Allyl *m*-Trifluoromethyldiazirine Mephobarbital: An Unusually Potent Enantioselective and Photoreactive Barbiturate General Anesthetic

Supporting Information

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Supporting information available: (1) Chiral chromatography of (\pm)-14, (2) HPLC of the mixture after hydrogenation of compound 15, (3) determination of pK_a value of 14, (4) NMR data for all new synthesized compounds.

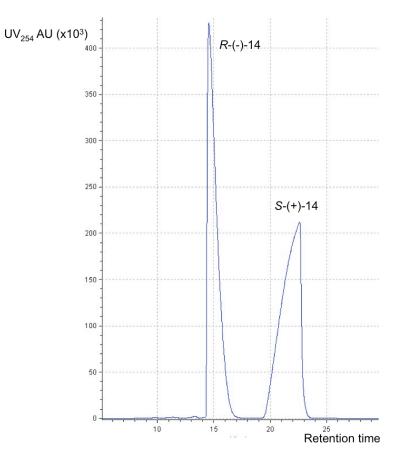


Figure 2s. Separation of compounds **14** and **15** by reverse phase HPLC. HPLC method: Luna 5 μ m C18 100Å column, 150 x 3.00 mm from Phenomenex. During the first 2 minutes isocratic 0.05 M TFA was used as an eluent; starting at 2 min the gradient of 0.05 M TFA/MeOH (0-100%) was used to reach 100% at 17 min, and elution was continued with isocratic MeOH. Flow rate: 1 mL/min. Detection – UV array detector at 254 nm. (A) starting propargyl barbiturate **15**; (B) product allyl barbiturate **14**; (C) the mixture of **14** and **15**.

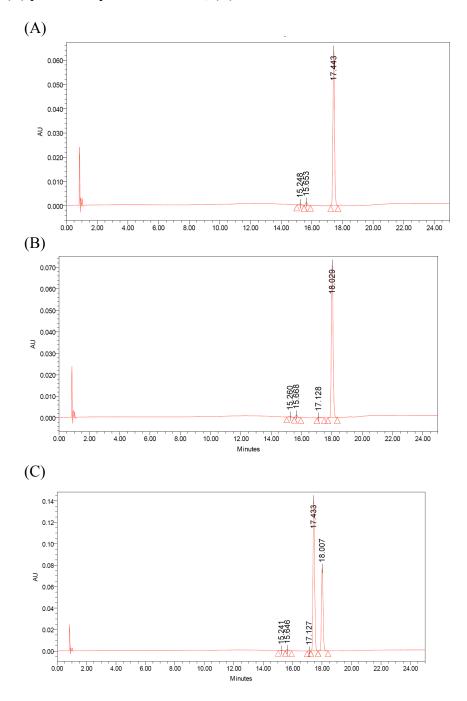
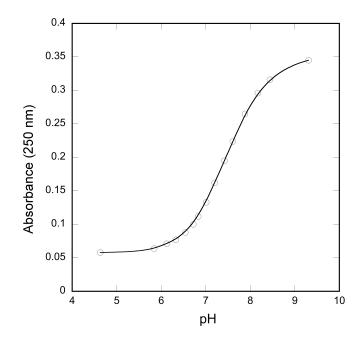
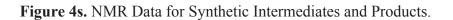
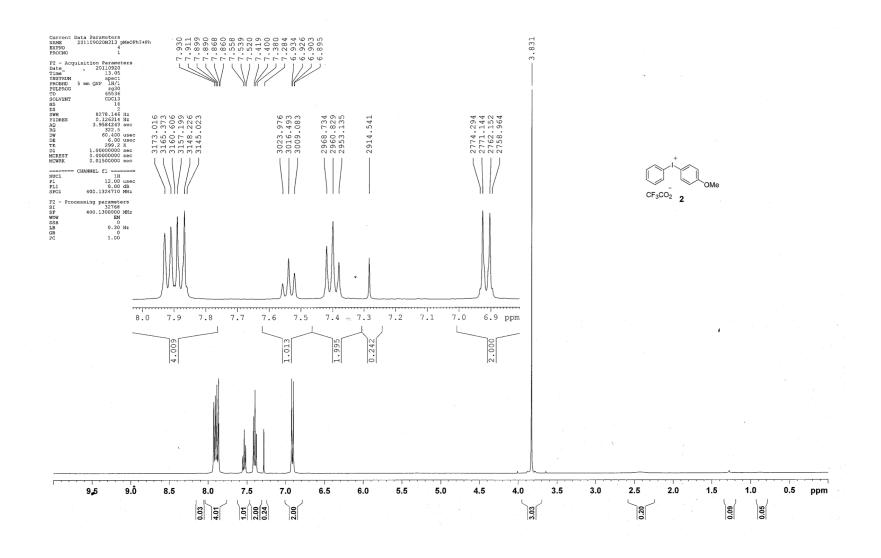
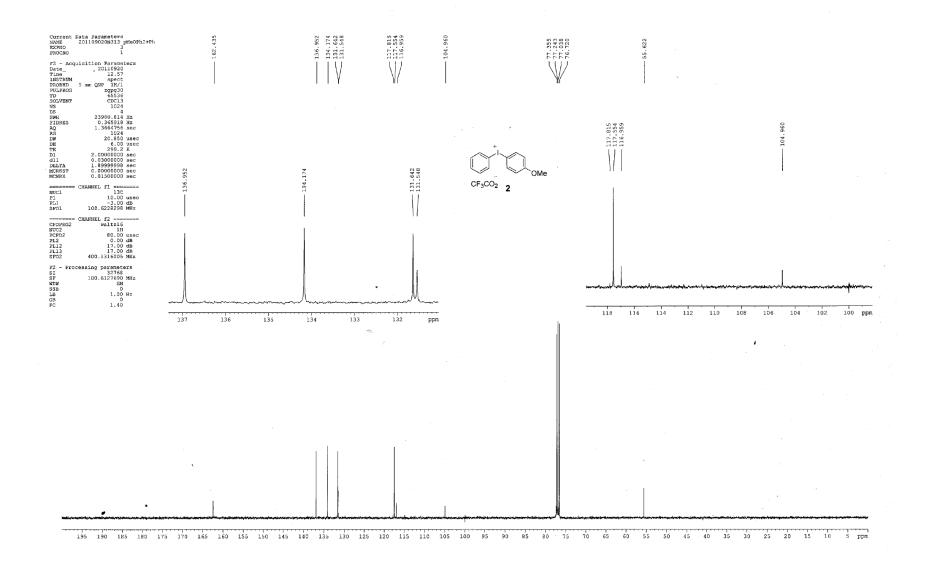


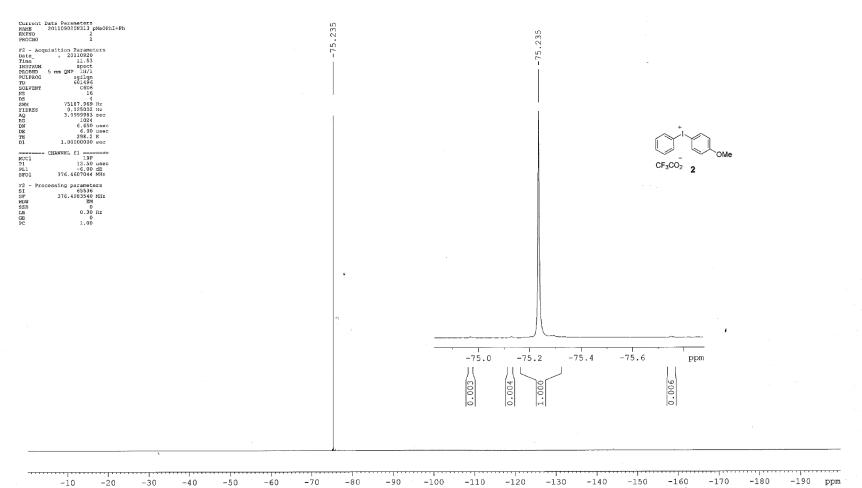
Figure 3s. Determination of pK_a of barbiturate (±)-14.









