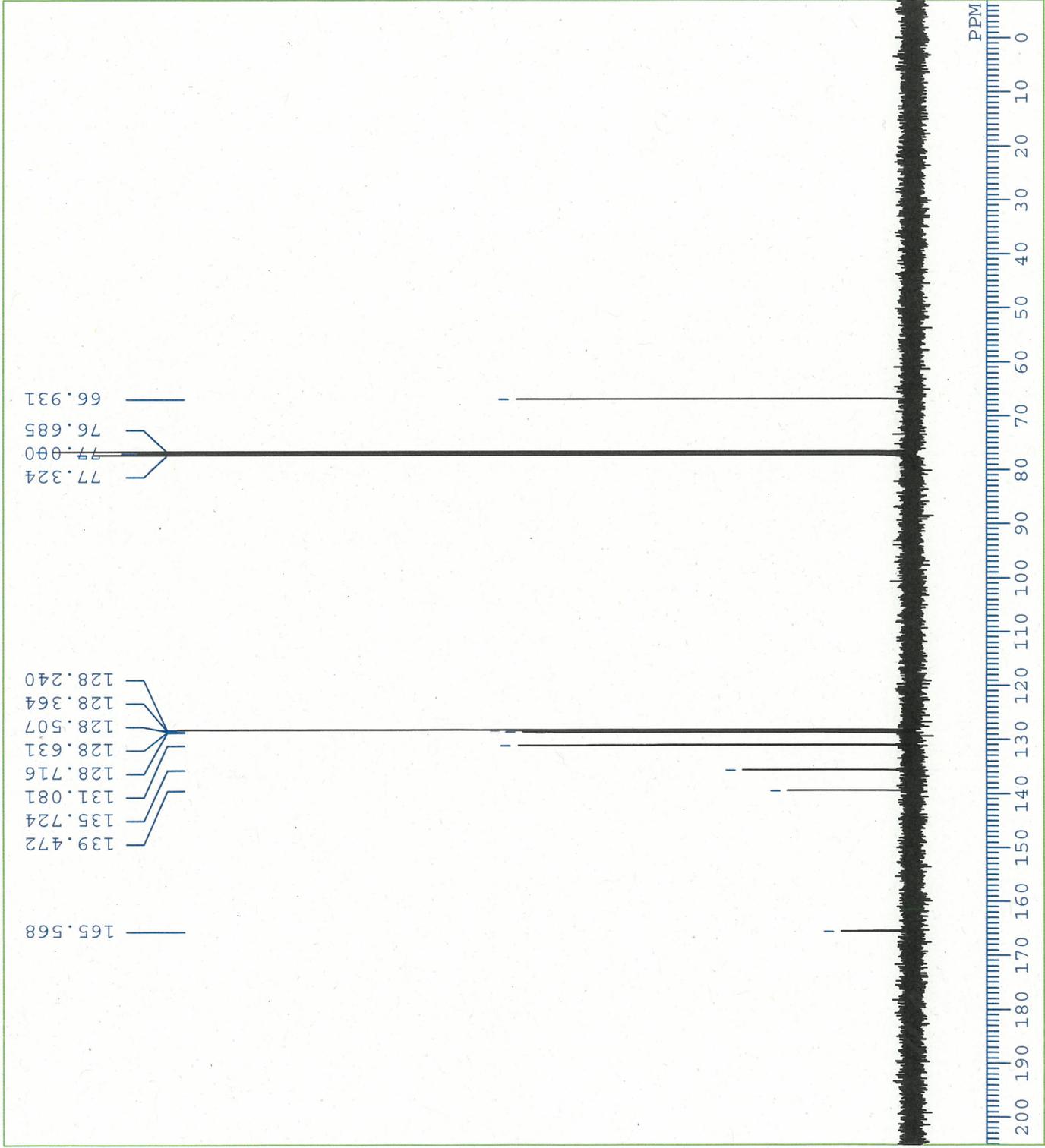


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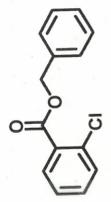


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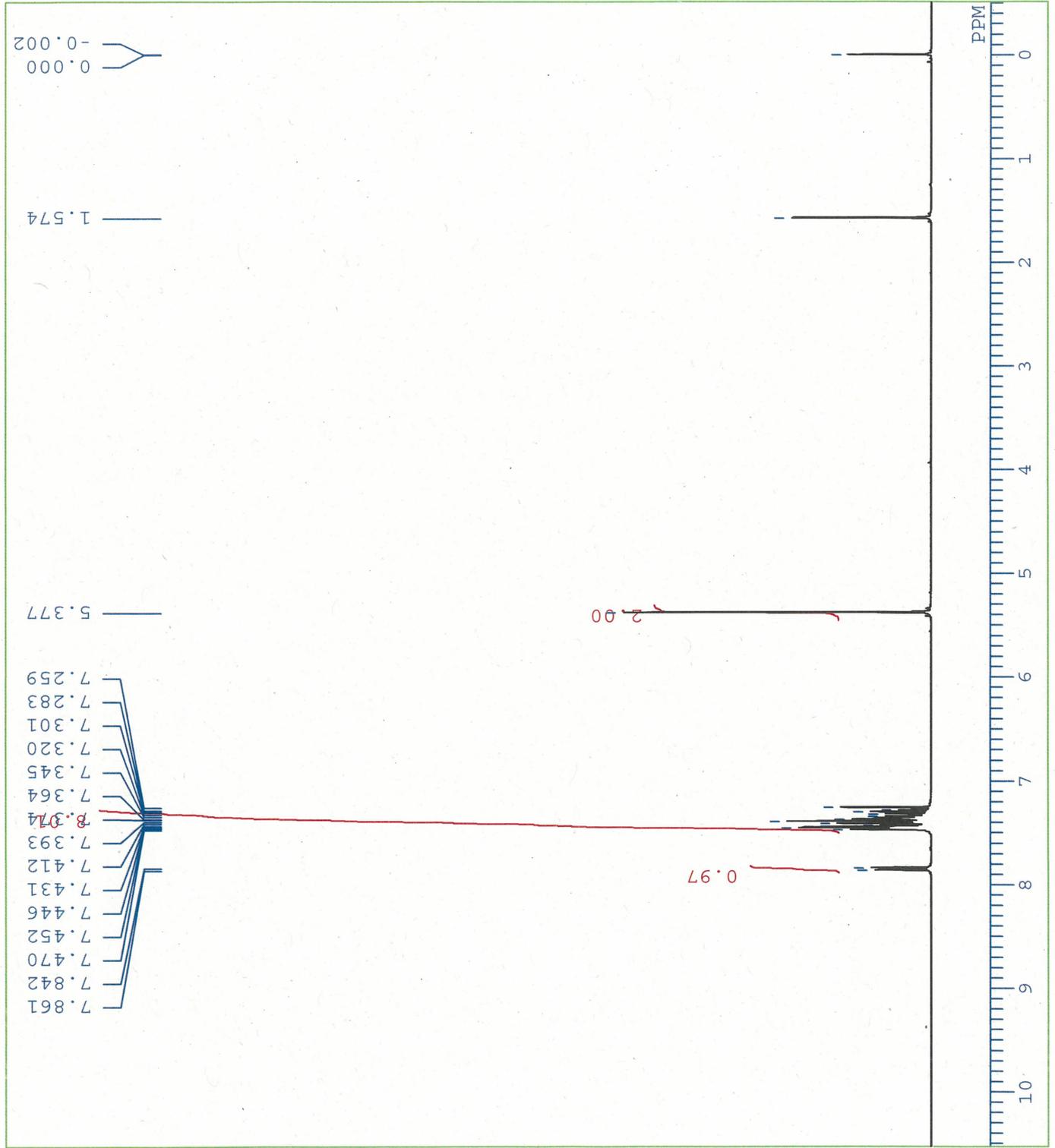


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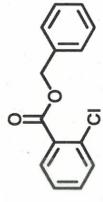
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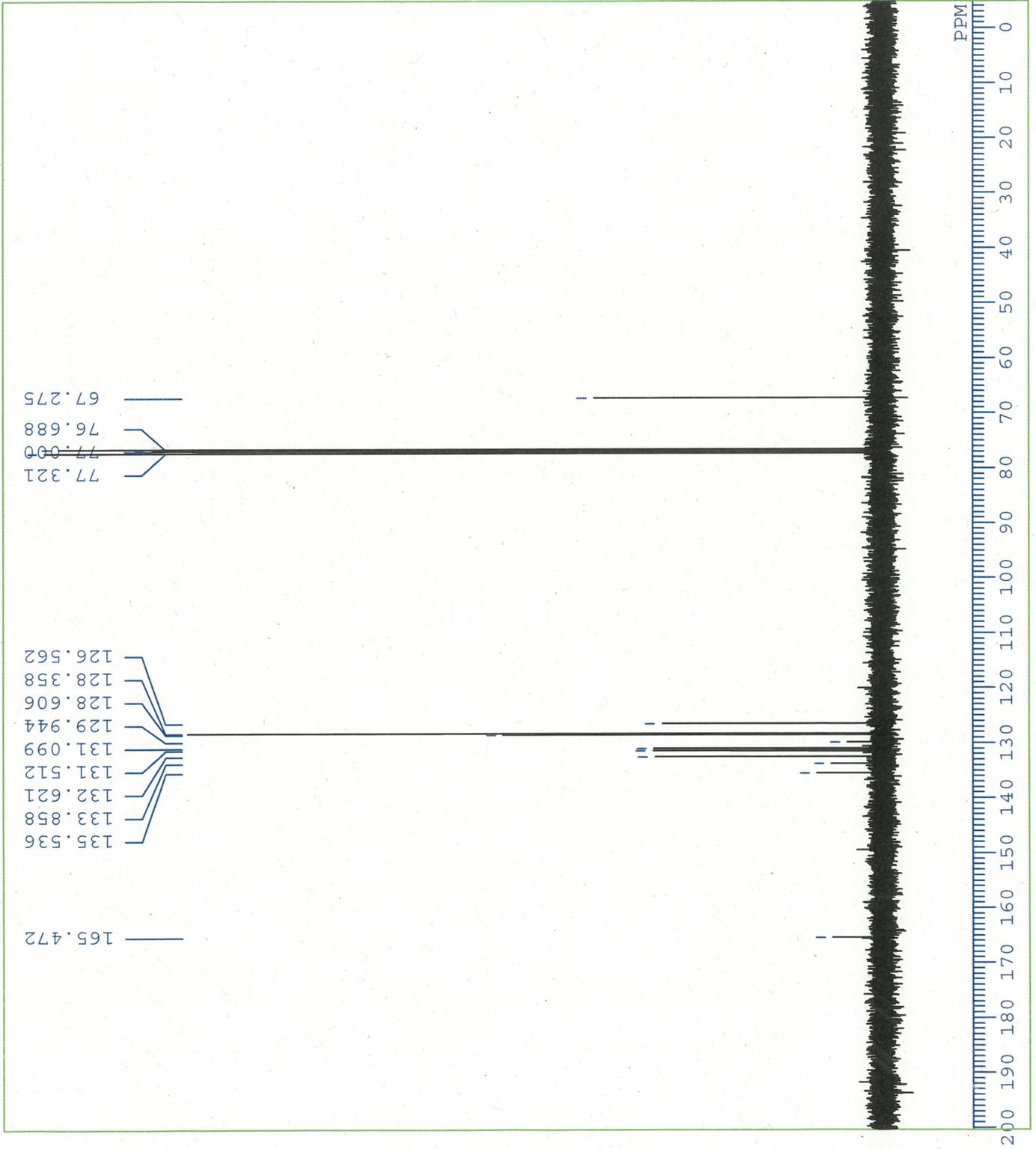
Benzyl 2-chlorobenzoate²⁾
¹H-NMR (400 MHz, CDCl₃)



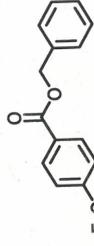
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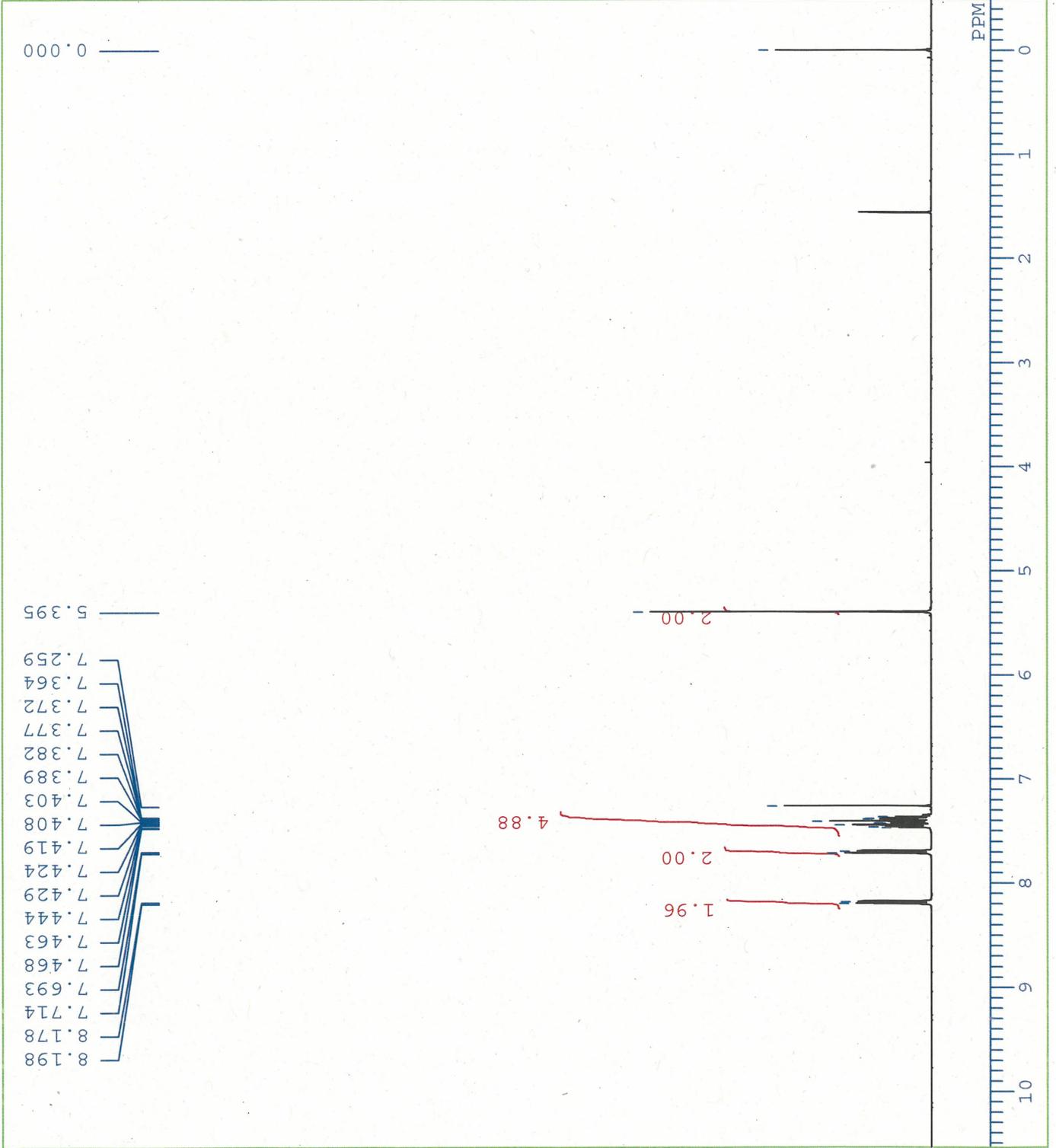
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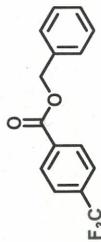


Benzyl 4-(trifluoromethyl)benzoate²
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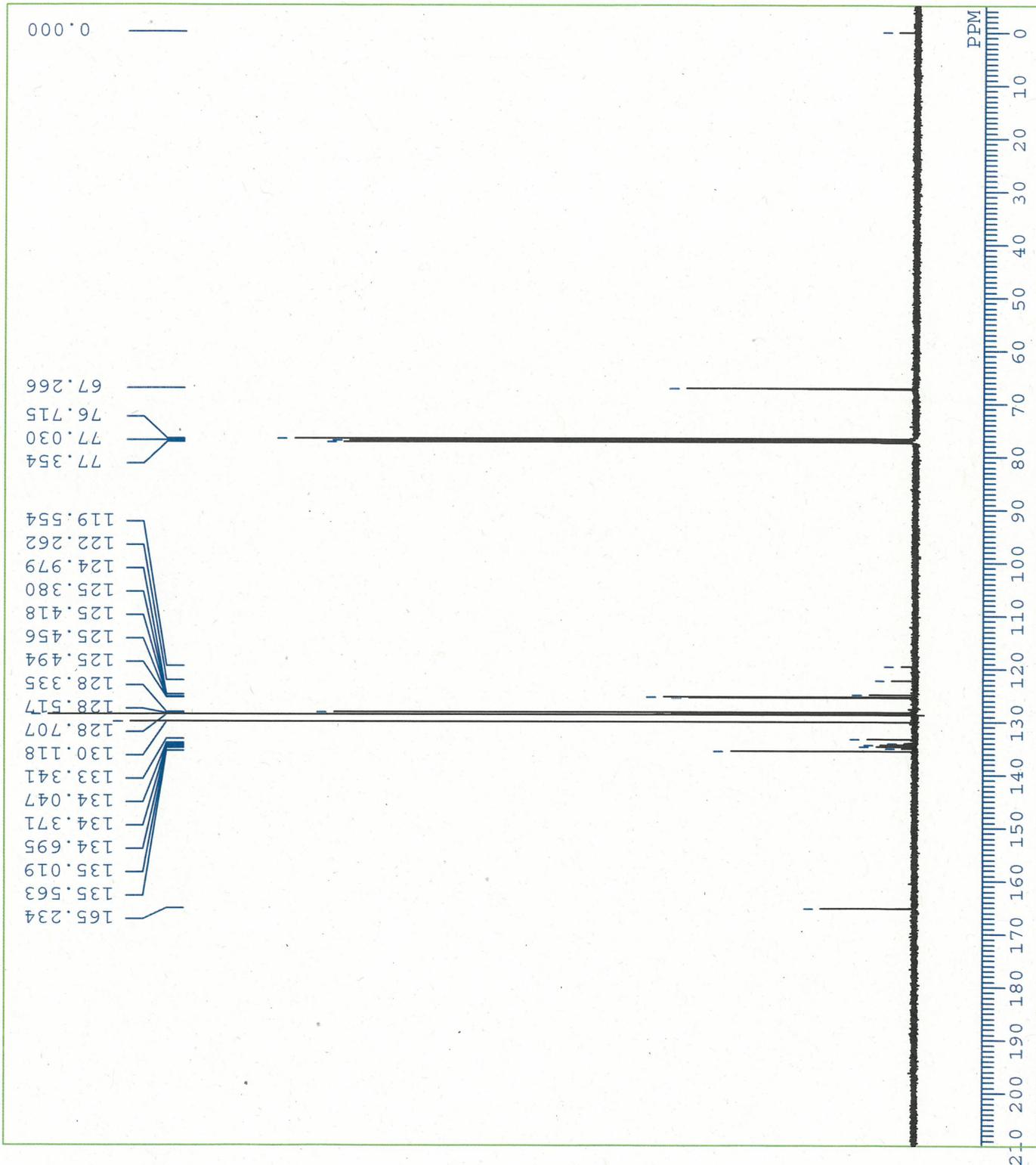


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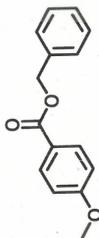
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OBFIN 5.86 Hz
POINT 32767
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BF 0.10 Hz
RGAIN 60



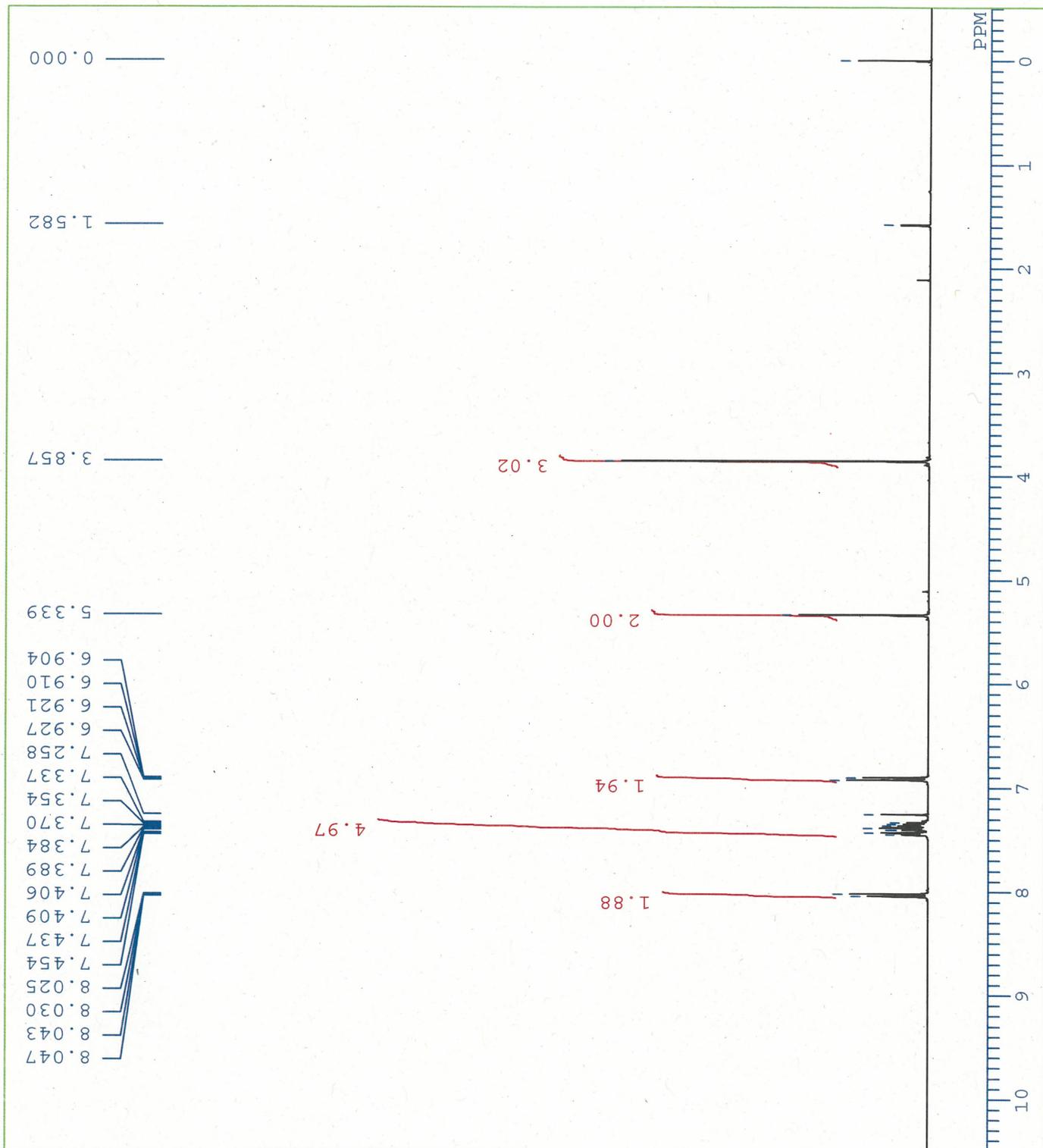
Benzyl 4-(trifluoromethyl)benzoate²
¹³C-NMR (100 MHz, CDCl₃)



