

## Supplementary Material

Title: Synthesis, kinetic evaluation and molecular docking studies of donepezil-based acetylcholinesterase inhibitors

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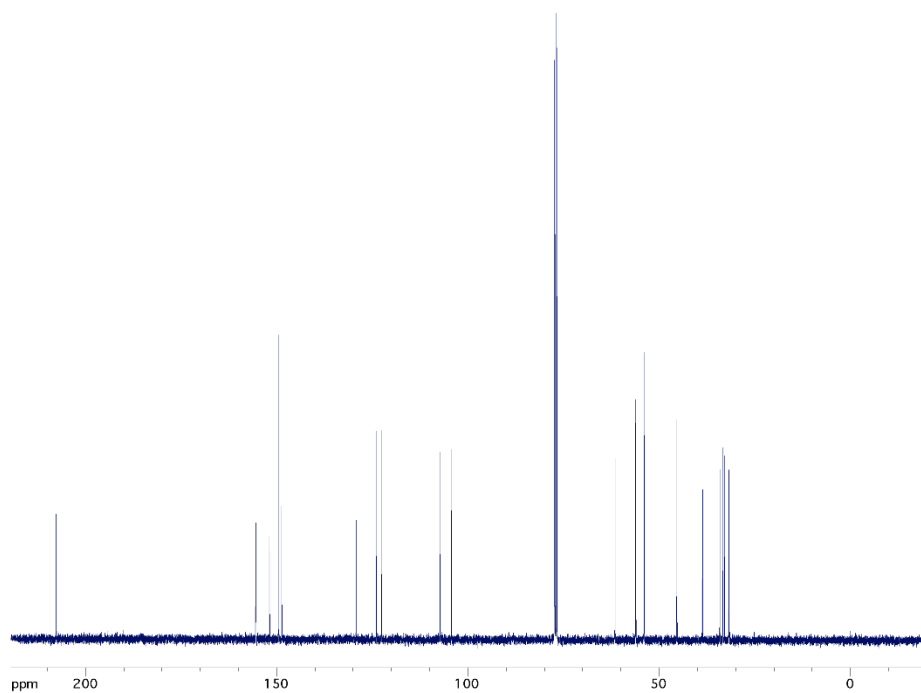
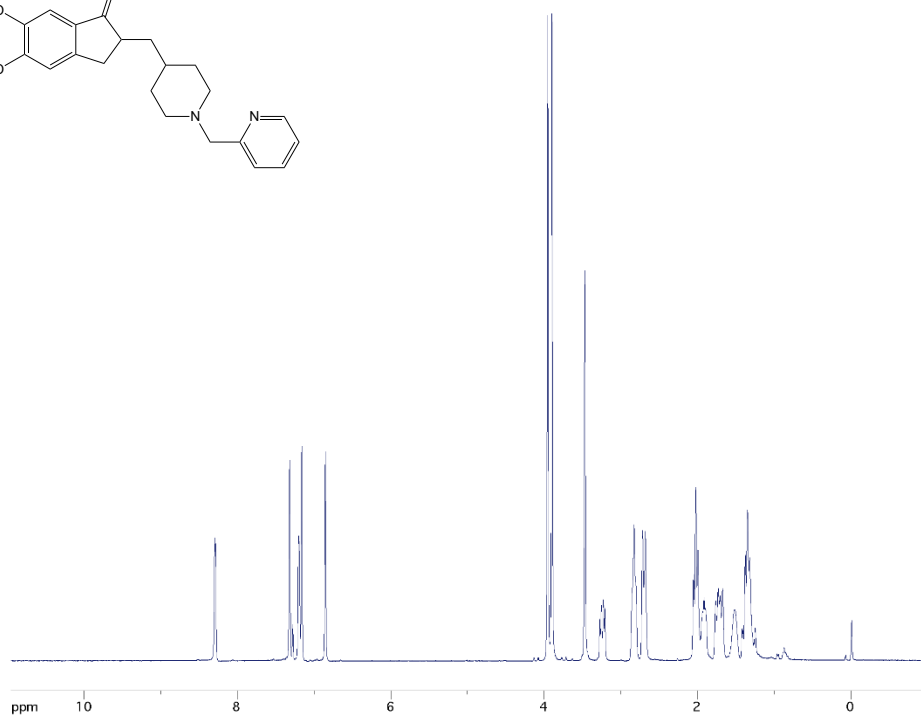
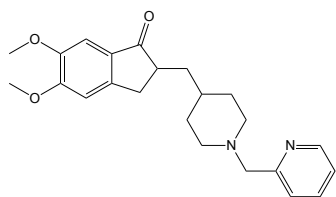
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<sup>2</sup>Department of Human Anatomy and Cell Science, Rady Faculty of Health Sciences, Max Rady College of Medicine, University of Manitoba, Winnipeg, MB R3E 0J9, Canada.

