

Electronic Supplementary Information #3

Spectra of NMR

Revisiting Secondary Interactions in Neighboring Group Participation, Exemplified by Reactivity Changes of Iminylium Intermediates

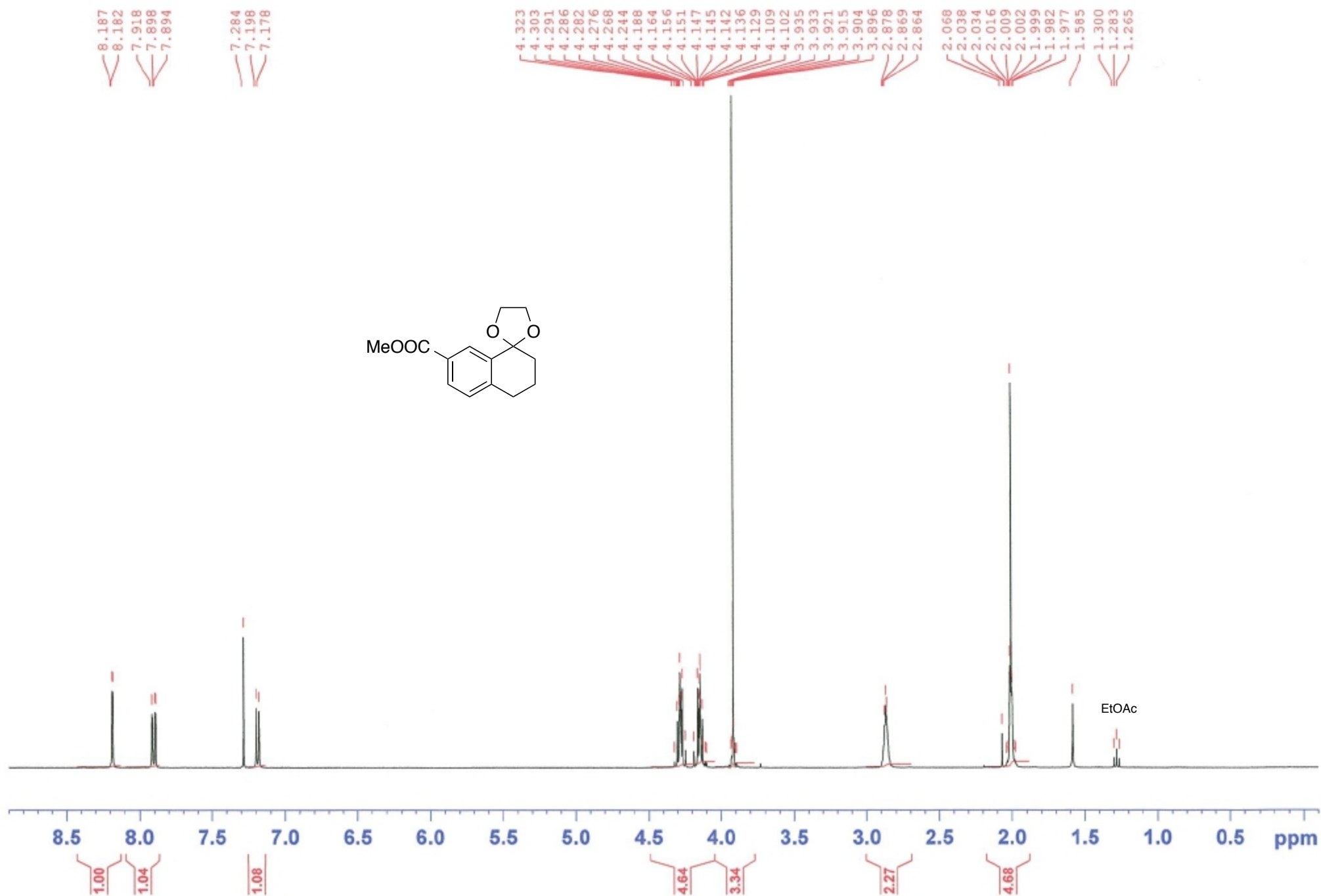
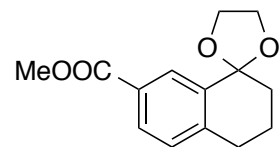
Yingtang Ning,¹ Tomoya Fukuda,¹ Hirotaka Ikeda,¹ Yuko Otani,¹ Masatoshi Kawahata,²
Kentaro Yamaguchi,² Tomohiko Ohwada^{*1}

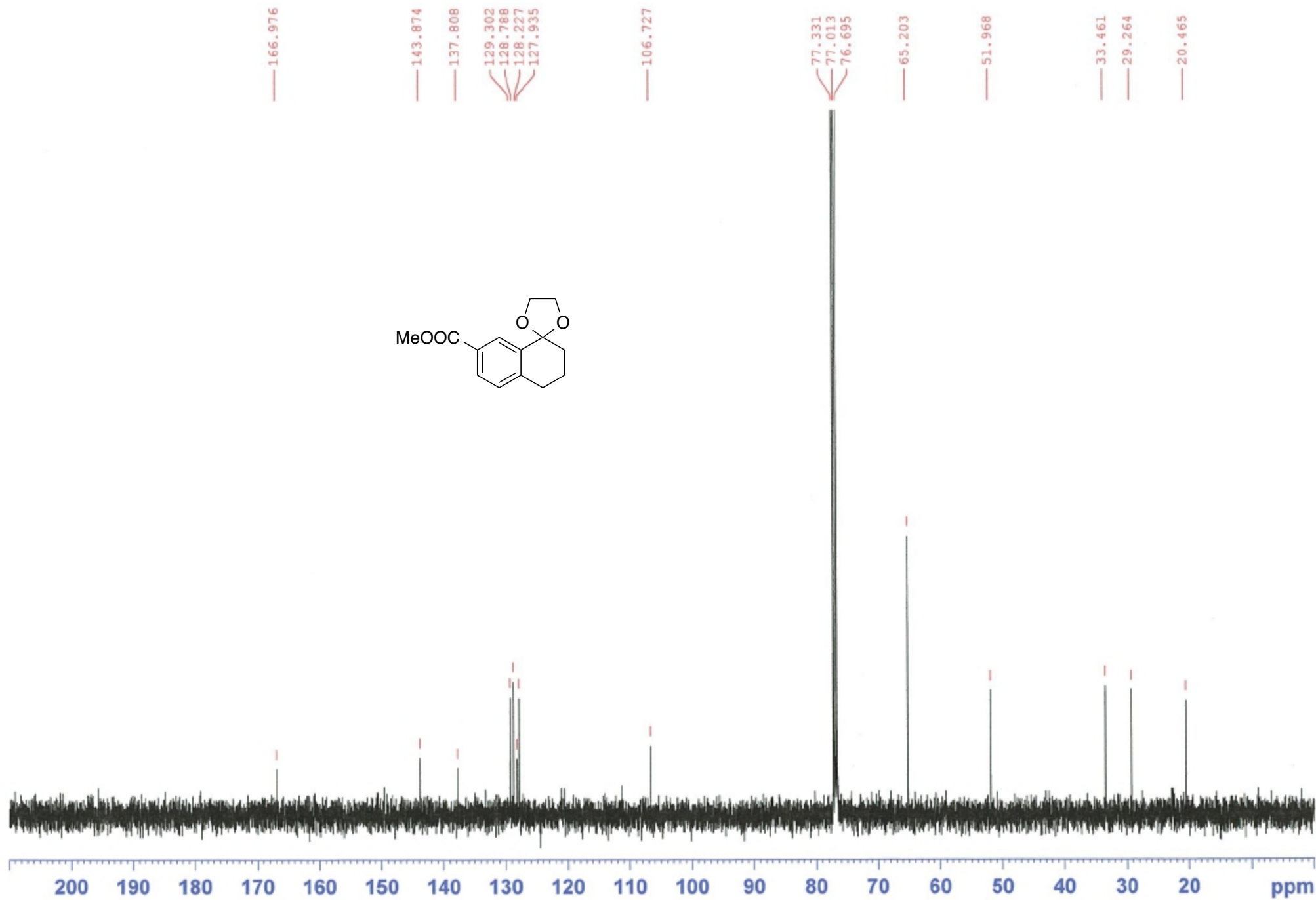
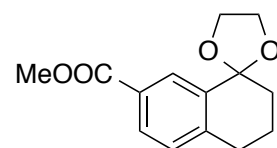
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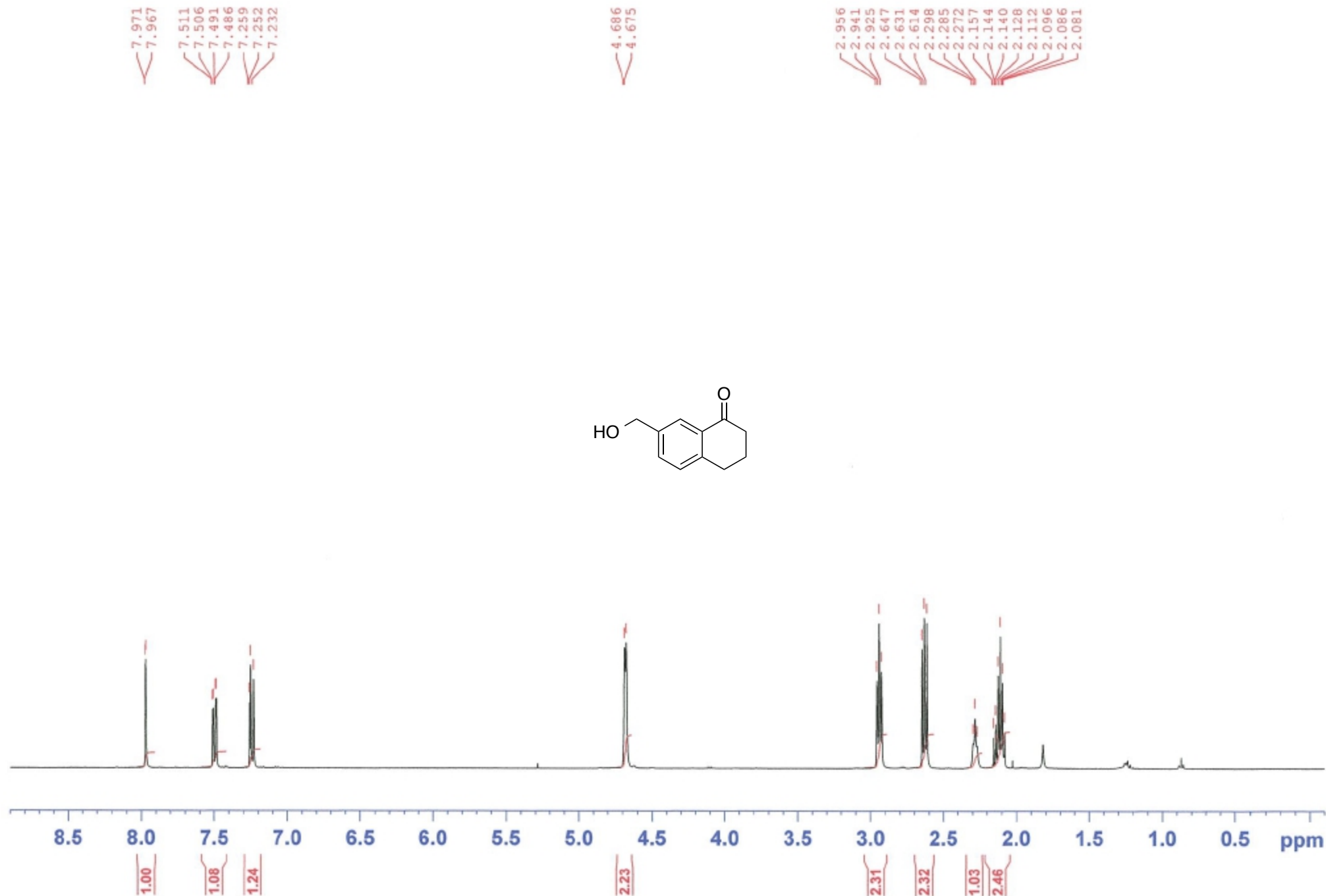
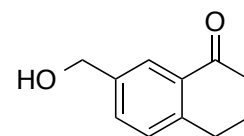
² Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University,
1314-1 Shido, Sanuki, Kagawa 769-2193, Japan

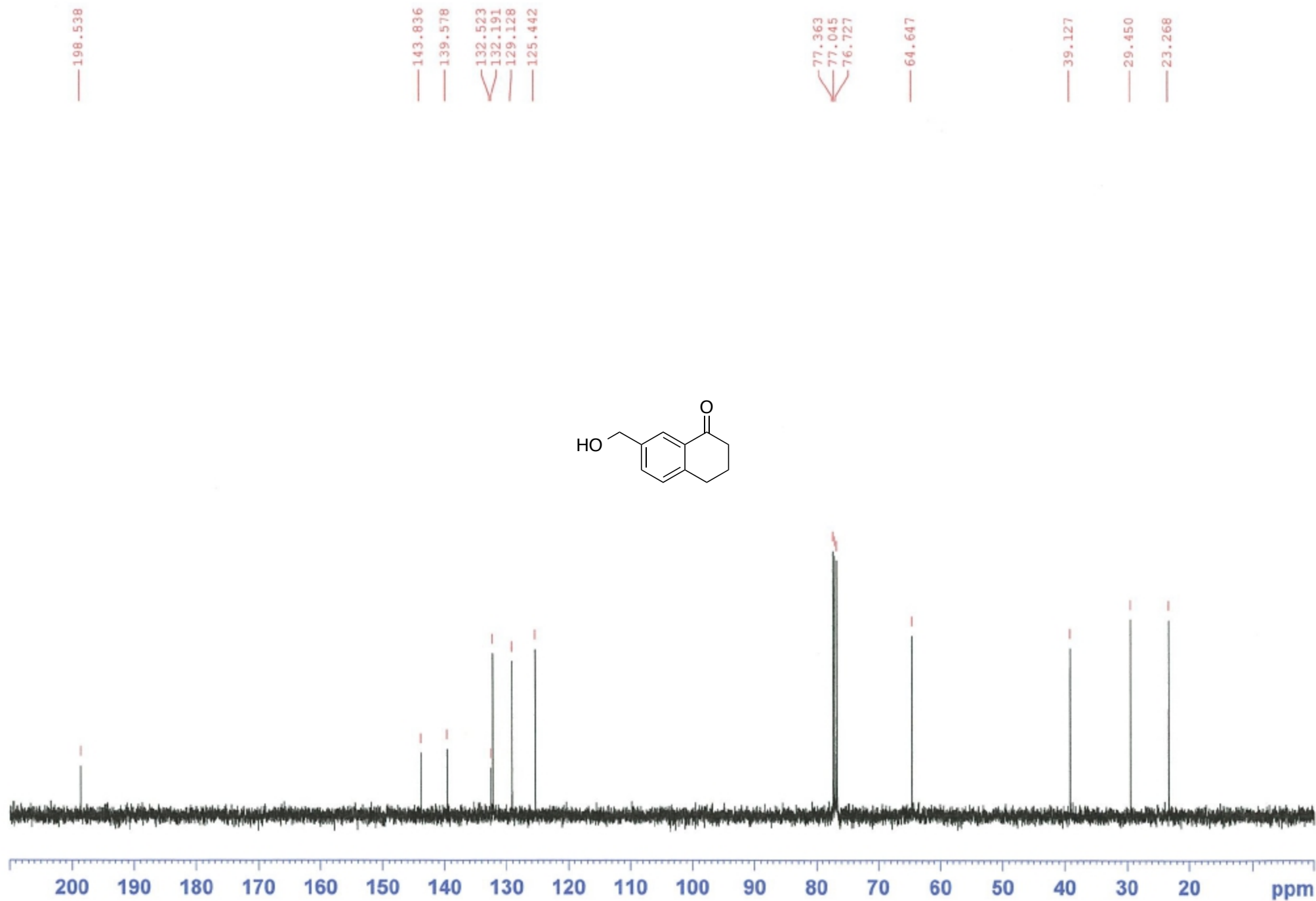
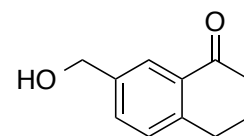
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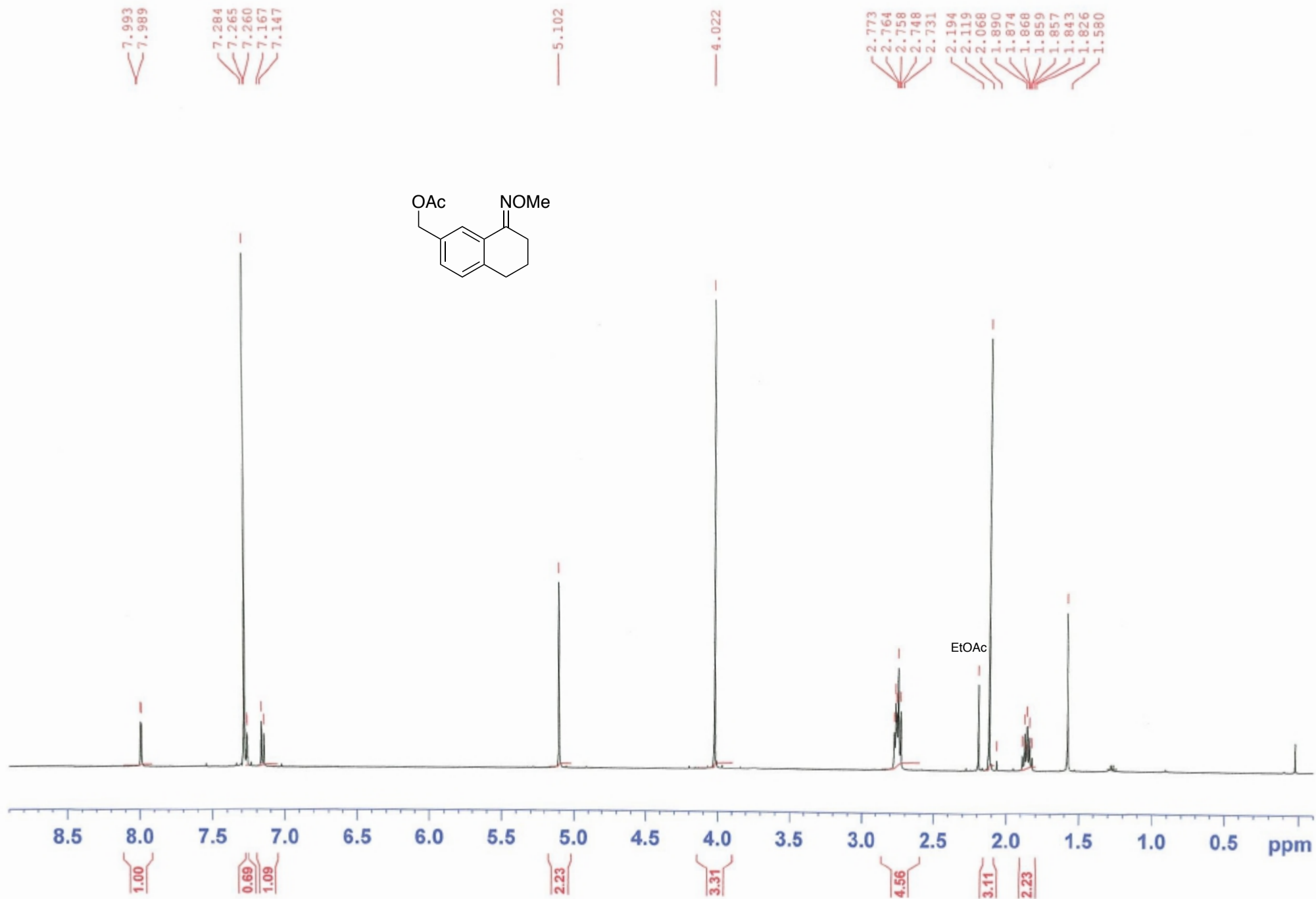
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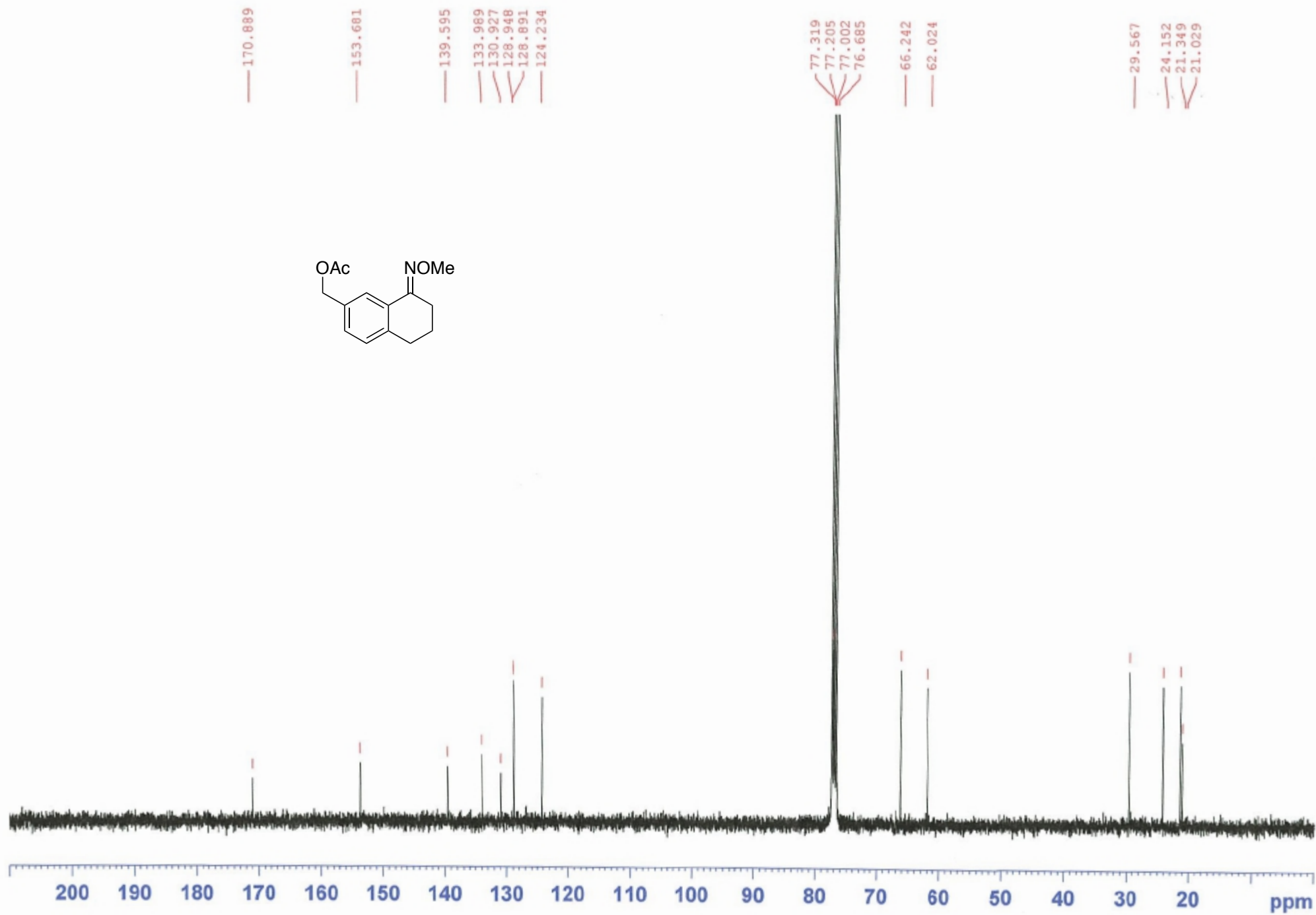
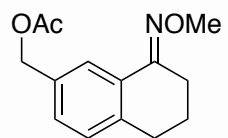


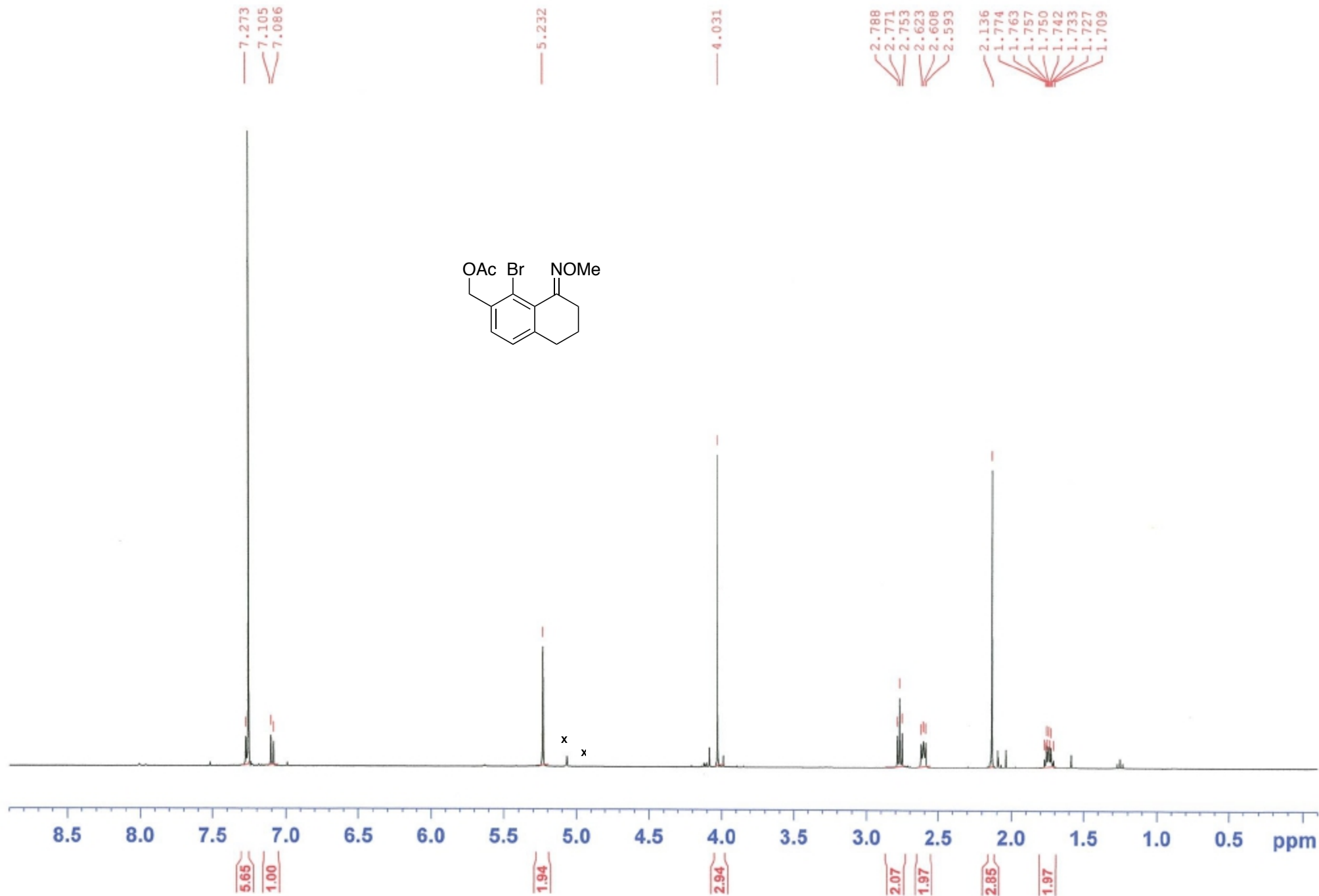


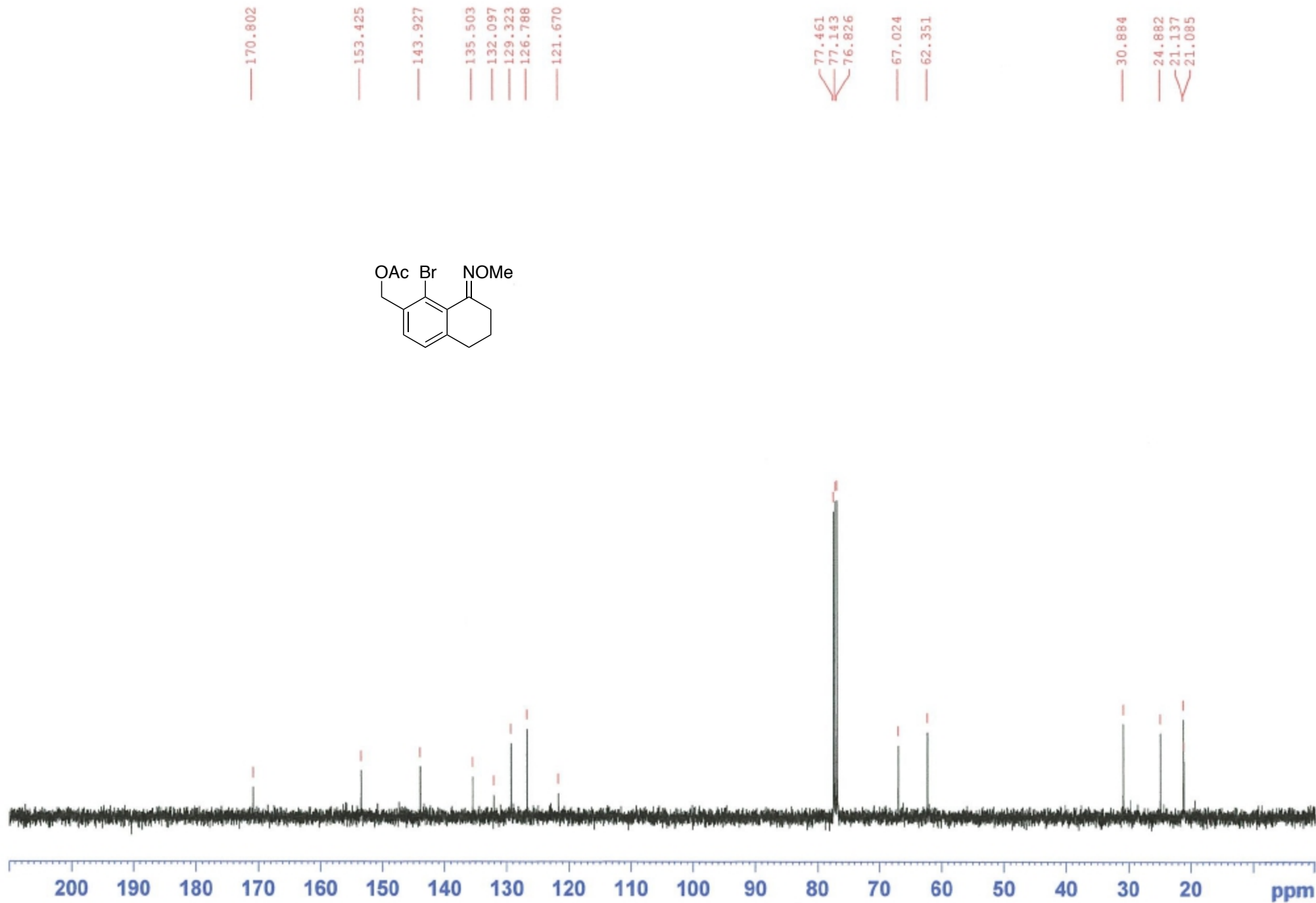
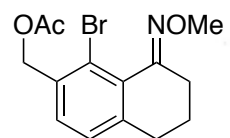


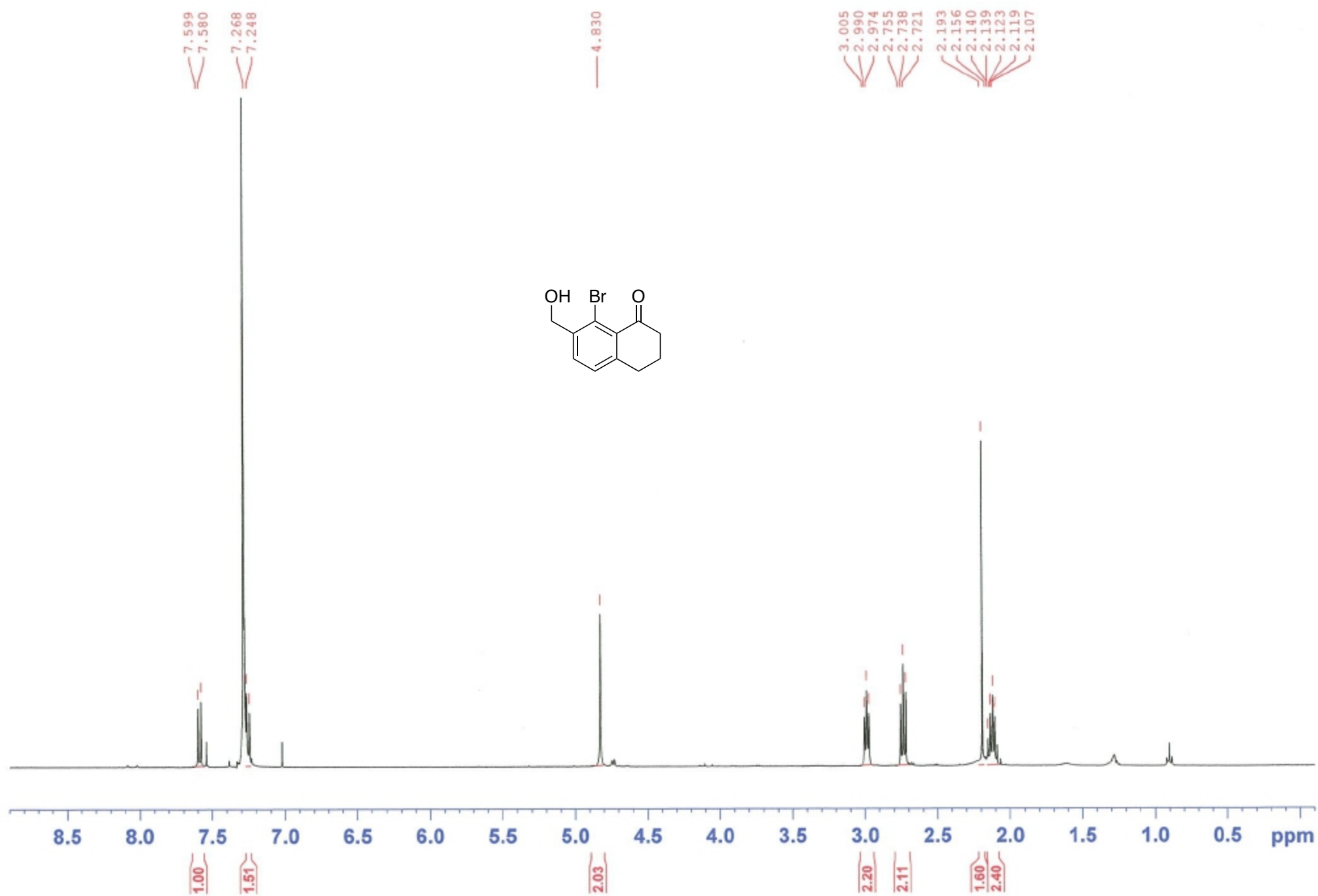
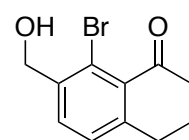


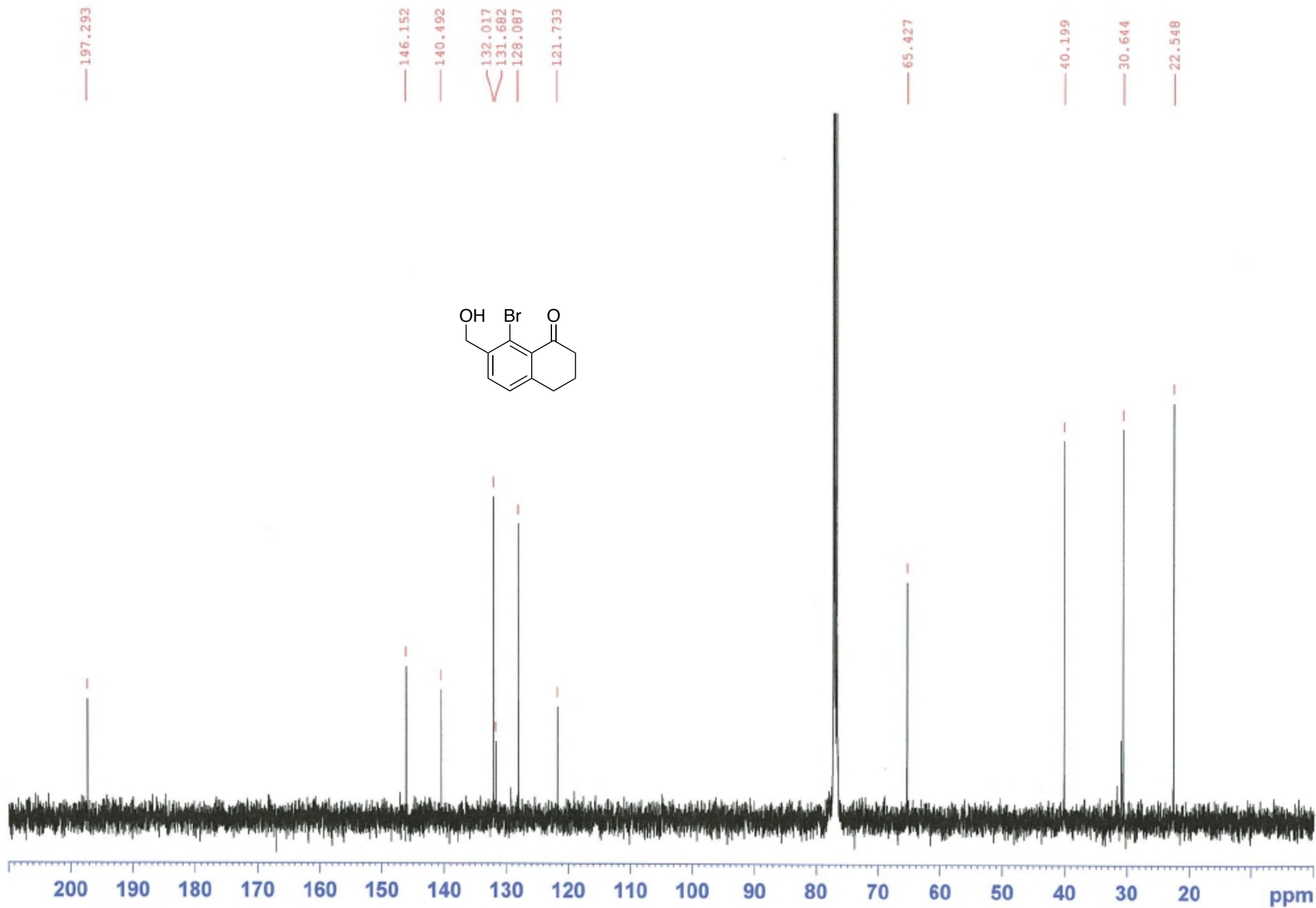
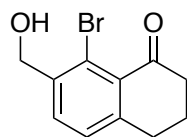


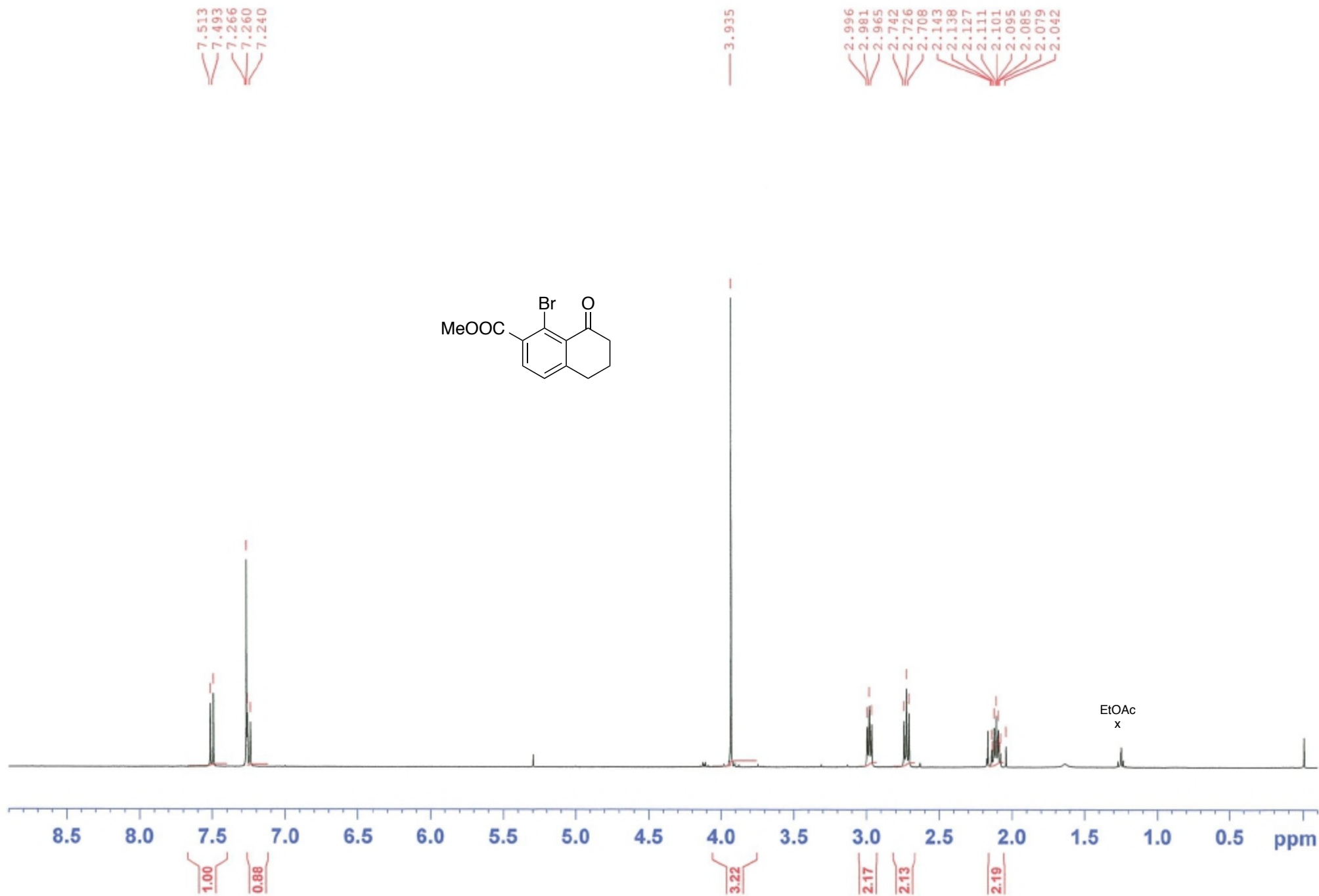
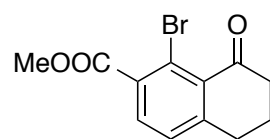


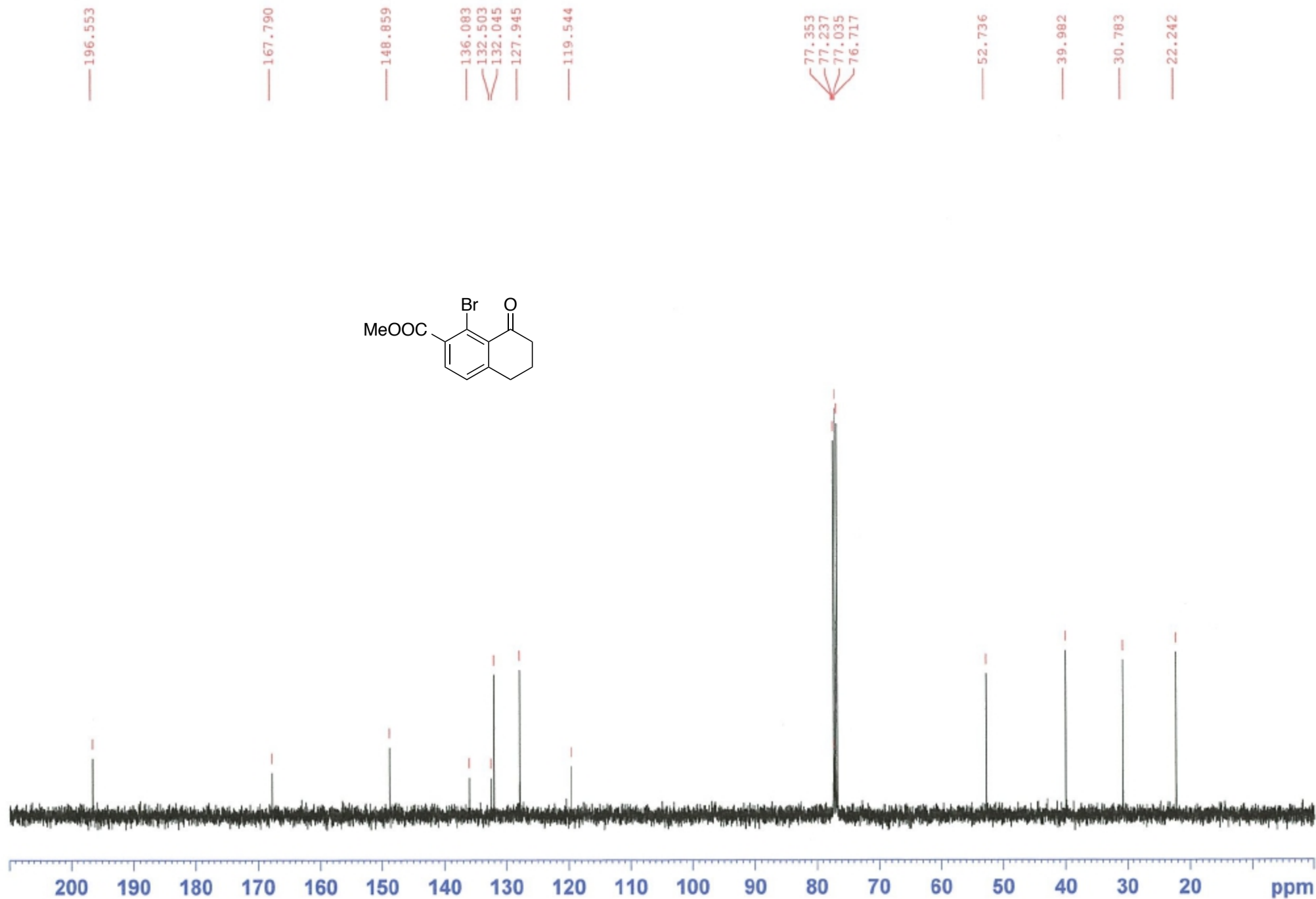
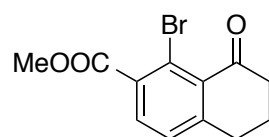


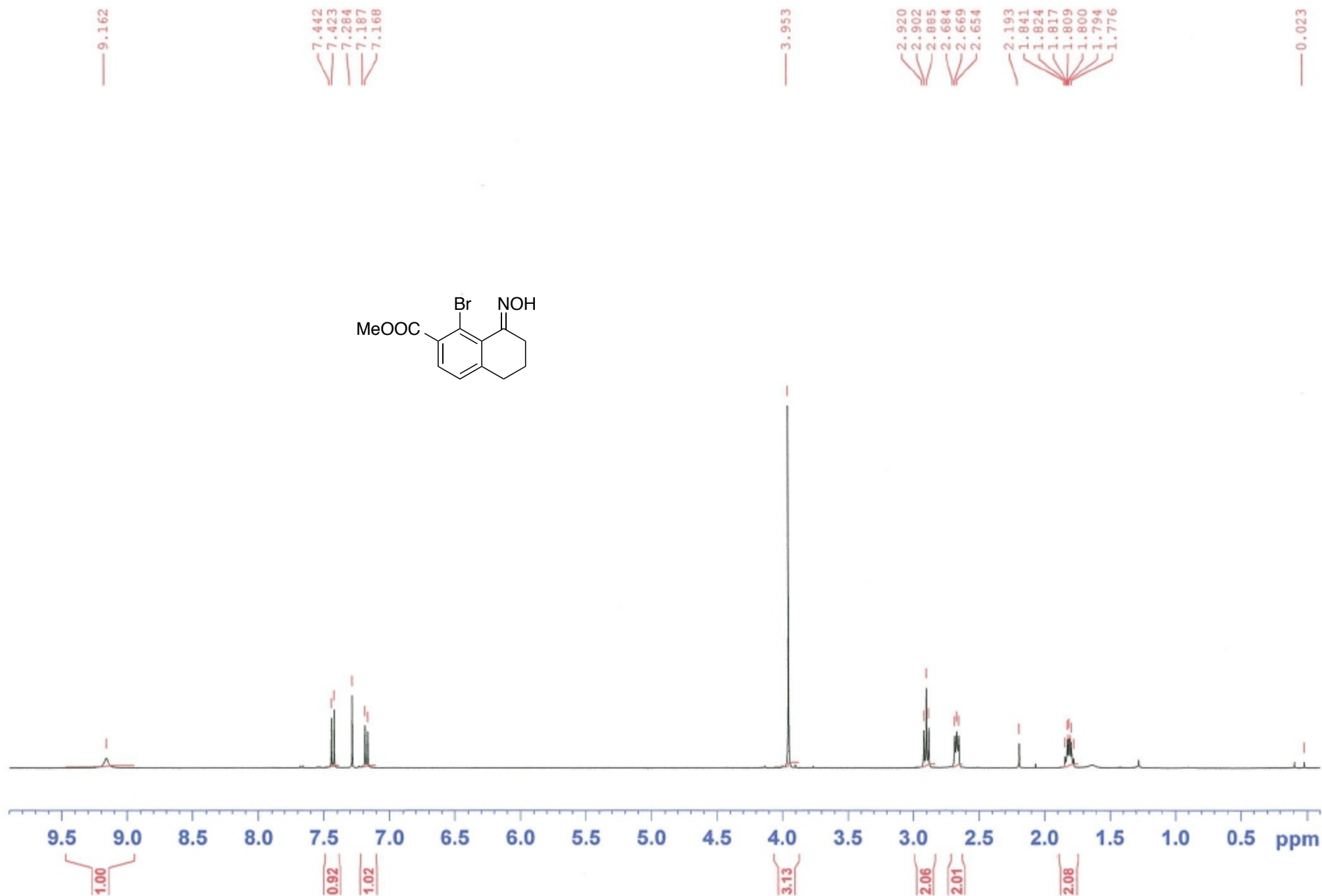
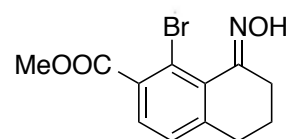


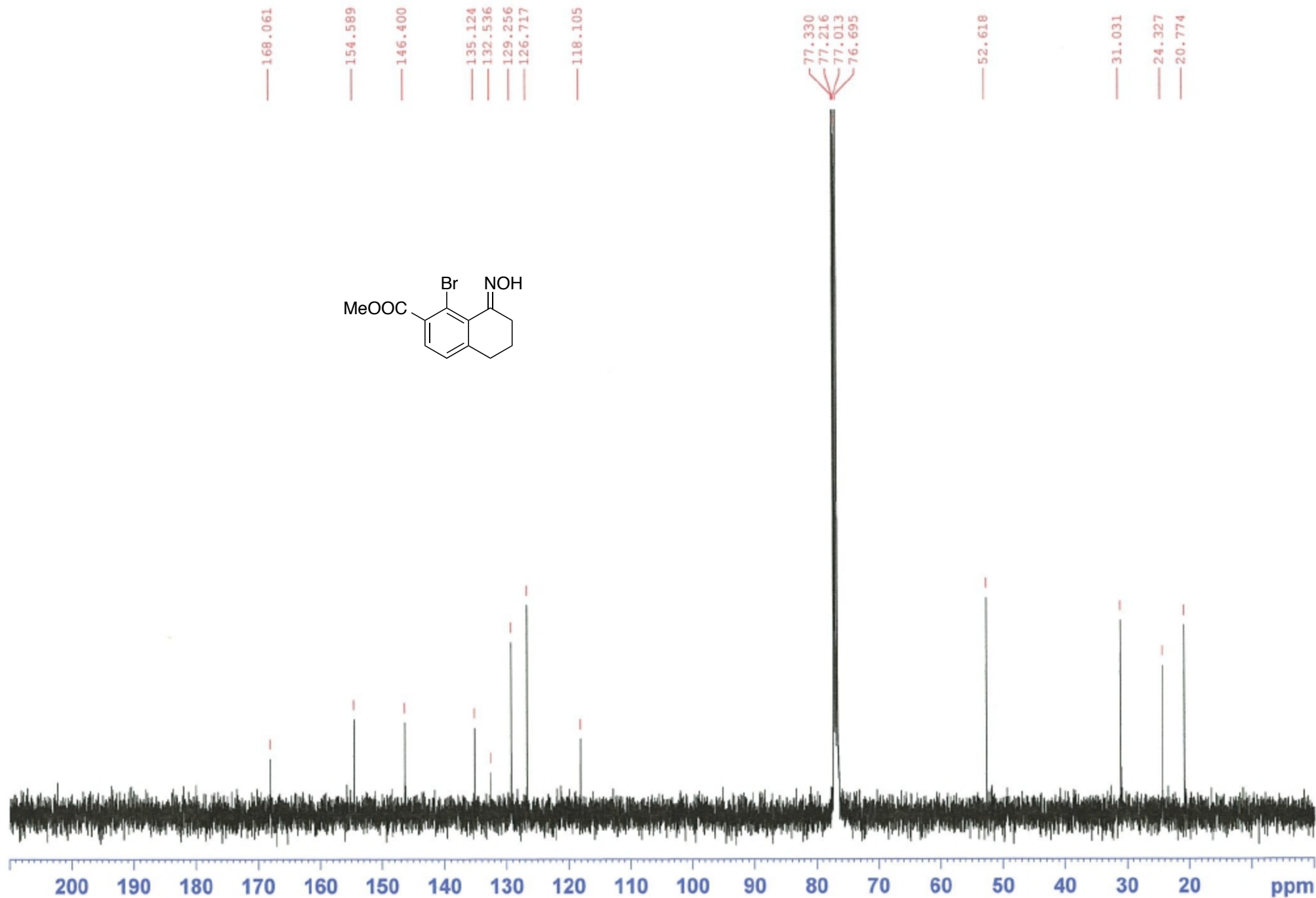
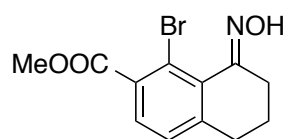


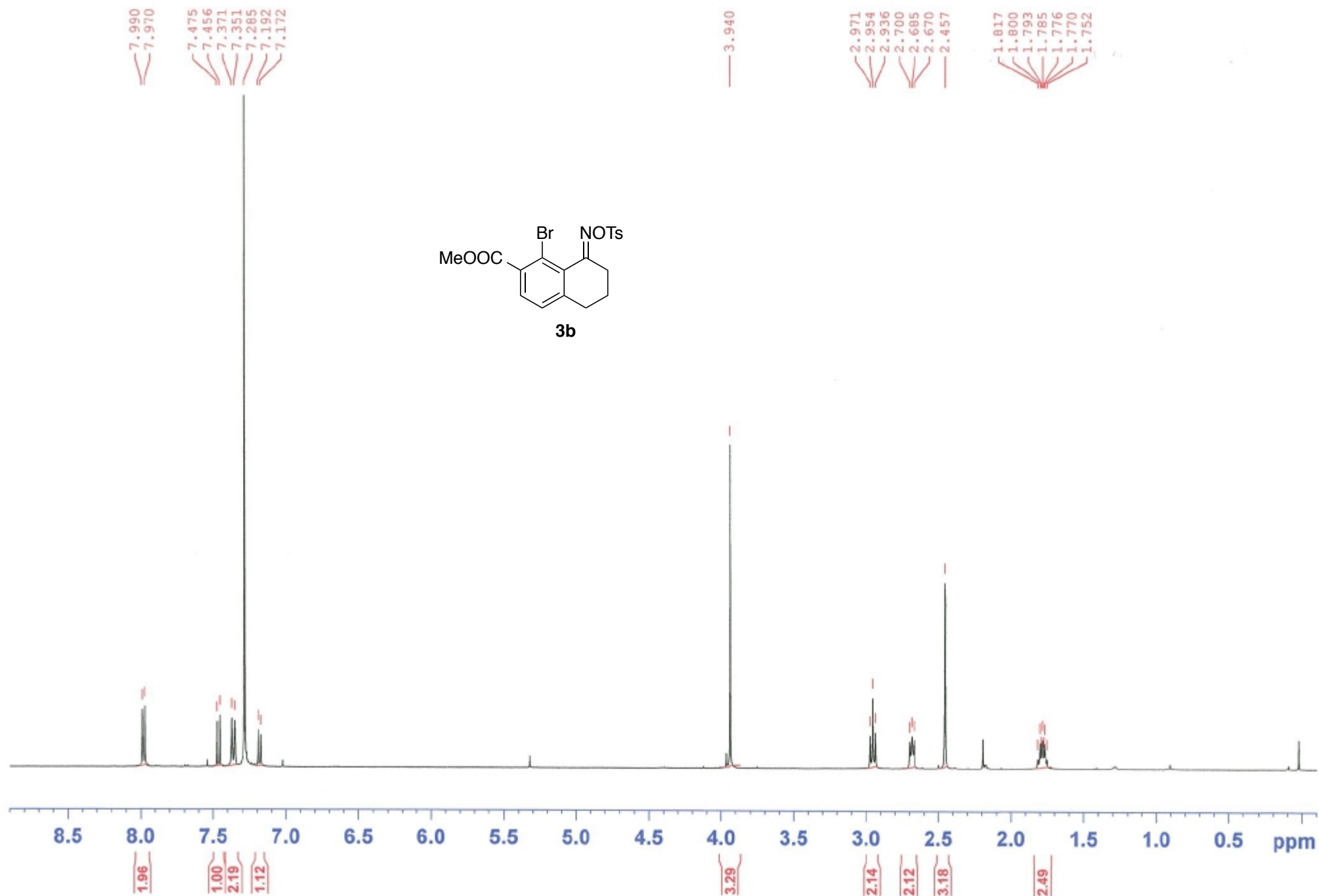
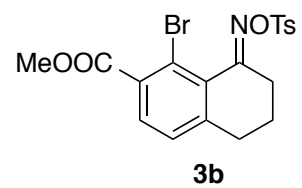


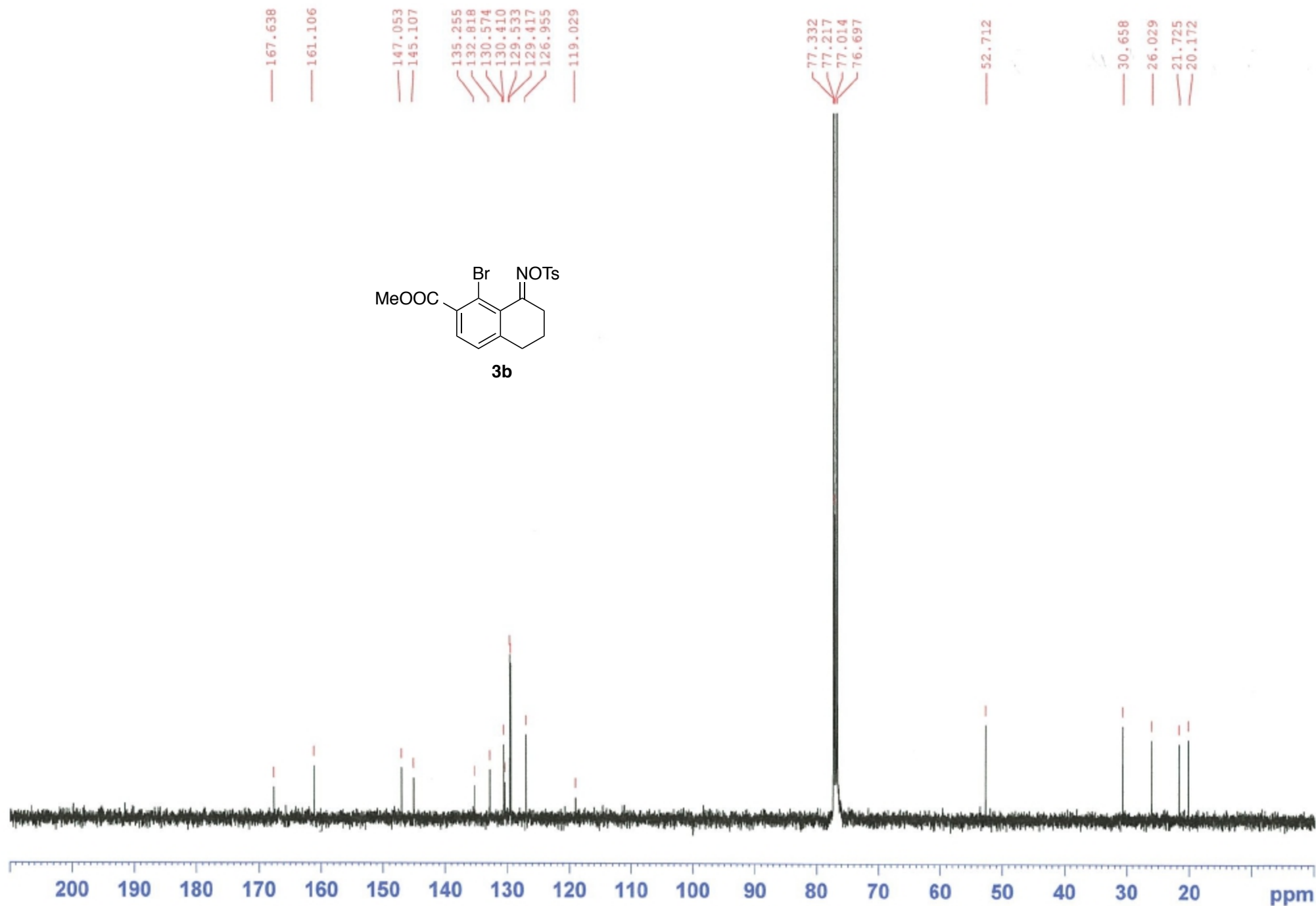
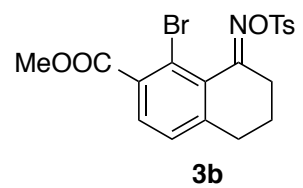


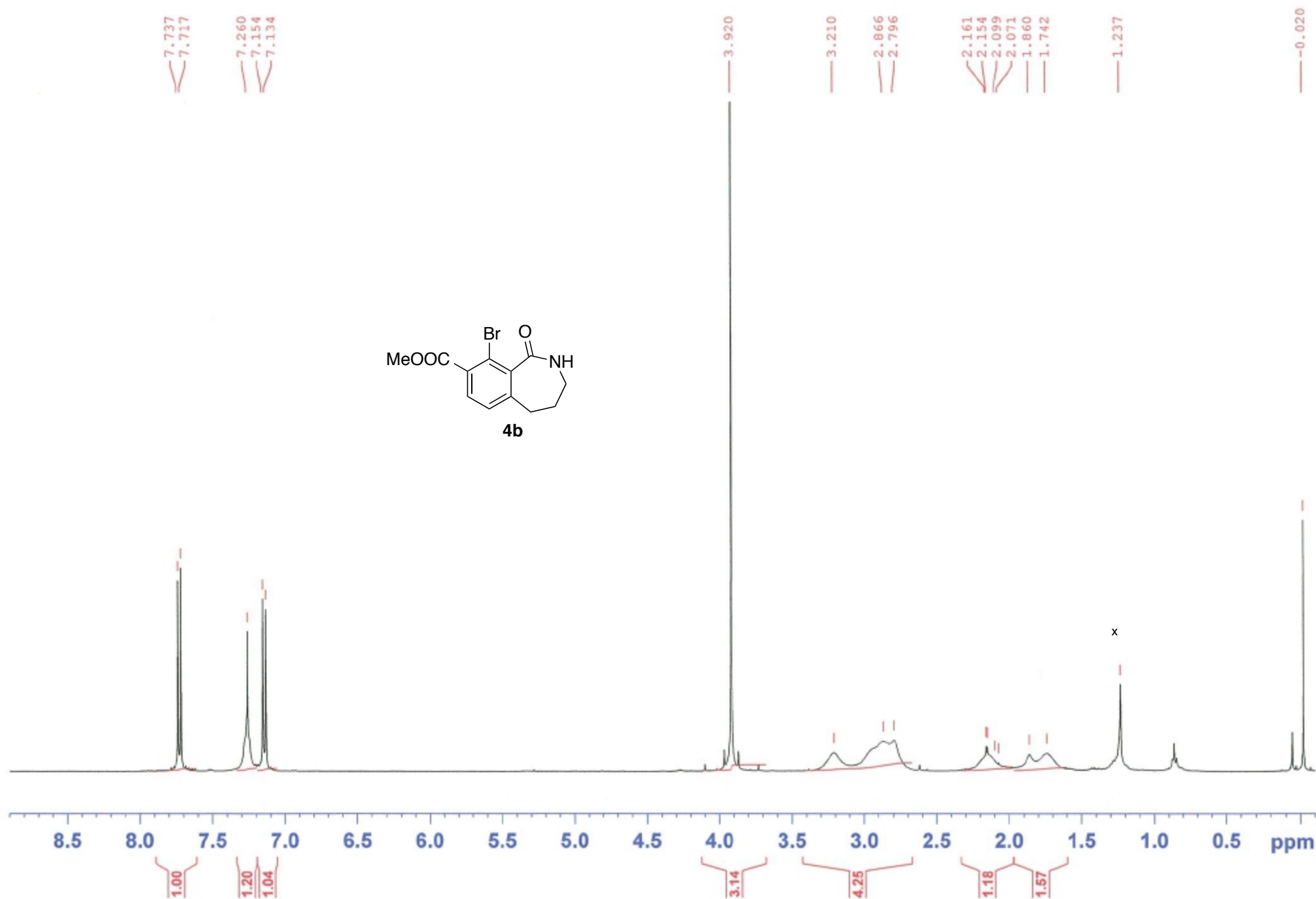
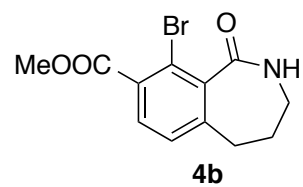


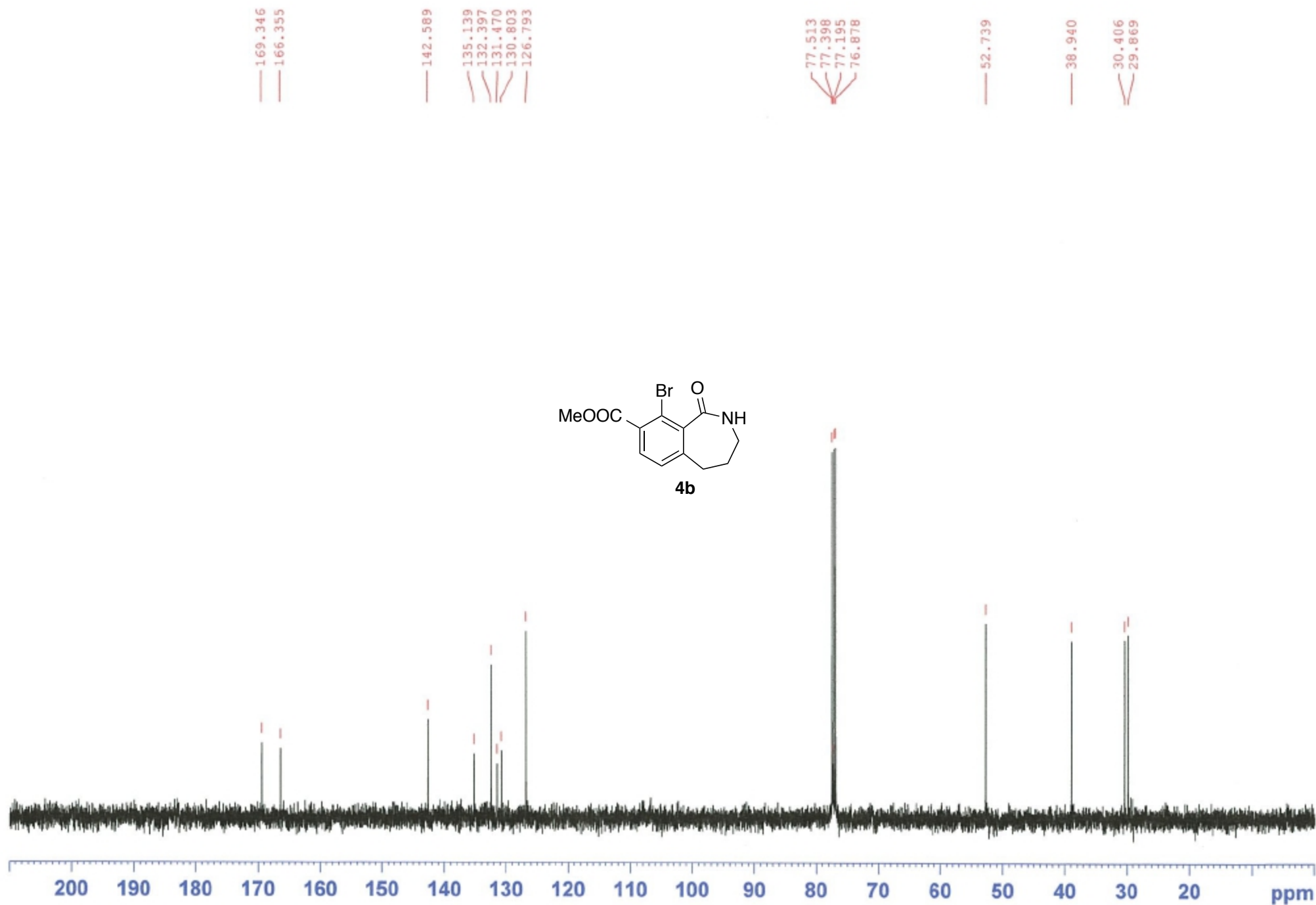
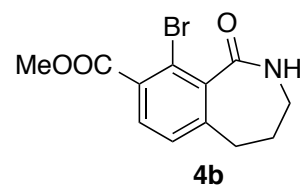


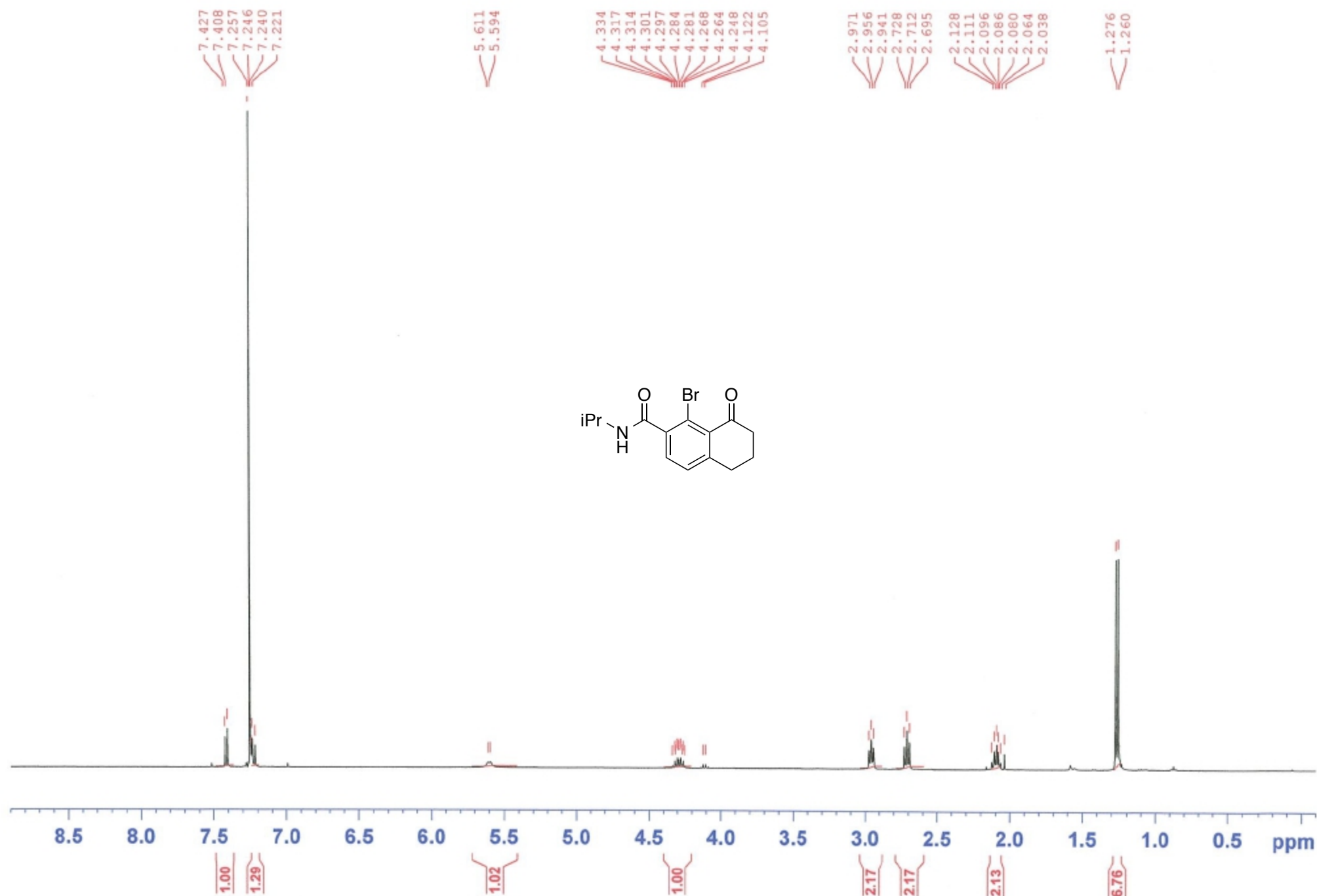
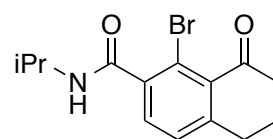


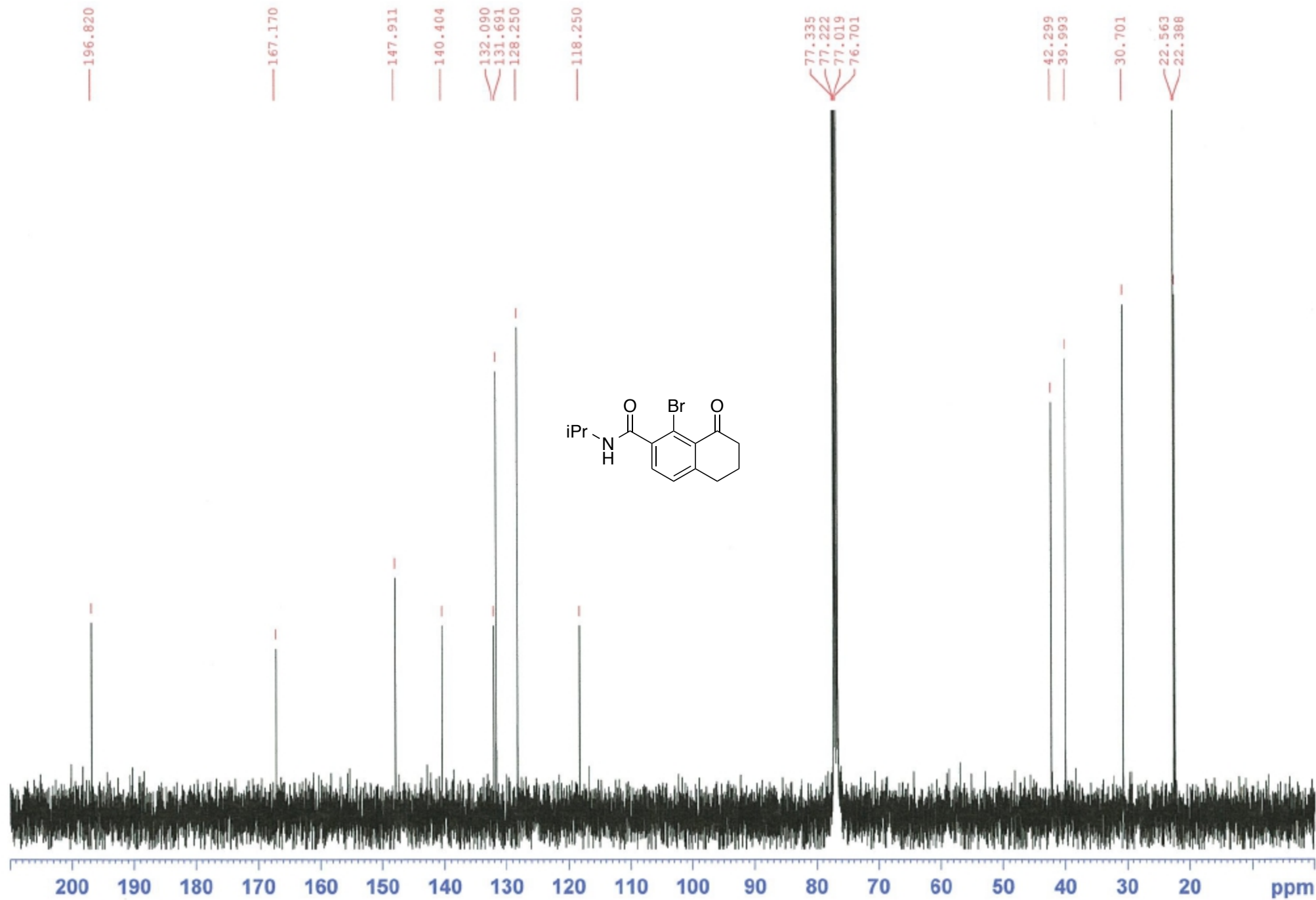


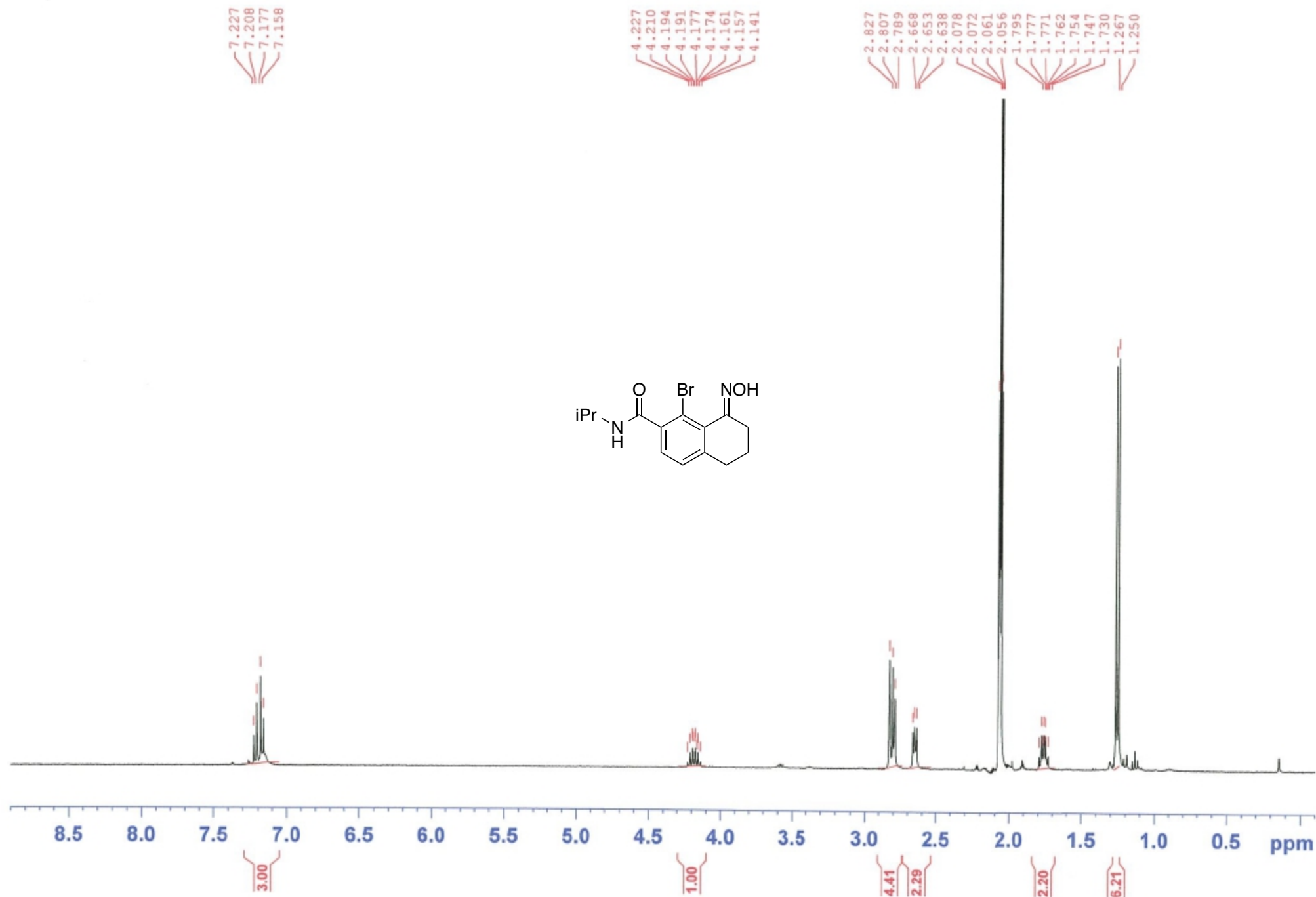
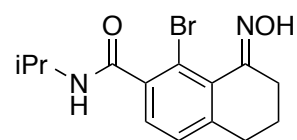


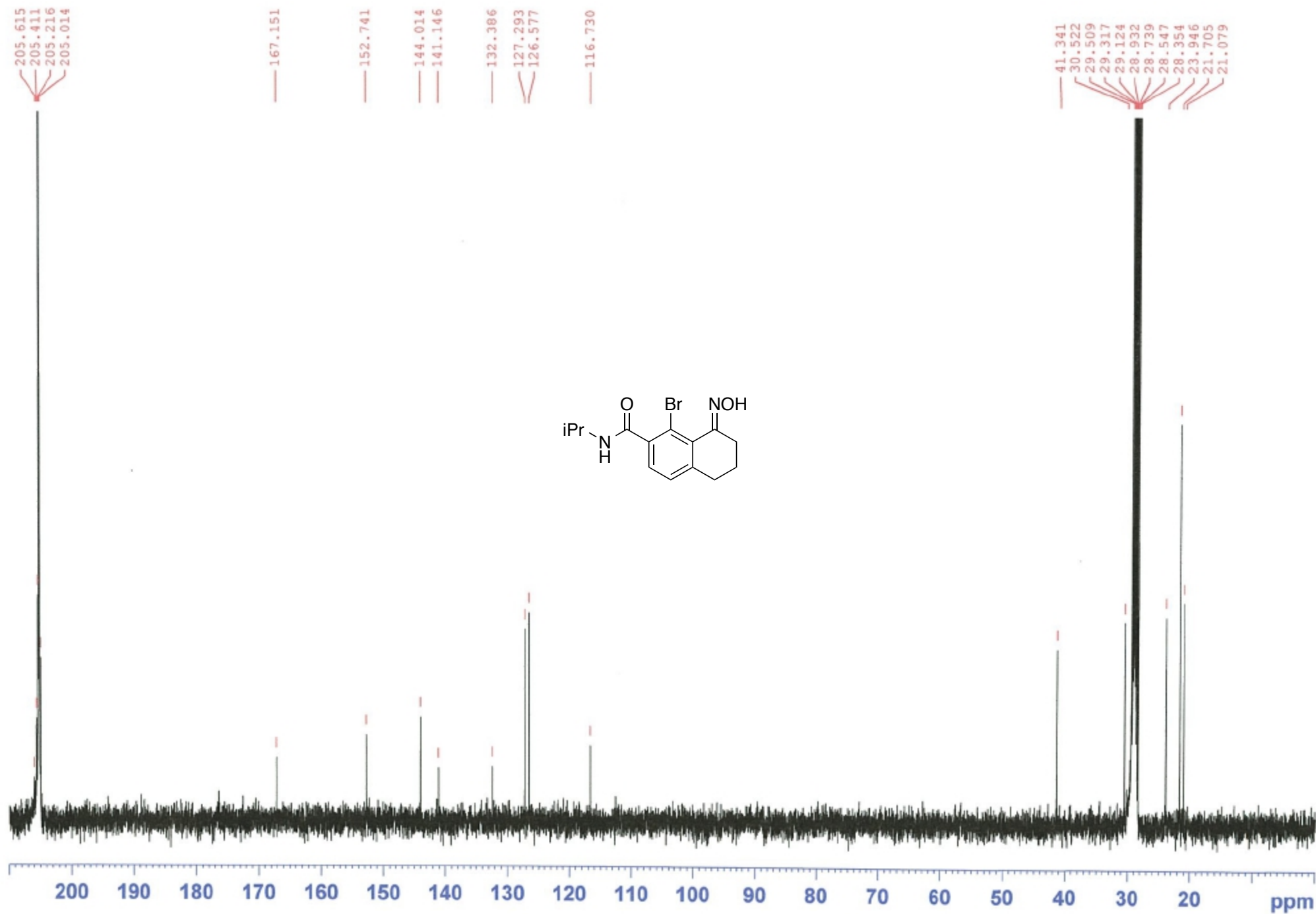


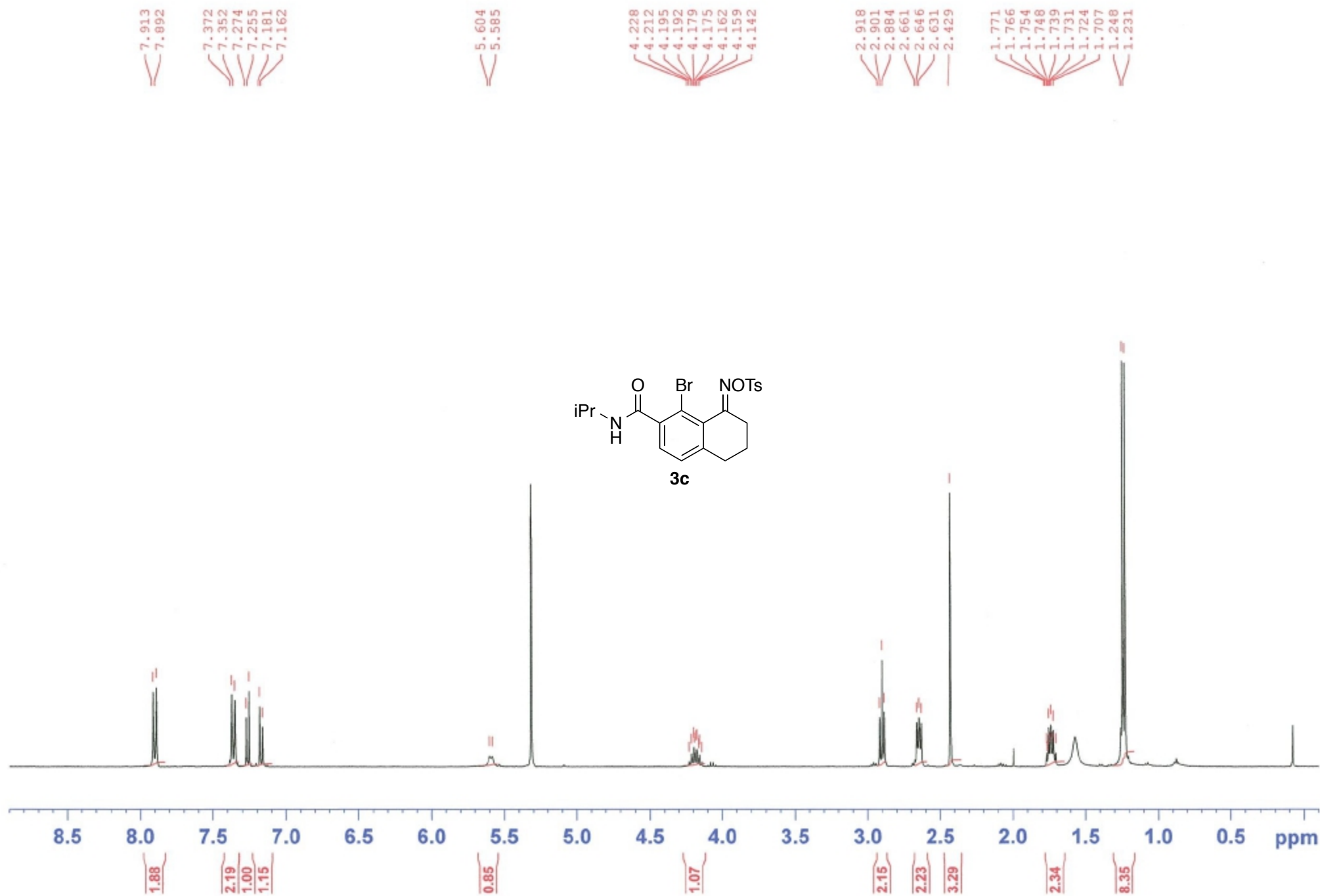
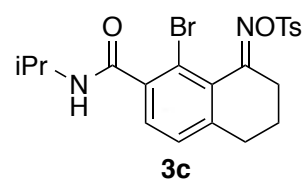


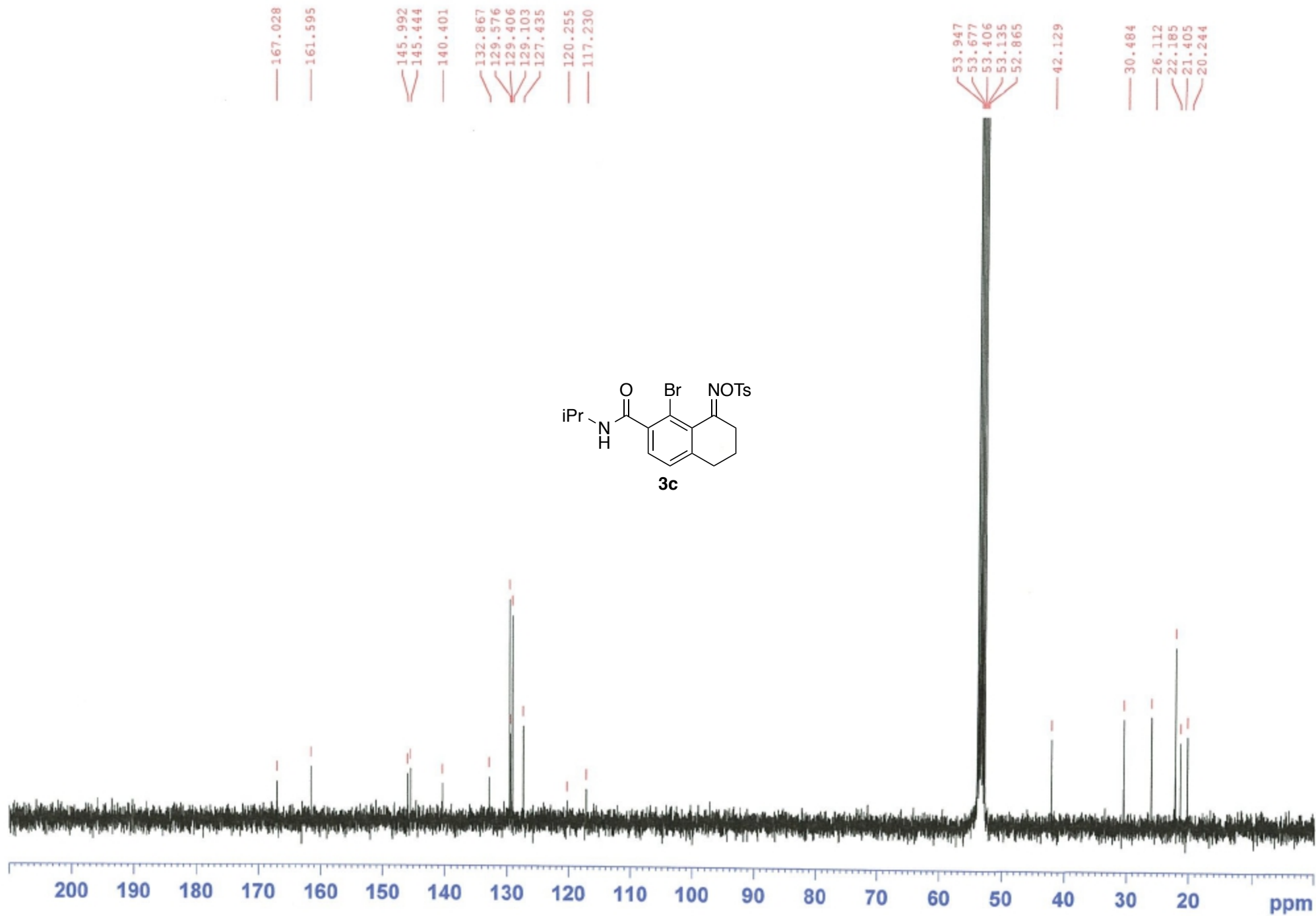


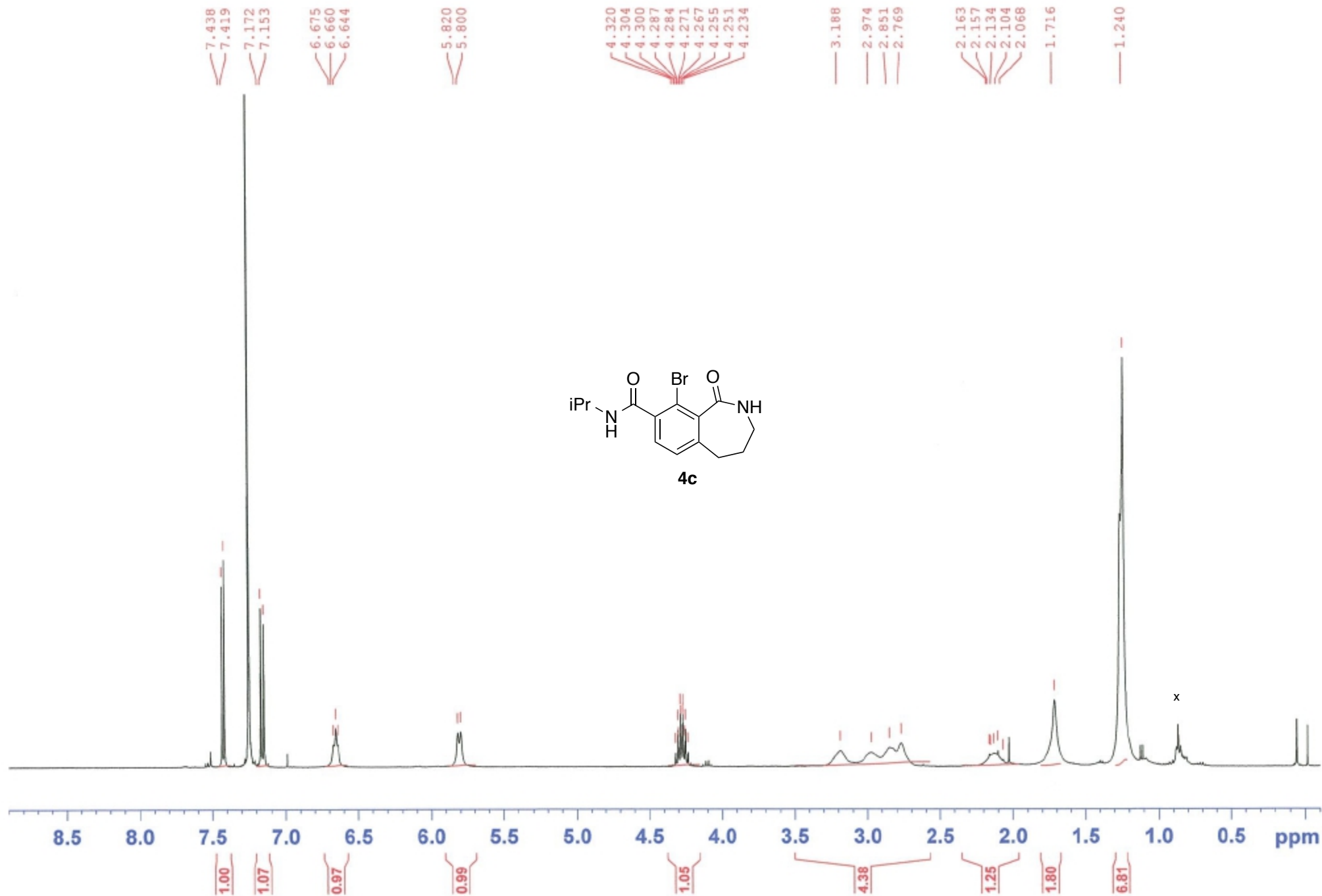
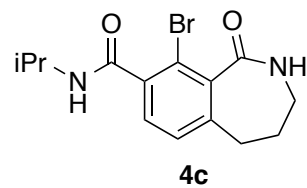


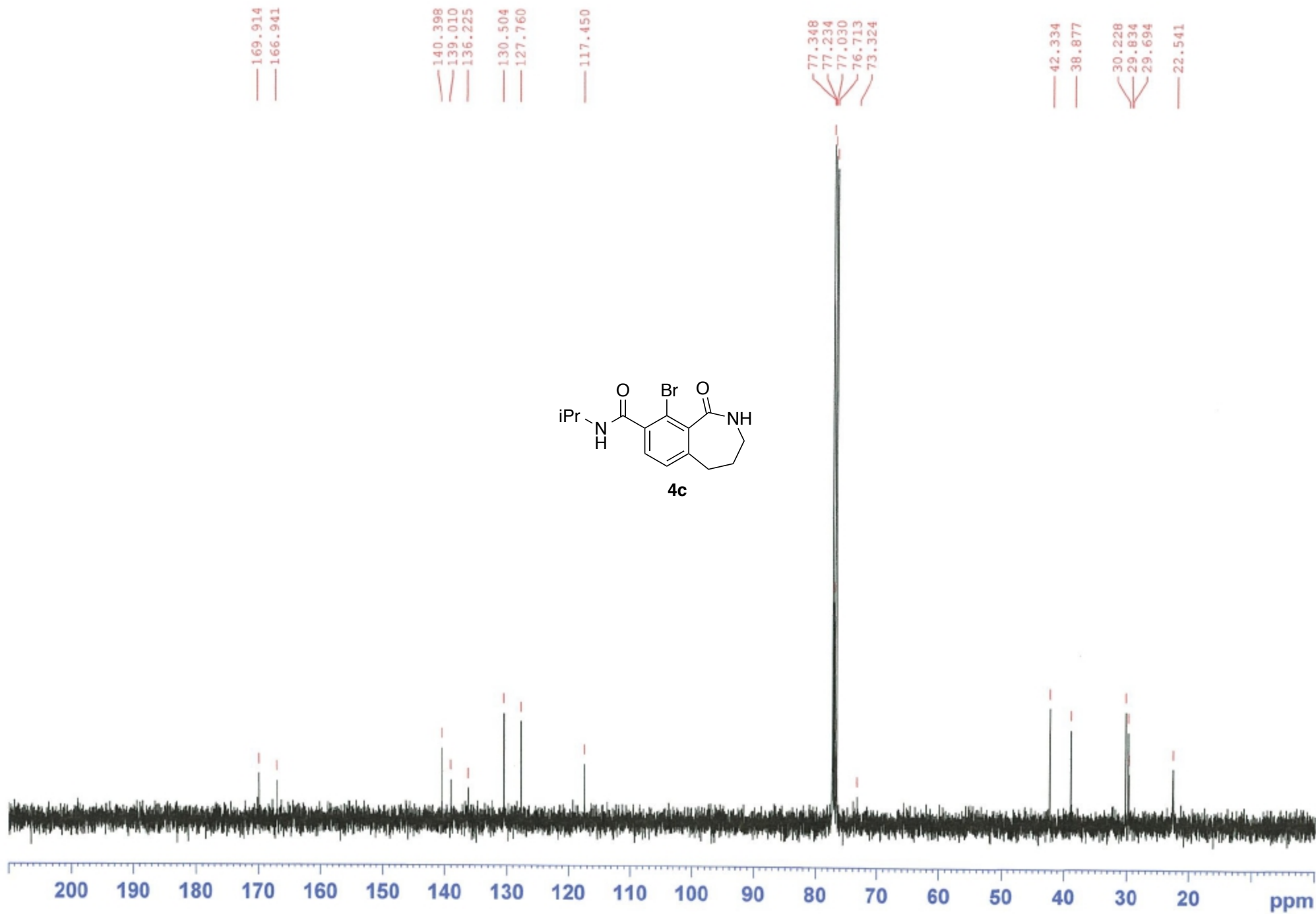
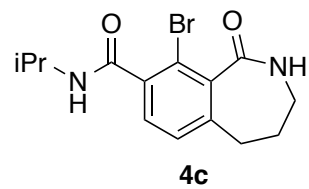


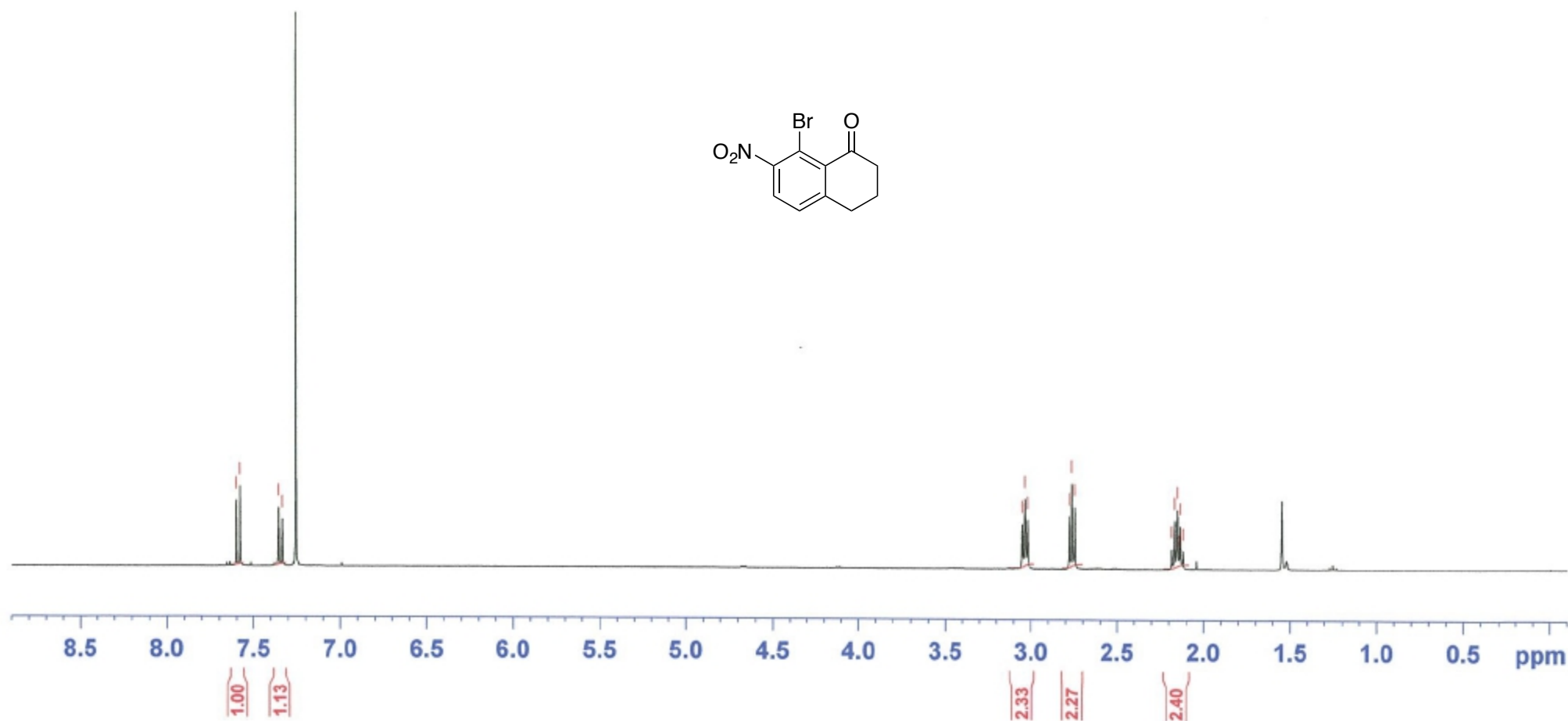
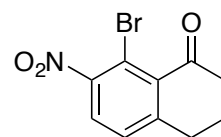


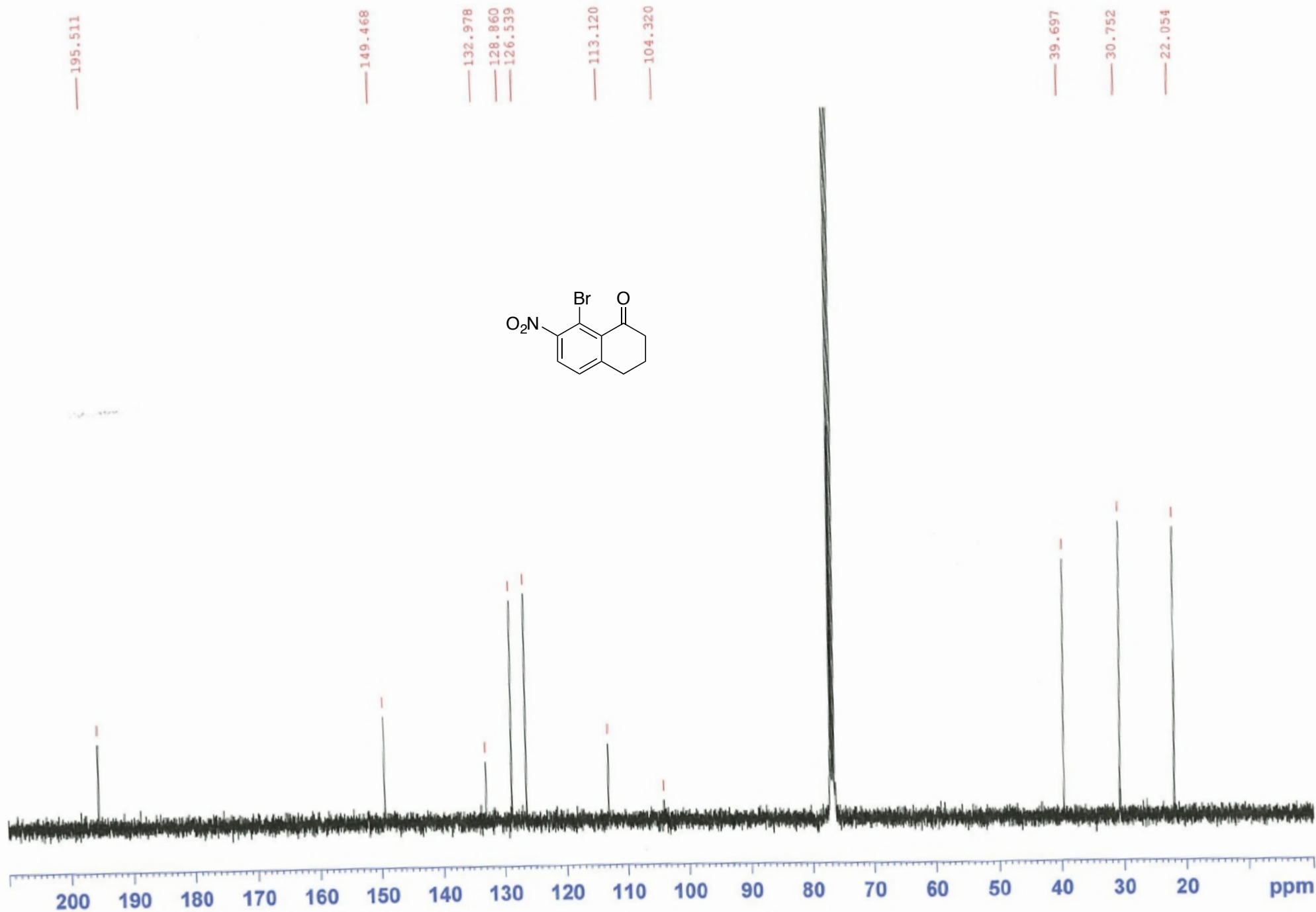
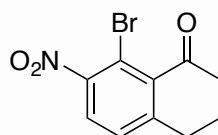


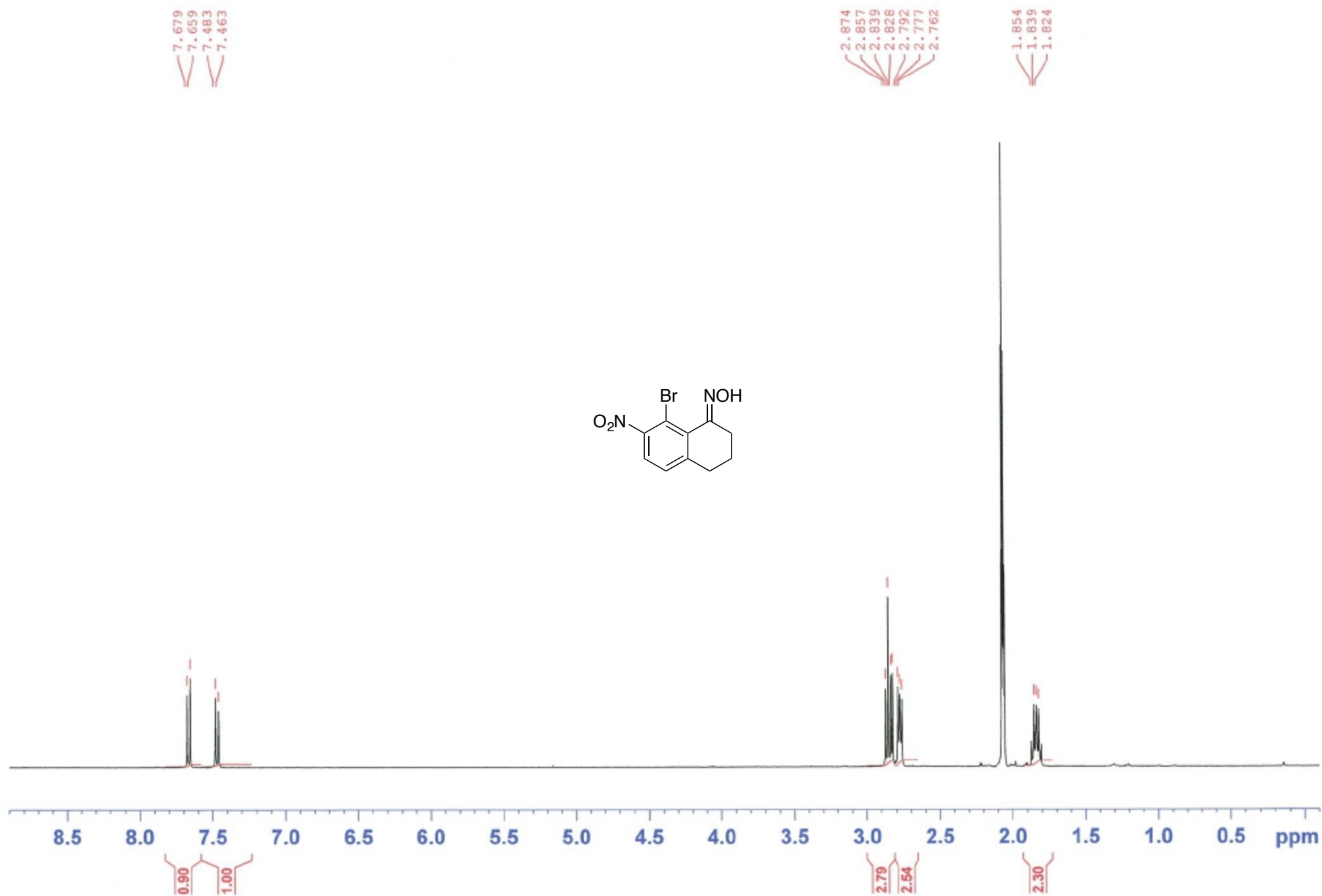
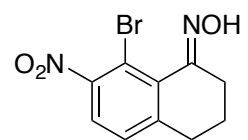


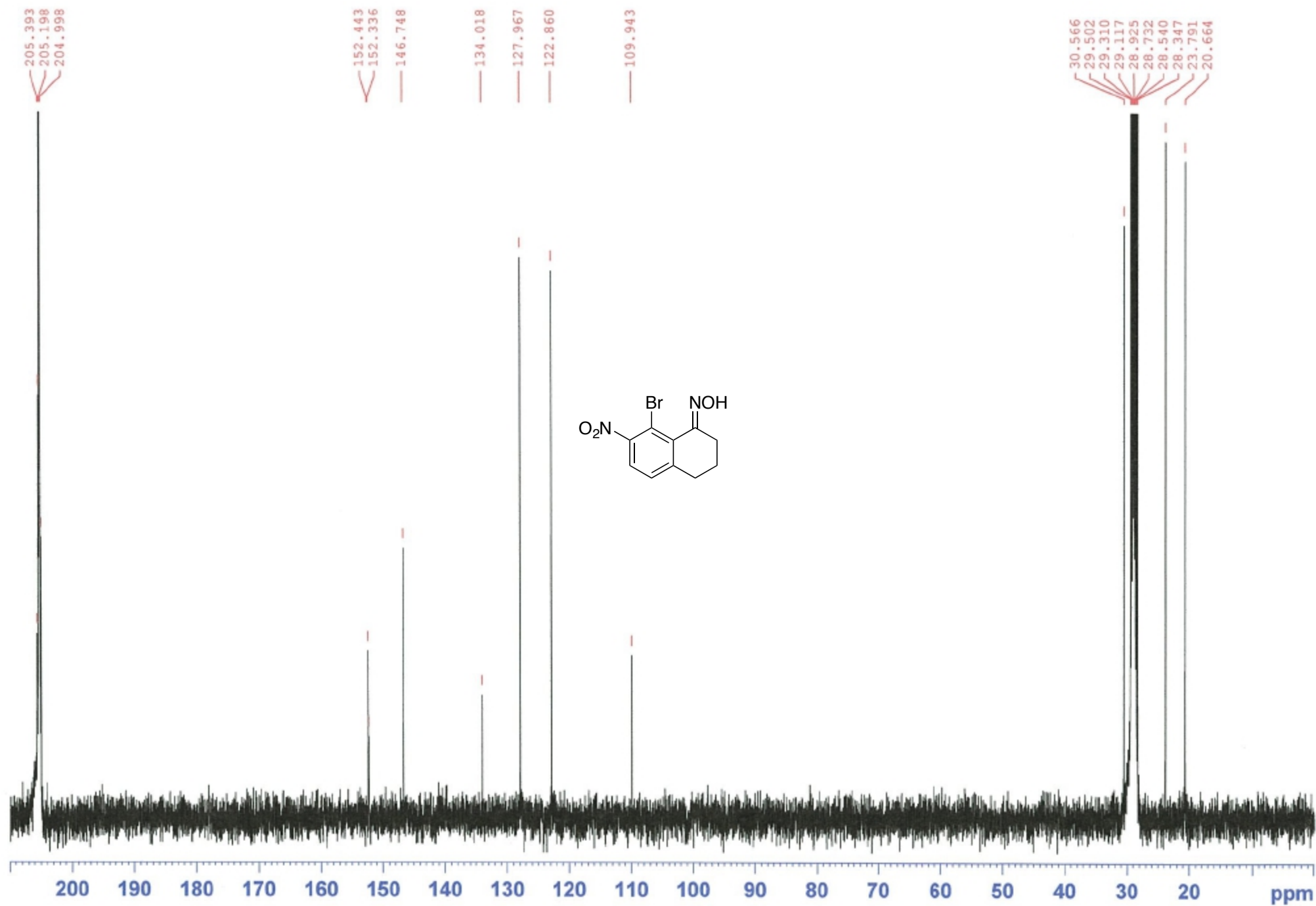


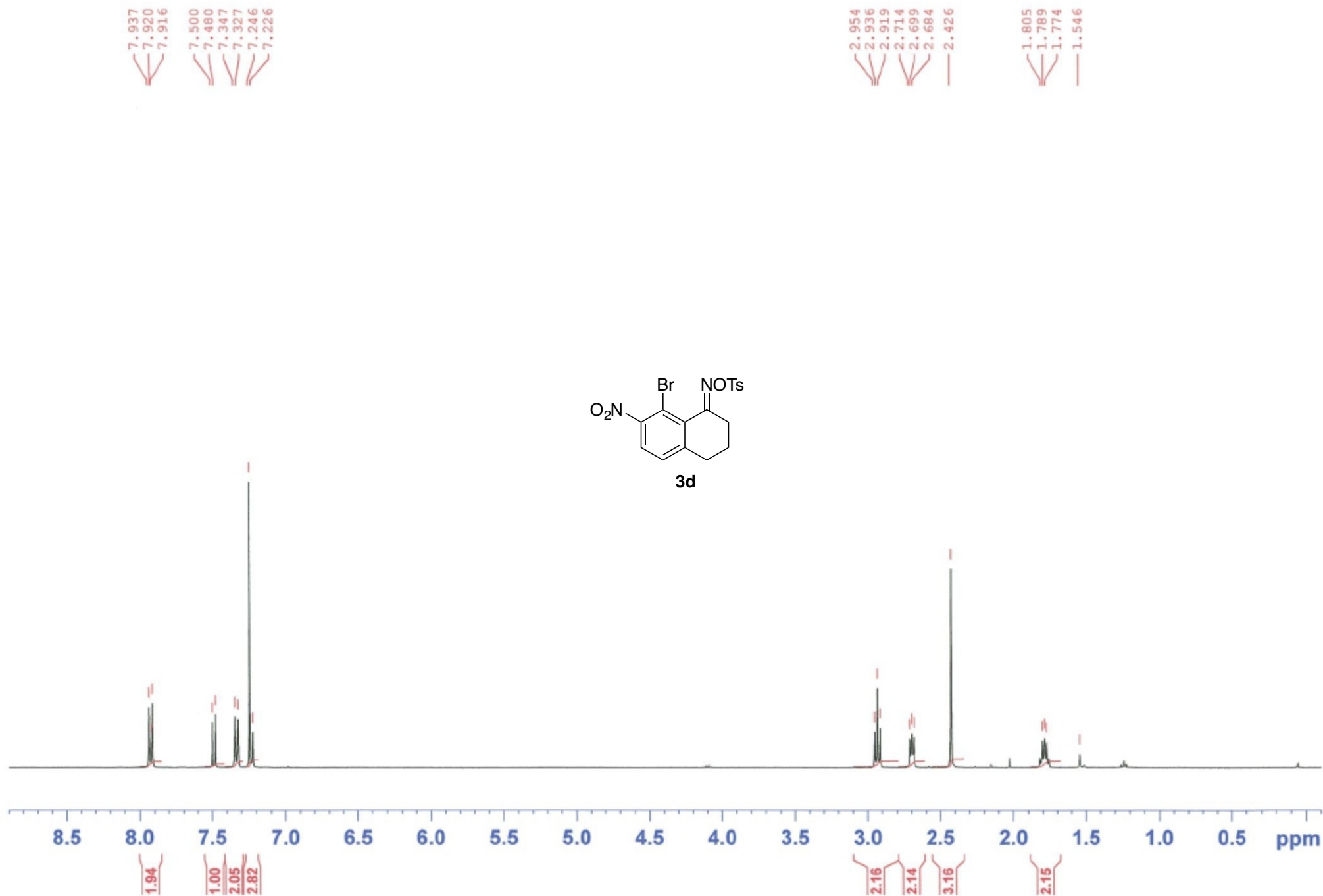
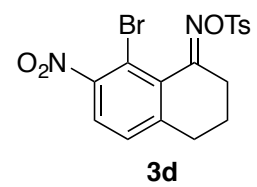


