

## *Supporting Information*

### **Hybrid Quinoline-Thiosemicarbazone Therapeutics as a New Treatment Opportunity for Alzheimer's Disease – Synthesis, In Vitro Cholinesterase Inhibitory Potential and Computational Modeling Analysis**

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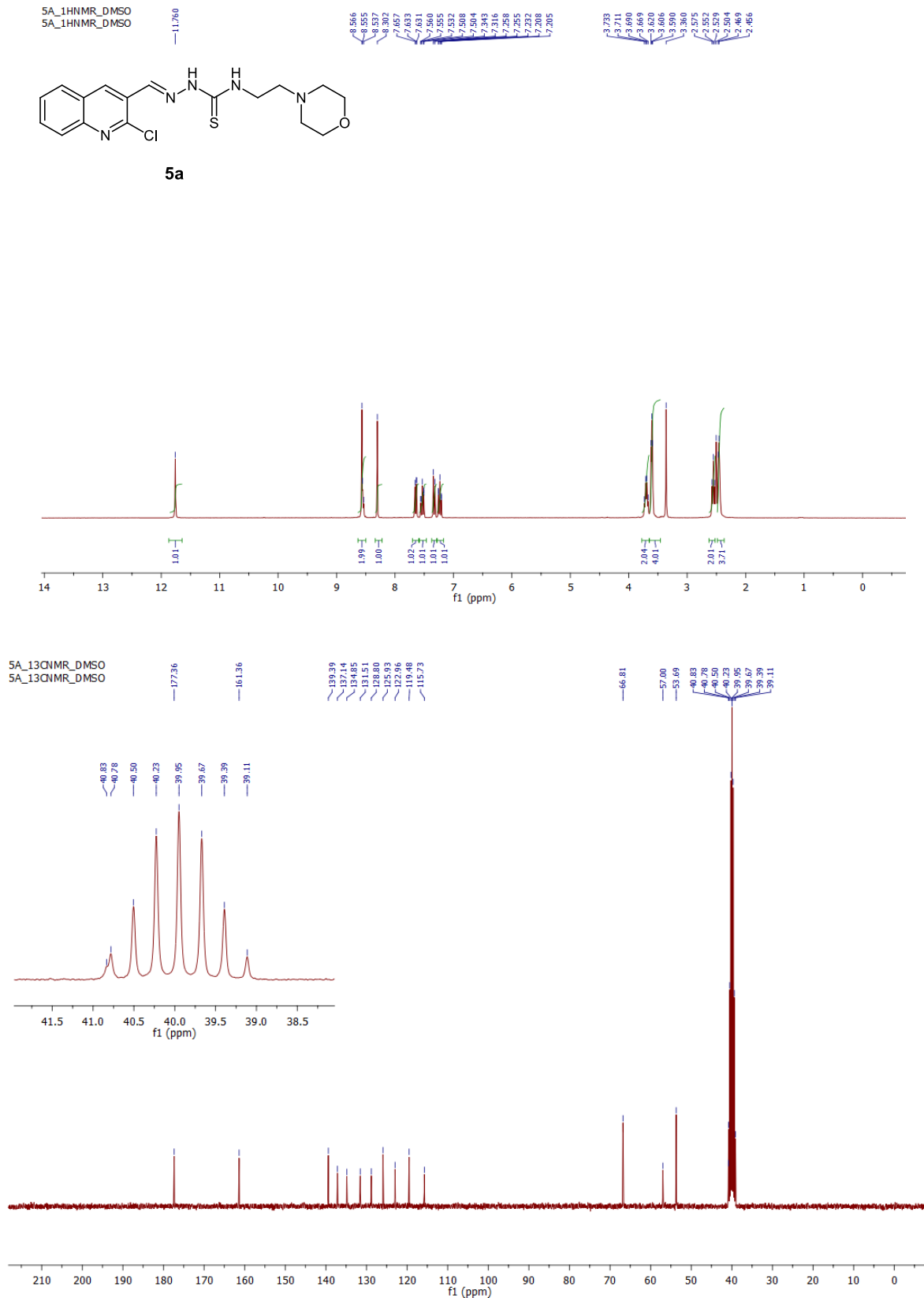