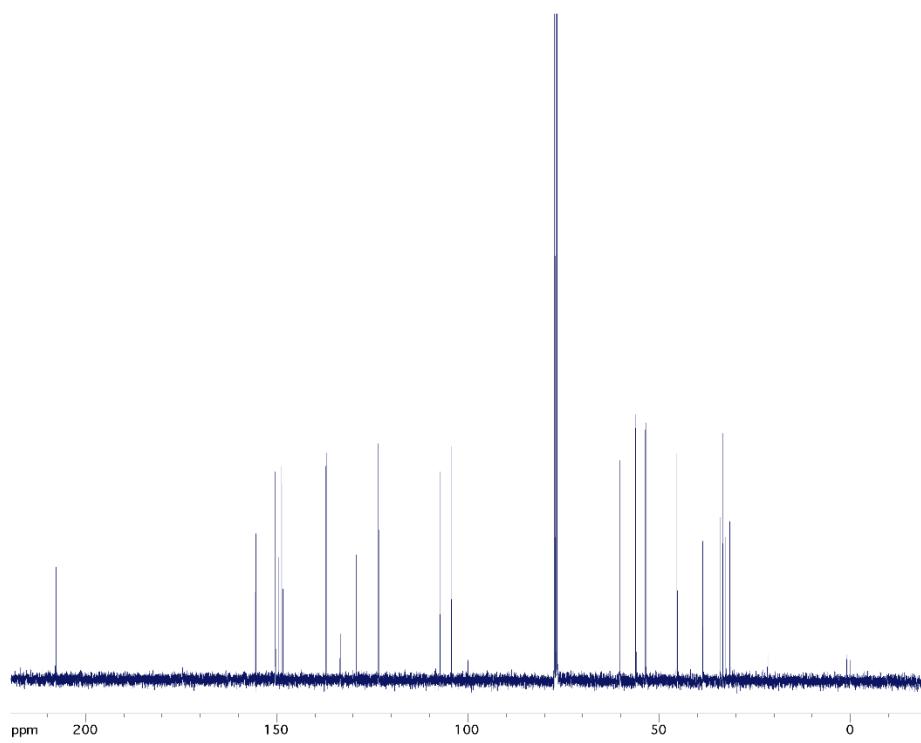
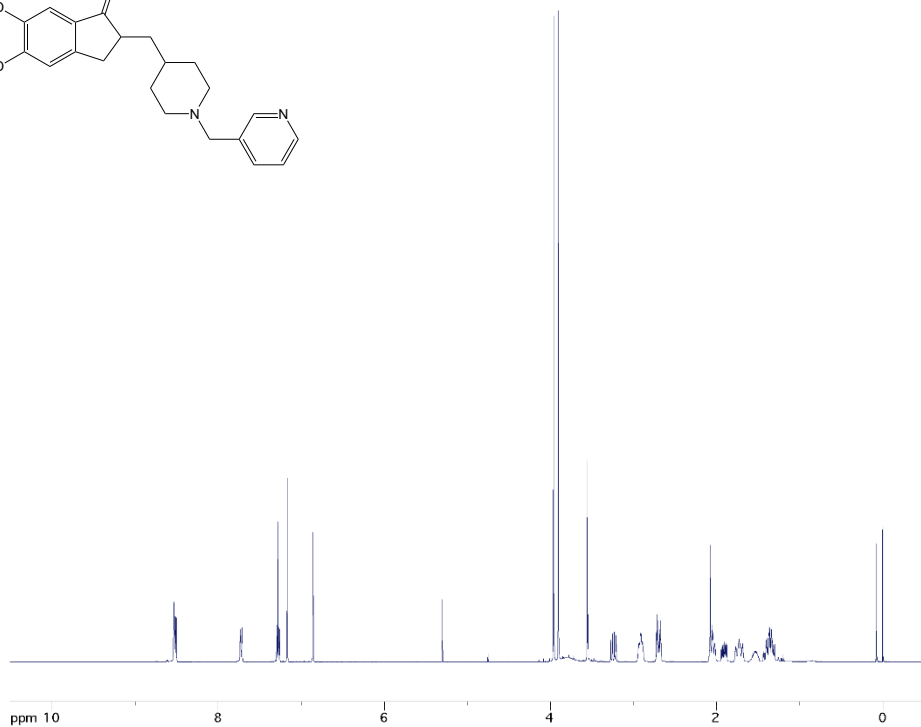
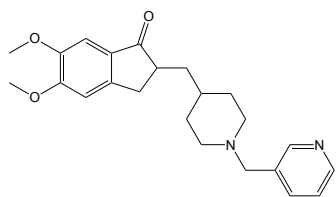
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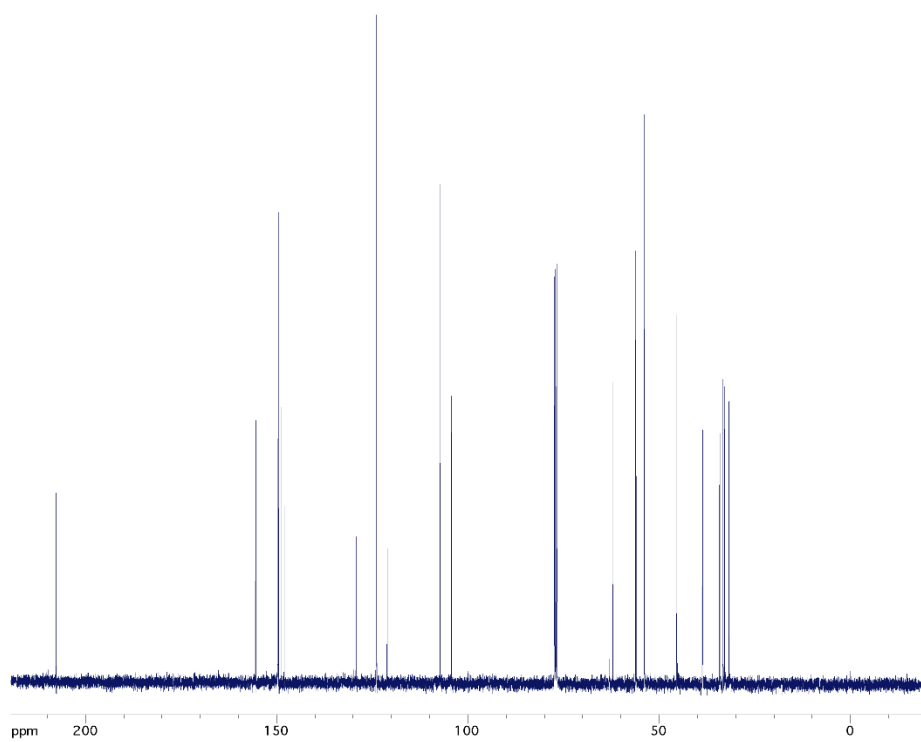
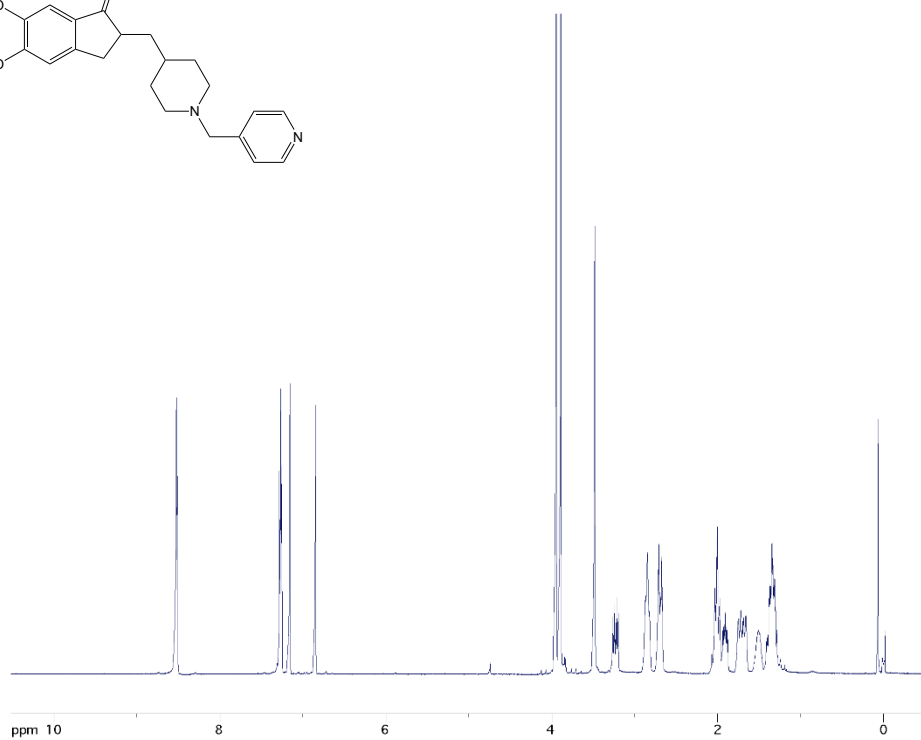
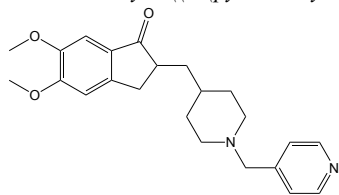
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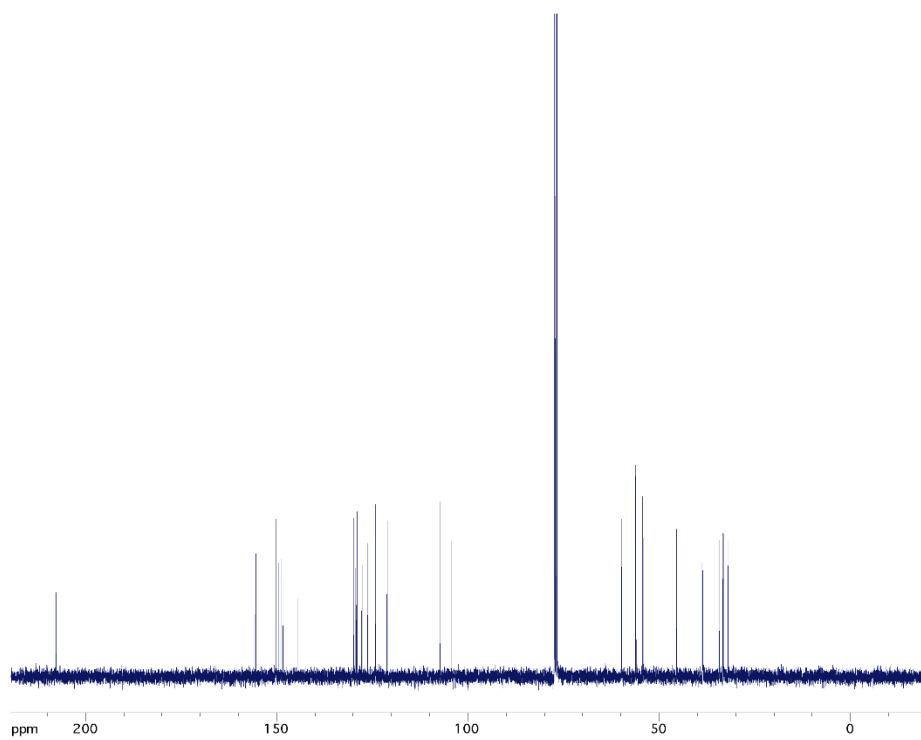
