

Cu(I)-Catalyzed Tandem Benzyldiazoester coupling with Terminal Alkyne-Allene formation-Michael reaction: Application to the synthesis of Oxa and Azacycles

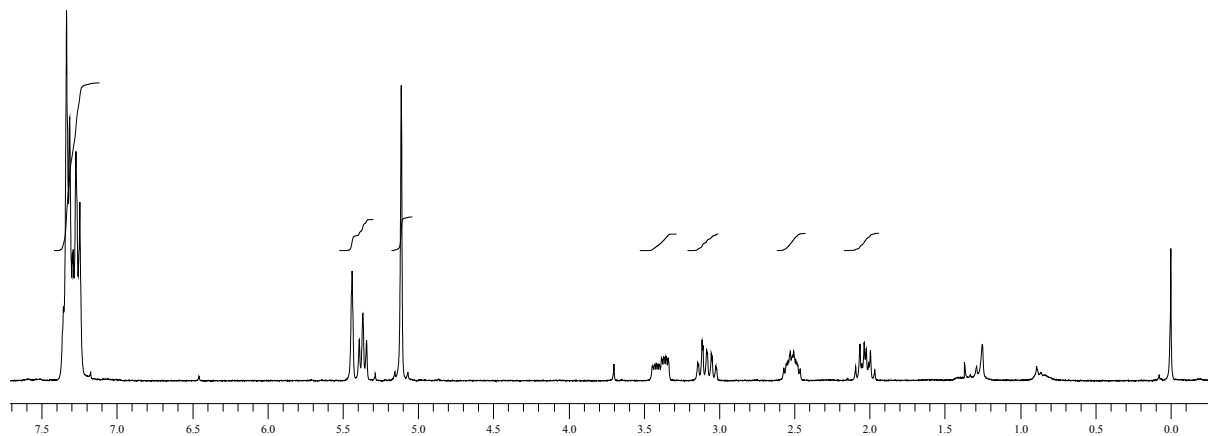
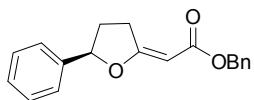
