

**SYNTHETIC STUDIES ON MARINEOSINS BASED ON A DIRECT  
COUPLING REACTION OF PYRROLE AND  $\delta$ -LACTONE**

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Fukuda,<sup>1</sup> Jun Ishihara,<sup>1\*</sup> and Susumi Hatakeyama<sup>2\*</sup>**

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852-8521, Japan

<sup>2</sup> Medical Innovation Center, Nagasaki University, 1-14 Bunkyo-machi, Nagasaki 852-8521,  
Japan

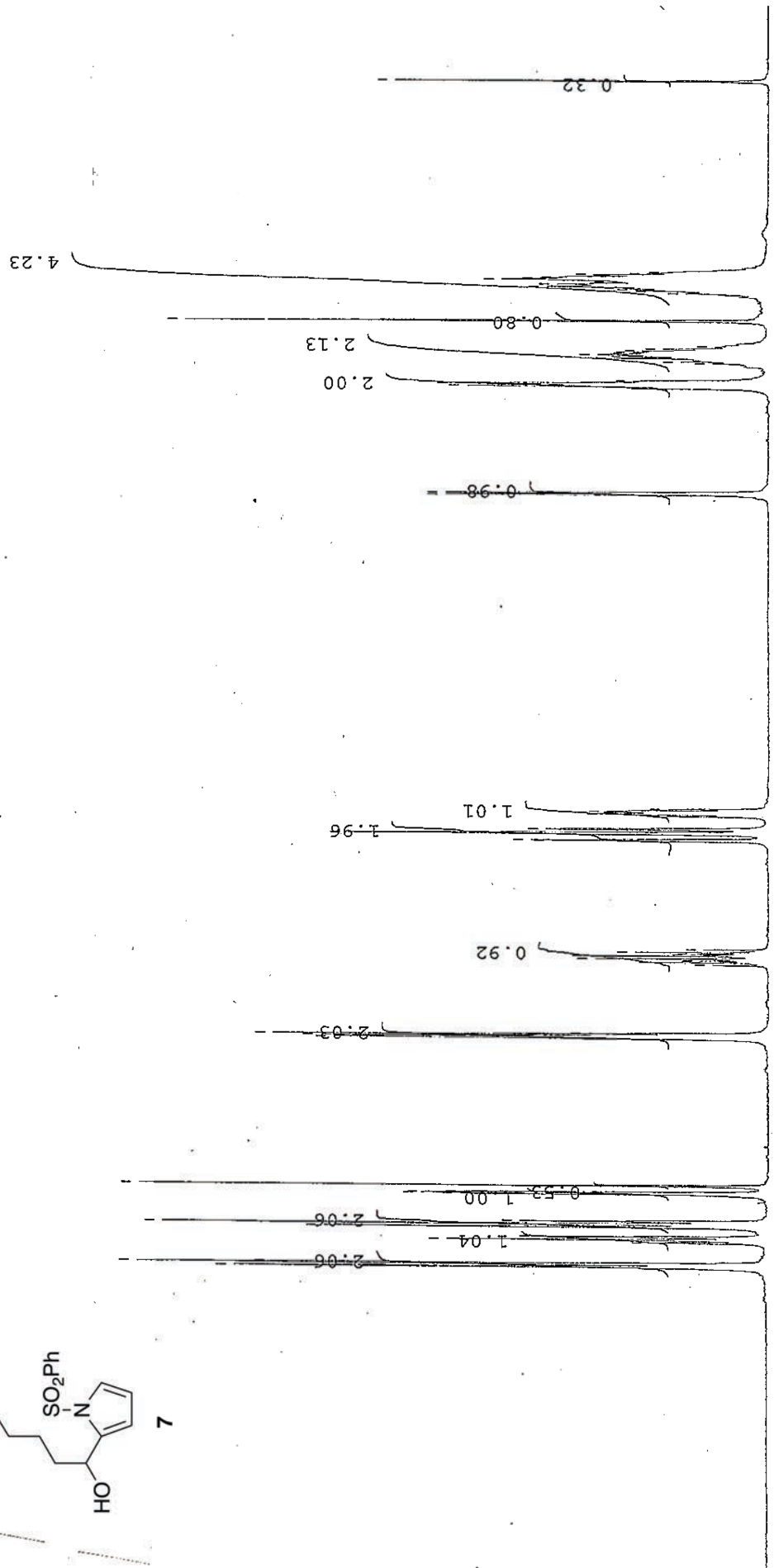
E-mail: jishi@nagasaki-u.ac.jp

**Supporting Information**

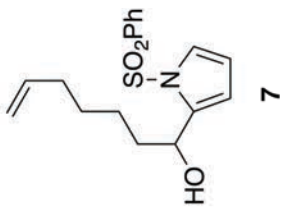
Spectral Data in Scheme 4 ( <b>7 and 4</b> )	S-2
Spectral Data in Scheme 5 ( <b>8, 9, and 5</b> )	S-8
Spectral Data in Scheme 6 and 7 ( <b>3, 2, 10, 11, 12, 13a, 13b, and 1</b> )	S-12

PPM

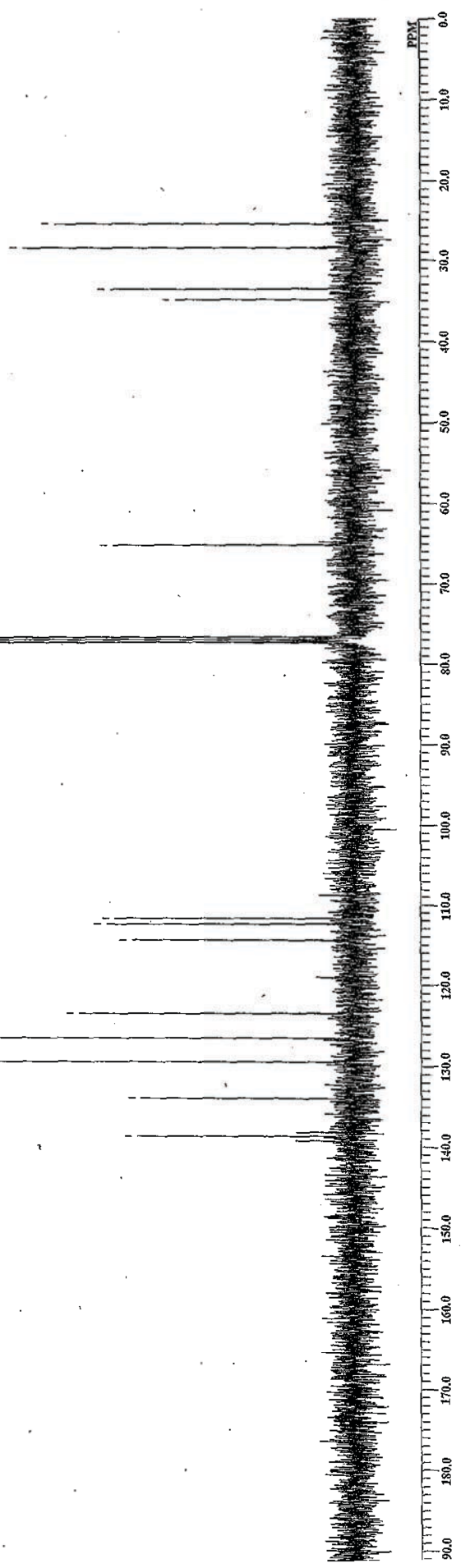
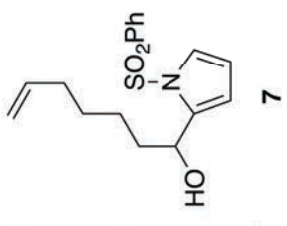
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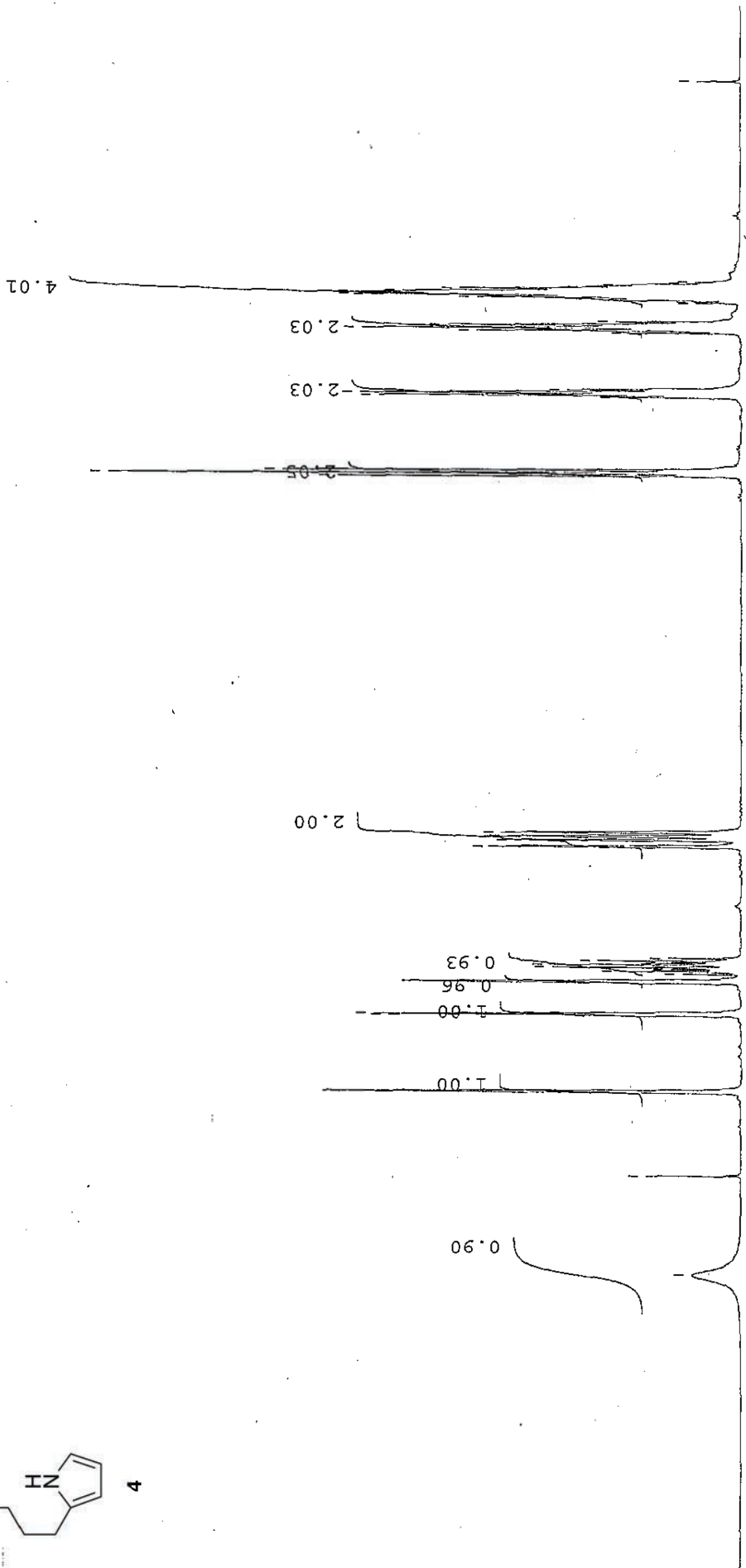
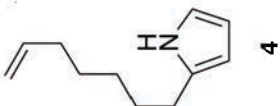
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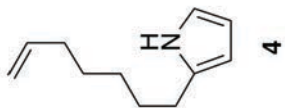


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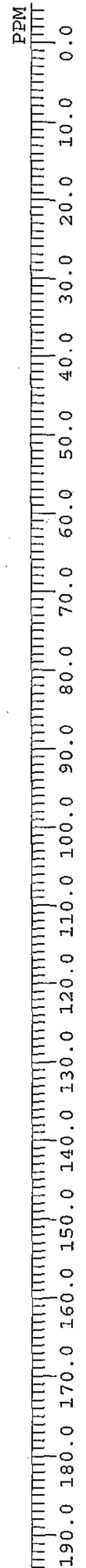


