

Supporting Information spectra

Synthesis of Functionalized Pyridazin-3(2*H*)-ones via Nucleophilic Substitution of Hydrogen (S_NH).

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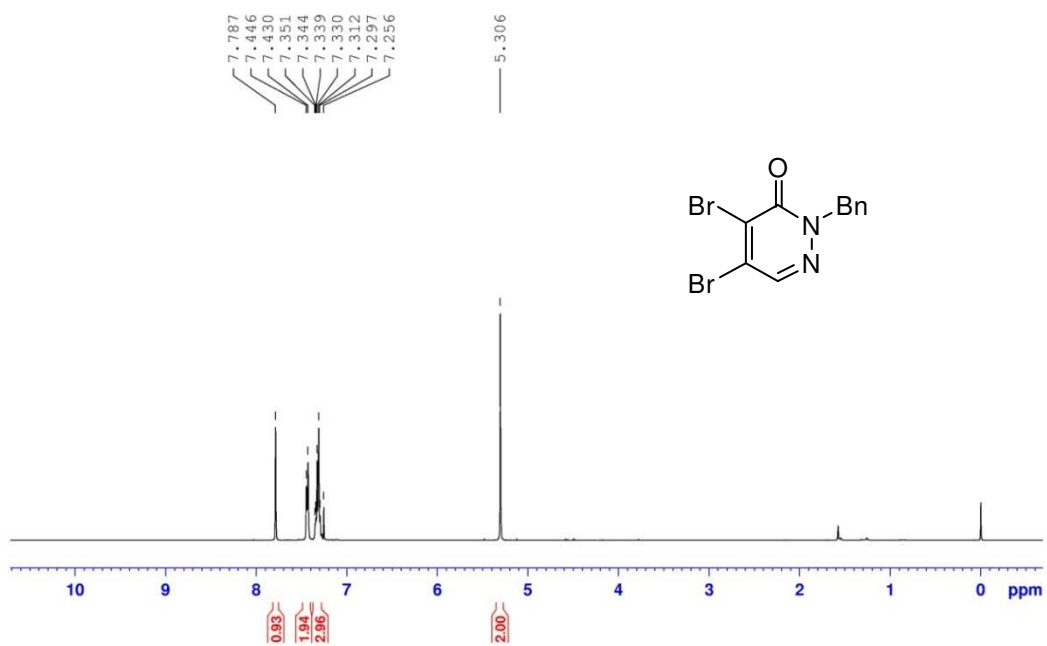
Contents

NMR spectra

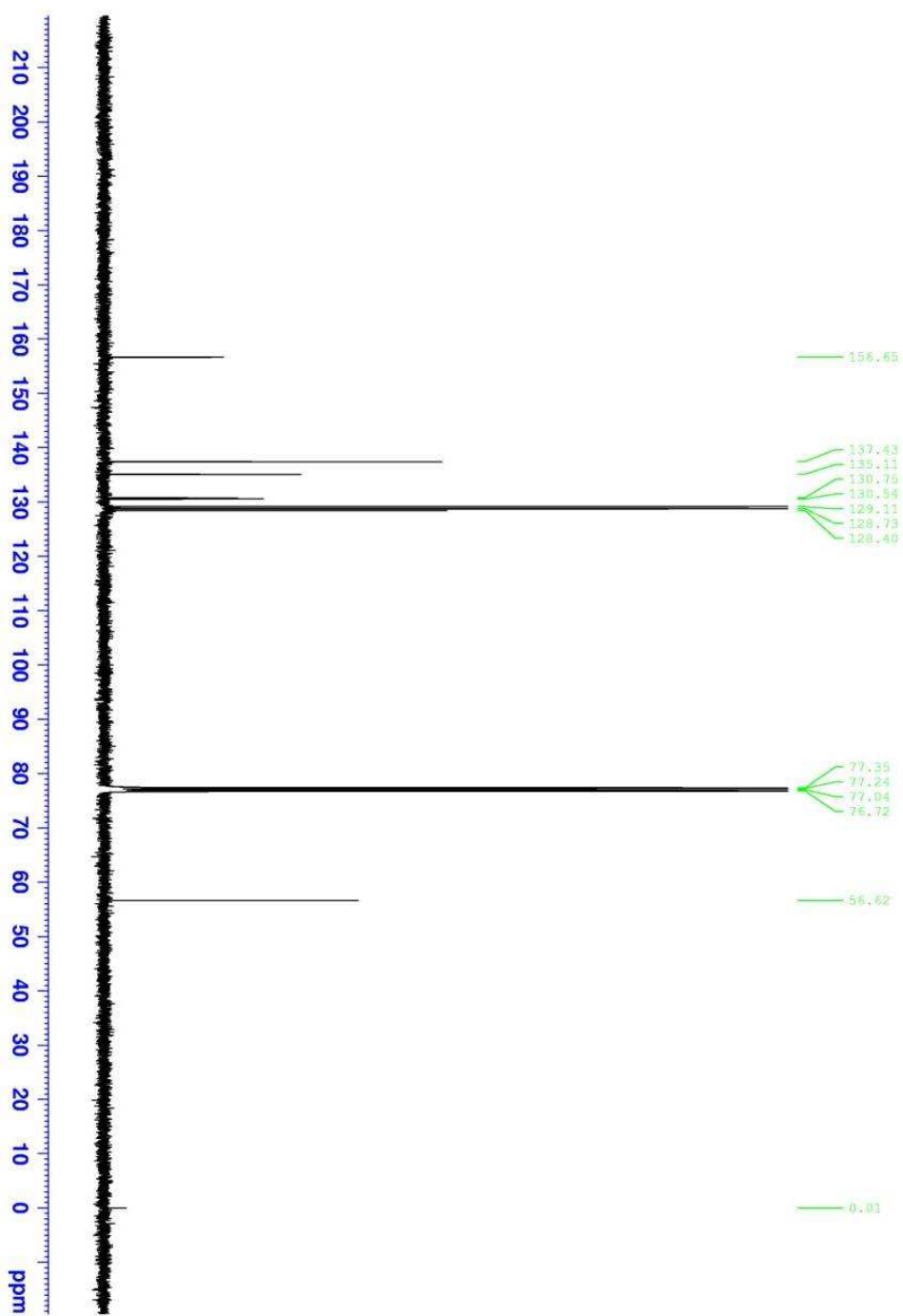
2-63

4,5-Dibromopyridazin-3(2H)-one

^1H NMR (CDCl_3)

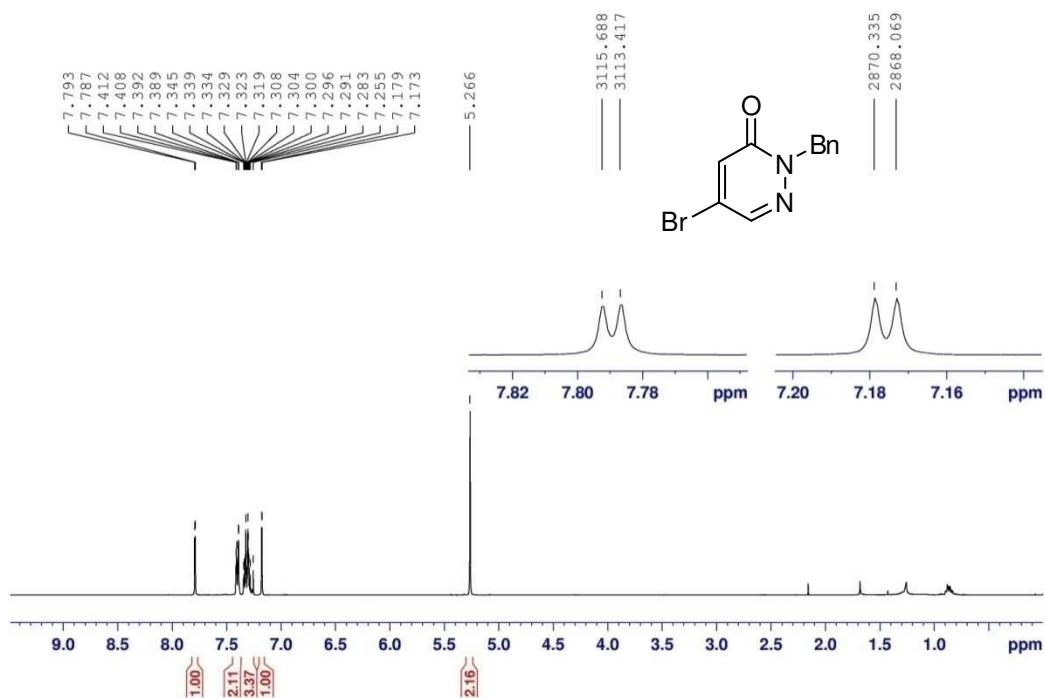


^{13}C NMR (CDCl_3)

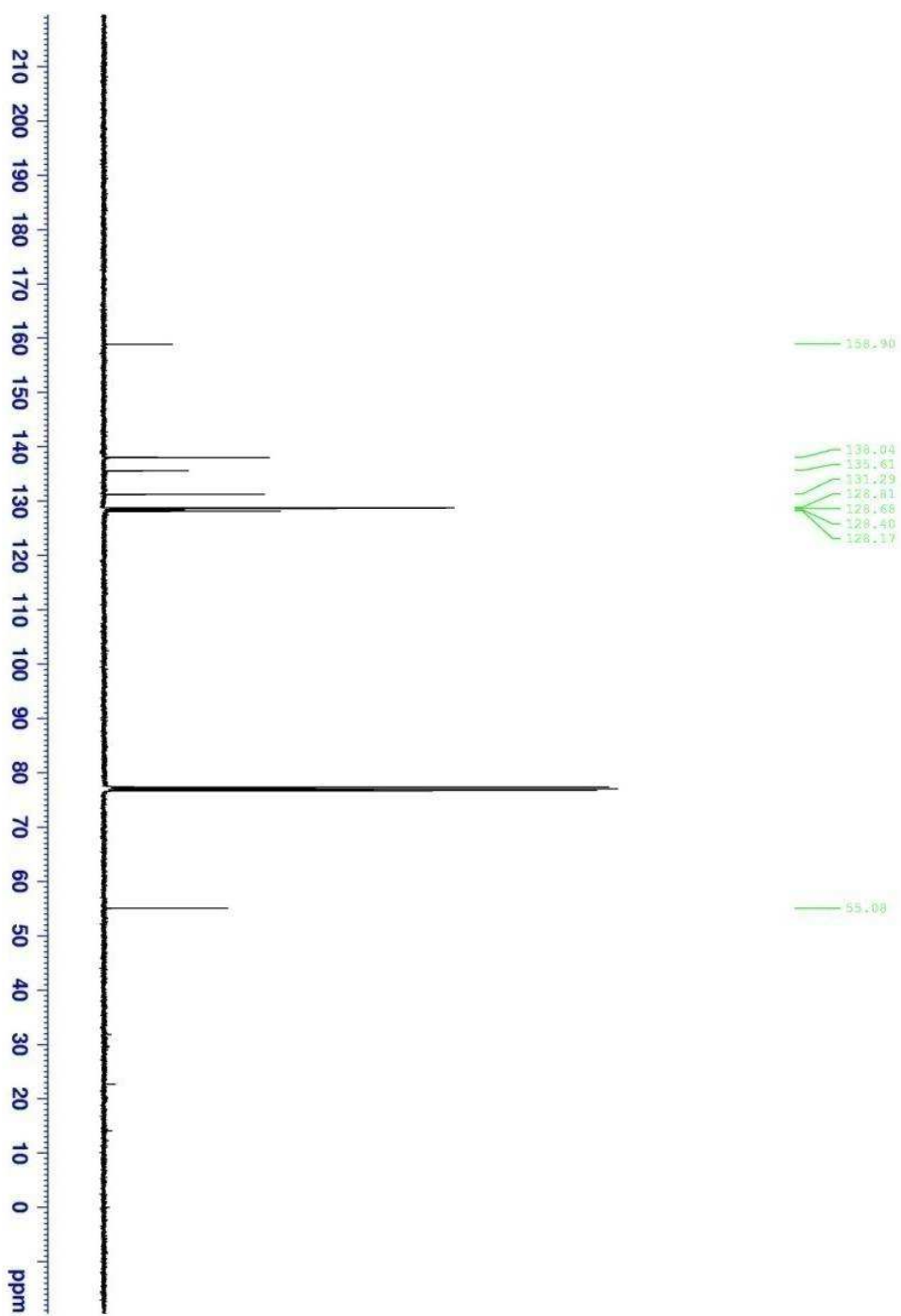


2-Benzyl-5-bromopyridazin-3(2H)-one (3a)

^1H NMR (CDCl_3)

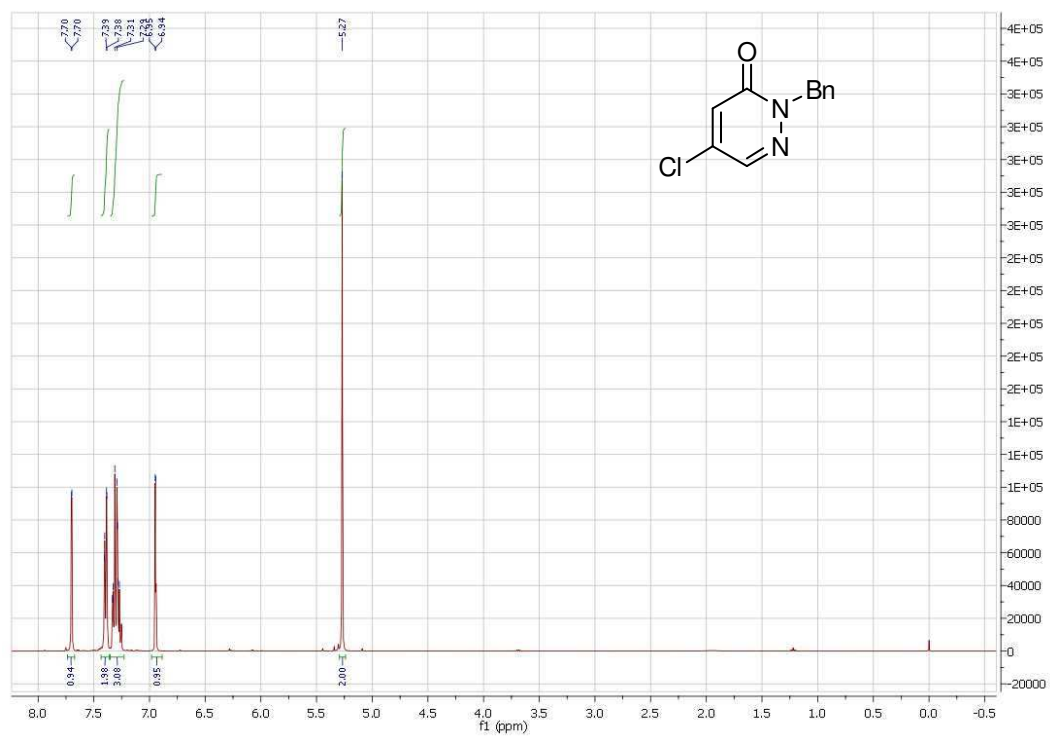


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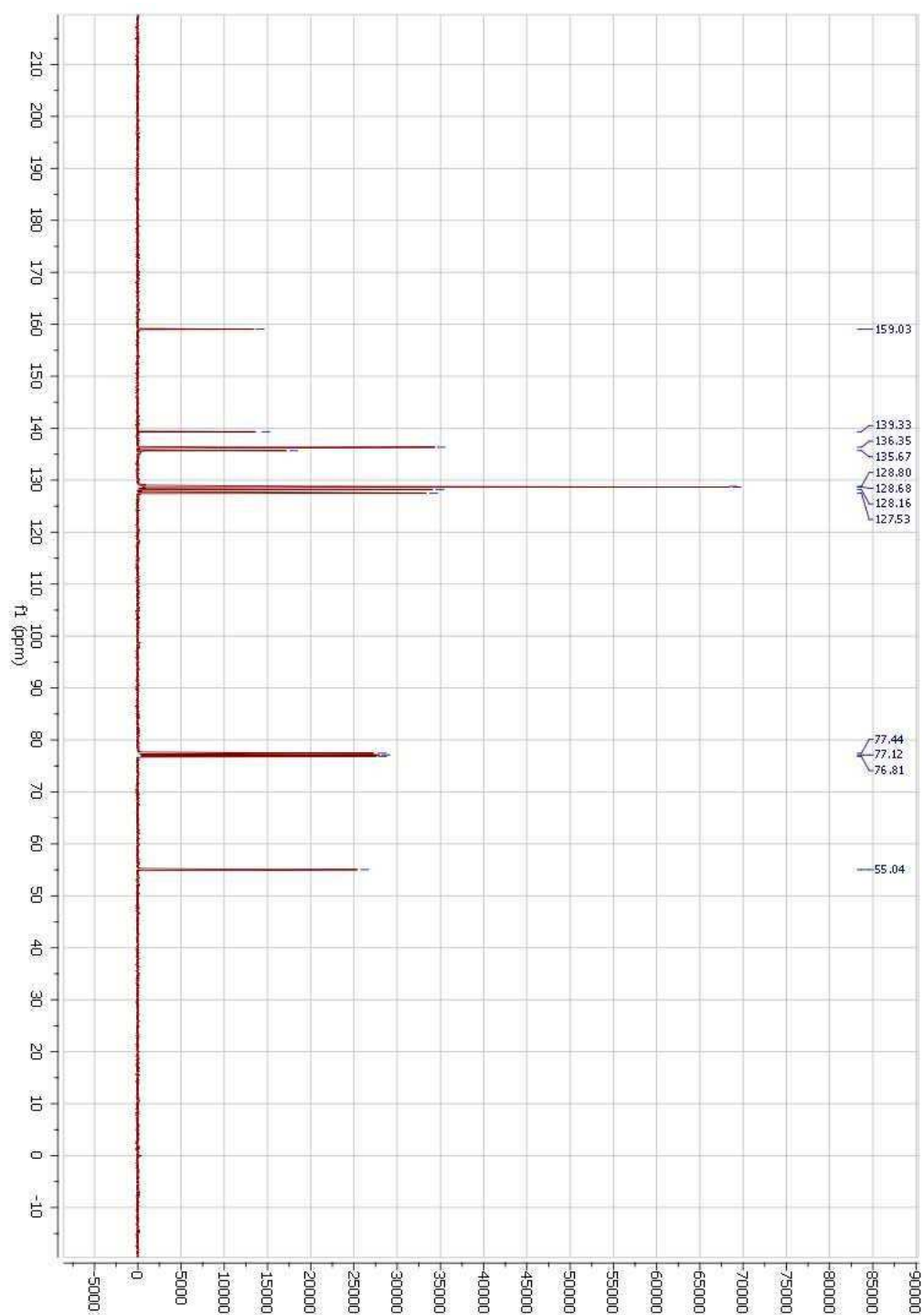


2-Benzyl-5-chloropyridazin-3(2H)-one (3b)

^1H NMR (CDCl_3)

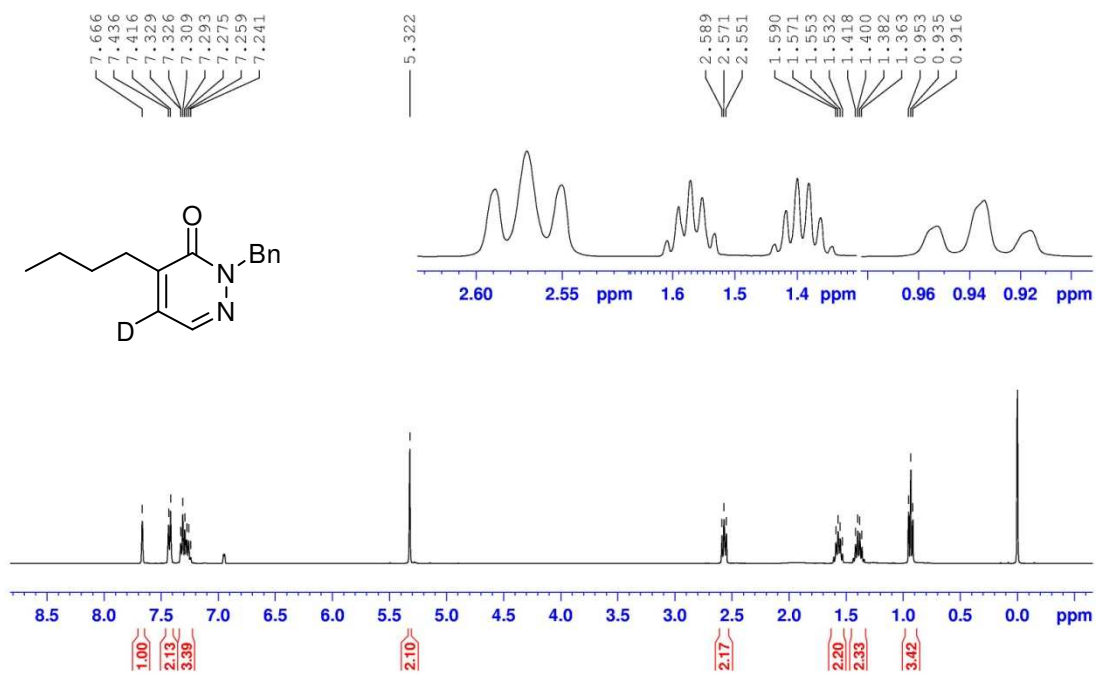


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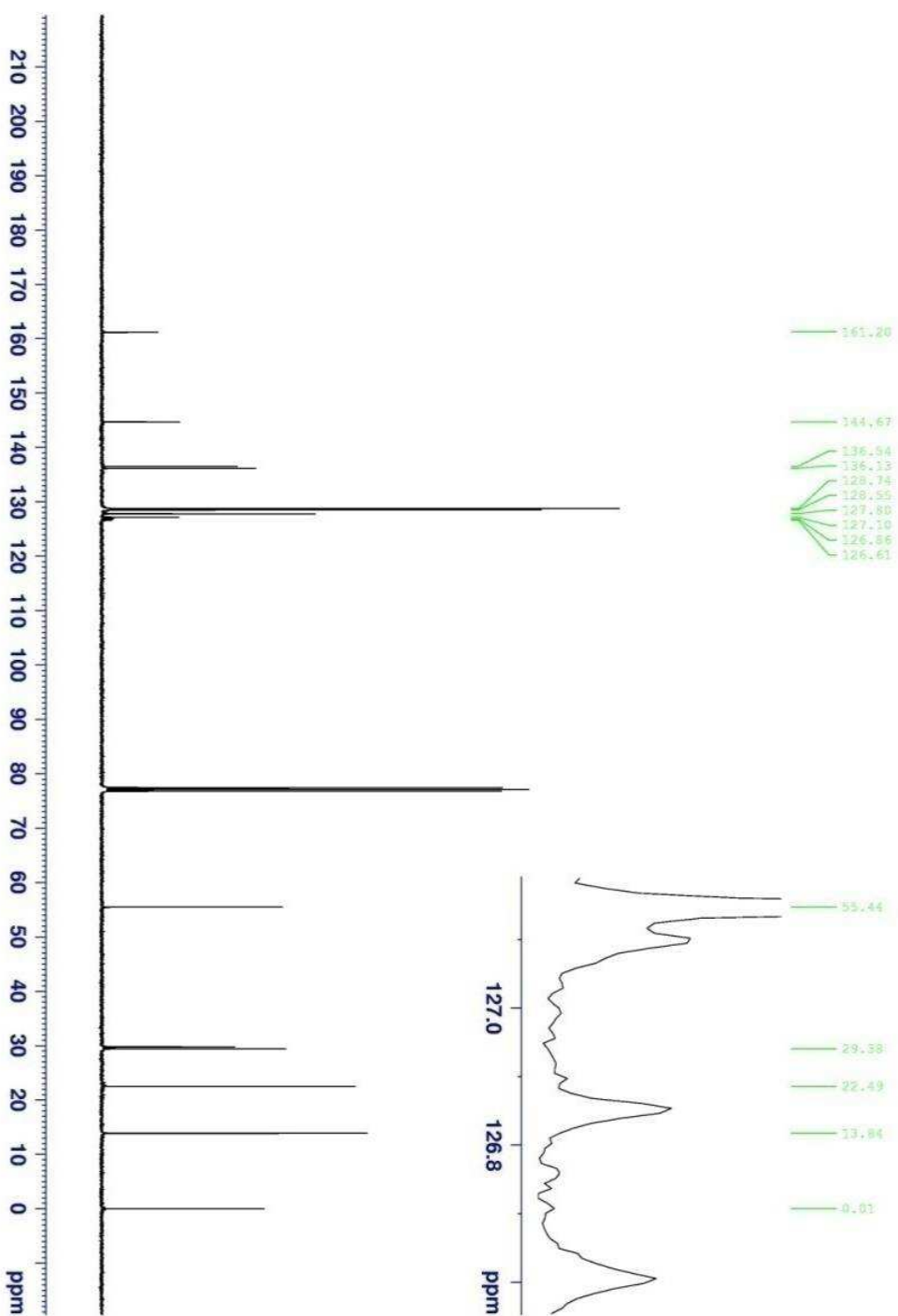