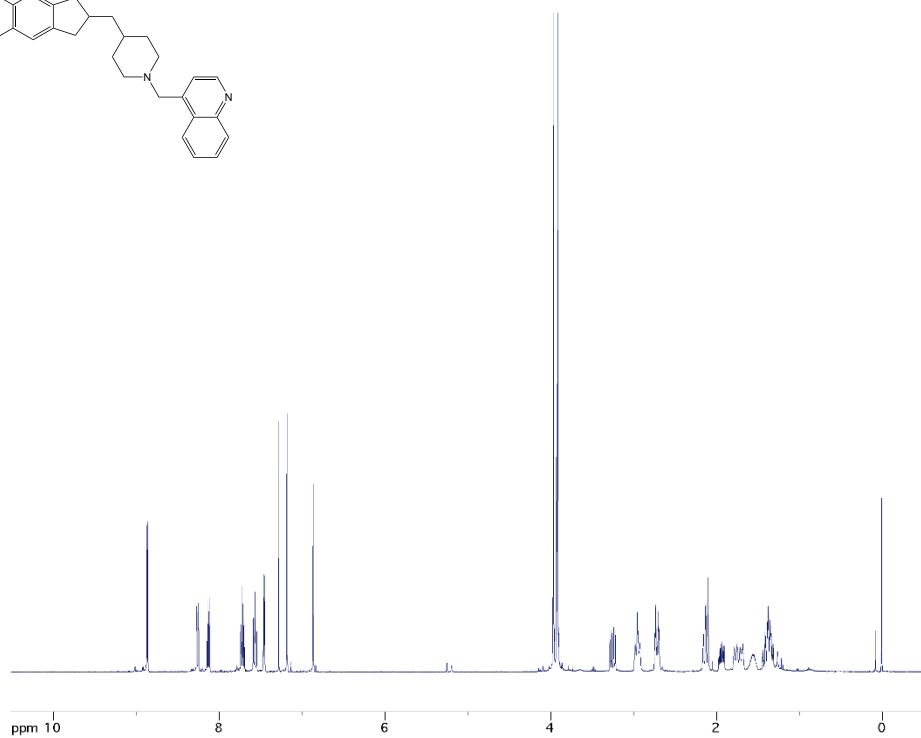
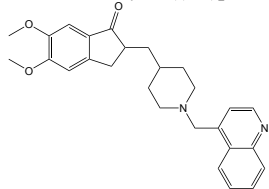
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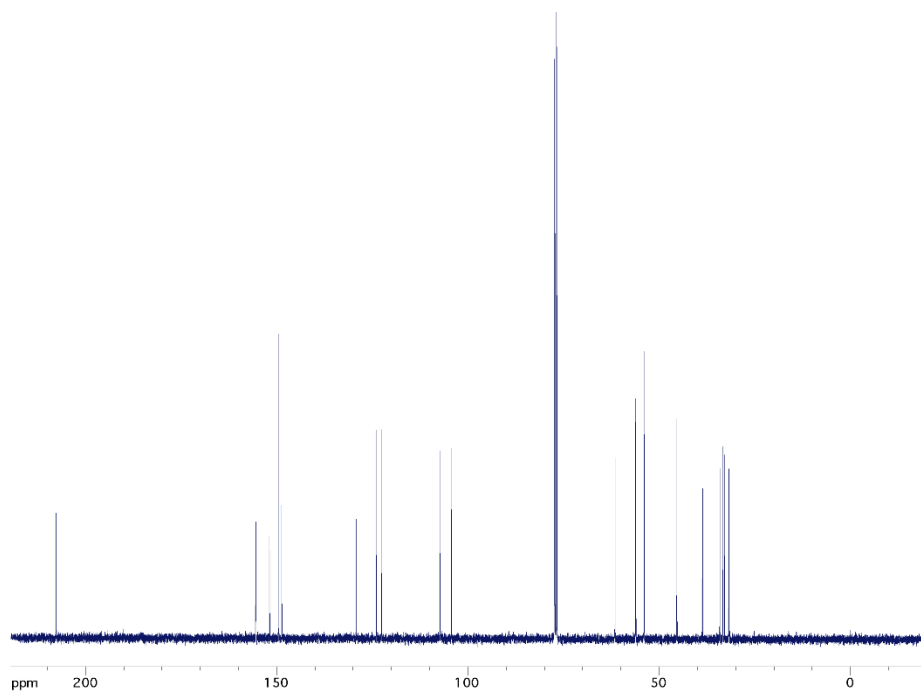
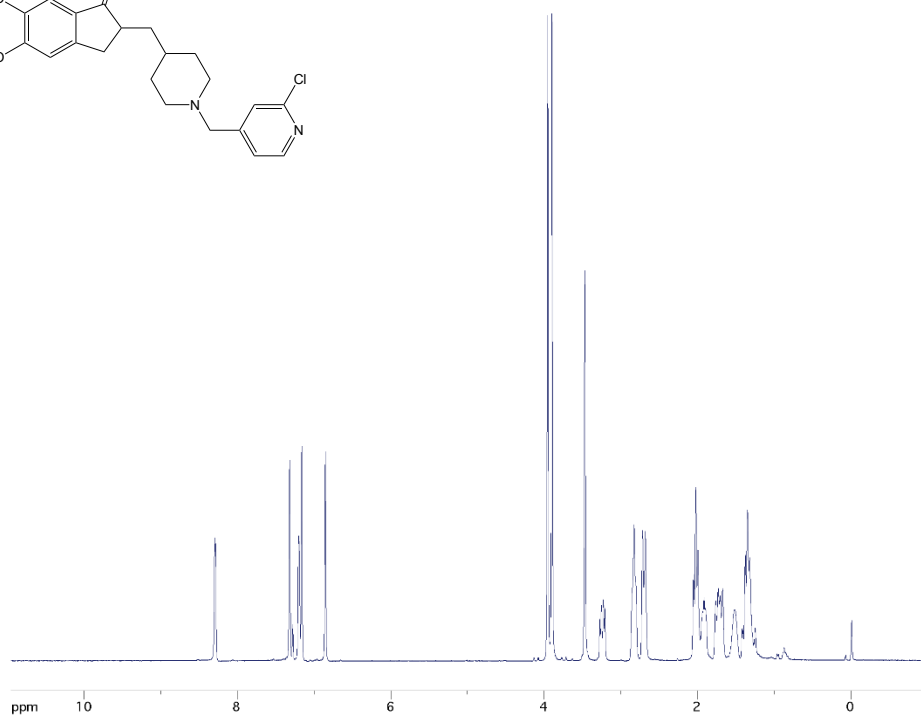
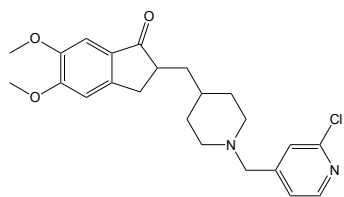
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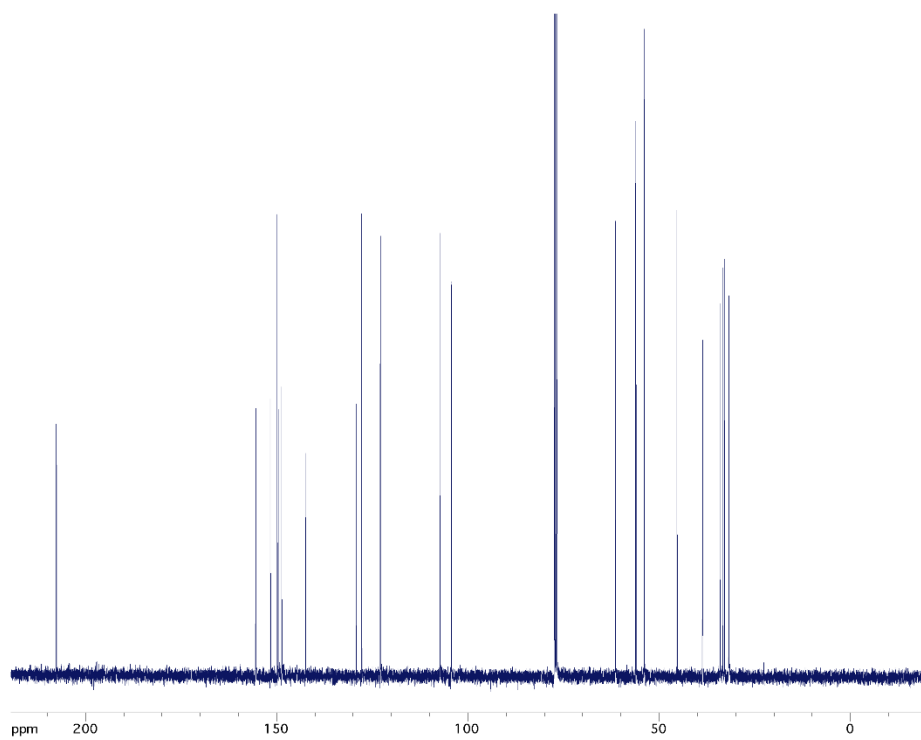