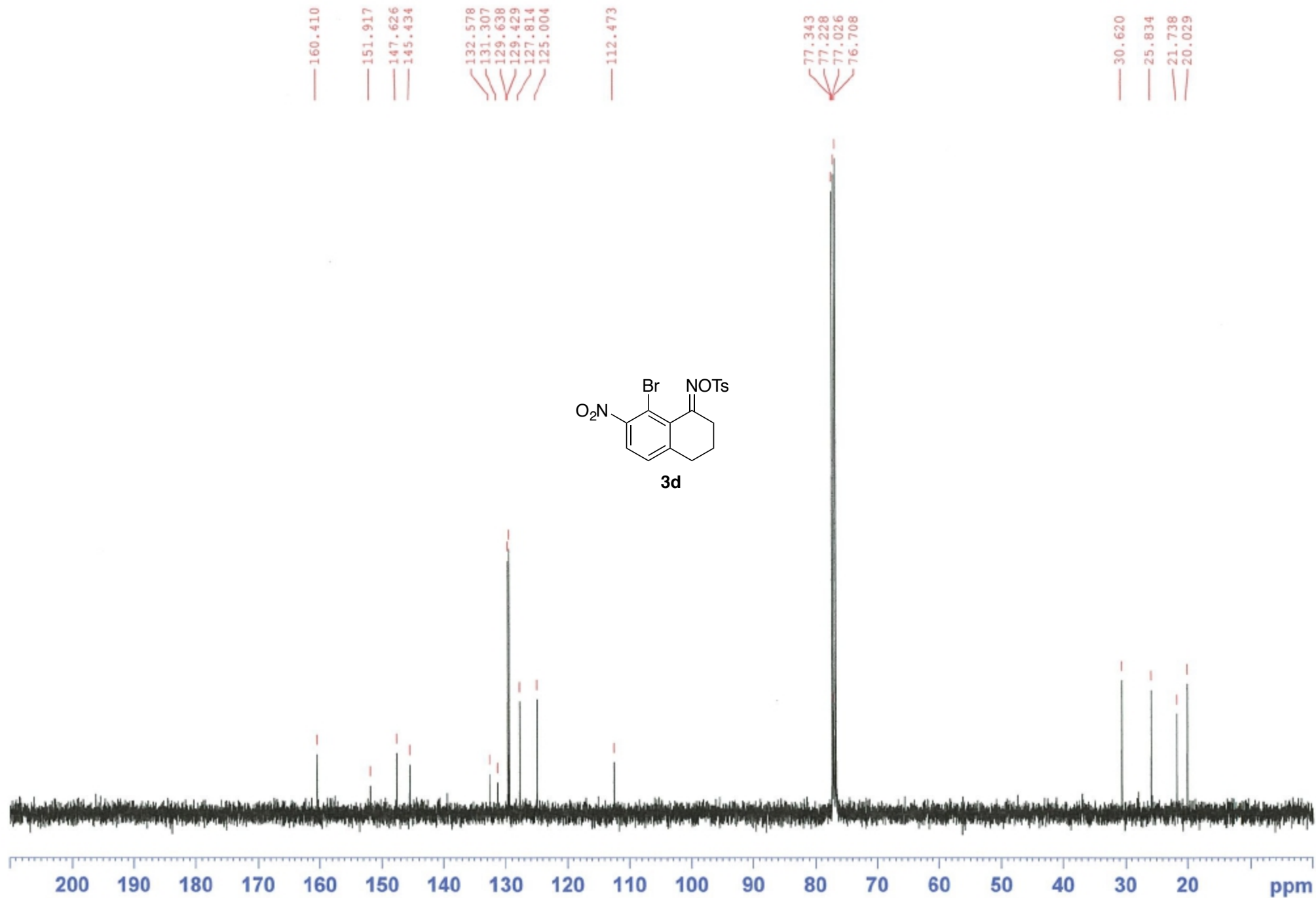


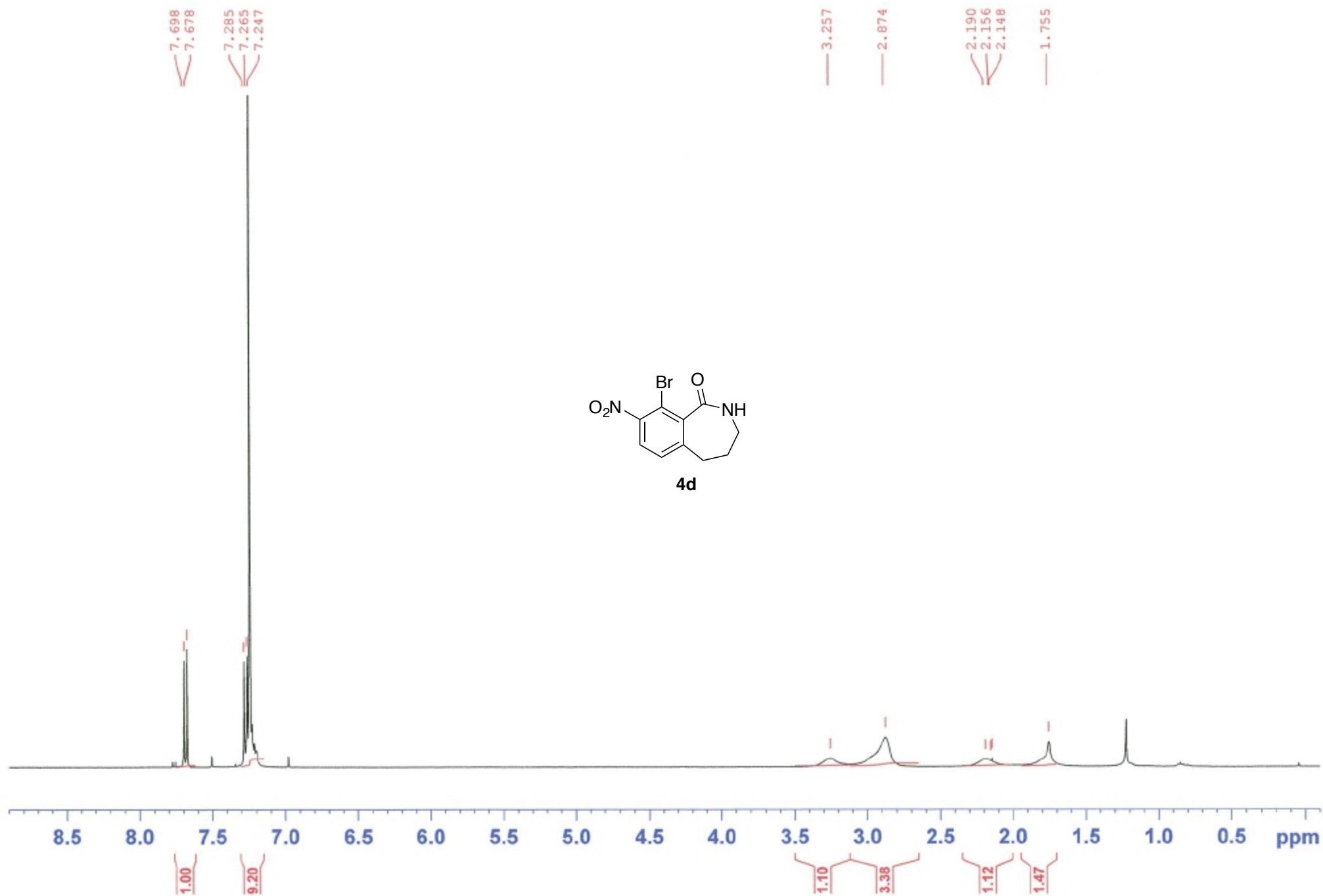
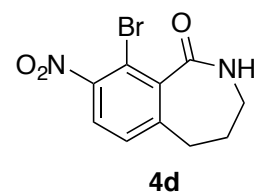


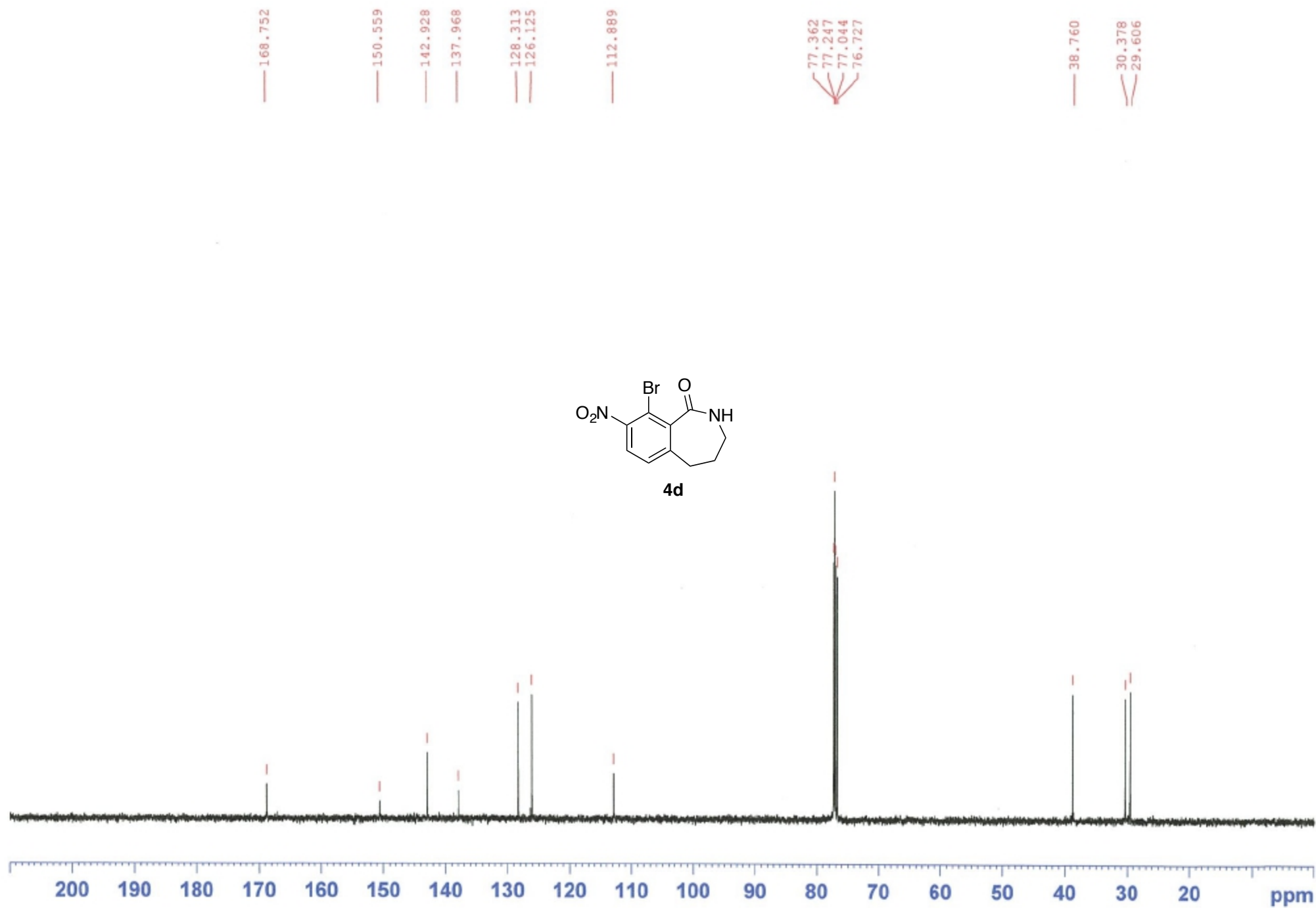
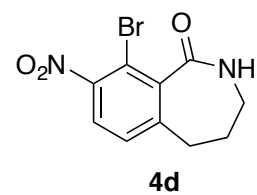


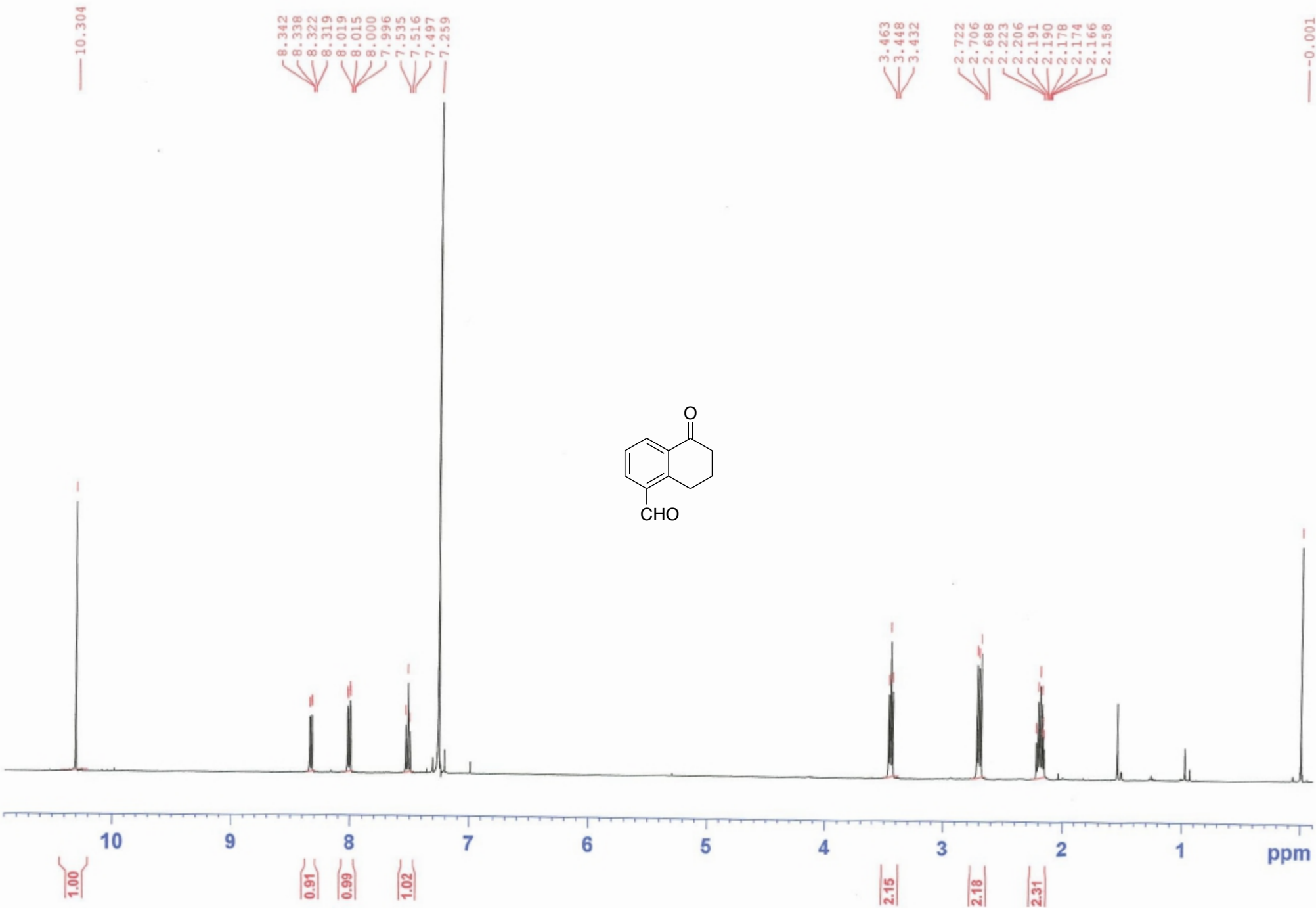


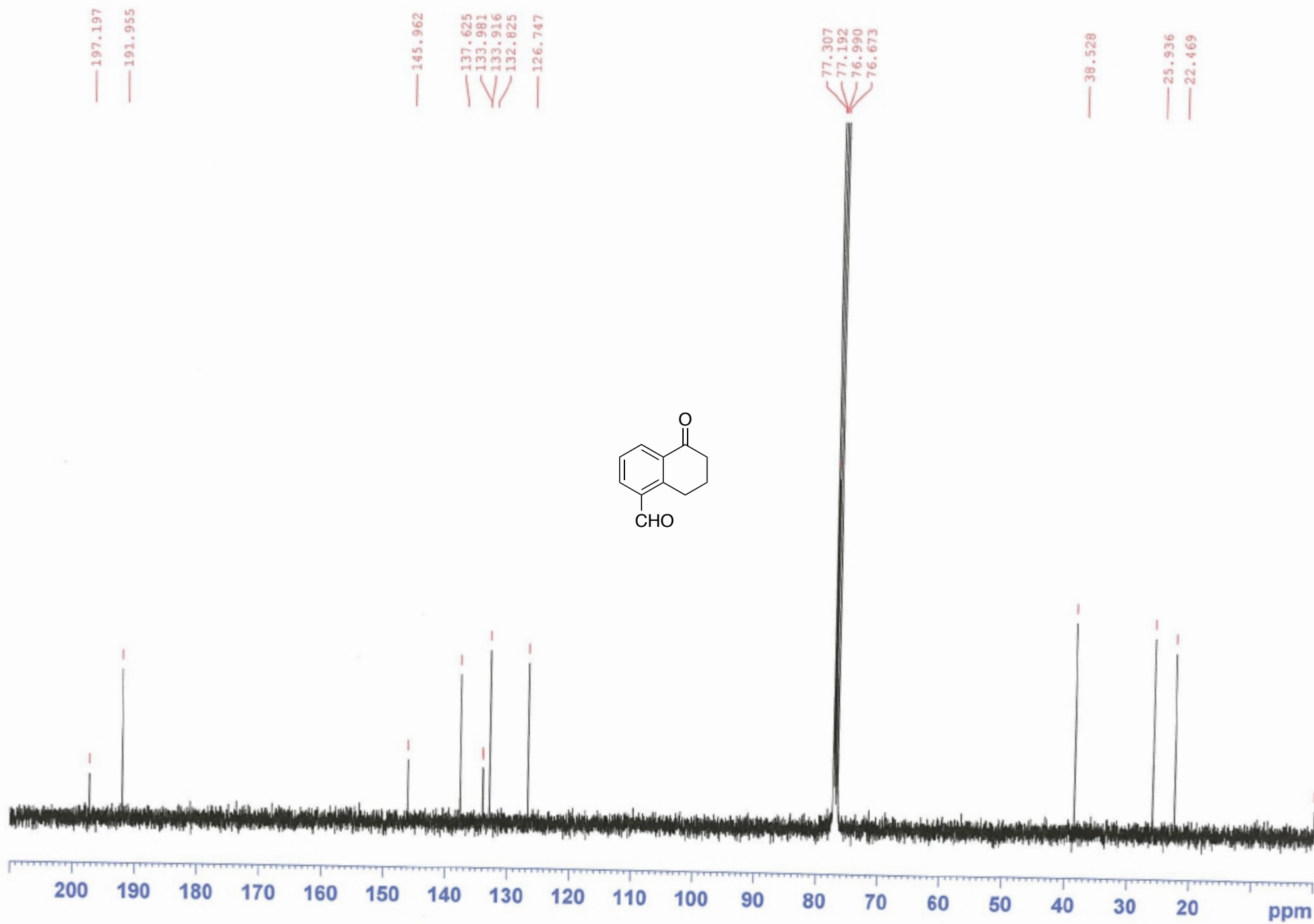
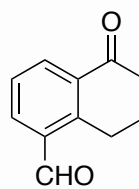


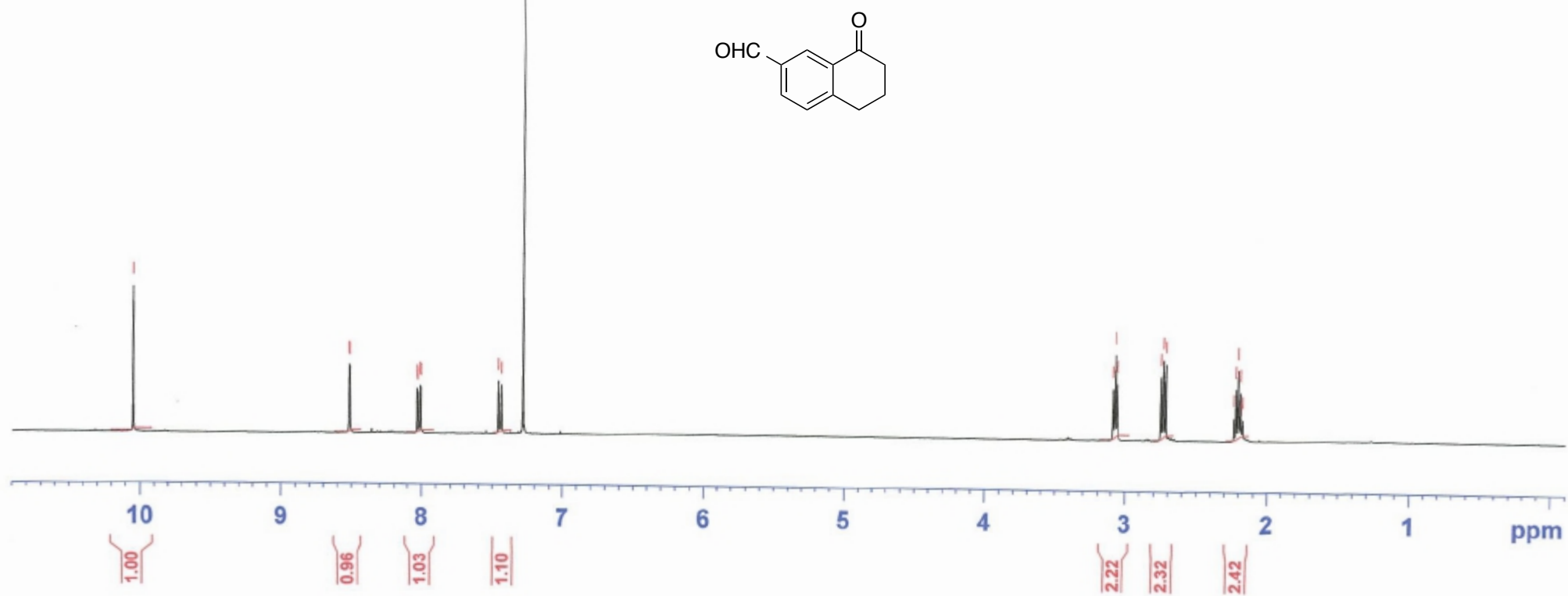


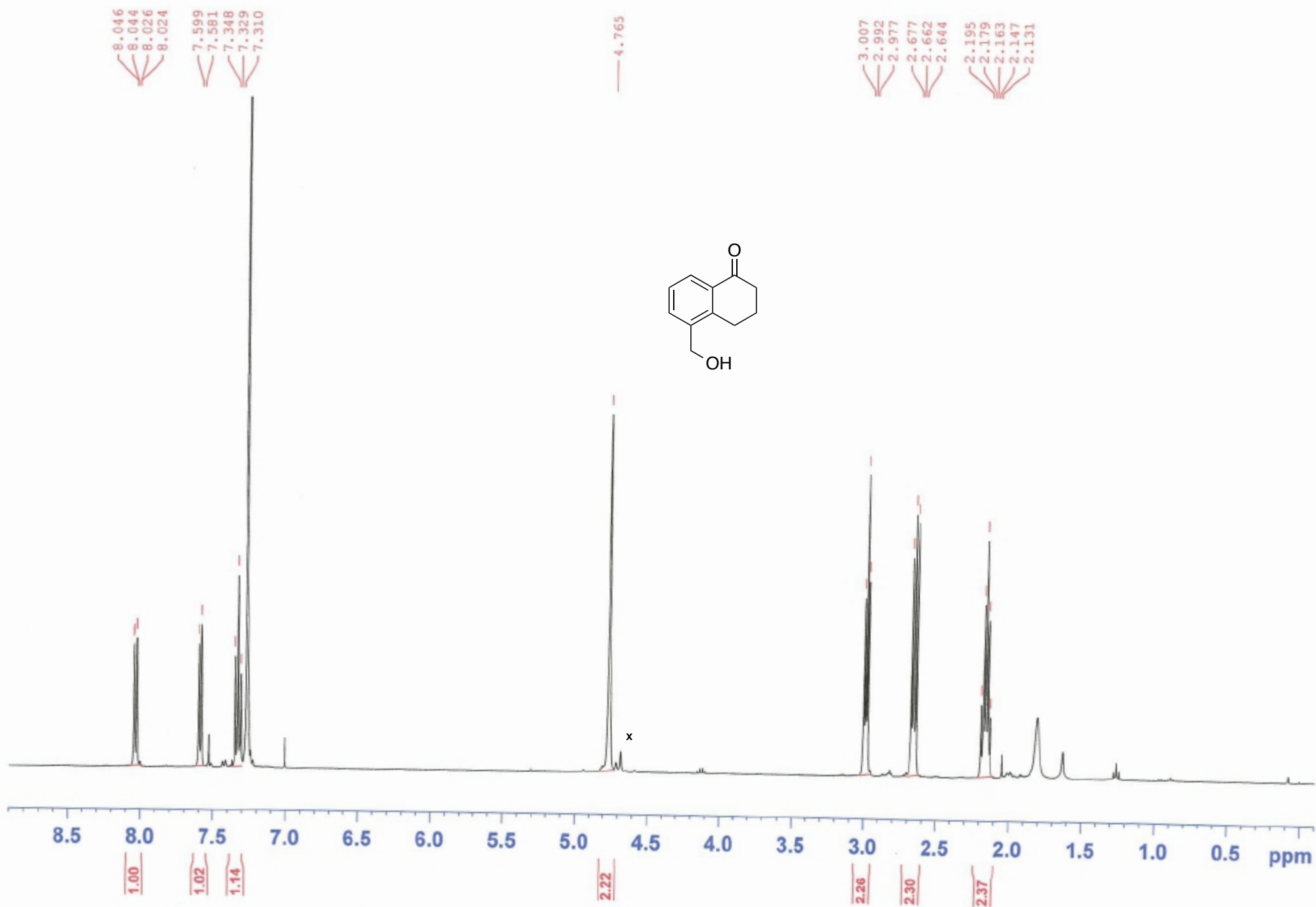
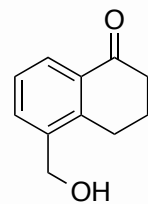


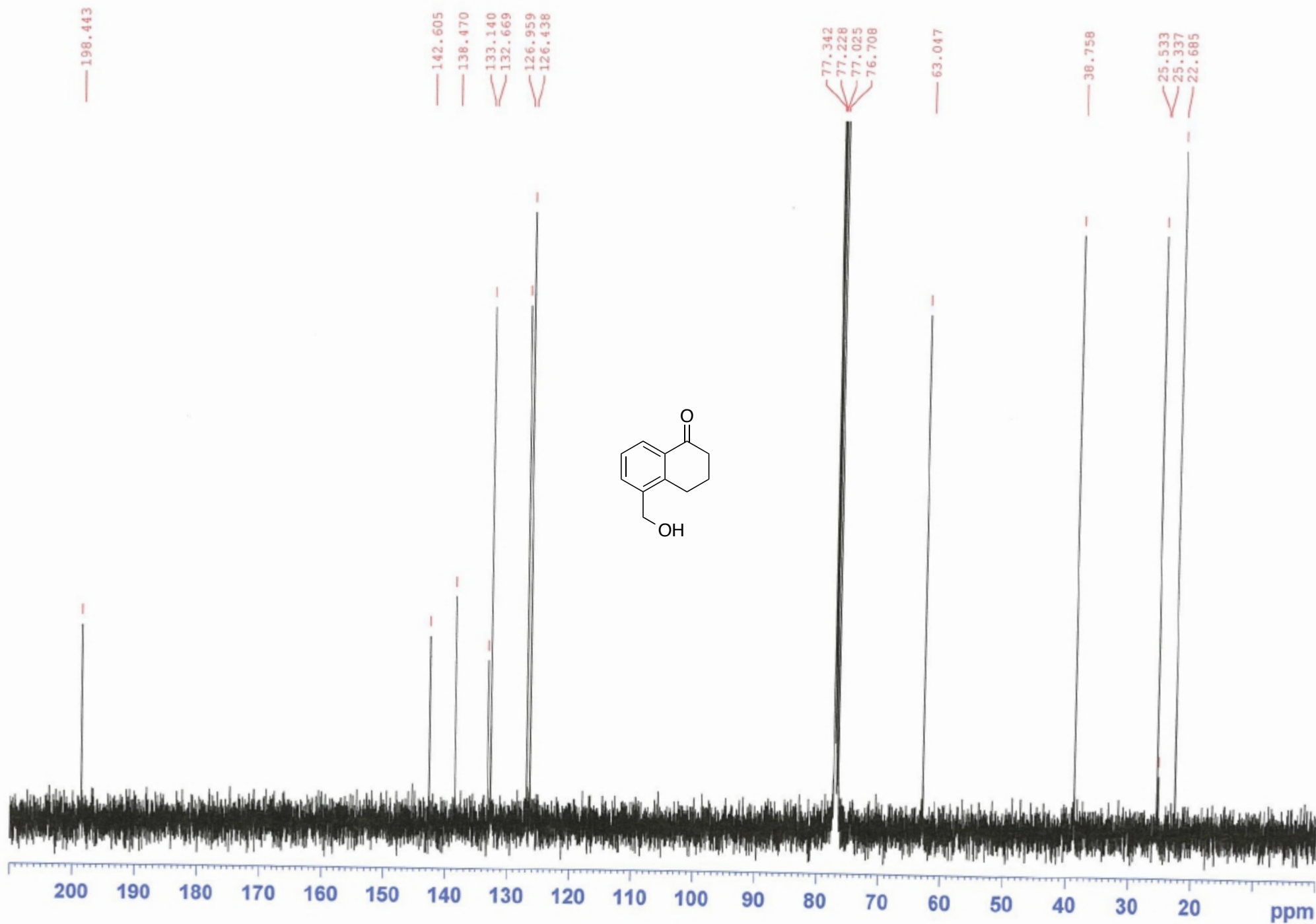
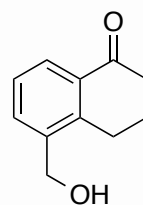


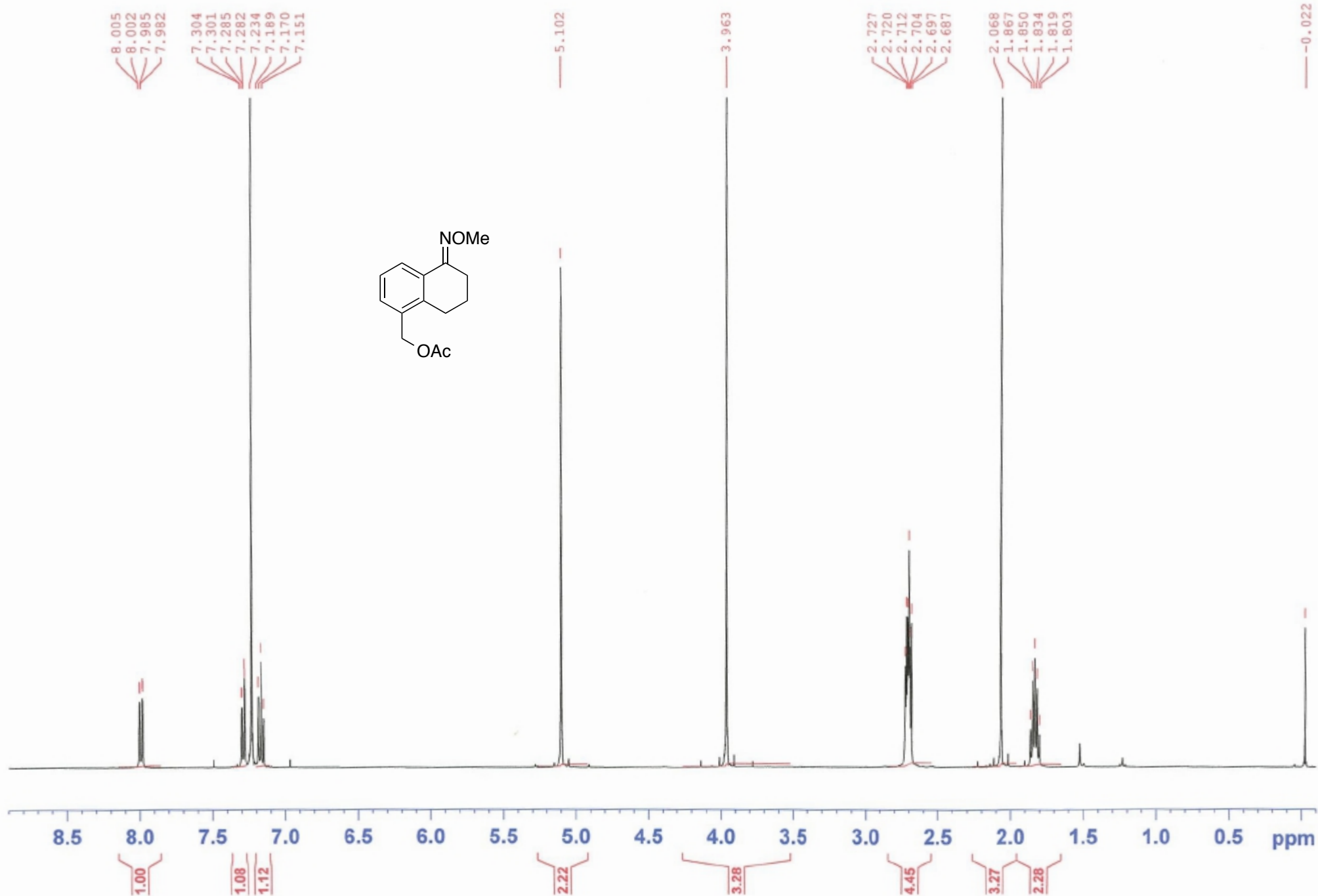


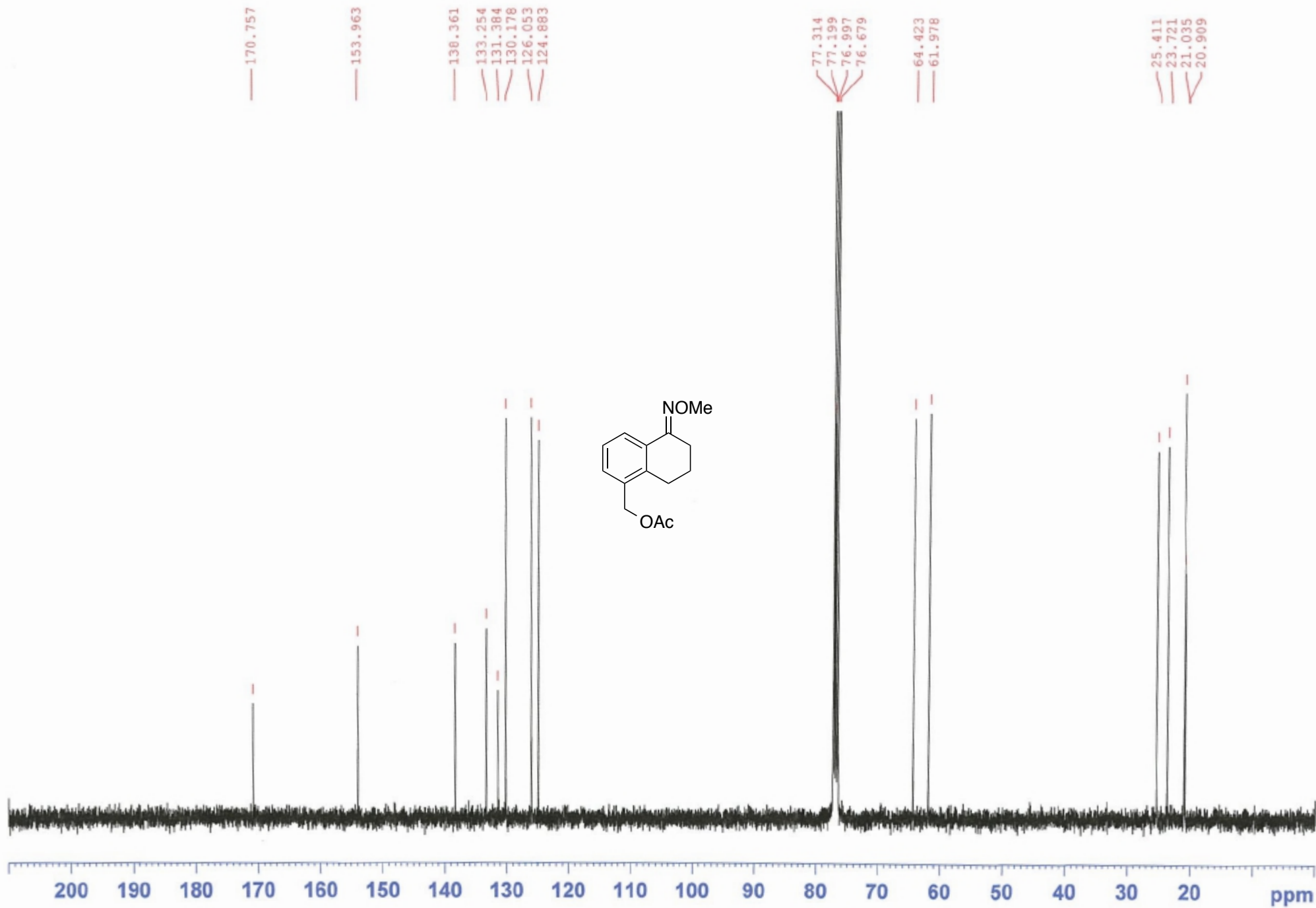


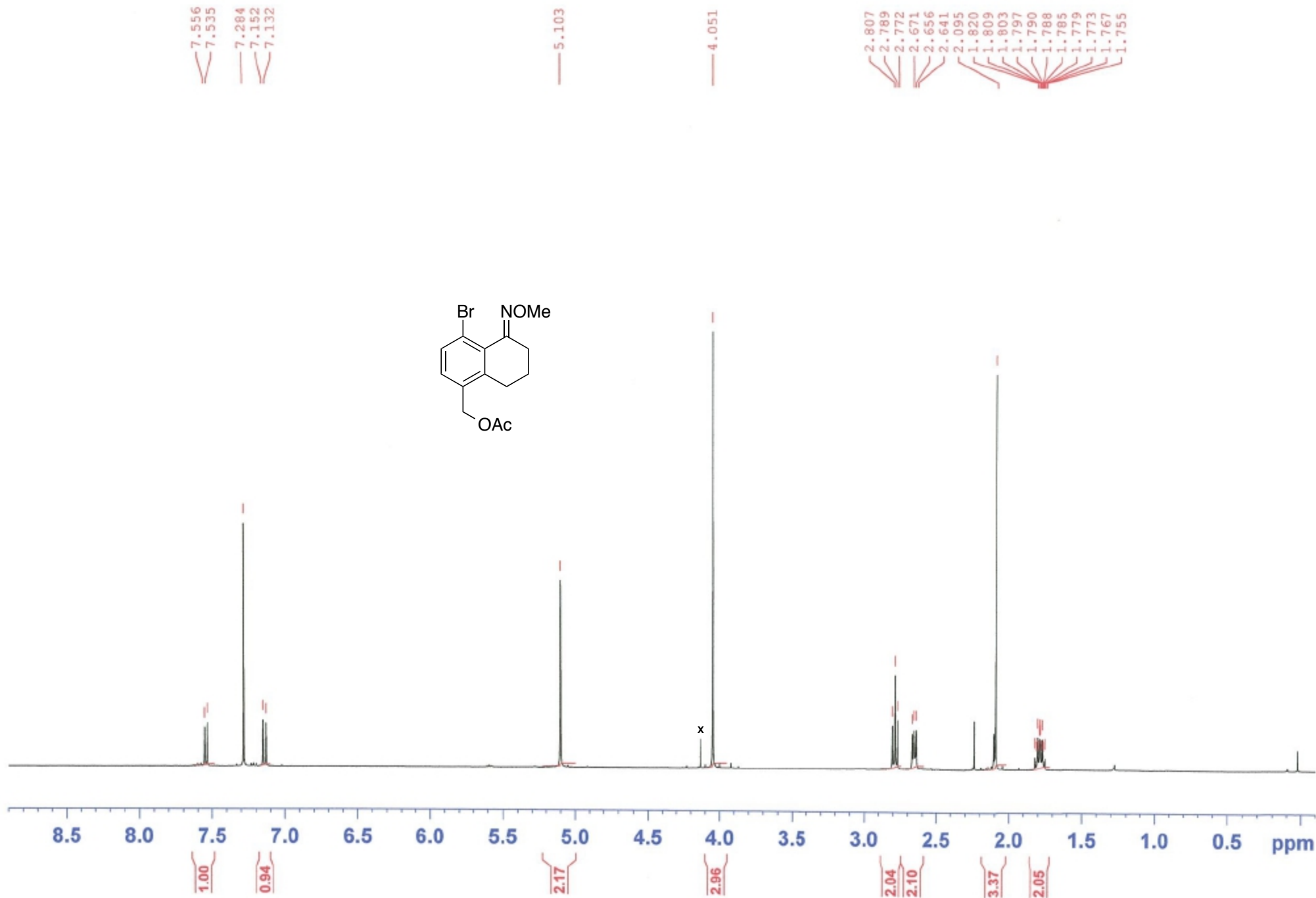
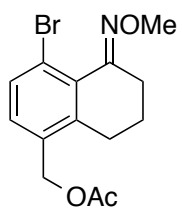


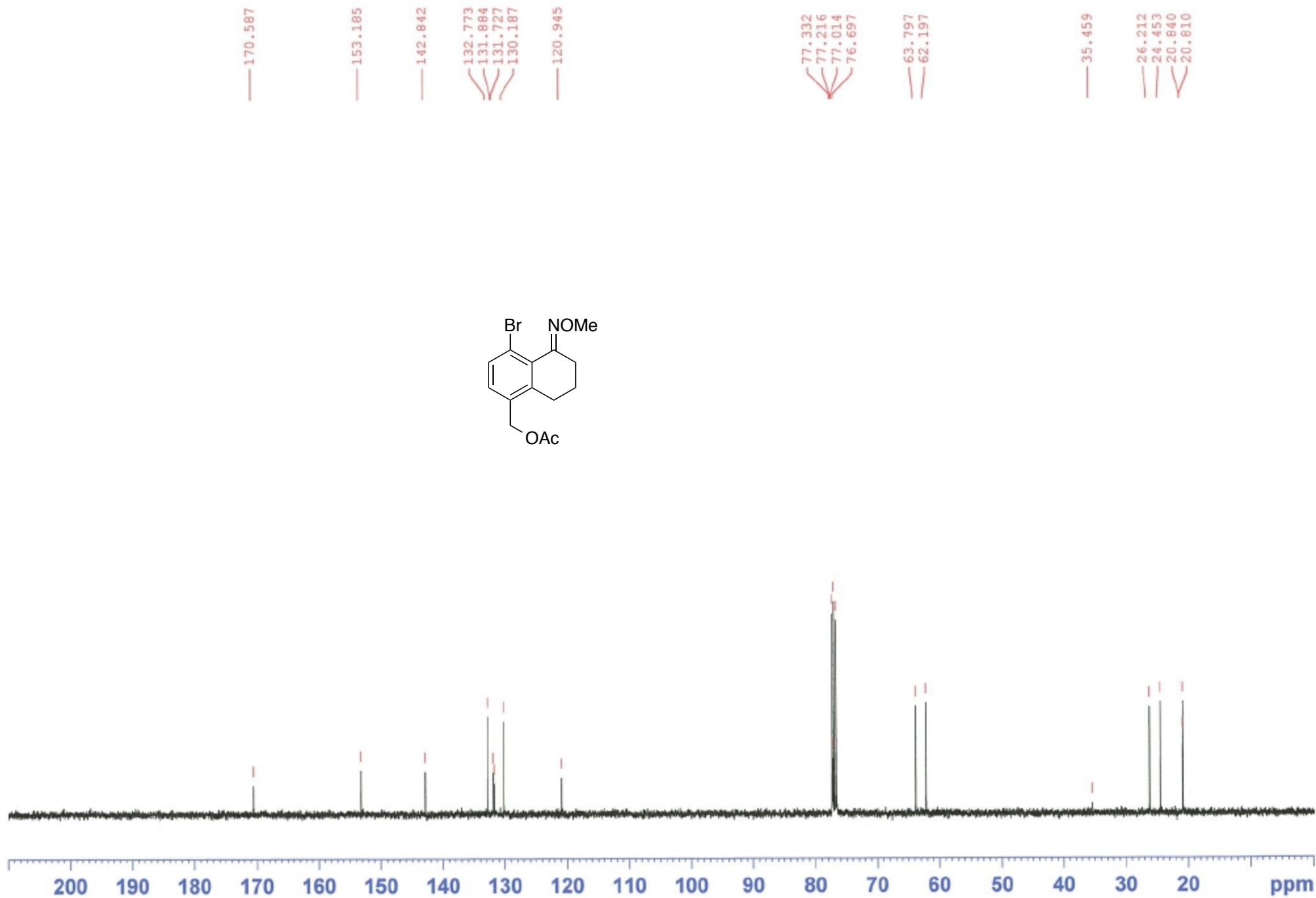
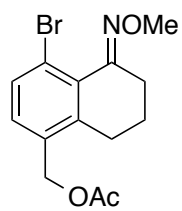


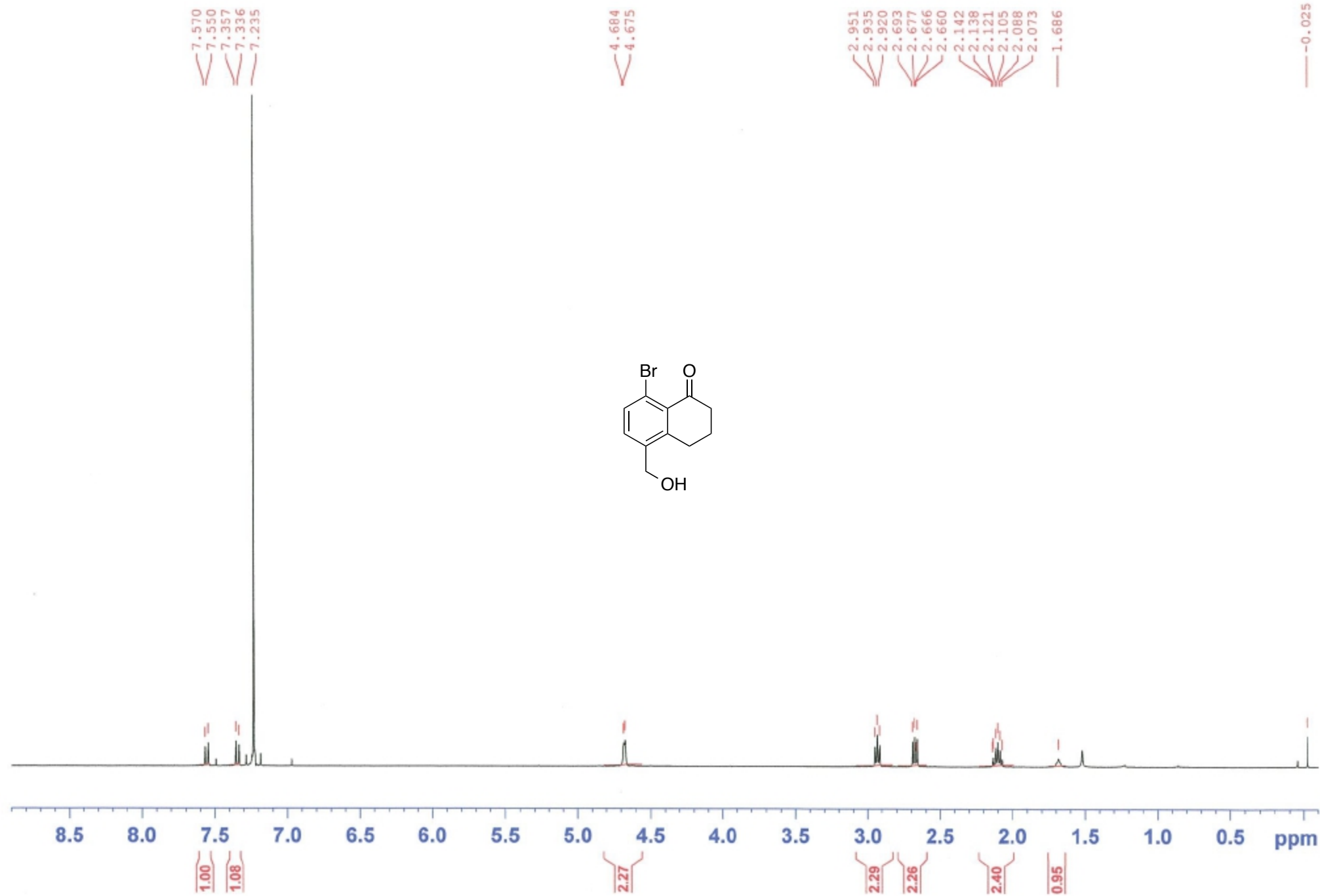


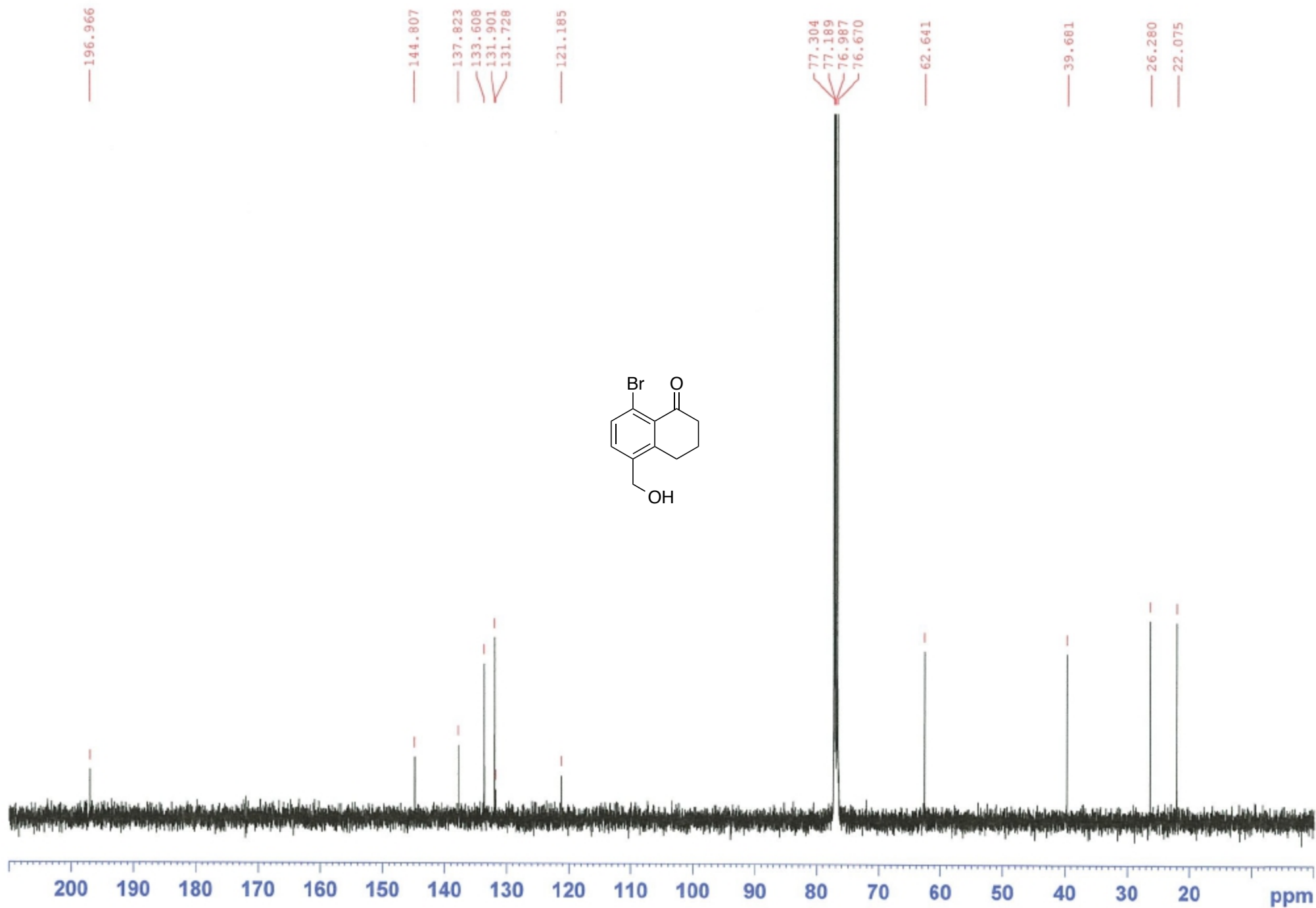
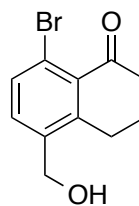


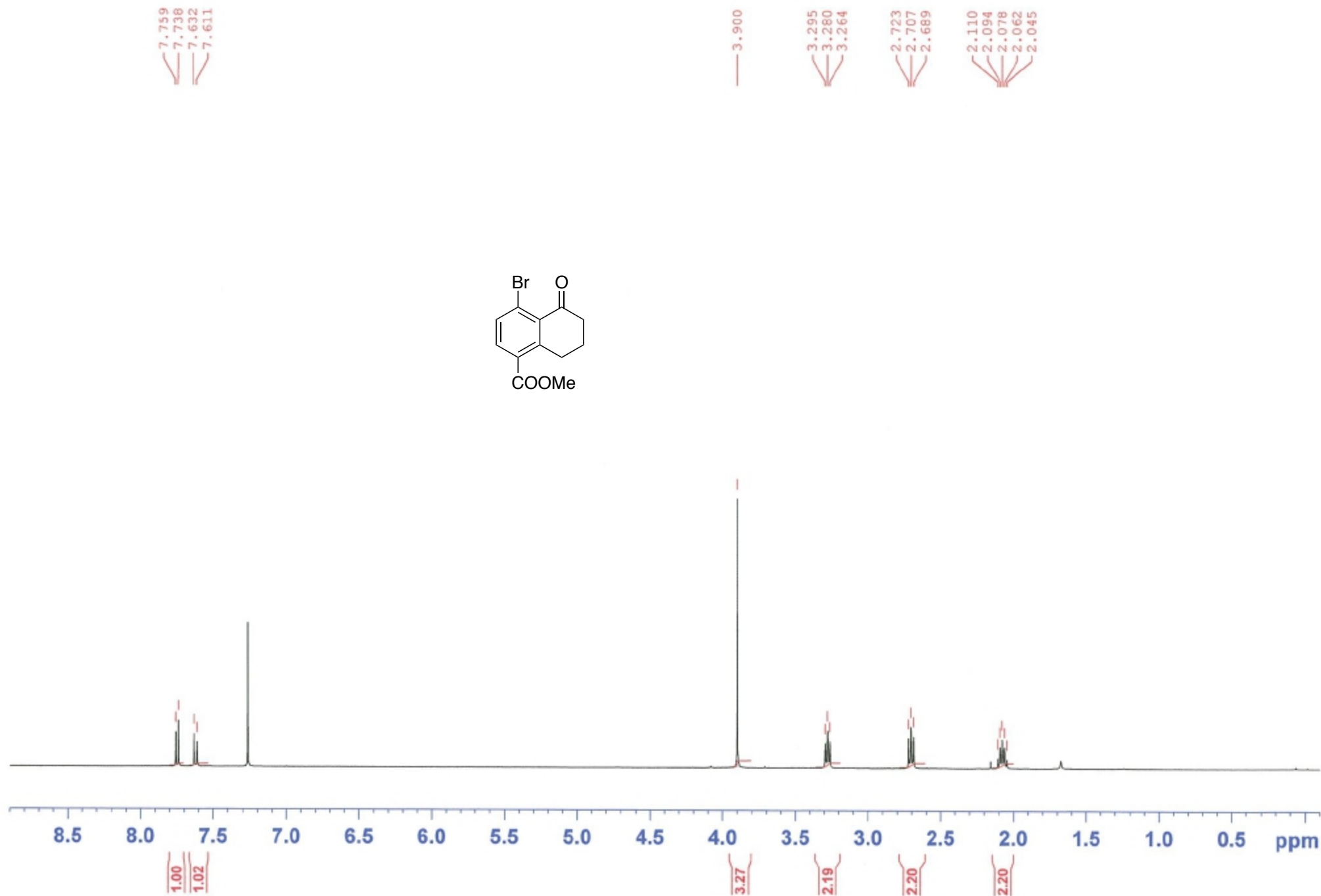
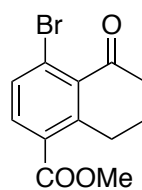


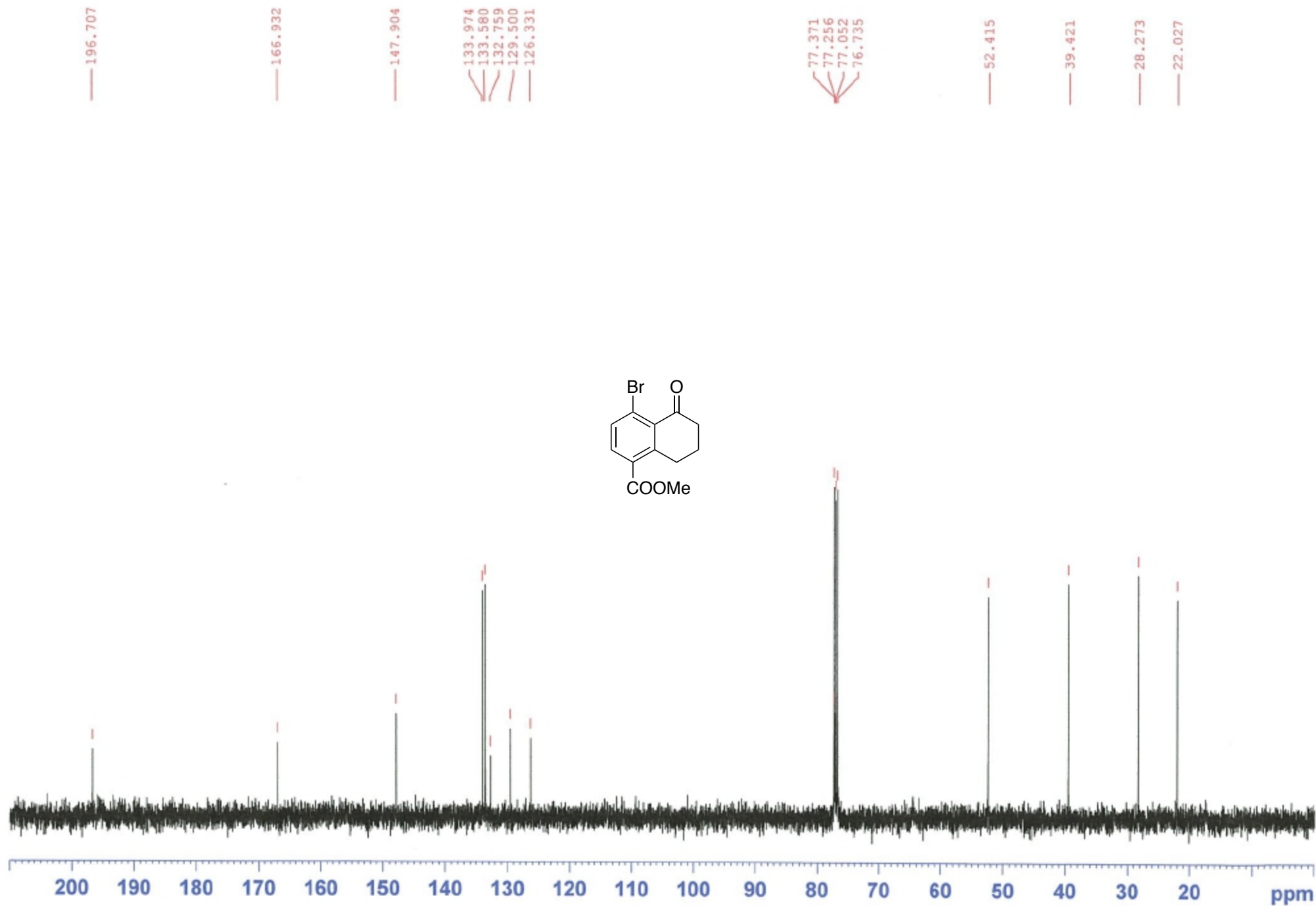
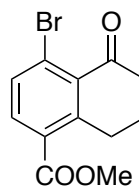


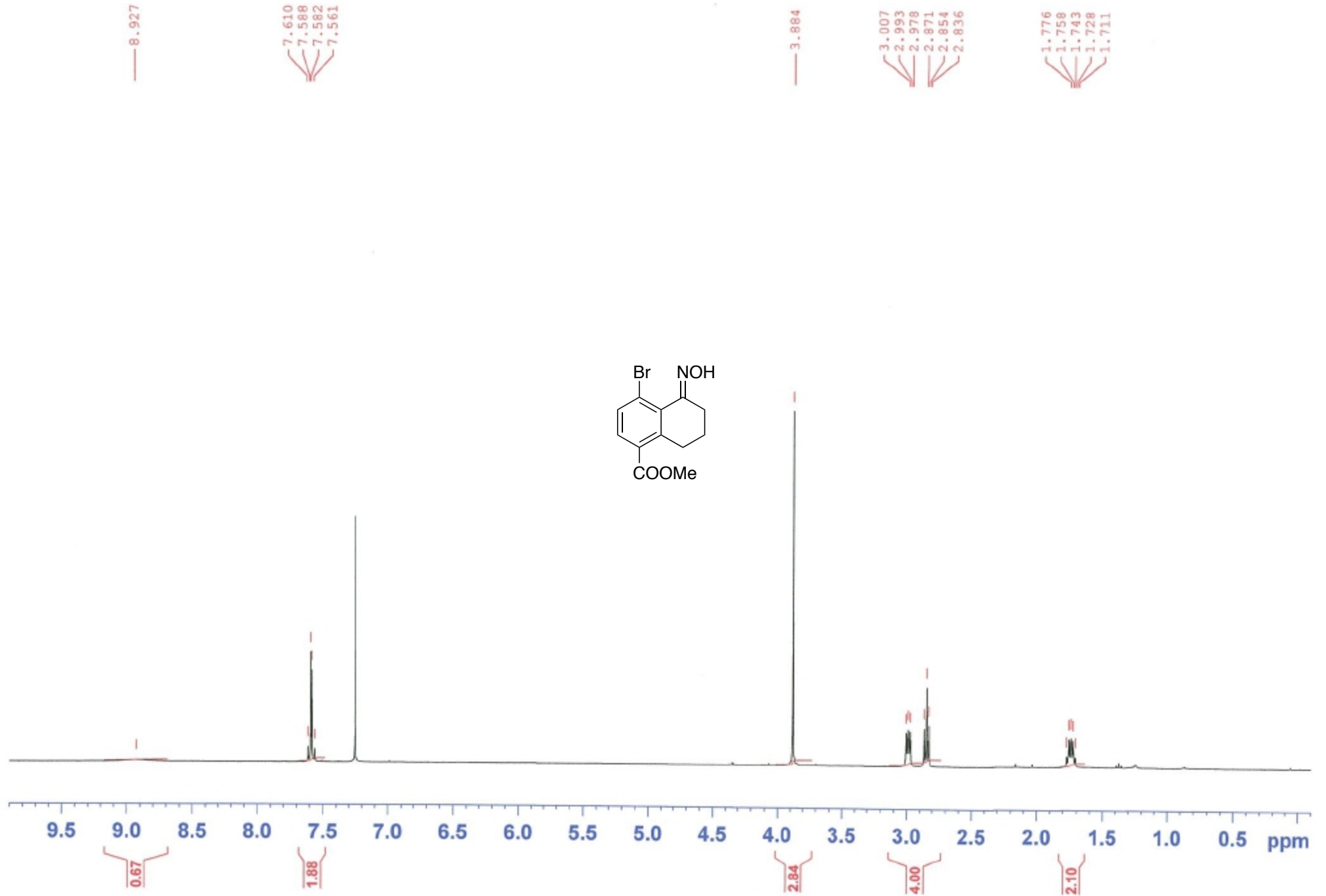
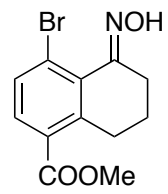


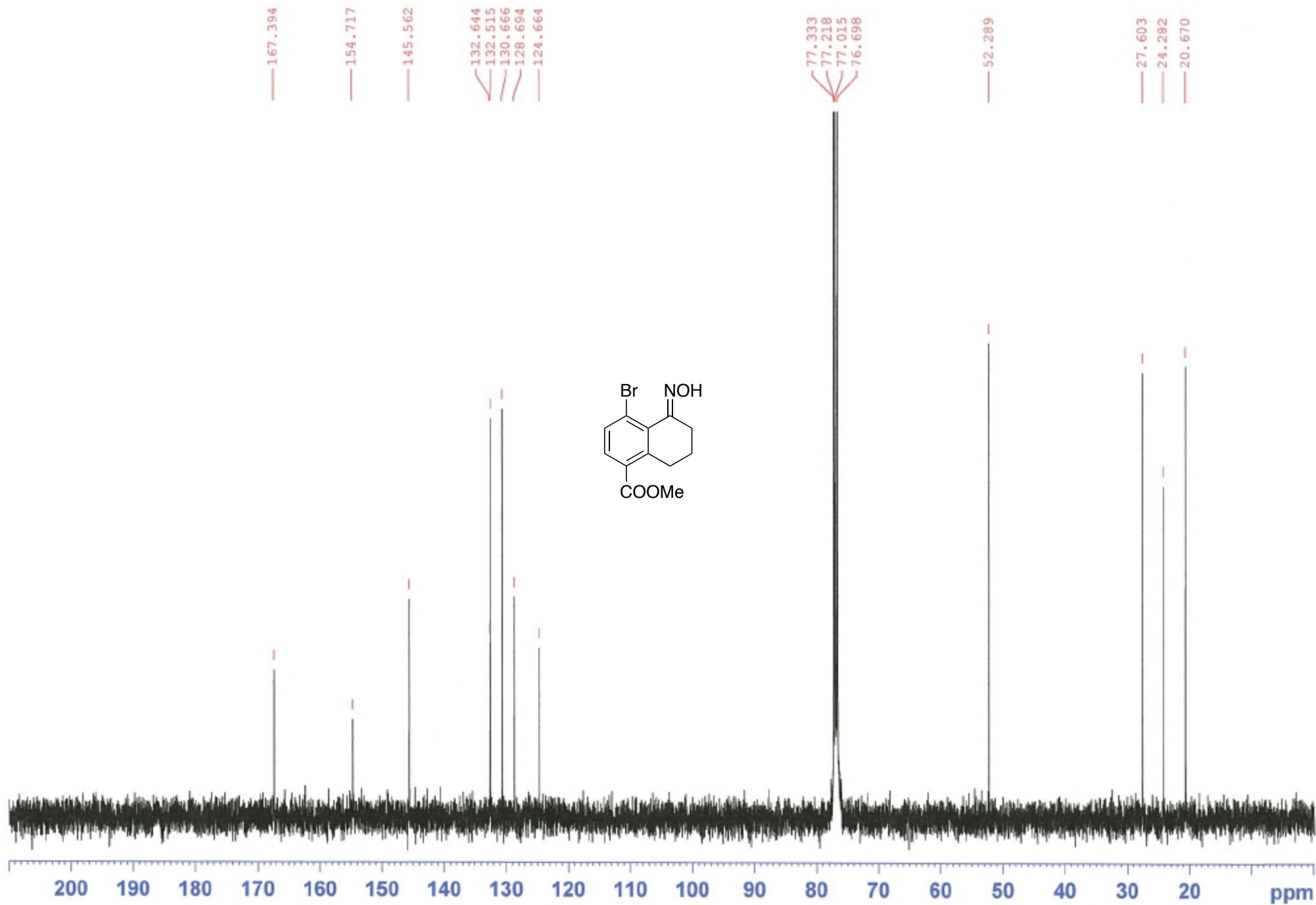




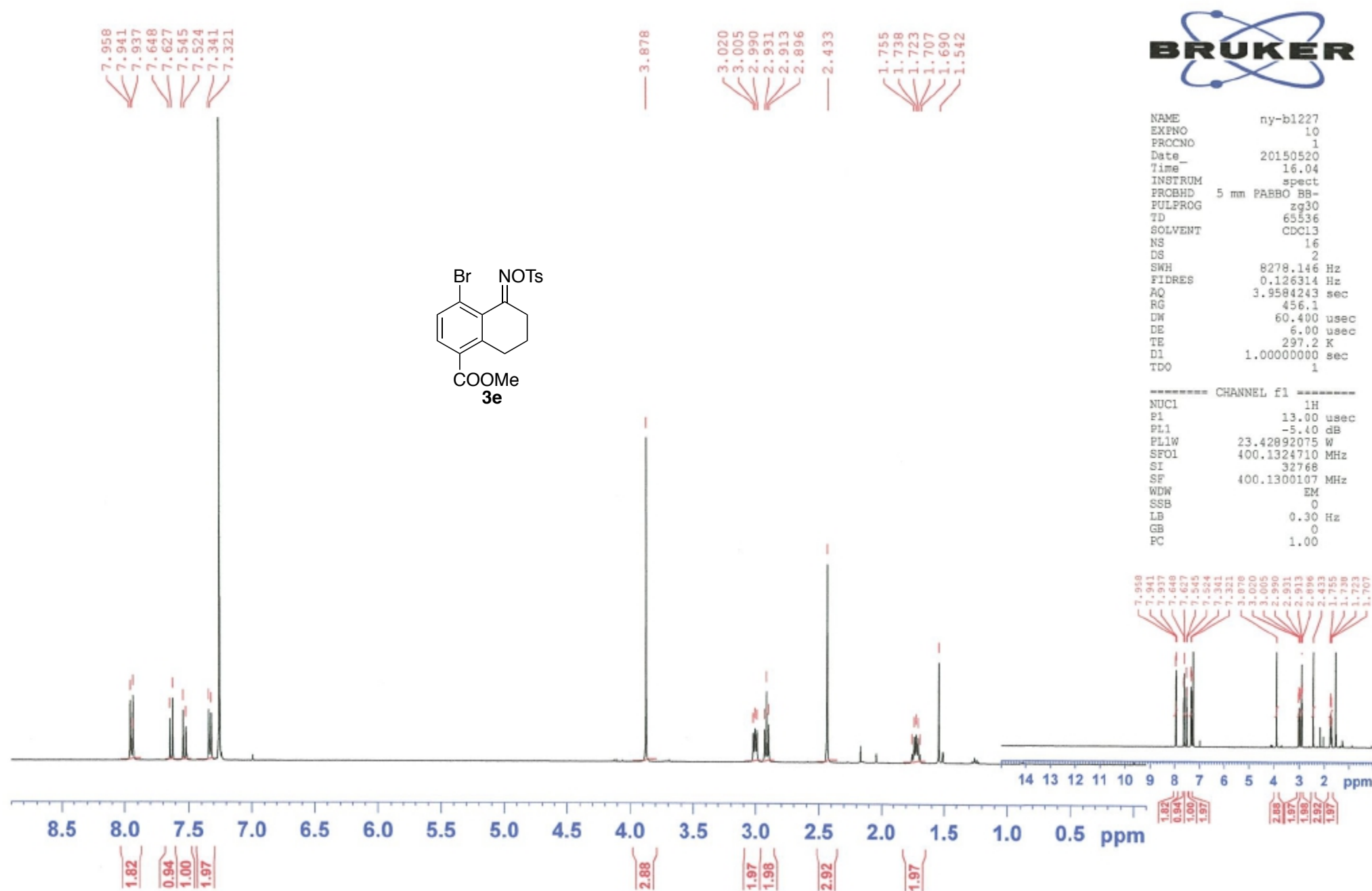


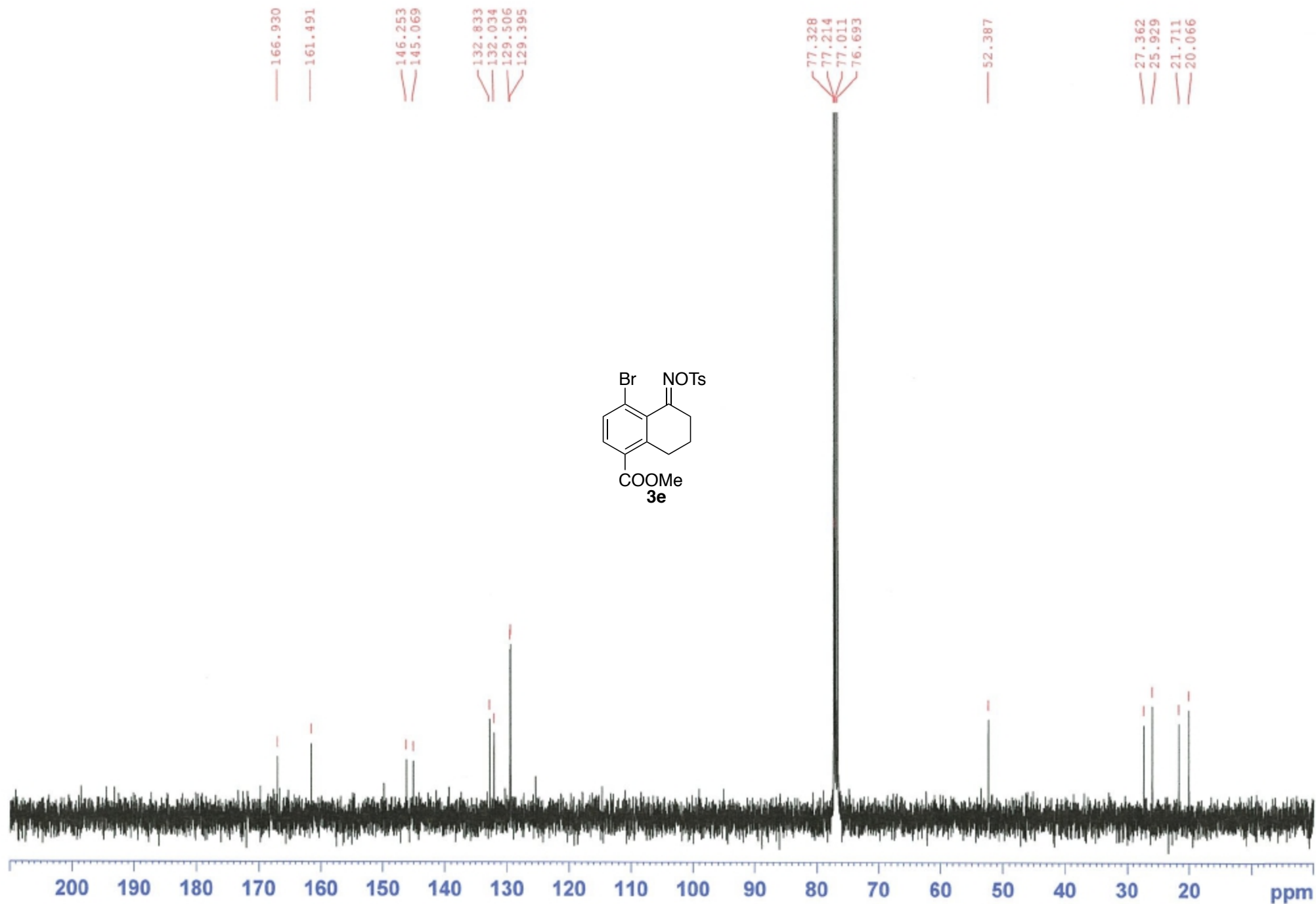


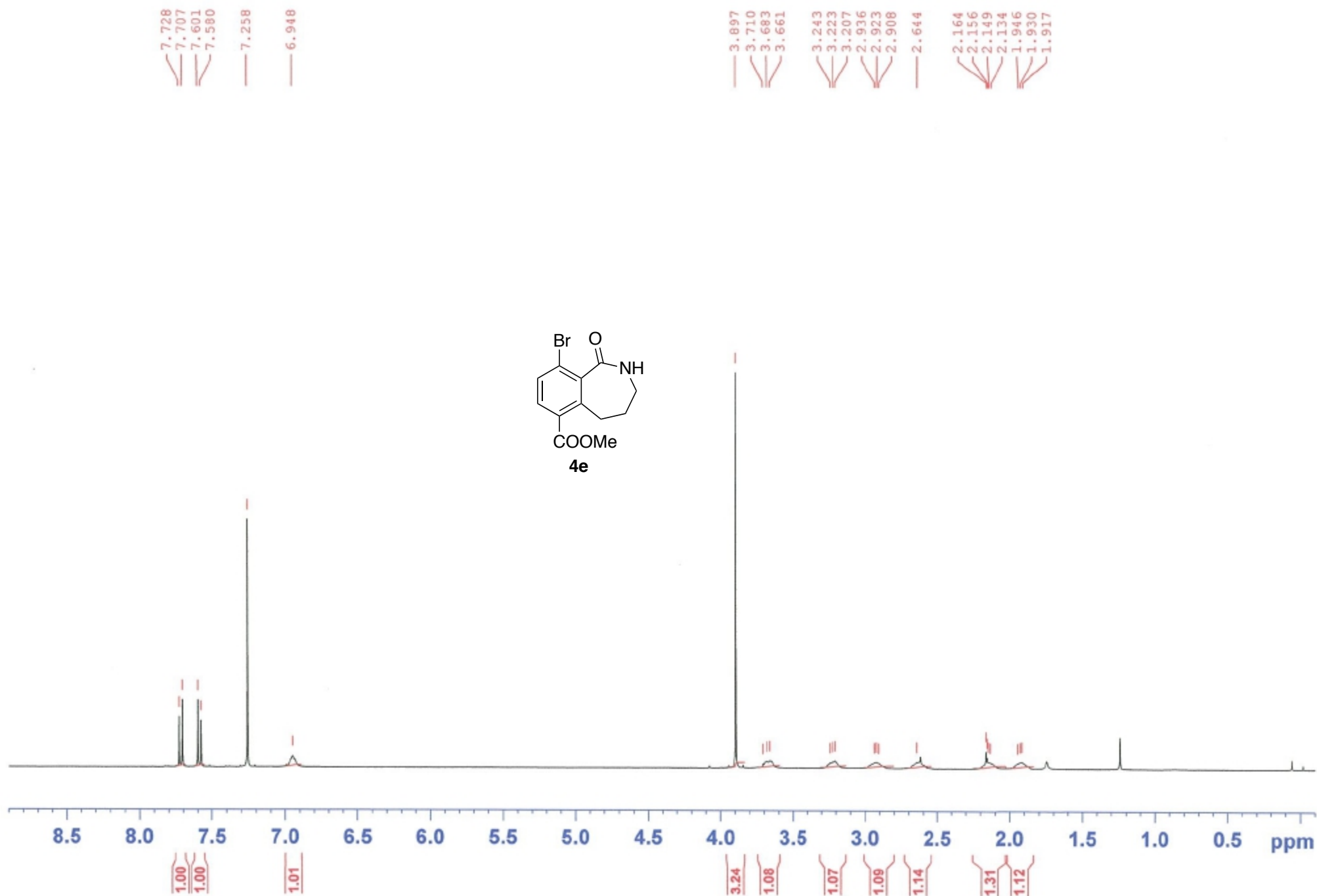
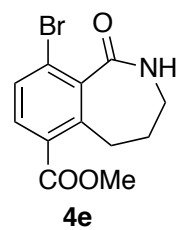


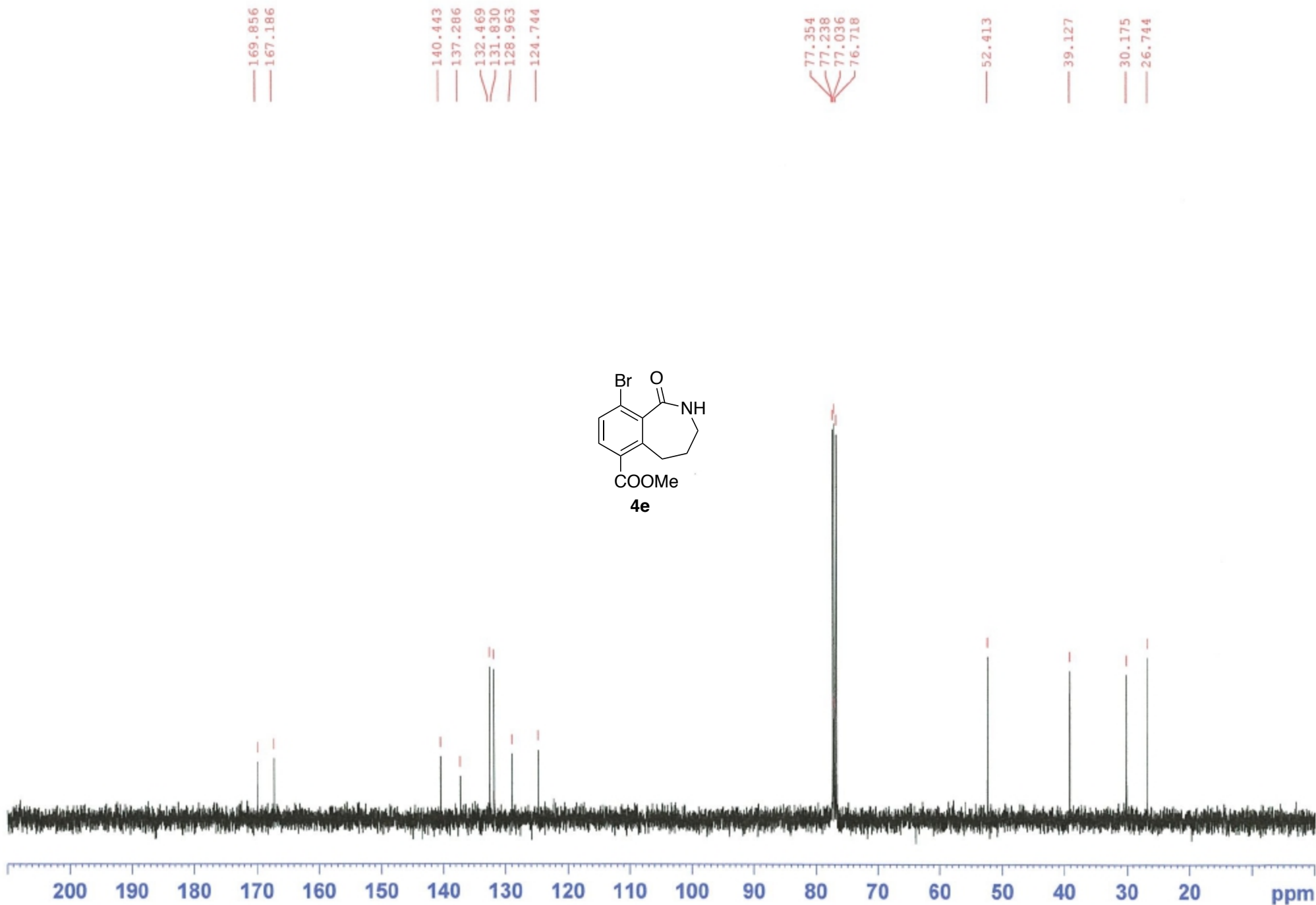
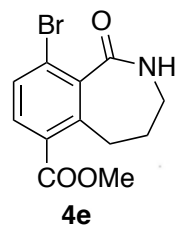


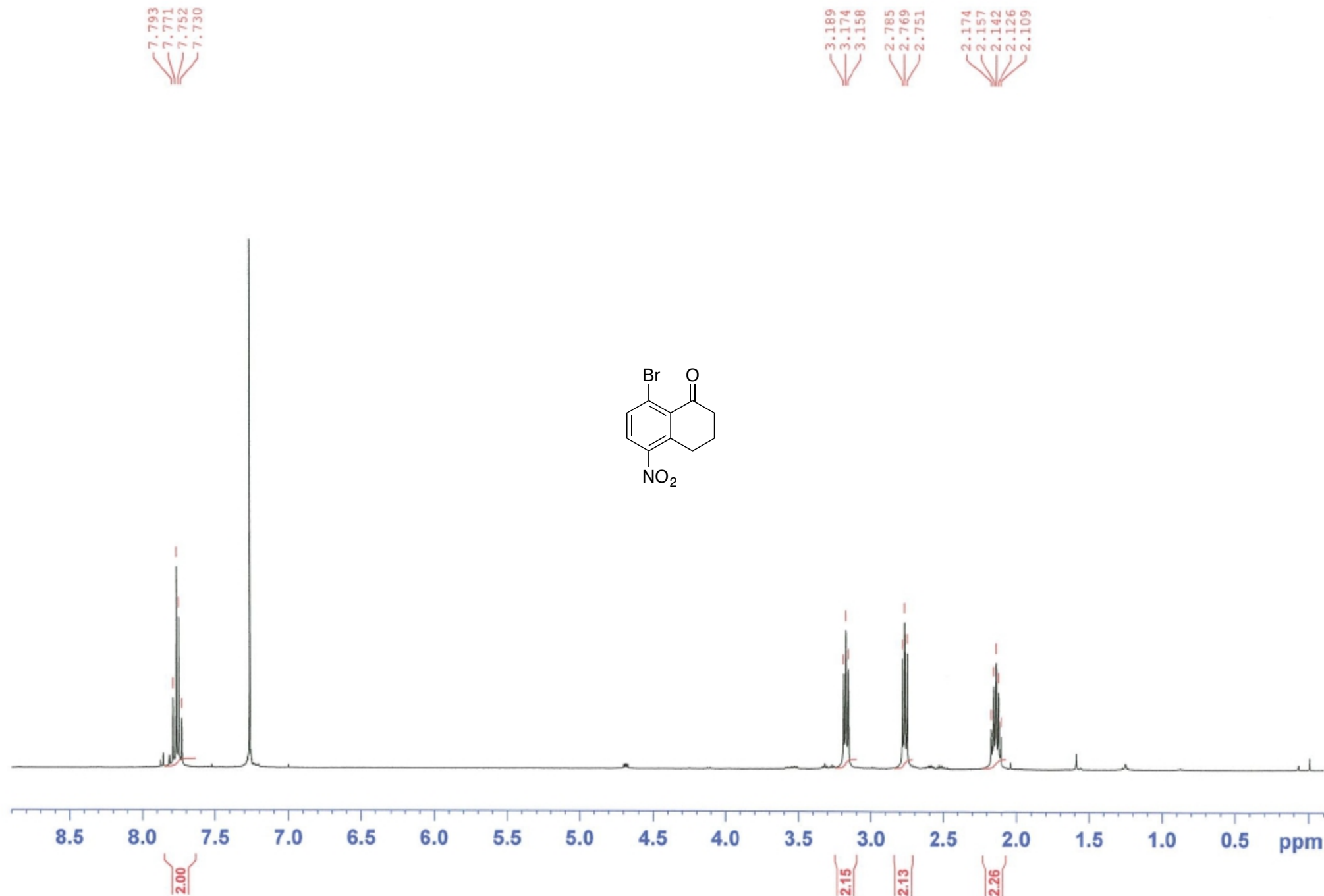
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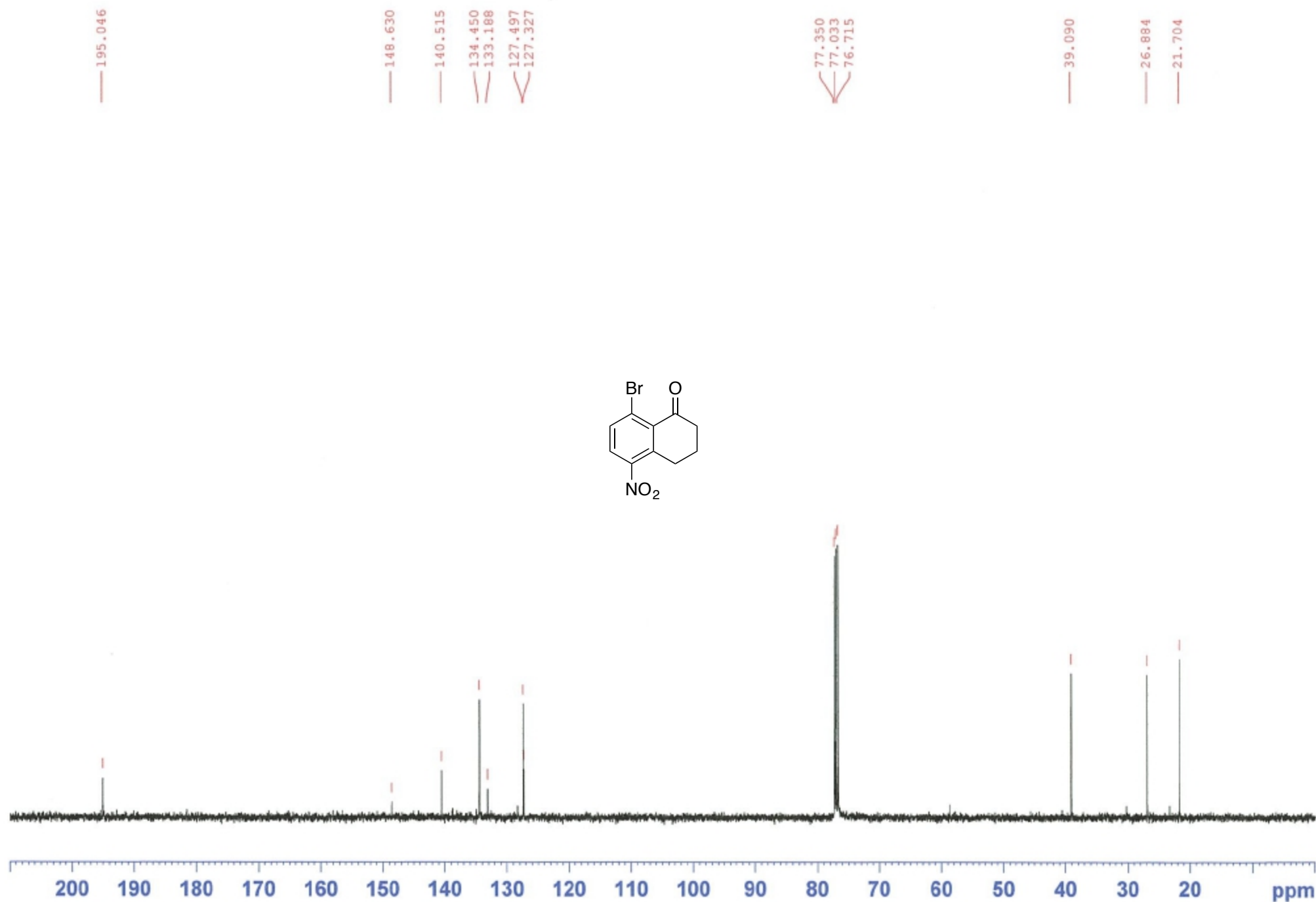
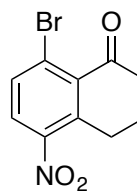


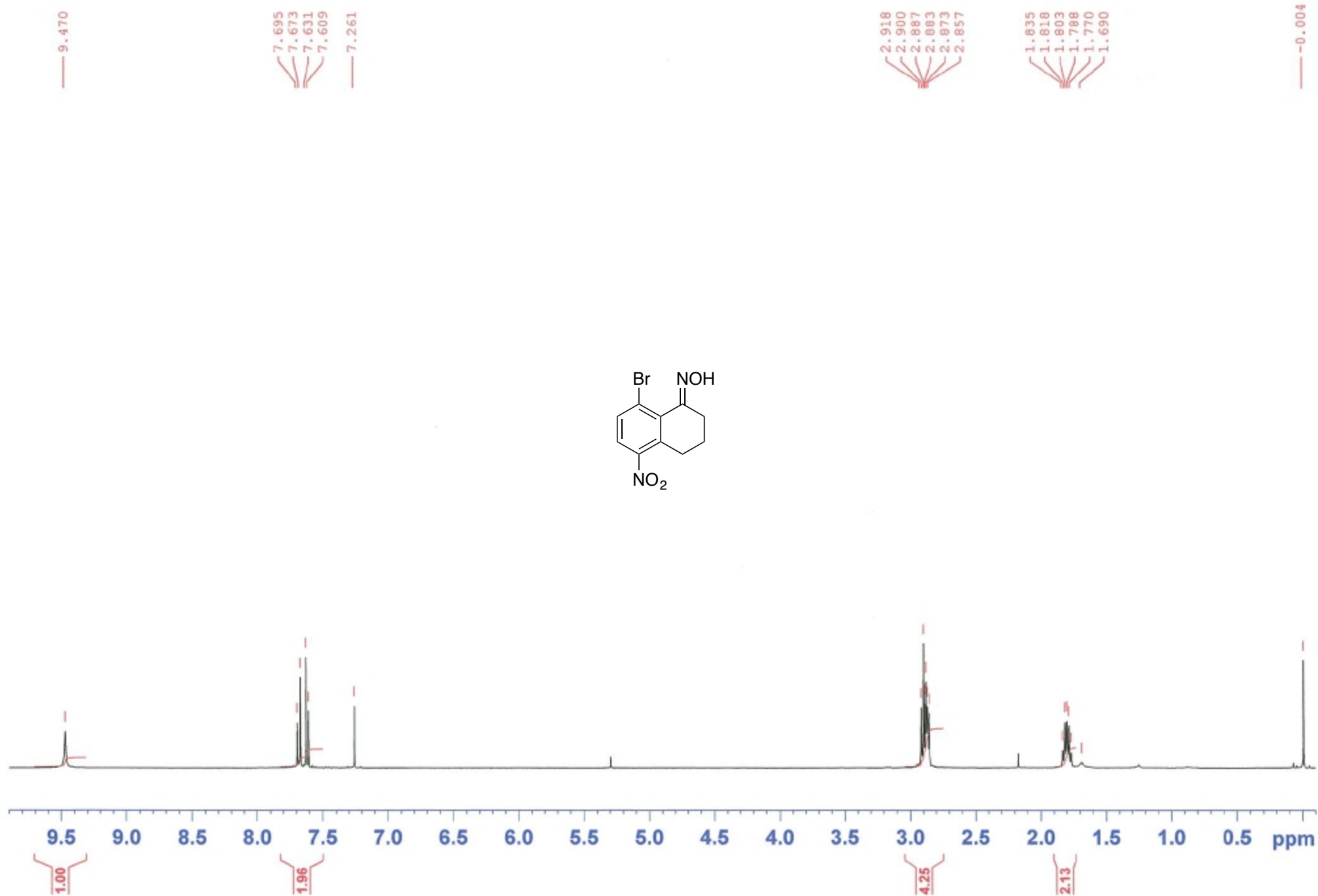
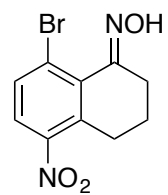


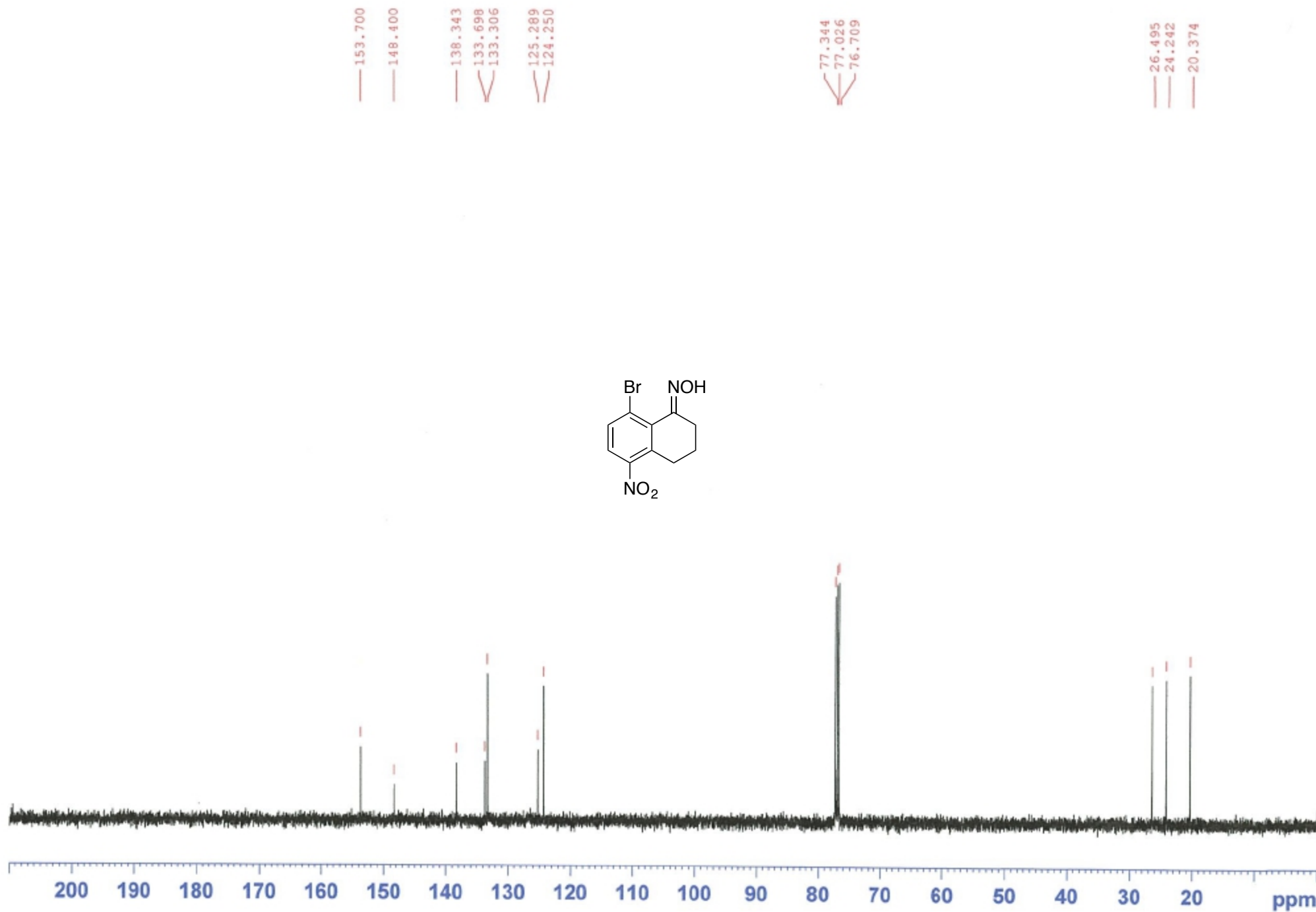
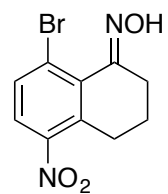


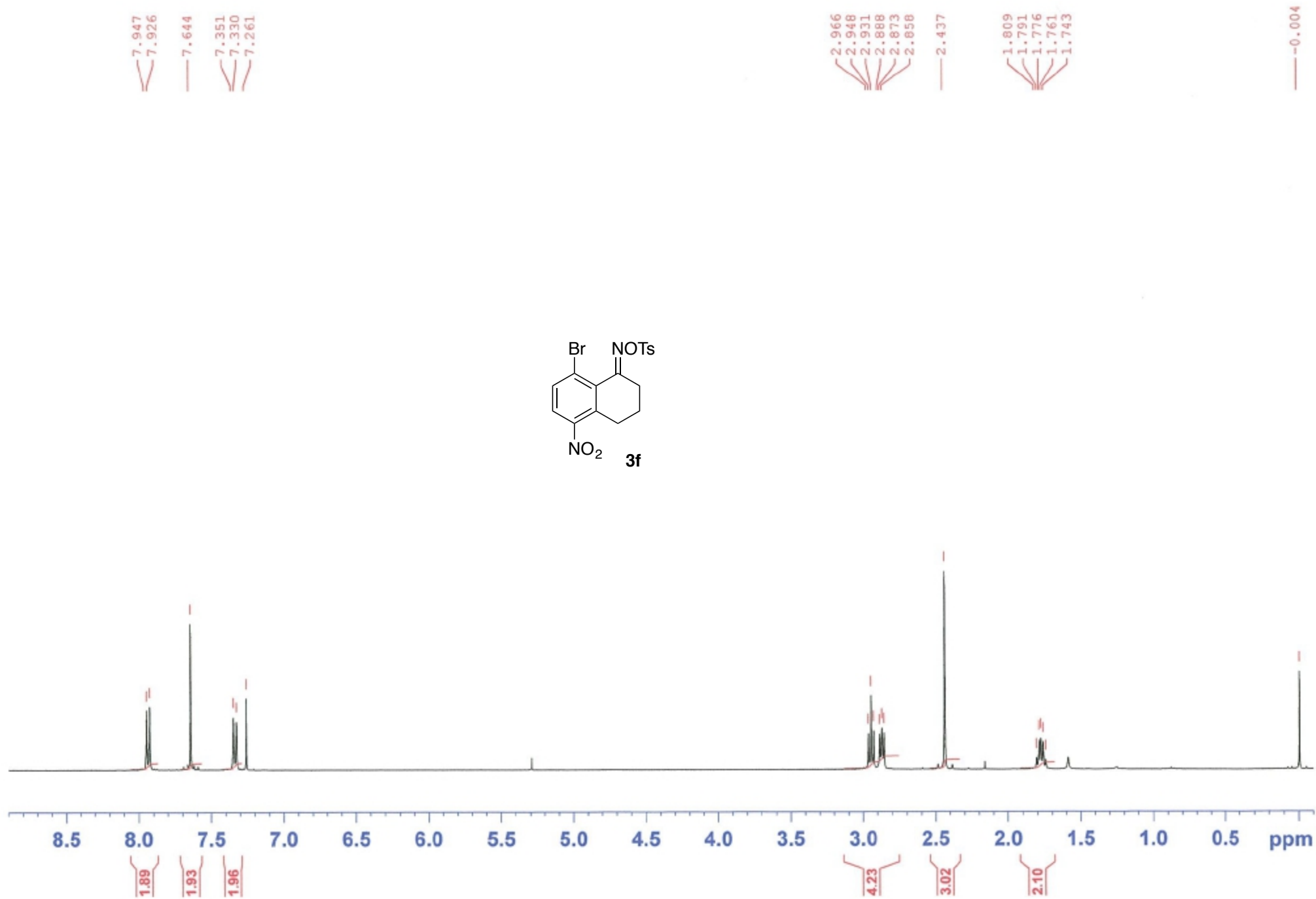
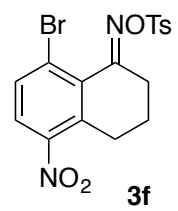


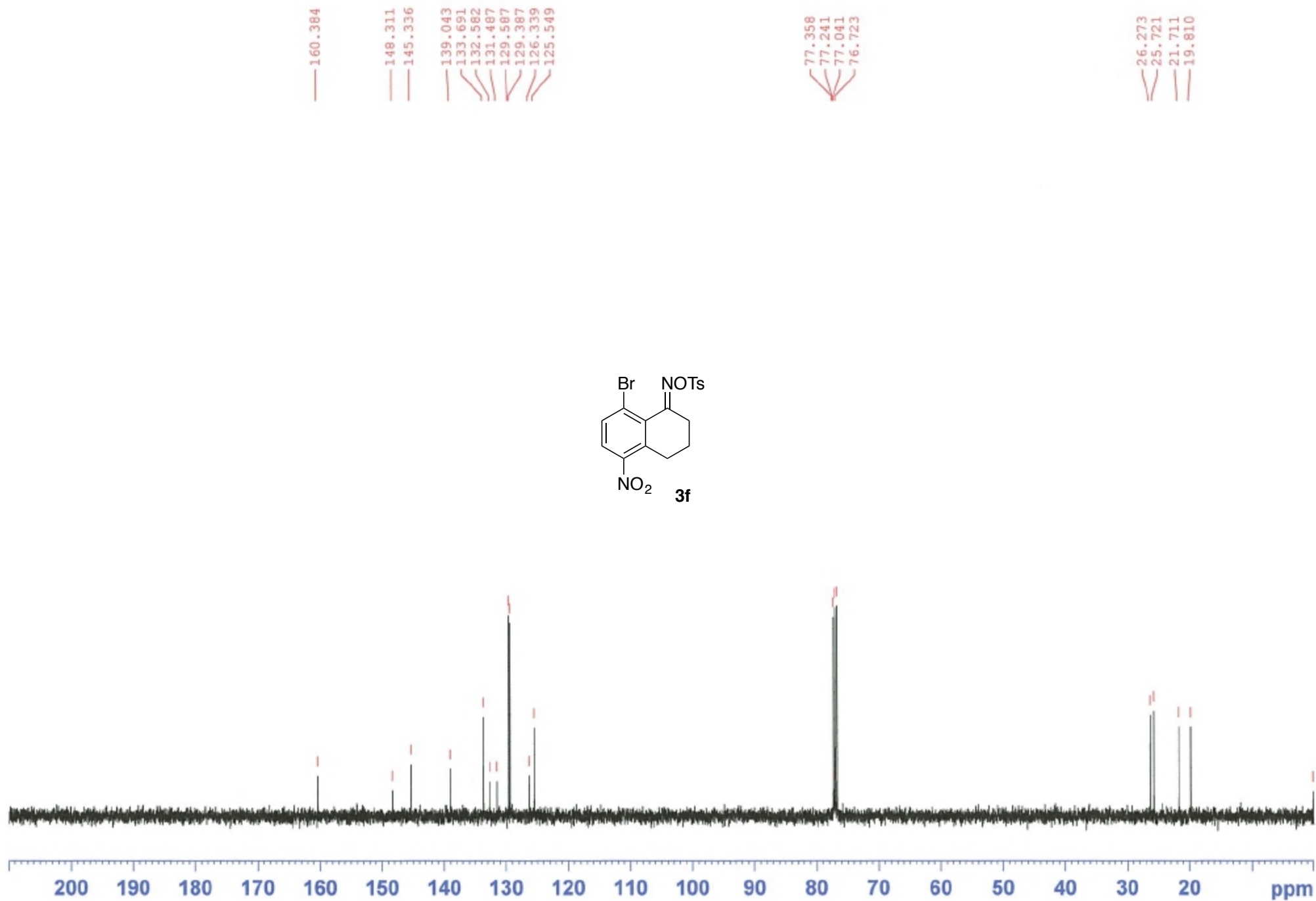
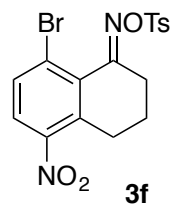


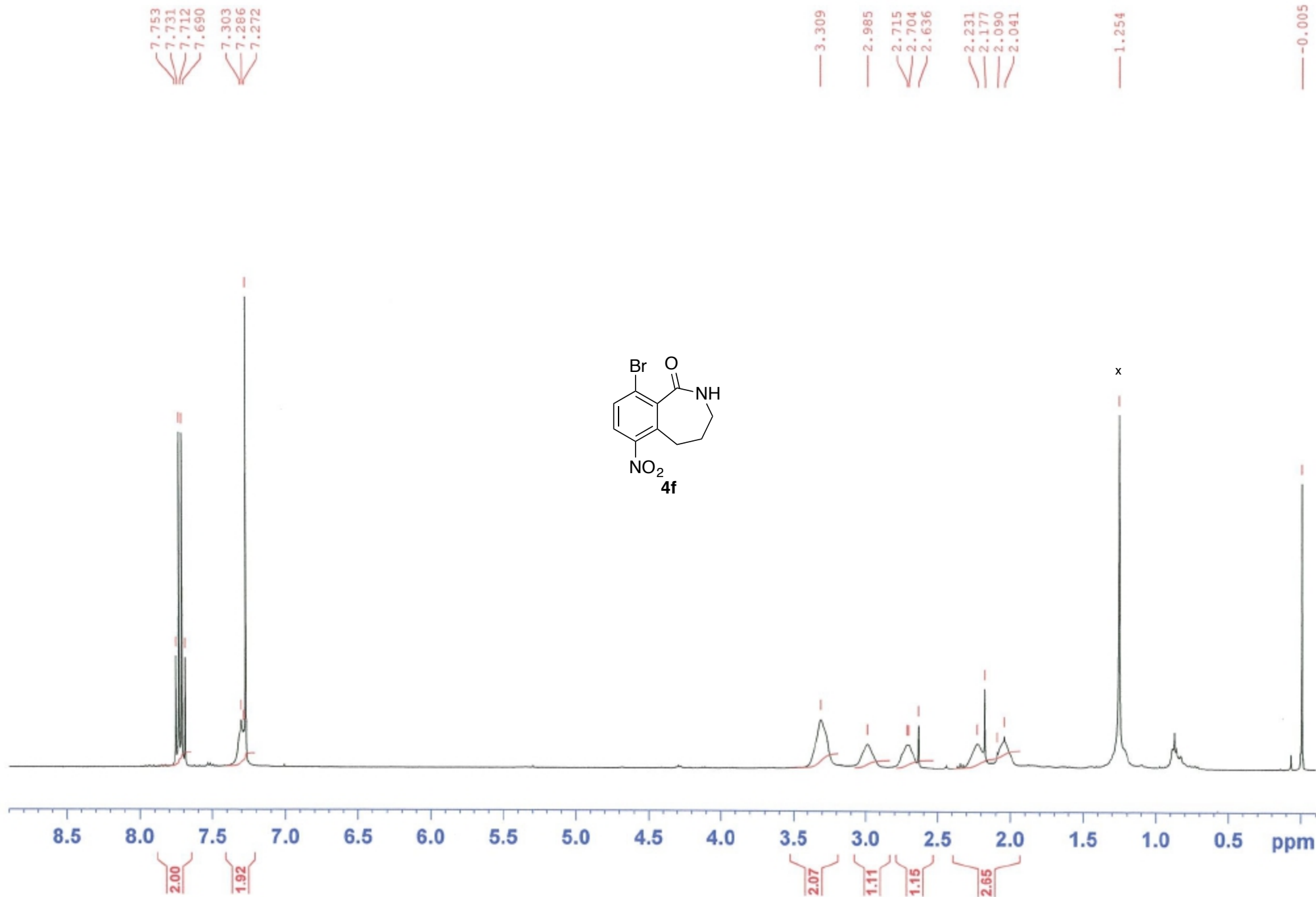
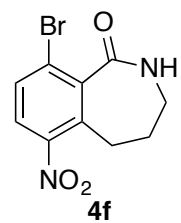


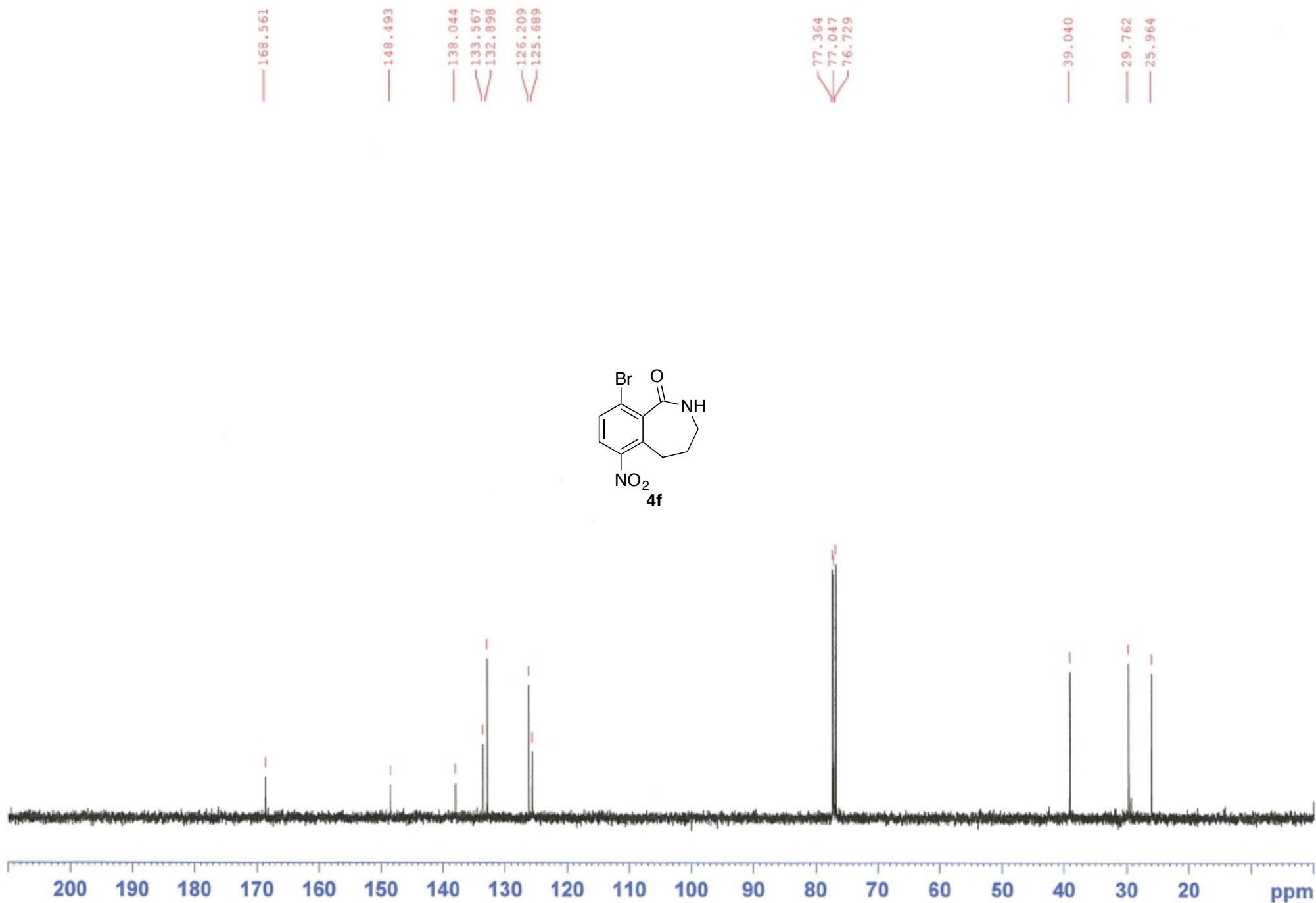
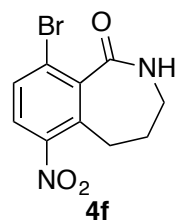