2-Benzyl-4-butyl-5-deuteropyridazin-3(2H)-one (4a)

^1H NMR (CDCl_3)

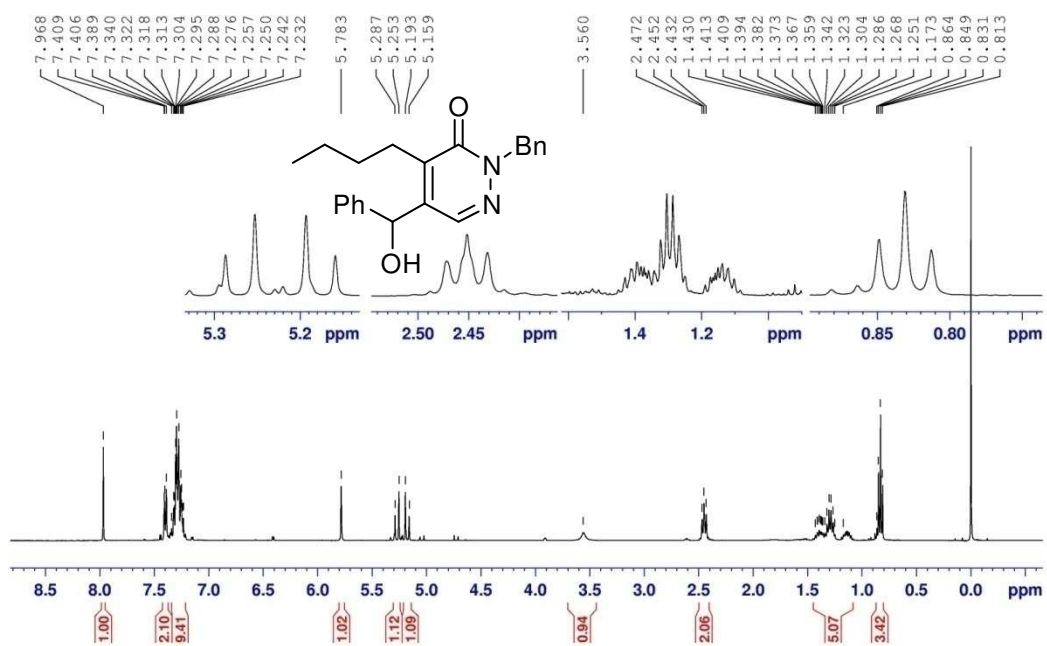


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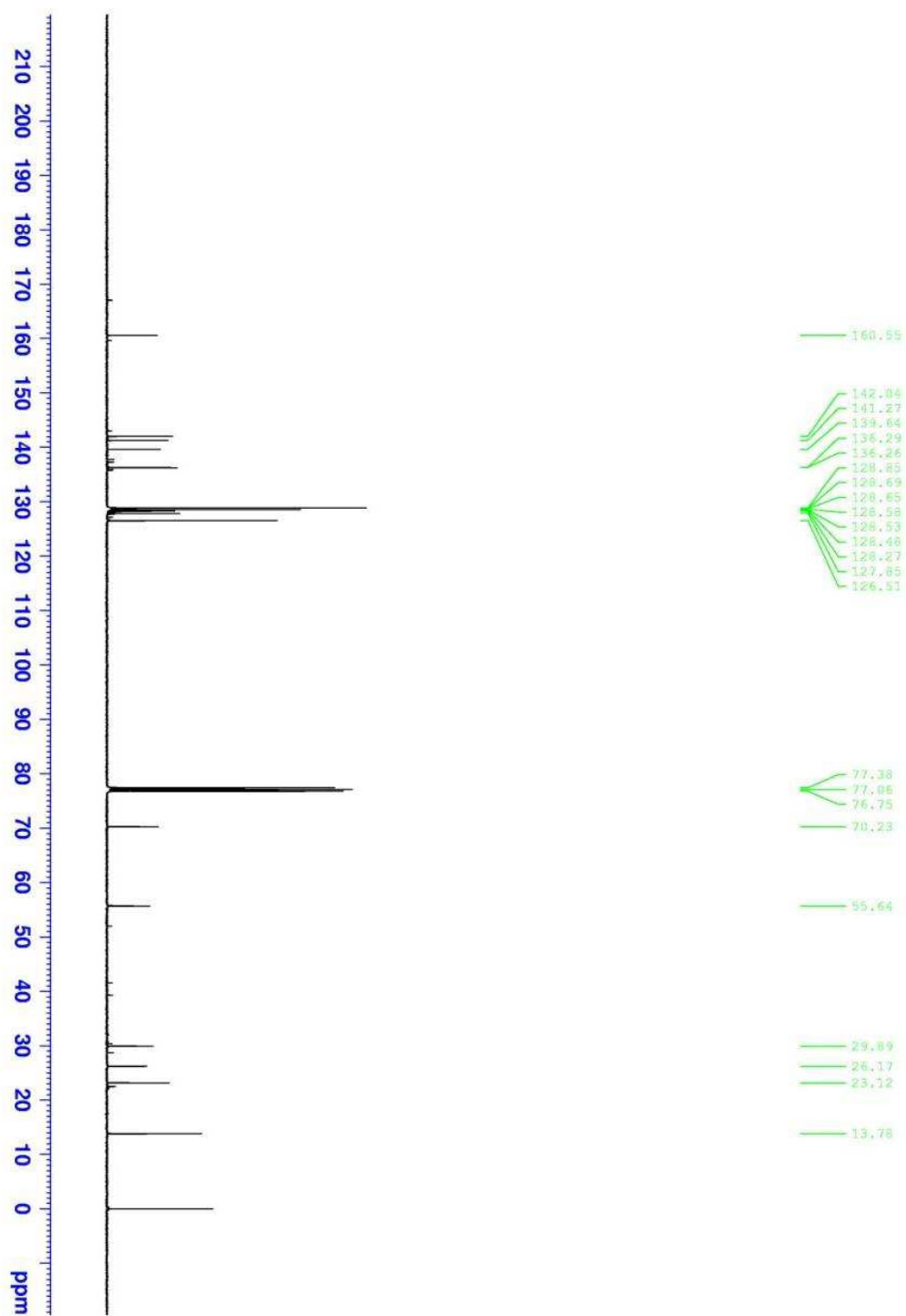


2-Benzyl-4-butyl-5-[hydroxy(phenyl)methyl]pyridazin-3(2H)-one (4b)

^1H NMR (CDCl_3)

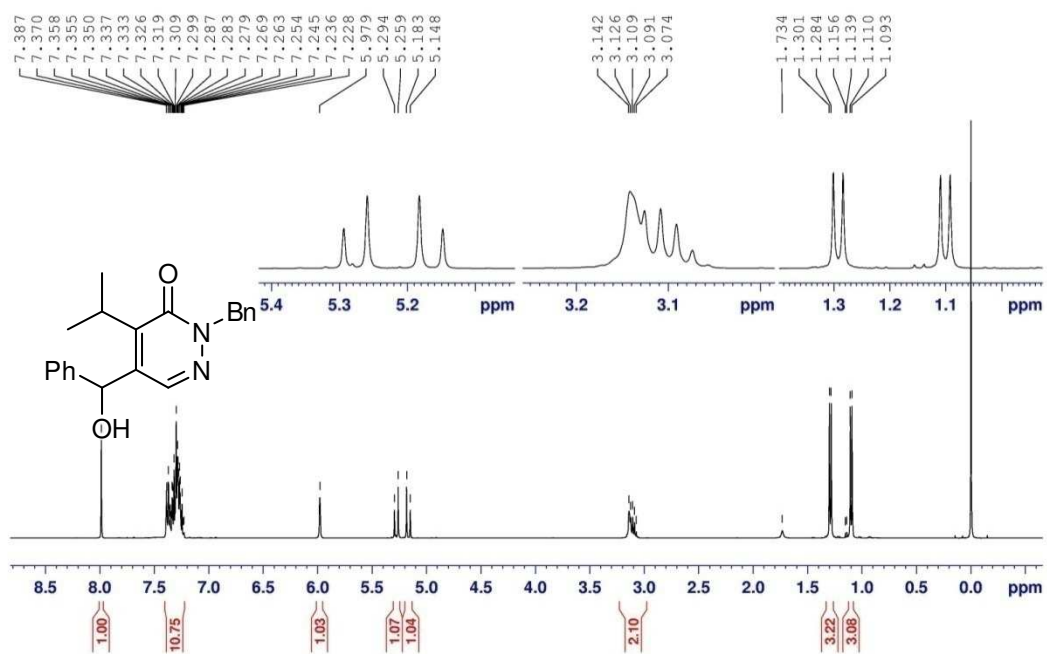


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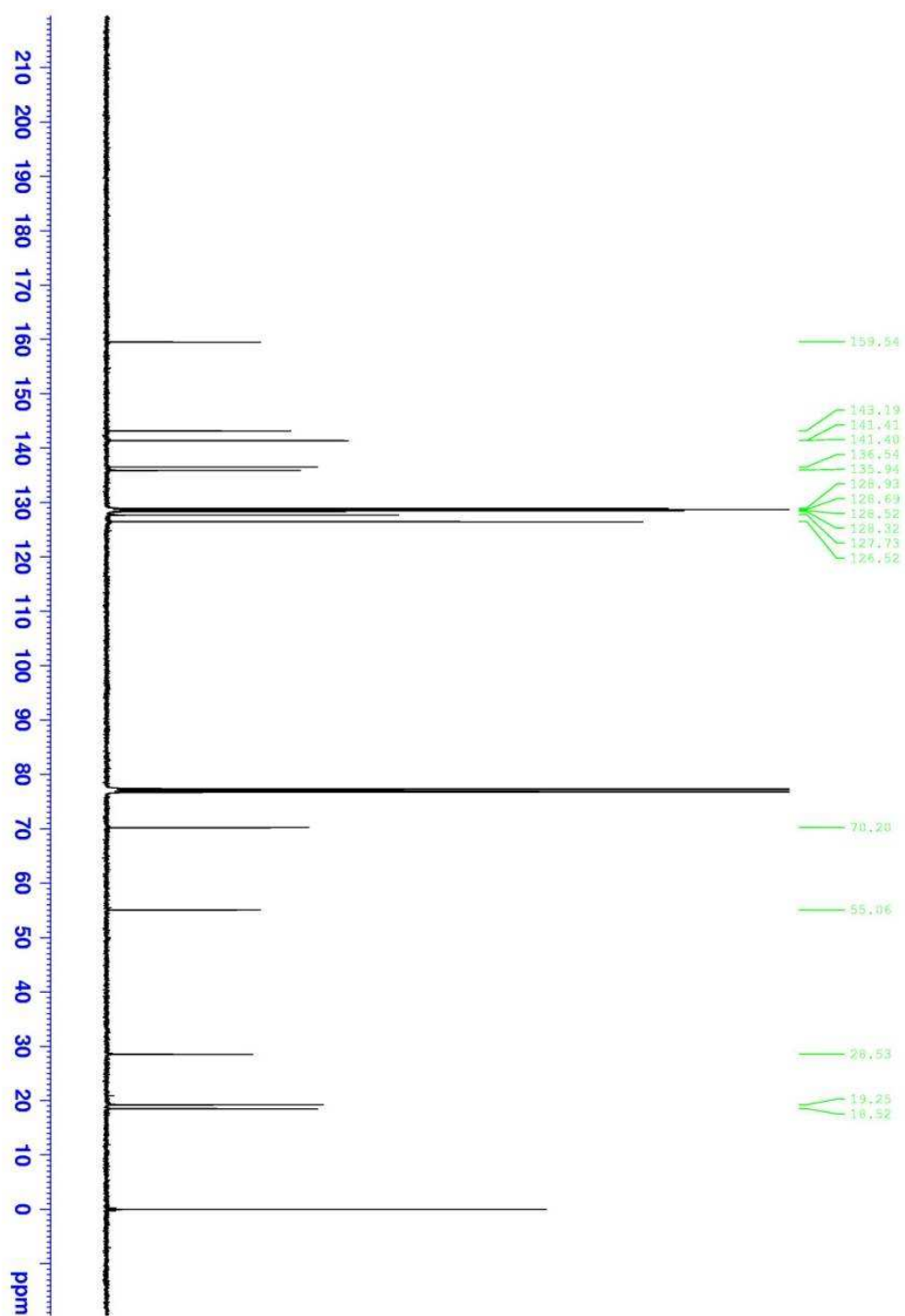


2-Benzyl-5-[hydroxy(phenyl)methyl]-4-isopropylpyridazin-3(2H)-one (4c)

^1H NMR (CDCl_3)

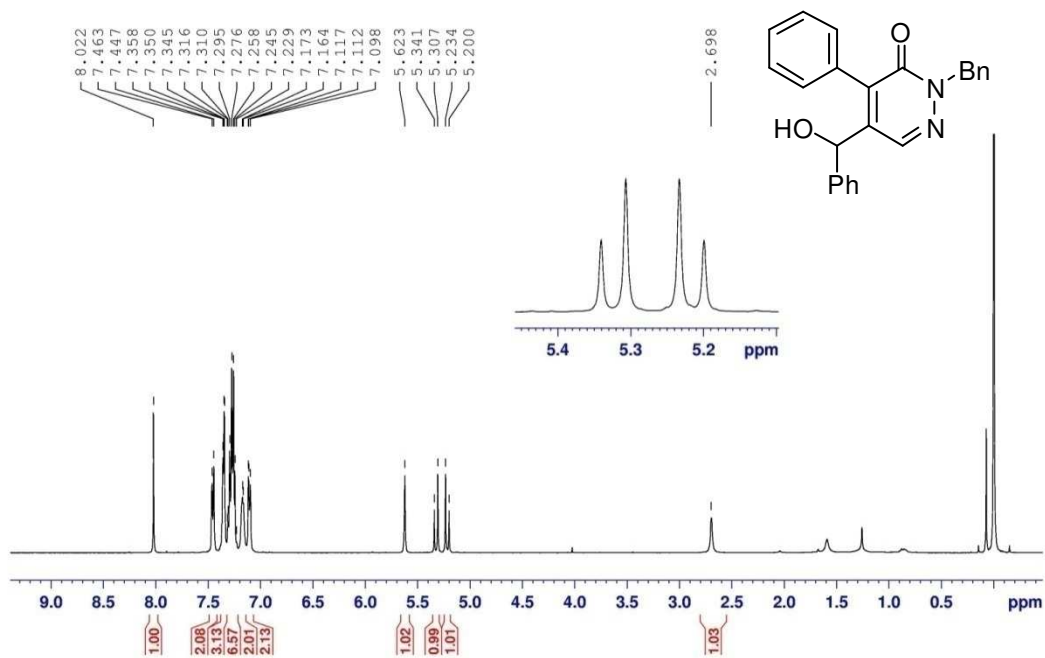


^{13}C NMR (CDCl_3)

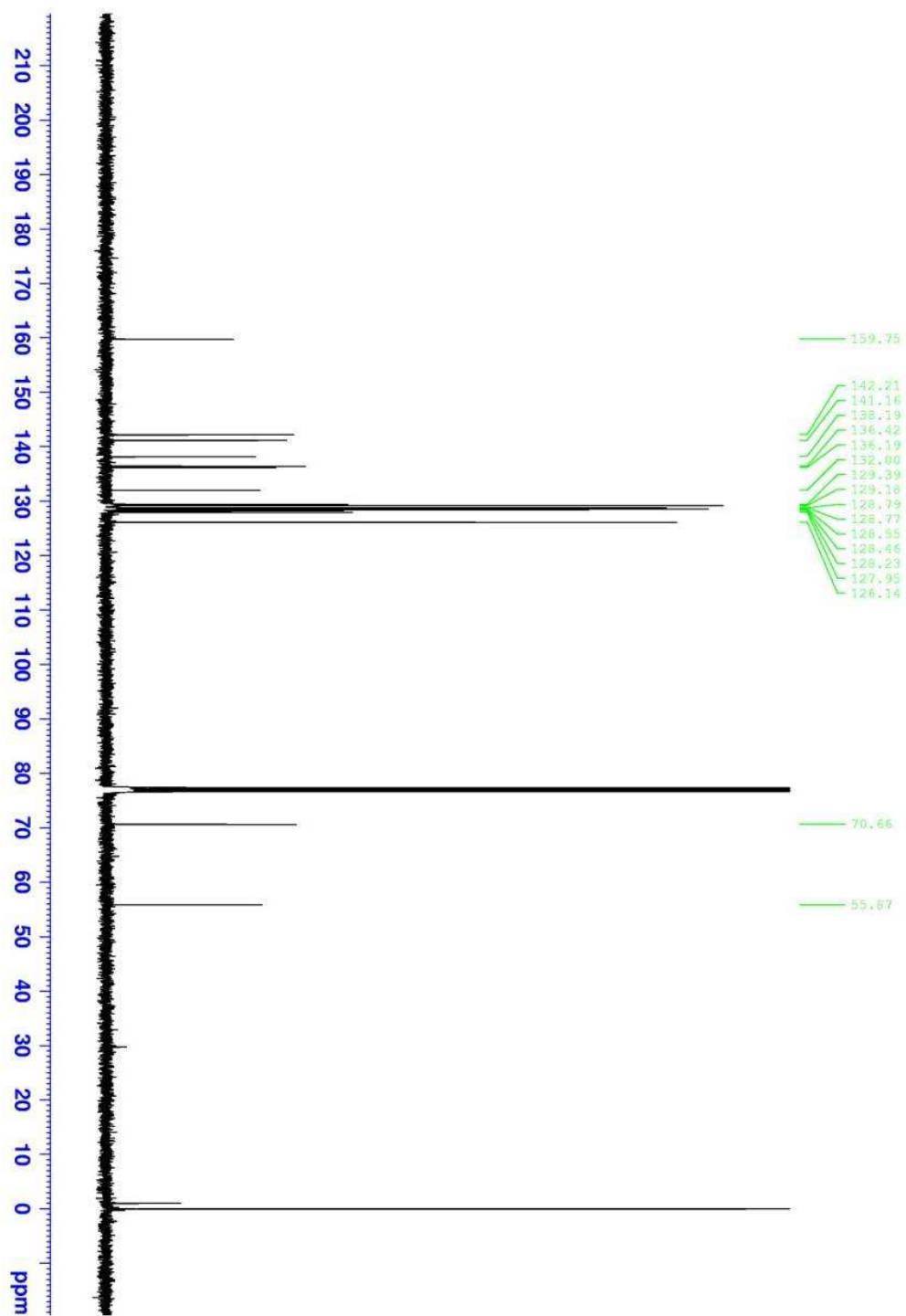


2-Benzyl-5-[hydroxy(phenyl)methyl]-4-phenylpyridazin-3(2H)-one (4d)

^1H NMR (CDCl_3)

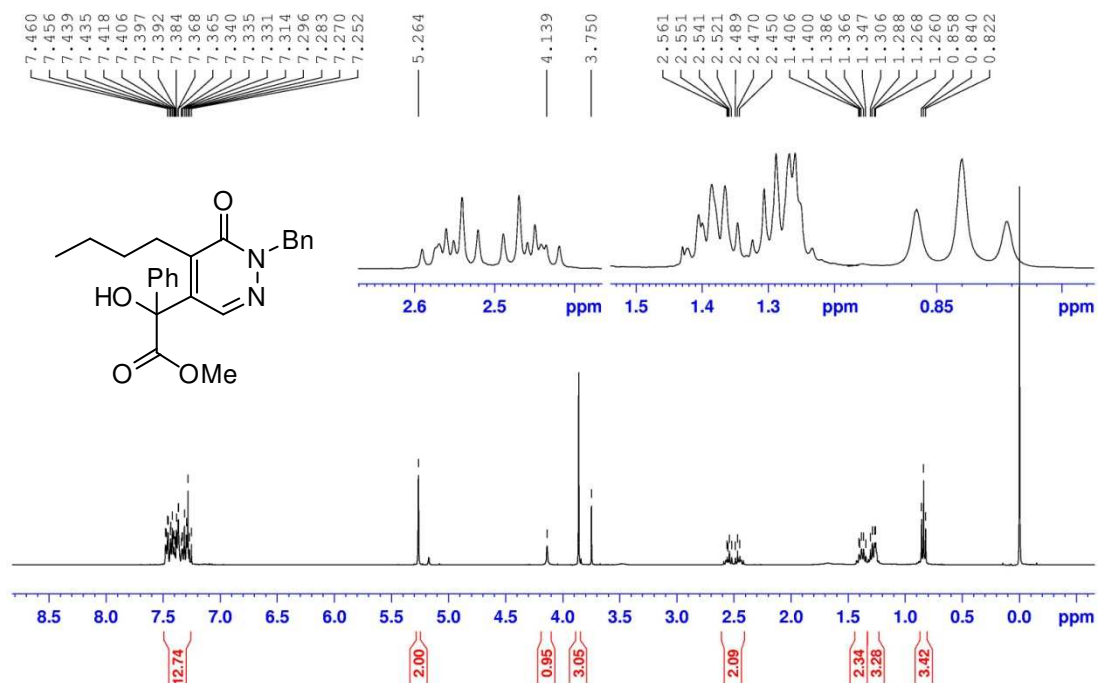


^{13}C NMR (CDCl_3)

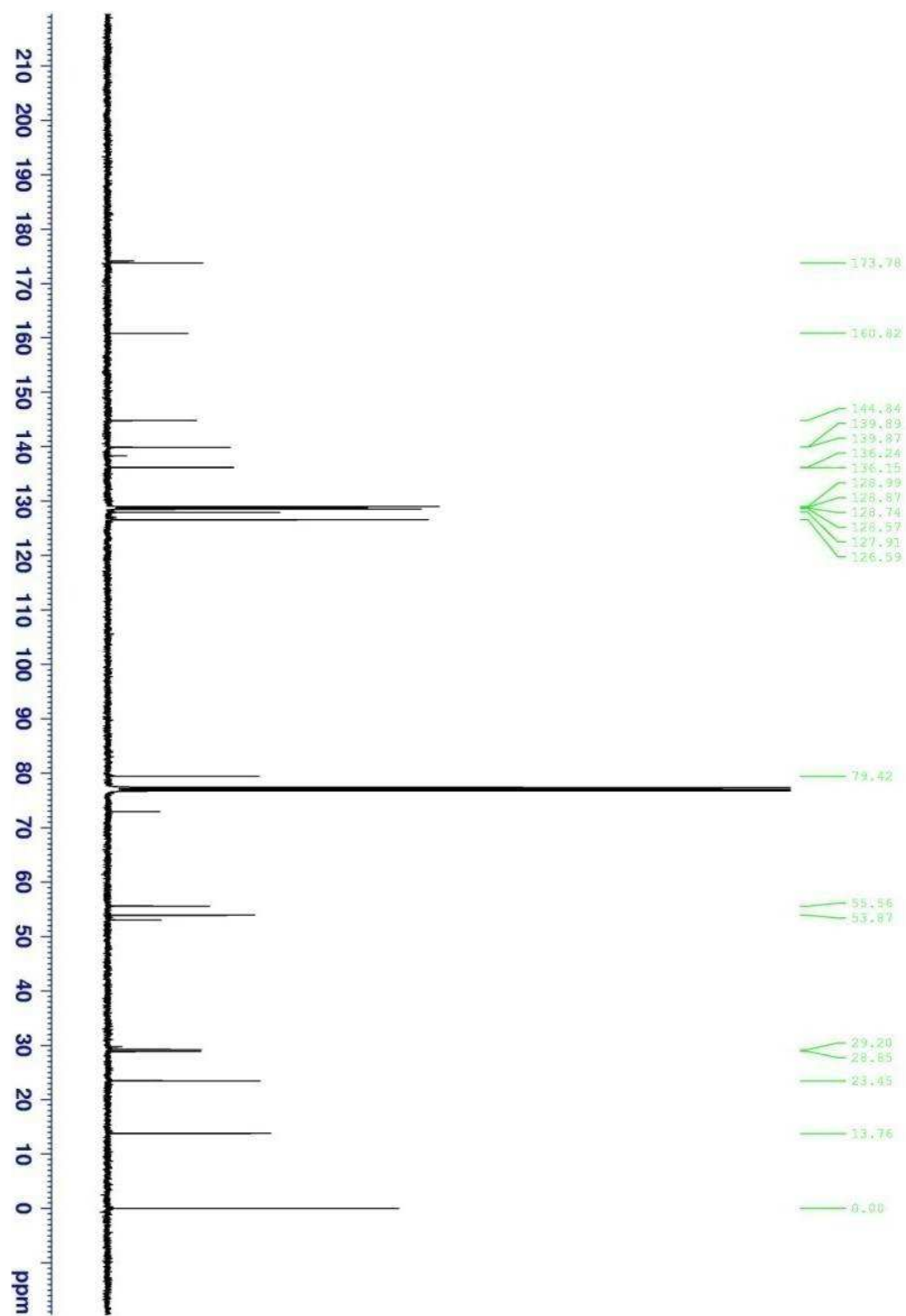


Methyl (1-benzyl-5-butyl-6-oxo-1,6-dihydropyridazin-4-yl)(hydroxy)phenylacetate (**4e**)

