

## **In Situ Formed Acetal Facilitated Direct Michael addition of Unactivated Ketones**

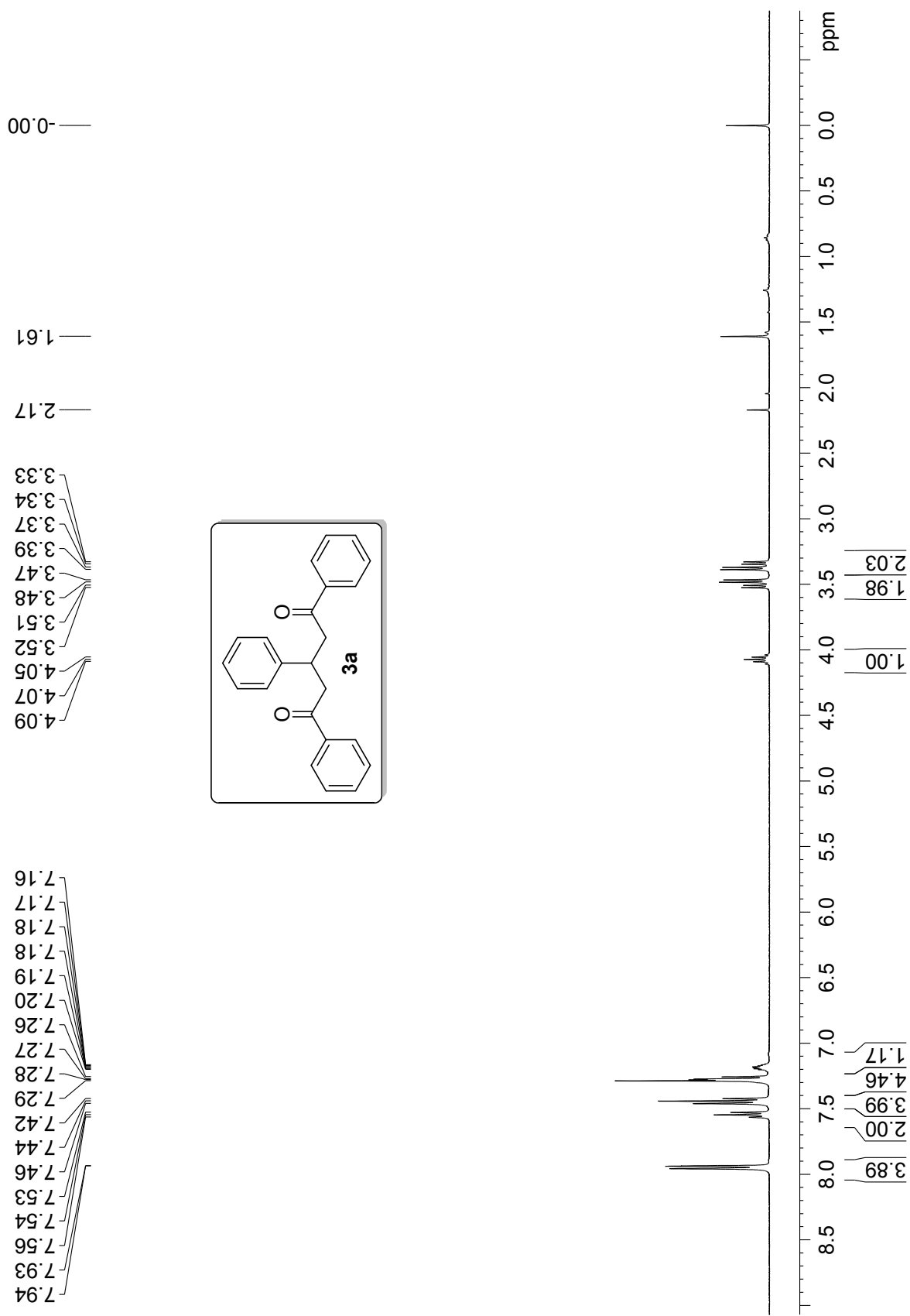
**Srinivasa Rao Koppolu and Rengarajan Balamurugan\***

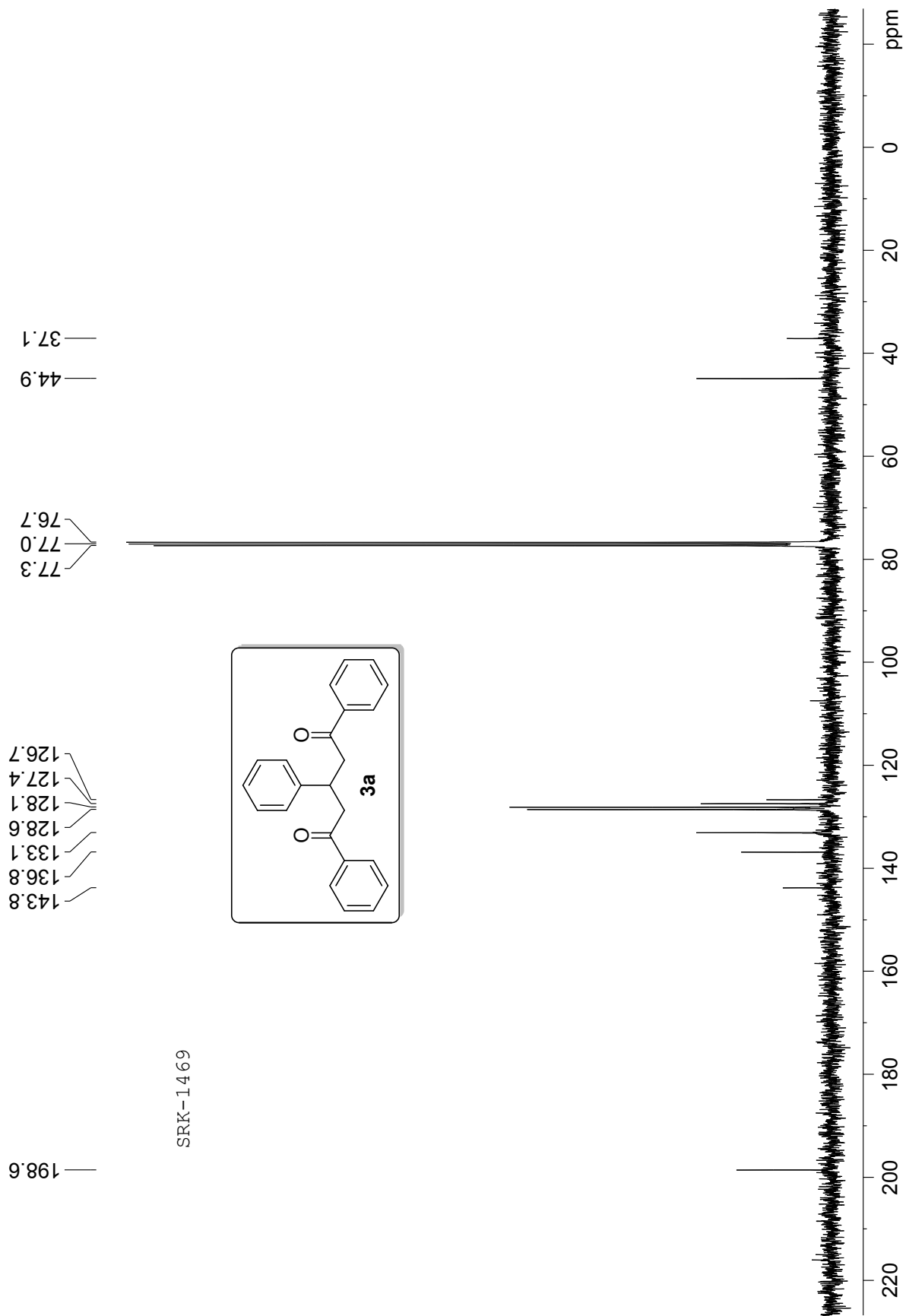
School of Chemistry, University of Hyderabad, Prof. C. R. Rao road, Gachibowli, Hyderabad 500046 INDIA

E-mail: [rpsc@uohyd.ernet.in](mailto:rpsc@uohyd.ernet.in)

