

# Novel 5'-norcarbocyclic pyrimidine derivatives as antibacterial agents

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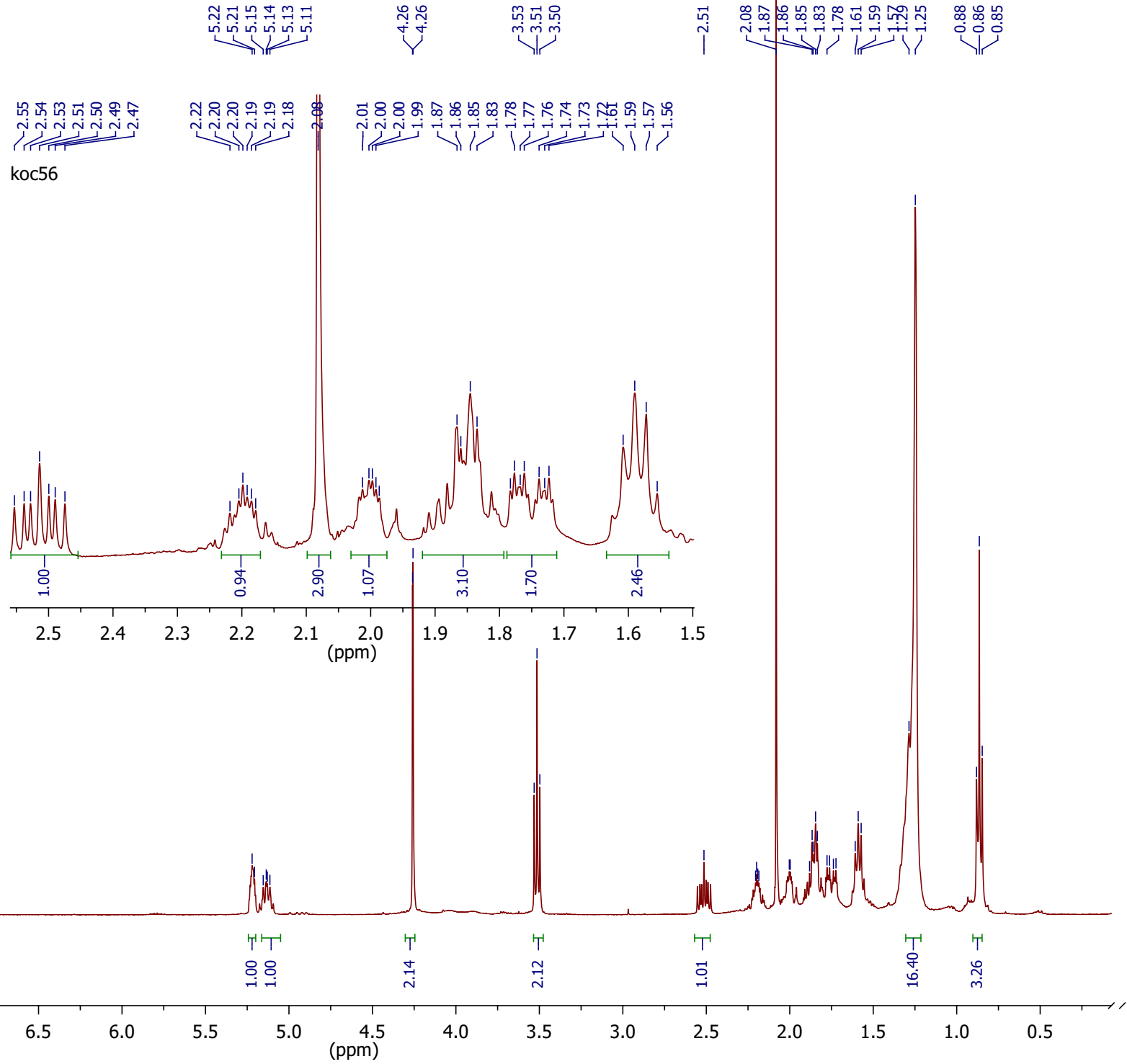
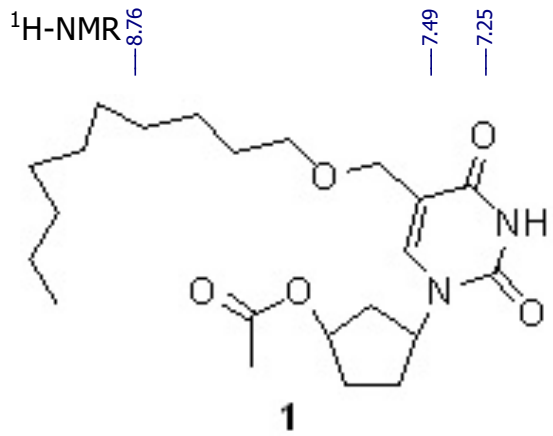
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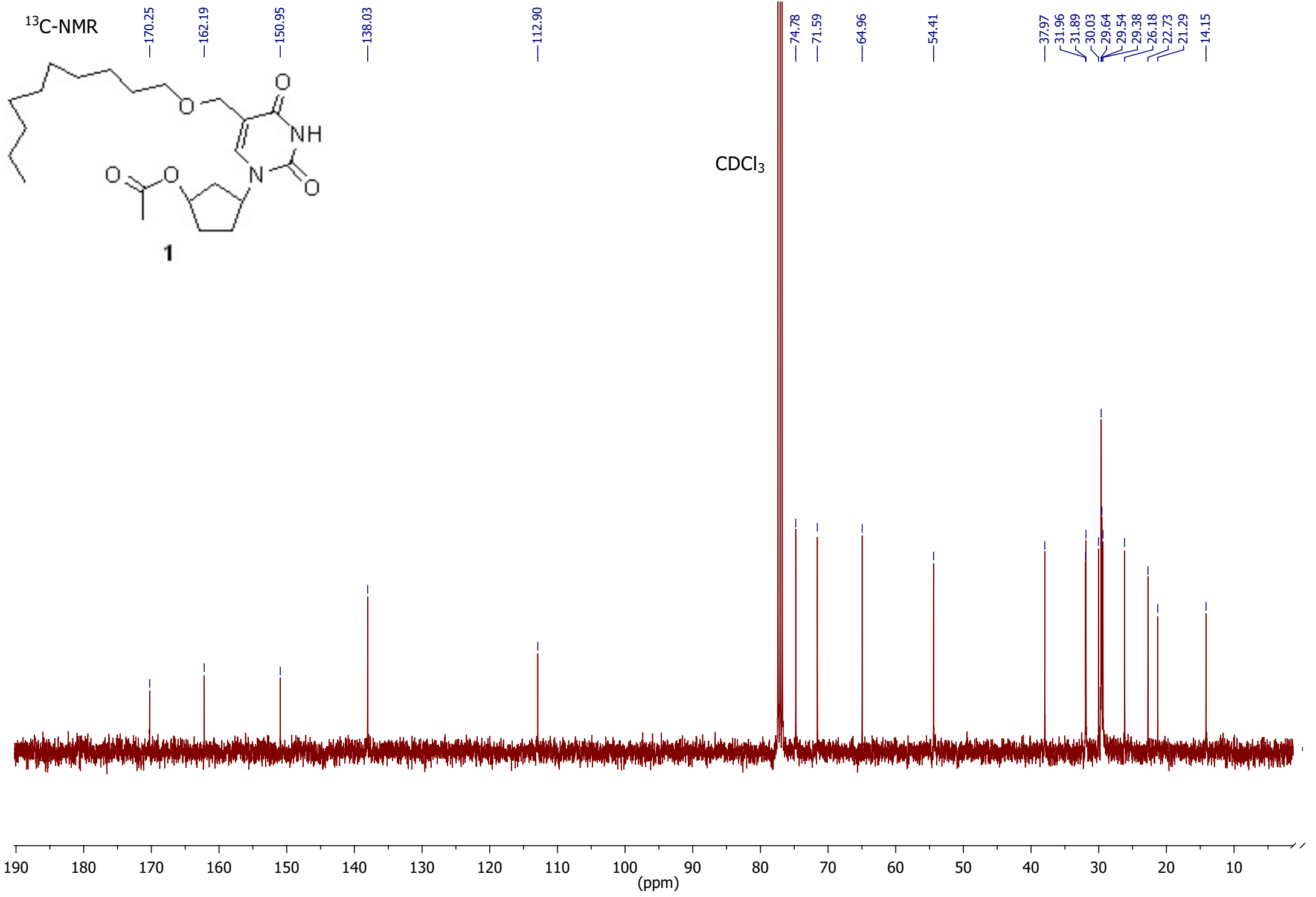
<sup>#</sup> equal contribution

## Supplementary materials

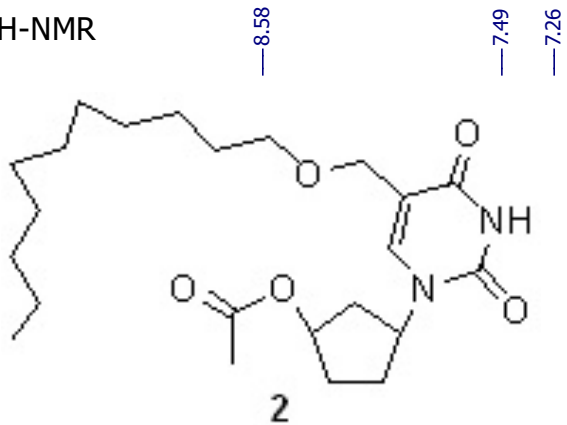
### Table of contents

<sup>1</sup> H NMR for compound 1	p. 2
<sup>13</sup> C NMR for compound 1	p. 3
<sup>1</sup> H NMR for compound 2	p. 4
<sup>13</sup> C NMR for compound 2	p. 5
<sup>1</sup> H NMR for compound 3	p. 6
<sup>13</sup> C NMR for compound 3	p. 7
<sup>1</sup> H NMR for compound 4	p. 8
<sup>13</sup> C NMR for compound 4	p. 9
<sup>1</sup> H NMR for compound 5	p.10
<sup>13</sup> C NMR for compound 5	p.11
<sup>1</sup> H NMR for compound 6	p.12
<sup>13</sup> C NMR for compound 6	p.13
<sup>1</sup> H NMR for compound 7	p.14
<sup>13</sup> C NMR for compound 7	p.15
<sup>1</sup> H NMR for compound 8	p.16
<sup>13</sup> C NMR for compound 8	p.17
<sup>1</sup> H NMR for compound 9	p.18
<sup>13</sup> C NMR for compound 9	p.19
<sup>1</sup> H NMR for compound 10	p.20
<sup>13</sup> C NMR for compound 10	p.21
<sup>1</sup> H NMR for compound 11	p.22
<sup>13</sup> C NMR for compound 11	p.23
<sup>1</sup> H NMR for compound 12	p.24
<sup>13</sup> C NMR for compound 12	p.25
<b>Table.</b> The antimycobacterial activity of 5'-norcarbocyclic derivatives of 5-substituted uracil	p.26





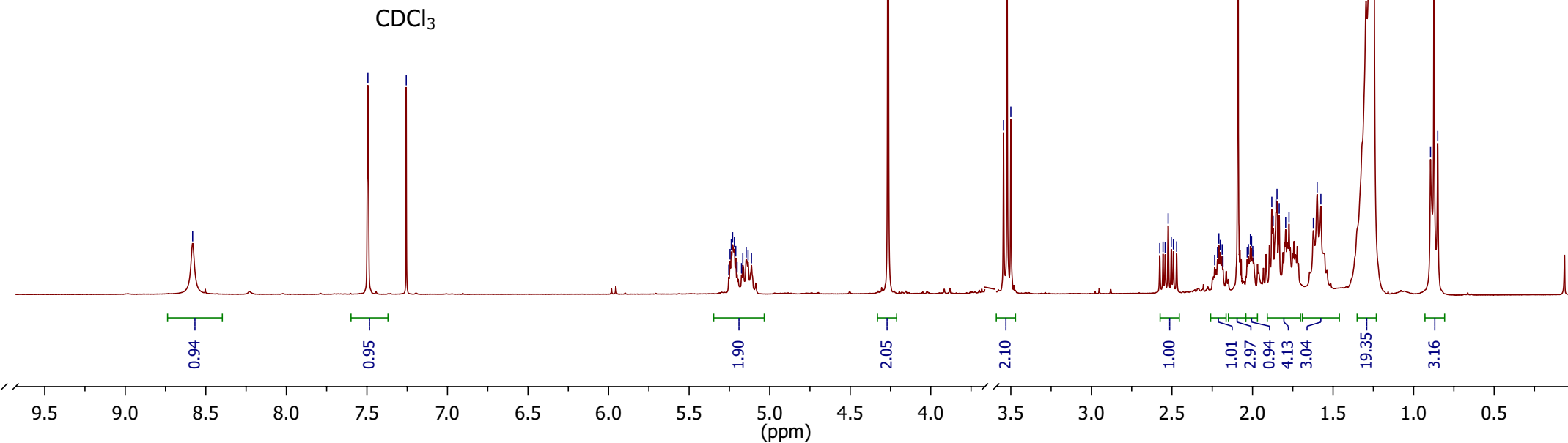
<sup>1</sup>H-NMR



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7.26

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4.26

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1.26  
0.90  
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0.94

