

Synthesis of C-4 and C-7 Triazole Analogs of Zanamivir as Multivalent Sialic Acid

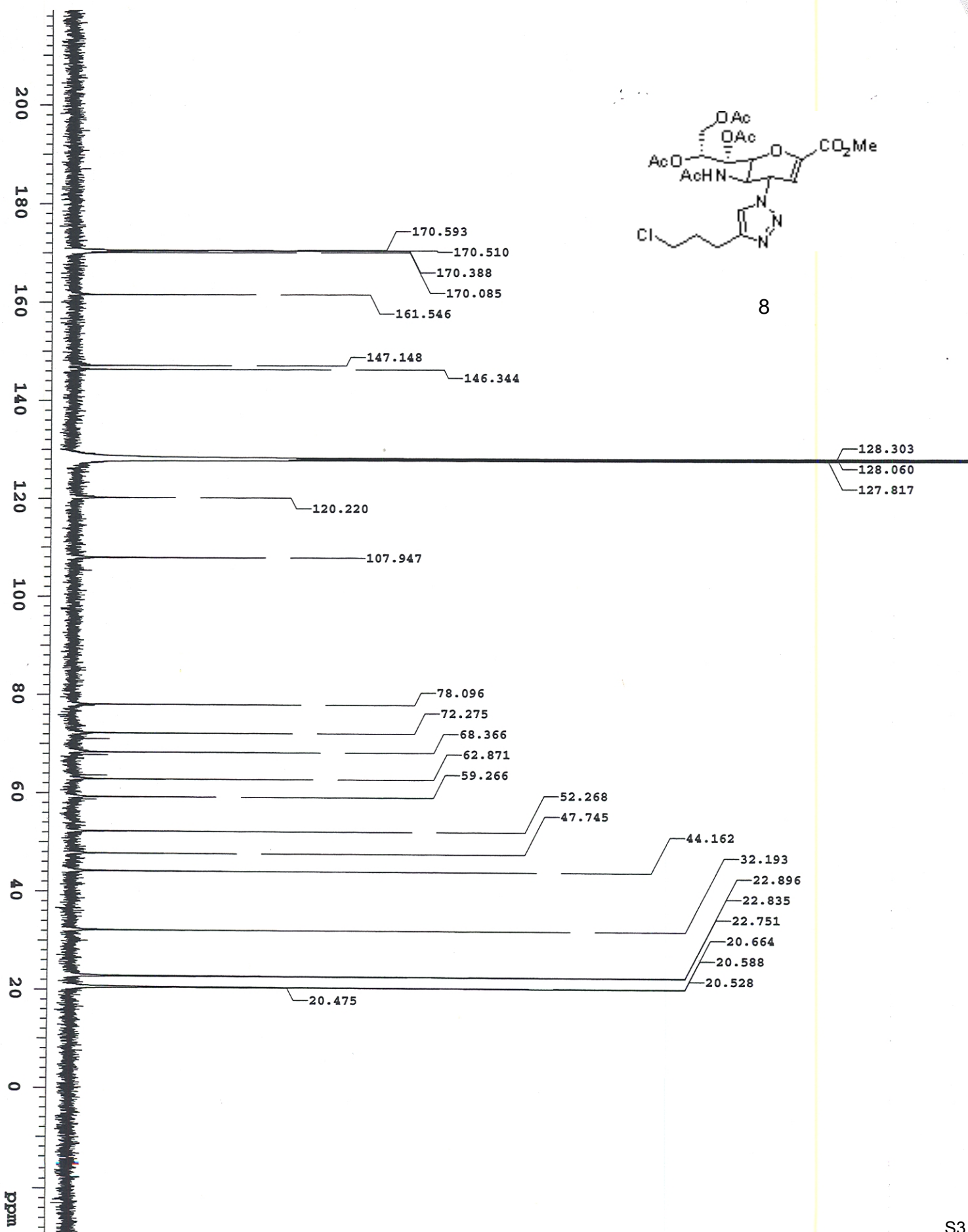
Containing Scaffolds

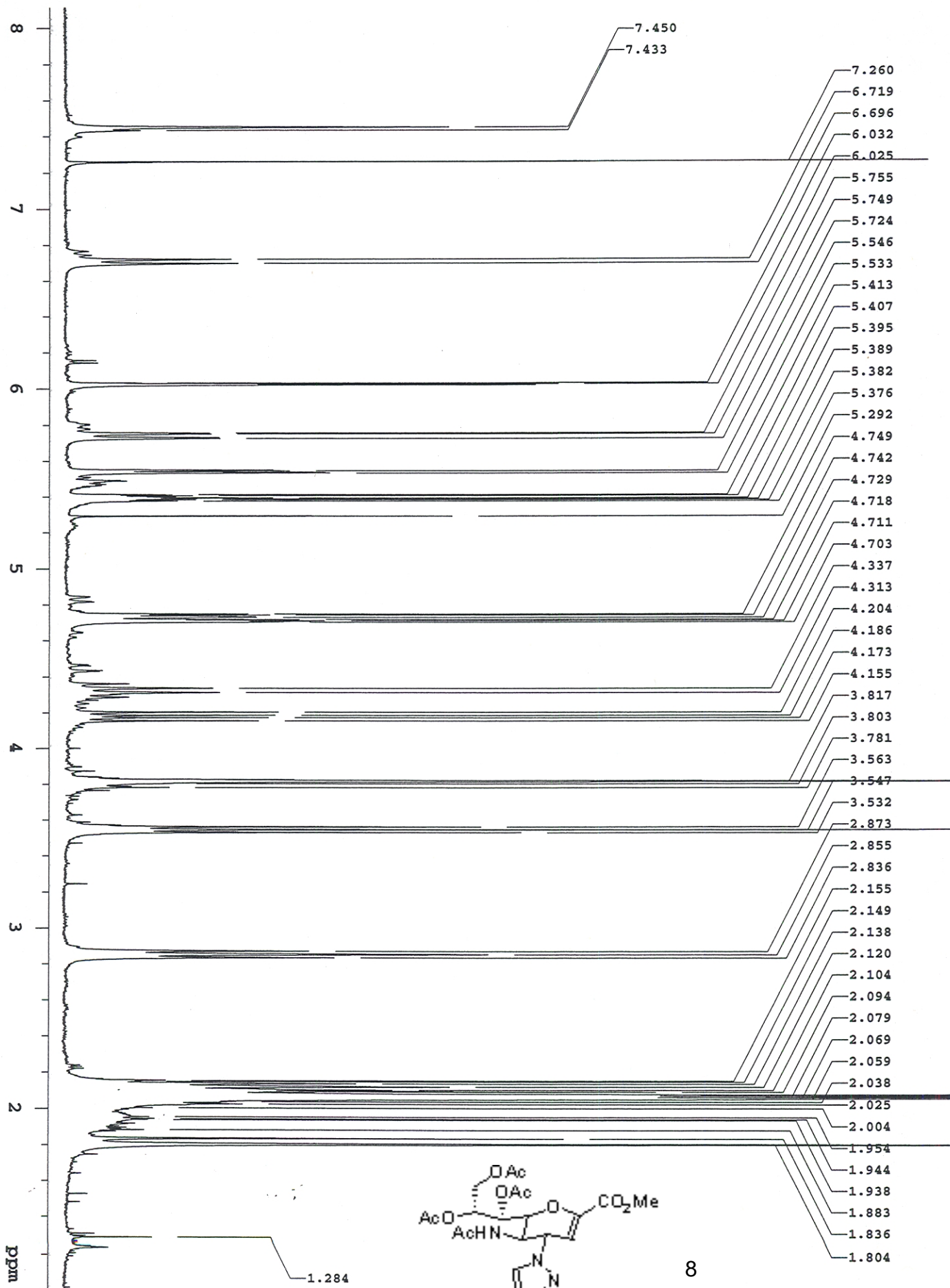
Yan Lu and Jacquelyn Gervay-Hague*

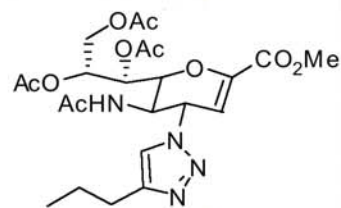
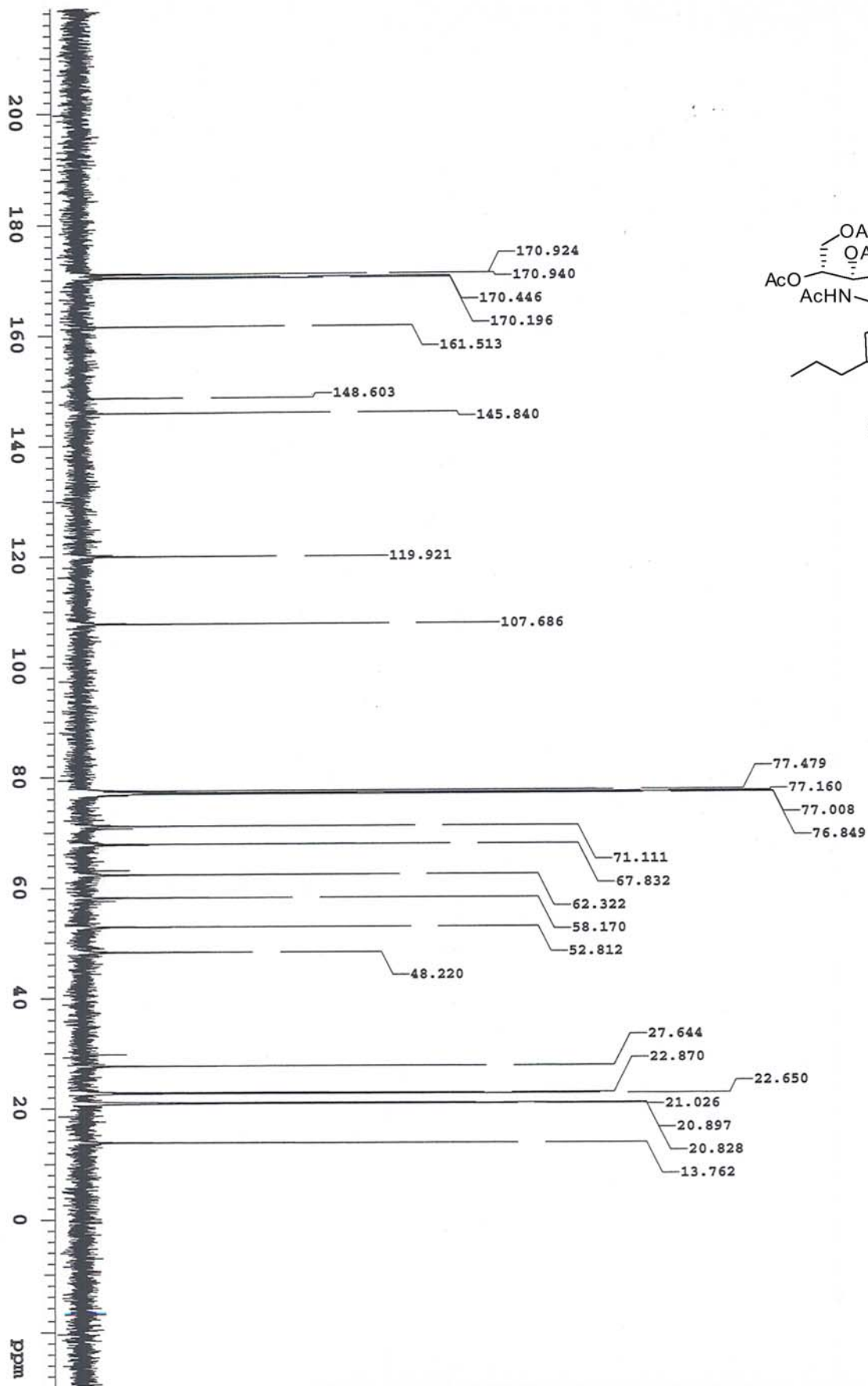
Supporting Information

¹ H NMR spectrum for Compound 8	S3
¹³ C NMR spectrum for Compound 8	S4
¹ H NMR spectrum for Compound 9	S5
¹³ C NMR spectrum for Compound 9	S6
¹ H NMR spectrum for Compound 10	S7
¹³ C NMR spectrum for Compound 10	S8
¹ H NMR spectrum for Compound 11	S9
¹³ C NMR spectrum for Compound 11	S10
¹ H NMR spectrum for Compound 12	S11
¹³ C NMR spectrum for Compound 12	S12
¹ H NMR spectrum for Compound 13	S13
¹³ C NMR spectrum for Compound 13	S14
¹ H NMR spectrum for Compound 14	S15
¹³ C NMR spectrum for Compound 14	S16
¹ H NMR spectrum for Compound 15	S17
¹³ C NMR spectrum for Compound 15	S18
¹ H NMR spectrum for Compound 16	S19
¹³ C NMR spectrum for Compound 16	S20
¹ H NMR spectrum for Compound 17	S21
¹³ C NMR spectrum for Compound 17	S22
¹ H NMR spectrum for Compound 18	S23
¹³ C NMR spectrum for Compound 18	S24
¹ H NMR spectrum for Compound 19	S25
¹³ C NMR spectrum for Compound 19	S26
¹ H NMR spectrum for Compound 20	S27
¹³ C NMR spectrum for Compound 20	S28
¹ H NMR spectrum for Compound 21	S29
¹³ C NMR spectrum for Compound 21	S30
¹ H NMR spectrum for Compound 22	S31

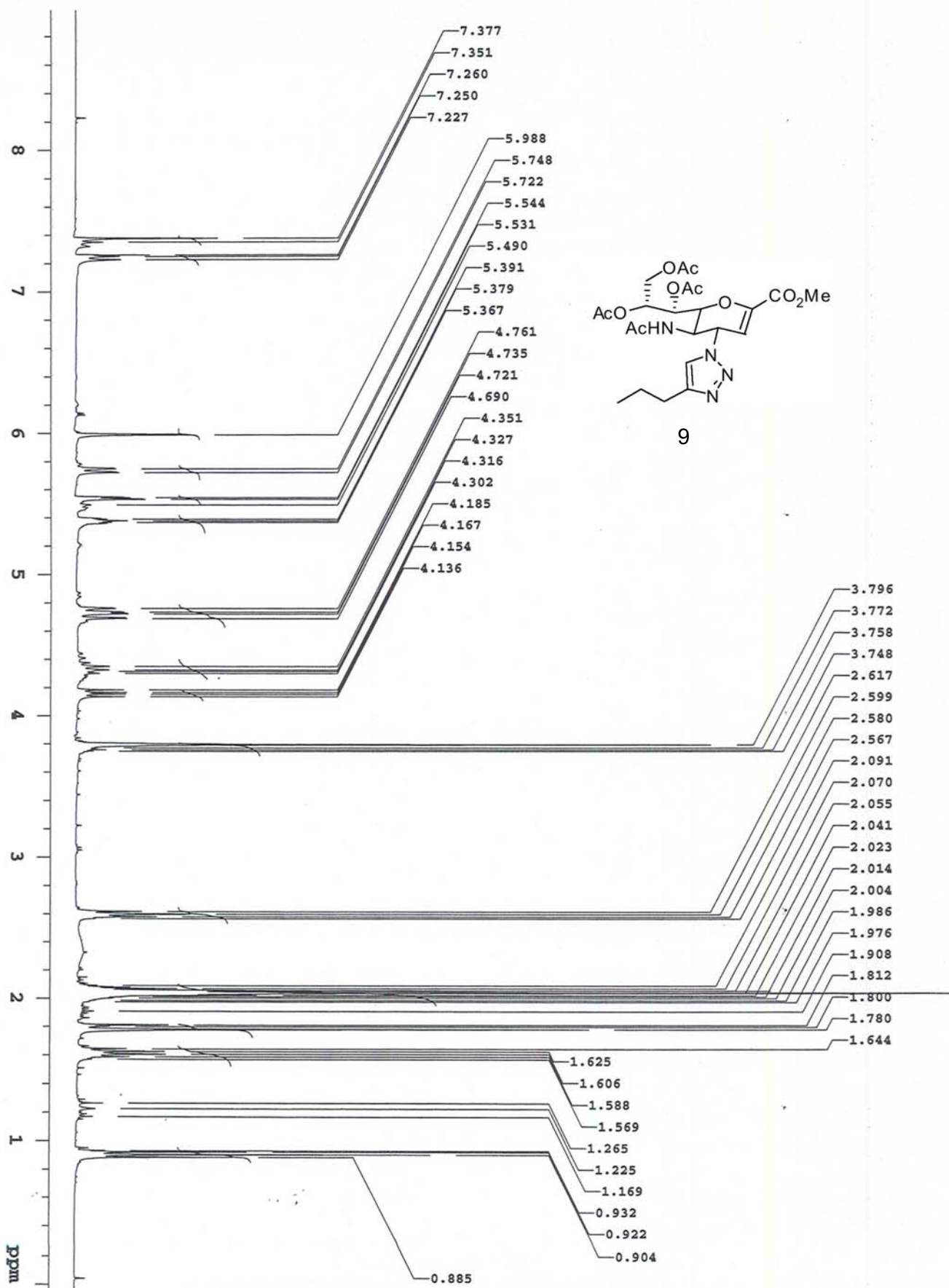
¹³ C NMR spectrum for Compound 22	S32
¹ H NMR spectrum for Compound 23	S33
¹³ C NMR spectrum for Compound 23	S34
¹ H NMR spectrum for Compound 24	S35
¹³ C NMR spectrum for Compound 24	S36
¹ H NMR spectrum for Compound 25	S37
¹³ C NMR spectrum for Compound 25	S38
¹ H NMR spectrum for 2-[2-(2-Azido-ethoxy)-ethoxy]-ethylamine	S39
¹³ C NMR spectrum for Compound 2-[2-(2-Azido-ethoxy)-ethoxy]-ethylamine	S40
¹ H NMR spectrum for Compound 30	S41
¹³ C NMR spectrum for Compound 30	S42
¹ H NMR spectrum for Compound 31	S43
¹³ C NMR spectrum for Compound 31	S44
¹ H NMR spectrum for Compound 32	S45
¹³ C NMR spectrum for Compound 32	S46
¹ H NMR spectrum for Compound 33	S47
¹³ C NMR spectrum for Compound 33	S48
¹ H NMR spectrum for Compound 34	S49
¹³ C NMR spectrum for Compound 34	S50
¹ H NMR spectrum for Compound 35	S51
¹³ C NMR spectrum for Compound 35	S52
¹ H NMR spectrum for Compound 36	S53
¹³ C NMR spectrum for Compound 36	S54
¹ H NMR spectrum for Compound 37	S55
¹³ C NMR spectrum for Compound 37	S56
¹ H NMR spectrum for Compound 38	S57
¹³ C NMR spectrum for Compound 38	S58

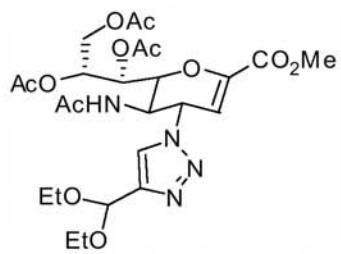
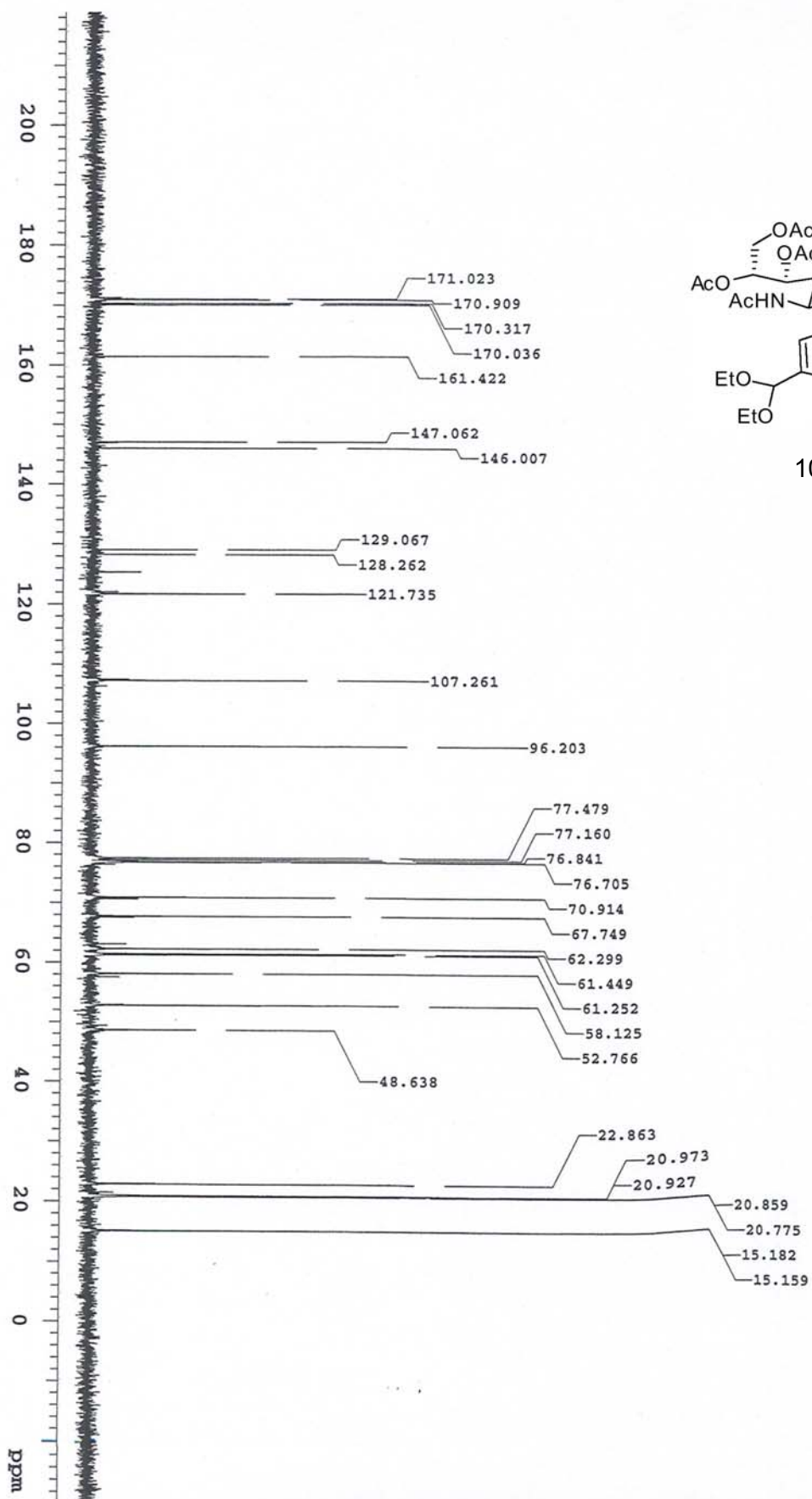