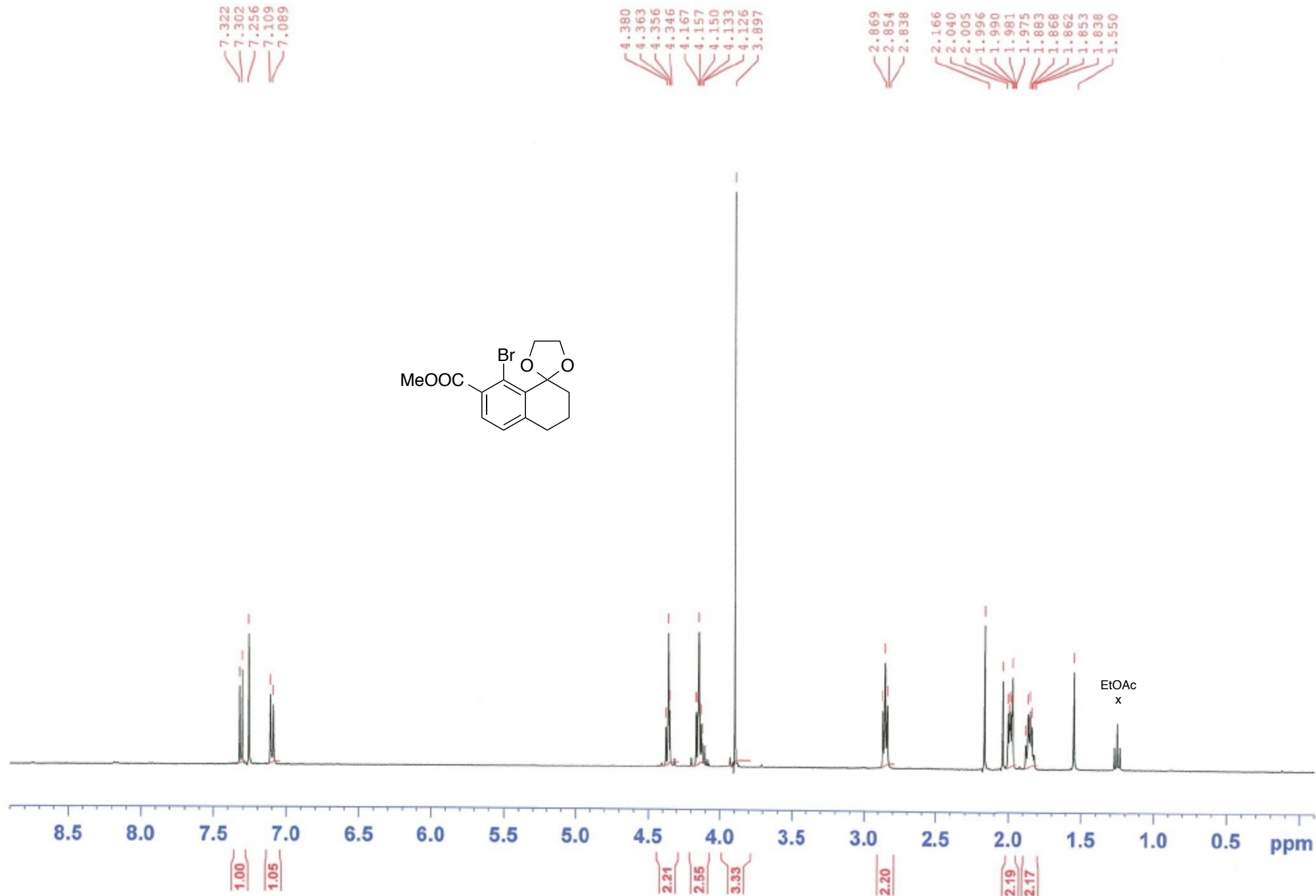
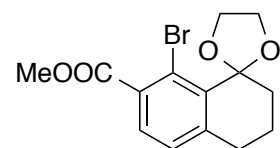


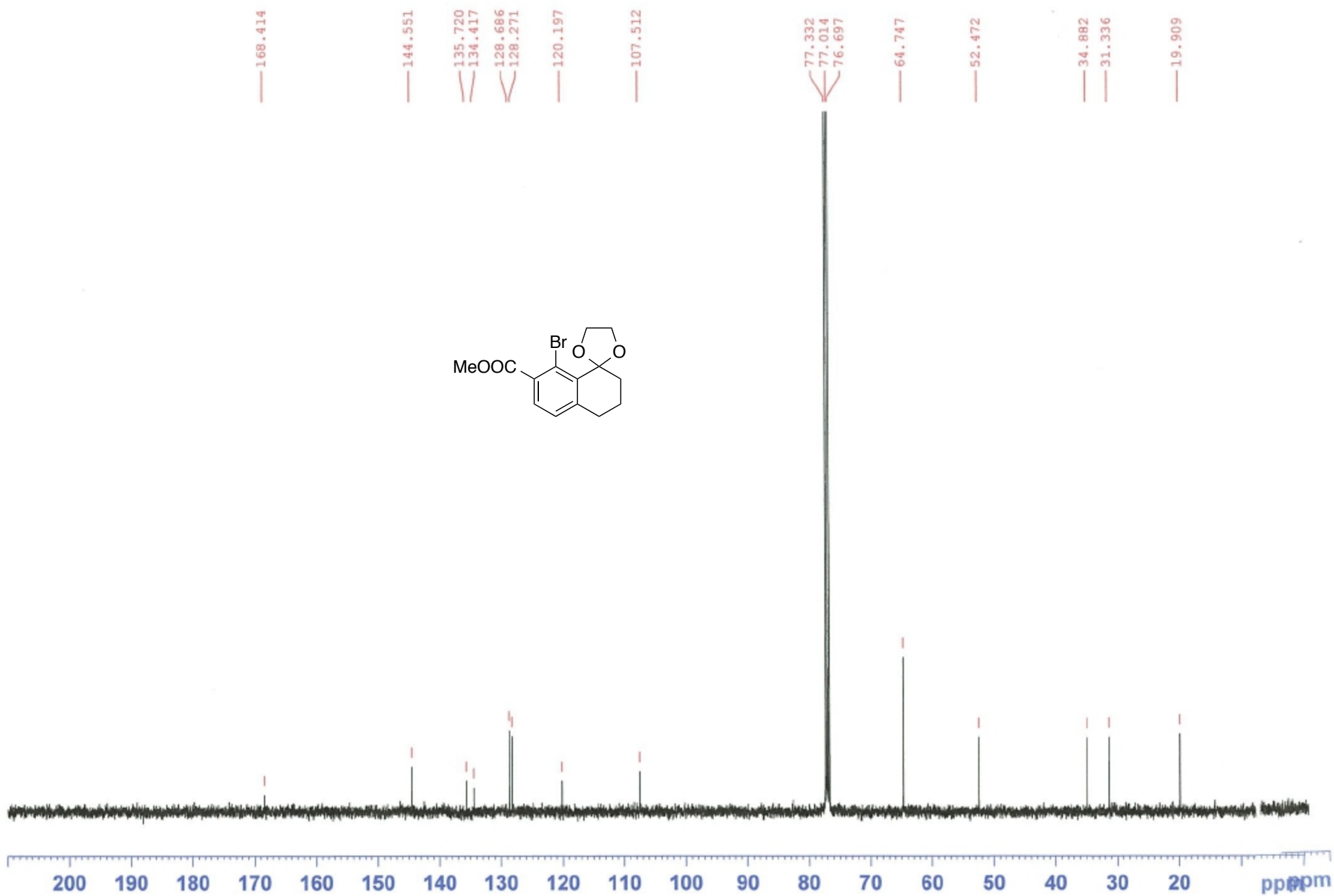
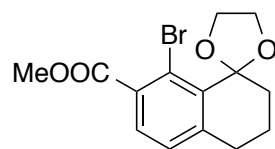


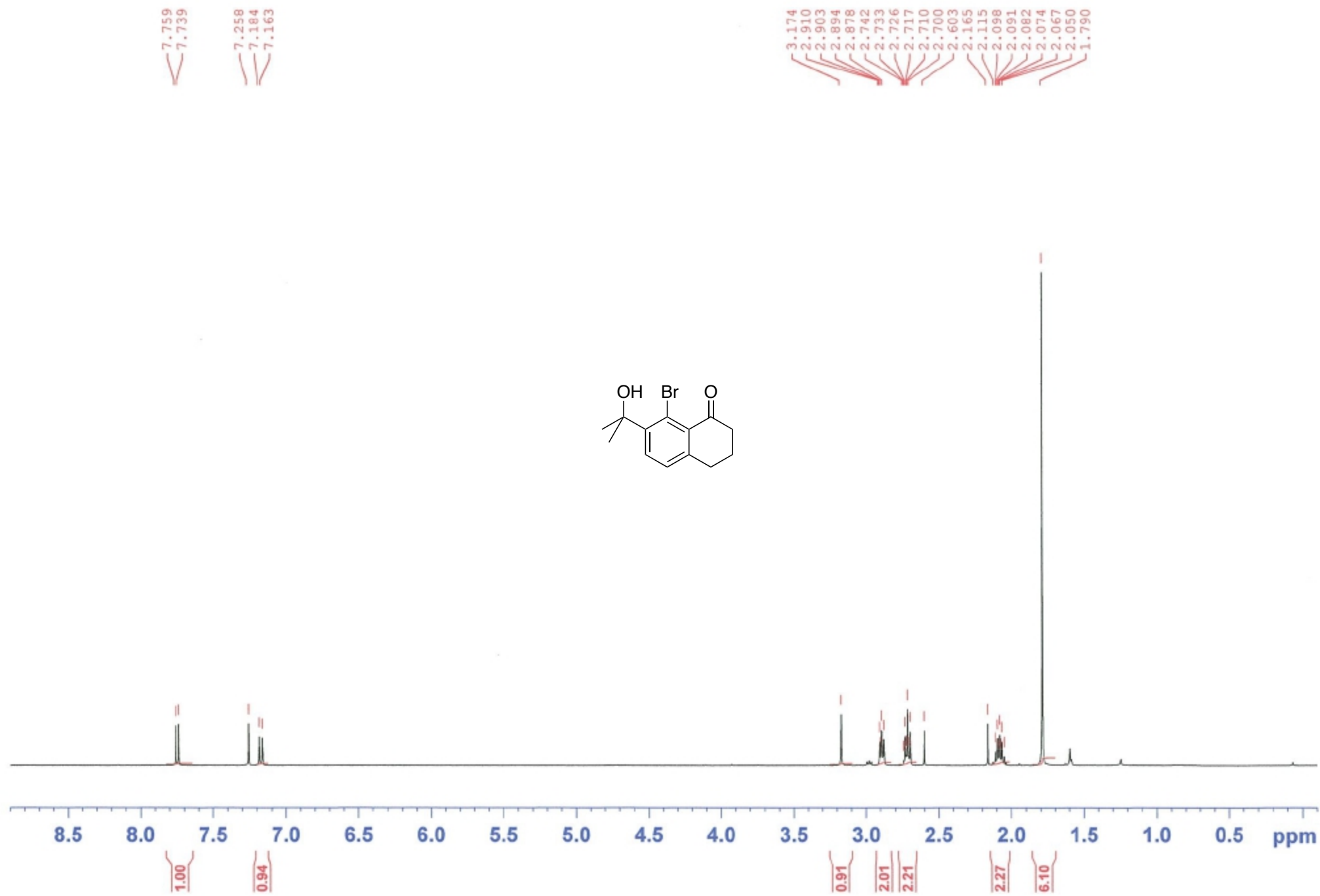
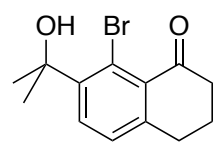


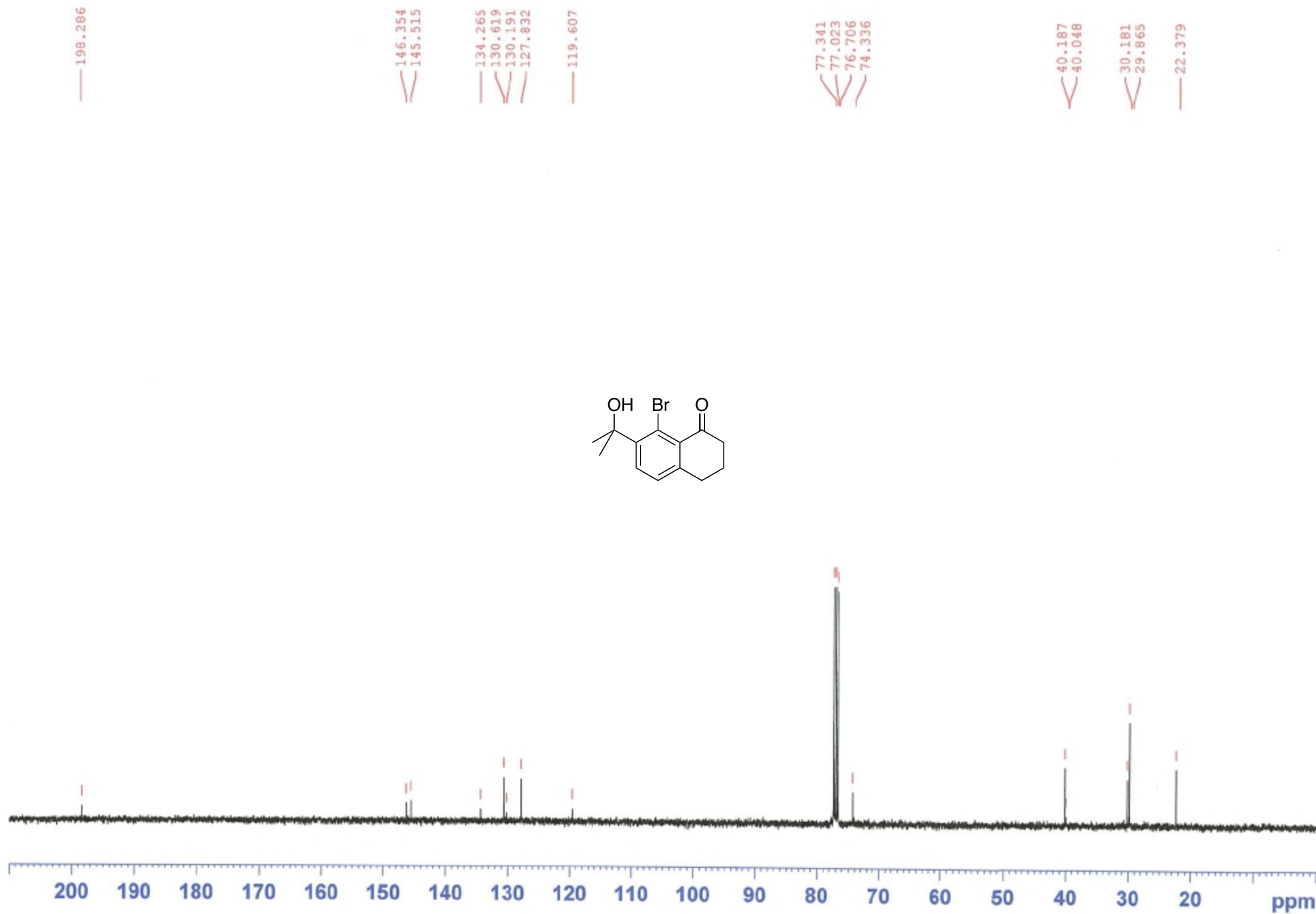
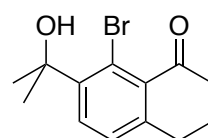


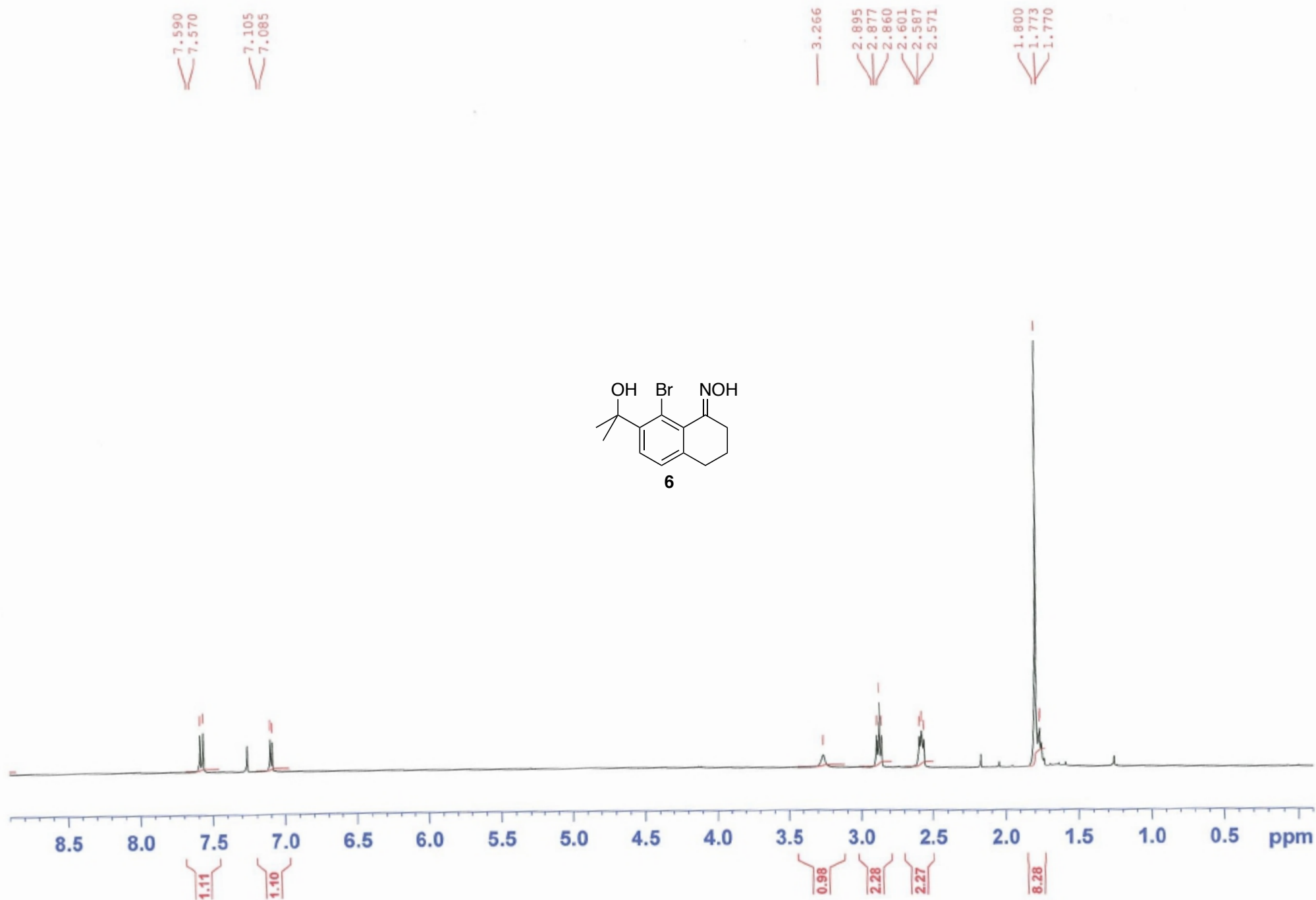
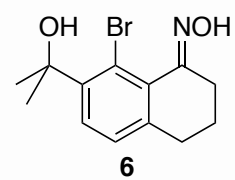


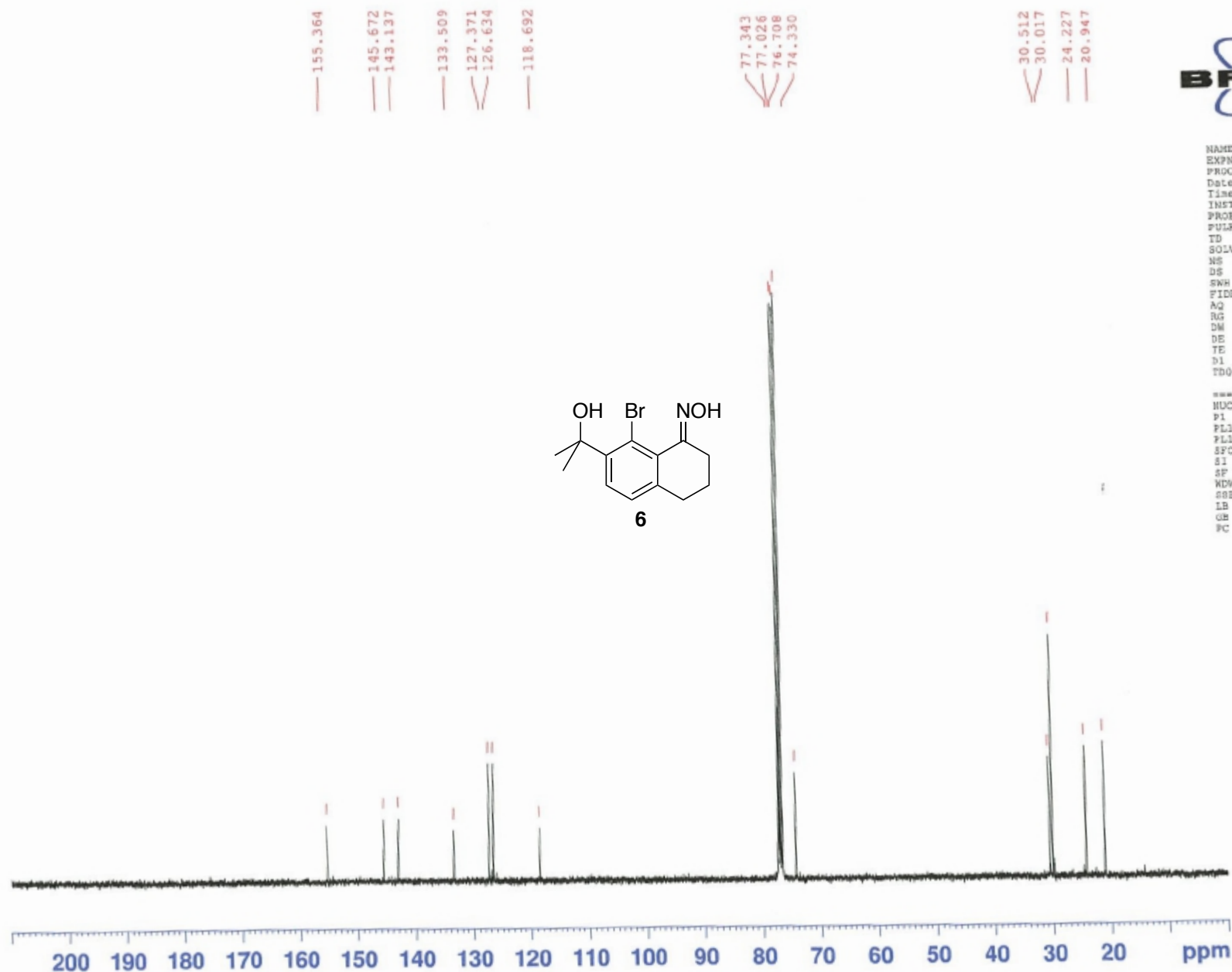










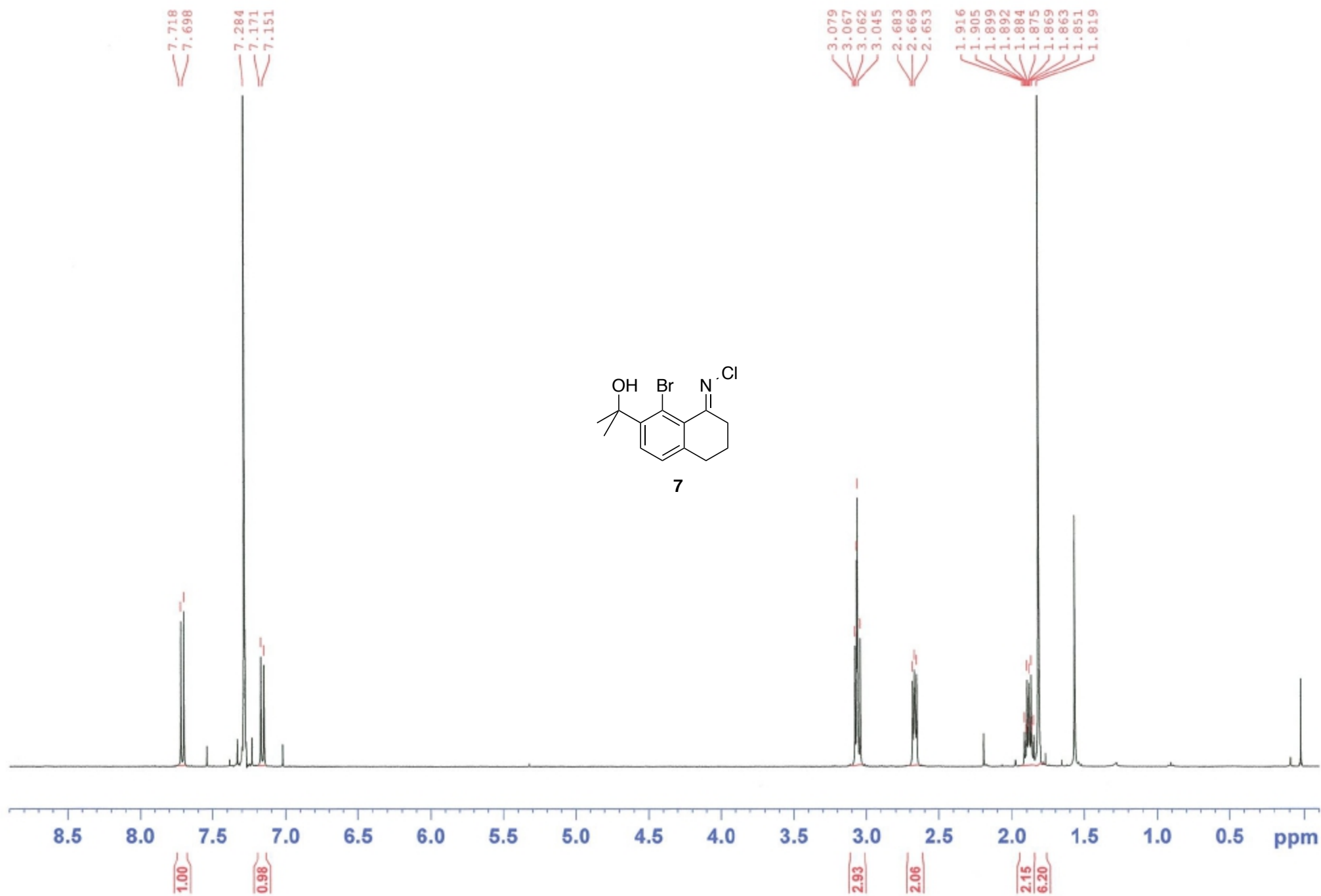
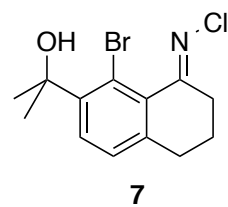


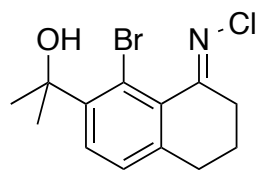
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PROCNO    1
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Time      17.10
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PULPROG   zg30
TD         65536
SOLVENT   CDCl3
NS         16
DS         2
SWH        8278.146 Hz
FIDRES     0.126314 Hz
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TE         299.1 K
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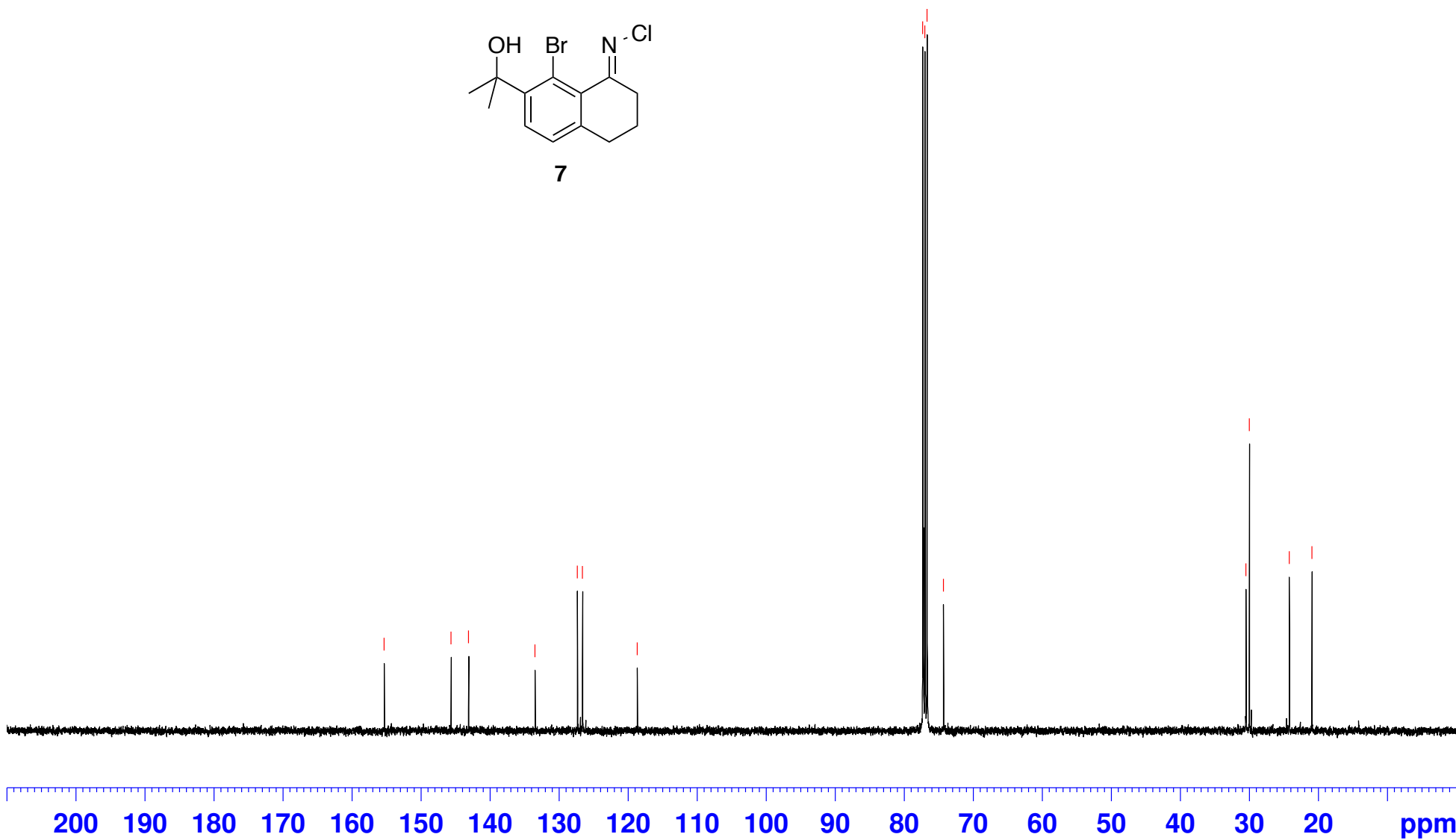
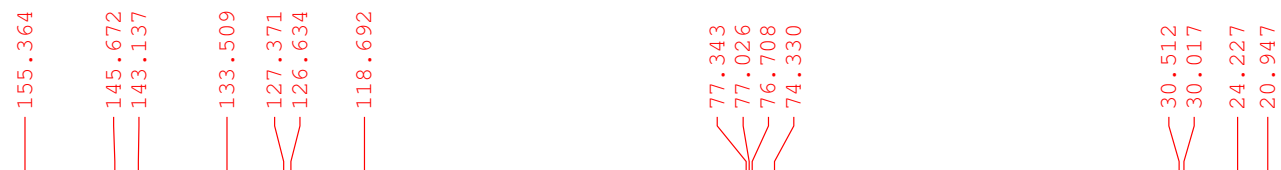
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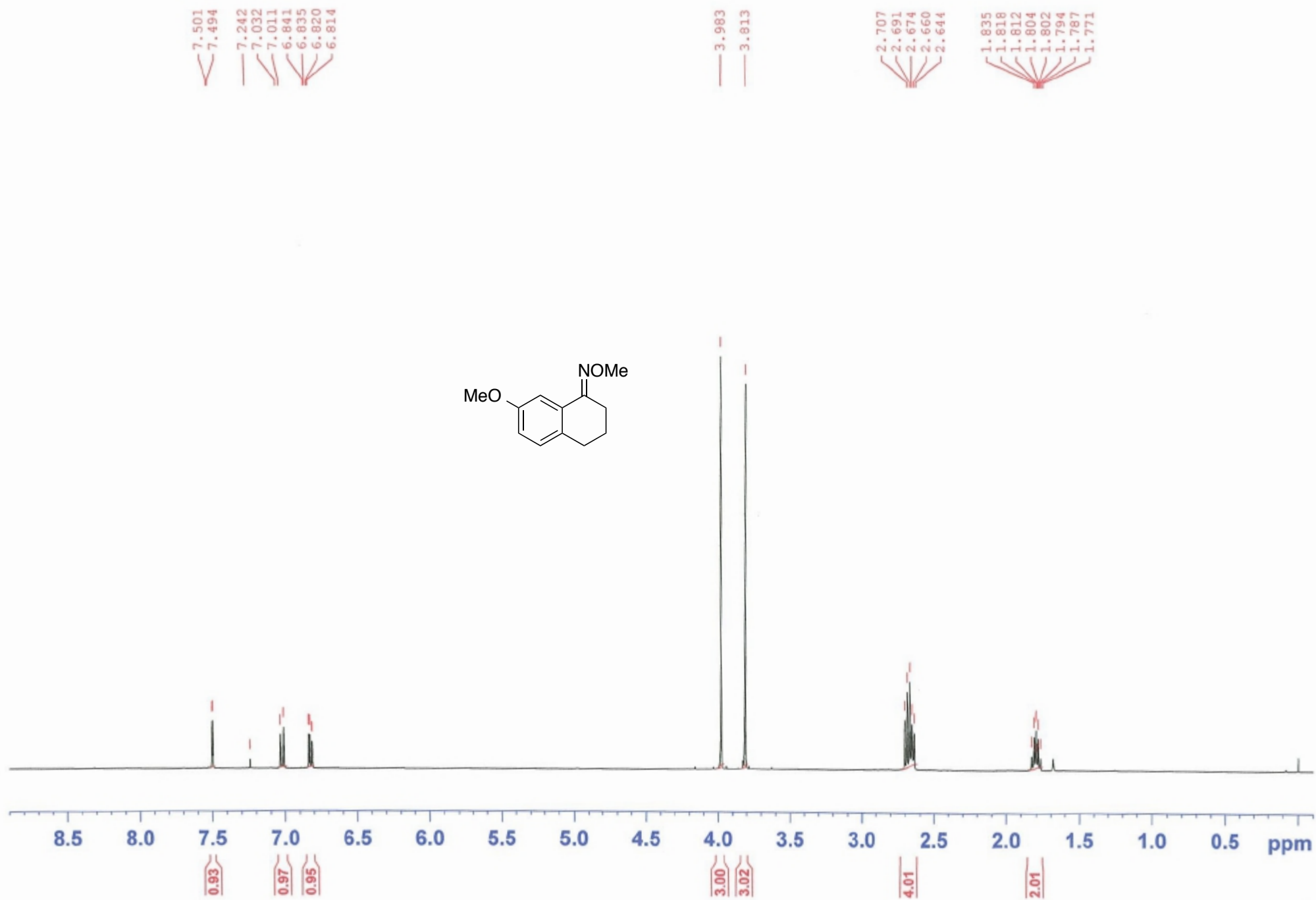
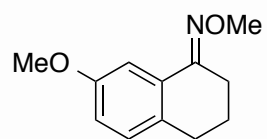
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PL1        -4.00 dB
PL1W       16.97275162 W
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LB         0.30 Hz
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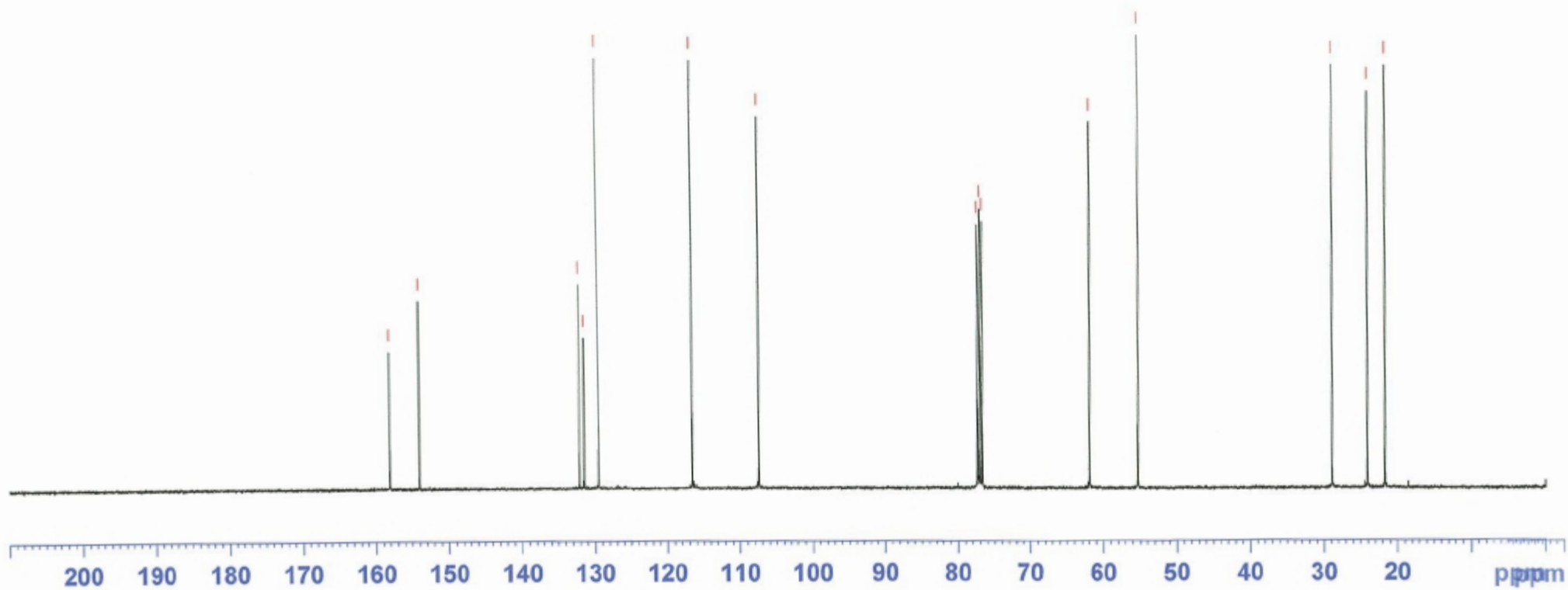
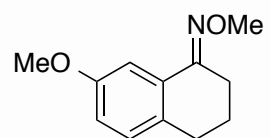



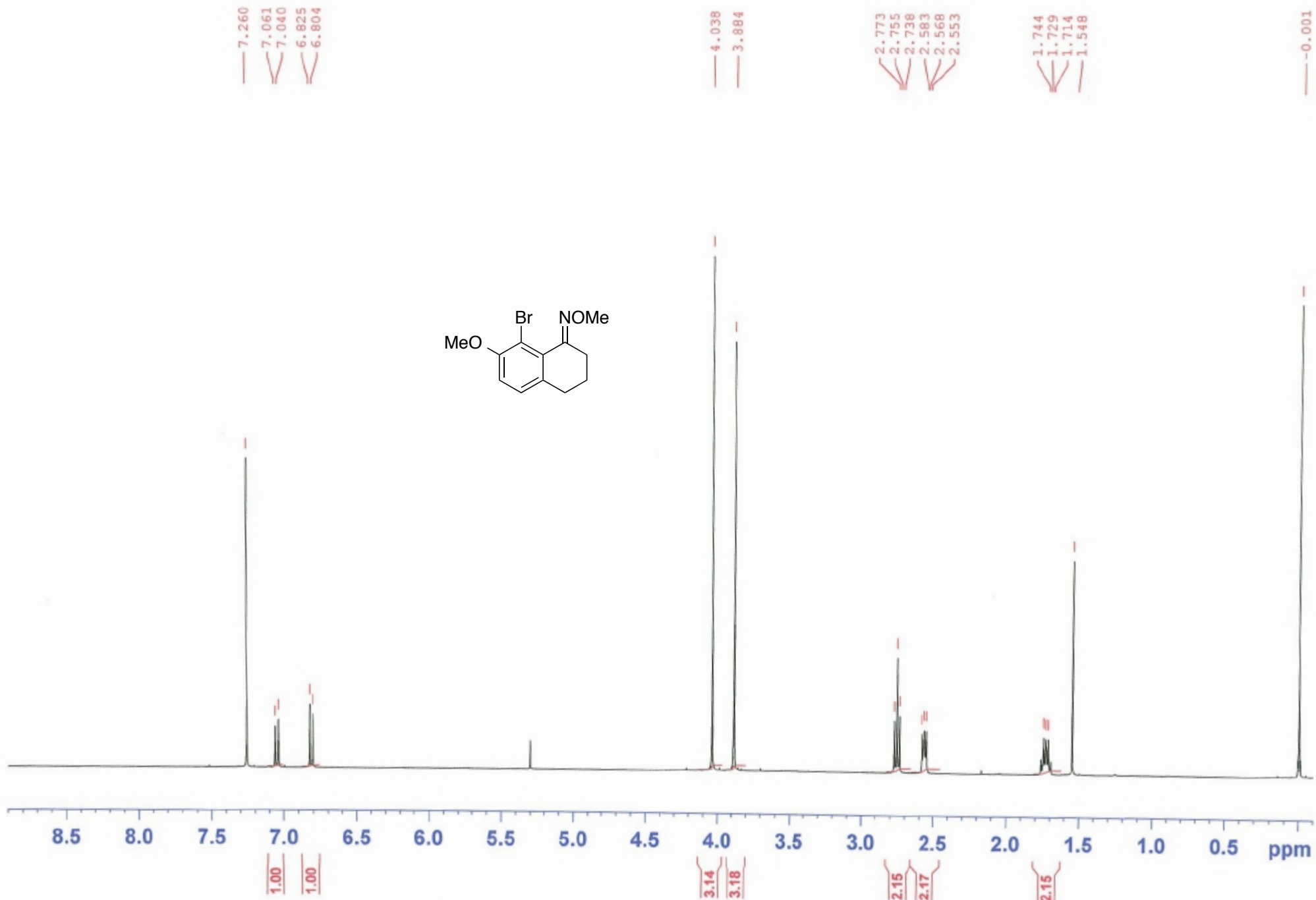
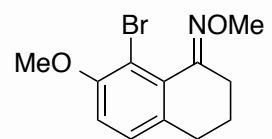


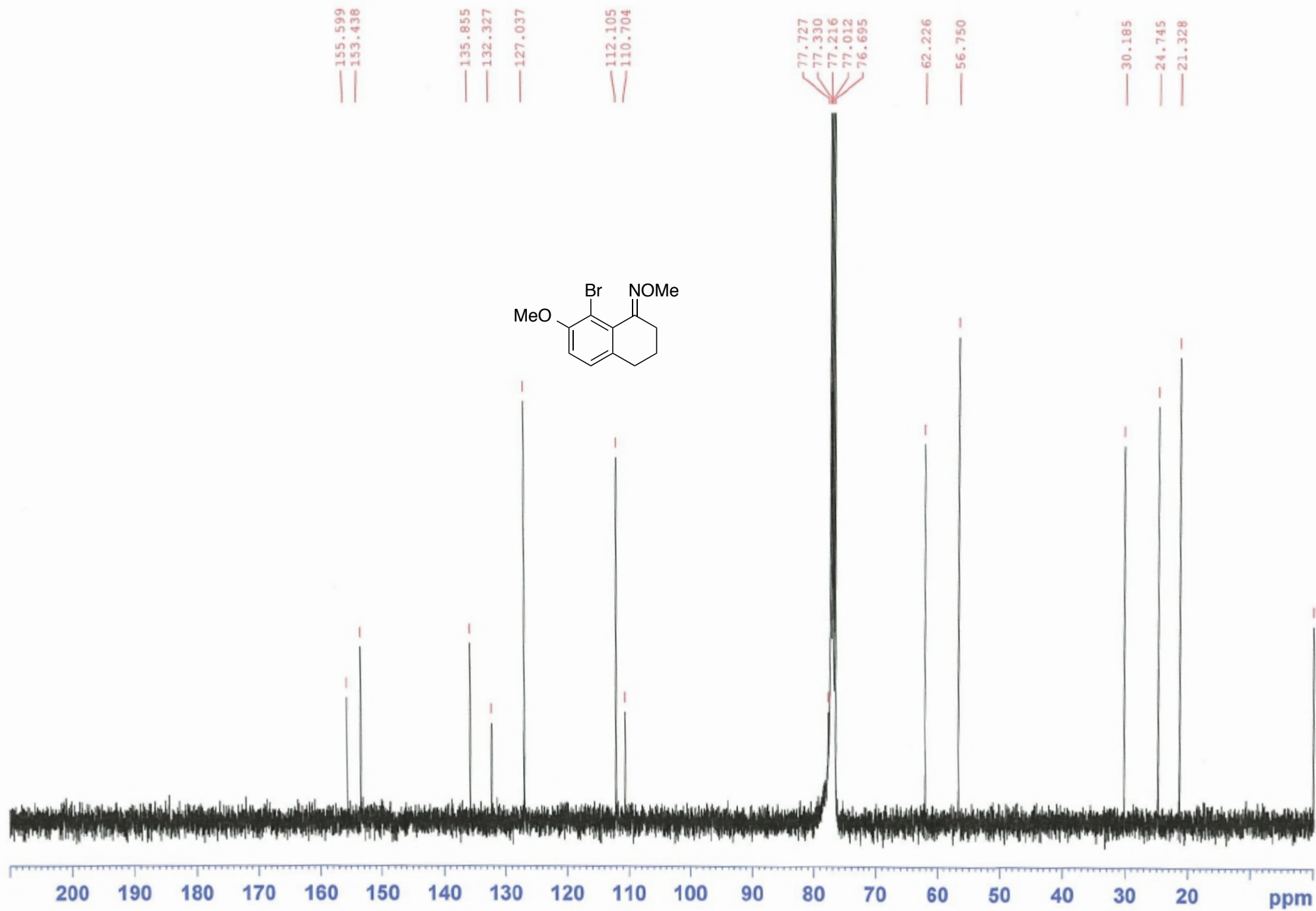
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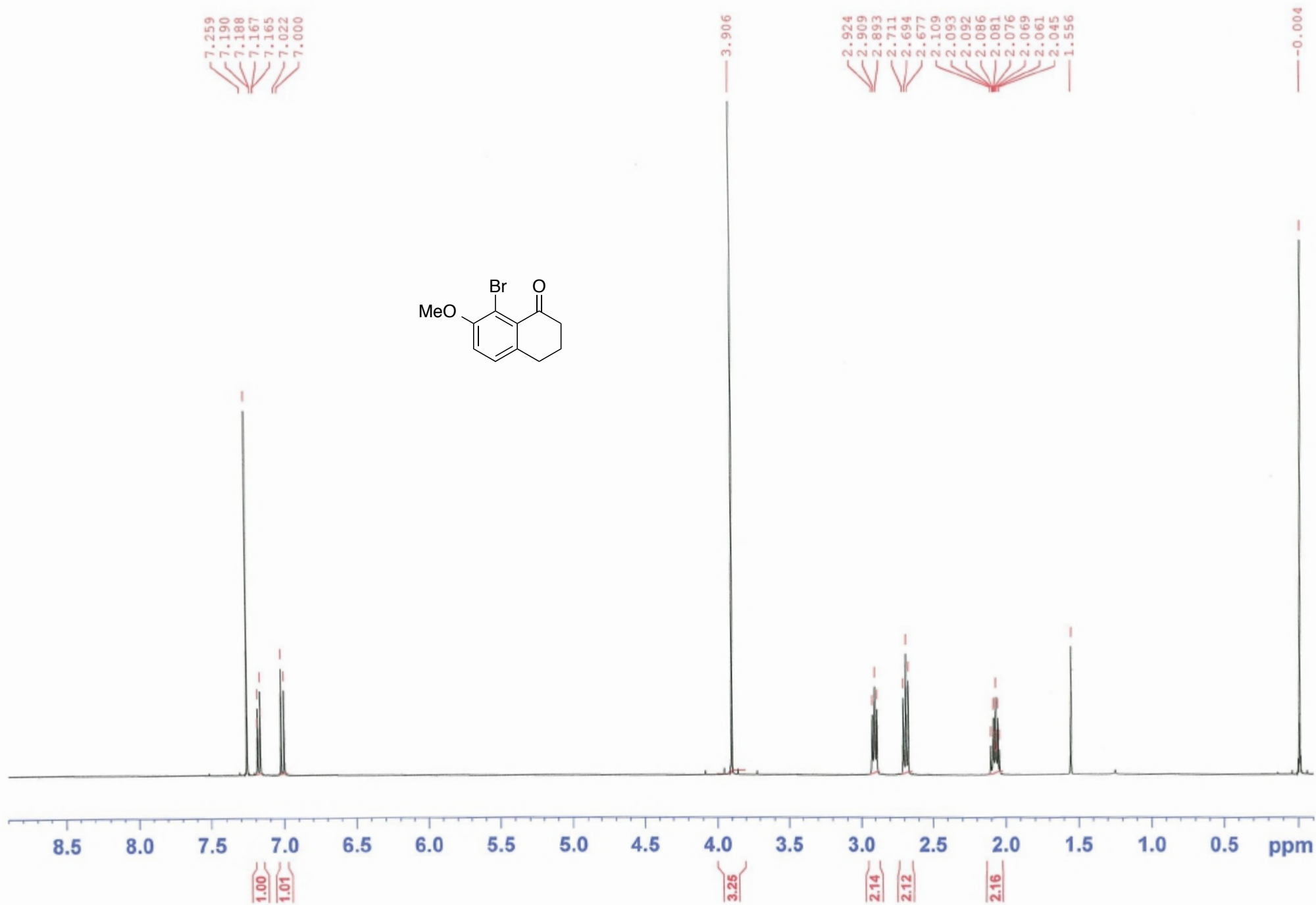
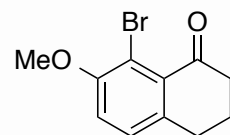


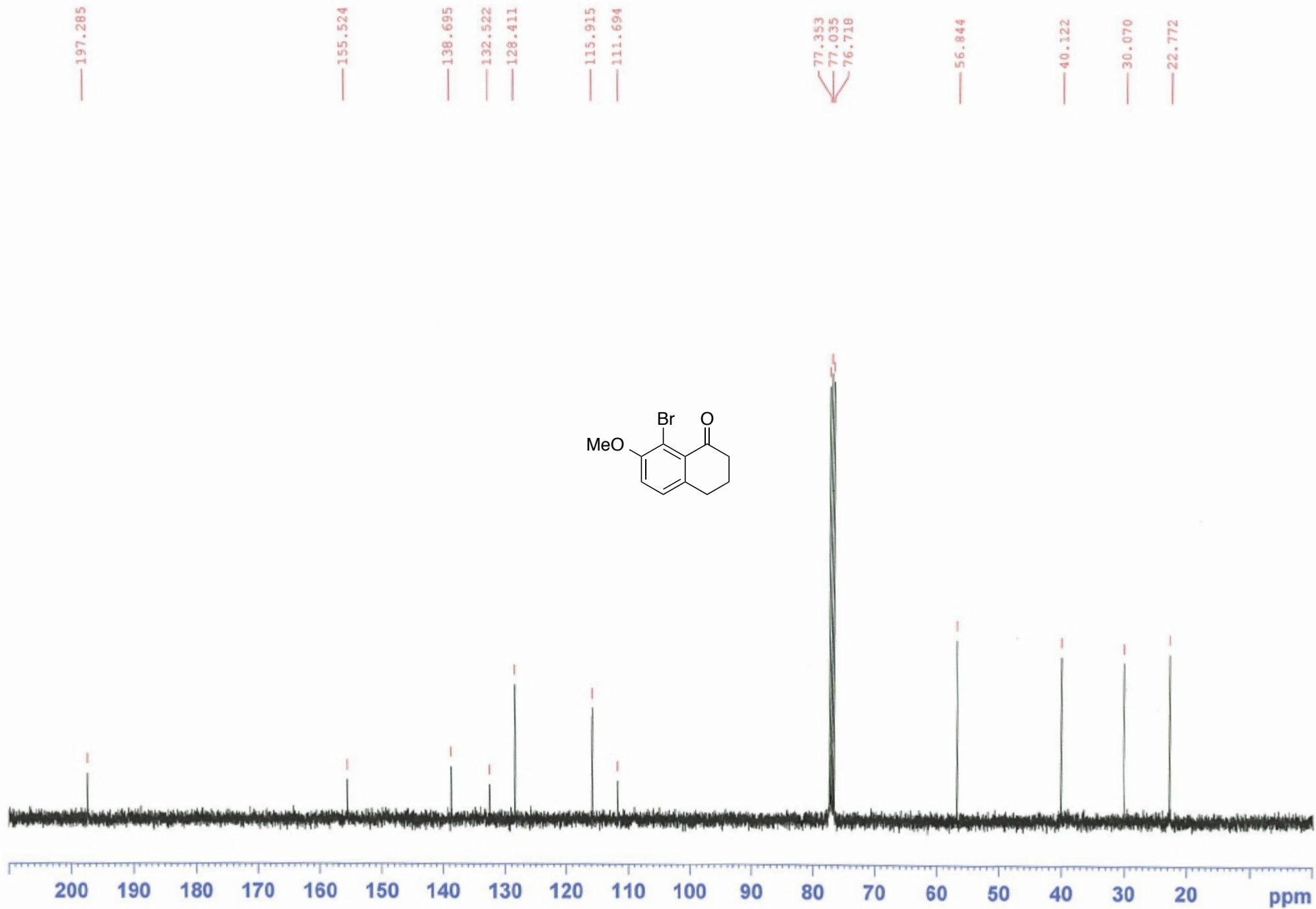


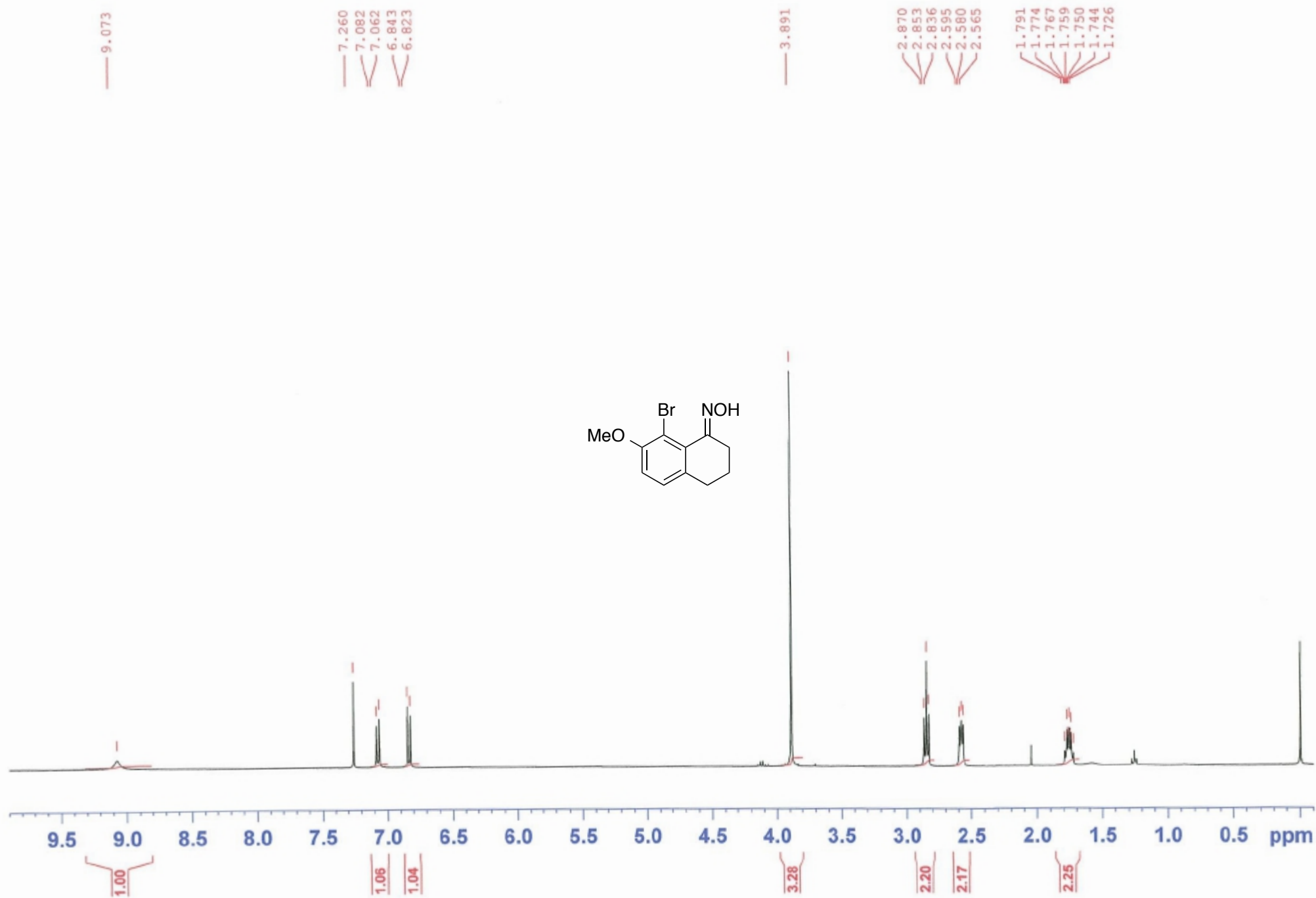
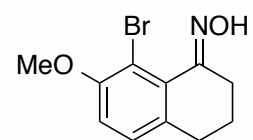


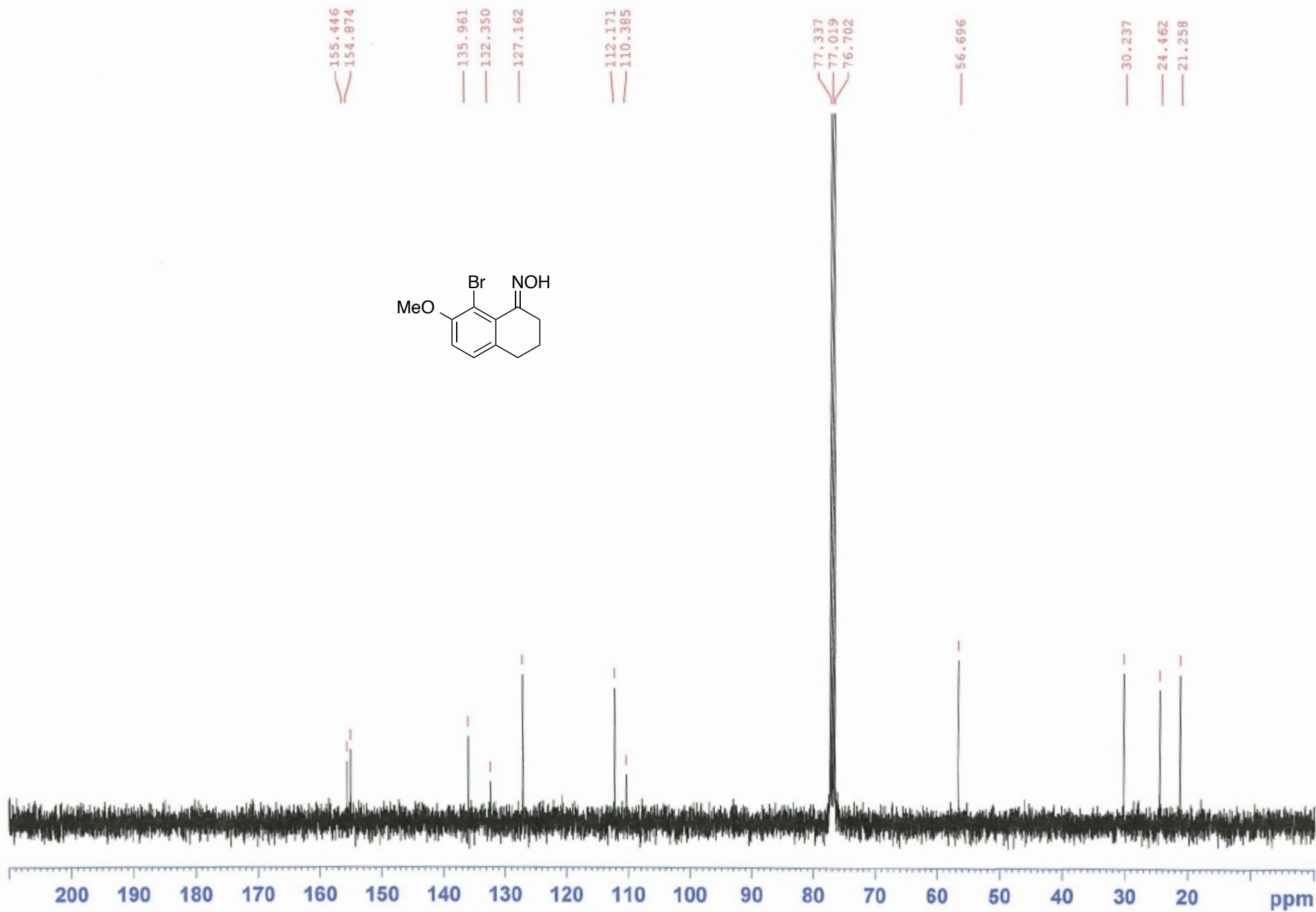
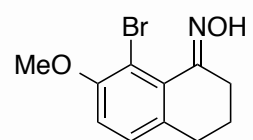


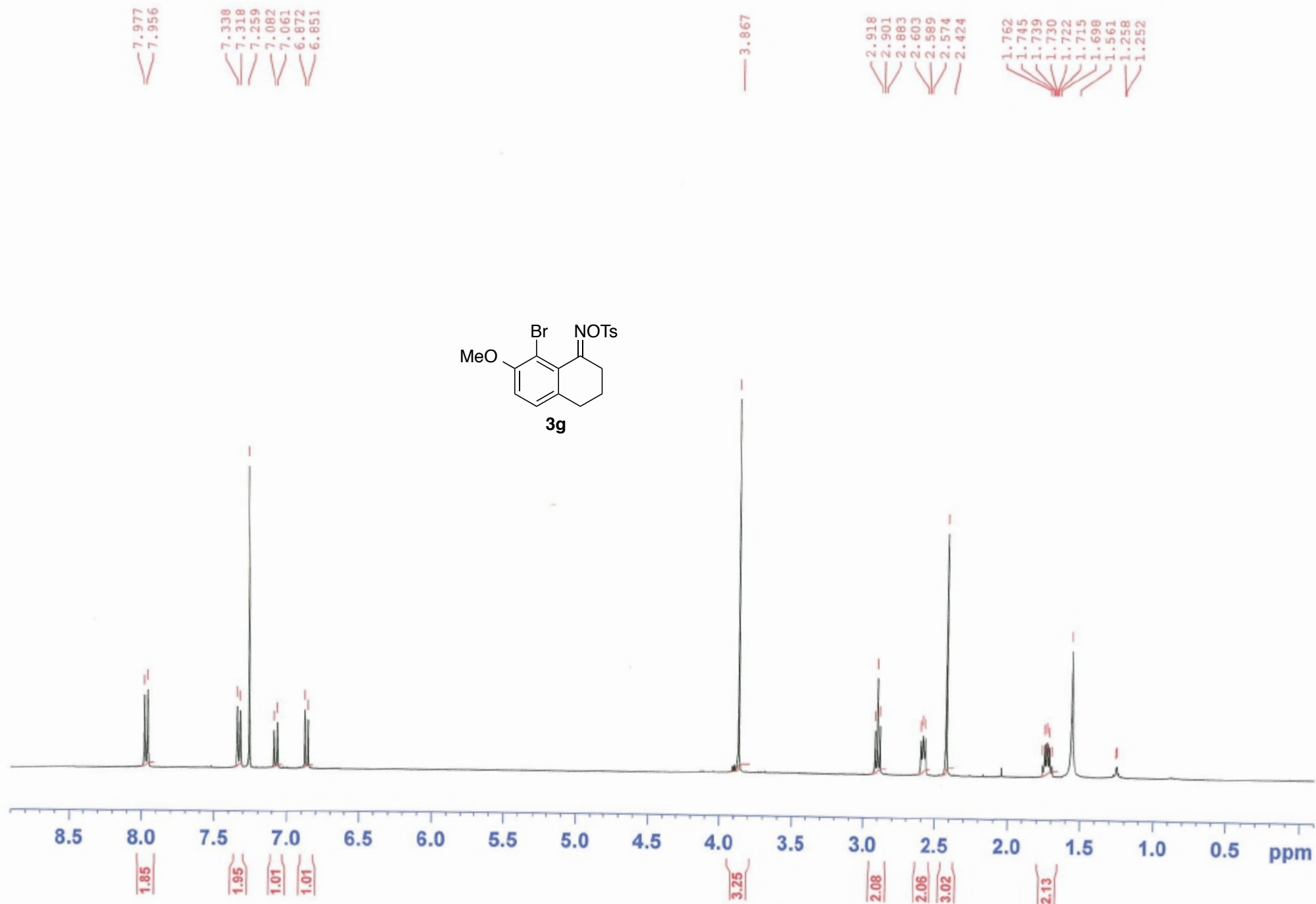
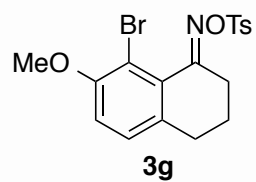


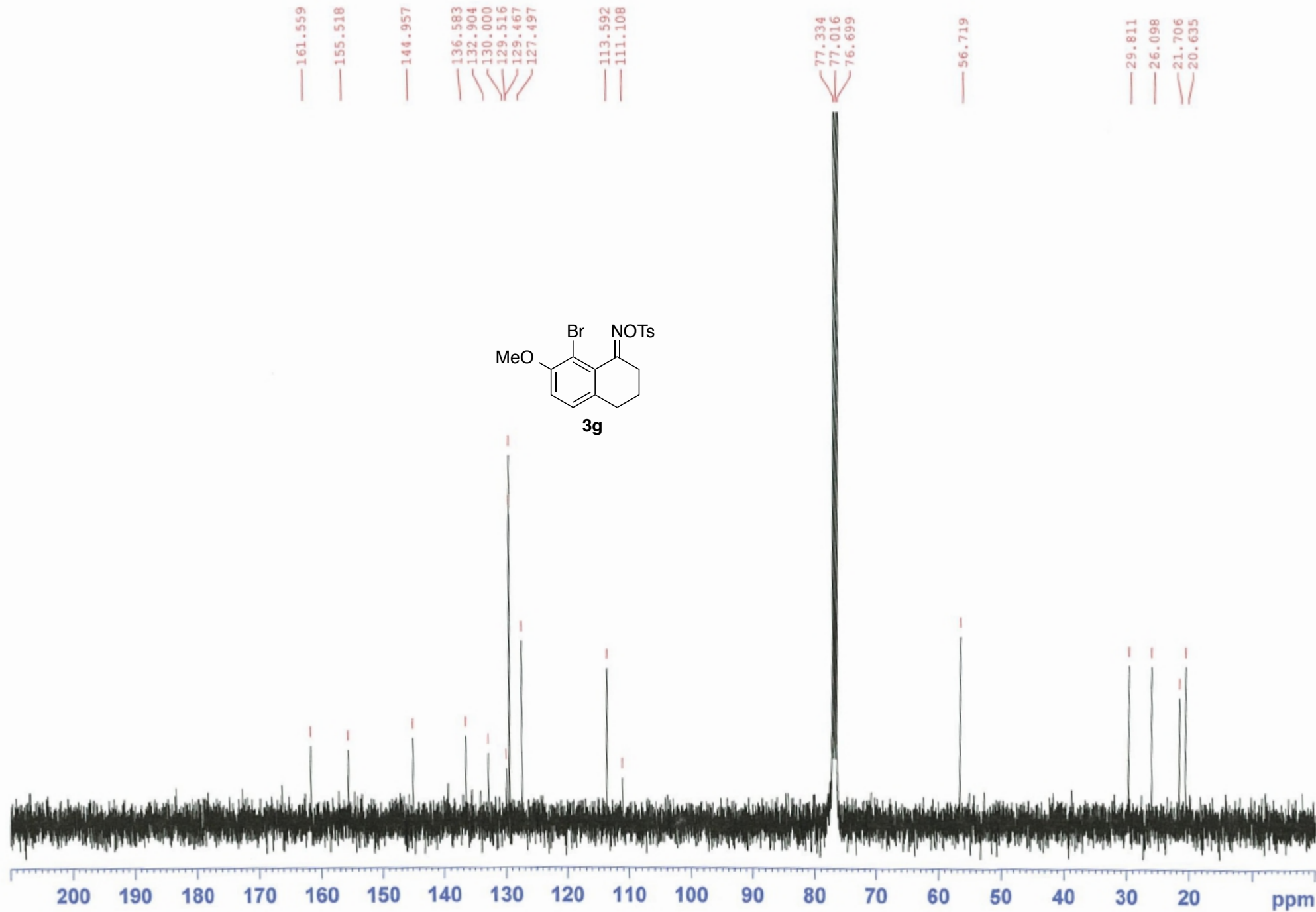


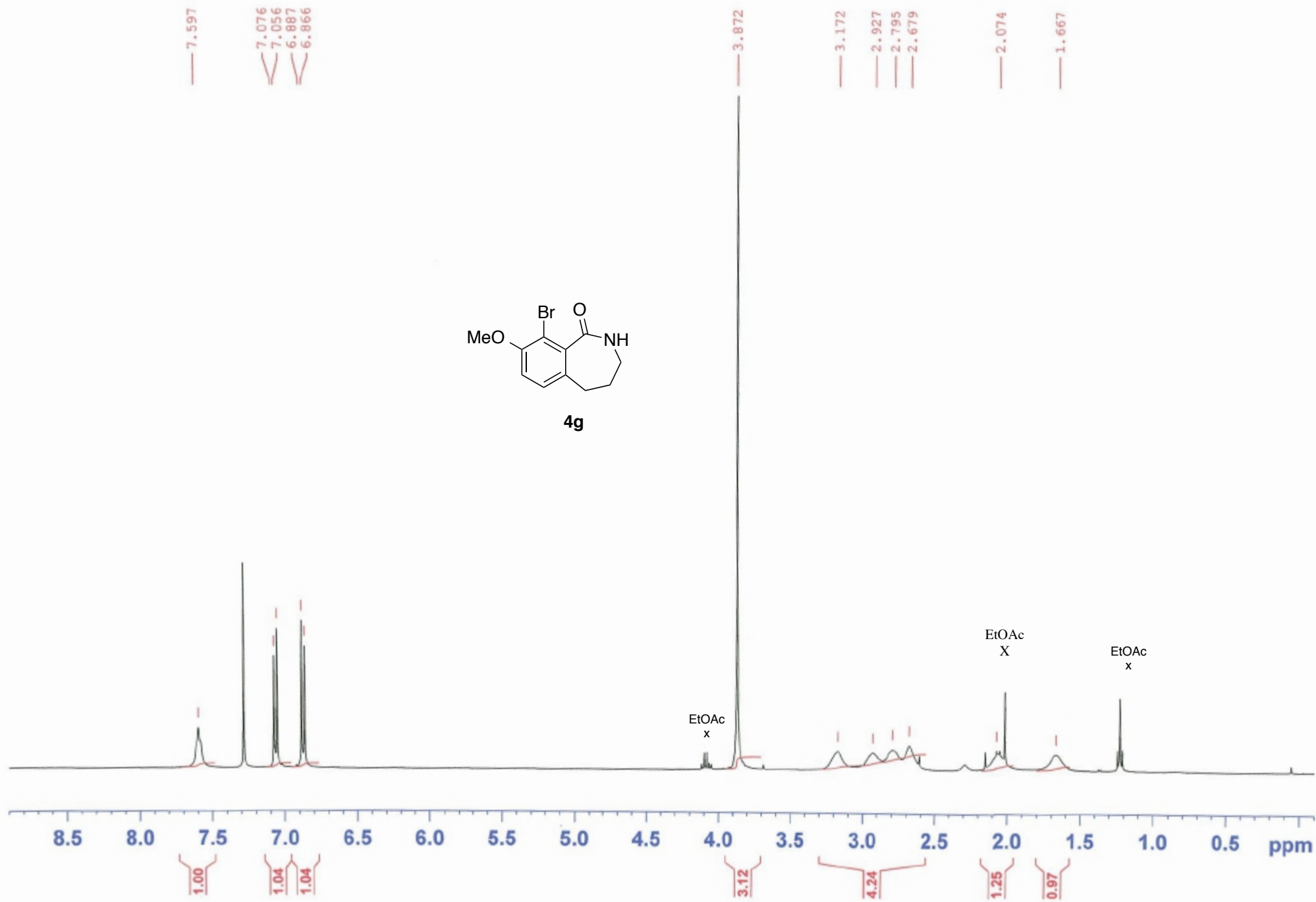
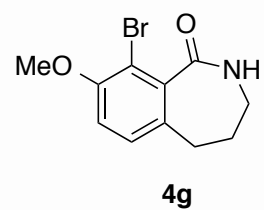


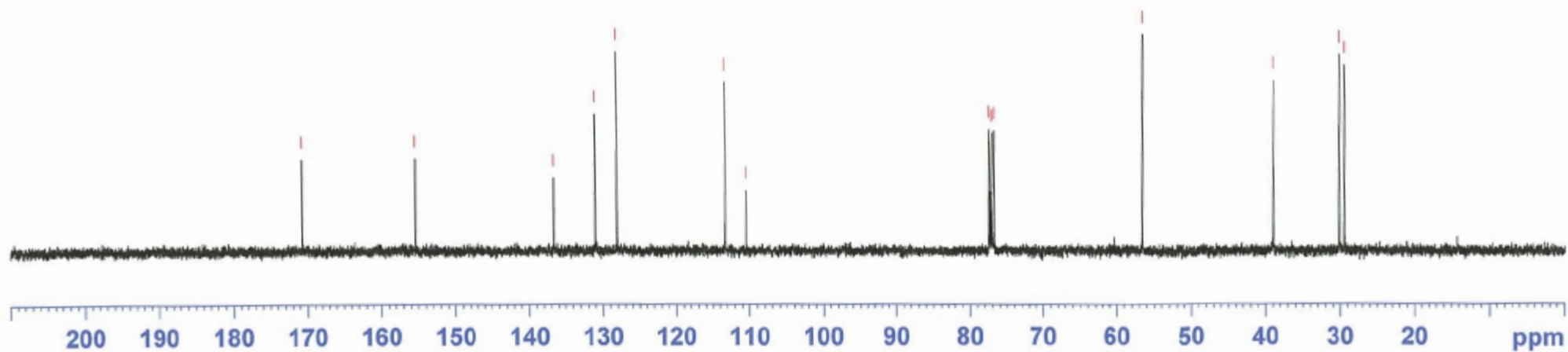
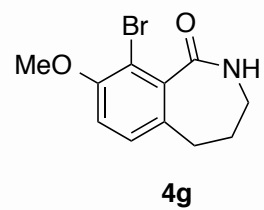


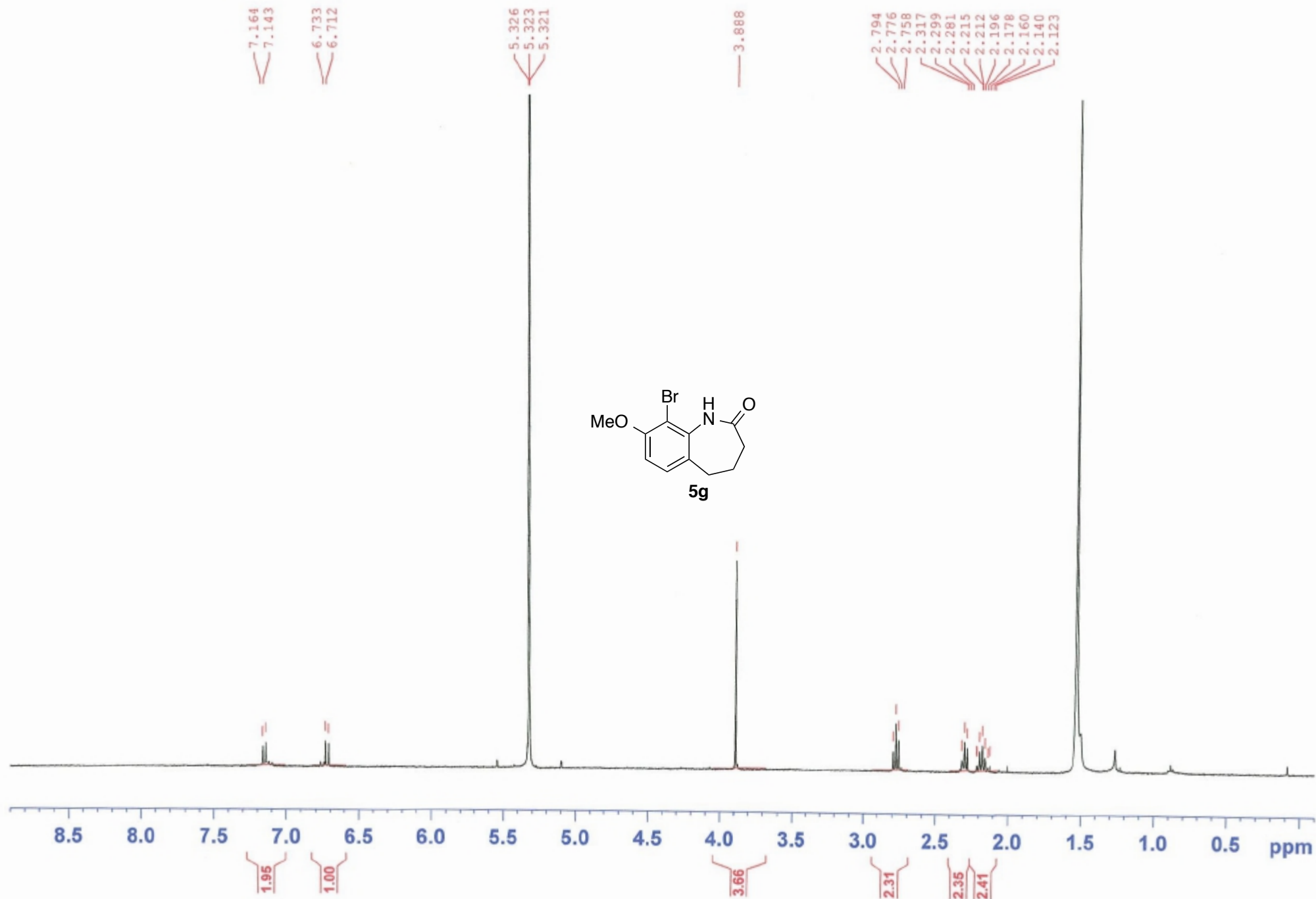
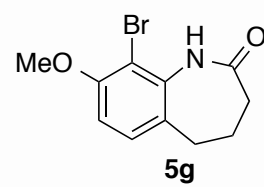


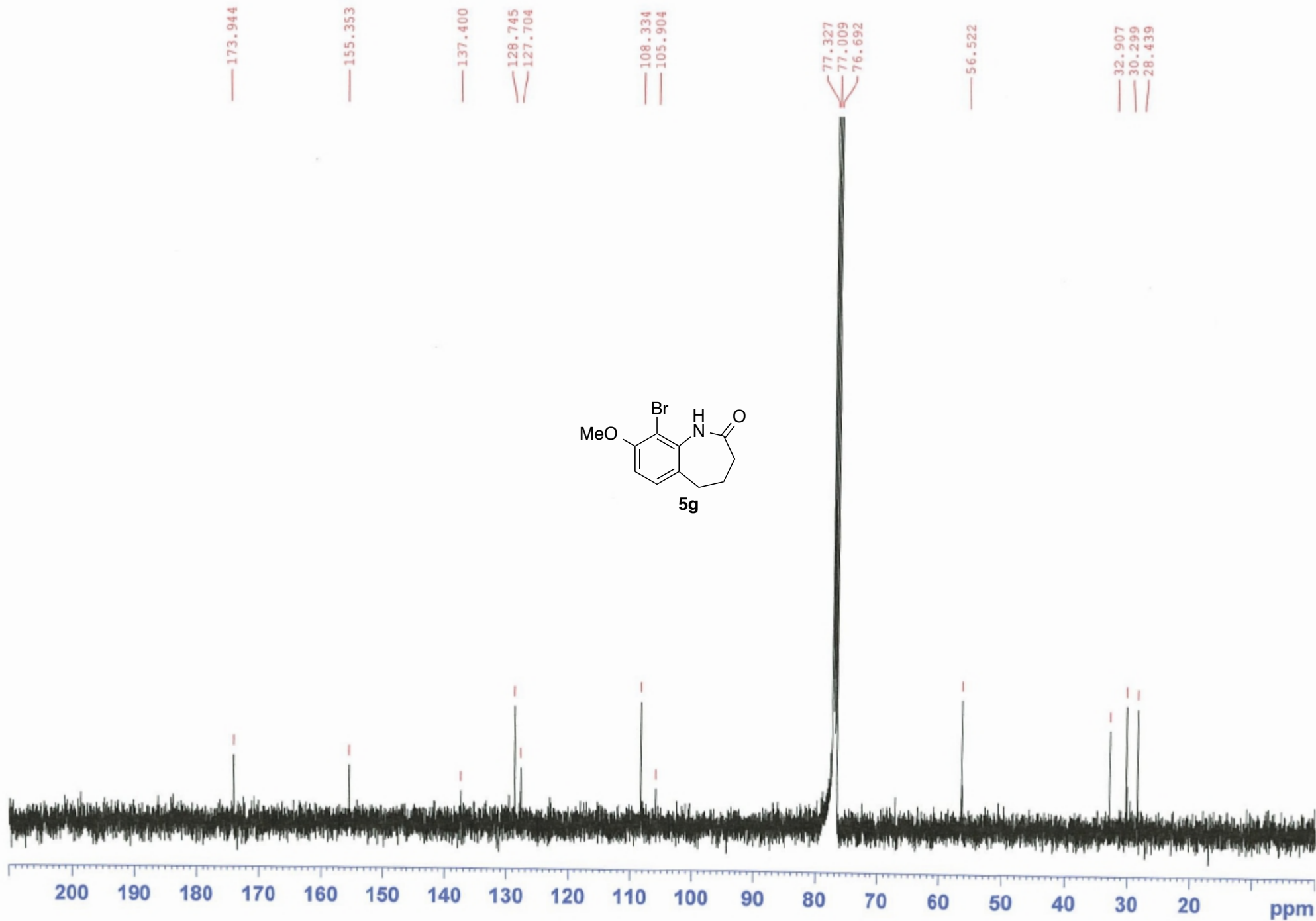


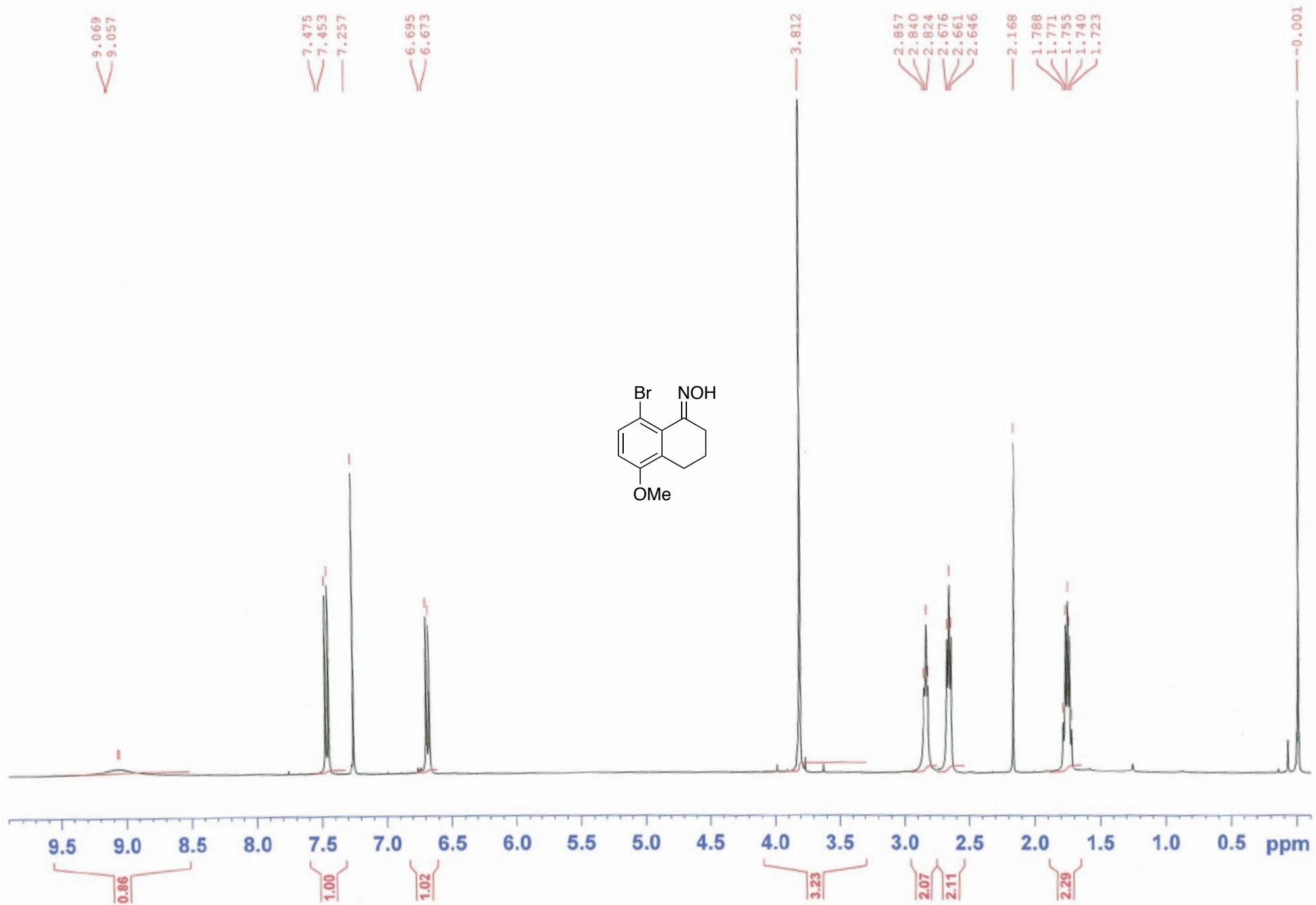
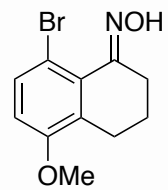


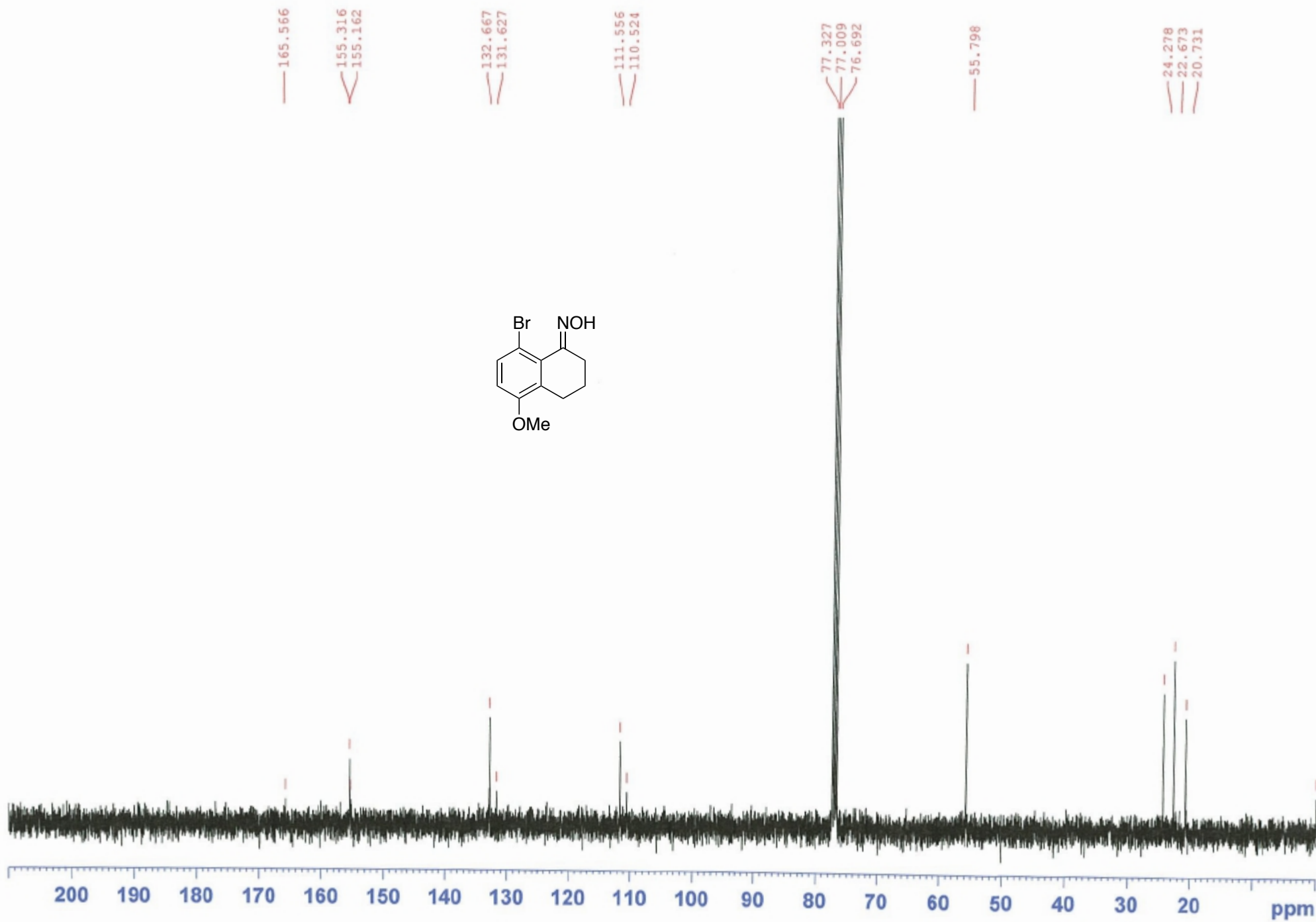
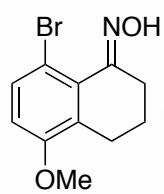


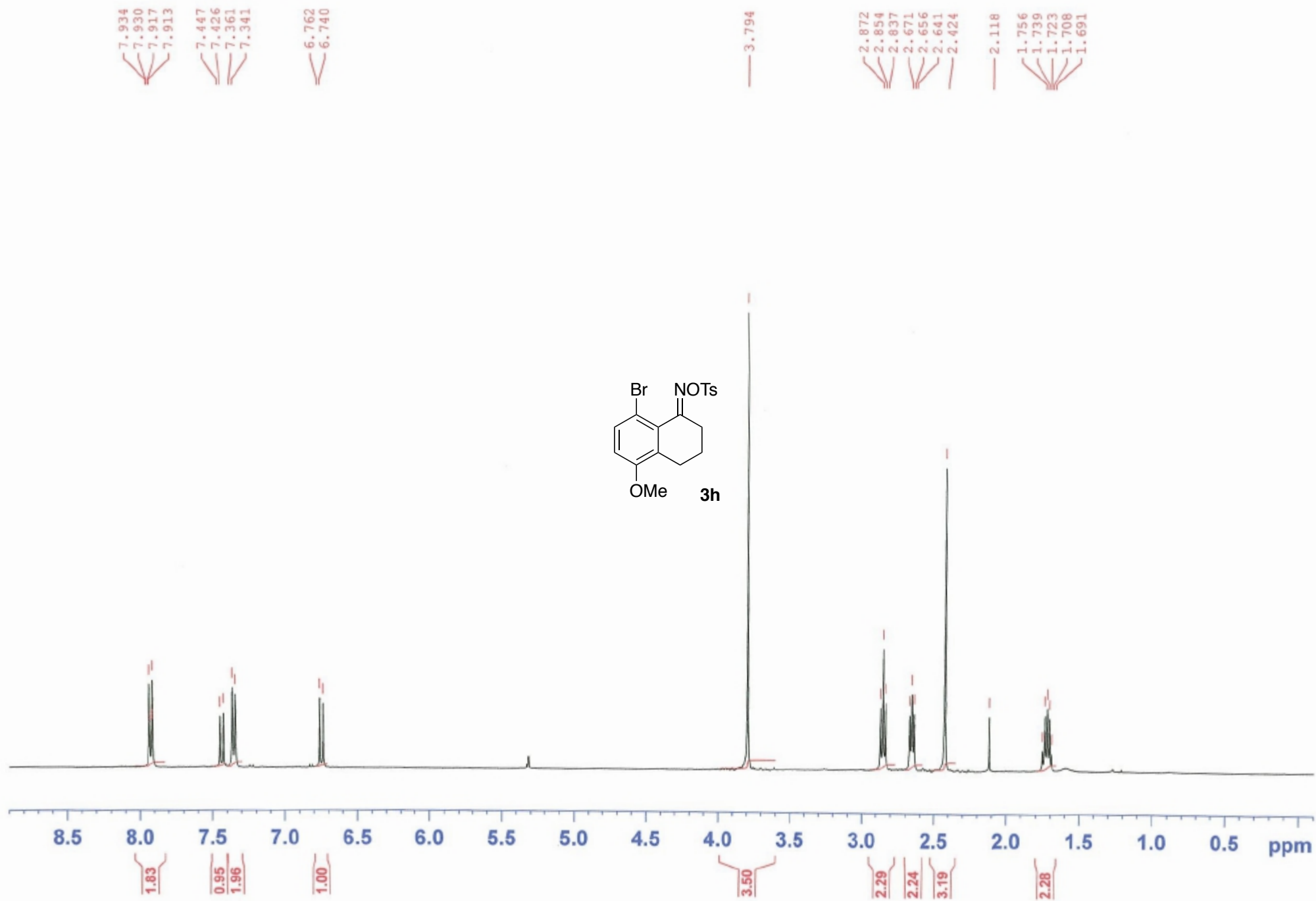
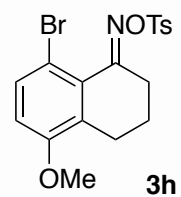


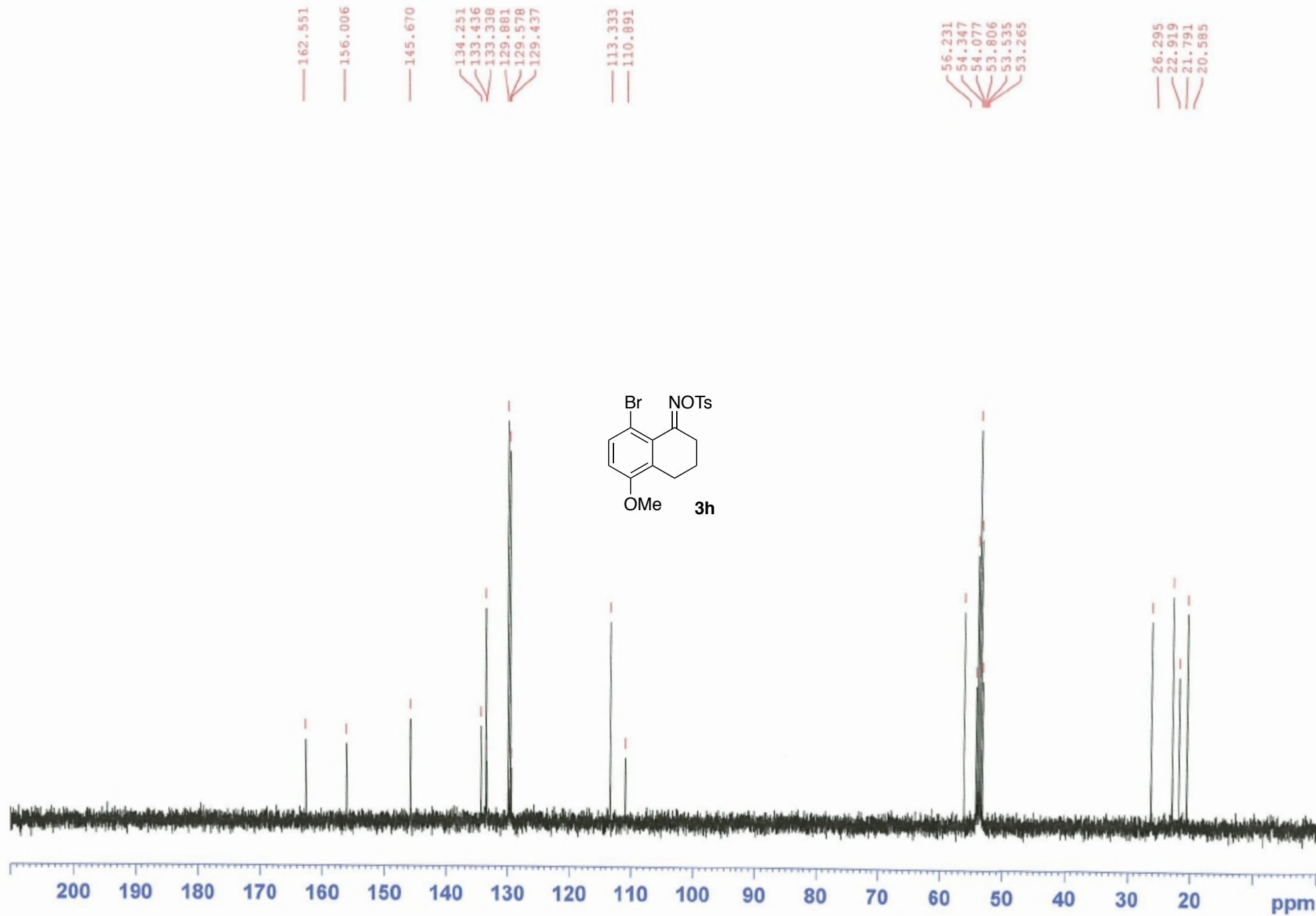


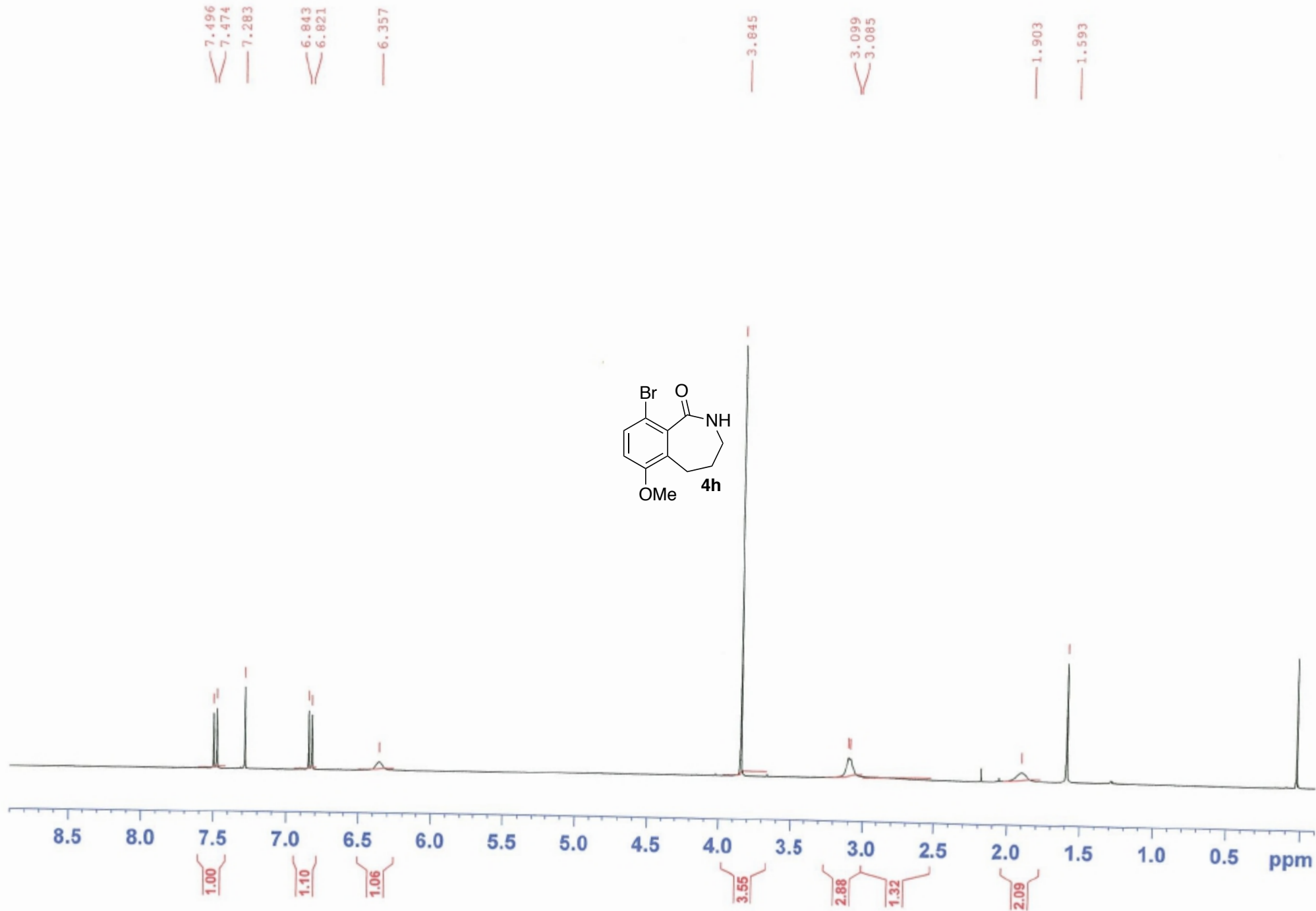
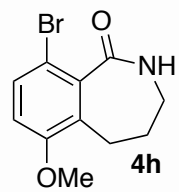


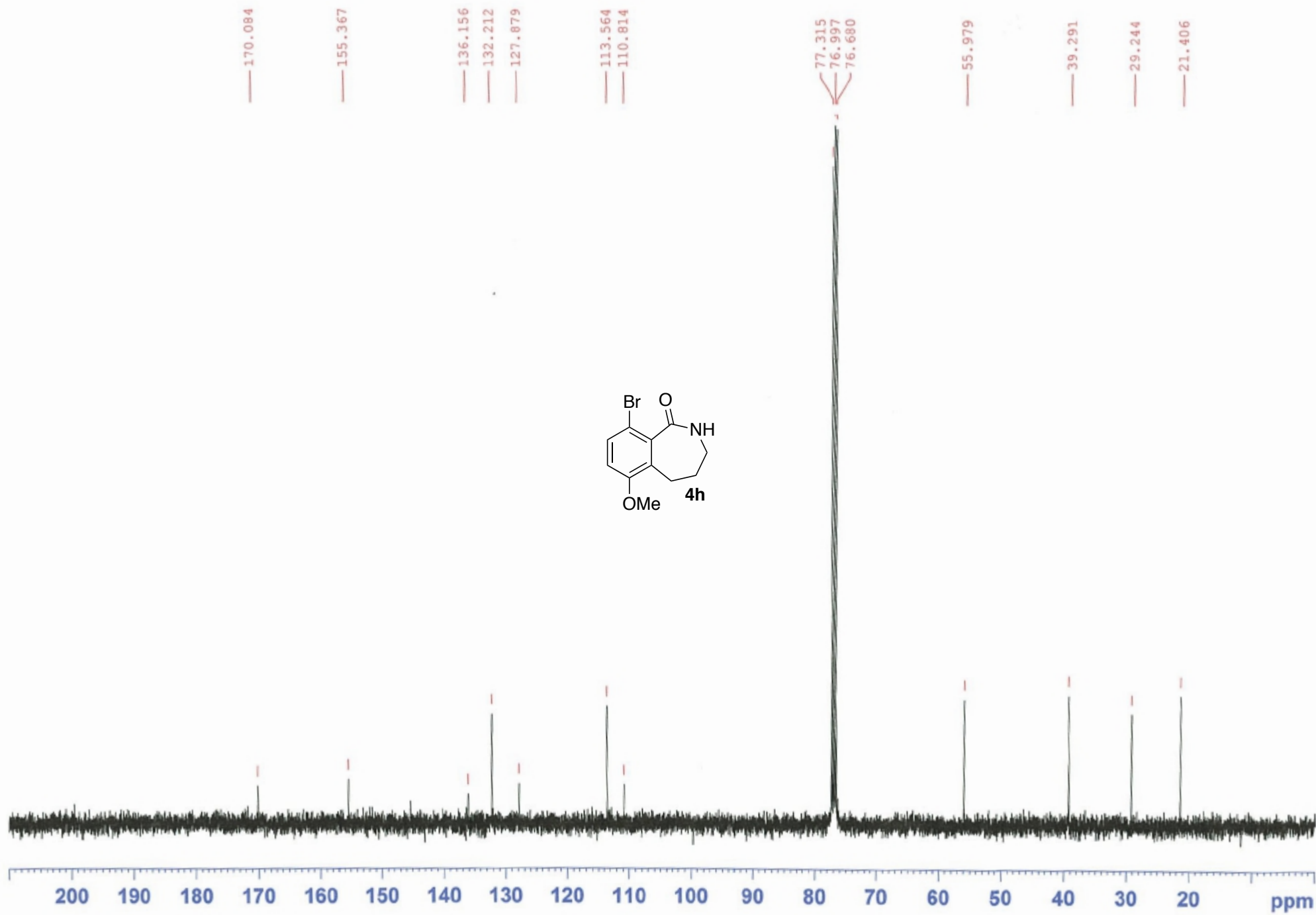


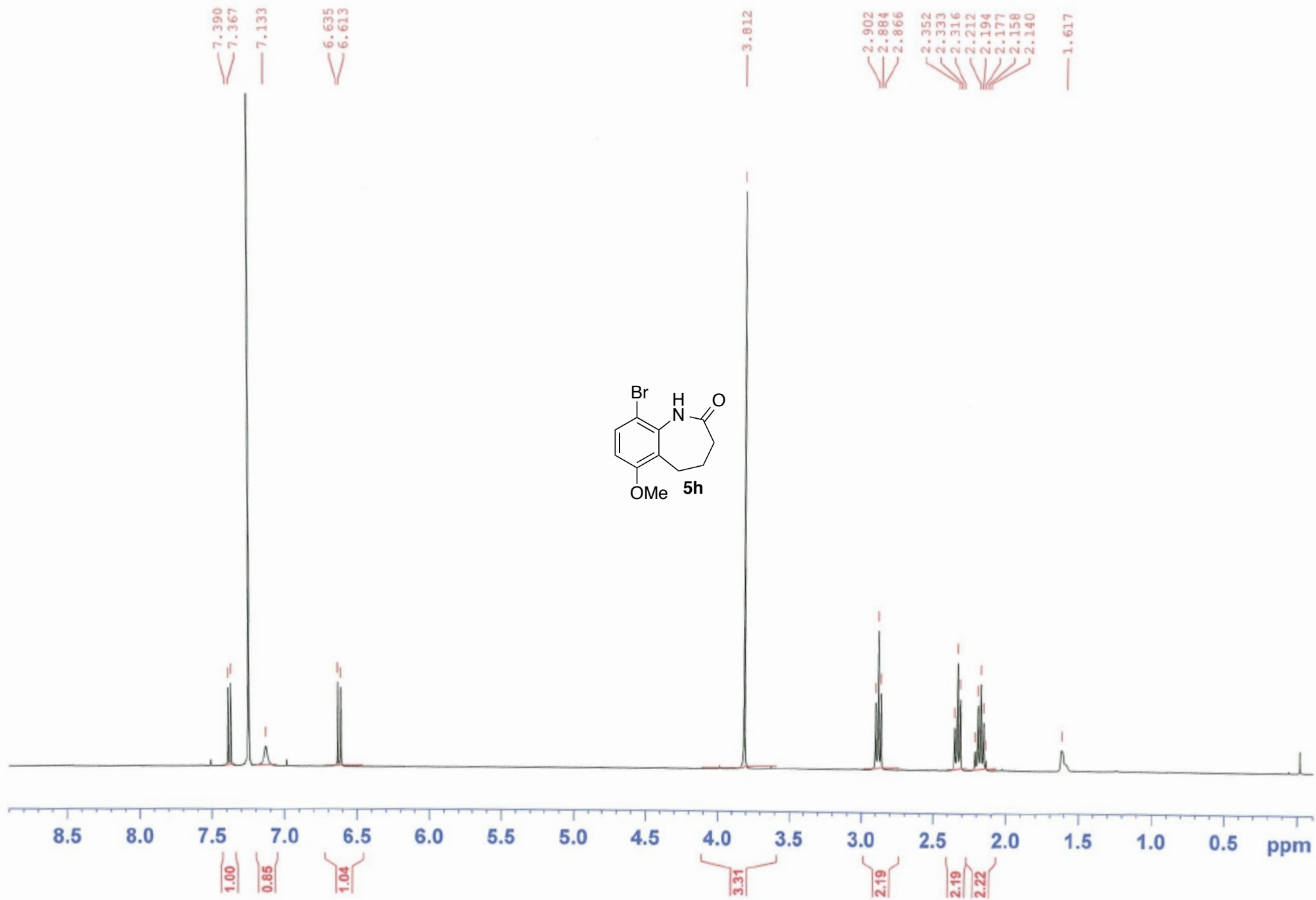
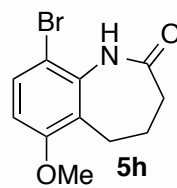


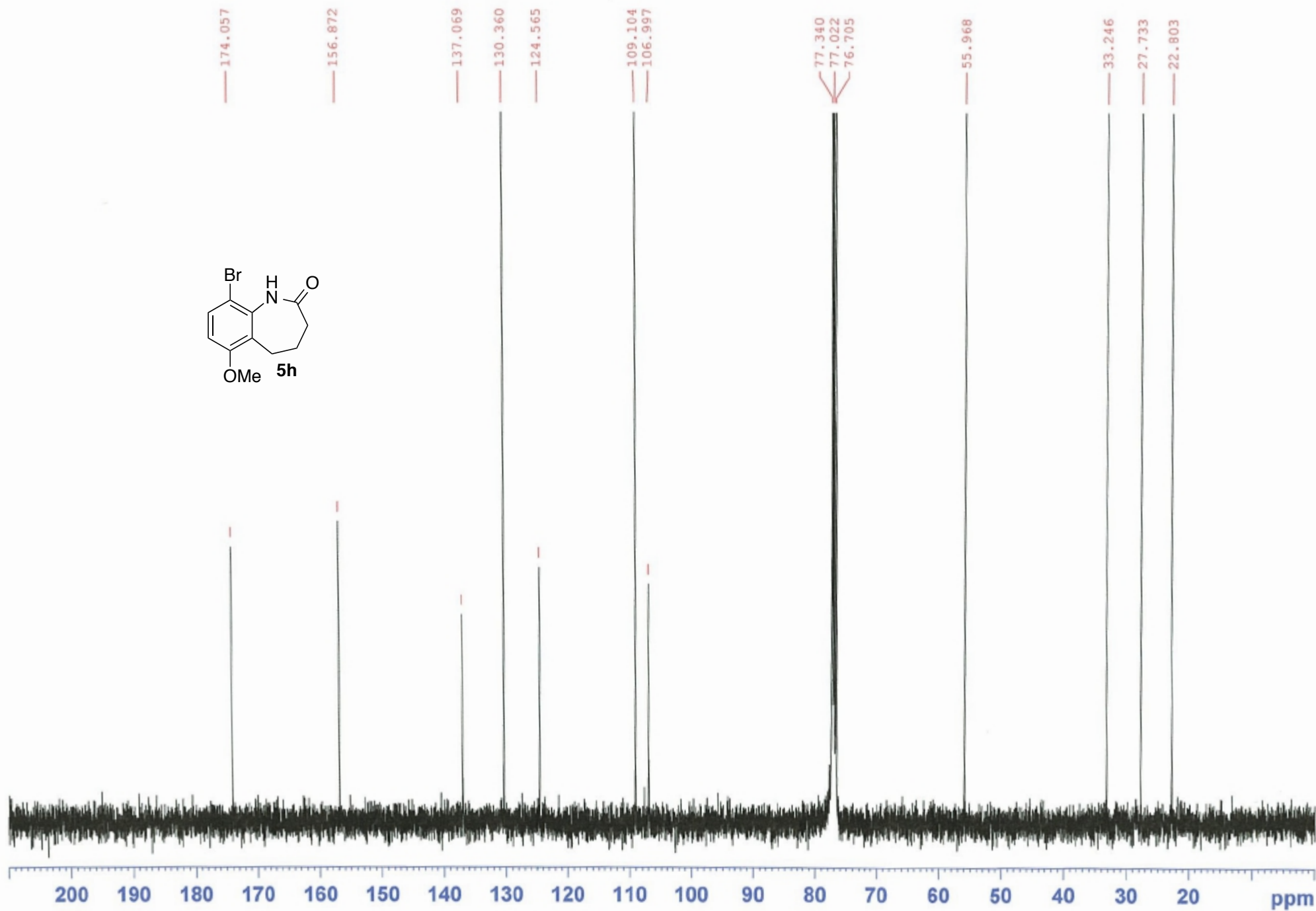
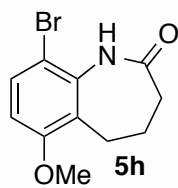


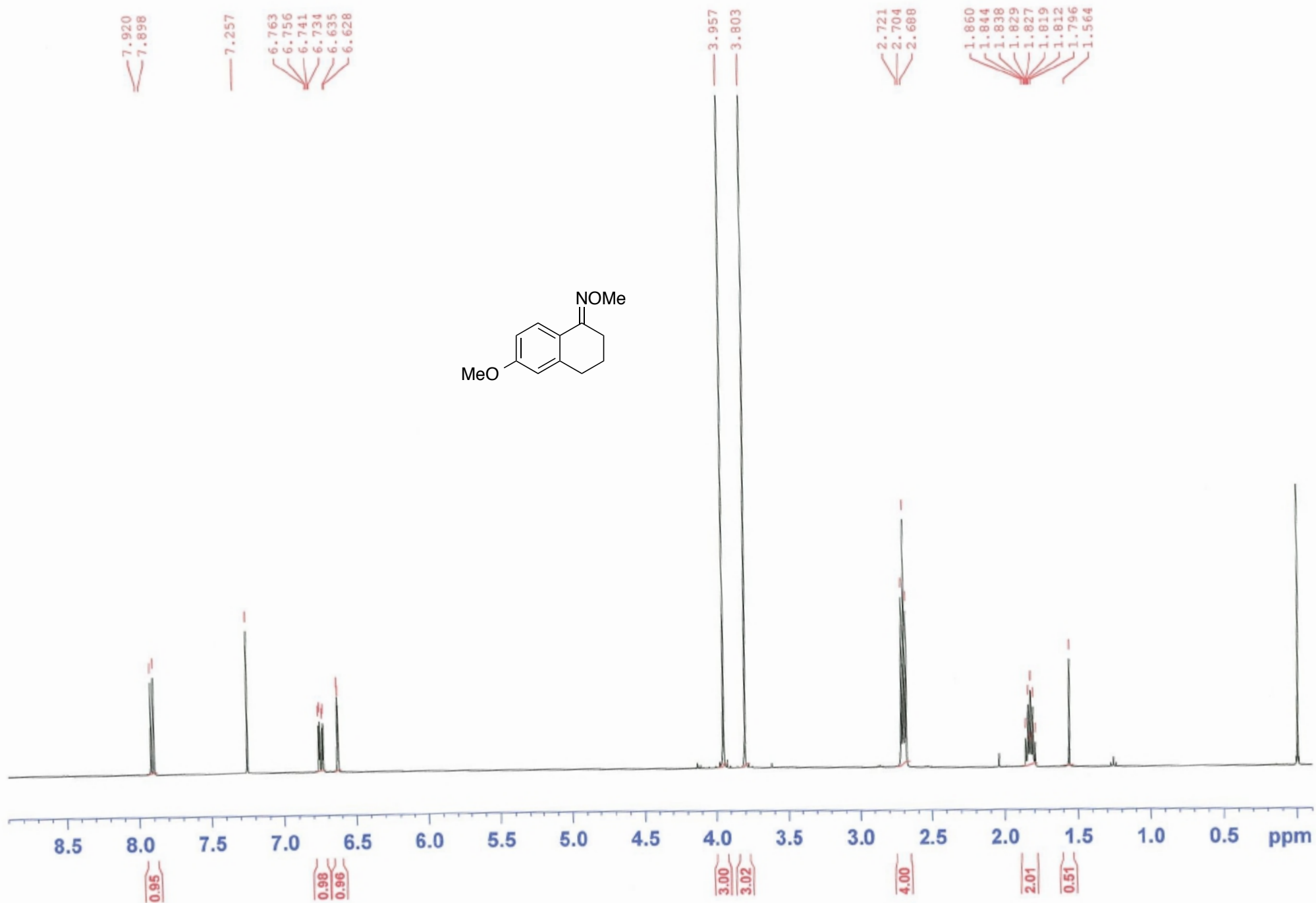
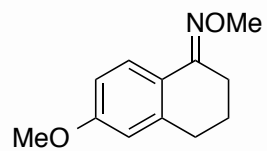