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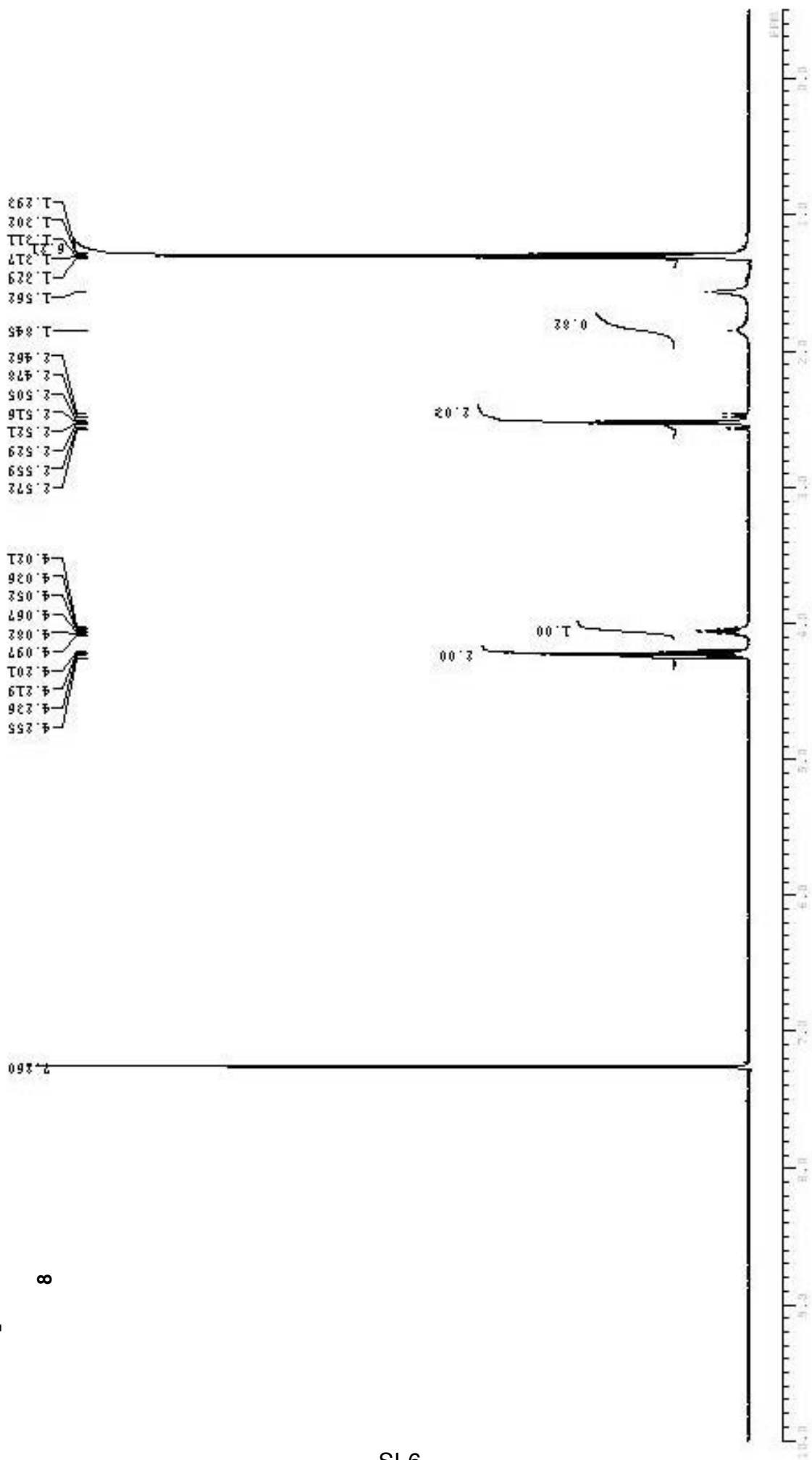
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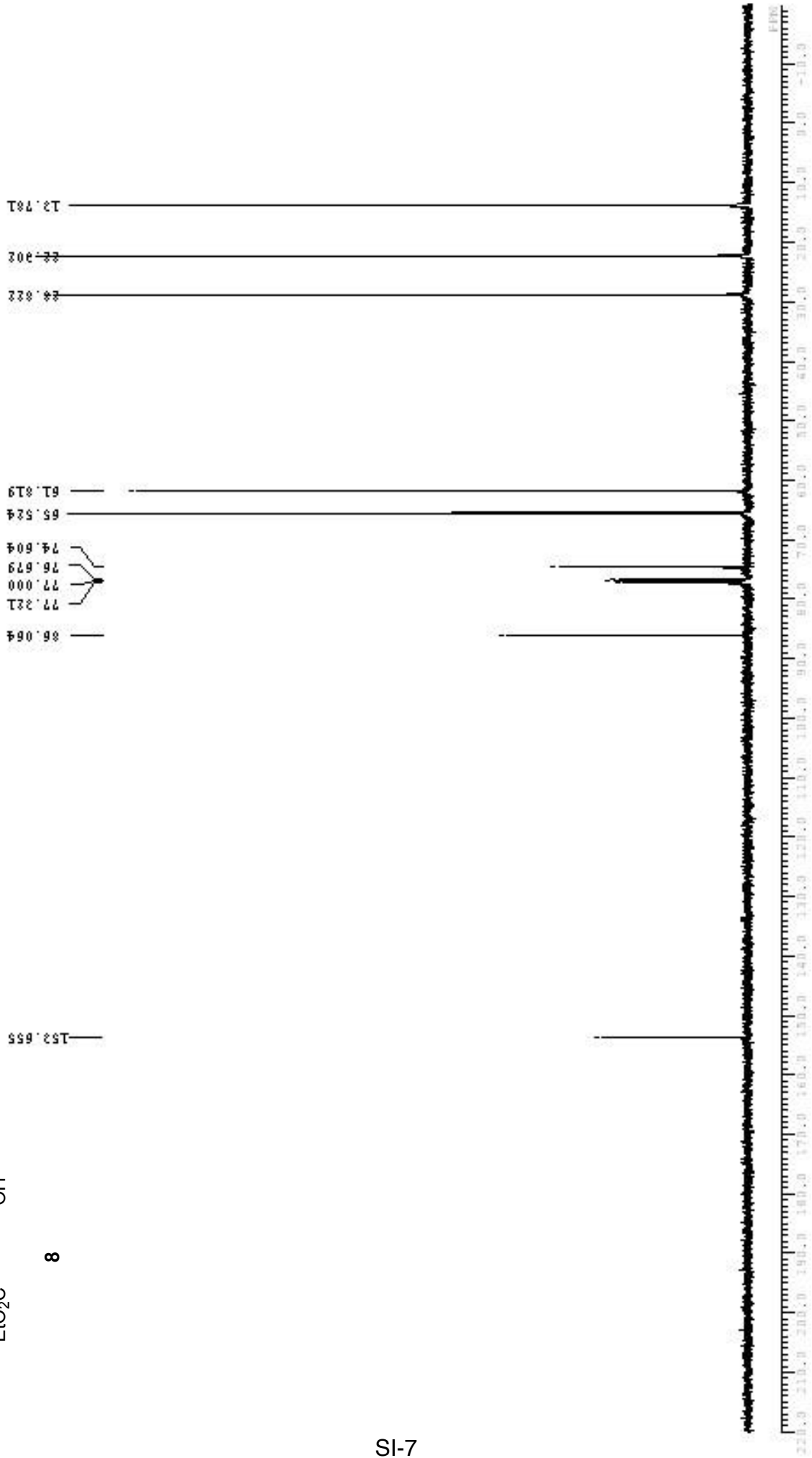


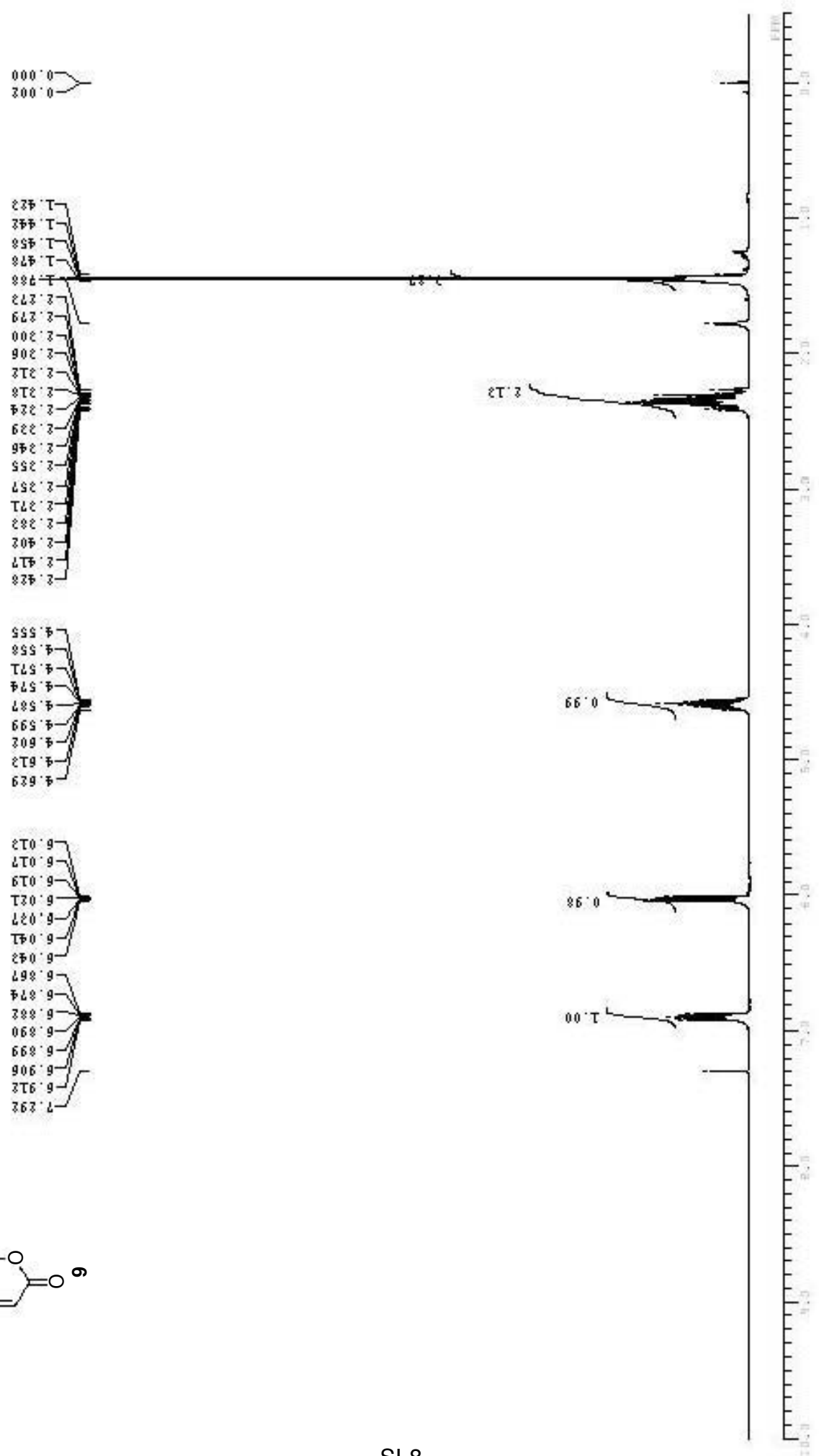
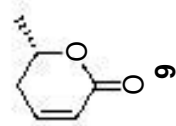
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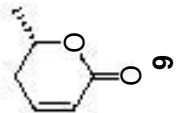