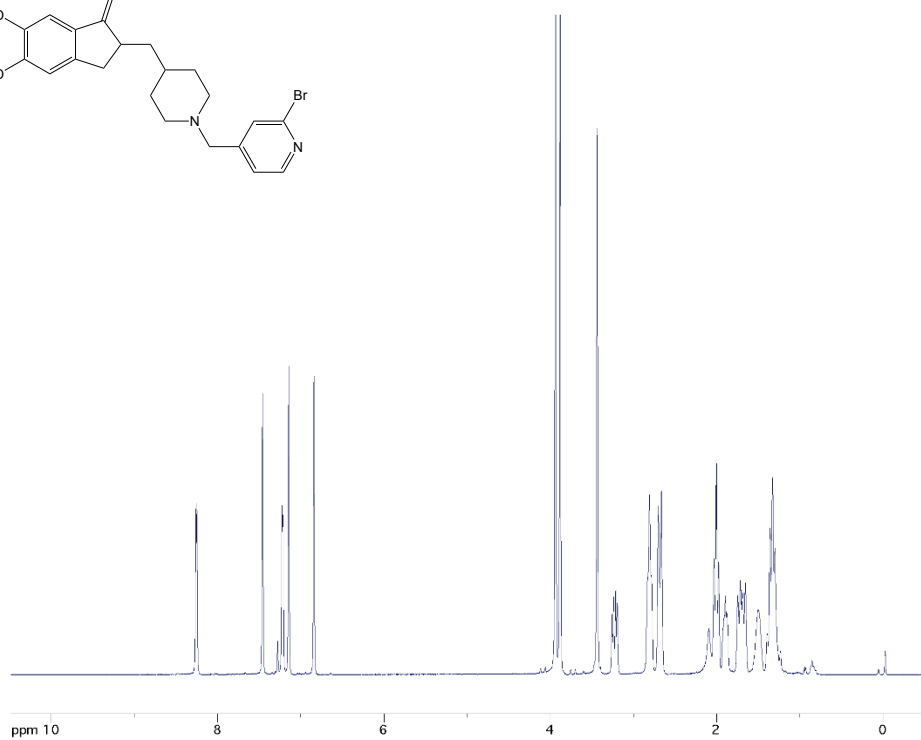
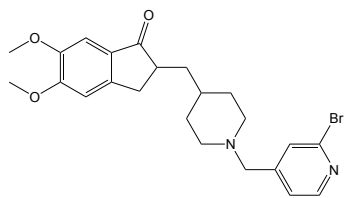
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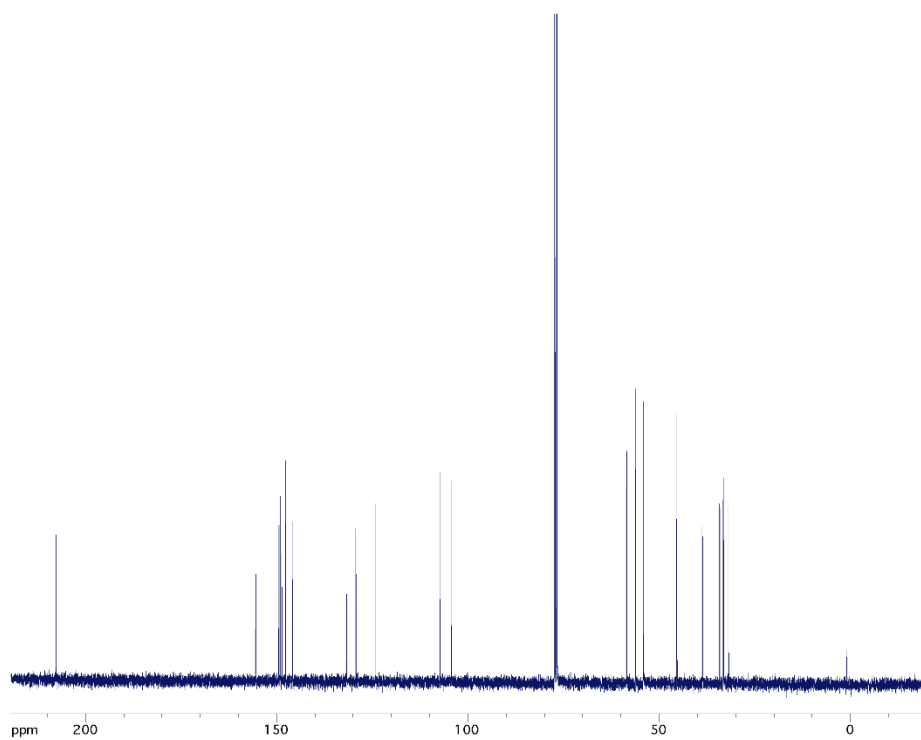
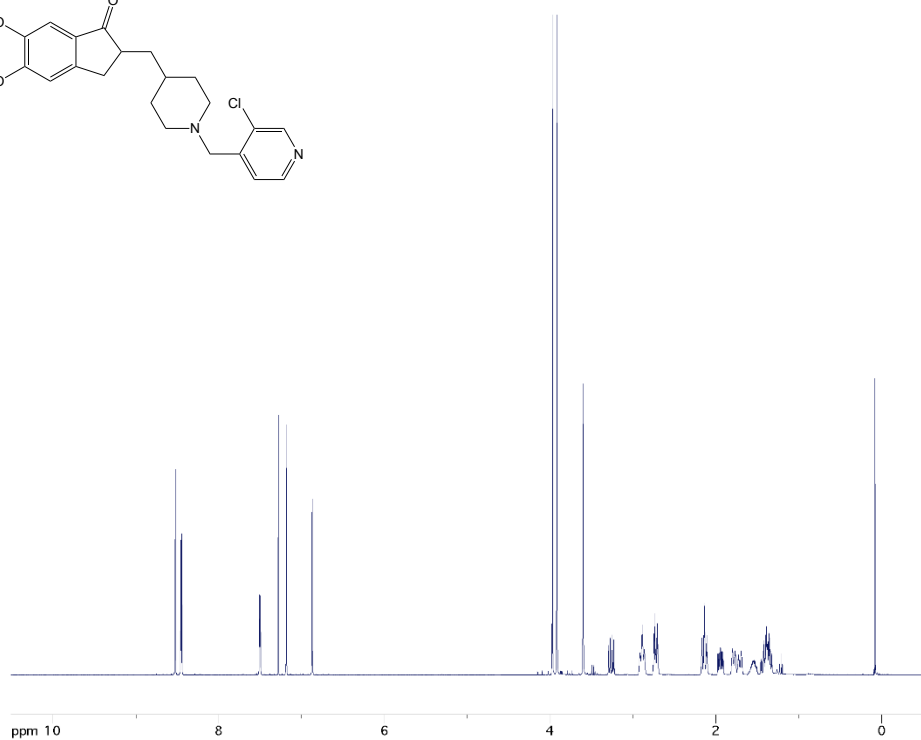
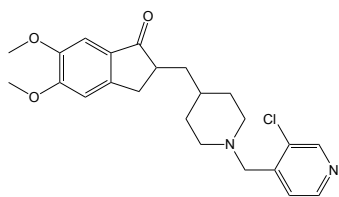
2-((1-((2-chloropyridin-4-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 5**