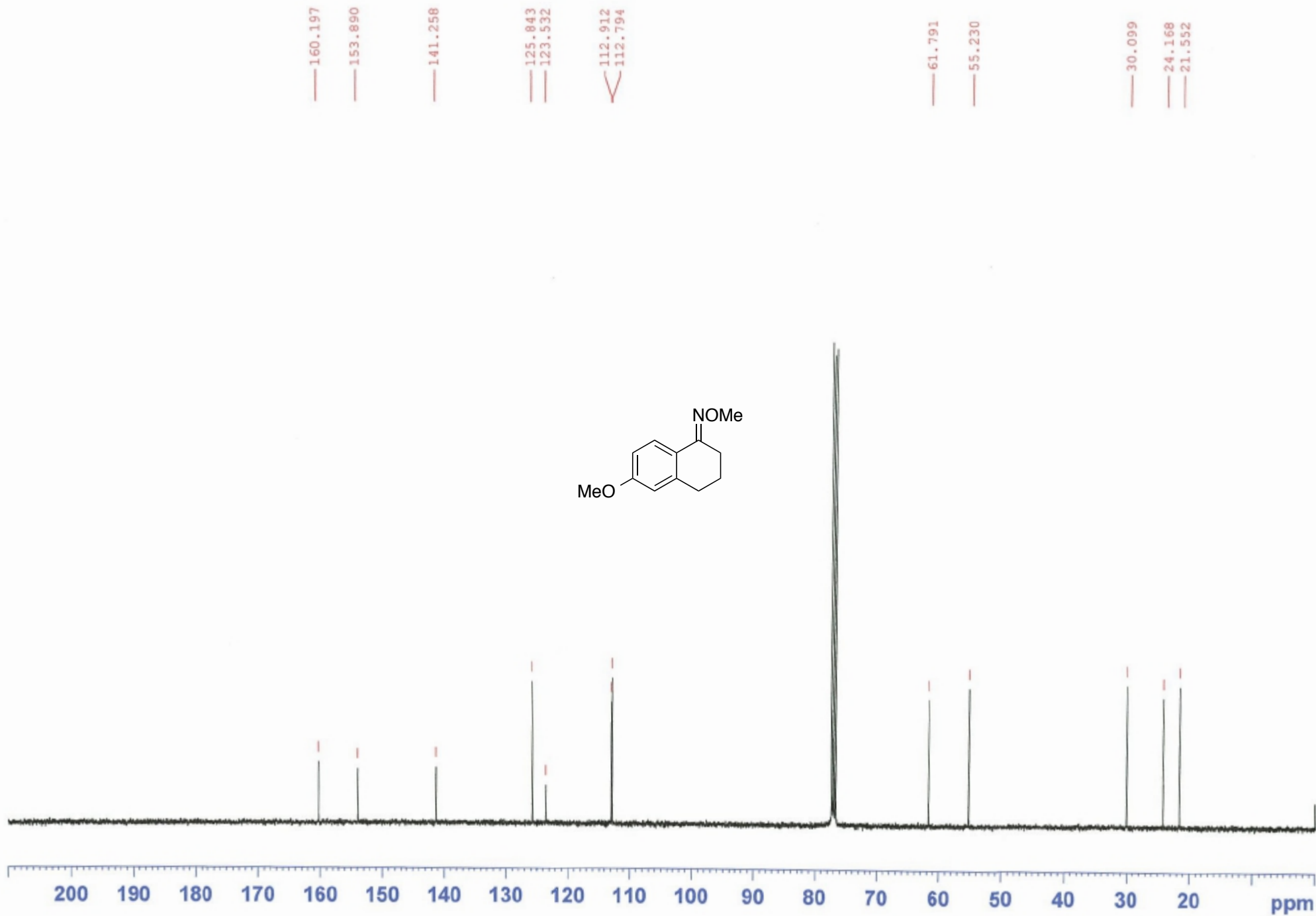
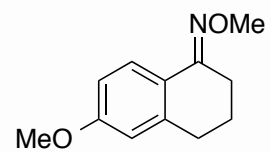


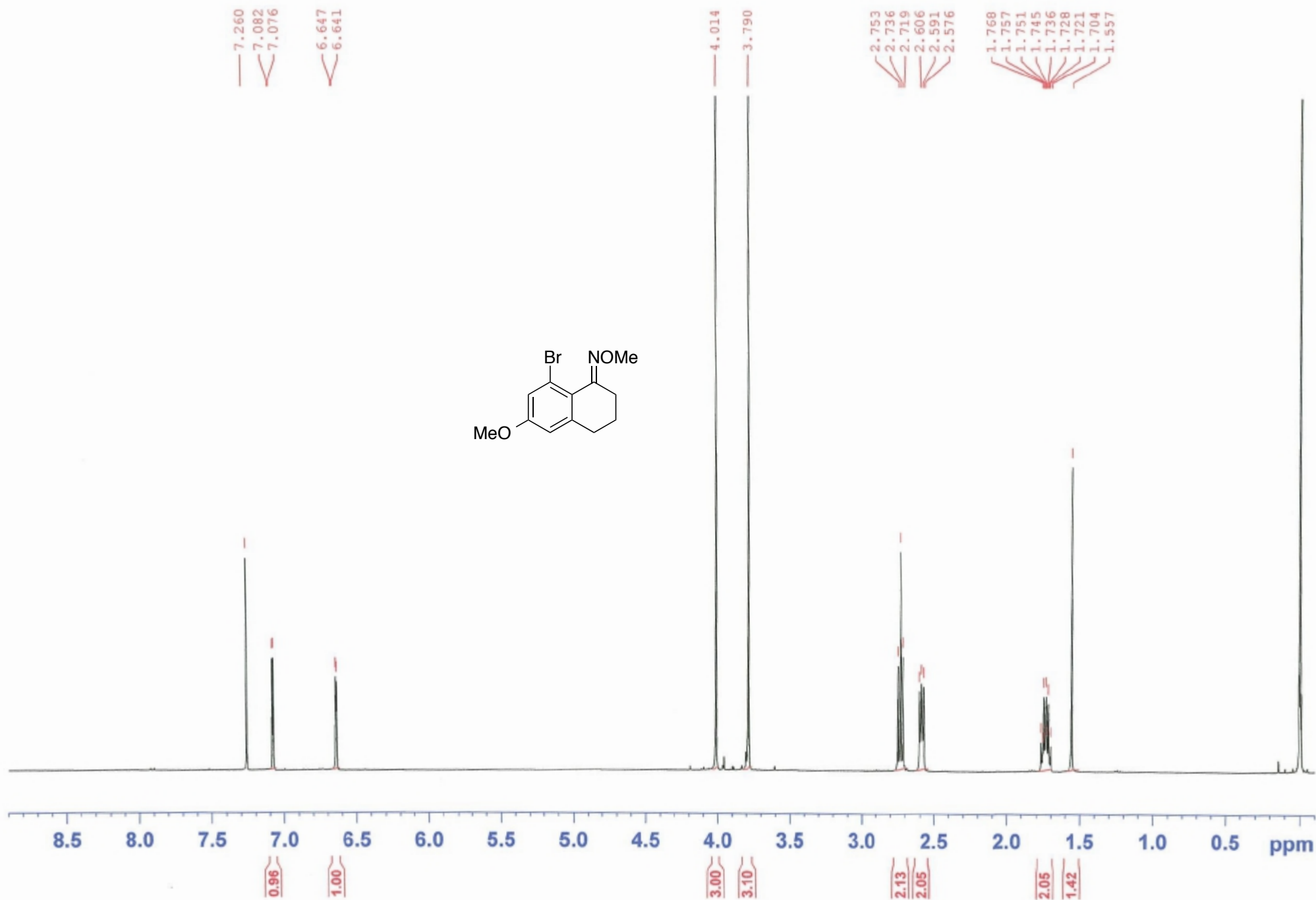
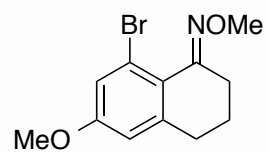


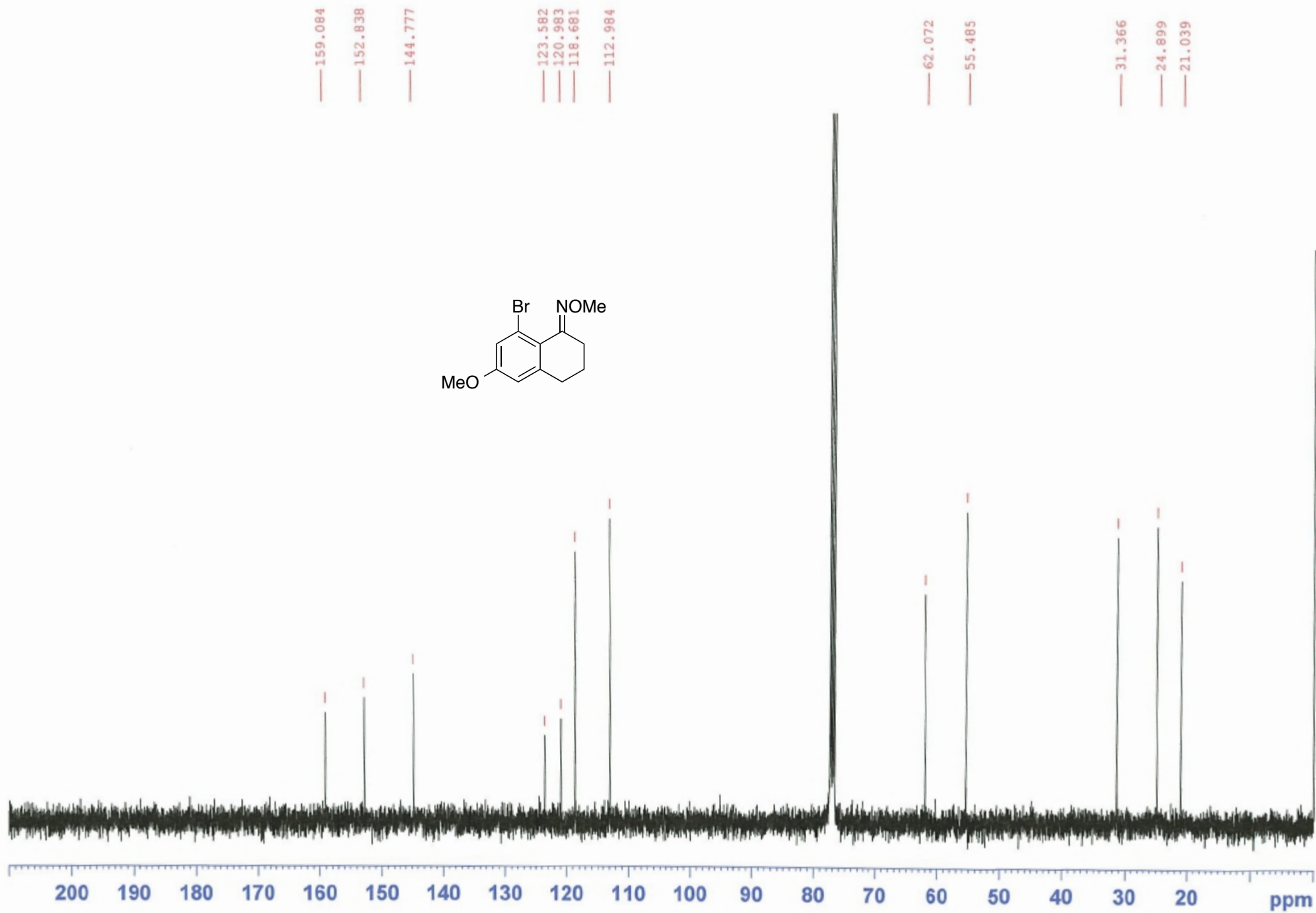
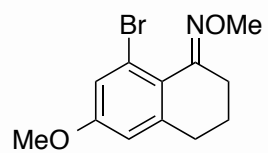


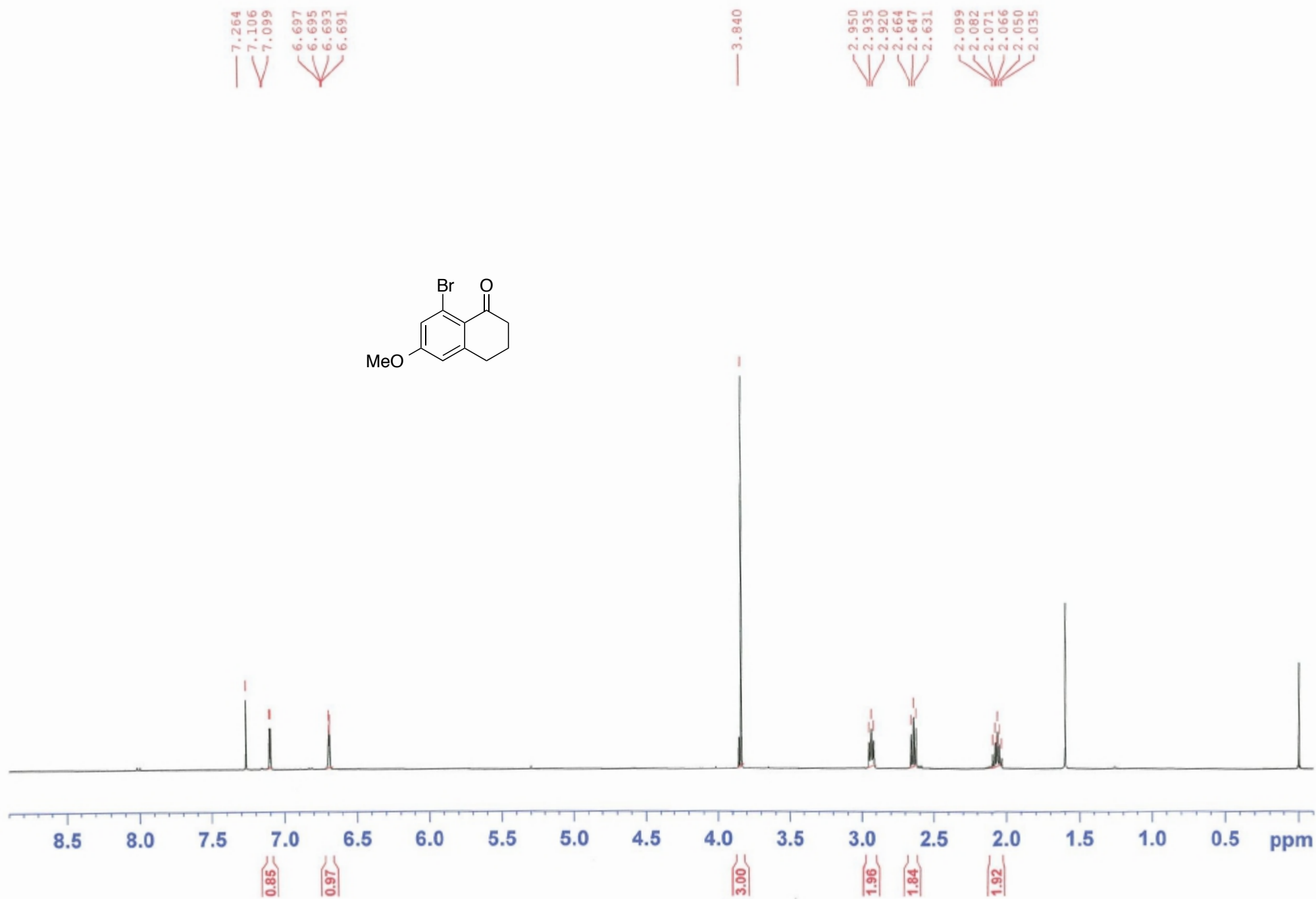
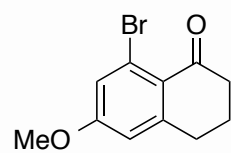


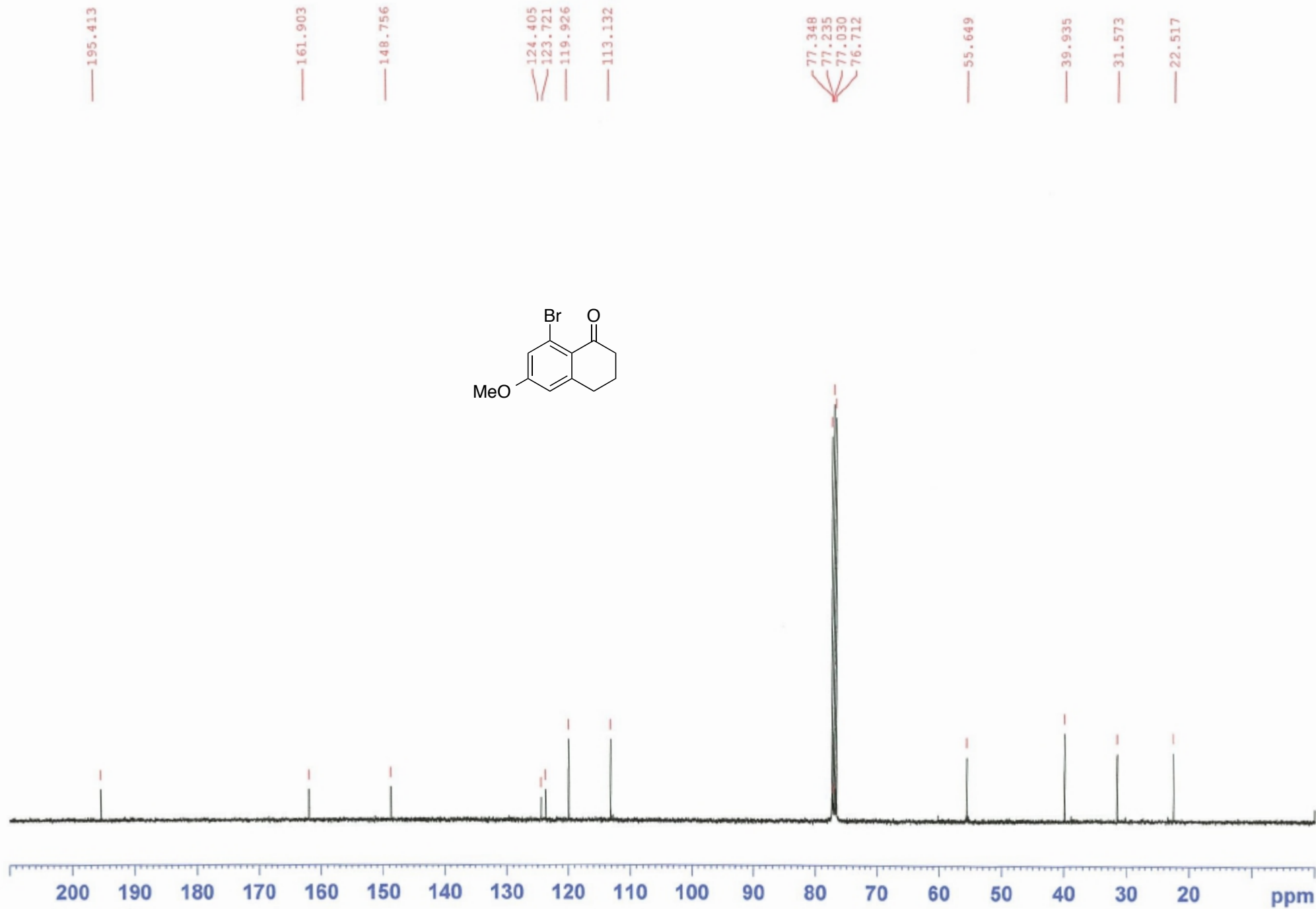
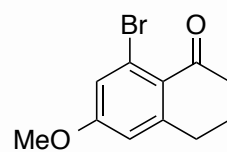


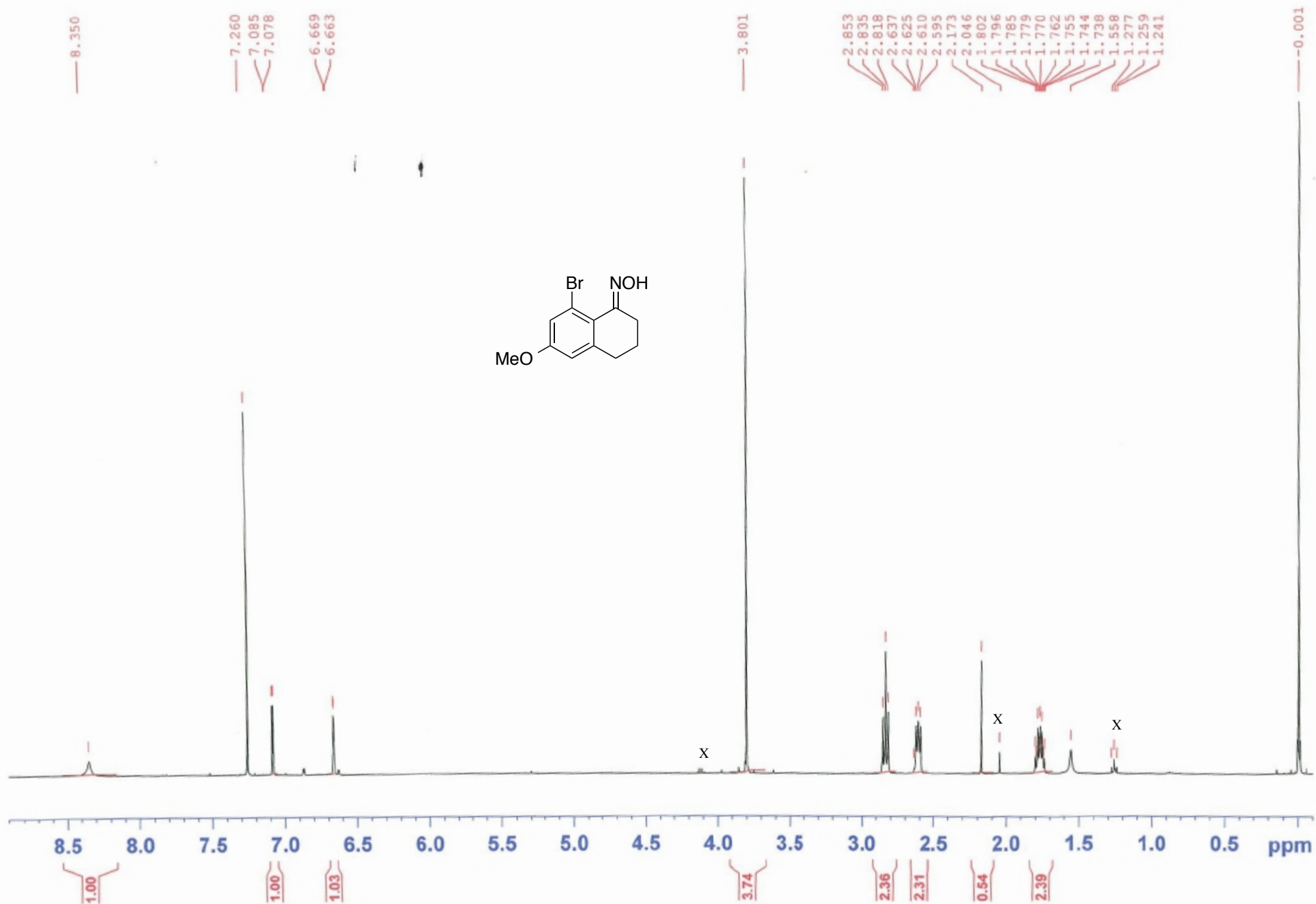
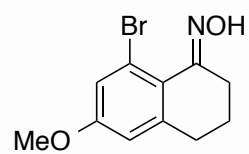


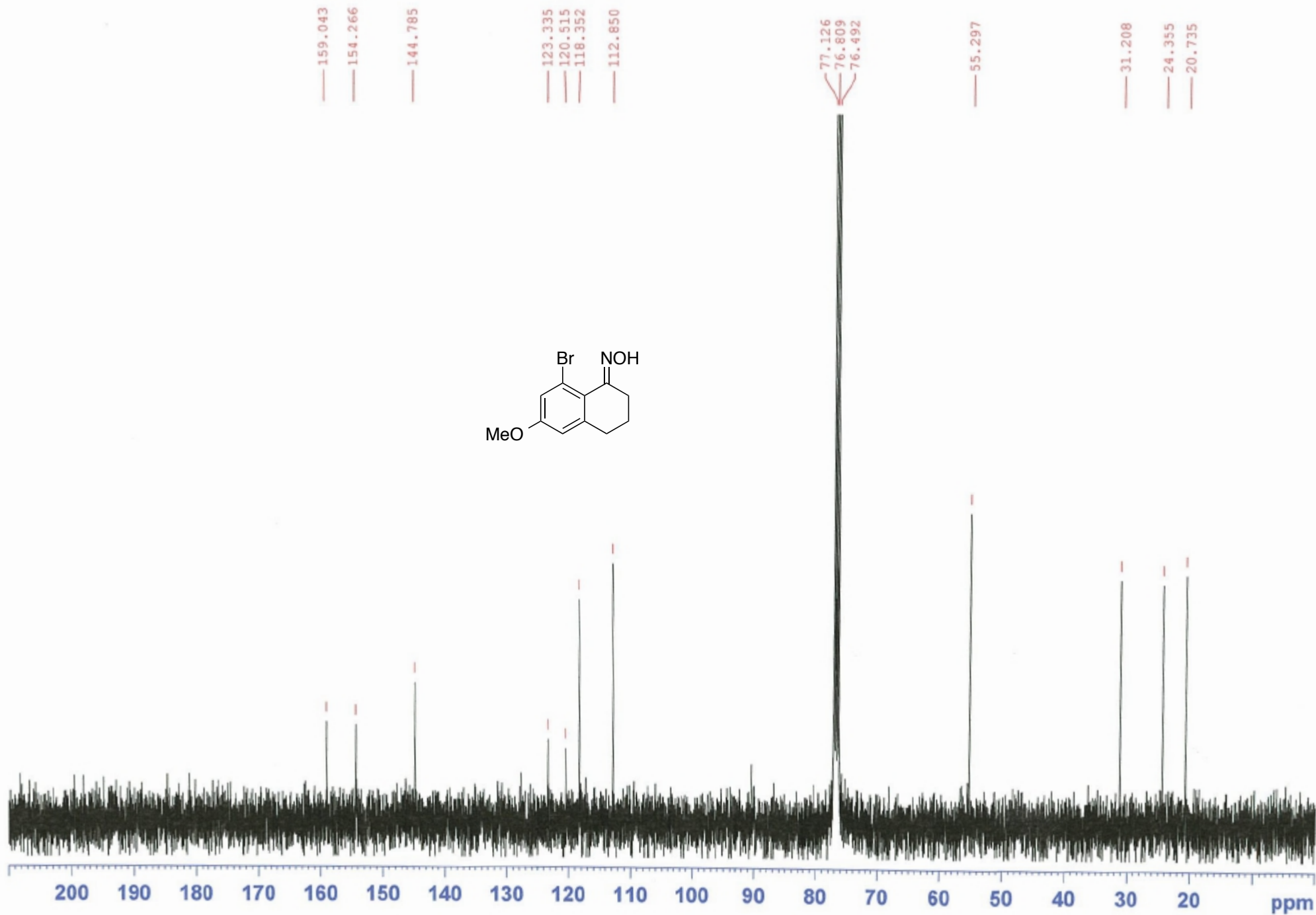
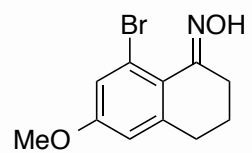


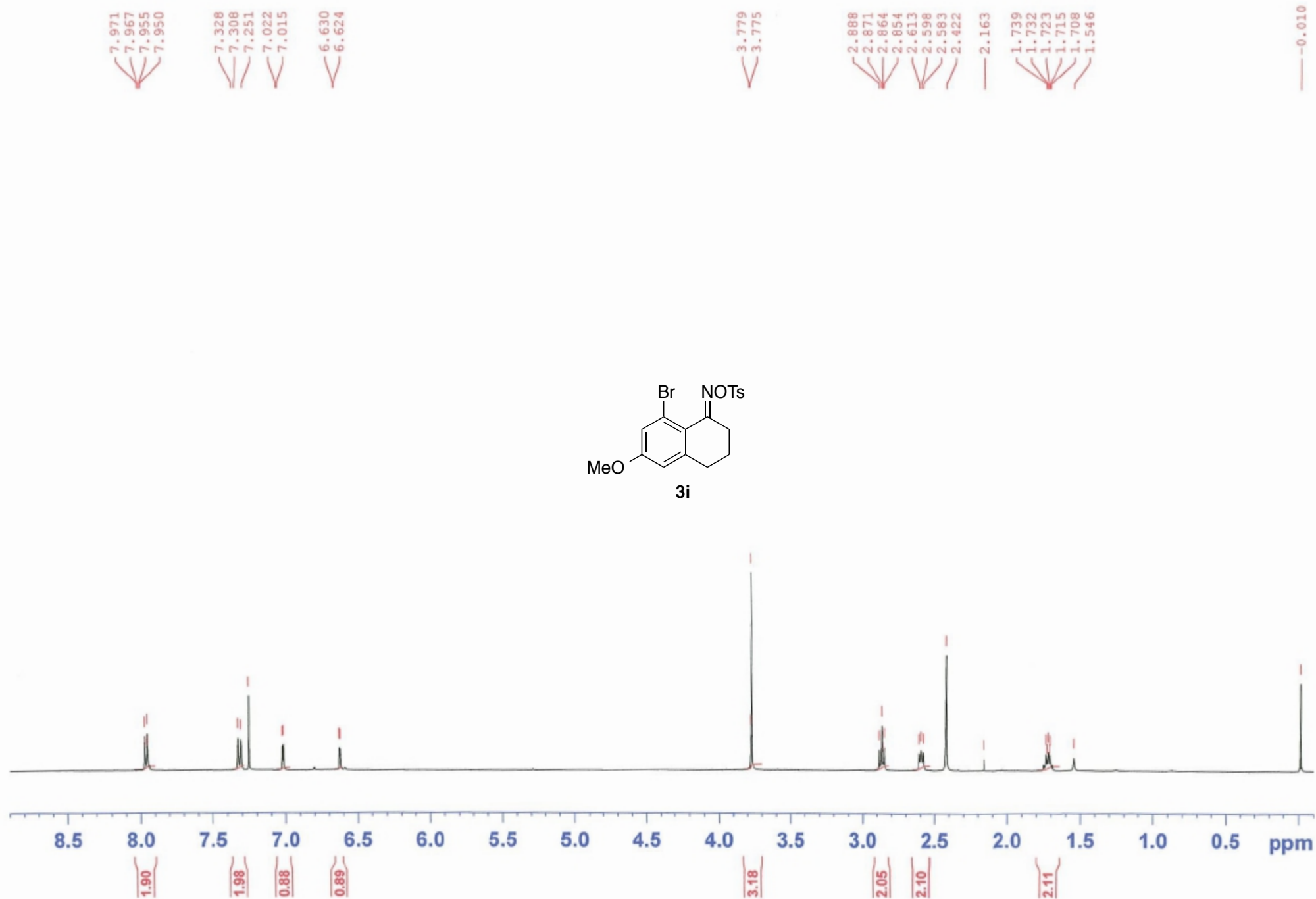
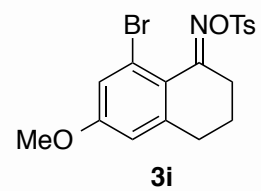


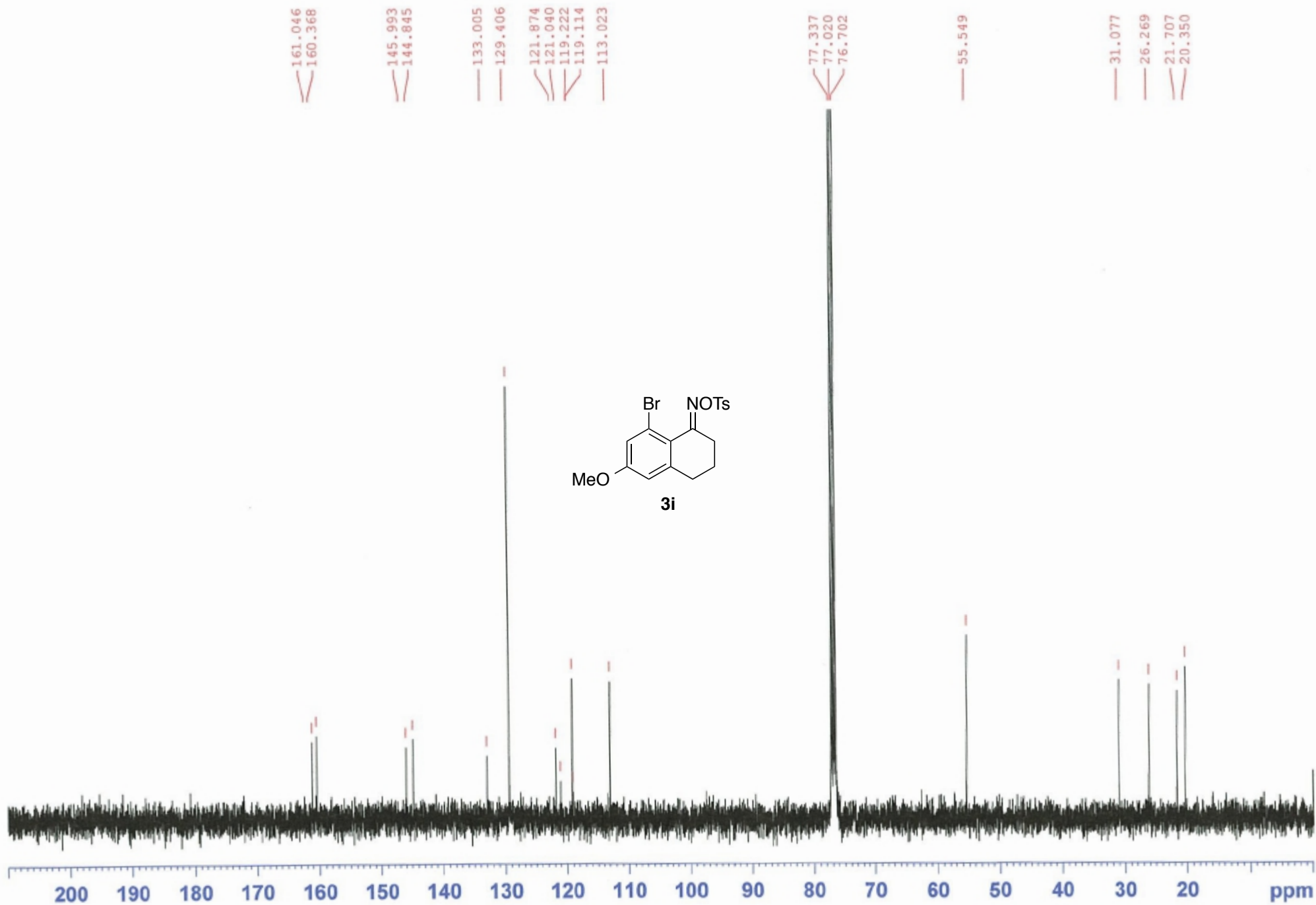
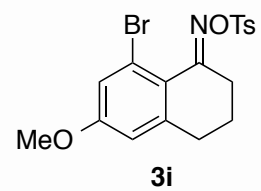


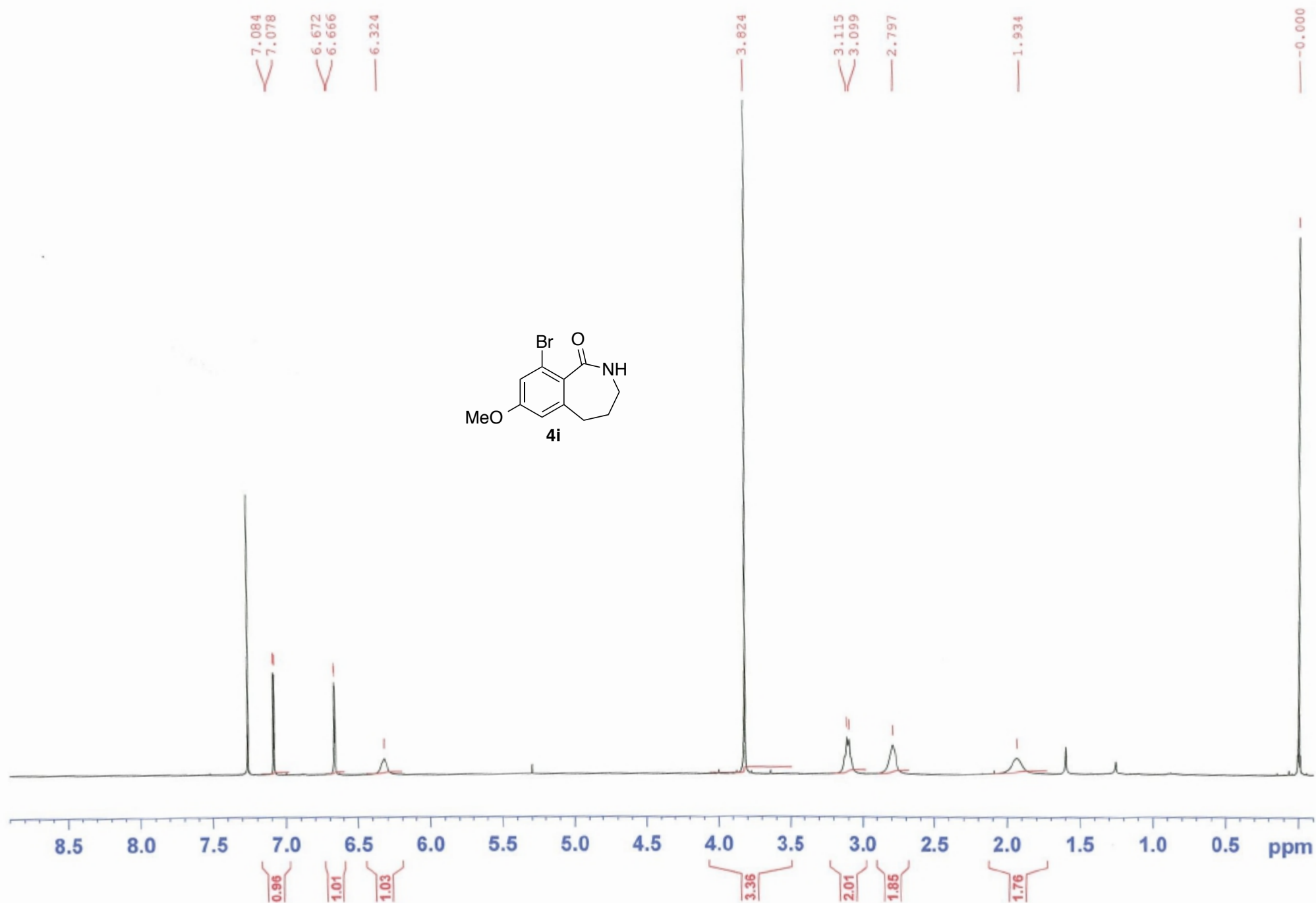
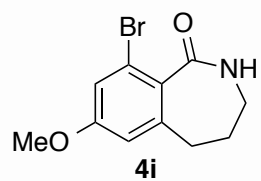


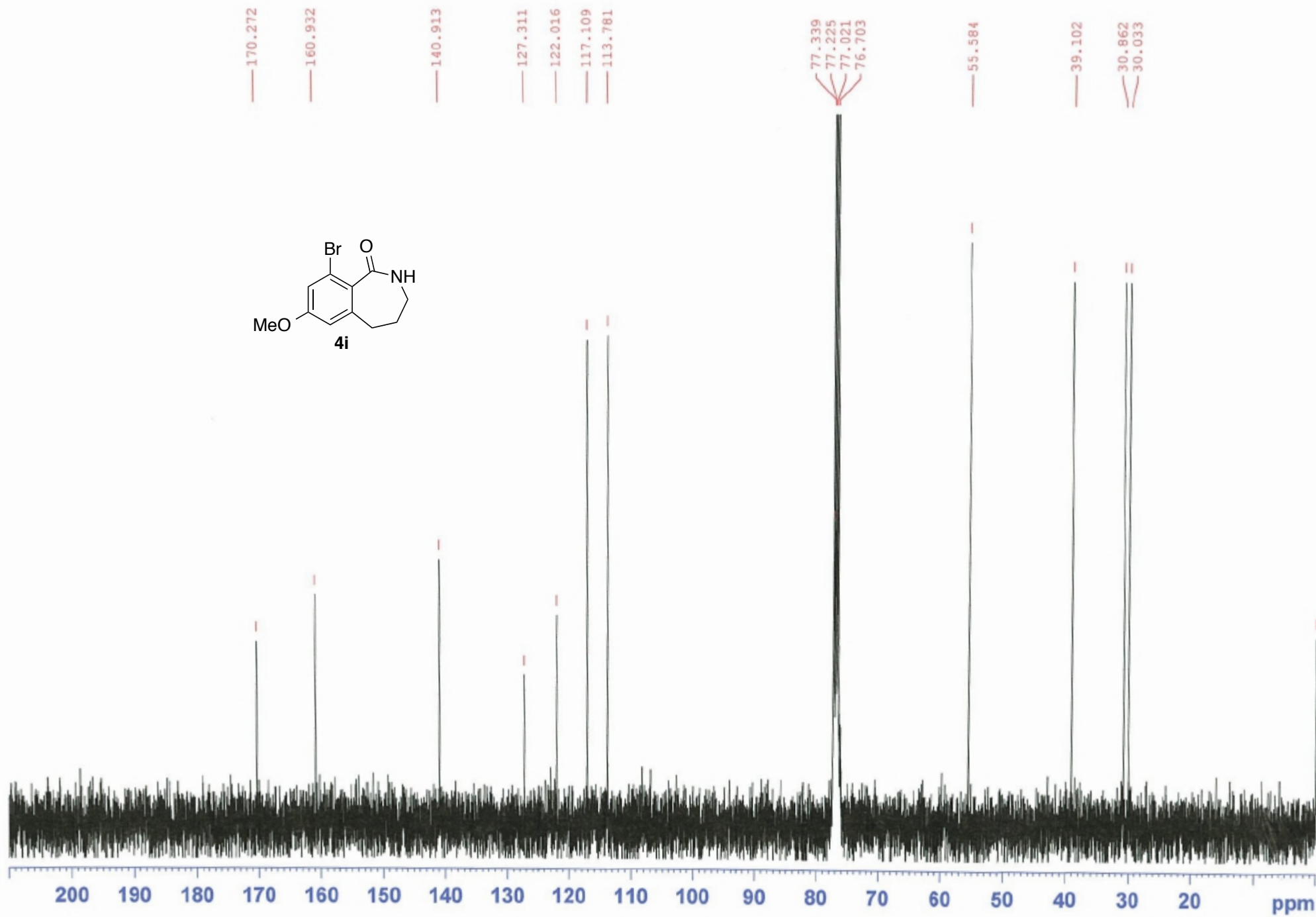
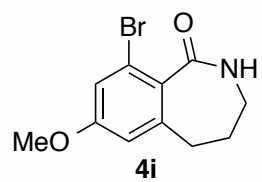


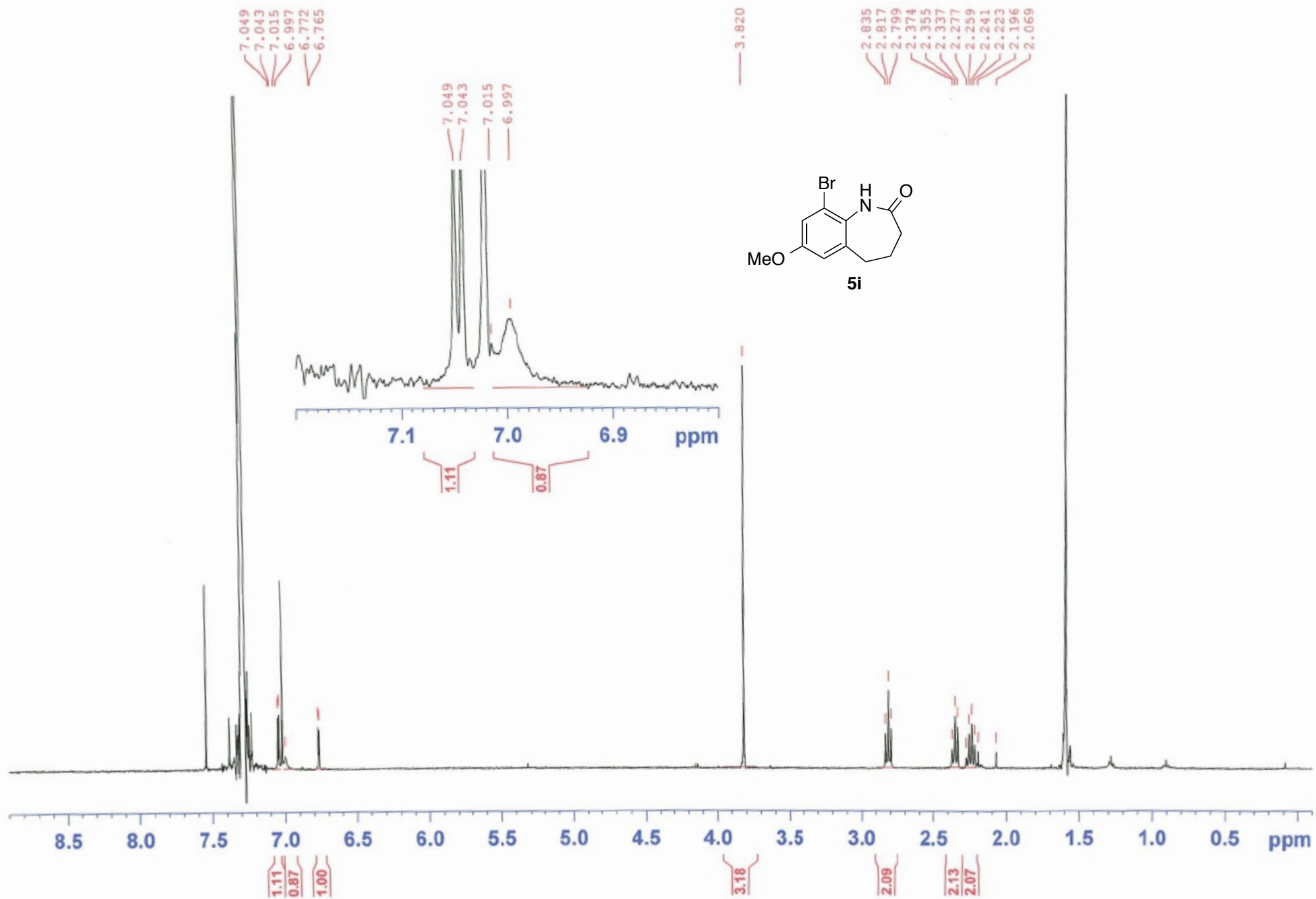


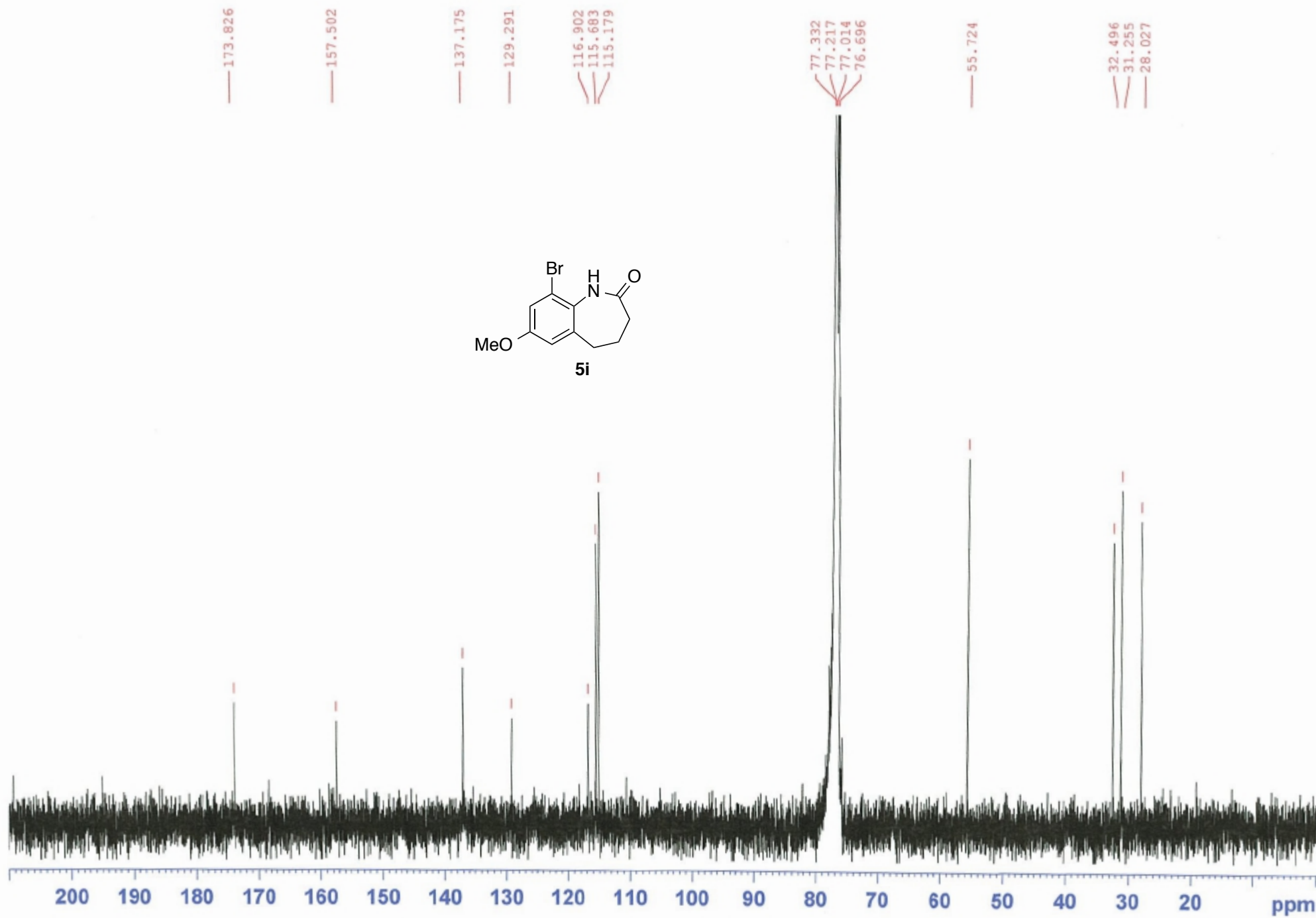
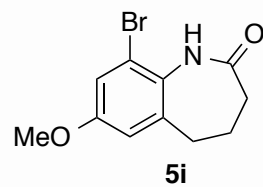


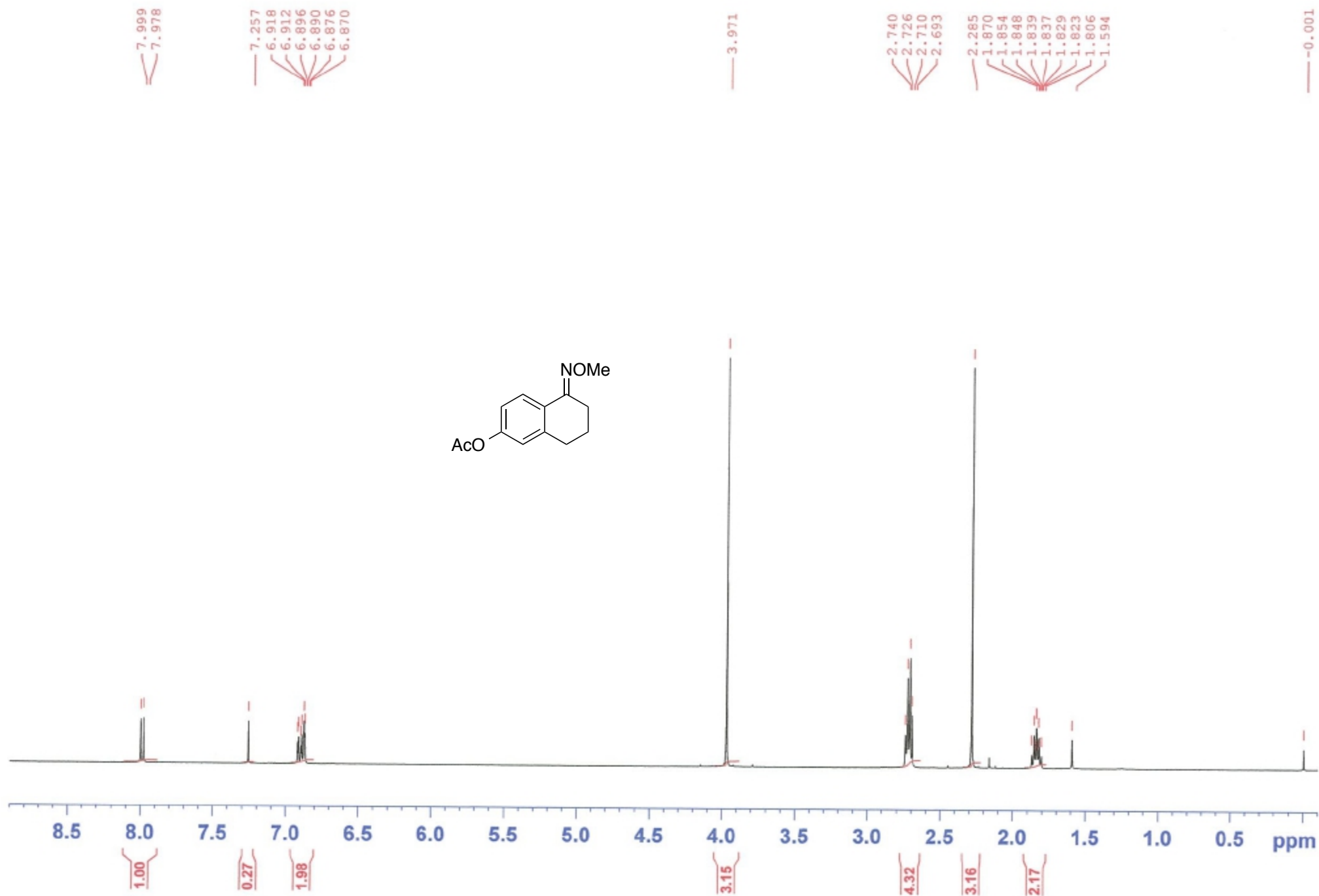


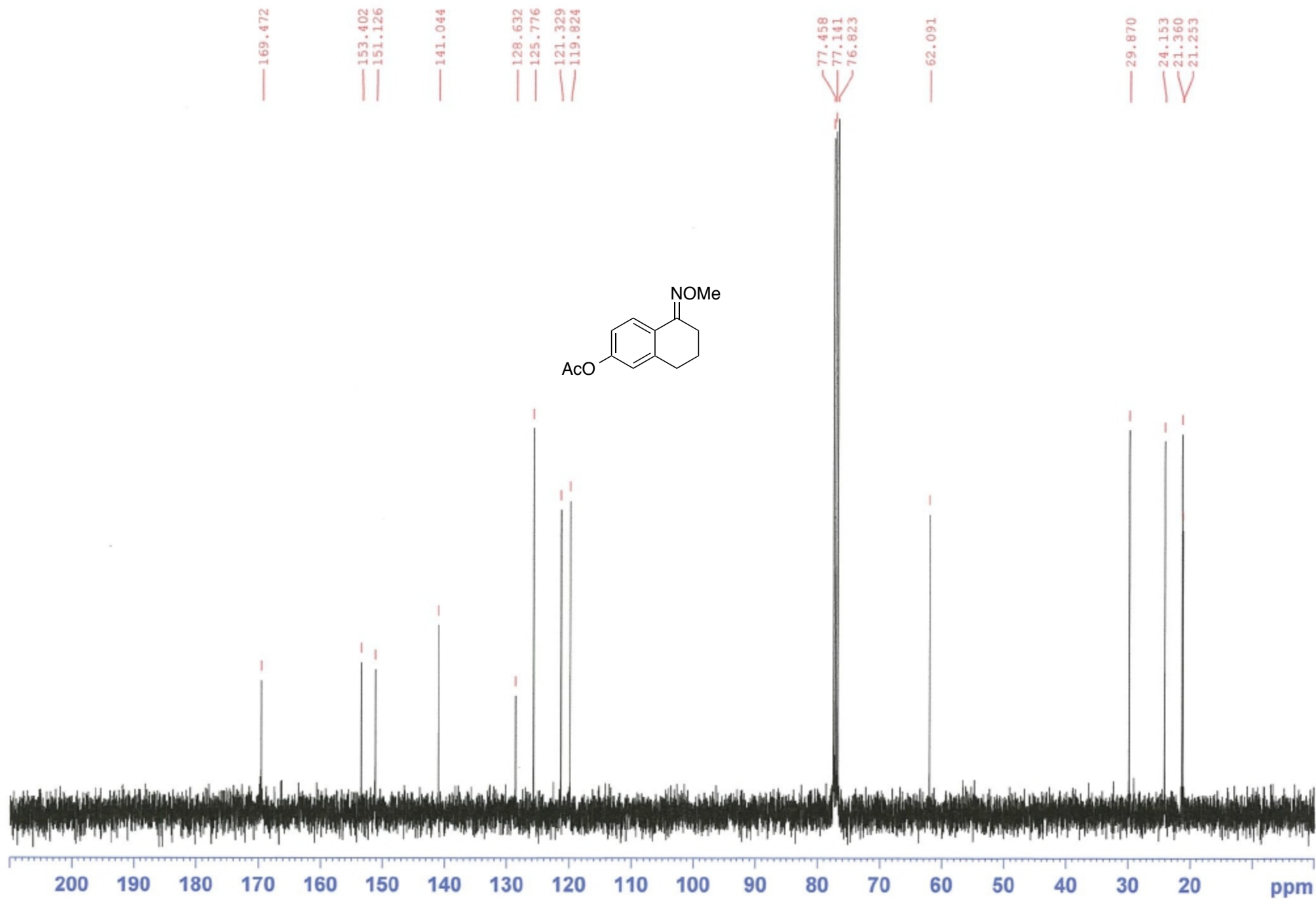
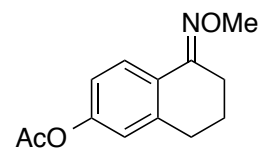


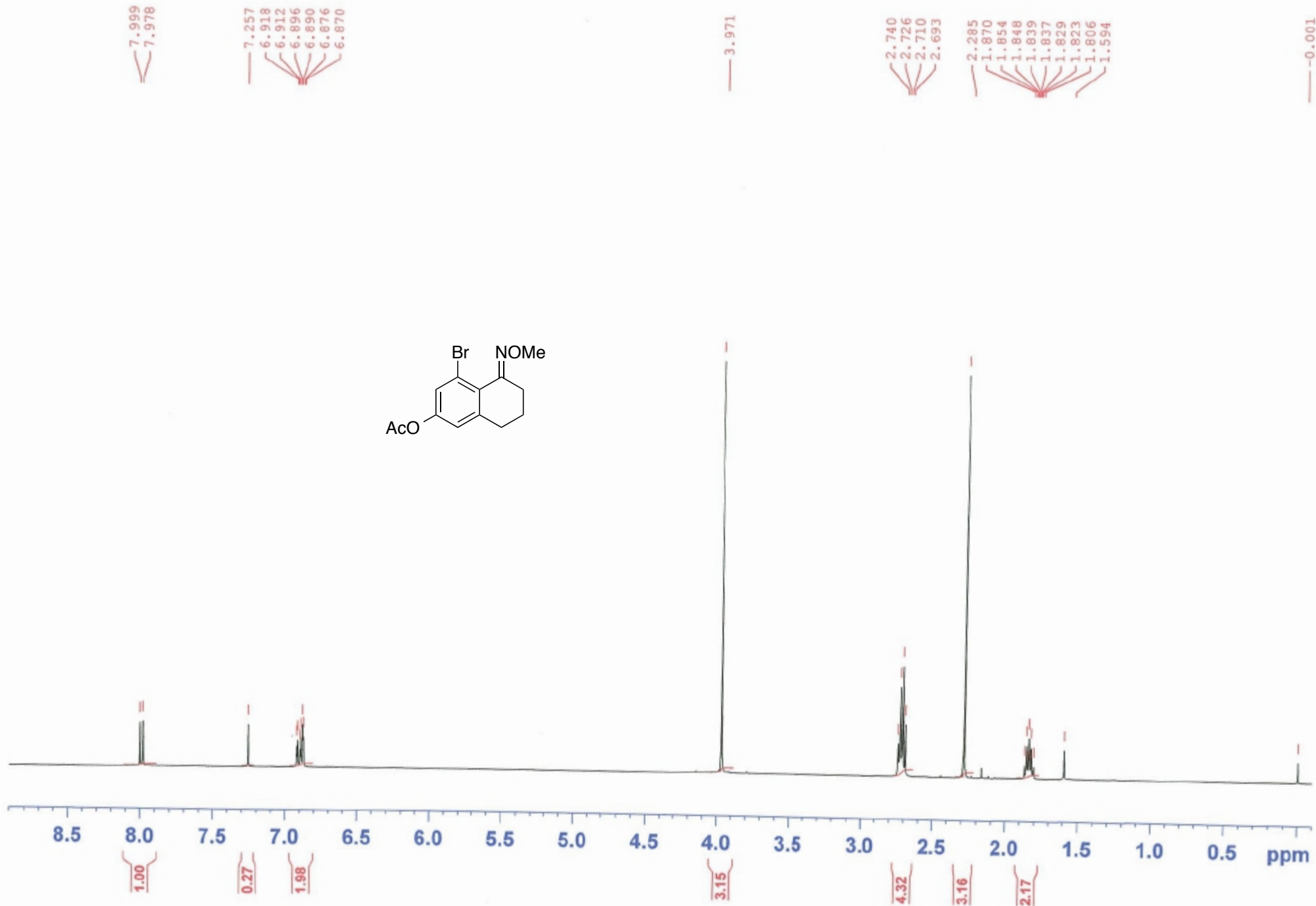


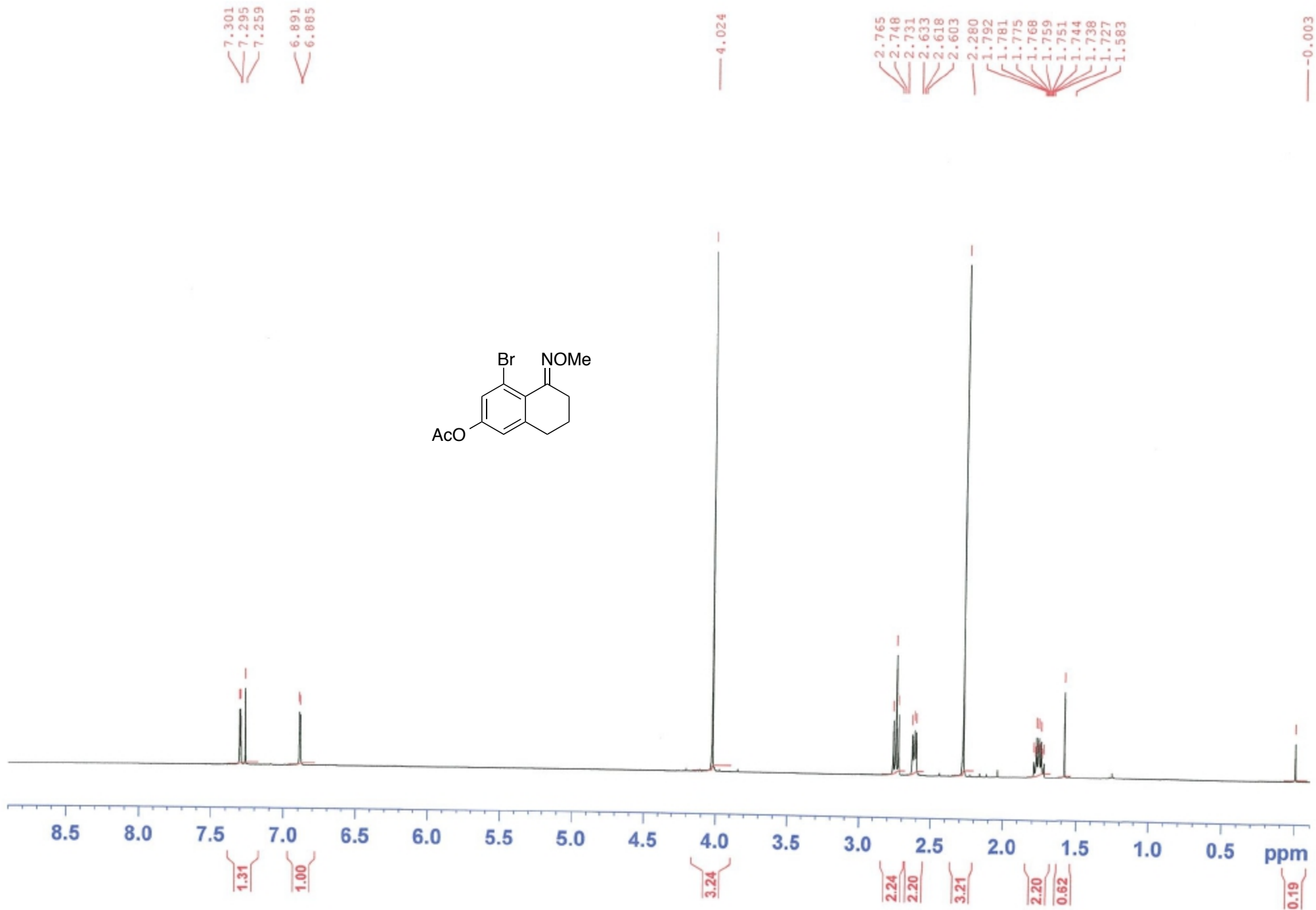
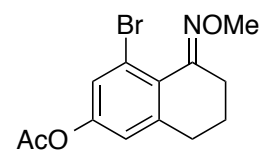


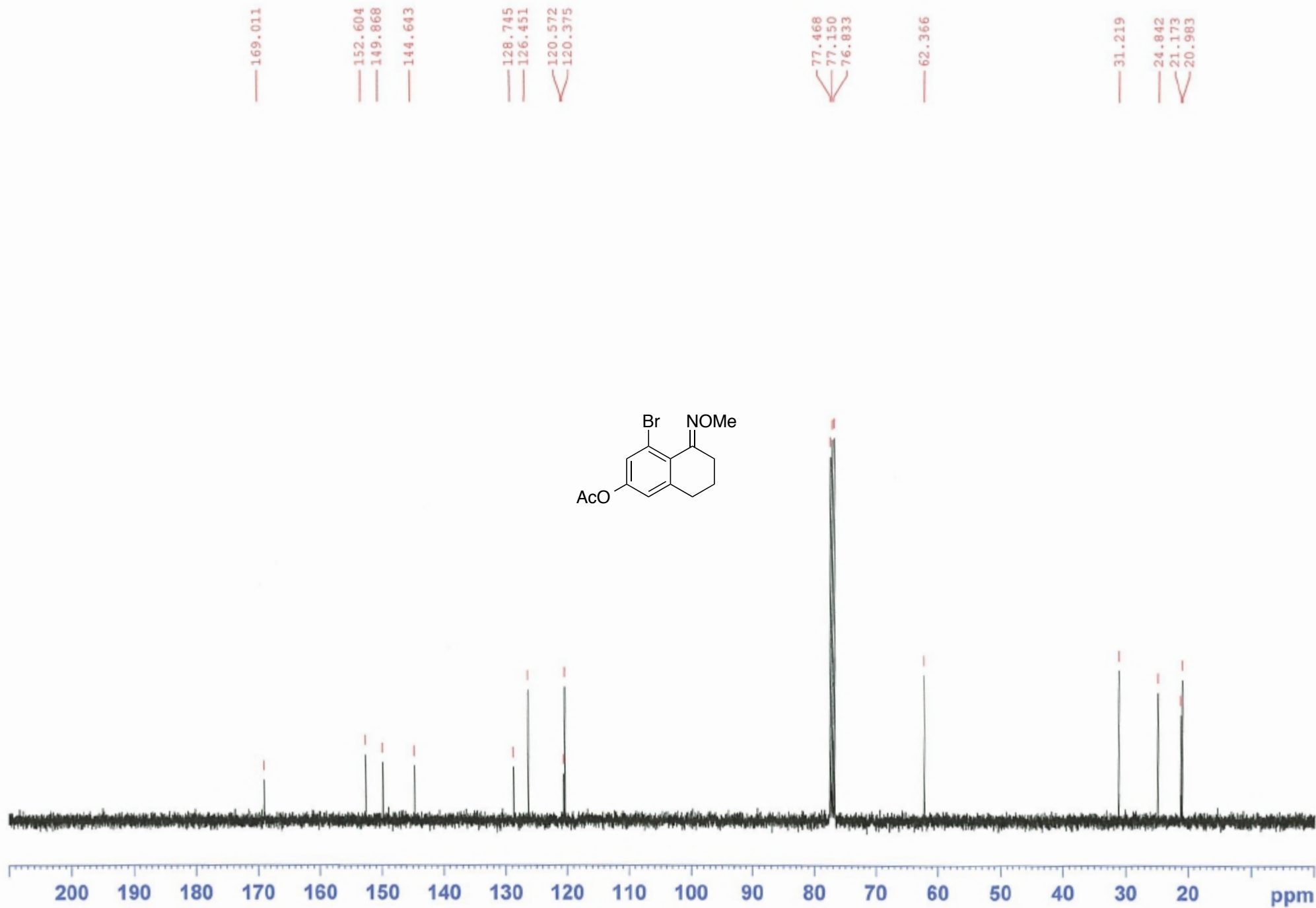
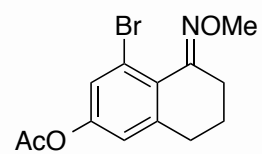


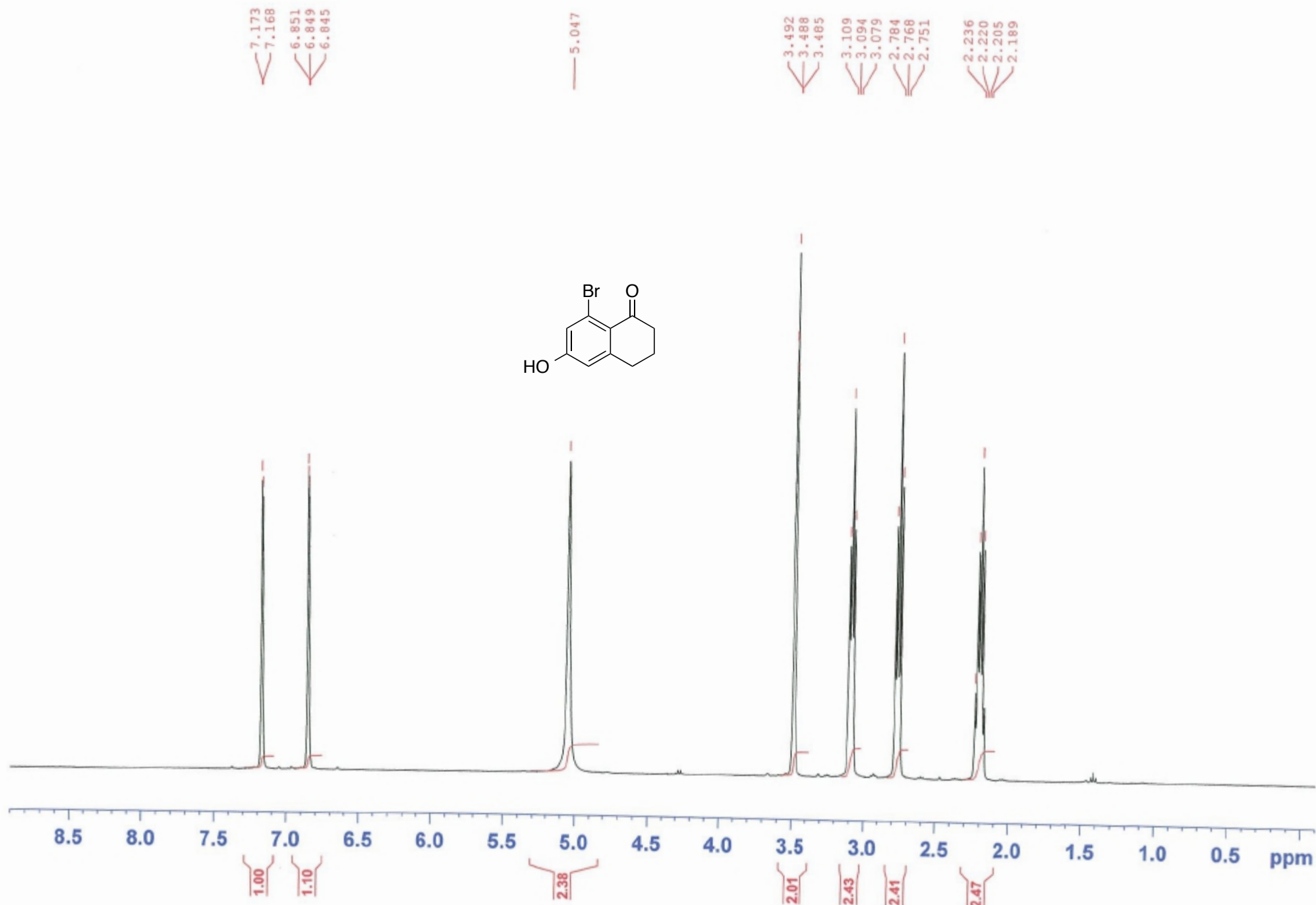
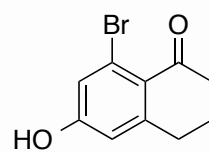


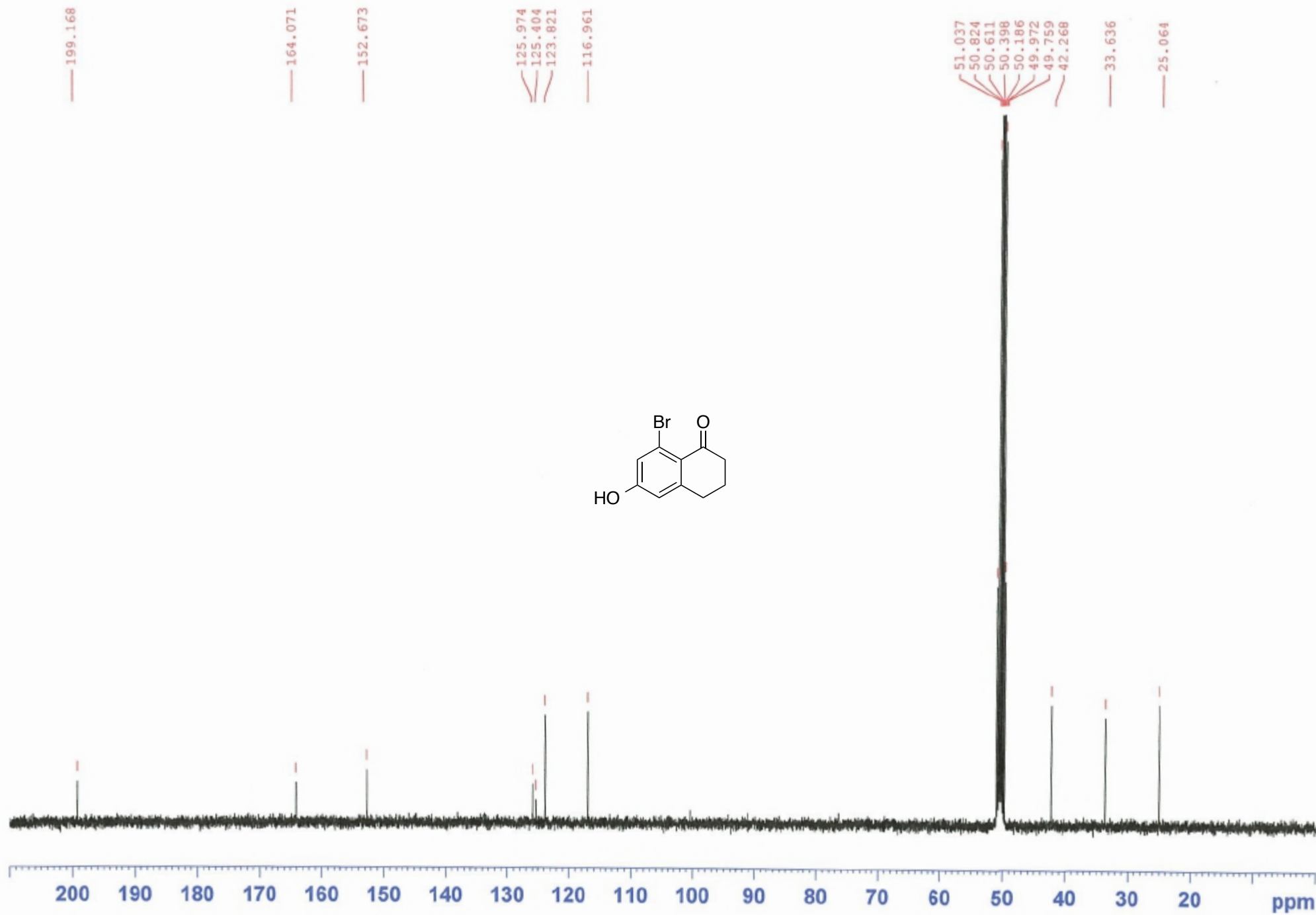


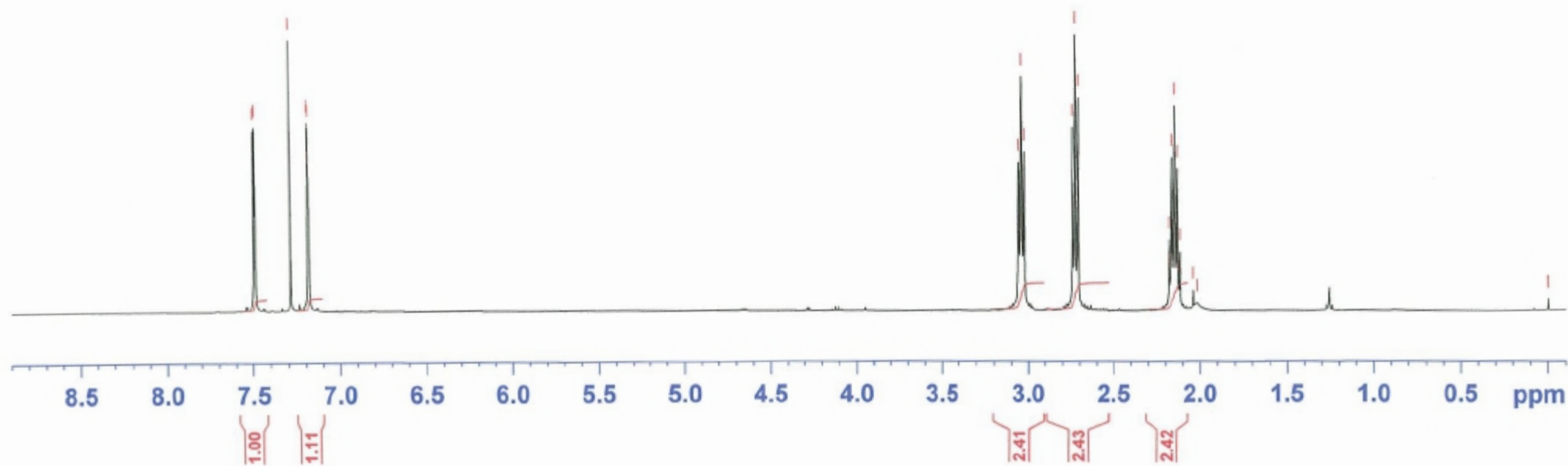
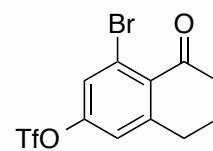


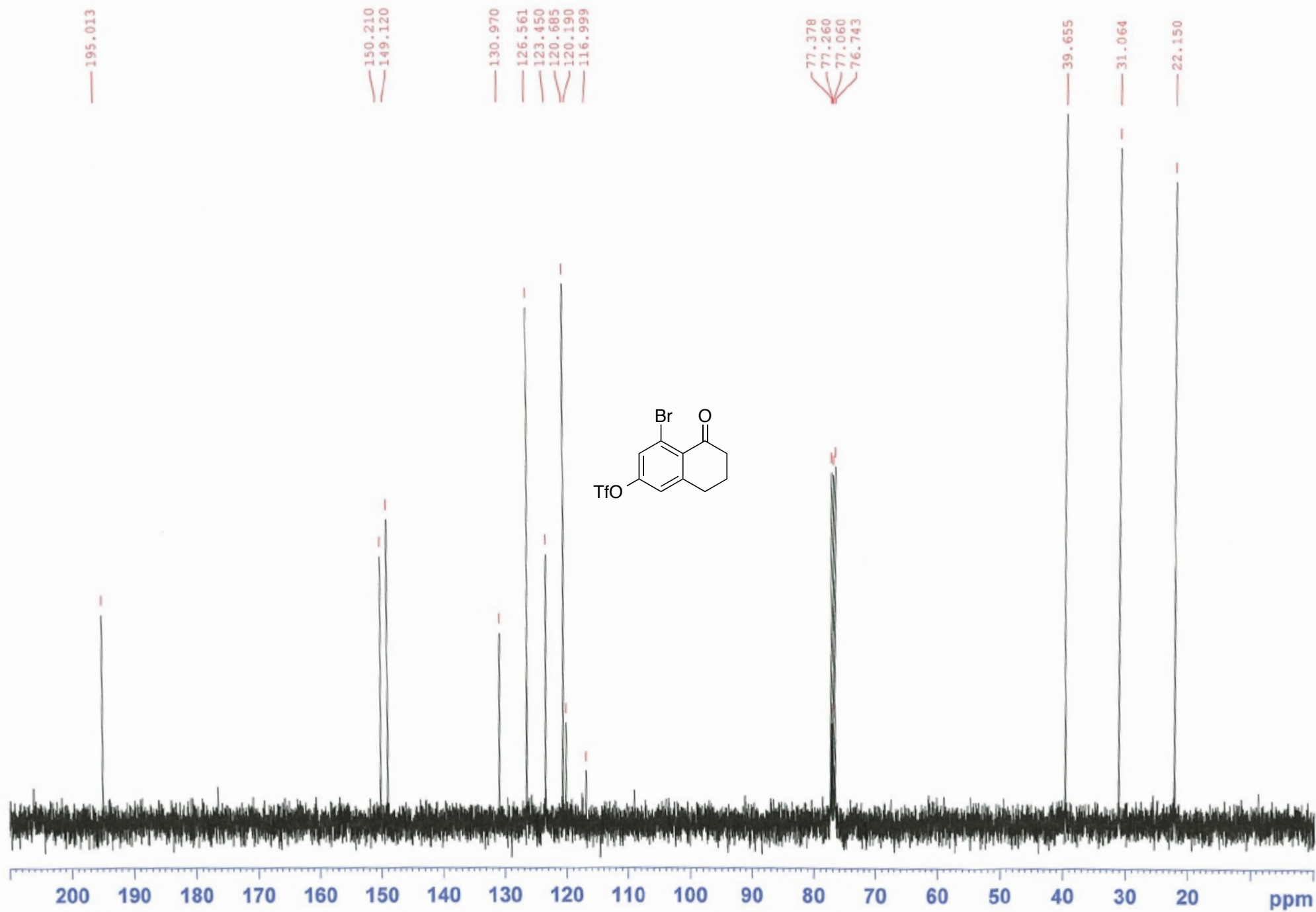


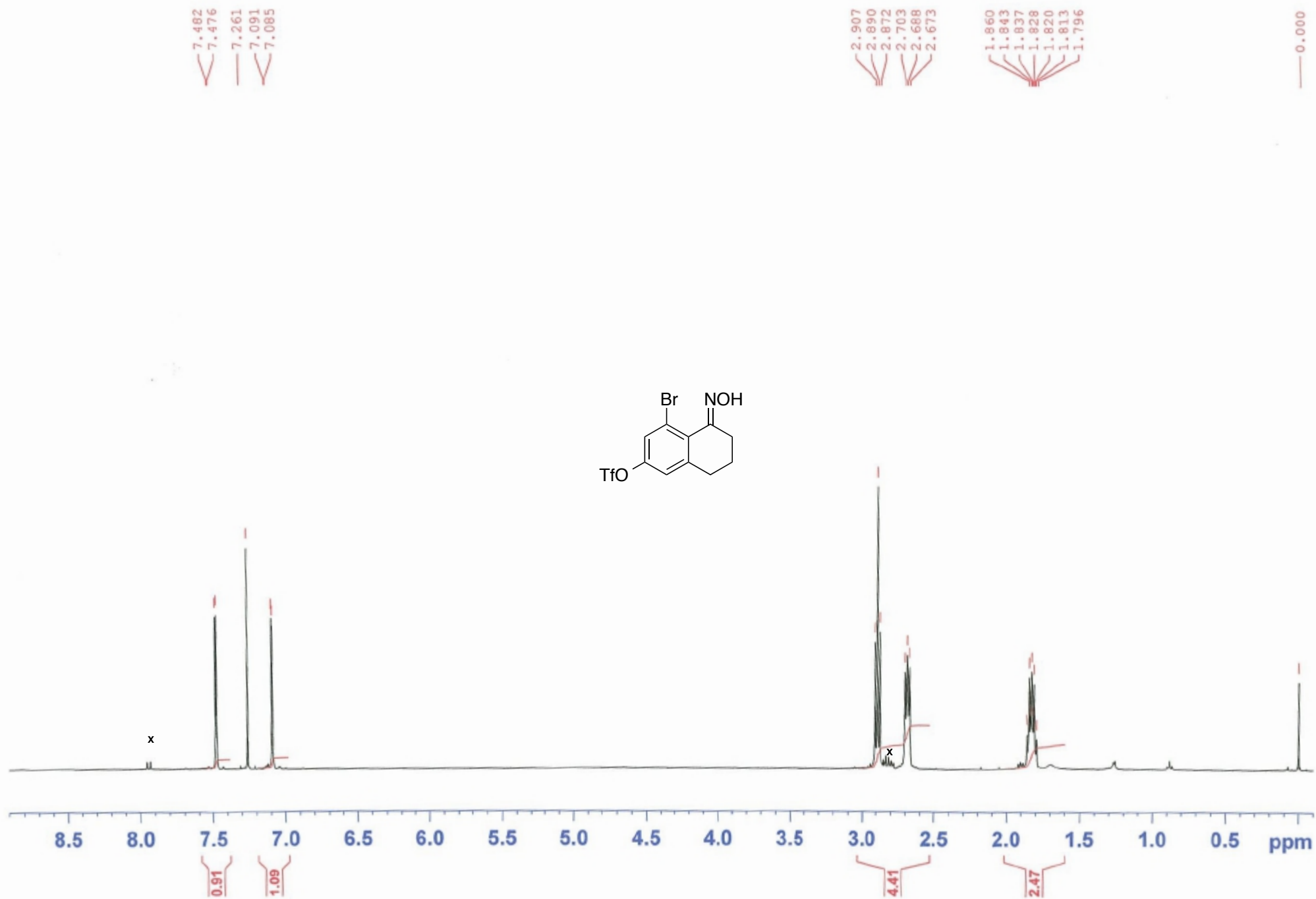
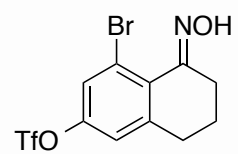


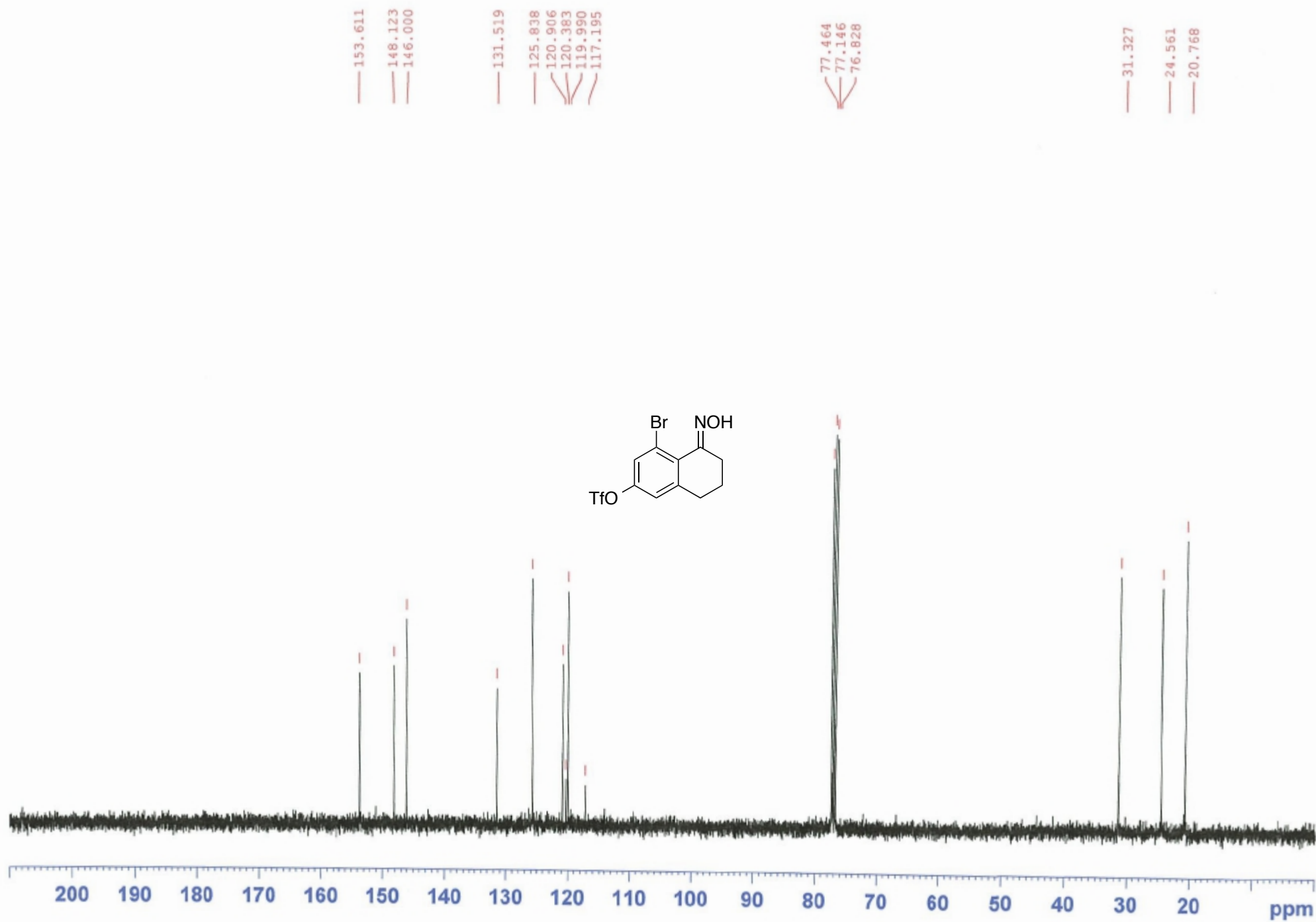
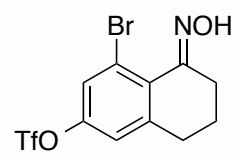


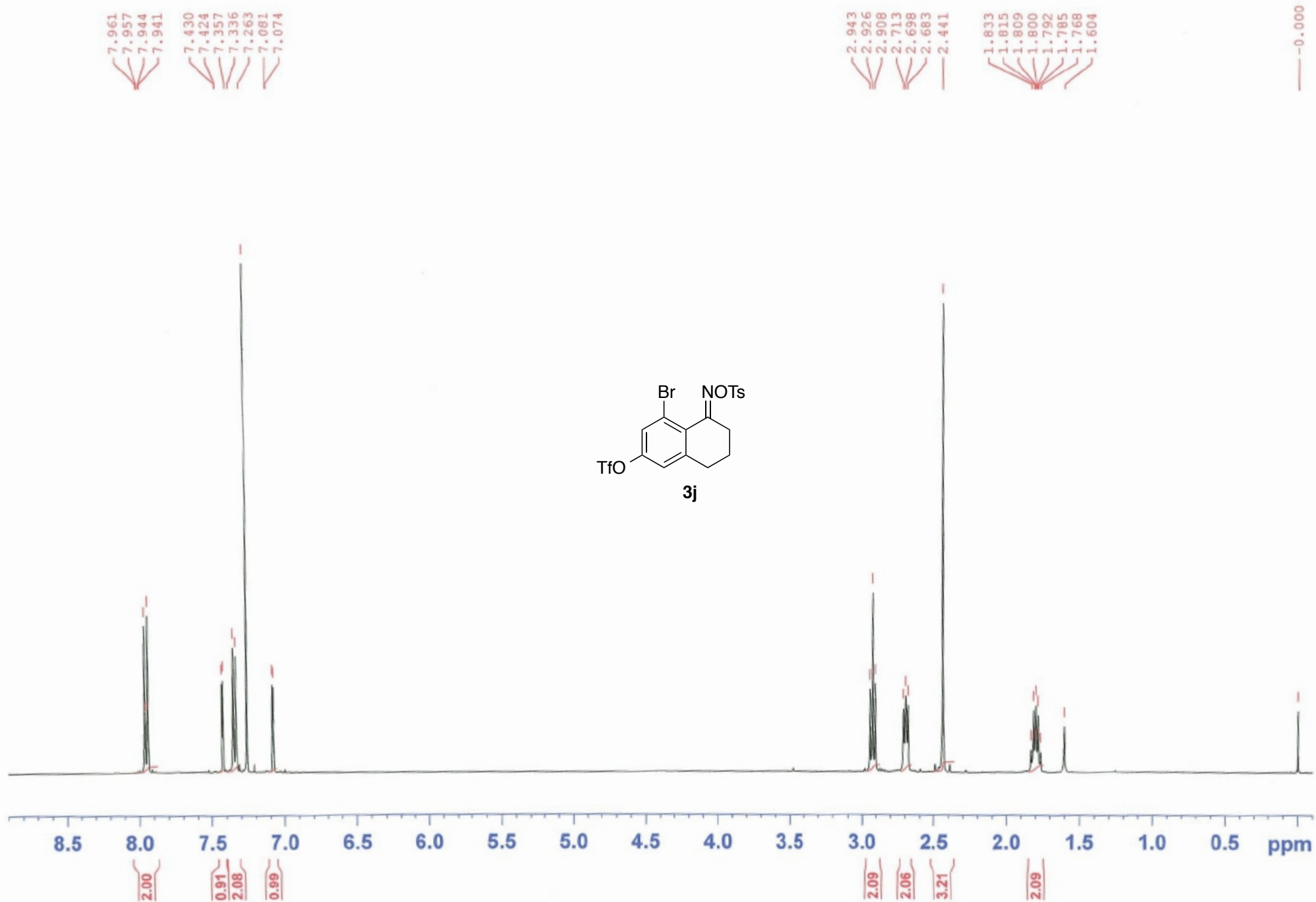
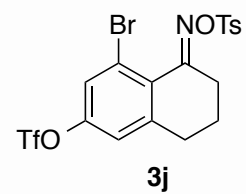


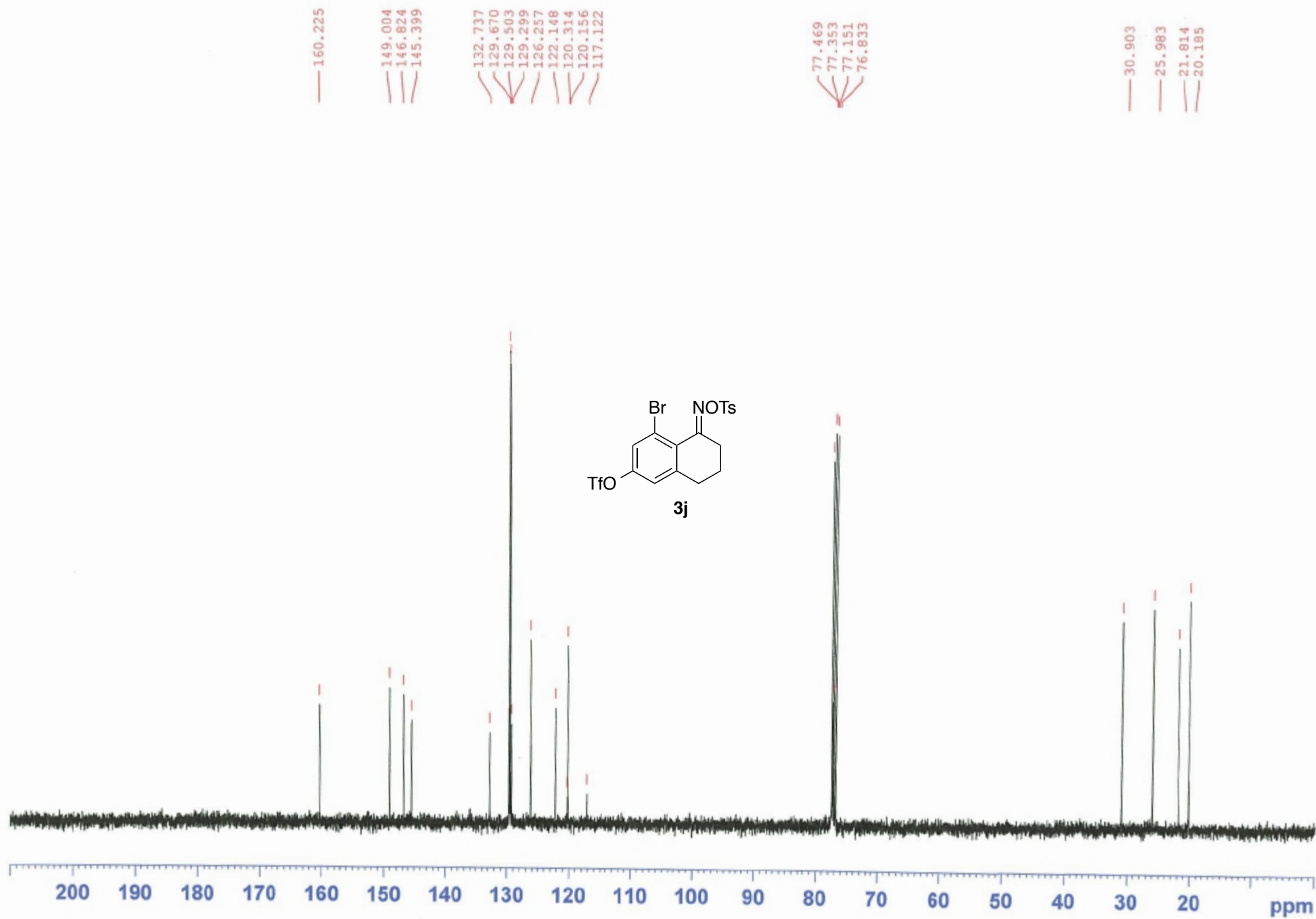


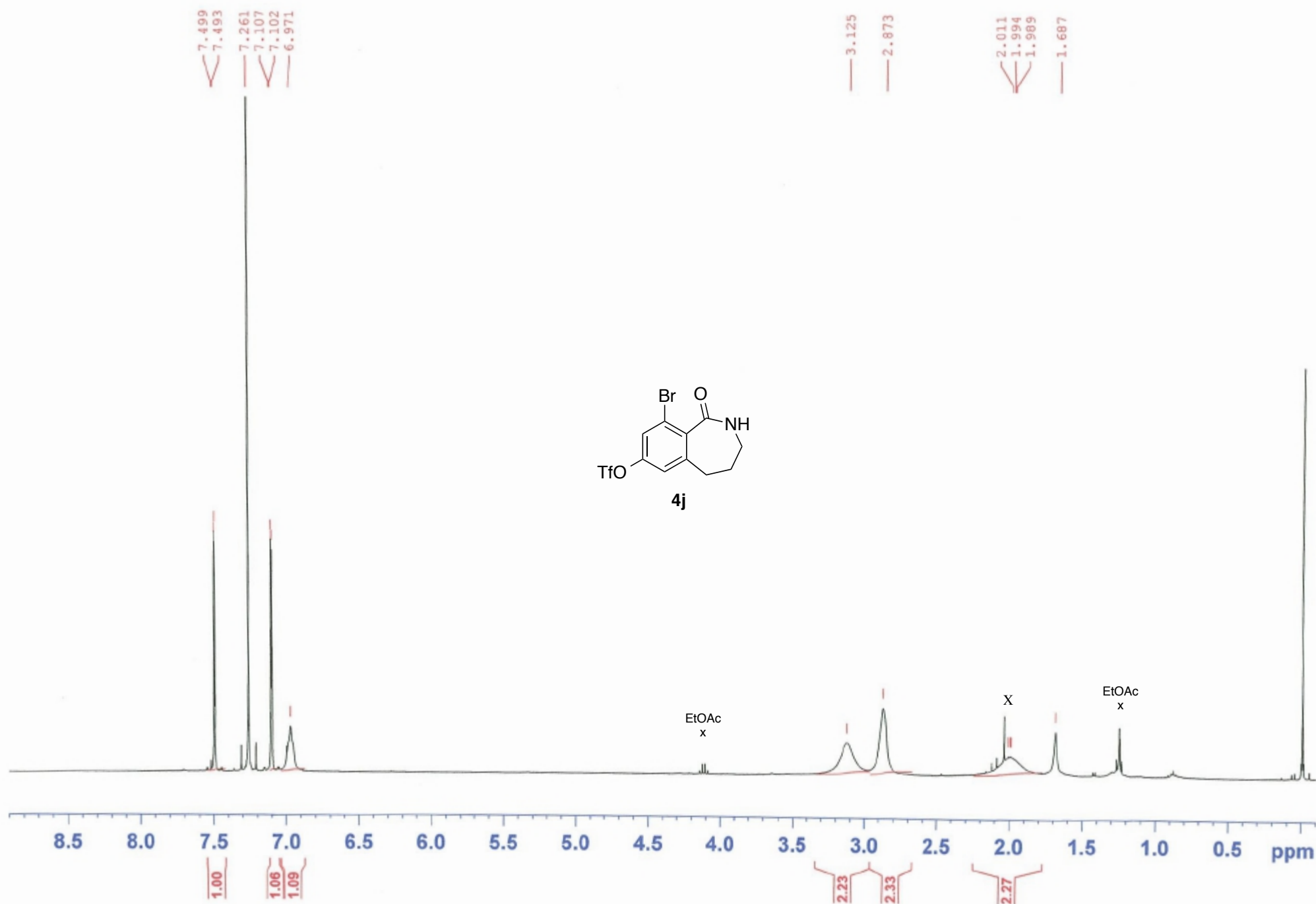
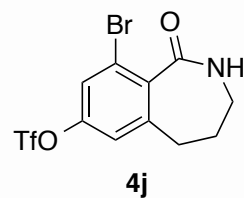


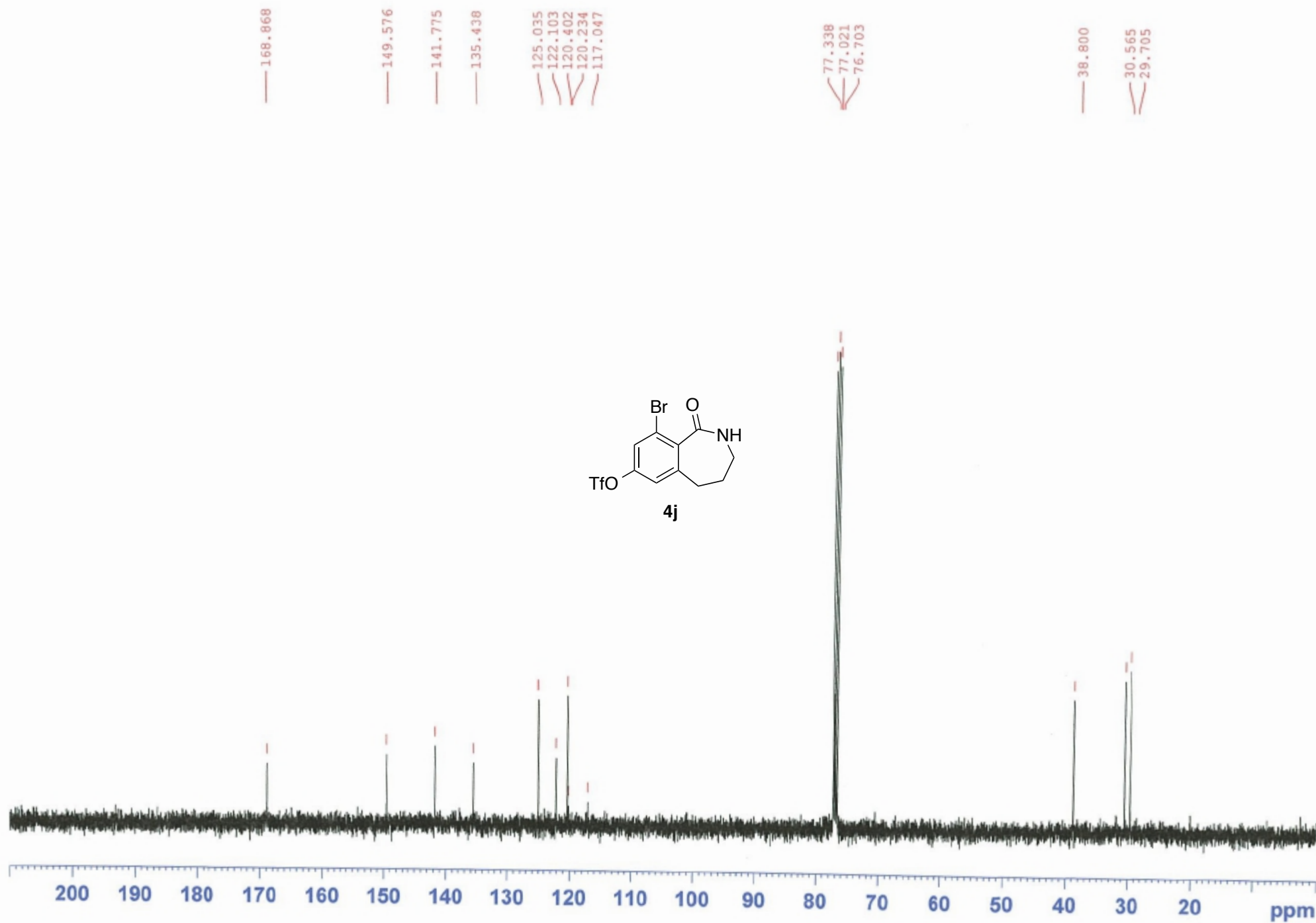
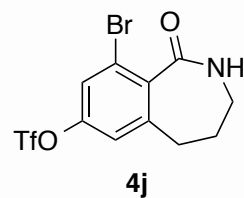


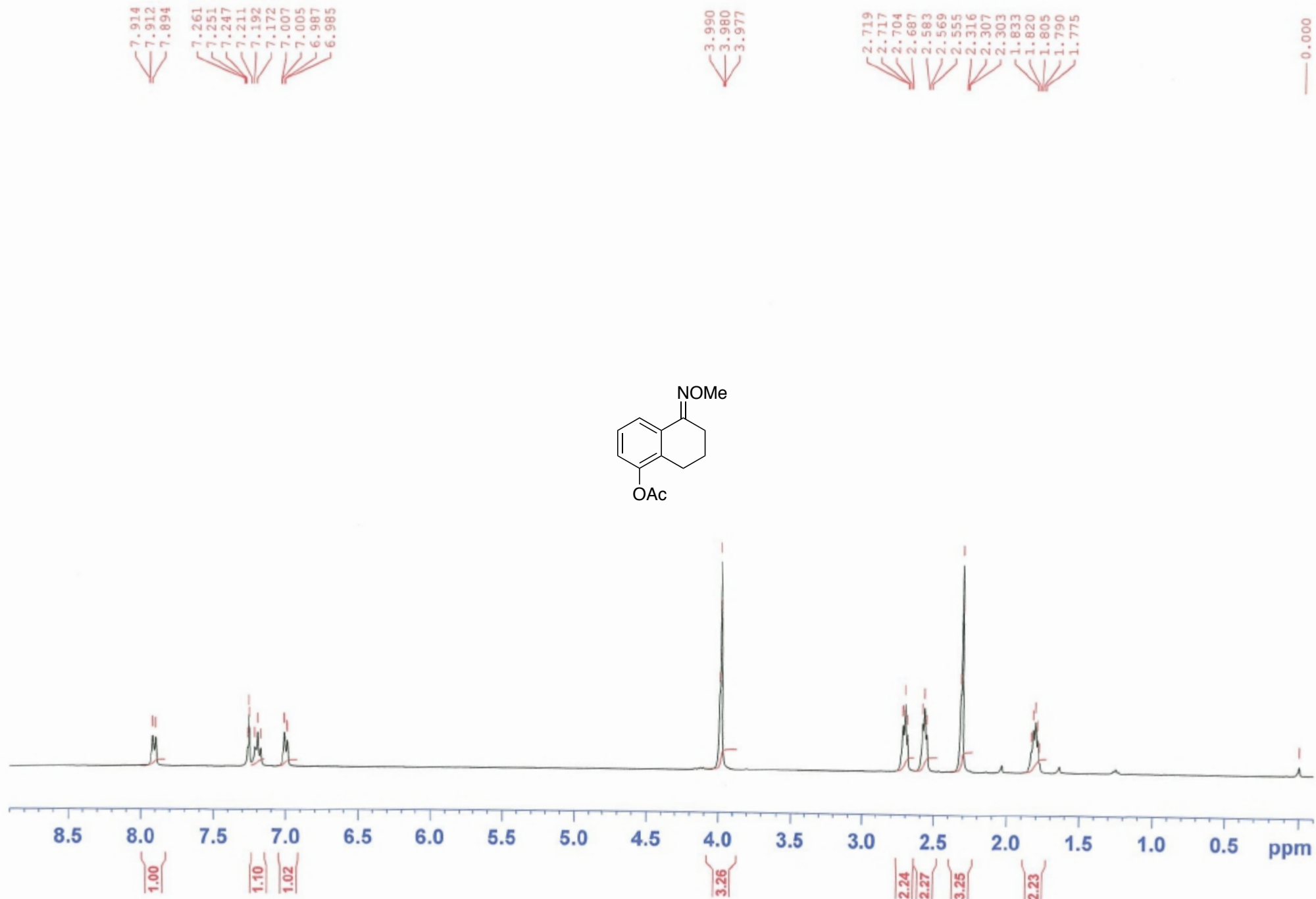


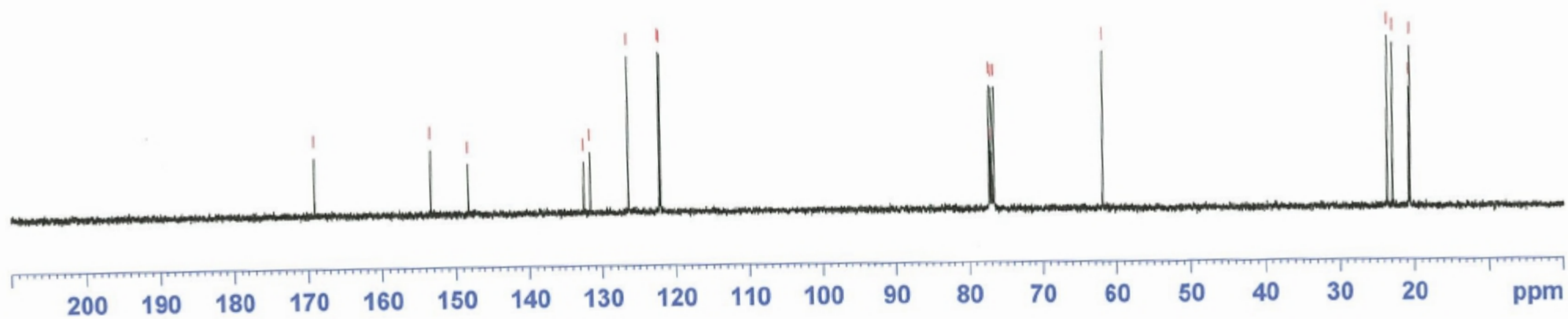
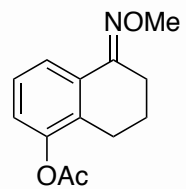


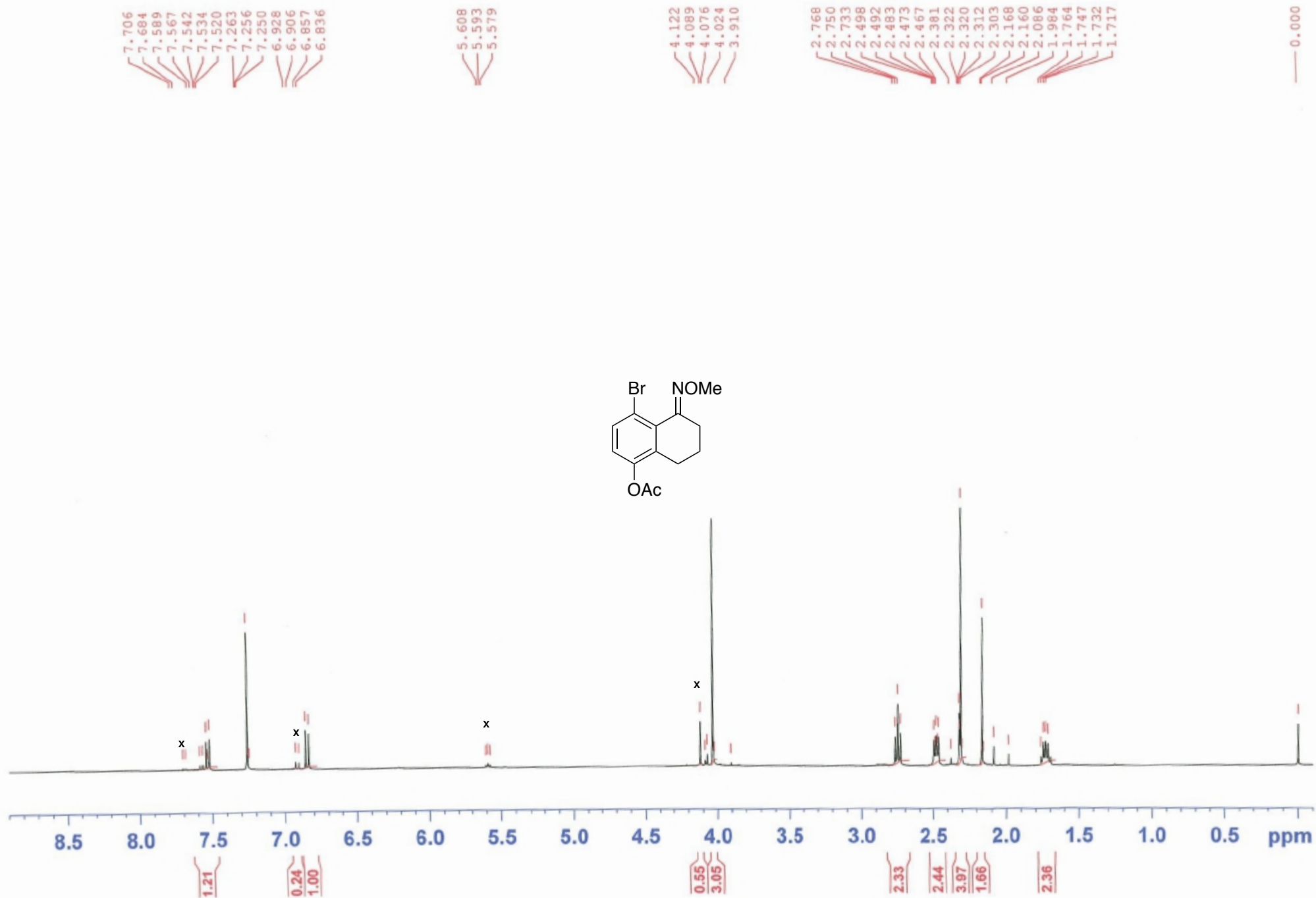
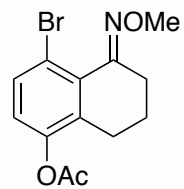


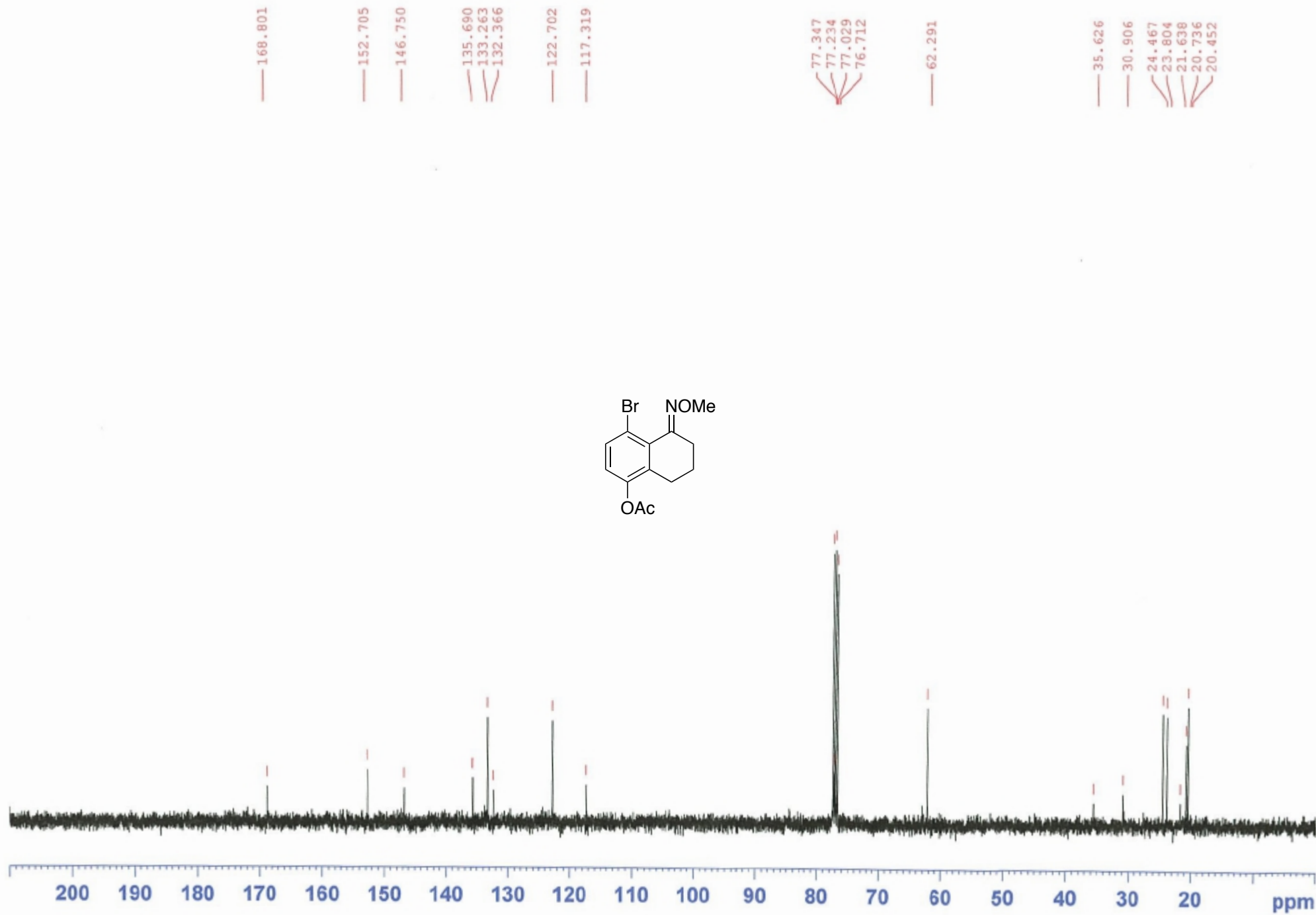
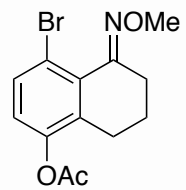