8







164.481

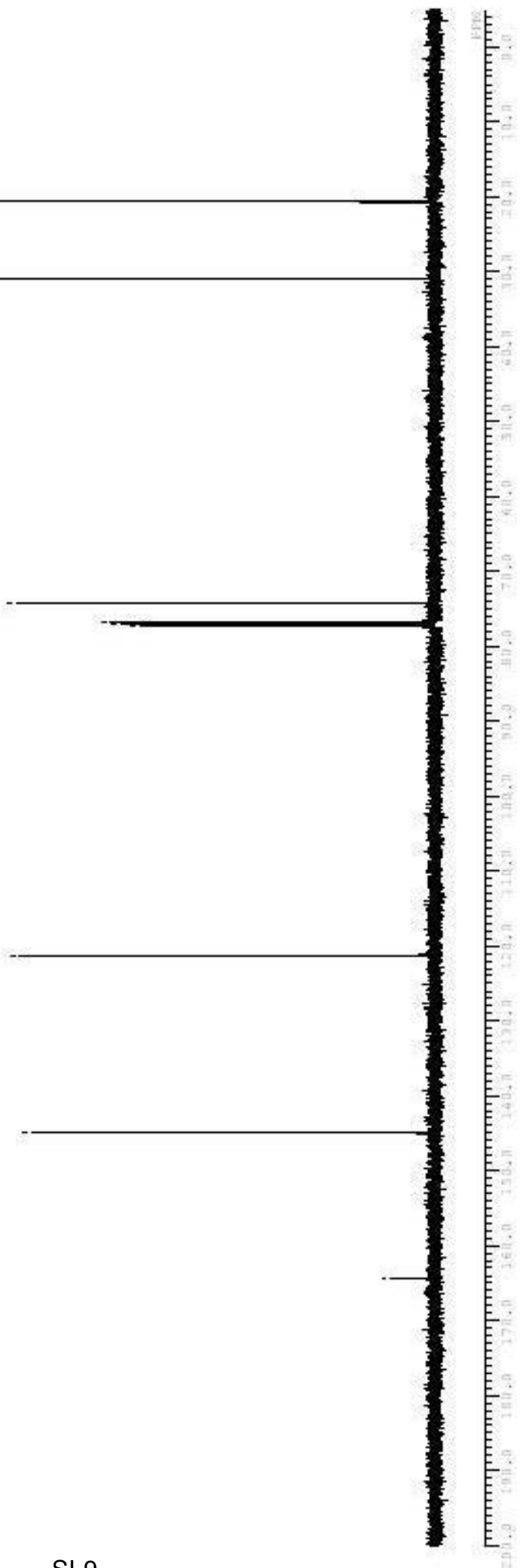
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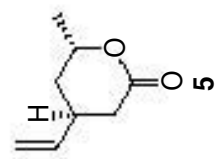
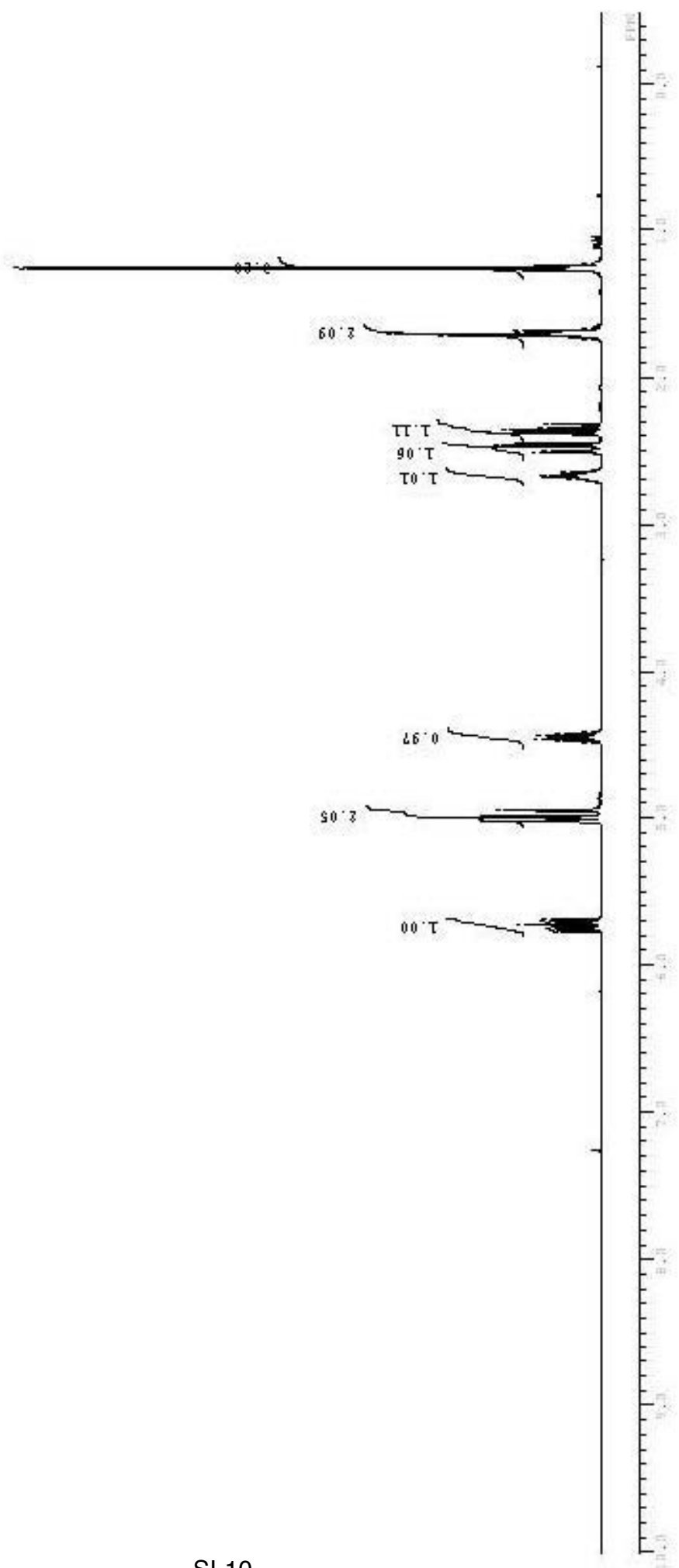
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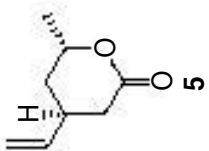
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171.231

