

**Biomimetic Total Synthesis of Cruentaren A via Aromatization of
Diketodioxinones**

Marianne Fouché,[†] Lisa Rooney[‡] and Anthony G. M. Barrett^{*,†}

[†]Department of Chemistry, Imperial College, London SW7 2AZ, England

[‡]Novartis, Wemblehurst Road, Horsham, West Sussex RH12 5AB, England

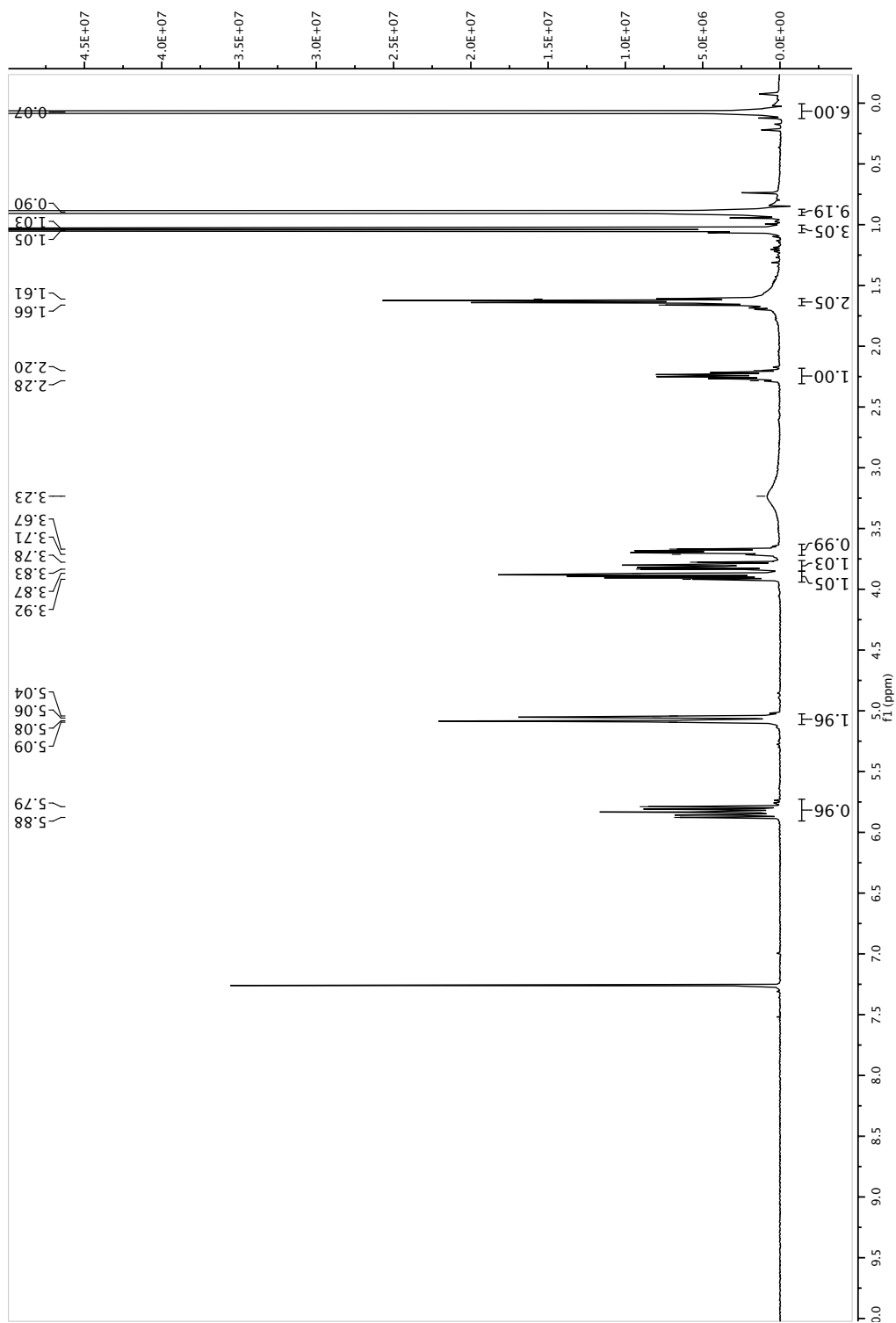
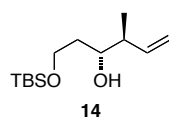
agm.barrett@imperial.ac.uk

CONTENT LIST

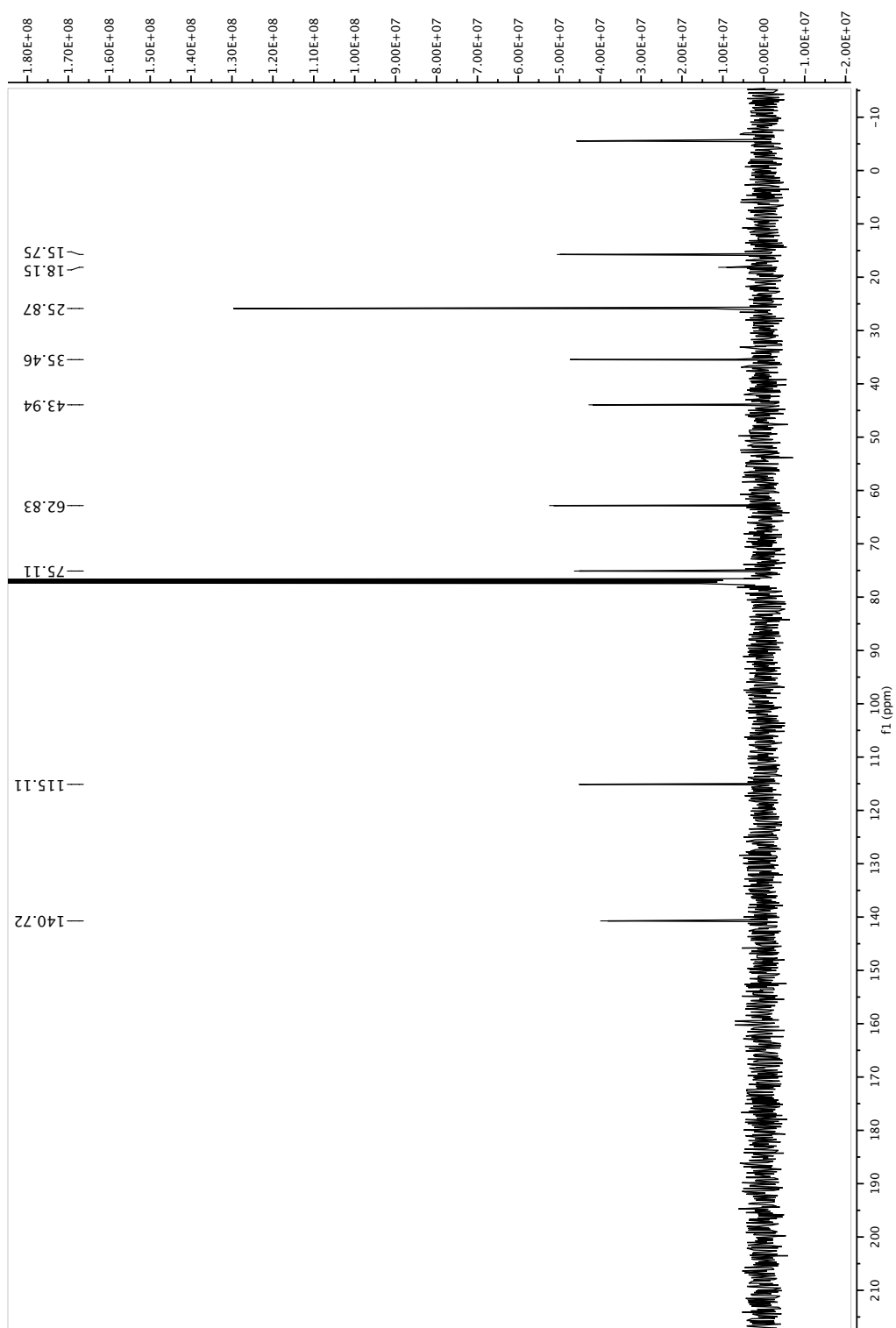
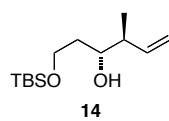
¹H and ¹³C spectra

S2-S63

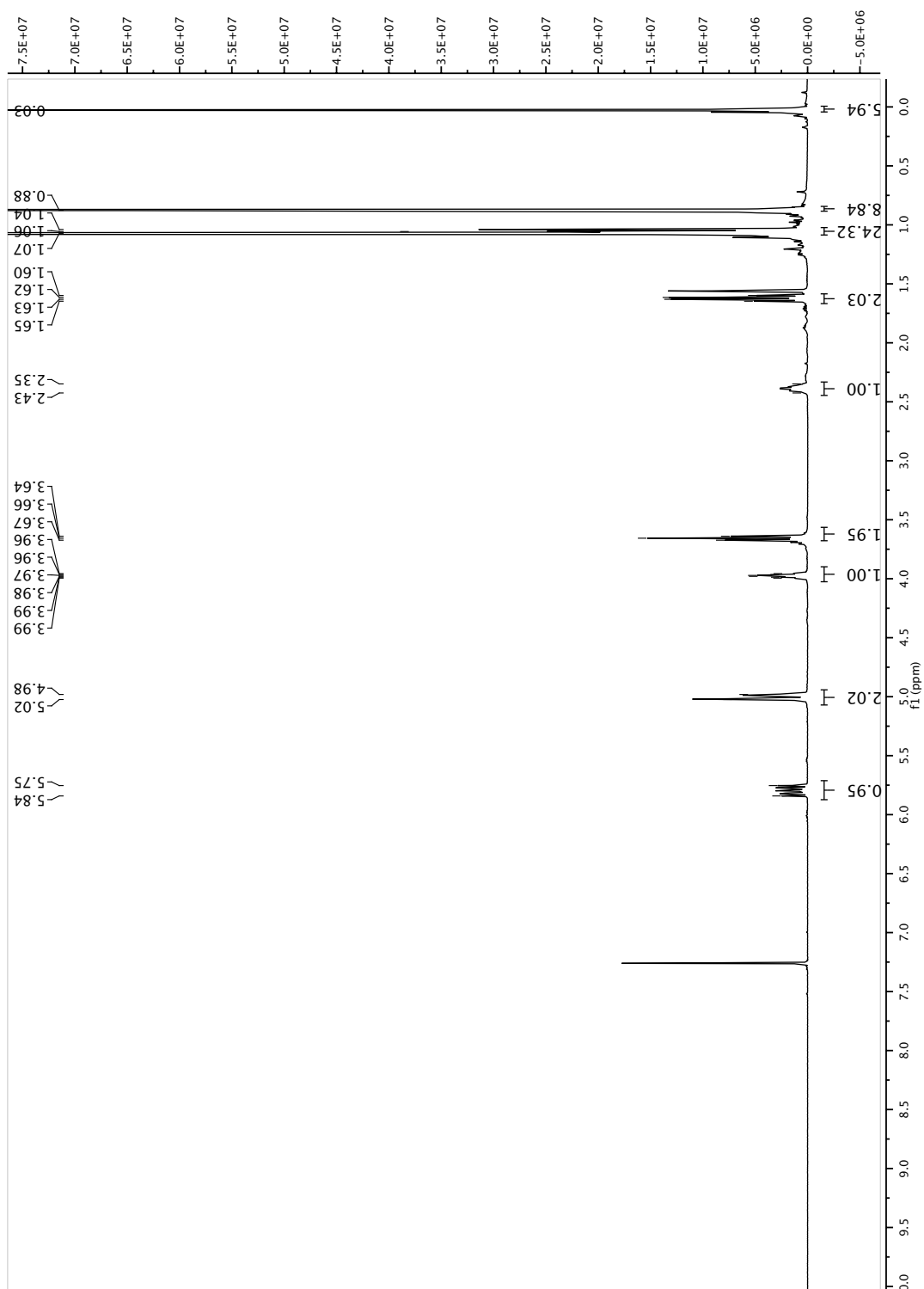
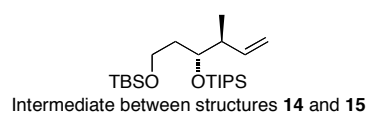
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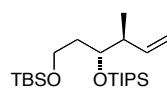
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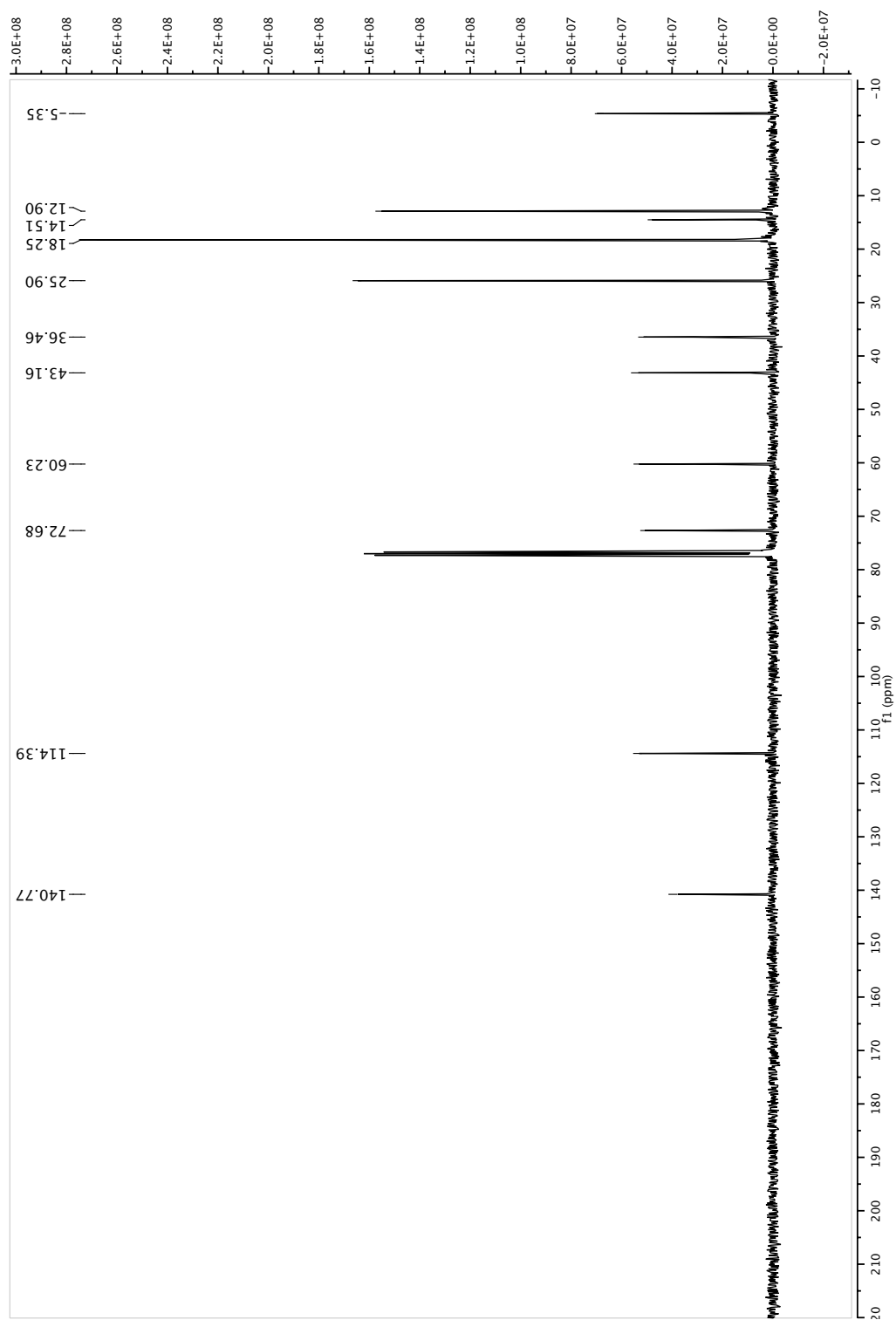
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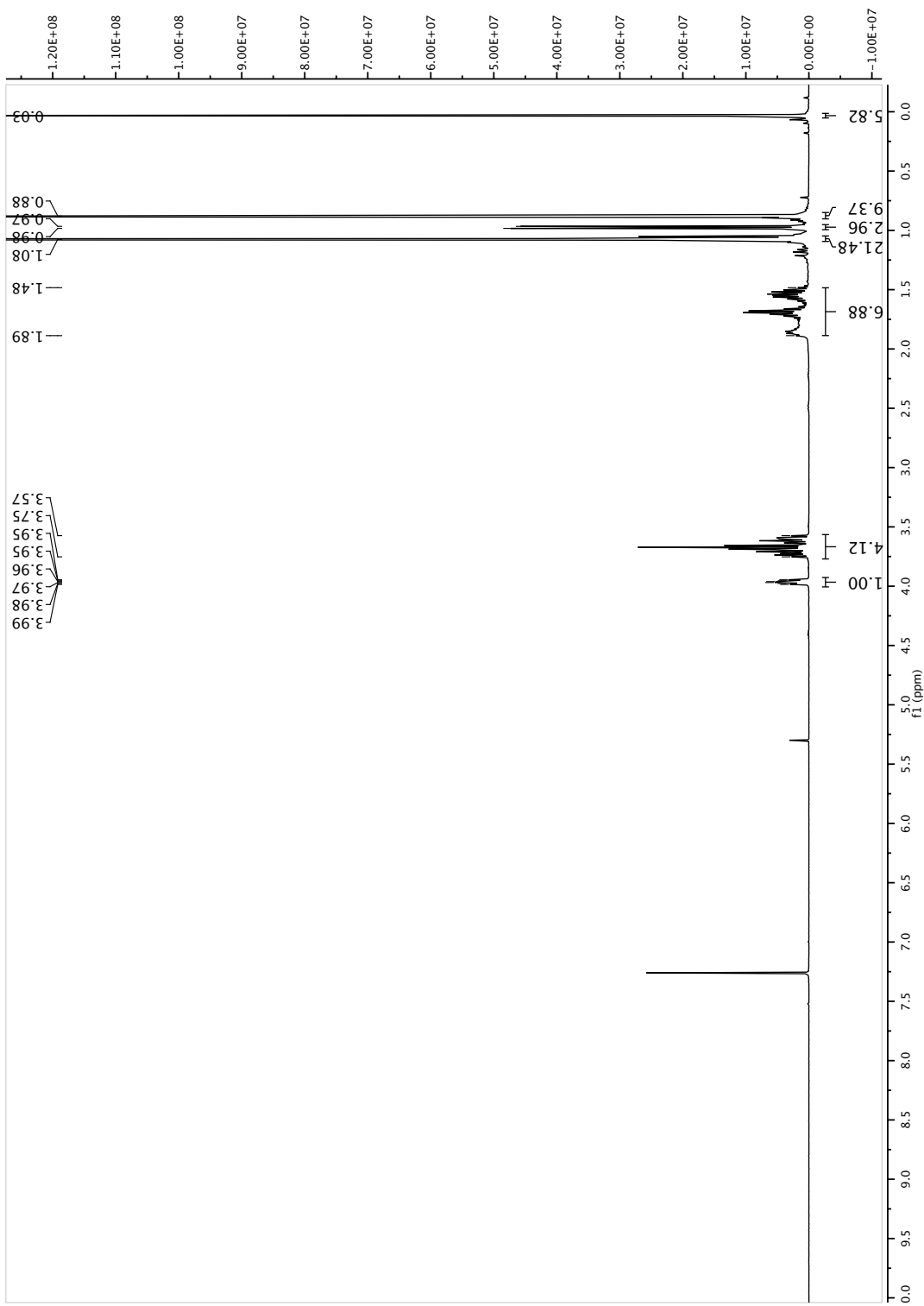
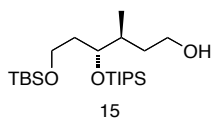


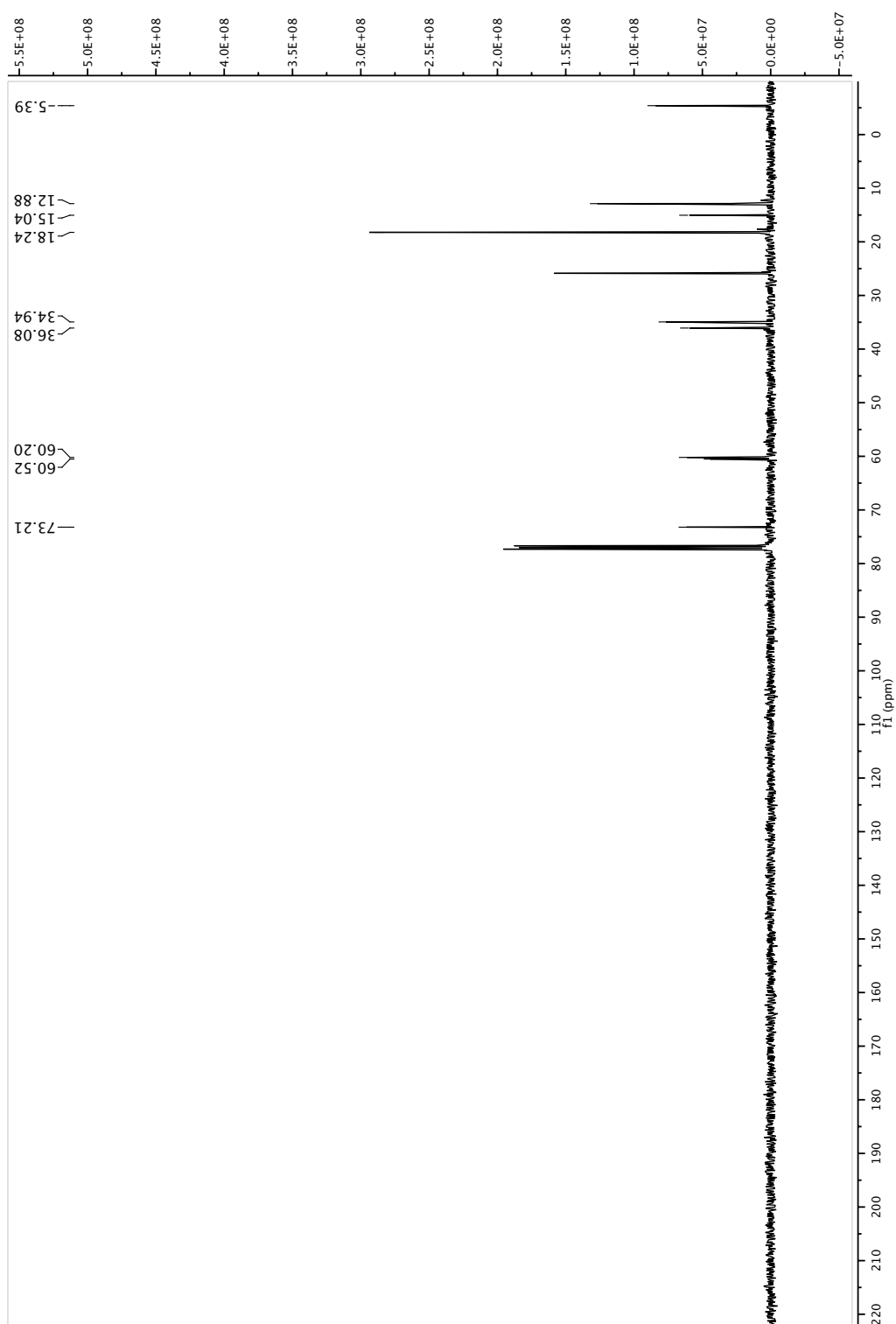
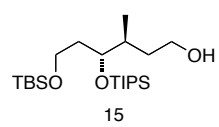
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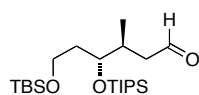


Intermediate between structures 14 and 15

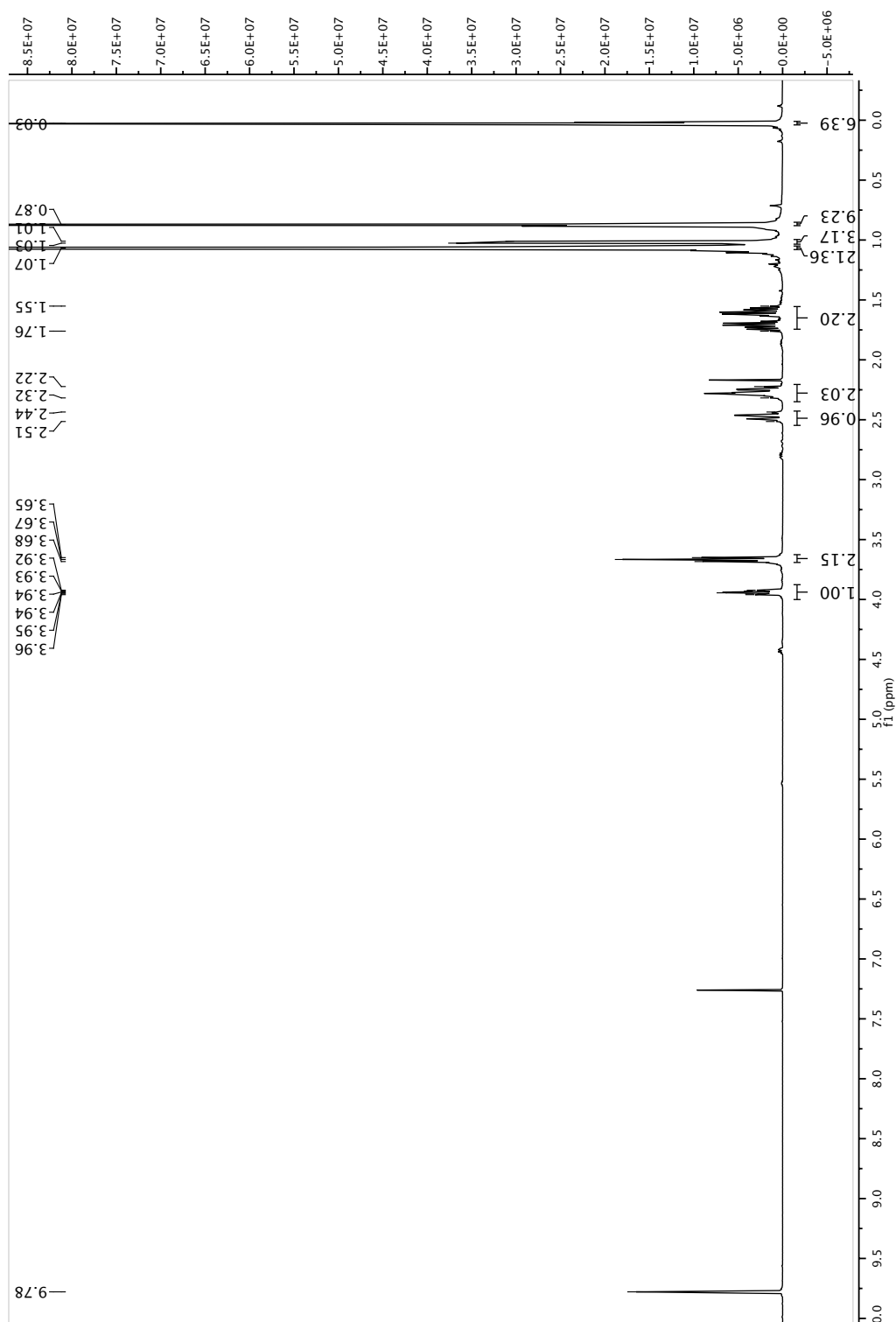


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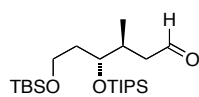
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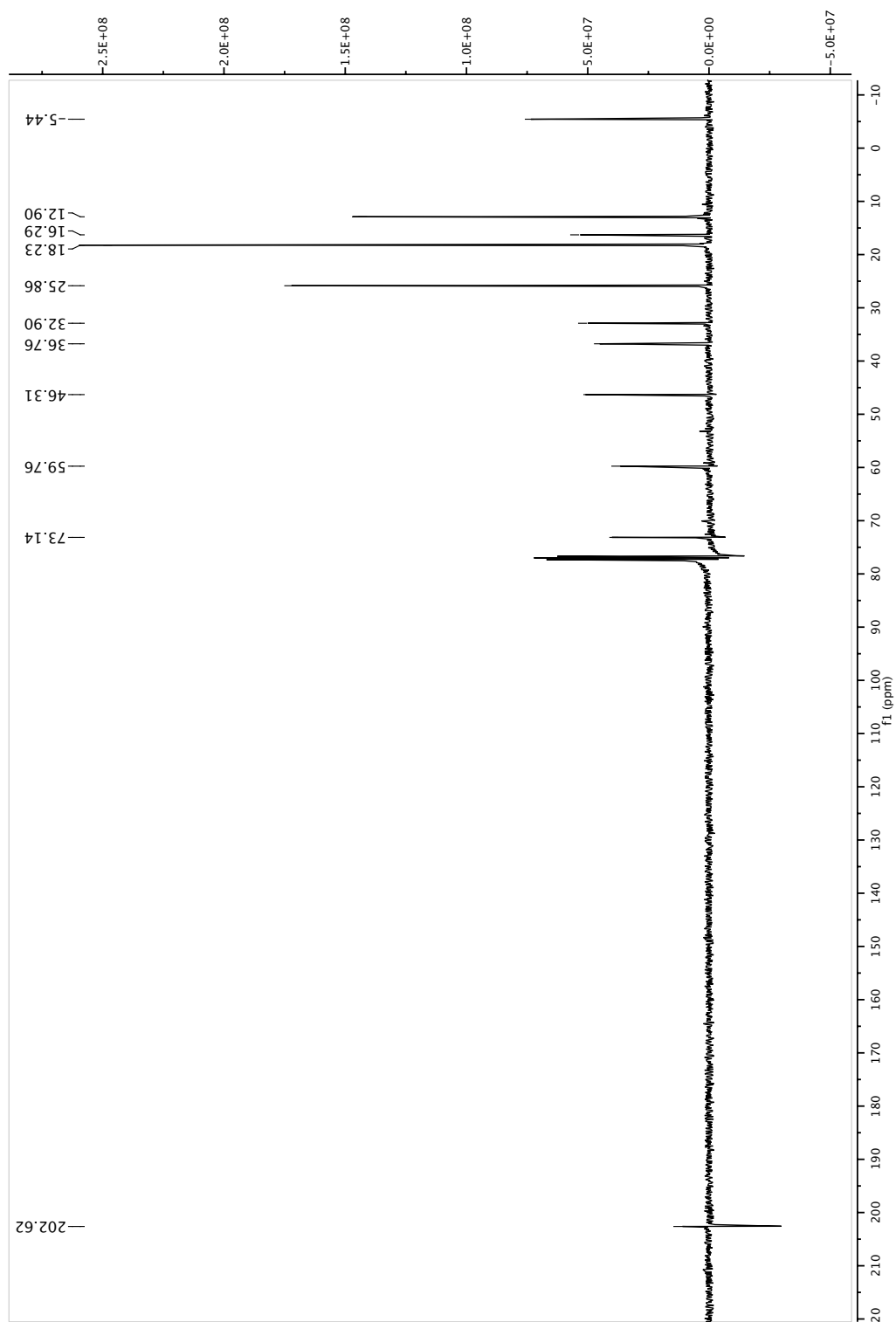
Intermediate between structures **15** and **17**

