

Electronic Supplementary Information

***N*-iodosuccinimide involved One-Pot Metal-free Synthesis of 2-Heteroaromatic Benzothiazole Compounds**

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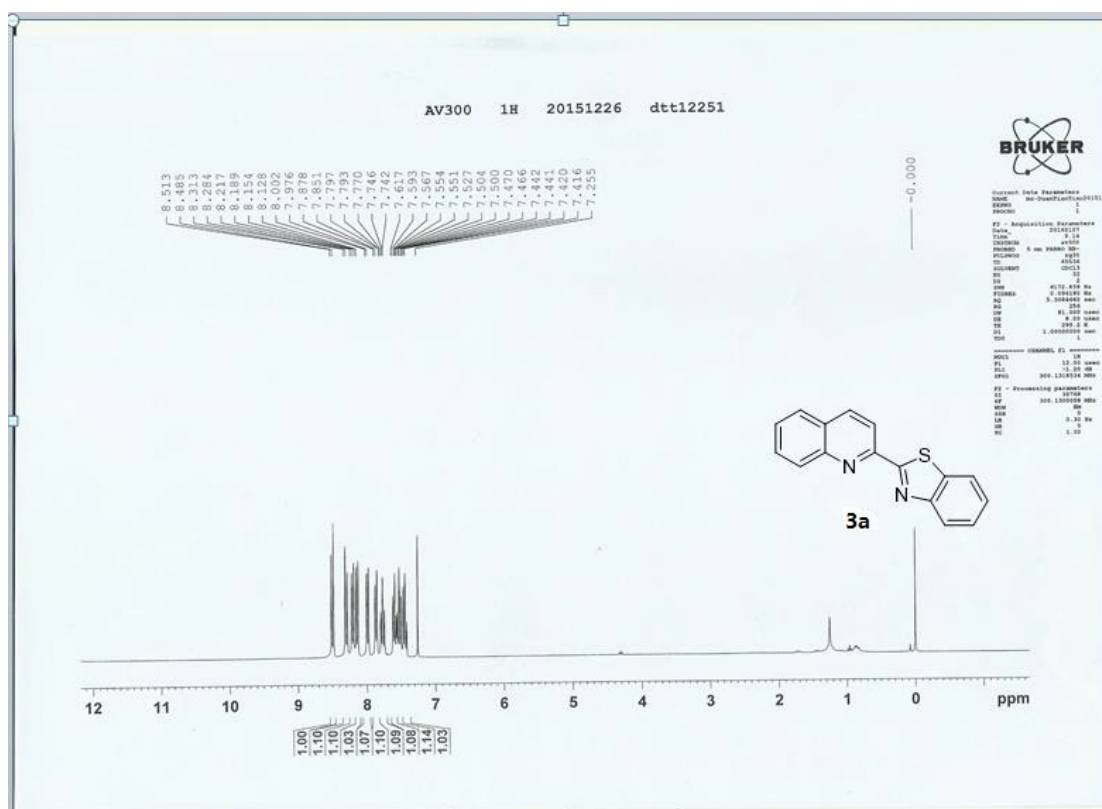
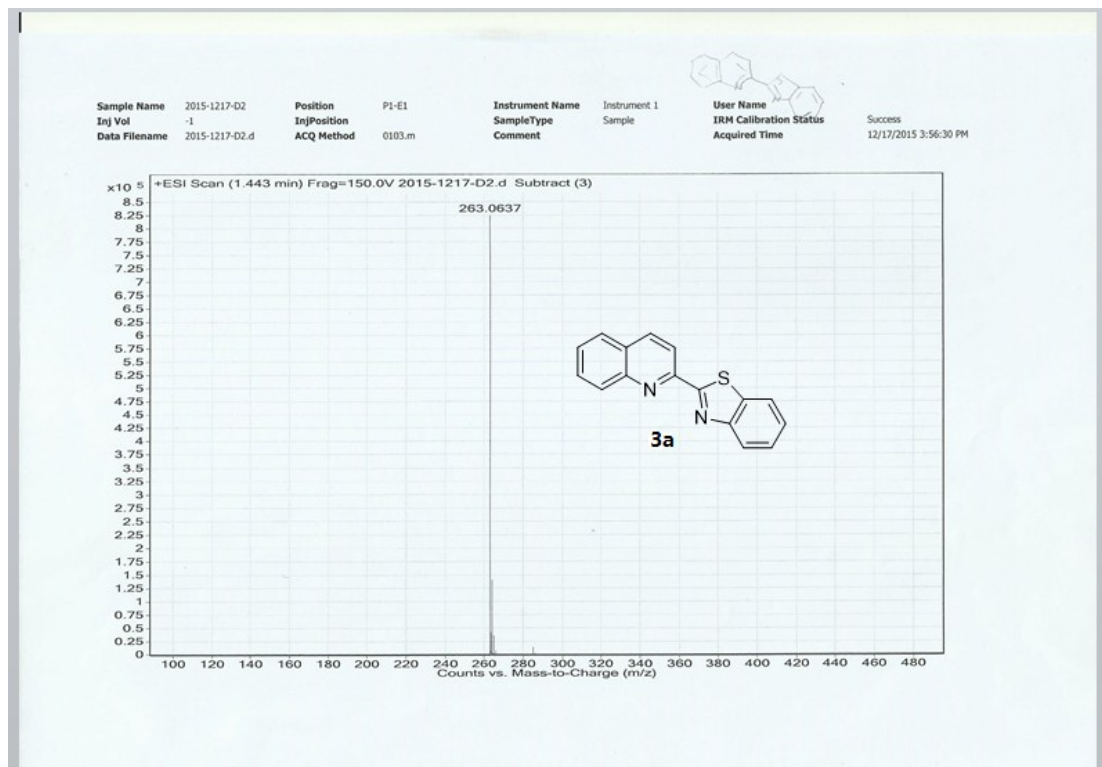
Table of Contents	-----