^1H NMR (CDCl_3)

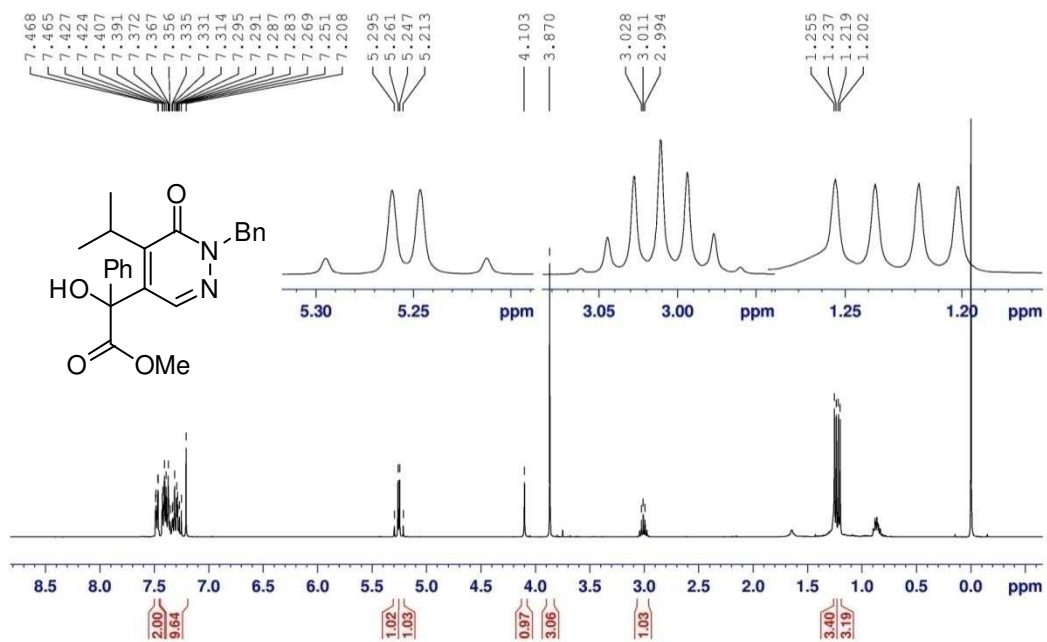


^{13}C NMR (CDCl_3)

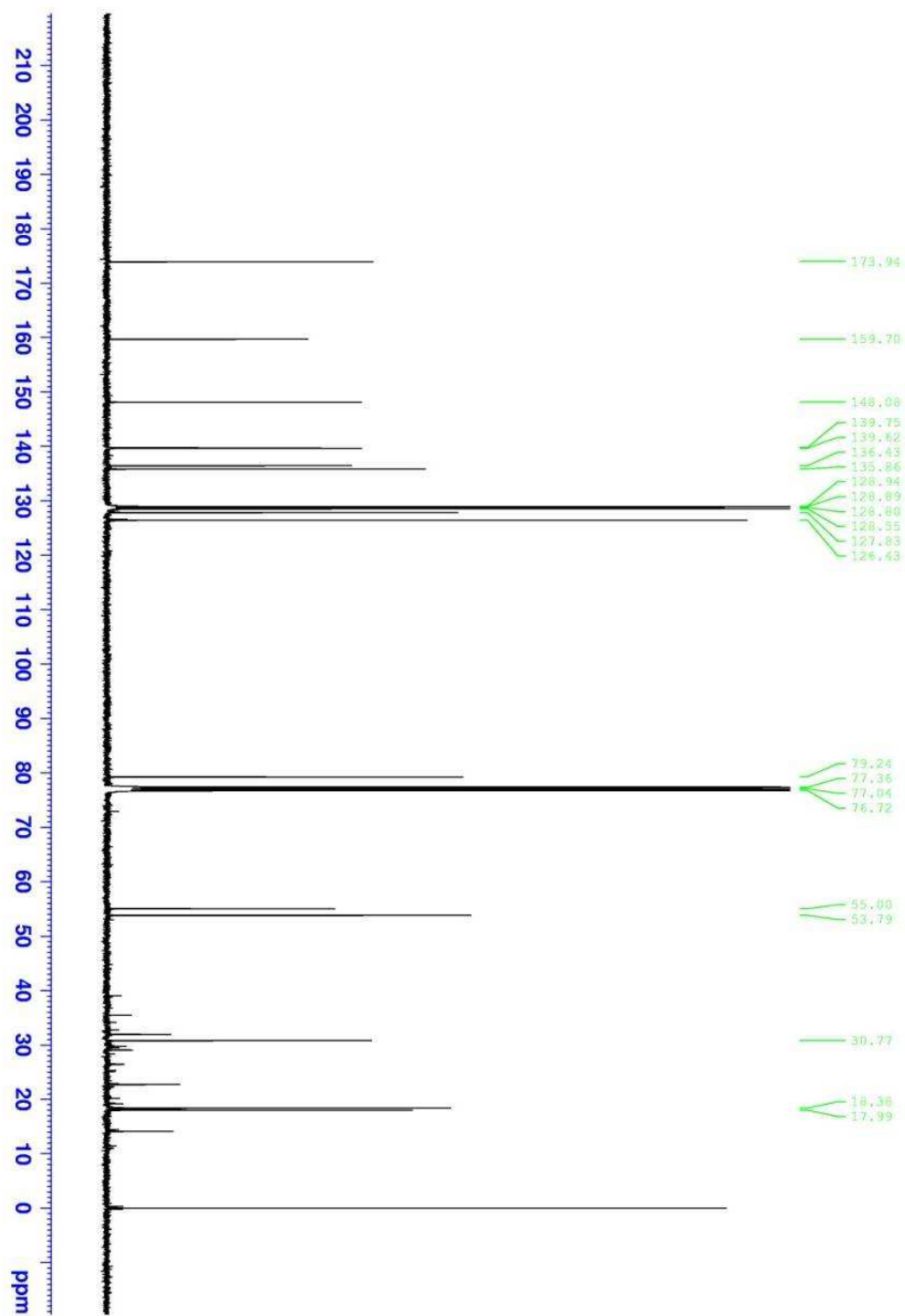


Methyl (1-benzyl-5-isopropyl-6-oxo-1,6-dihydropyridazin-4-yl)(hydroxy)phenylacetate
(4f)

^1H NMR (CDCl_3)

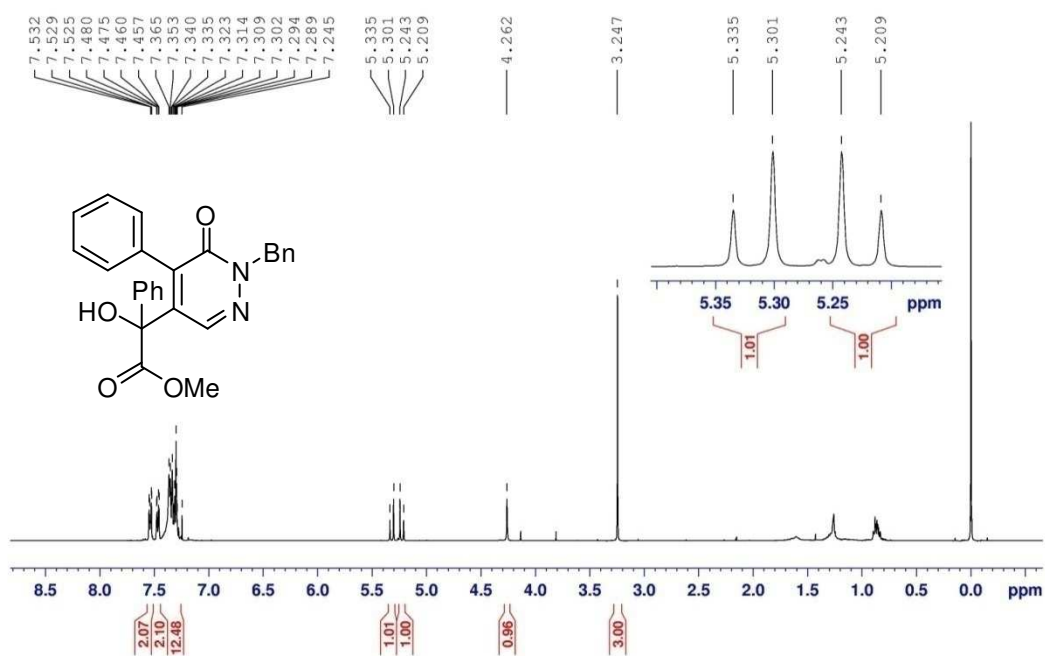


^{13}C NMR (CDCl_3)

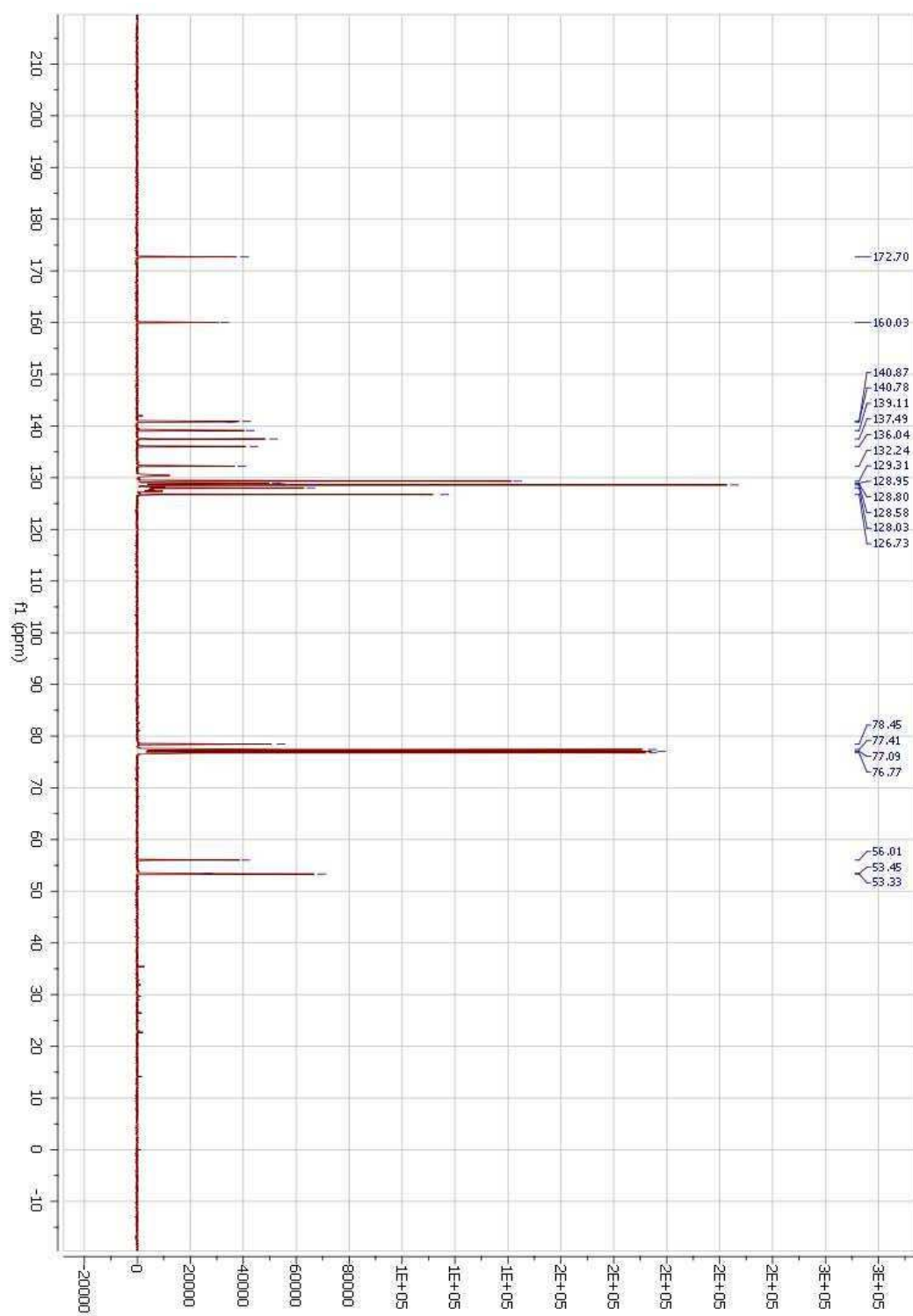


Methyl (1-benzyl-6-oxo-5-phenyl-1,6-dihydropyridazin-4-yl)(hydroxy)phenylacetate (**4g**)

^1H NMR (CDCl_3)

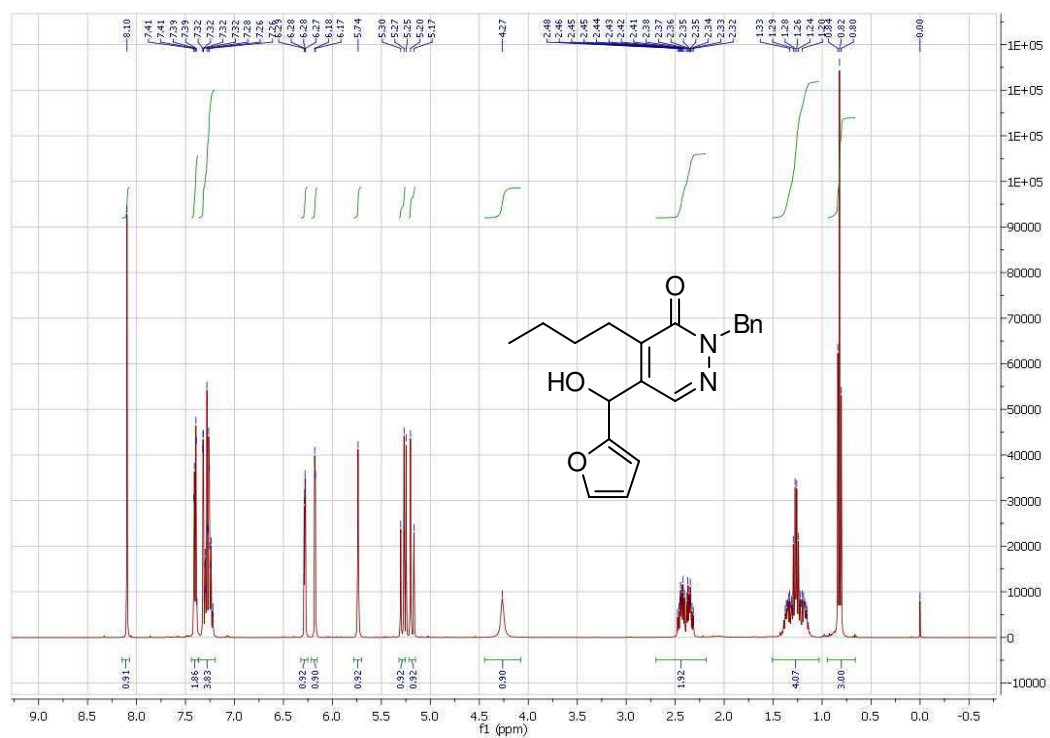


^{13}C NMR (CDCl_3)

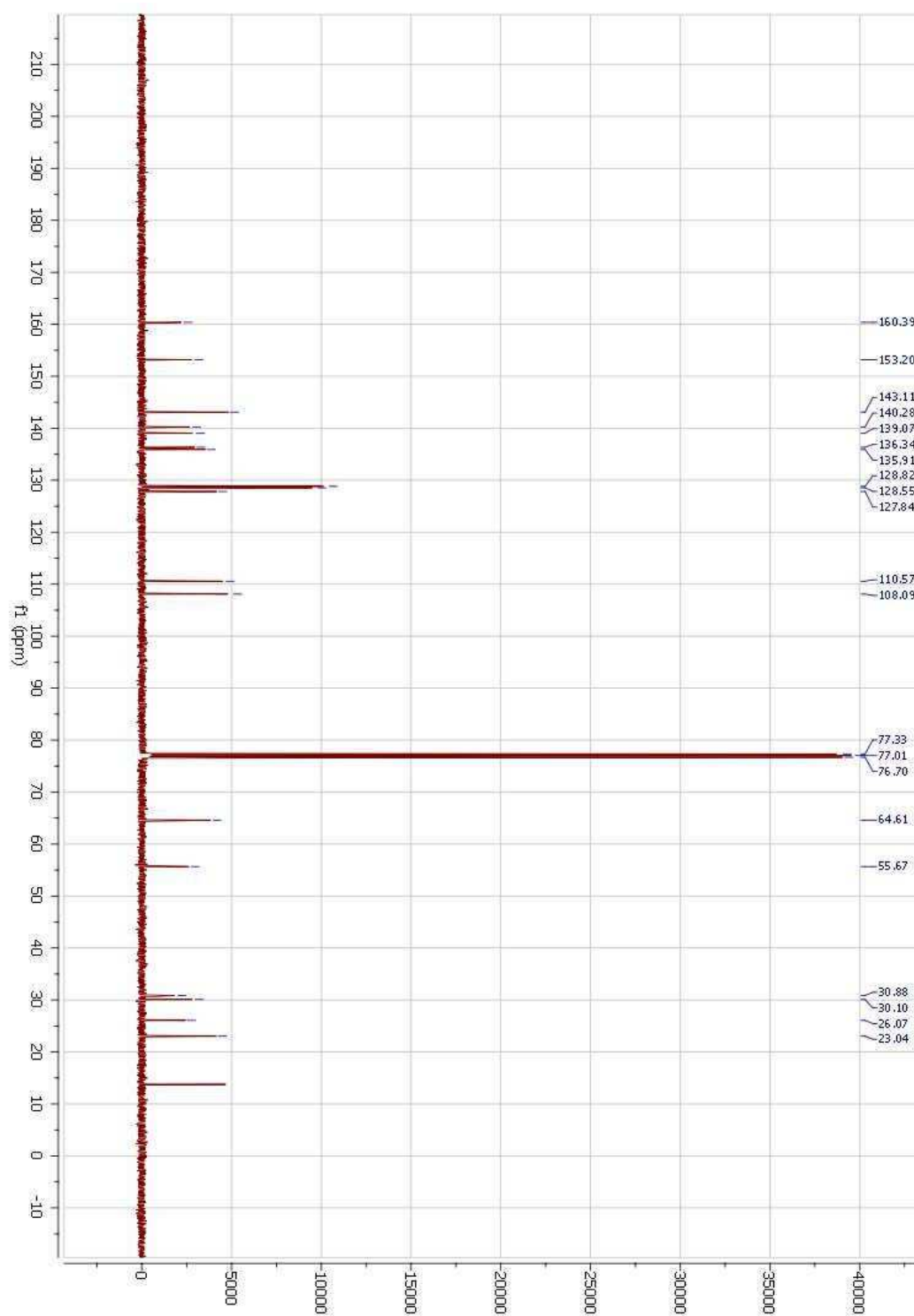


2-Benzyl-4-butyl-5-(furane-2-yl(hydroxy)methyl)pyridazin-3(2H)-one (4h)

^1H NMR (CDCl_3)

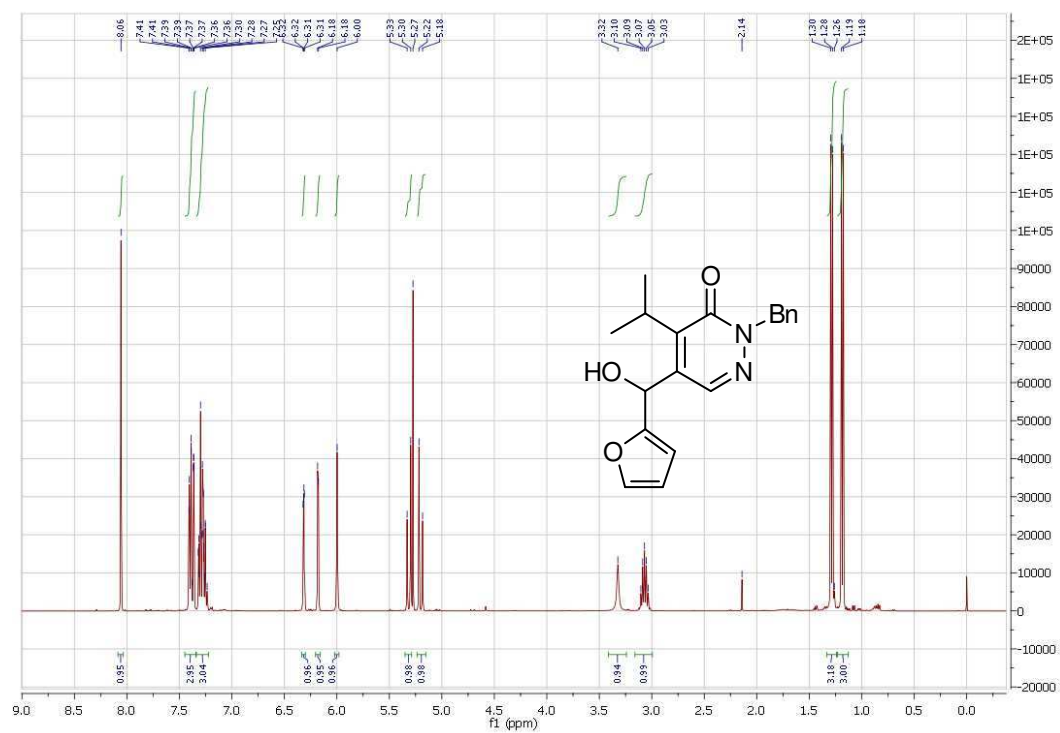


^{13}C NMR (CDCl_3)