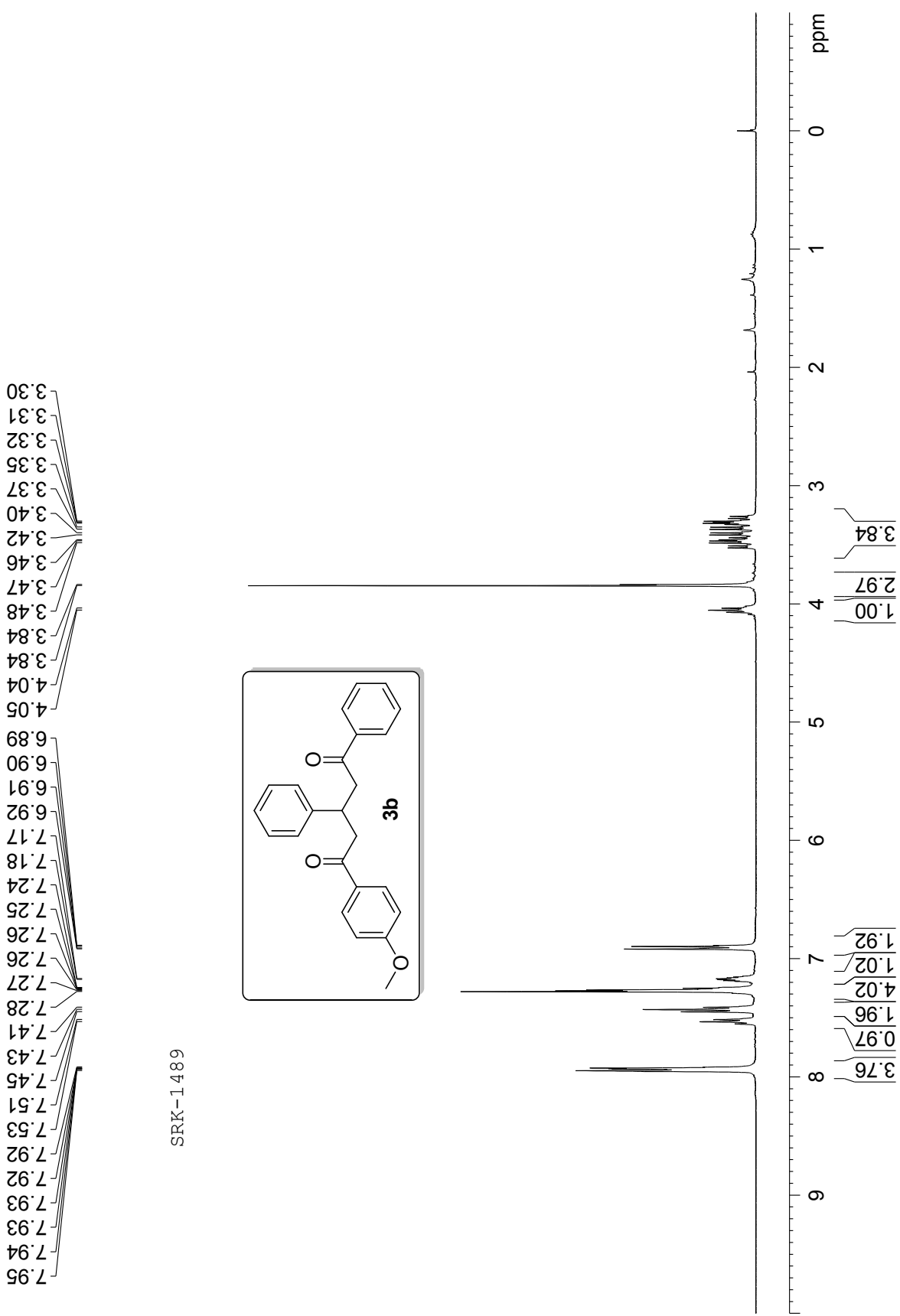
**Submitted to New J. Chem**

**Supporting Information**

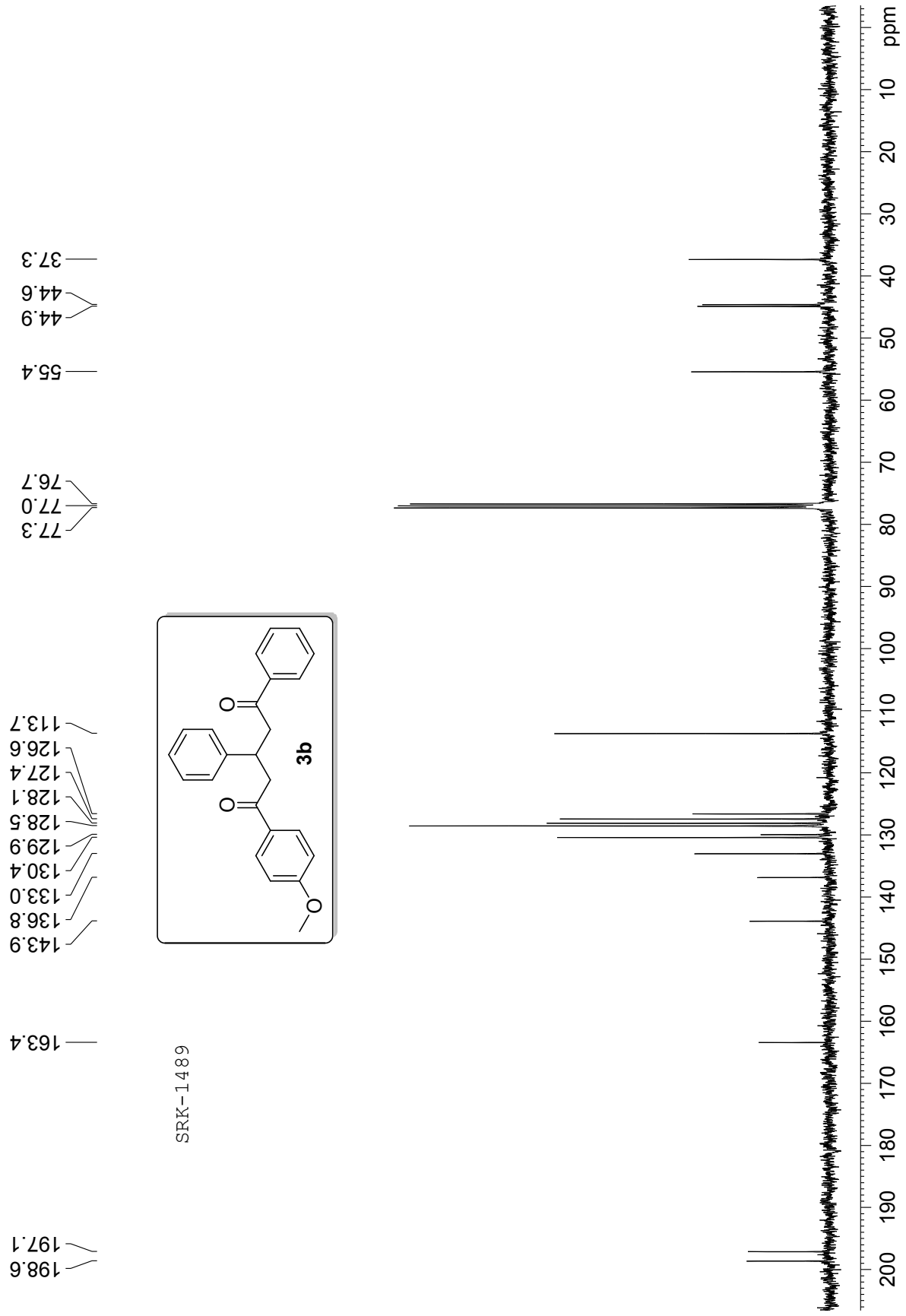




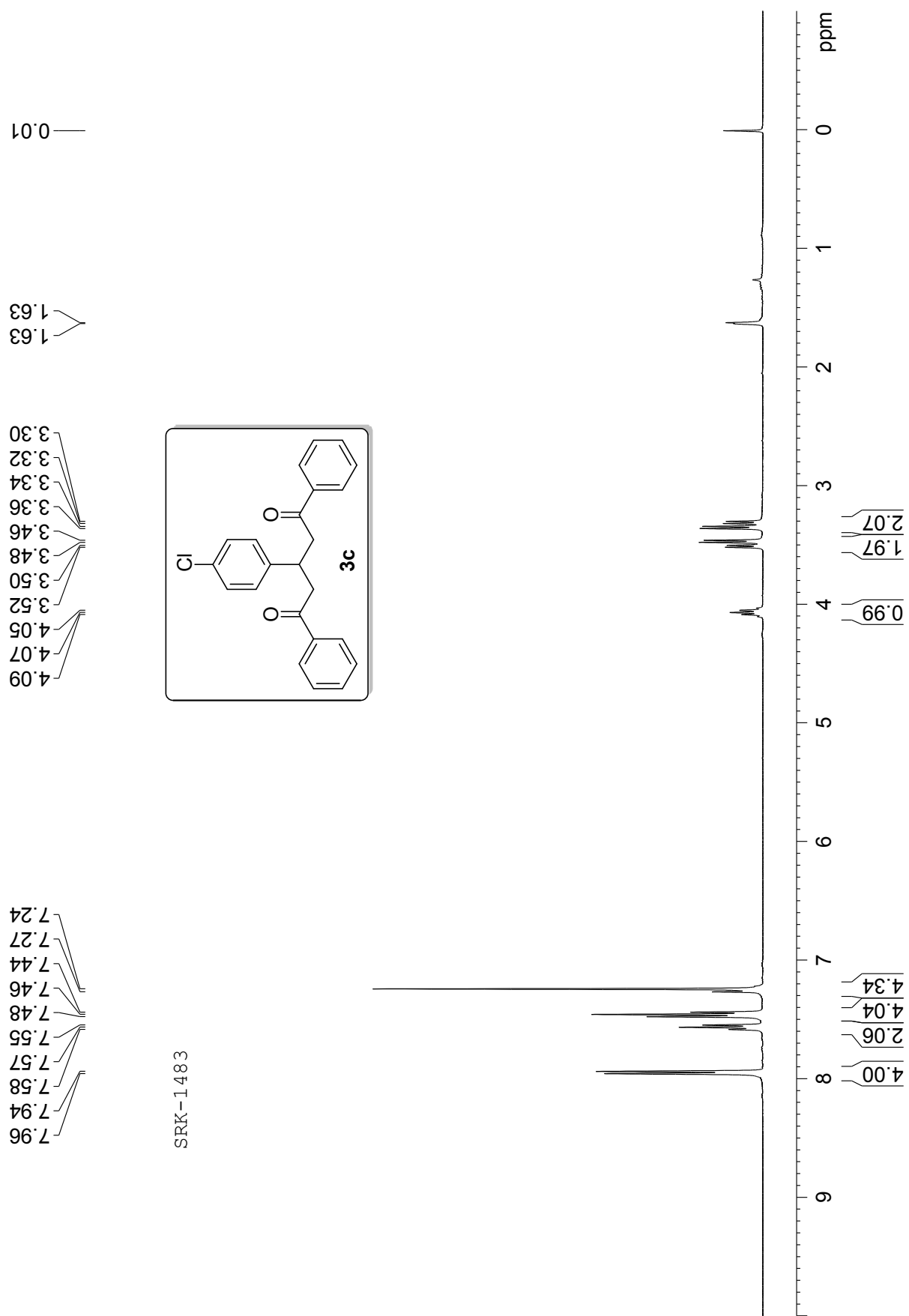
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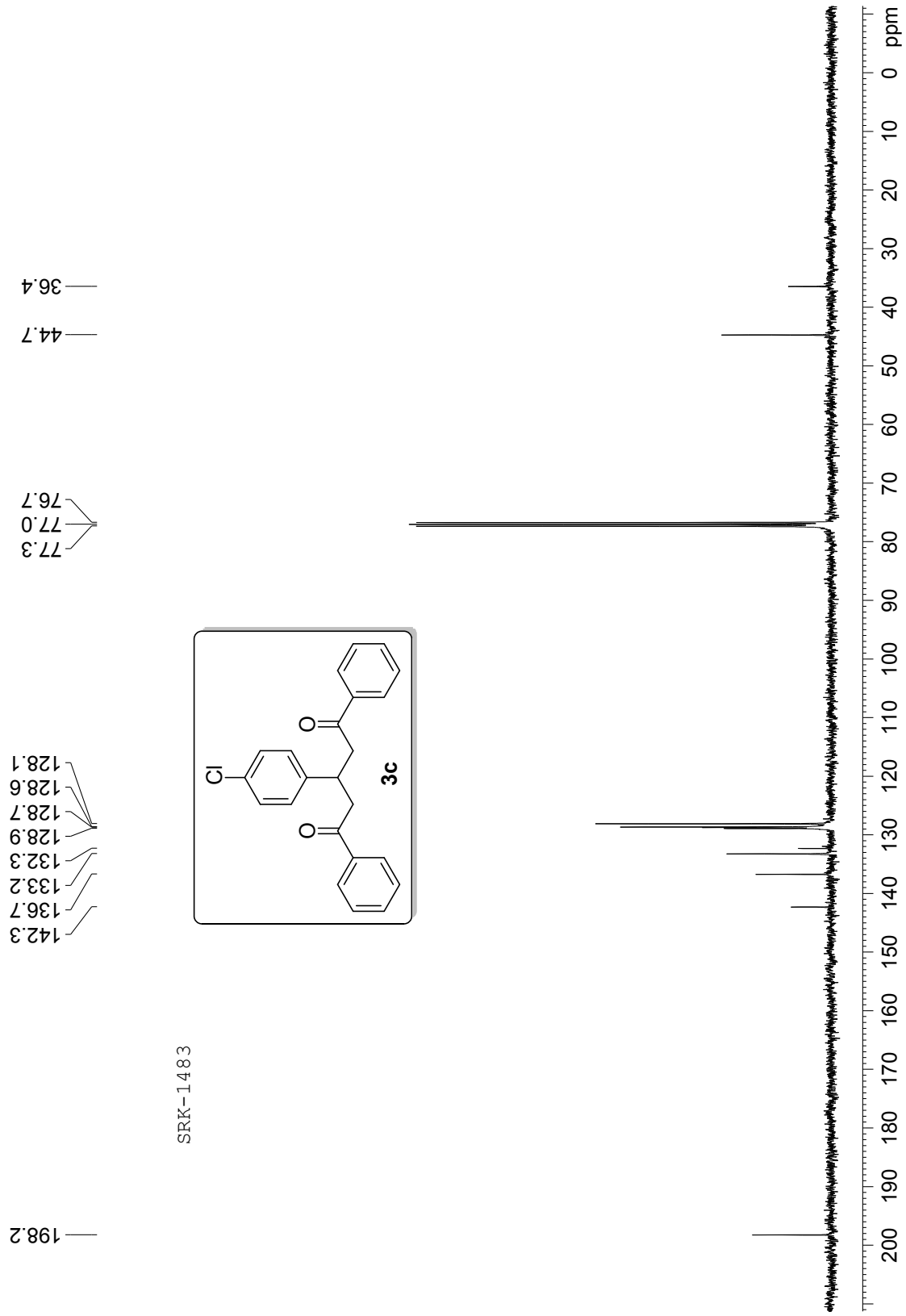
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SRK-1489

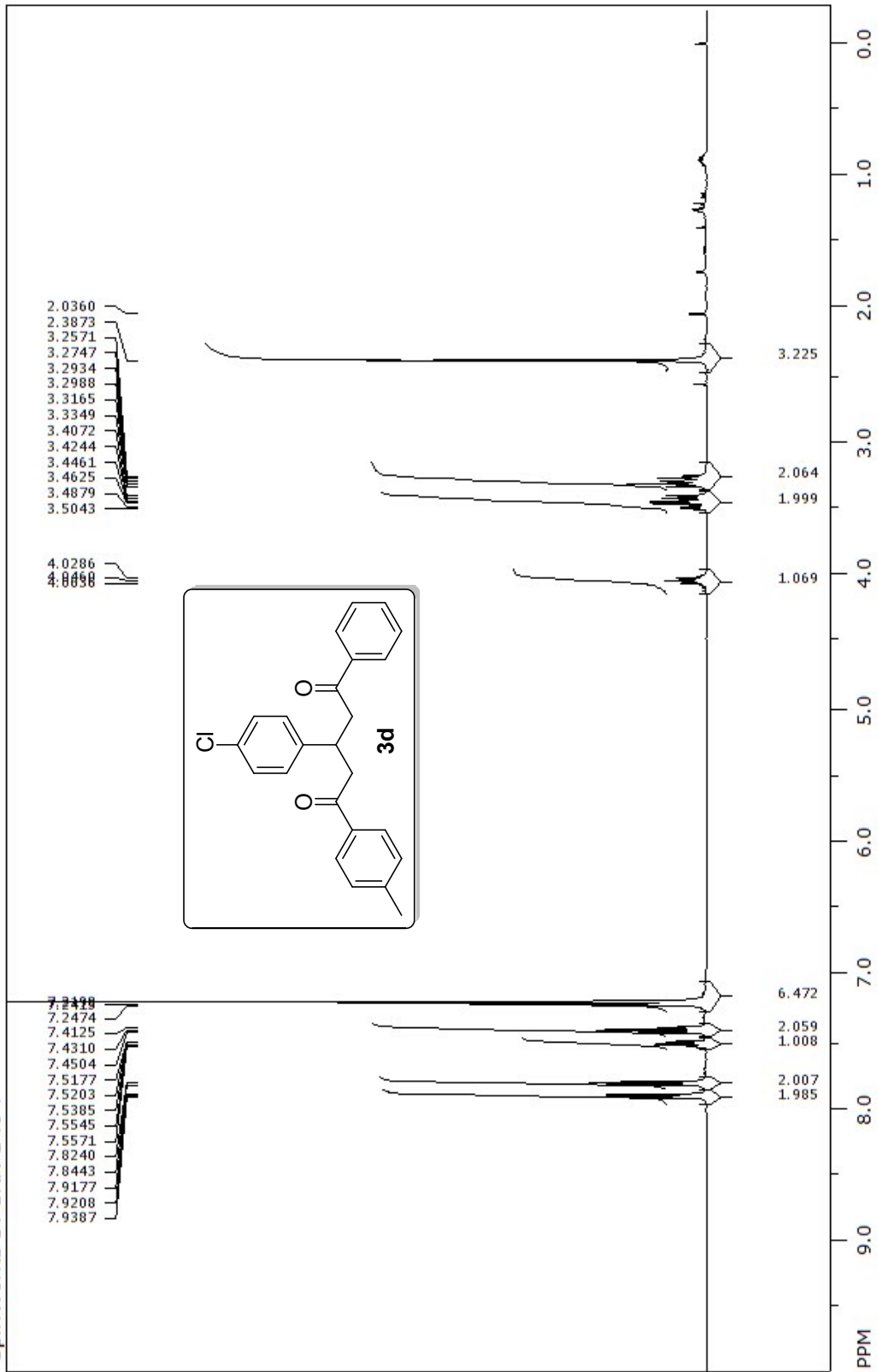


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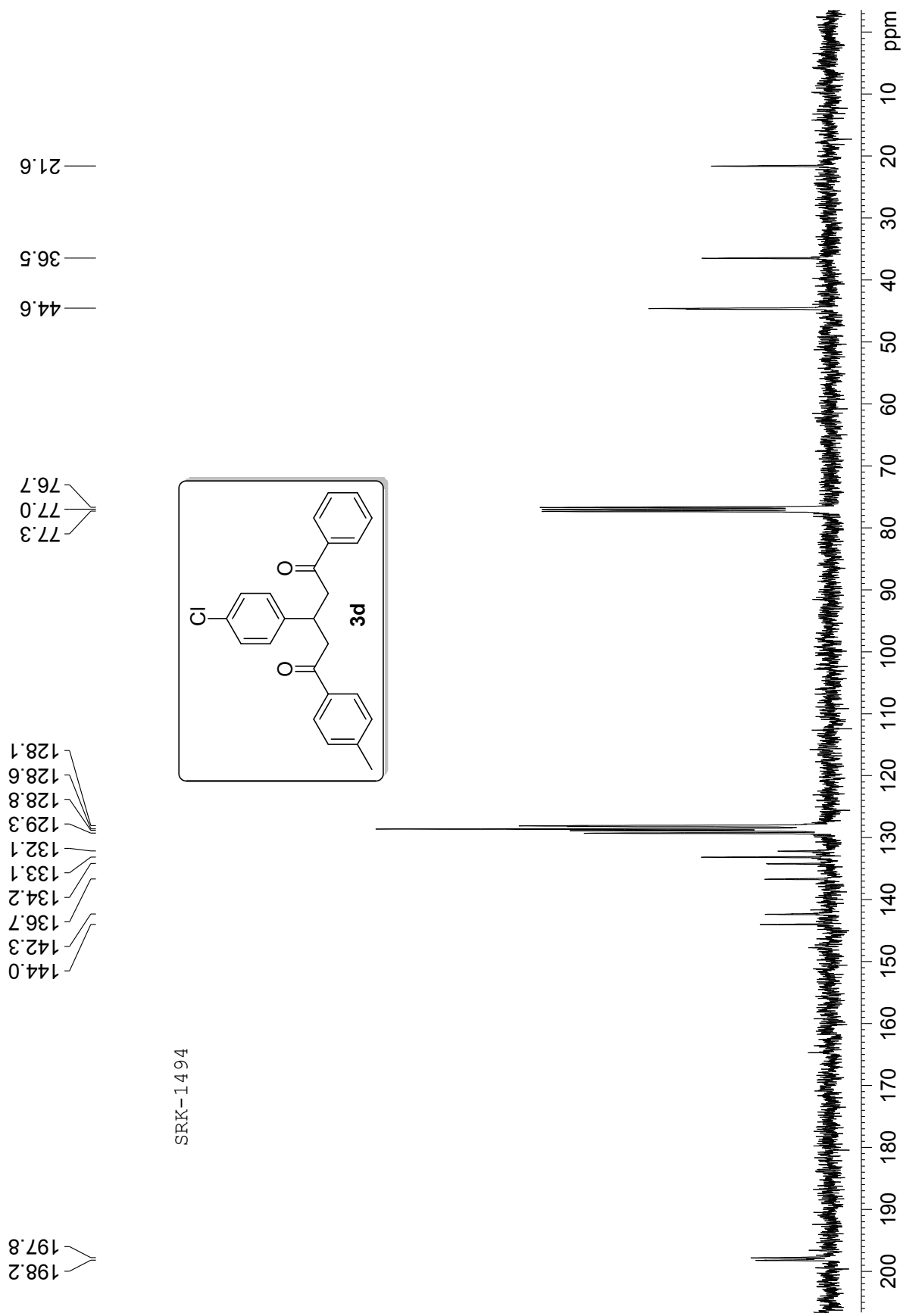


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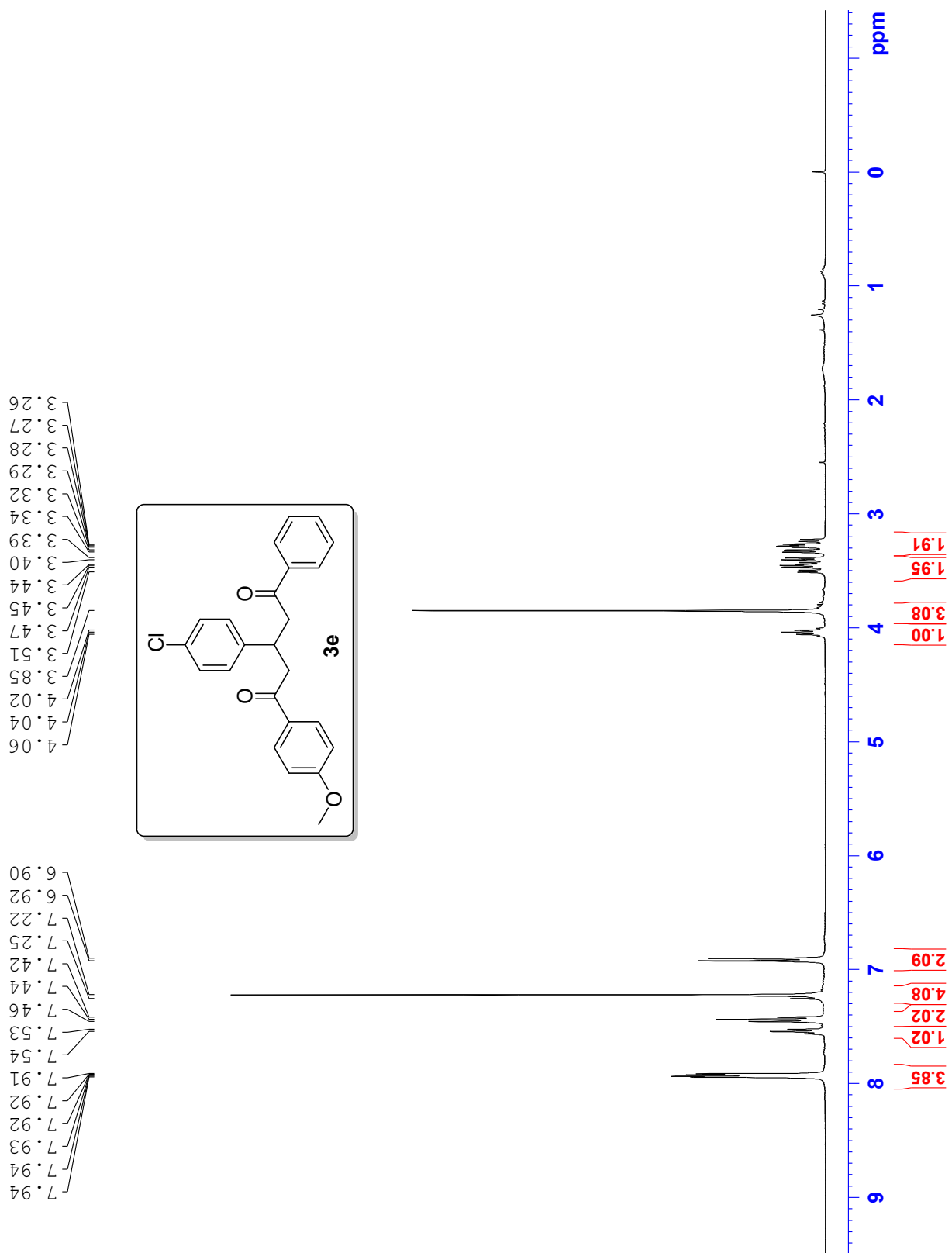
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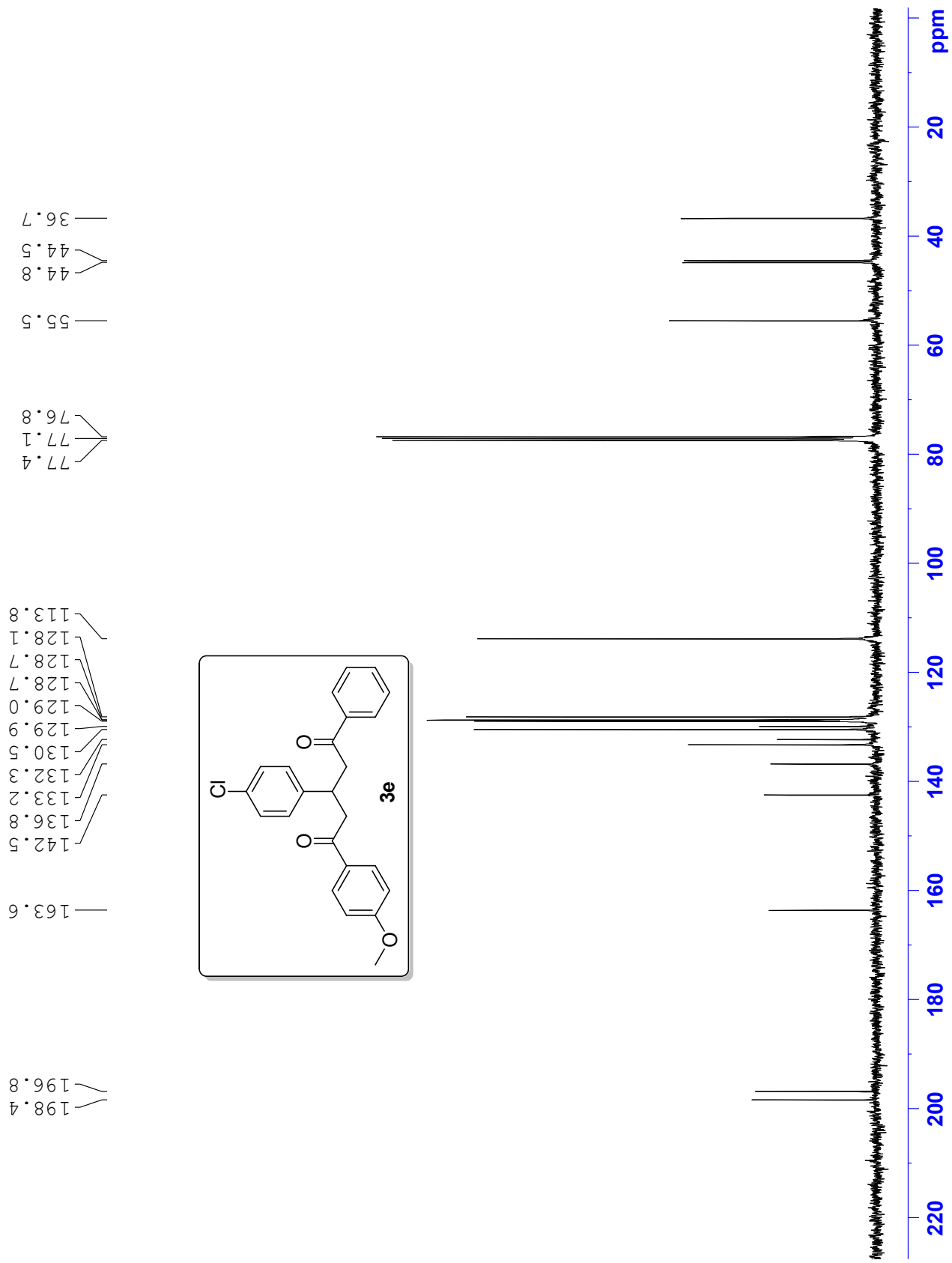