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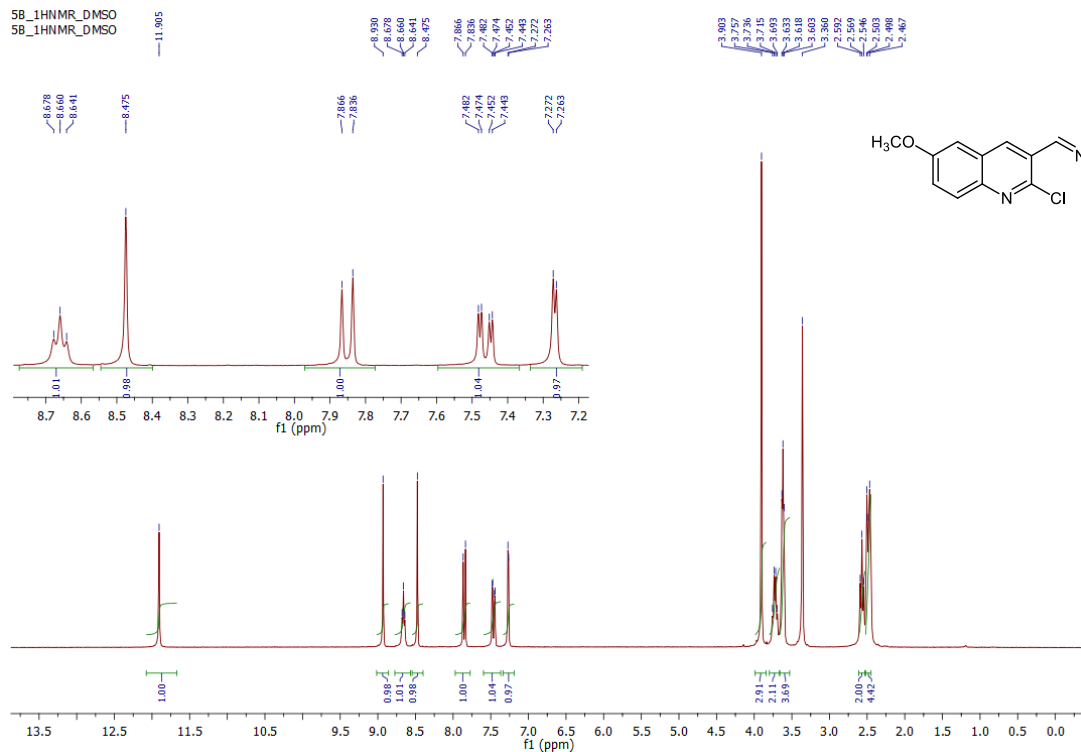
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### NMR spectra of quinoline-thiosemicarbazones 5(a-k)

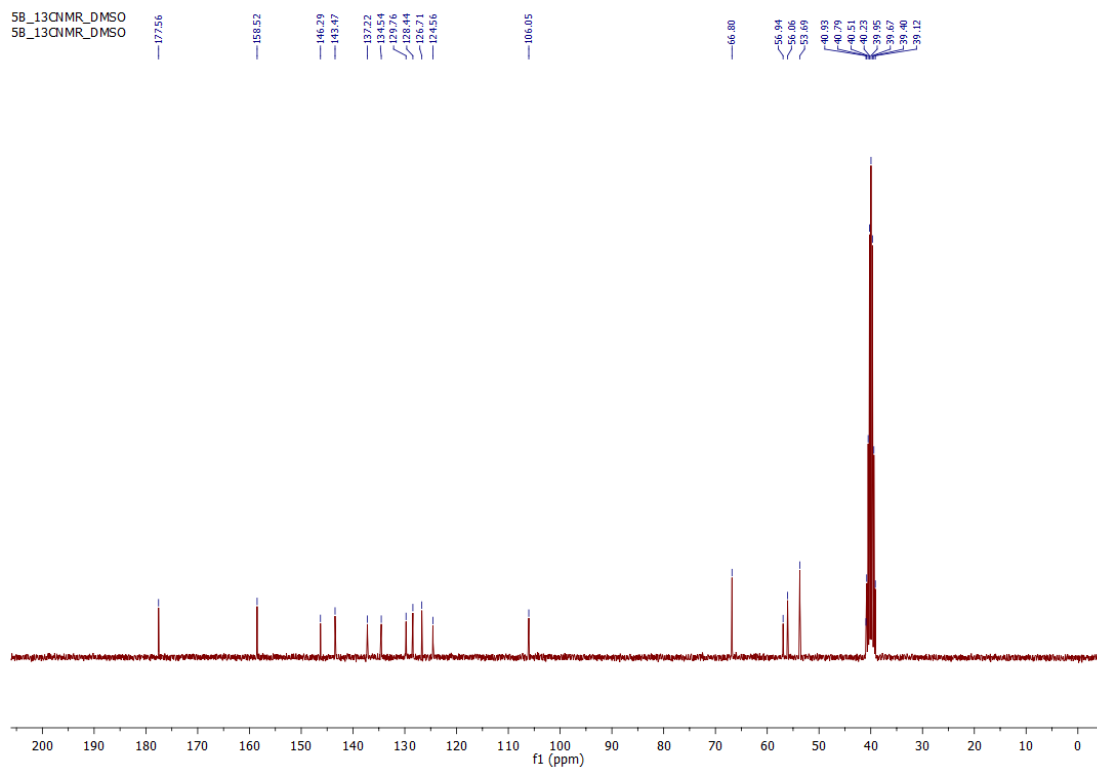


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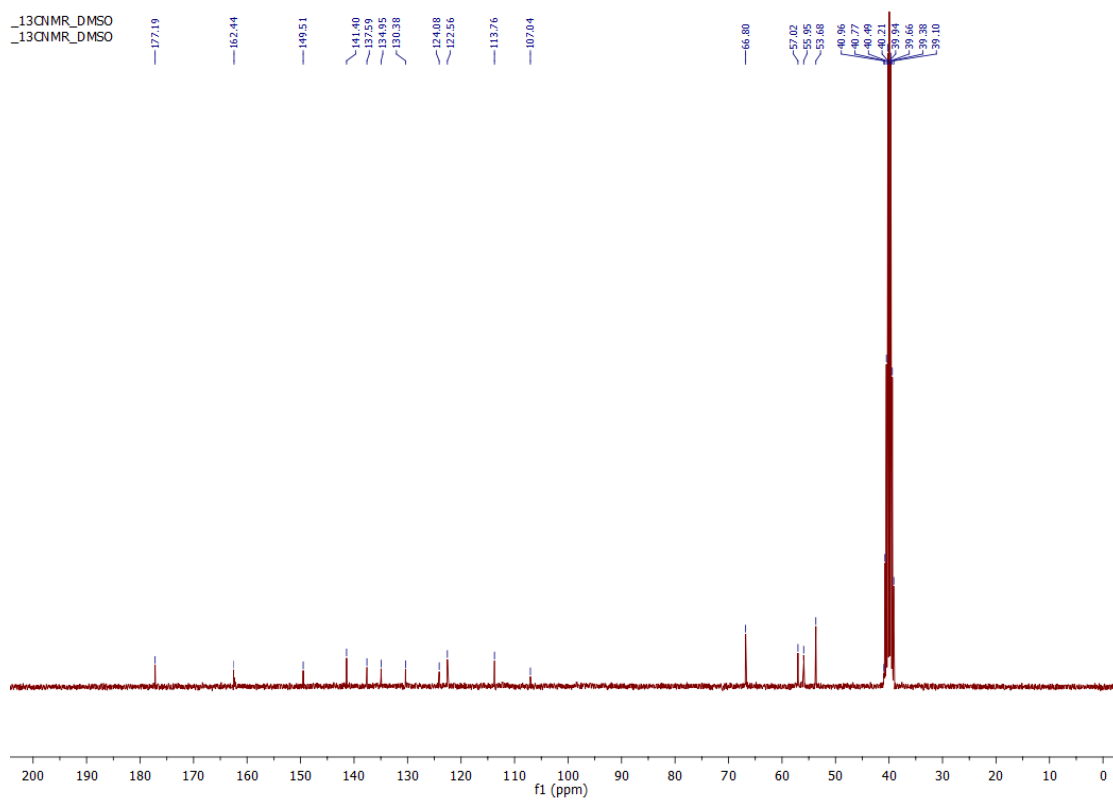
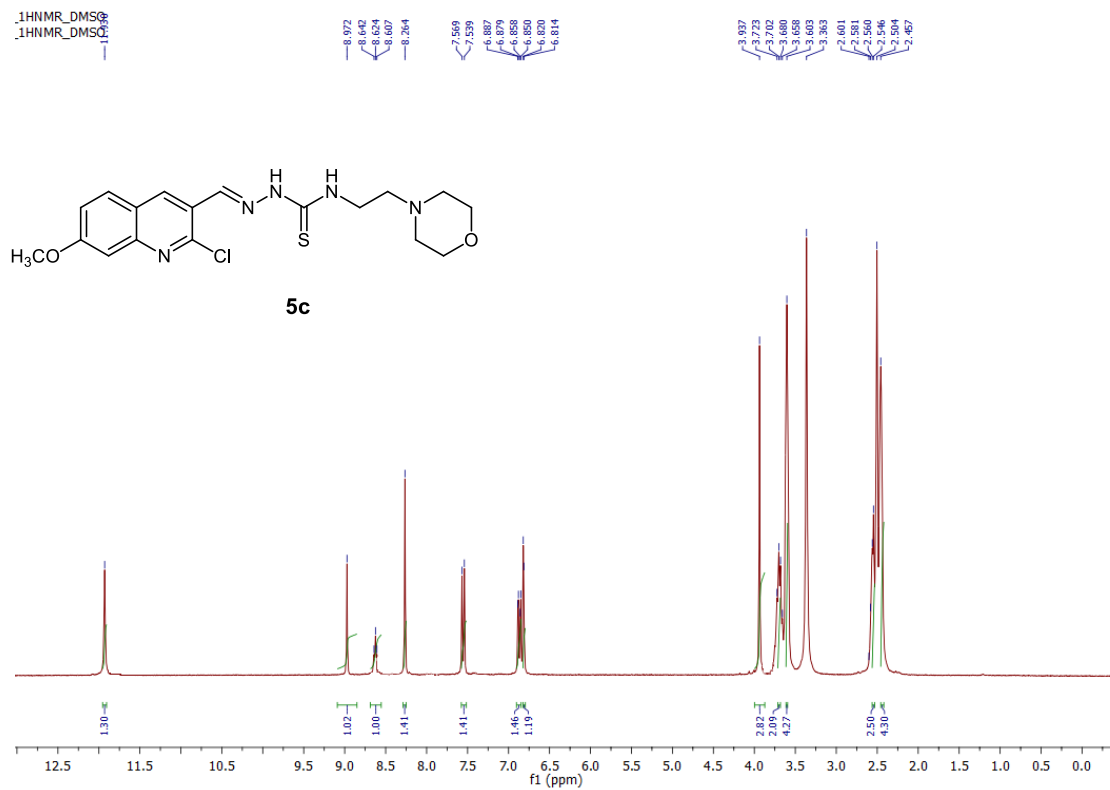