0.95

1.90

2.05

2.10

1.00

1.01

2.97

0.94

4.13

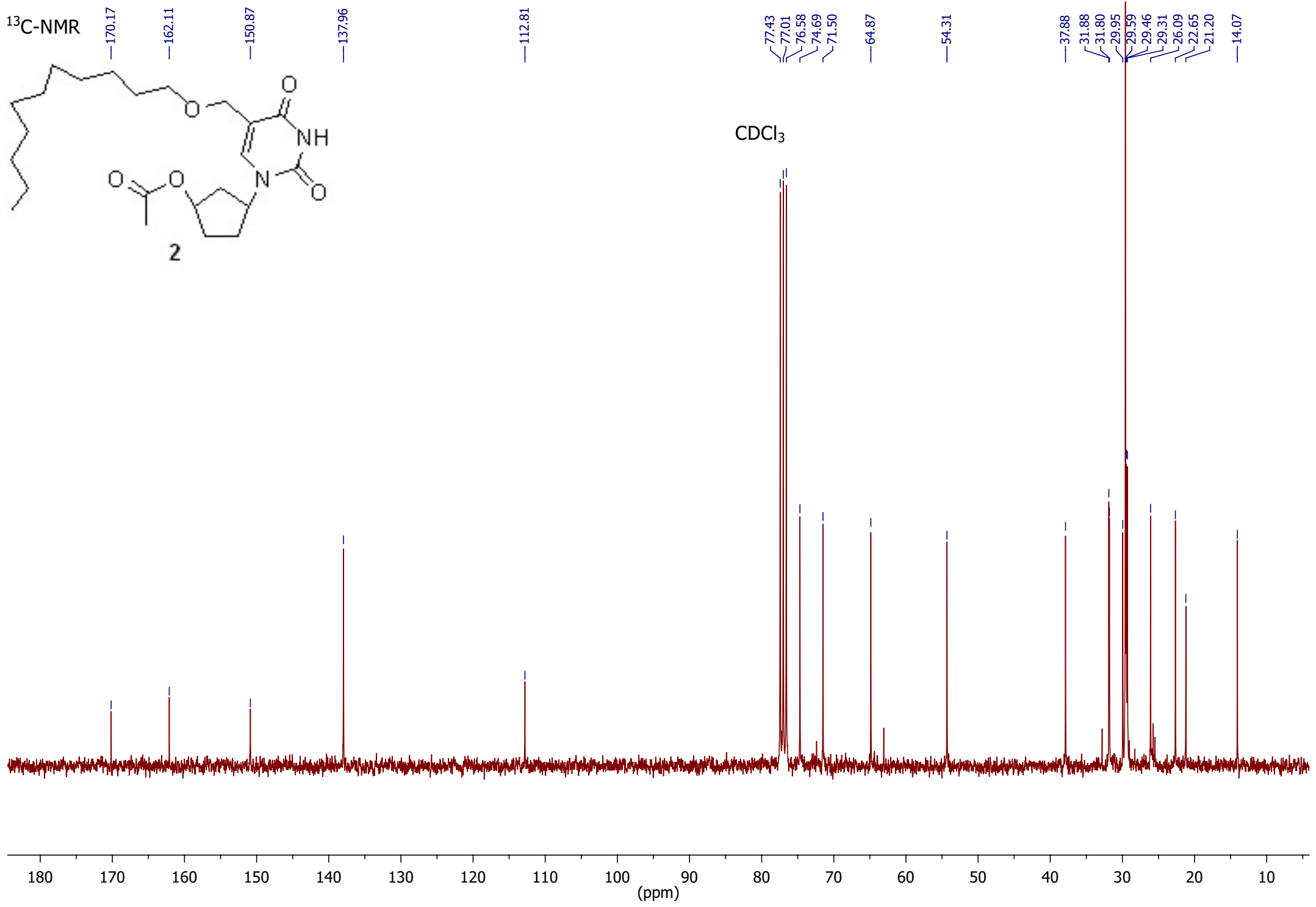
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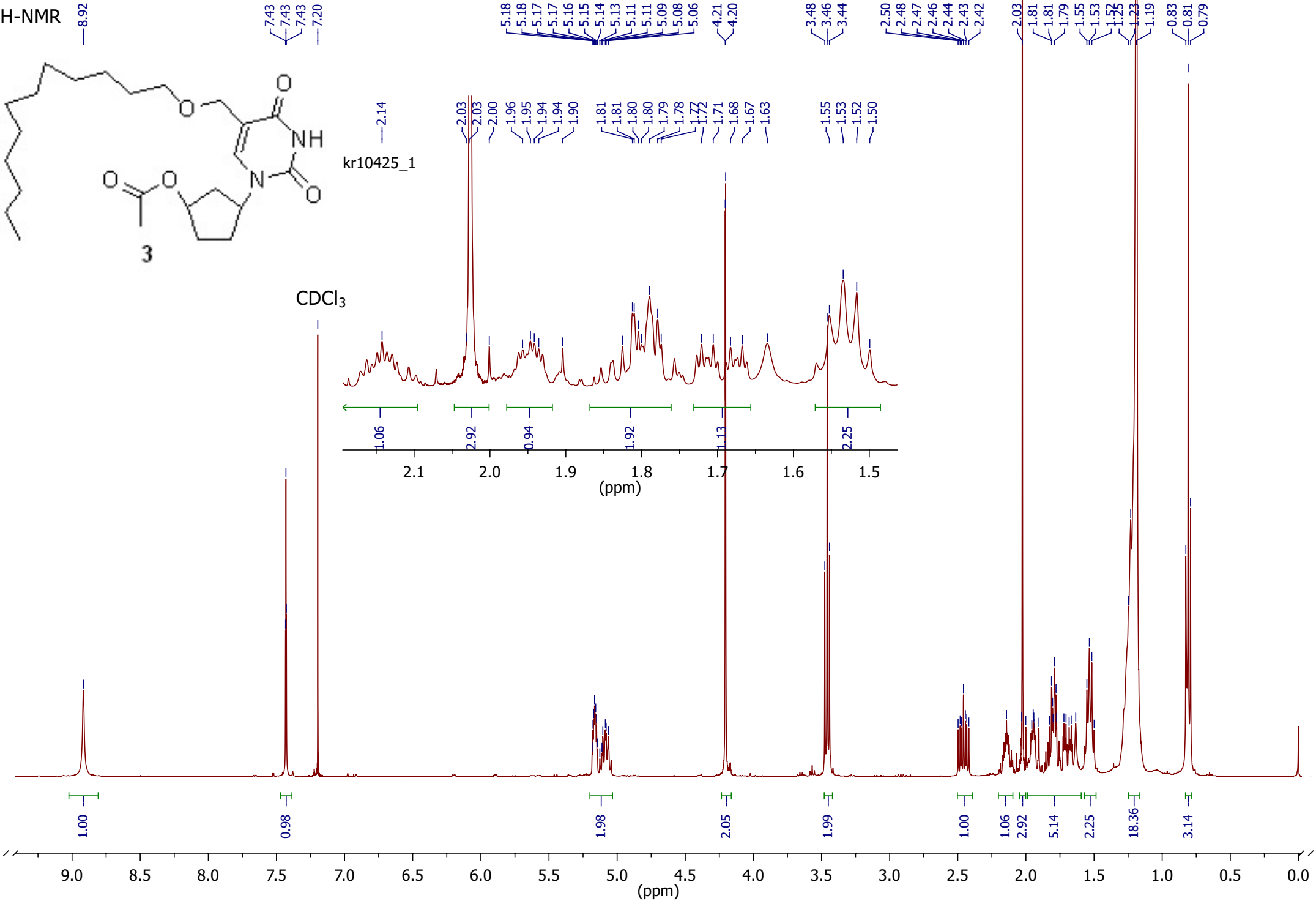
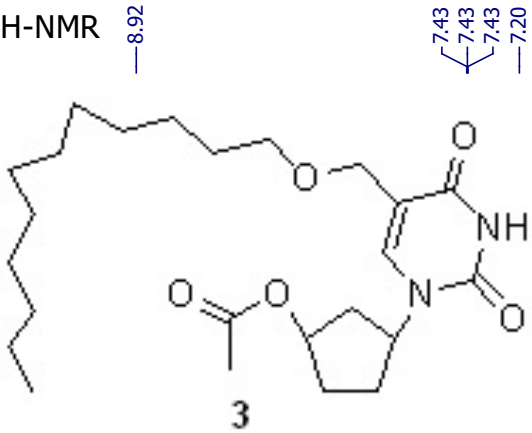
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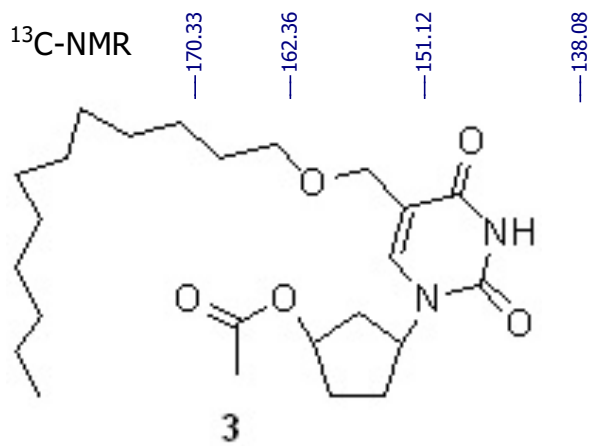
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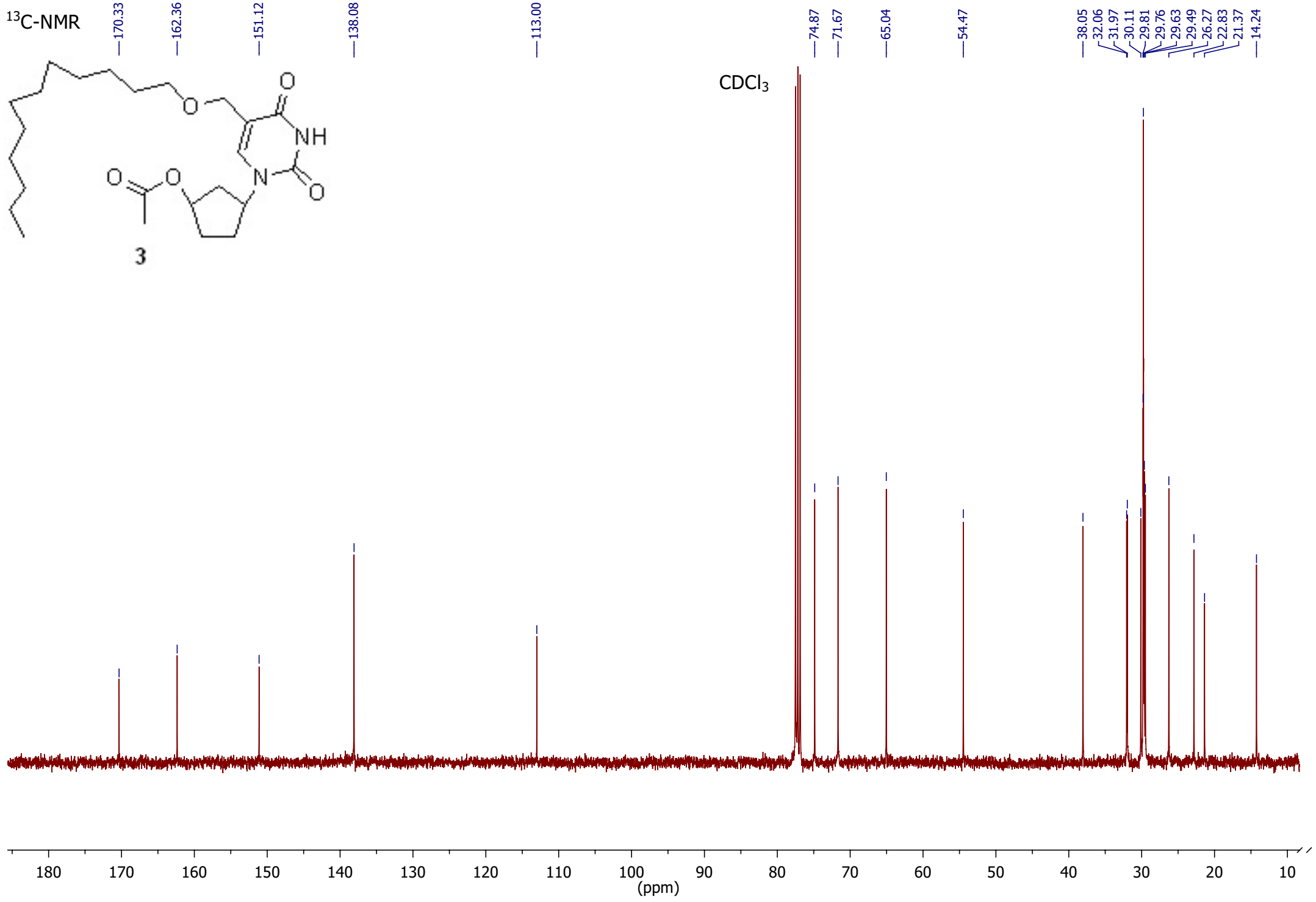
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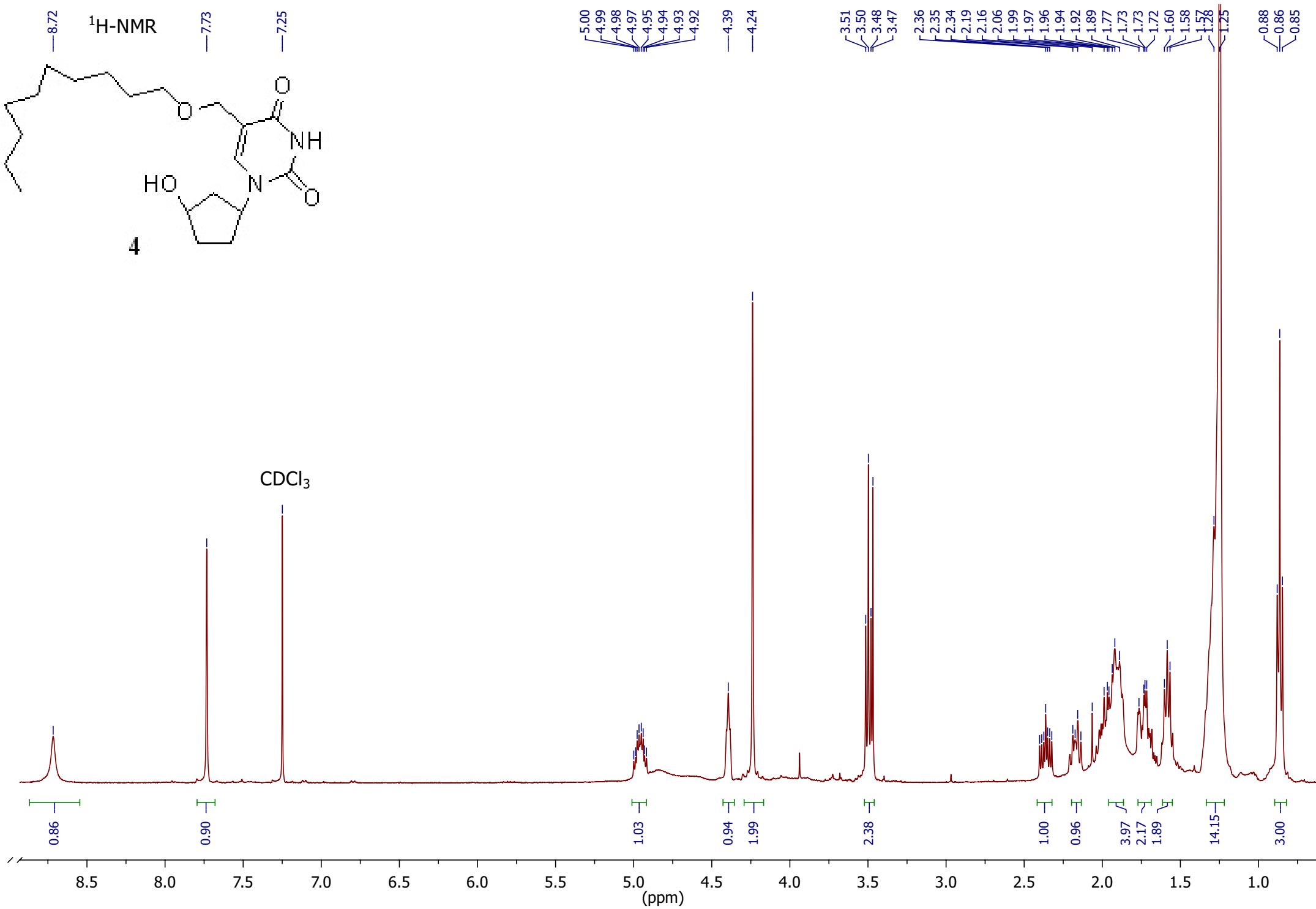
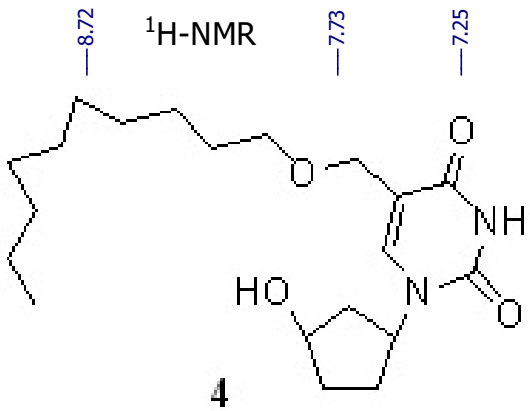