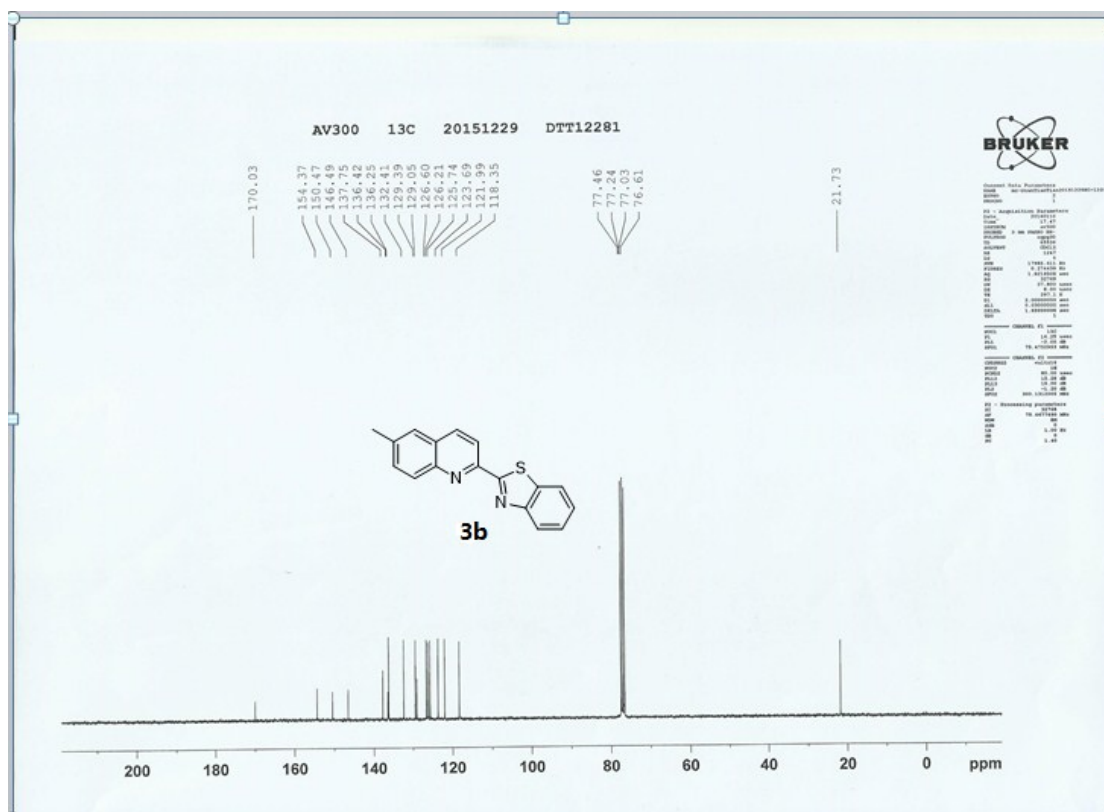
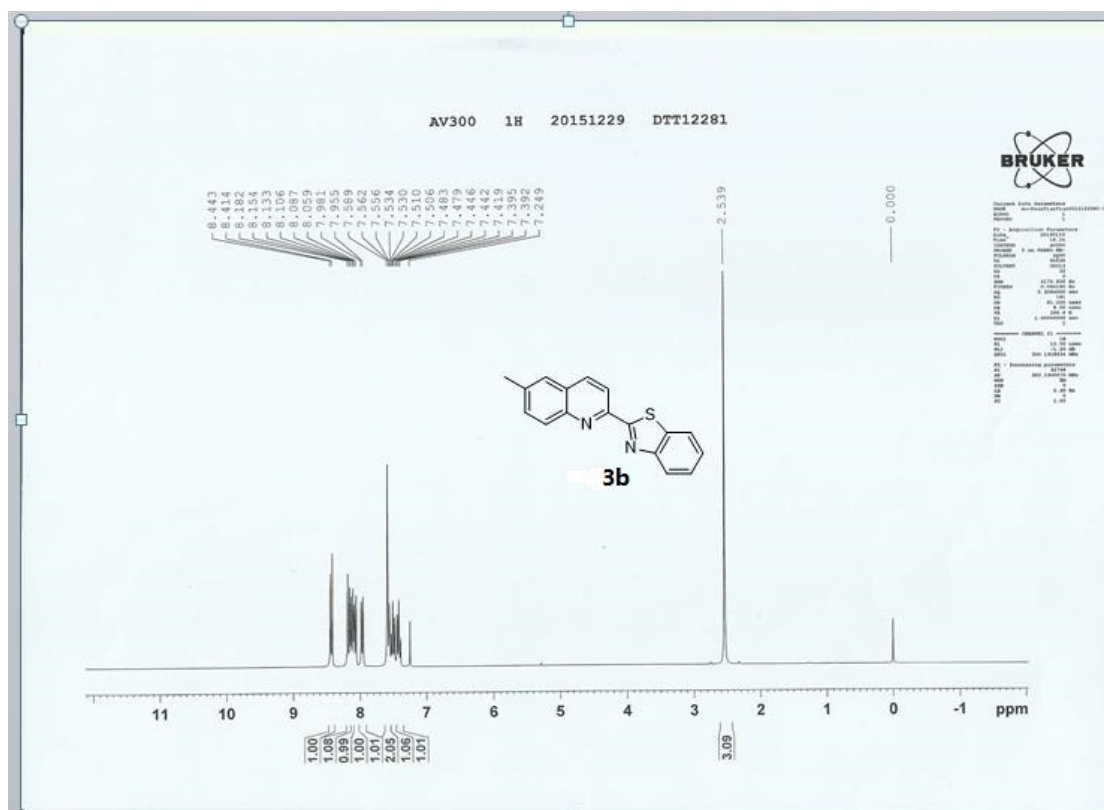
	I. Typical procedure for synthesis of 2
	Page 2
II. NMR Spectra and HRMS	Page 3
III. References	Page 36