2-((1-((2-bromopyridin-4-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 6**

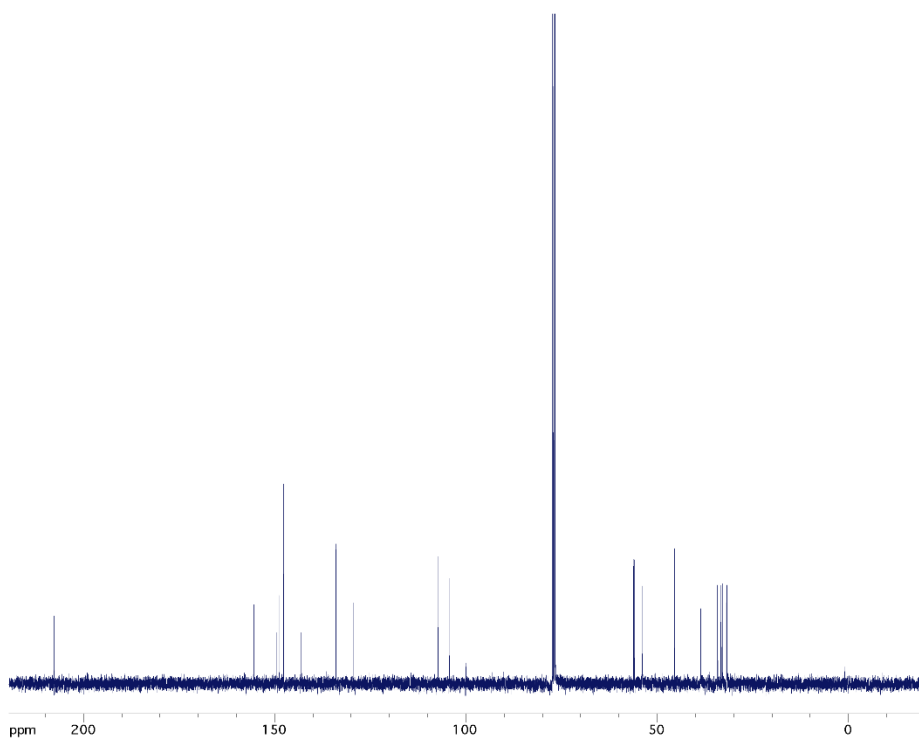
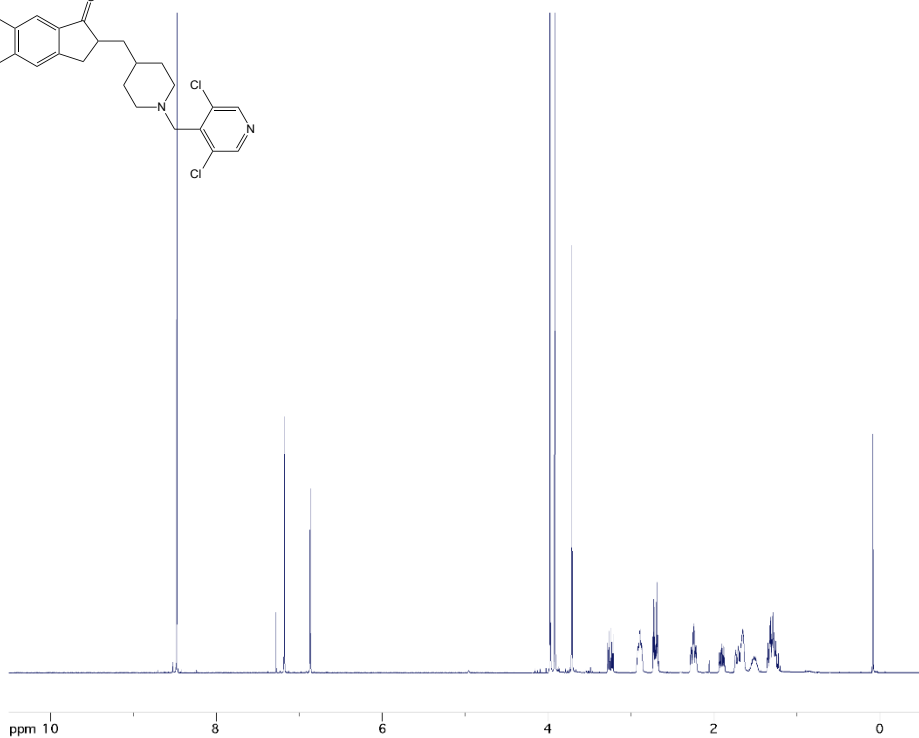
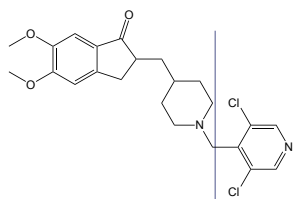