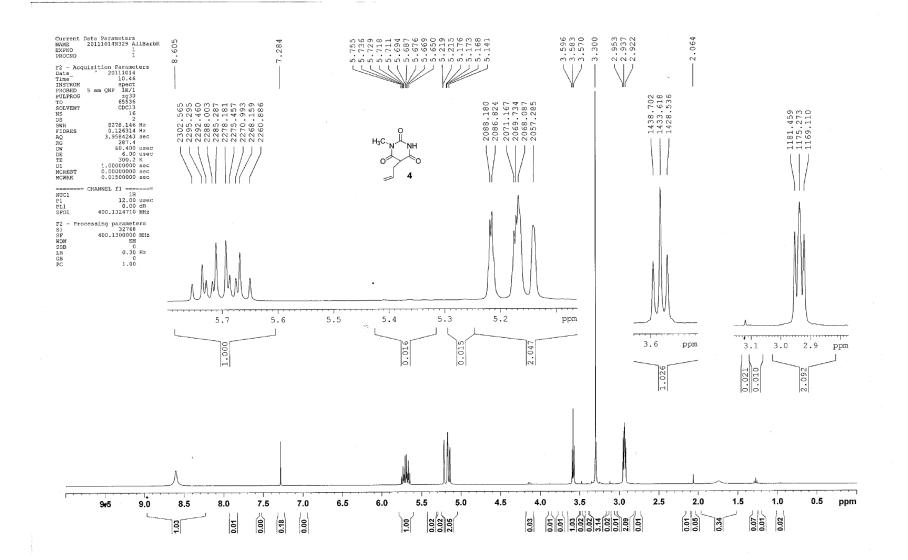


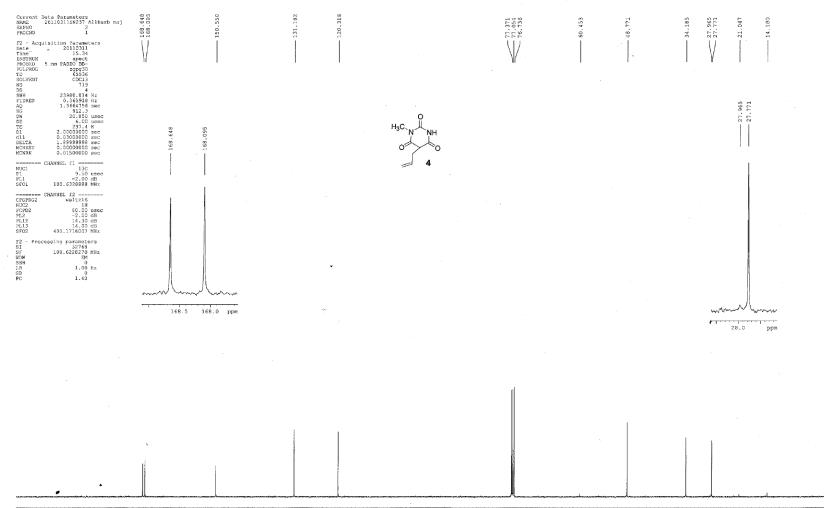
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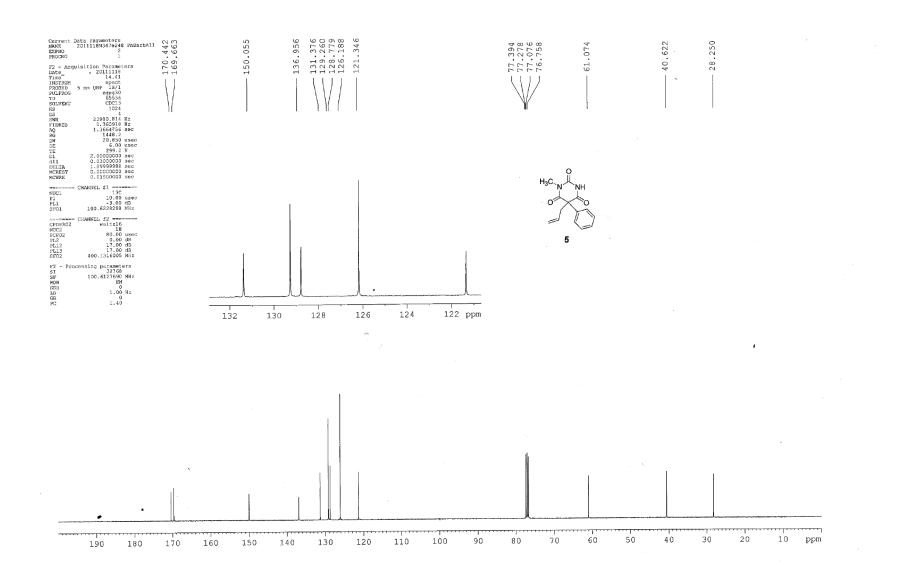
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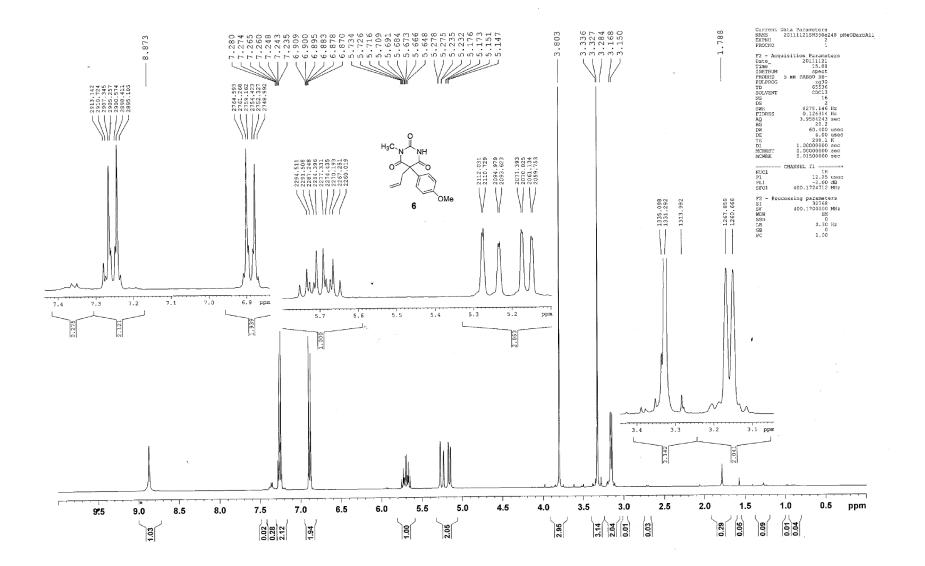
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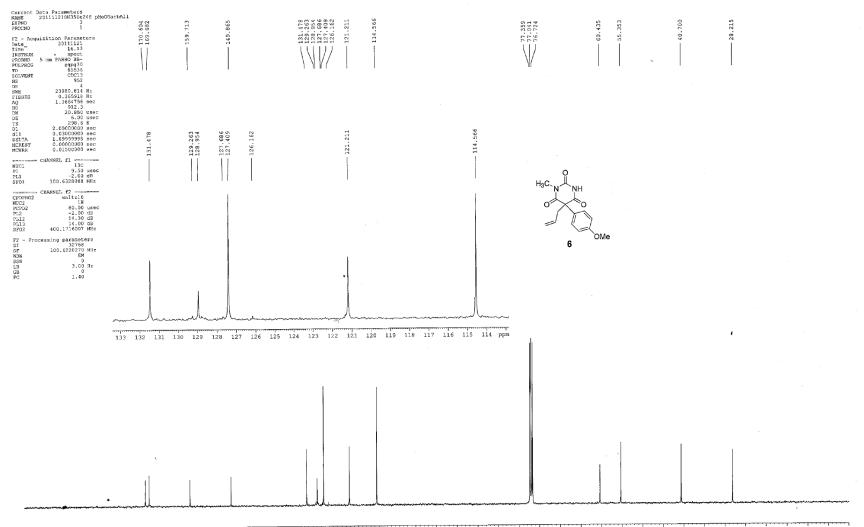




