

Thiazolidin-4-ones as potential antimicrobial agents: Experimental and in silico evaluation

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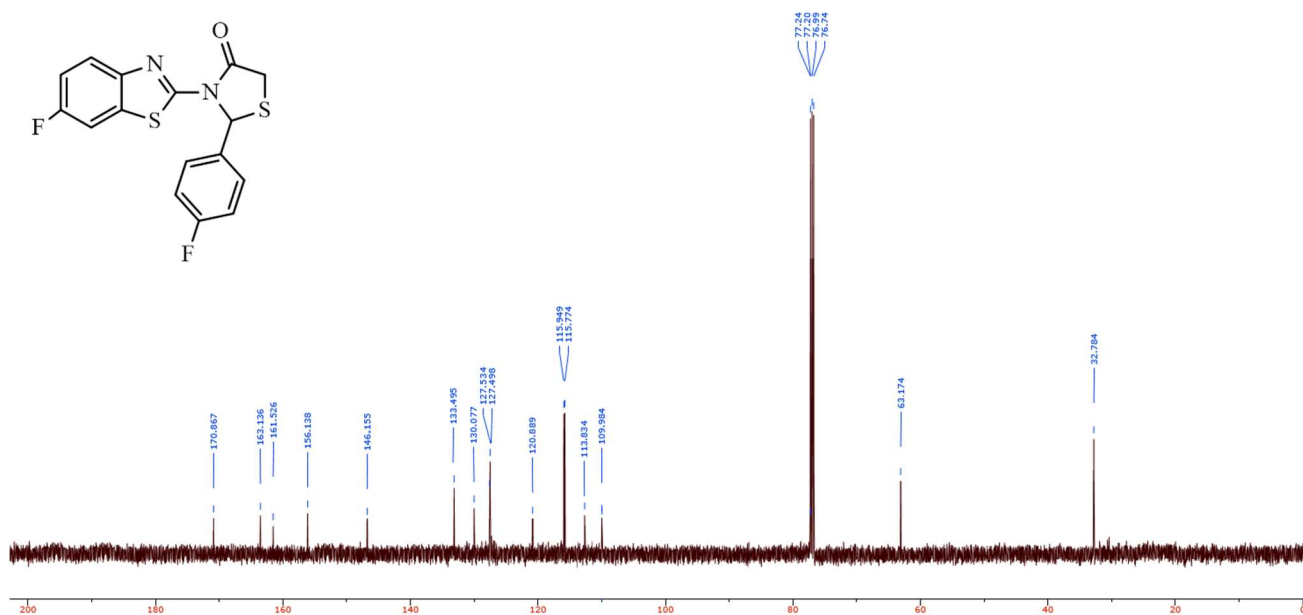
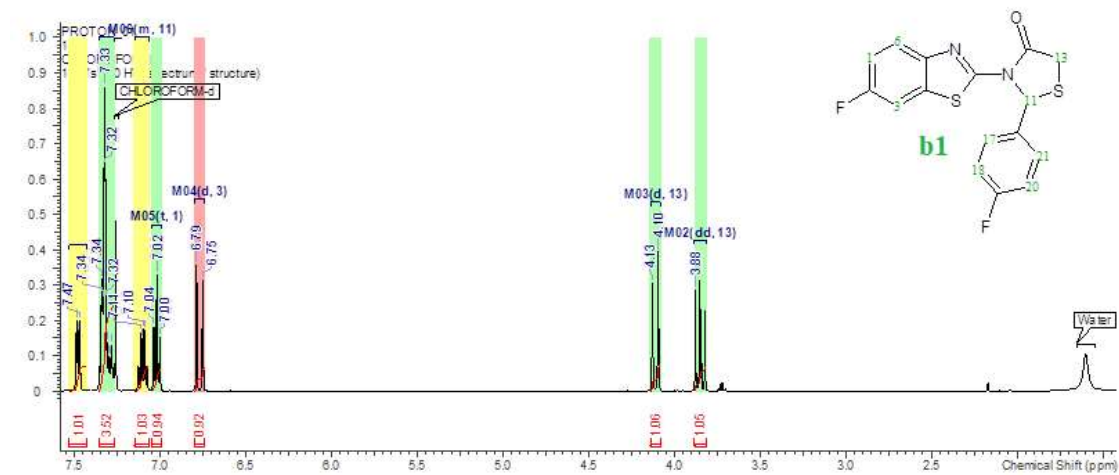
* Correspondence: geronik@pharm.auth.gr; Tel.: +302301997616

General procedure for the synthesis of thiazolidinones by conventional method

The appropriate heteroaromatic amine (1.0 mmol) and substituted benzaldehyde (1.2 mmol) were stirred in dry toluene under reflux followed by addition of mercatoacetic acid (2.0 mmol). The reaction mixture was refluxed for 18–32 hours and then concentrated to dryness under reduce pressure. The residue was diluted in ethyl acetate and the organic layer was washed with 5% aq citric acid, water and 5% aq sodium hydrogen carbonate. The organic layer was dried over sodium sulfate and concentrated under reduced pressure. All the synthesized compounds were characterized by TLC, ¹H-NMR and ¹³C-NMR.

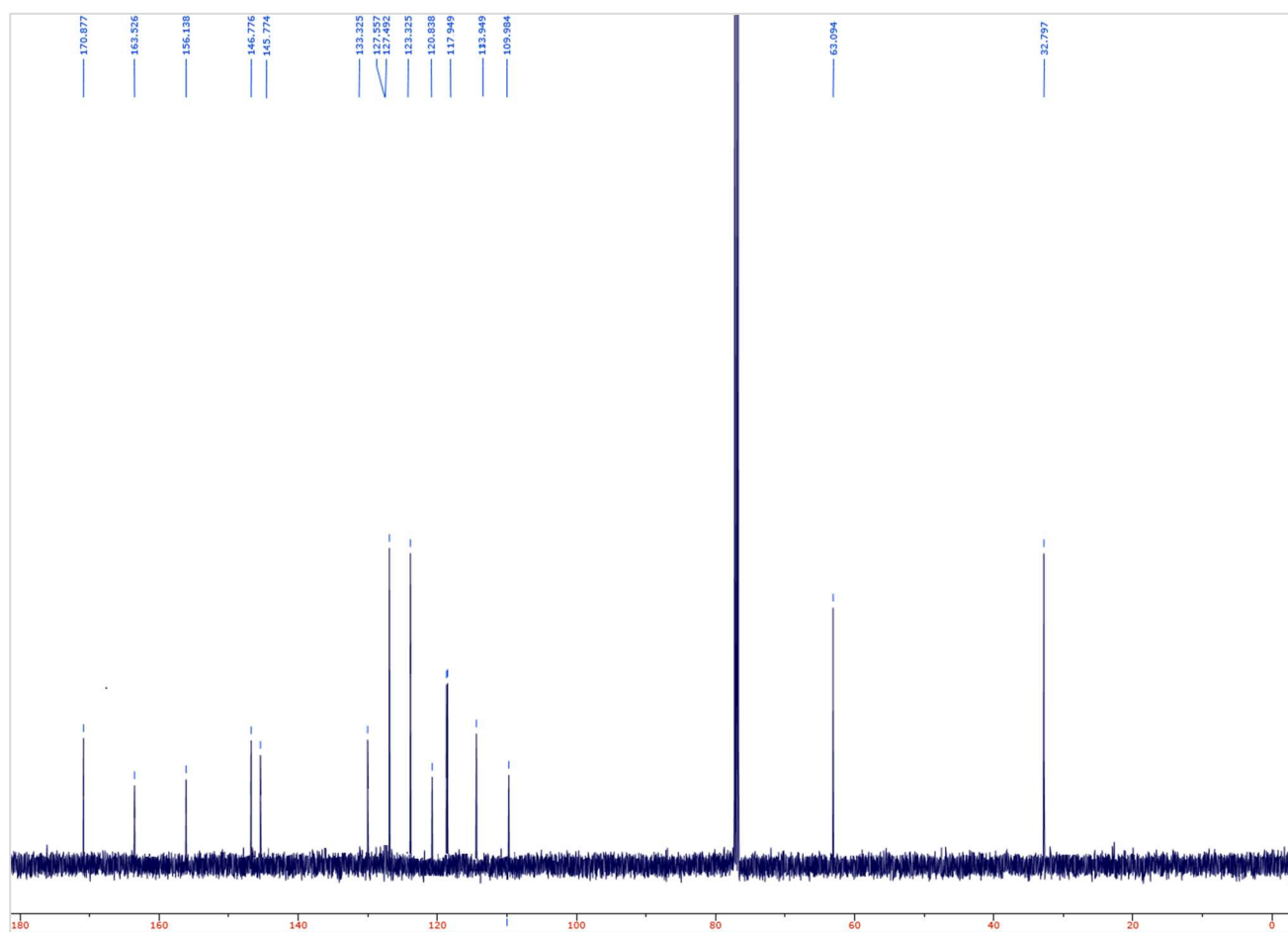
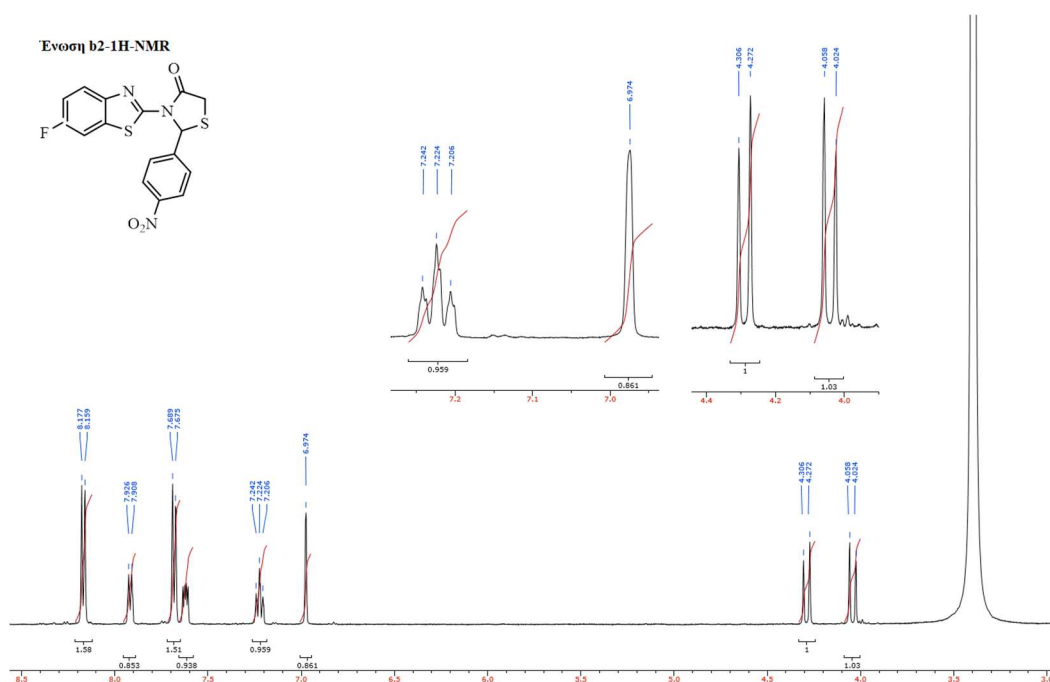
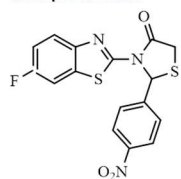
^1H -NMR and ^{13}C -NMR of compounds

