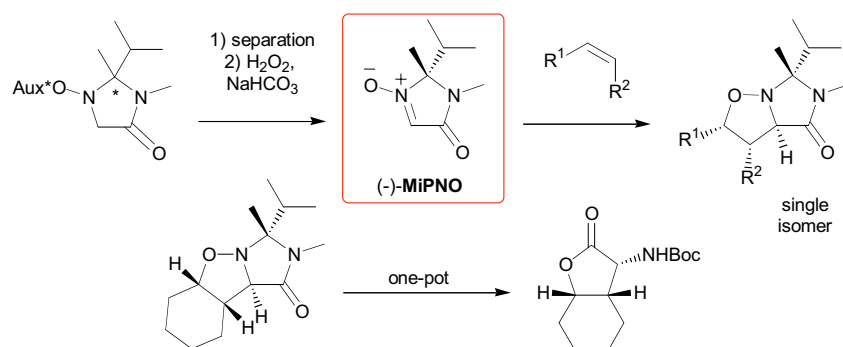


MiPNO, a new chiral cyclic nitron for enantioselective amino acid synthesis: the cycloaddition approach.

Maryse Thiverny, Christian Philouze, Pierre Yves Chavant and Véronique Blandin*

Département de Chimie Moléculaire, UMR-5250, ICMG FR-2607, CNRS, Université Joseph Fourier,
BP-53, 38041 Grenoble Cedex 9, France.

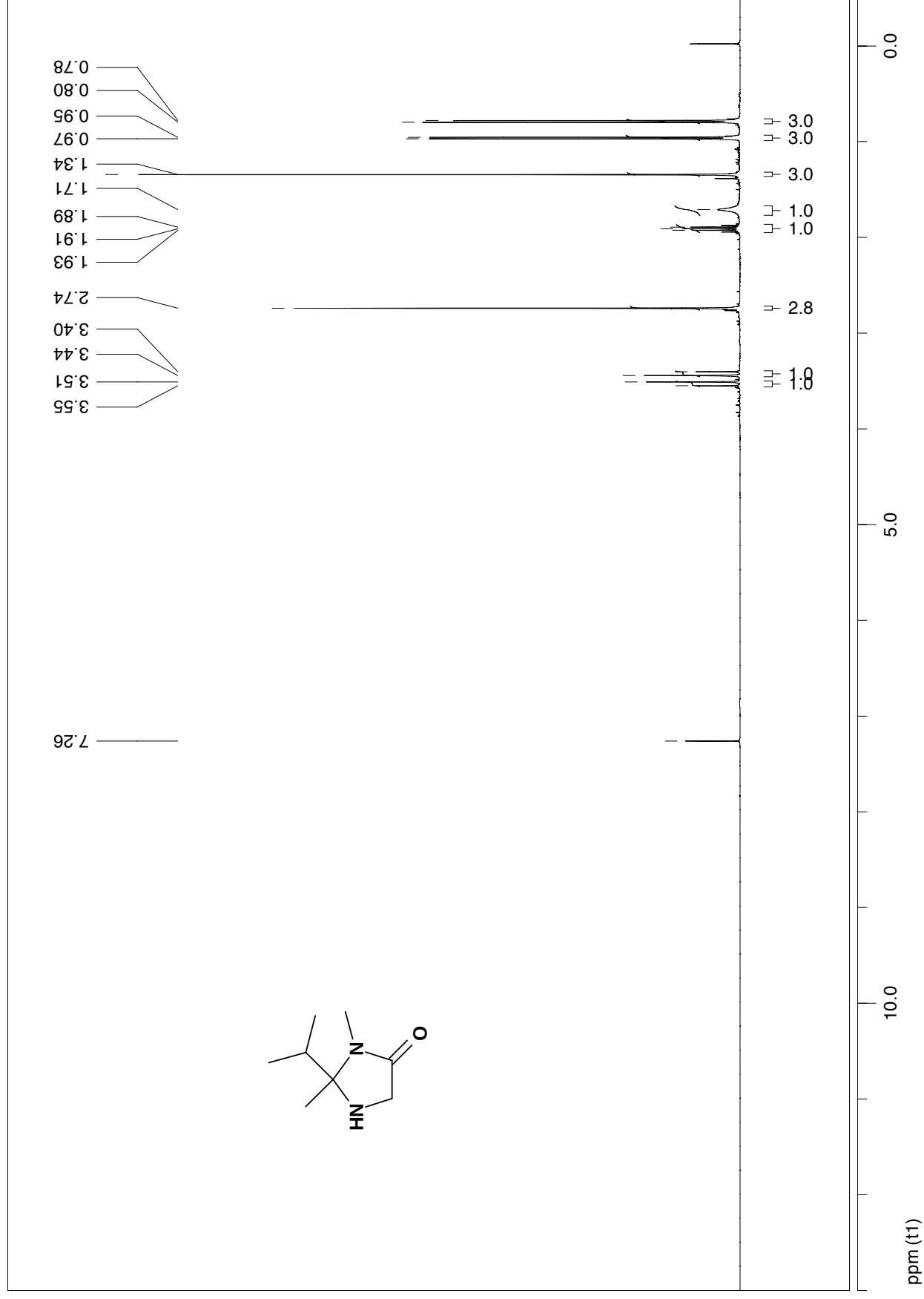
Veronique.Blandin@ujf-grenoble.fr

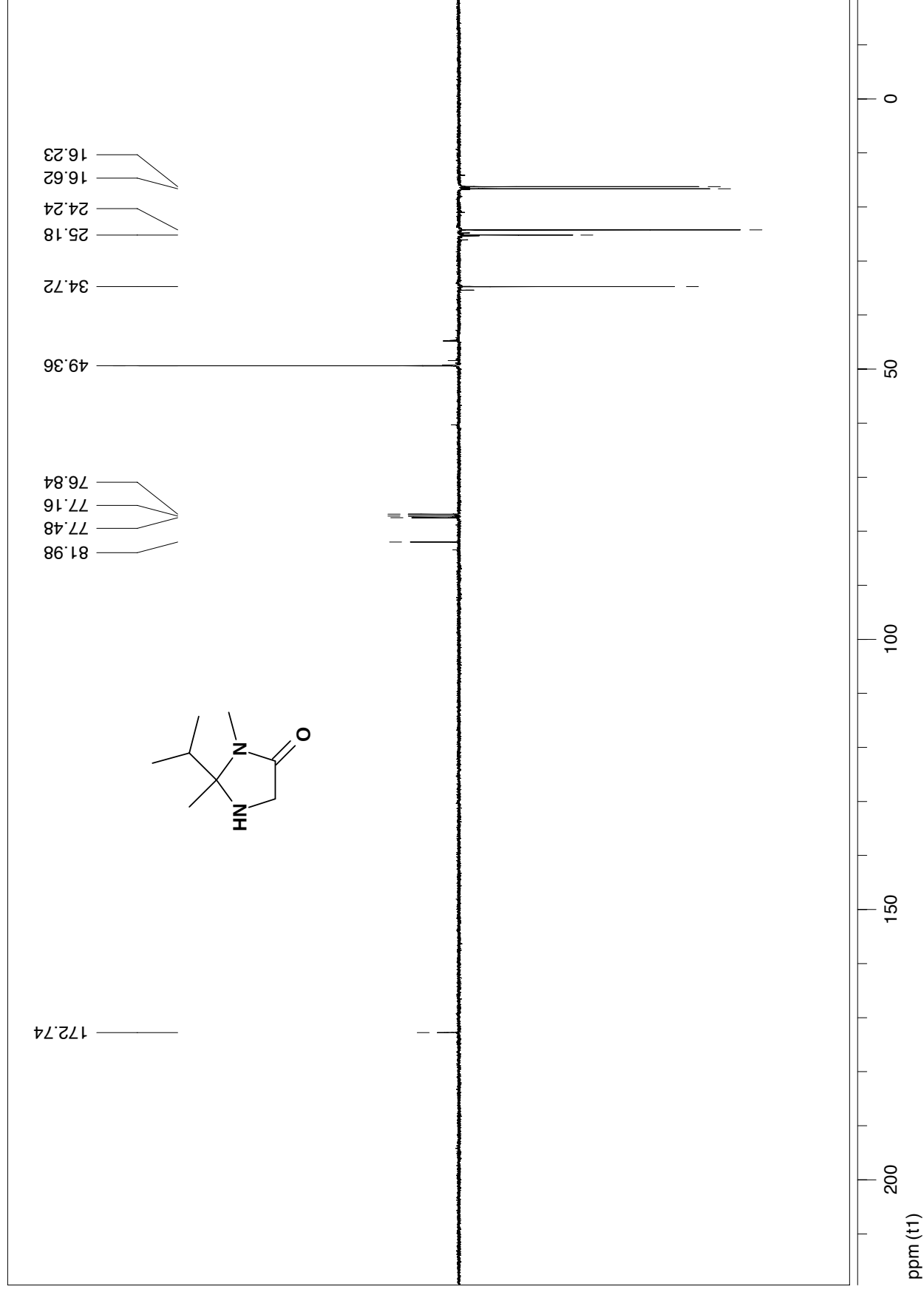


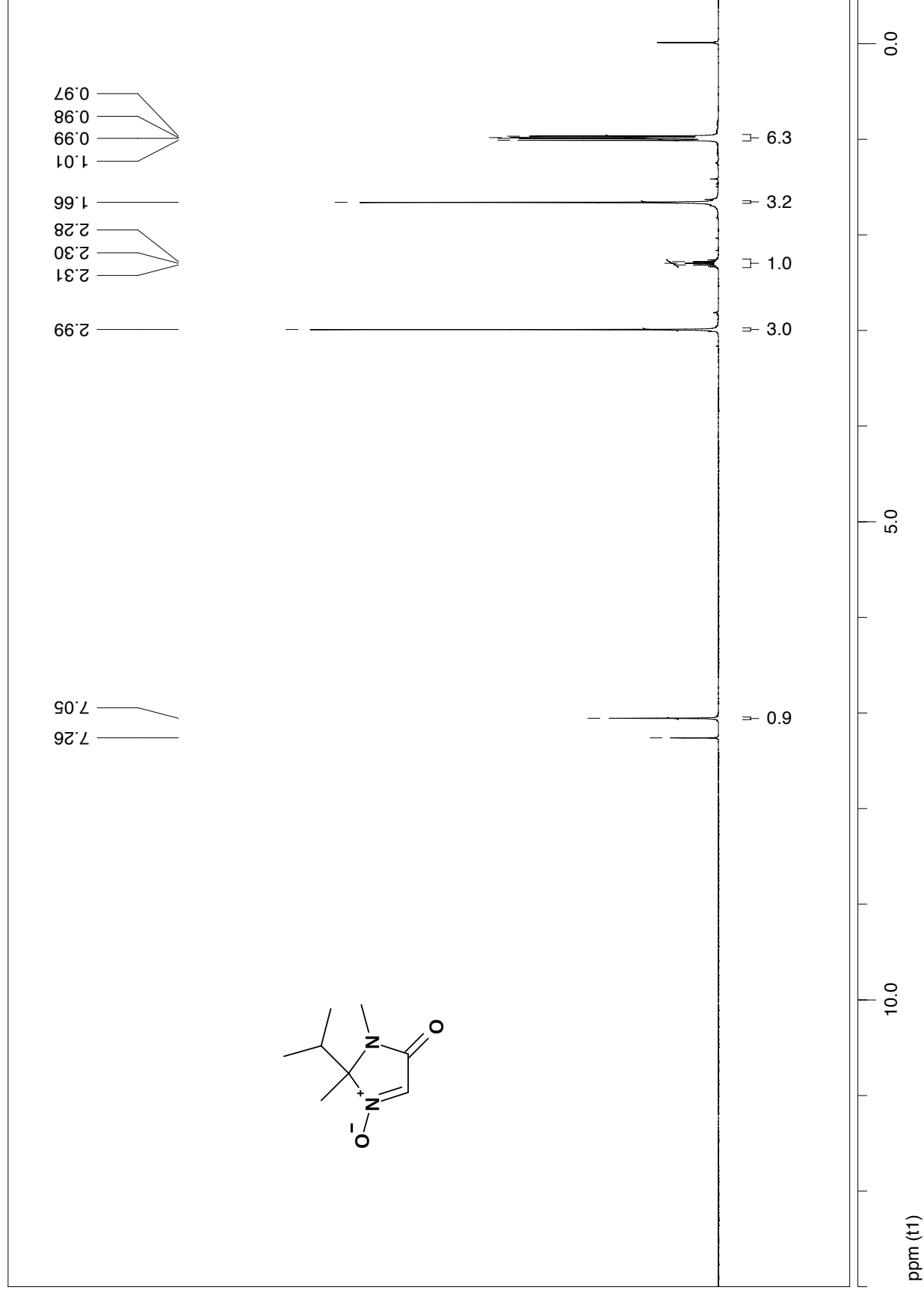
Abstract : The resolution of chiral nitrones *via* derivatization of hydroxylamines was applied to MiPNO, a new, stable, easily prepared chiral cyclic nitron. The application of MiPNO in totally regio- and diastereo- selective 1,3-dipolar cycloadditions provides an expeditious enantioselective access to unusual γ-hydroxy α-aminoacids

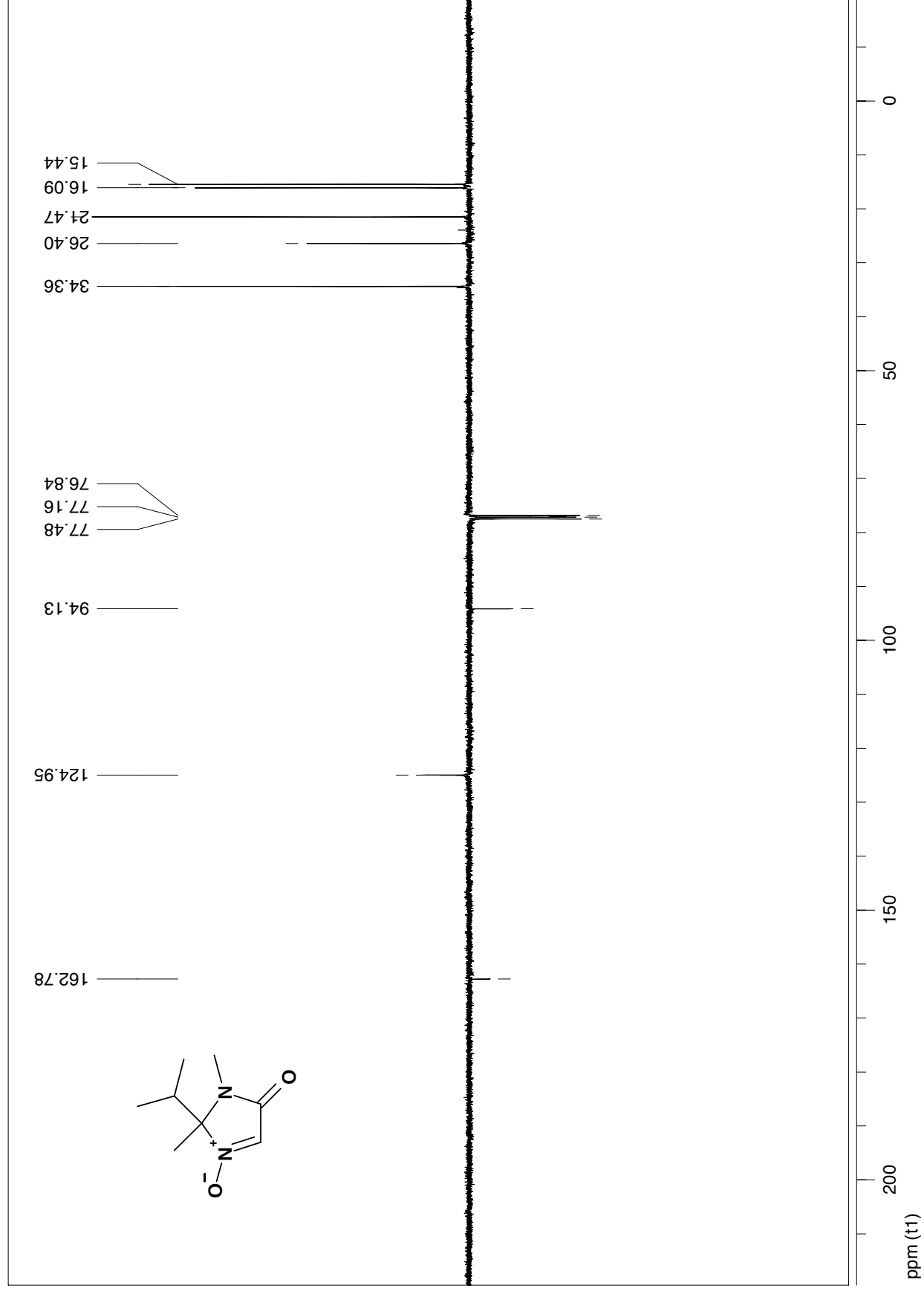
Contents :

¹ H and ¹³ C NMR spectra for compounds 3 , 1 , 5a-5h , 7 , 8c , 8e , 8f , 9 , 10a , 11	S2-37
2D NOESY spectrum for compound 5f	S18
2D NOESY spectrum for compound 5h	S23
Microwave irradiation parameters for the preparation of compound 11	S38
ORTEP drawings of 1 and 10a	S39