Gullapalli Kumaraswamy* Neerasa Jayaprakash and Guniganti Balakishan
Organic Division III,
Indian Institute of Chemical Technology, Hyderabad-500 607, India.
Tel: + 91-40-27193154. Fax: + 91-40-27193275.

Supporting Information

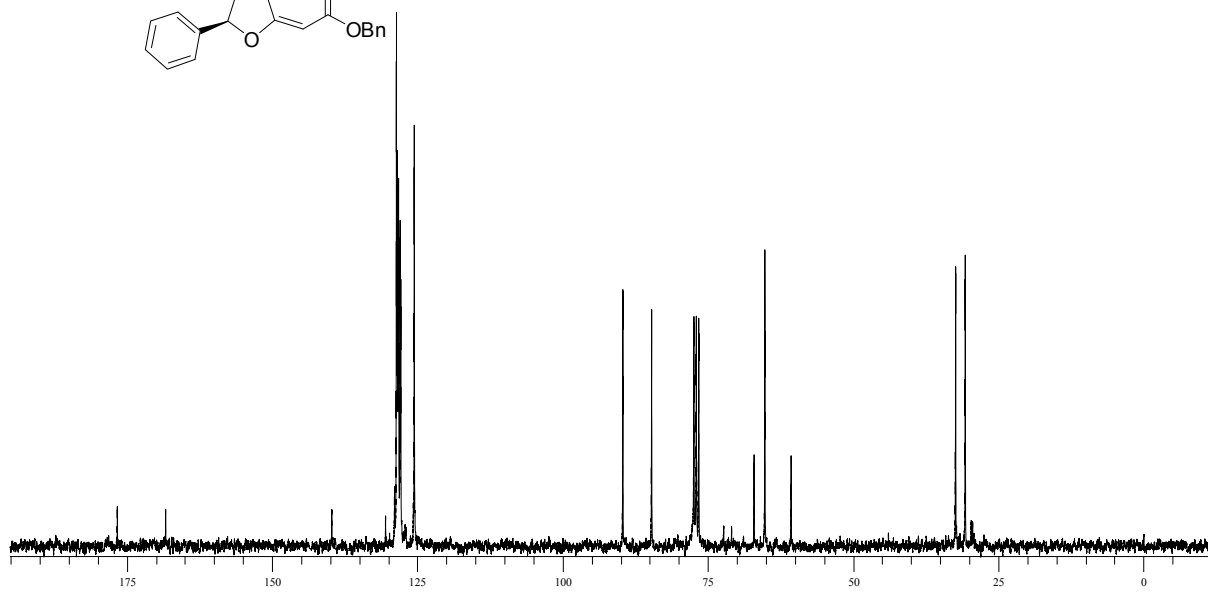