Compound 1

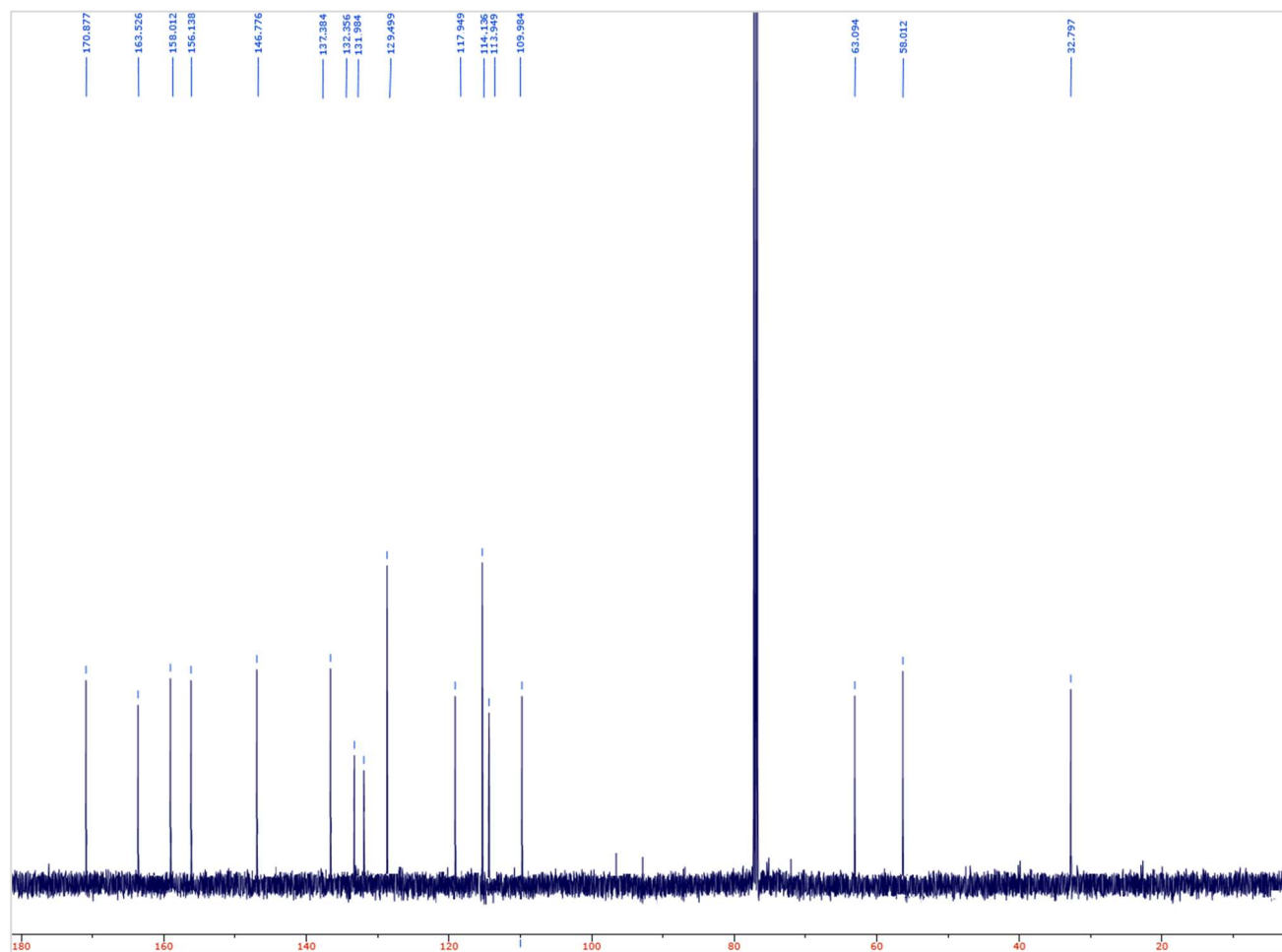
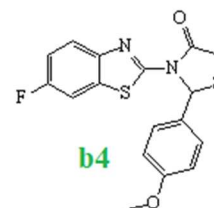
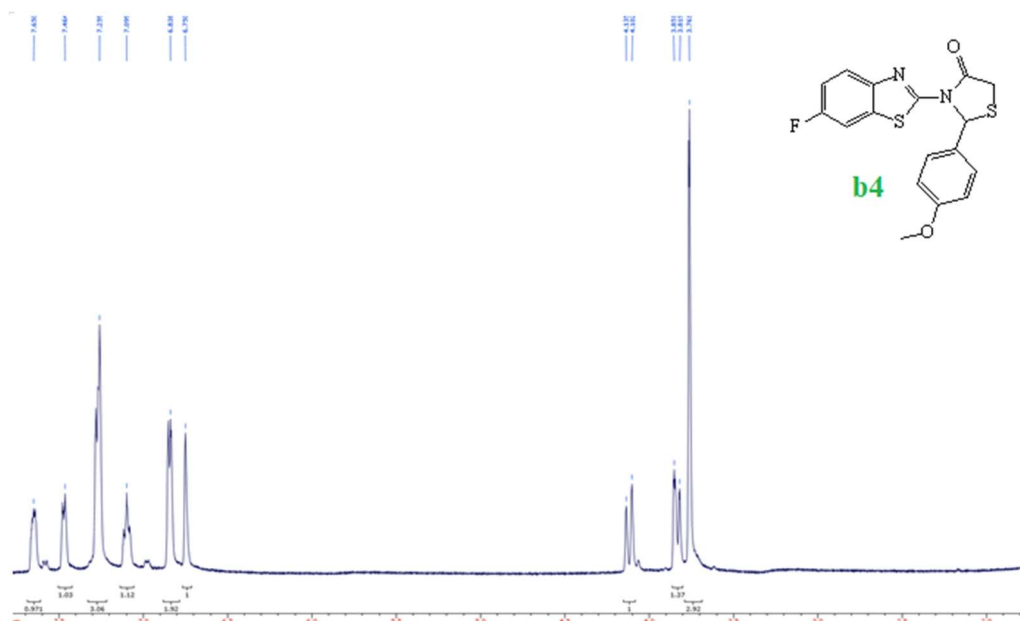


Compound 2

Ένωση b2-1H-NMR

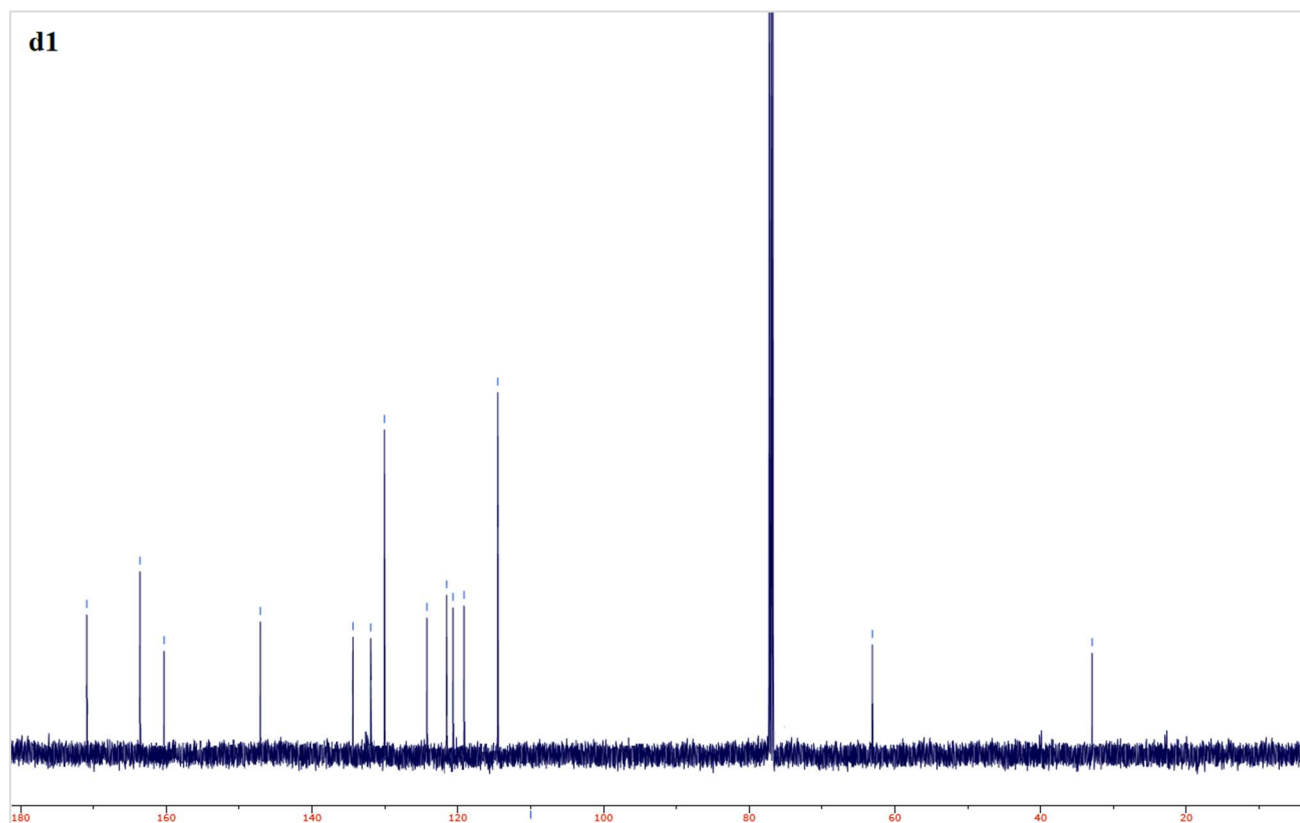
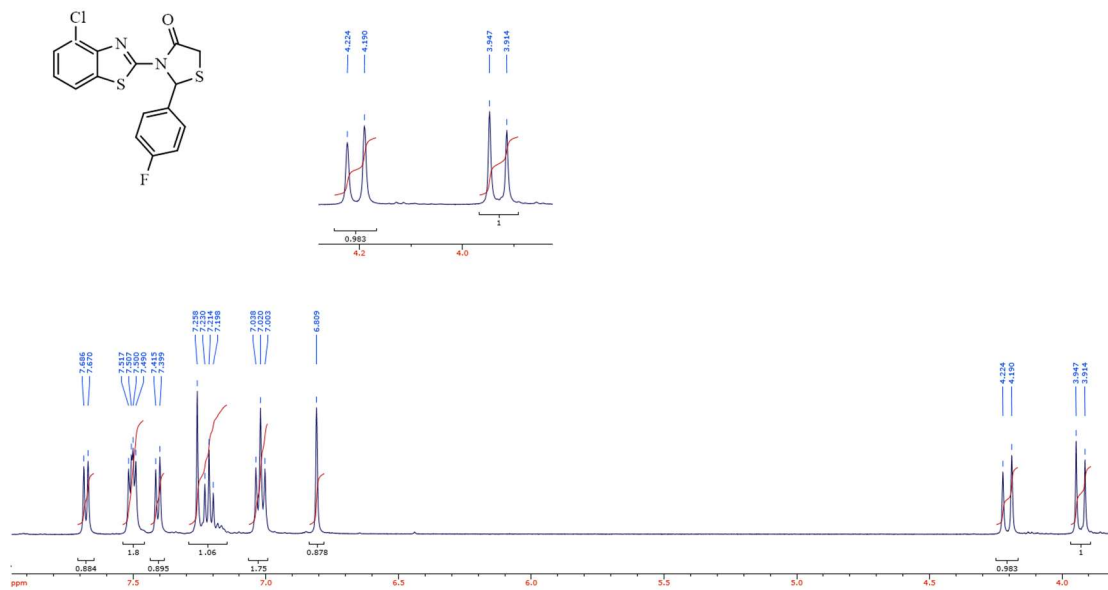


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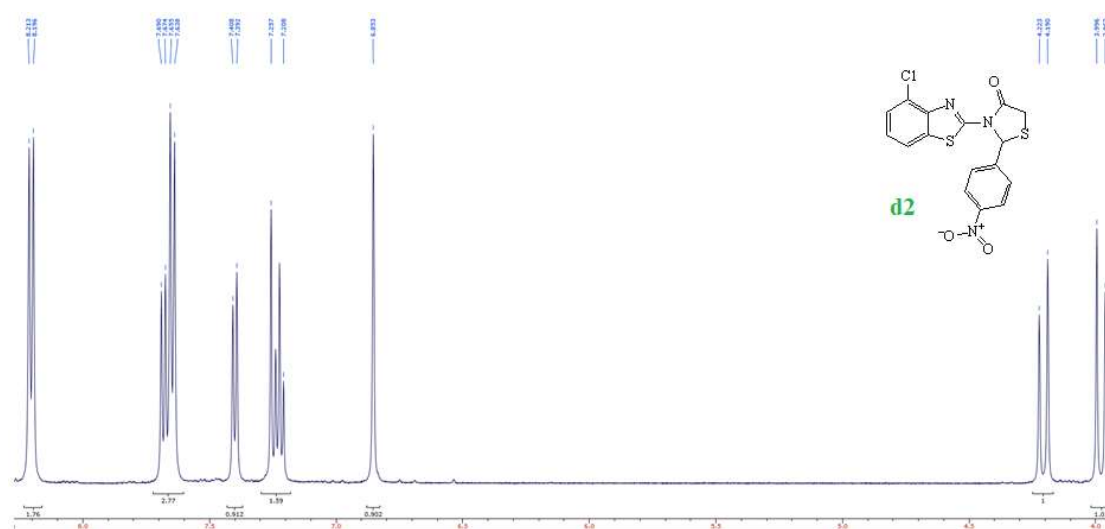