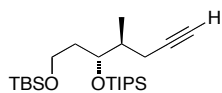


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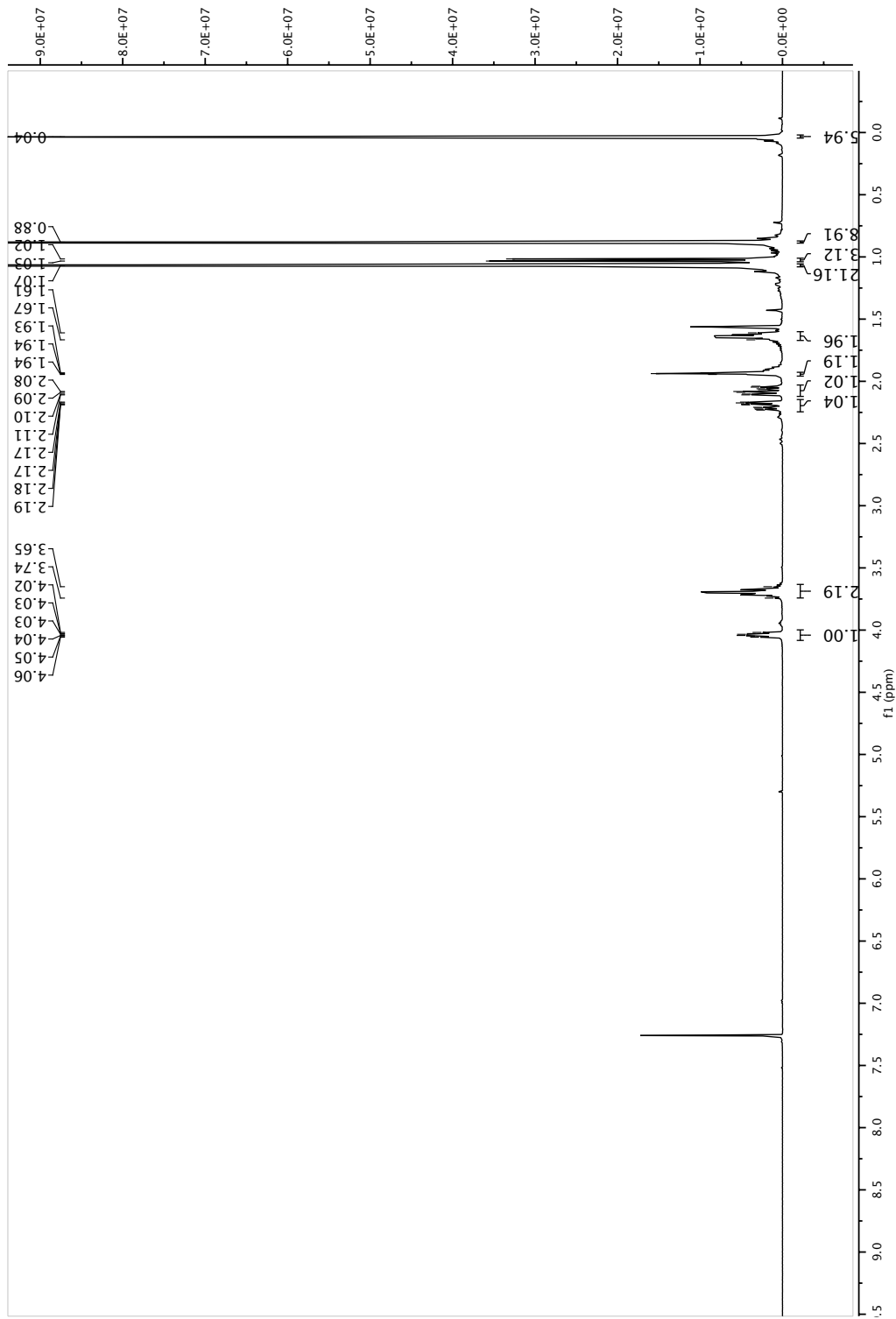


Intermediate between structures 15 and 17

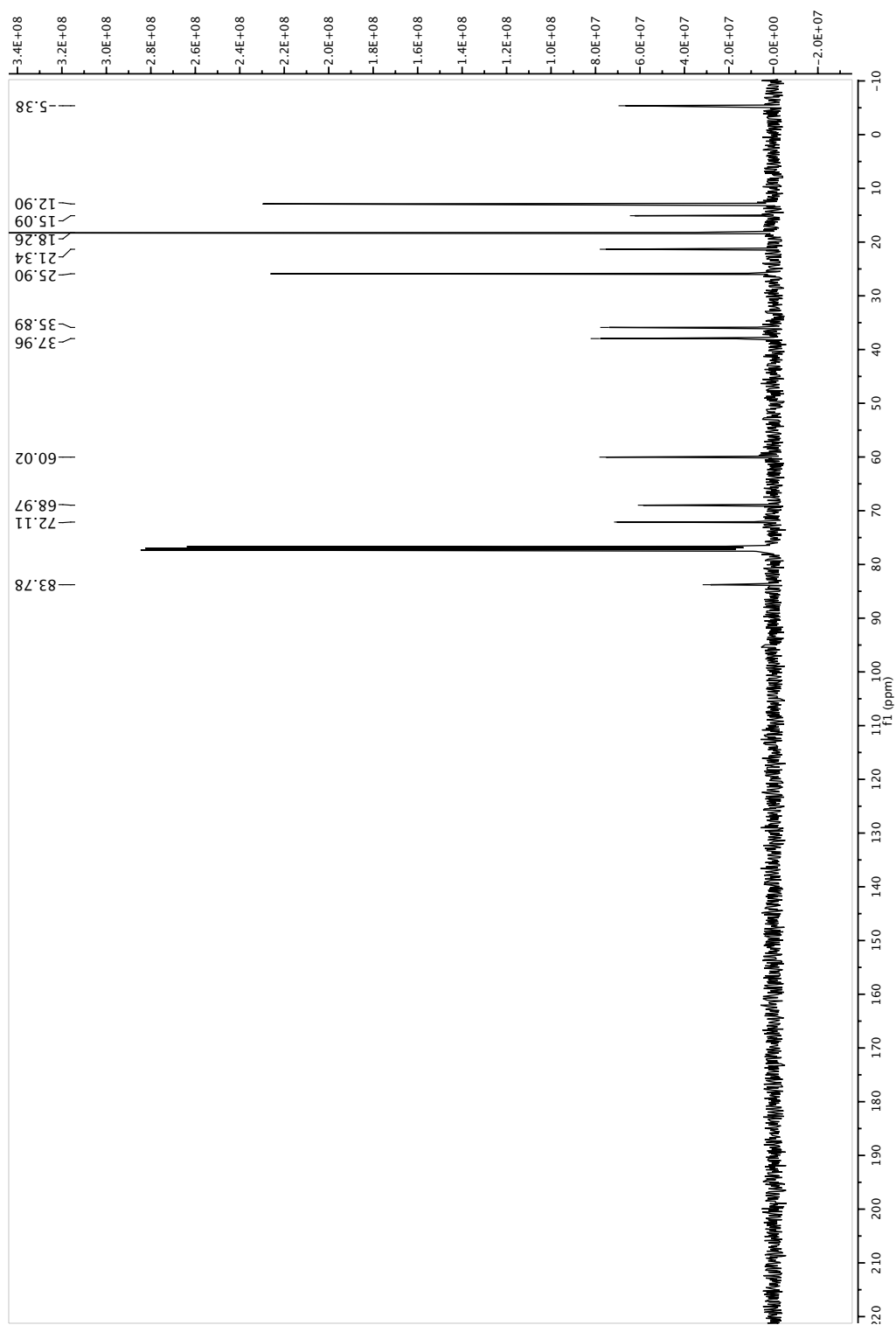
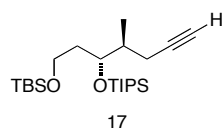


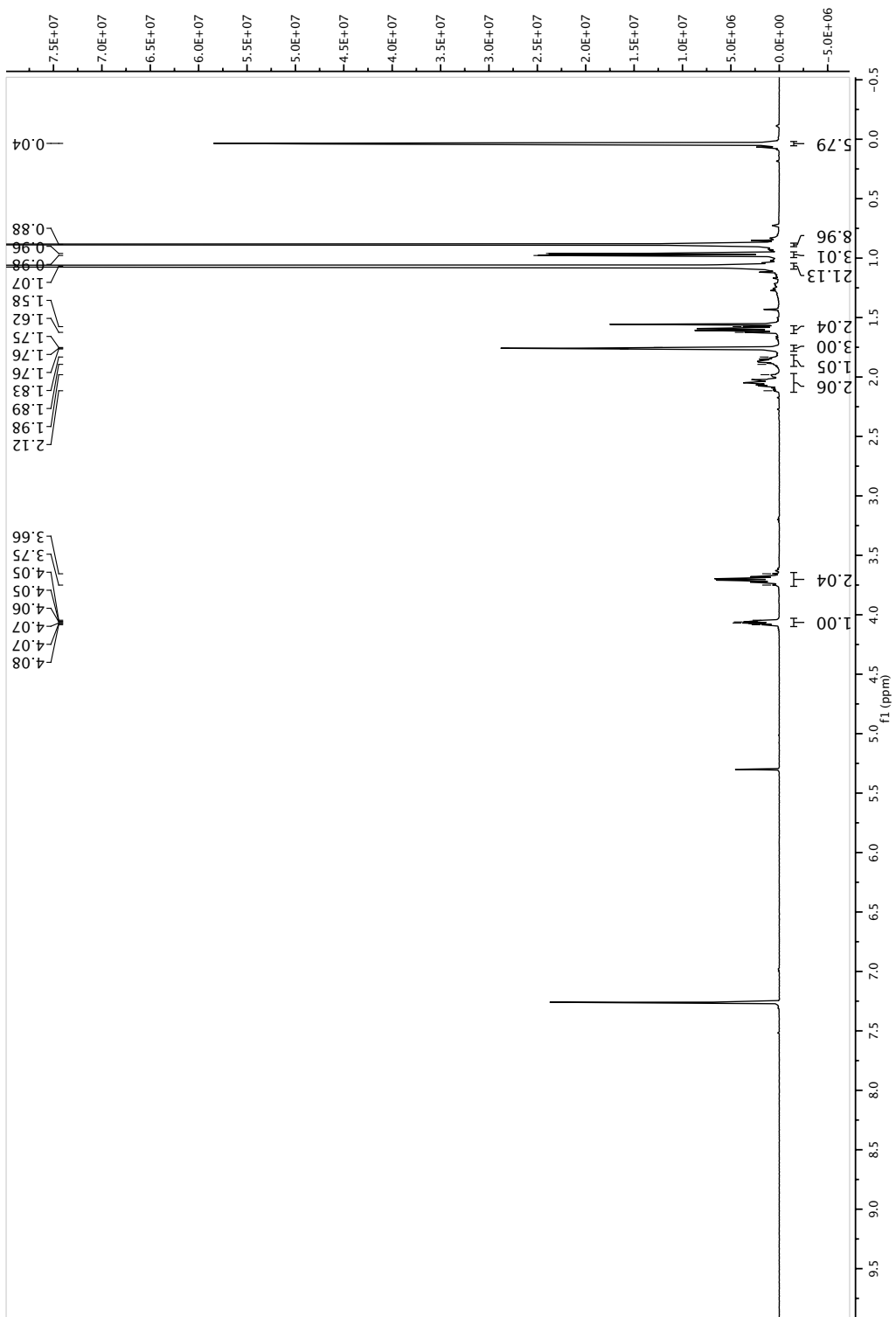
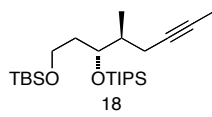
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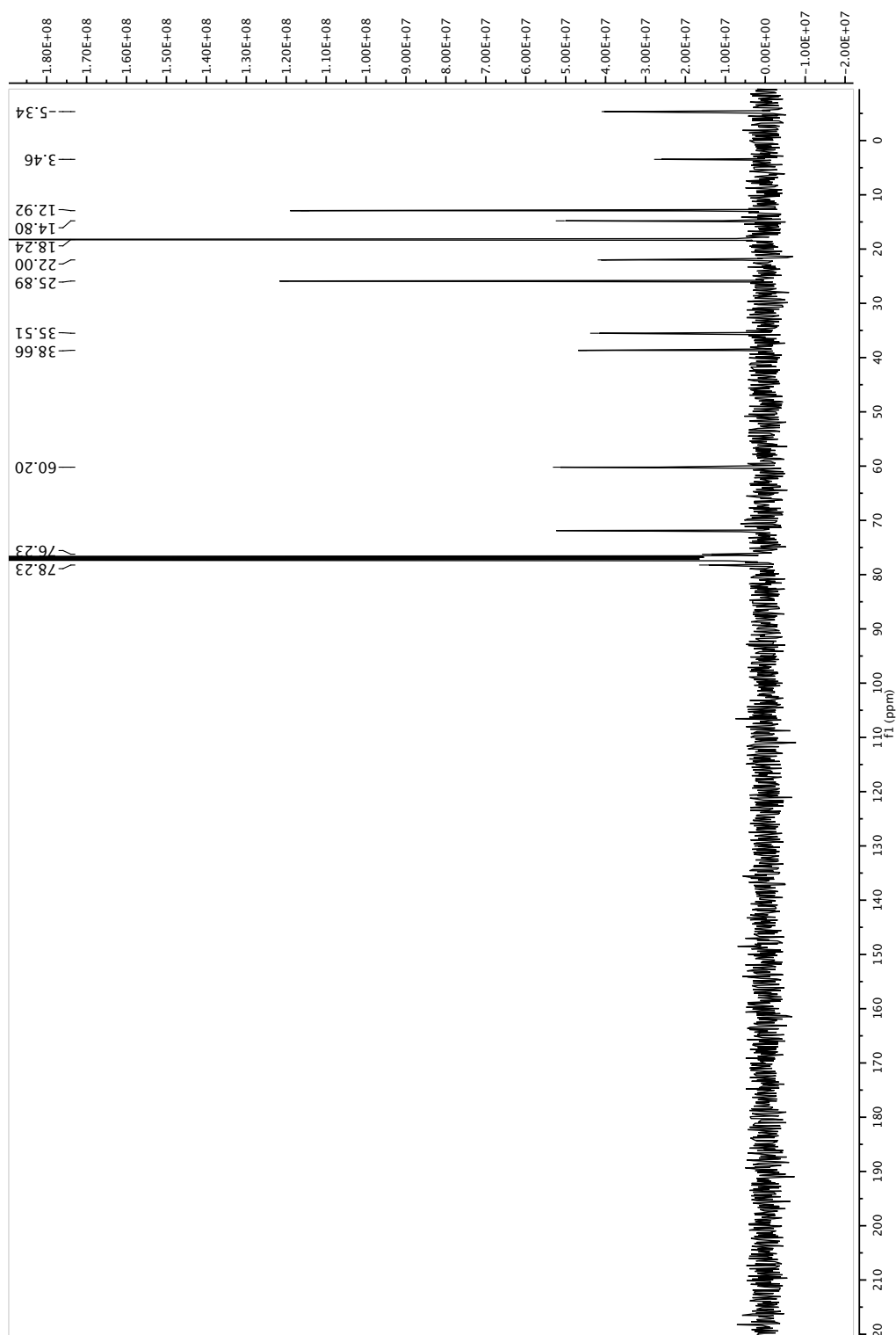
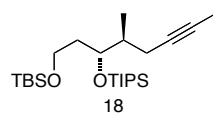


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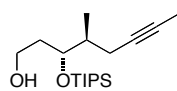


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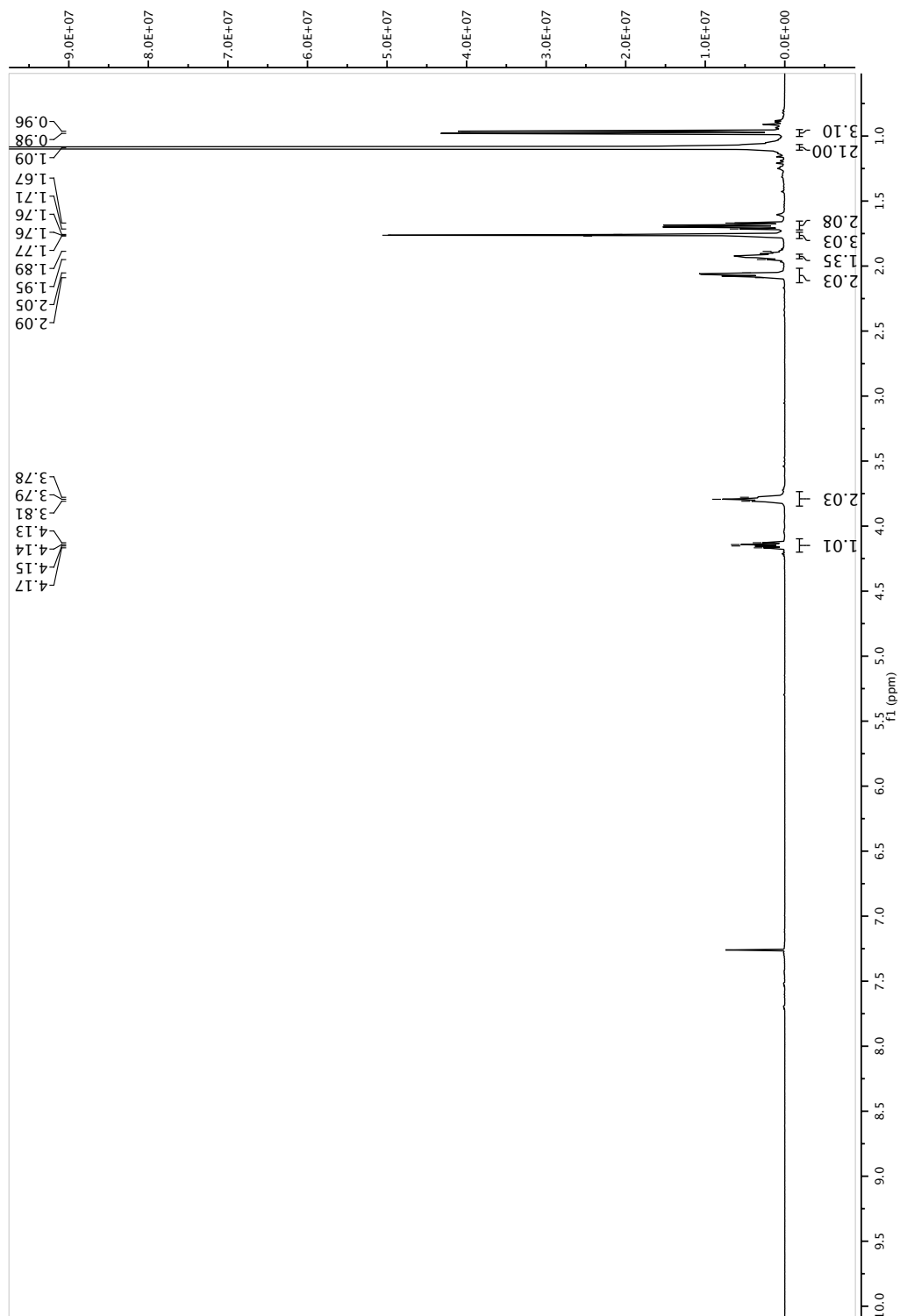
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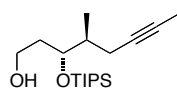
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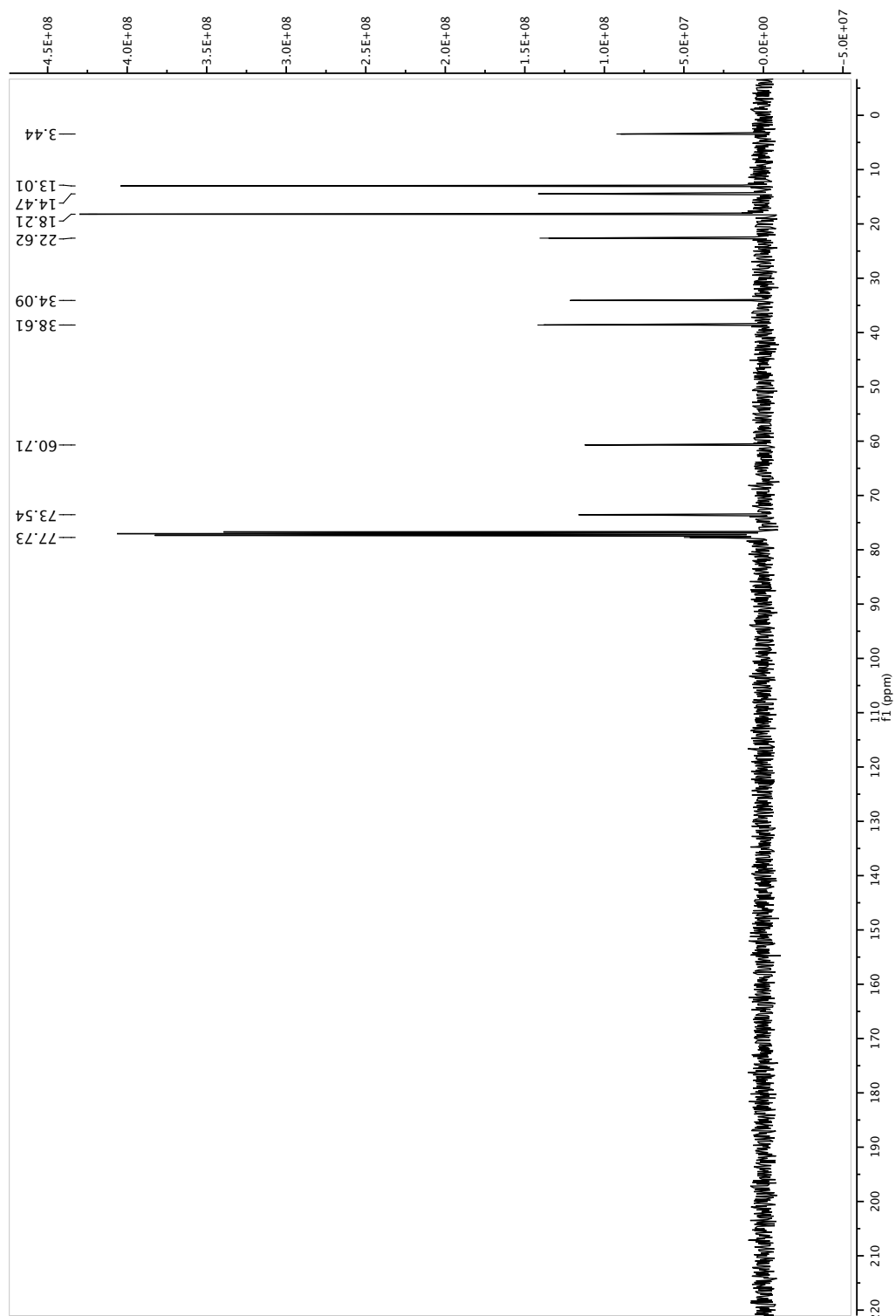
Intermediate between structures **18** and **19**

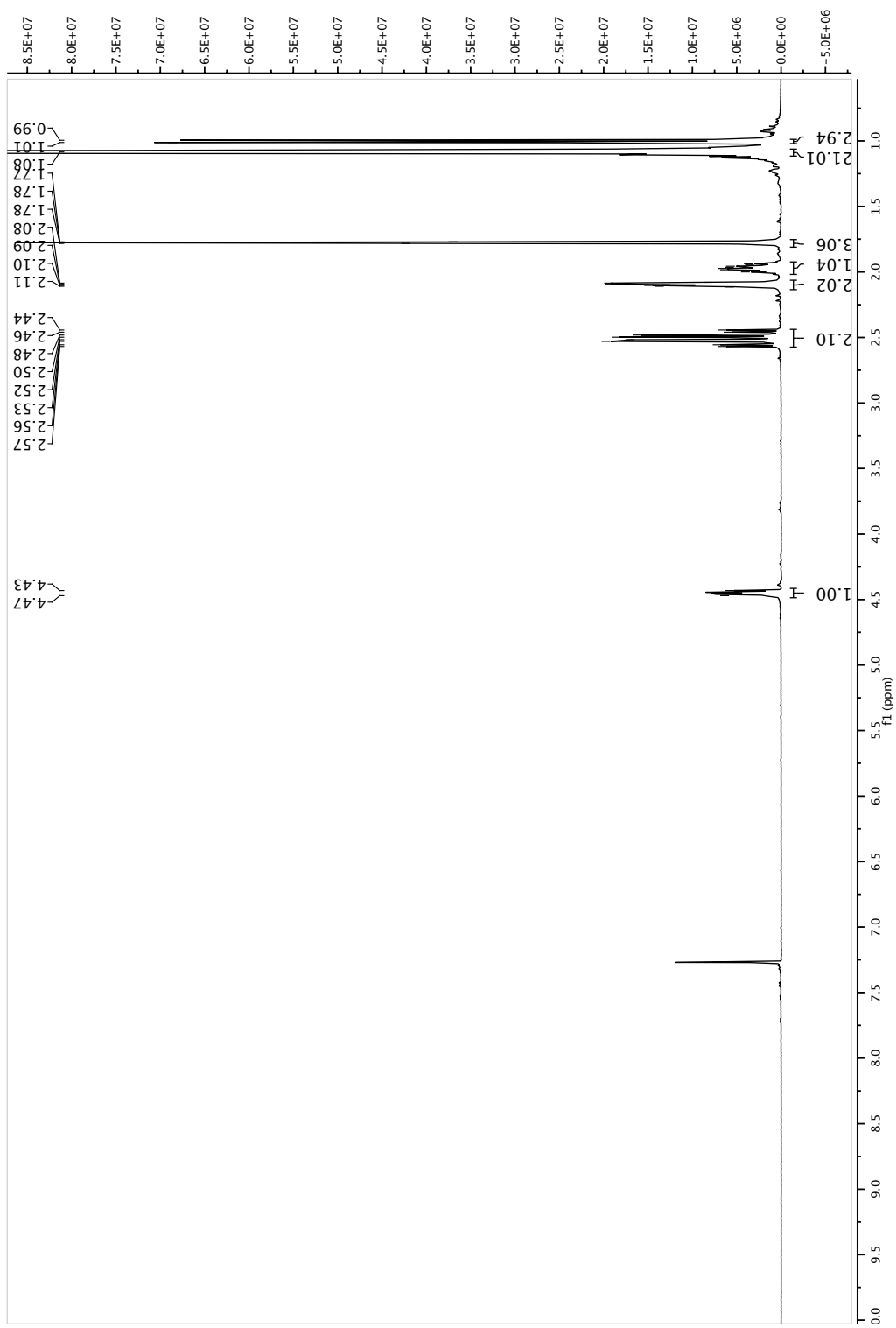
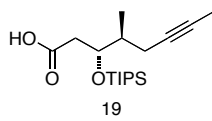


