

## *Supplementary Information*

# Design, synthesis, and structure elucidation of novel 3-alkyl/arylamino-1-pyridin-3-ylpropanones and 3-adamantyl-5-nicotinoyl-1,2,3,4-tetrahydropyrimidine hybrids with promising anti-inflammatory activities<sup>§</sup>

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<sup>§</sup>This manuscript is a part of the Ph D thesis of Utpalparna Kalita (2015) which has already been uploaded on [www.shodhganga.inflibnet.ac.in](http://www.shodhganga.inflibnet.ac.in) as mandated by the UGC.

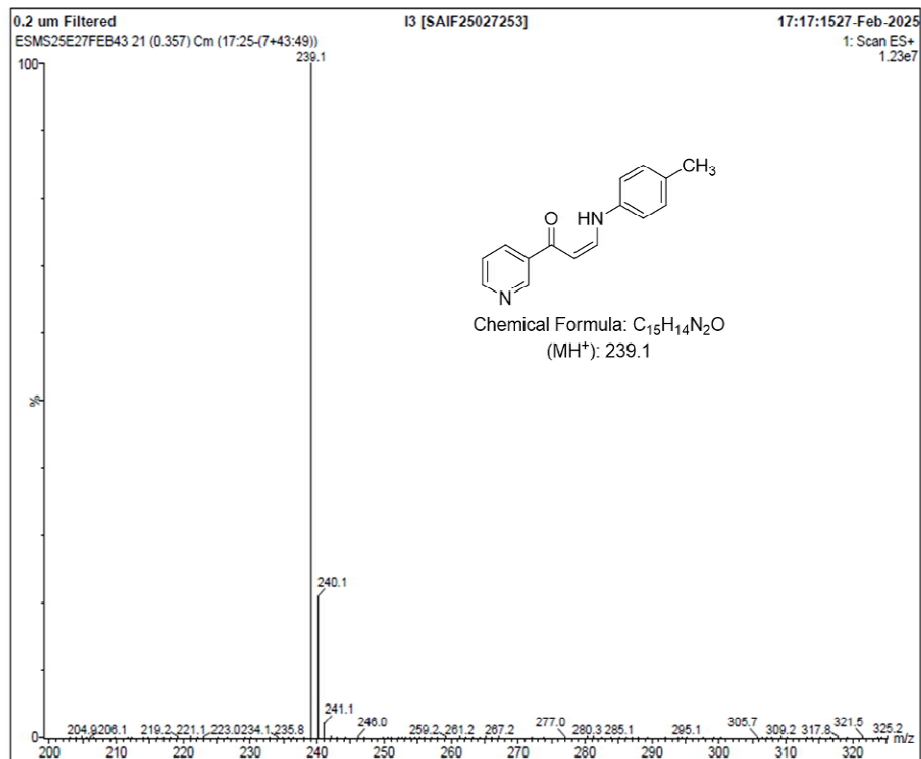
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\*\* Corresponding author

## Synthesis of (Z)-3-aralkyl/arylamino -1-pyridine-3-yl-prop-2-en-1-ones (3a–3h)

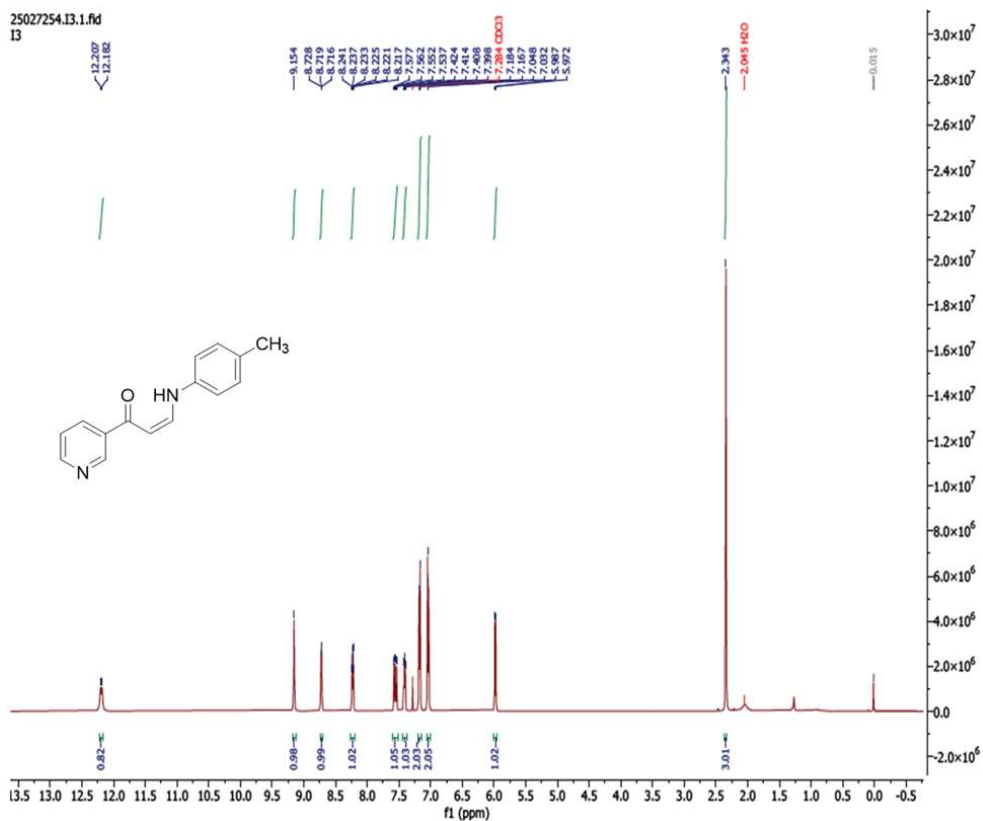
Synthesis of (3-((3*s*,5*s*,7*s*)-adamantan-1-yl)-1-alkyl/aralkyl/aryl-1,2,3,4-tetrahydropyrimidin-5-yl)(pyridin-3-yl)methanone (5a–h)

Mass of 3b



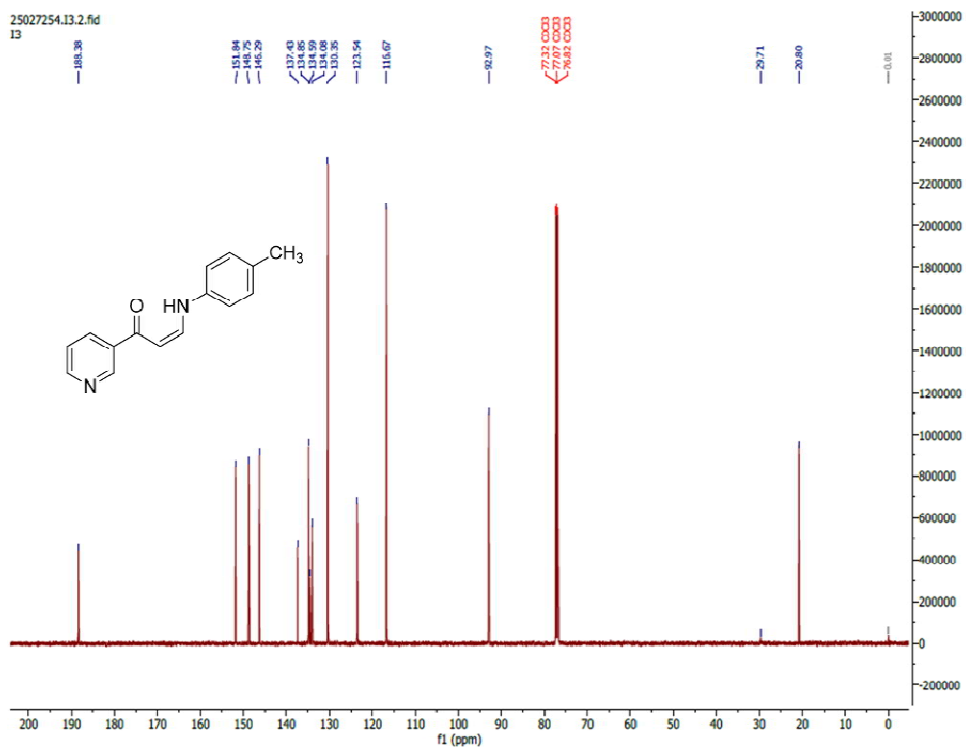
# <sup>1</sup>H NMR of 3b

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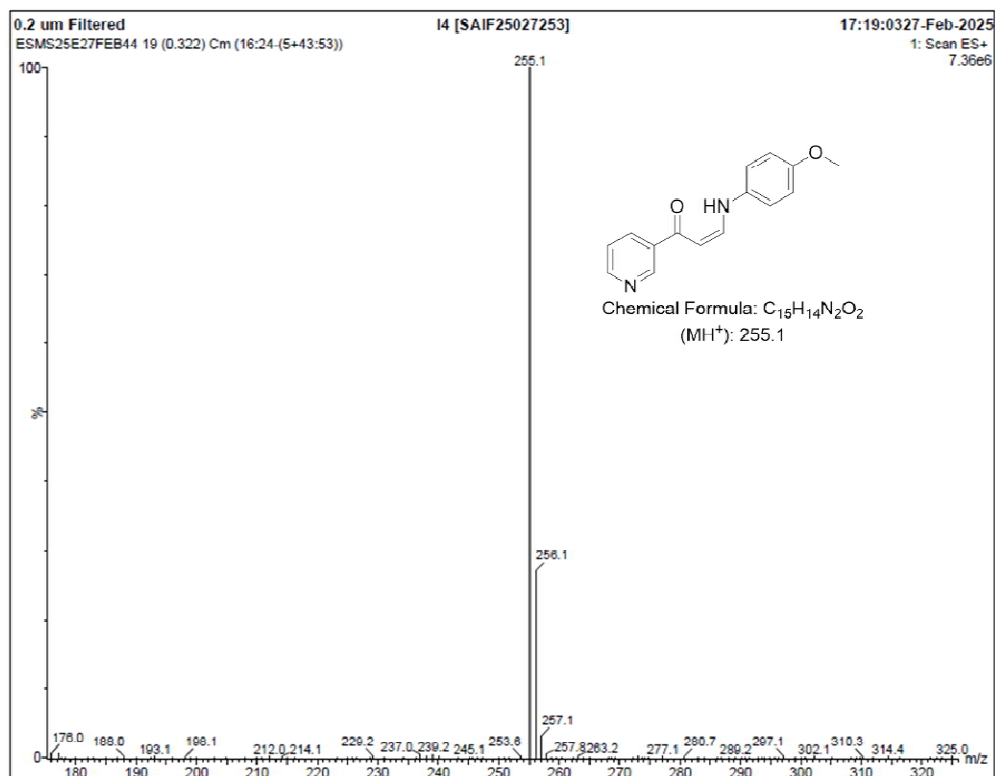