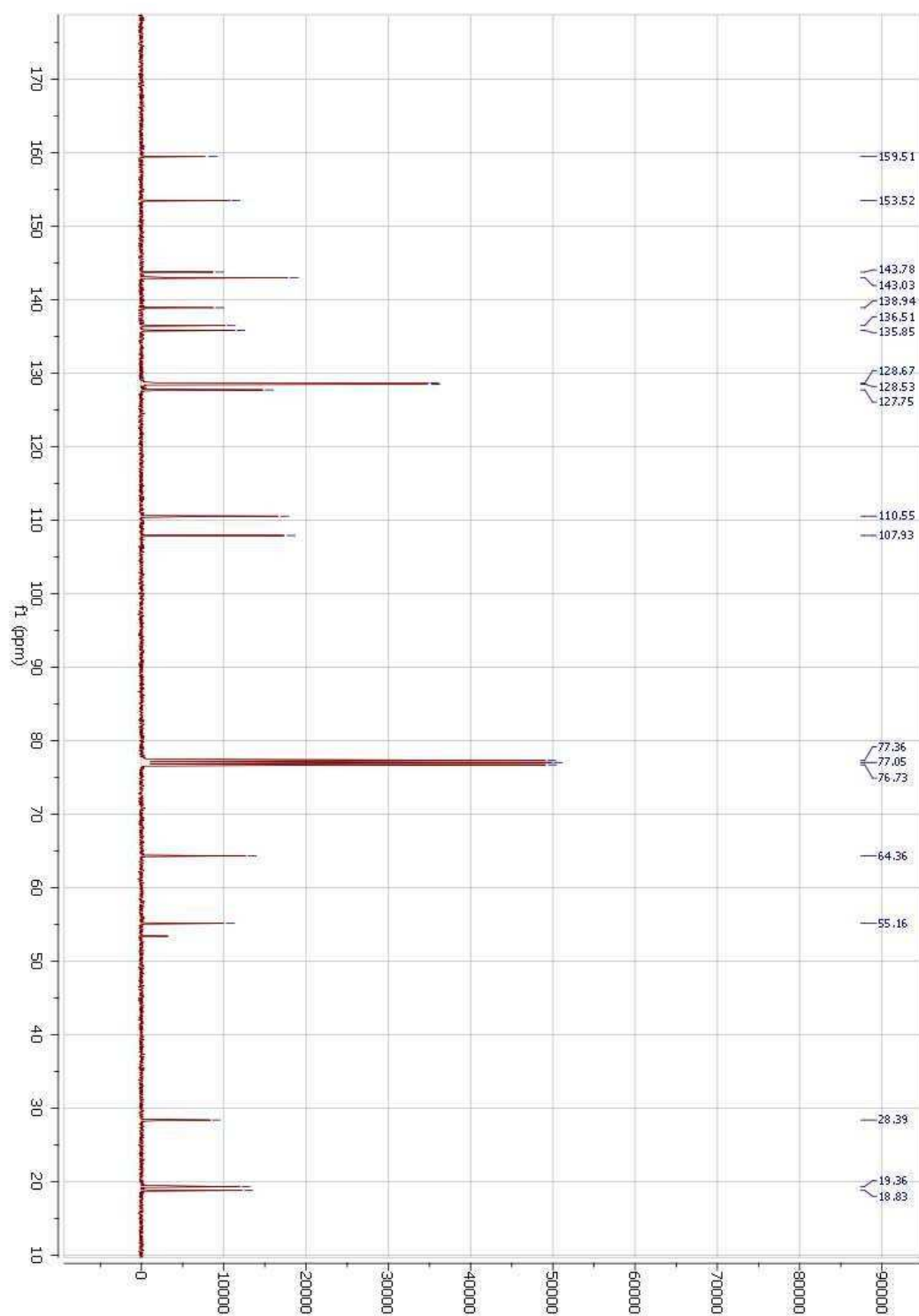


2-Benzyl-5-(furane-2-yl(hydroxy)methyl)-4-isopropylpyridazin-3(2H)-one (4i)

^1H NMR (CDCl_3)

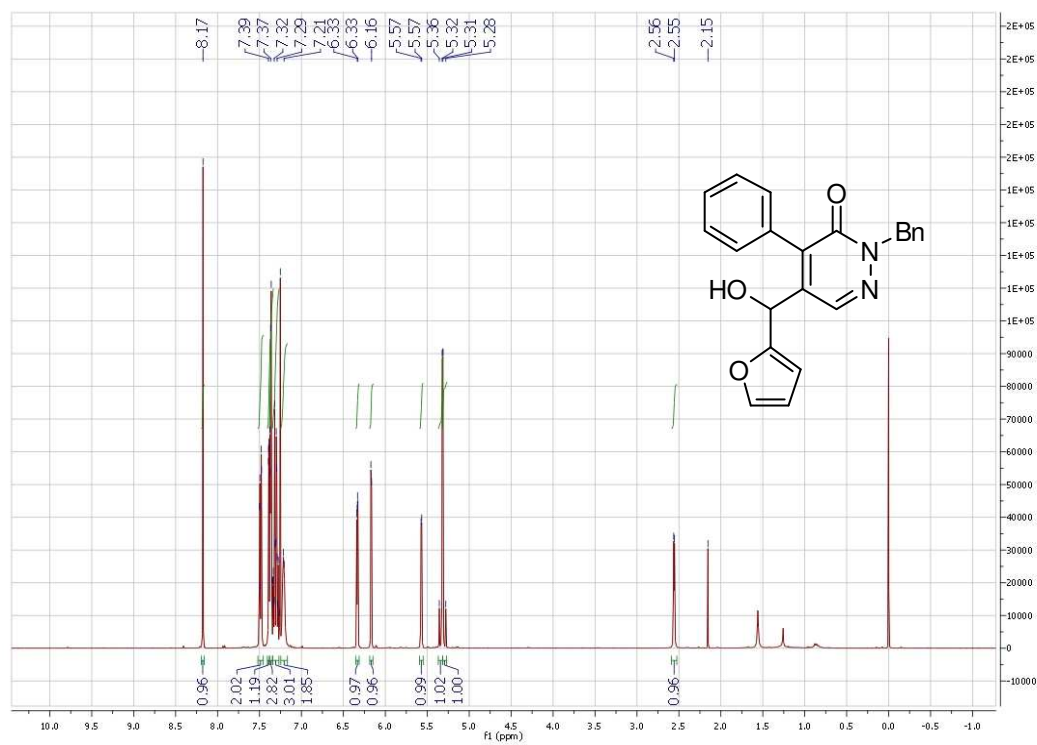


^{13}C NMR (CDCl_3)

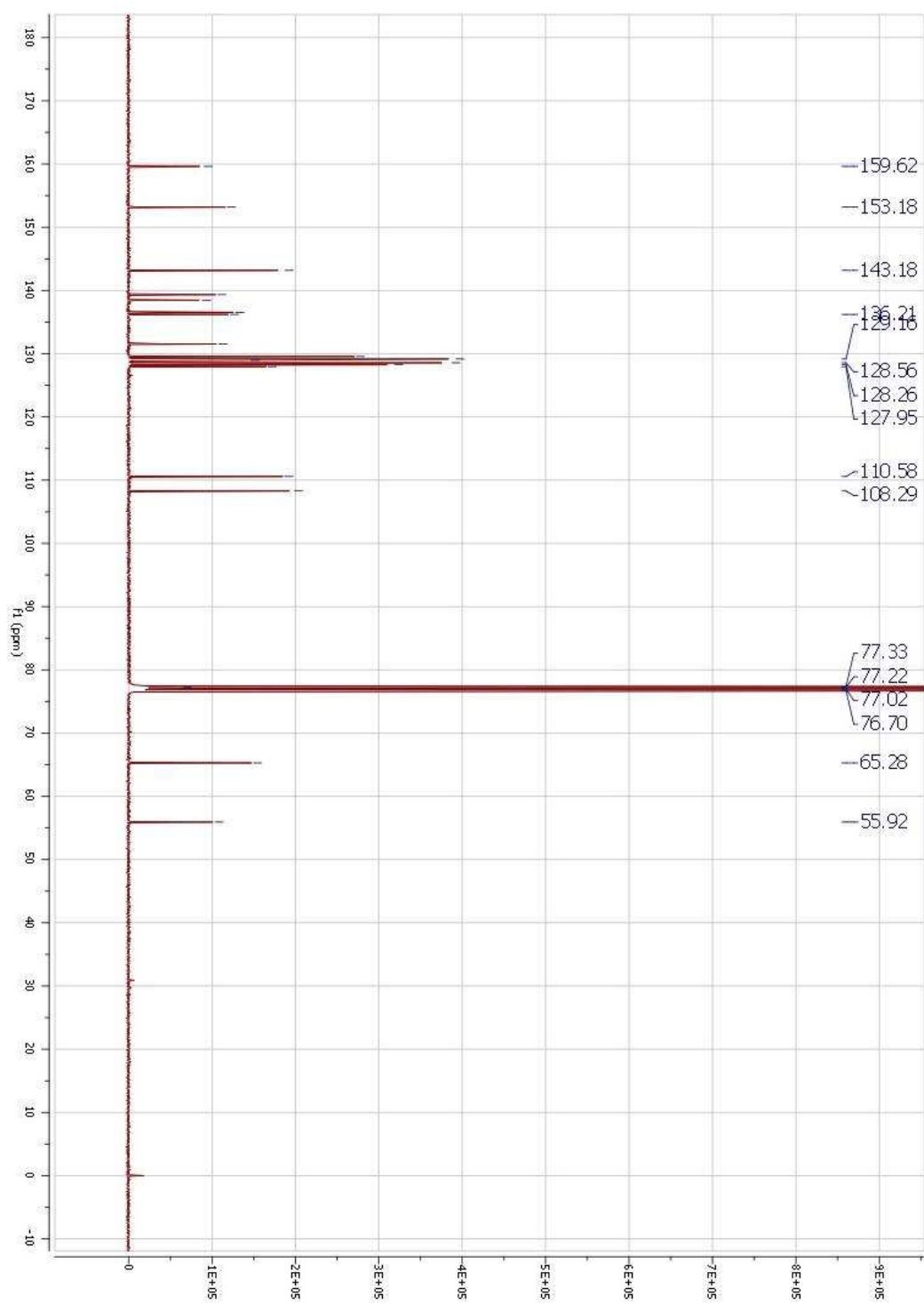


2-Benzyl-5-(furane-2-yl(hydroxy)methyl)-4-phenylpyridazin-3(2H)-one (4j)

^1H NMR (CDCl_3)

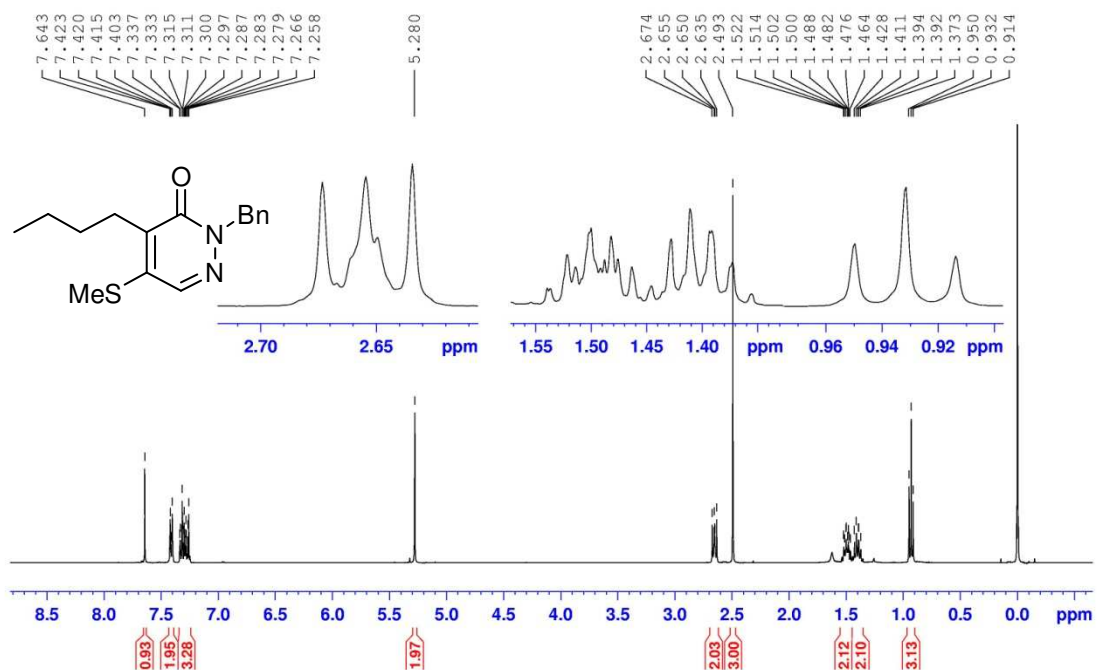


^{13}C NMR (CDCl_3)

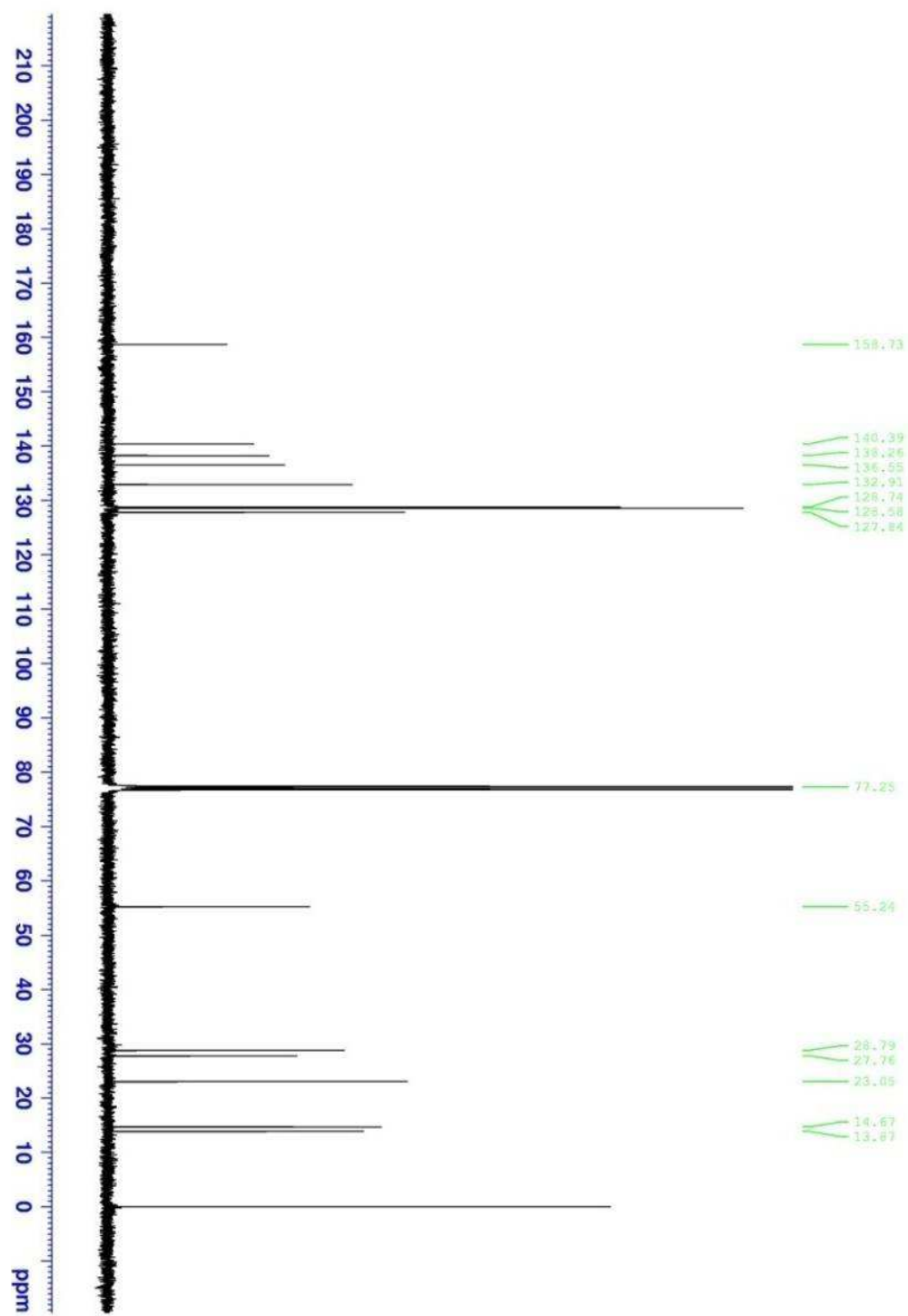


2-Benzyl-4-butyl-5-(methylthio)pyridazin-3(2H)-one (4l)

^1H NMR (CDCl_3)

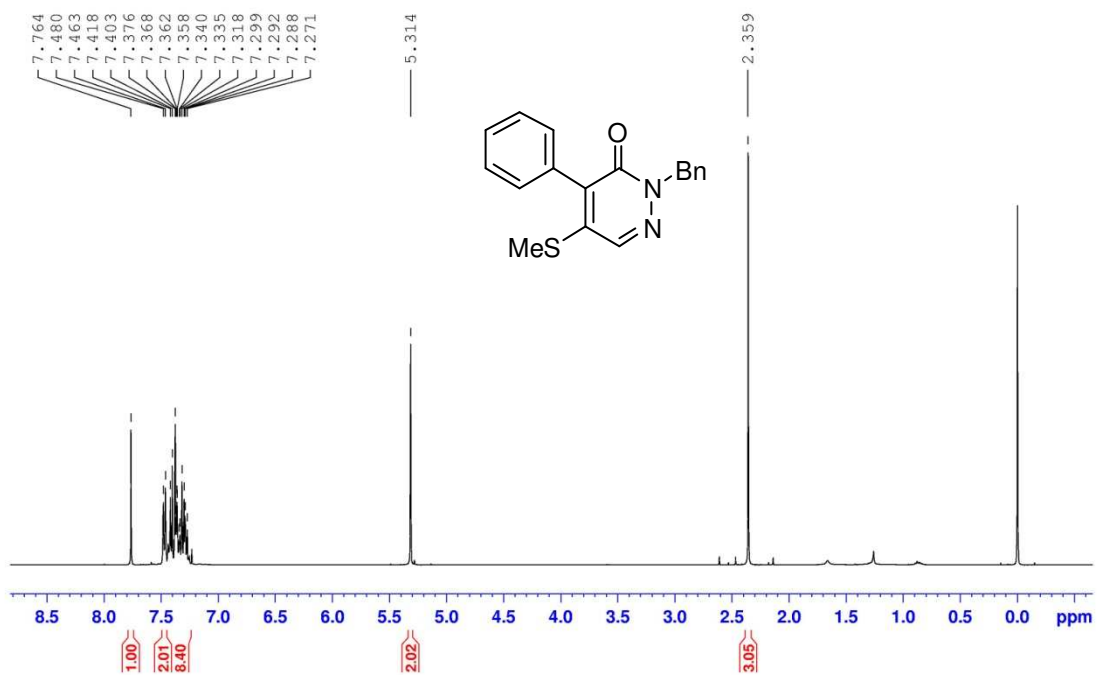


^{13}C NMR (CDCl_3)

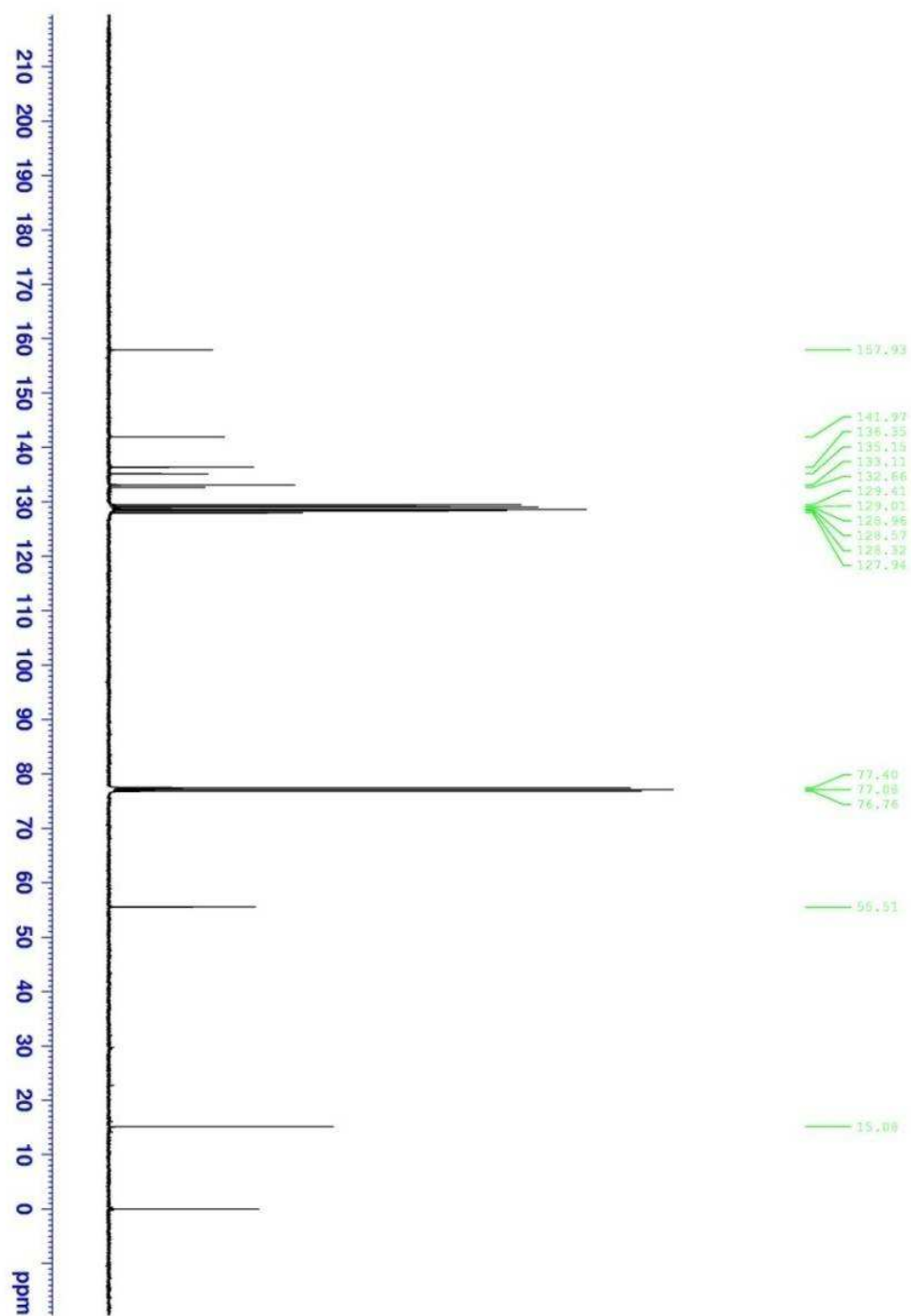


2-Benzyl-5-(methylthio)-4-phenylpyridazin-3(2H)-one (4m)

^1H NMR (CDCl_3)

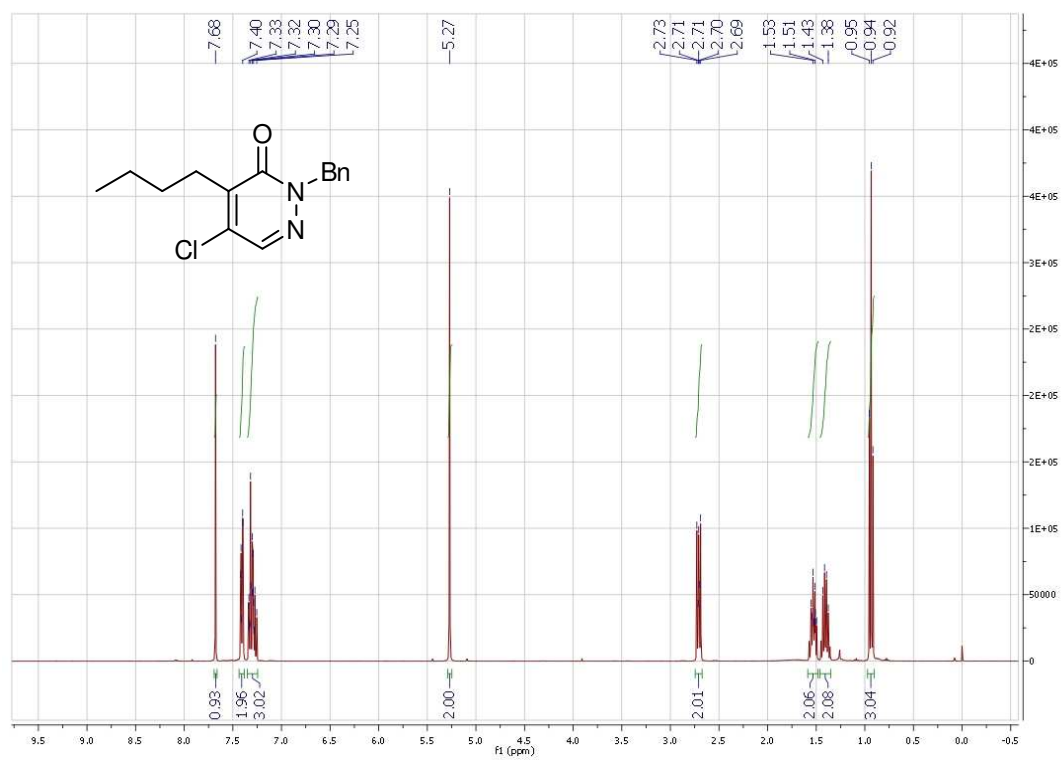


^{13}C NMR (CDCl_3)

