

Supporting Information

Pd(II)-Catalyzed oxidative alkenylation of 4-hydroxycoumarin with maleimide *via* a C-H bond activation strategy

Kumud Sharma^{a,b}, Kashmiri Neog^{a,b}, Abhilash Sharma^{a,b} and Pranjal Gogoi^{a,b*}

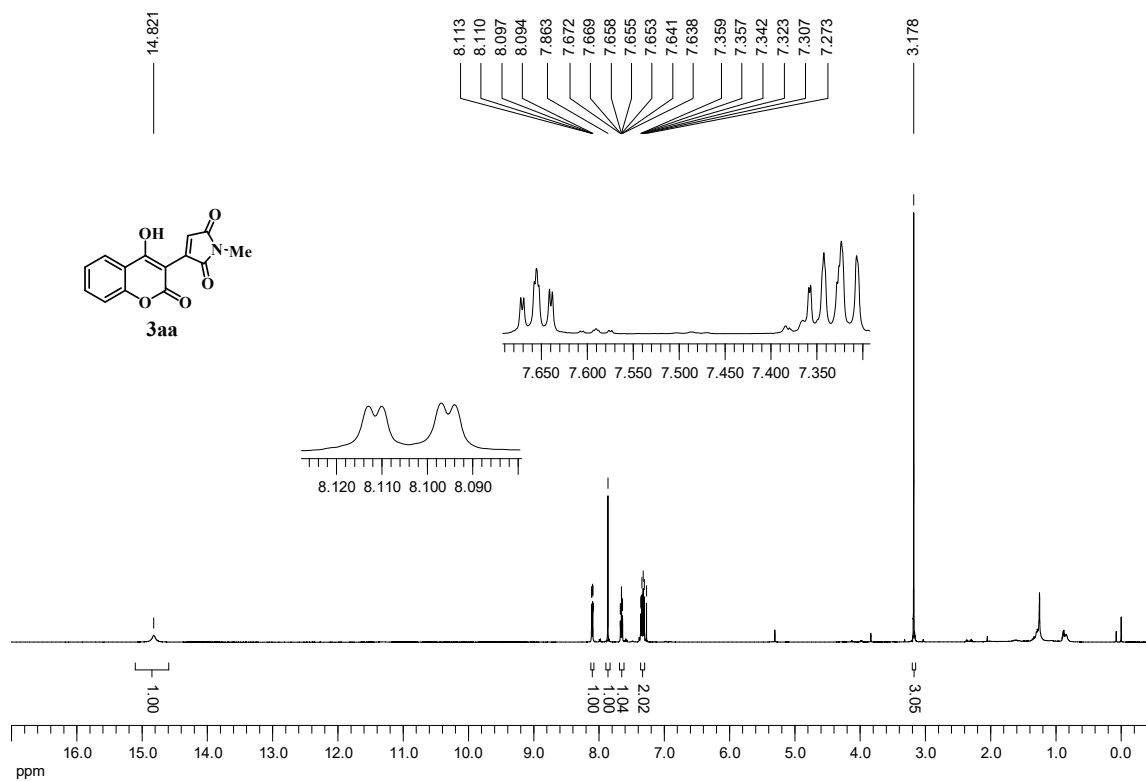
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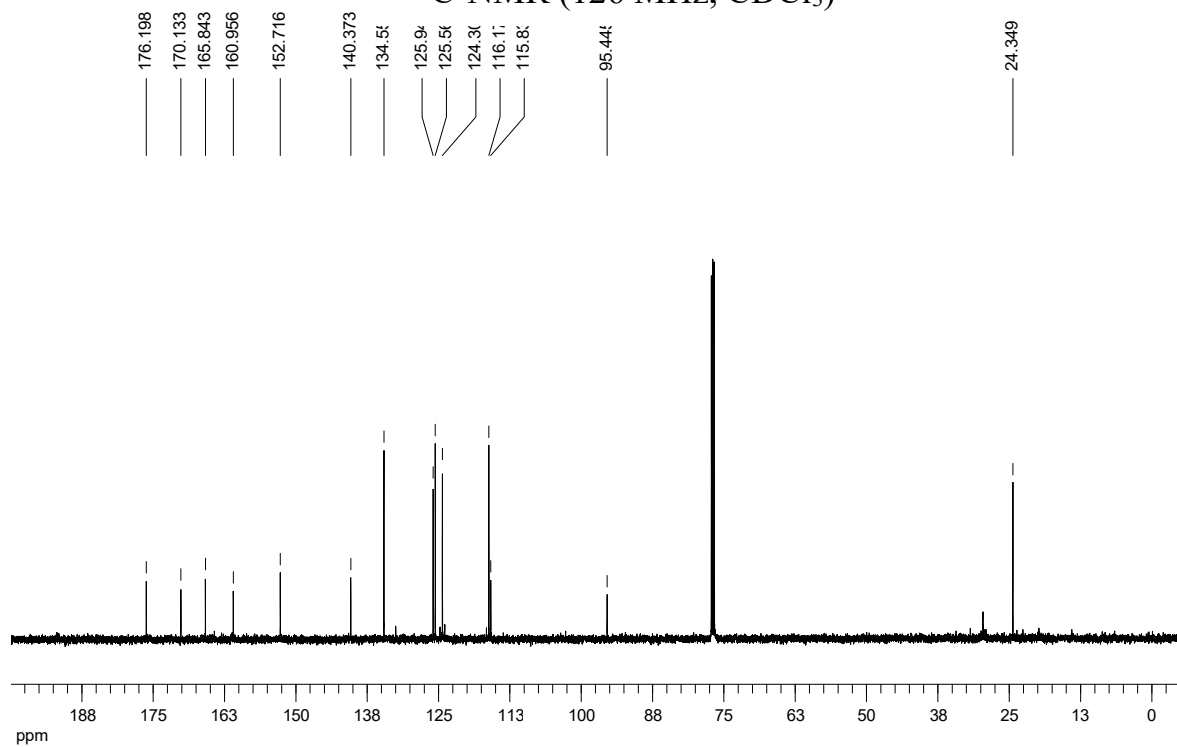
E-mail: gogoipranji@yahoo.co.uk

Copies of ¹H, ¹³C NMR and HRMS spectra of all products along with ¹⁹F NMR and 2D-NMR of representative products

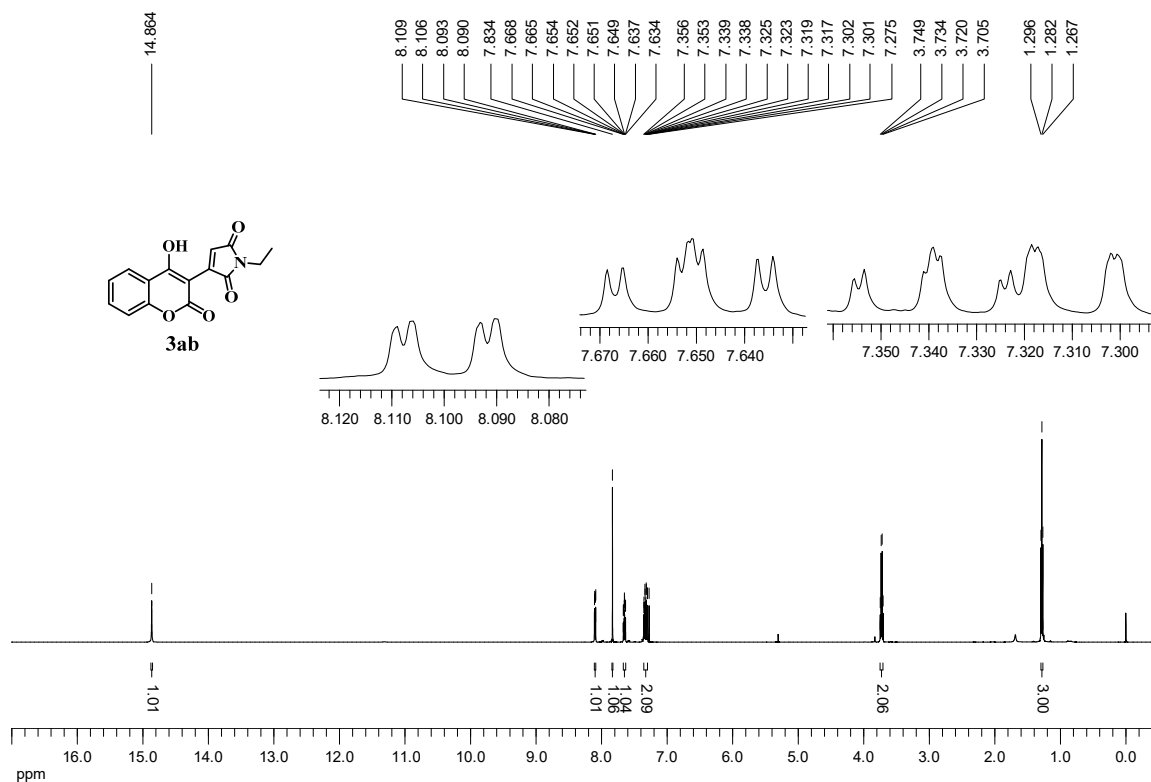
¹H-NMR (500 MHz, CDCl₃)



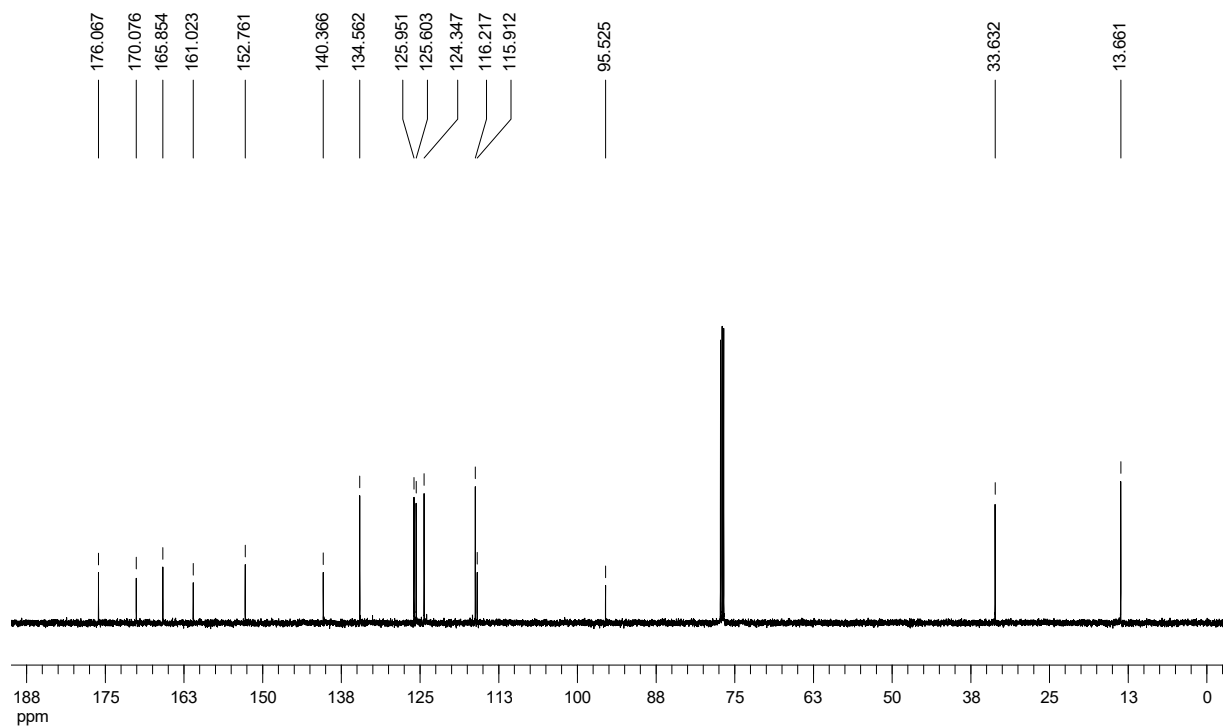
¹³C-NMR (126 MHz, CDCl₃)



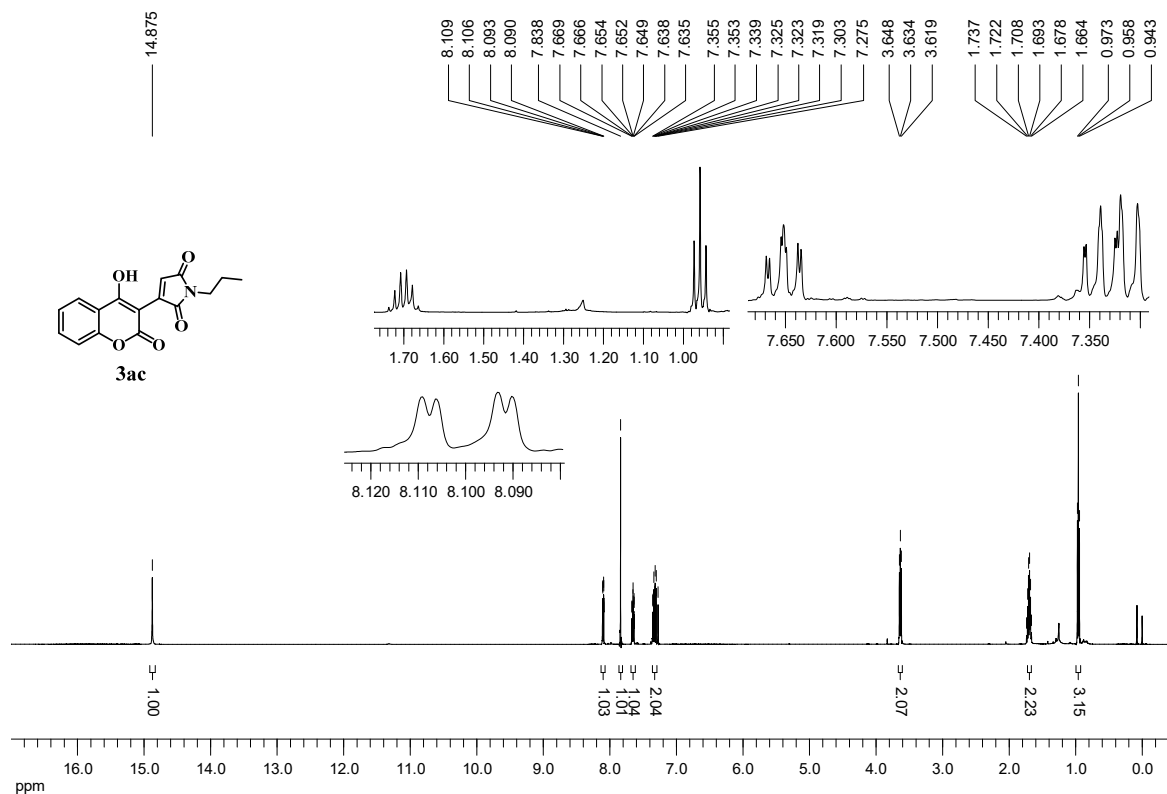
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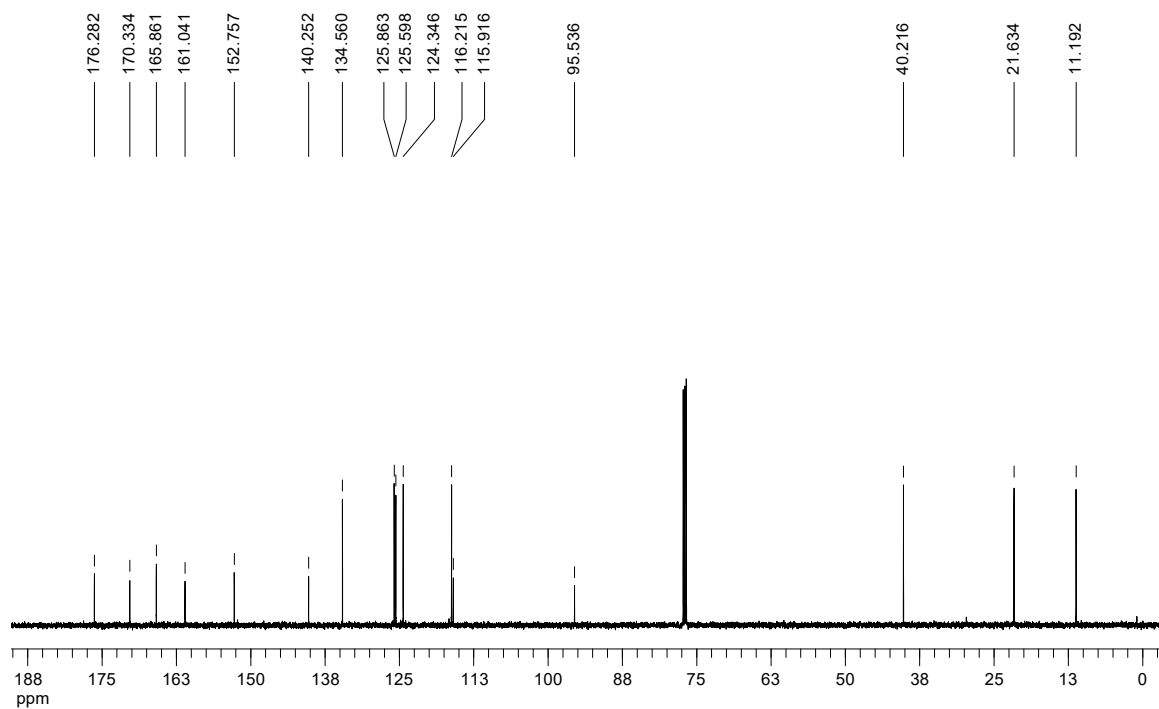
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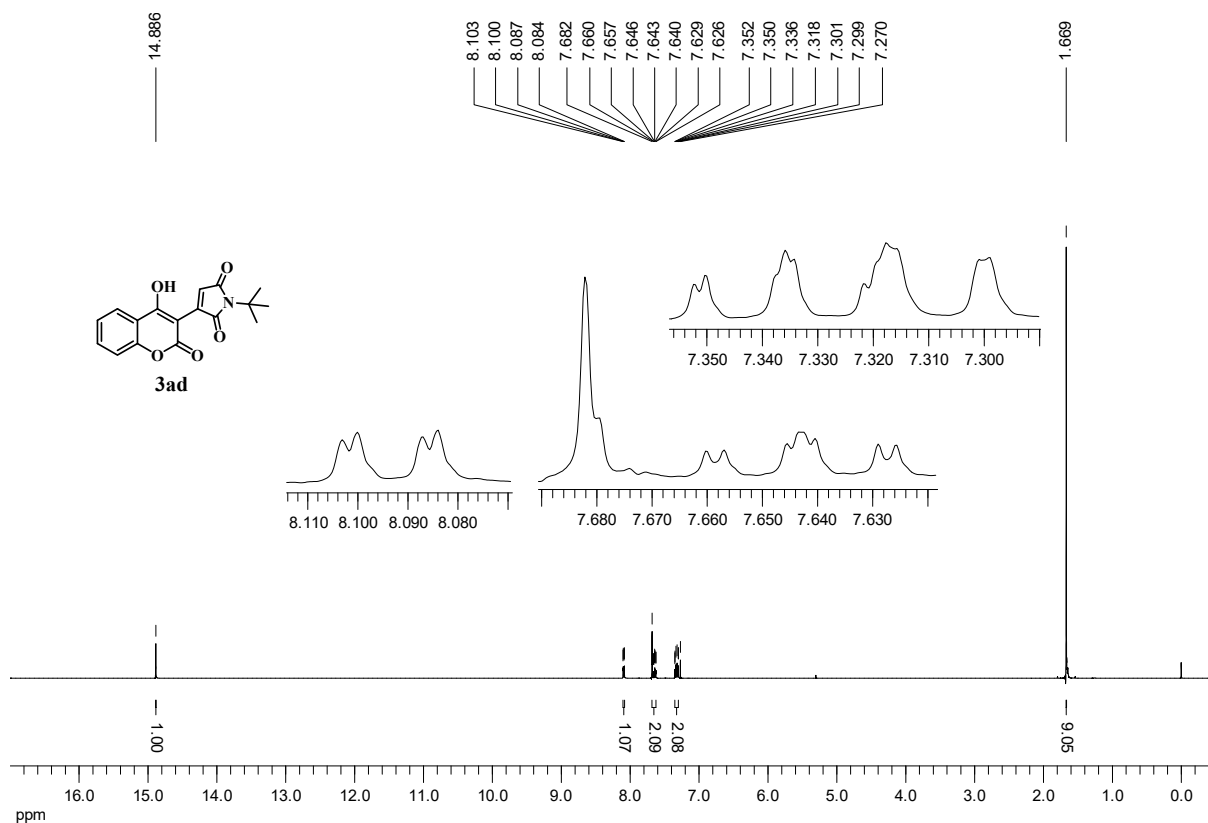
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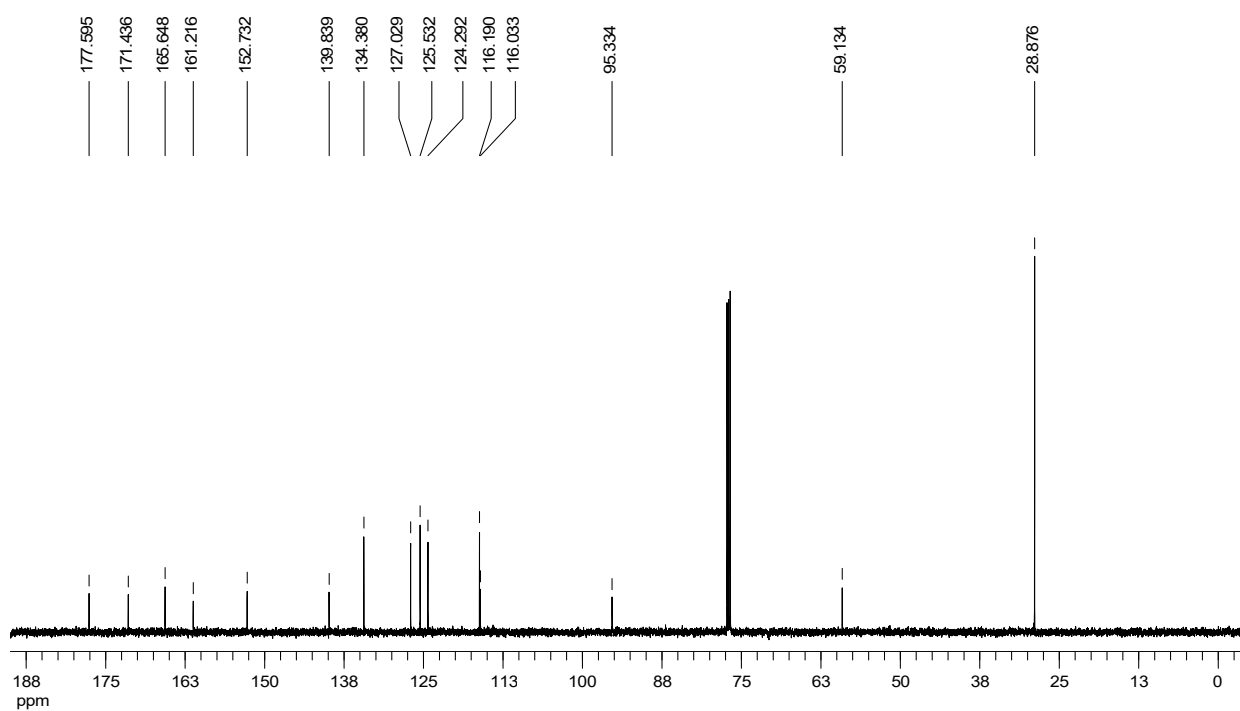
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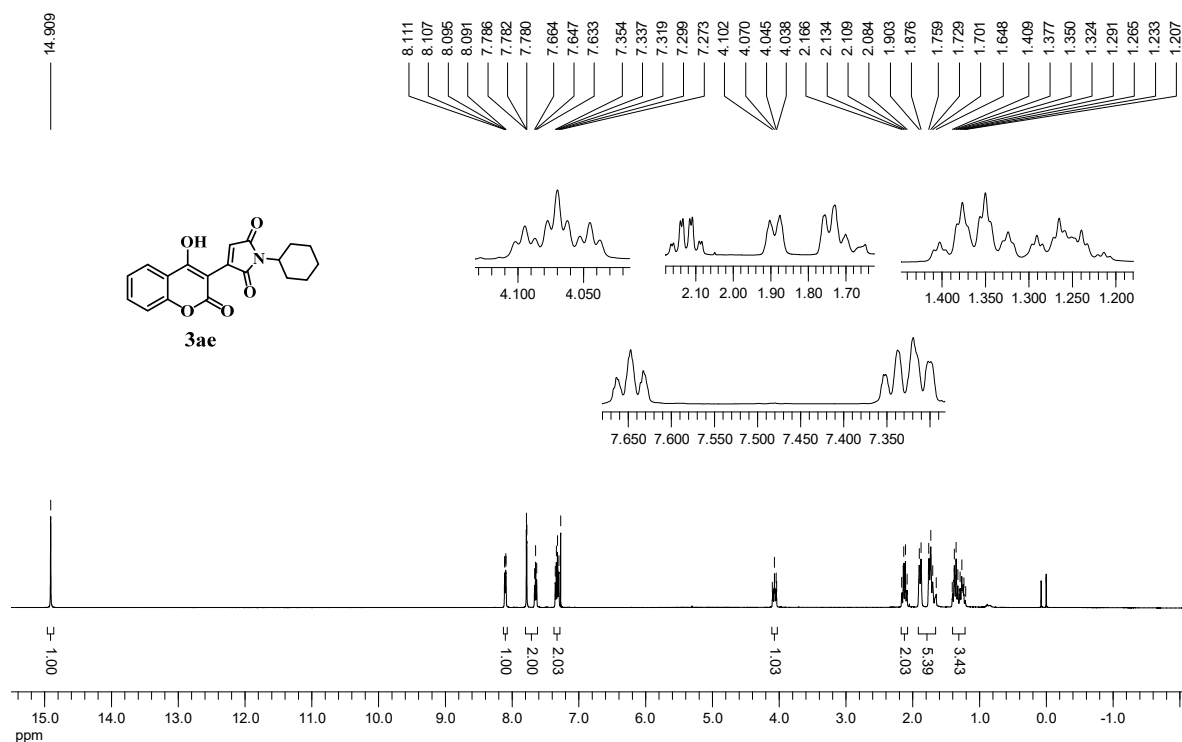
^1H -NMR (500 MHz, CDCl_3)



