

Synthesis of C5-arylated pyrazoles from a pyrazole-4-carboxylate by a palladium-catalyzed C5–H bond activation/C4-decarboxylation sequence.

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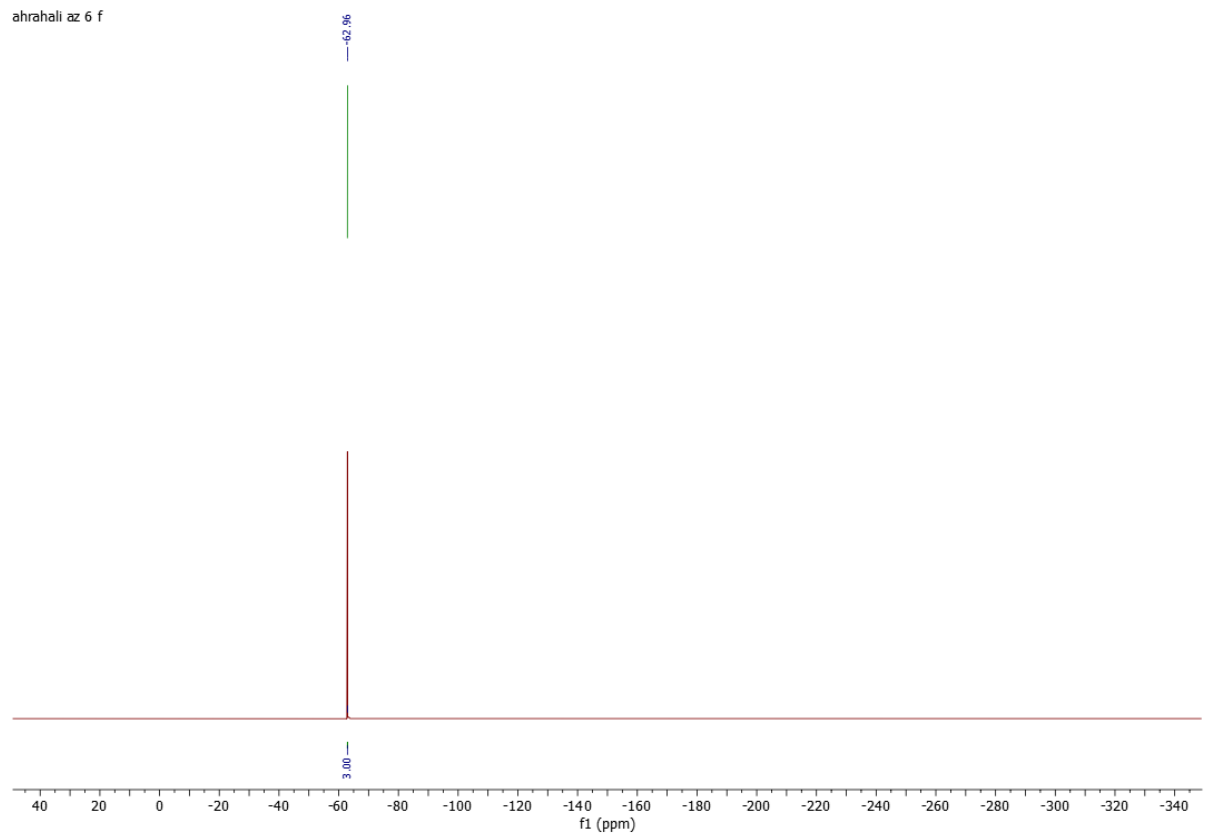
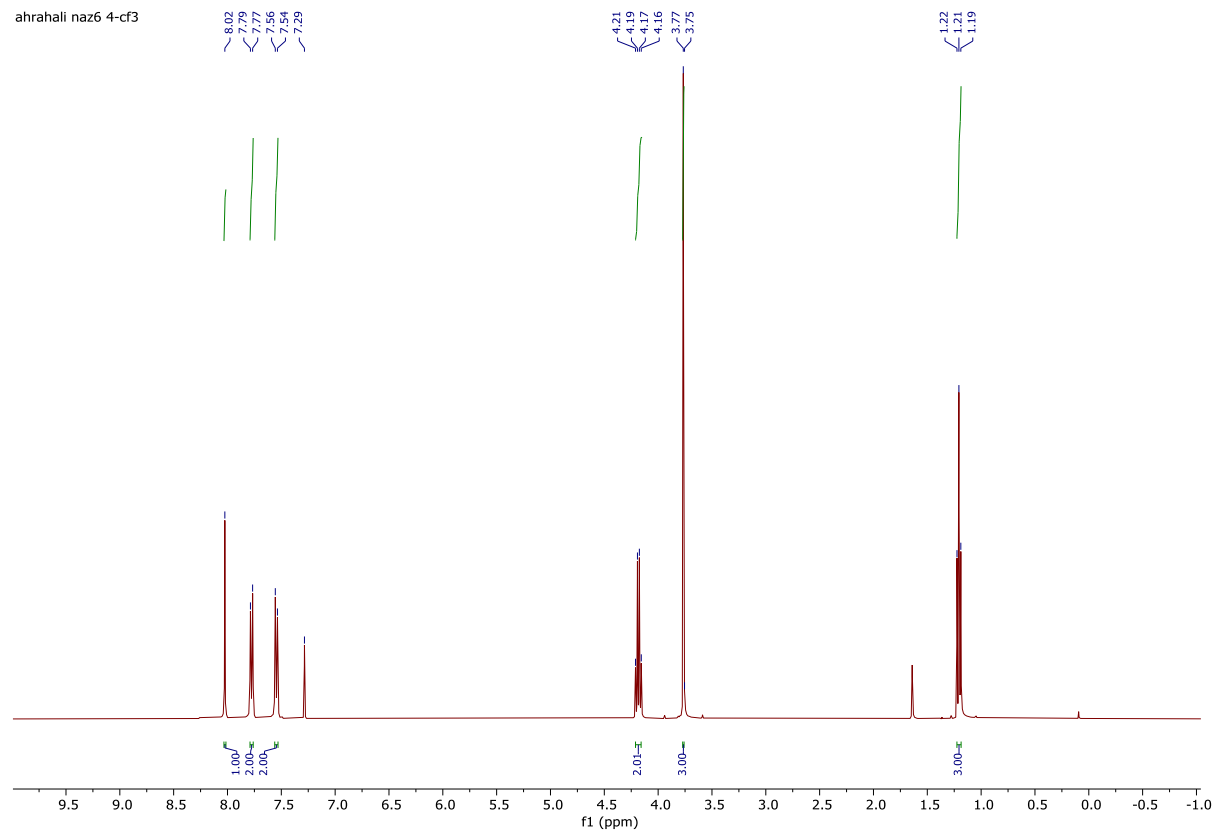
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Supplementary material

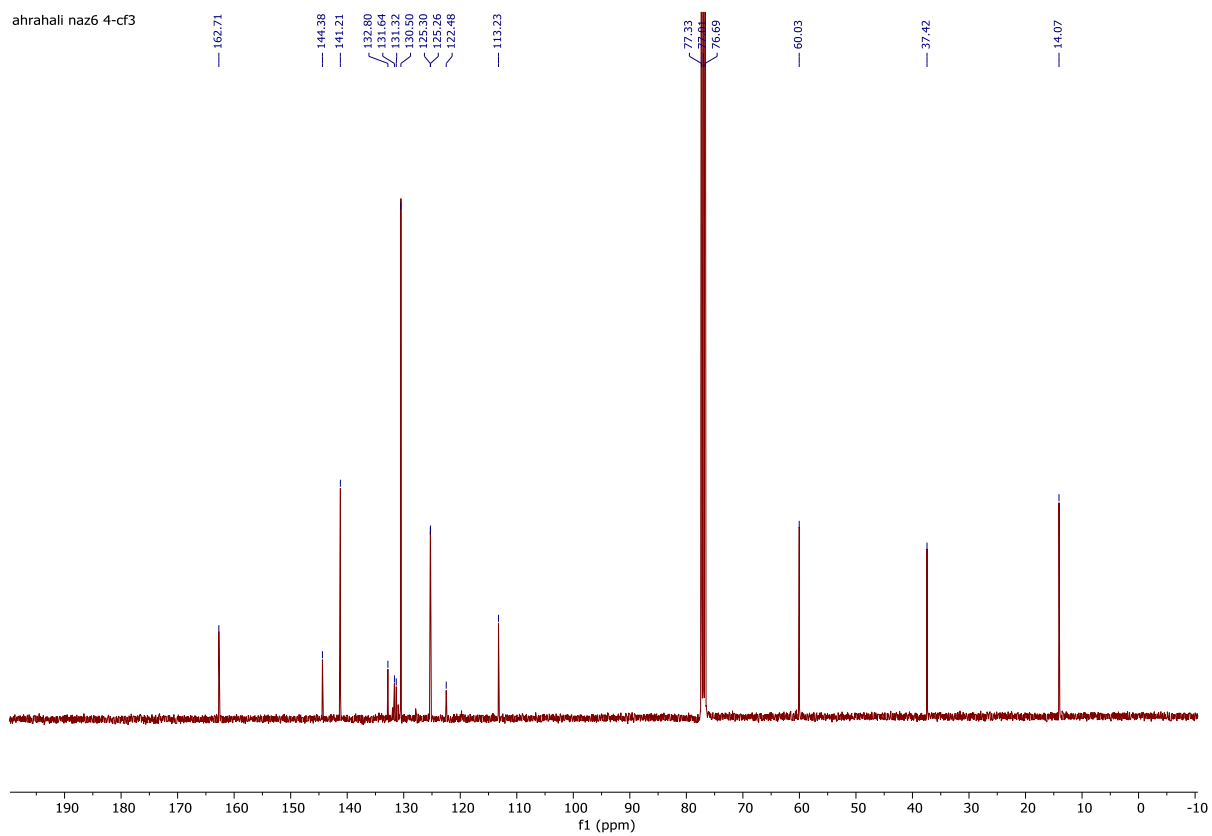
Copy of ¹H, ¹³C and ¹⁹F NMR spectra of all products

S2-S33

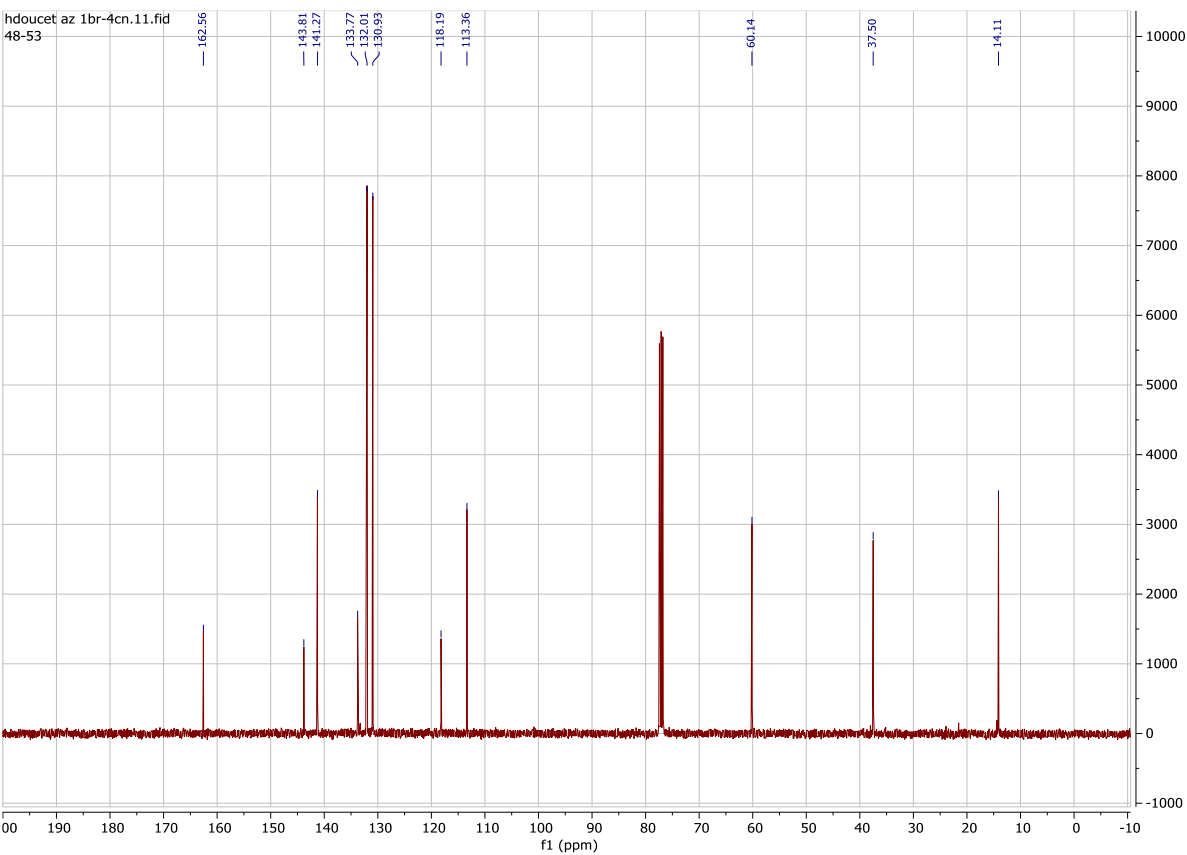
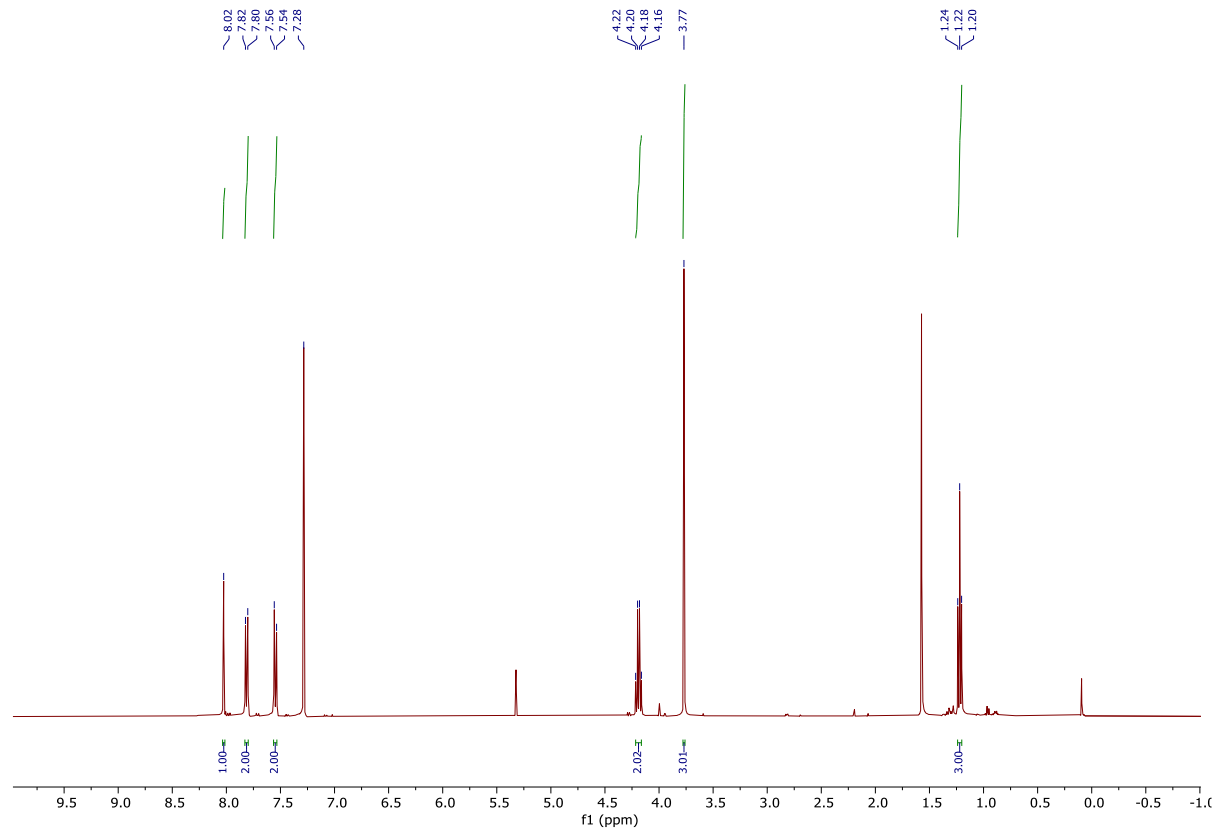
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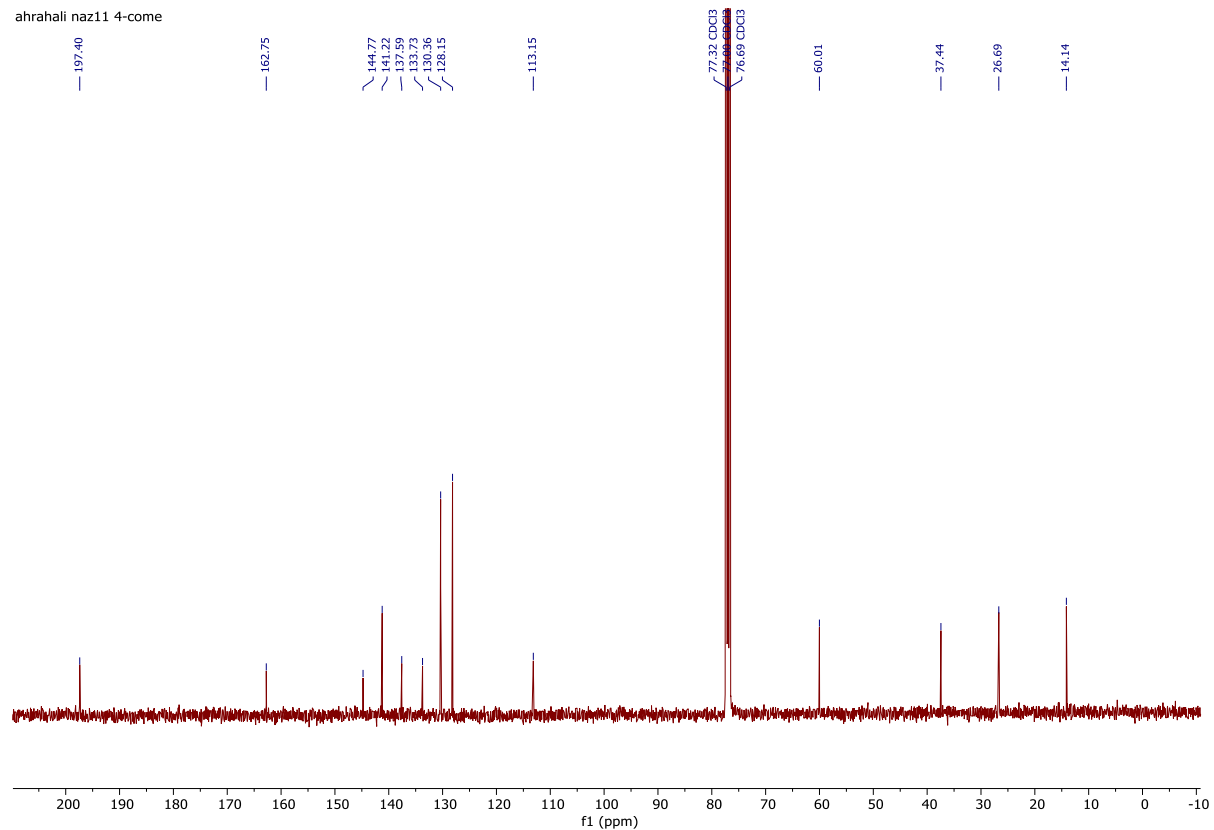
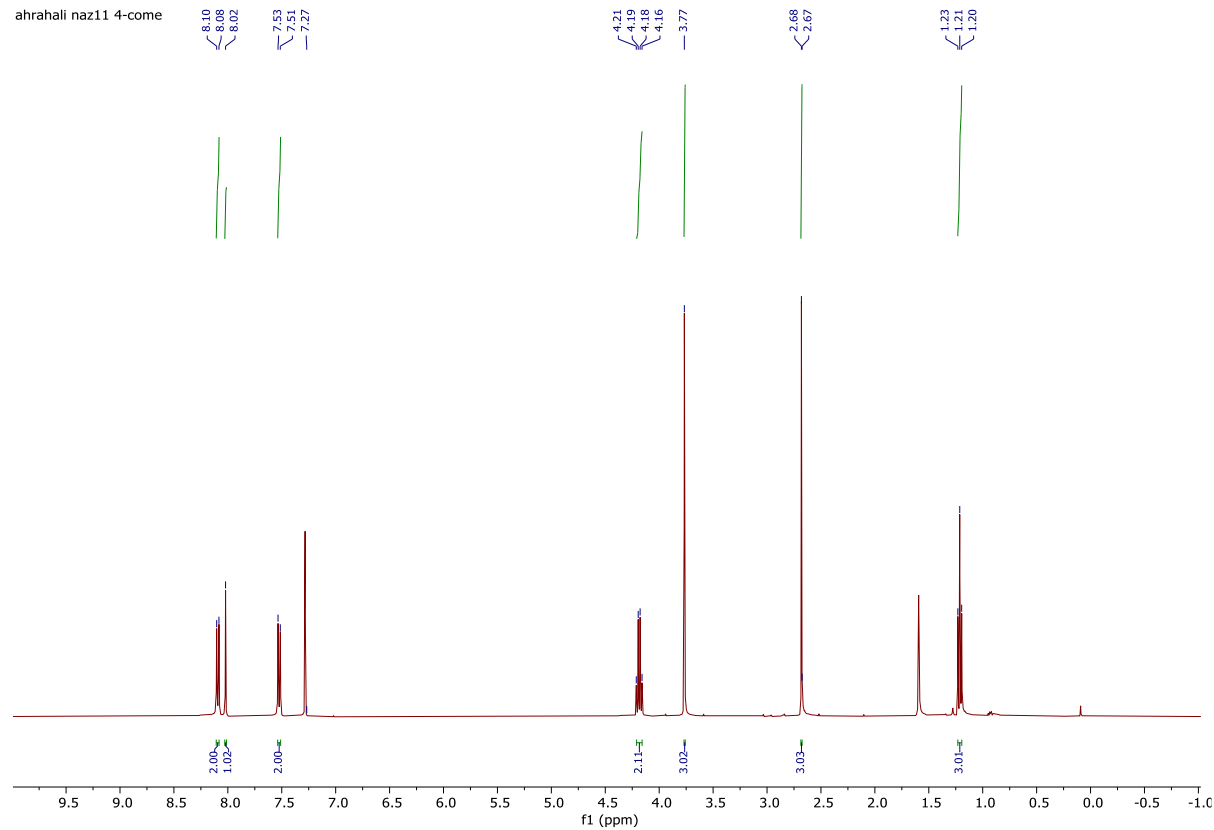
ahrahali naz6 4-cf3



