

Supplementary Information

Synthesis and Biological Evaluation of Disubstituted Pyrimidines as Selective 5-HT_{2C} agonists

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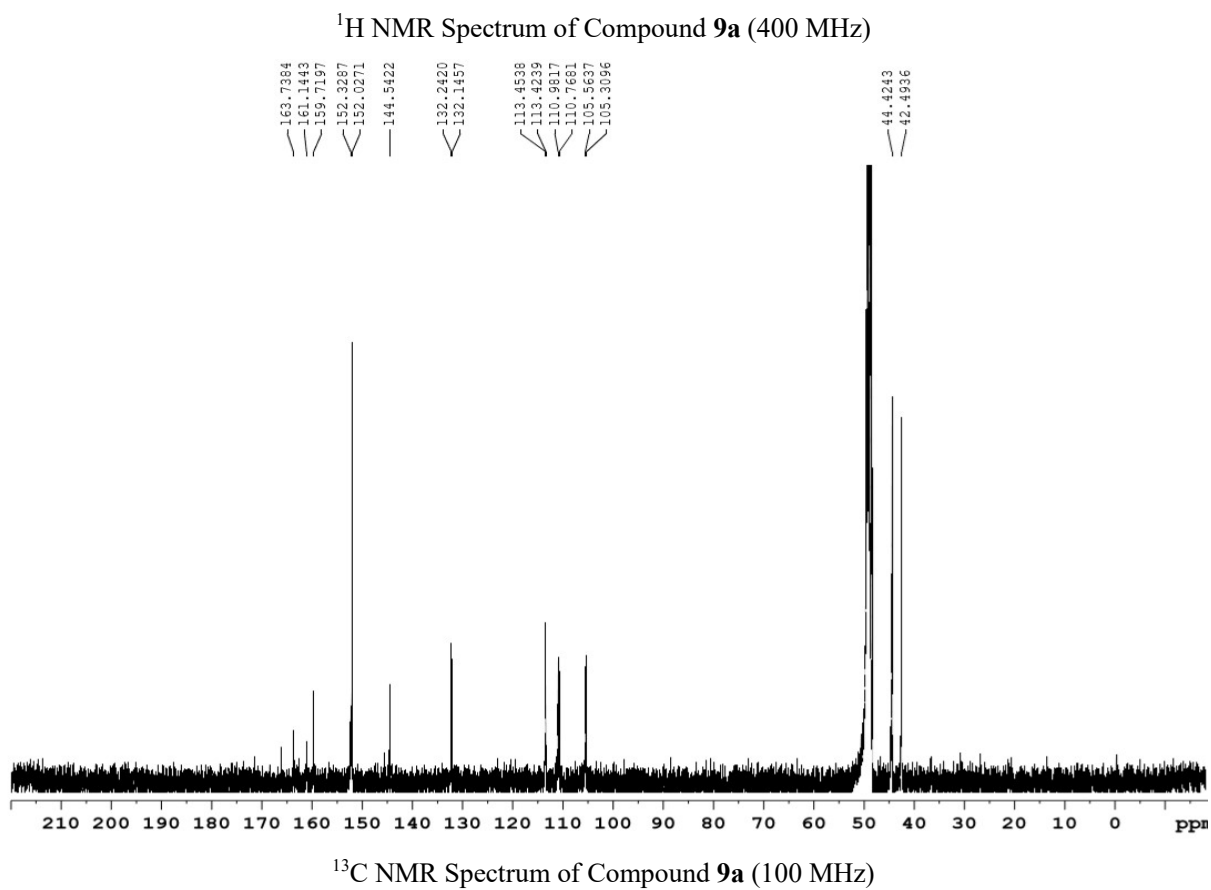
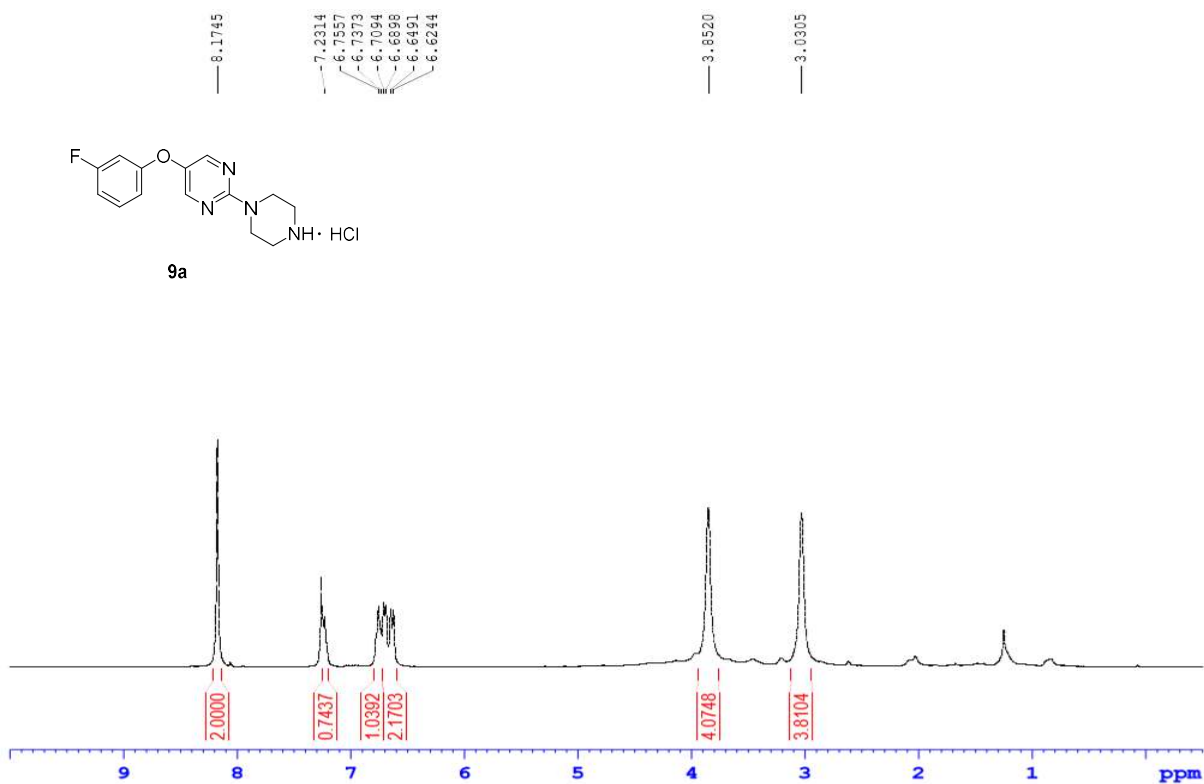
Both authors contributed equally to this work.

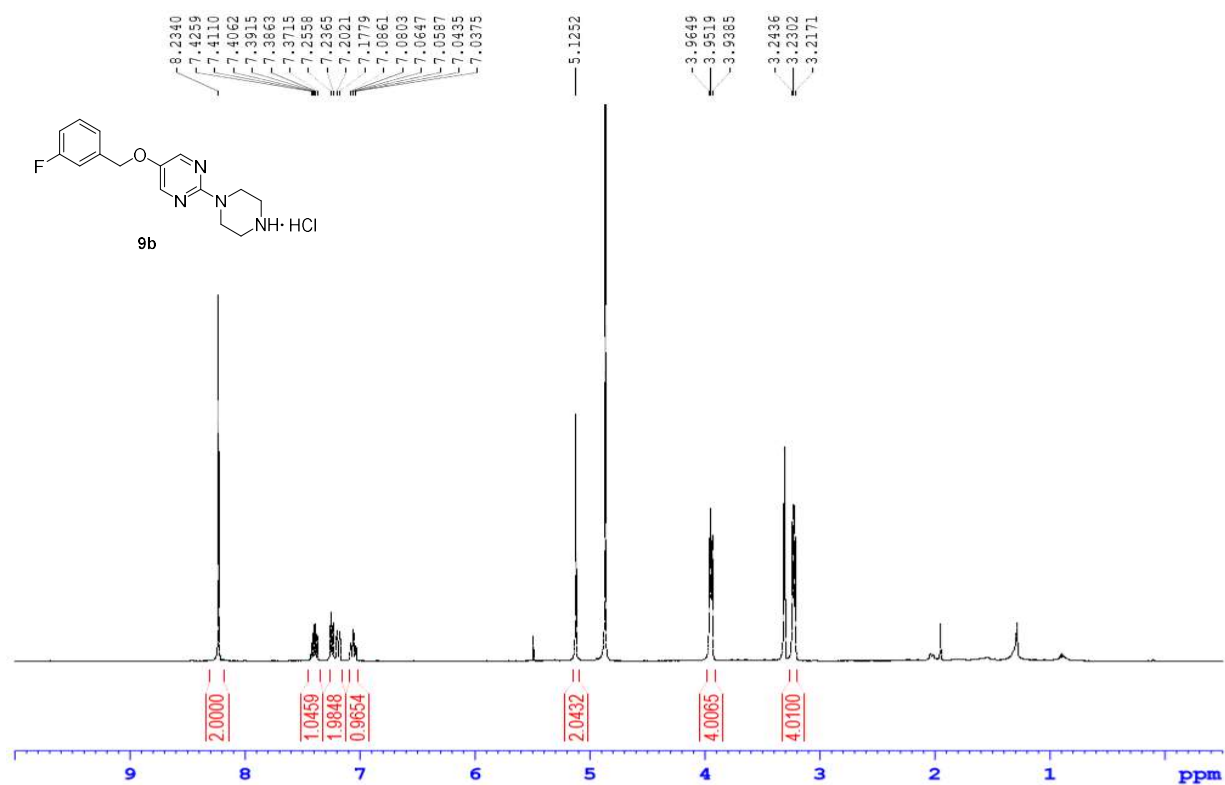
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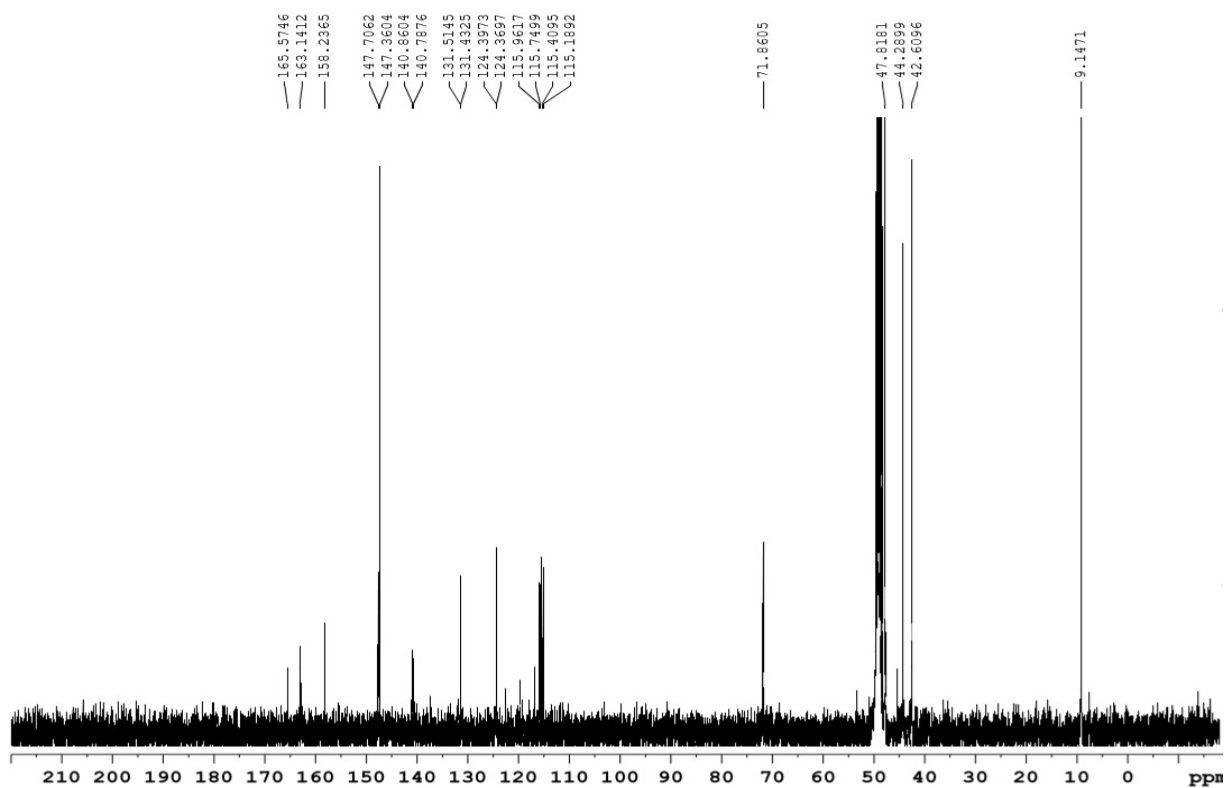
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1. NMR spectral data of 2,5-disubstituted pyrimidine **9a-9i**

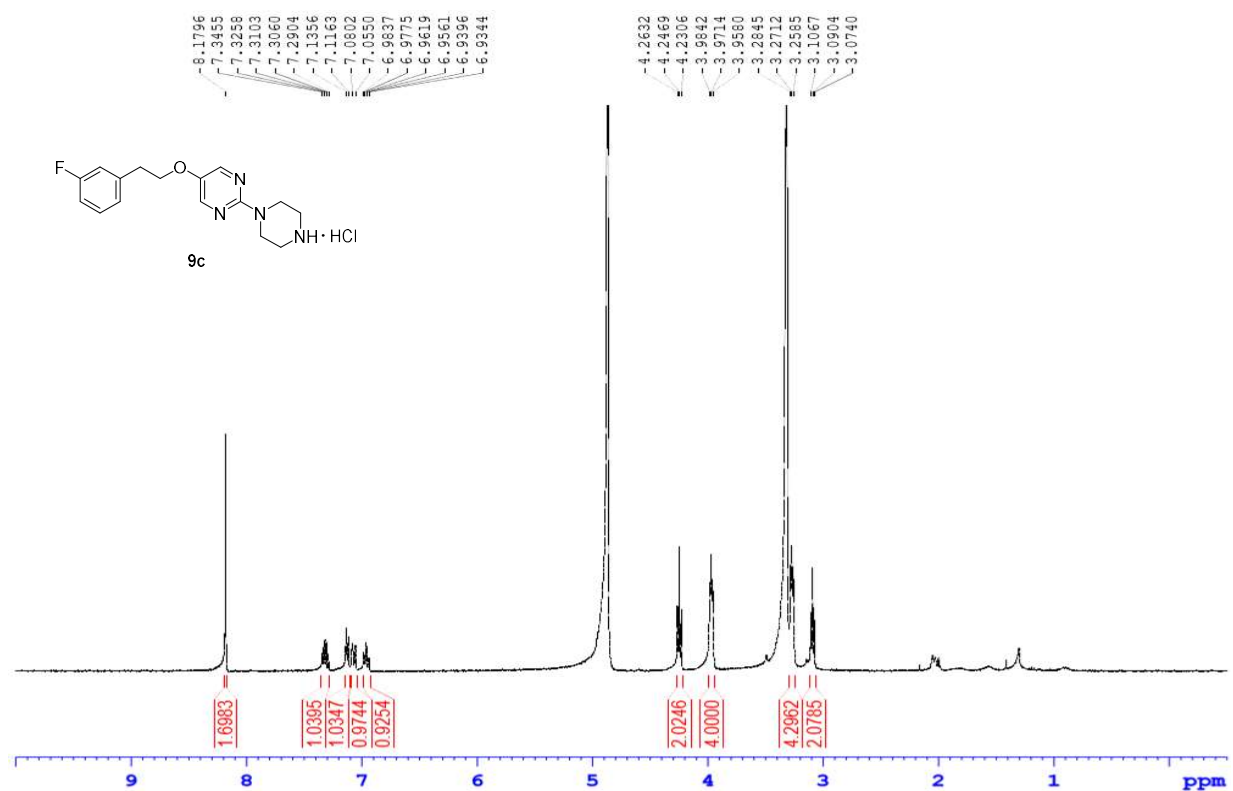




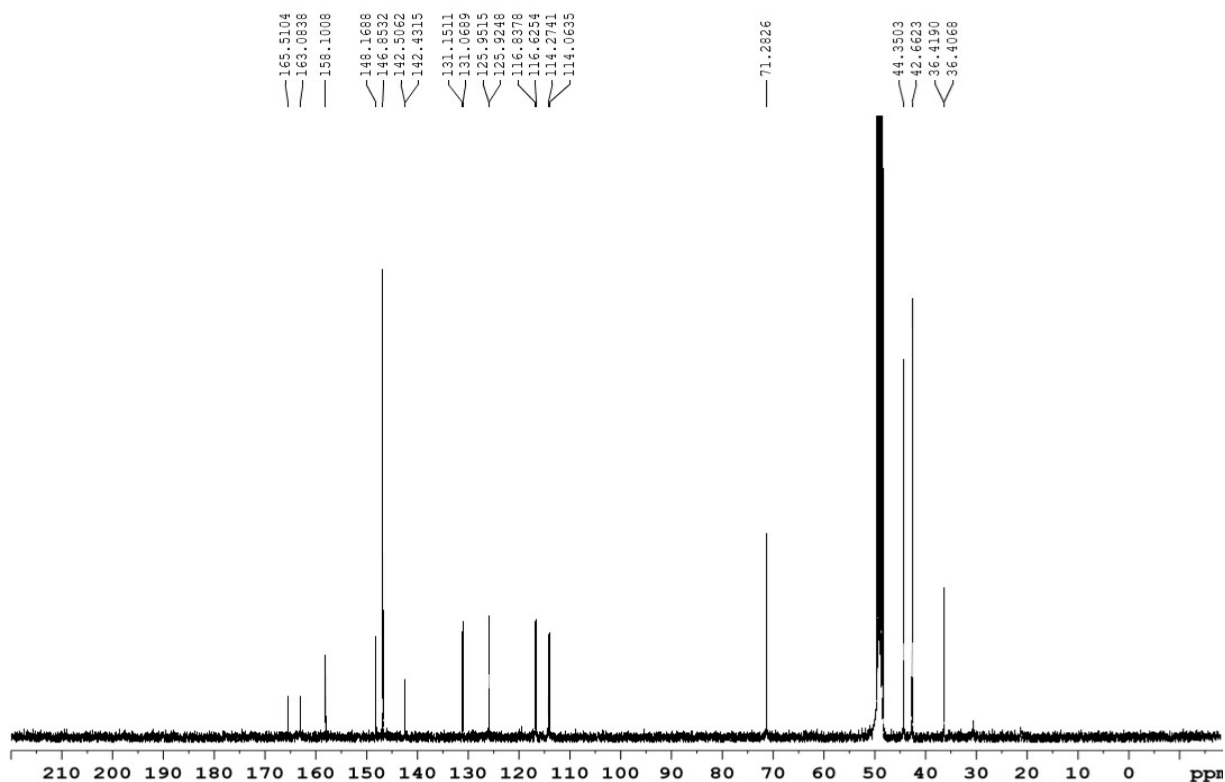
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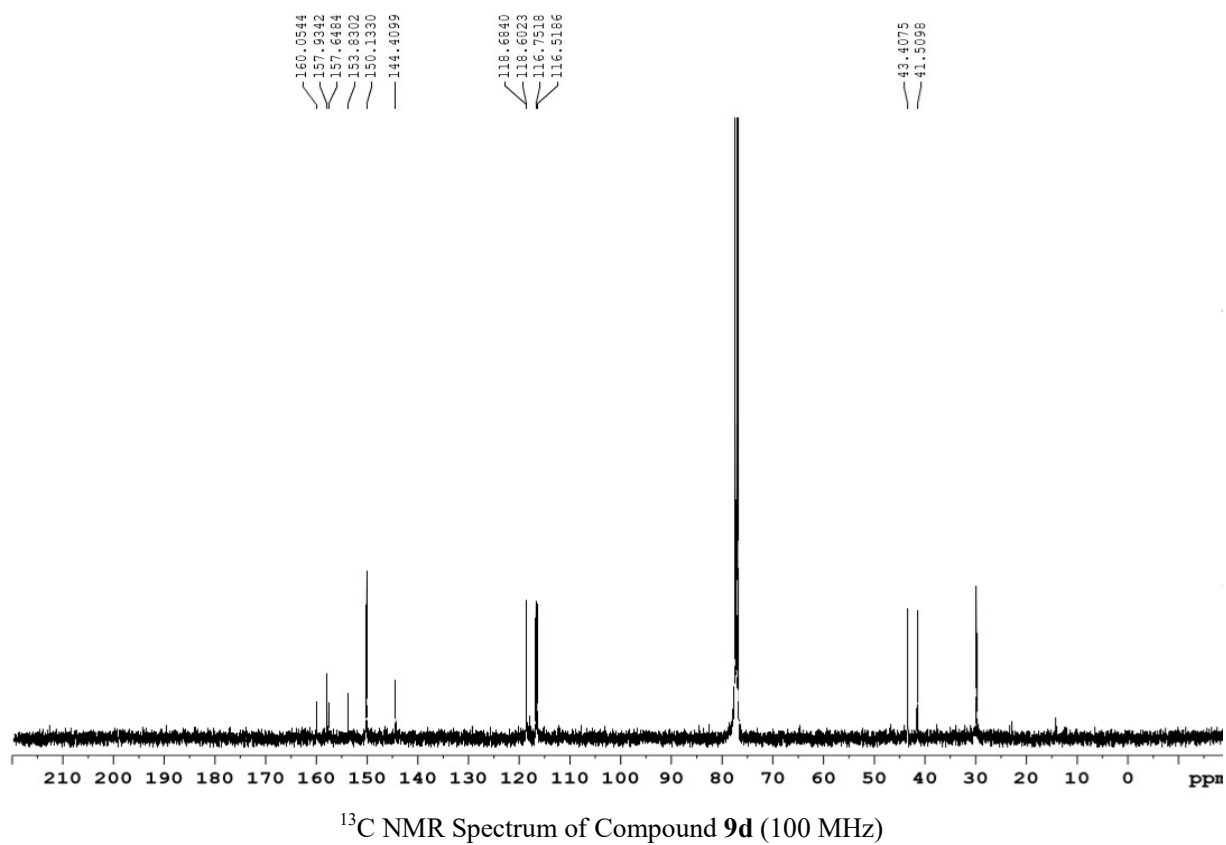
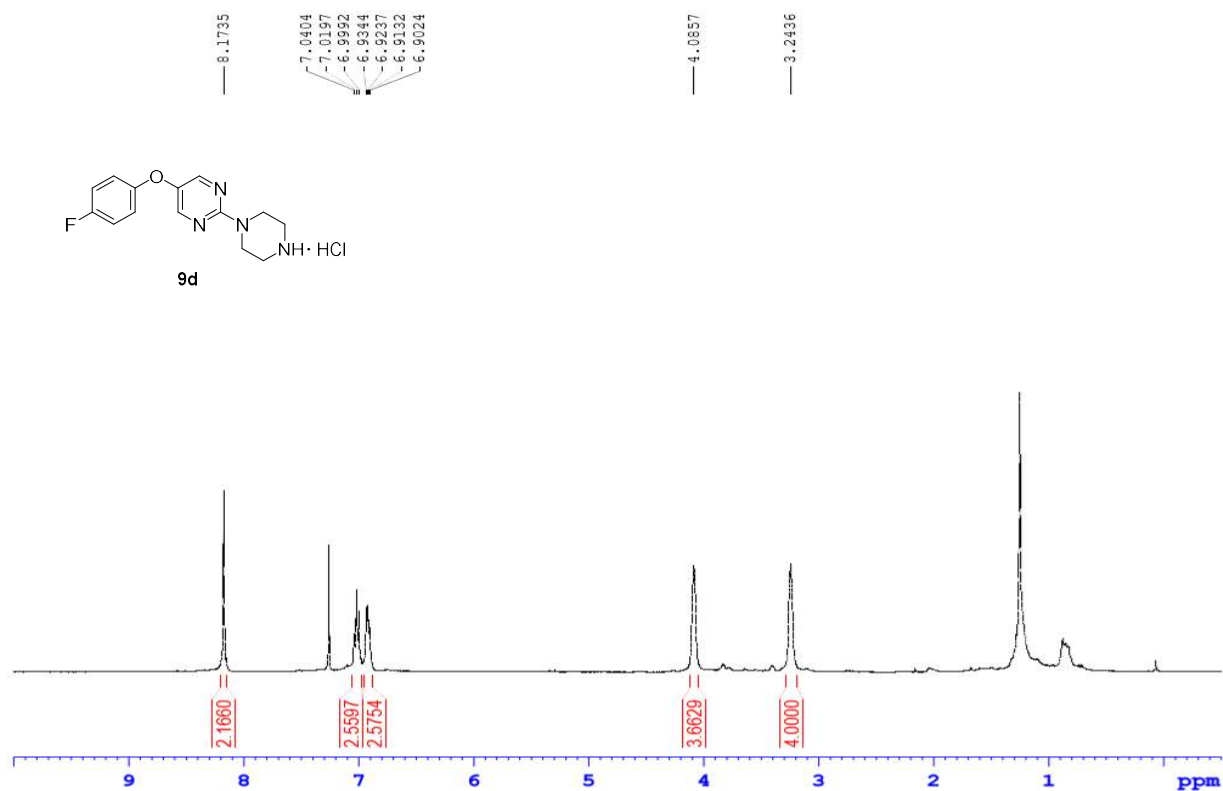
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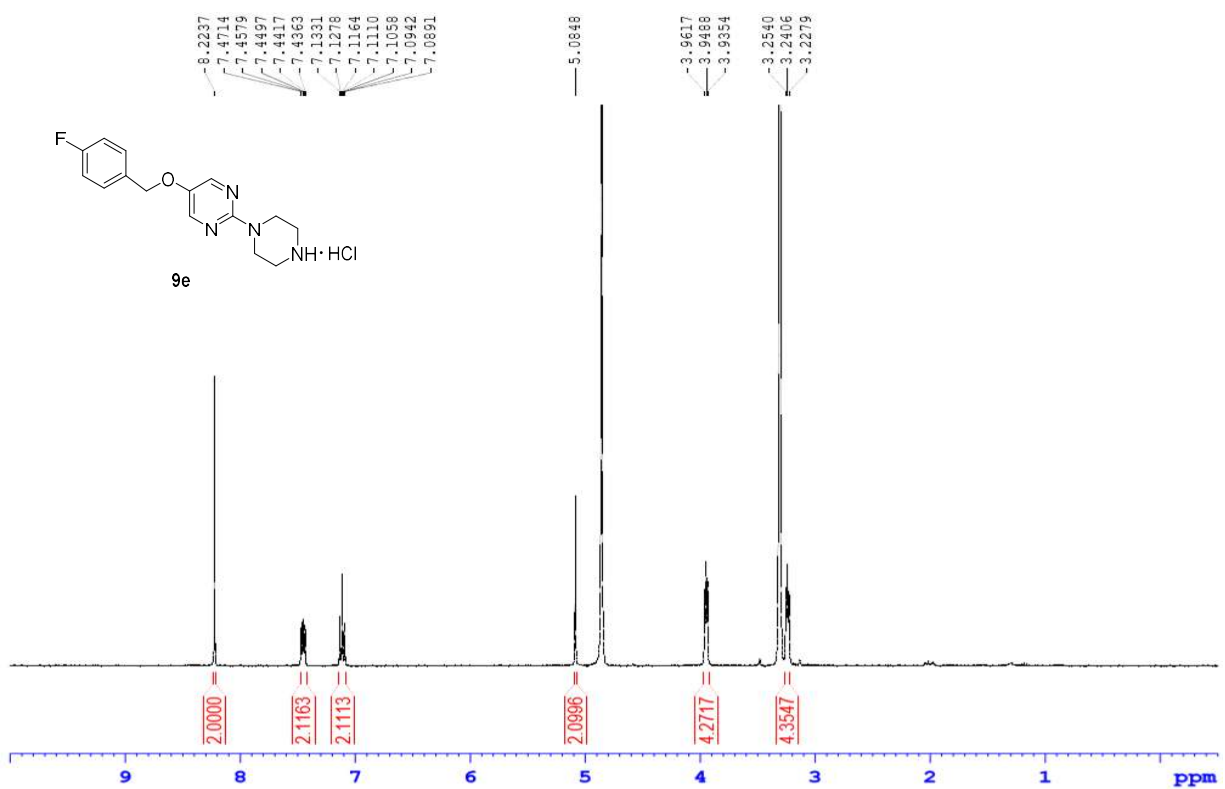