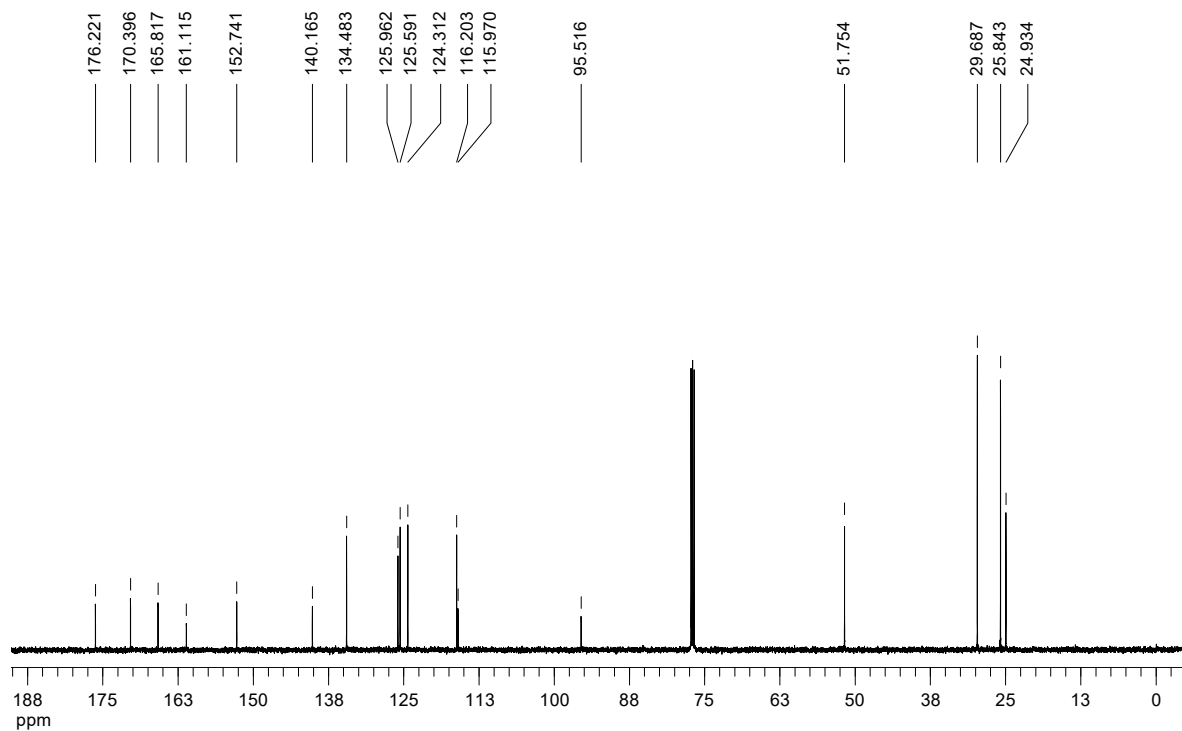
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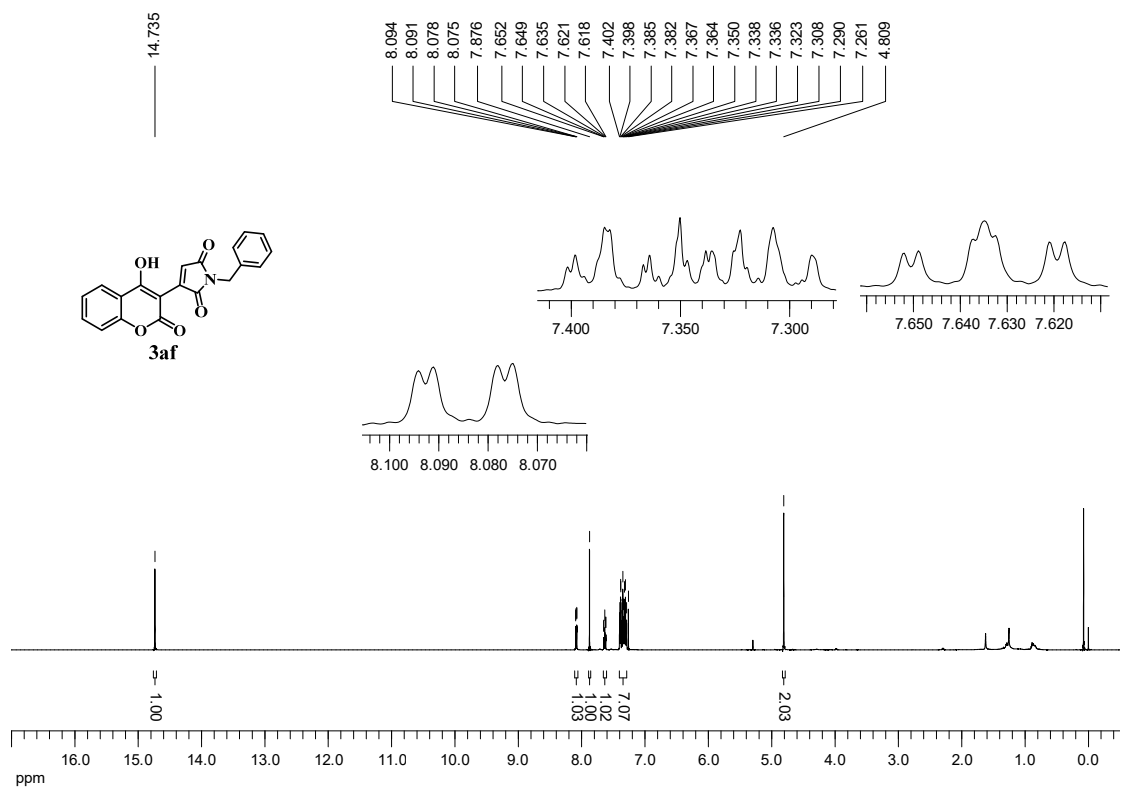
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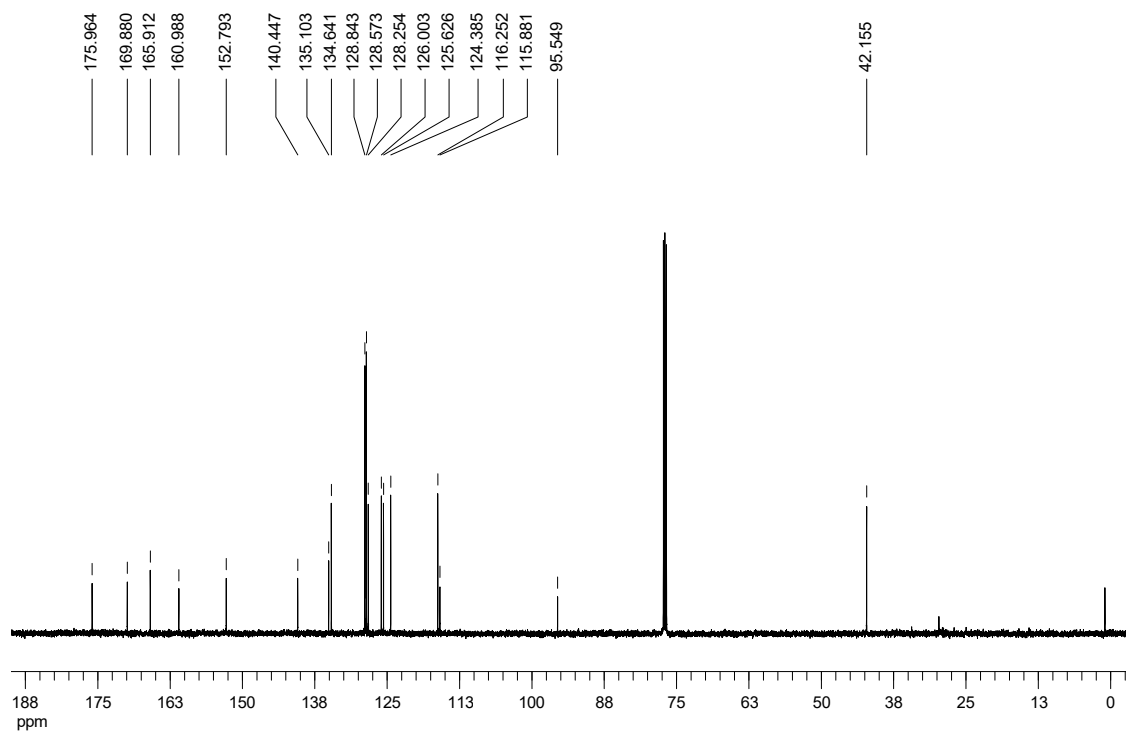
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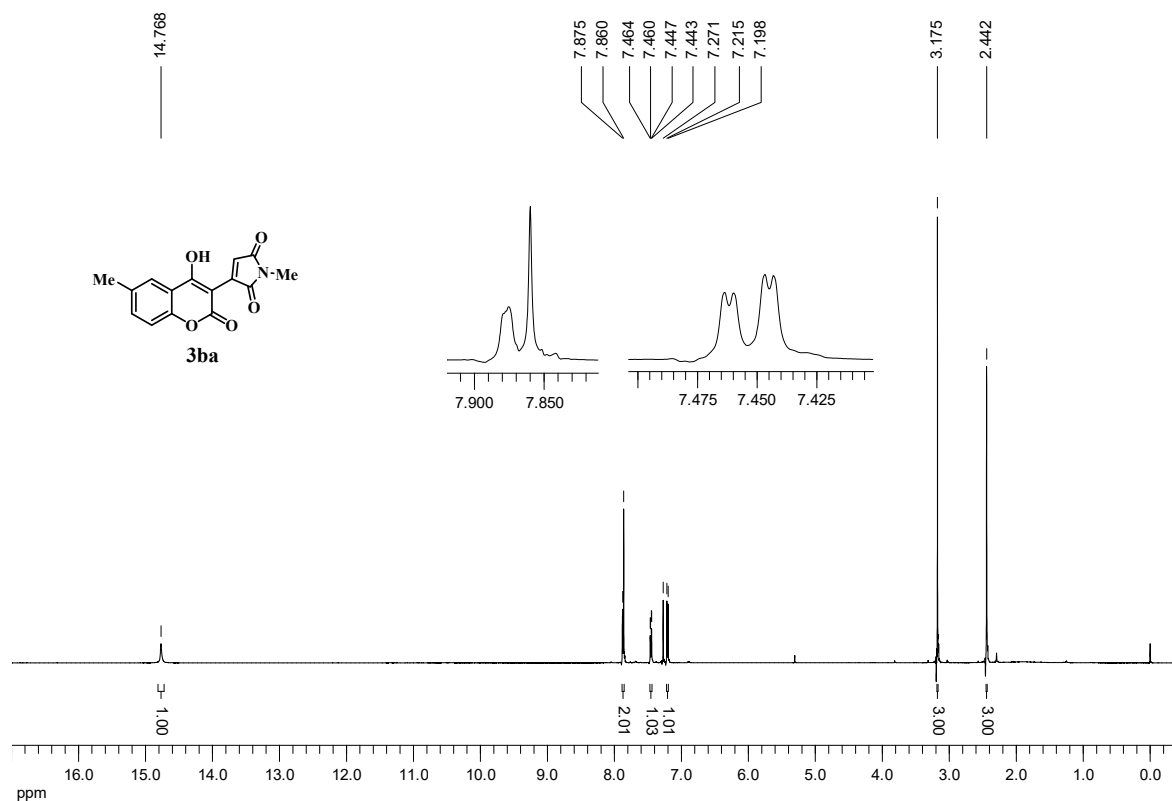
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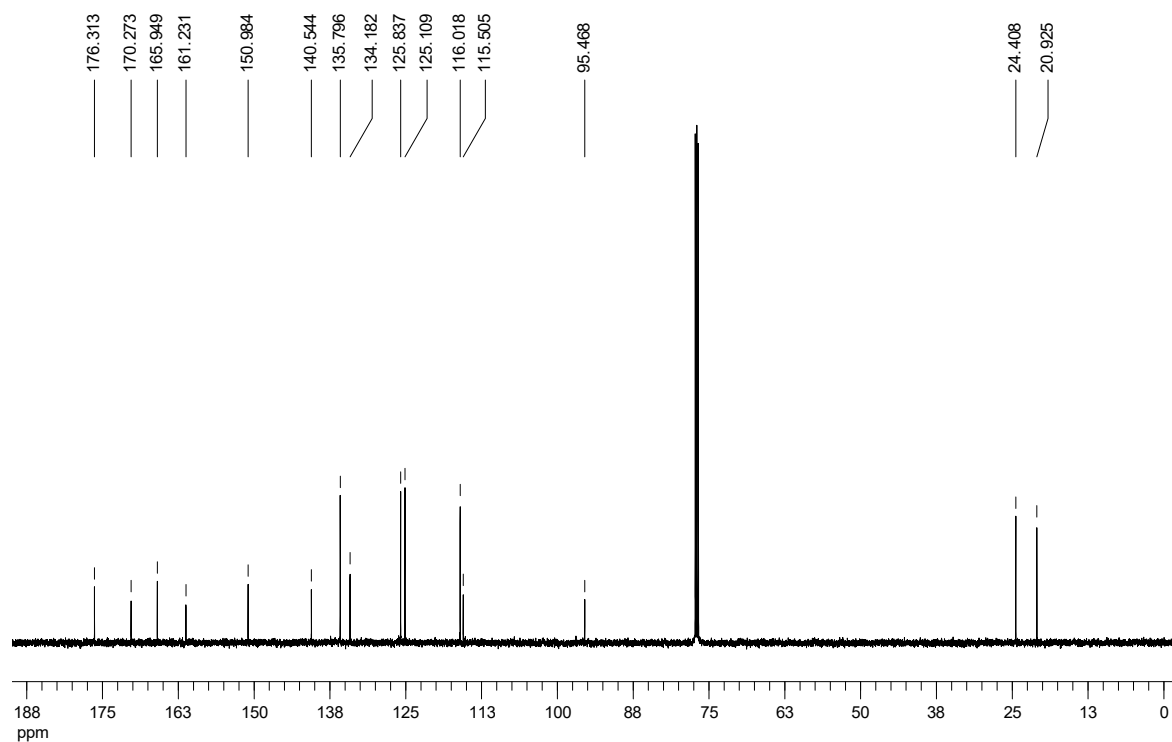
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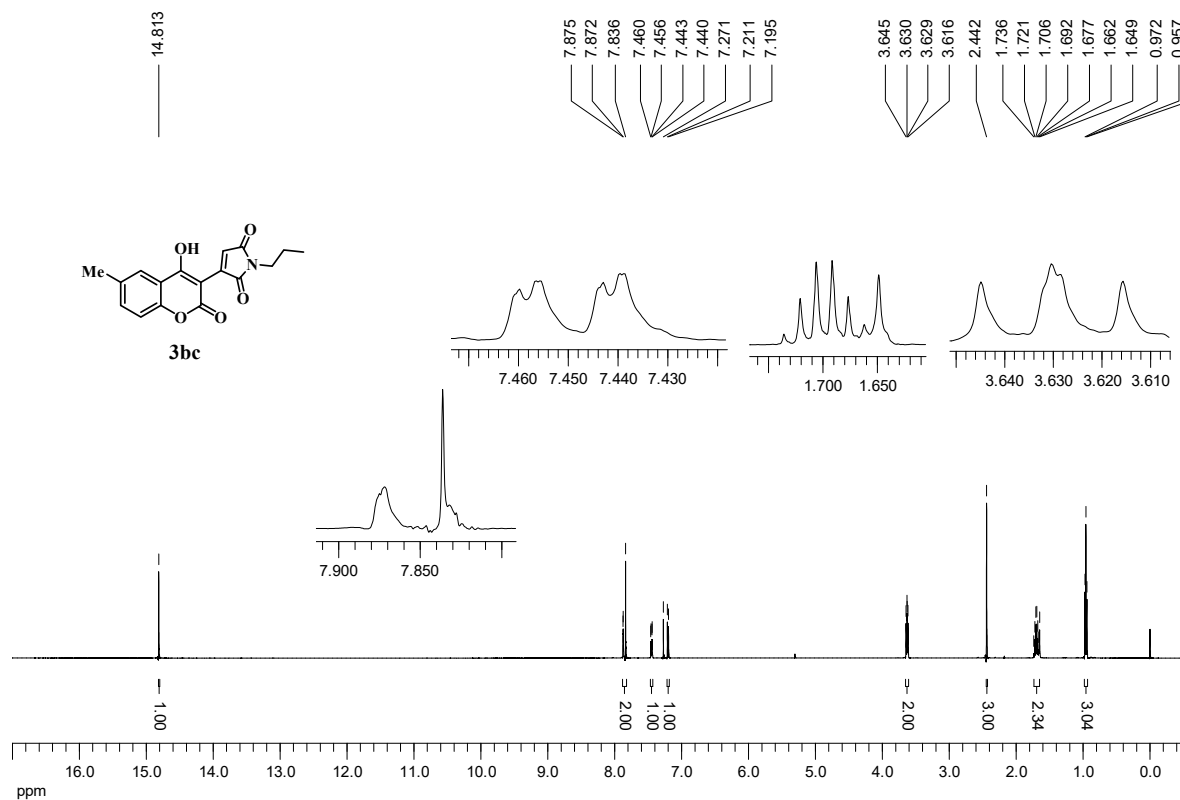
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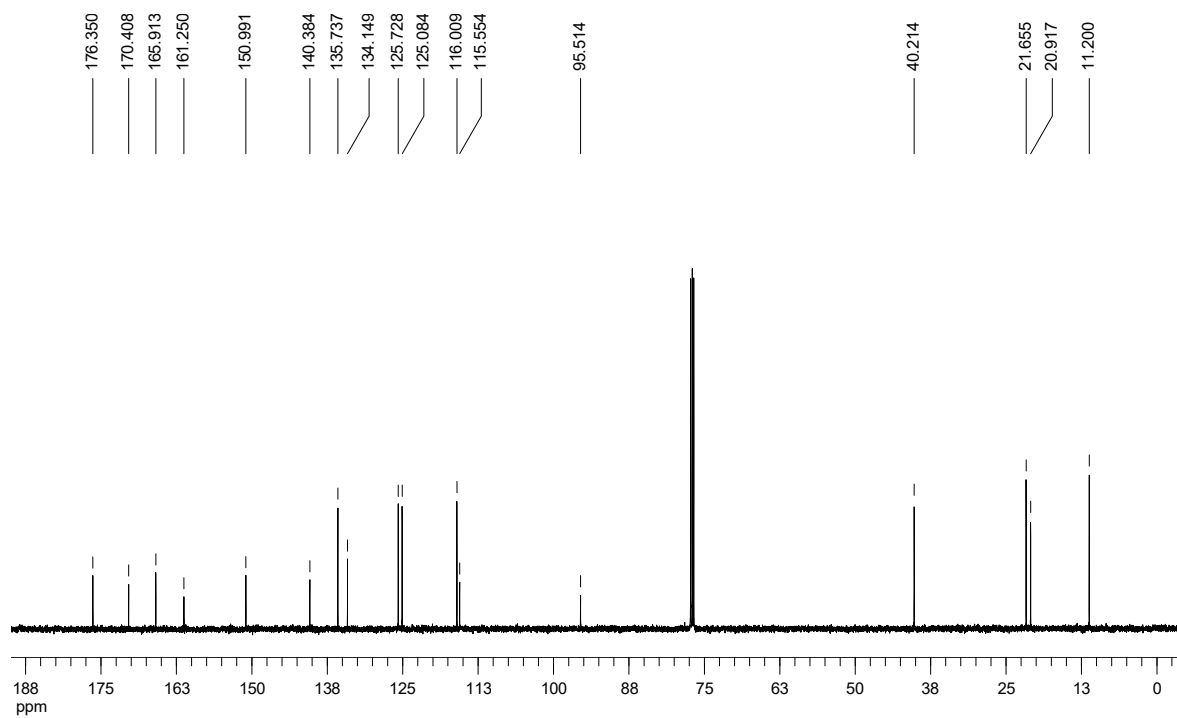
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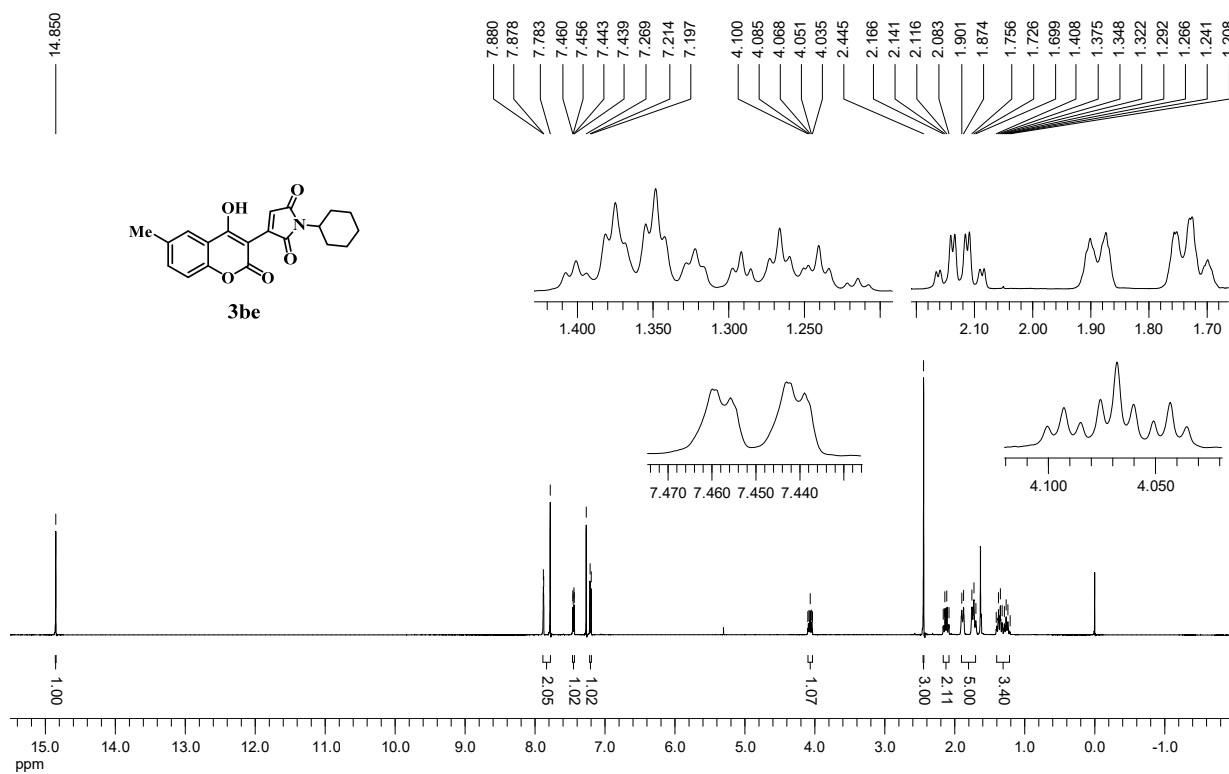
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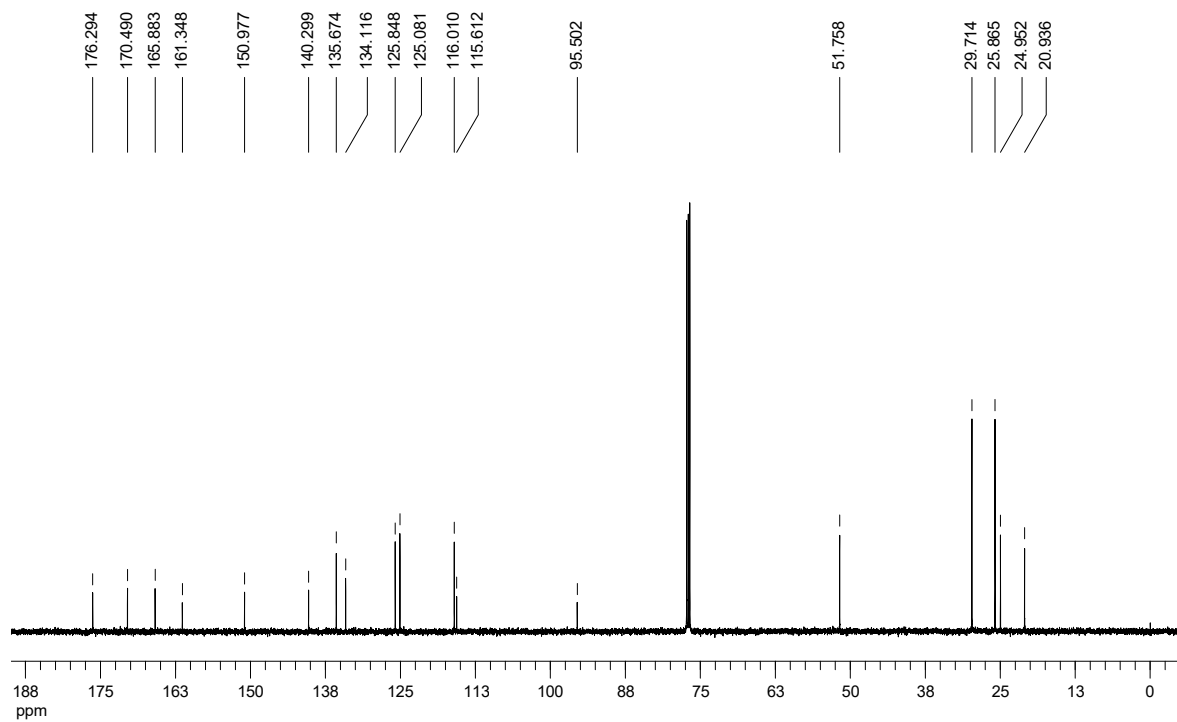
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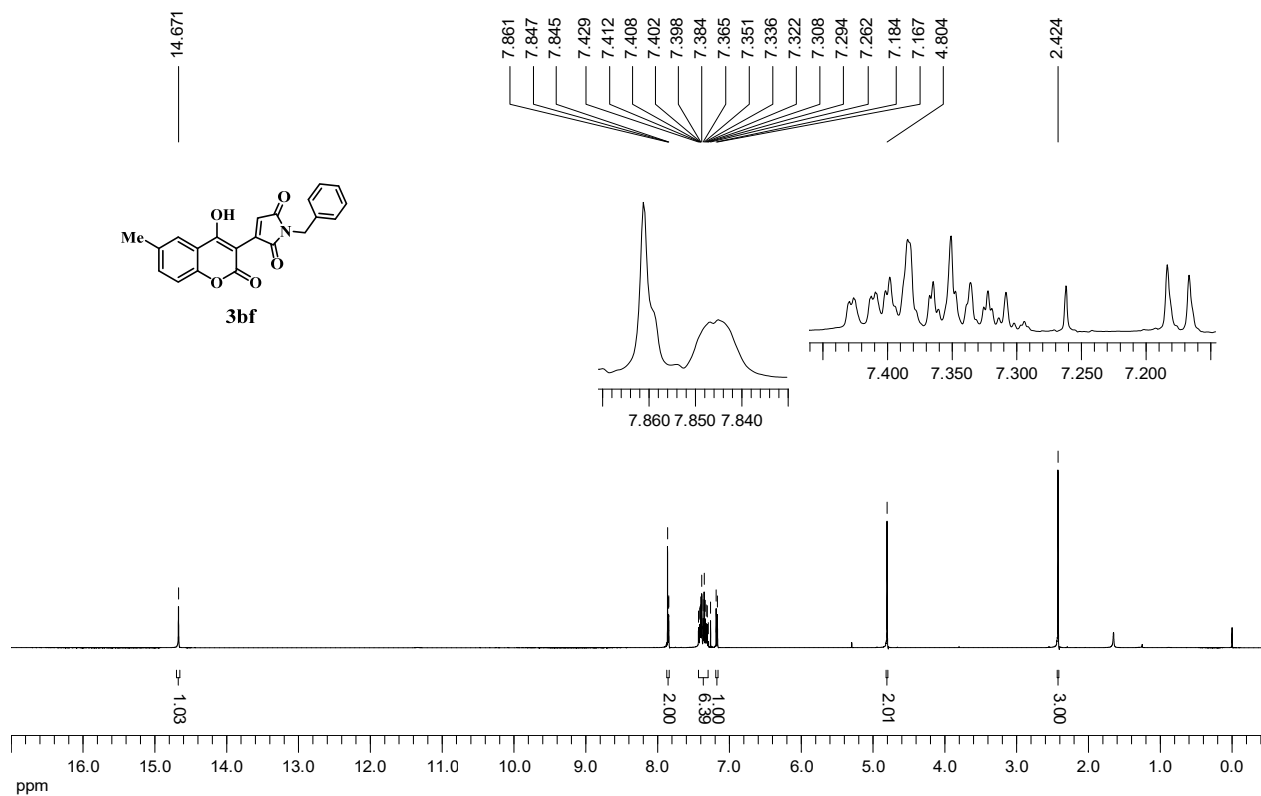
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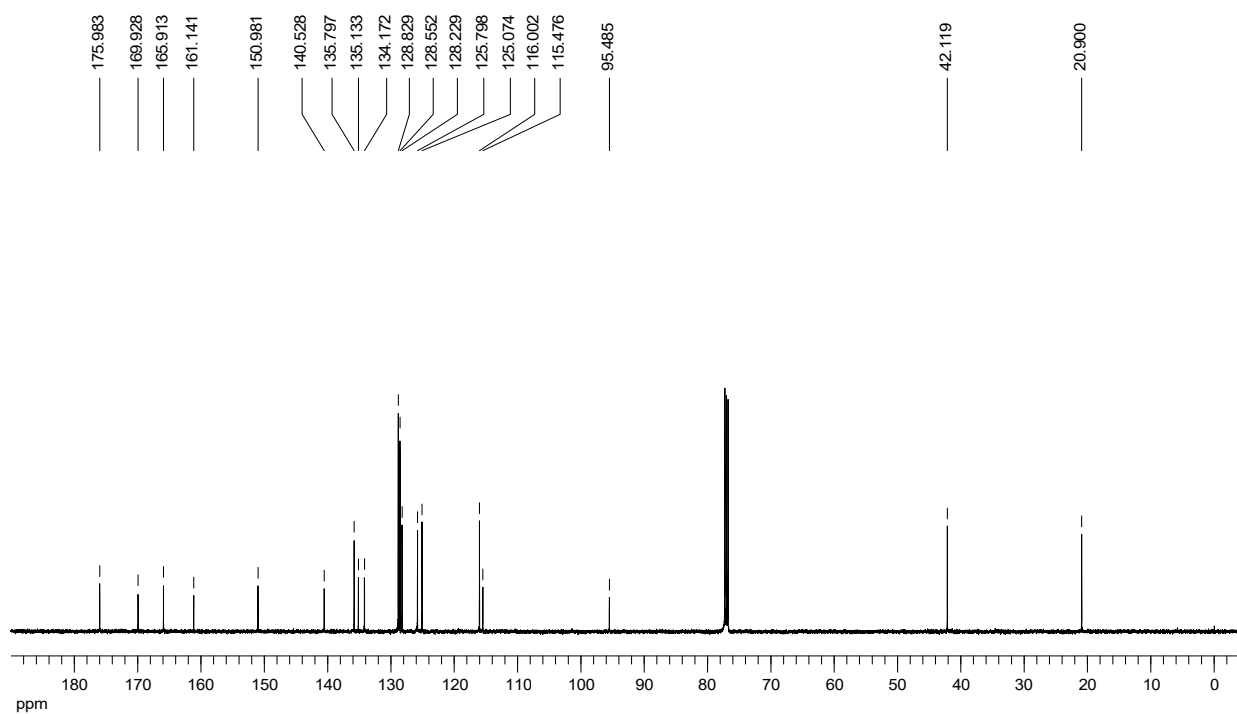
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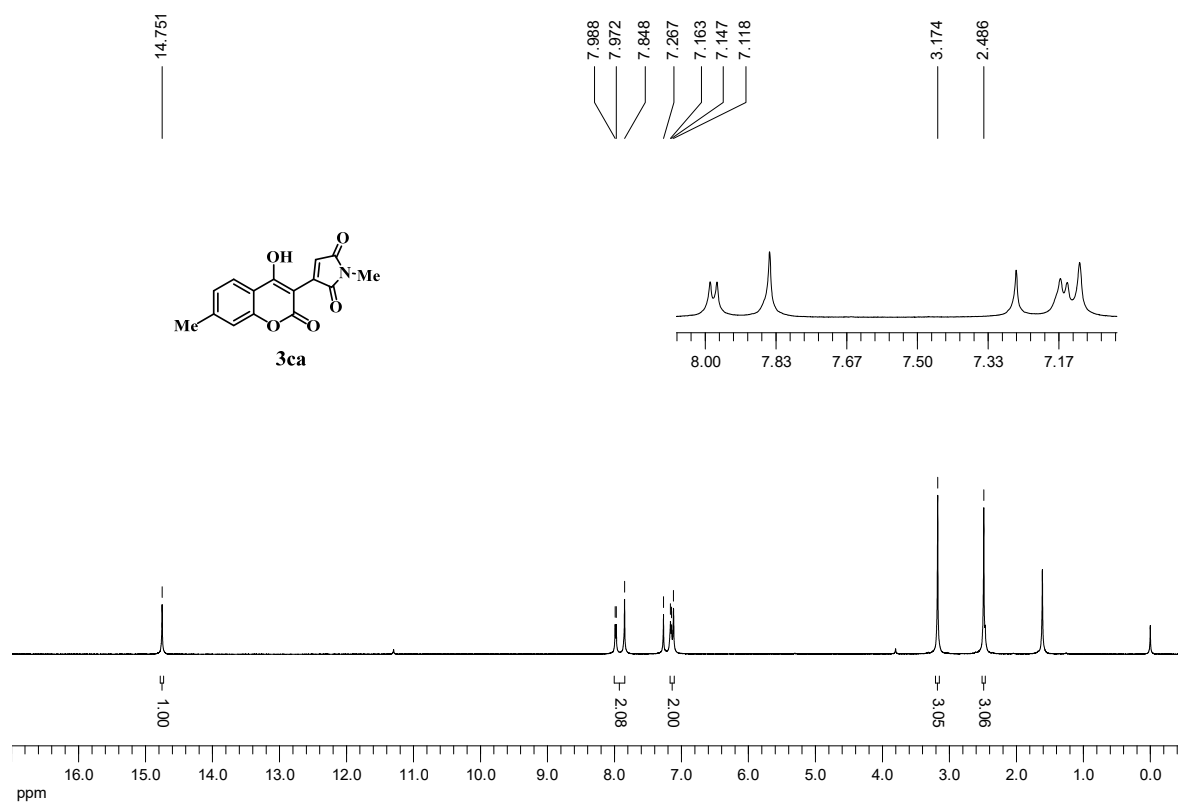
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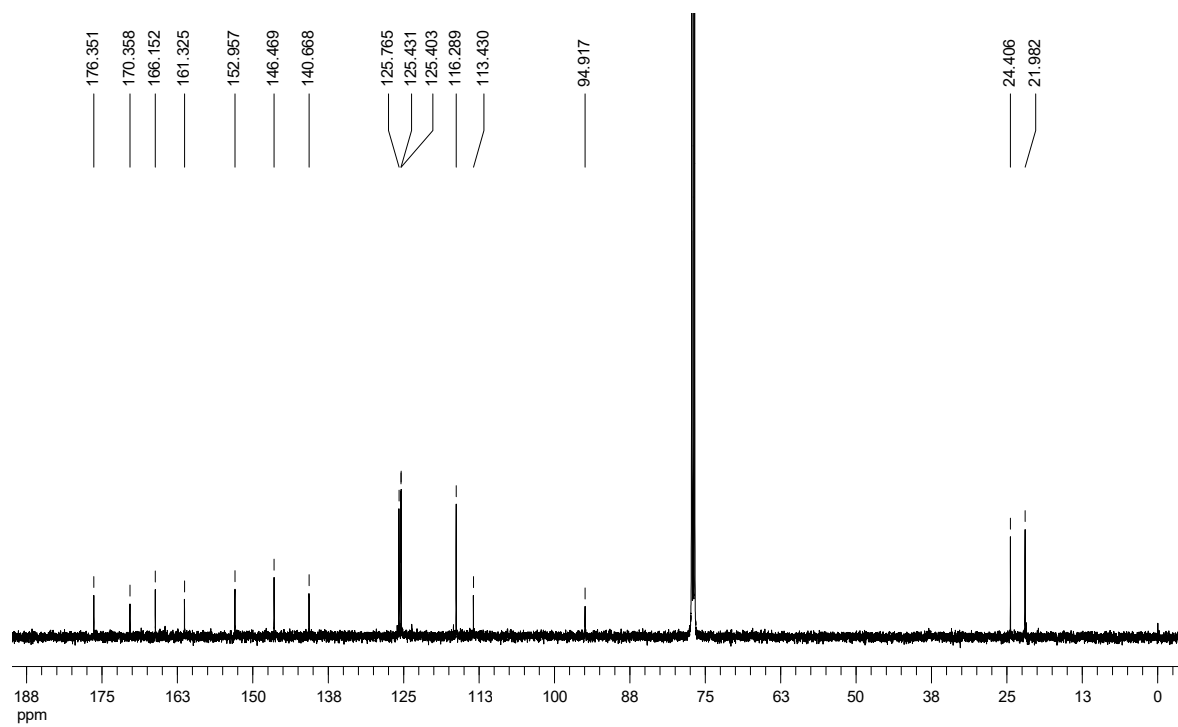
