

Supplementary Material

Mandelic acid catalyzed one-pot pseudo three-component synthesis of various trisubstituted methane derivatives at room temperature

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²Post-Graduate Department of Physics, University of Jammu, Jammu Tawi - 180 006, India

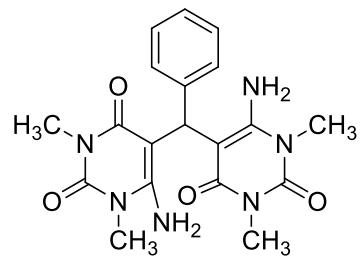
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¹H-NMR, ¹³C-NMR and HRMS spectra of all the synthesized scaffoldsS2

Characterization data with scanned spectra of all the synthesized compounds:



3a

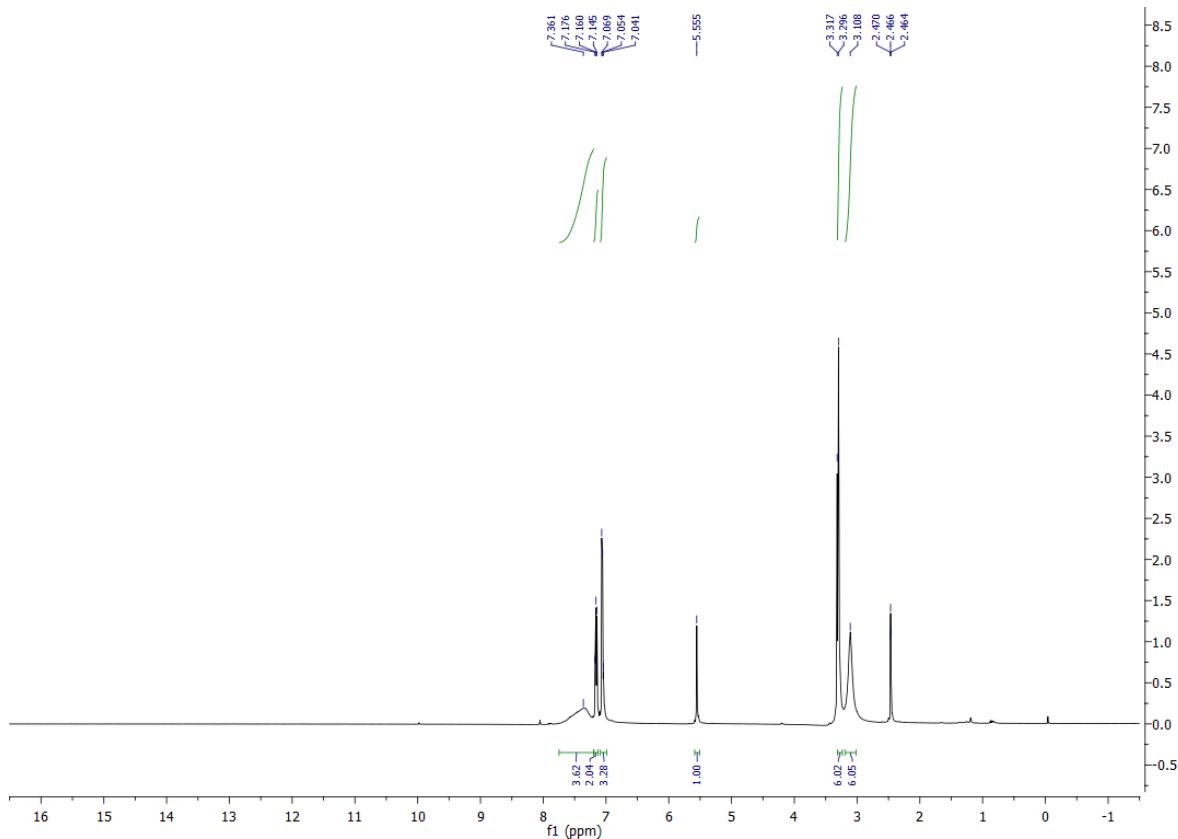


Figure S1. ¹H NMR spectrum of compound 3a.

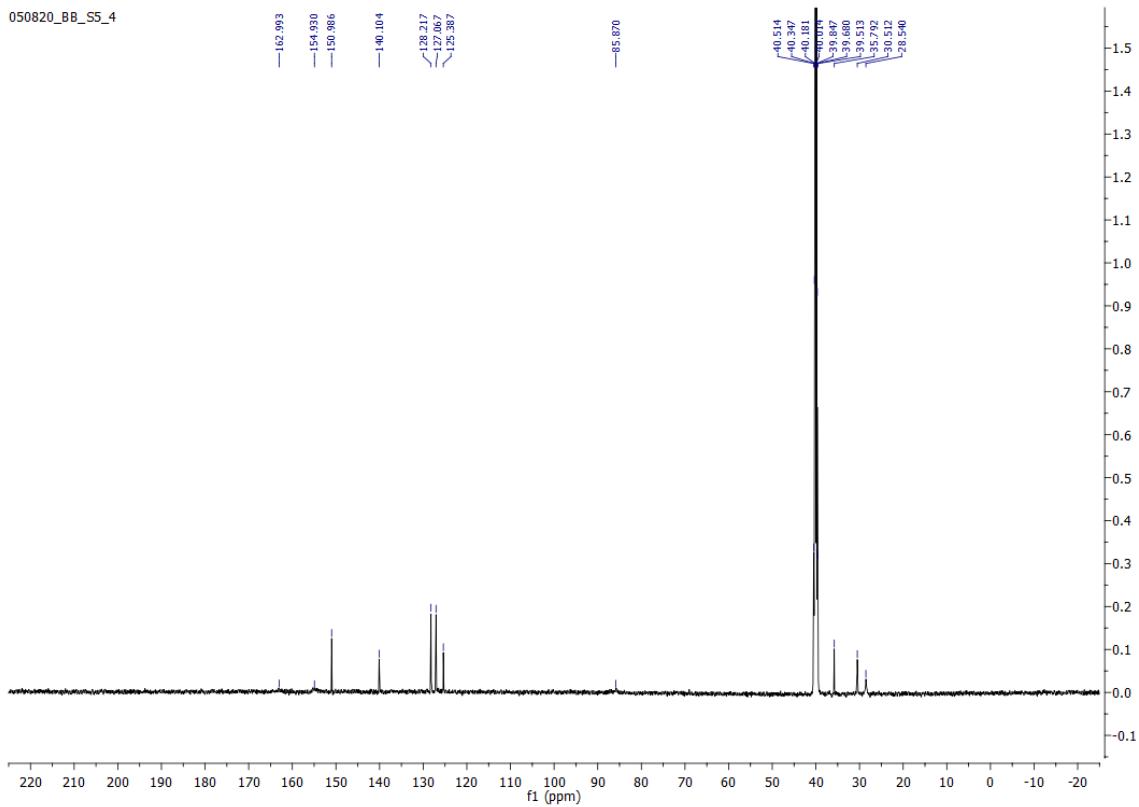


Figure S2. ^{13}C NMR spectrum of compound **3a**.

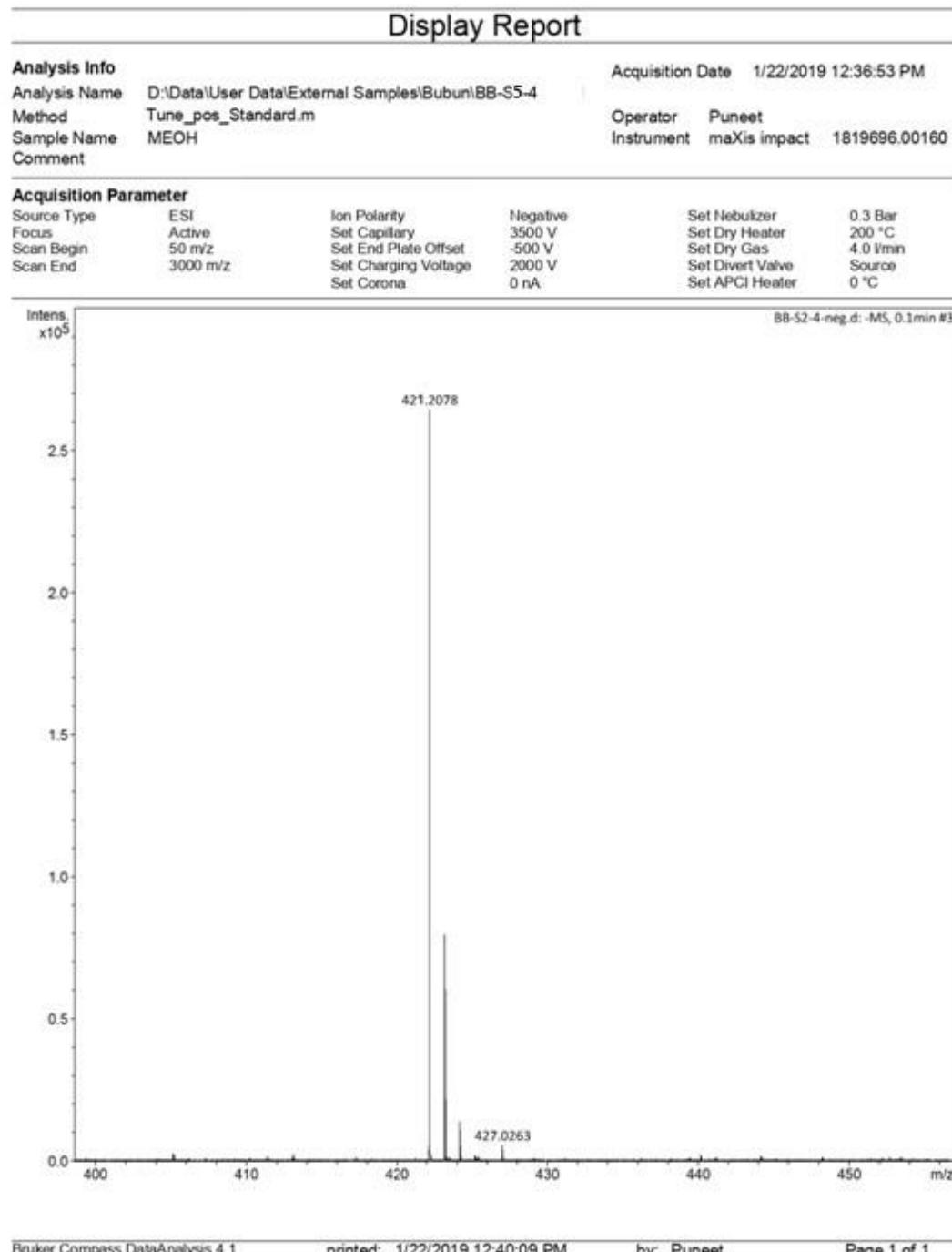
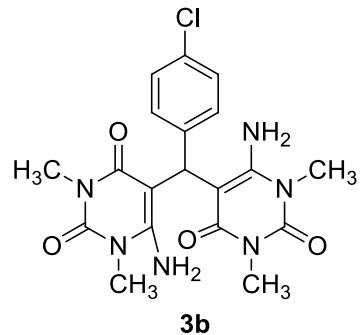
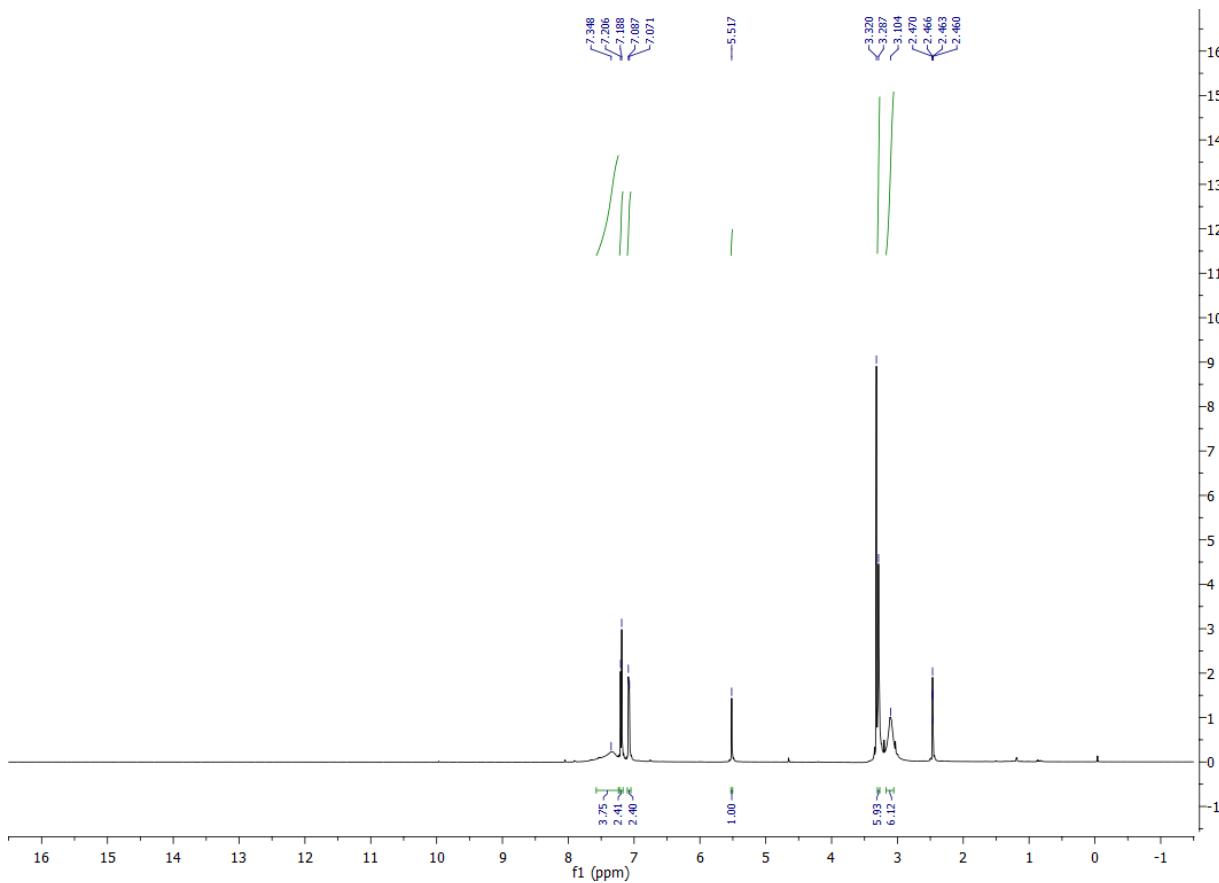


Figure S3. HRMS spectrum of compound **3a**.