^1H NMR Spectrum of Compound **9c** (400 MHz)

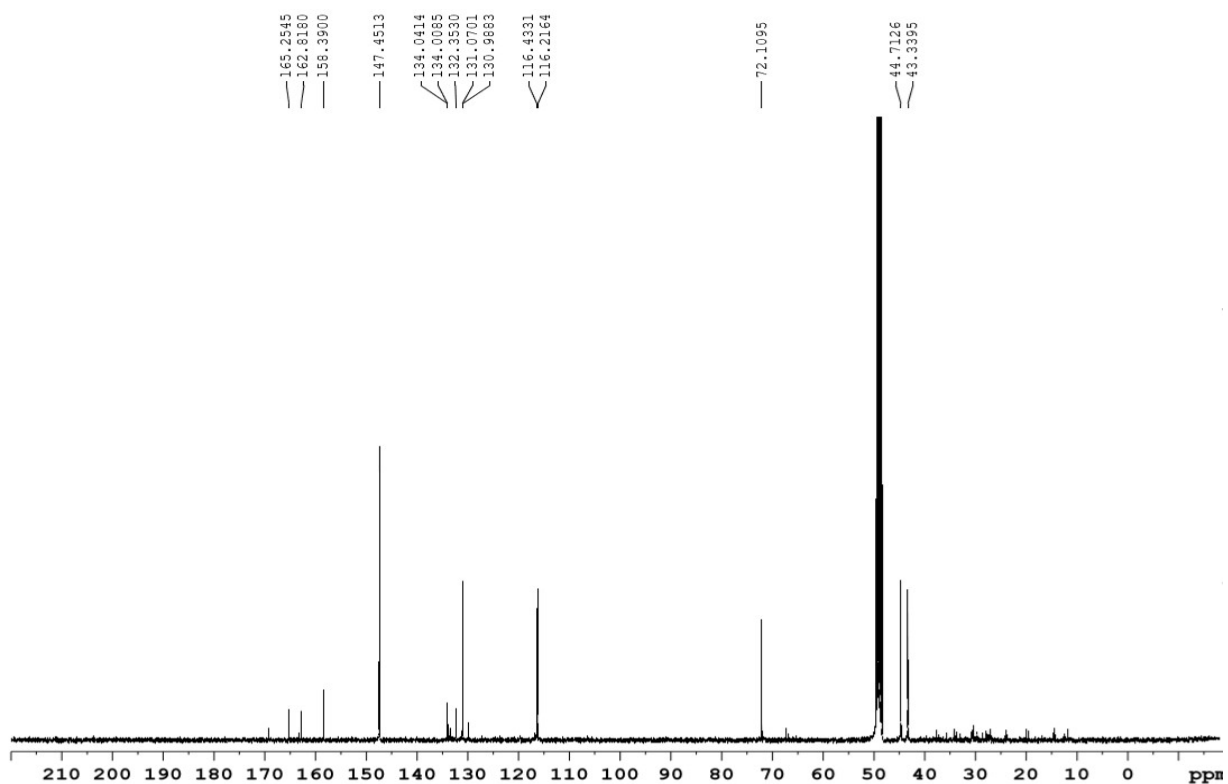


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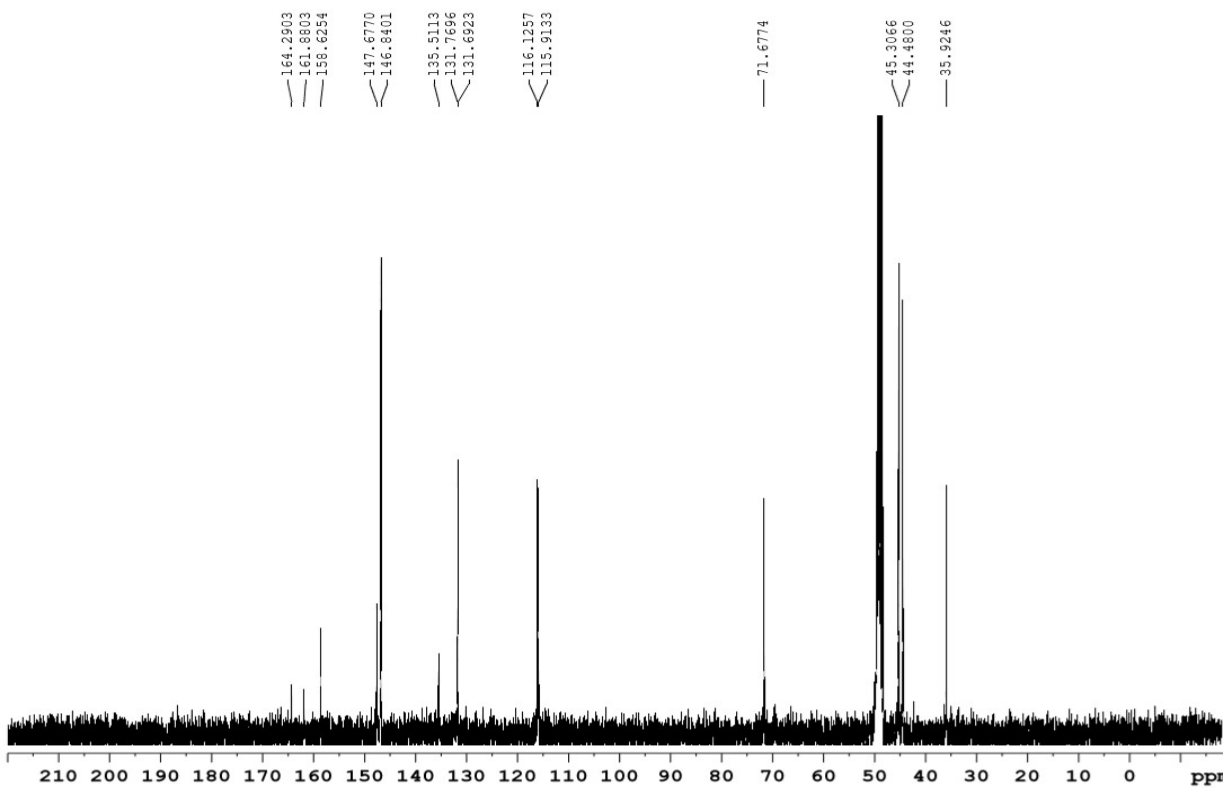
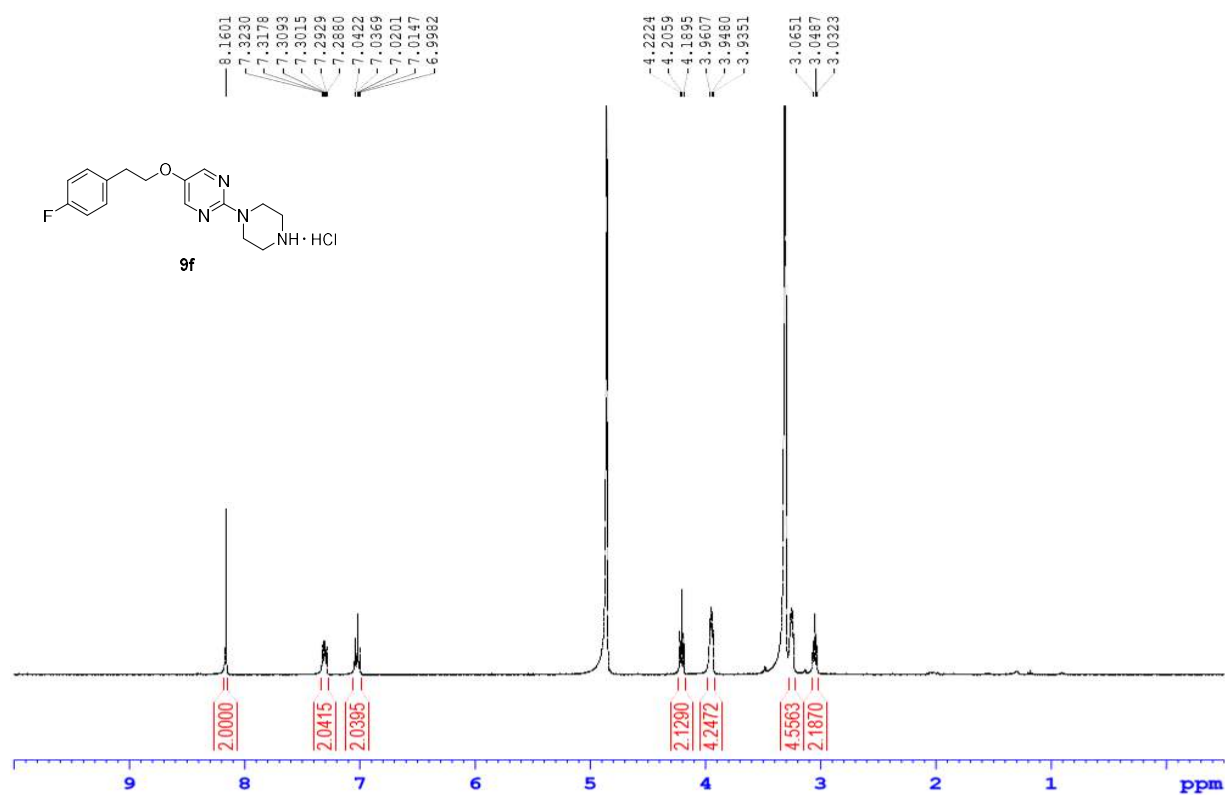




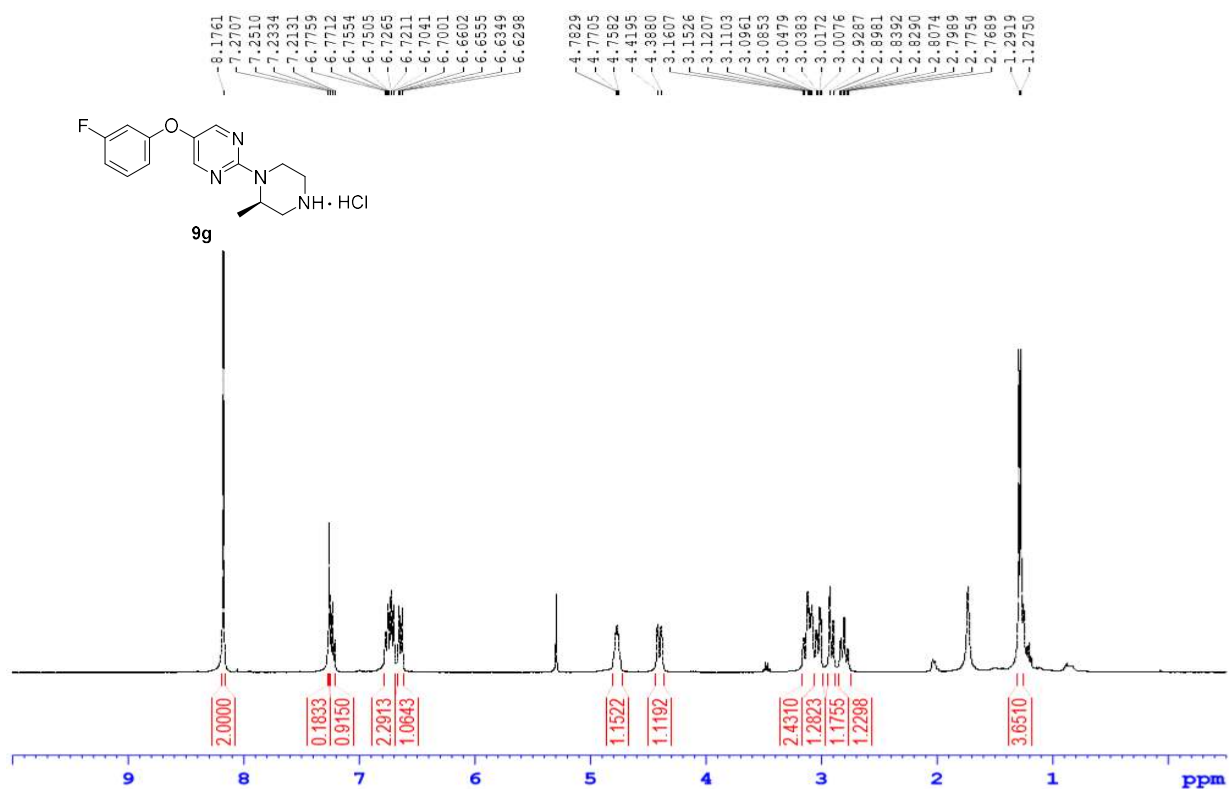
¹H NMR Spectrum of Compound 9e (400 MHz)



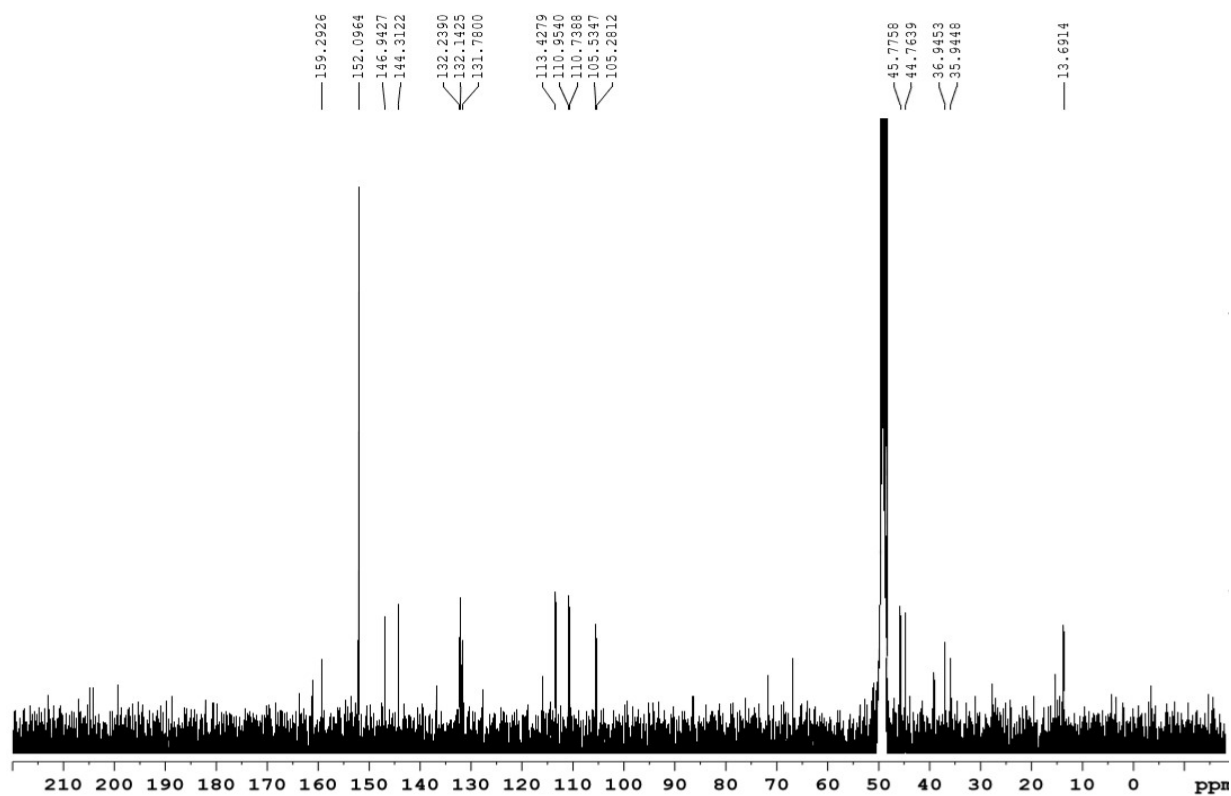
¹³C NMR Spectrum of Compound 9e (100 MHz)