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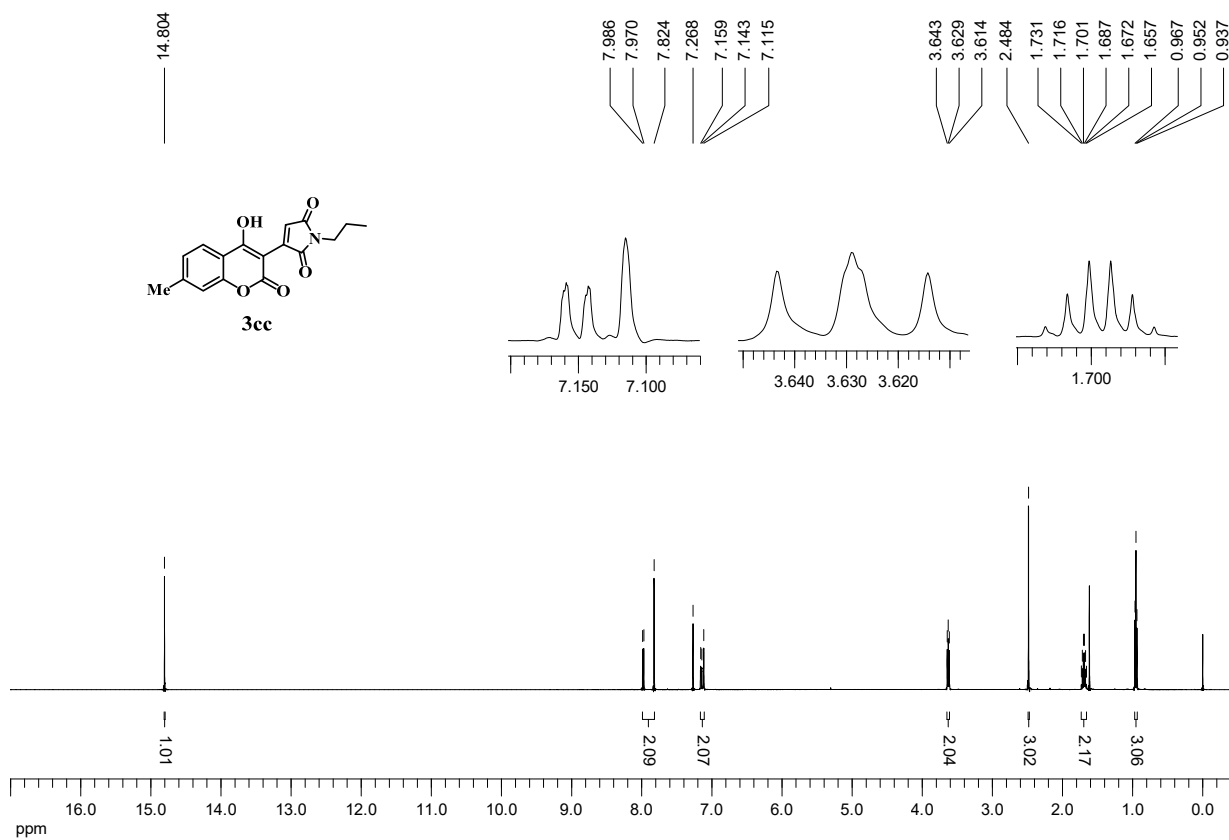
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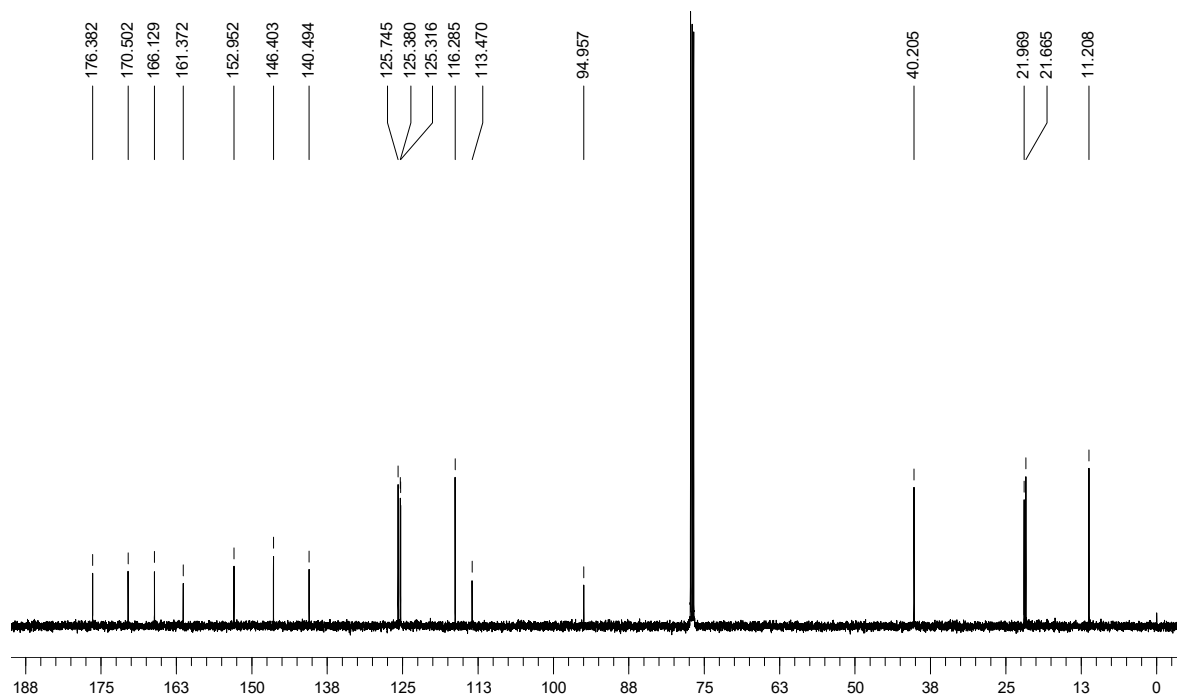
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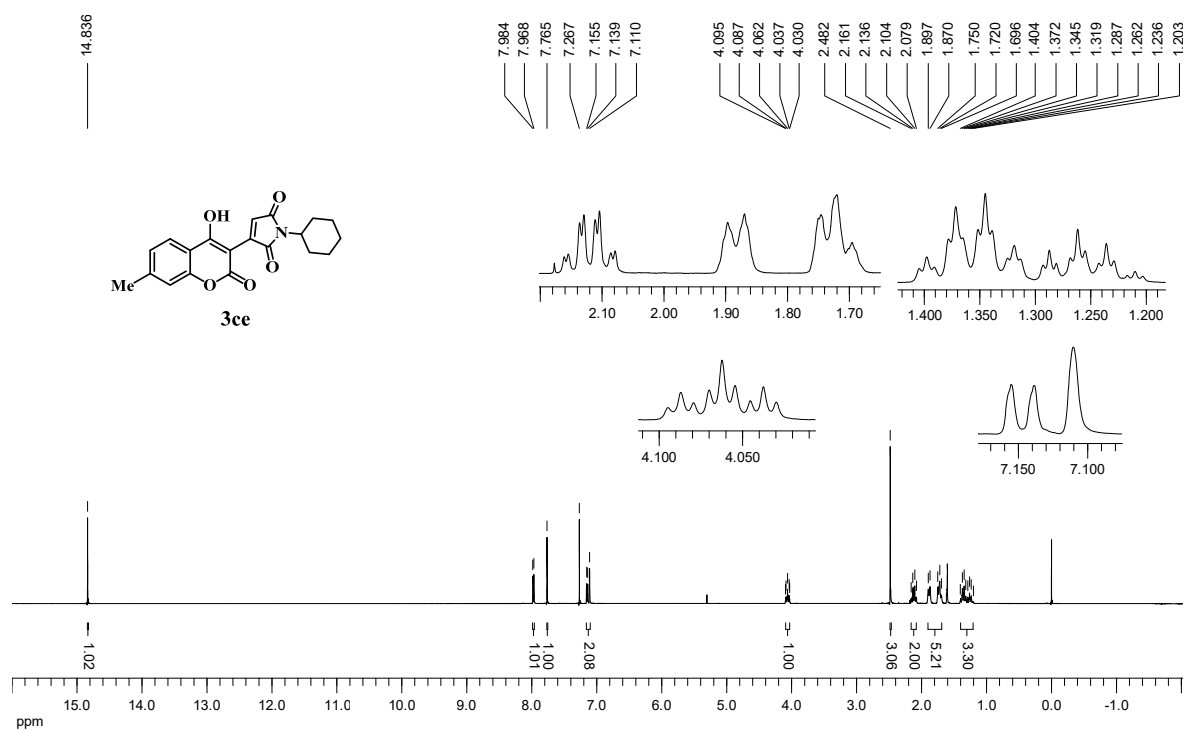
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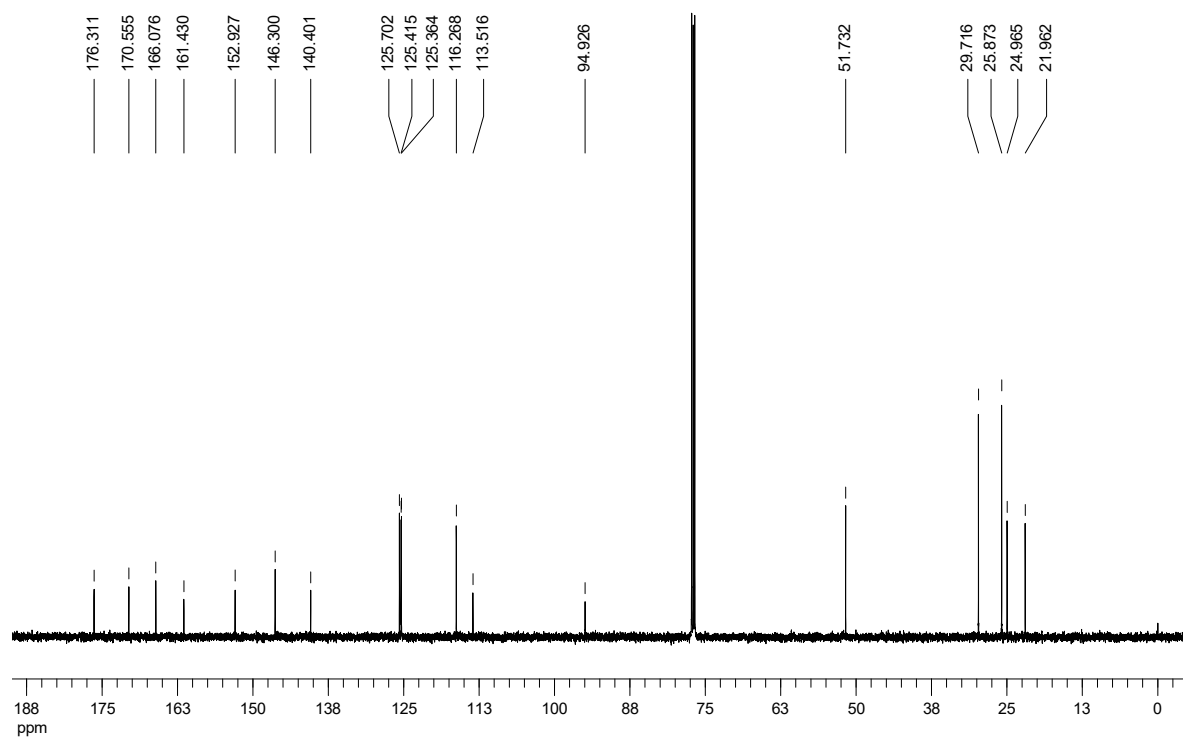
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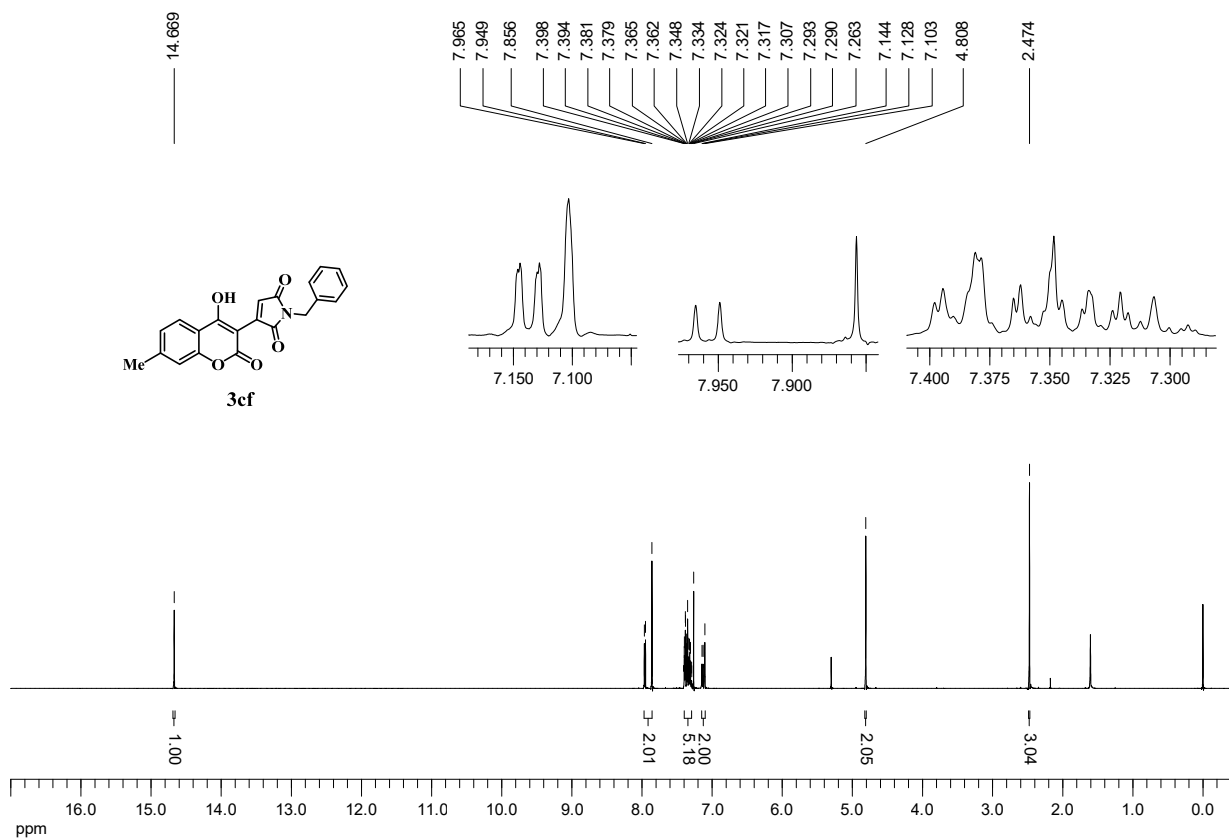
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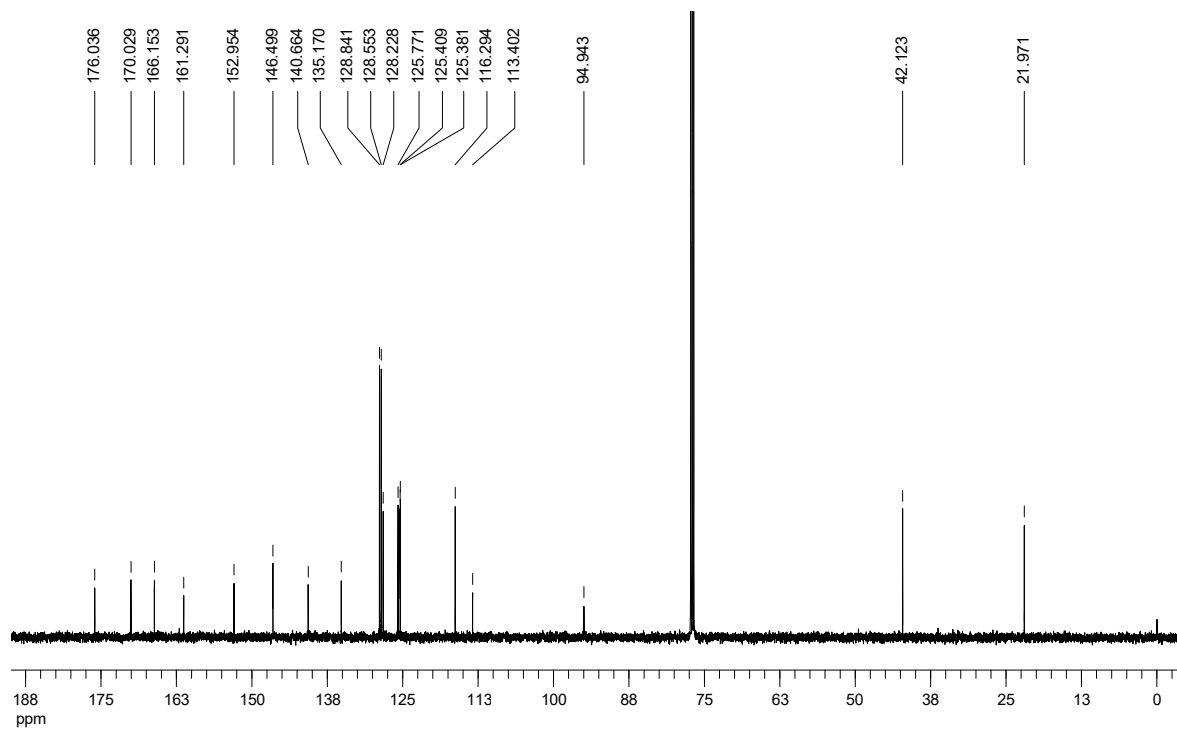
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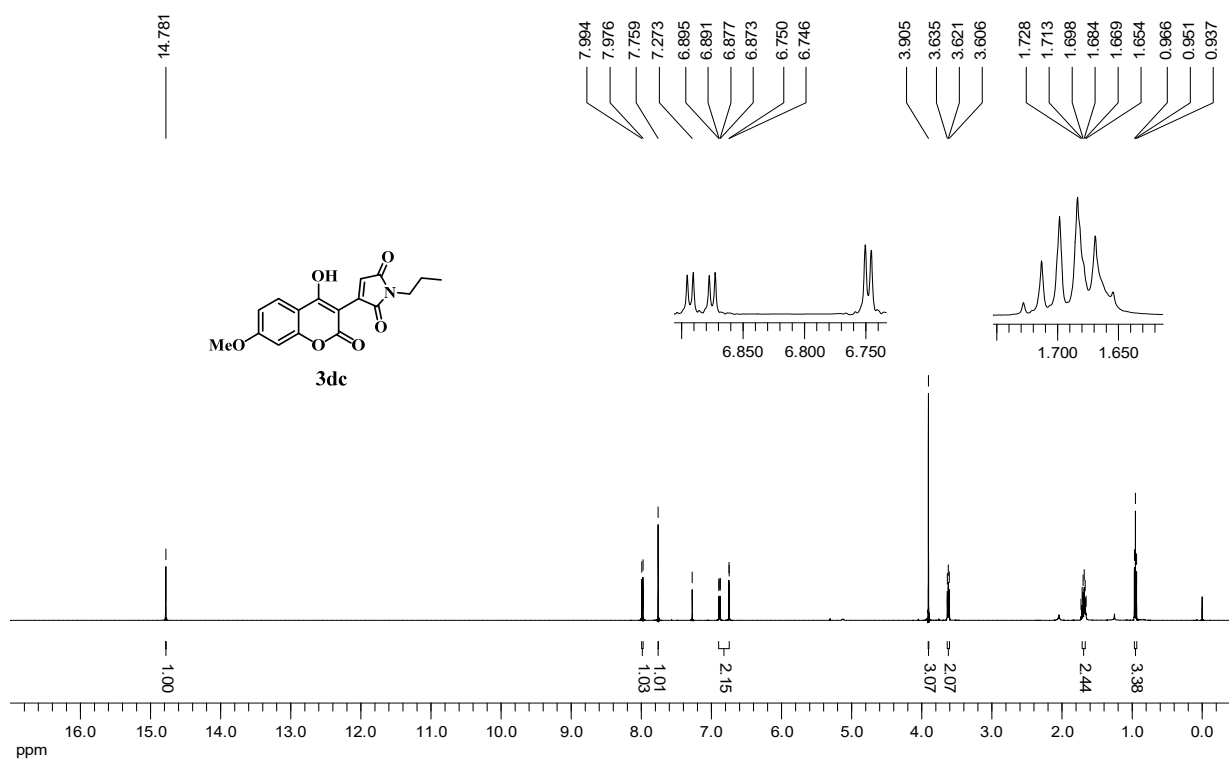
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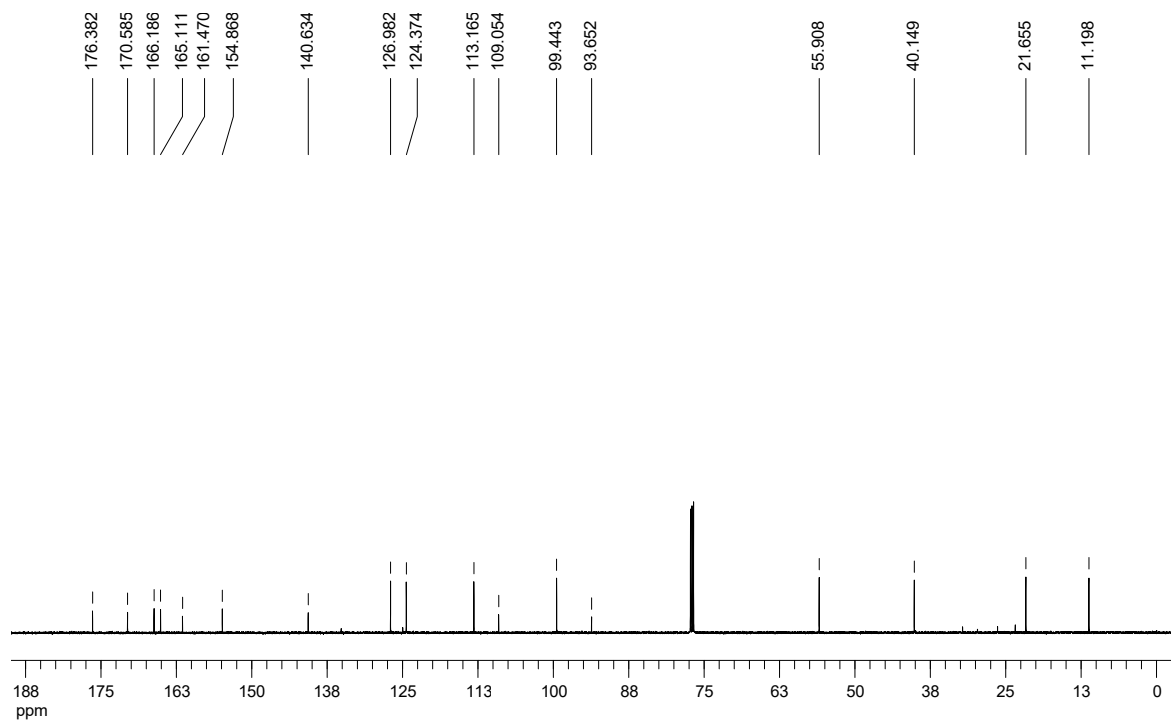
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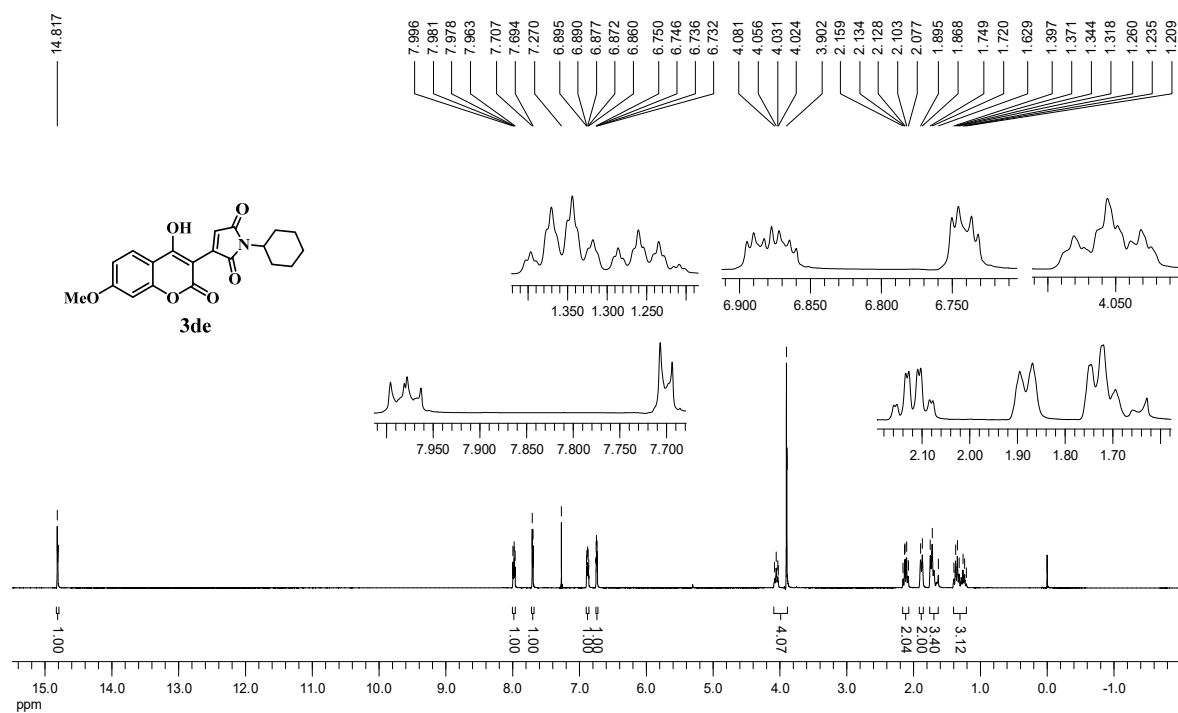
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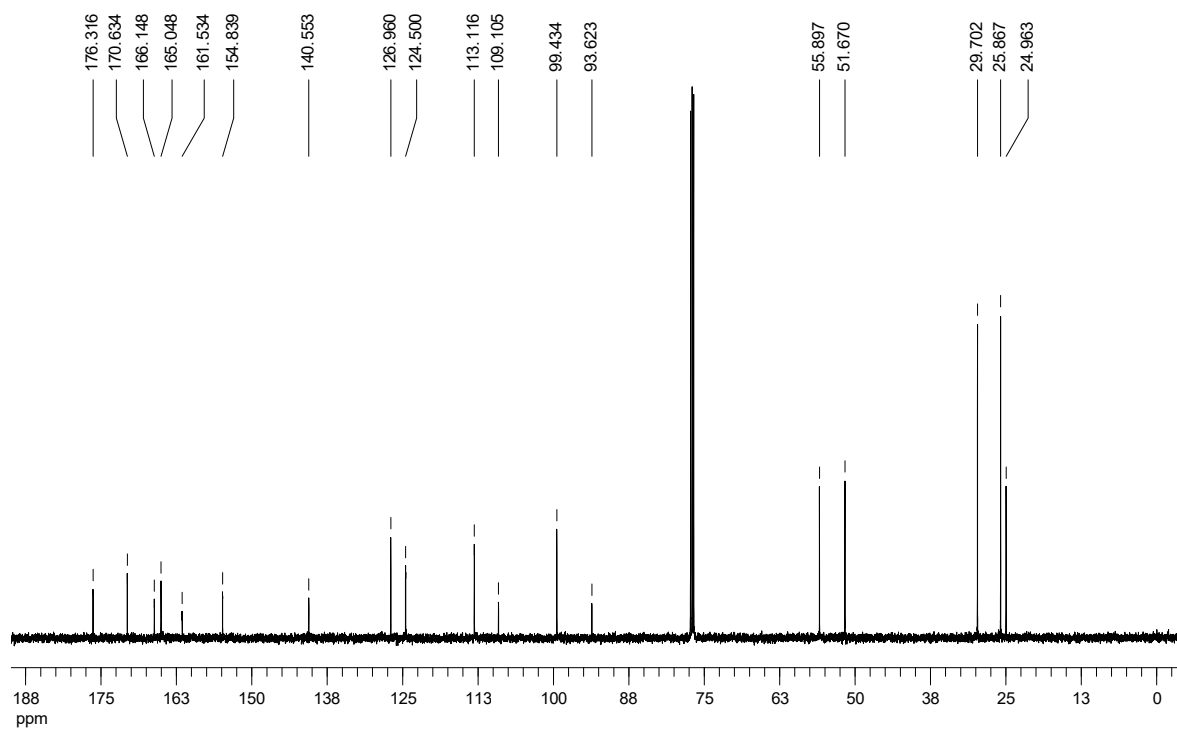
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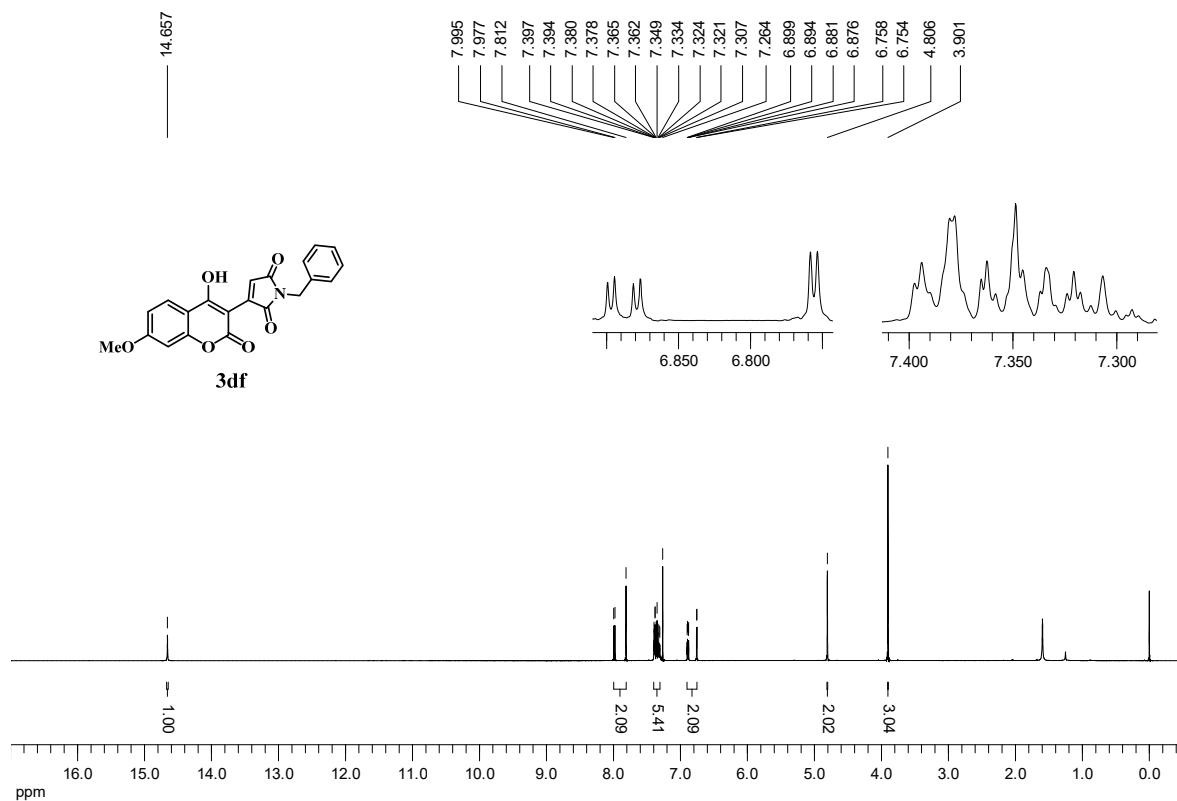
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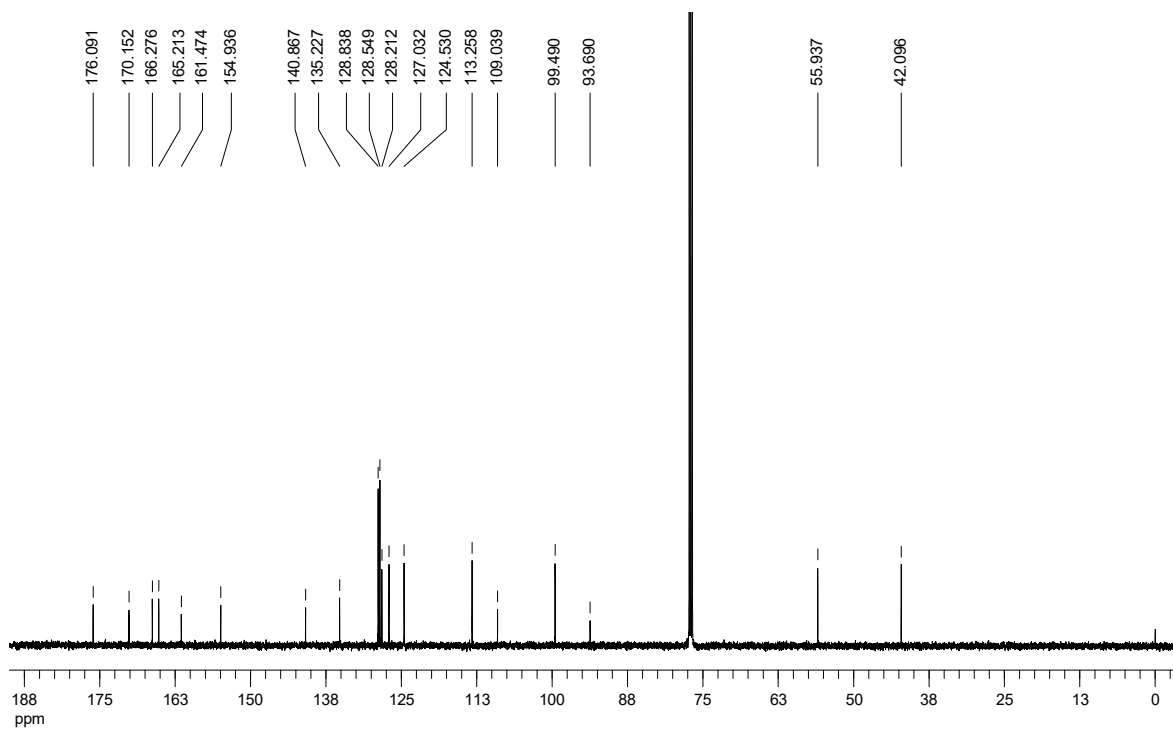
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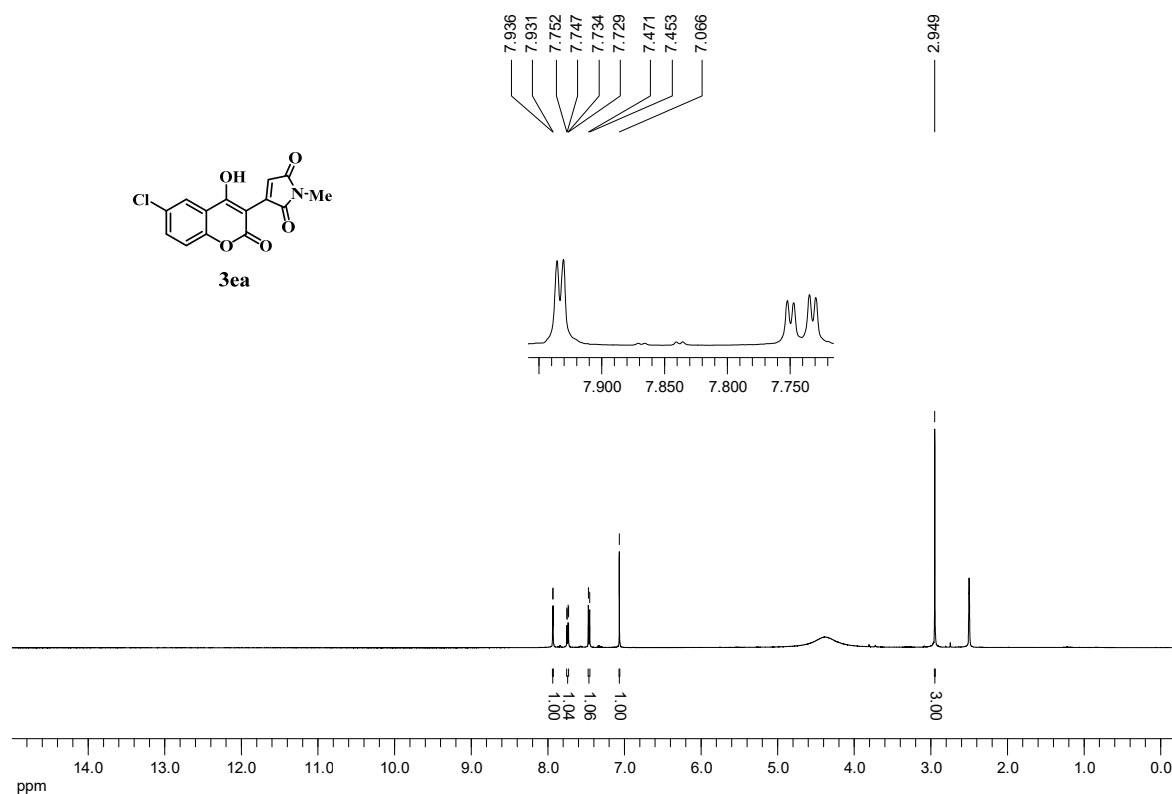