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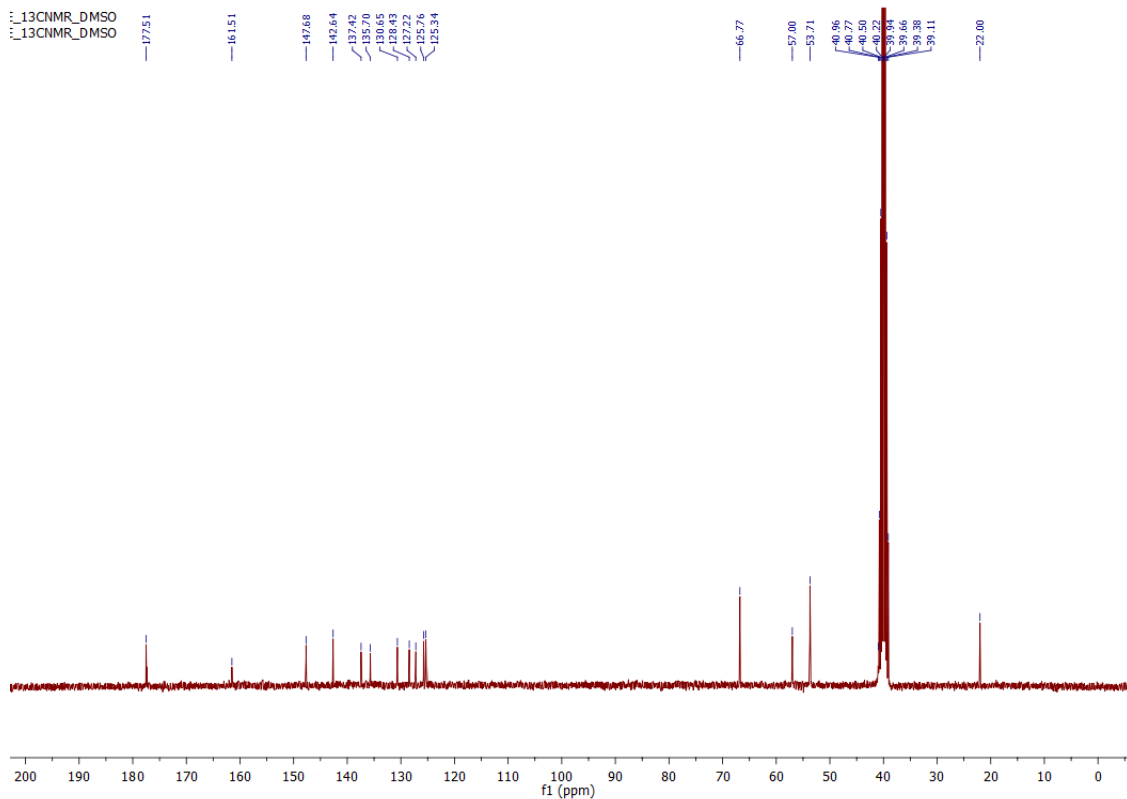
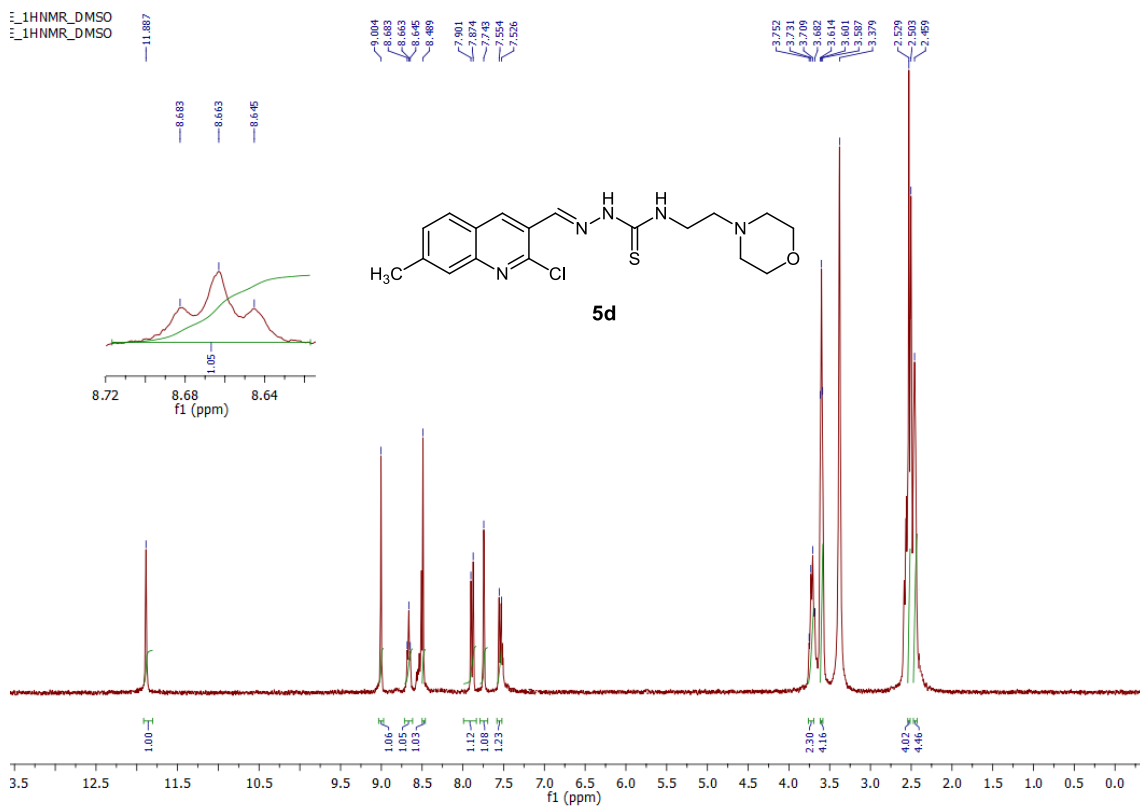
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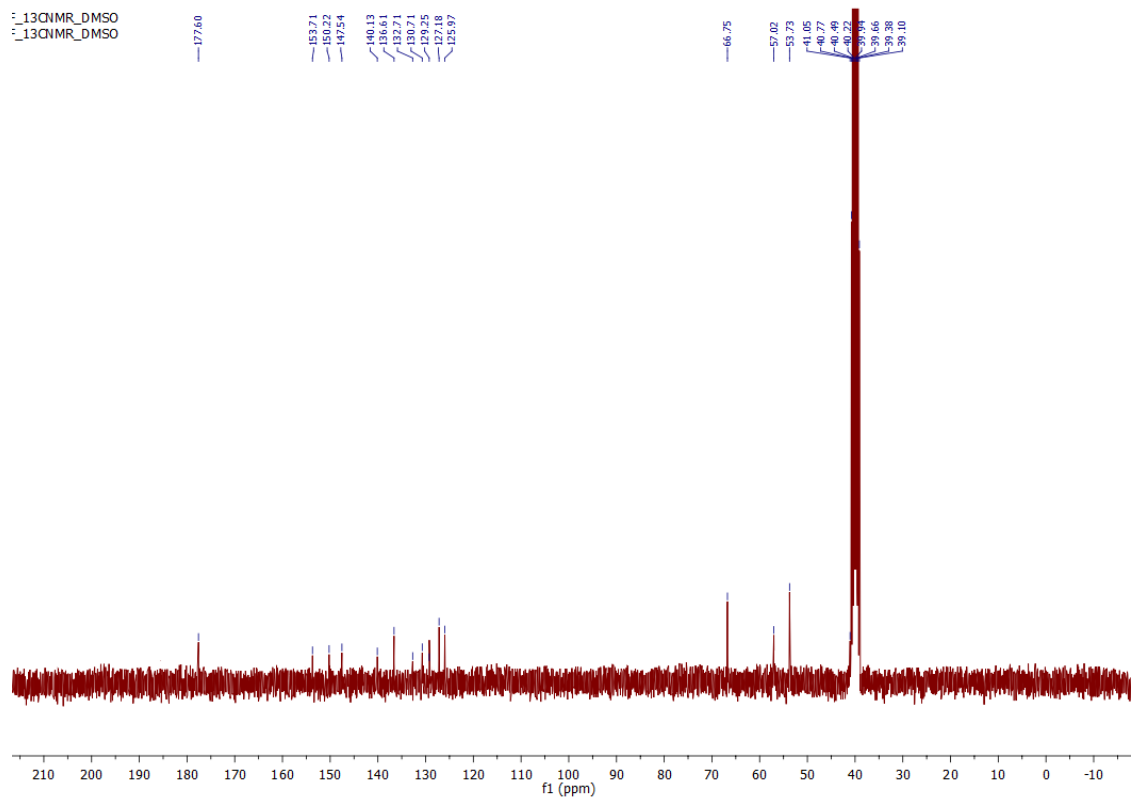
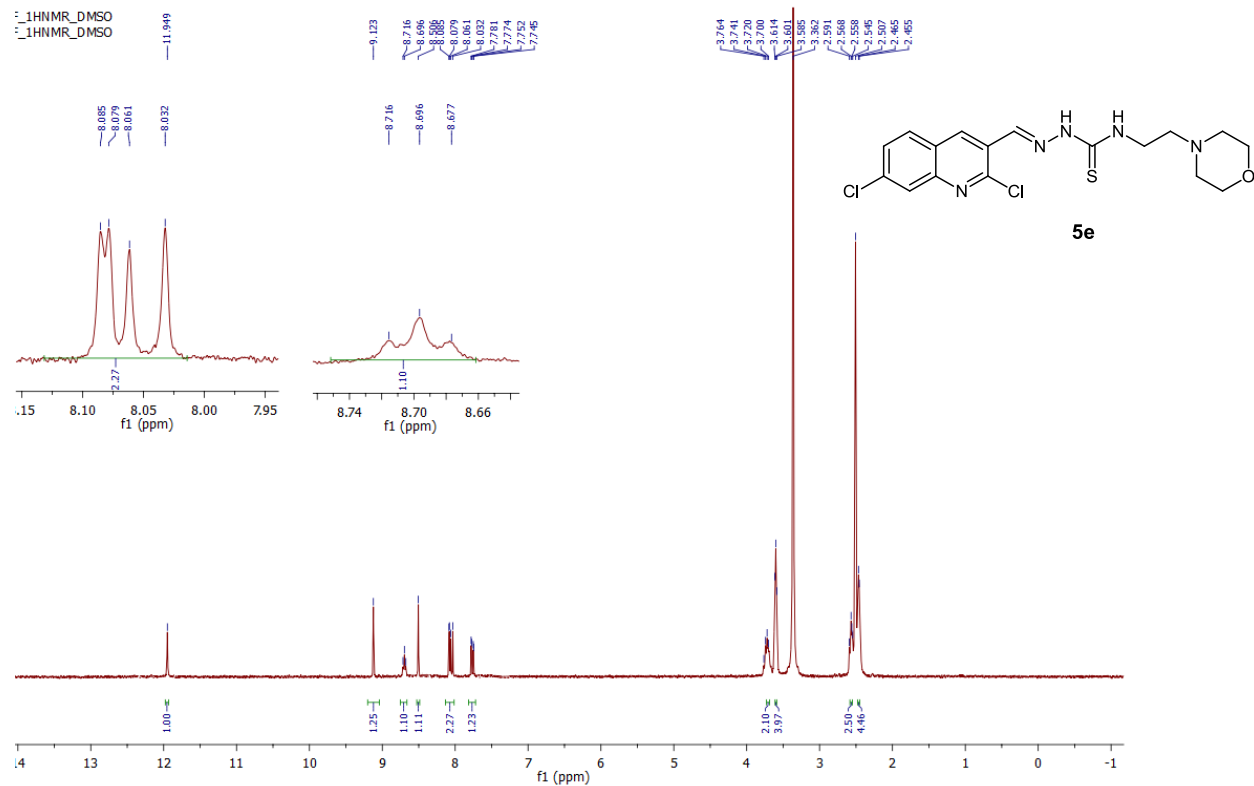
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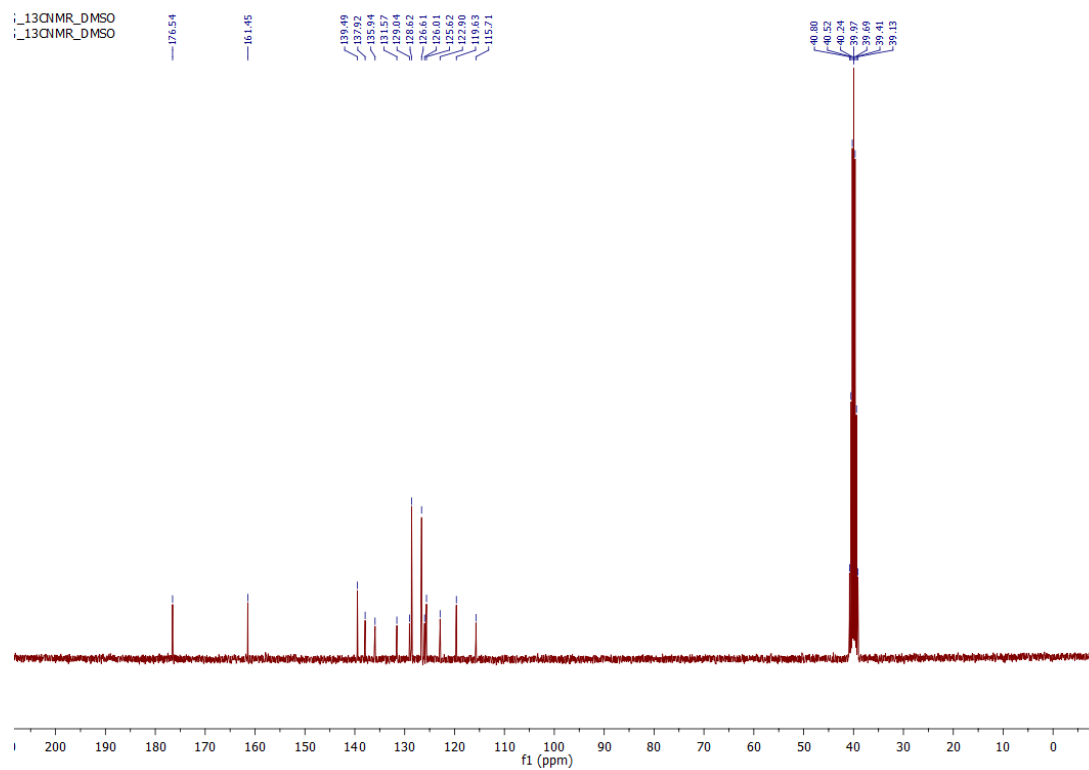