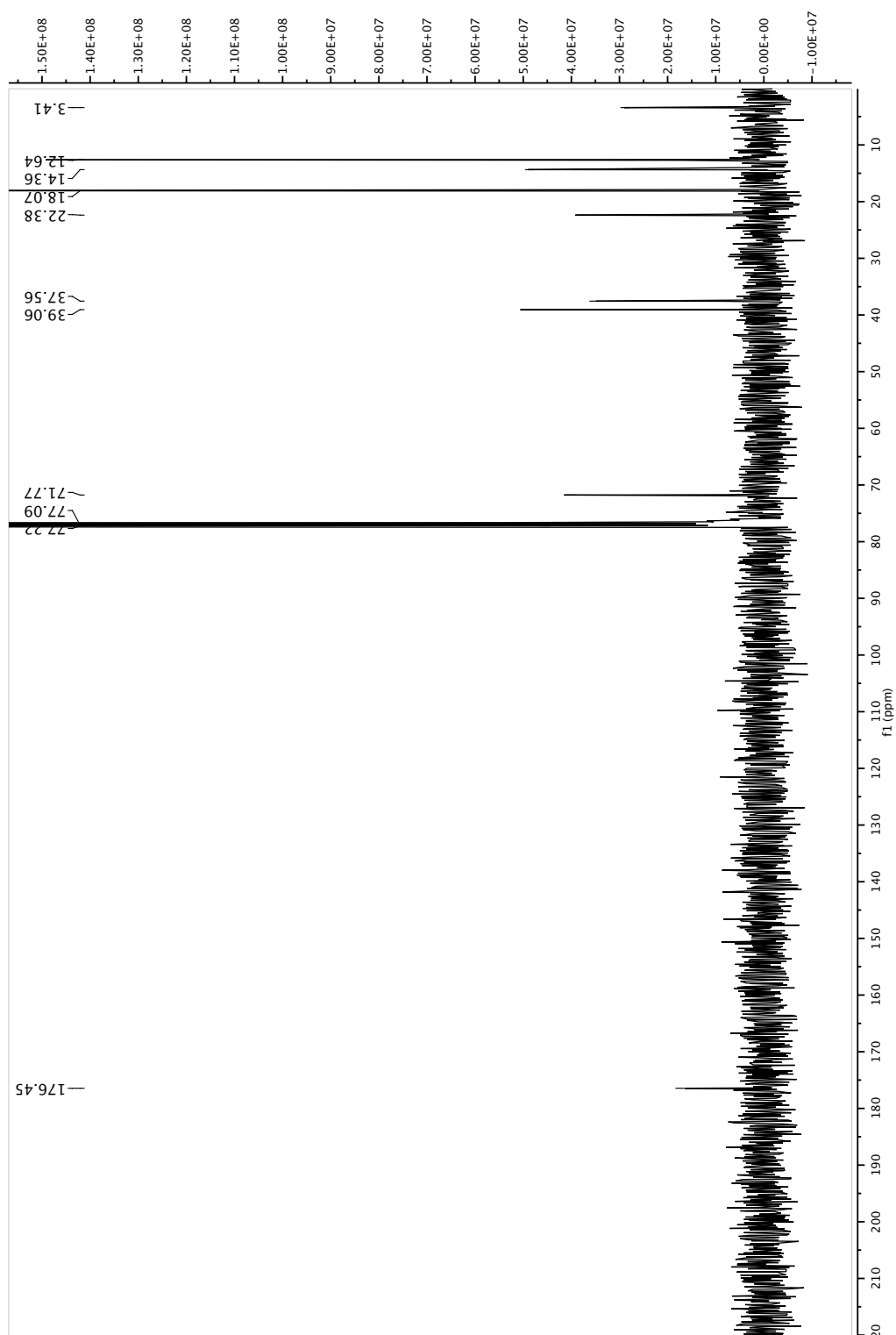
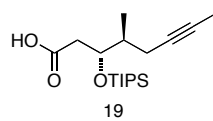
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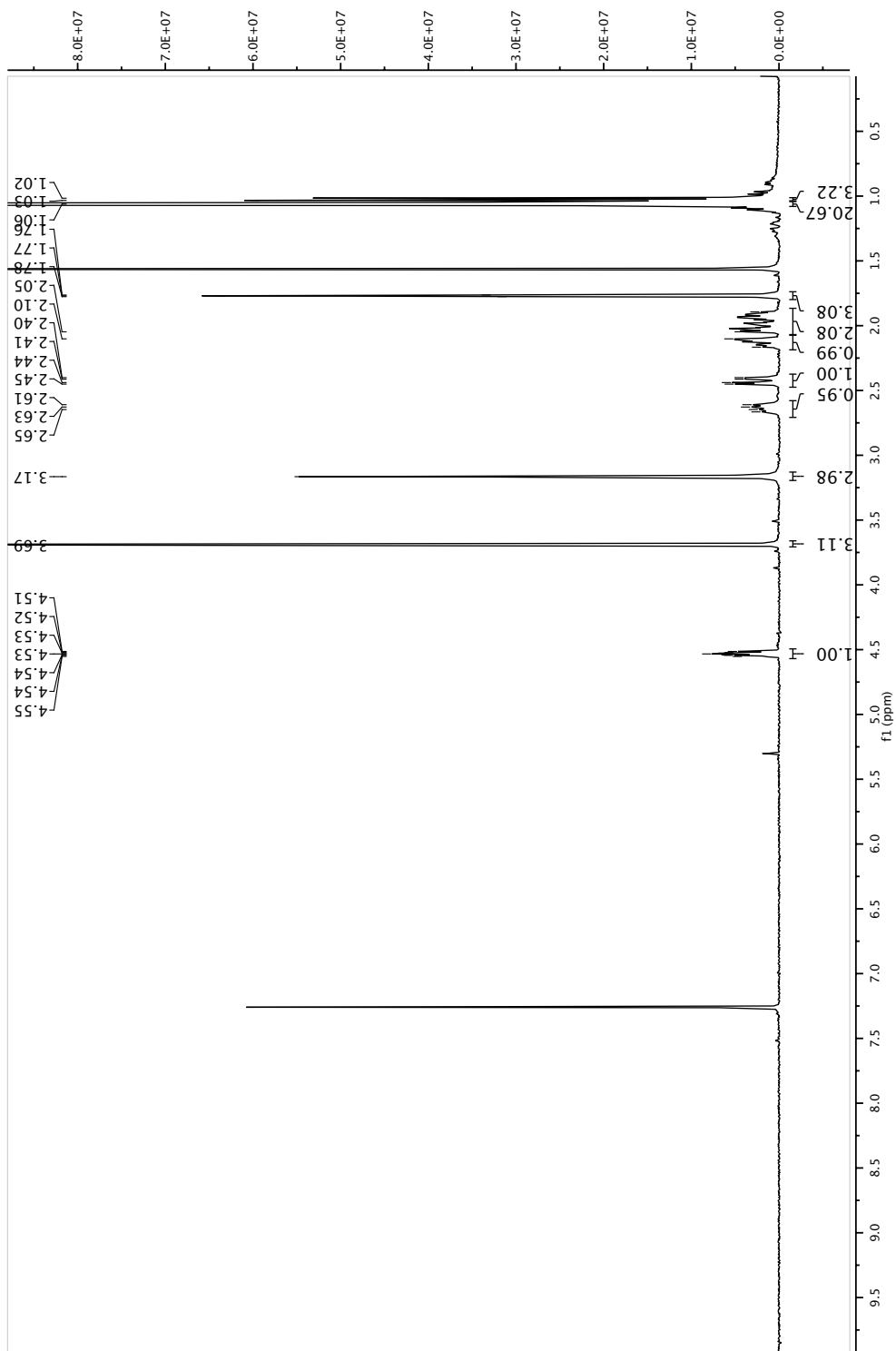
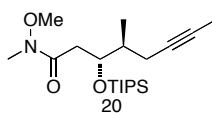
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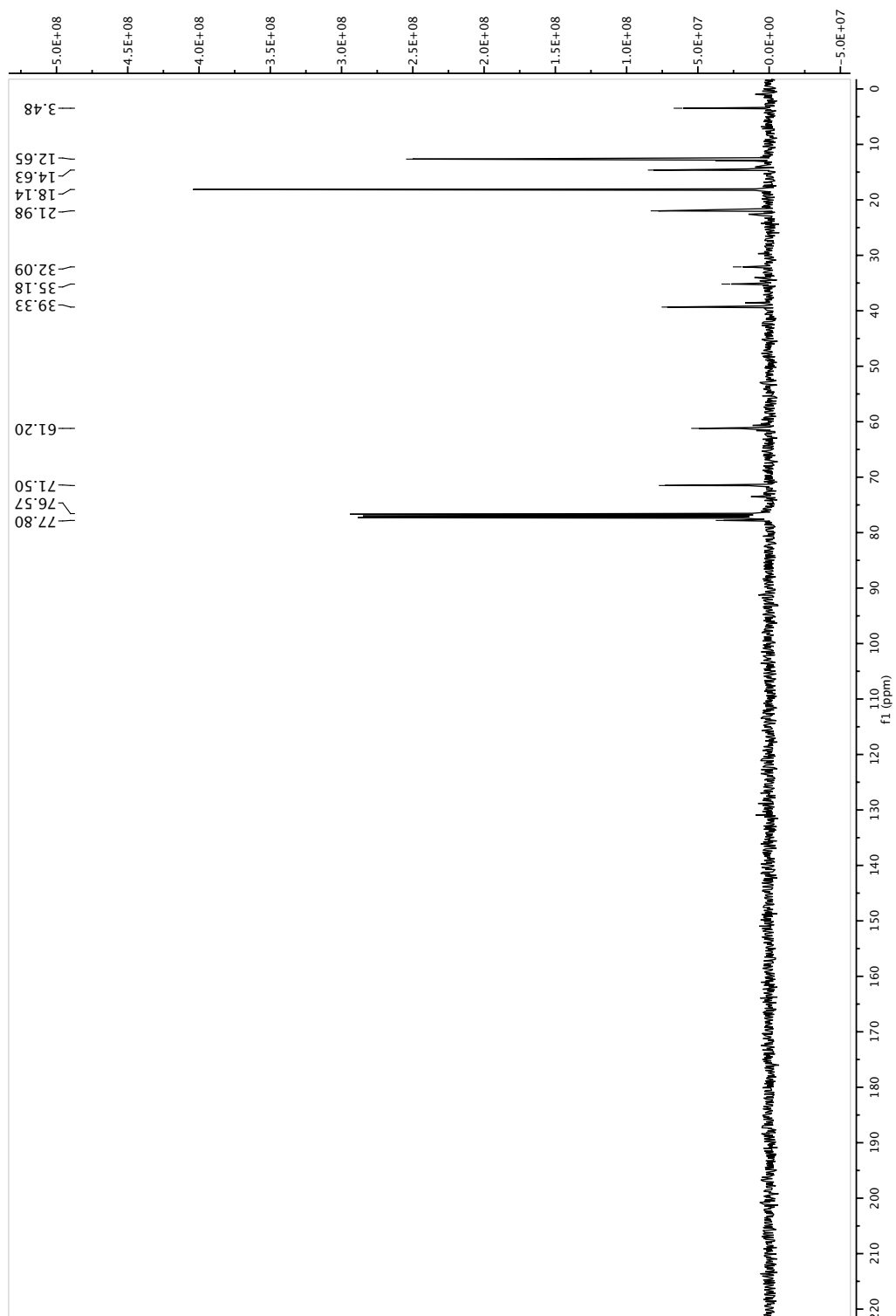
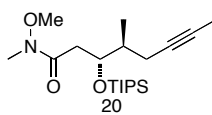
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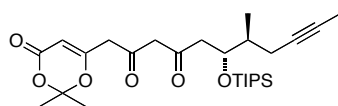
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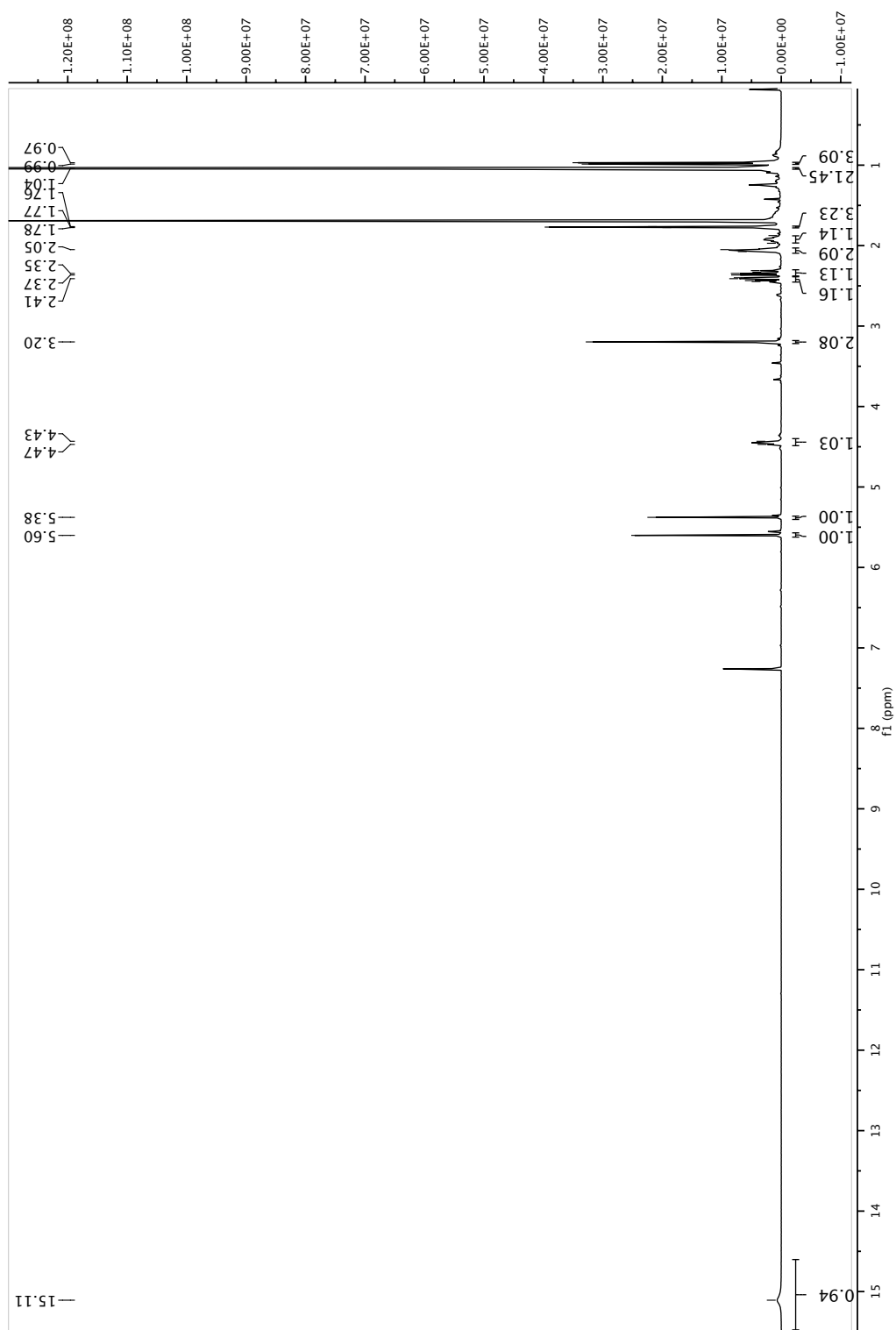
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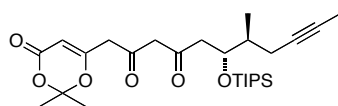
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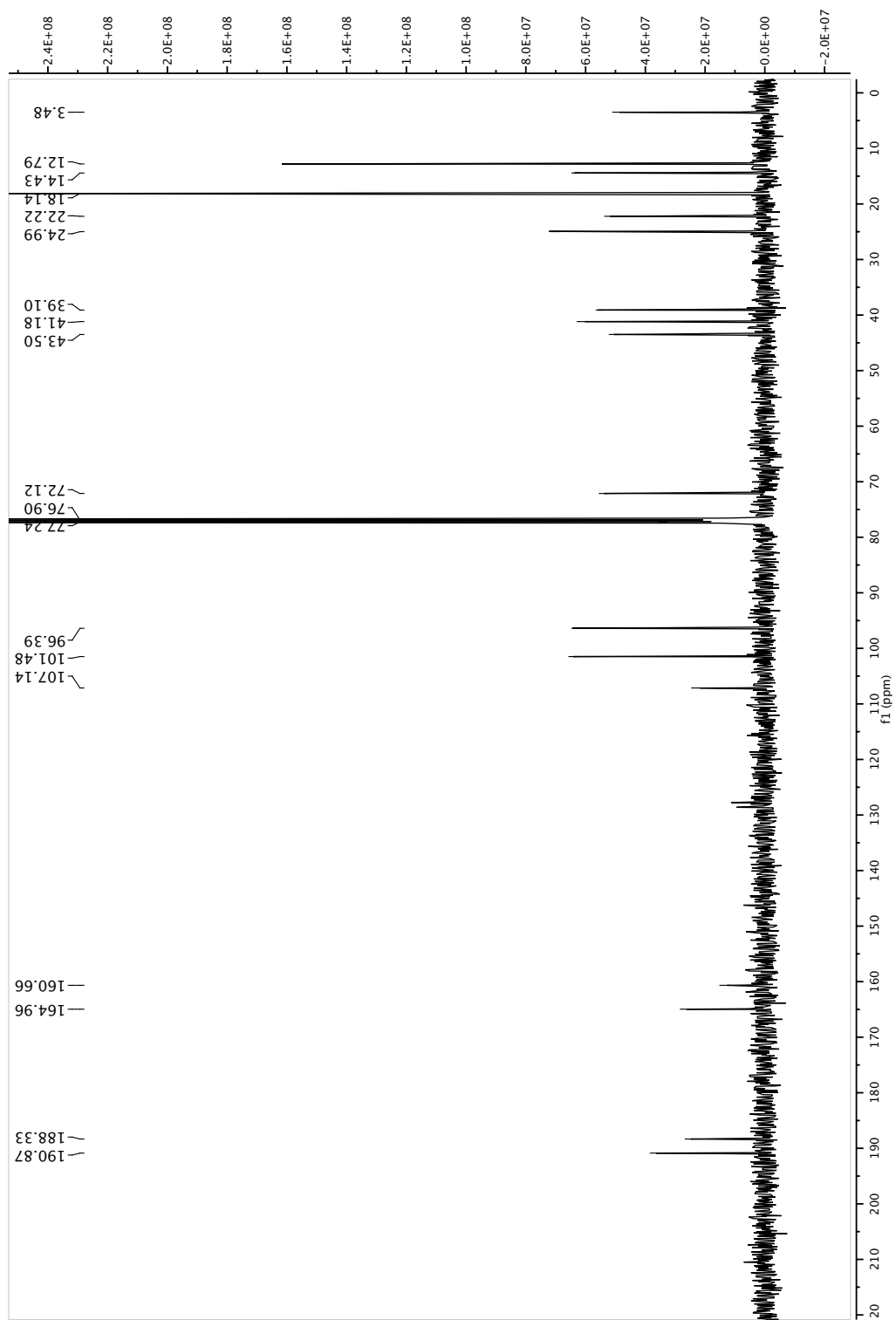
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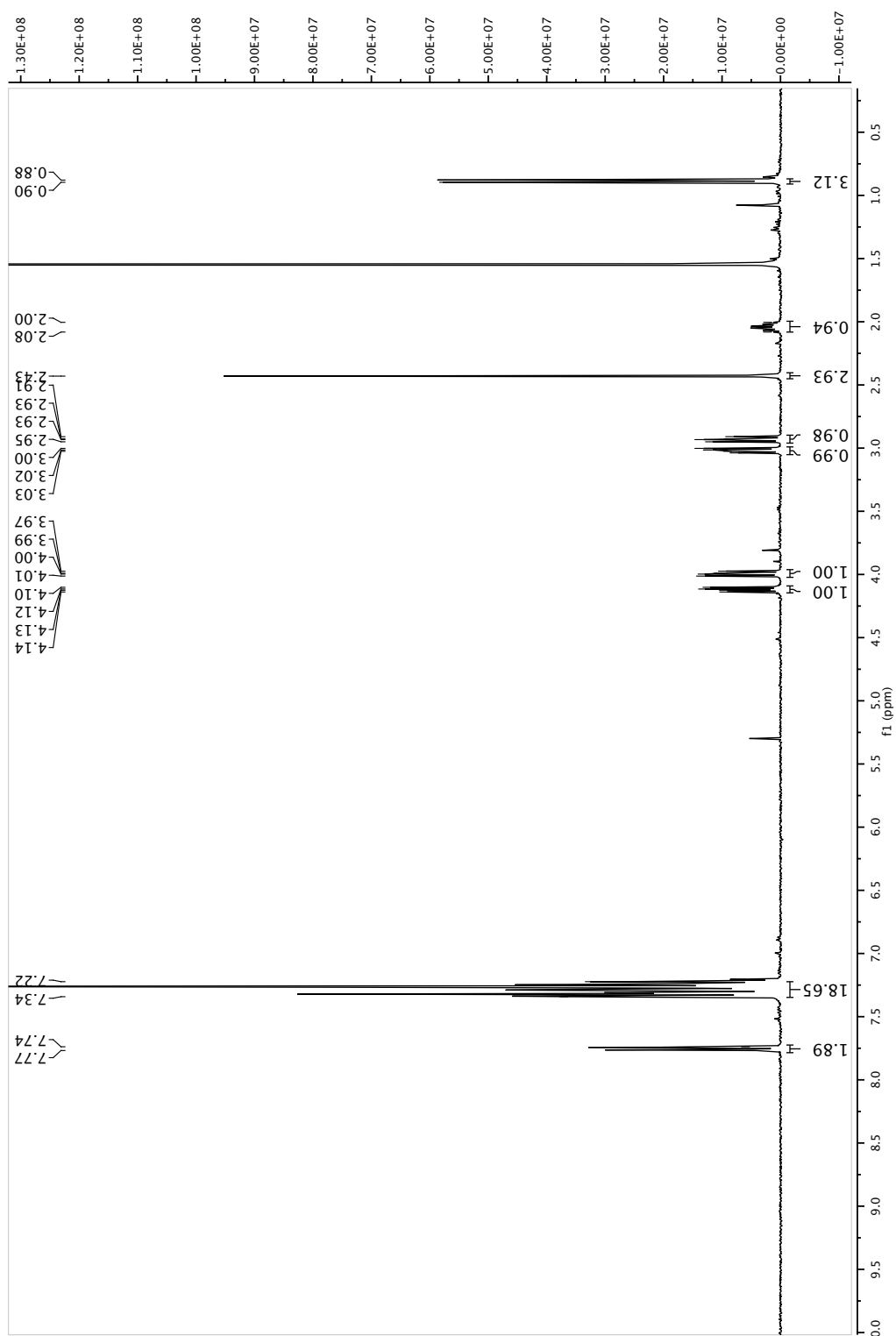
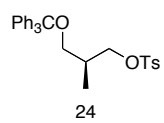
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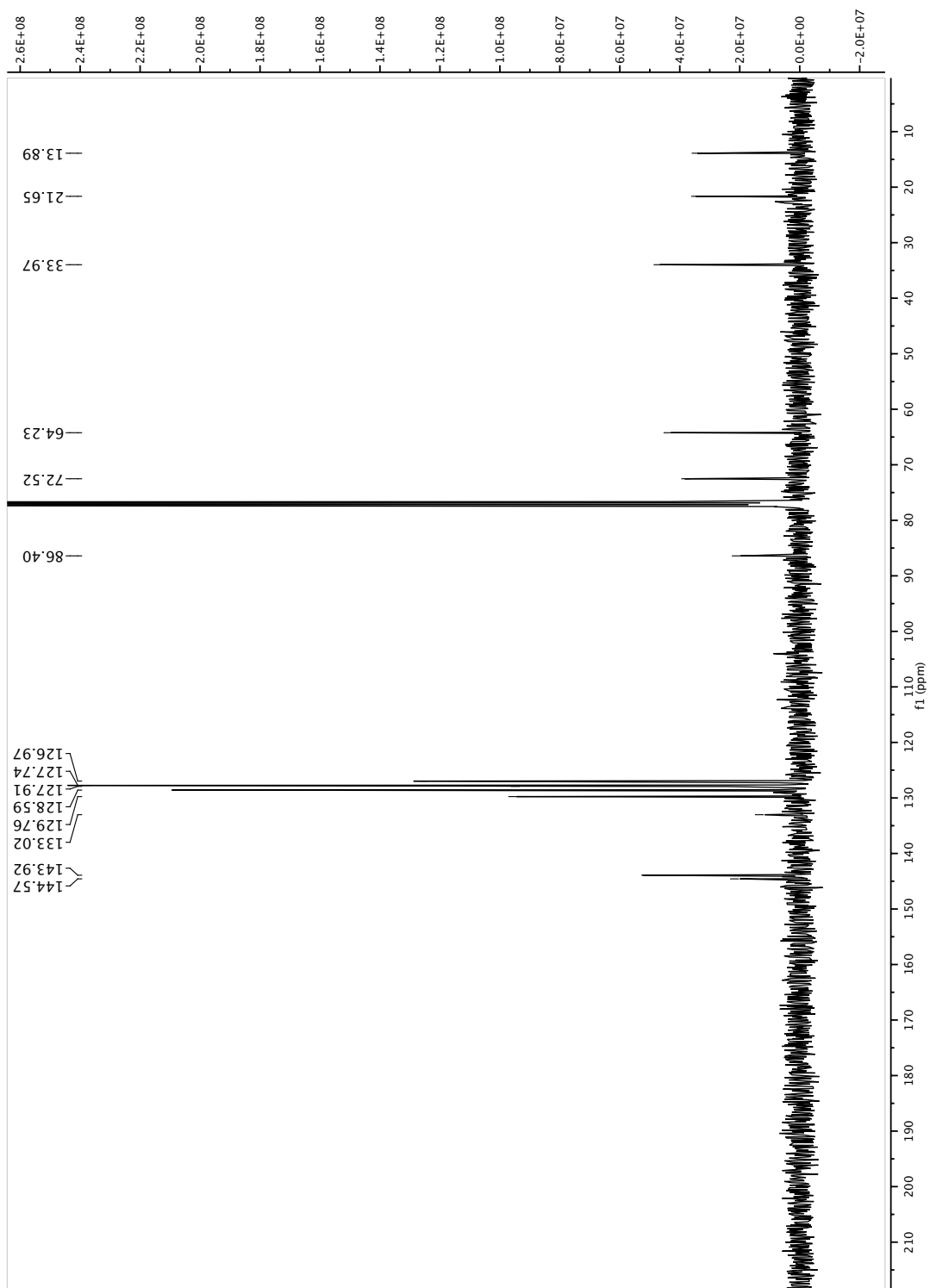
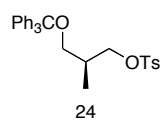
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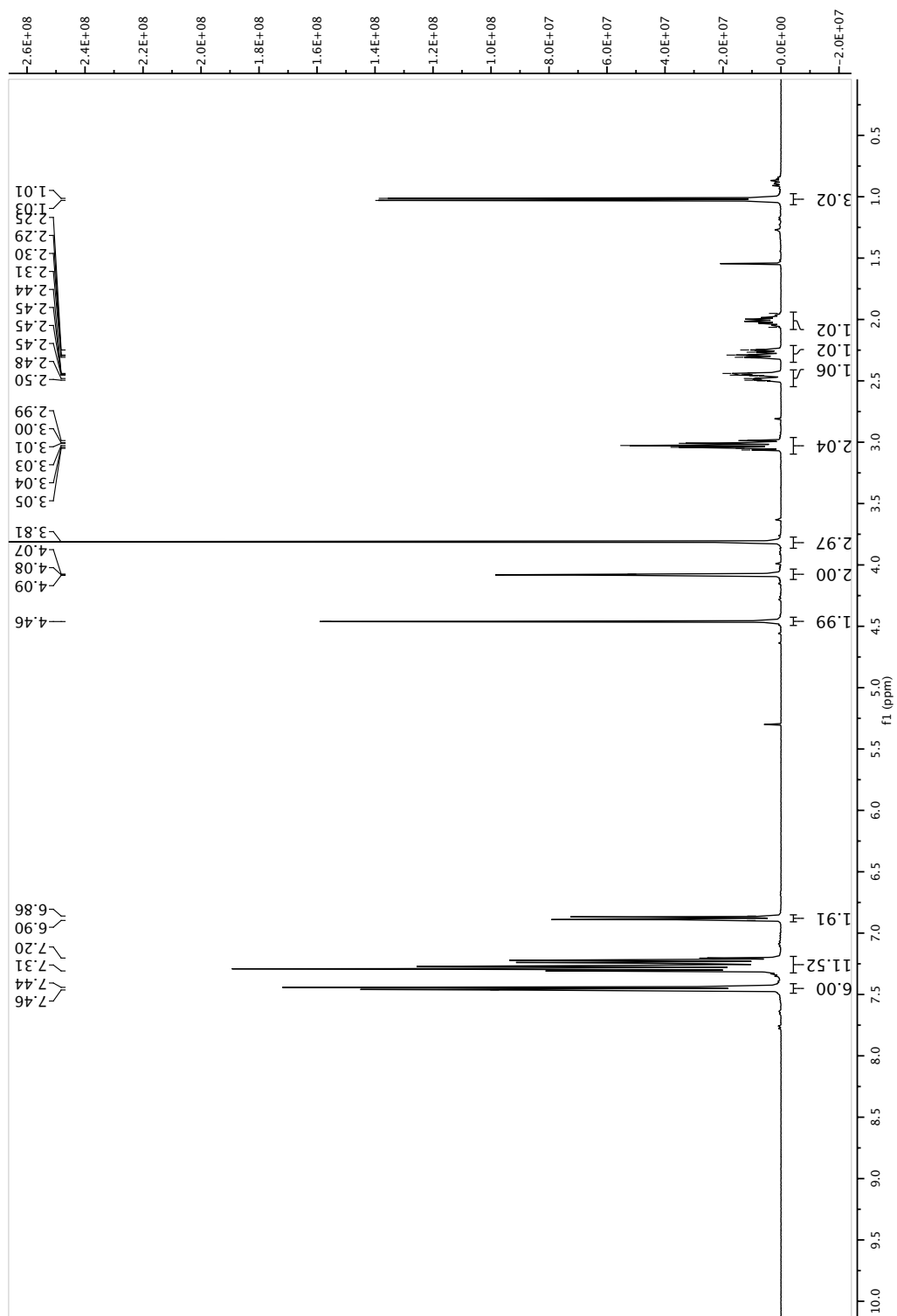
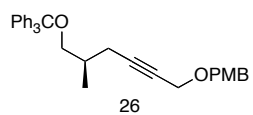
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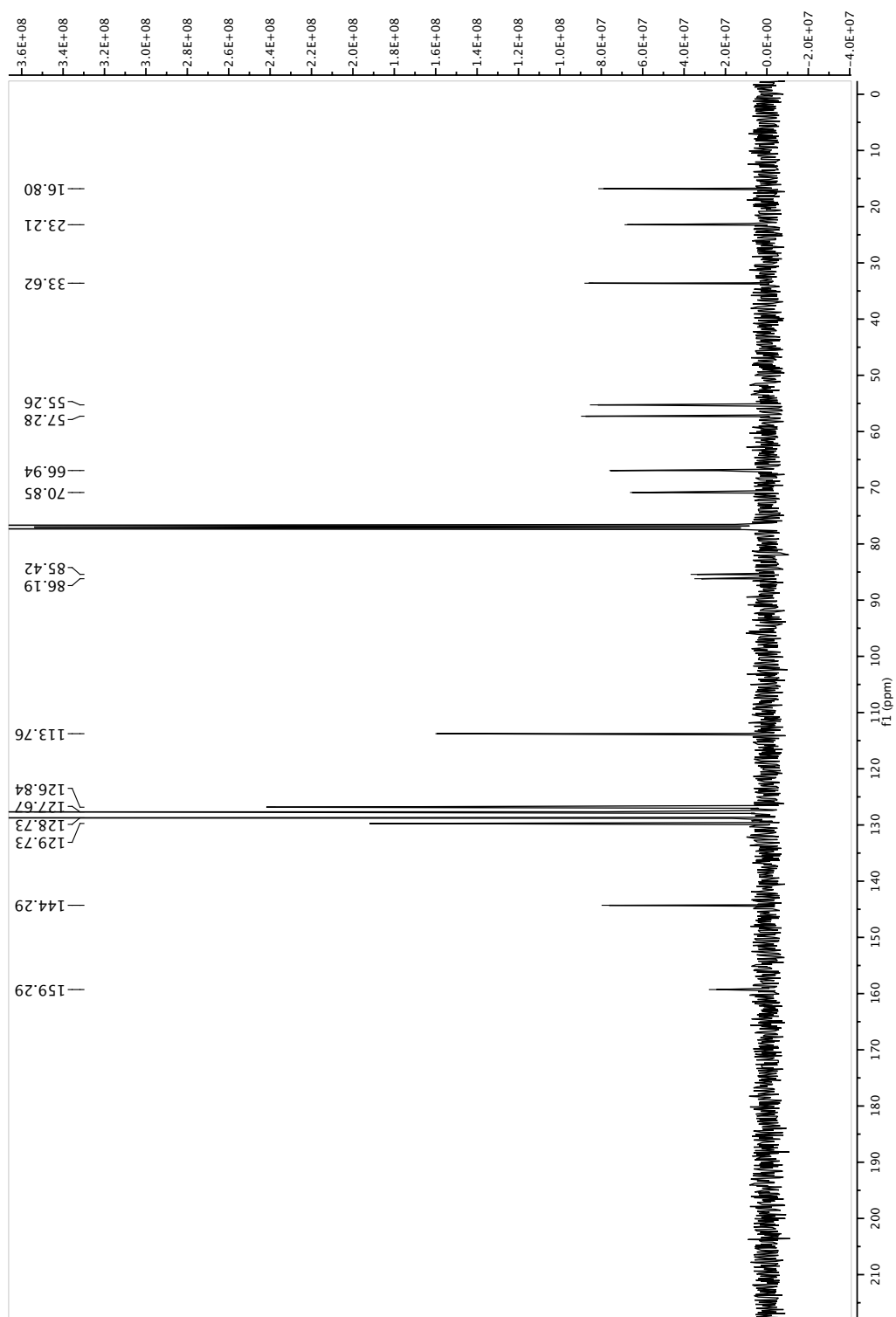
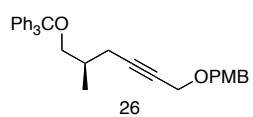
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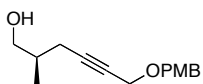
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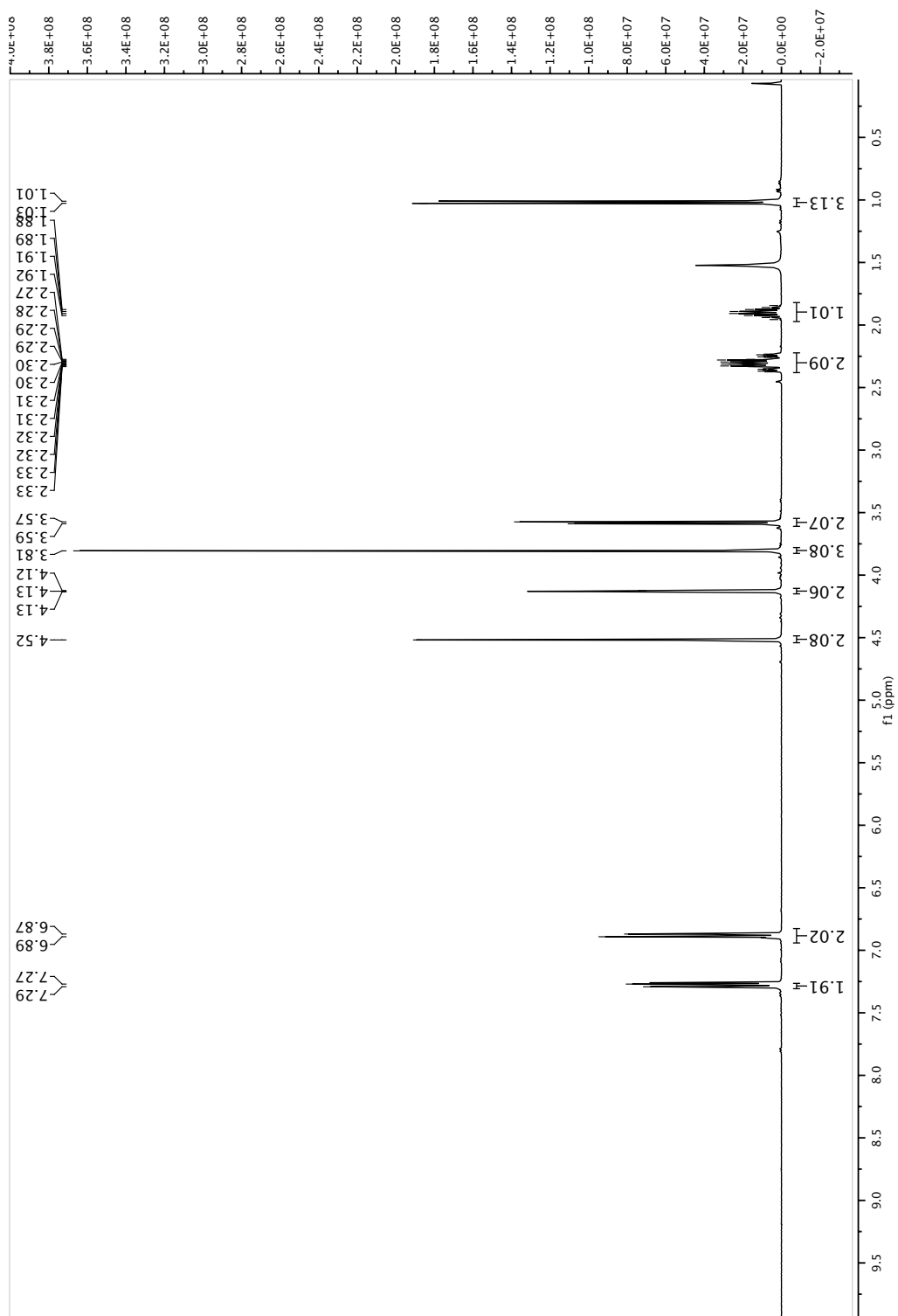
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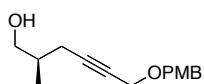
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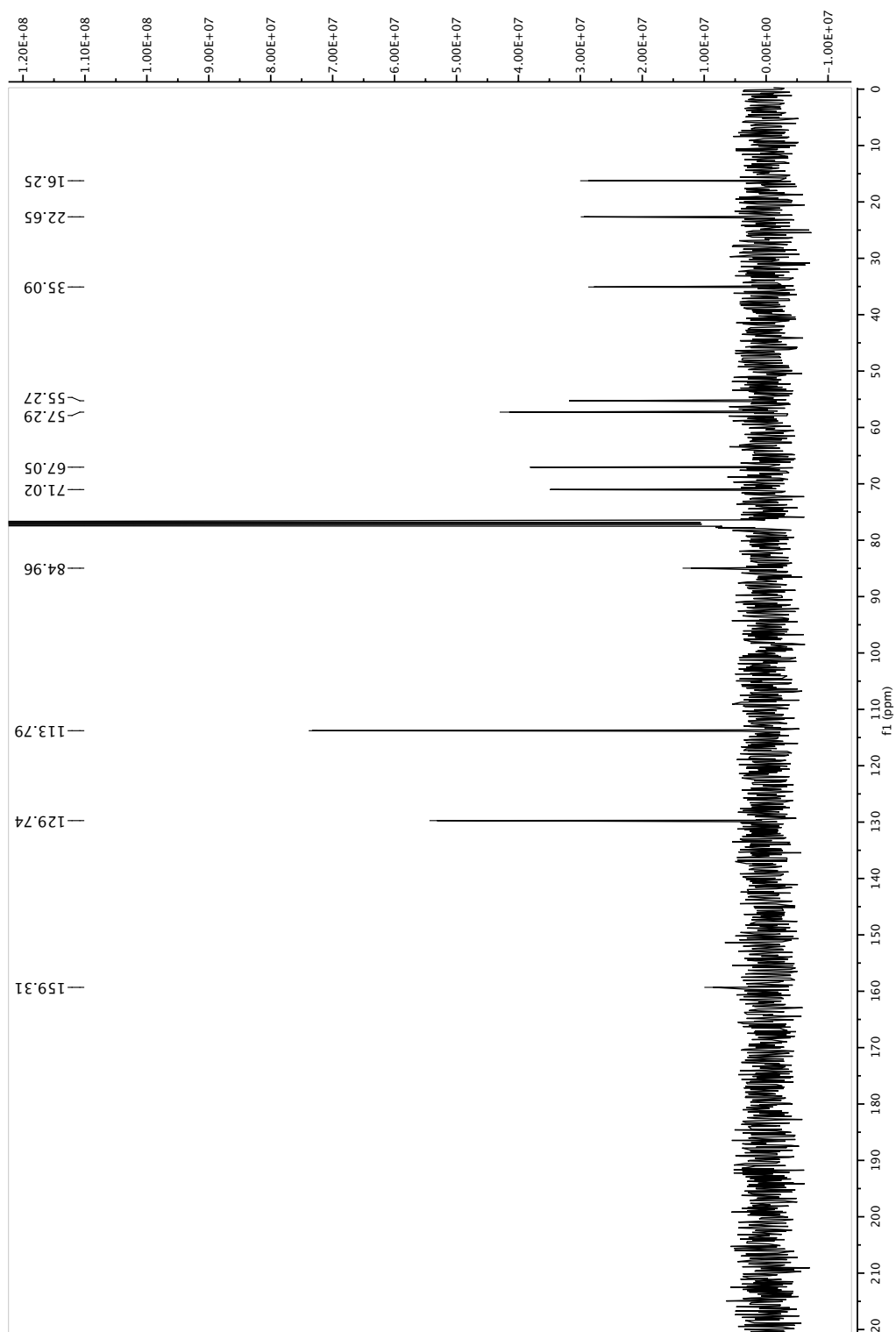
Intermediate between structures **26** and **27**

