



Supporting Information

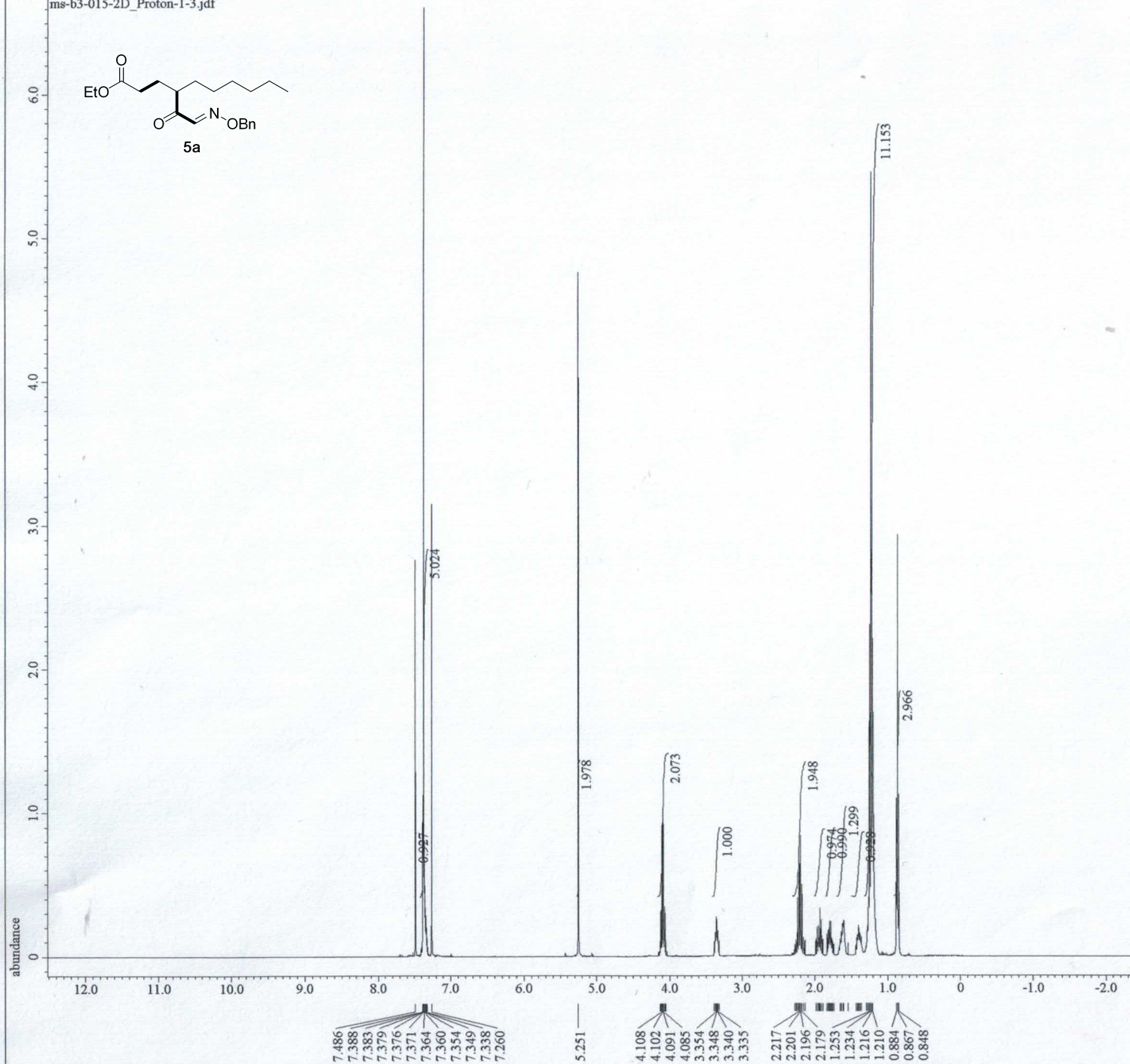
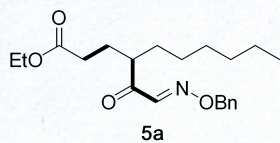
for

Vicinal difunctionalization of alkenes by four-component radical cascade reaction of xanthogenates, alkenes, CO, and sulfonyl oxime ethers

Shuhei Sumino, Takahide Fukuyama, Mika Sasano, Ilhyong Ryu, Antoine Jacquet, Frédéric Robert and Yannick Landais

Beilstein J. Org. Chem. **2019**, *15*, 1822–1828. doi:10.3762/bjoc.15.176

Copies of NMR spectra



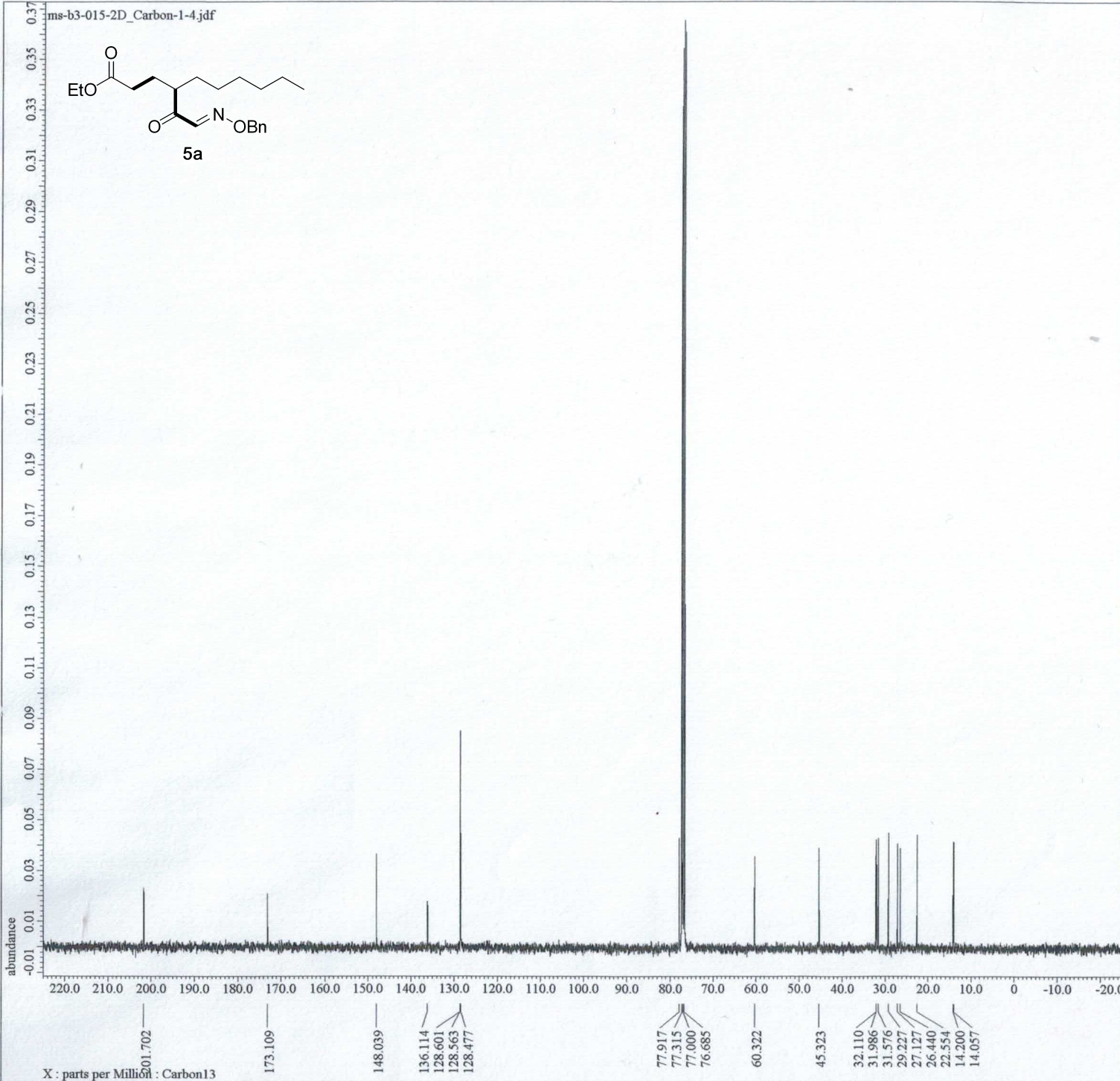
X : parts per Million : Proton

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 Author = delta
 Experiment = proton.jmp
 Sample_Id = ms-b3-015-2D
 Solvent = CHLOROFORM-D
 Creation_Time = 26-DEC-2013 00:17:06
 Revision_Time = 26-DEC-2013 14:13:22
 Current_Time = 26-DEC-2013 14:13:28

Comment = single_pulse
 Data_Format = 1D COMPLEX
 Data_Size = 13107
 Data_Title = Proton
 Data_Units = [ppm]
 Dimensions = X
 Site = JNM-ECS400
 Spectrometer = DELTA2_NMR

Field_Strength = 9.42499681 [T] (400 [MHz])
 X_Acq_Duration = 2.1757952 [s]
 X_Domain = 1H
 X_Freq = 401.28219856 [MHz]
 X_Offset = 5 [ppm]
 X_Points = 16384
 X_Prescans = 1
 X_Resolution = 0.45960208 [Hz]
 X_Sweep = 7.53012048 [kHz]
 X_Sweep_Clipped = 6.02409639 [kHz]
 Iir_Domain = Proton
 Iir_Freq = 401.28219856 [MHz]
 Iir_Offset = 5 [ppm]
 Tri_Domain = Proton
 Tri_Freq = 401.28219856 [MHz]
 Tri_Offset = 5 [ppm]
 Clipped = FALSE
 Scans = 32
 Total_Scans = 32

Relaxation_Delay = 5 [s]
 Recvr_Gain = 40
 Temp_Get = 20.4 [dC]
 X_90_Width = 9.25 [us]
 X_Acq_Time = 2.1757952 [s]
 X_Angle = 45 [deg]
 X_Atn = 0.8 [dB]
 X_Pulse = 4.625 [us]
 Iir_Mode = Off
 Tri_Mode = Off
 Dante_Presat = FALSE
 Initial_Wait = 1 [s]
 Repetition_Time = 7.1757952 [s]