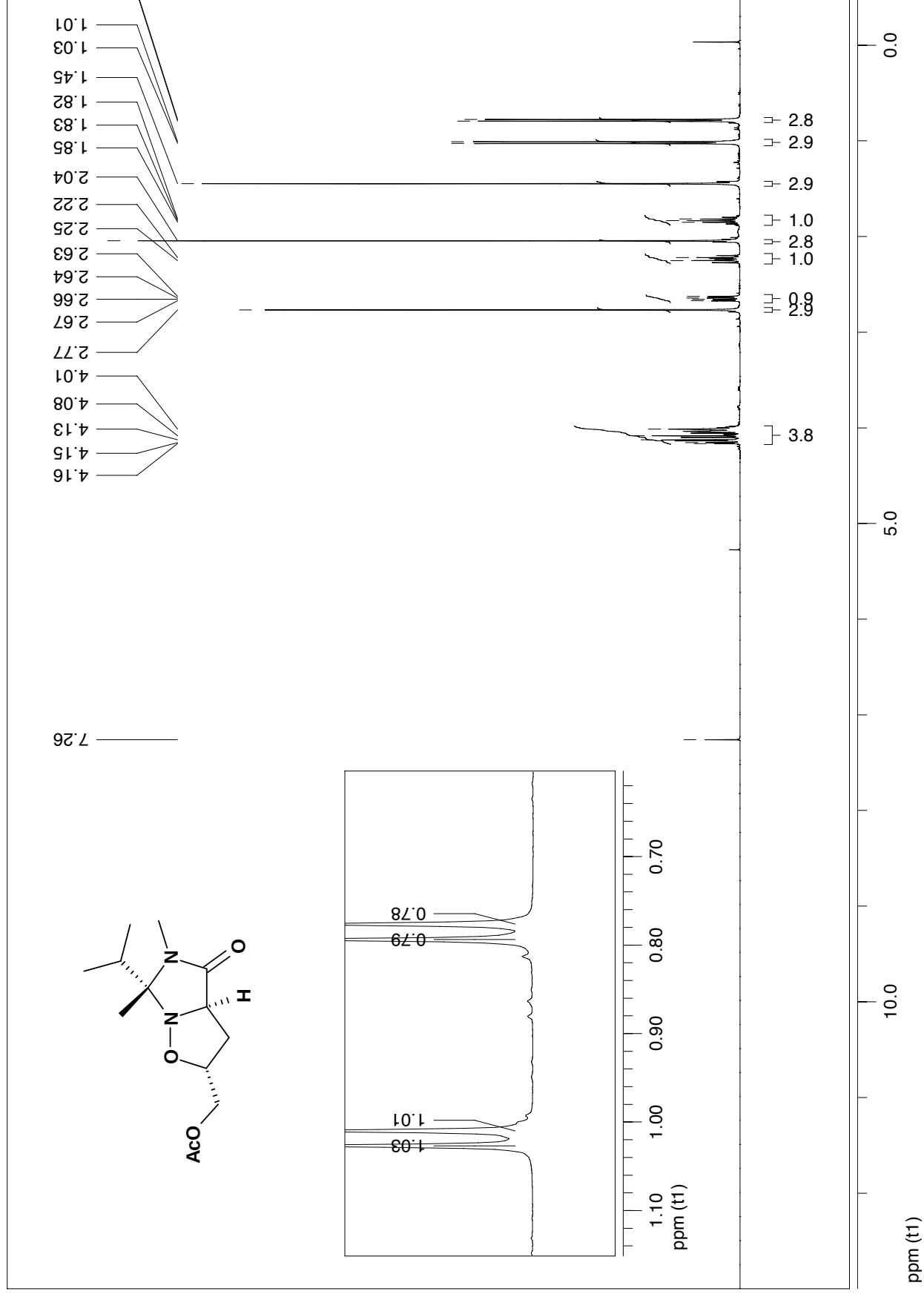


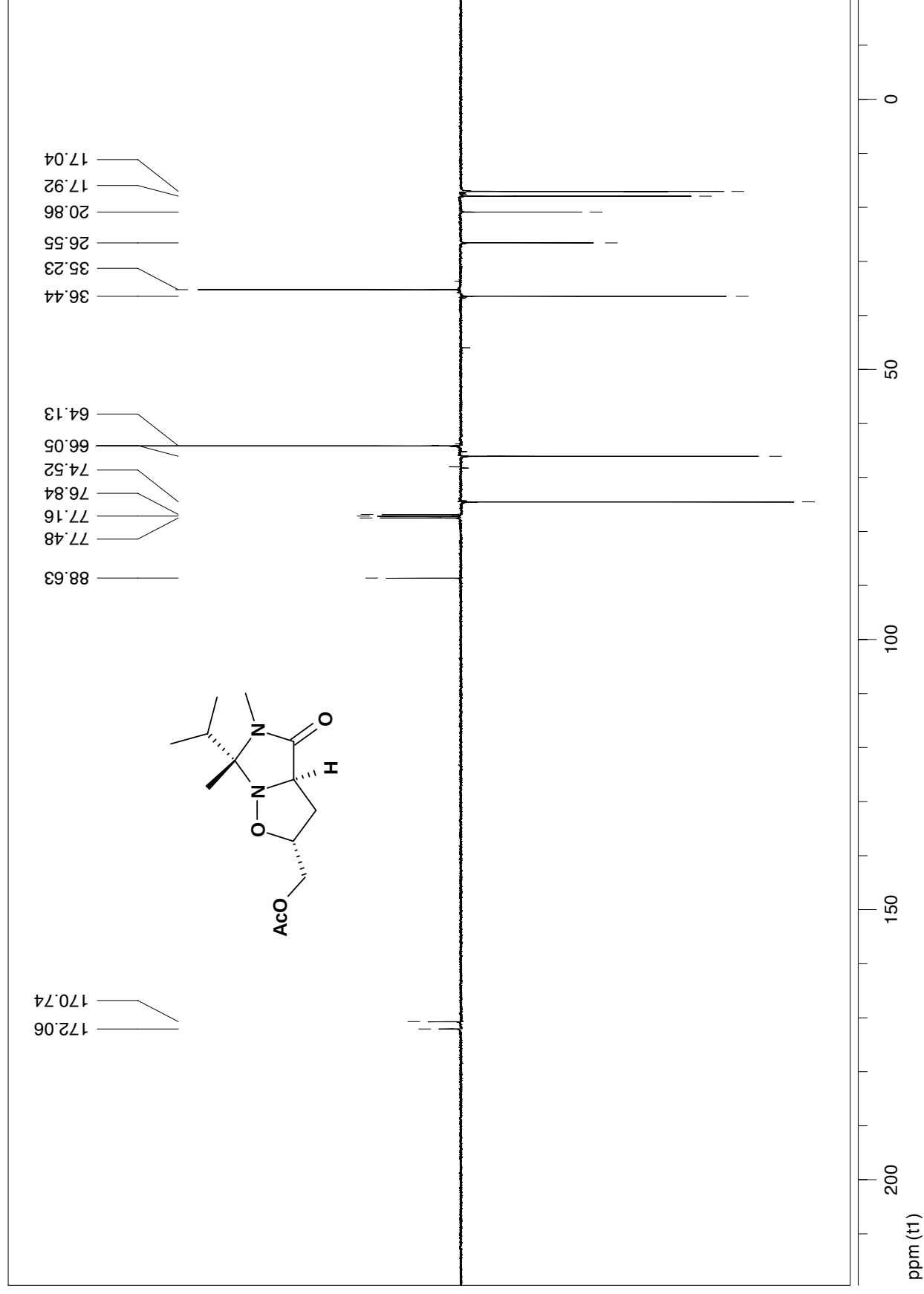




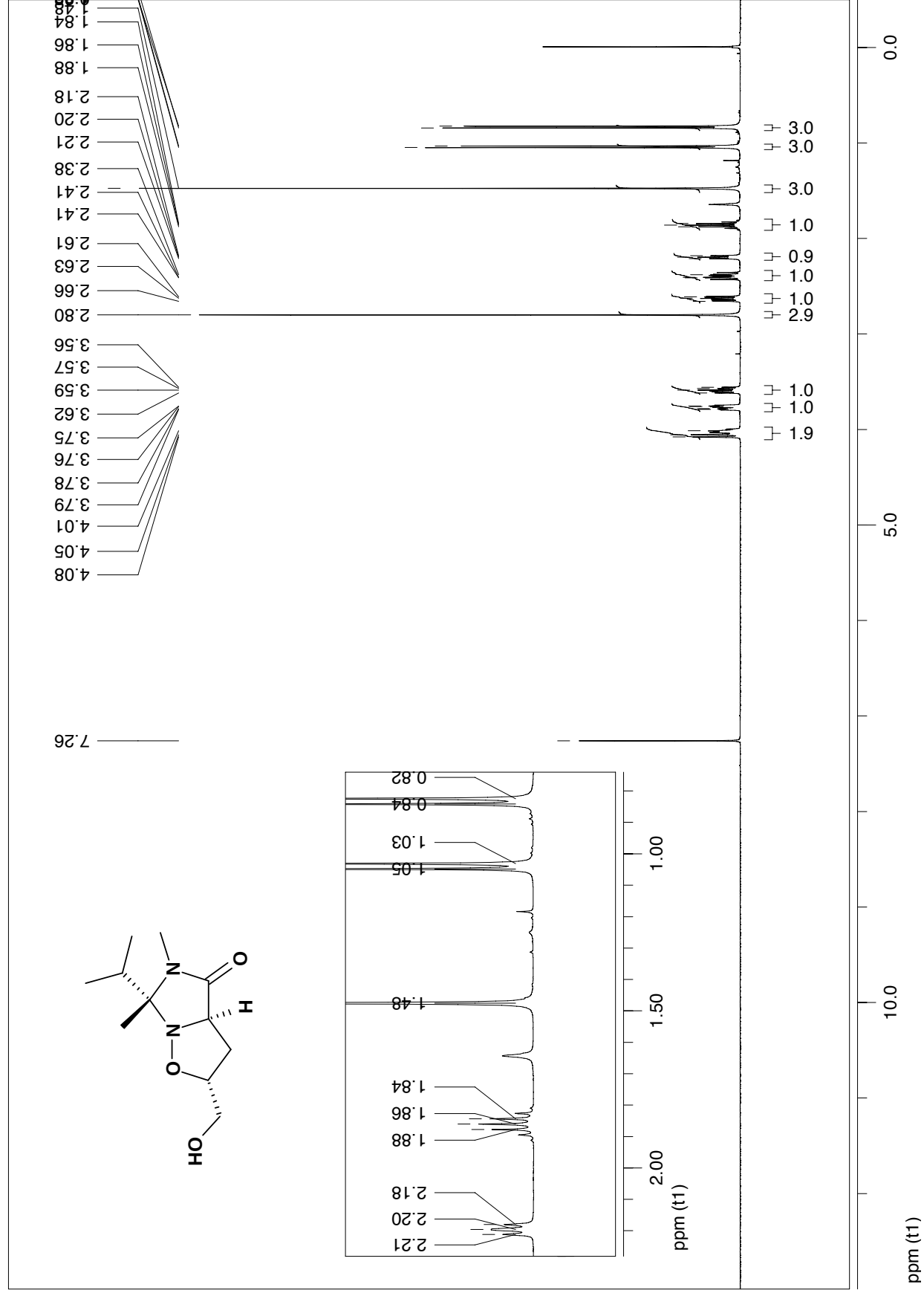


product 5a, ¹H NMR, CDCl₃, 400 MHz



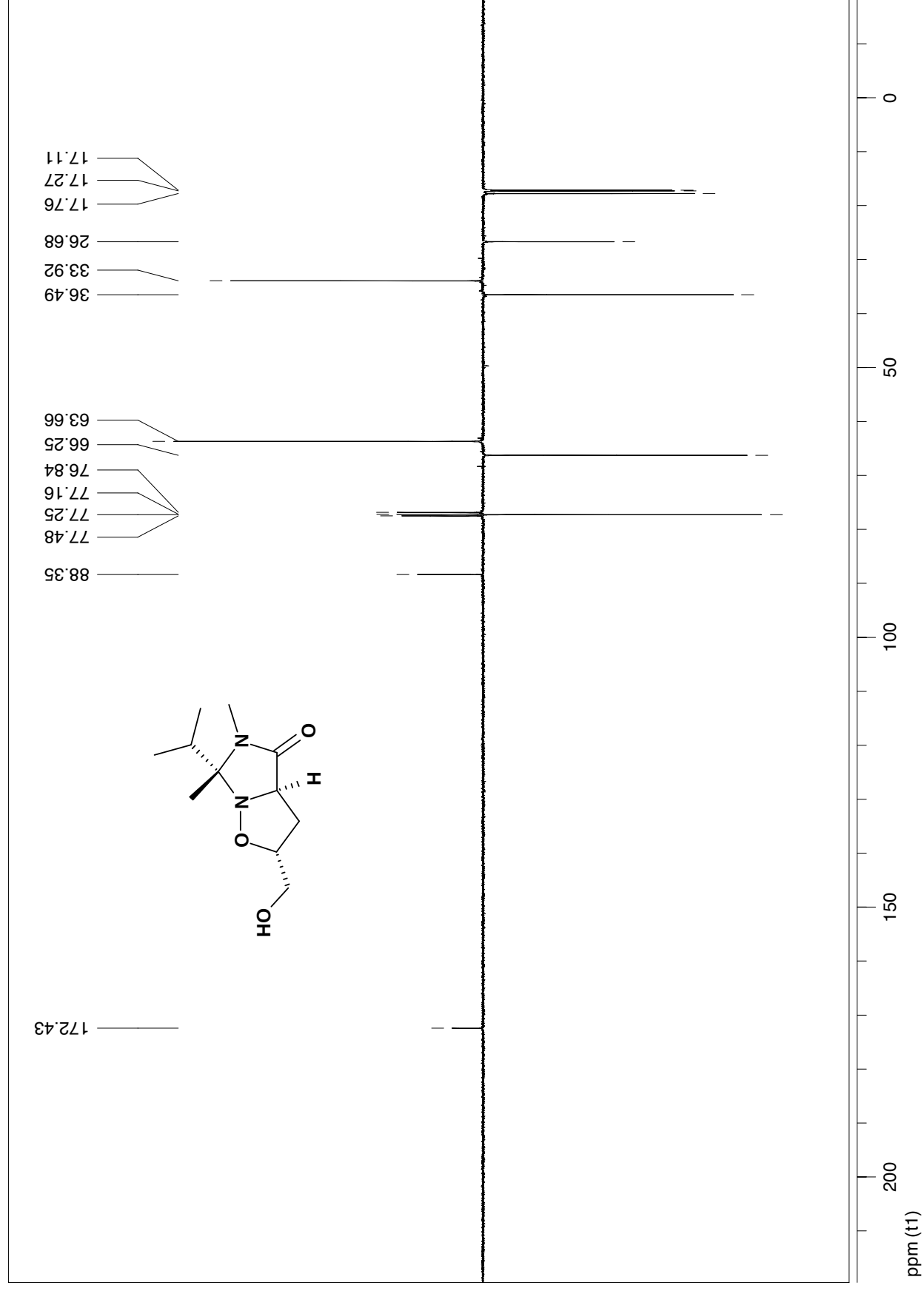


product 5b, ^1H NMR, CDCl_3 , 400 MHz



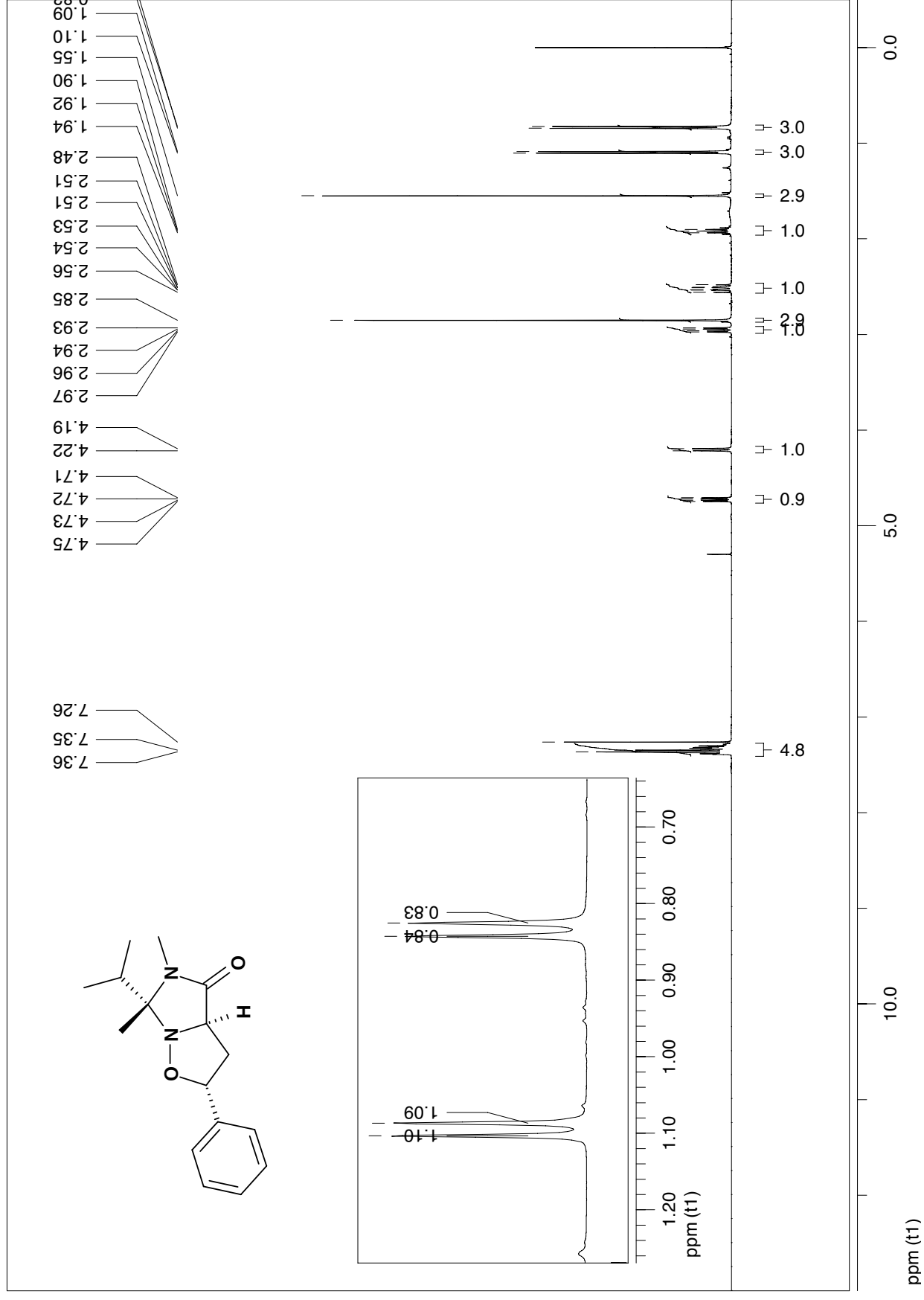
product 5b, ^{13}C NMR, CDCl_3 , 100 MHz