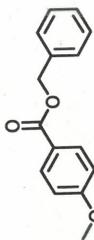
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 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
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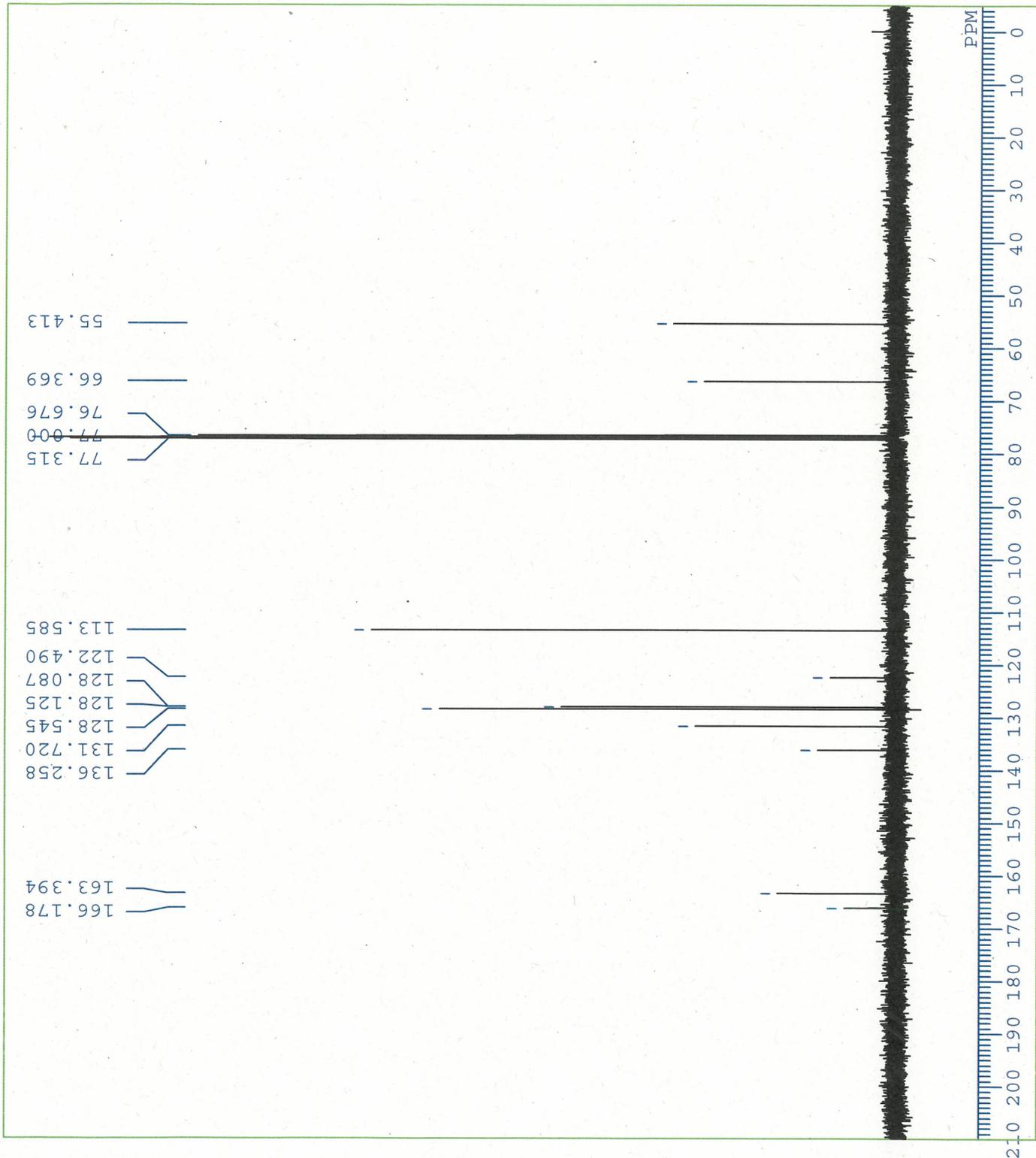
Benzyl 4-methoxybenzoate²⁾
 1H-NMR (400 MHz, CDCl₃)



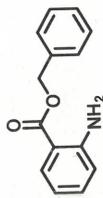
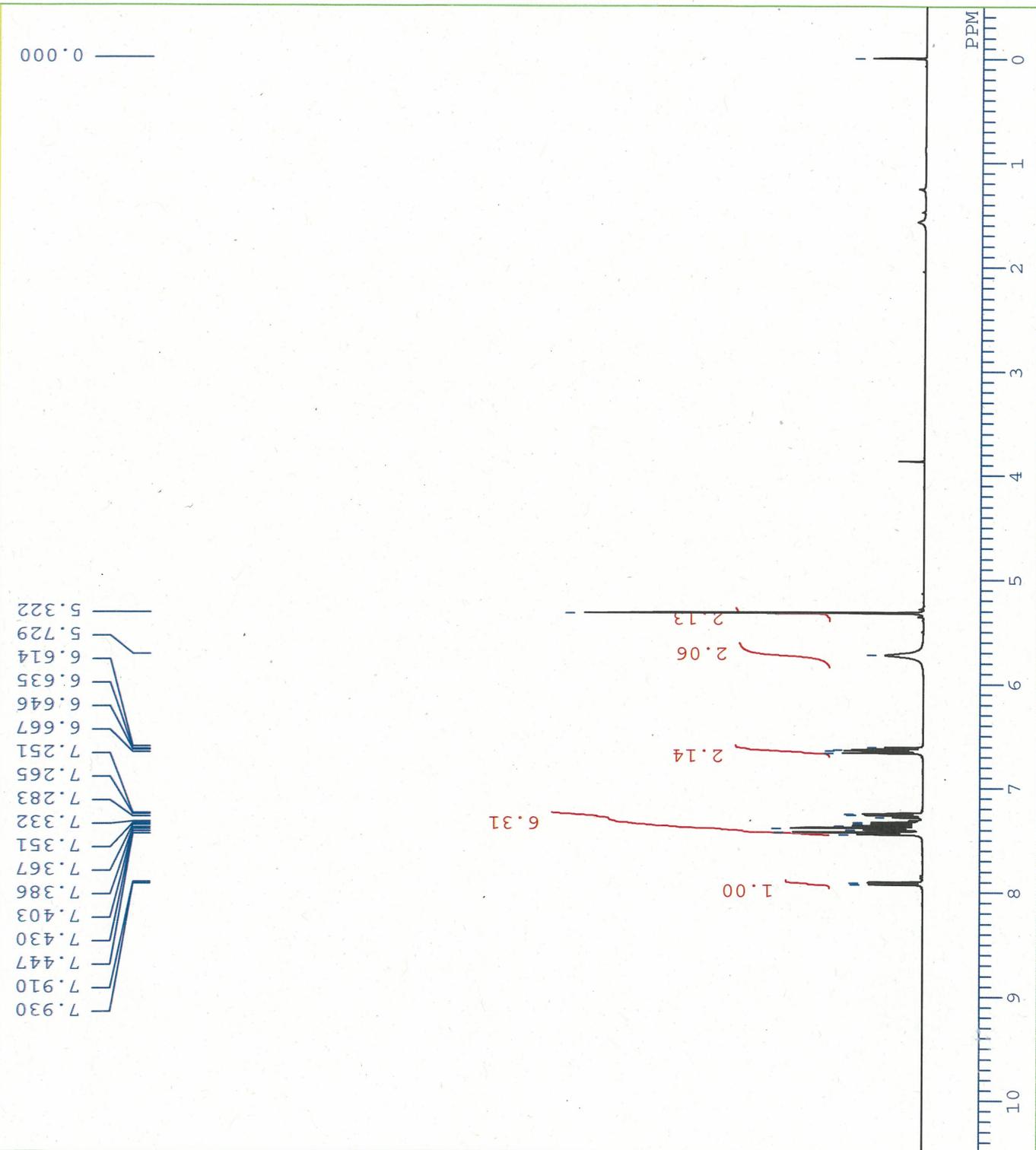
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 OBFIN 5.86 Hz
 POINT 26214
 FREQU 25125.63 Hz
 SCANS 256
 ACQTM 1.0433 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 20.2 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 50



Benzyl 4-methoxybenzoate²⁾
¹³C-NMR (100 MHz, CDCl₃)



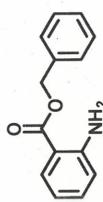
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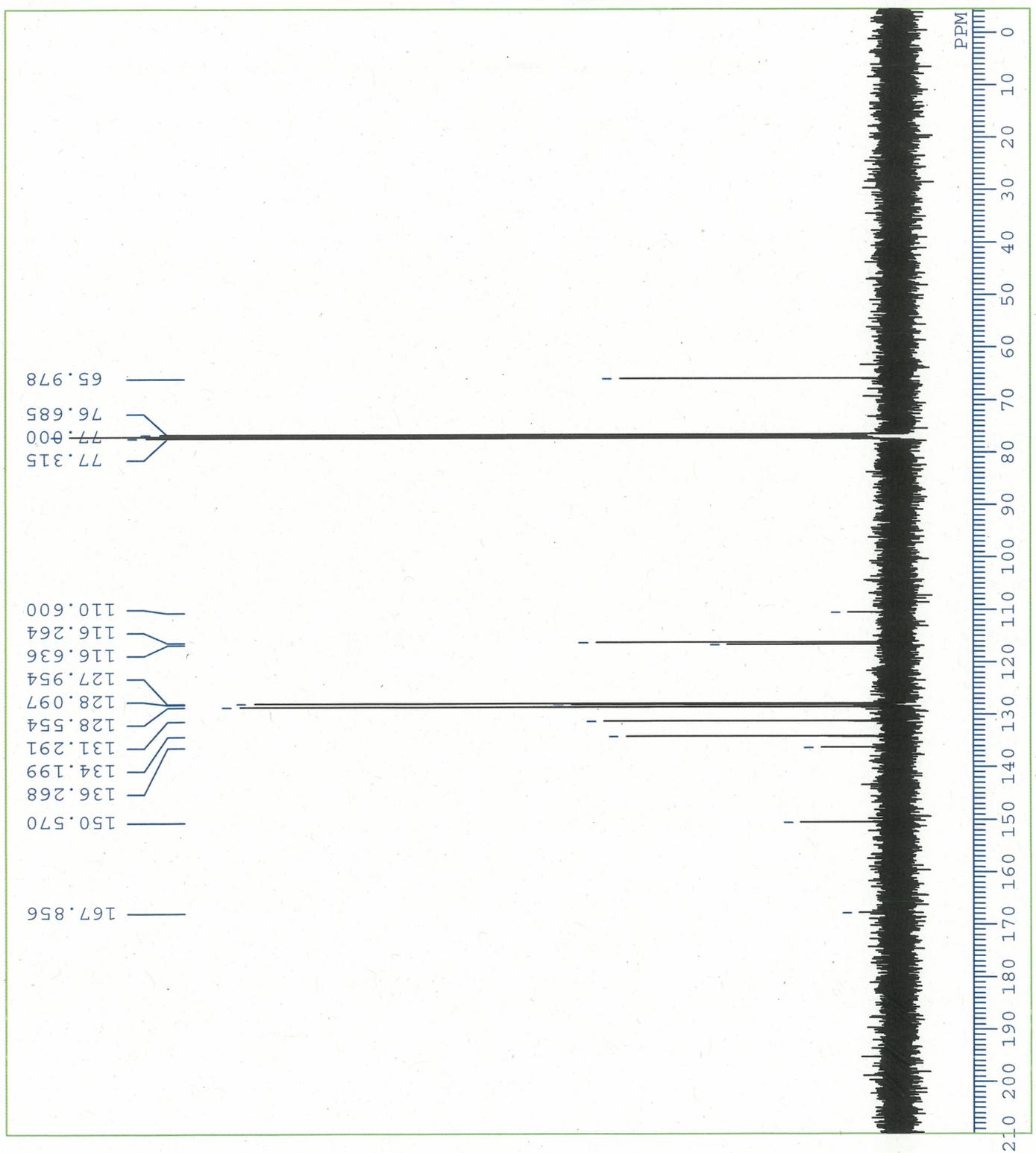
Benzyl 2-aminobenzoate^{5,6}
¹H-NMR (400 MHz, CDCl₃)

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OBNUC 13C

EXMOD carbon.jxp
OBFRQ 100.53 MHz
OBSET 5.35 KHZ
OBFIN 5.86 Hz
POINT 26214
FREQU 25125.63 Hz
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 19.7 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50

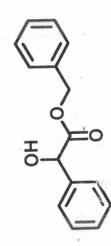


Benzyl 2-aminobenzoate^{5,6}
¹³C-NMR (100 MHz, CDCl₃)

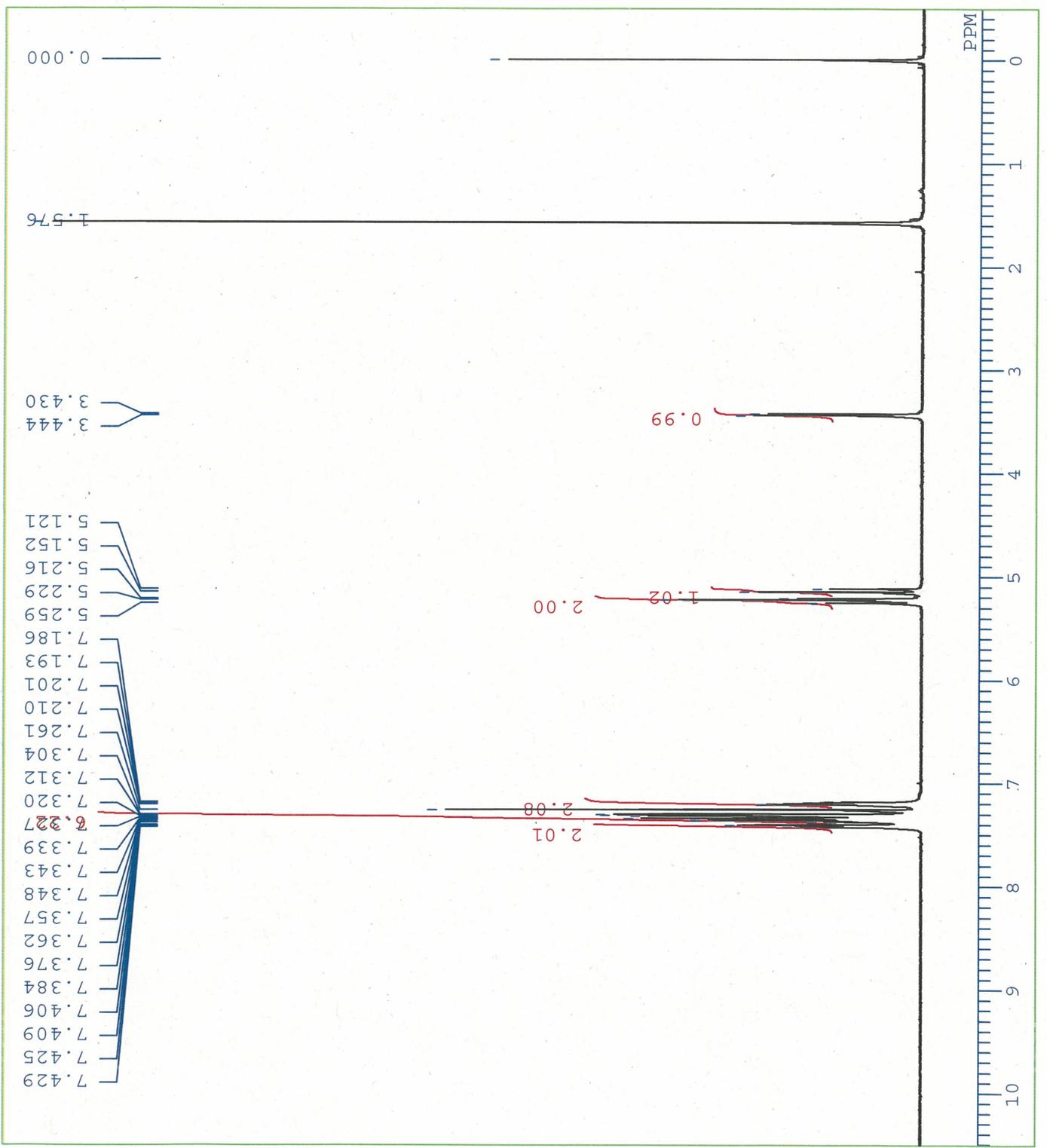


2023-11-14 19:17:27
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 1H
 proton.jxp

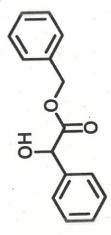
EXMOD 399.78 MHz
 OBFRQ 4.19 KHZ
 OBSET 7.29 Hz
 OBFIN 52428
 POINT 5000.00 Hz
 FREQU 10.4858 sec
 SCANS 5.0000 sec
 ACQTM 8
 PD 6.55 usec
 PW1 0
 IRATN 19.8 c
 CTEMP 0.00 ppm
 SLVNT CDCL3 0.10 Hz
 EXREF 52
 BF
 RGAIN



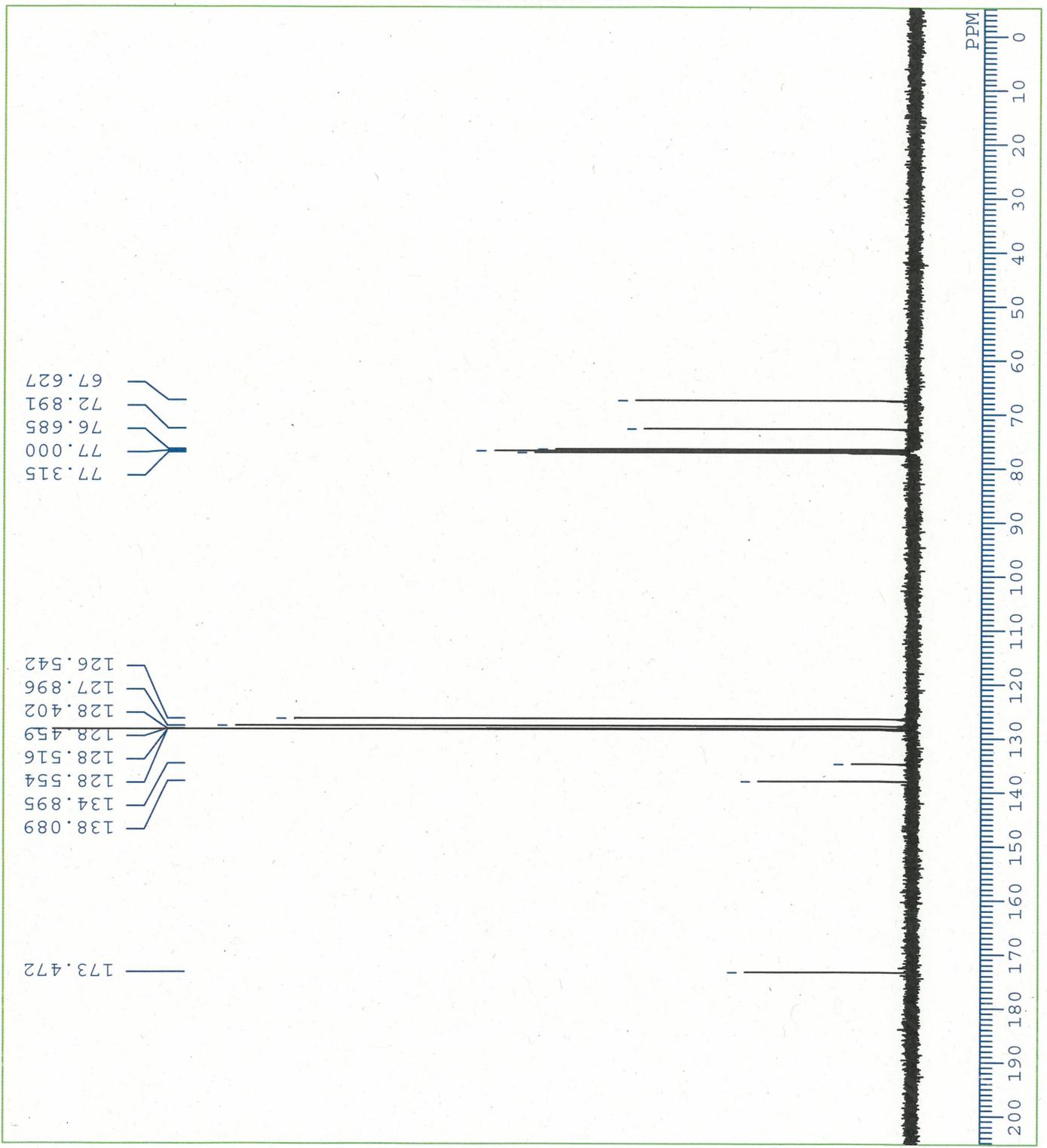
Benzyl mandelate⁷
¹H-NMR (400 MHz, CDCl₃)



DATIM 2024-01-31 06:25:43
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 OBNUC 13C
 EXMOD carbon.jxp
 OBFRQ 100.53 MHz
 OBSET 5.35 KHz
 OBFIN 5.86 Hz
 POINT 26214
 FREQU 25125.63 Hz
 SCANS 256
 ACQTM 1.0433 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 17.4 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 50



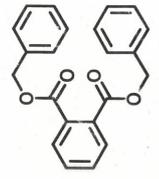
Benzyl mandelate⁷⁾
¹³C-NMR (100 MHz, CDCl₃)