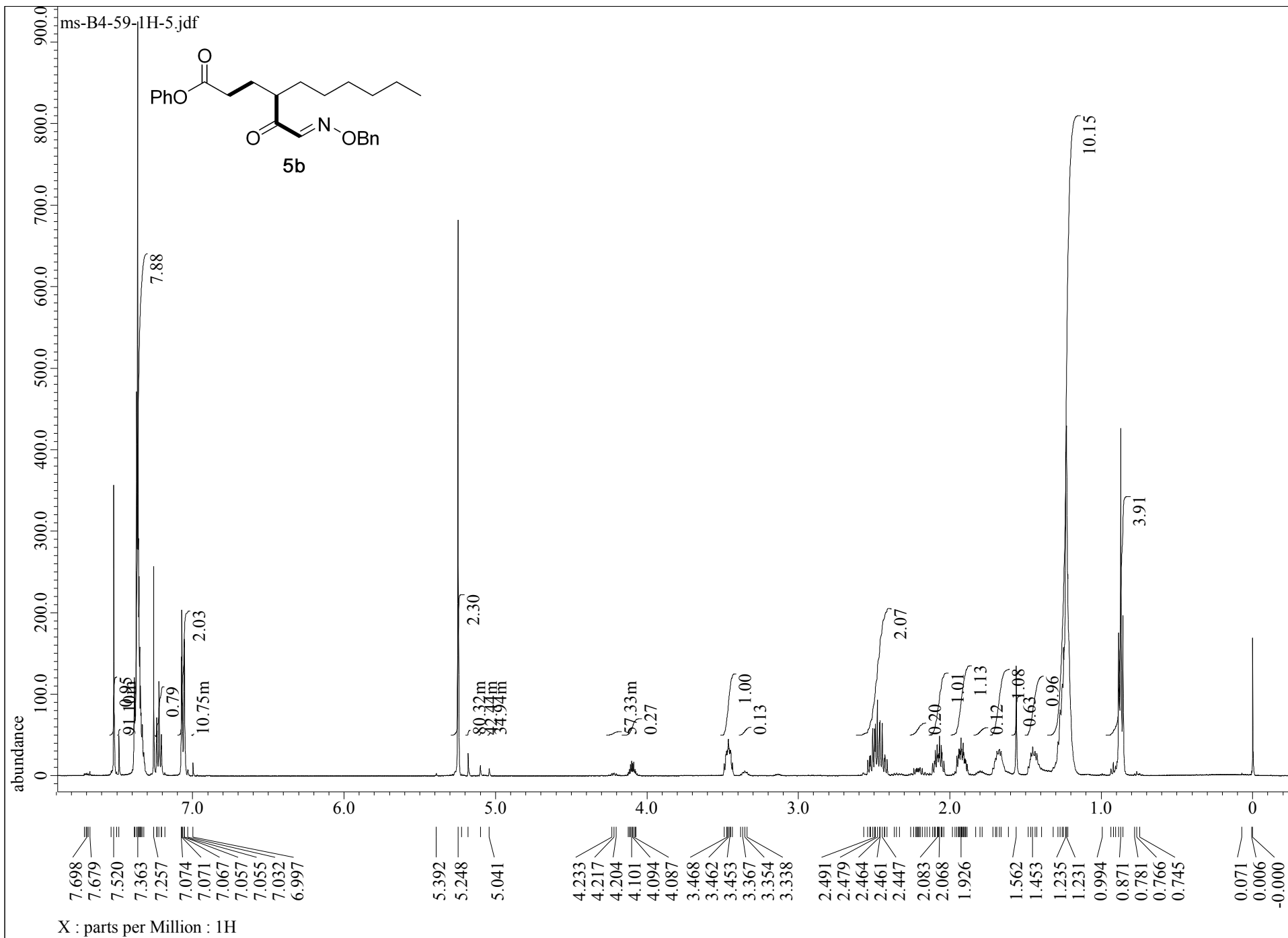


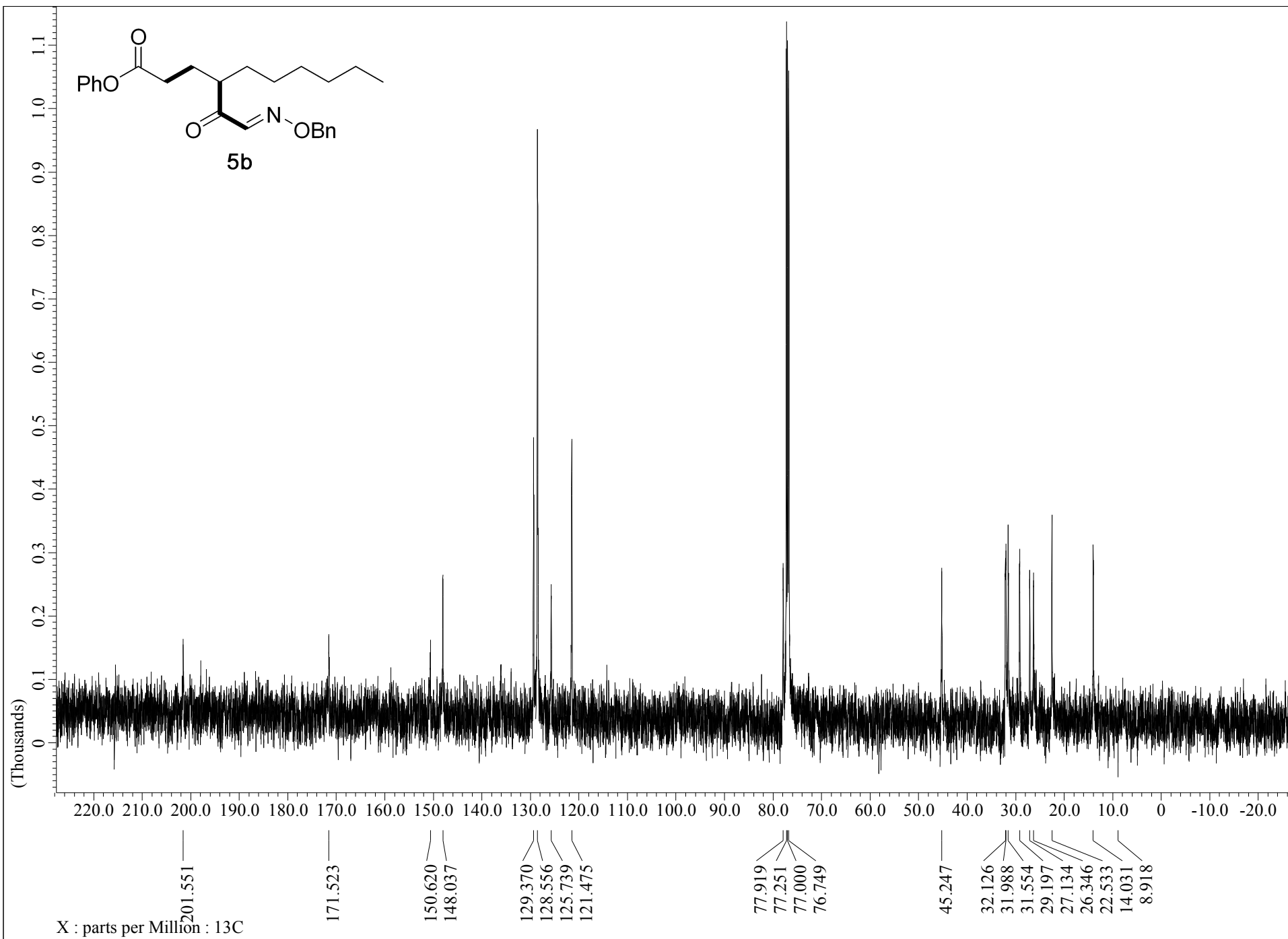
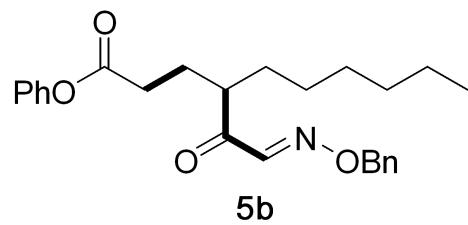
Filename = ms-b3-015-2D_Carbon-1-4.jdf
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Experiment = carbon.jxp
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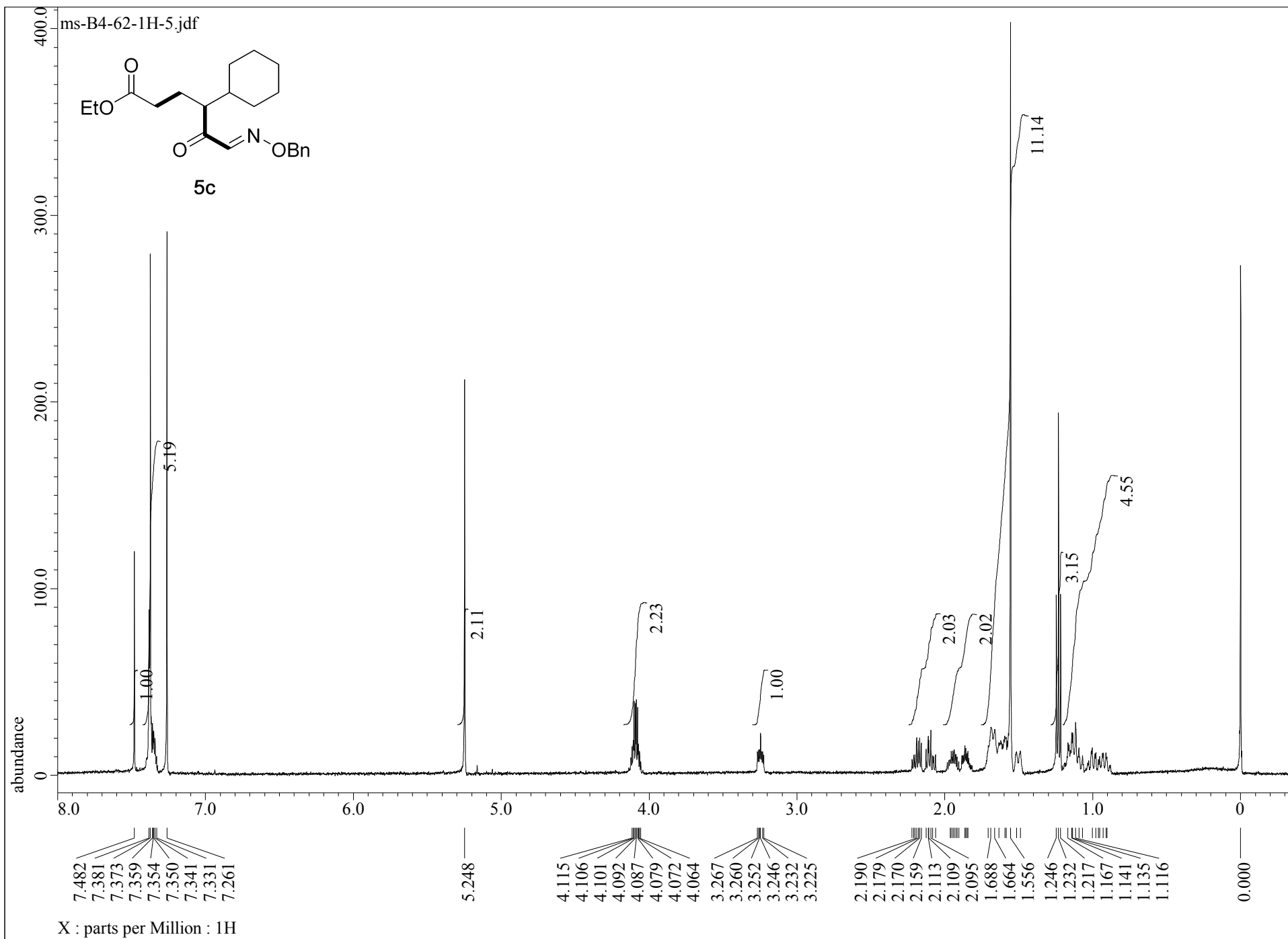
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Spectrometer = DELTA2_HMR

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X_Domain = 13C
X_Freq = 100.90247863 [MHz]
X_Offset = 100 [ppm]
X_Points = 32768
X_Prescans = 4
X_Resolution = 0.96330739 [Hz]
X_Sweep = 31.56565657 [kHz]
X_Sweep_Clippped = 25.25252525 [kHz]
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Irr_Freq = 401.28219856 [MHz]
Irr_Offset = 5 [ppm]
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Total_Scans = 512