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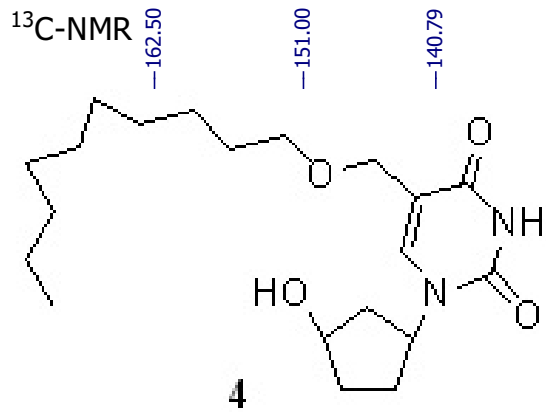


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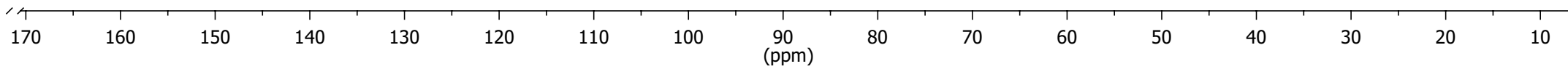


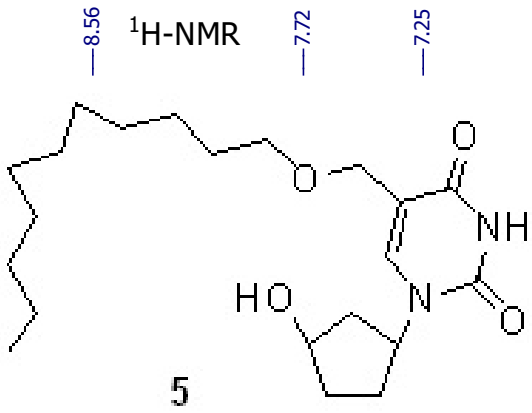




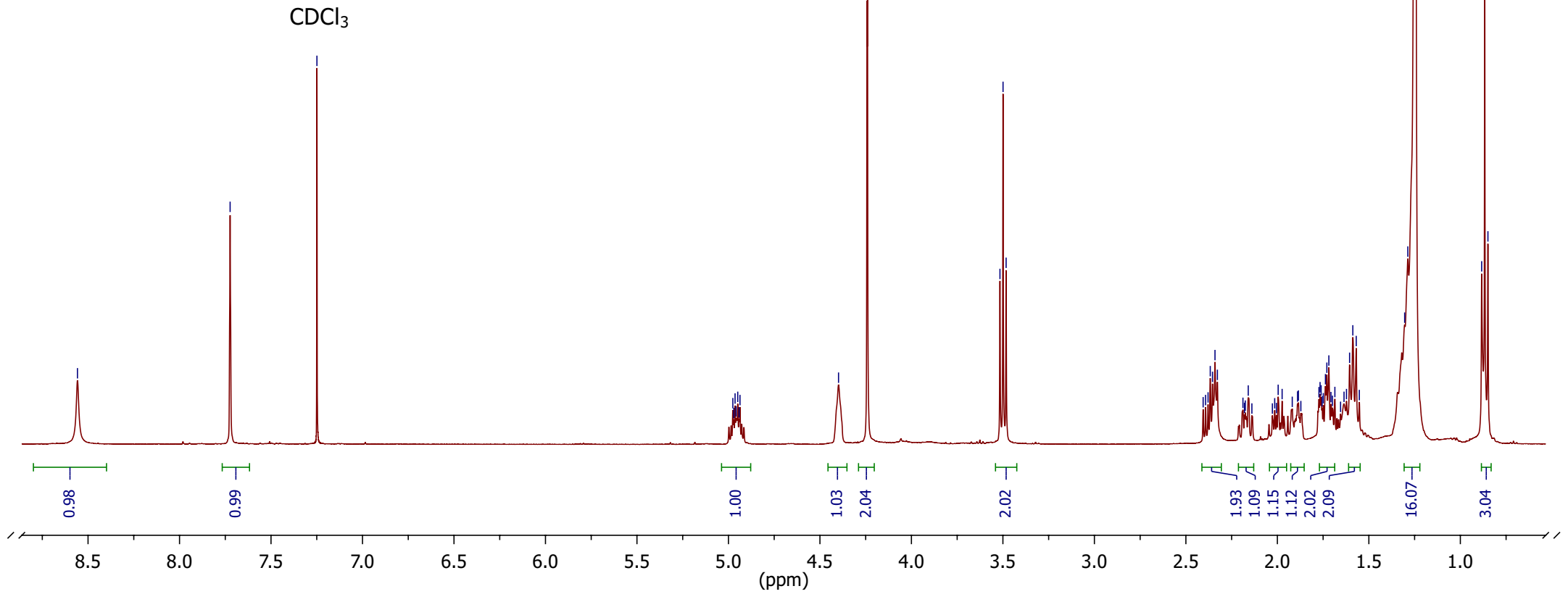
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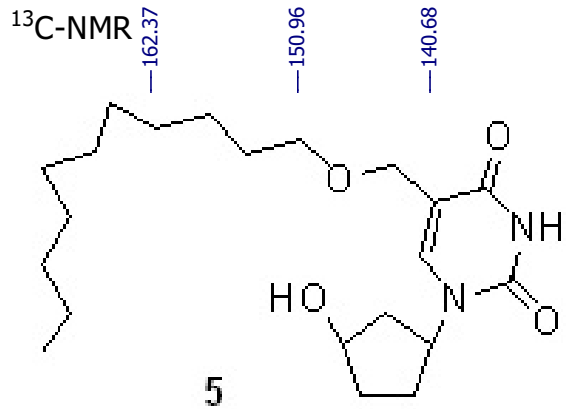
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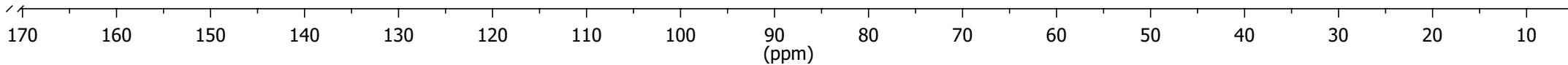
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3.52  
3.50  
3.48  
2.37  
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2.34  
2.33  
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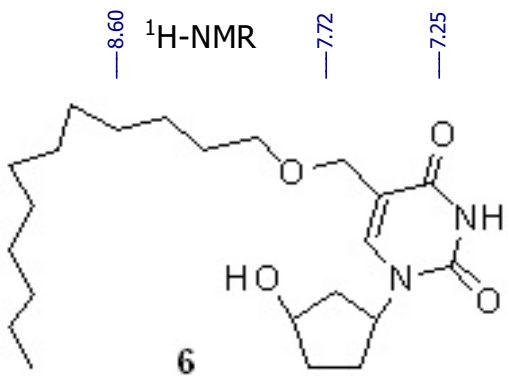