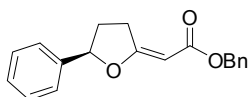
Table of Contents

1. Copies of ^1H and ^{13}C NMR spectra for all compounds	S2-S24
2. HPLC data for compounds 3b and 3f	S25-28

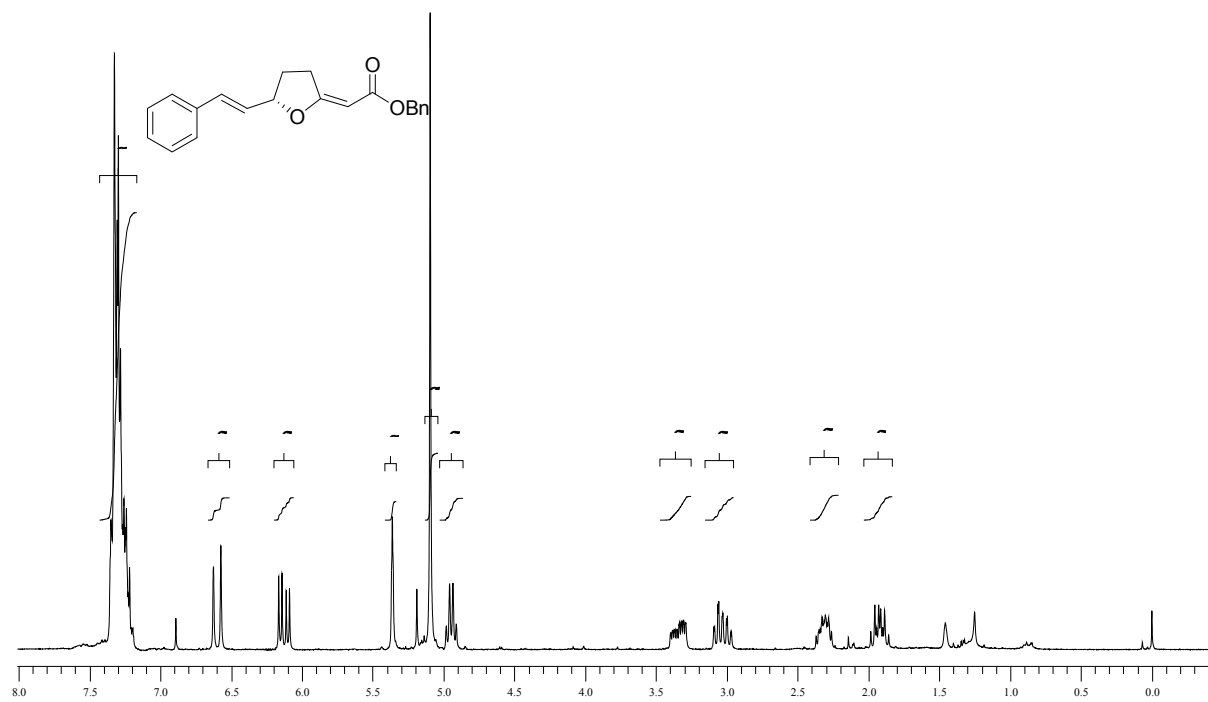
^1H NMR of **3b** in CDCl_3