**3b****Figure S4.** ¹H NMR spectrum of compound **3b**.

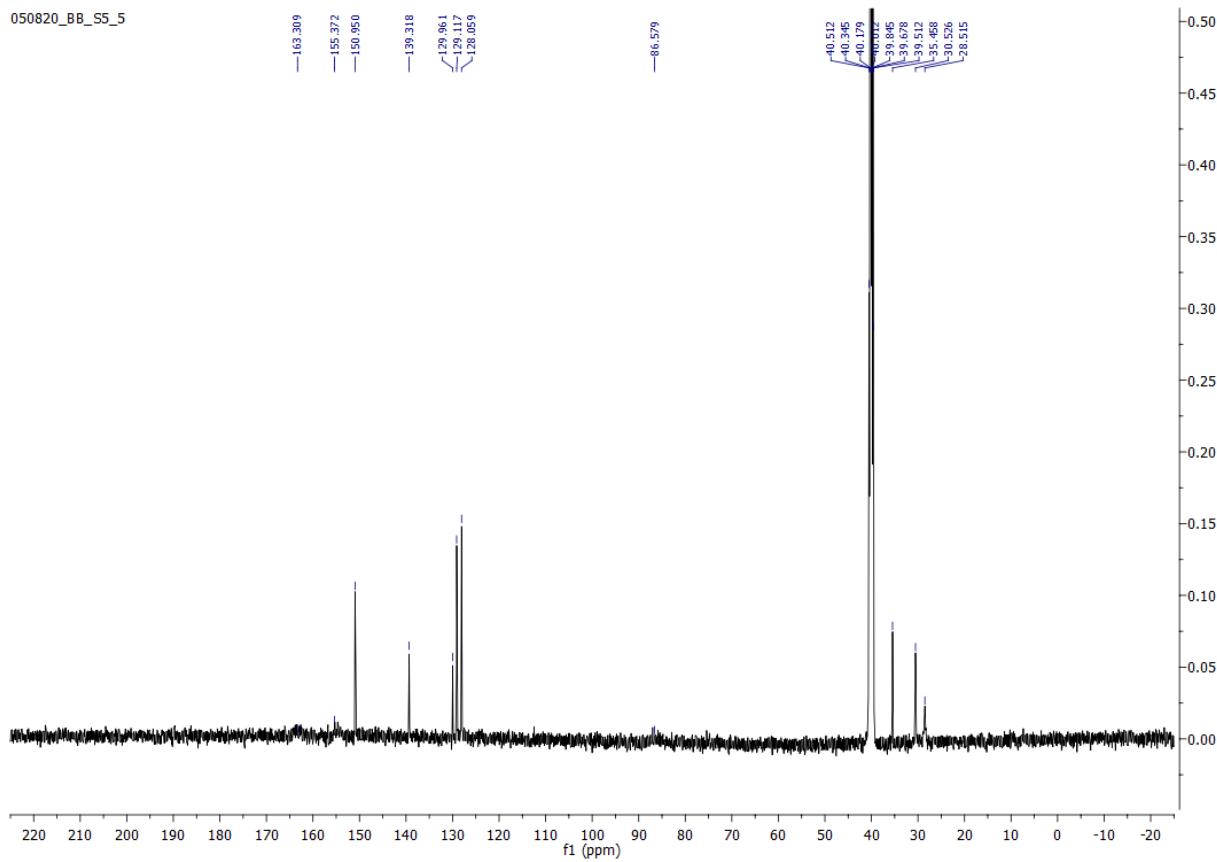


Figure S5. ^{13}C NMR spectrum of compound **3b**.

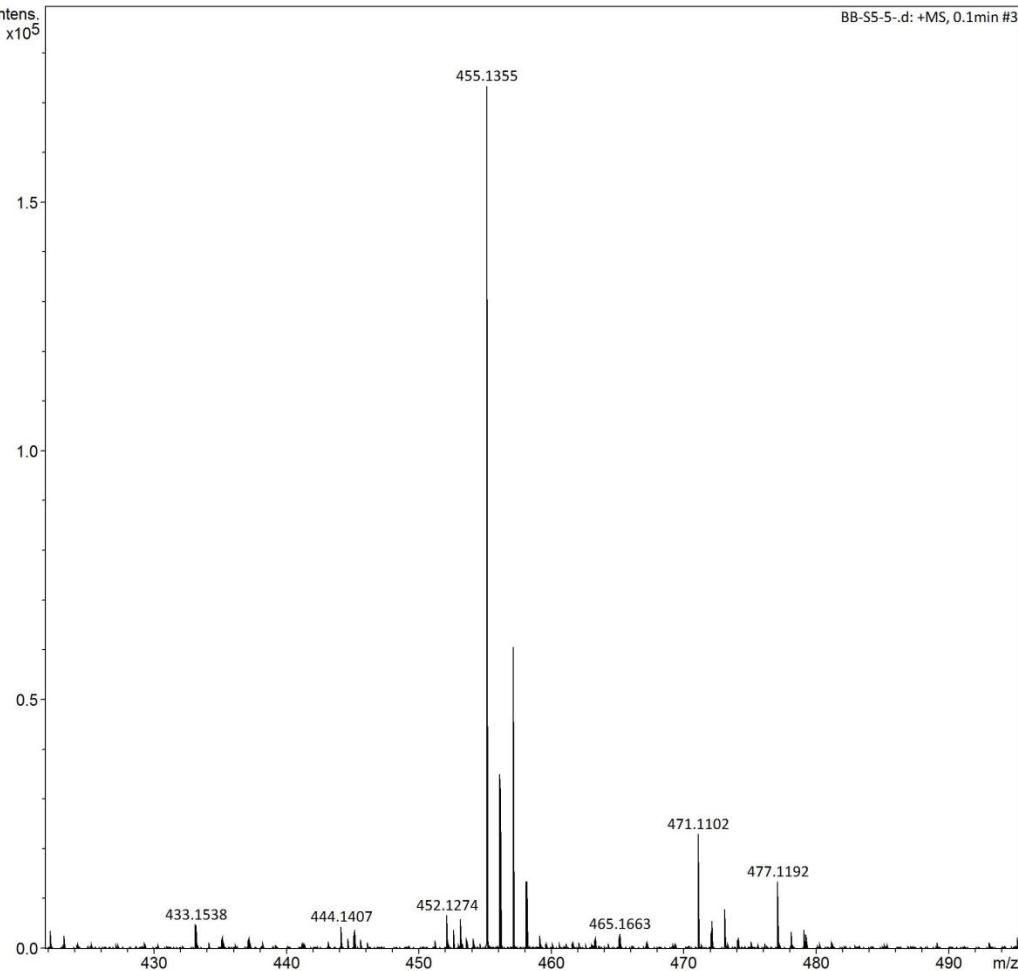
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Comment			1819696.00160

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Figure S6. HRMS spectrum of compound **3b**.

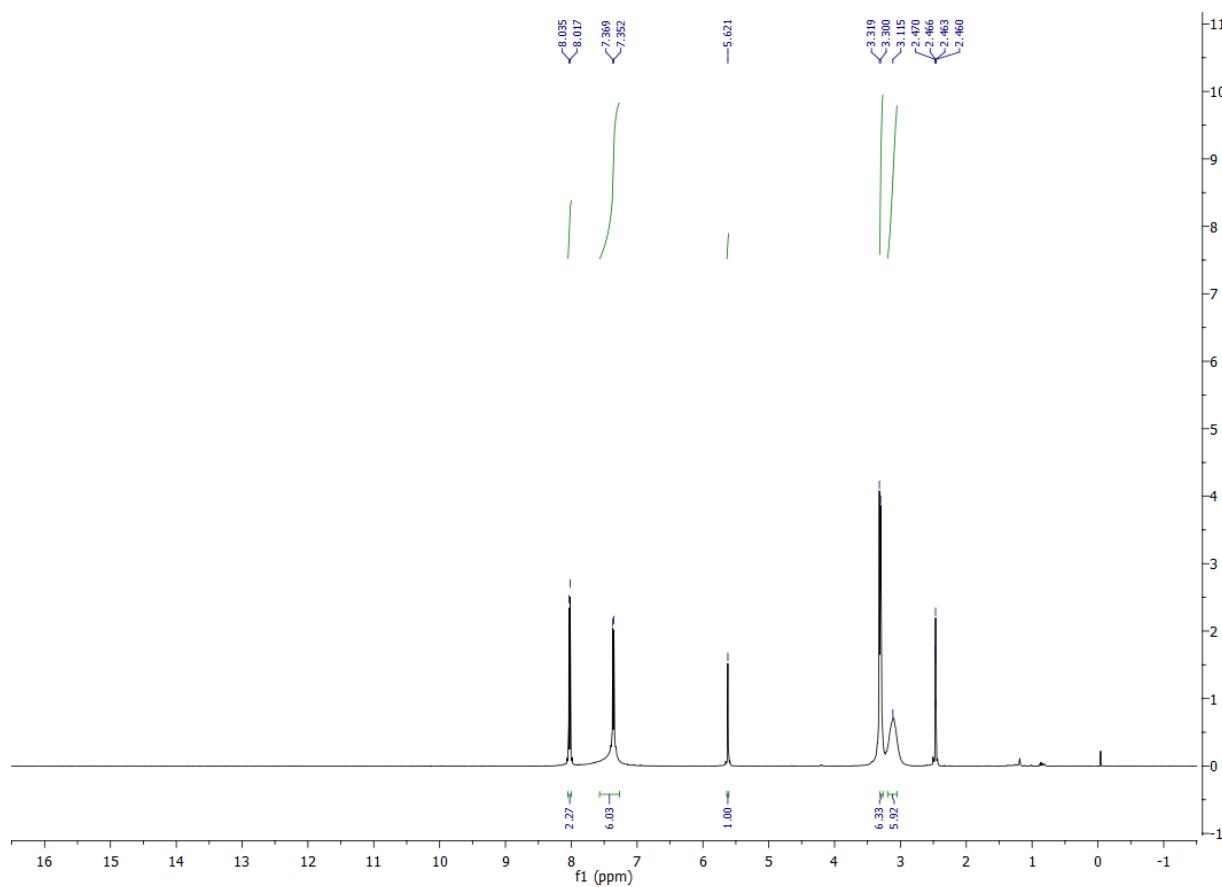
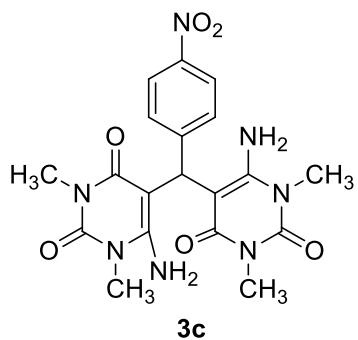


Figure S7. ¹H NMR spectrum of compound **3c**.

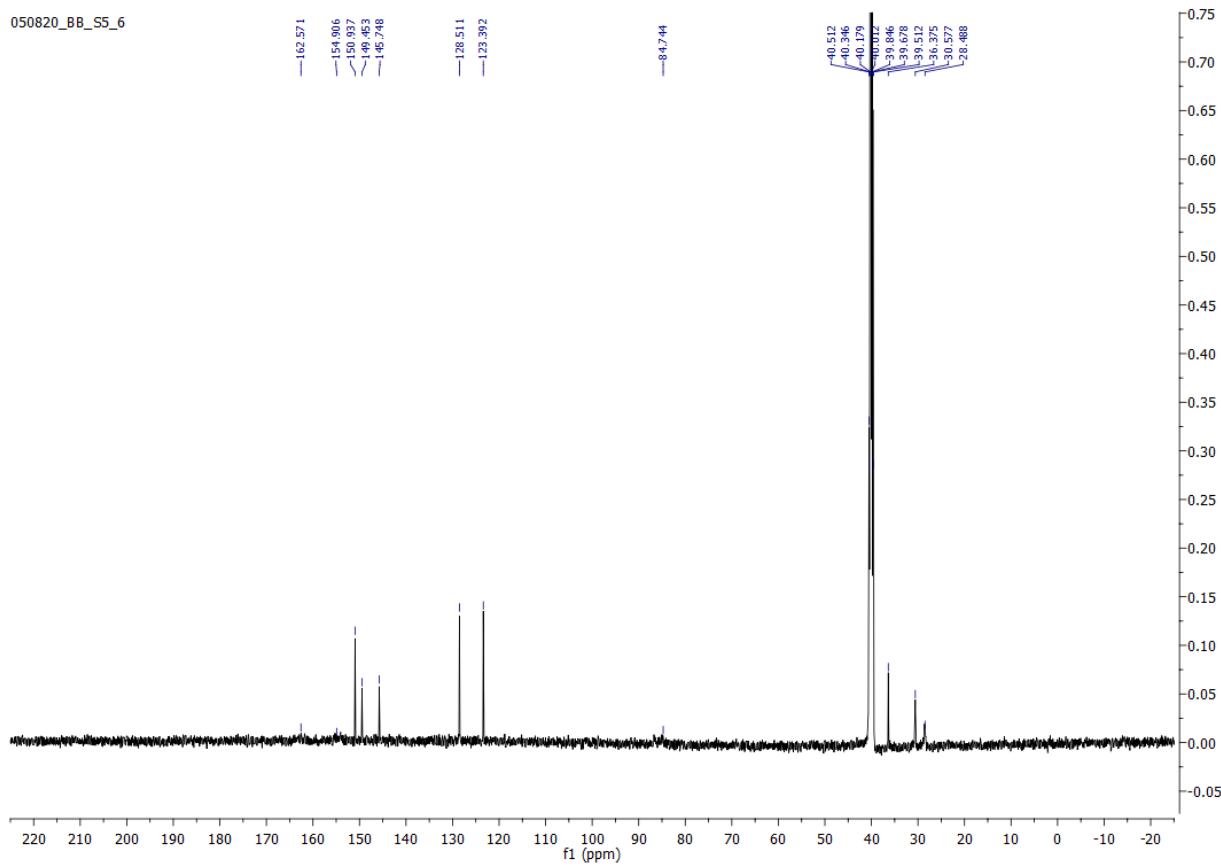


Figure S8. ^{13}C NMR spectrum of compound **3c**.

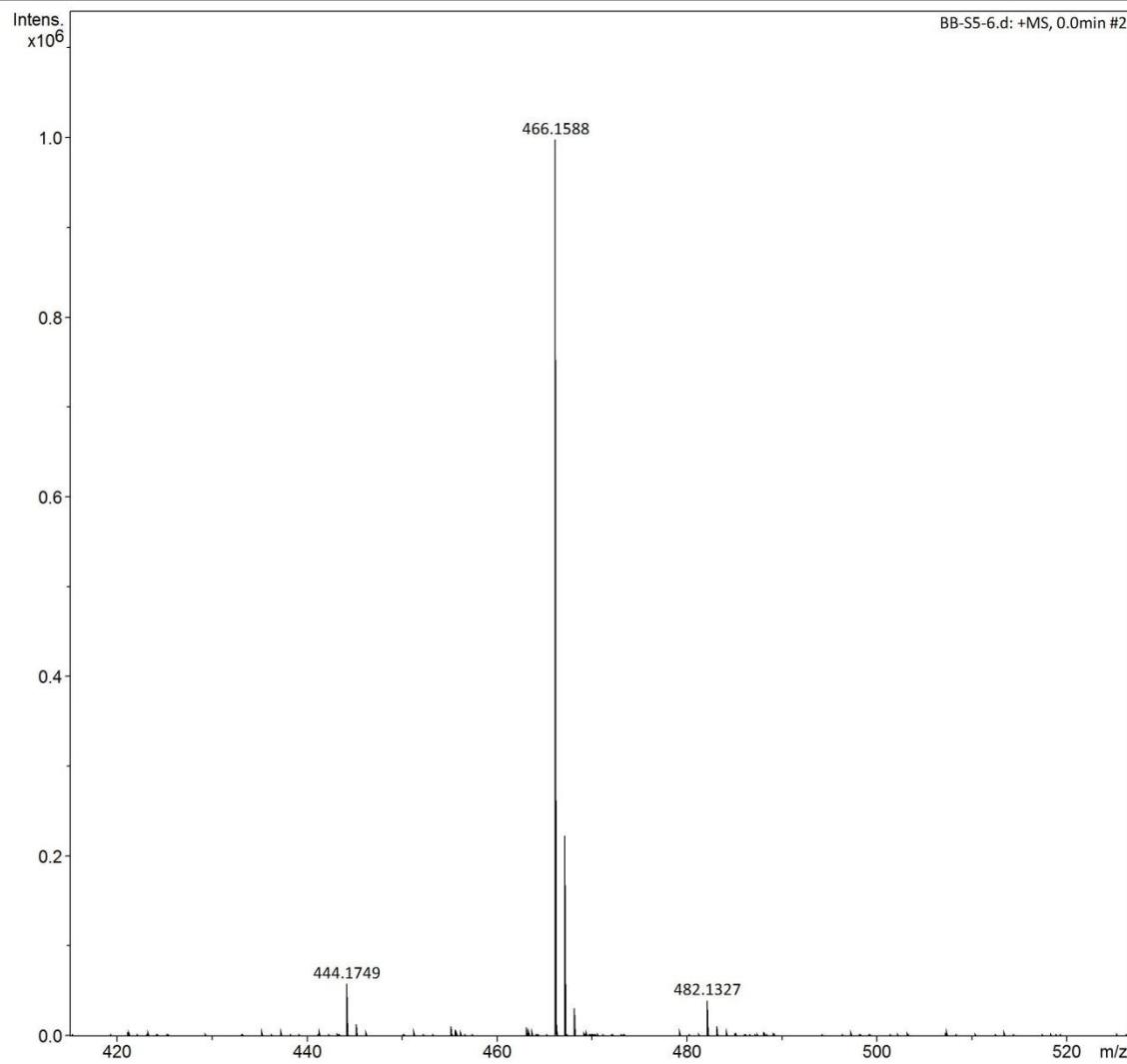
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Figure S9. HRMS spectrum of compound **3c**.