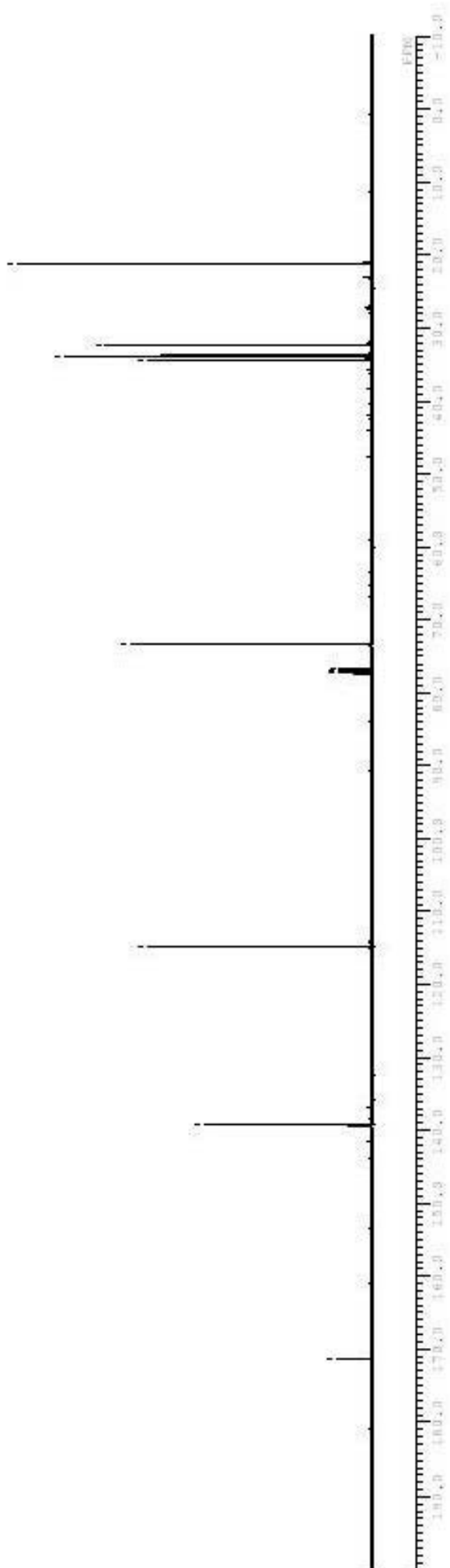
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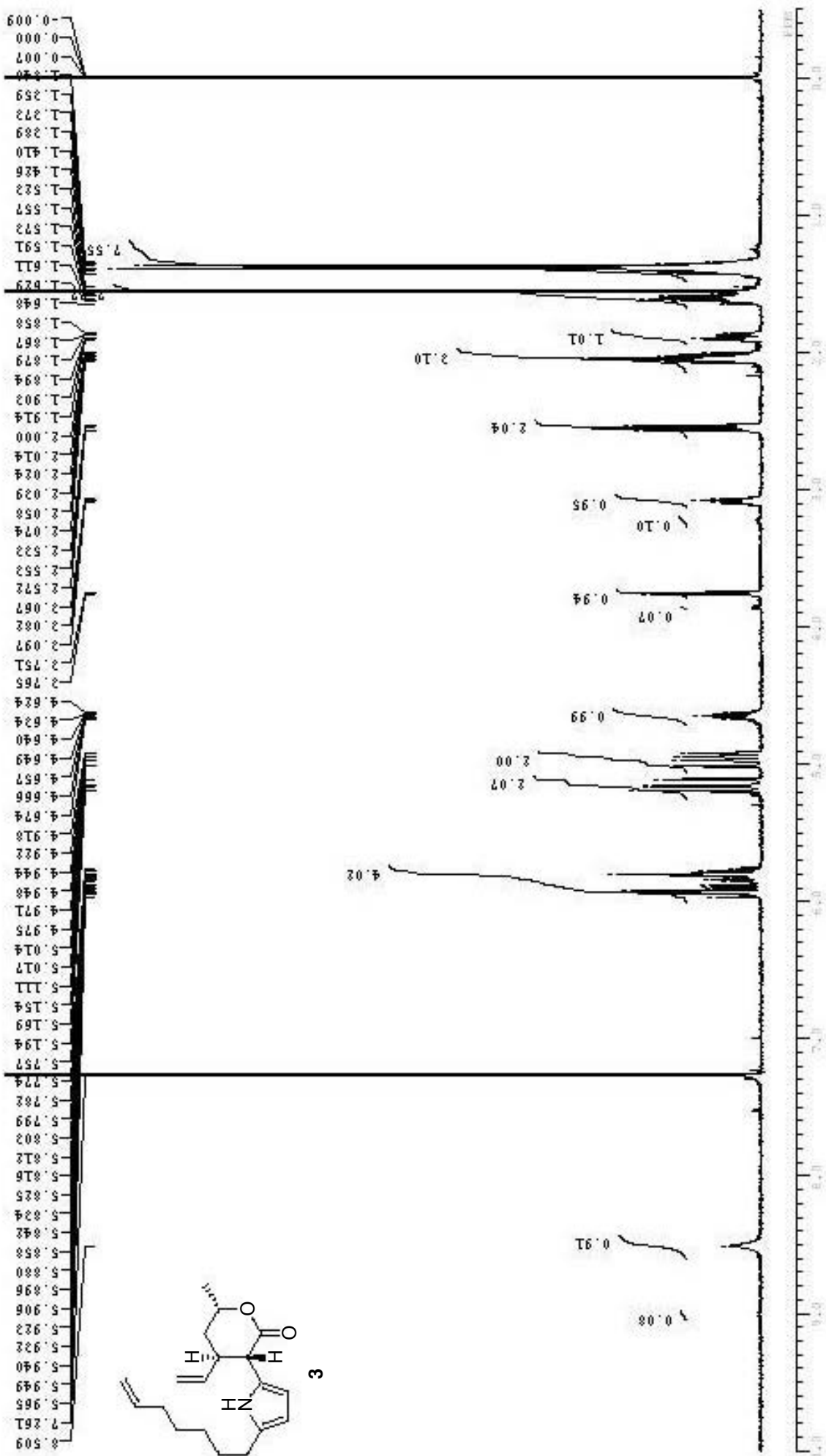
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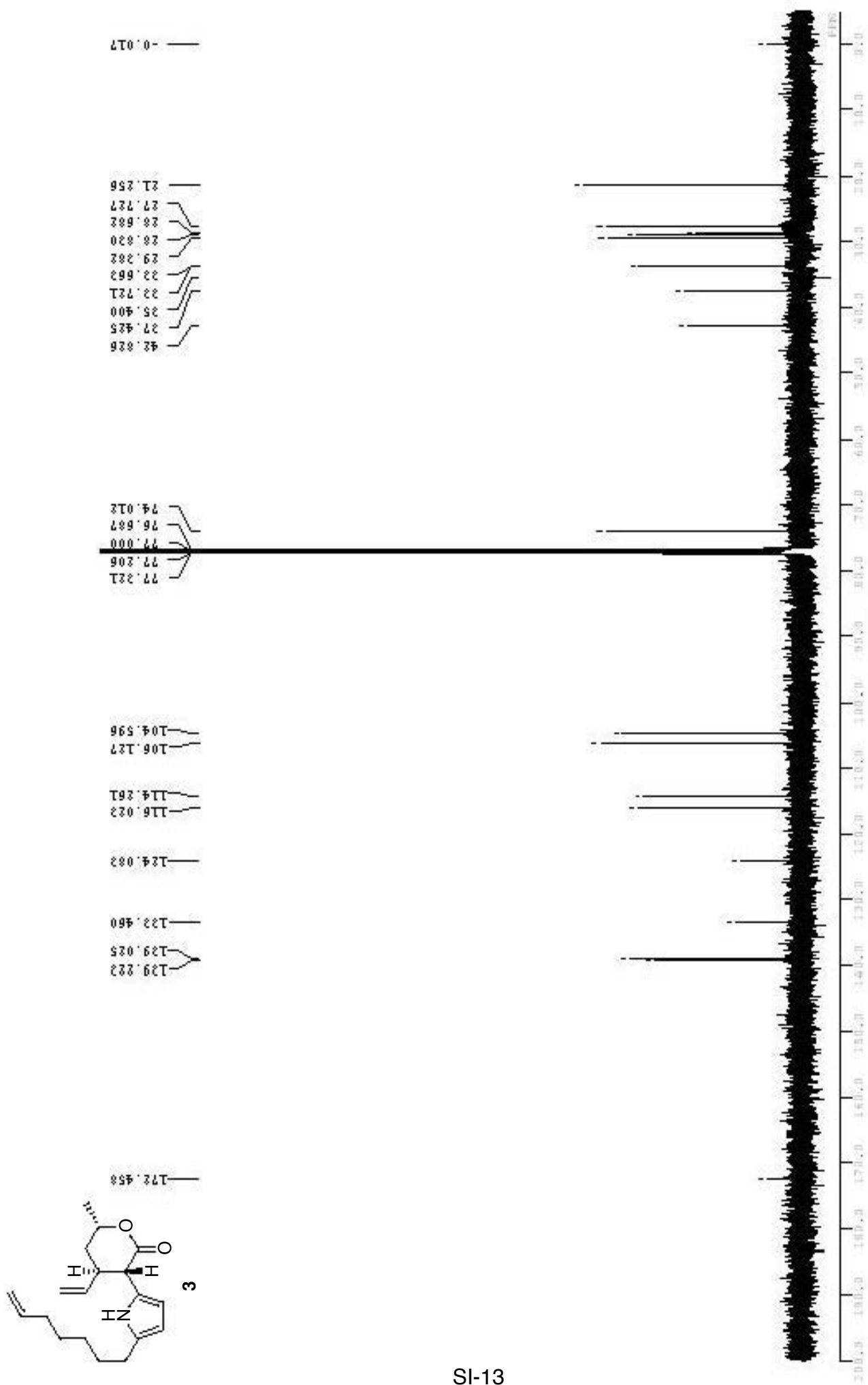
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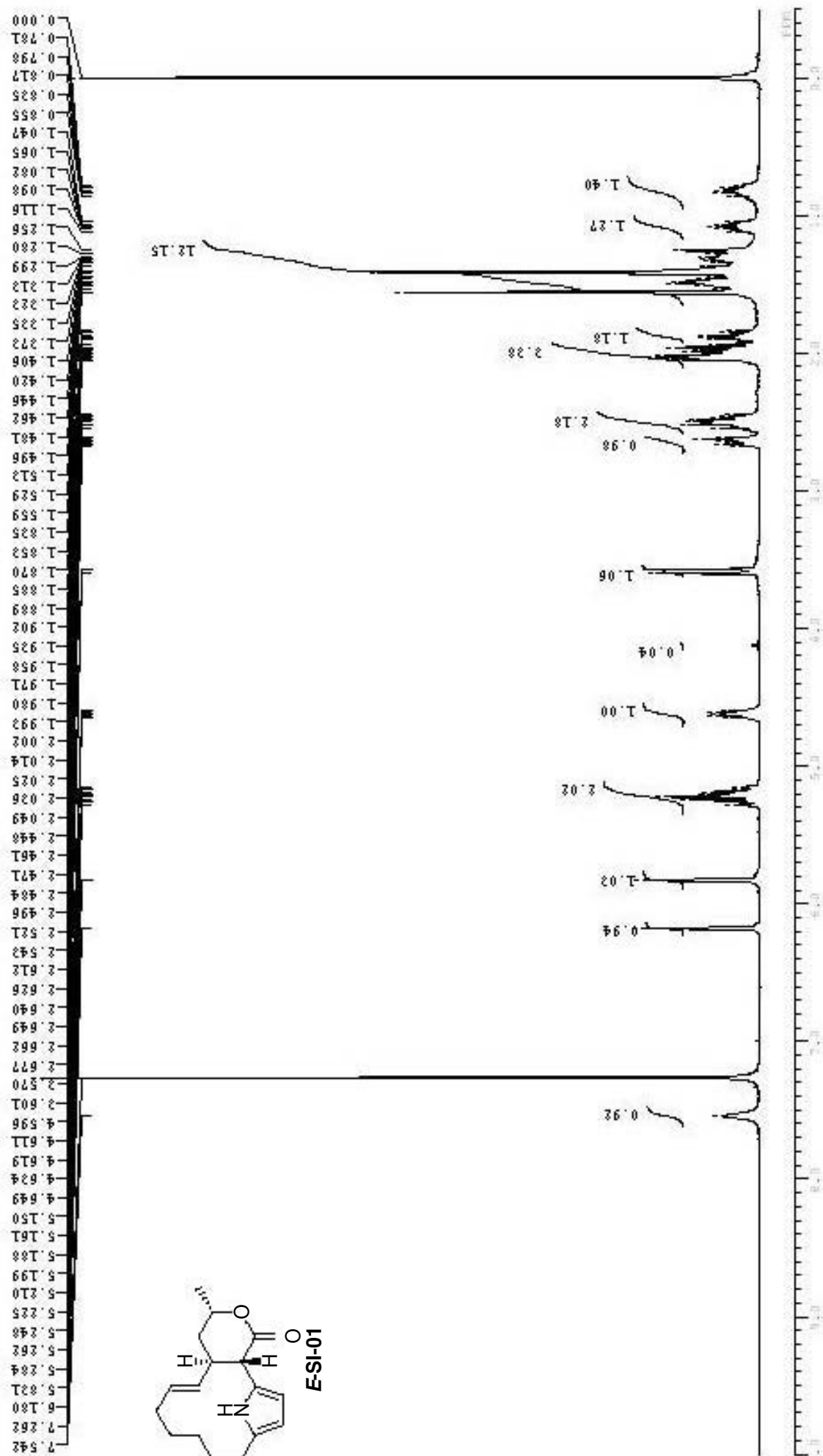
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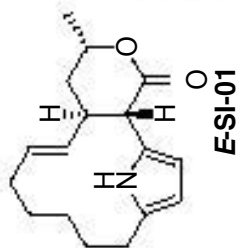
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171.775