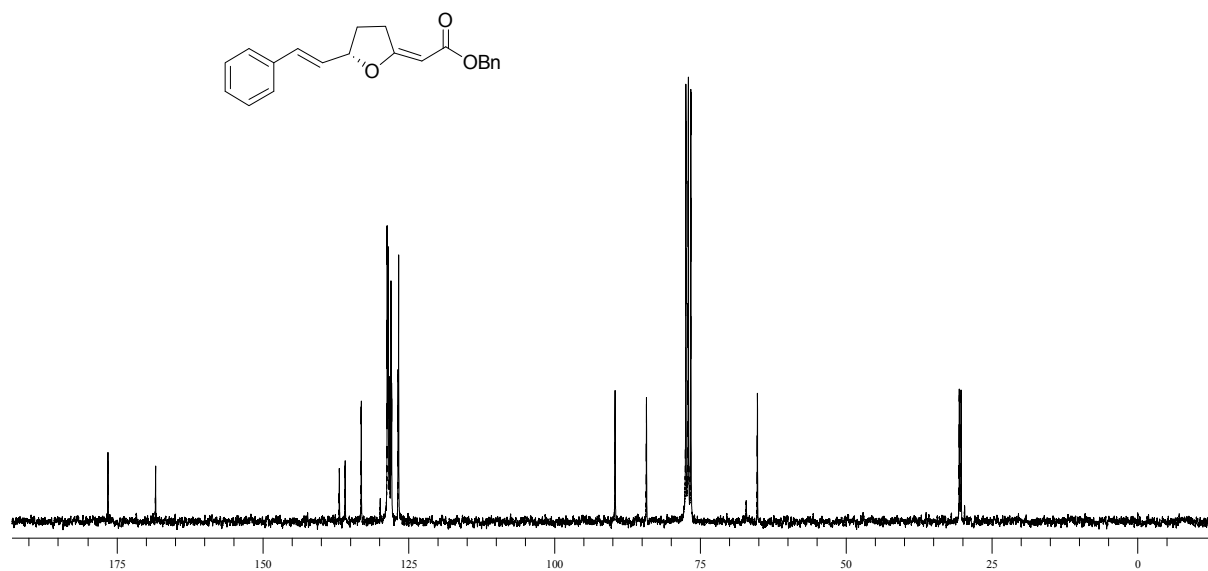
^{13}C NMR of **3b** in CDCl_3



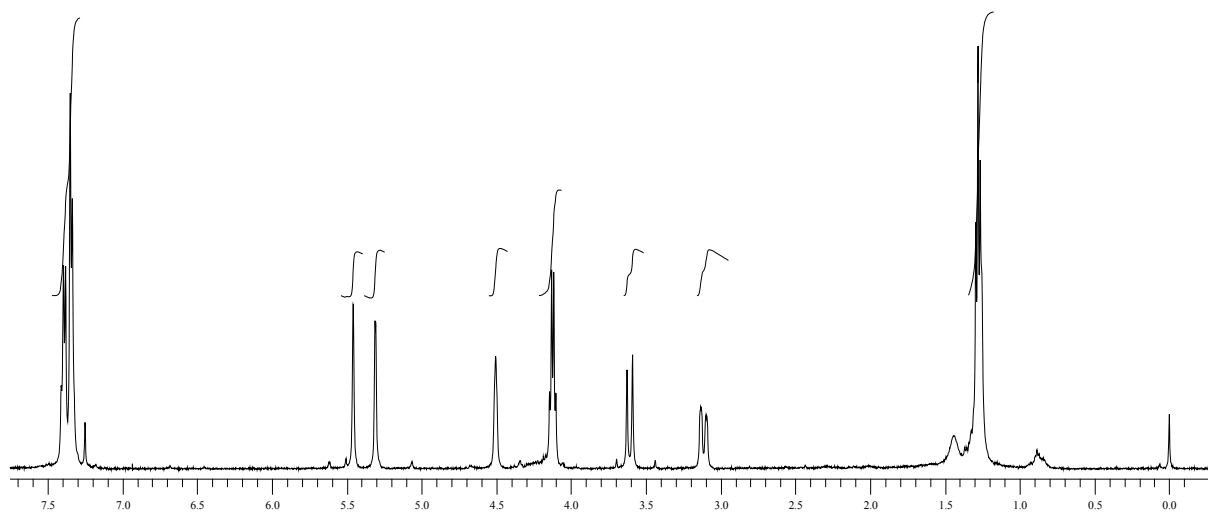
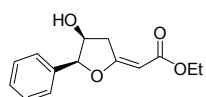
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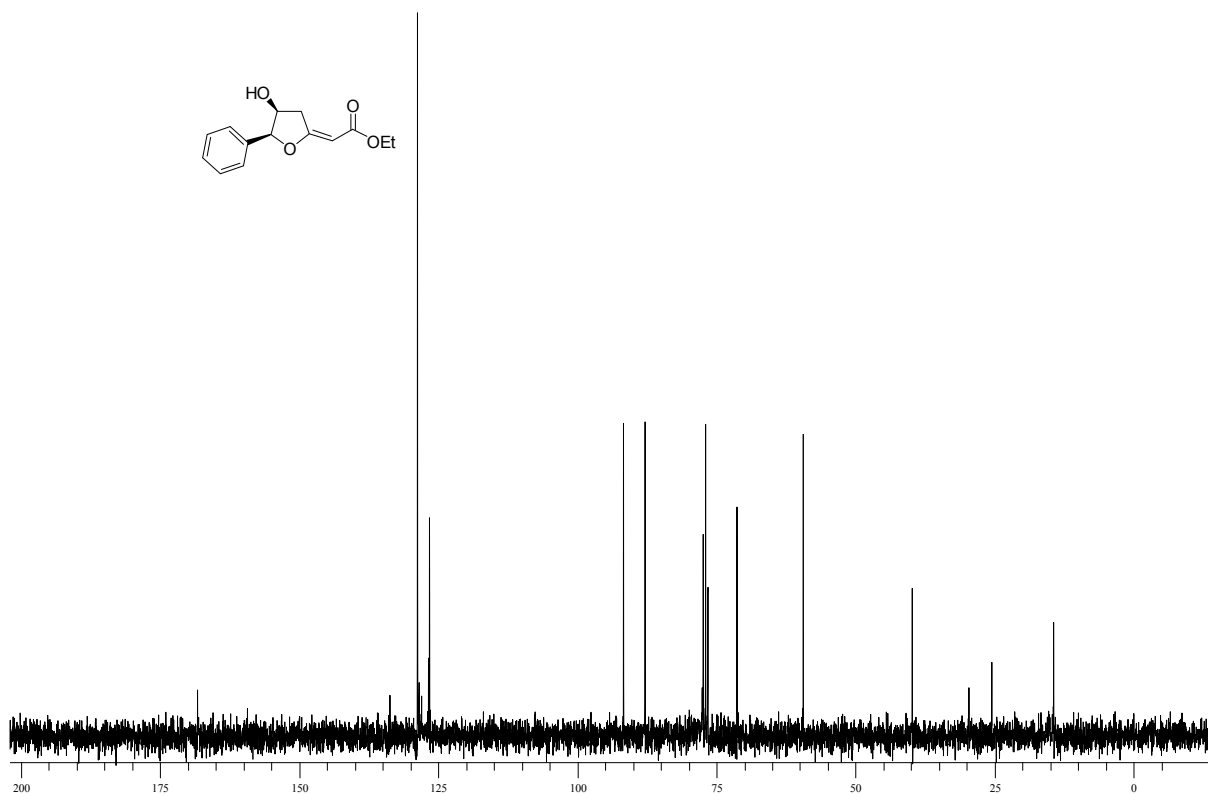