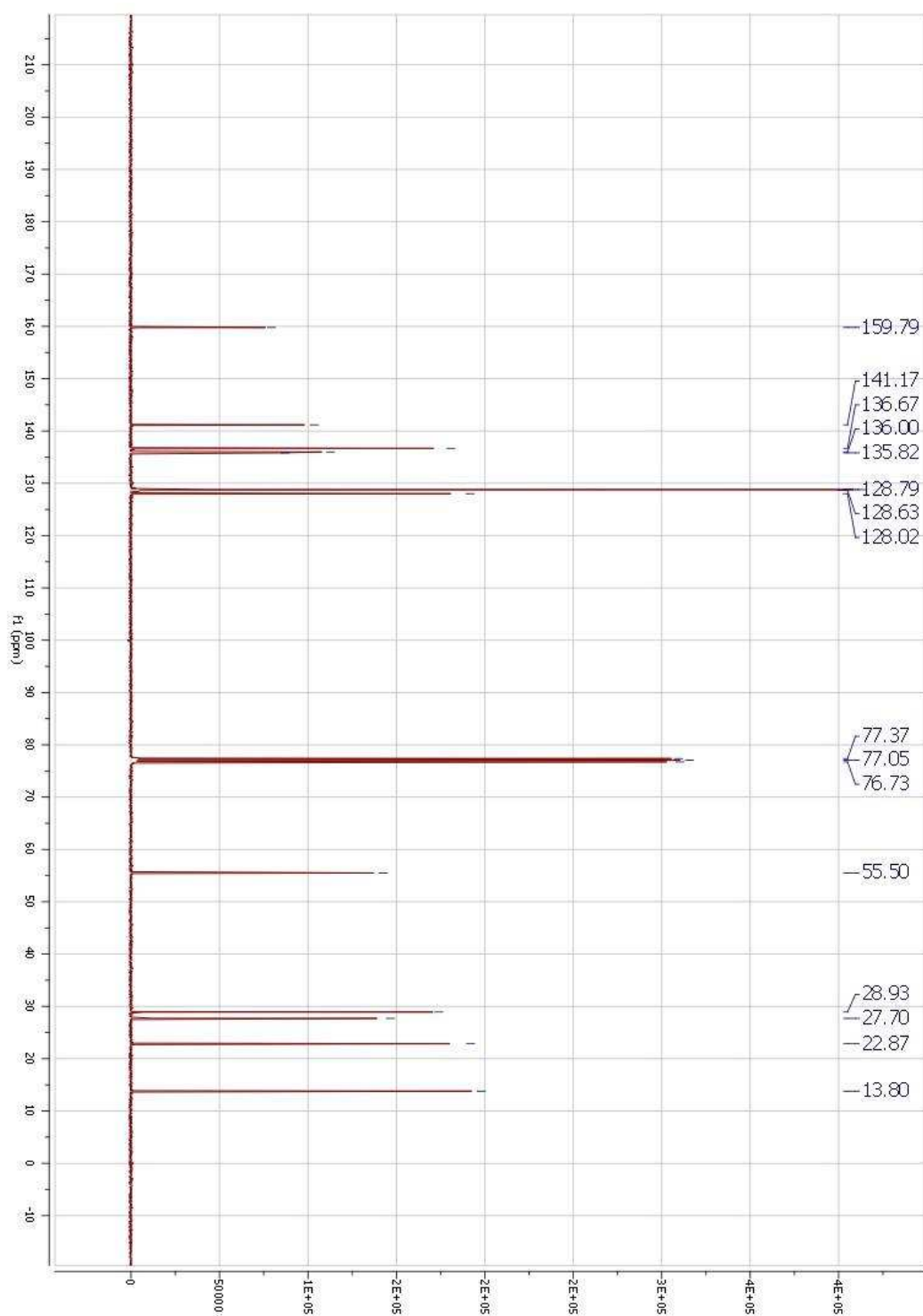


2-Benzyl-4-butyl-5-chloropyridazin-3(2H)-one (4n)

^1H NMR (CDCl_3)

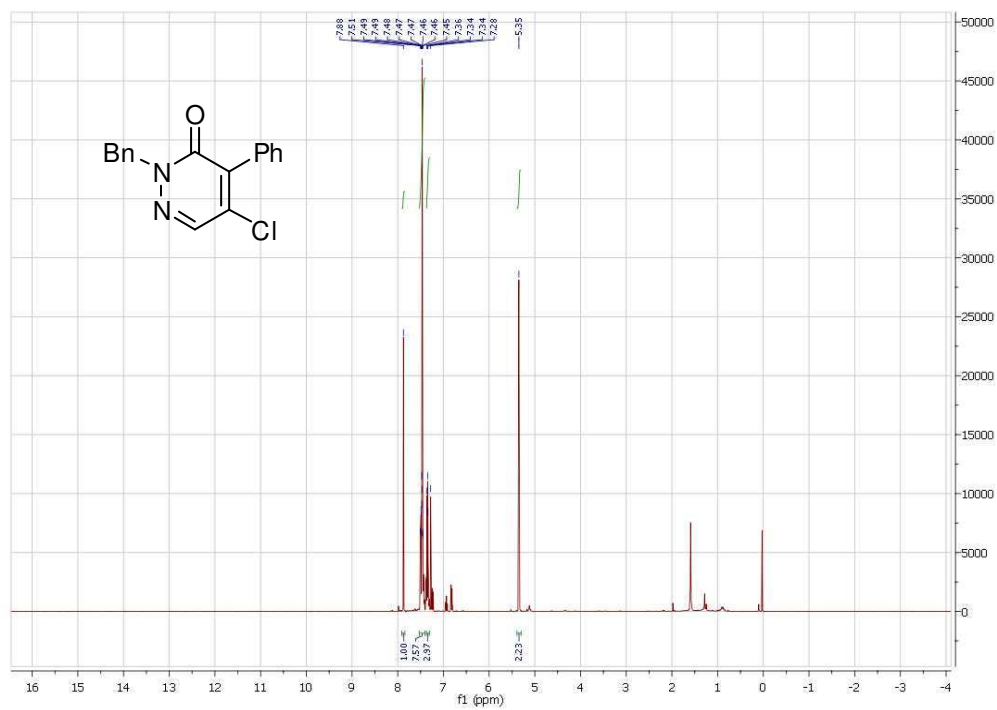


^{13}C NMR (CDCl_3)

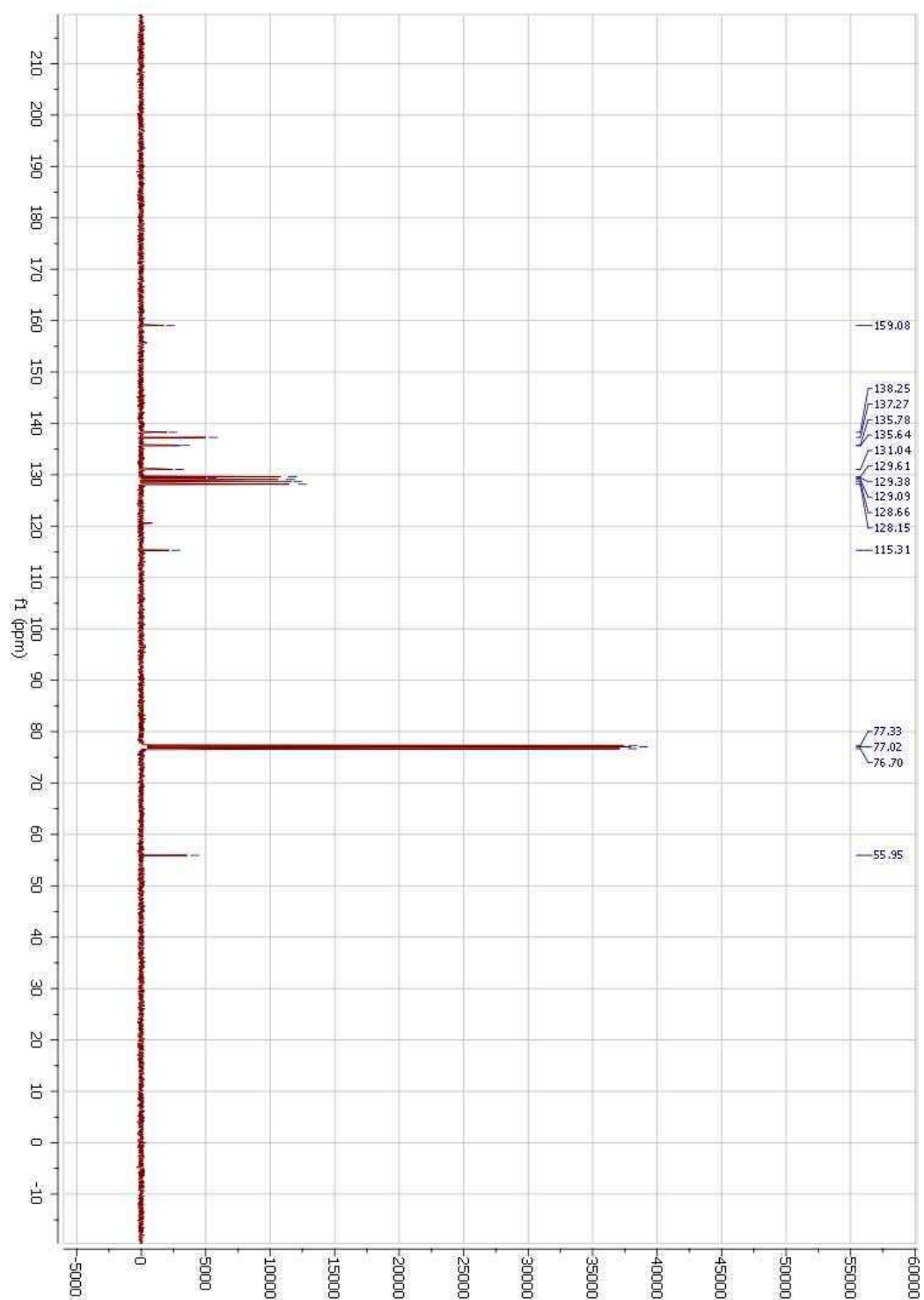


2-Benzyl-5-chloro-4-phenylpyridazin-3(2H)-one (4o)

^1H NMR (CDCl_3)

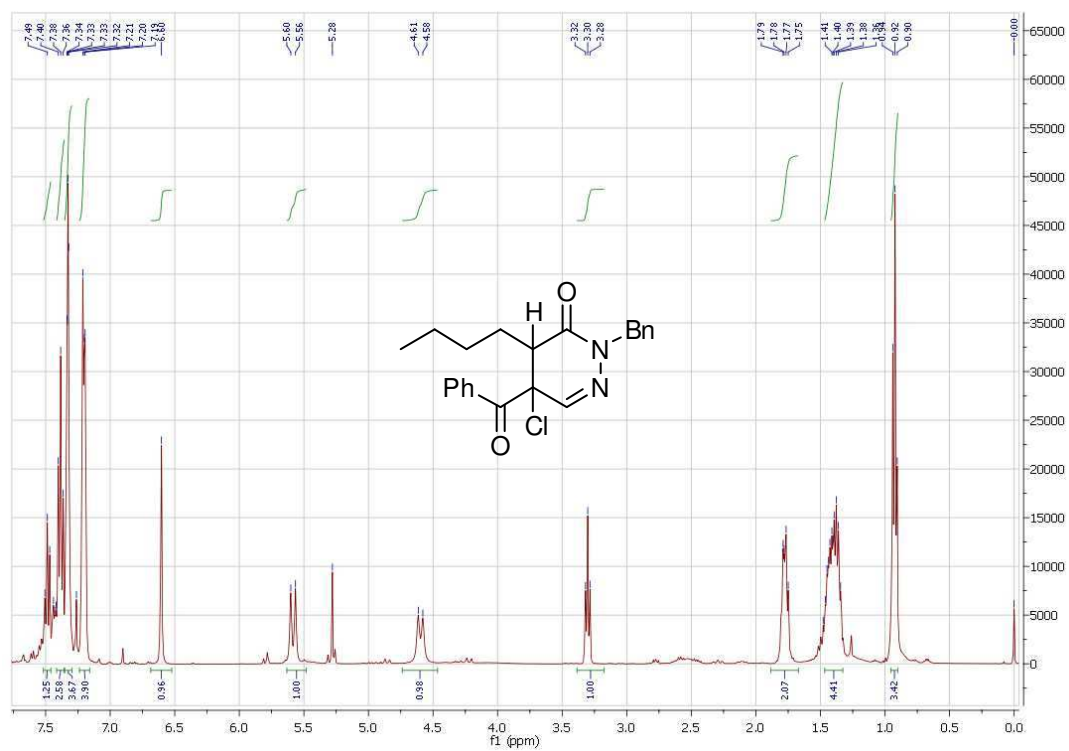


^{13}C NMR (CDCl_3)

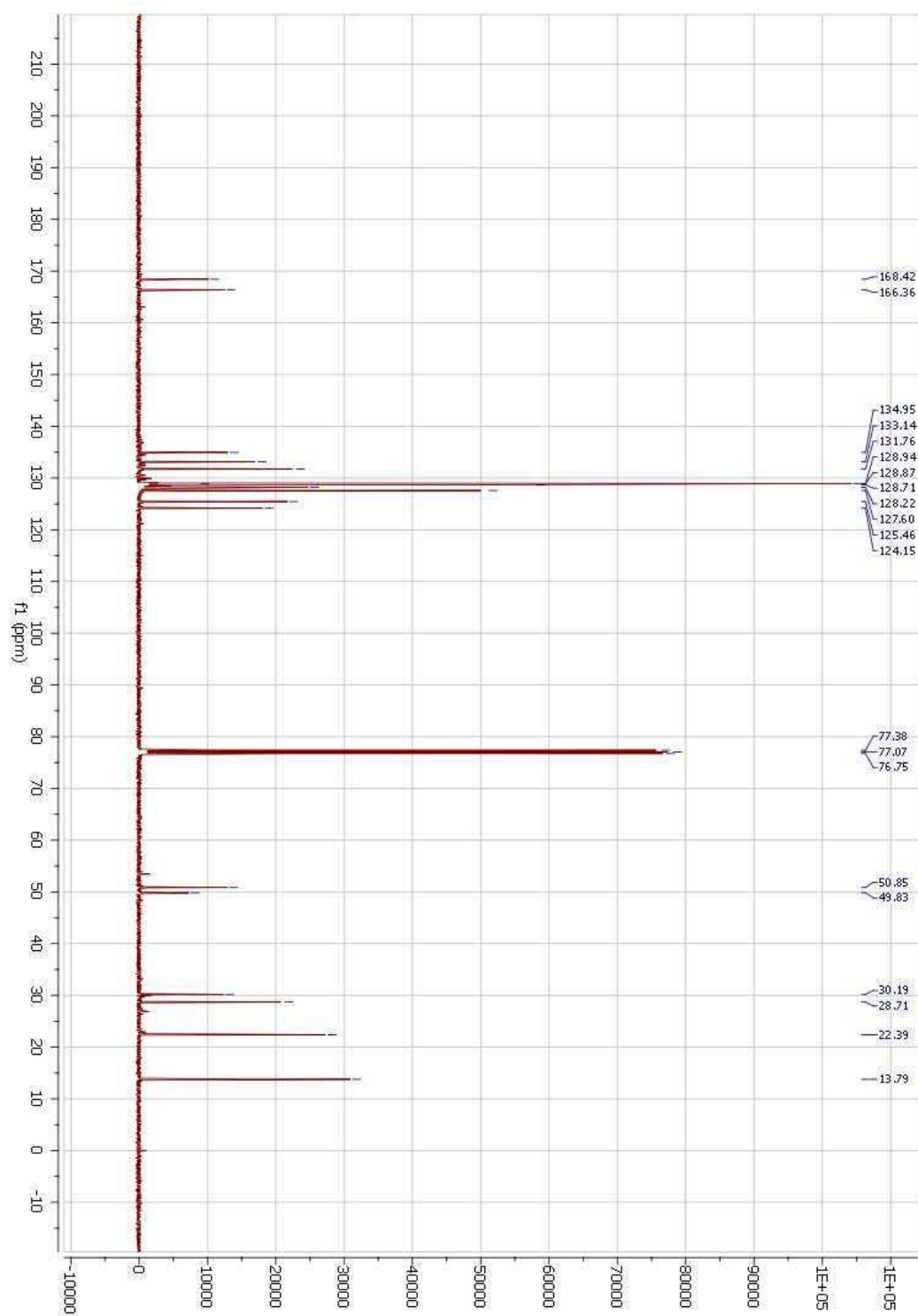


2-Benzoyl-2-benzyl-4-butyl-5-chloro-4,5-dihydropyridazin-3(2H)-on (6a)

^1H NMR (CDCl_3)

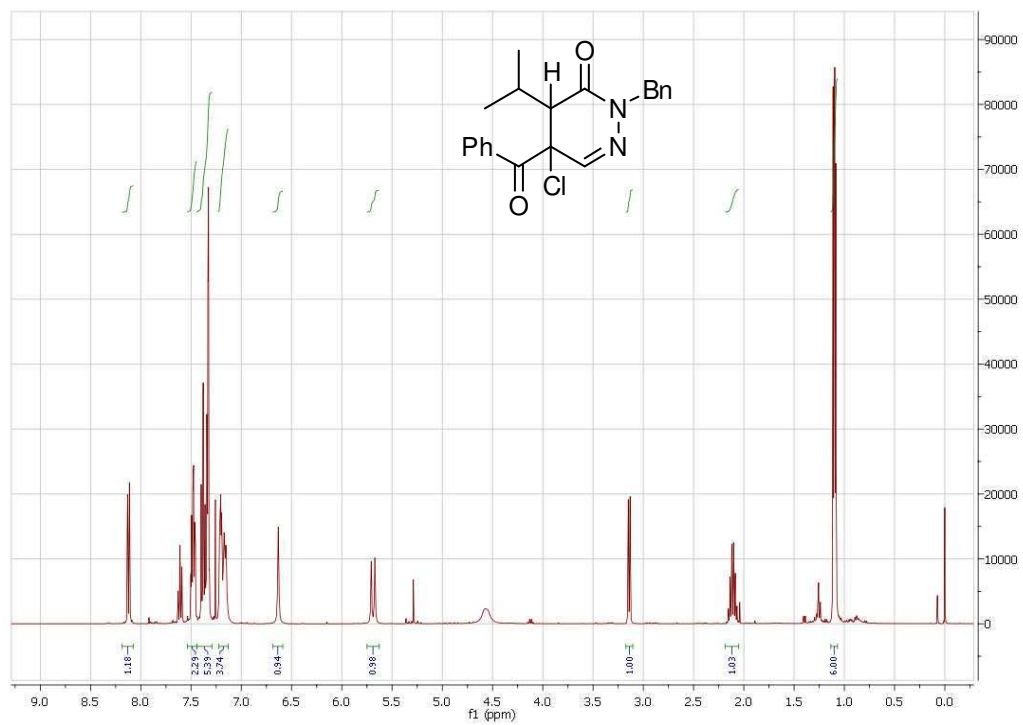


^{13}C NMR (CDCl_3)

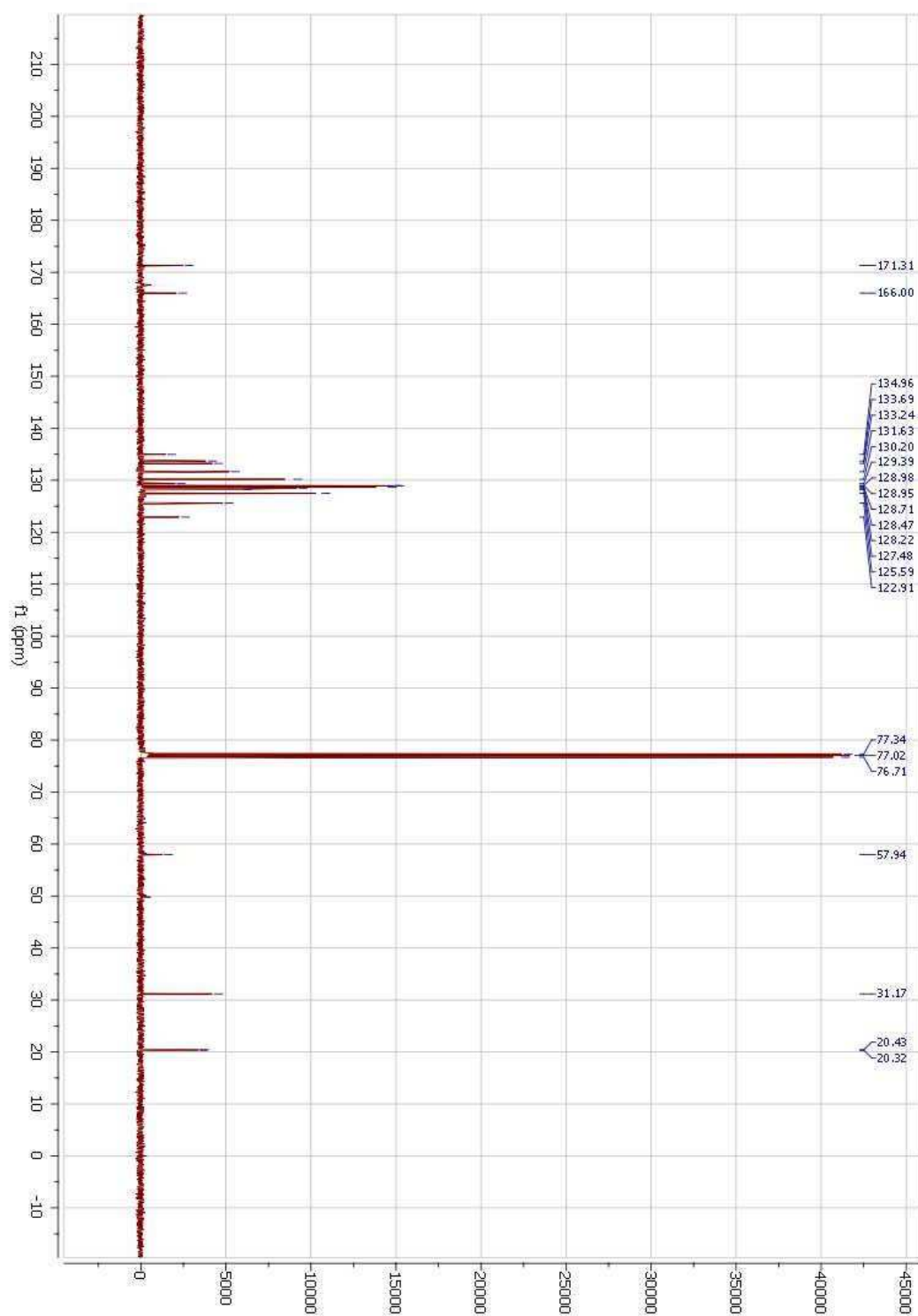


5-Benzoyl-2-benzyl-5-chloro-4-isopropyl-4,5-dihydropyridazin-3(2H)-one (6b)

^1H NMR (CDCl_3)

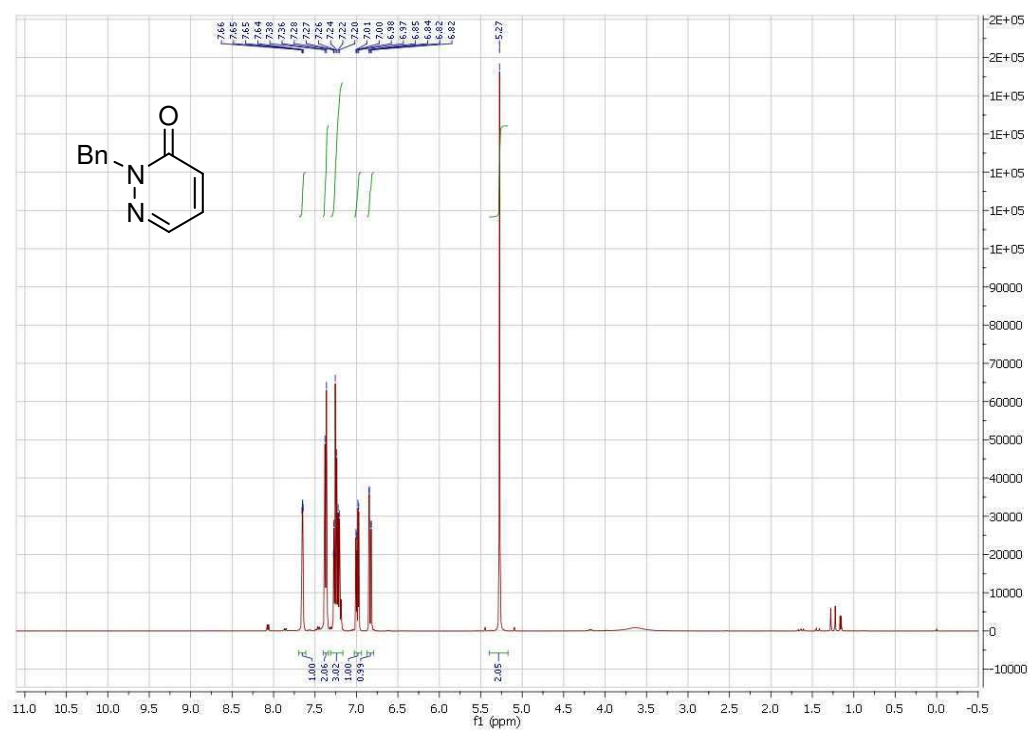


^{13}C NMR (CDCl_3)