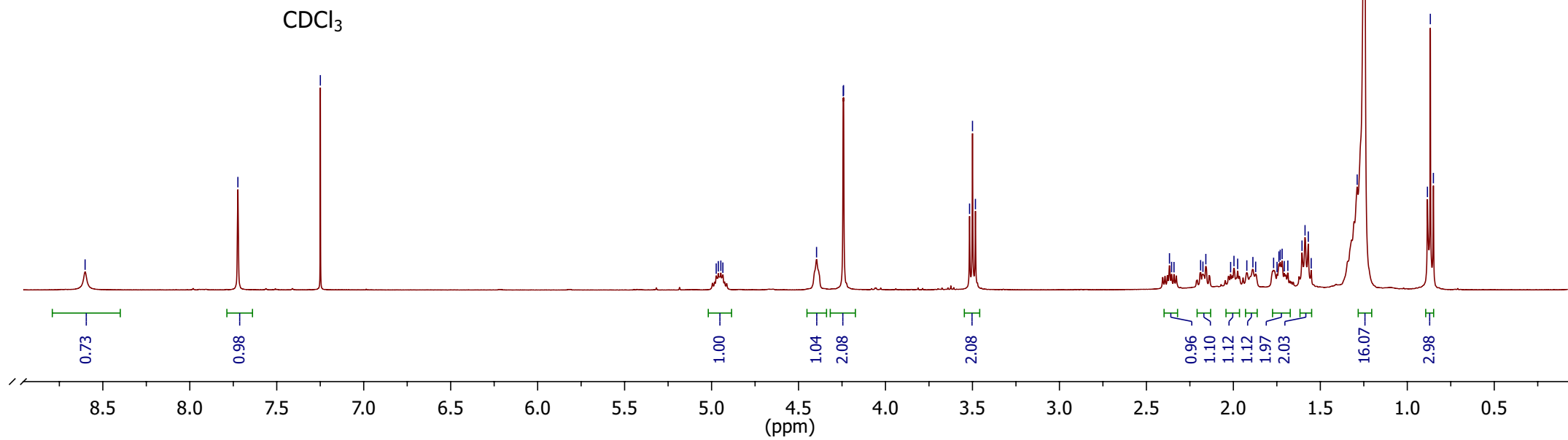
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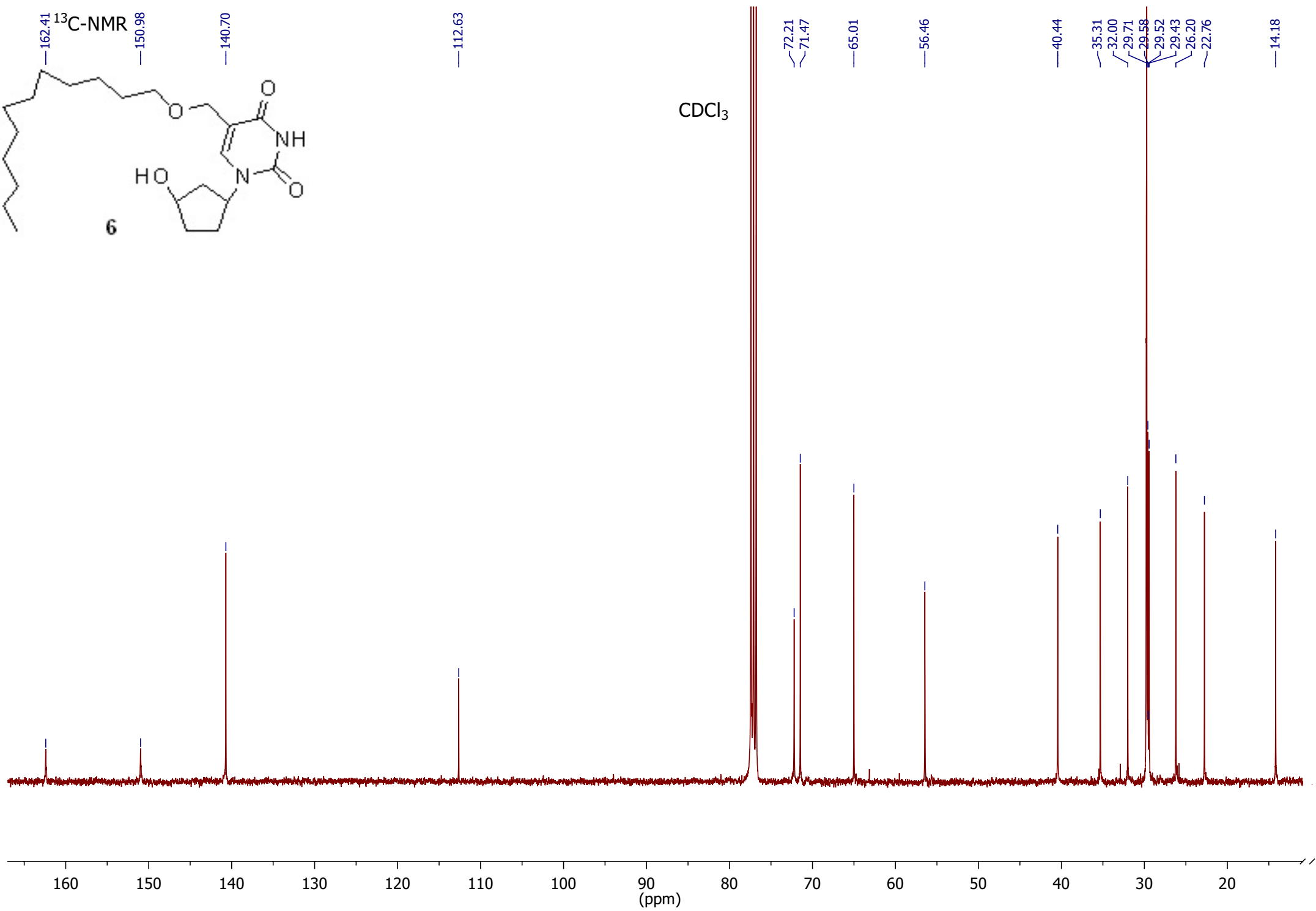
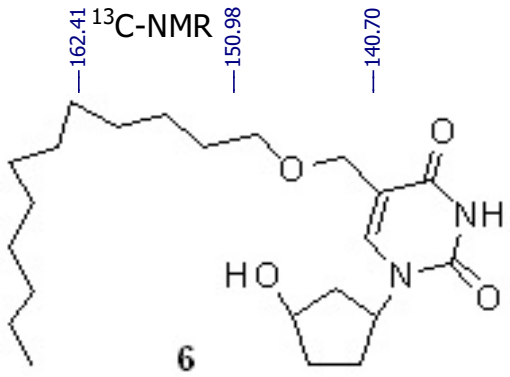
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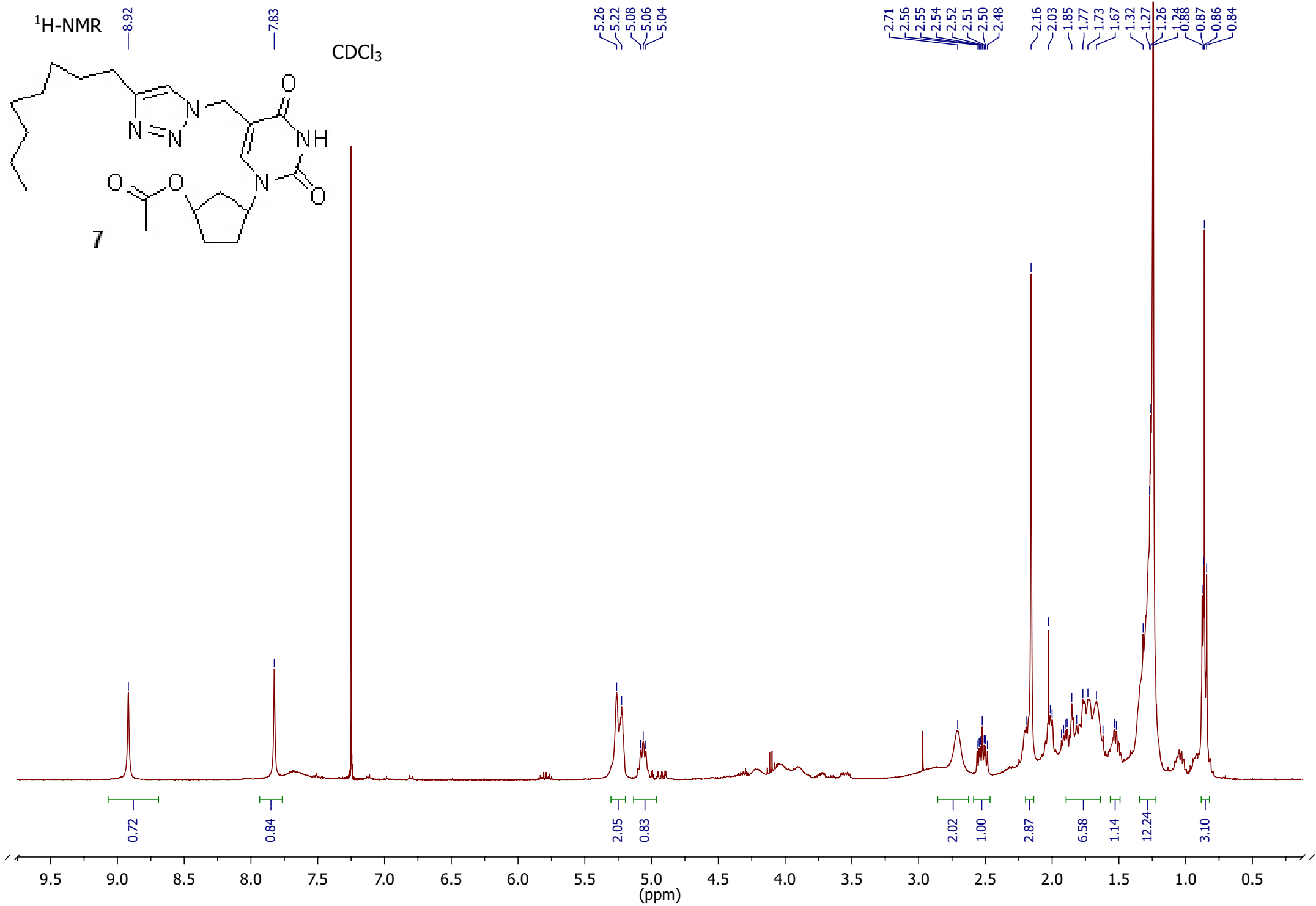