# <sup>13</sup>C NMR of 3b

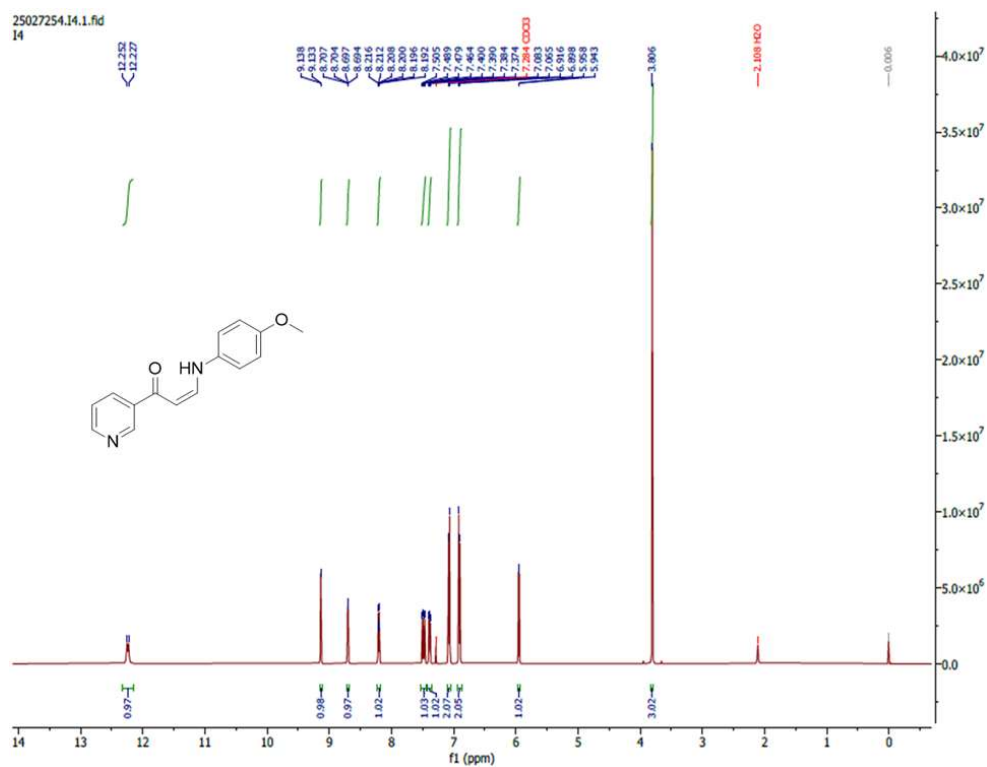
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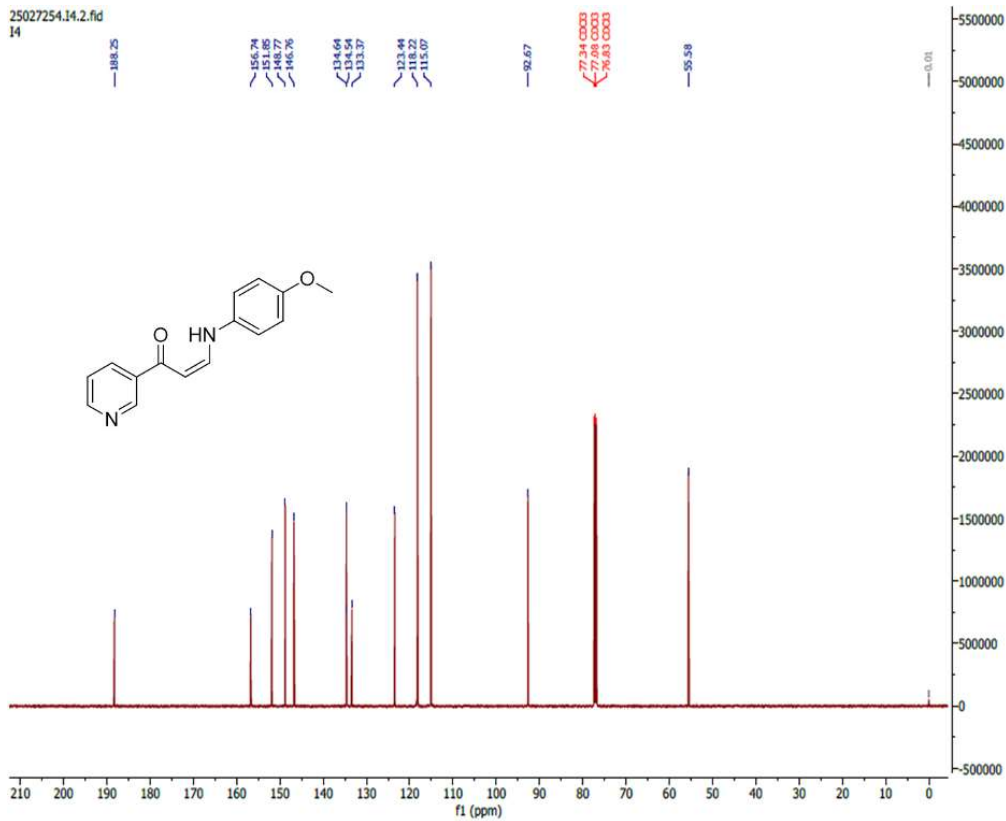
# Mass of 3c



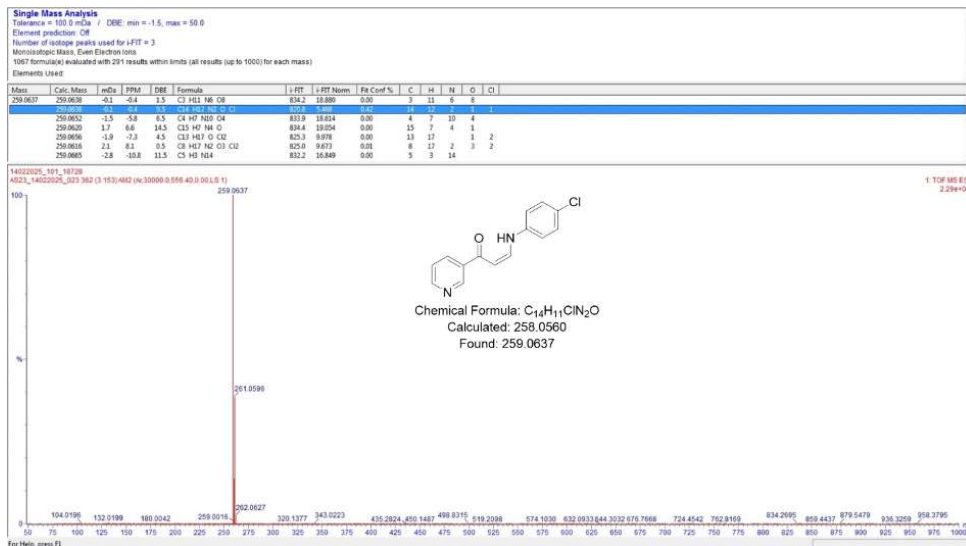
# <sup>1</sup>H NMR of 3c



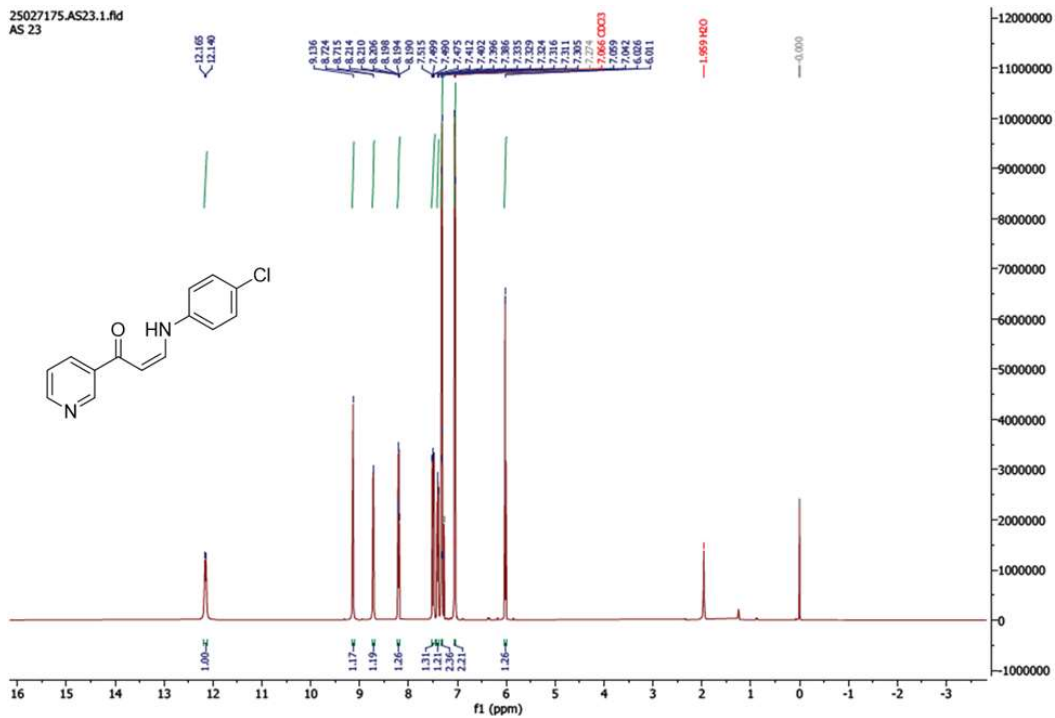
### <sup>13</sup>C NMR of 3c



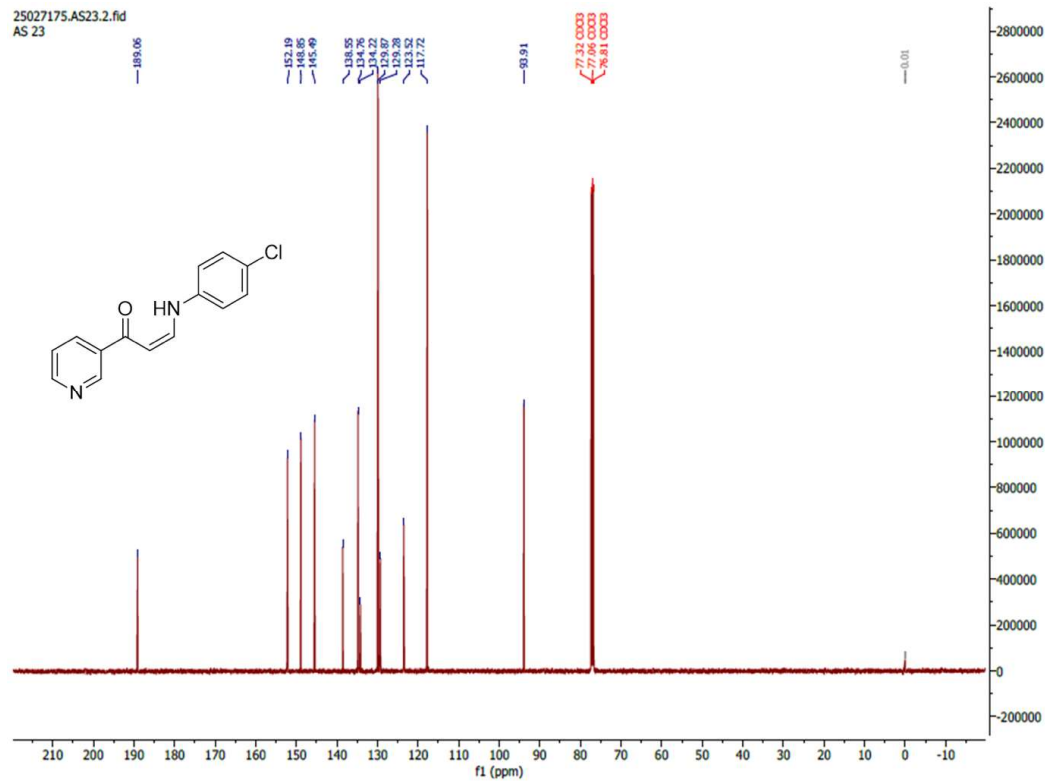
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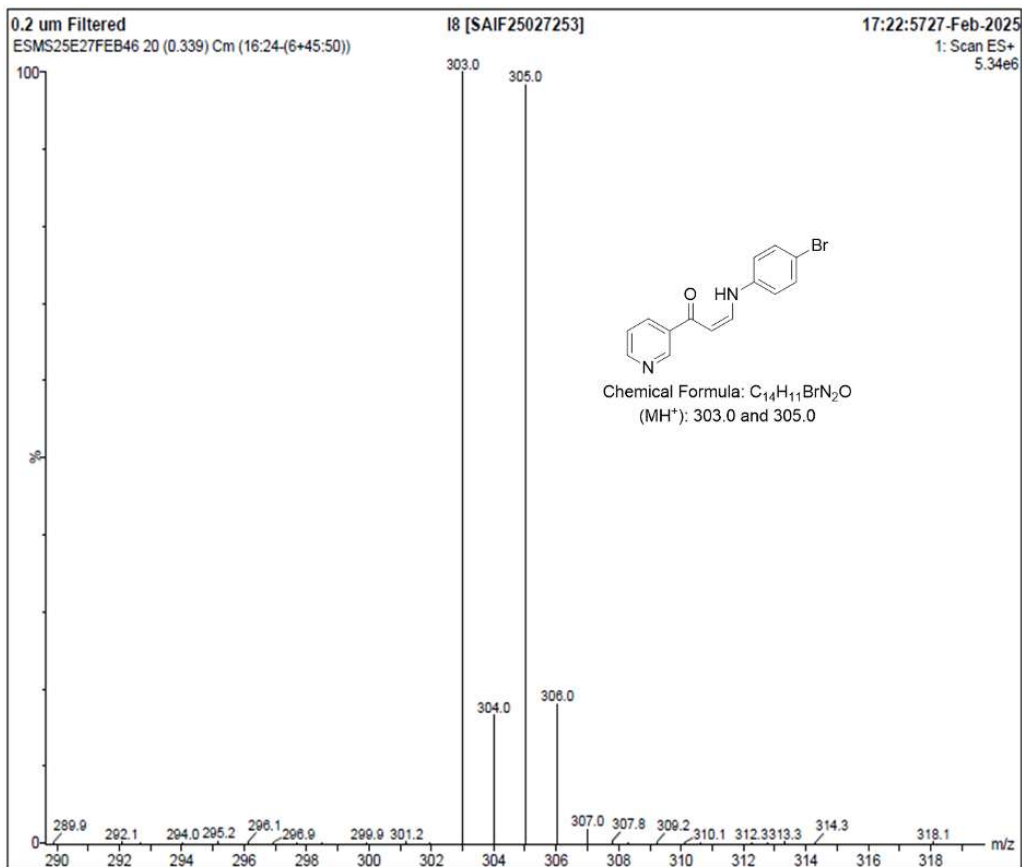
# <sup>1</sup>H NMR of 3d