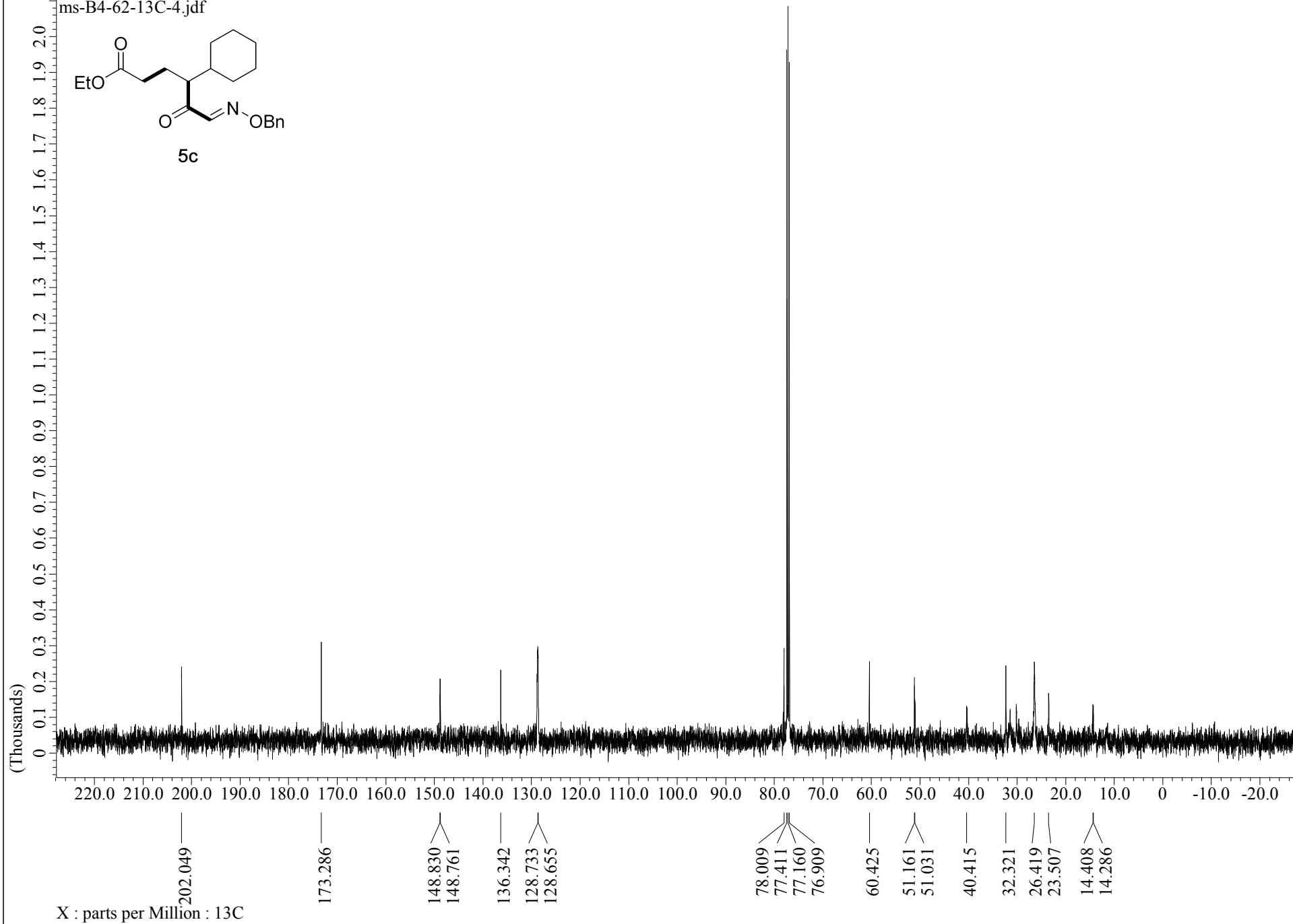
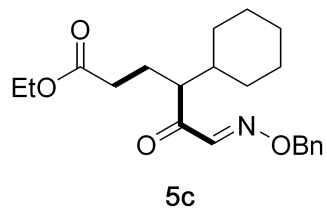
Relaxation_Delay = 2 [s]
Recvr_Gain = 50
Temp_Get = 20.8 [dC]
X_90_Width = 8.75 [us]
X_Acq_Time = 1.03809024 [s]
X_Angle = 30 [deg]
X_Atn = 5.2 [dB]
X_Pulse = 2.91666667 [us]
Irr_Atn_Dec = 22.691 [dB]
Irr_Atn_Noe = 22.691 [dB]
Irr_Noise = WALTZ
Irr_Fwidth = 0.115 [ms]
Decoupling = TRUE
Initial_Wait = 1 [s]
Noe = TRUE
Noe_Time = 2 [s]
Repetition_Time = 3.03809024 [s]

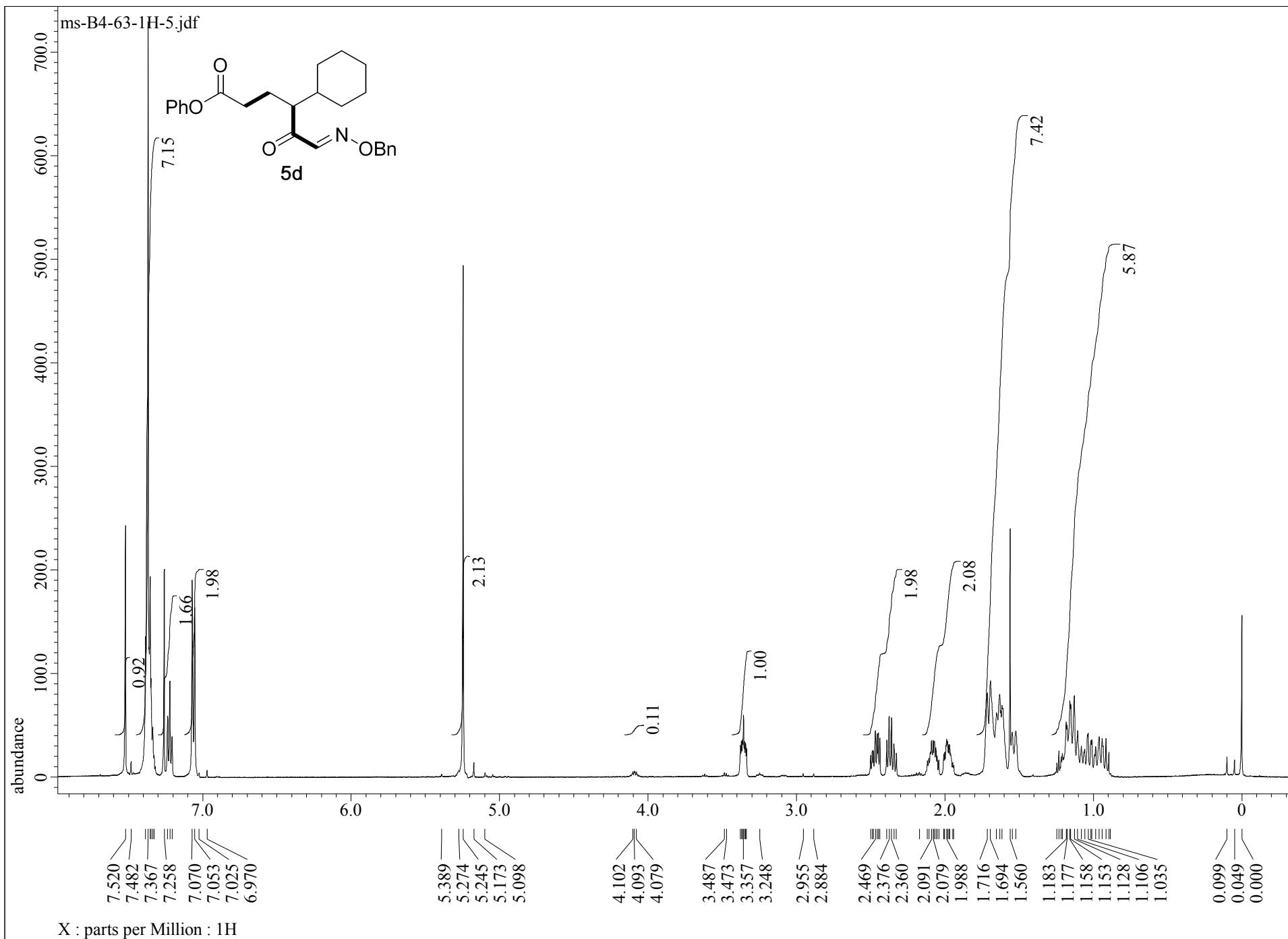




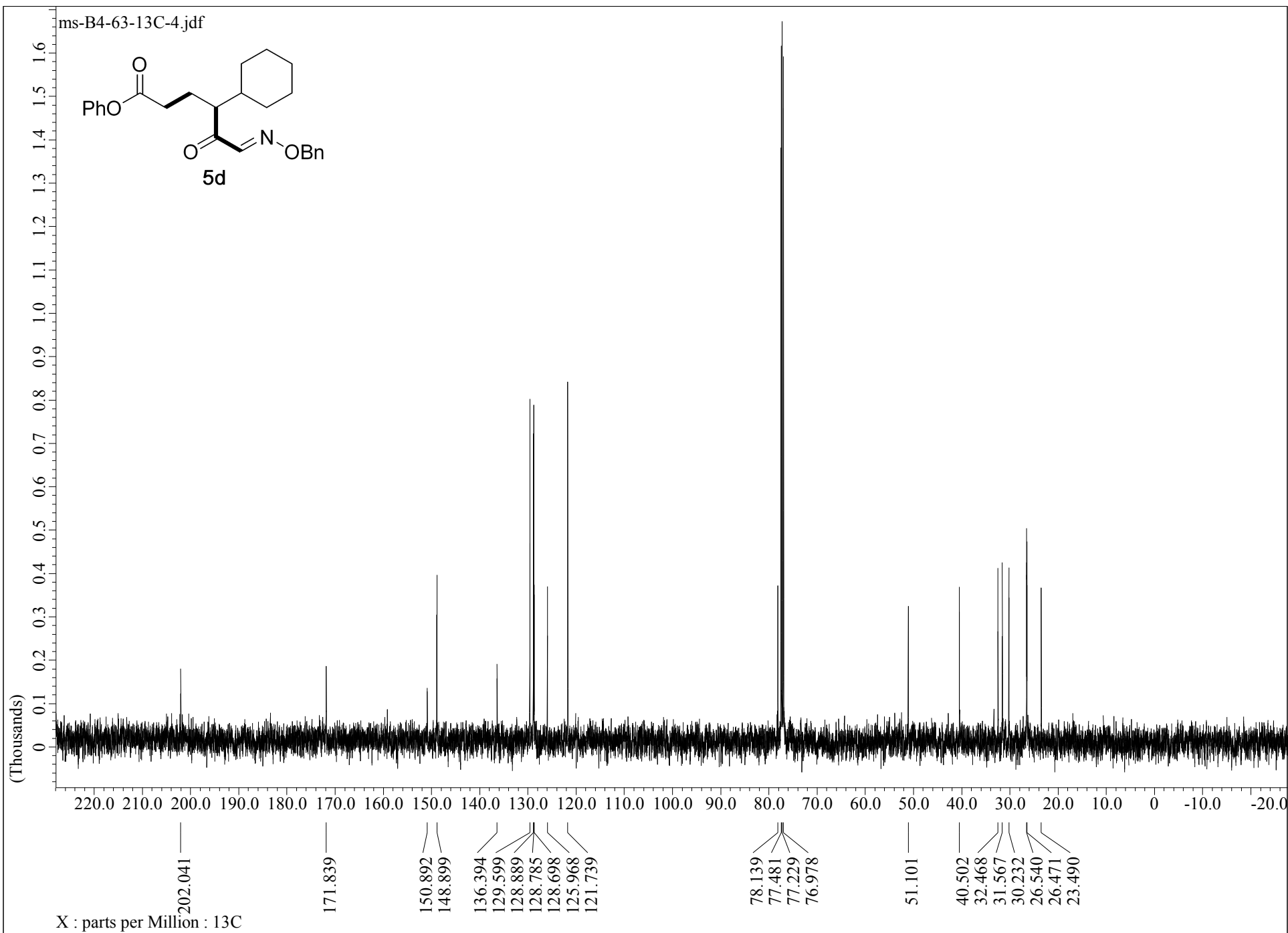
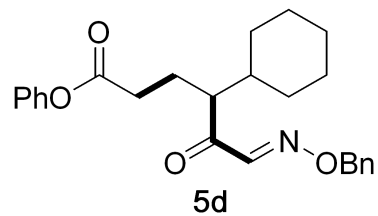