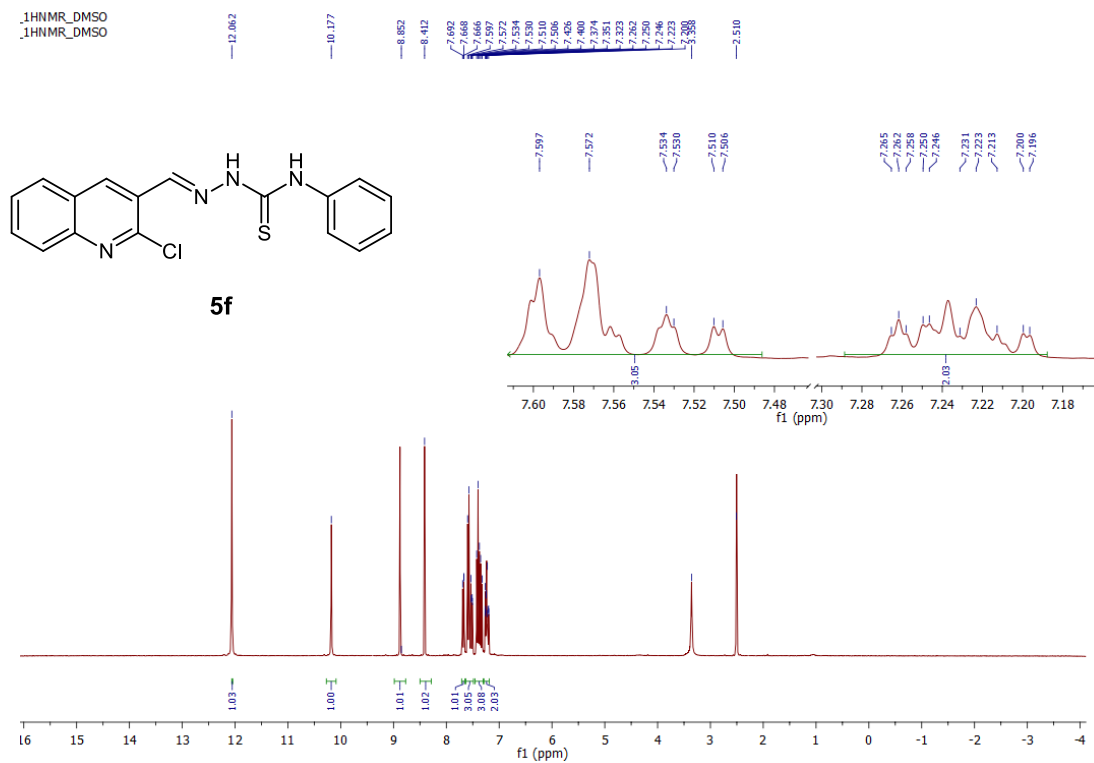
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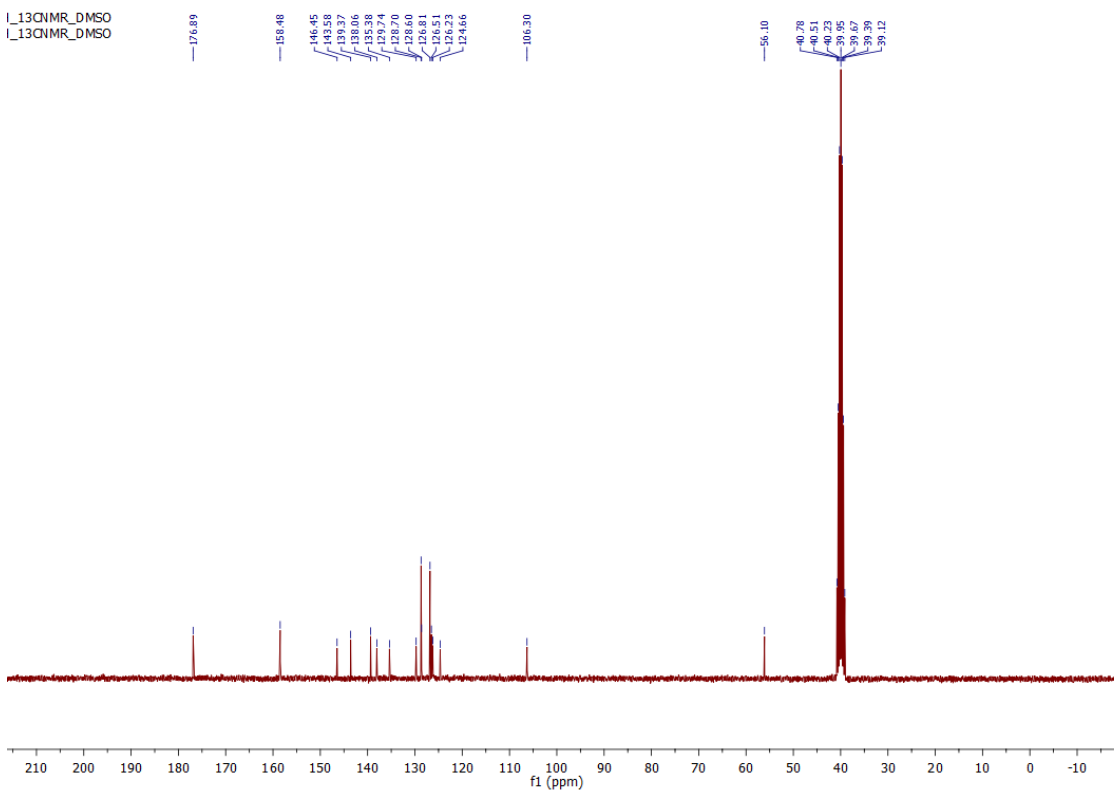
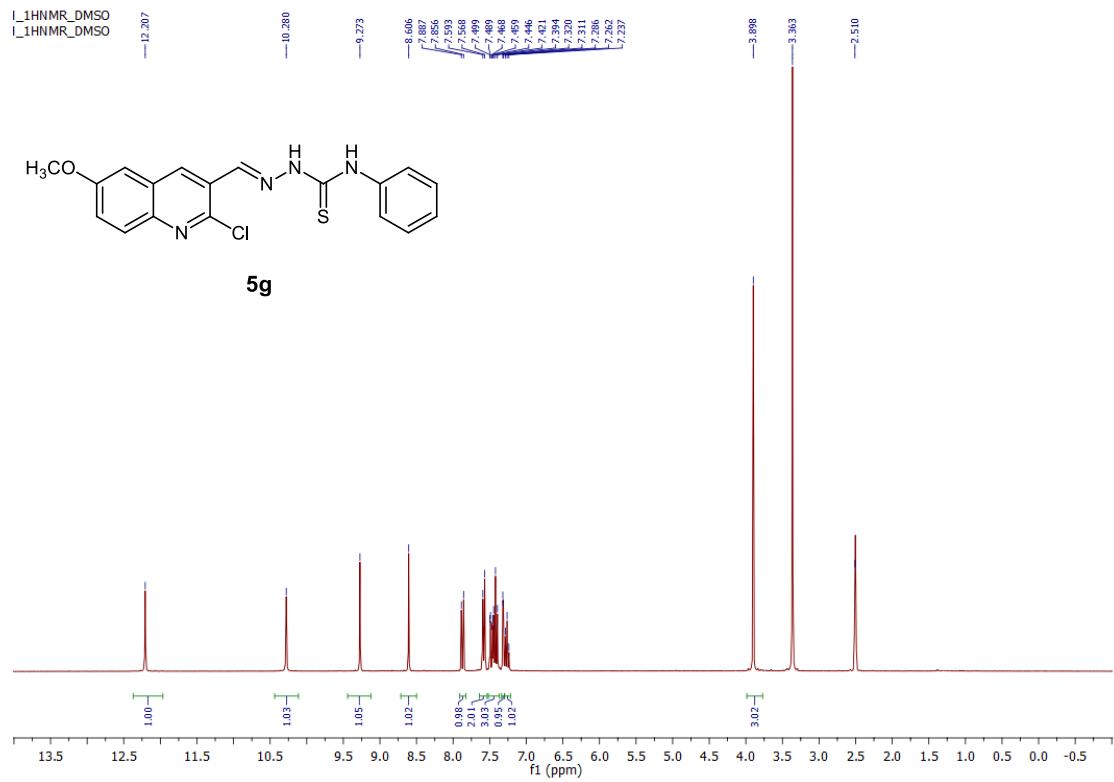
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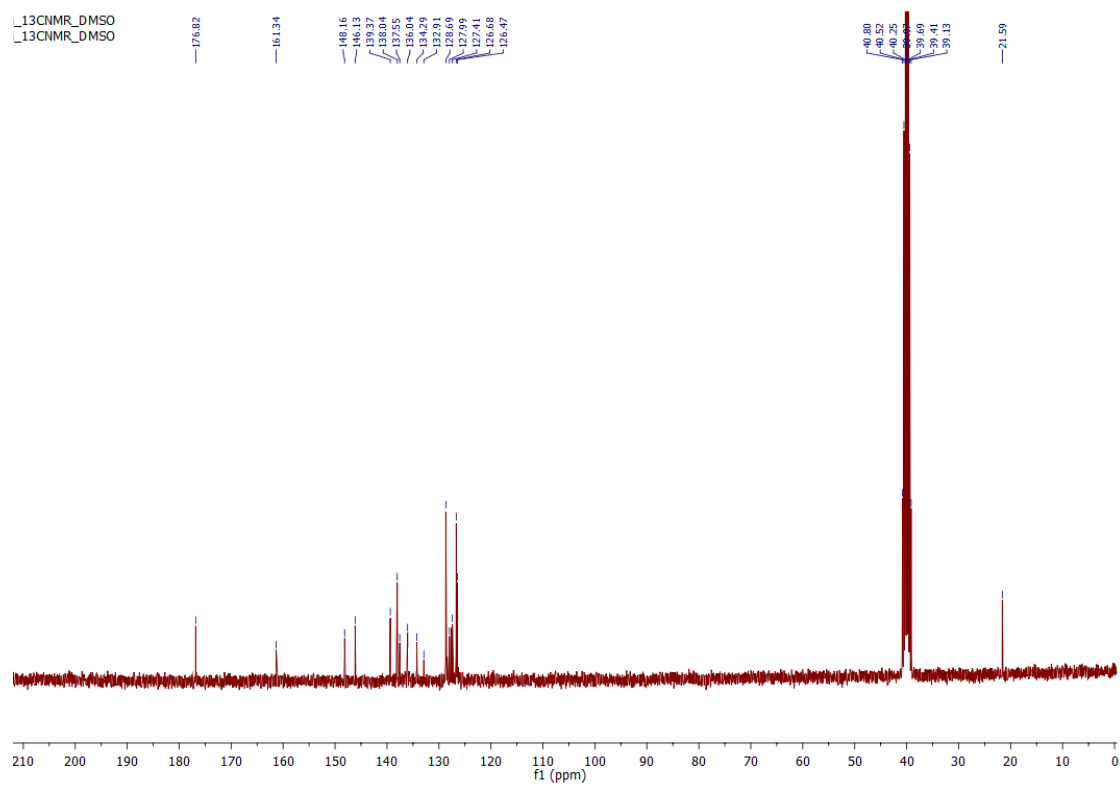
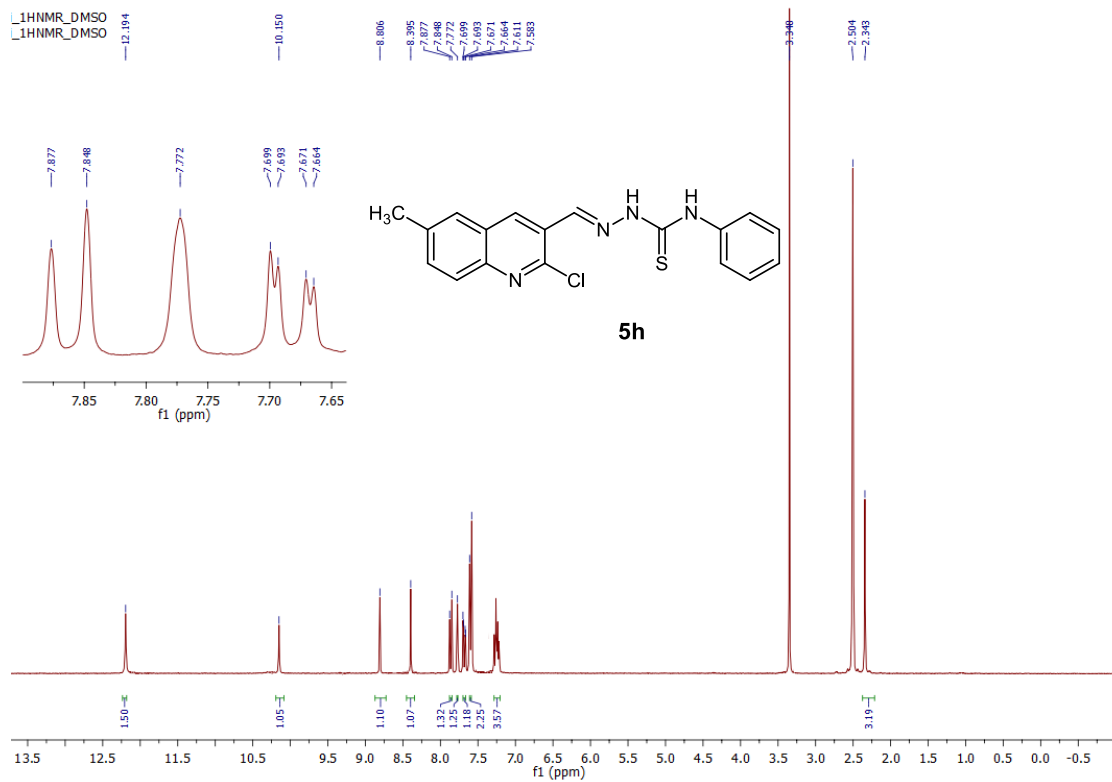