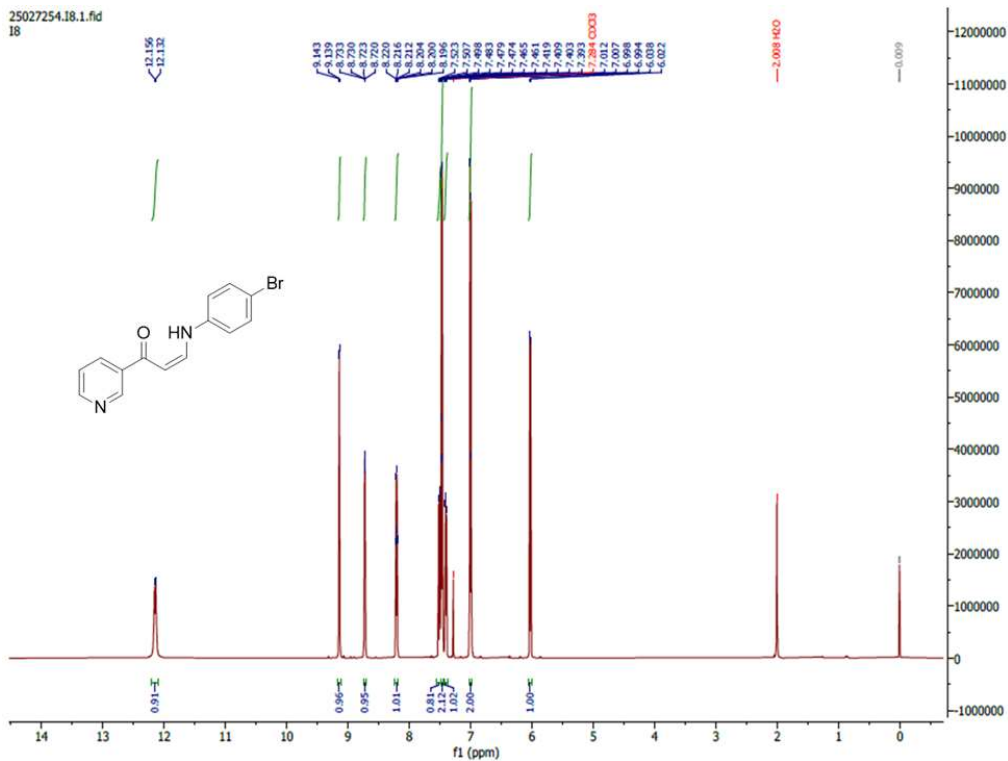
# <sup>13</sup>C NMR of 3d



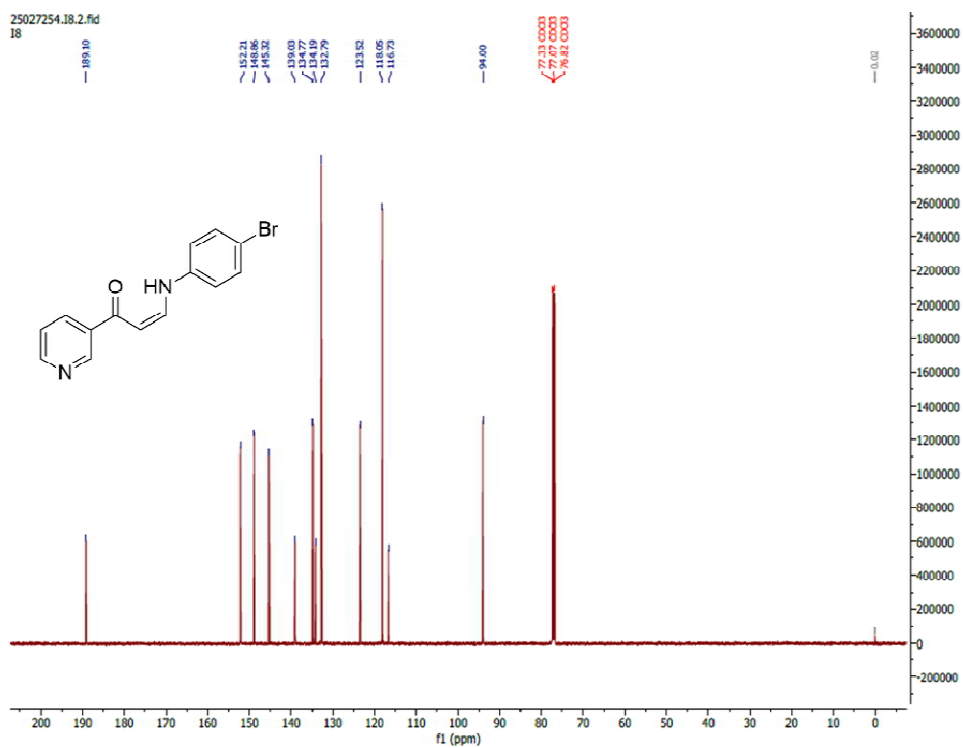
Mass of 3e



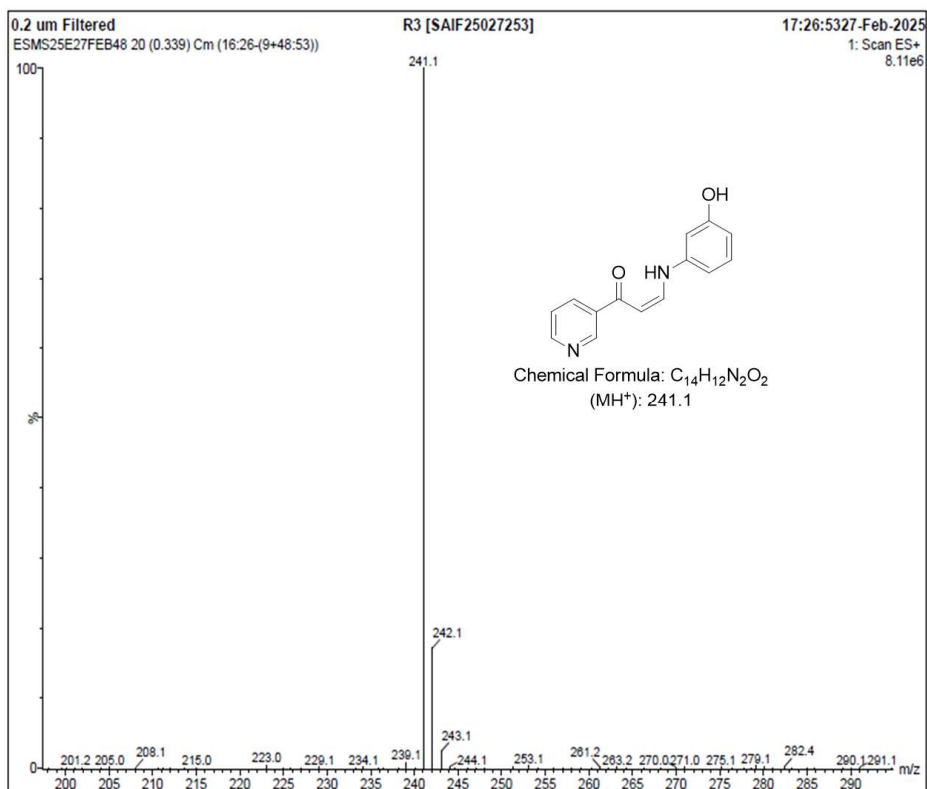
<sup>1</sup>H NMR of 3e



# <sup>13</sup>C NMR of 3e

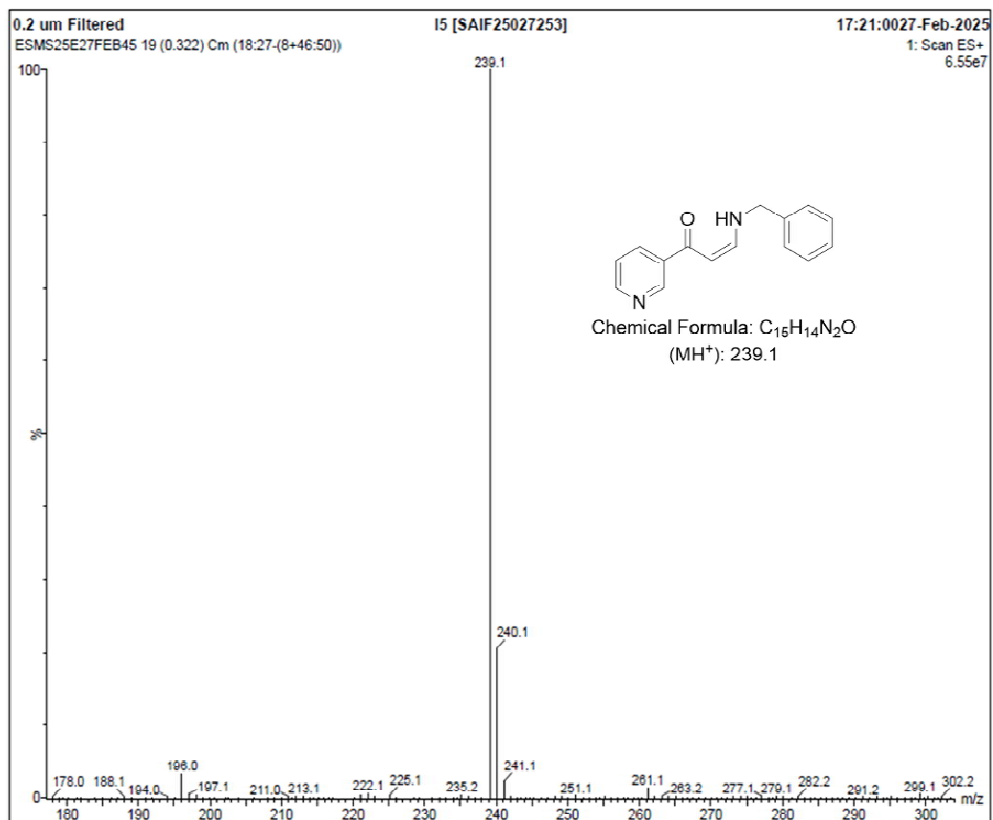


# Mass of 3f

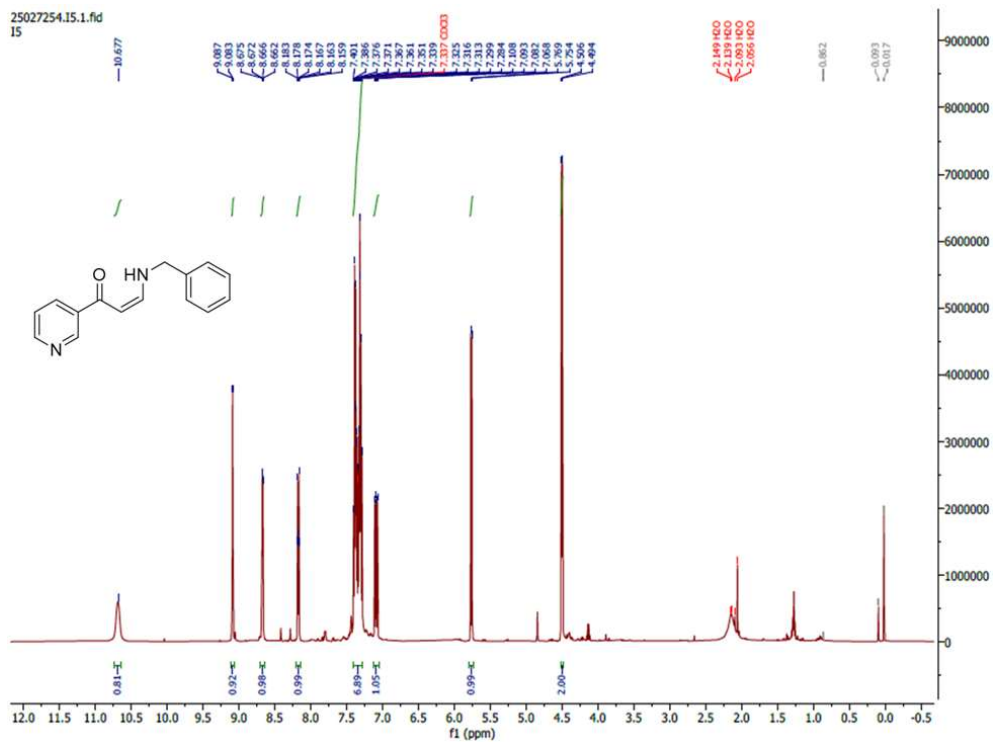




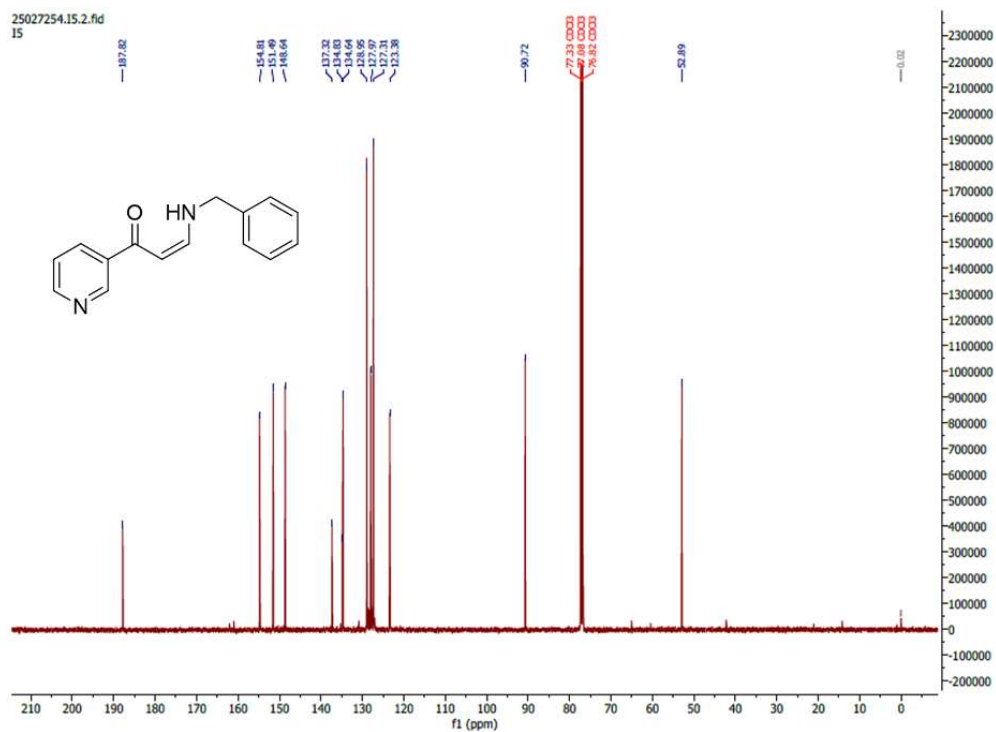