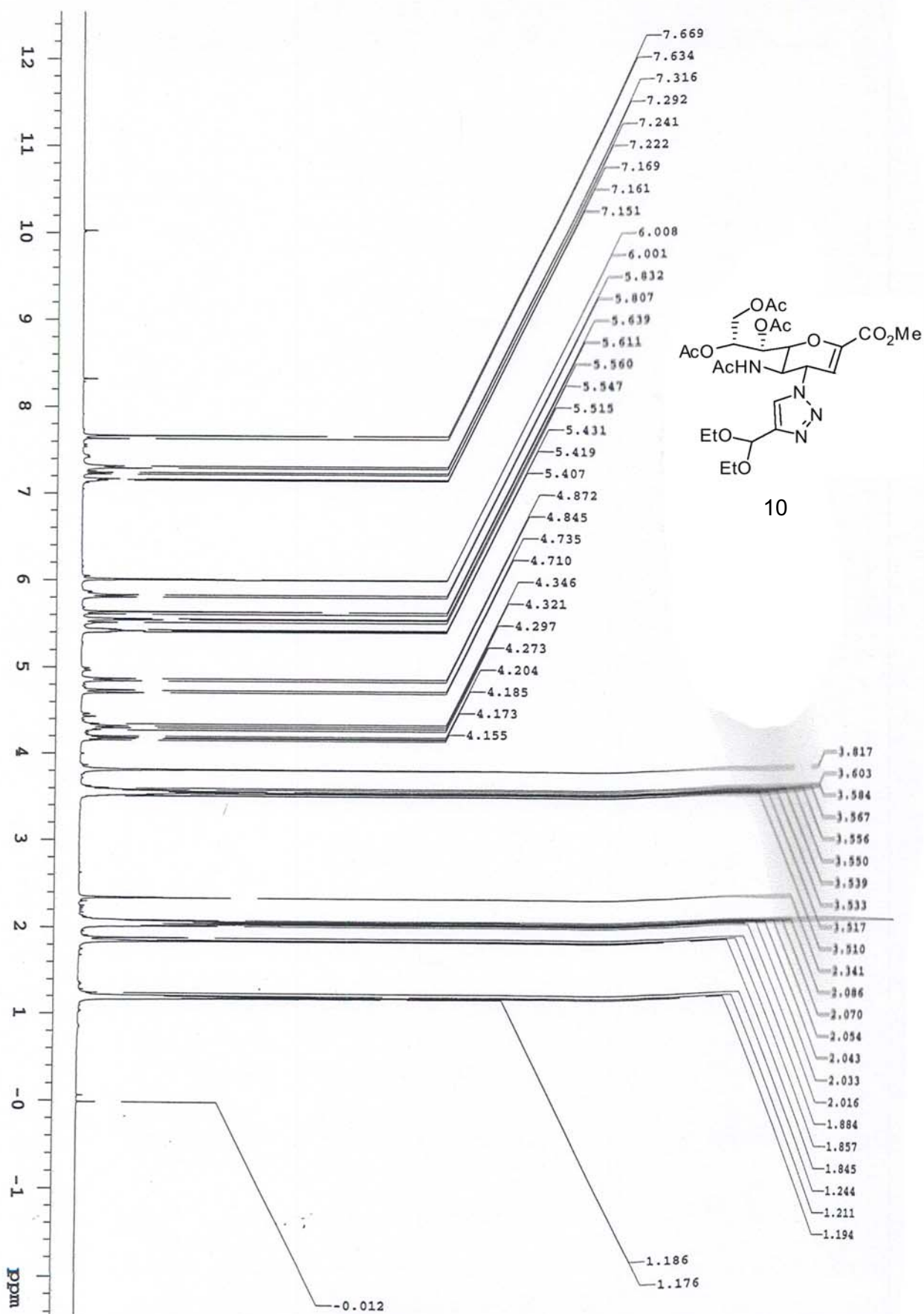


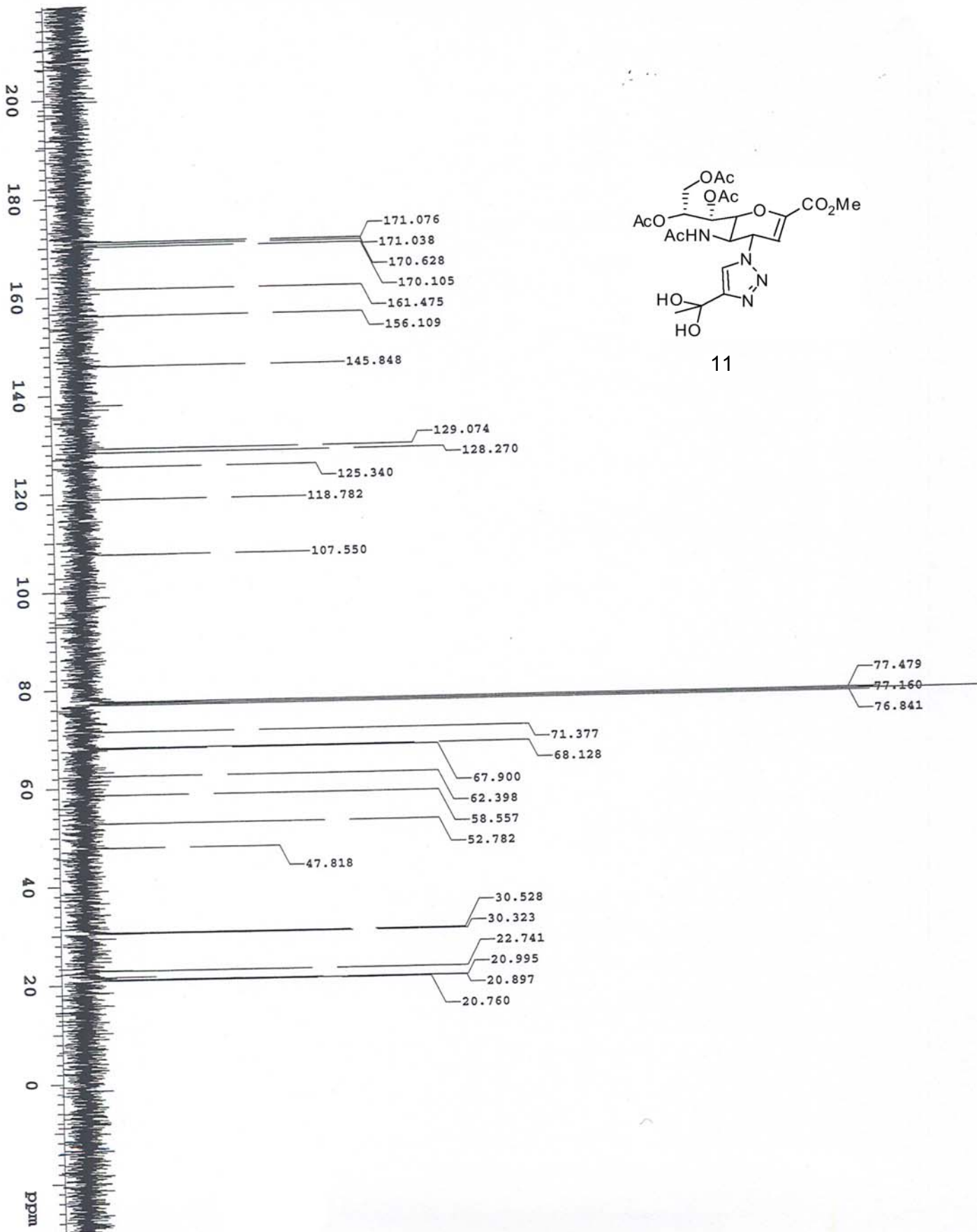
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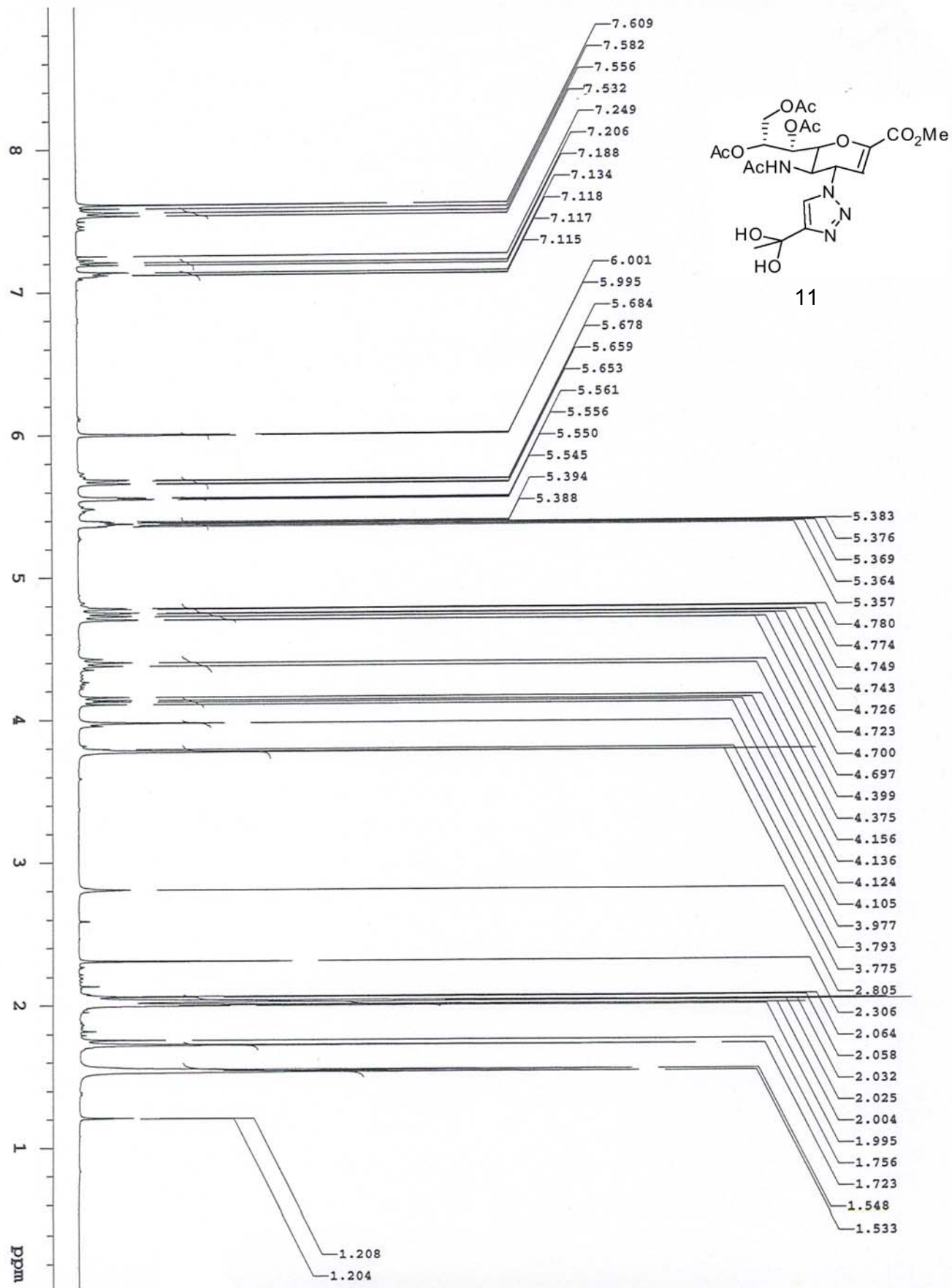


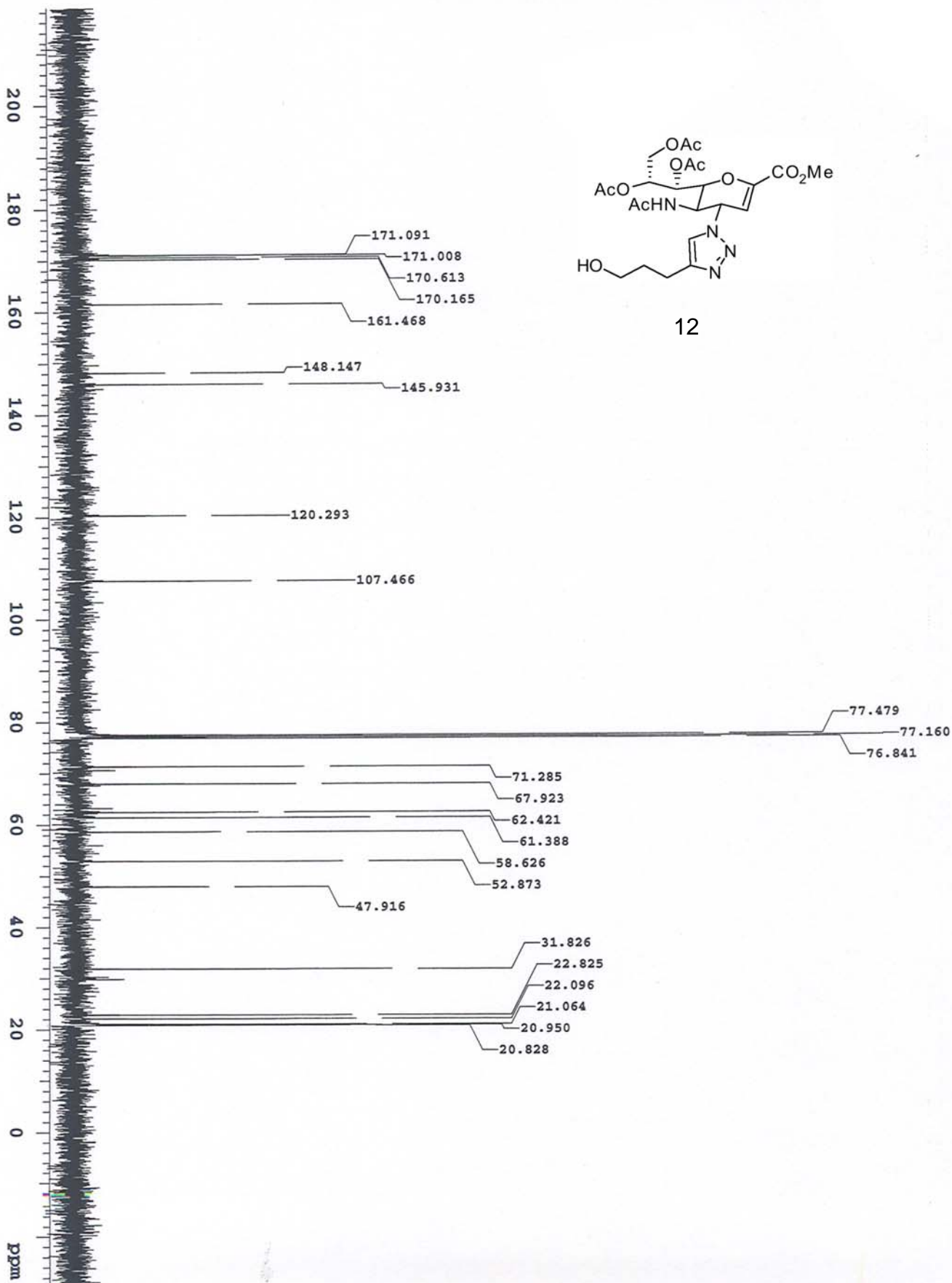


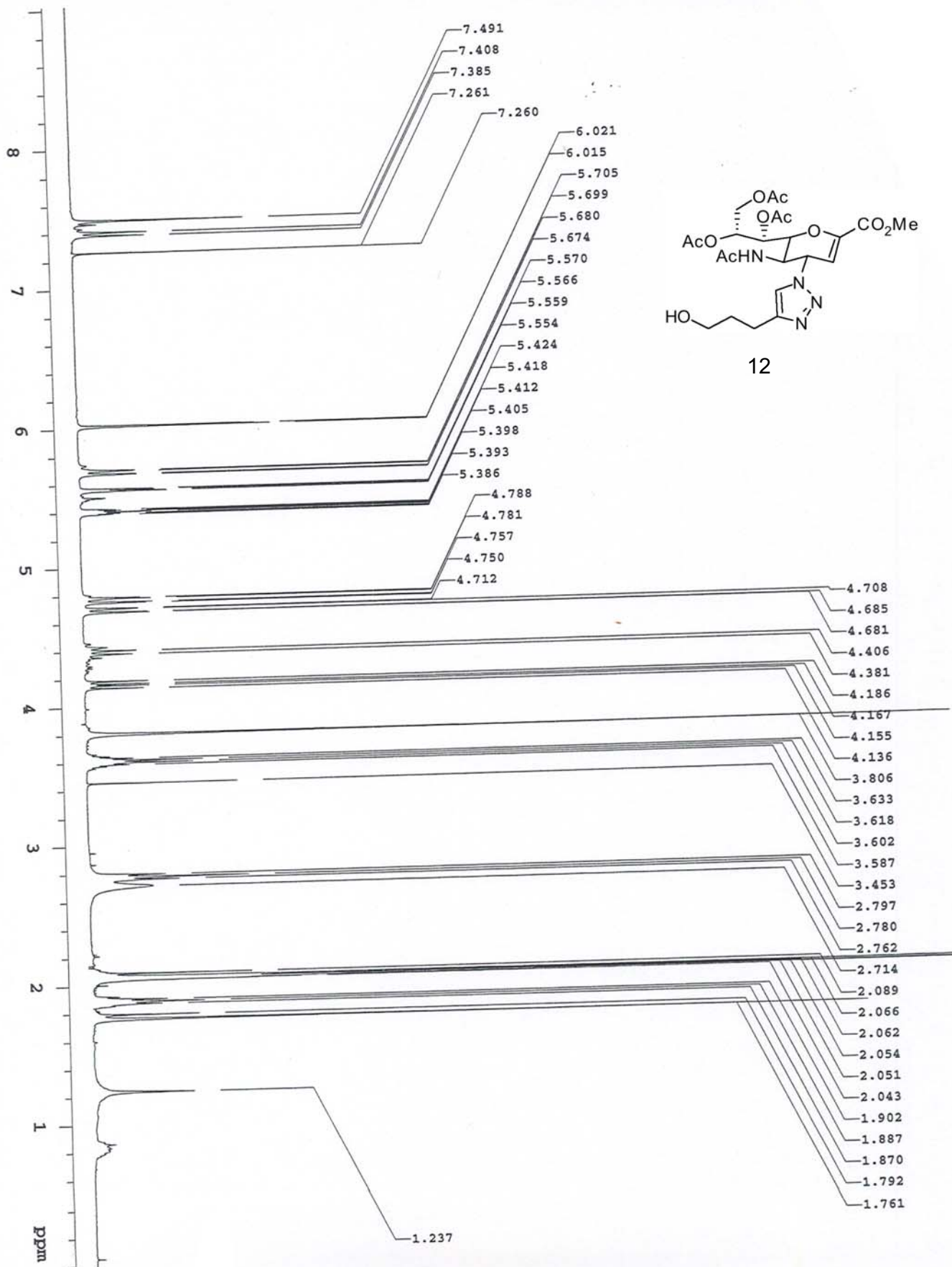
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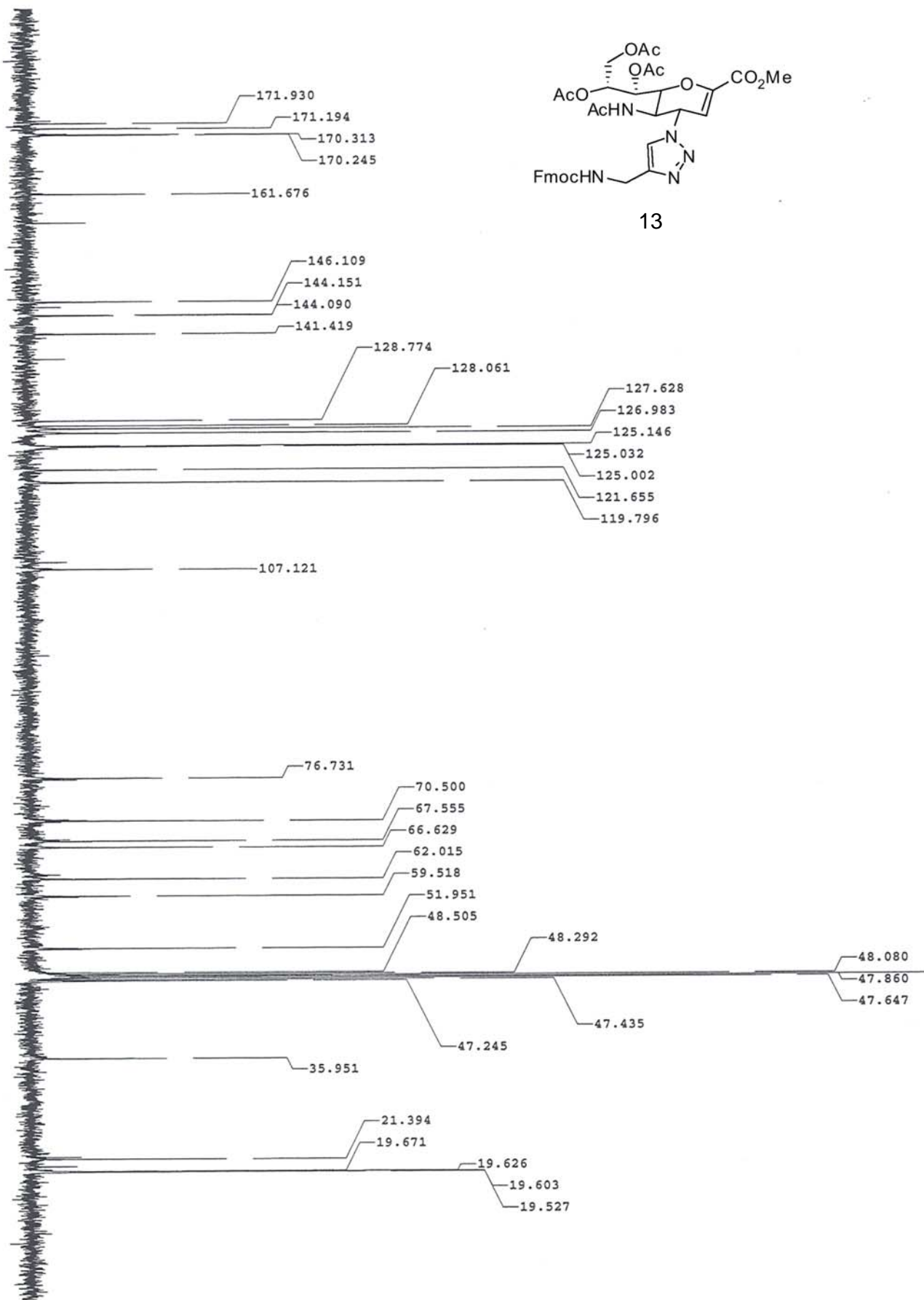












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Pulse Sequence: s2pul

Solvent: CD3OD

Ambient temperature

INOVA-400 "nmr400"