Compound 4

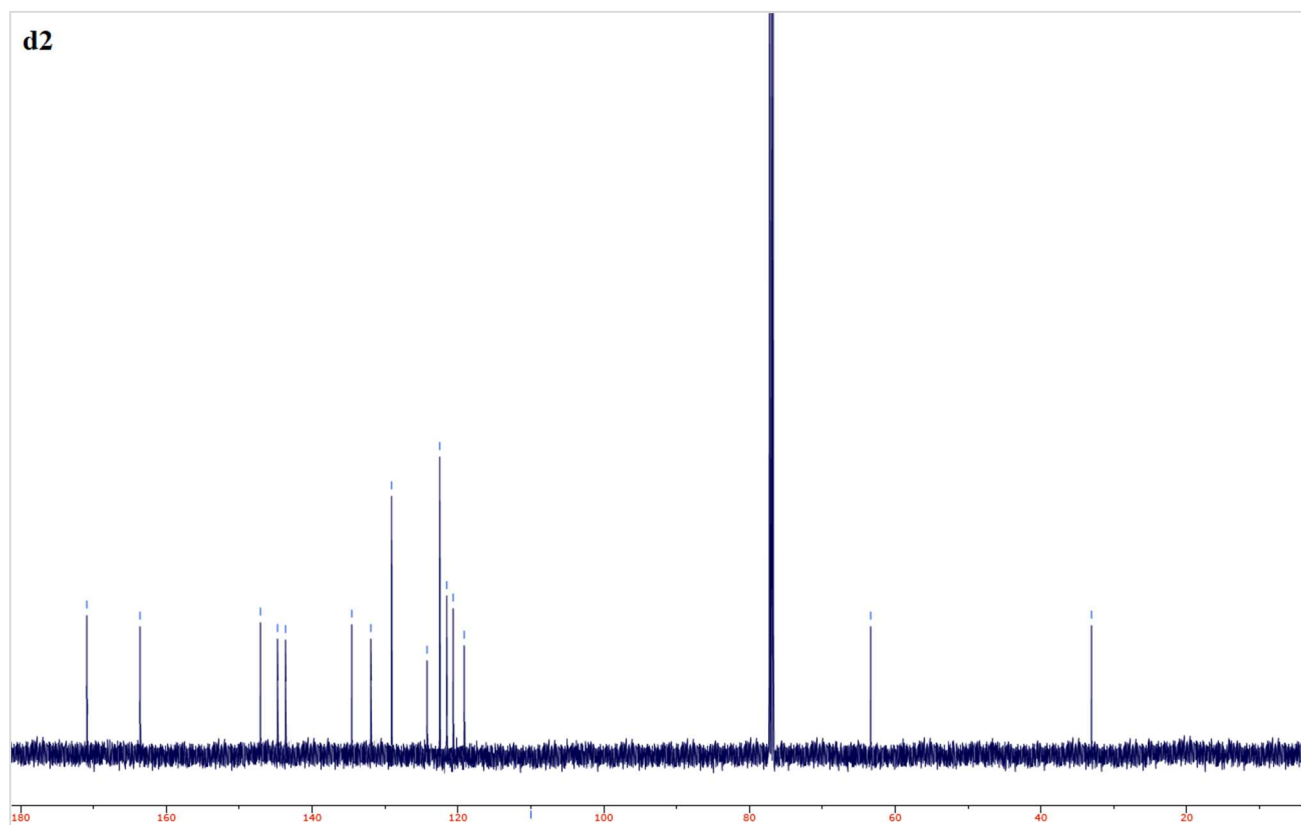
Evosyl d1 1H-NMR



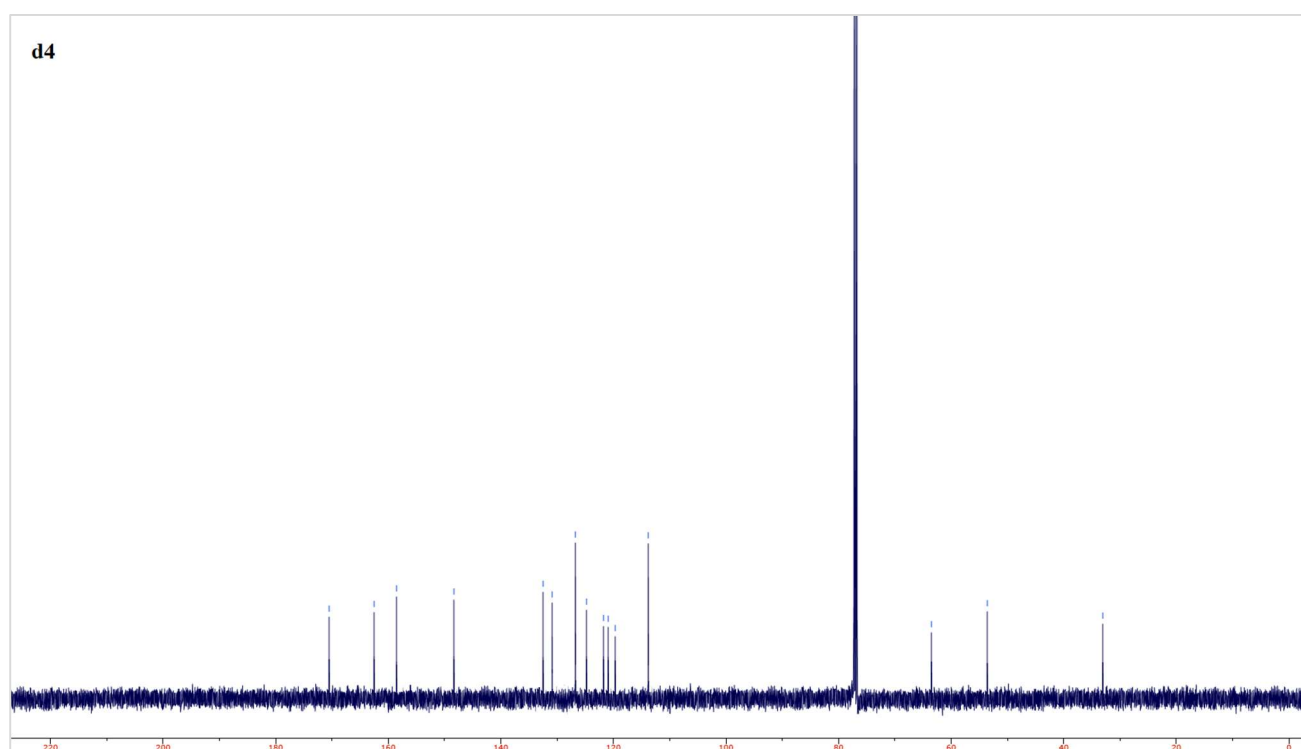
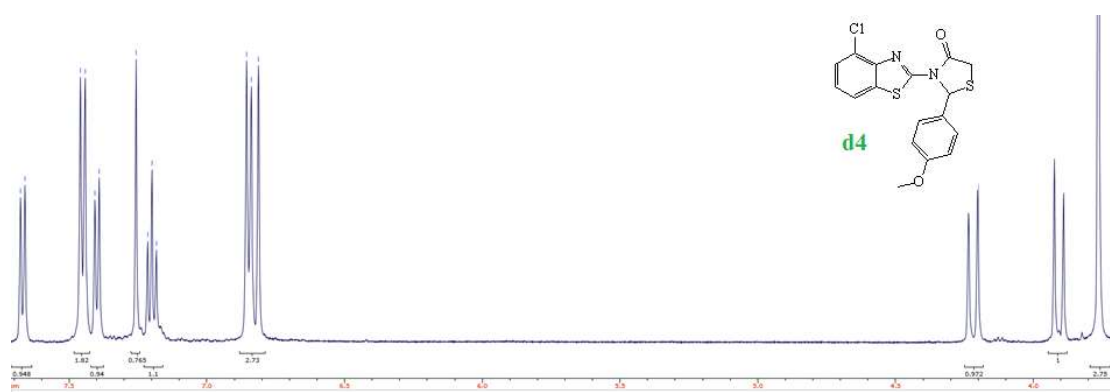
Compound 5



d2

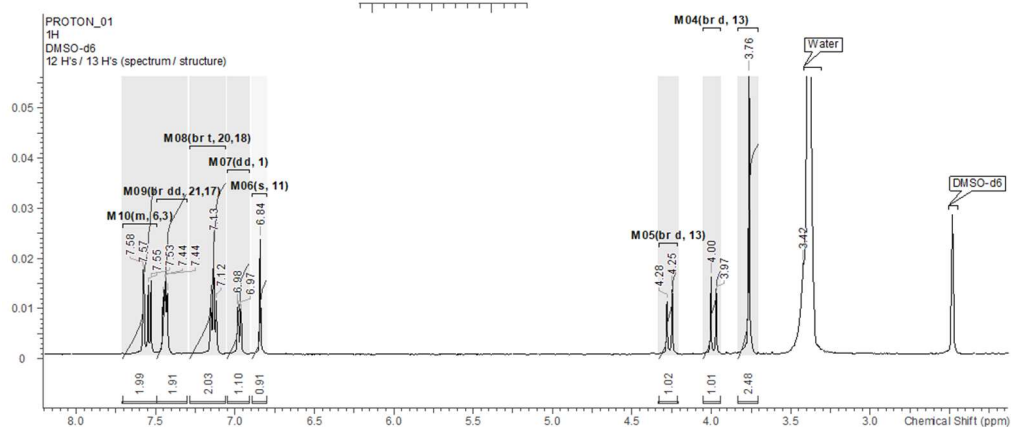
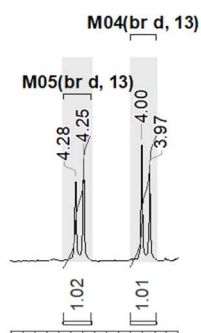
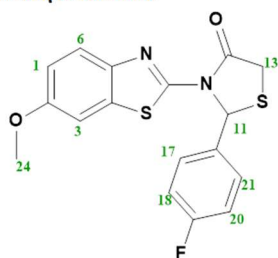


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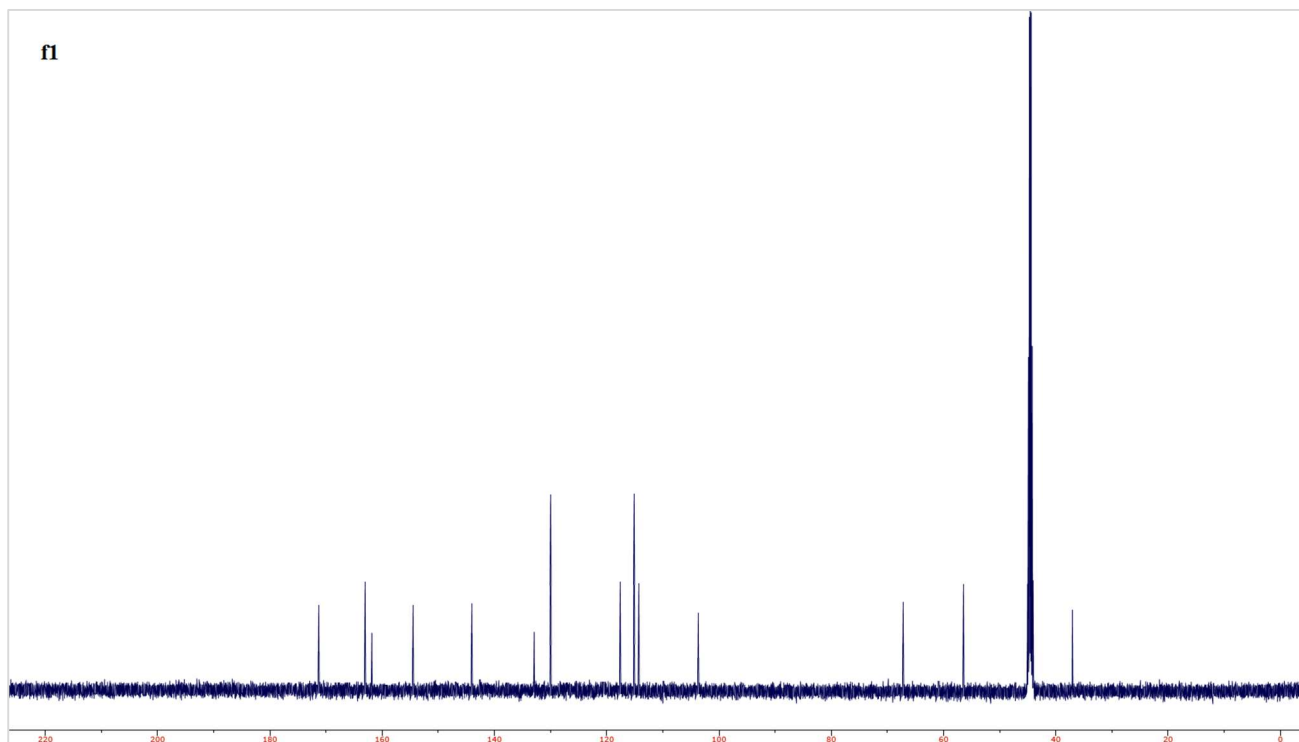