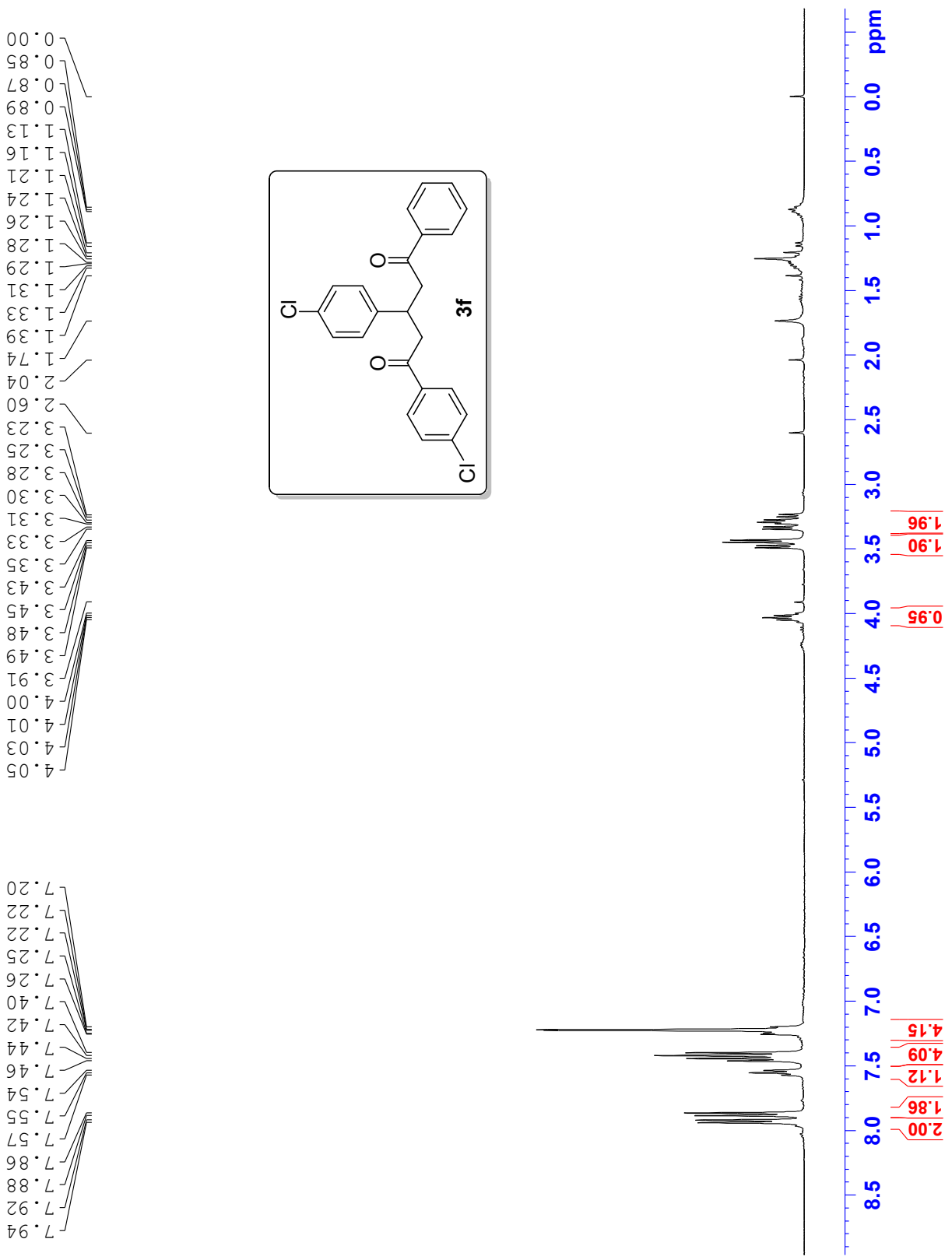


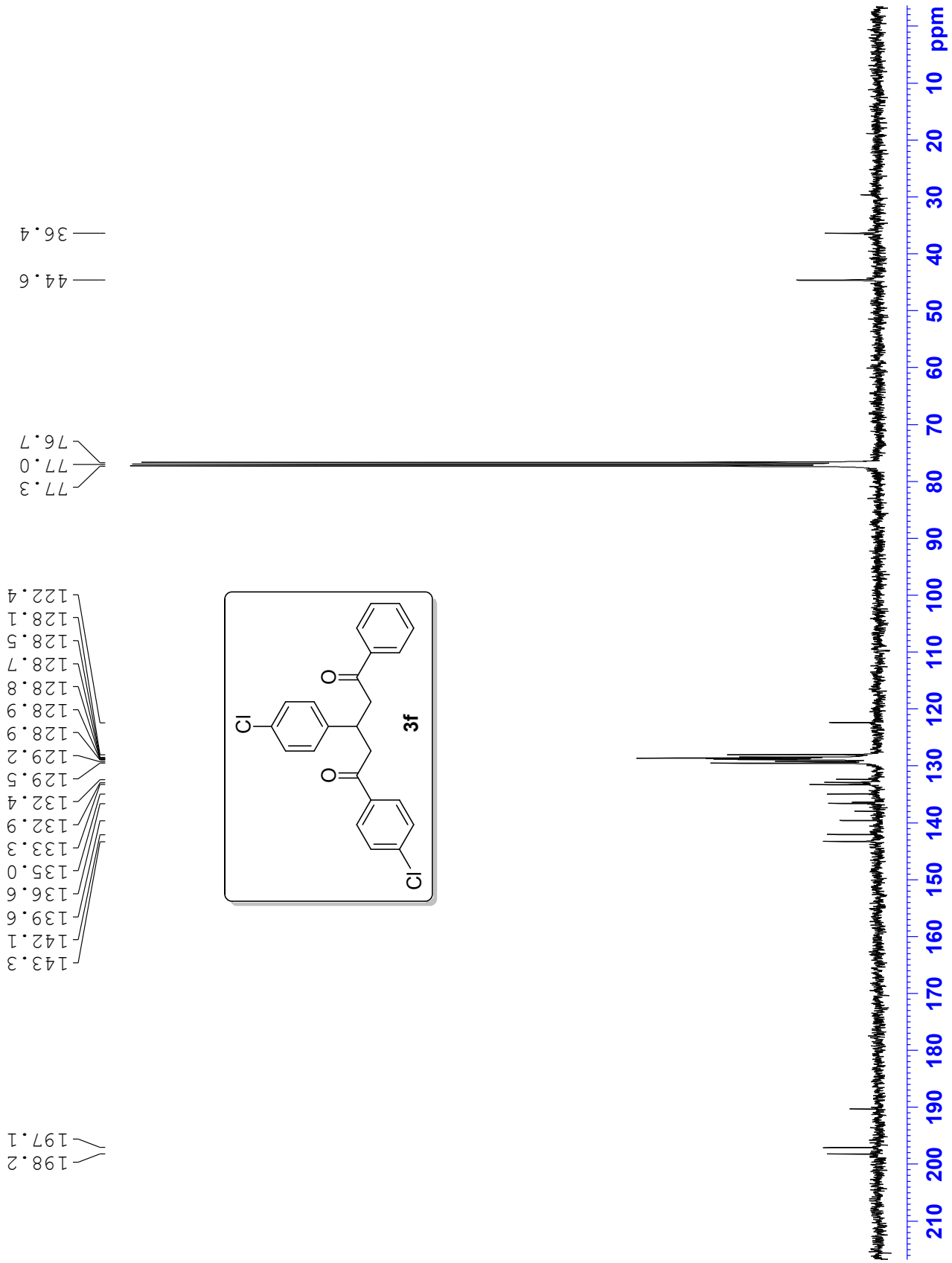


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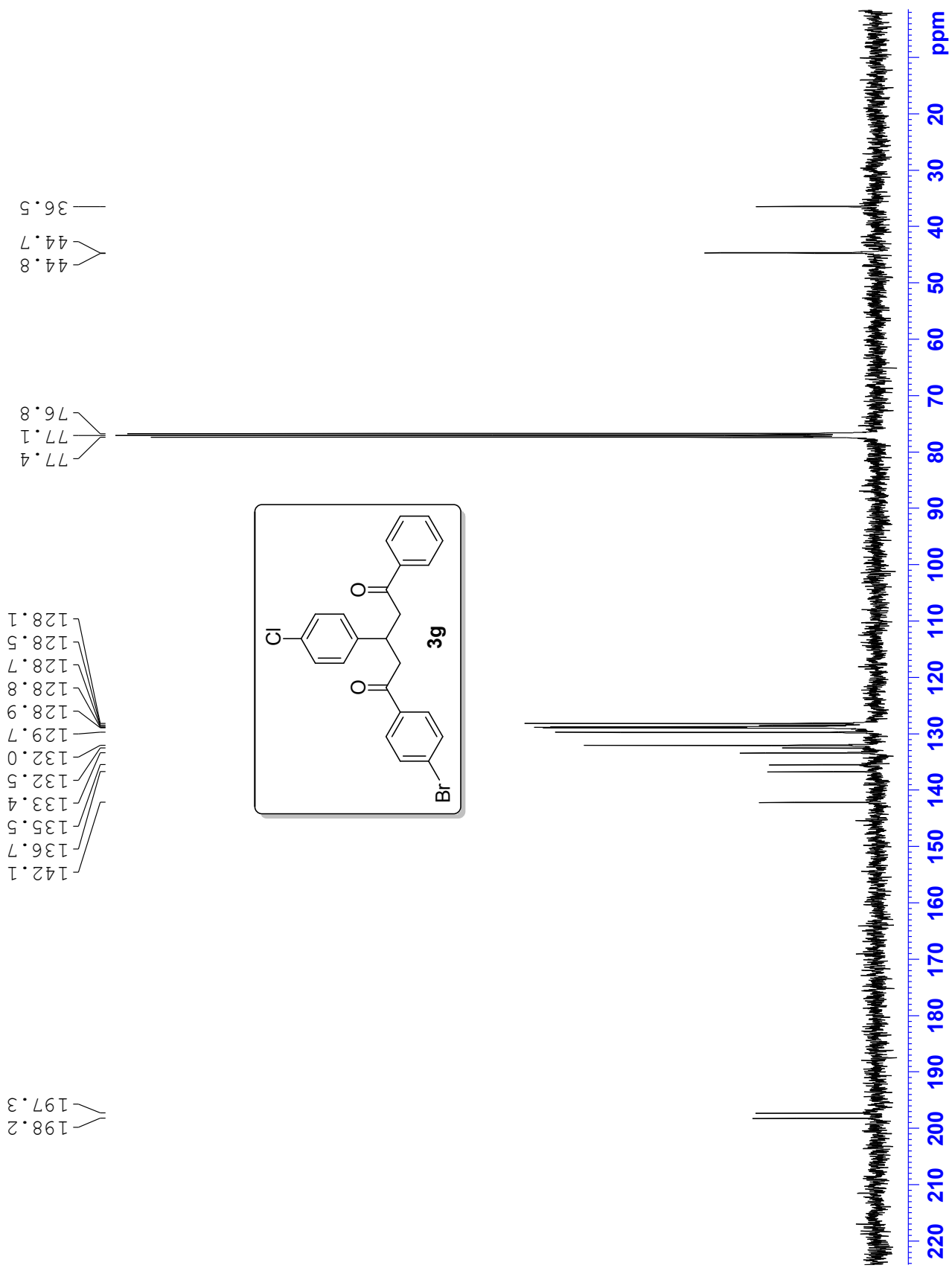


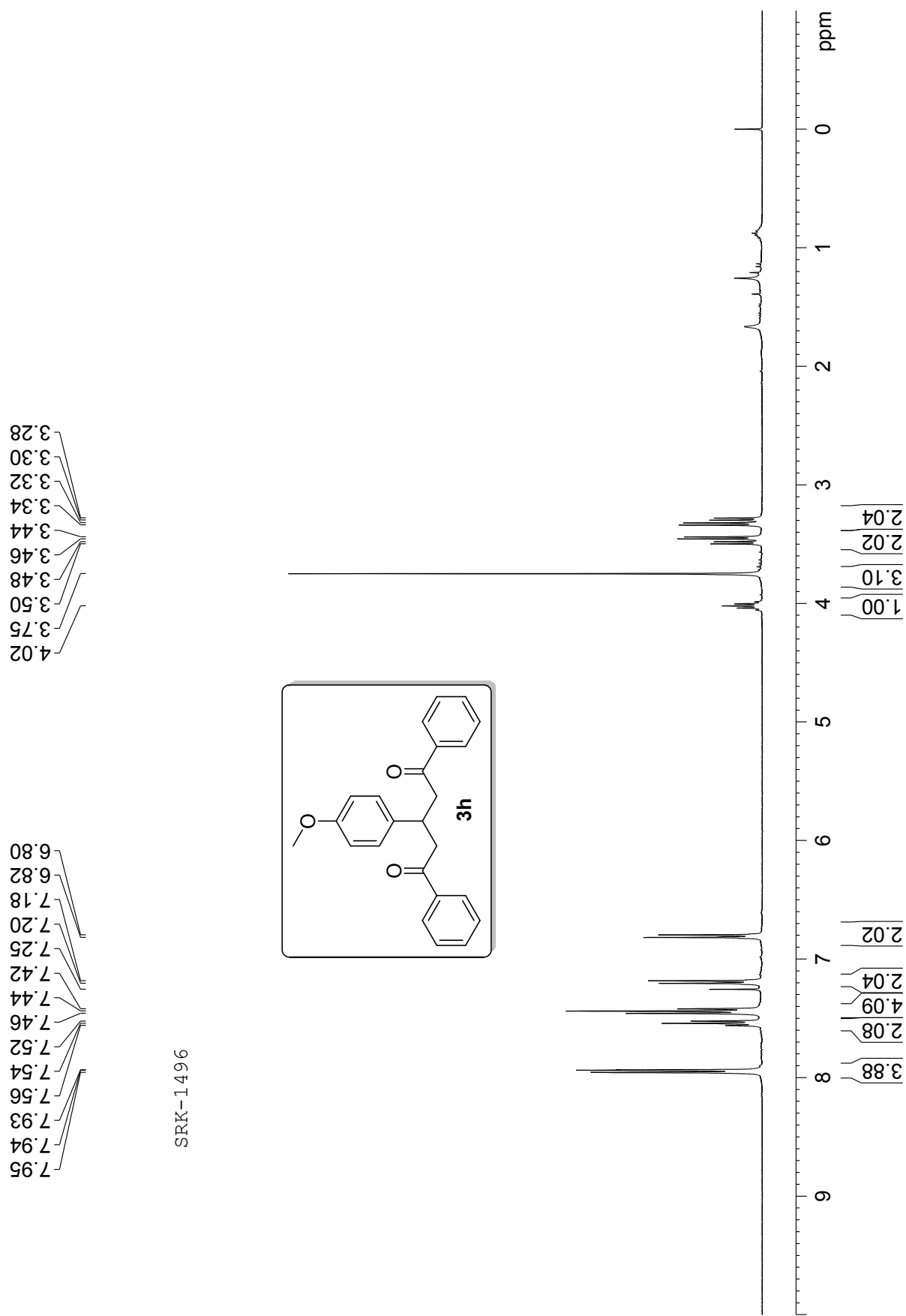






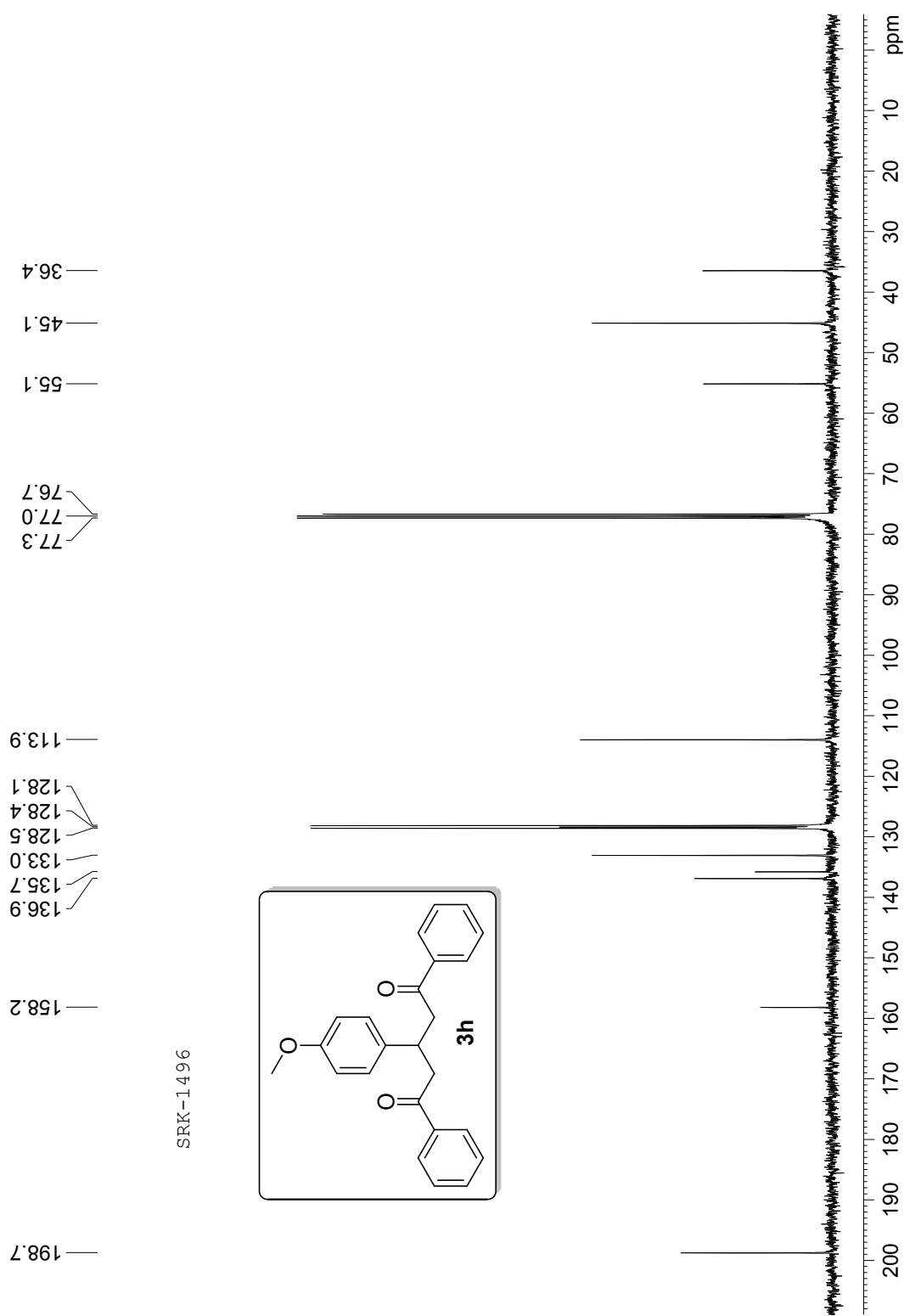






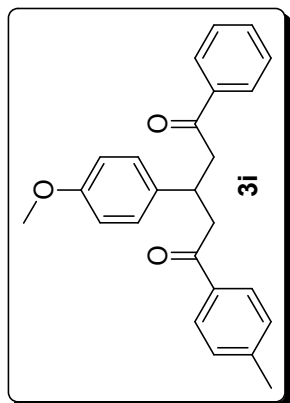
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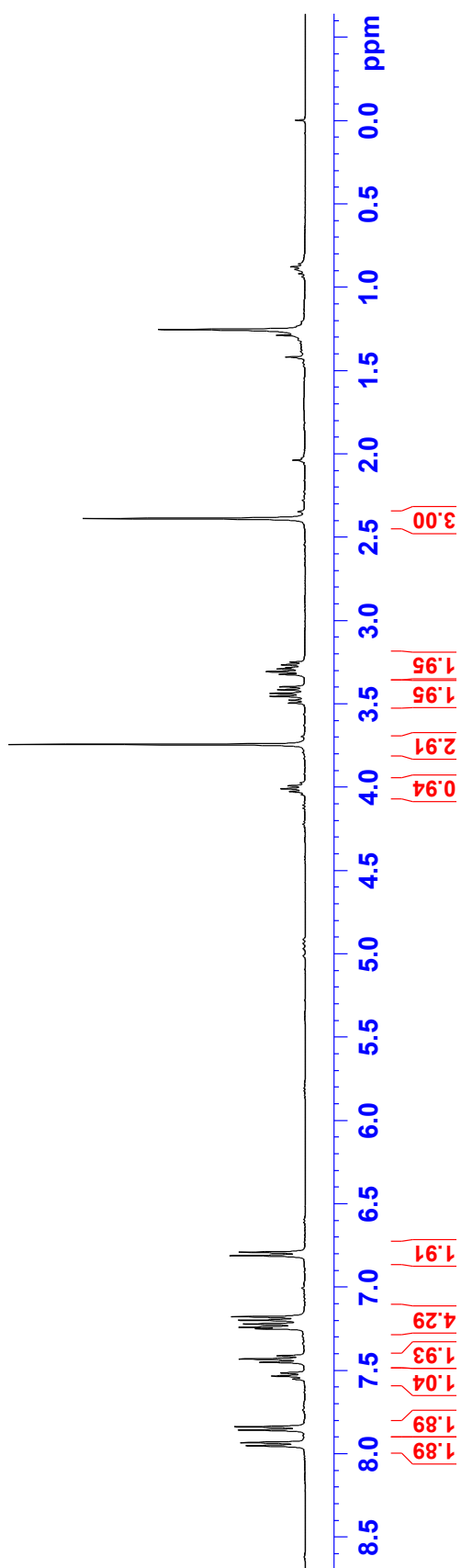