Pulse 45.7 degrees

Acq. time 3.744 sec

Width 6000.6 Hz

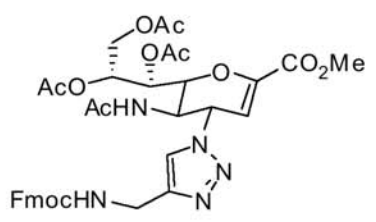
16 repetitions

OBSERVE H1, 399.7691485 MHz

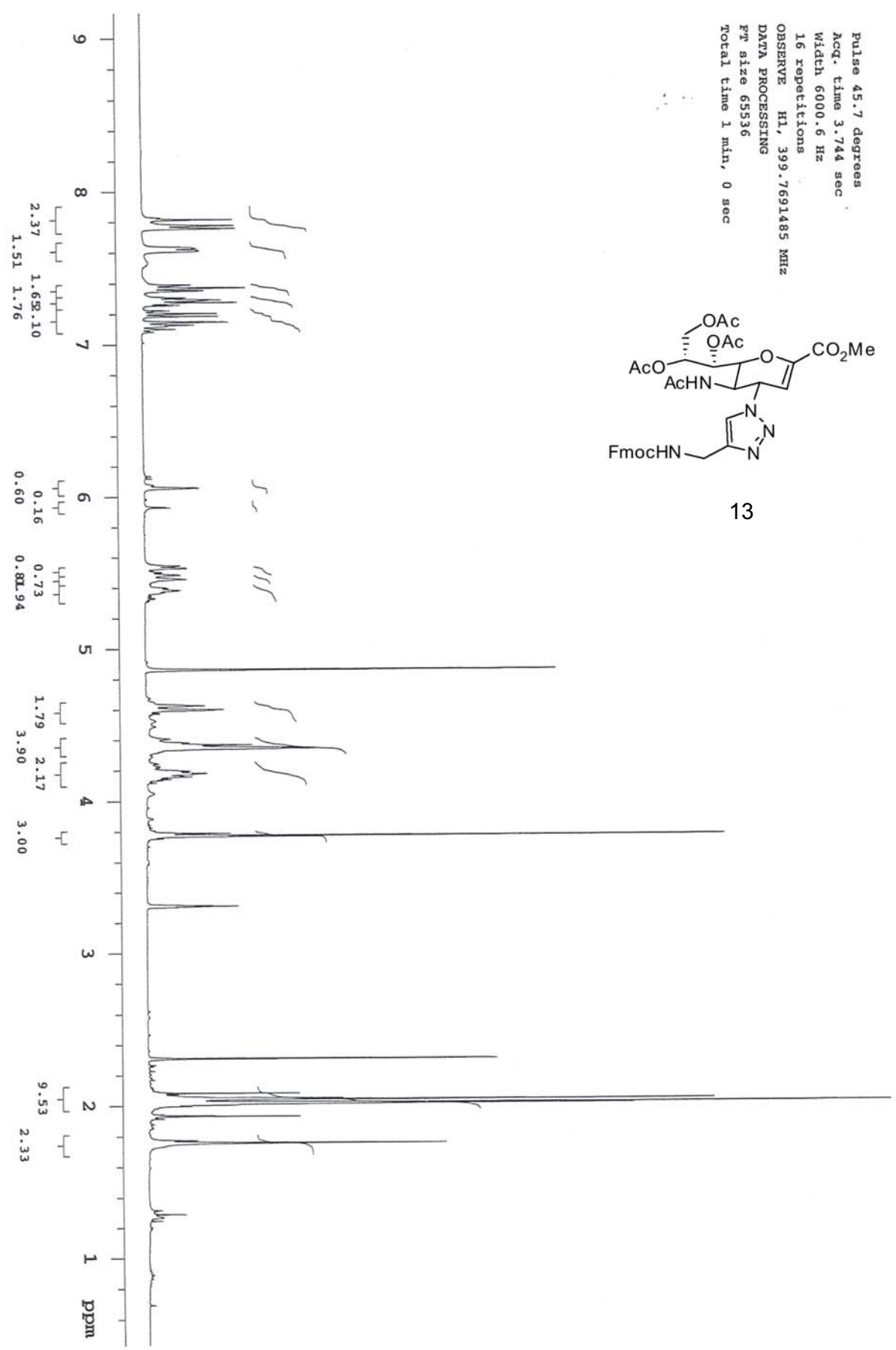
DATA PROCESSING

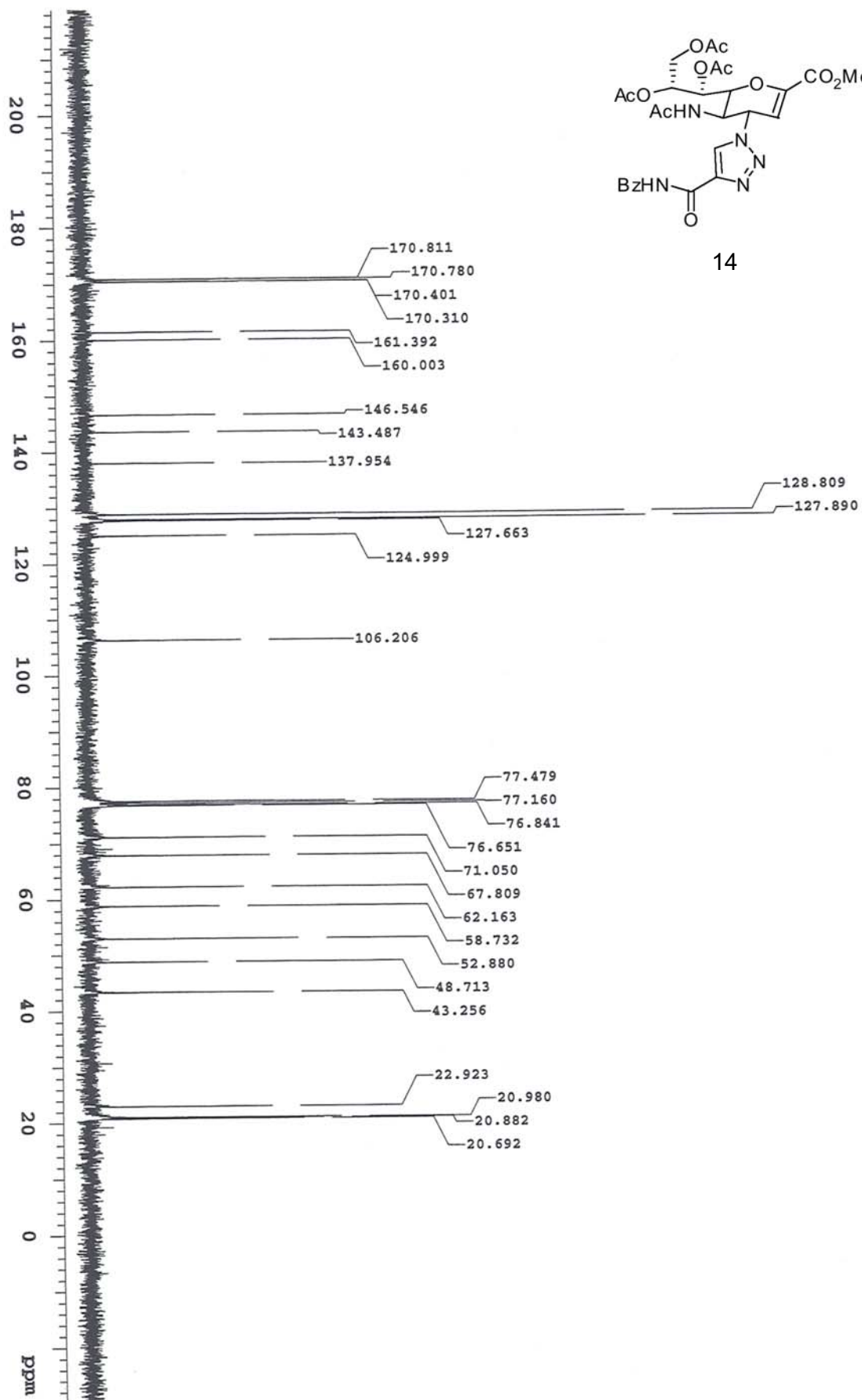
FW size 65536

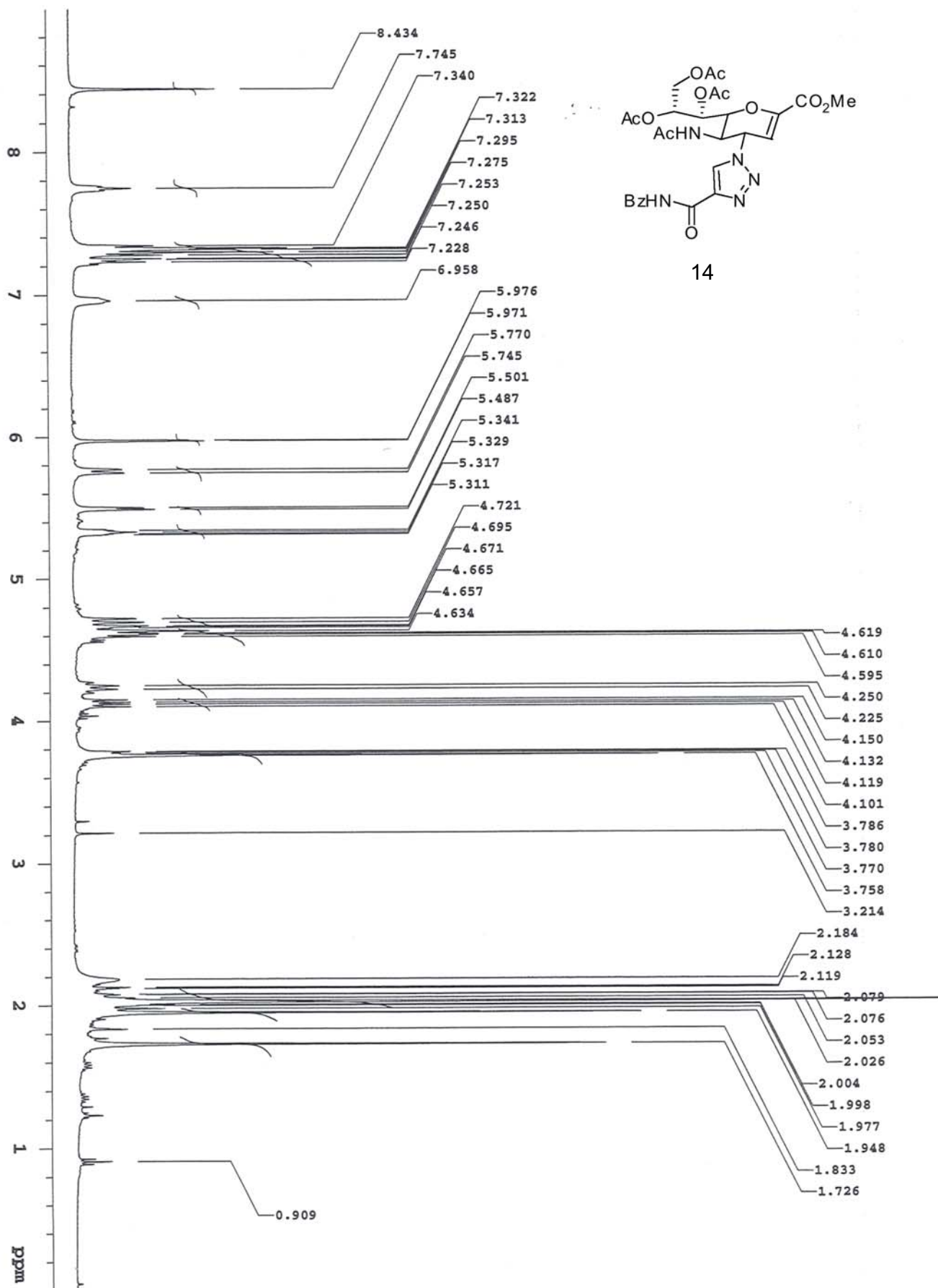
Total time 1 min, 0 sec

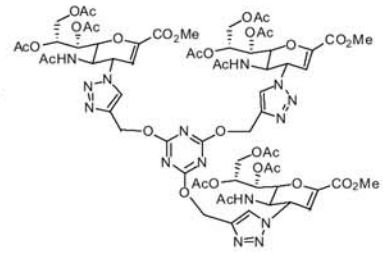


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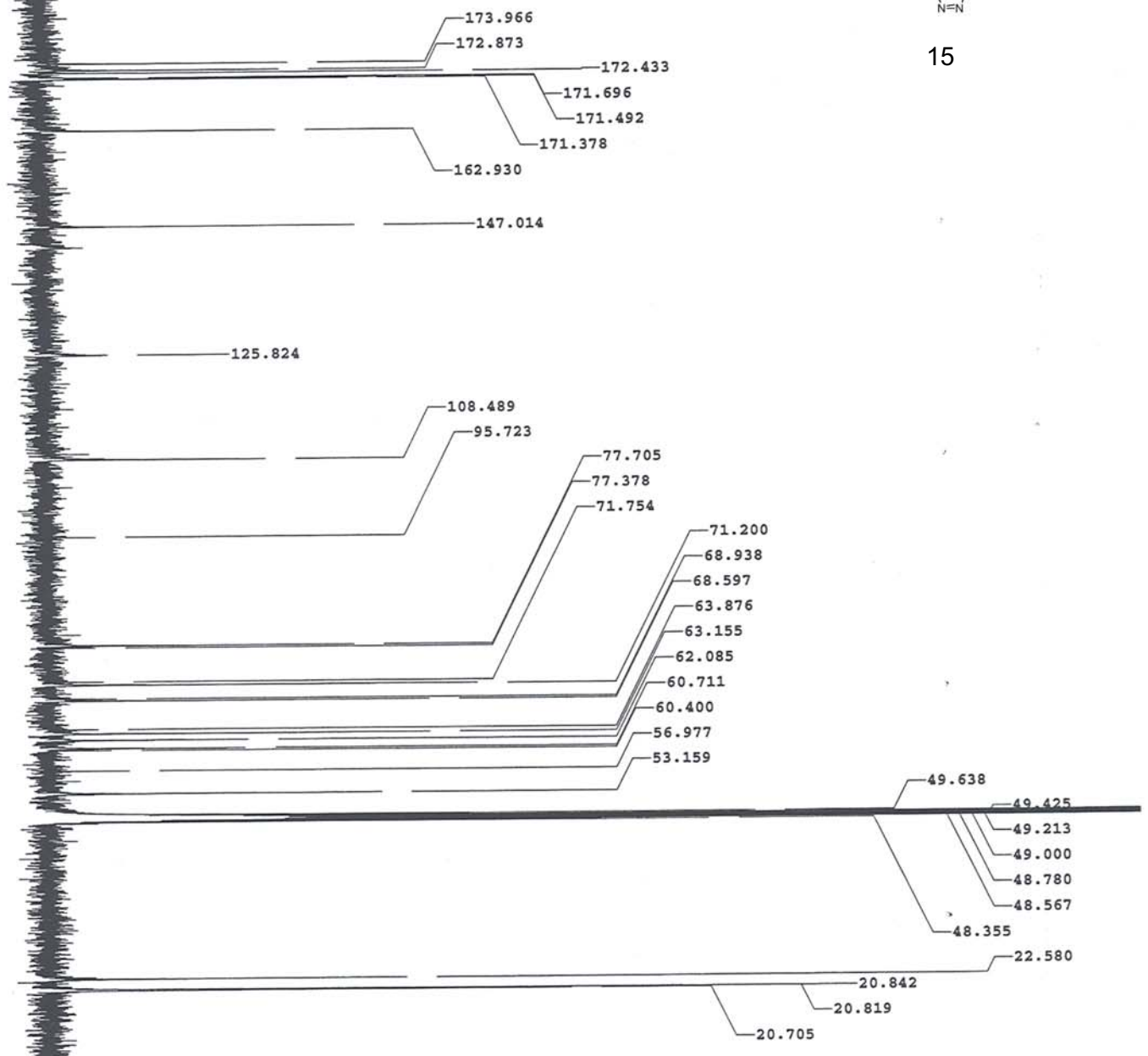


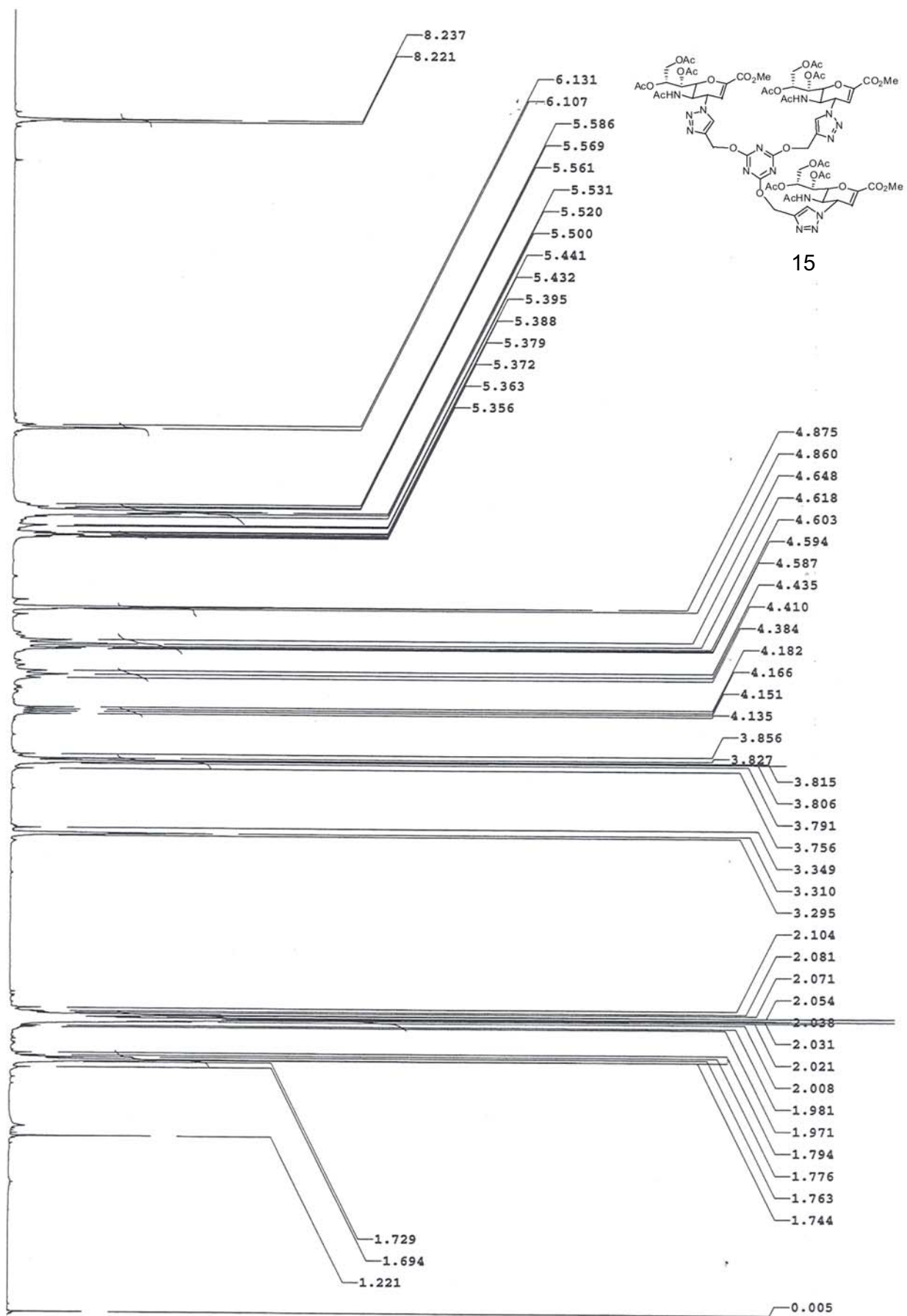


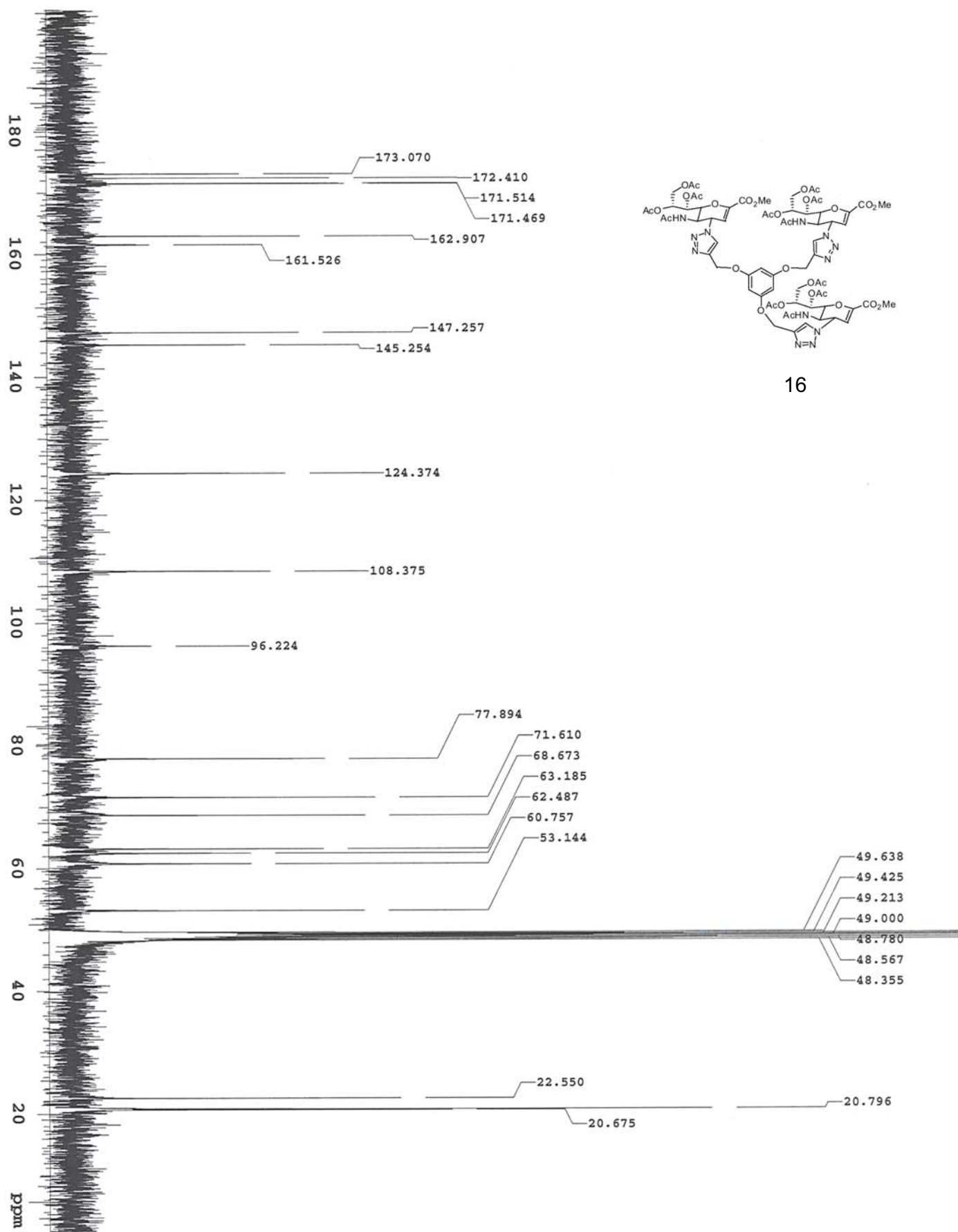


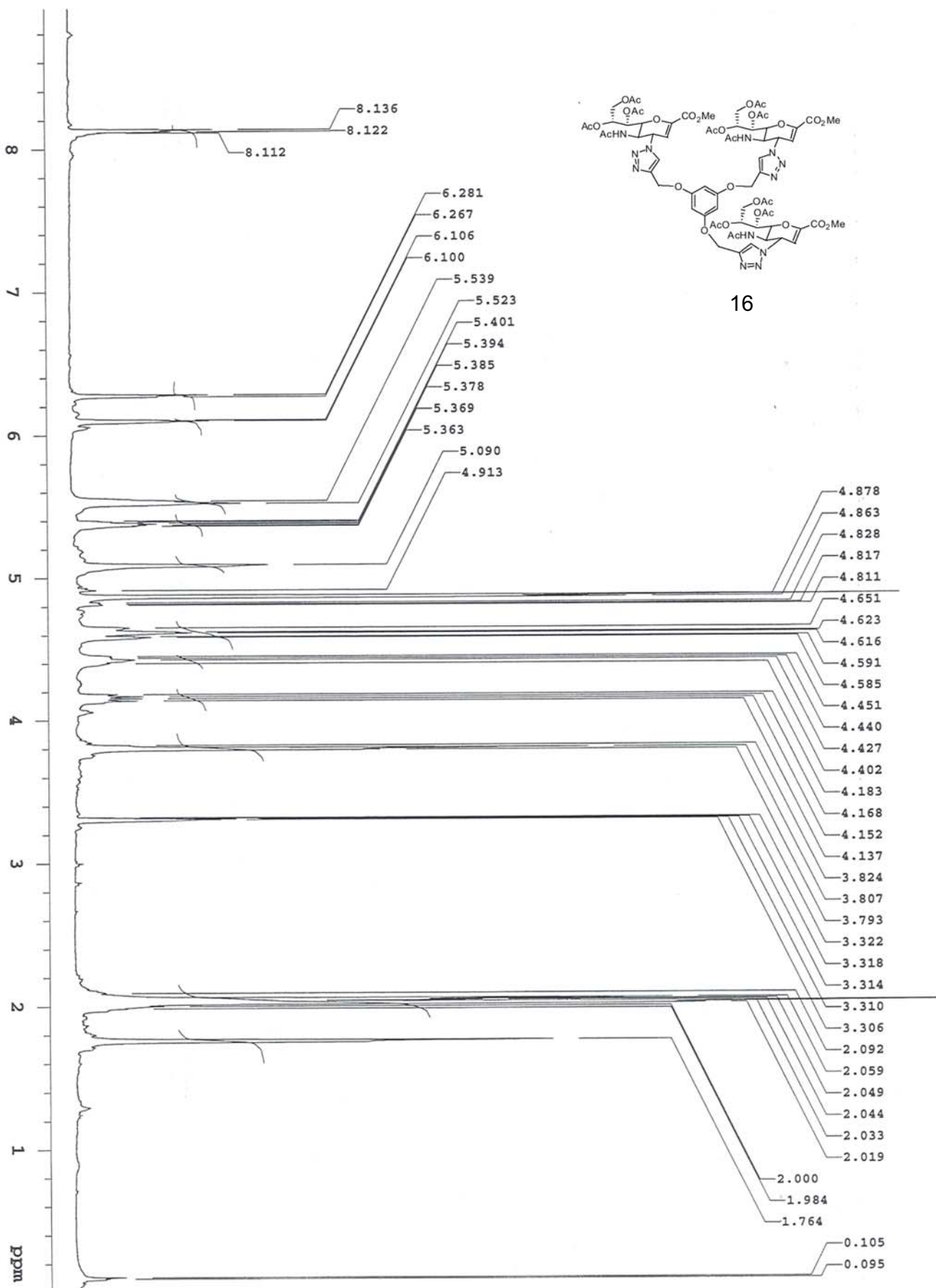


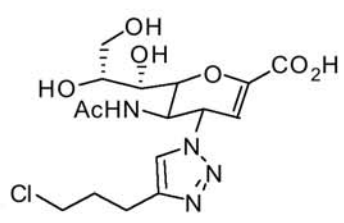
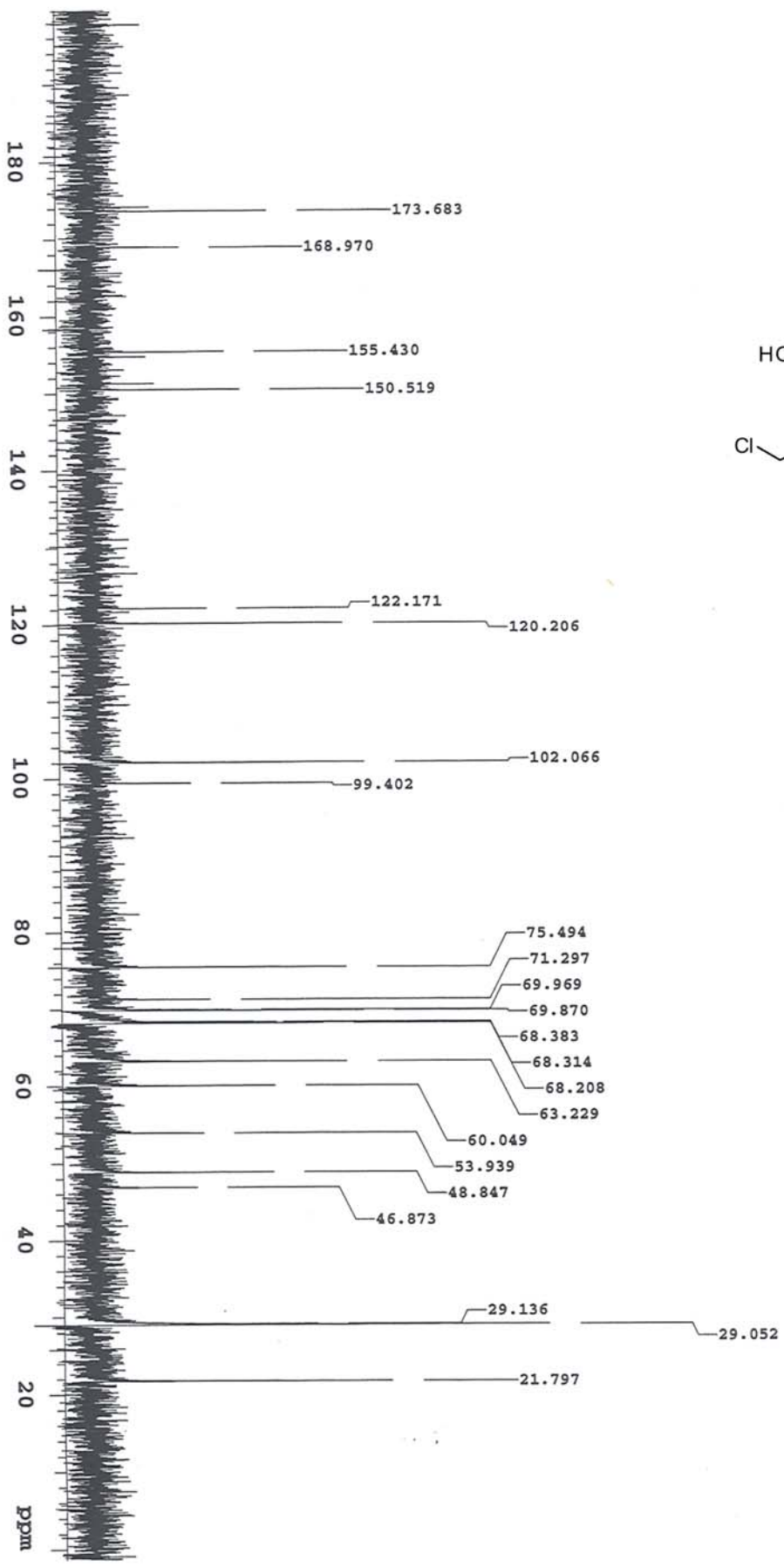
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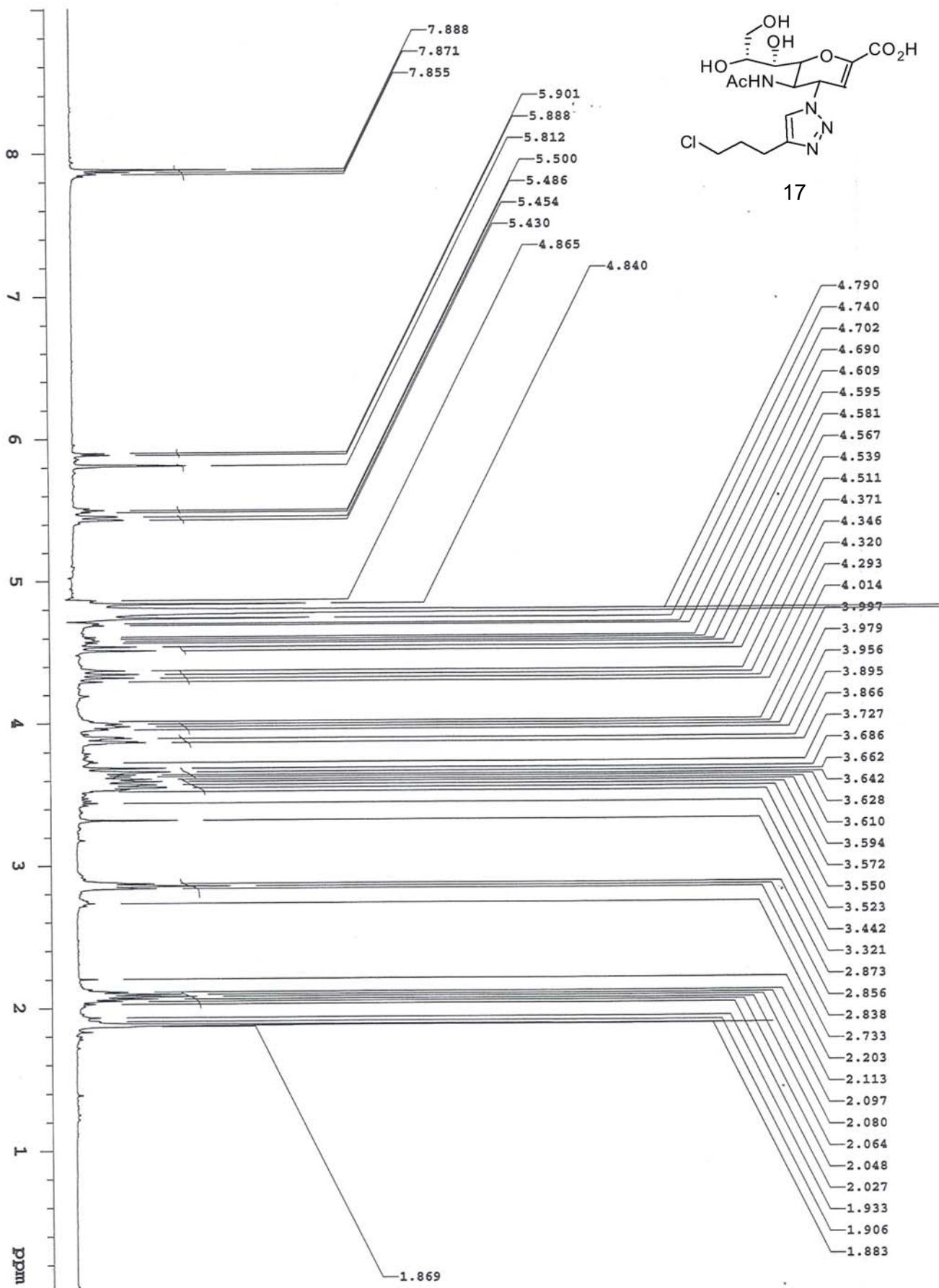