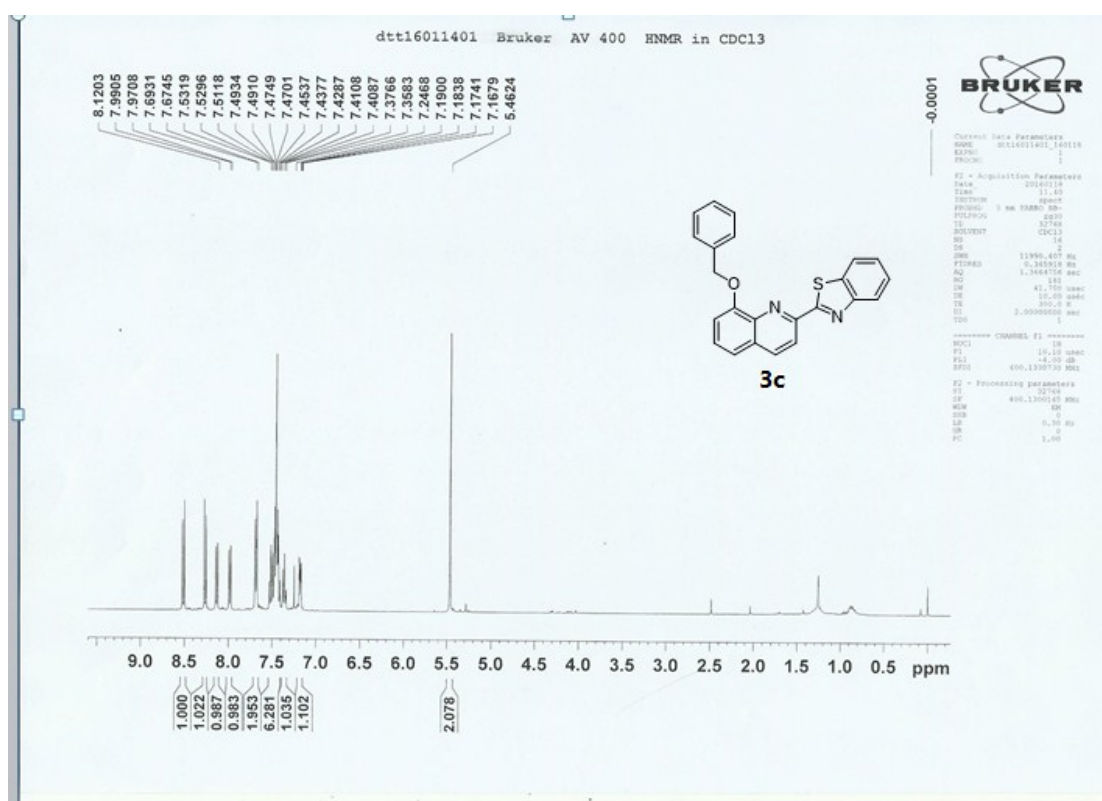
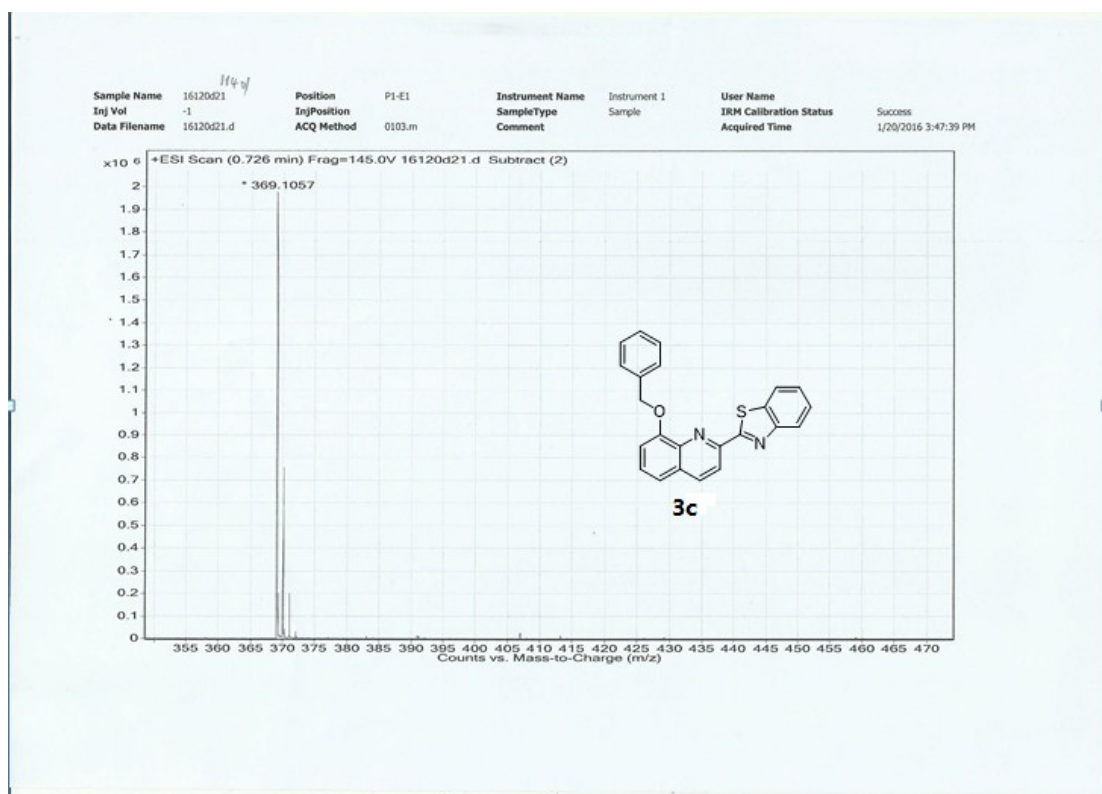
Typical procedure for synthesis of 2¹