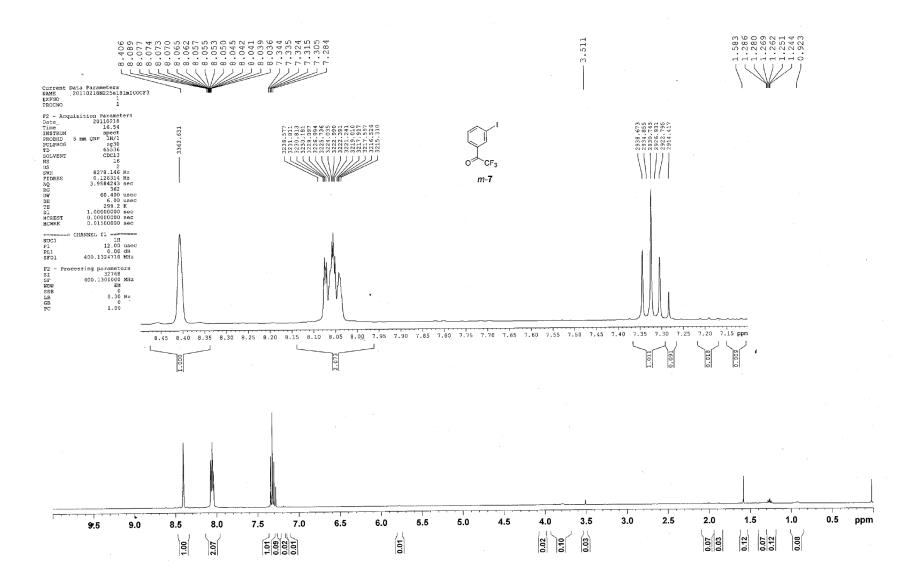
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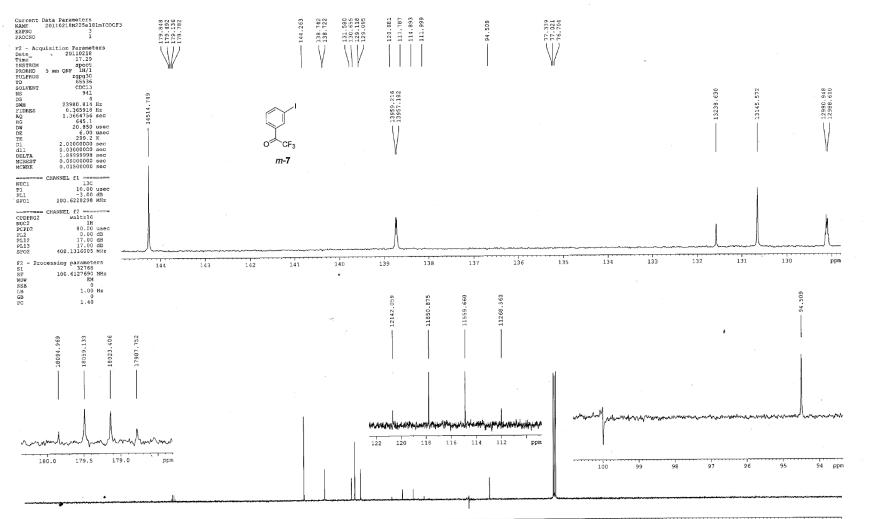




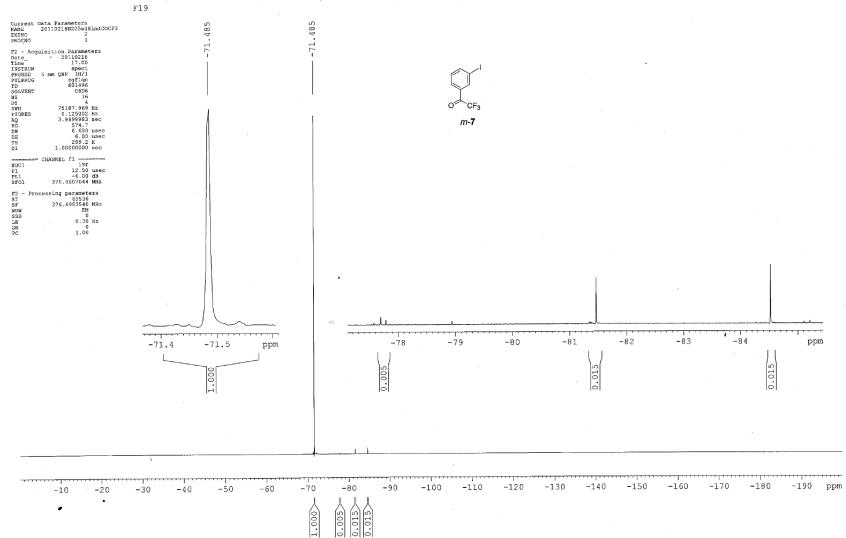


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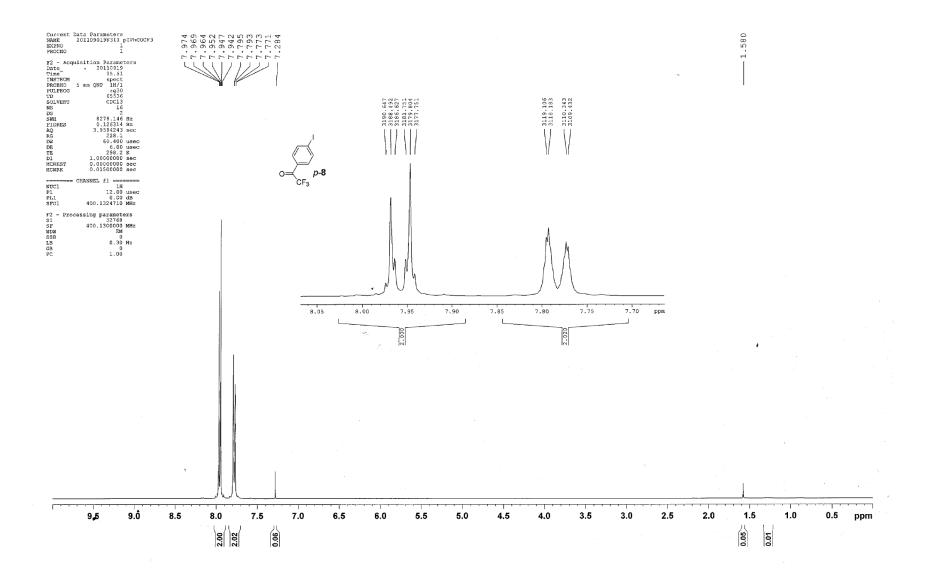