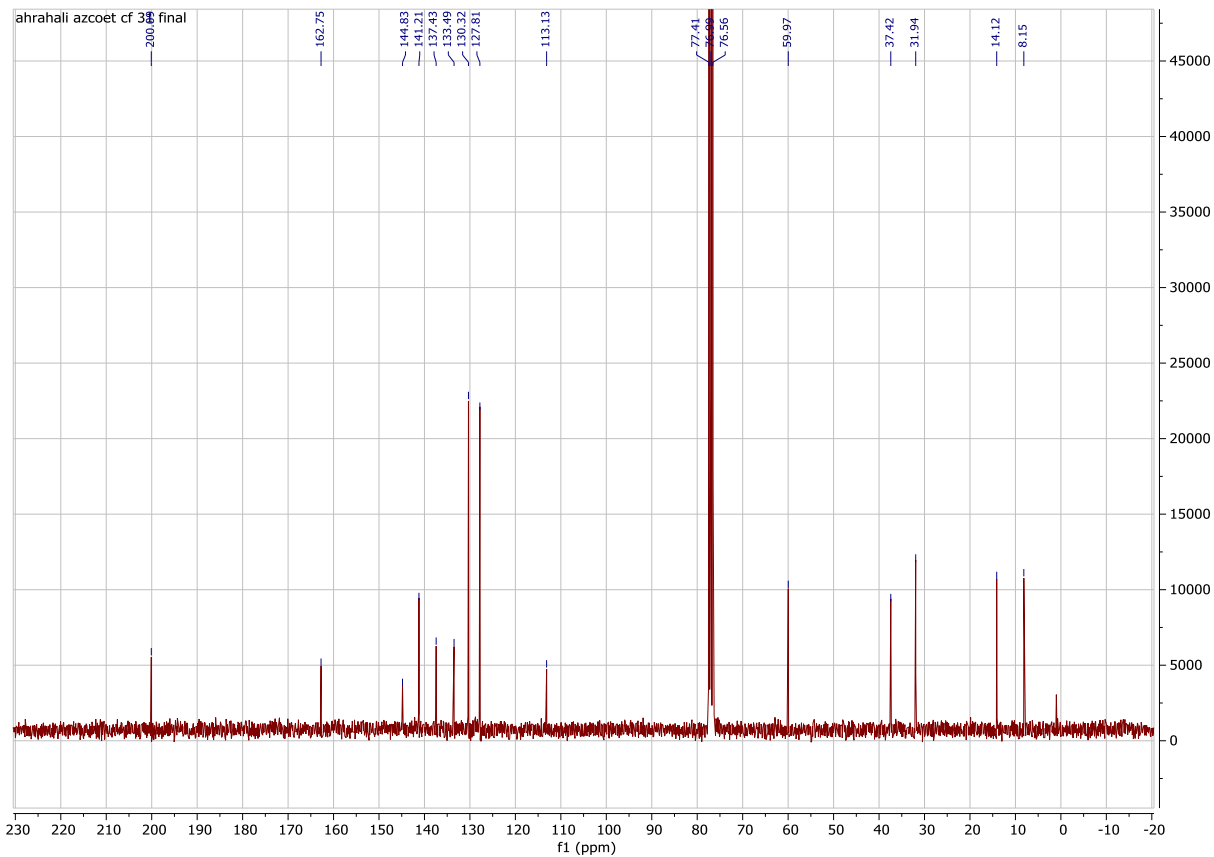
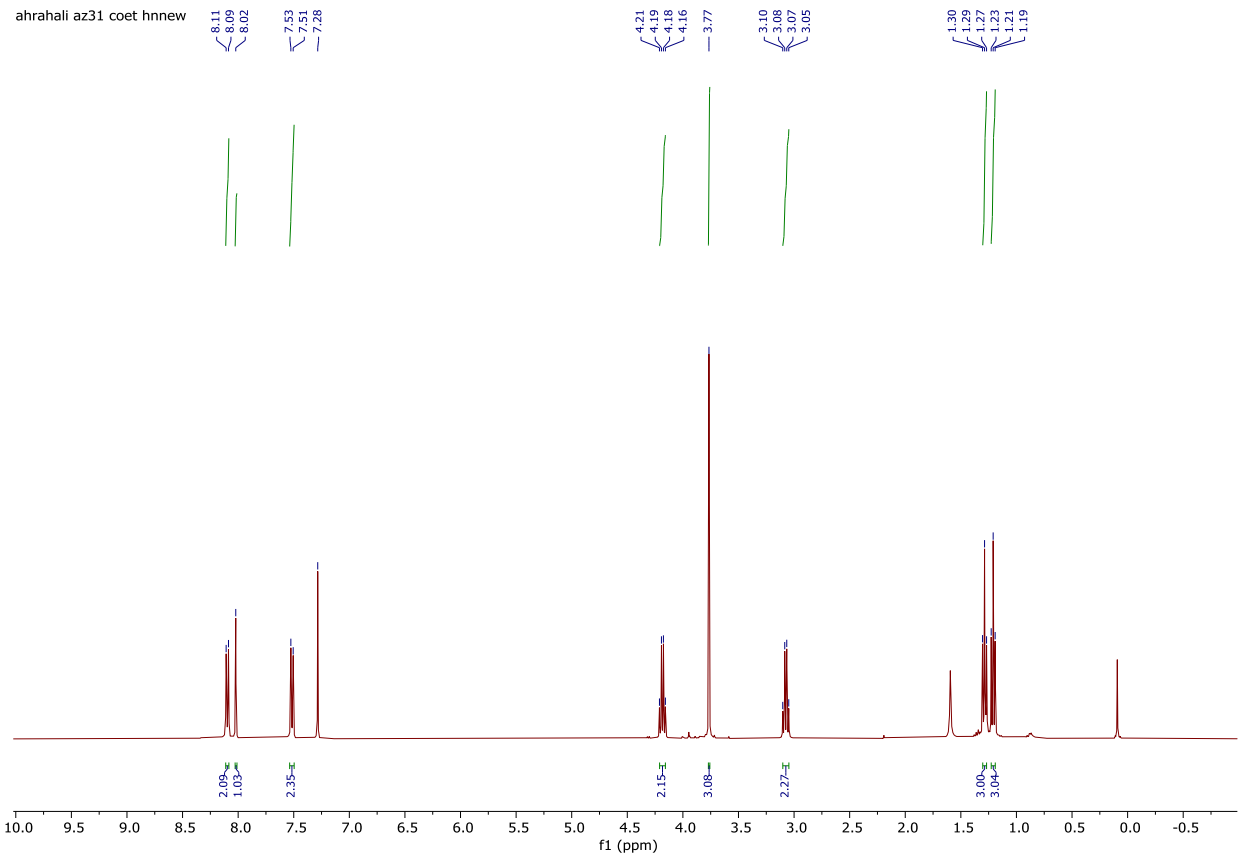
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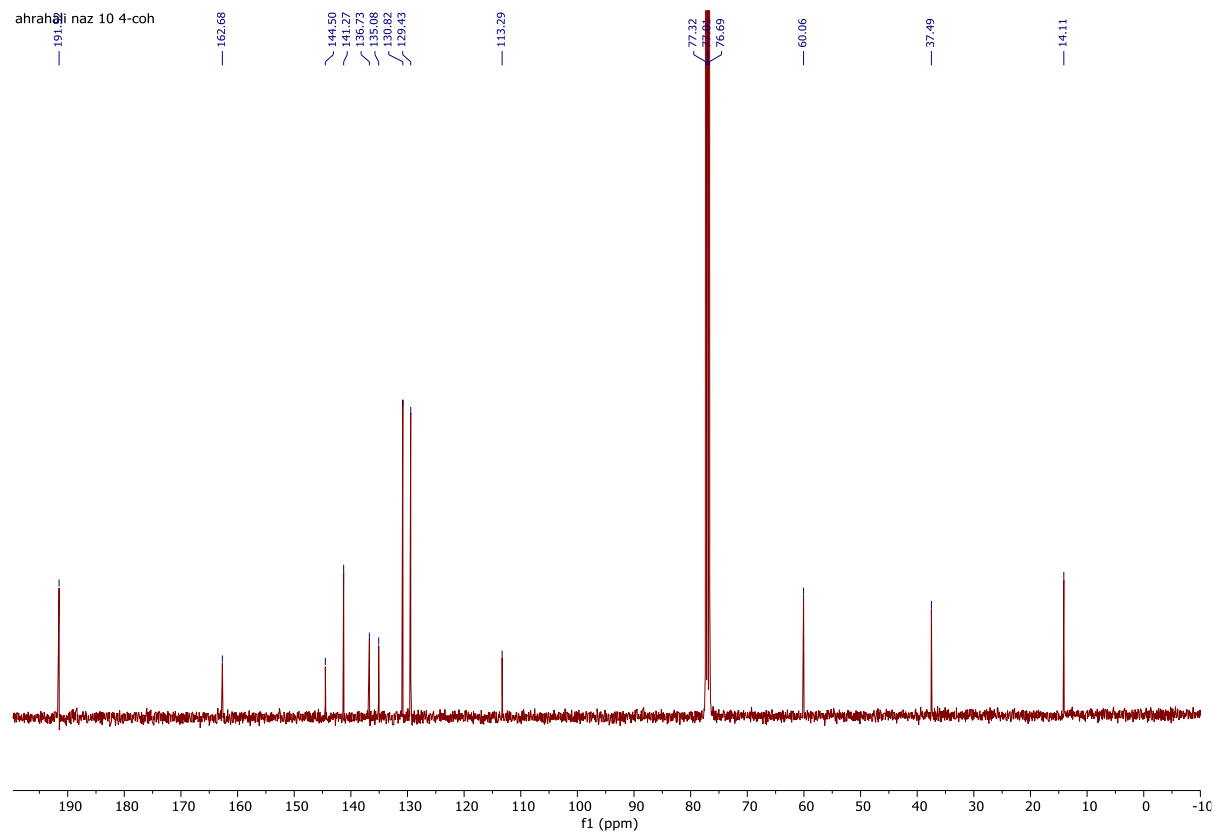
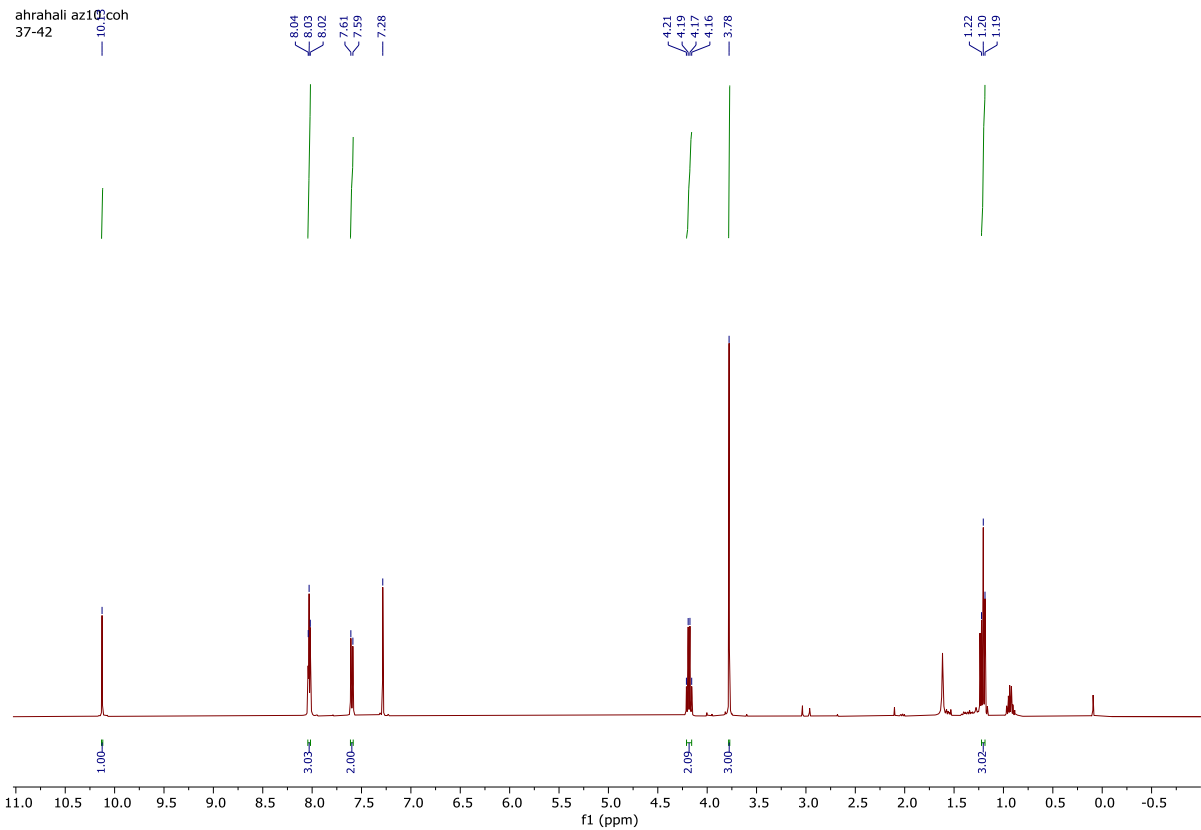
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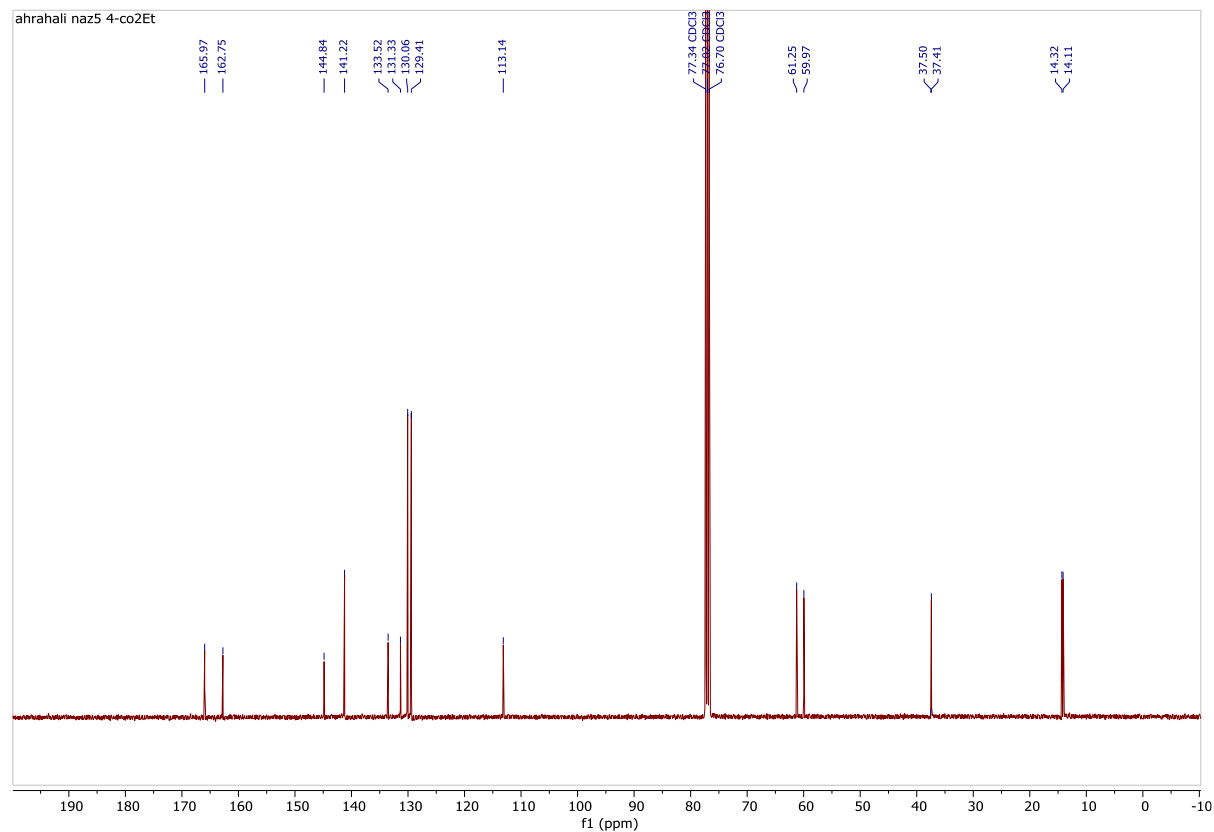
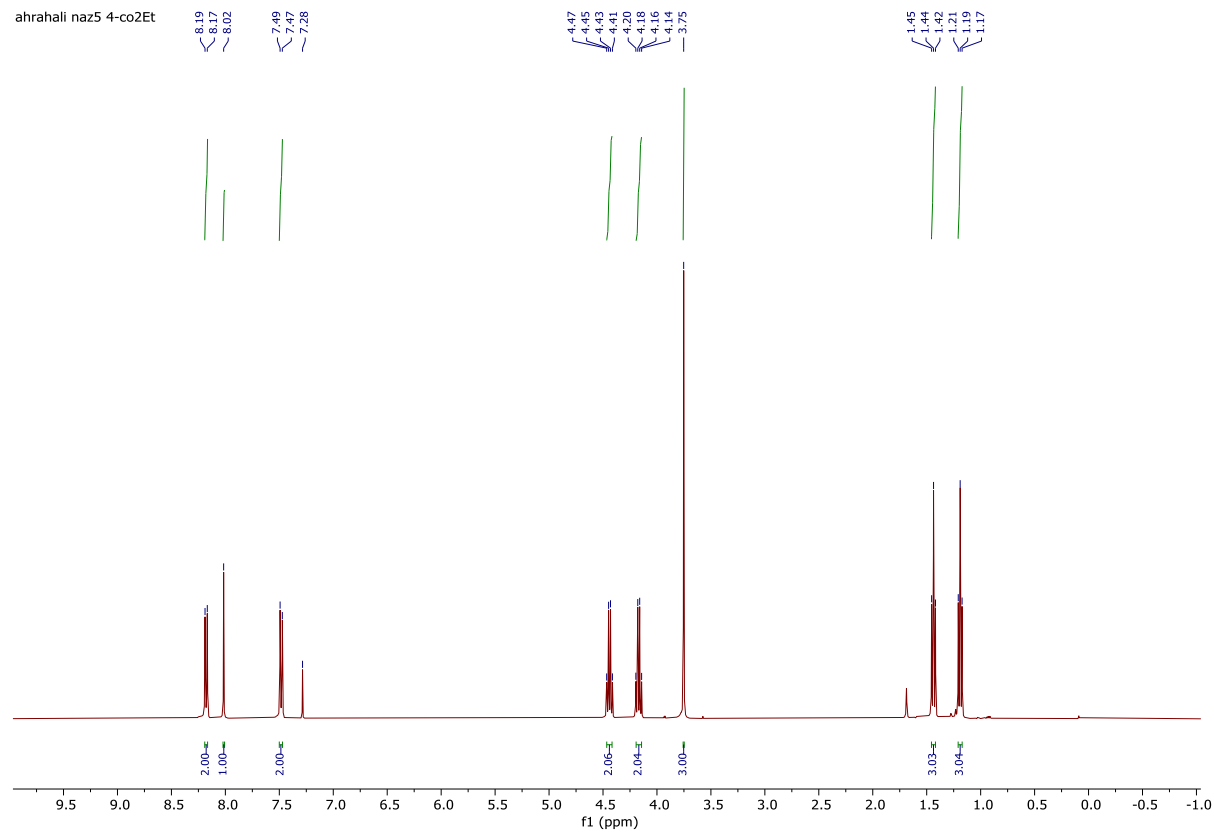
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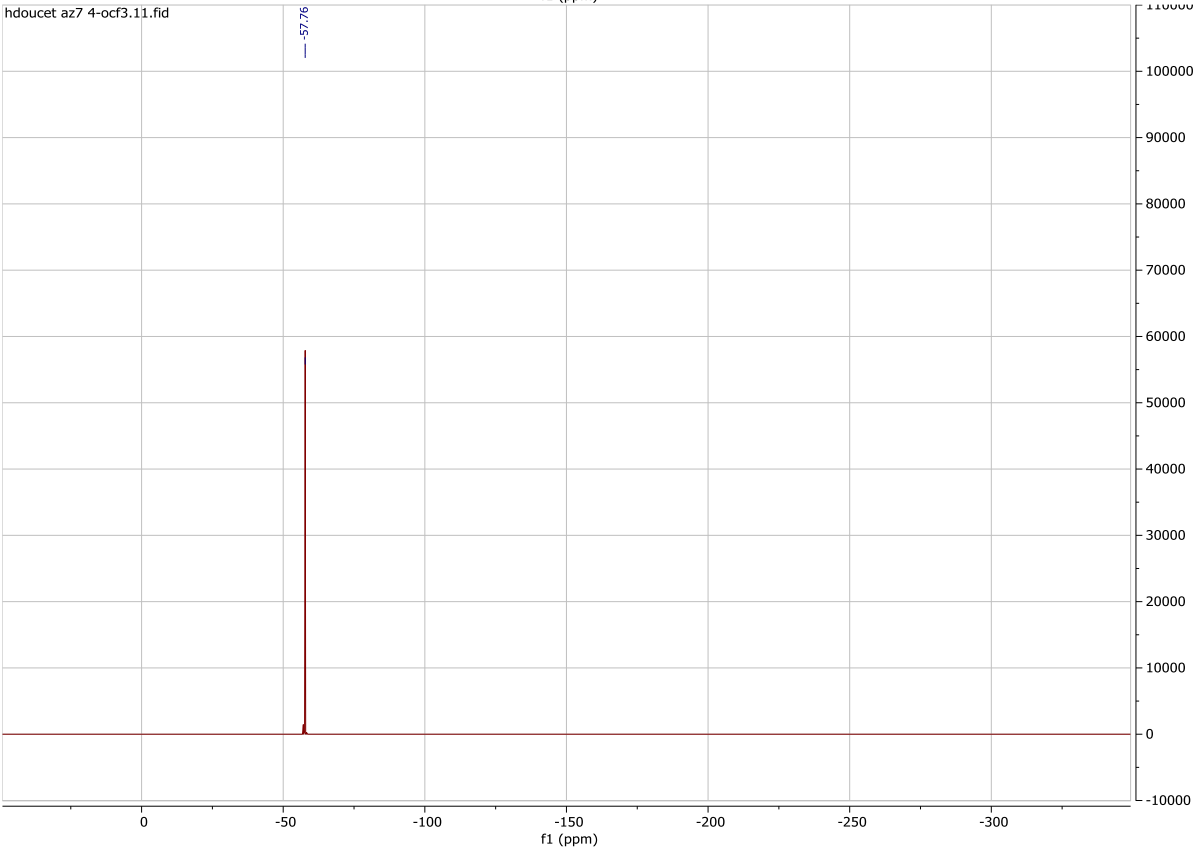
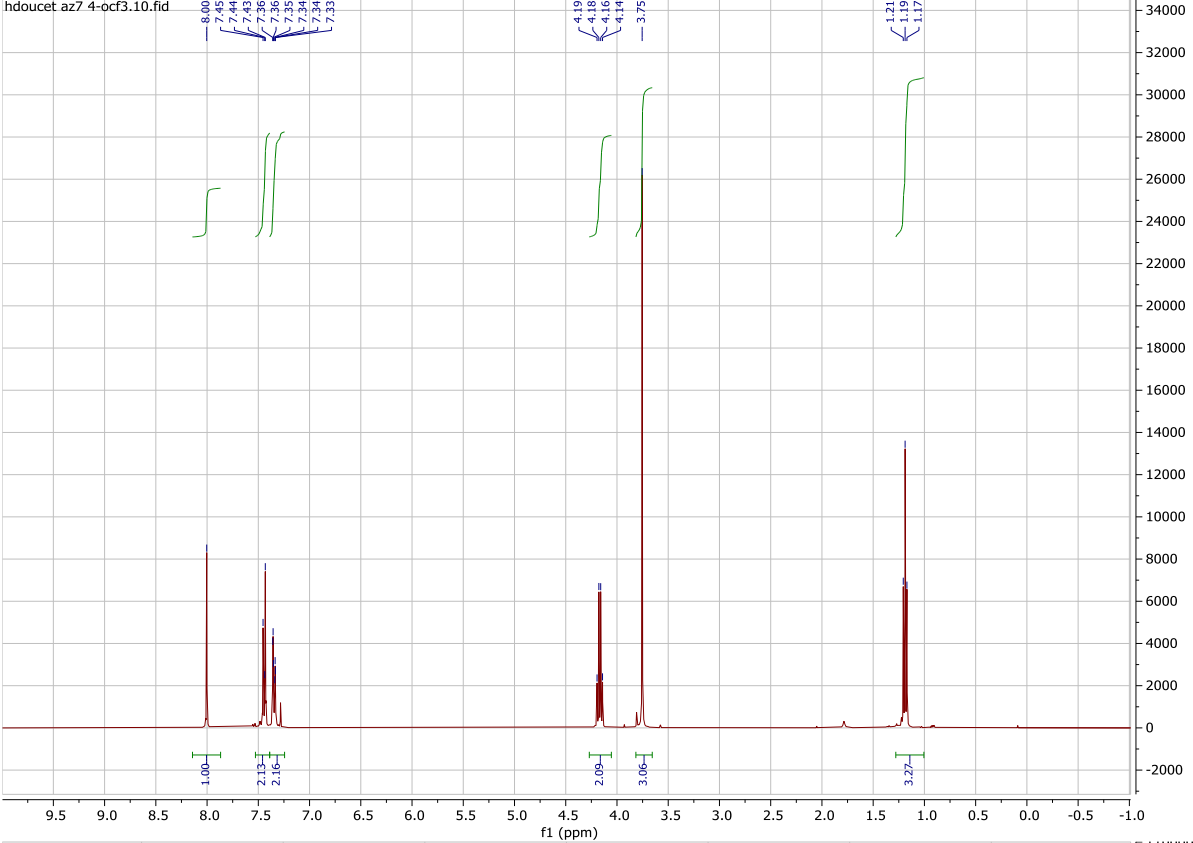
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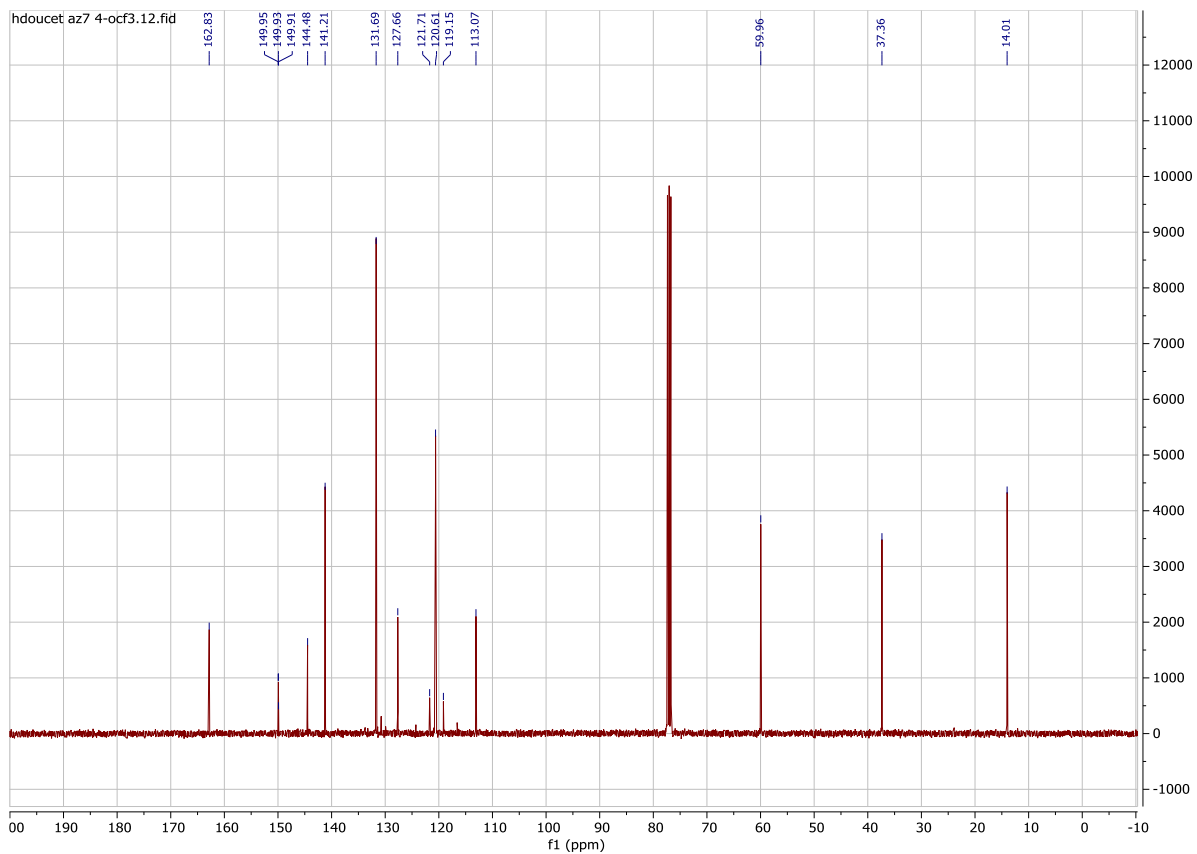