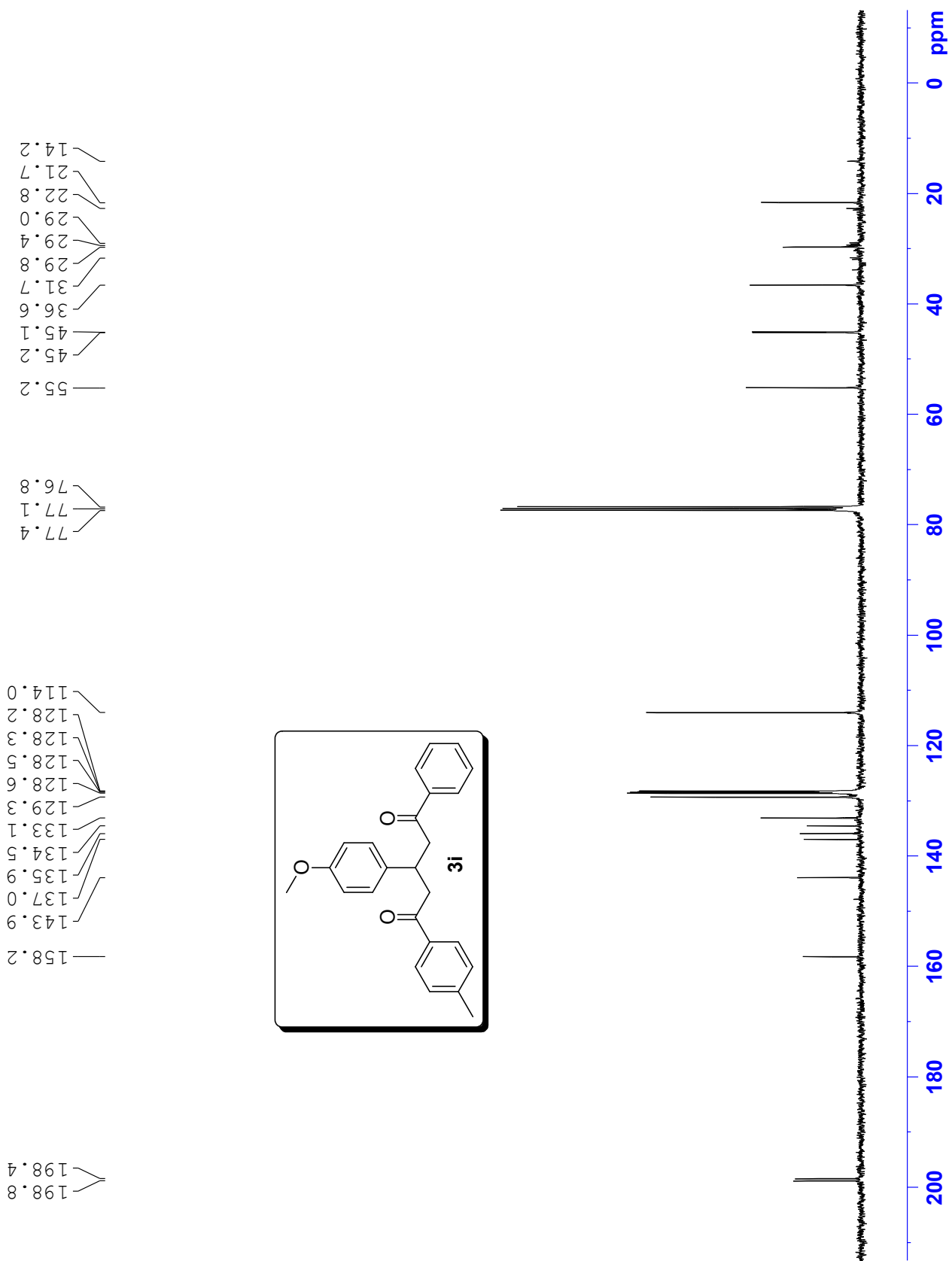
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7.86  
7.84  
7.53  
7.51  
7.45  
7.43  
7.41  
7.25  
7.24  
7.22  
7.20  
7.18  
6.81  
6.79



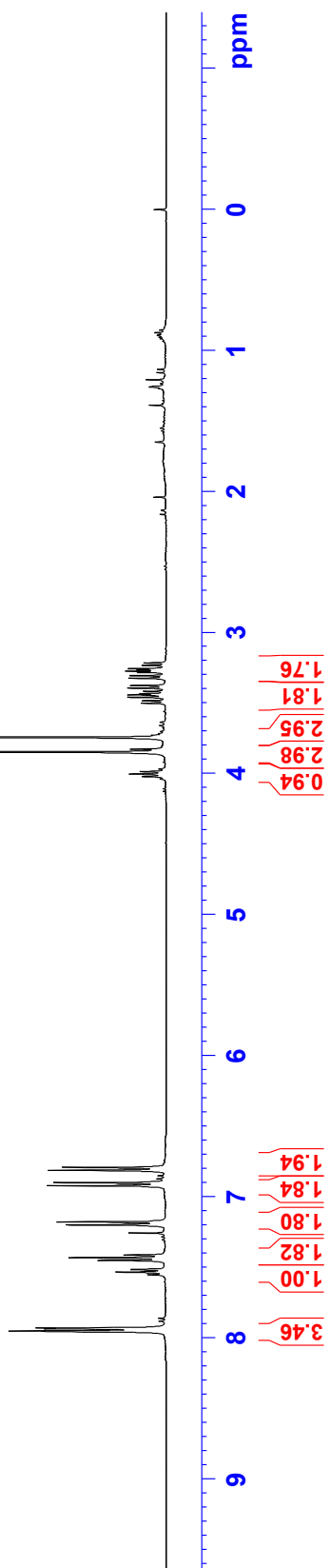
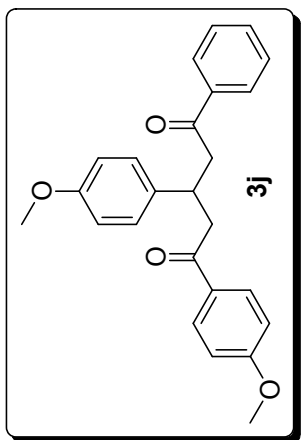
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3.74  
3.45  
3.44  
3.41  
3.40  
3.32  
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3.29  
3.27  
2.39  
1.42  
1.29  
1.26

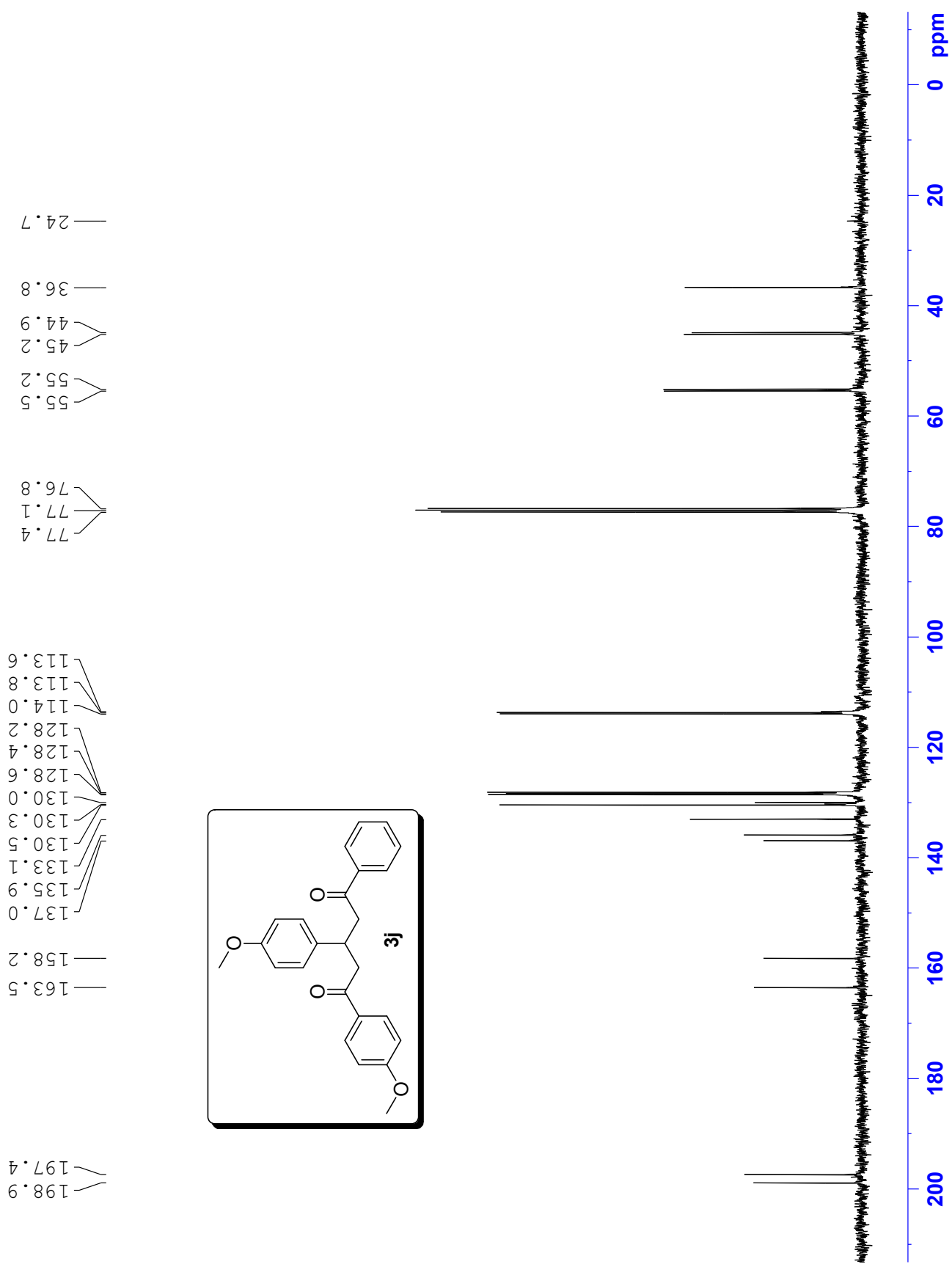


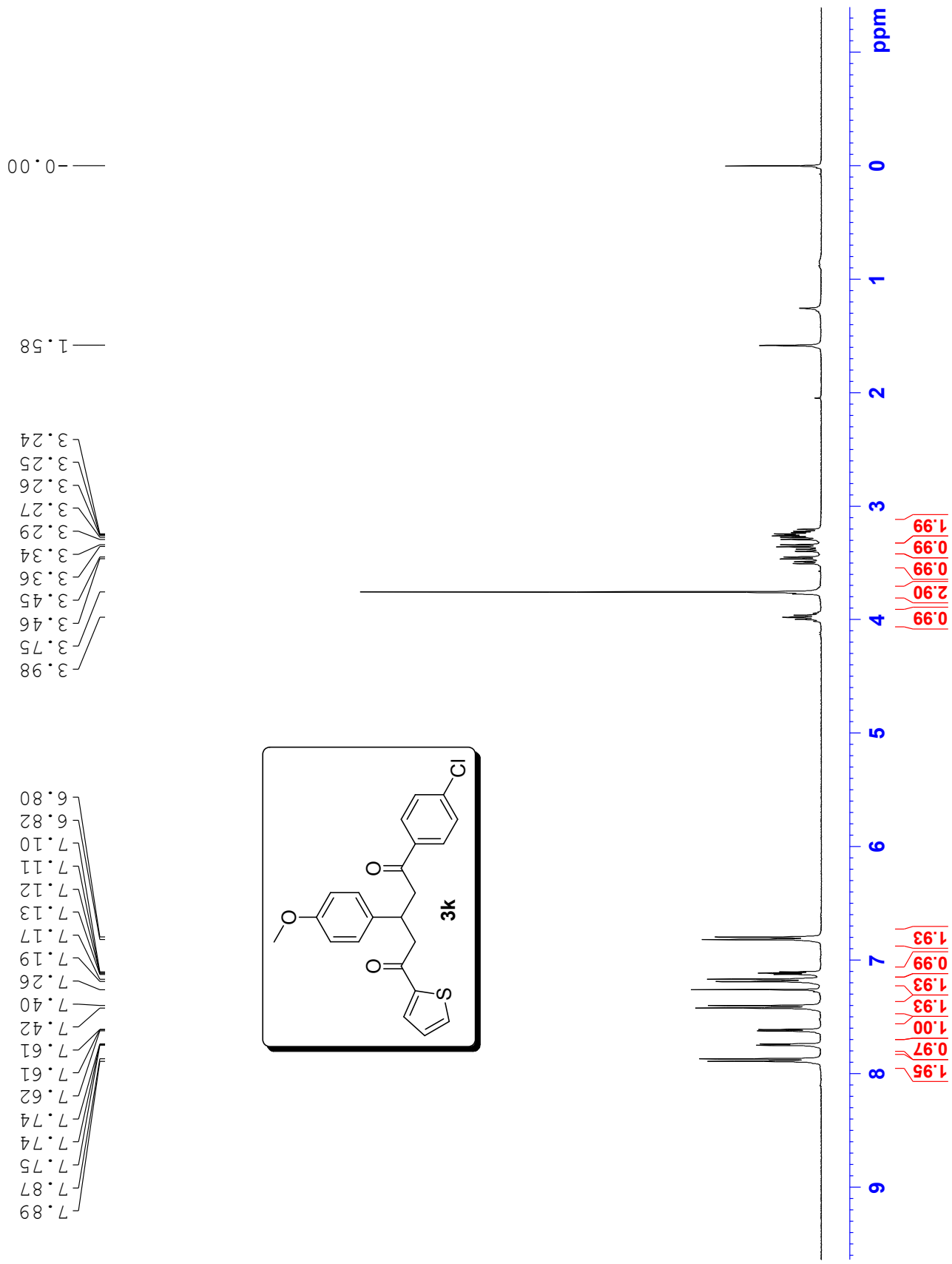


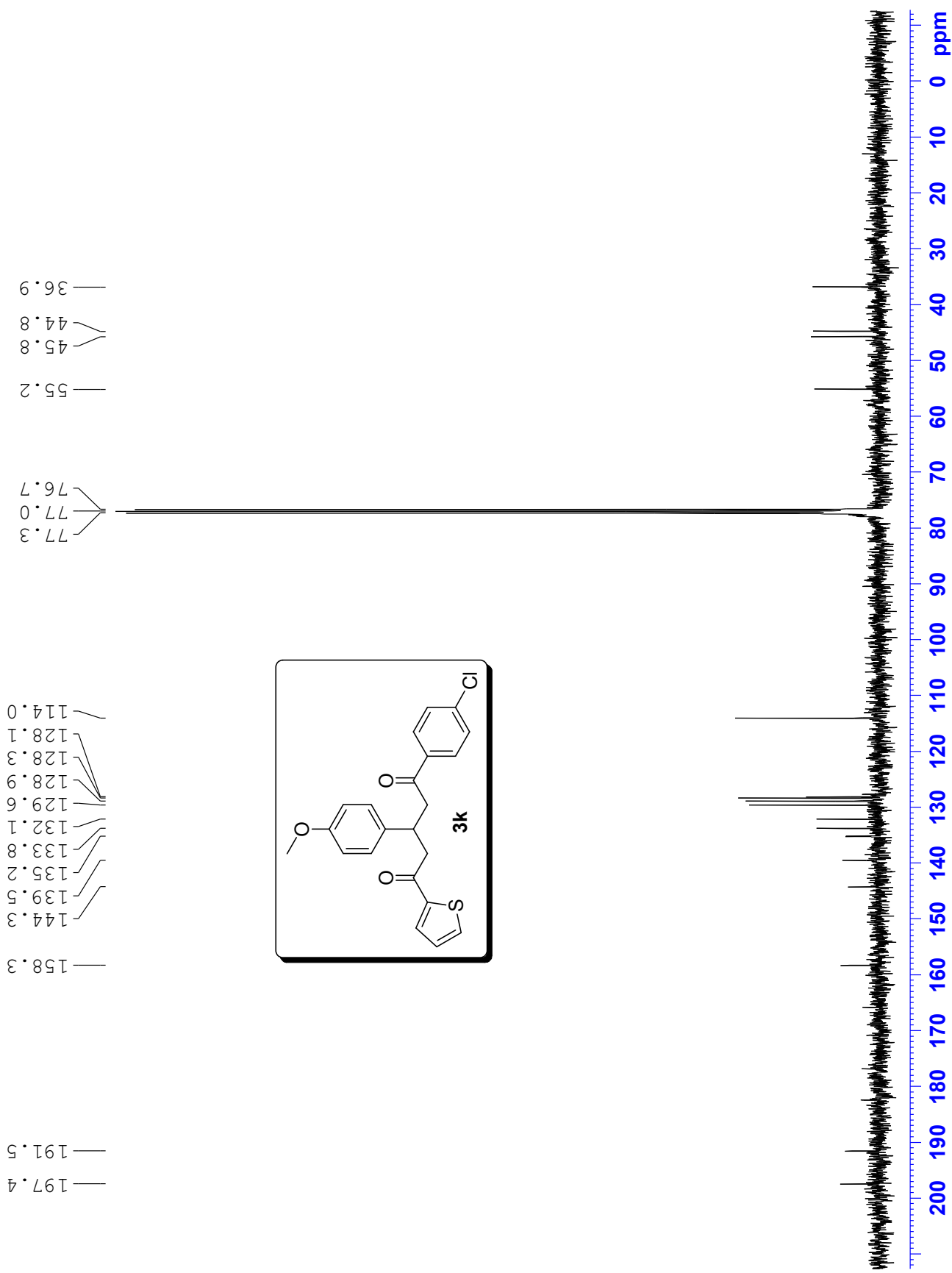
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 3.84  
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 3.74  
 3.46  
 3.44  
 3.39  
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 3.32  
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 3.27  
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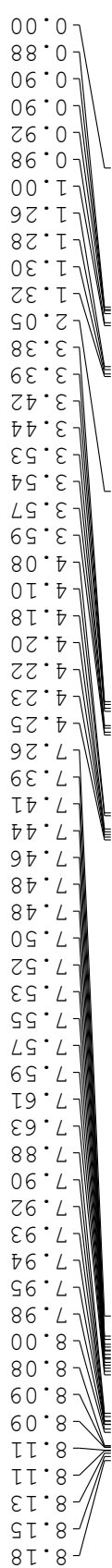
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 7.93  
 7.93  
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 7.53  
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 7.45  
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 7.41  
 7.25  
 7.20  
 7.18  
 6.92  
 6.92  
 6.90  
 6.81  
 6.79