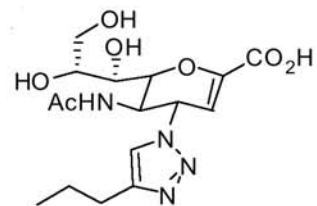
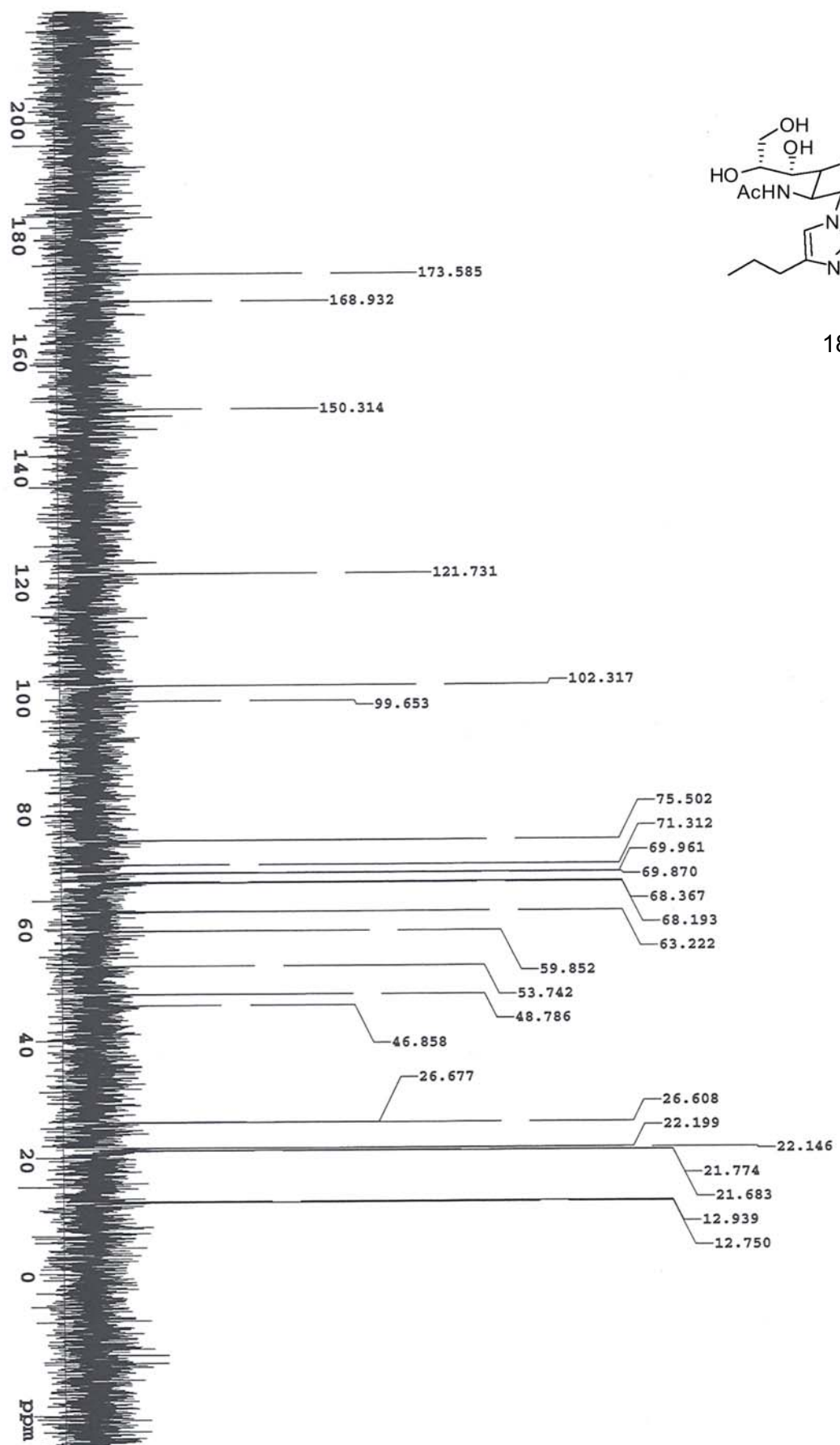




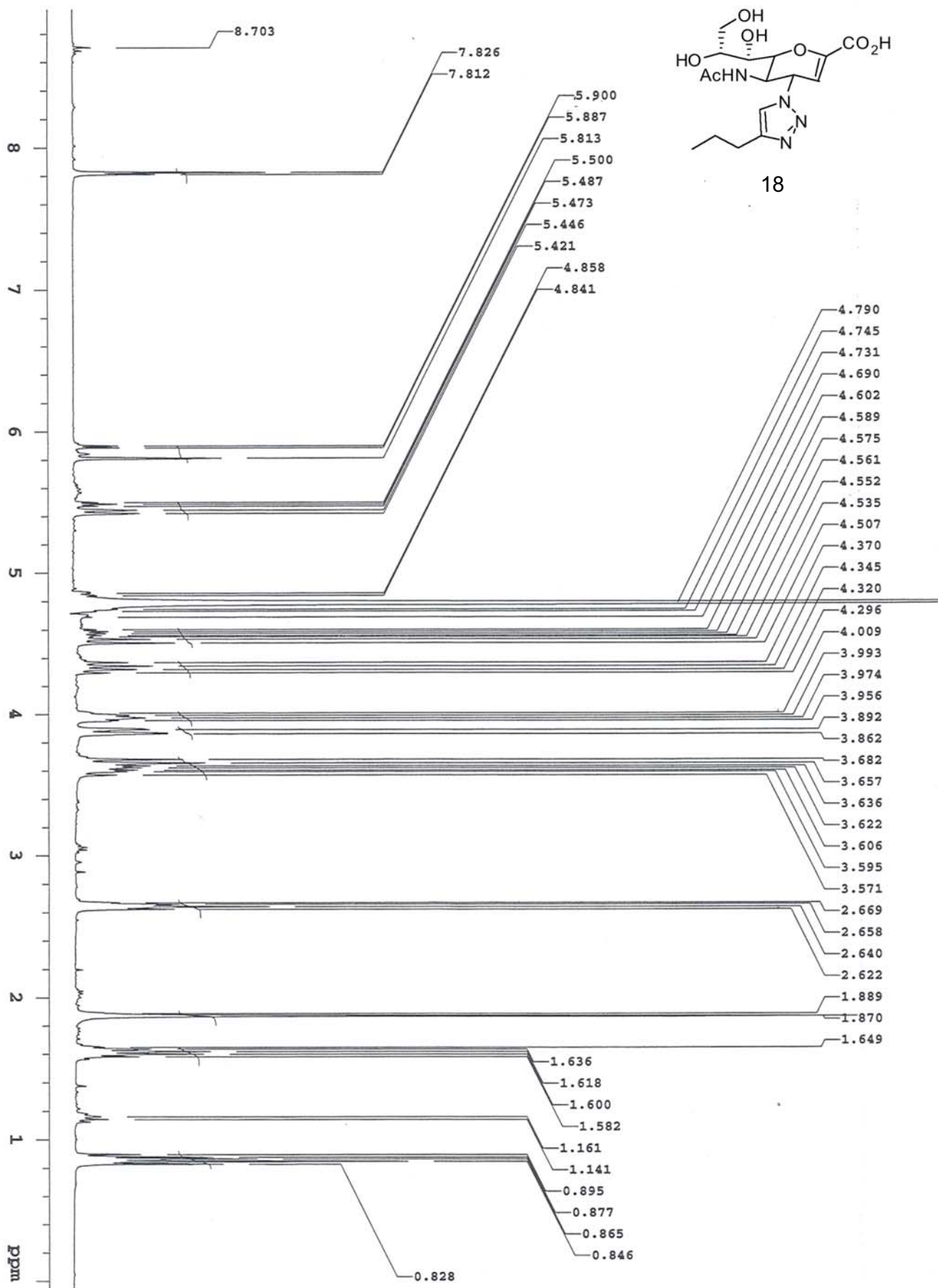


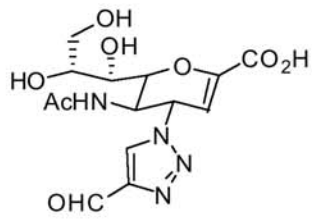
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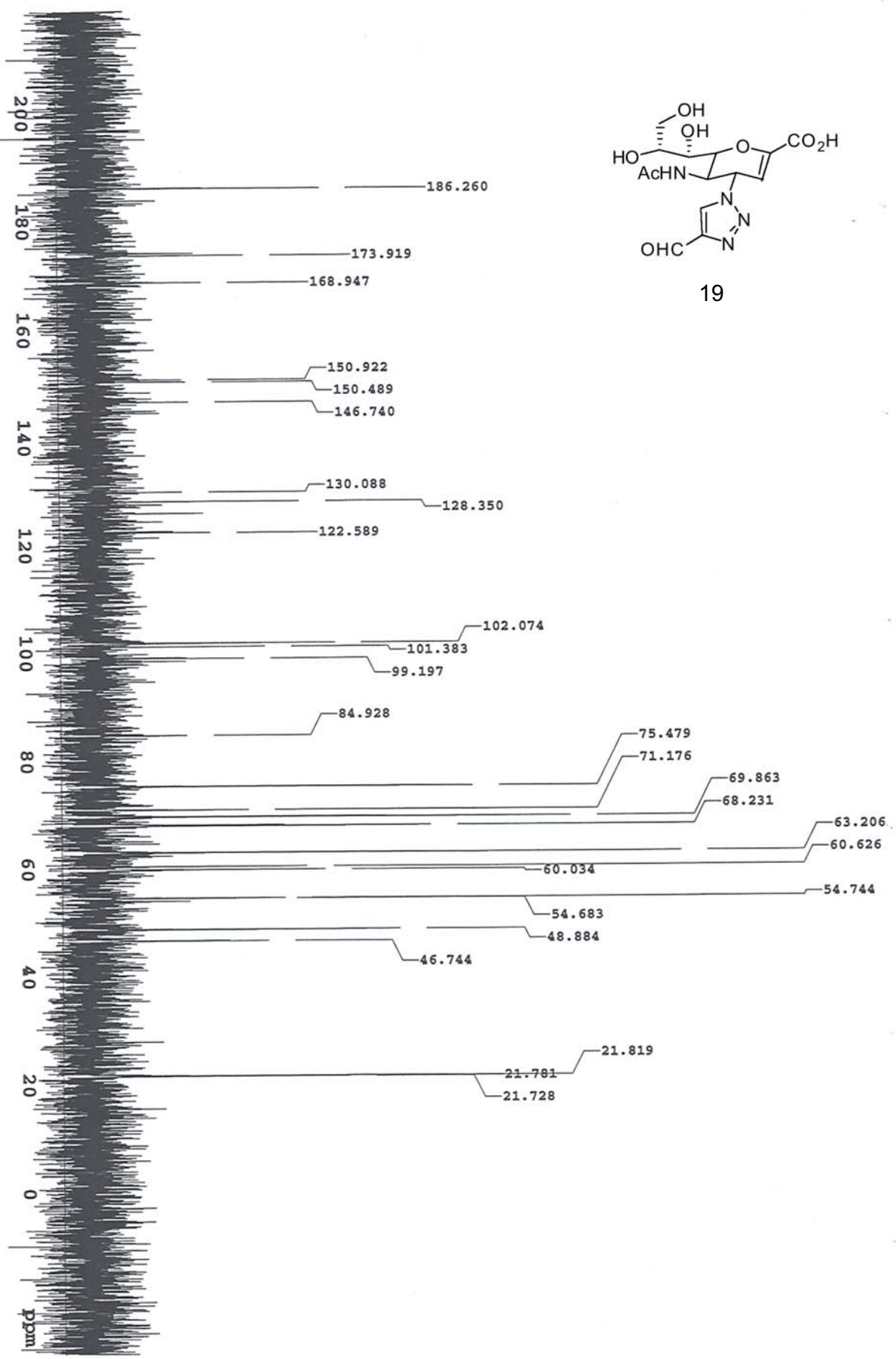


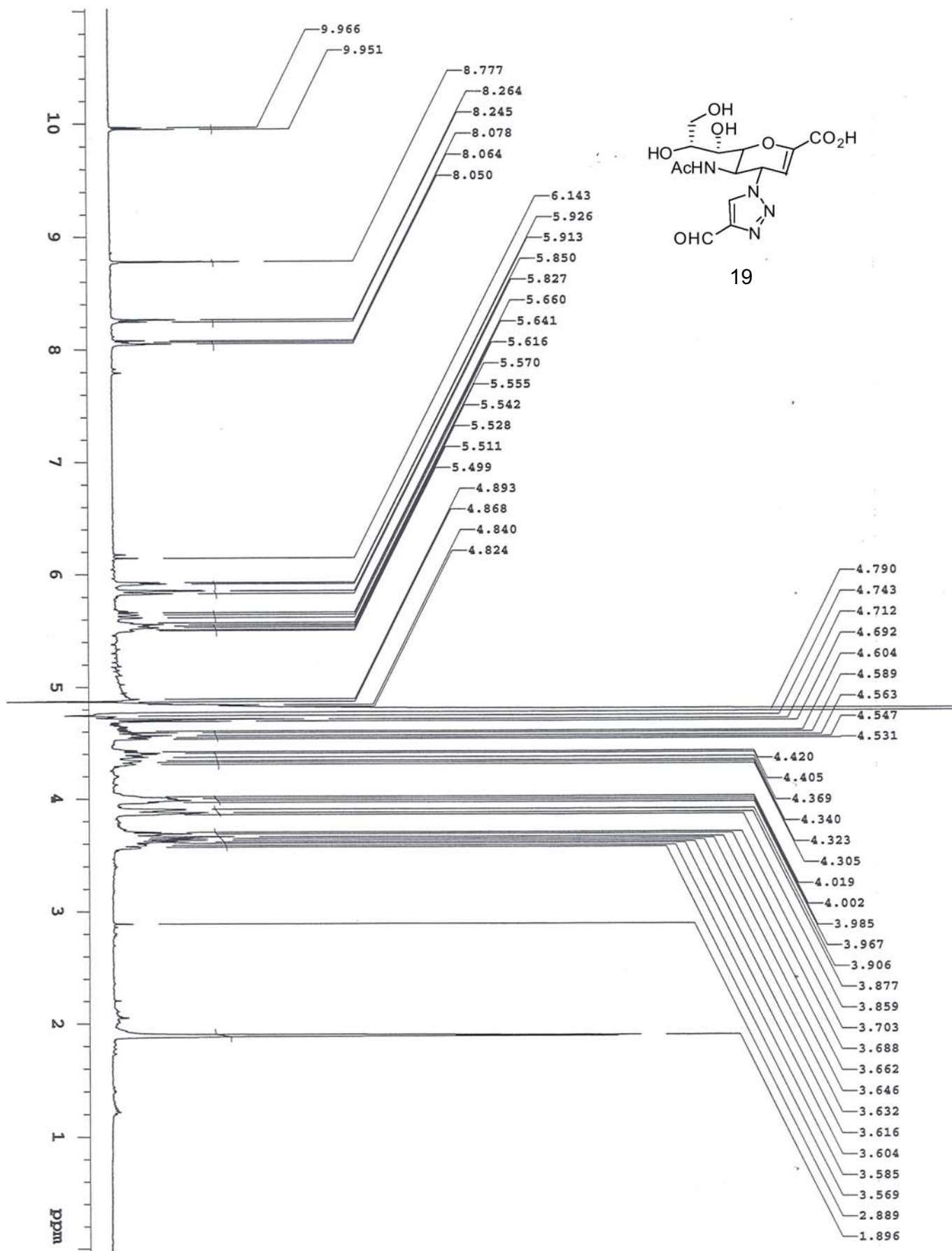
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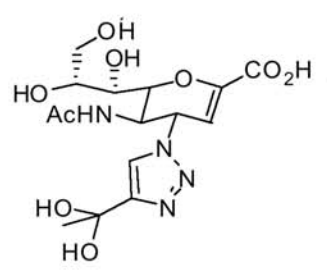
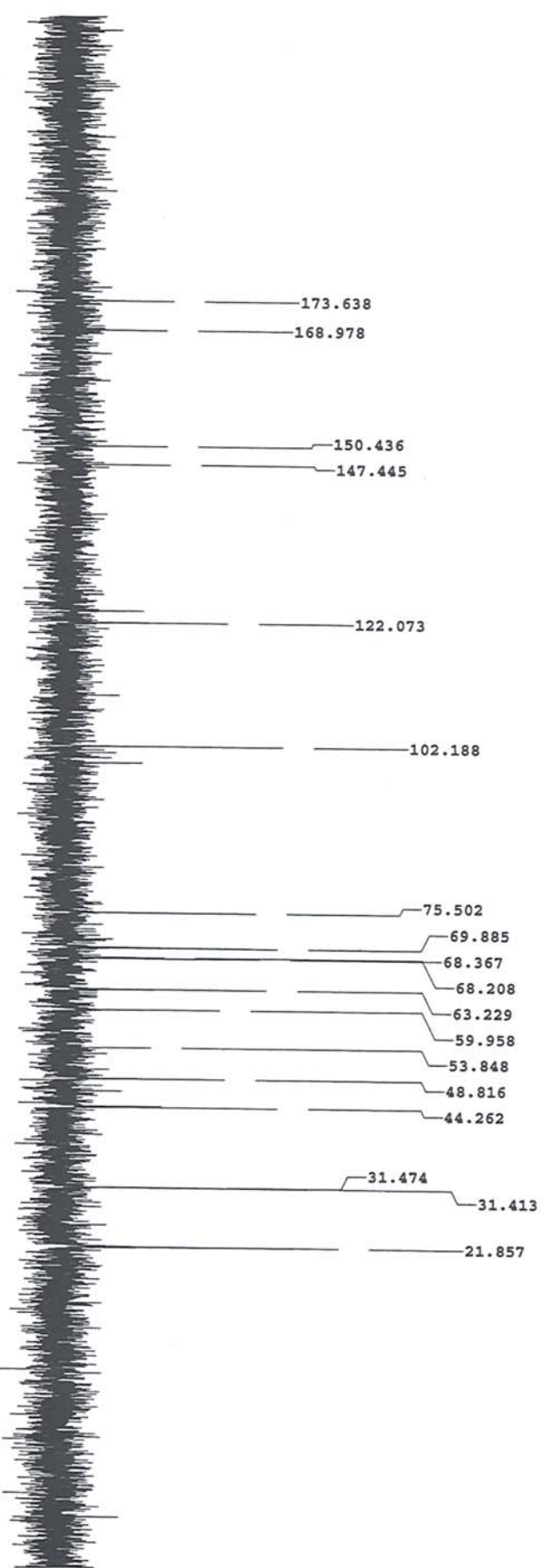




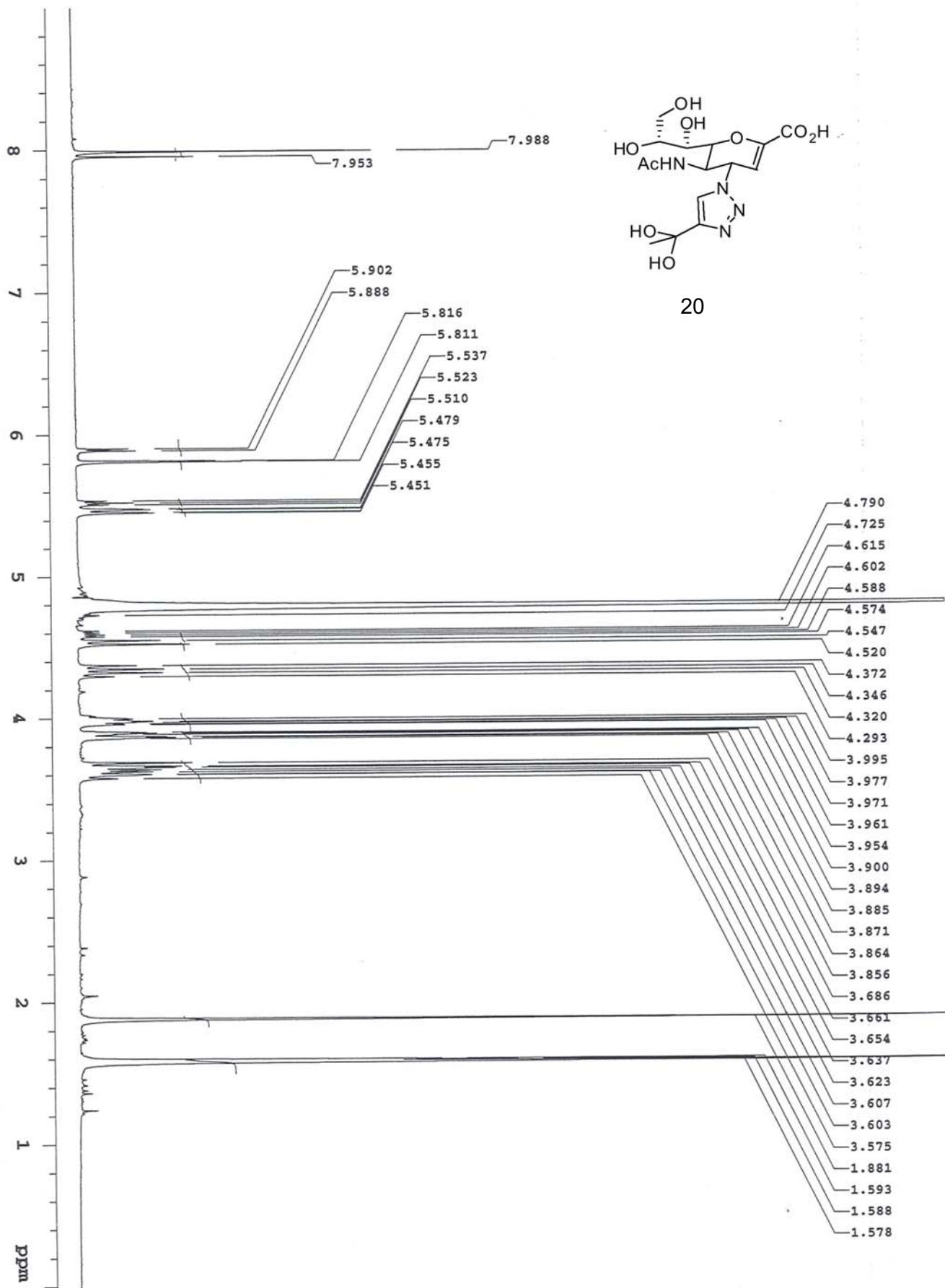
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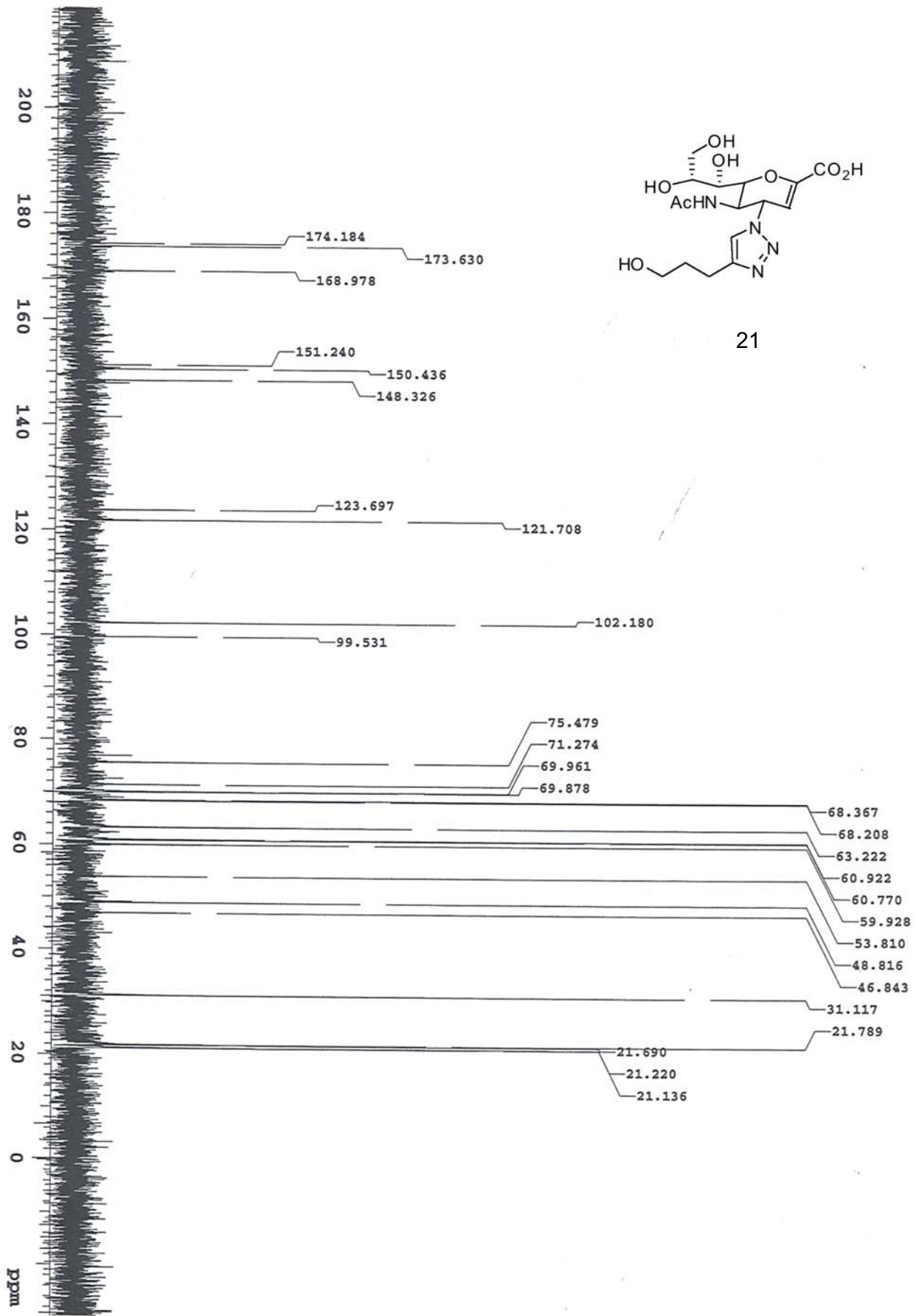