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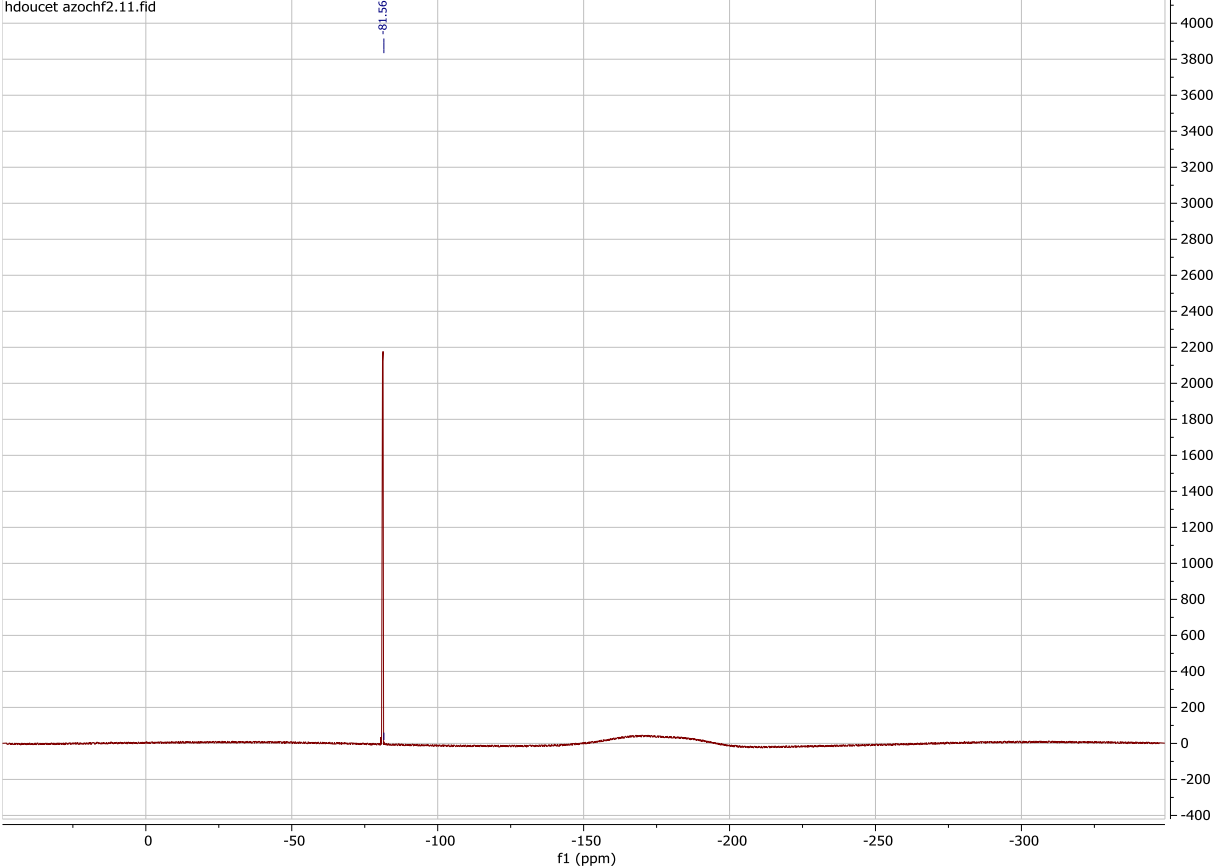
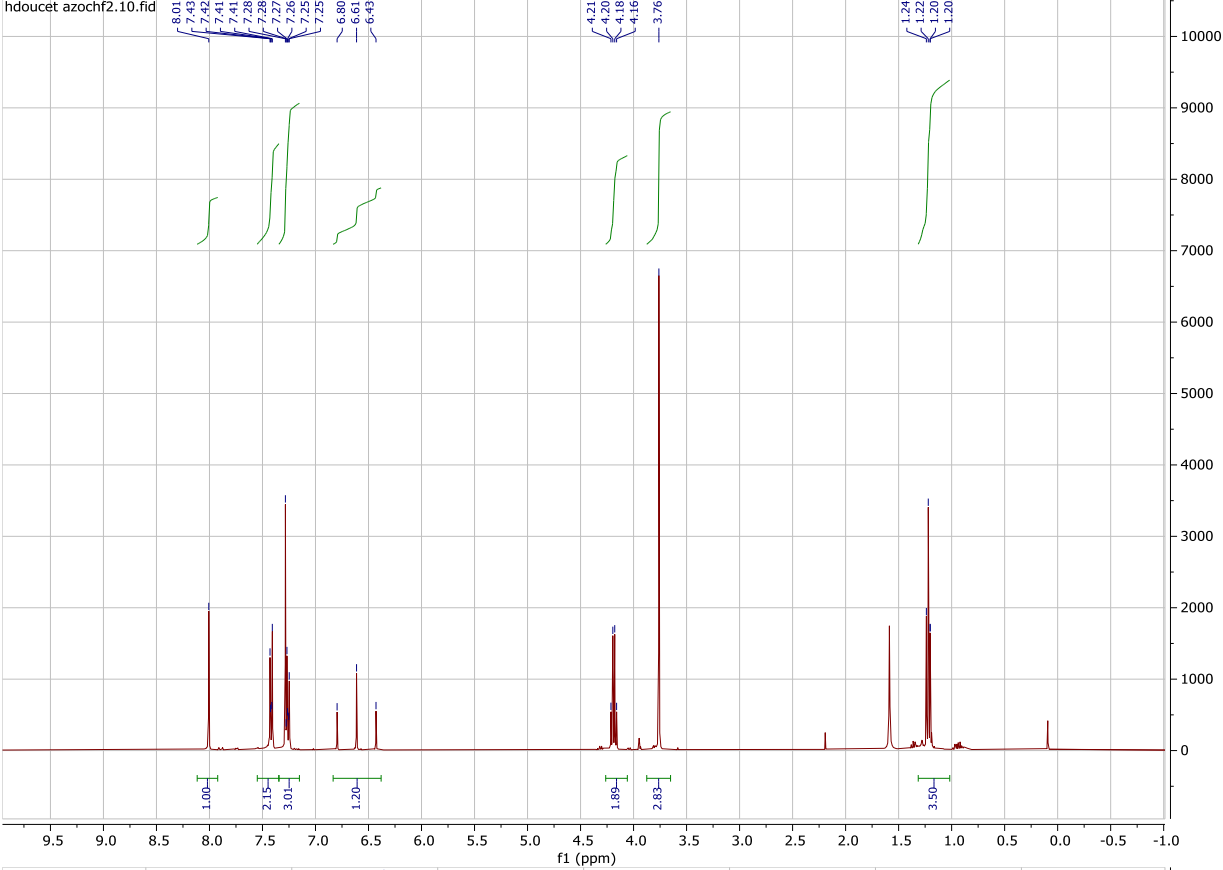


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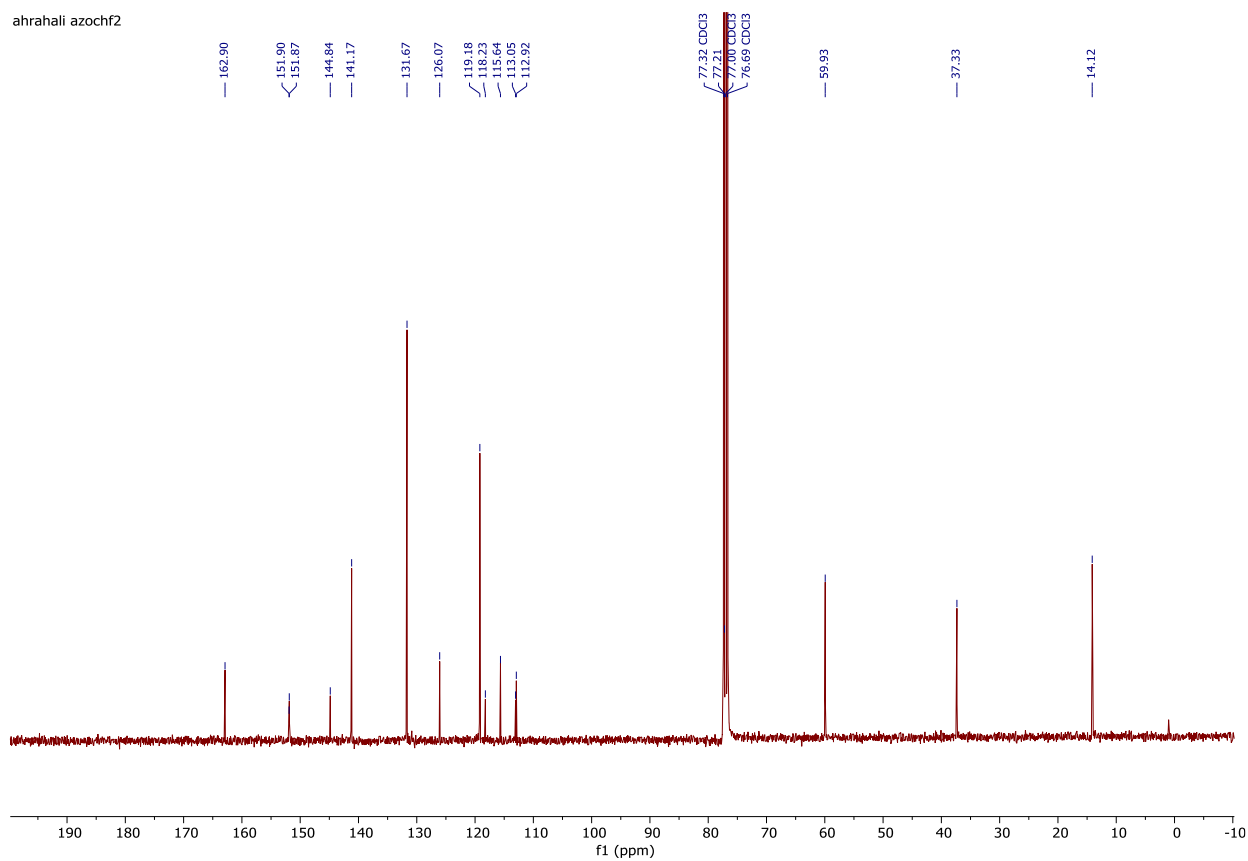




Ethyl 5-(4-(difluoromethoxy)phenyl)-1-methylpyrazole-4-carboxylate (8)