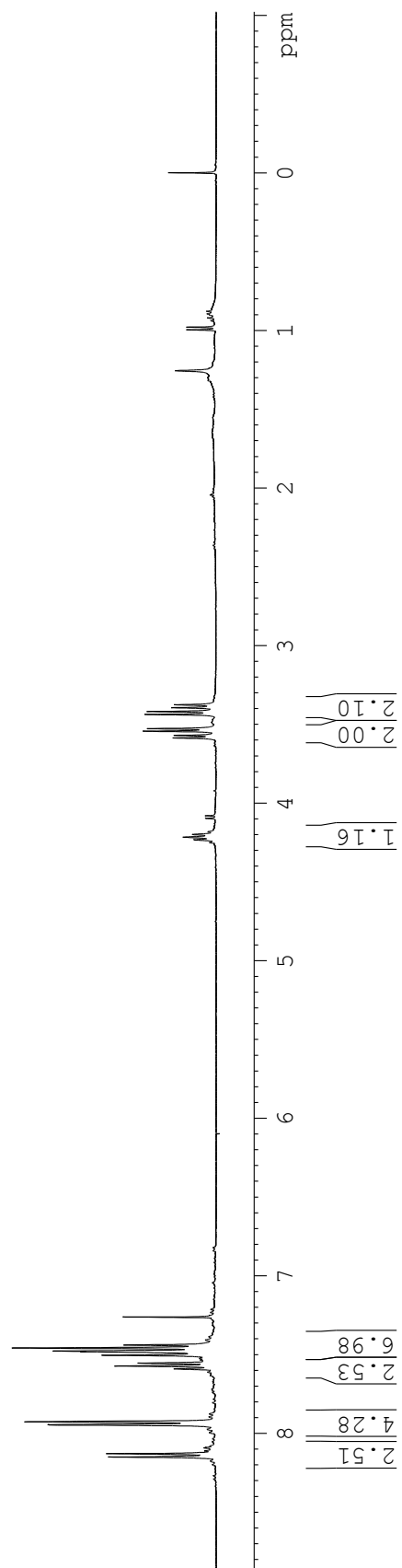
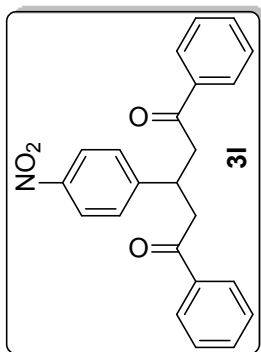




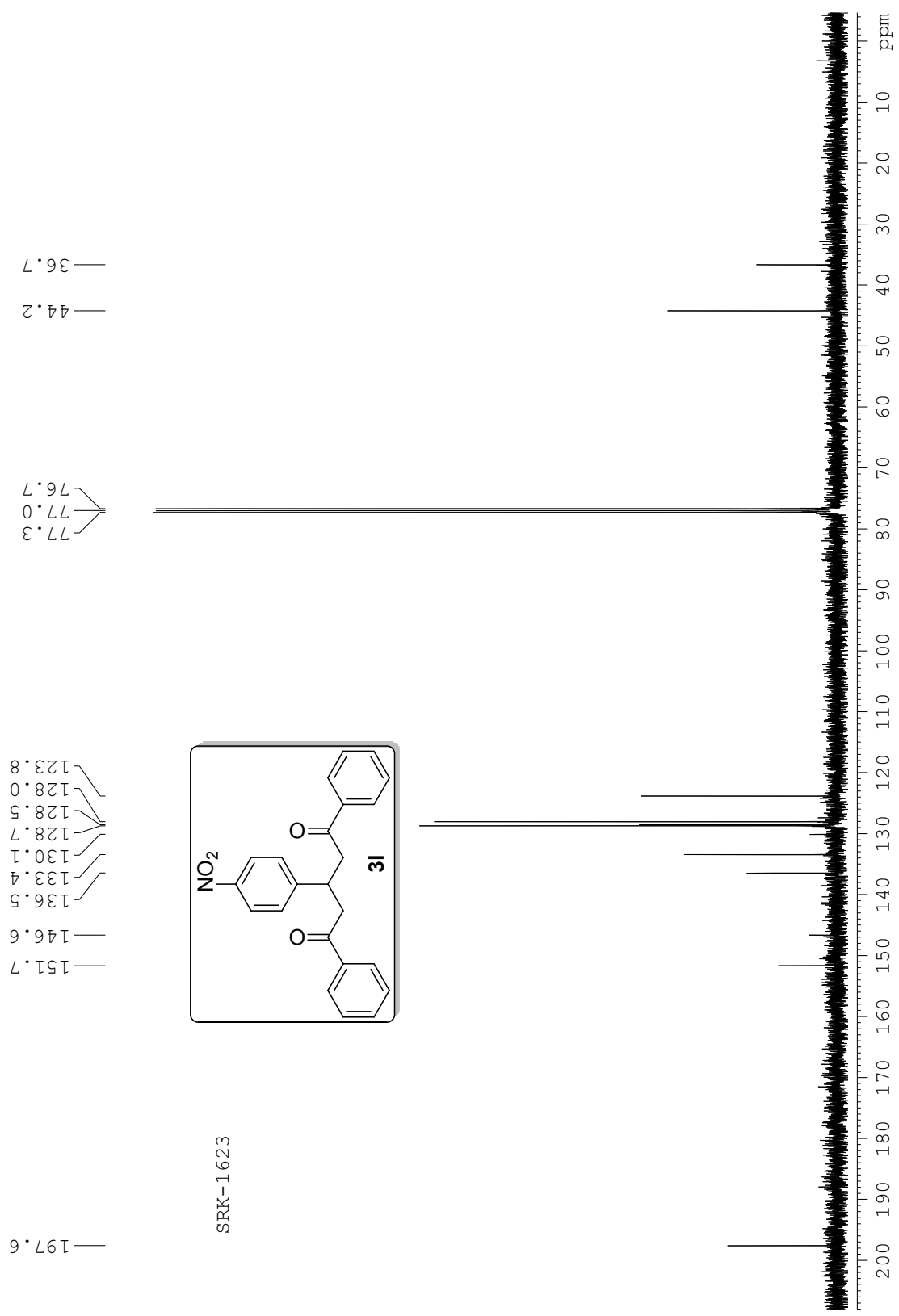




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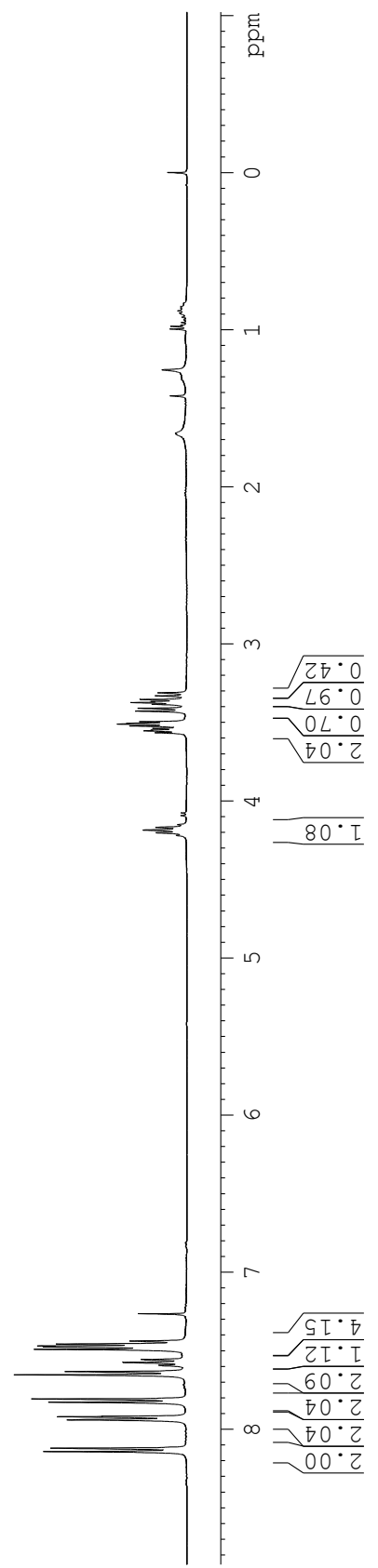
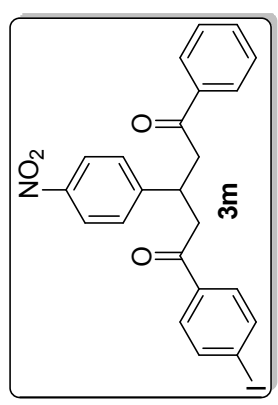




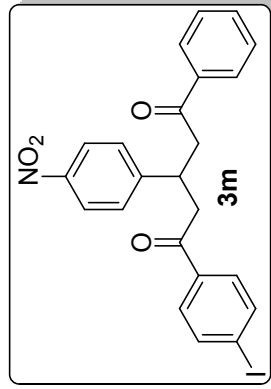


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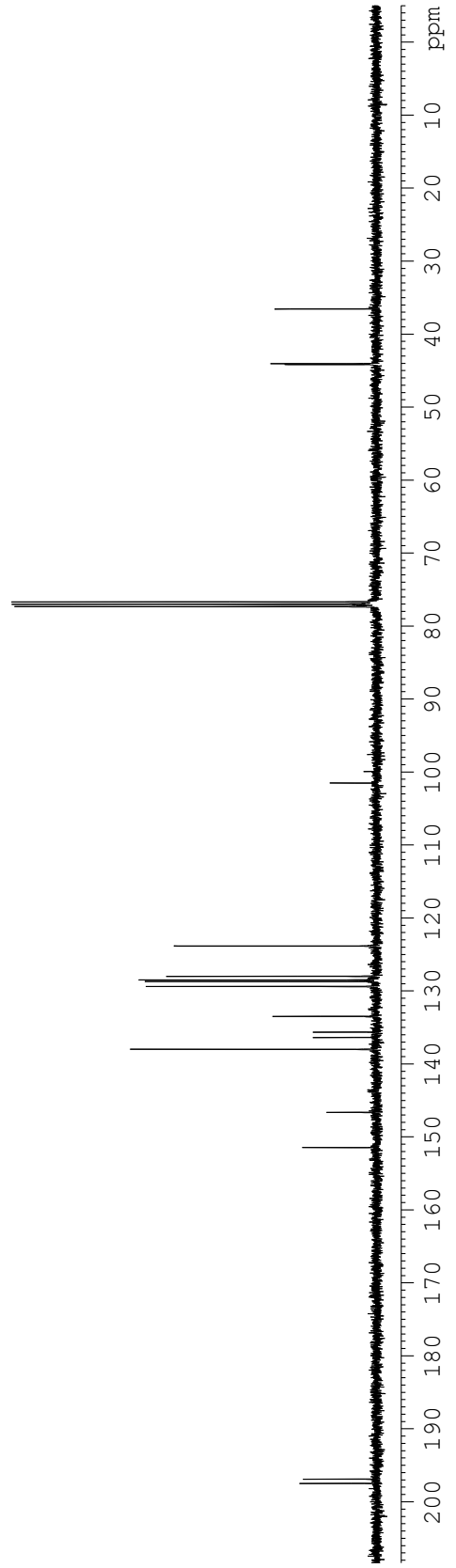
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 1.26  
 1.28  
 1.42  
 1.66  
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 3.33  
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 3.39  
 3.41  
 3.43  
 3.50  
 3.51  
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 3.52  
 3.54  
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 3.55  
 3.57  
 4.08  
 4.09  
 4.15  
 4.17  
 4.19  
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 4.22  
 7.26  
 7.44  
 7.46  
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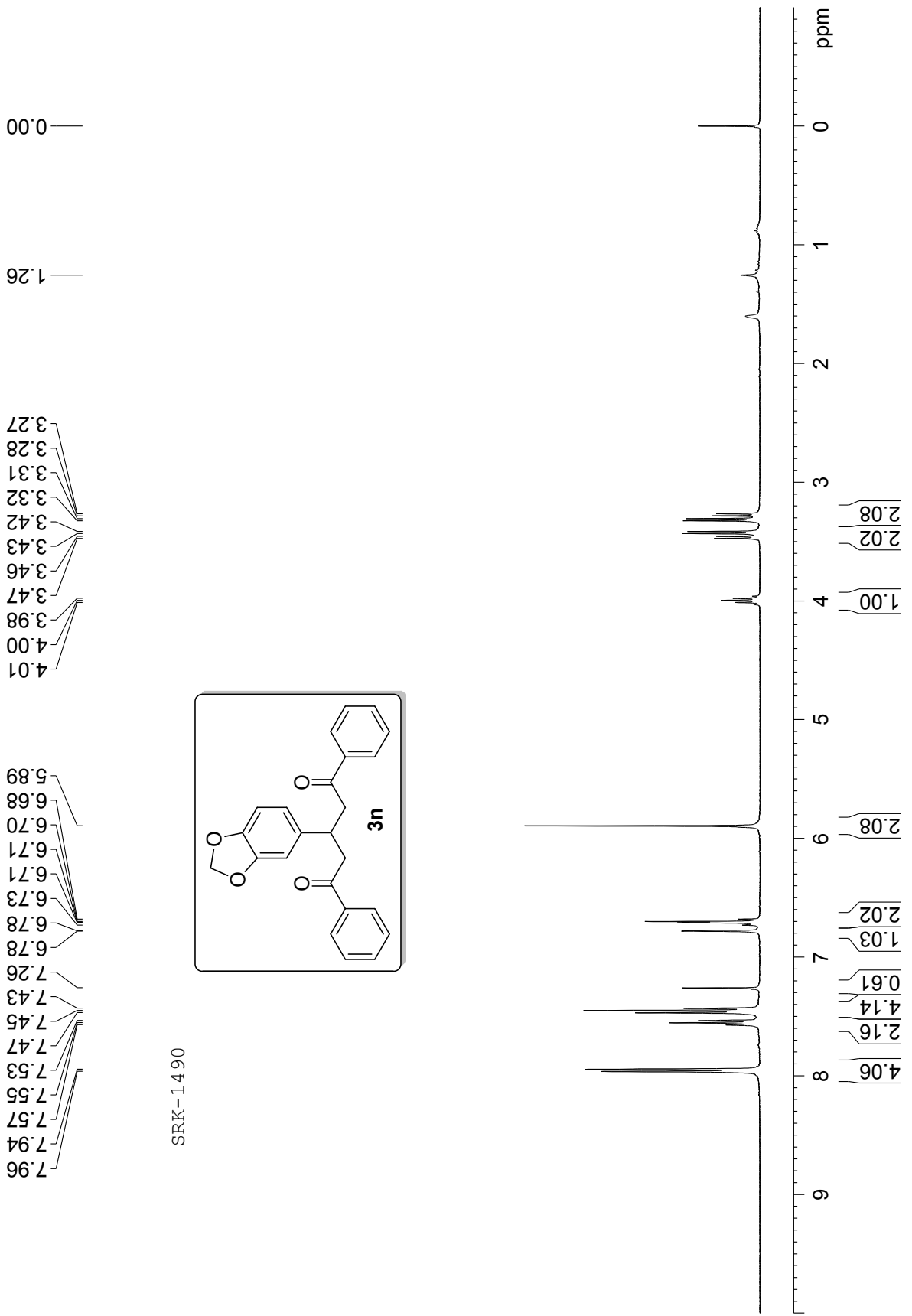


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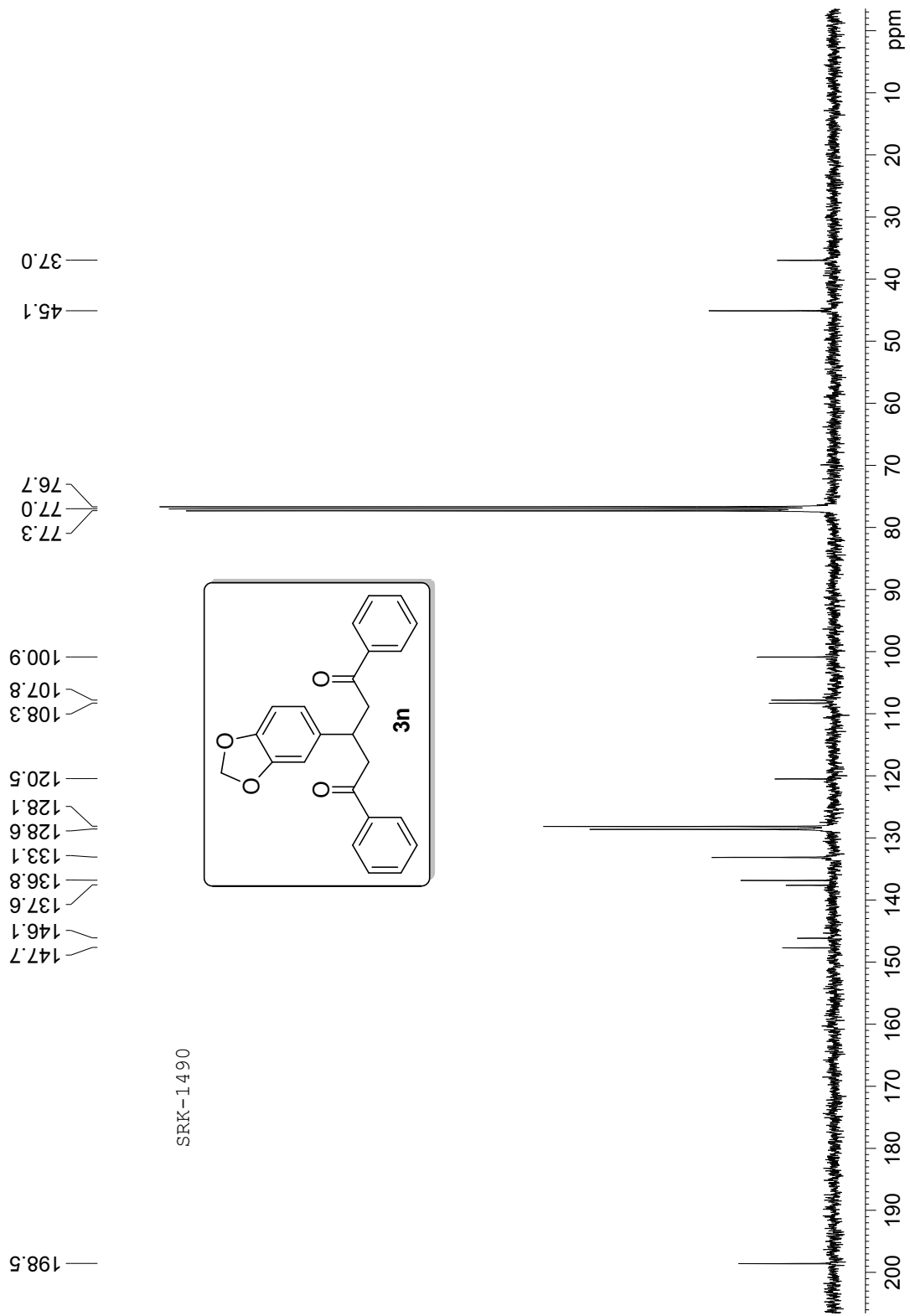