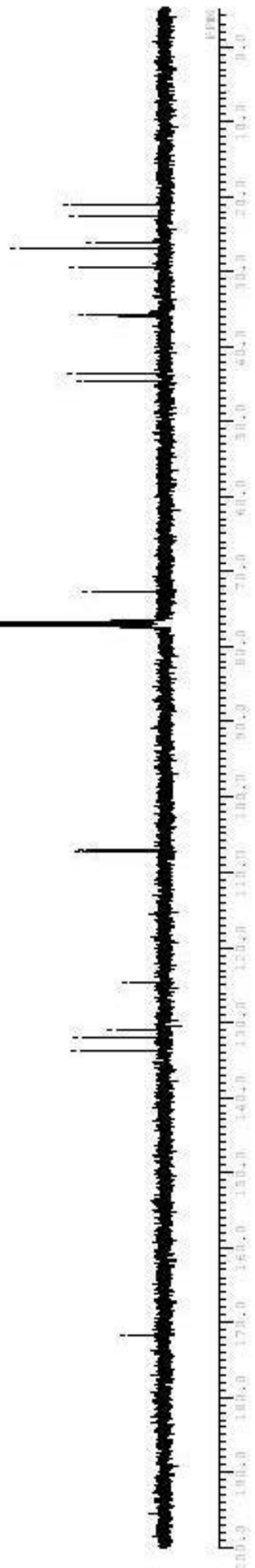
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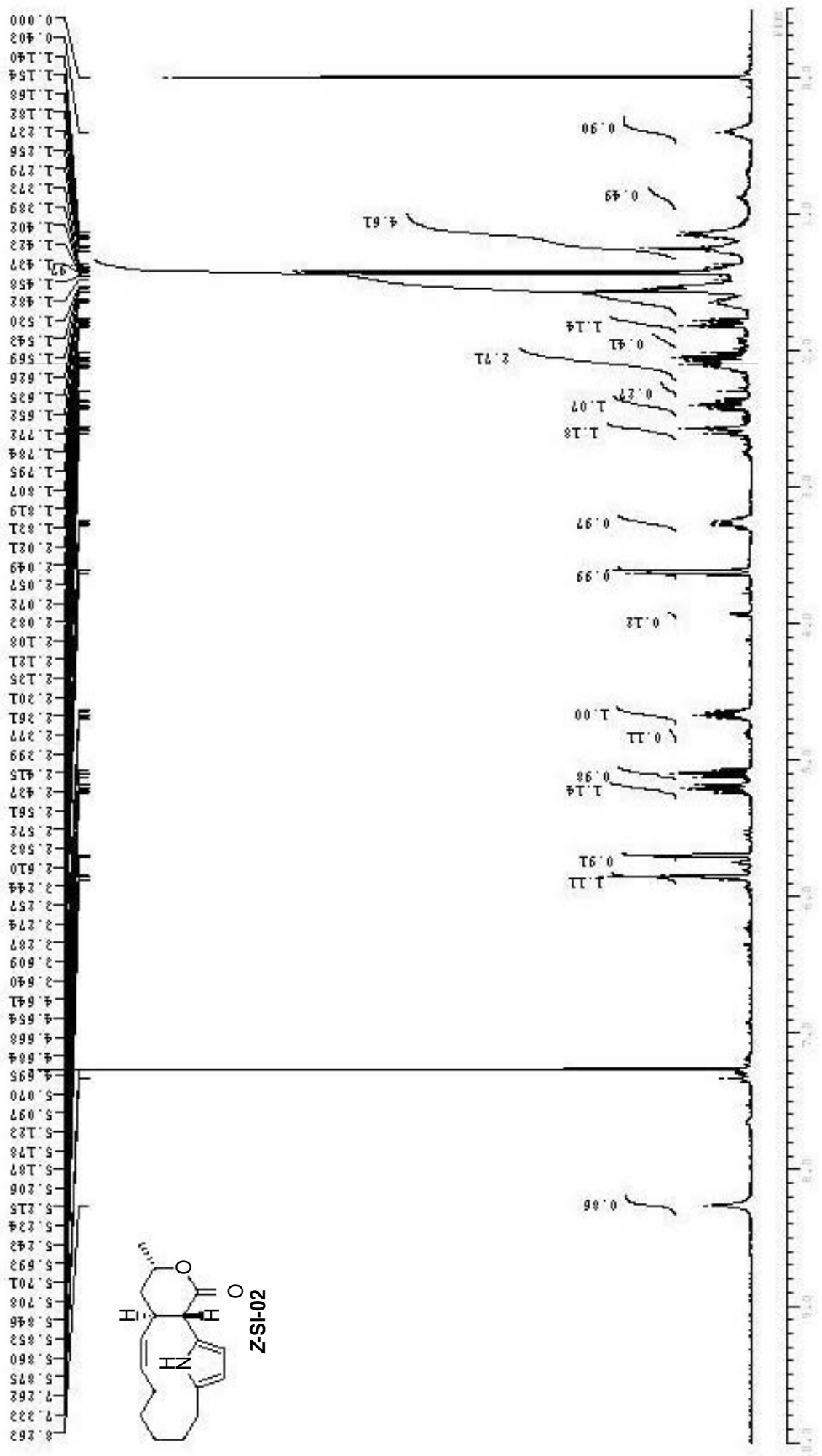
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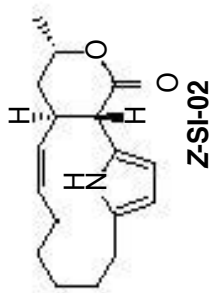
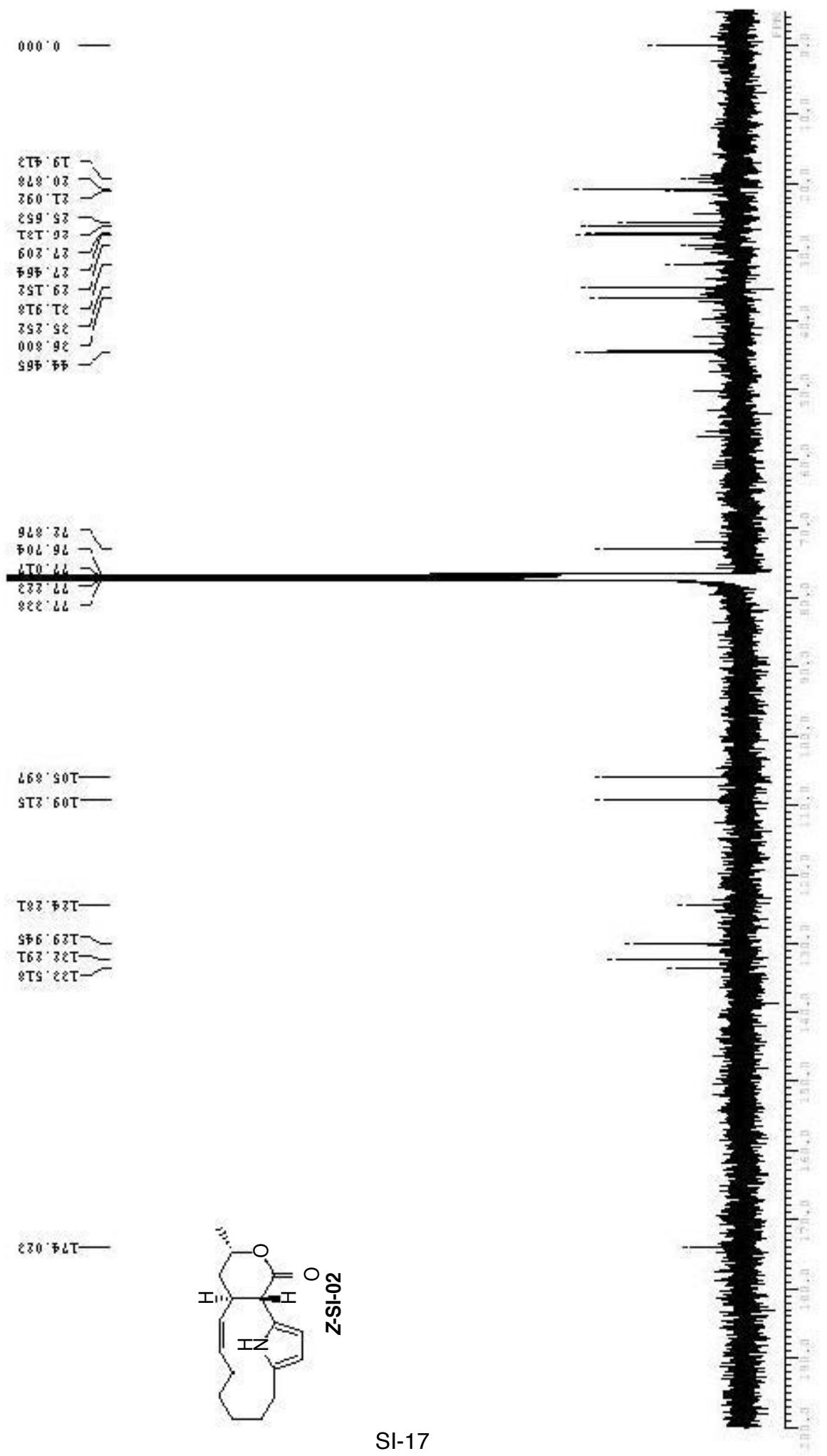
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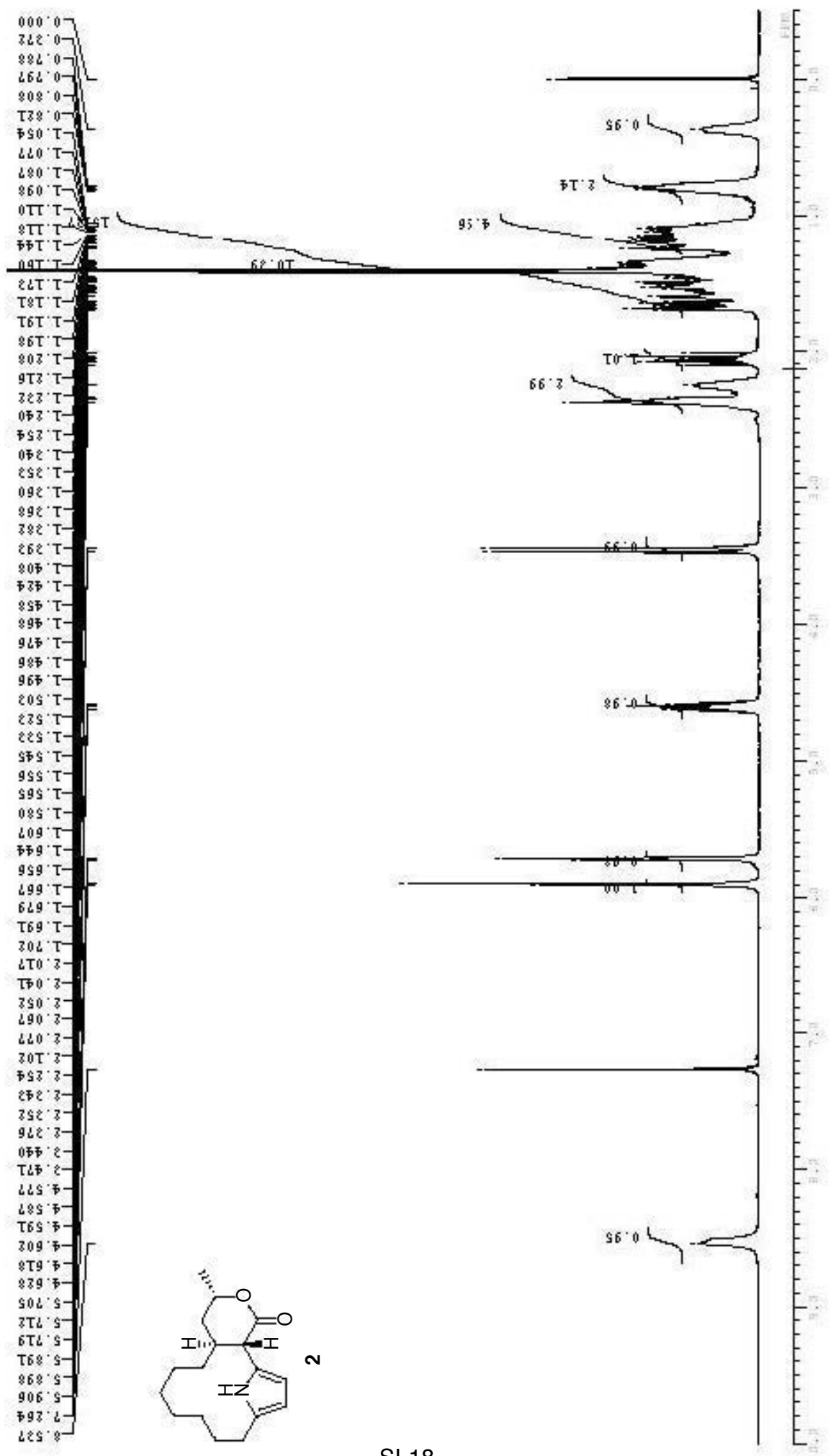
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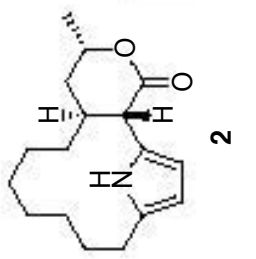
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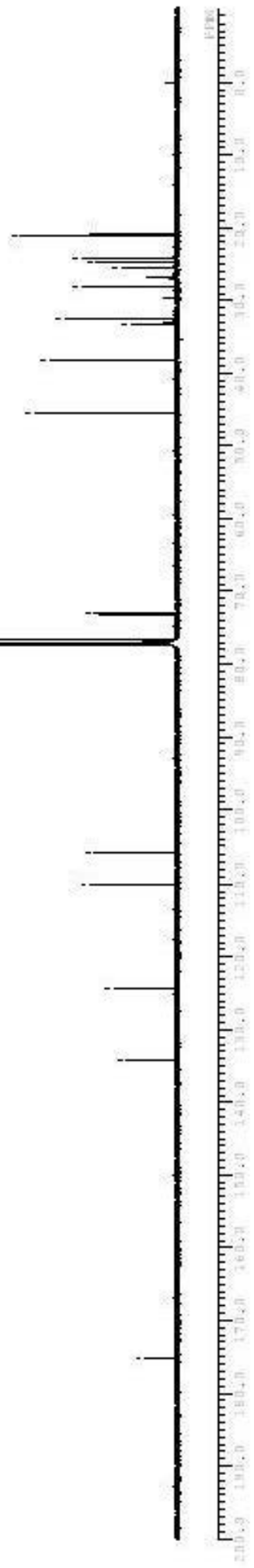
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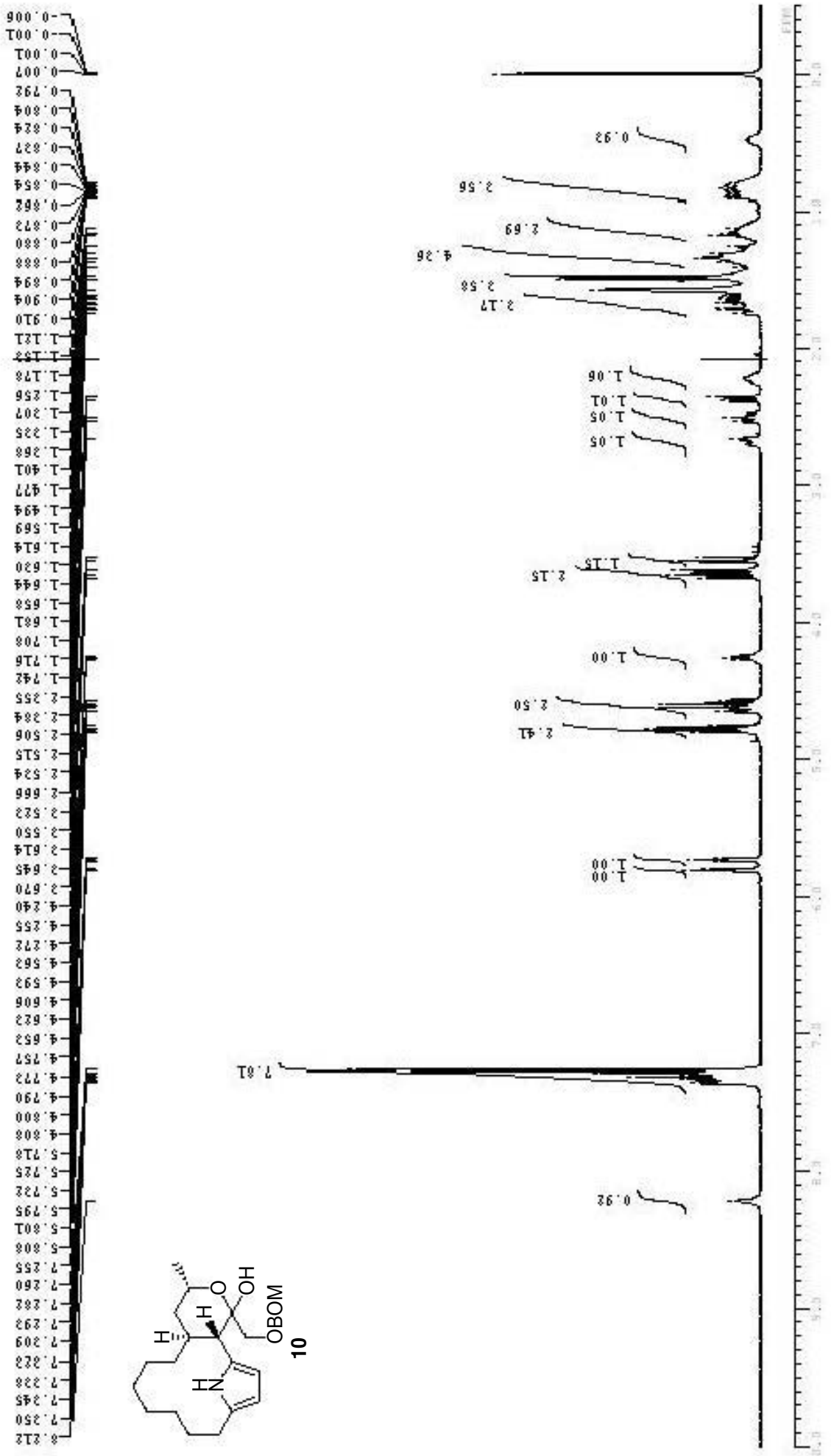
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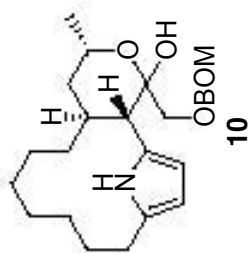
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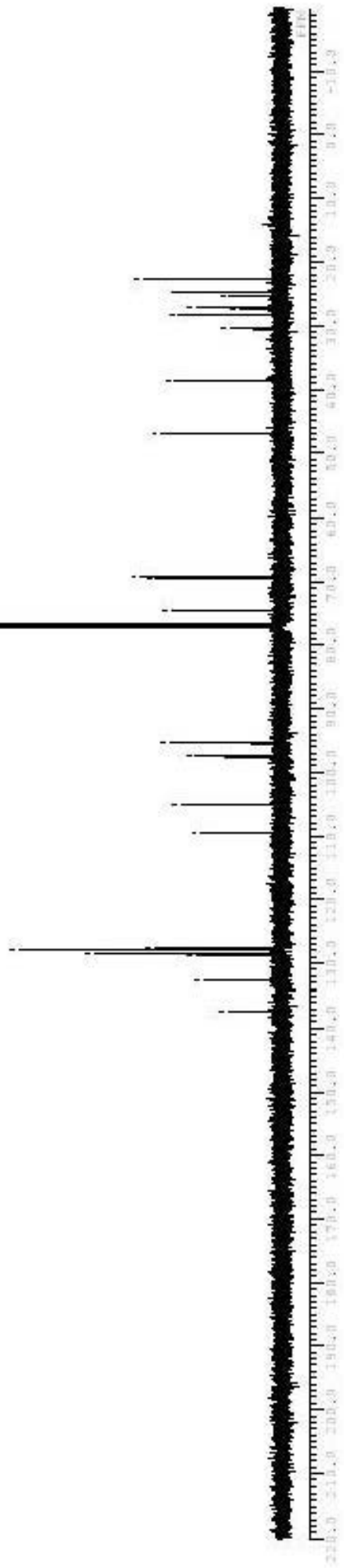
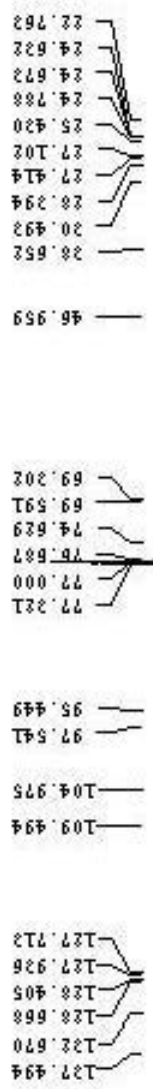
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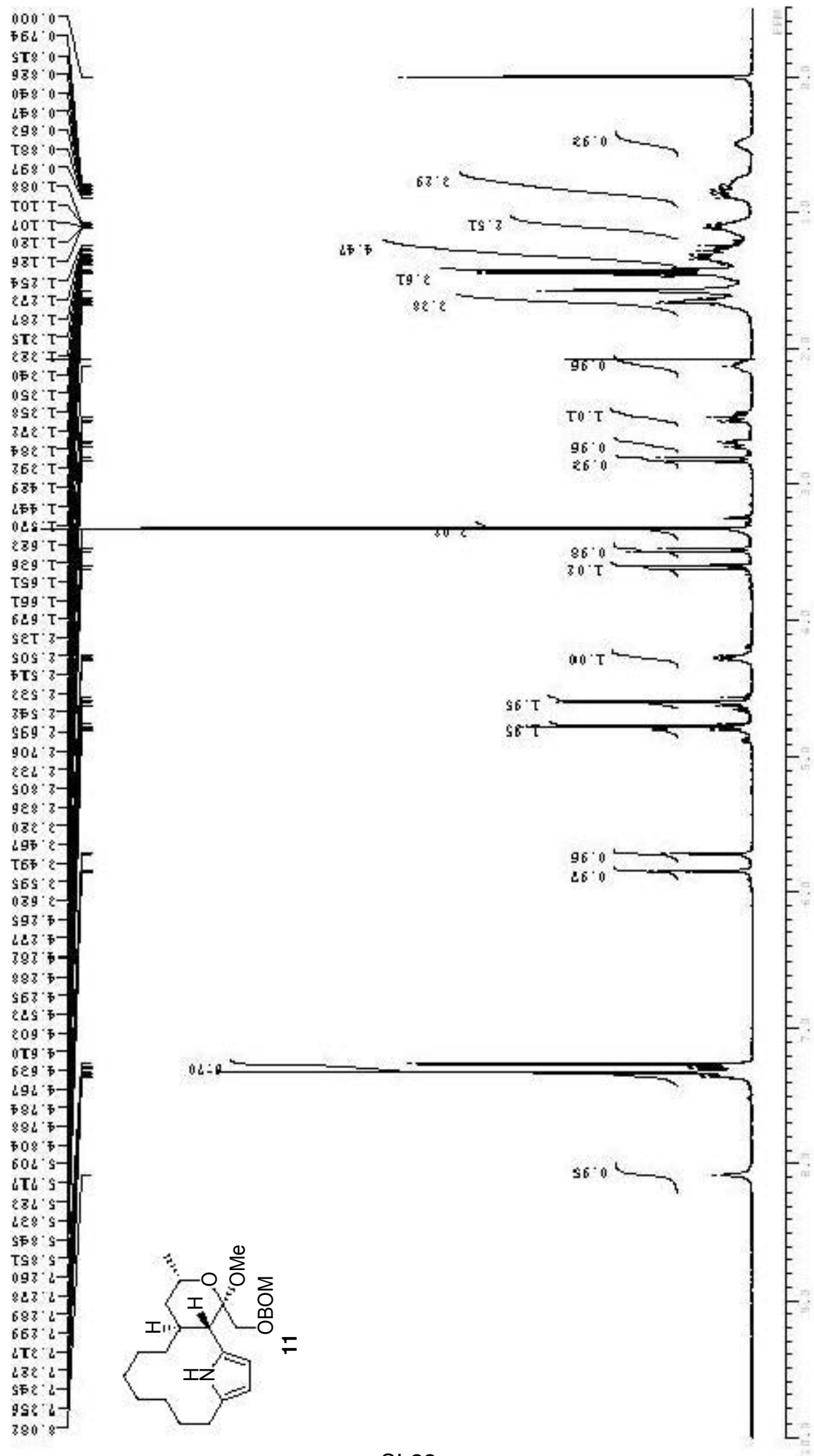