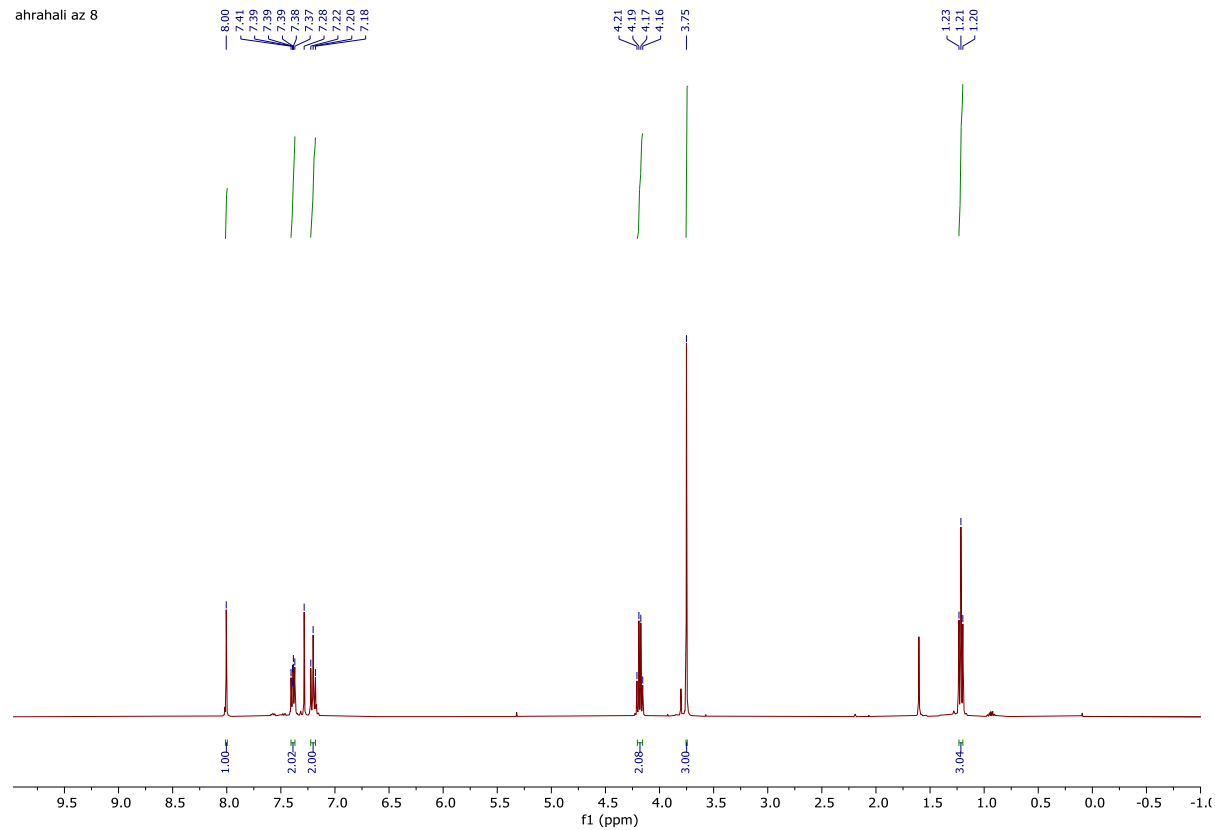


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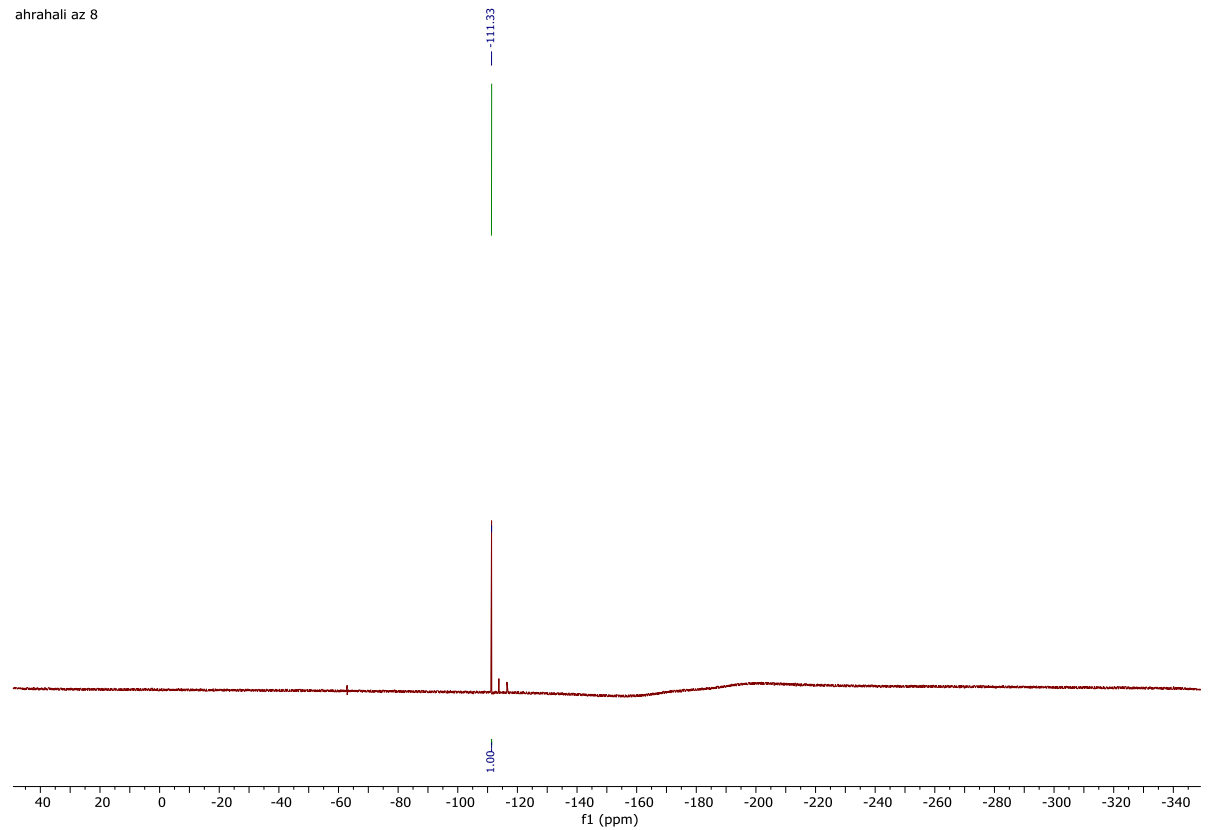


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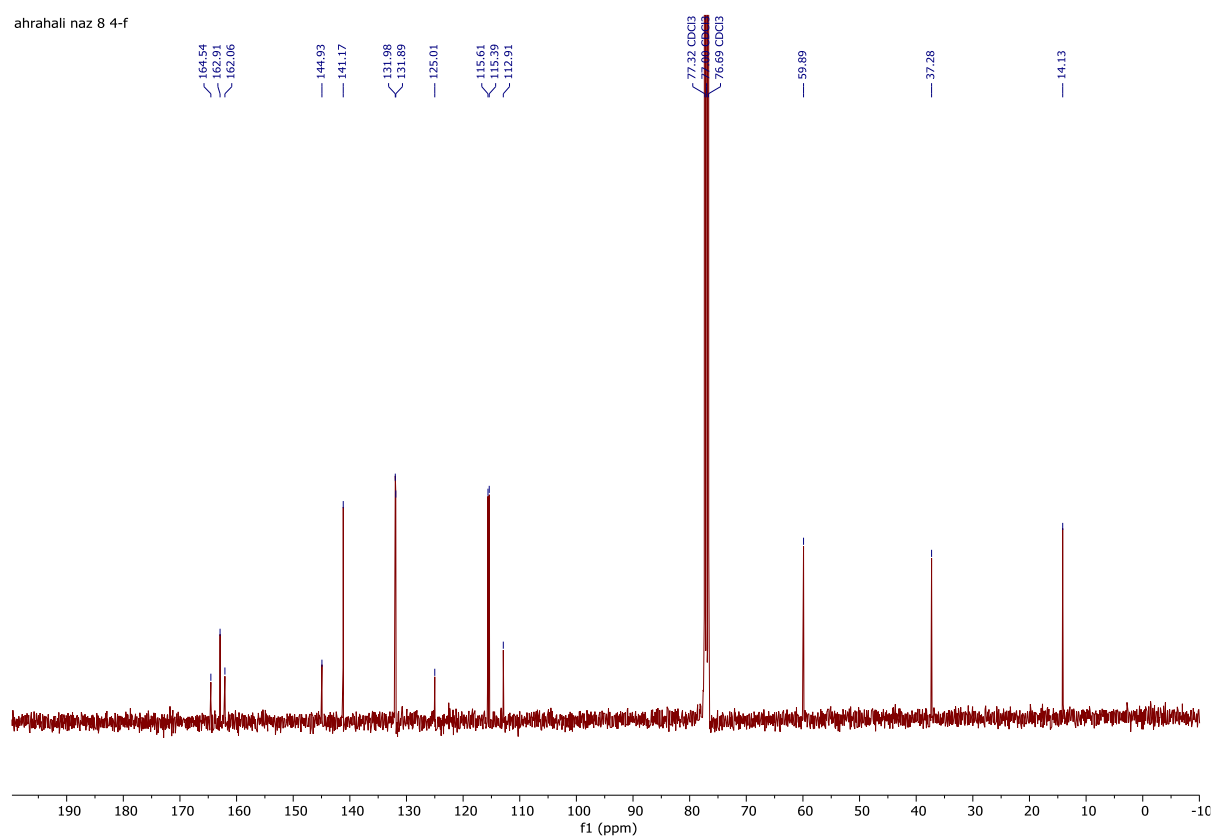
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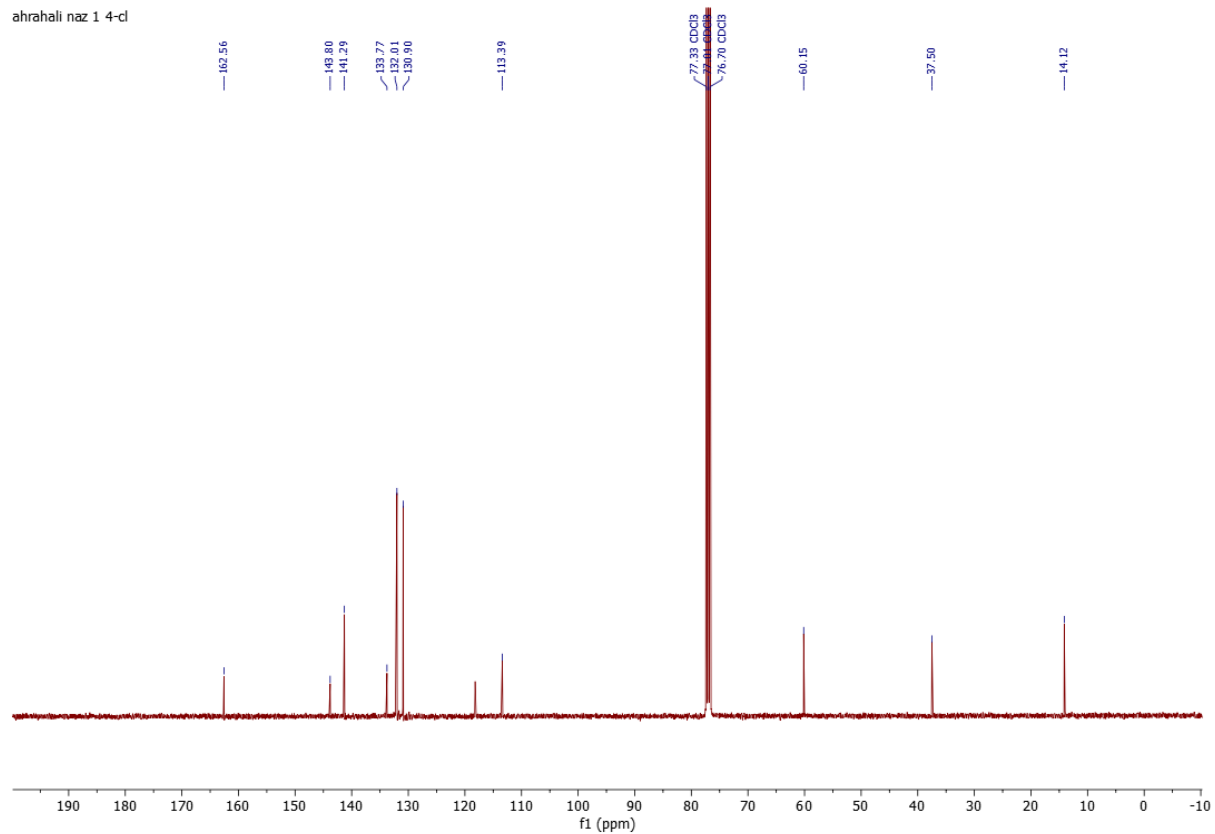
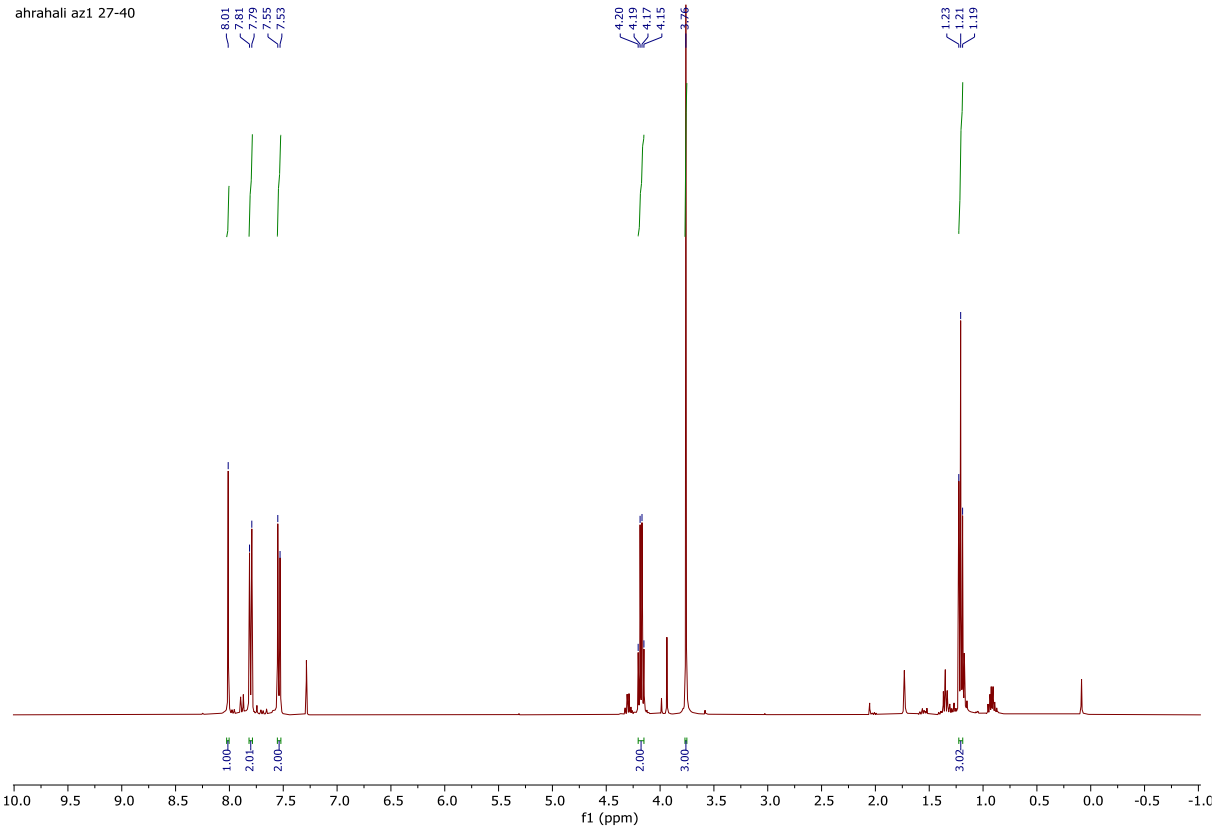
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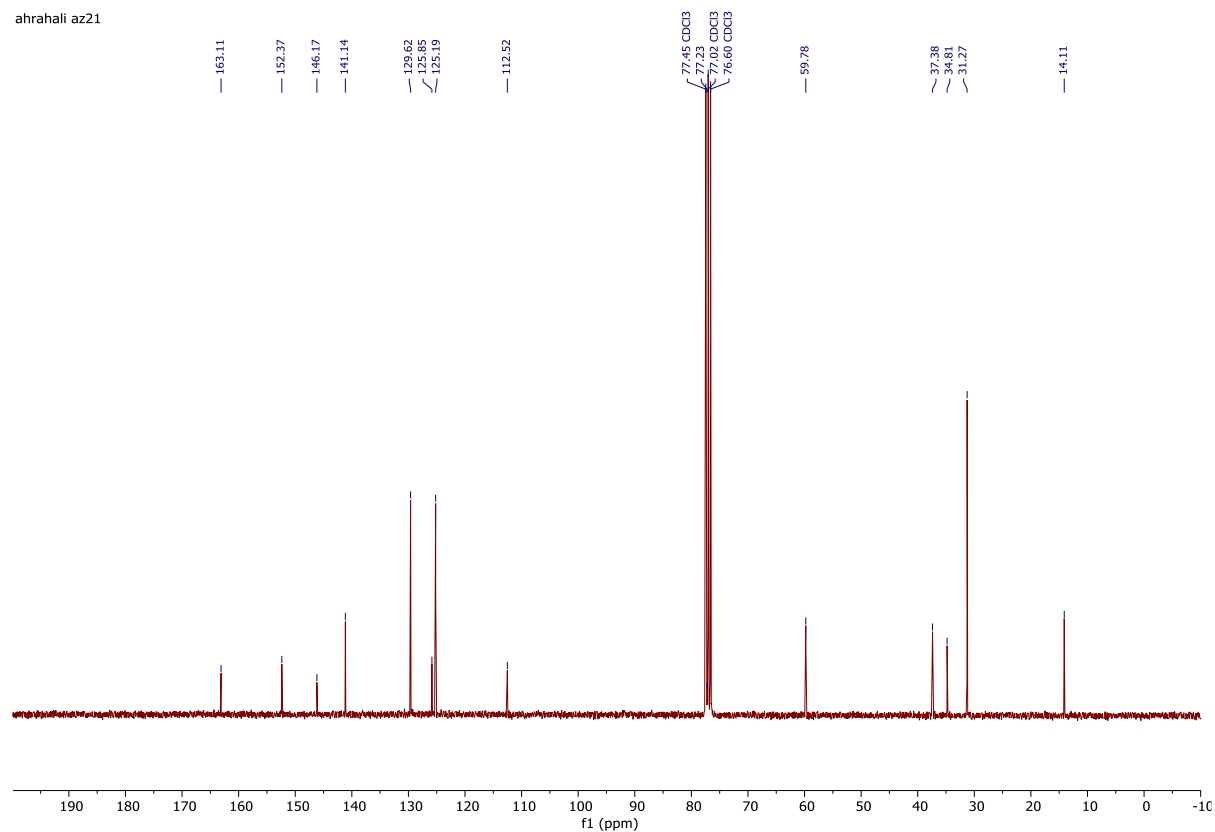
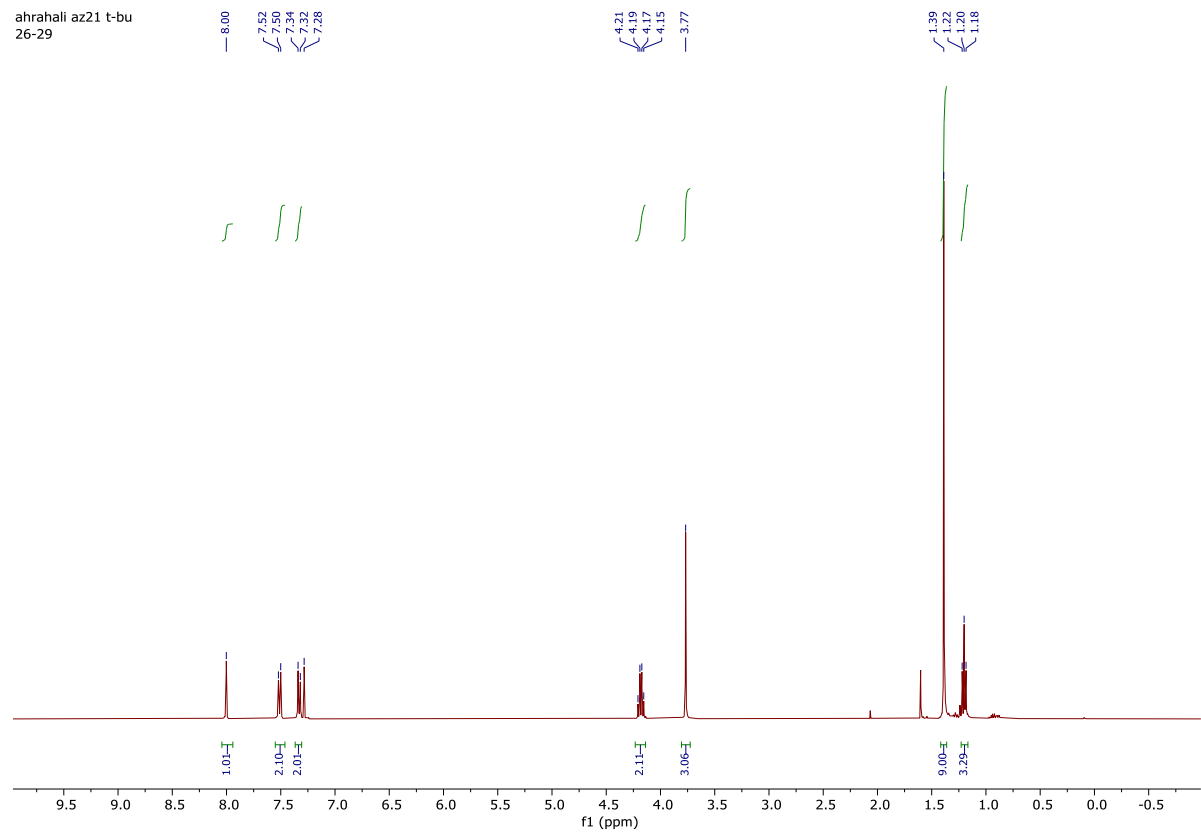
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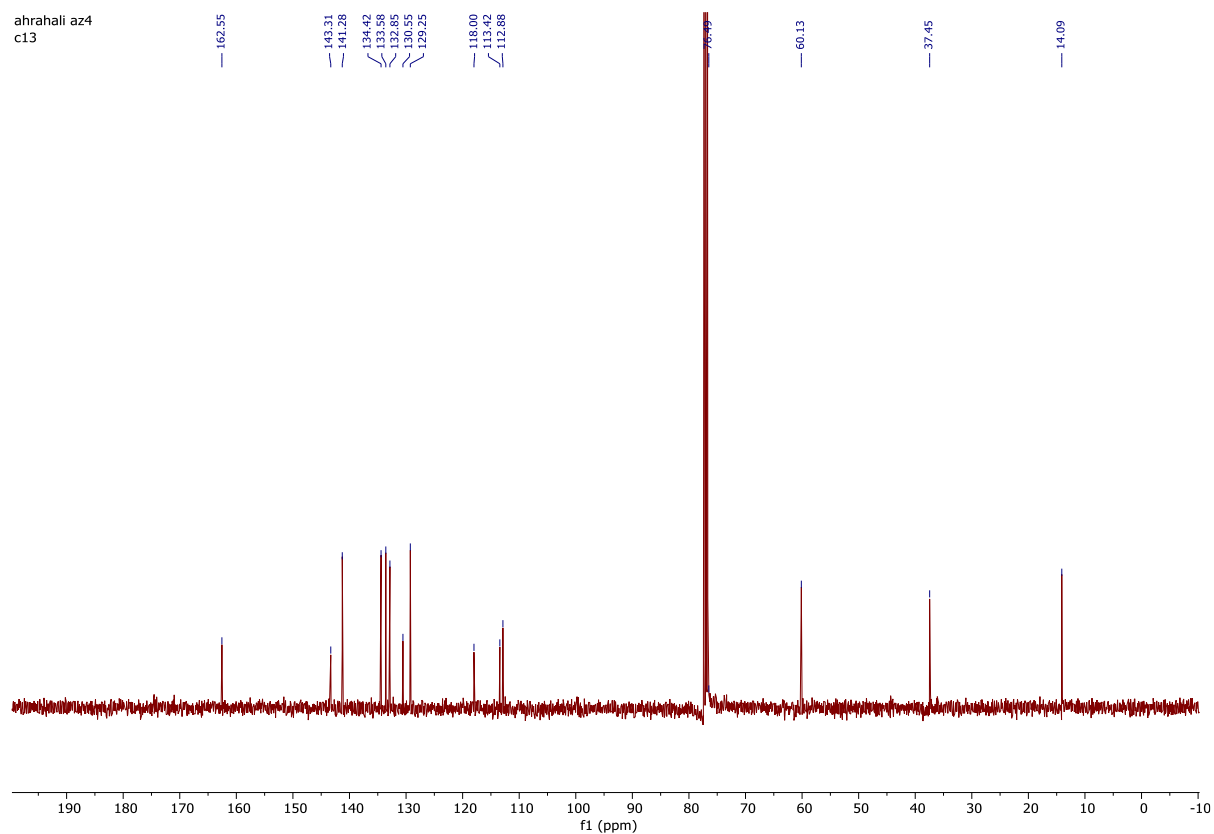