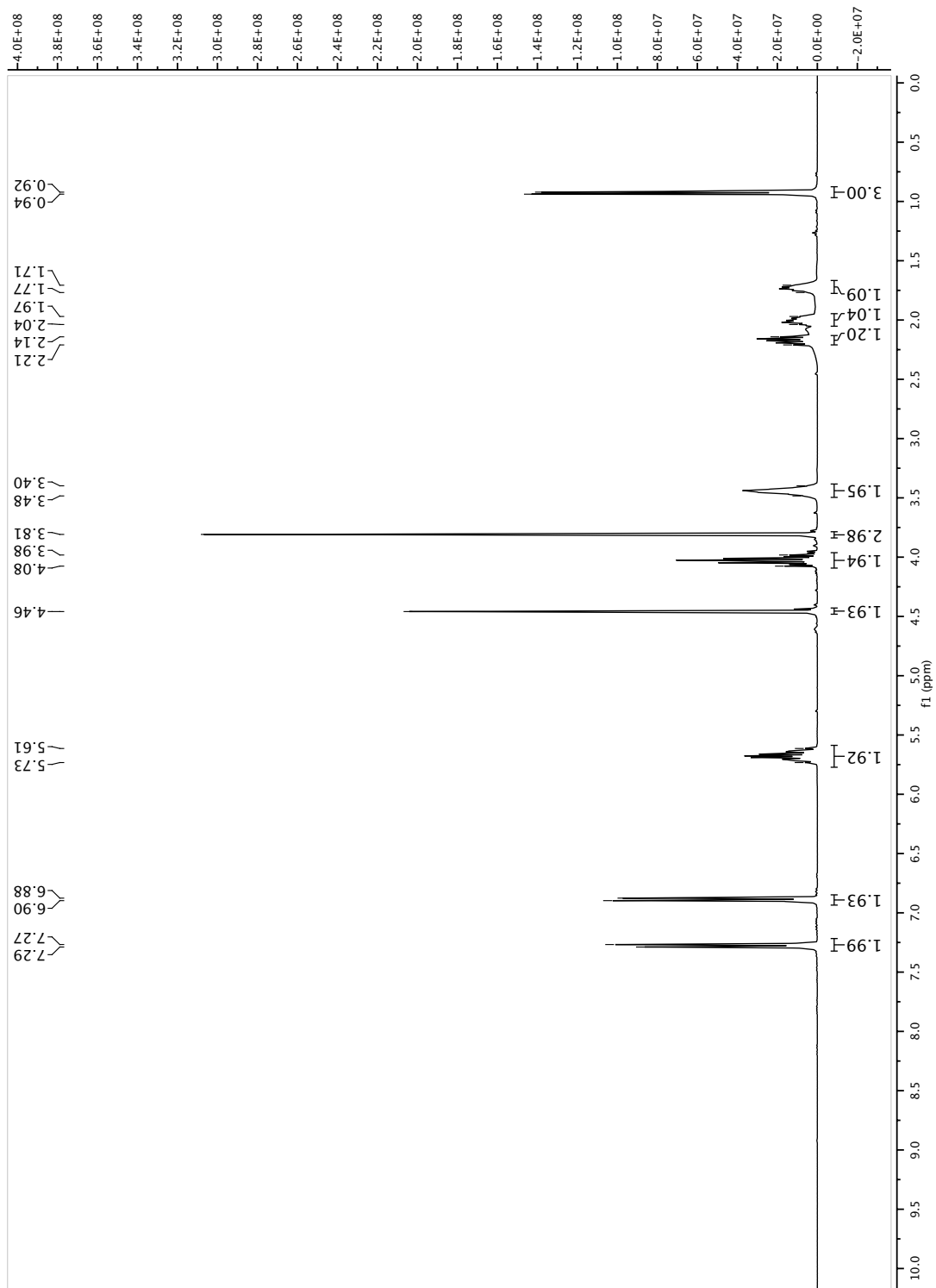
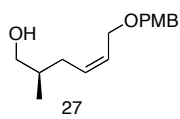


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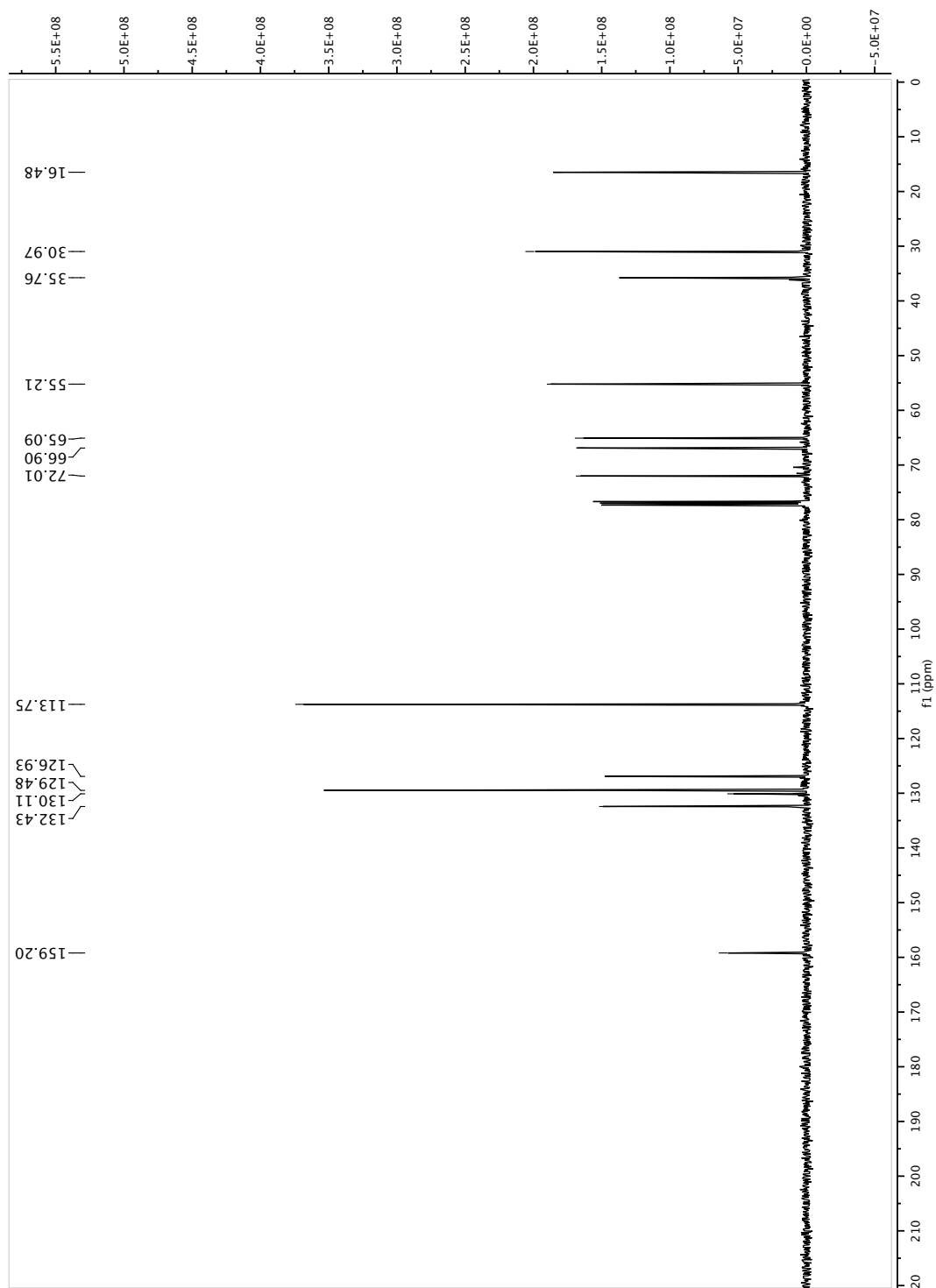
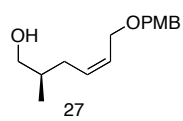


Intermediate between structures **26** and **27**

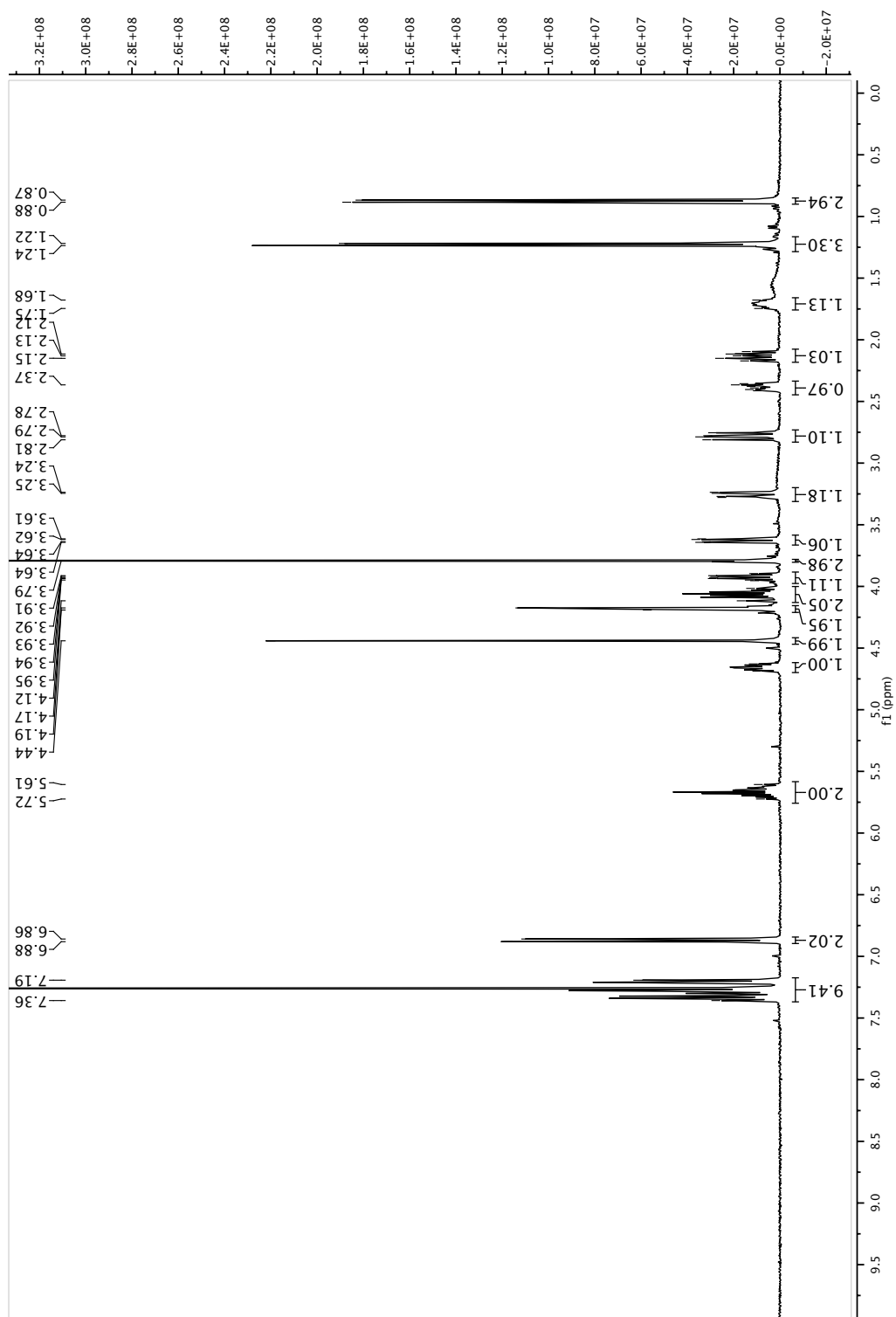
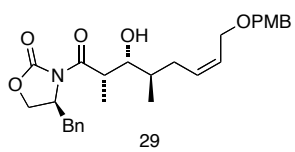


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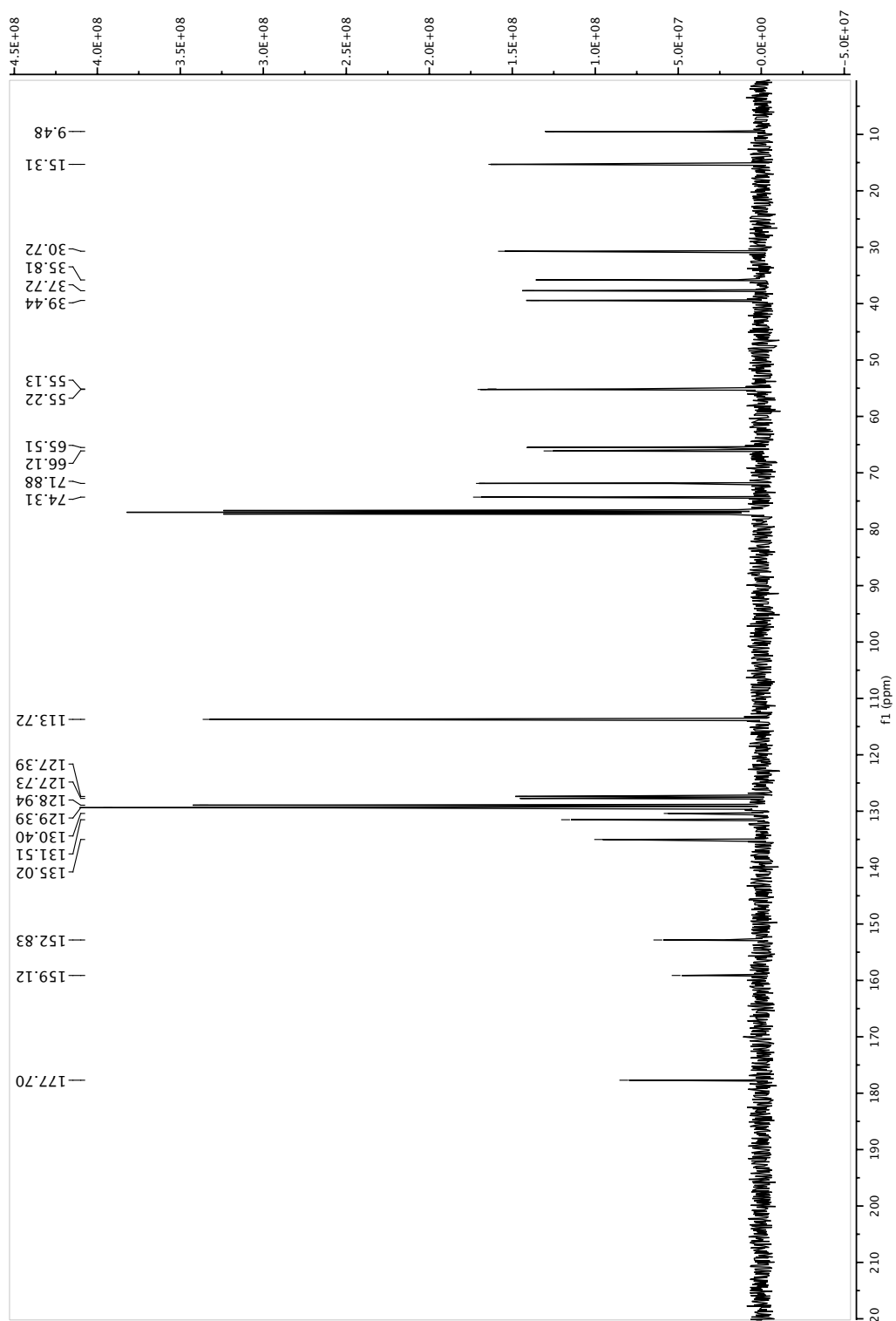
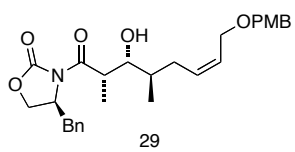
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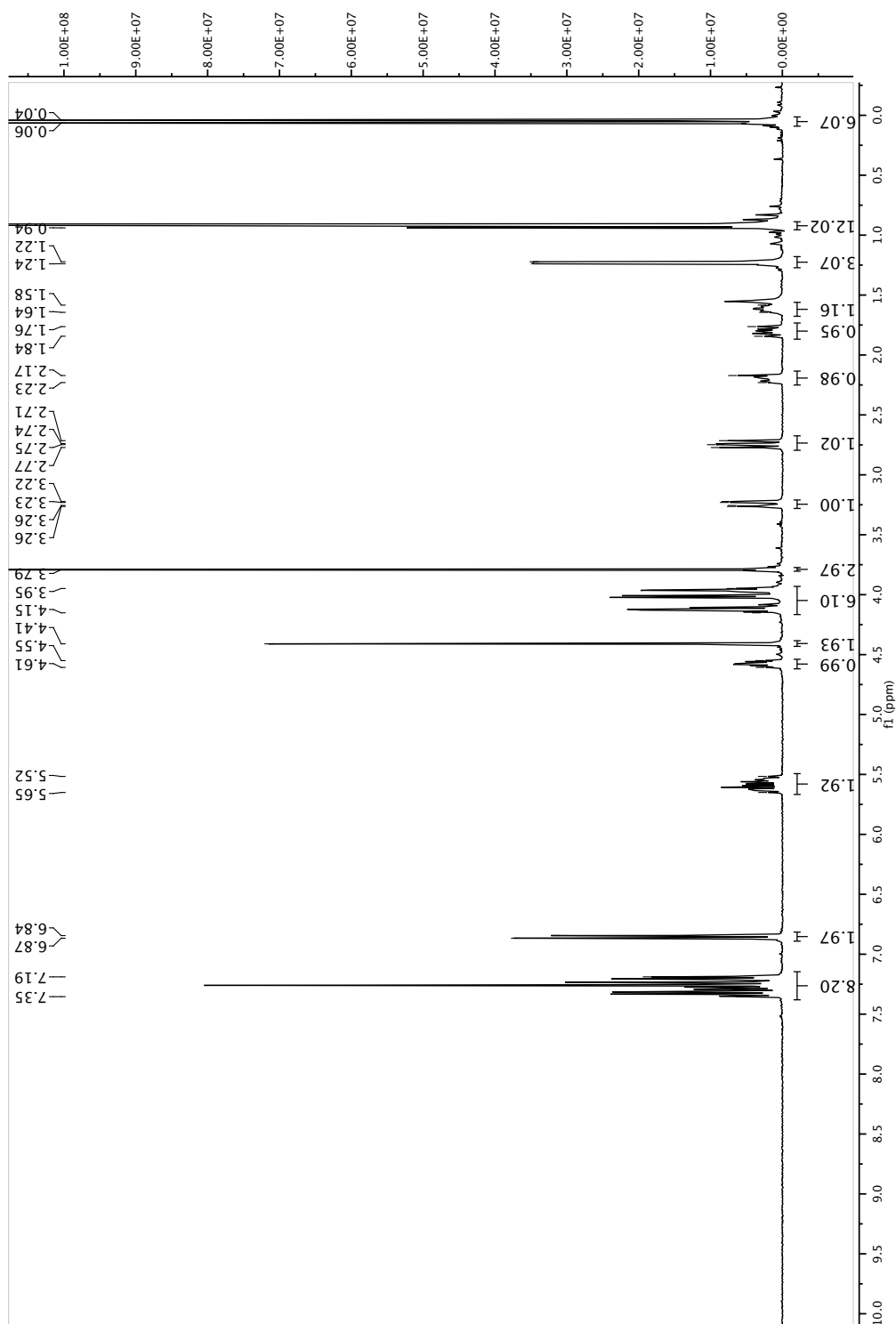
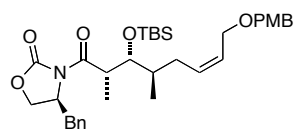
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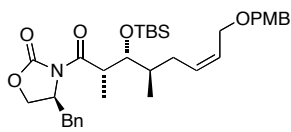