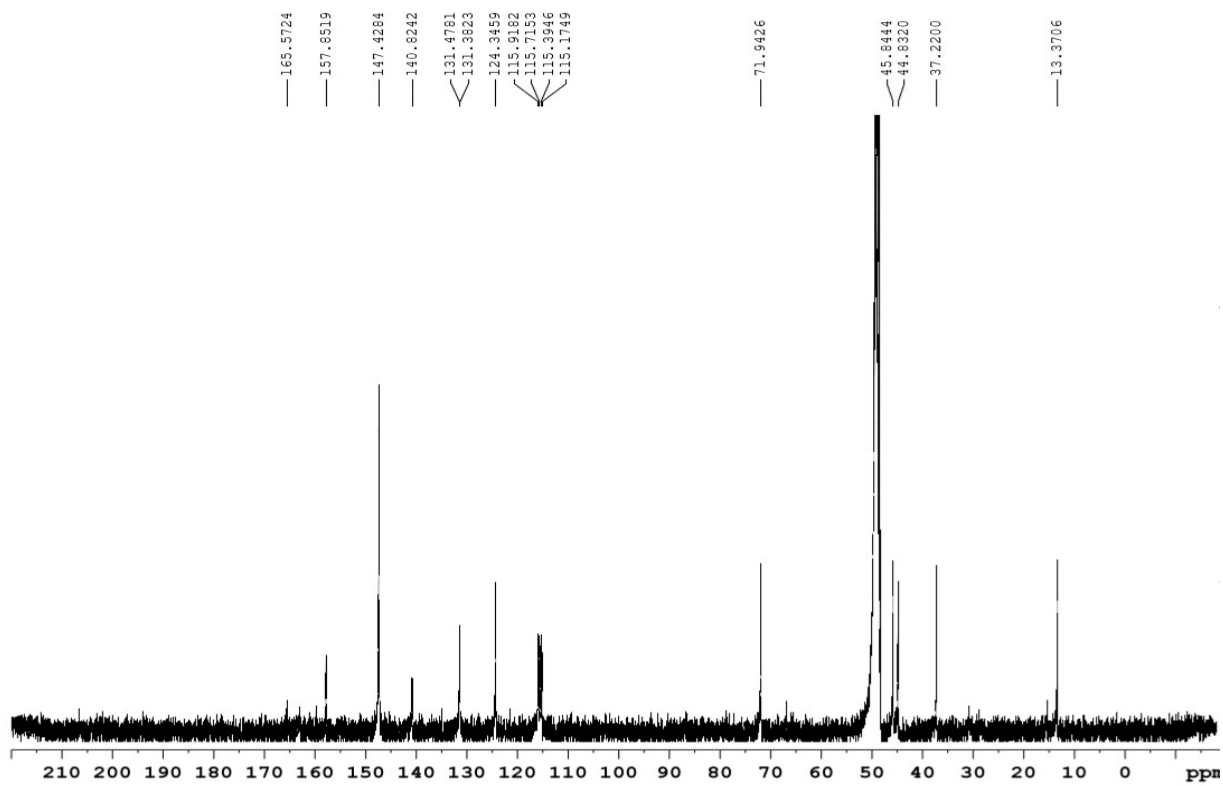
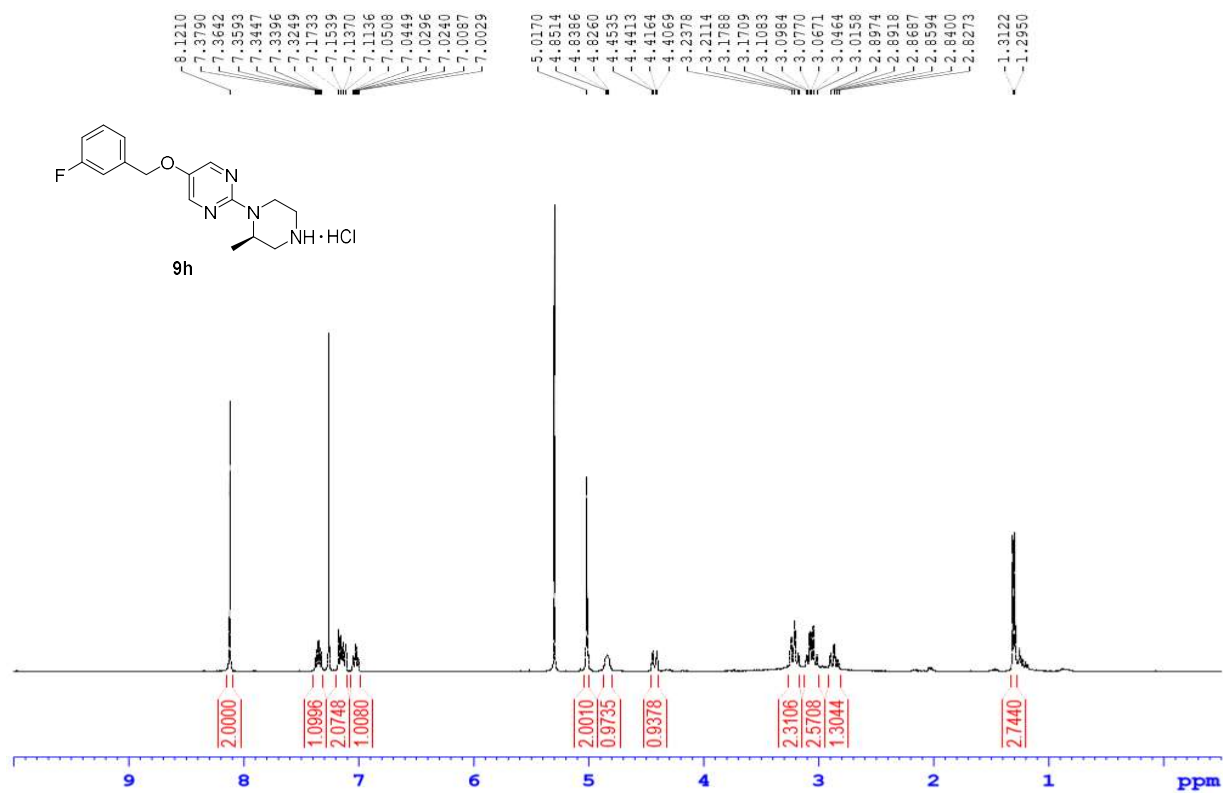
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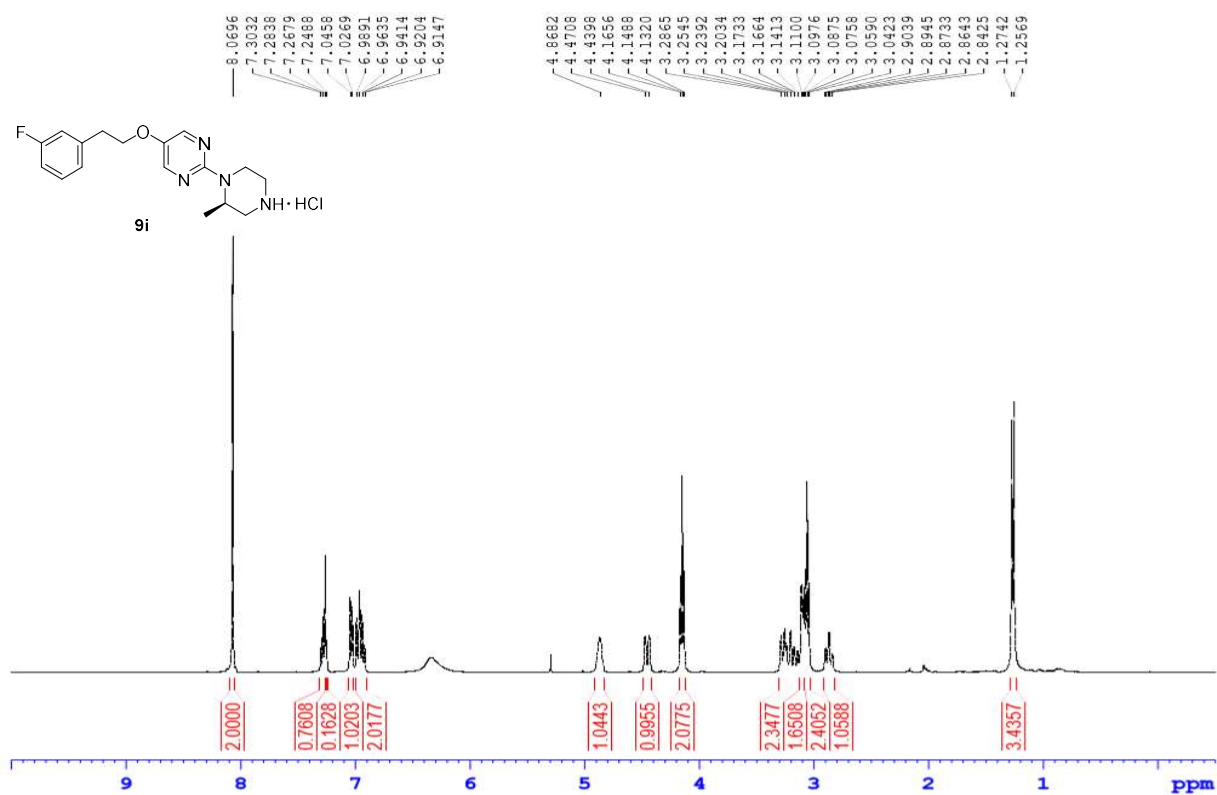


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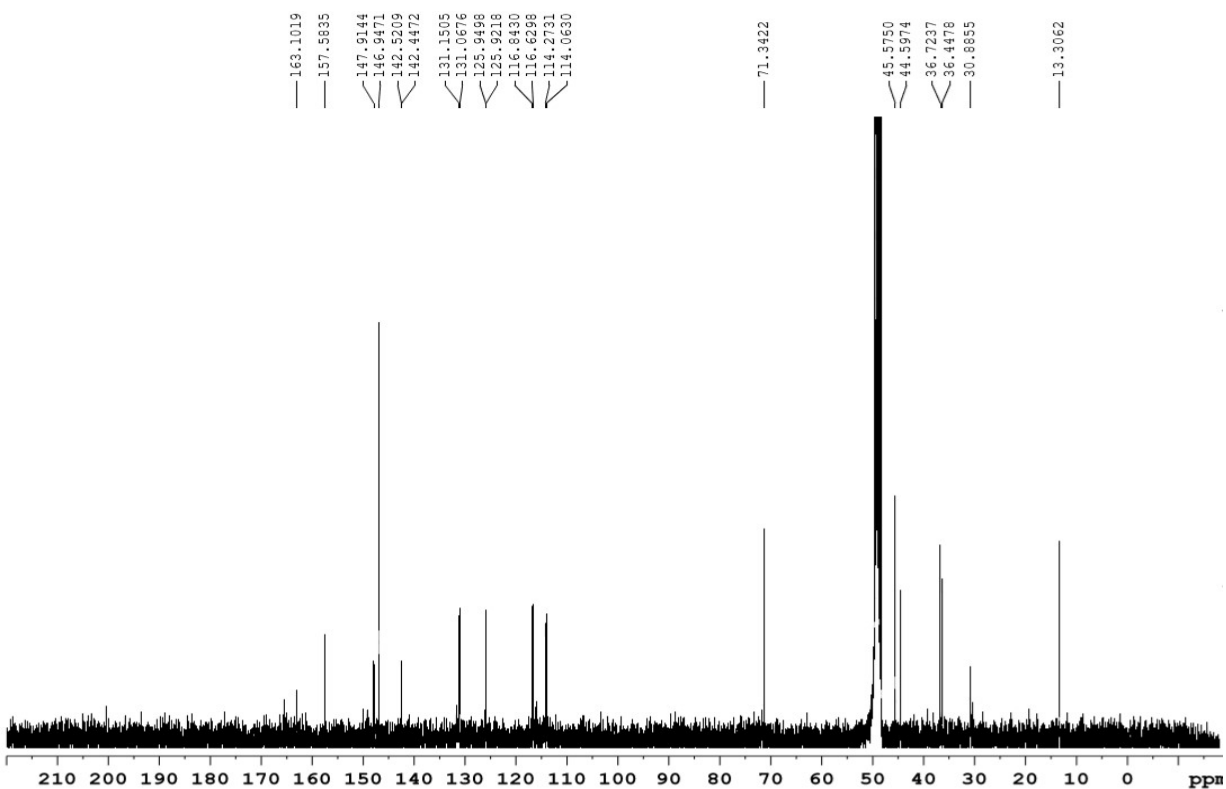


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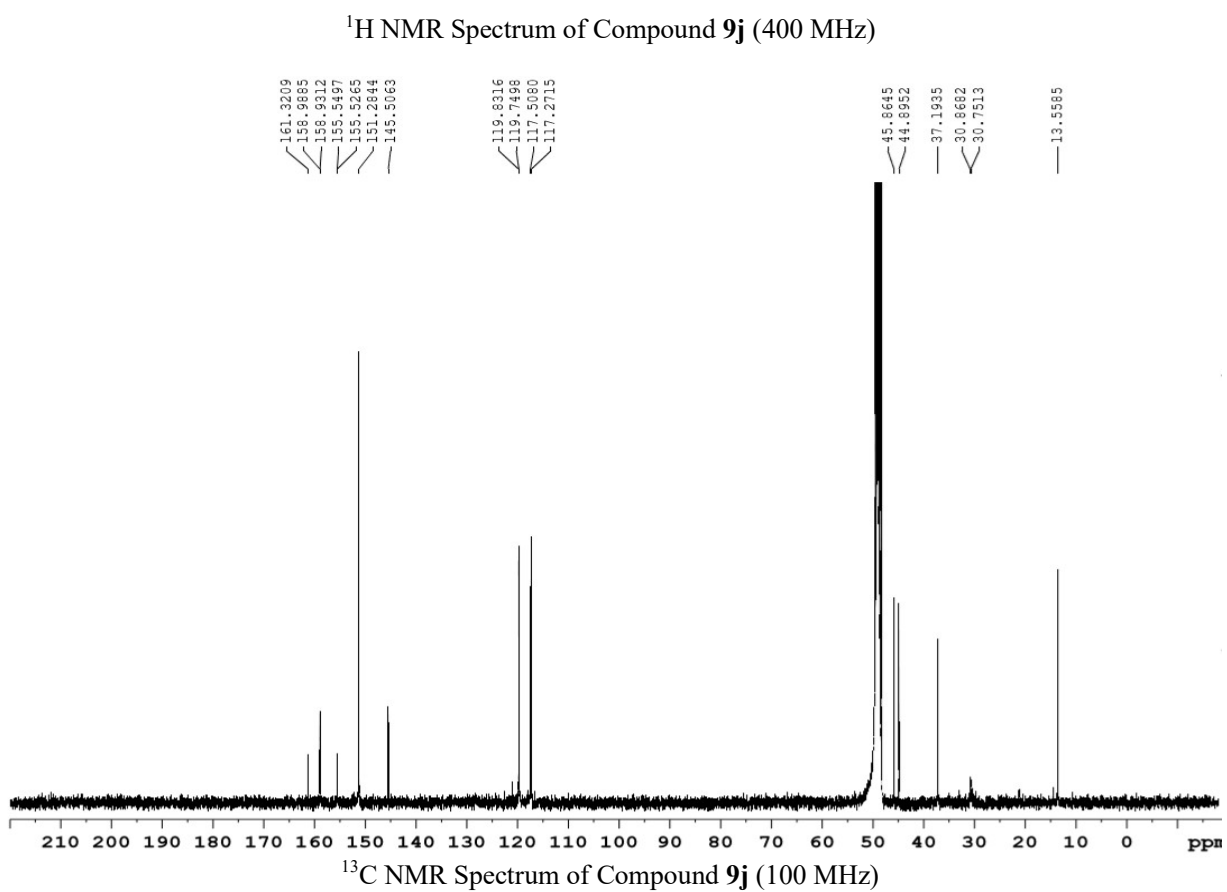
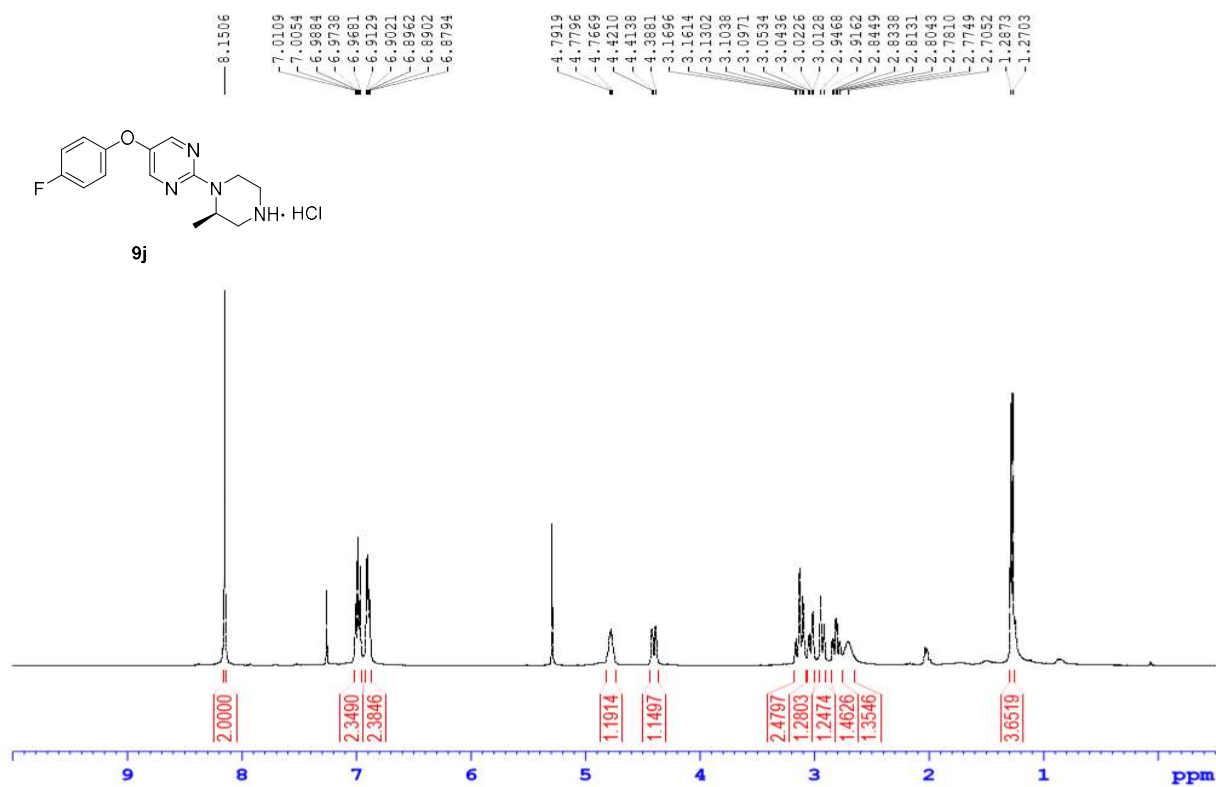


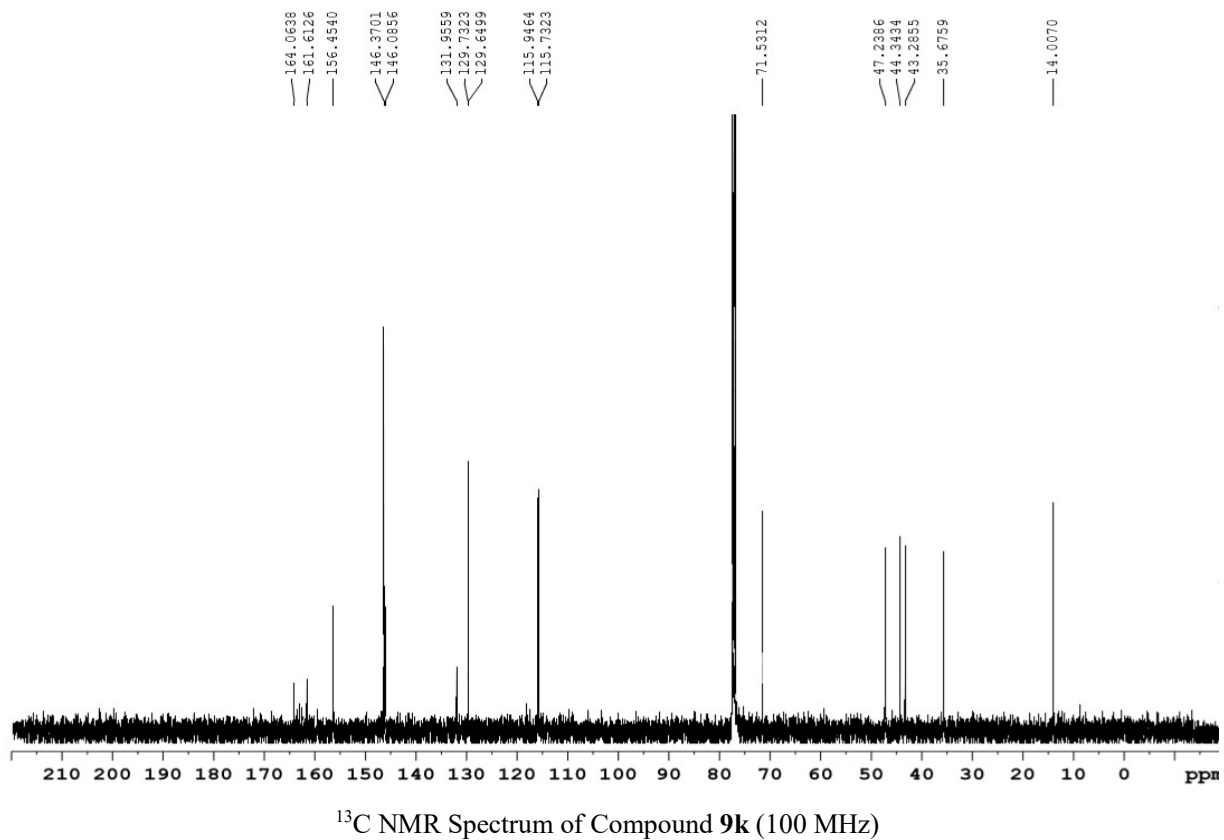
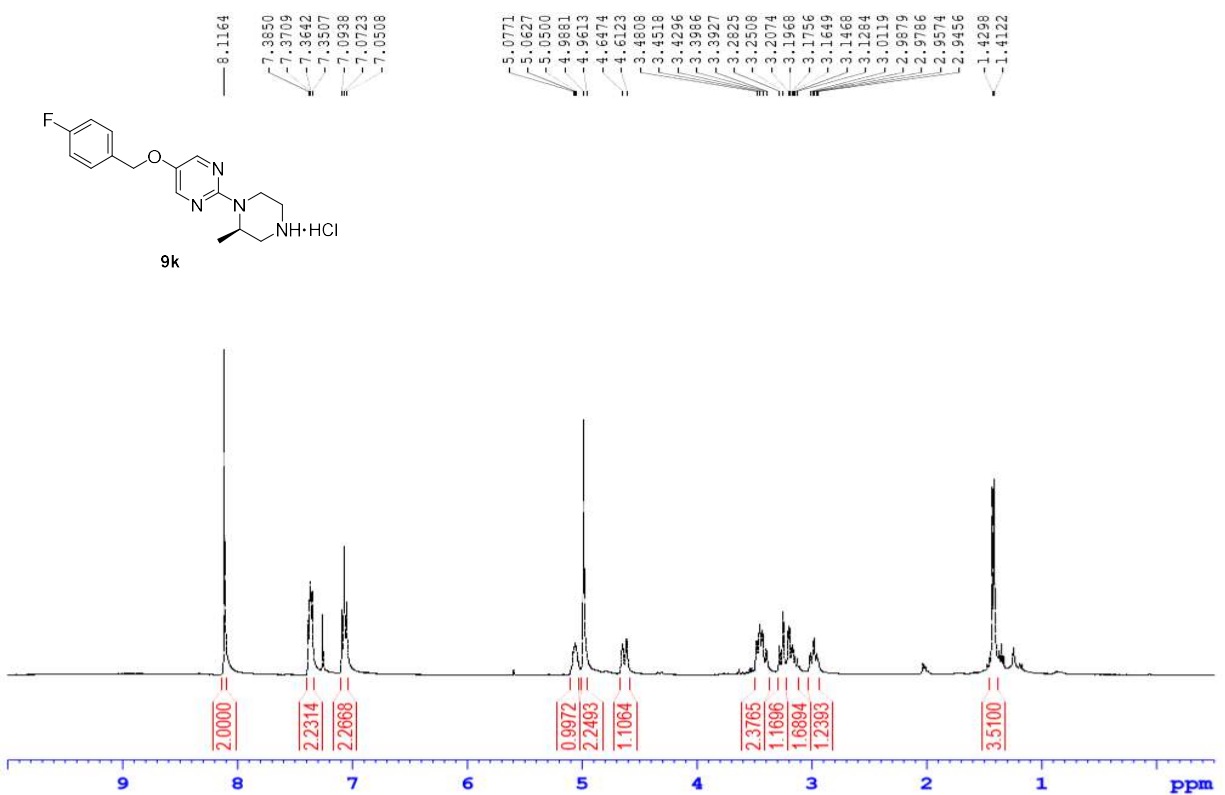