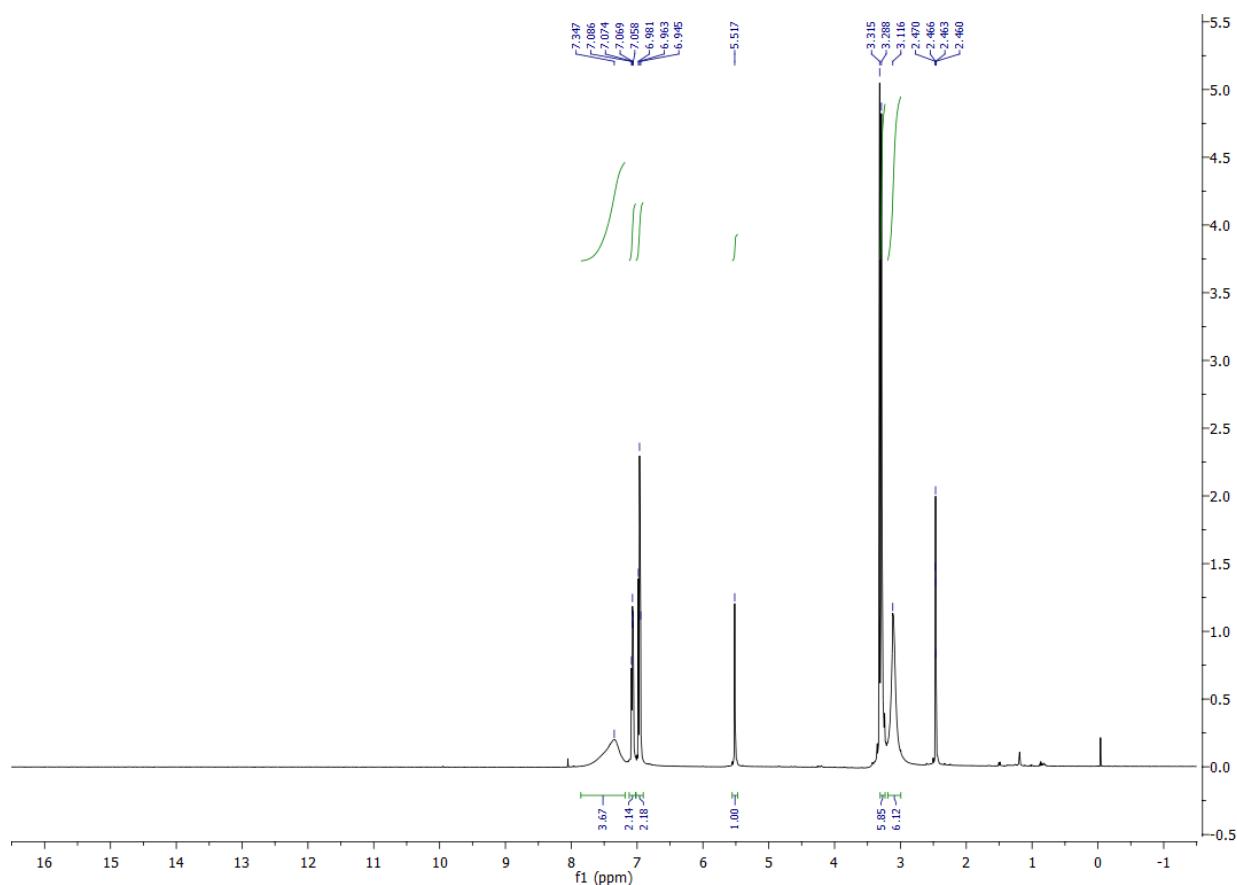
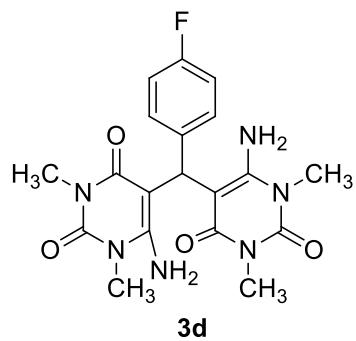


Figure S10. ^1H NMR spectrum of compound **3d**.

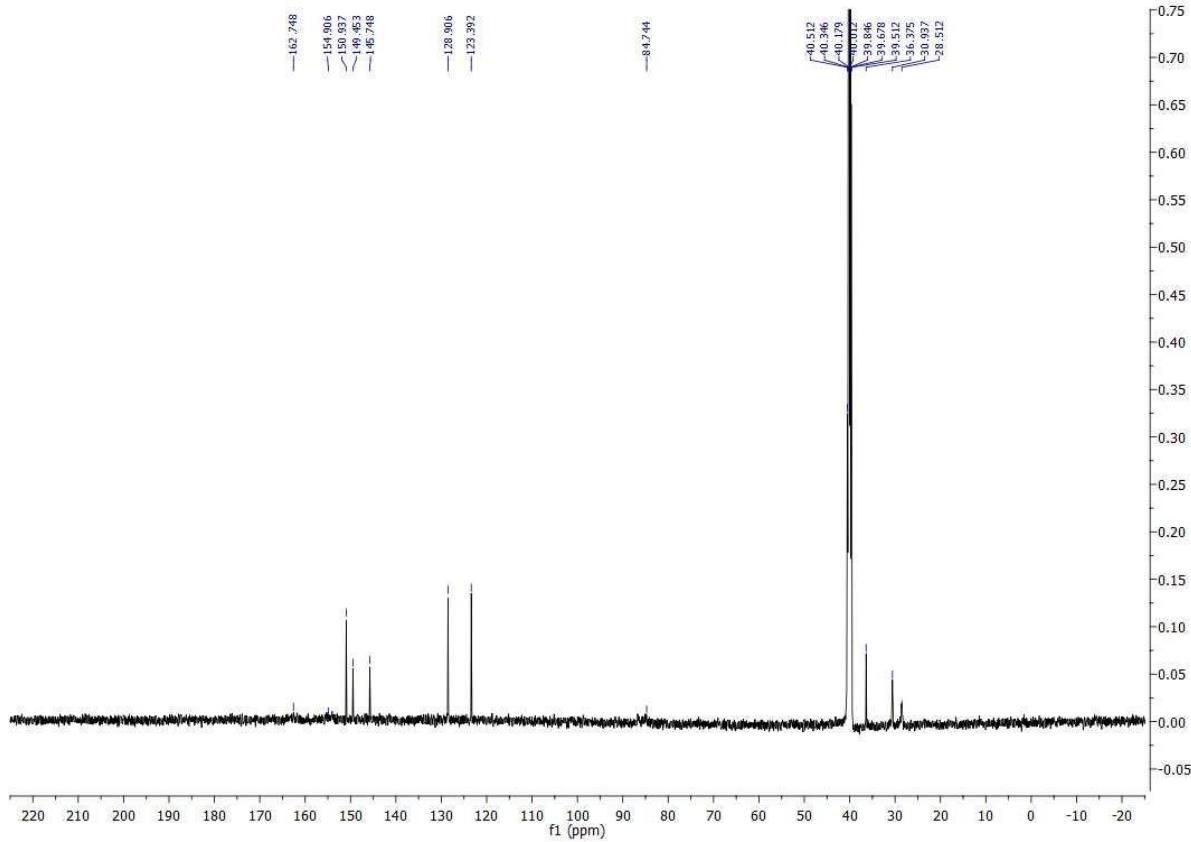


Figure S11. ¹³C NMR spectrum of compound 3d.

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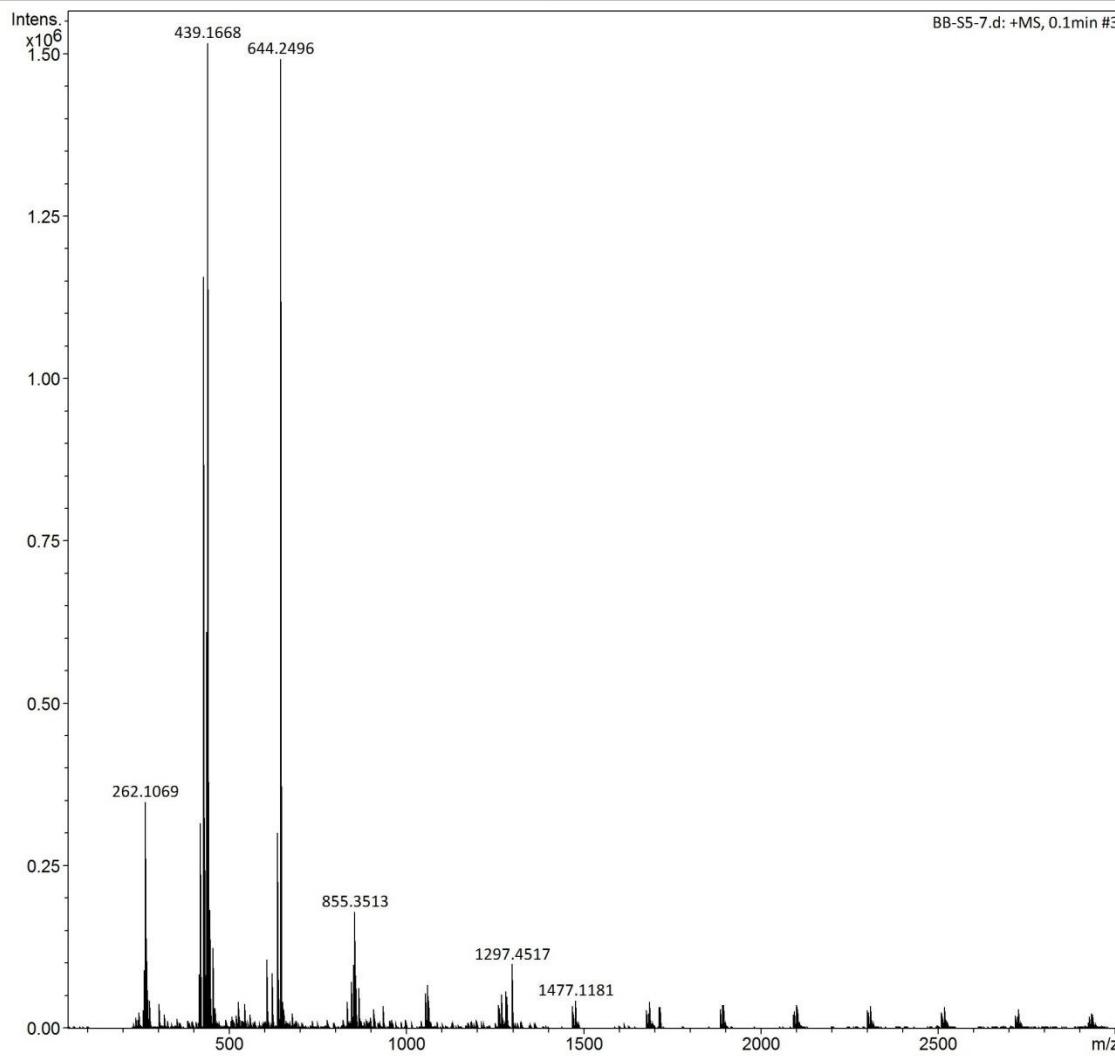
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Figure S12. HRMS spectrum of compound **3d**.

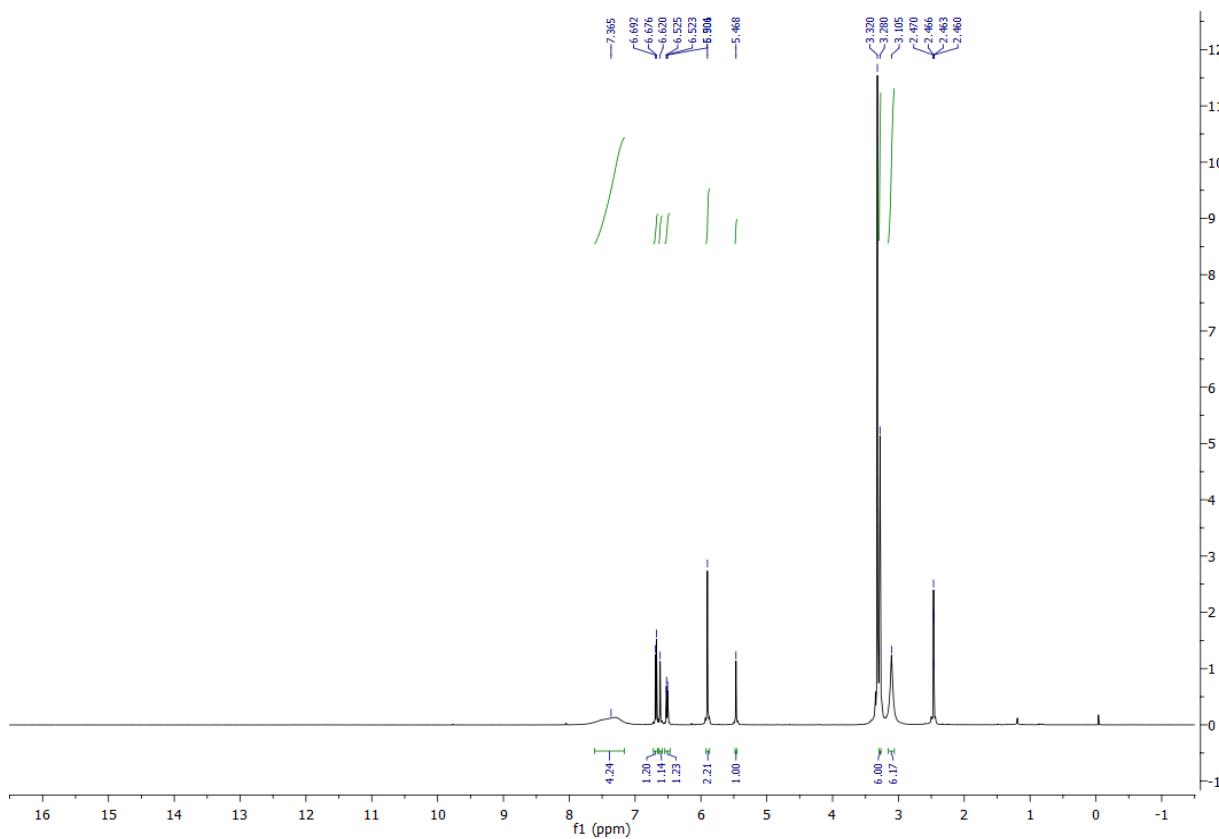
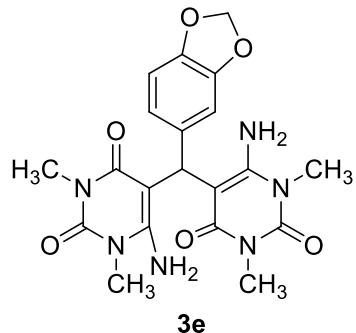


Figure S13. ¹H NMR spectrum of compound **3e**.