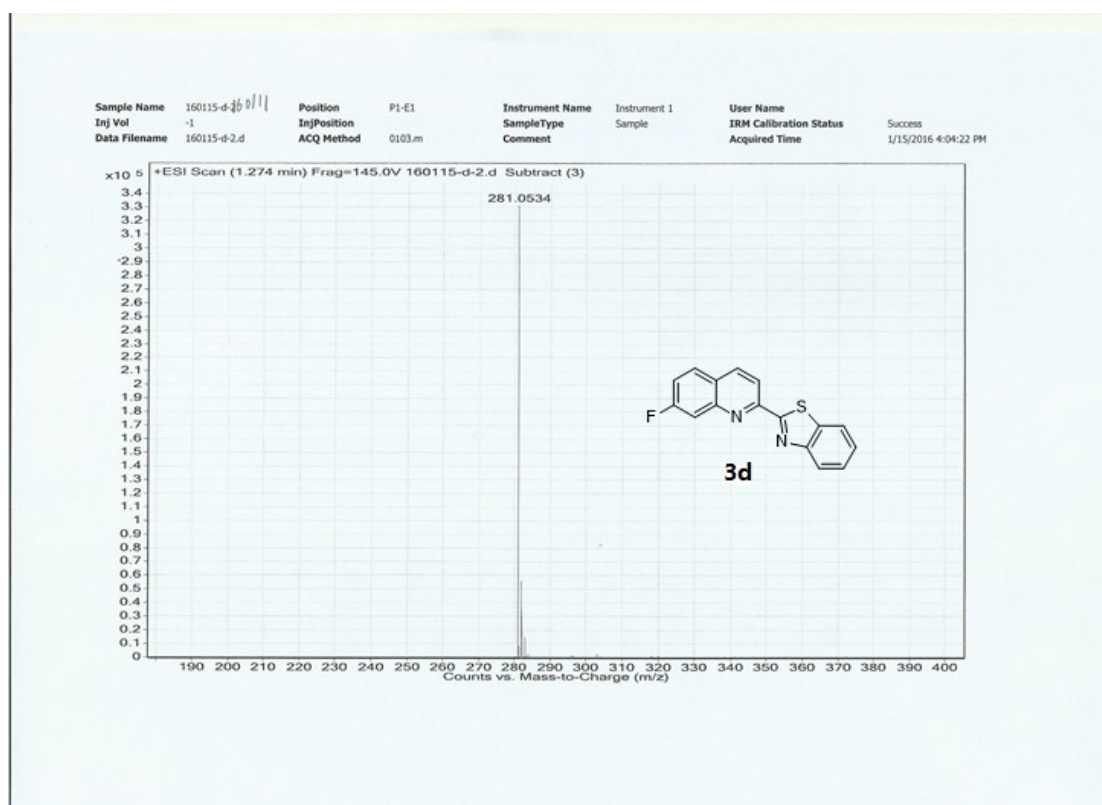
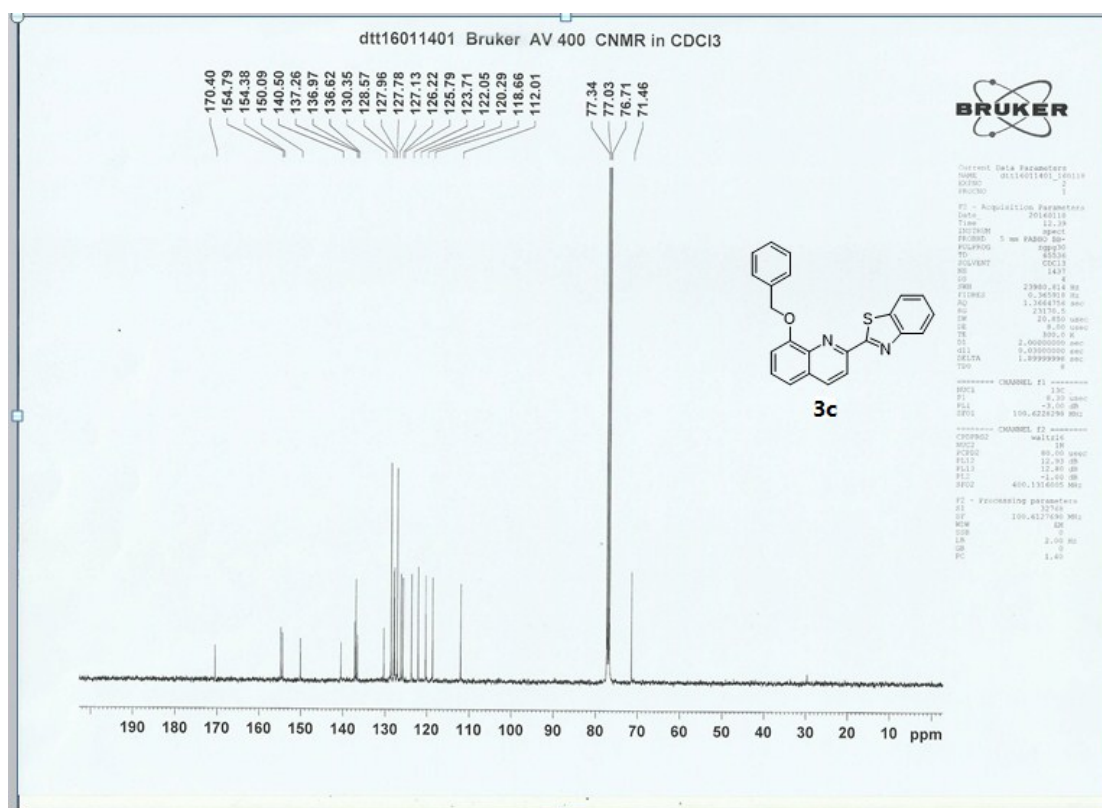
0.06 Moles of the 2-aminobenzothiazole was dissolved in 40 ml of warm 85% H_3PO_4 . The resultant homogeneous solution was cooled to $-8\text{ }^\circ\text{C}$ and a concentrated aqueous solution of 0.036 moles of NaNO_2 was added slowly below the surface with stirring such that the temperature was not allowed to rise above $-4\text{ }^\circ\text{C}$. The resultant thick yellow syrup was added to 15 ml of pre-chilled ($0\text{ }^\circ\text{C}$) H_3PO_2 (50% Fisher) drop wise with stirring and then allowed to warm to room temperature. After all gas evolution ceased, the solution was diluted with ice-cold water, neutralized with Na_2CO_3 , and extracted with chloroform. The chloroform layer was dried (Na_2SO_4), concentrated on vacuo, and the crude benzothiazole purified either by sublimation or crystallization from water /ethanol