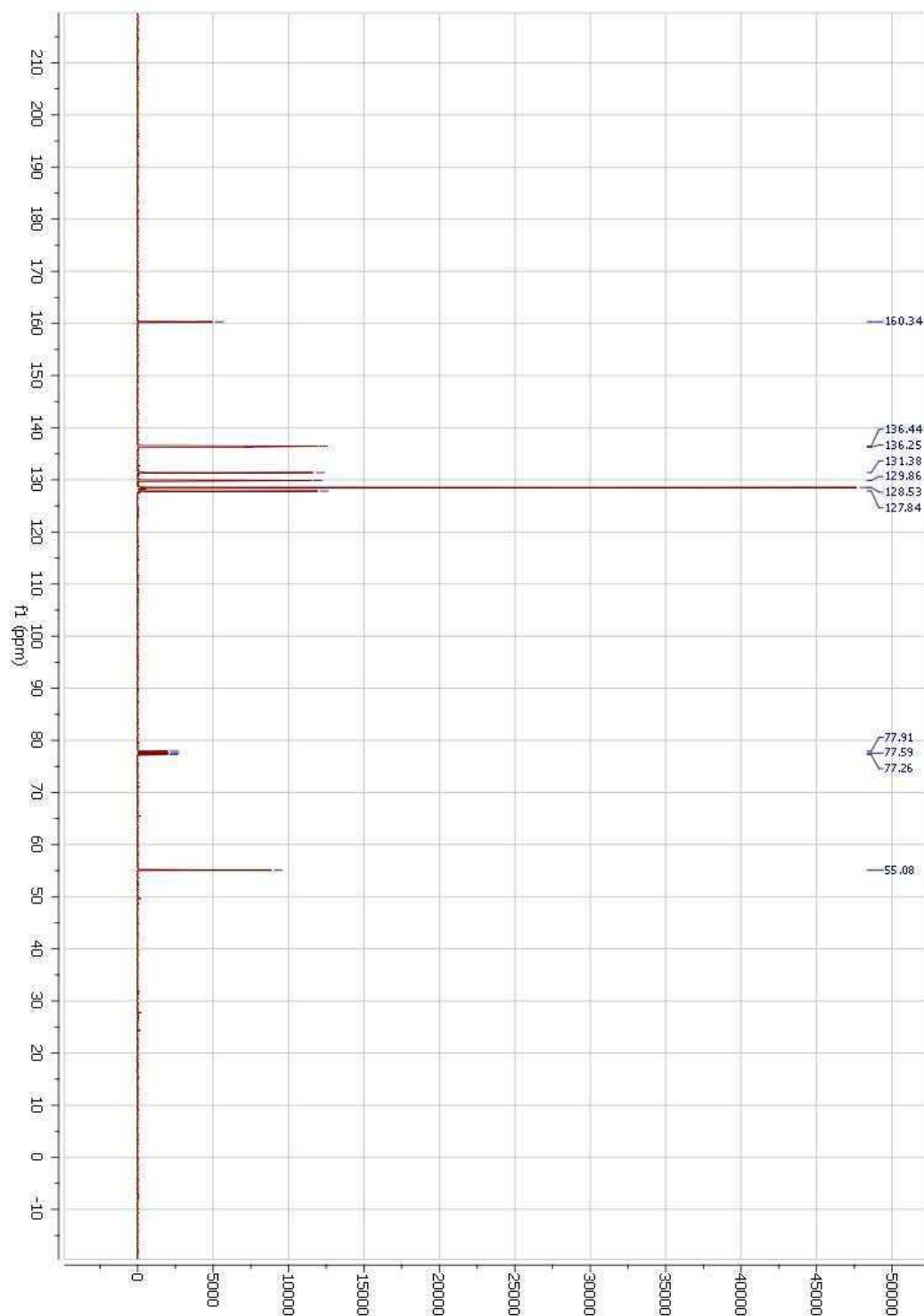


2-Benzylpyridazin-3(2H)-one (7)

^1H NMR (CDCl_3)

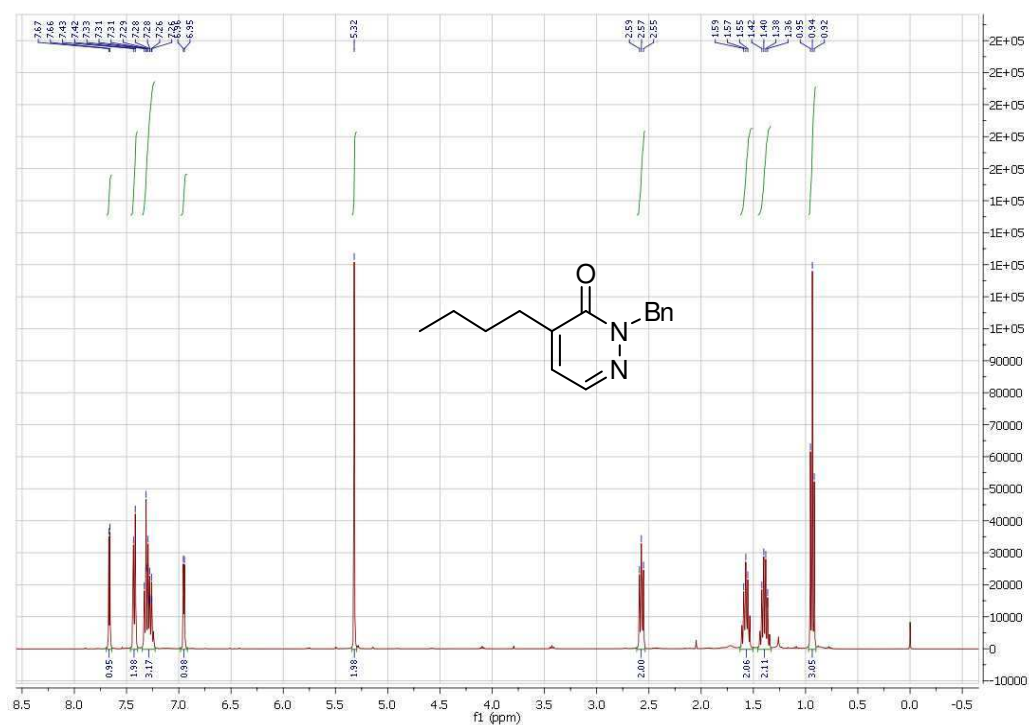


^{13}C NMR (CDCl_3)

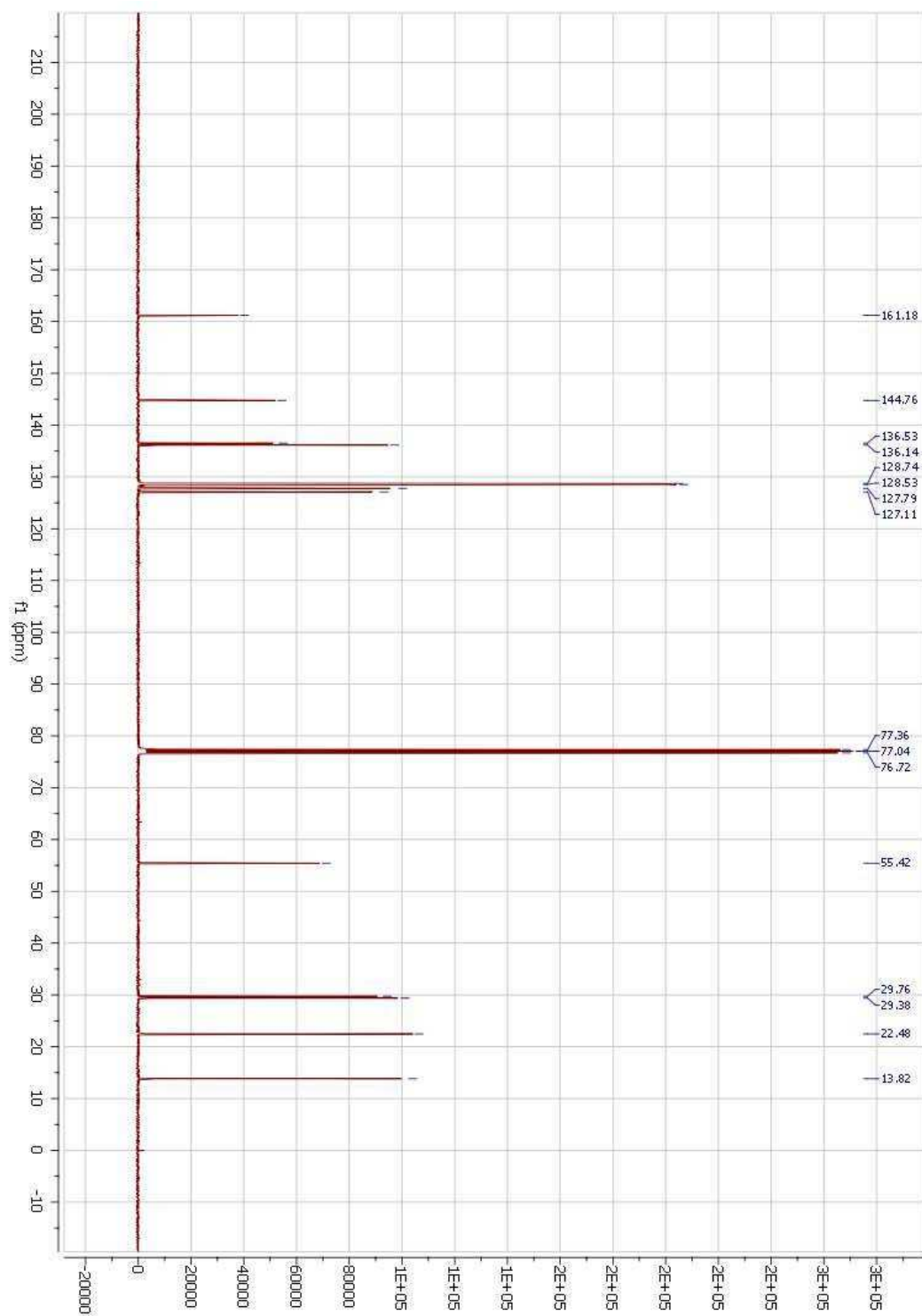


2-Benzyl-4-butylpyridazin-3(2H)-one (8a)

^1H NMR (CDCl_3)

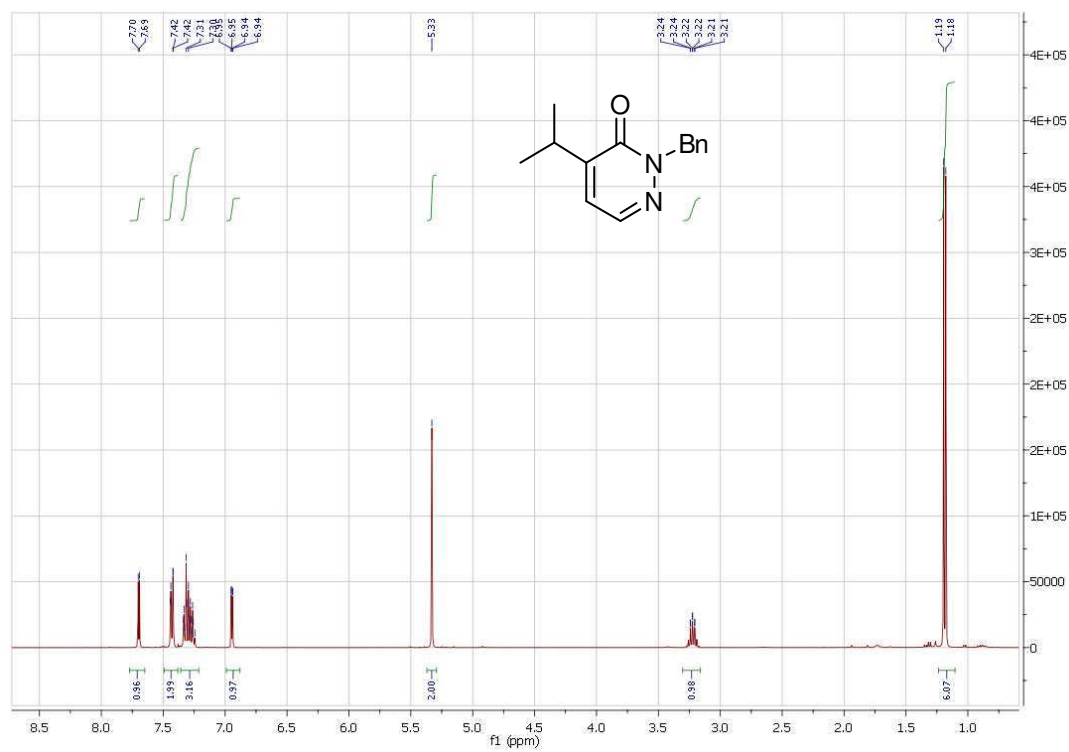


^{13}C NMR (CDCl_3)

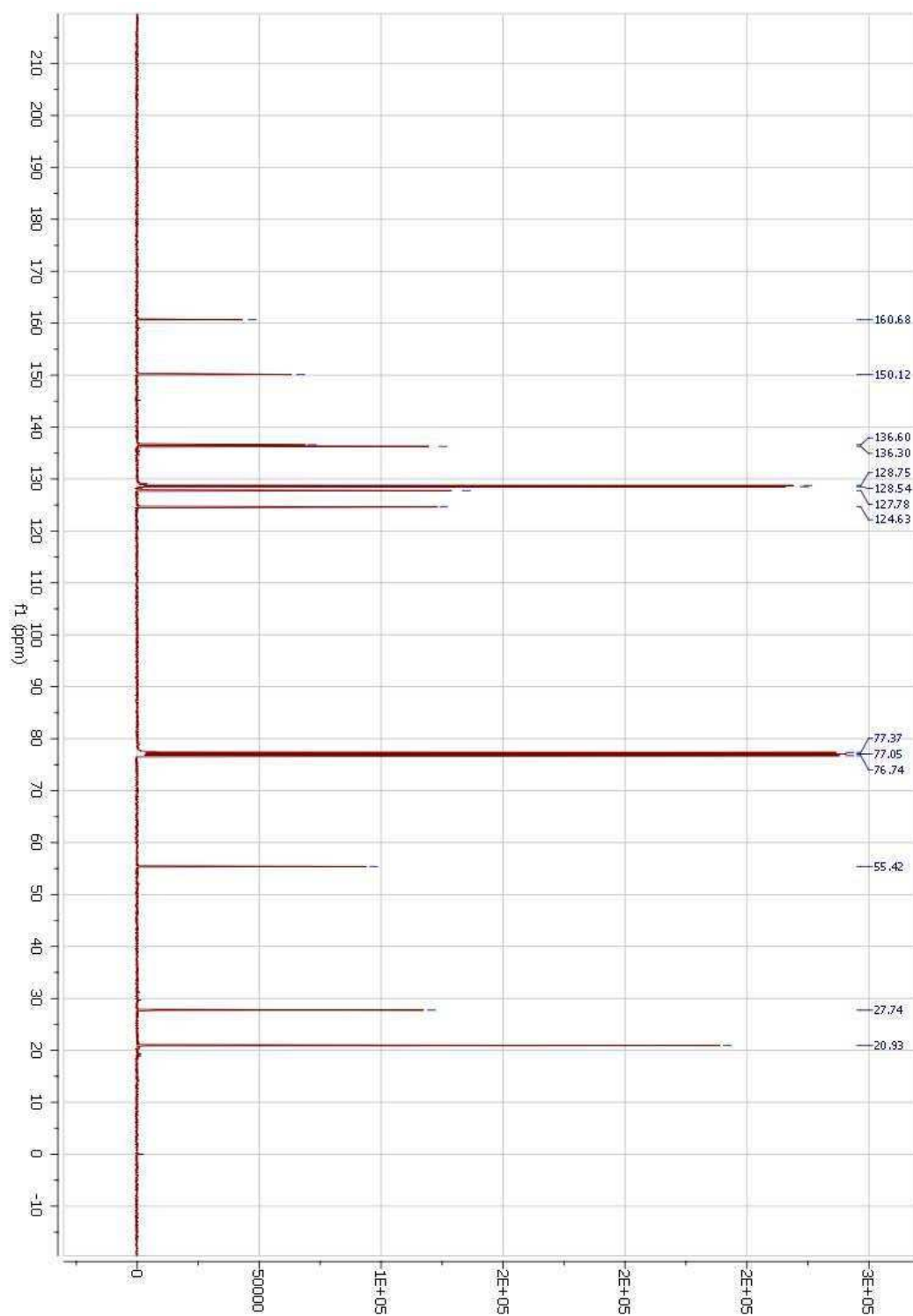


2-Benzyl-4-isopropylpyridazin-3(2H)-one (8b)

^1H NMR (CDCl_3)

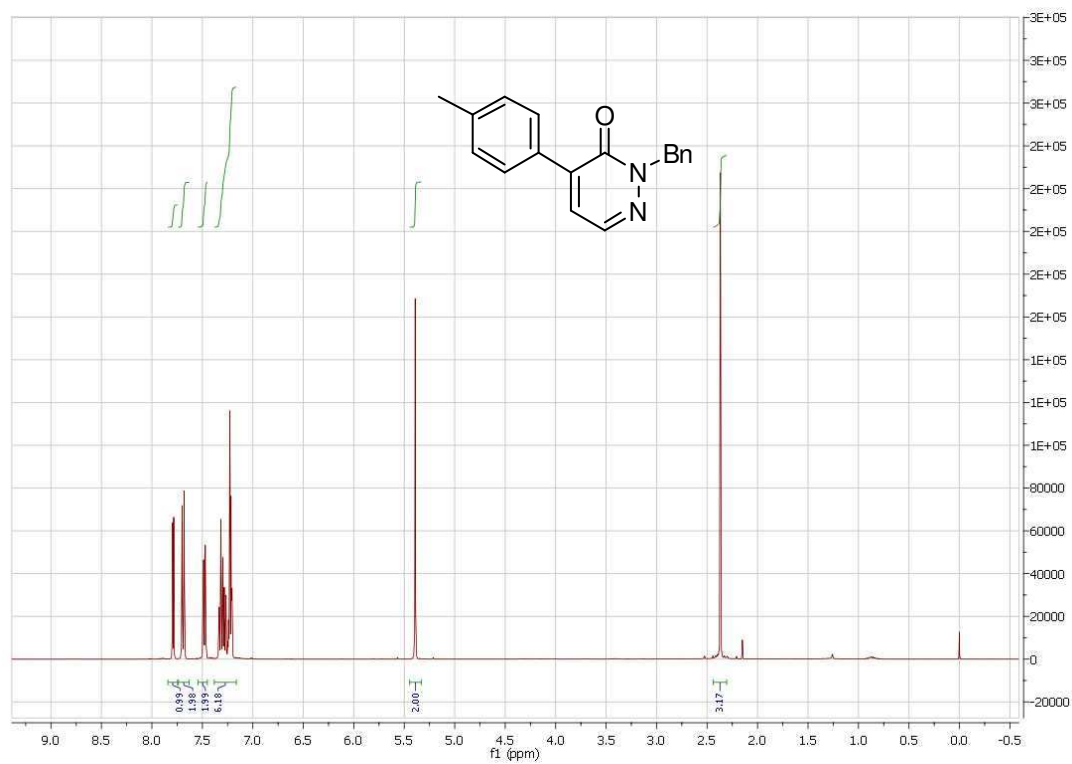


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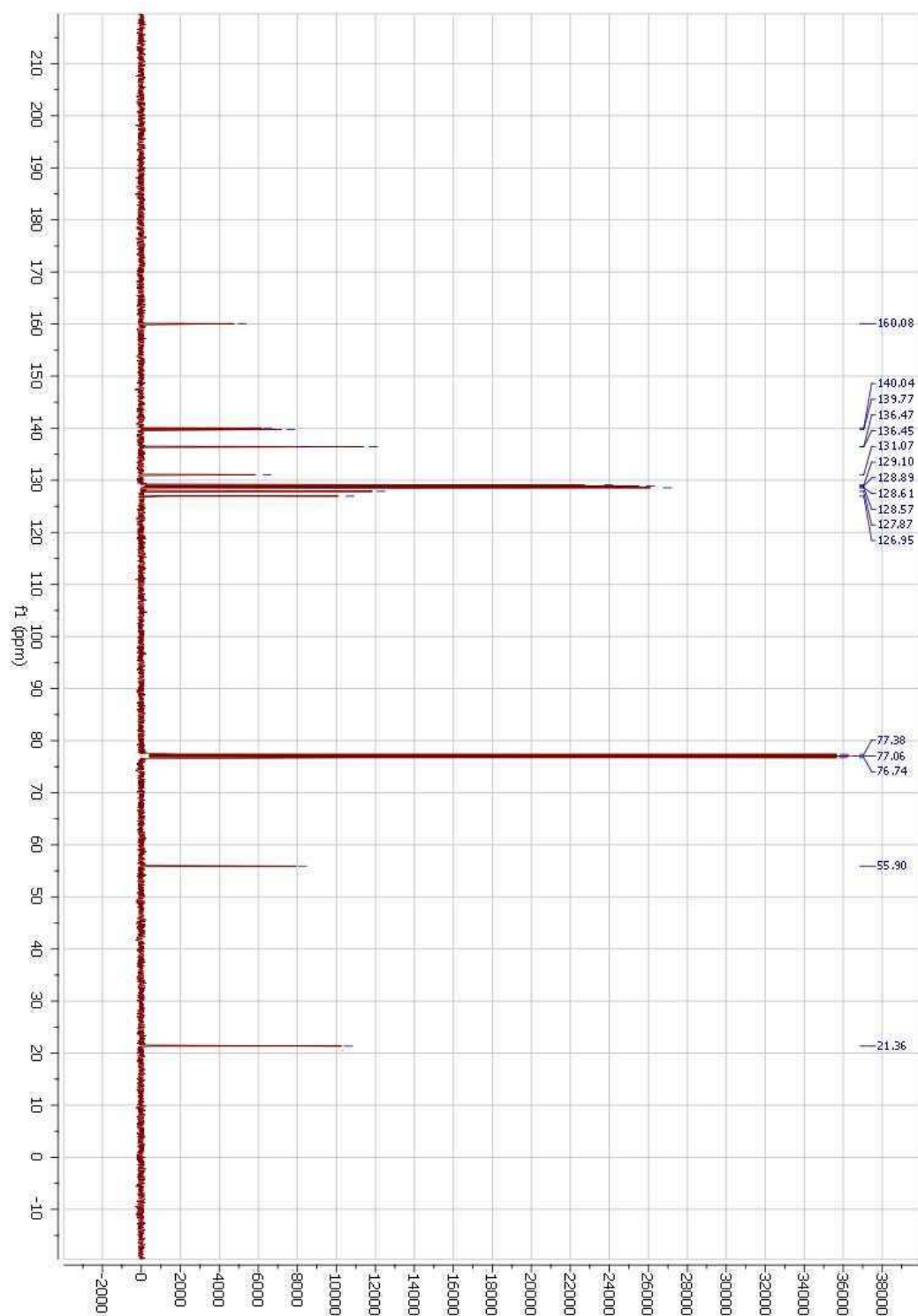


2-Benzyl-4-(*p*-tolyl)pyridazin-3(2*H*)-one (8c)

^1H NMR (CDCl_3)