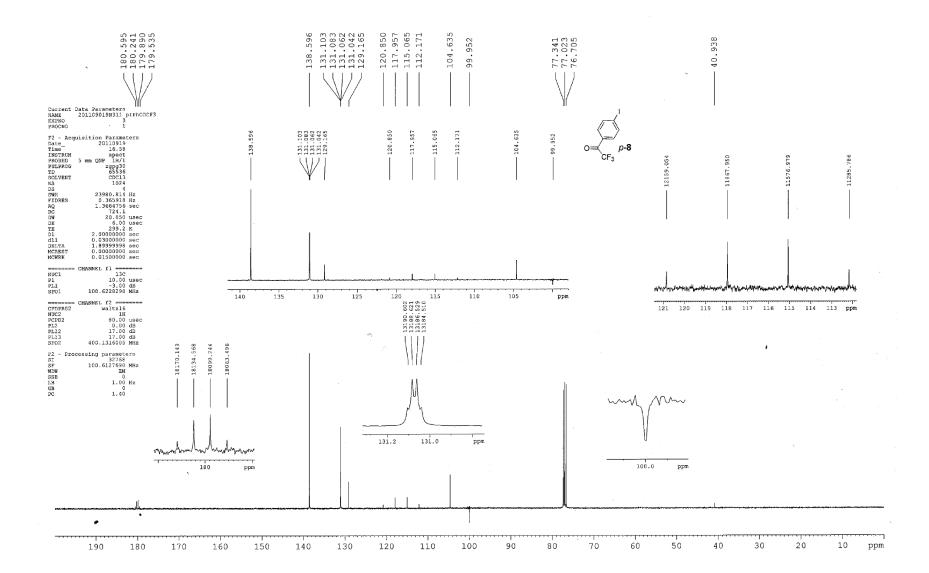


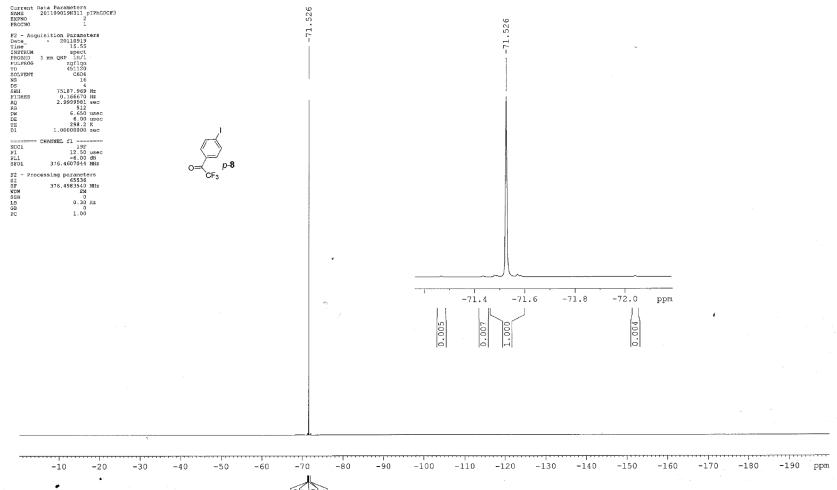
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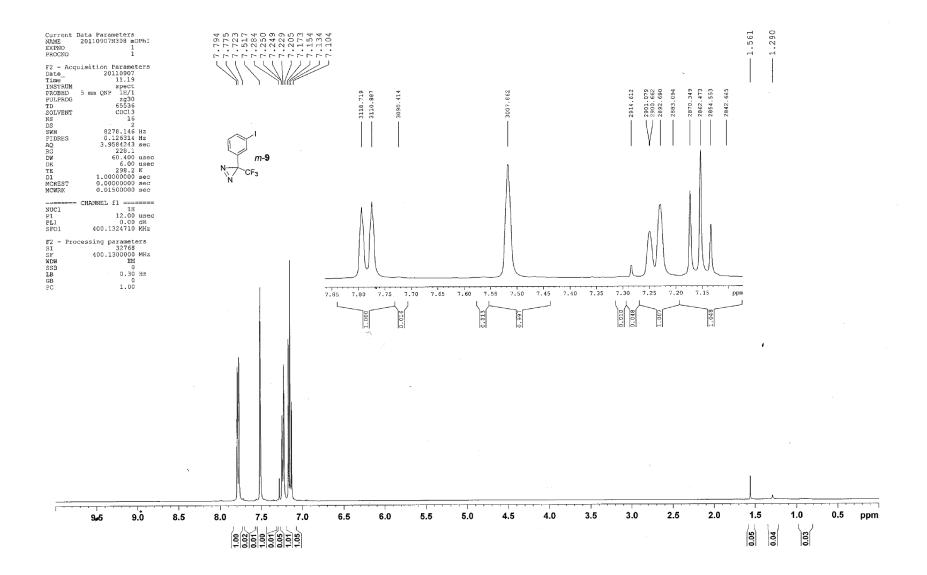
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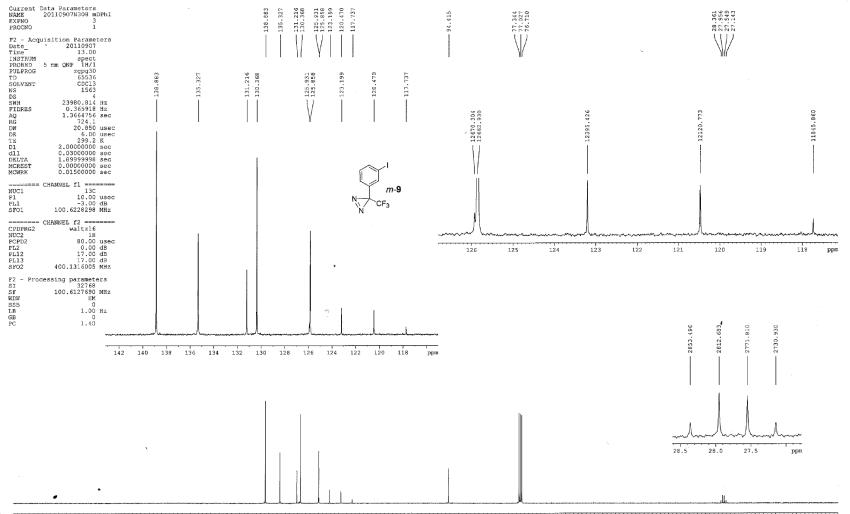




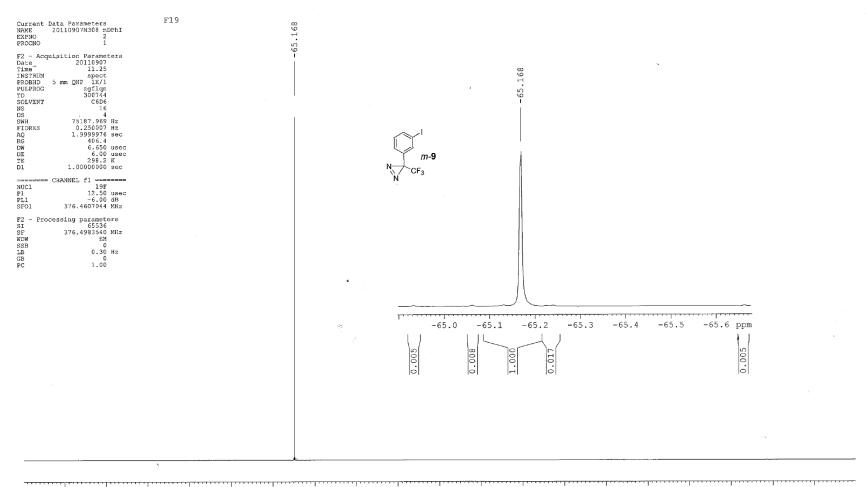


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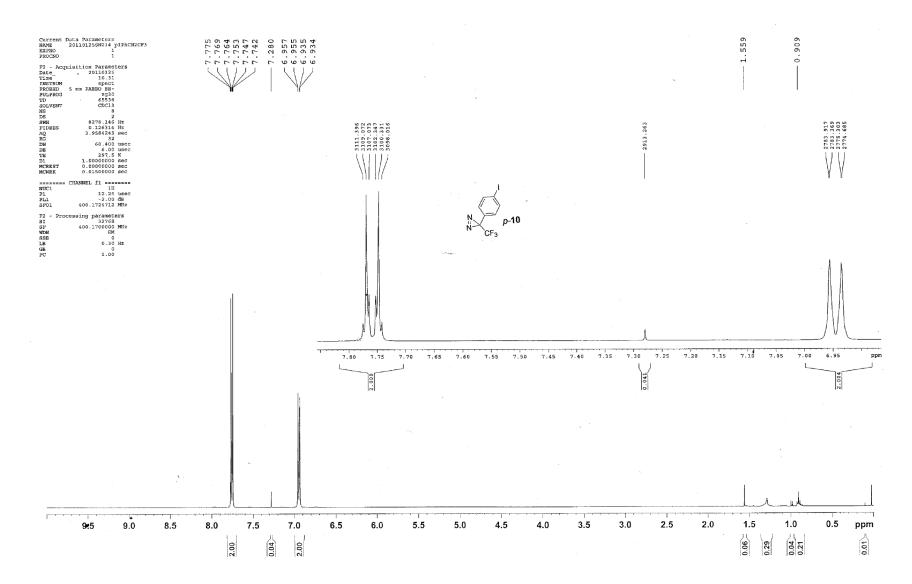