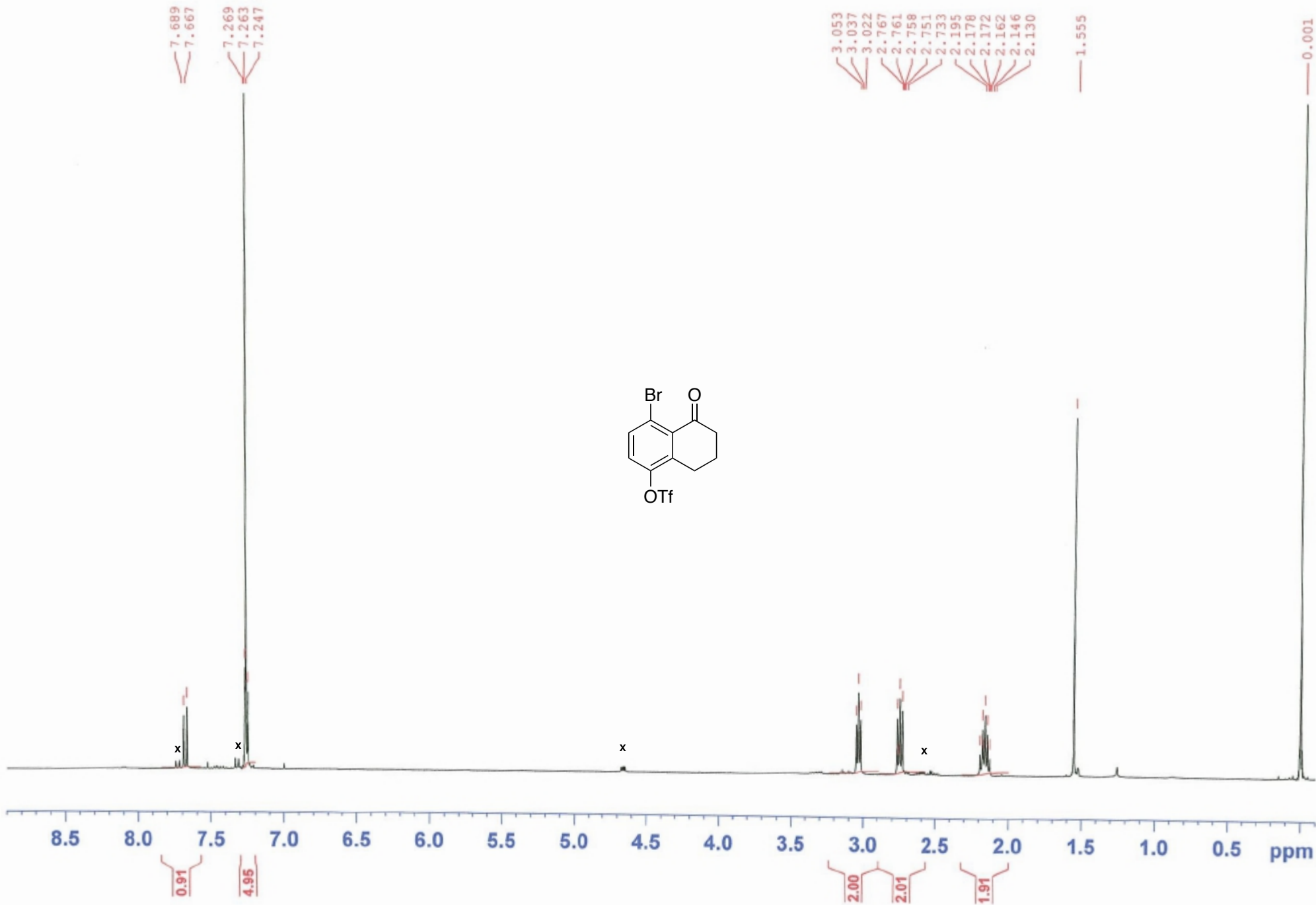


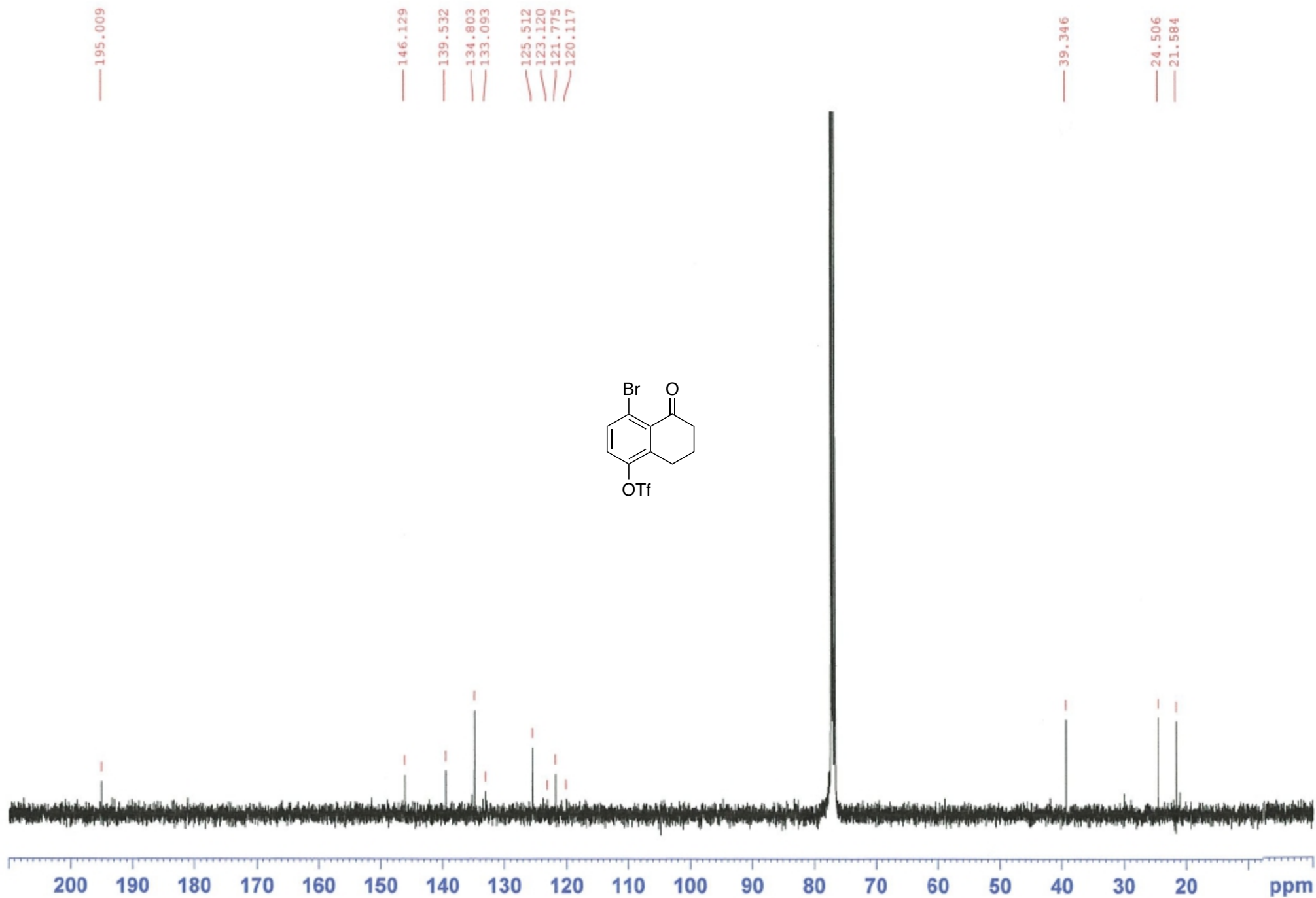
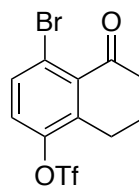


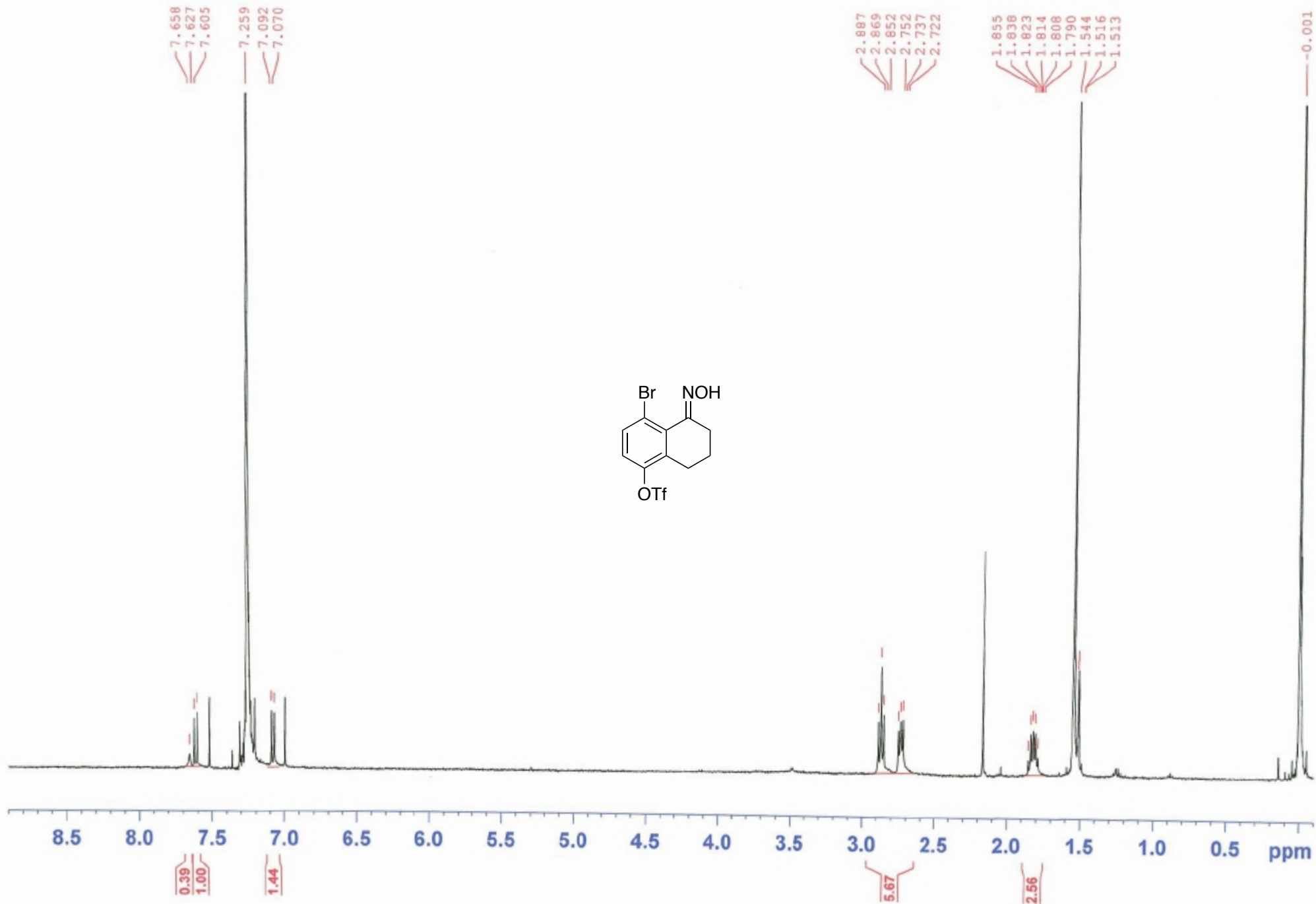
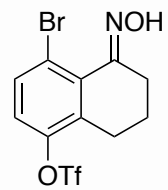


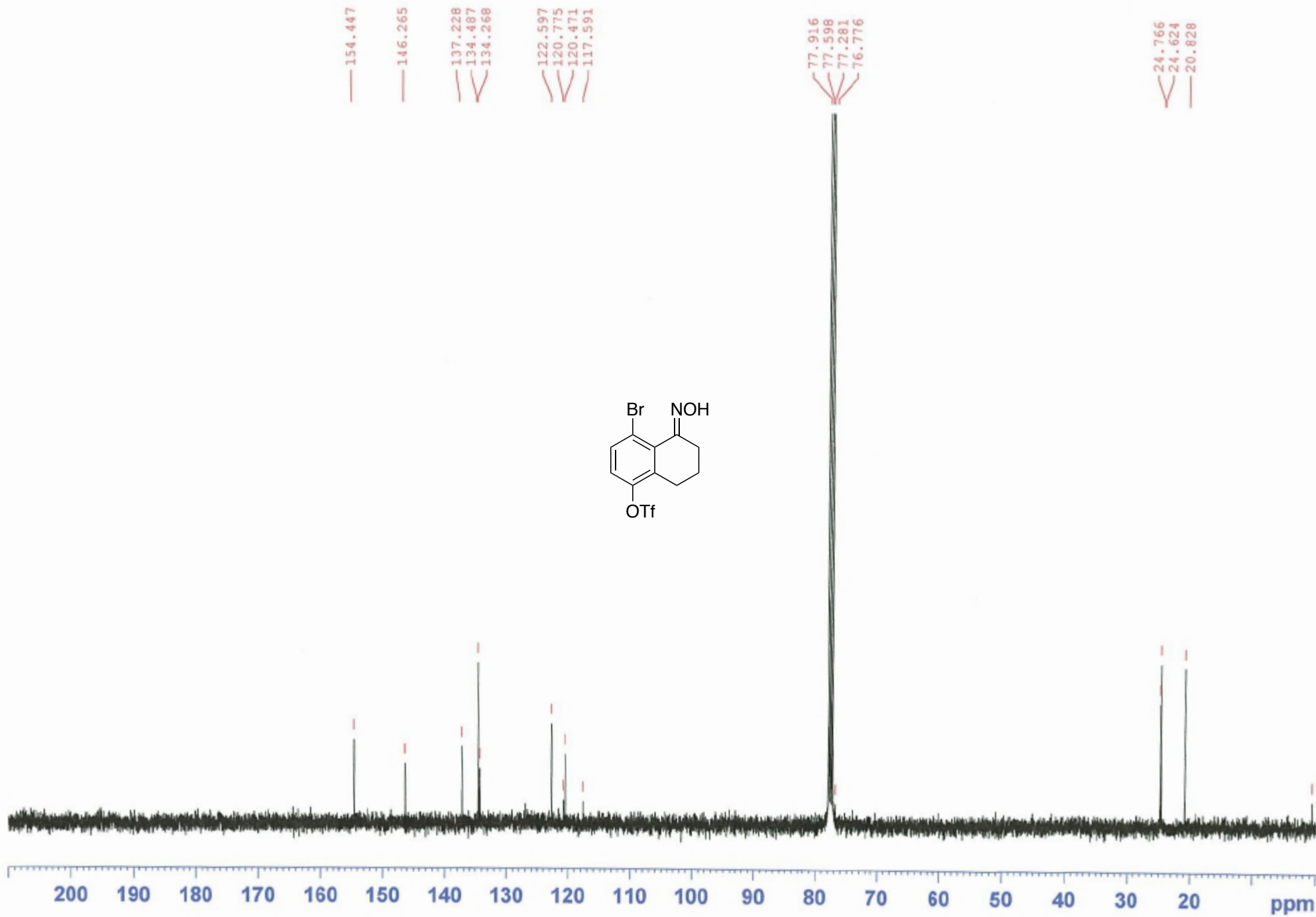
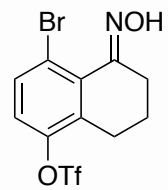


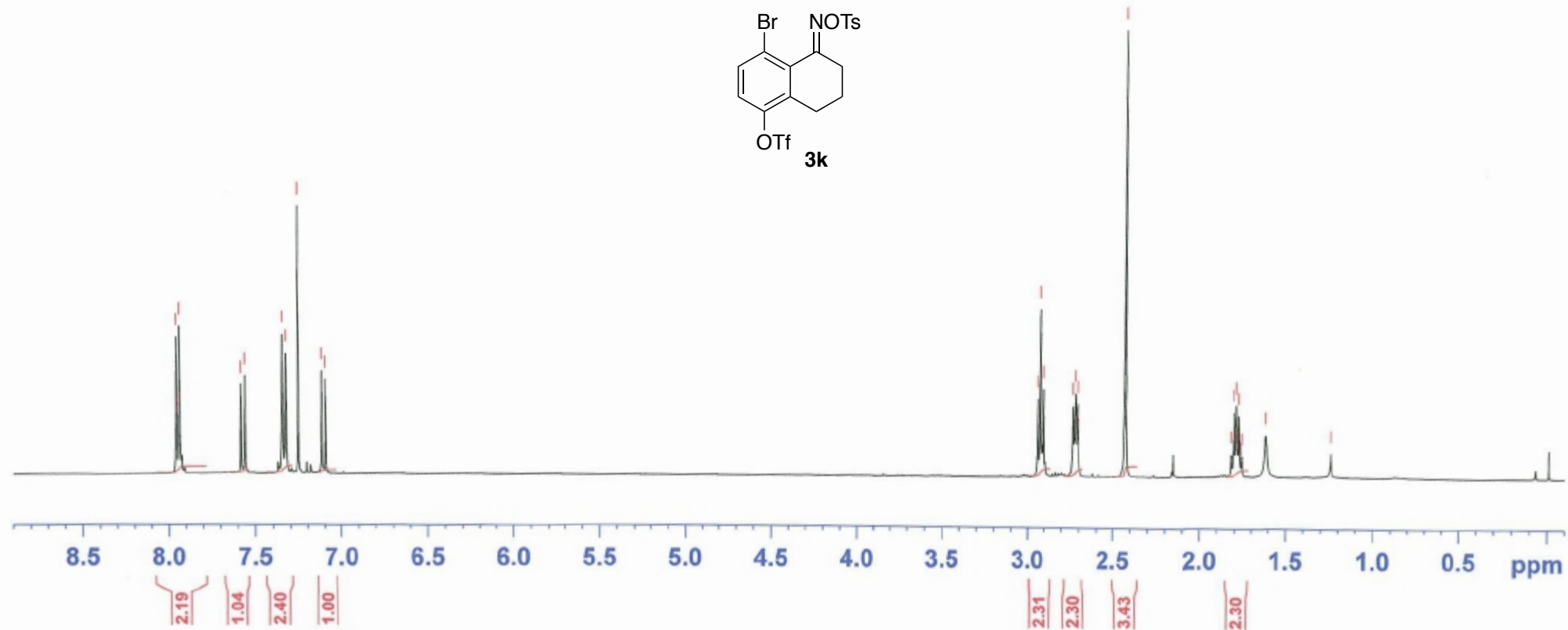


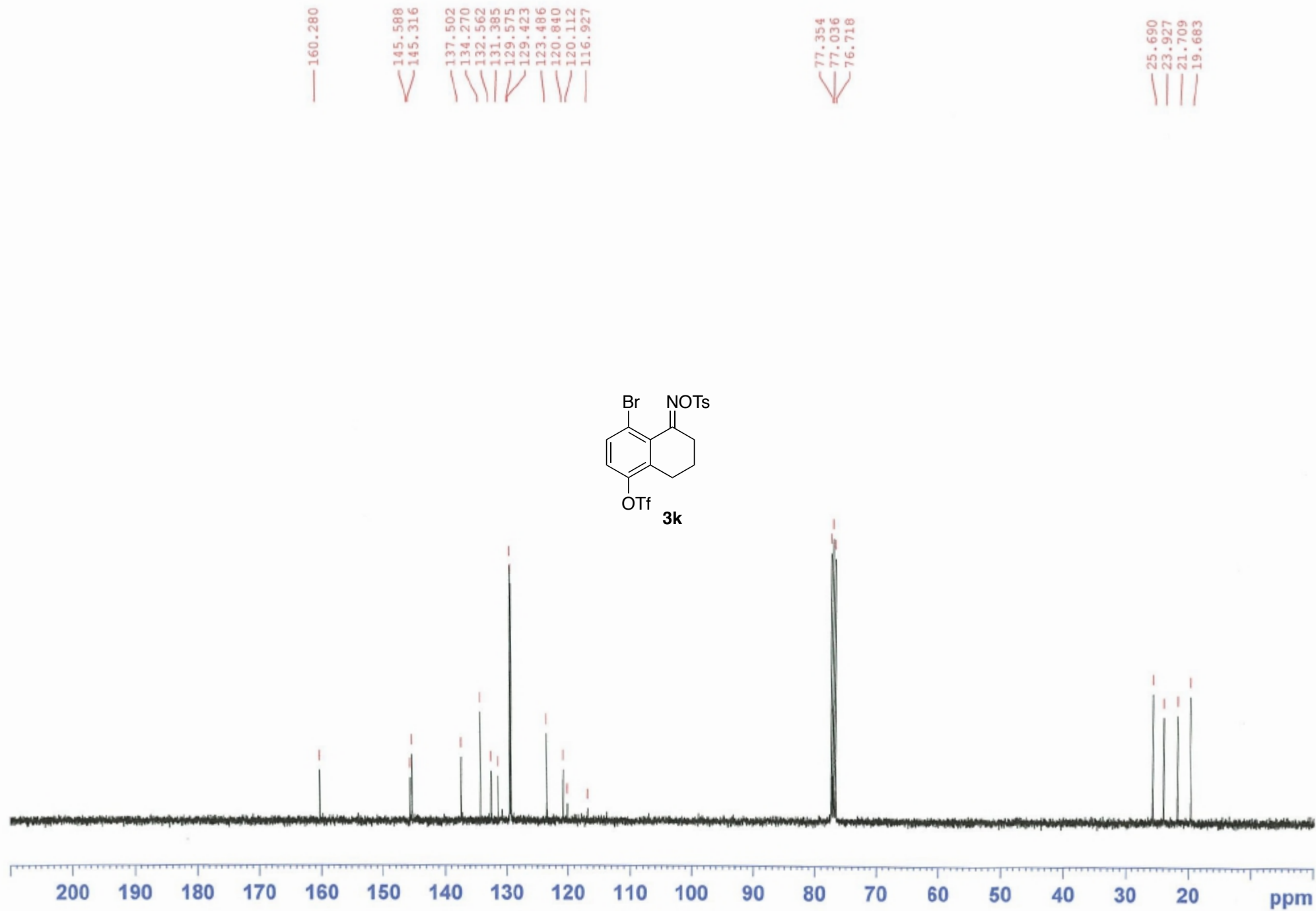


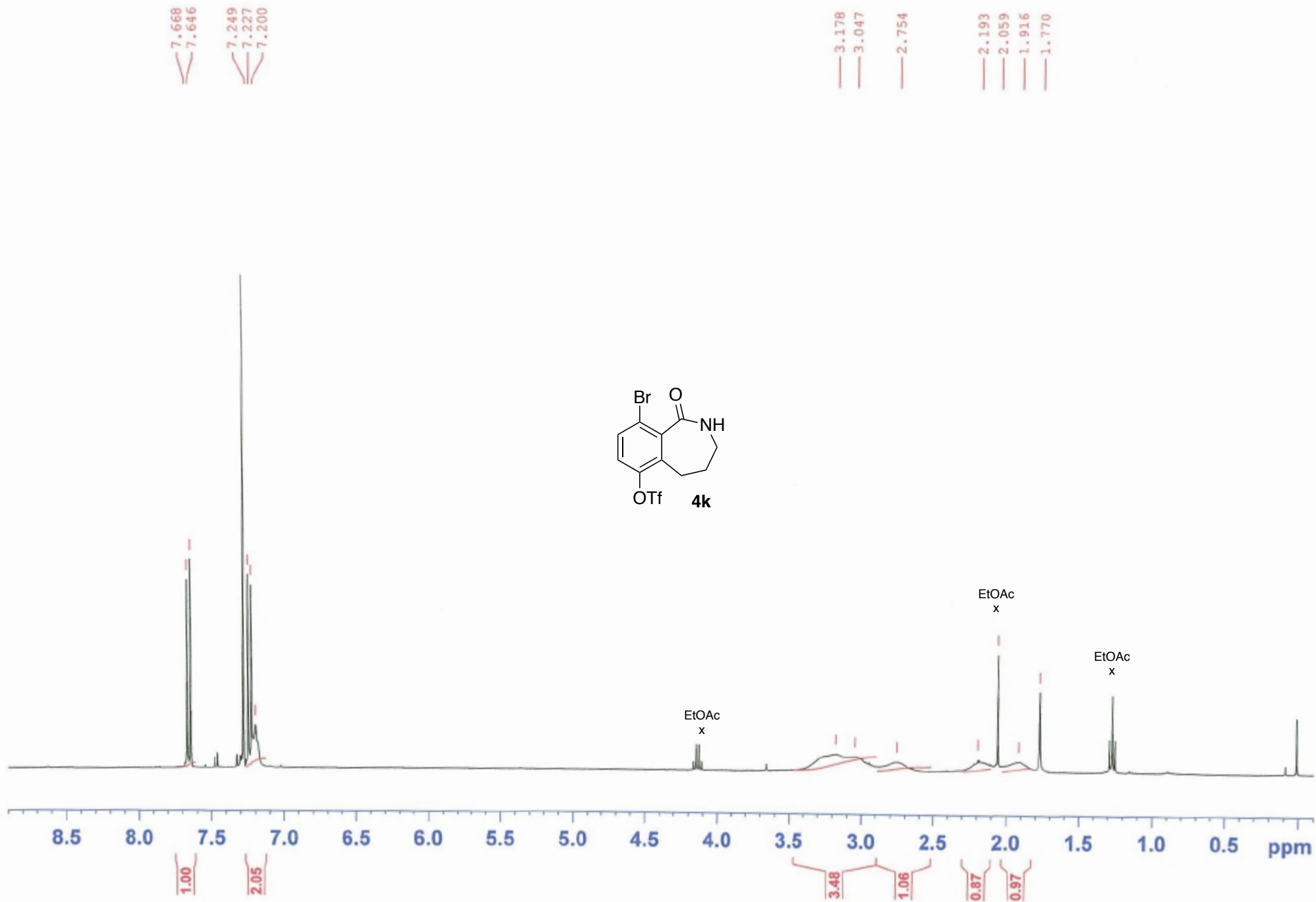
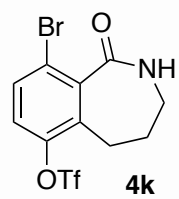


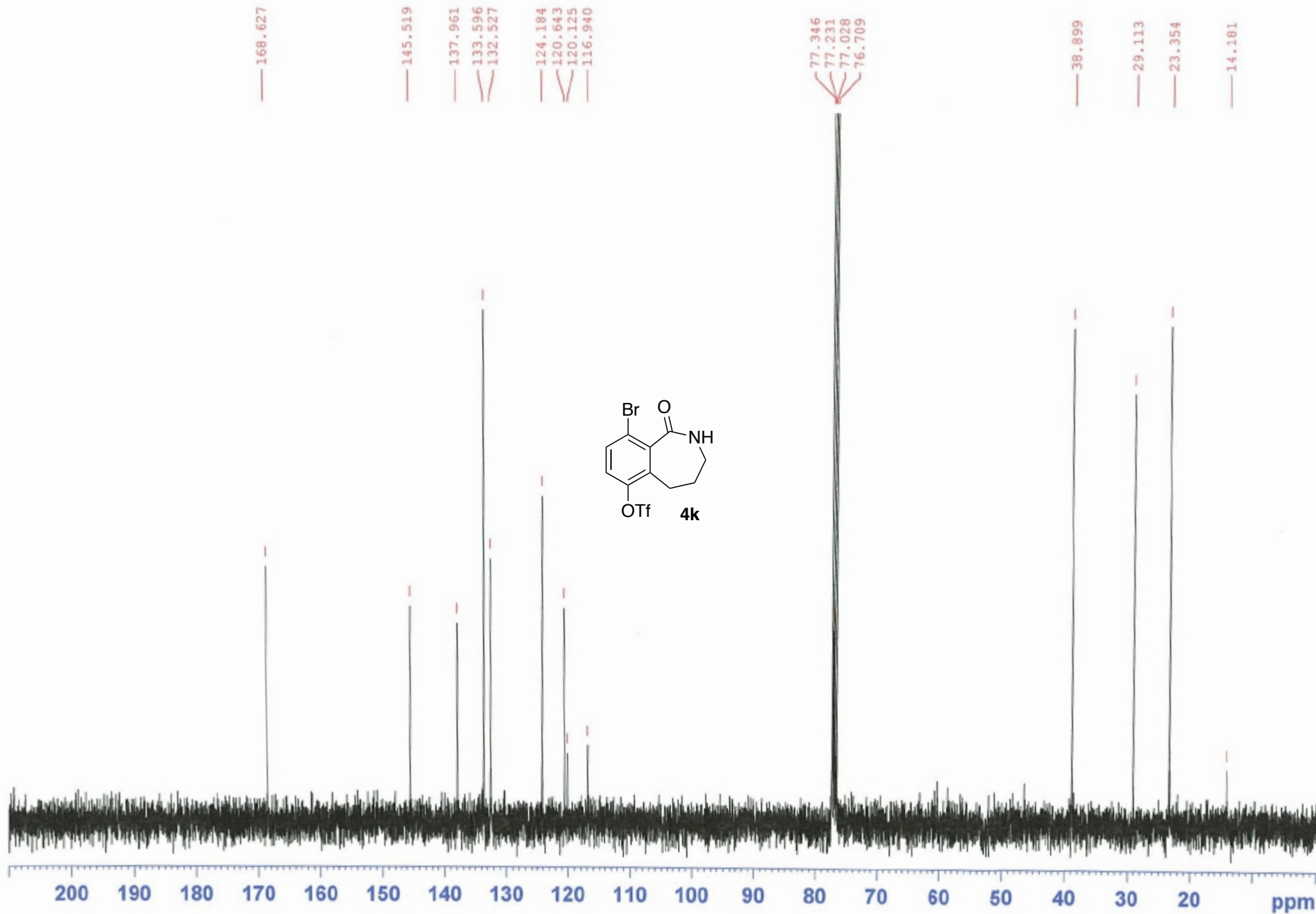


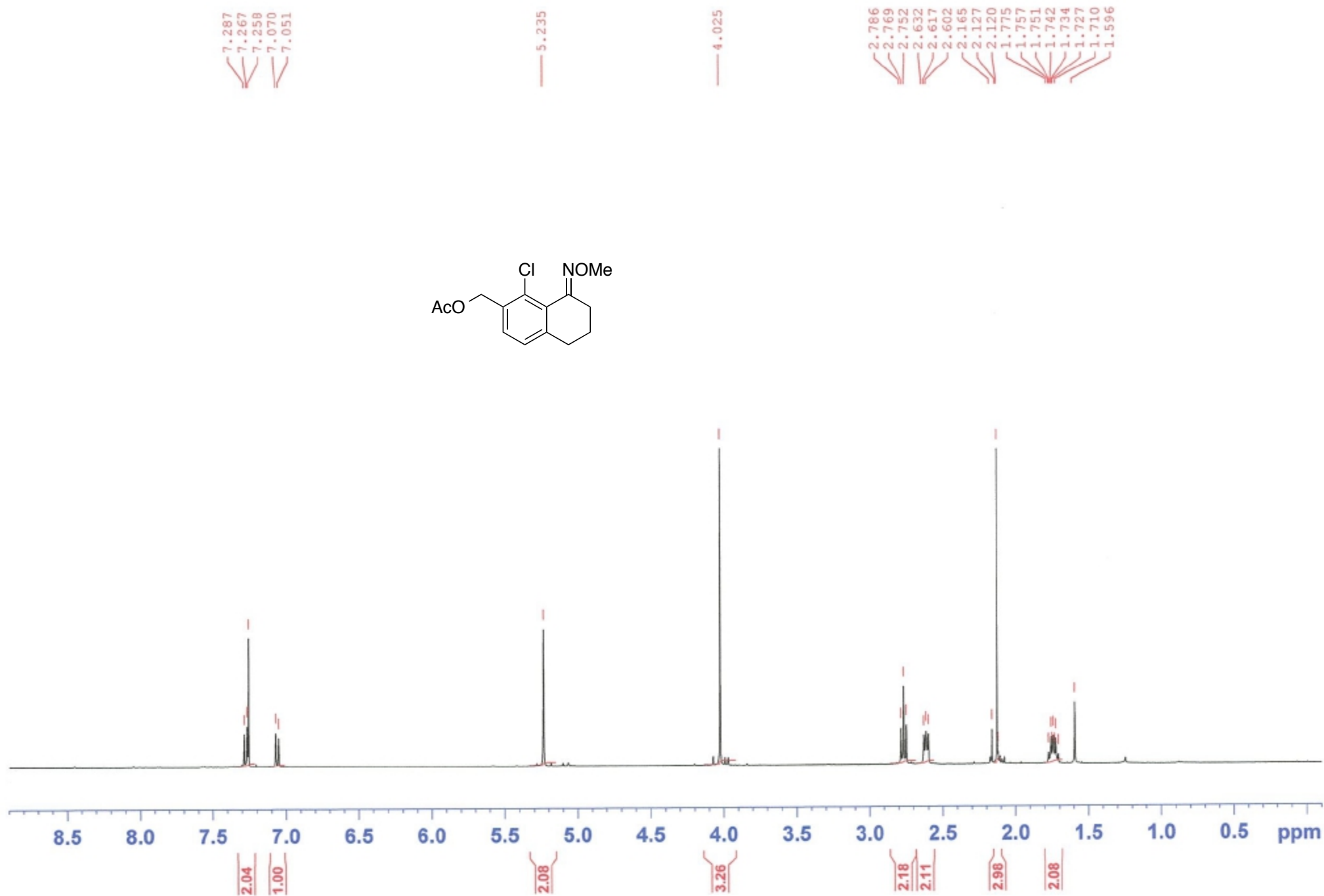
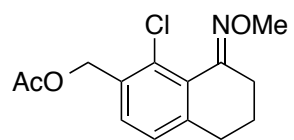


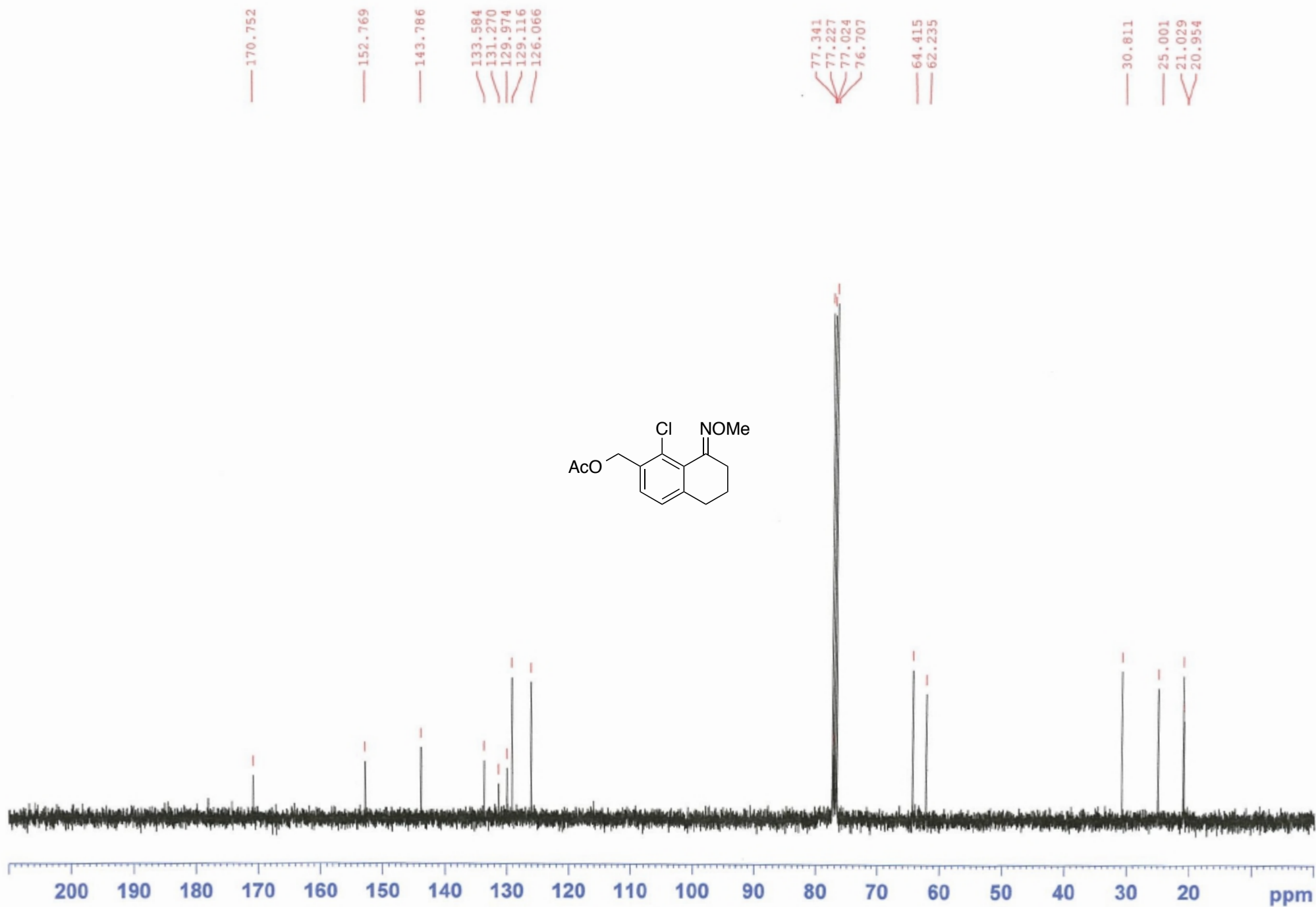
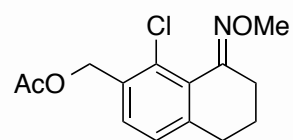


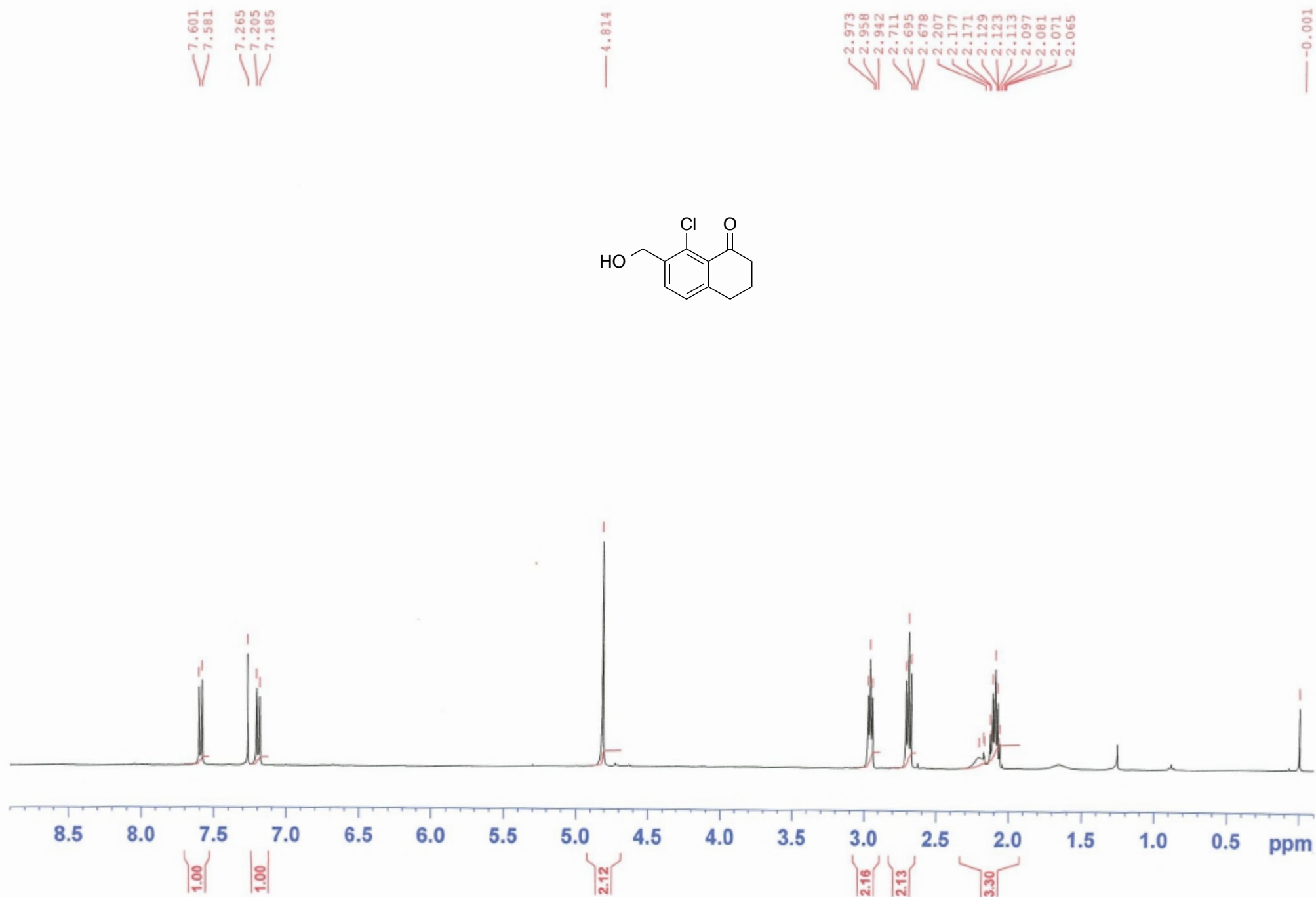
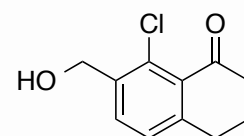


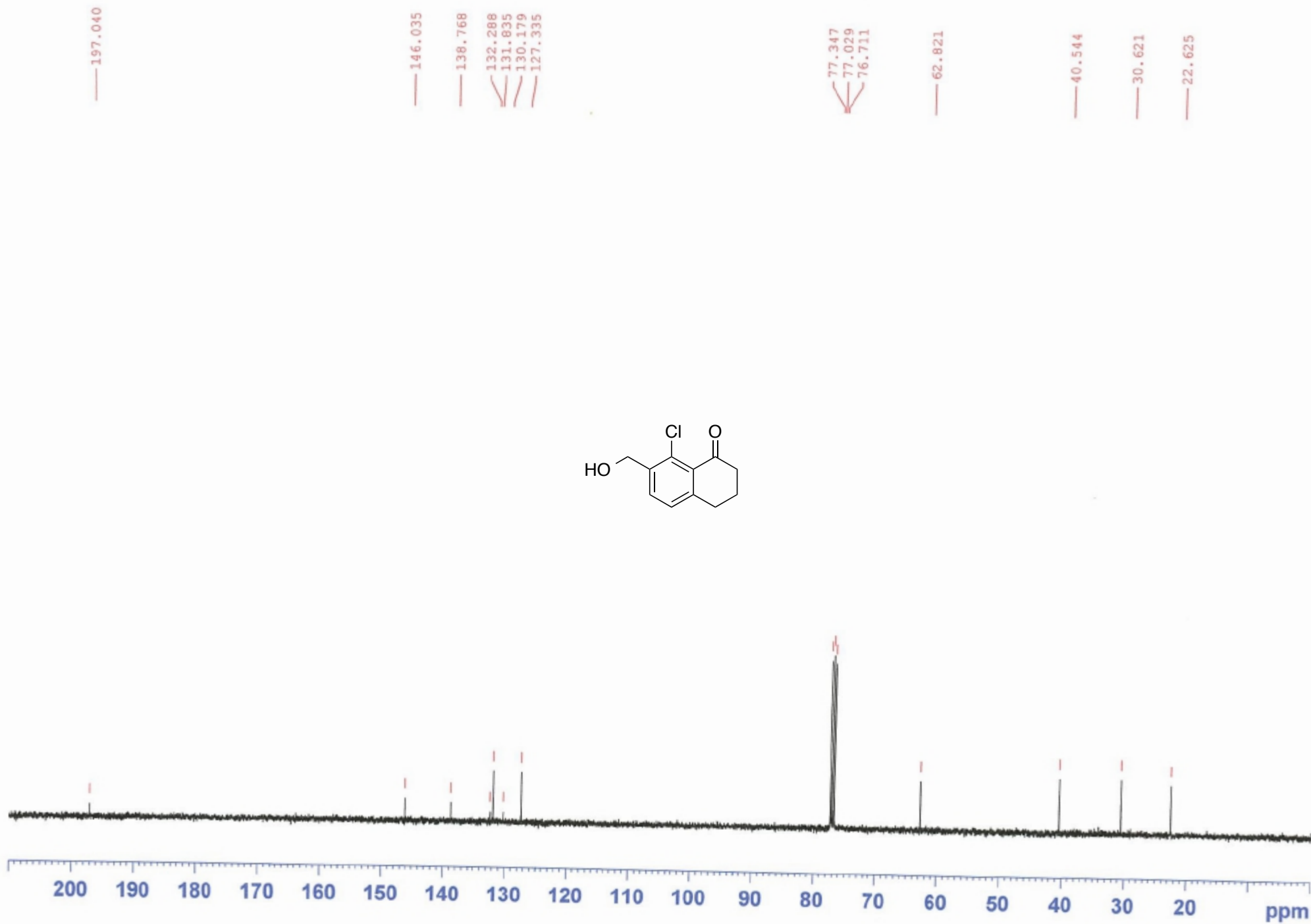
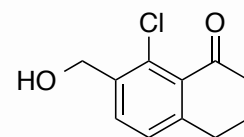


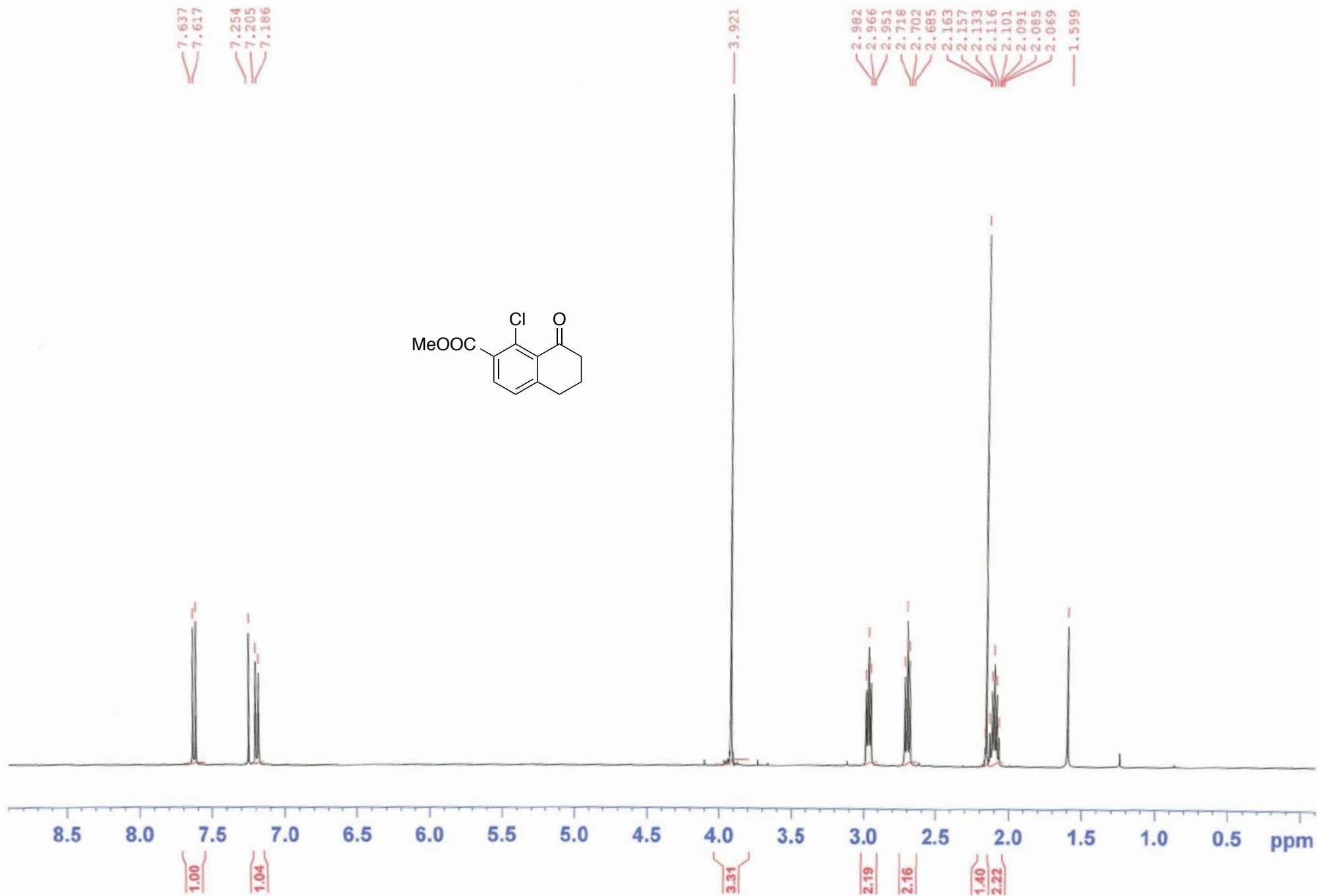
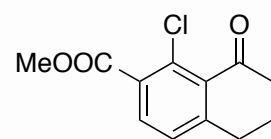


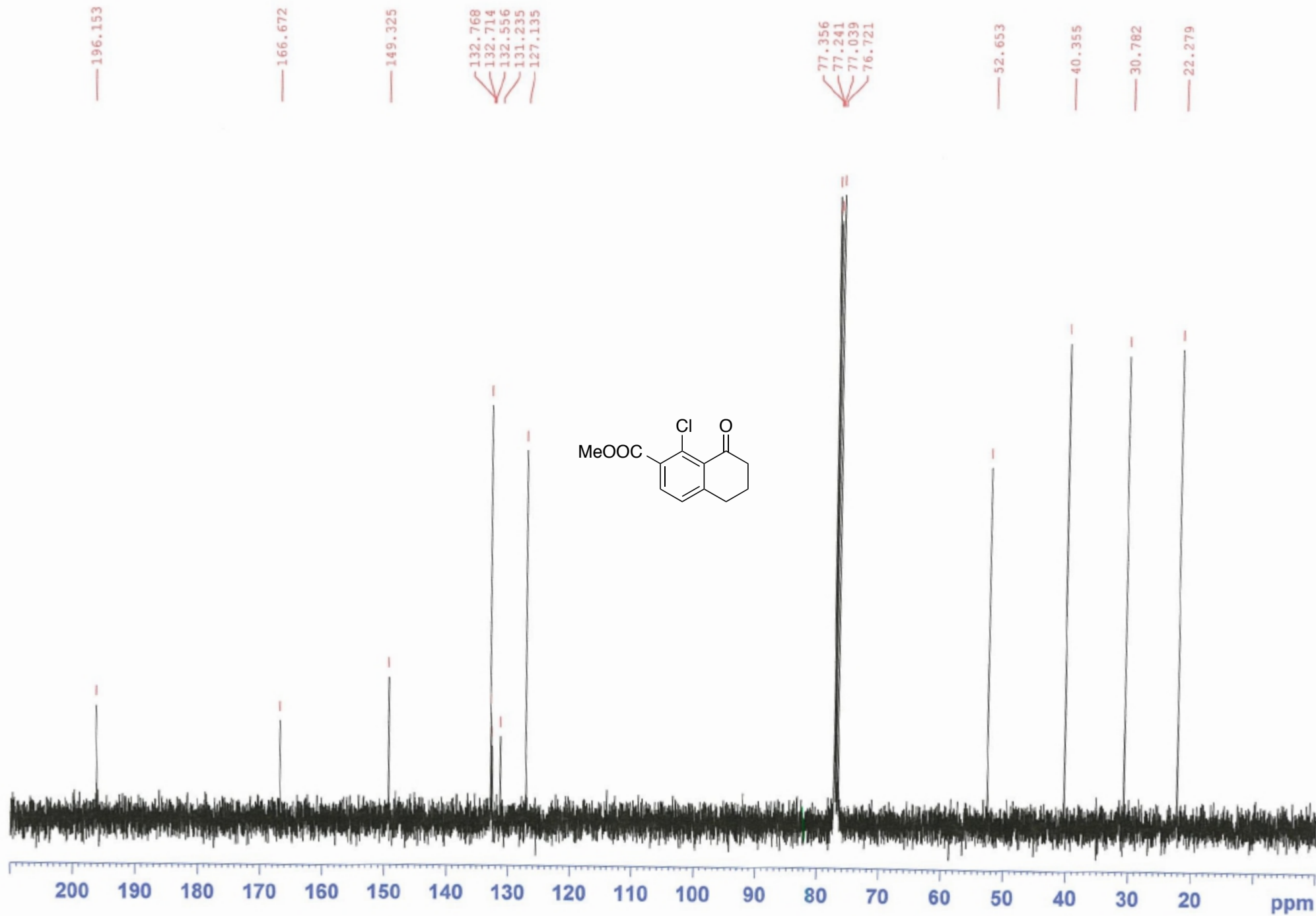


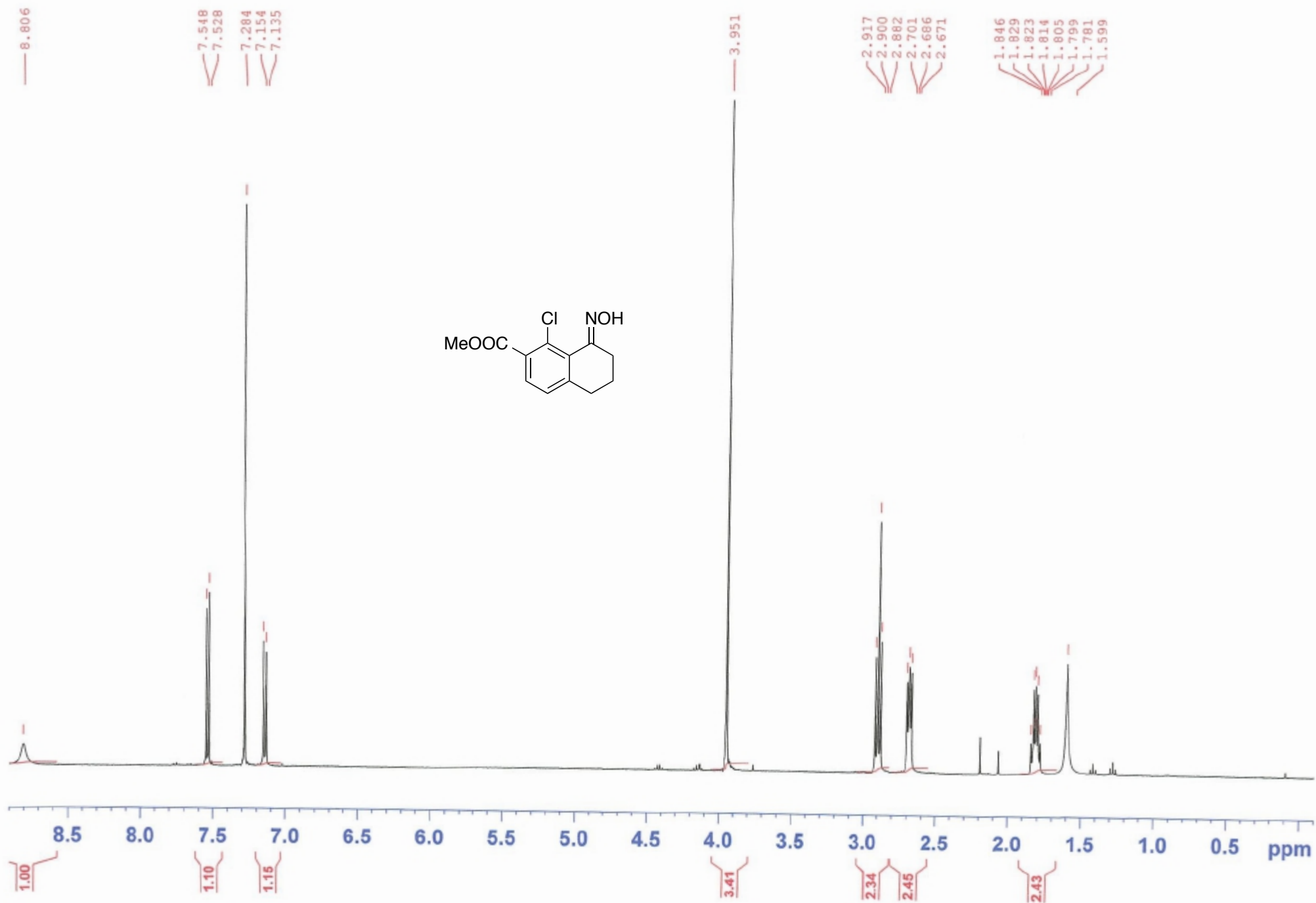


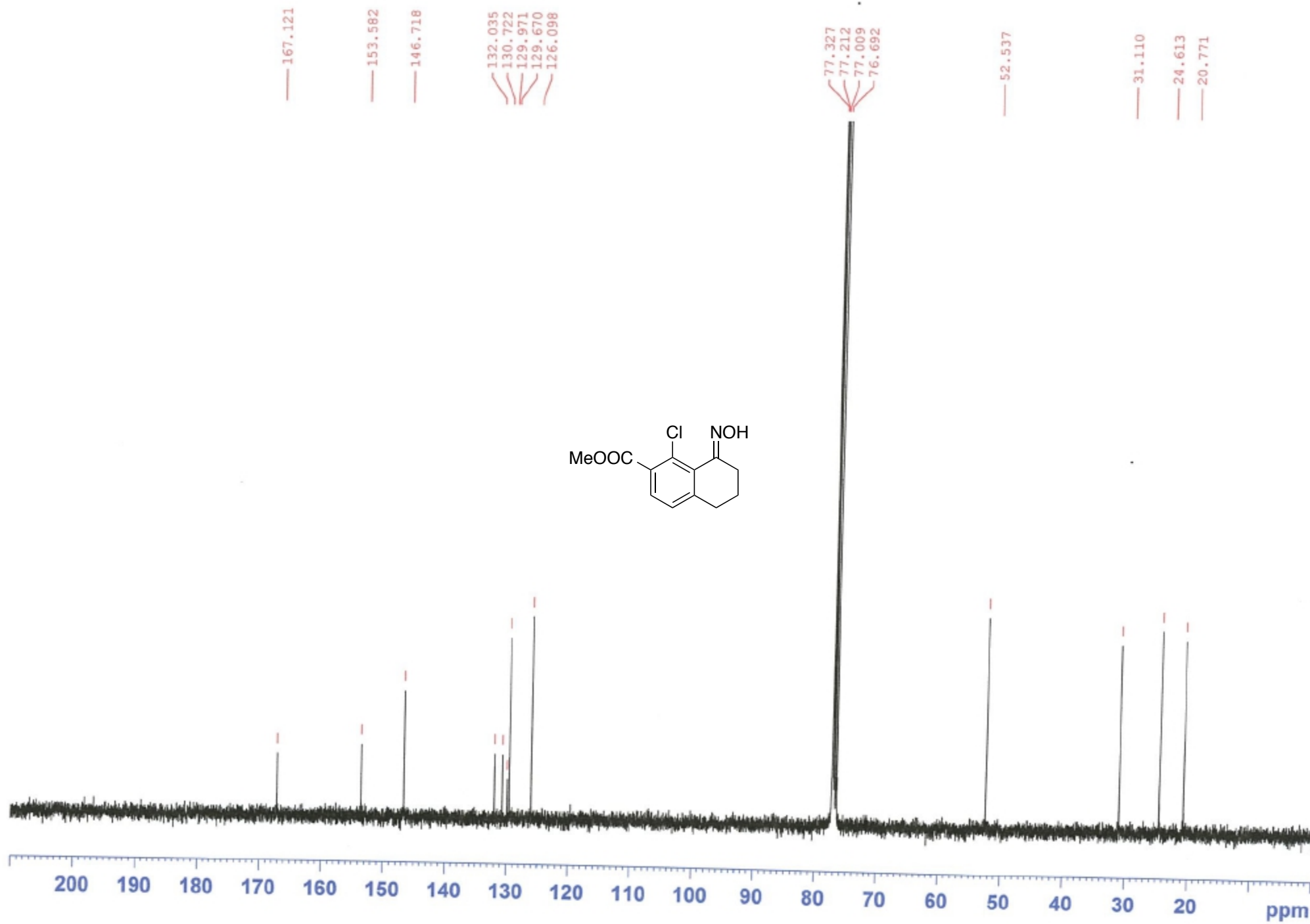
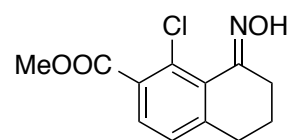


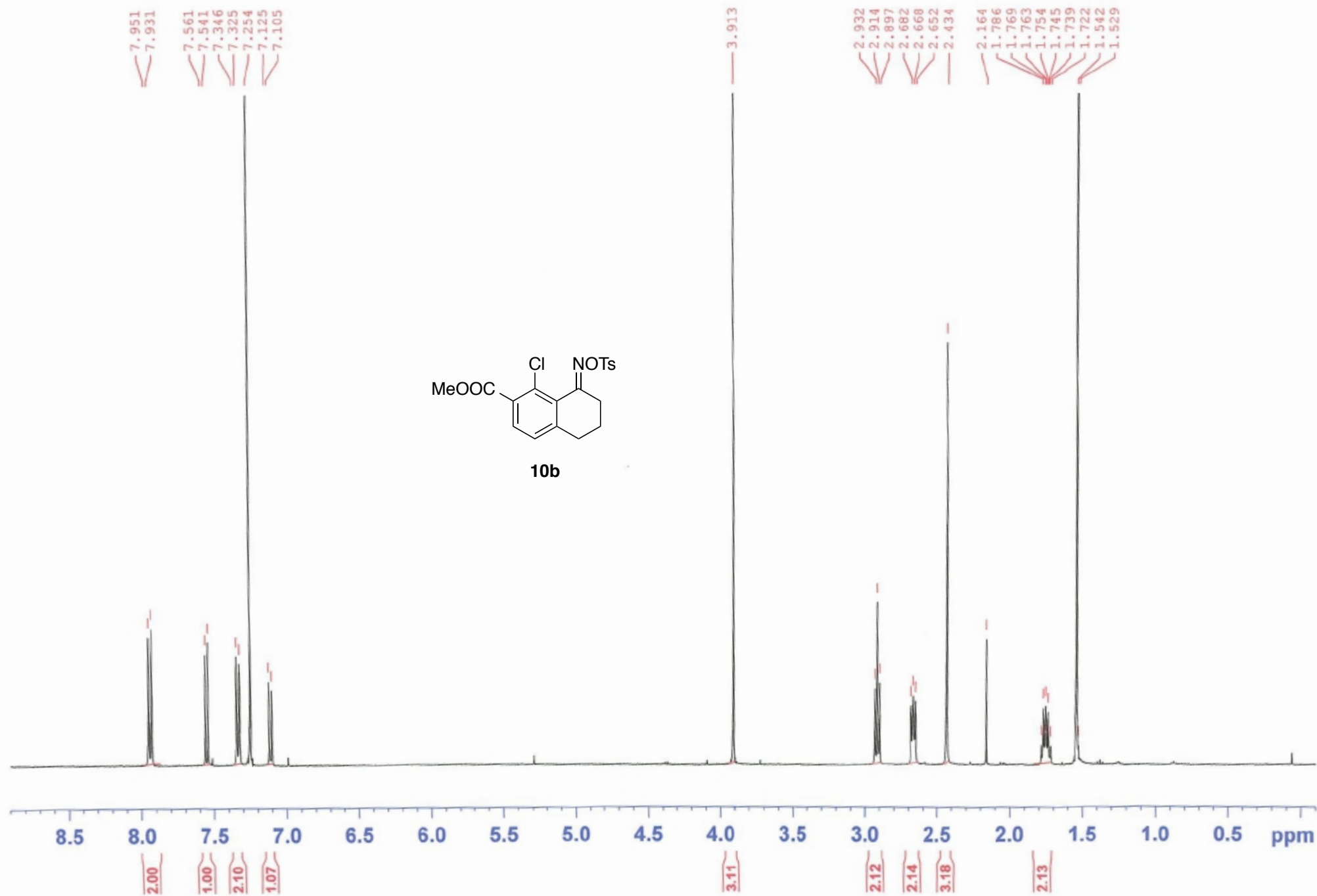


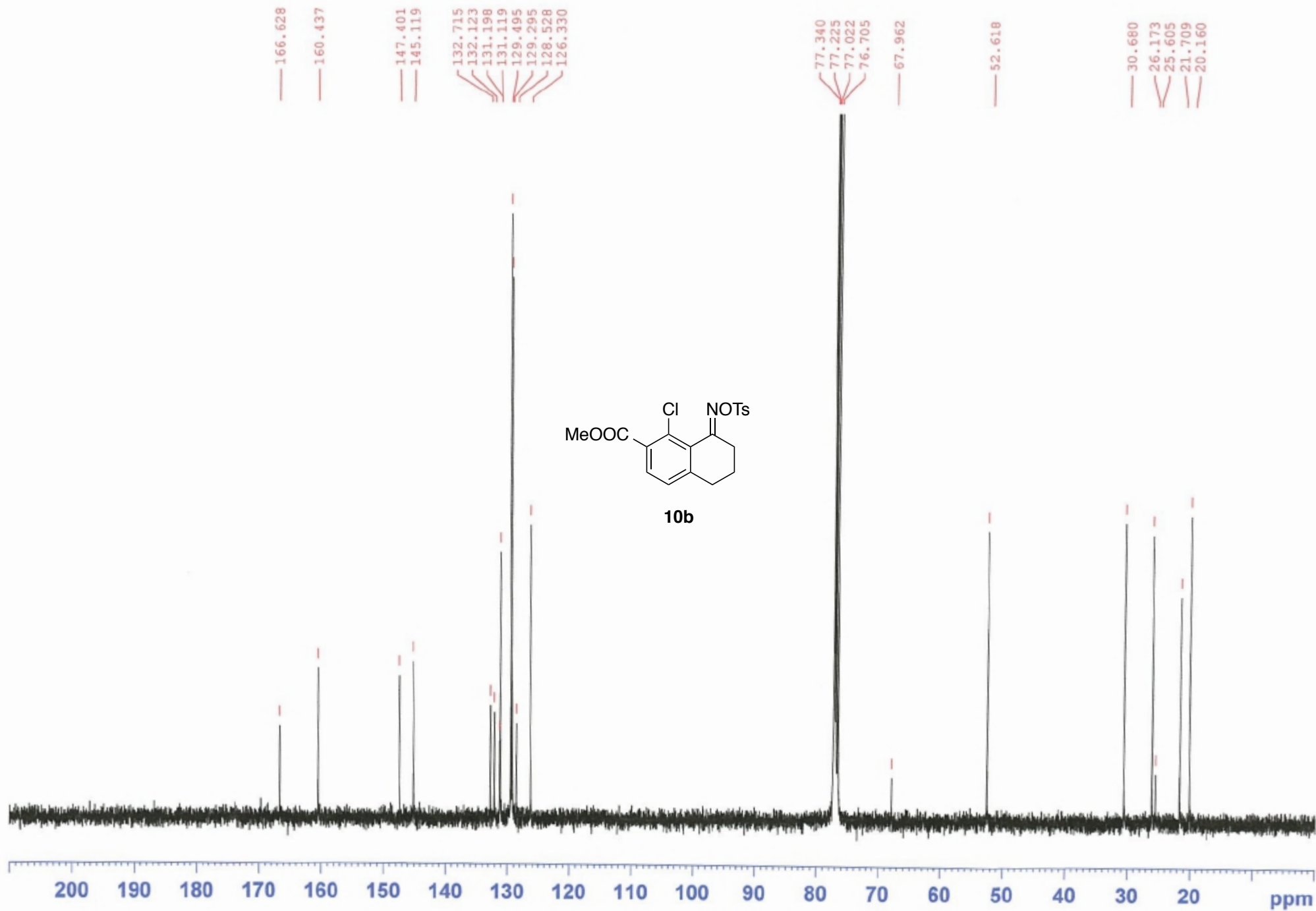


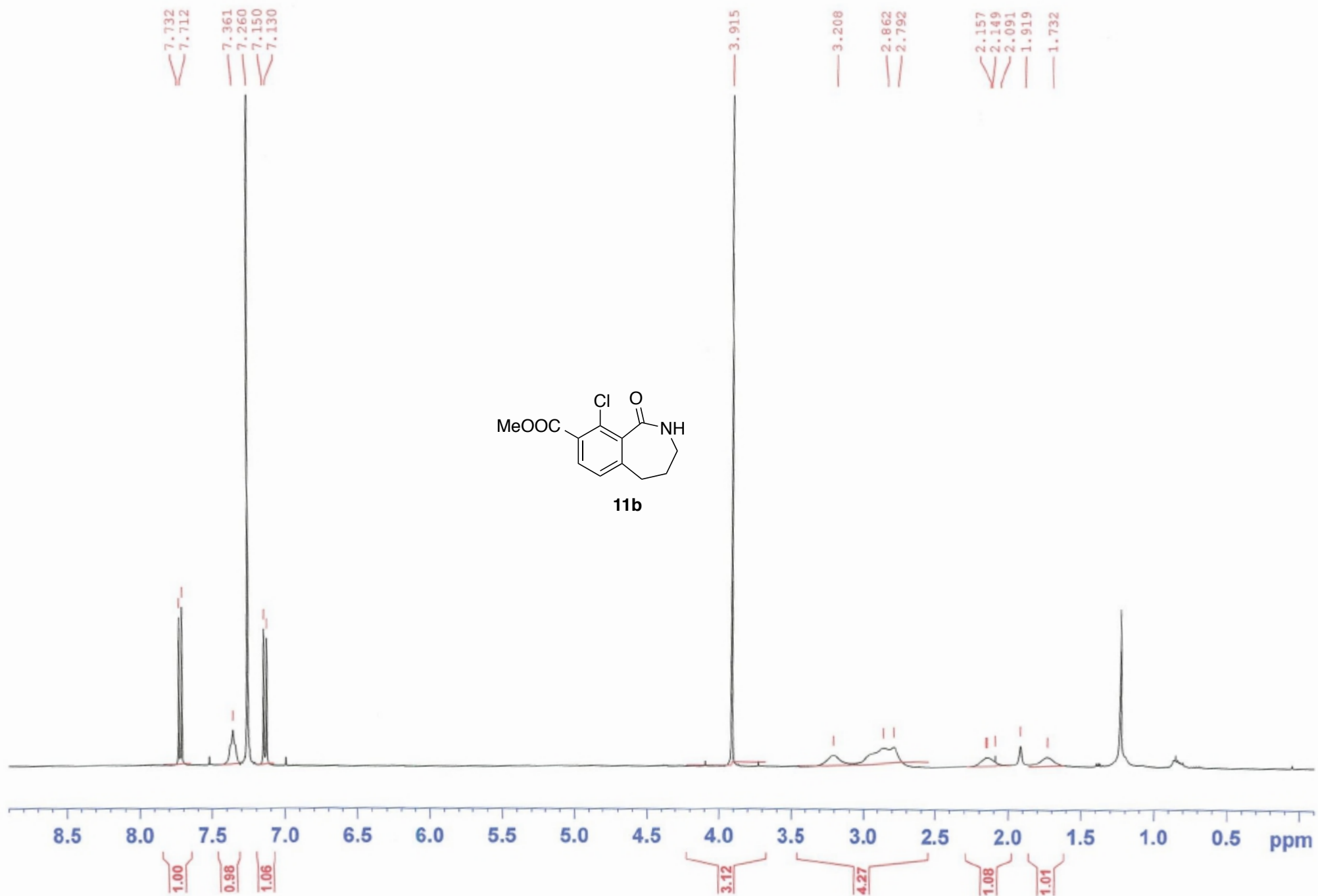
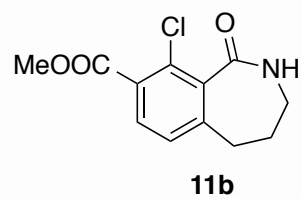


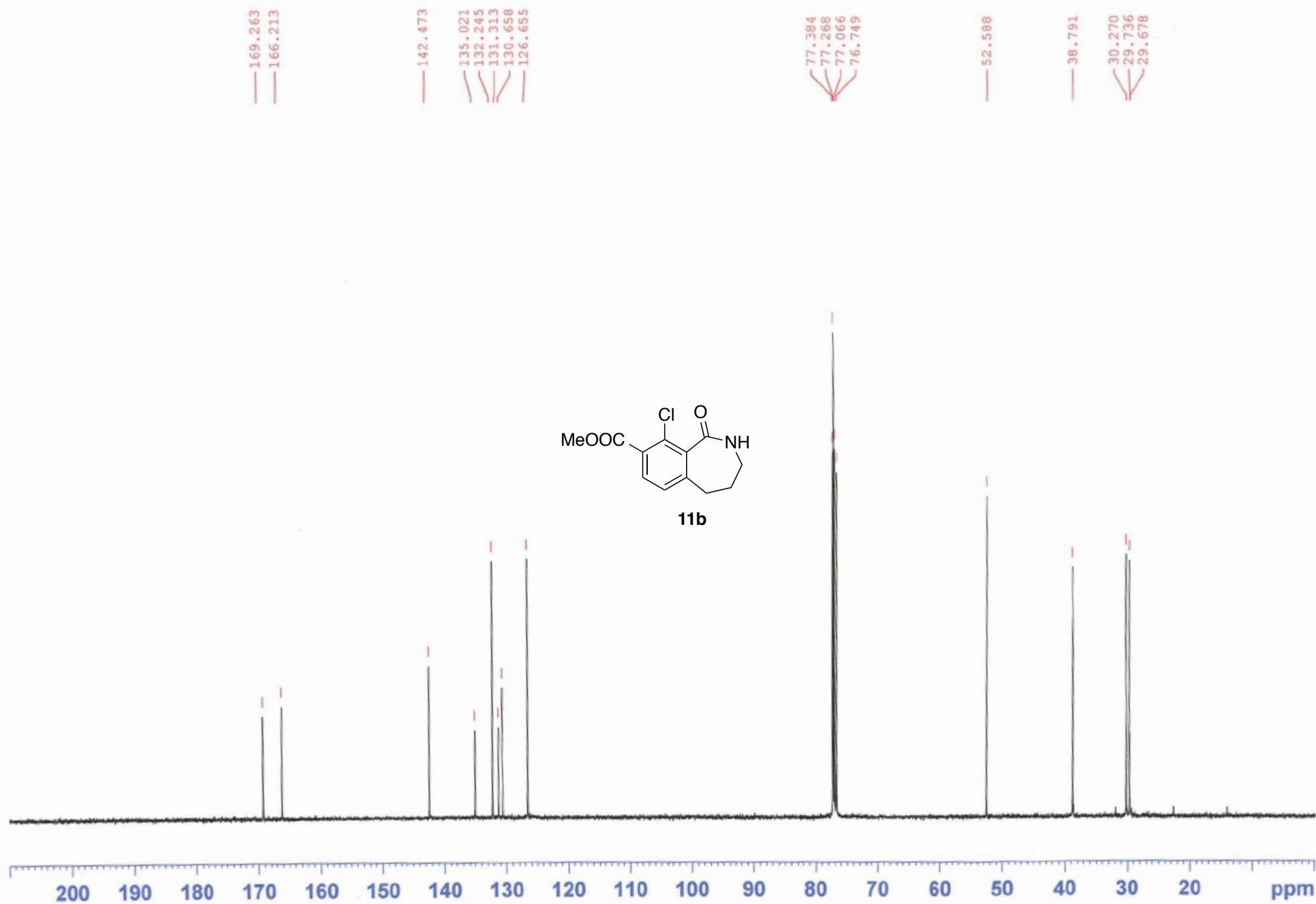


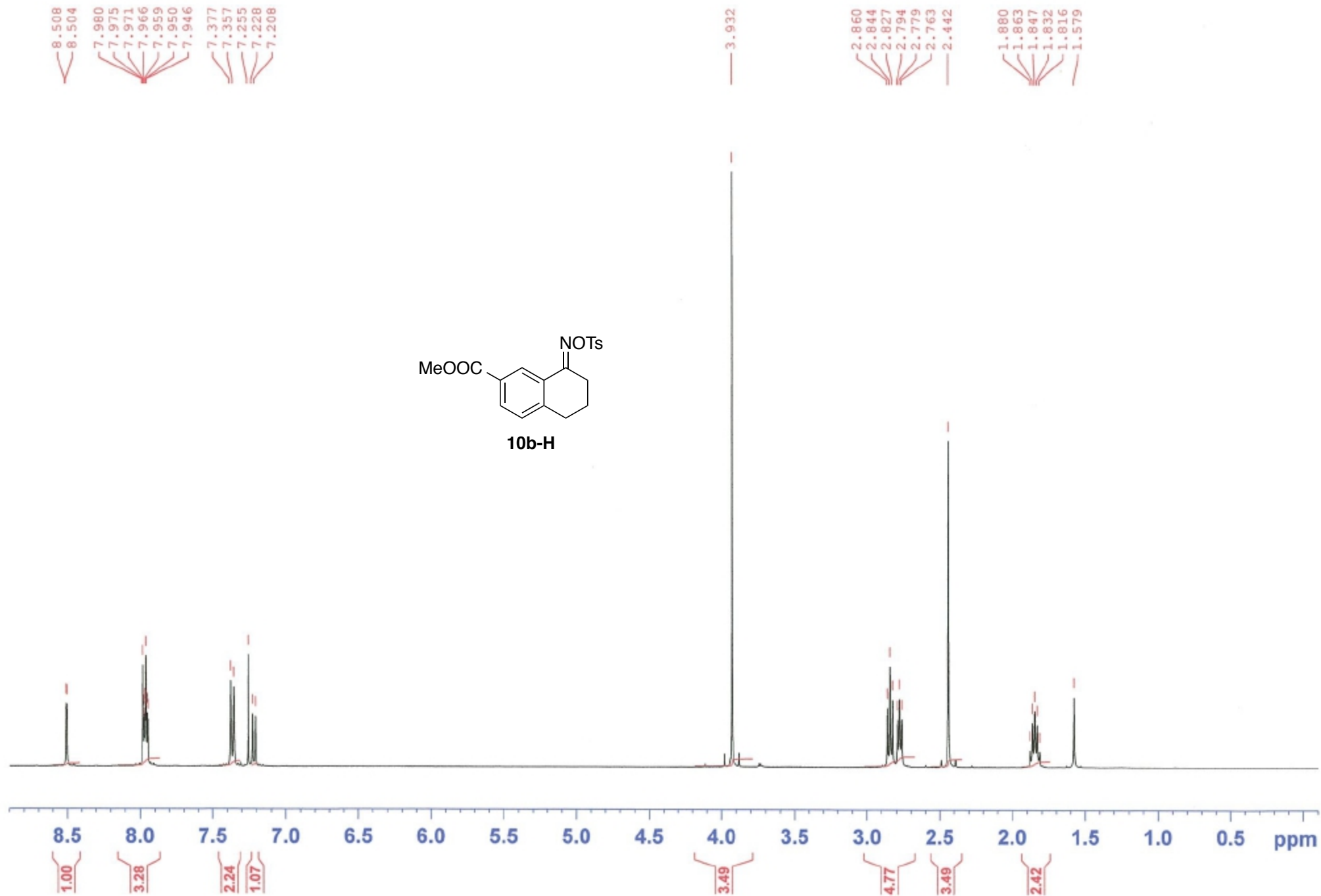
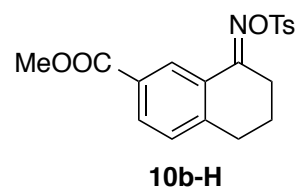


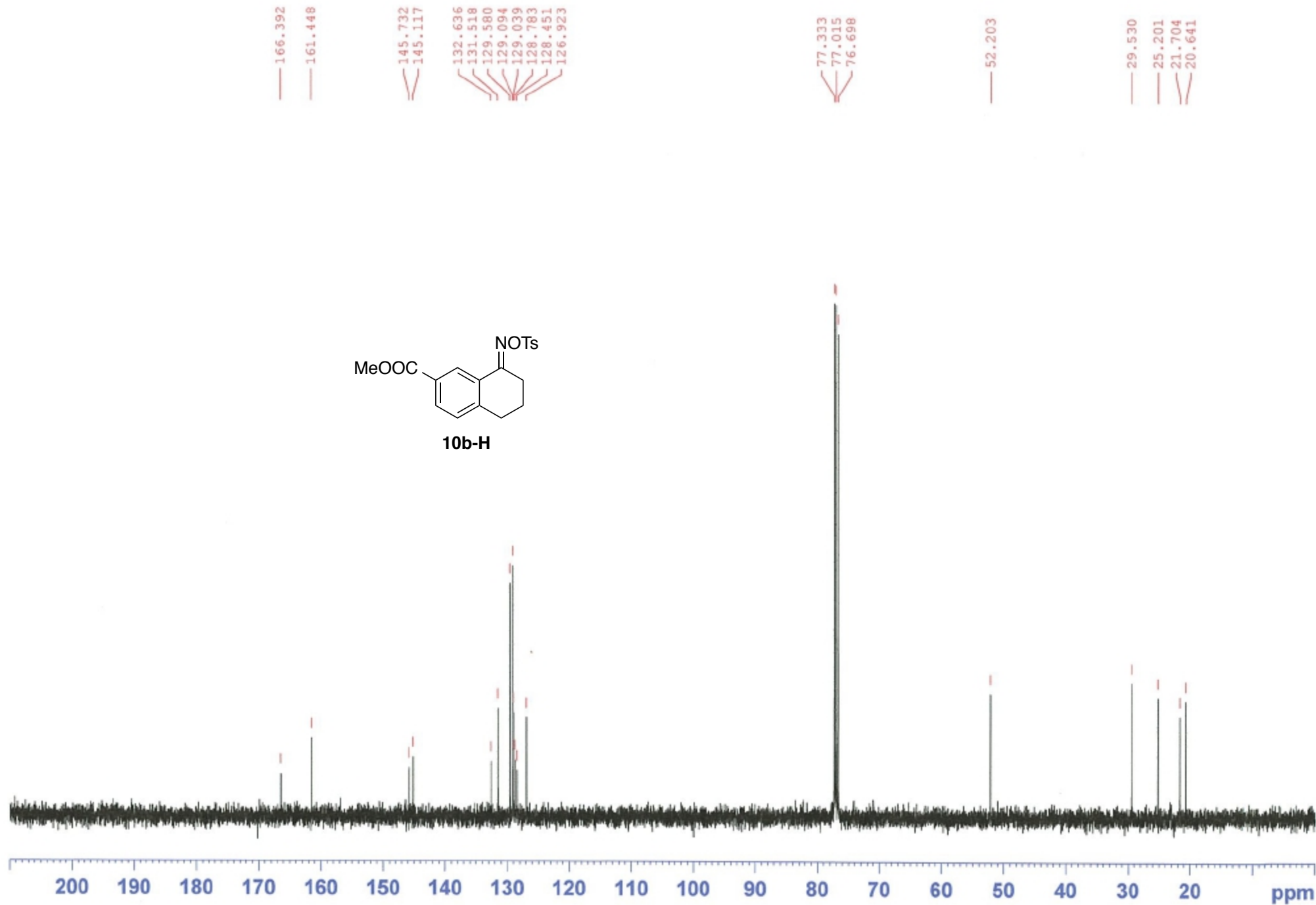
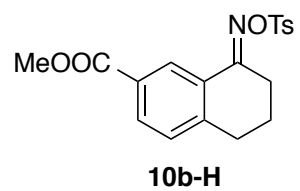


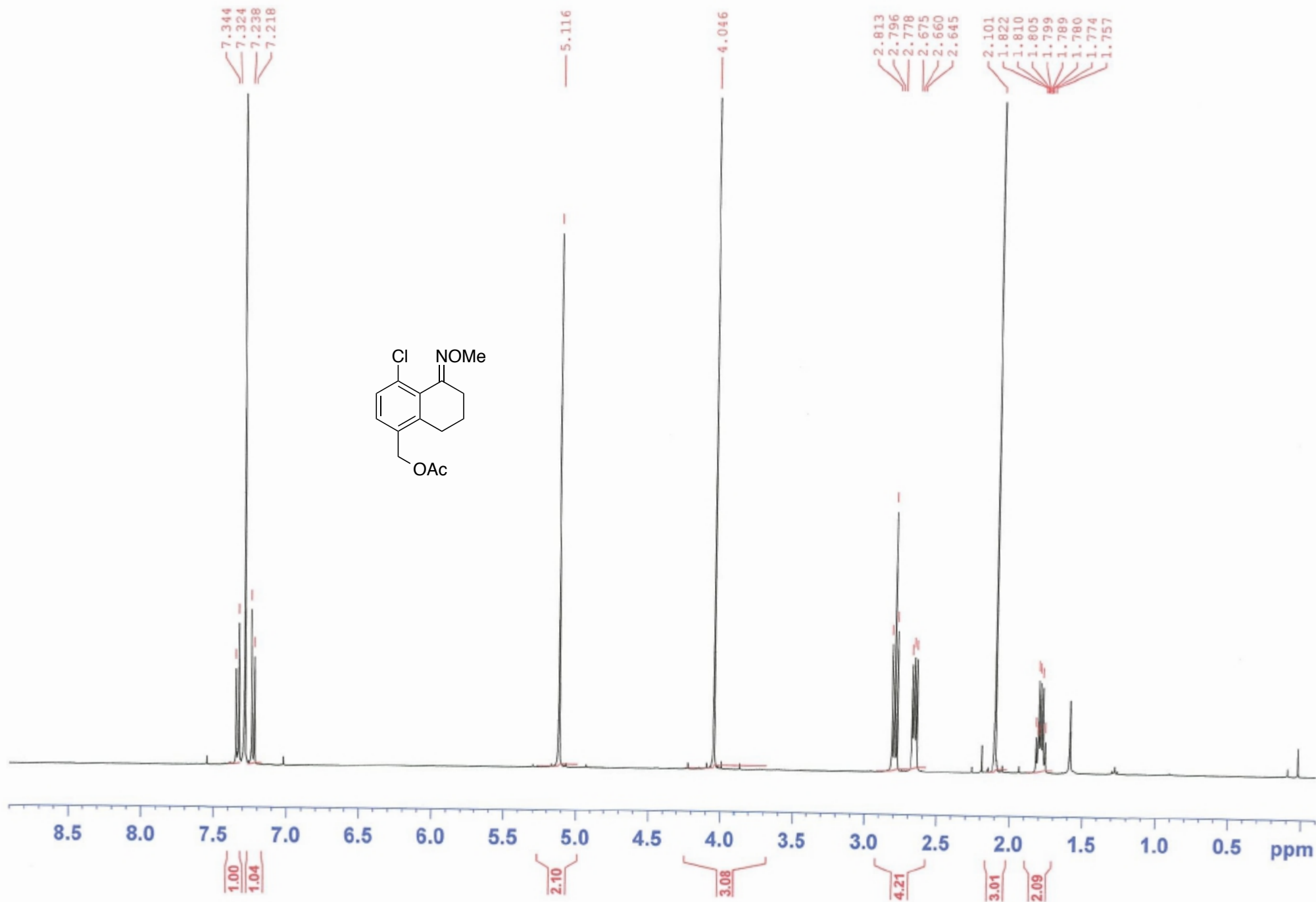
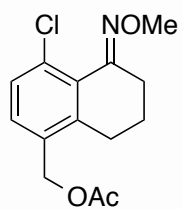


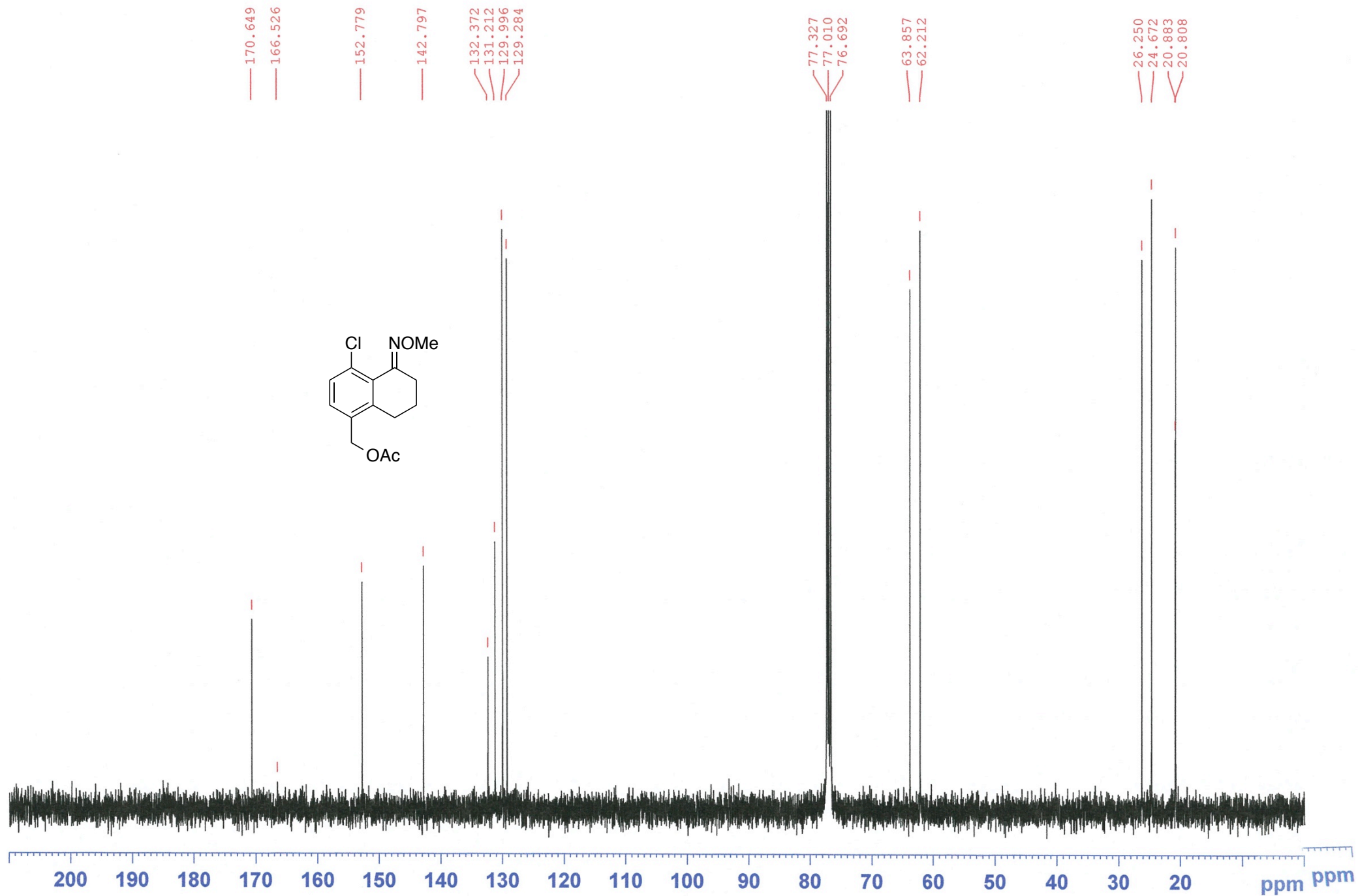
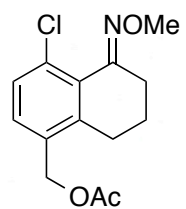


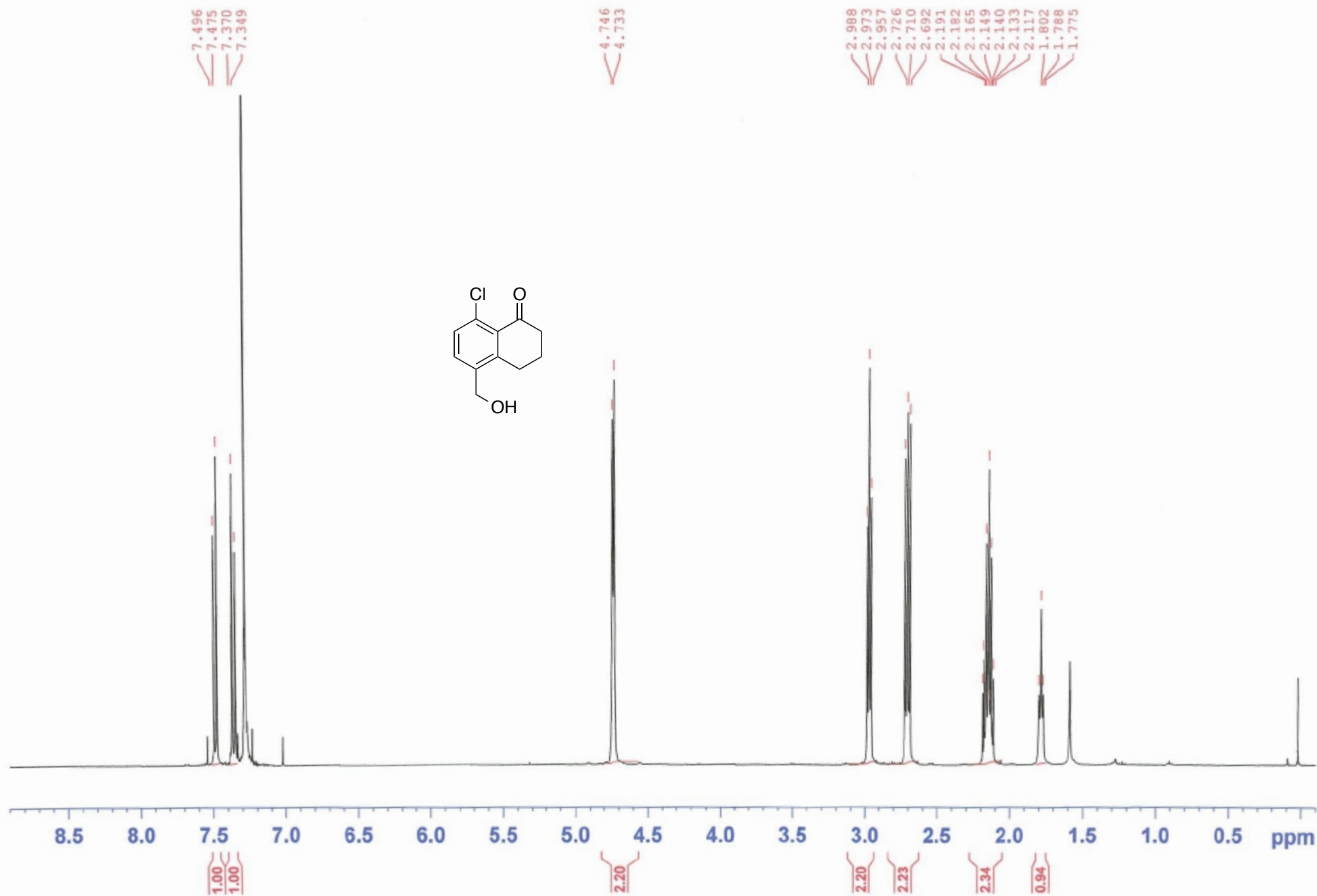
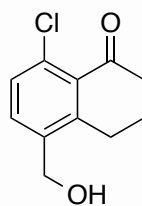


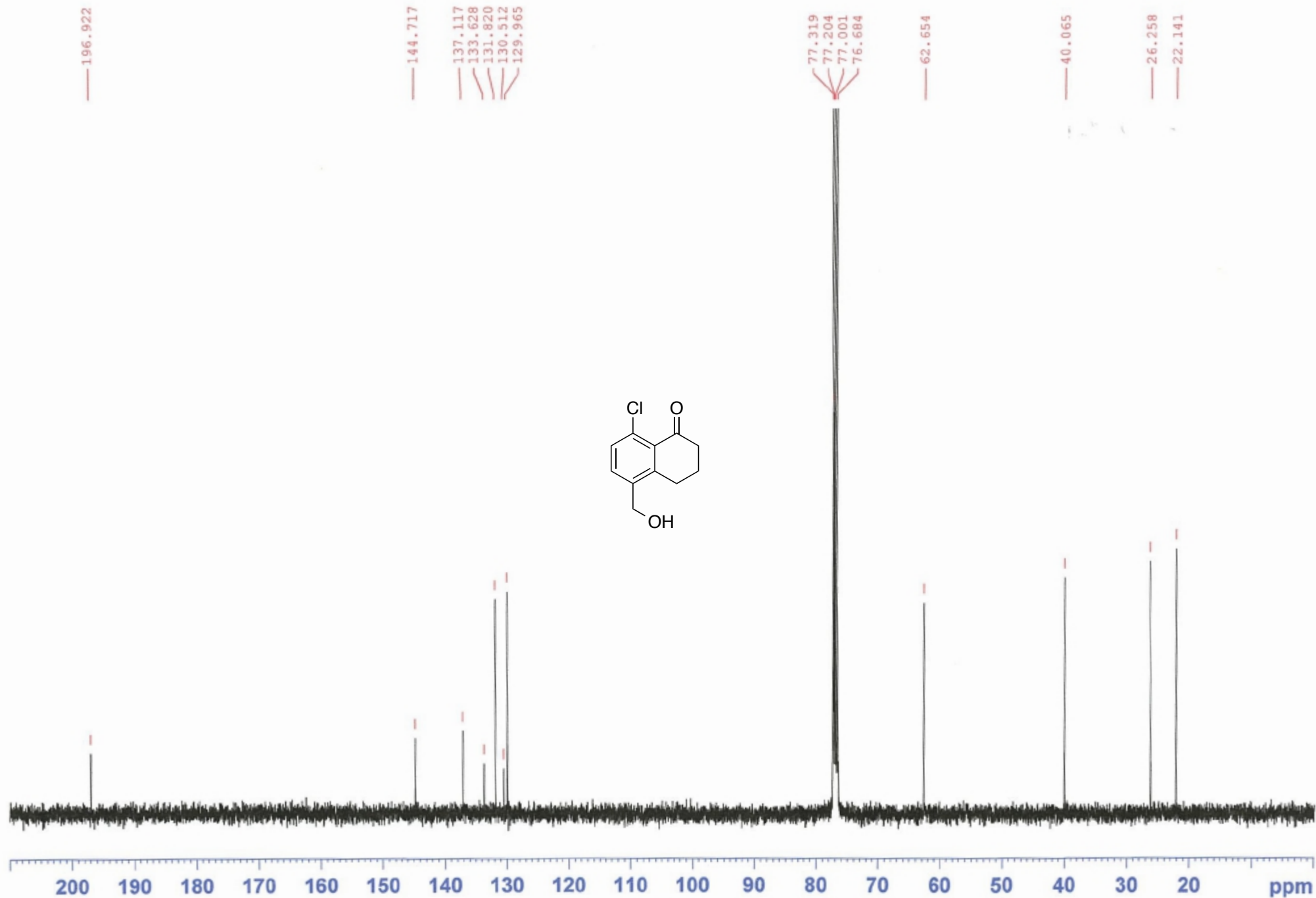
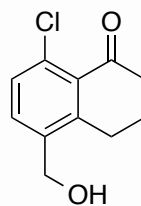


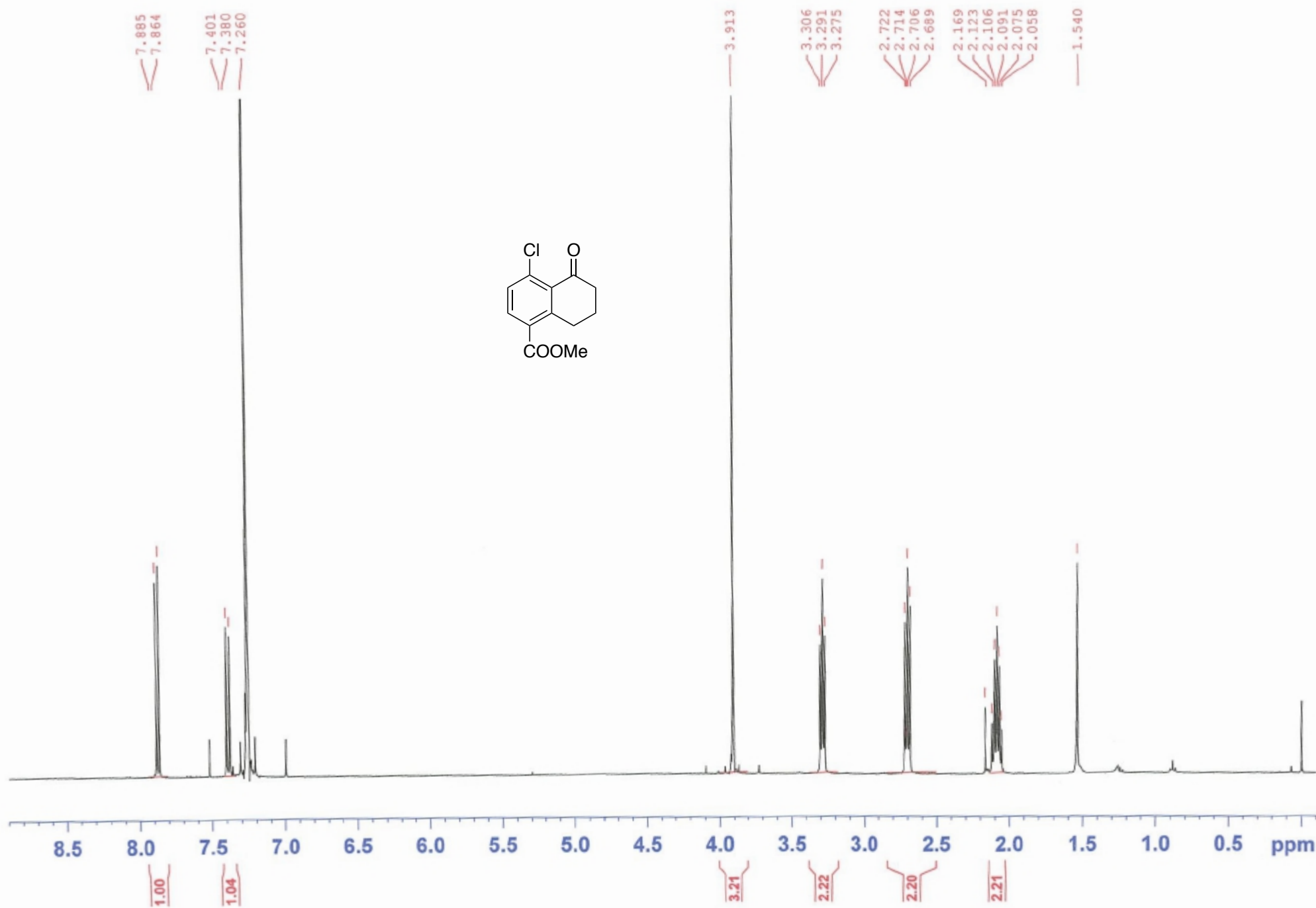
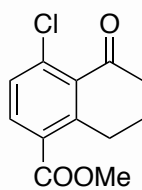


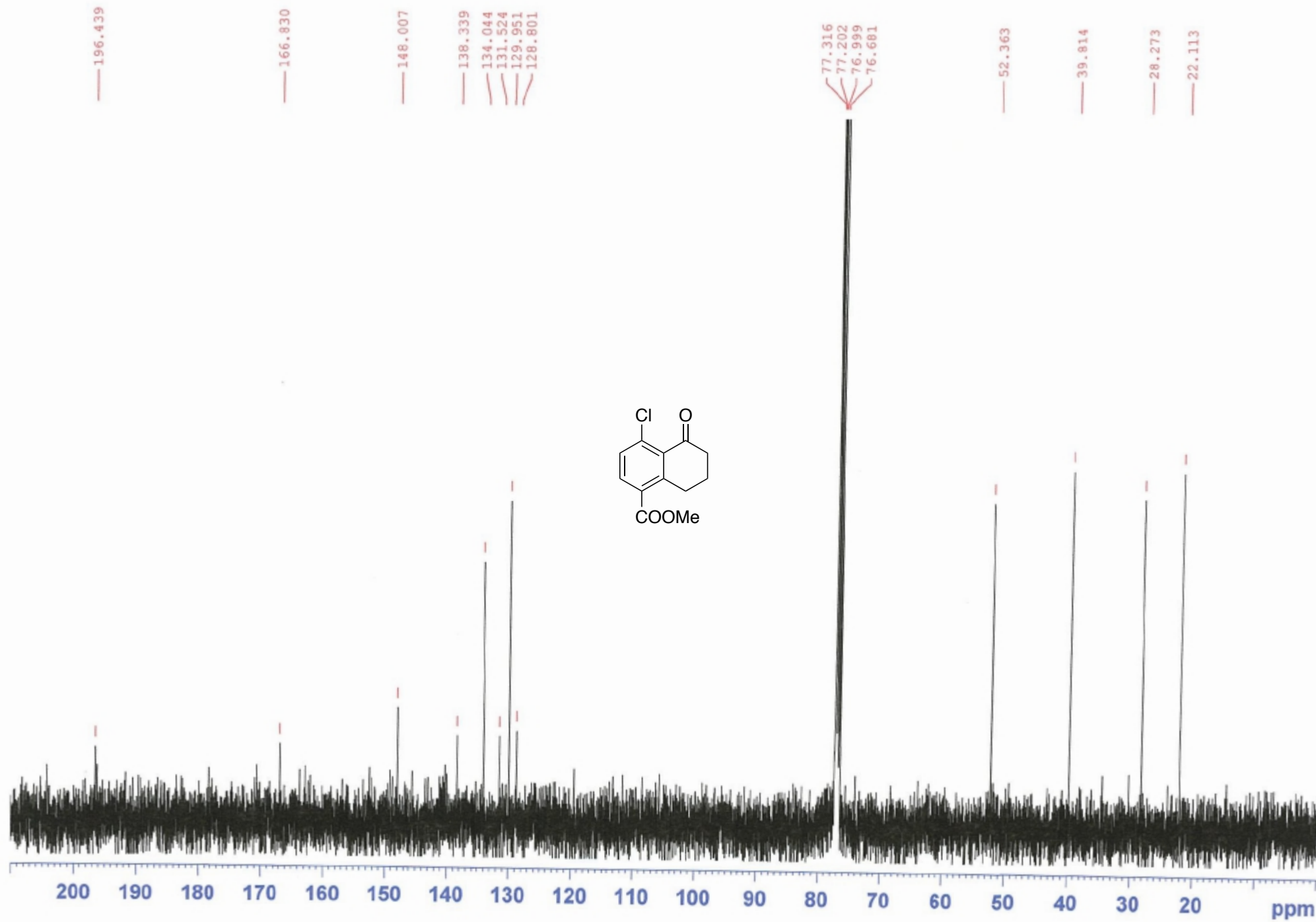


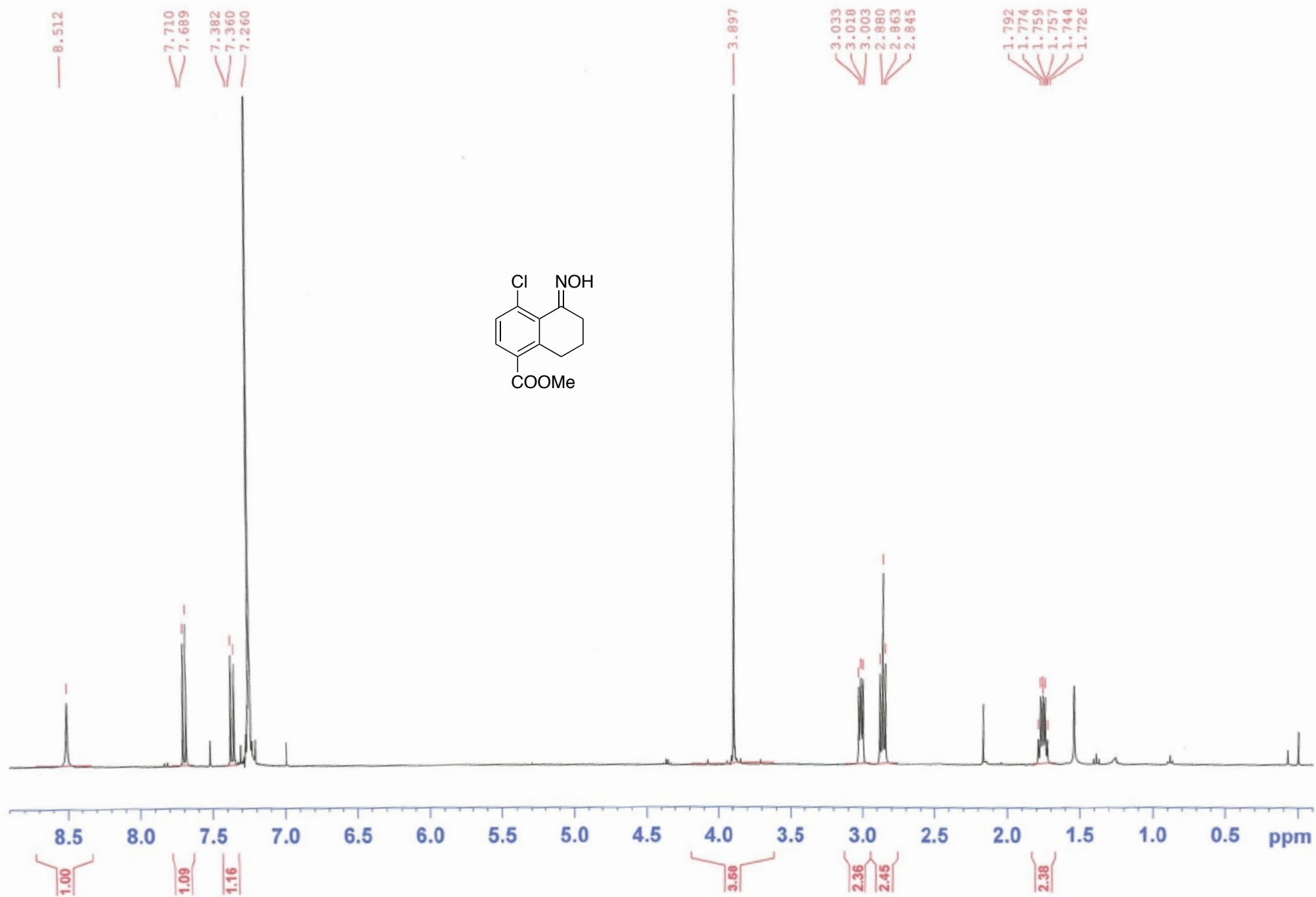
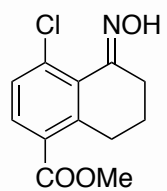