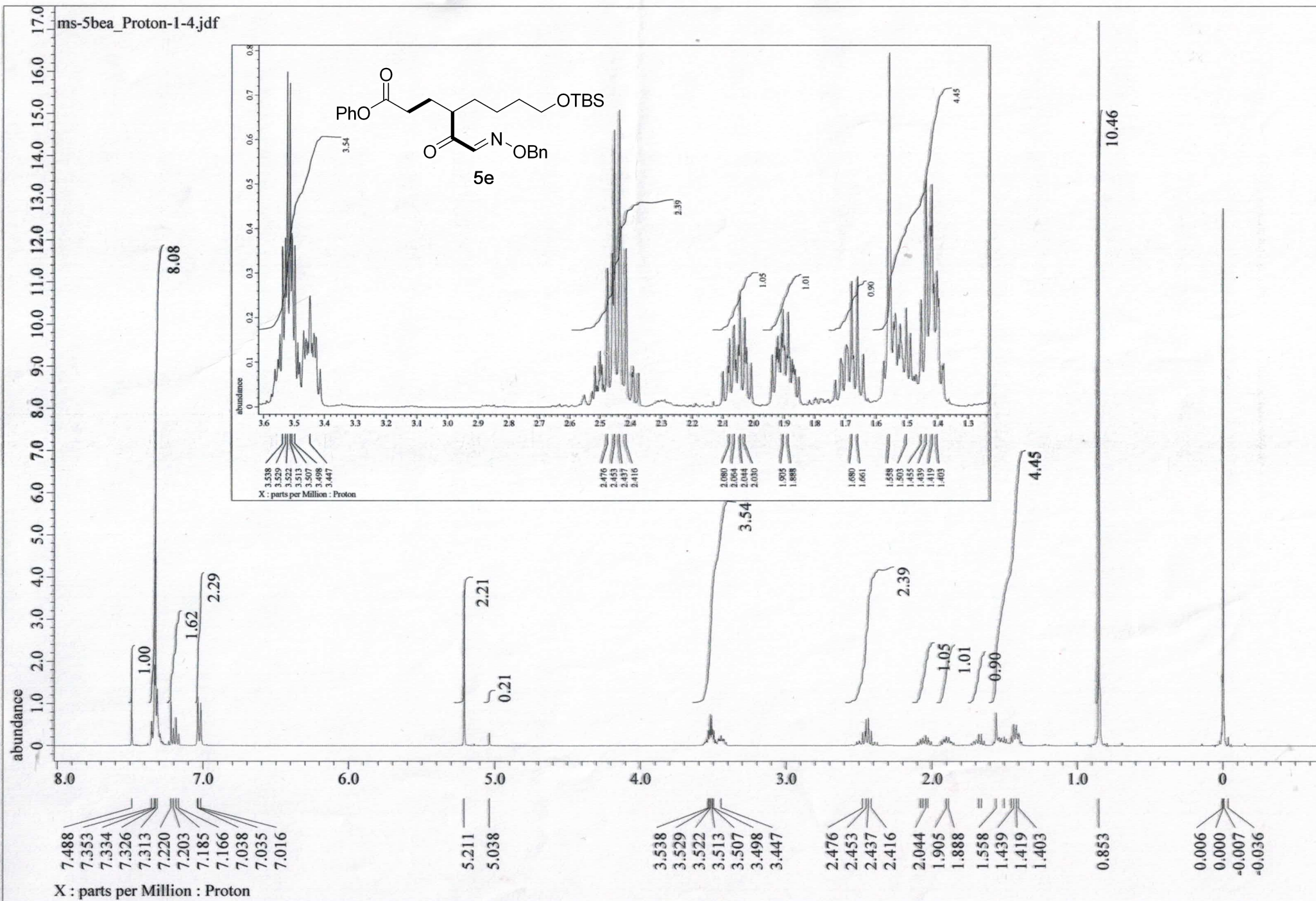
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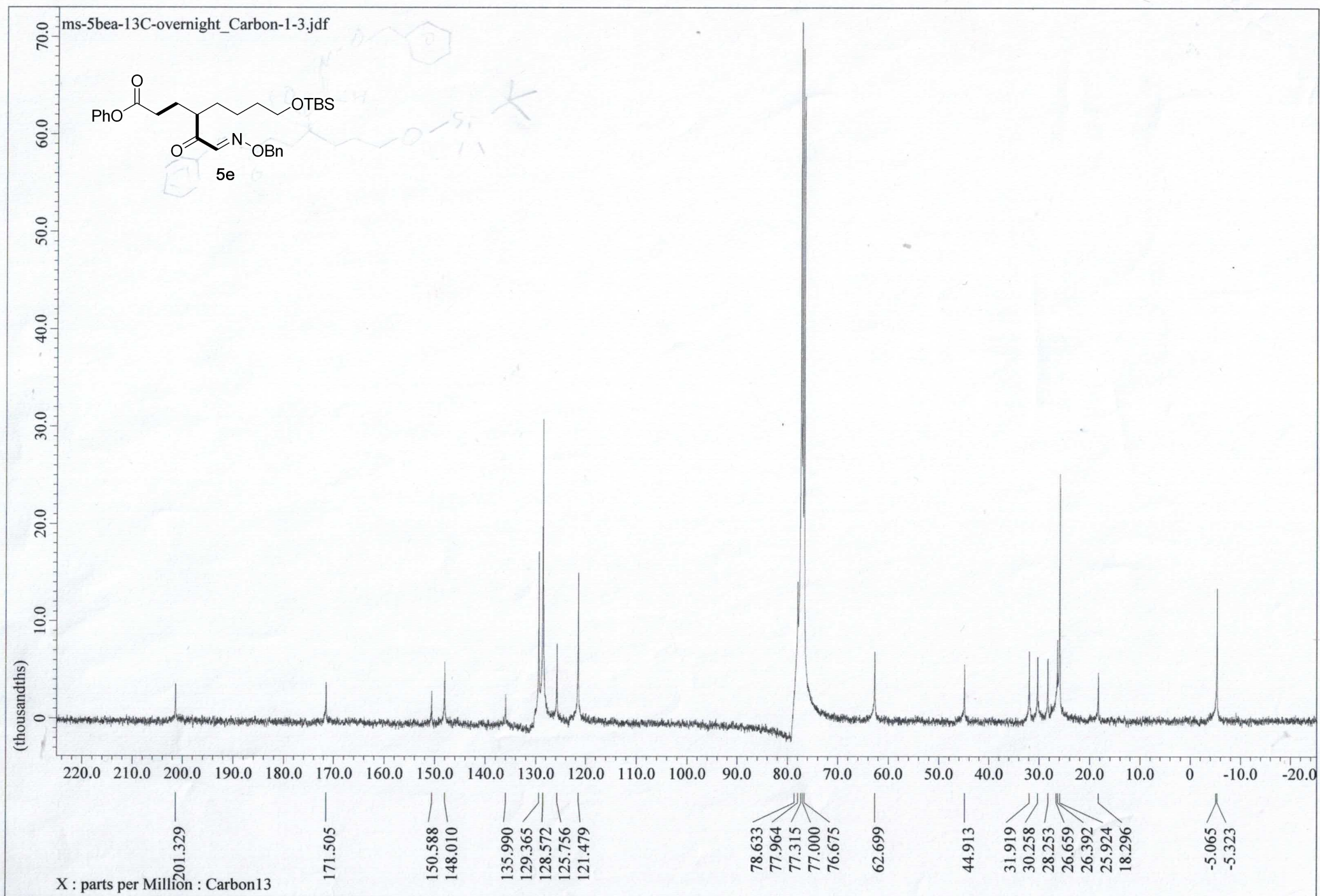