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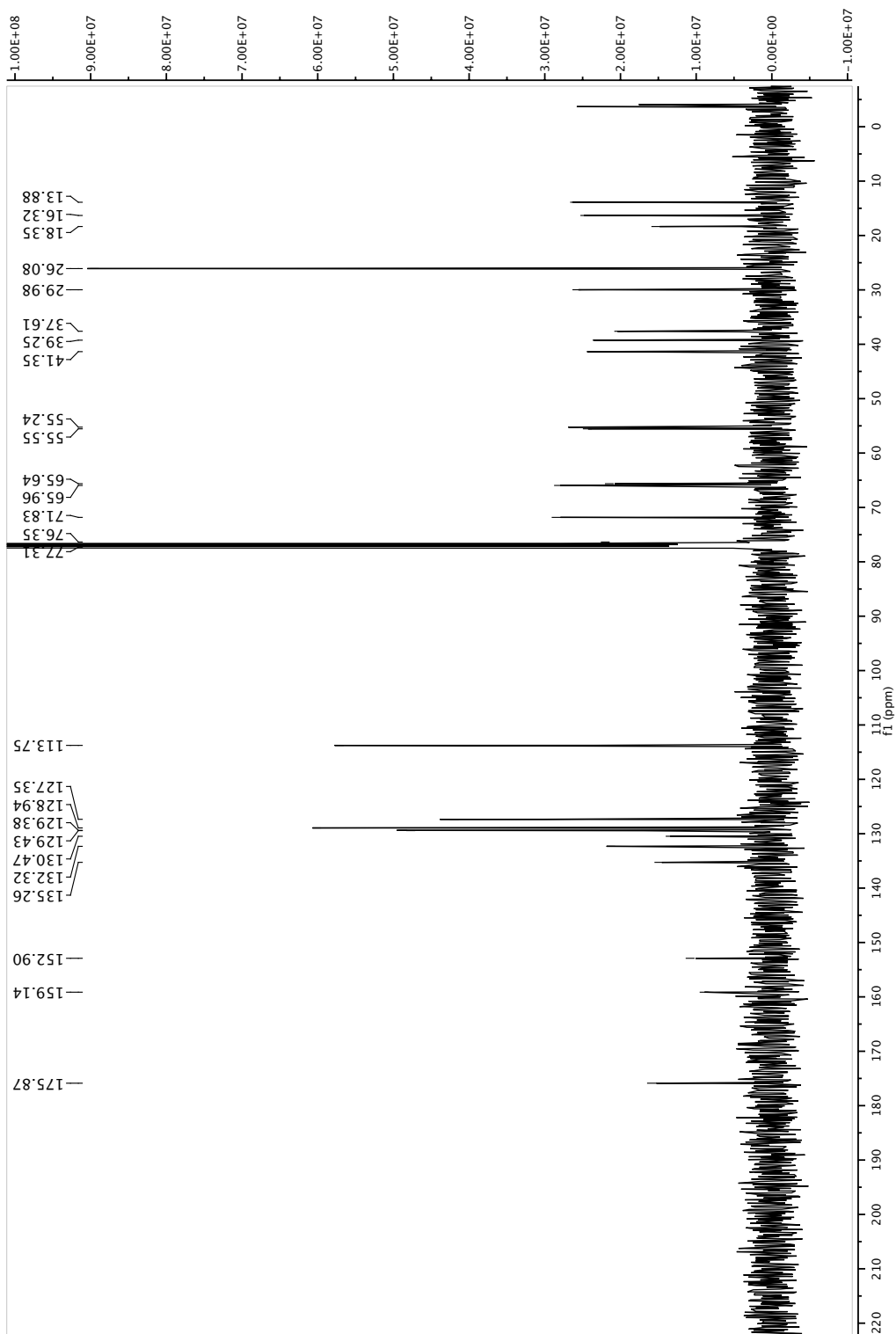


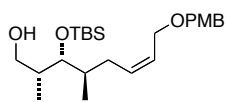
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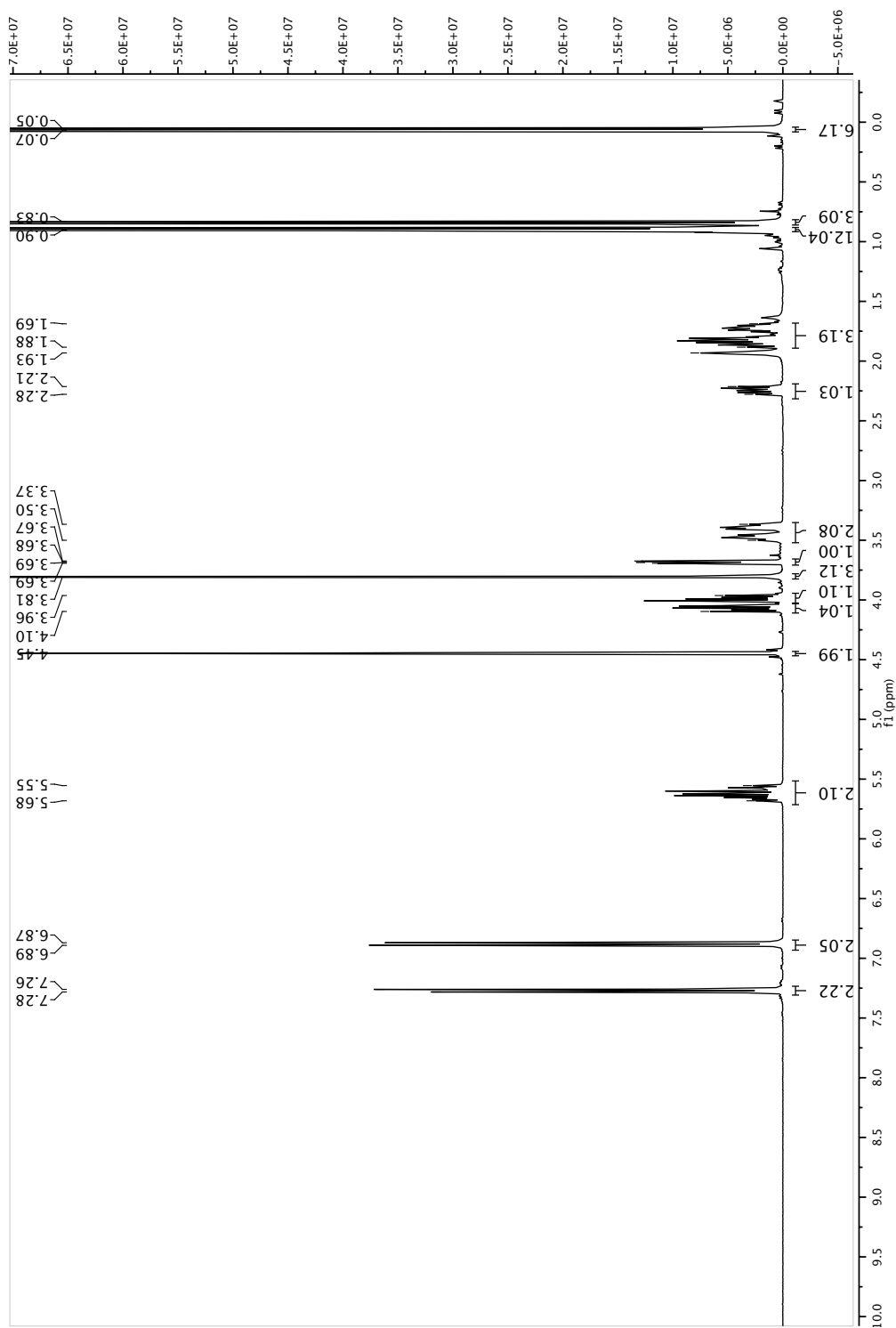
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Intermediate between structures **29** and **30**

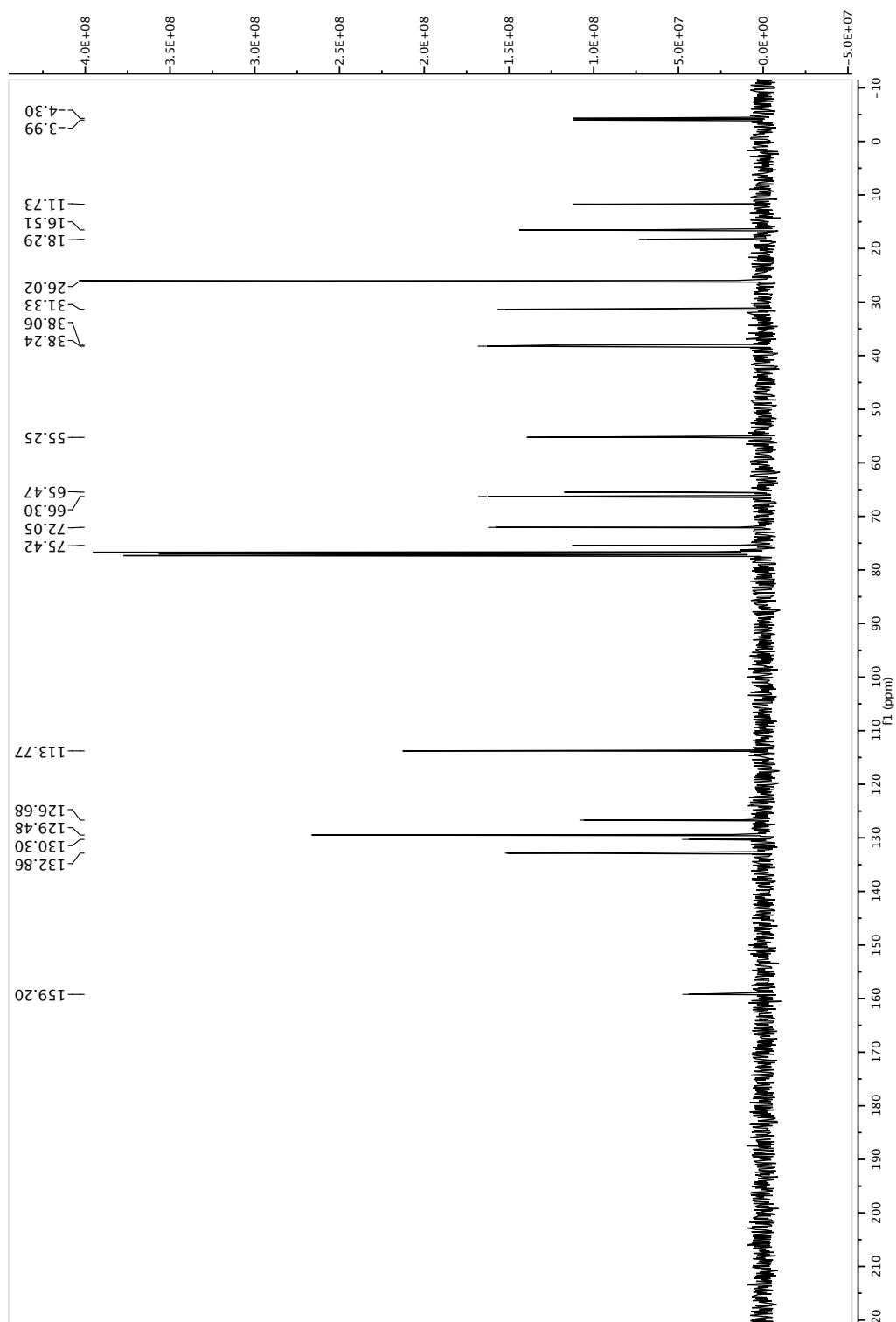
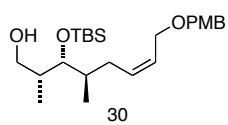


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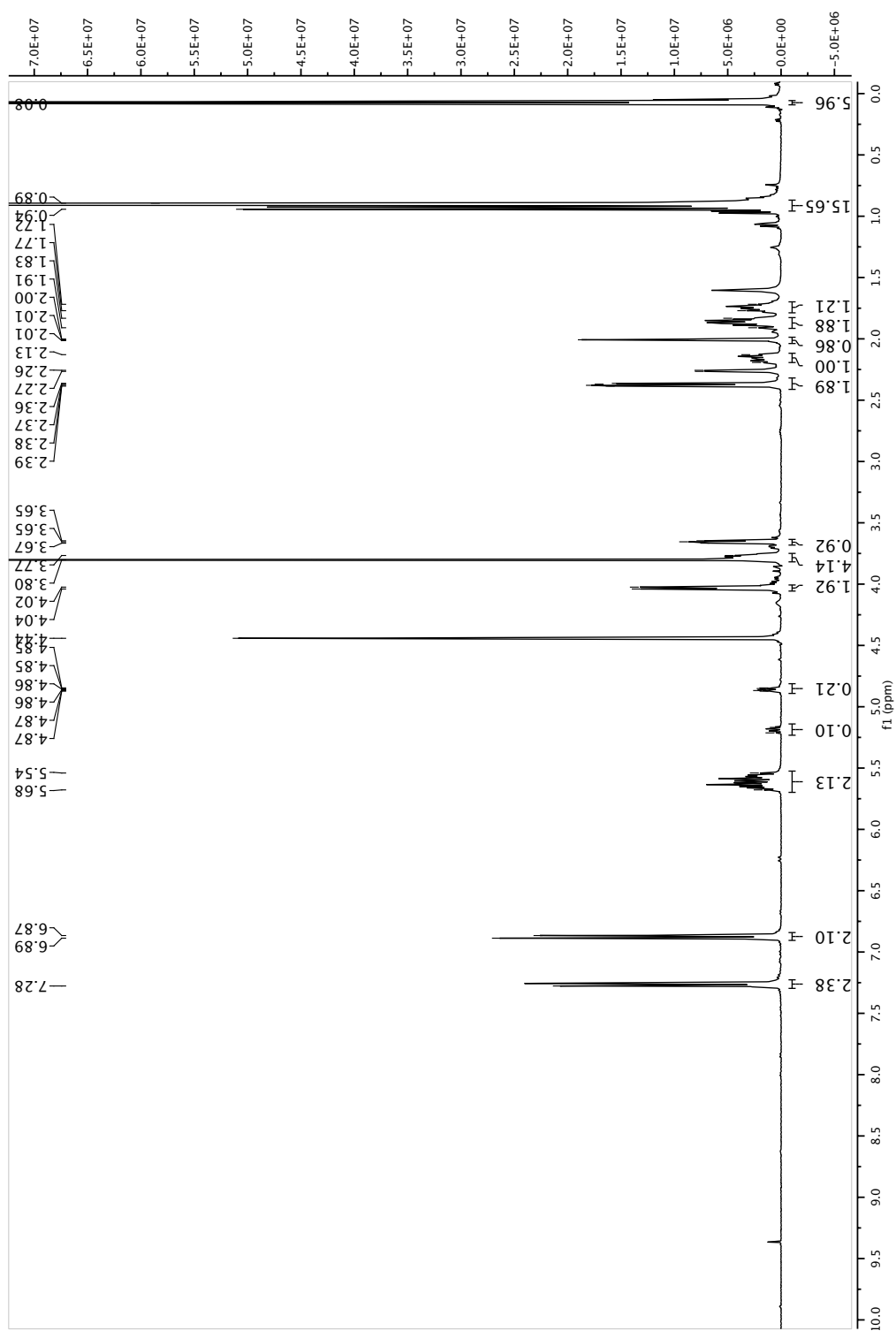
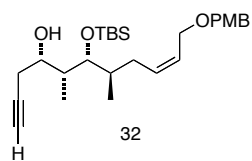
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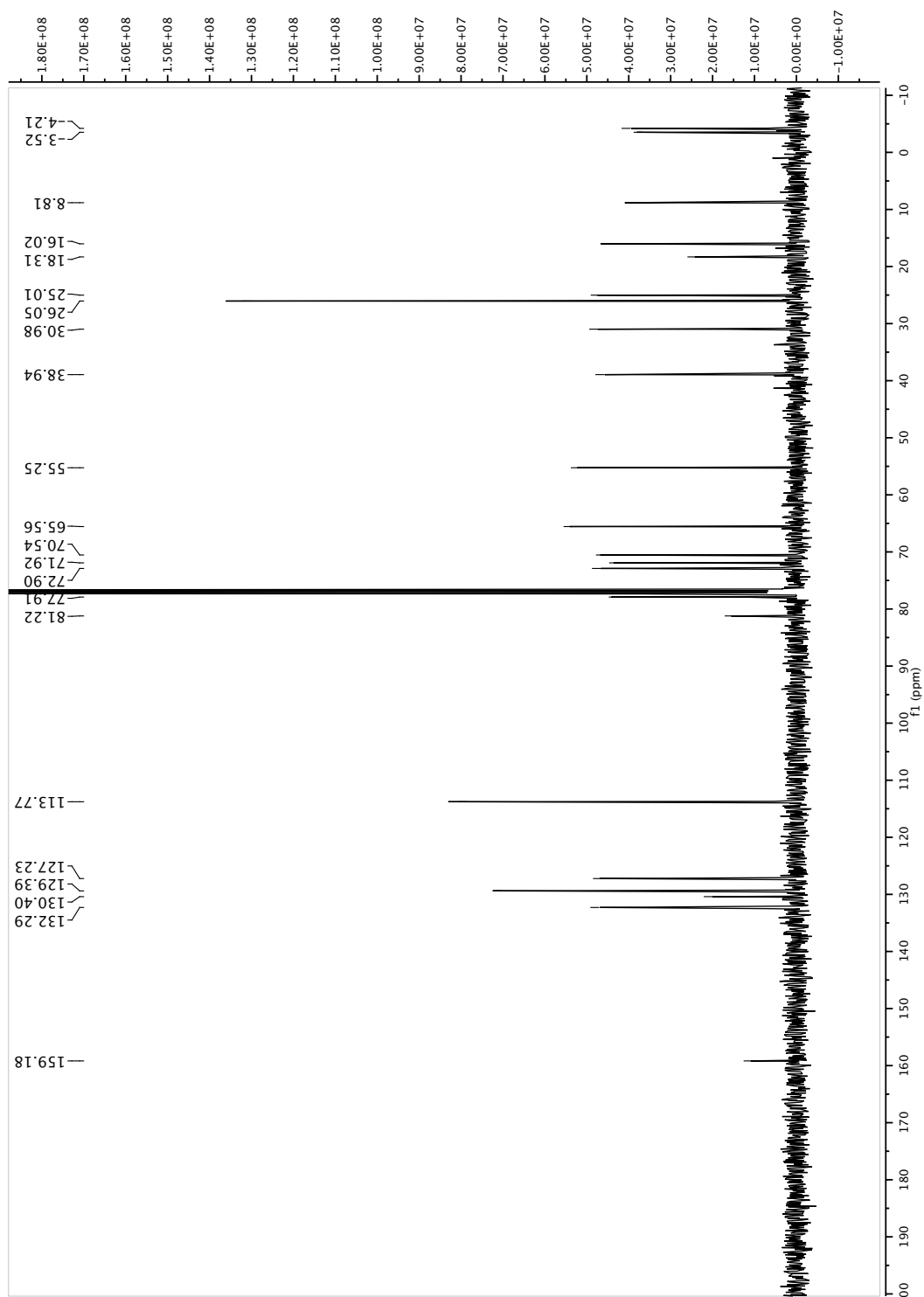
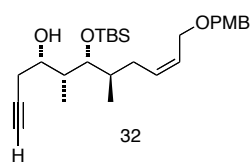
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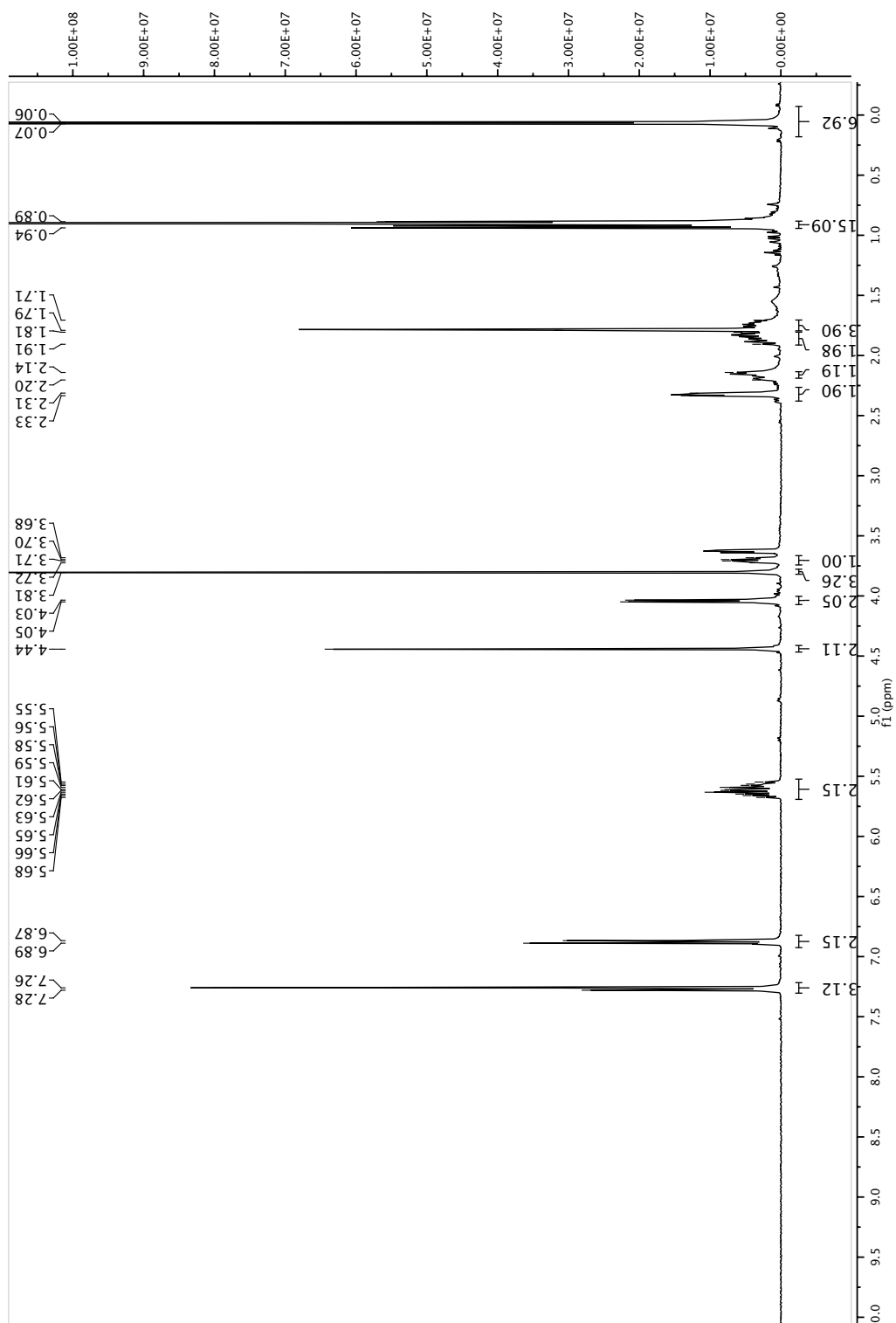
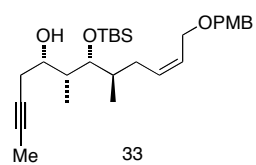
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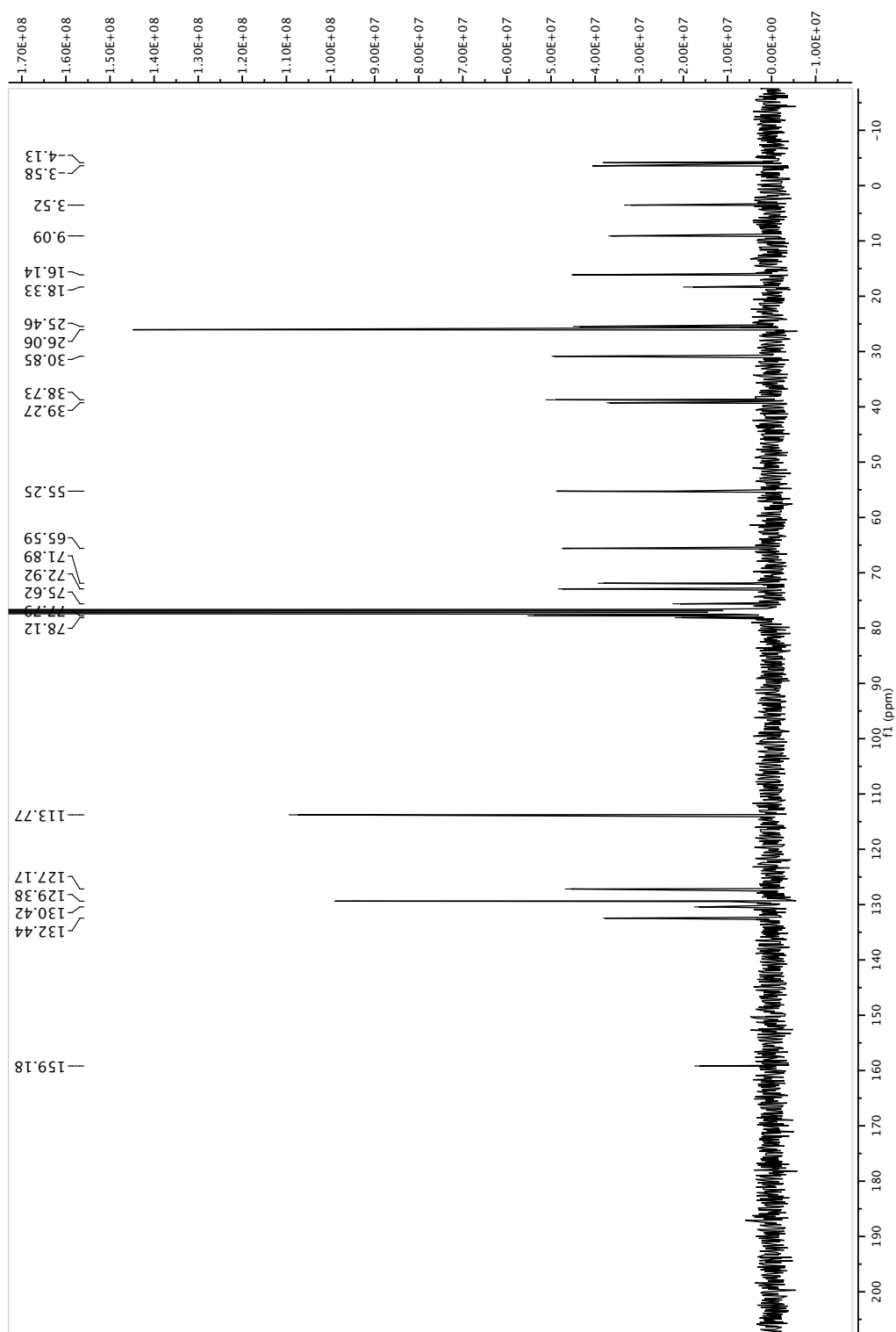
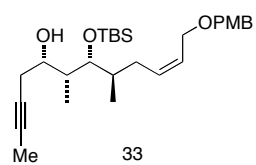
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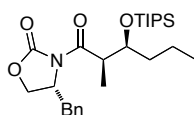
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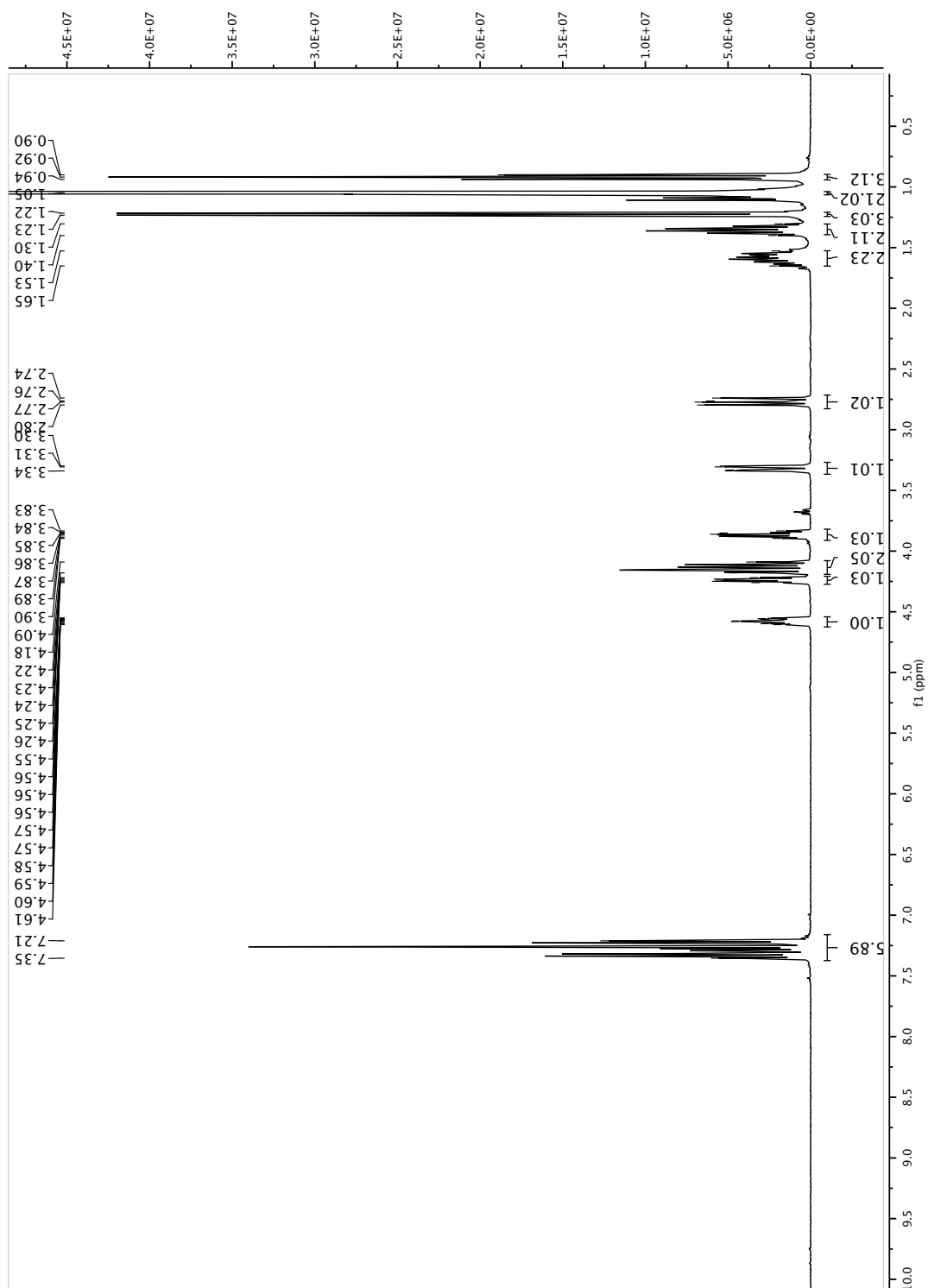
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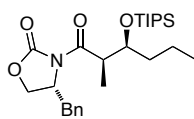
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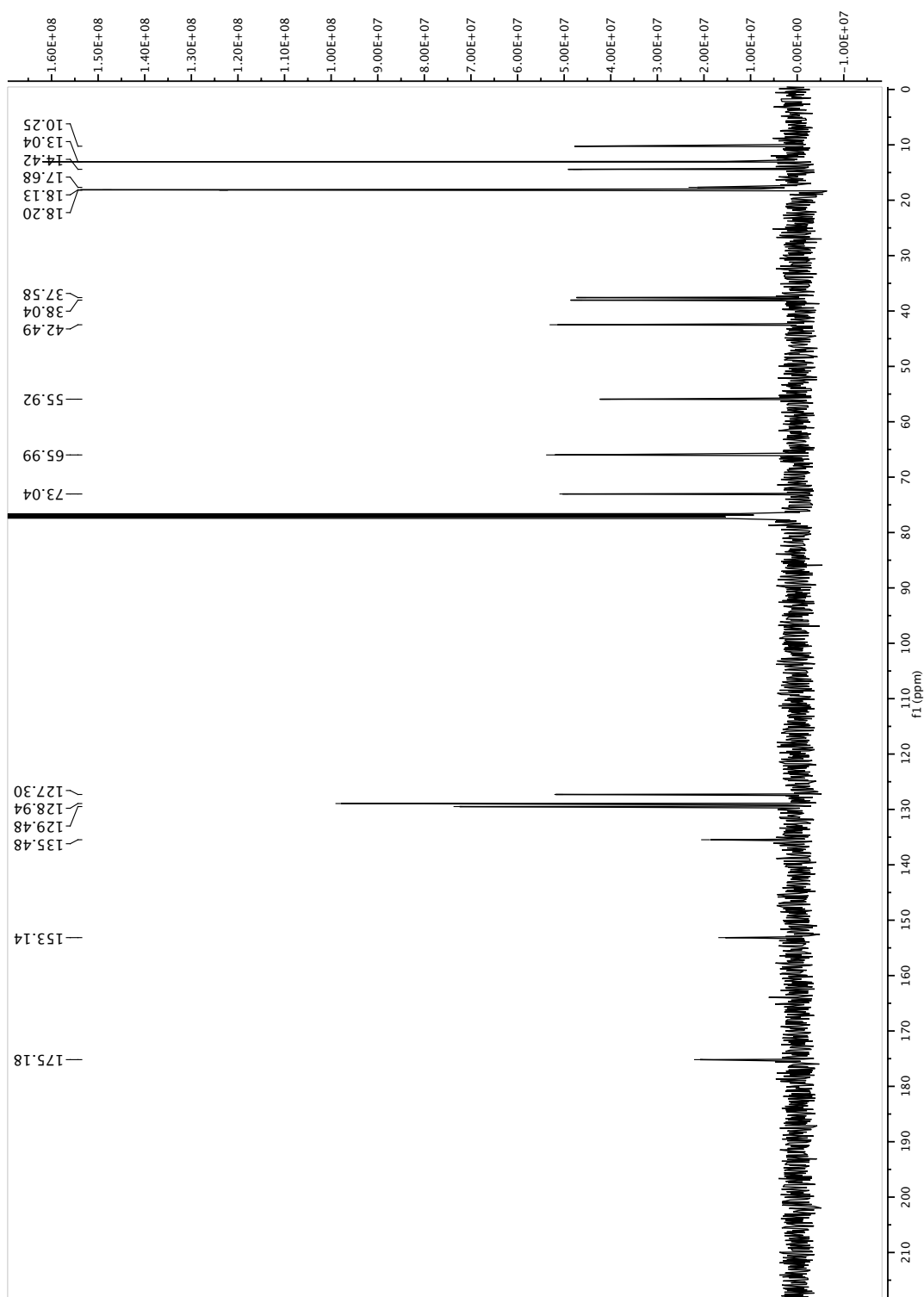
Intermediate before structure **40**