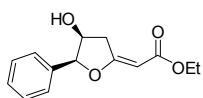
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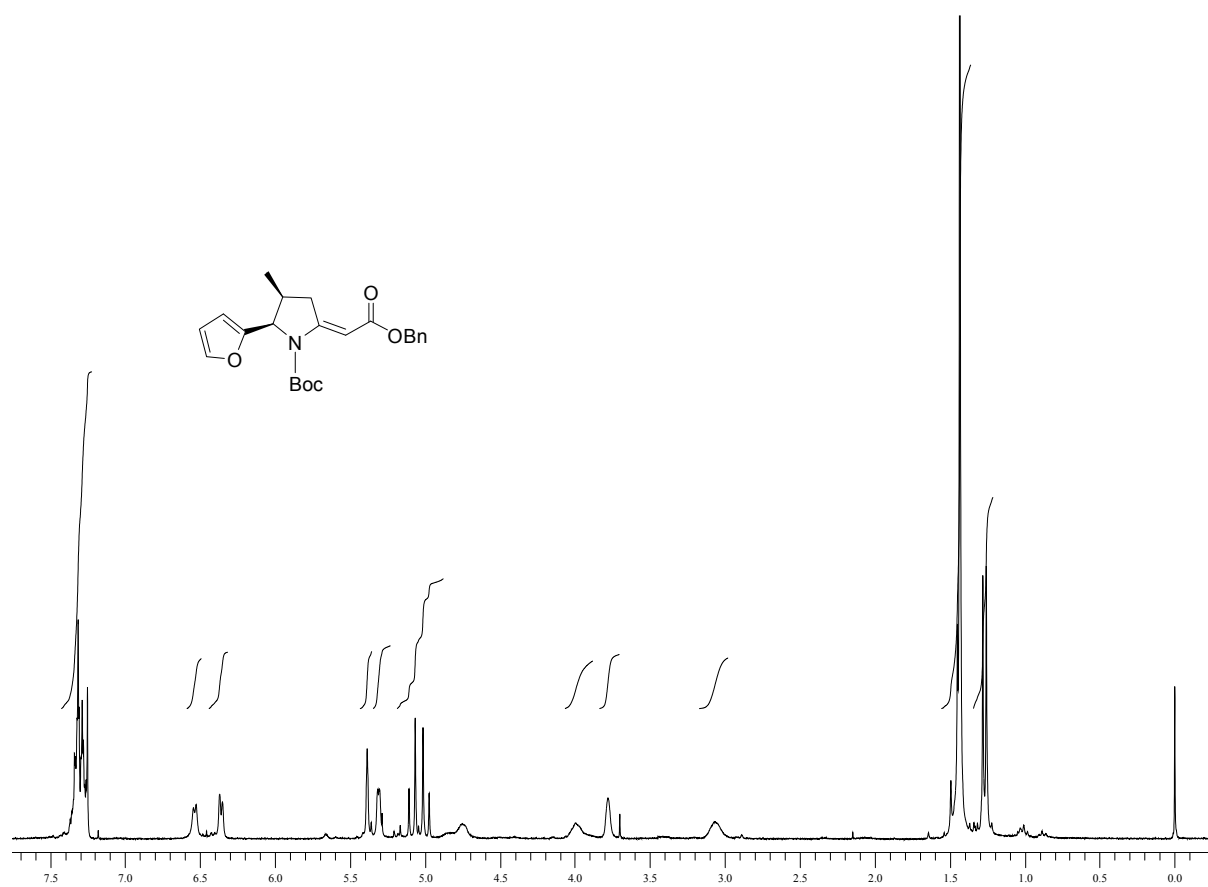
^1H NMR of **3d** in CDCl_3



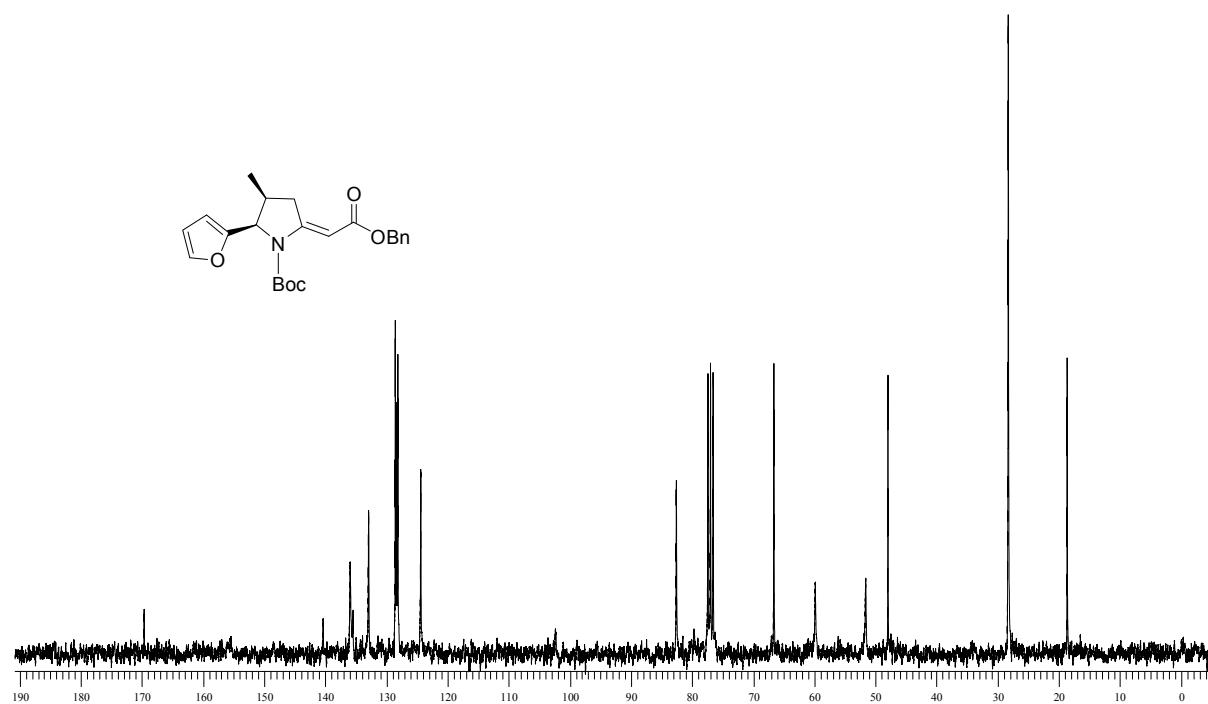
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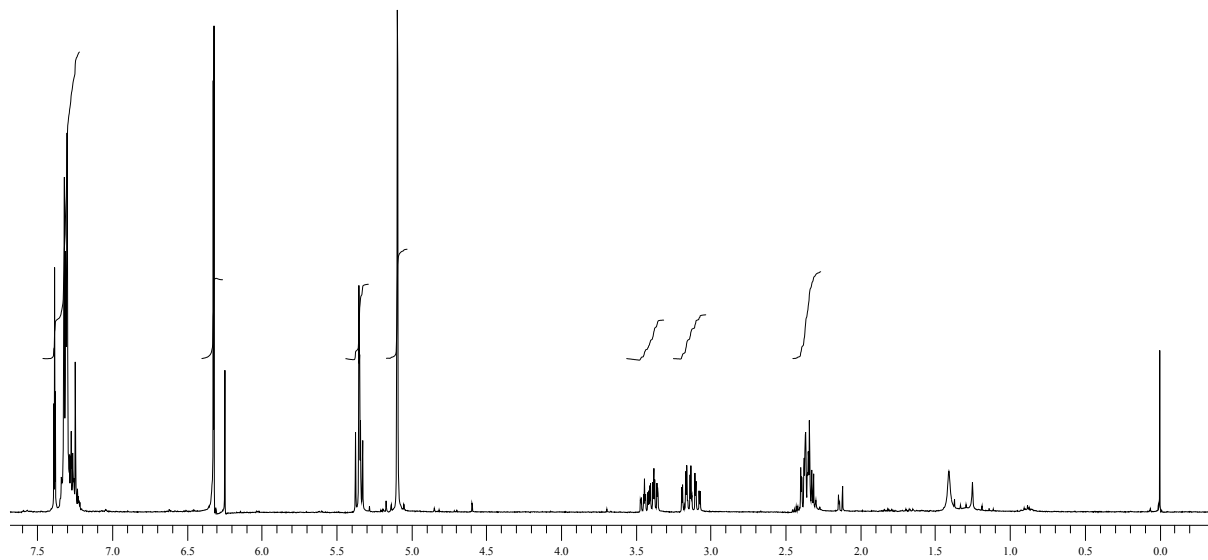