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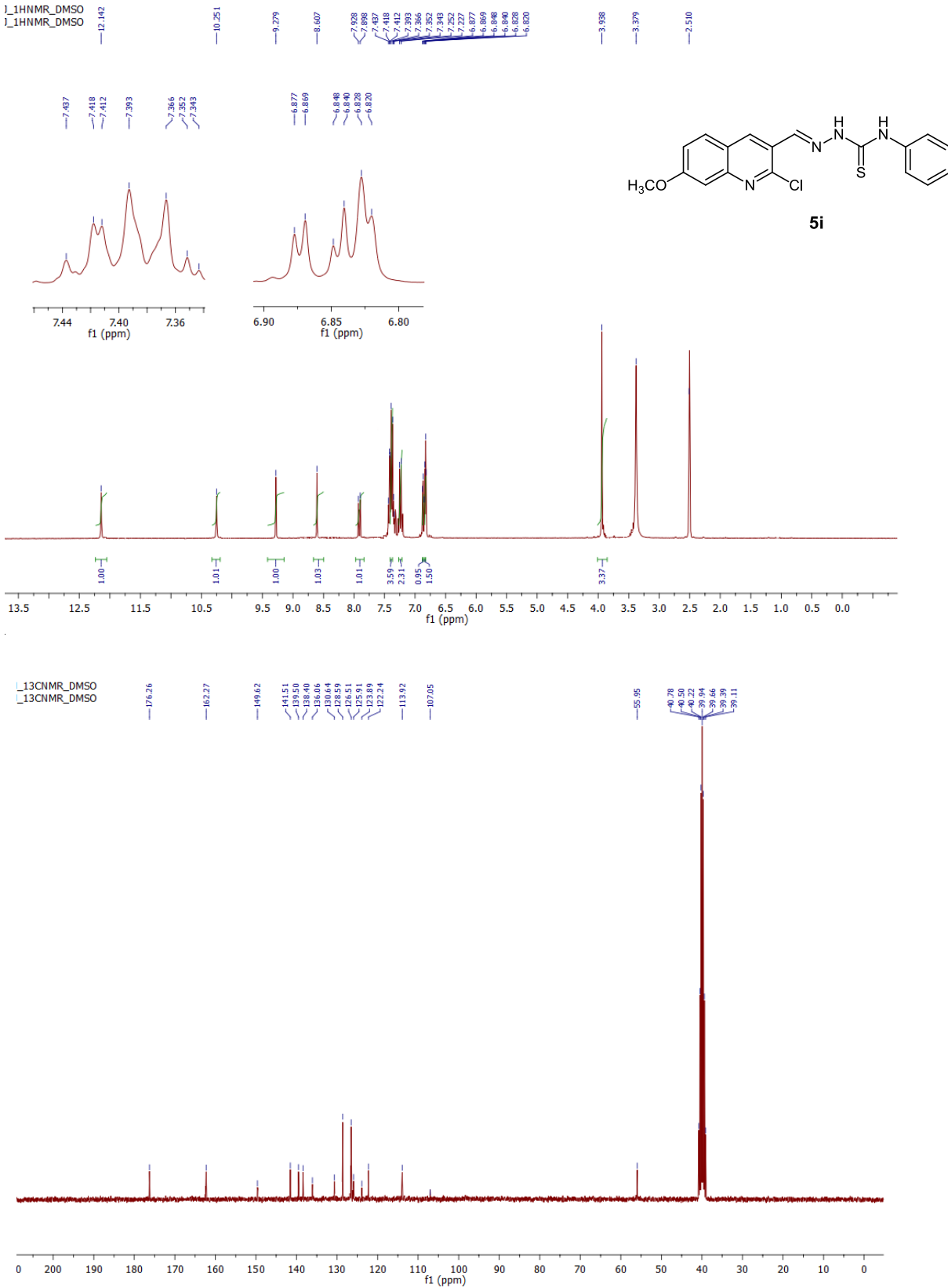




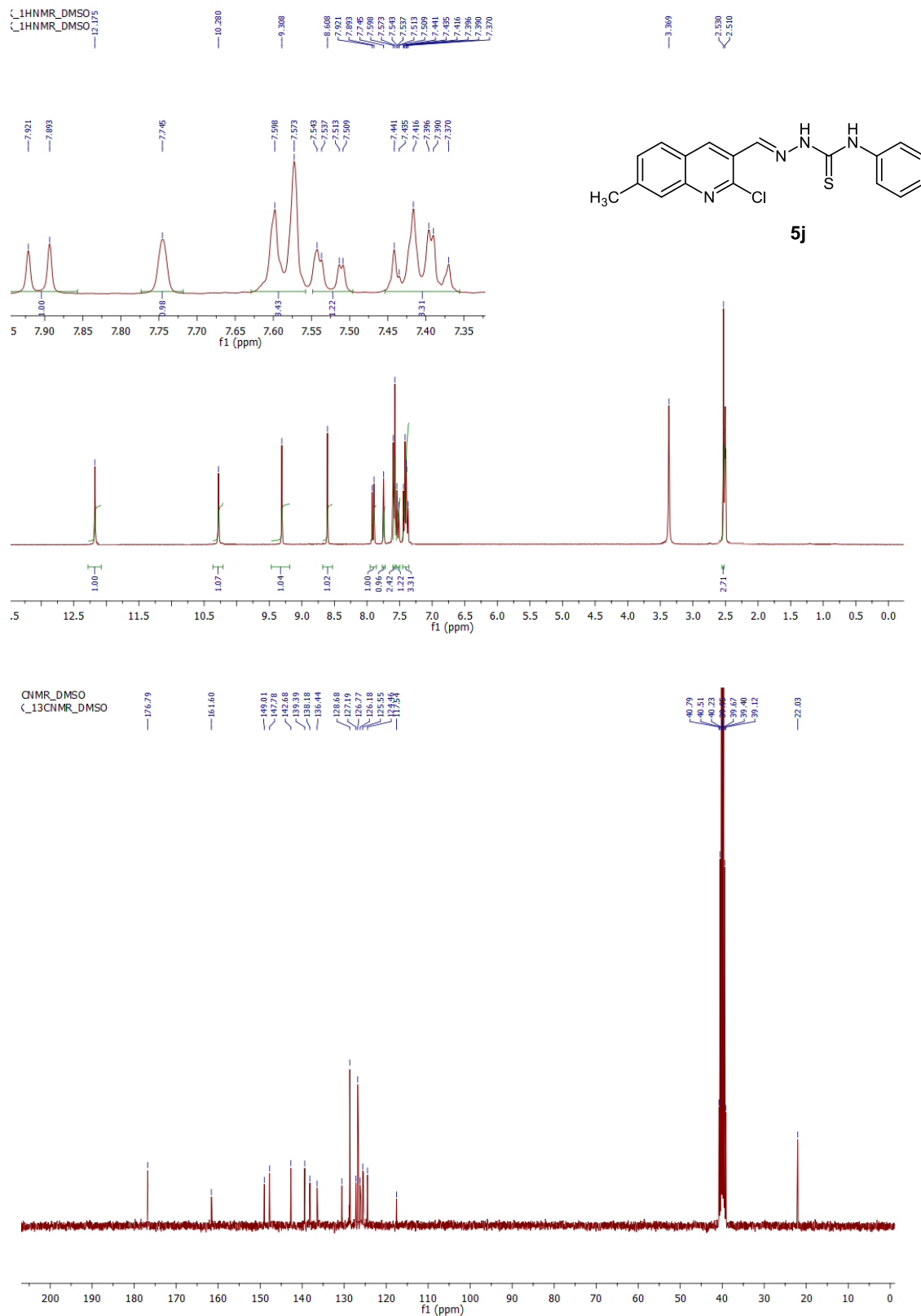
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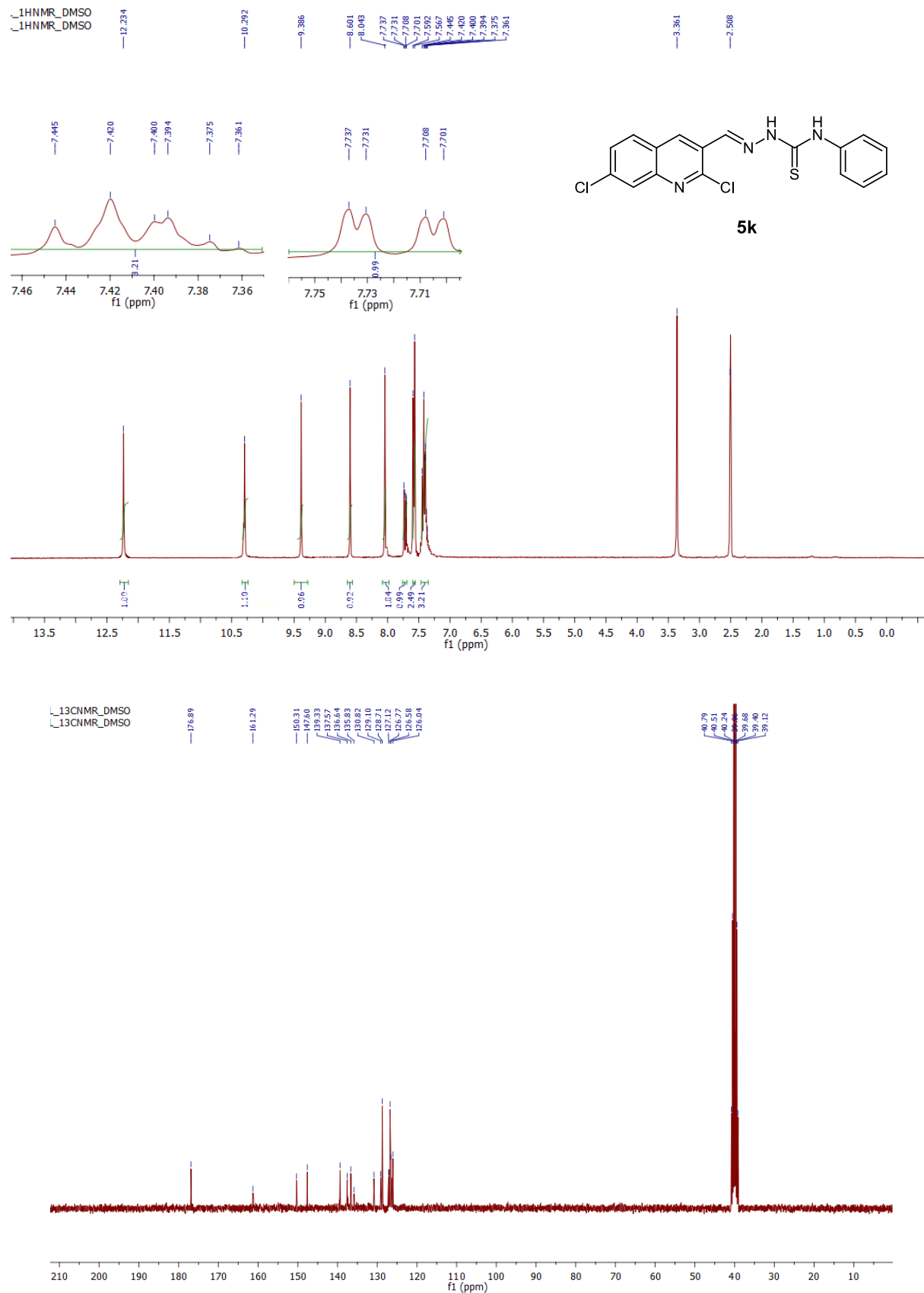
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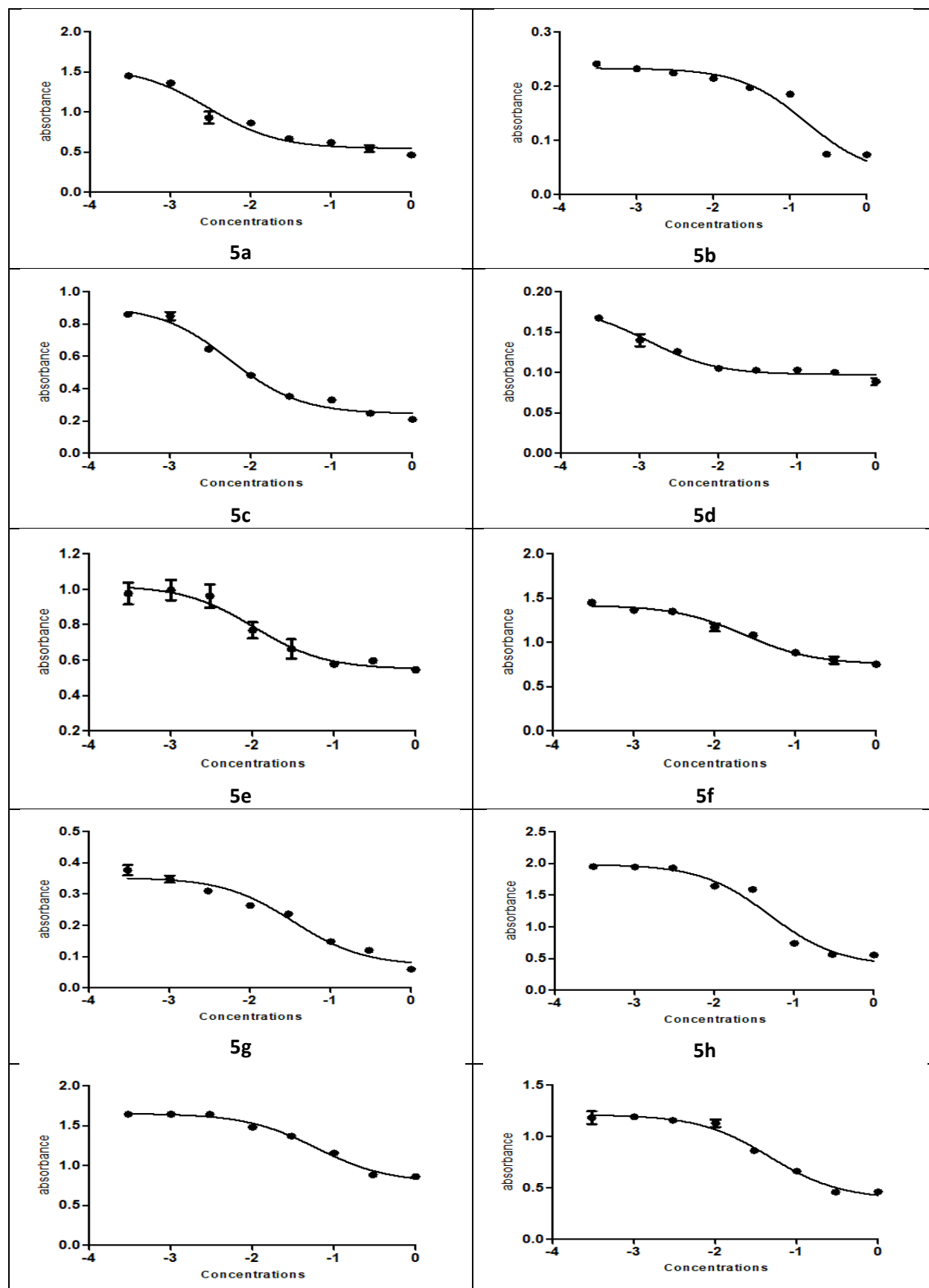