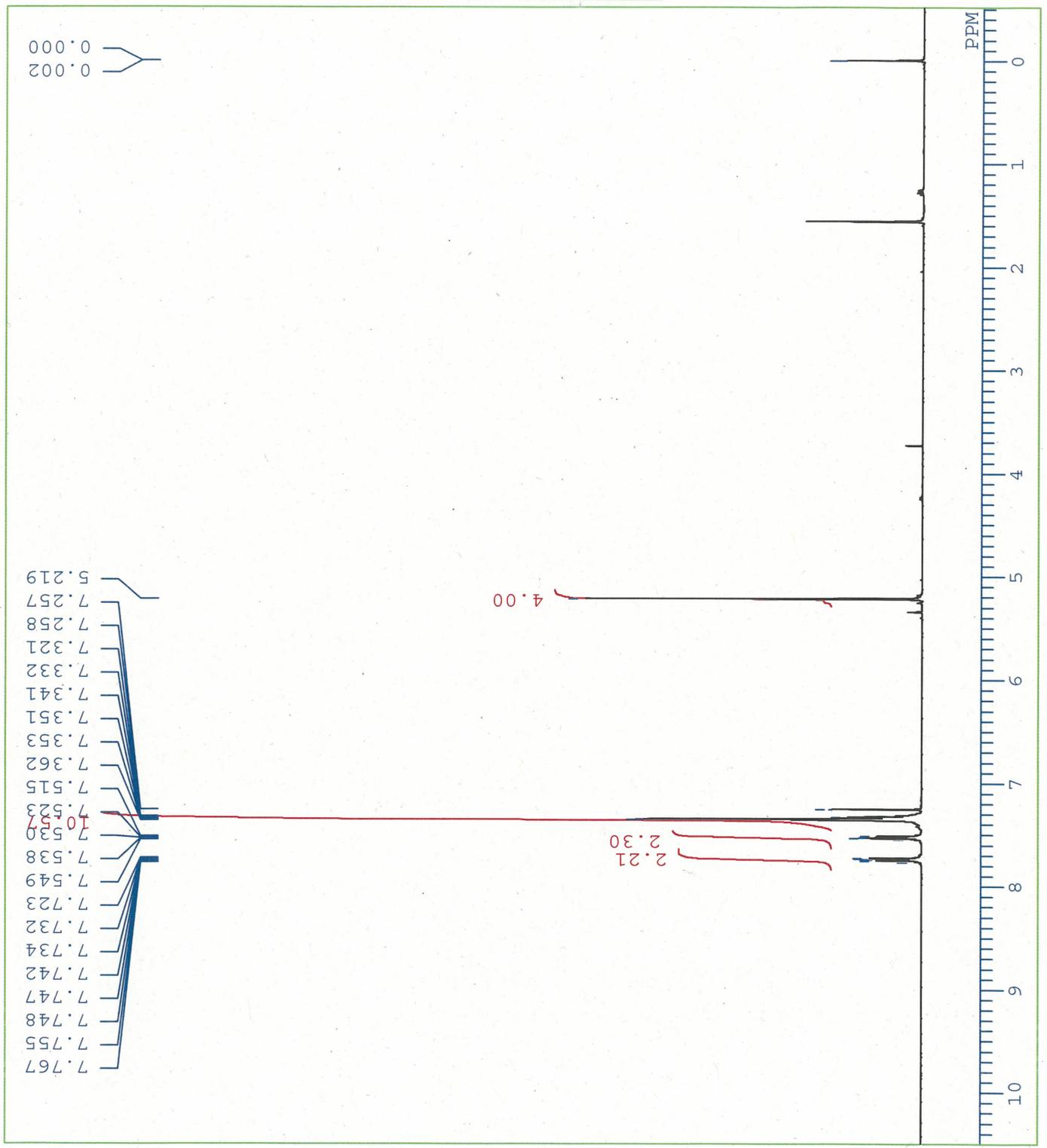
2023-10-26 19:58:48
 fWff`f<ftf^fE[fg_Proton
 1H
 proton.jxp

399.78 MHz
 4.19 KHZ
 7.29 Hz
 52428
 5000.00 Hz
 8
 10.4858 sec
 5.0000 sec
 6.55 usec
 0
 24.5 C
 CDCL3
 0.00 ppm
 0.10 Hz
 48

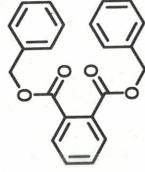
DATIM
 DFILE
 OBNUC
 EXMOD
 OBFRQ
 OBSET
 OBFIN
 POINT
 FREQU
 SCANS
 ACQTM
 PD
 PW1
 IRATN
 CTEMP
 SLVNT
 EXREF
 BF
 RGAIN



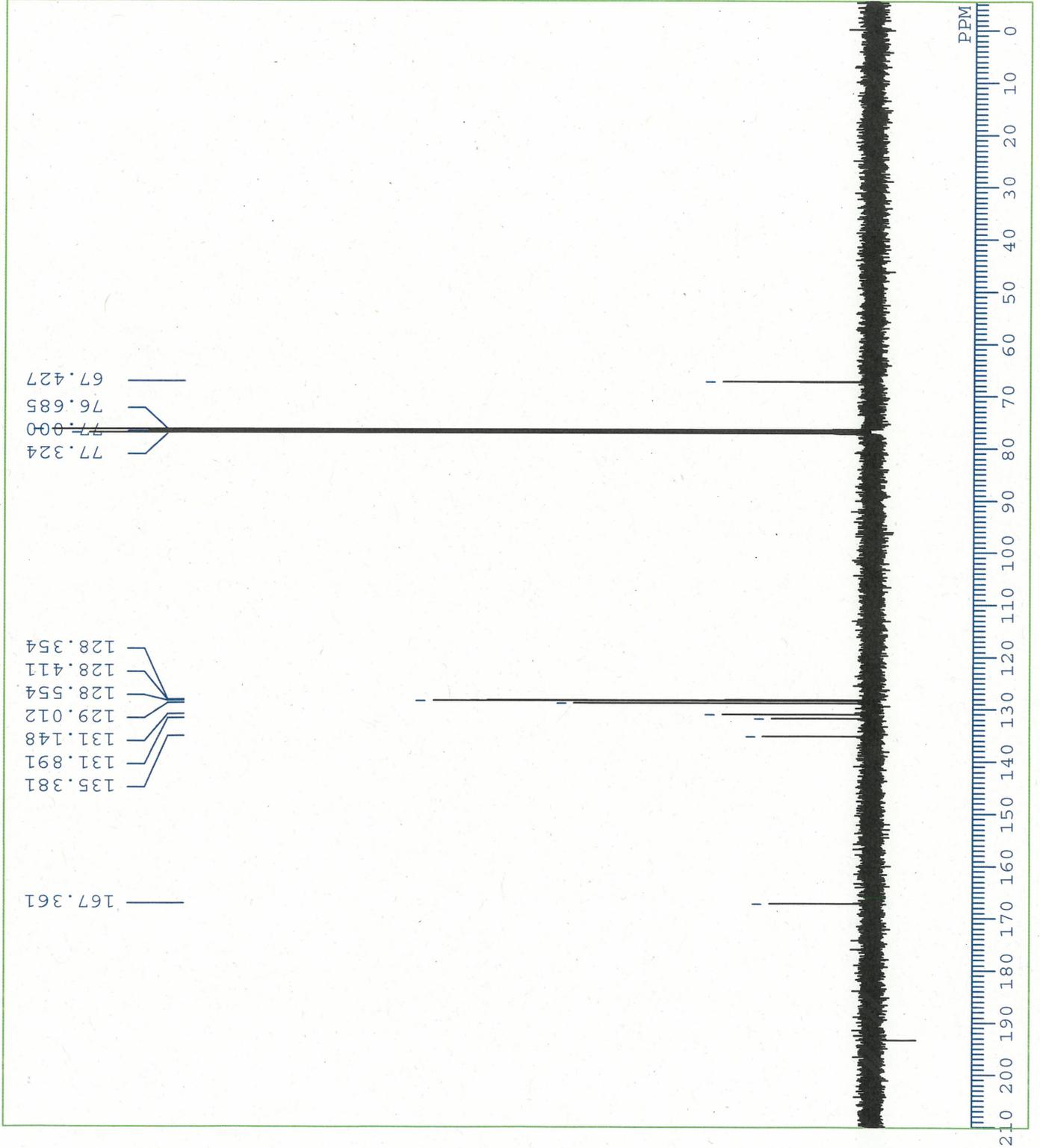
Dibenzyl phthalate²
¹H-NMR (400 MHz, CDCl₃)



DATIM 2024-02-11 16:58:10
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 EXMOD carbon.jxp
 OBFRQ 100.53 MHz
 OBSET 5.35 KHz
 OBFIN 5.86 Hz
 POINT 26214
 FREQU 25125.63 Hz
 SCANS 256
 ACQTM 1.0433 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 17.7 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 50



Dibenzyl phthalate²
¹³C-NMR (100 MHz, CDCl₃)



DATIM 2026-02-03 23:00:26
DFILE kamada ex650_Proton-2-1

OBNUC 1H

EXMOD proton.jxp

OBFRQ 399.78 MHz
OBSET 4.19 KHz
OBFIN 7.29 Hz

POINT 16384

FREQU 7503.00 Hz

SCANS 8

ACQTM 2.1837 sec

PD 5.0000 sec

PW1 6.55 usec

IRATN 0

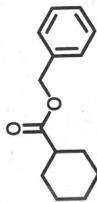
CTEMP 21.1 c

SLVNT CDCL3

EXREF 0.00 ppm

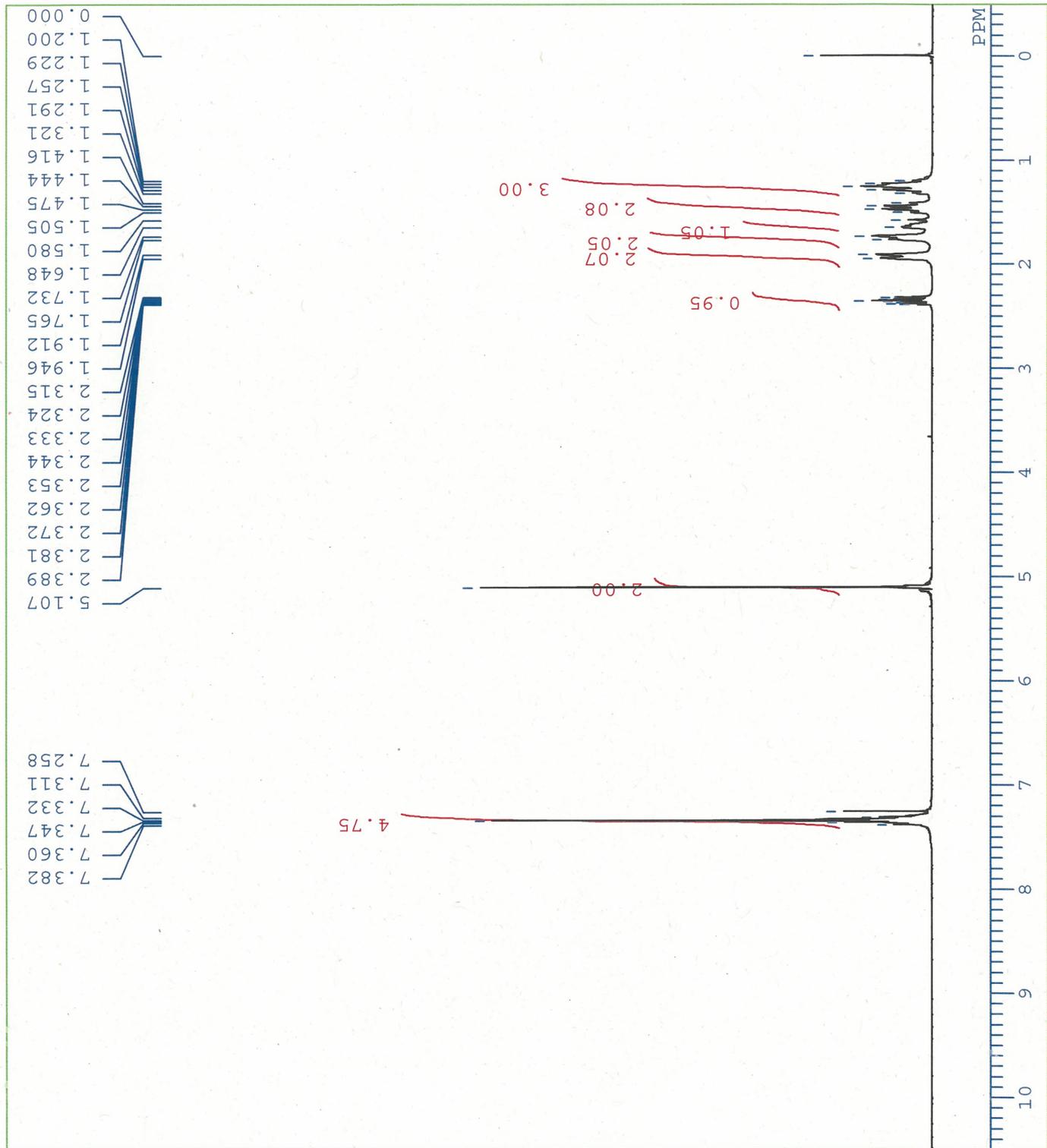
BF 0.10 Hz

RGAIN 40



Benzyl cyclohexanecarboxylate²⁾

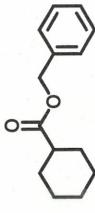
¹H-NMR (400 MHz, CDCl₃)



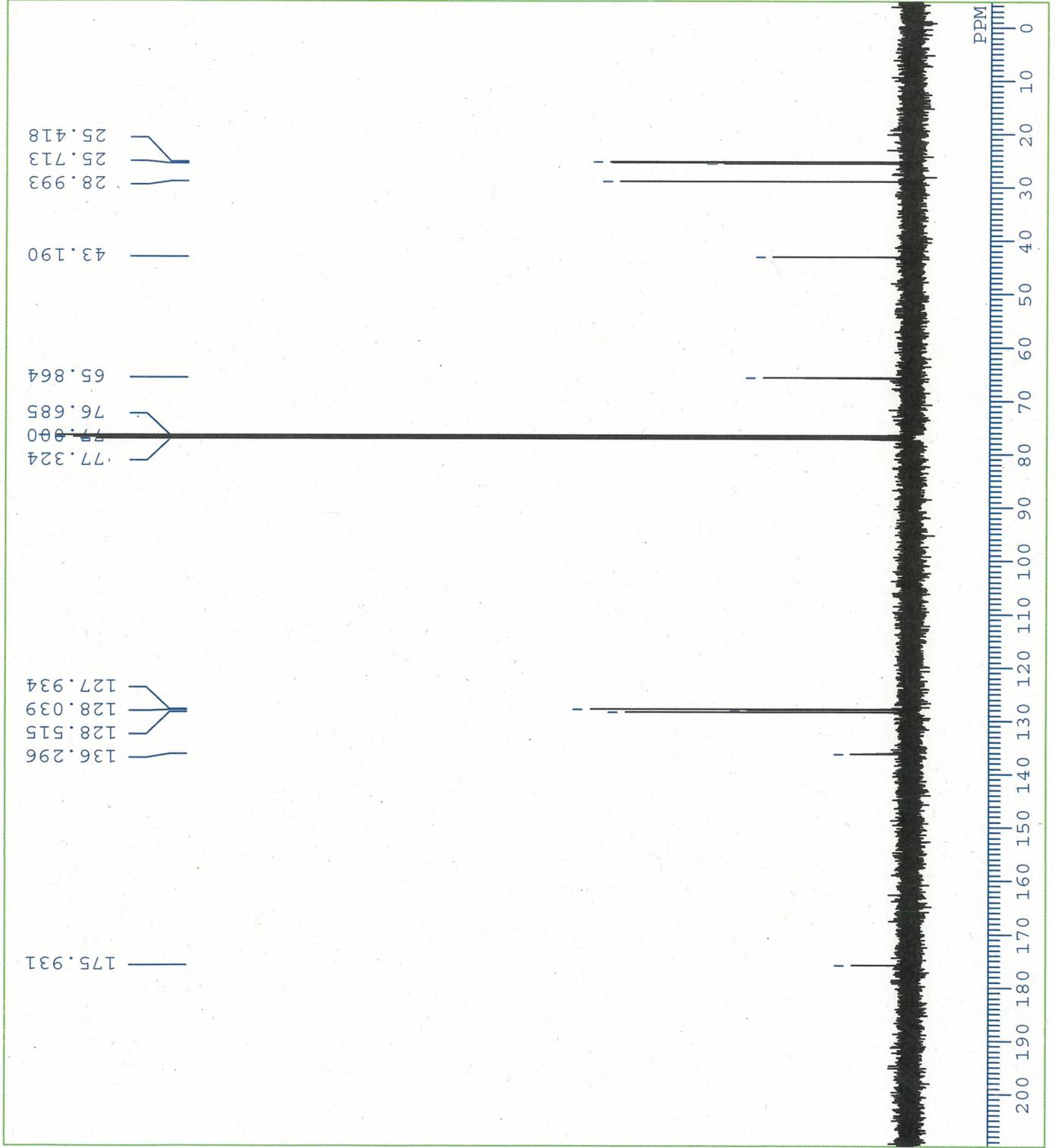
DATIM 2026-02-03 16:32:39
DFILE kamada ex650_Carbon-1-1
OBNUC 13C
EXMOD carbon.jxp

OBFRQ 100.53 MHz
OBSET 5.35 KHZ
OBFIN 5.86 Hz
POINT 32767
FREQU 31407.04 Hz
SCANS 512
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0

CTEMP 21.6 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 60

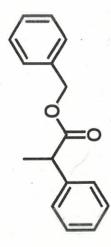


Benzyl cyclohexanecarboxylate²
¹³C-NMR (100 MHz, CDCl₃)

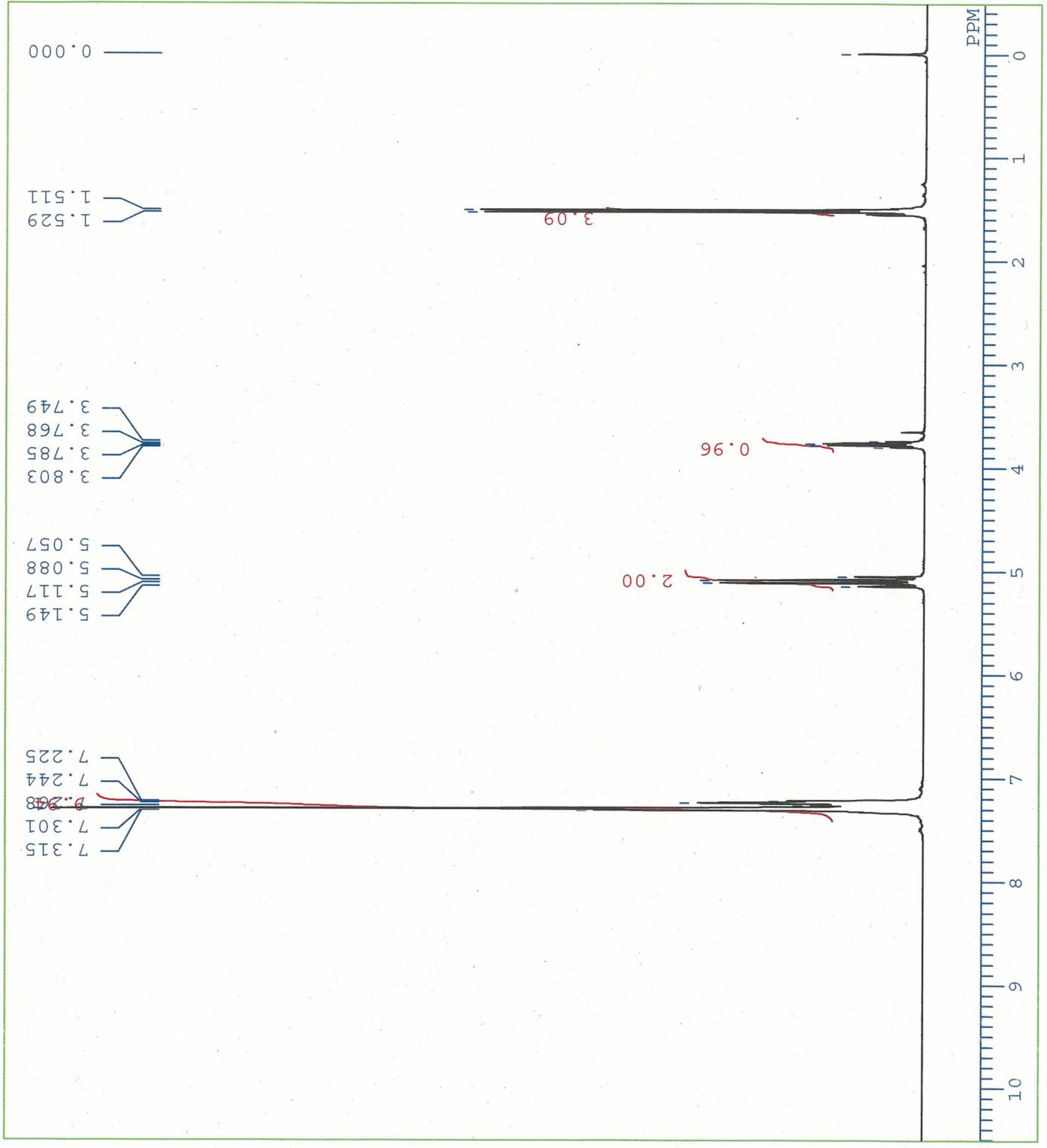


2026-02-04 12:28:25
fxf"fwf<2-ftfFjfj<fvvff

DATIM 1H
DFILE proton.jxp
OBNUC 399.78 MHz
EXMOD 4.19 KHZ
OBFRQ 7.29 Hz
OBSET 16384
OBFIN 7503.00 Hz
POINT 8
FREQU 2.1837 sec
SCANS 5.0000 sec
ACQTM 6.55 usec
PD 0
PW1 21.3 C
IRAIN CDCL3
CTEMP 0.00 ppm
SLVNT 0.10 Hz
EXREF 42
BF
RGAIN

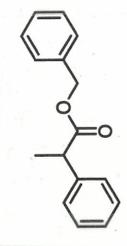


Benzyl 2-phenylpropanoate⁽⁴⁾
¹H-NMR (400 MHz, CDCl₃)

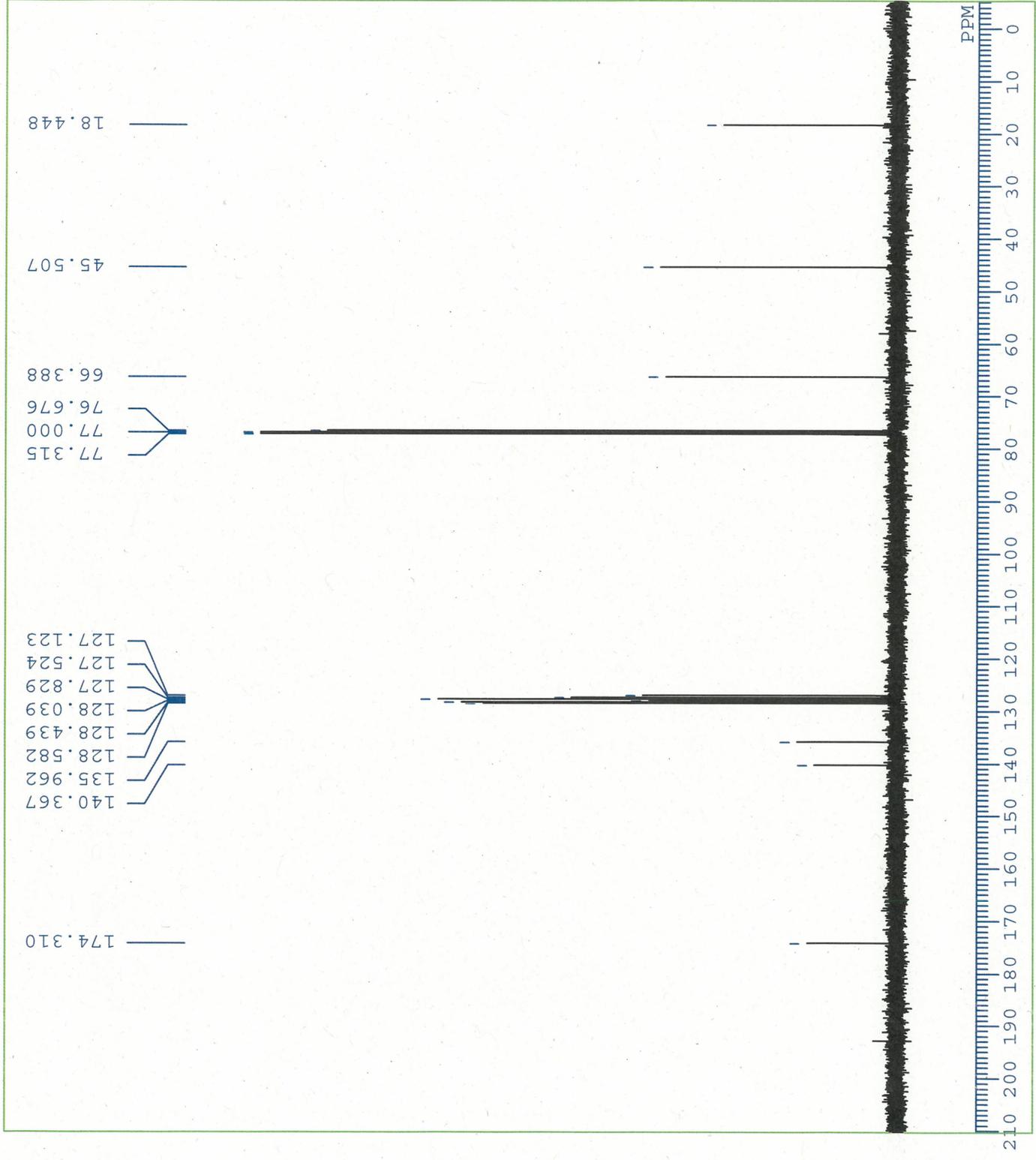


2026-02-04 12:30:03
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 13C
 carbon.jxp