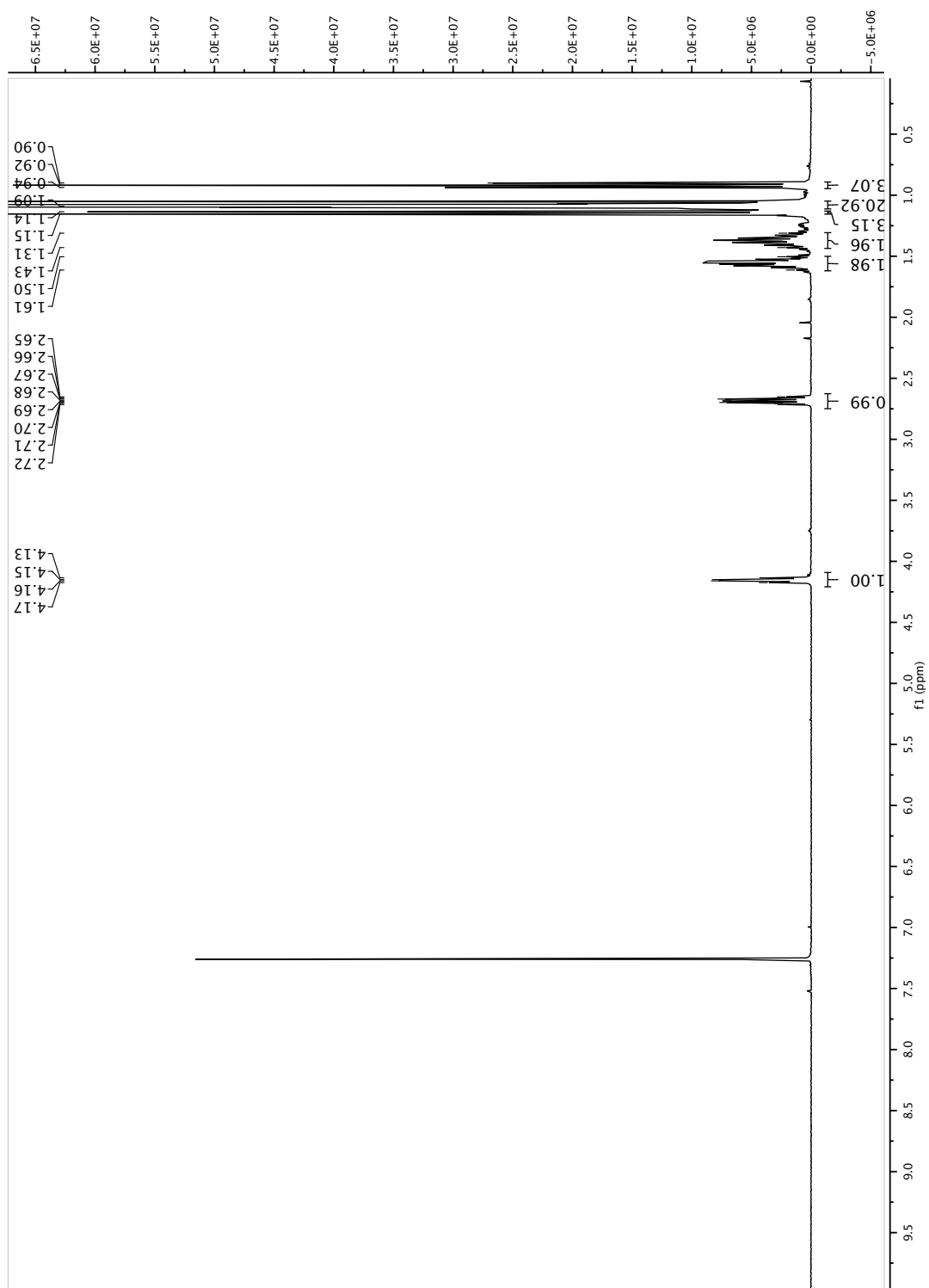
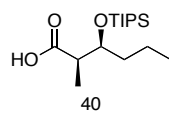
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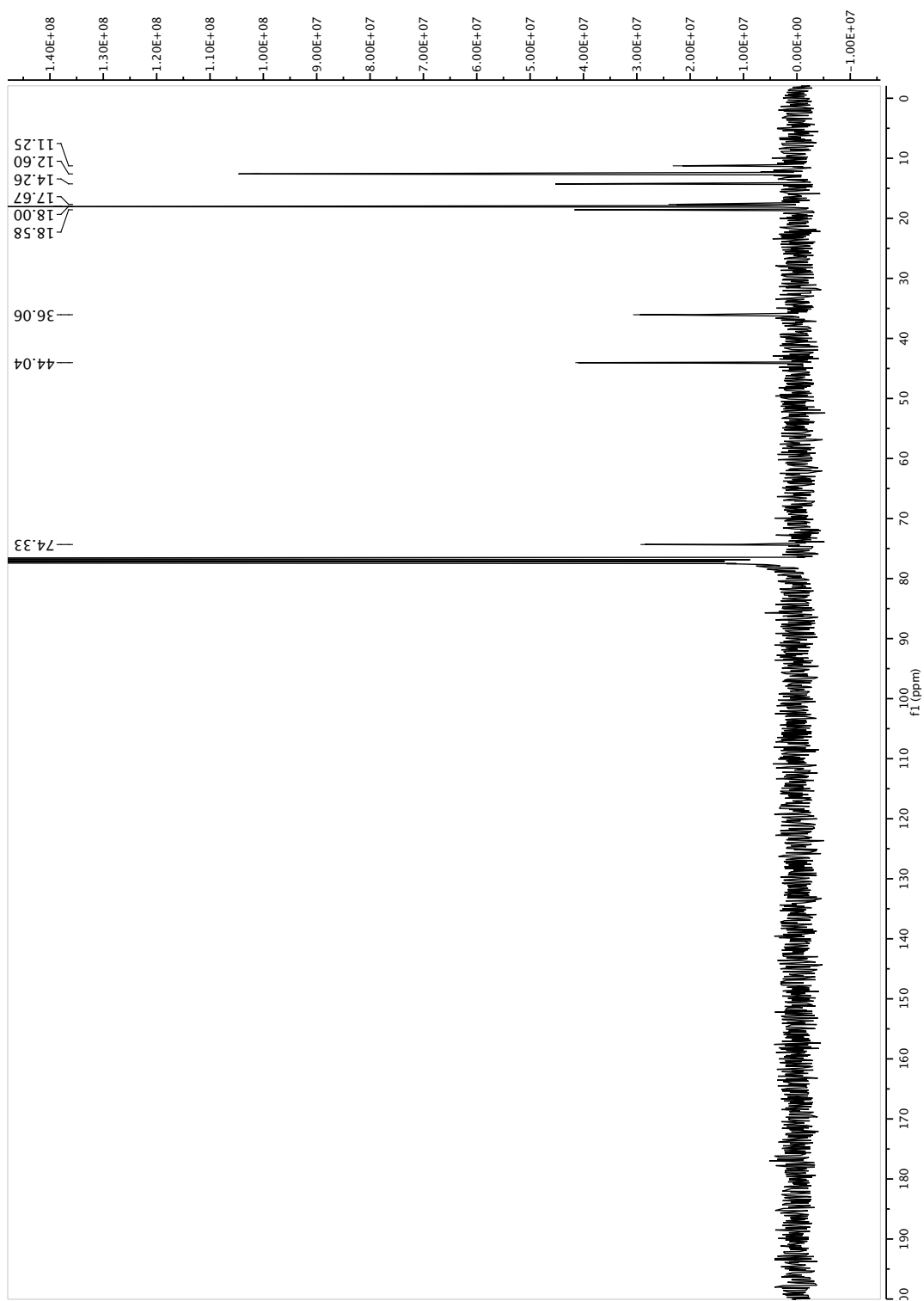
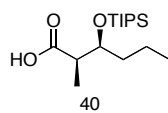
Intermediate before structure **40**



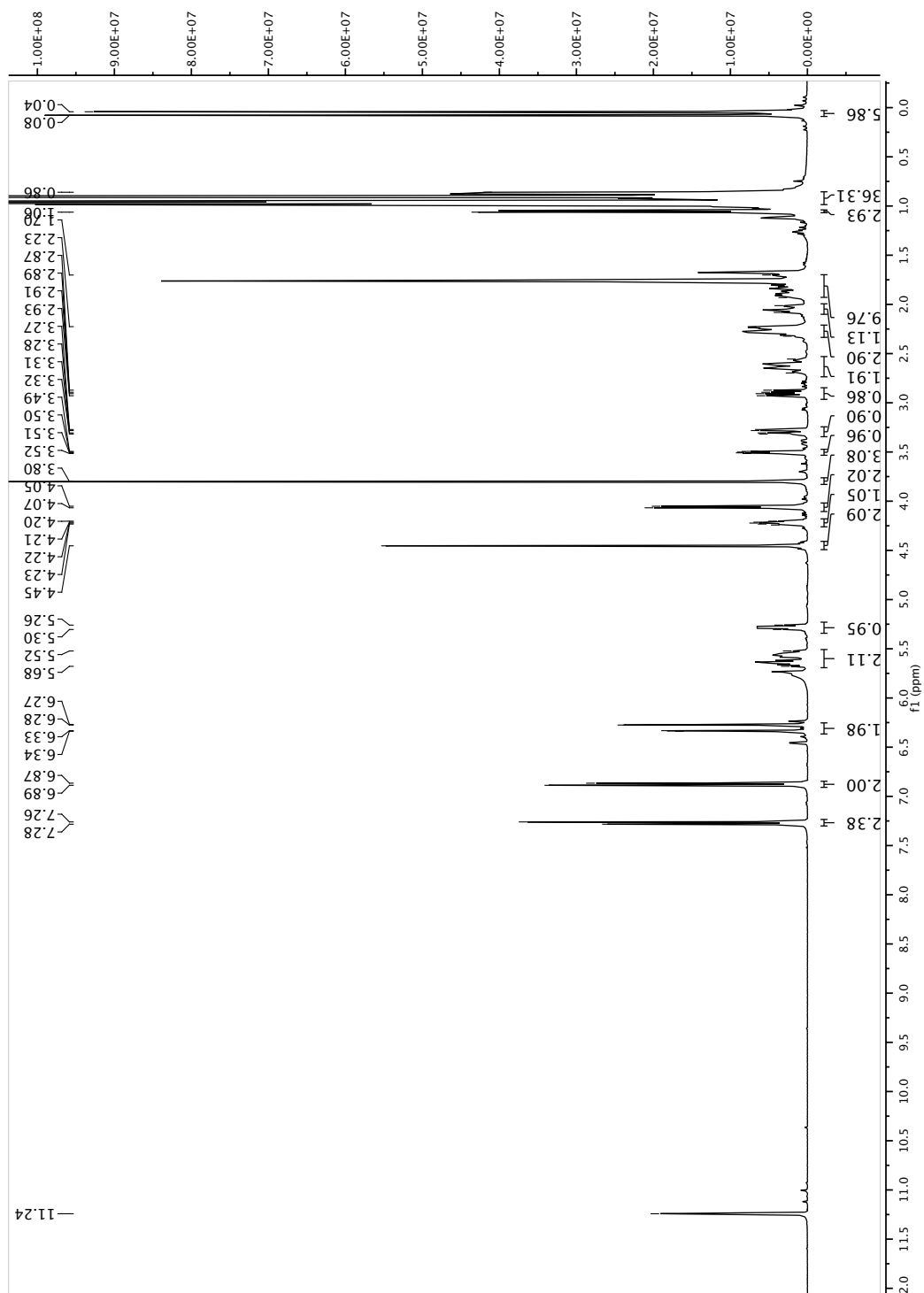
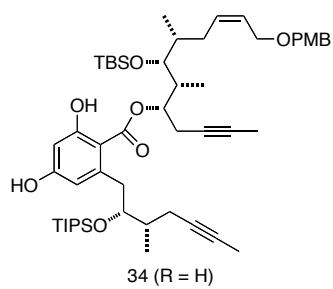
¹H NMR (400 MHz, CDCl₃)



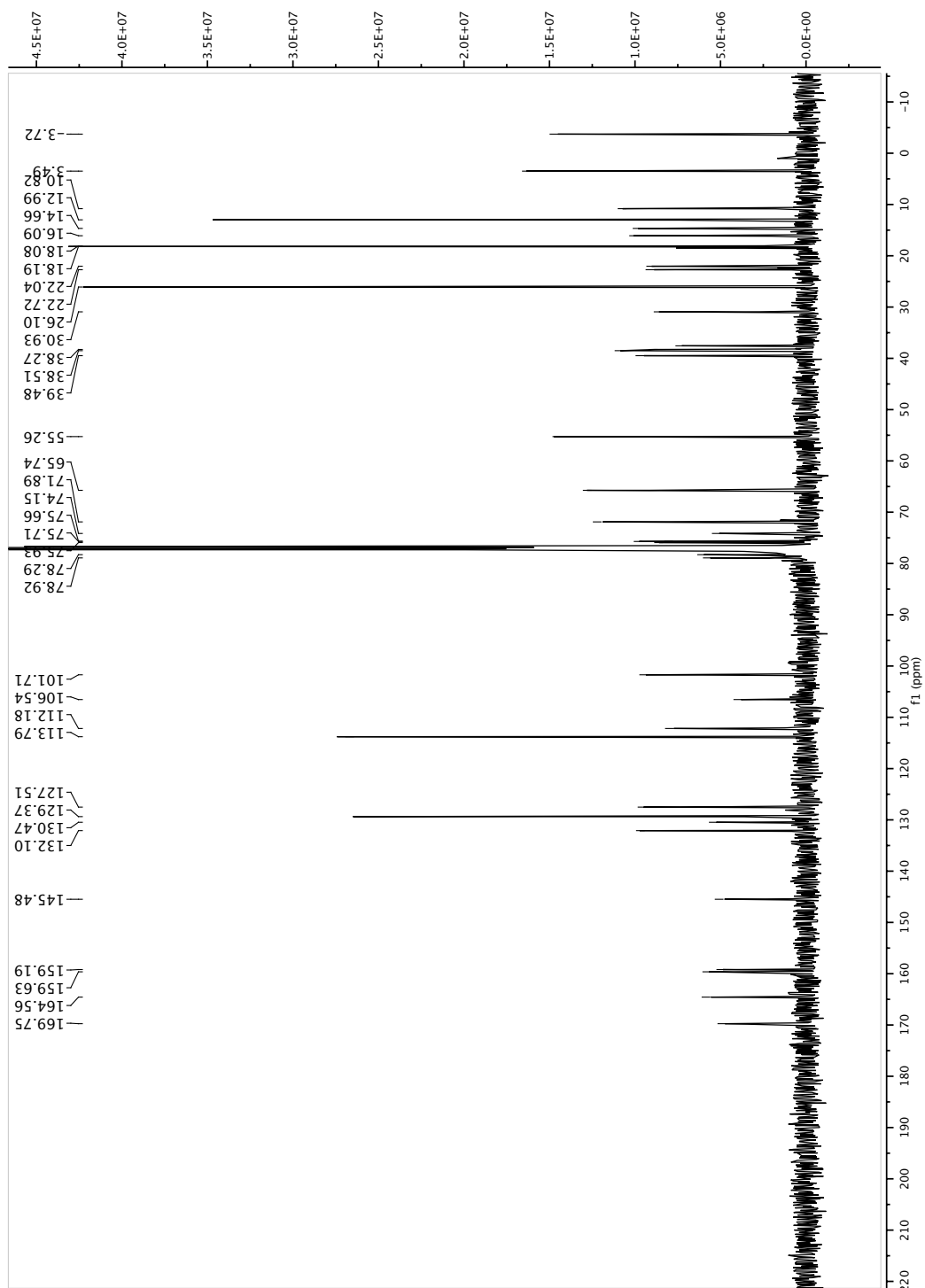
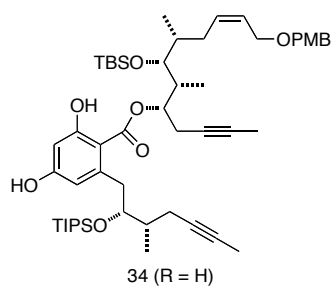
^{13}C NMR (100 MHz, CDCl_3)



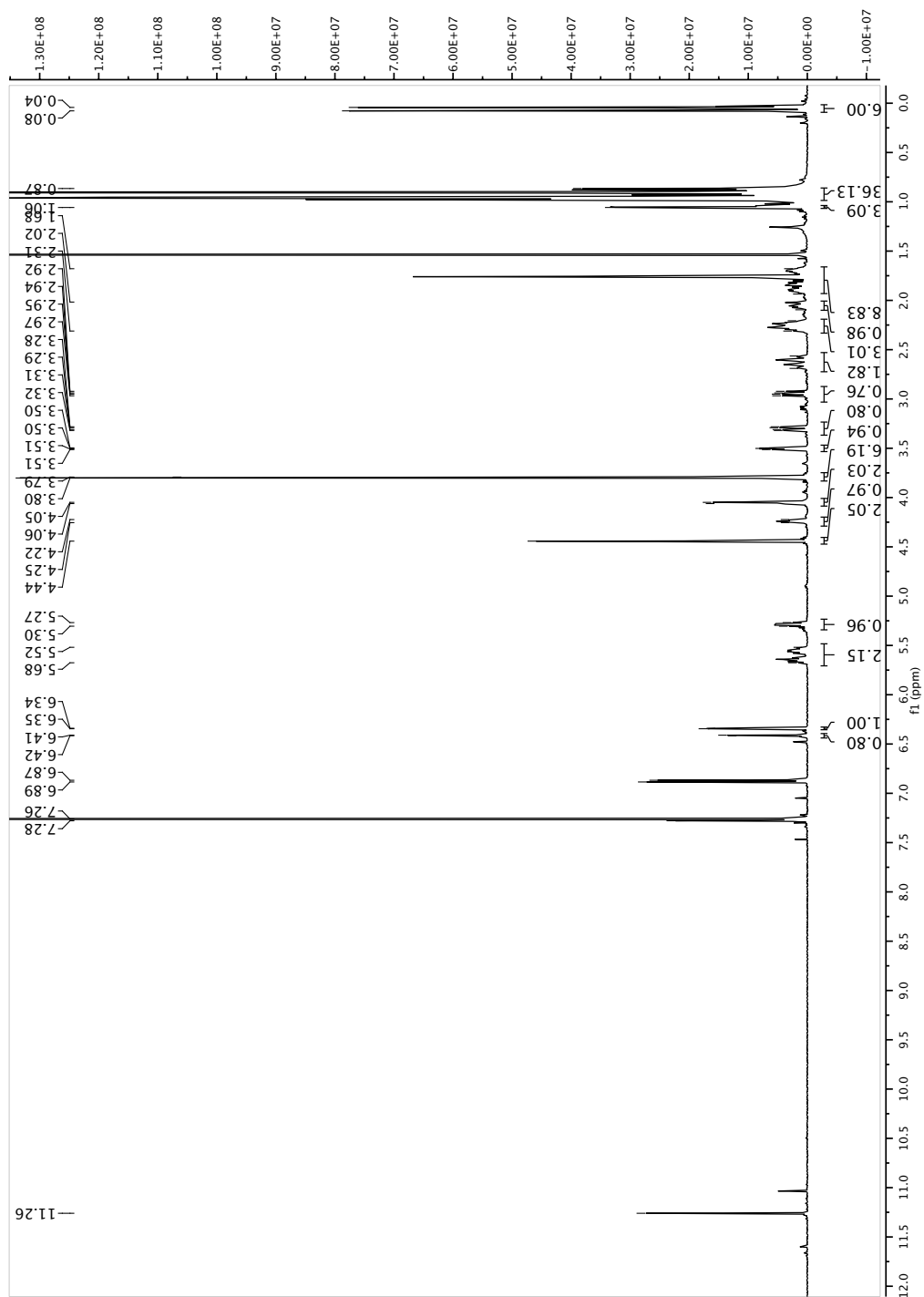
^1H NMR (400 MHz, CDCl_3)



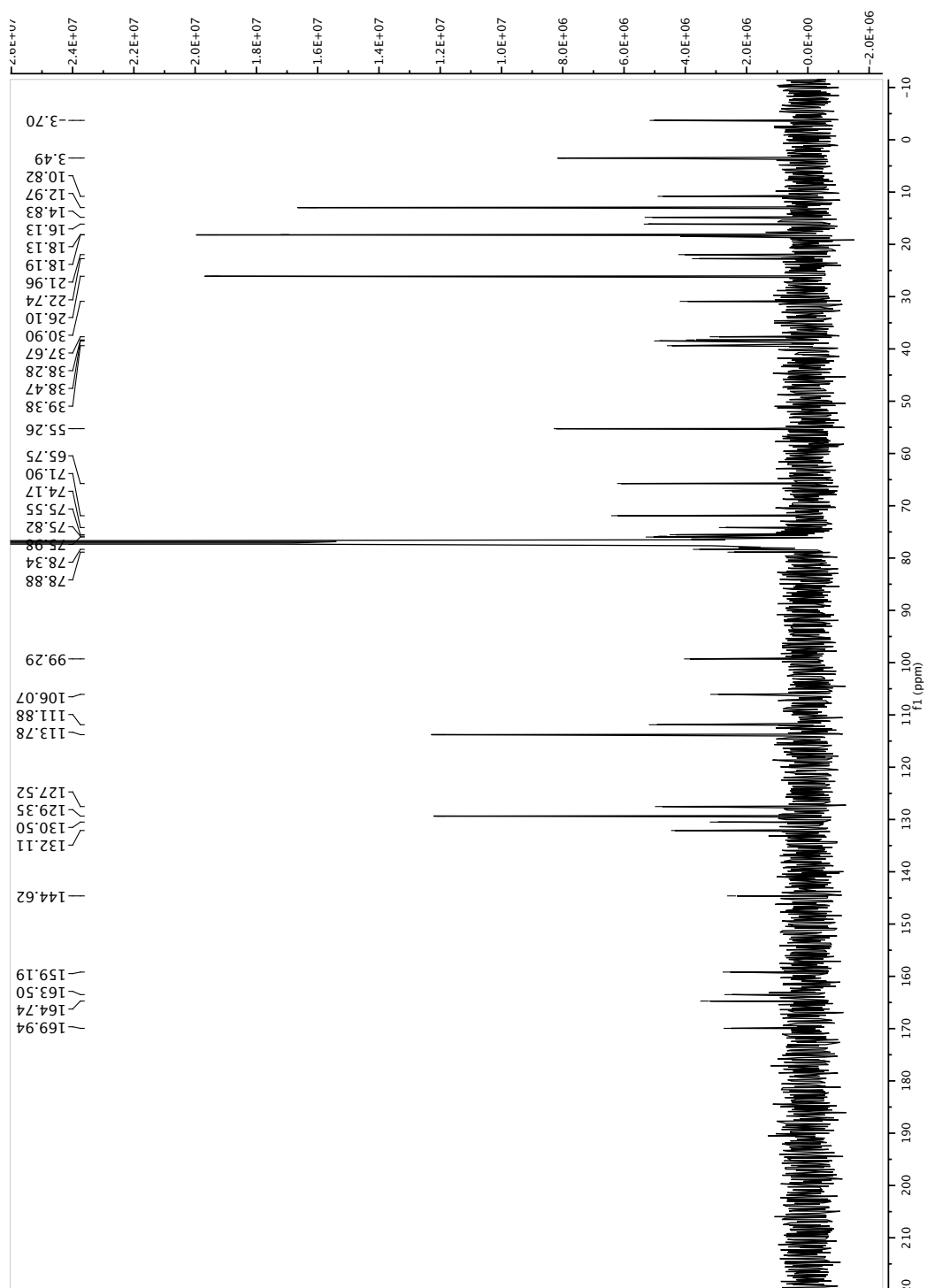
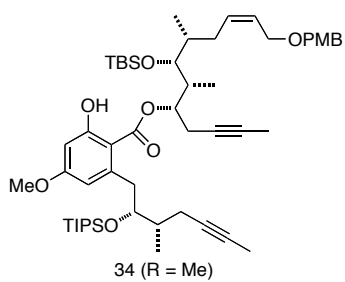
^{13}C NMR (100 MHz, CDCl_3)