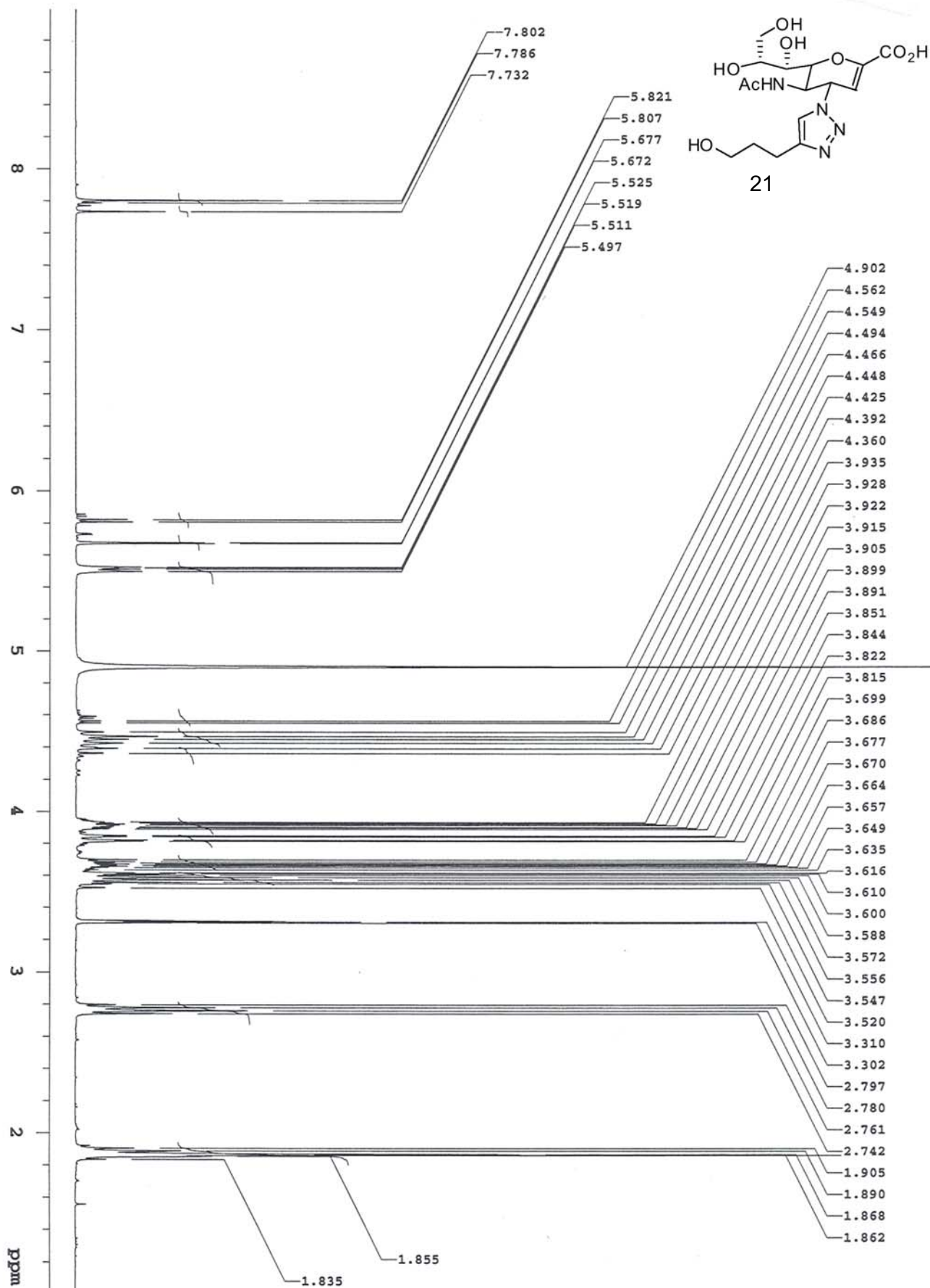


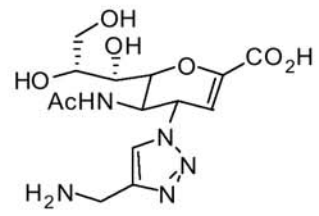
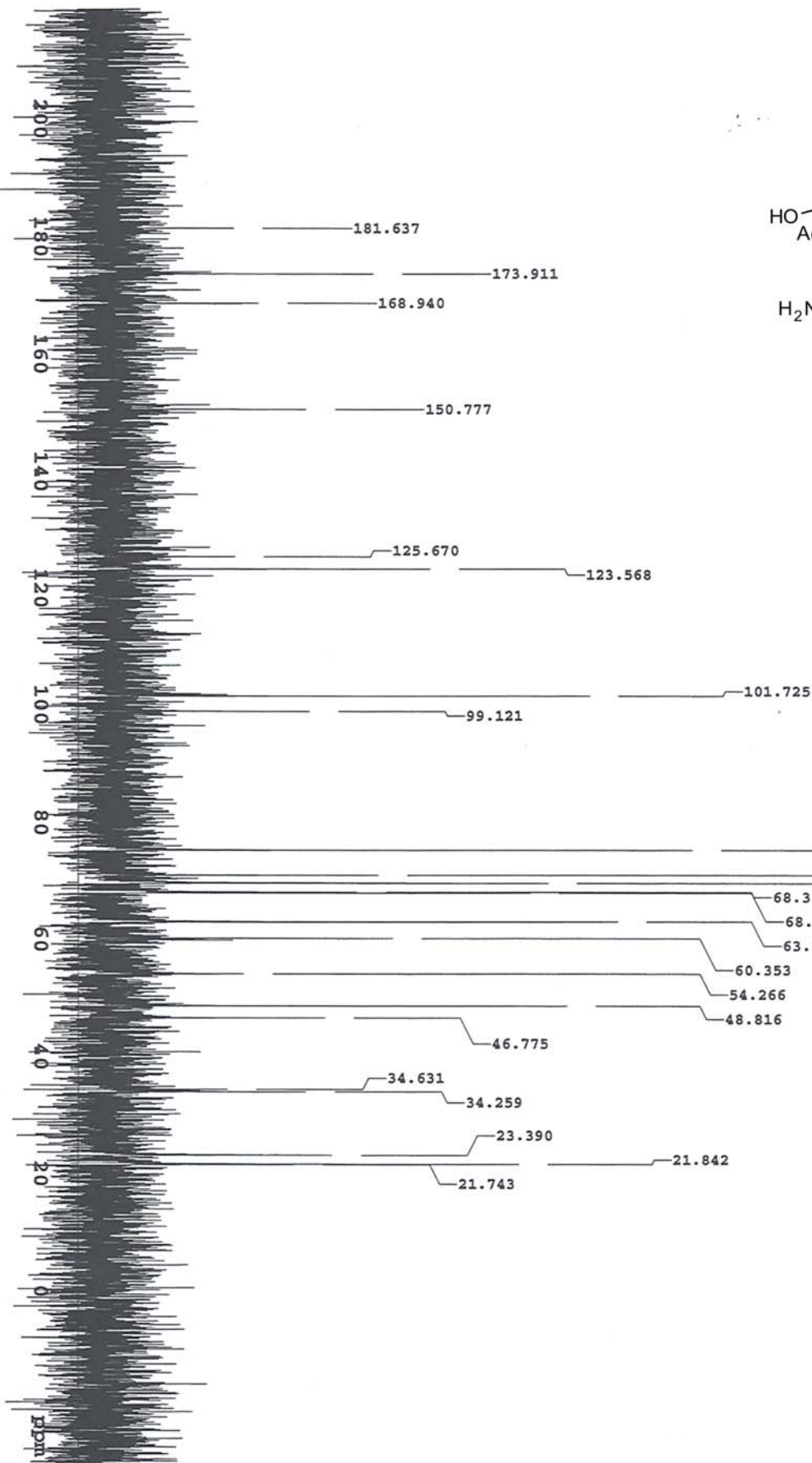


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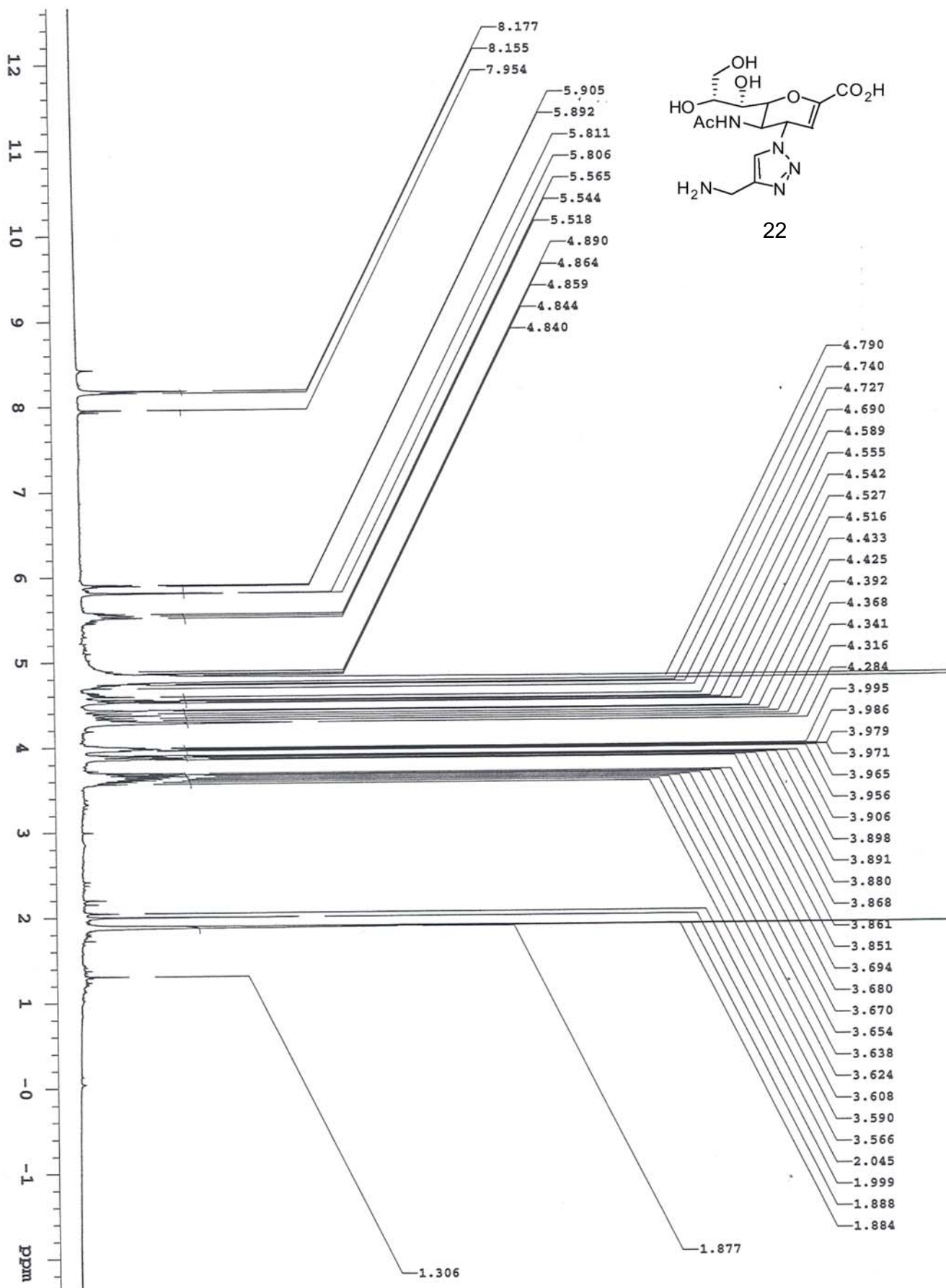


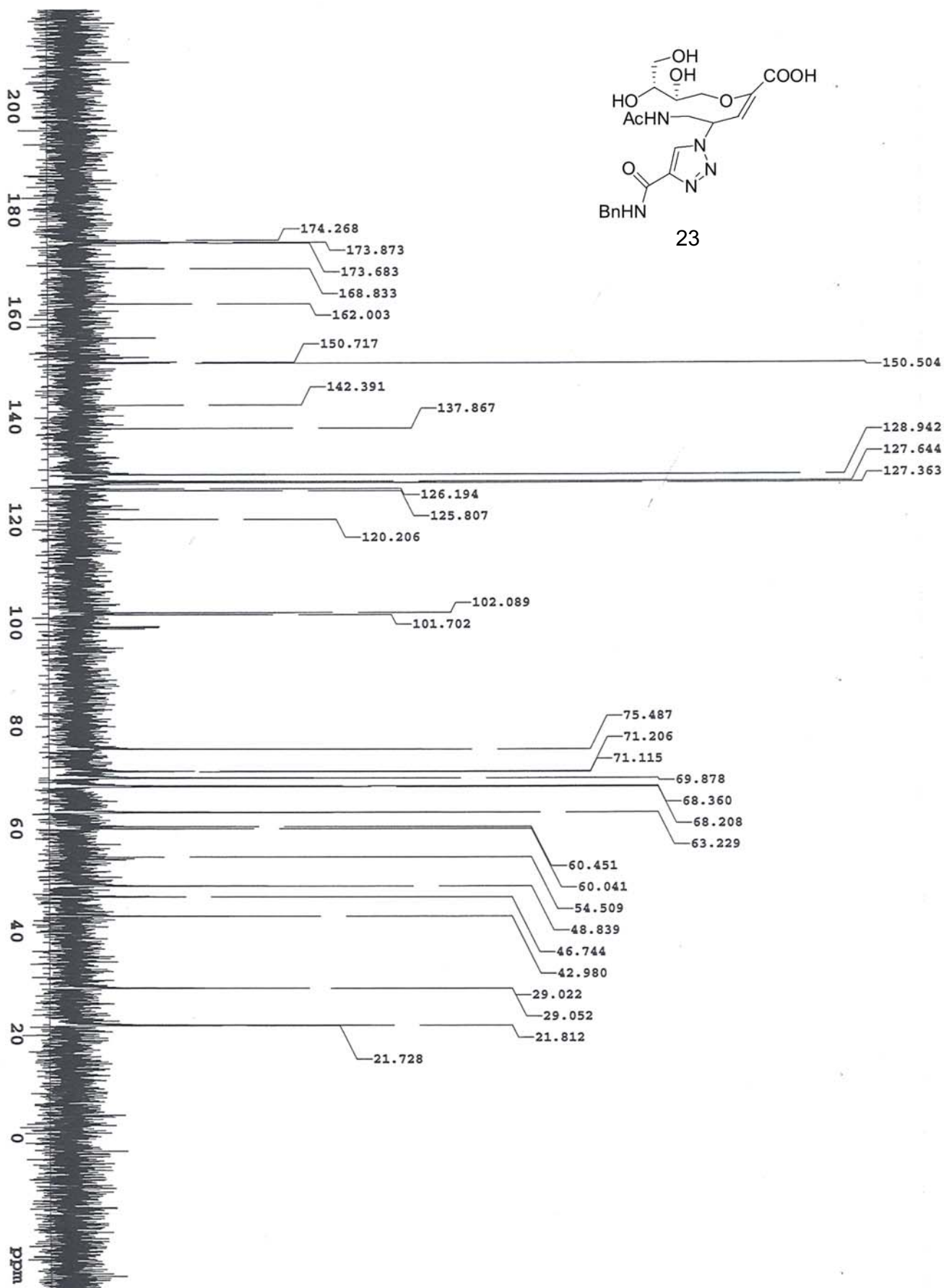


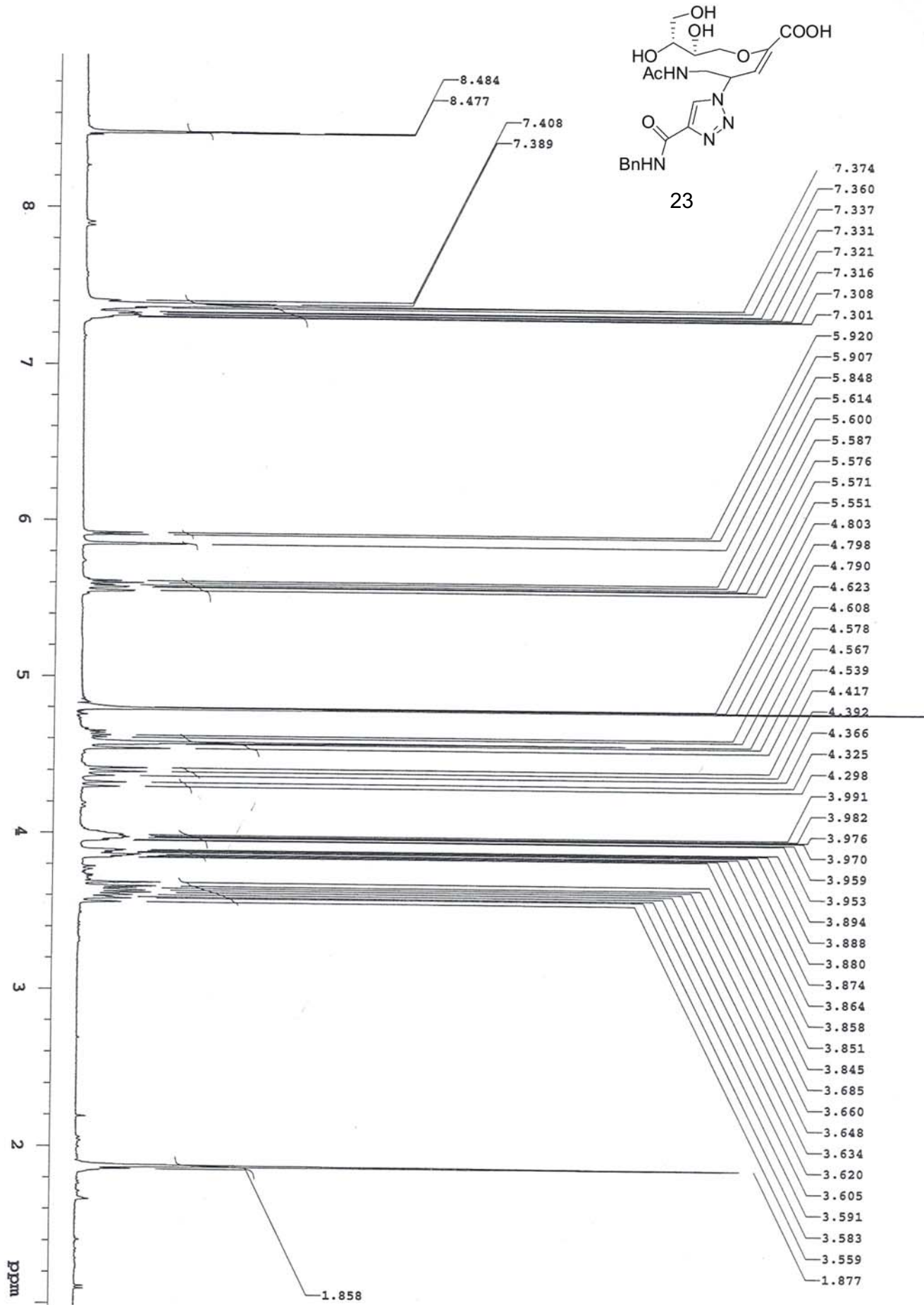


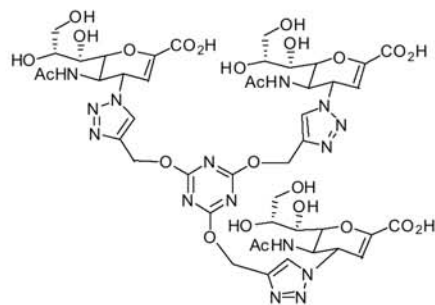


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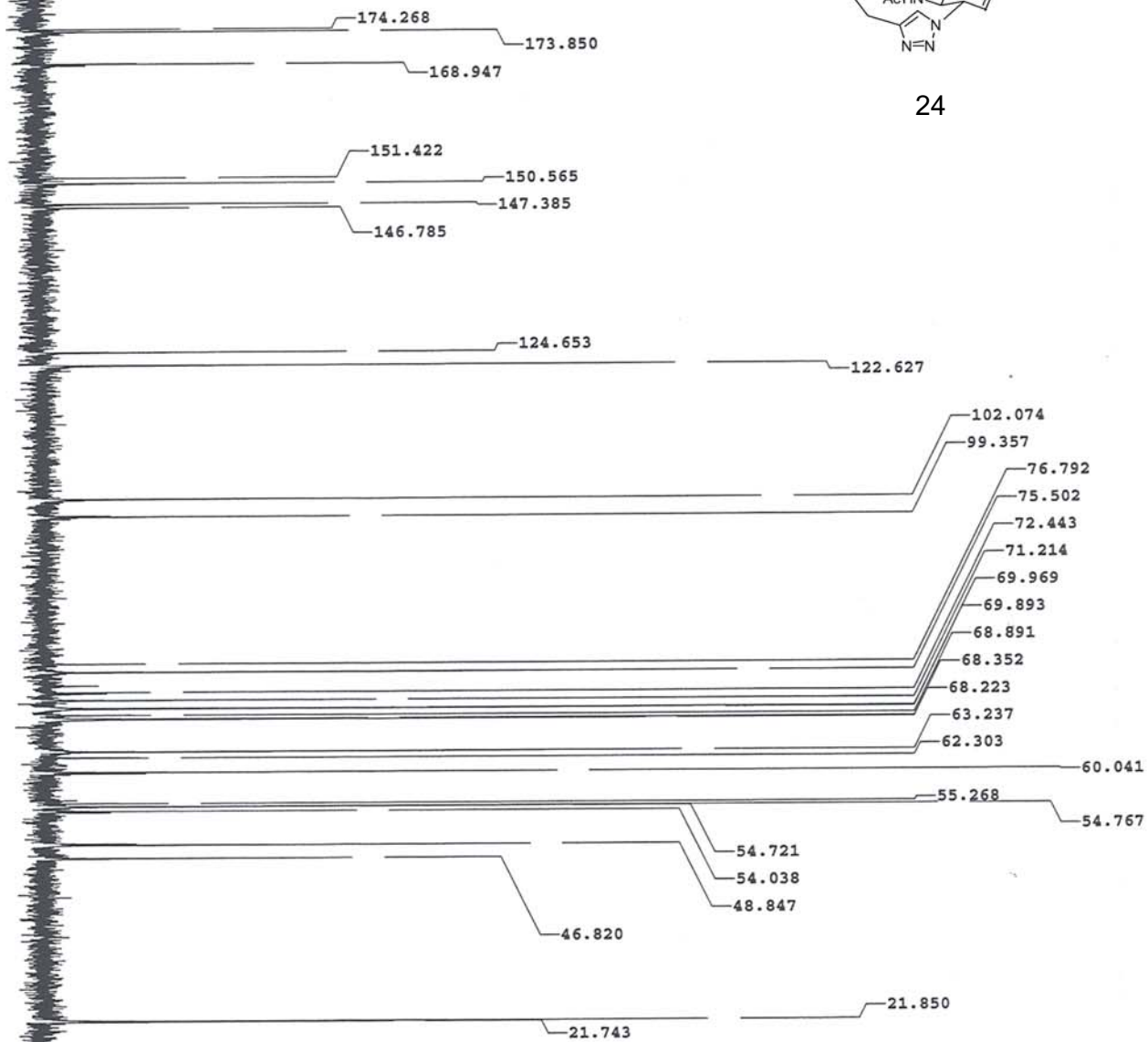