III. NMR Spectra and HRMS

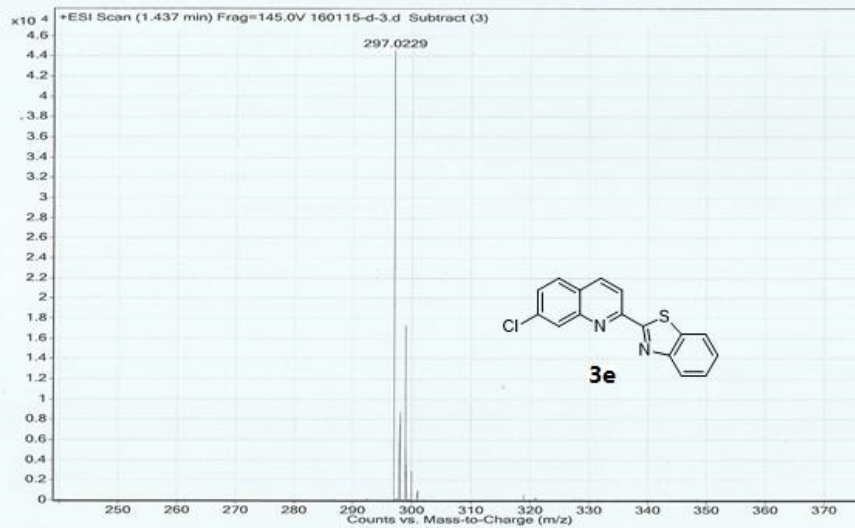




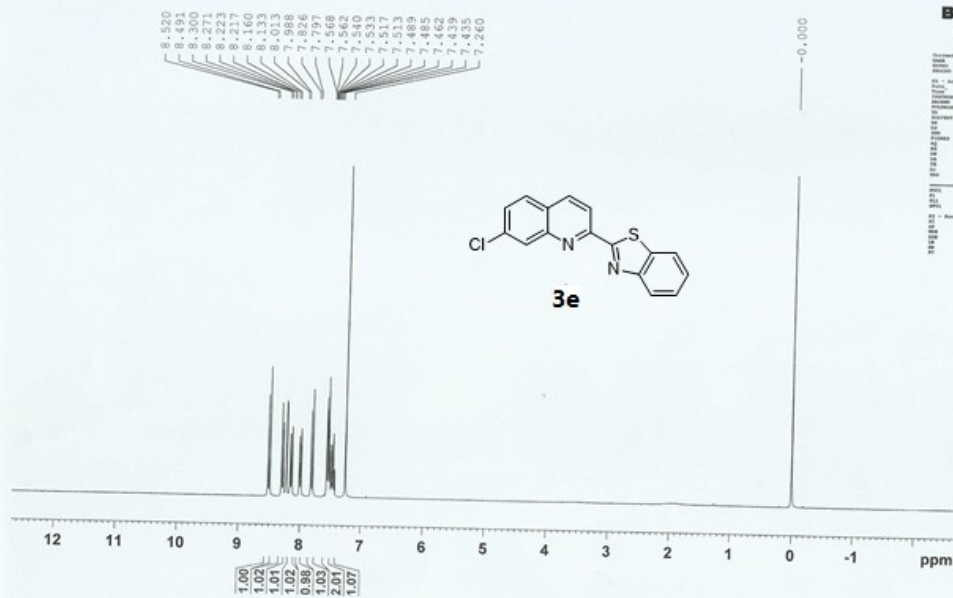




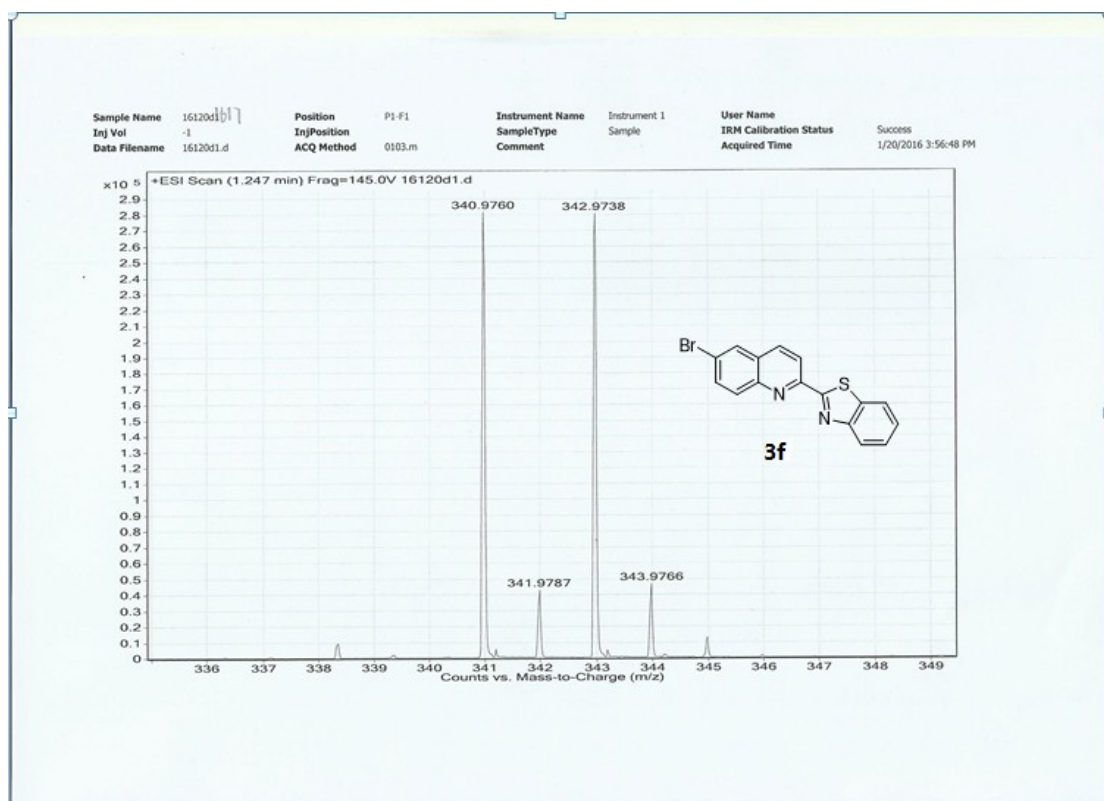
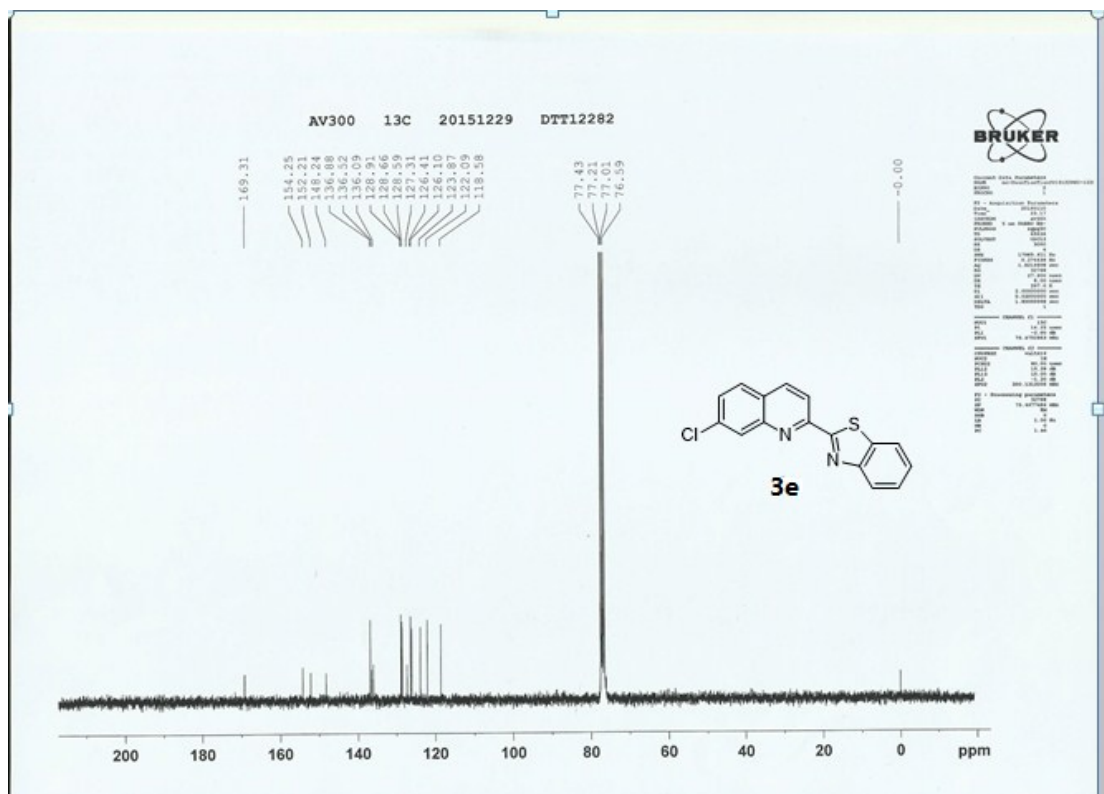
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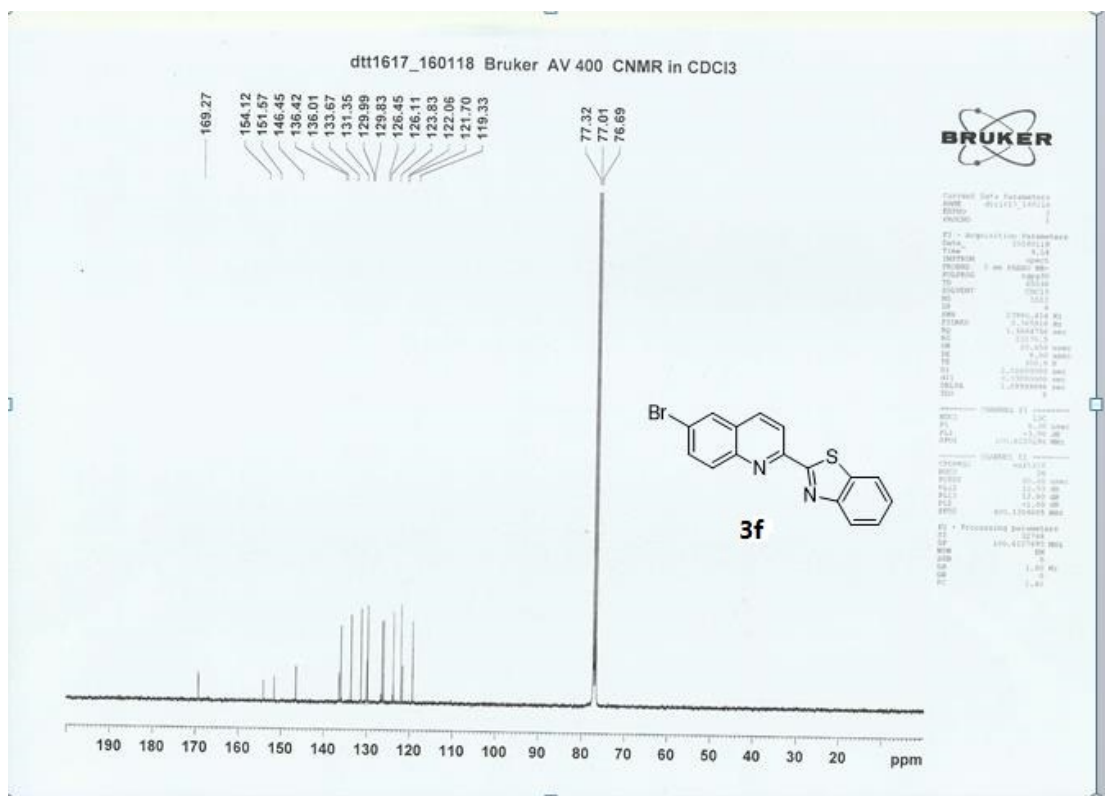
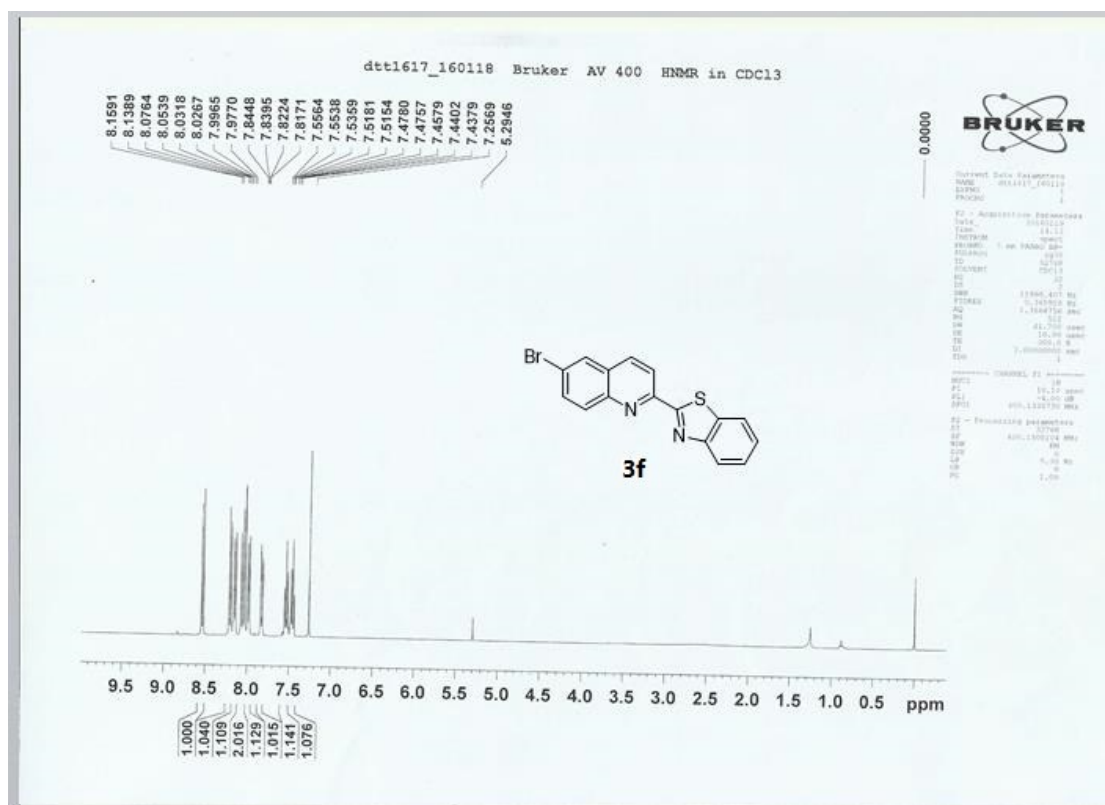