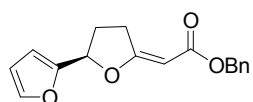
^1H NMR of **3e** in CDCl_3



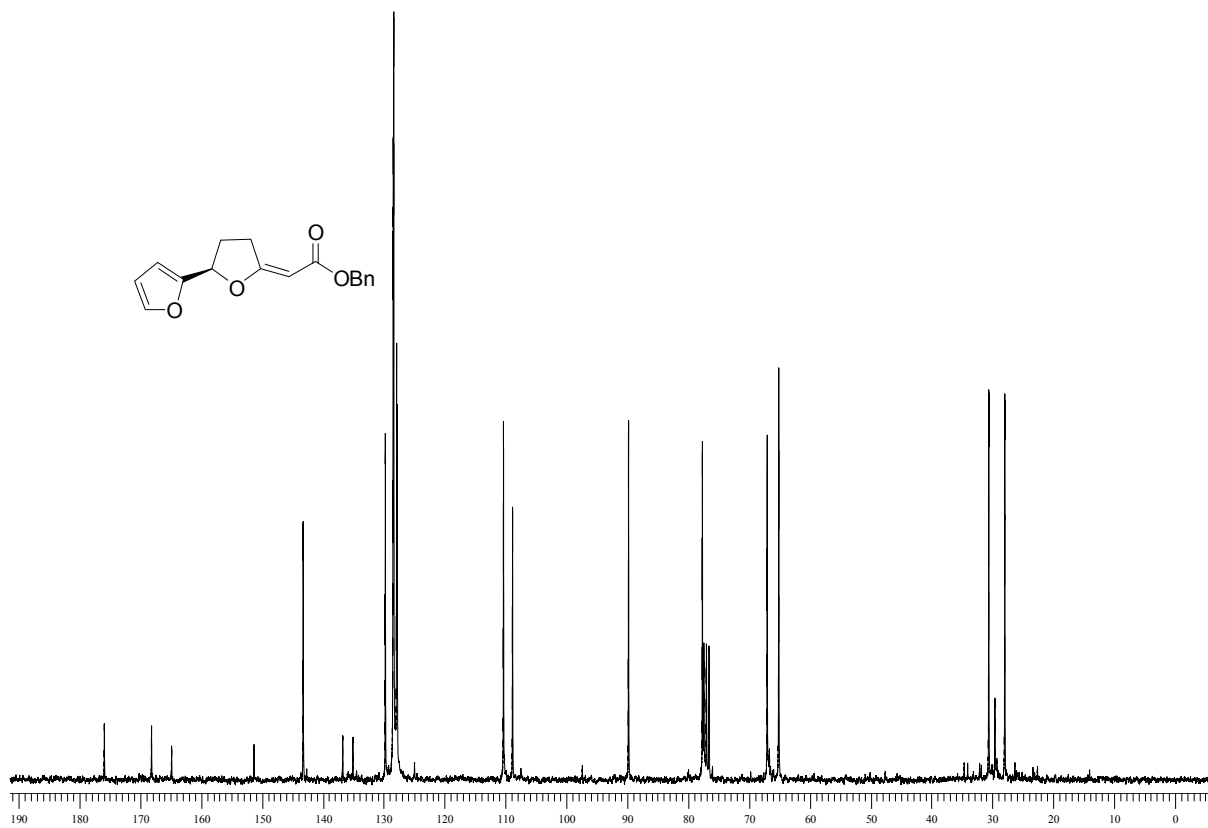
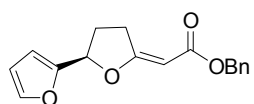
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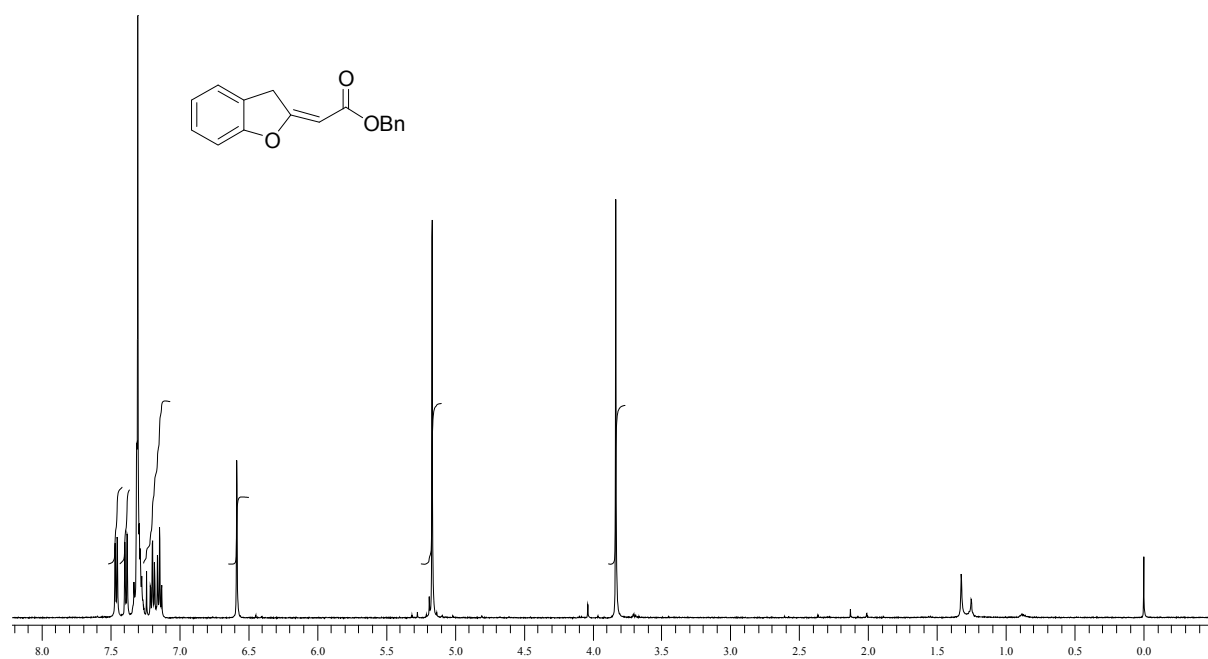