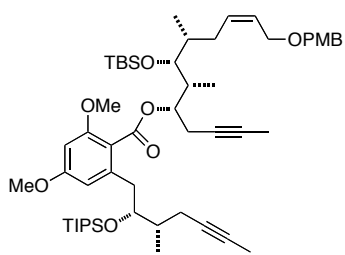
34 (R = Me)



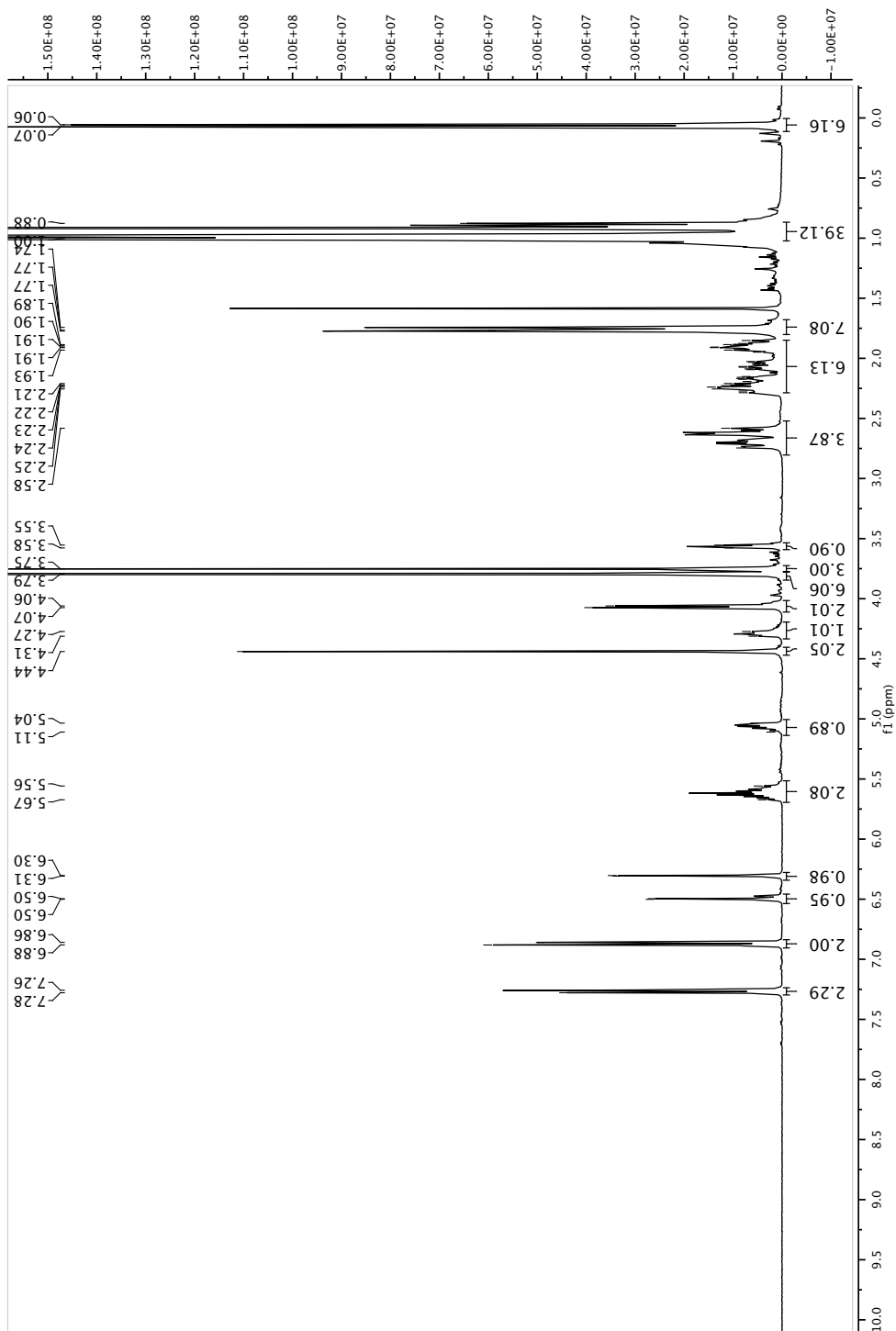
^{13}C NMR (100 MHz, CDCl_3)



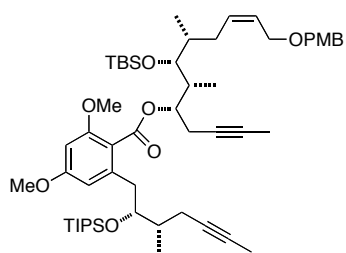
^1H NMR (400 MHz, CDCl_3)



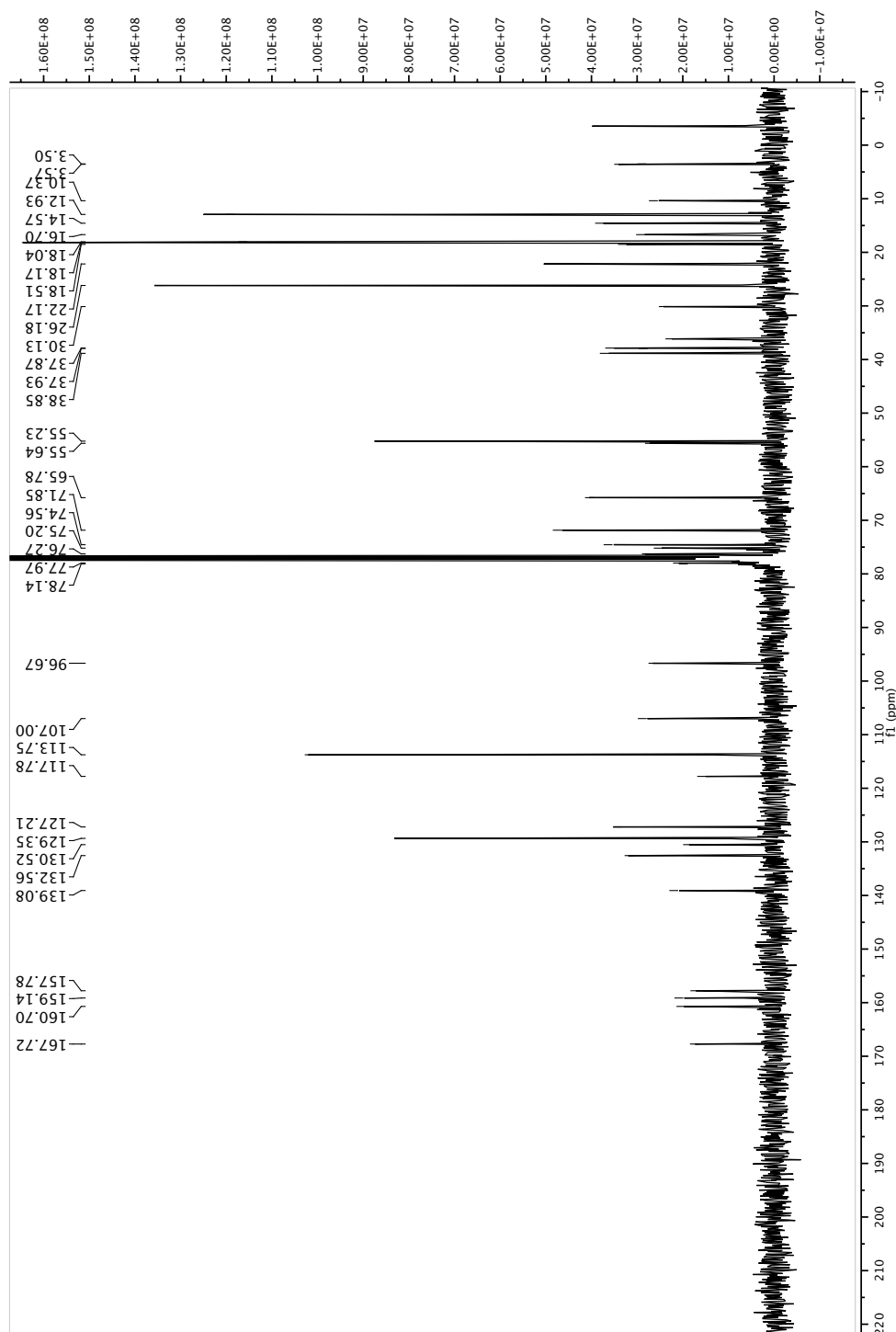
Intermediate between structures **34** and **36**



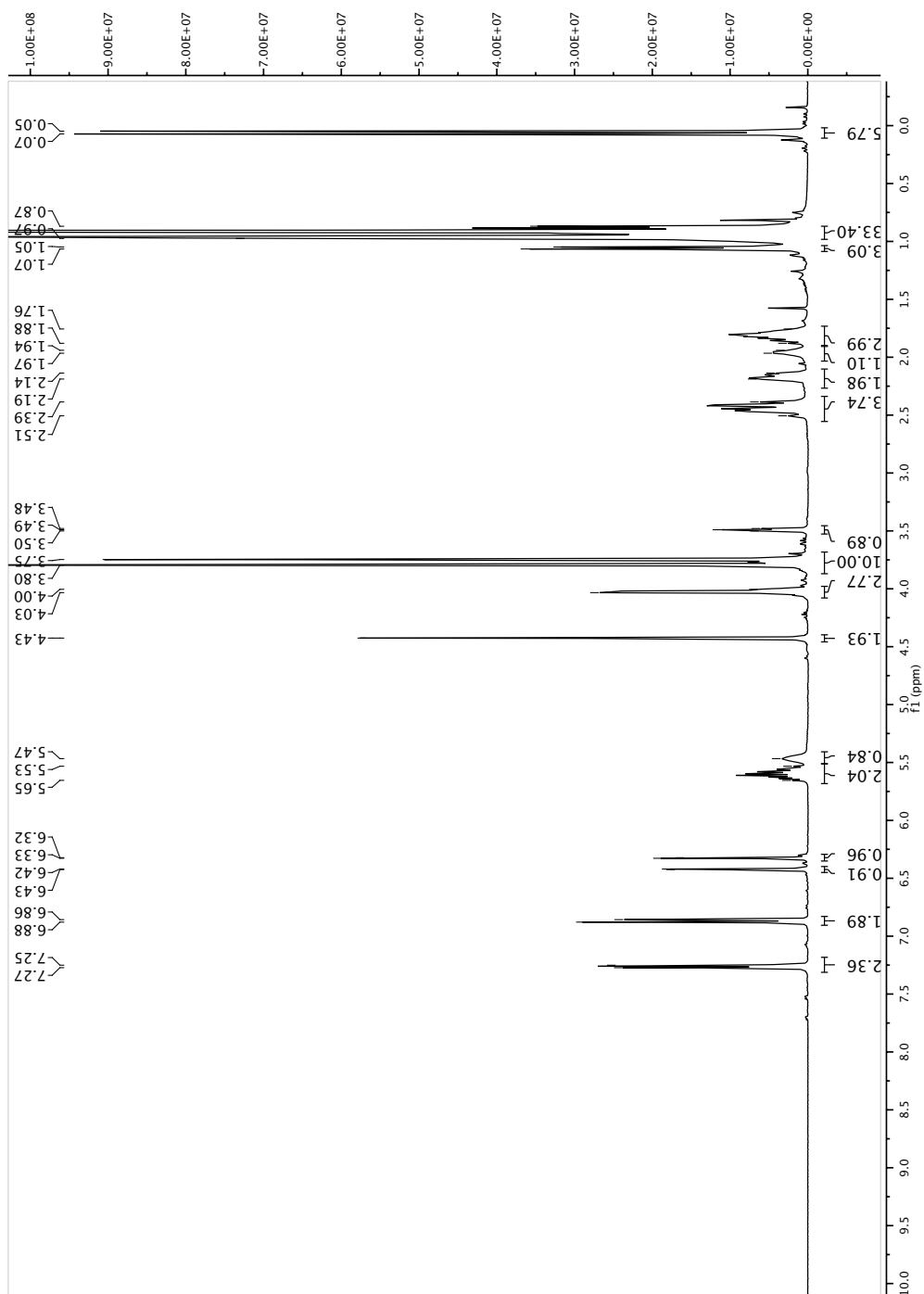
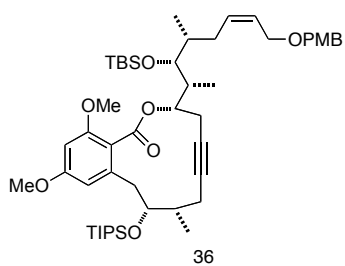
^{13}C NMR (100 MHz, CDCl_3)



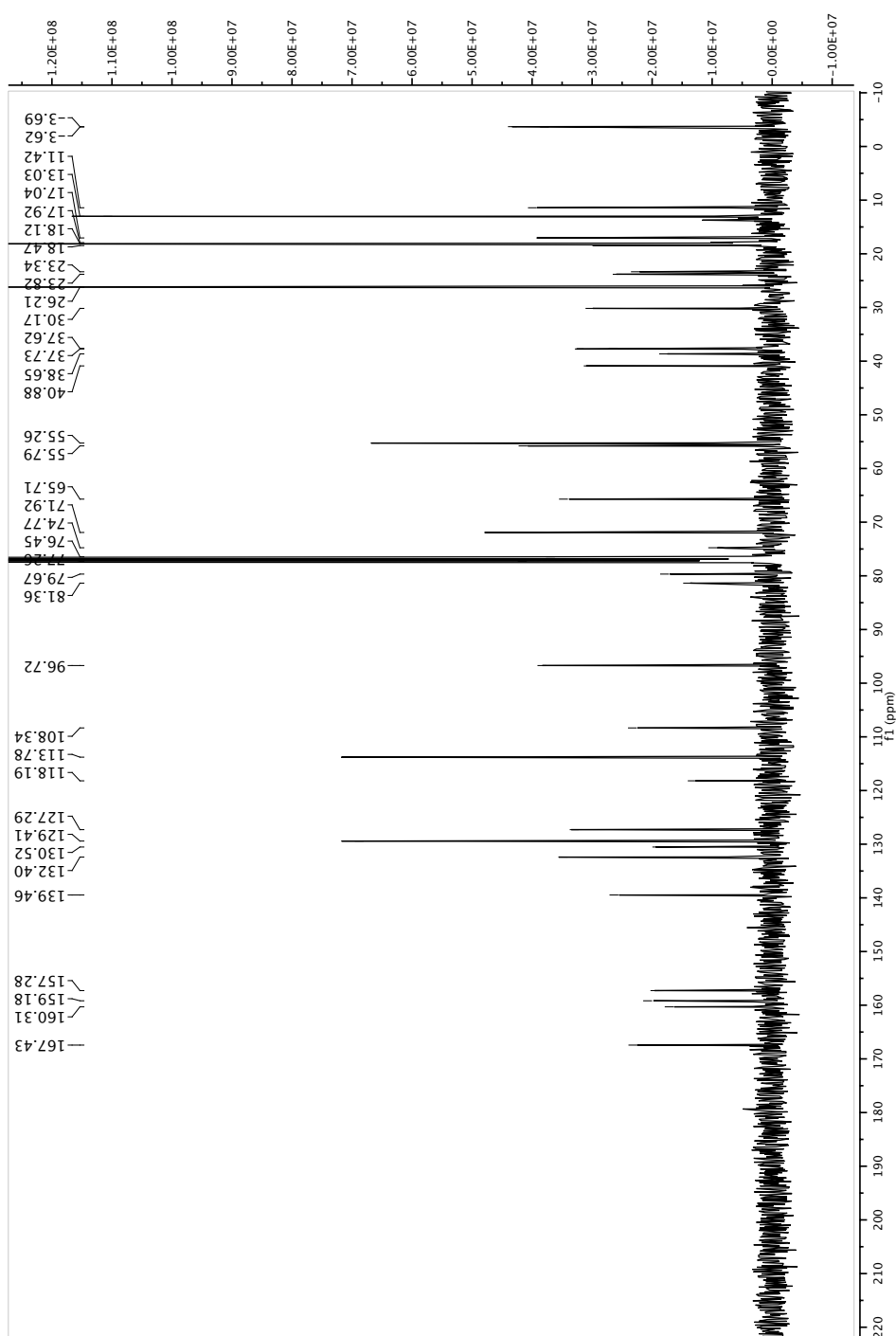
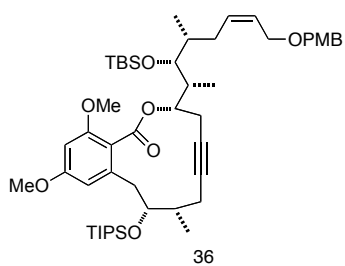
Intermediate between structures **34** and **36**



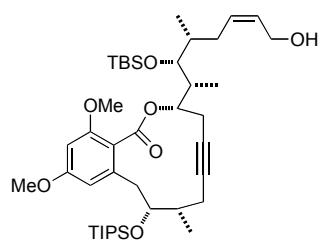
^1H NMR (400 MHz, CDCl_3)



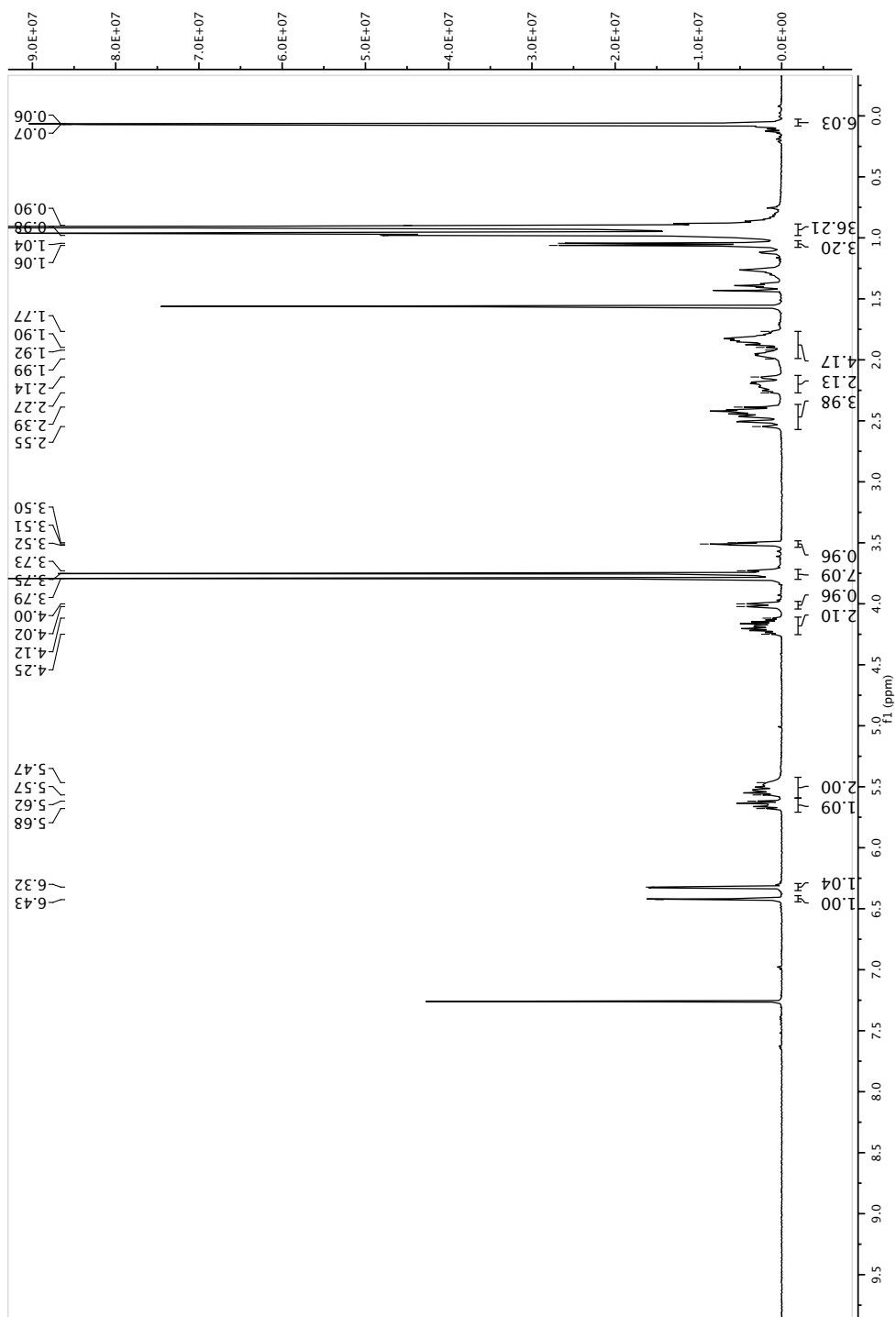
^{13}C NMR (100 MHz, CDCl_3)



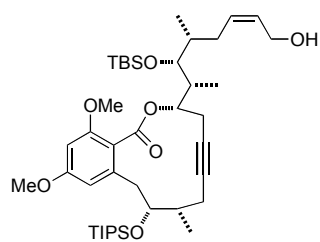
^1H NMR (400 MHz, CDCl_3)



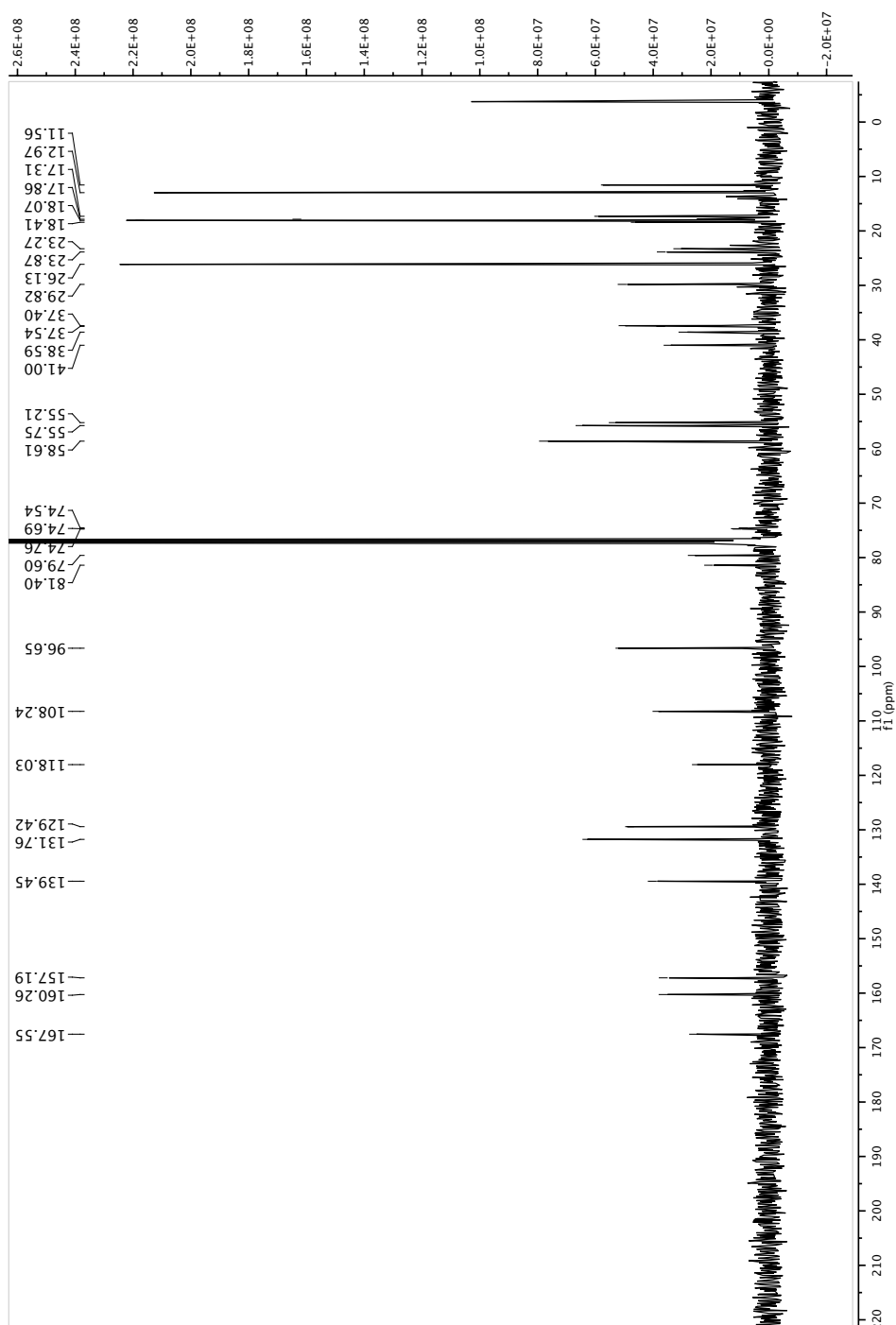
38



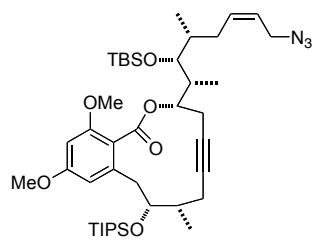
^{13}C NMR (100 MHz, CDCl_3)



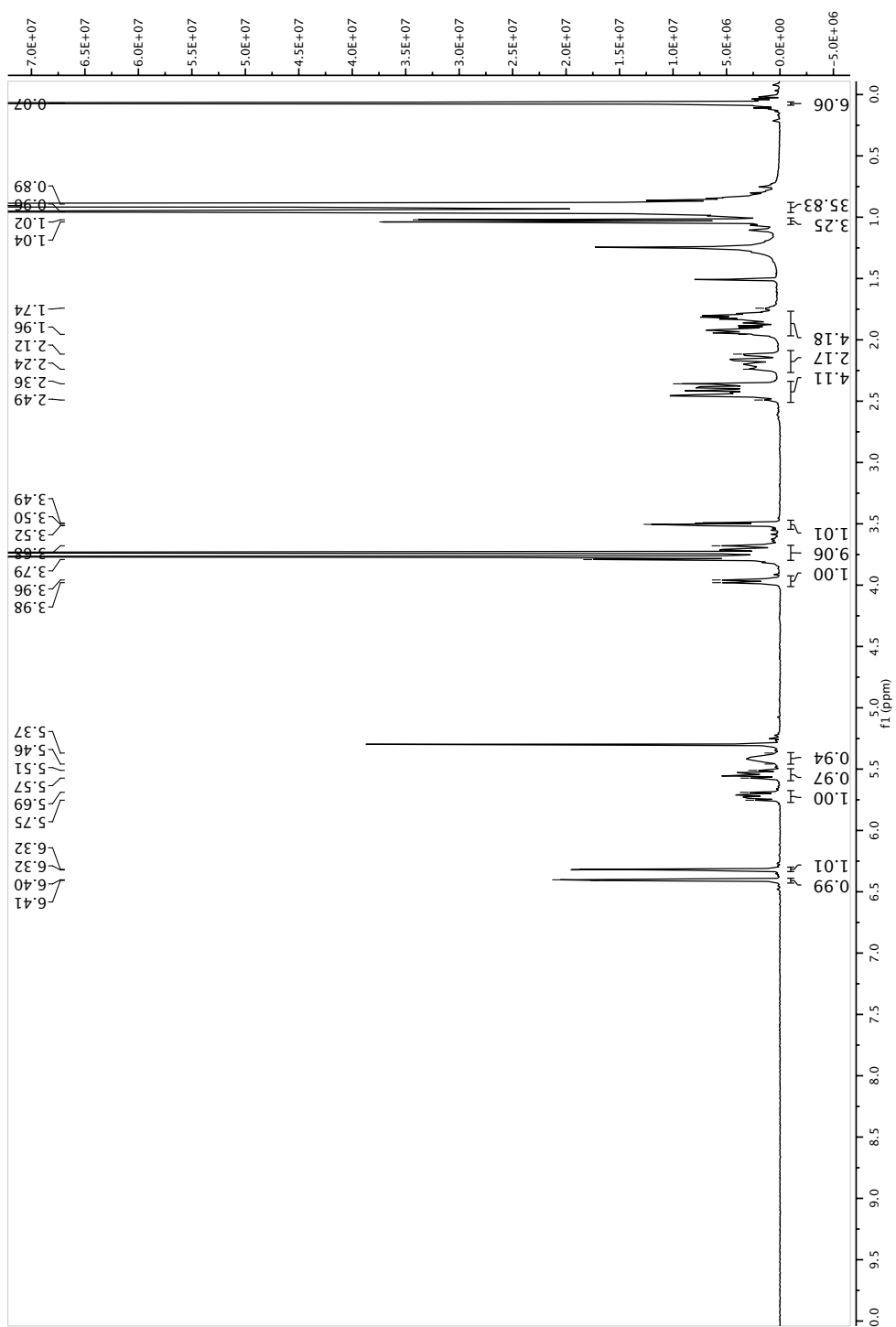
38



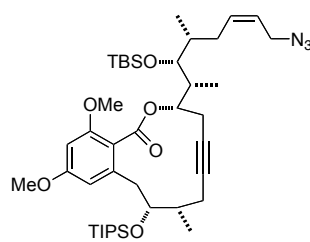
^1H NMR (400 MHz, CD_2Cl_2)