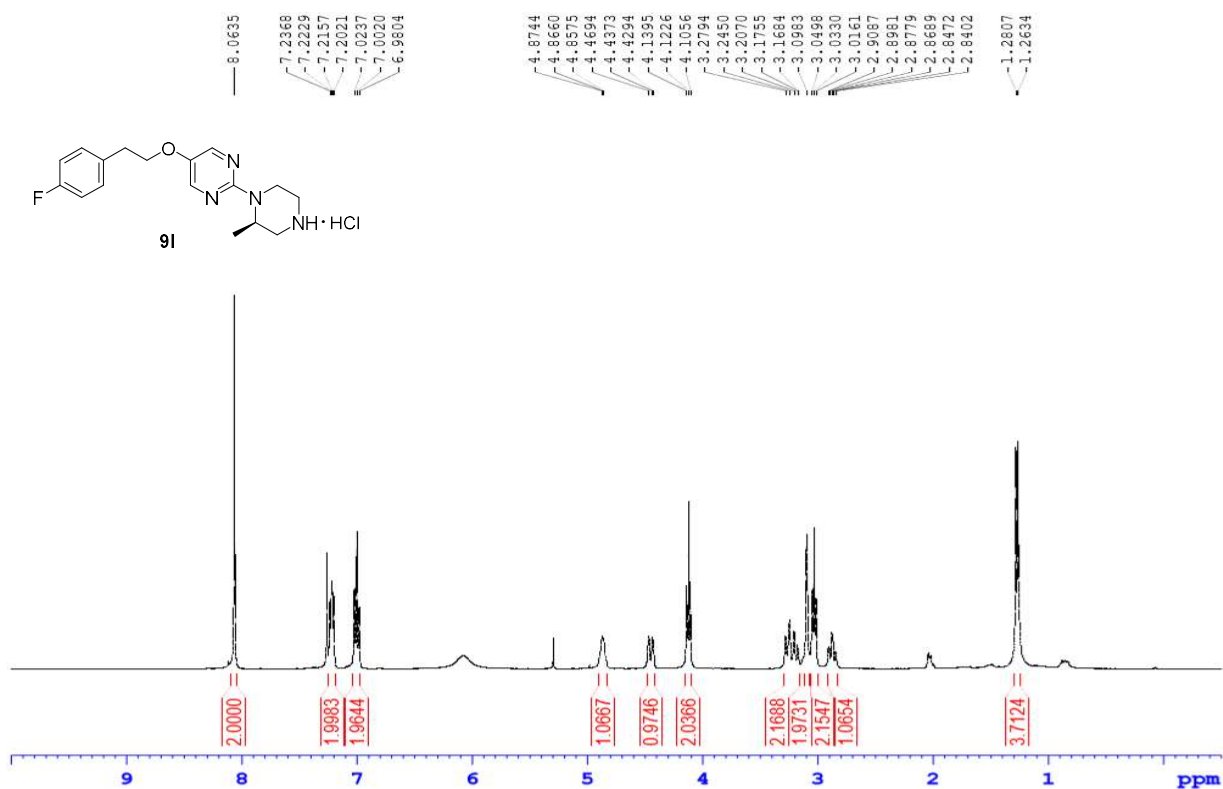
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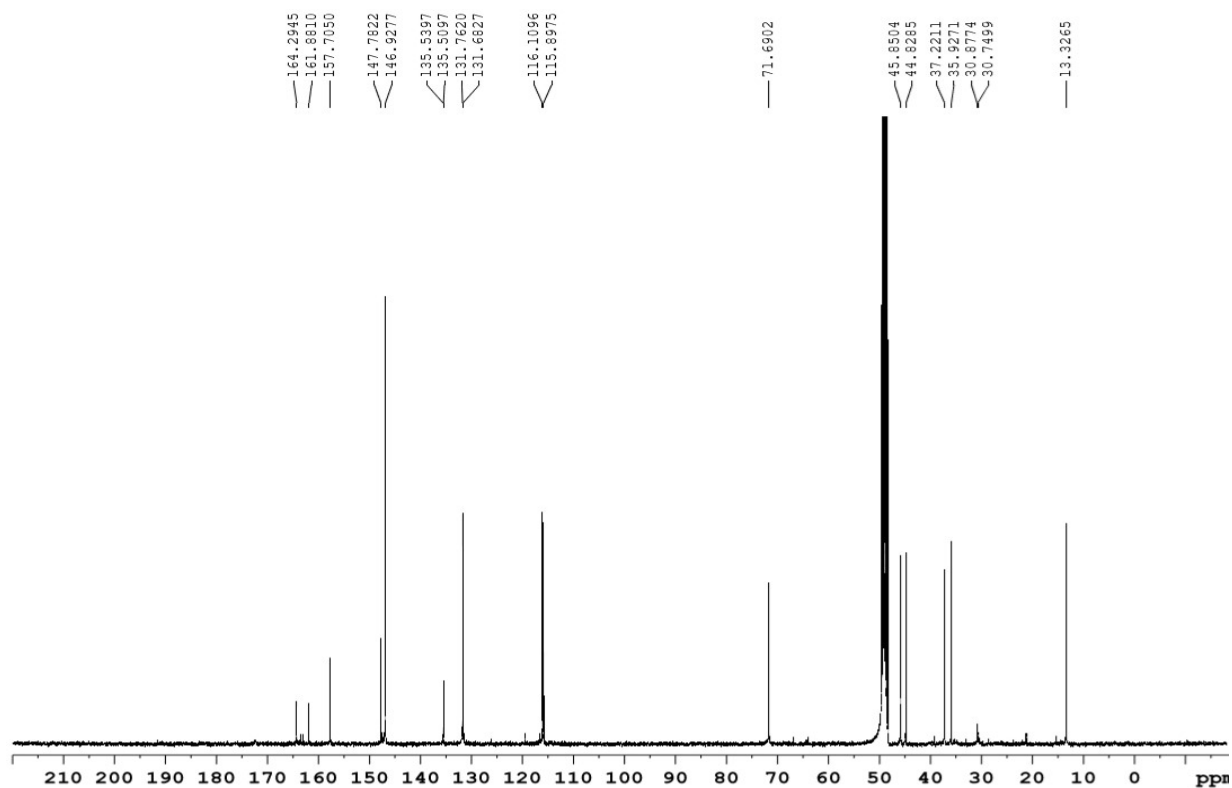
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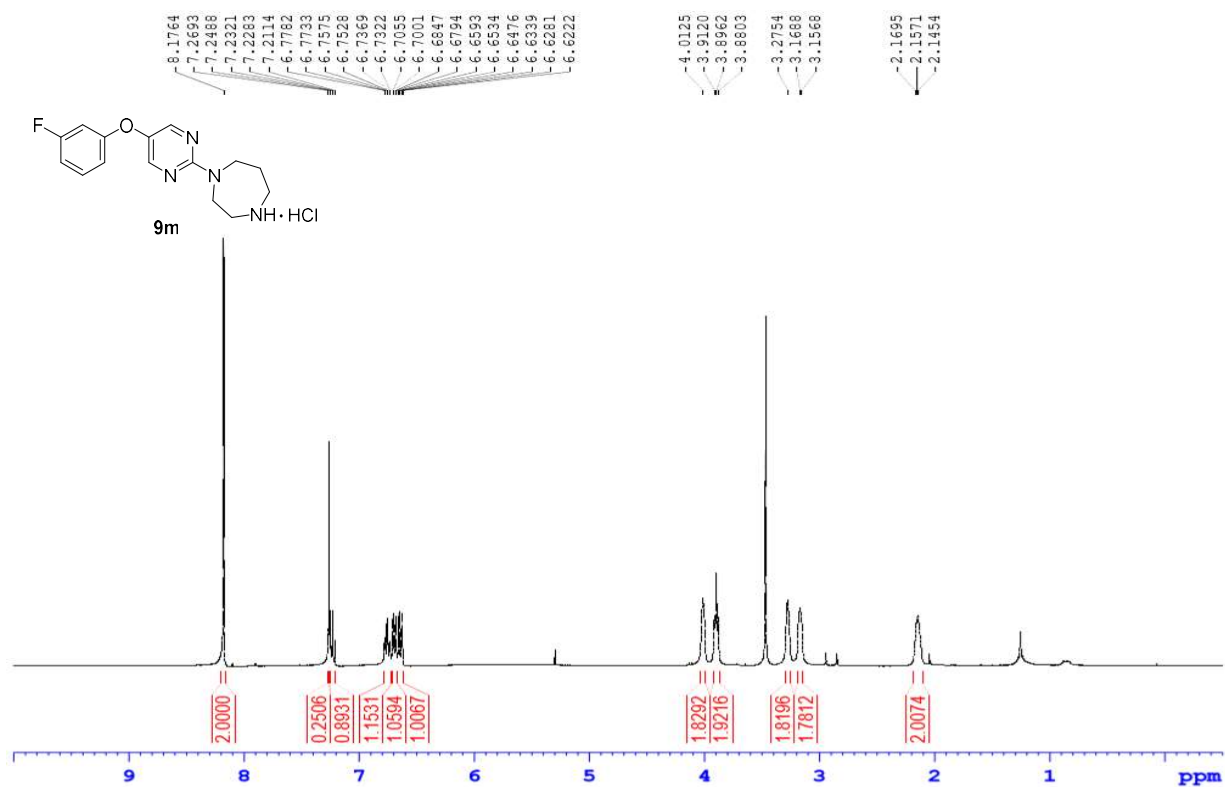




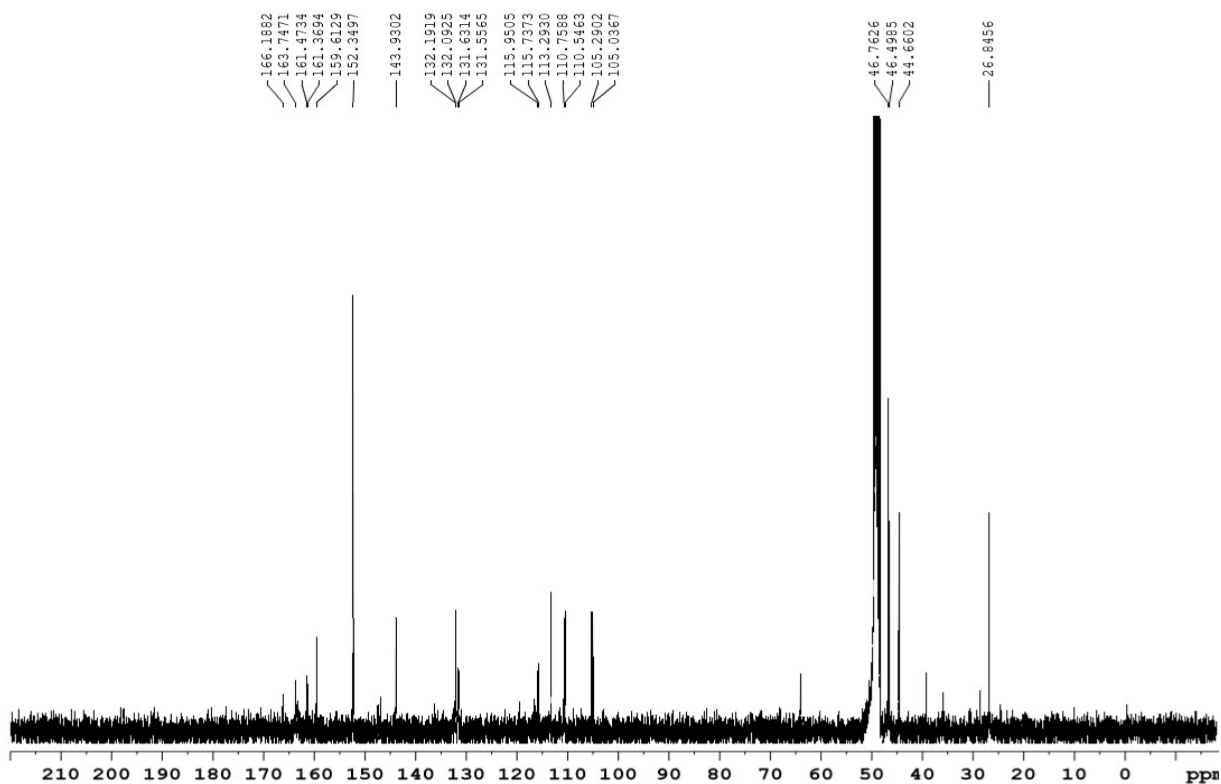
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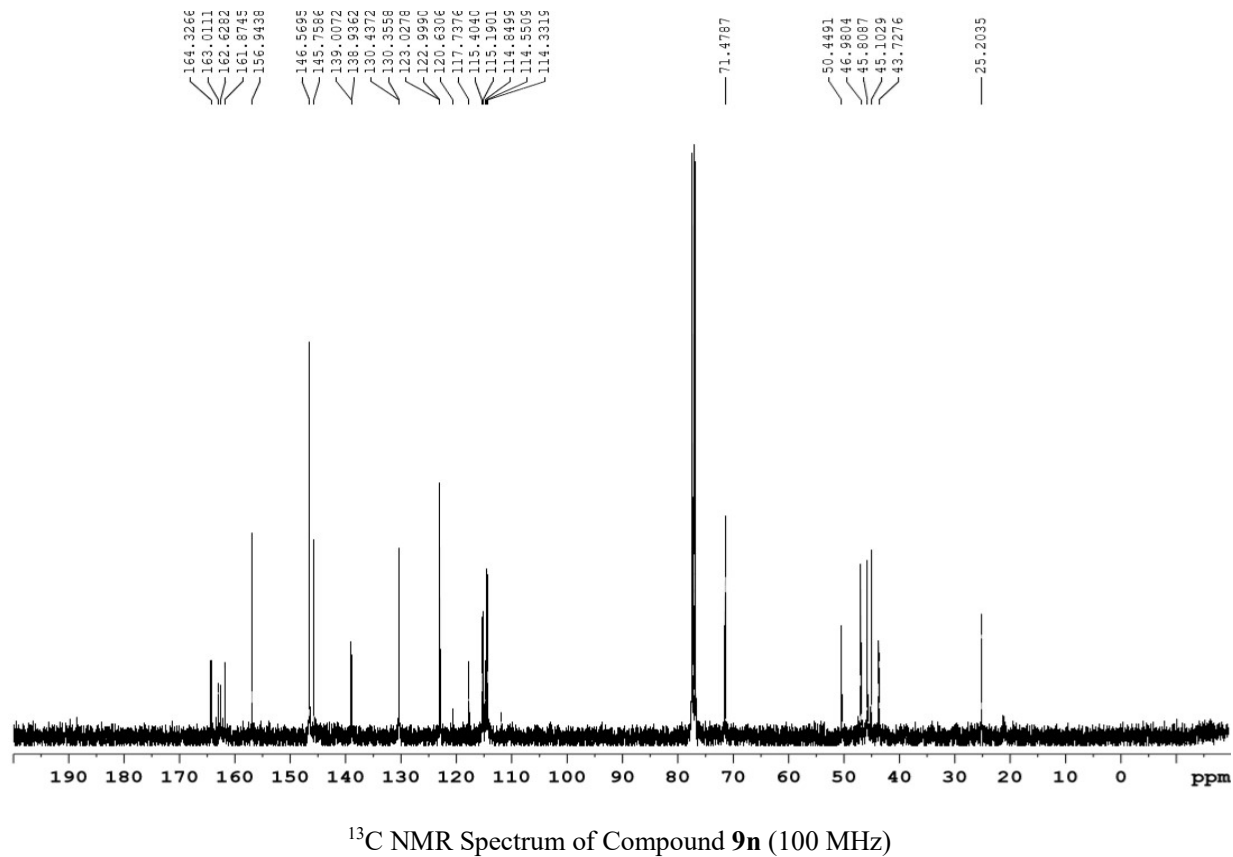
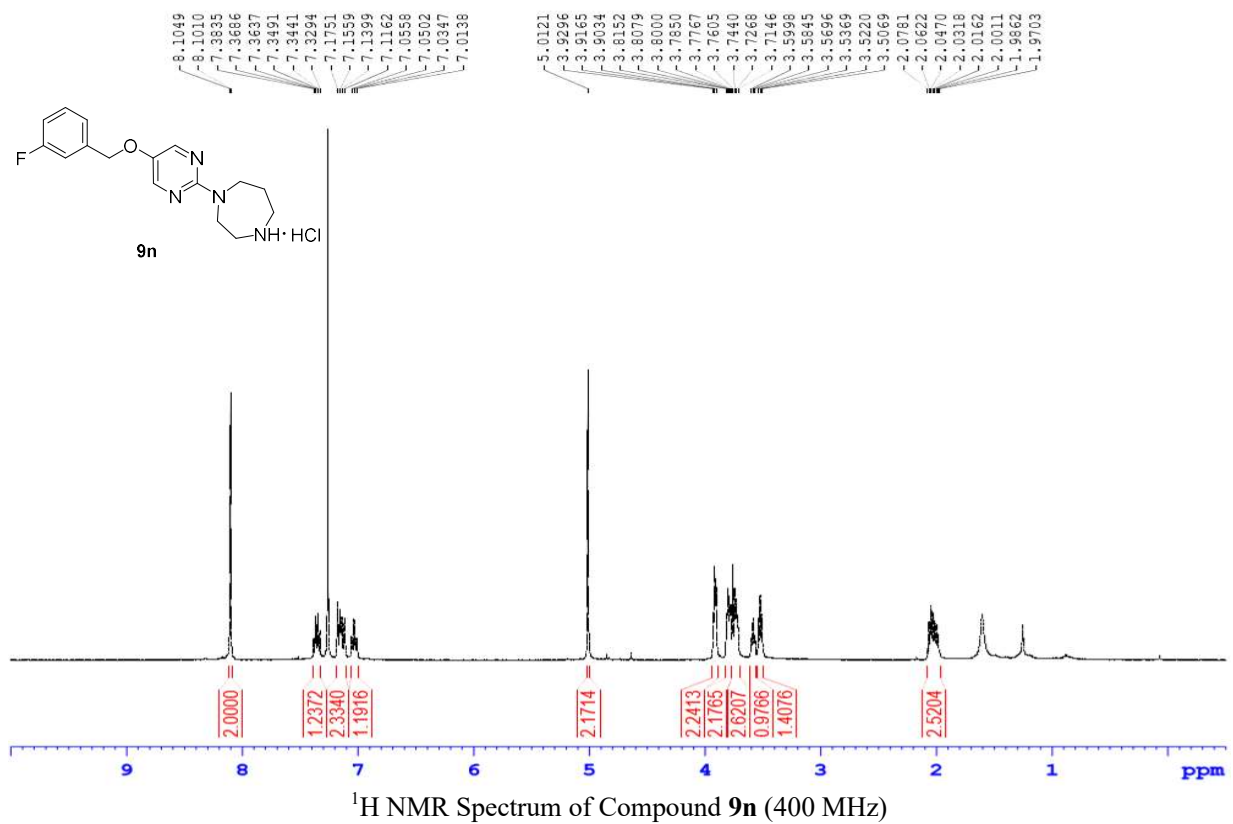
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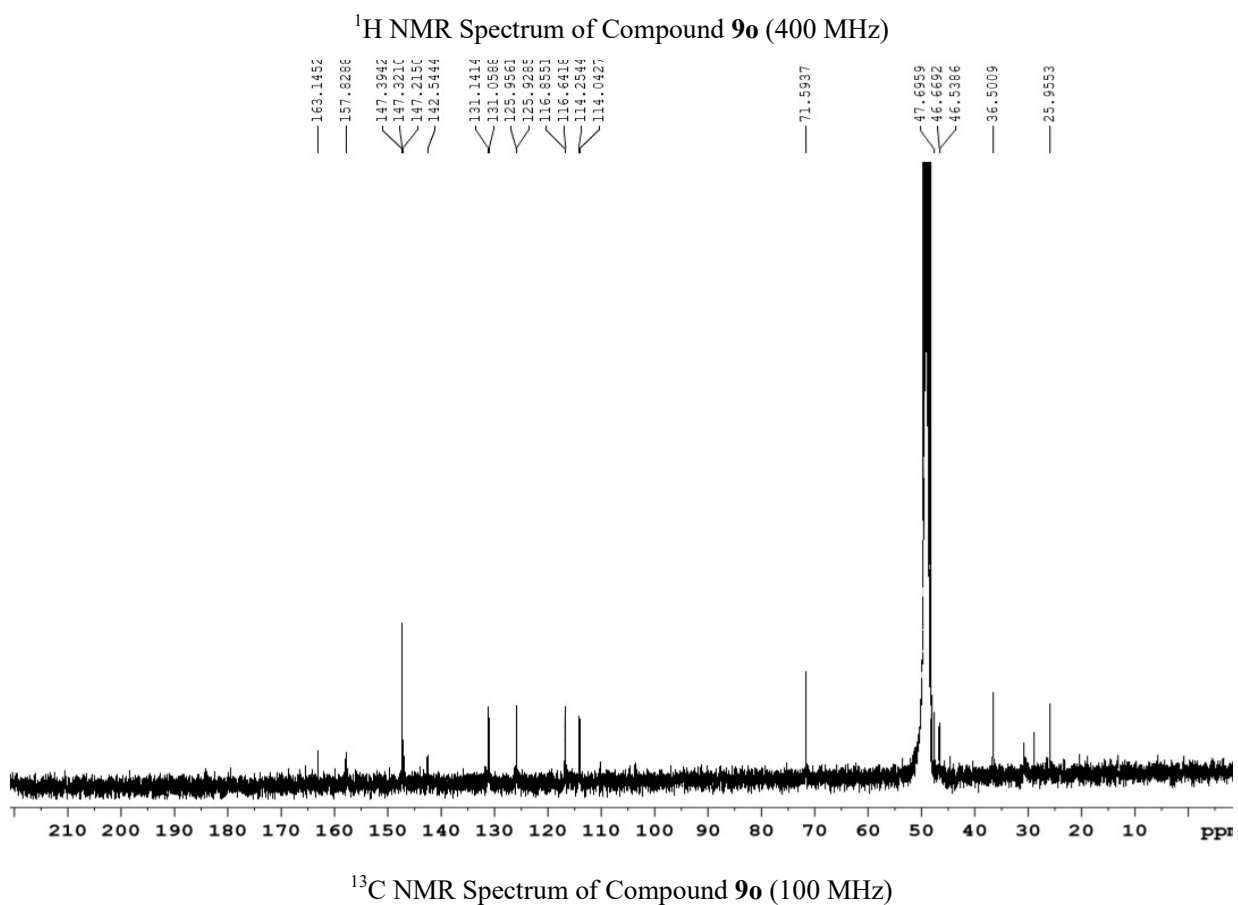
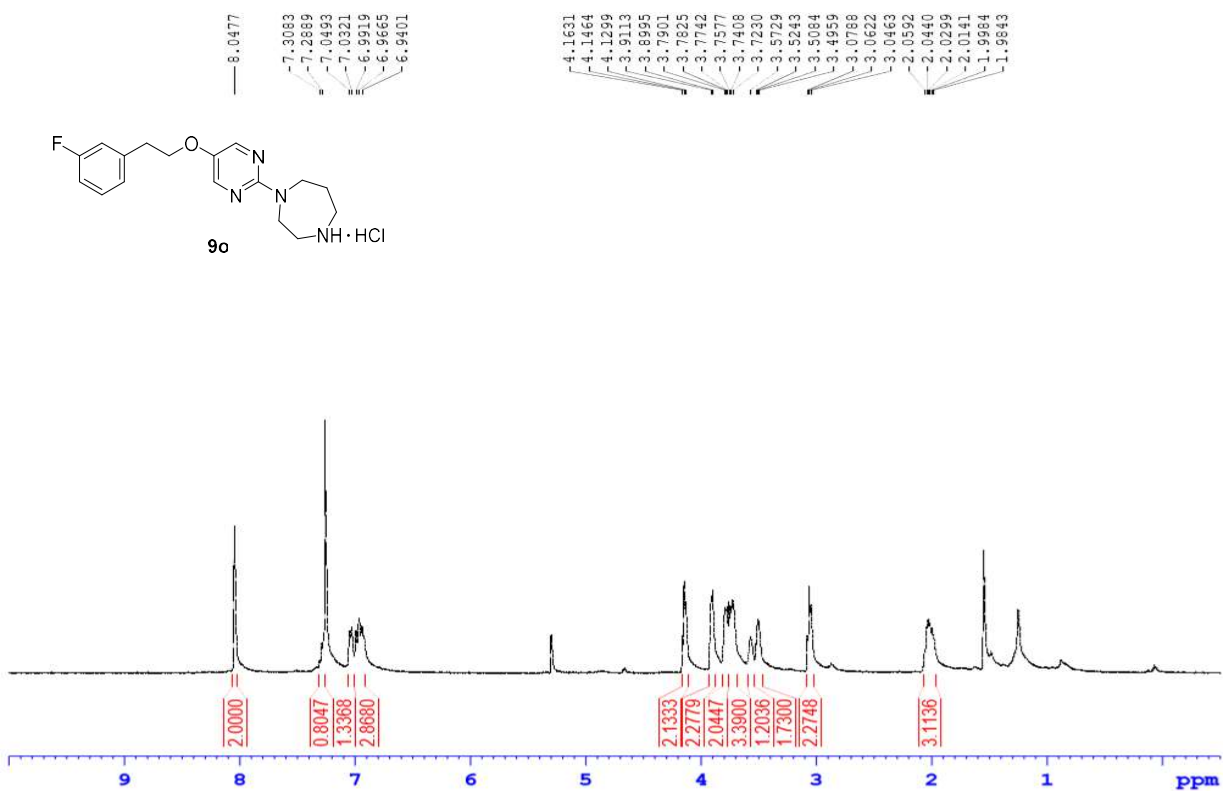