2-((1-((3-chloropyridin-4-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 7**

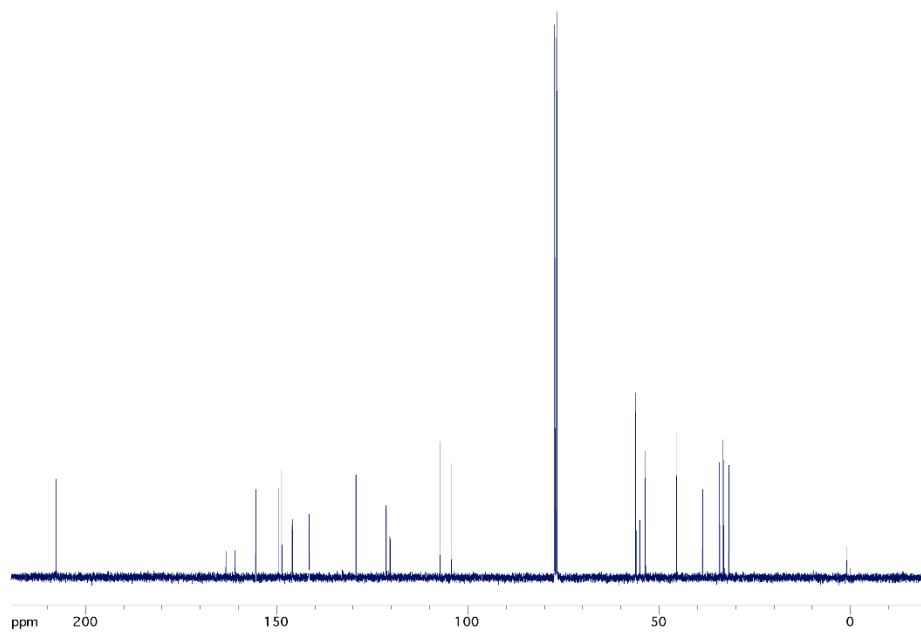
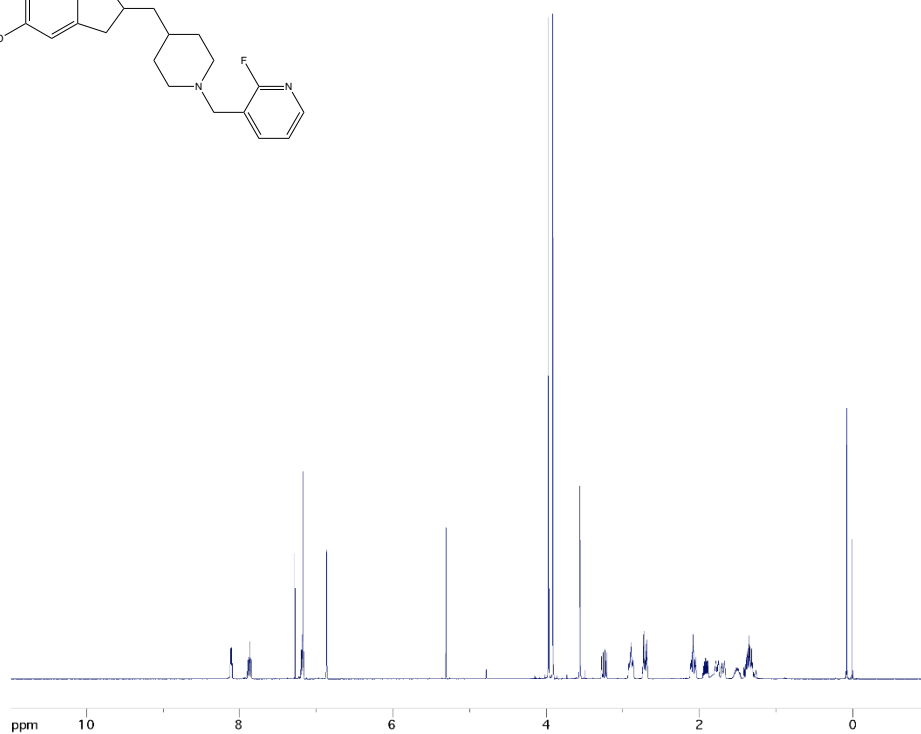
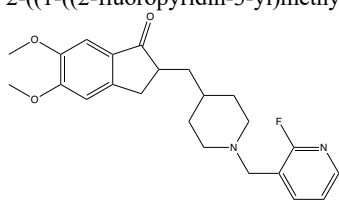