EXMOD 100.53 MHz
 OBFRQ 5.35 KHZ
 OBSET 5.86 Hz
 POINT 32767
 FREQU 31407.04 Hz
 SCANS 512
 ACQTM 1.0433 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 21.5 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 60



Benzyl 2-phenylpropanoate (4)
¹³C-NMR (100 MHz, CDCl₃)

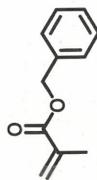


DATIM 2024-04-16 18:37:29
ff^fNf\$ff<Z_ff`f`f<_Protoi

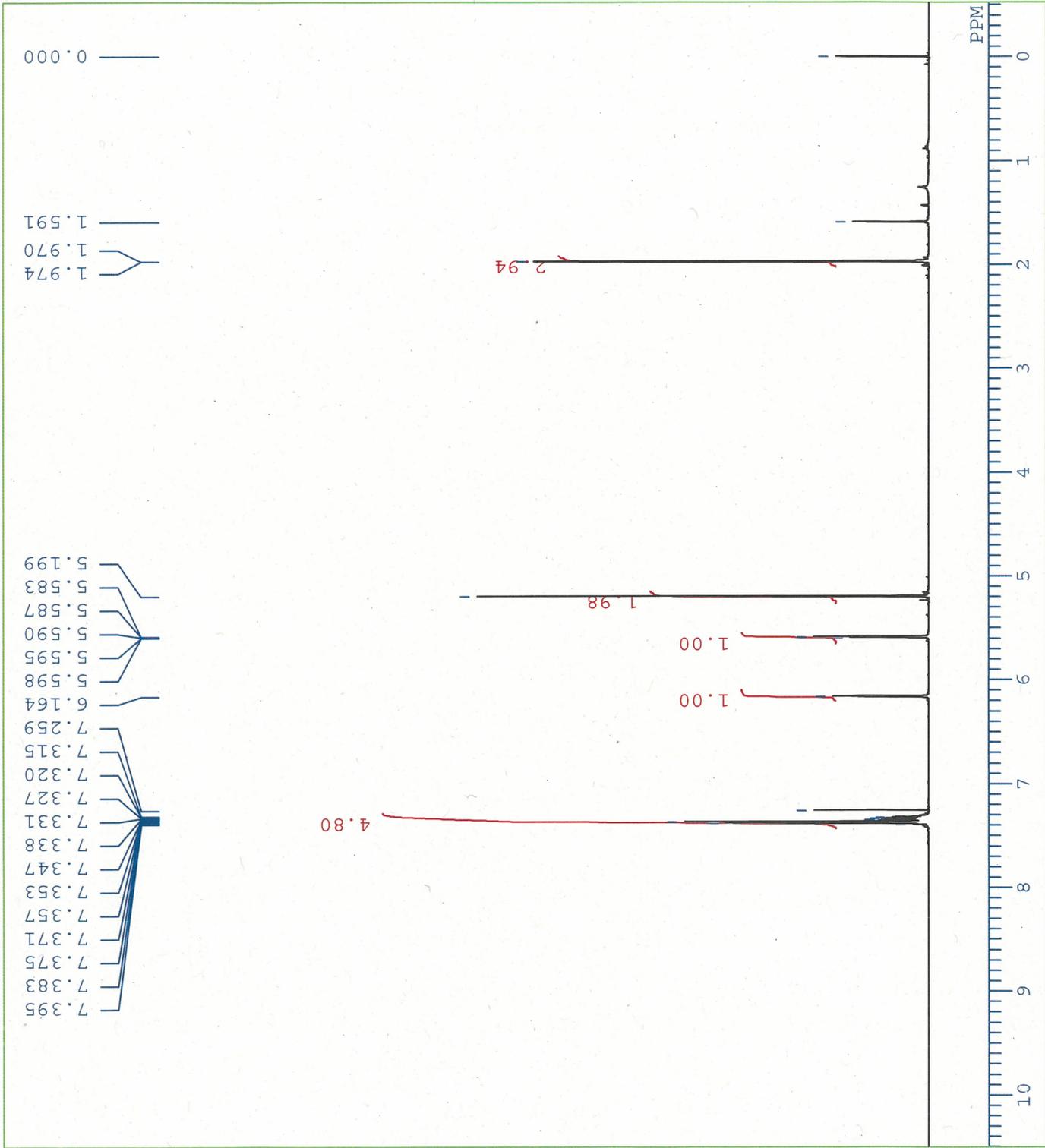
1H

proton.jxp

OBFRQ 399.78 MHz
OBSET 4.19 KHz
OBFIN 7.29 Hz
POINT 16384
FREQU 7503.00 Hz
SCANS 8
ACQTM 2.1837 sec
PD 5.0000 sec
PW1 6.55 usec
IRATN 0
CTEMP 18.7 C
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.10 Hz
RGAIN 42

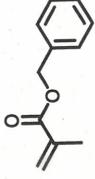


Benzyl methacrylate⁽⁵⁾
1H-NMR (400 MHz, CDCl₃)

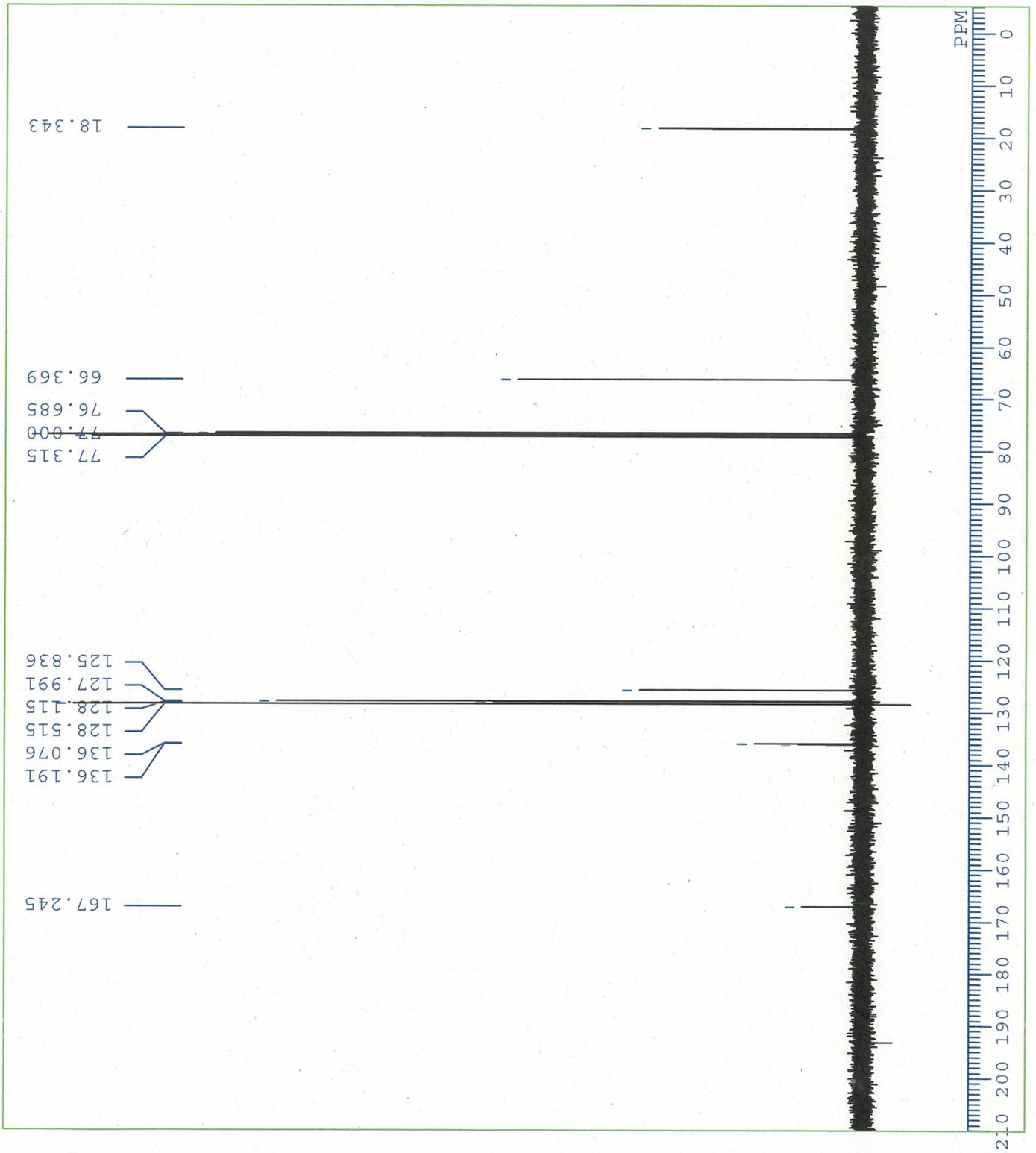


DATIM 2024-04-16 18:41:18
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OBNUC 13C

EXMOD carbon.jxp
OBFRQ 100.53 MHz
OBSET 5.35 KHz
OBFIN 5.86 Hz
POINT 32767
FREQU 31407.04 Hz
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 20.2 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50



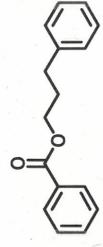
Benzyl methacrylate-5
13C-NMR (100 MHz, CDCl3)



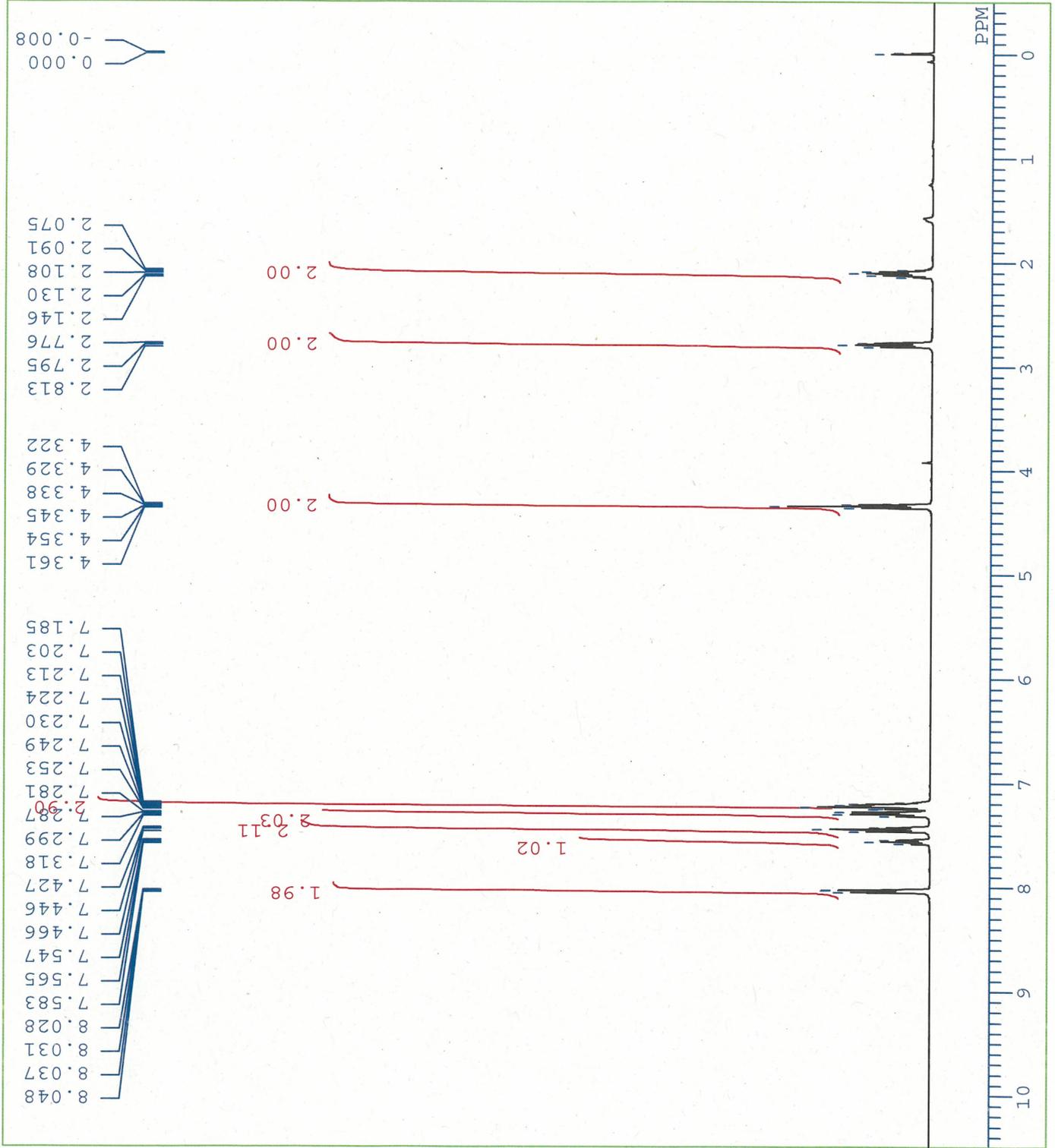
2024-02-09 20:11:24
 3-ftfFfj_Proton-2-1.als
 1H
 proton.jxp

399.78 MHz
 4.19 KHZ
 7.29 HZ
 13107
 6002.40 HZ
 8
 2.1837 sec
 5.0000 sec
 6.55 usec
 0
 17.6 C
 0.00 ppm
 0.10 Hz
 42

DATIM
 DFILE
 OBNUC
 EXMOD
 OBFRO
 OBSET
 OBFIN
 POINT
 FREQU
 SCANS
 ACQTM
 PD
 PW1
 IRATN
 CTEMP
 SLVNT
 EXREF
 BF
 RGAIN



3-Propylphenyl benzoate^{8,9)}
 1H-NMR (400 MHz, CDCl₃)

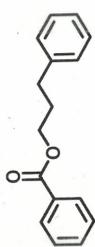


DATIM 2024-02-09 20:37:43
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OBNUC 13C
EXMOD carbon.jxp

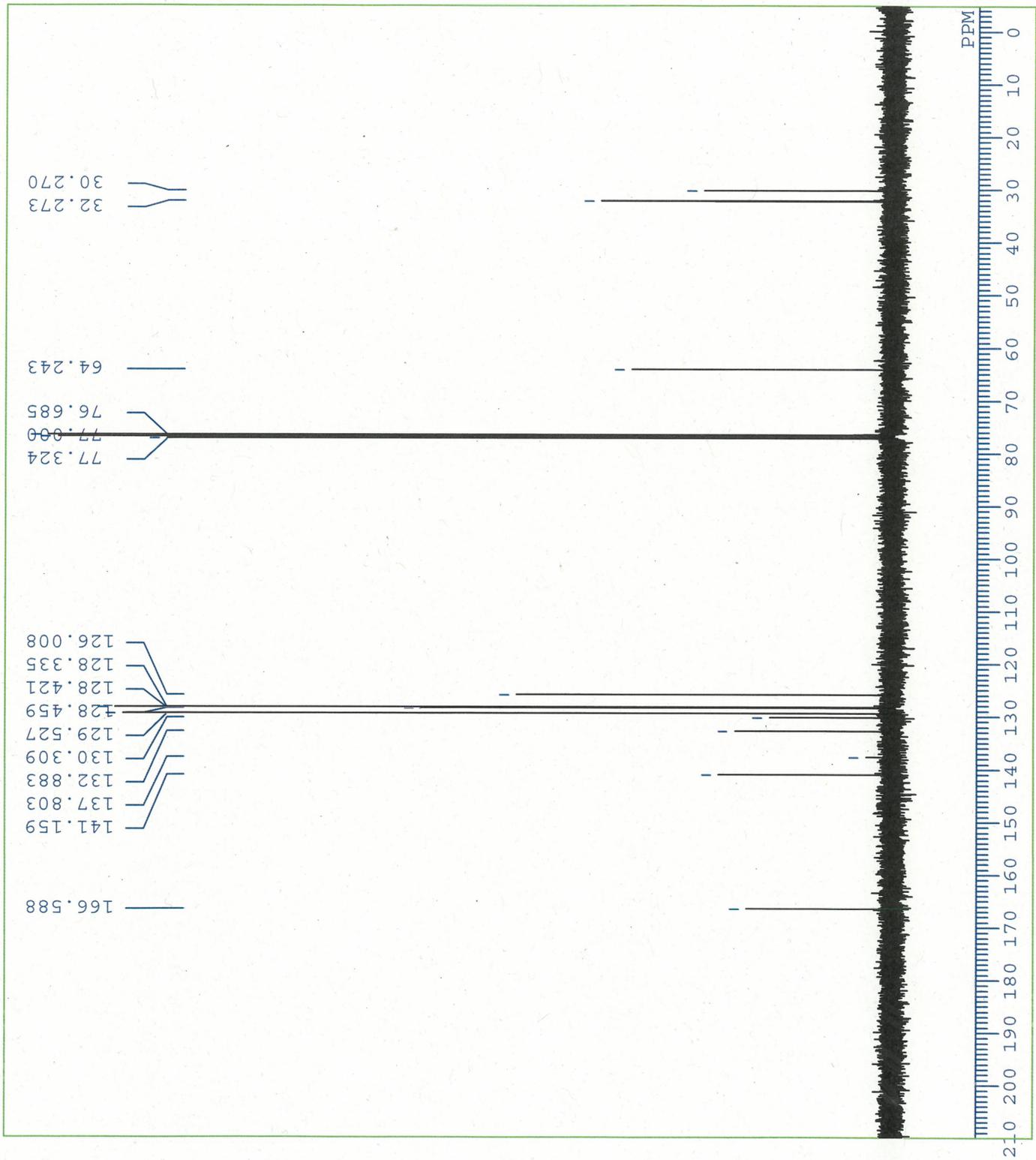
OBFRQ 100.53 MHz
OBSET 5.35 KHZ
OBFIN 5.86 Hz
POINT 26214

FREQU 25125.63 Hz
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec

IRATN 0
CTEMP 17.9 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50

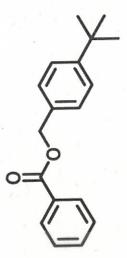


3-Phenylpropyl benzoate^{8,9)}
¹³C-NMR (100 MHz, CDCl₃)

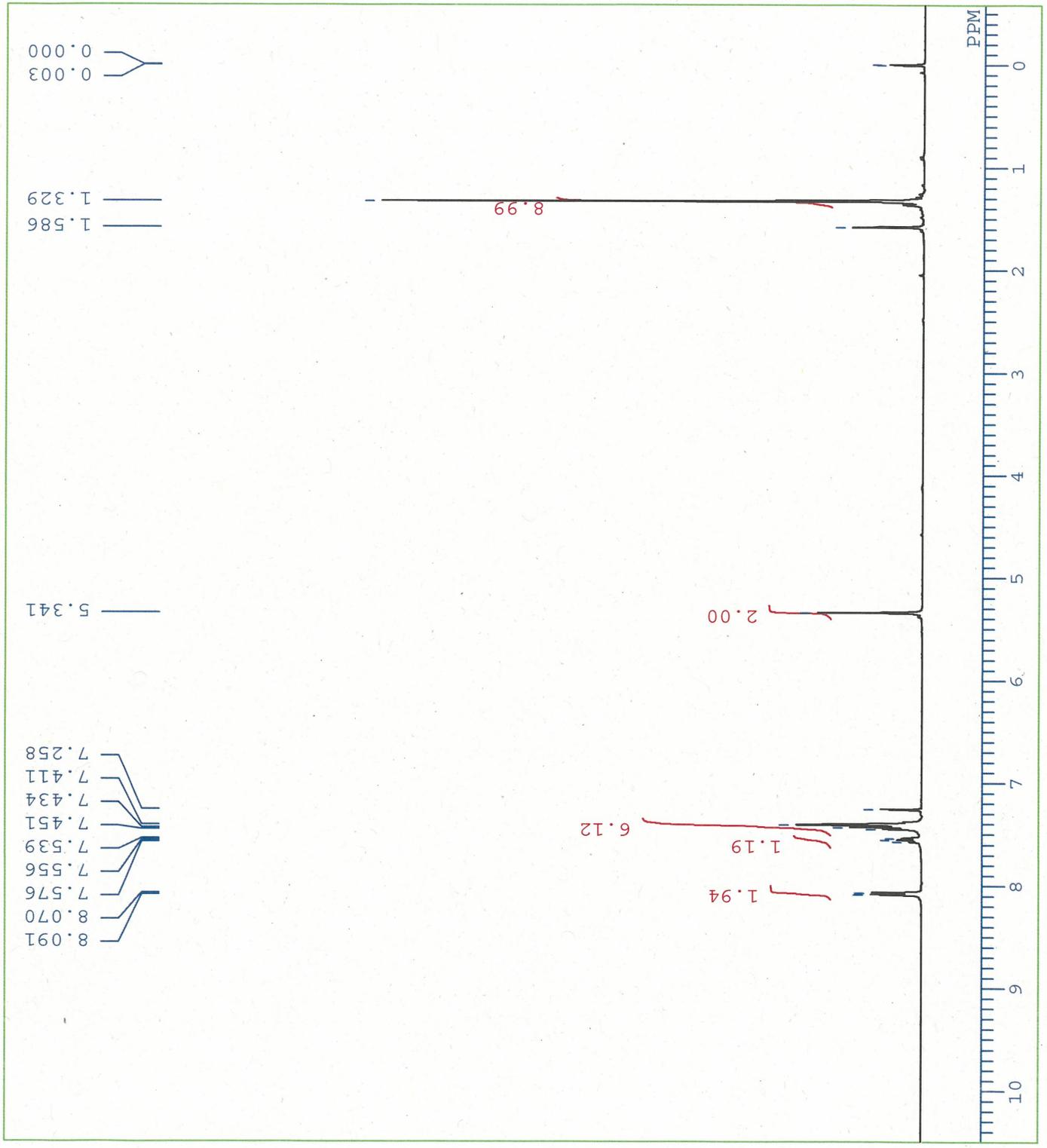


DATIM 2023-11-14 10:29:05
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 OBNUC 1H
 EXMOD proton.jxp