# Mass of 3g



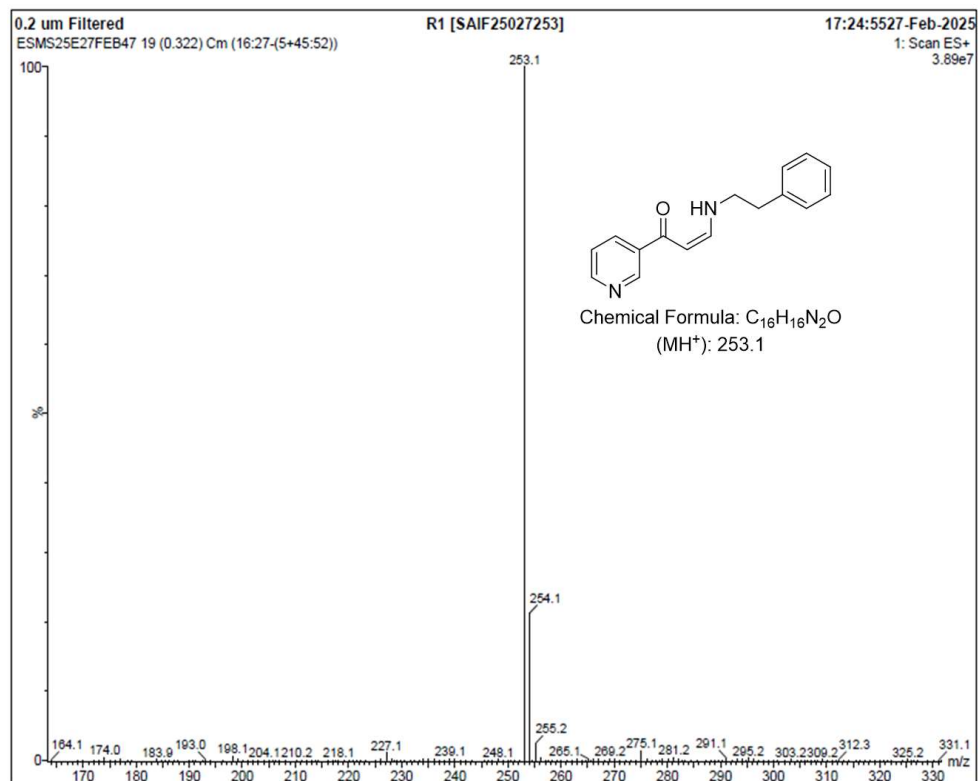
# <sup>1</sup>H NMR of 3g



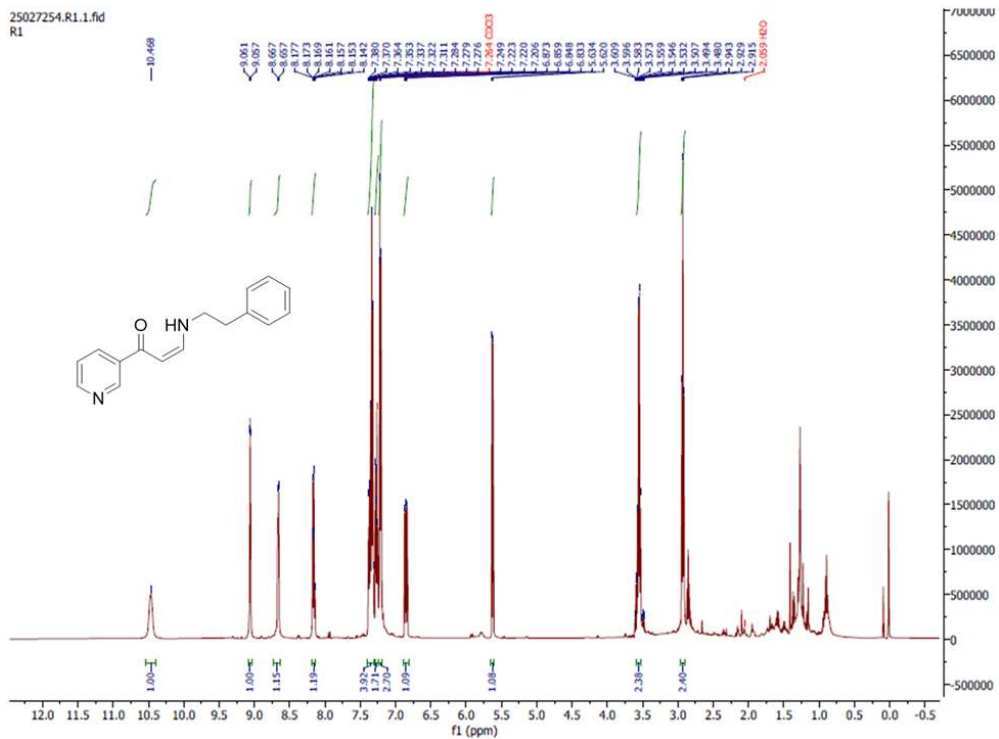
### <sup>13</sup>C NMR of **3g**



### Mass of **3h**

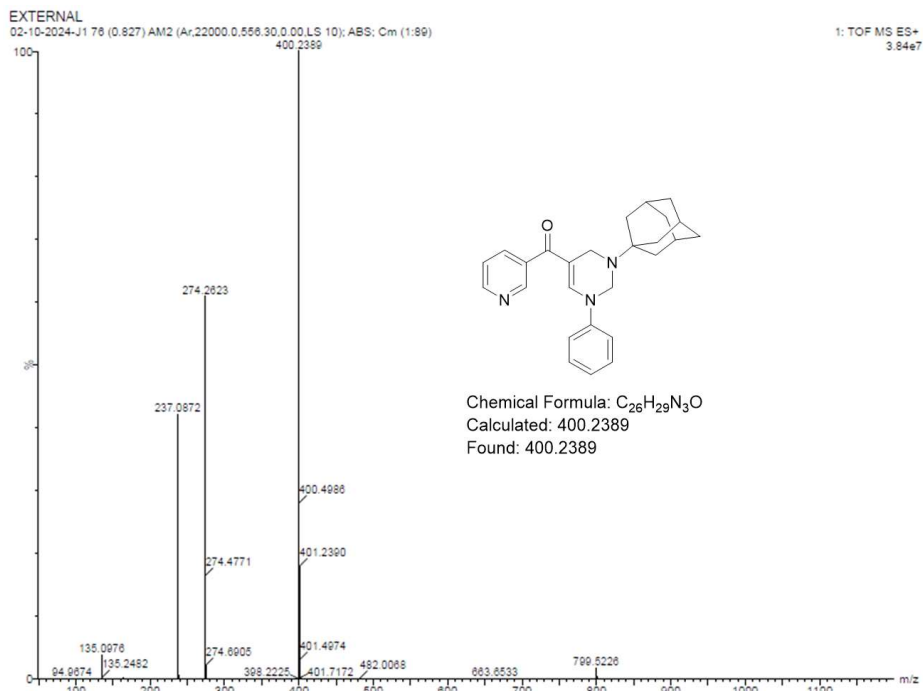


# <sup>1</sup>H NMR of 3h

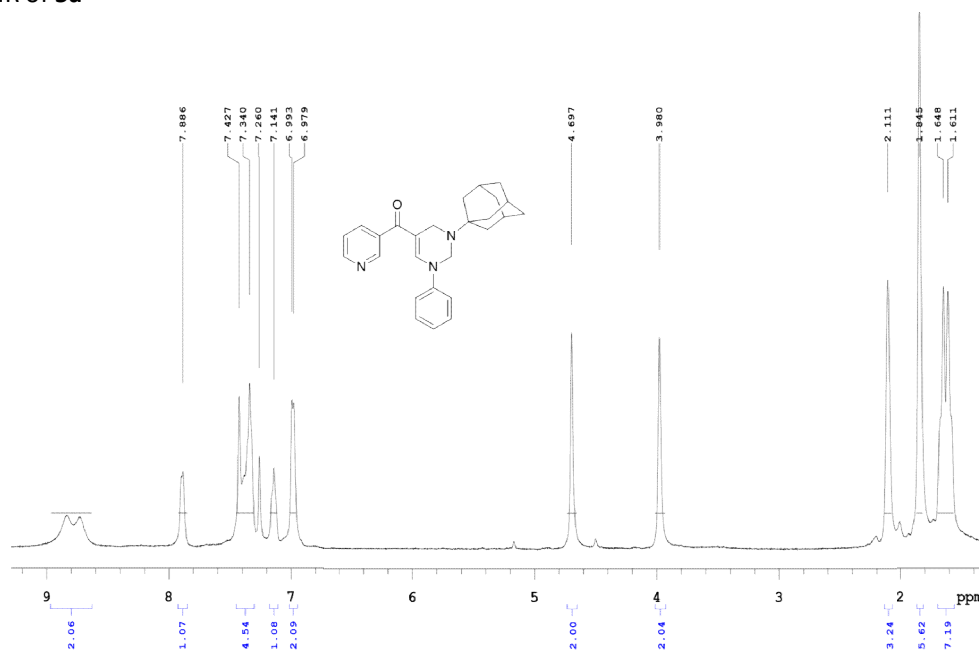


Synthesis of (3-((3*s*,5*s*,7*s*)-adamantan-1-yl)-1-aryl-1,2,3,4-tetrahydropyrimidin-5-yl)(pyridin-3-yl)methanones (5a–h)