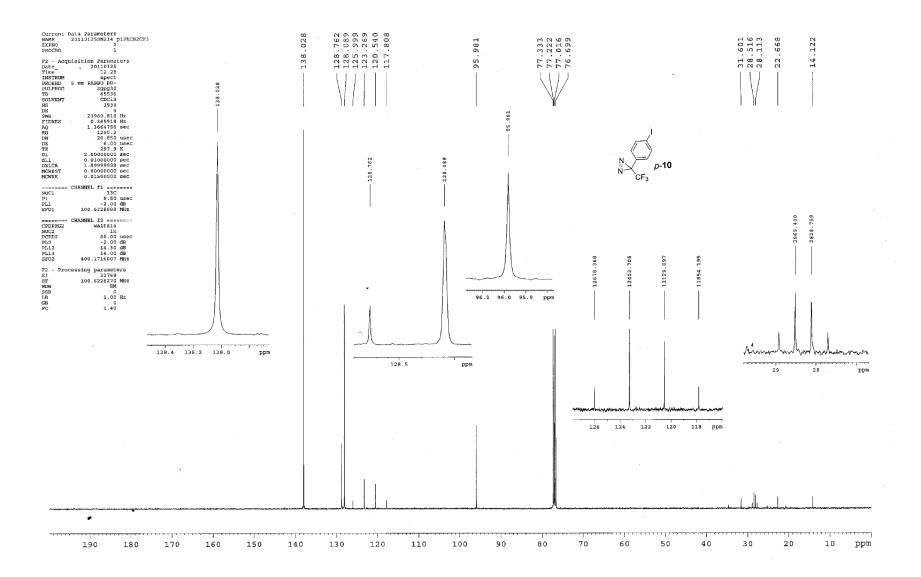
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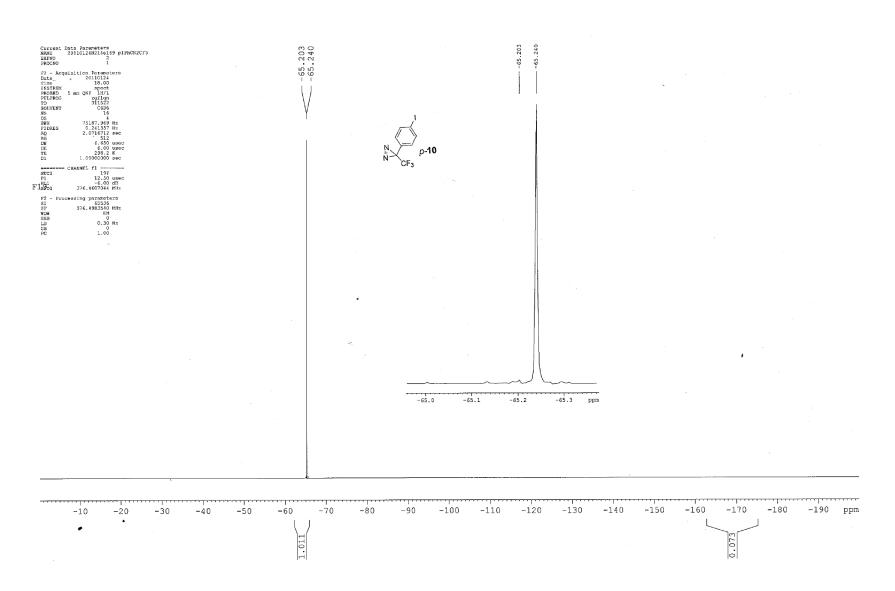


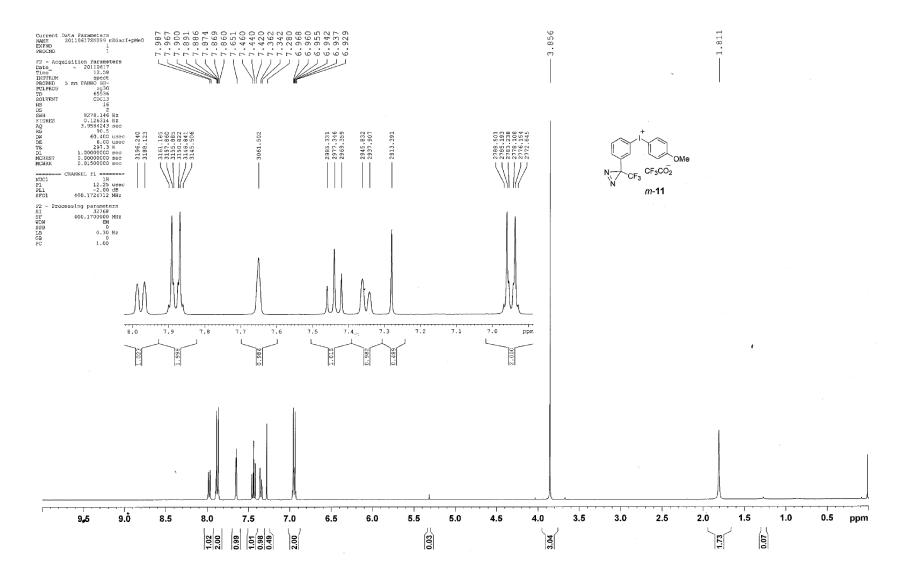
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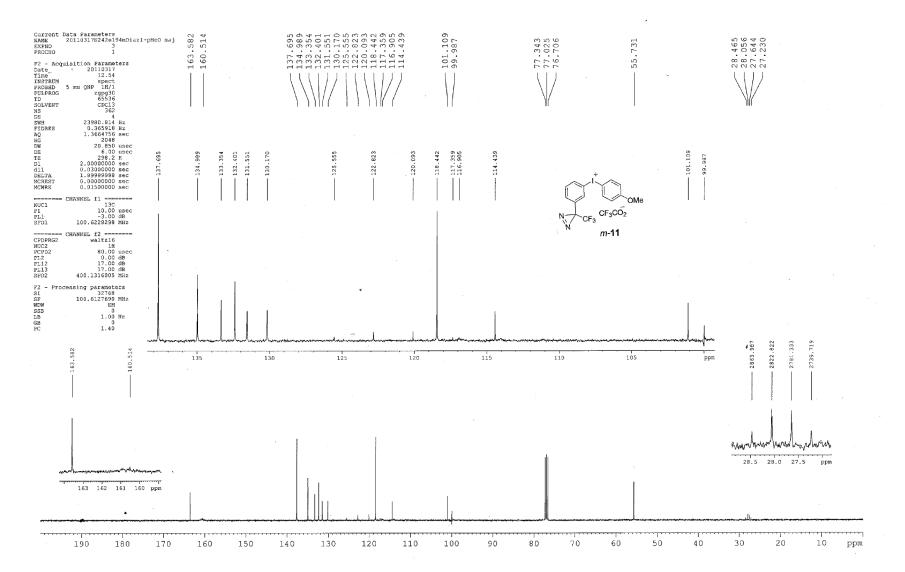
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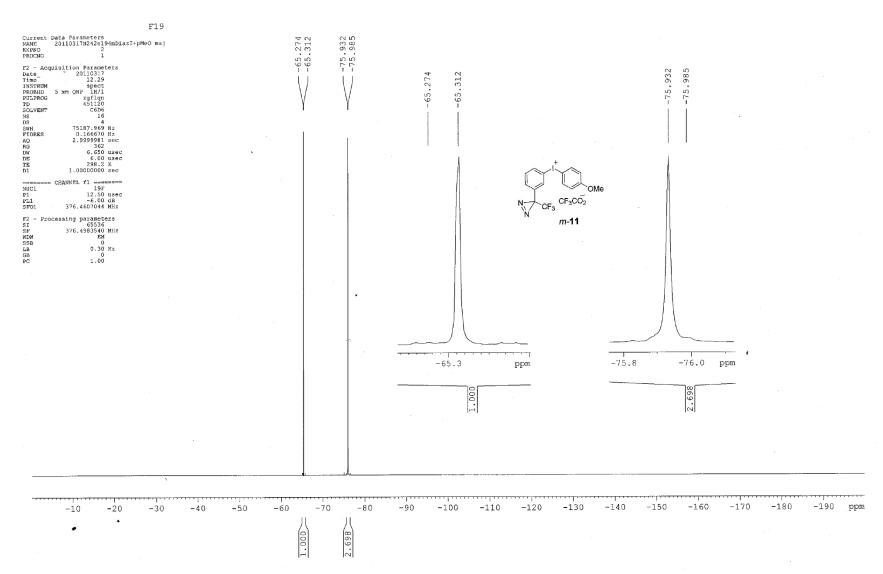