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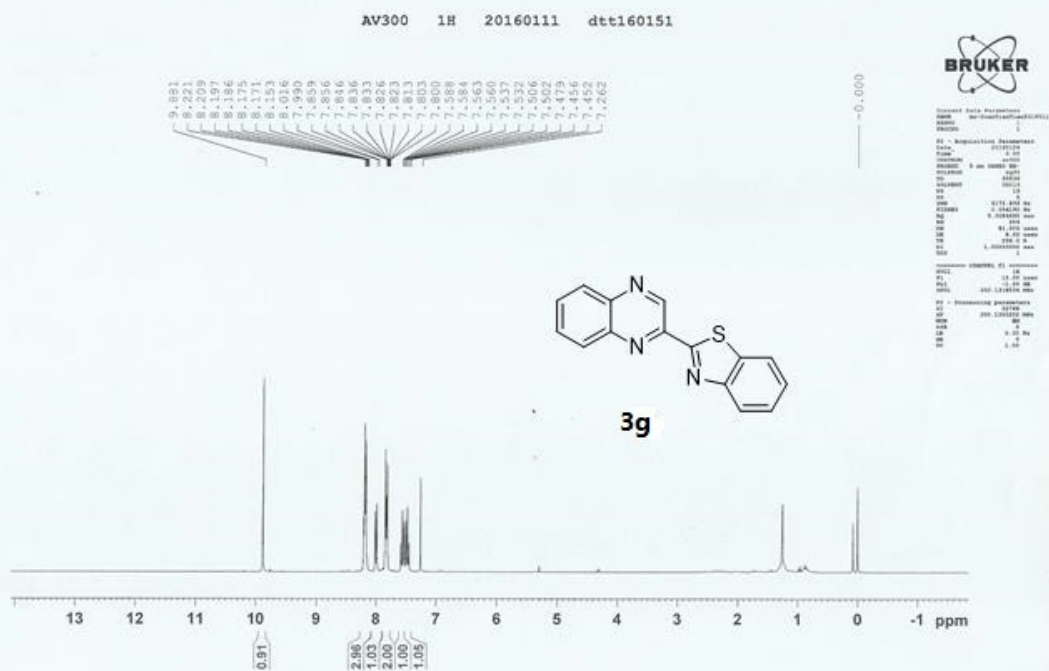
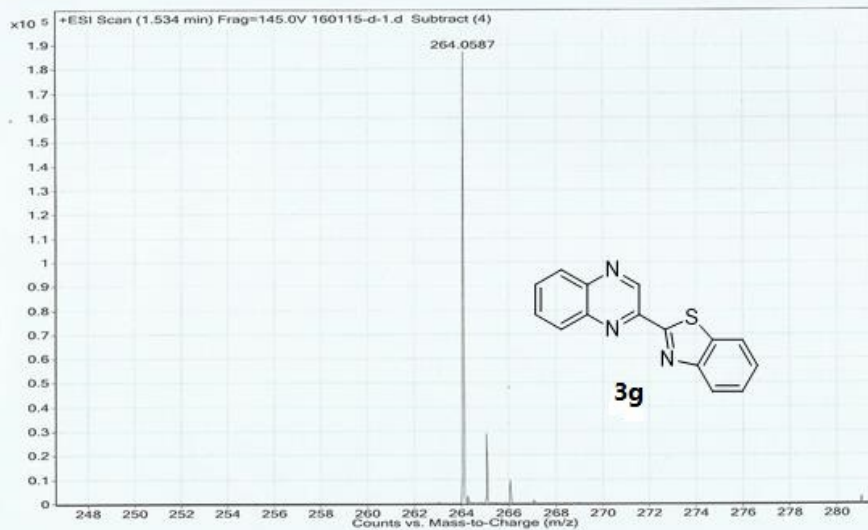