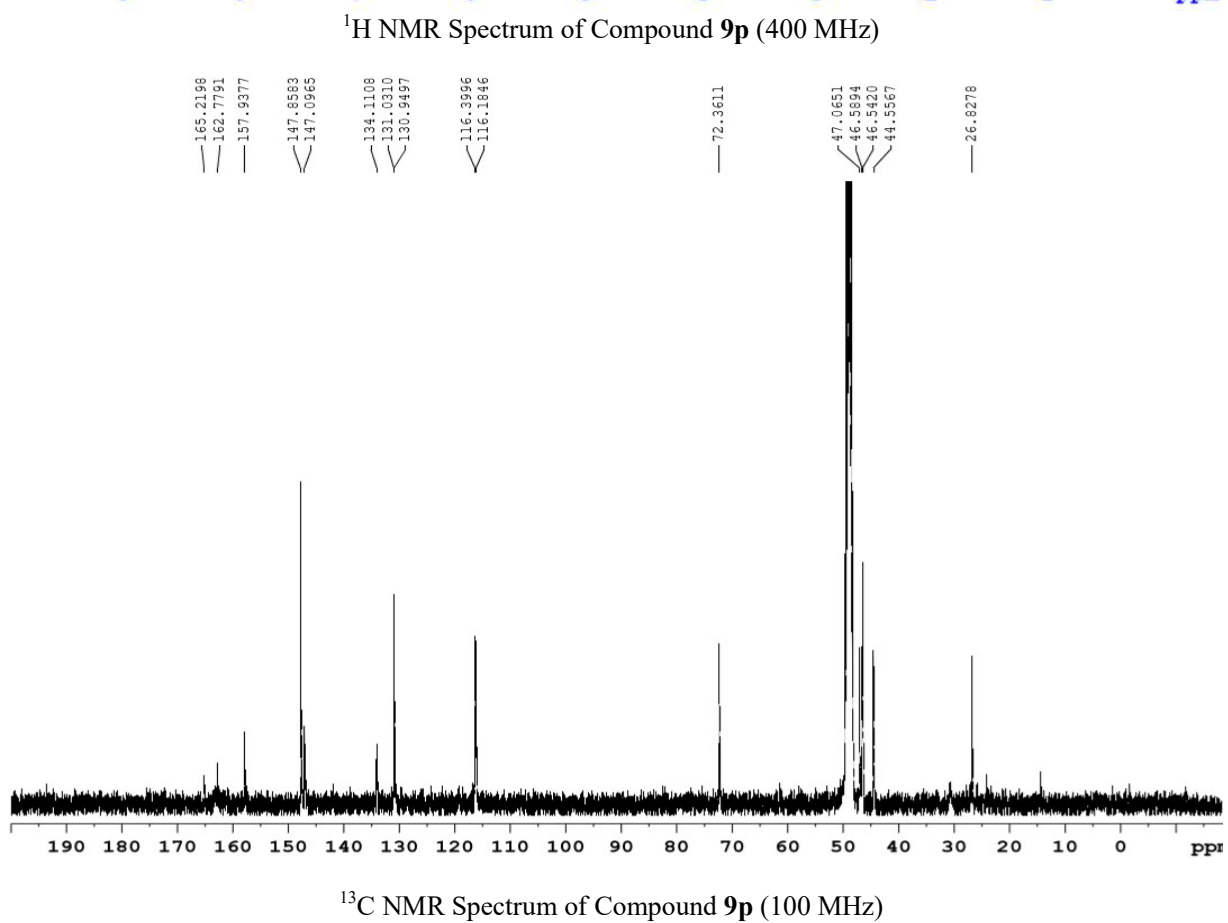
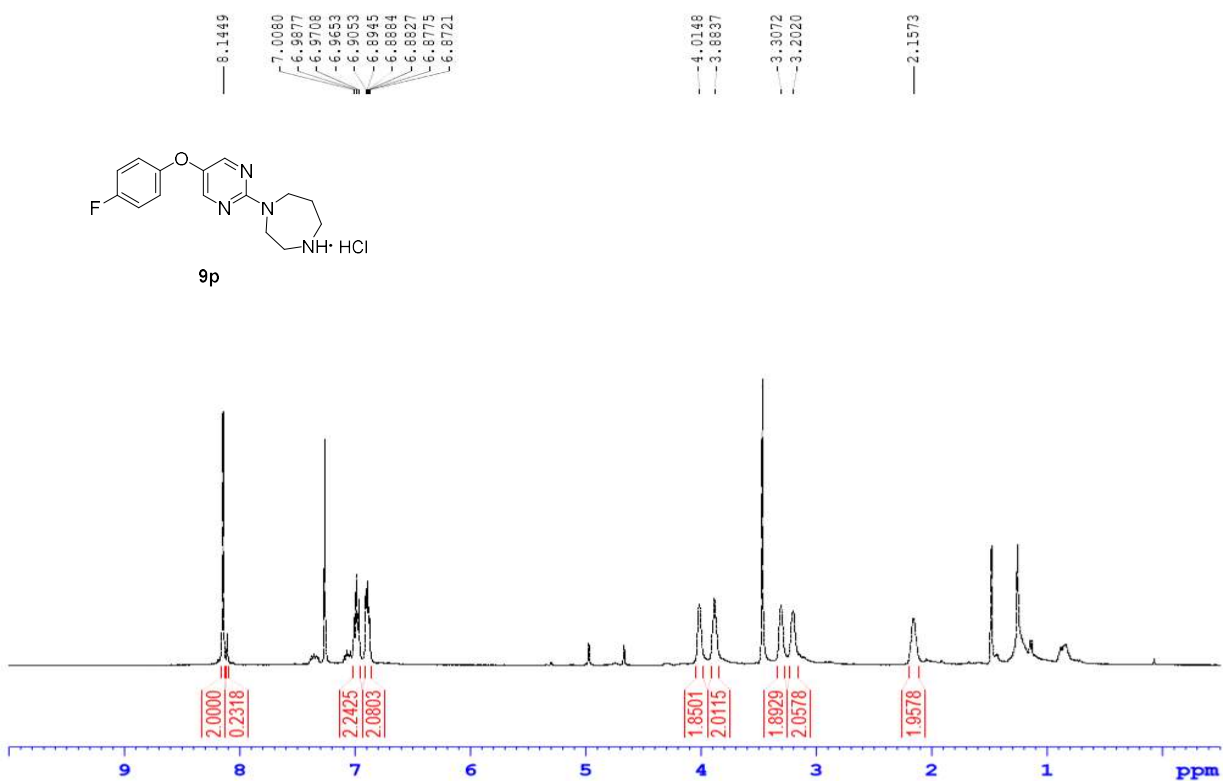
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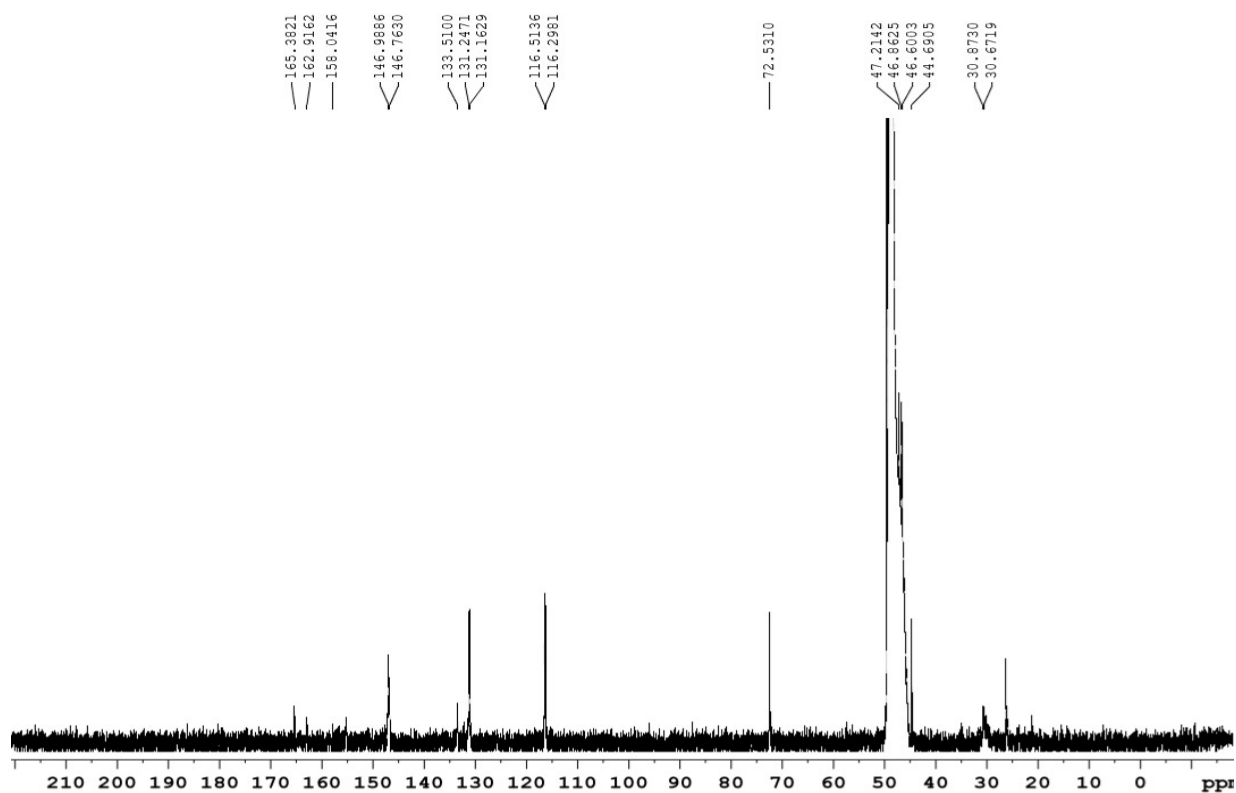
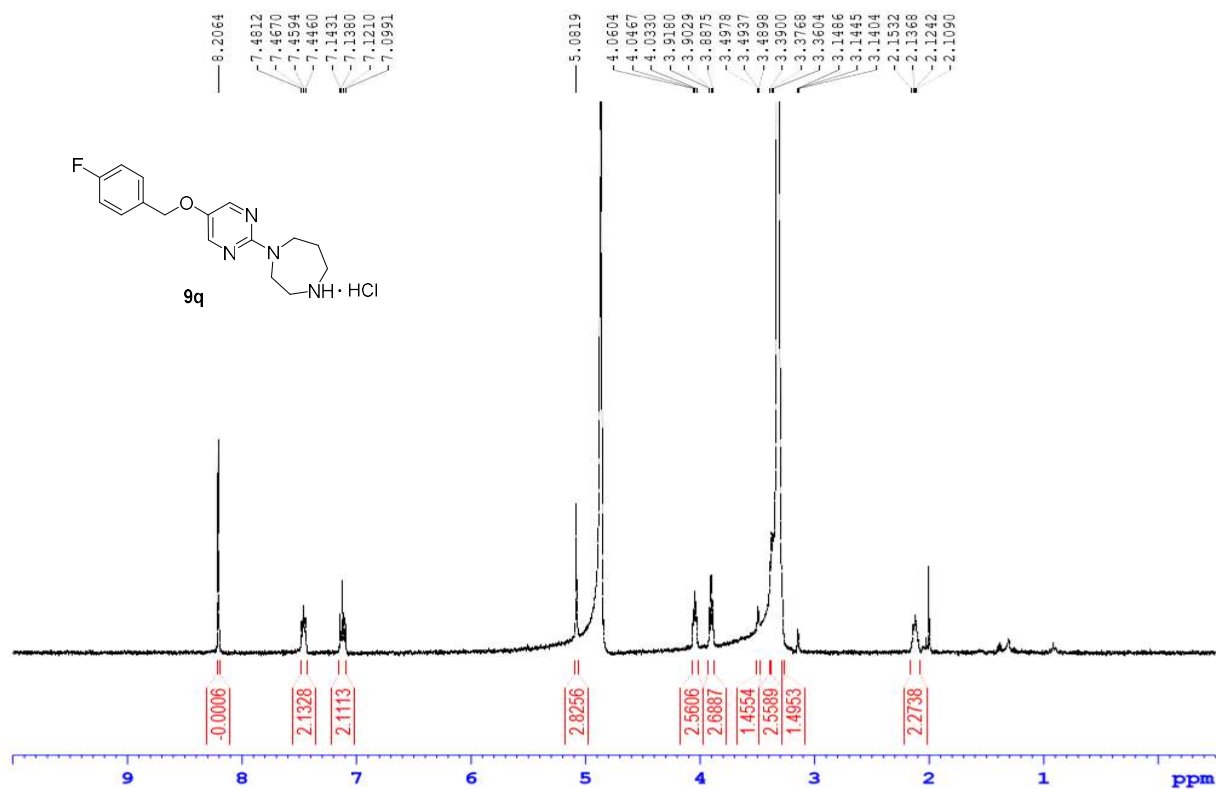


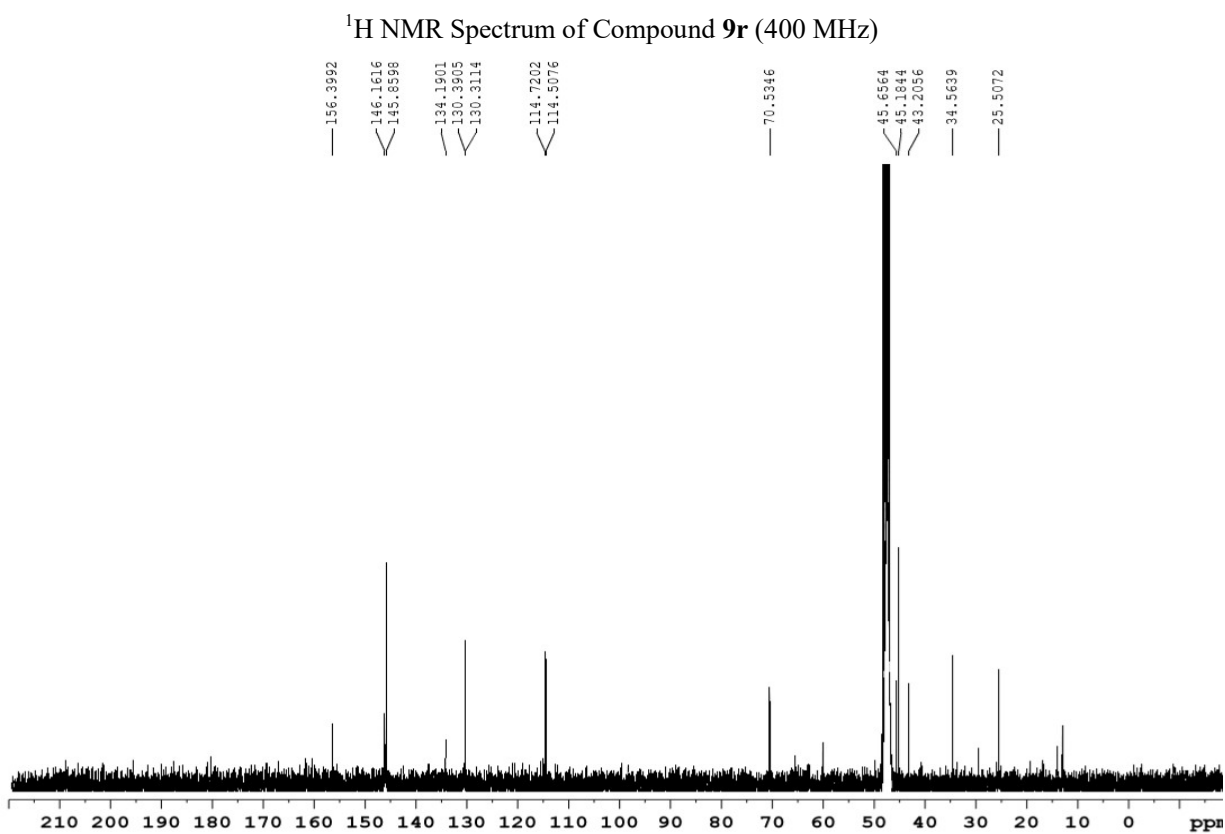
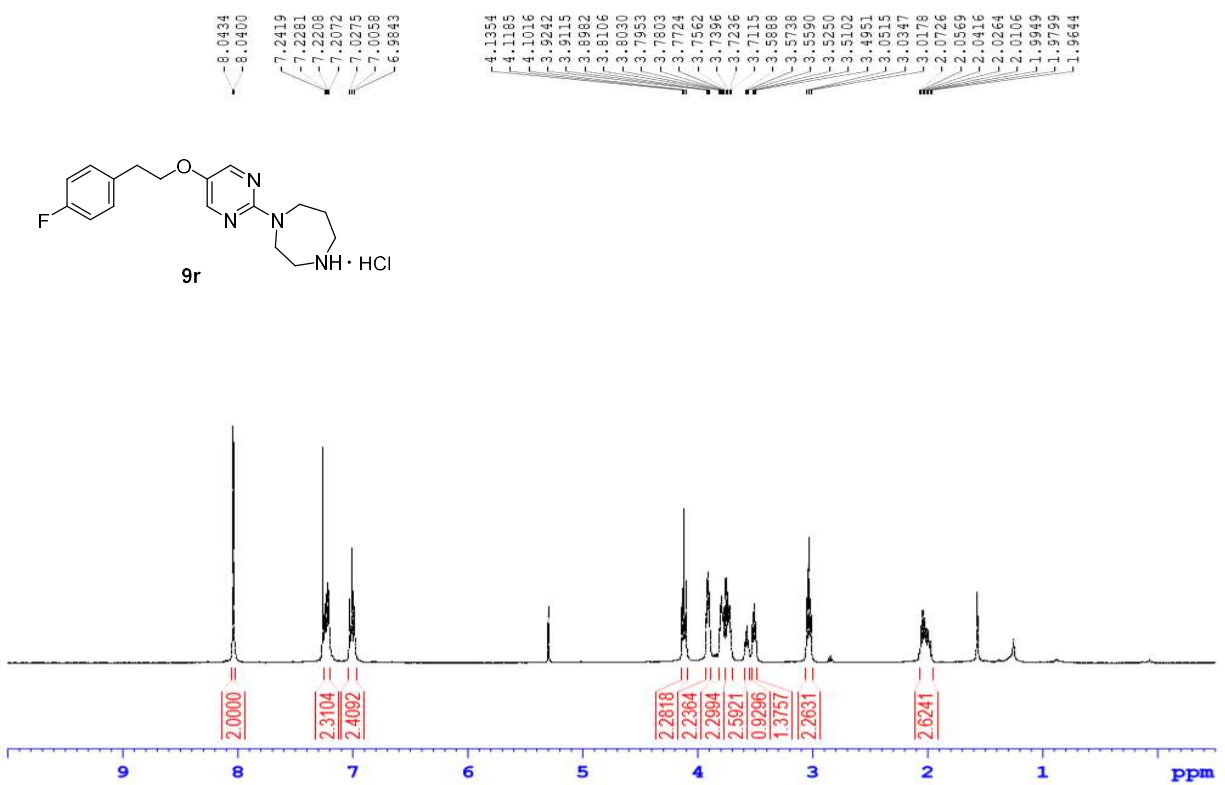
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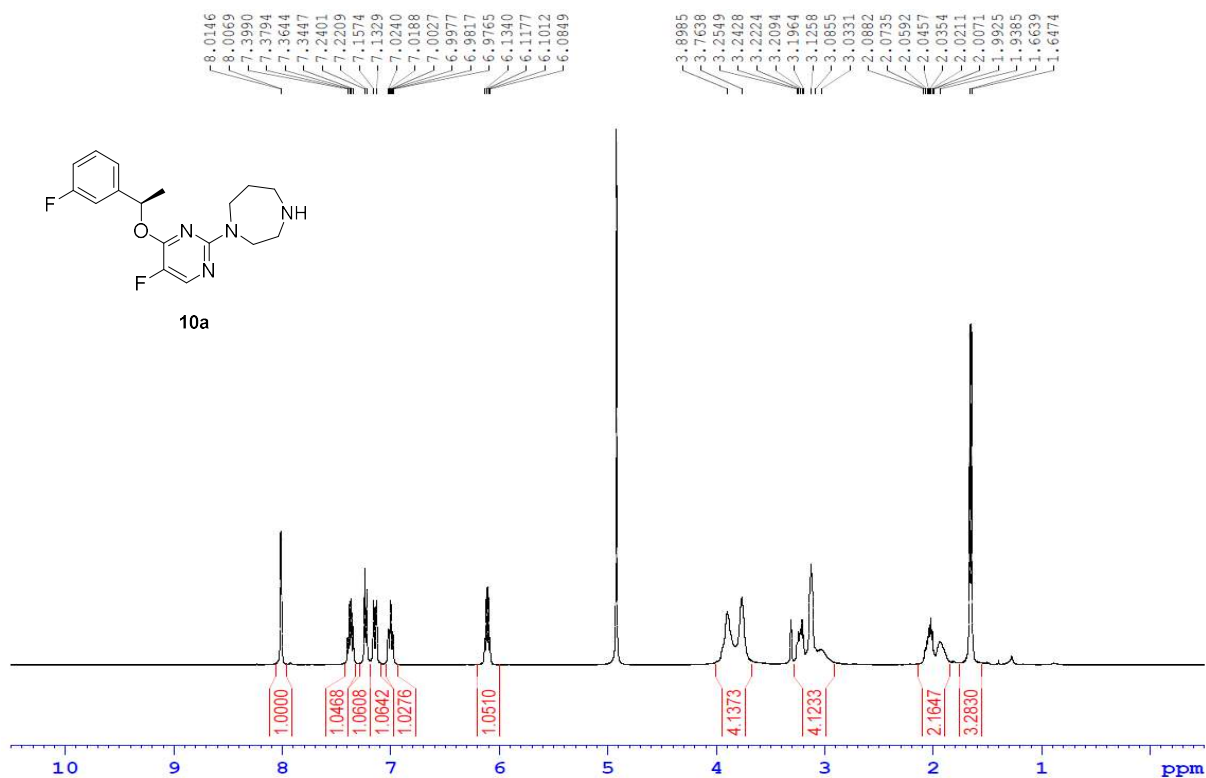