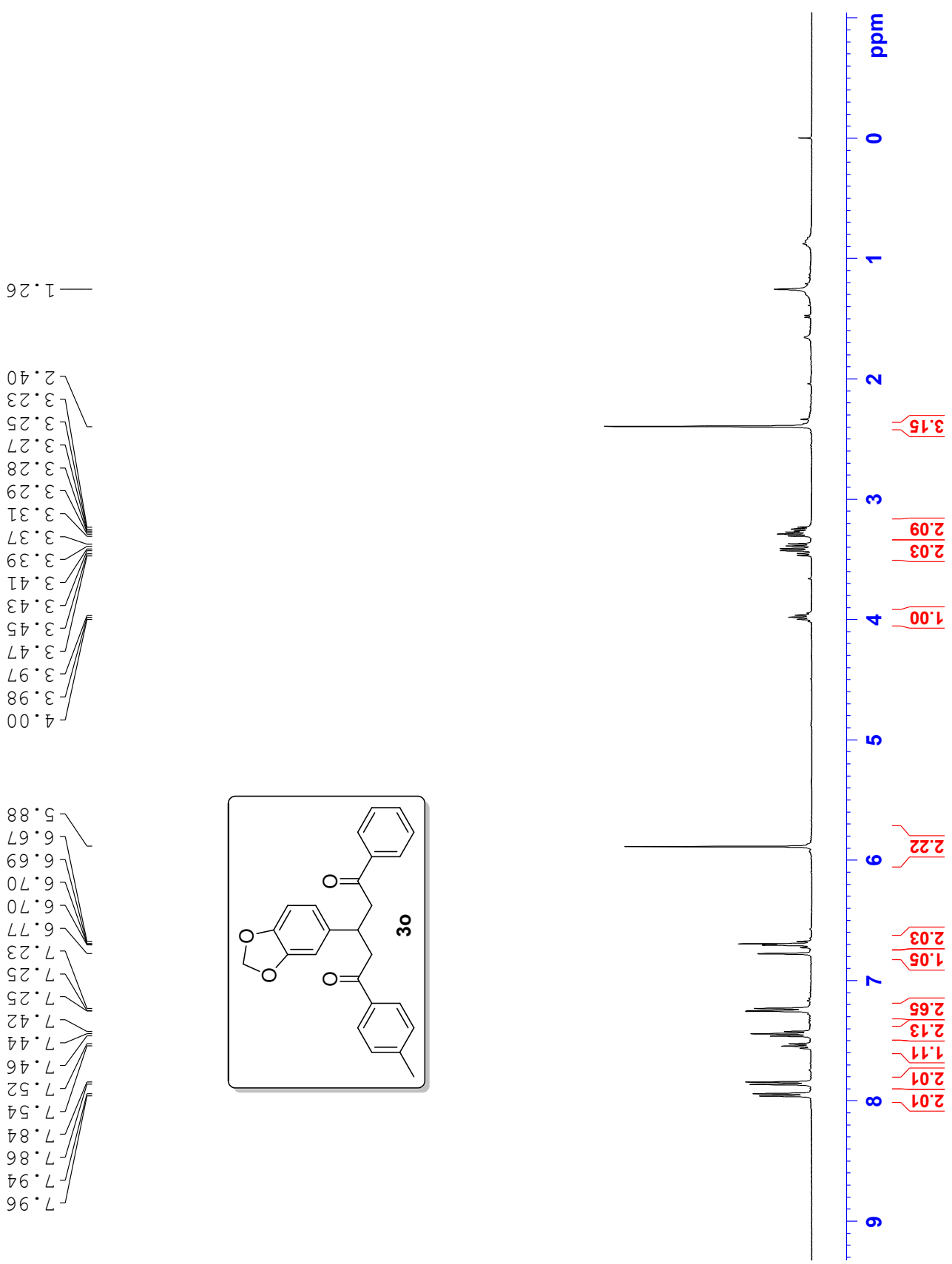
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- 196.9
- 151.4
- 146.6
- 138.0
- 136.4
- 135.6
- 133.5
- 129.4
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- 77.3
- 77.0
- 76.7
- 44.1
- 44.0
- 36.5

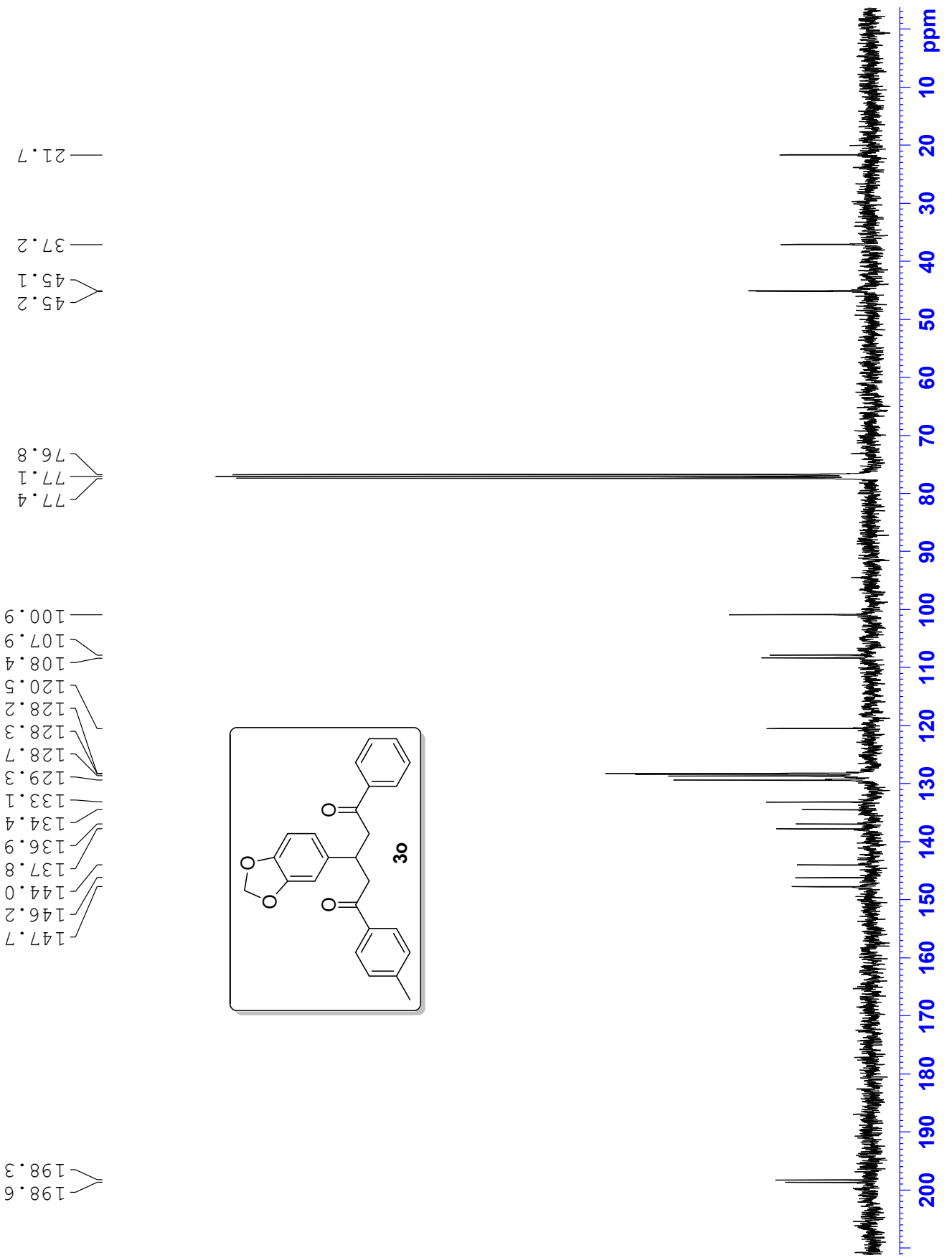




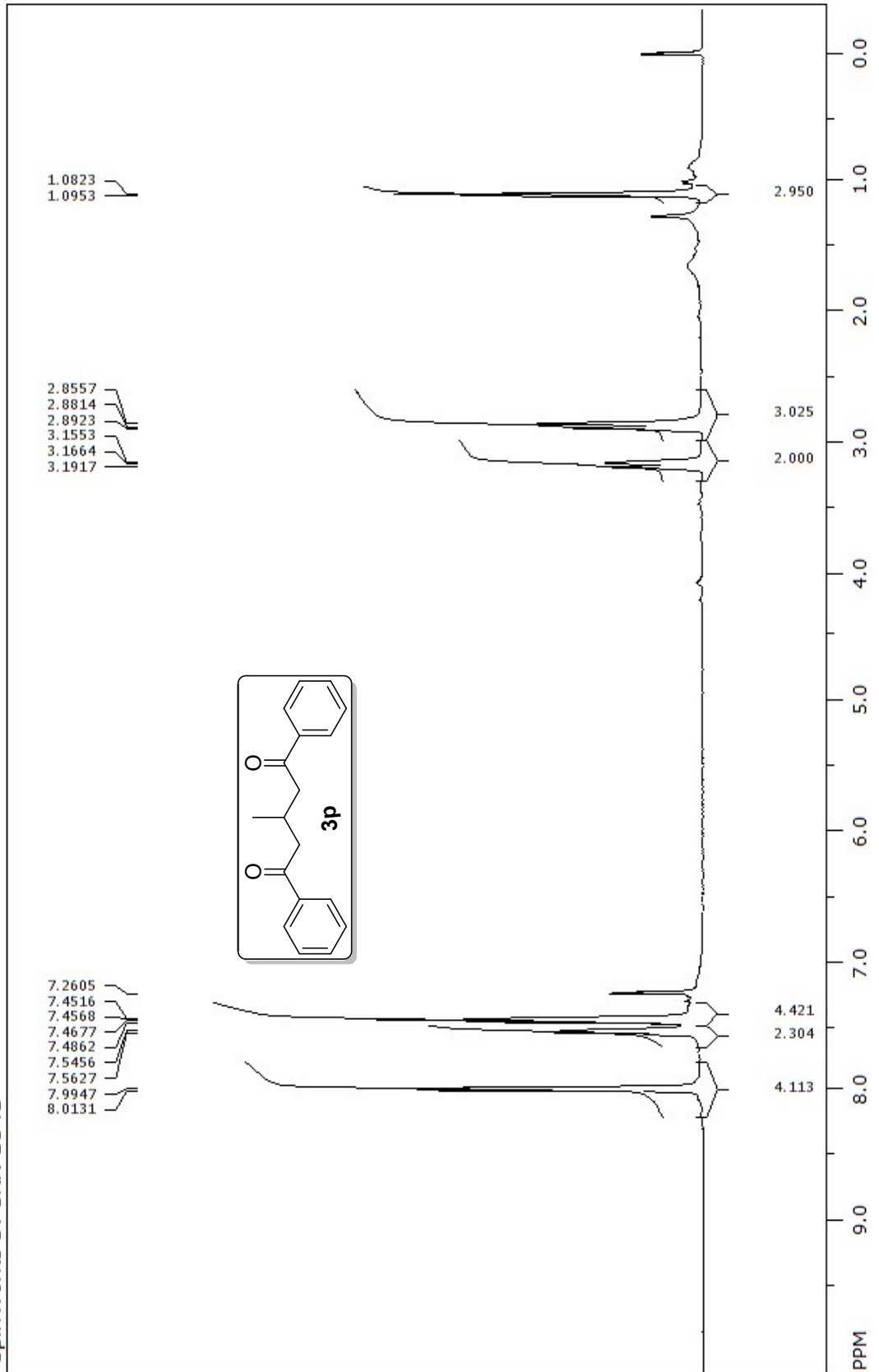
SRK-1490





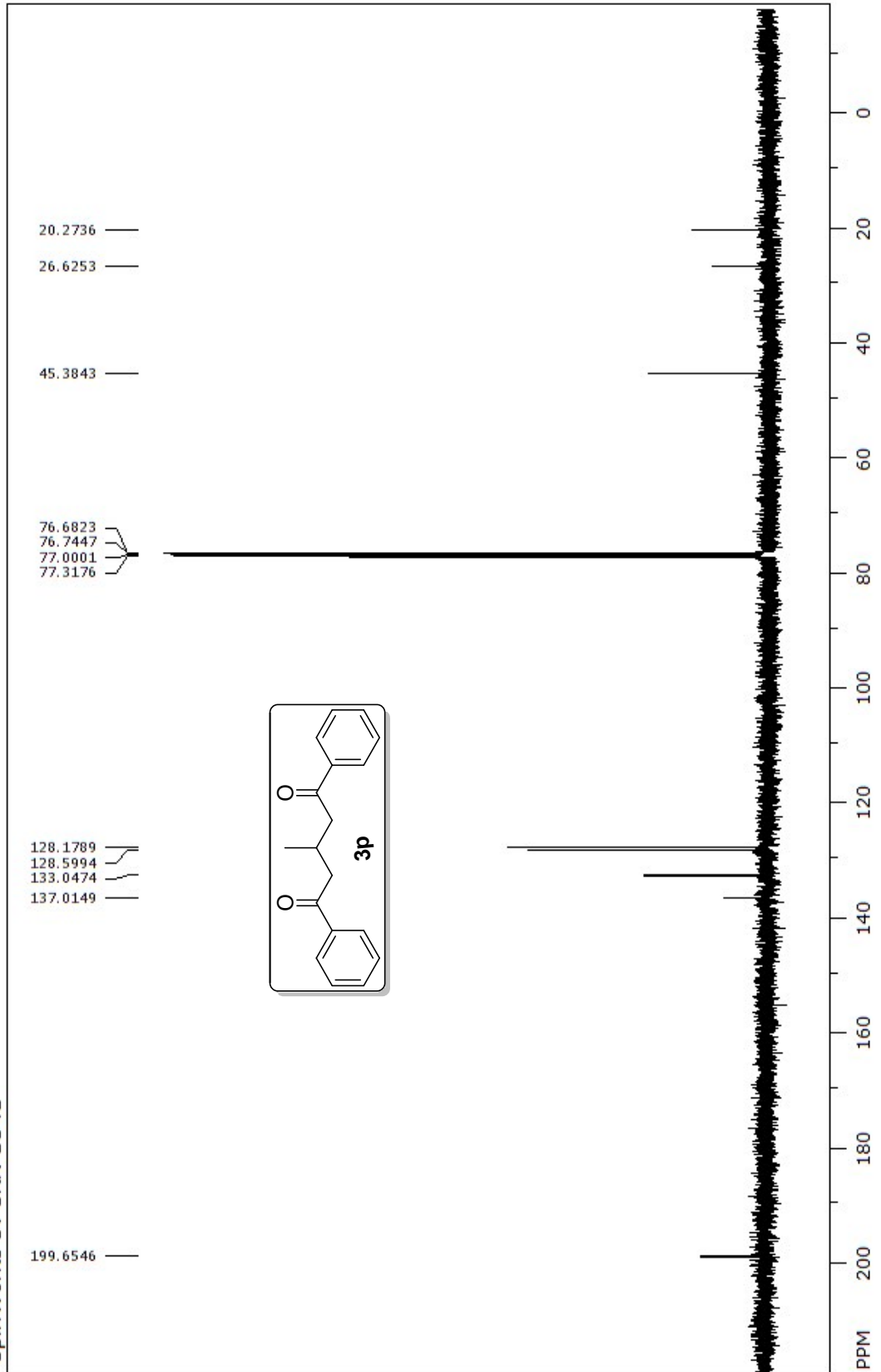


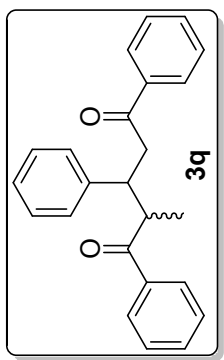
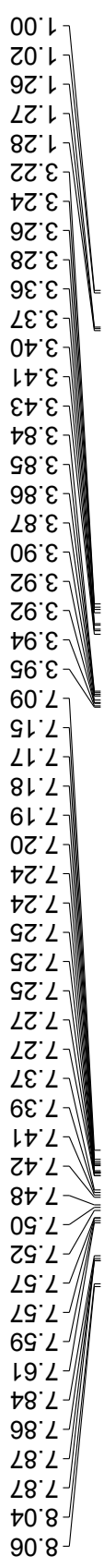
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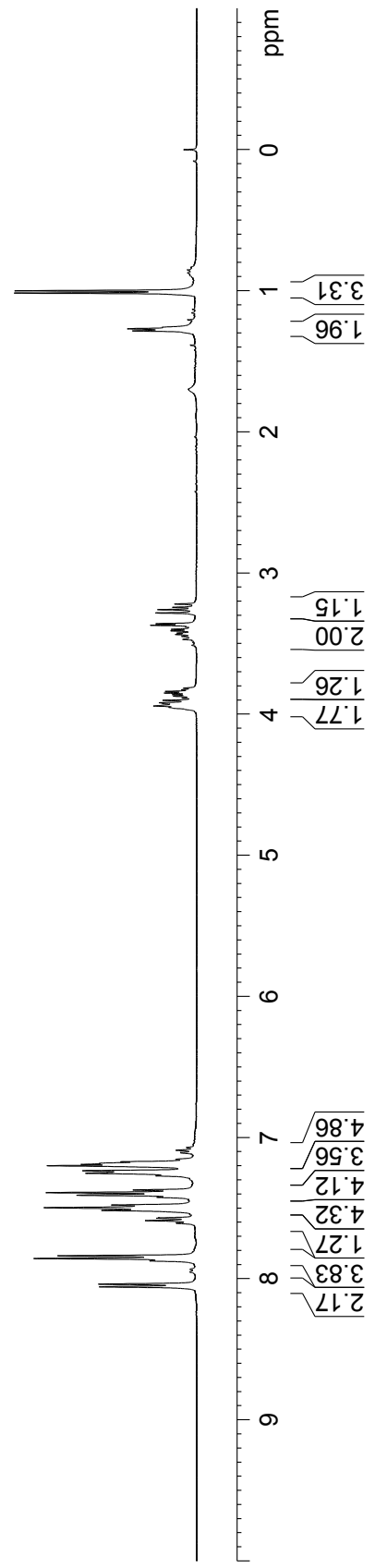