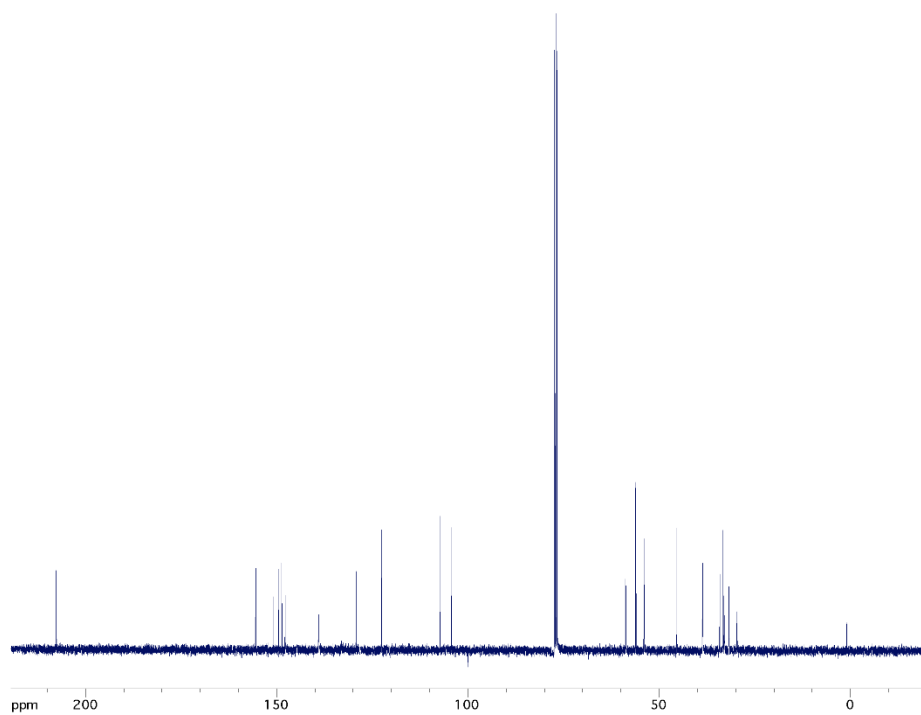
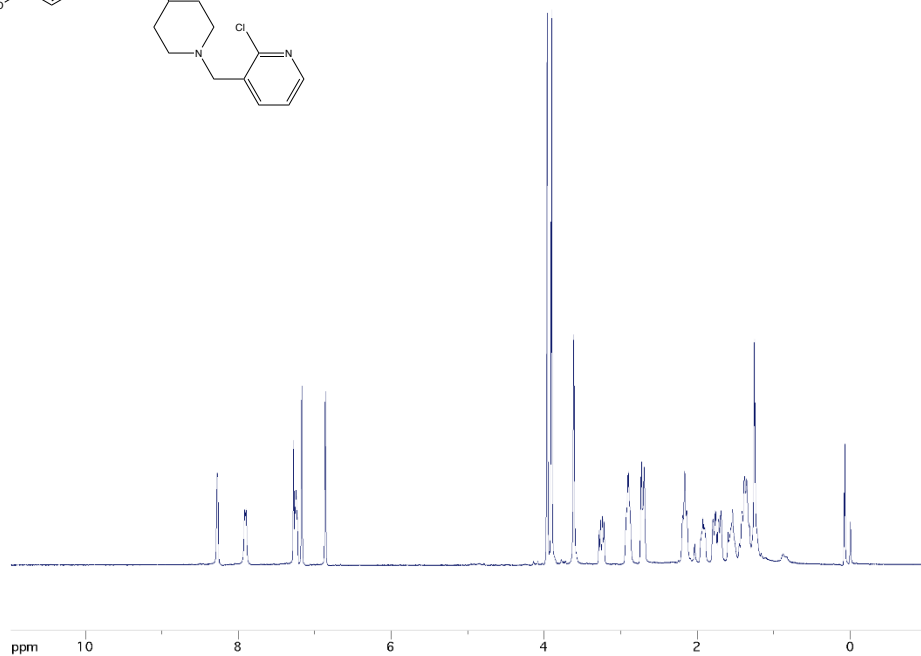
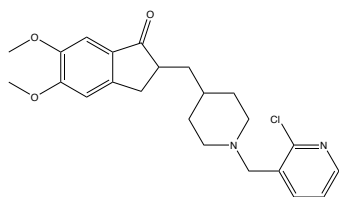
2-((1-((3,5-dichloropyridin-4-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, Analog 8



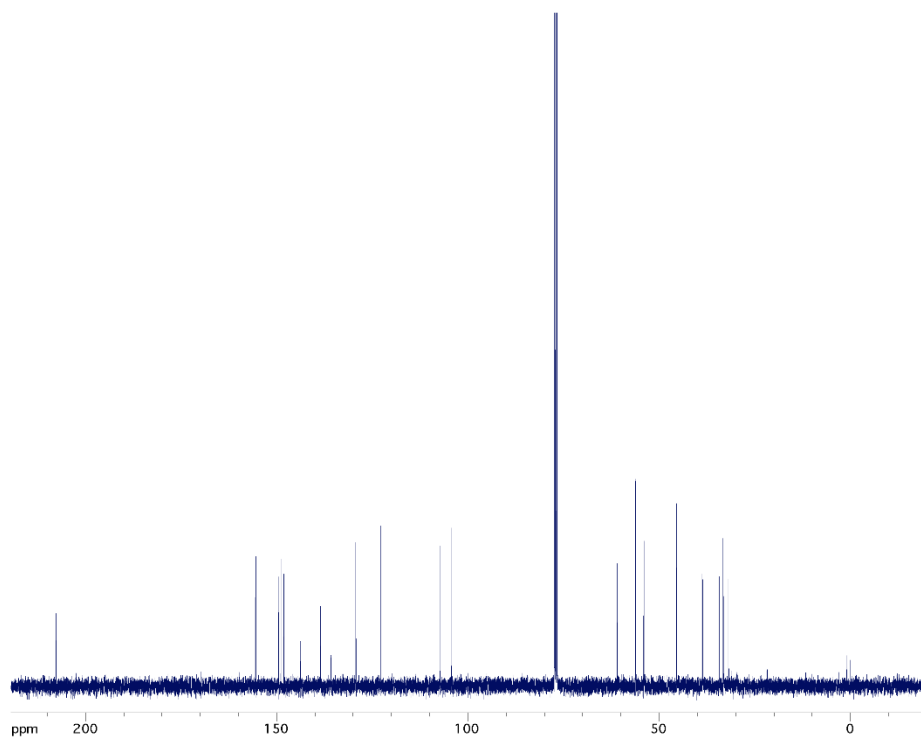
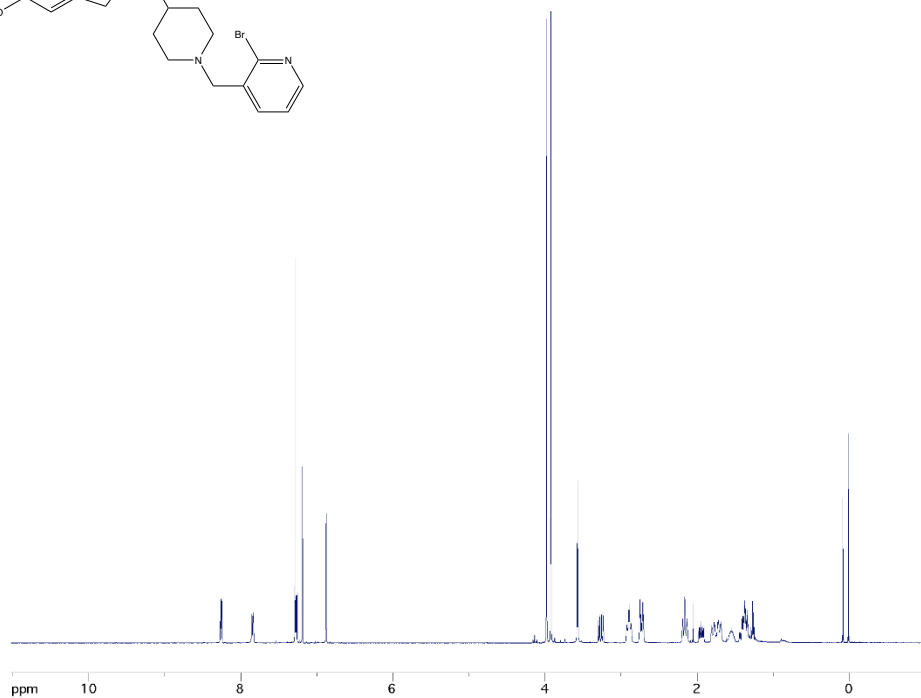
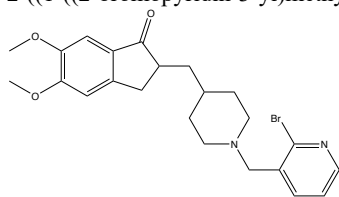
2-((1-((2-fluoropyridin-3-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 9**