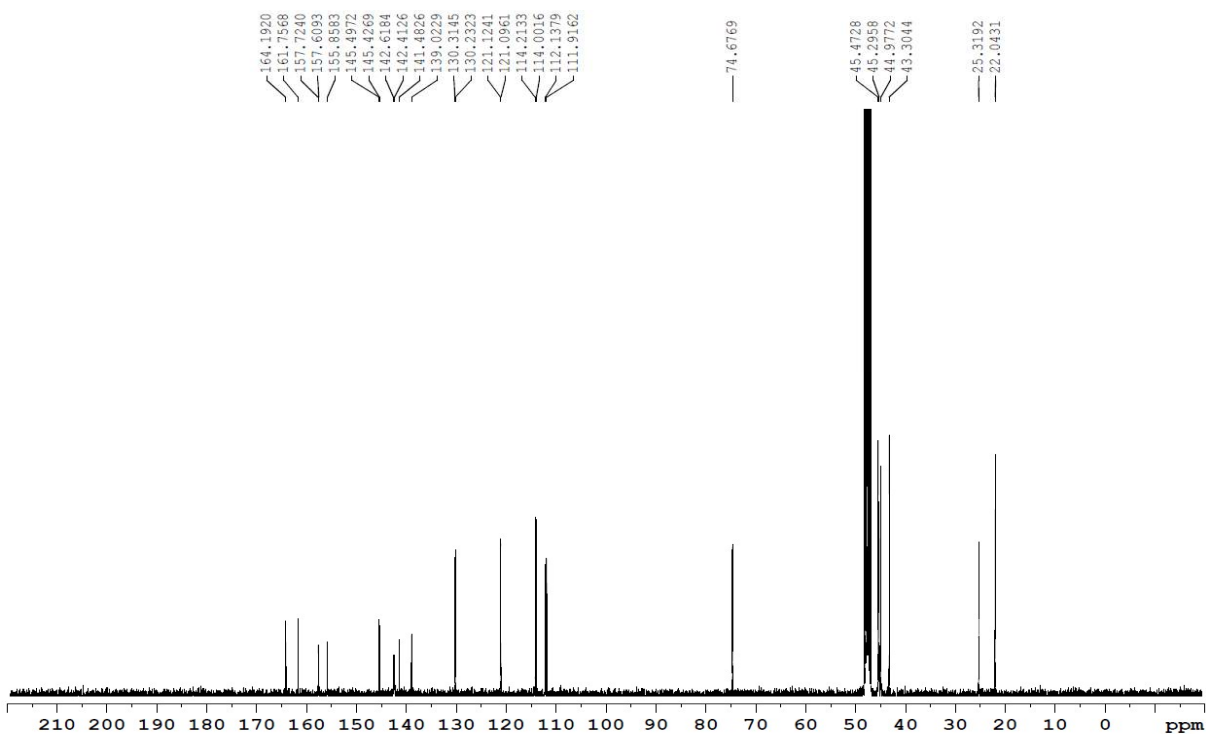




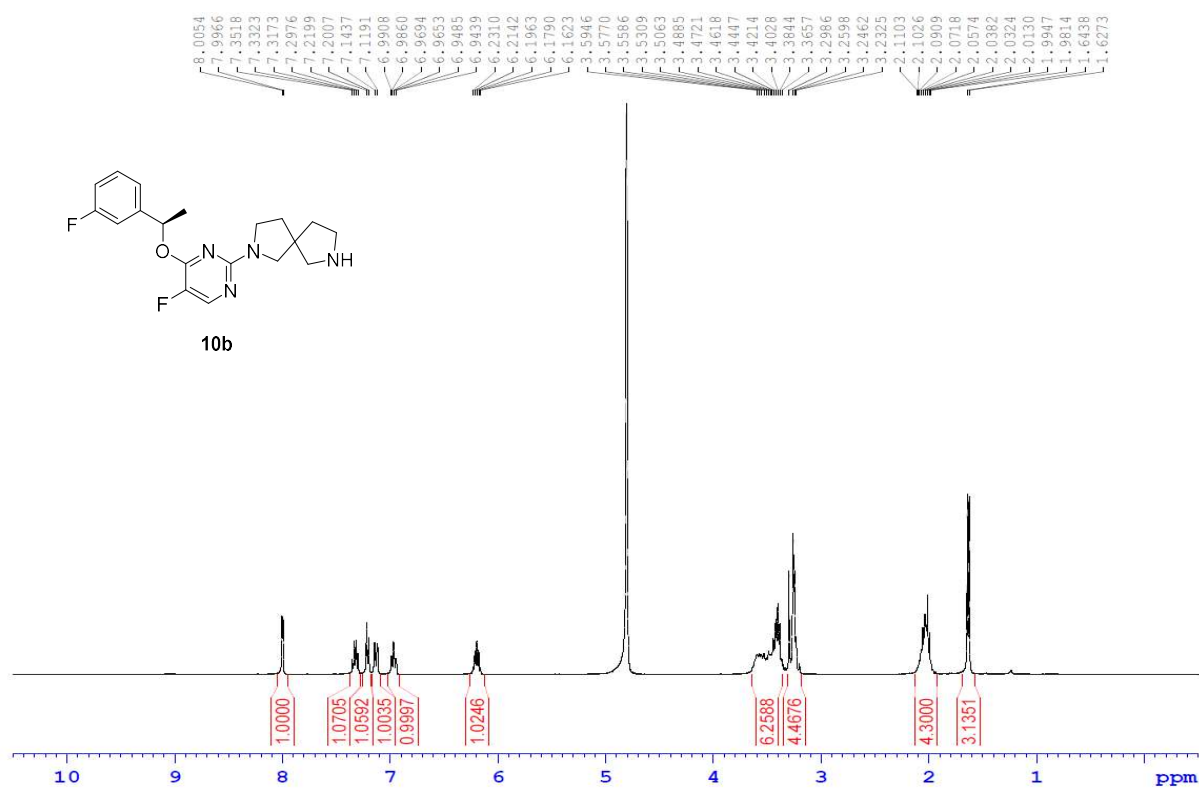
2. NMR spectral data of 2,4-disubstituted pyrimidine **10a-10j**, and **20a/b**



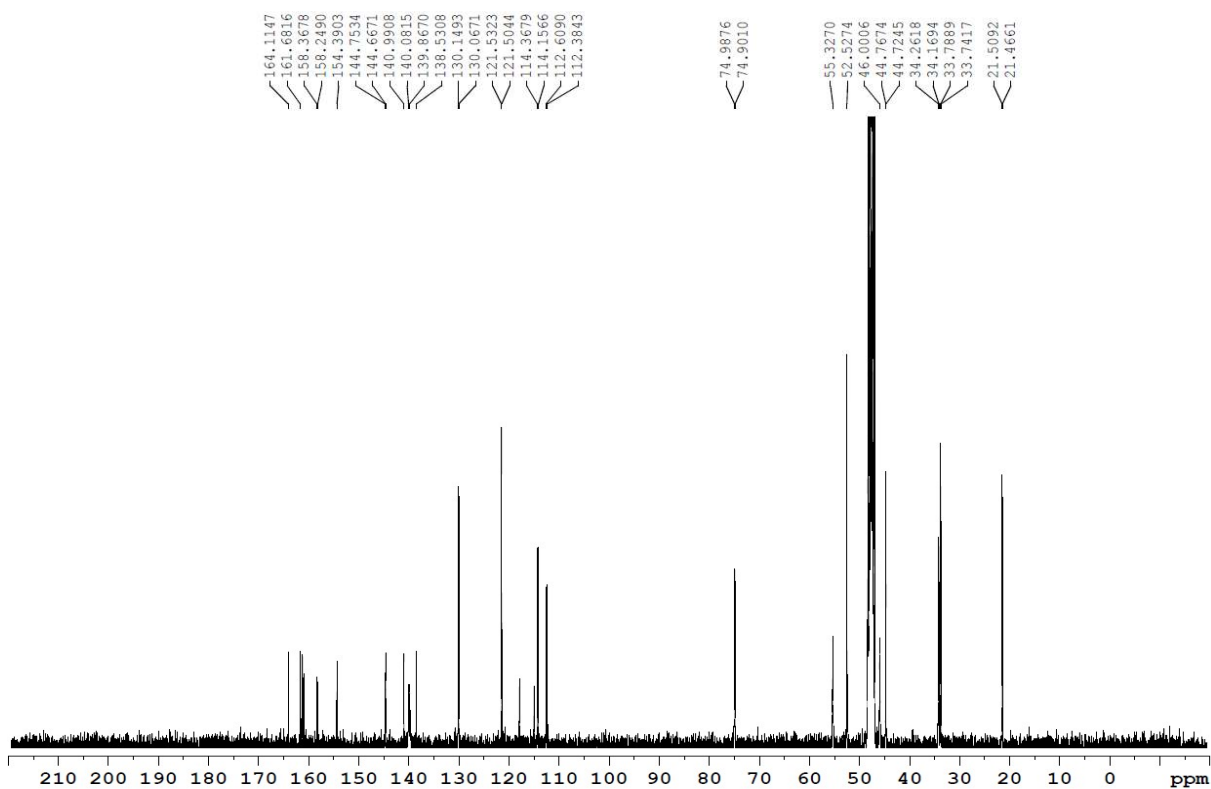
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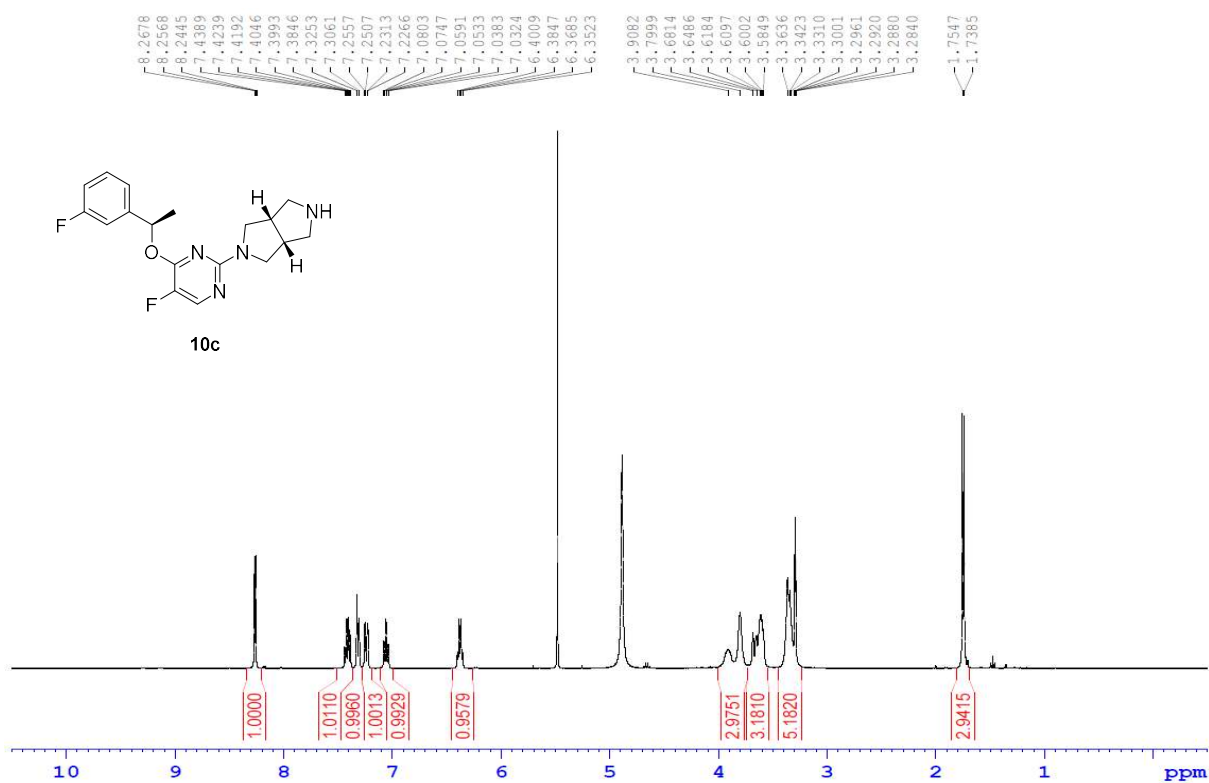
¹³C NMR Spectrum of Compound **10a** (100 MHz)