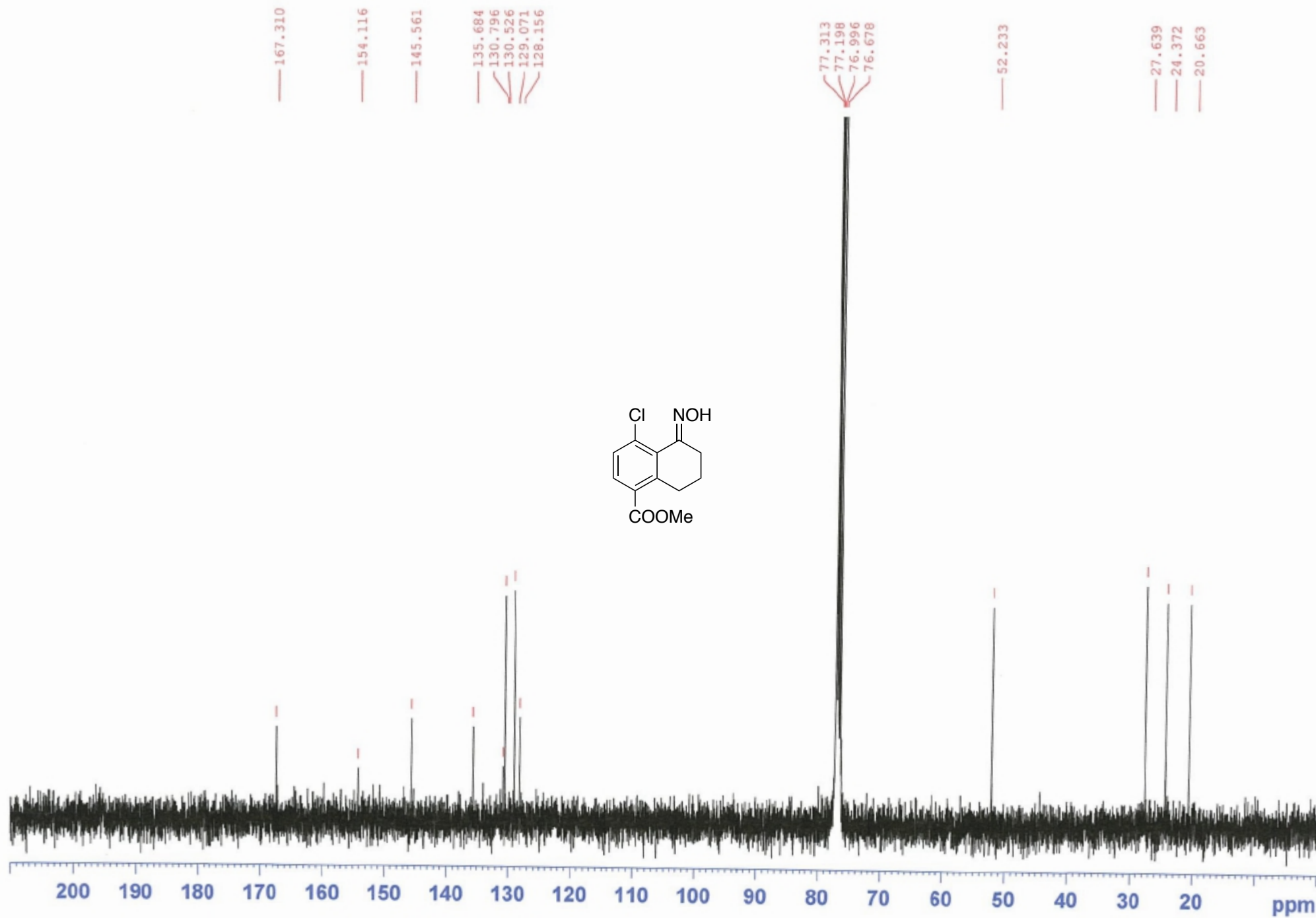


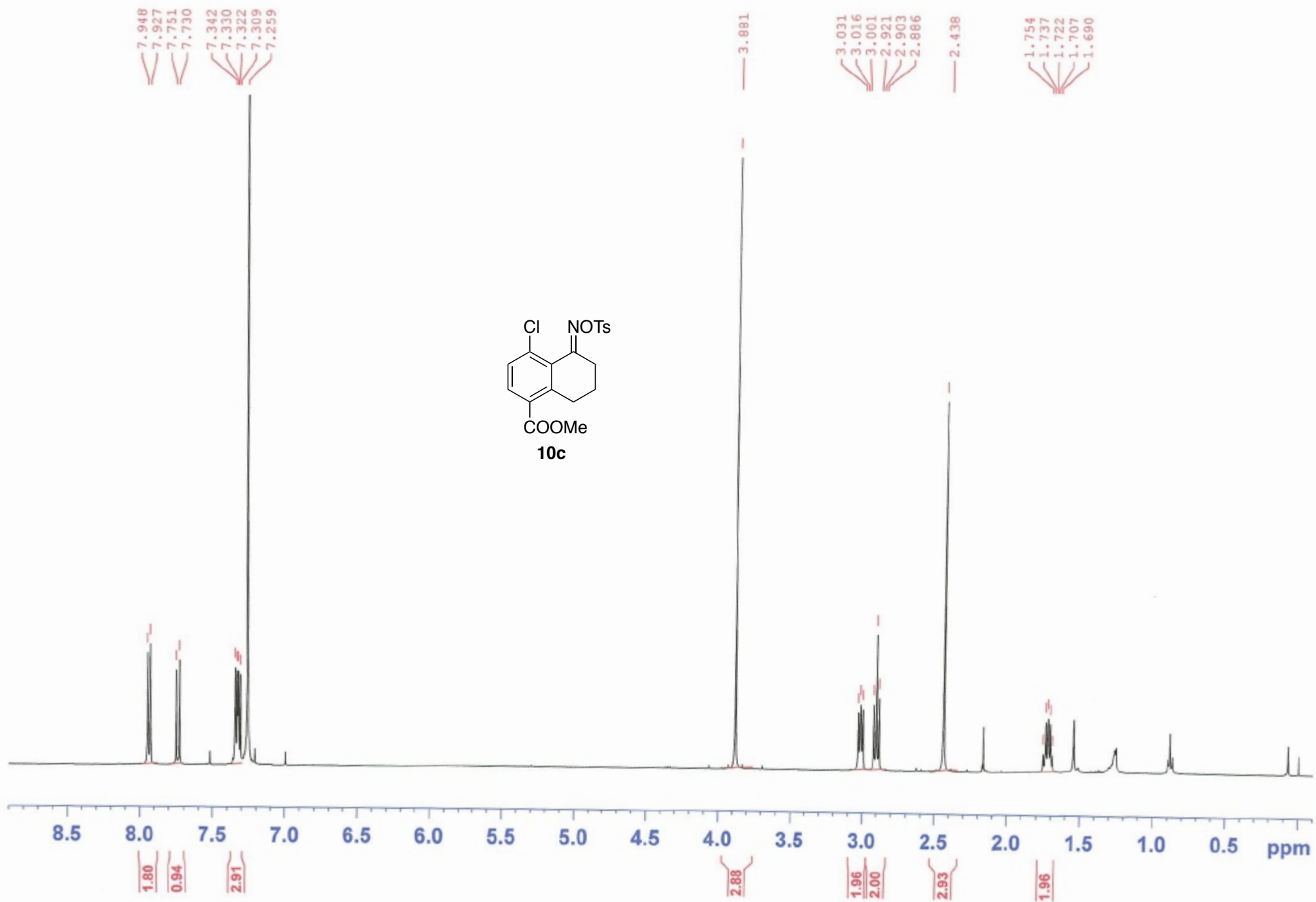


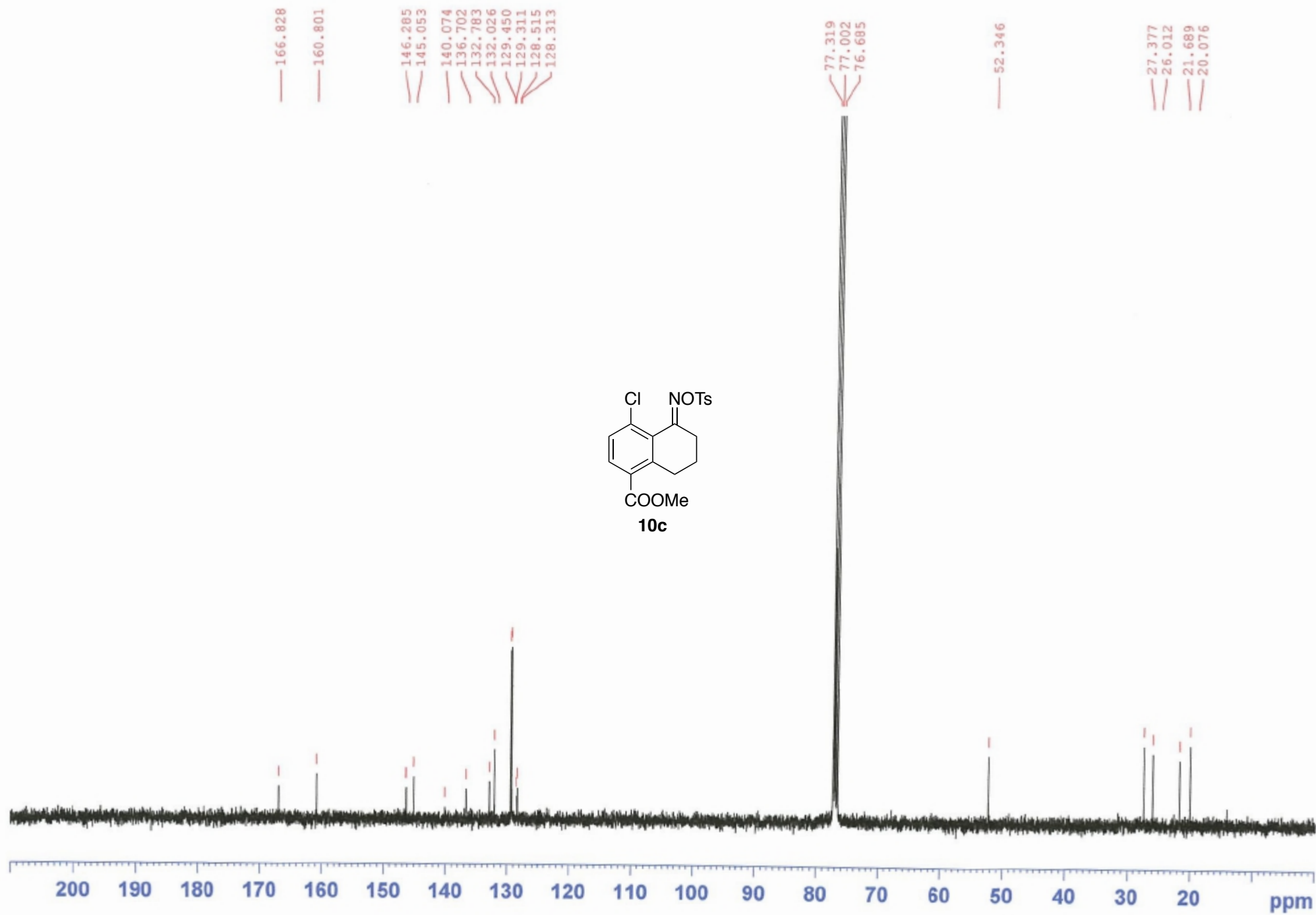


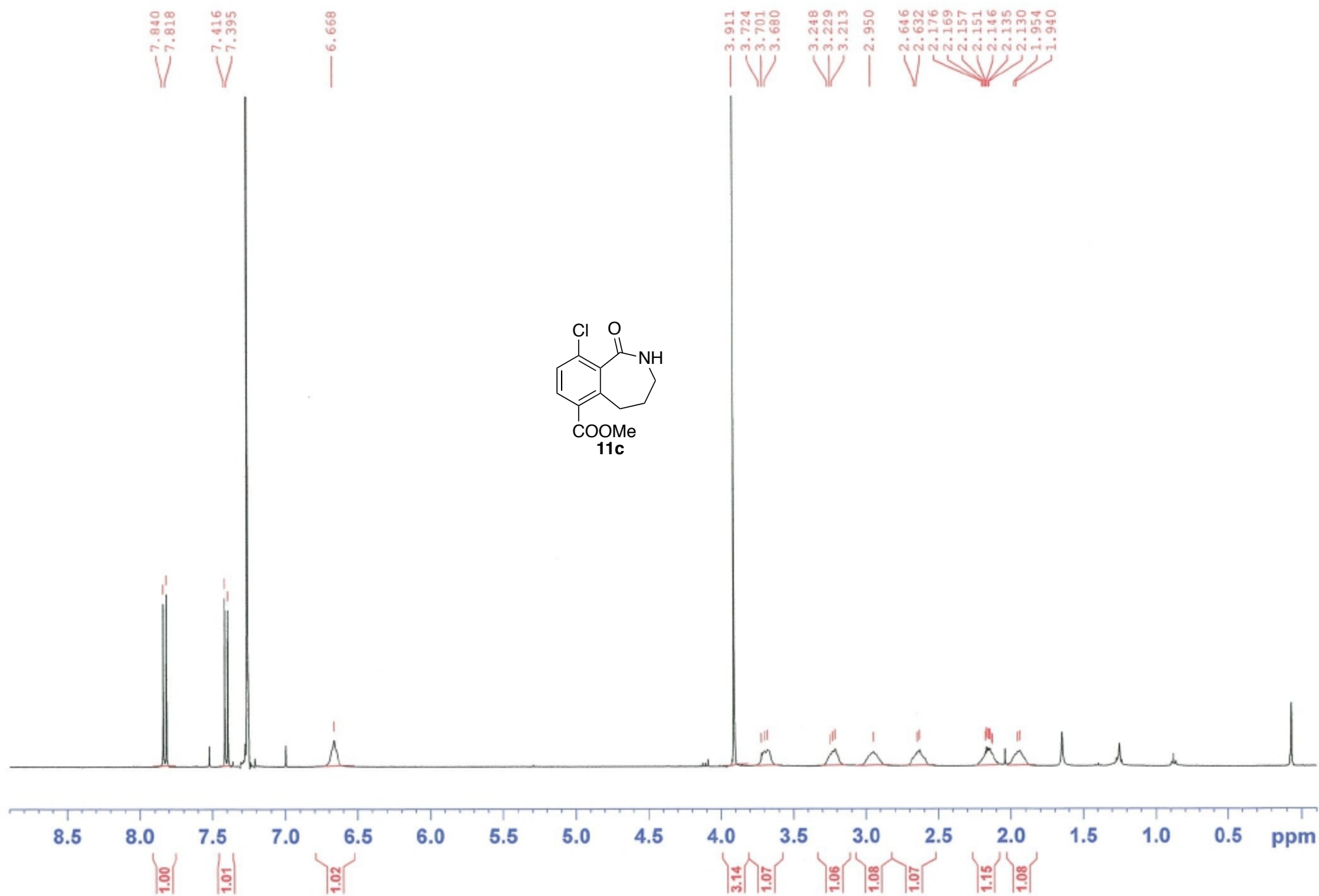
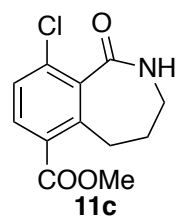


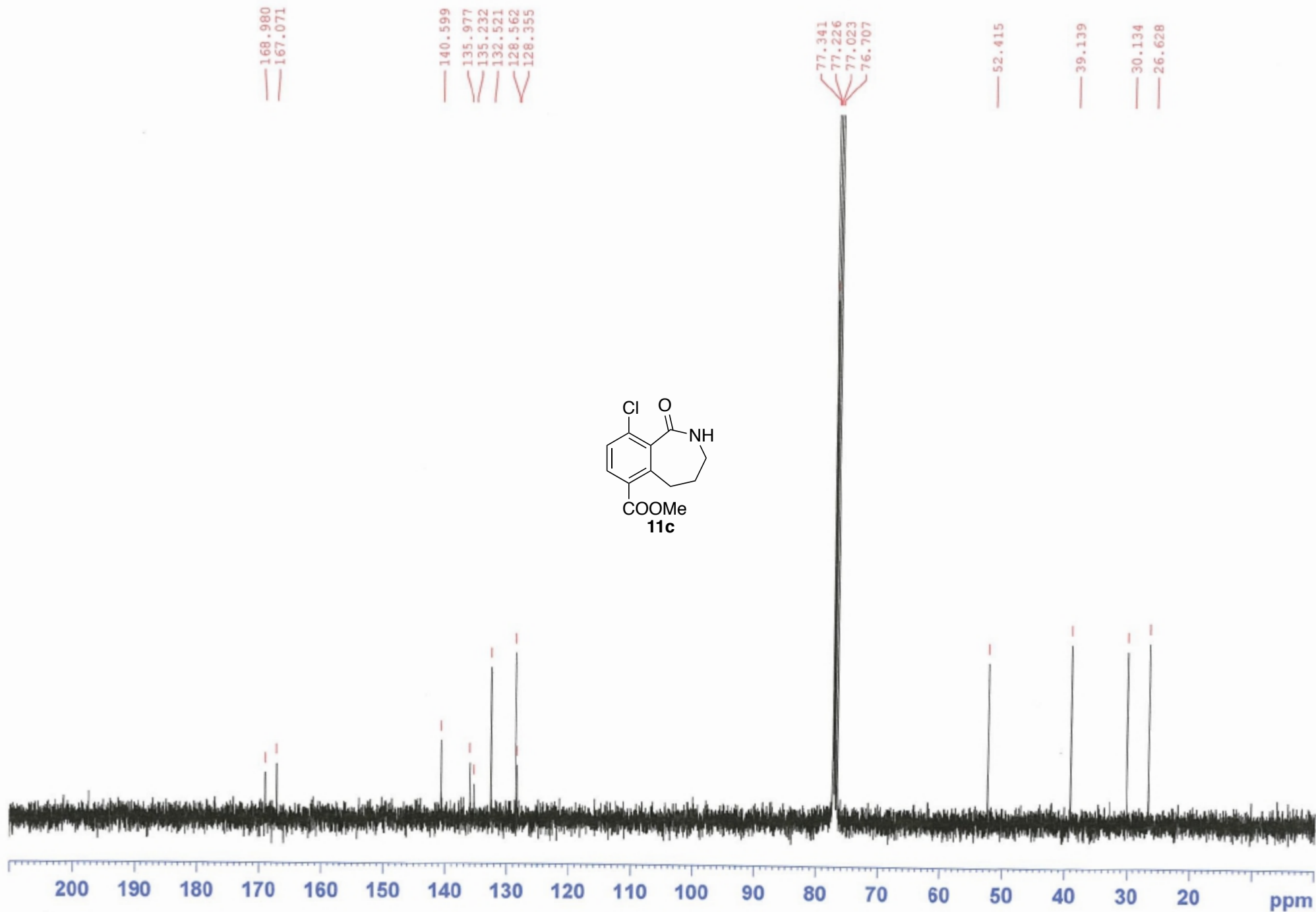
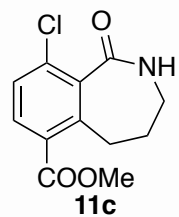


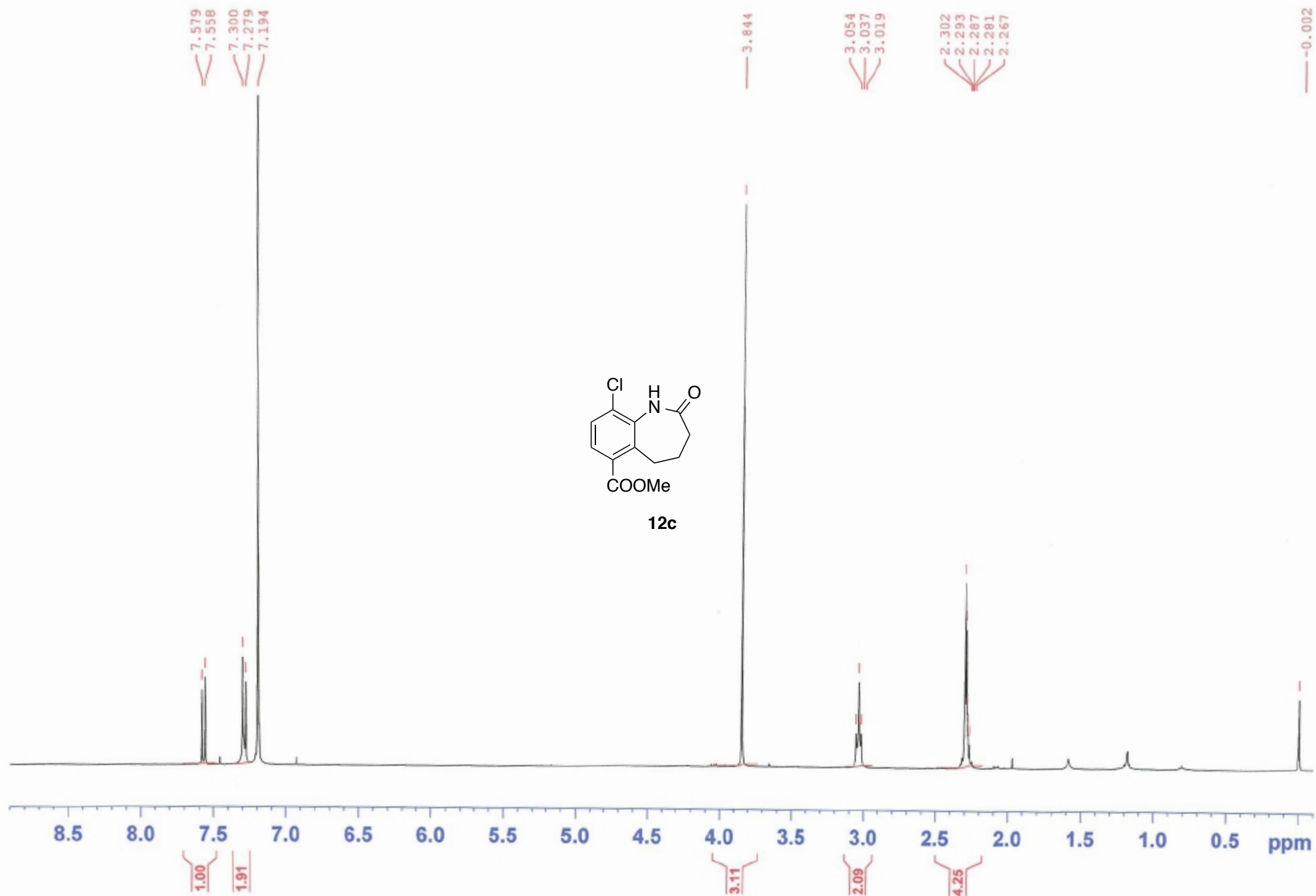
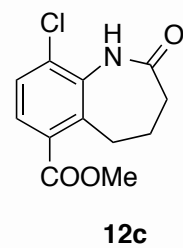


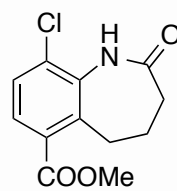




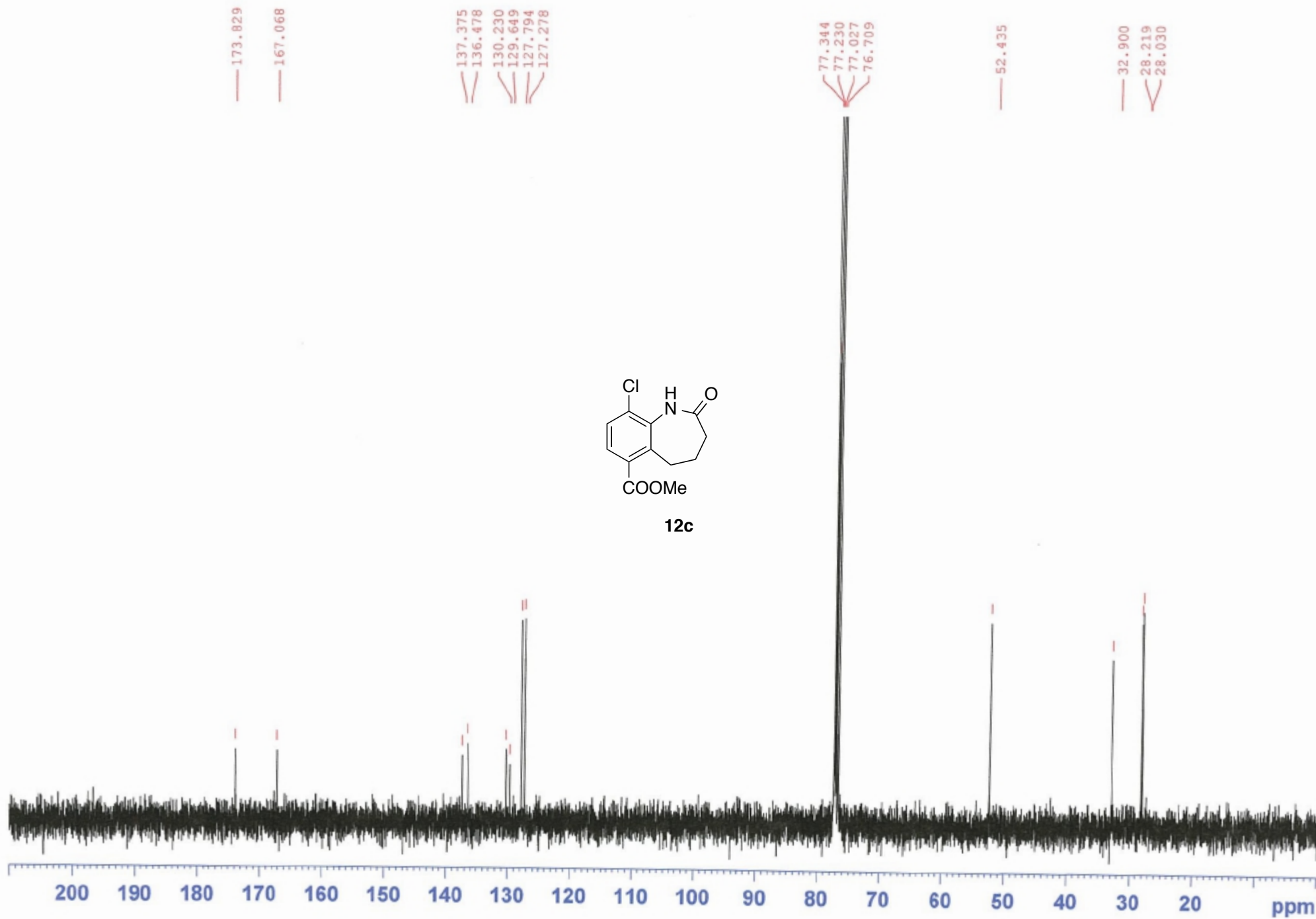


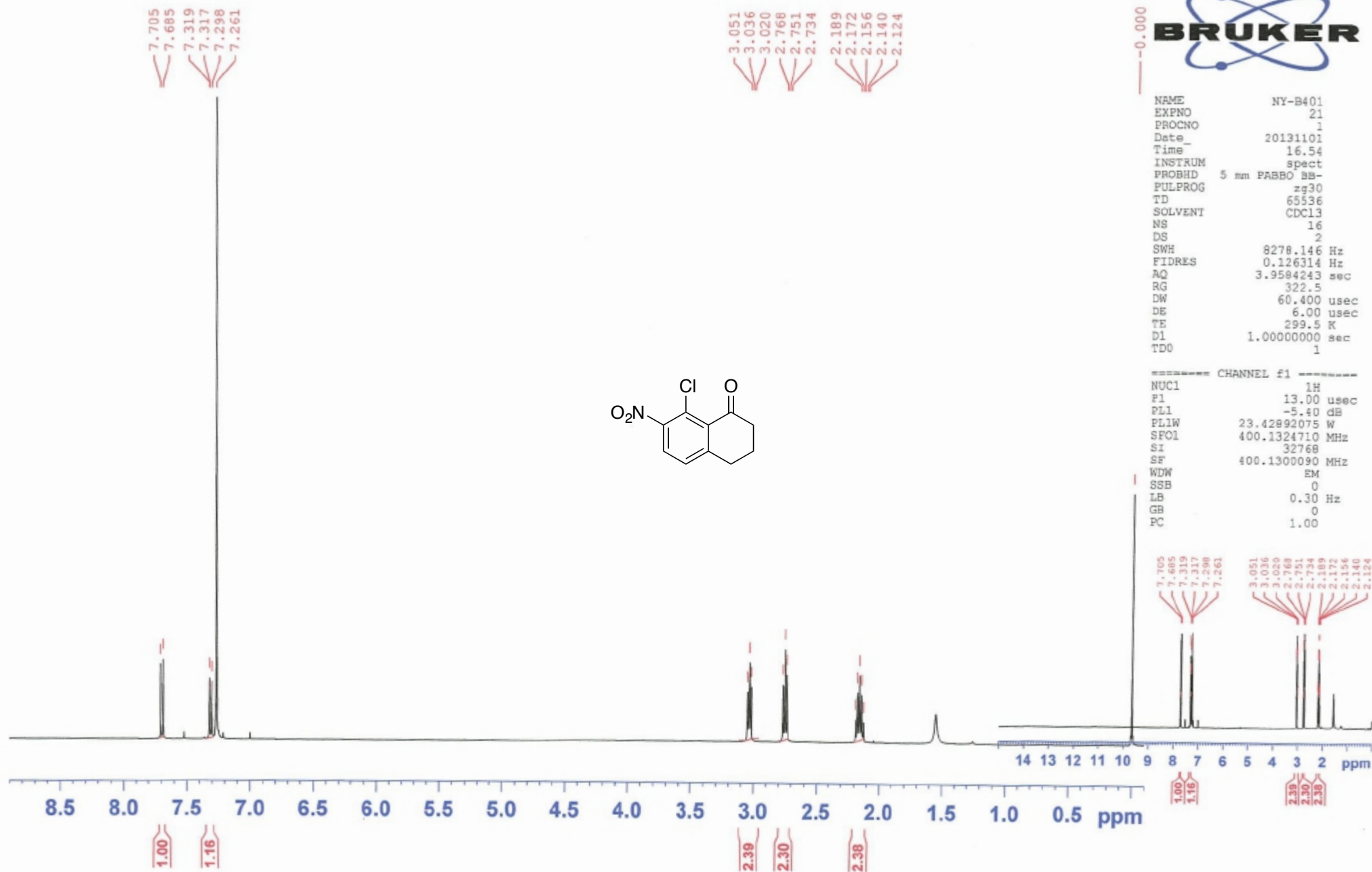


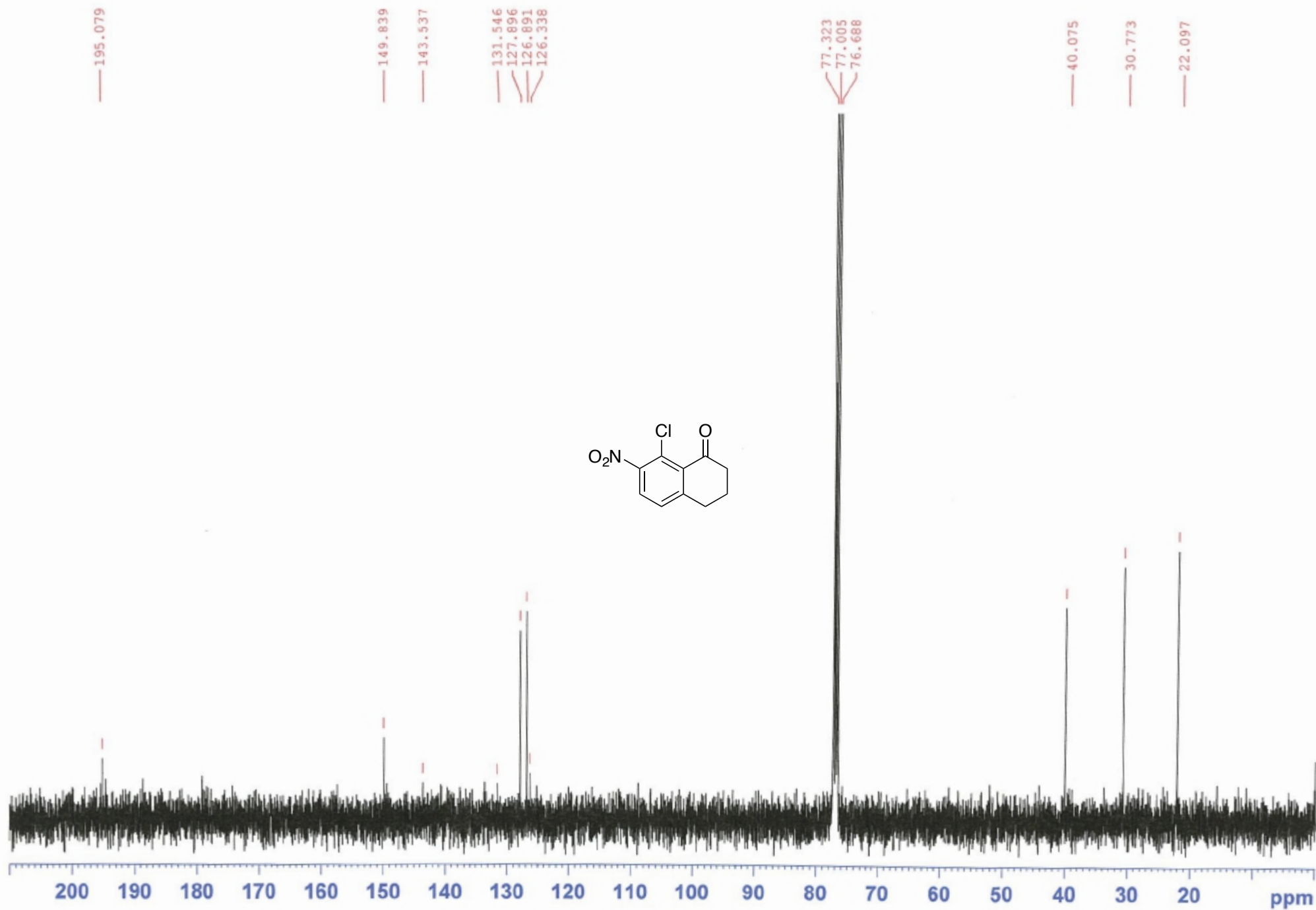
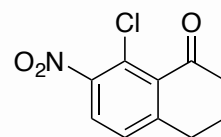


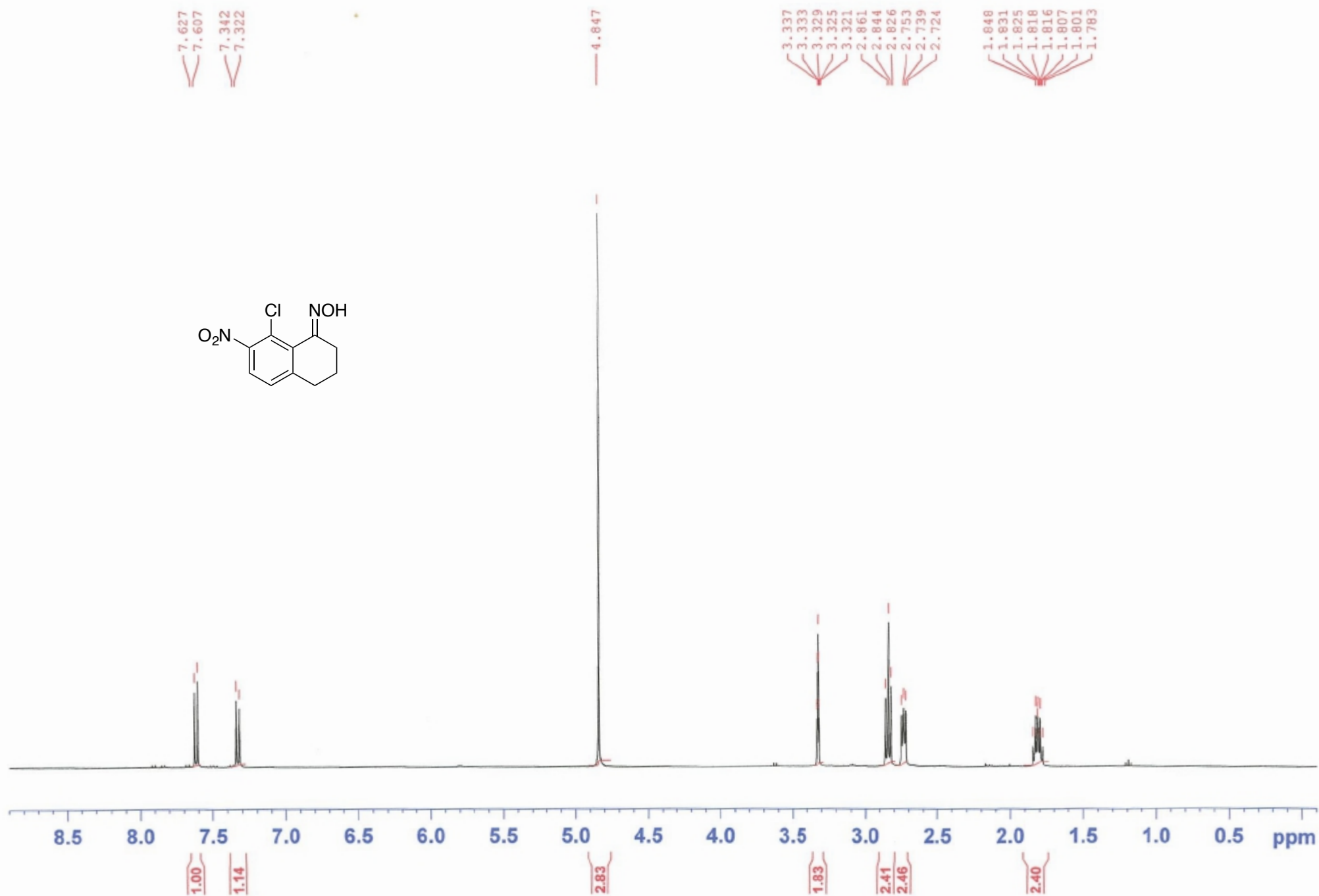
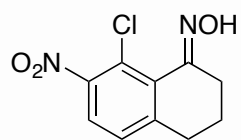


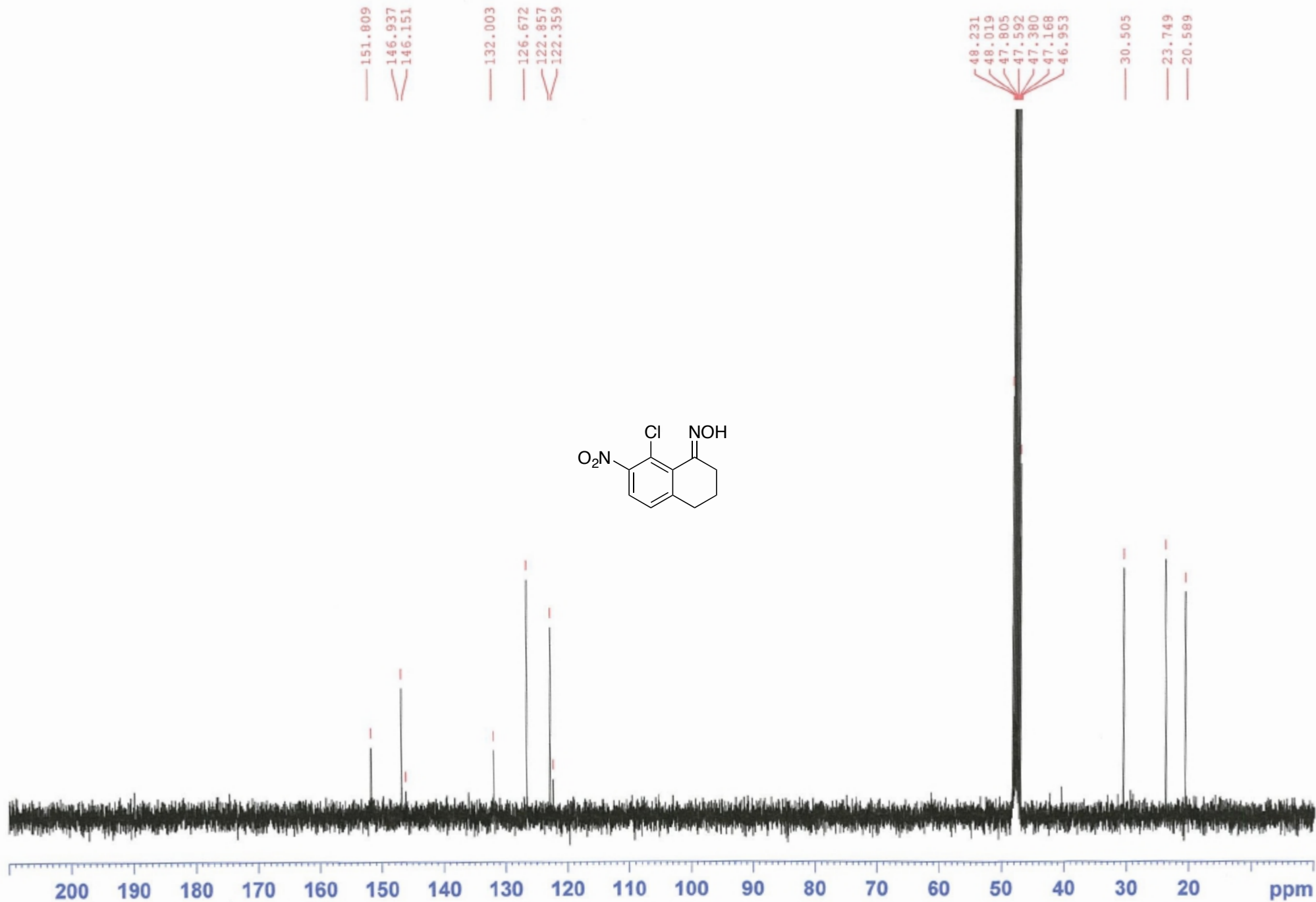
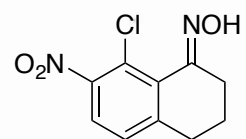
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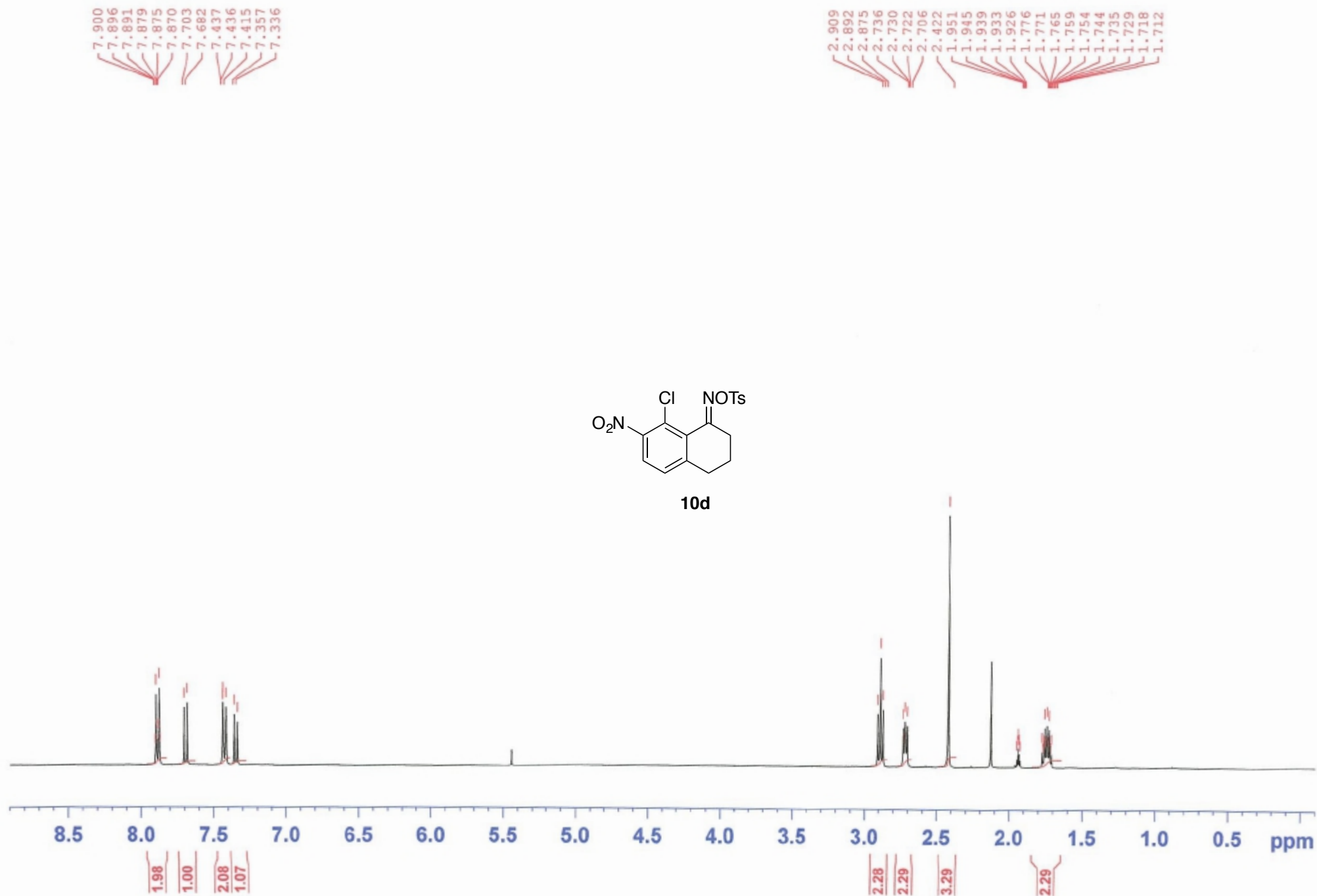
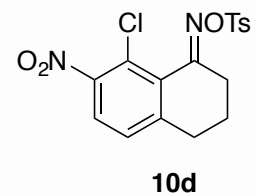


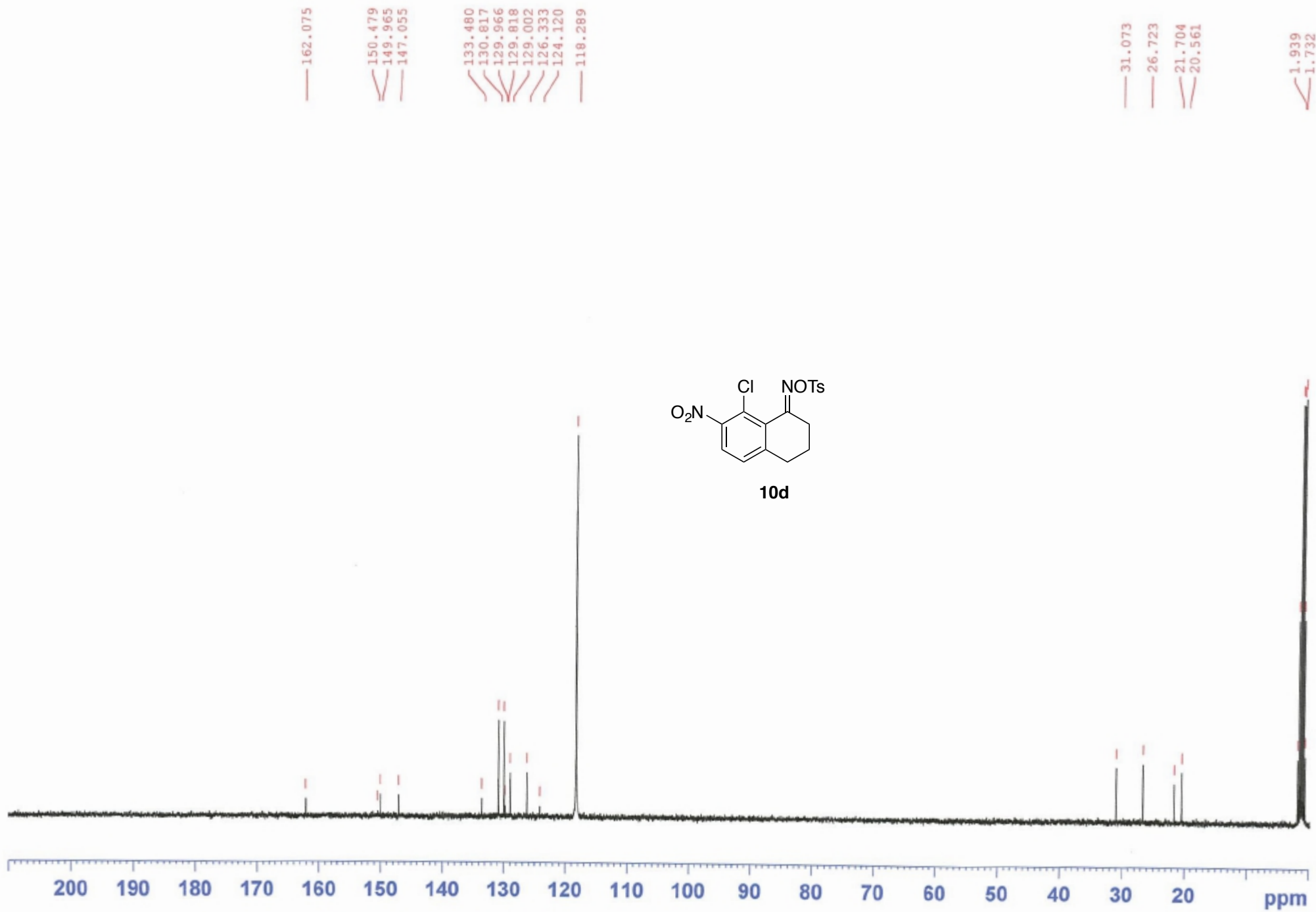
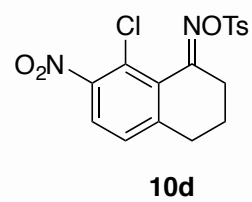


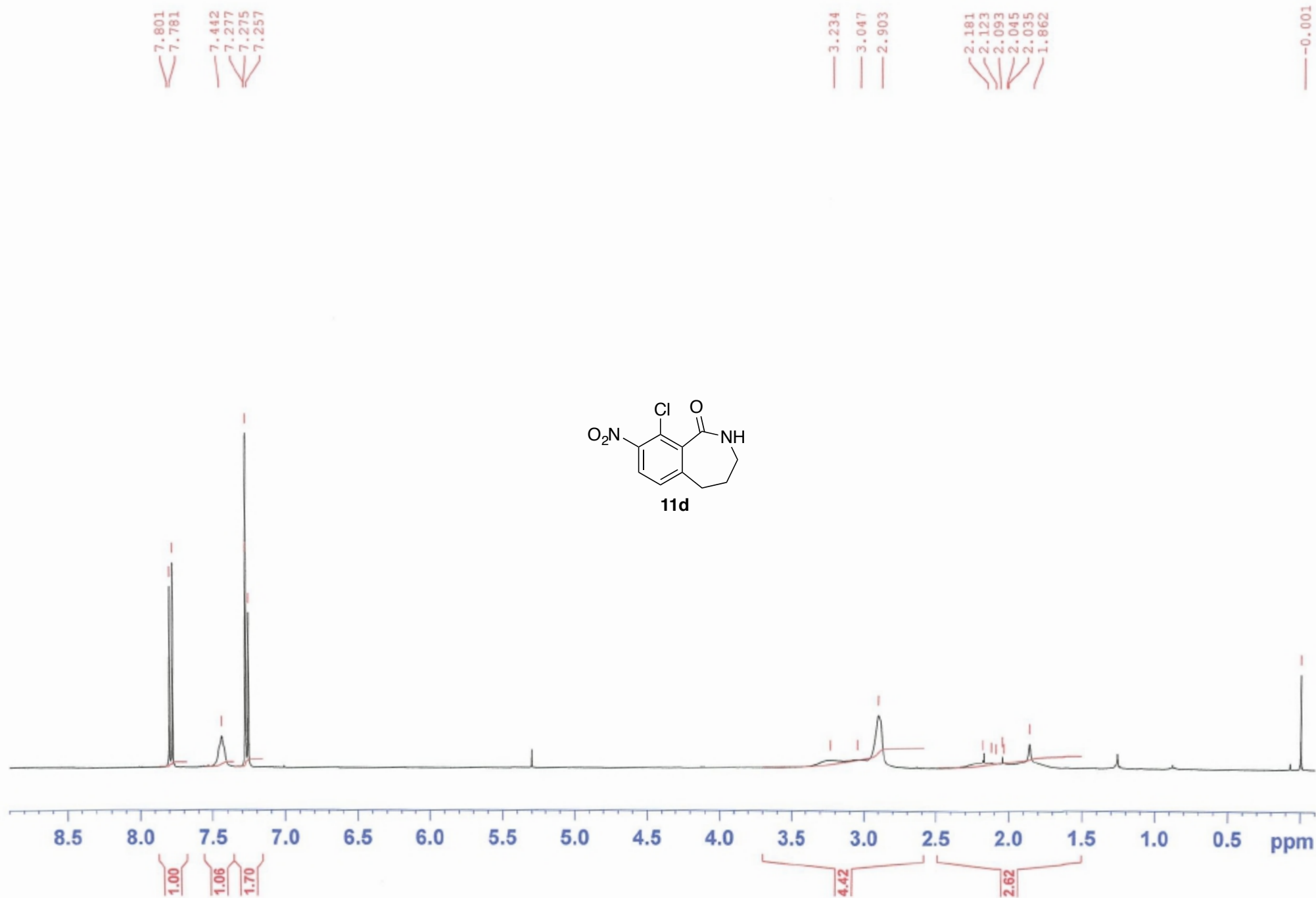
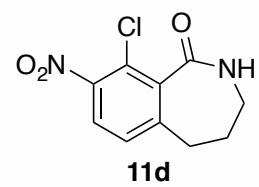


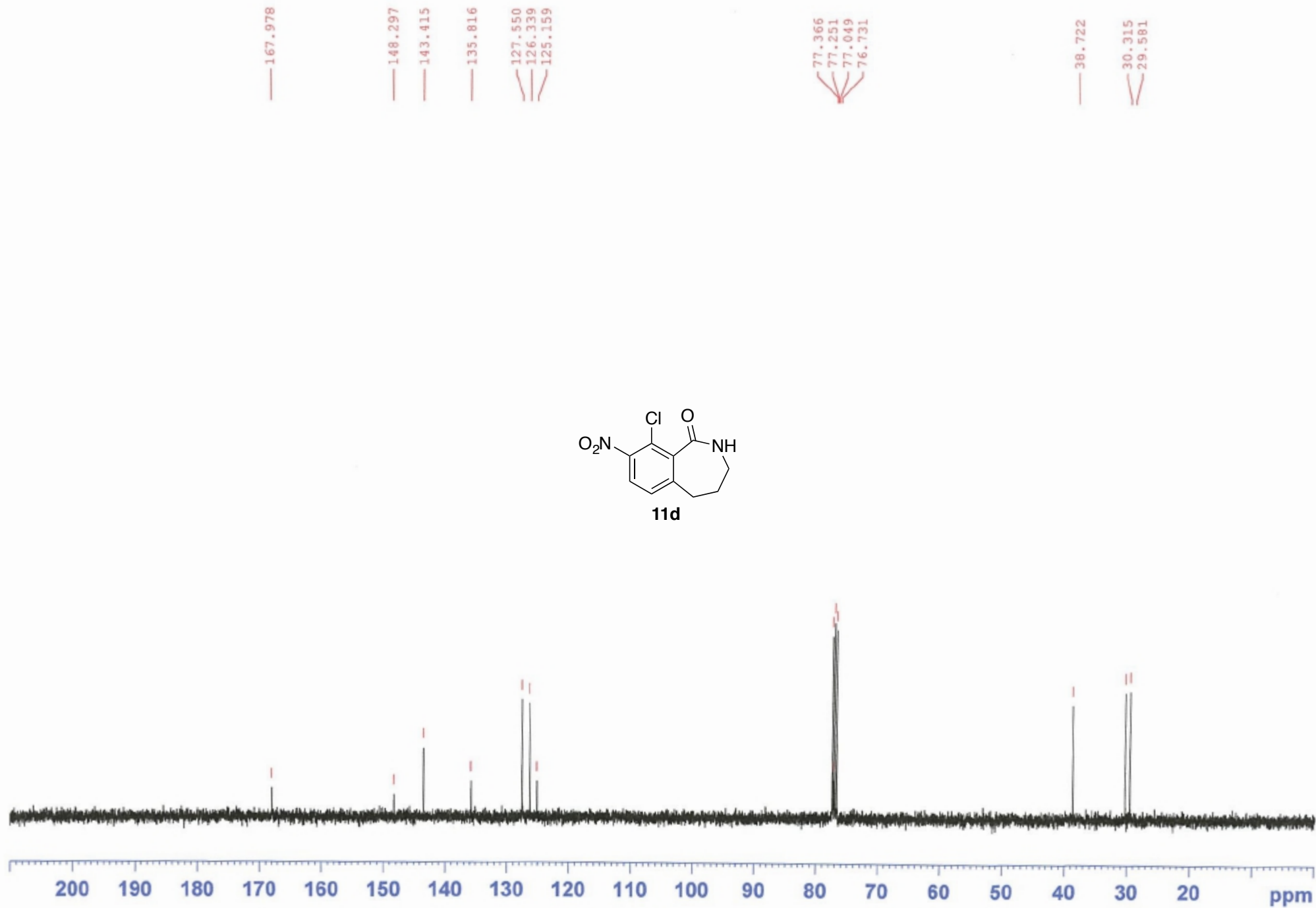
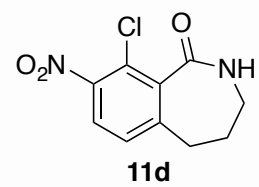


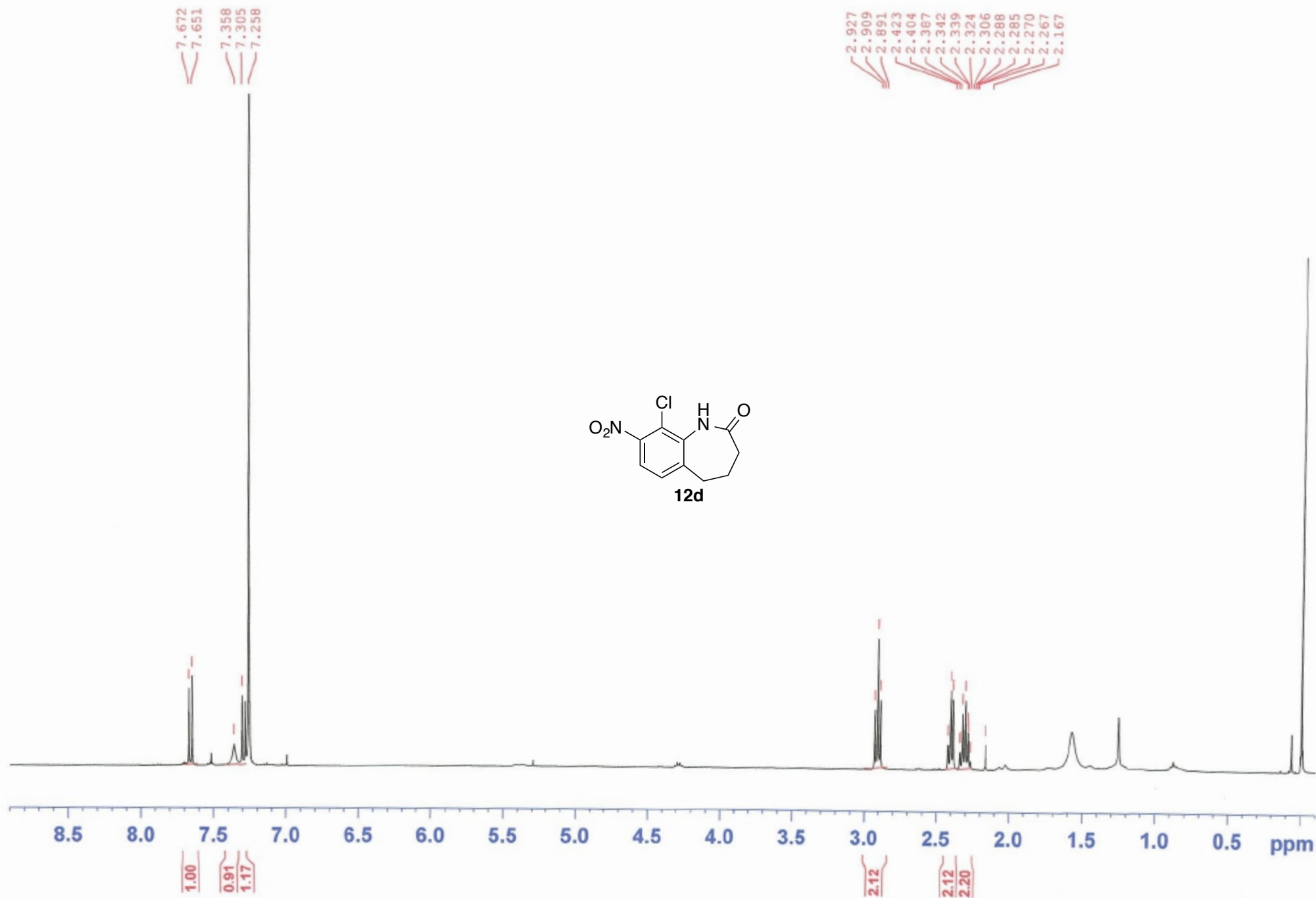
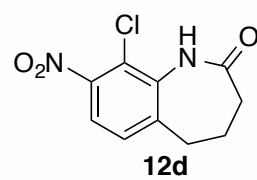


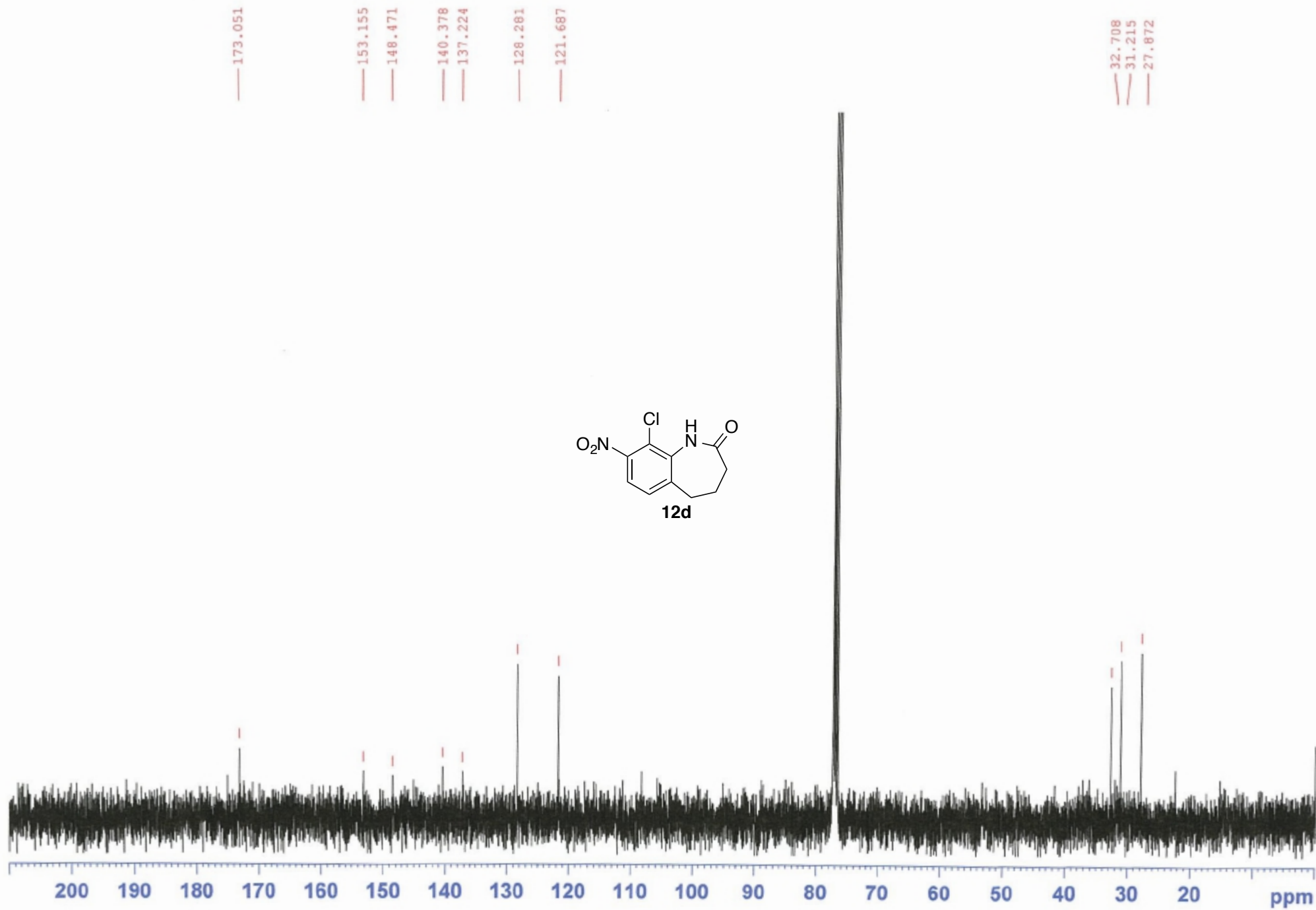
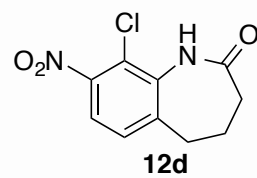


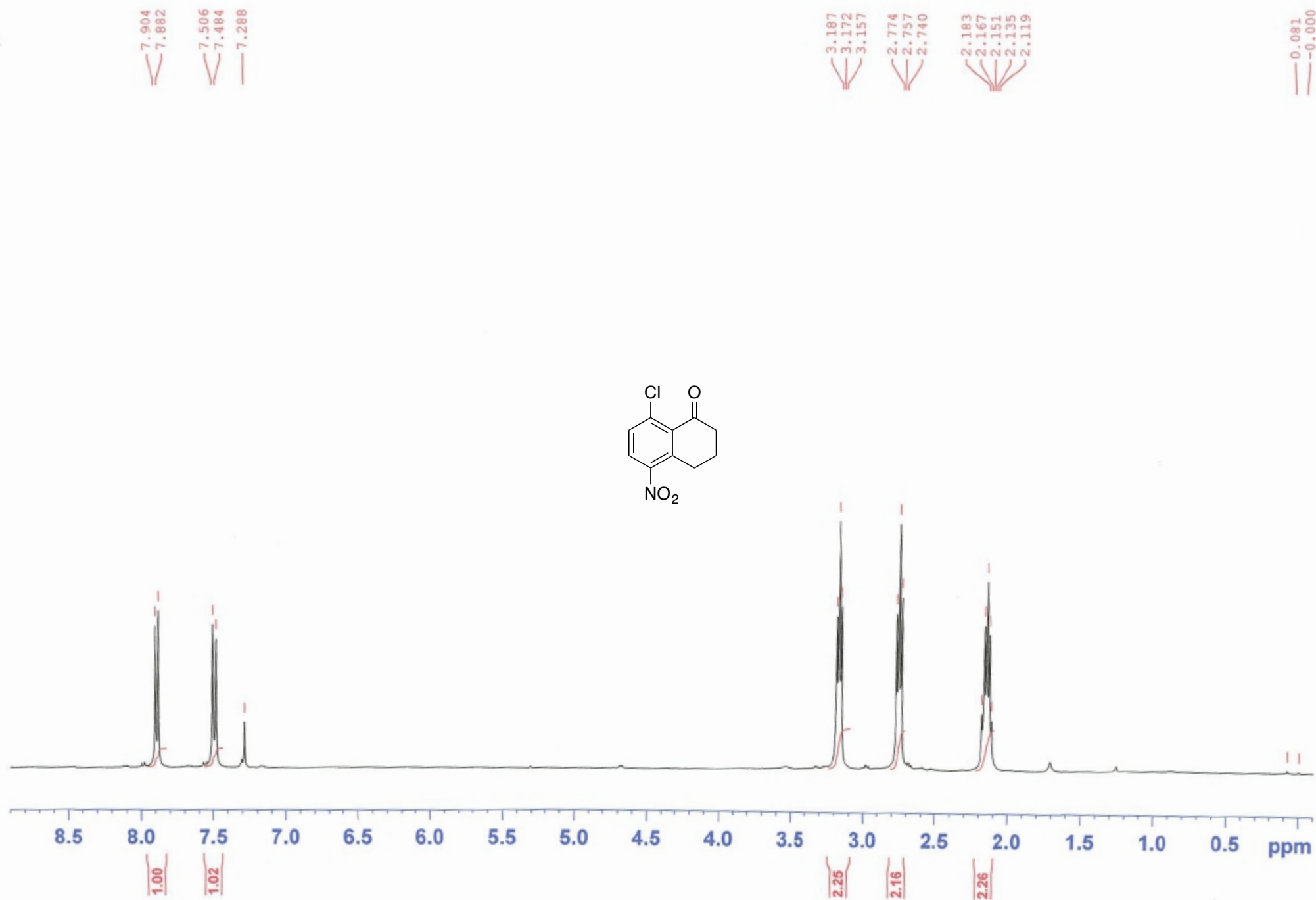


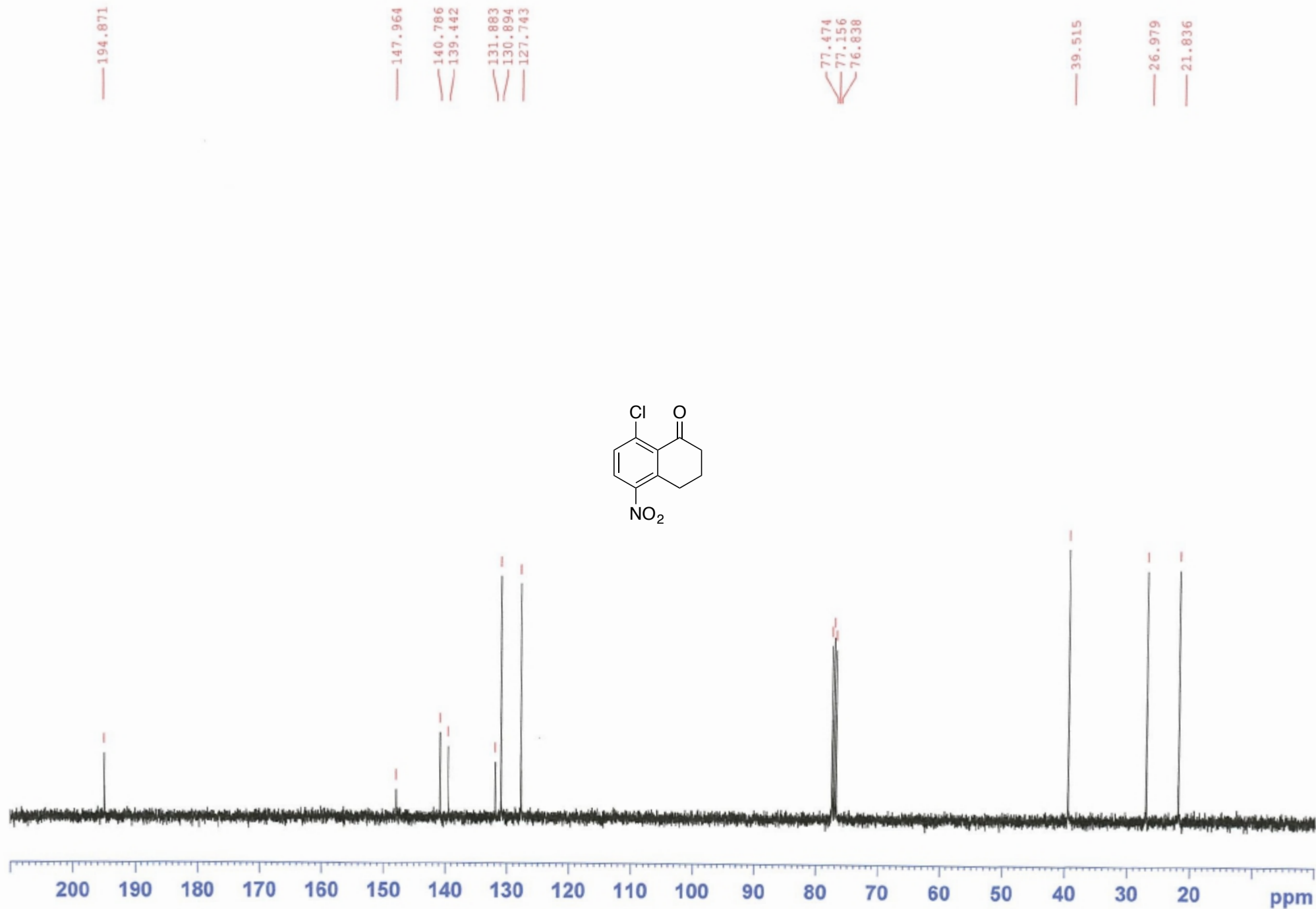
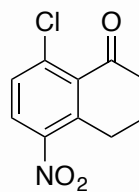


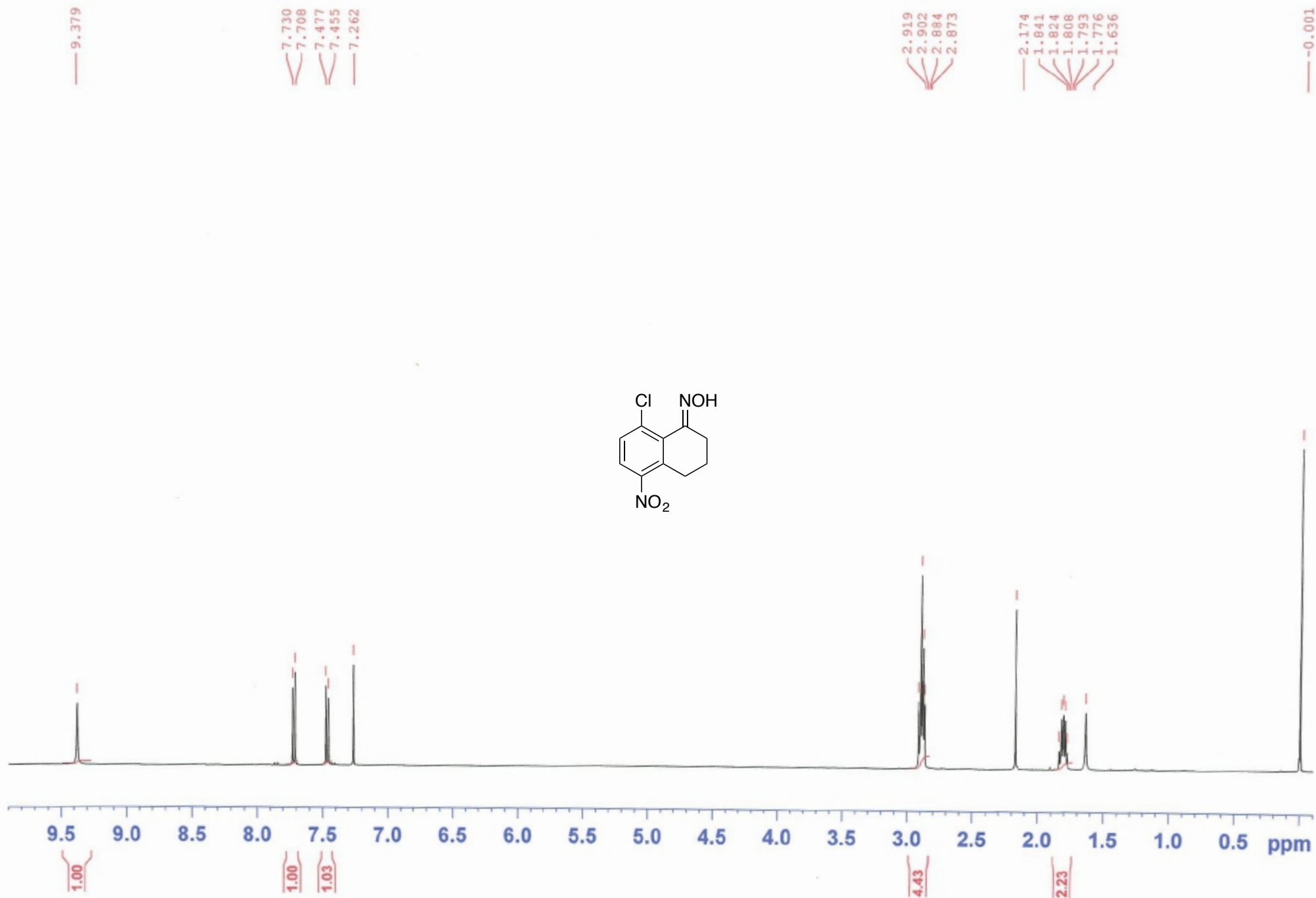


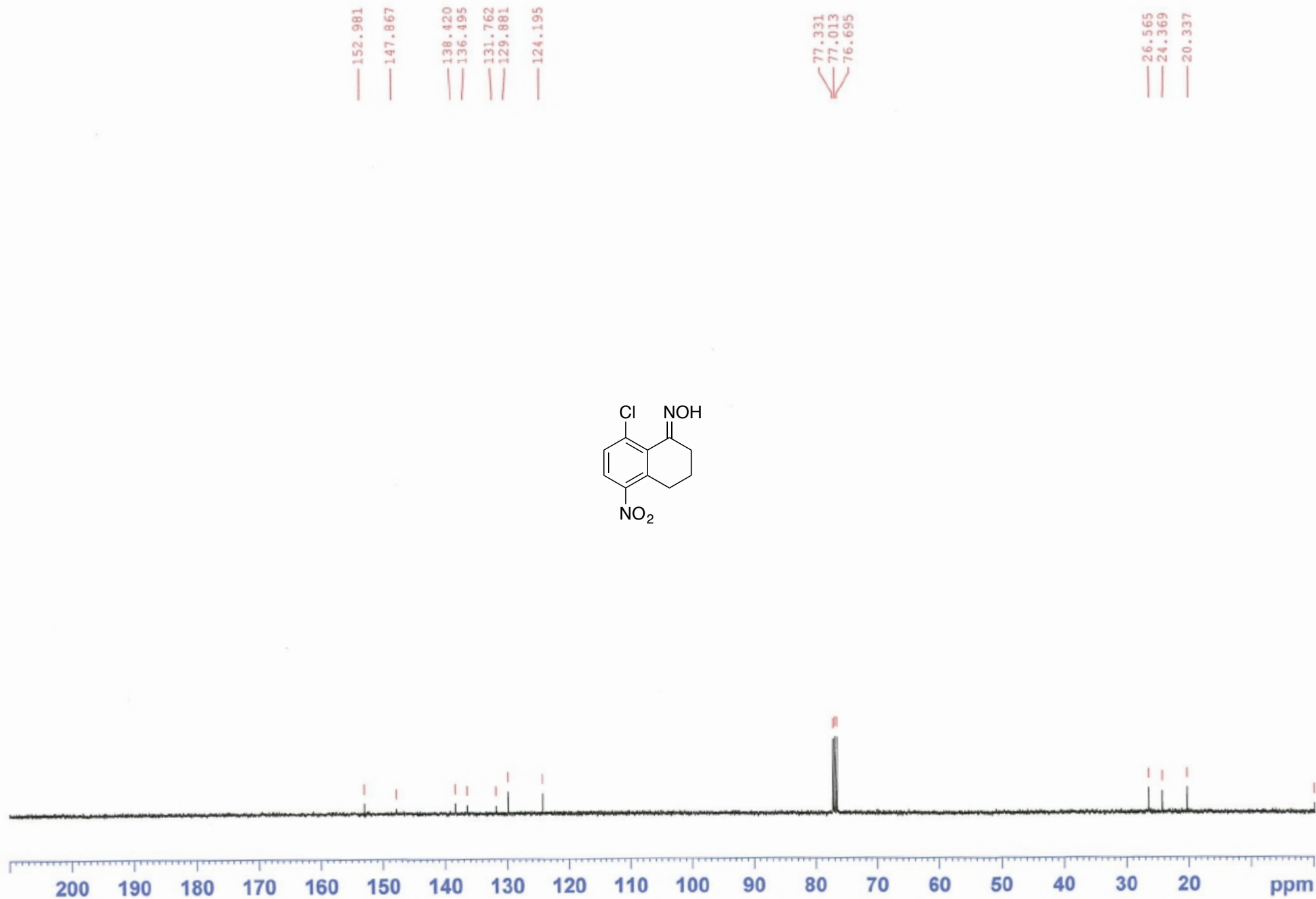
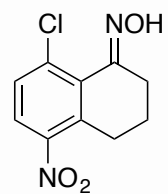


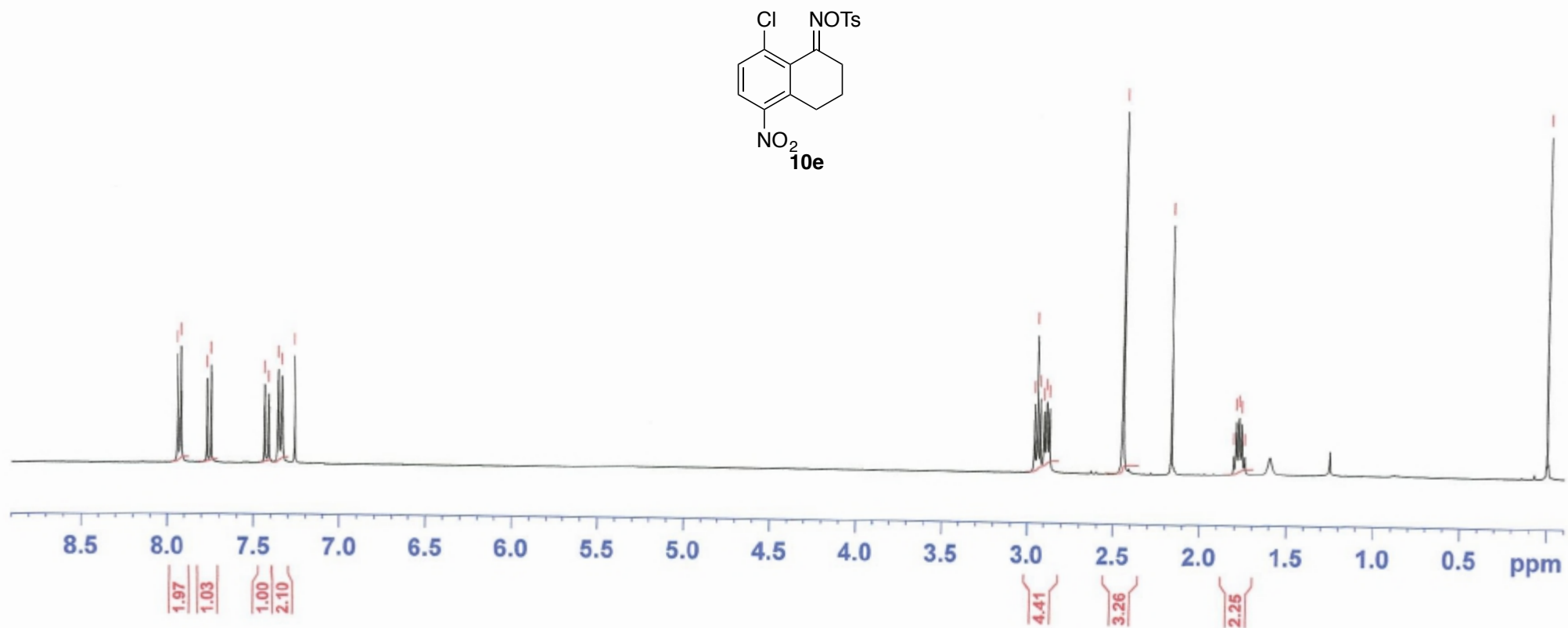


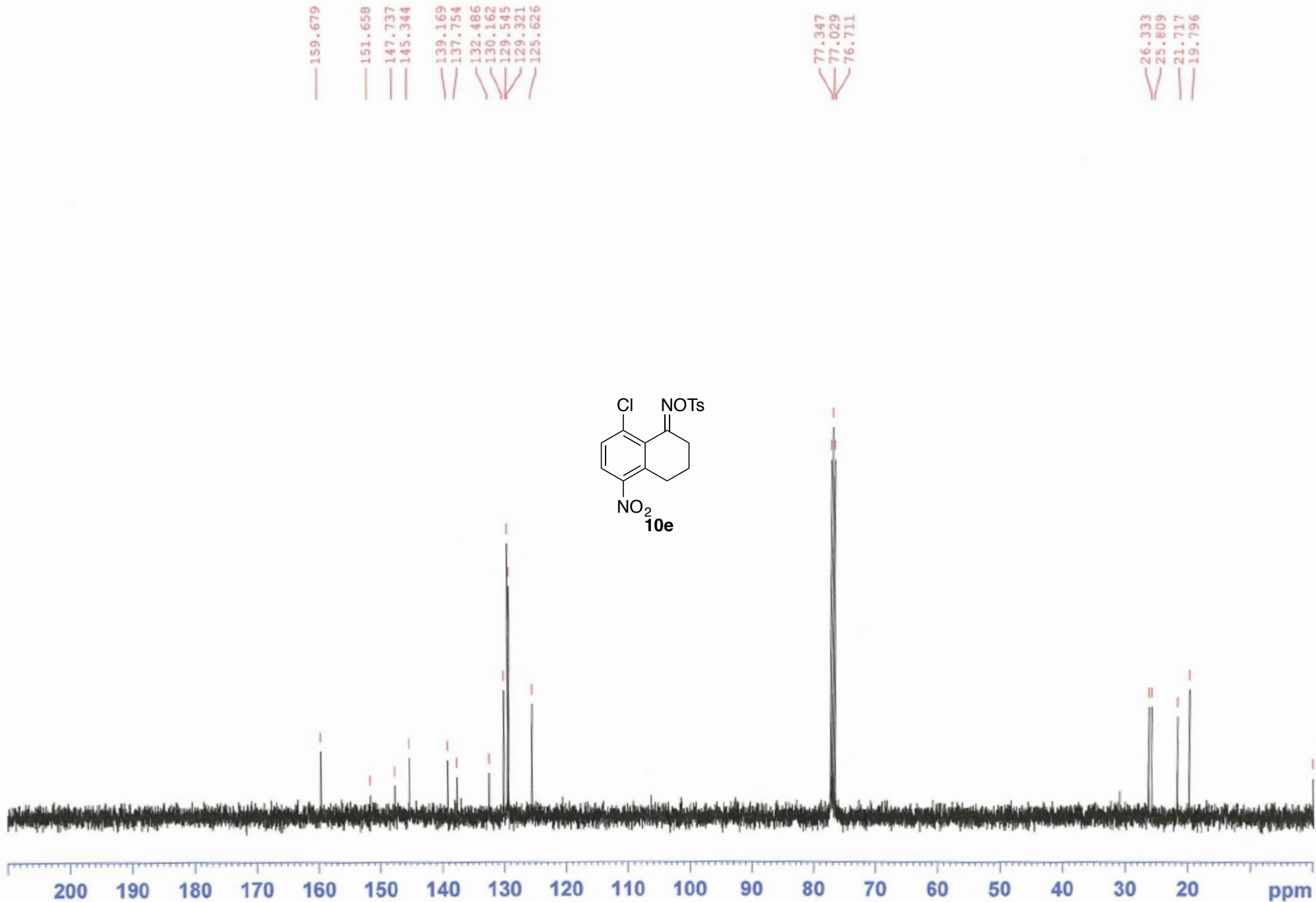
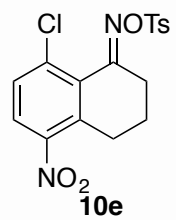


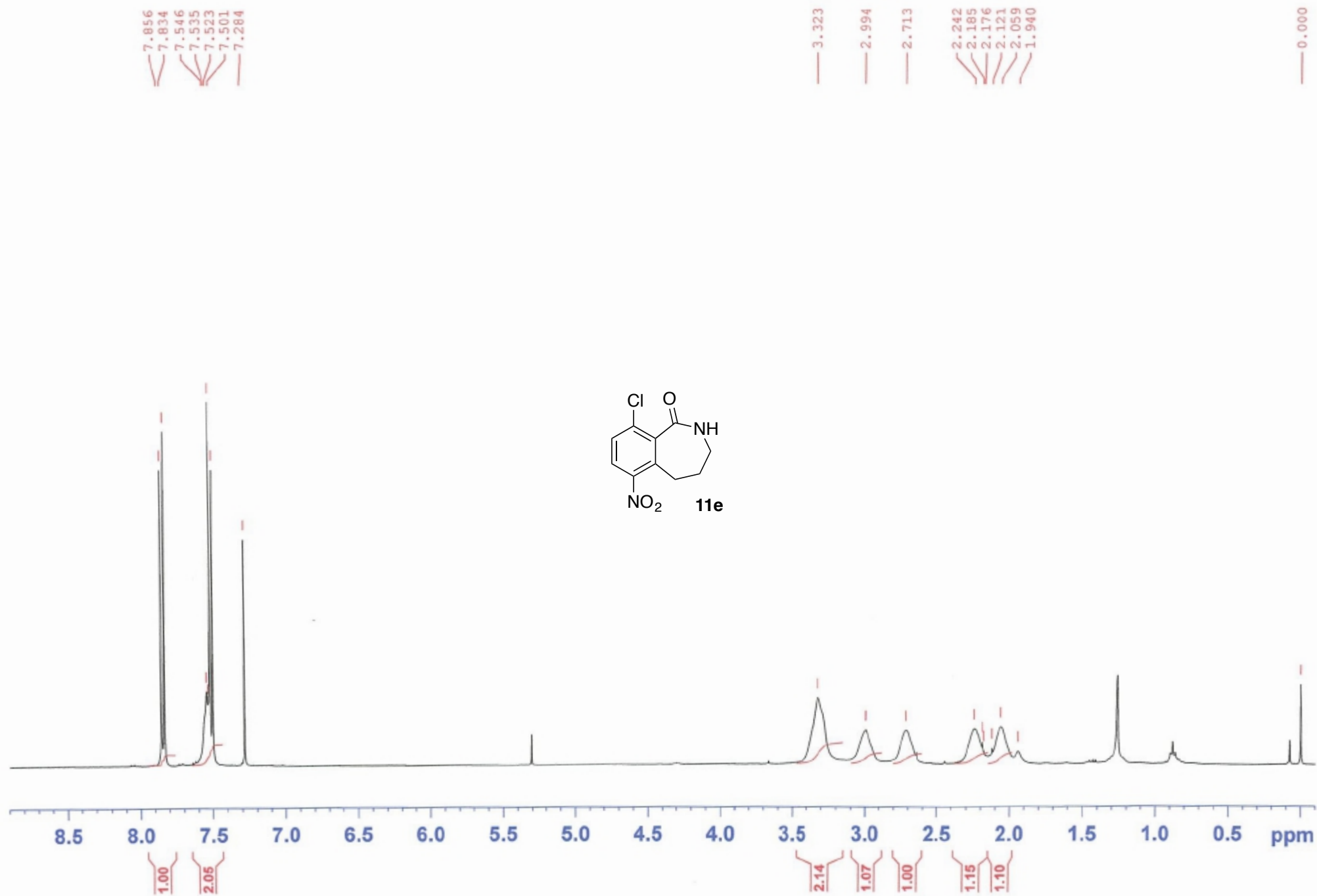
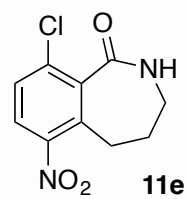


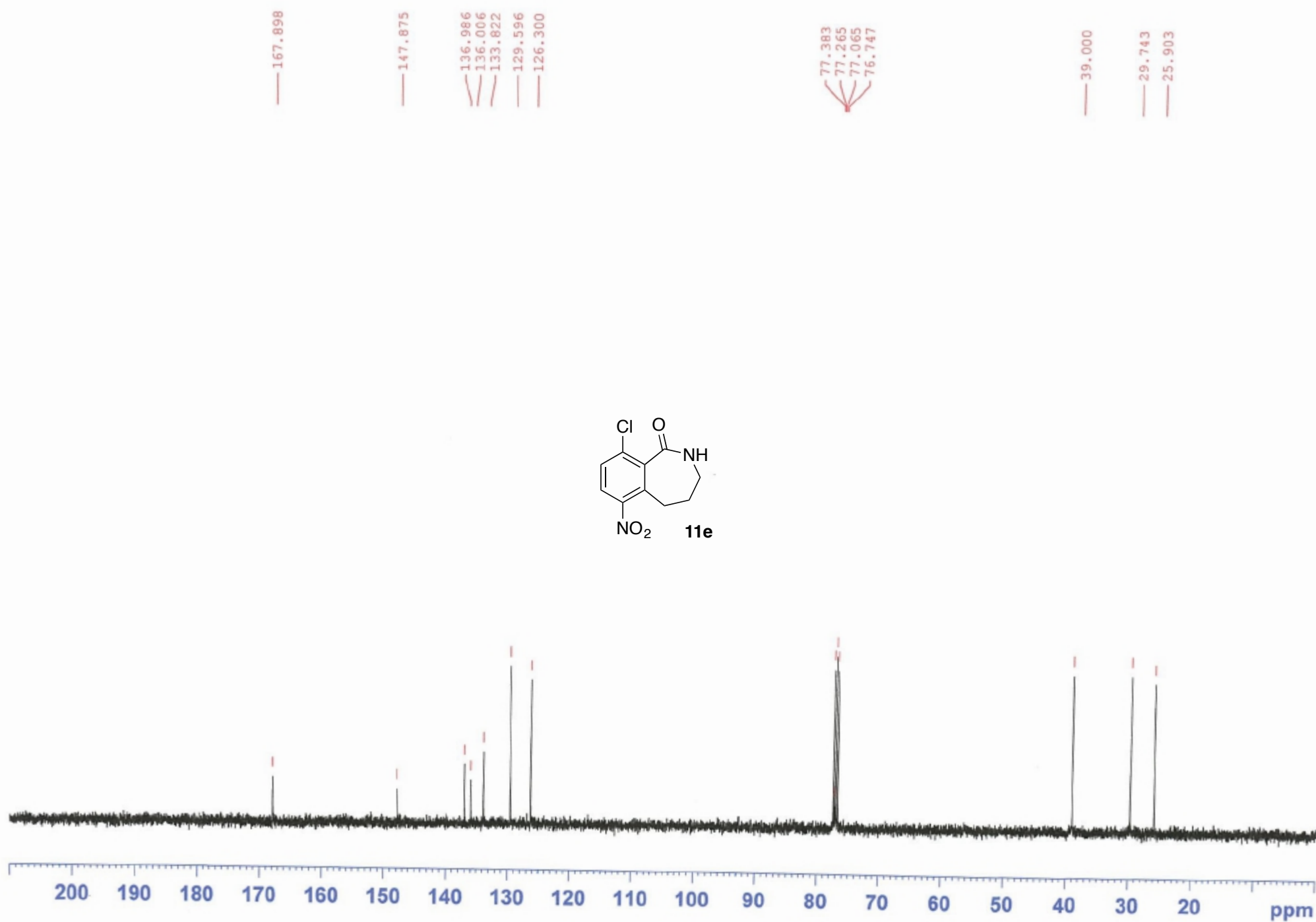
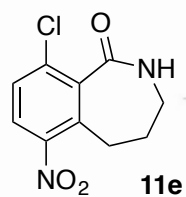


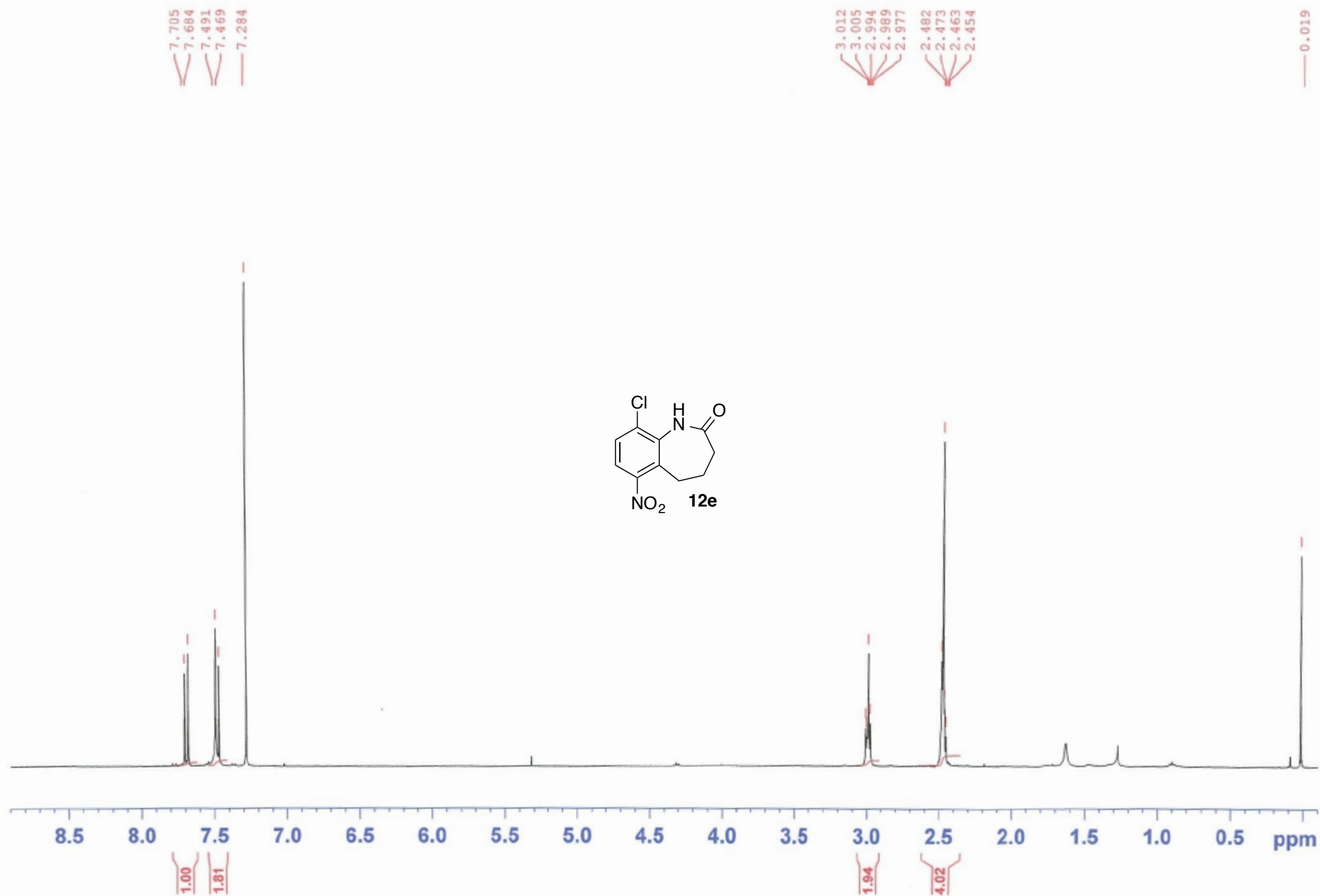
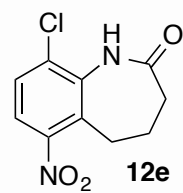


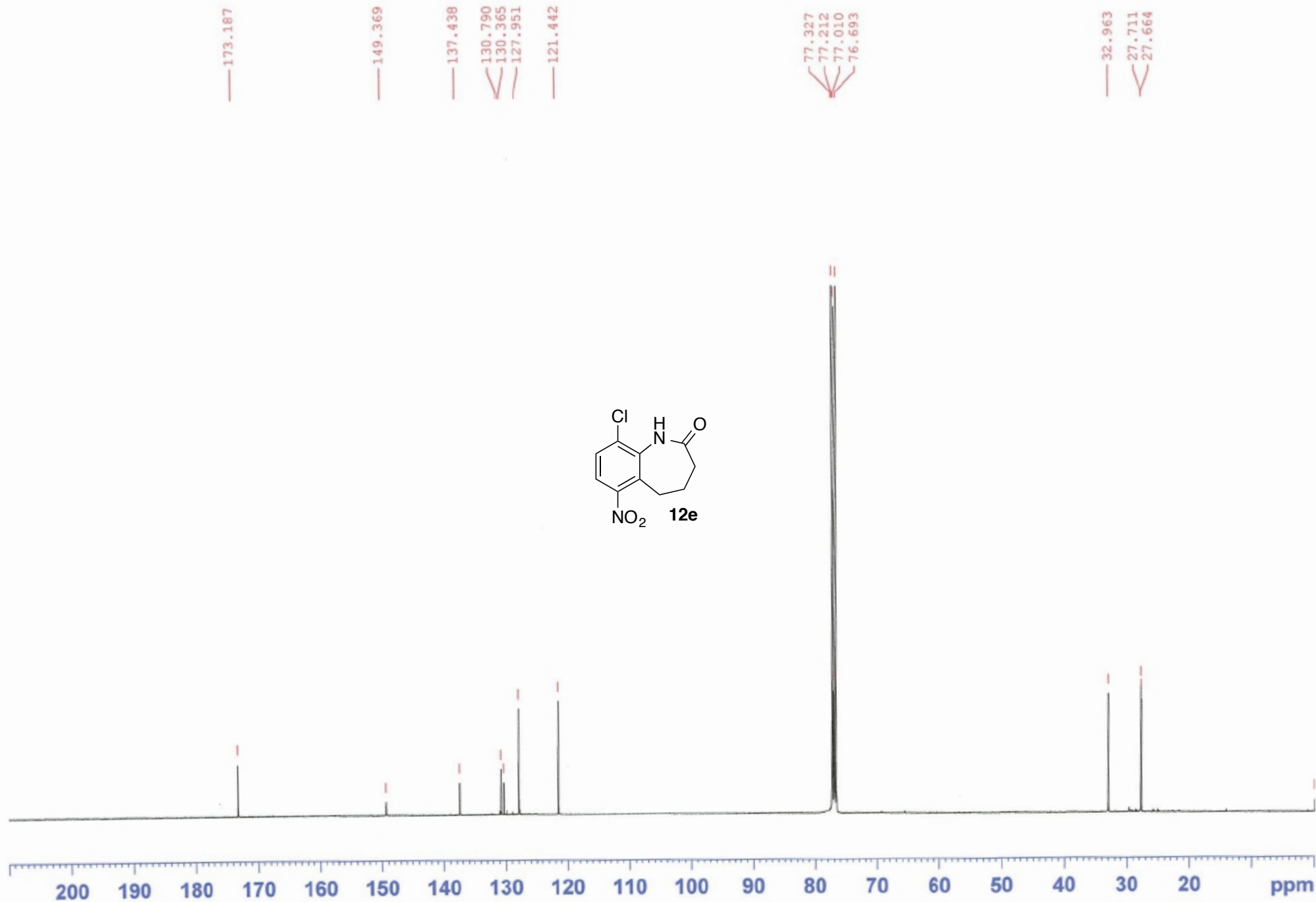
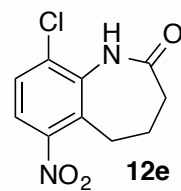


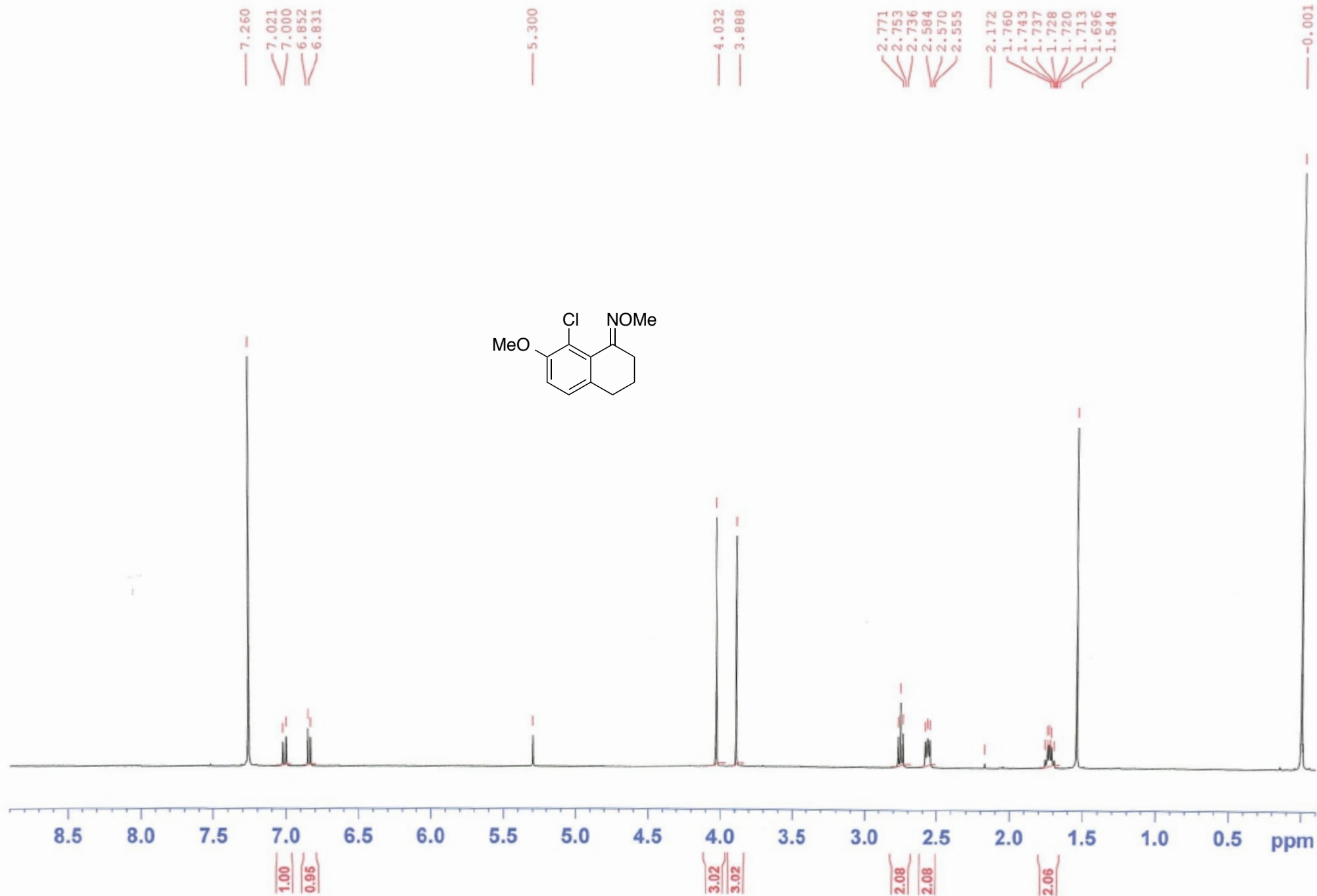
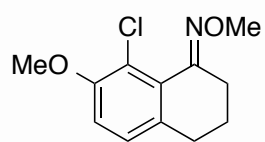


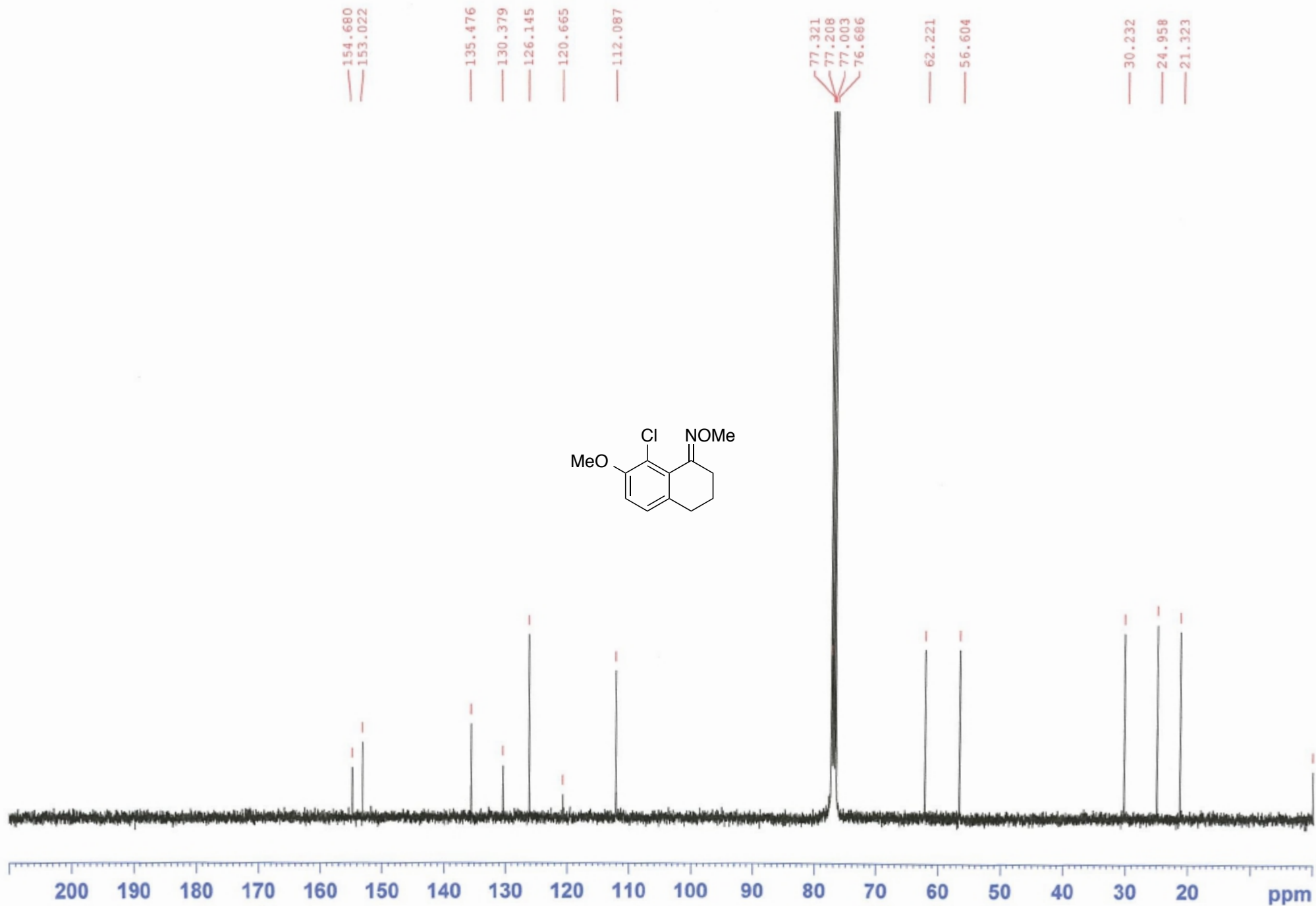
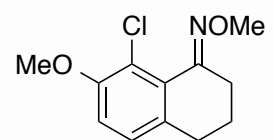


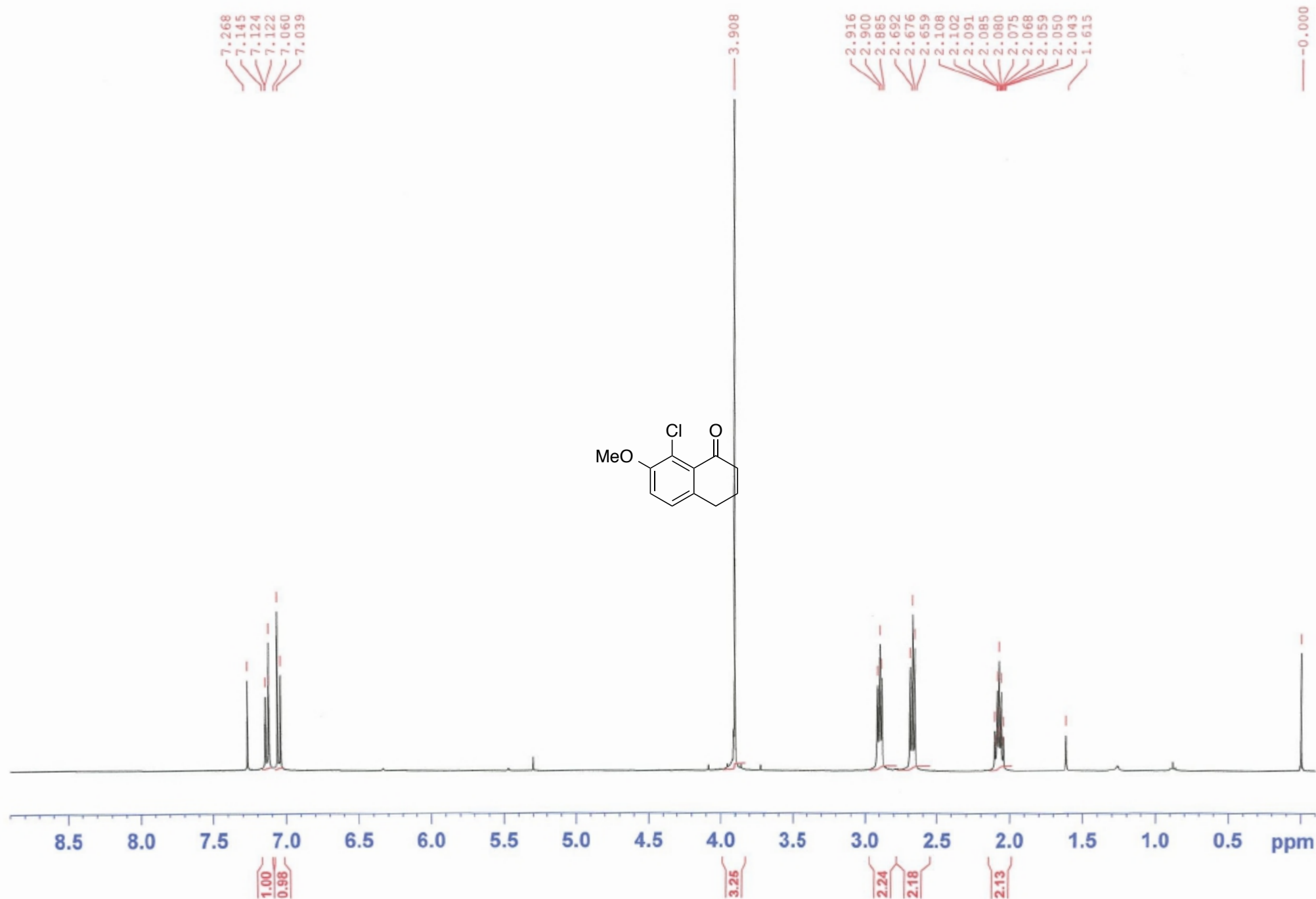
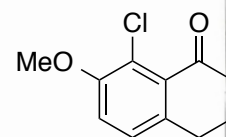


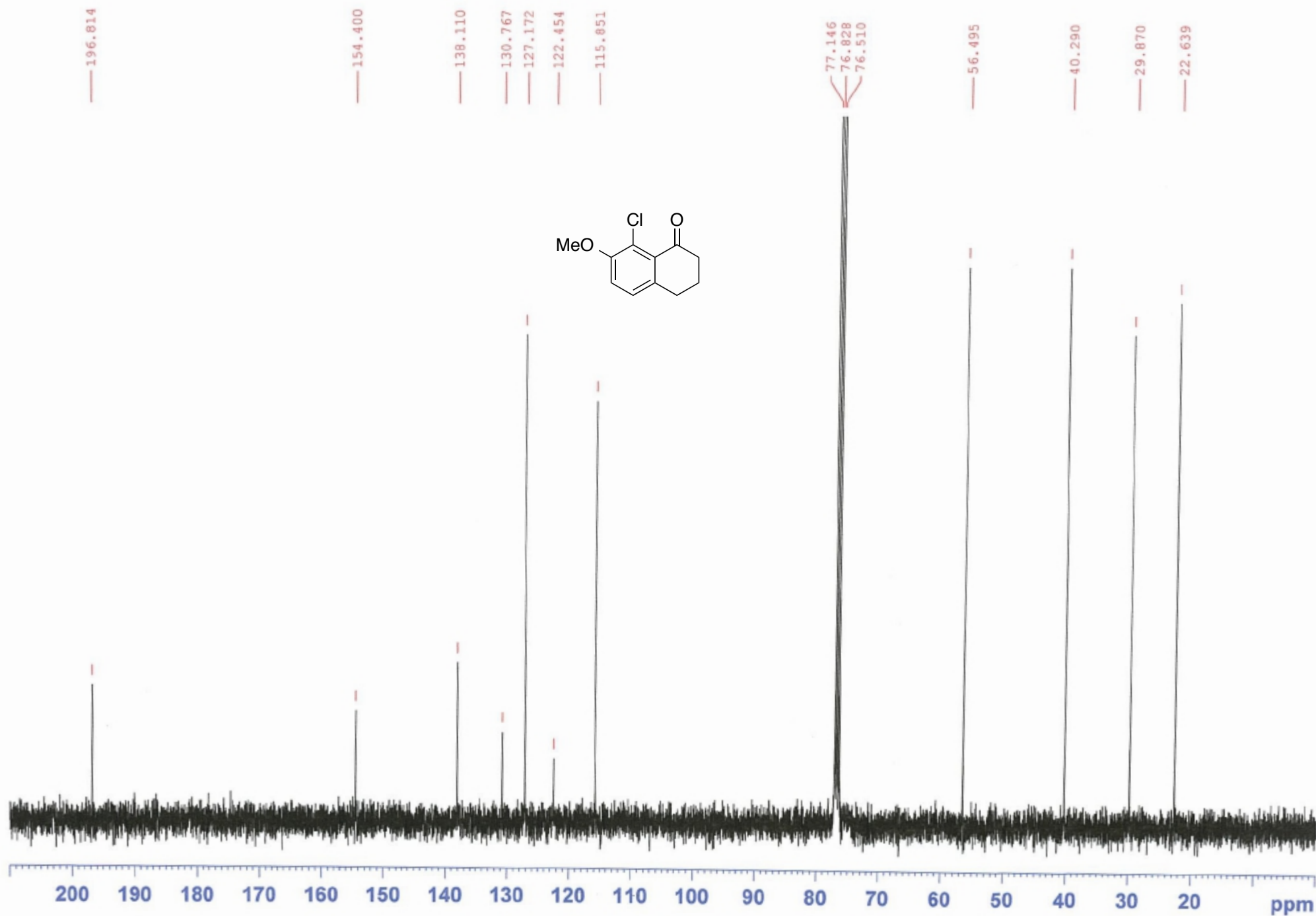
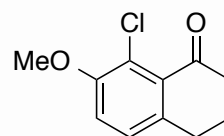


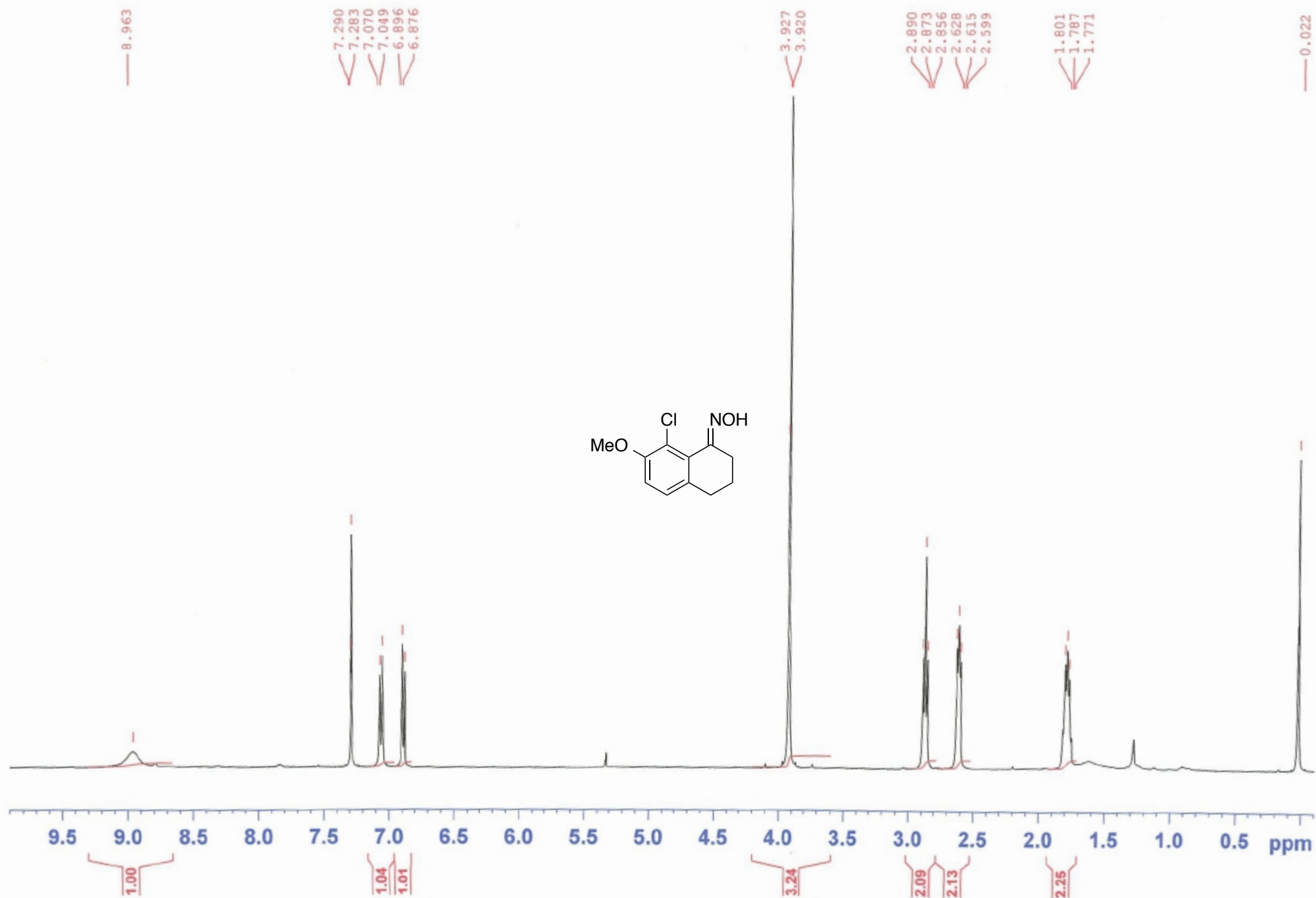
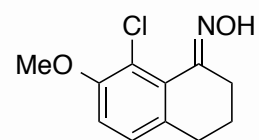