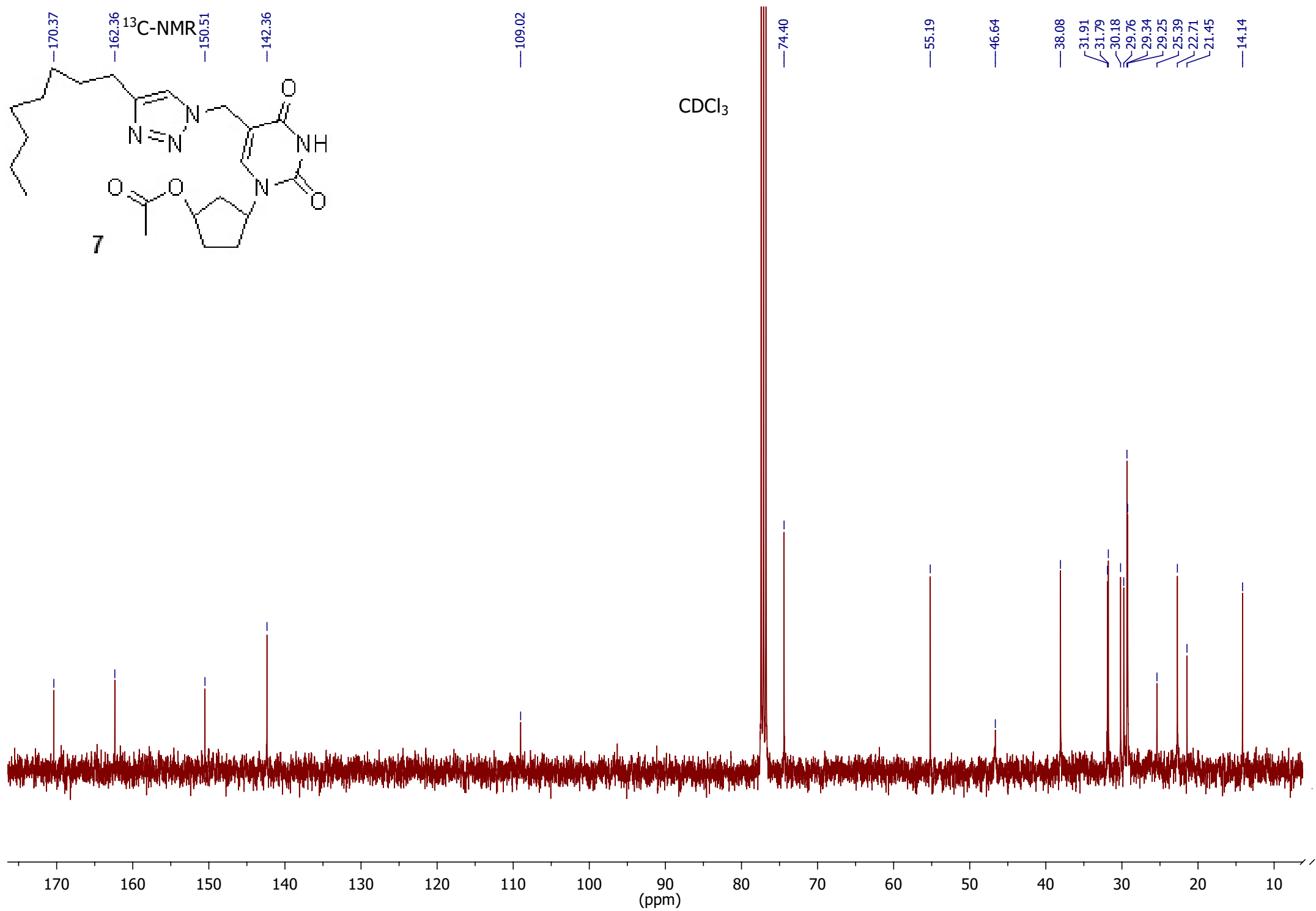
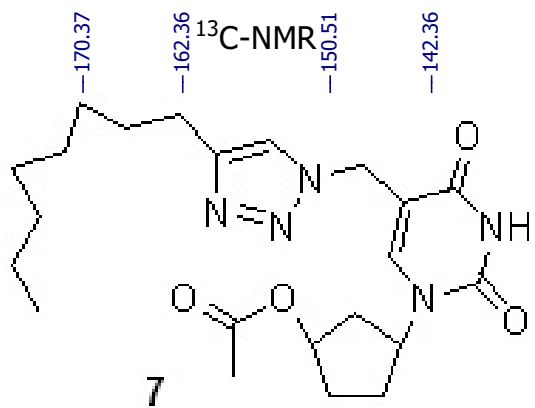


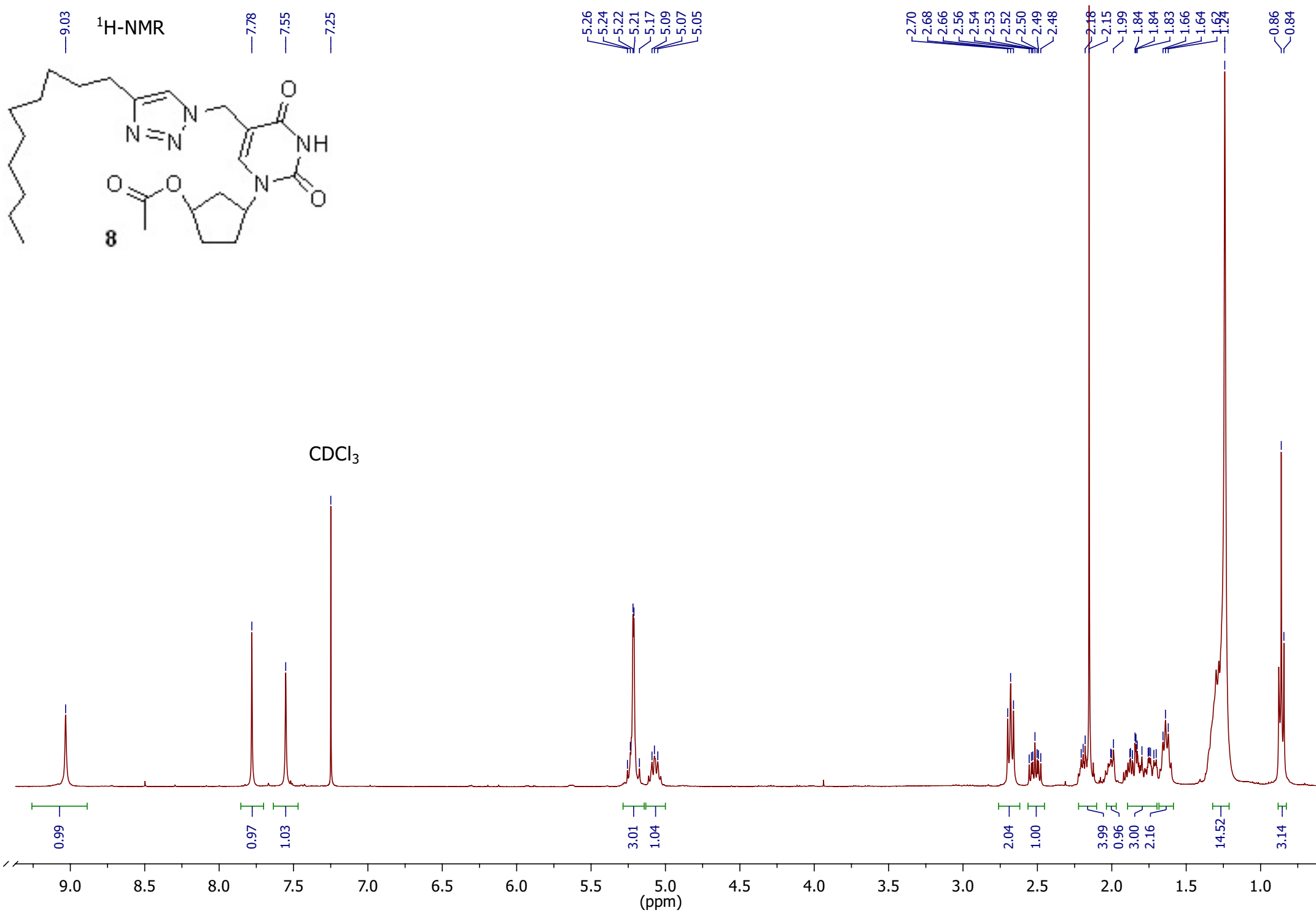
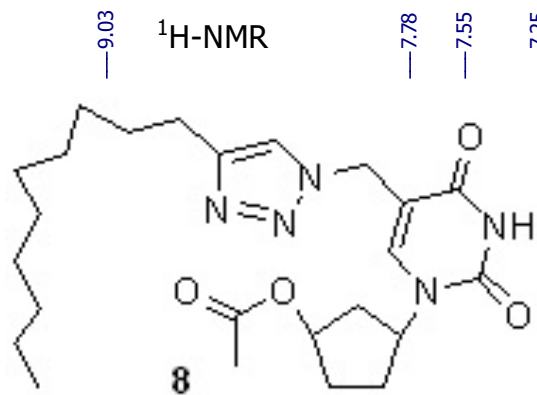
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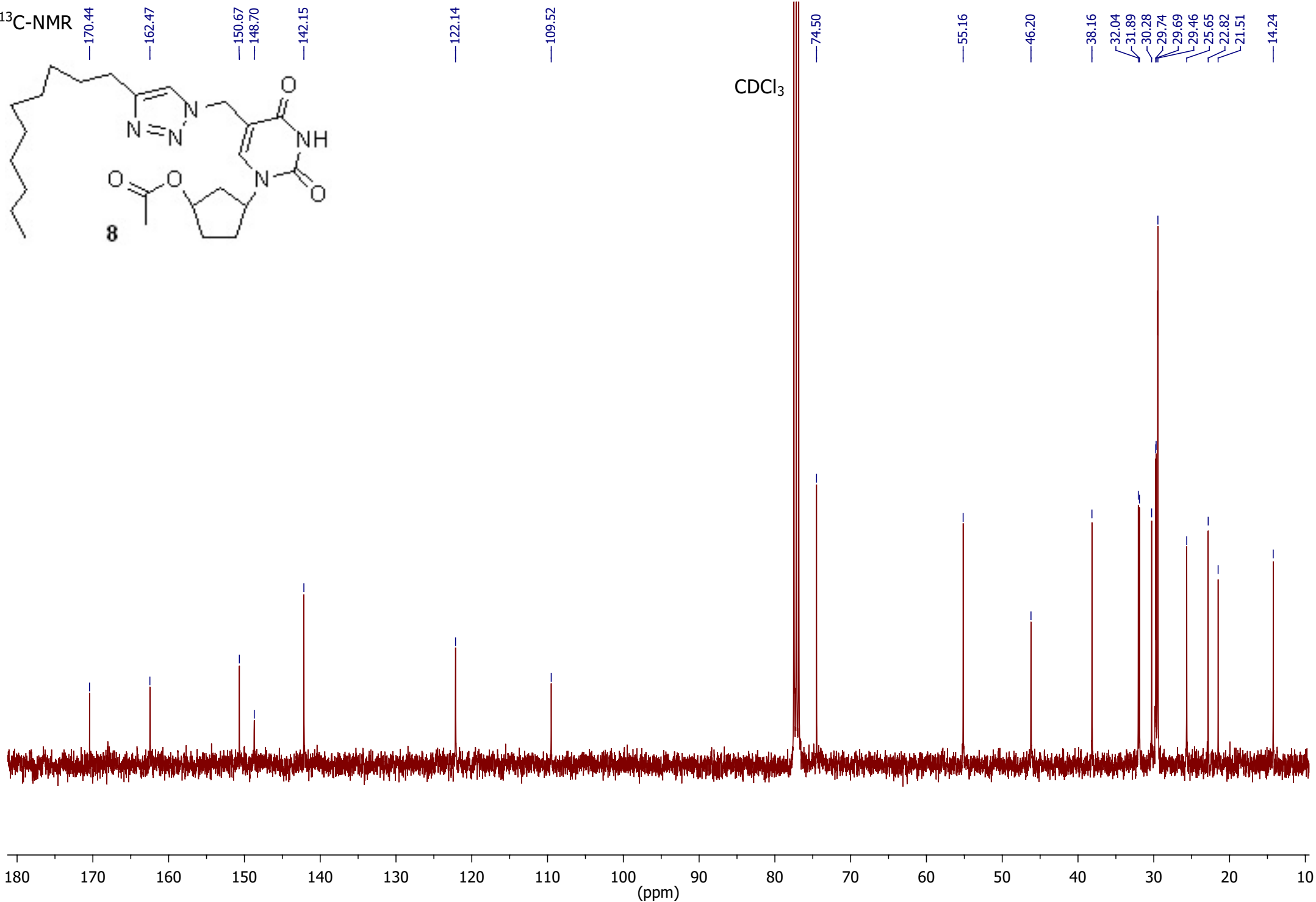