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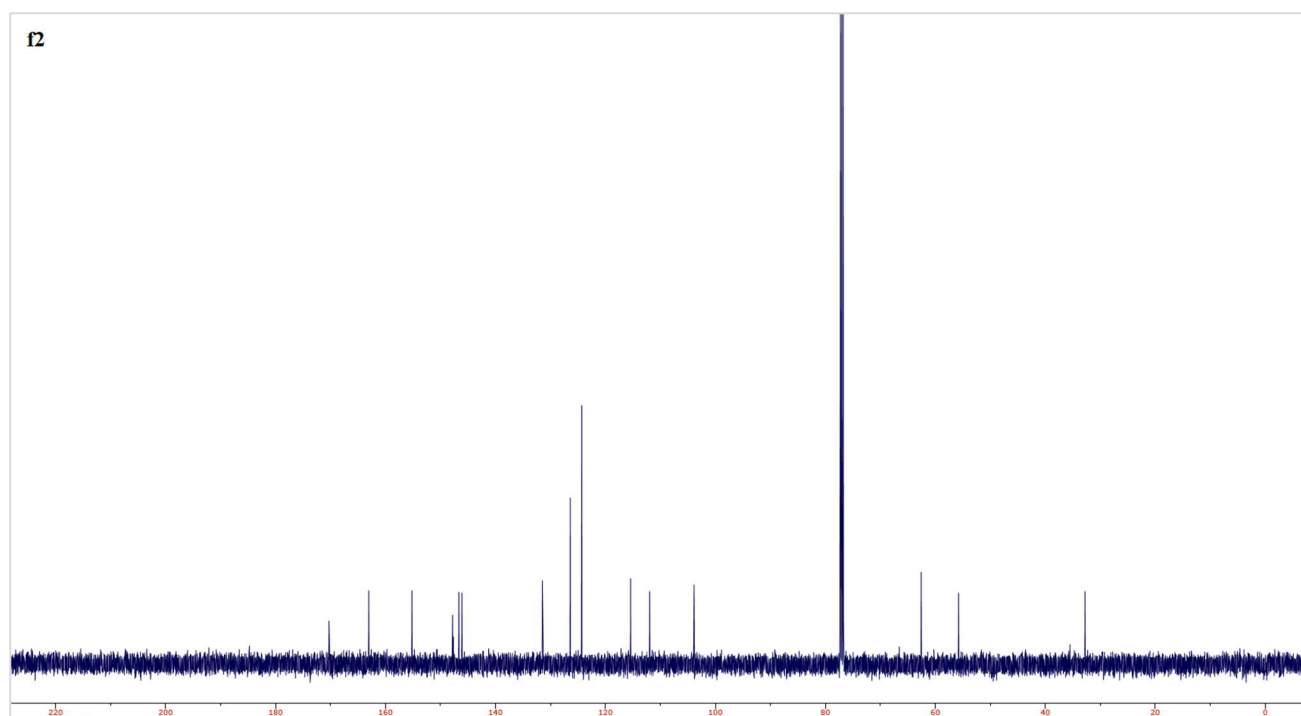
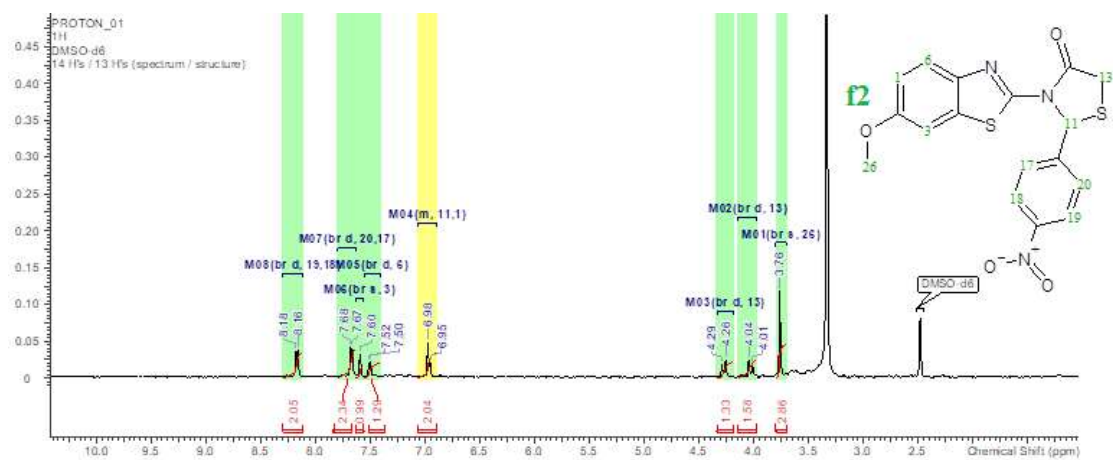
Ενότητα f1 1H-NMR



f1

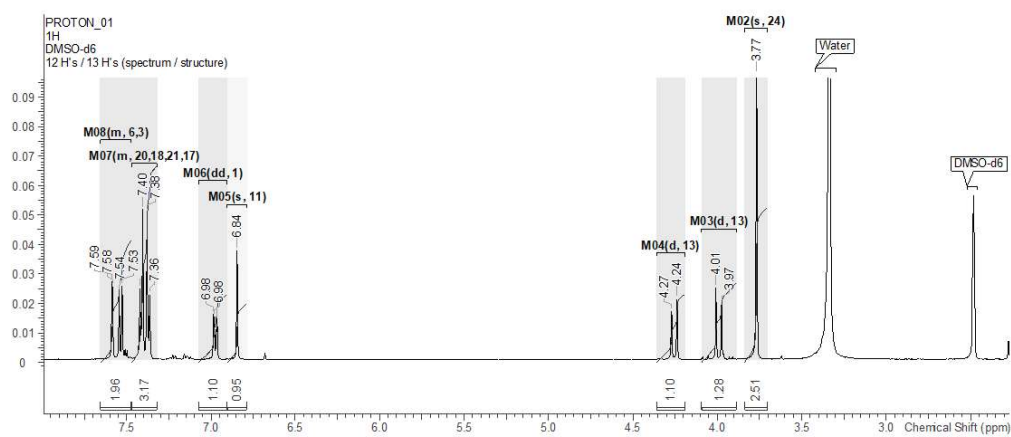
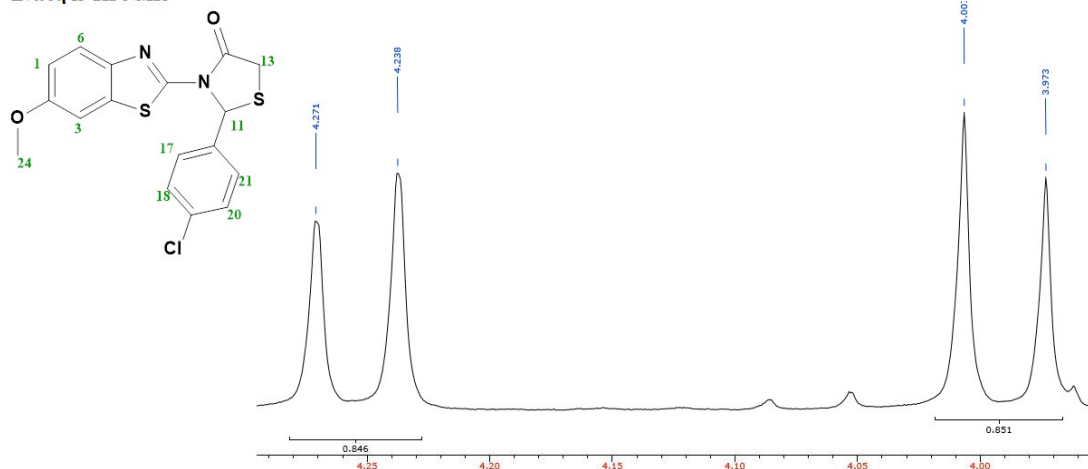