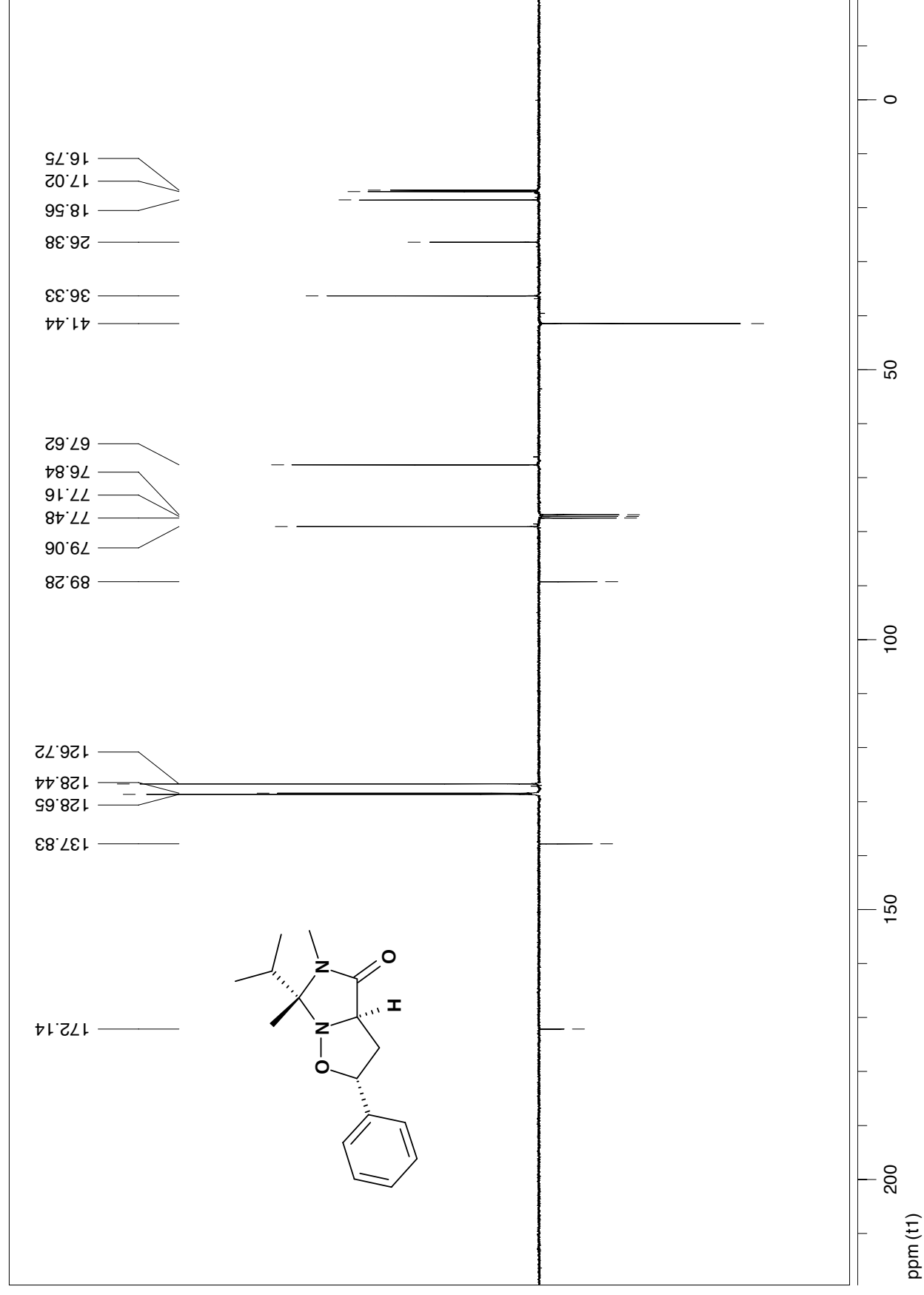
S 9



product 5c, ¹H NMR, CDCl₃, 400 MHz

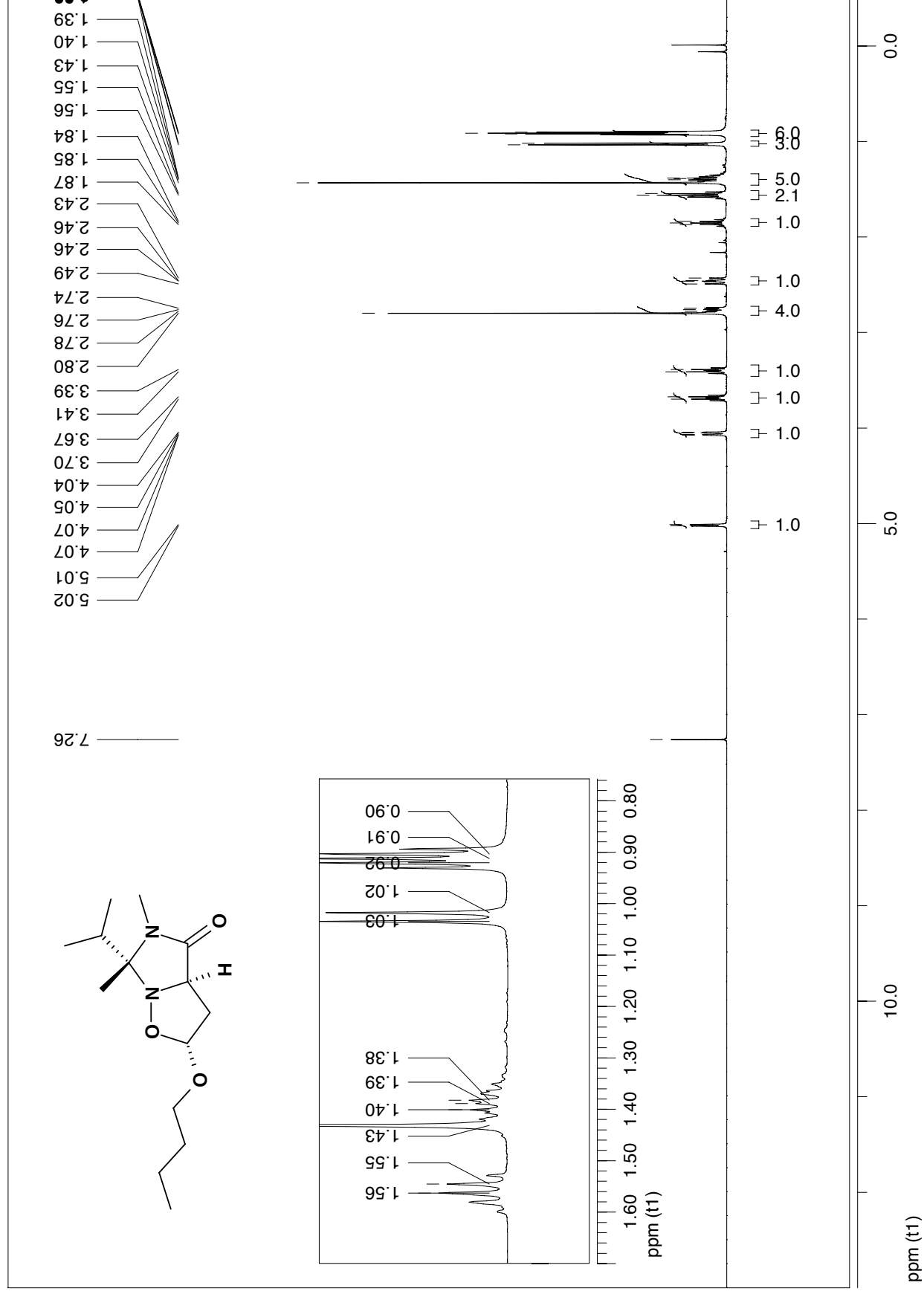
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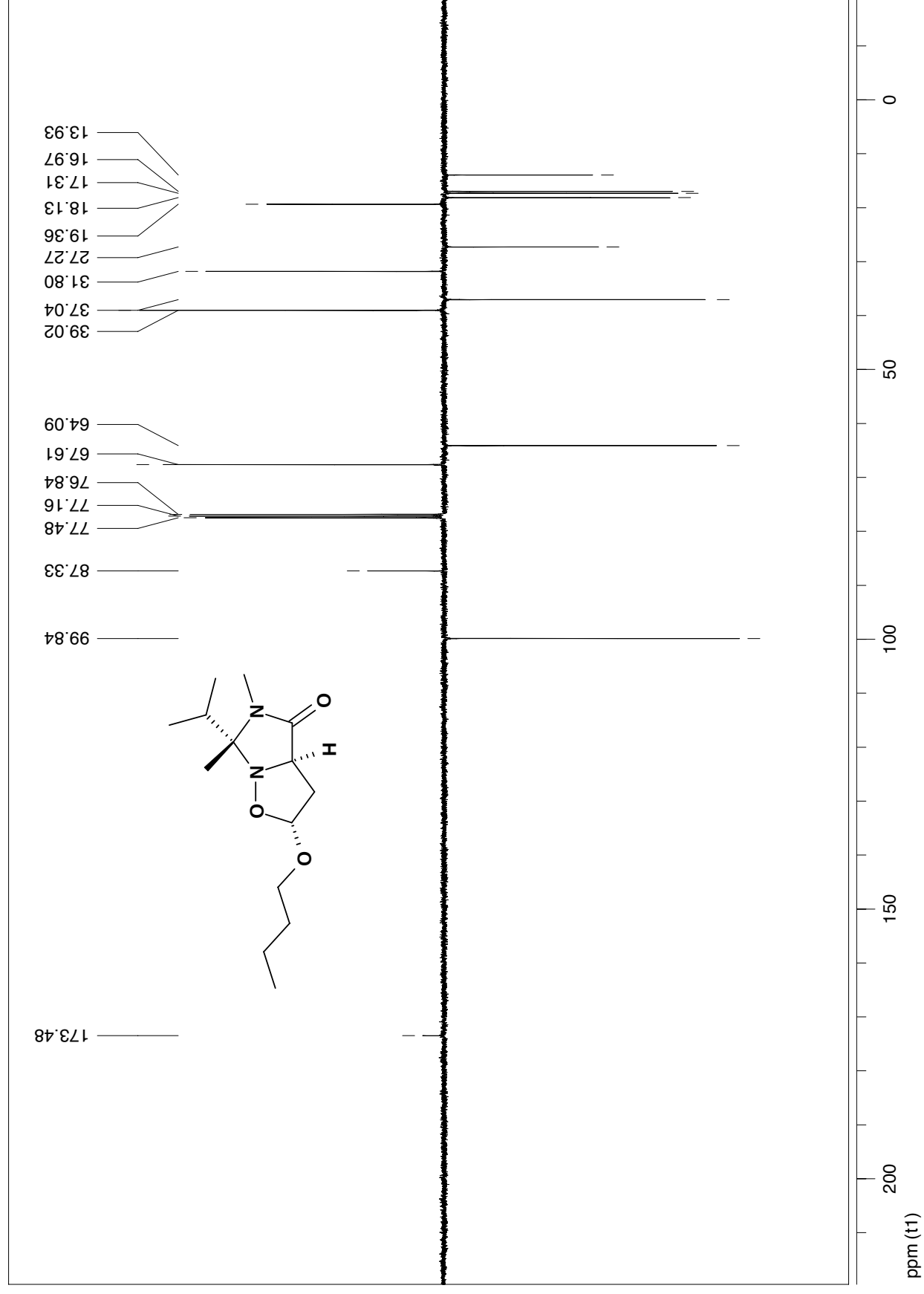