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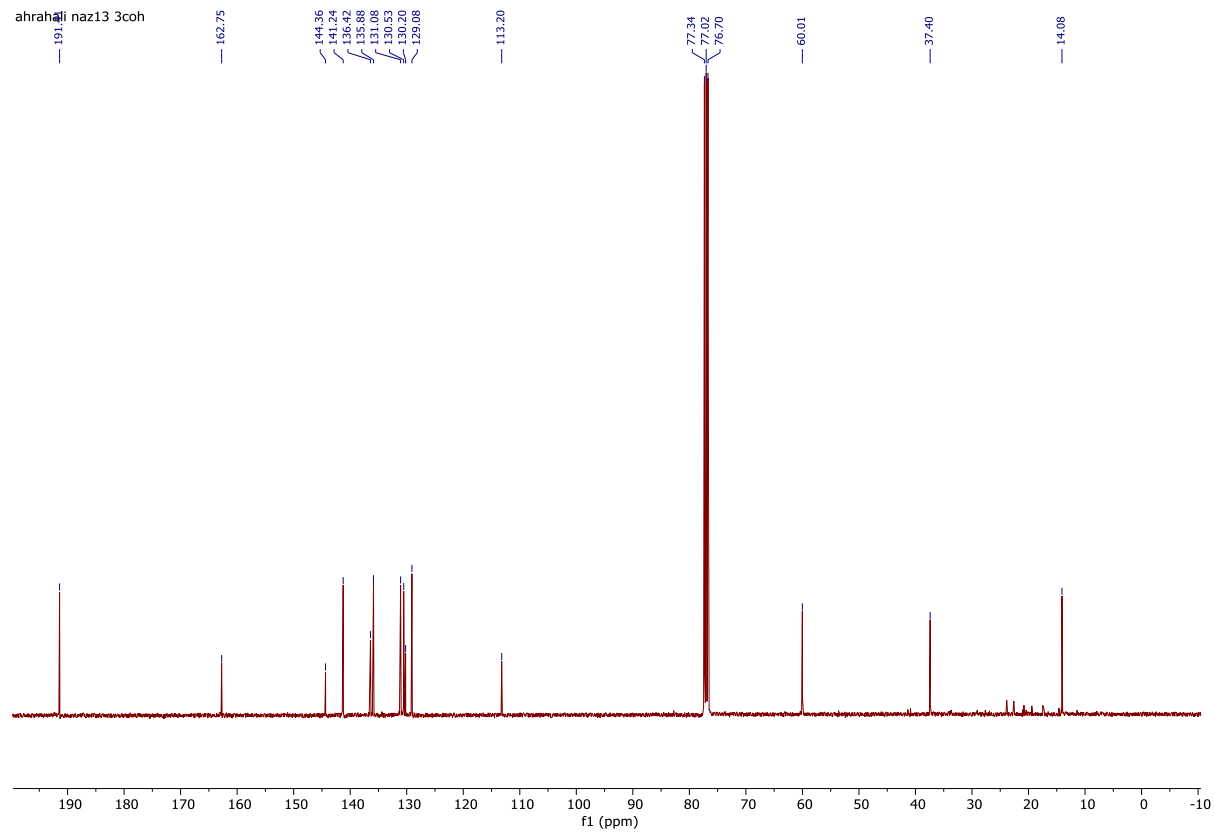
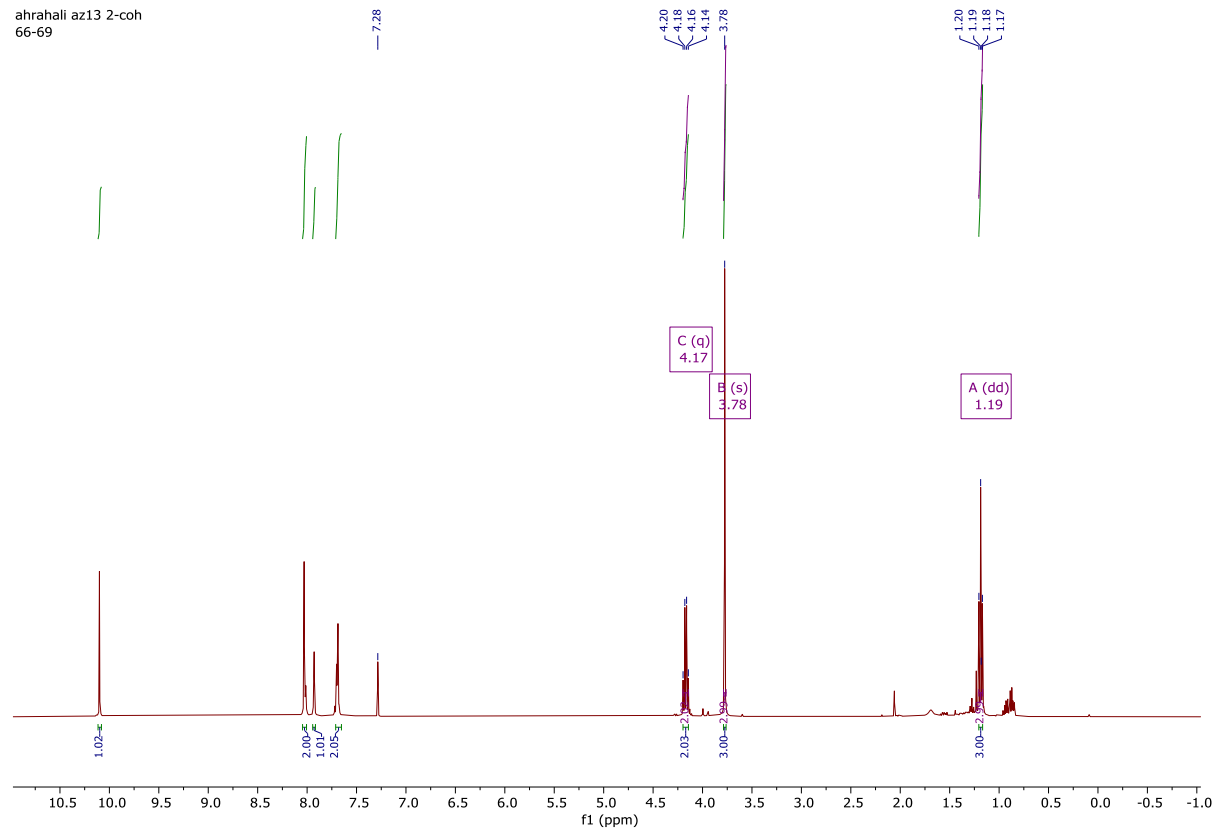
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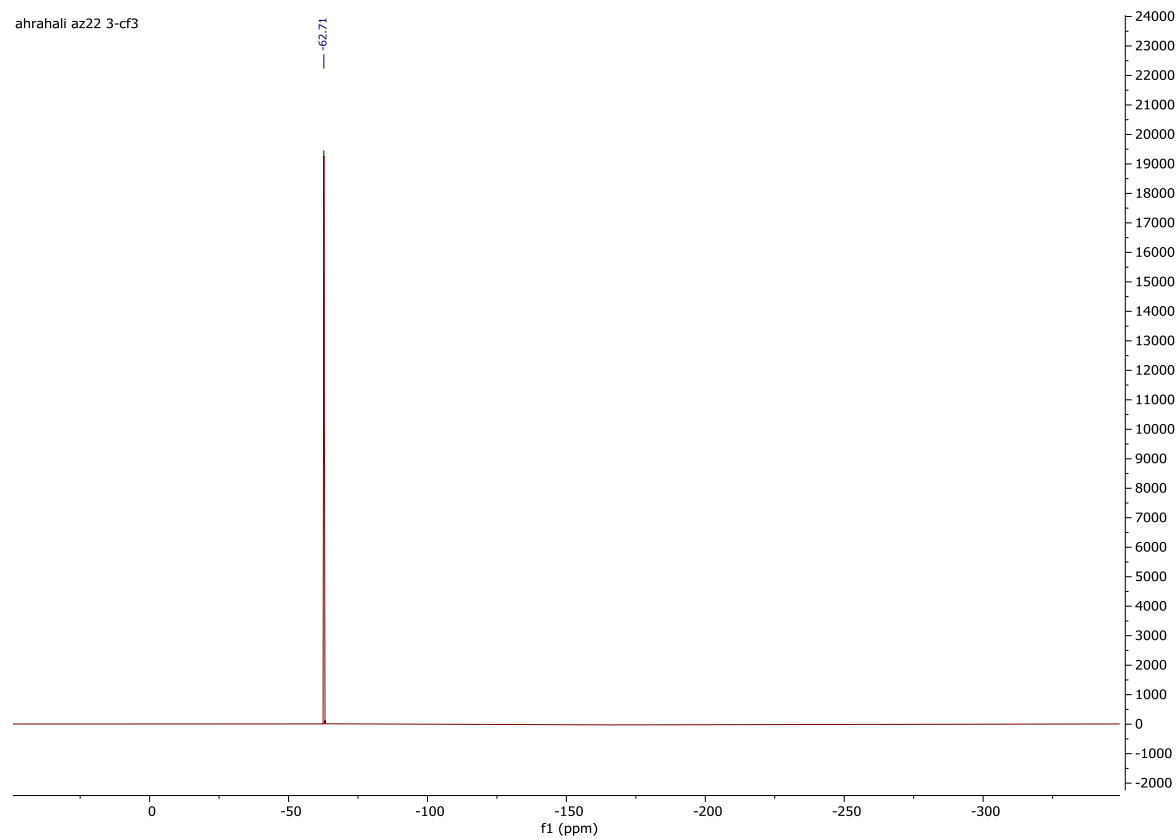
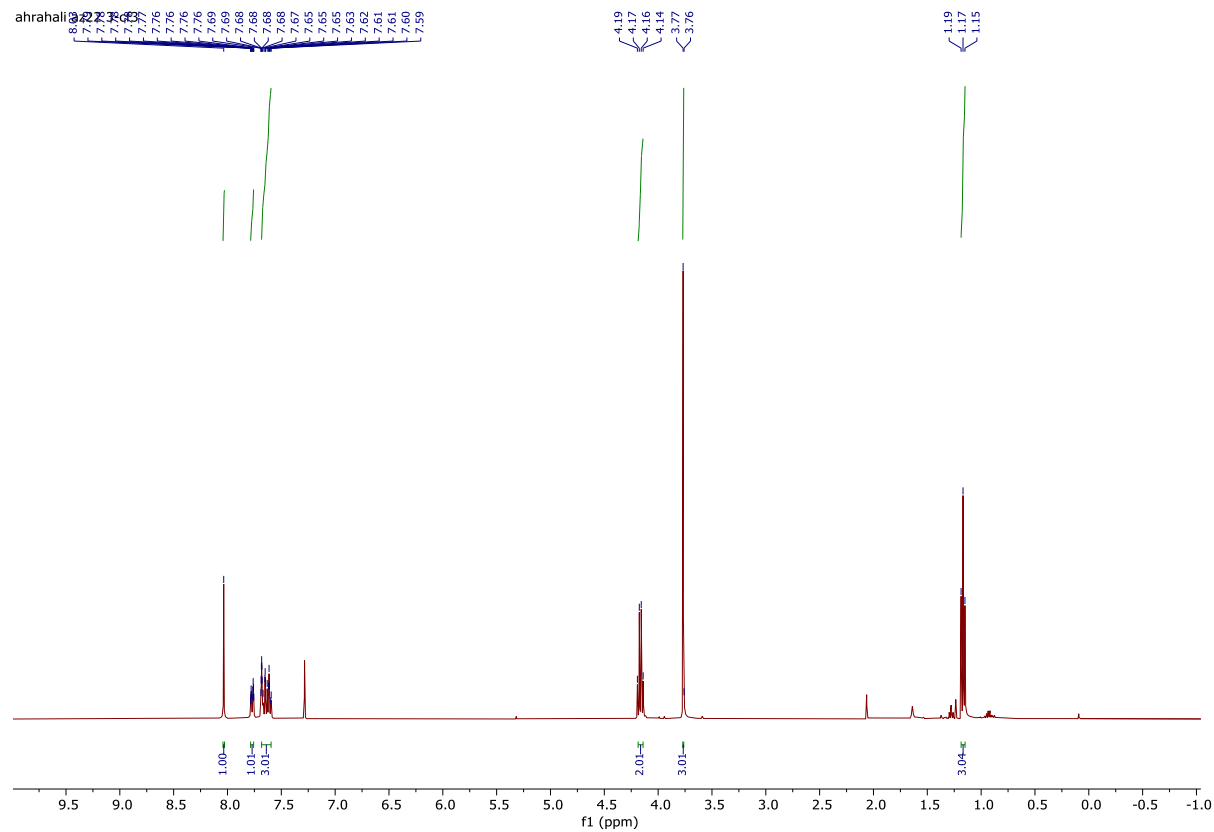


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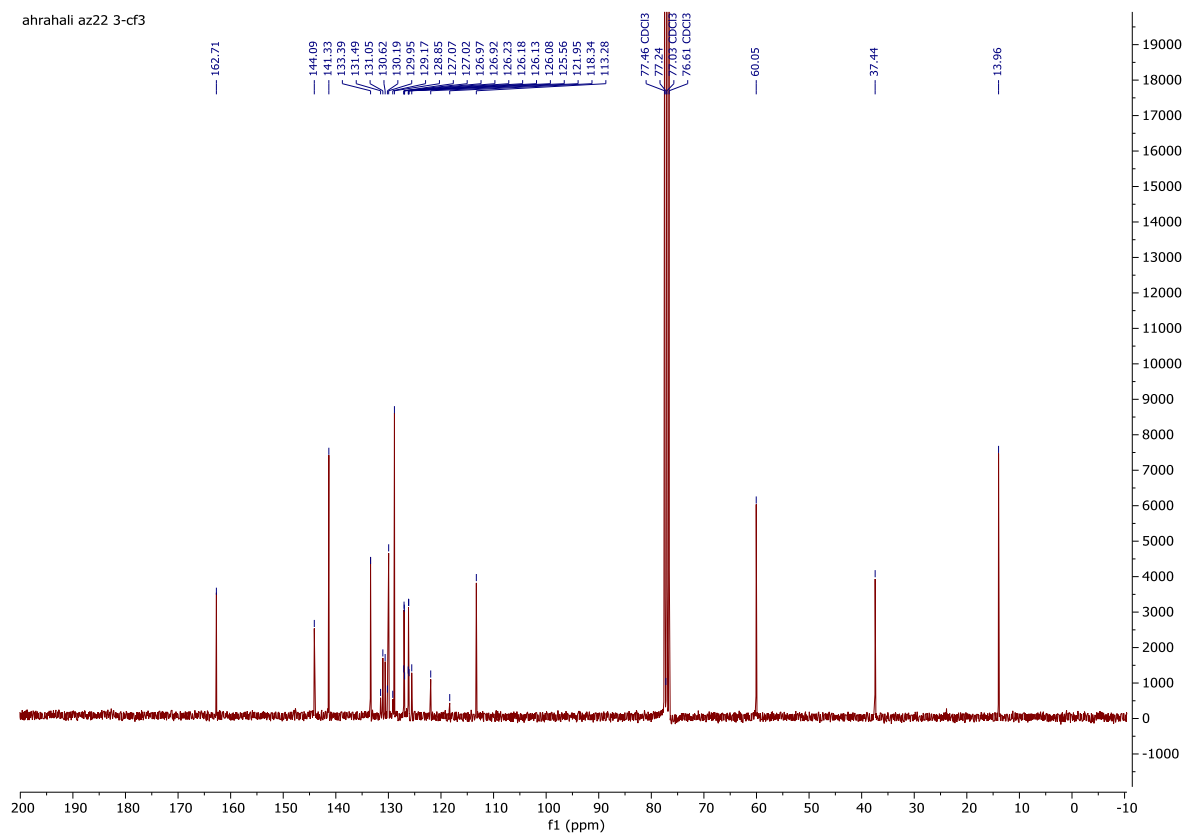
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66-69



Ethyl 1-methyl-5-(3-(trifluoromethyl)phenyl)pyrazole-4-carboxylate (14)