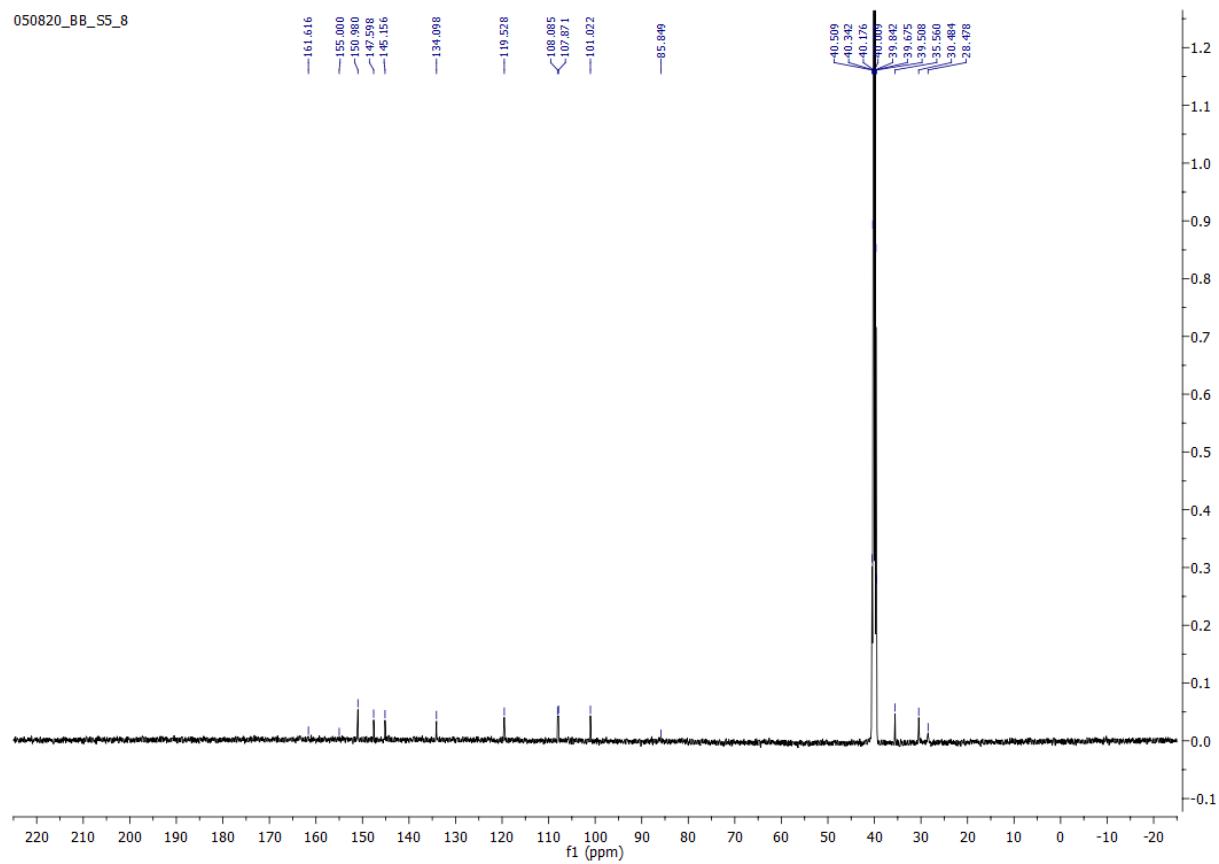


Figure S14. ^{13}C NMR spectrum of compound **3e**.

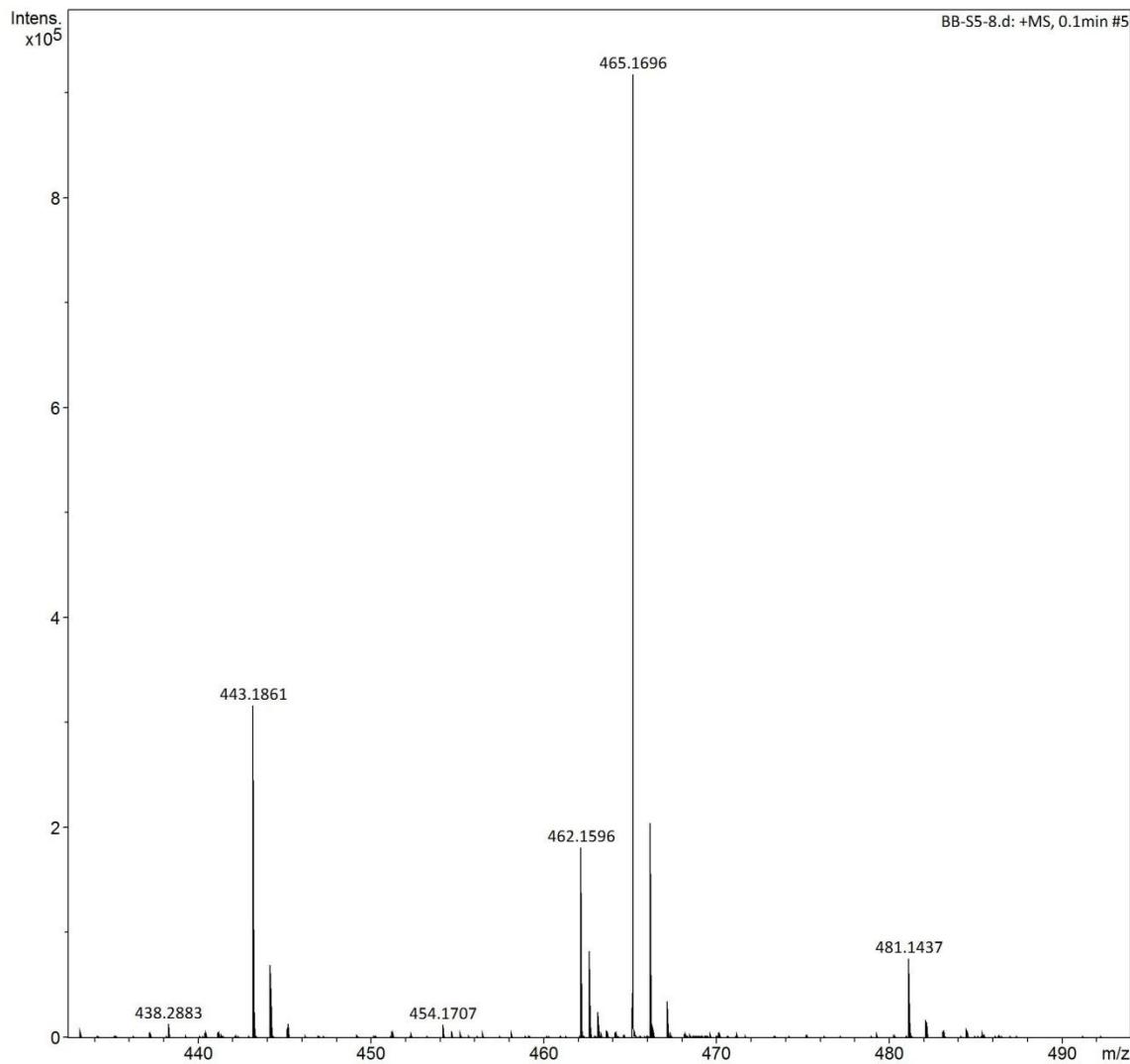
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Figure S15. HRMS spectrum of compound **3e**.

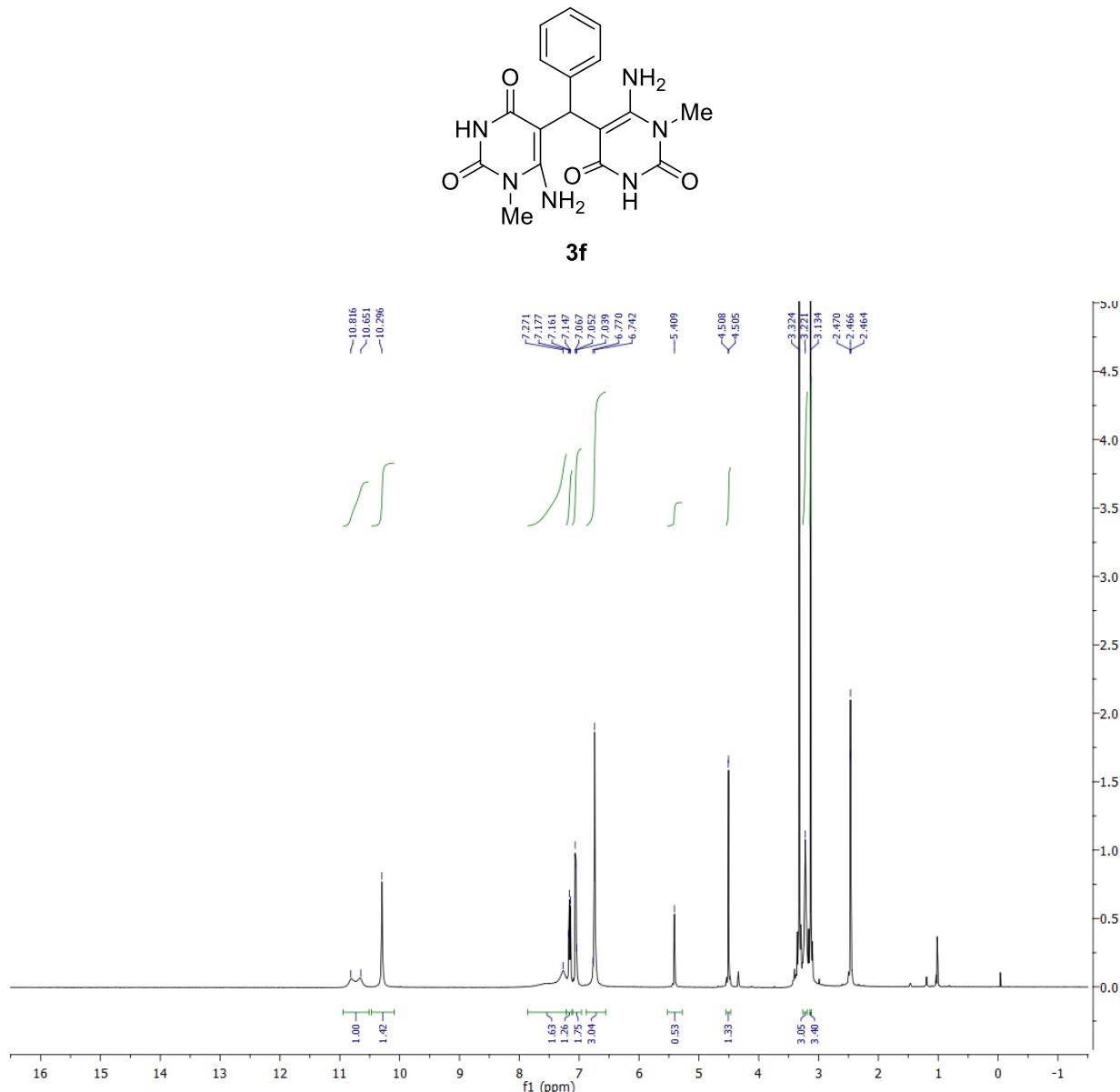


Figure S16. ^1H NMR spectrum of compound **3f**.

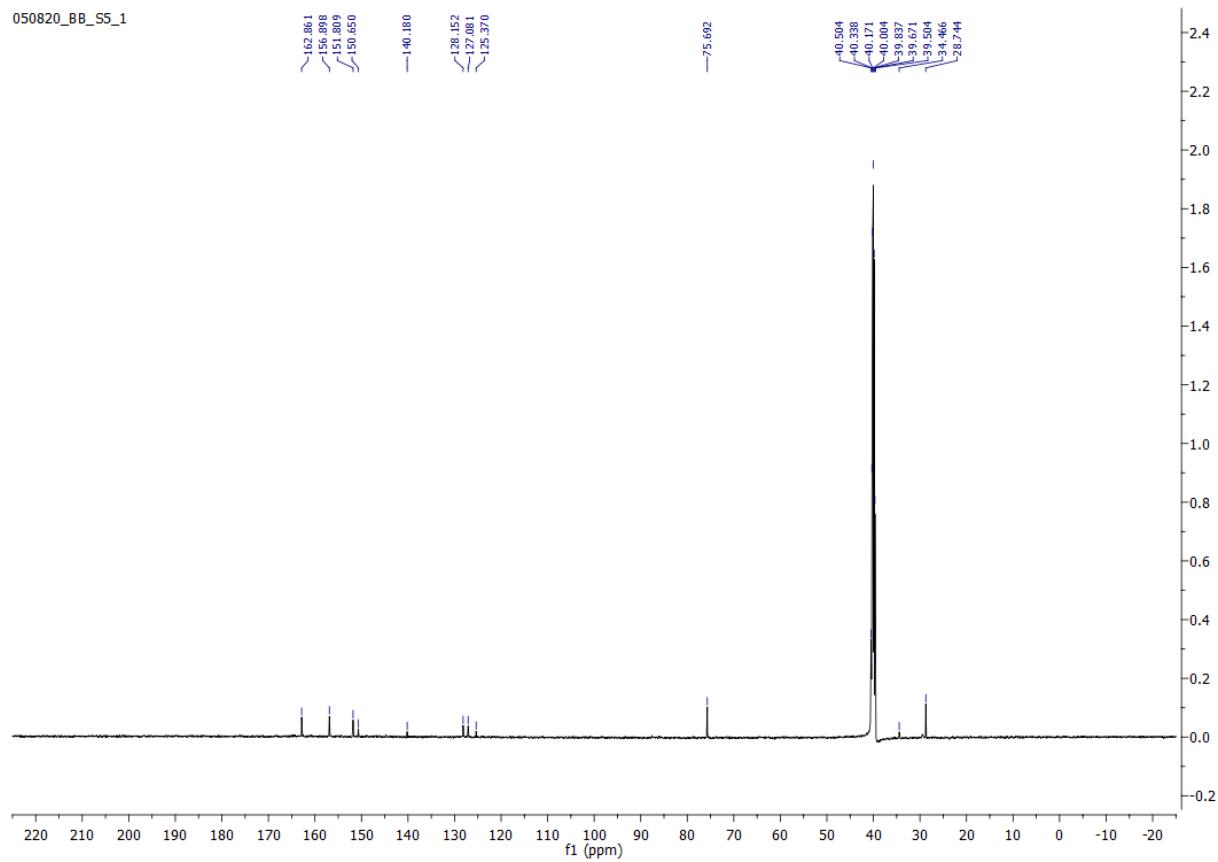


Figure S17. ^{13}C NMR spectrum of compound **3f**.

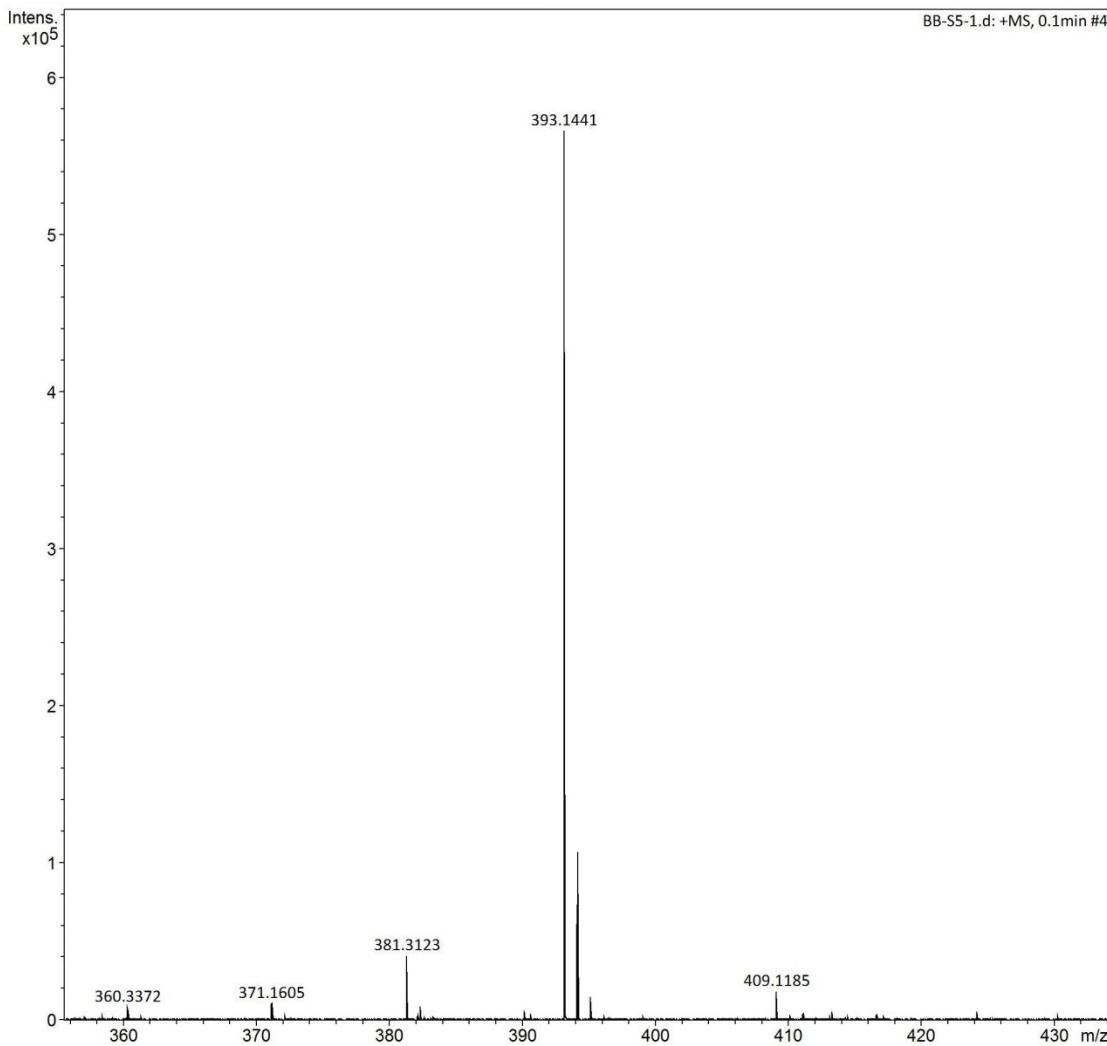
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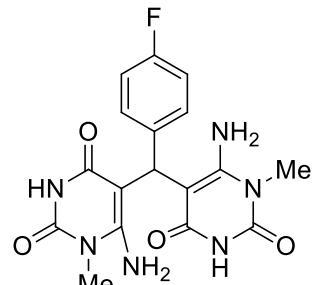
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Figure S18. HRMS spectrum of compound 3f.