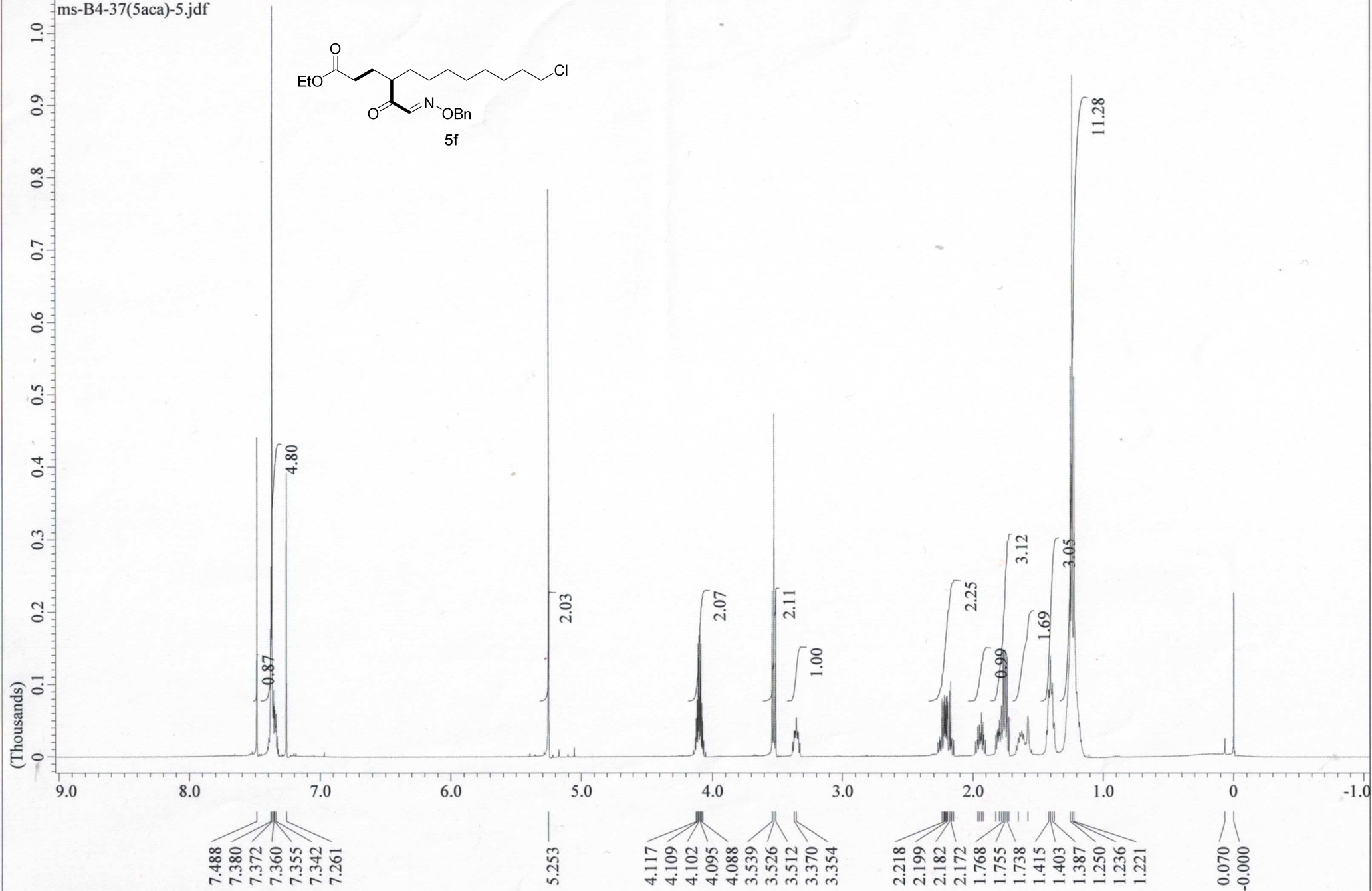
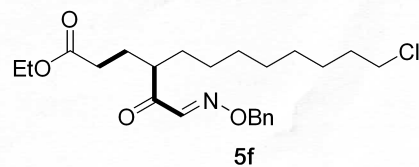
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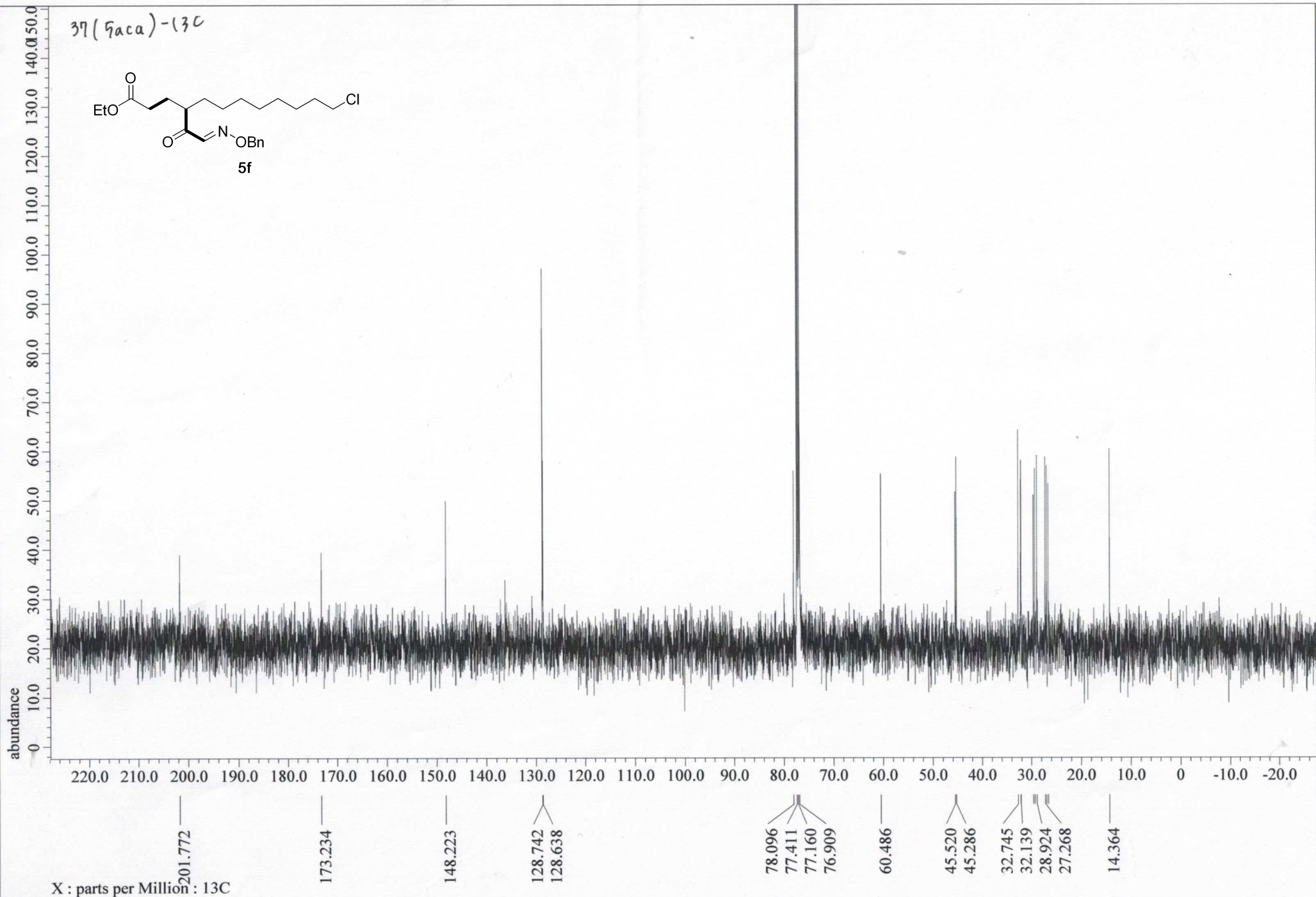
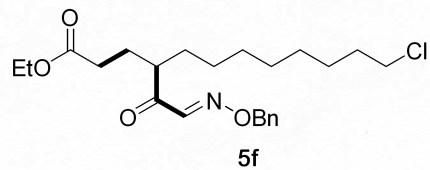


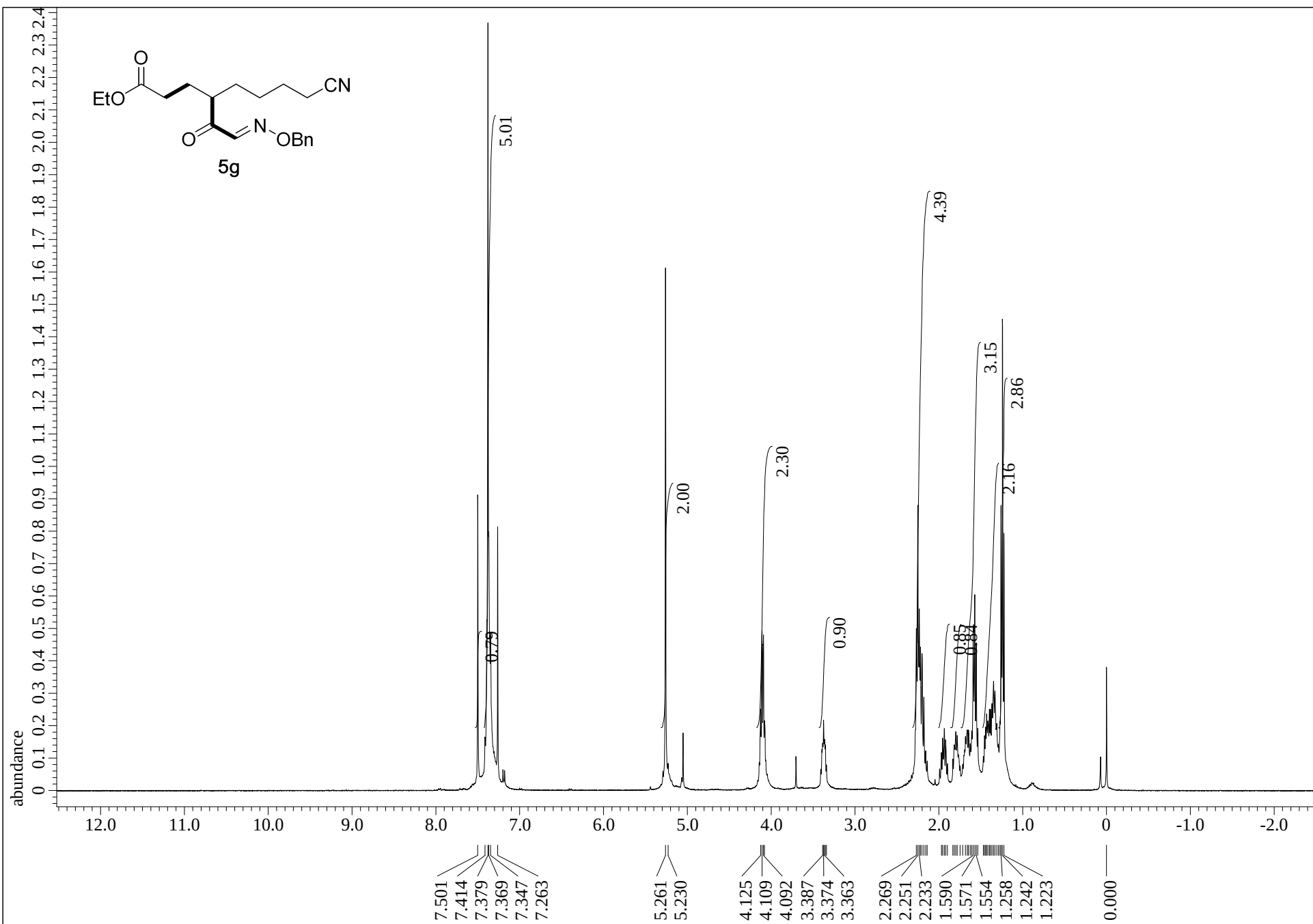
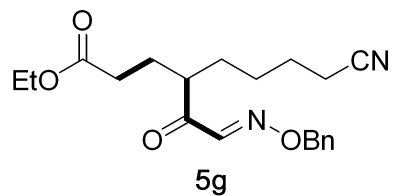
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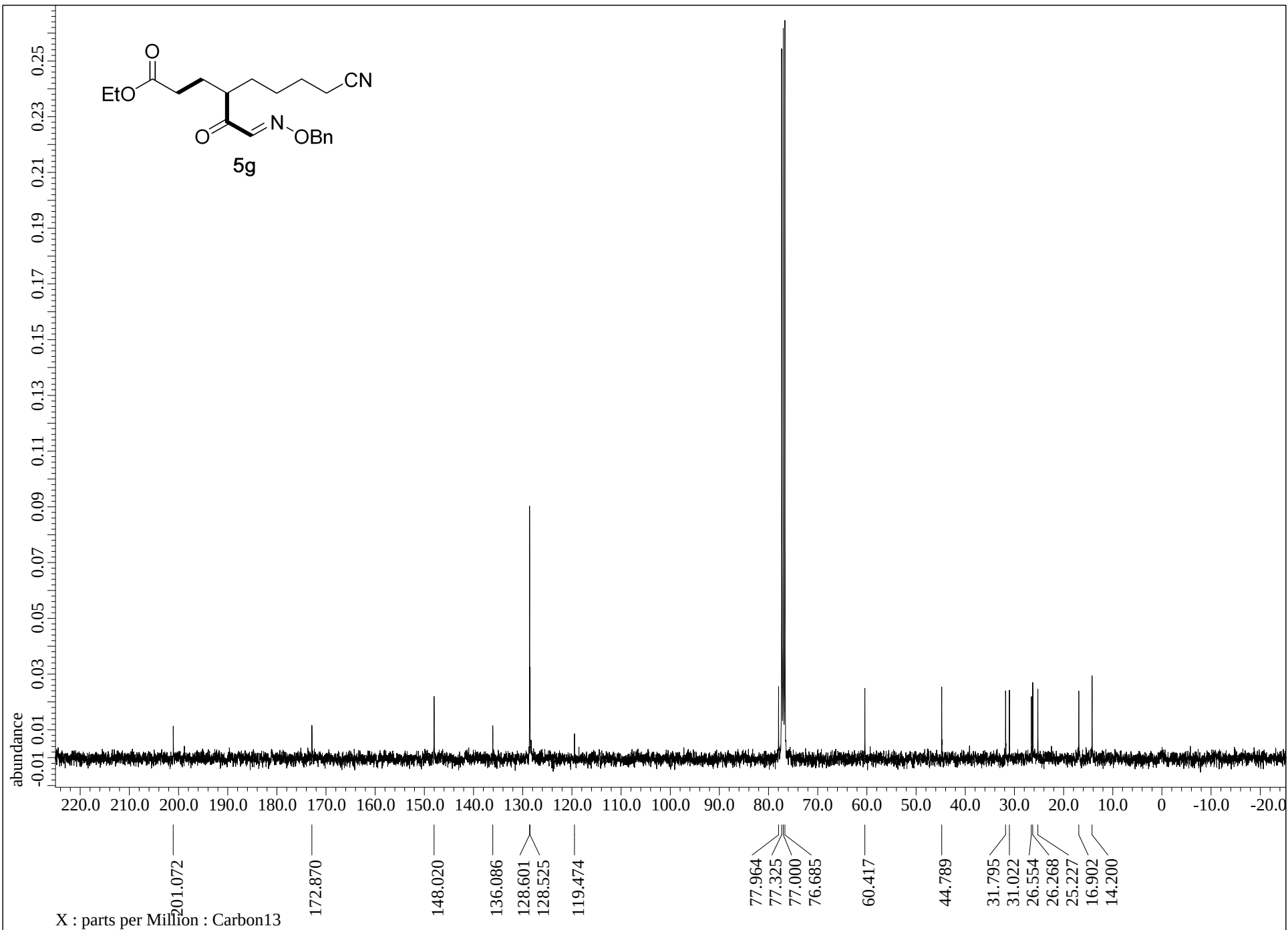
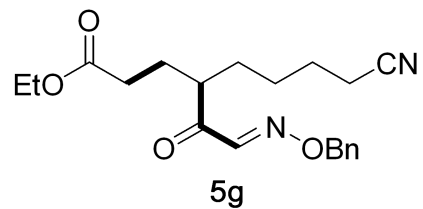
X : parts per Million : 1H