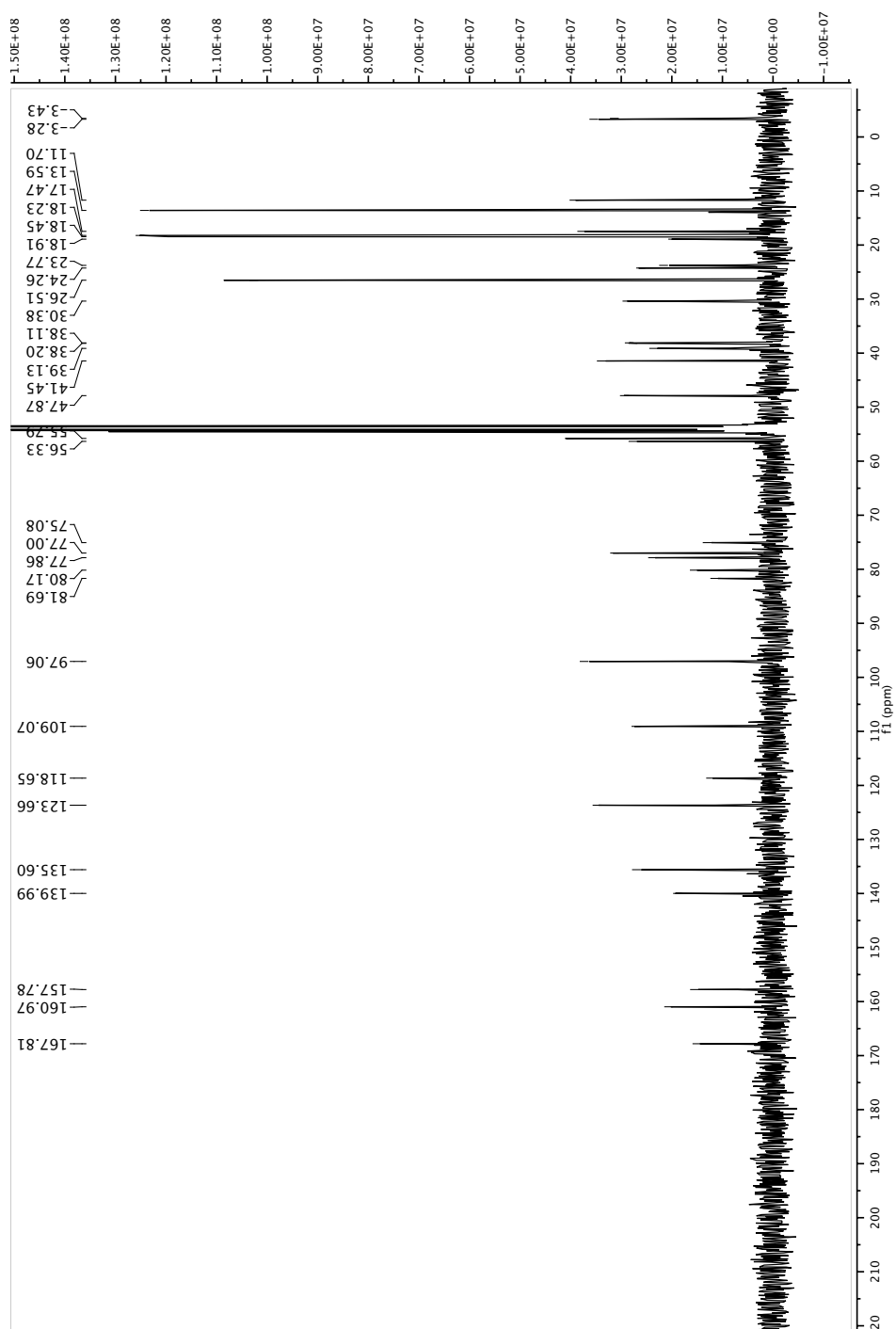
Intermediate between structures **38** and **39**



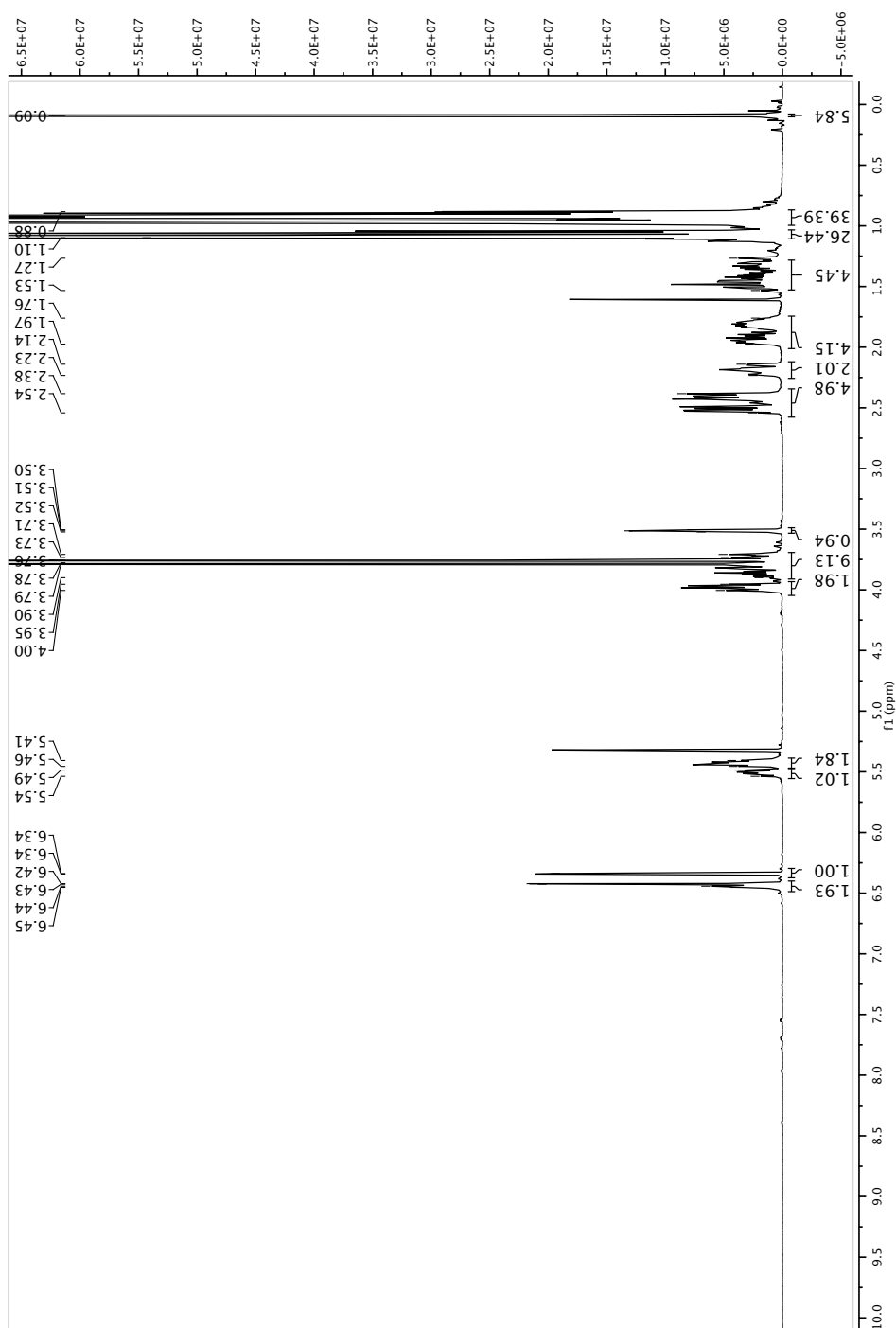
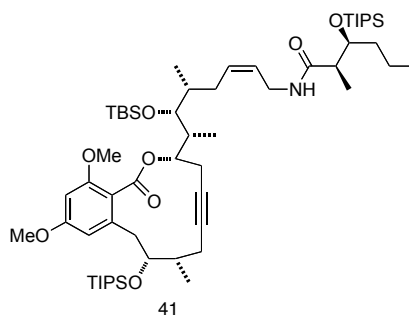
^{13}C NMR (100 MHz, CD_2Cl_2)



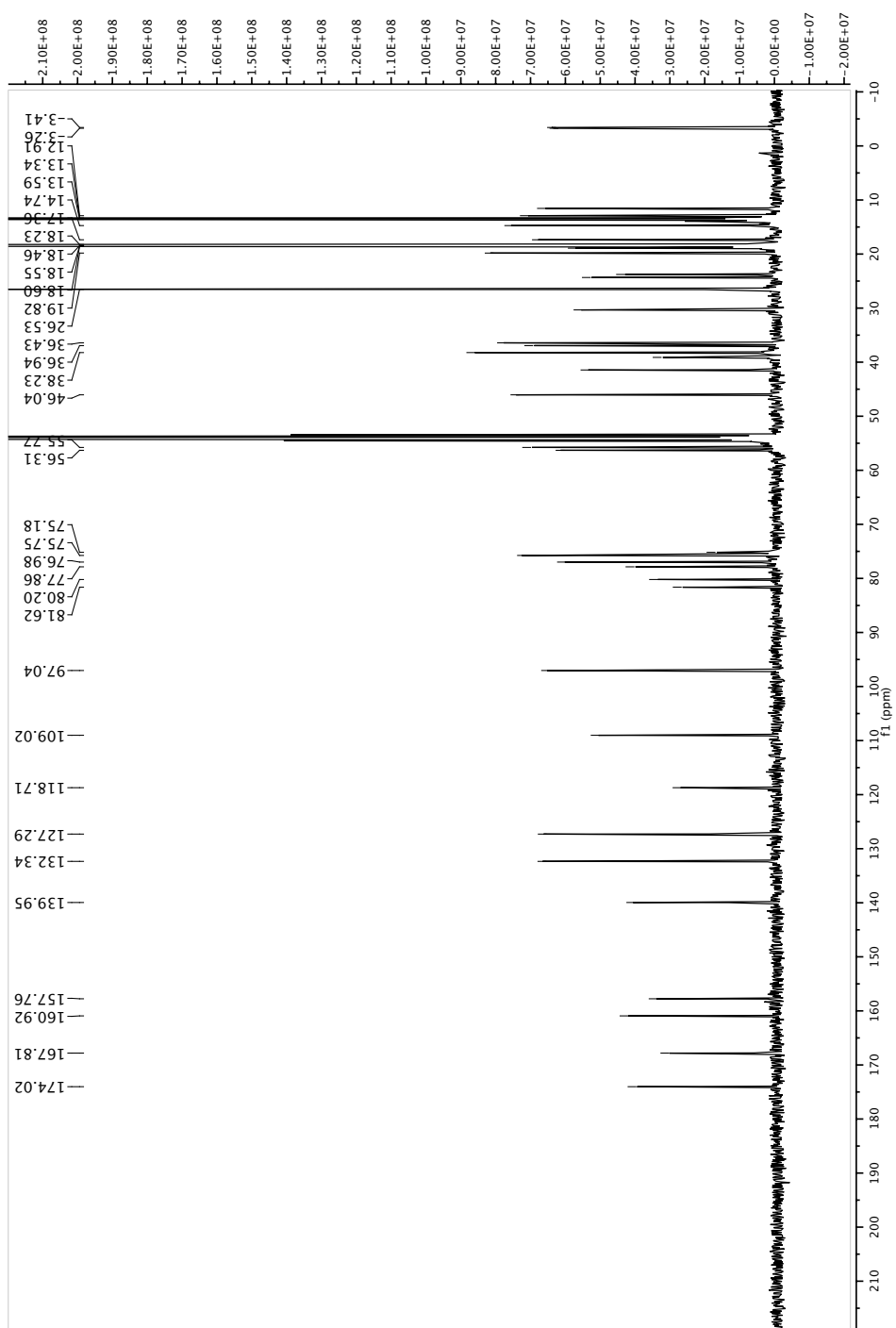
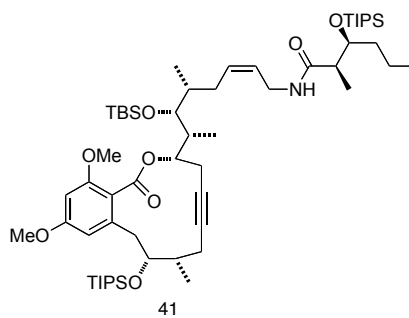
Intermediate between structures **38** and **39**



^1H NMR (500 MHz, CD_2Cl_2)

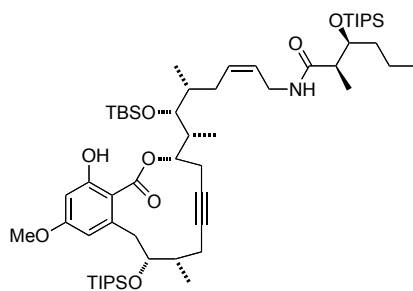


^{13}C NMR (125 MHz, CD_2Cl_2)

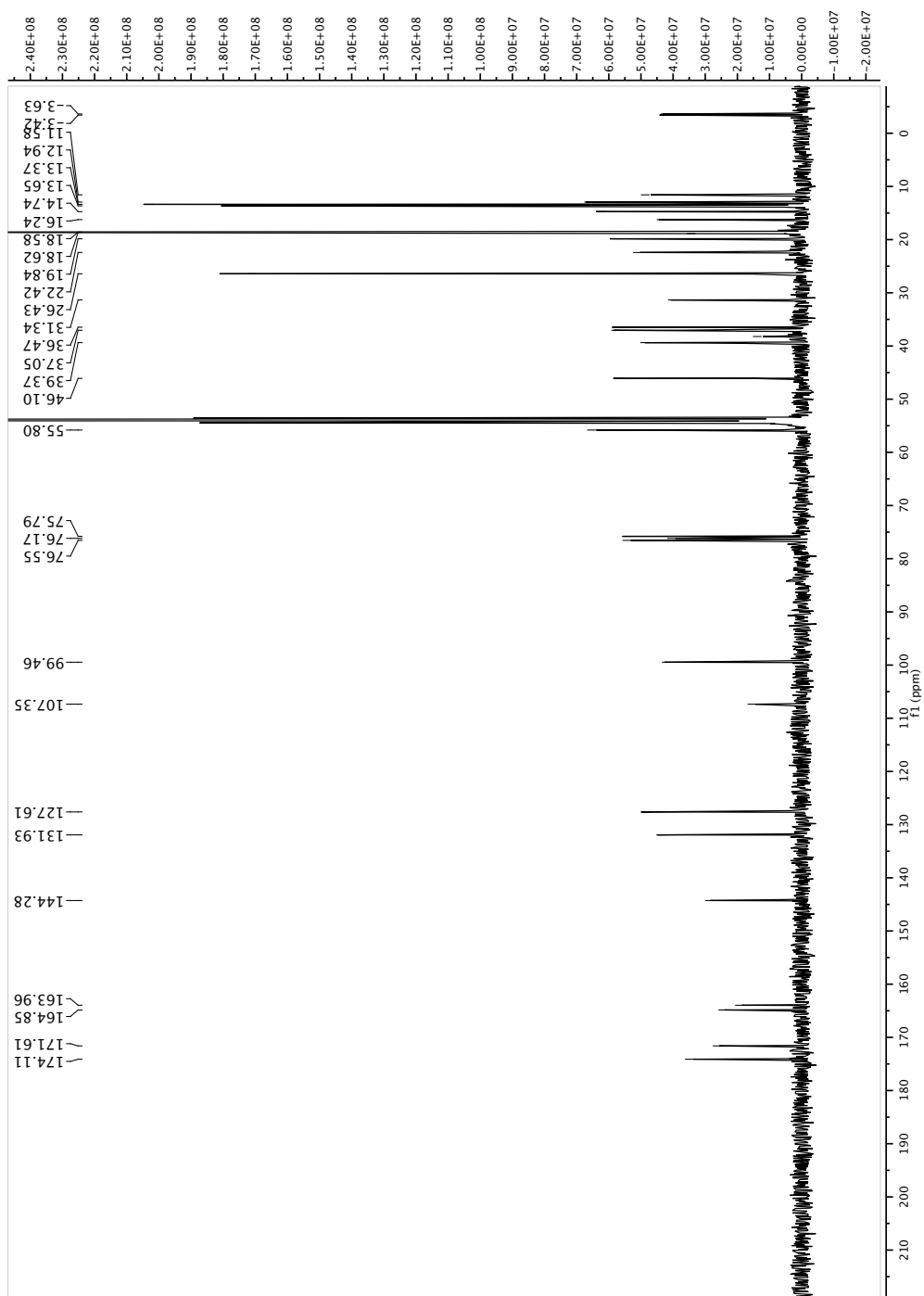


Chemical structure of compound 10, showing a complex molecule with a substituted benzene ring, a lactone, and a long chain with multiple functional groups including a TBSO group, a TIPS group, and a TIPS group.

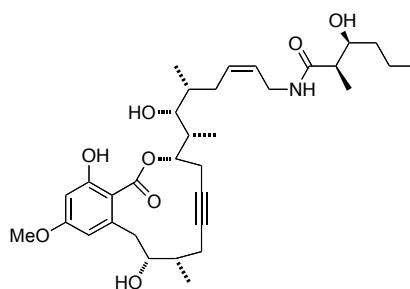
^{13}C NMR (125 MHz, CD_2Cl_2)



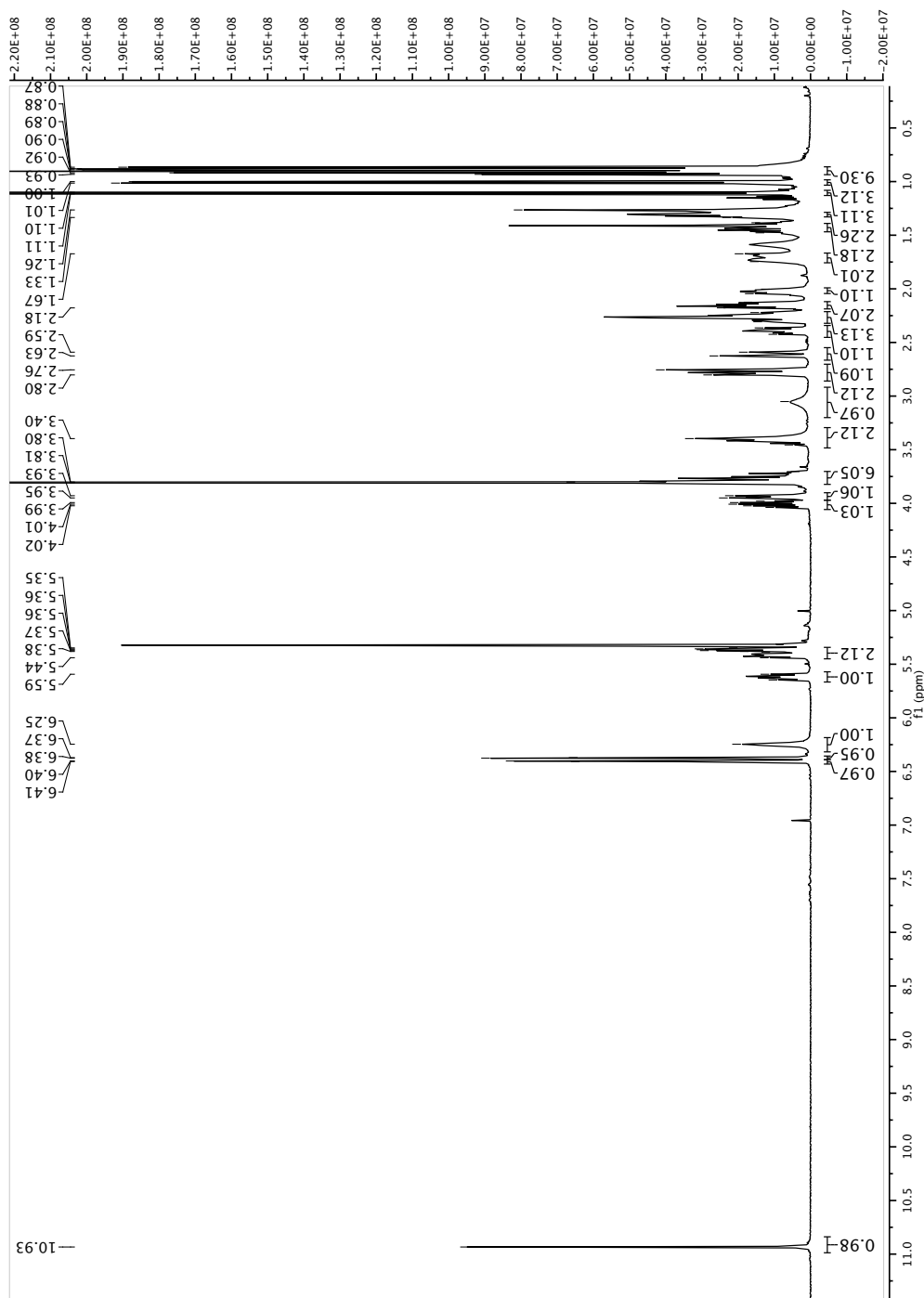
Intermediate between structures **41** and **42**



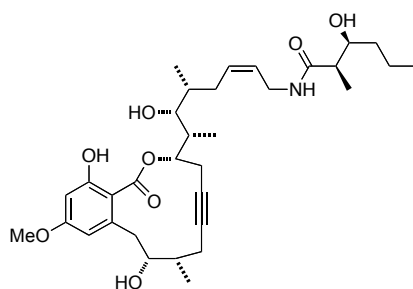
^1H NMR (500 MHz, CD_2Cl_2)



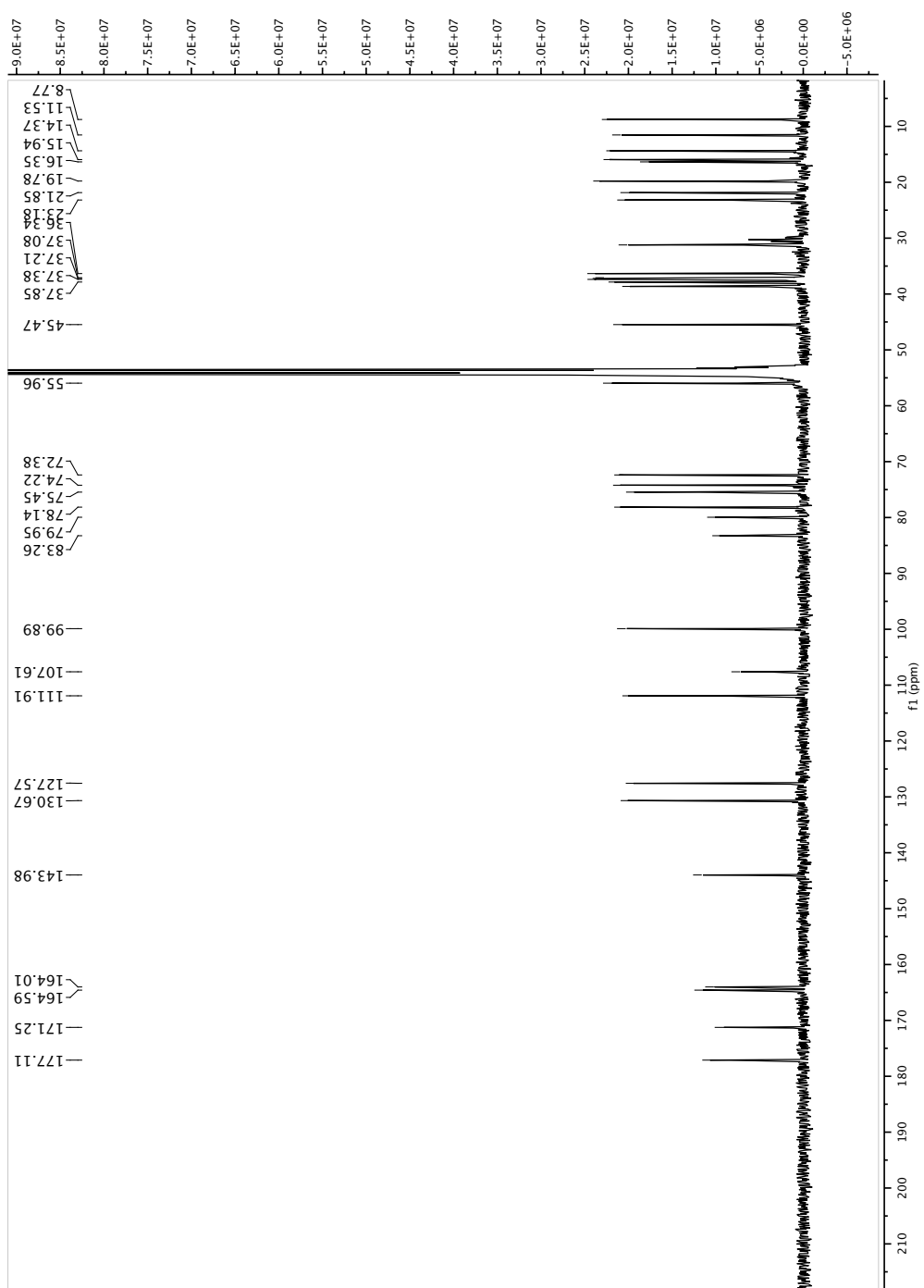
42



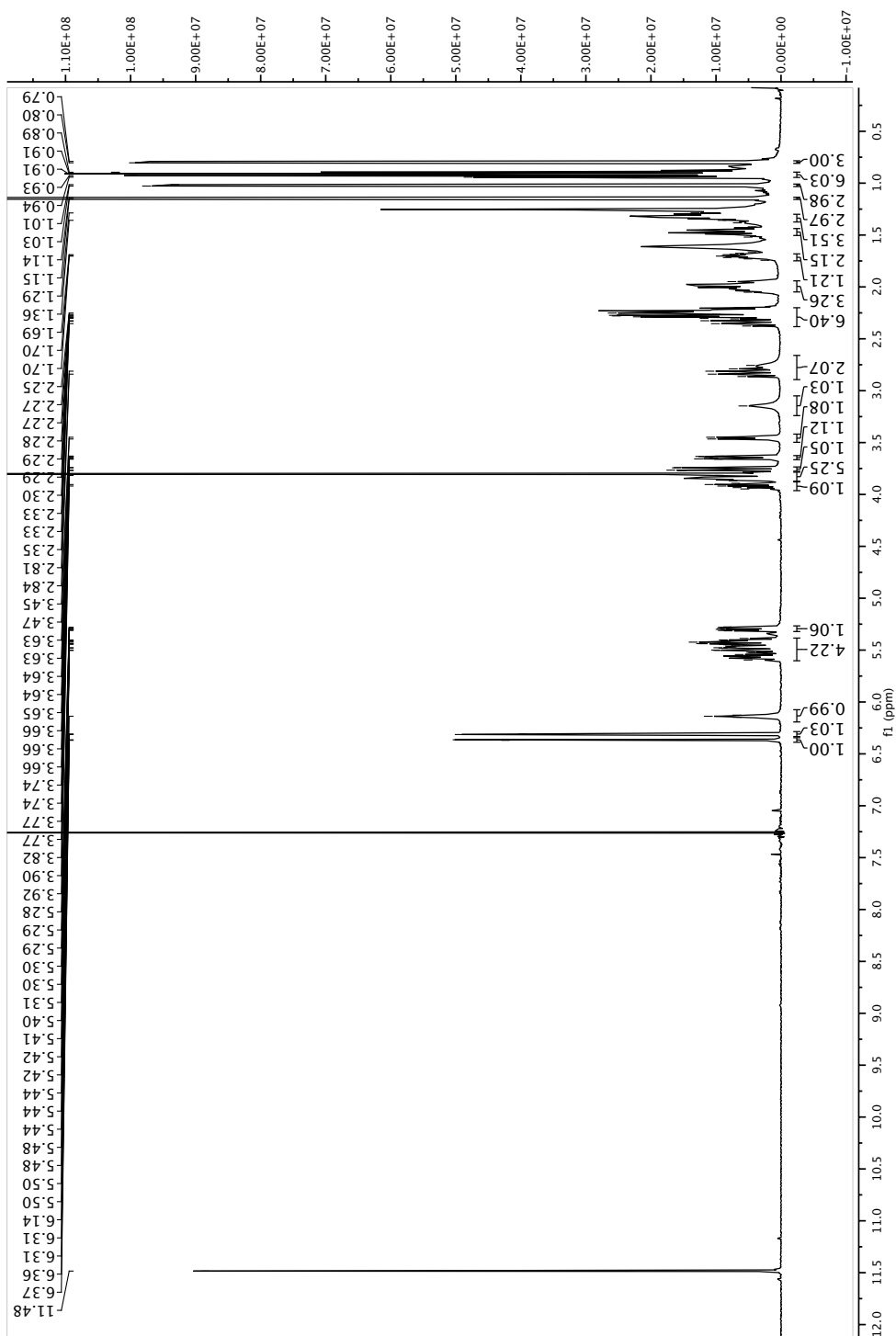
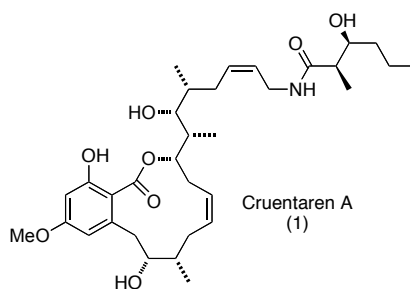
^{13}C NMR (125 MHz, CD_2Cl_2)



42



^1H NMR (500 MHz, CDCl_3)



^{13}C NMR (125 MHz, CDCl_3)