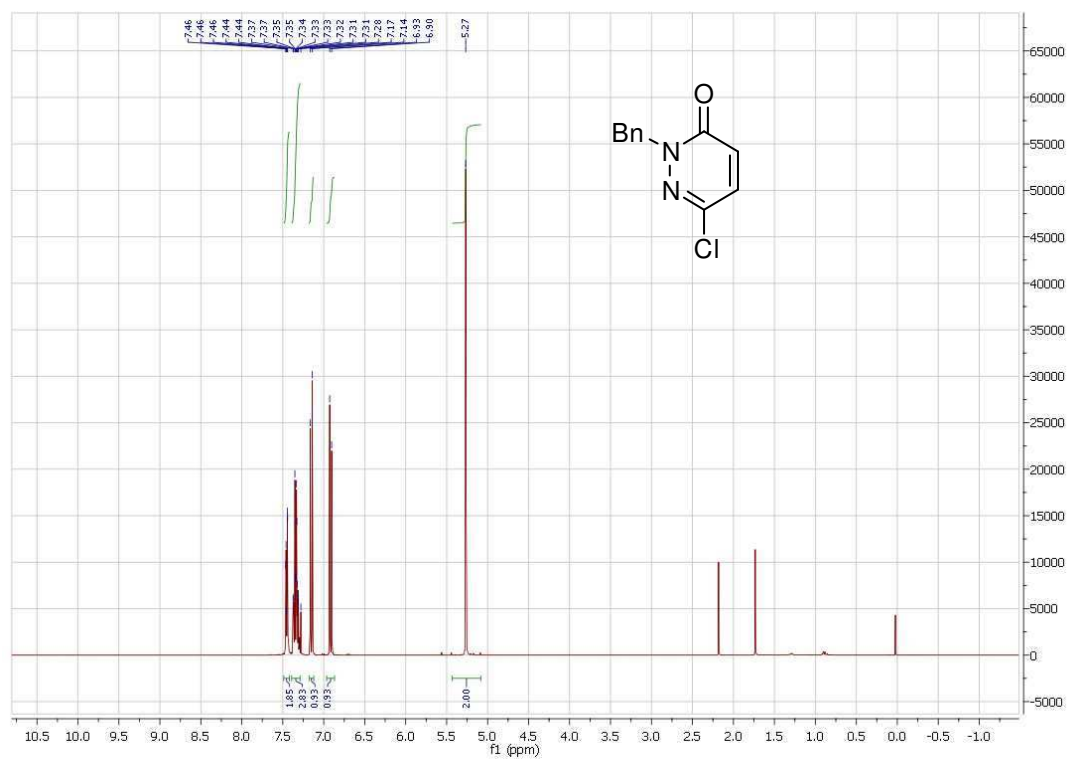


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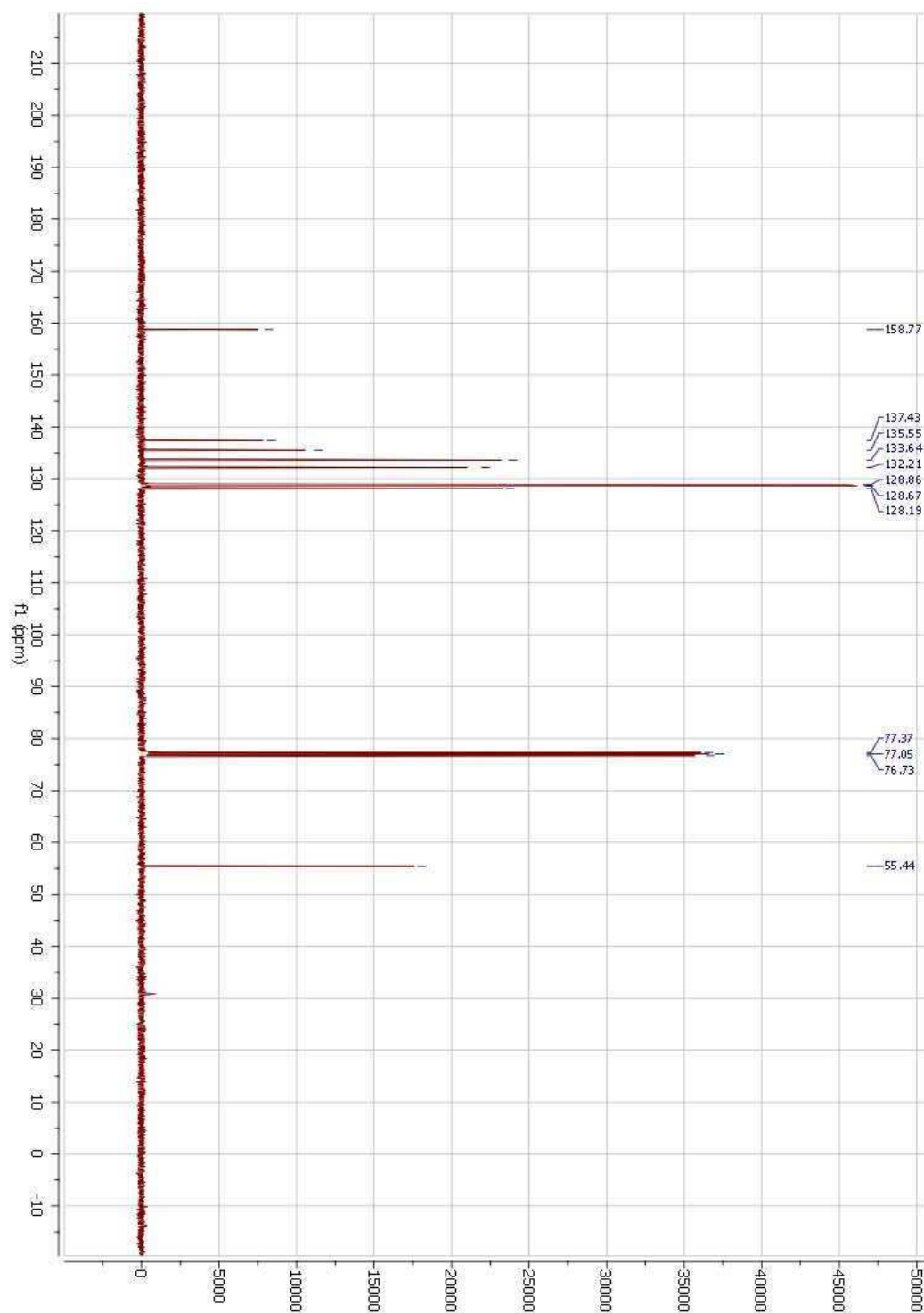


2-Benzyl-6-chloropyridazin-3(2H)-one (9)

^1H NMR (CDCl_3)

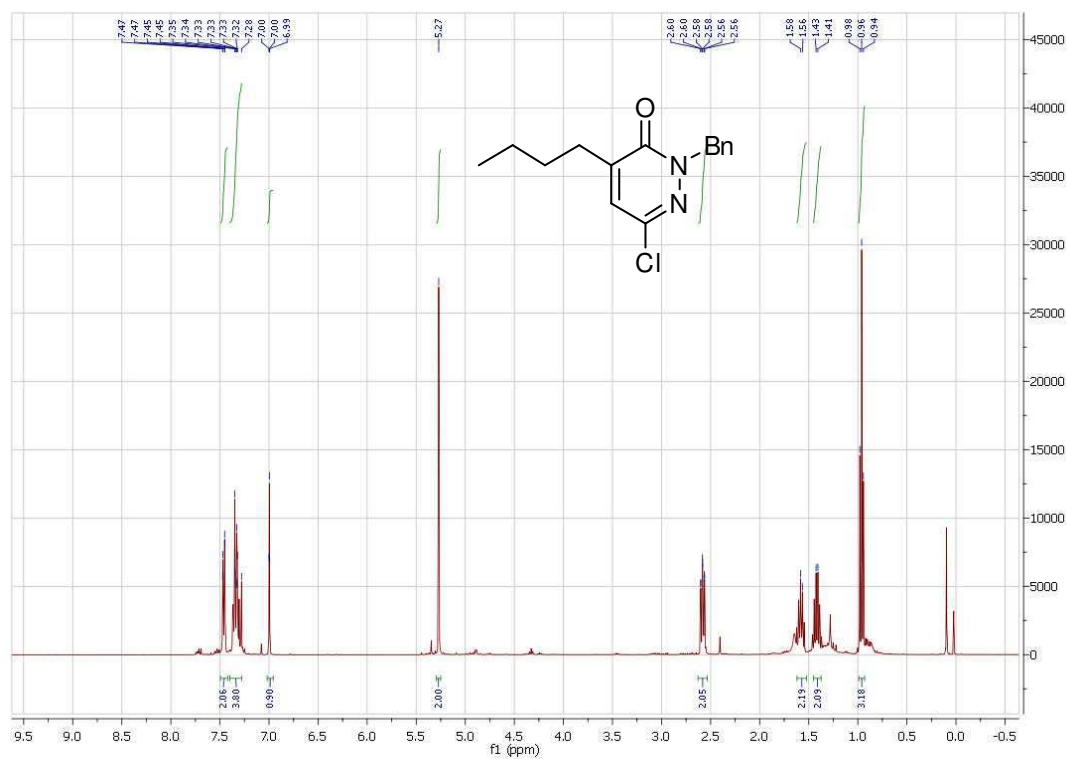


^{13}C NMR (CDCl_3)

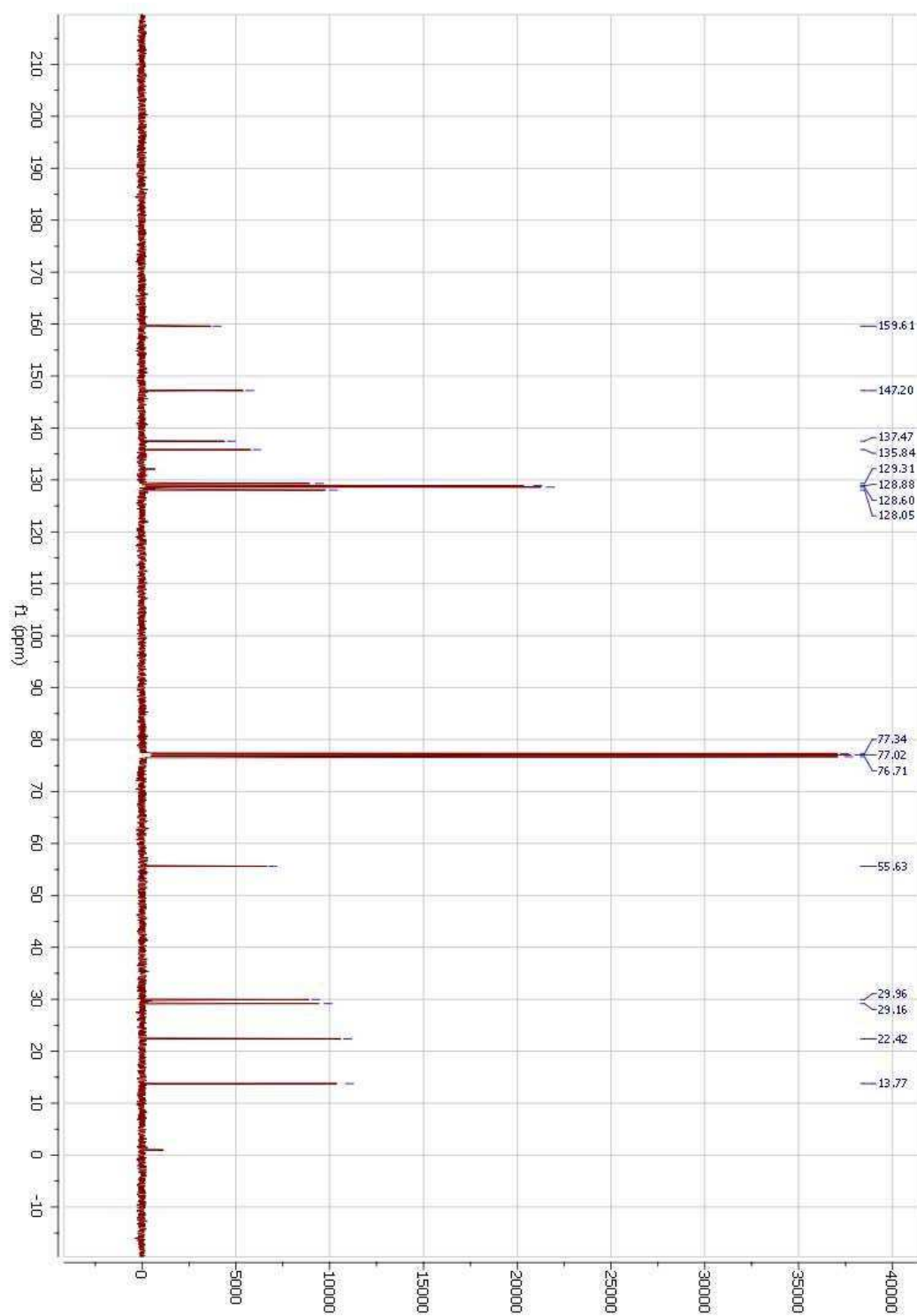


2-Benzyl-4-butyl-6-chloropyridazin-3(2H)-one (10a)

^1H NMR (CDCl_3)

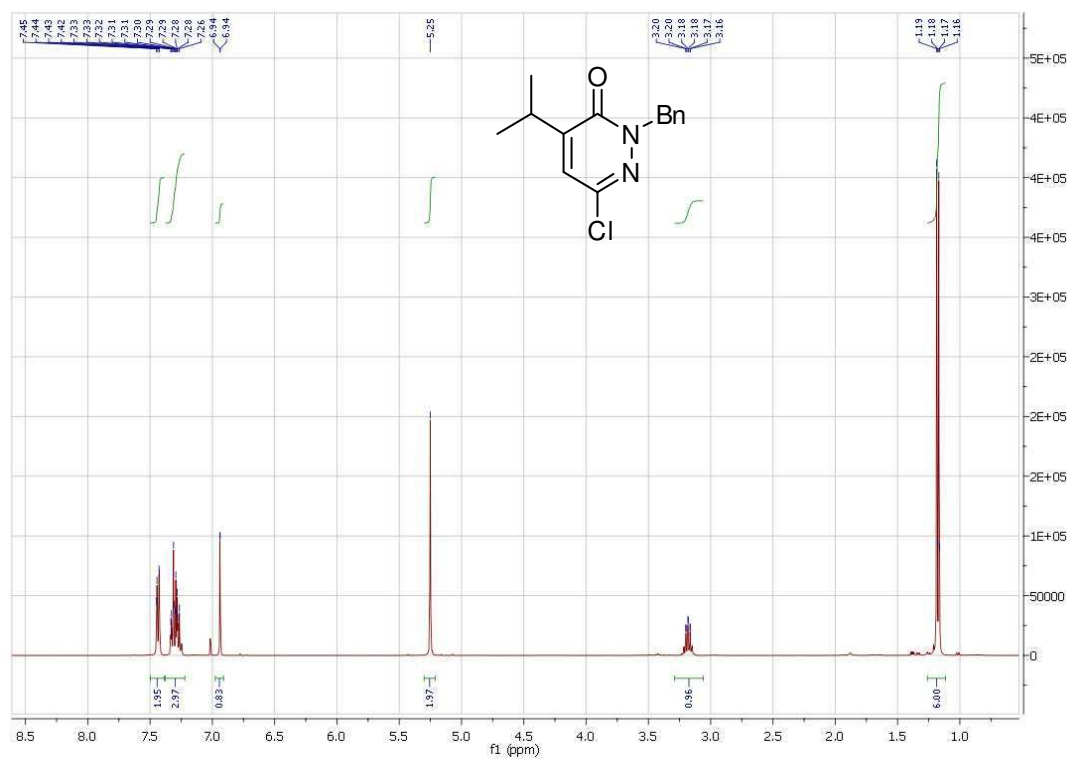


^{13}C NMR (CDCl_3)

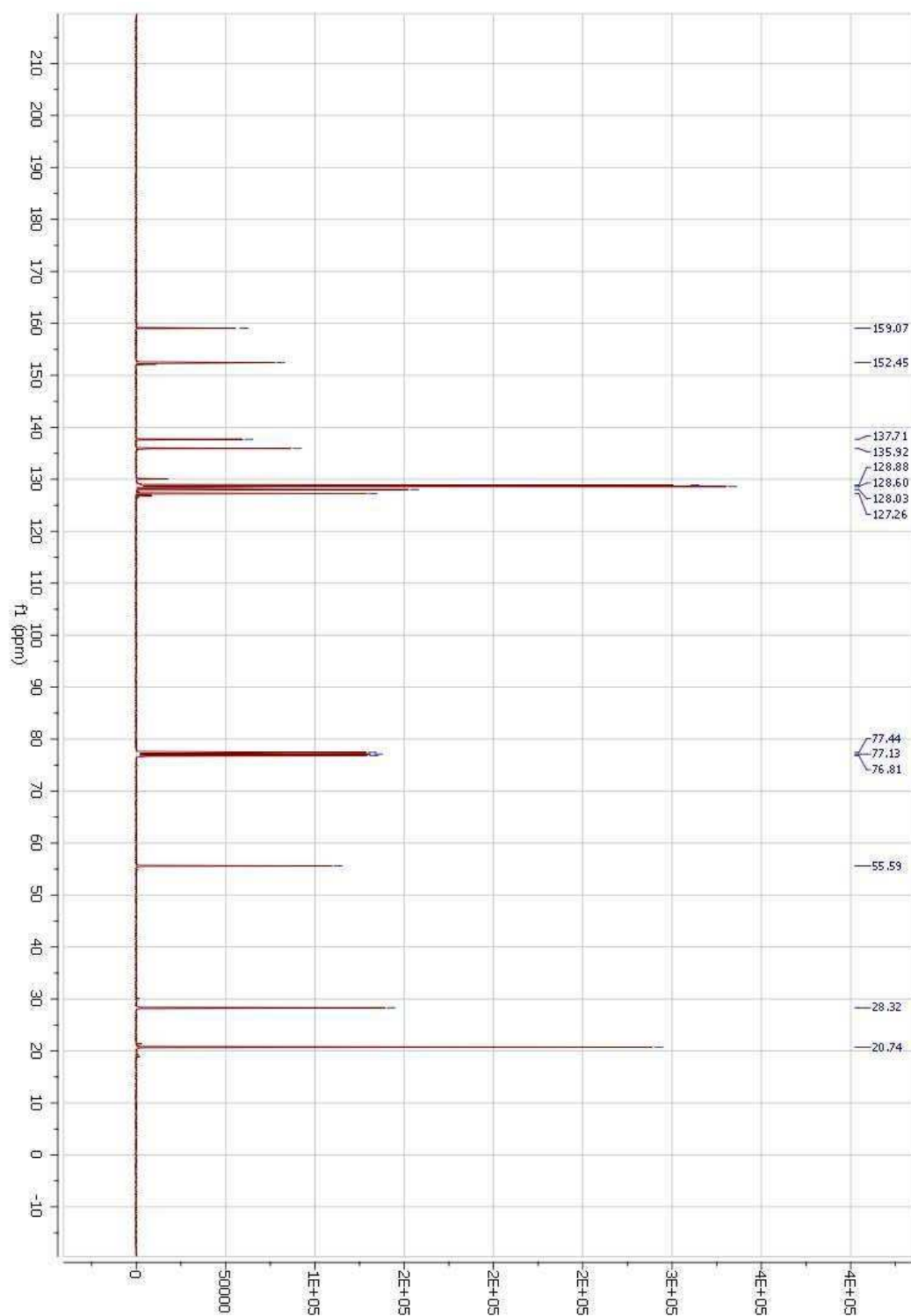


2-Benzyl-6-chloro-4-isopropylpyridazin-3(2H)-one (10b)

^1H NMR (CDCl_3)

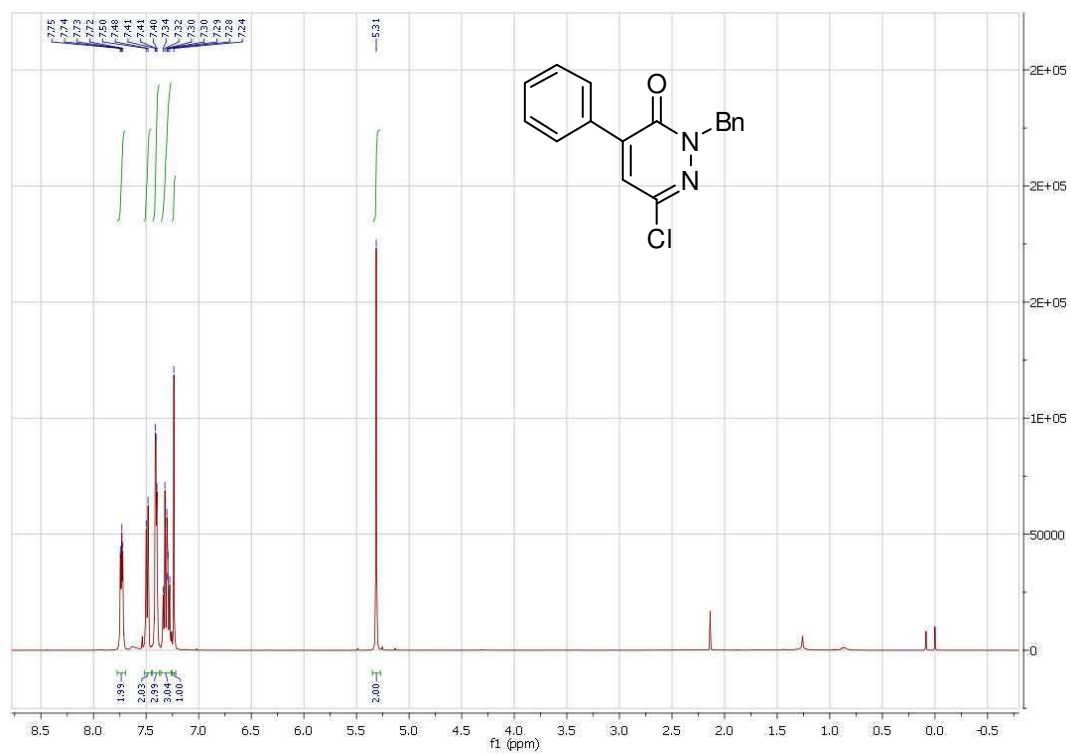


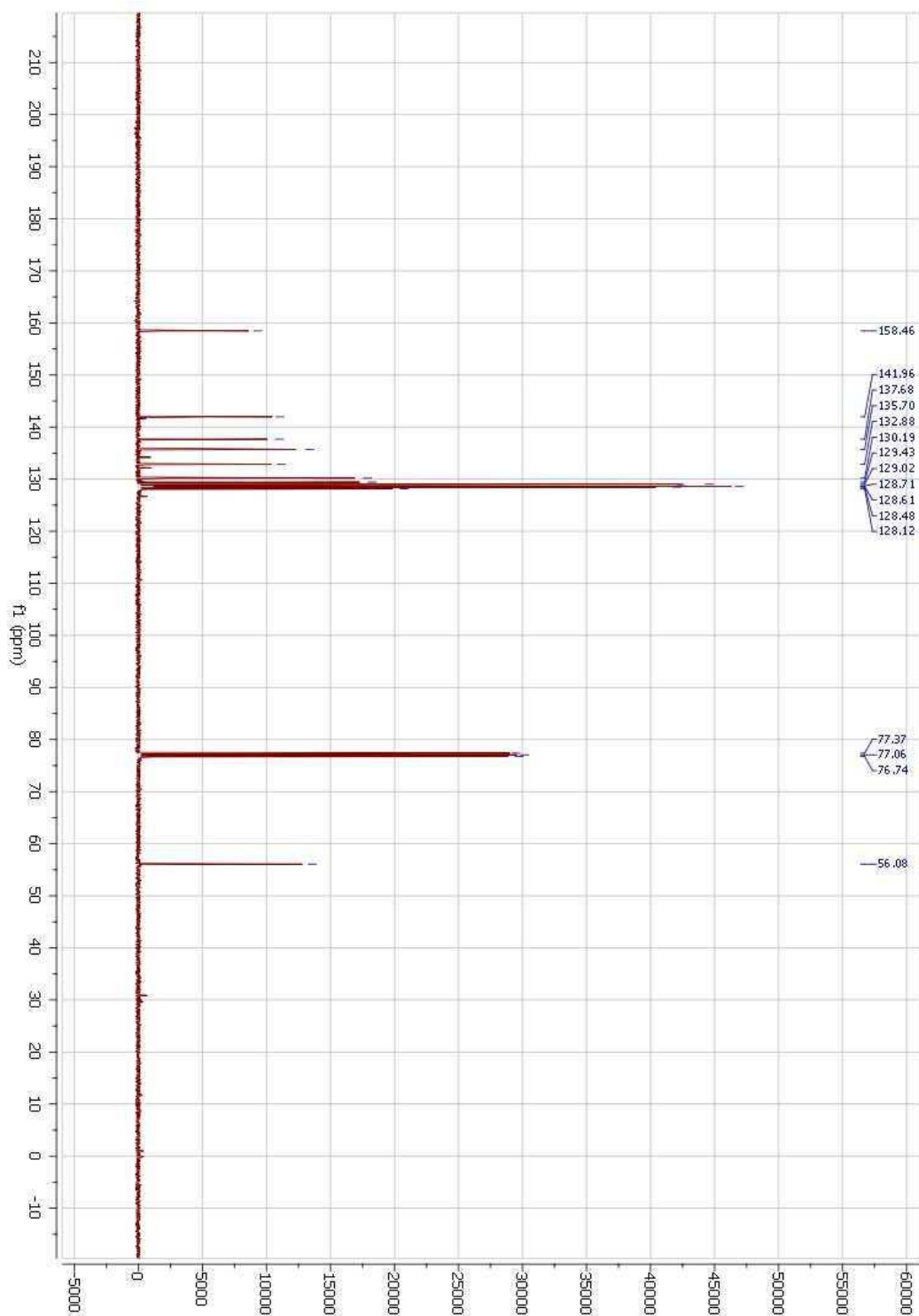
^{13}C NMR (CDCl_3)