OBFRQ 399.78 MHz
 OBSET 4.19 KHz
 OBFIN 7.29 Hz
 POINT 52428
 FREQU 5000.00 Hz
 SCANS 8
 ACQTM 10.4858 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 19.5 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 46

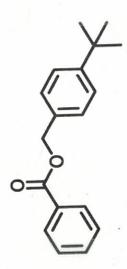


4-tert-Butylbenzyl benzoate⁽¹⁾
¹H-NMR (400 MHz, CDCl₃)

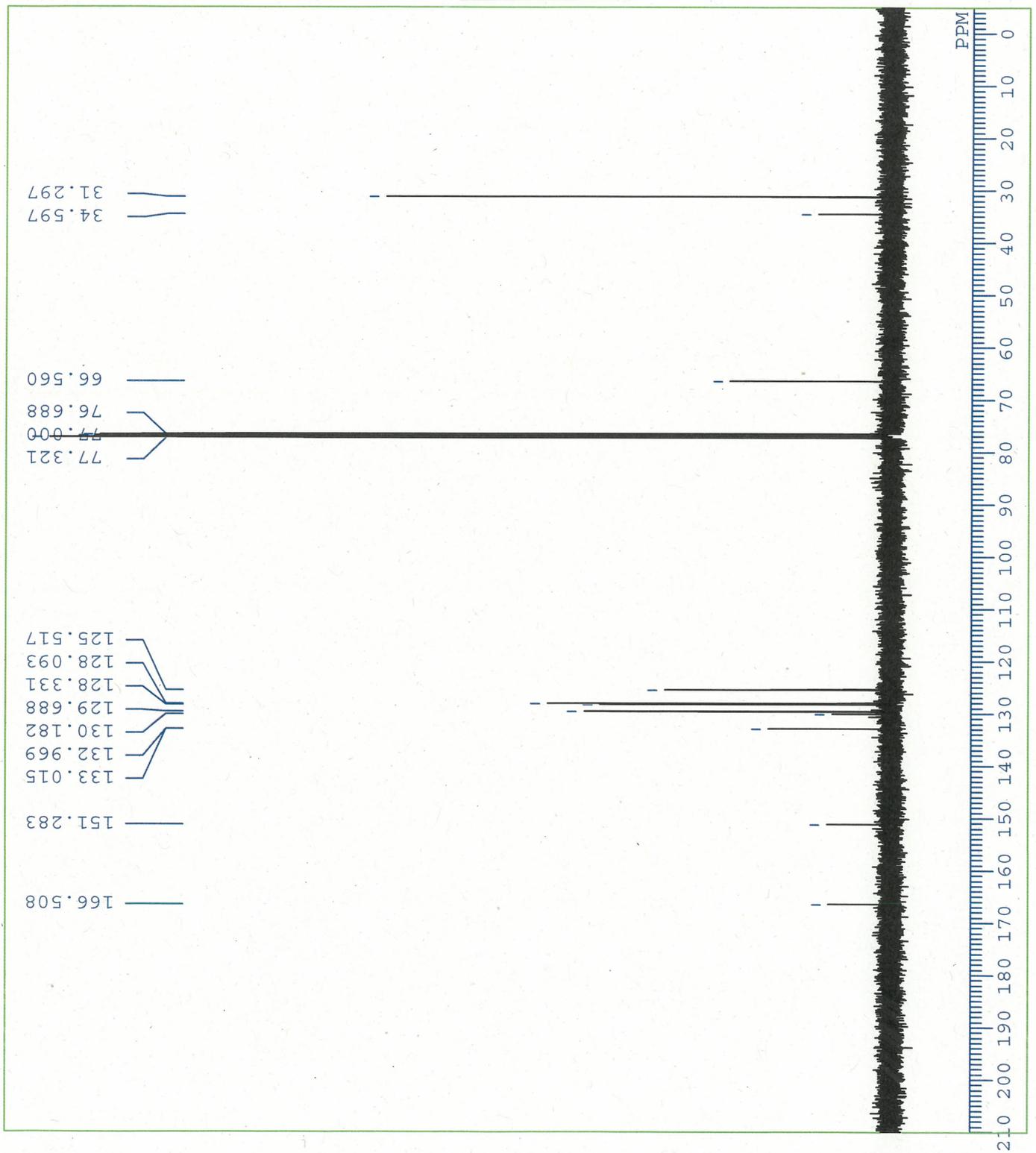


DATIM 2023-11-14 10:31:58
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 OBNUC 13C
 EXMOD carbon.jxp

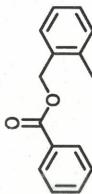
OBFRQ 100.53 MHz
 OBSET 5.35 KHZ
 OBFIN 5.86 HZ
 POINT 26214
 FREQU 24154.59 HZ
 SCANS 256
 ACQTM 1.0853 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 20.0 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 60



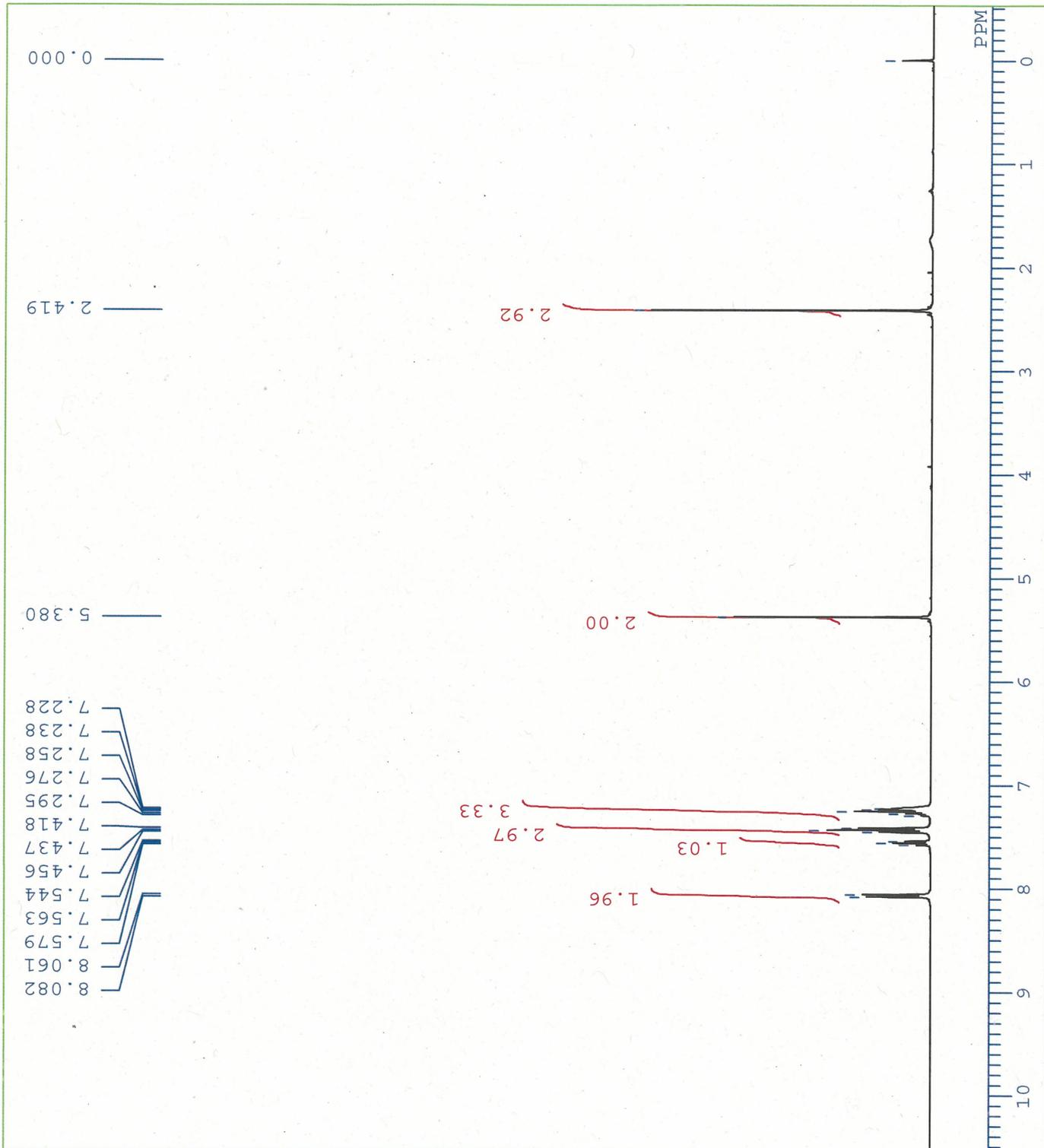
4-tert-Butylbenzoate¹⁰
¹³C-NMR (100 MHz, CDCl₃)



DATIM 2024-02-09 22:36:22
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 OBNUC 1H
 EXMOD proton.jxp
 OBFRO 399.78 MHz
 OBSET 4.19 KHZ
 OBFIN 7.29 Hz
 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 17.3 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 42

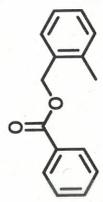


2-methylbenzoate²
¹H-NMR (400 MHz, CDCl₃)

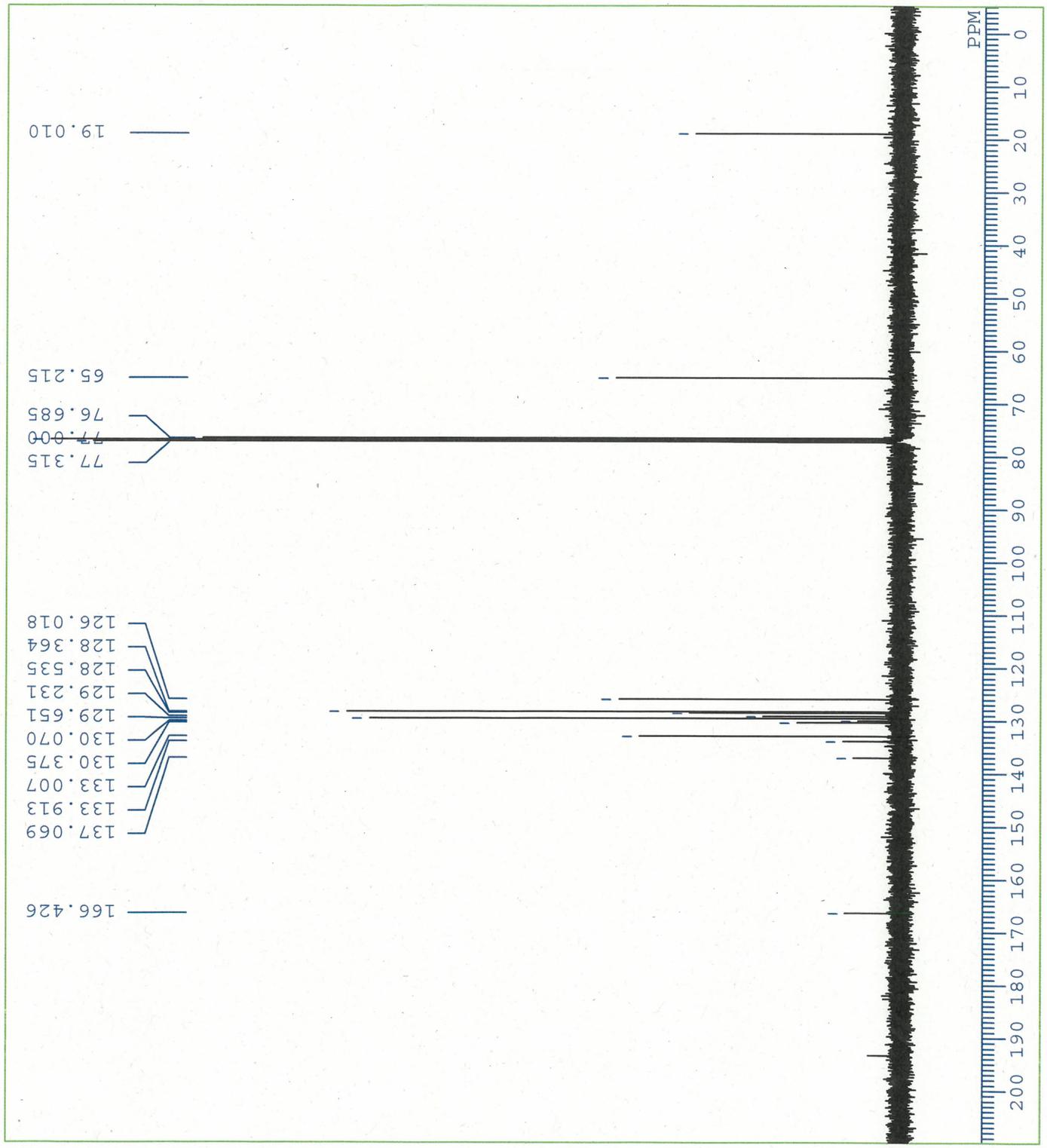


DATIM 2024-02-09 22:37:43
DFILE 2-ff`f<fxf`fWf<fAf<fR[f
OBNUC 13C
EXMOD carbon.jxp

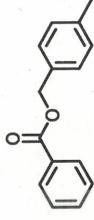
OBFRQ 100.53 MHz
OBSET 5.35 KHz
OBFIN 5.86 Hz
POINT 26214
FREQU 25125.63 Hz
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 17.8 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50



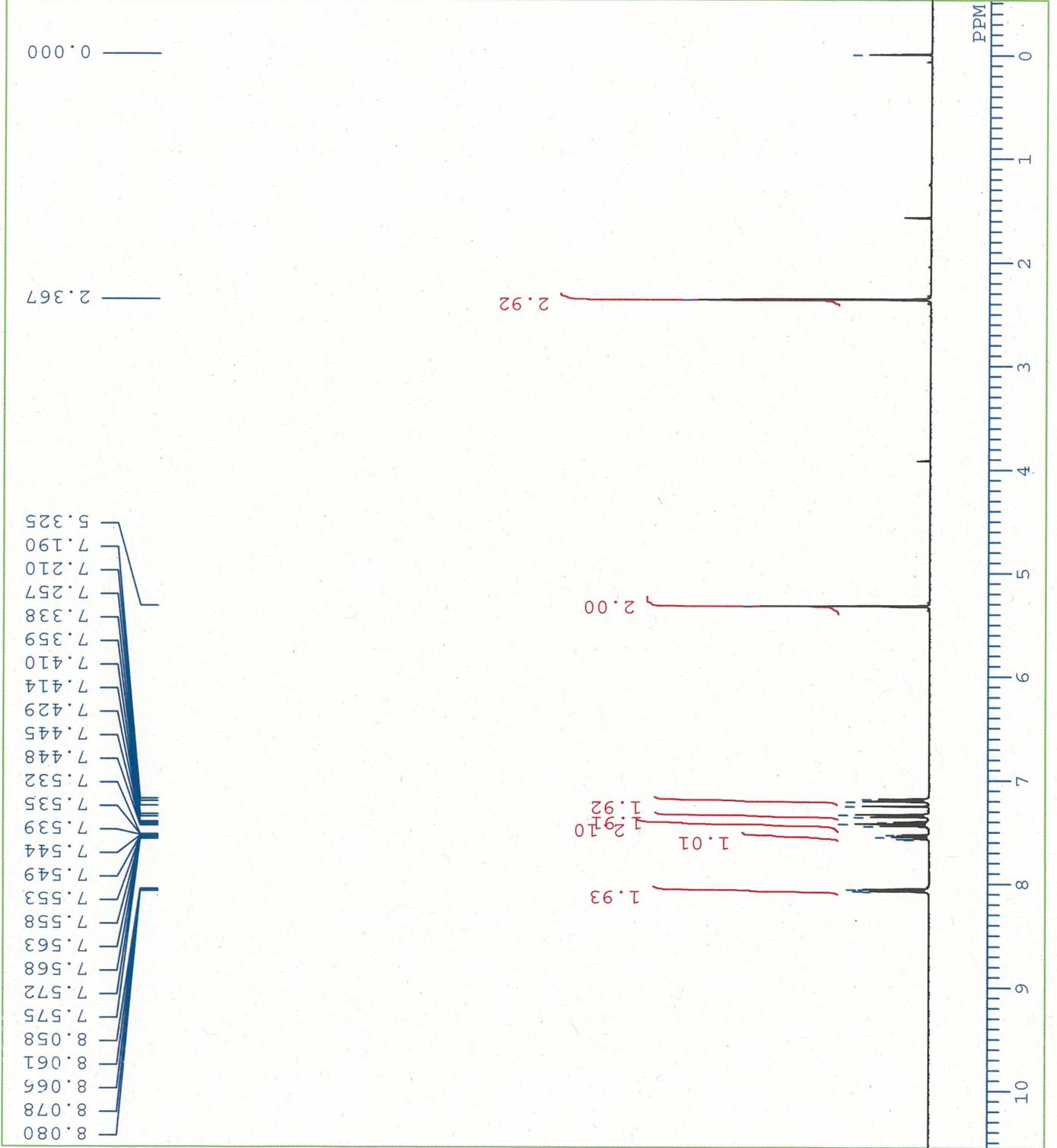
2-methylbenzylbenzoate²⁾
¹³C-NMR (100 MHz, CDCl₃)



DATIM 2024-02-02 22:23:47
 DFILE 4-ff`f<fxf`fWf<fAf<fR []
 OBNUC 1H
 EXMOD proton.jxp
 OBFRQ 399.78 MHz
 OBSET 4.19 KHz
 OBFIN 7.29 Hz
 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 17.5 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 44

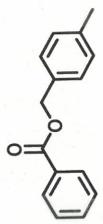


4-methylbenzoate²
¹H-NMR (400 MHz, CDCl₃)

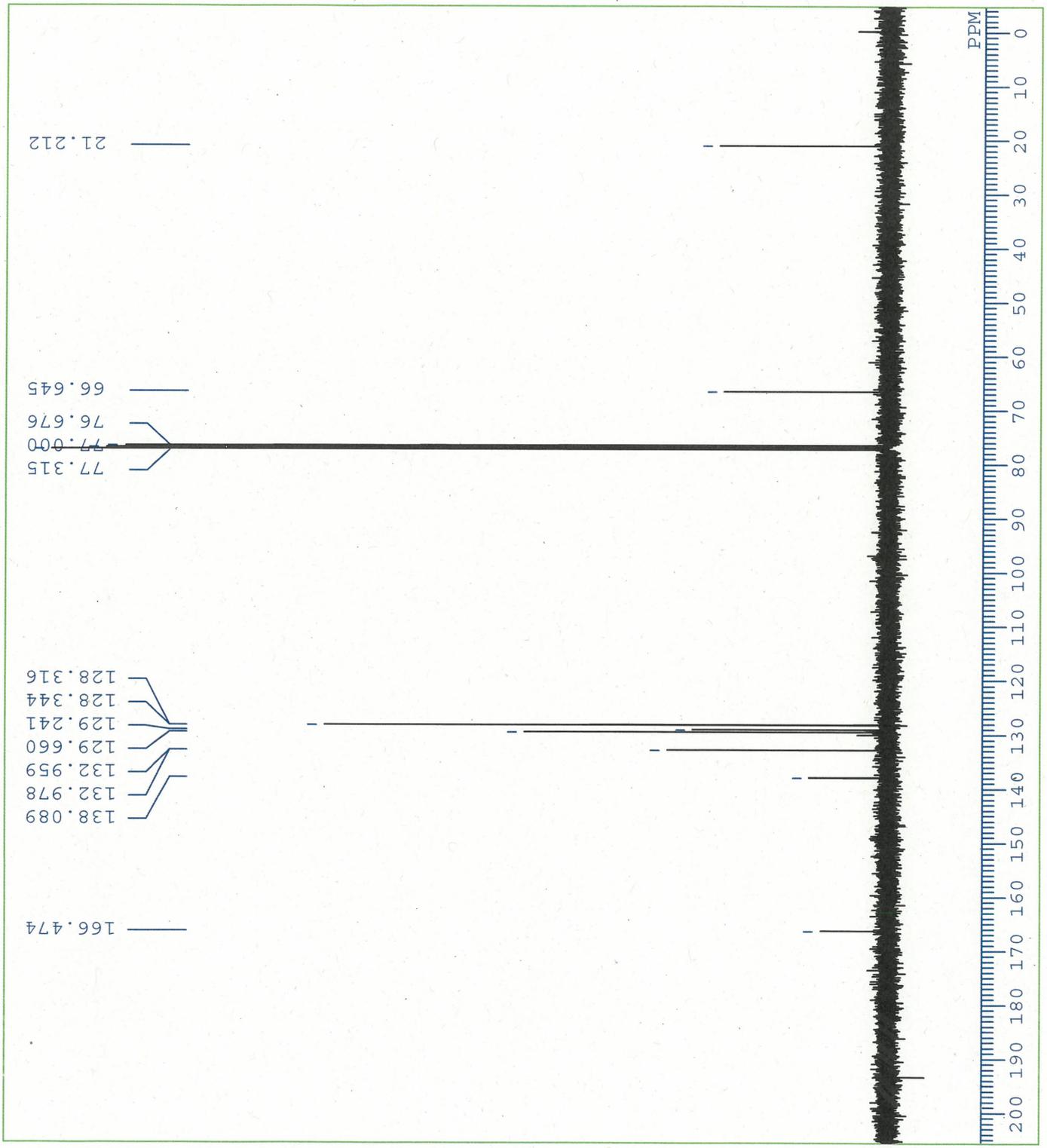


DATIM 2024-02-03 02:06:02
DFILE 4-ff`f<fxf`fWf<fAf<fR [f
OBNUC 13C
EXMOD carbon.jxp

OBFRQ 100.53 MHz
OBSET 5.35 KHz
OBFIN 5.86 Hz
POINT 26214
FREQU 25125.63 Hz
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 18.0 C
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50