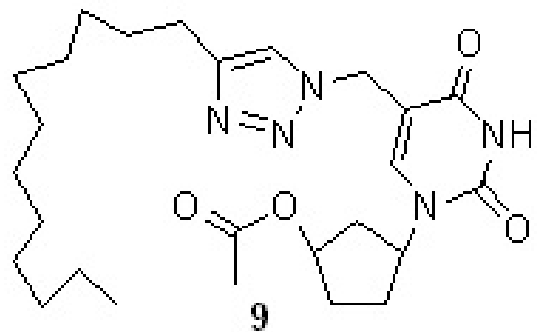




<sup>13</sup>C-NMR



<sup>1</sup>H-NMR



9.30

7.78

7.55

7.25

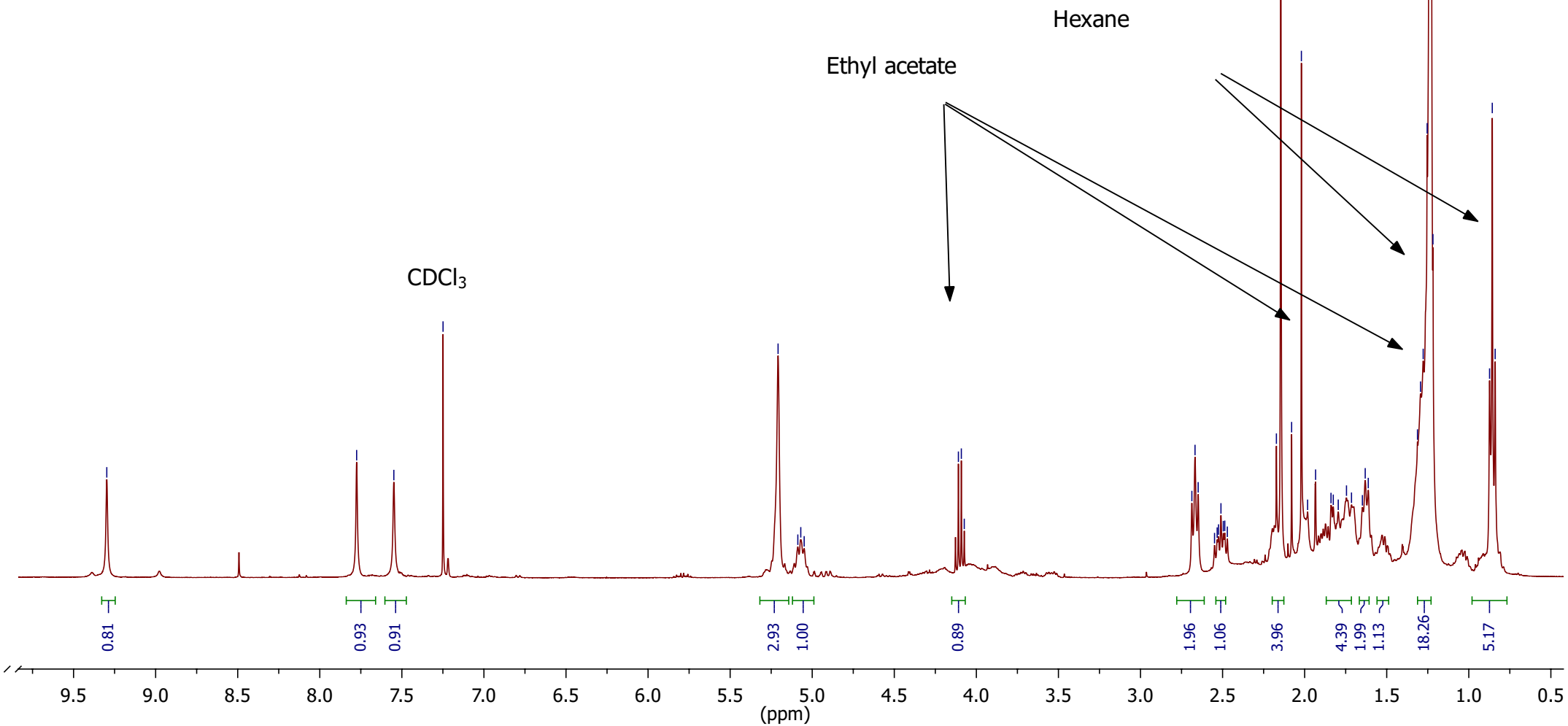
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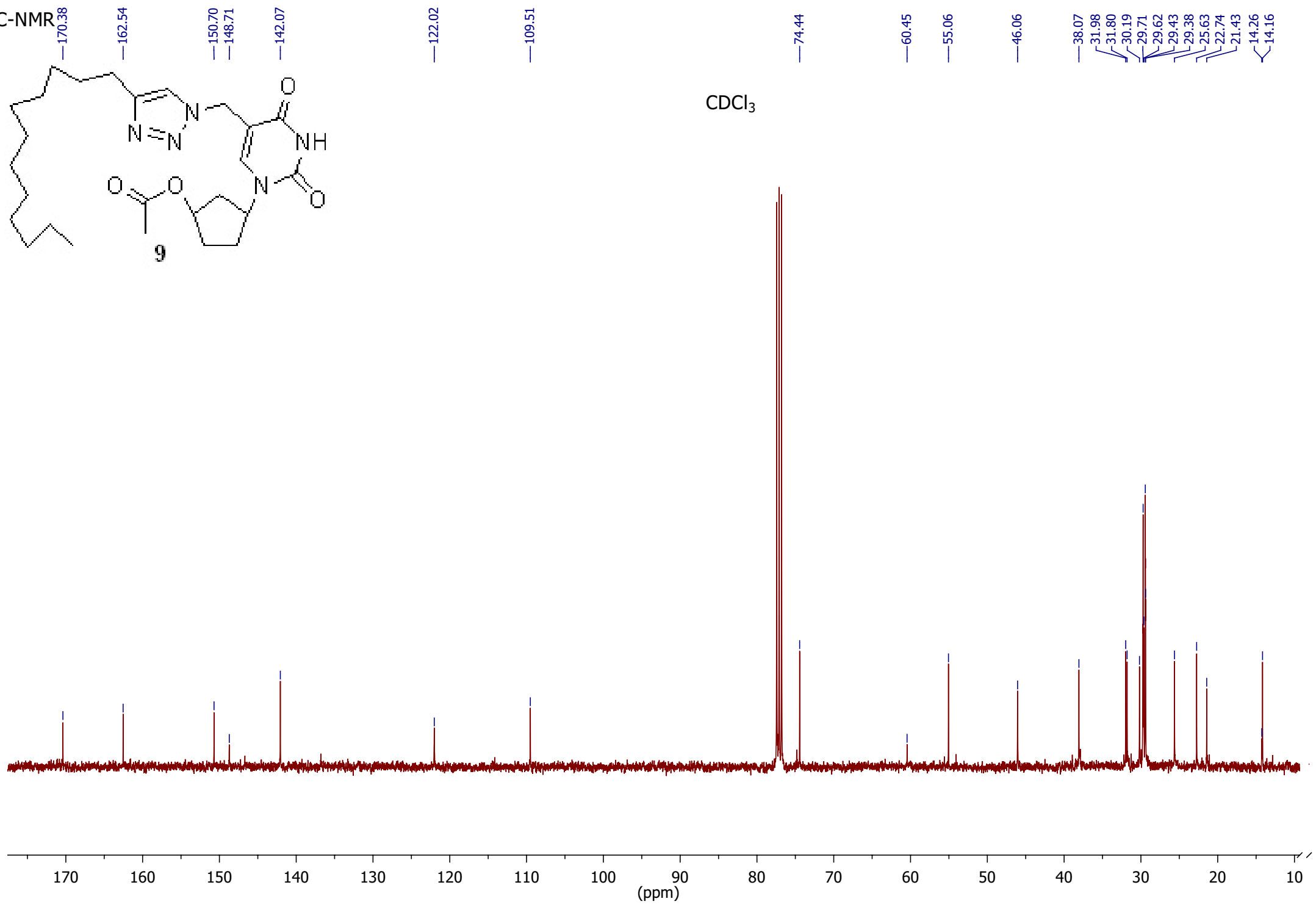
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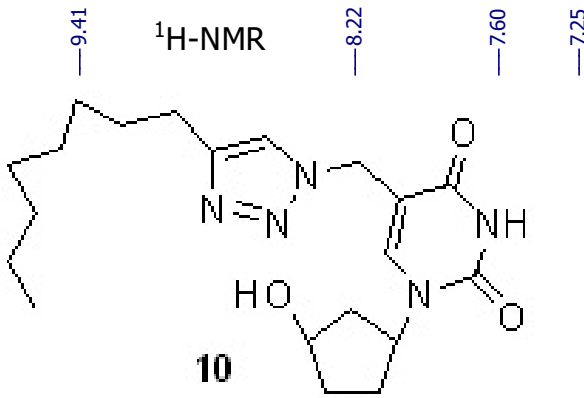
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1.24  
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0.84