2-((1-((2-chloropyridin-3-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 10**



2-((1-((2-bromopyridin-3-yl)methyl)piperidin-4-yl)methyl)-5,6-dimethoxy-2,3-dihydro-1H-inden-1-one, **Analog 11**



5,6-dimethoxy-2-((1-((6-methylpyridin-3-yl)methyl)piperidin-4-yl)methyl)-2,3-dihydro-1H-inden-1-one, **Analog 12**

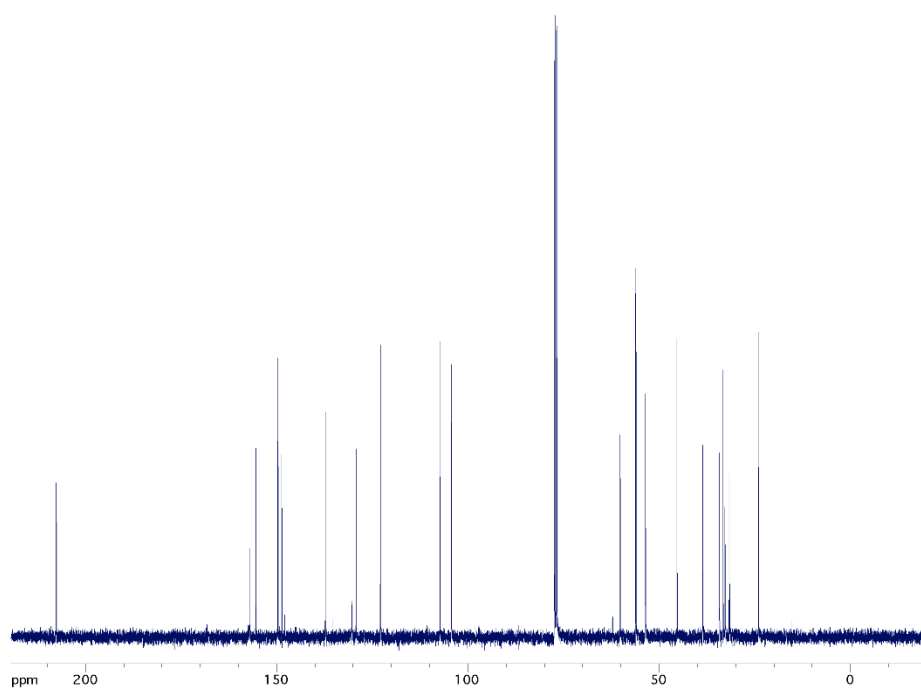
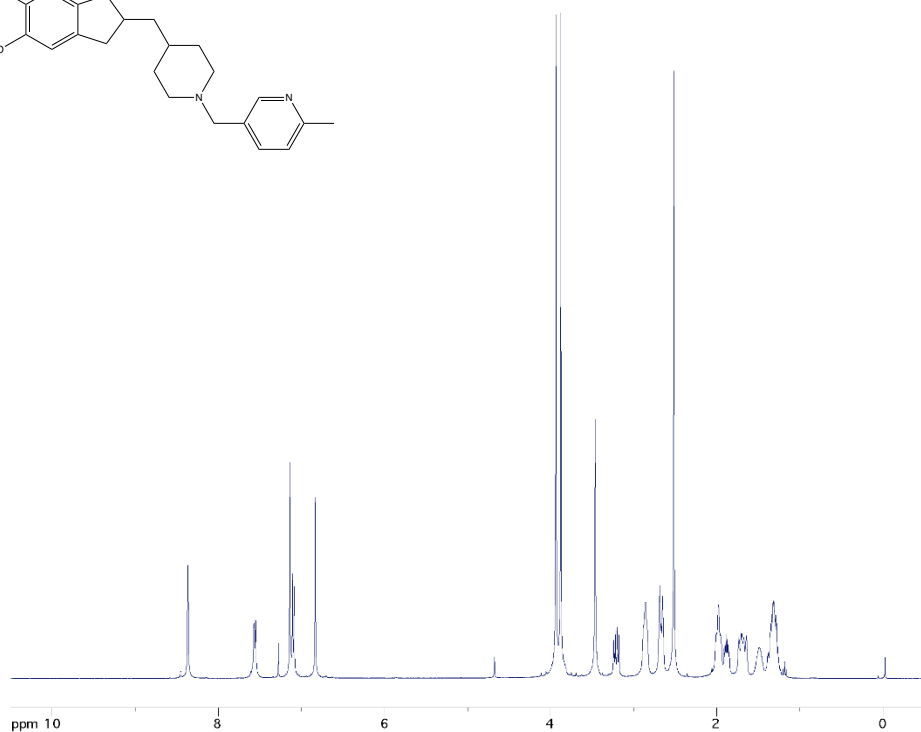
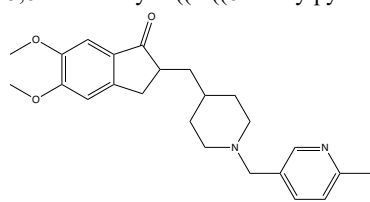


Figure S1. Sequence alignment – electric eel and human AChE enzymes

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