Compound 8

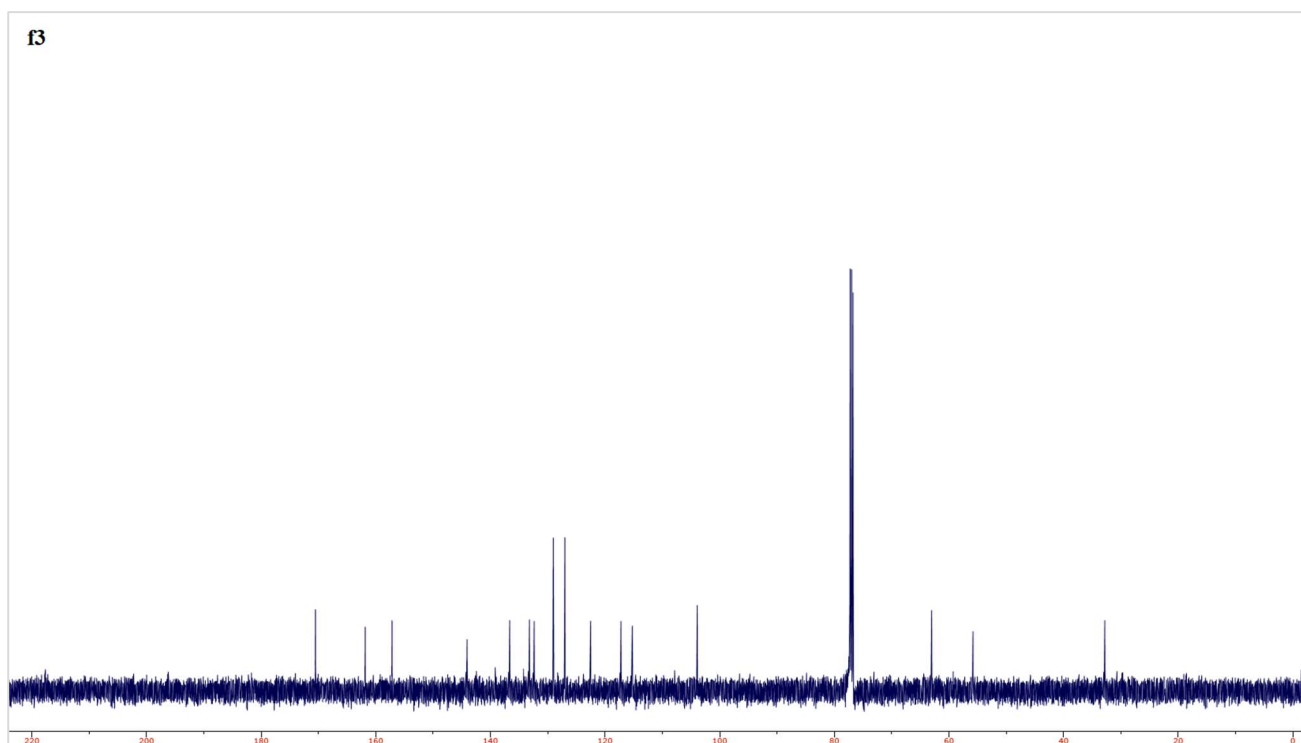


Compound 9

Ένωση f3 1H-NMR



f3

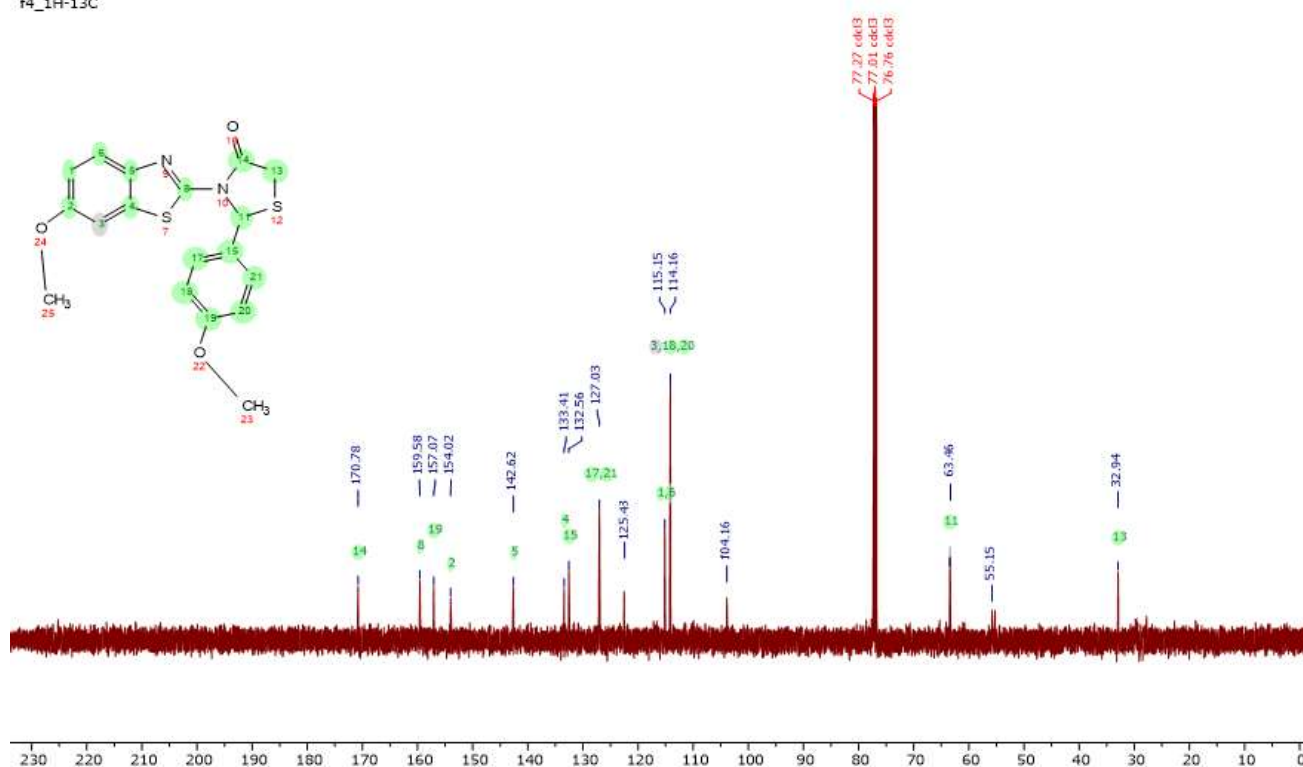


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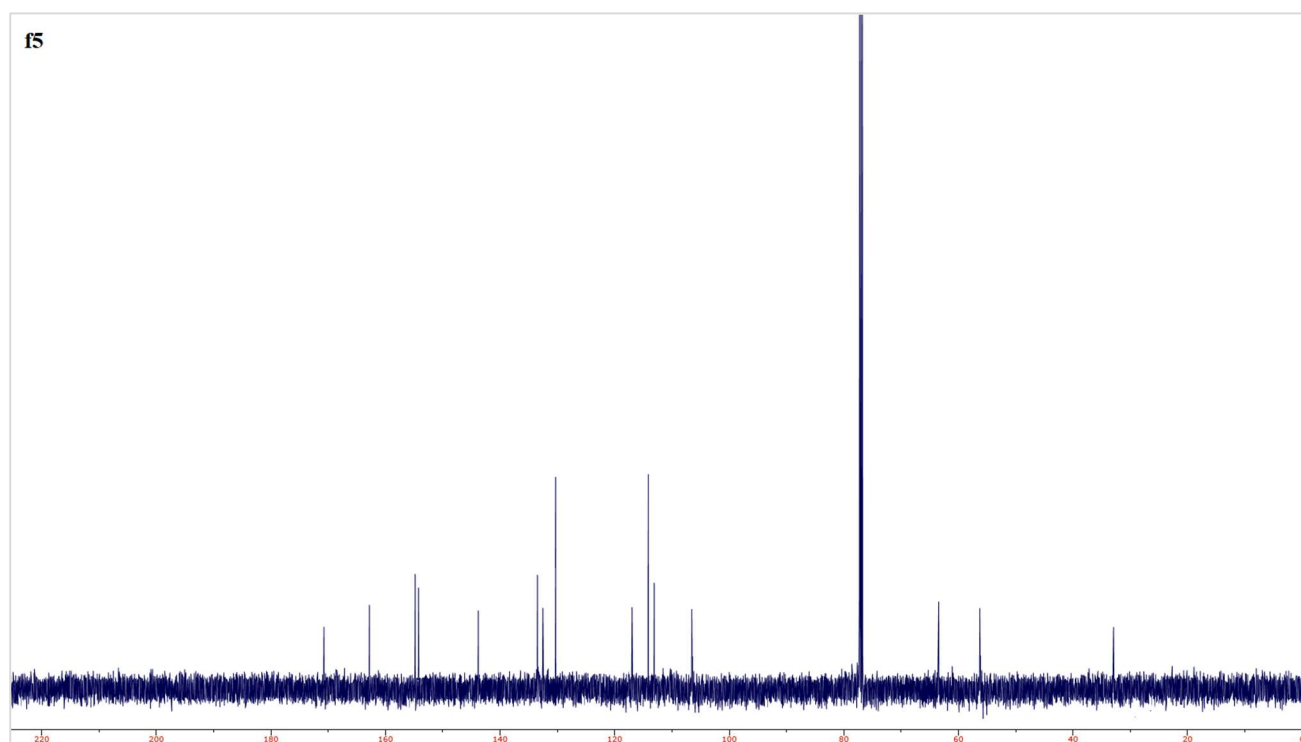
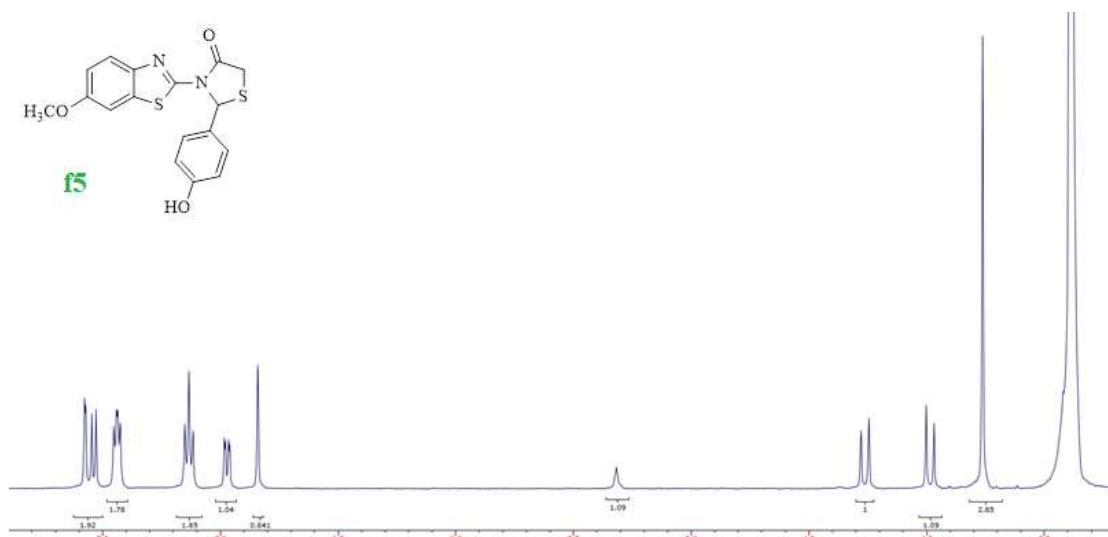
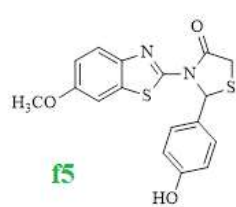


Ένωση f4 13 C-NMR

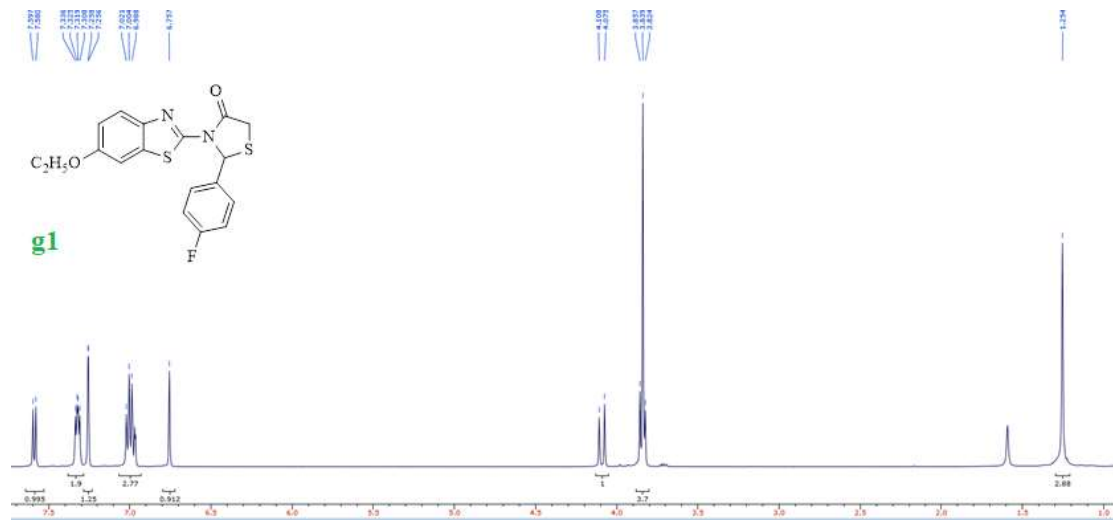
CARBON_01
f4_1H-13C



Compound 11

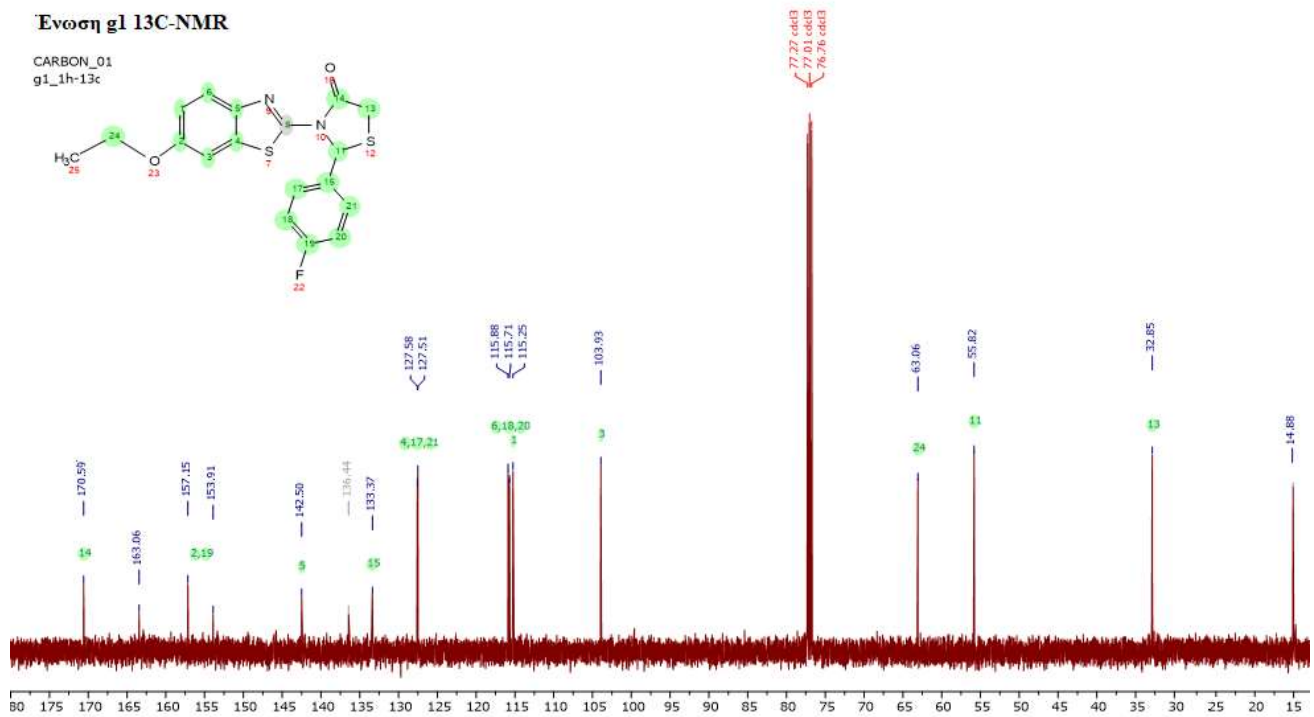


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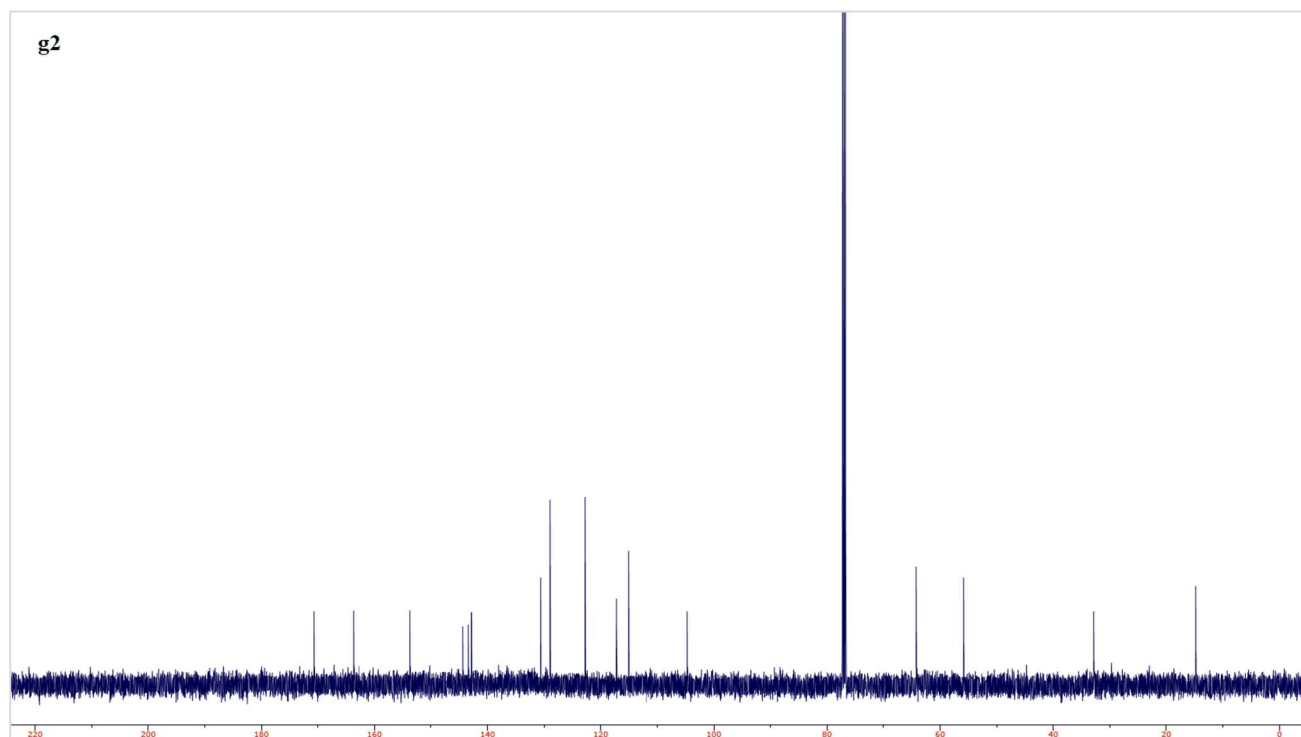
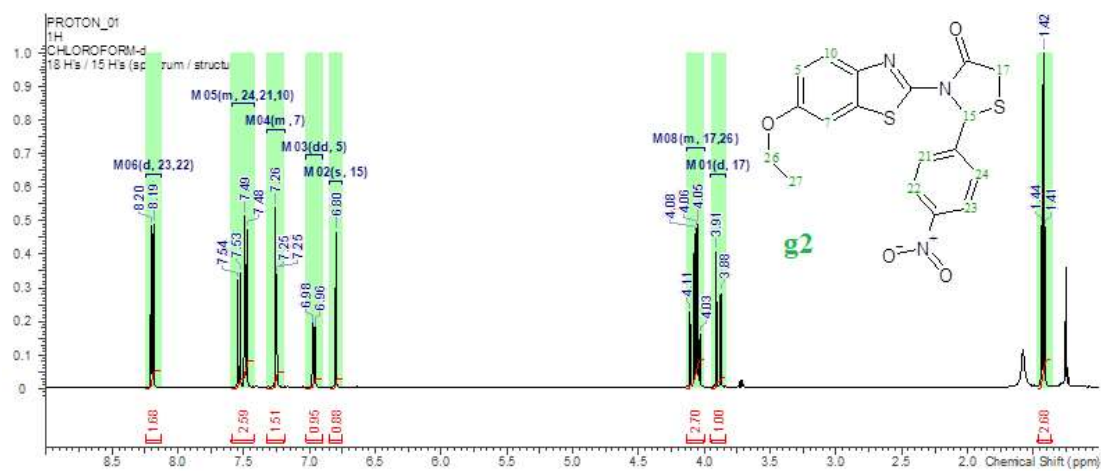