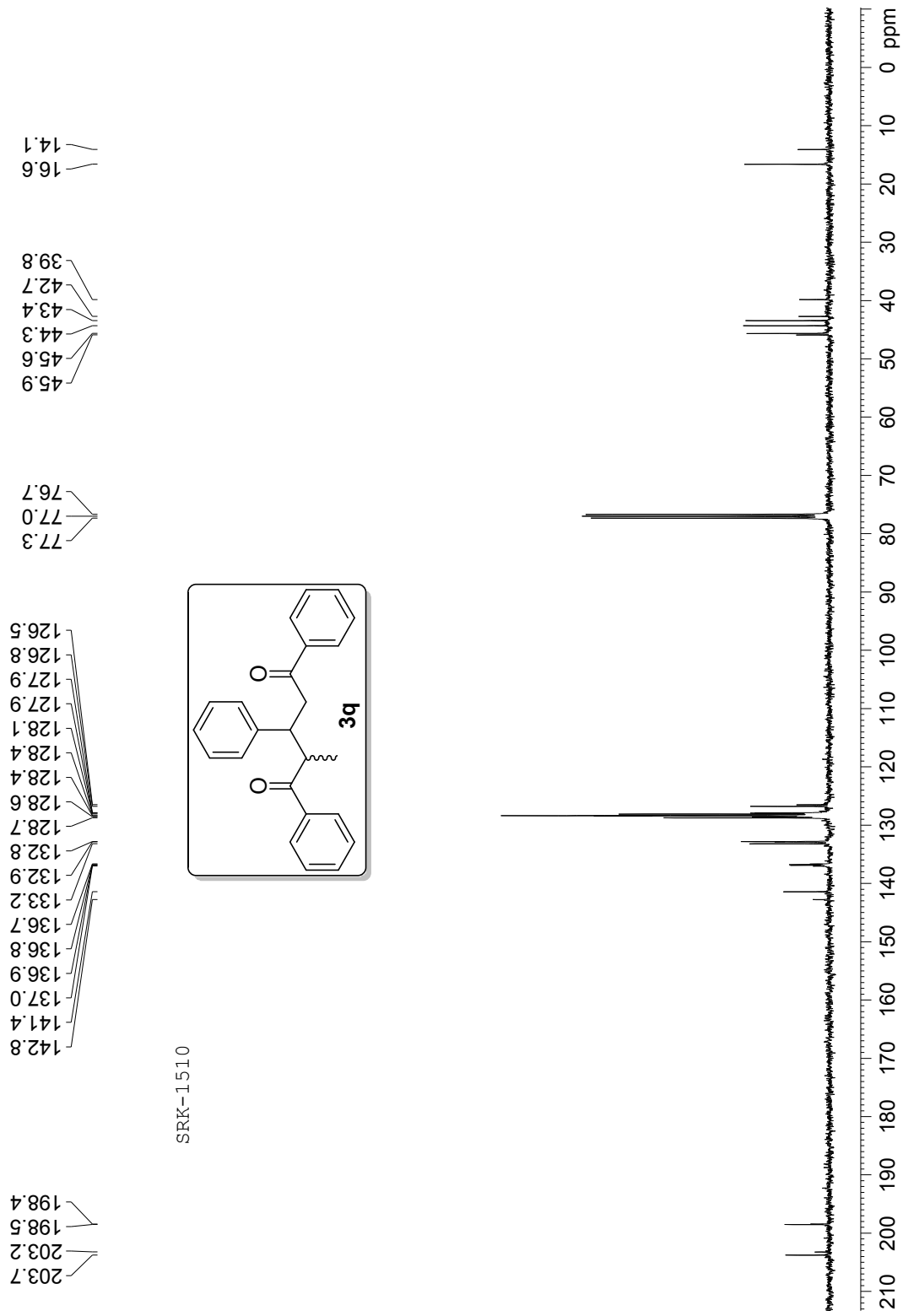
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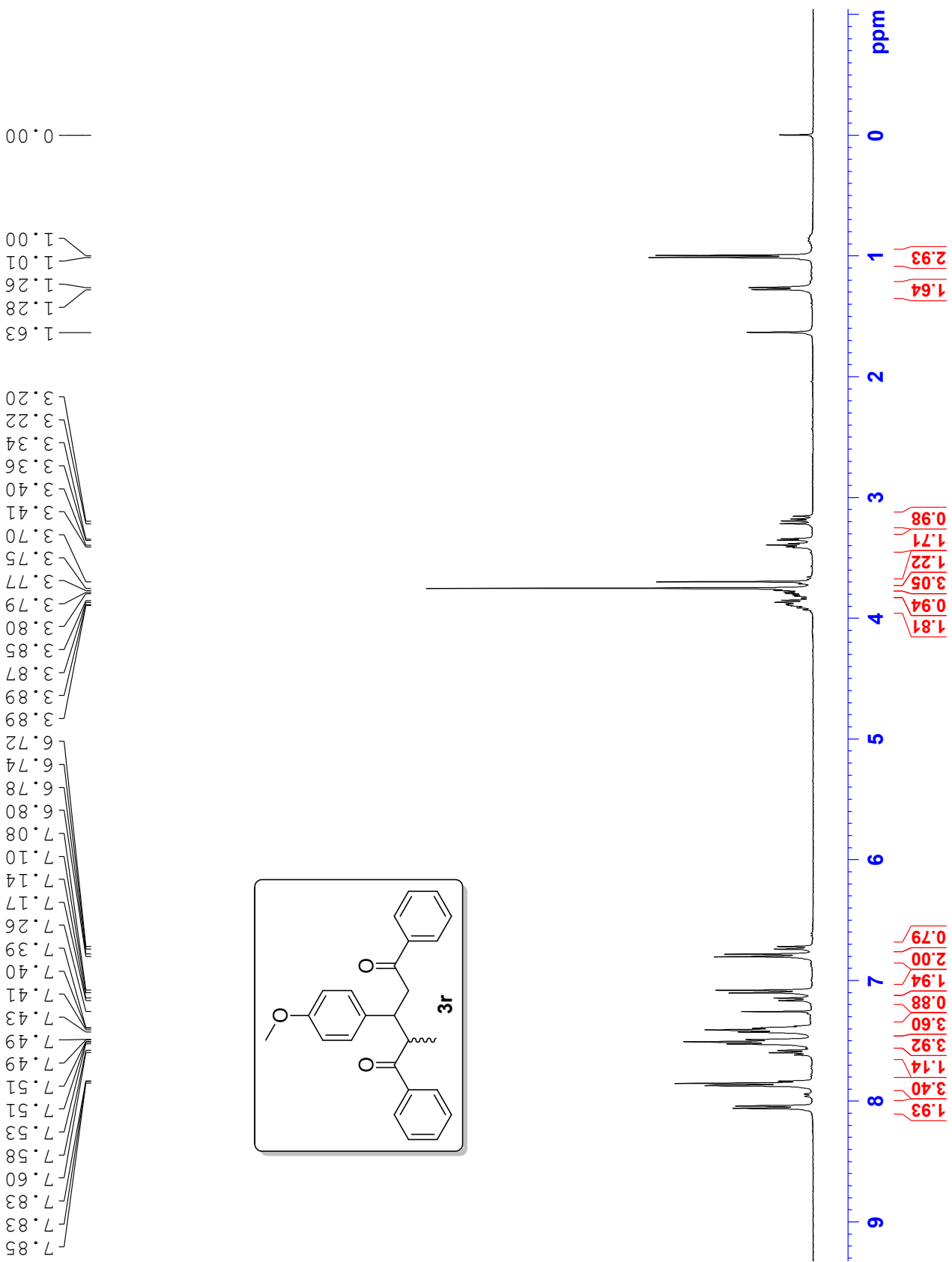


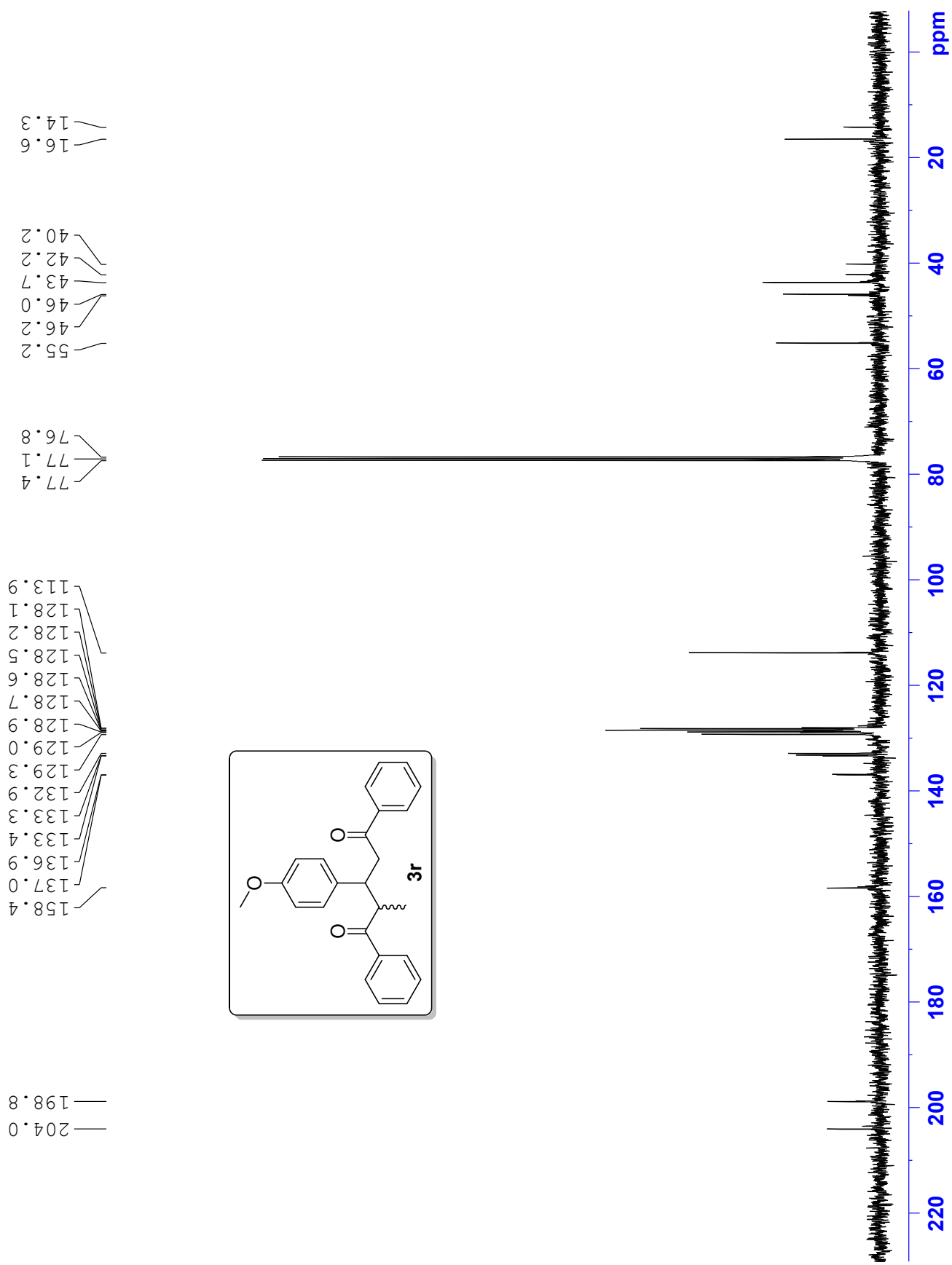


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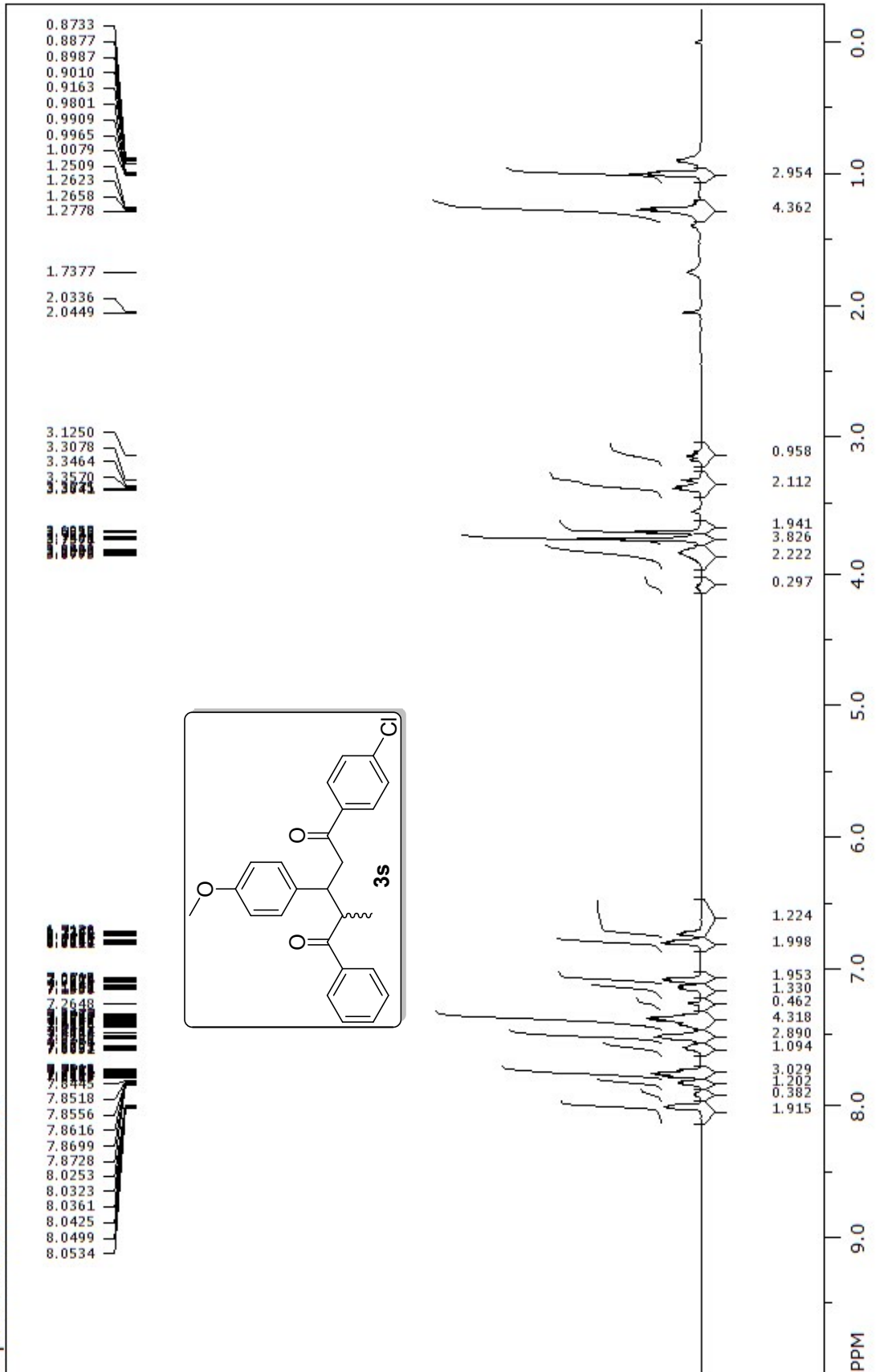