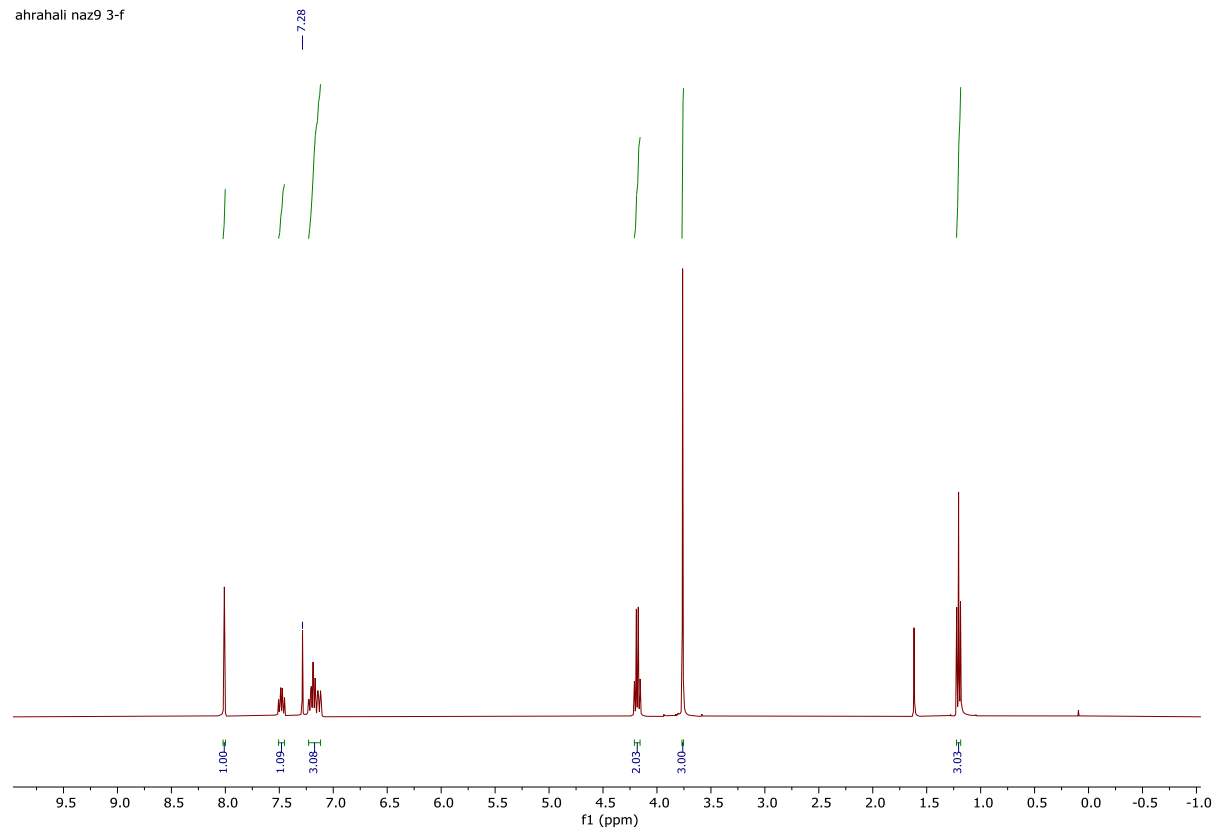


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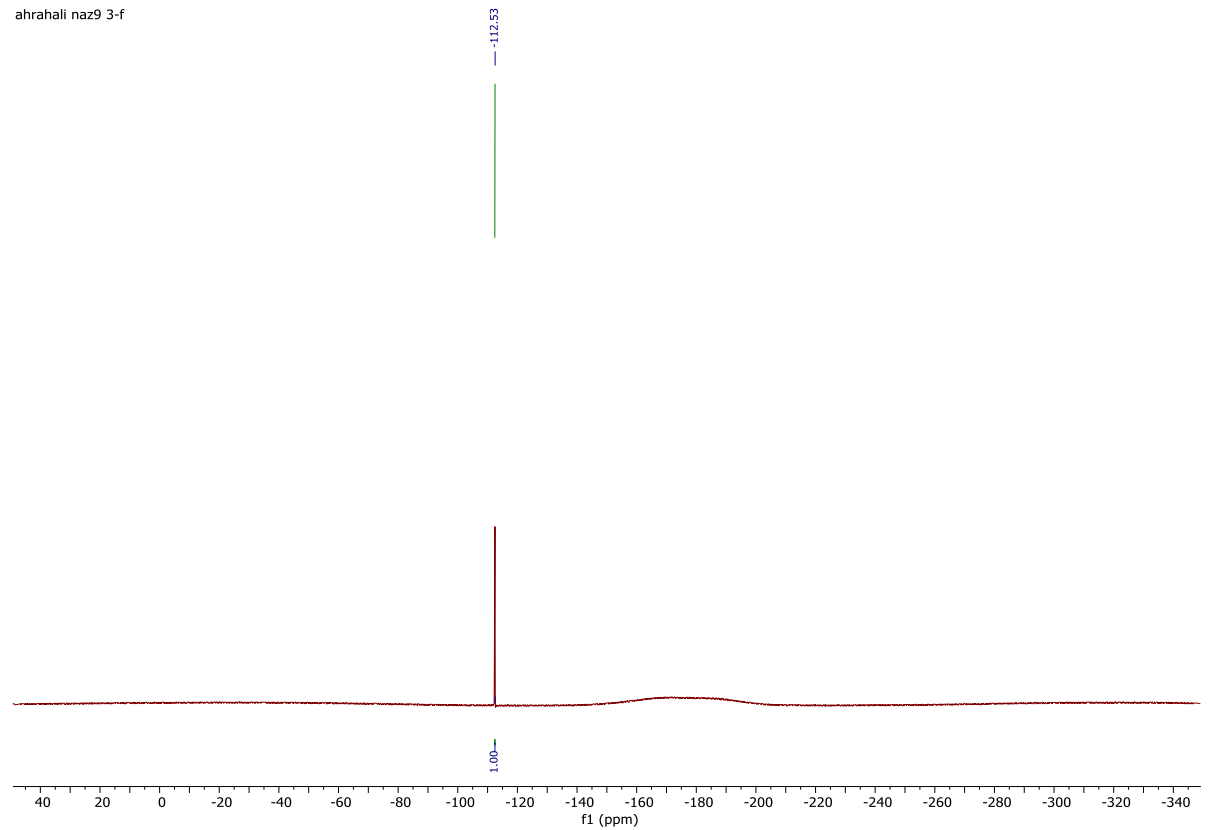


Ethyl 5-(3-fluorophenyl)-1-methylpyrazole-4-carboxylate (15)