Ένωση g1 13C-NMR

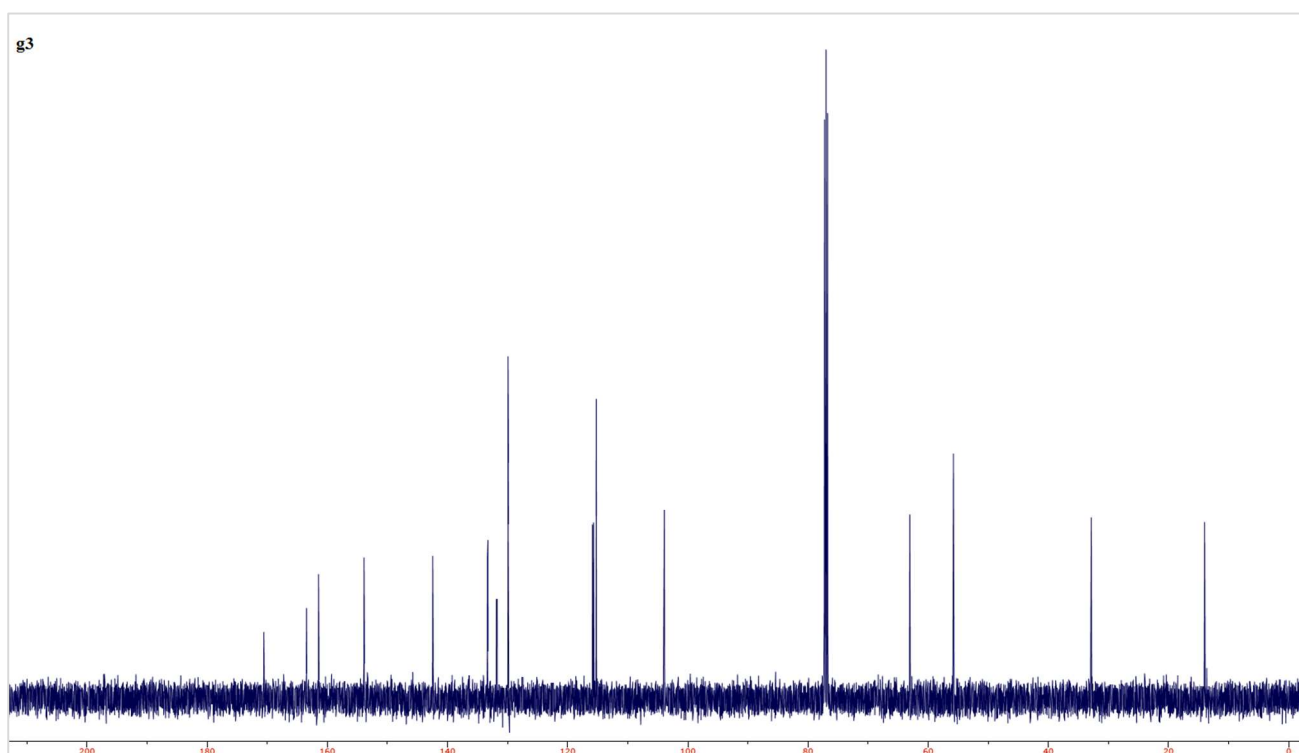
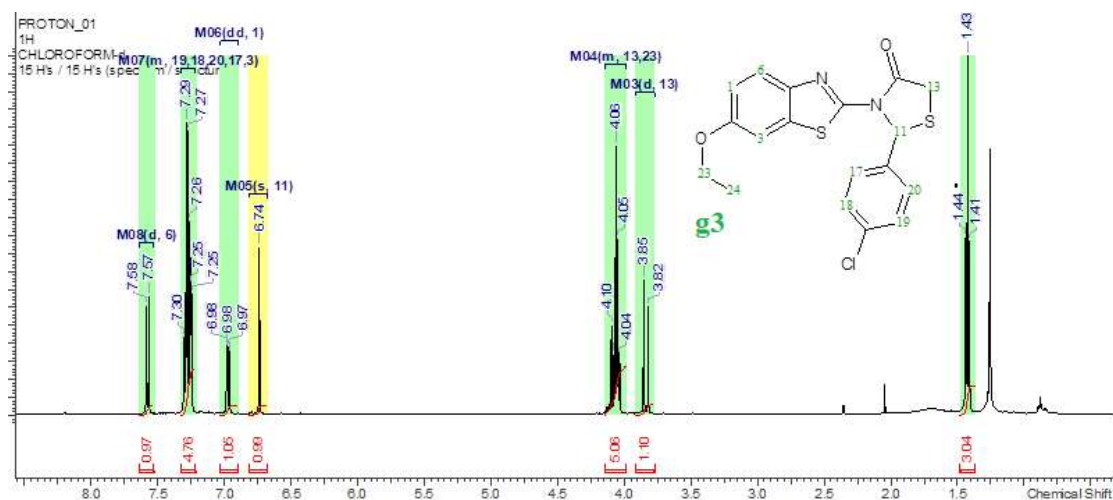
CARBON_01
g1_1h-13c



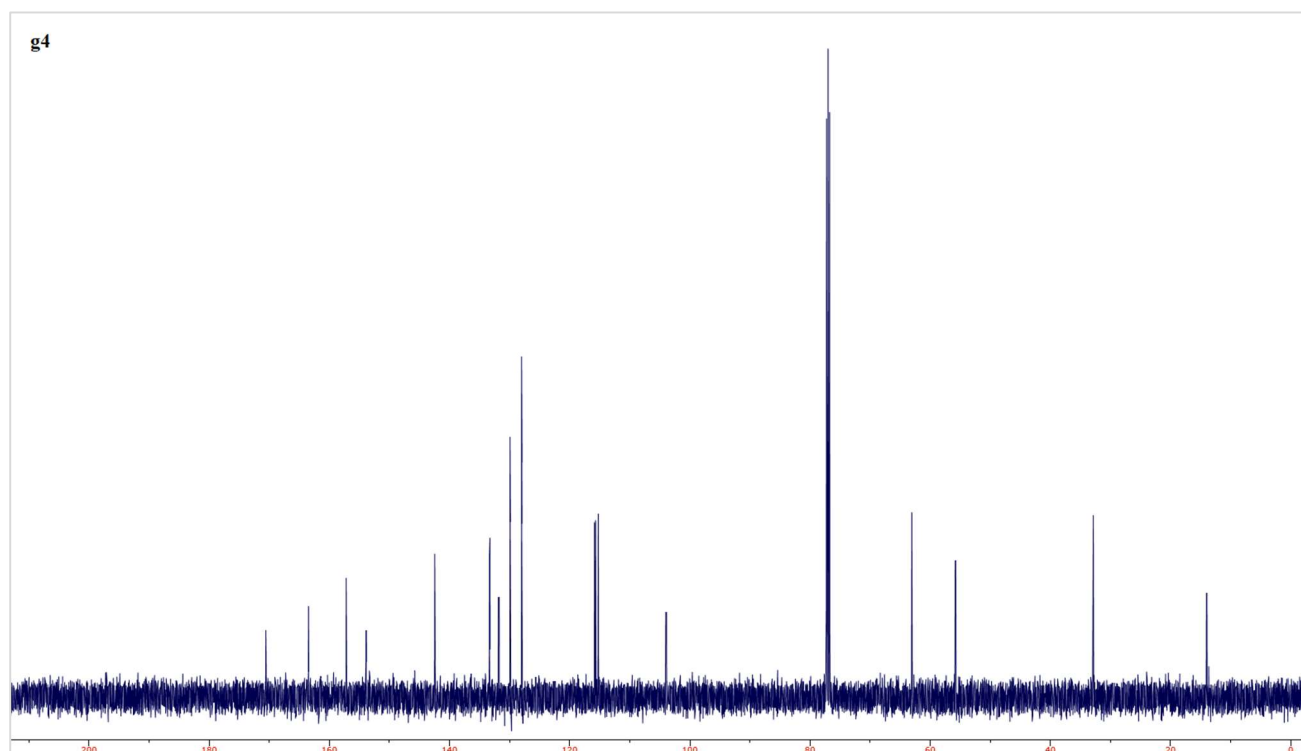
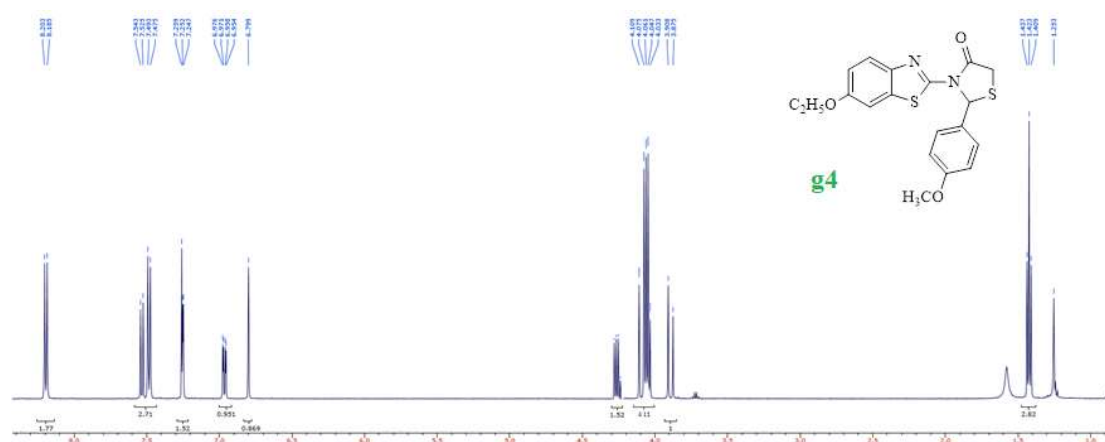
Compound 13