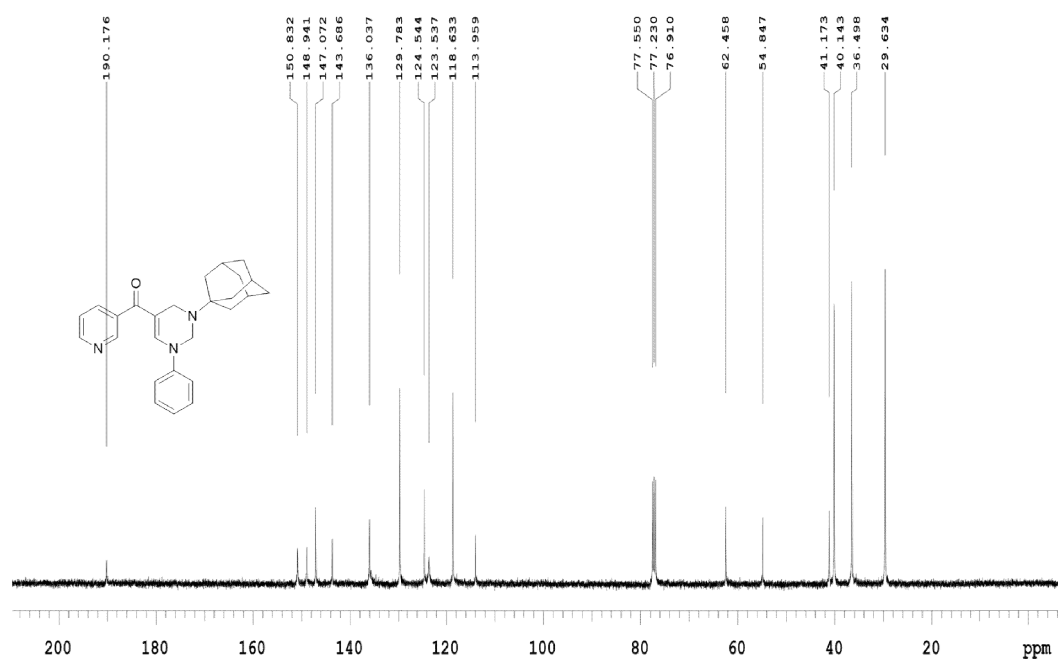
HRMS of 5a



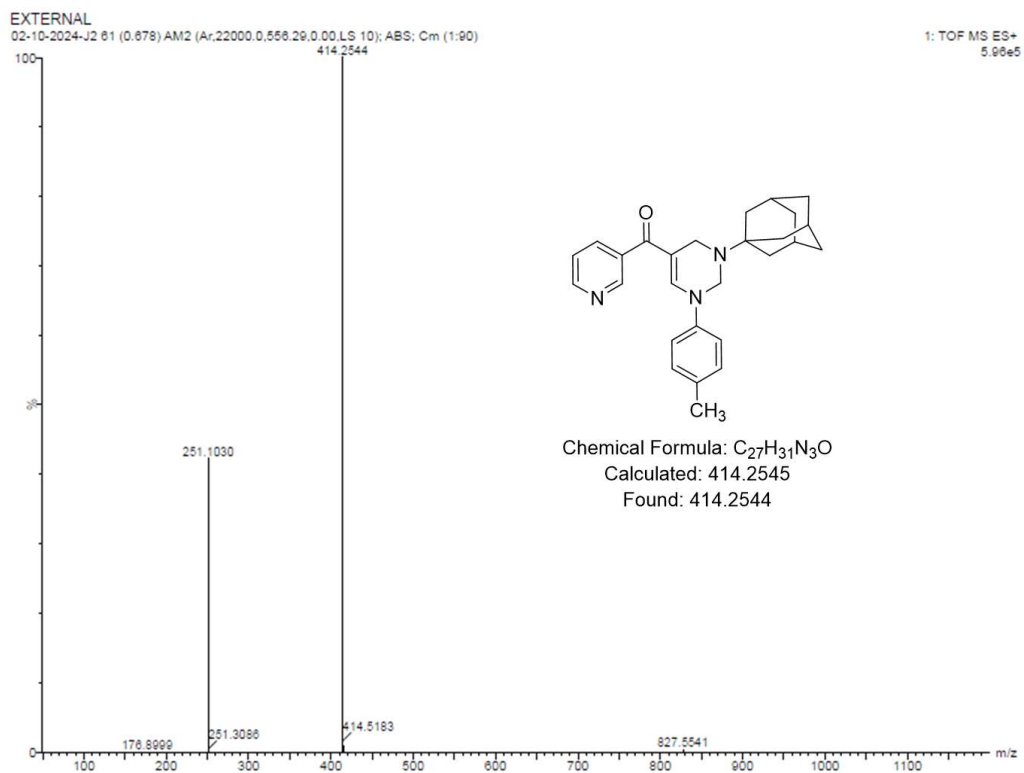
<sup>1</sup>H NMR of 5a



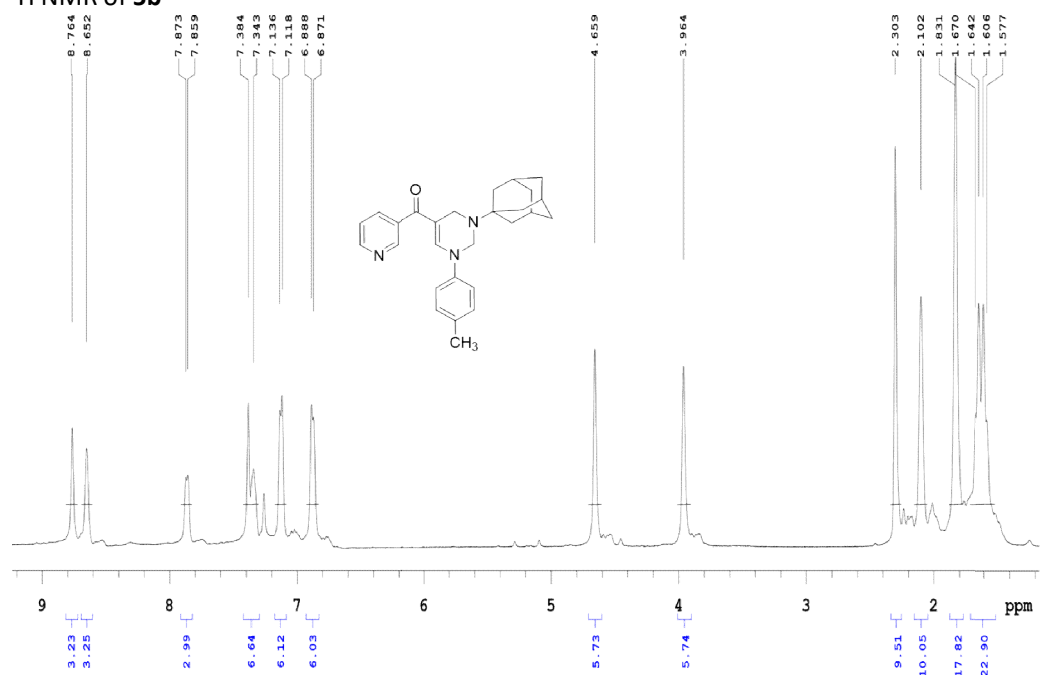
### <sup>13</sup>C NMR of 5a



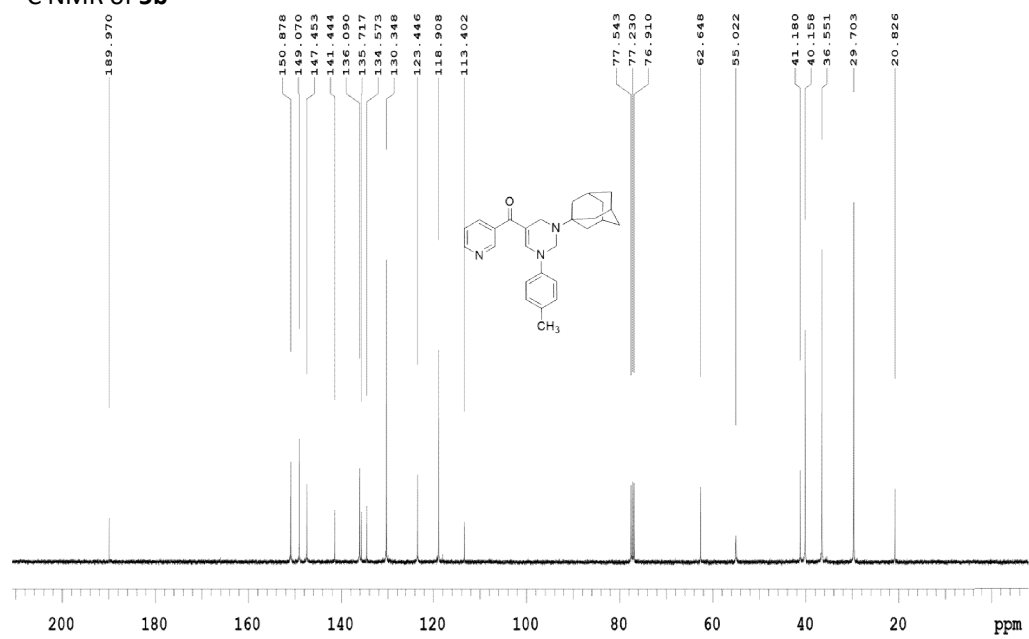
### HRMS of 5b



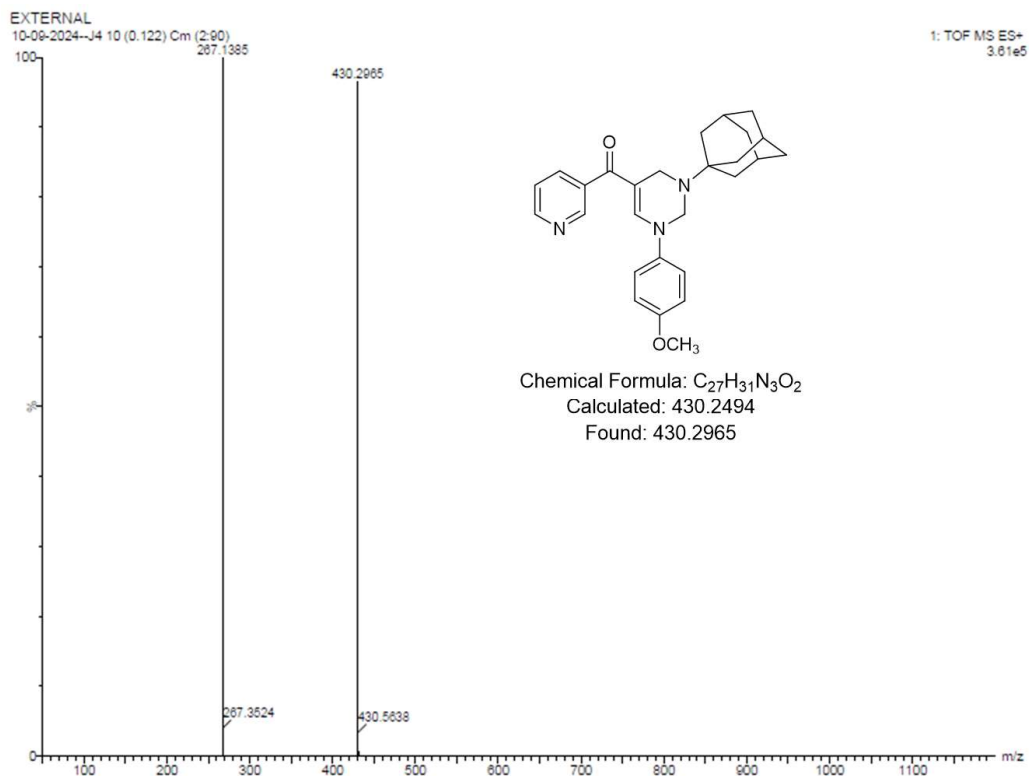
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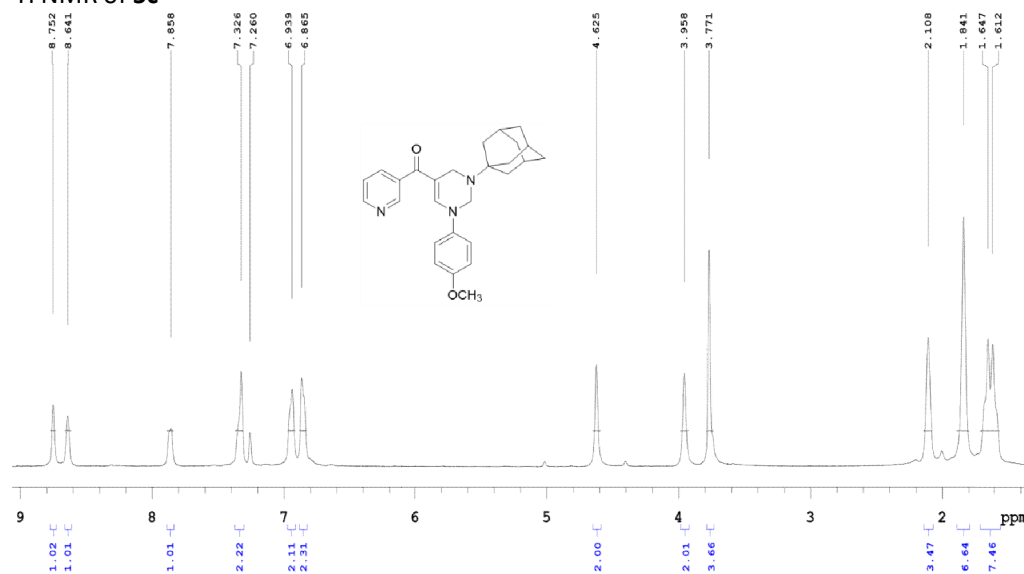
<sup>13</sup>C NMR of 5b