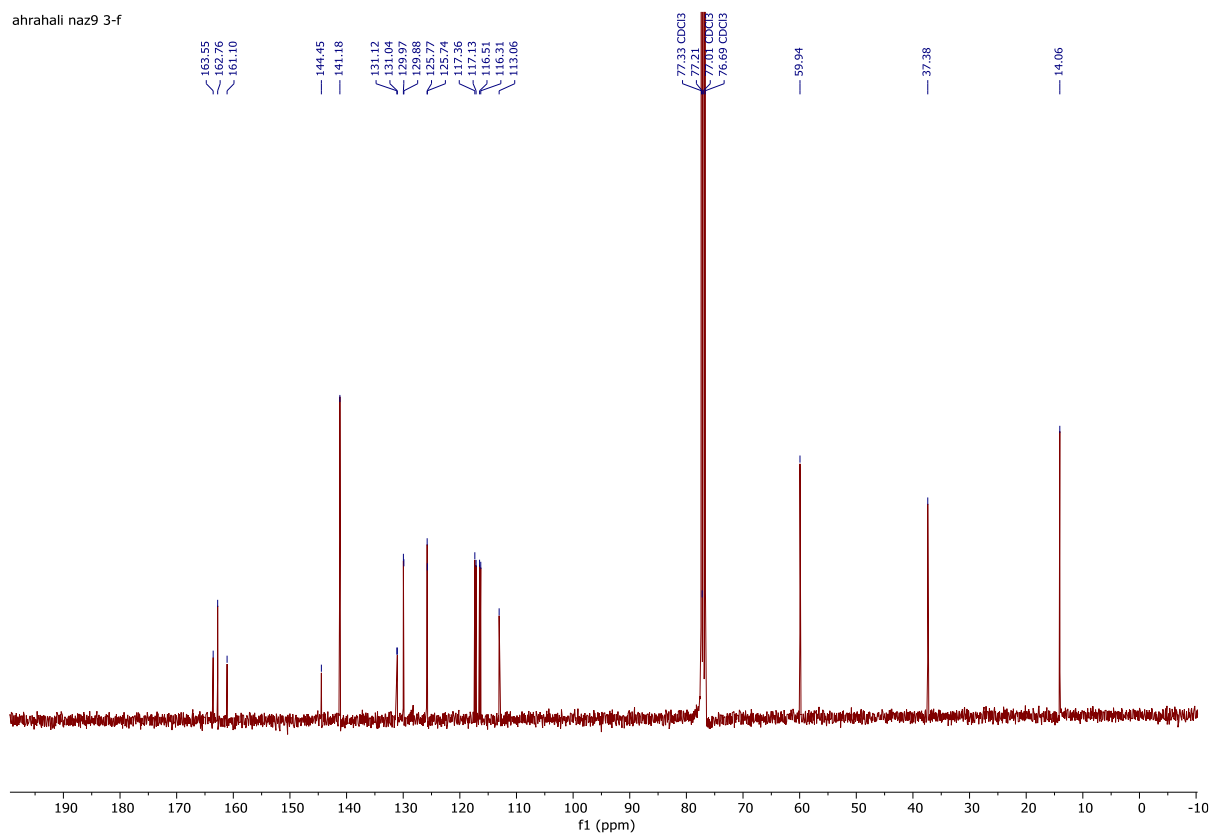
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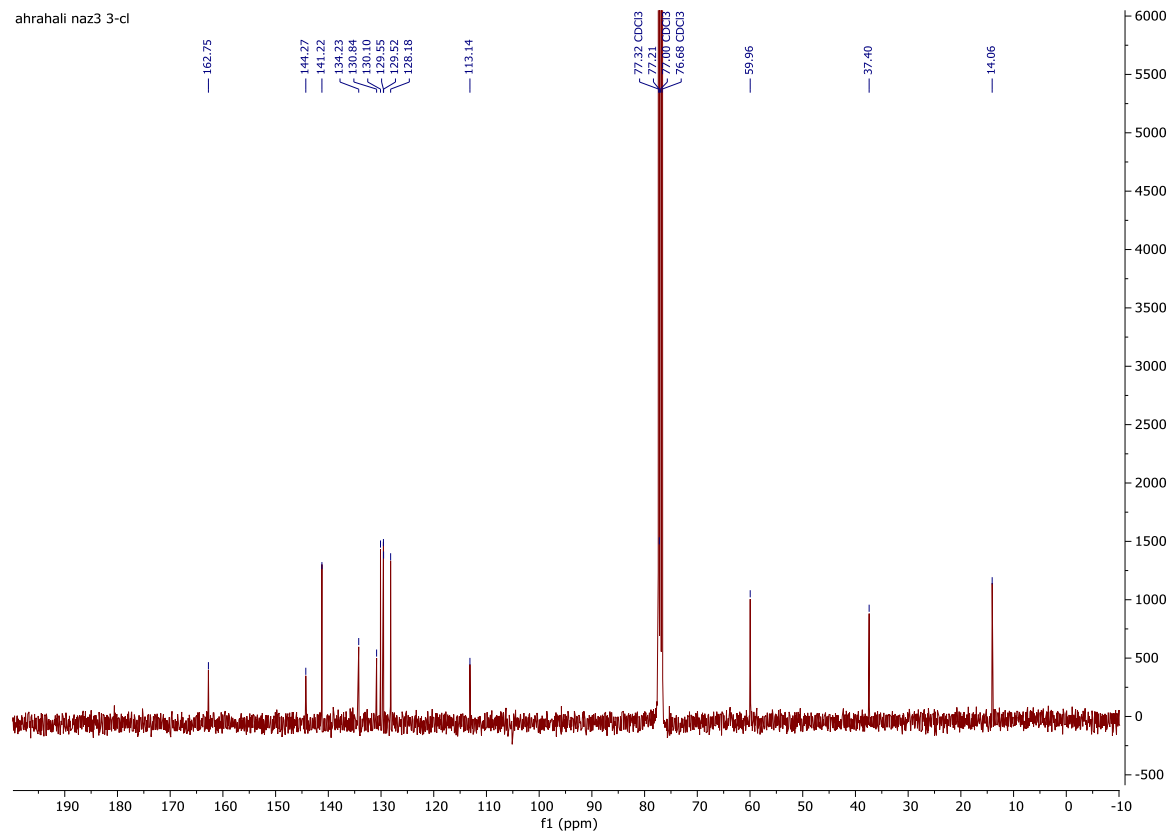
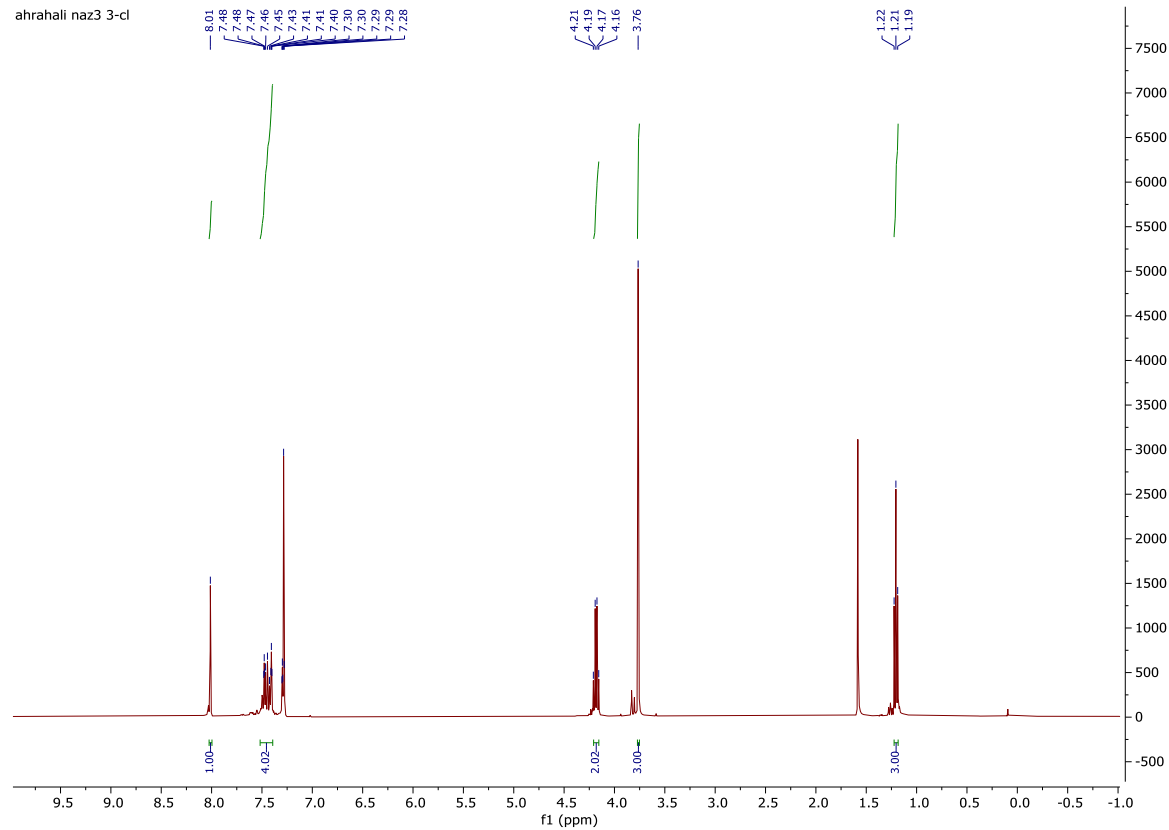
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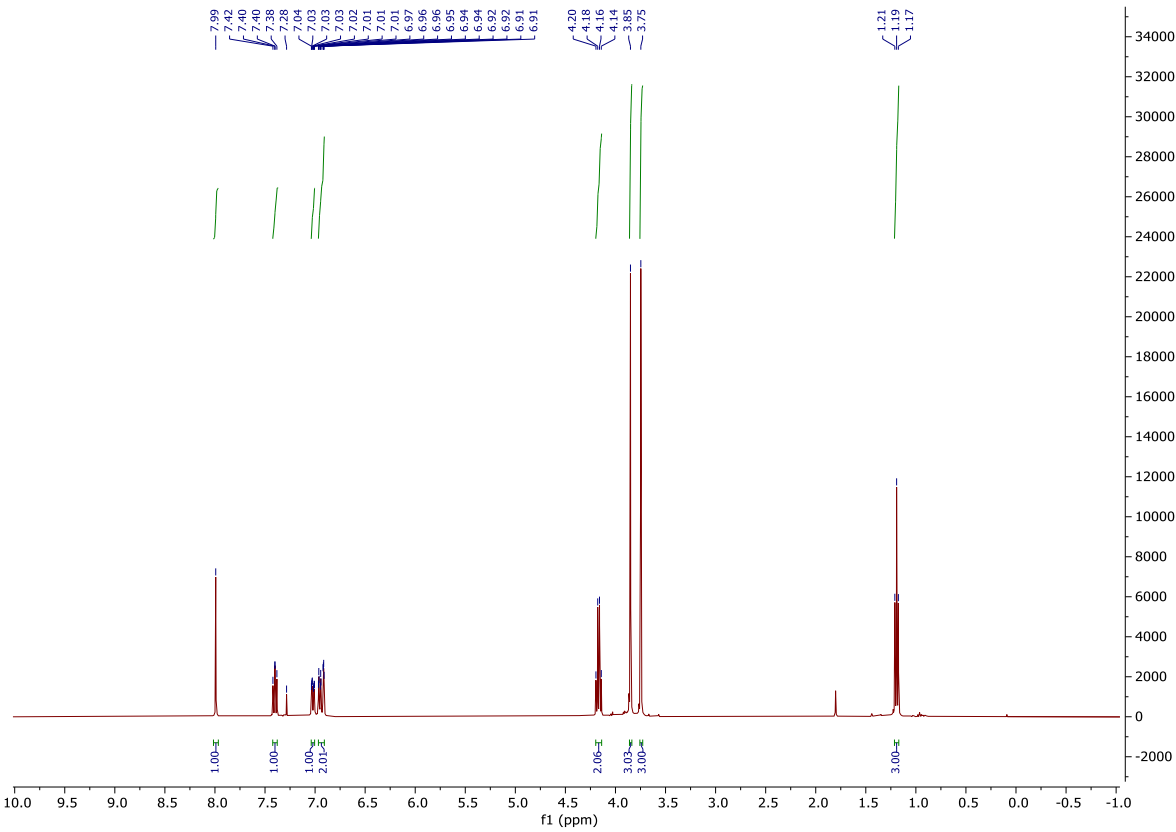
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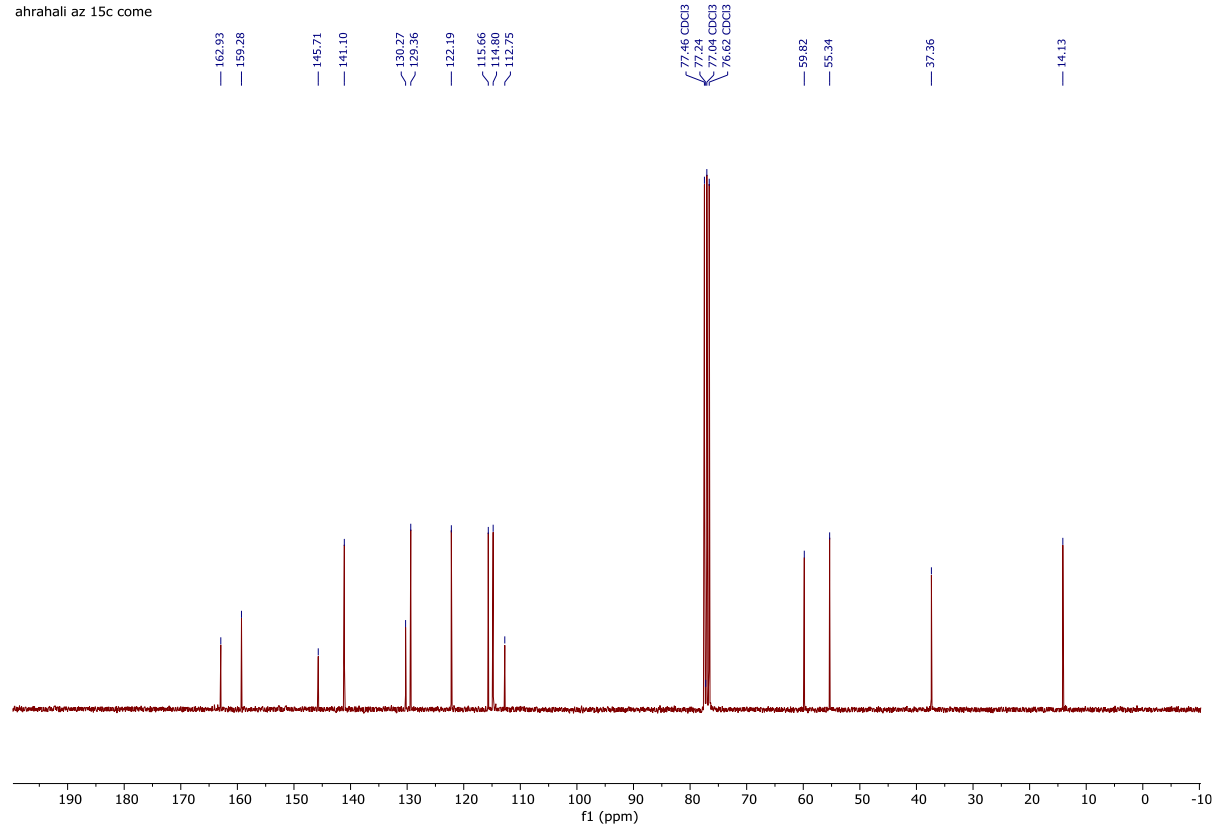
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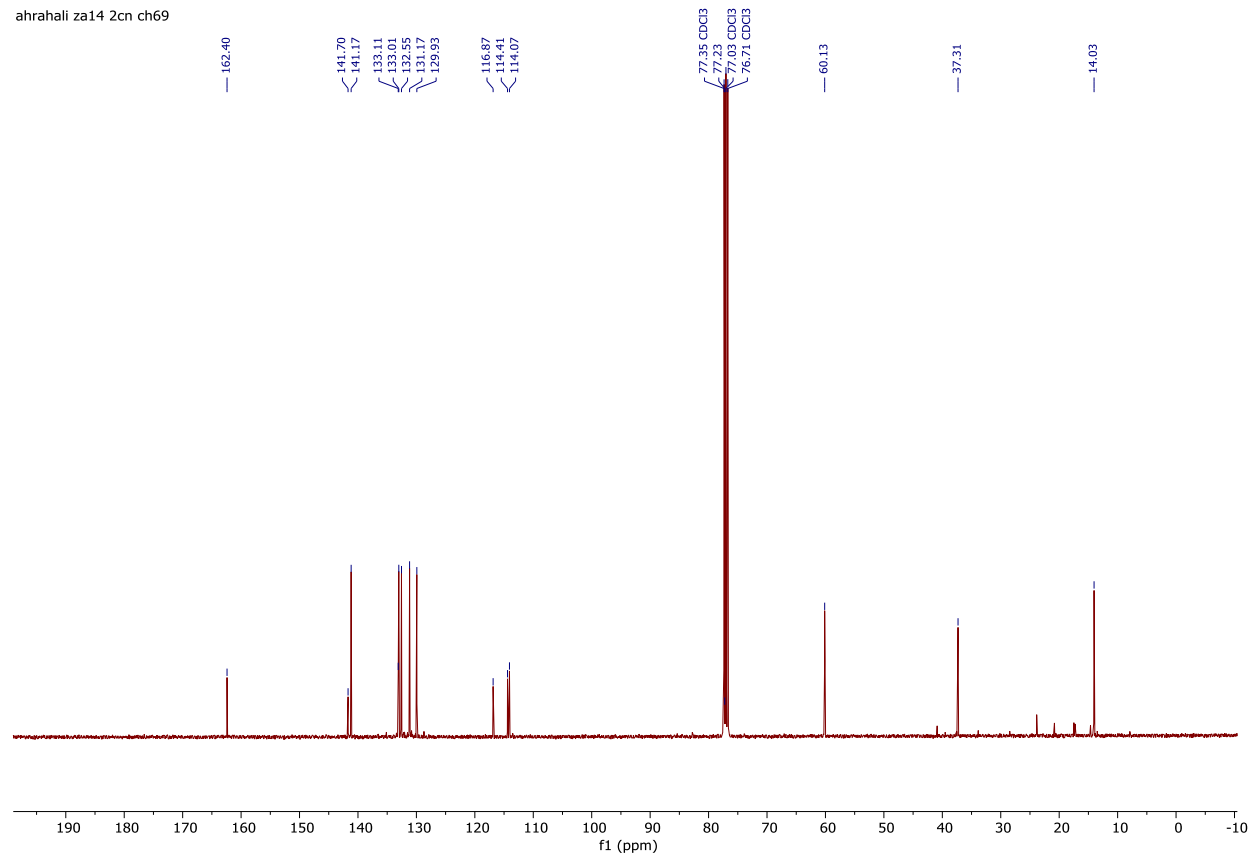
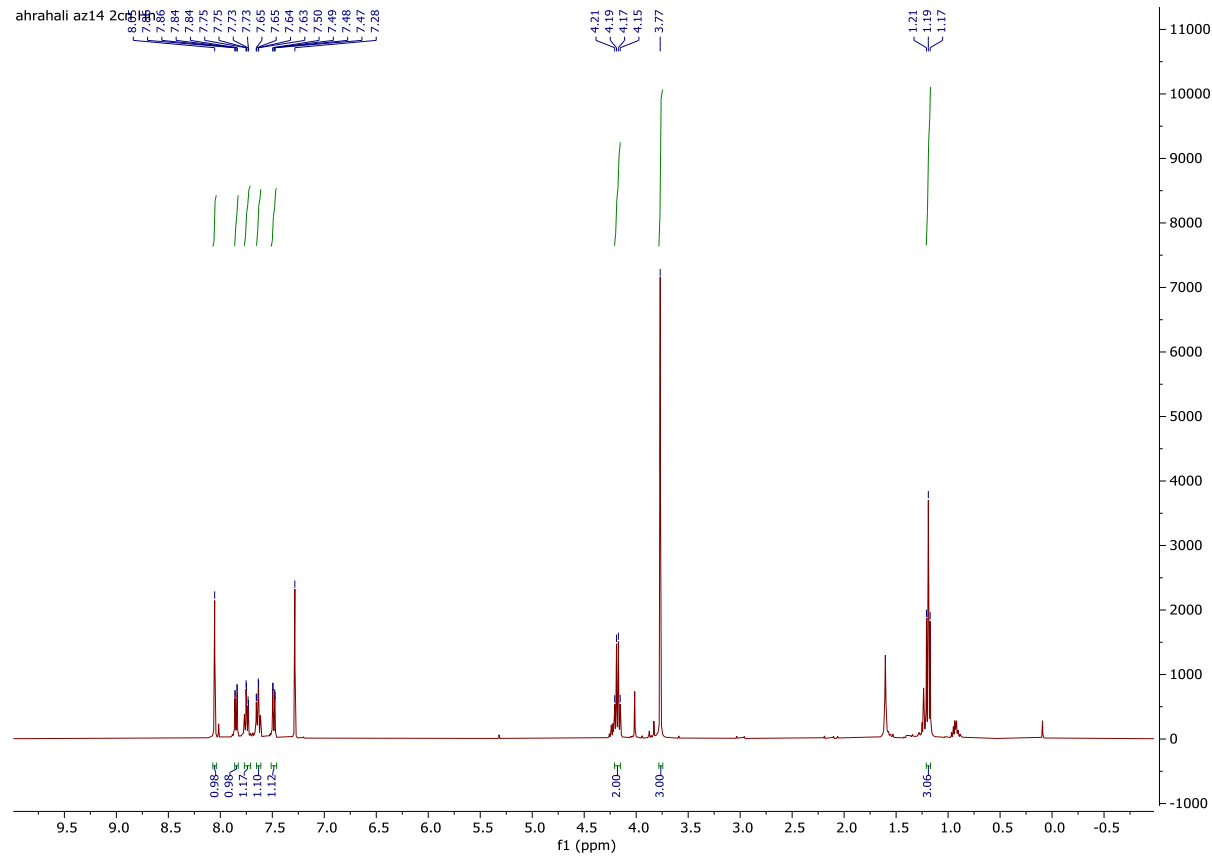
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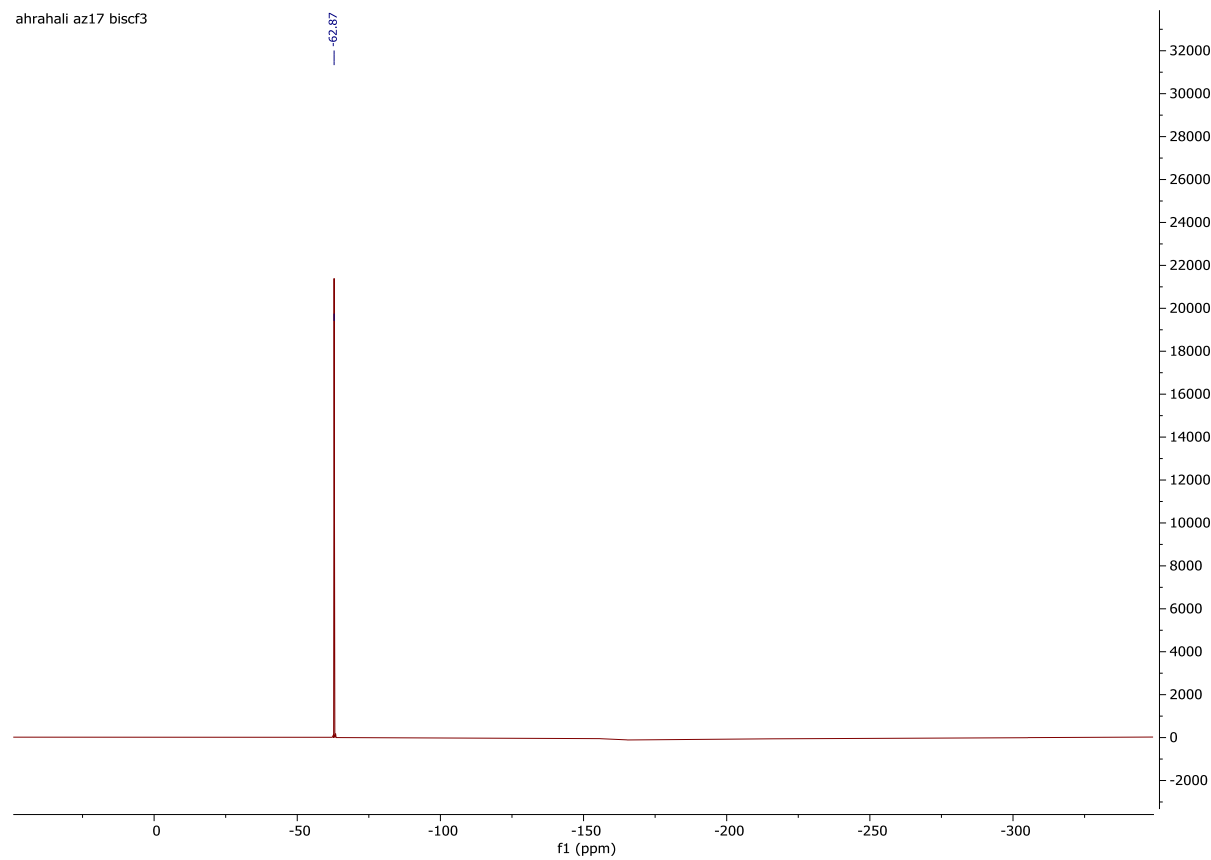
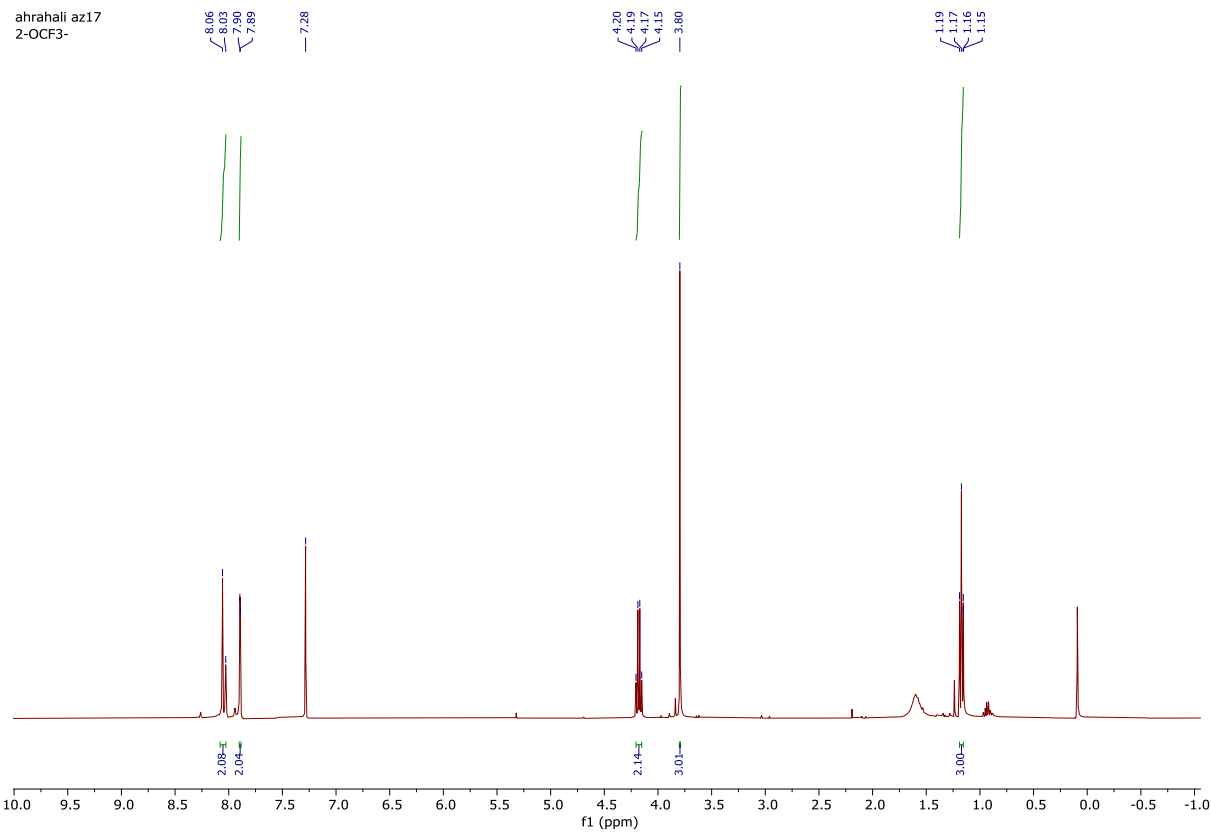
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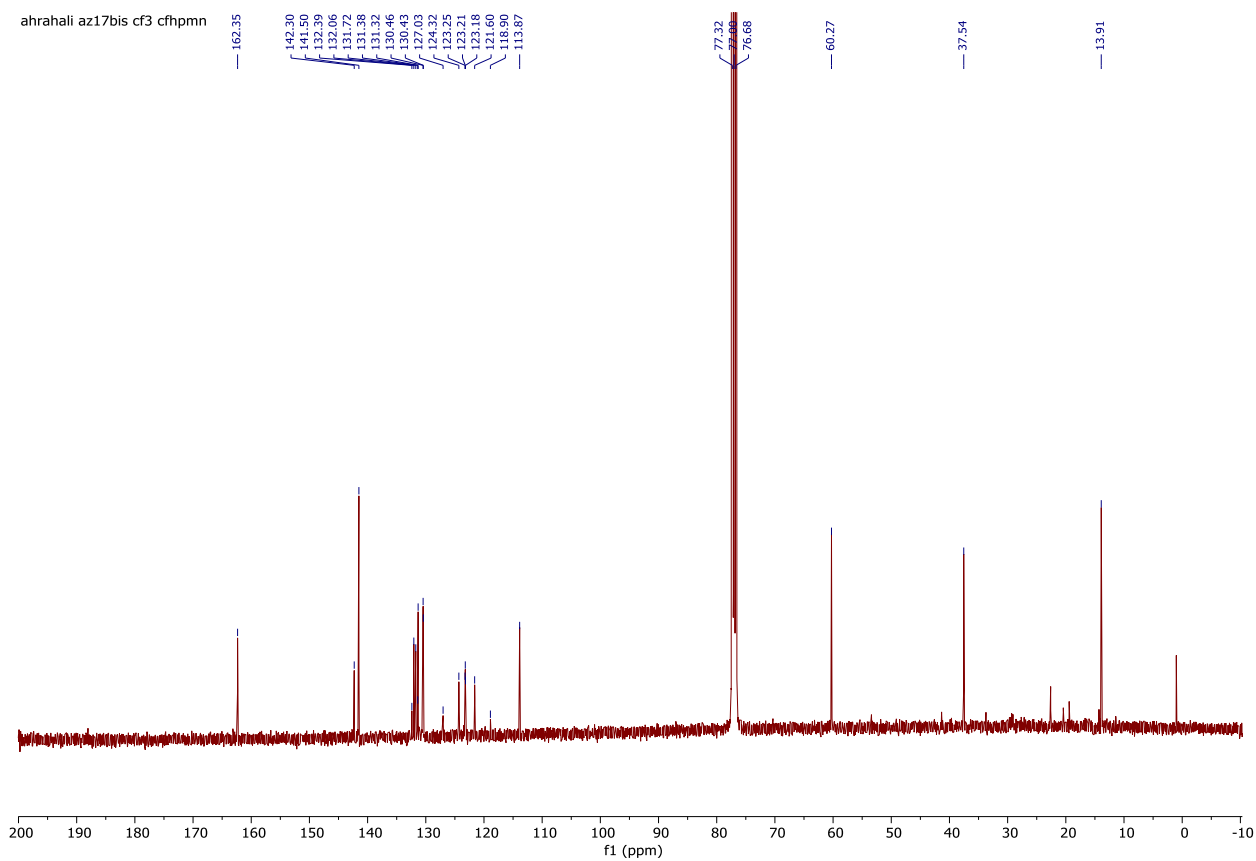
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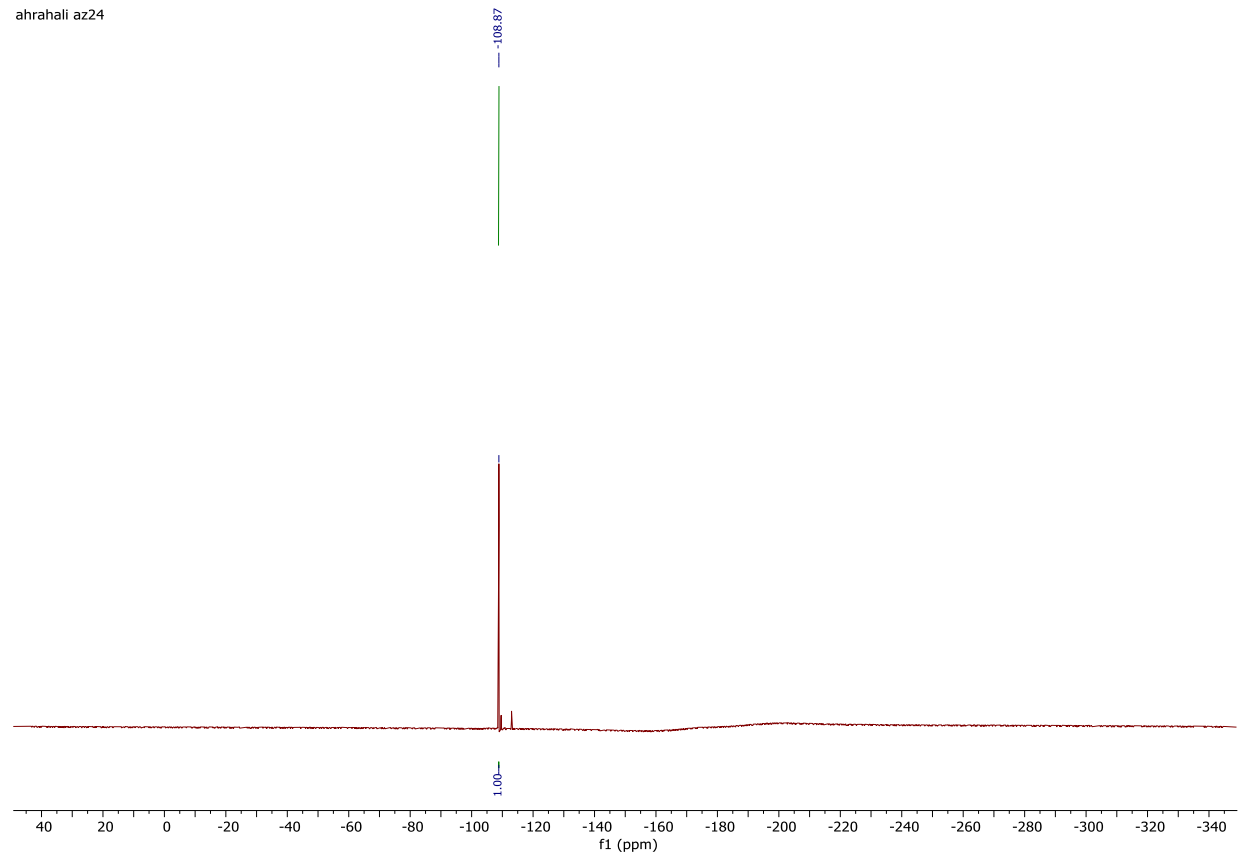
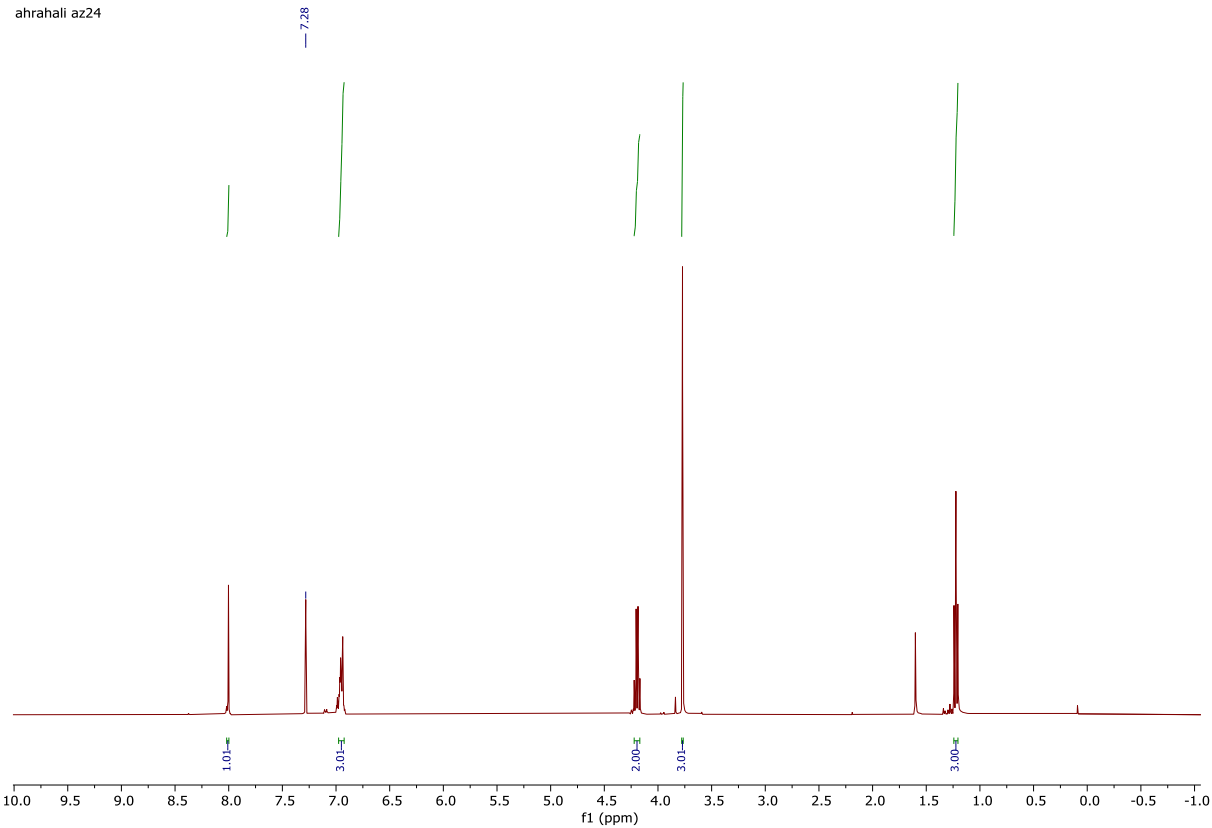
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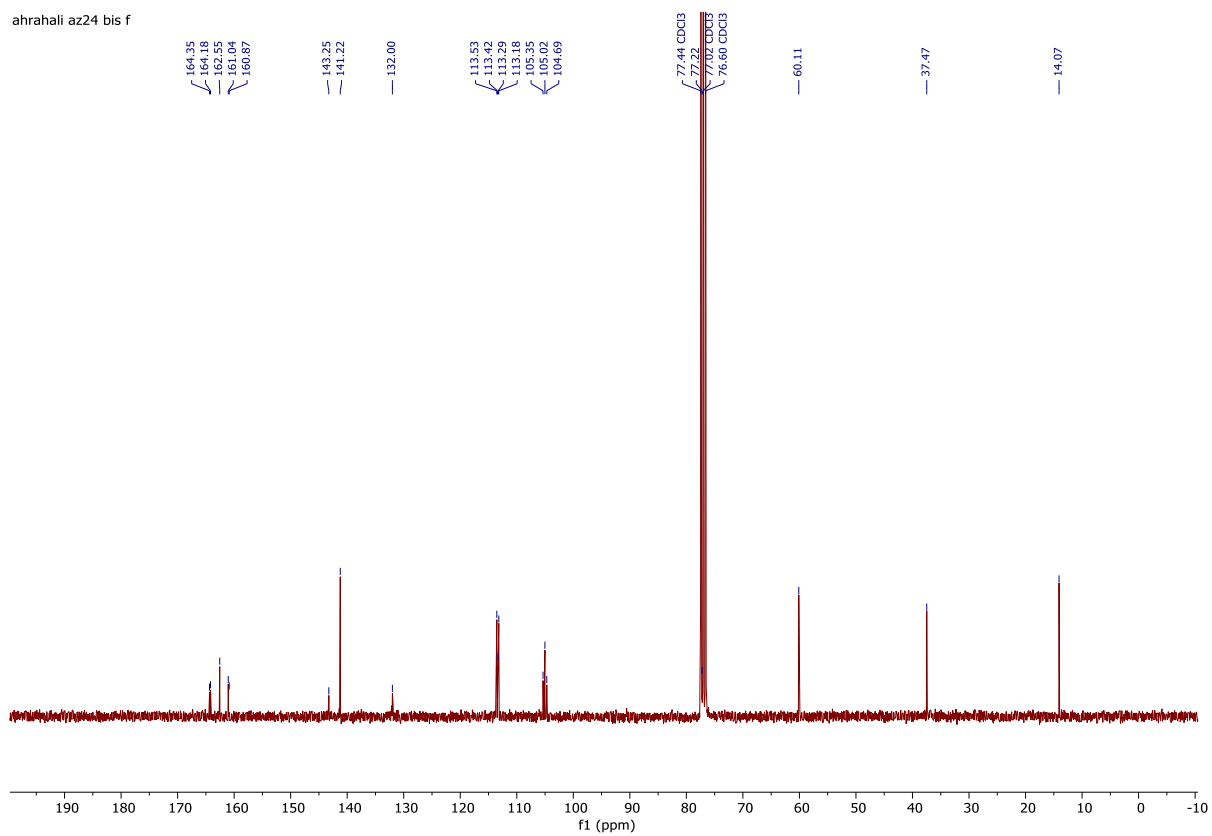
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Ethyl 5-(3,5-difluorophenyl)-1-methylpyrazole-4-carboxylate (20)