3g

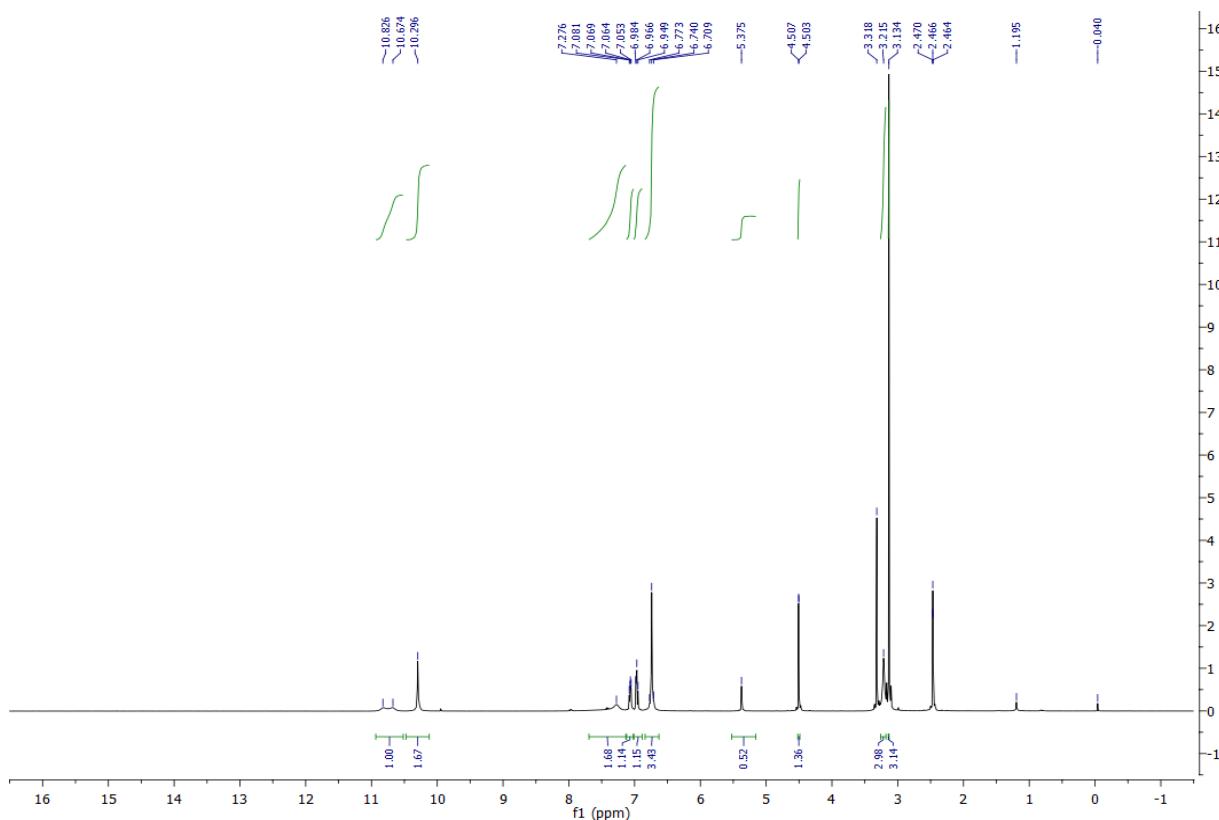


Figure S19. ^1H NMR spectrum of compound 3g.

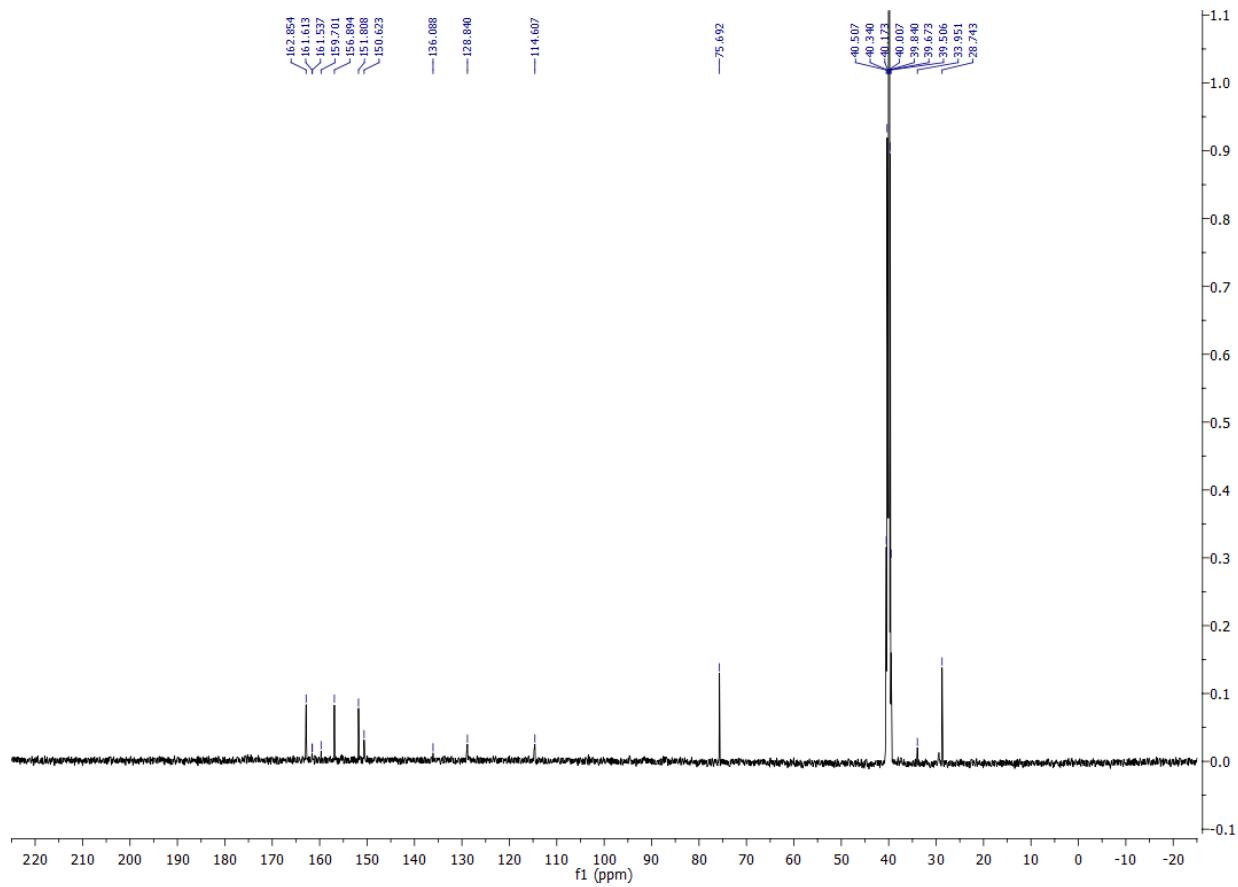


Figure S20. ¹³C NMR spectrum of compound 3g.

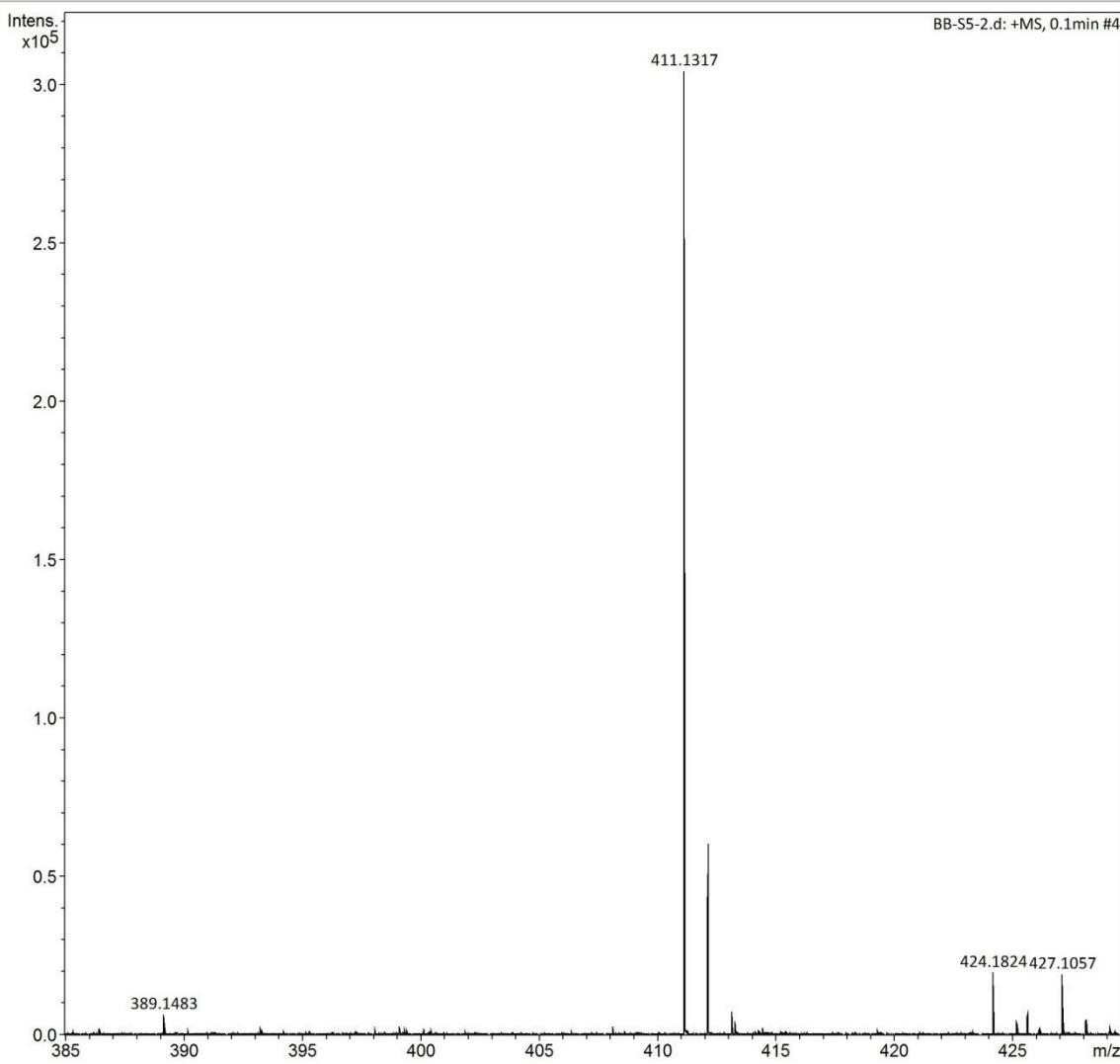
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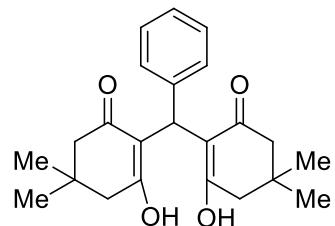
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Figure S21. HRMS spectrum of compound **3g**.



5a

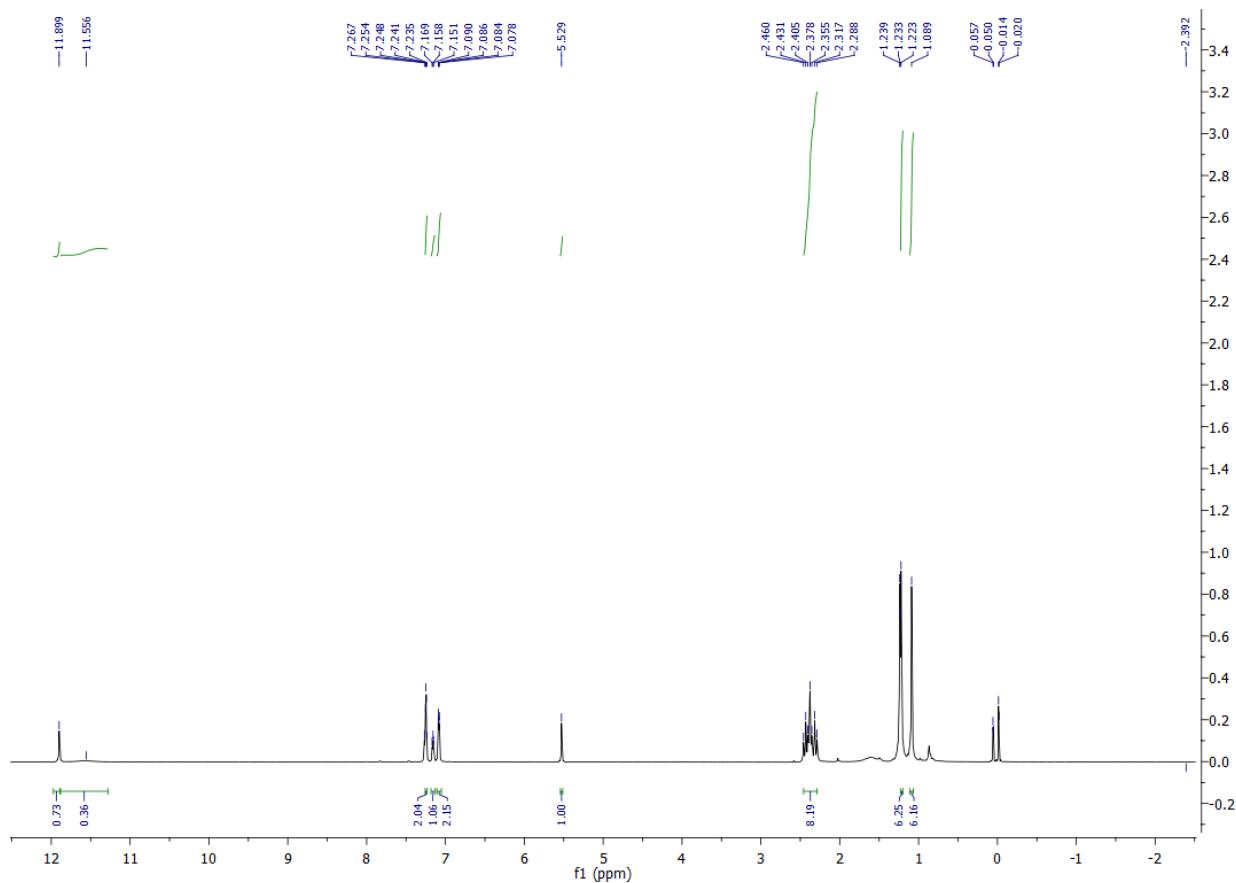


Figure S22. ^1H NMR spectra of compound 5a.