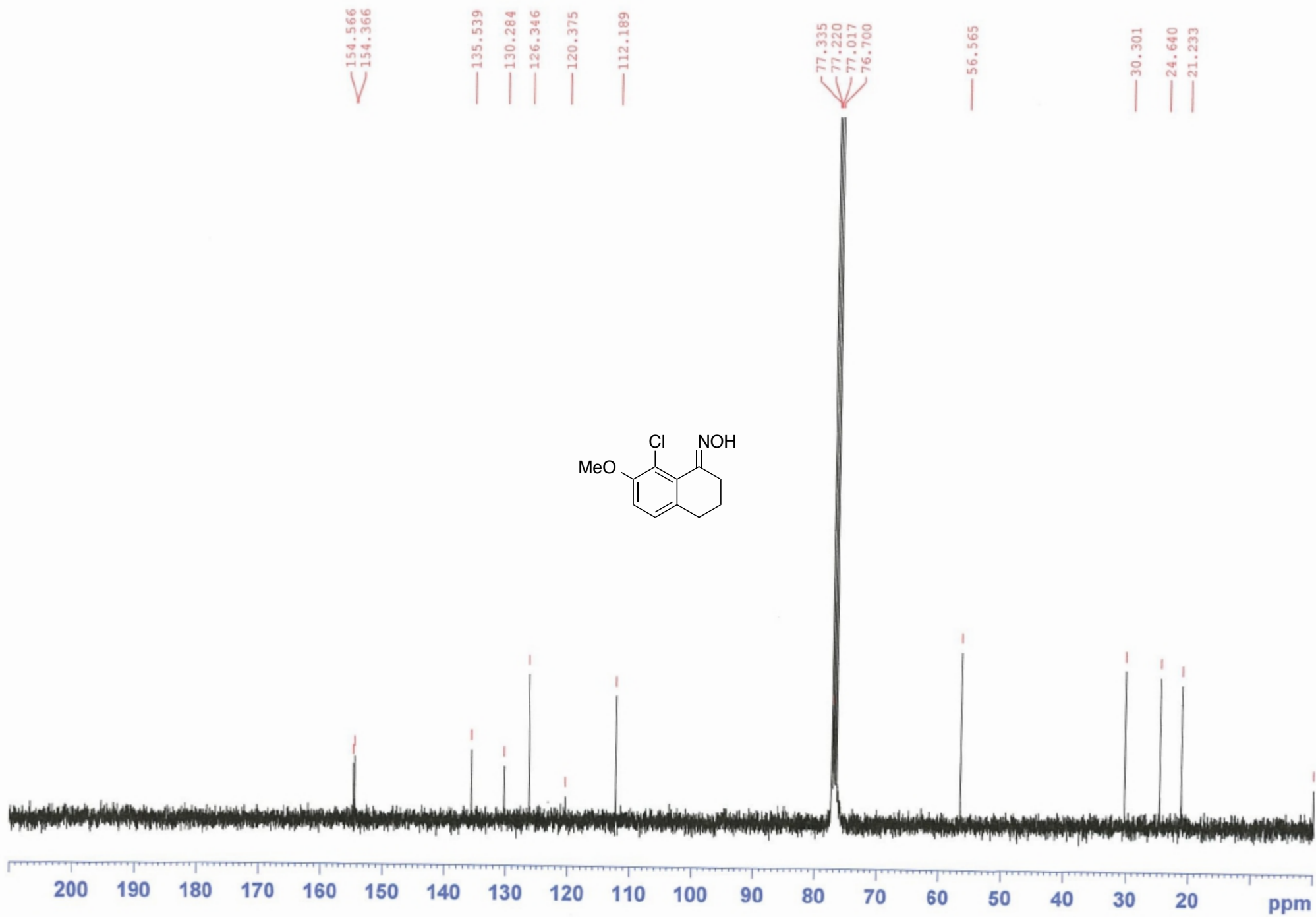
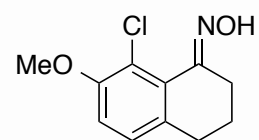


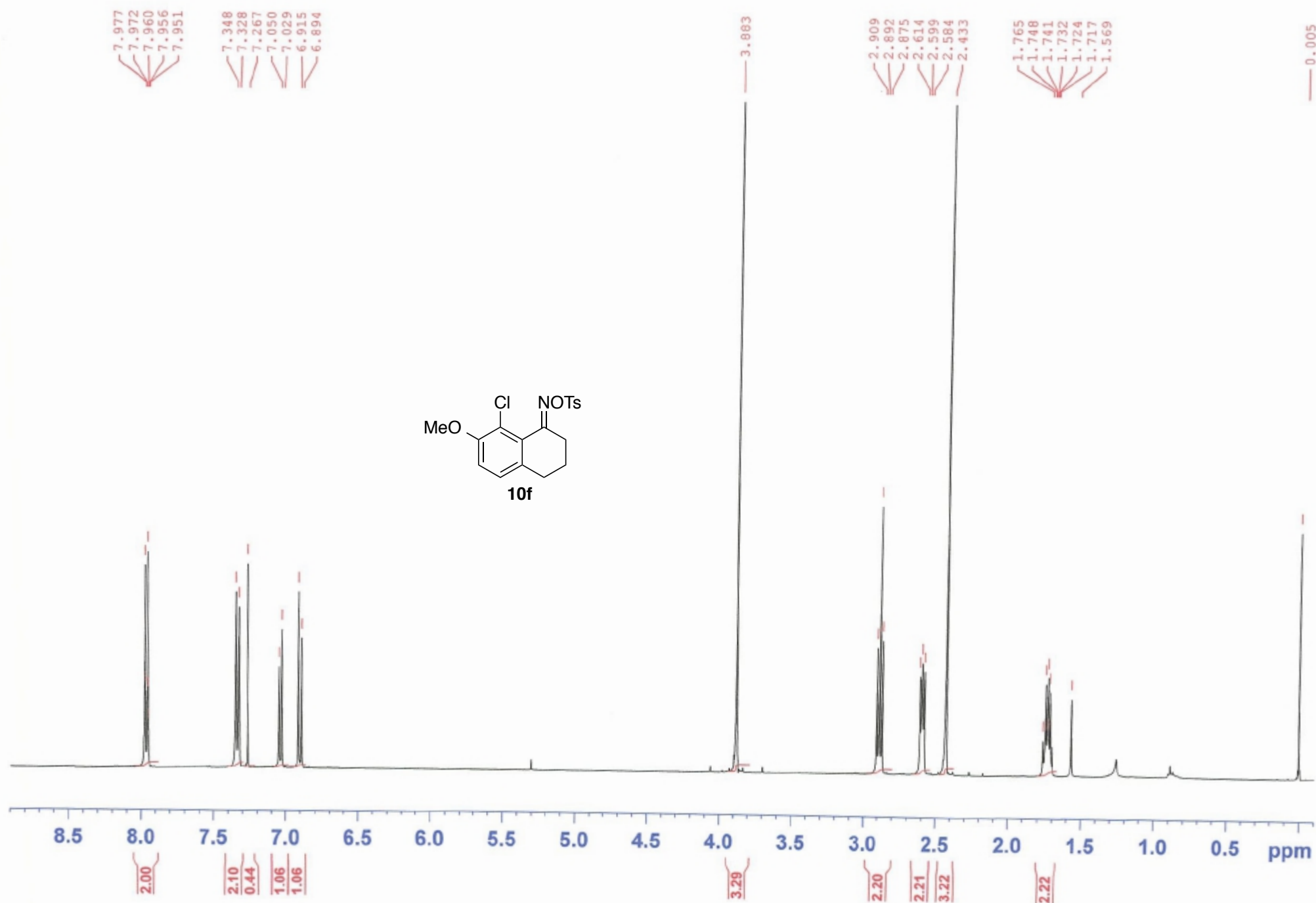
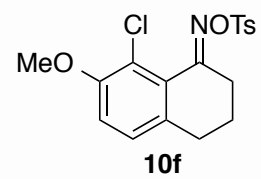


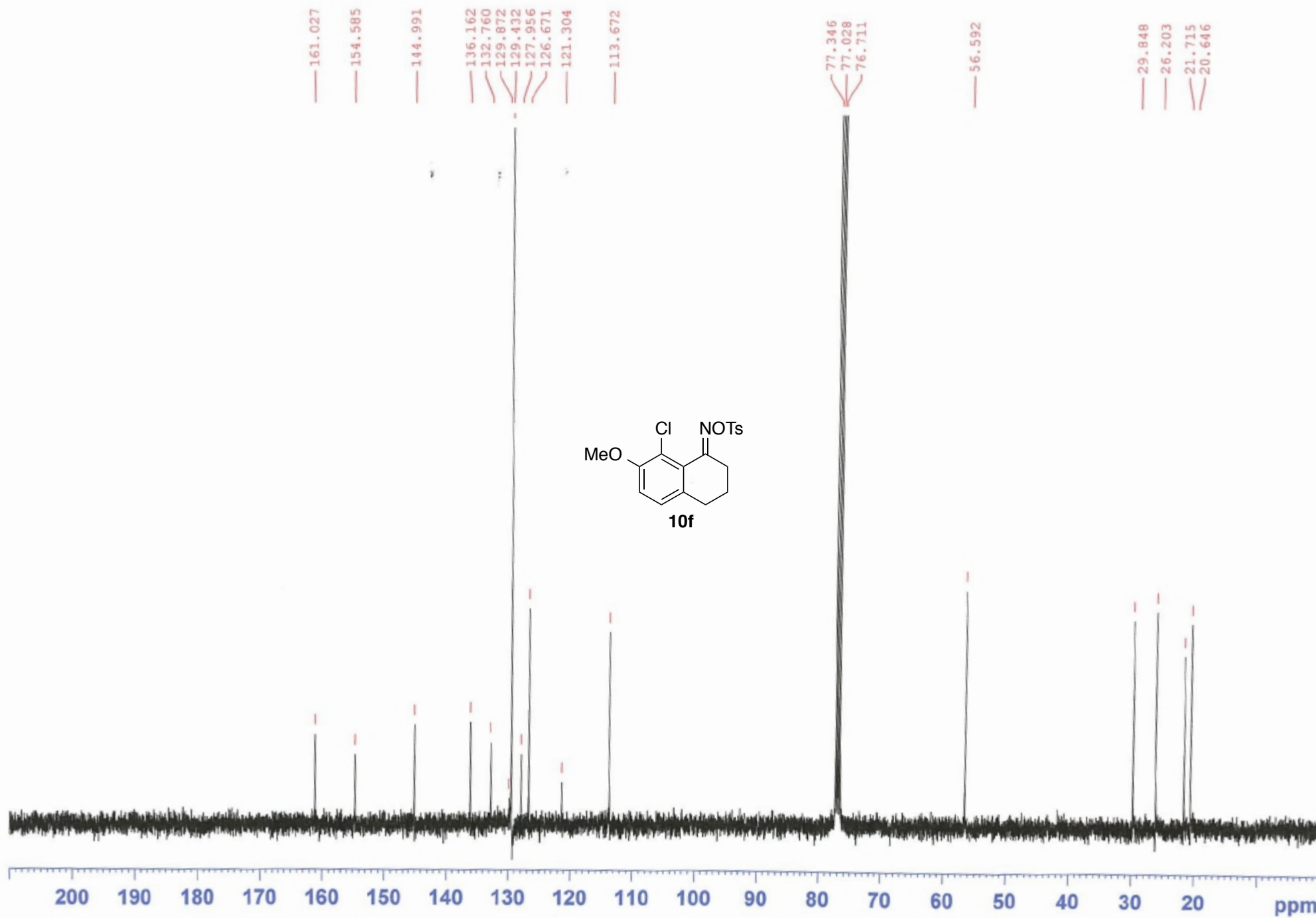


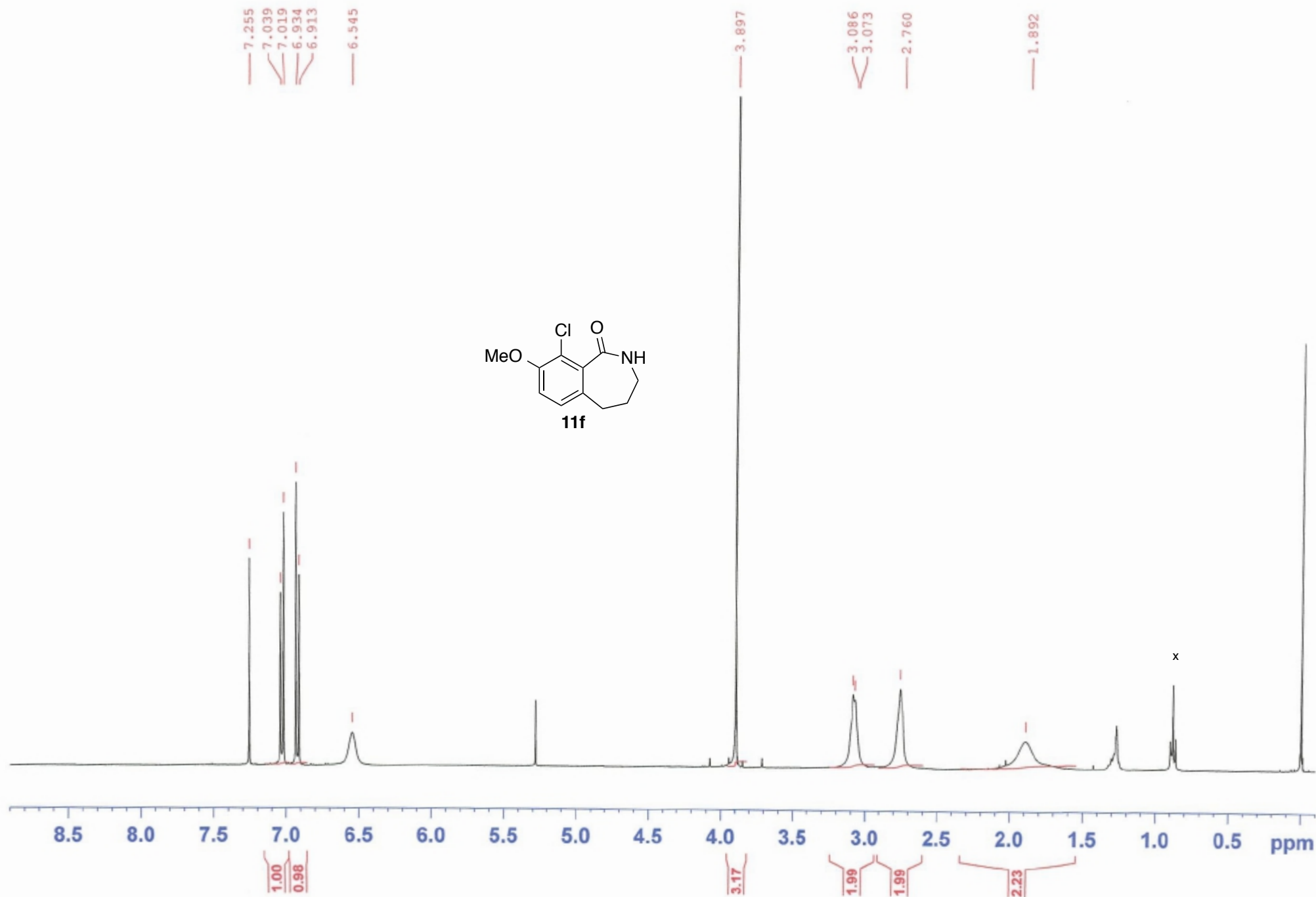
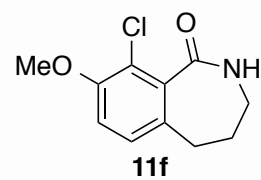


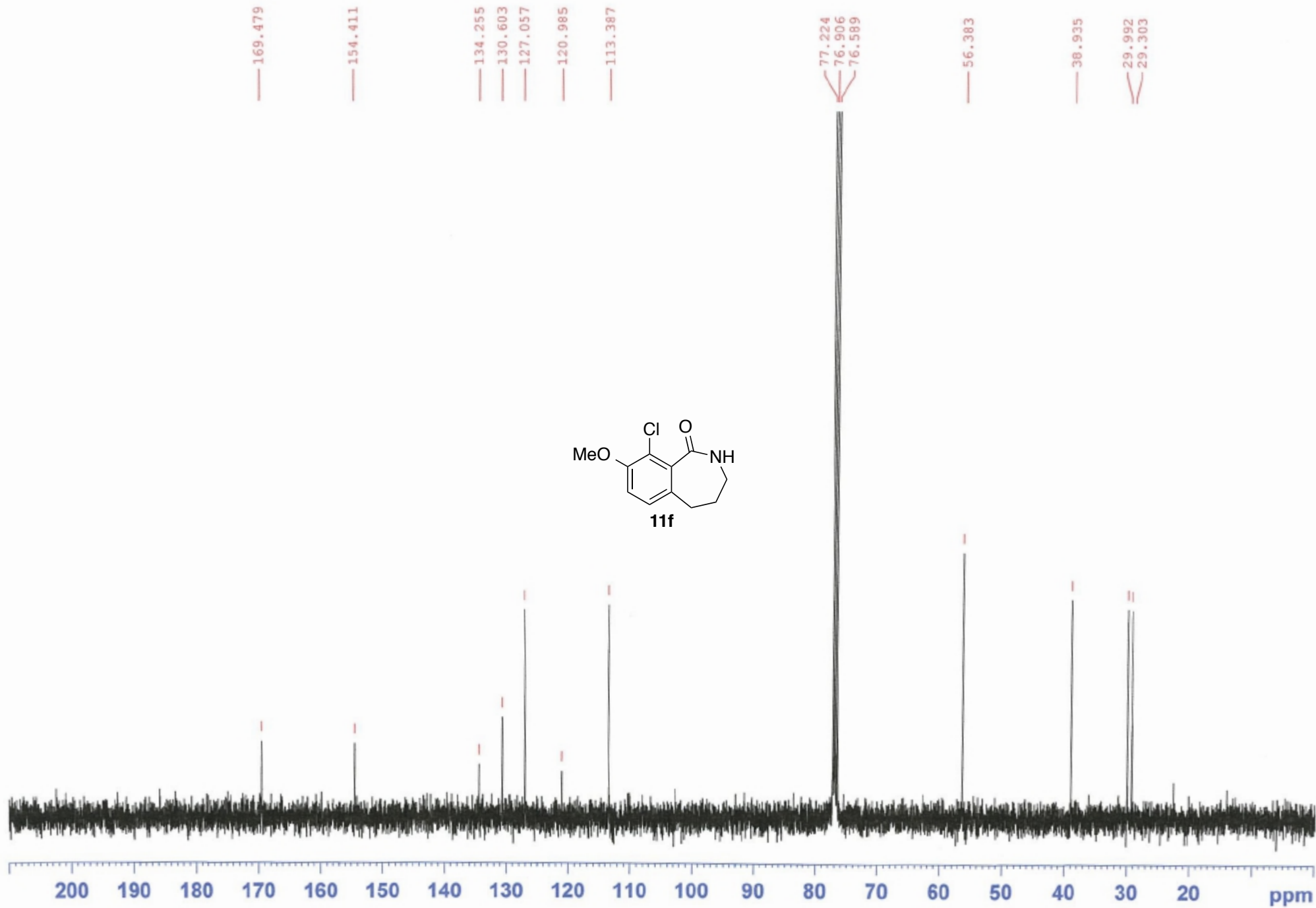
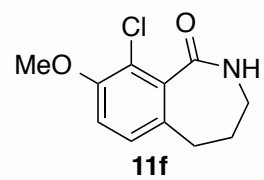


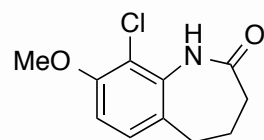




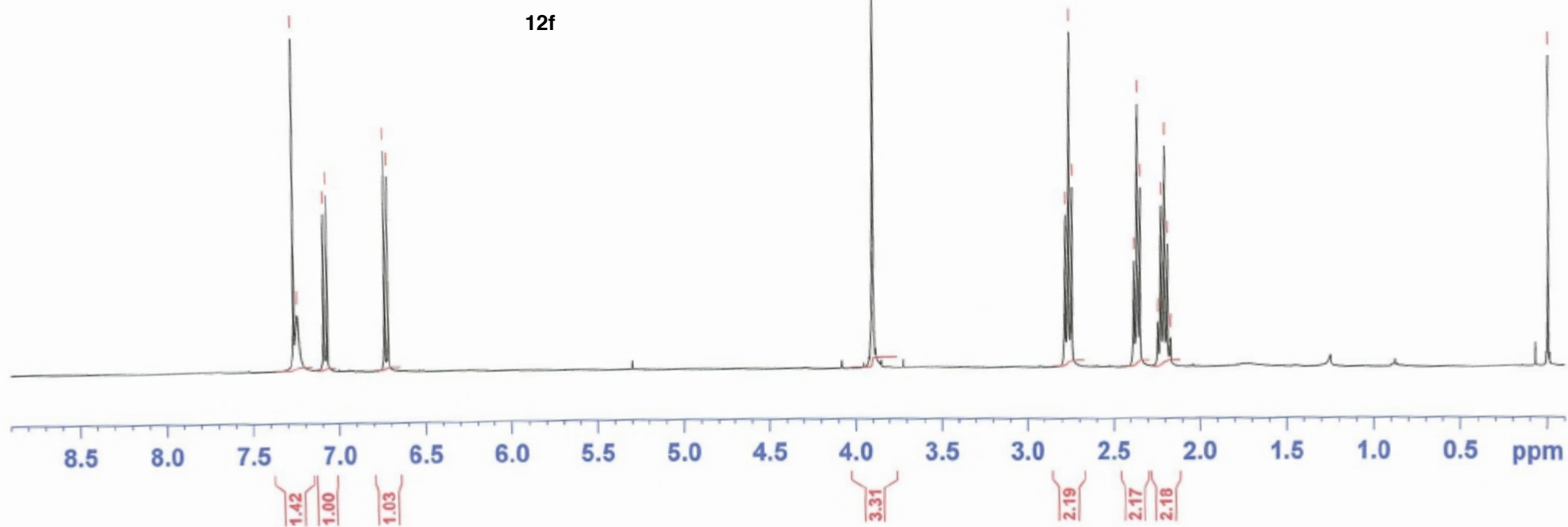


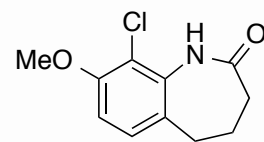




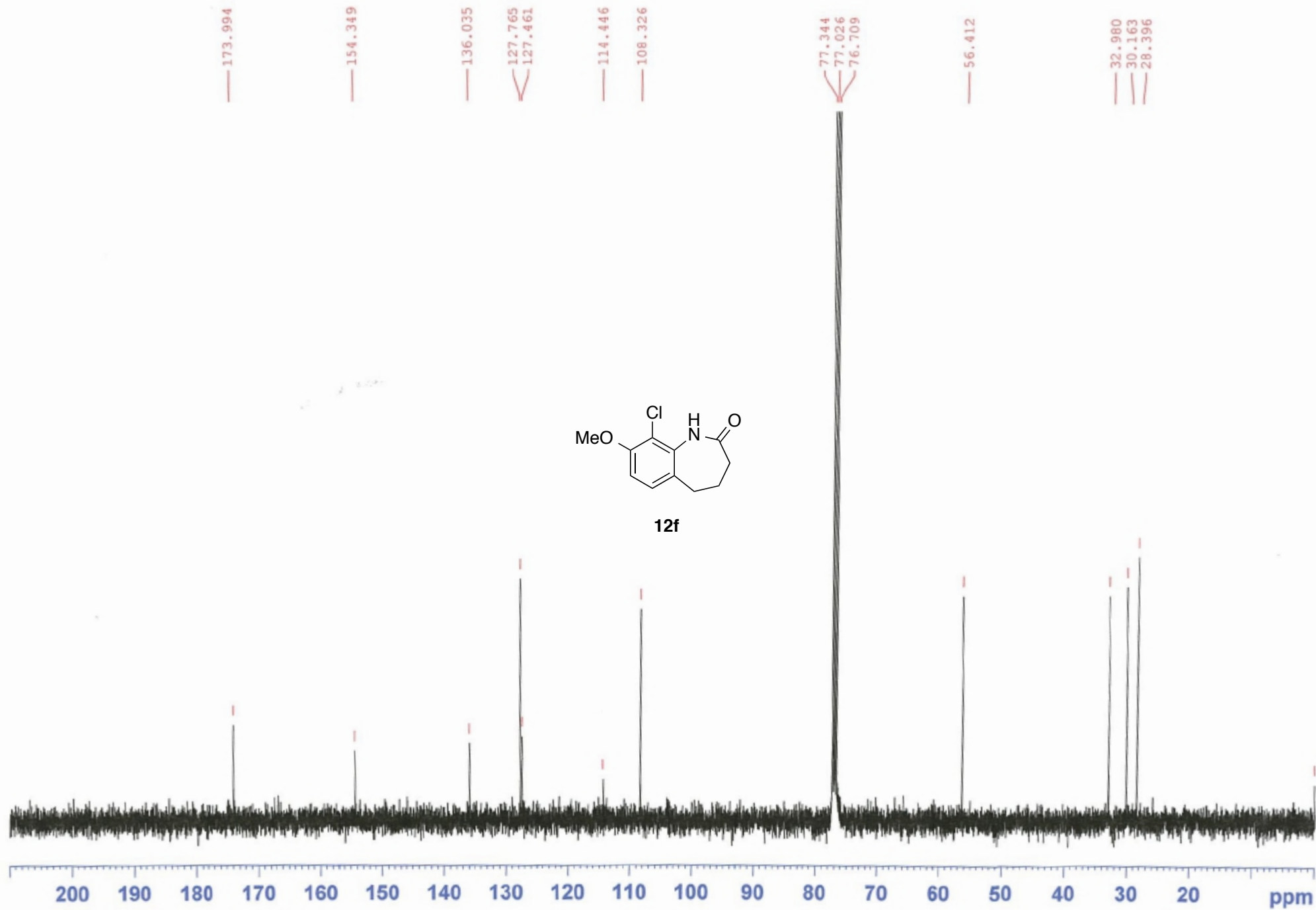


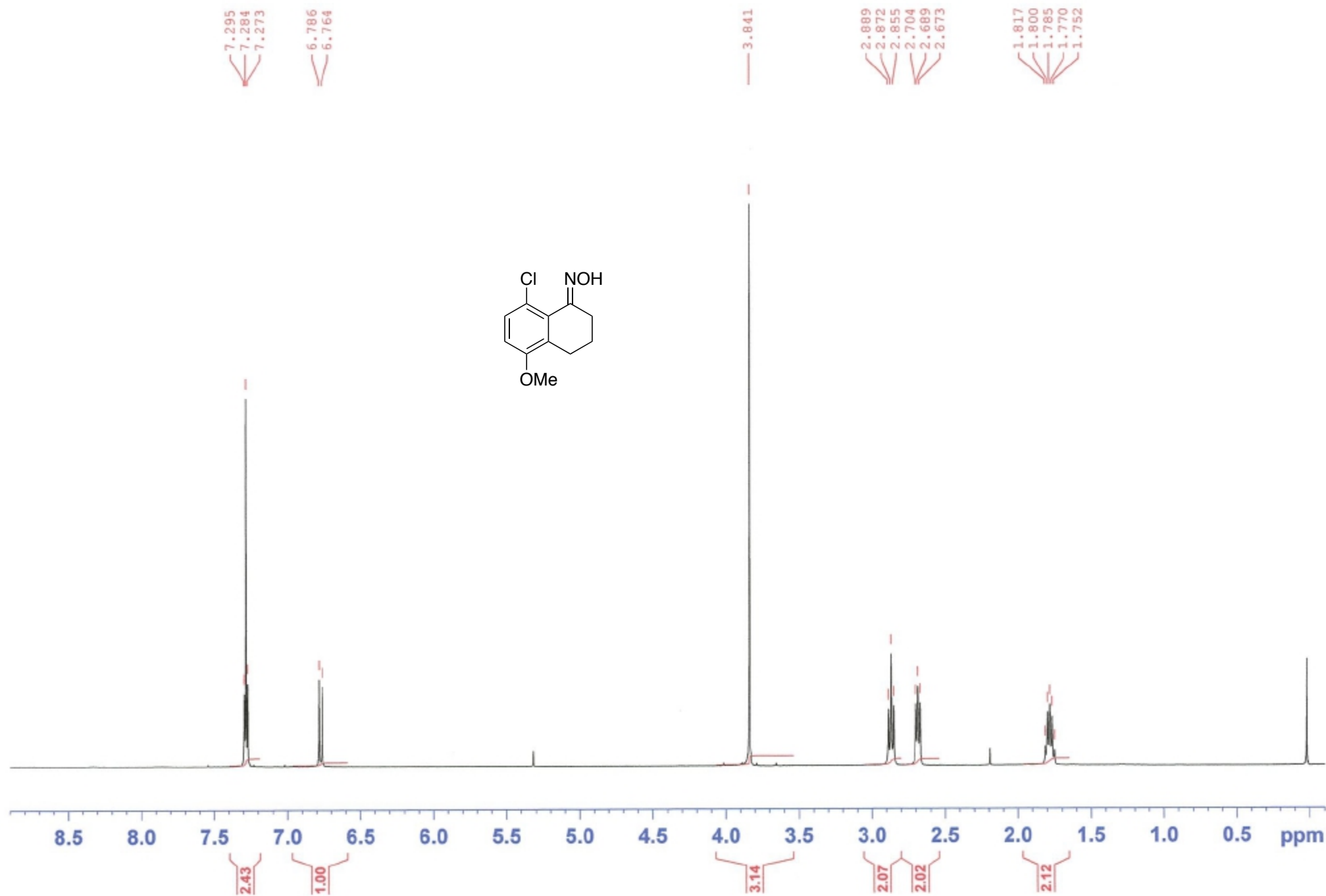
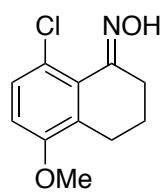
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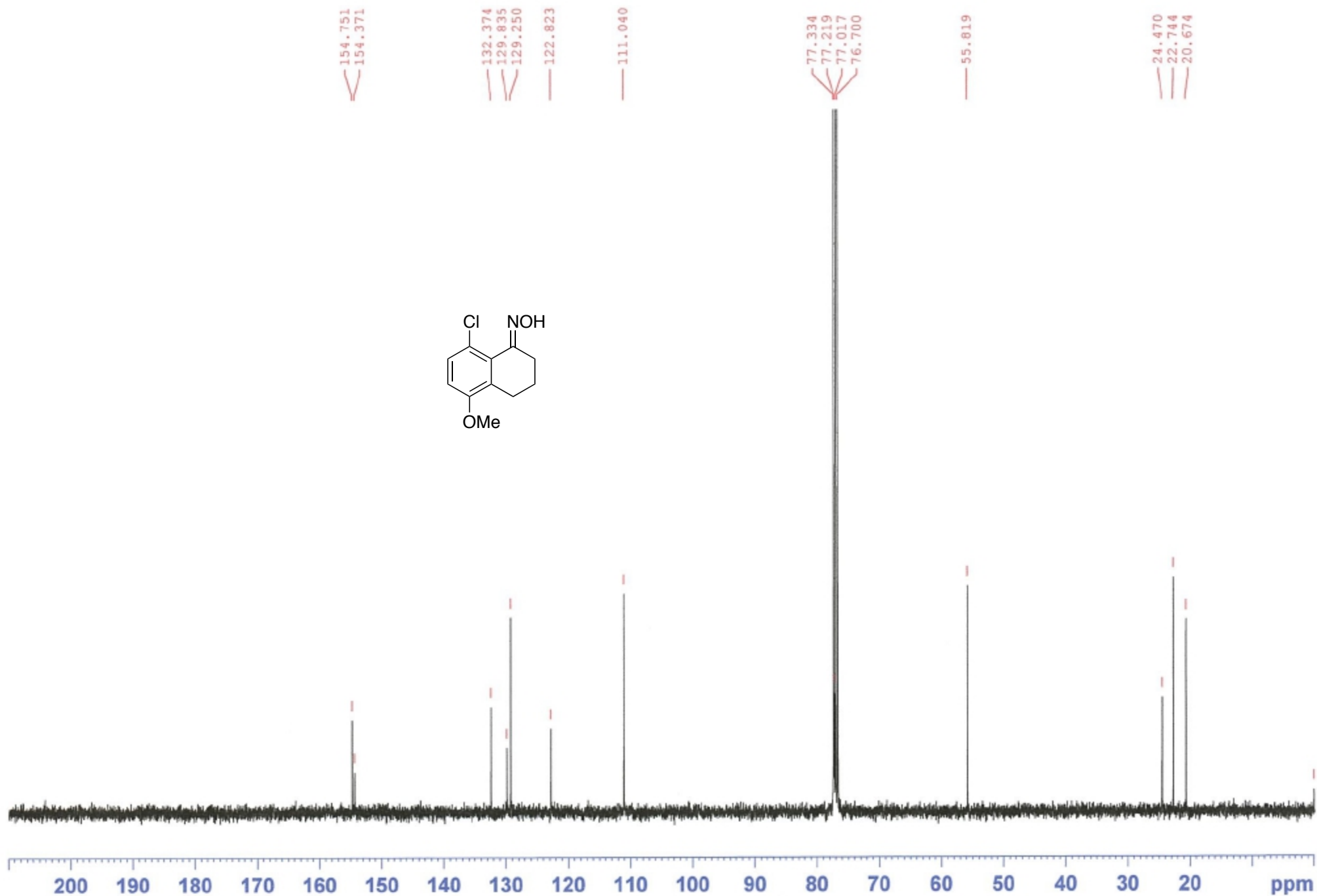
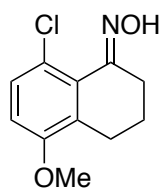


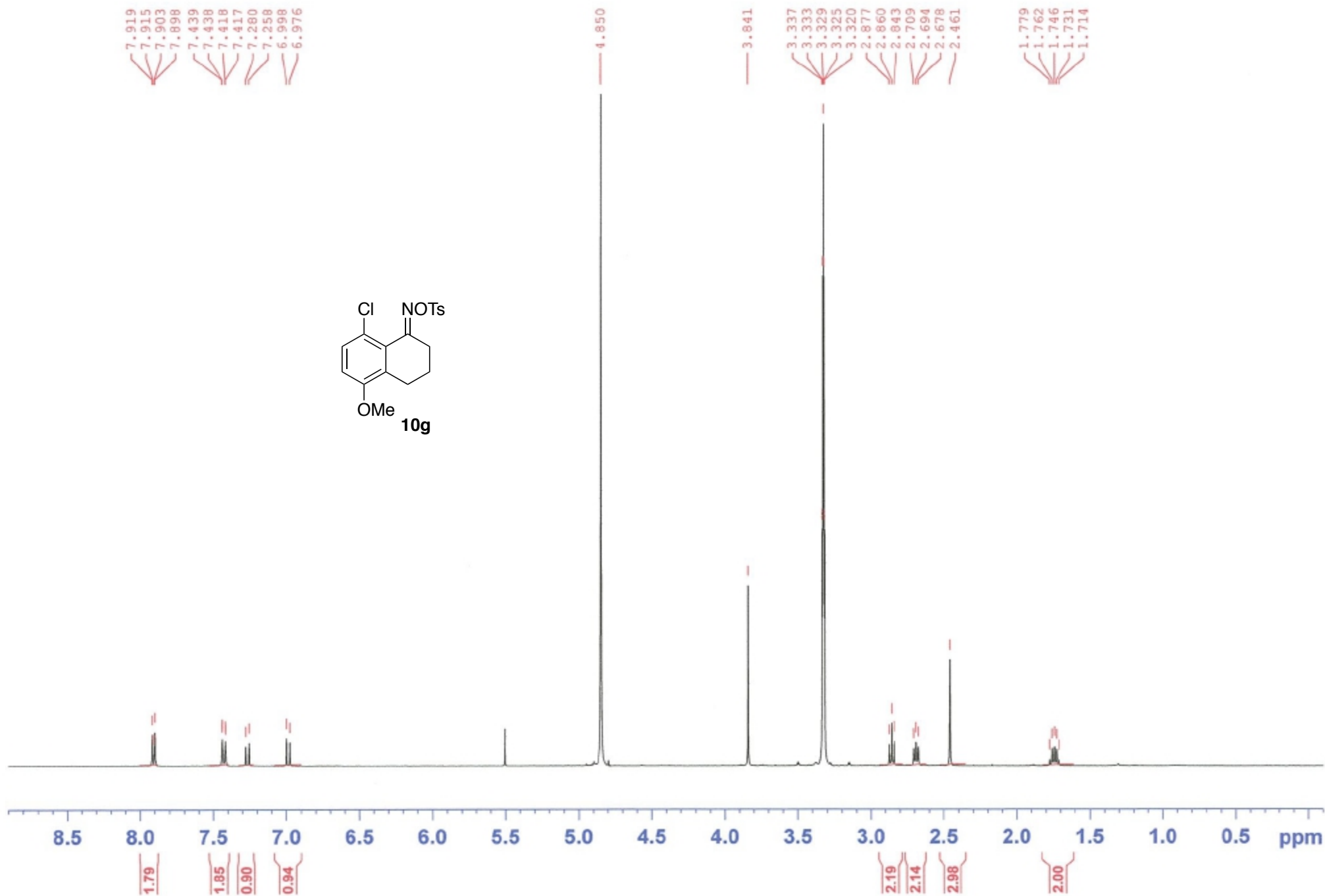
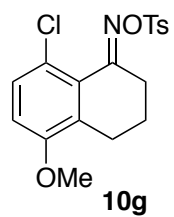


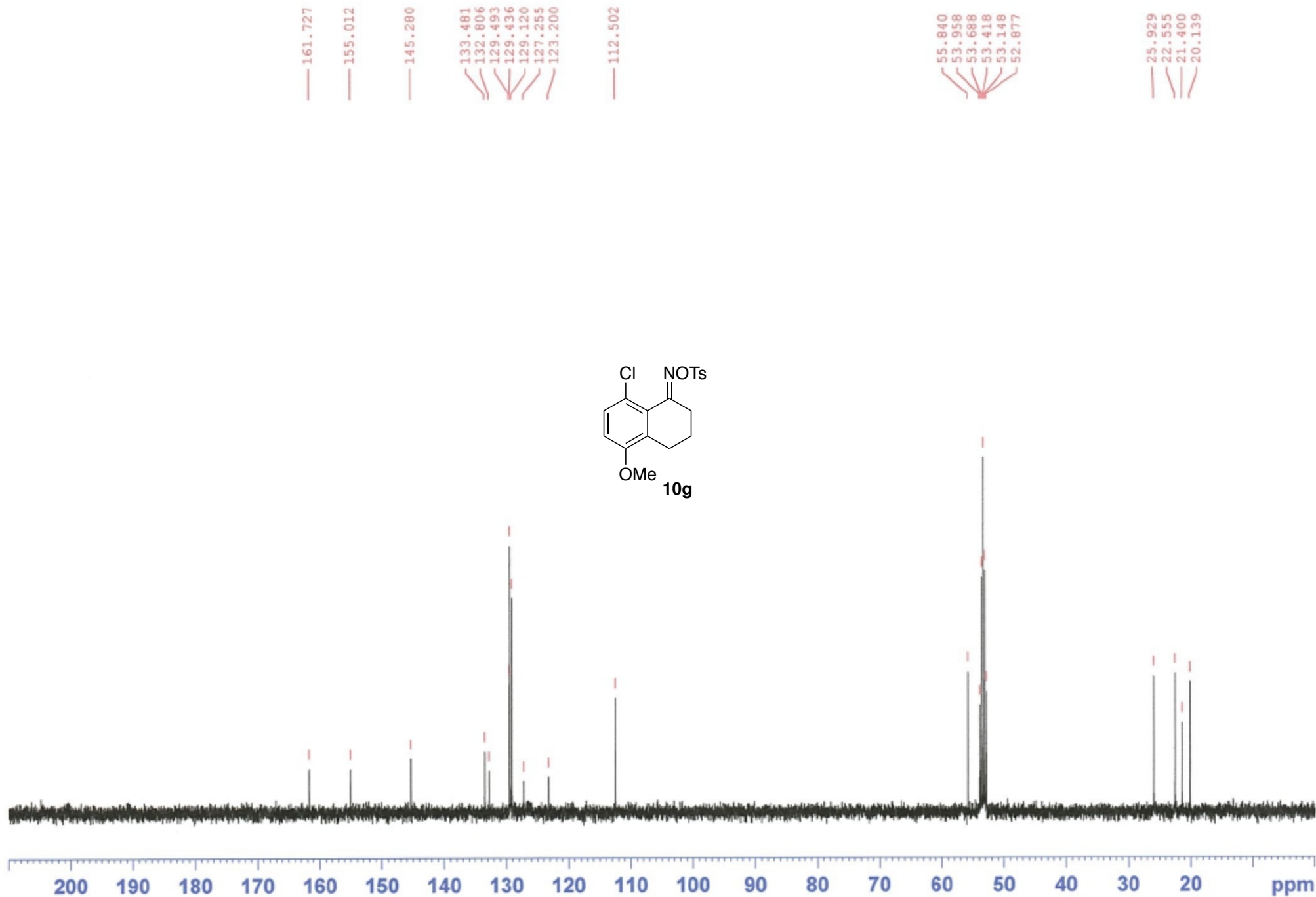
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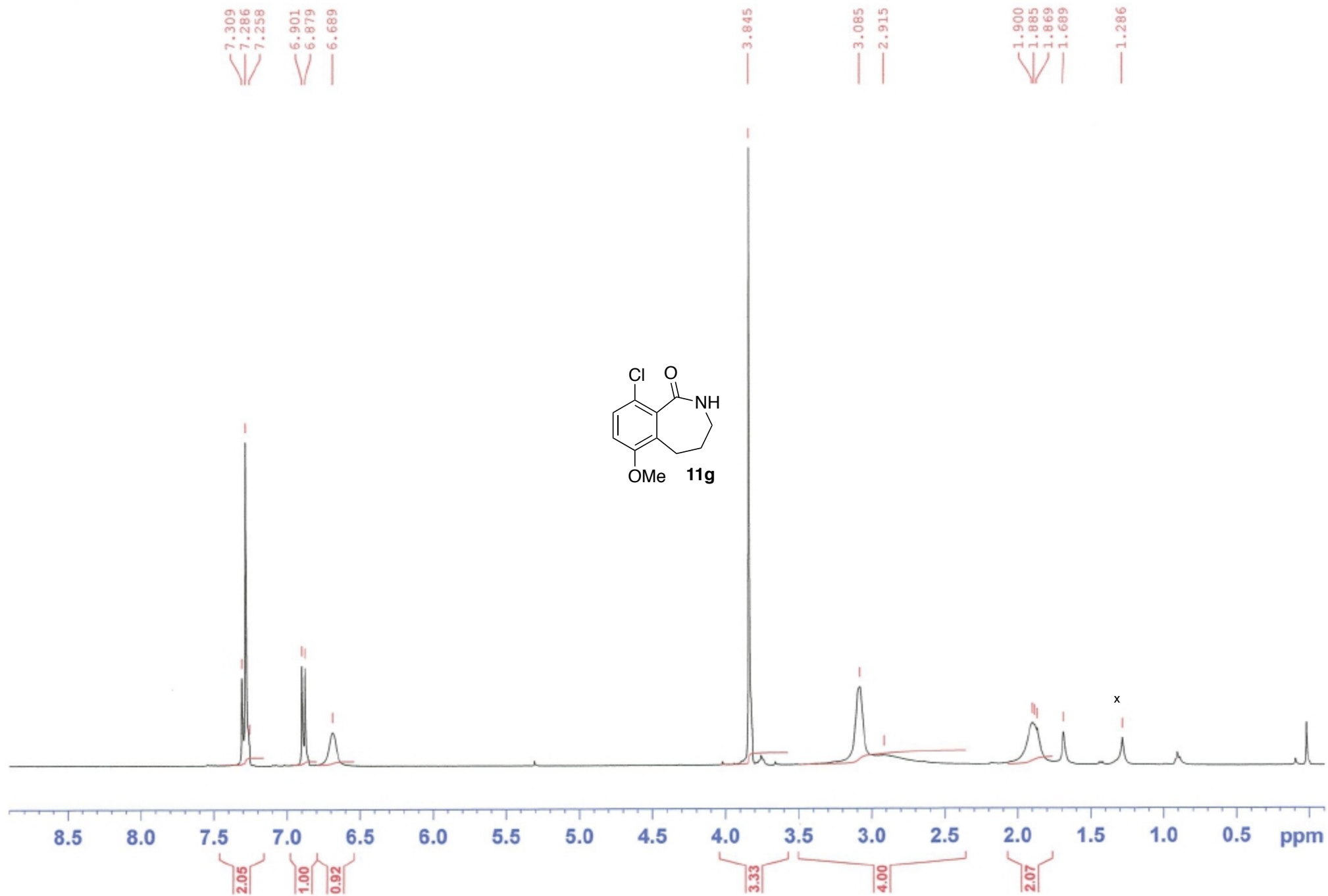
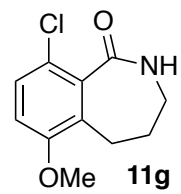


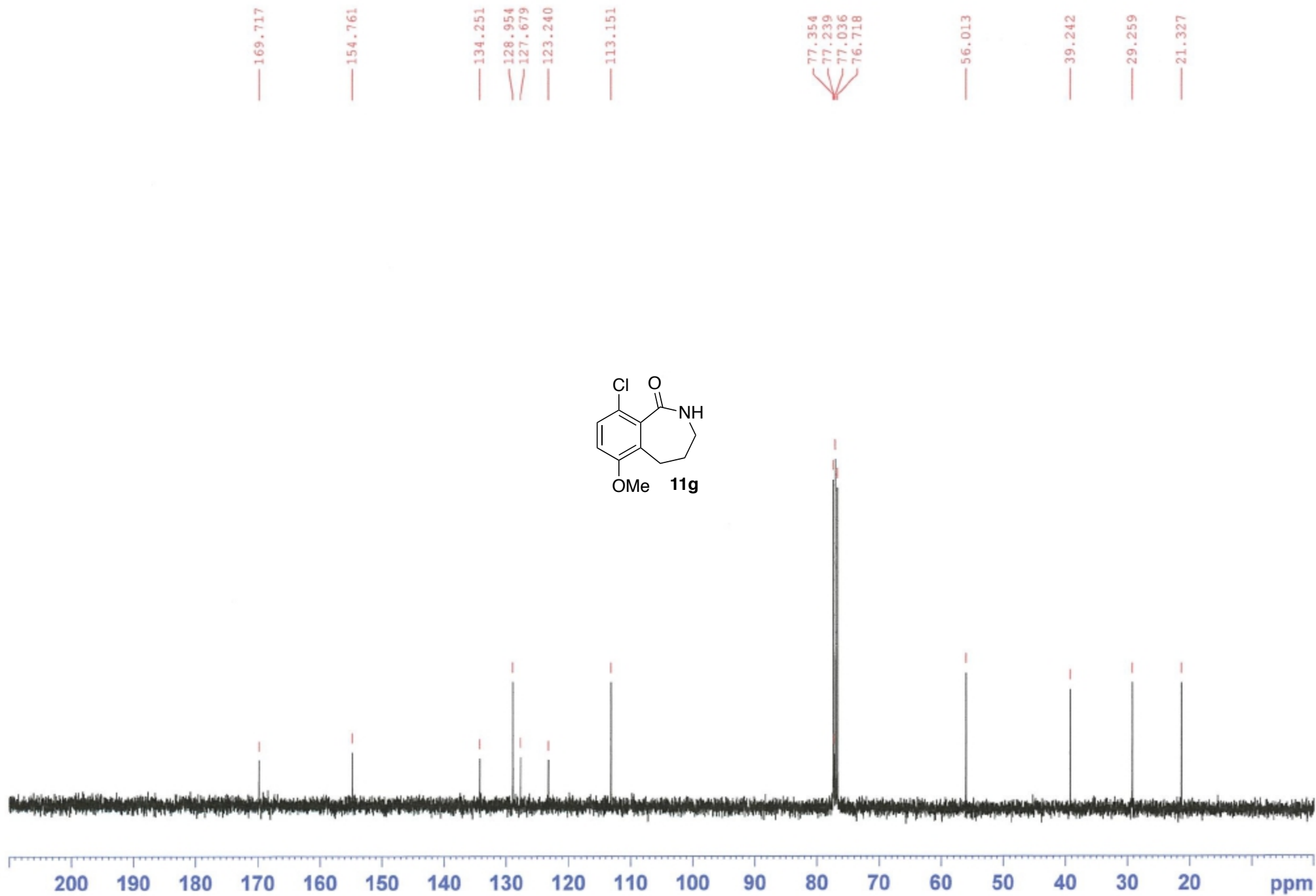
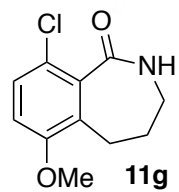


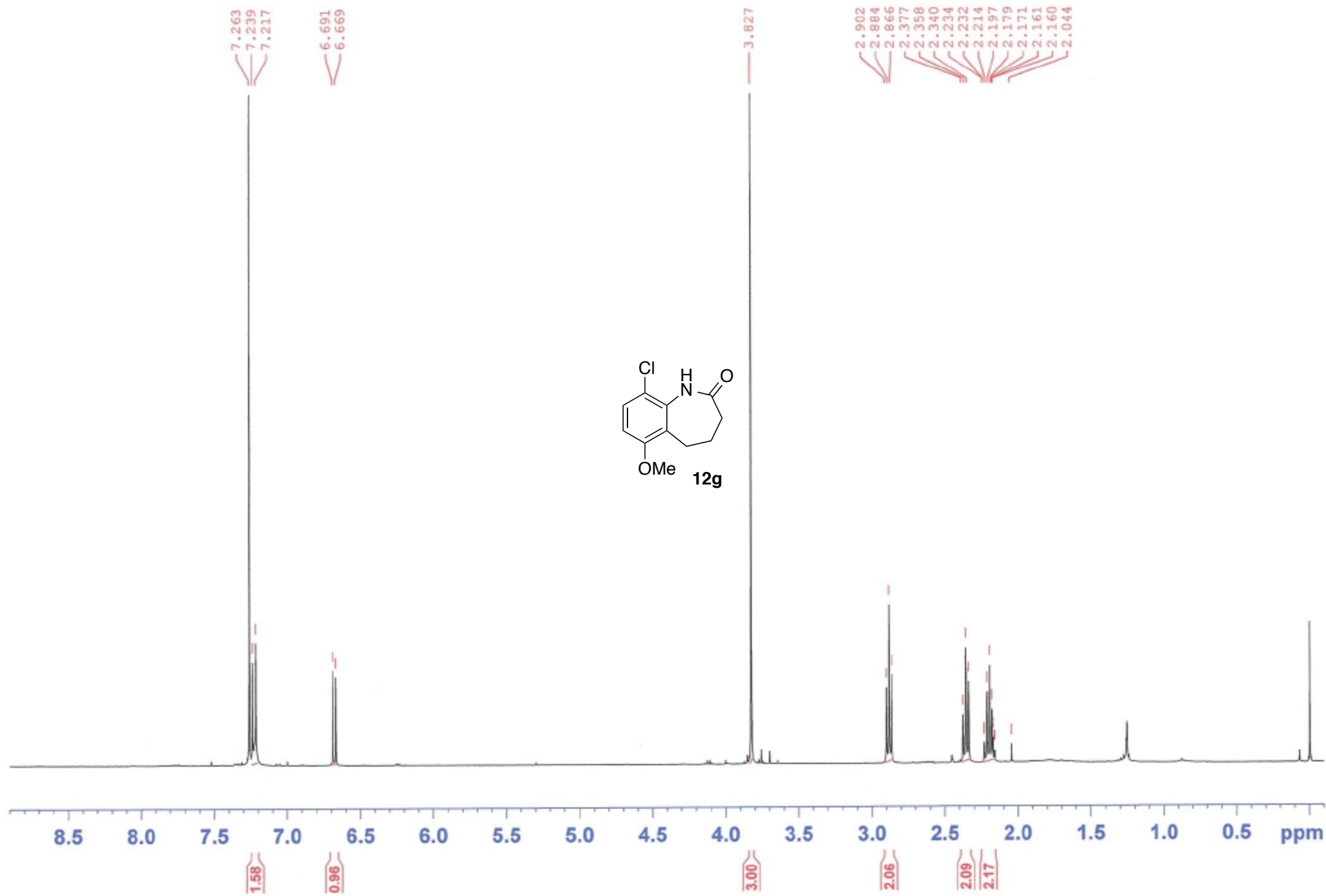
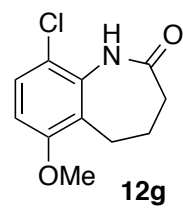


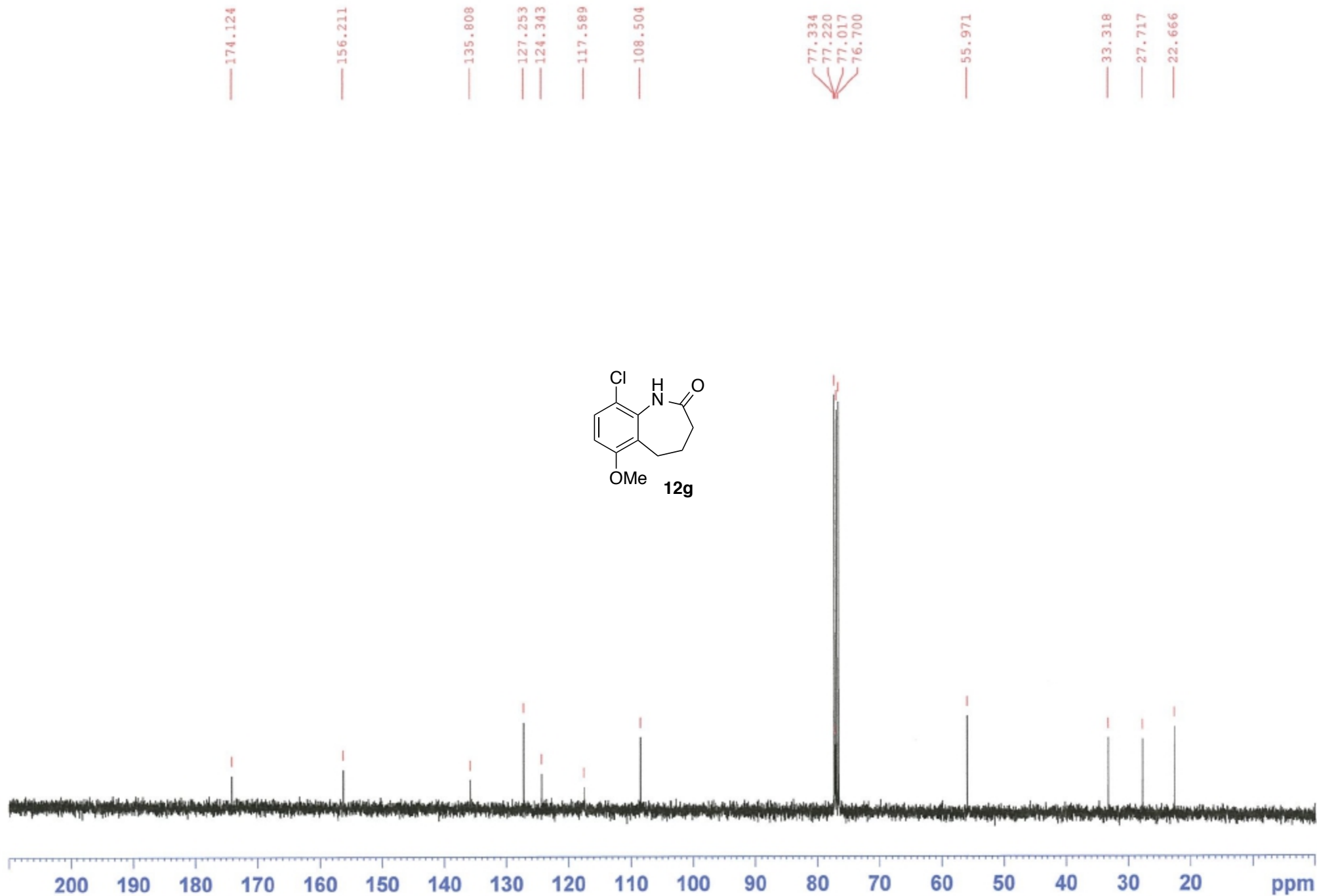
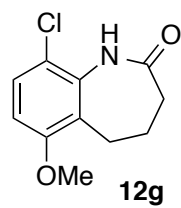


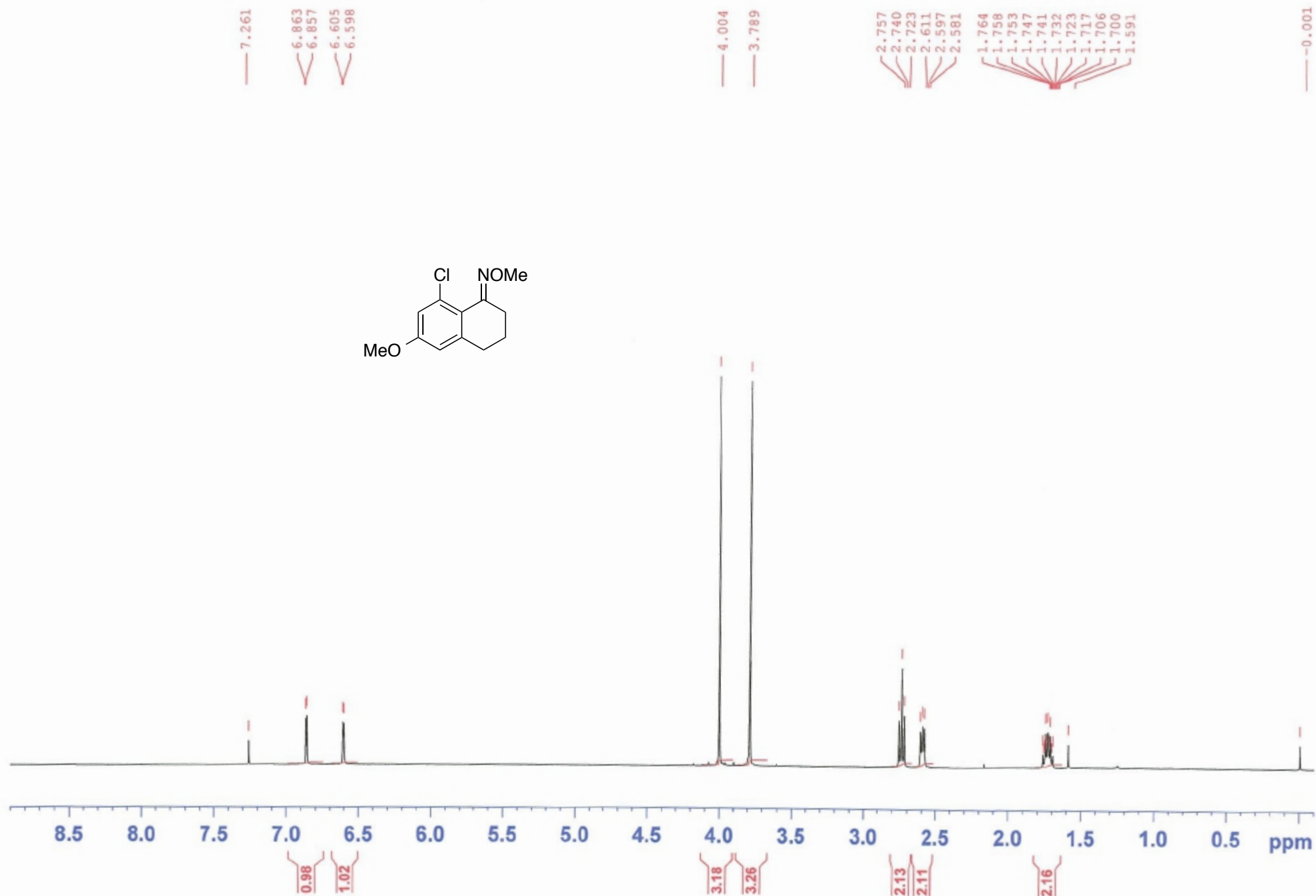
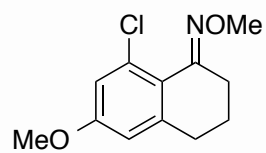


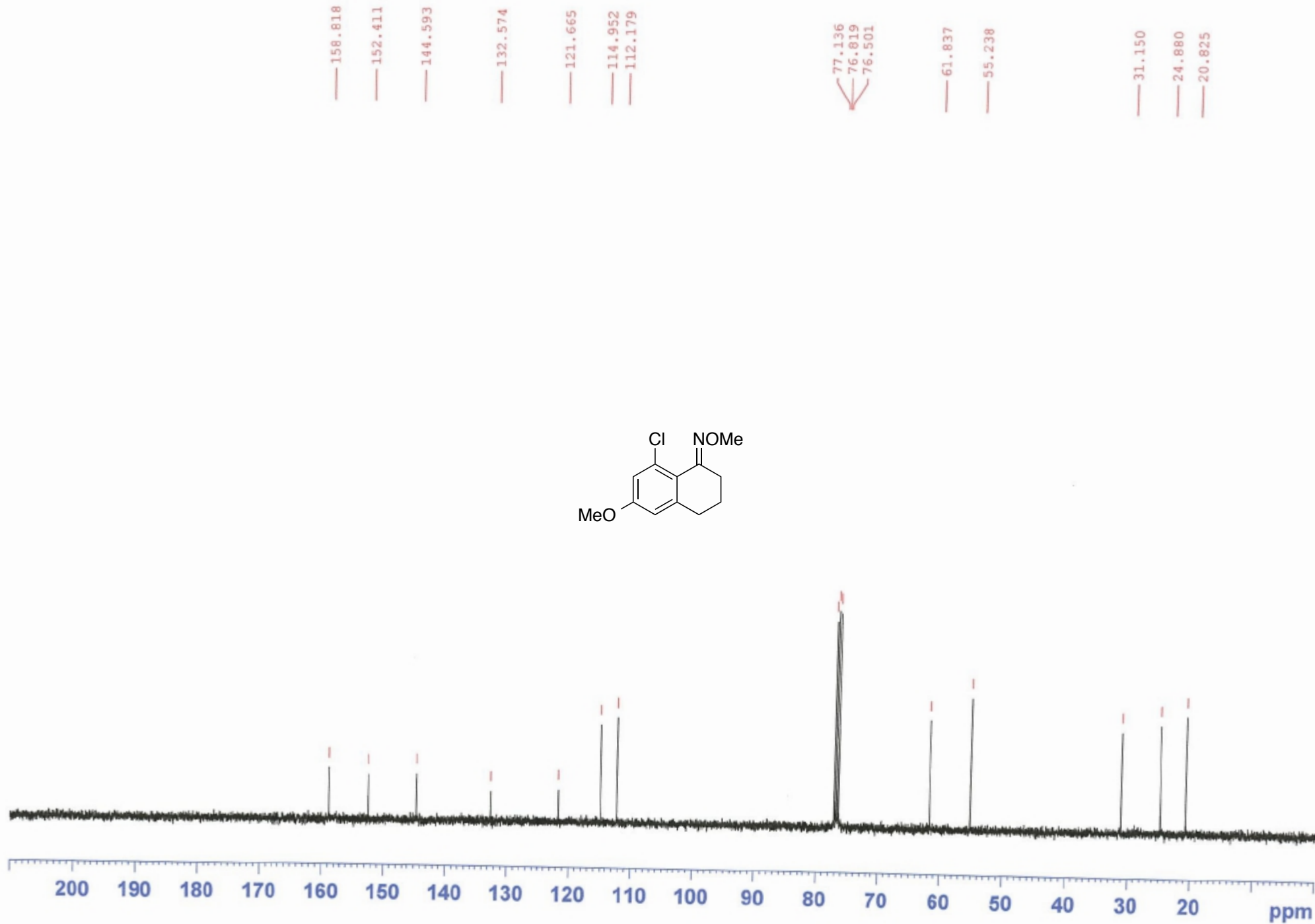
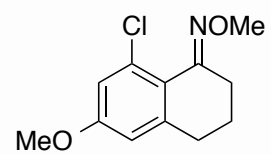


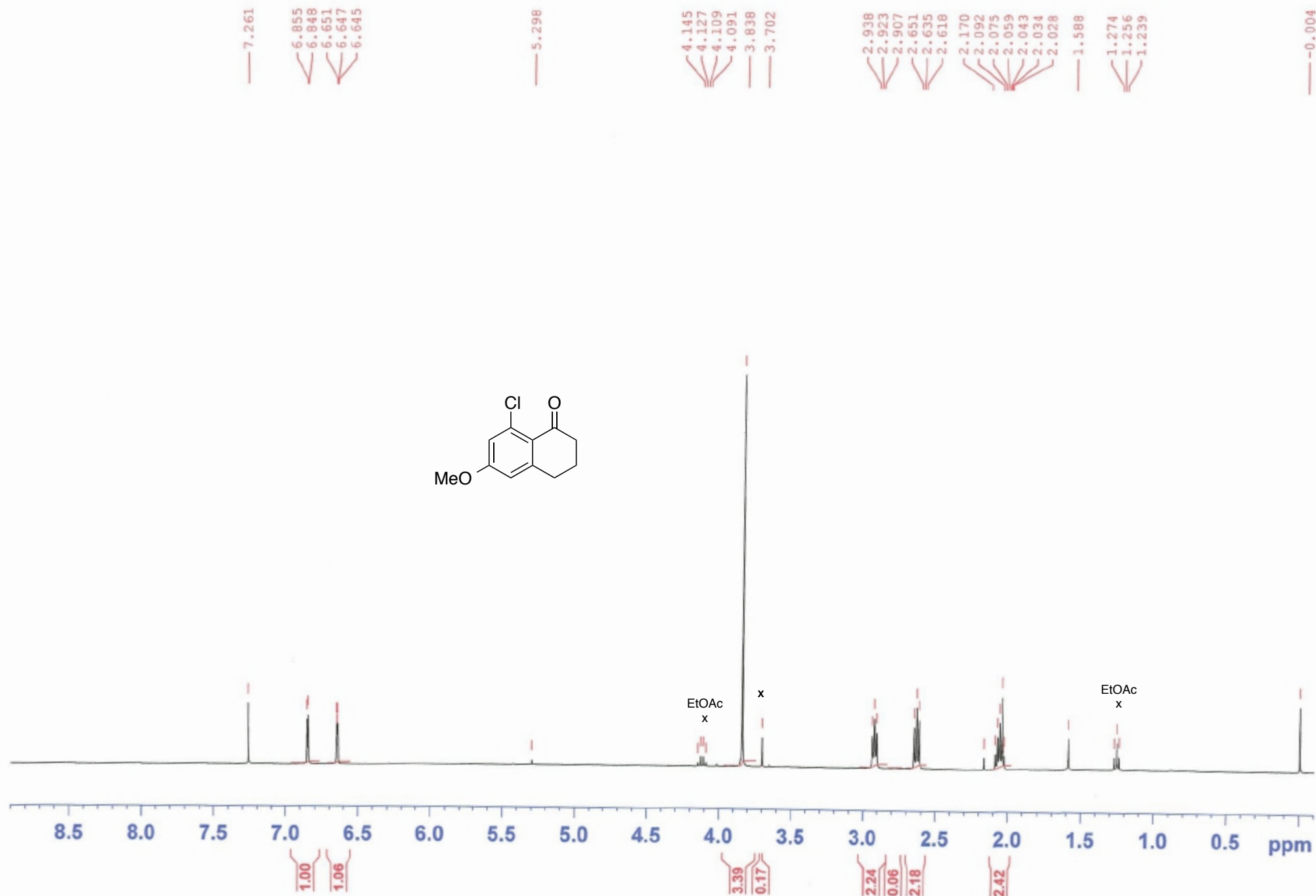
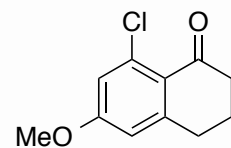


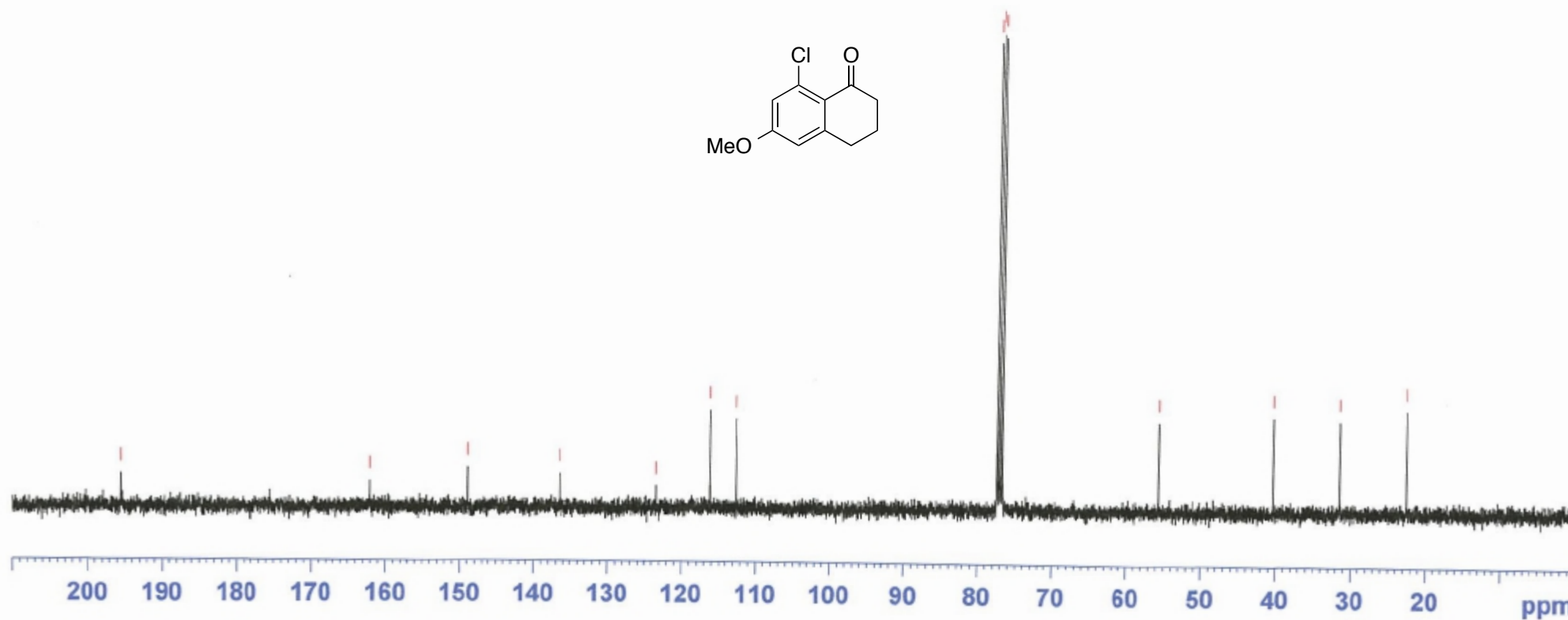
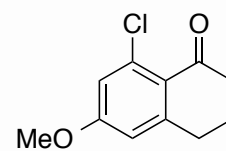












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136.500

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116.237

112.603

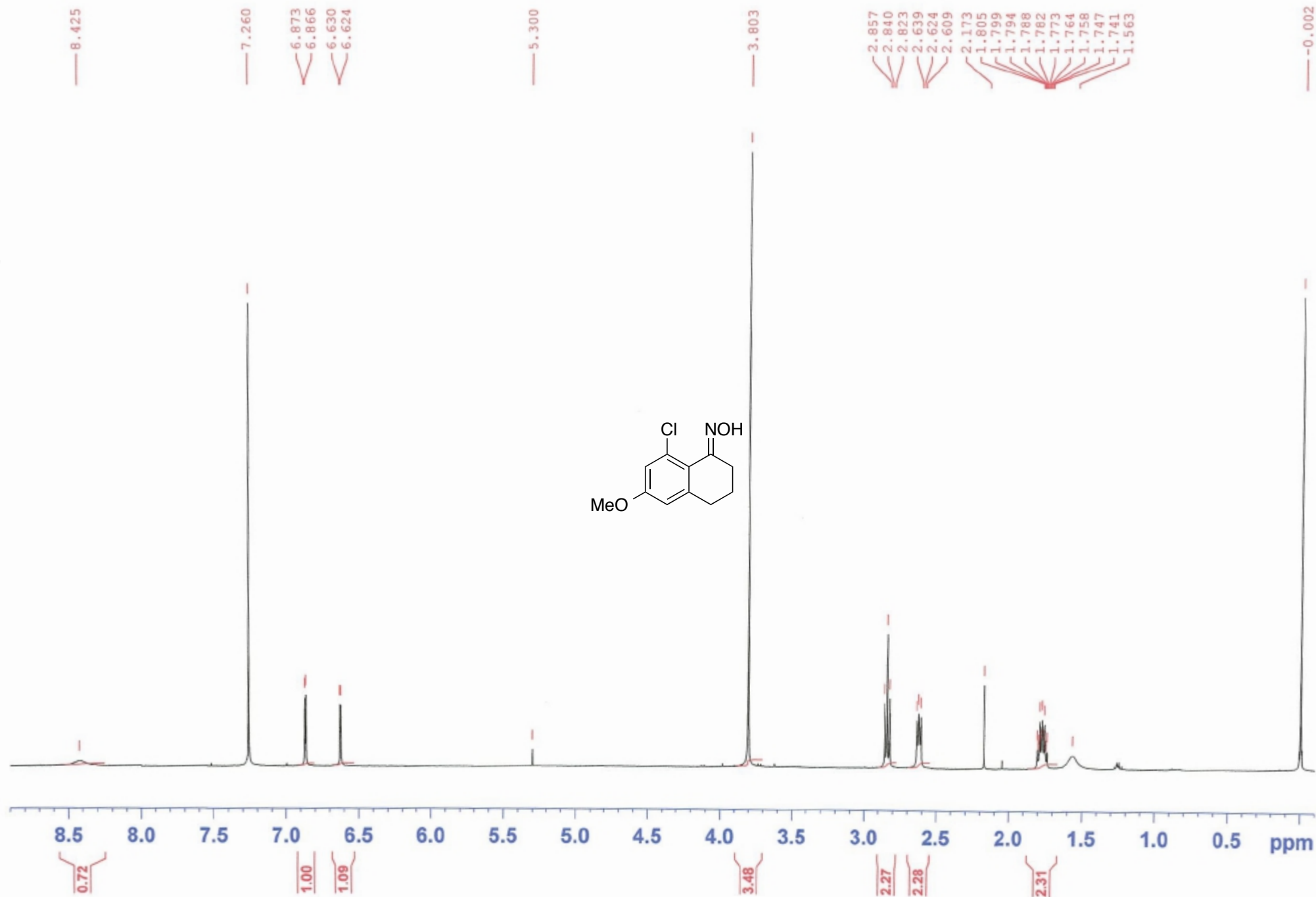
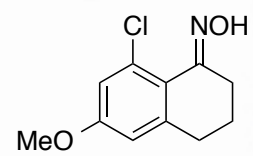
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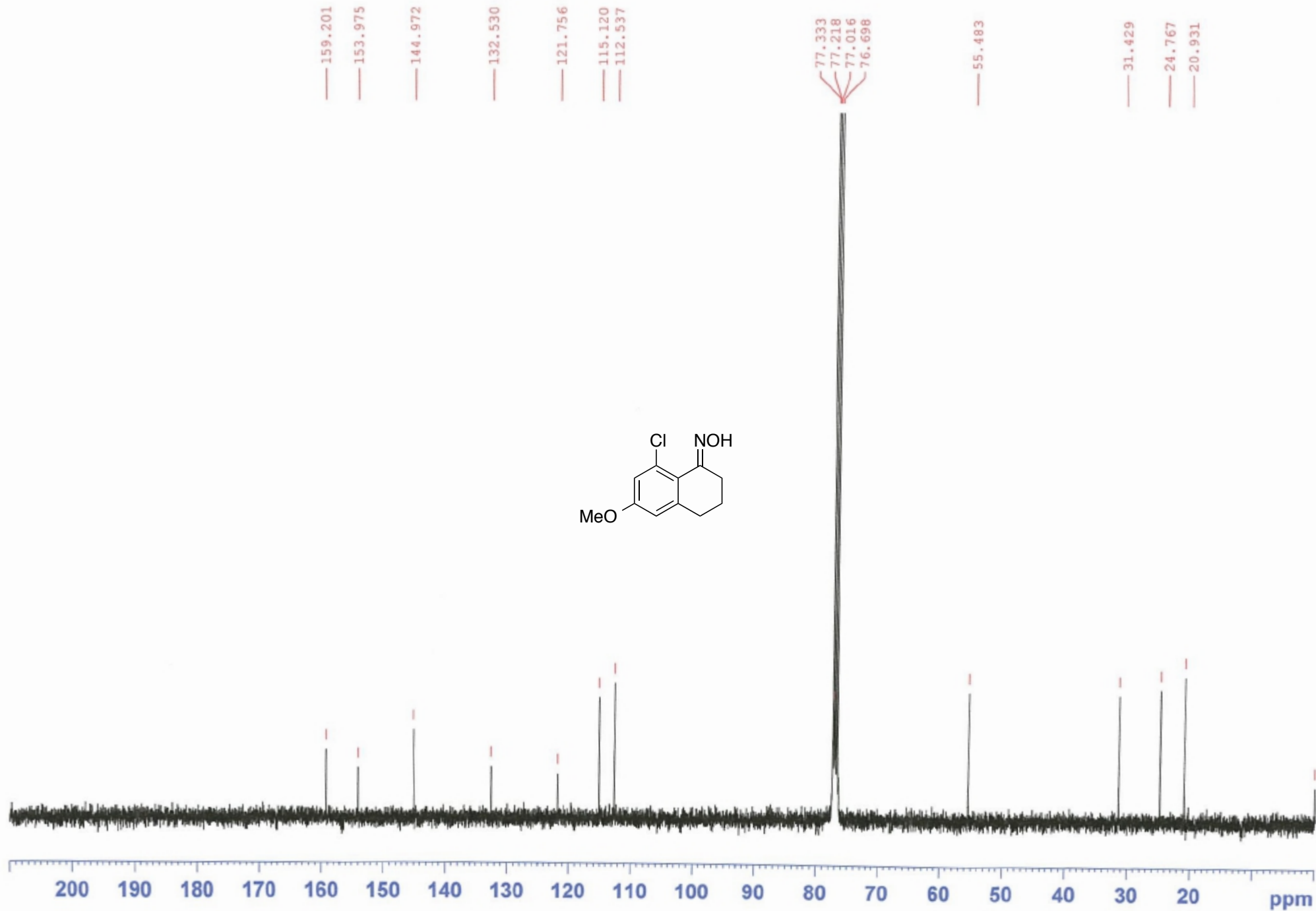
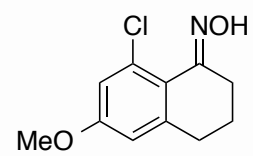
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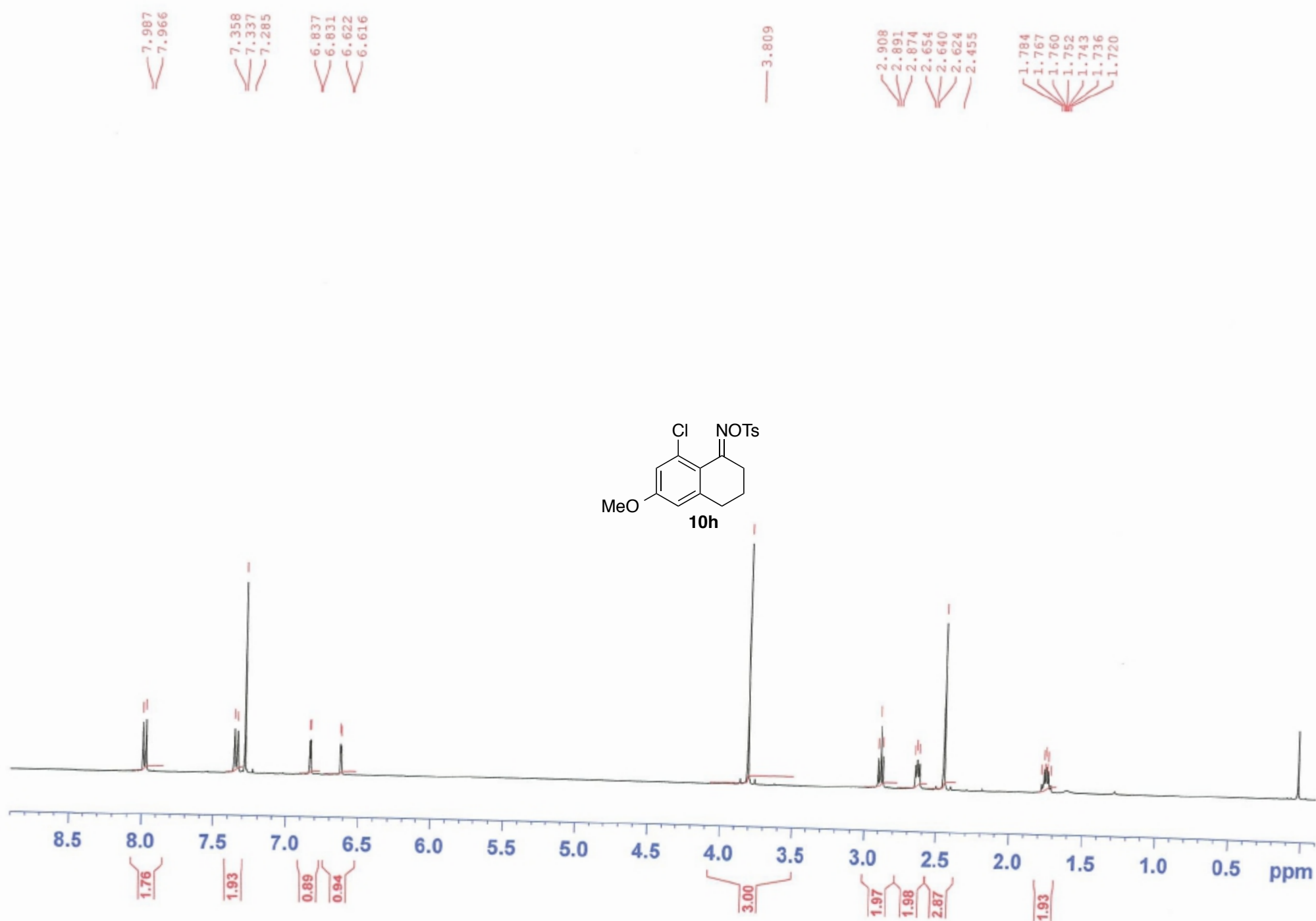
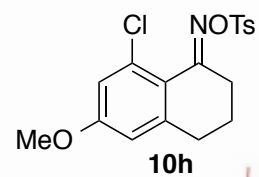
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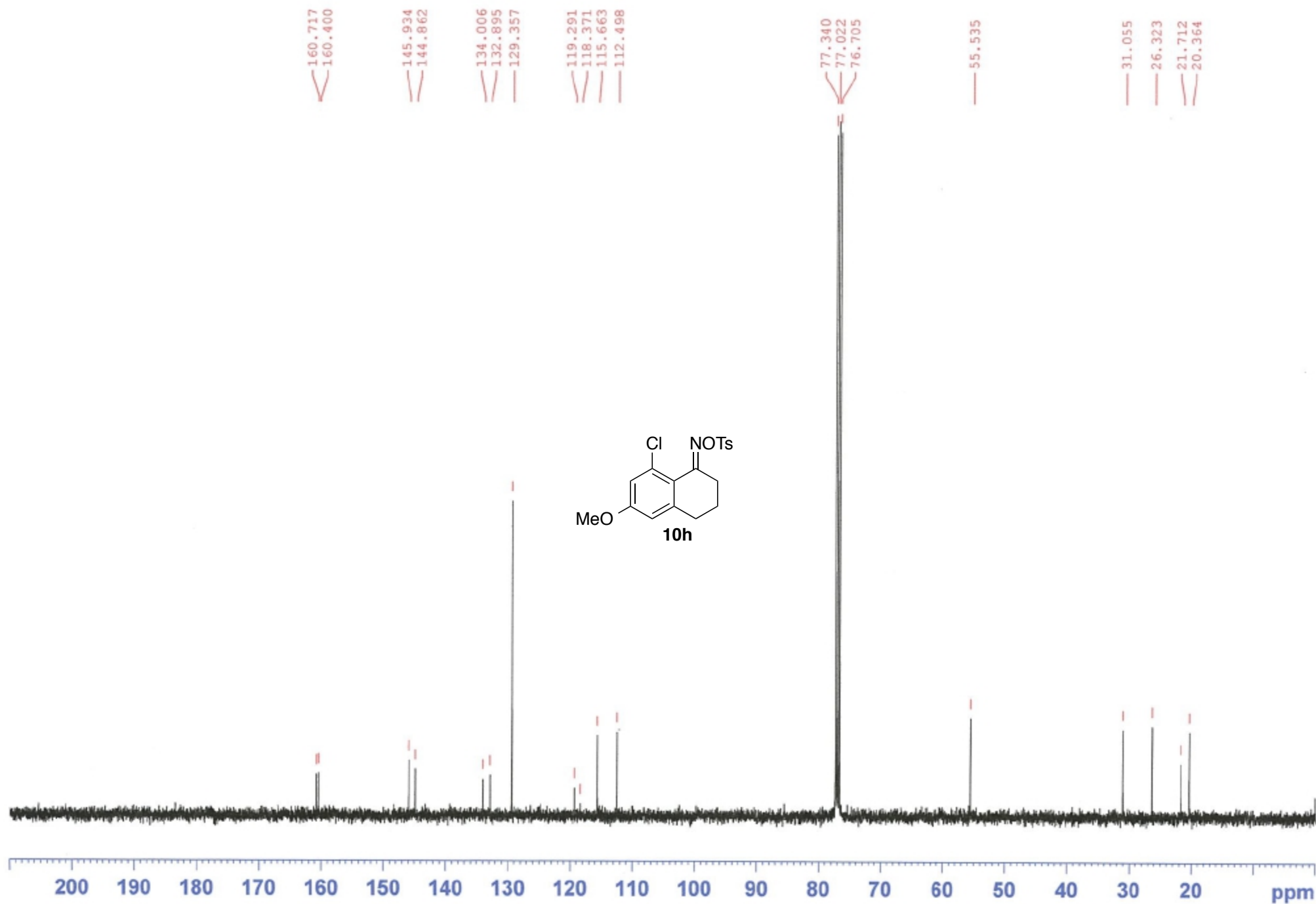
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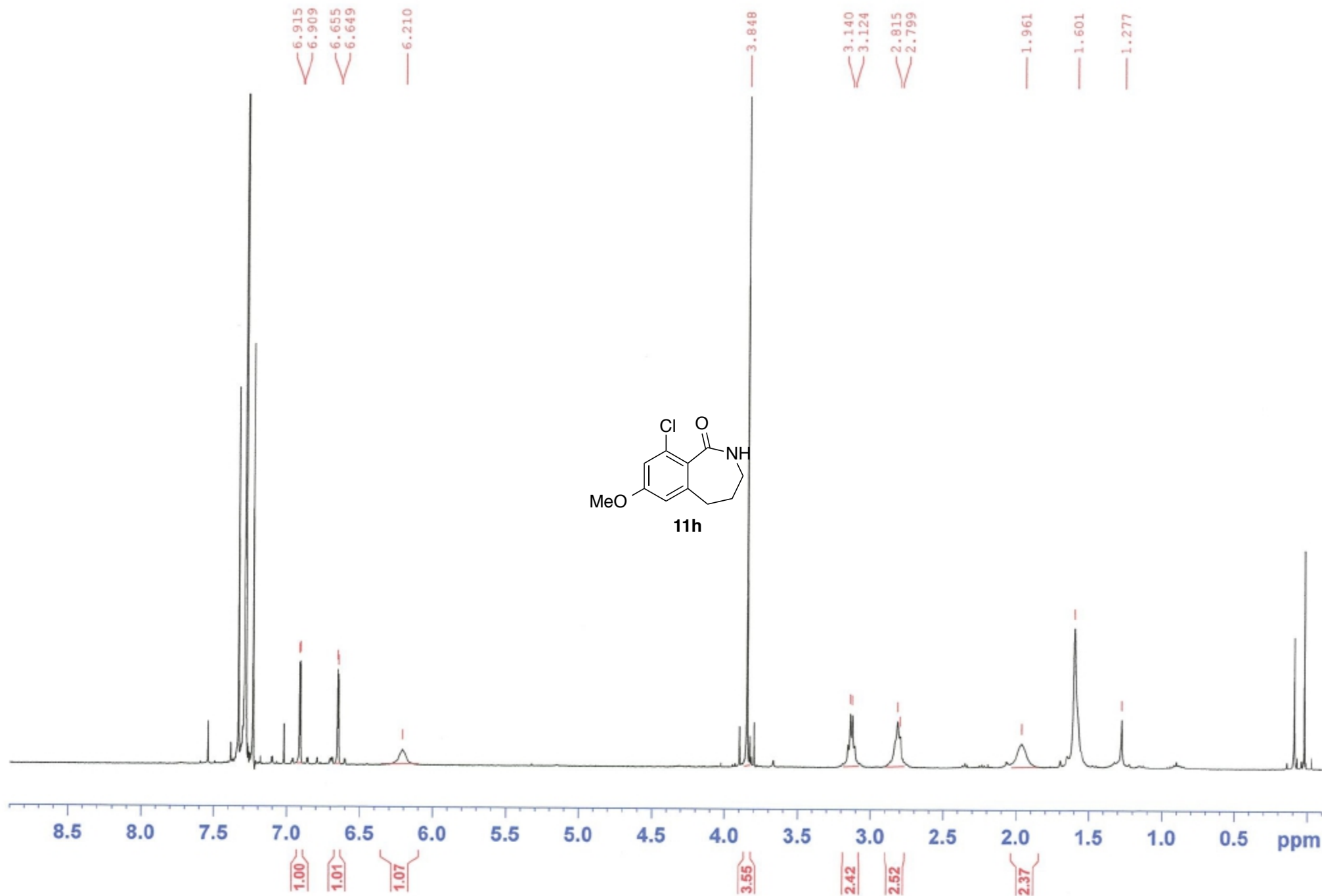
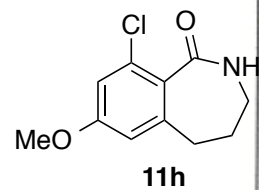
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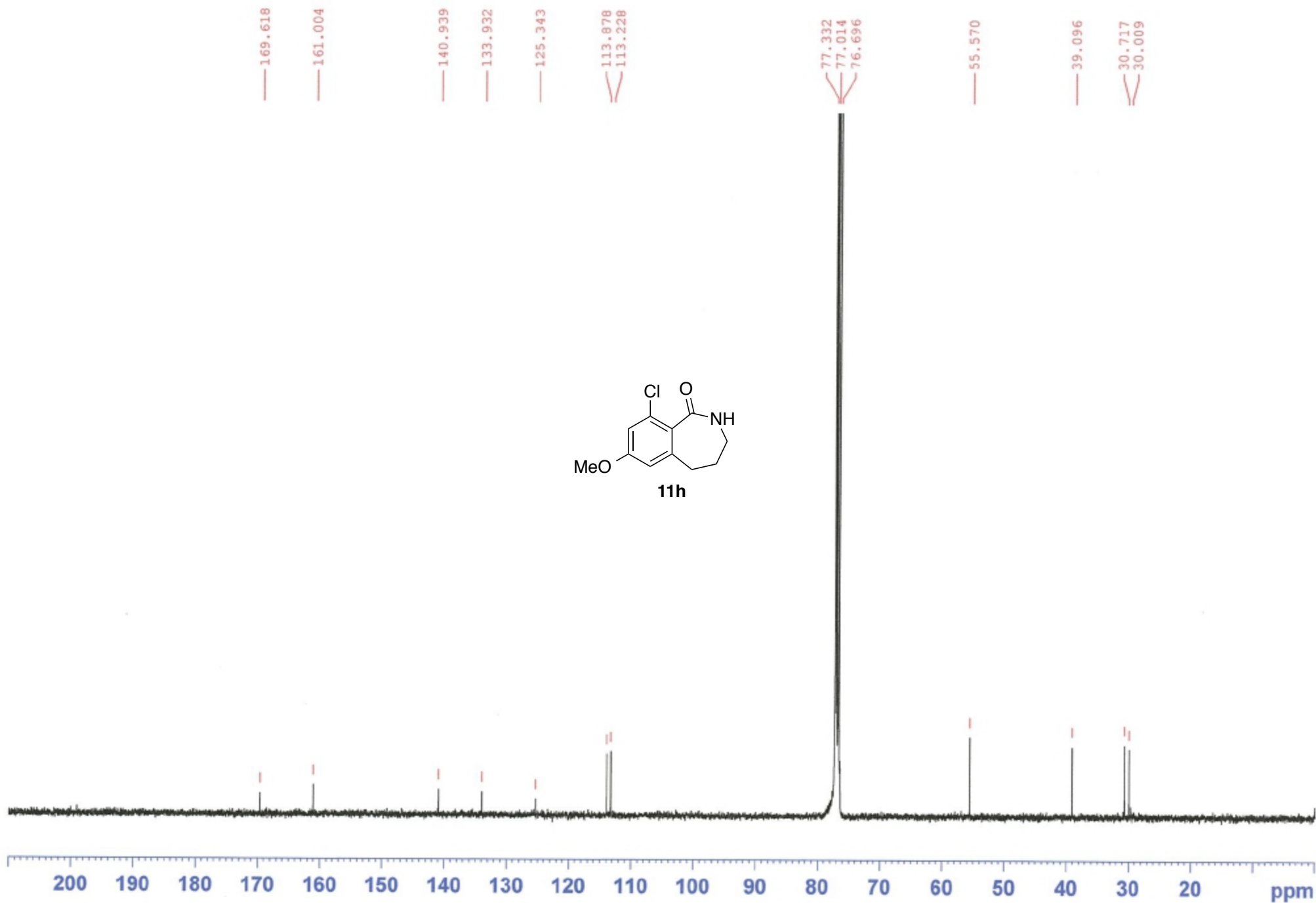
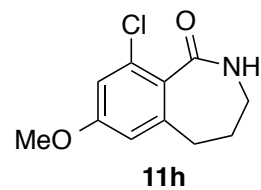


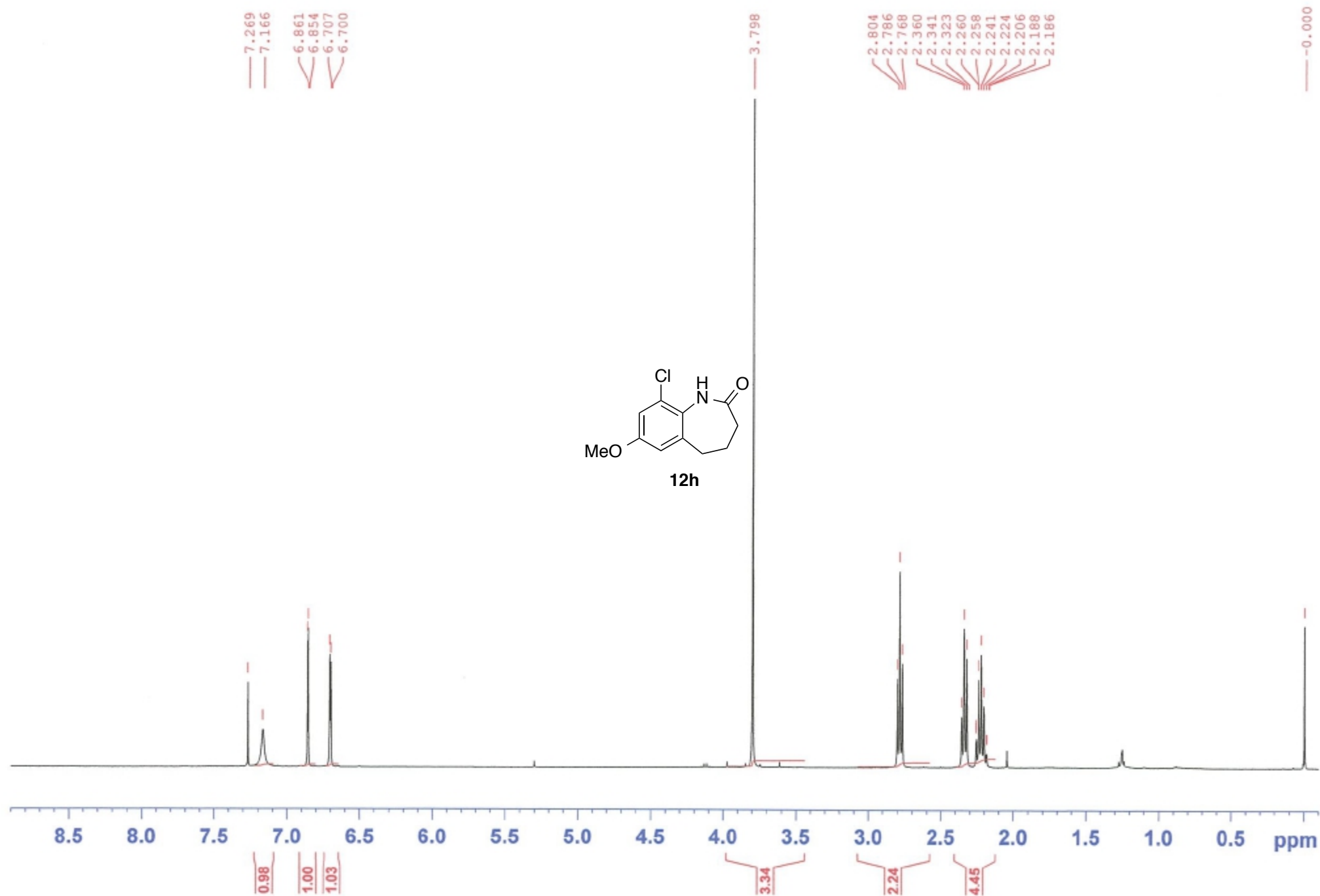
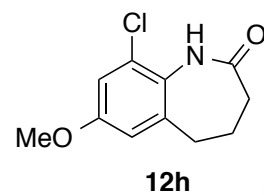


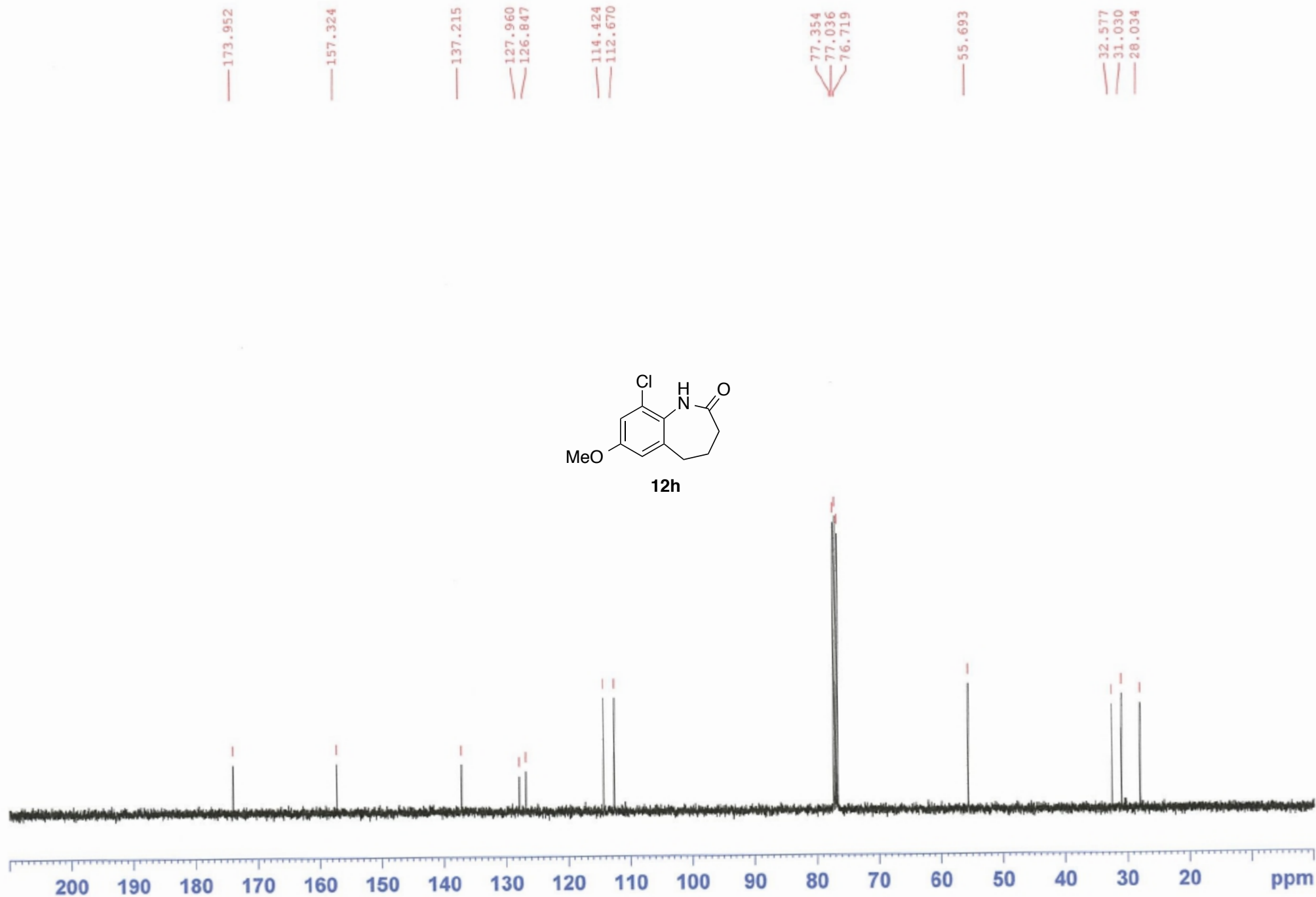
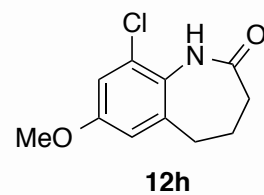


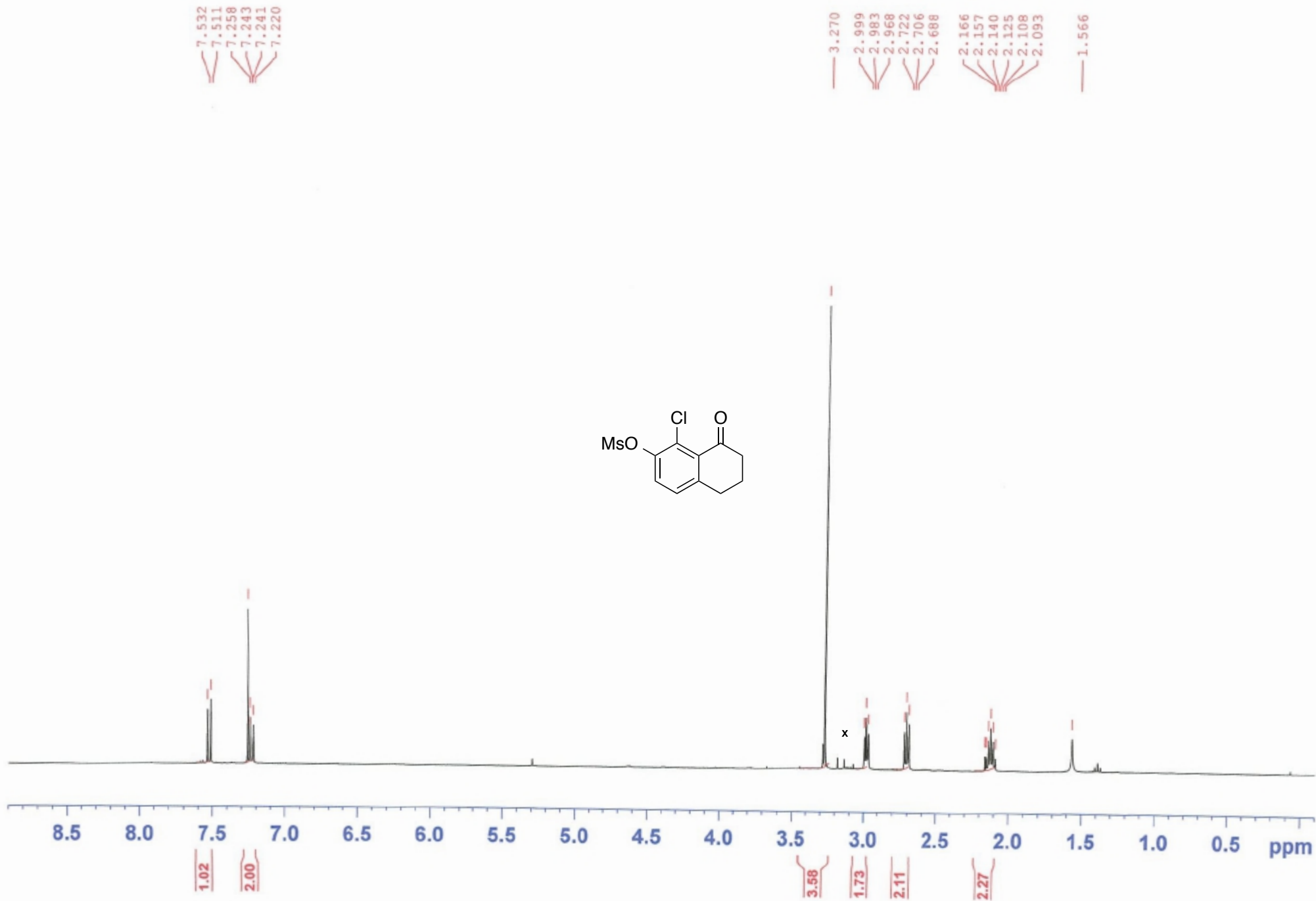


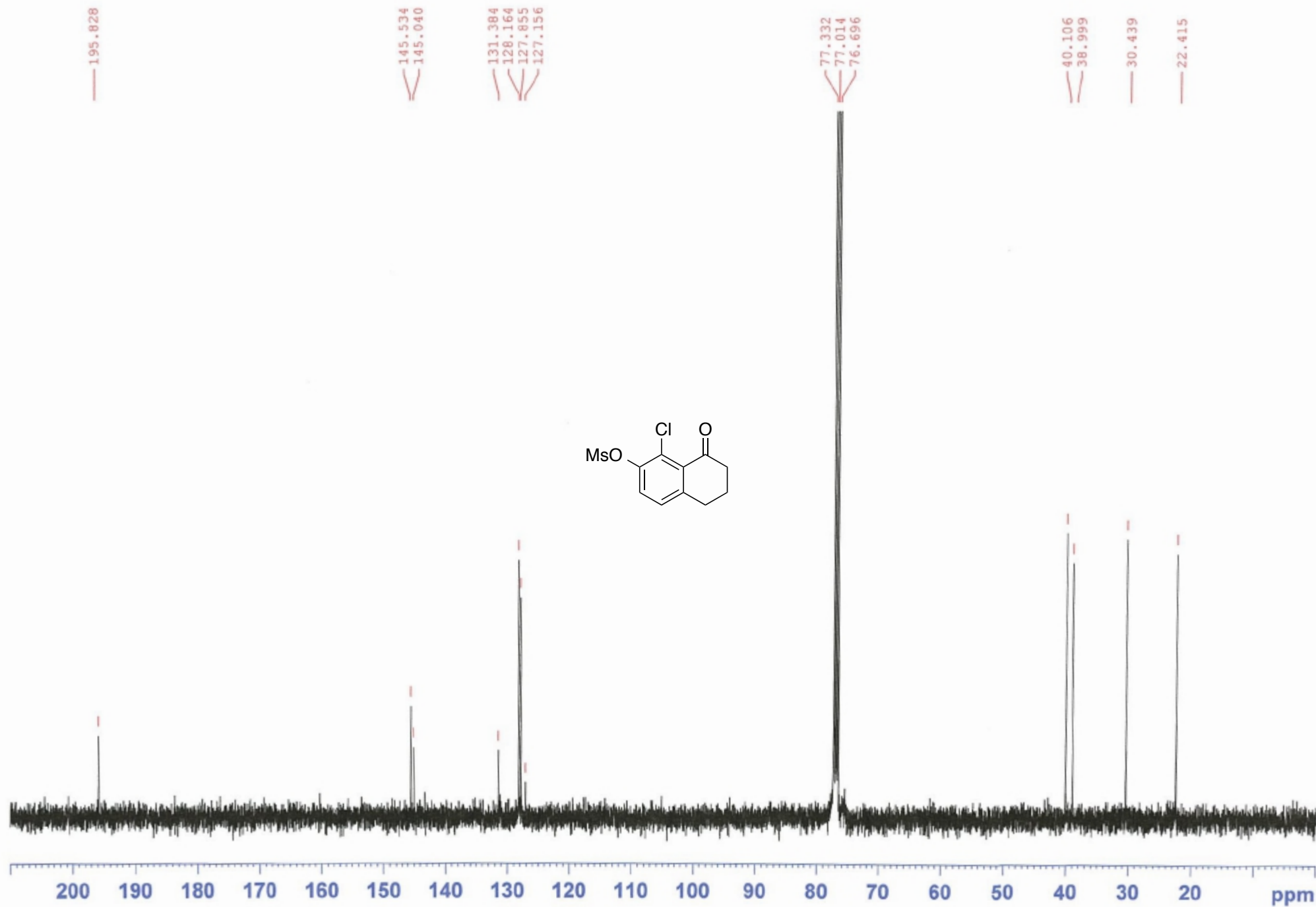


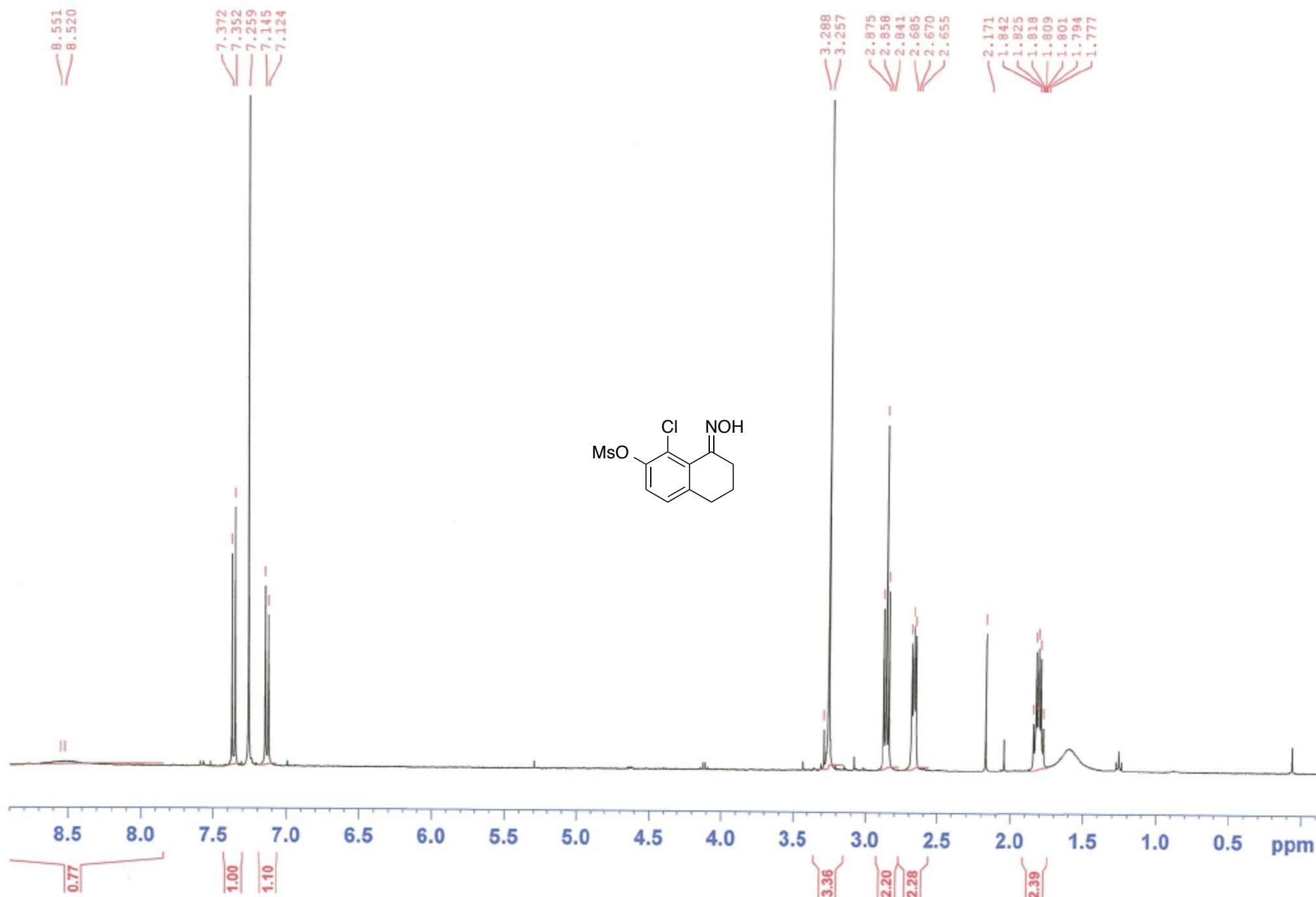
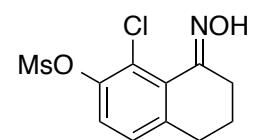


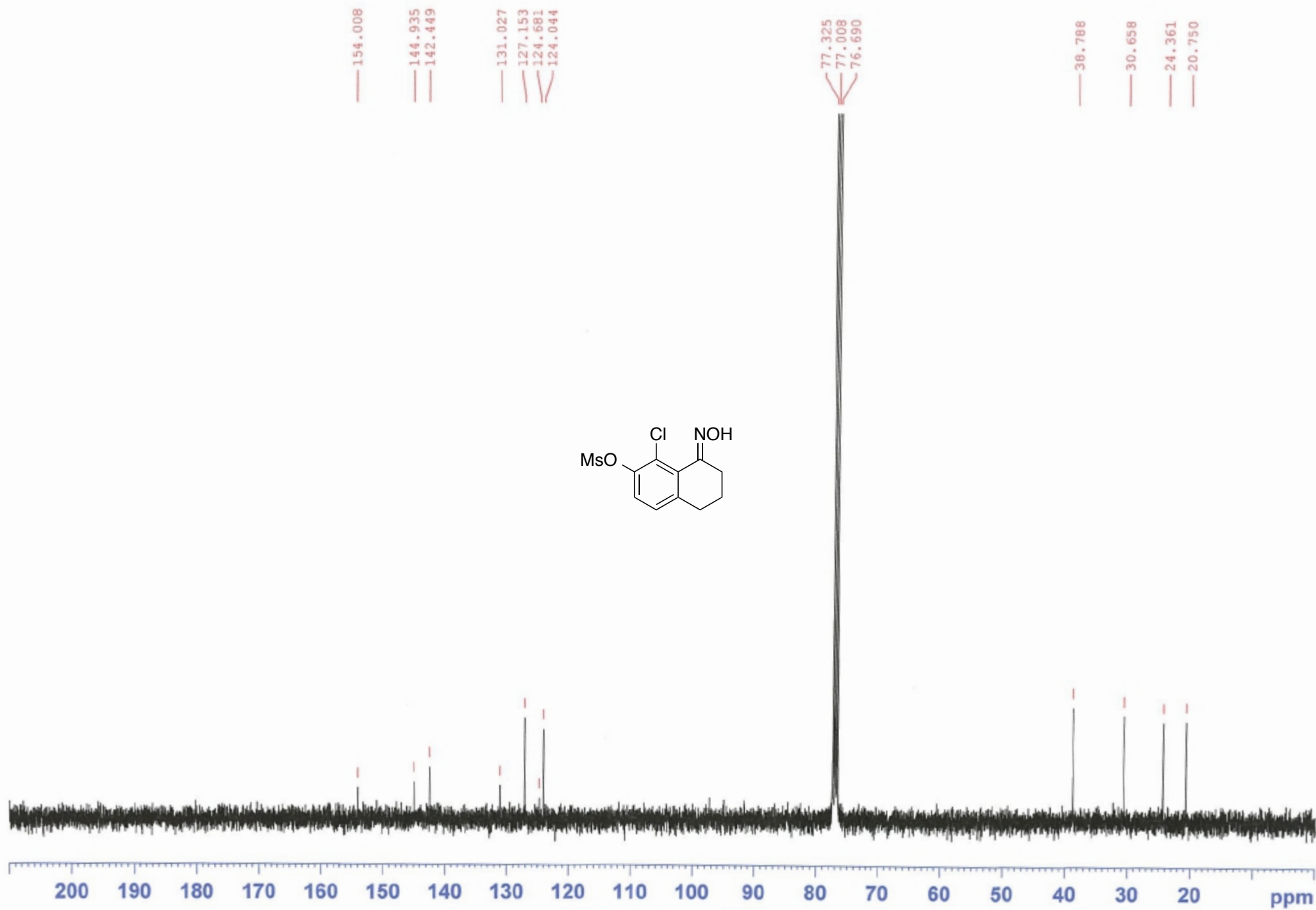
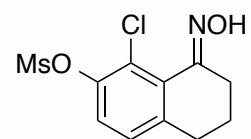