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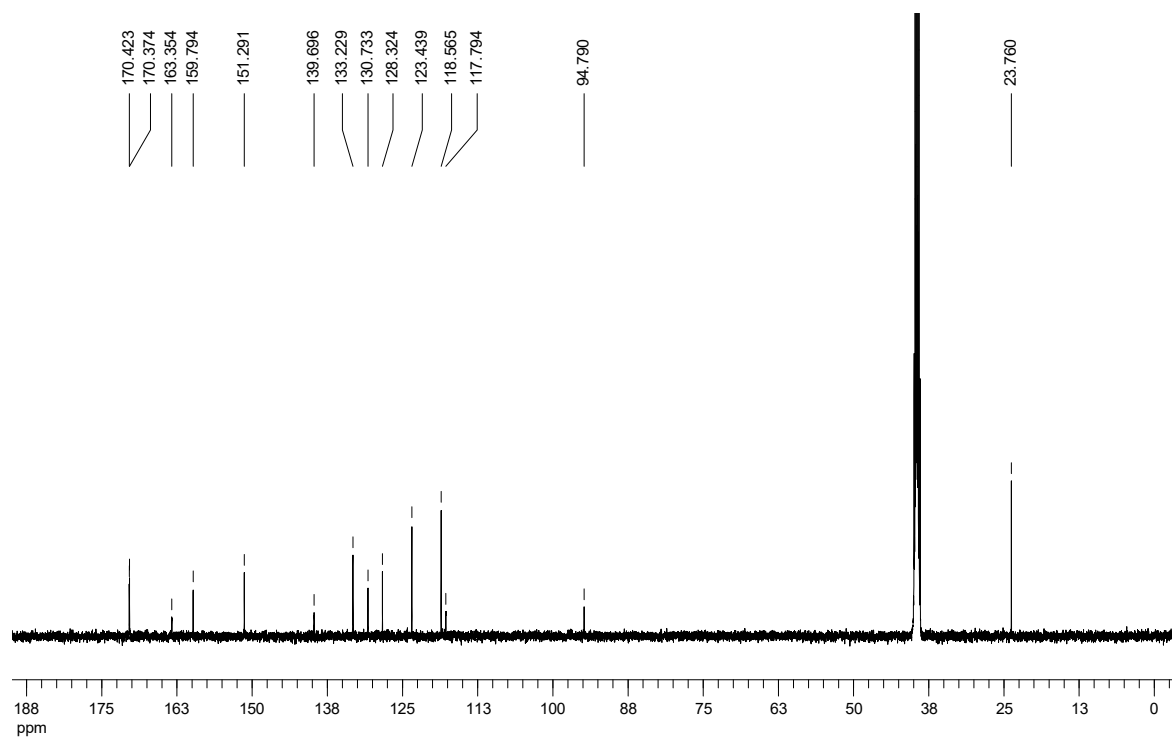
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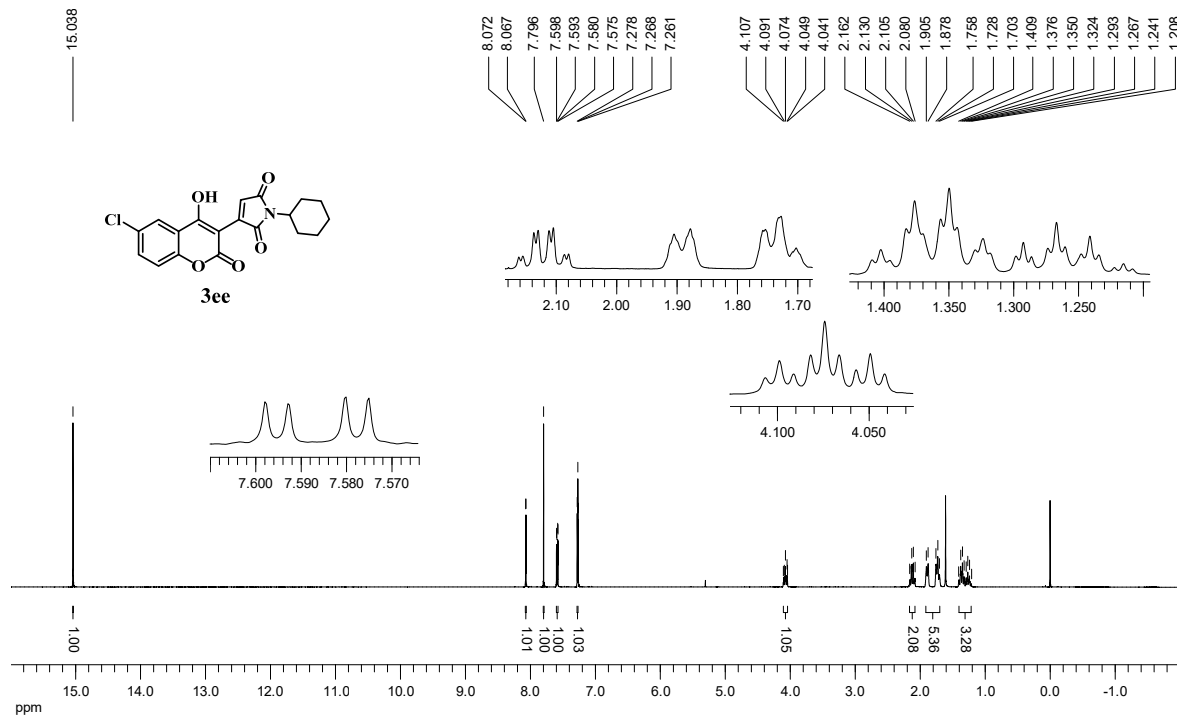
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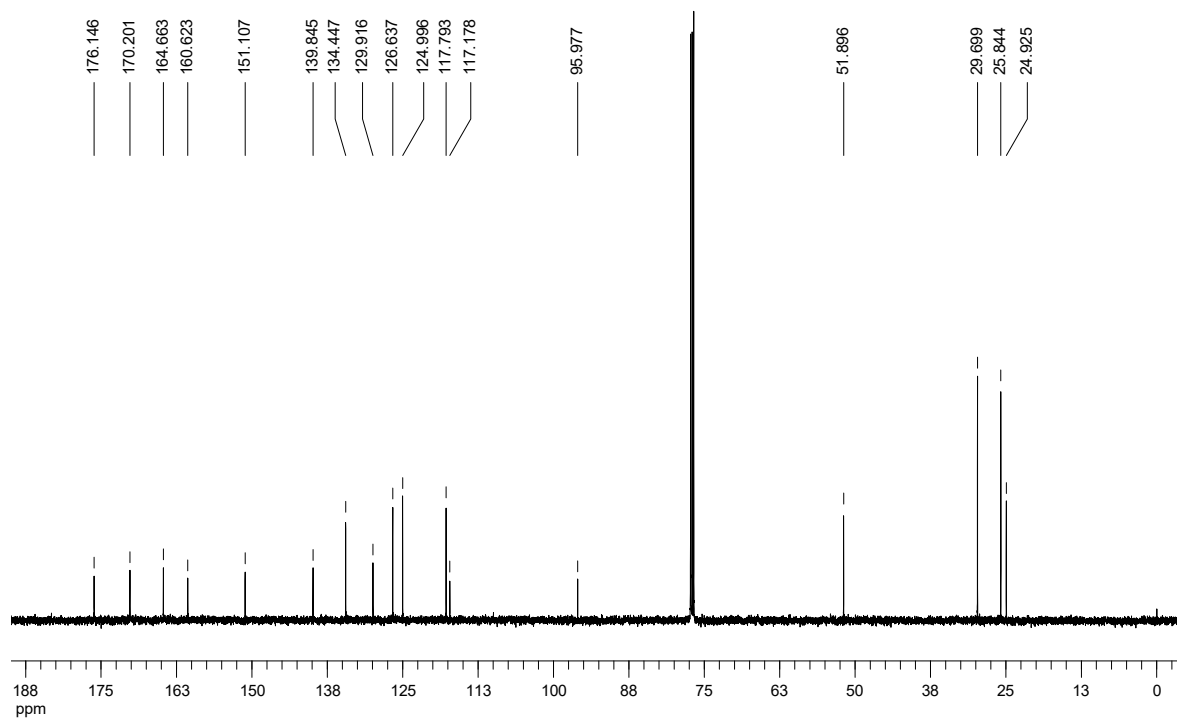
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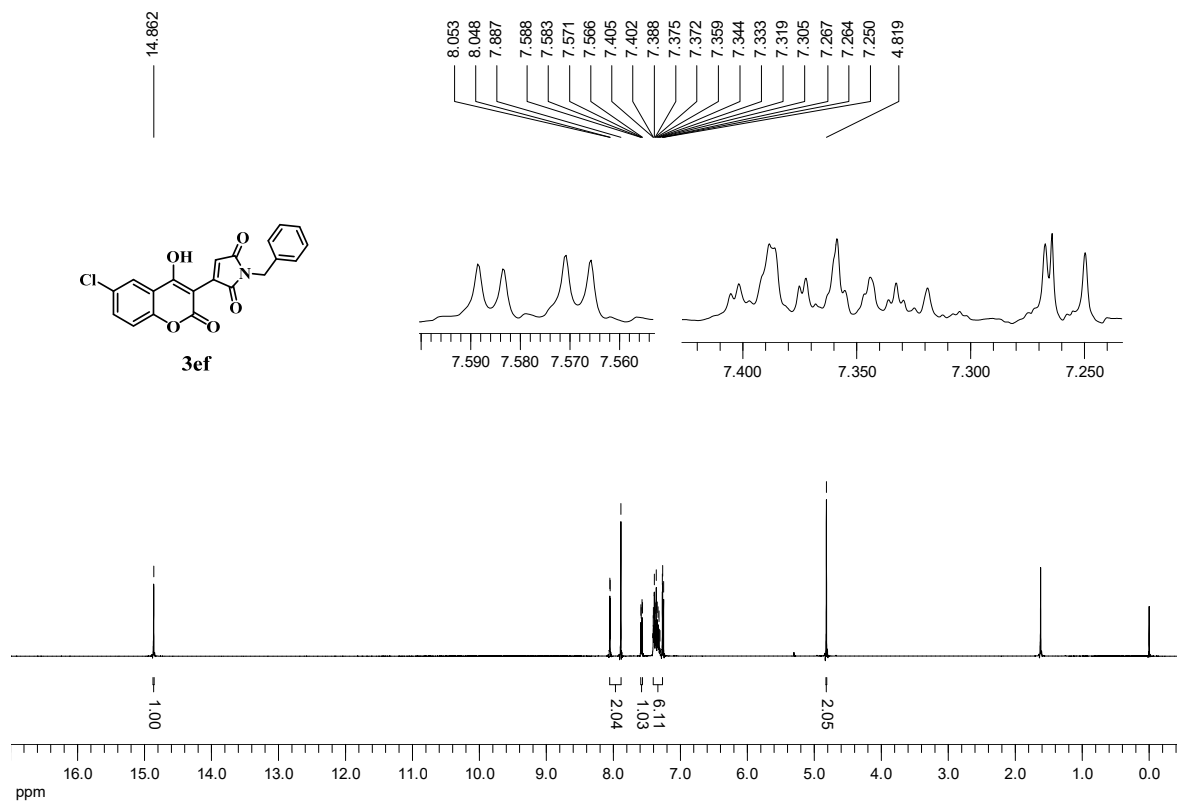
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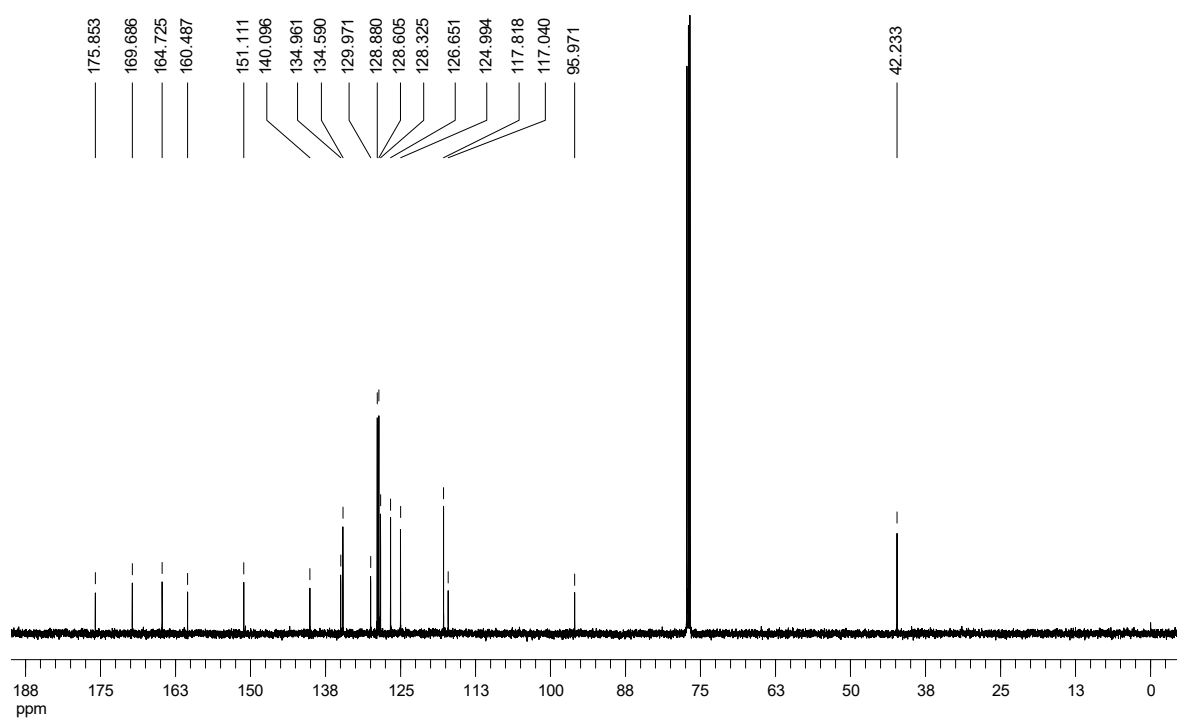
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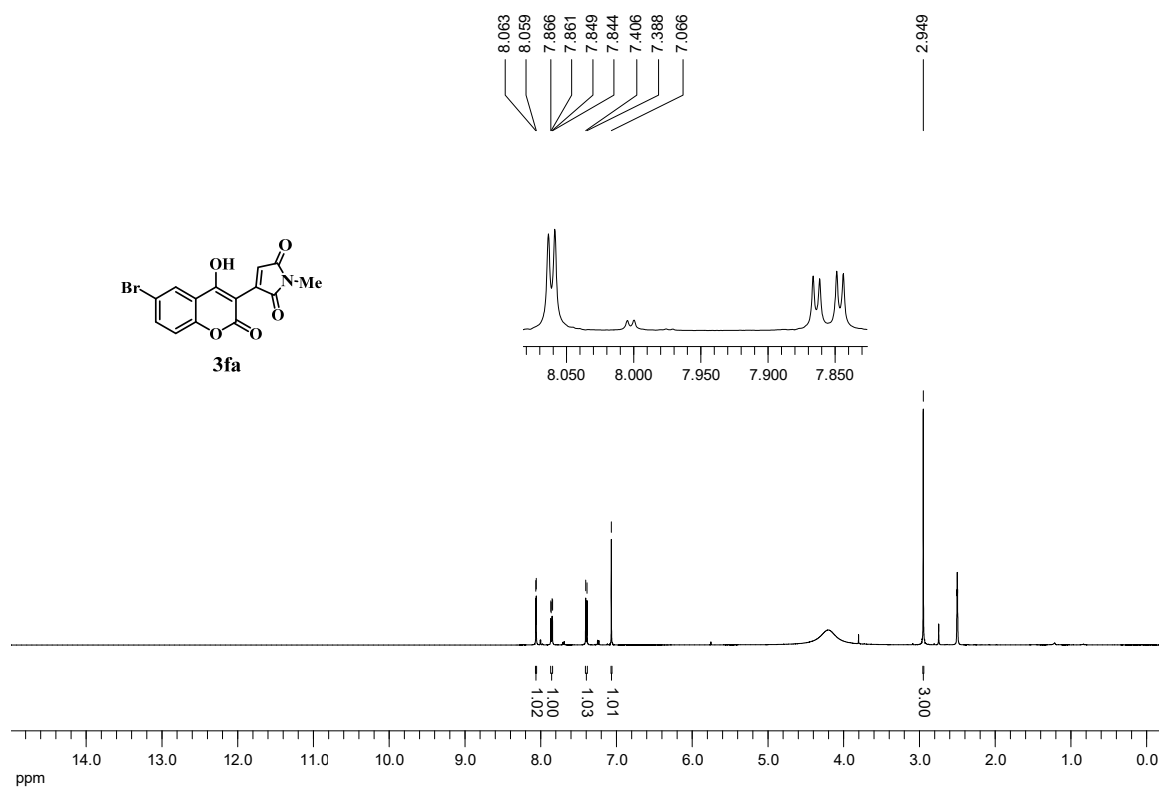
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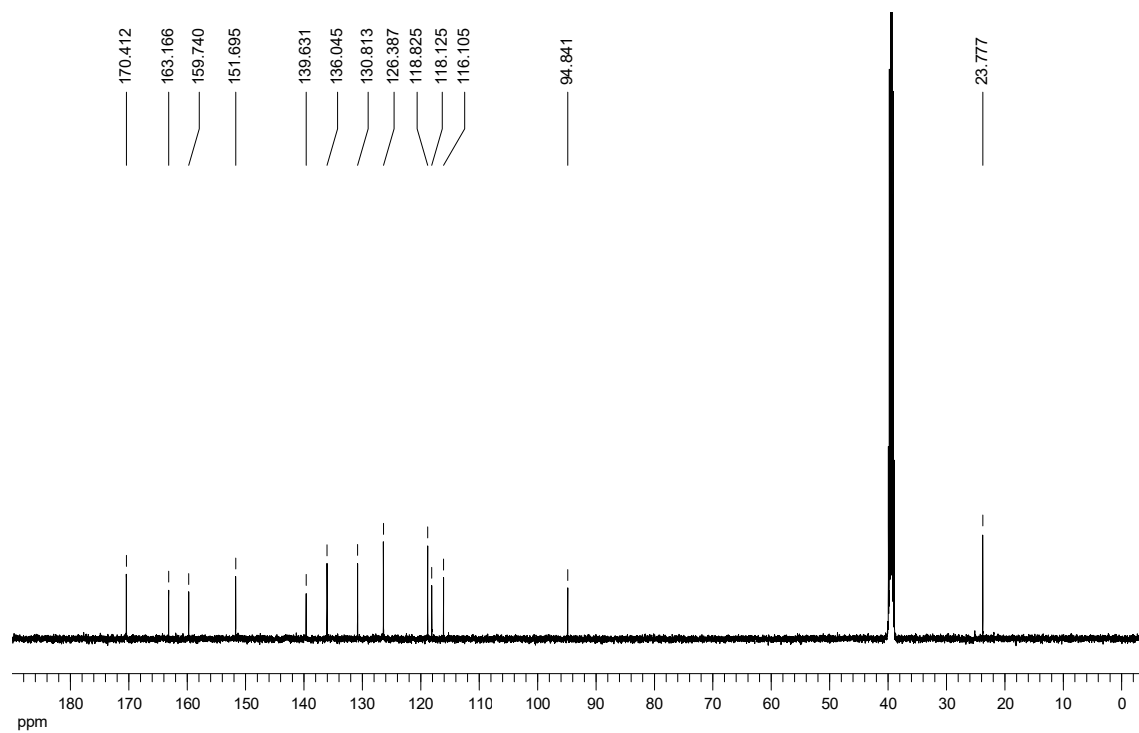
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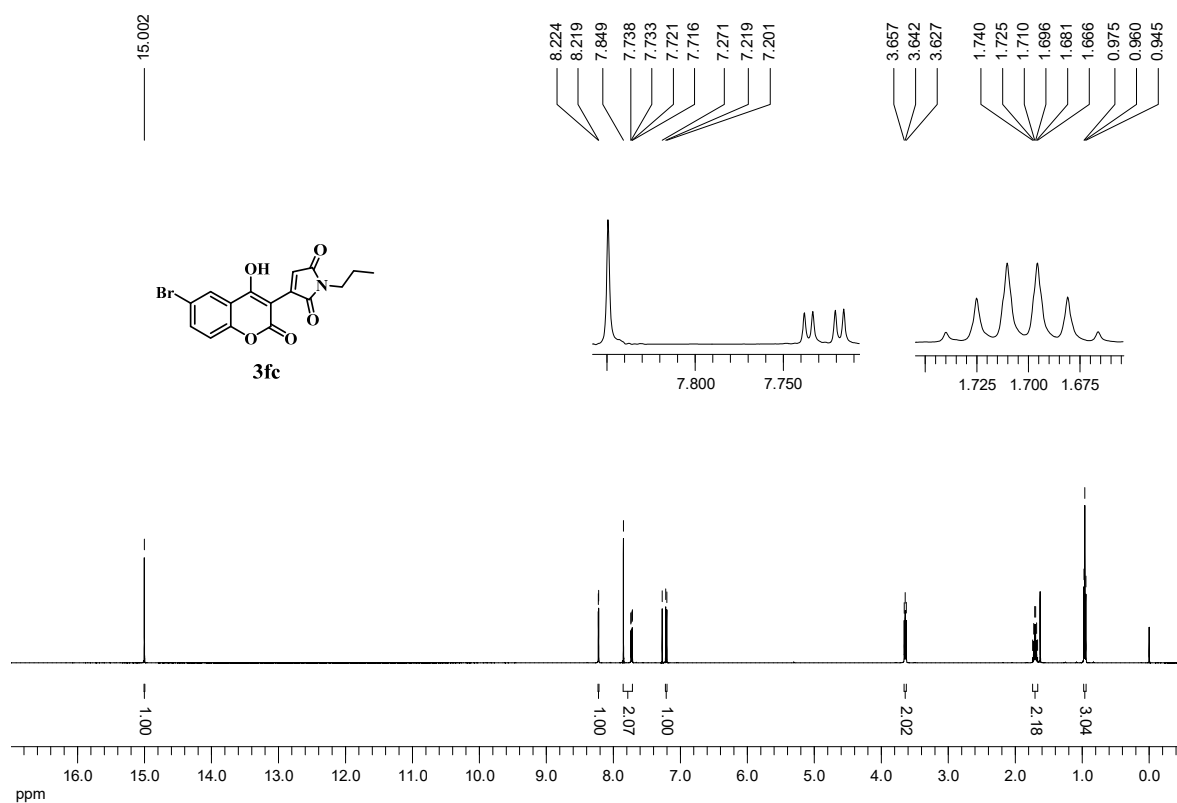
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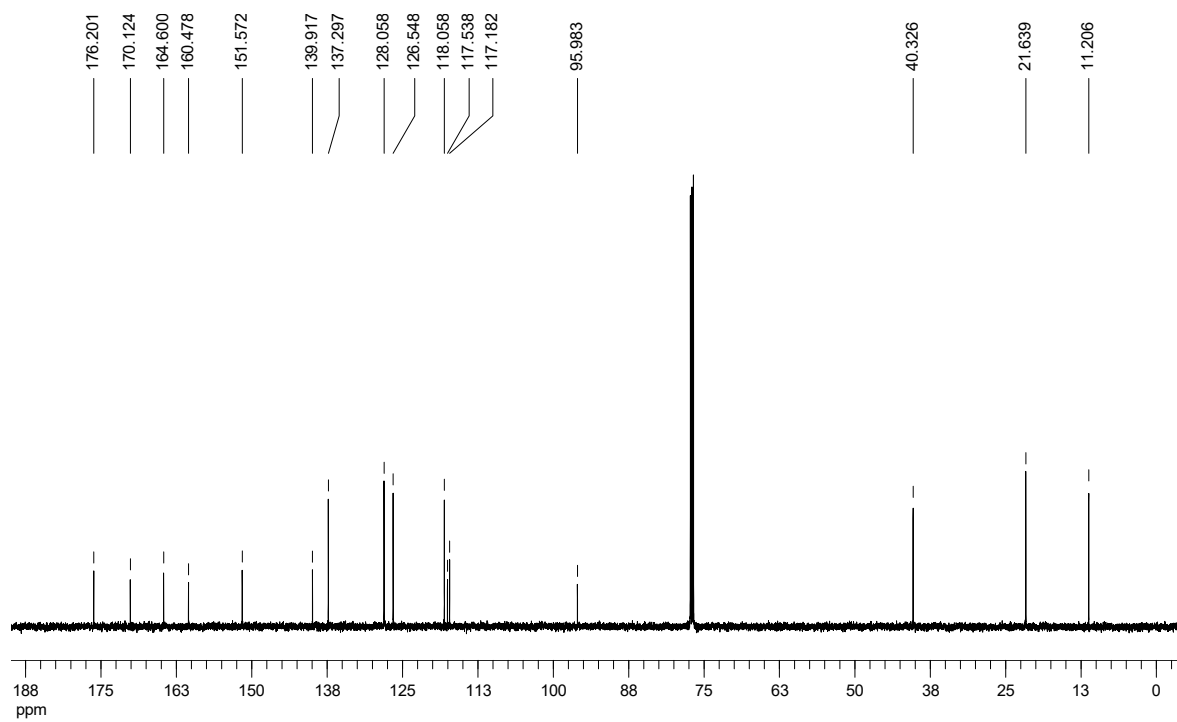
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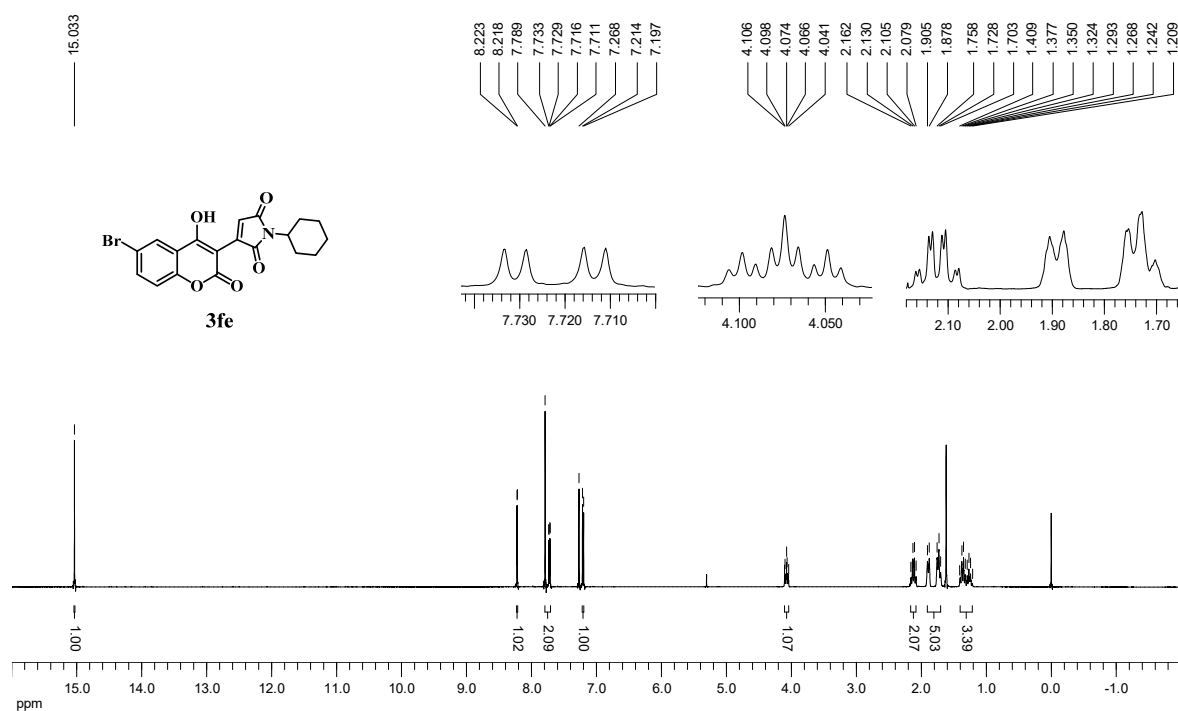
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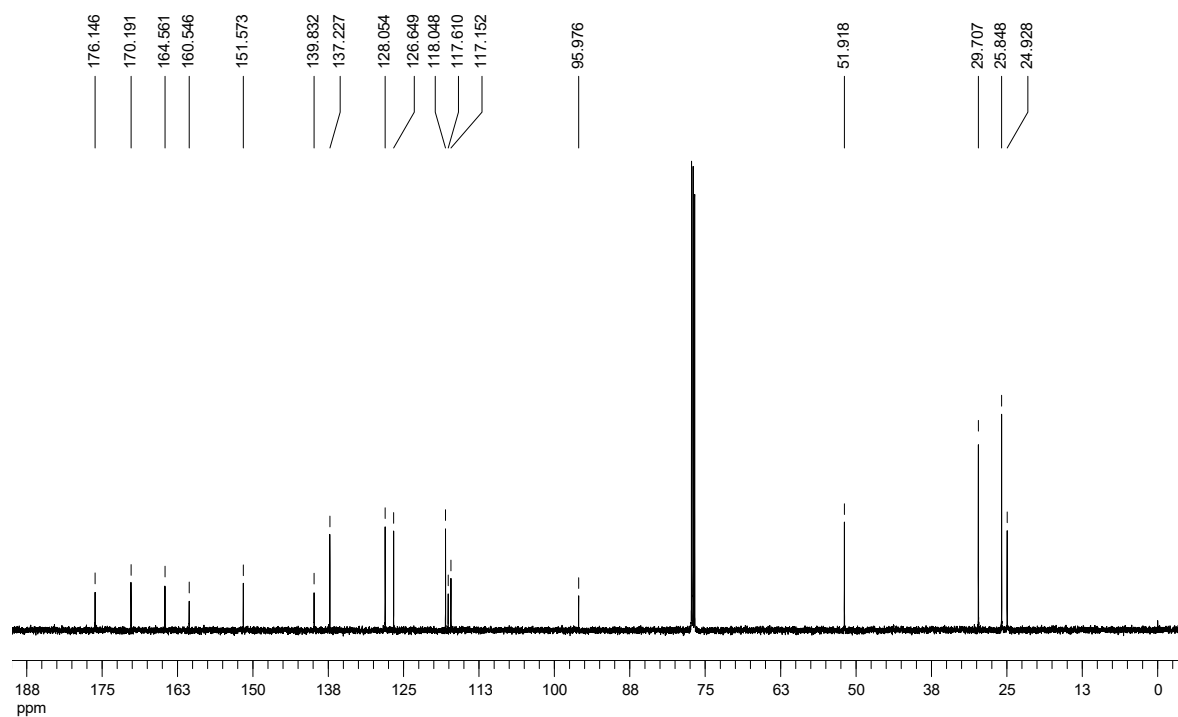
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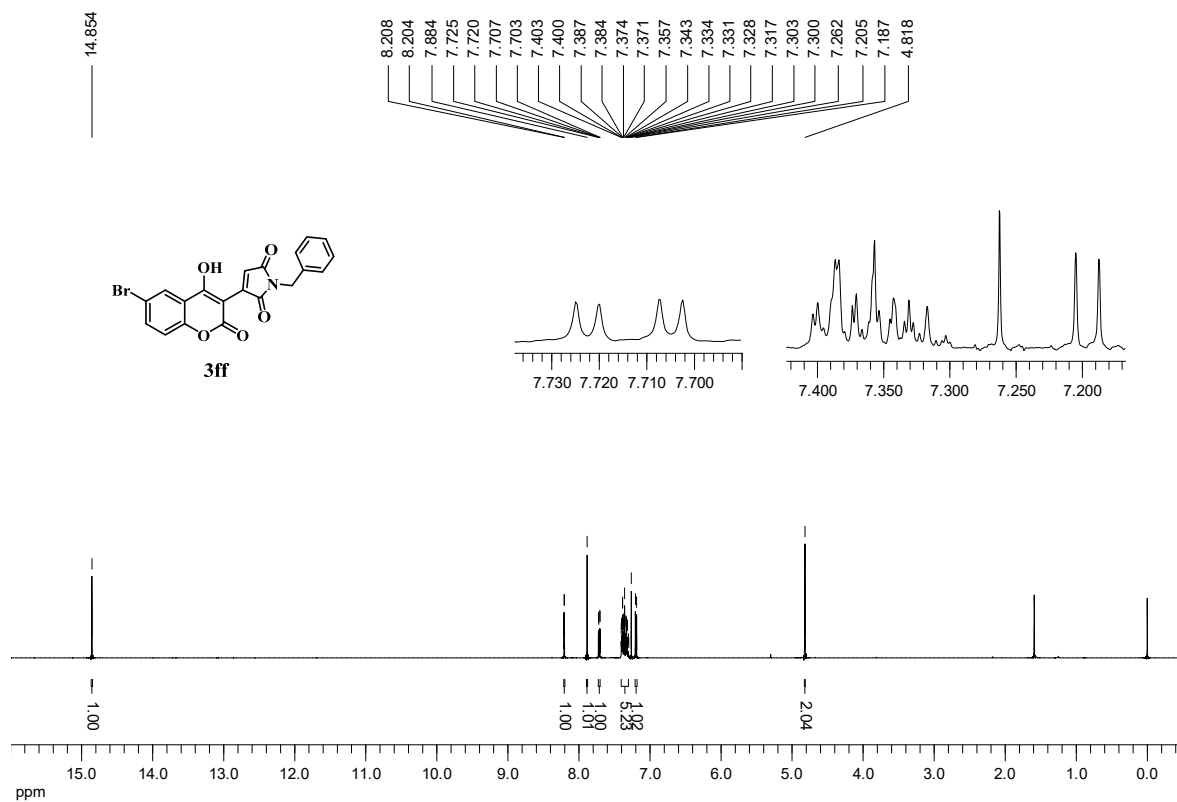
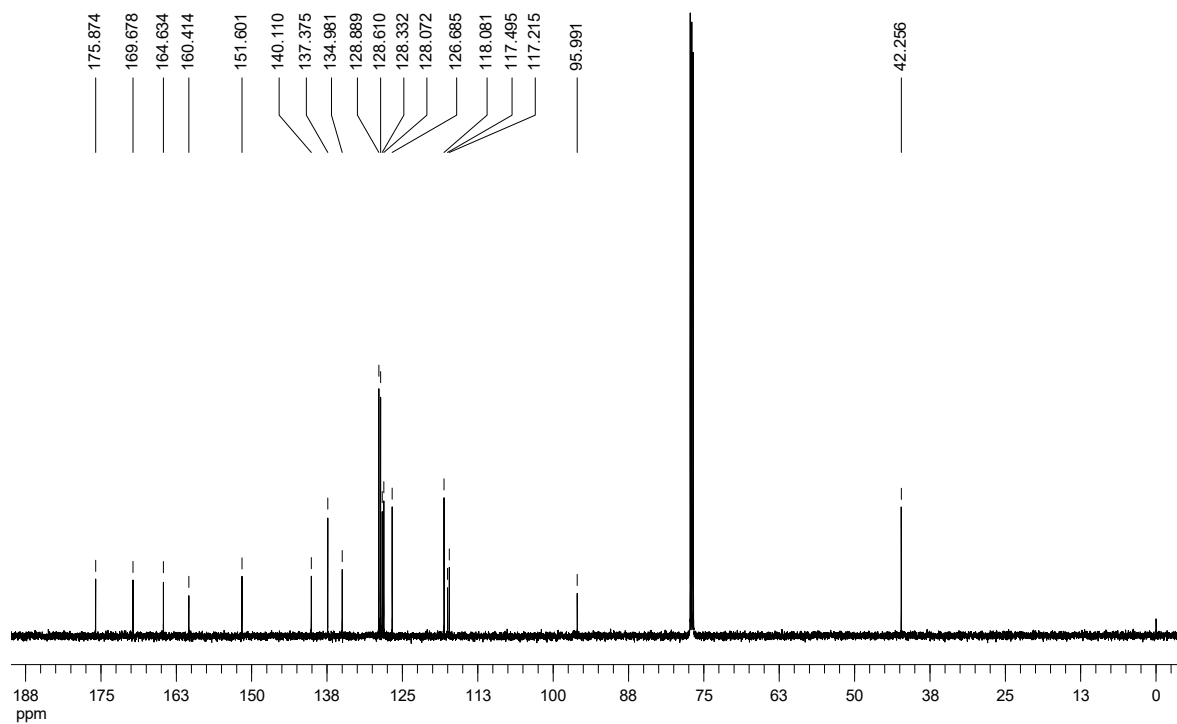