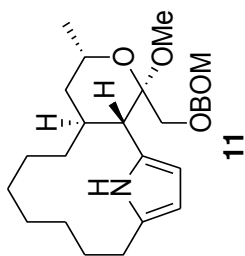




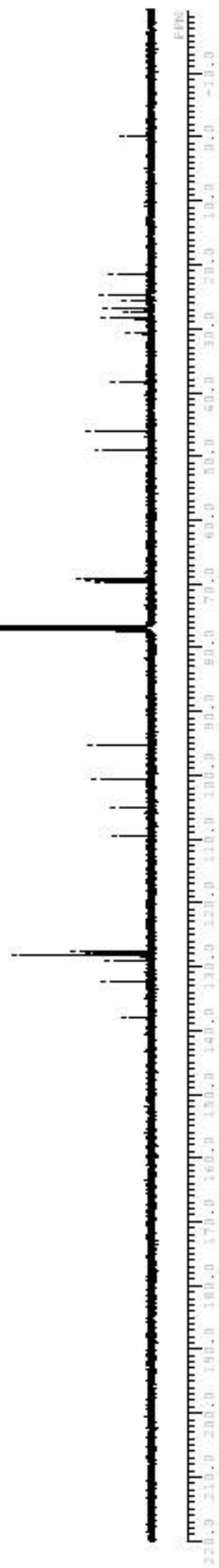
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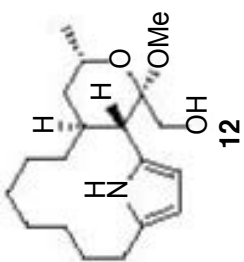




Chemical Shift (ppm)
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127.565
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77.000
76.687
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69.366
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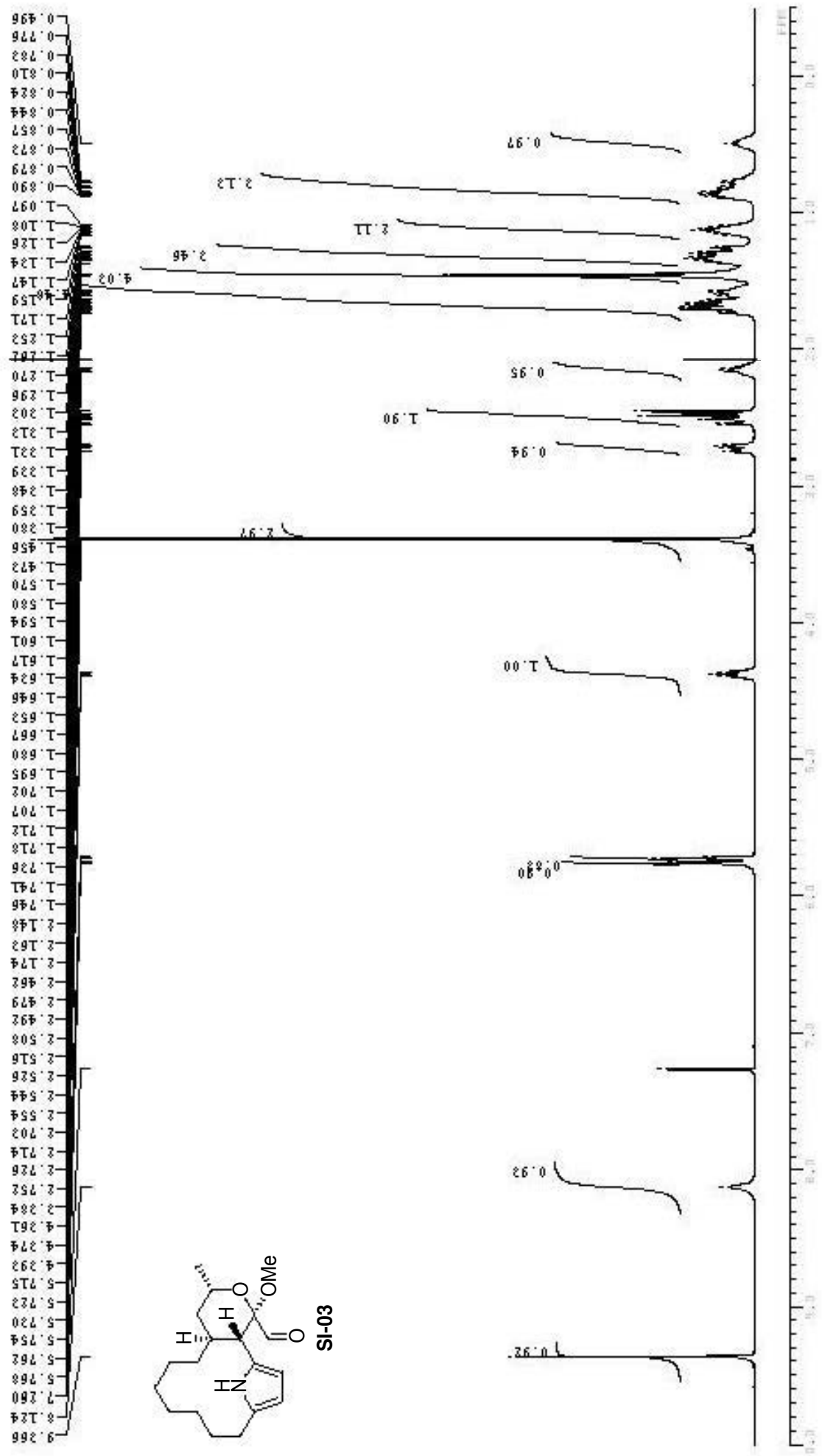