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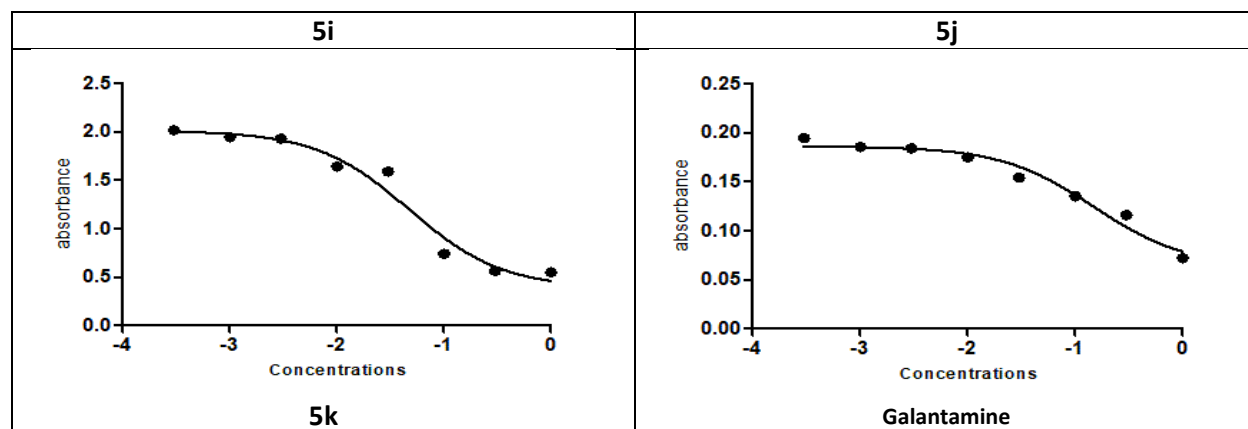
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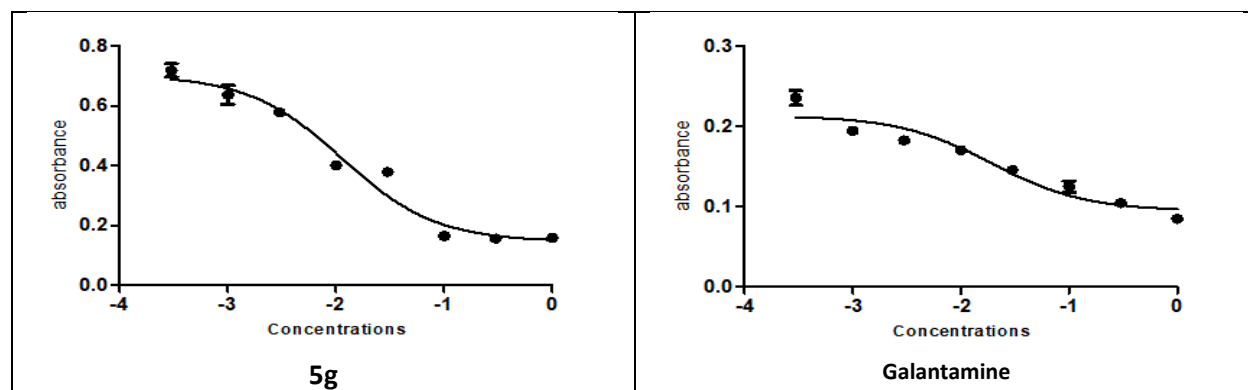


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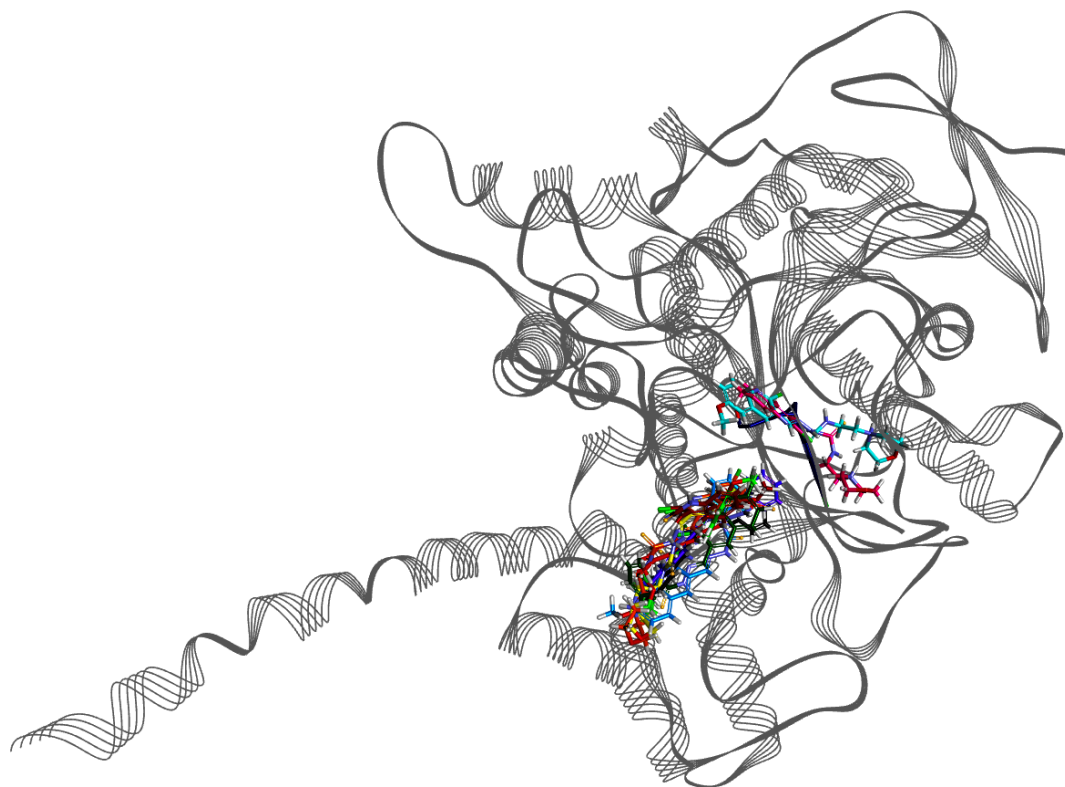
**Figure S1.** Dose response curves for enzyme inhibition activity (AChE)

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**Figure S2.