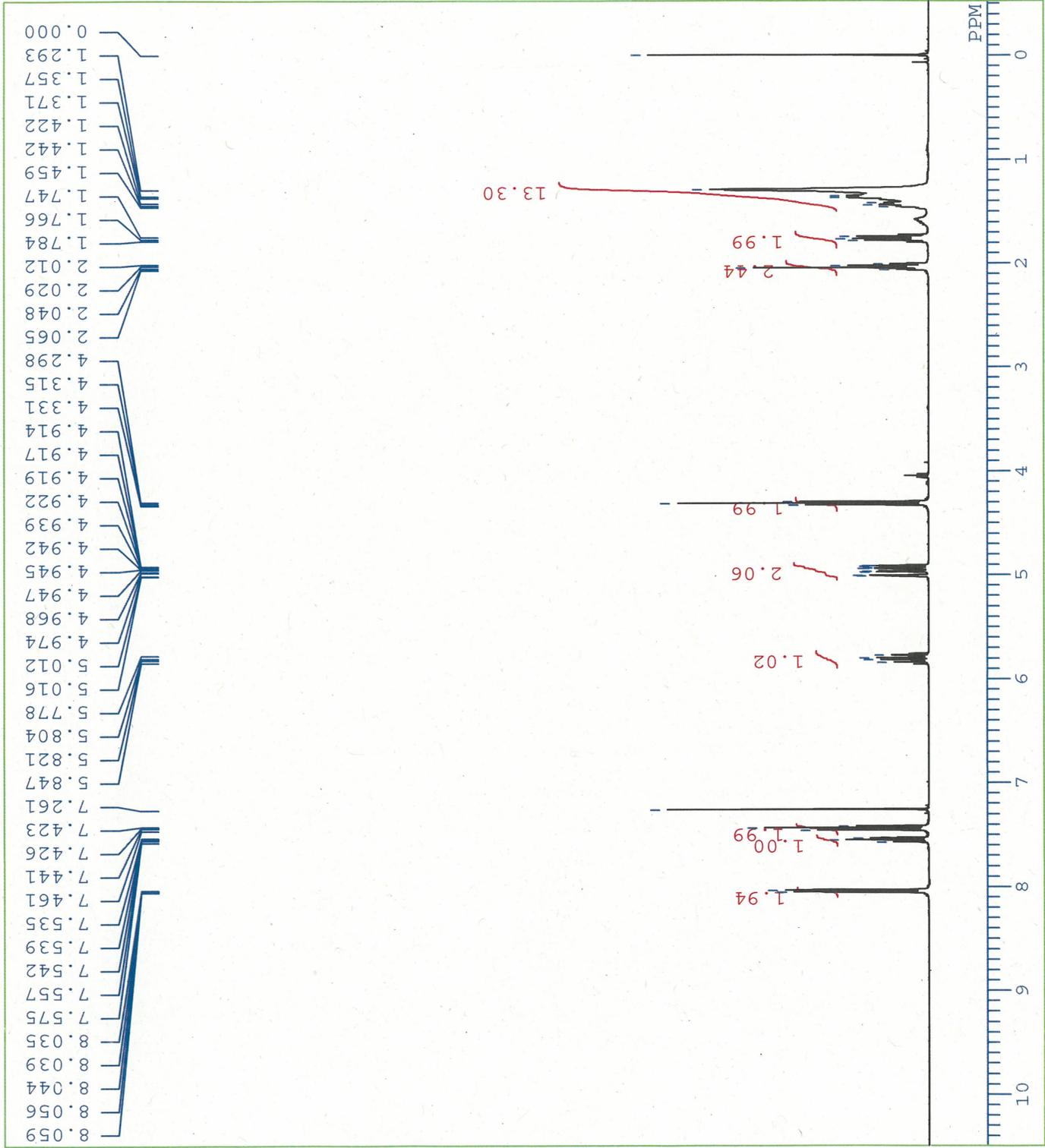
4-methylbenzoate²
¹³C-NMR (100 MHz, CDCl₃)



2024-02-18 16:27:32
 10-fEf"ffzf"lflf<_Prc
 1H
 proton.jxp
 399.78 MHz
 4.19 KHZ
 7.29 Hz
 13107
 6002.40 Hz
 8
 2.1837 sec
 5.0000 sec
 6.55 usec
 0
 19.6 c
 CDCL3
 0.00 ppm
 0.10 Hz
 42



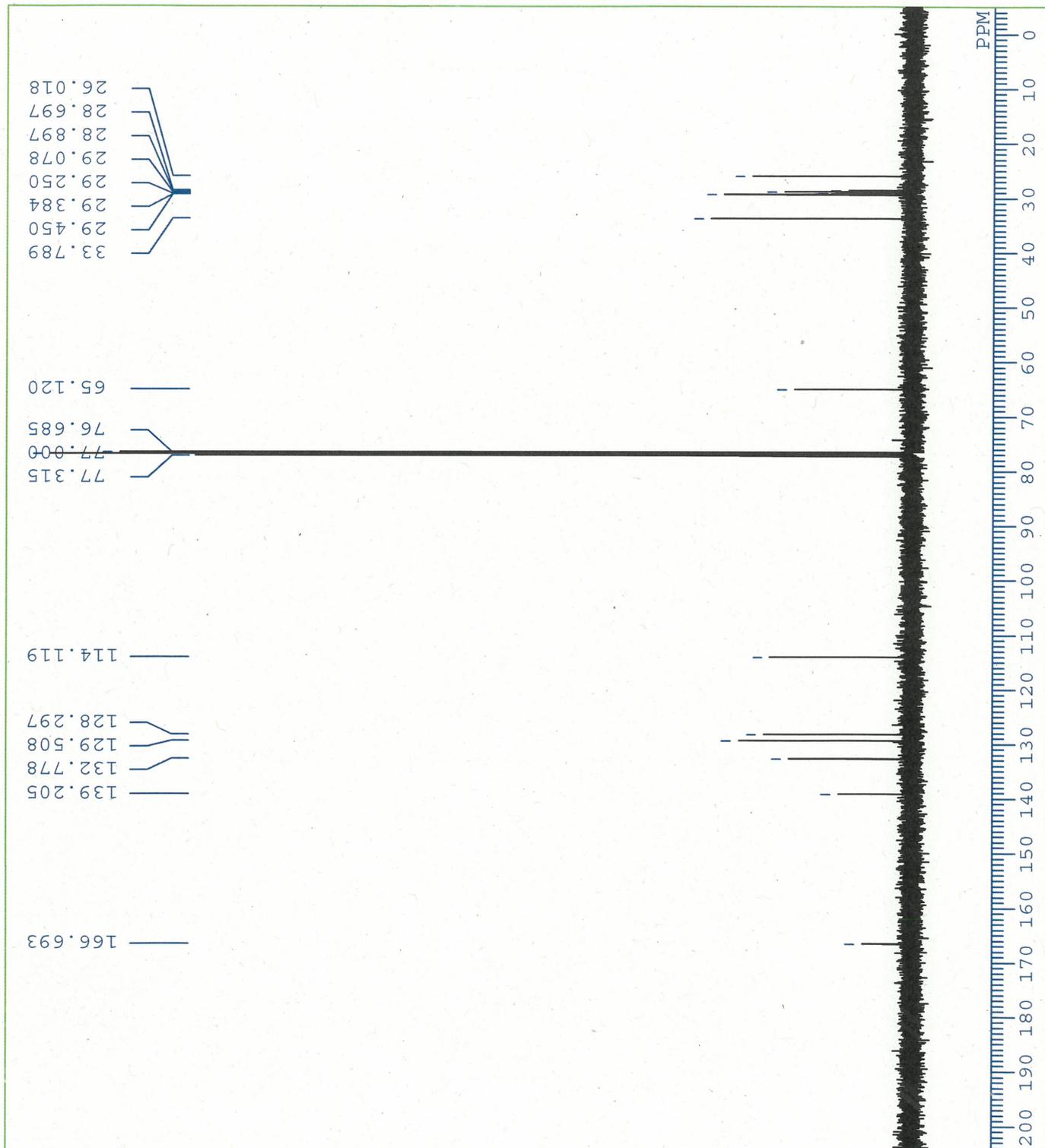
10-Undecenyl benzoate⁽¹⁾
¹H-NMR (400 MHz, CDCl₃)



DATIM 2024-02-18 16:30:07
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 OBNUC 13C
 EXMOD carbon.jxp
 OBFRQ 100.53 MHz
 OBSET 5.35 KHz
 OBFIN 5.86 Hz
 POINT 26214
 FREQU 25125.63 Hz
 SCANS 256
 ACQTM 1.0433 sec
 PD 2.0000 sec
 PW1 3.23 usec
 IRATN 0
 CTEMP 20.1 C
 SLVNT CDCL3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 50

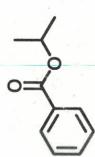


10-Undecenyl benzoate⁽¹⁾
¹³C-NMR (100 MHz, CDCl₃)

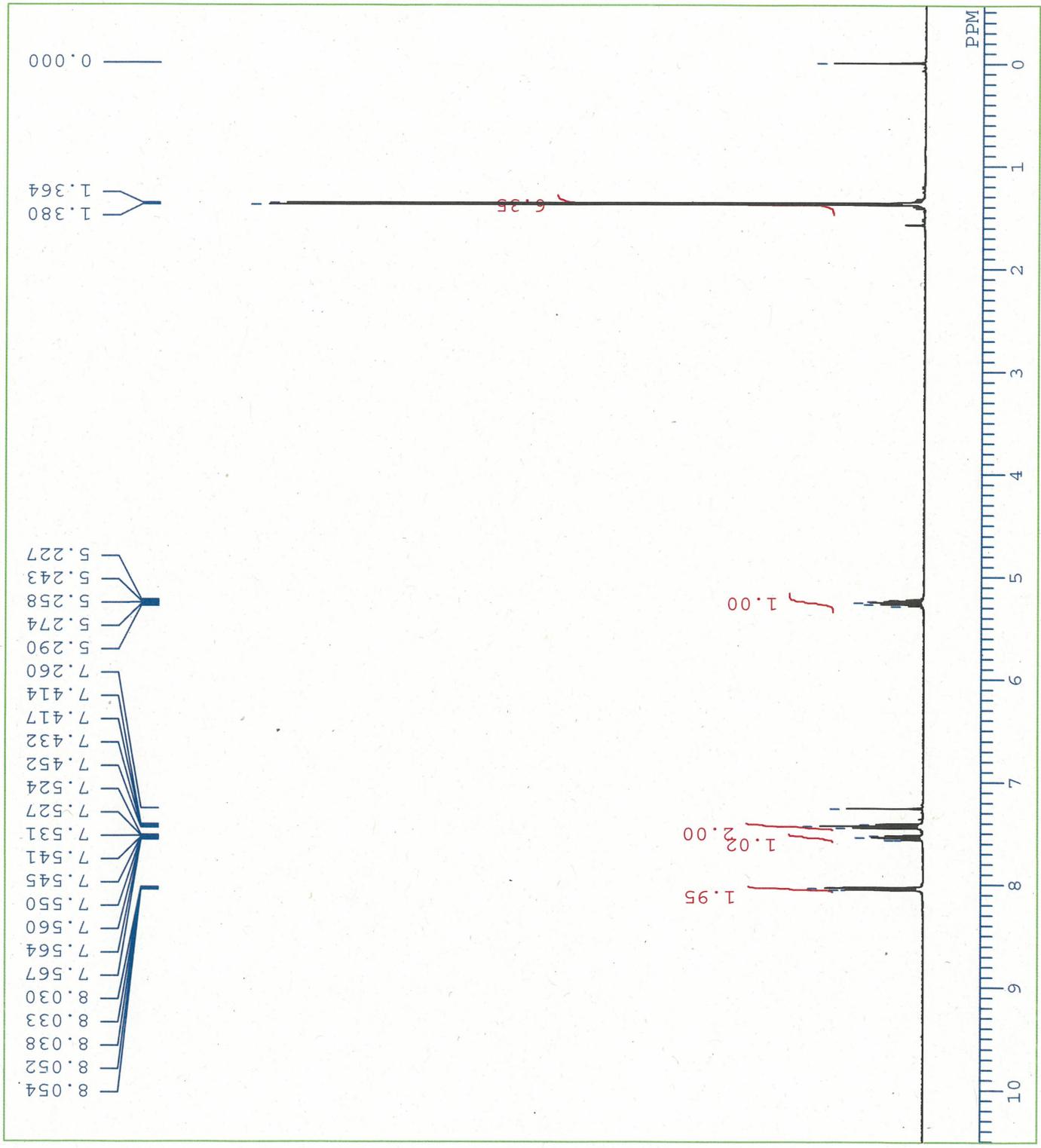


DATIM 2023-12-14 22:18:08
DFILE fvffpmlf<_Proton-1-1.
OBNUC 1H

EXMOD proton.jxp
OBFRQ 399.78 MHz
OBSET 4.19 KHz
OBFIN 7.29 Hz
POINT 13107
FREQU 6002.40 Hz
SCANS 8
ACQTM 2.1837 sec
PD 5.0000 sec
PWL 6.55 usec
IRATN 0
CTEMP 21.1 C
SLVNT CDCL3
EXREF 0.00 ppm
BF 0.10 Hz
RGAIN 44



2-Propyl benzoate⁽²⁾
1H-NMR (400 MHz, CDCl₃)



DATIM 2023-12-14 22:42:55
DFILE fvffpfm\fk_Carbon-1-1.a

OBNUC 13C

EXMOD carbon.jxp

OBFRQ 100.53 MHz

OBSET 5.35 KHz

OBFIN 5.86 Hz

POINT 26214

FREQU 25125.63 Hz

SCANS 256

ACQTM 1.0433 sec

PD 2.0000 sec

PW1 3.23 usec

IRATN 0

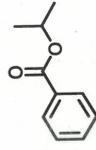
CTEMP 21.4 C

SLVNT CDCL3

EXREF 77.00 ppm

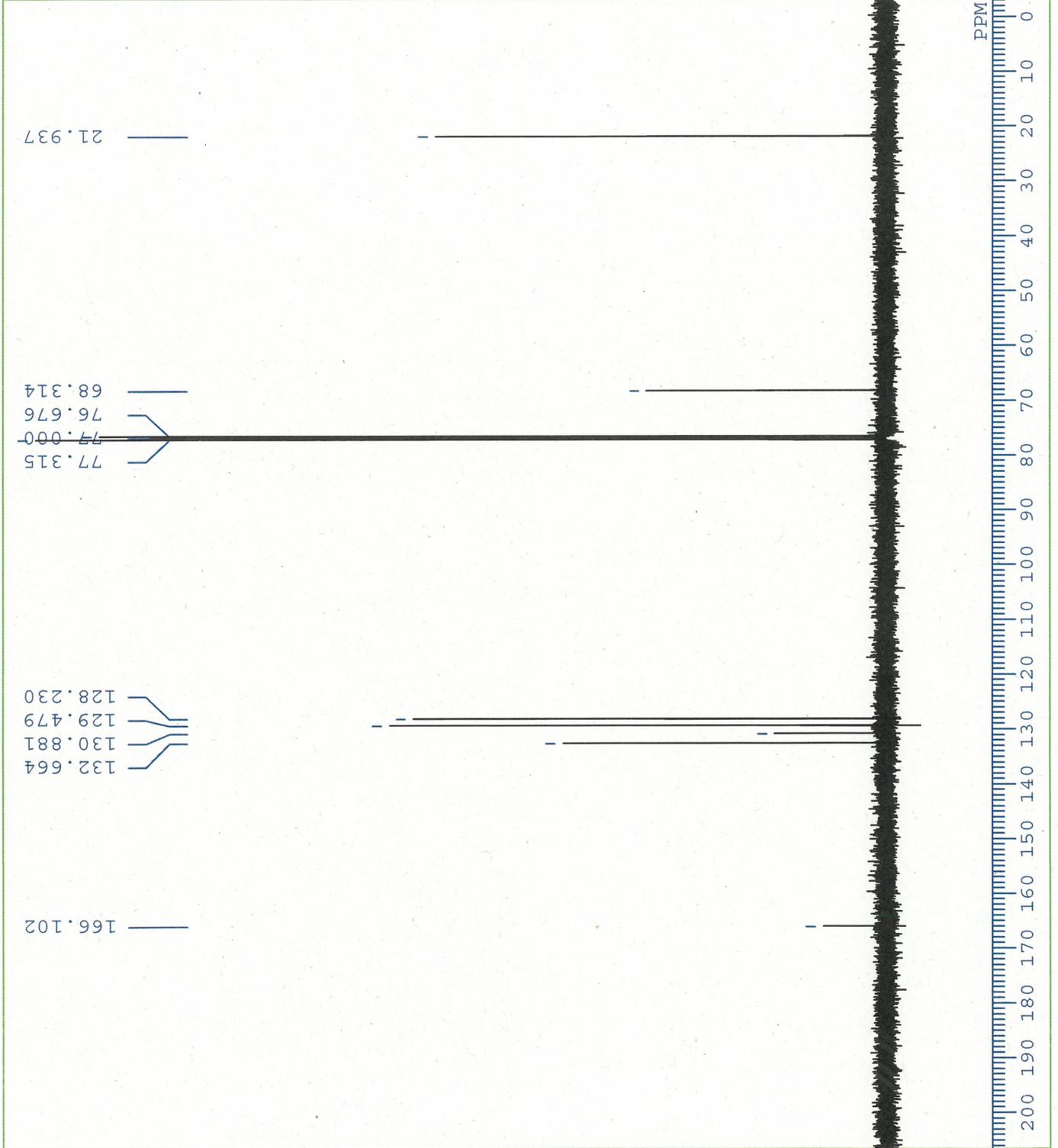
BF 0.10 Hz

RGAIN 50

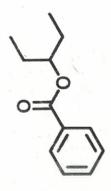


2-Propyl benzoate¹²⁾

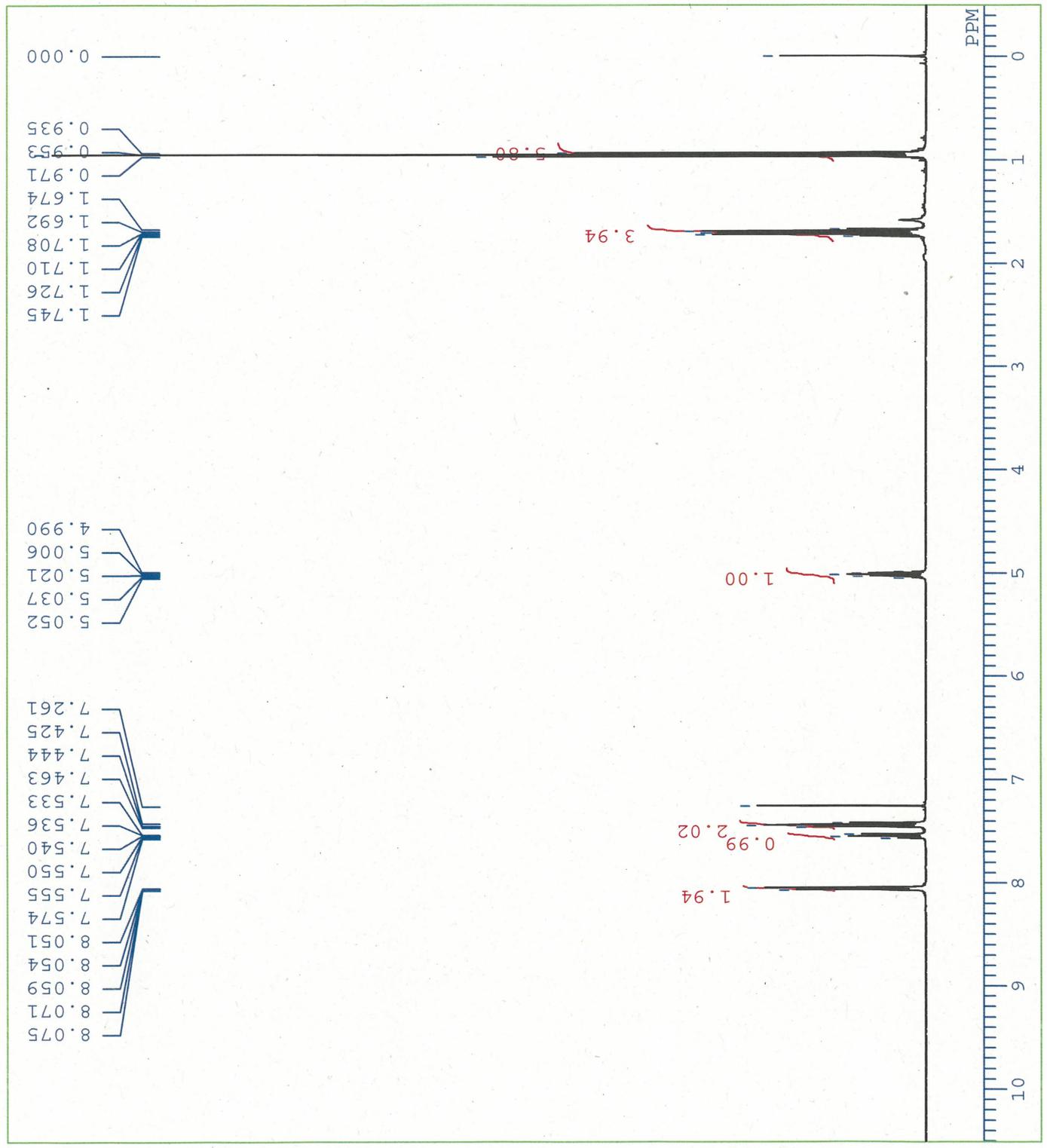
¹³C-NMR (100 MHz, CDCl₃)



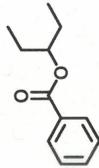
DATIM 2023-12-19 17:36:55
 DFILE 3-fyf" f^fm[f<_Proton-1-
 OBNUC 1H
 EXMOD proton.jxp
 OBFRQ 399.78 MHz
 OBSET 4.19 KHz
 OBFIN 7.29 Hz
 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 18.5 c
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 44



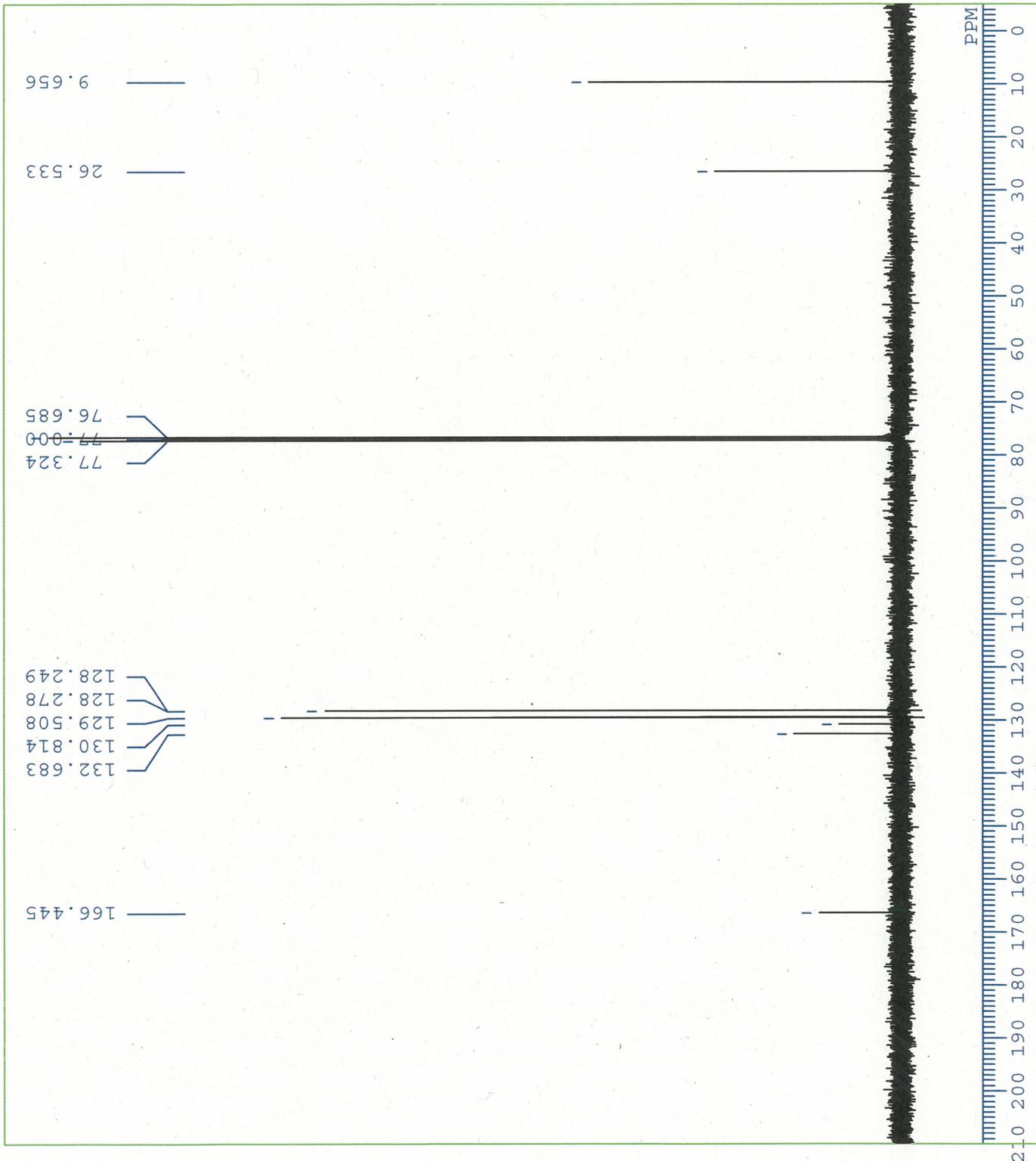
3-Pentyl benzoate⁸⁾
¹H-NMR (400 MHz, CDCl₃)