2-Benzyl-6-chloro-4-phenylpyridazin-3(2H)-one (10c)

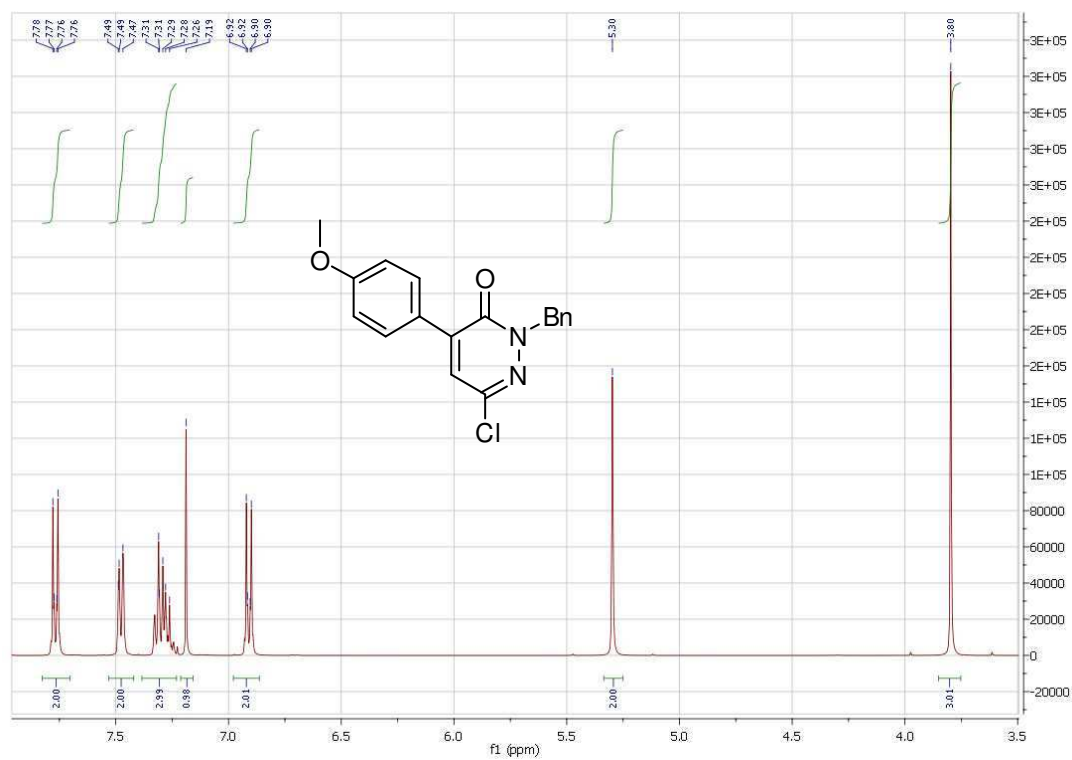
^1H NMR (CDCl_3)



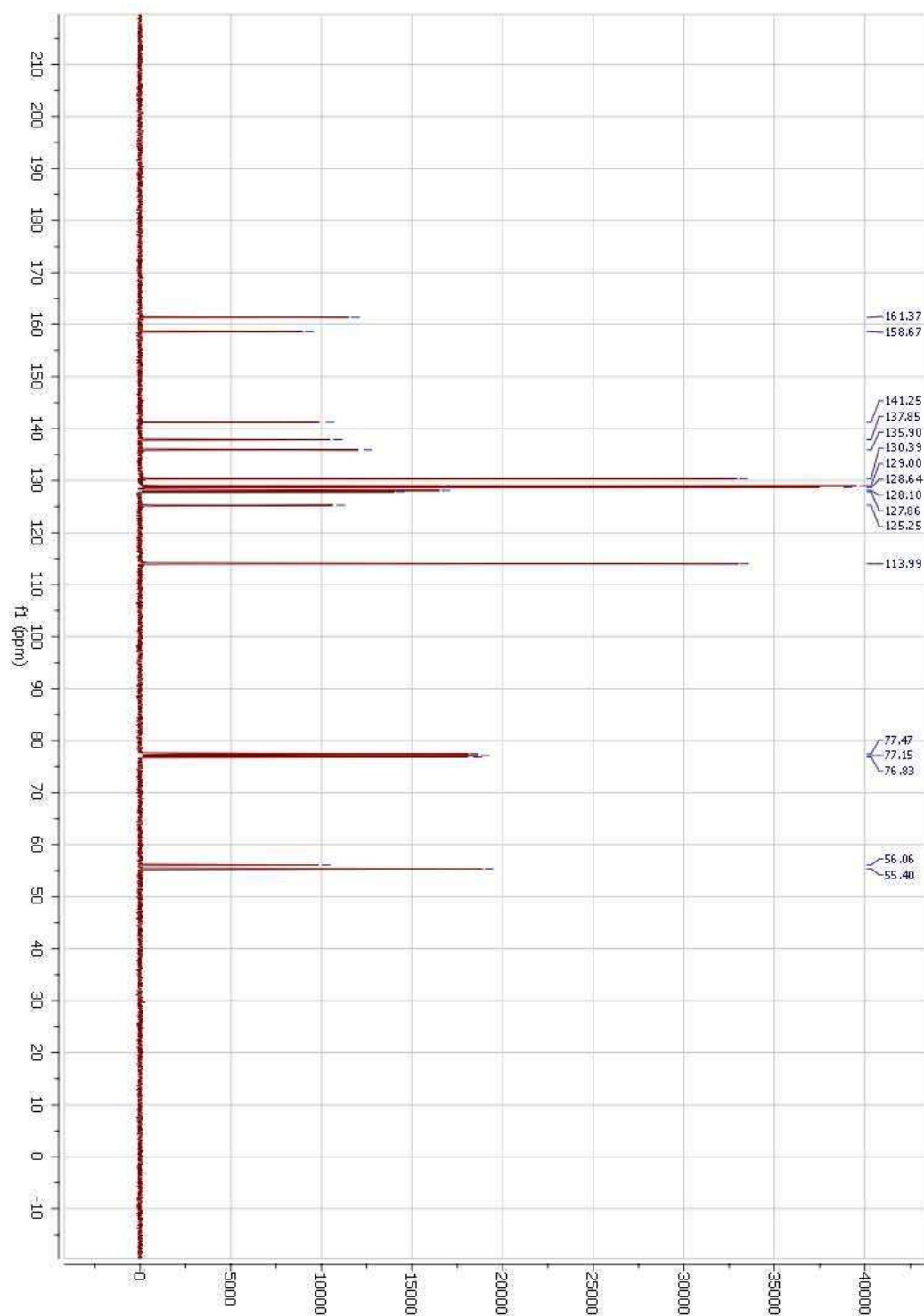
¹³C NMR (CDCl₃)

2-Benzyl-6-chloro-4-(4-methoxyphenyl)pyridazin-3(2H)-one (10d)

^1H NMR (CDCl_3)

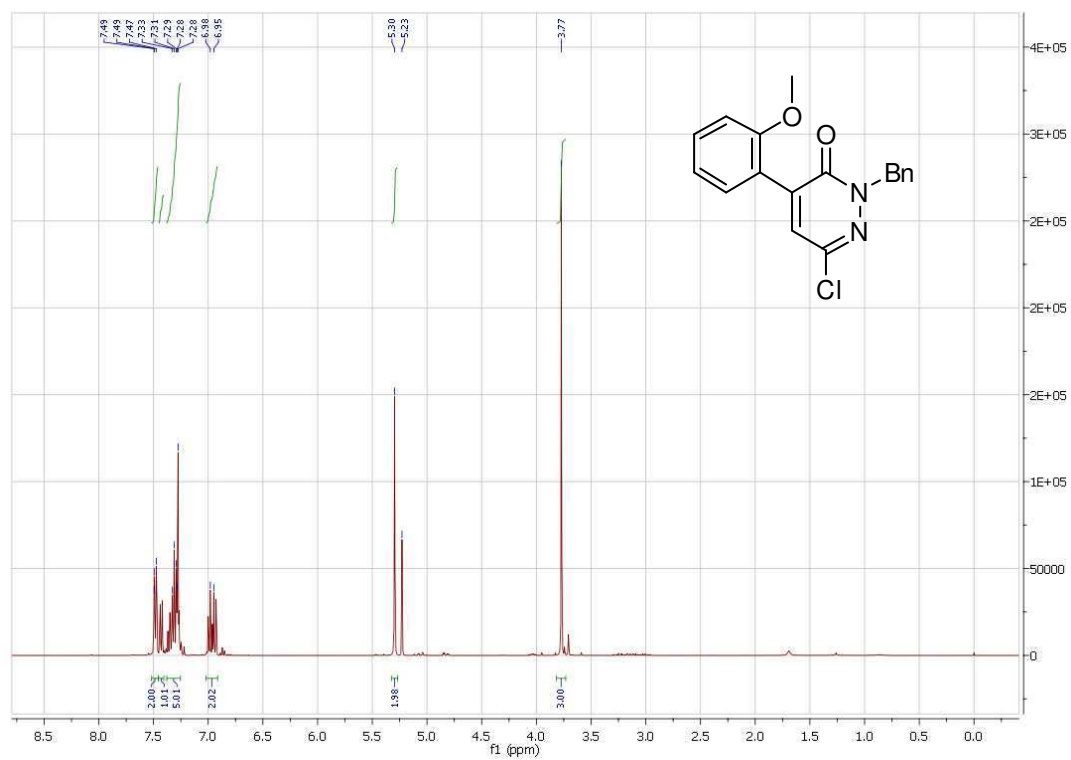


^{13}C NMR (CDCl_3)

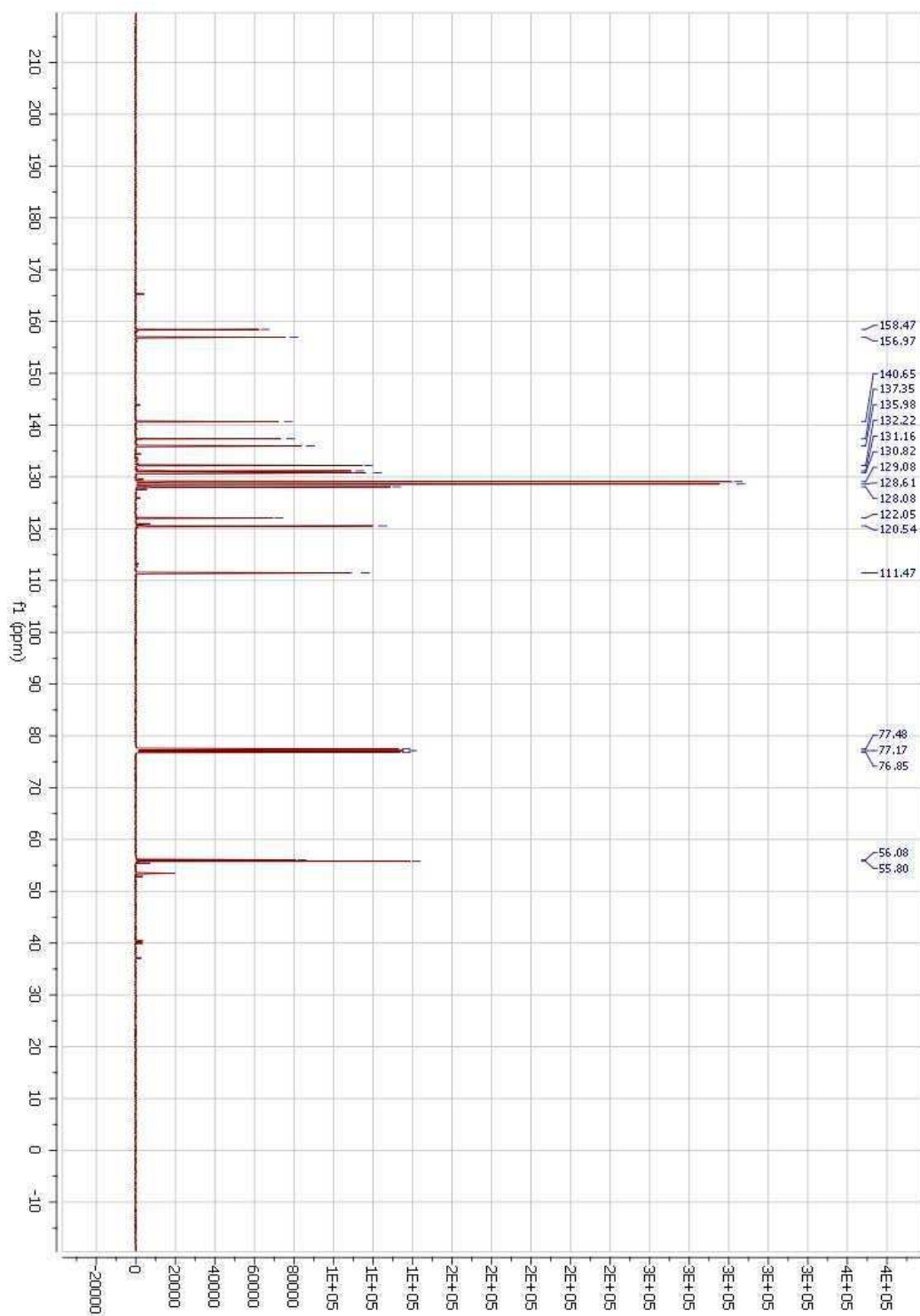


2-Benzyl-6-chloro-4-(2-methoxyphenyl)pyridazin-3(2H)-one (10e)

^1H NMR (CDCl_3)

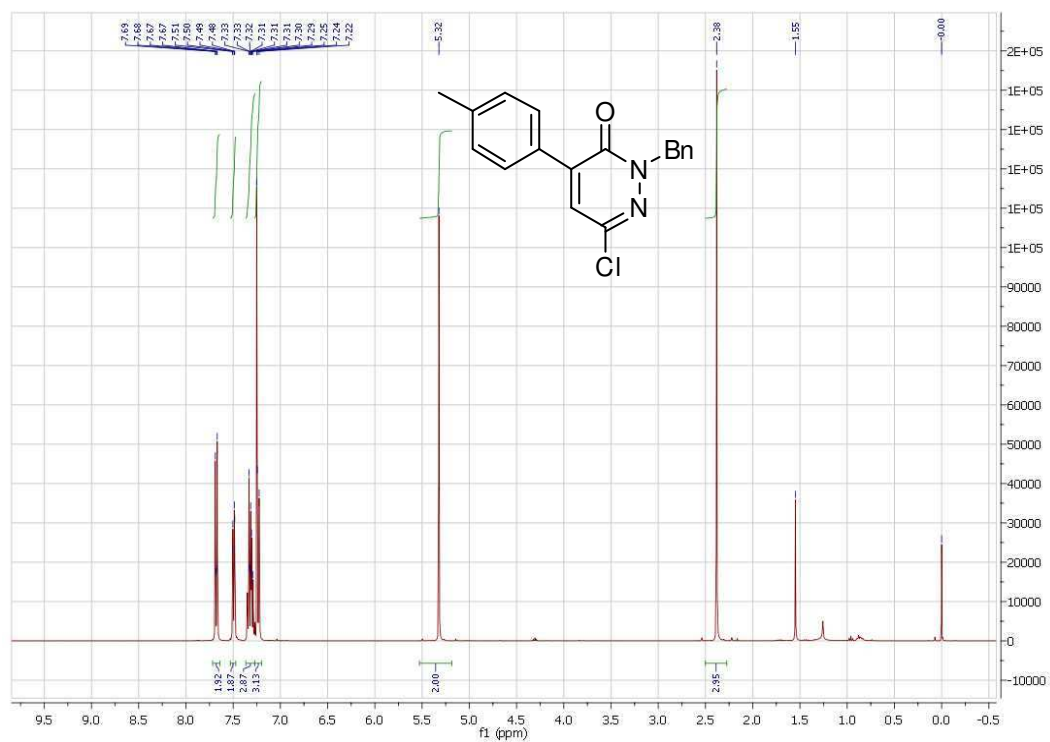


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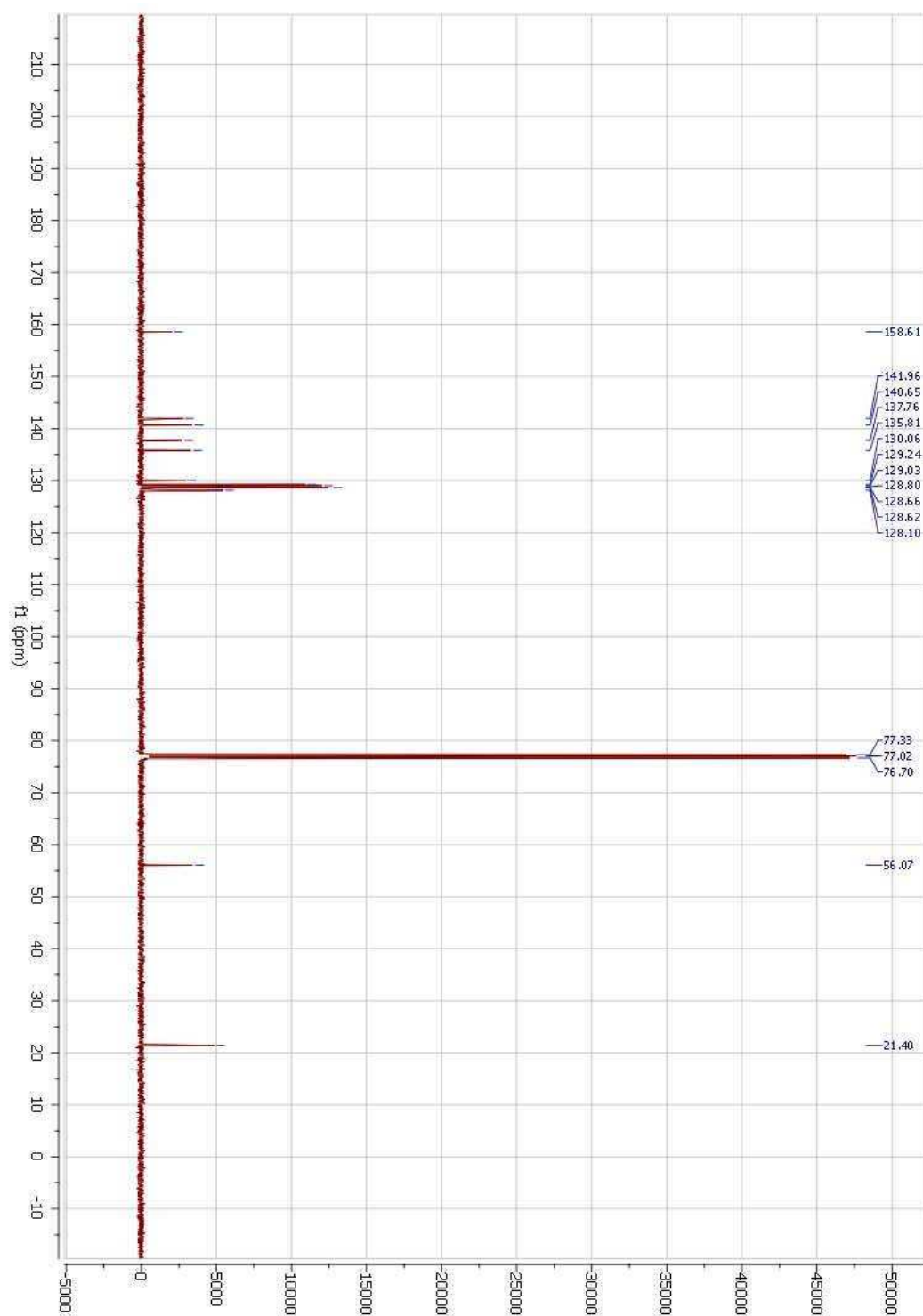


2-Benzyl-6-chloro-4-(*p*-tolyl)pyridazin-3(2*H*)-one (10f)

^1H NMR (CDCl_3)

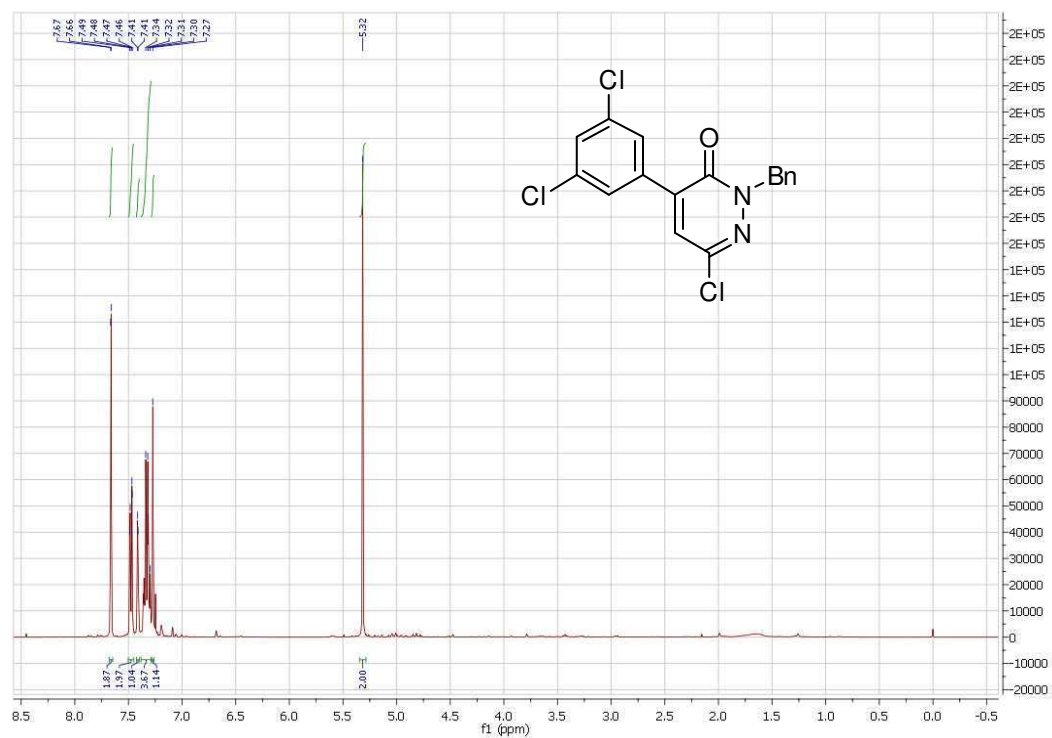


^{13}C NMR (CDCl_3)



2-Benzyl-6-chloro-4-(3,6-dichlorophenyl)pyridazin-3(2H)-one (10g)

^1H NMR (CDCl_3)



^{13}C NMR (CDCl_3)