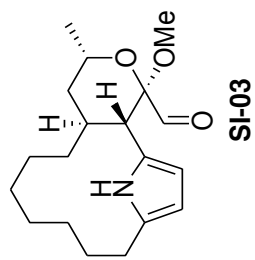




122.269  
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105.252  
99.708  
77.221  
77.000  
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69.467  
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49.208  
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26.265  
24.772  
24.722  
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21.512







199.247

132.575

126.026

110.028

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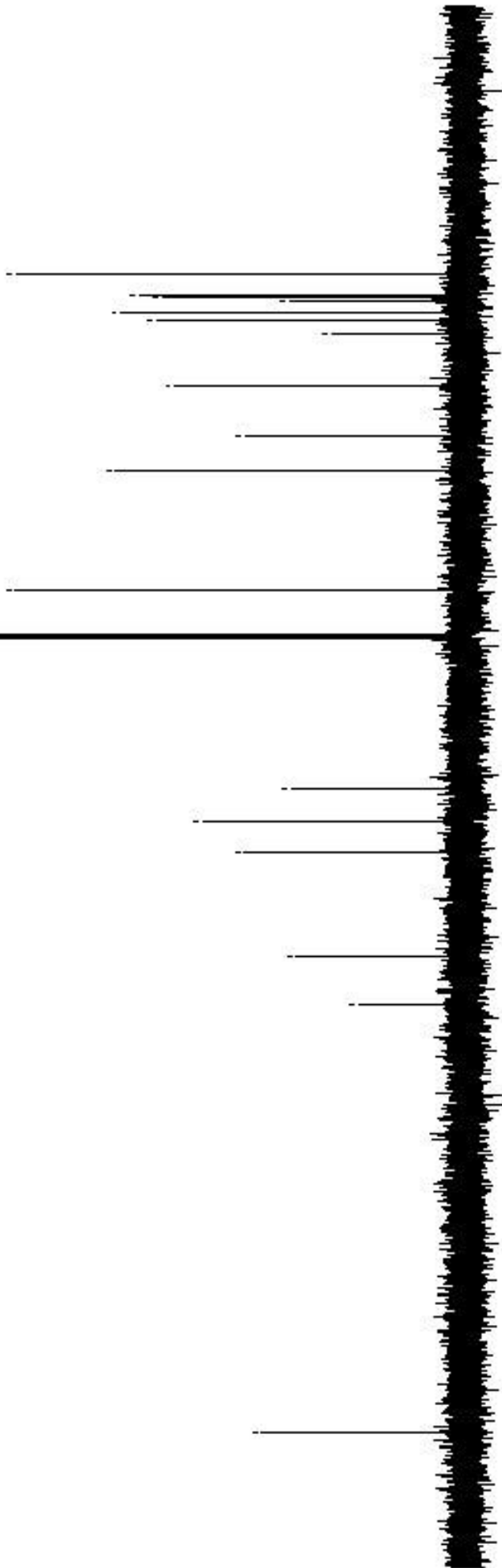
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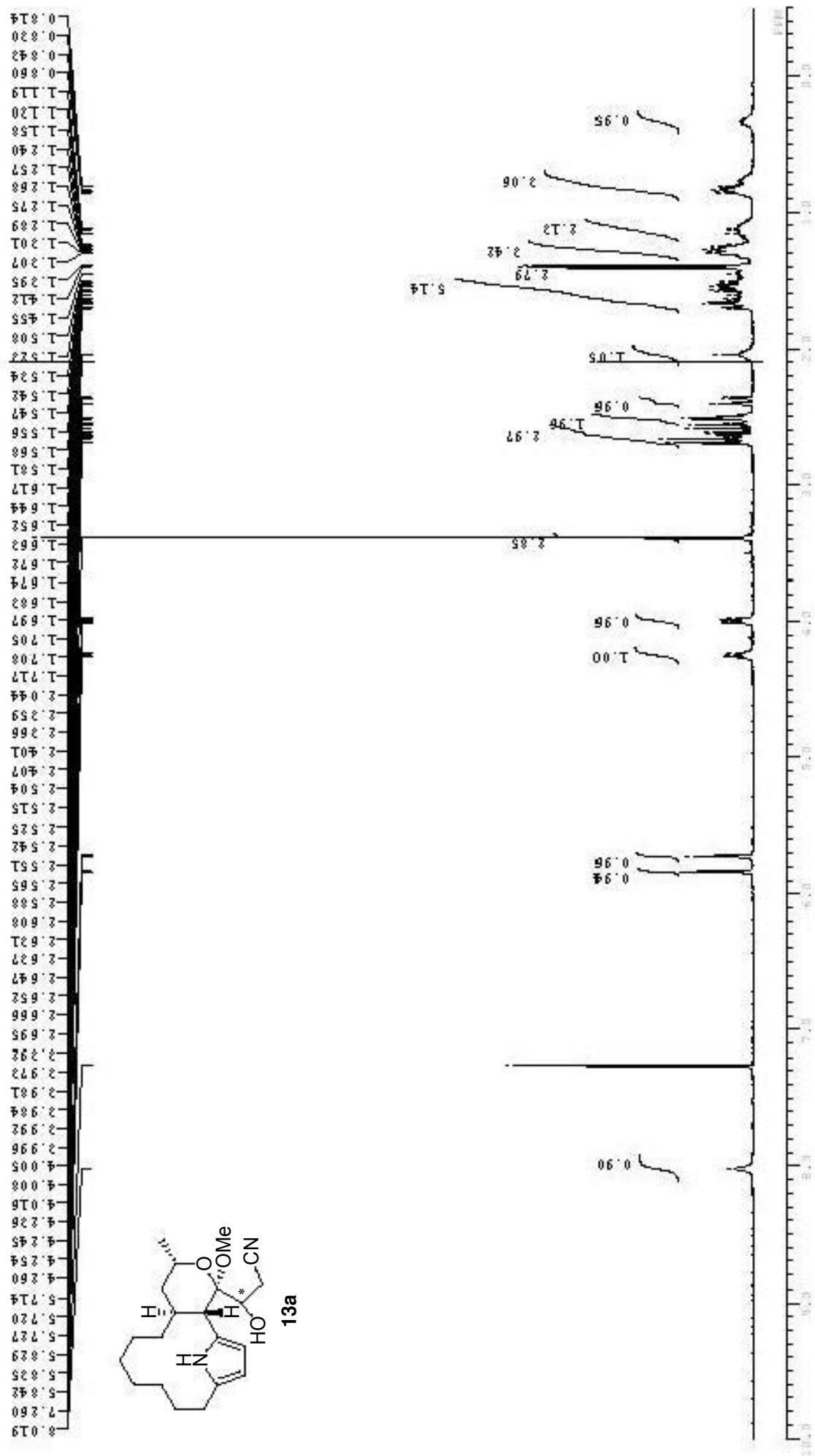
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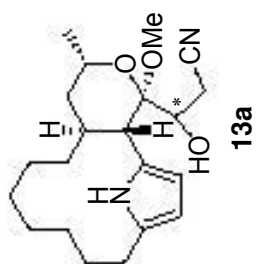
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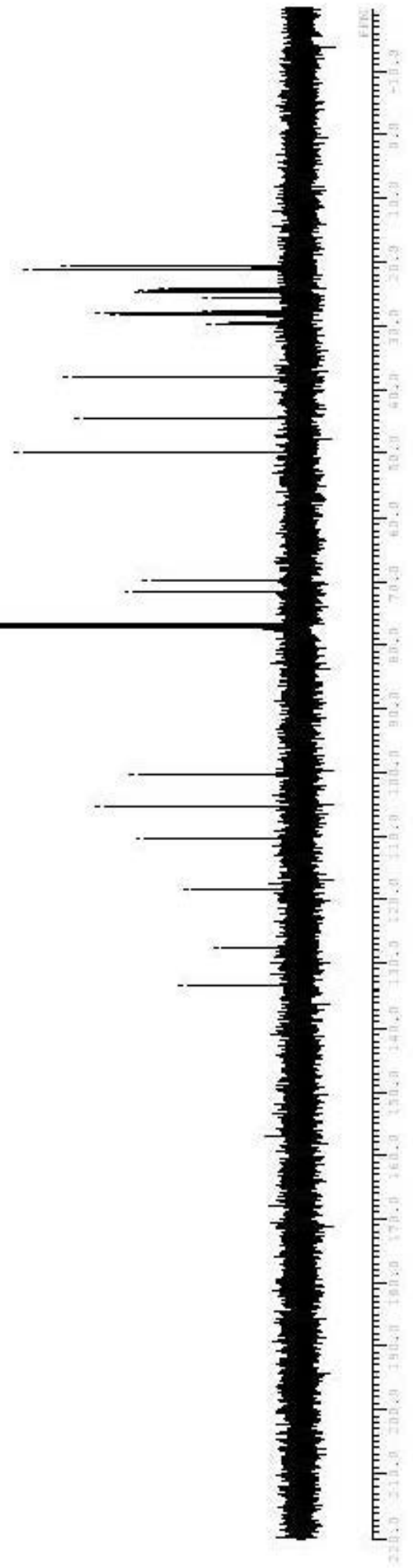
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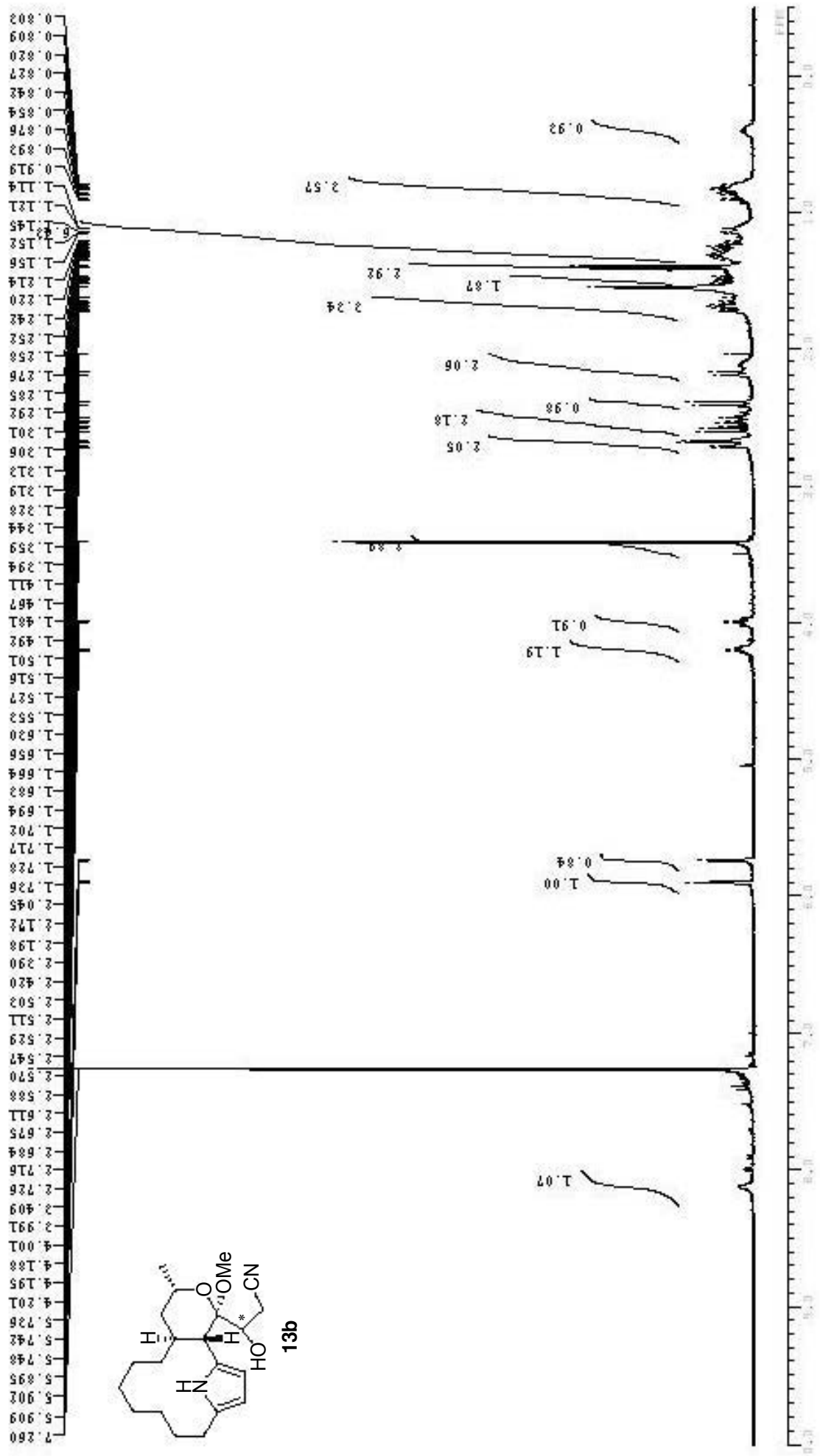