DATIM 2023-12-19 17:56:37
 DFILE 3-fyf" f^fm [f< Carbon-1-
 OBNUC 13C
 EXMOD carbon.jxp
 OBFRQ 100.53 MHz
 OBSET 5.35 KHz
 OBFIN 5.86 Hz
 POINT 26214
 FREQU 25125.63 Hz
 SCANS 256
 ACQTM 1.0433 sec
 PD 2.0000 sec
 FW1 3.23 usec
 IRATN 0
 CTEMP 19.1 C
 SLVNT CDCl3
 EXREF 77.00 ppm
 BF 0.10 Hz
 RGAIN 50

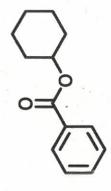


3-Pentyl benzoate⁸
¹³C-NMR (100 MHz, CDCl₃)

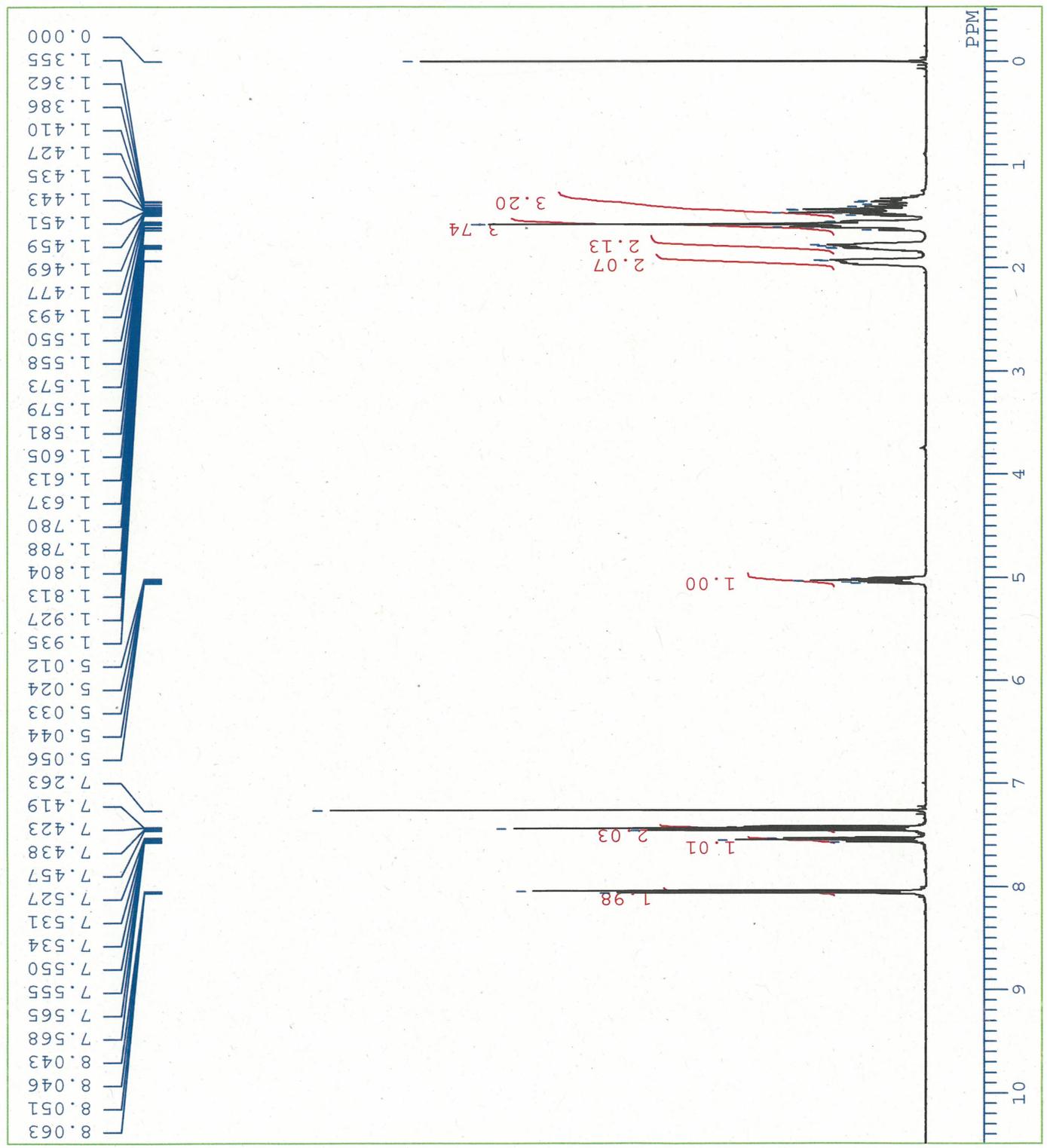


DATIM 2023-12-23 18:05:27
 DFILE fVfNffwflfTfm[f<_Proton
 OBNUC 1H
 EXMOD proton.jxp

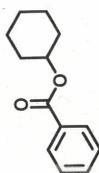
OBFRQ 399.78 MHz
 OBSET 4.19 KHZ
 OBFIN 7.29 Hz
 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 17.4 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 46



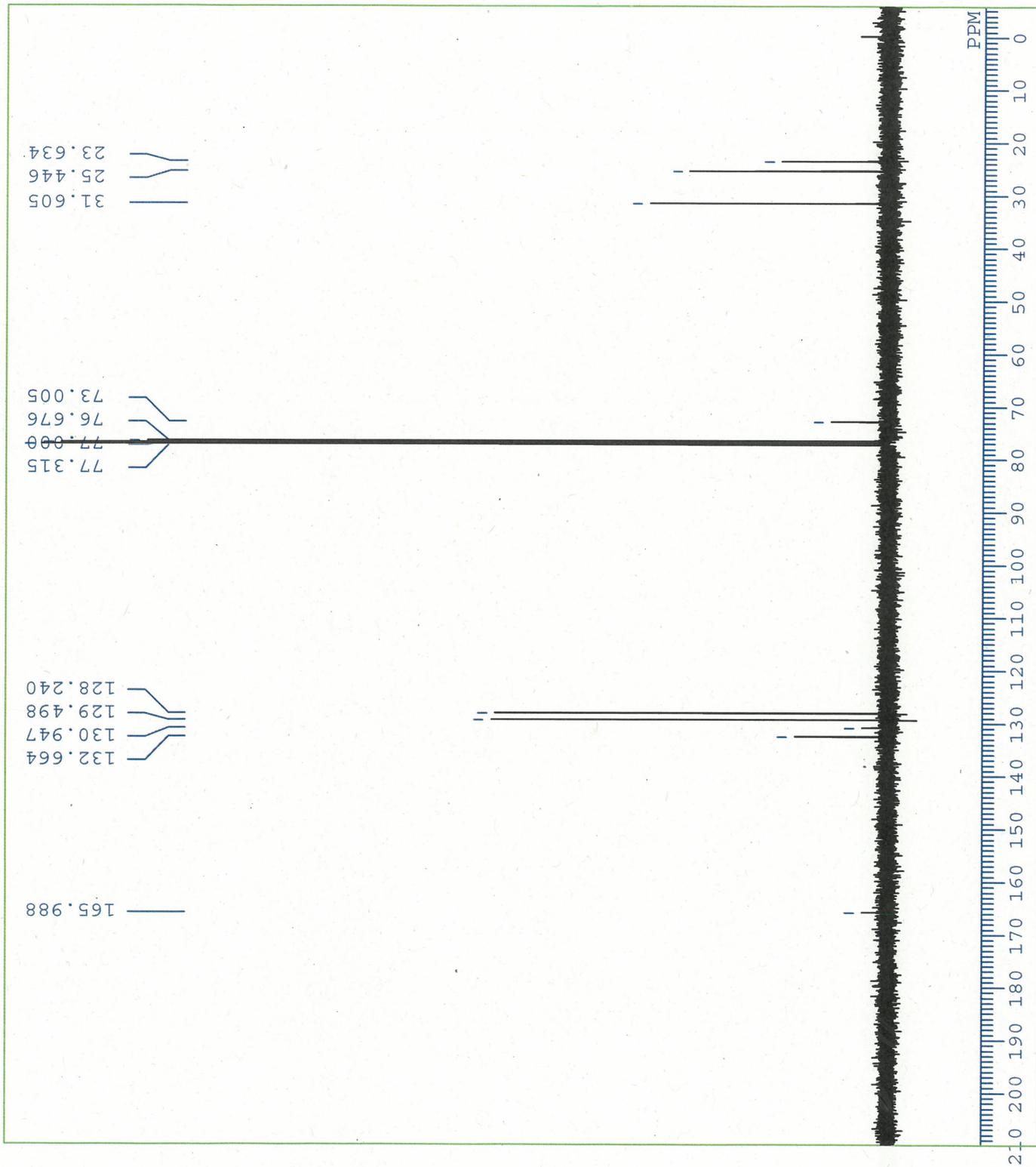
Cyclohexyl benzoate⁸
¹H-NMR (400 MHz, CDCl₃)



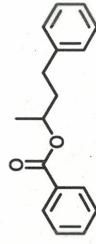
2023-12-23 18:06:47
 fVfNffwJLfTfm[f< Carbor.
 13C
 carbon.jxp
 100.53 MHz
 5.35 KHz
 5.86 Hz
 26214
 25125.63 Hz
 256
 1.0433 sec
 2.0000 sec
 3.23 usec
 0
 18.1 C
 CDCL3
 77.00 ppm
 0.10 Hz
 50



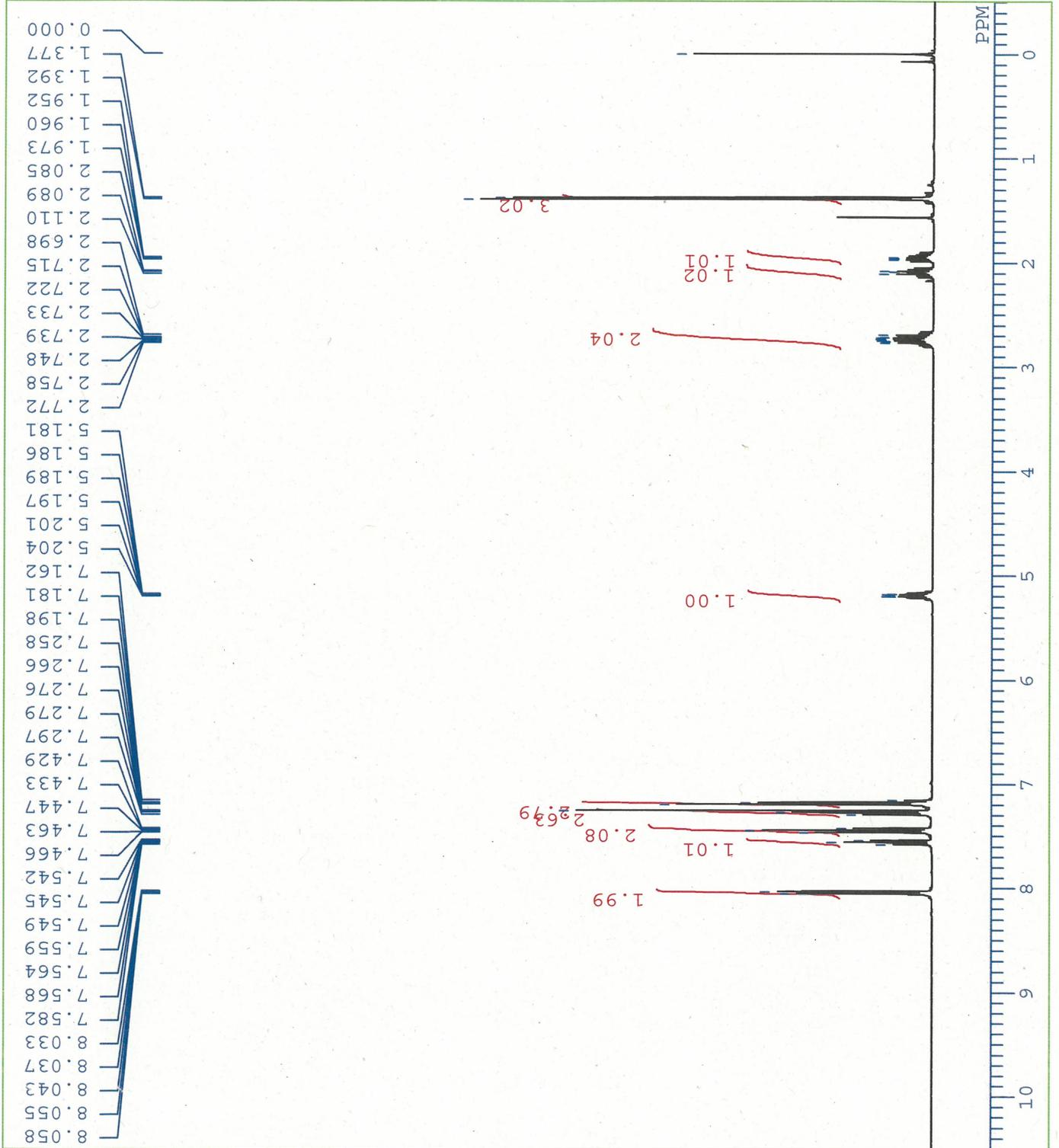
Cyclohexyl benzoate[®]
¹³C-NMR (100 MHz, CDCl₃)



DATIM 2024-01-18 14:58:18
 DFILE 4-ftfFjfj<-2-fuf^fm [f<
 OBNUC 1H
 EXMOD proton.jxp
 OBFRQ 399.78 MHz
 OBSET 4.19 KHZ
 OBFIN 7.29 HZ
 POINT 13107
 FREQU 6002.40 HZ
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 17.8 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 44

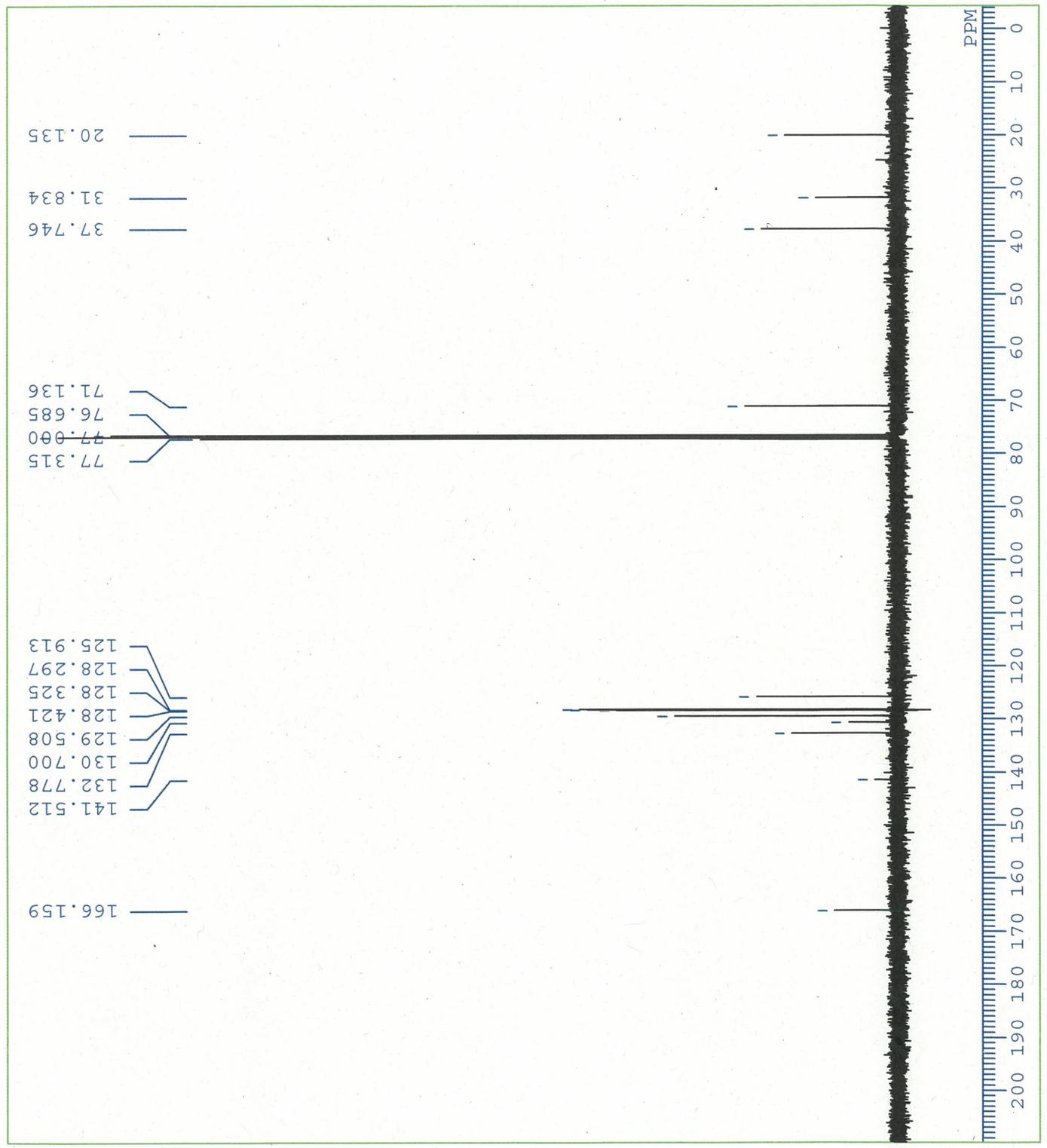
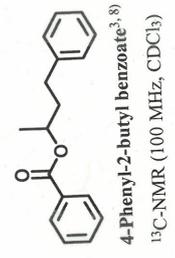


4-Phenyl-2-butyl benzoate^{3, 8}
¹H-NMR (400 MHz, CDCl₃)



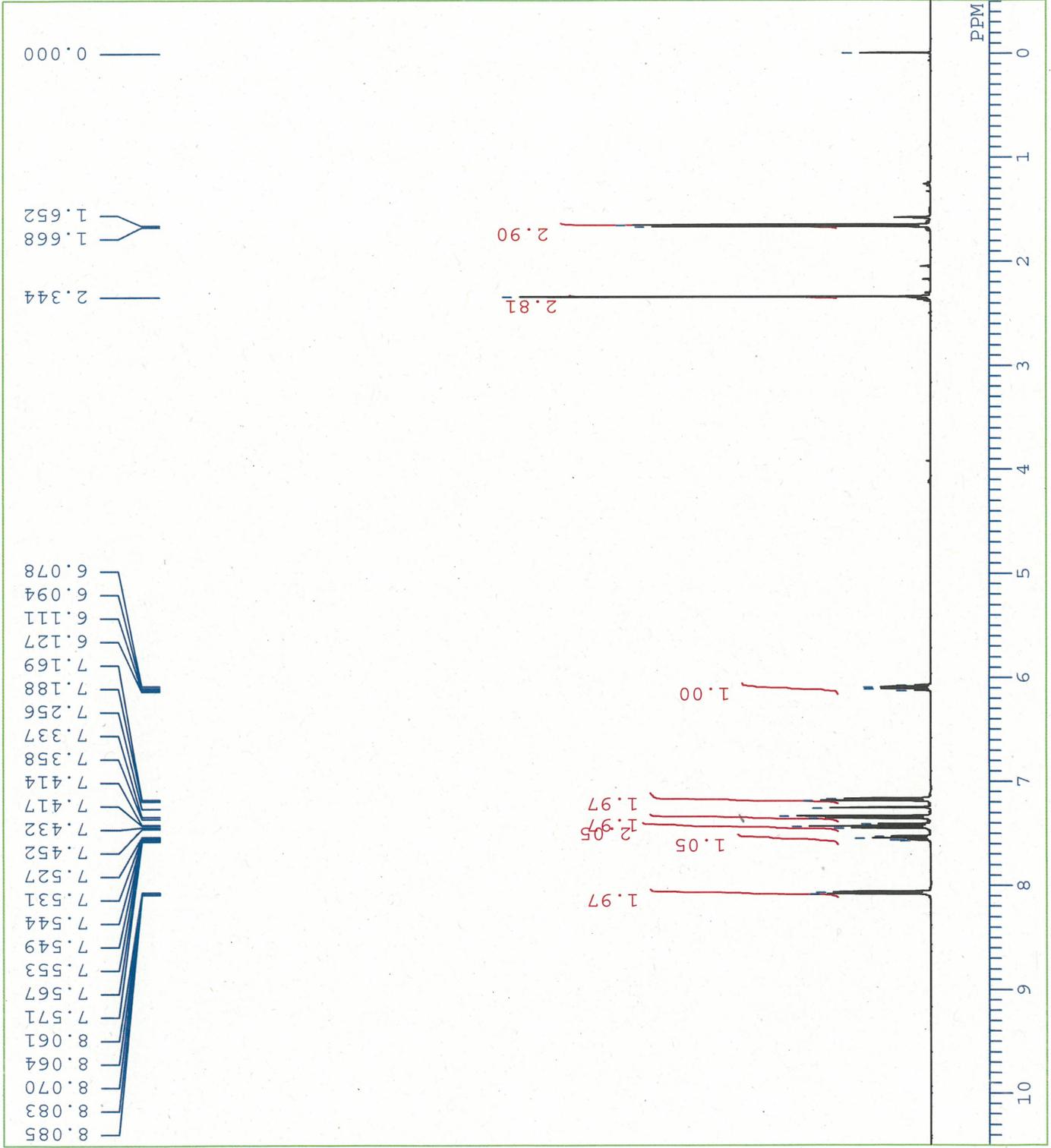
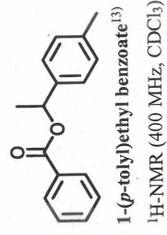
DATIM 2024-01-18 14:59:38
DFILE 4-ftfFjfj<-2-fuf^fm[f<-
OBNUC 13C