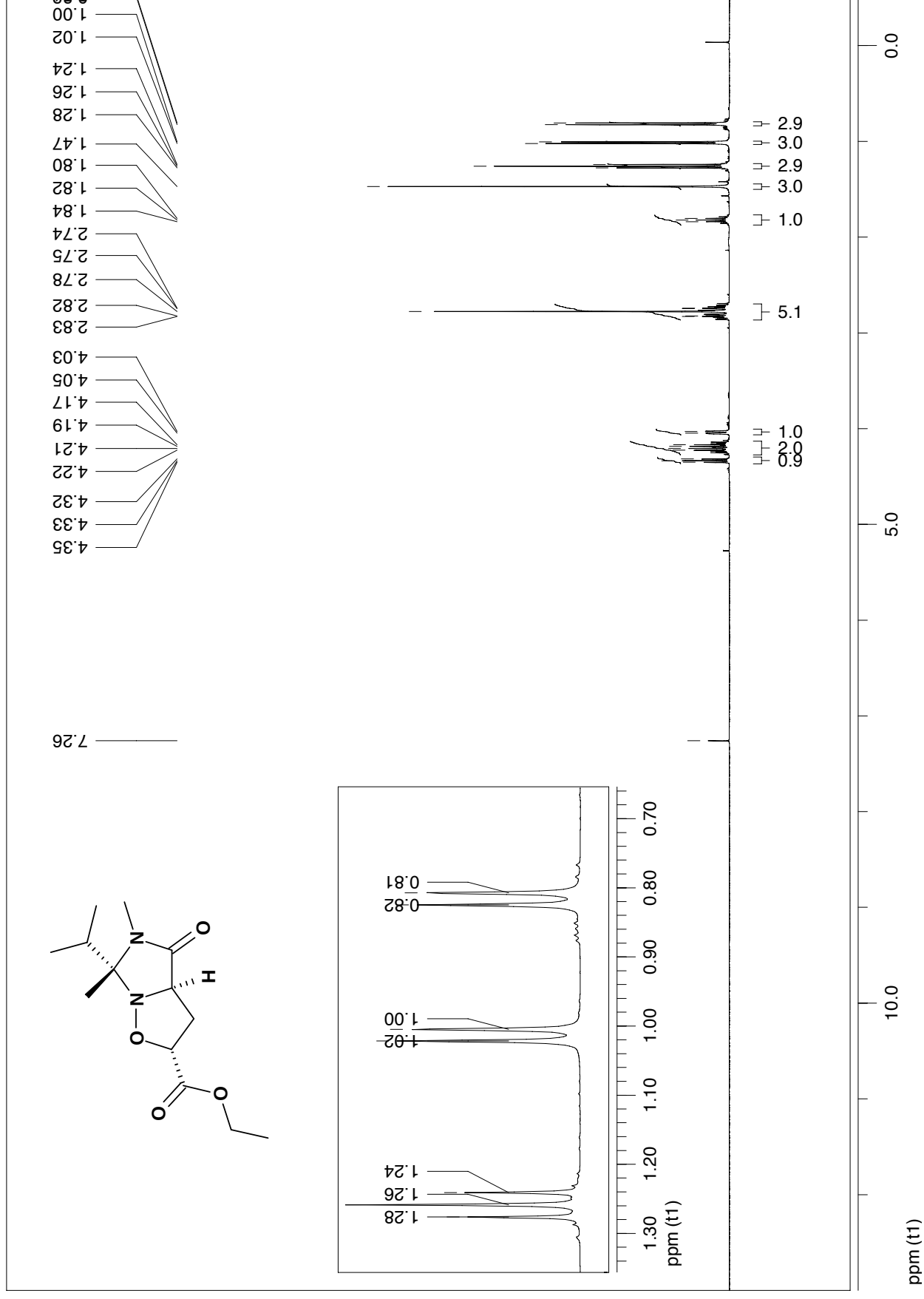


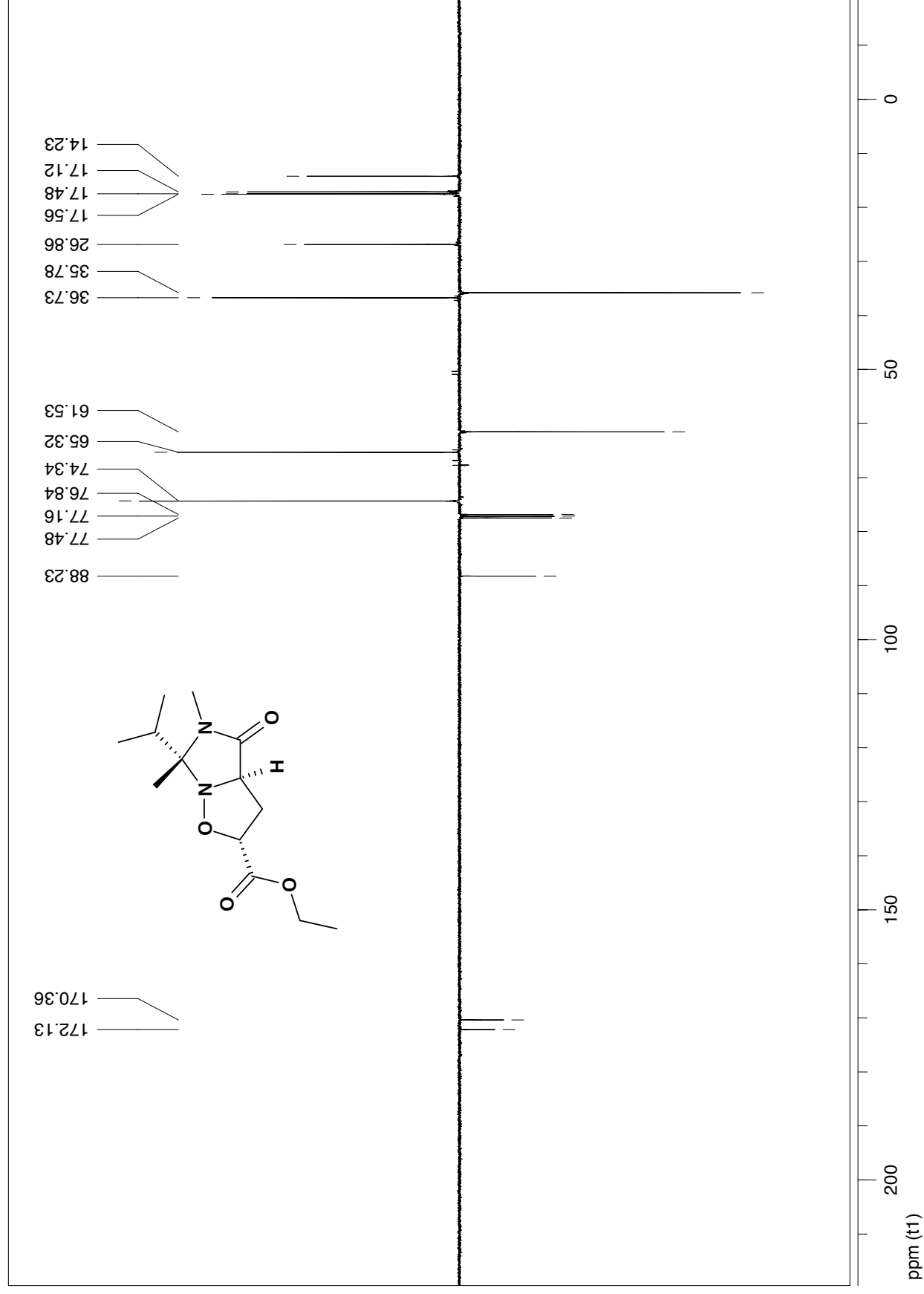
product 5d, ^1H NMR, CDCl_3 , 400 MHz

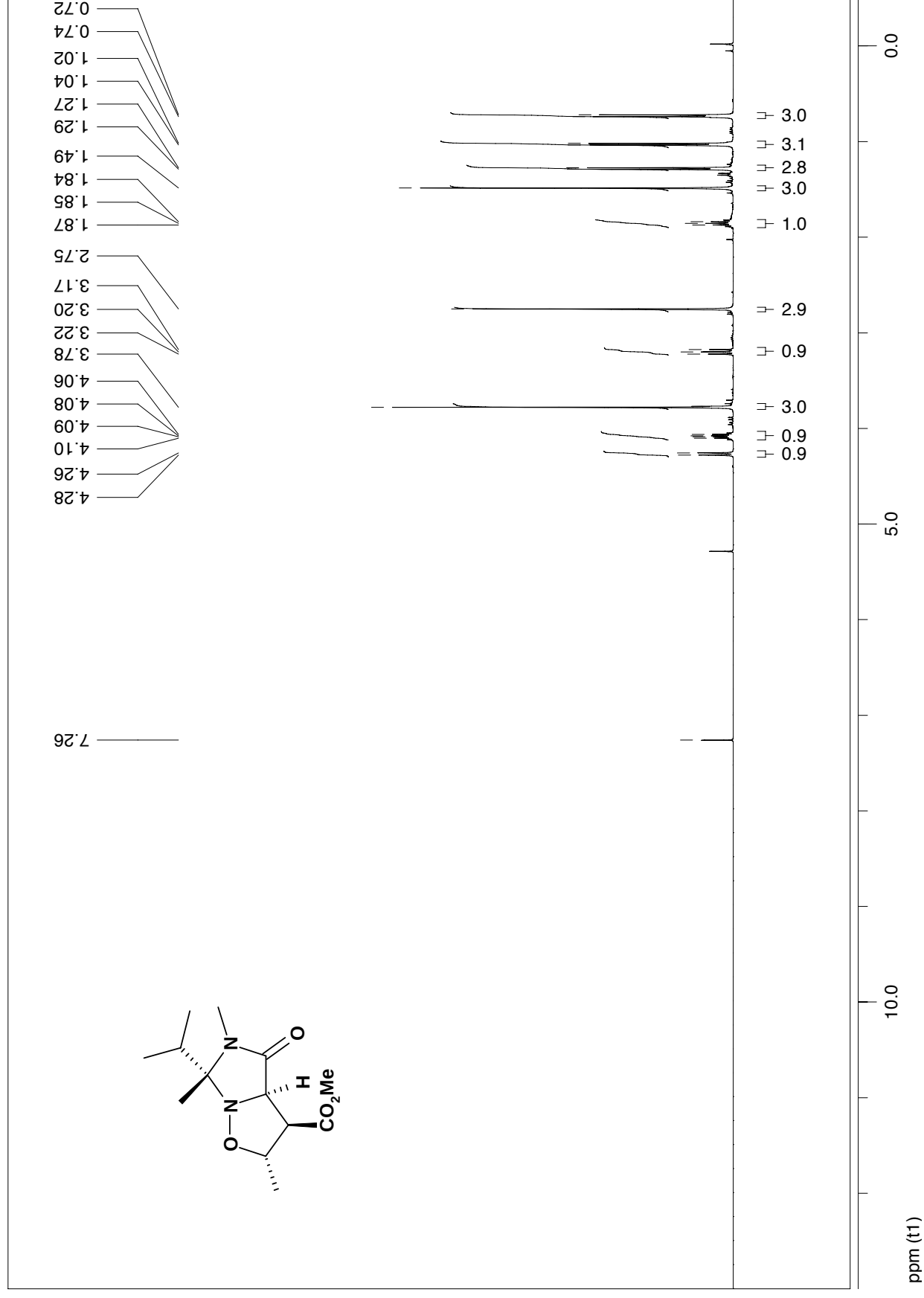
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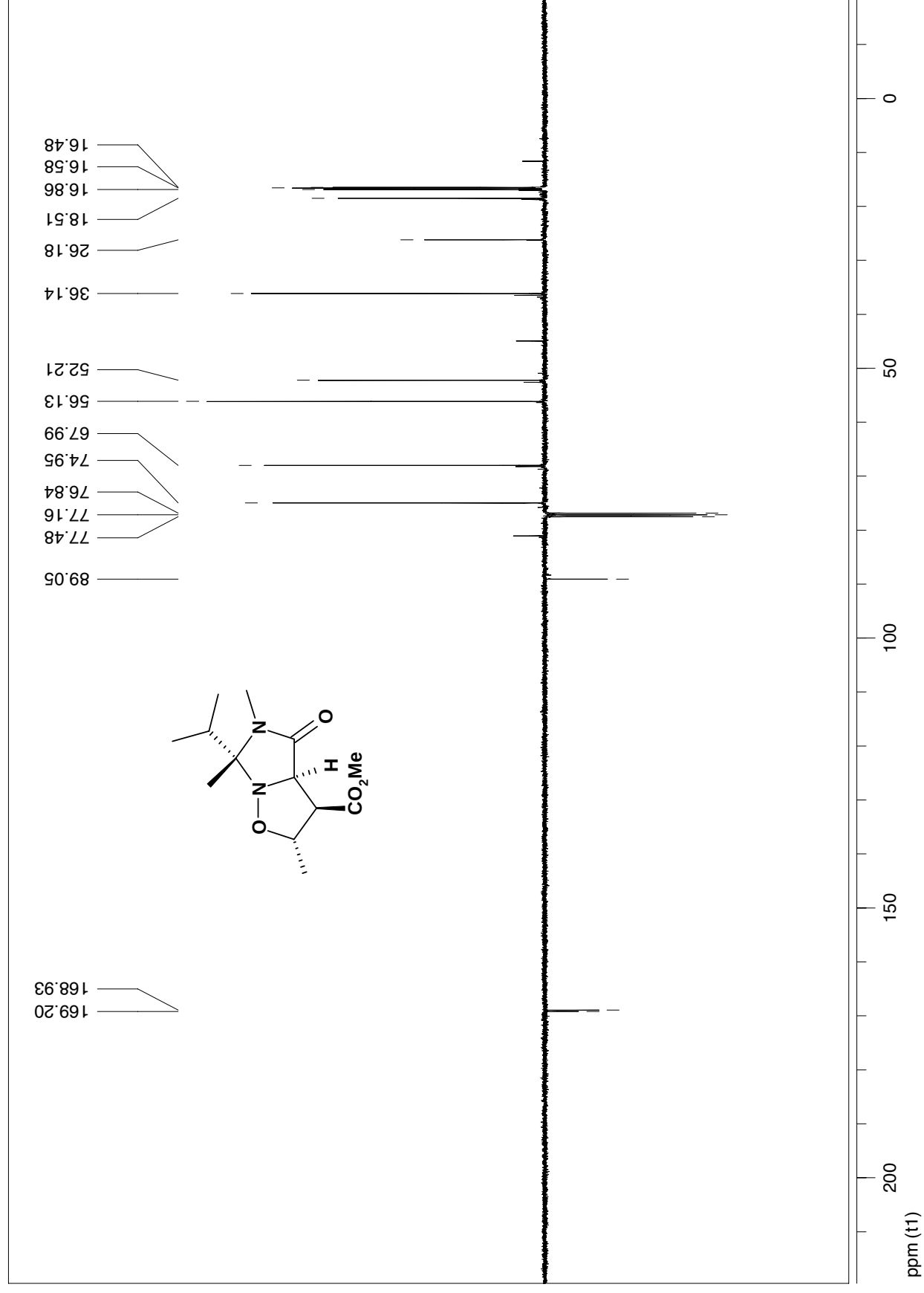


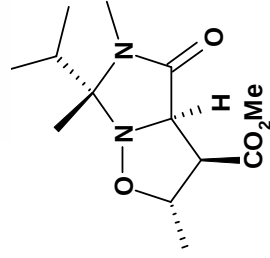
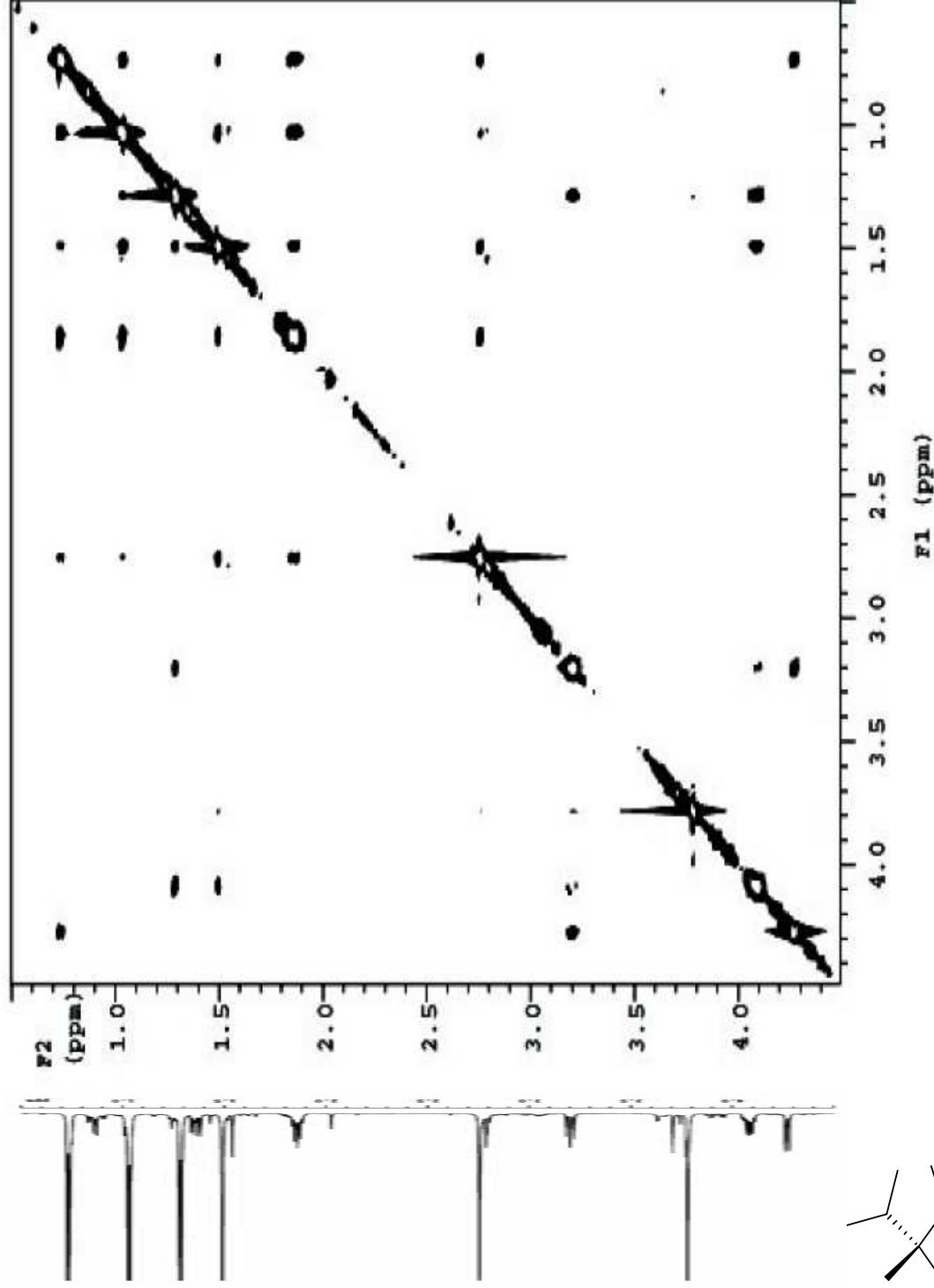