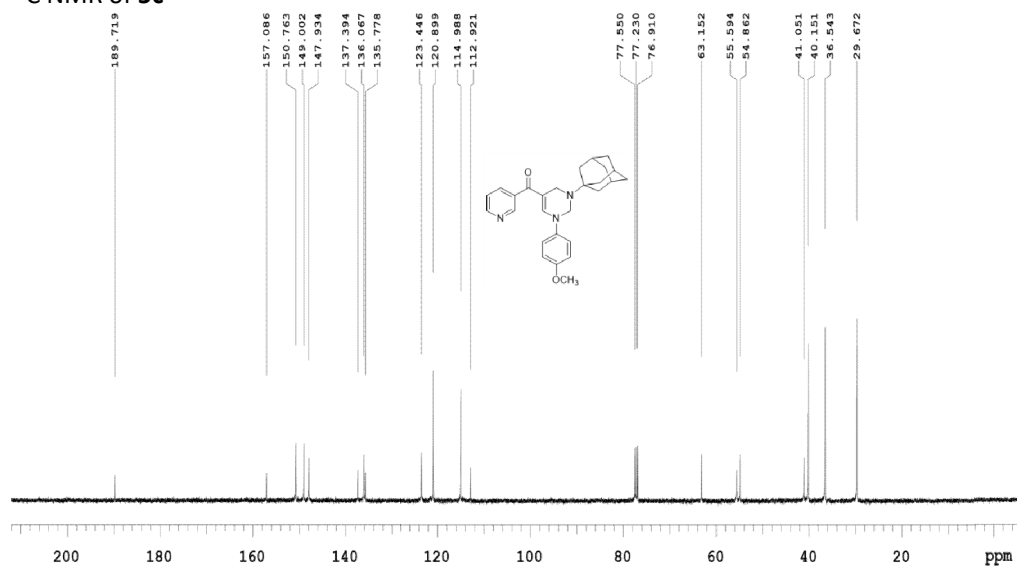
# HRMS of 5c



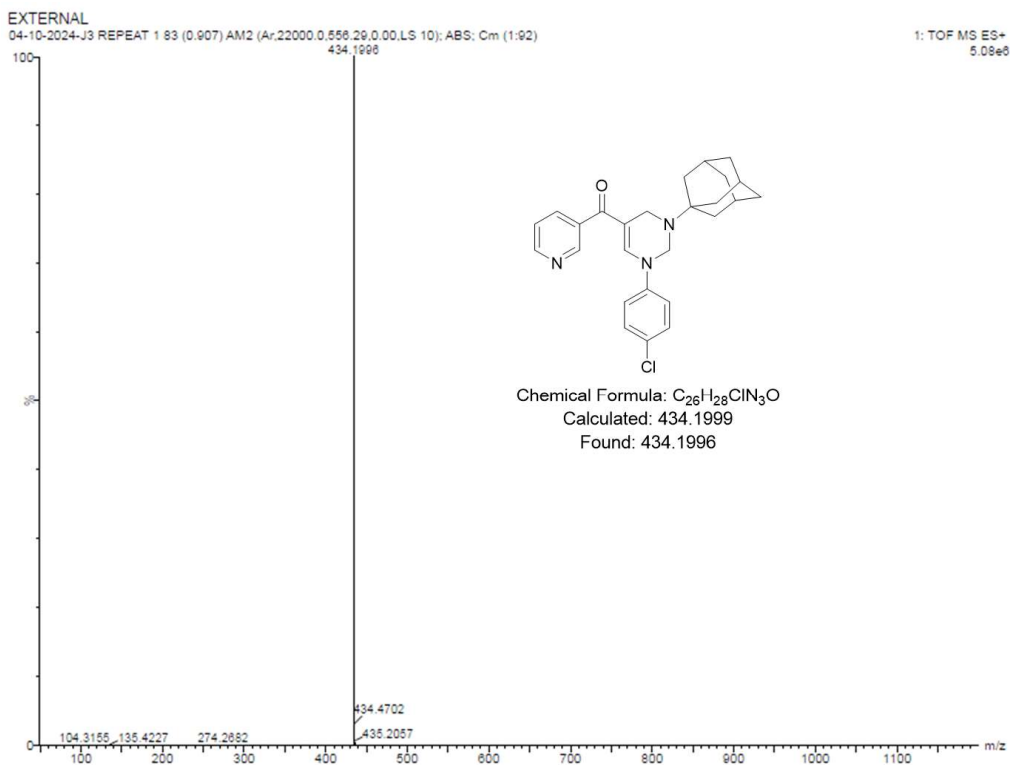
# $^1H$ NMR of 5c



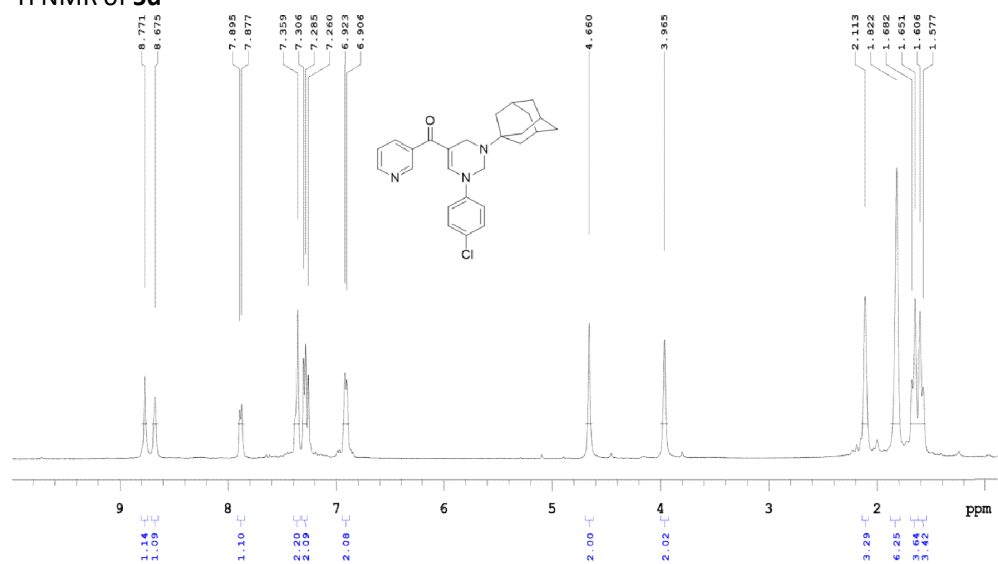
### <sup>13</sup>C NMR of 5c



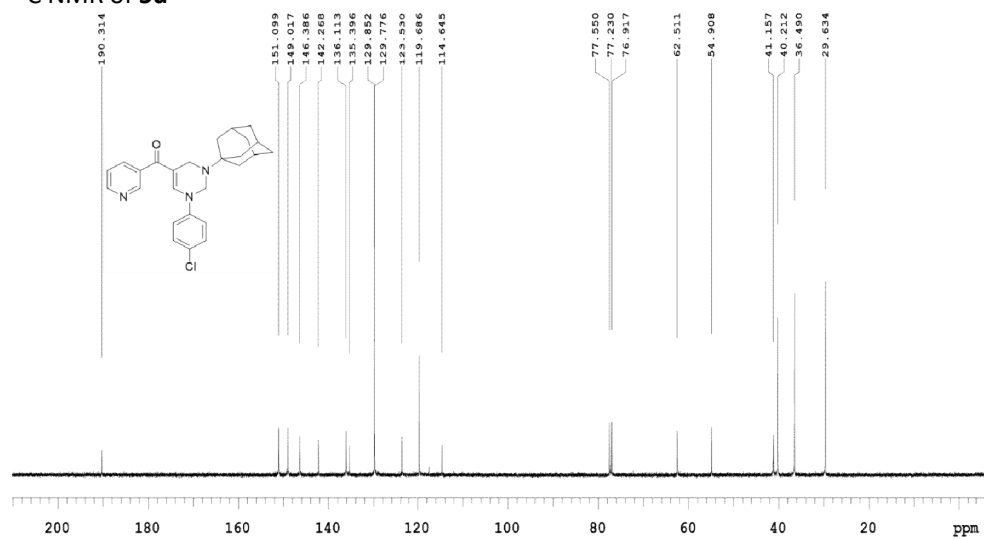
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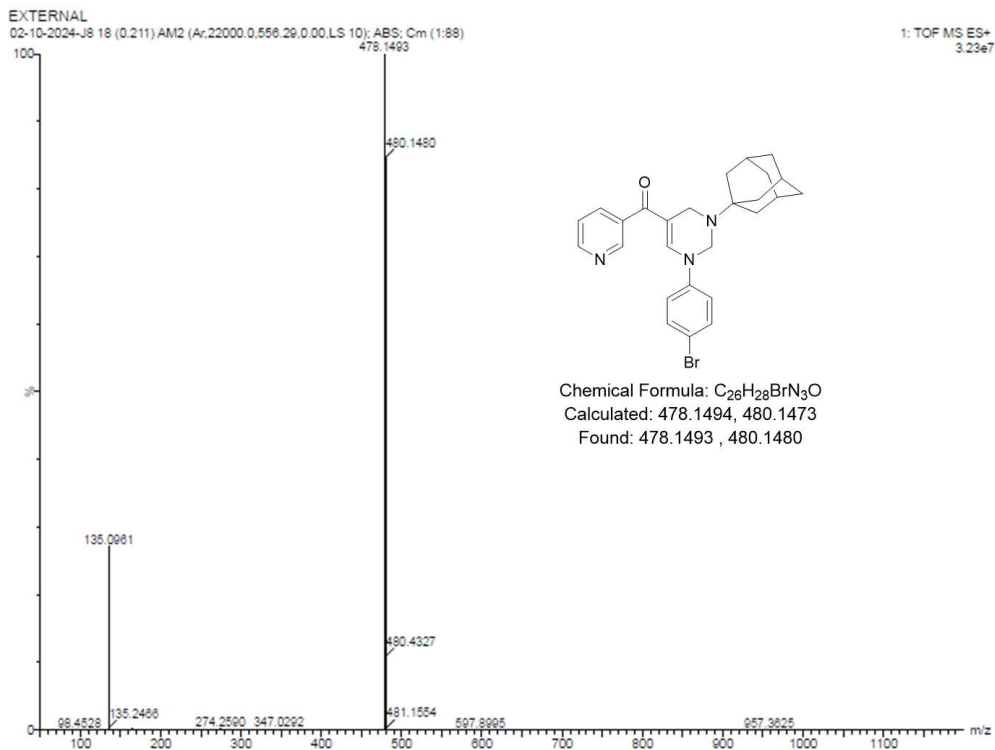
### <sup>1</sup>H NMR of 5d



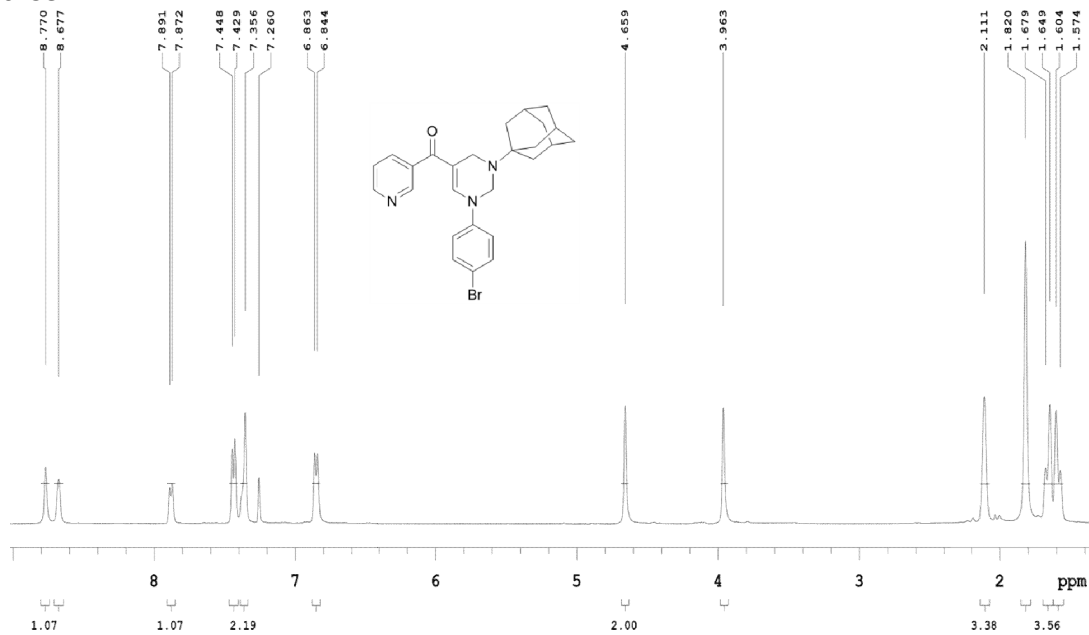
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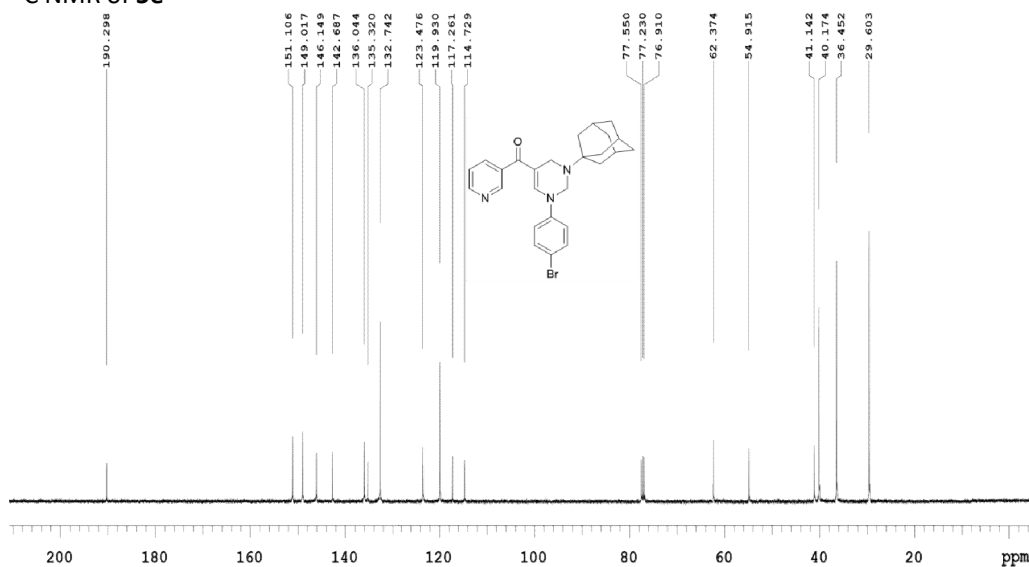
# HRMS of 5e