EXMOD carbon.jxp
OBFRQ 100.53 MHZ
OBSET 5.35 KHZ
OBFIN 5.86 HZ
POINT 26214
FREQU 25125.63 HZ
SCANS 256
ACQTM 1.0433 sec
PD 2.0000 sec
PW1 3.23 usec
IRATN 0
CTEMP 18.3 c
SLVNT CDCL3
EXREF 77.00 ppm
BF 0.10 Hz
RGAIN 50

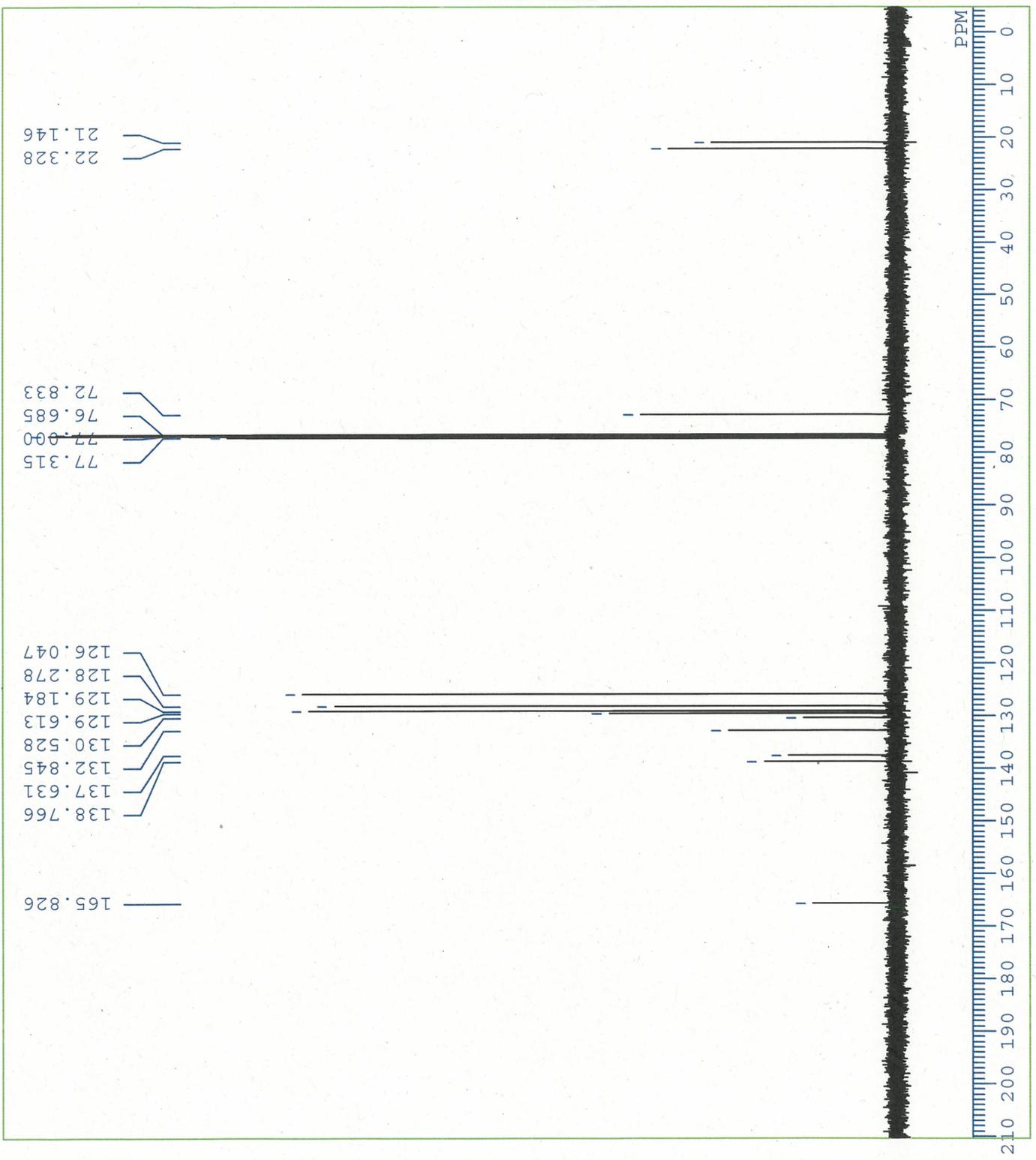
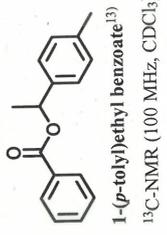


DATIM 2024-01-24 10:31:47
 DFILE 1-fpf%fgf\$<fgf^fm[f<_F
 OBNUC 1H
 EXMOD proton.jxp

OBFRQ 399.78 MHz
 OBSET 4.19 KHZ
 OBFIN 7.29 Hz
 POINT 13107
 FREQU 6002.40 Hz
 SCANS 8
 ACQTM 2.1837 sec
 PD 5.0000 sec
 PW1 6.55 usec
 IRATN 0
 CTEMP 16.7 C
 SLVNT CDCL3
 EXREF 0.00 ppm
 BF 0.10 Hz
 RGAIN 42



2024-01-24 10:33:06
 1-fpf%fgf\$<fGf^fm[f<_c
 13C
 carbon.jxp
 100.53 MHz
 5.35 KHZ
 5.86 Hz
 26214
 25125.63 Hz
 256
 1.0433 sec
 2.0000 sec
 3.23 usec
 0
 17.0 C
 CDCL3
 77.00 ppm
 0.10 Hz
 50



DATIM 2026-02-06 21:54:10
DFILE kamada THF_Proton-2-1-1.j

OBNUC 1H
EXMOD proton.jxp

OBFREQ 399.78 MHz
OBSET 4.19 KHz
OBFIN 7.29 Hz

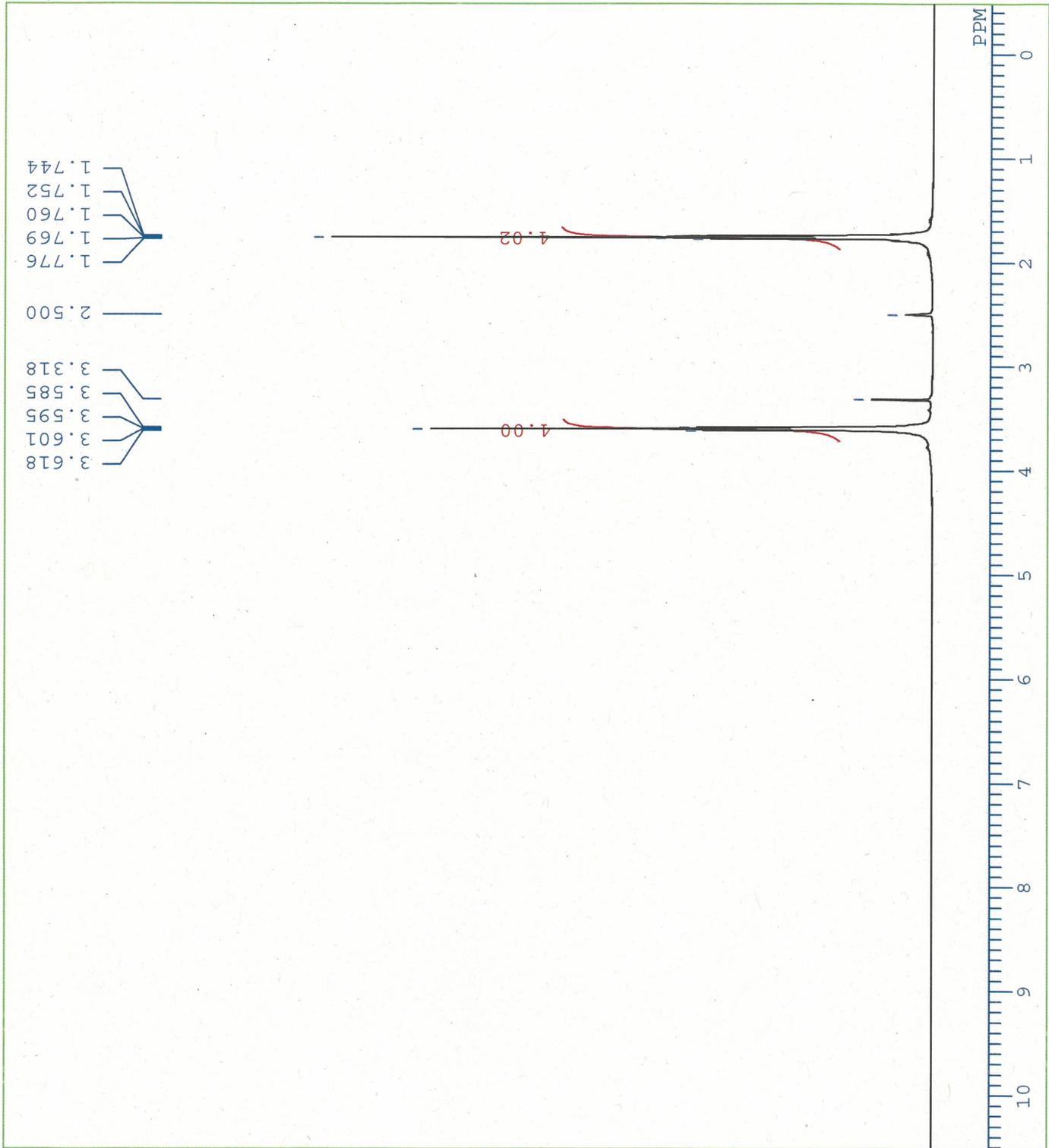
POINT 16384
FREQU 7503.00 Hz
SCANS 8

ACQTM 2.1837 sec
PD 5.0000 sec
PW1 6.55 usec

IRATN 0
CTEMP 21.1 C

SLVNT DMSO
EXREF 2.50 ppm
BF 0.10 Hz
RGAIN 32

THF
¹H-NMR (400 MHz, DMSO-d₆)



DATIM 2026-02-06 18:16:31
DFILE kamada THF_Carbon-1-1.j

OBNUC 13C

EXMOD carbon.jxp

OBFRQ 100.53 MHz

OBSET 5.35 KHz

OBFIN 5.86 Hz

POINT 32767

FREQU 31407.04 Hz

SCANS 512

ACQTM 1.0433 sec

PD 2.0000 sec

PW1 3.23 usec

IRAIN 0

CTEMP 21.5 C

SLVNT DMSO

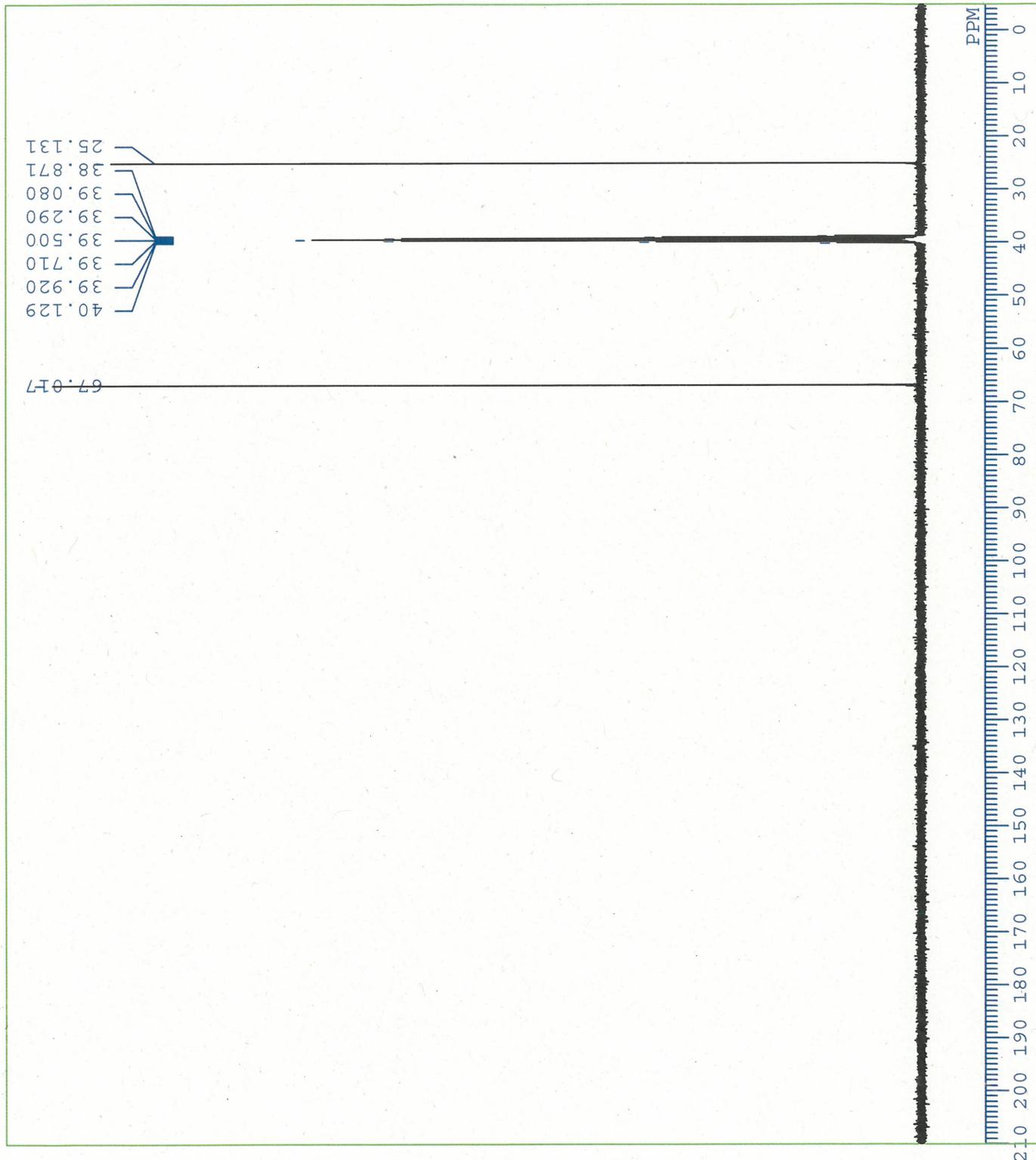
EXREF 39.50 ppm

BF 0.10 Hz

RGAIN 60

THF

¹³C-NMR (100 MHz, DMSO-d₆)



DATIM 2026-02-06 21:47:57
DFILE kamada tBuOH_Proton-3-1

OBNUC 1H
EXMOD proton.jxp

OBFRQ 399.78 MHz
OBSET 4.19 KHz
OBFIN 7.29 Hz
POINT 16384
FREQU 7503.00 Hz

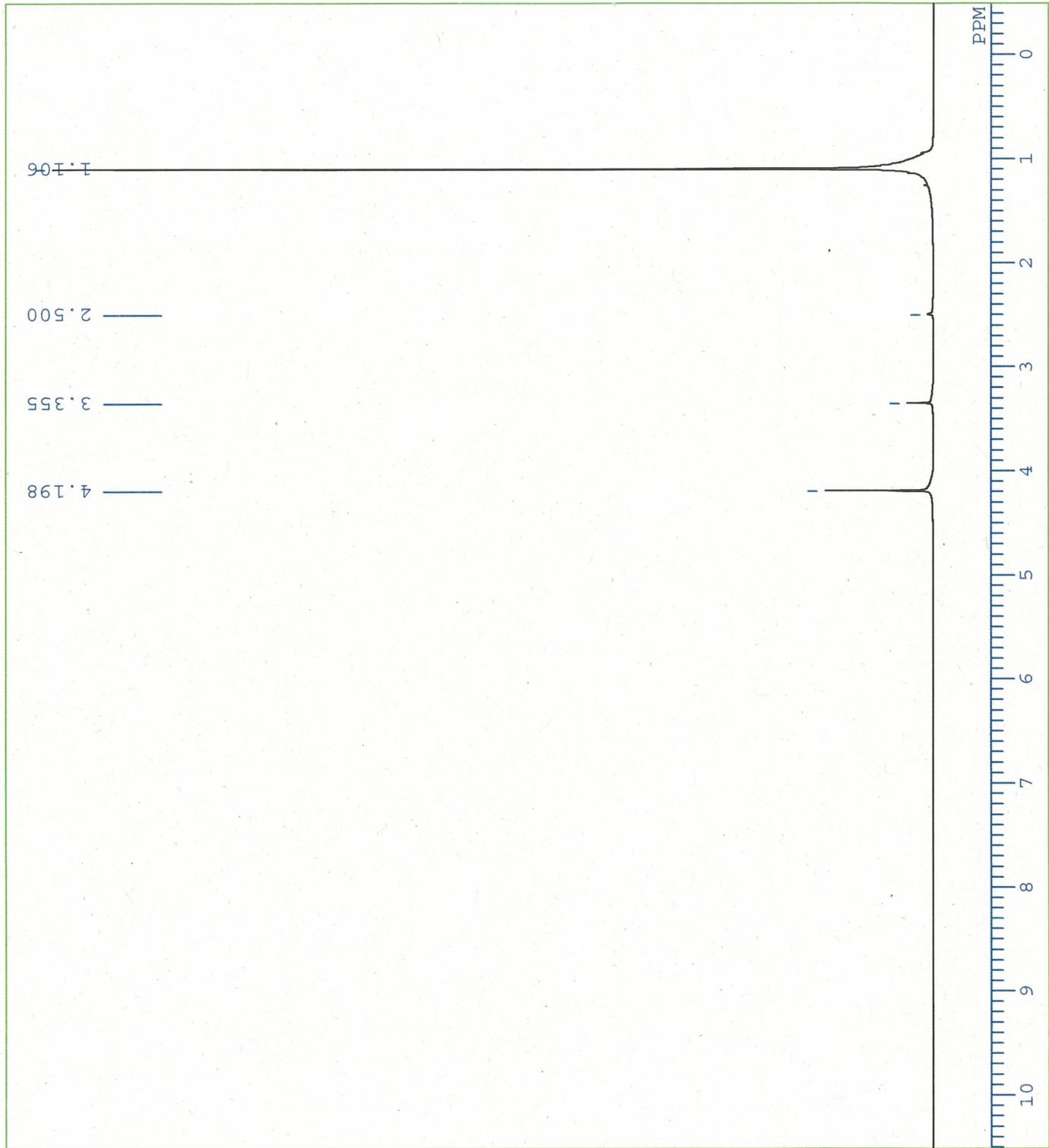
SCANS 8
ACQTM 2.1837 sec
PD 5.0000 sec
PWL 6.55 usec

IRATN 0
CTEMP 20.9 c

SLVNT DMSO
EXREF 2.50 ppm
BF 0.10 Hz
RGAIN 30



tert-Butanol
¹H-NMR (400 MHz, DMSO-*d*₆)



DATIM 2026-02-06 17:43:22
DFILE kamada tBuOH_Carbon-1-1

OBNUC 13C

EXMOD carbon.jxp

OBFRQ 100.53 MHz

OBSET 5.35 KHz

OBFIN 5.86 Hz

POINT 32767

FREQU 31407.04 Hz

SCANS 512

ACQTM 1.0433 sec

PD 2.0000 sec

PW1 3.23 usec

IRATN 0

CTEMP 21.7 c

SLVNT DMSO

EXREF 39.50 ppm

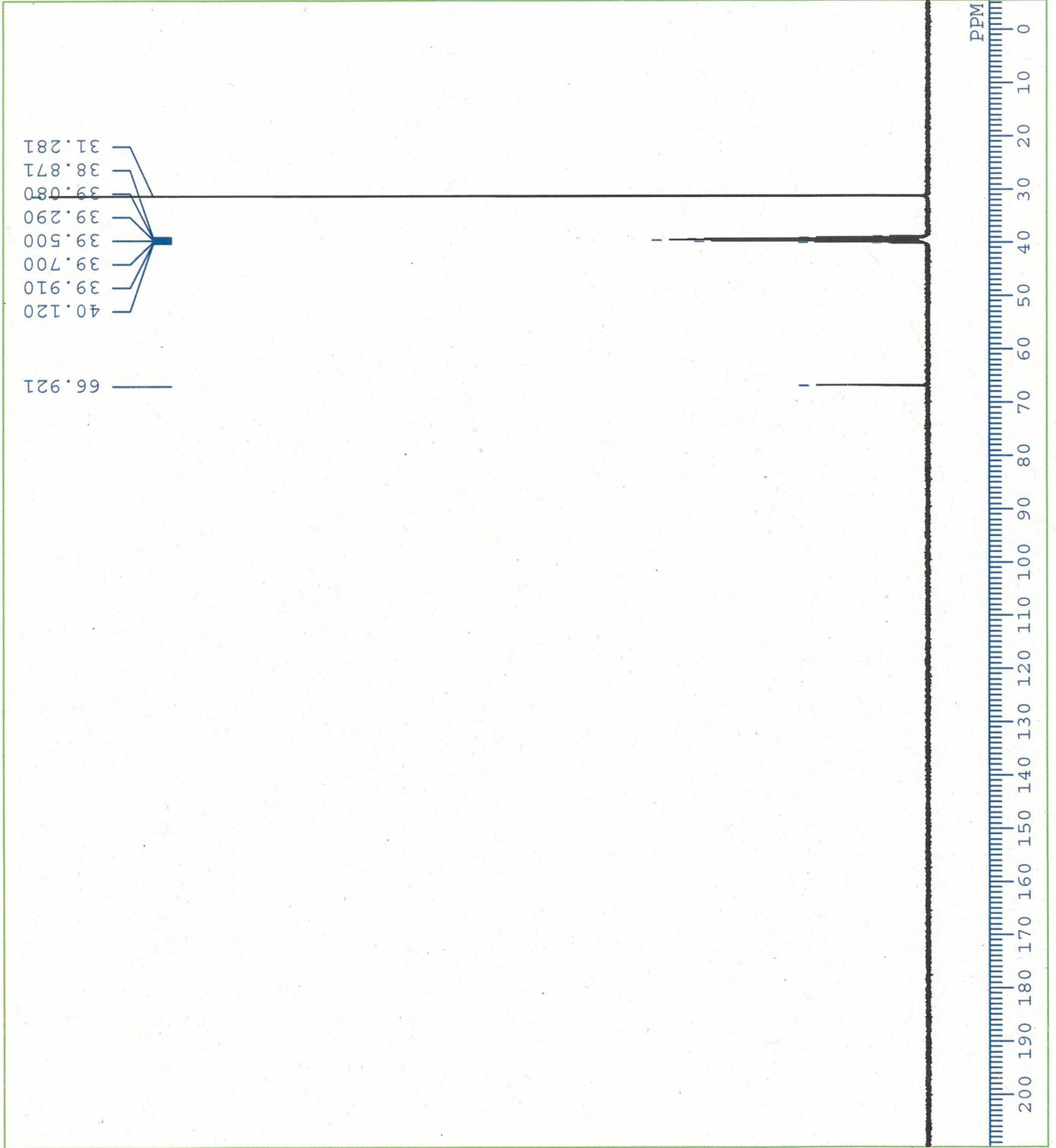
BF 0.10 Hz

RGAIN 60



tert-Butanol

¹³C-NMR (100 MHz, DMSO-d₆)



6 References

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