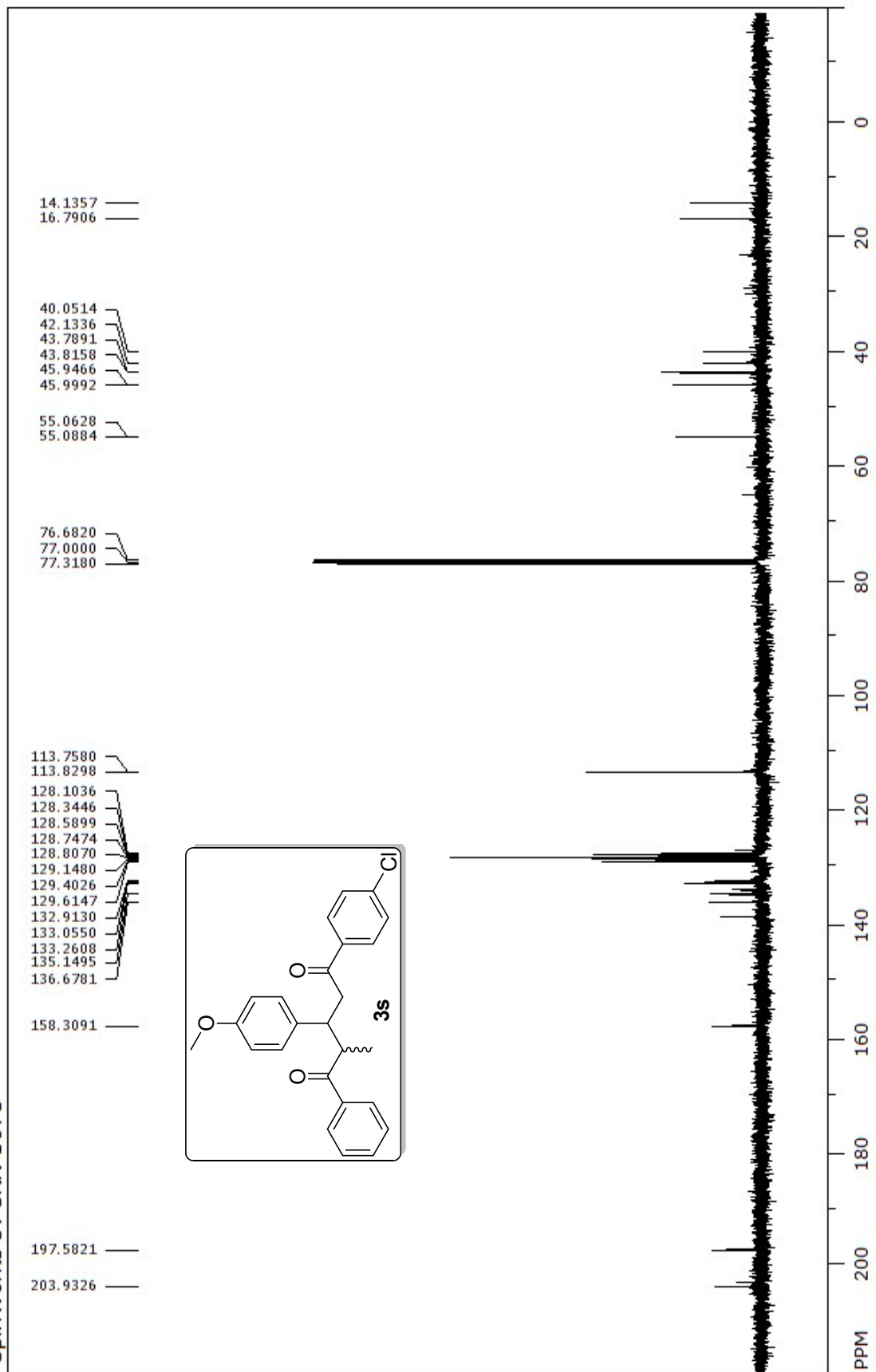




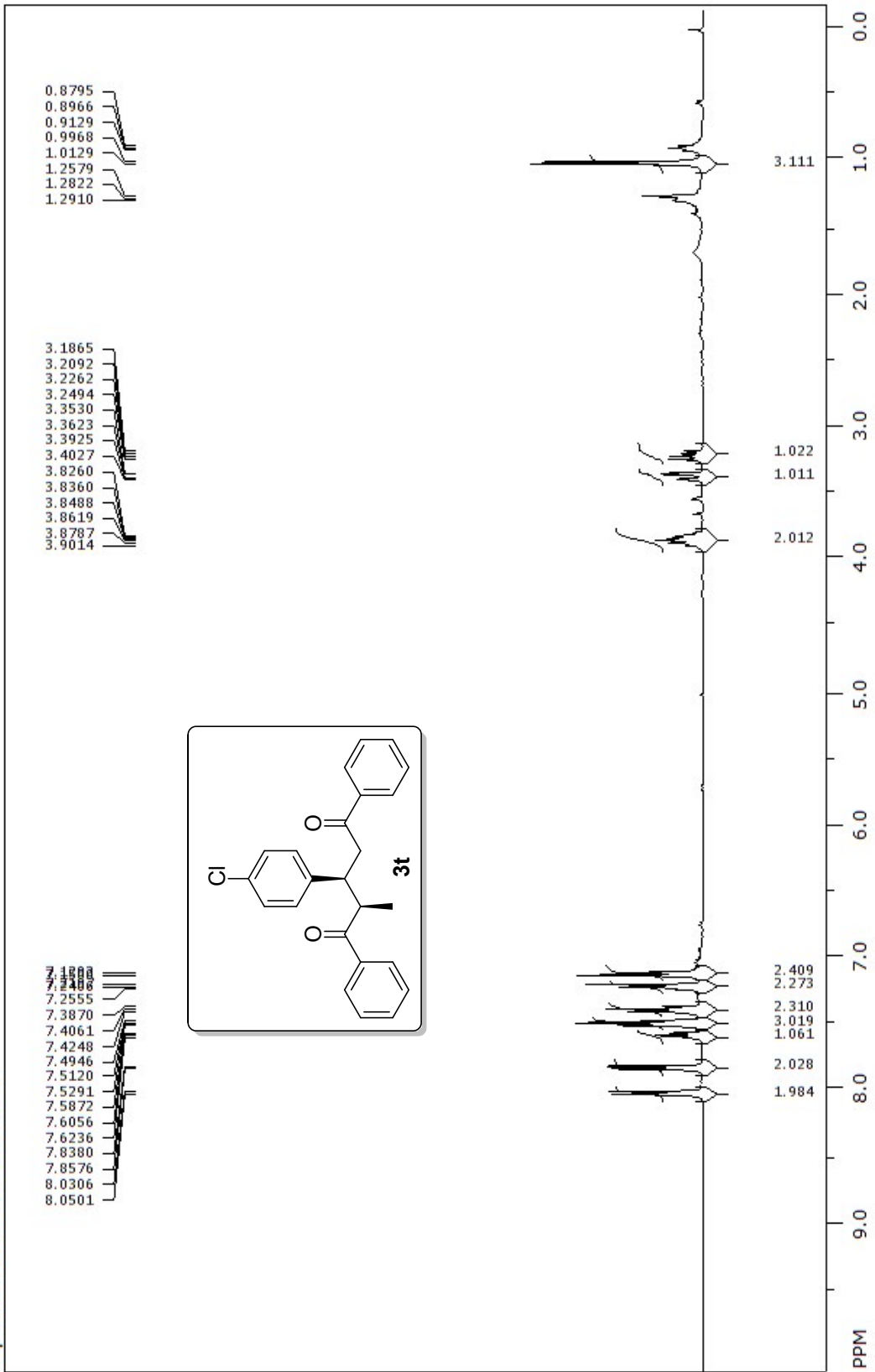
SpinWorks 3: SRK-1675



SpinWorks 3: SRK-1675

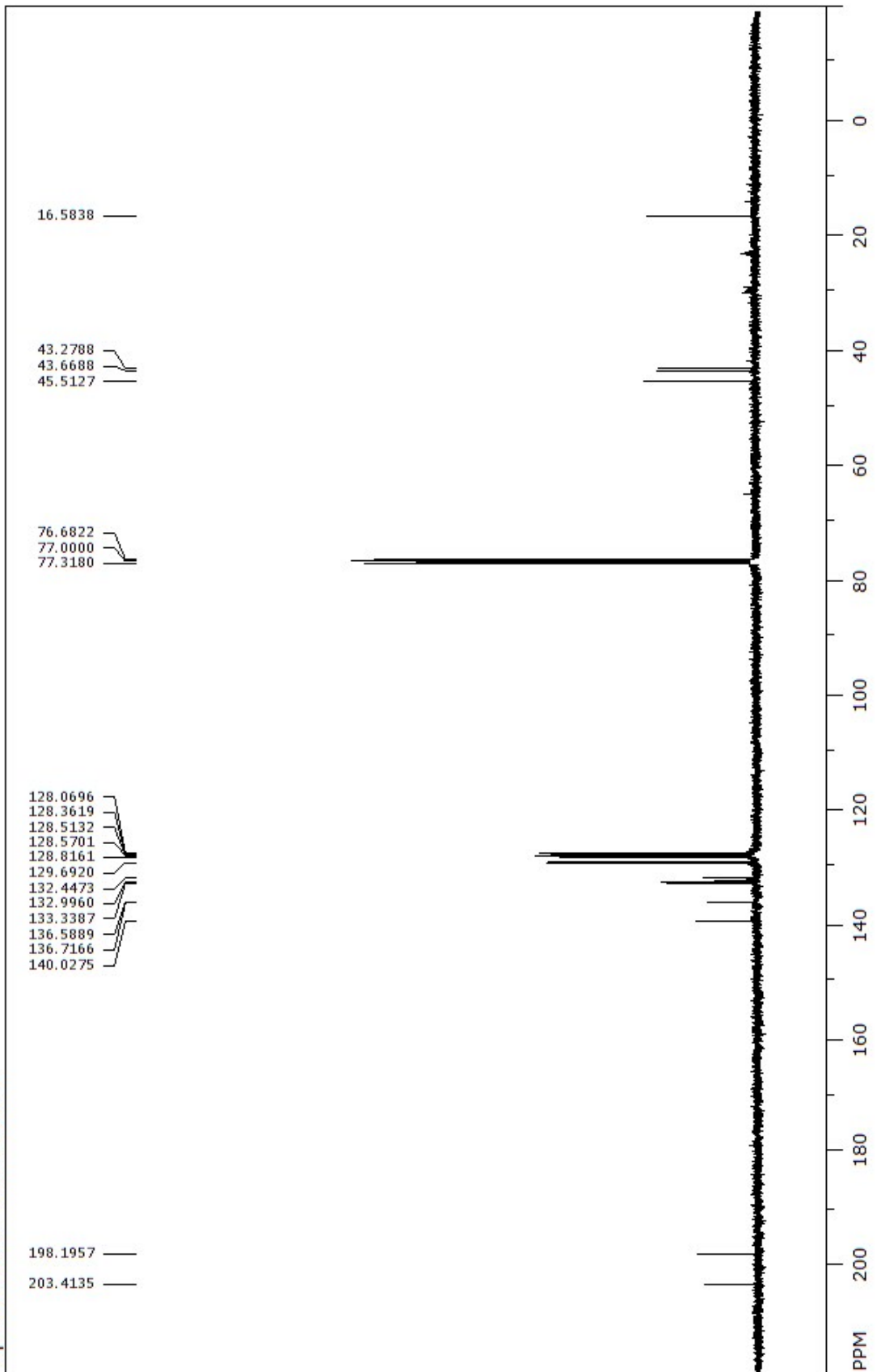


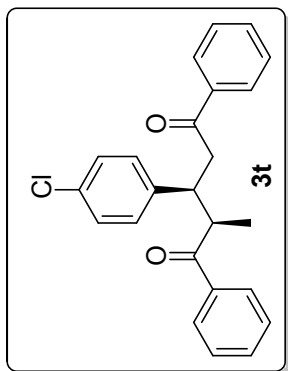
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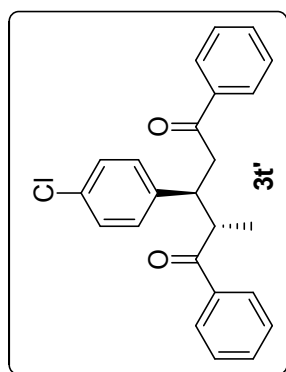
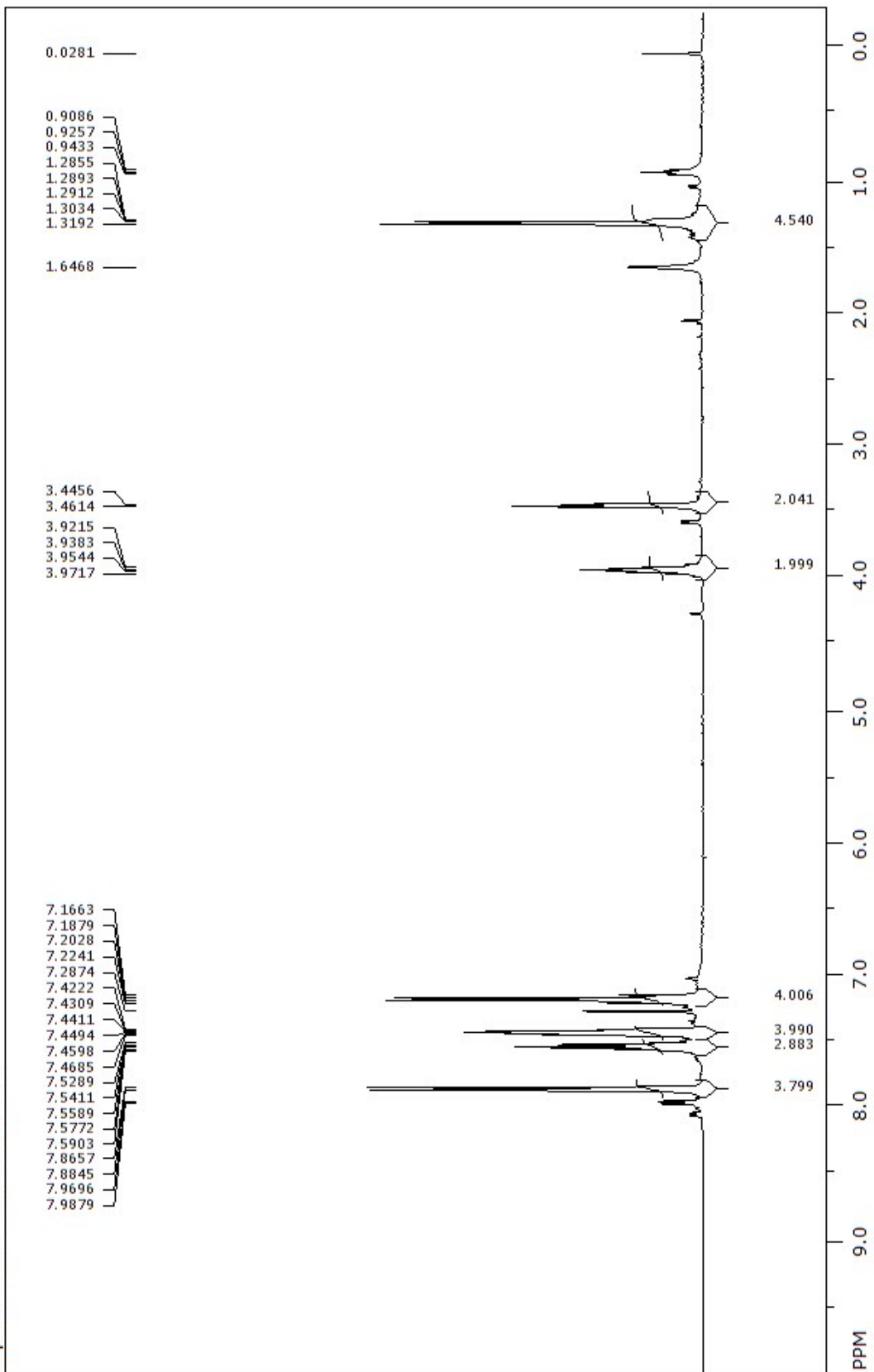


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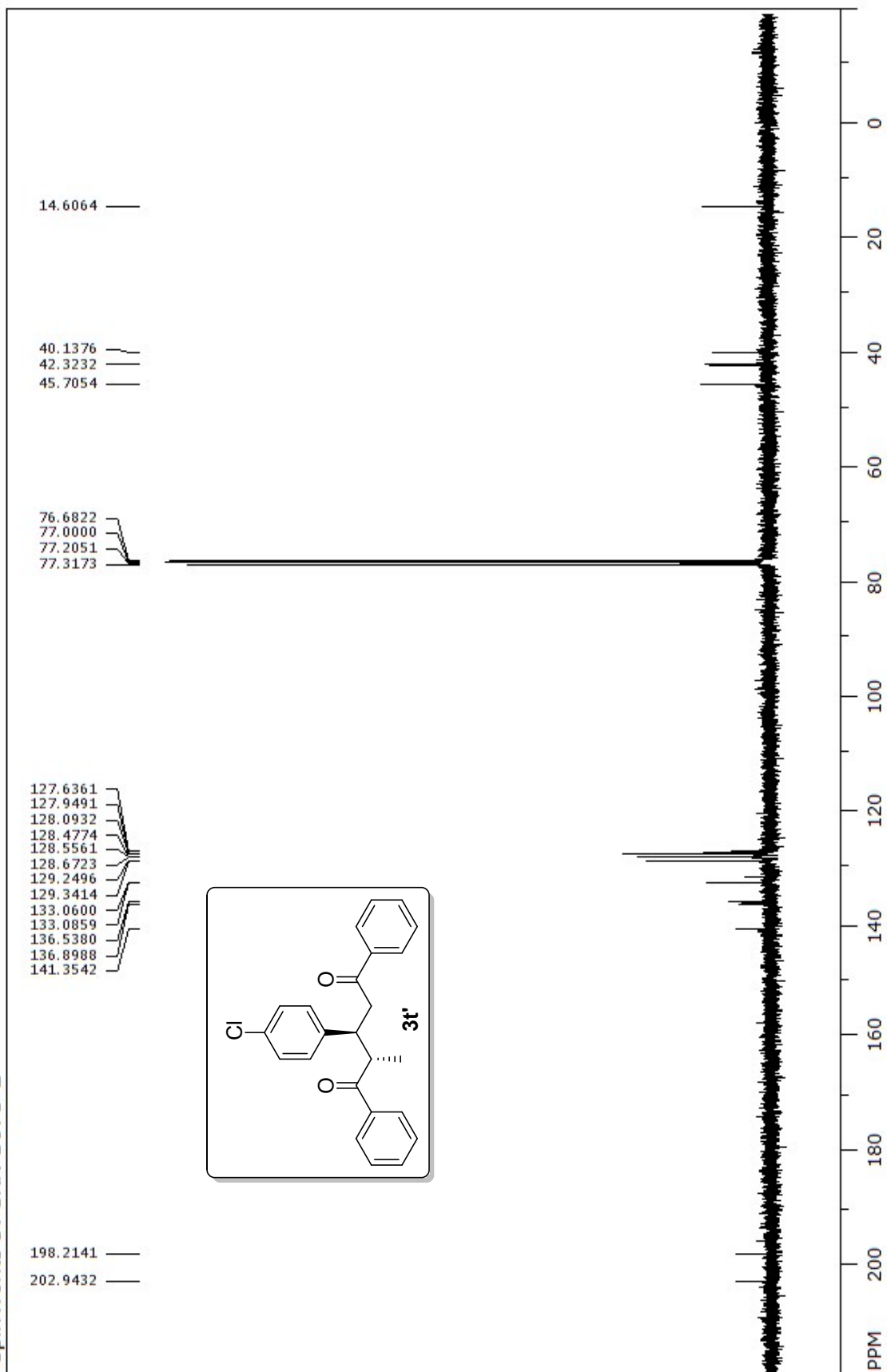


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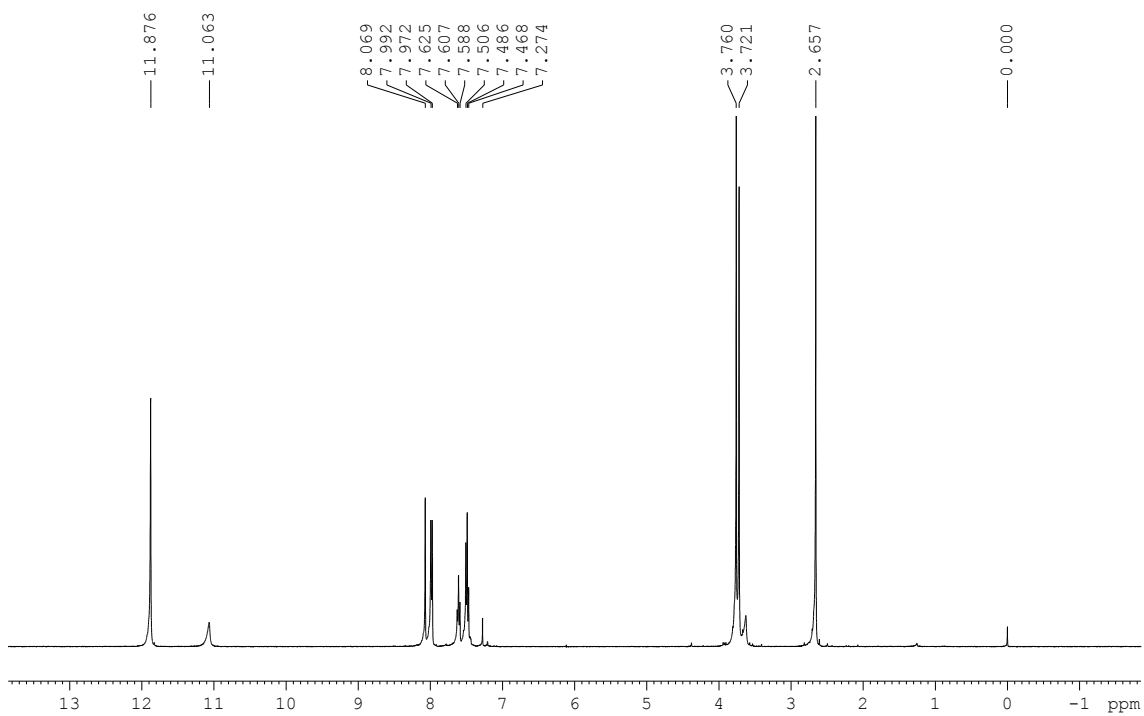
SpinWorks 3: SRK-1673-2



**NMR experiment for check the formation of acetal**

(1 equiv. Acetophenone, 1 equiv. TMOF, 0.5 equiv. TfOH)

**After 30 min; CDCl<sub>3</sub>:CCl<sub>4</sub> (1:1)**



After 2 h; CDCl<sub>3</sub>:CCl<sub>4</sub> (1:1)