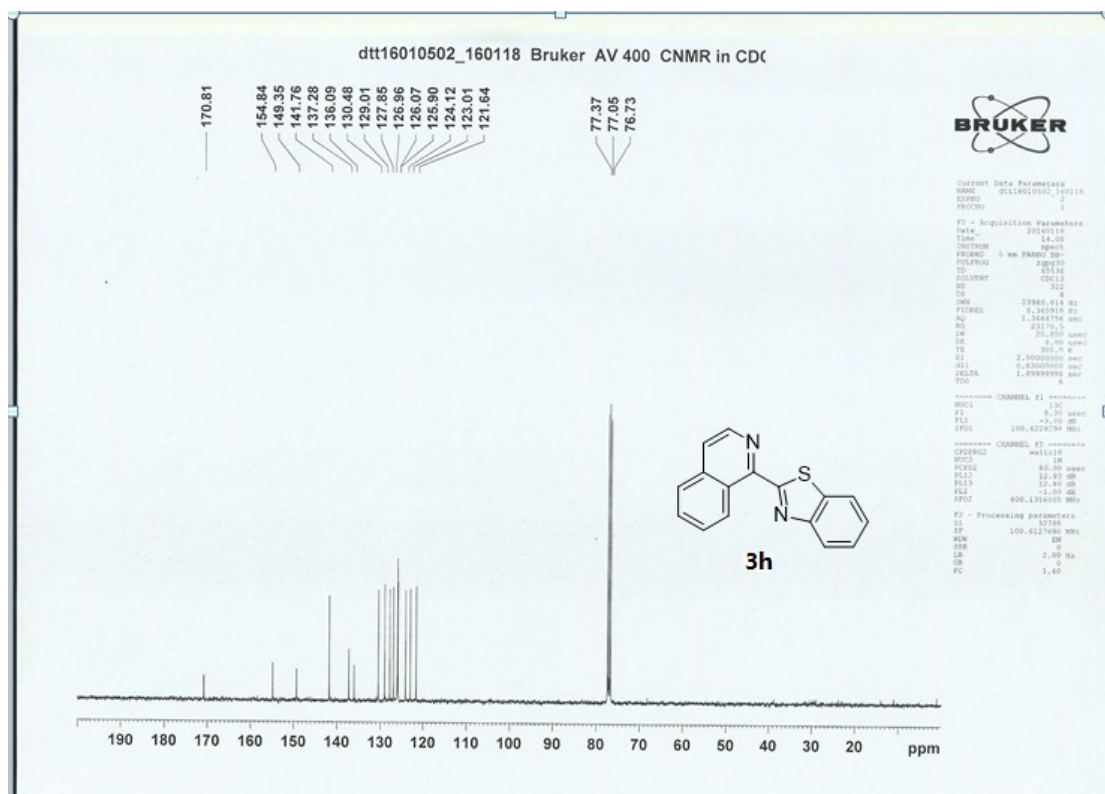
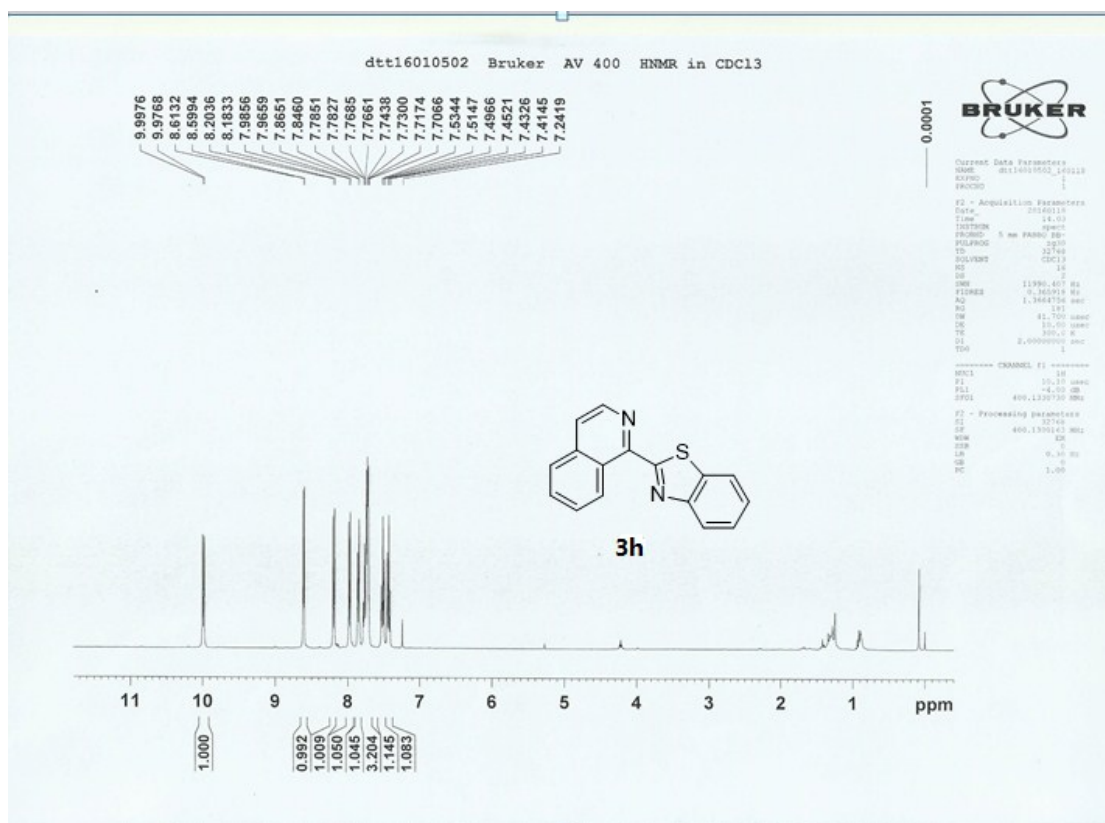
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1.01
1.02
0.98
1.03
2.01
1.07