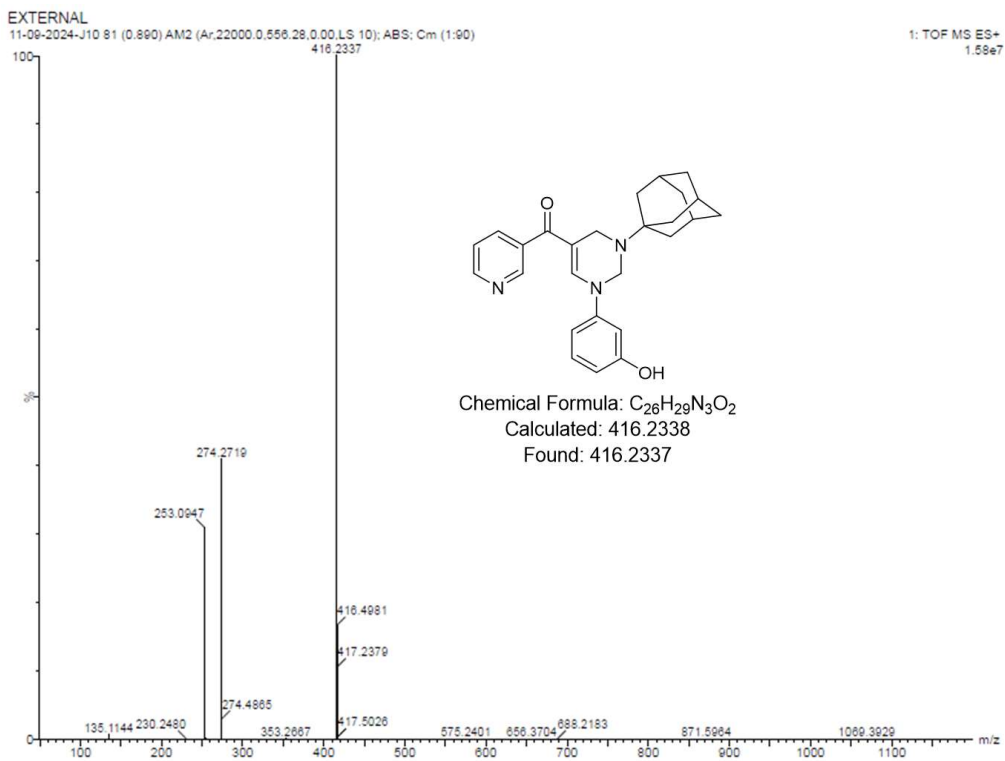
# <sup>1</sup>H NMR of 5e



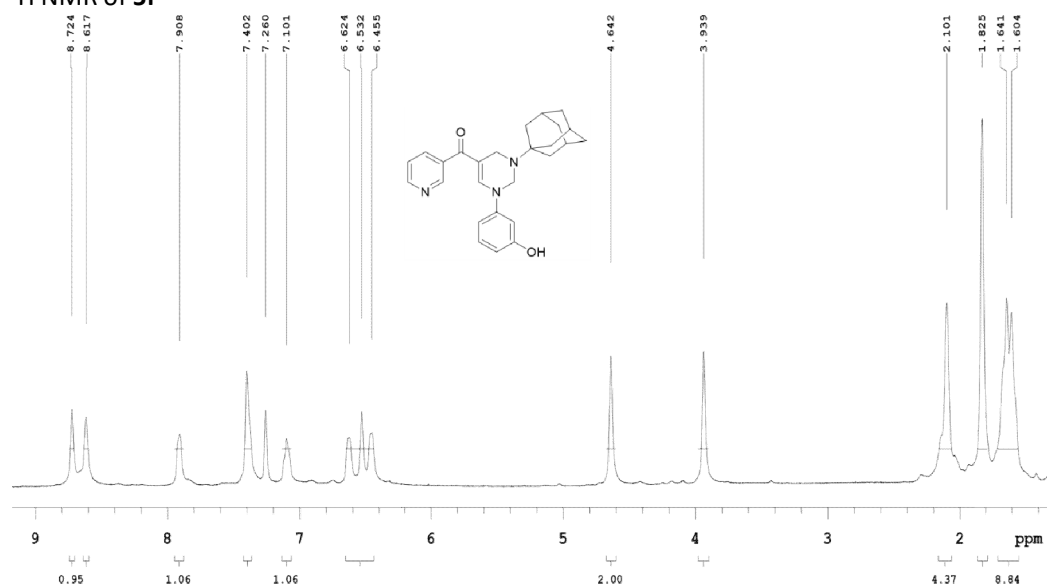
<sup>13</sup>C NMR of 5e



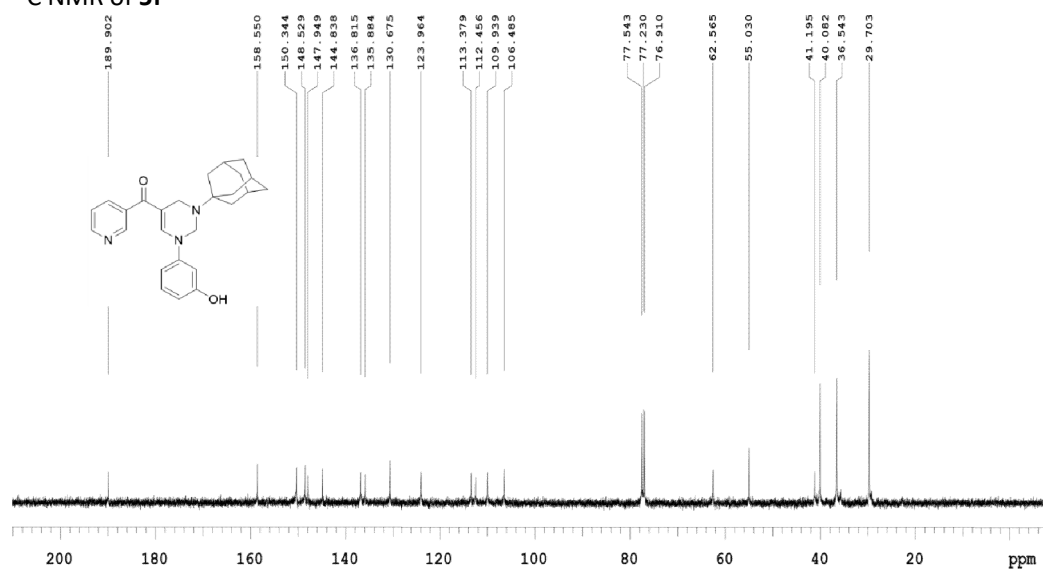
HRMS of 5f



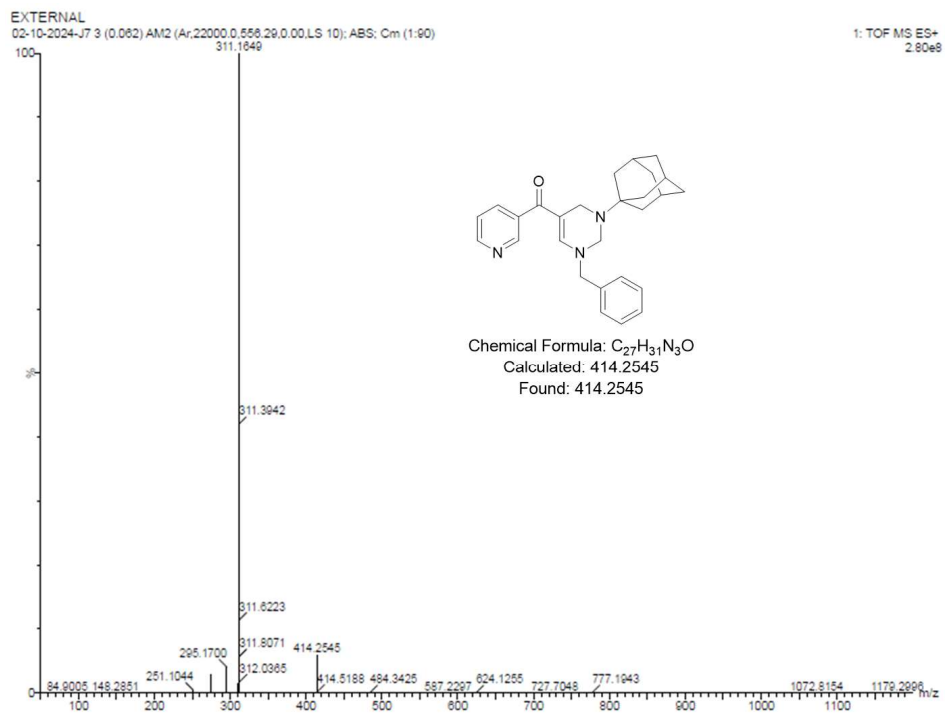
### <sup>1</sup>H NMR of 5f



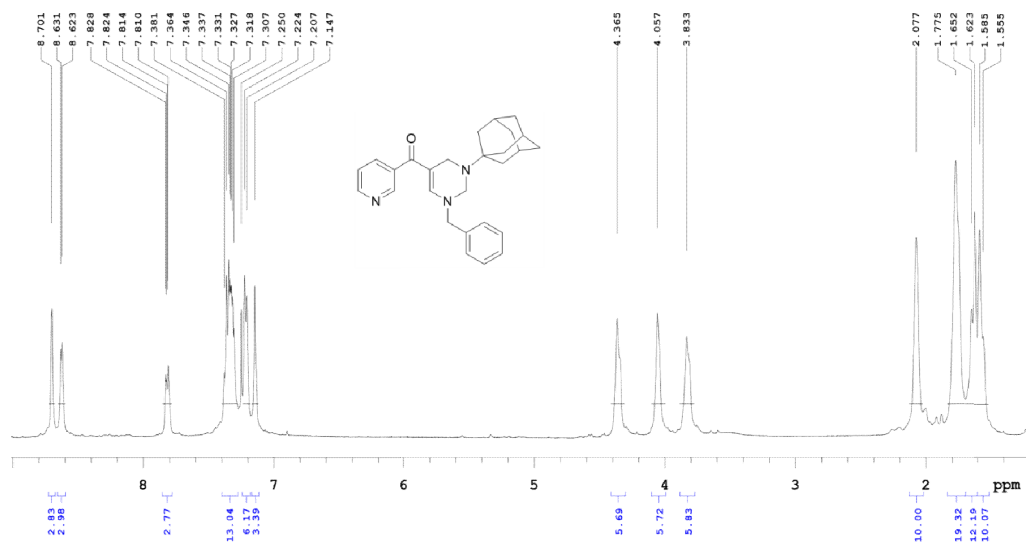
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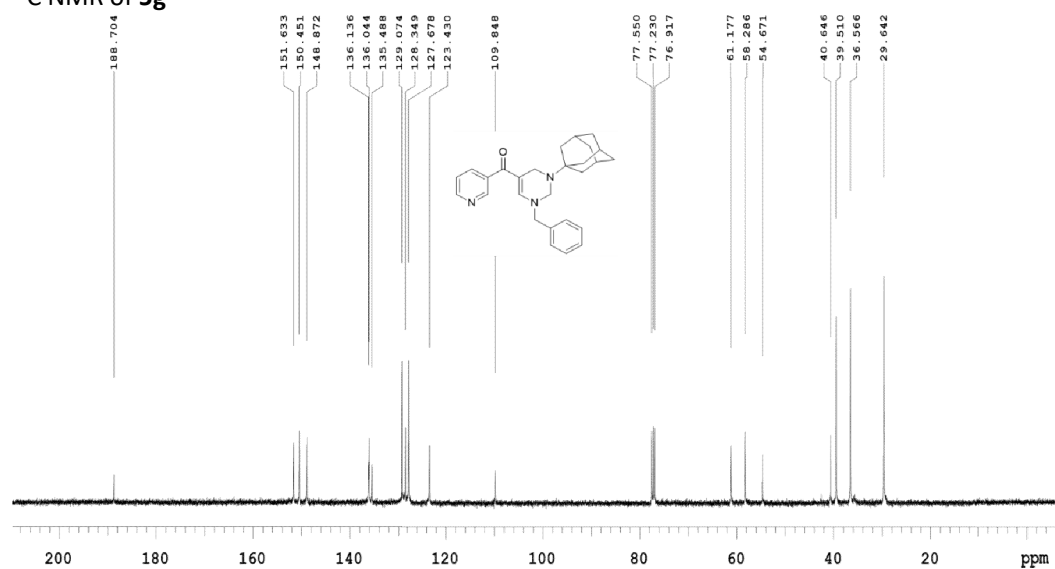