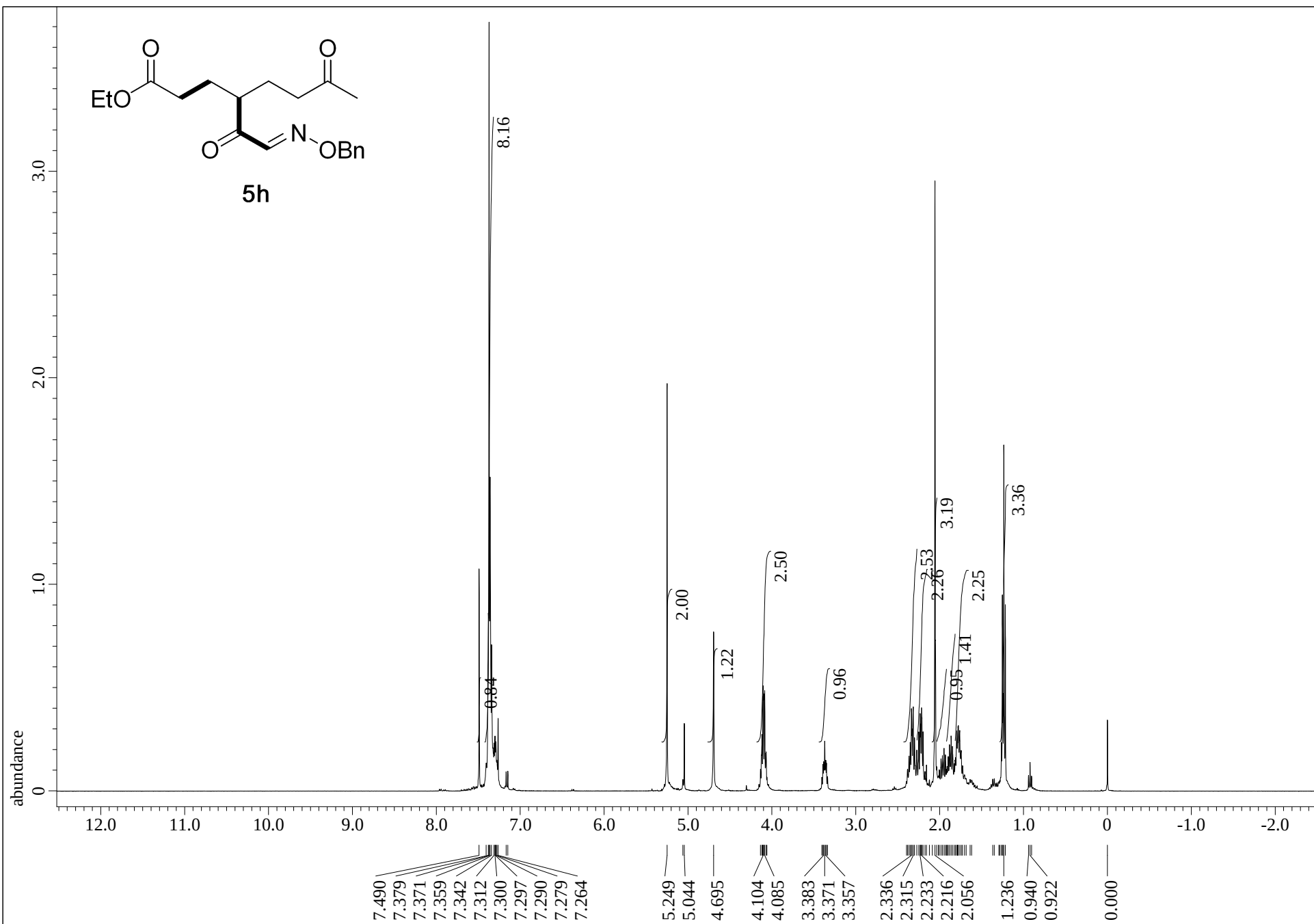
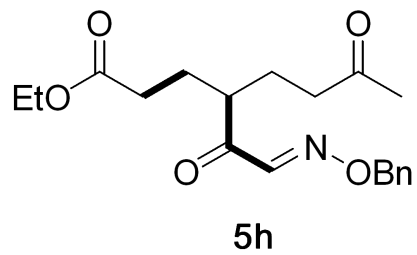
37 (9aca) - (3C)



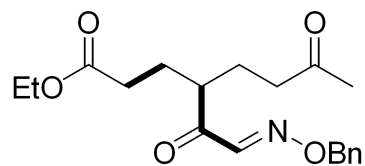


X : parts per Million : Proton

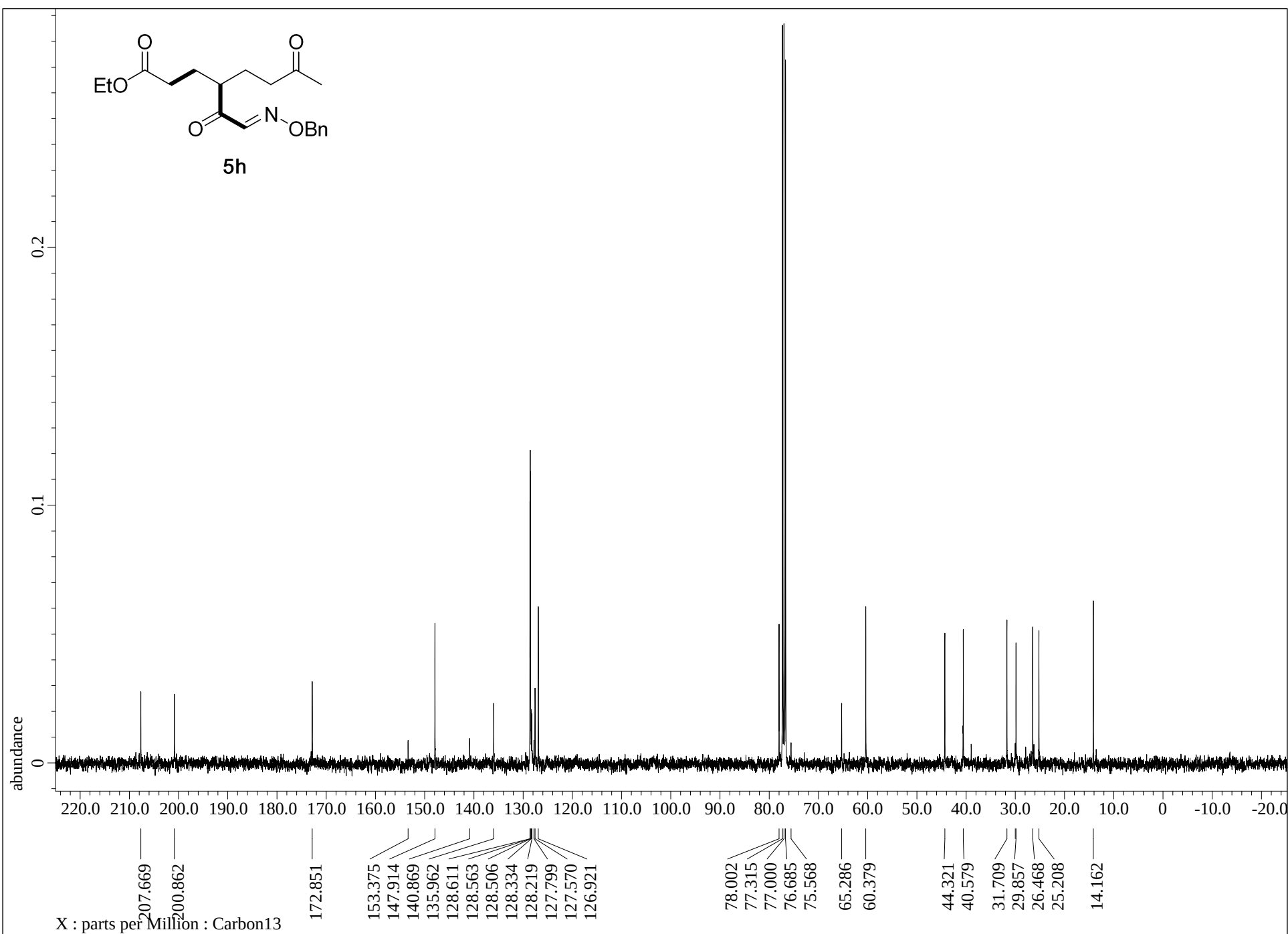




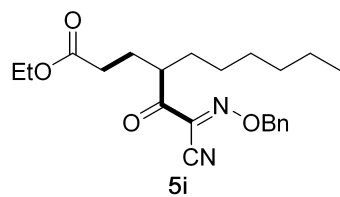
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5h