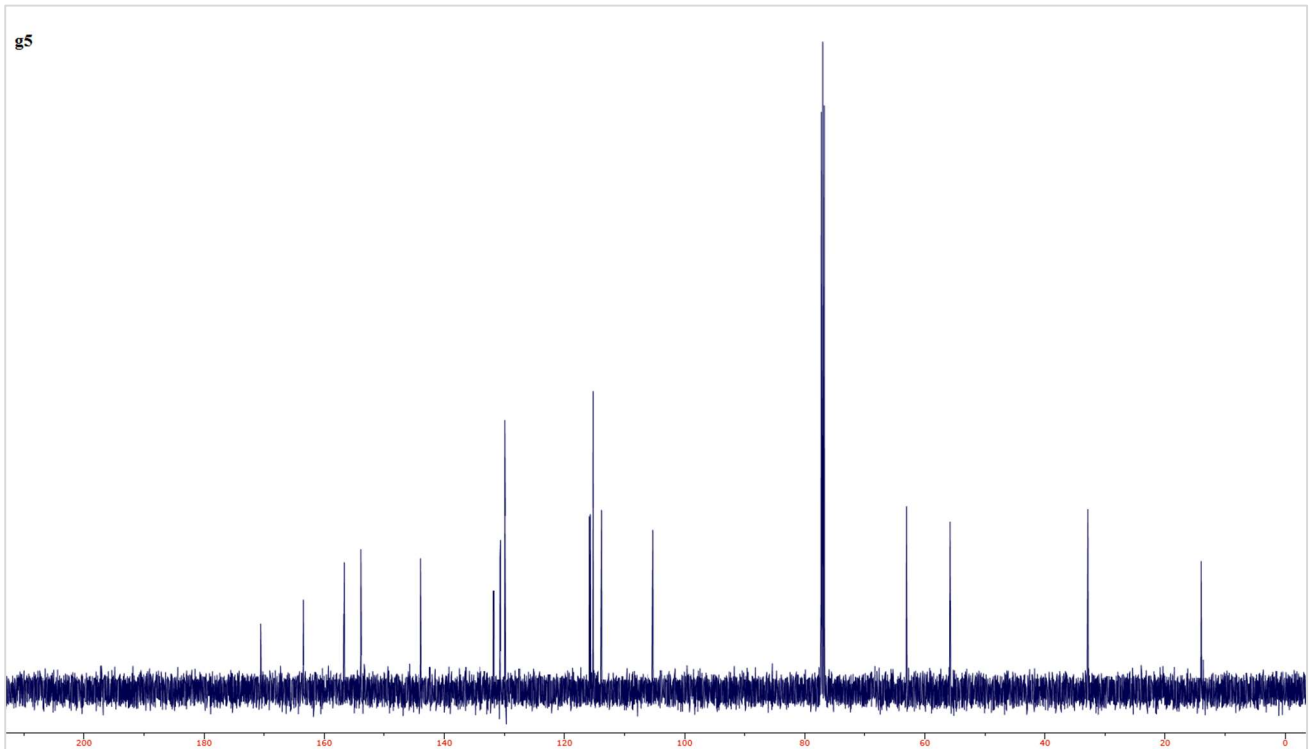
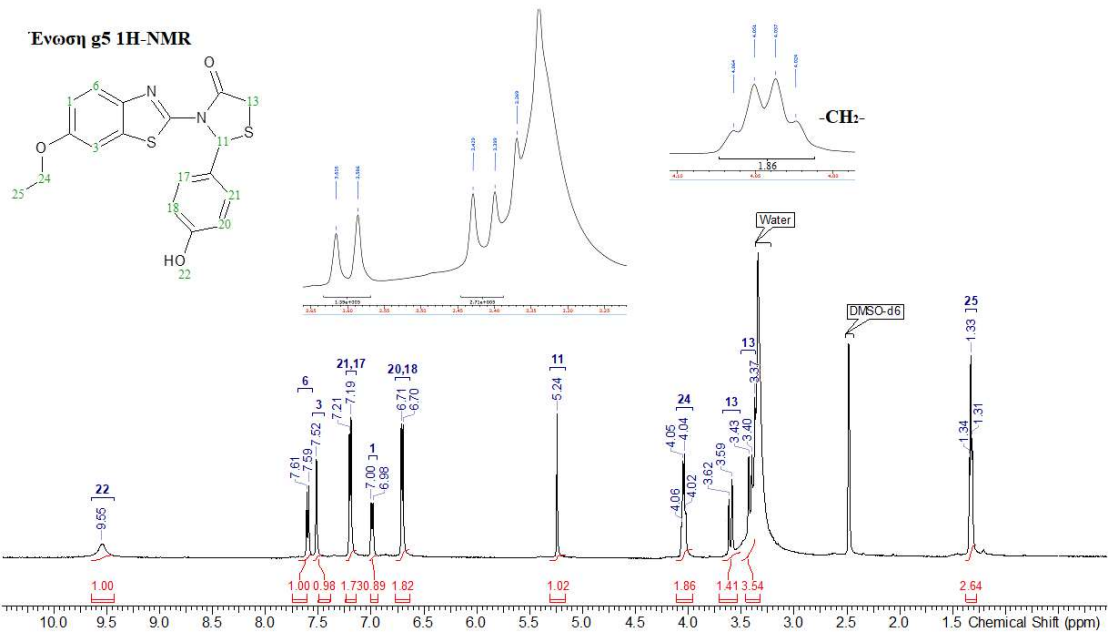
Compound 14



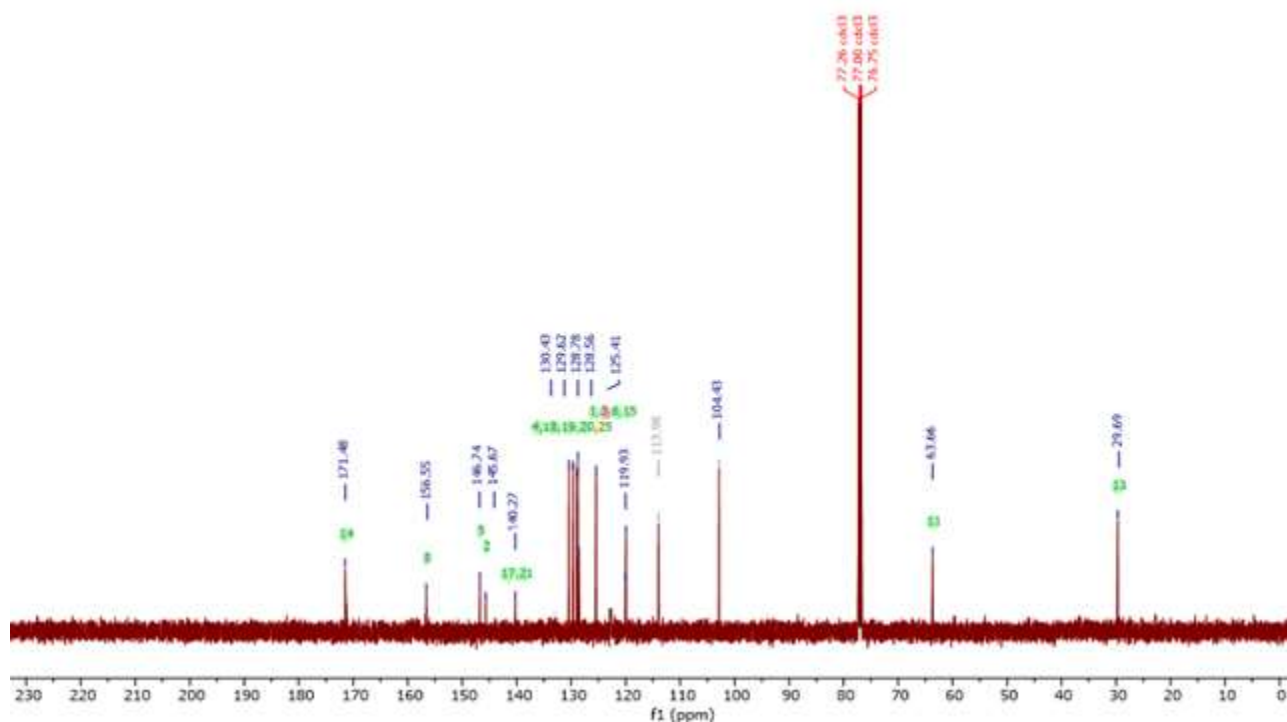
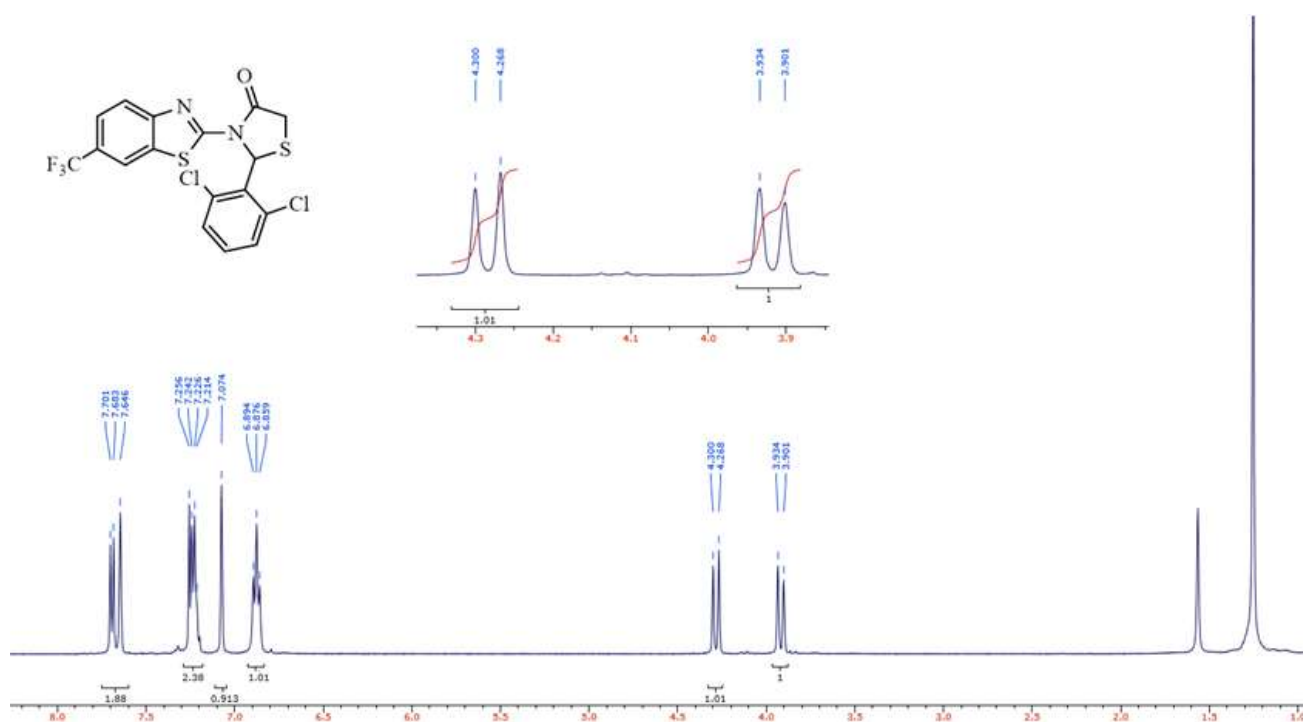
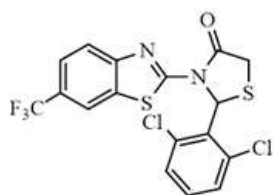
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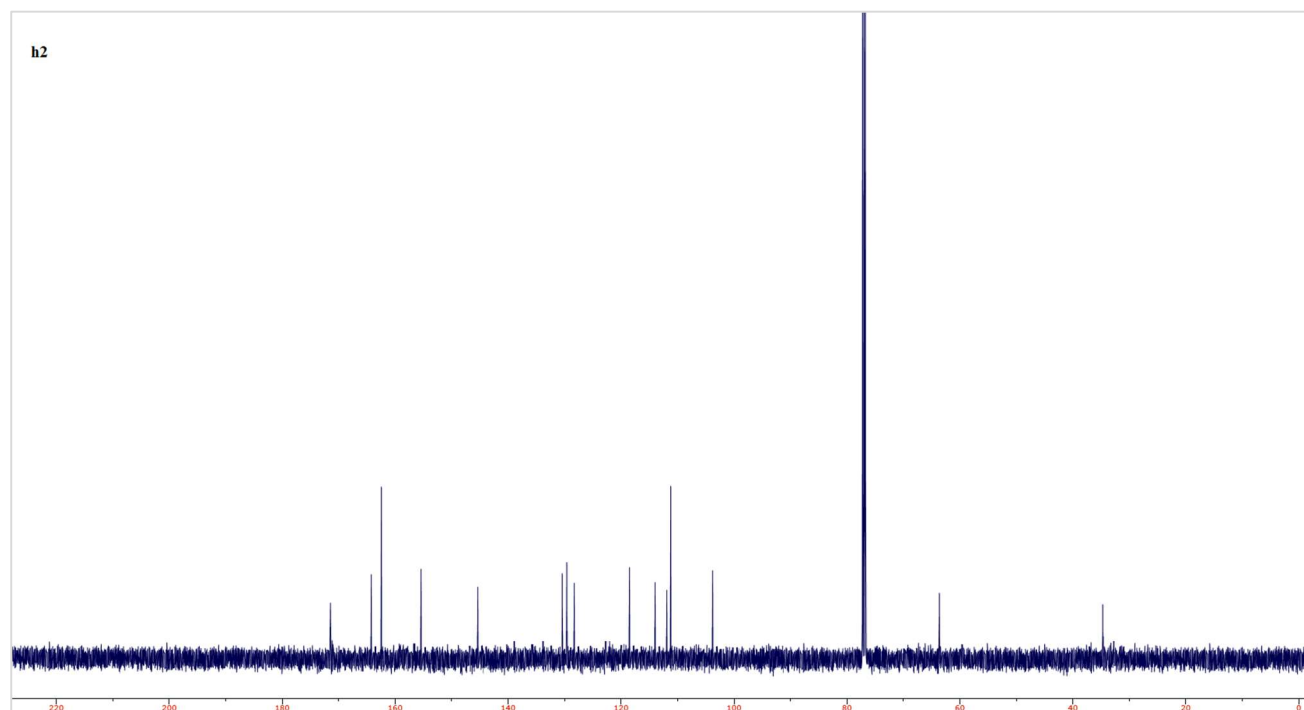
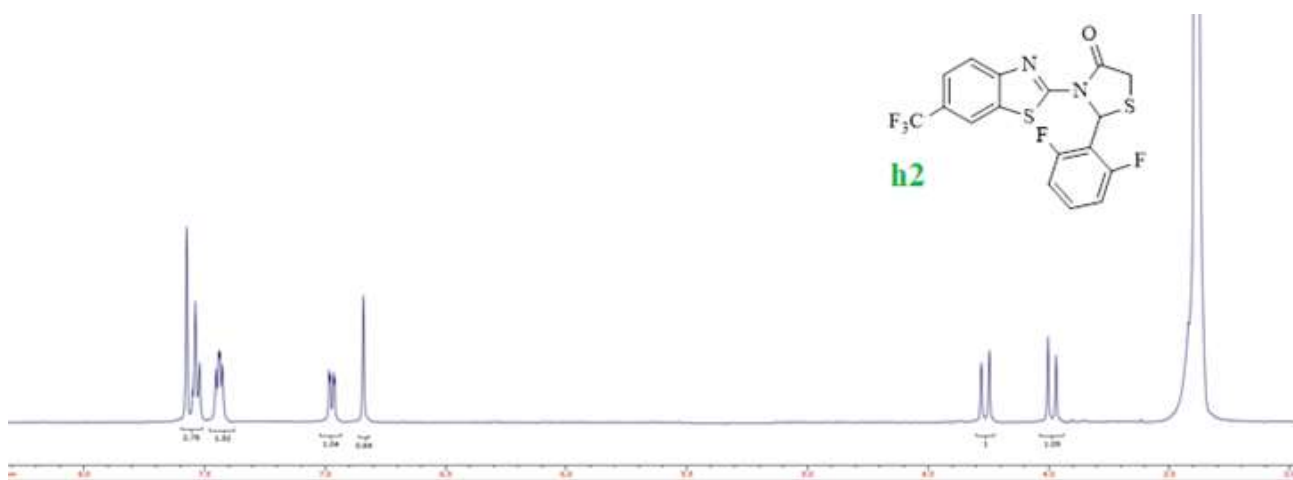
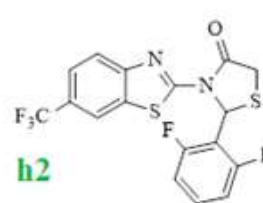
Compound 16