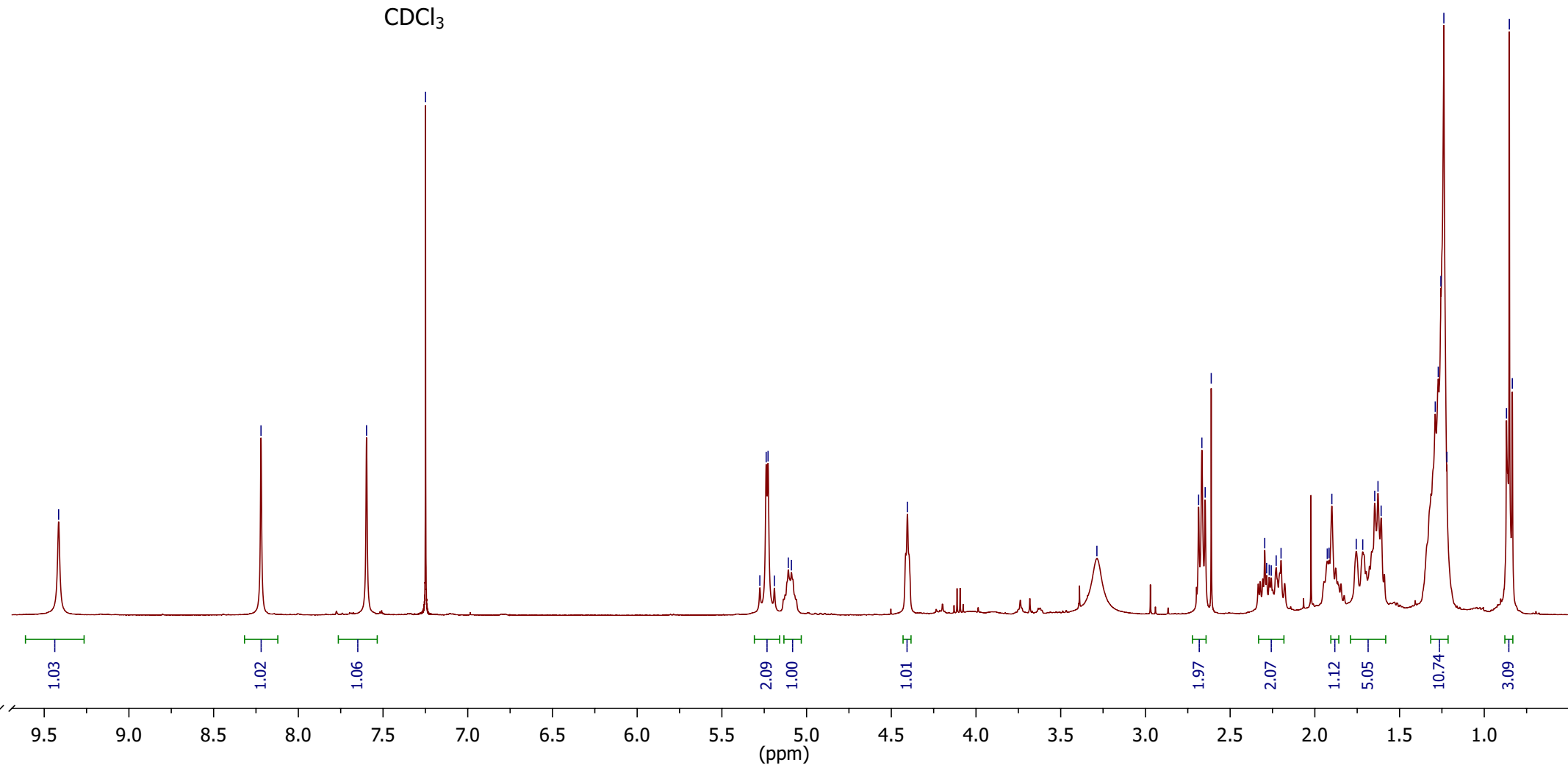


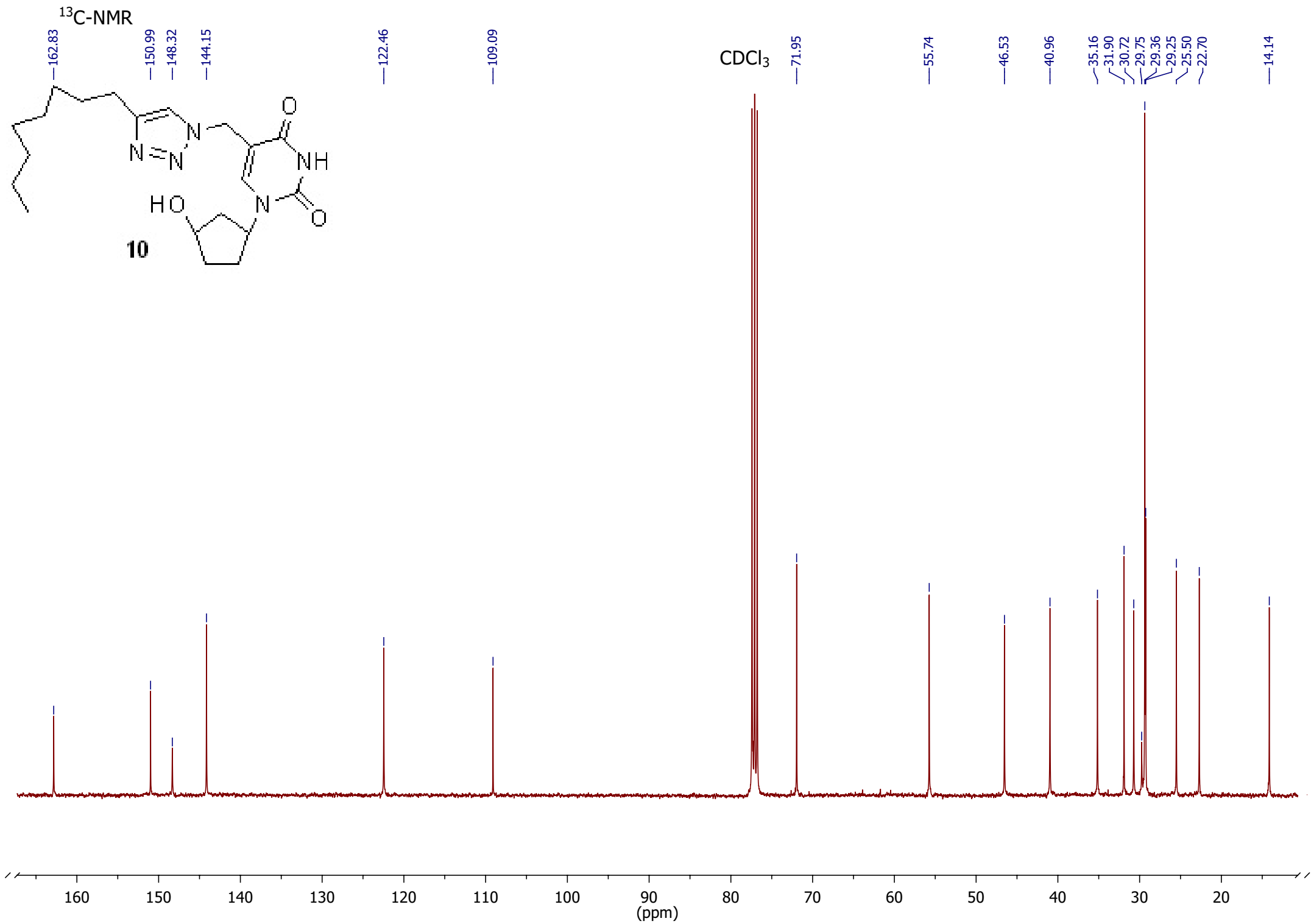
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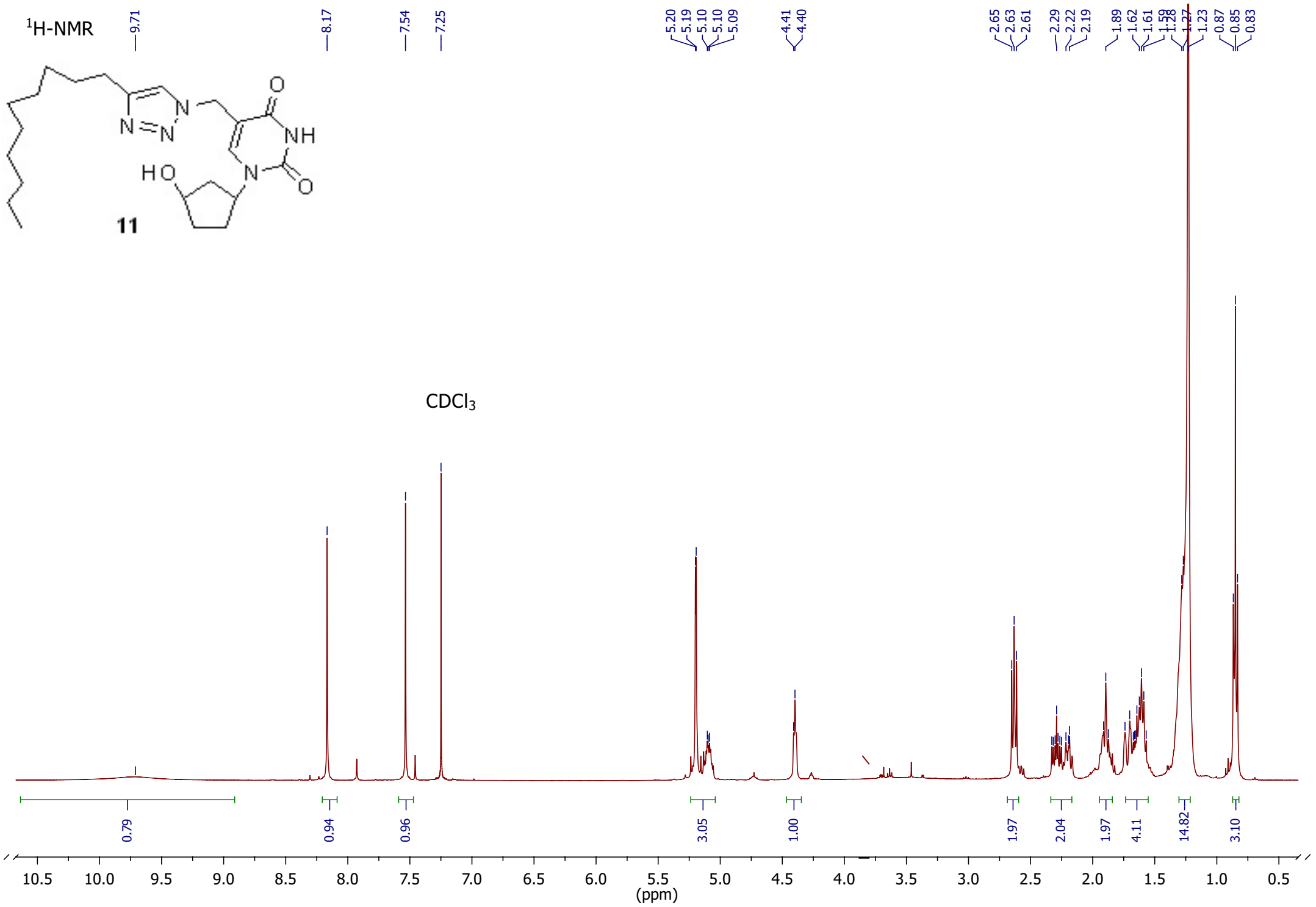
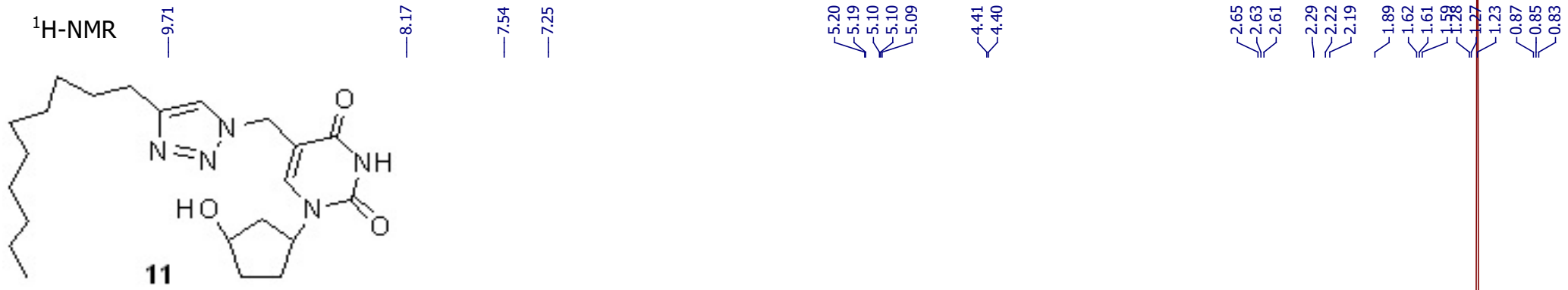


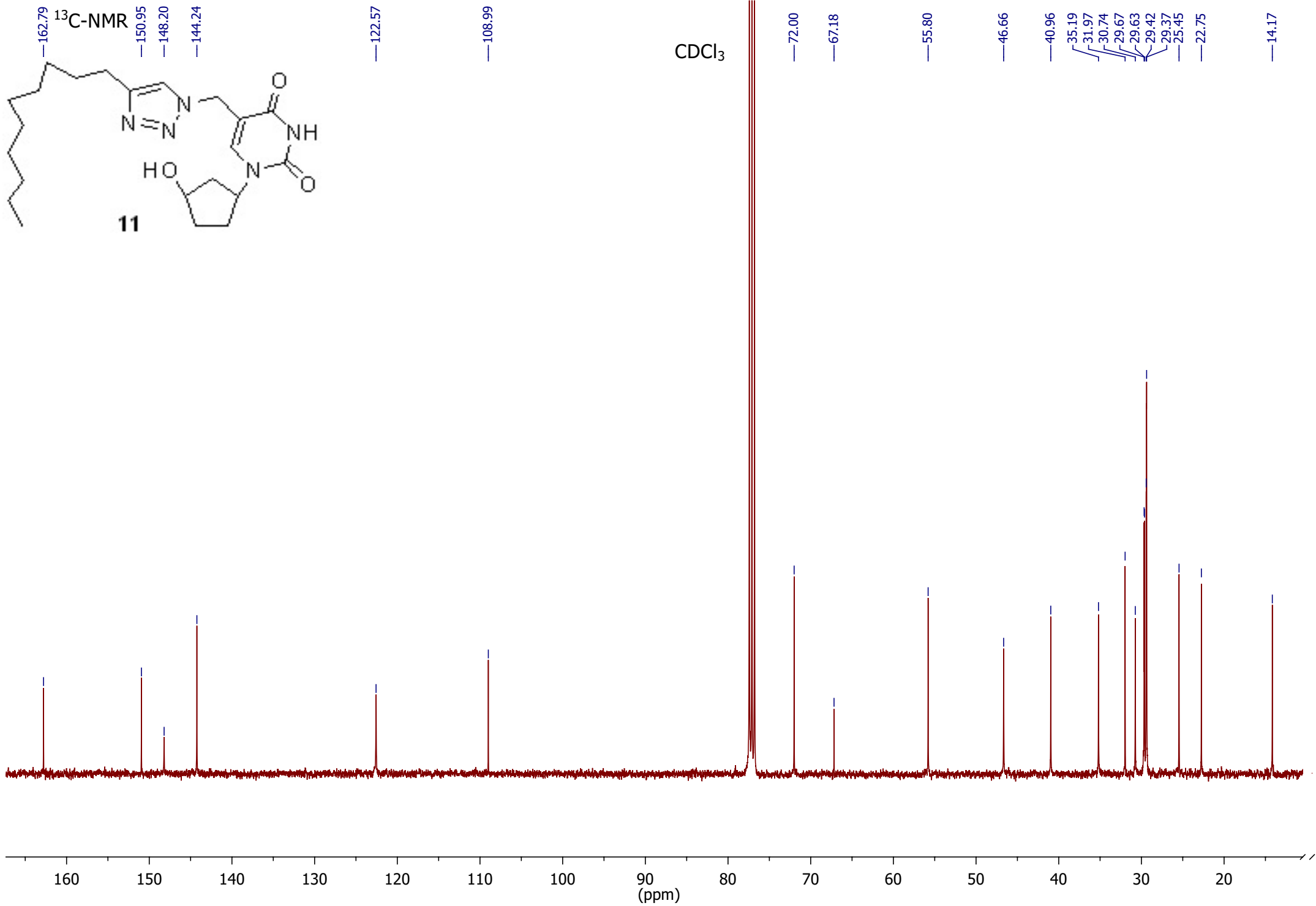
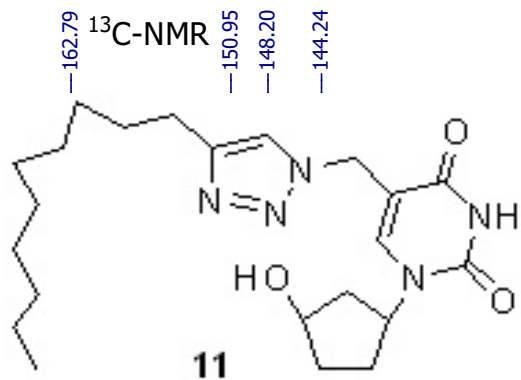
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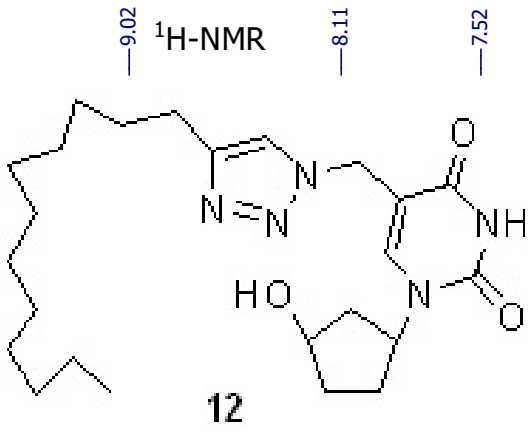