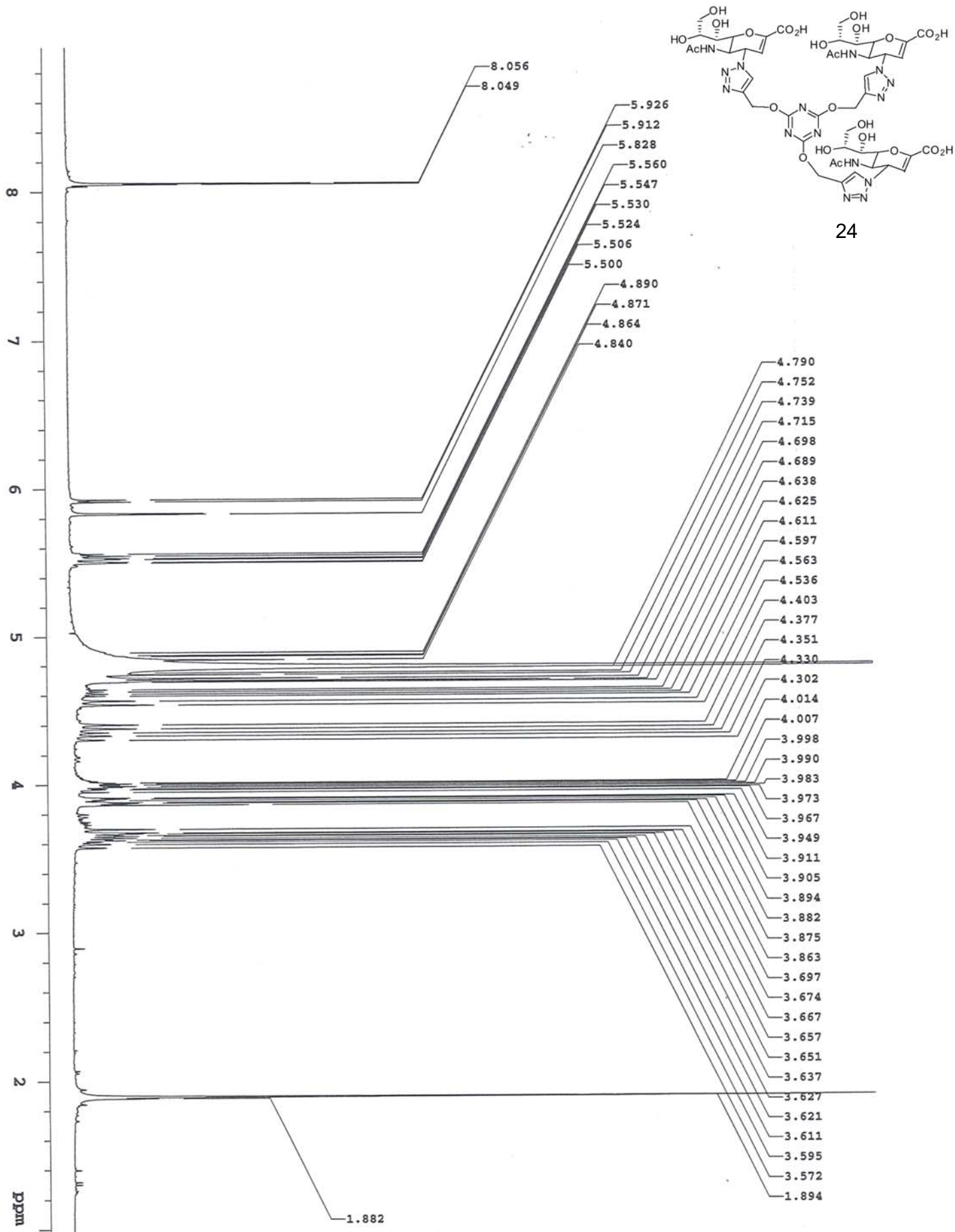


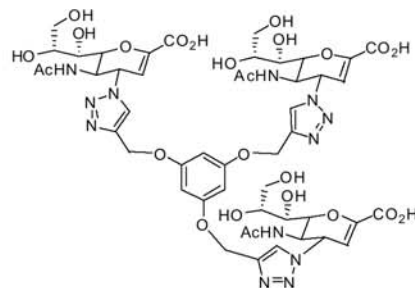
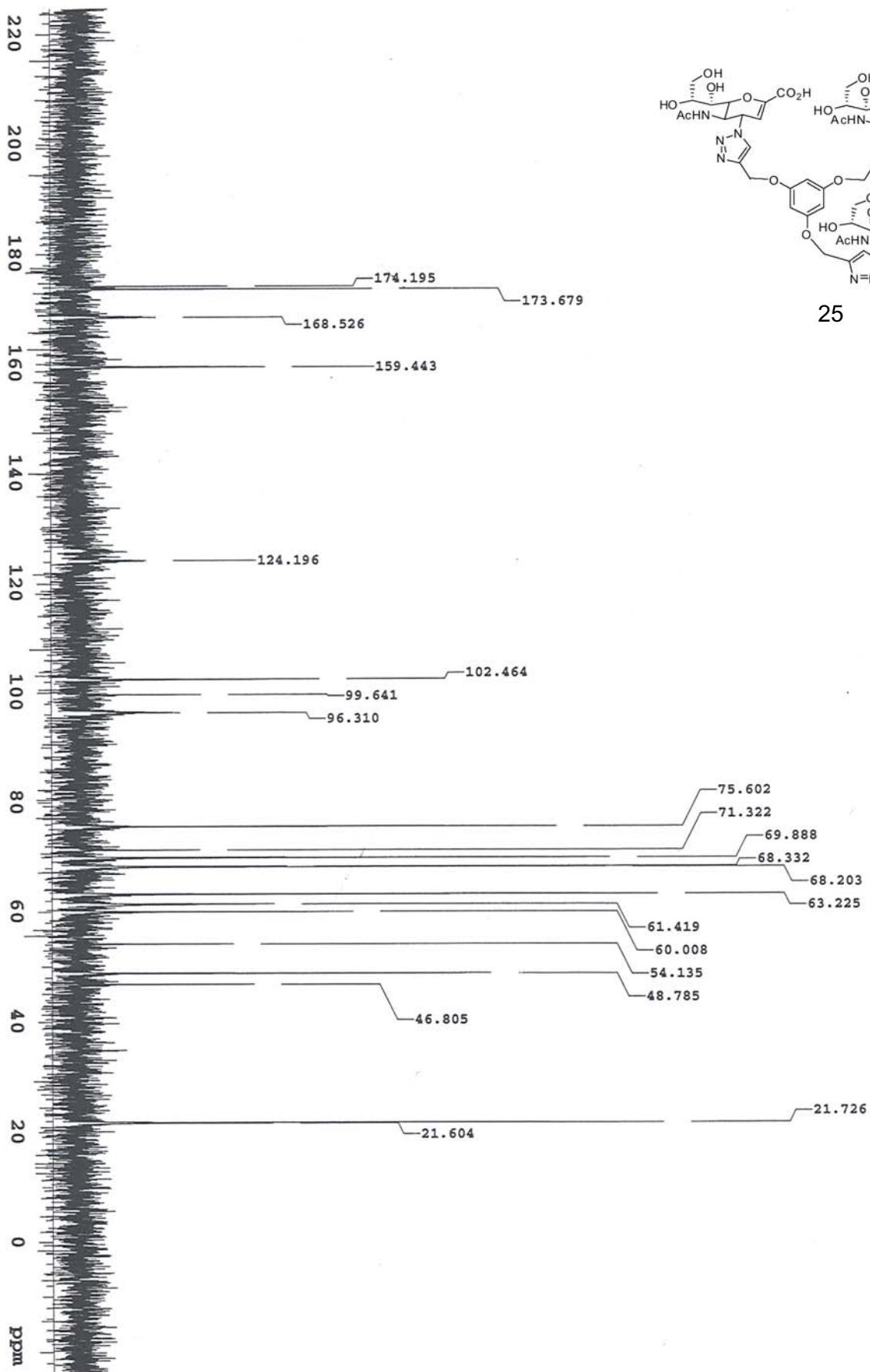




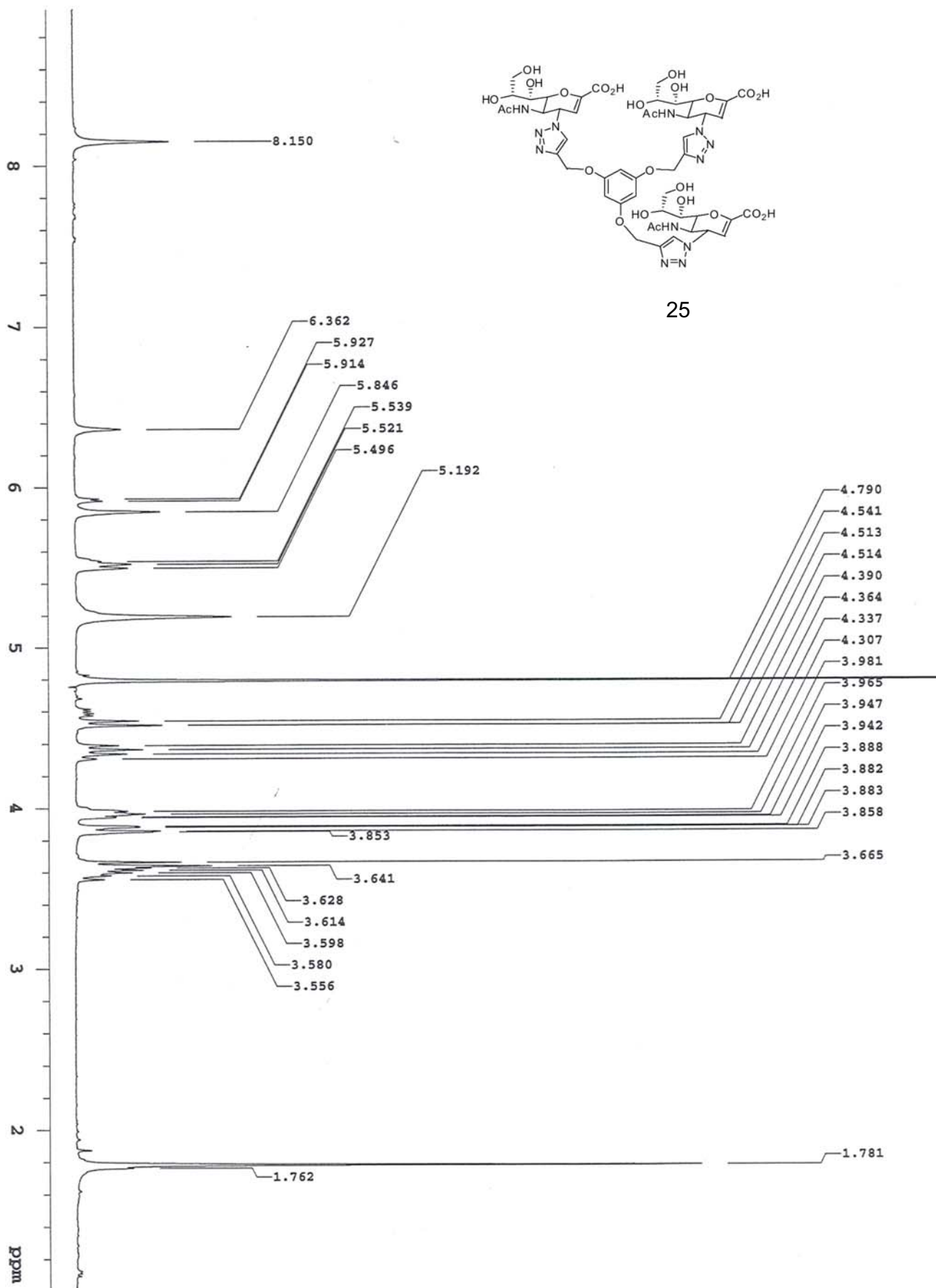
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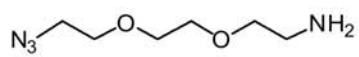




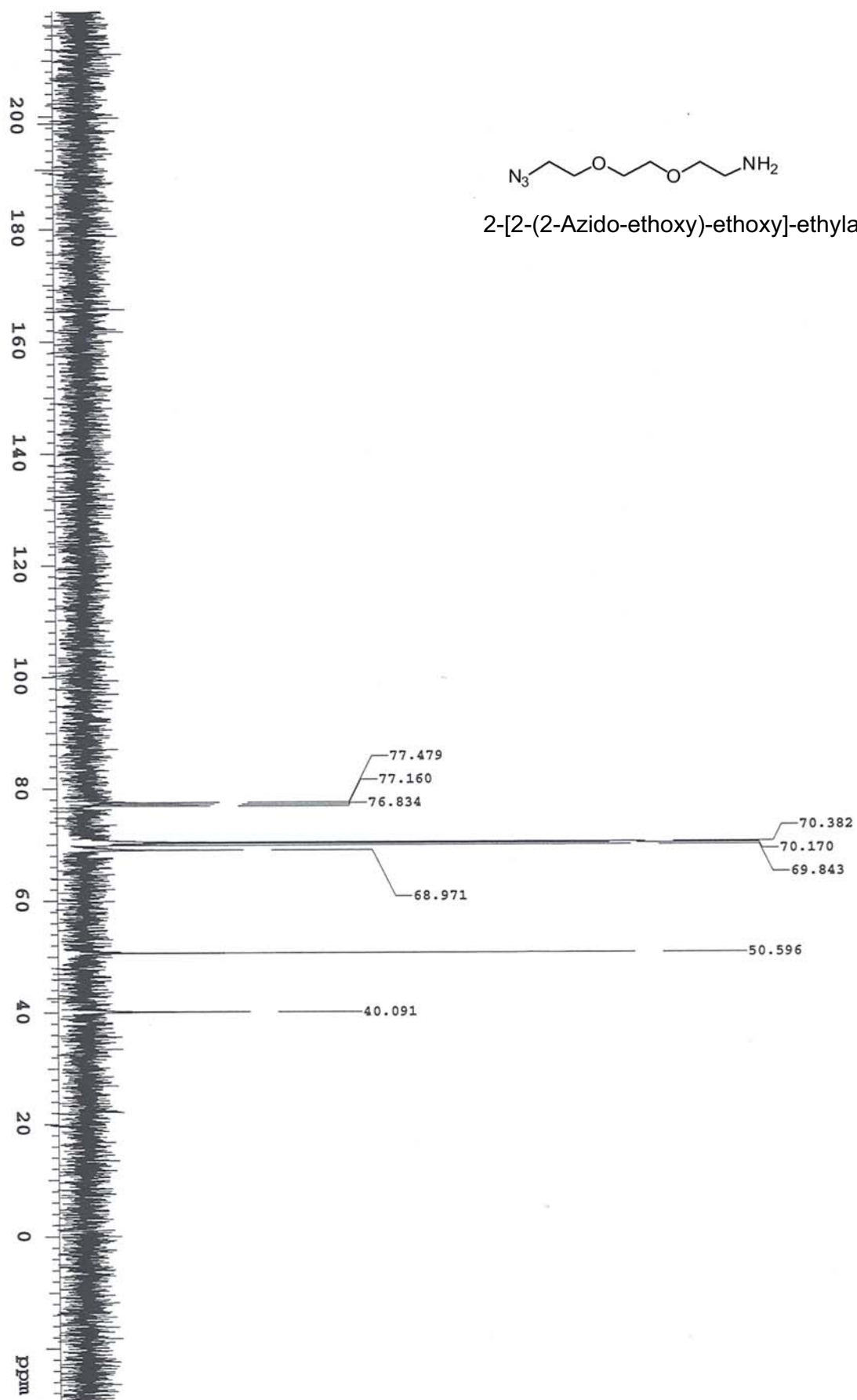


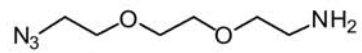
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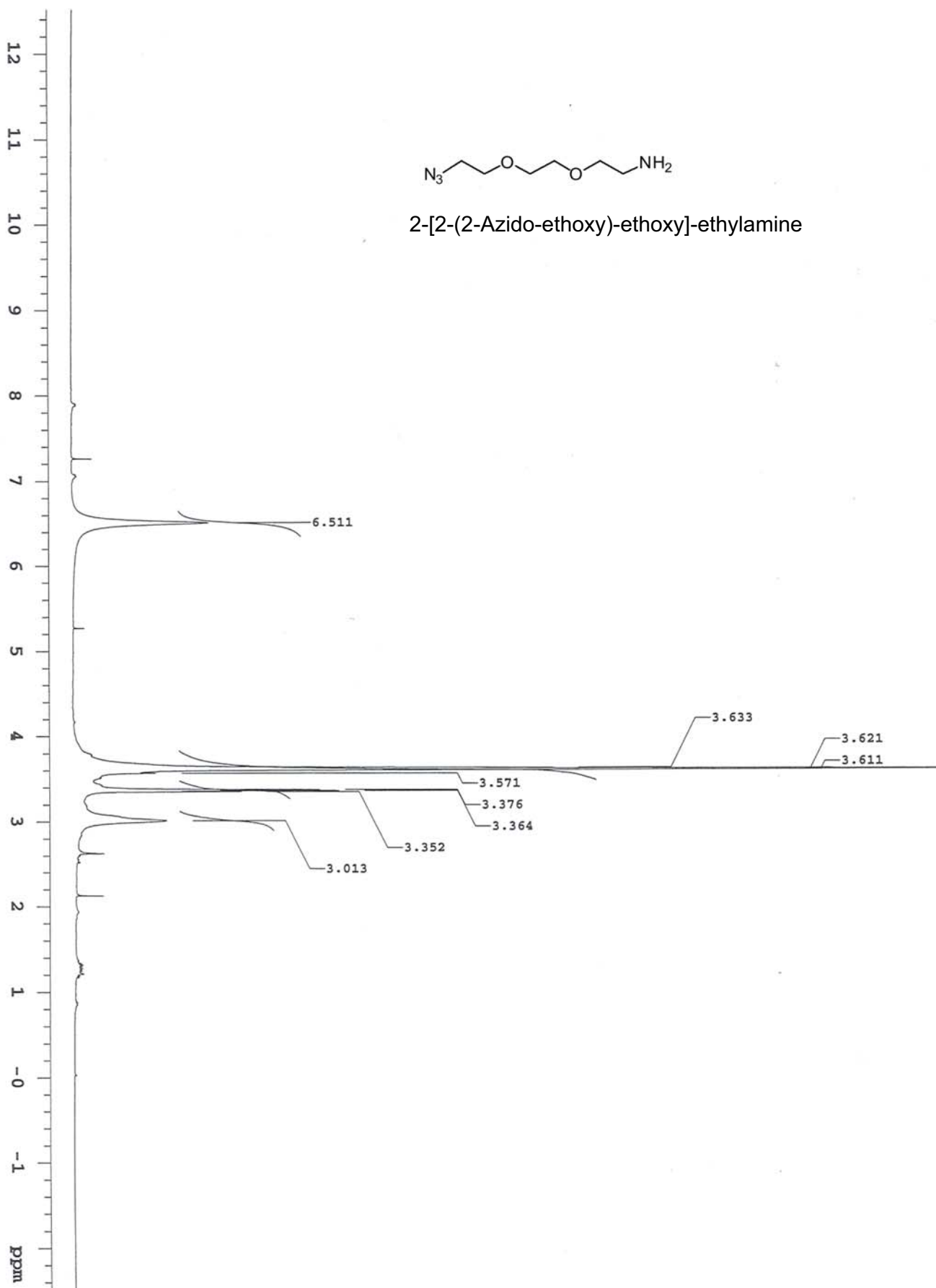


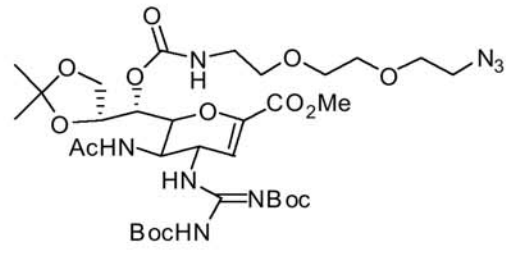
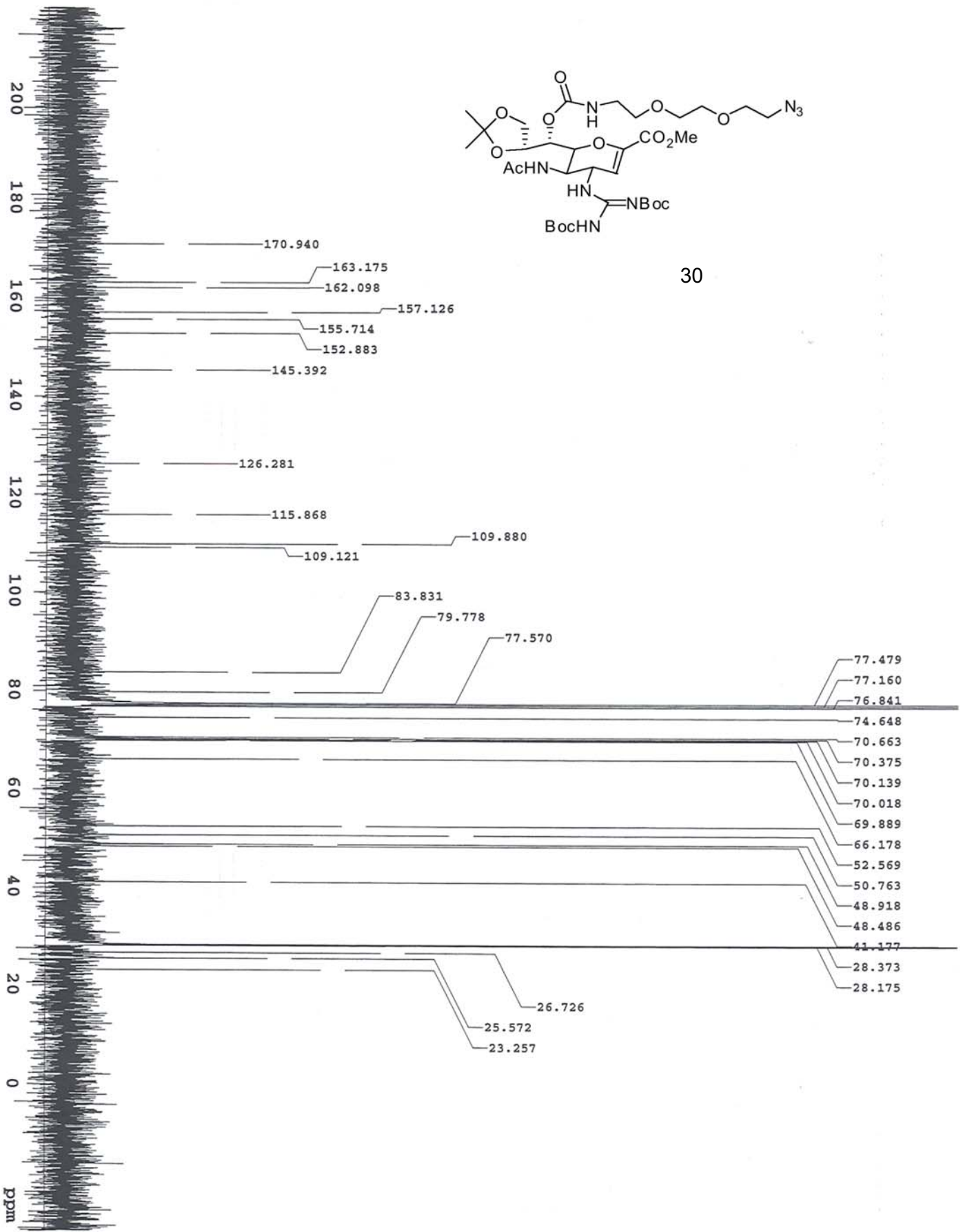
2-[2-(2-Azido-ethoxy)-ethoxy]-ethylamine