¹H-NMR (500 MHz, CDCl₃)

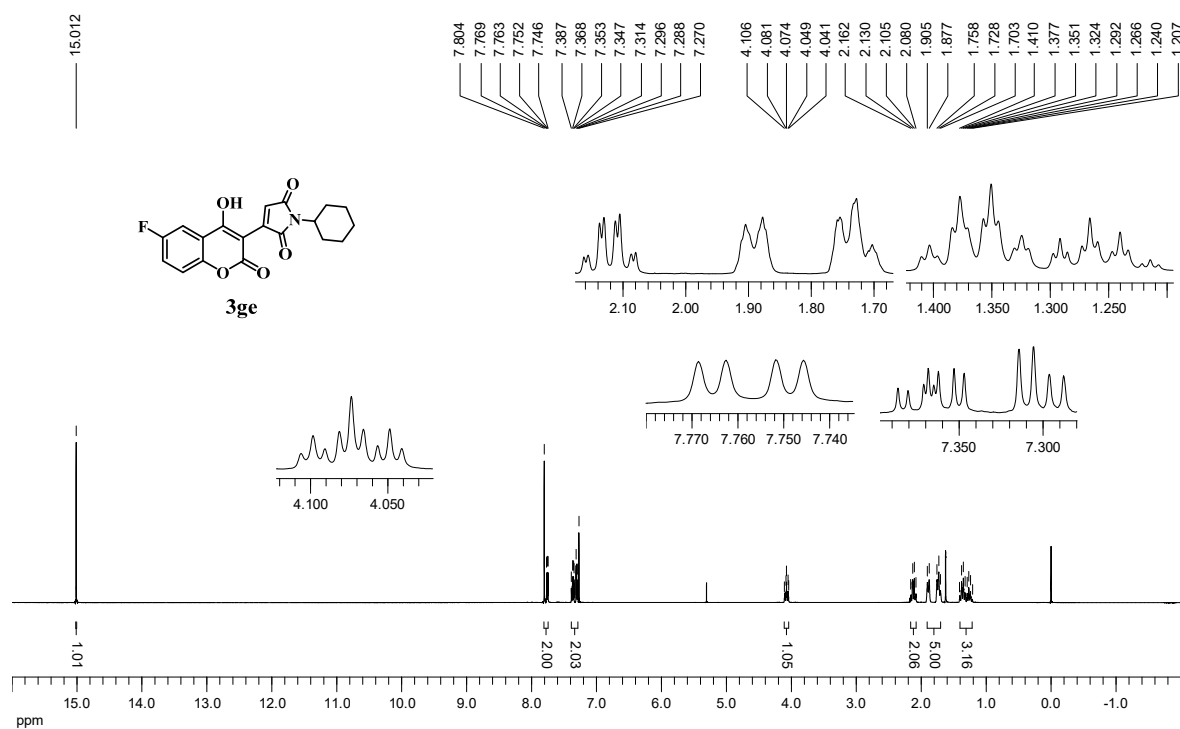


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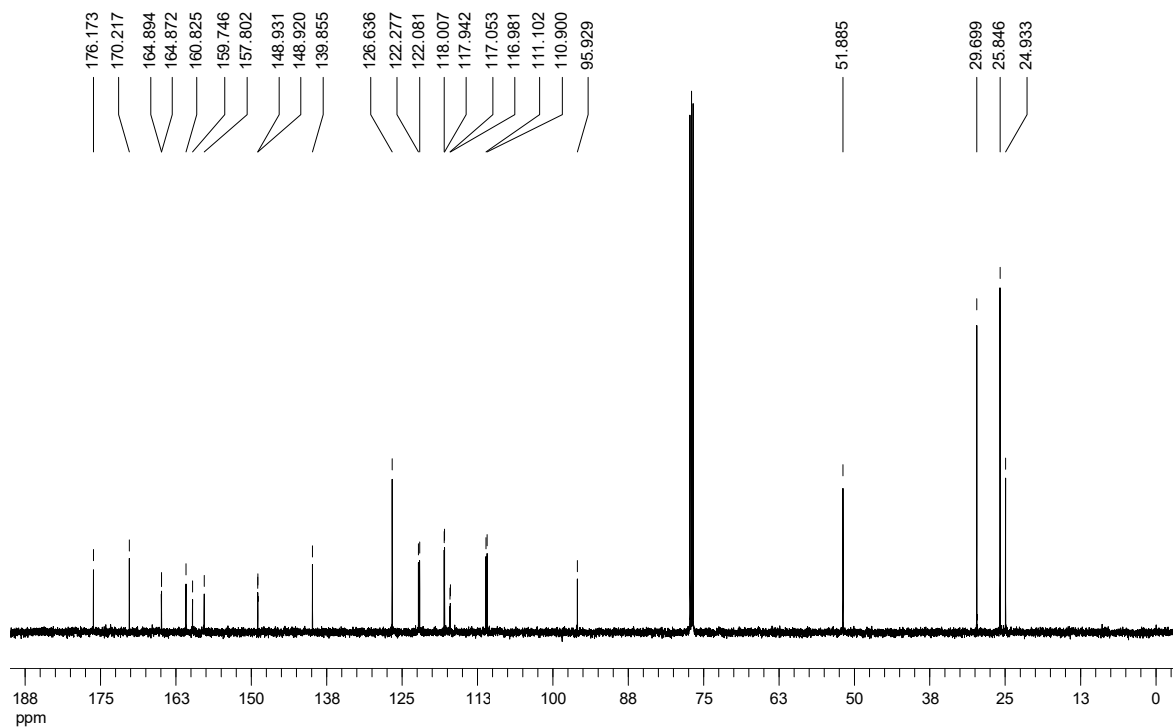


¹H-NMR (500 MHz, CDCl₃) ^{13}C -NMR (126 MHz, CDCl_3)