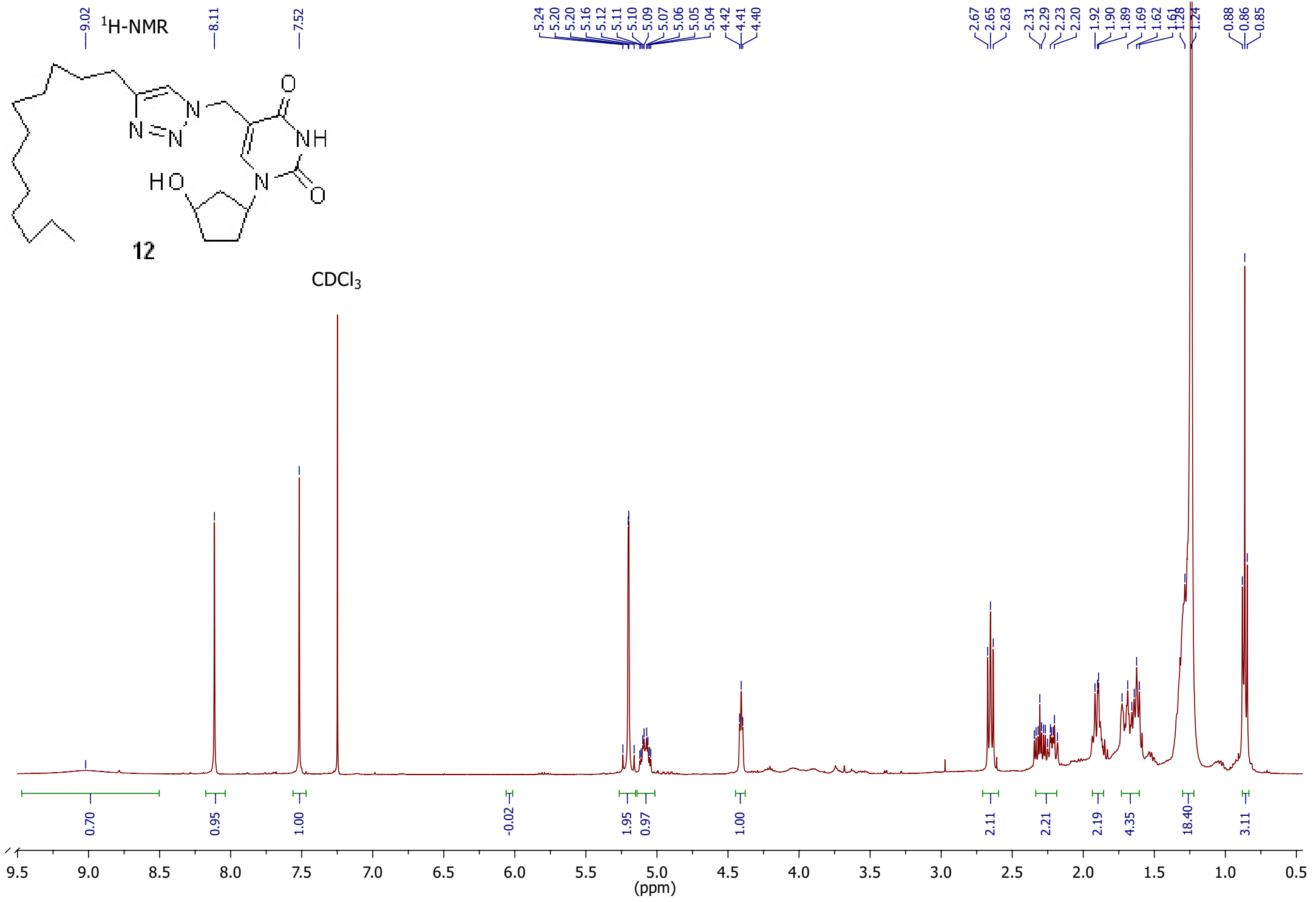
<sup>1</sup>H-NMR





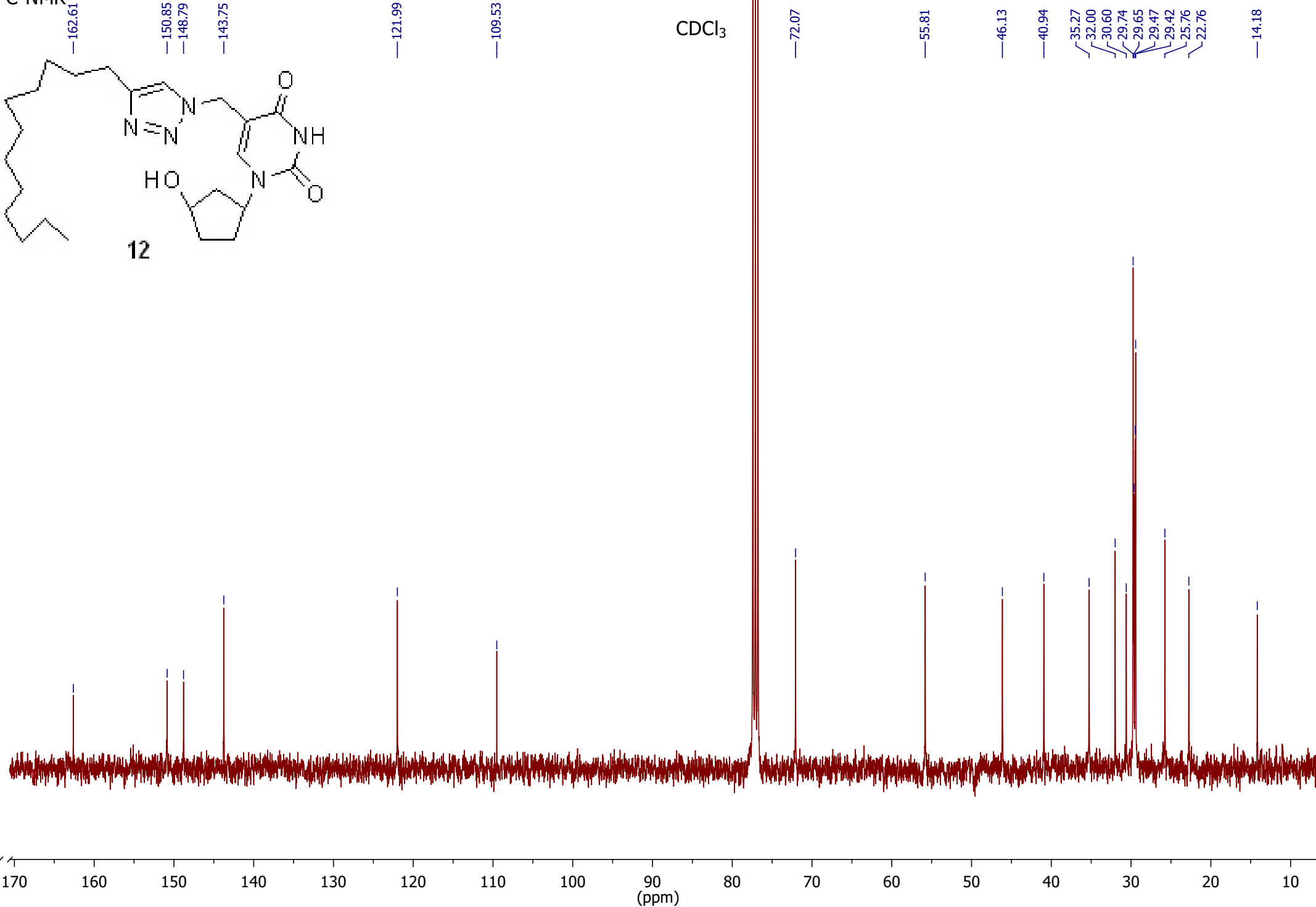


CDCl<sub>3</sub>





<sup>13</sup>C-NMR



**Table .** The antimycobacterial activity of 5'-norcarbocyclic derivatives of 5-substituted uracil

Compounds	Concentration, $\mu\text{g/ml}$	<i>M.tuberculosis</i> H37Rv			<i>M.tuberculosis</i> MS-115		
		Culture growth initiation, days (Mean $\pm$ SD)	Growth inhibition (%)	MIC(99), $\mu\text{g/ml}$	Culture growth initiation, days (Mean $\pm$ SD)	Growth inhibition (%)	MIC(99), $\mu\text{g/ml}$
drug-free control		6,00 $\pm$ 0,12	-	-	5,66 $\pm$ 0,02	-	-
INH	0,1	No culture growth	100	$\leq$ 0,1	5,80 $\pm$ 0,02	No	>100
RIF	1	No culture growth	100	$\leq$ 1	5,73 $\pm$ 0,08	No	>50
LFX	1,5	No culture growth	100	$\leq$ 1,5	No culture growth	100	$\leq$ 1,5
<b>(<math>\pm</math>)3</b>	2,5	6,02 $\pm$ 0,25	No	20	5,72 $\pm$ 0,09	No	20
	5	7,37 $\pm$ 0,64	No		5,95 $\pm$ 0,11	No	
	10	9,80 $\pm$ 0,40	90		7,74 $\pm$ 0,34	75	
	20	11,05 $\pm$ 3,54	99		12,23 <sup>1)</sup>	99	
	50	8,57 $\pm$ 0,27 <sup>1)</sup>	99		No culture growth	100	
<b>(<math>\pm</math>)7</b>	2,5	5,82 $\pm$ 0,09	No	50	5,62 $\pm$ 0,06	No	20
	5	6,14 $\pm$ 0,05	No		5,84 $\pm$ 0,10	No	
	10	8,11 $\pm$ 0,23	75		6,48 $\pm$ 0,11	No	
	20	9,31 $\pm$ 0,31	90		12,35 $\pm$ 2,00 <sup>1)</sup>	99	
	50	10,38 <sup>1)</sup>	99		No culture growth	100	
<b>(<math>\pm</math>)8</b>	2,5	5,17 $\pm$ 0,04	No	50	5,65 $\pm$ 0,15	No	50
	5	5,27 $\pm$ 0,05	No		5,58 $\pm$ 0,09	No	
	10	5,81 $\pm$ 0,06	No		5,85 $\pm$ 0,11	No	
	20	7,73 $\pm$ 0,27	No		6,84 $\pm$ 0,27	No	
	50	No culture growth	100		No culture growth	100	

<sup>1)</sup> growth in one sample from three