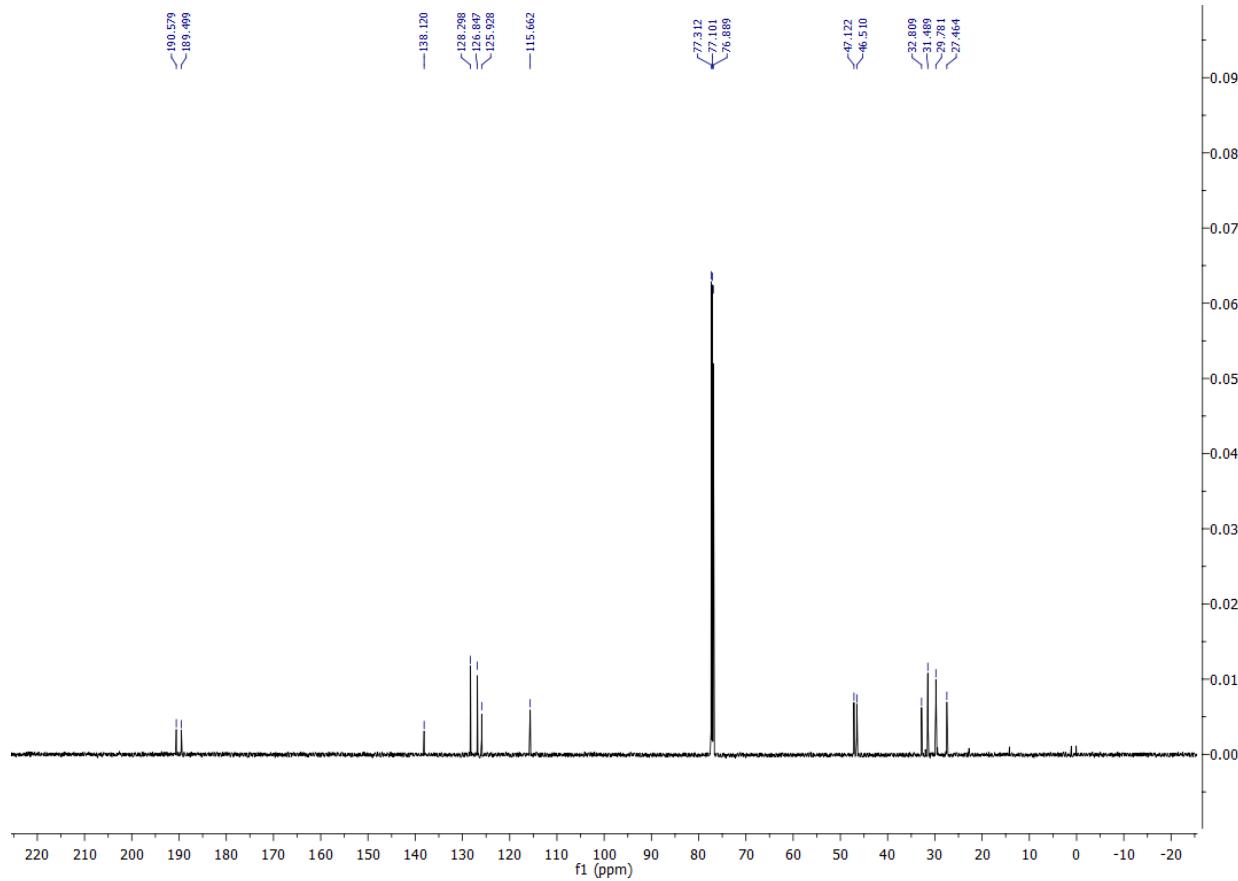


Figure S23. ^{13}C NMR spectra of compound 5a.

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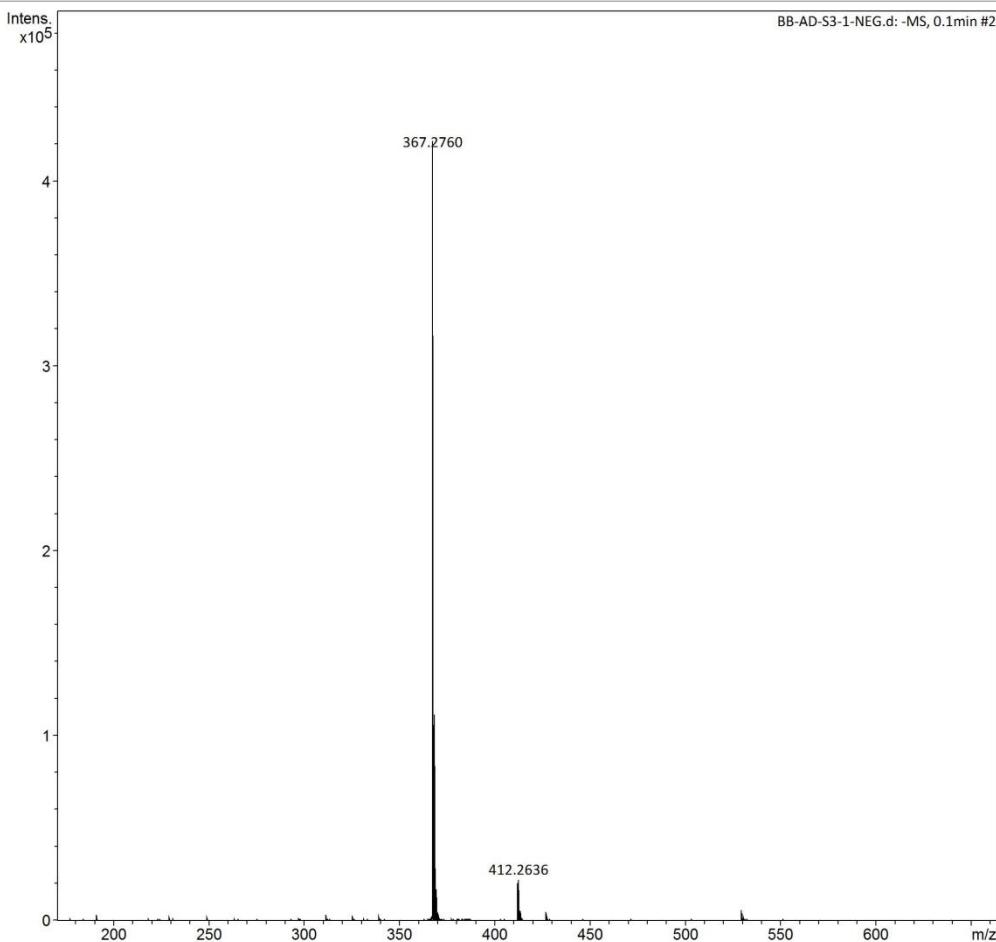
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Operator HRMS
Instrument maXis impact 1819696.00160**Acquisition Parameter**

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BB-AD-S3-1-NEG.d

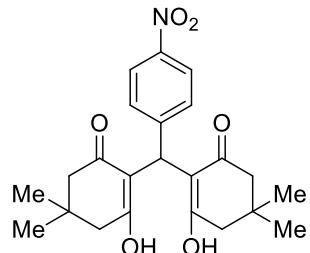
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Figure S24. HRMS spectra of compound 5a.



5b

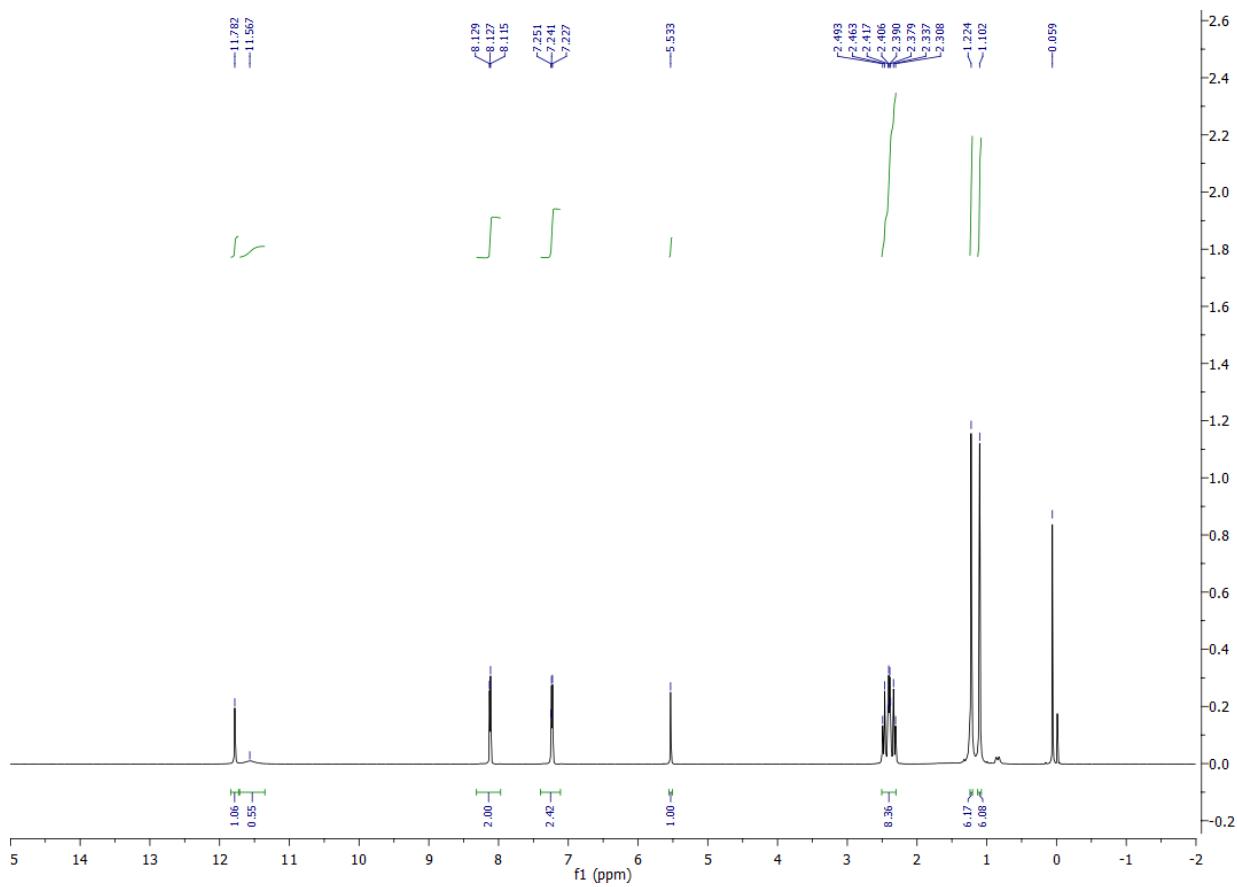


Figure S25. ^1H NMR spectra of compound **5b**.

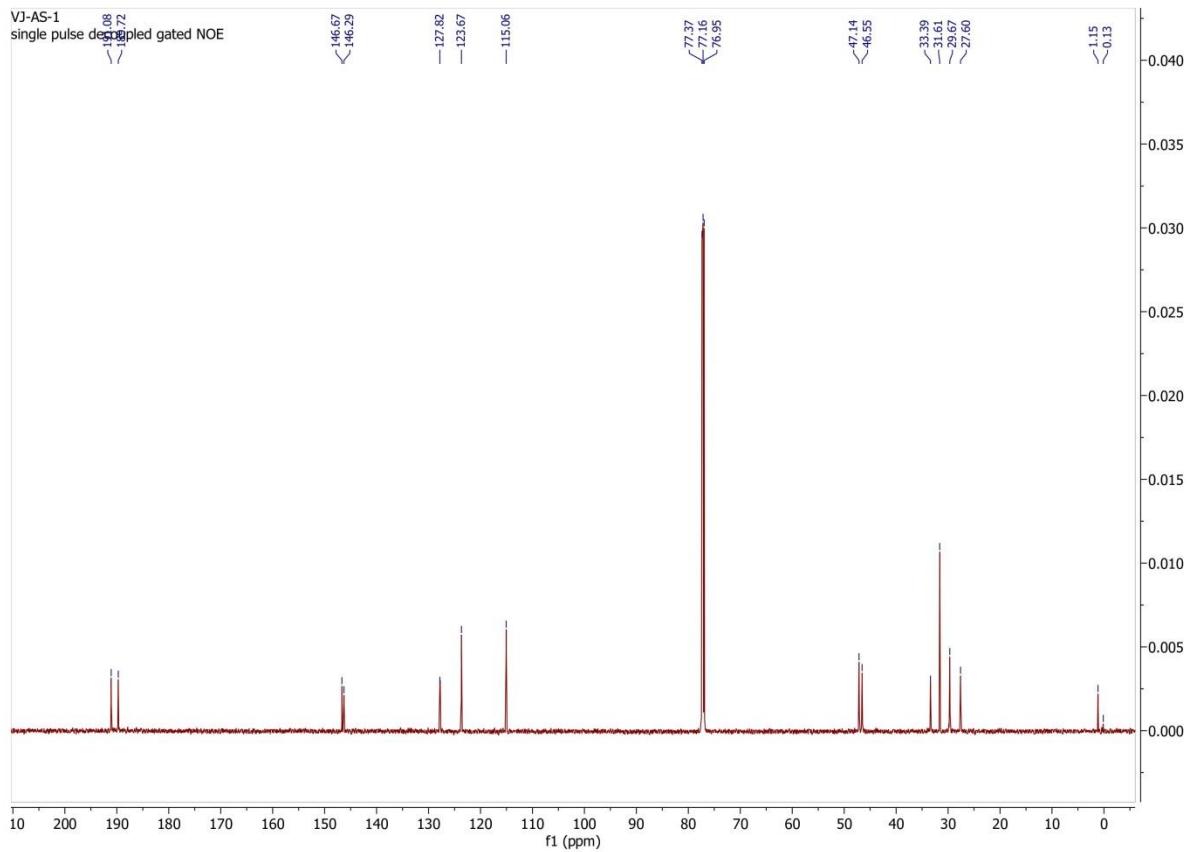


Figure S26.¹³C NMR spectra of compound **5b**.

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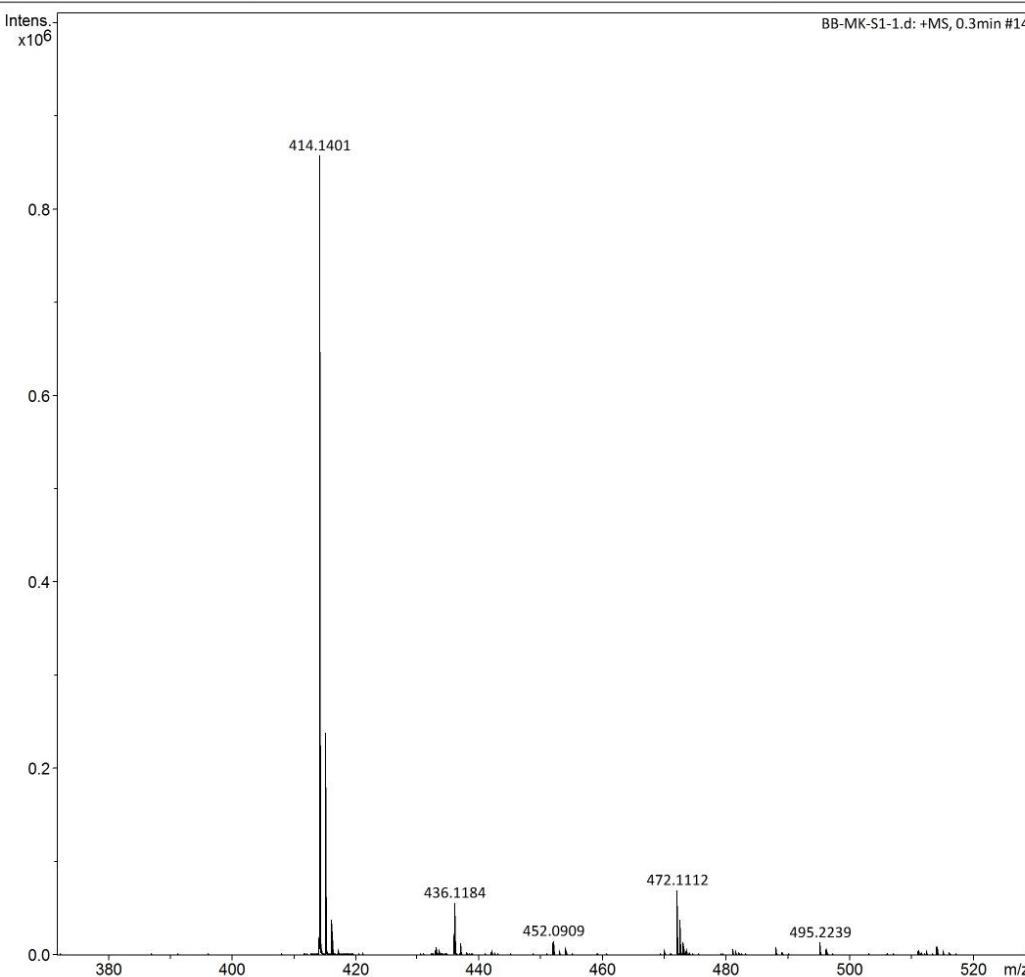
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Figure S27.HRMS spectra of compound **5b**.