# HRMS of 5g



# $^1H$ NMR of 5g



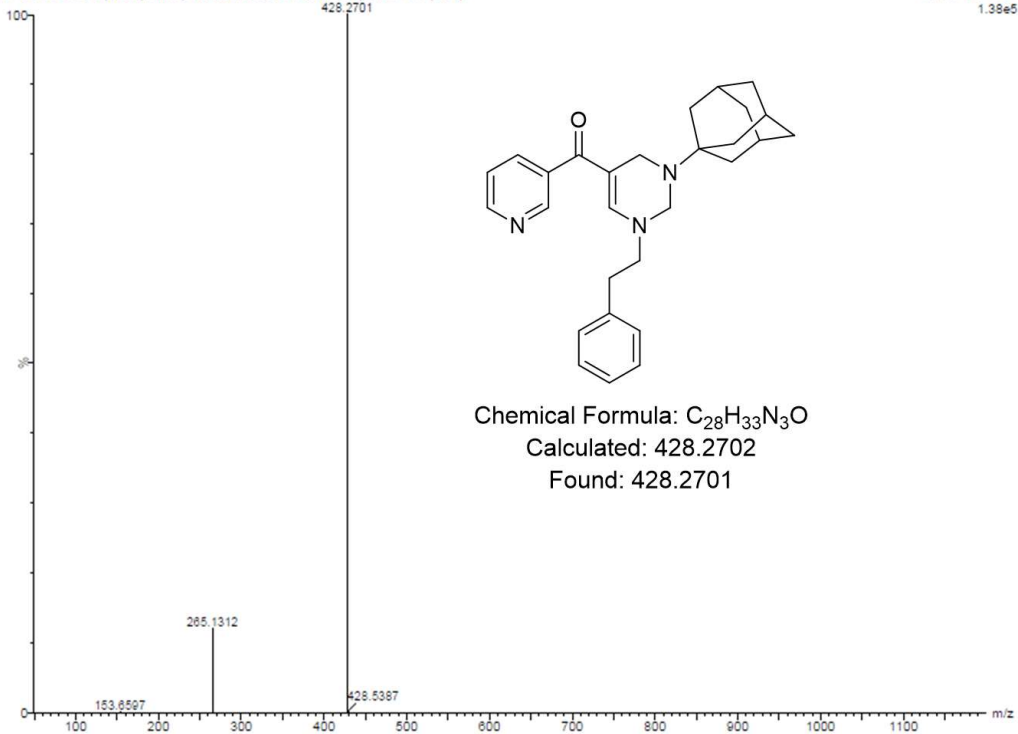
### <sup>13</sup>C NMR of 5g



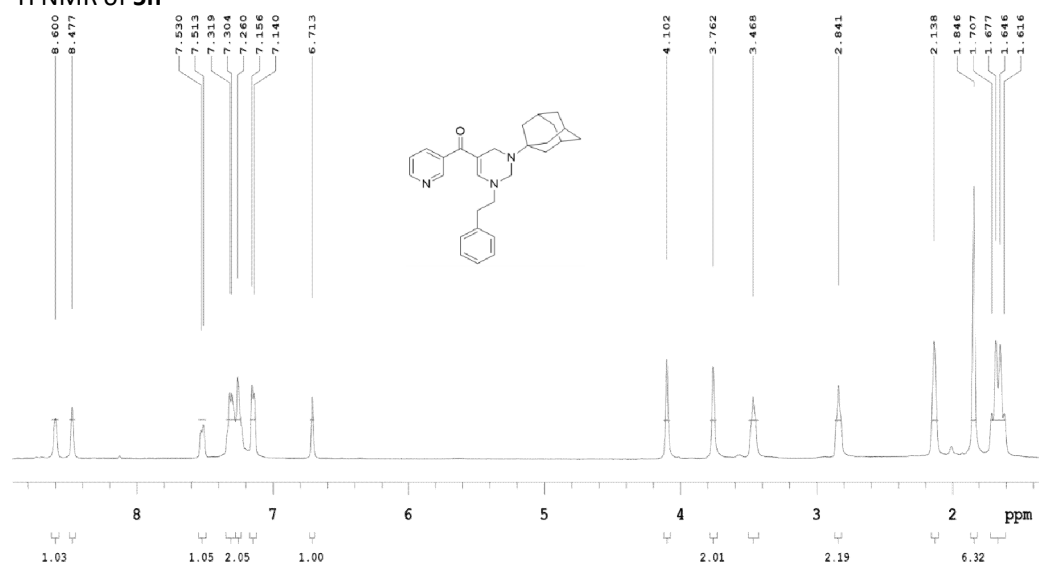
### HRMS of 5h

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11-09-2024-J9 6 (0.088) AM2 (Ar.22000.0.556.28.0.00.LS.10); ABS; Cm (2.89)

1: TOF MS ES+  
1.38e5



### <sup>1</sup>H NMR of 5h



### <sup>13</sup>C NMR of 5h