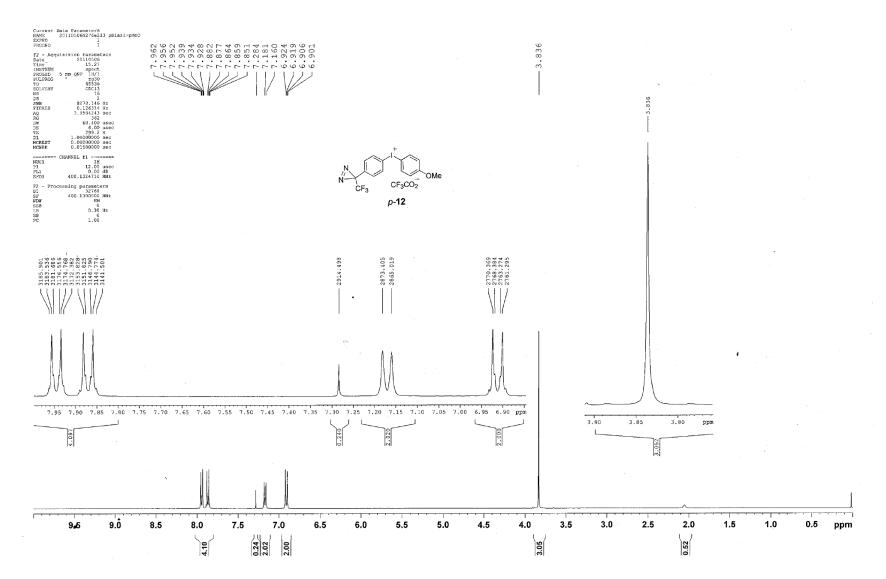


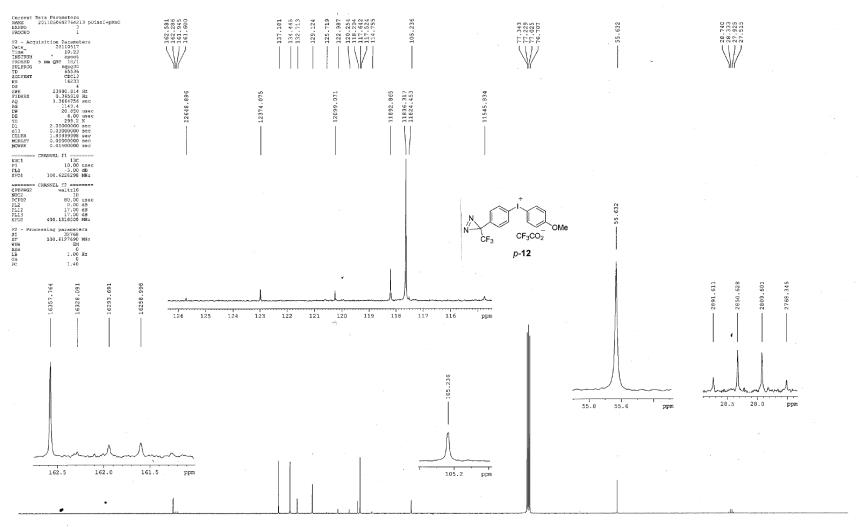




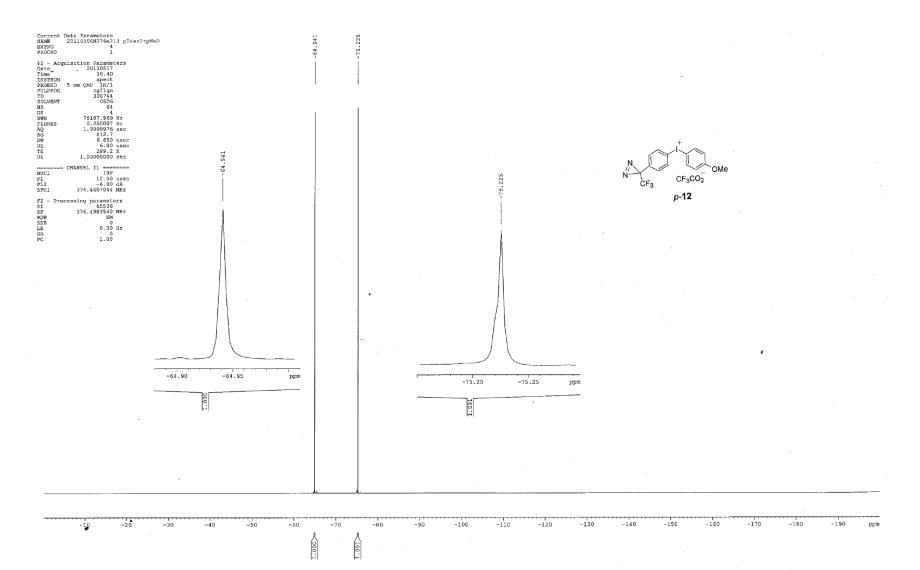


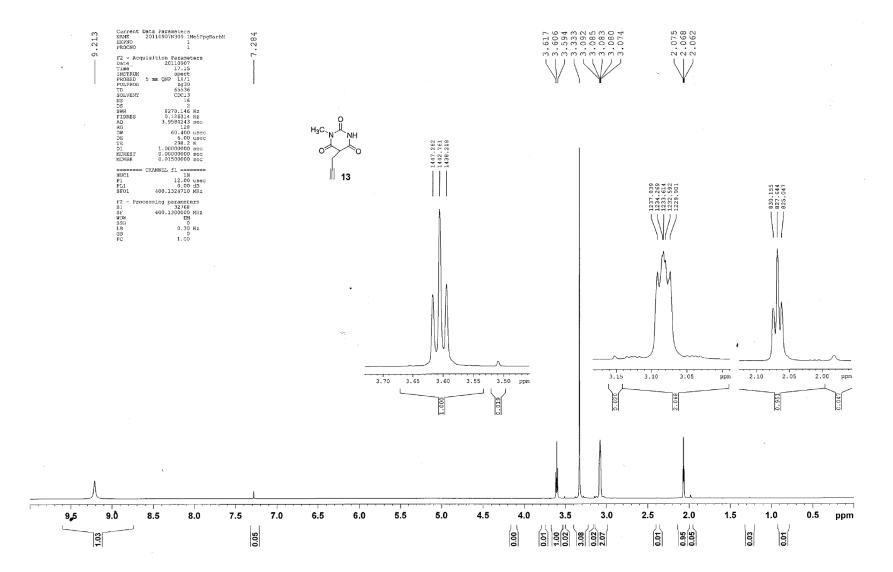


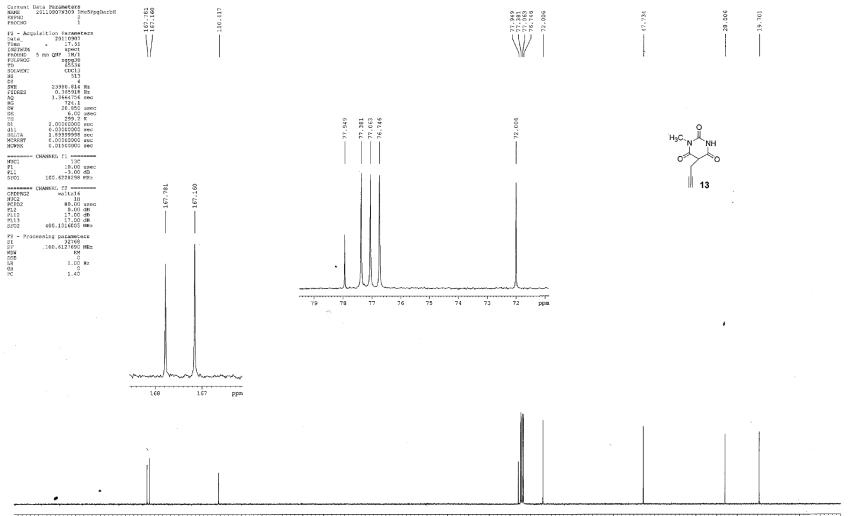




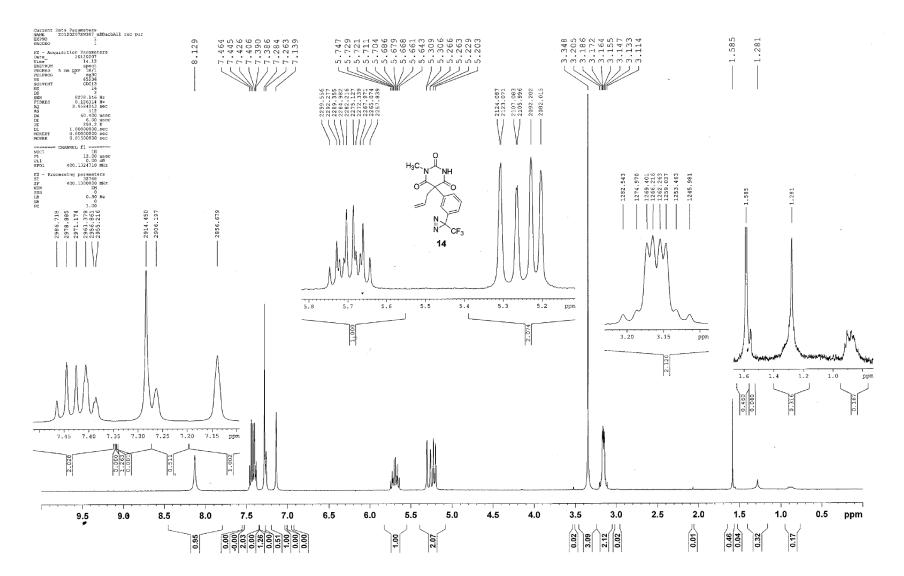
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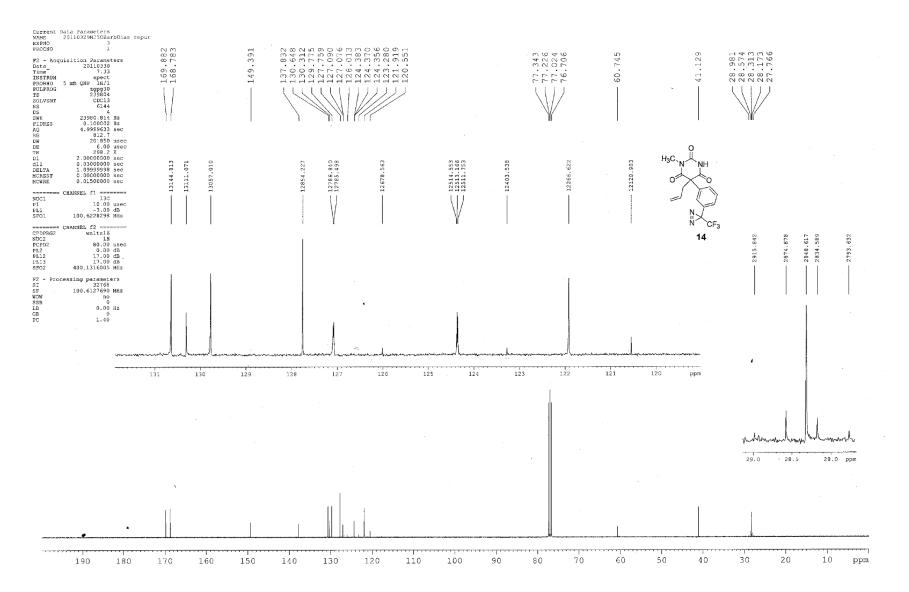