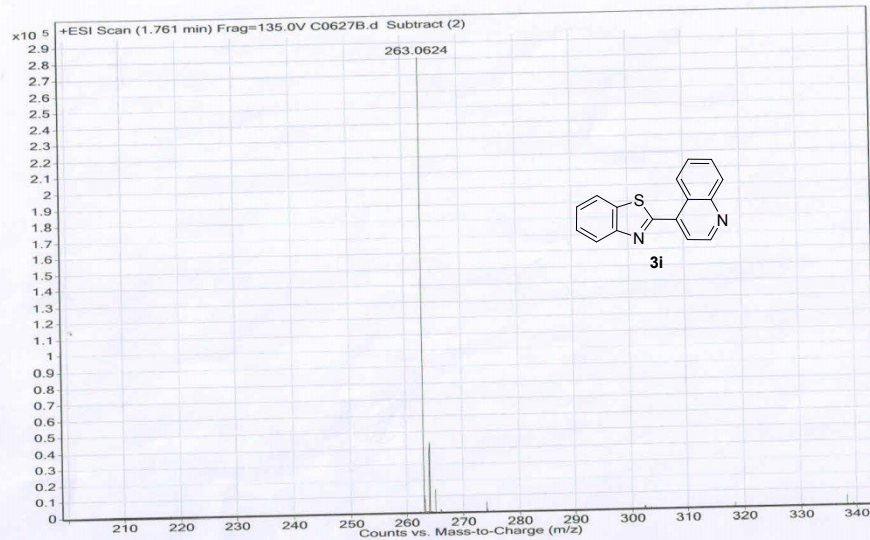


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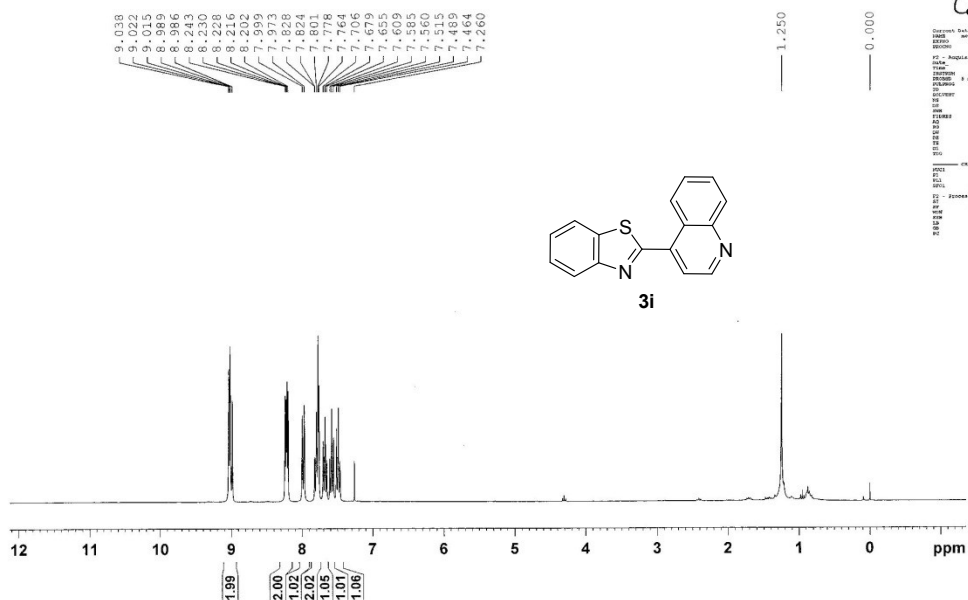




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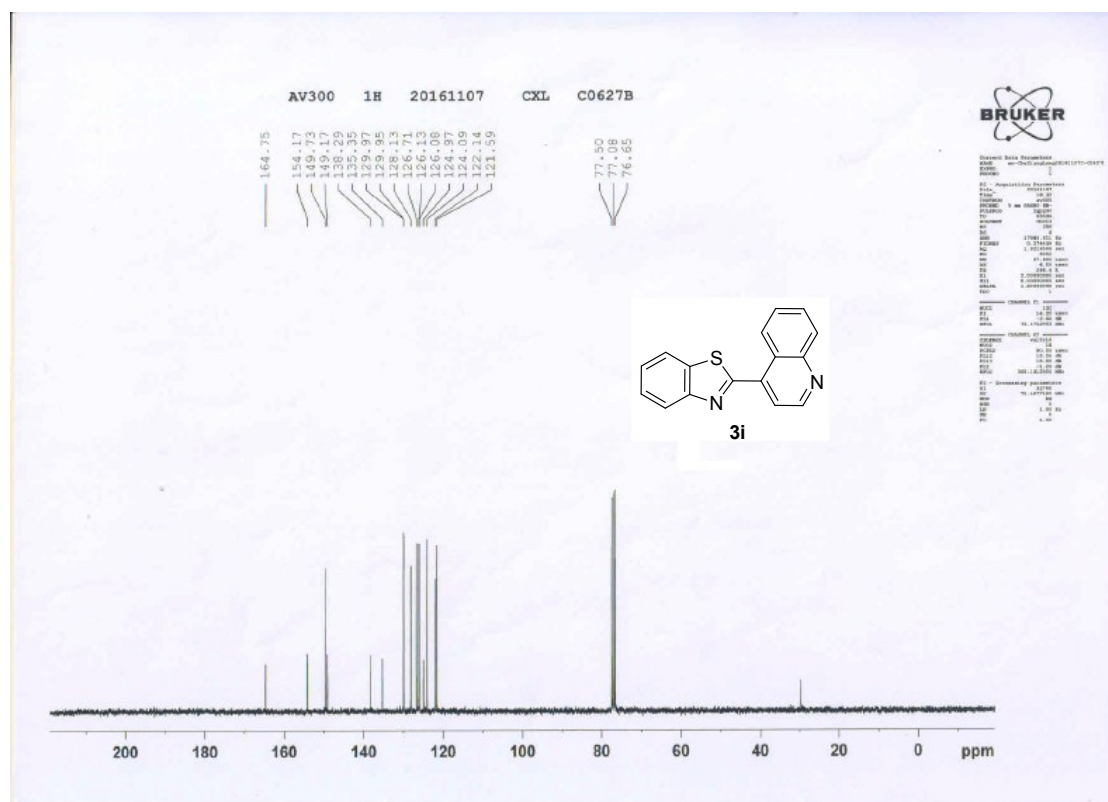


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BRUKER

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3j

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