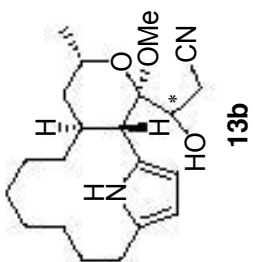




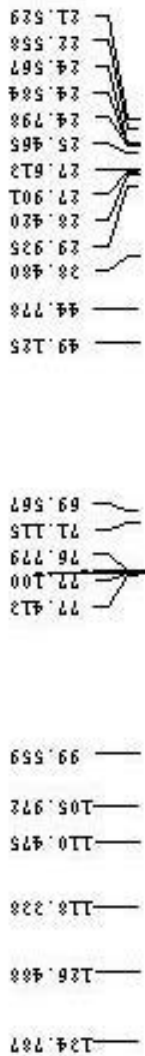
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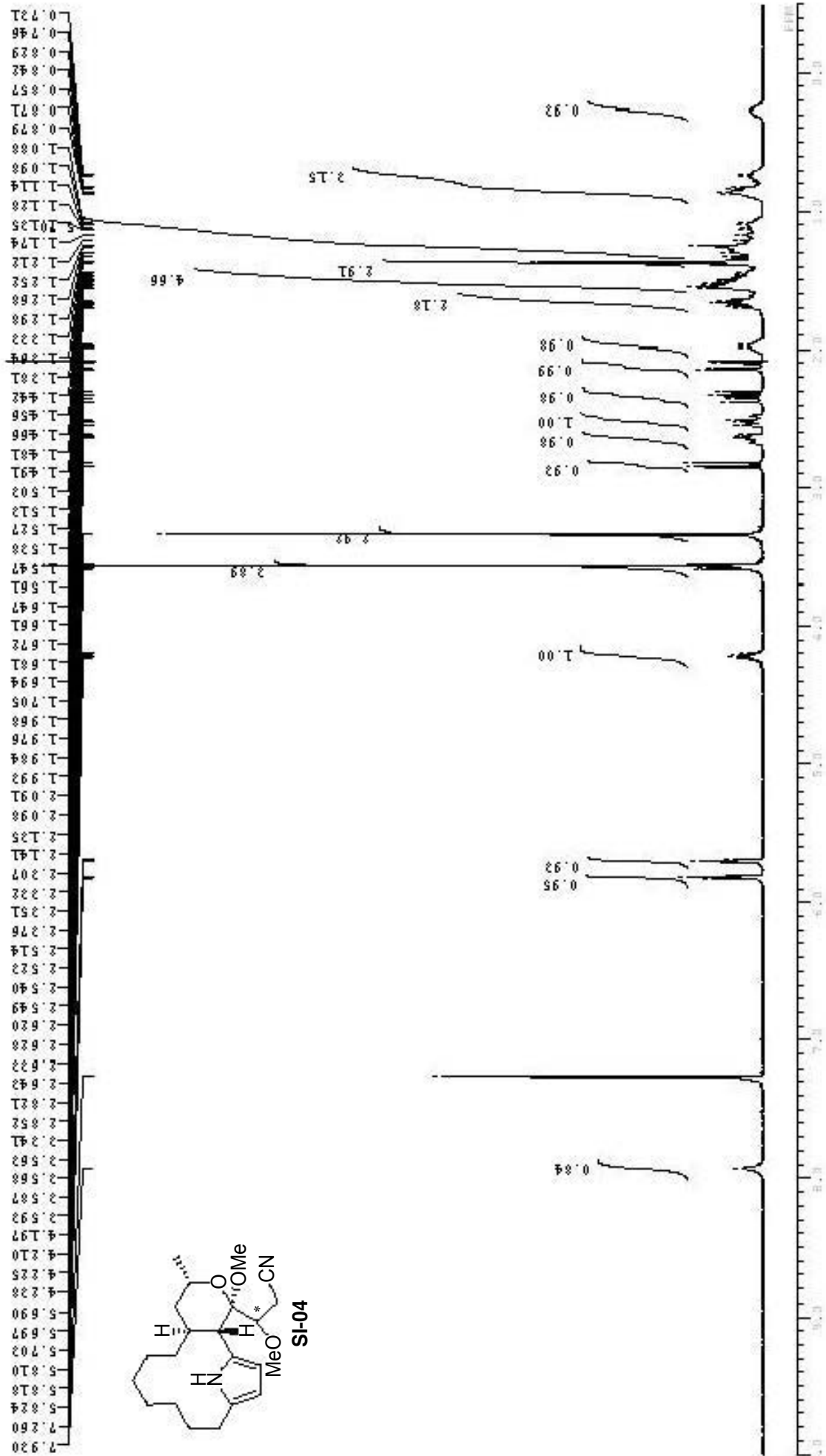


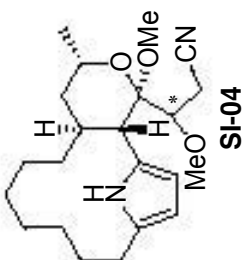




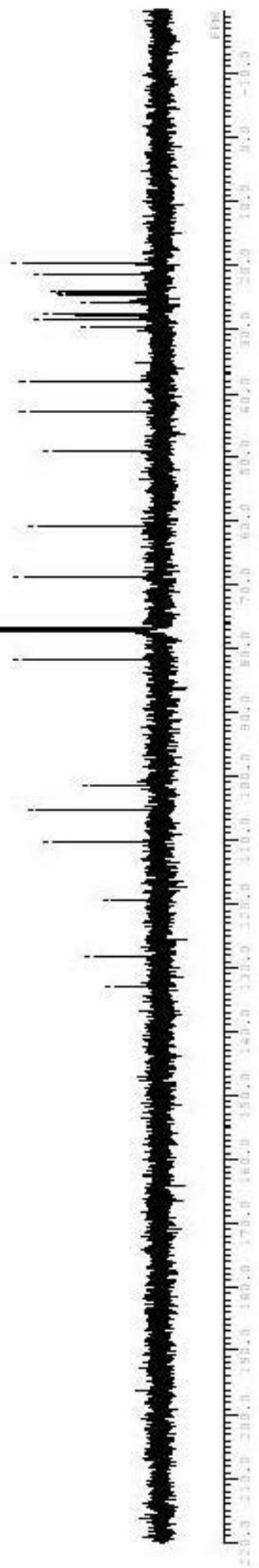
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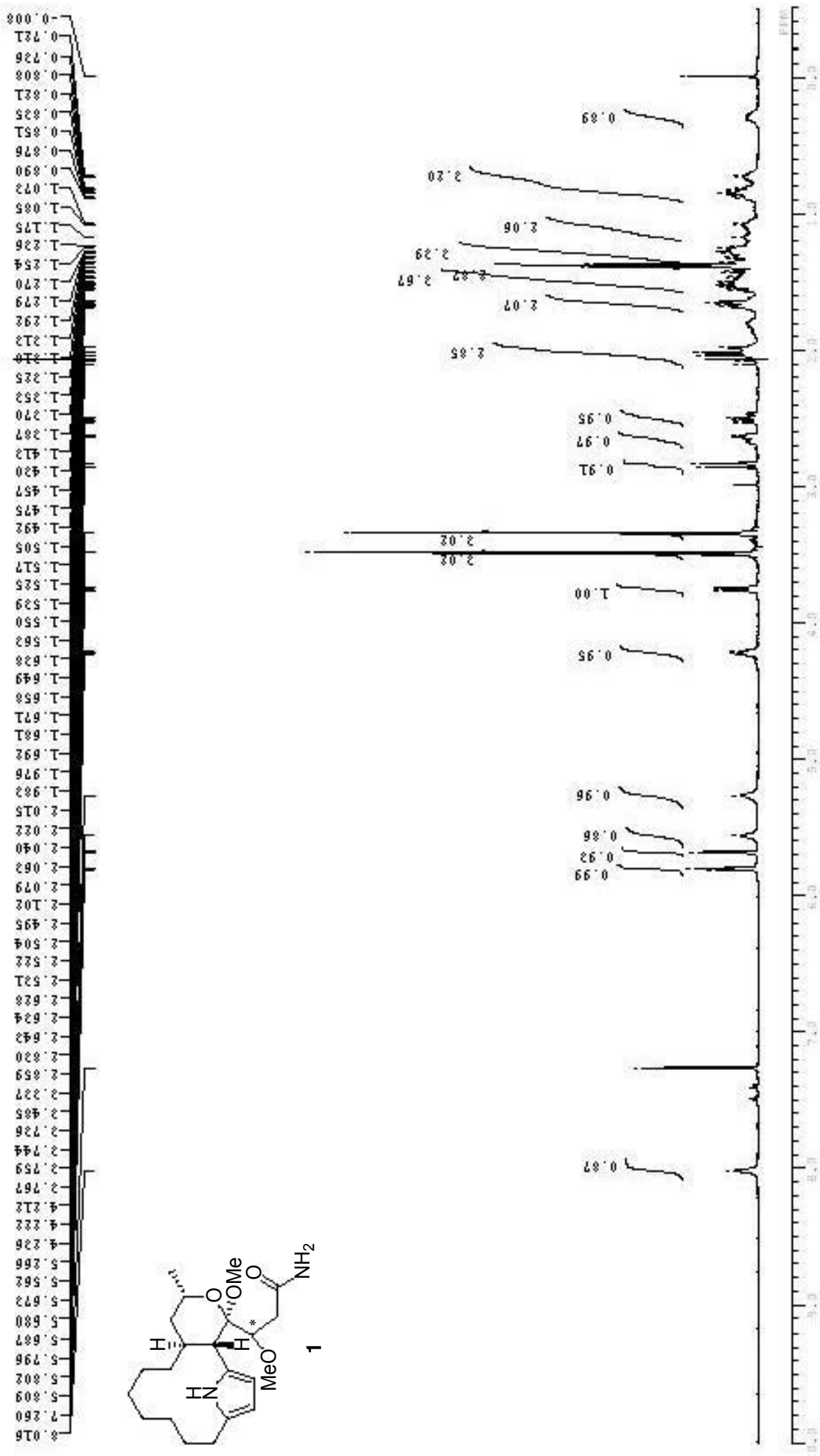


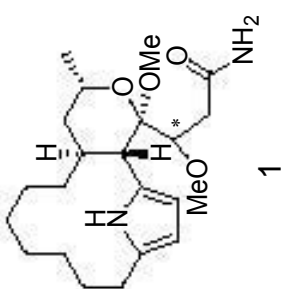




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76.679
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48.959
42.810
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28.476
28.032
27.859
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24.755
24.484
24.187
21.428
19.687







174.475

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129.286

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102.257

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