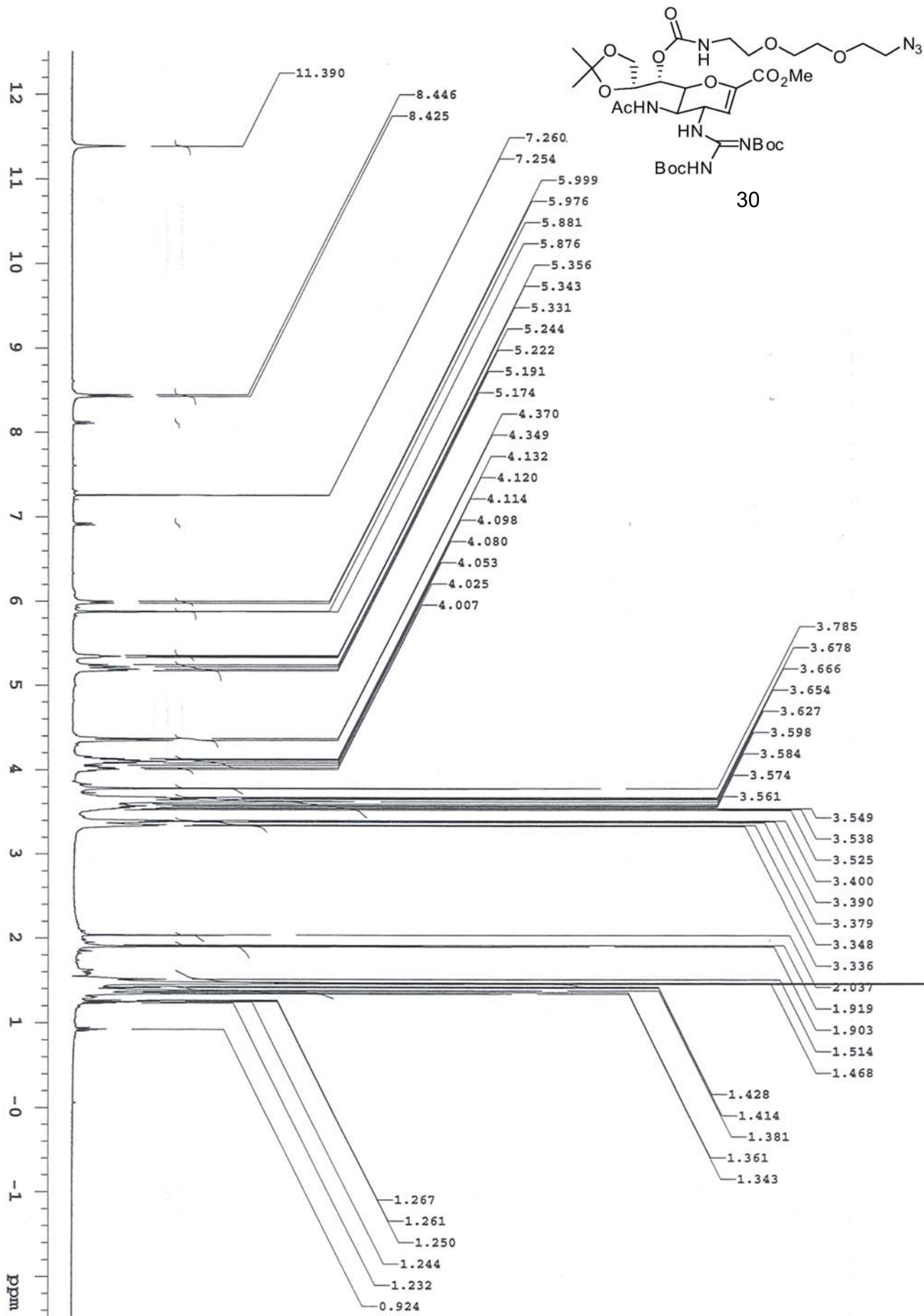


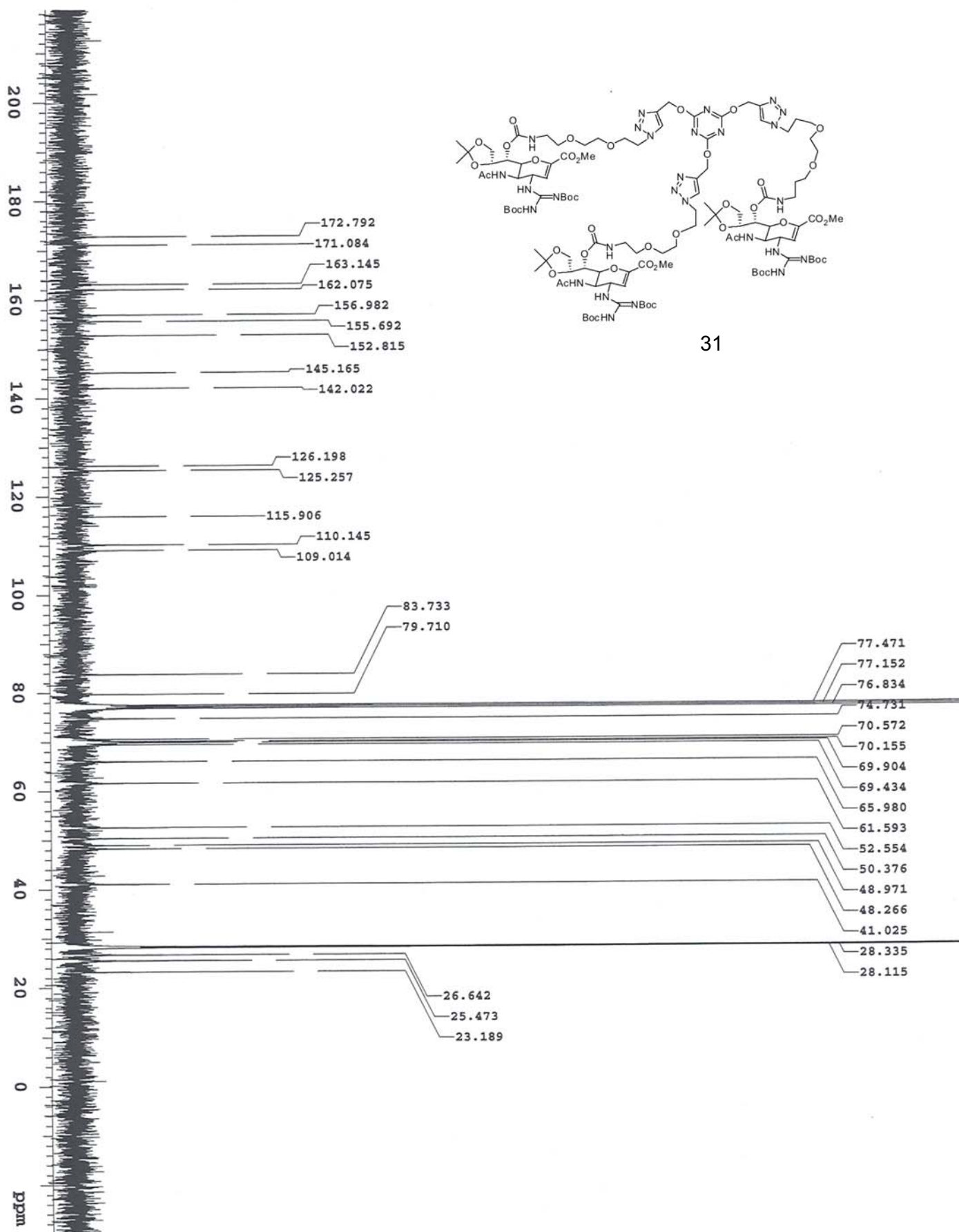
2-[2-(2-Azido-ethoxy)-ethoxy]-ethylamine



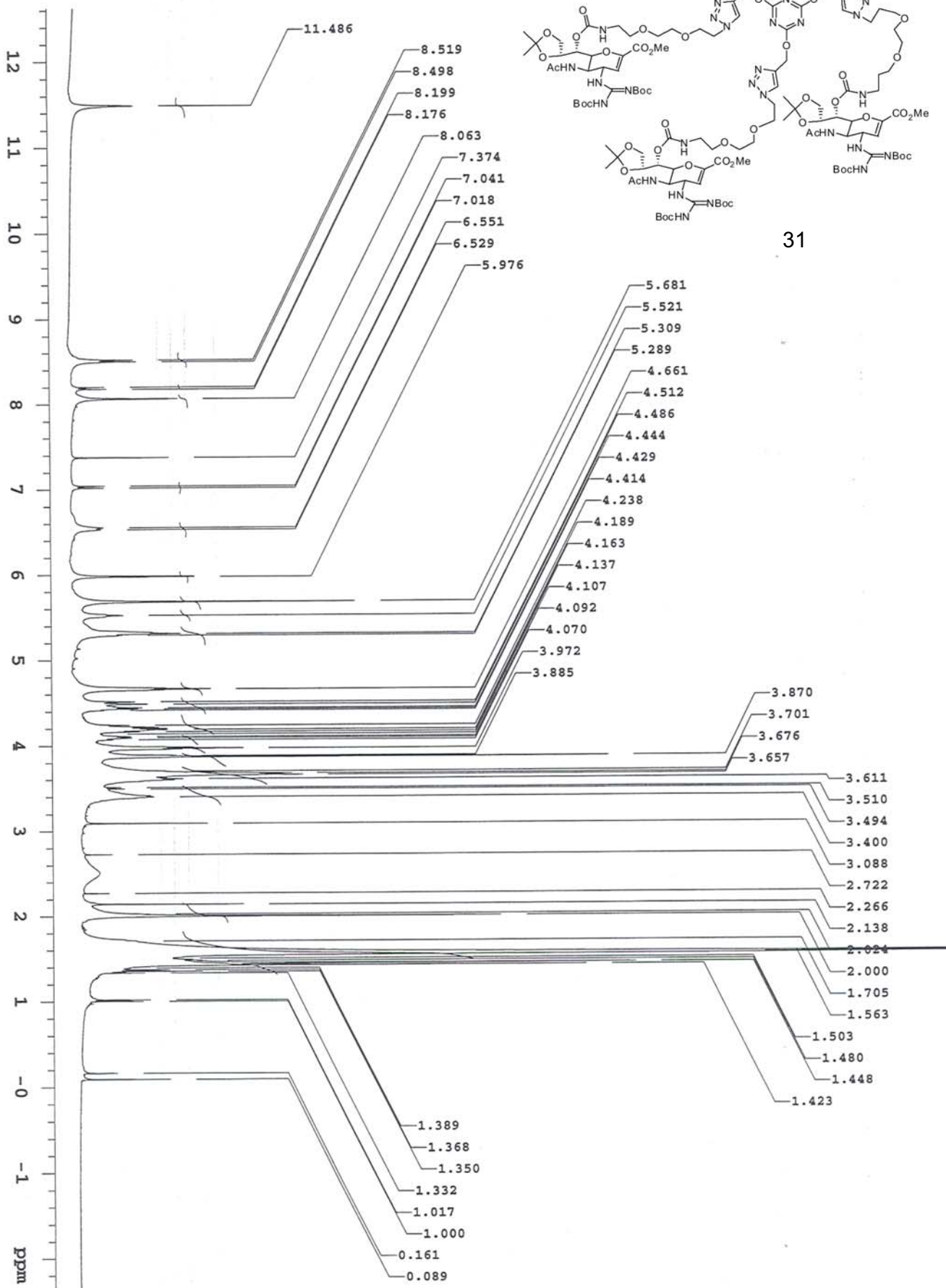


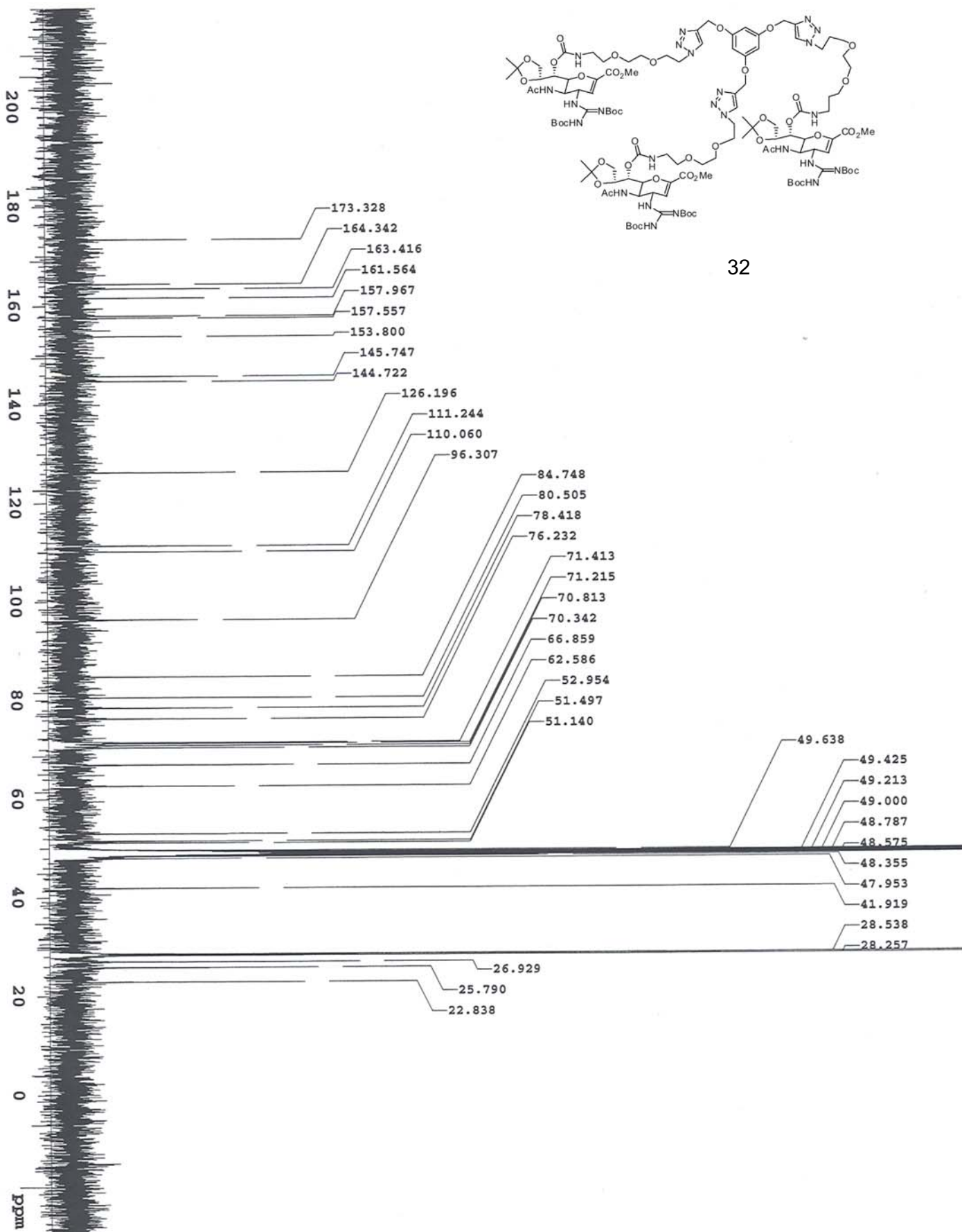
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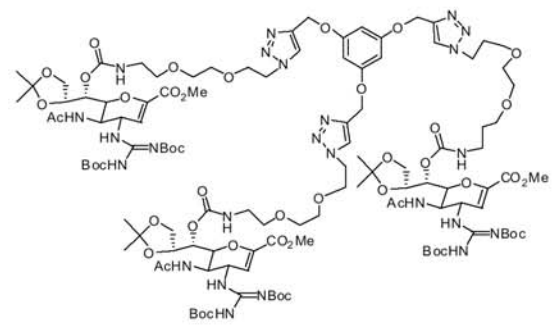
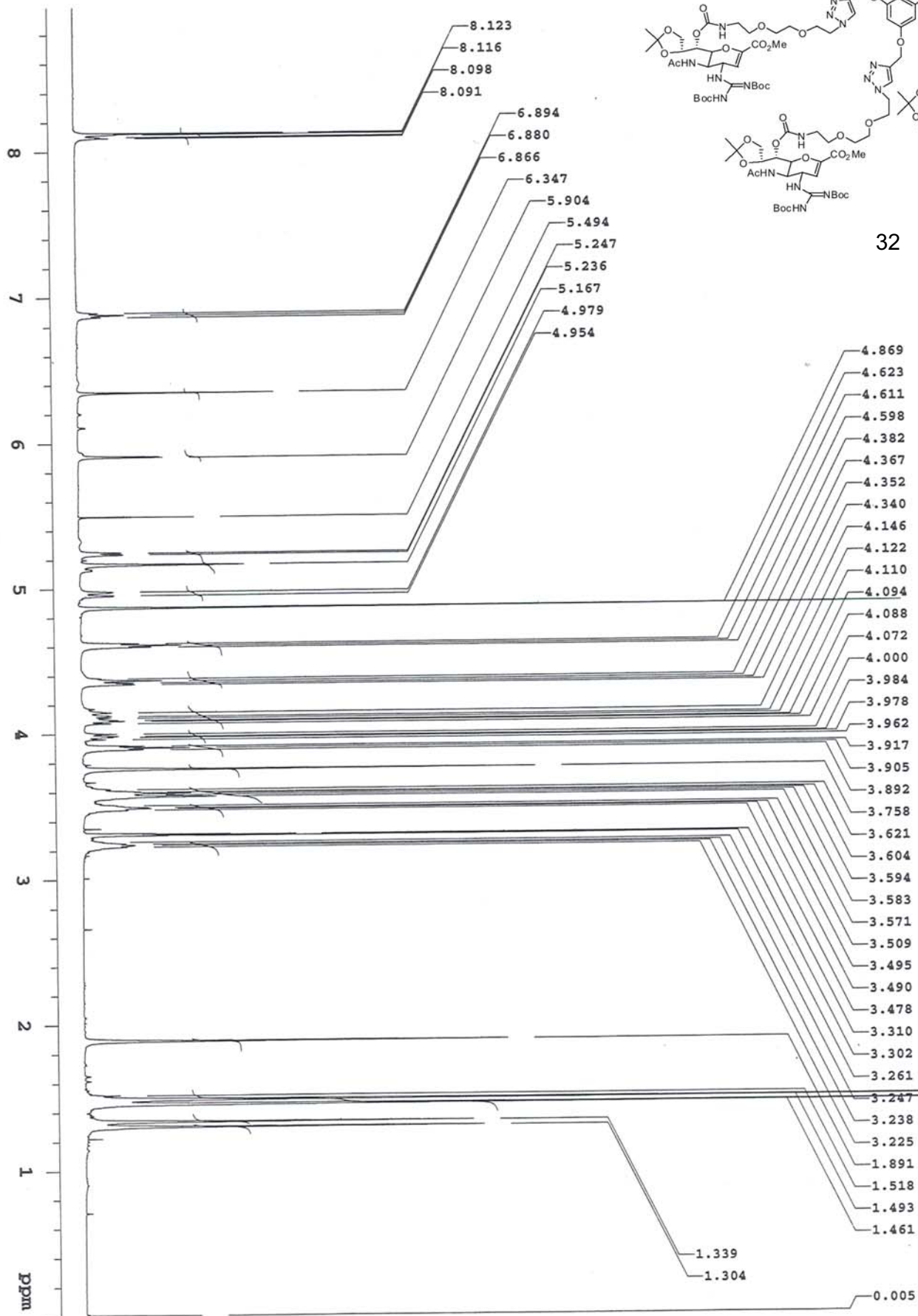


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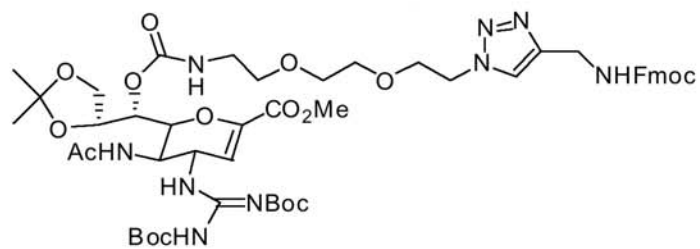




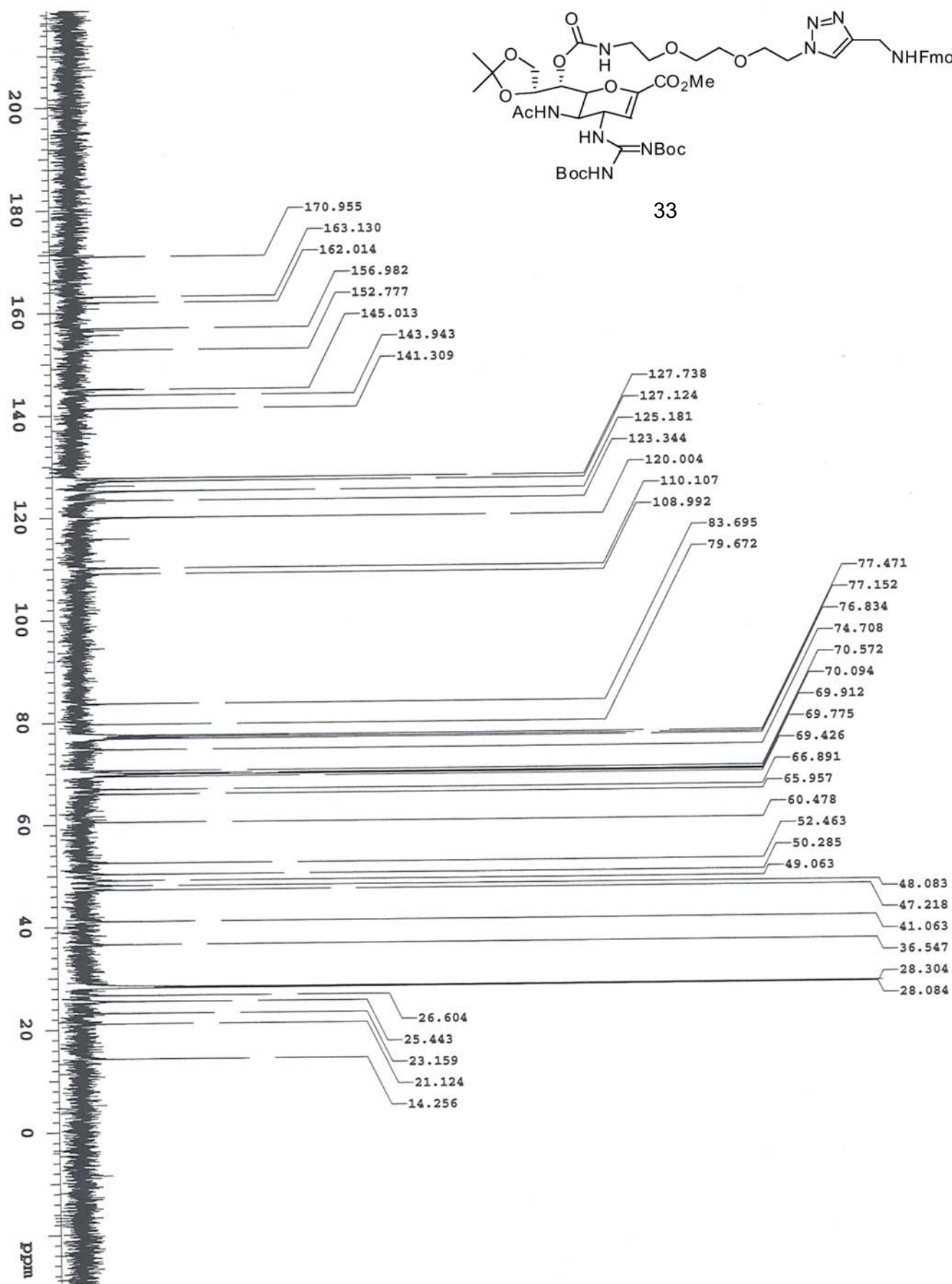
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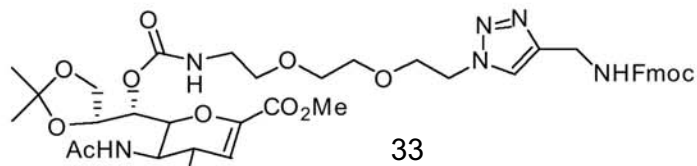


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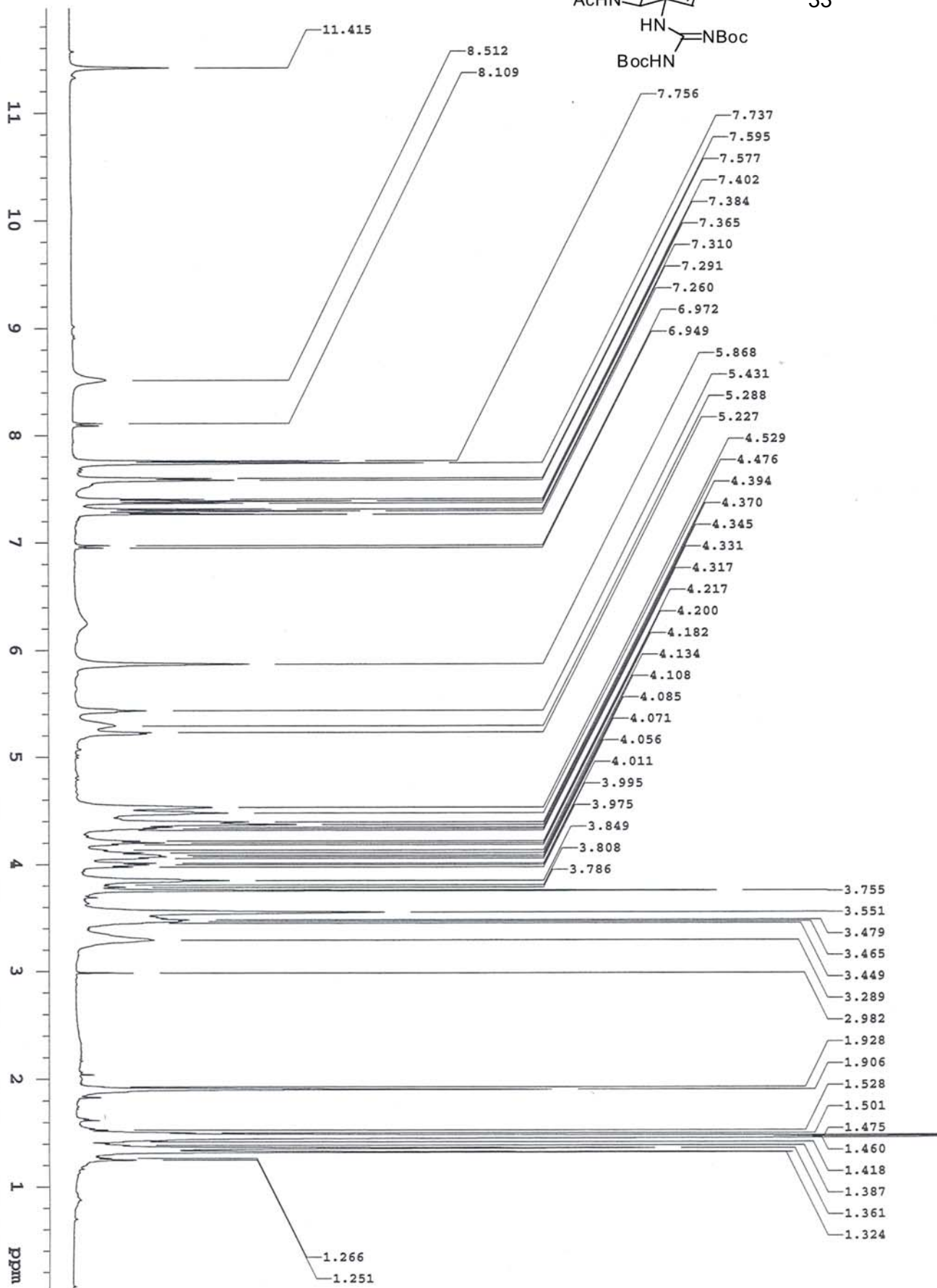