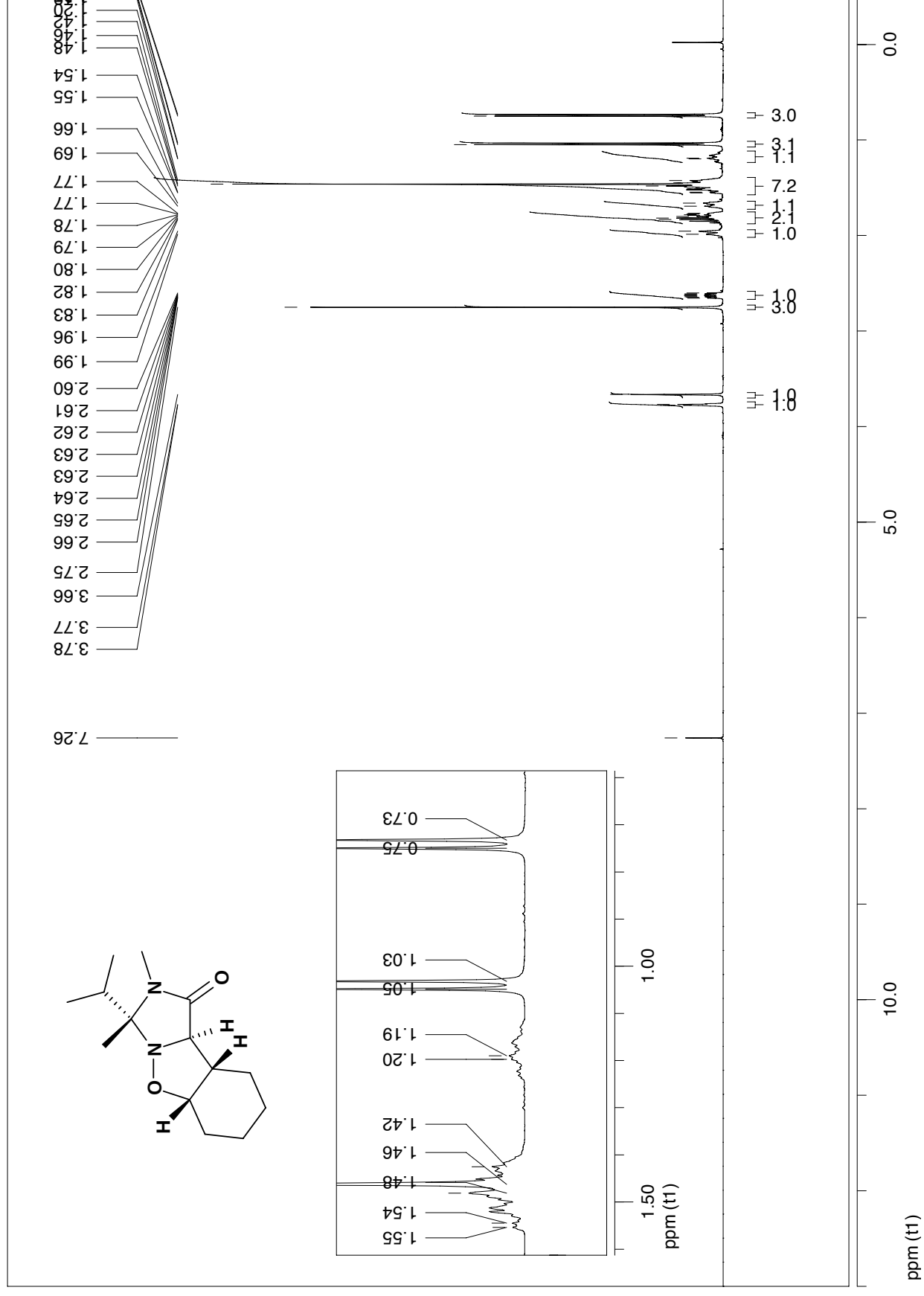


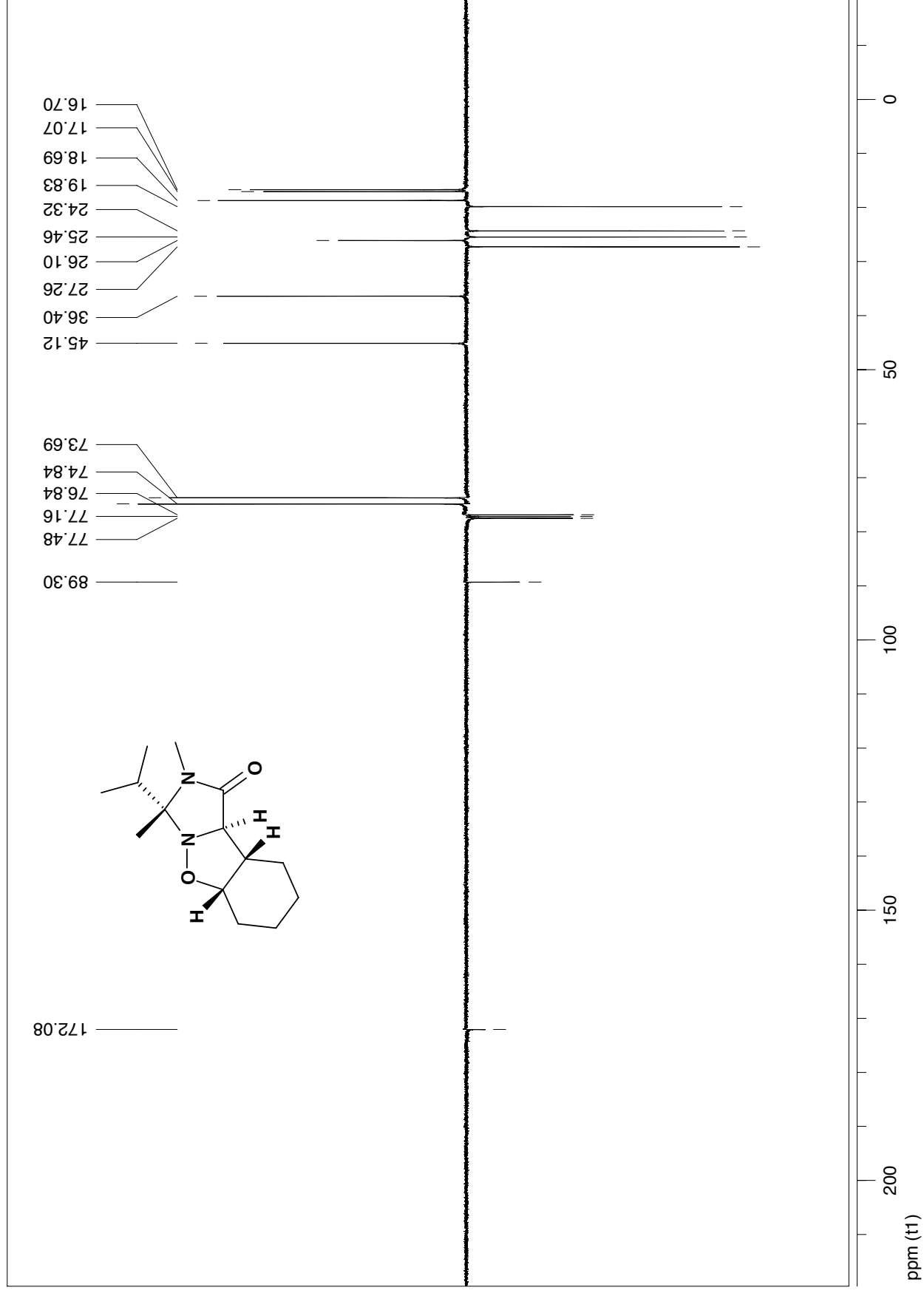


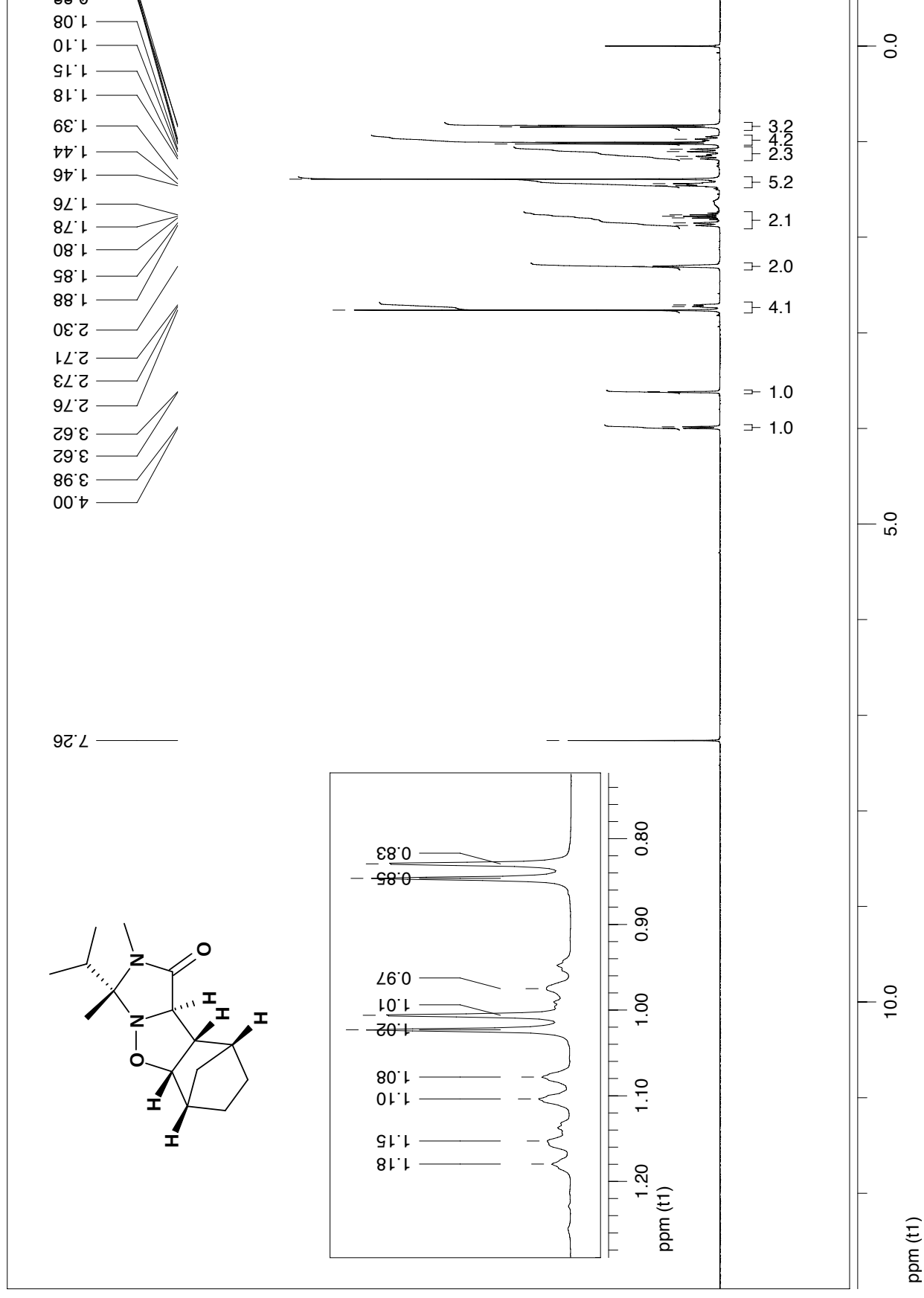


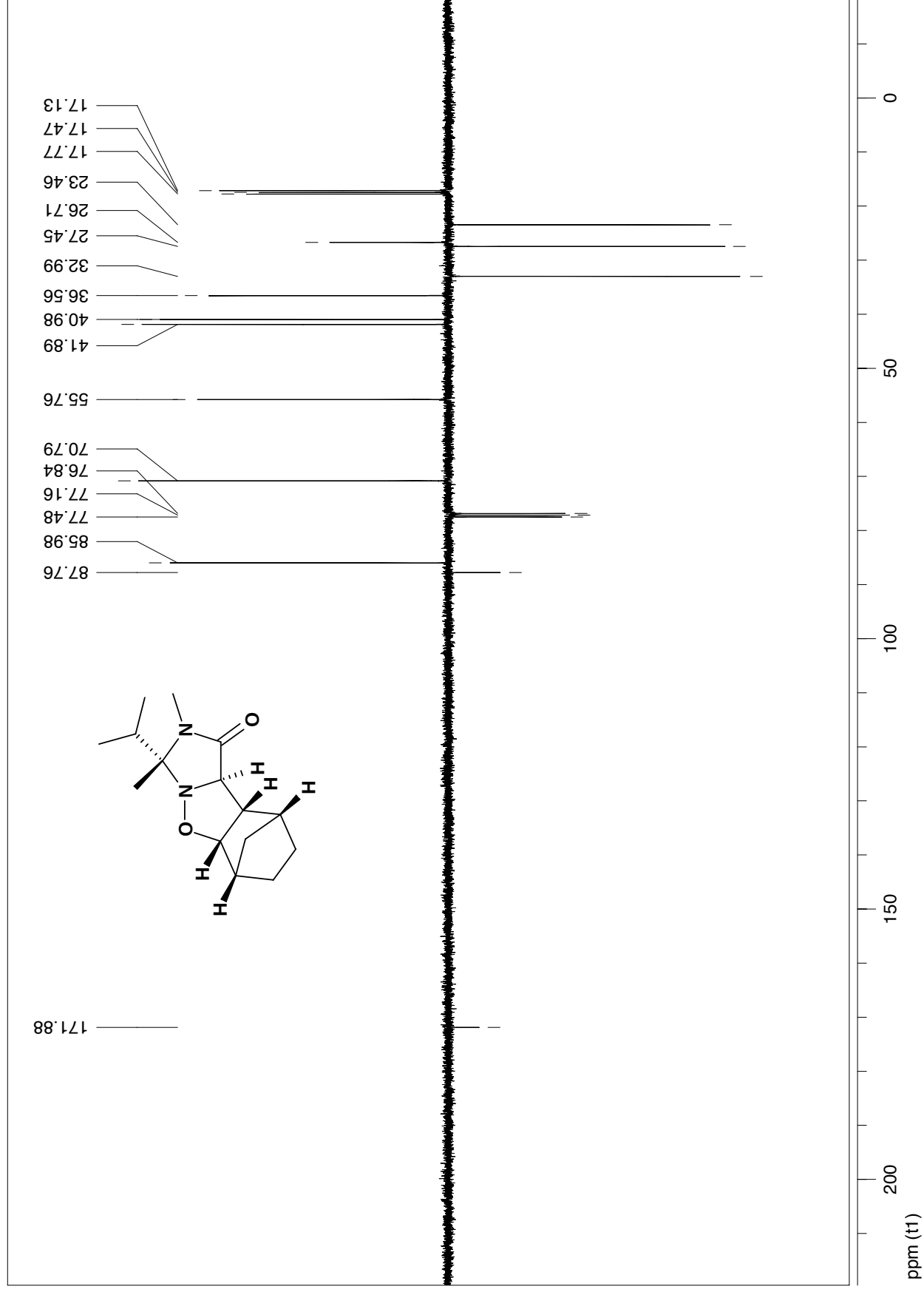


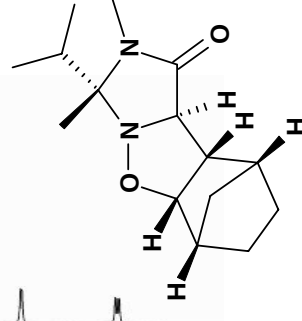
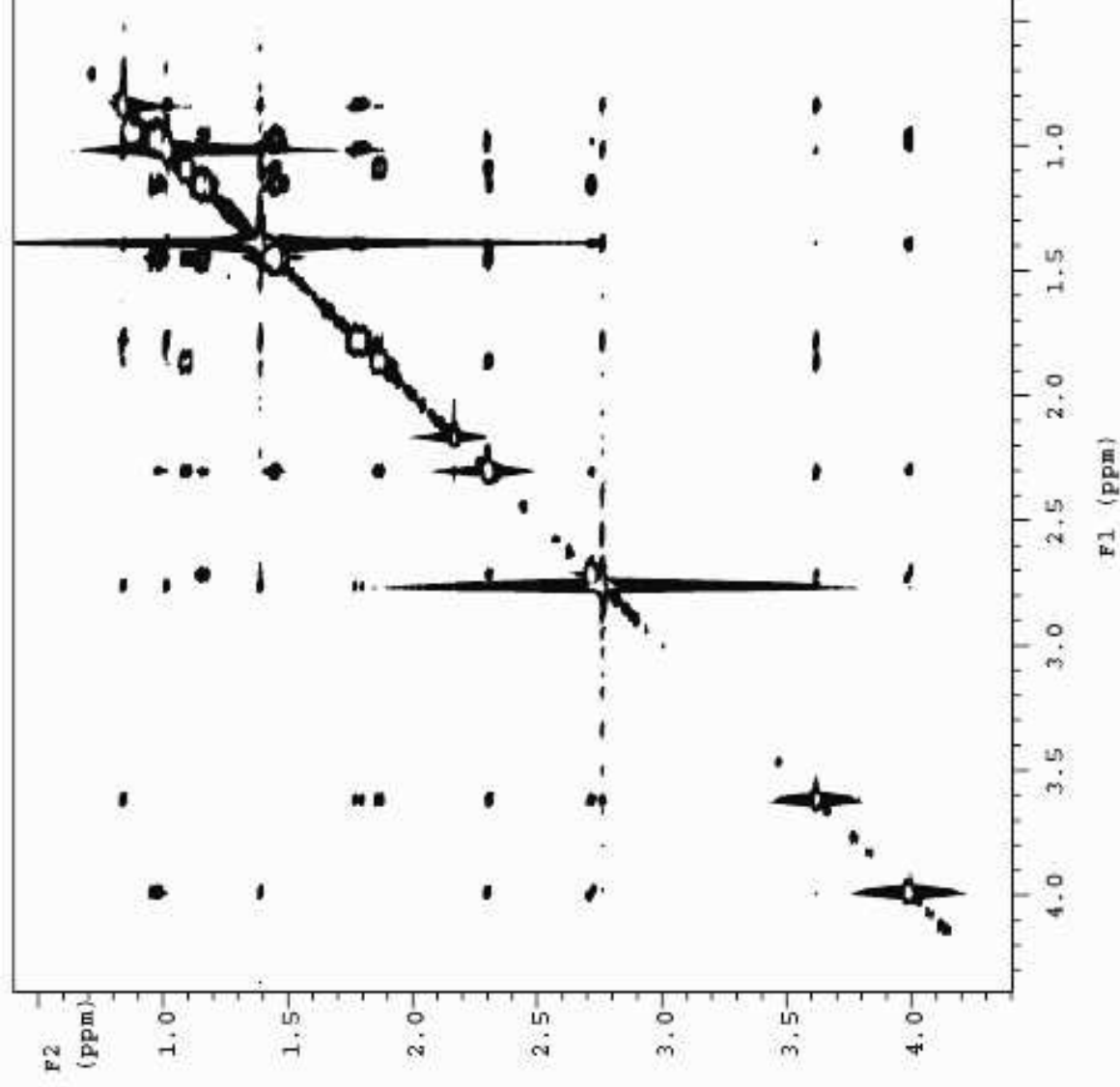