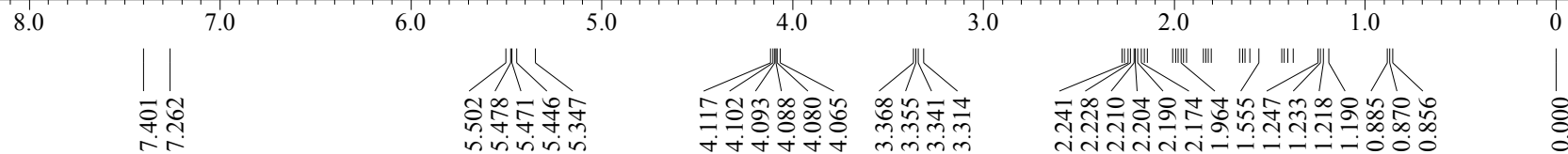


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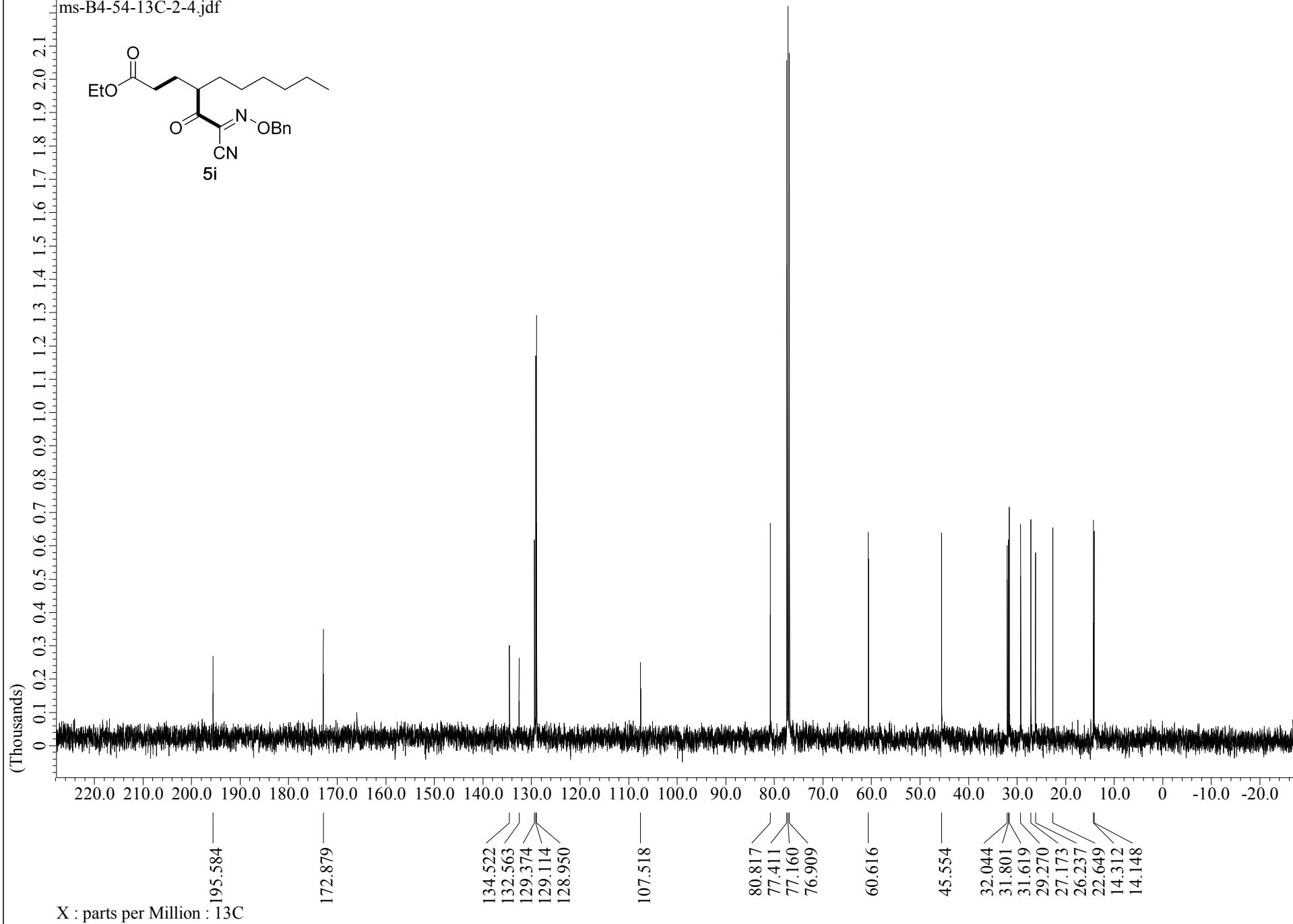
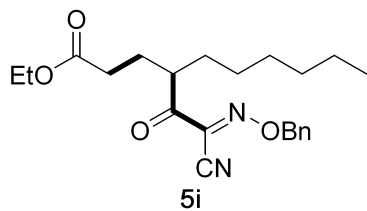
abundance

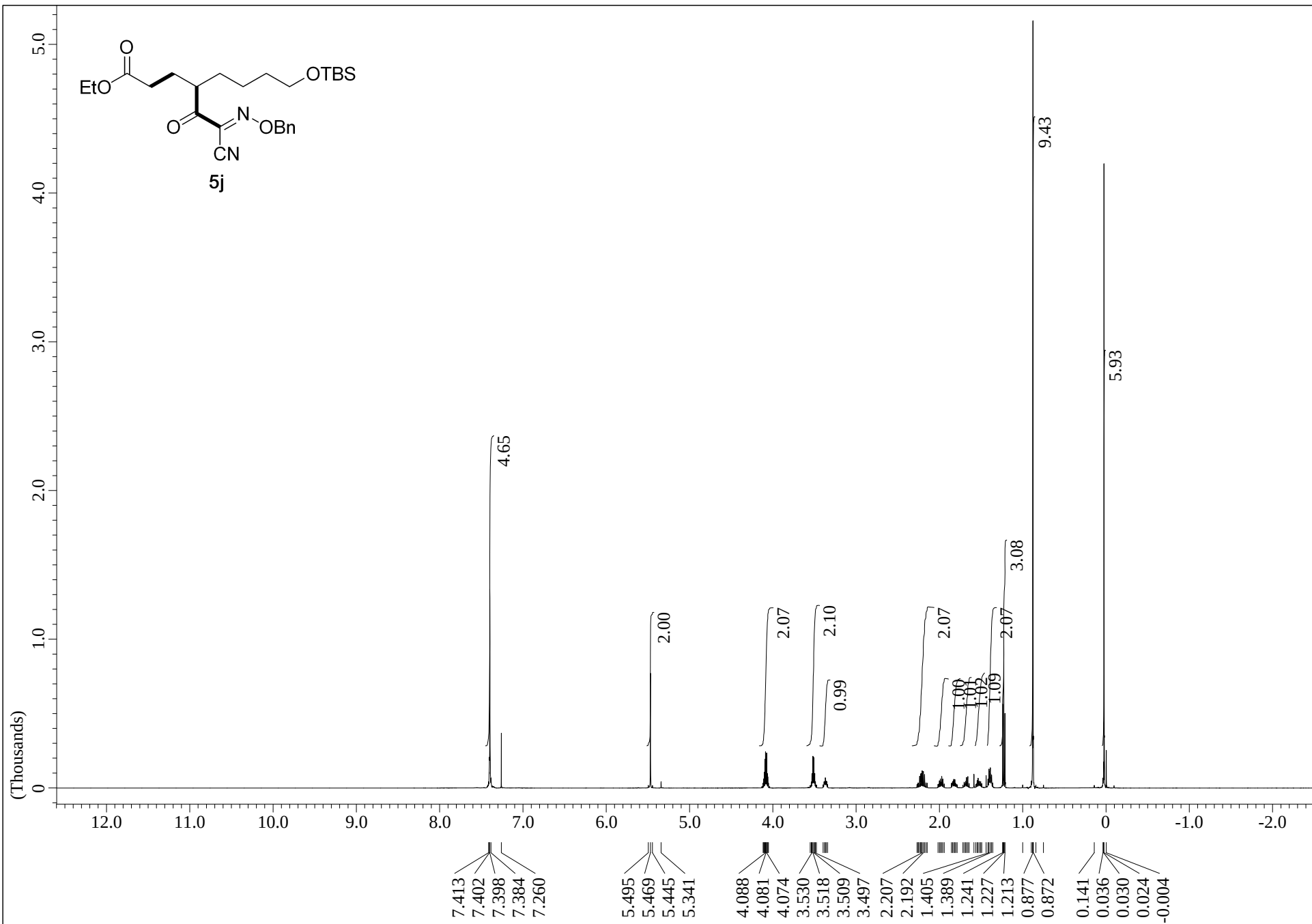
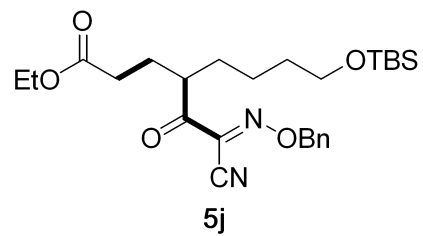
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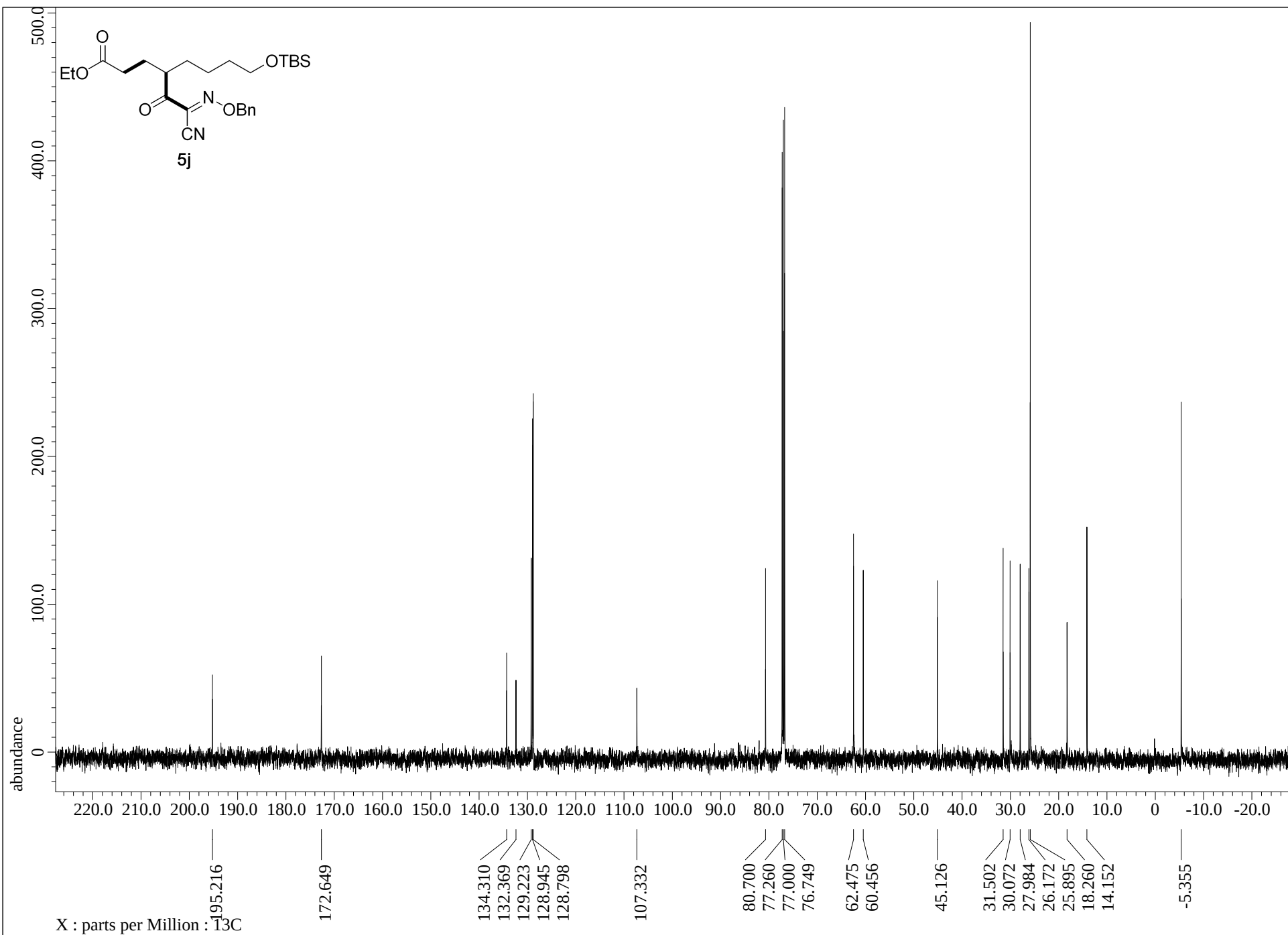
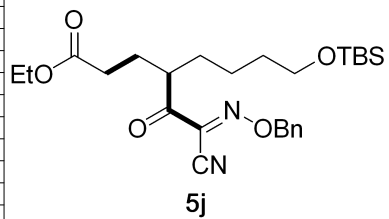
X : parts per Million : 1H