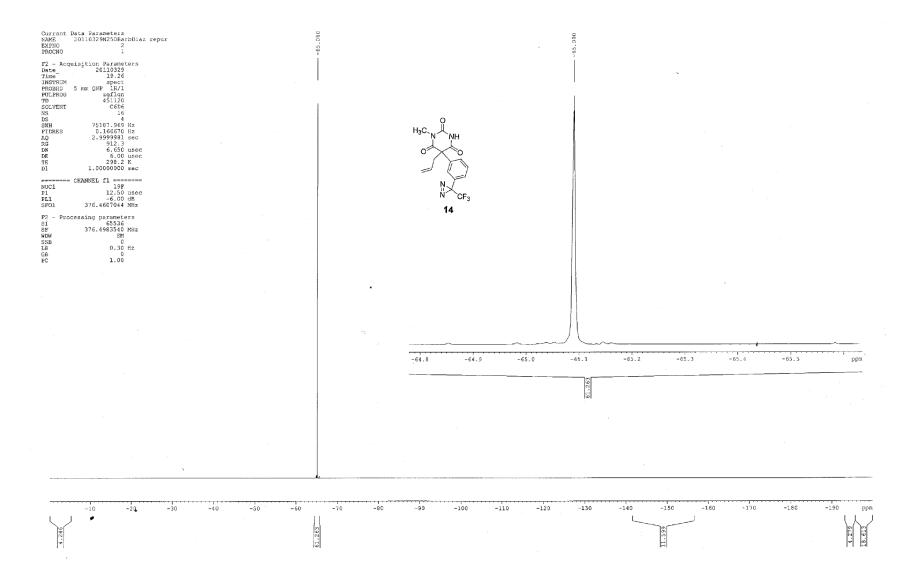


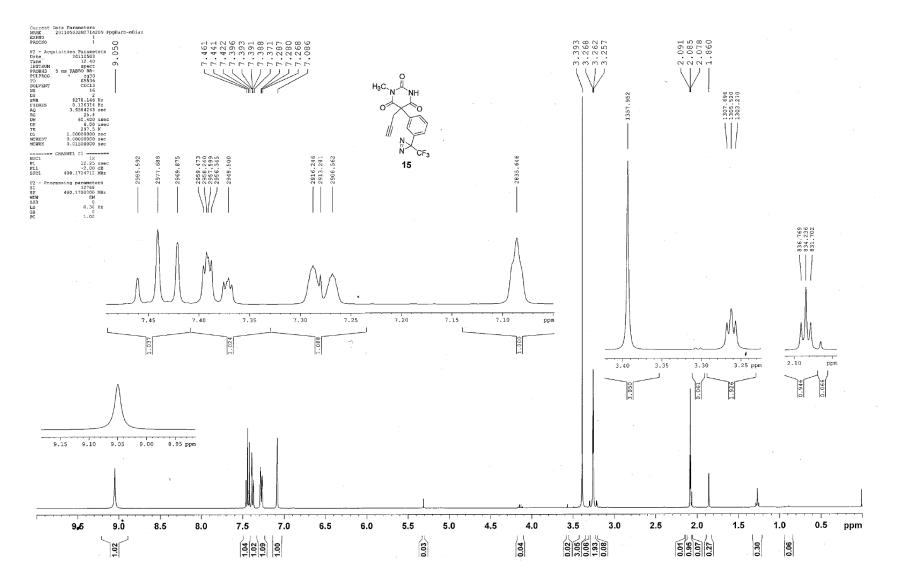


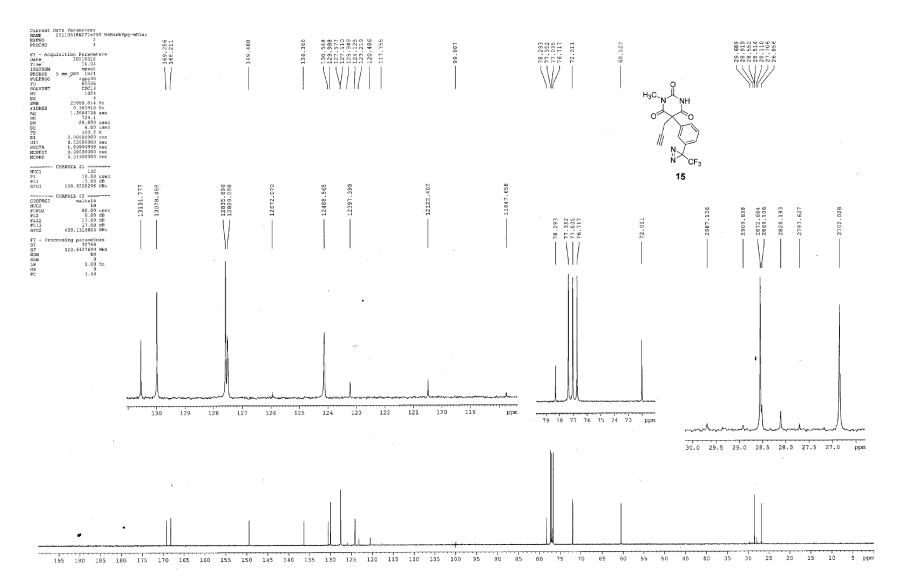
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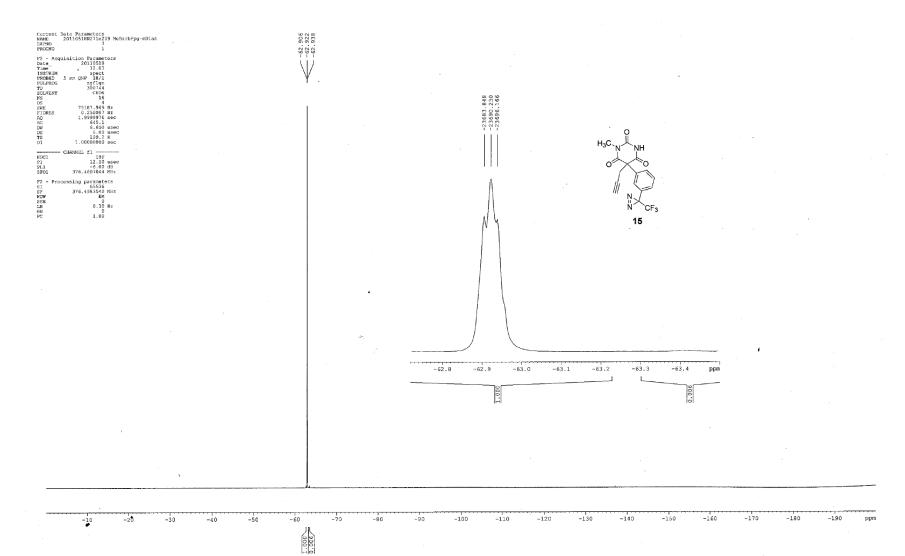