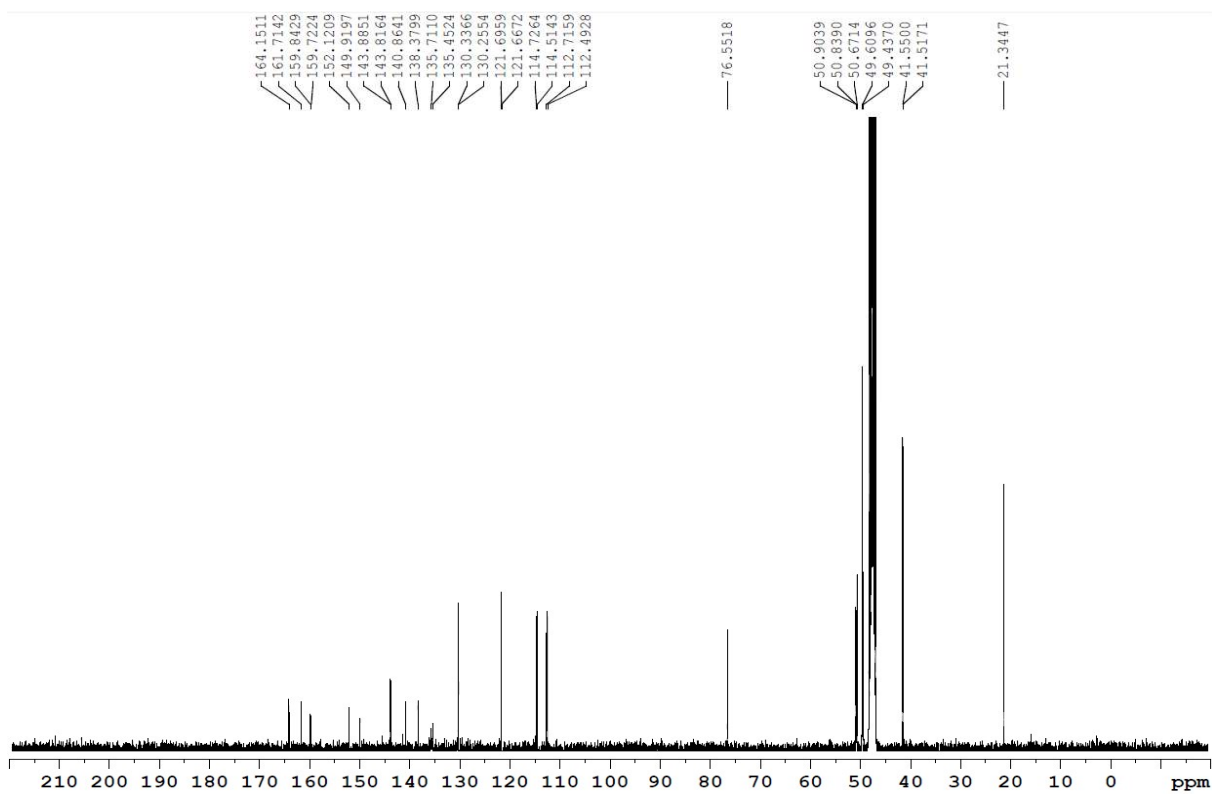
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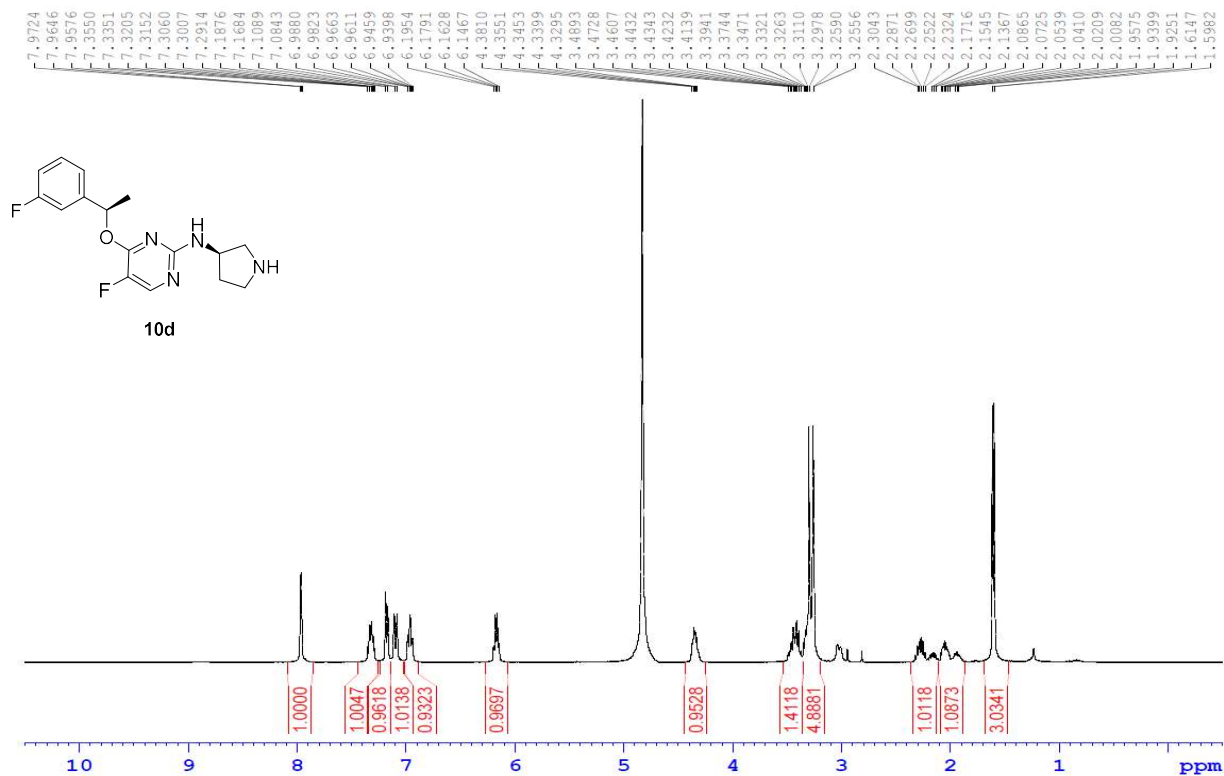
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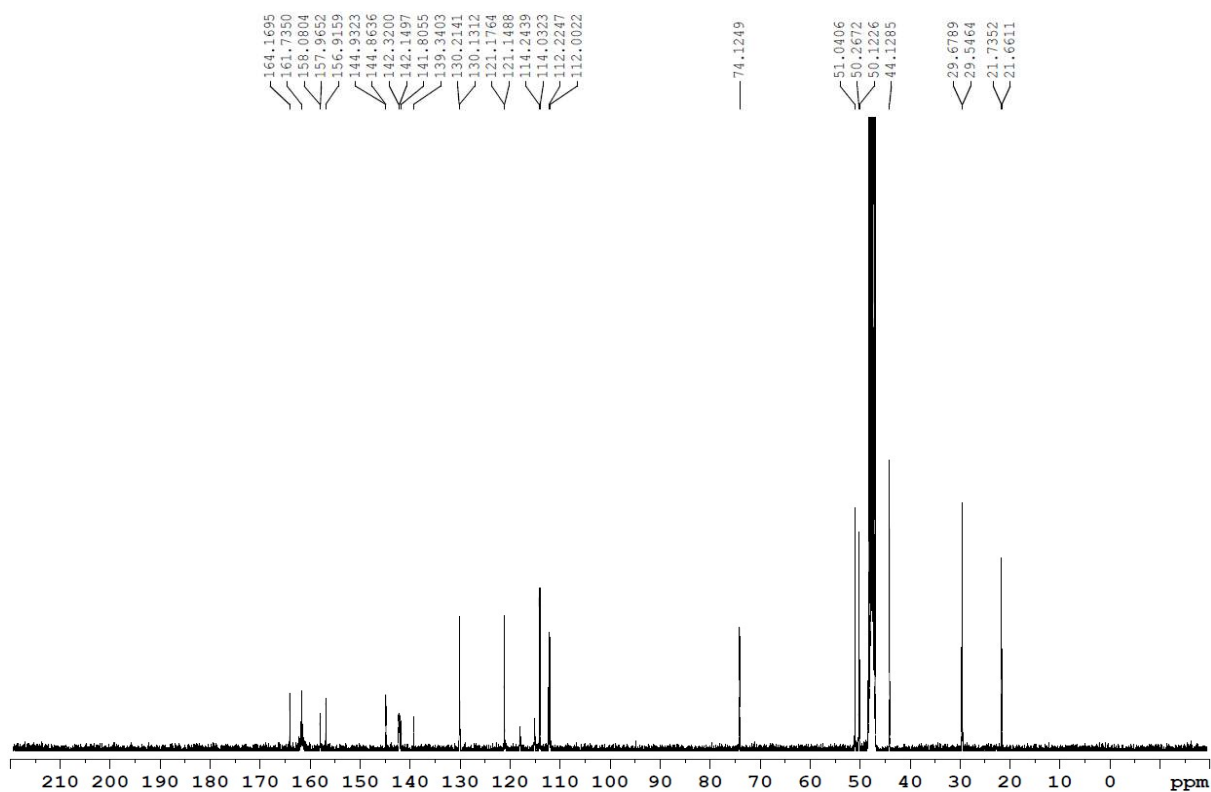
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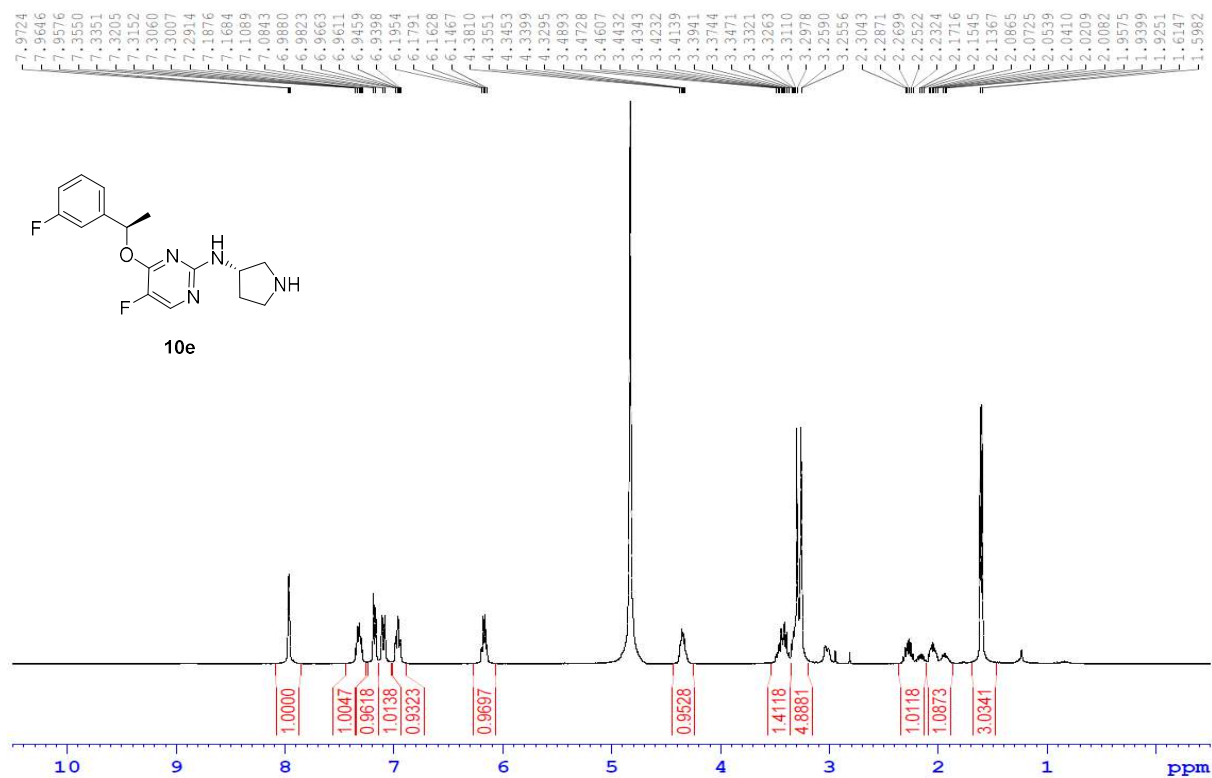
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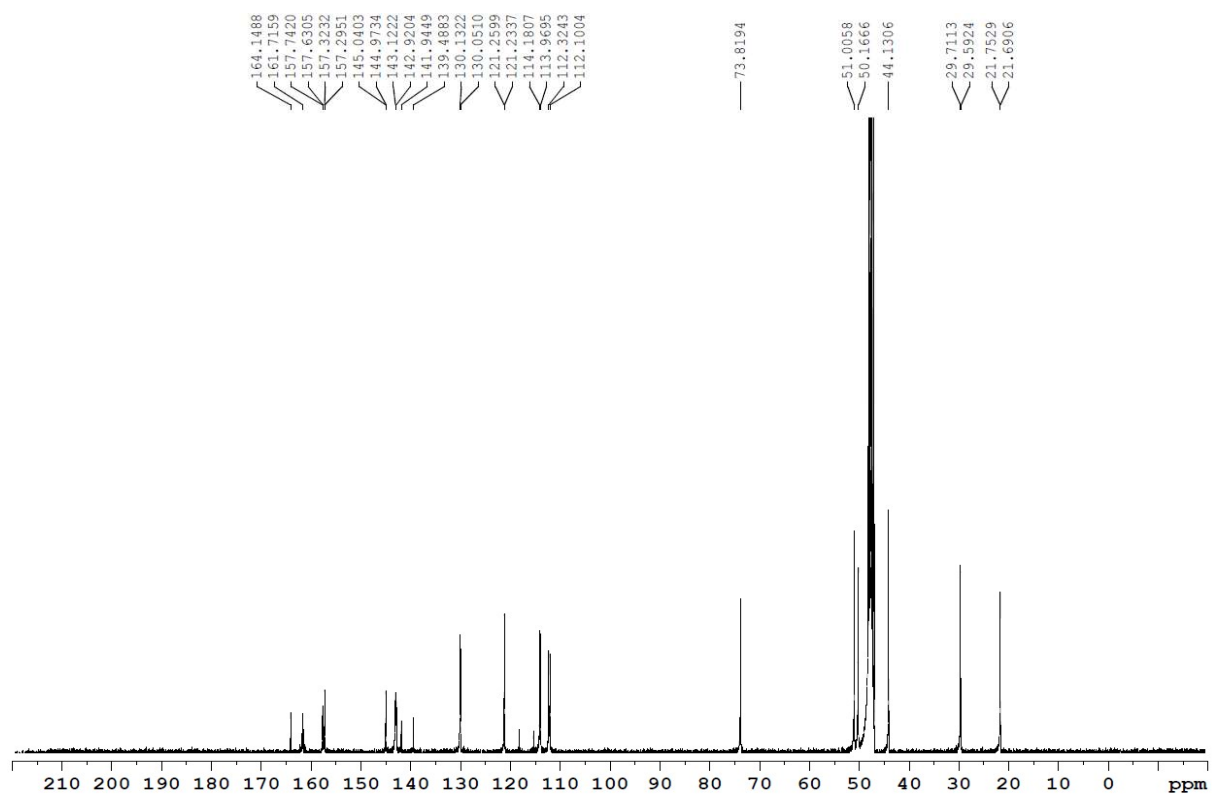
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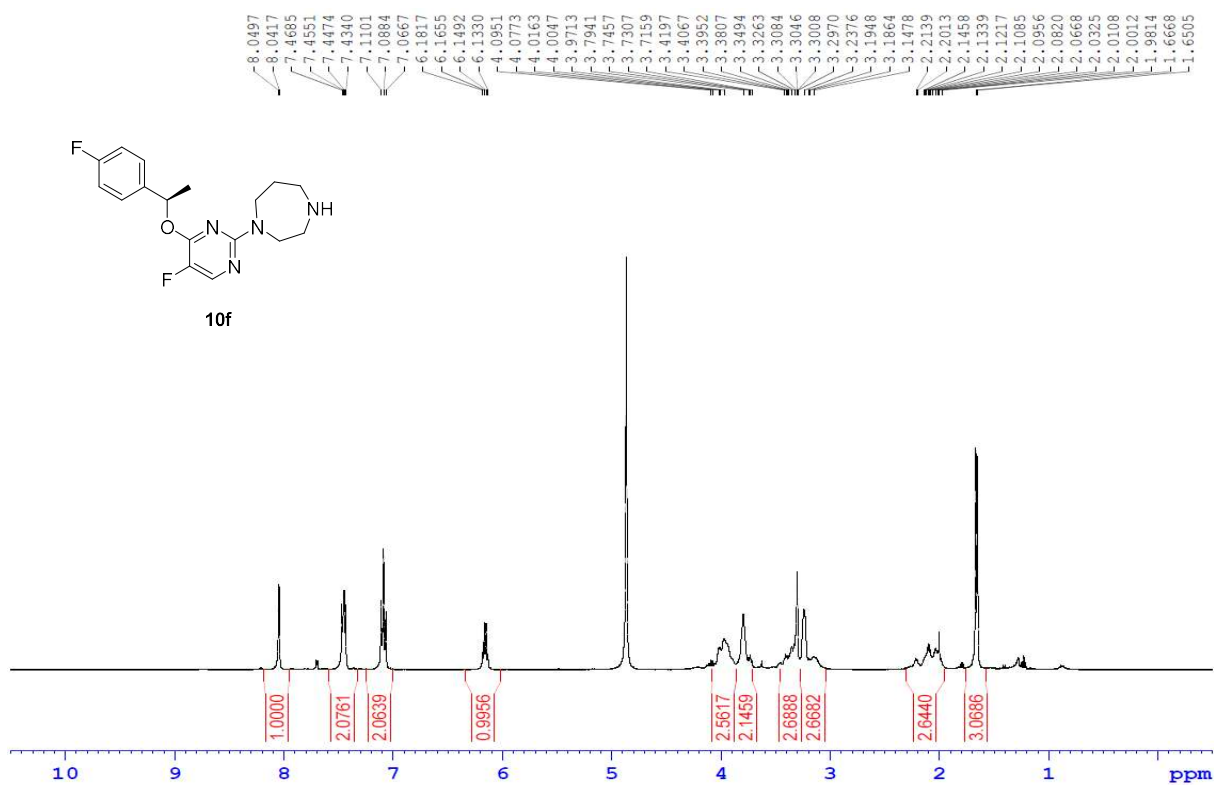
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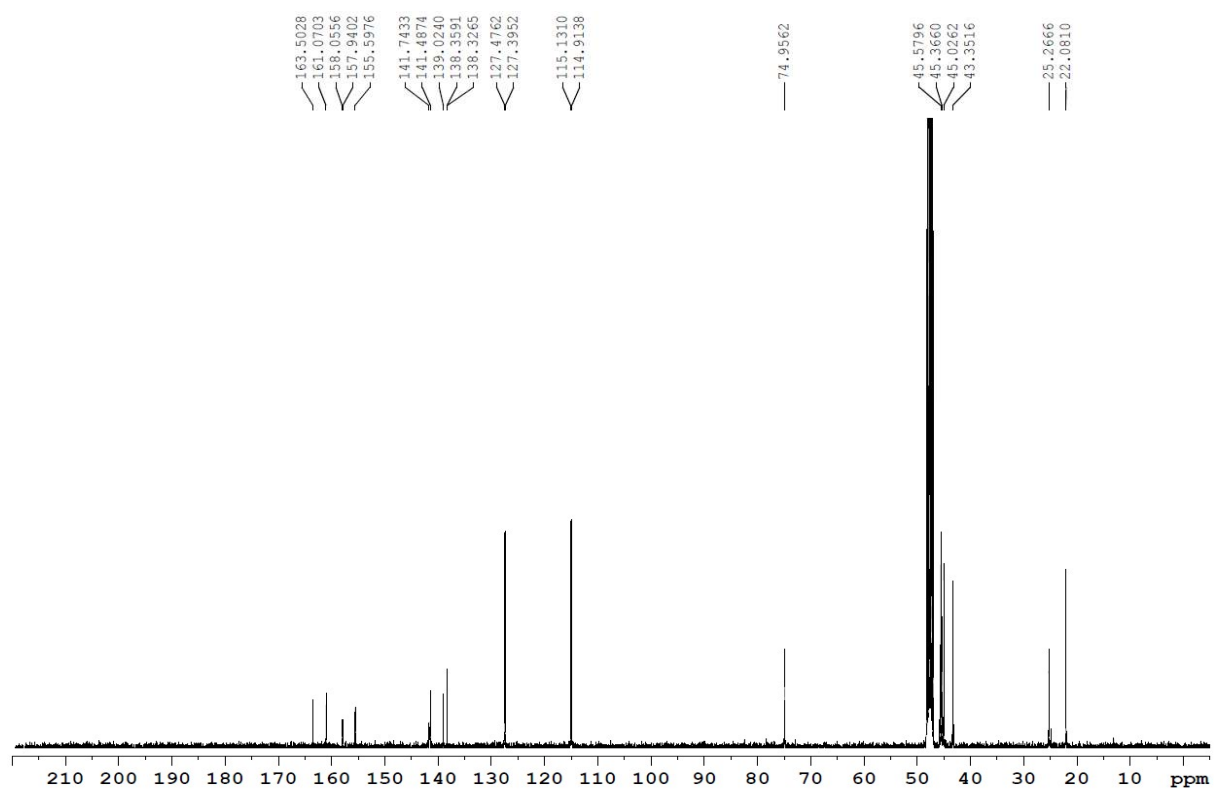
¹H NMR Spectrum of Compound **10e** (400 MHz)



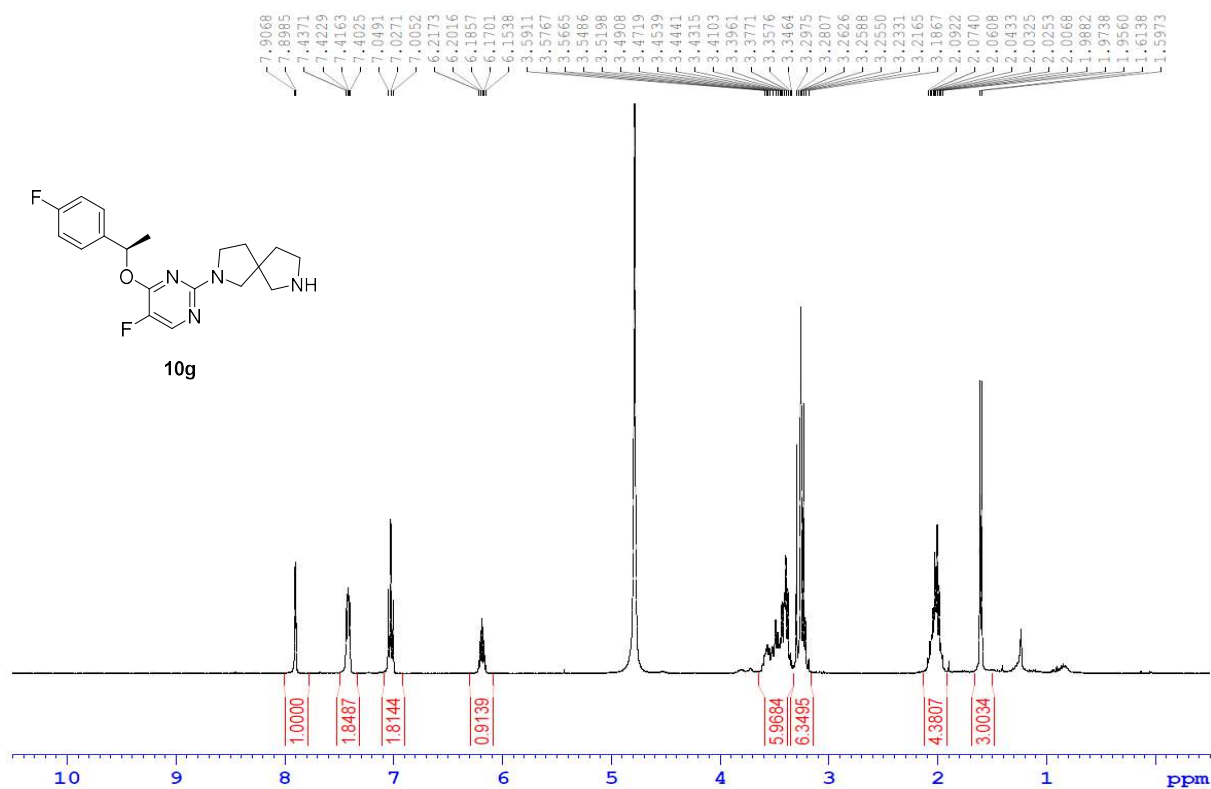
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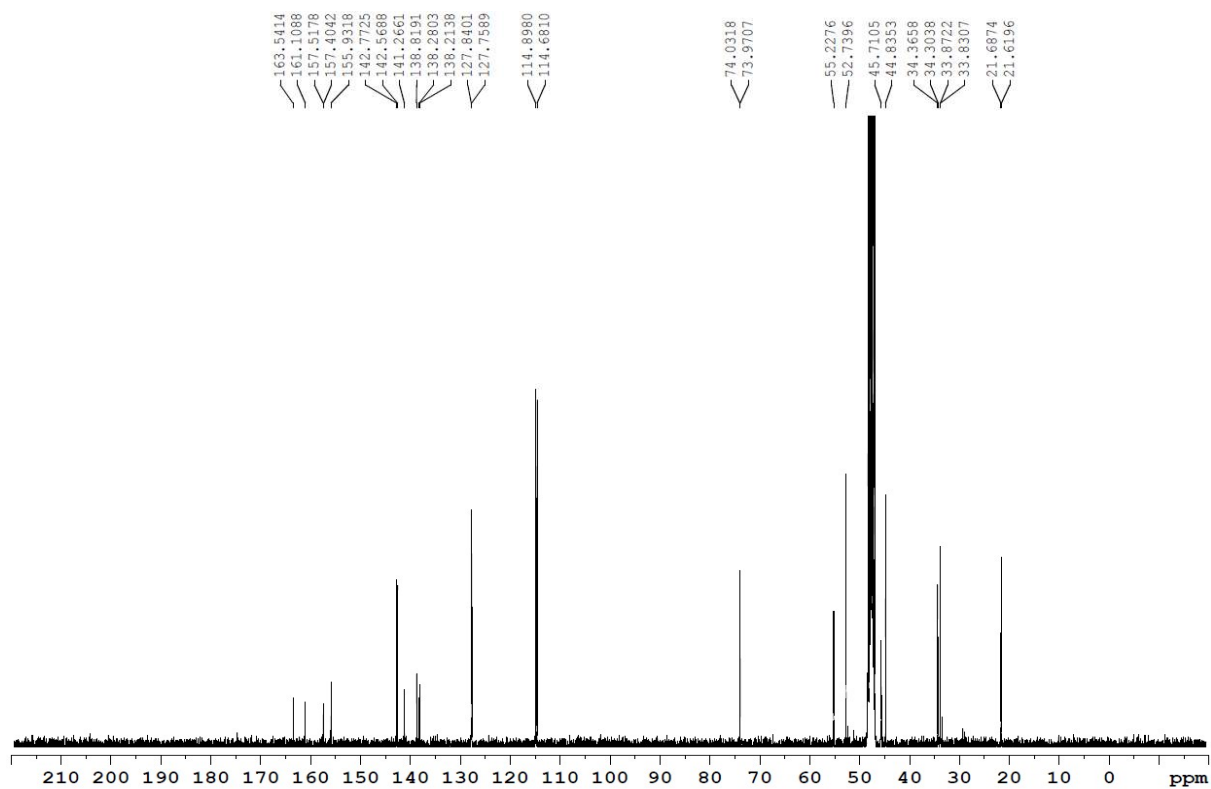
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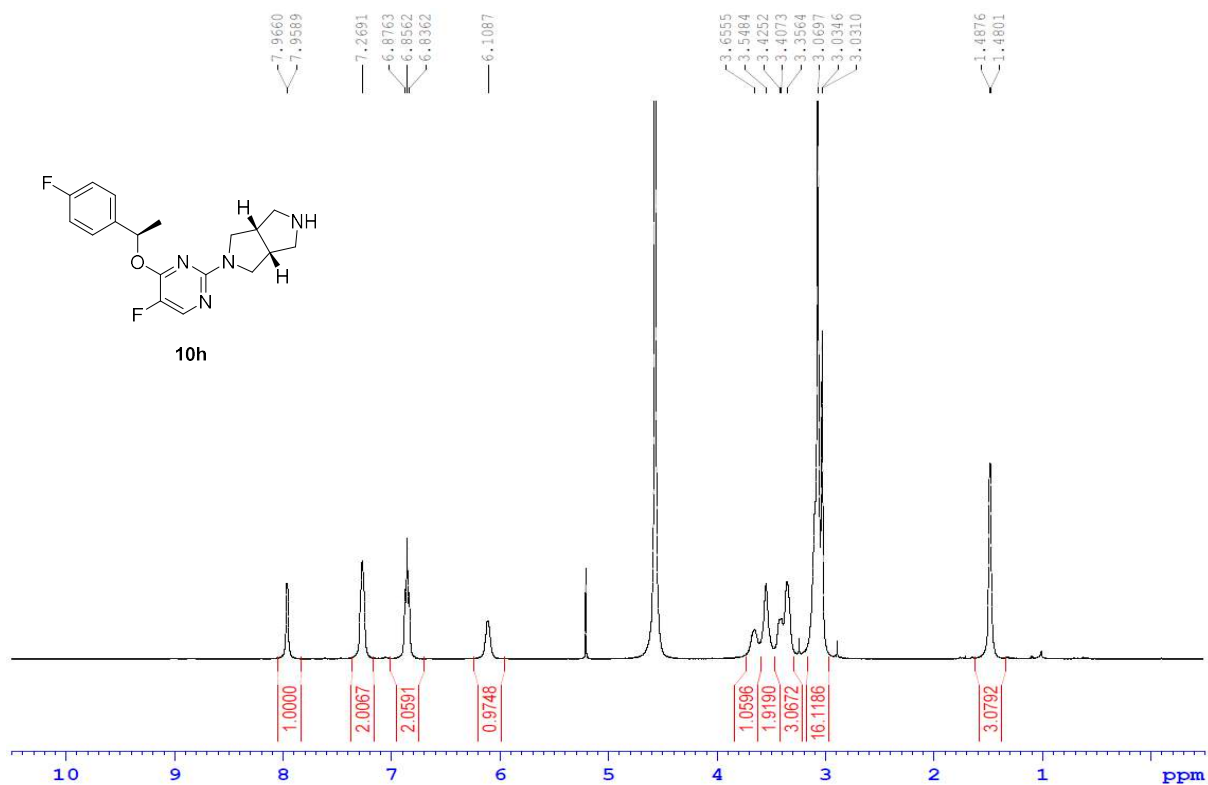
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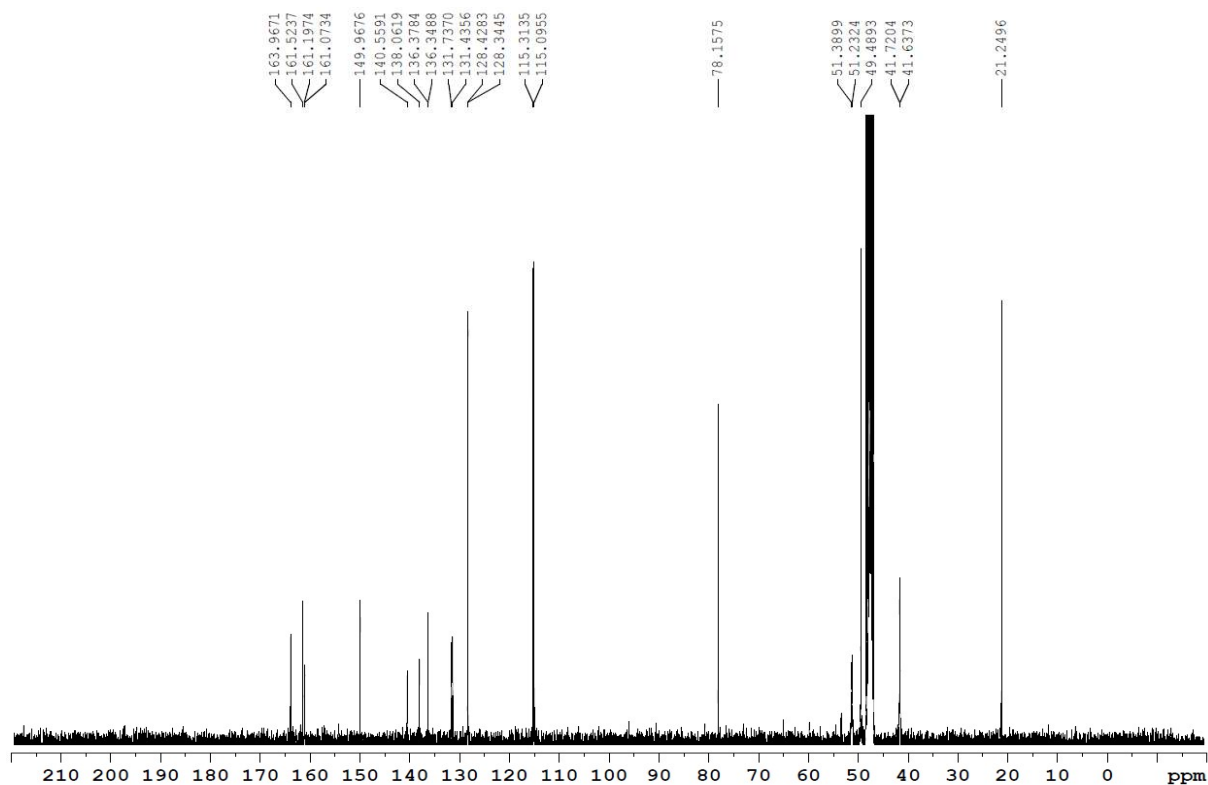
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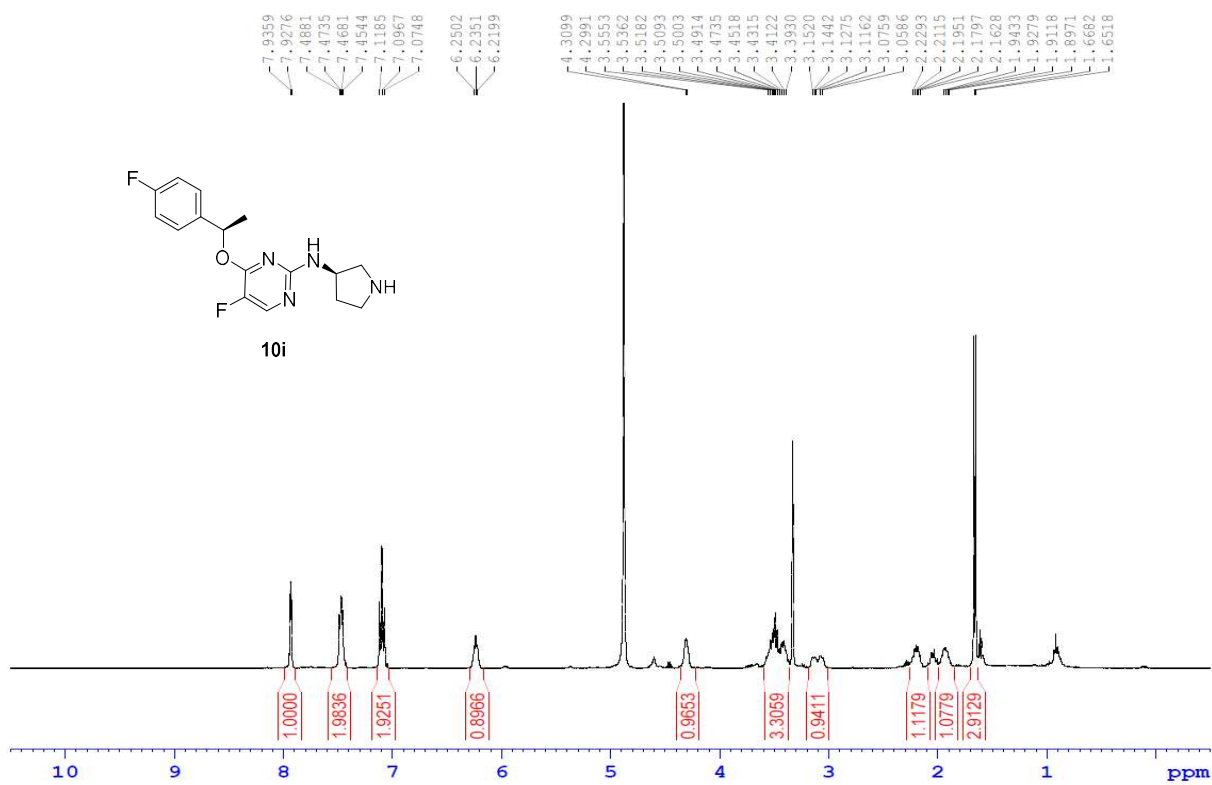
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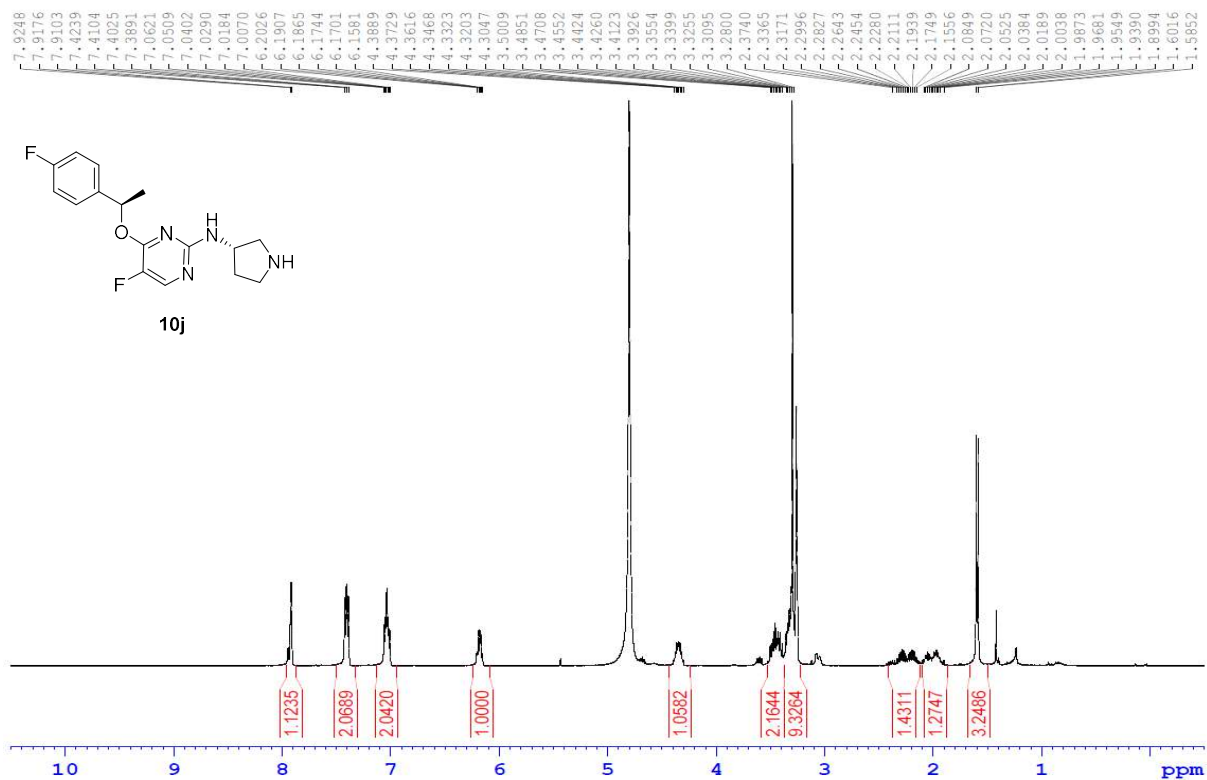
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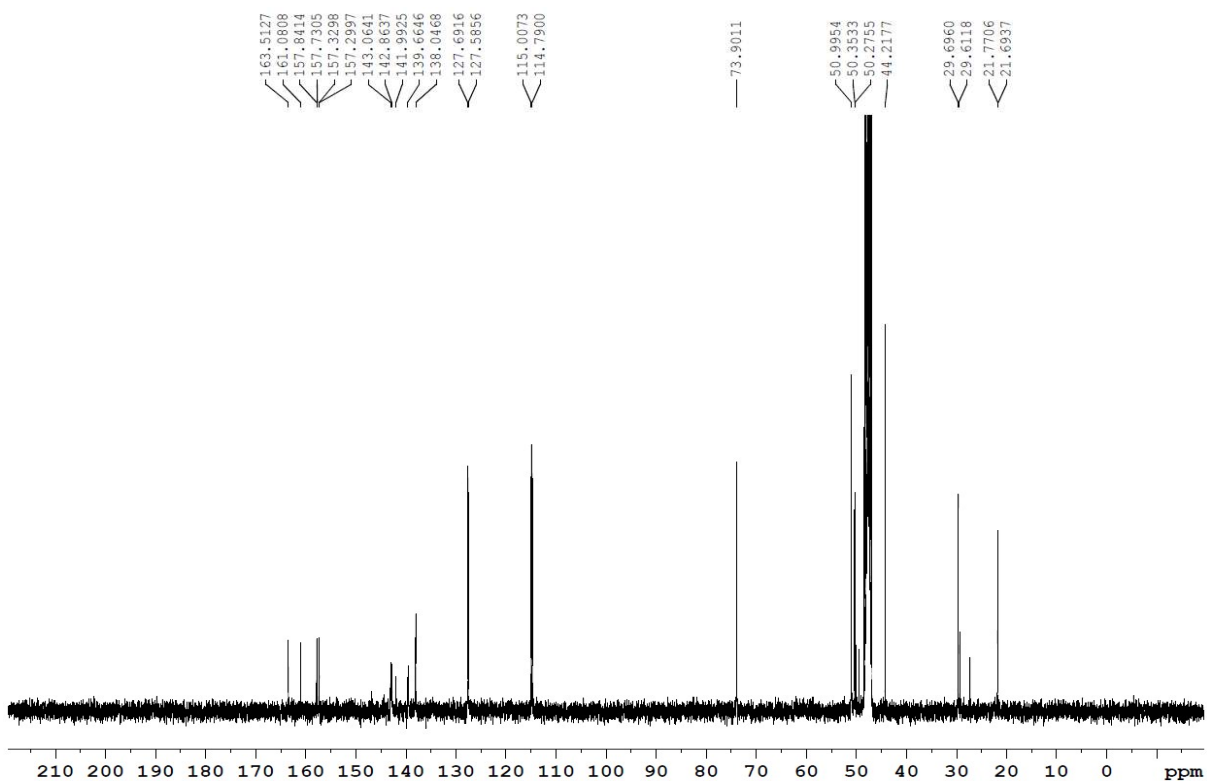
¹³C NMR Spectrum of Compound **10h** (100 MHz)