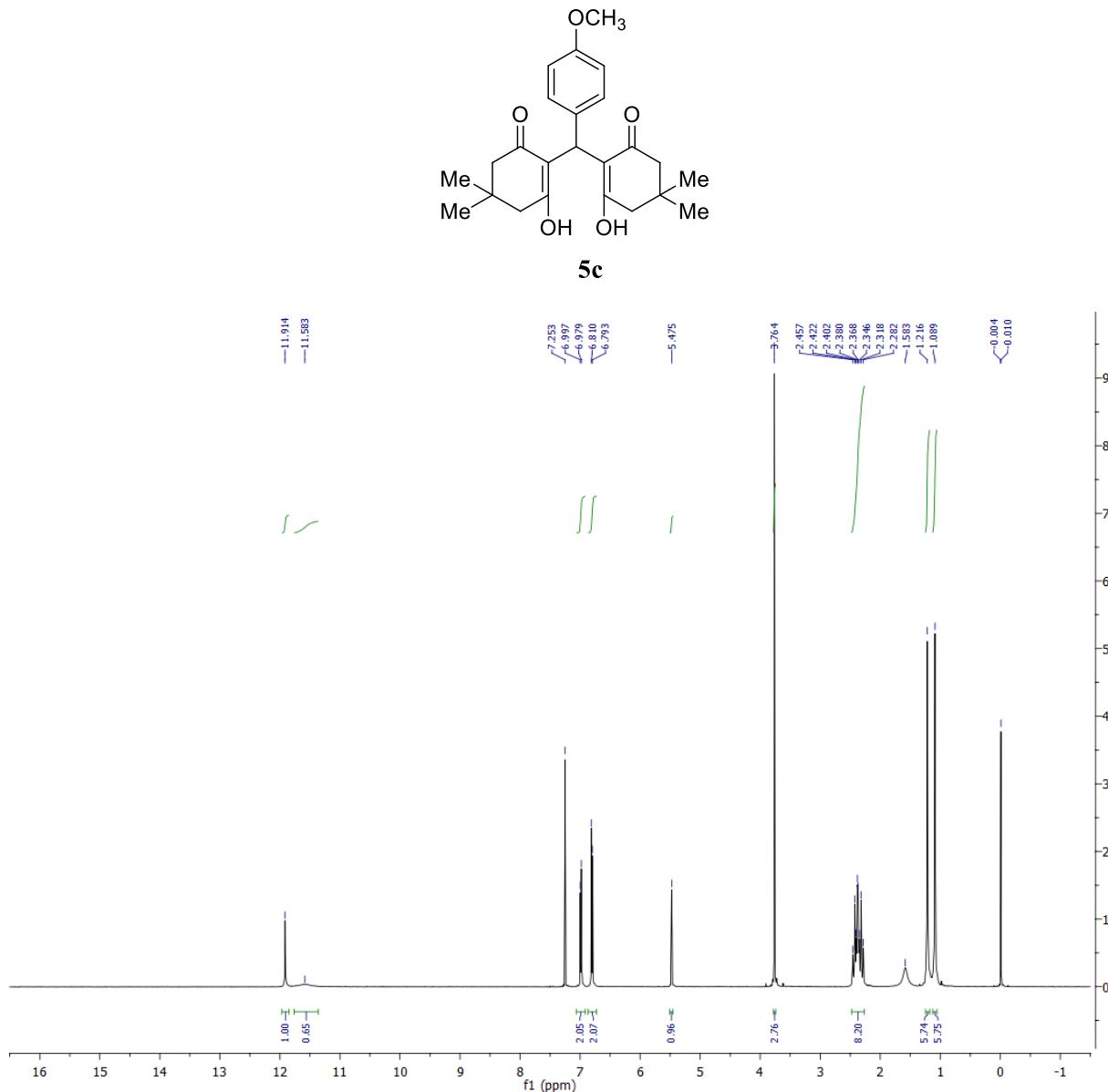


Figure S28. ^1H NMR spectra of compound **5c**.

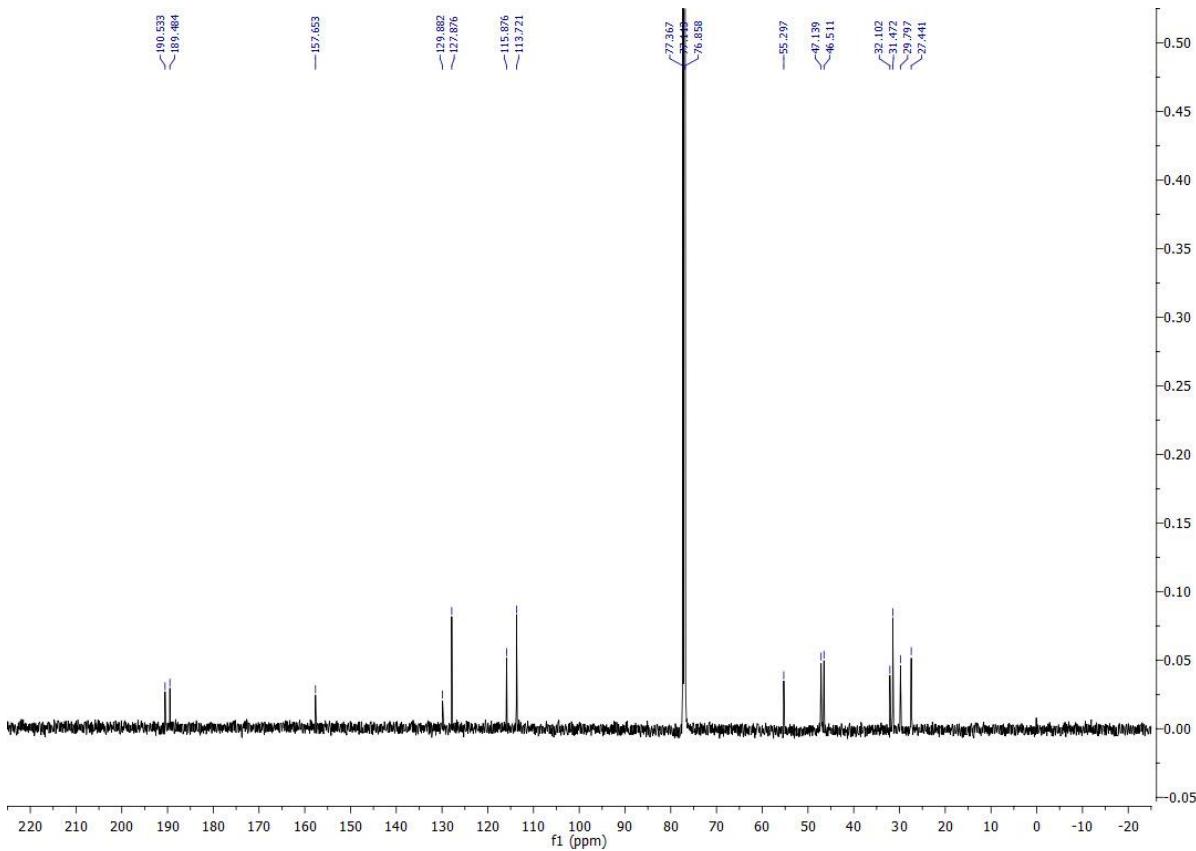


Figure S29. ^{13}C NMR spectra of compound **5c**.

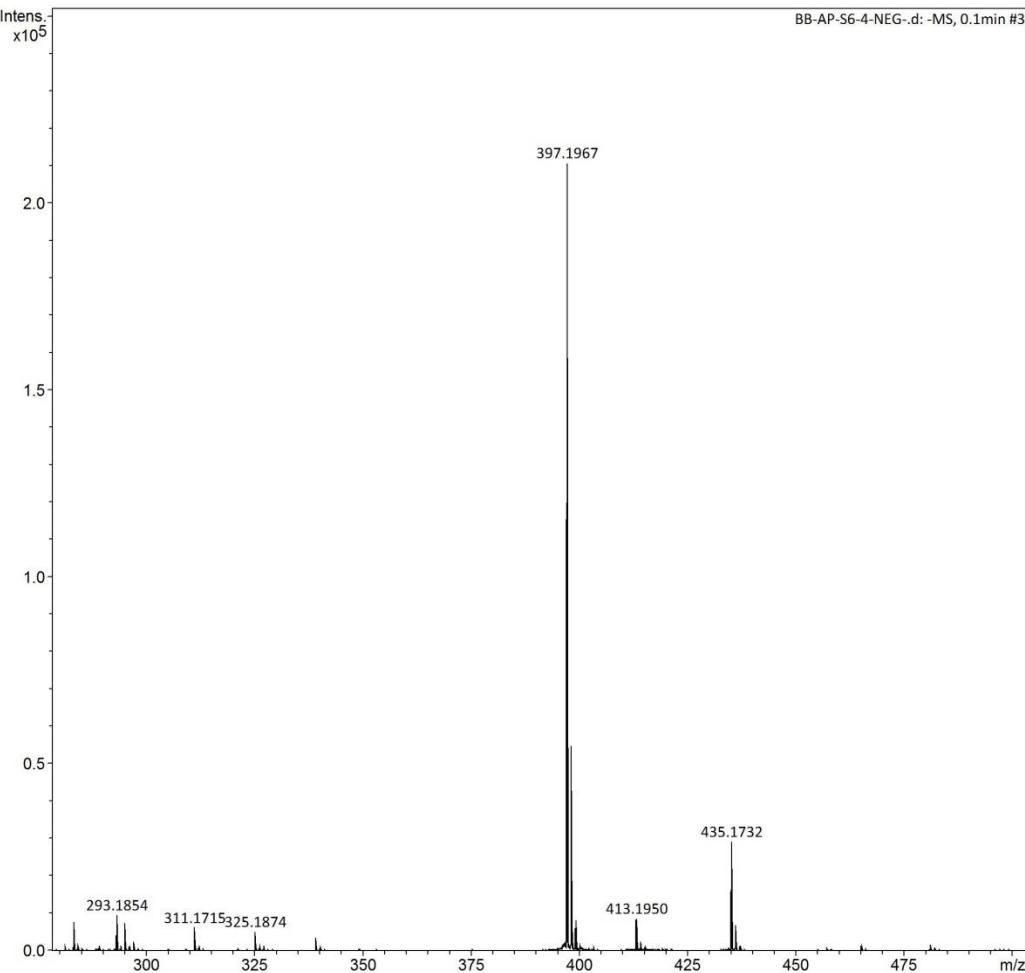
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Figure S30. HRMS spectra of compound 5c.

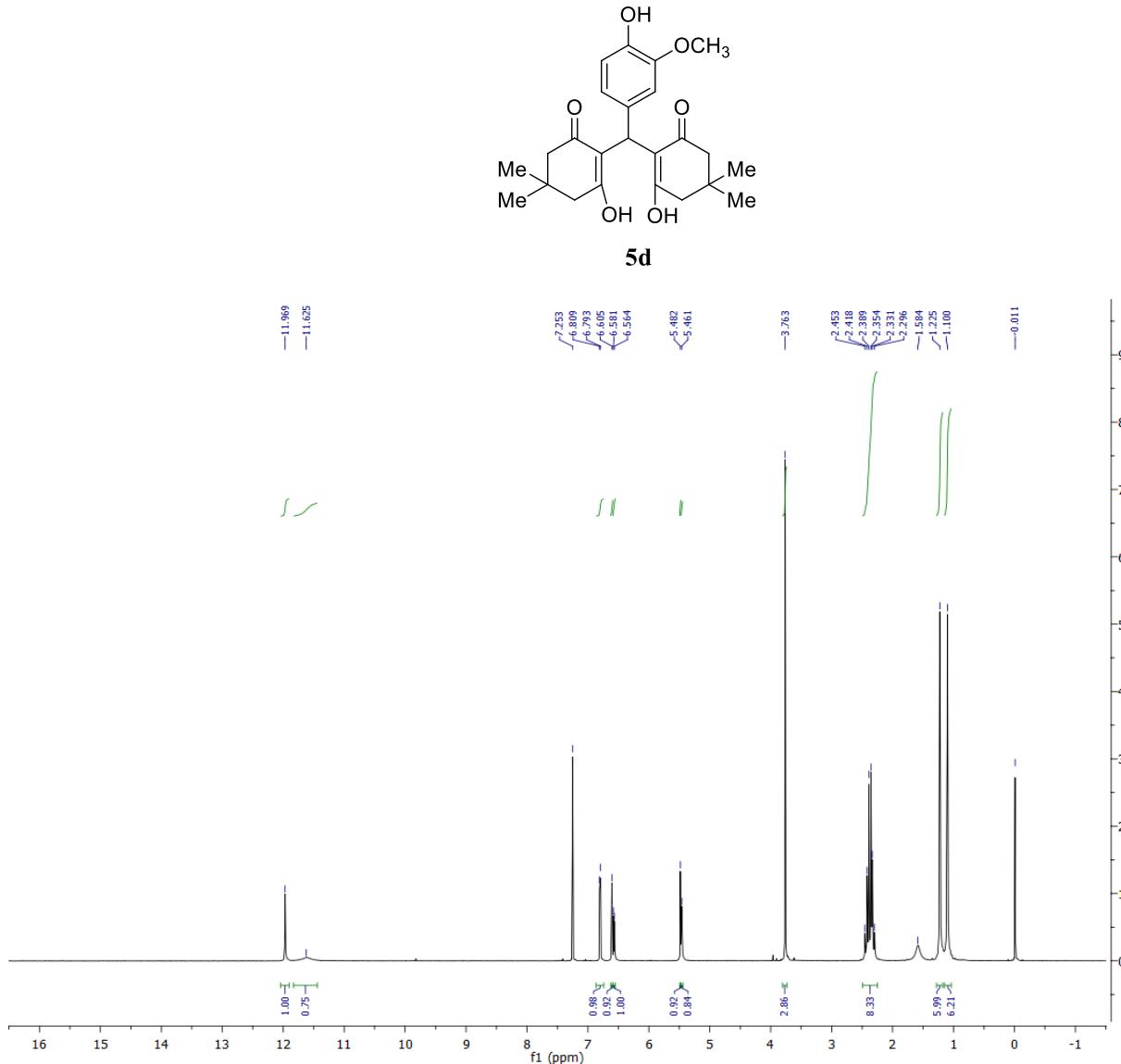


Figure S31.¹H NMR spectra of compound **5d**.