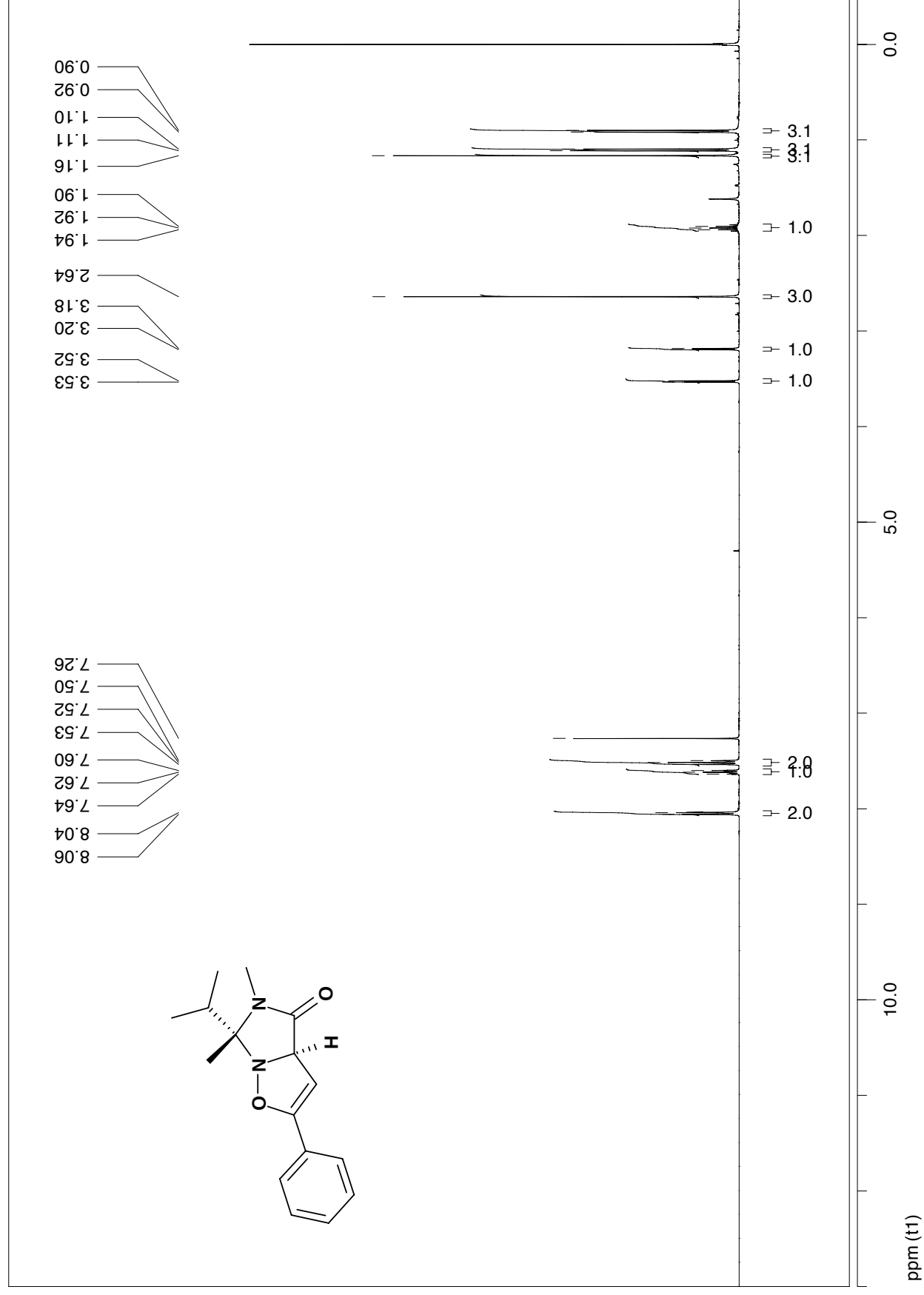


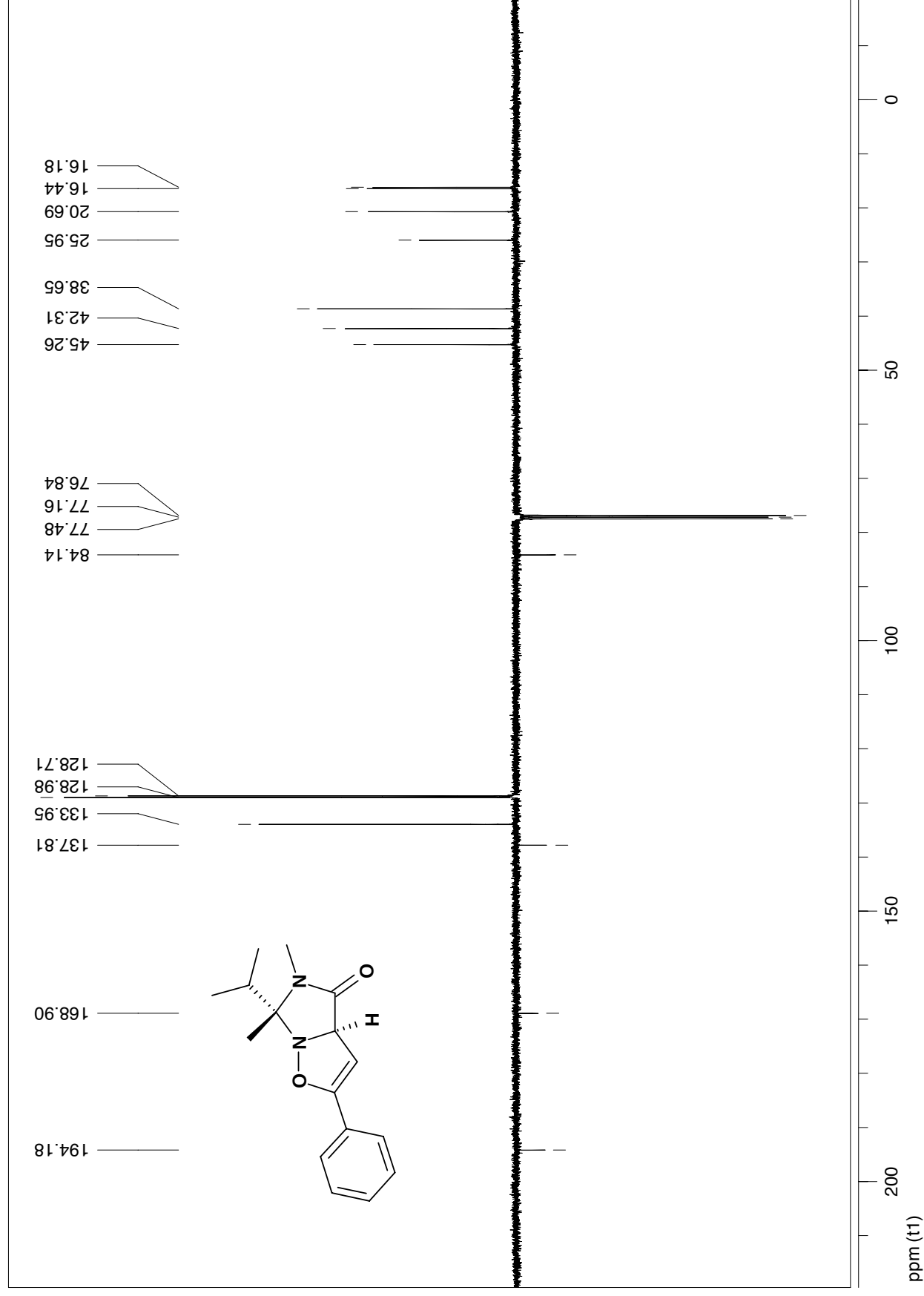


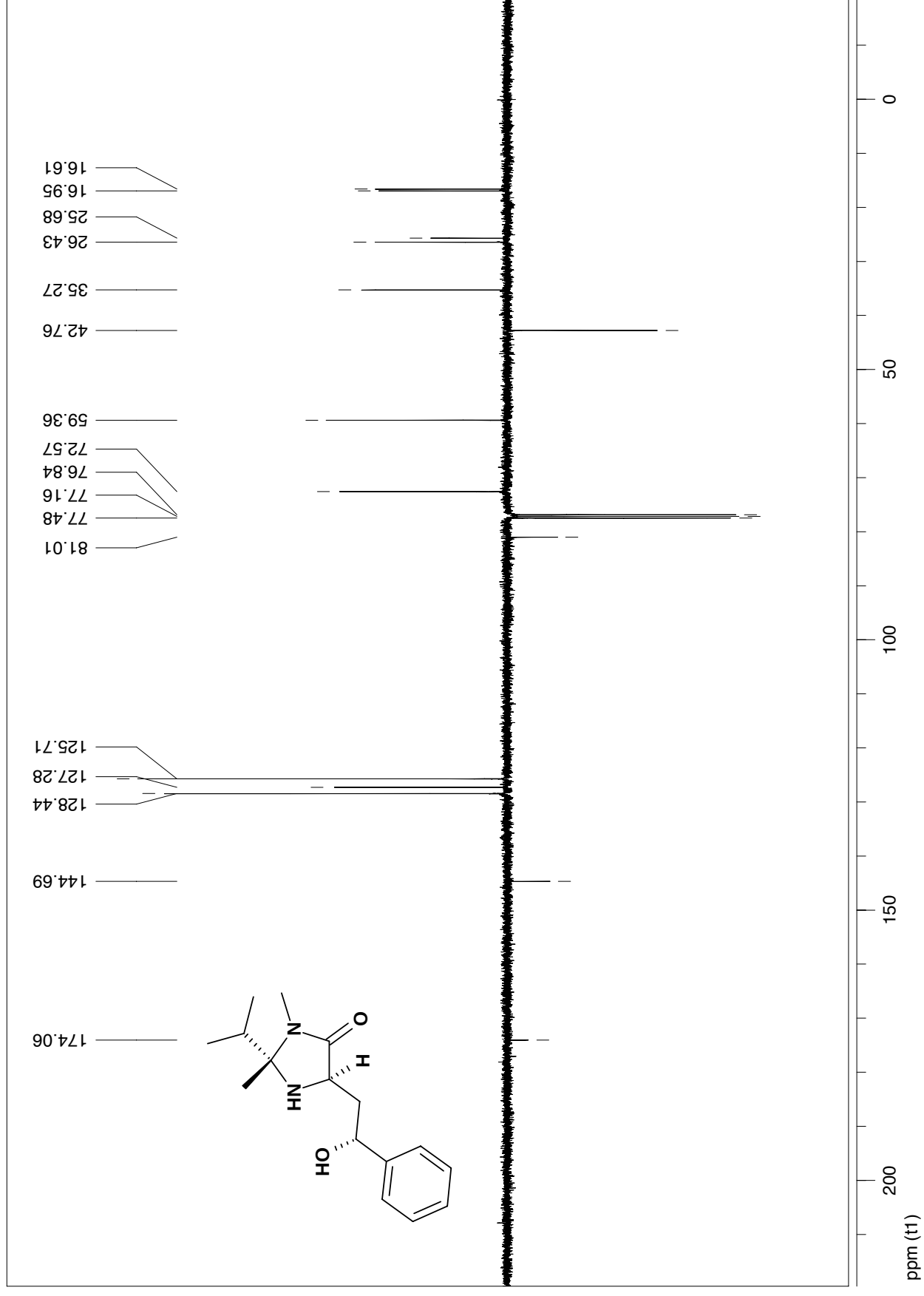


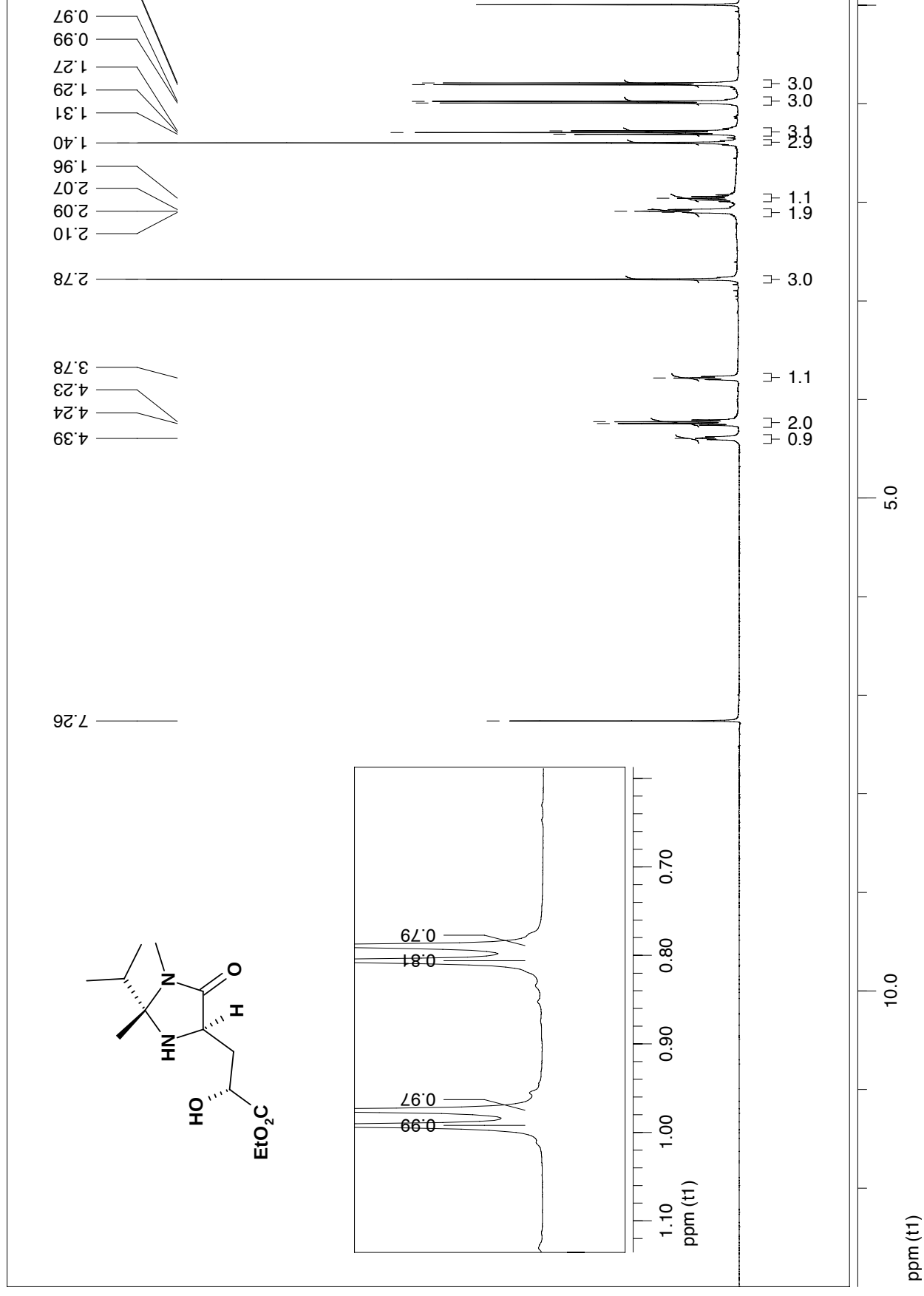


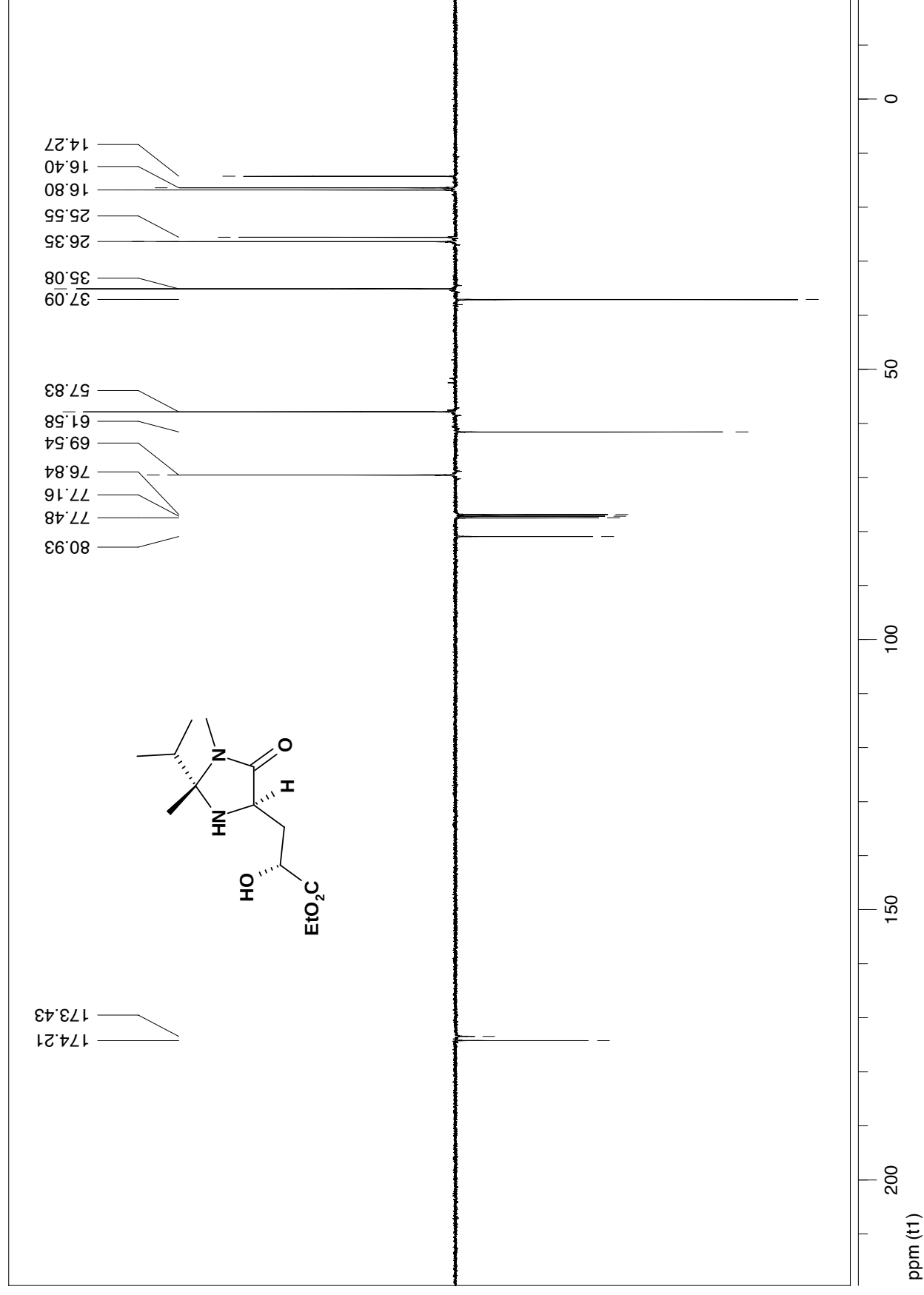


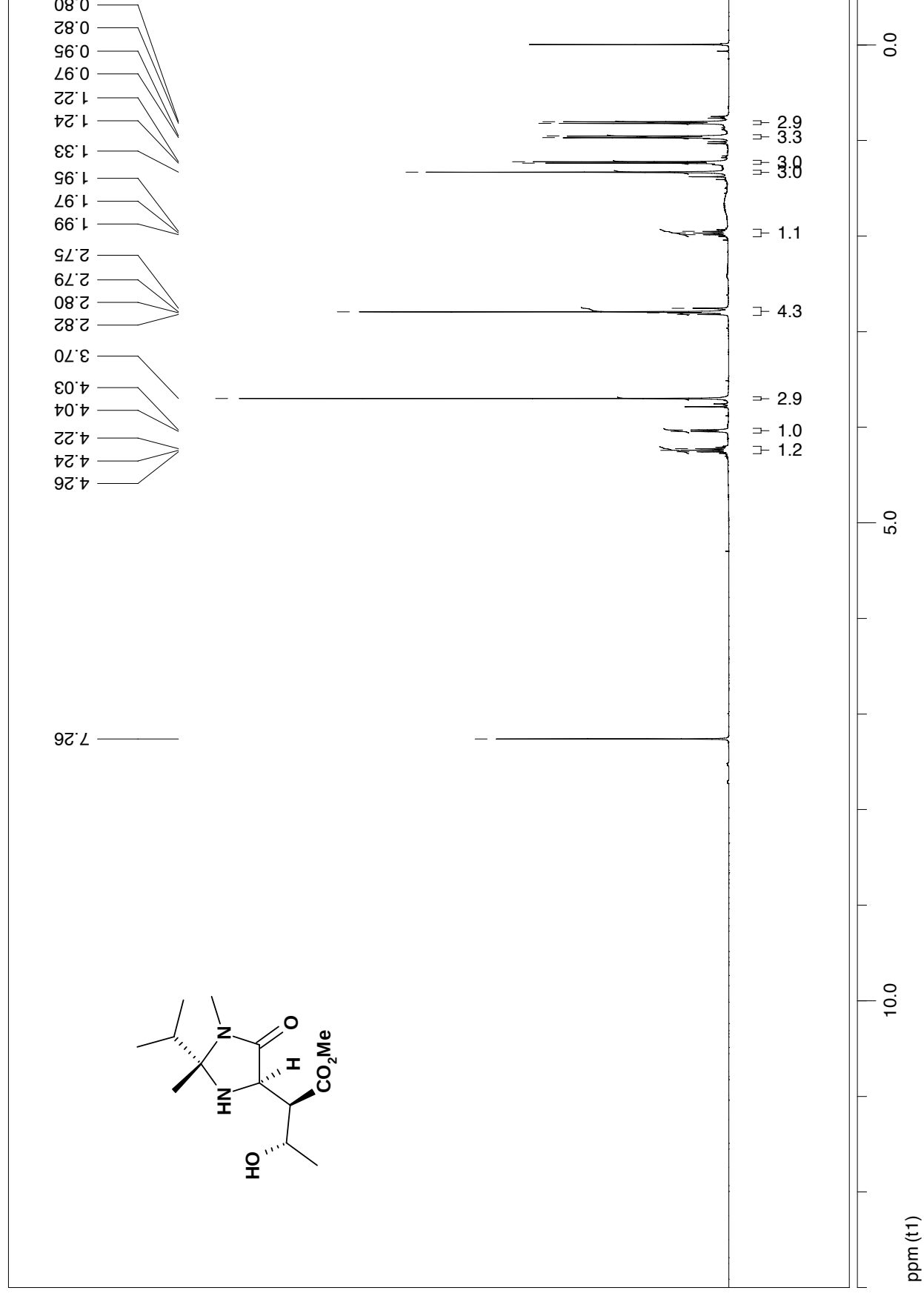


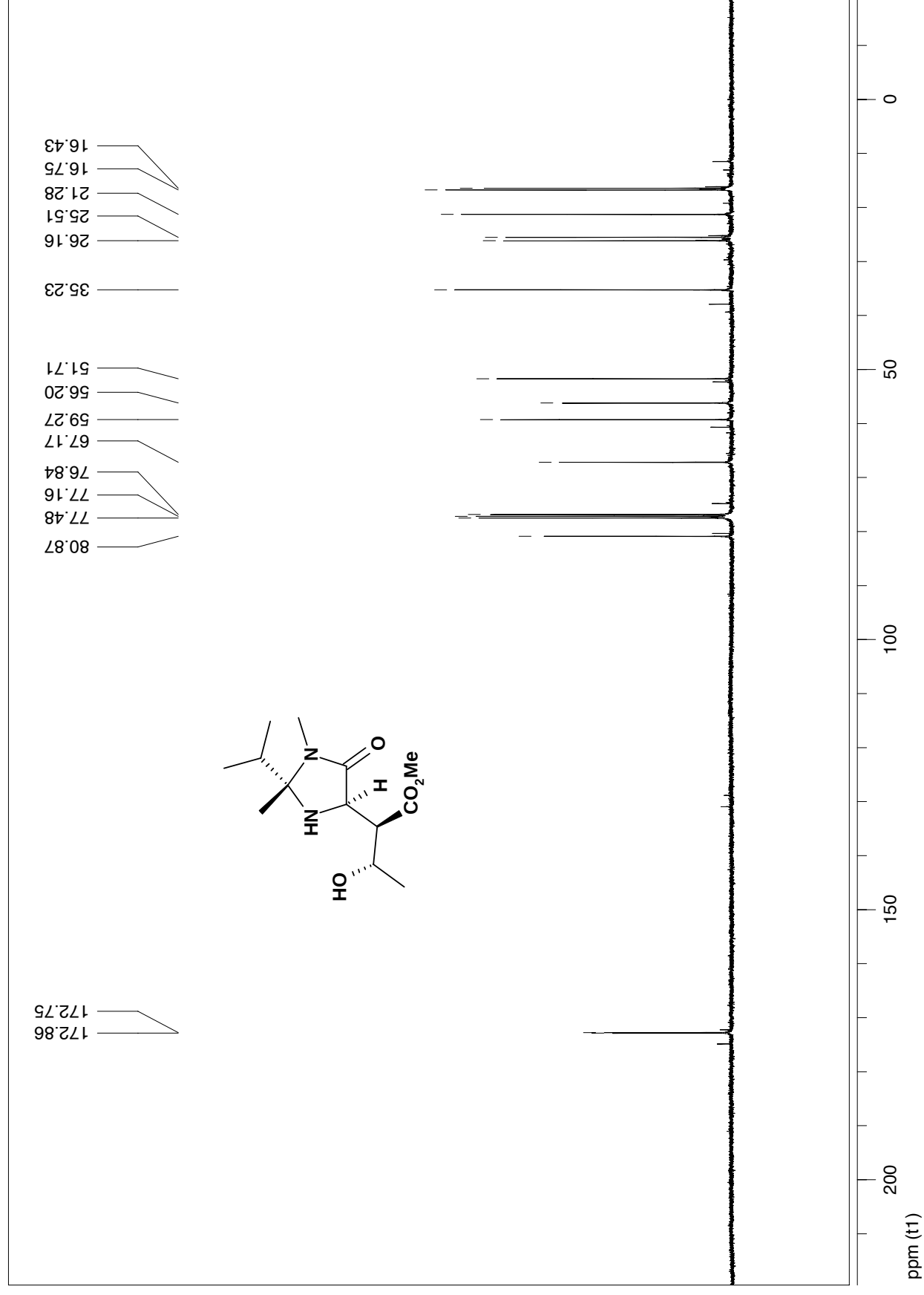


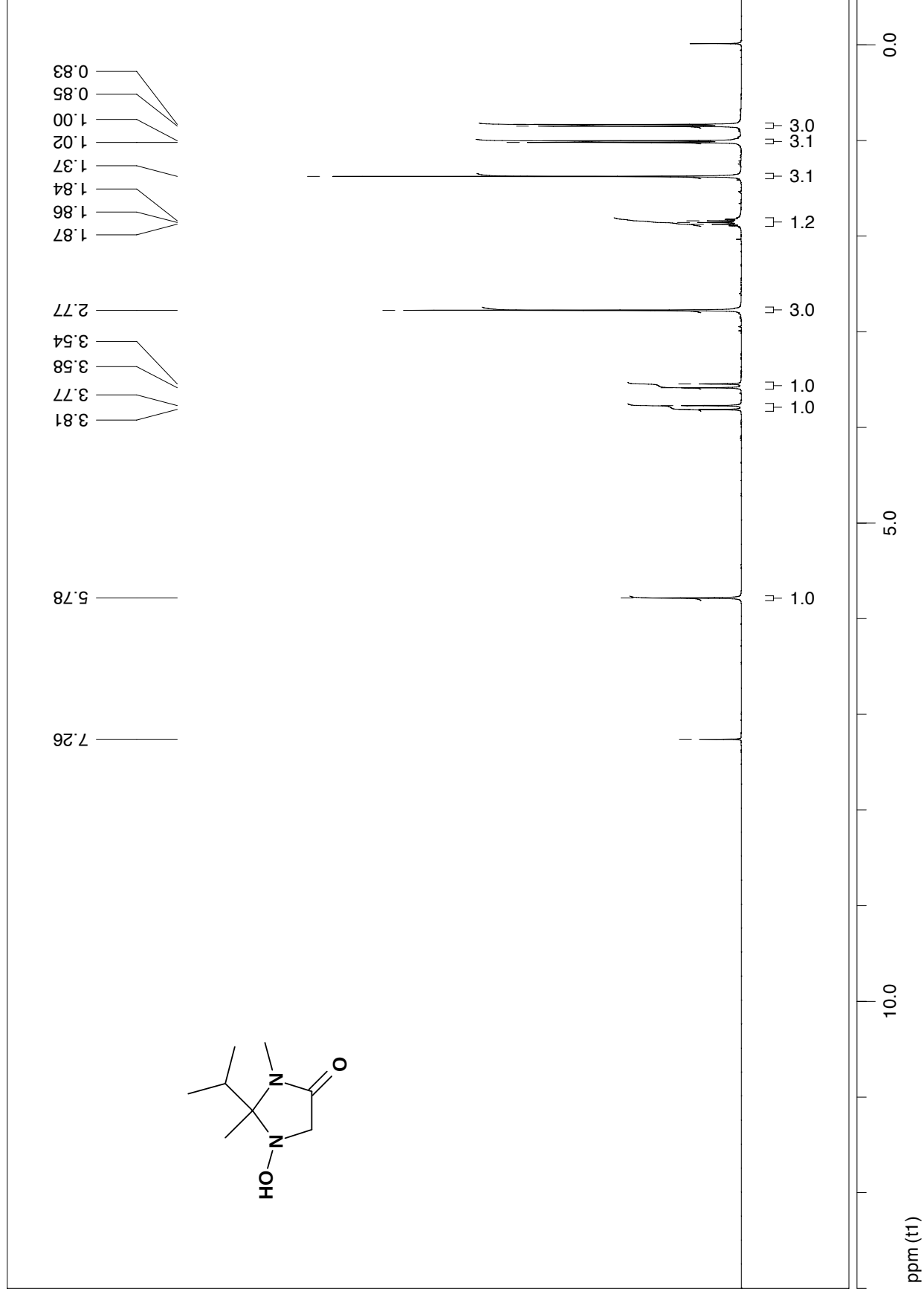


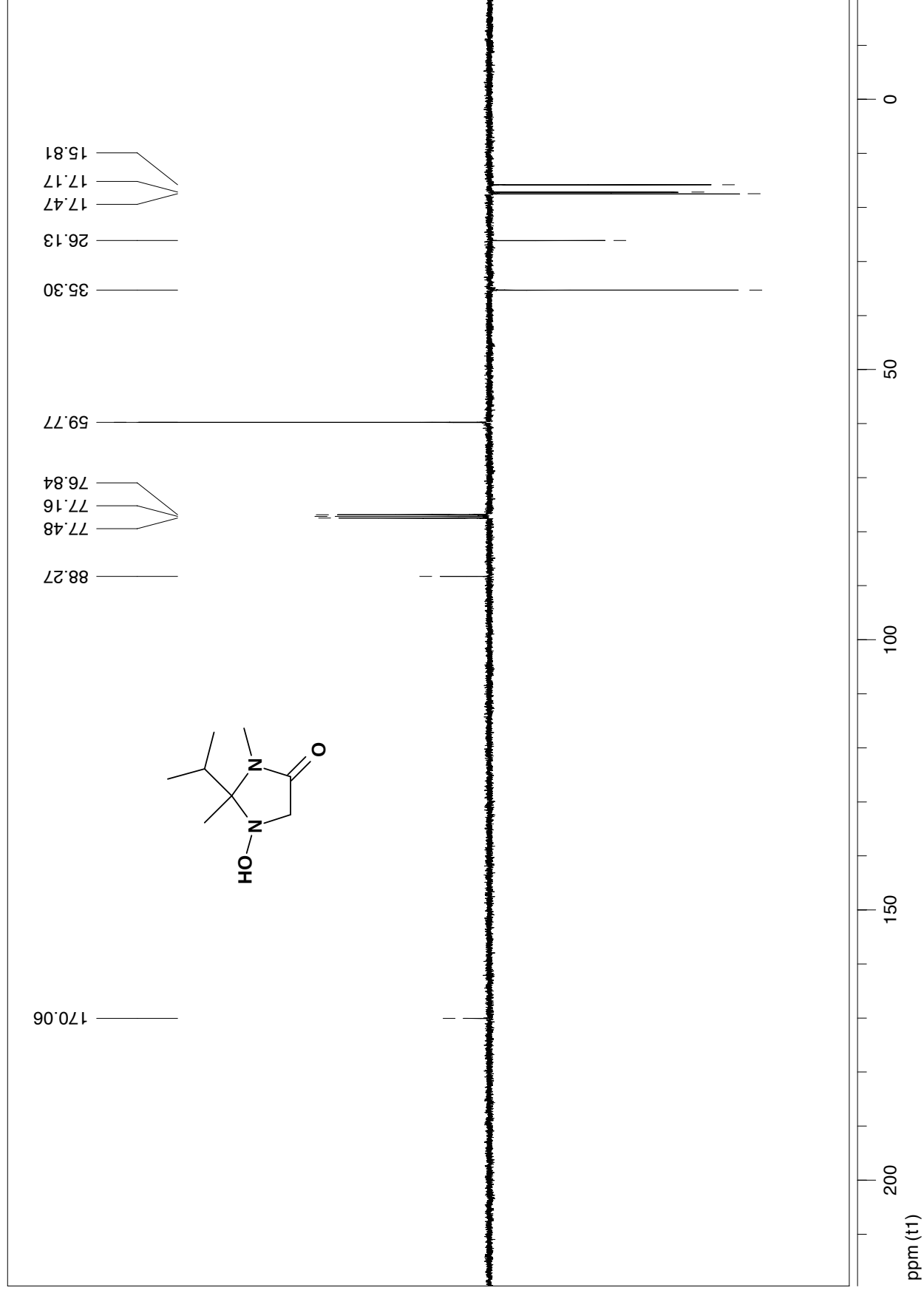


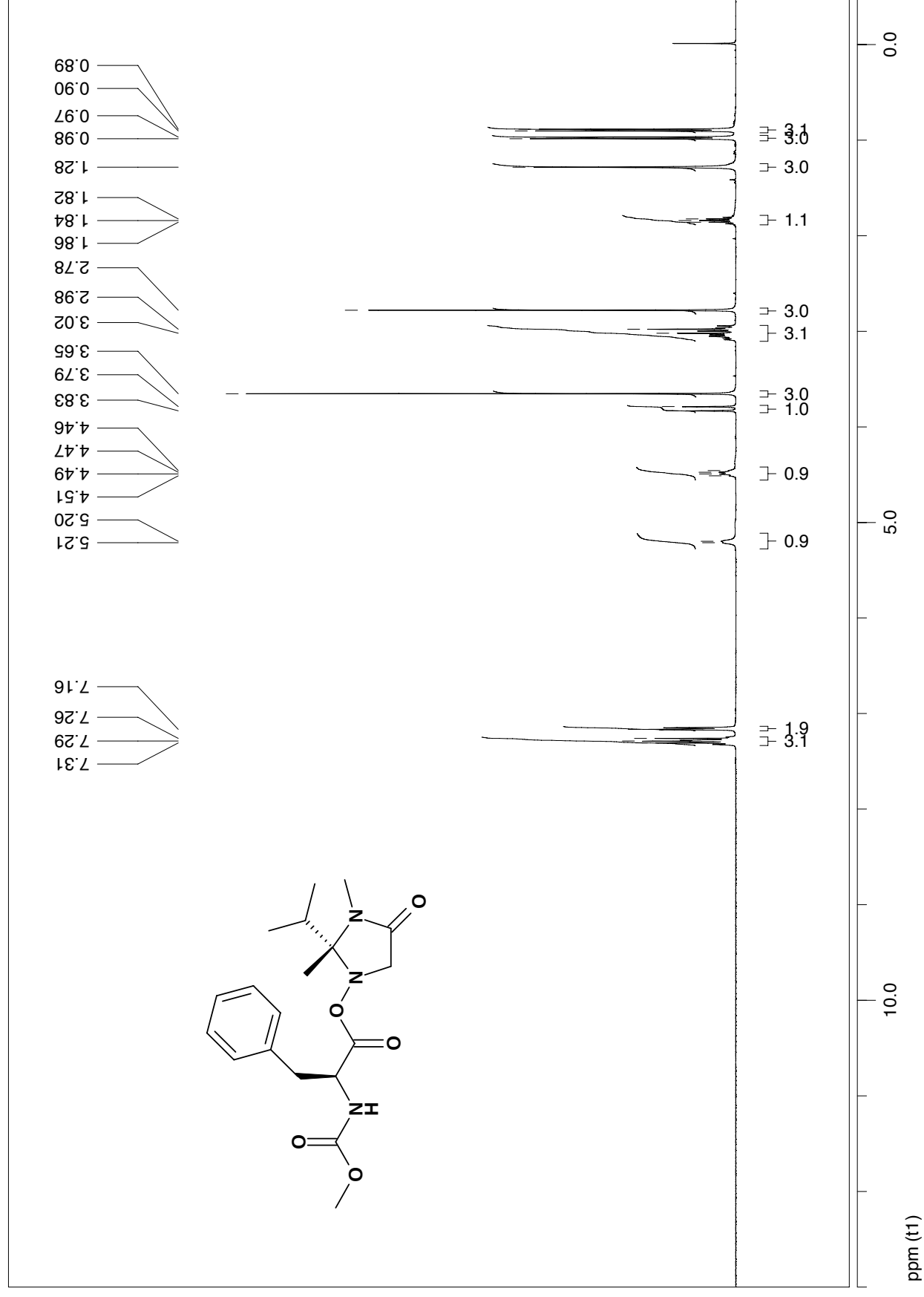


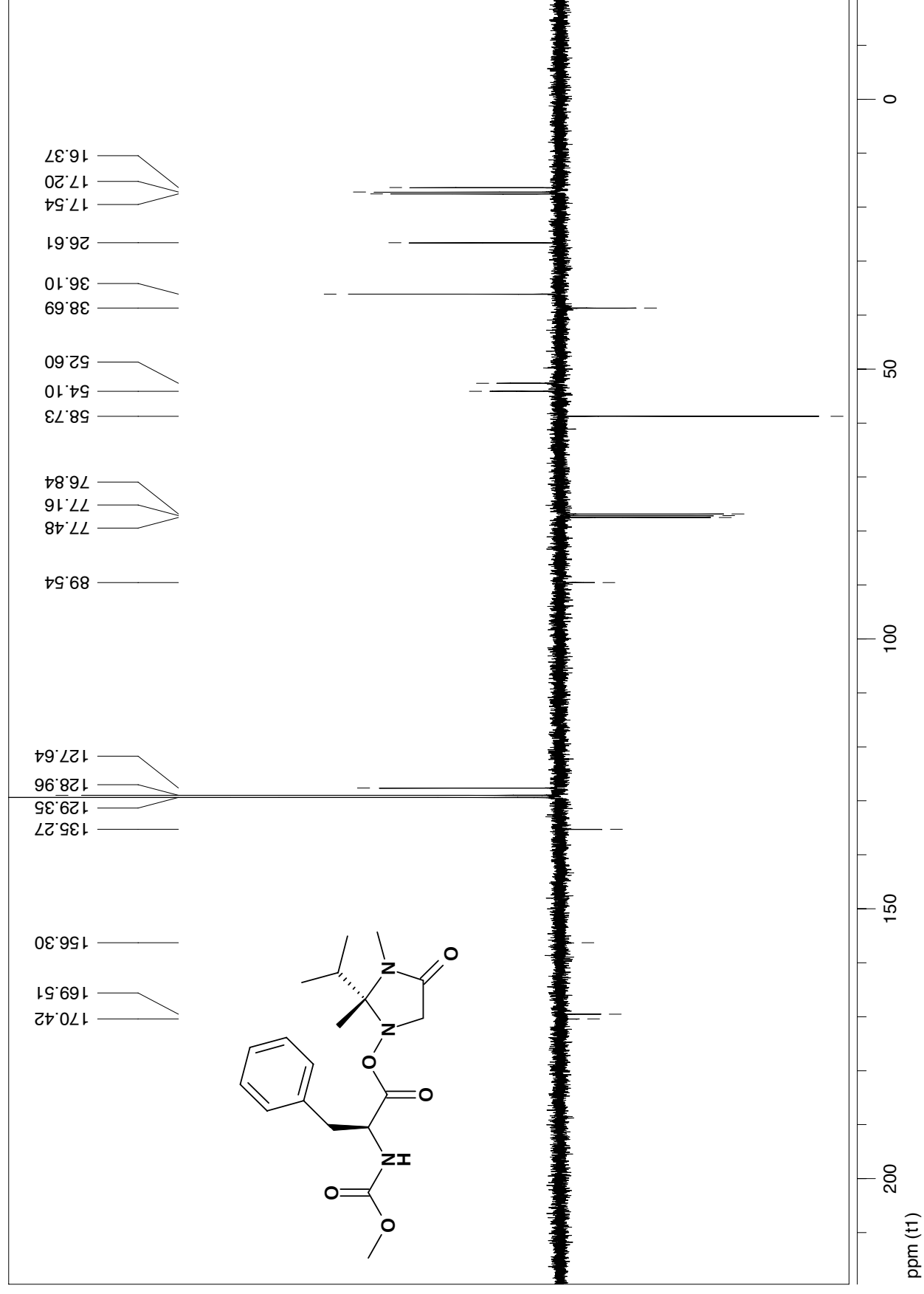


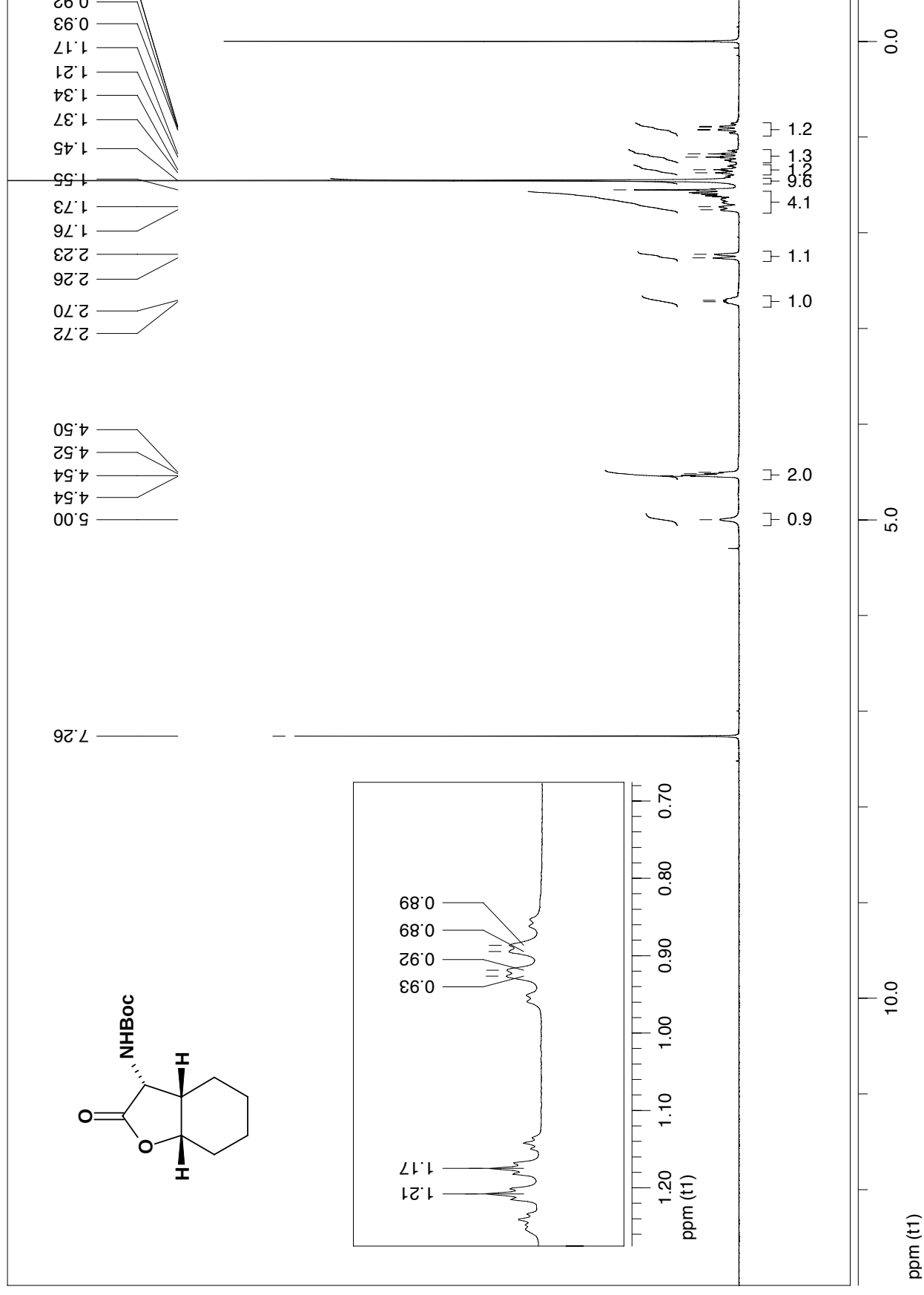