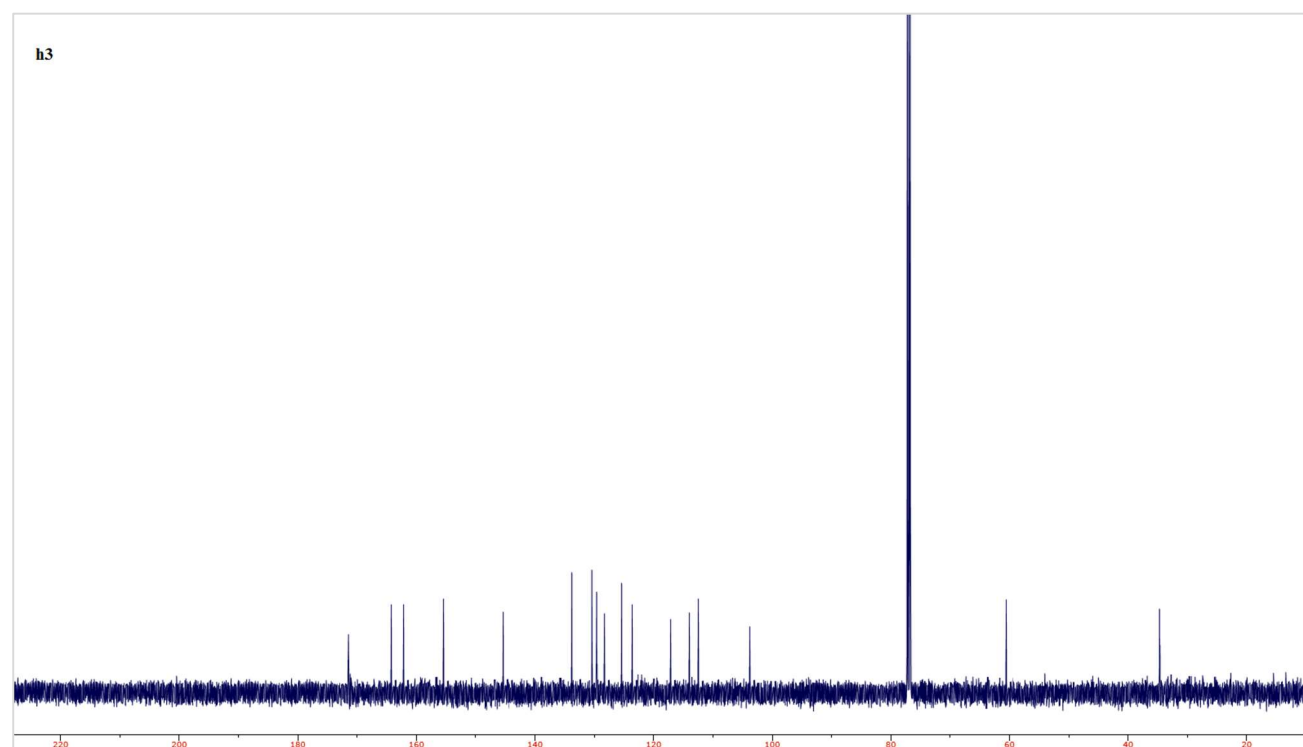
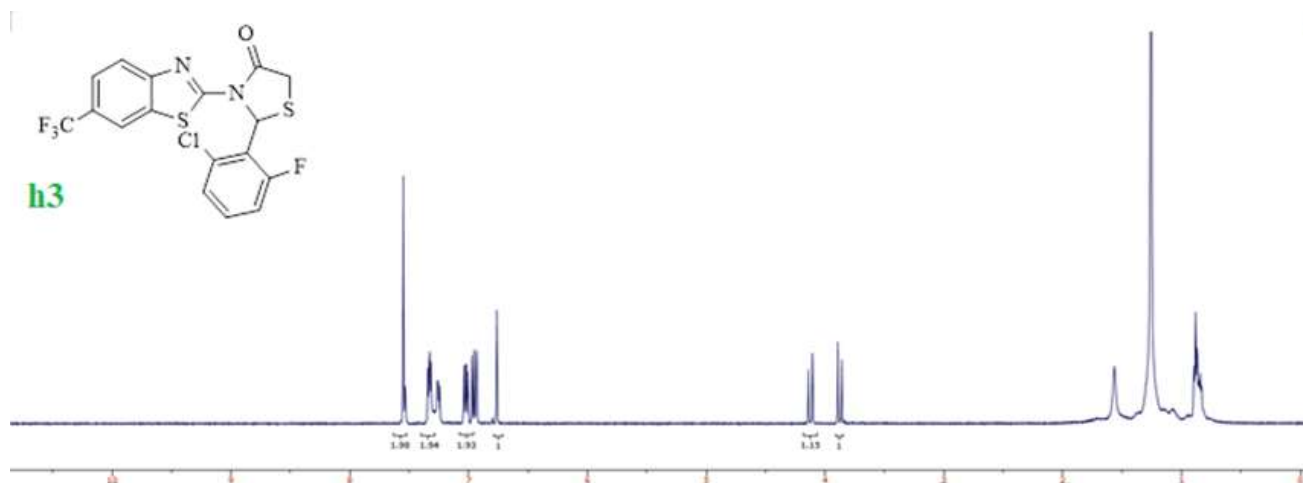
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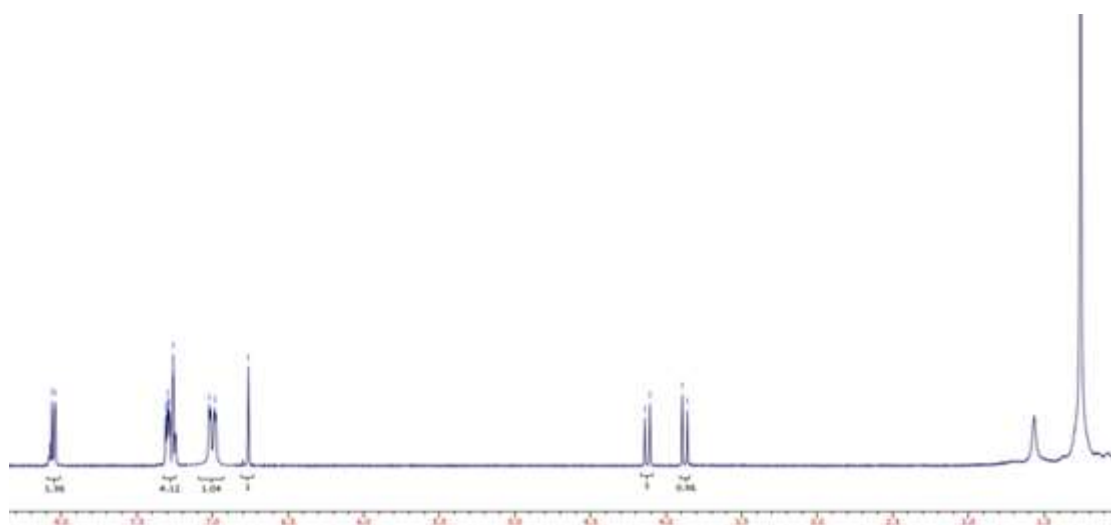
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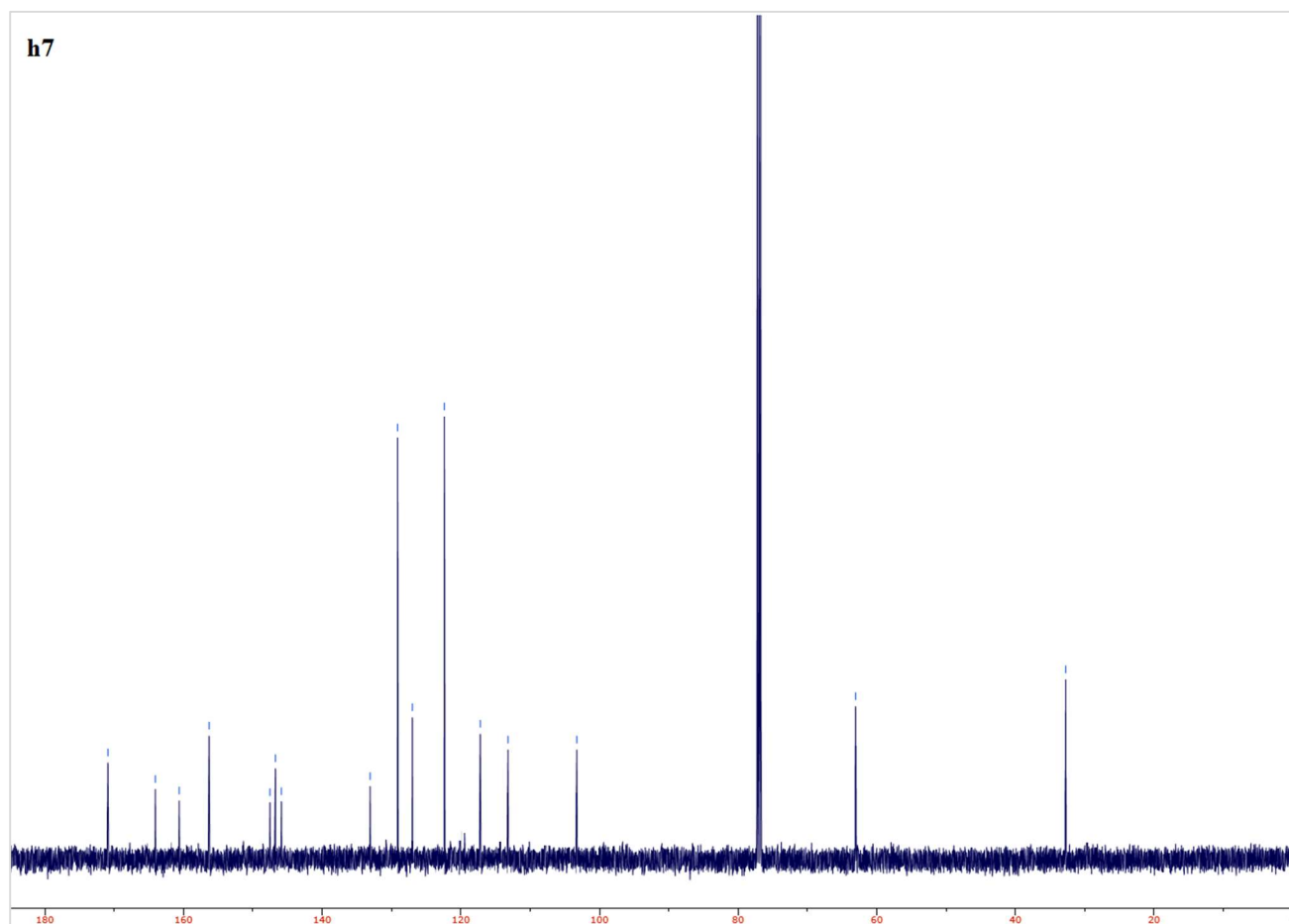
Compound 19



Compound 20



h7



Compound 21