** Dose response curves for enzyme inhibition activity (BChE)

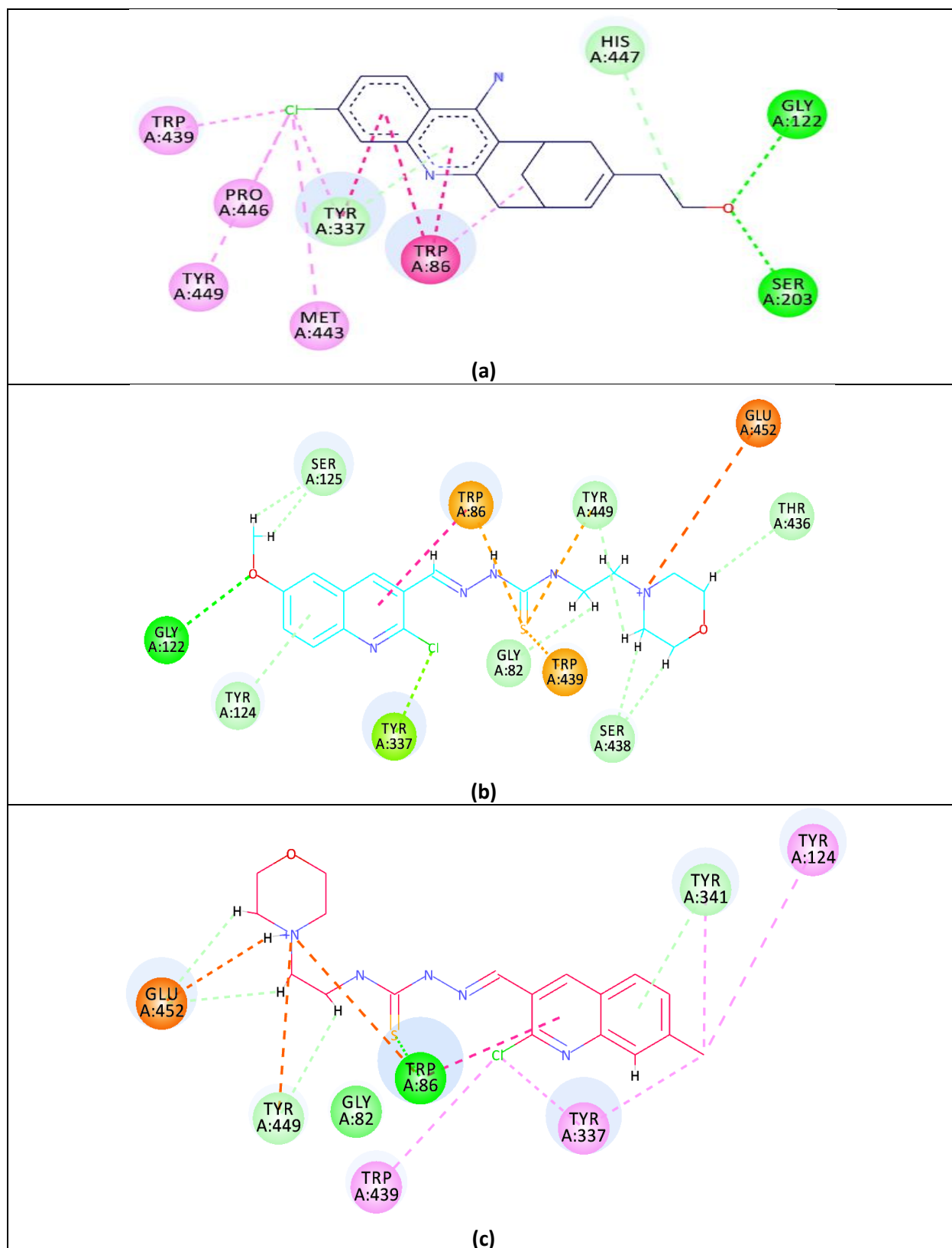
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**Figure S3.** An overview of the active site of AChE containing cognate ligand and all the tested compounds.

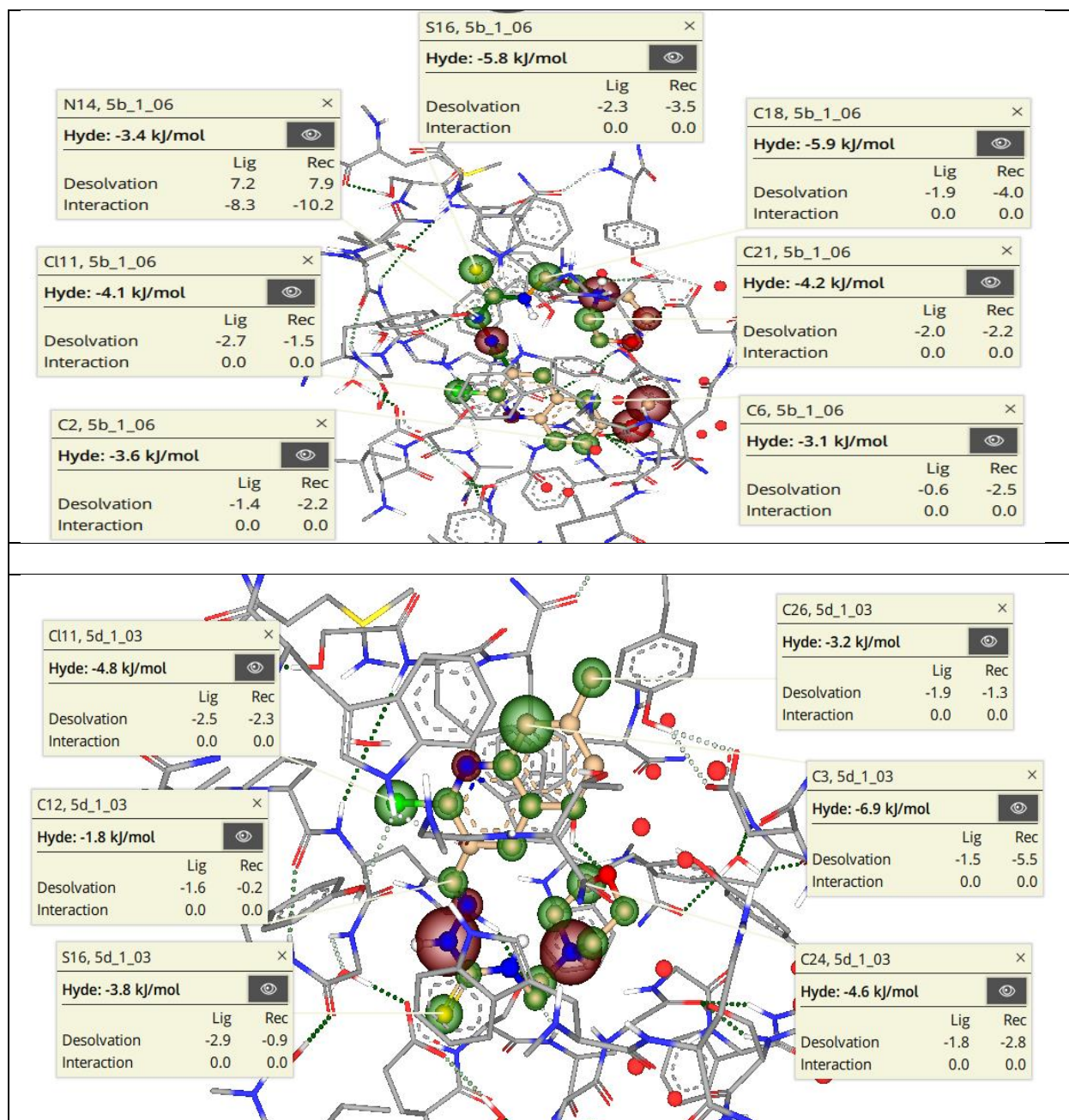


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**Figure S4.** 2D interactions of **huprine W** (a), compounds **5b** (b) and **5d** (c) with amino acid residues.

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**Figure S5.** Visual and investigative modes of the docked pose of compounds **5b** (above) and **5d** (below) within the active site of AChE.