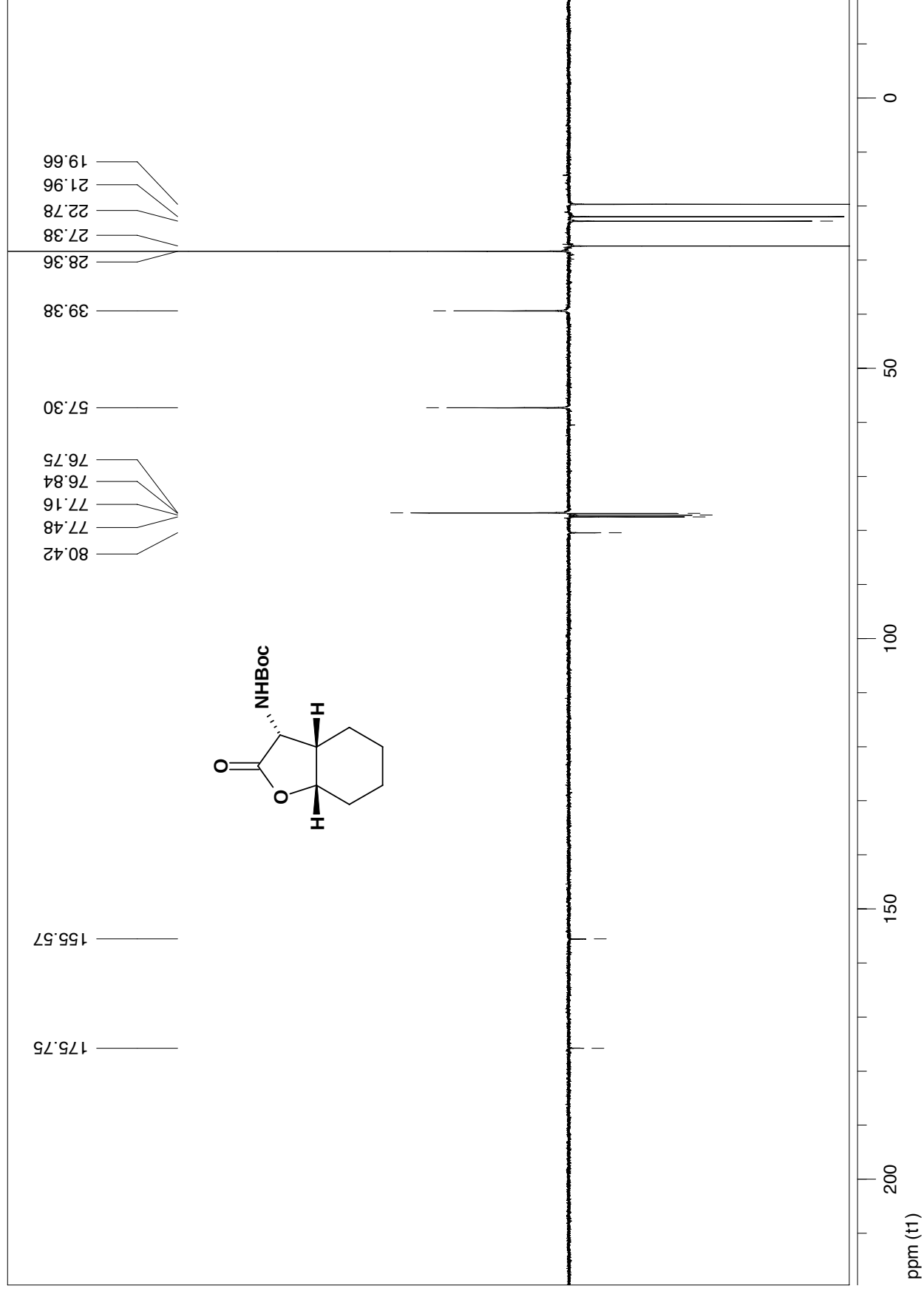














Reaction

mth_hdrogena 06/04/2009 13:08:32 User: CEM 10mL Vessel Snap Cap

Method Parameters

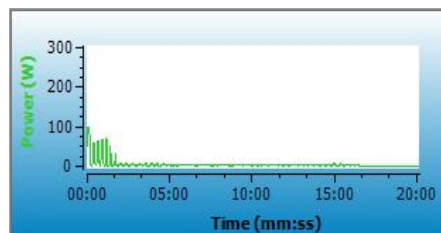
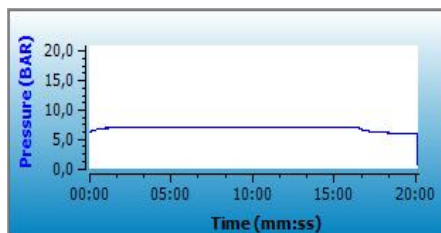
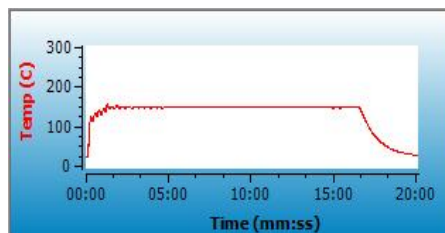
Name: mth_hdrogena

Prestirring(mm:ss): 00:15

Type: Dynamic

Stage	Temp(C)	Time(mm:ss)	Pressure(BAR)	Power(W)	PowerMAX	Stirring
1	150	15:15	11,0	100	No	Low

Graphs



Method Summary

Reaction started: 06/04/2009 13:08:43
 Temperature setpoint reached: 06/04/2009 13:09:59