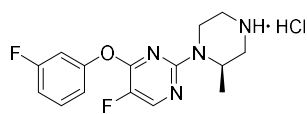
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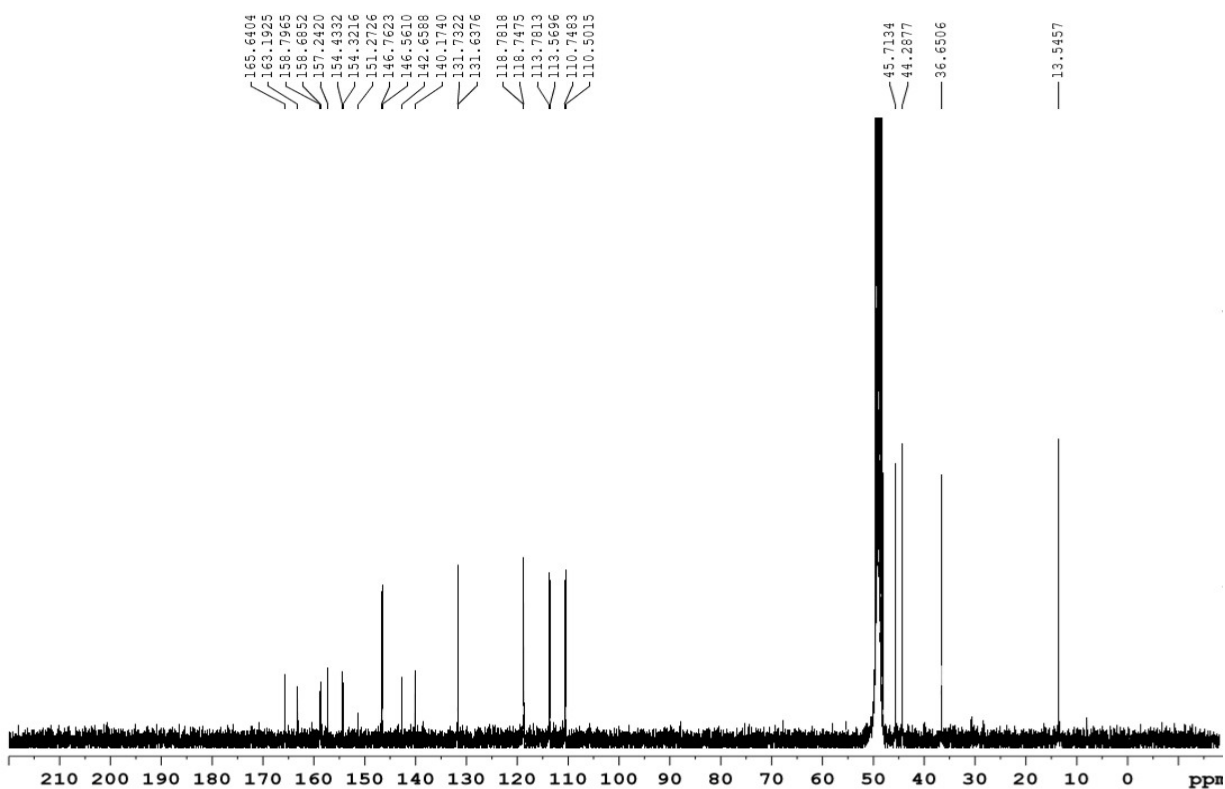
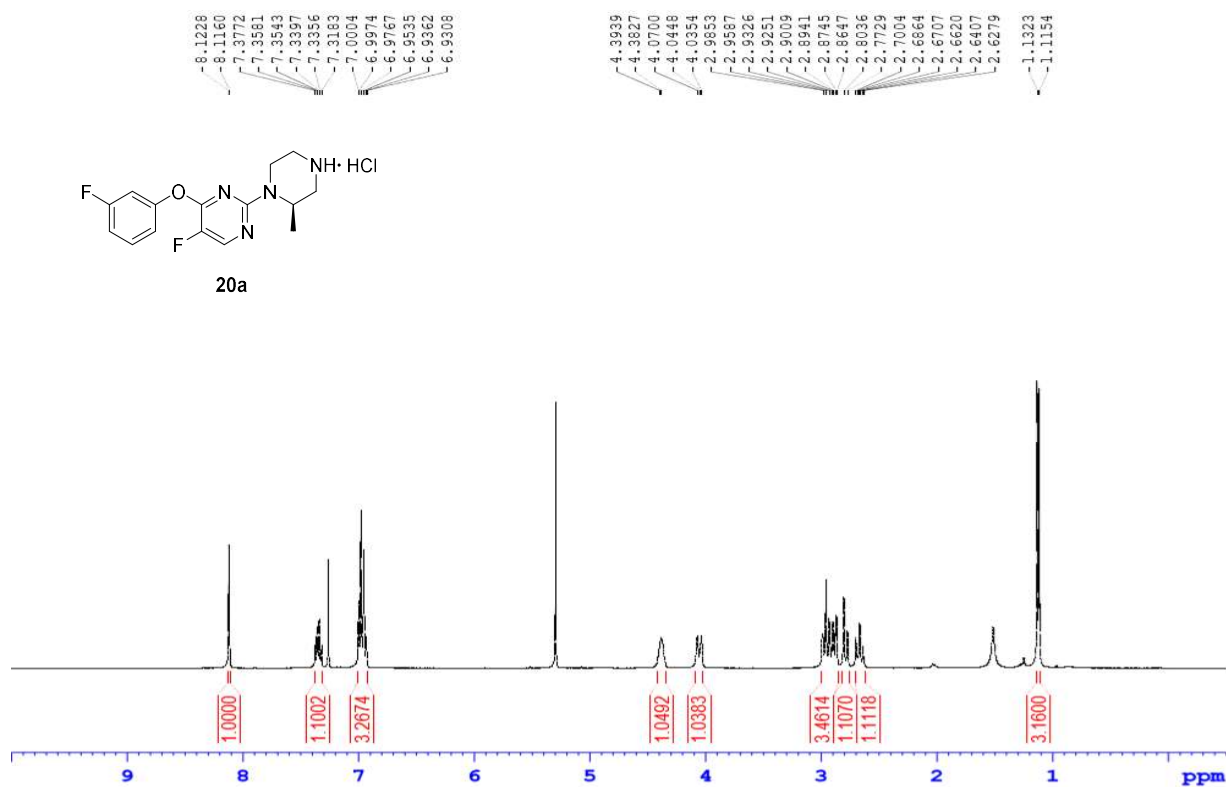
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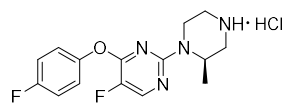


¹³C NMR Spectrum of Compound **10j** (100 MHz)

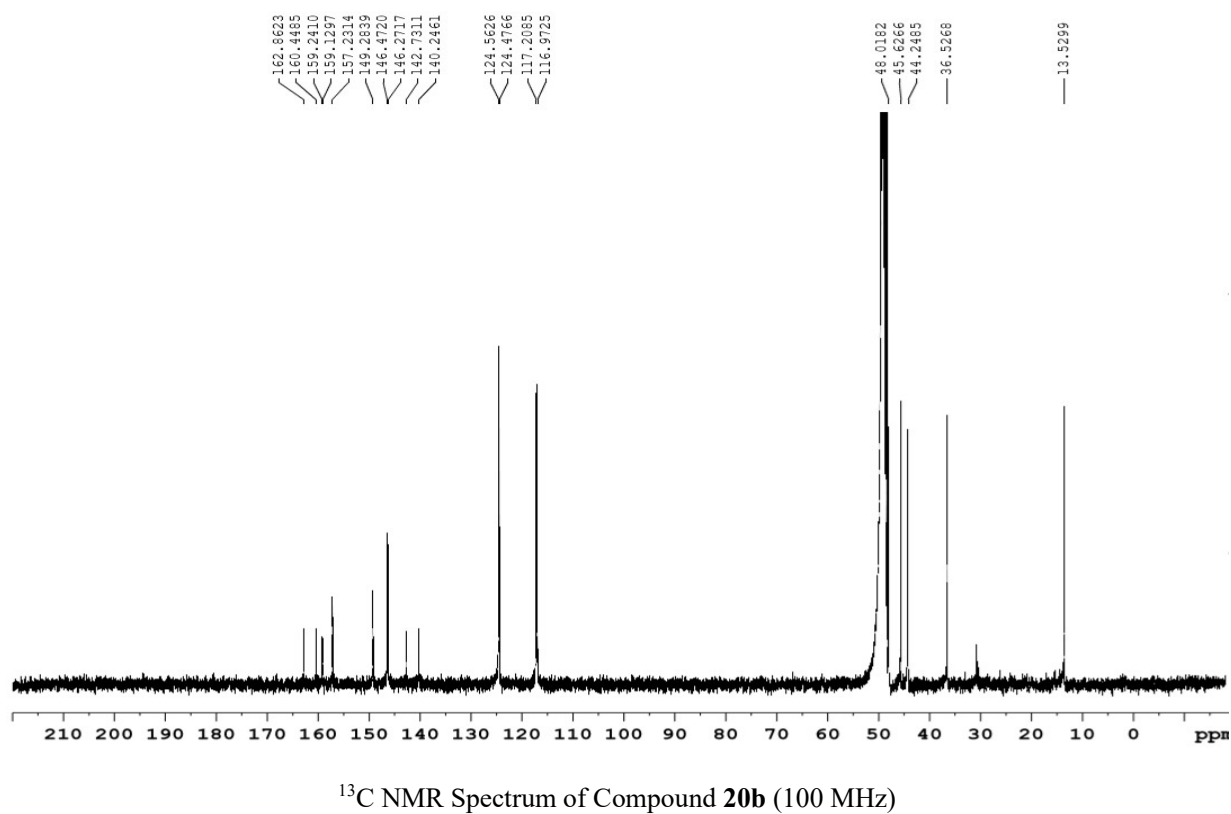
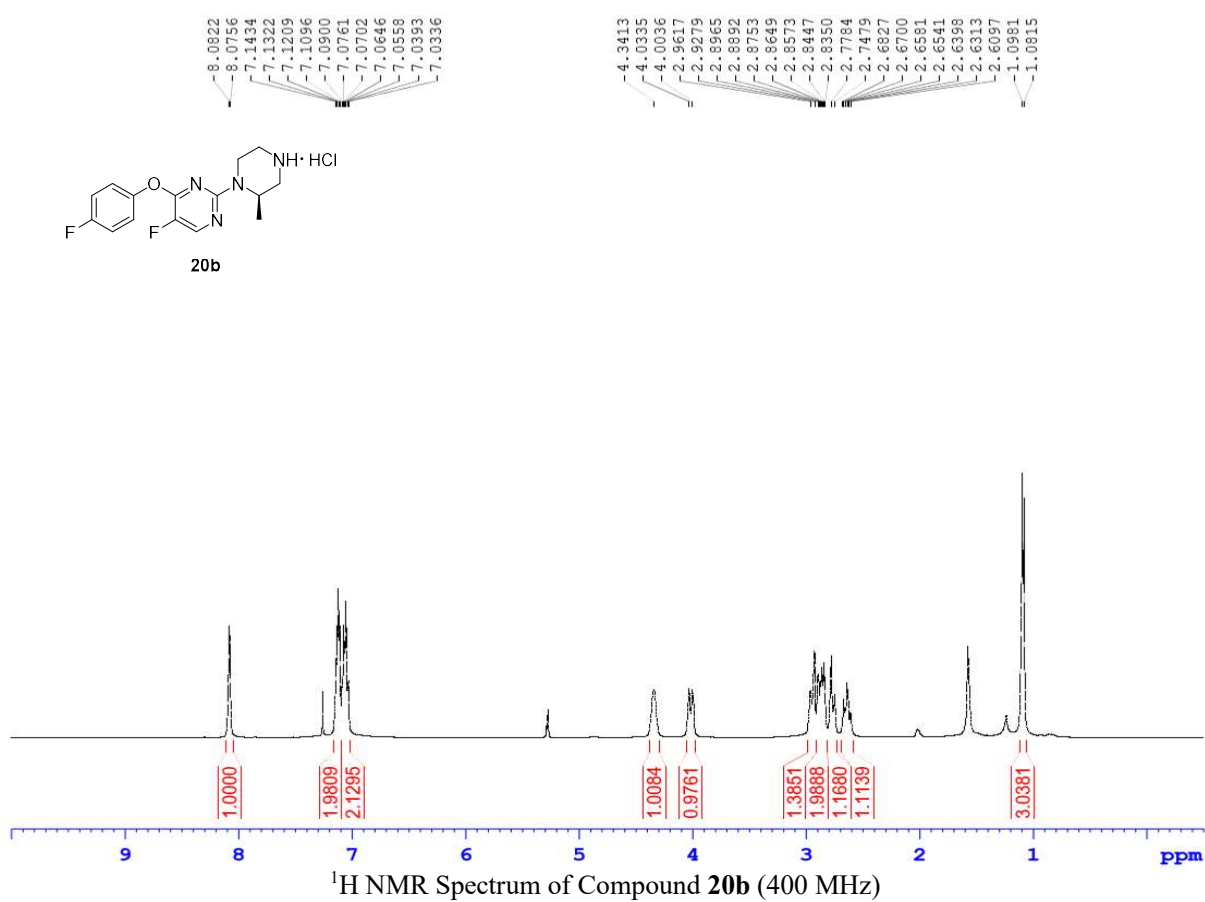


20a





20b



3. Radioligands and reference compounds for binding assay

Table S1. A list of 5-HT receptor radioligands and reference compounds for binding assay.

Receptor subtype	Radioligand	Reference compound
1A	[³ H]8-OH-DPAT	Methysergide
1B	[³ H]GR125743	Ergotamine
1D	[³ H]GR125743	Ergotamine
1E	[³ H]5-HT	5-HT
2A	[³ H]Ketanserin	Chlorpromazine
2B	[³ H]LSD	5-HT
2C	[³ H]Mesulergine	Chlorpromazine
3	[³ H]LY278584	LY278584
5A	[³ H]LSD	Ergotamine
6	[³ H]LSD	Chlorpromazine
7	[³ H]LSD	Chlorpromazine