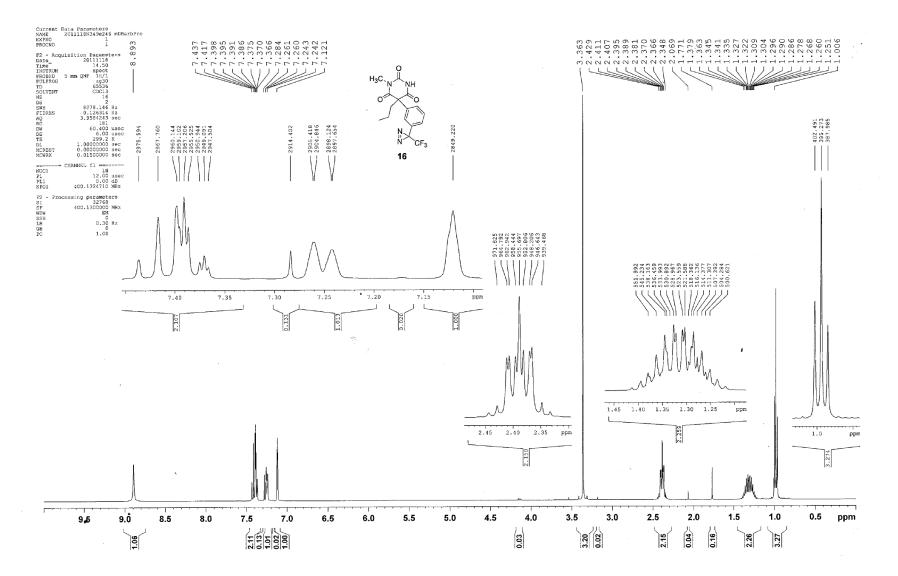


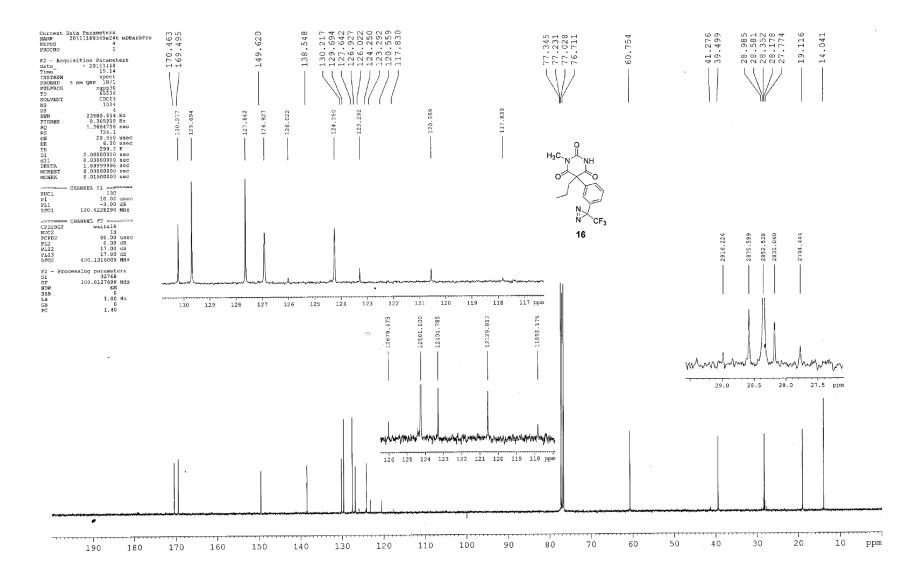


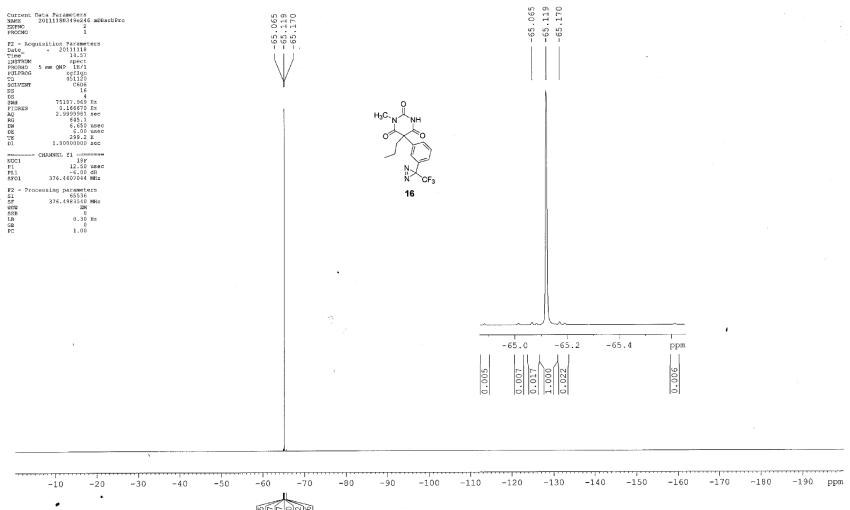












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