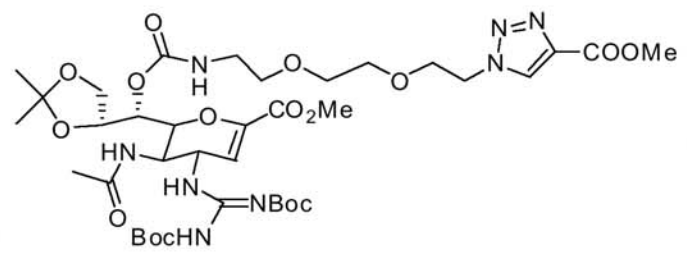
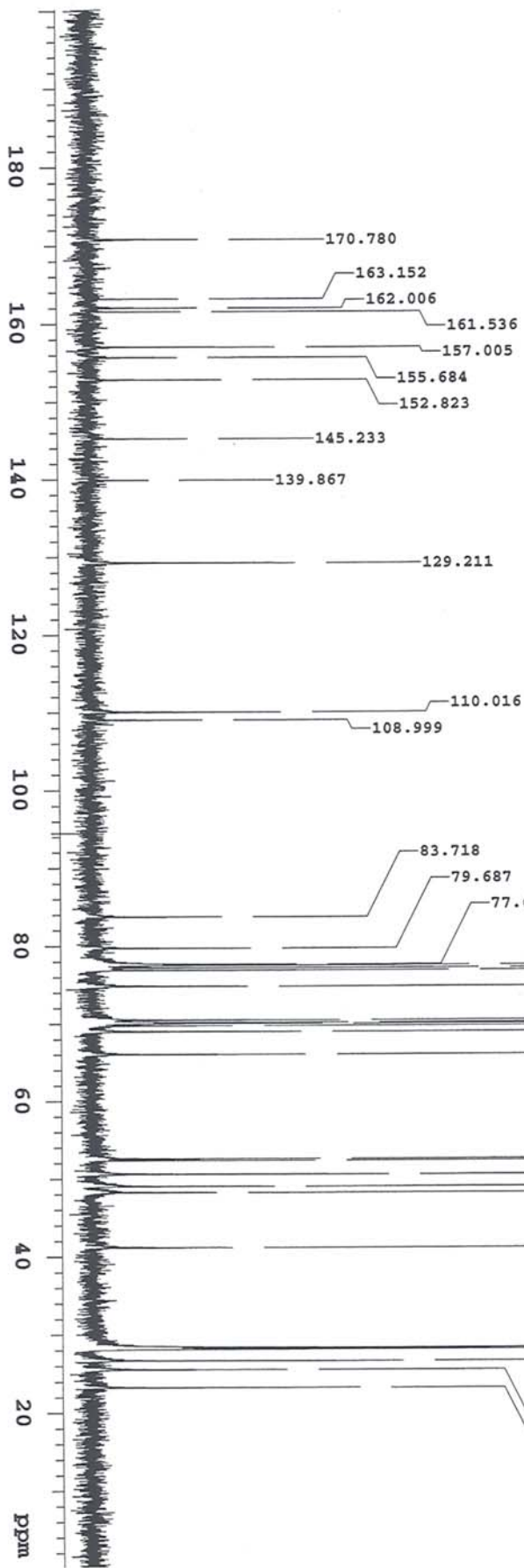
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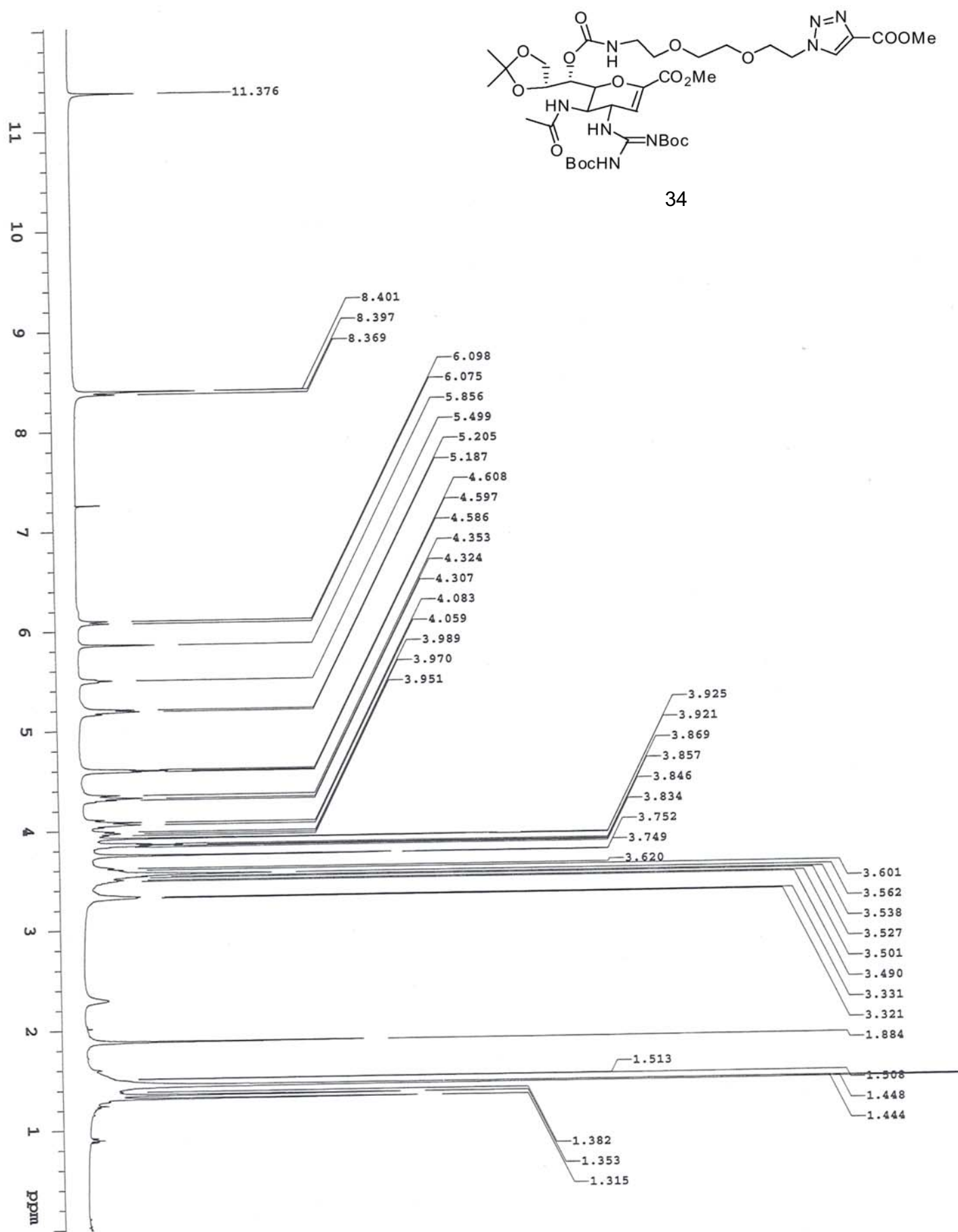


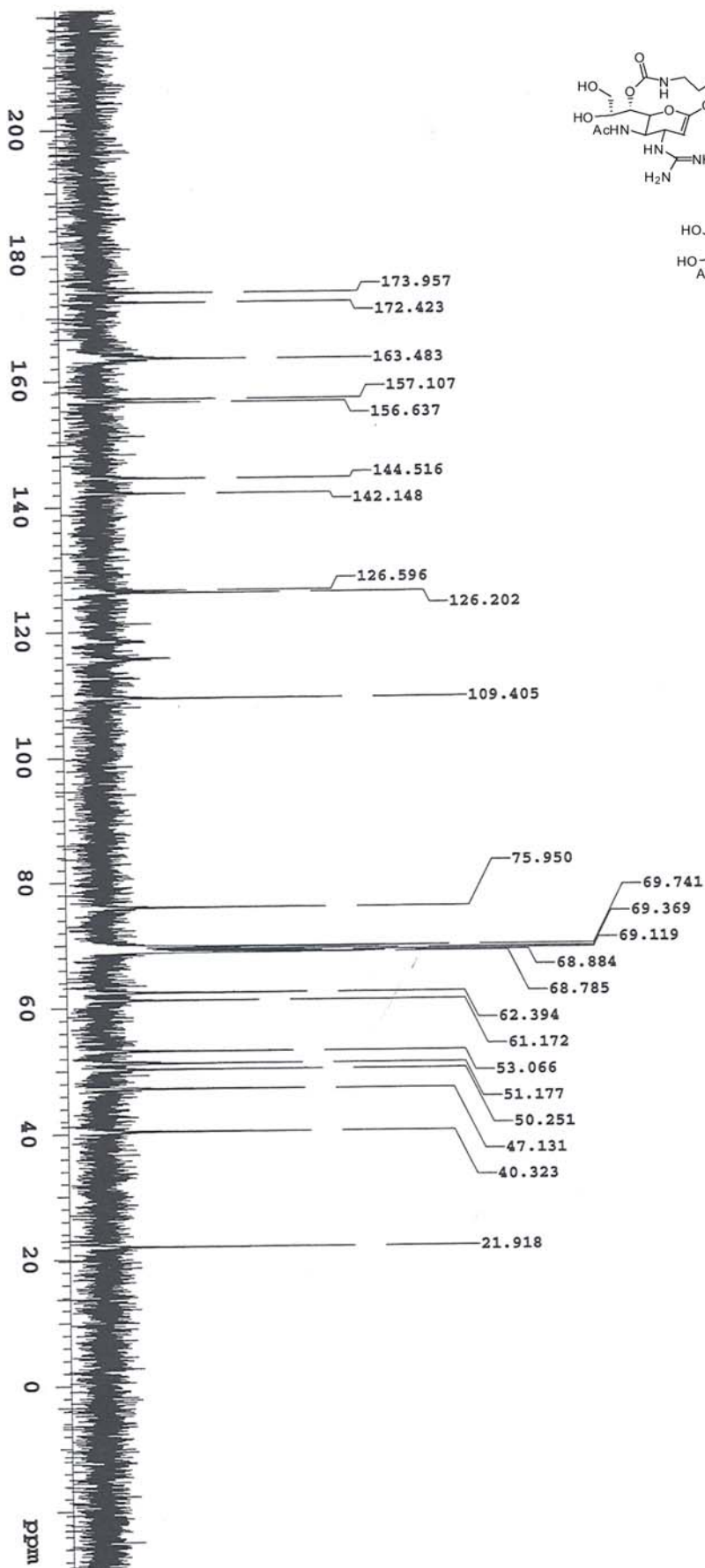
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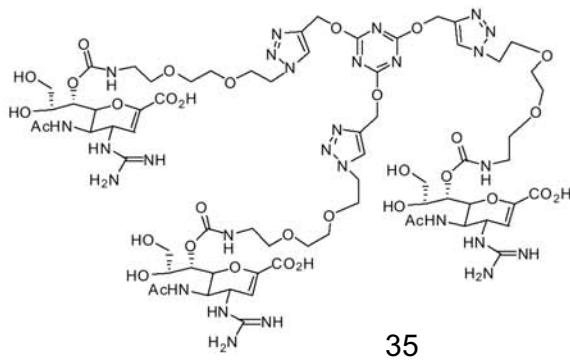


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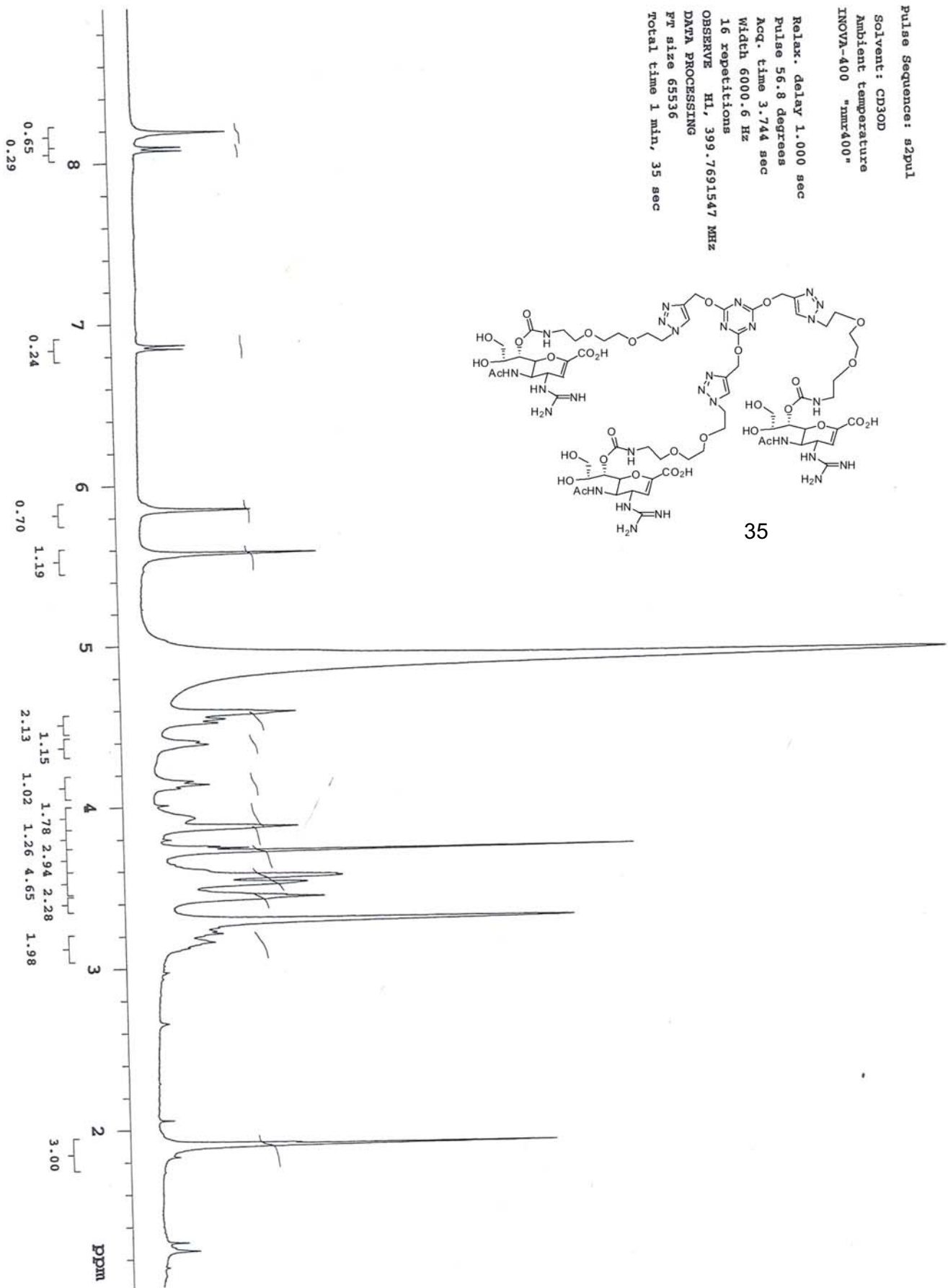
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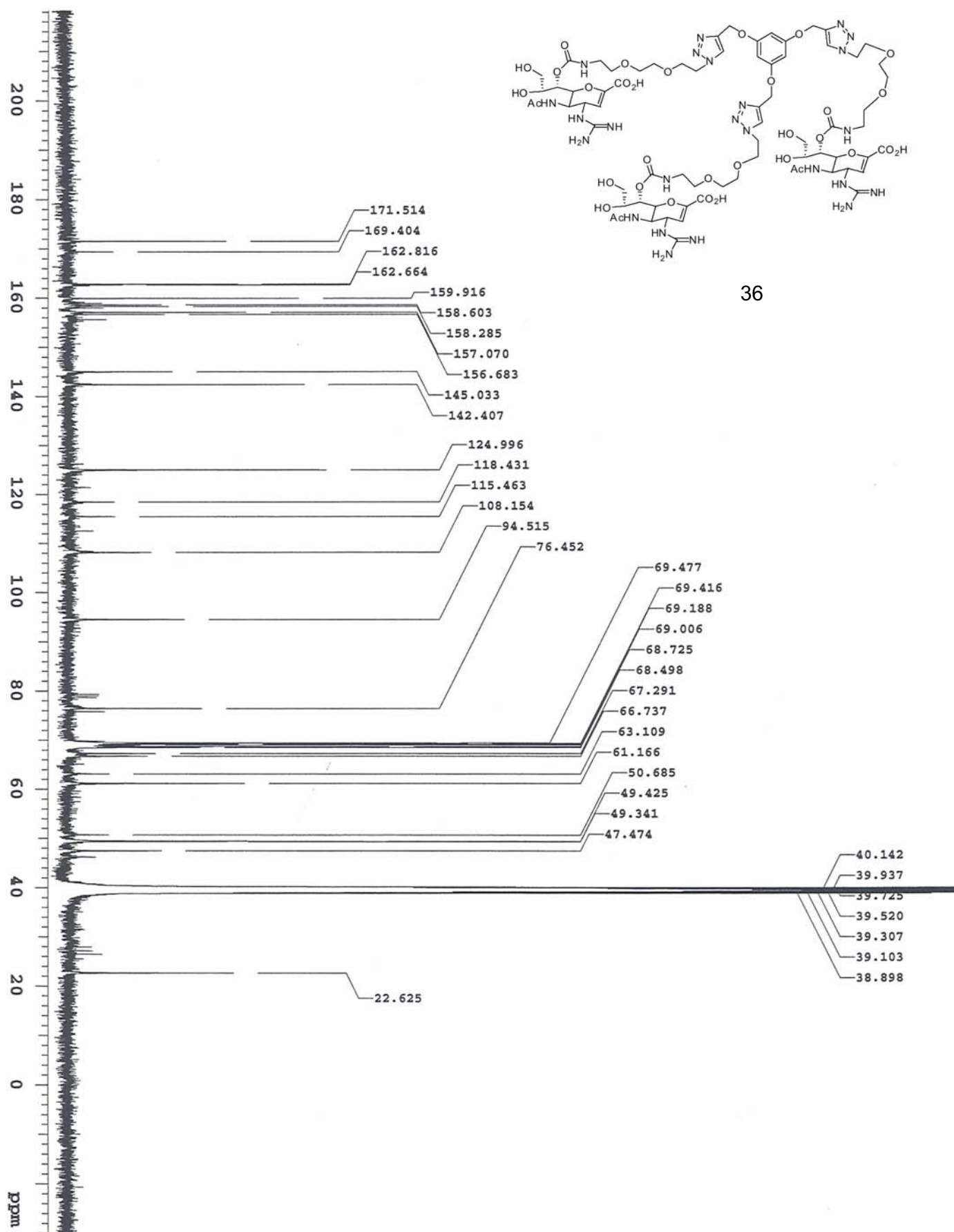
Solvent: CD3OD
Ambient temperature
INOVA-400 "nmr400"

Relax. delay 1.000 sec
Pulse 56.8 degrees
Acq. time 3.744 sec
Width 6000.6 Hz
16 repetitions
OBSERVE H1, 399.7691547 MHz
DATA PROCESSING
FT size 65536
Total time 1 min, 35 sec



35



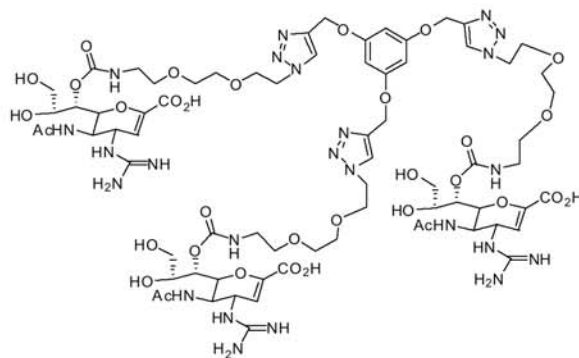


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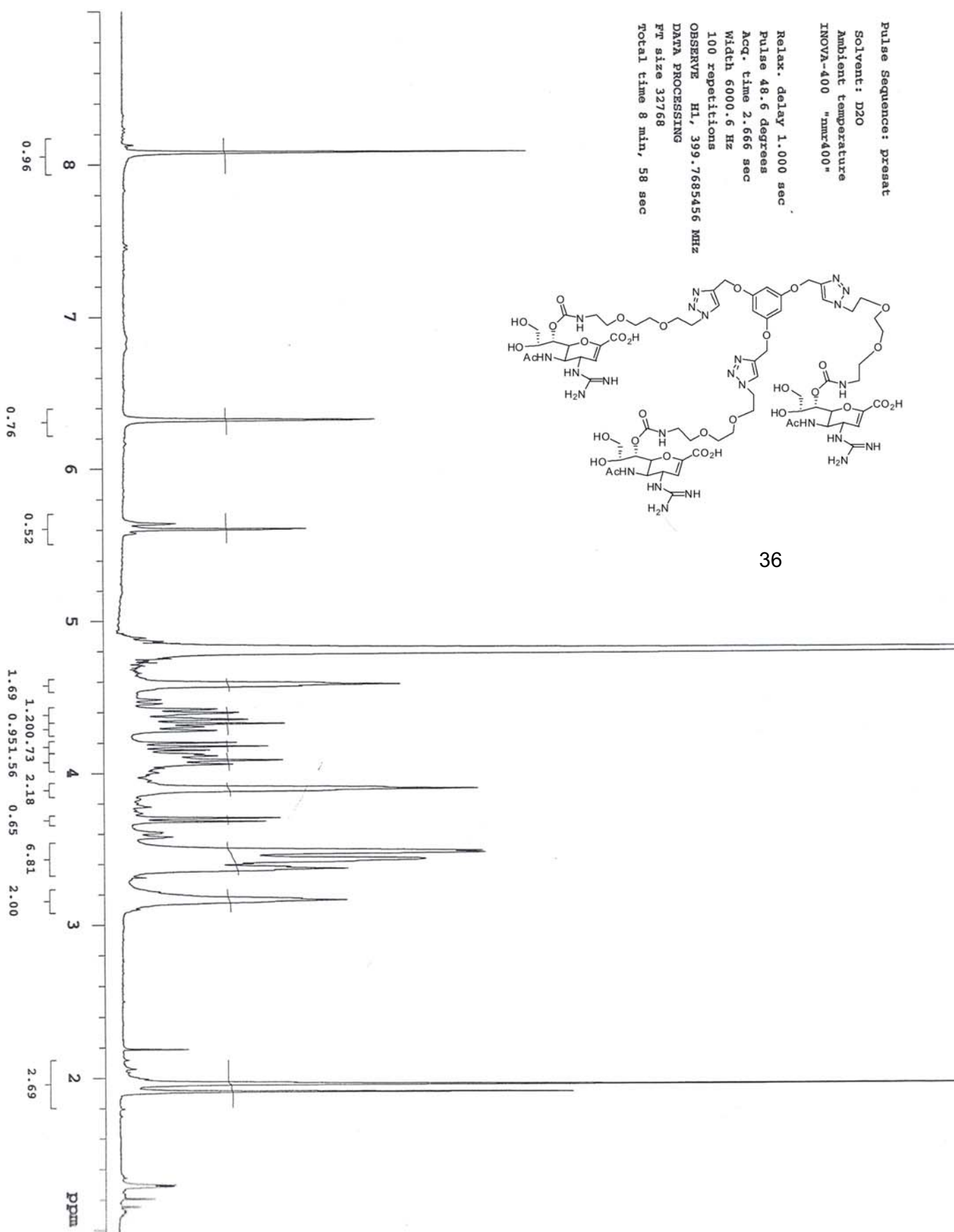
Pulse Sequence: presat

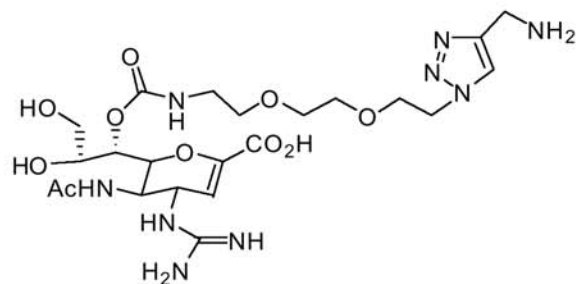
Solvent: D2O
Ambient temperature
INNOVA-400 "nmr400"

Relax. delay 1.000 sec
Pulse 48.6 degrees
Acq. time 2.666 sec
Width 6000.6 Hz
100 repetitions
OBSERVE H1, 399.7685456 MHz
DATA PROCESSING
F1 size 32768
Total time 8 min, 58 sec



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