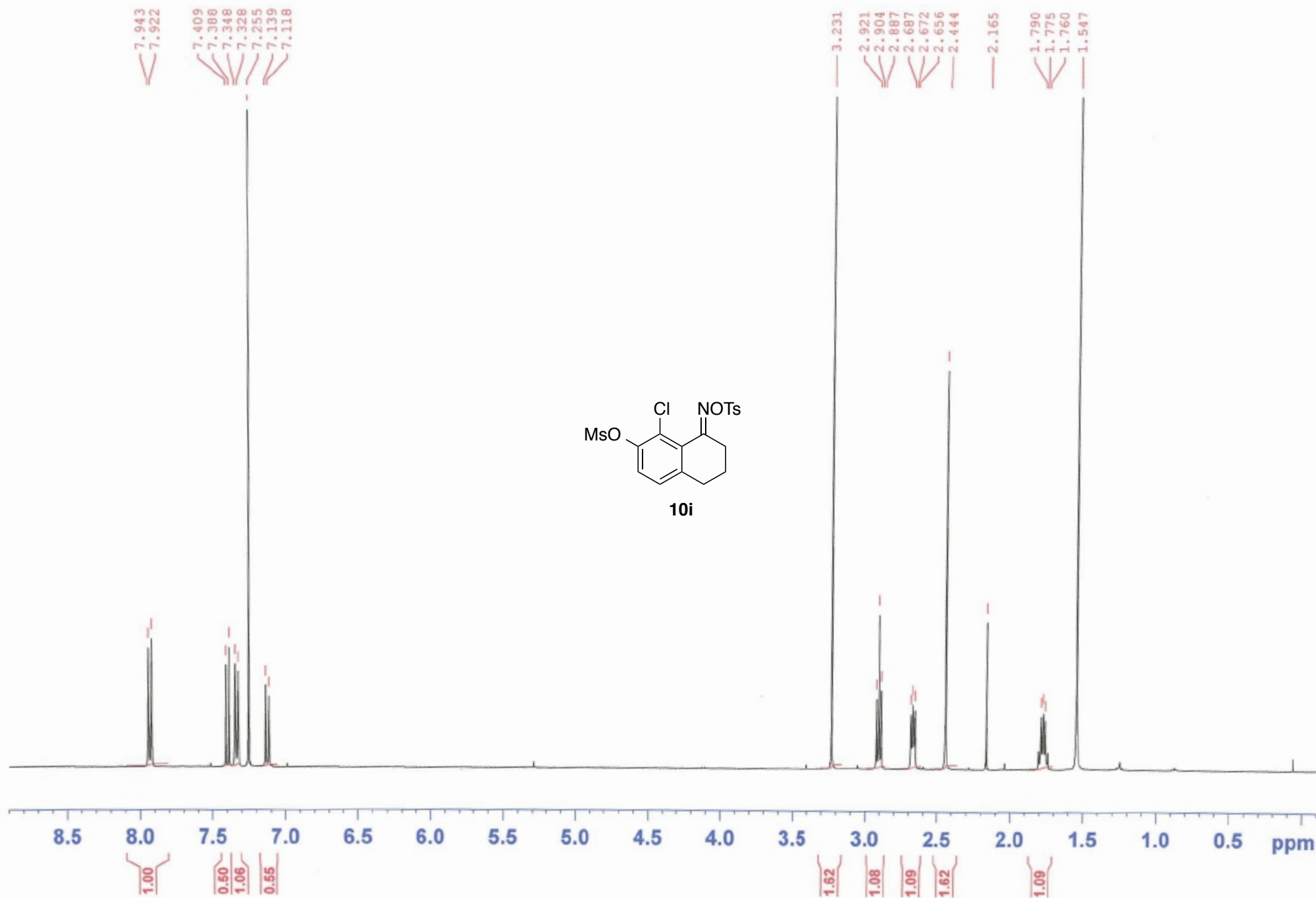
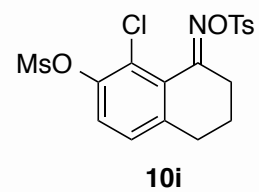


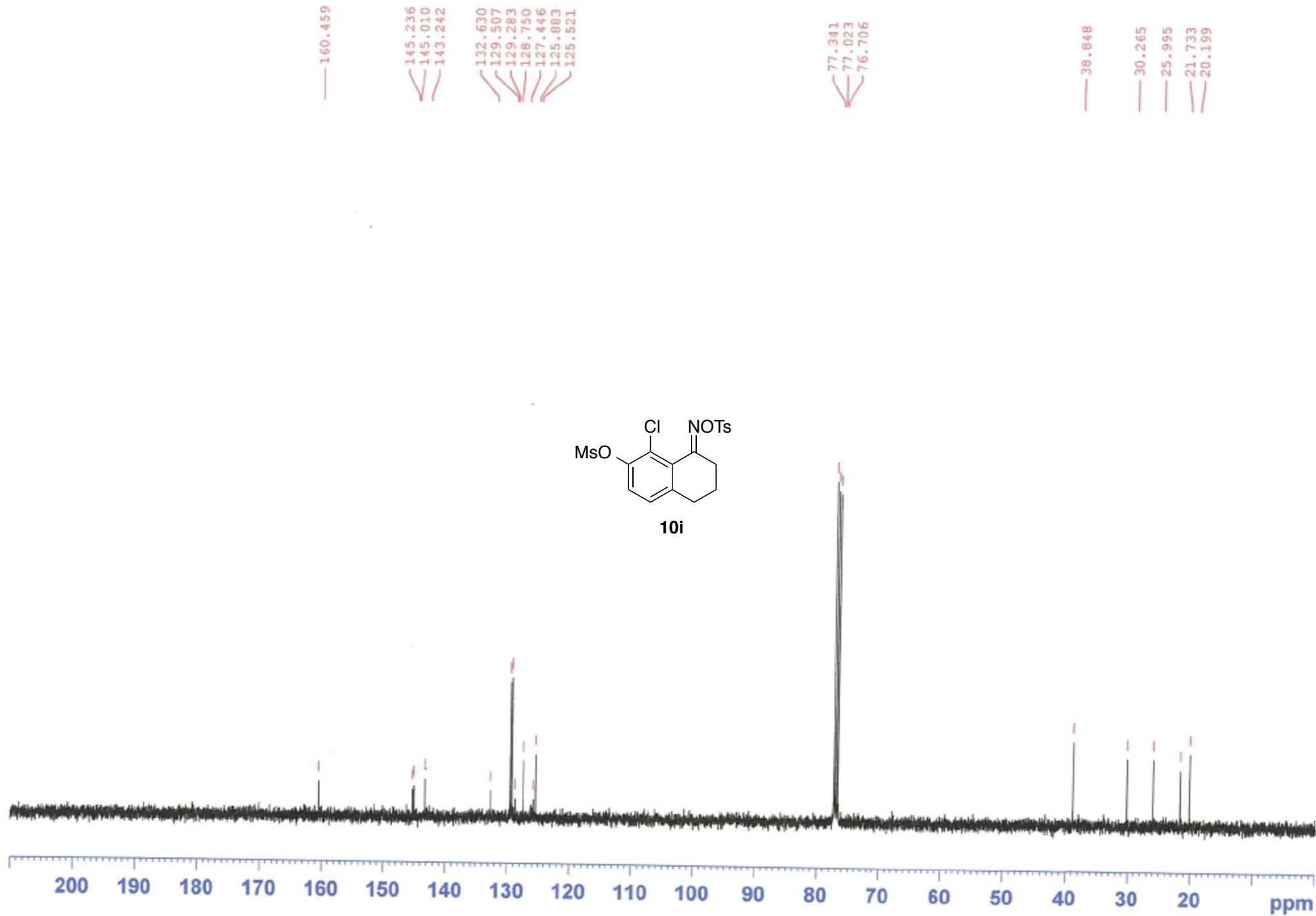
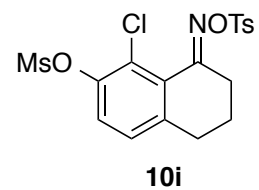


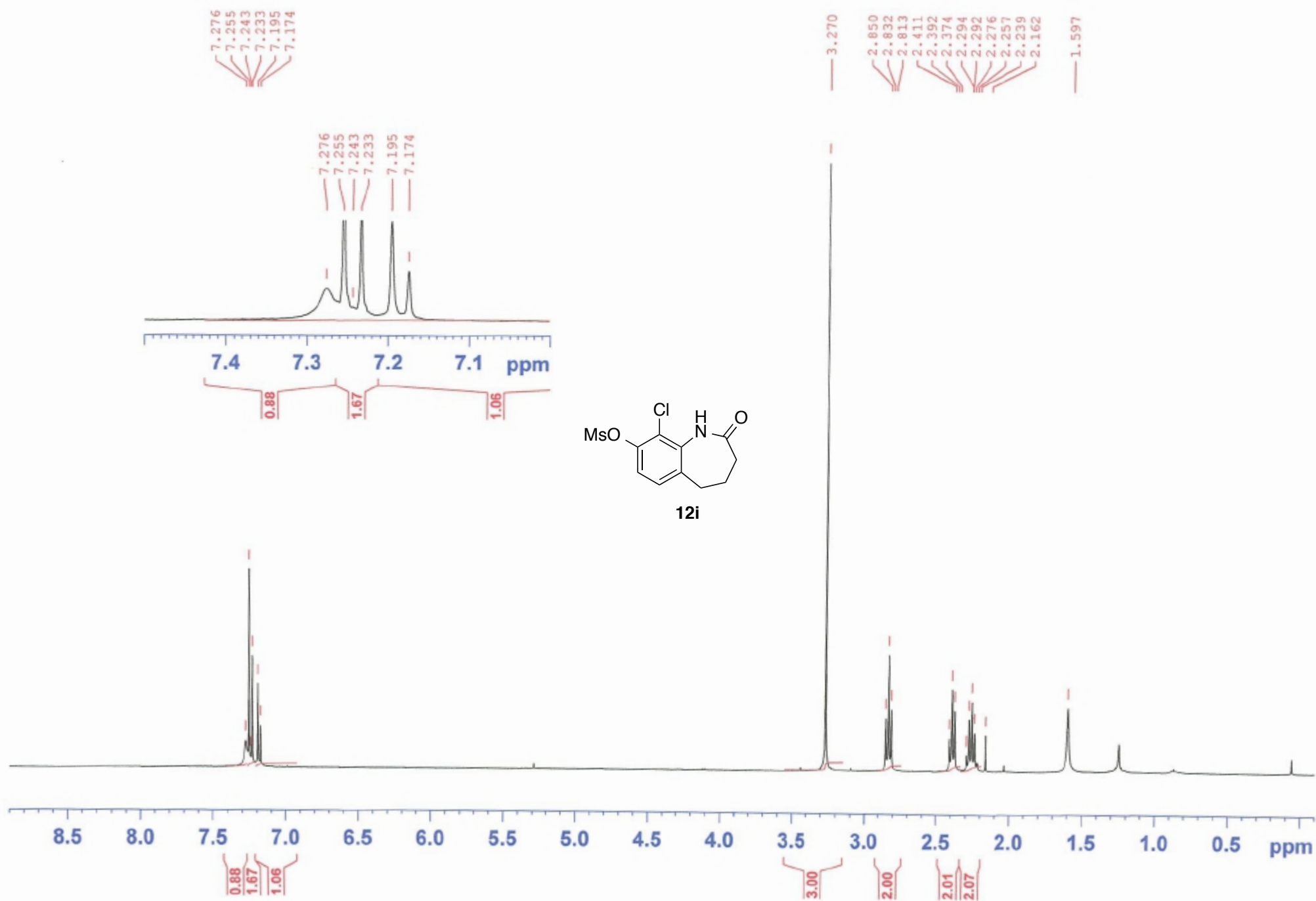
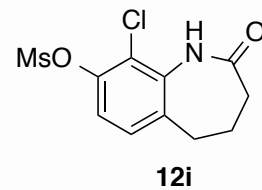


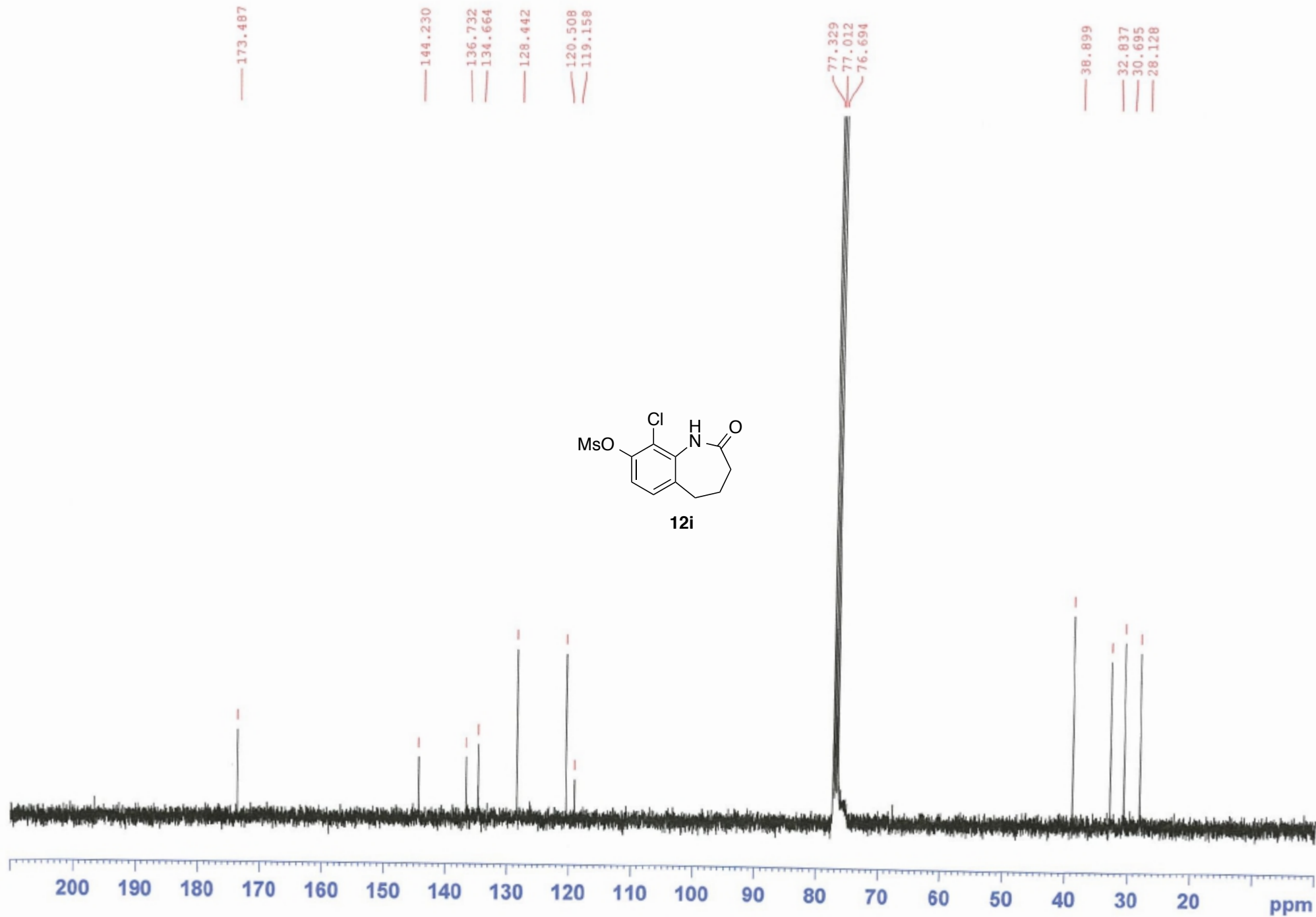
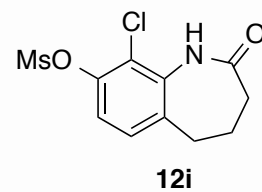


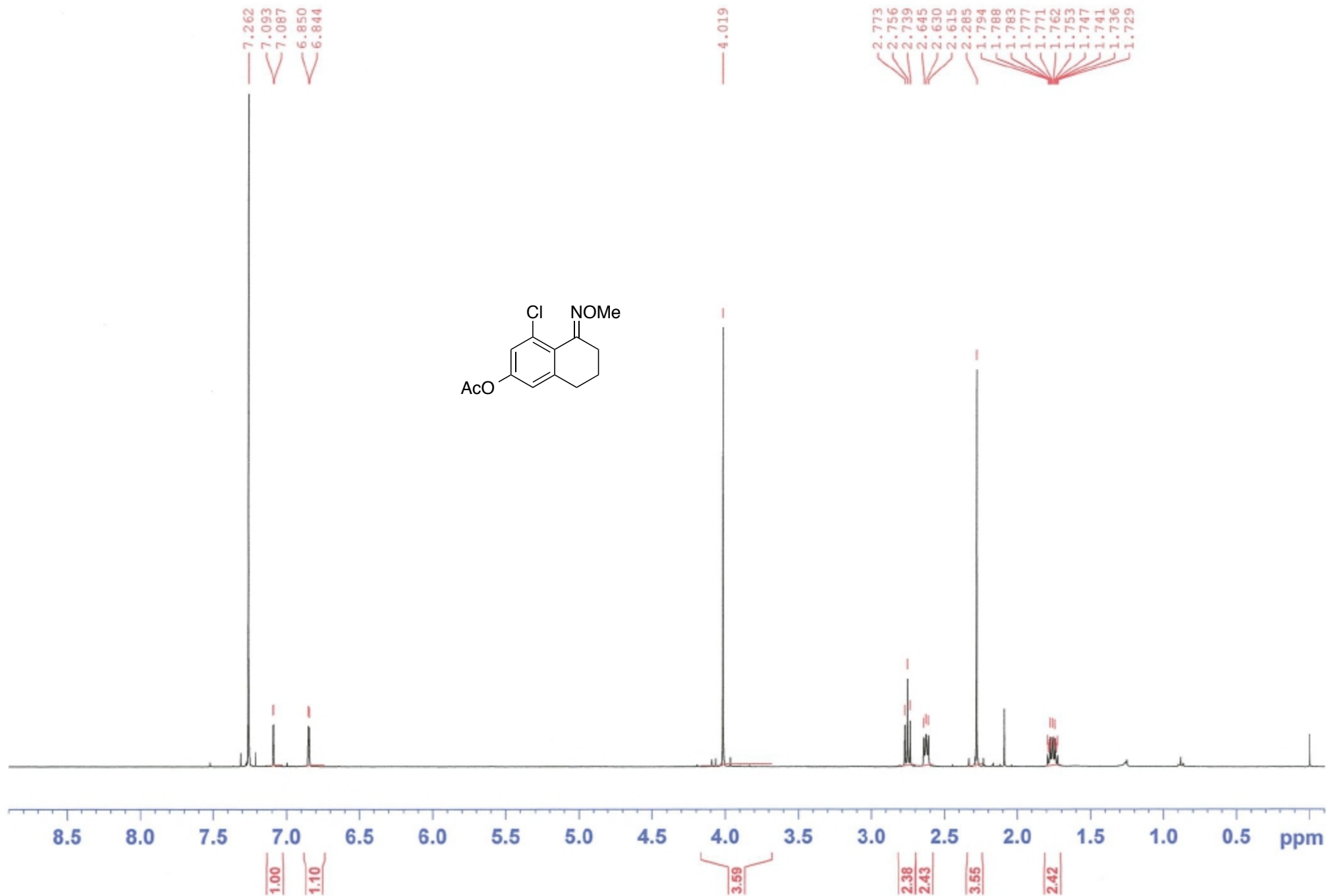
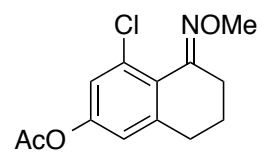


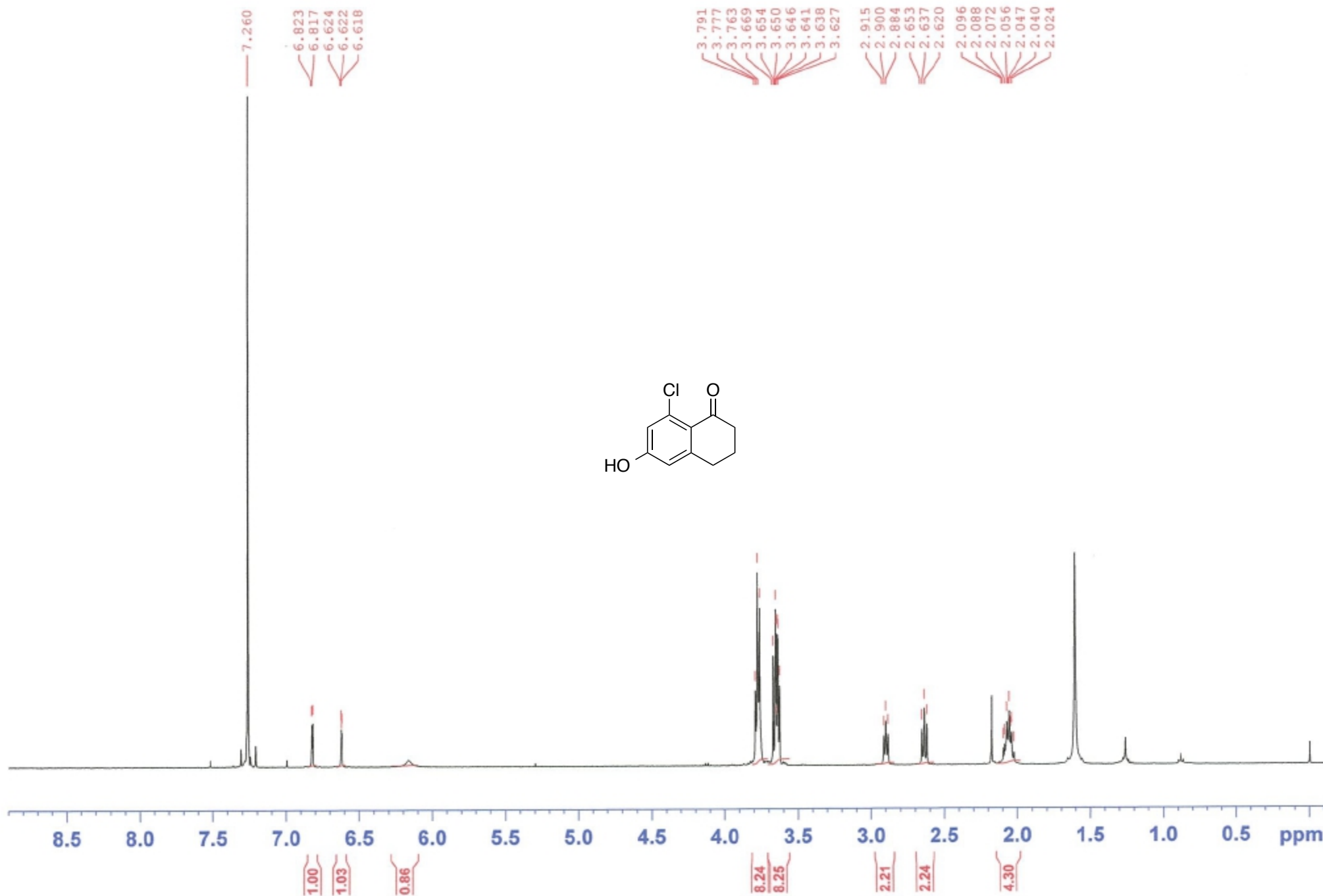
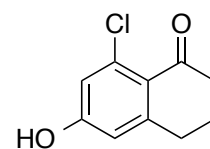


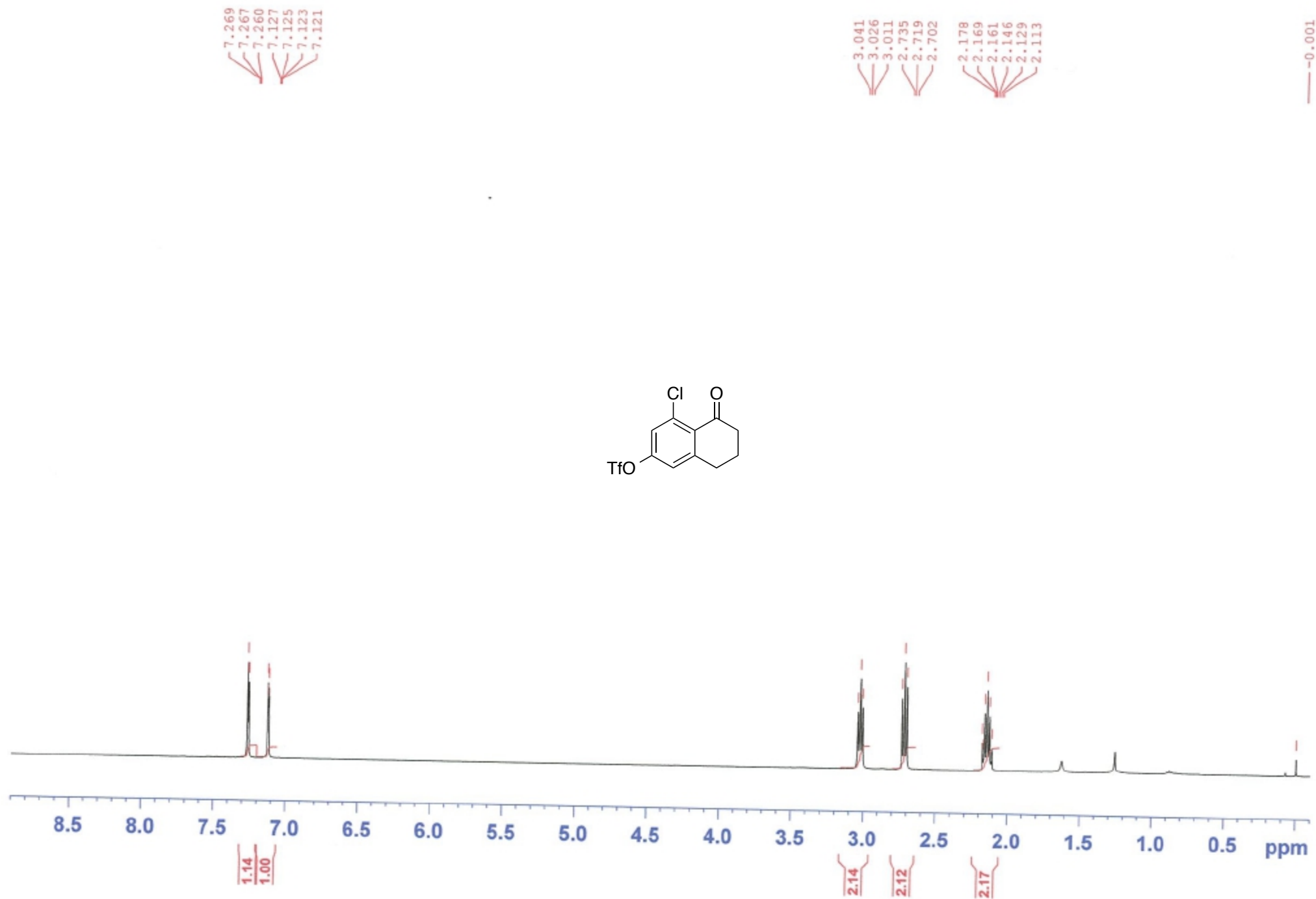
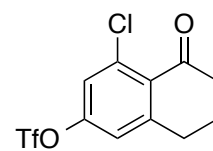


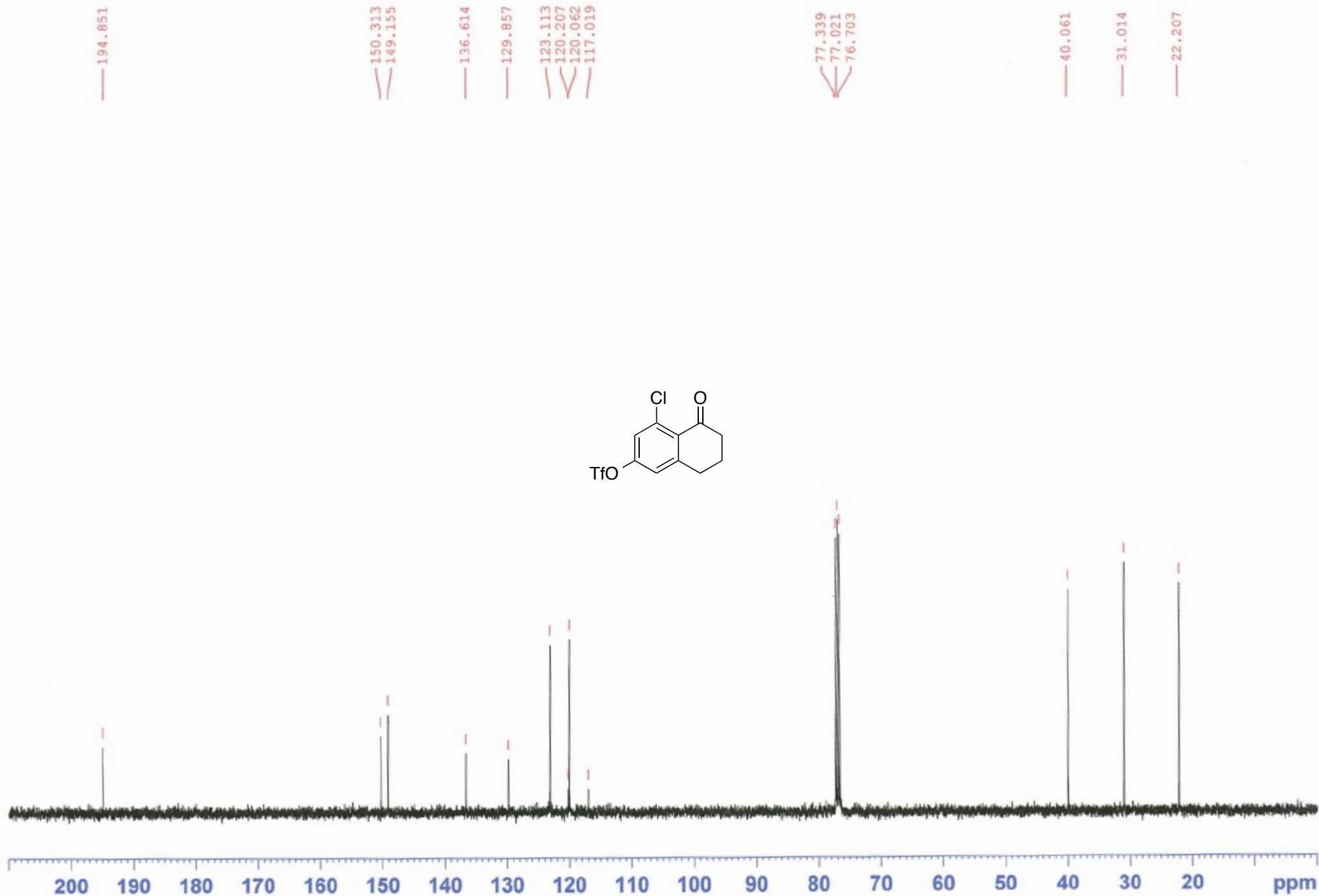
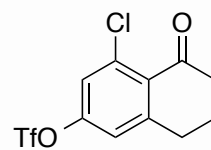


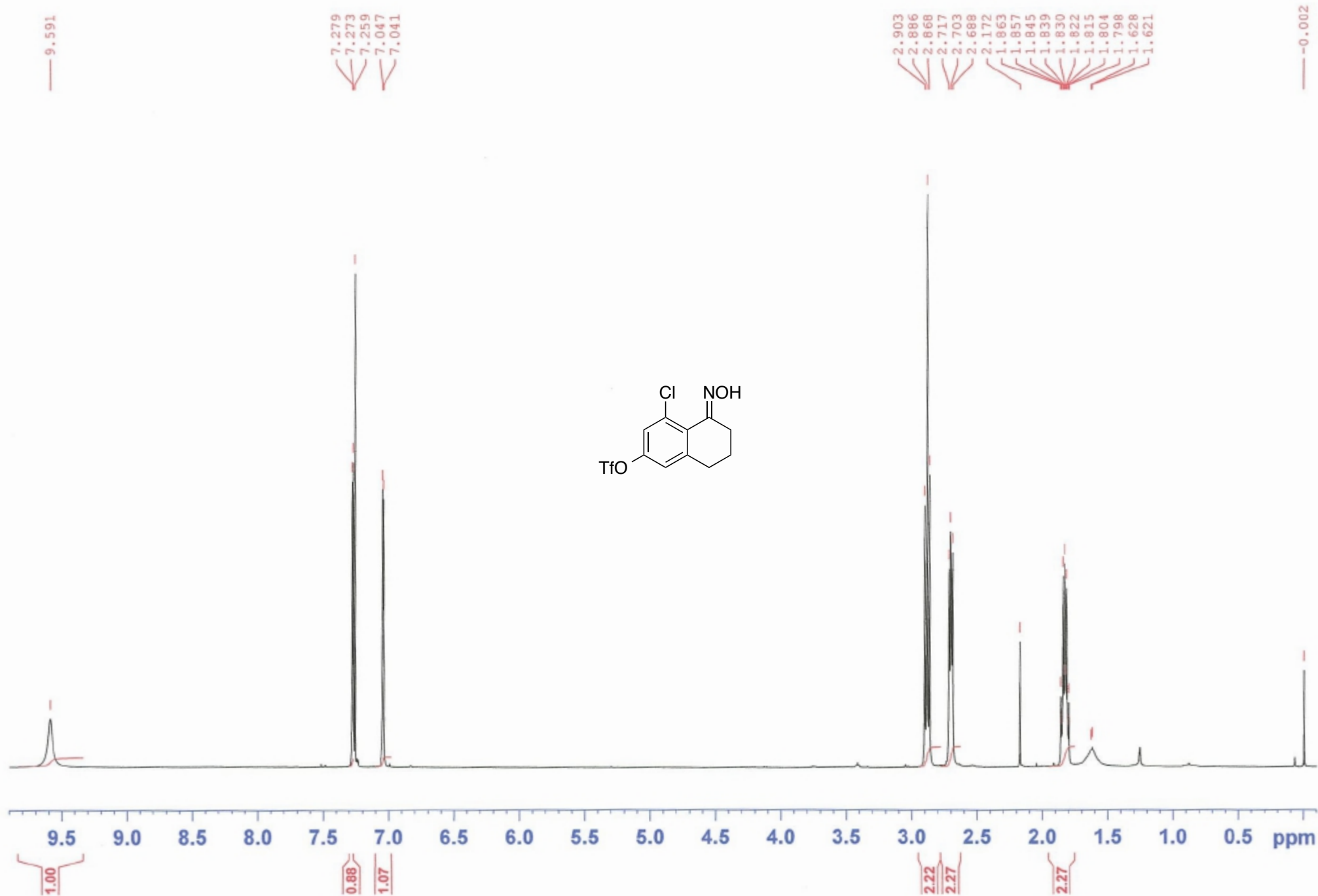


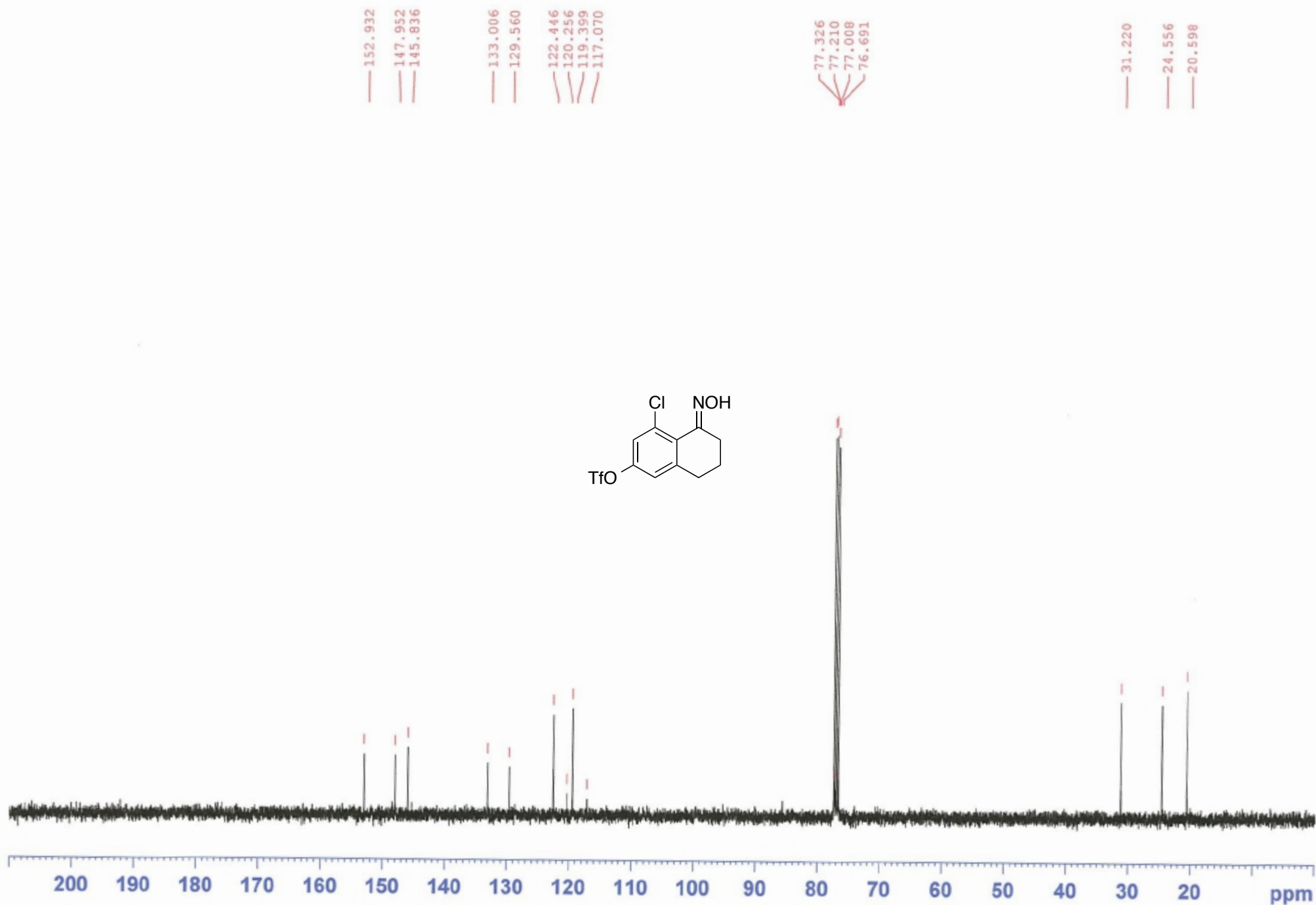
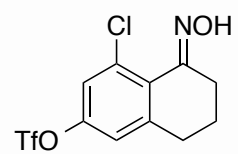


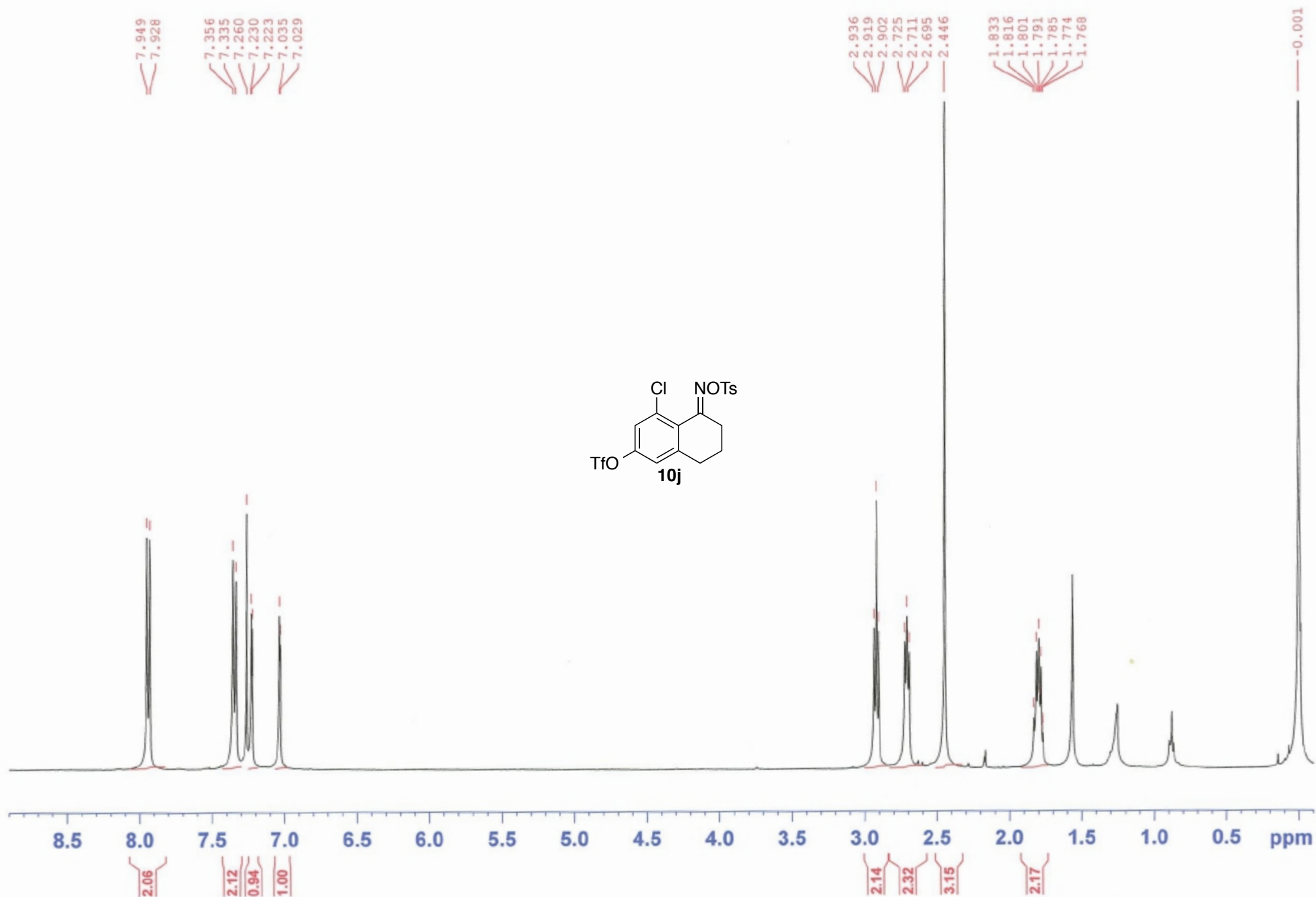
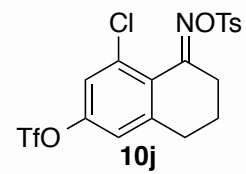


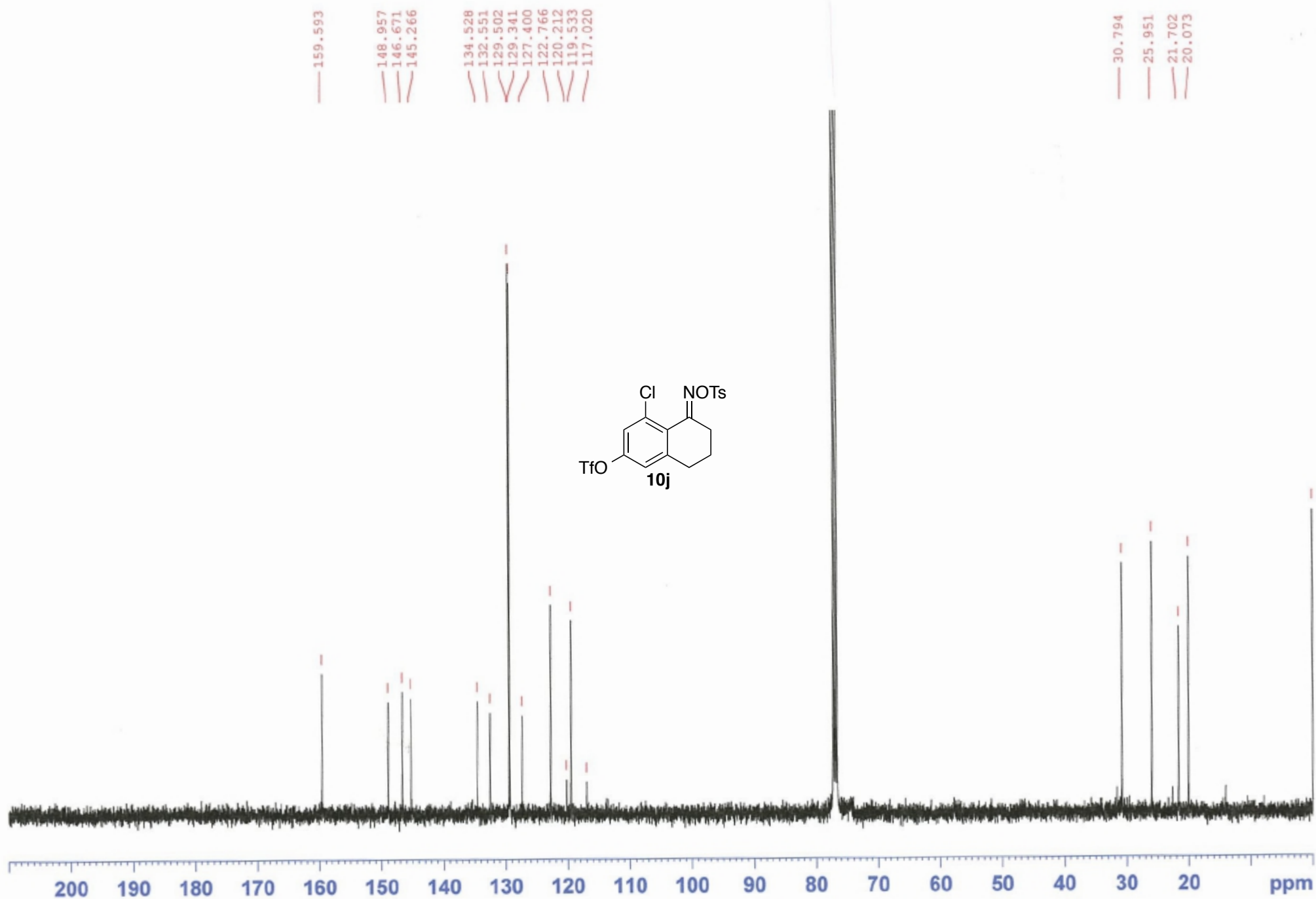


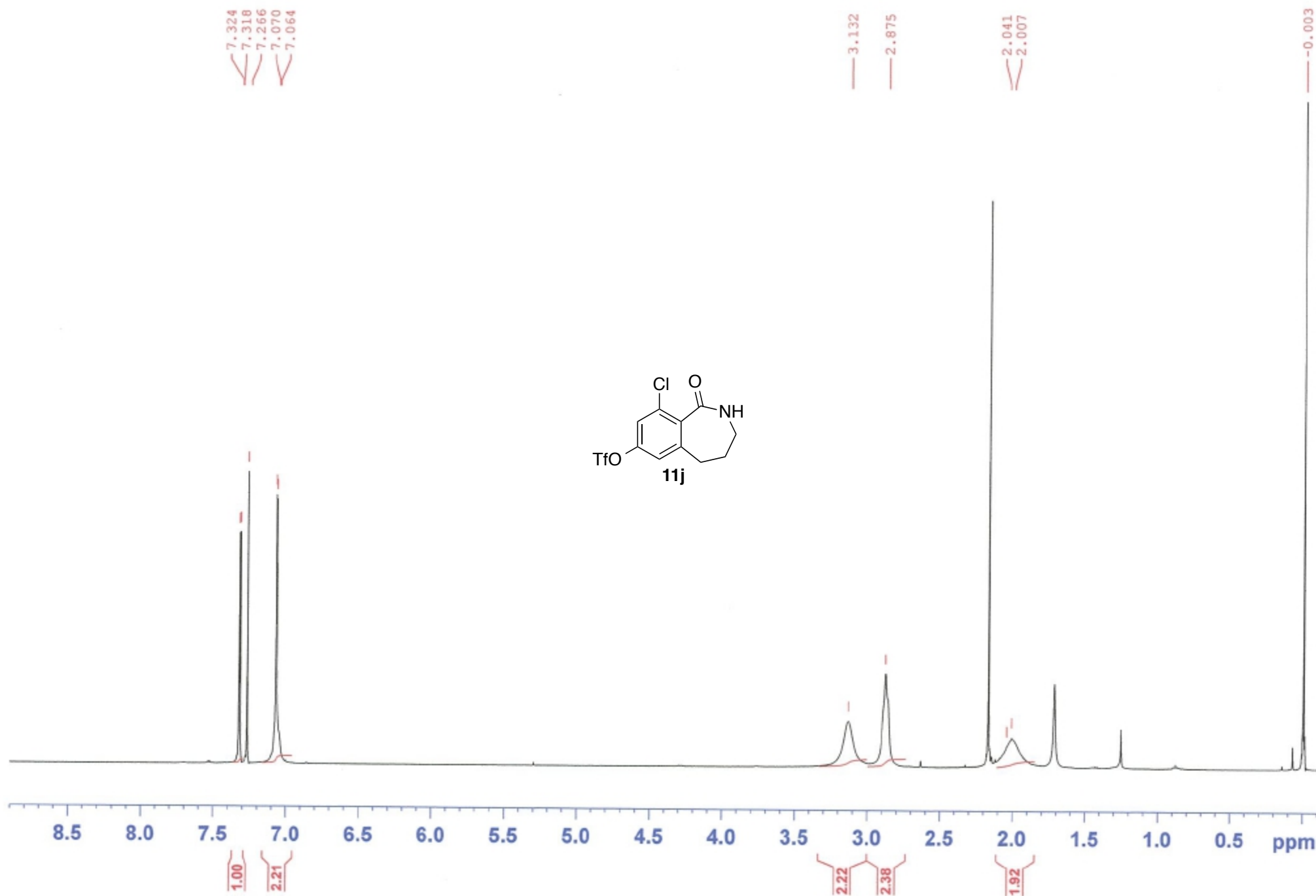
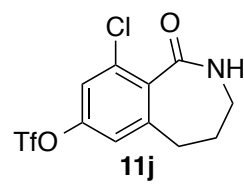


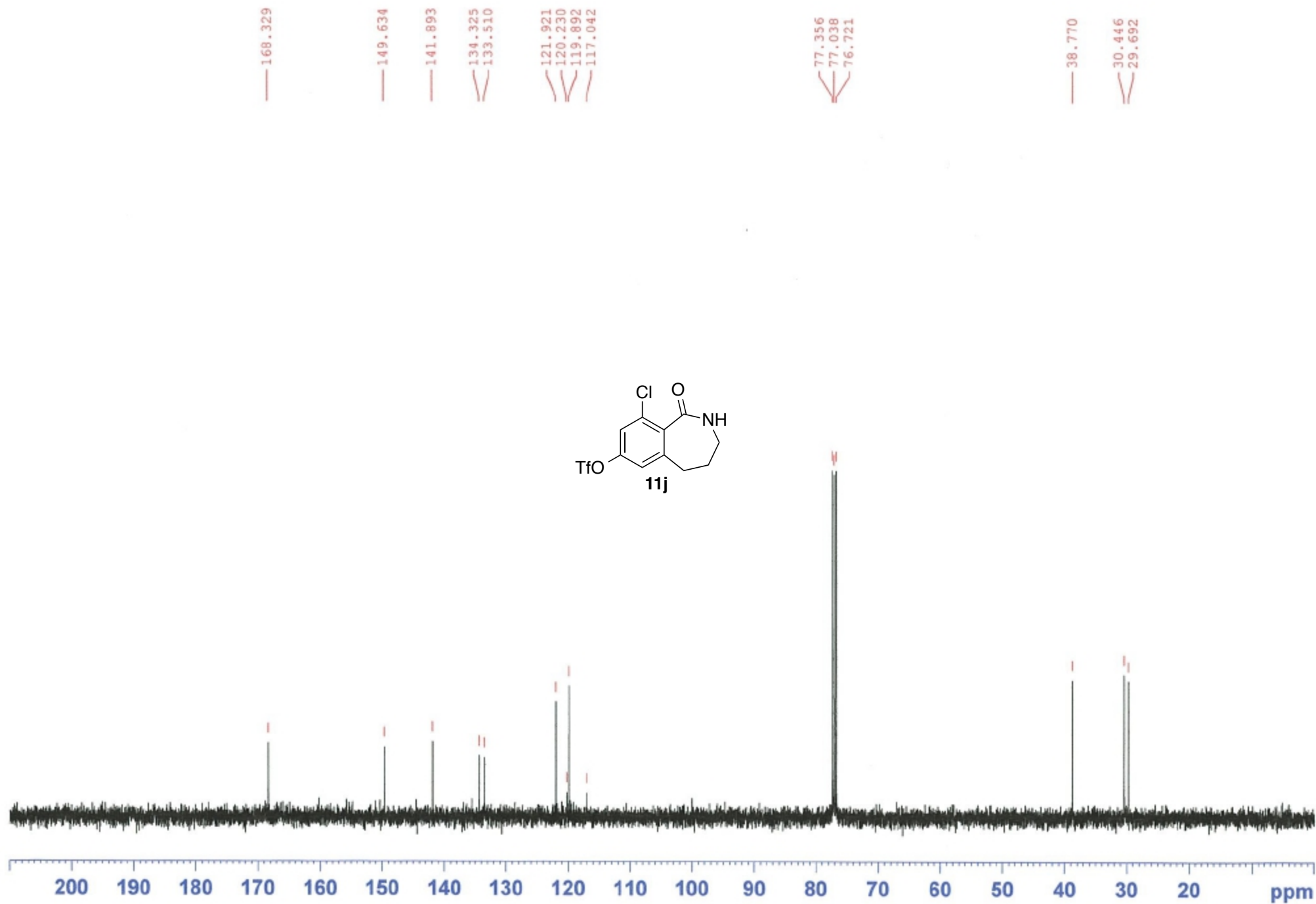
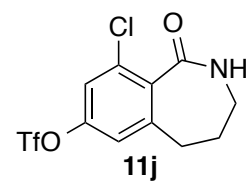


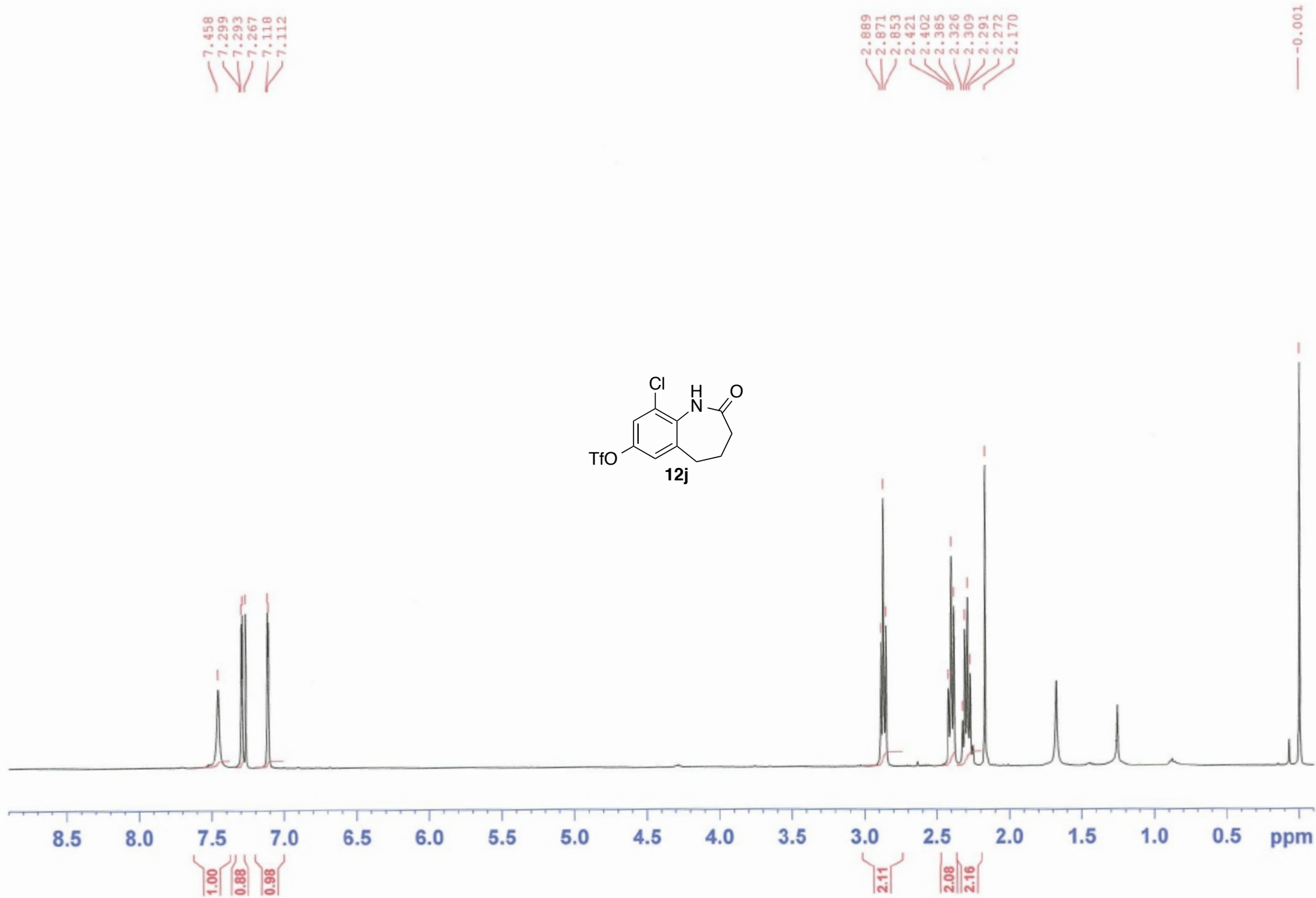
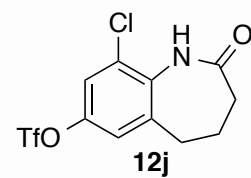


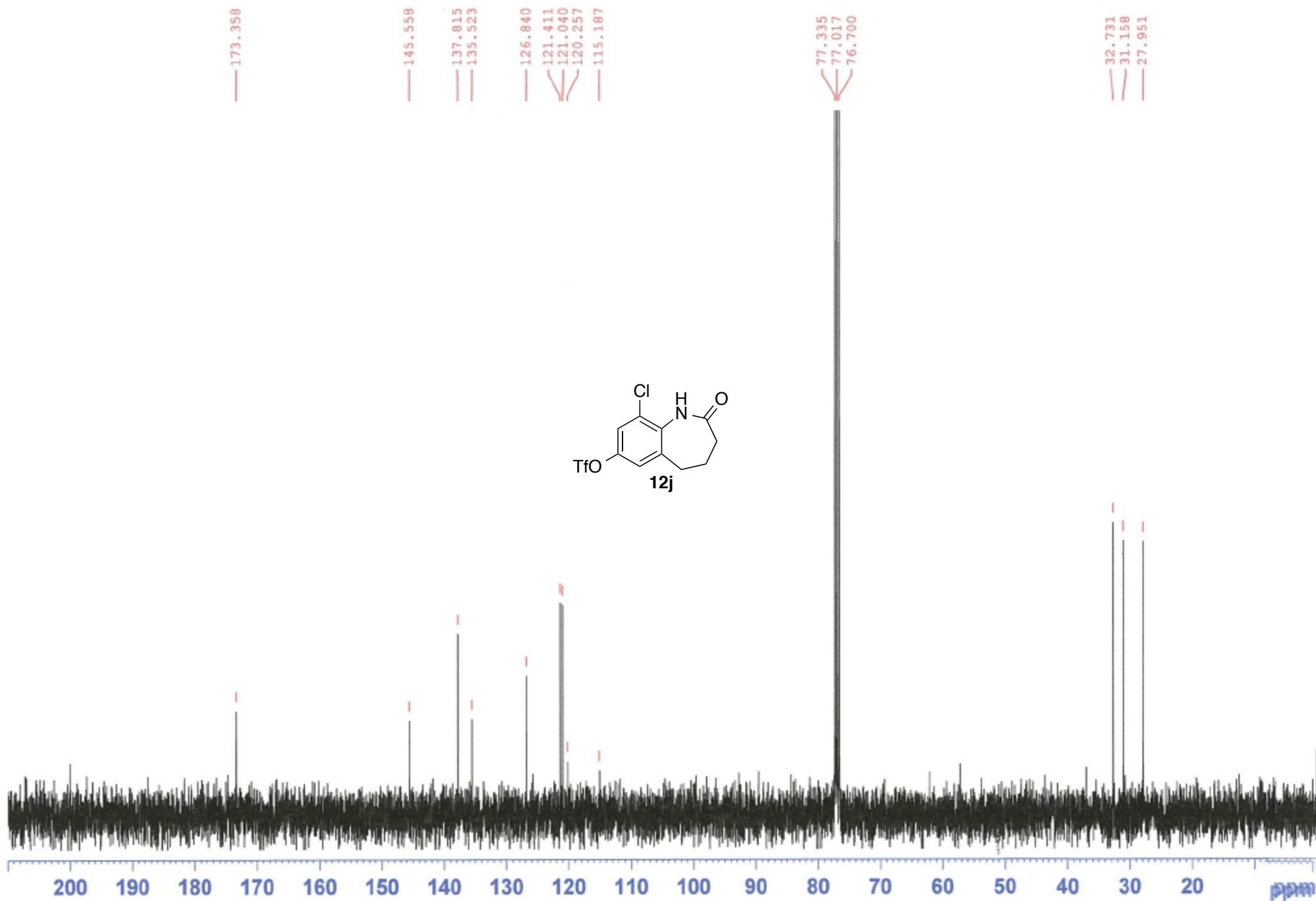
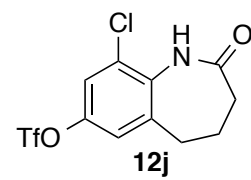


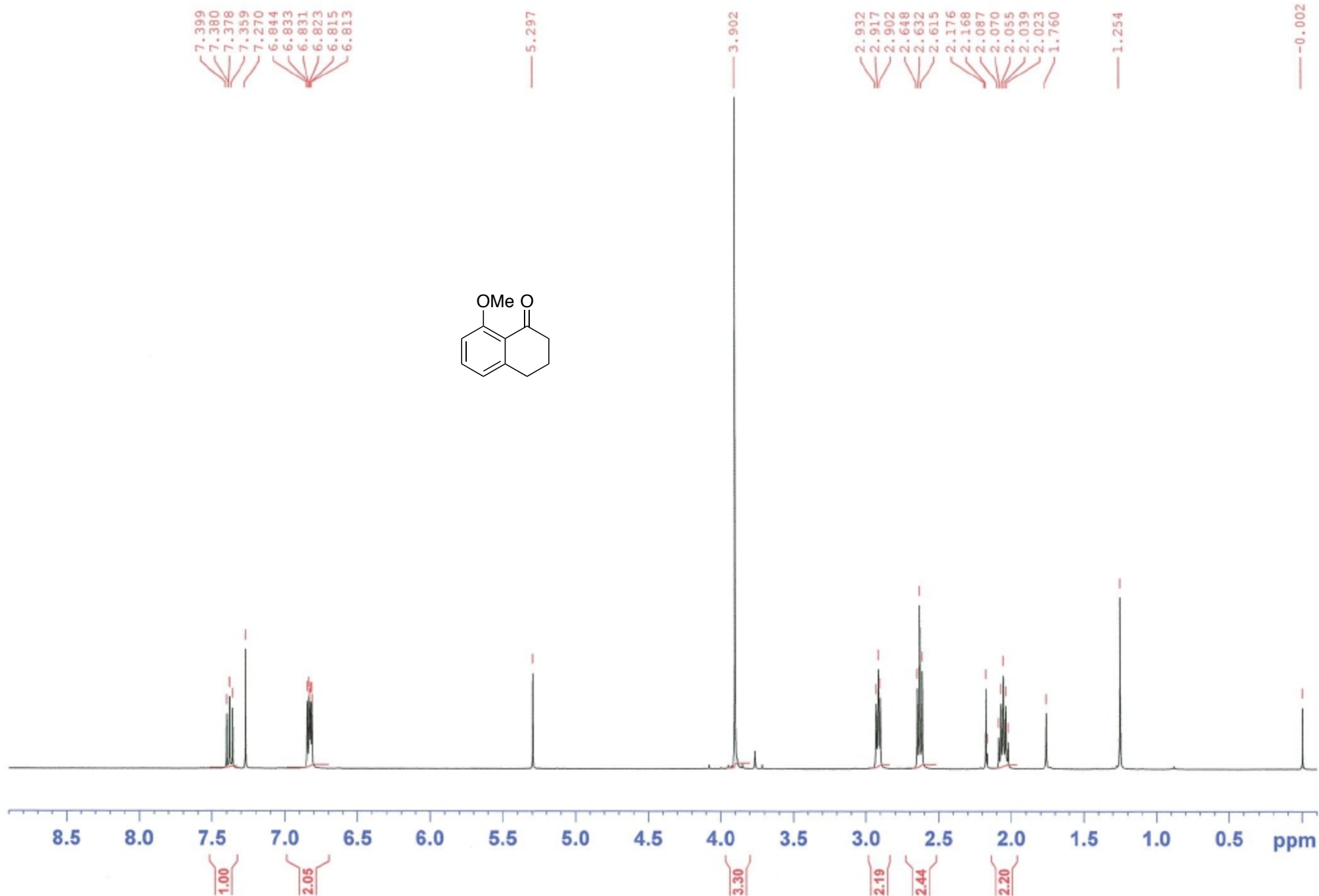
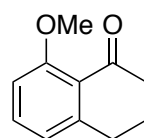


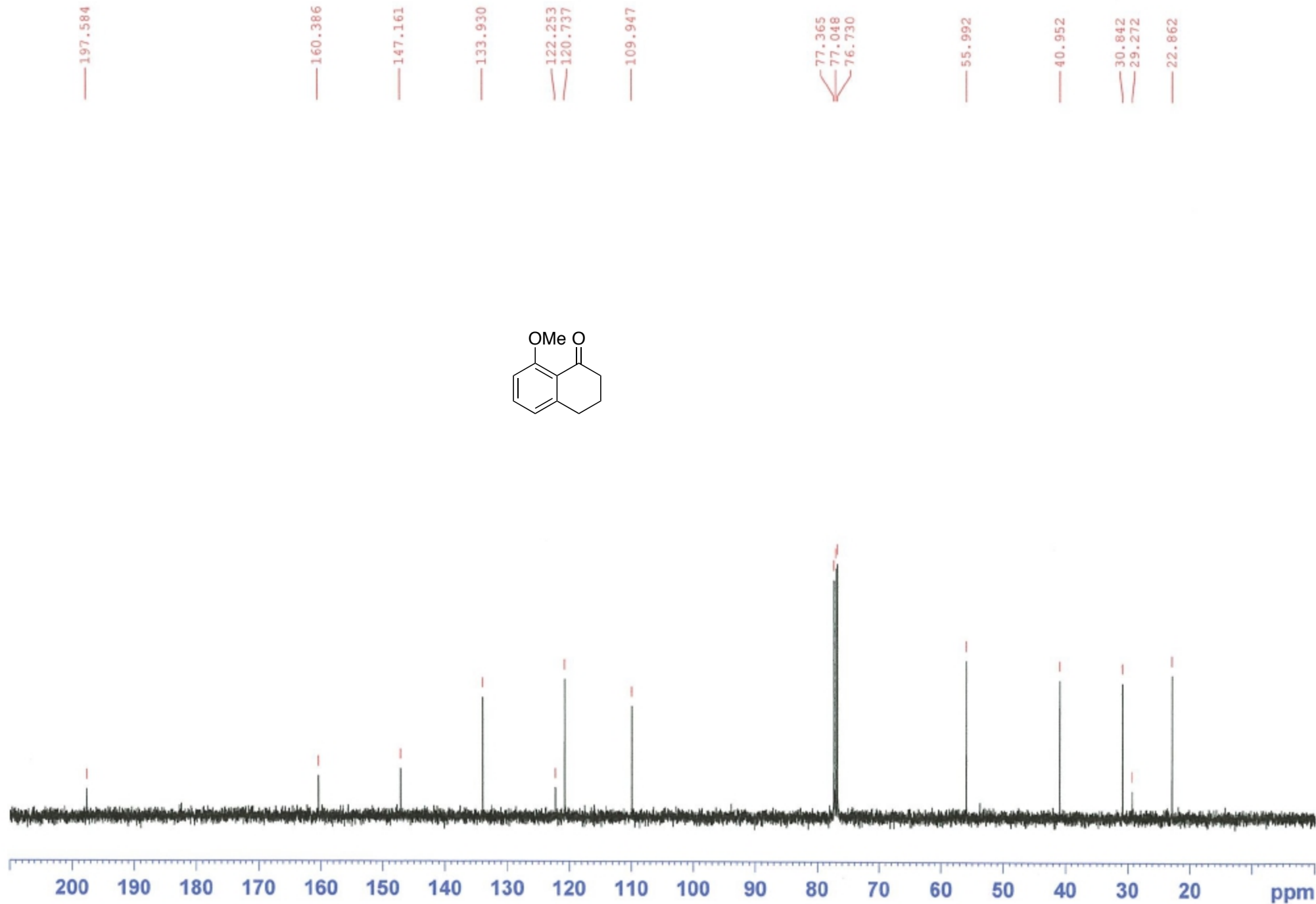
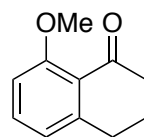


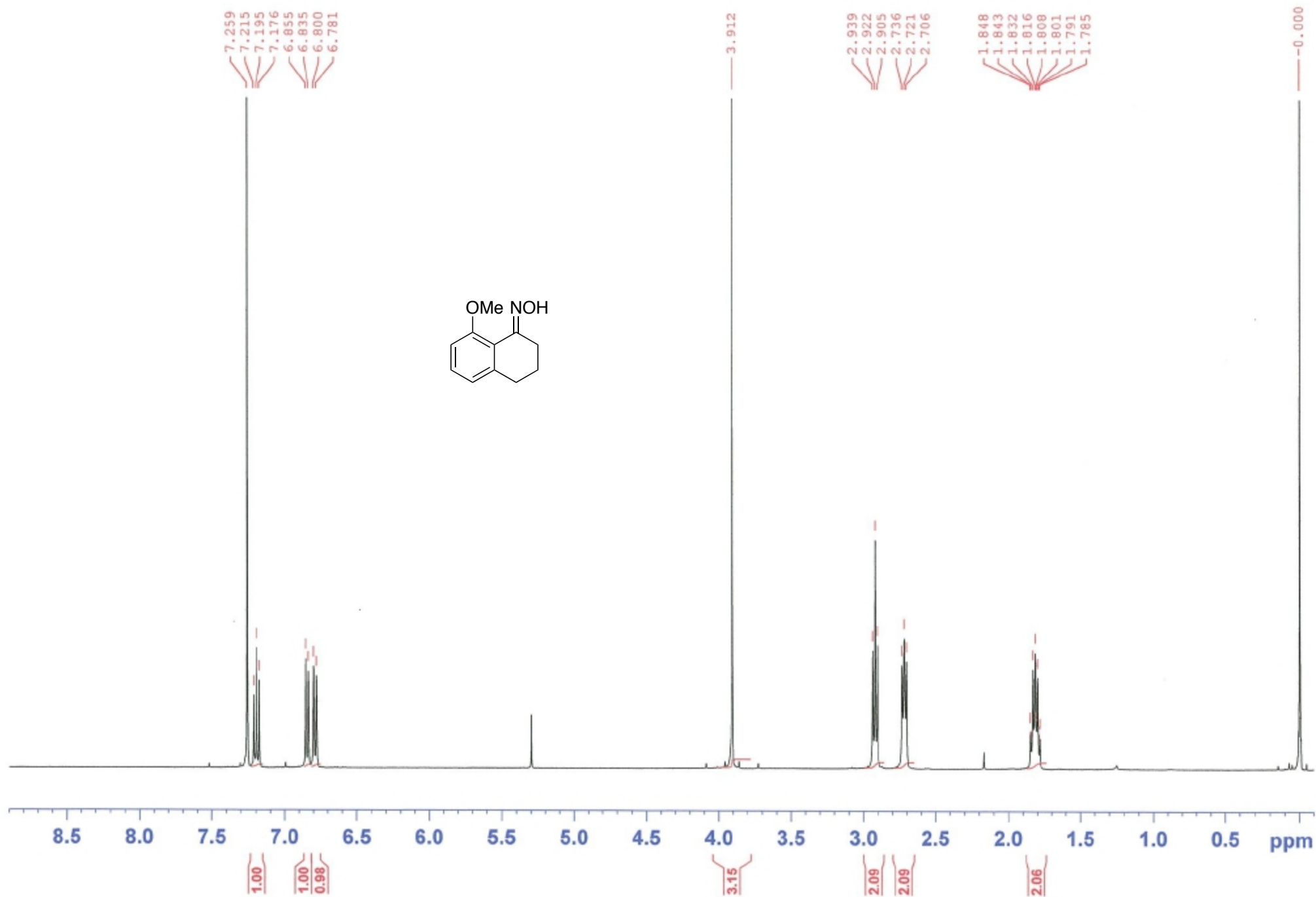
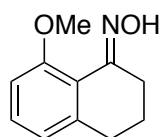


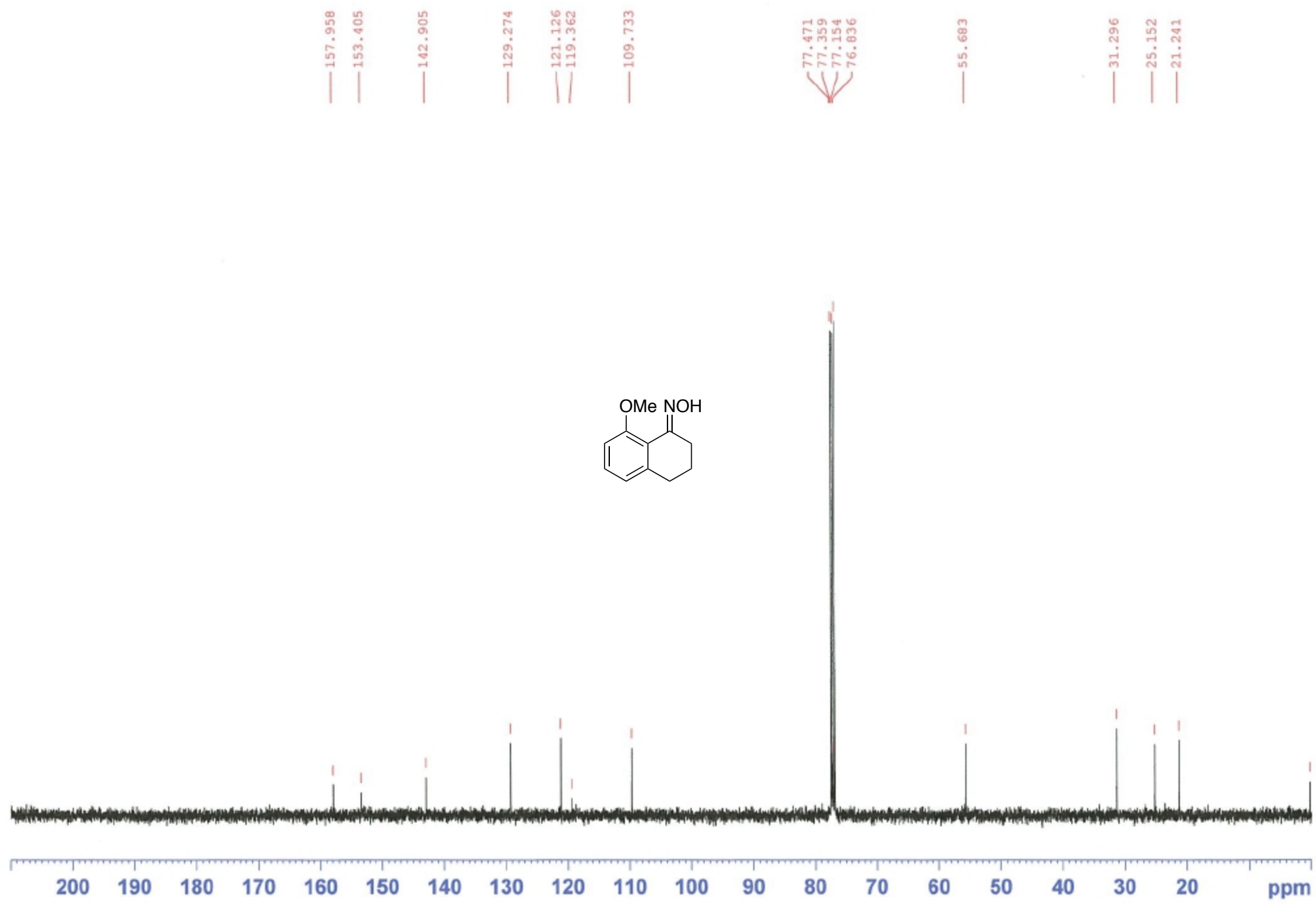
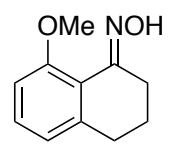


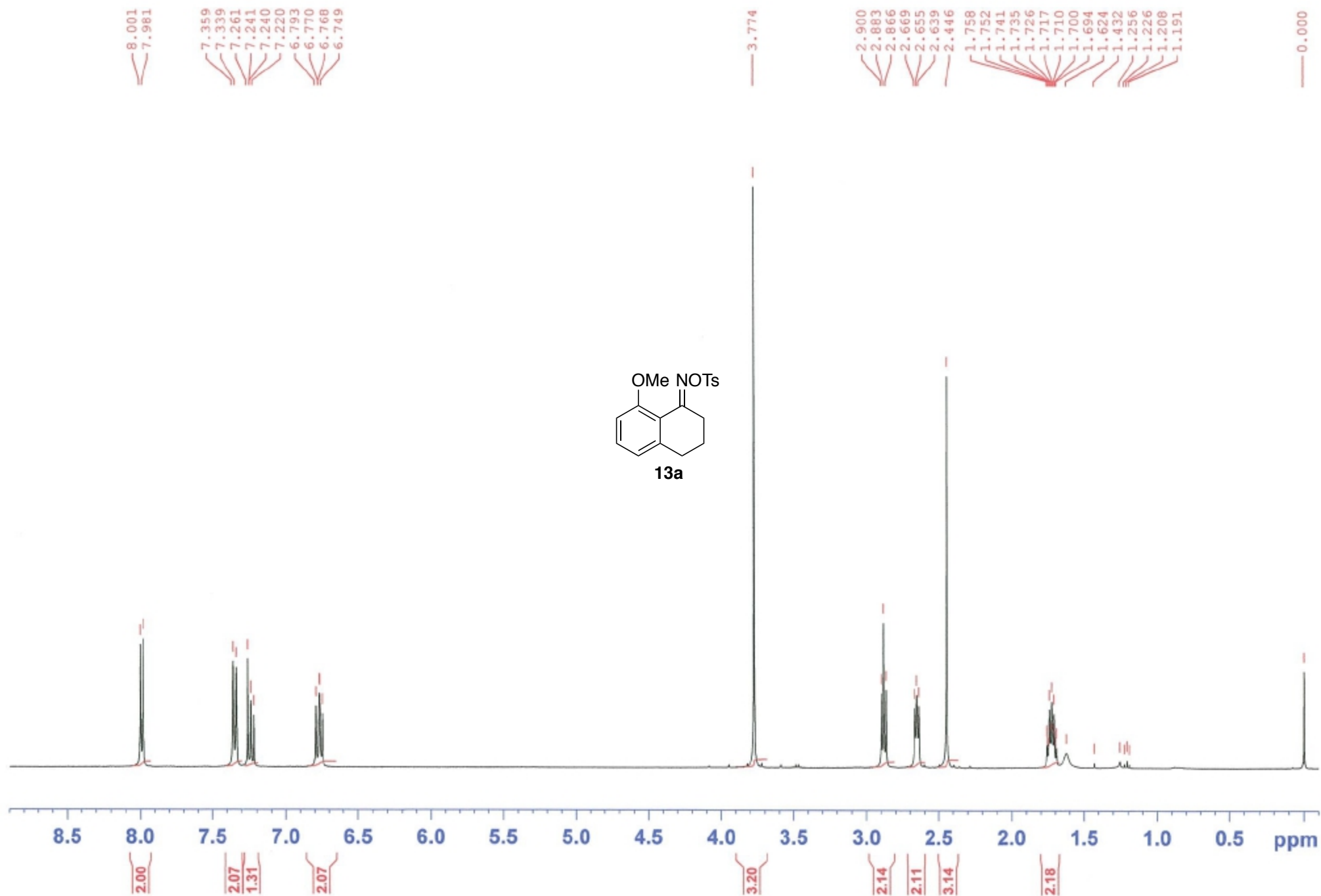
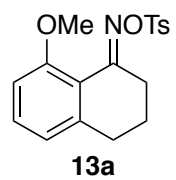


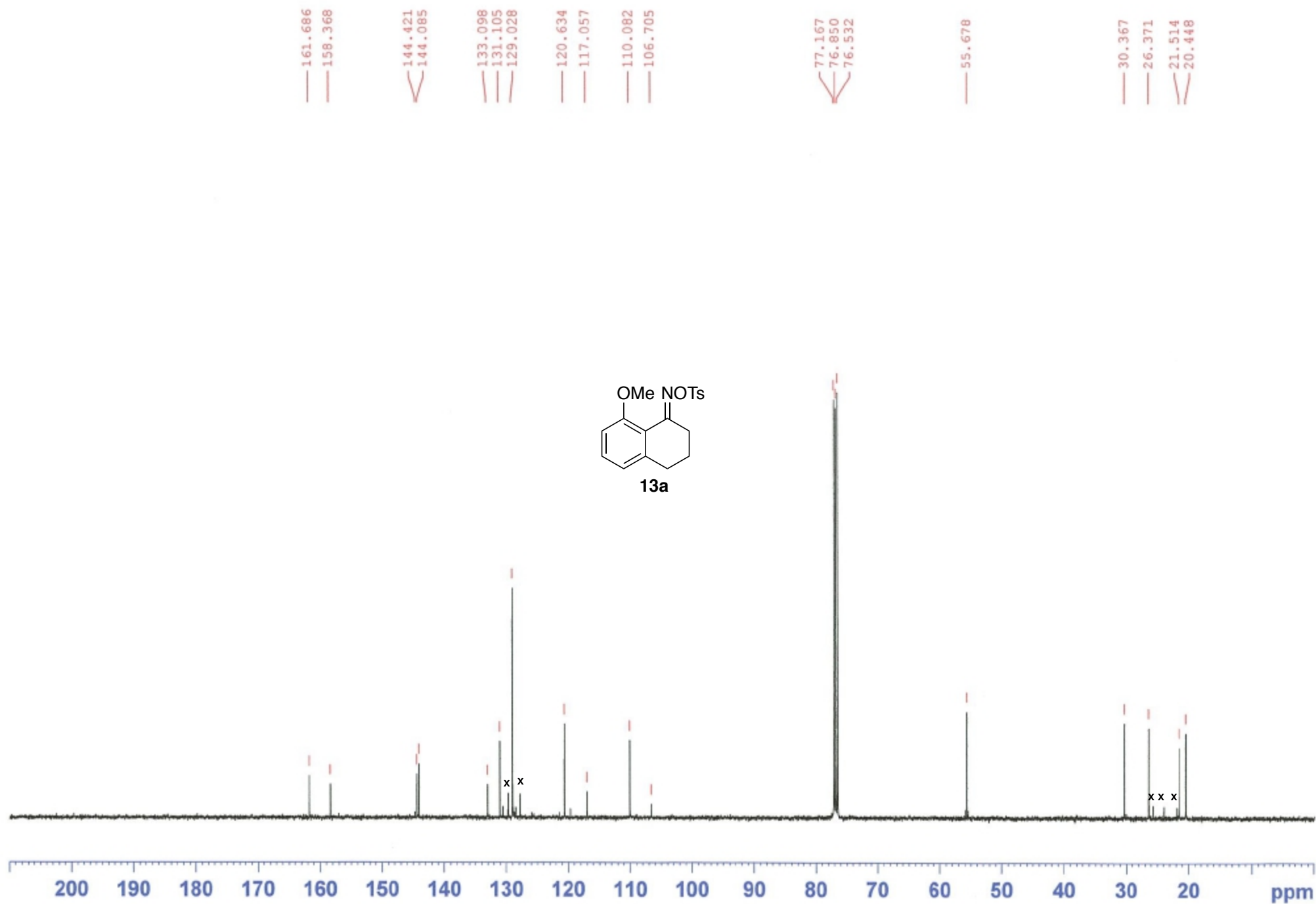


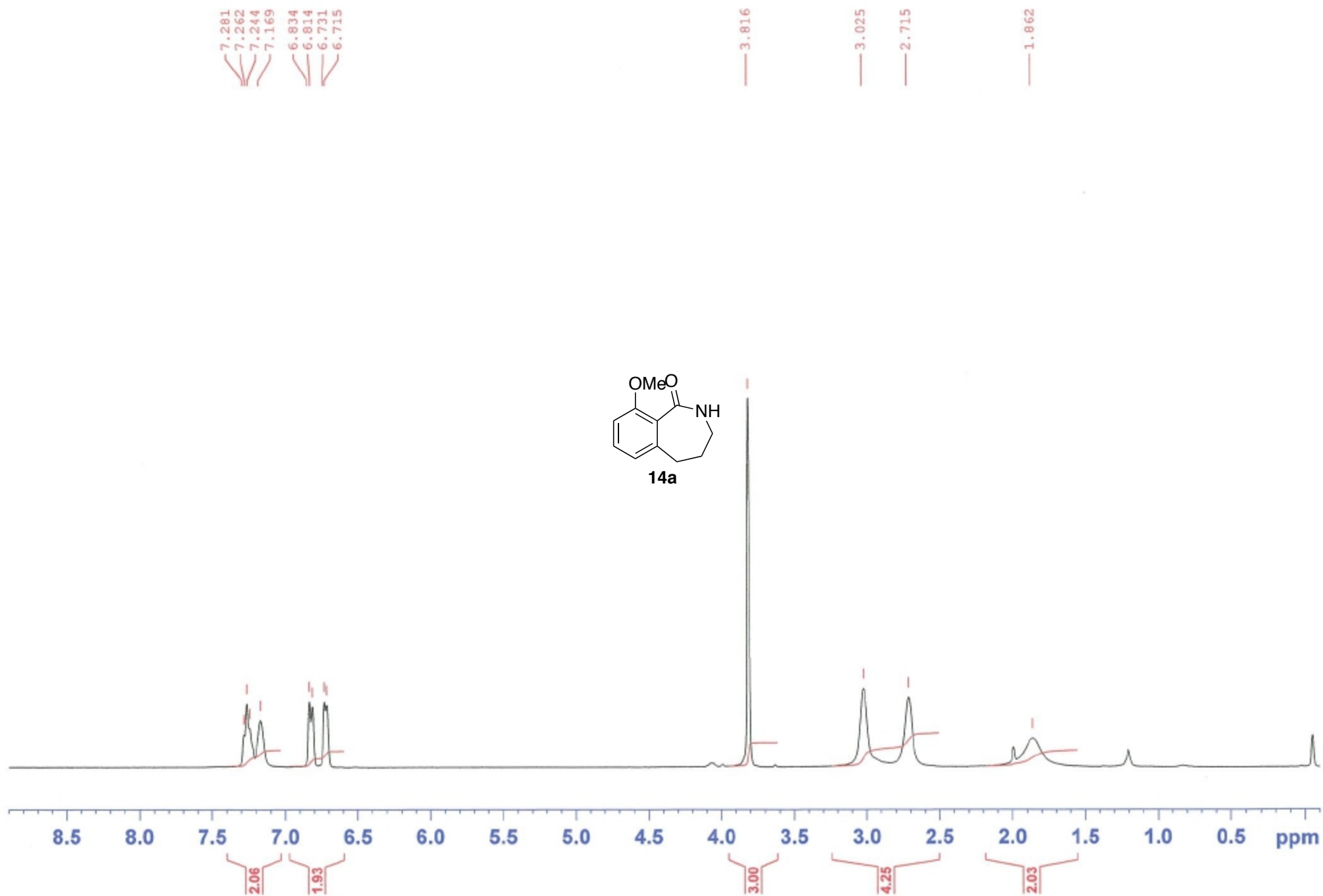
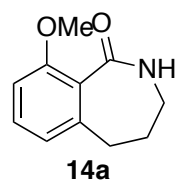


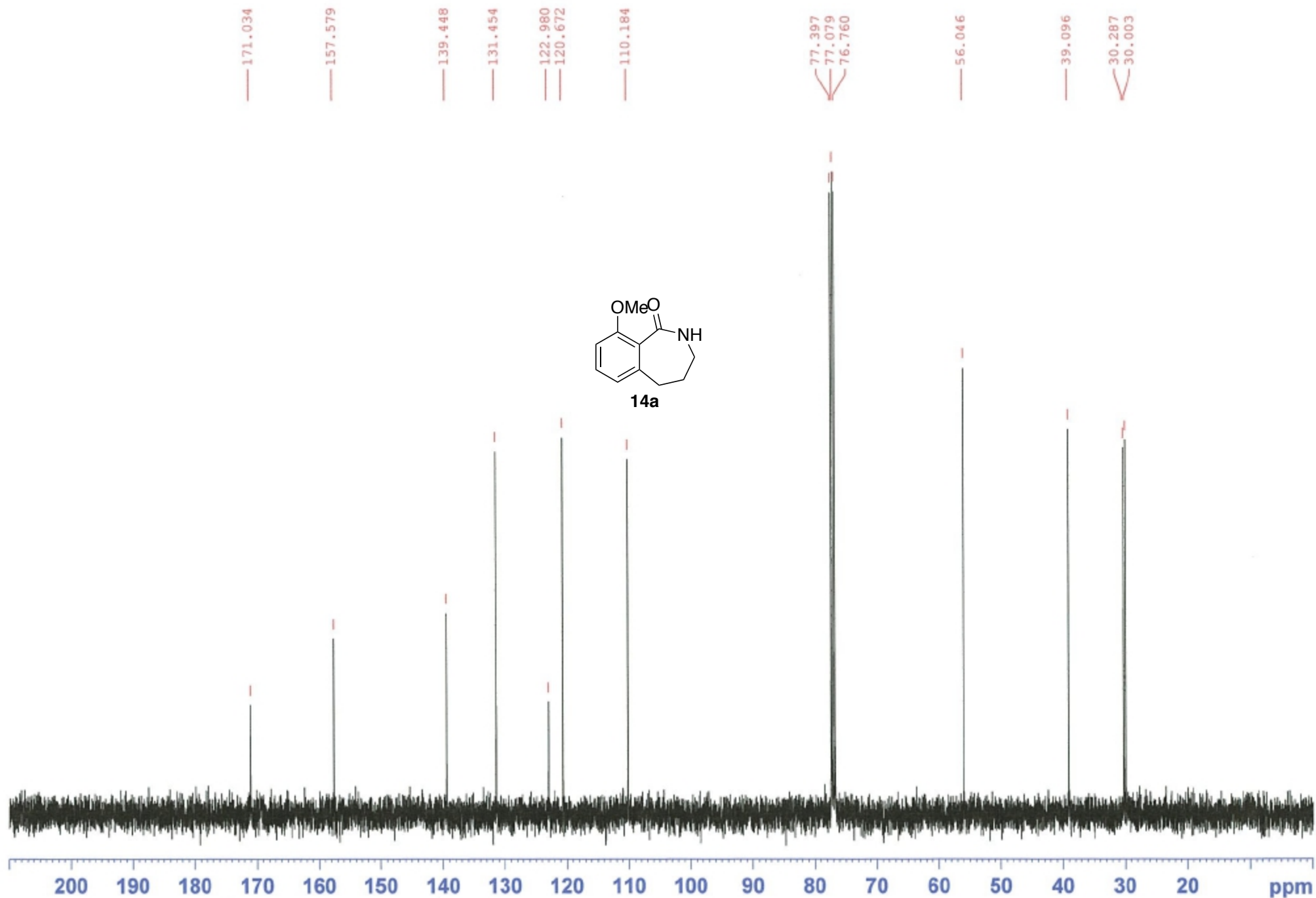
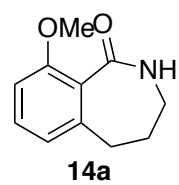


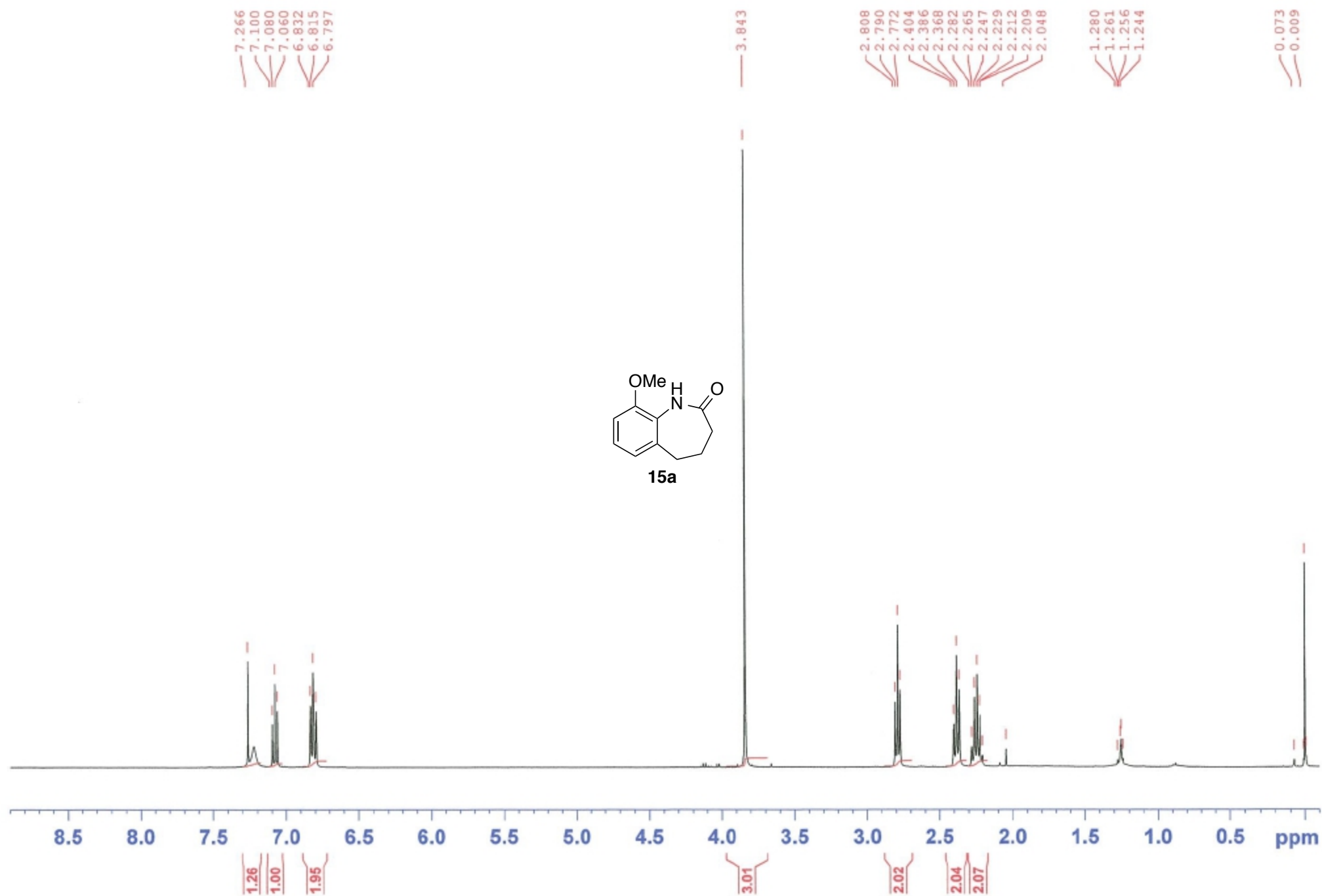
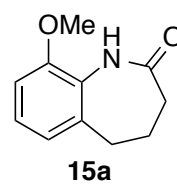


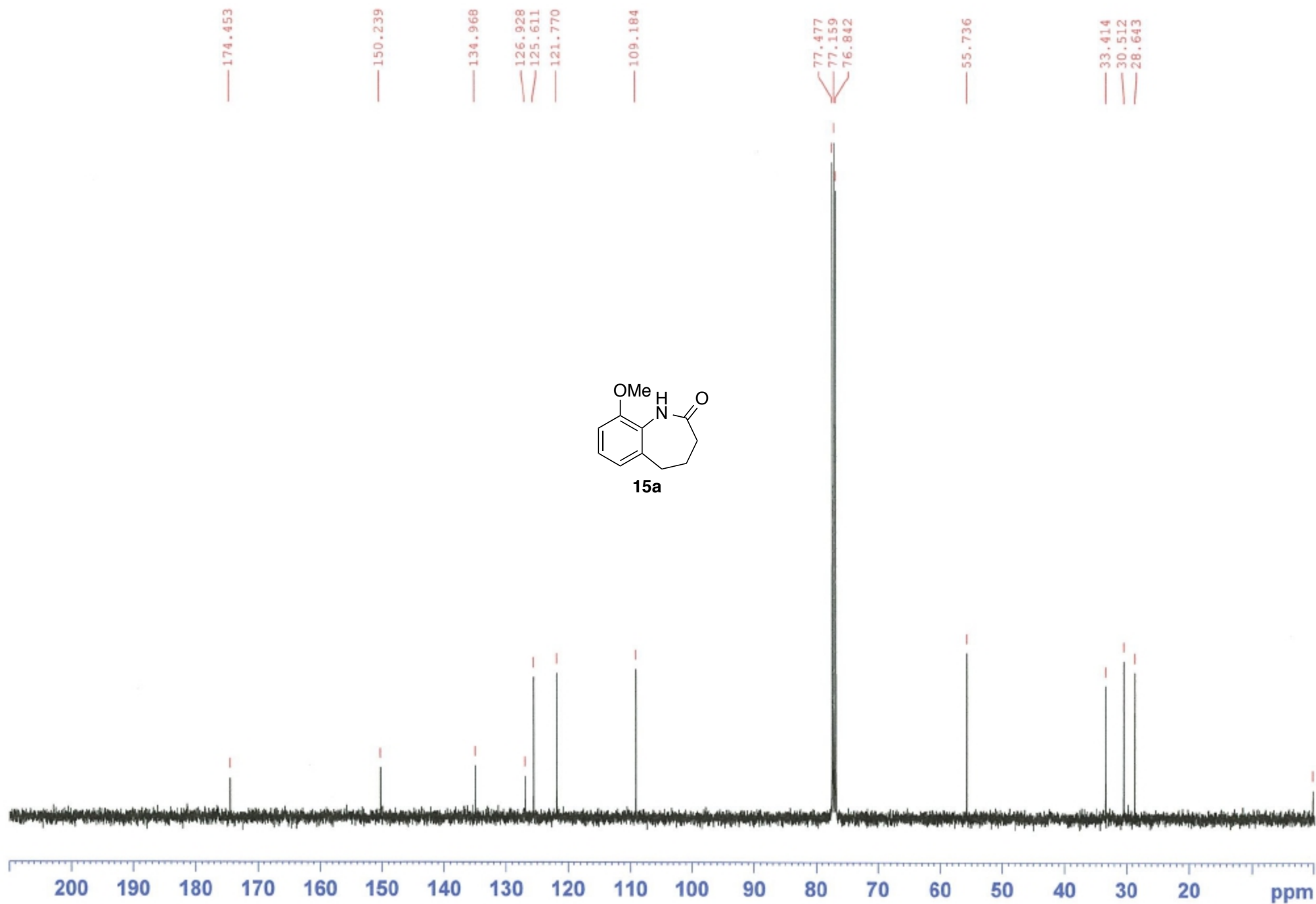
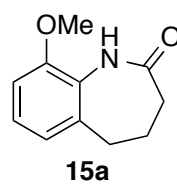


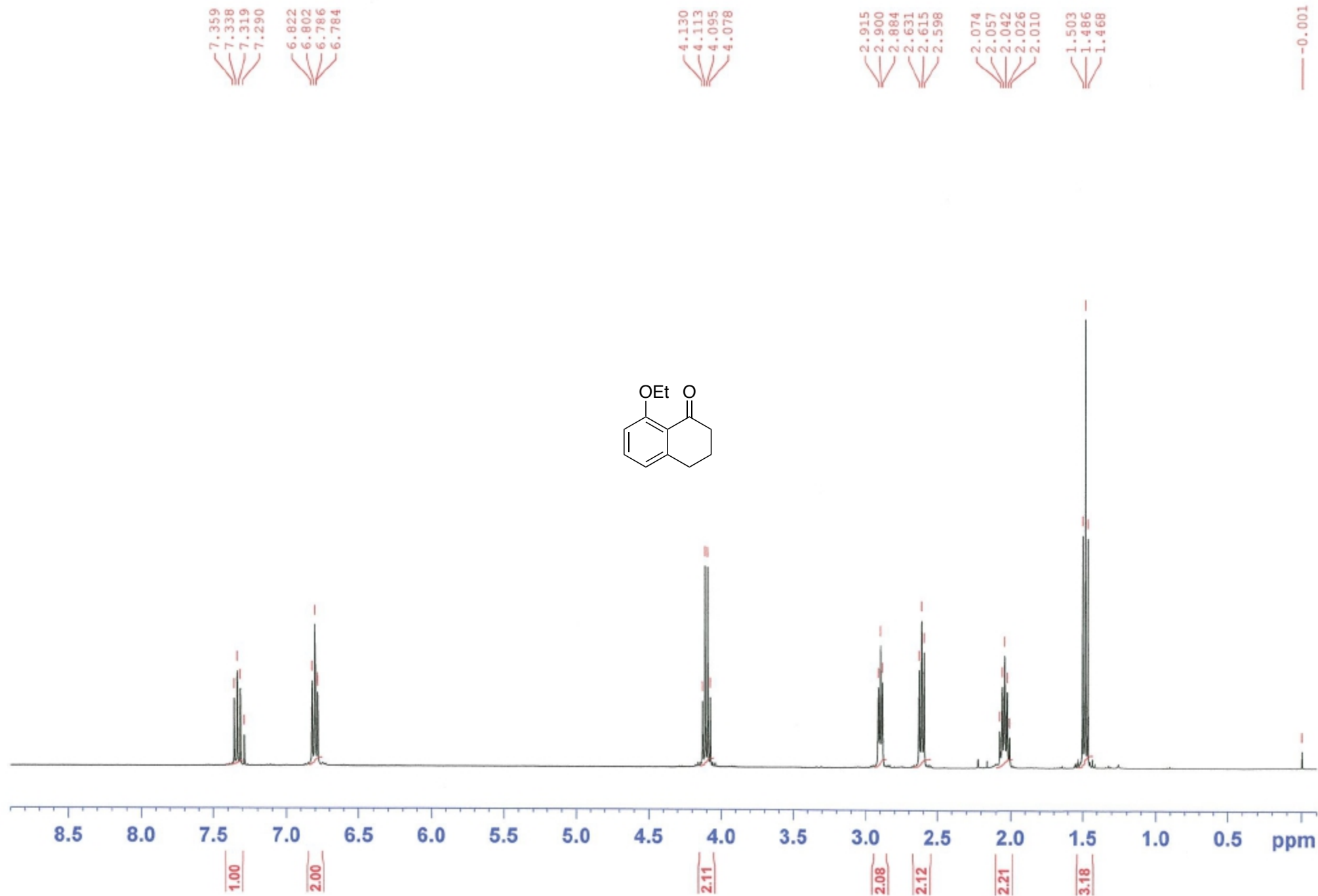


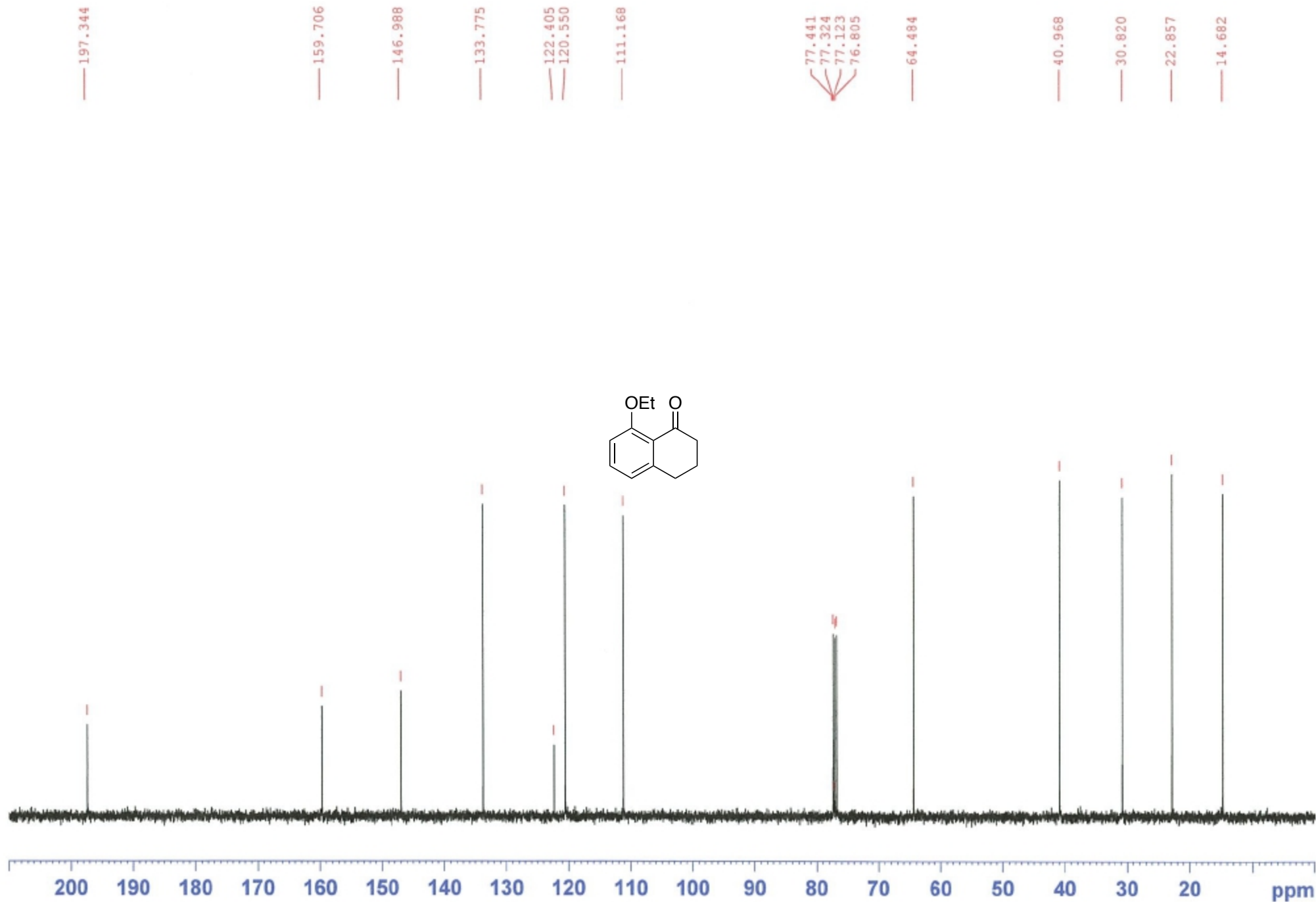


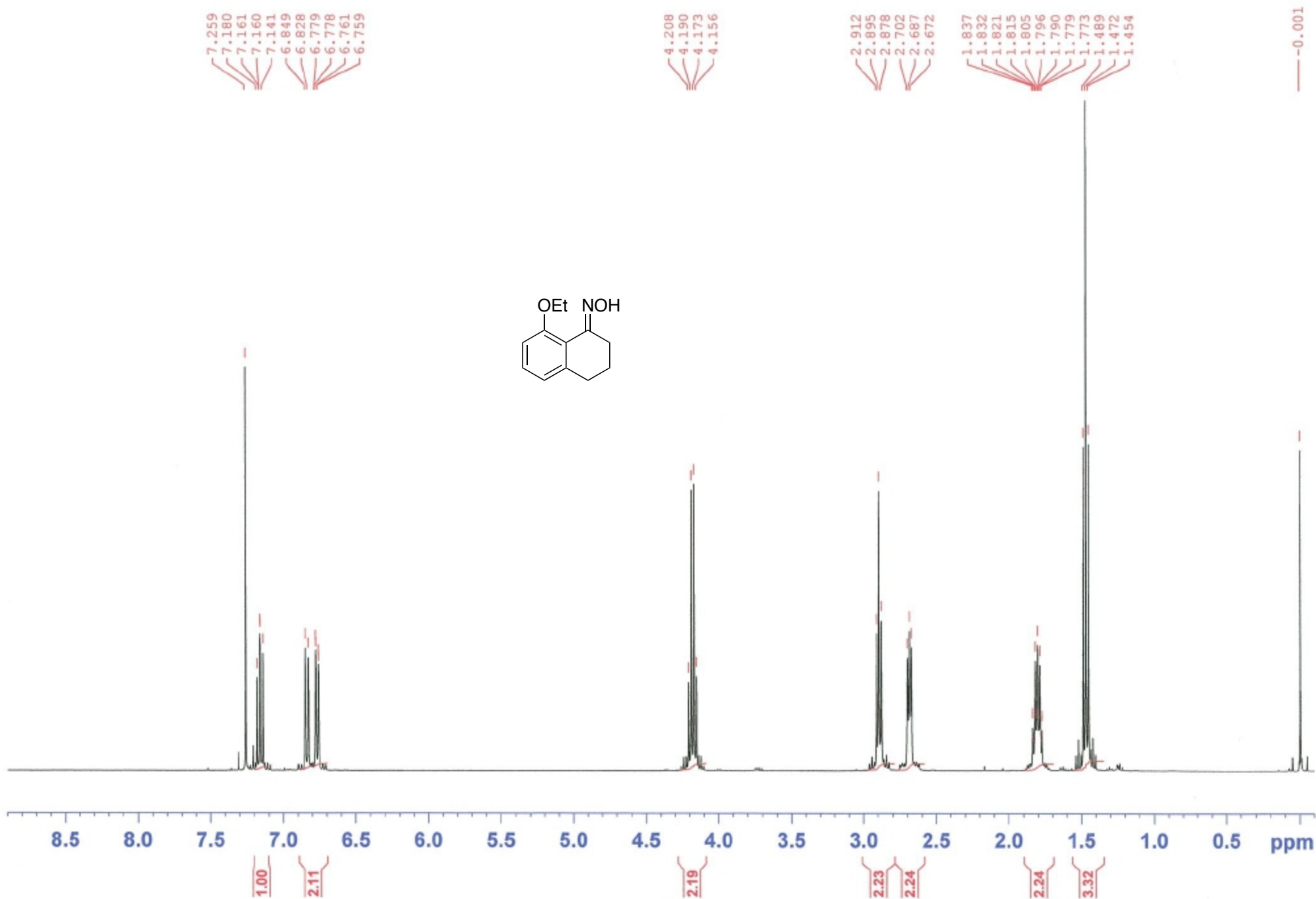
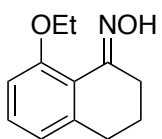


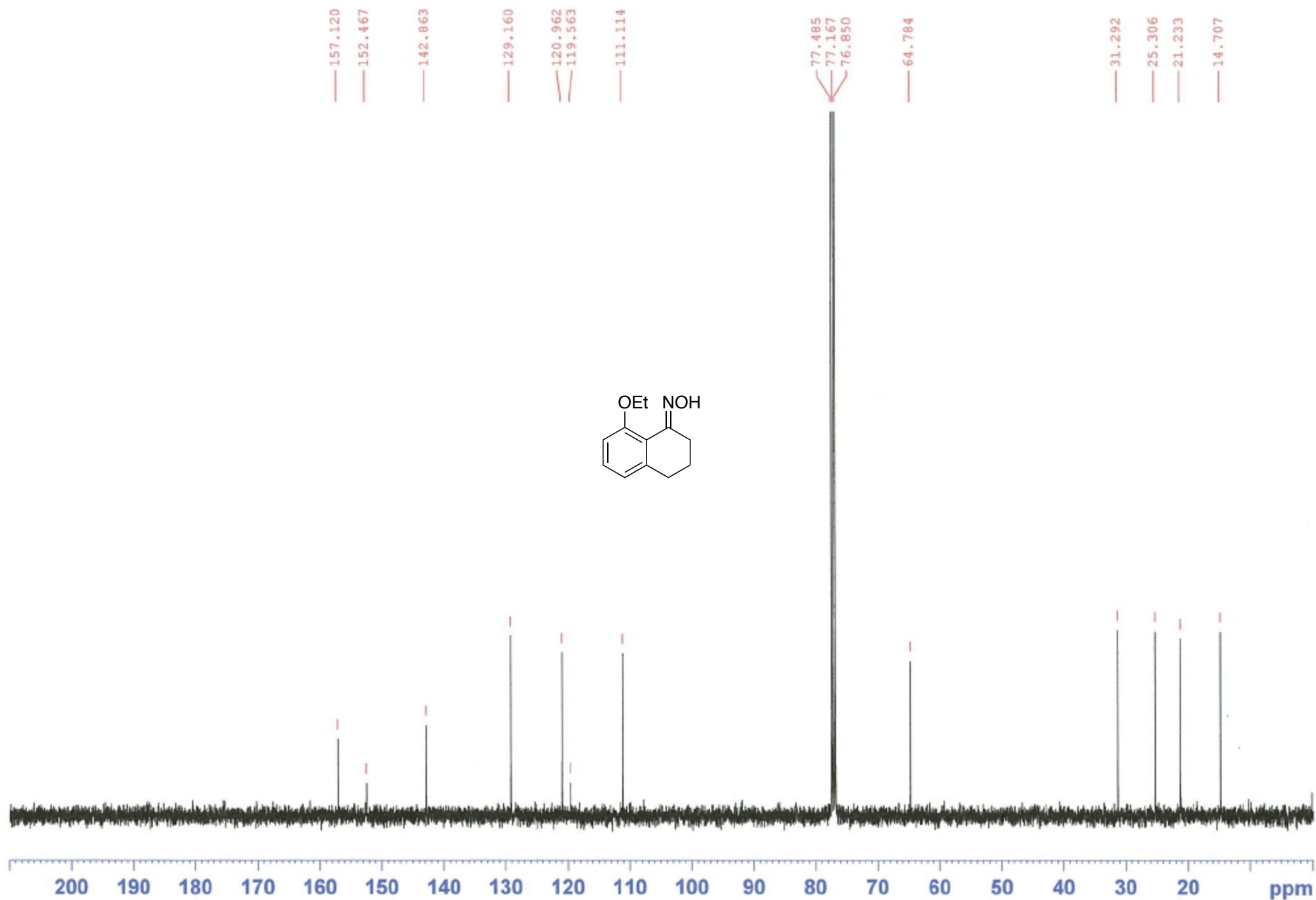
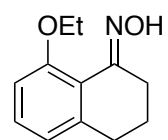


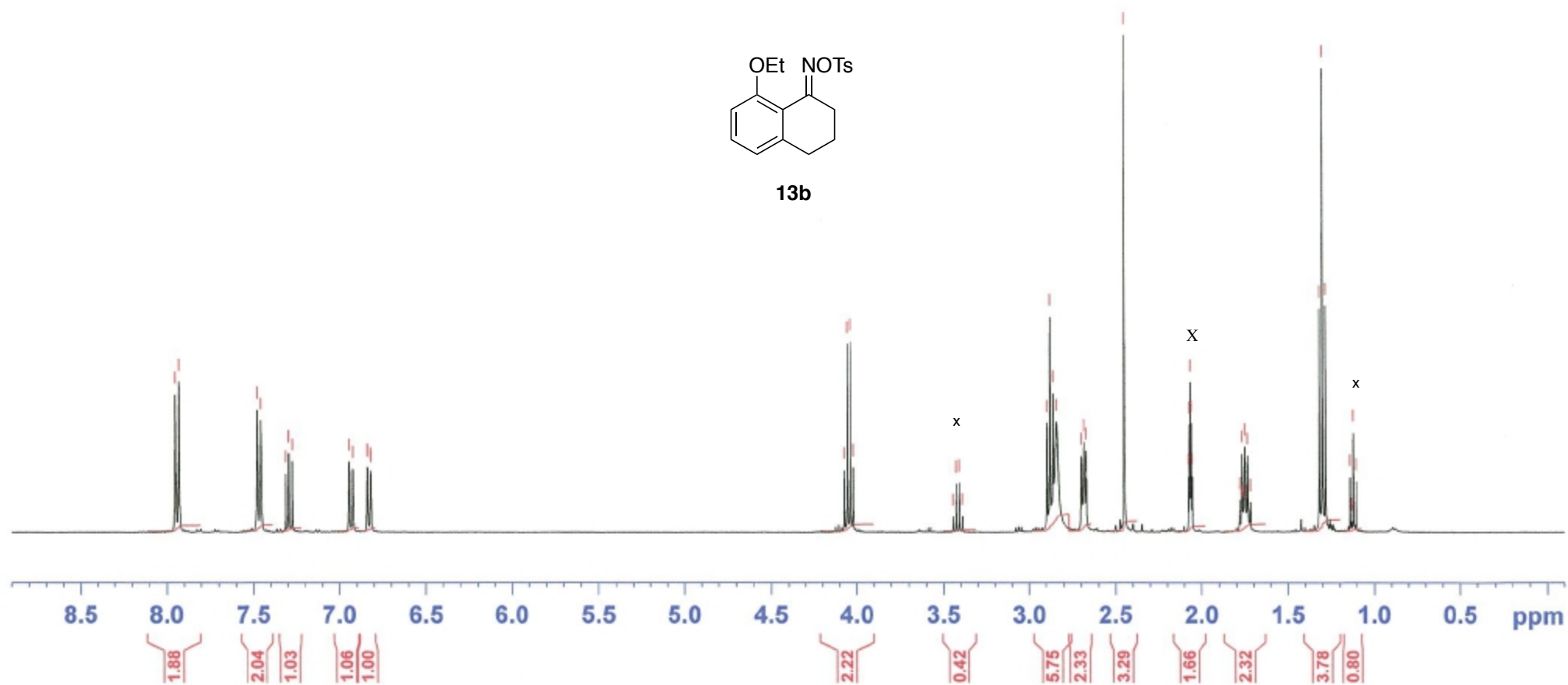
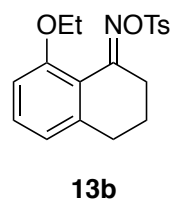


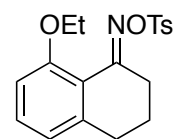












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