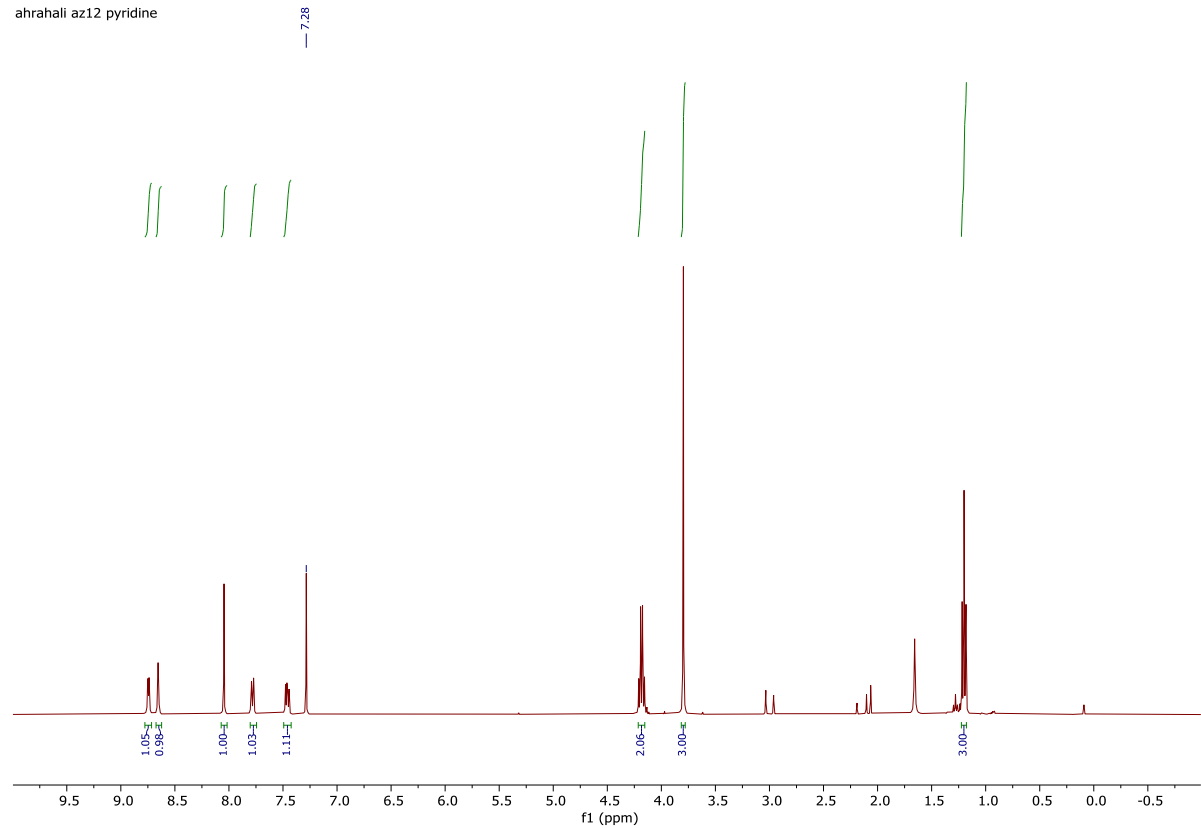


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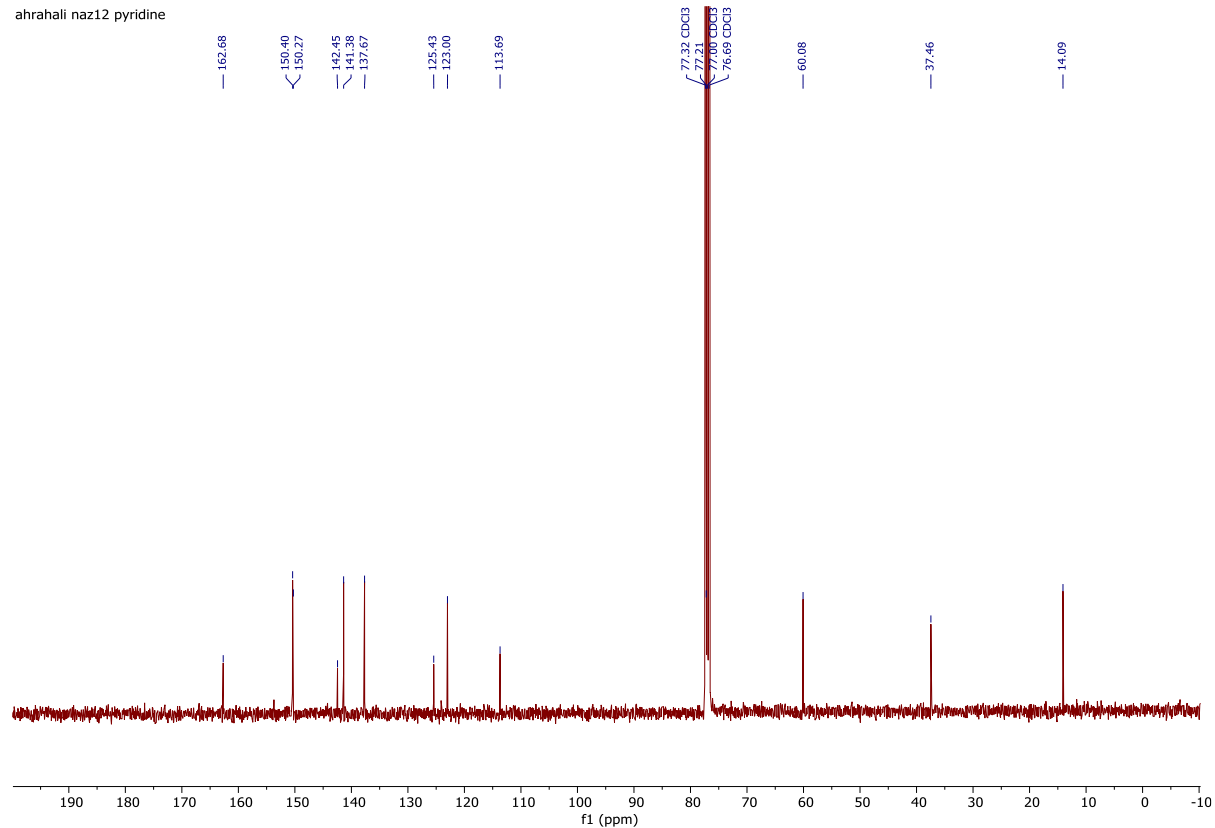


Ethyl 1-methyl-5-(pyridin-3-yl)pyrazole-4-carboxylate (21)

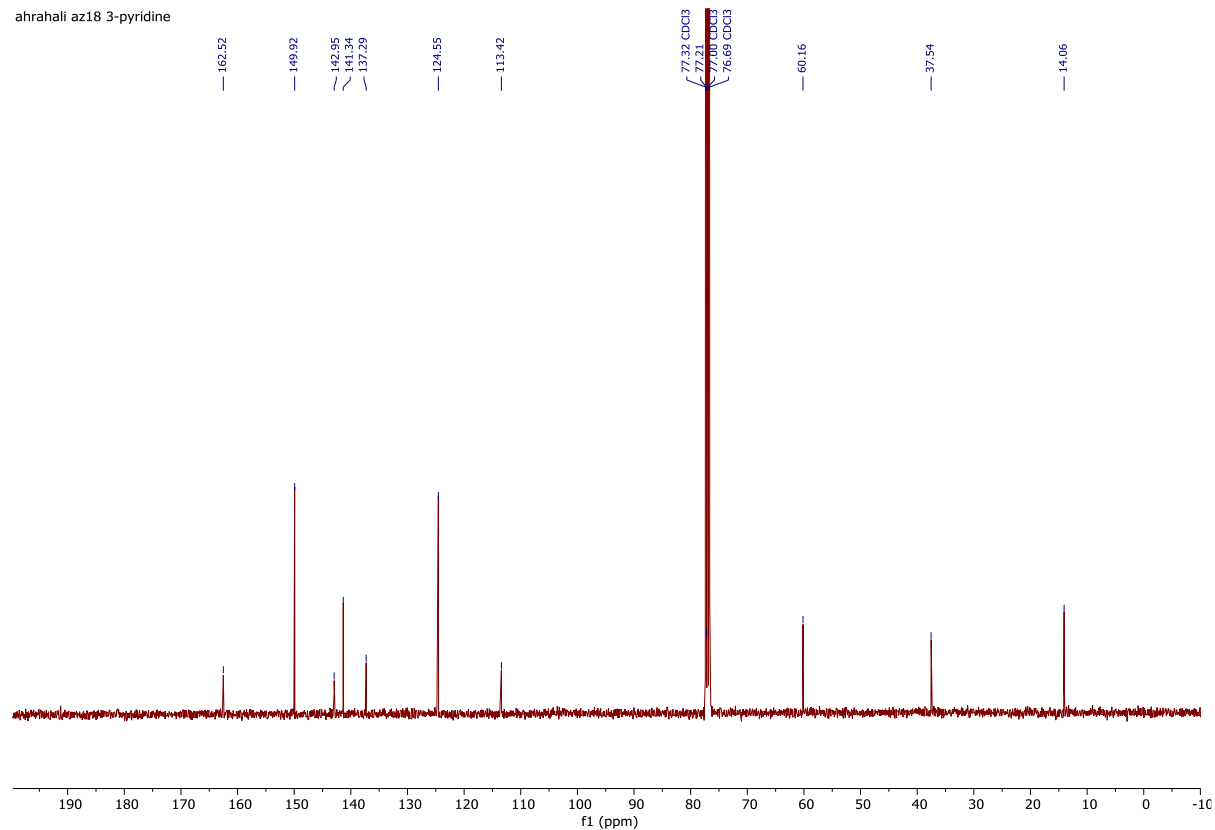
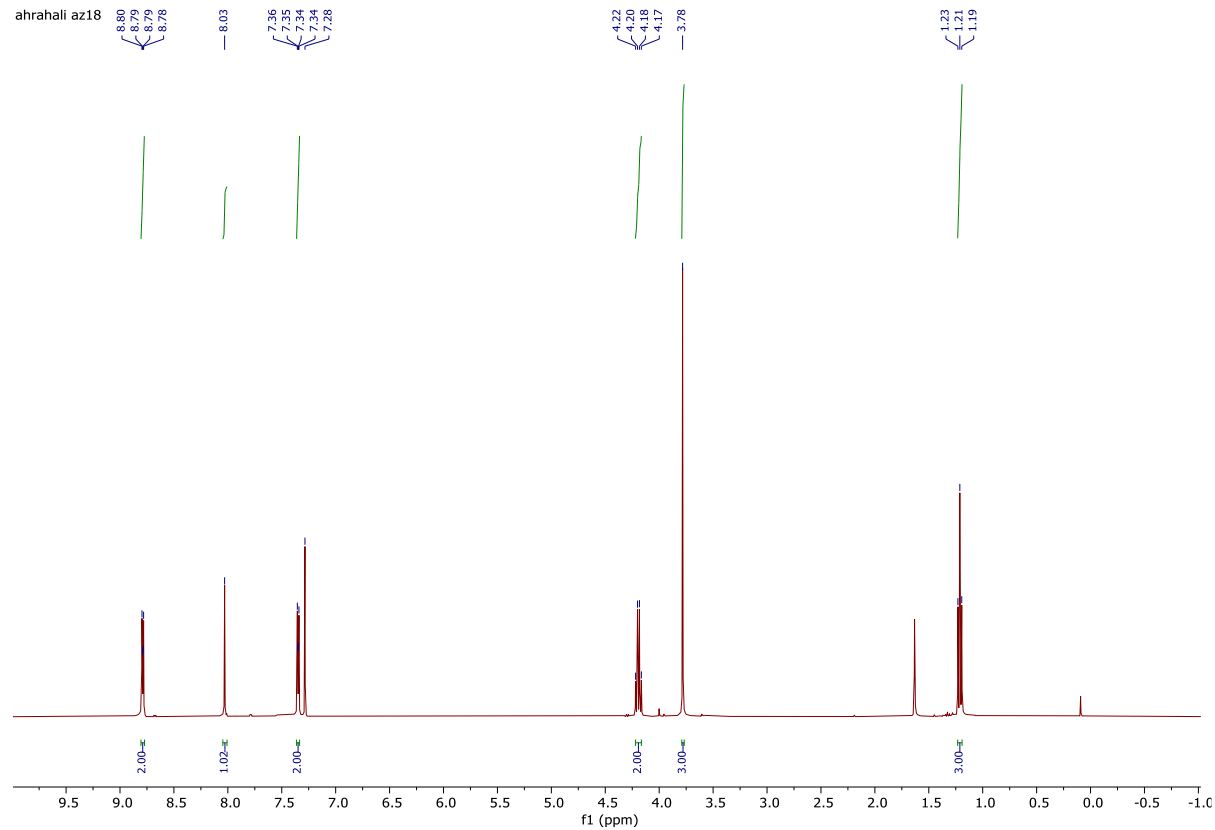
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ahrahali naz12 pyridine

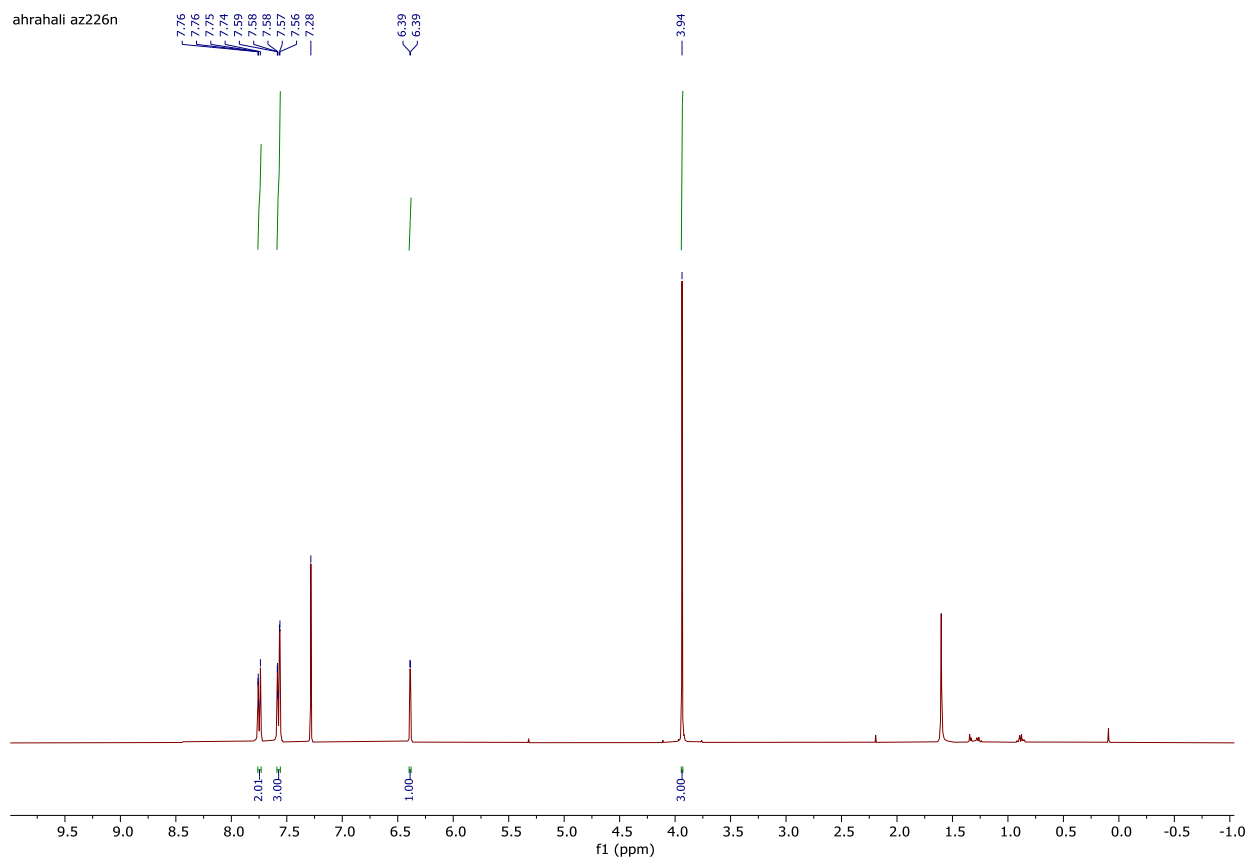


Ethyl 1-methyl-5-(pyridin-4-yl)pyrazole-4-carboxylate (22)



1-Methyl-5-(4-(trifluoromethyl)phenyl)pyrazole (23)

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