^1H NMR of **3f** in CDCl_3



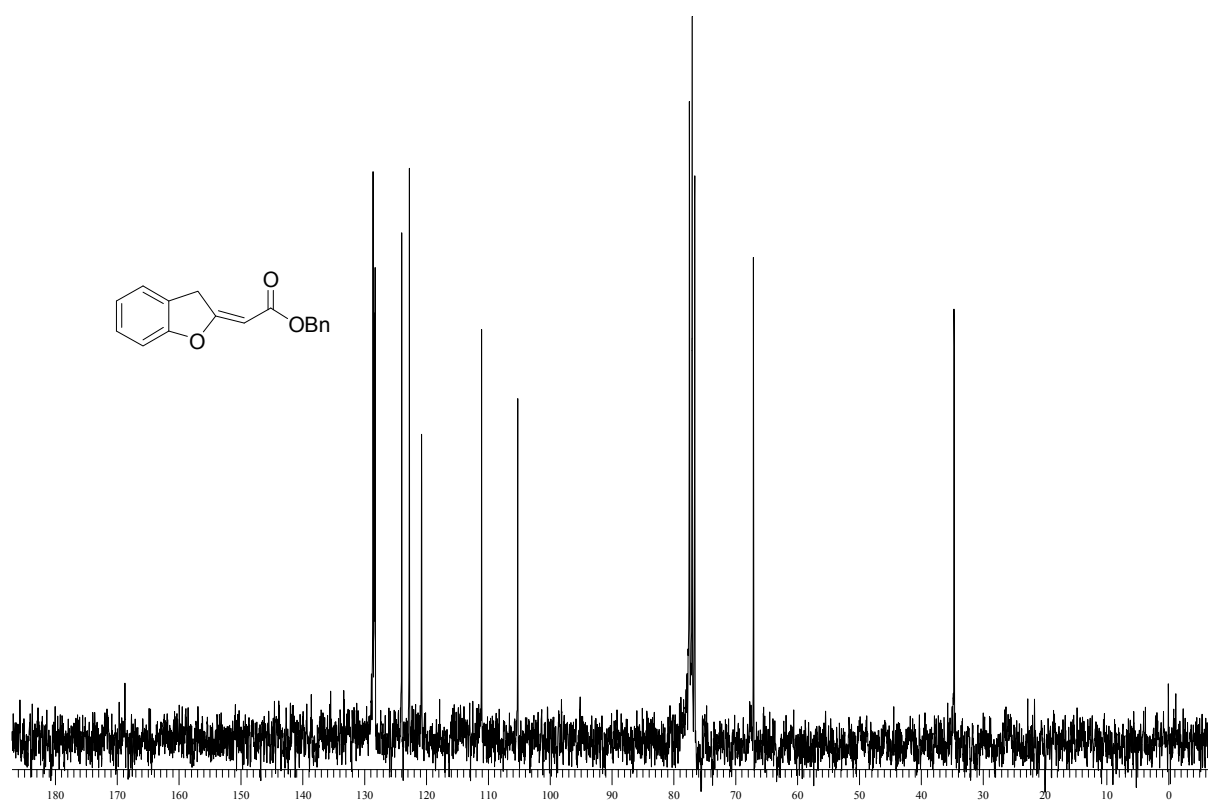
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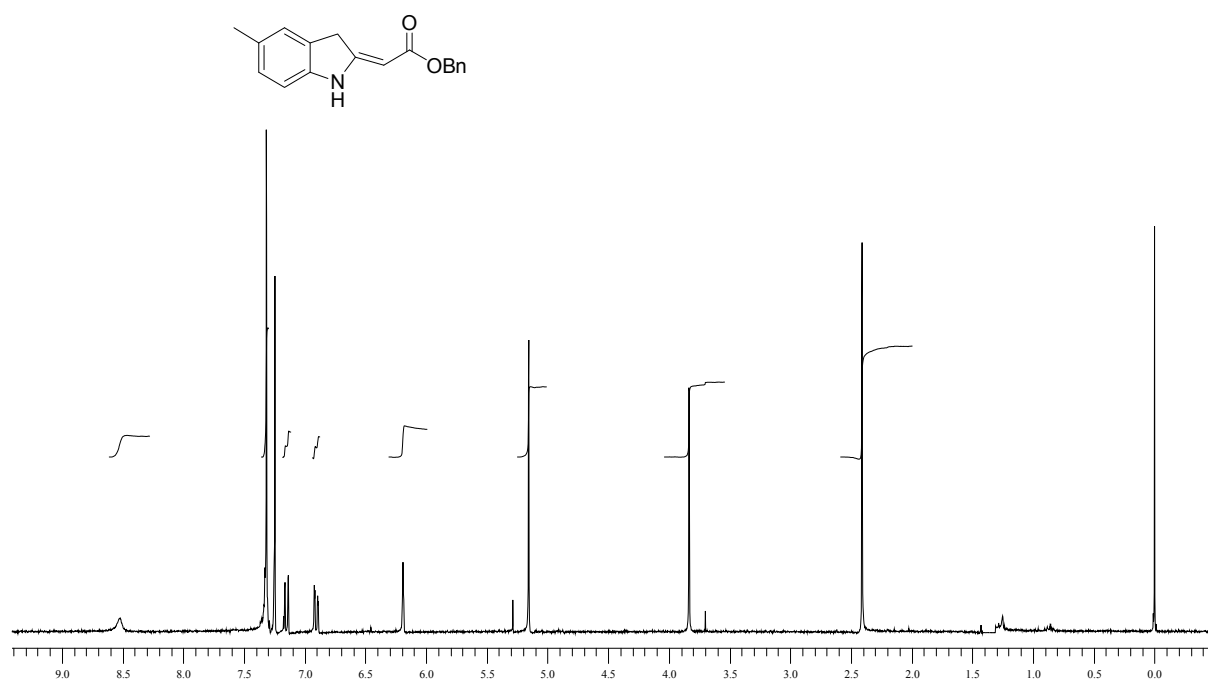
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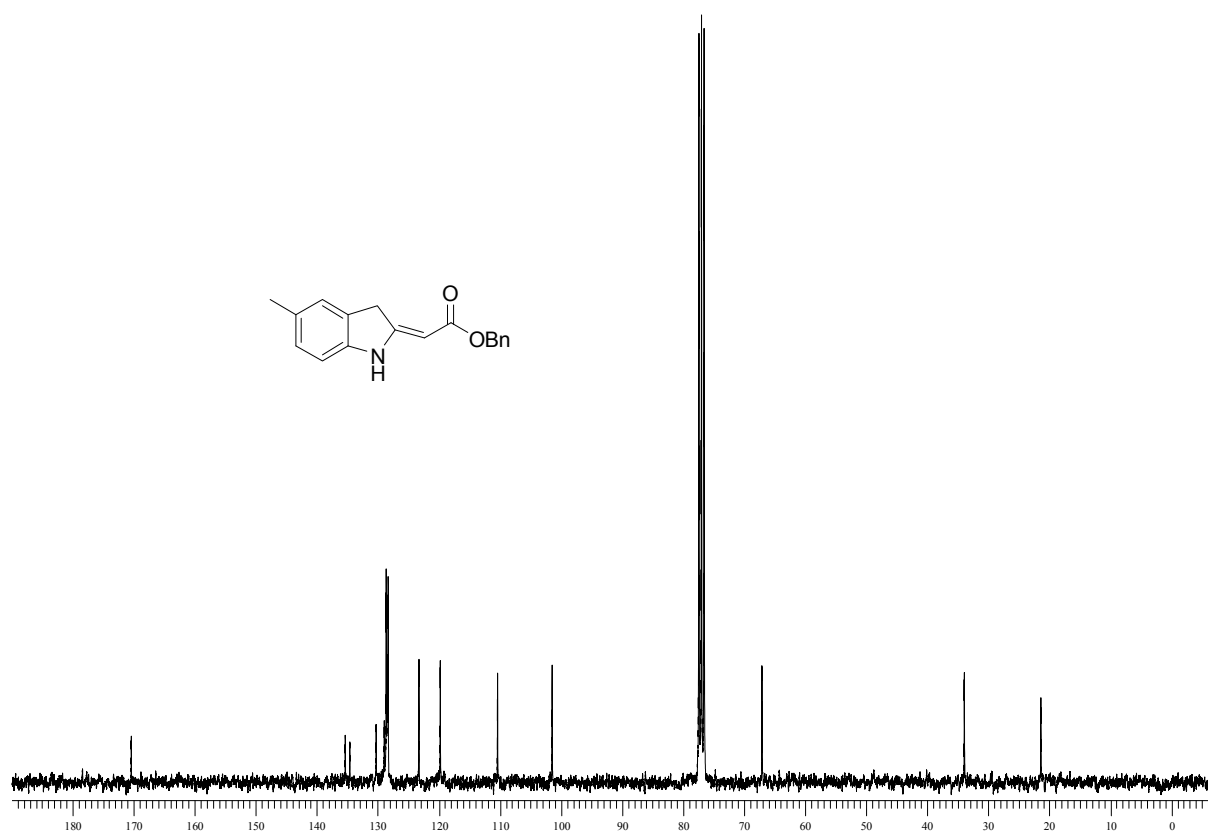