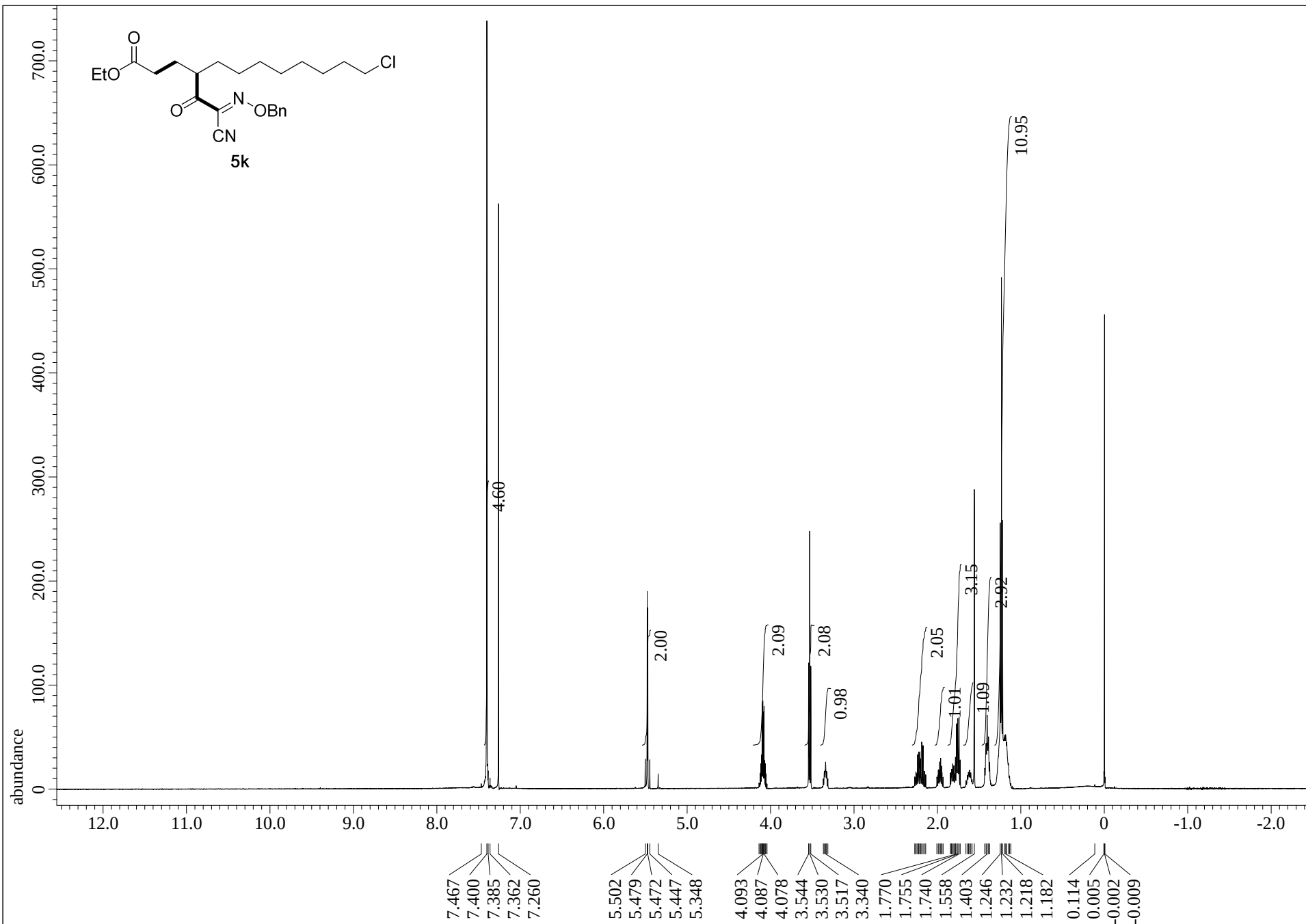
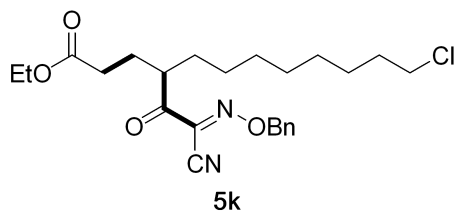
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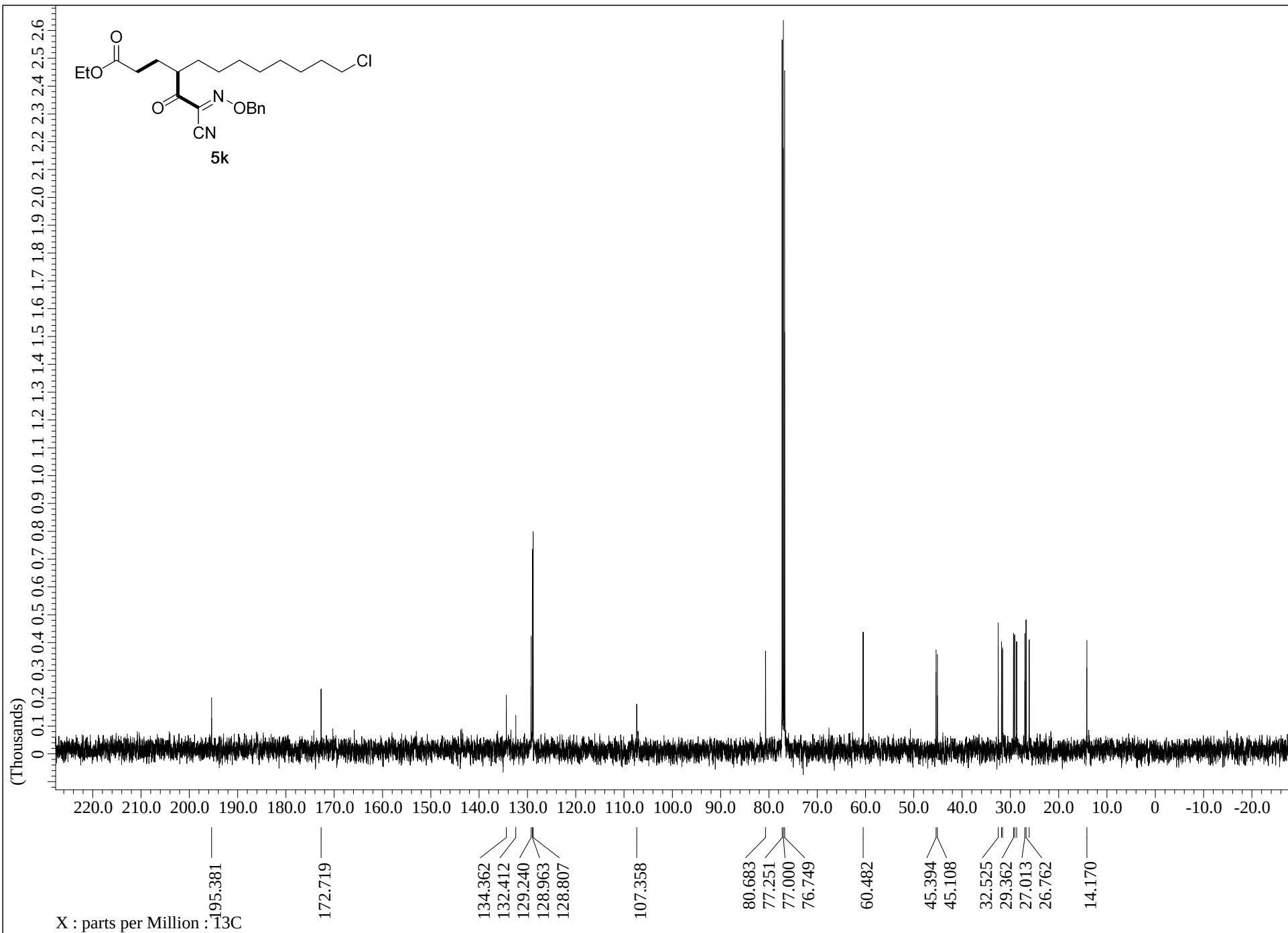
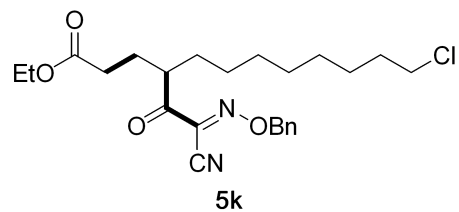


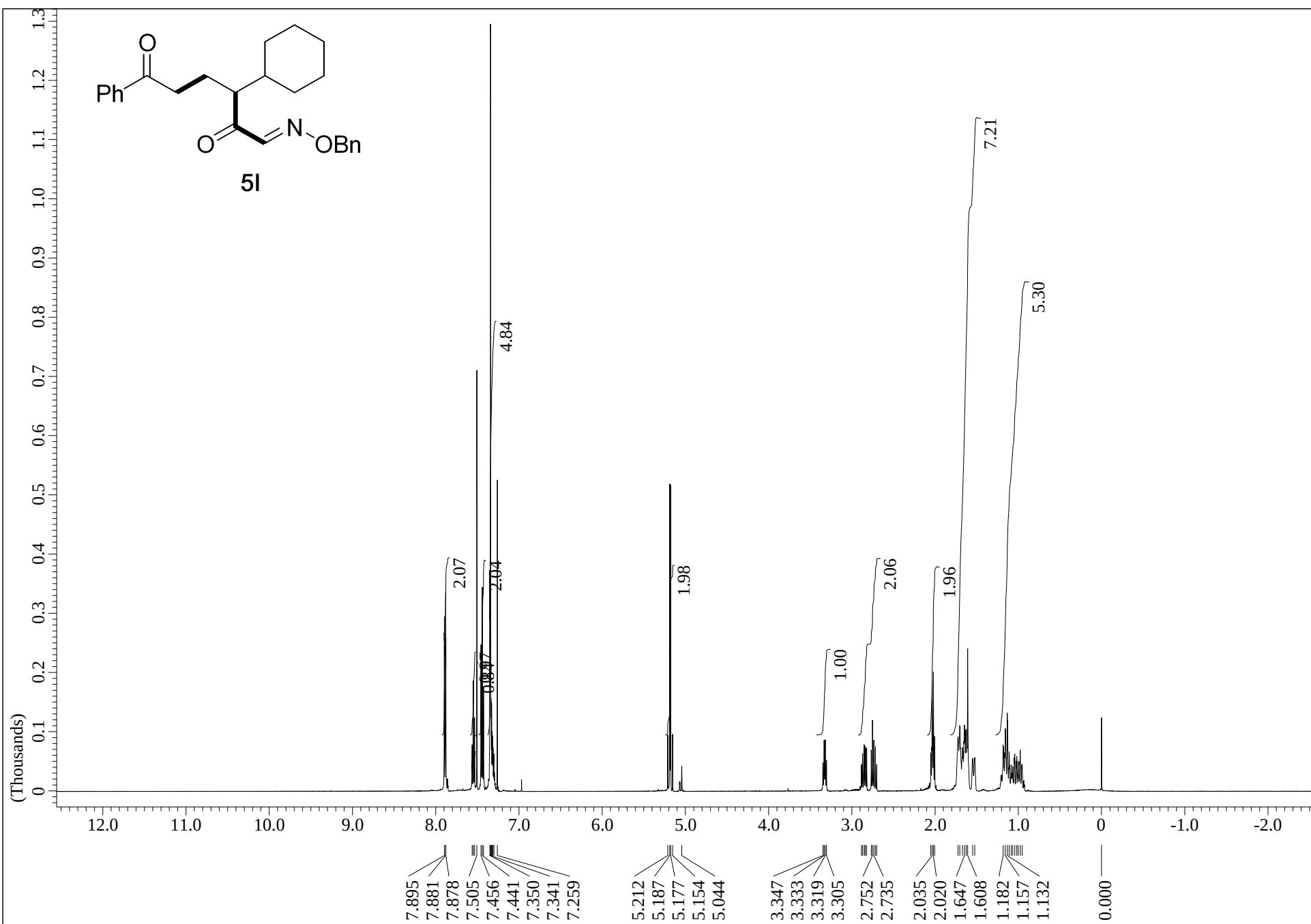
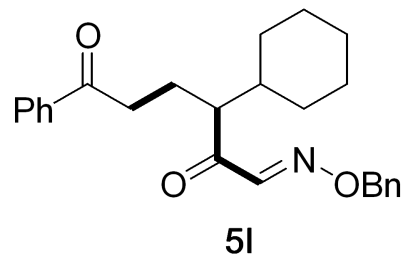
X : parts per Million : 1H





X : parts per Million : ^1H





X : parts per Million : ^1H