 Reaction cooling started: 06/04/2009 13:25:15

Reaction Completed Successfully!

Maximum temperature: 157 C
 Maximum pressure: 7 BAR
 Time to obtain setpoint: 01:16 mm:ss
 Time at setpoint: 15:16 mm:ss

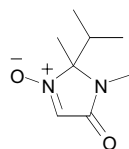


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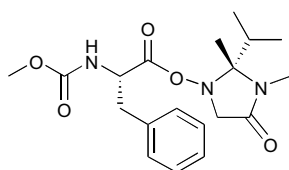
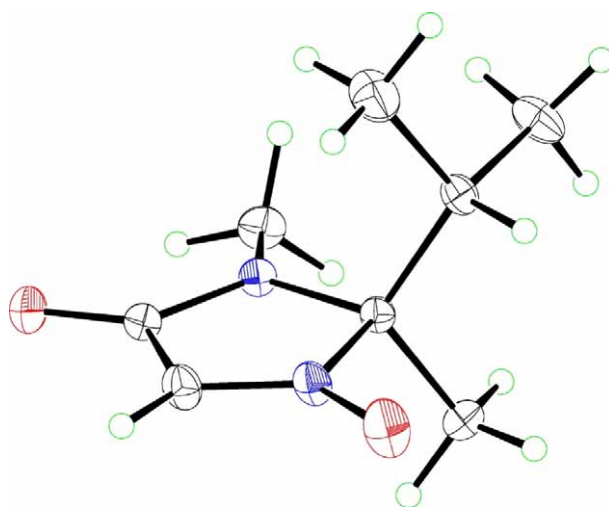
ORTEP representations of **1** and **10a**

The ellipsoids are plotted at the 25% probability level.



MiPNO 1

(racemic sample)



10a

(enantiopure sample)