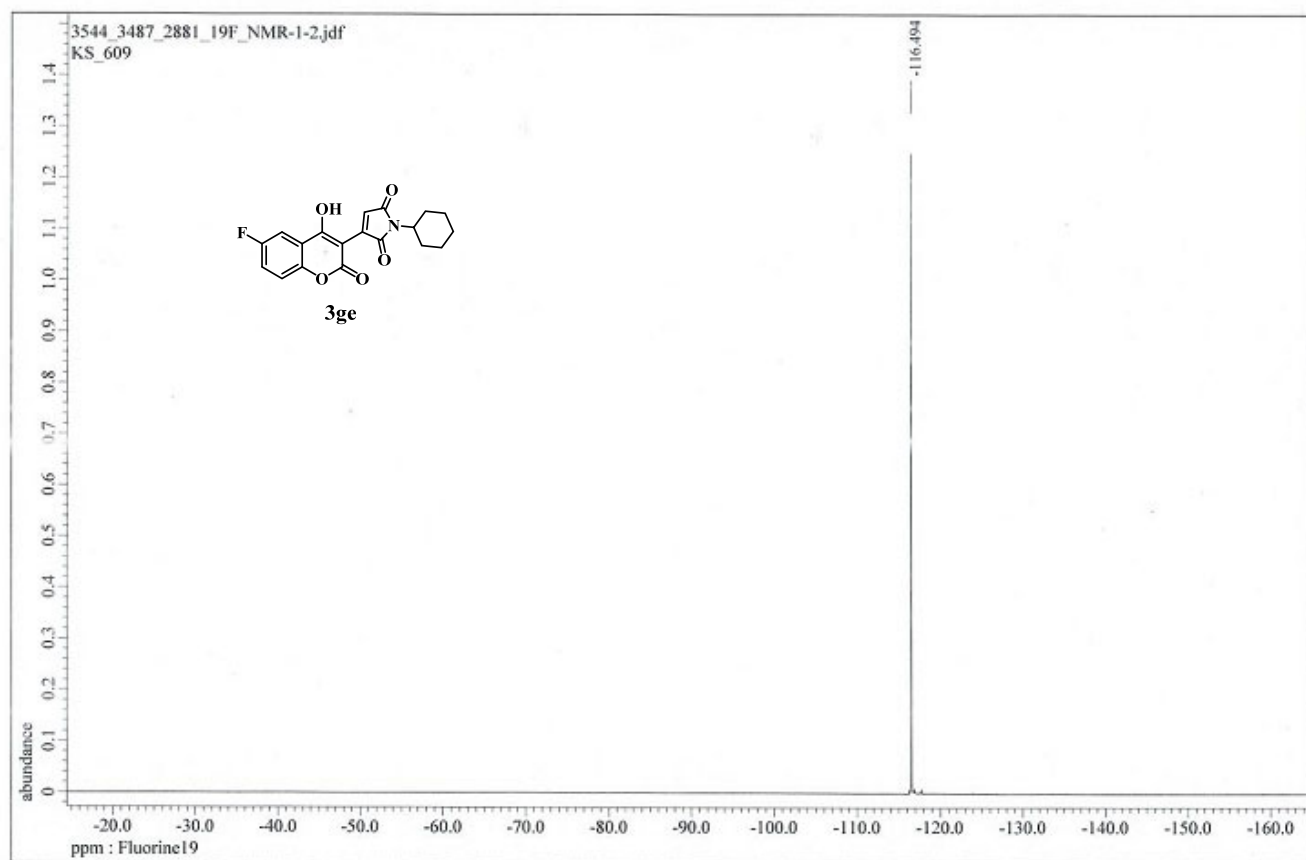
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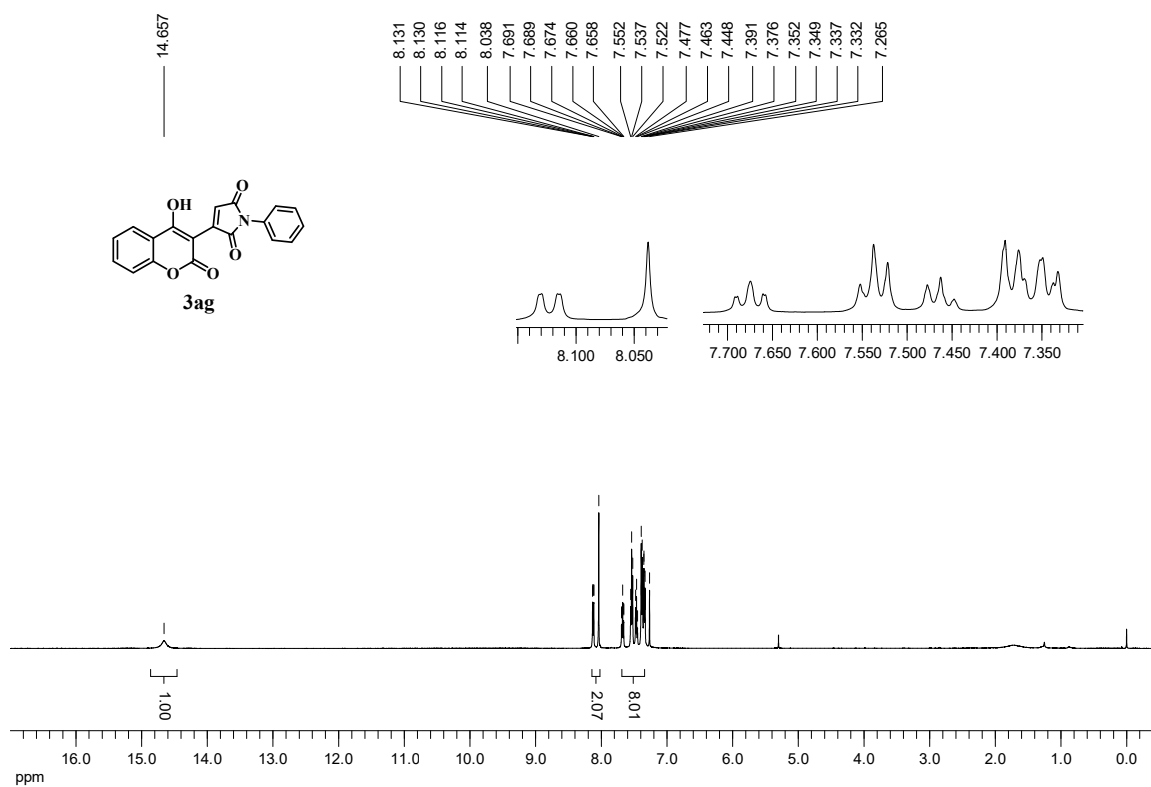
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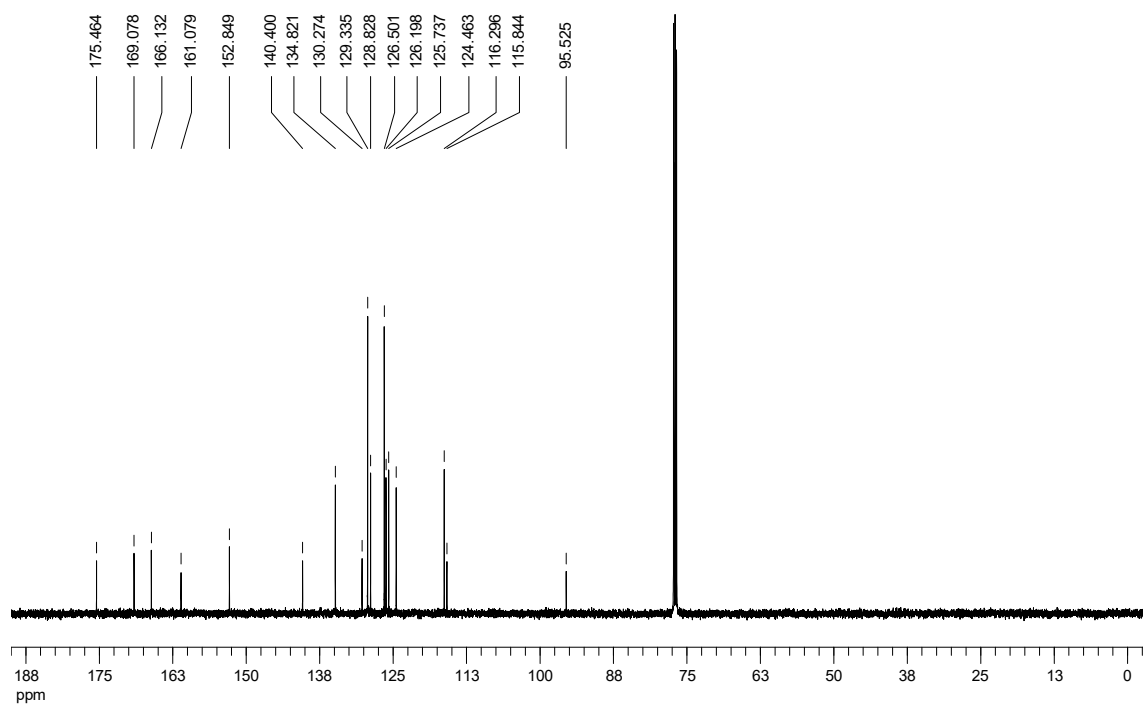
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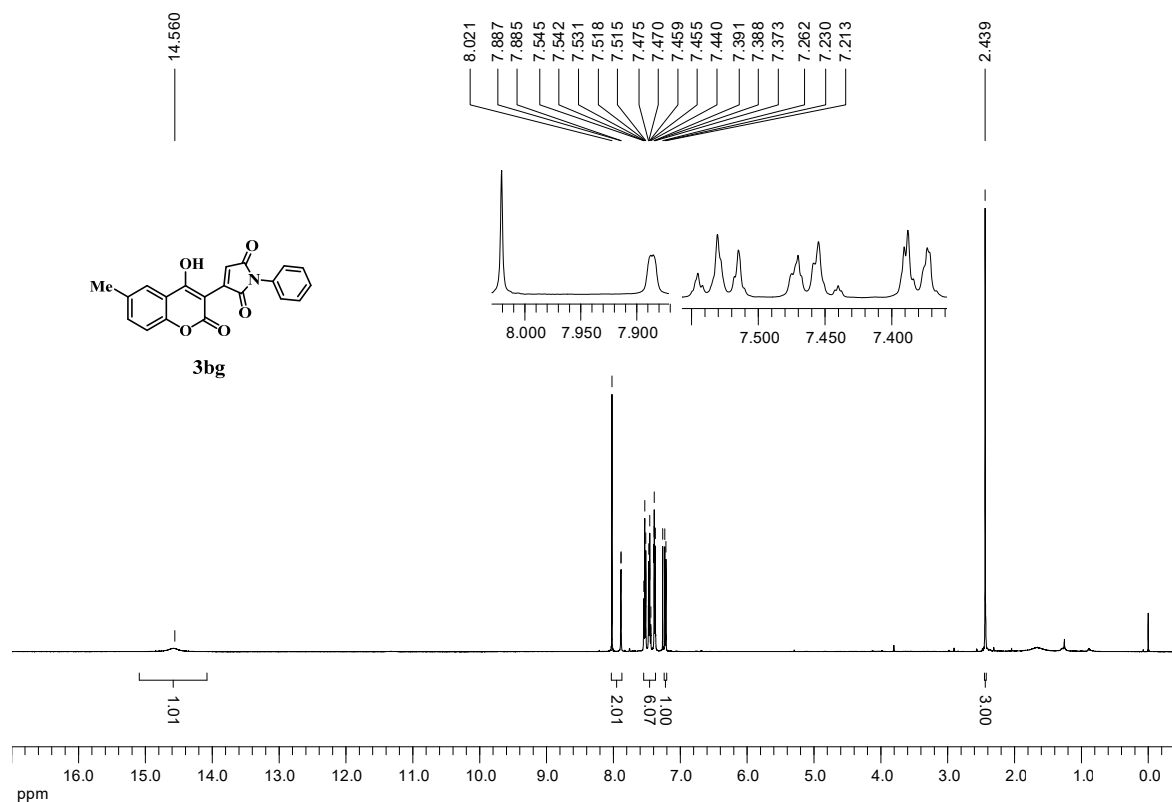
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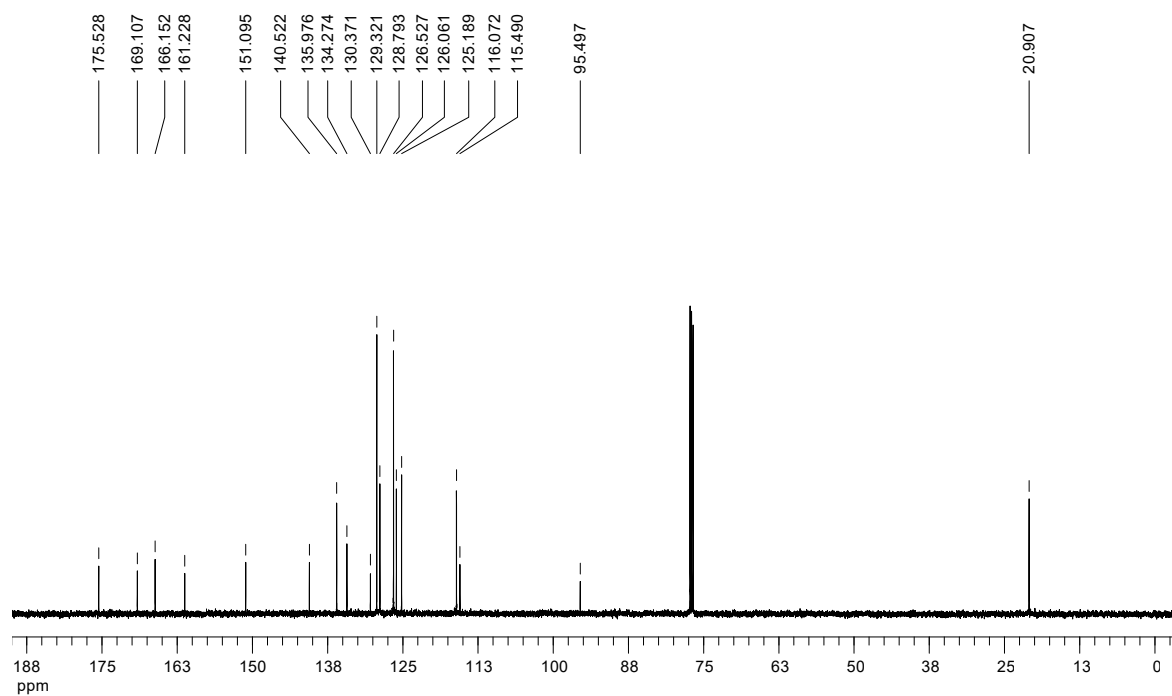
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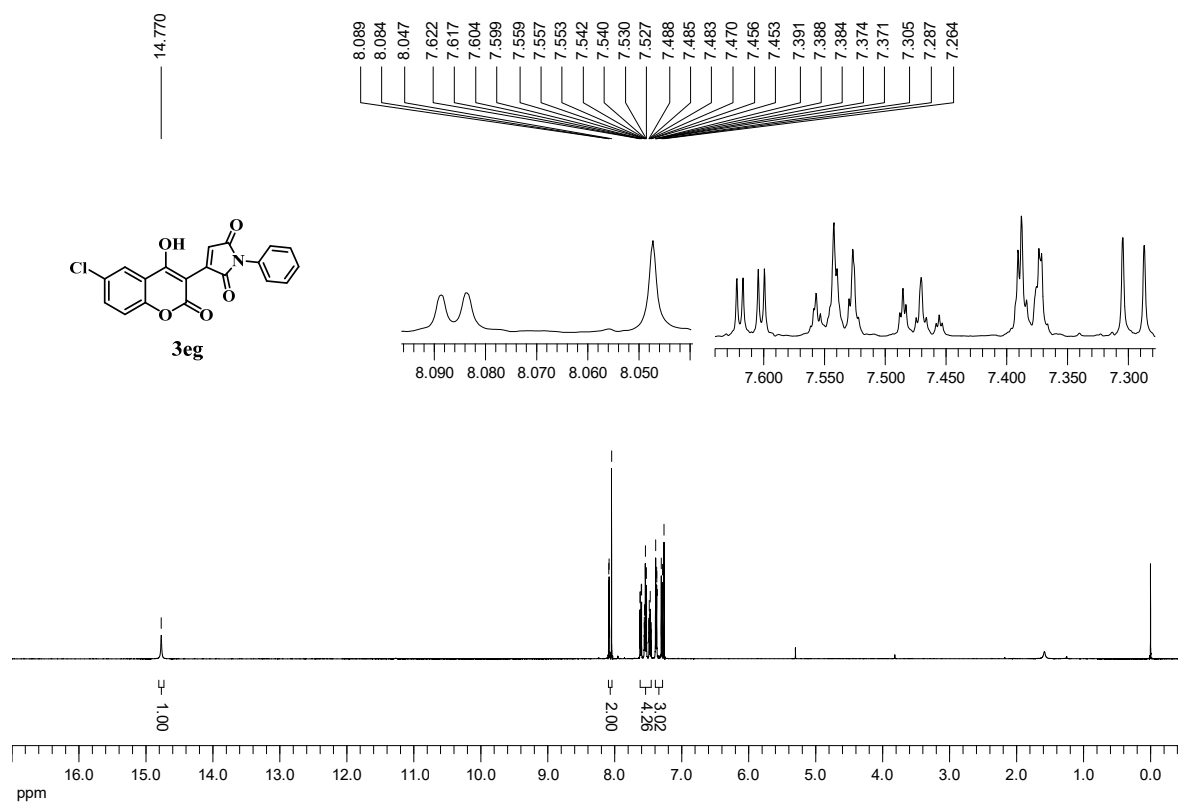
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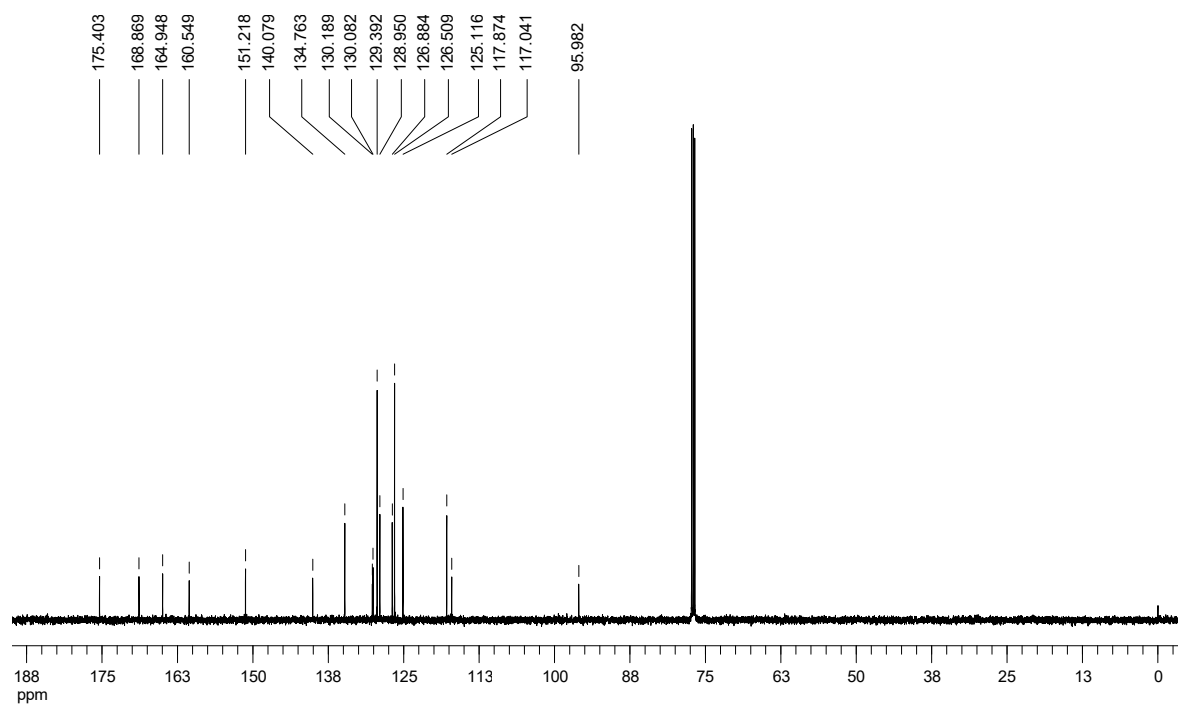
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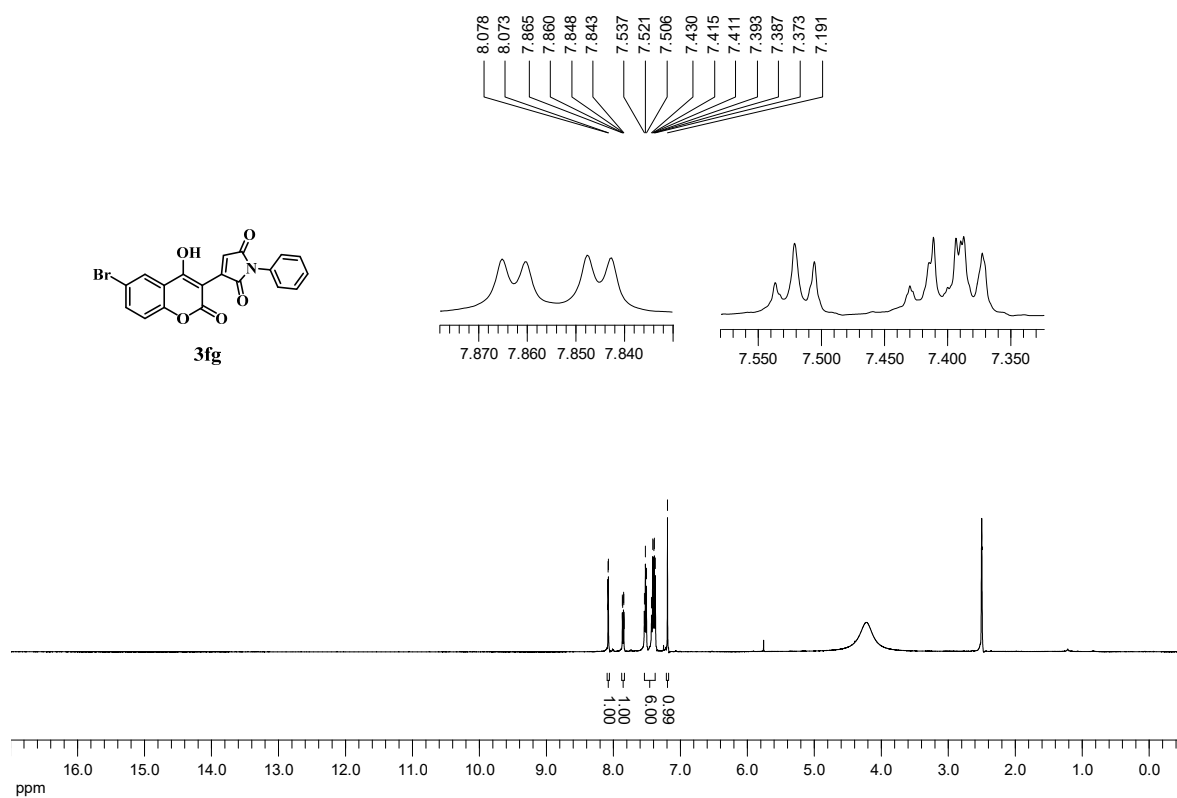
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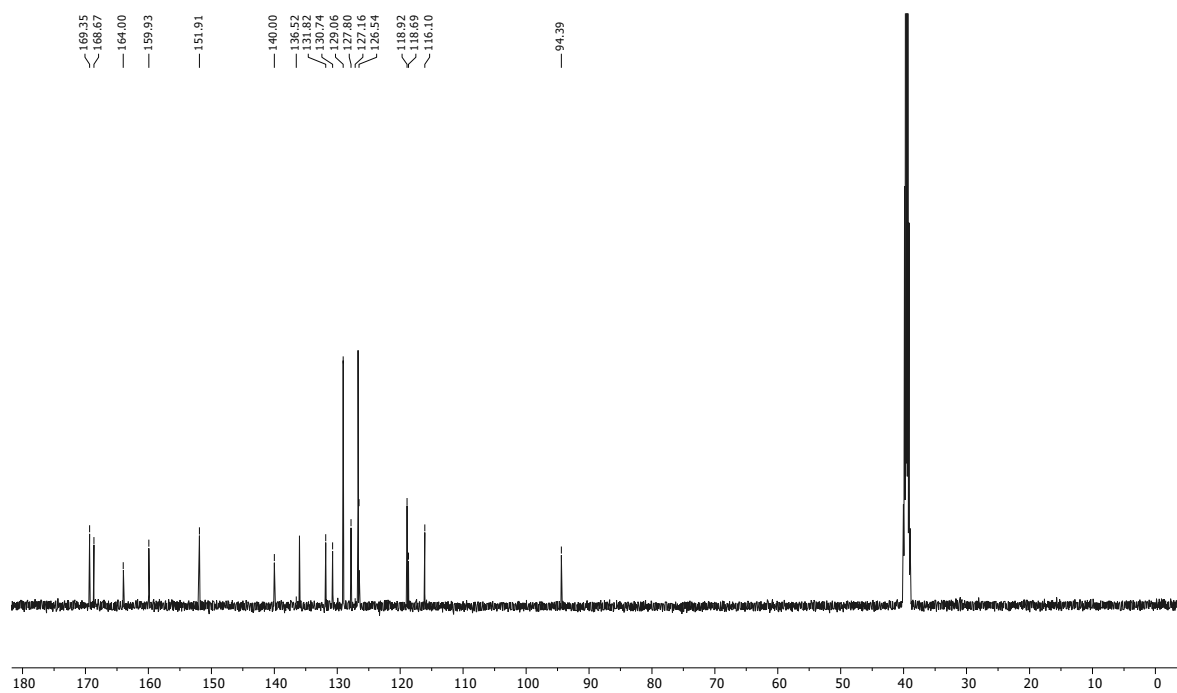
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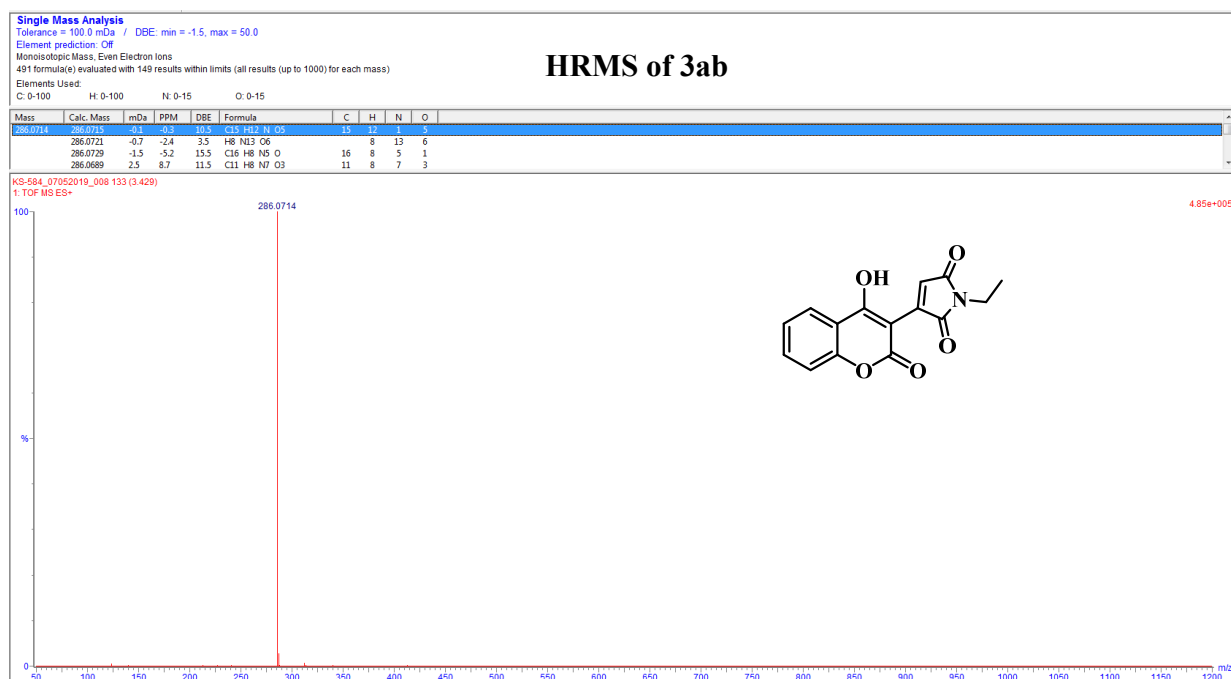
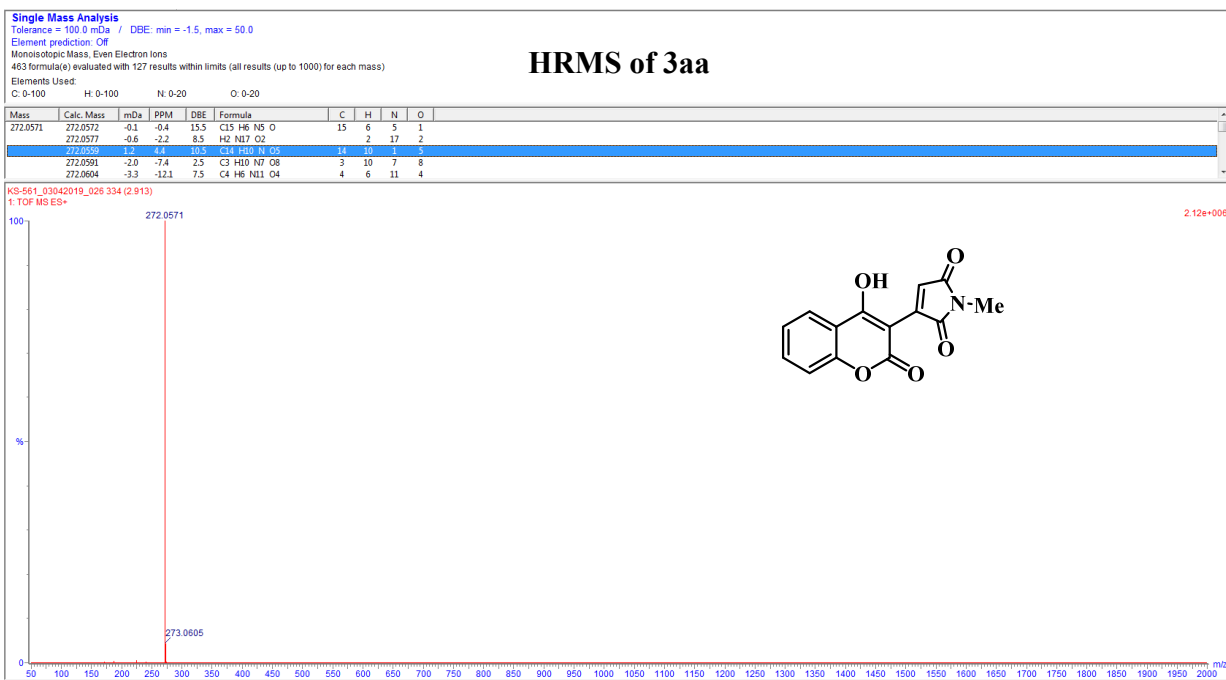


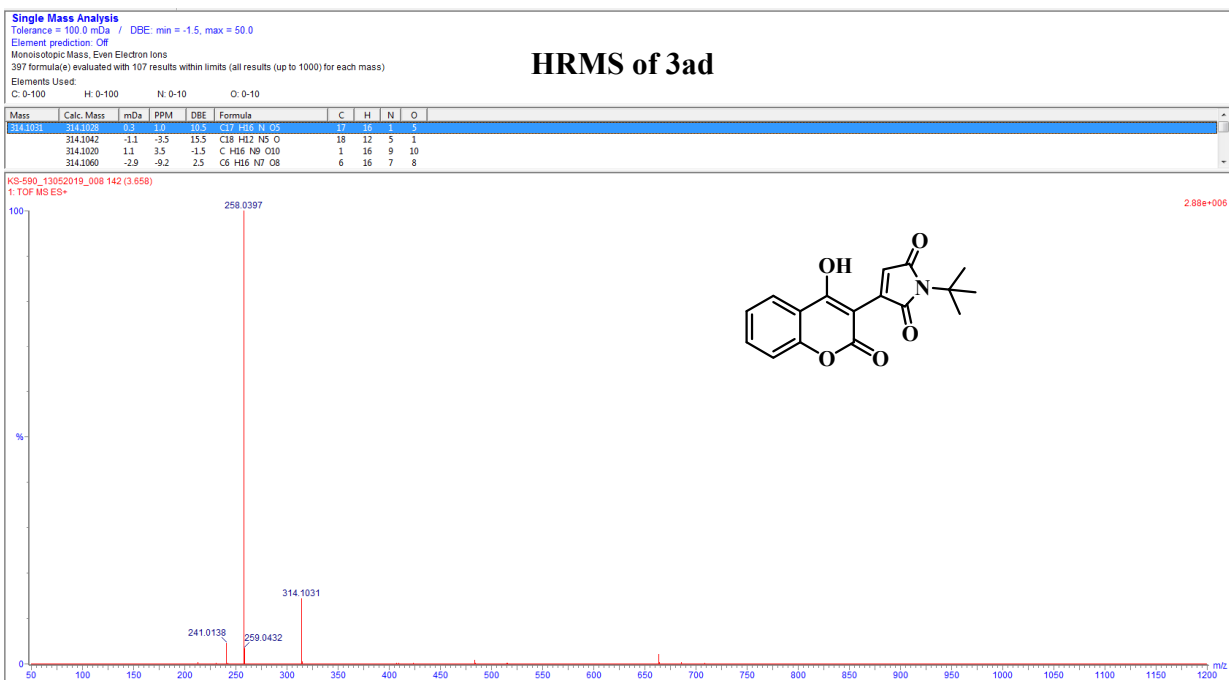
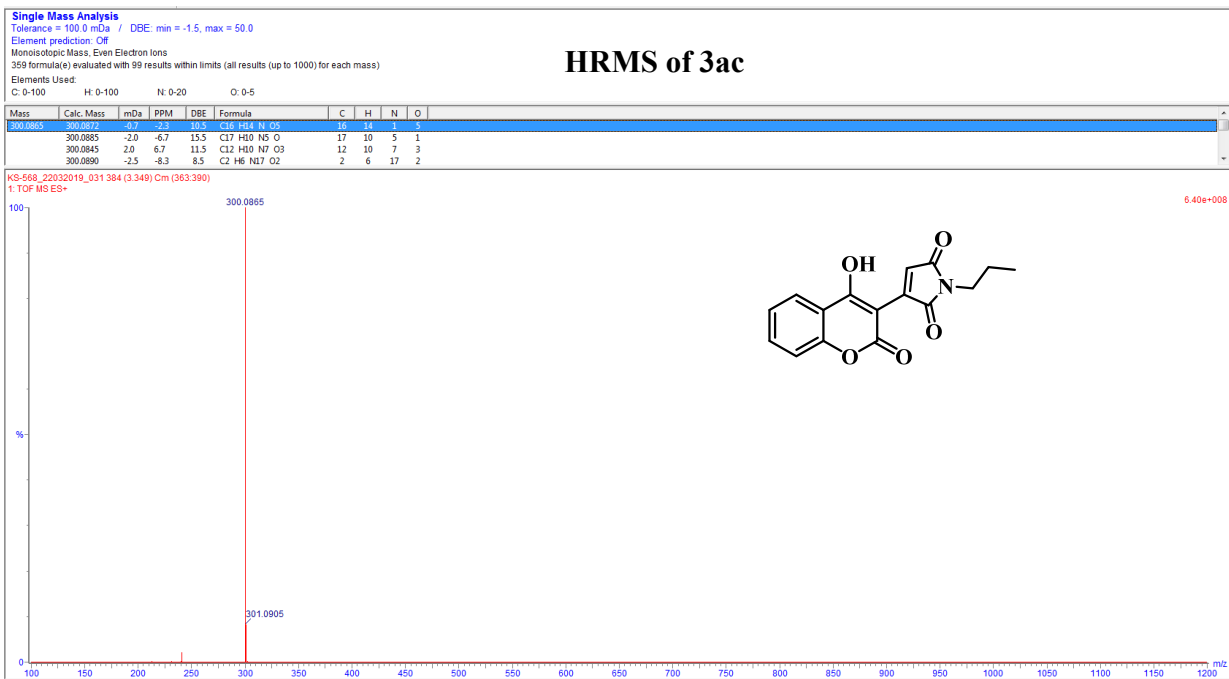
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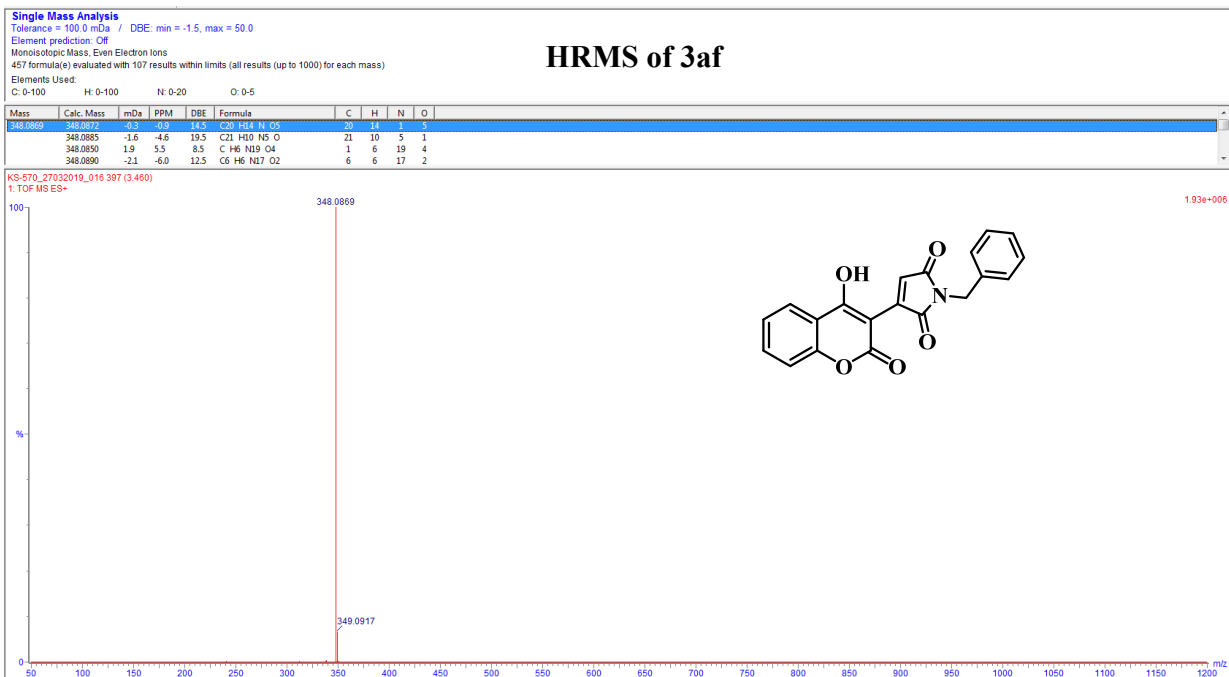
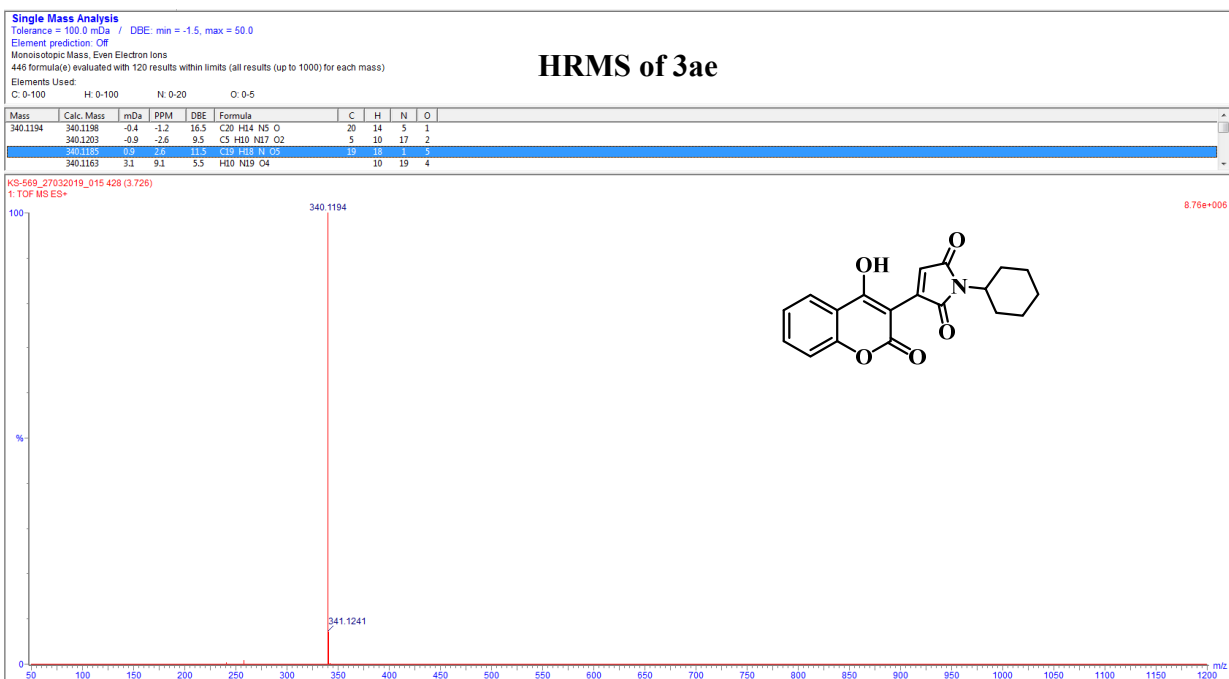