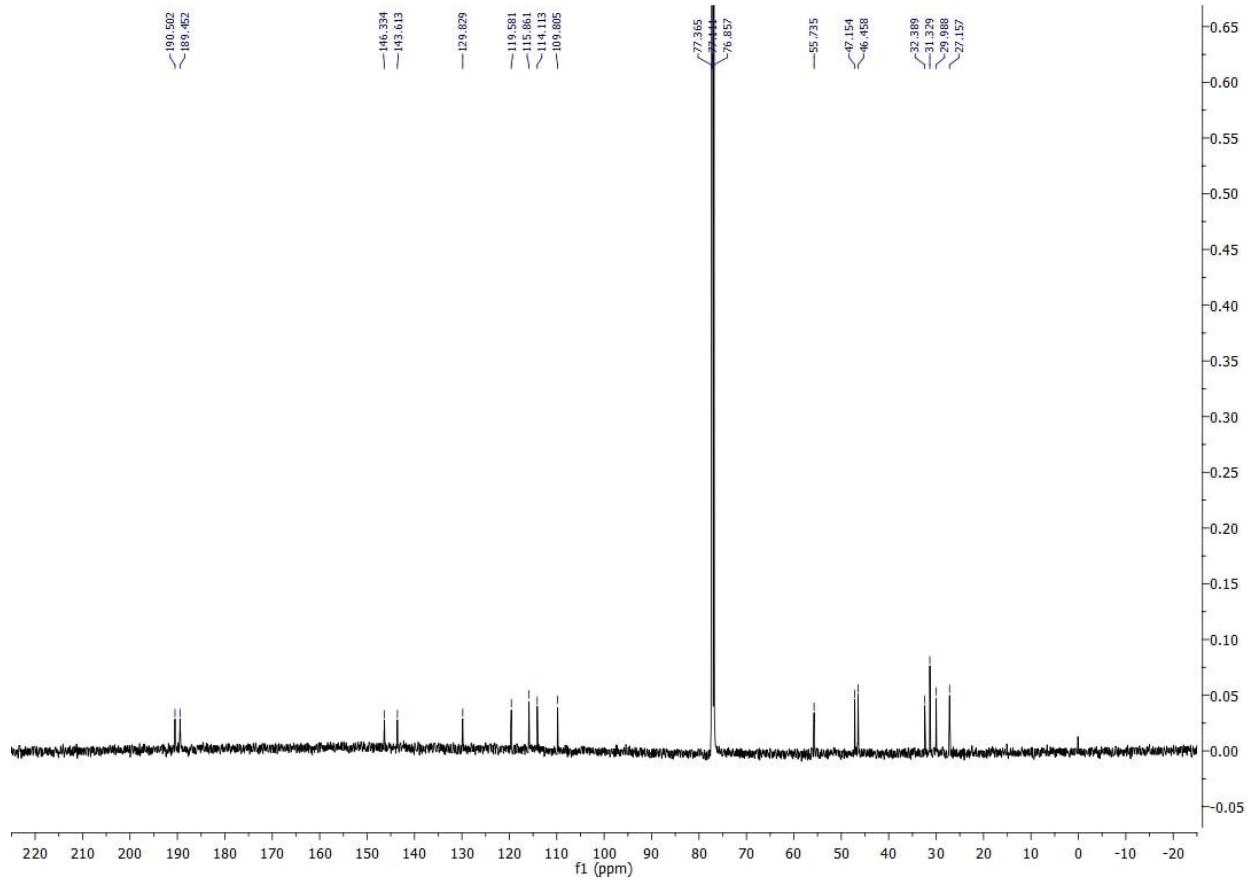


Figure S32. ^{13}C NMR spectra of compound **5d**.

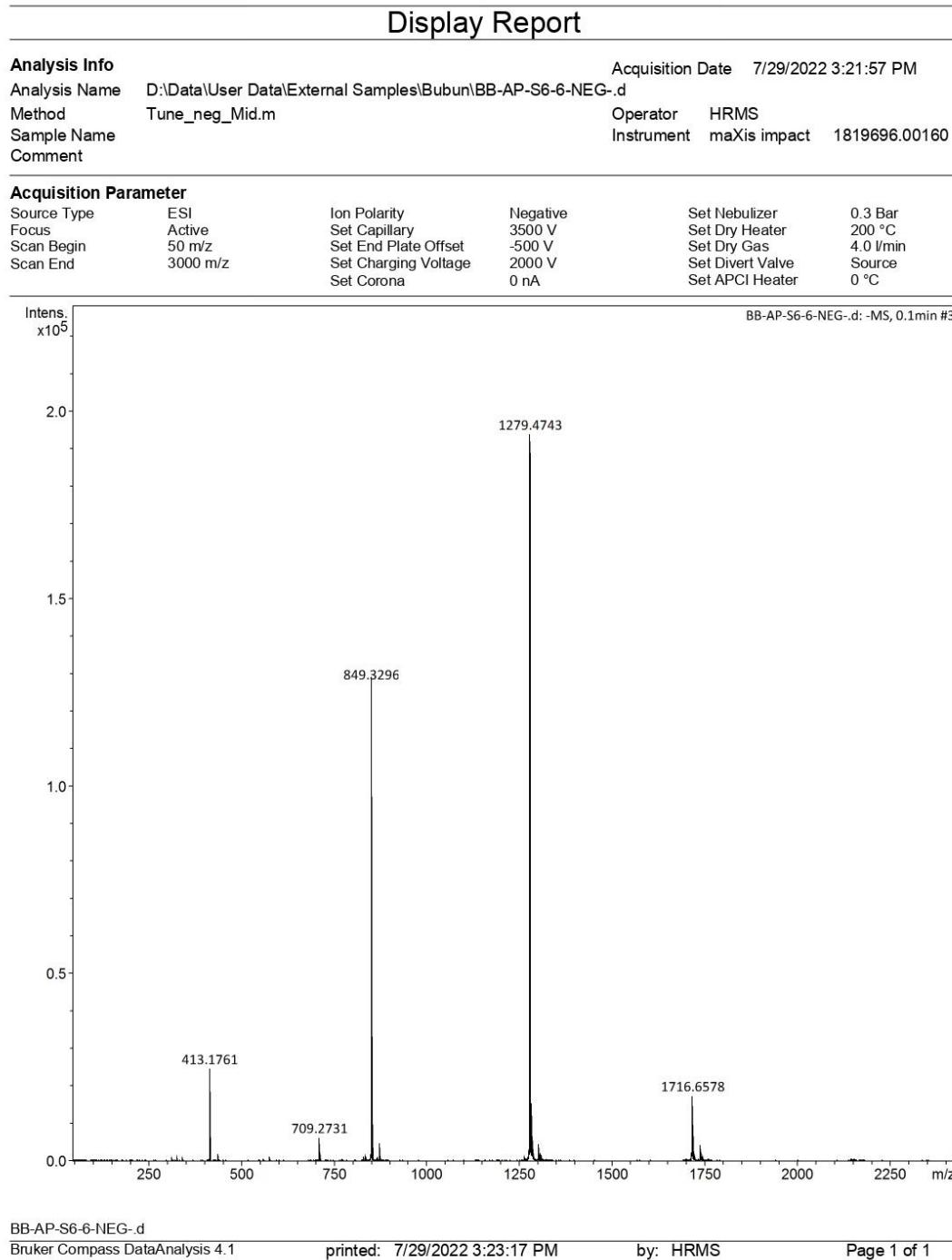
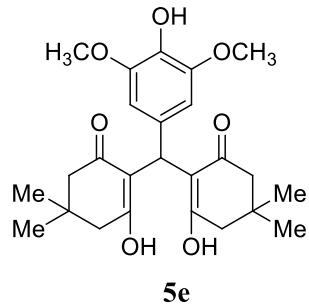
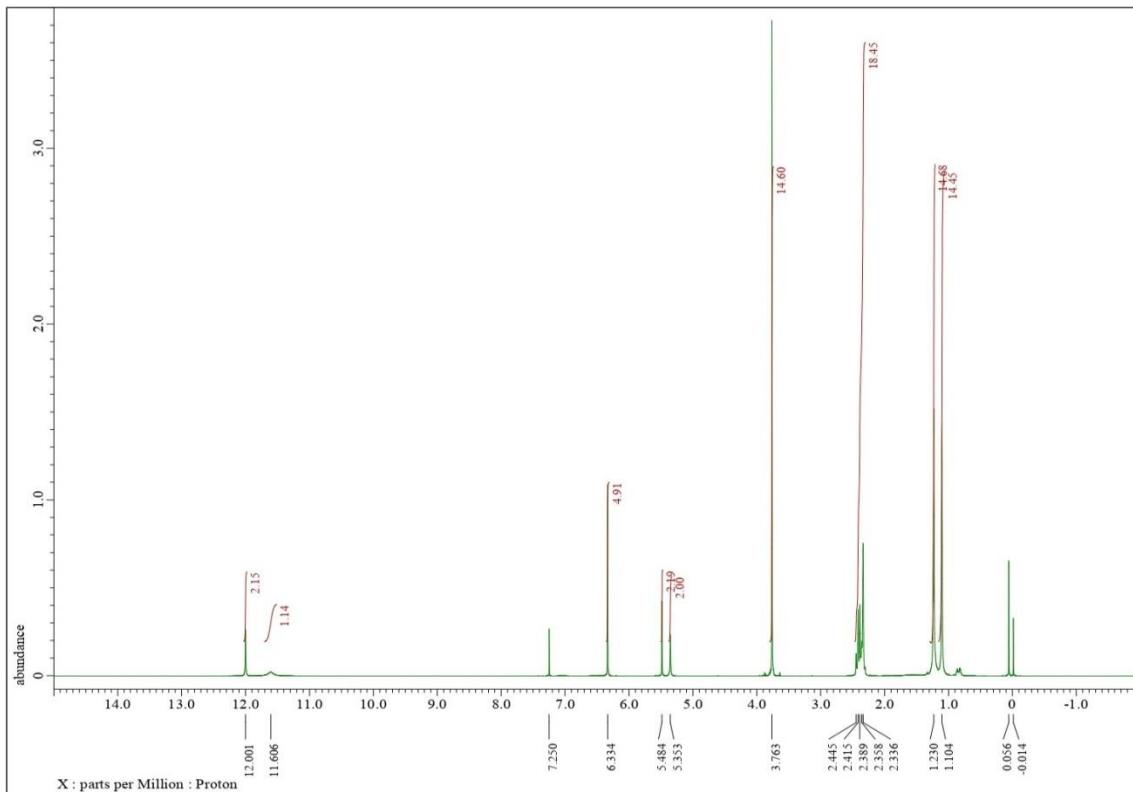


Figure S33. HRMS spectra of compound **5d**.

**5e****Figure S34.**¹H NMR spectra of compound **5e**.

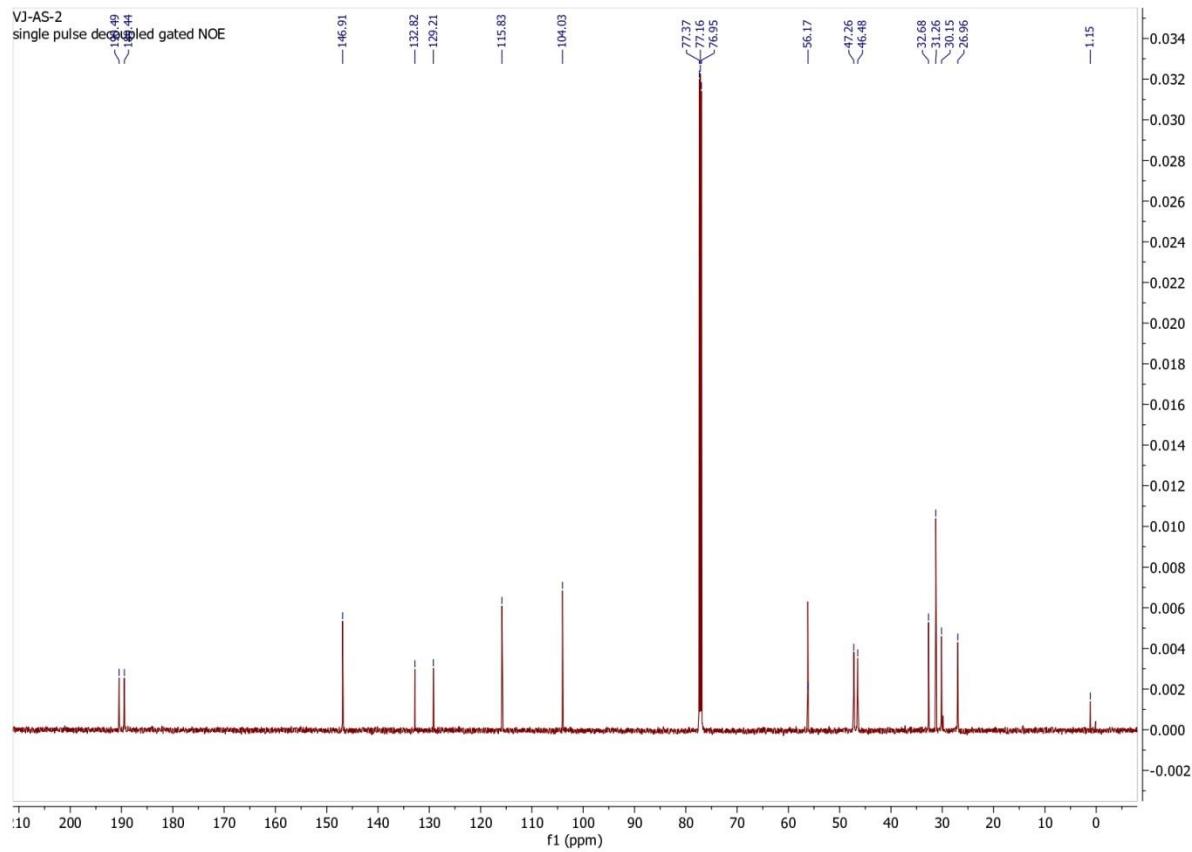


Figure S35. ^{13}C NMR spectra of compound **5e**.

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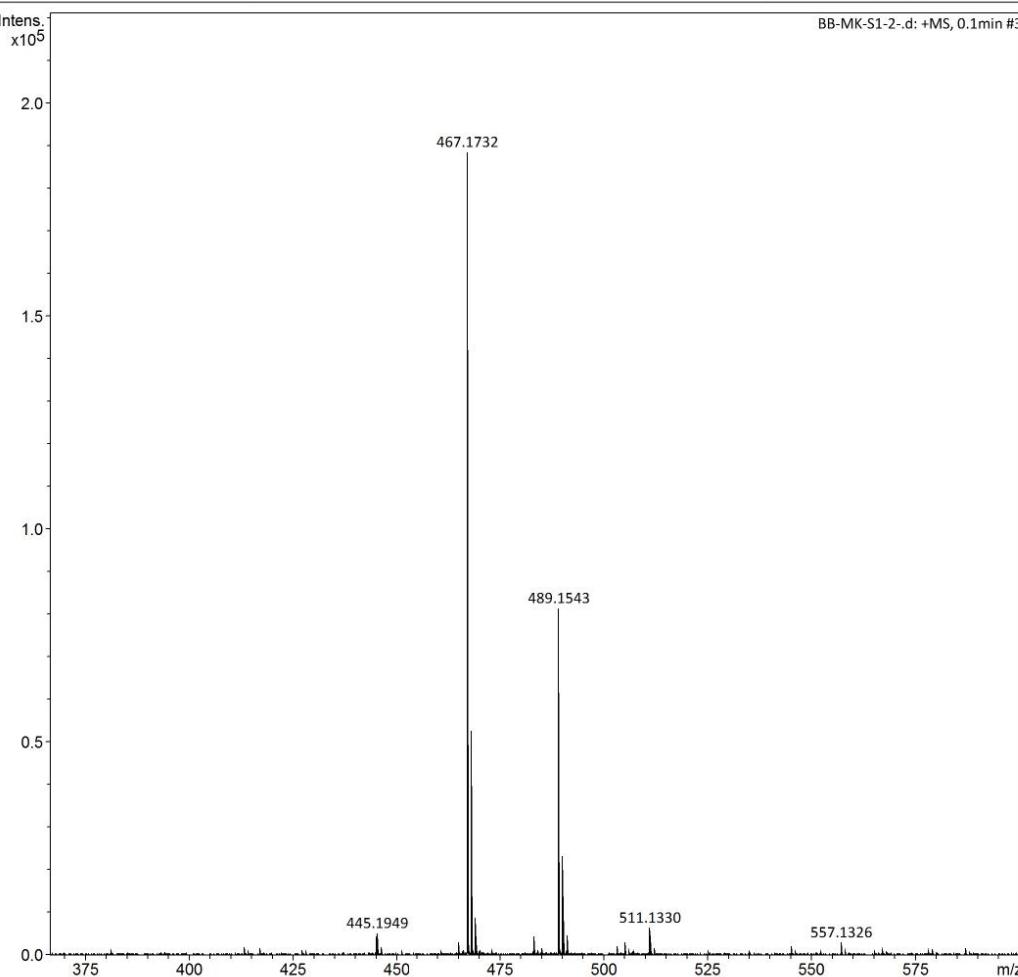
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Figure S36. HRMS spectra of compound 5e.