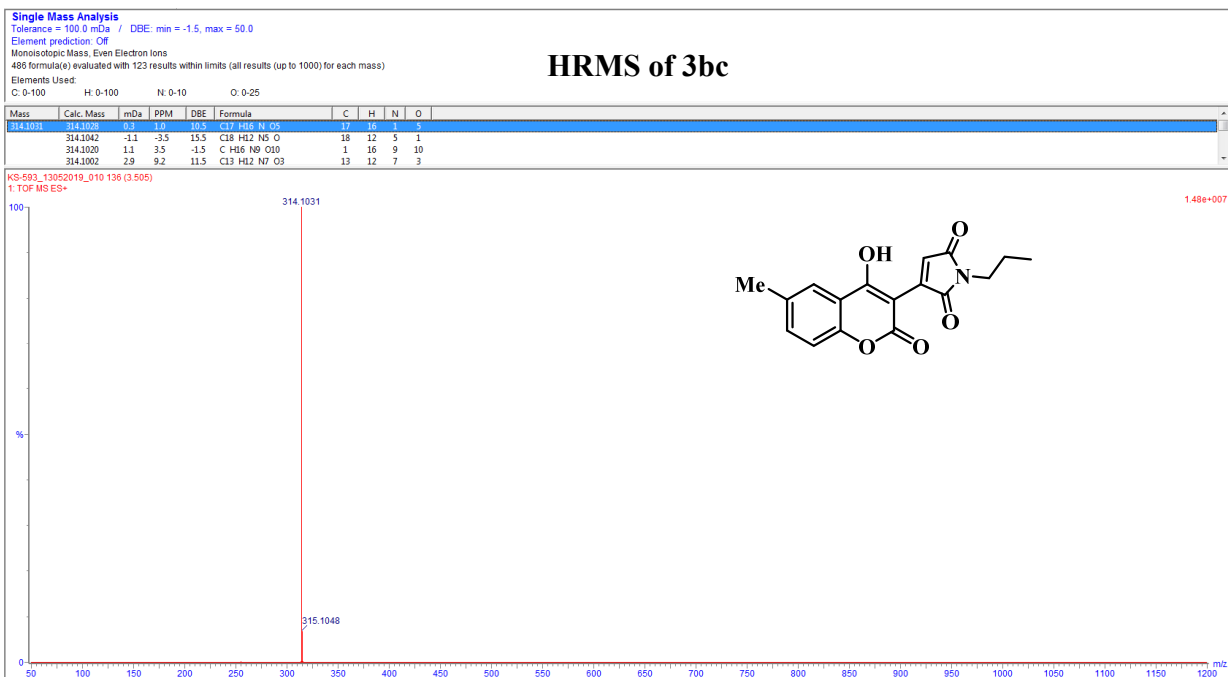
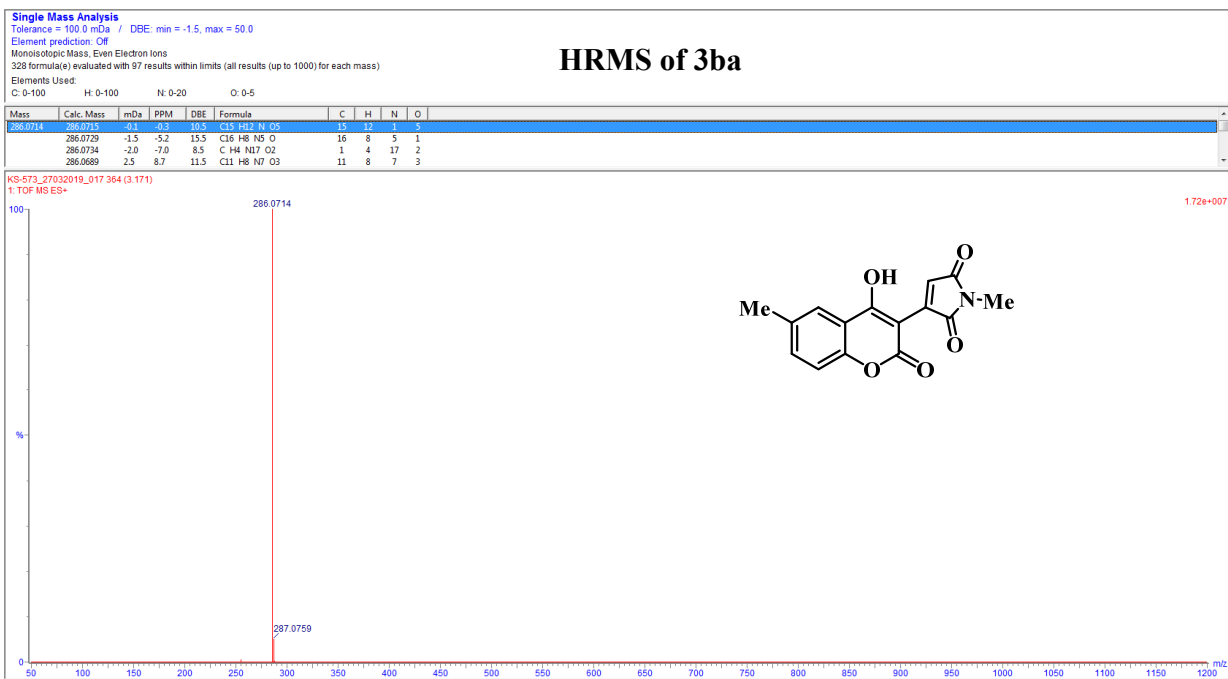
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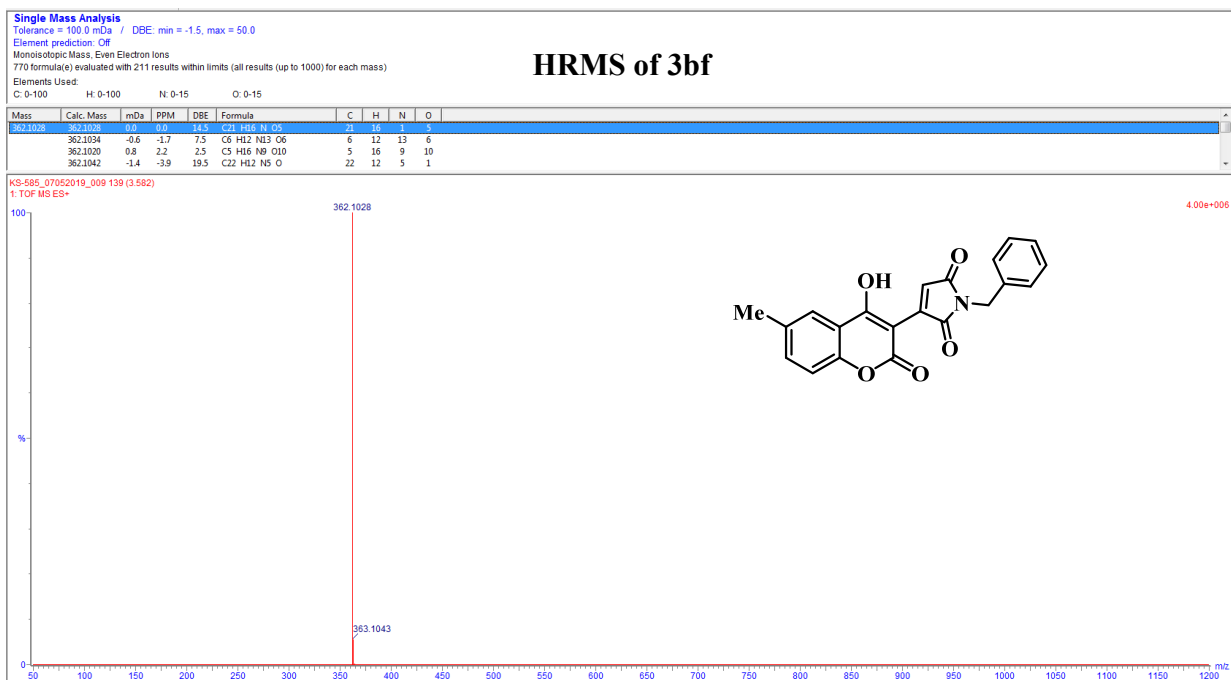
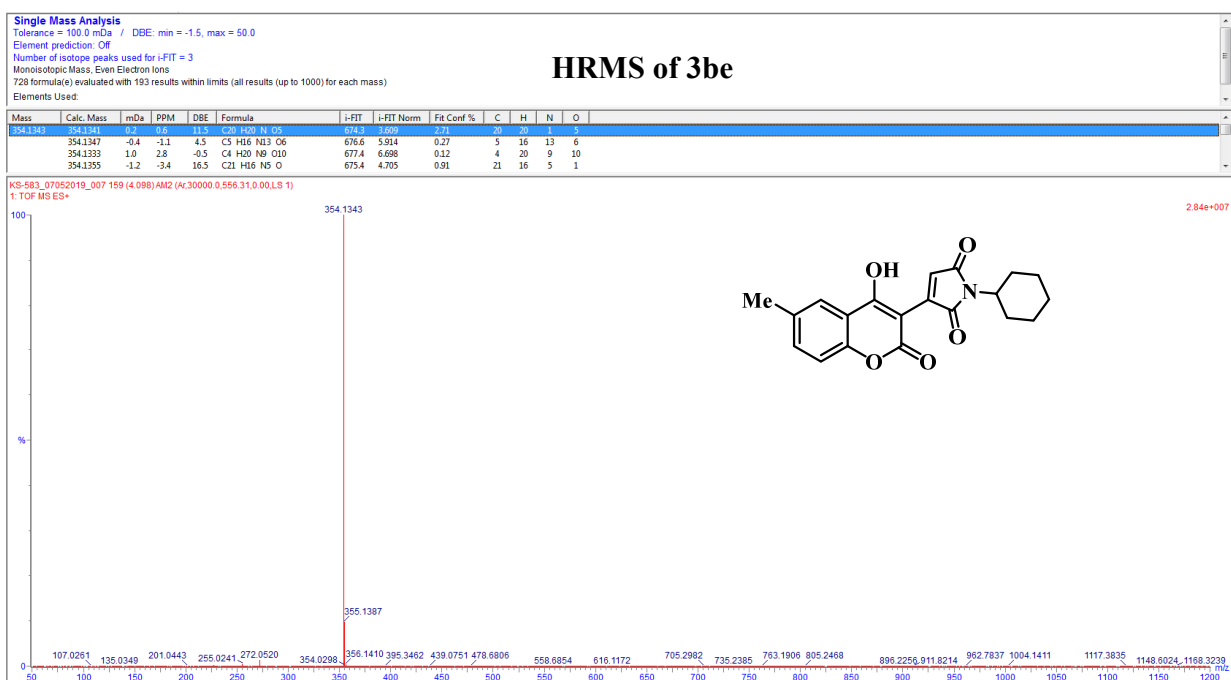


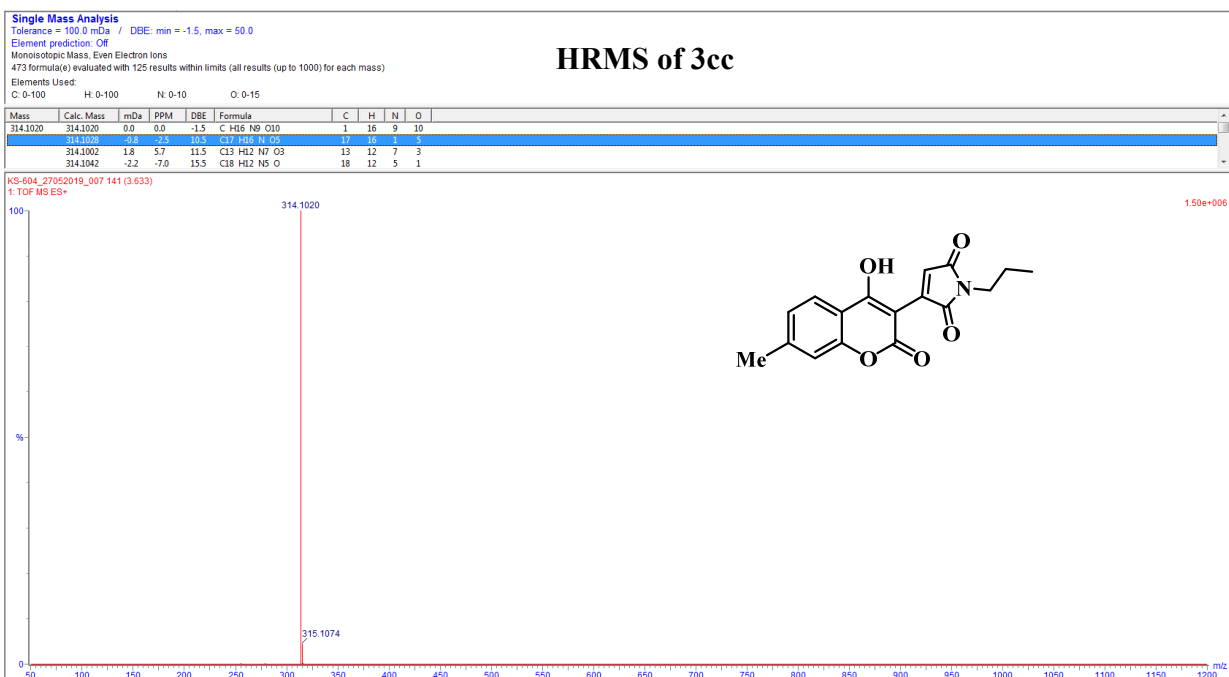
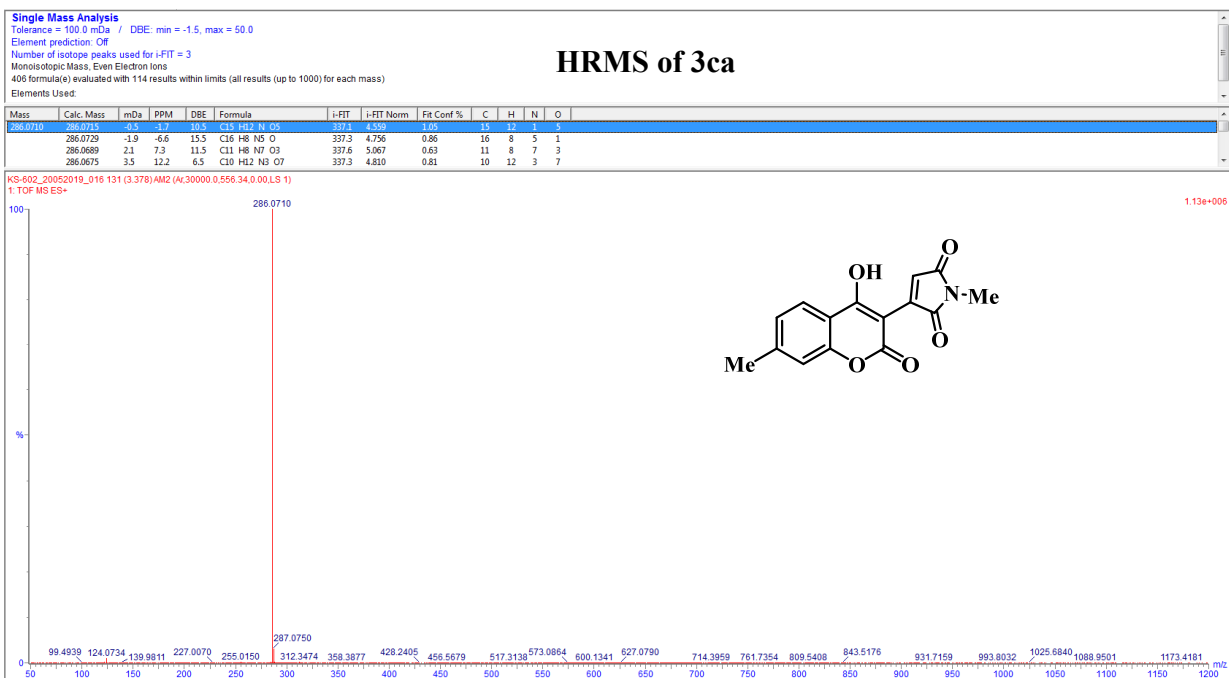


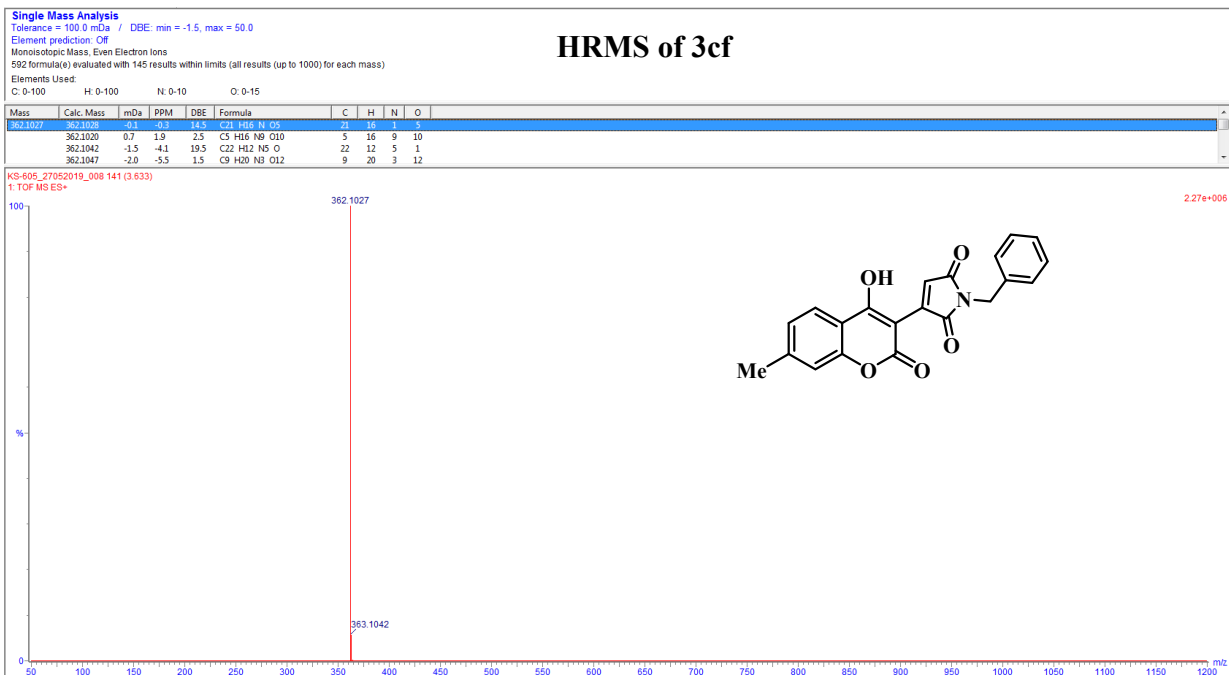
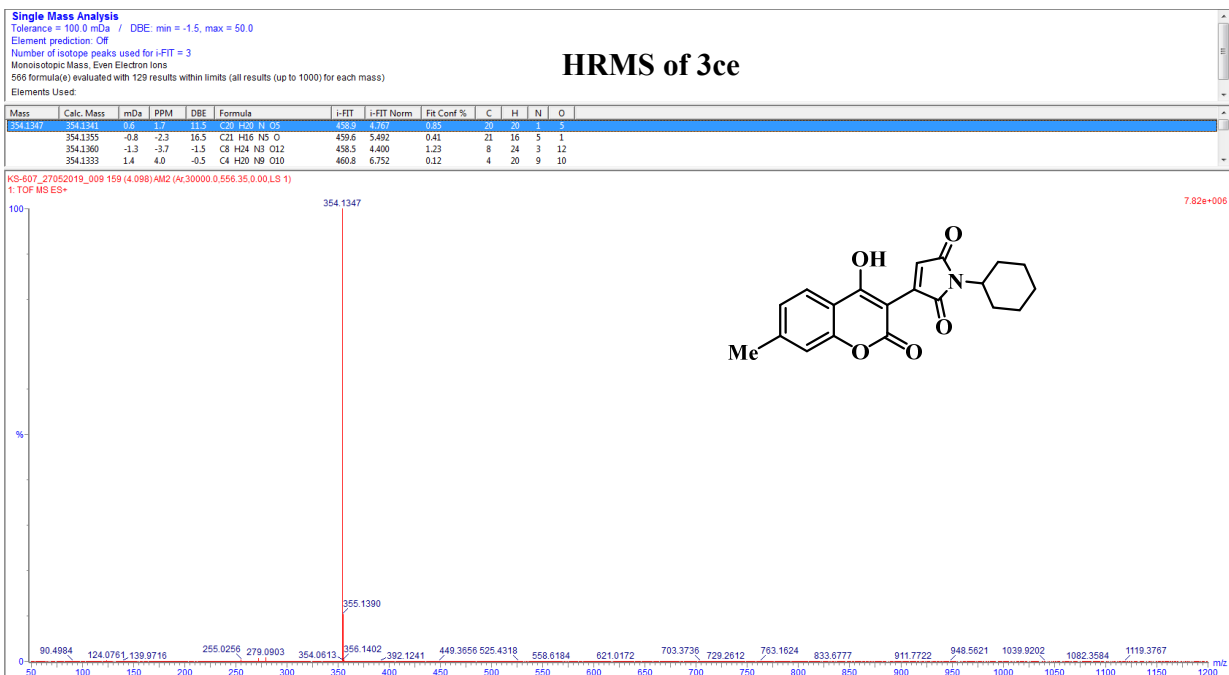


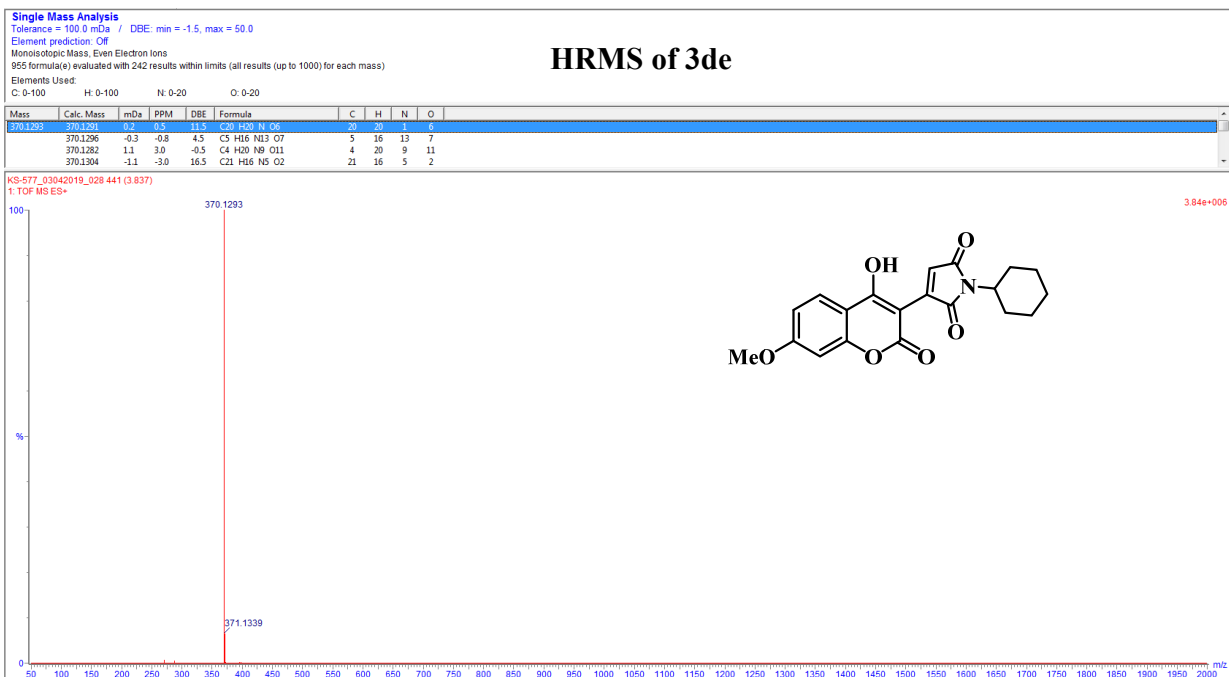
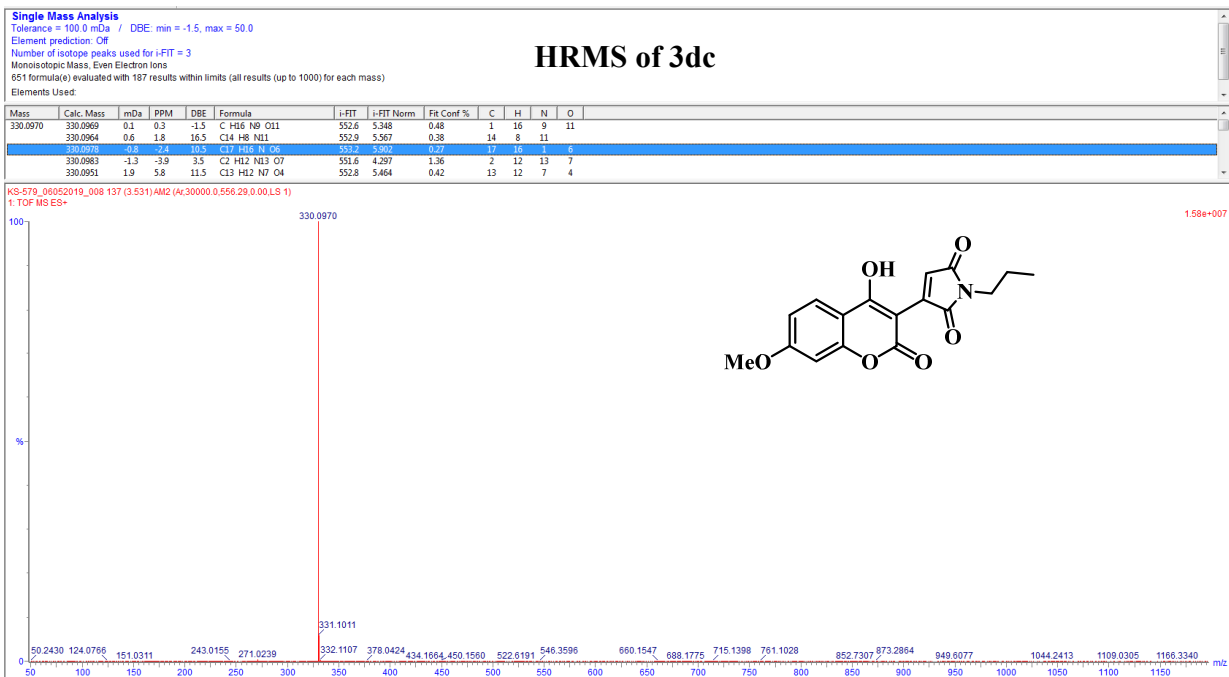


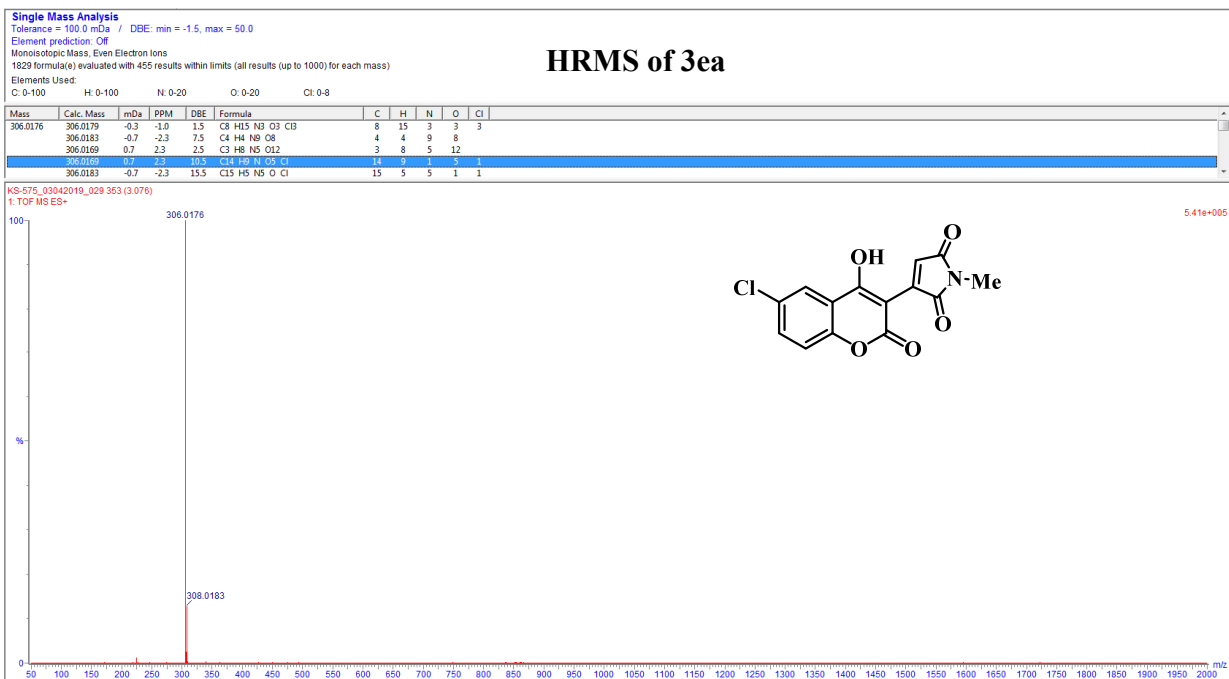
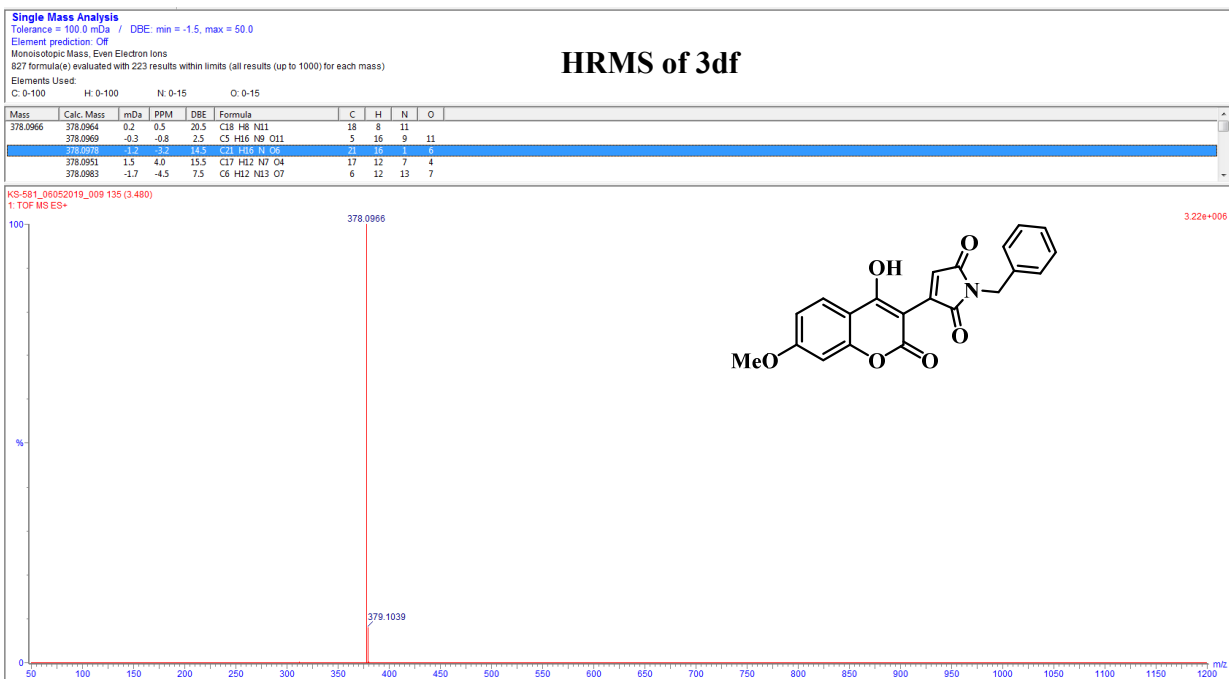


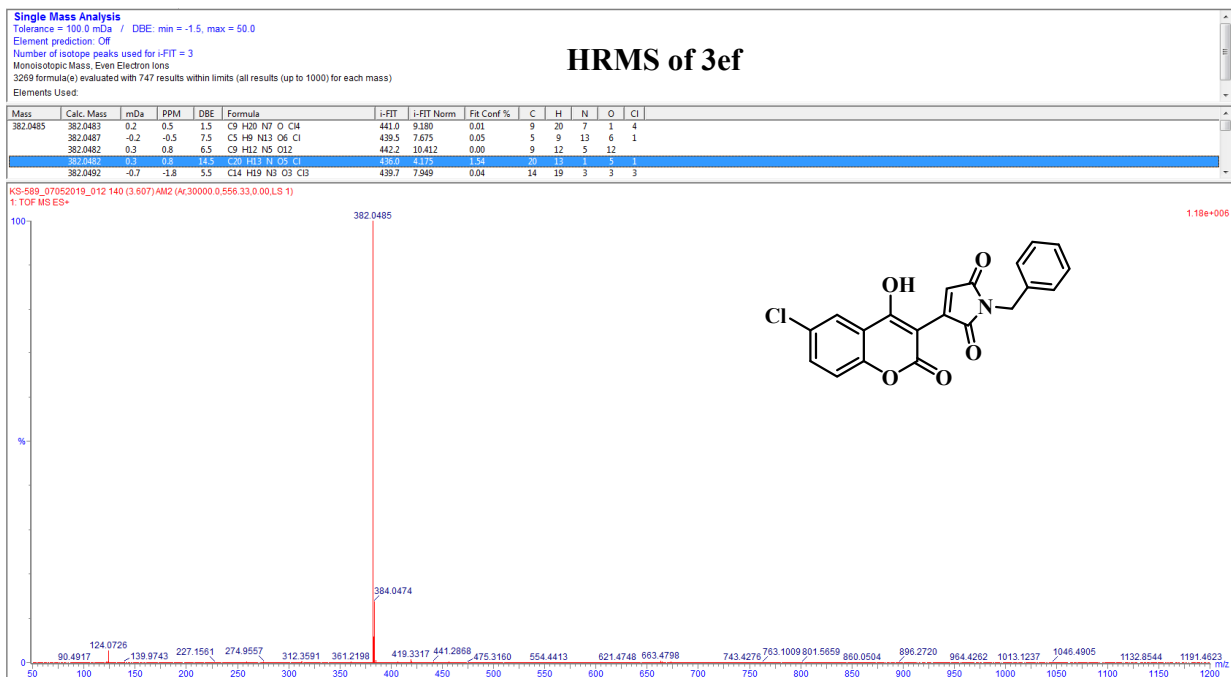
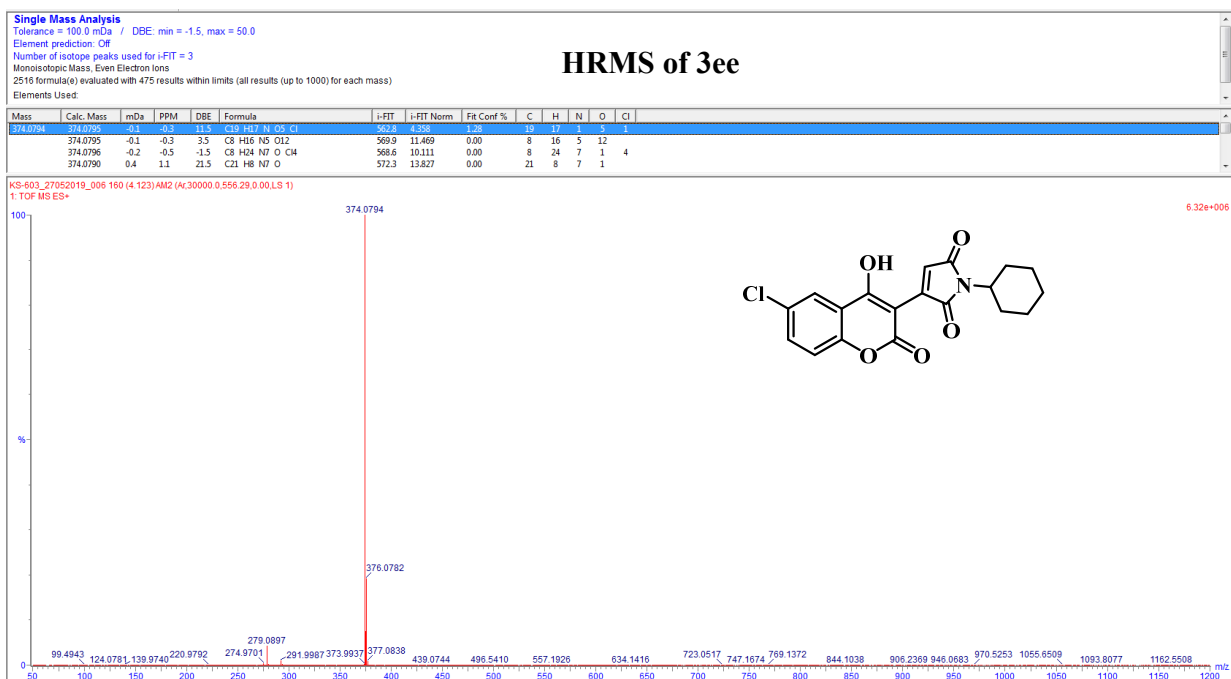


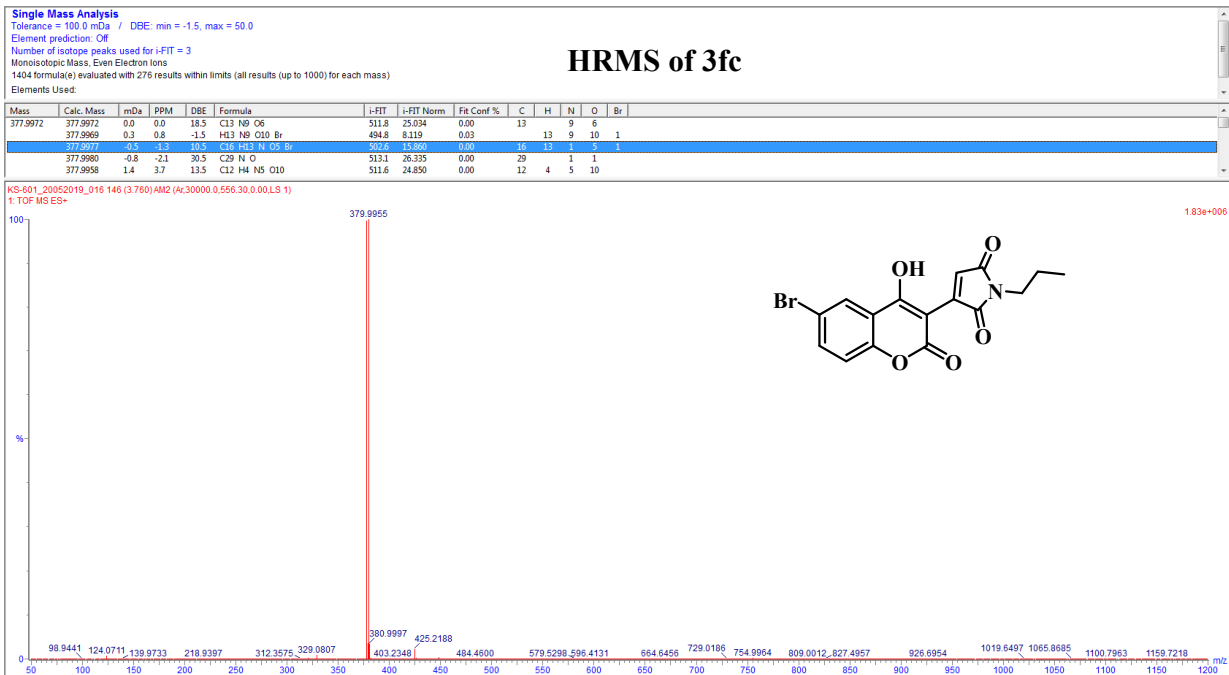
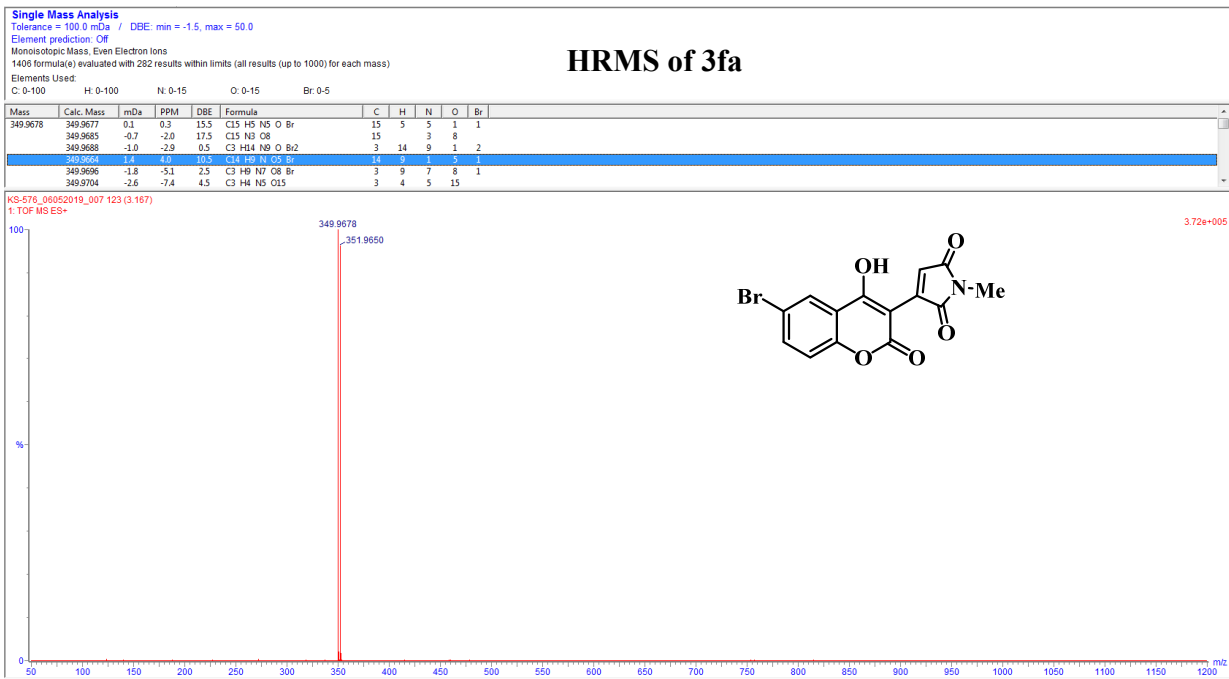


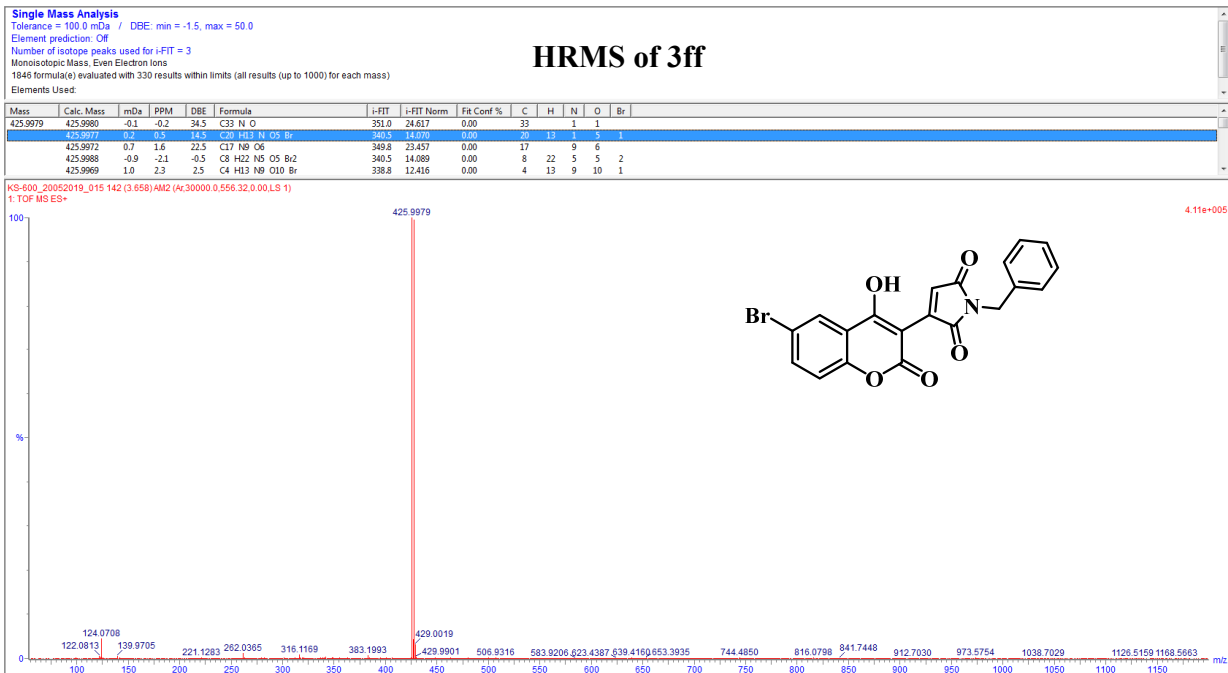
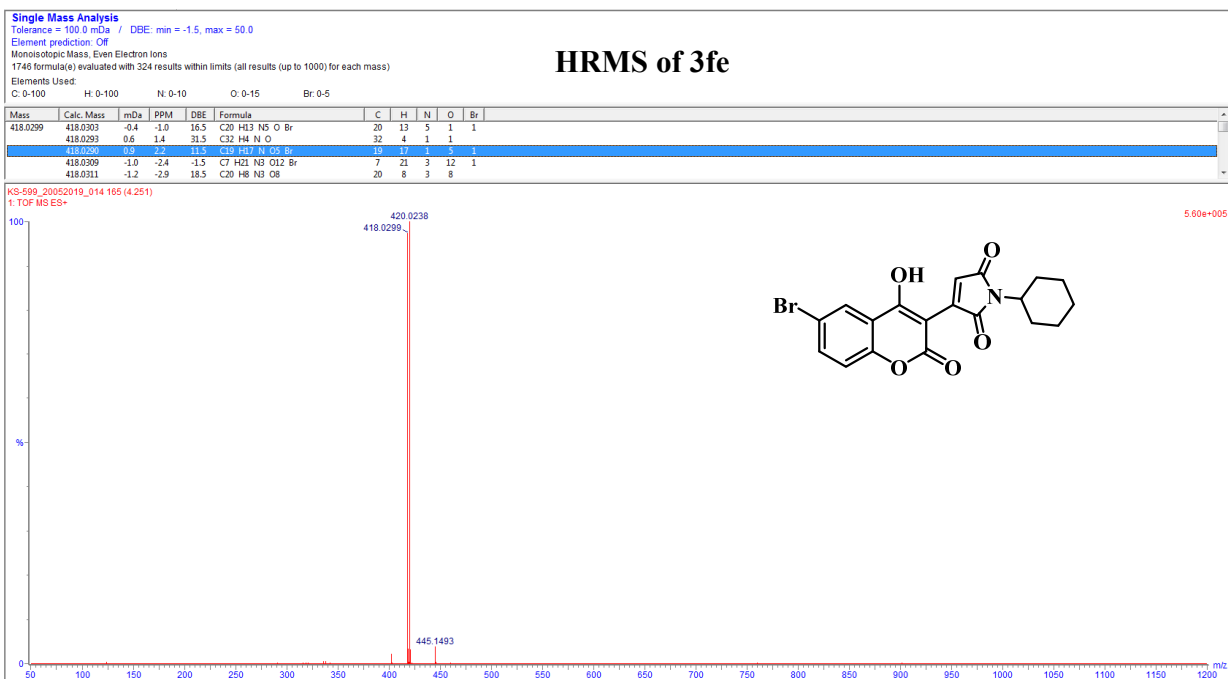


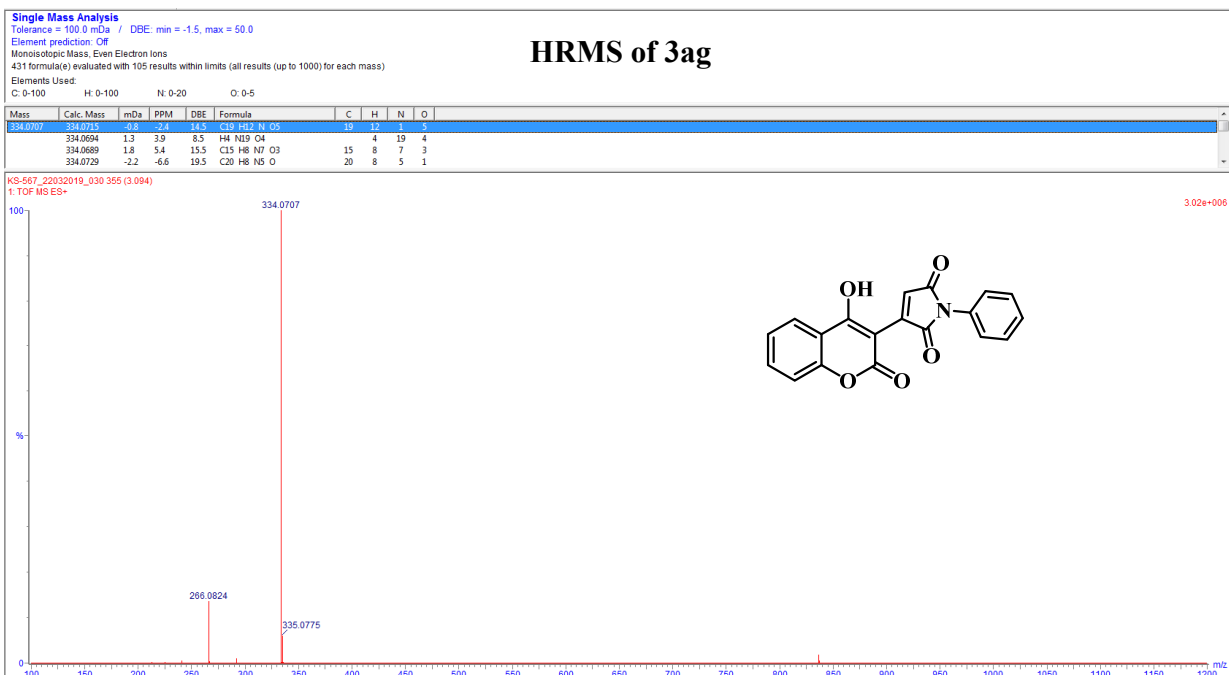
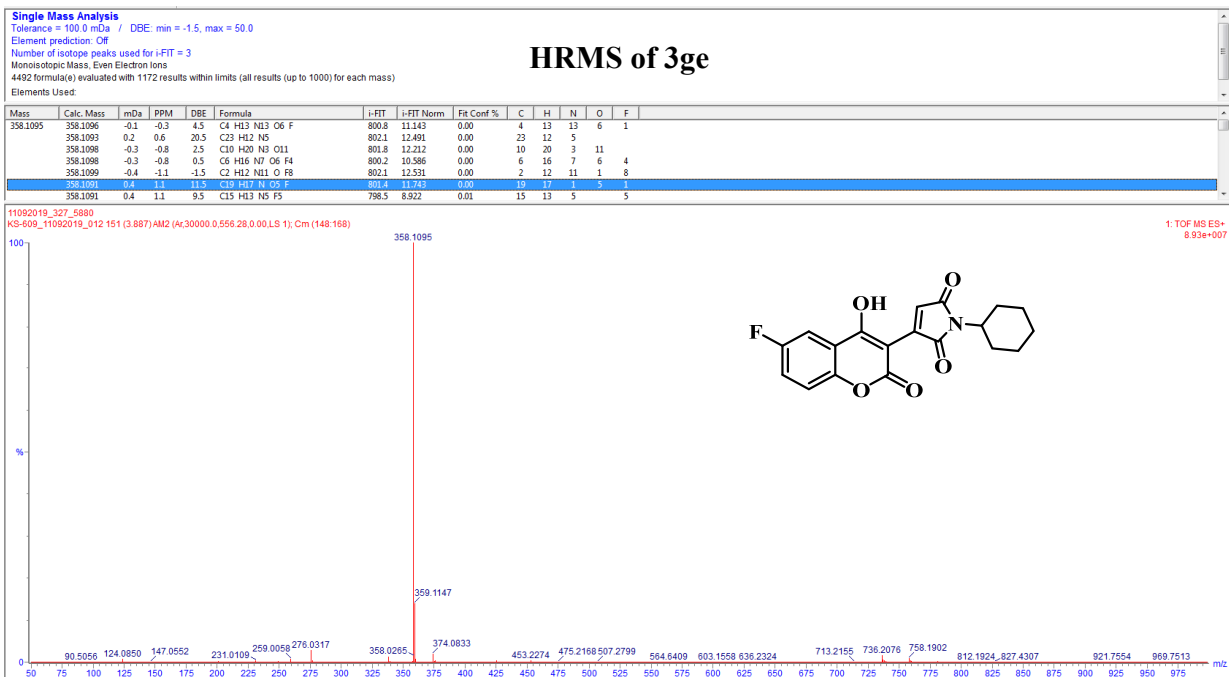


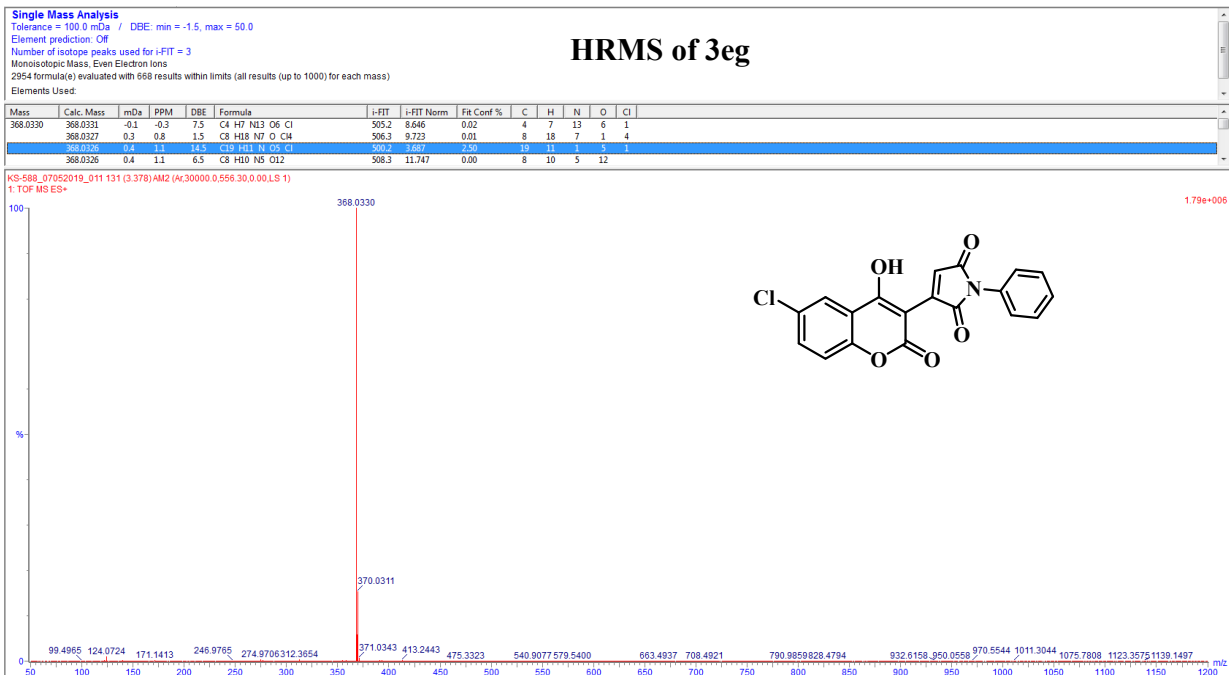
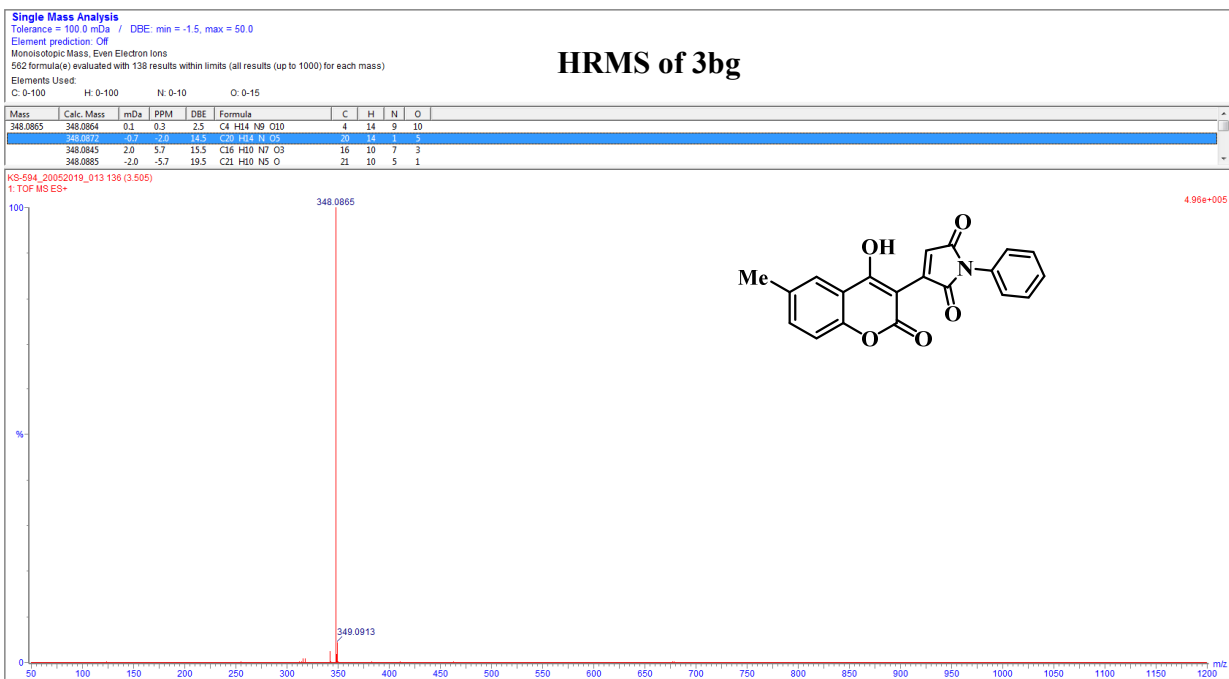


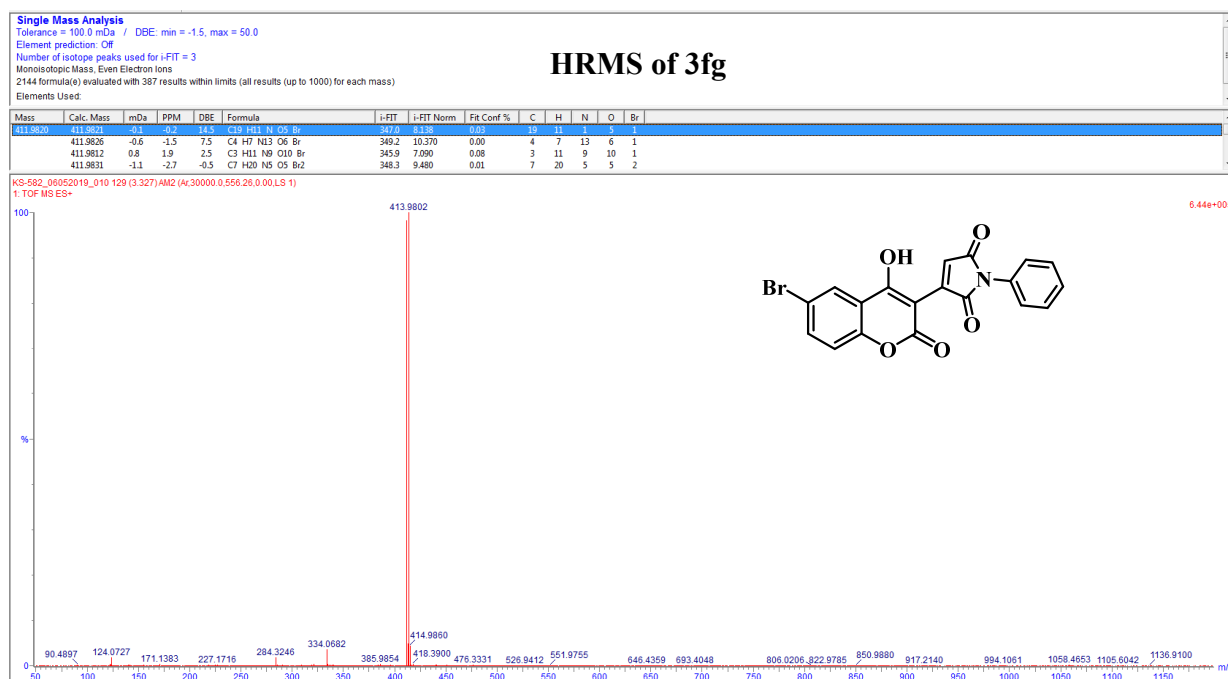








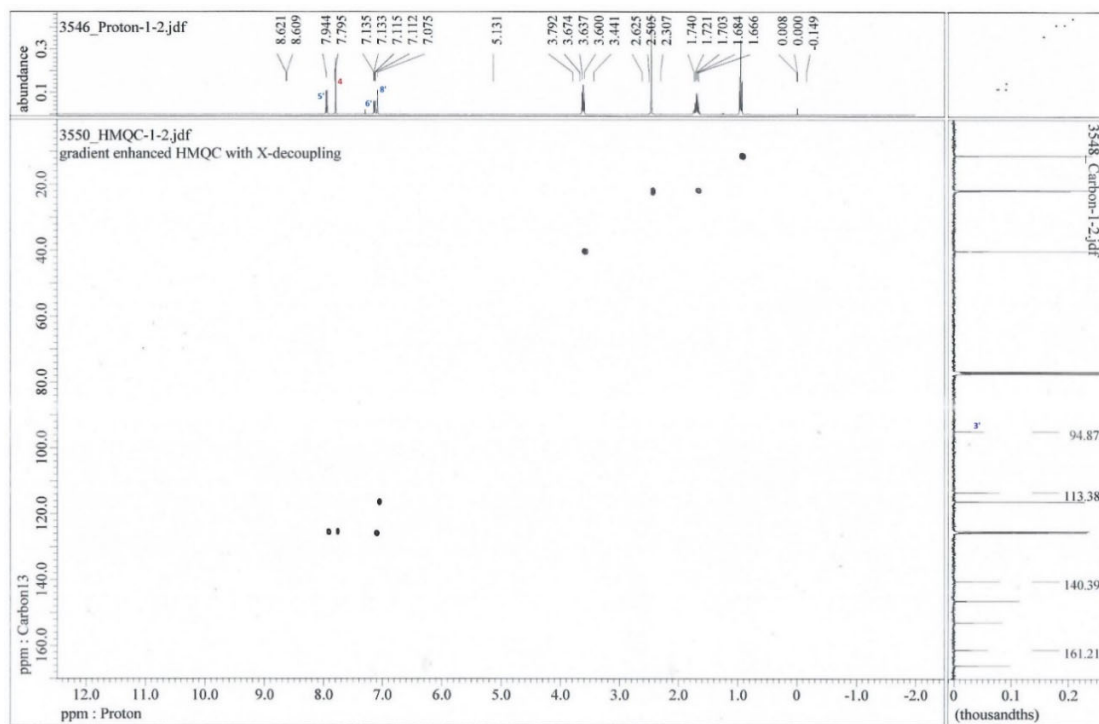
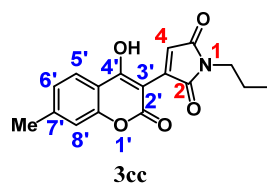




HMQC and HMBC spectra of compound 3cc

The 2D spectra (HMQC and HMBC) of **3cc** at 400 MHz are shown below. From HMBC spectrum, the peak outlined in red shows the three-bond correlation between the **3'**-carbon of coumarin unit and the **4**-proton of maleimide unit. This correlation clearly indicates the presence of maleimide unit at the C3-position of 4-hydroxycoumarin unit. Additionally, **5'**-carbon, **6'**-carbon and **8'**-carbon of coumarin unit are seen as unfunctionalized.

HMQC spectrum of 3cc



HMBC spectrum of 3cc