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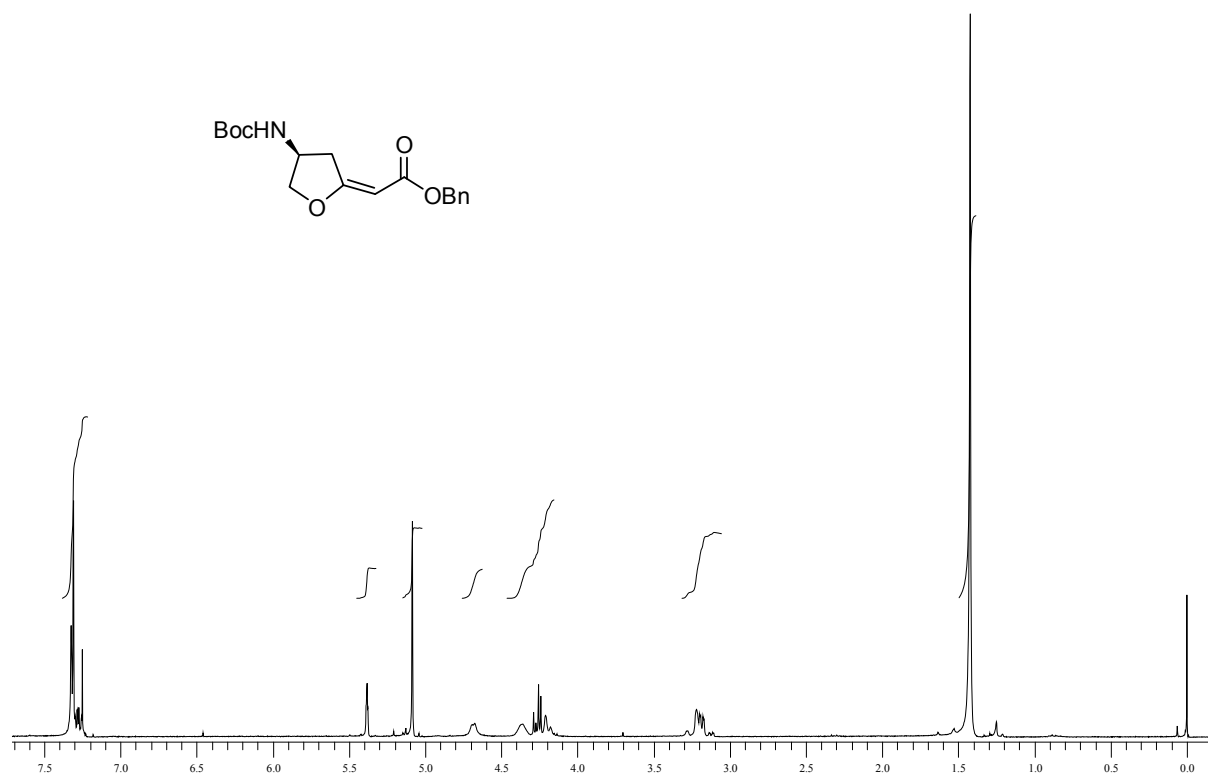
^1H NMR of **3h** in CDCl_3



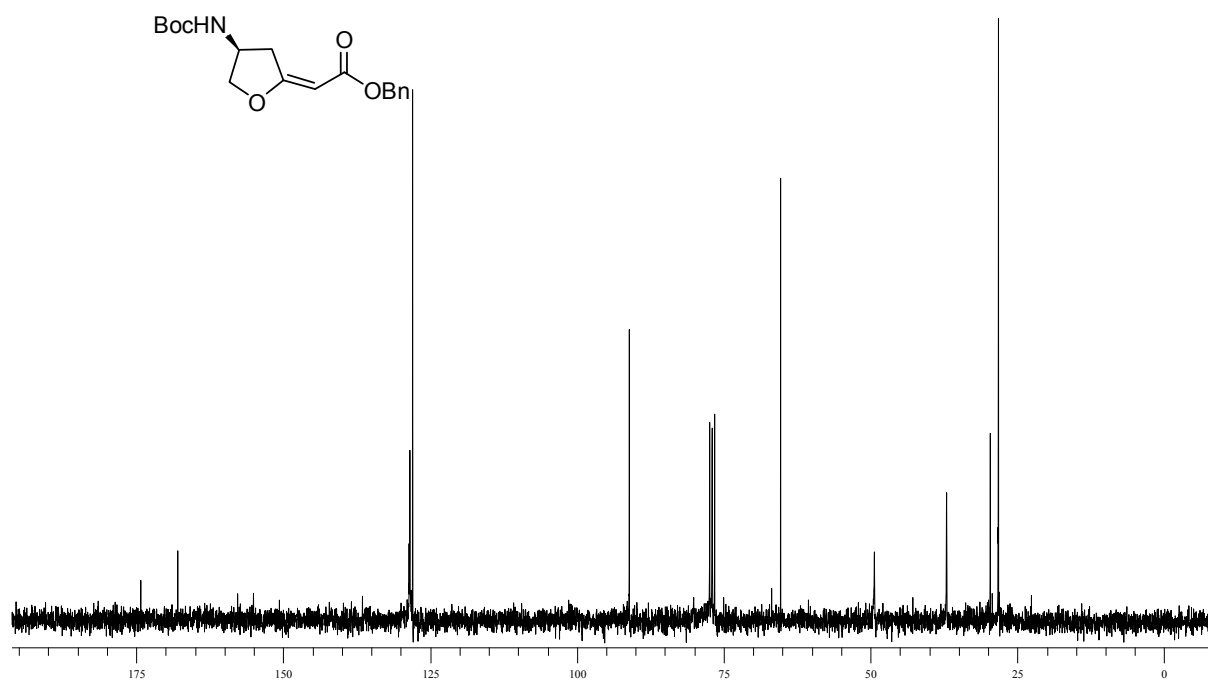
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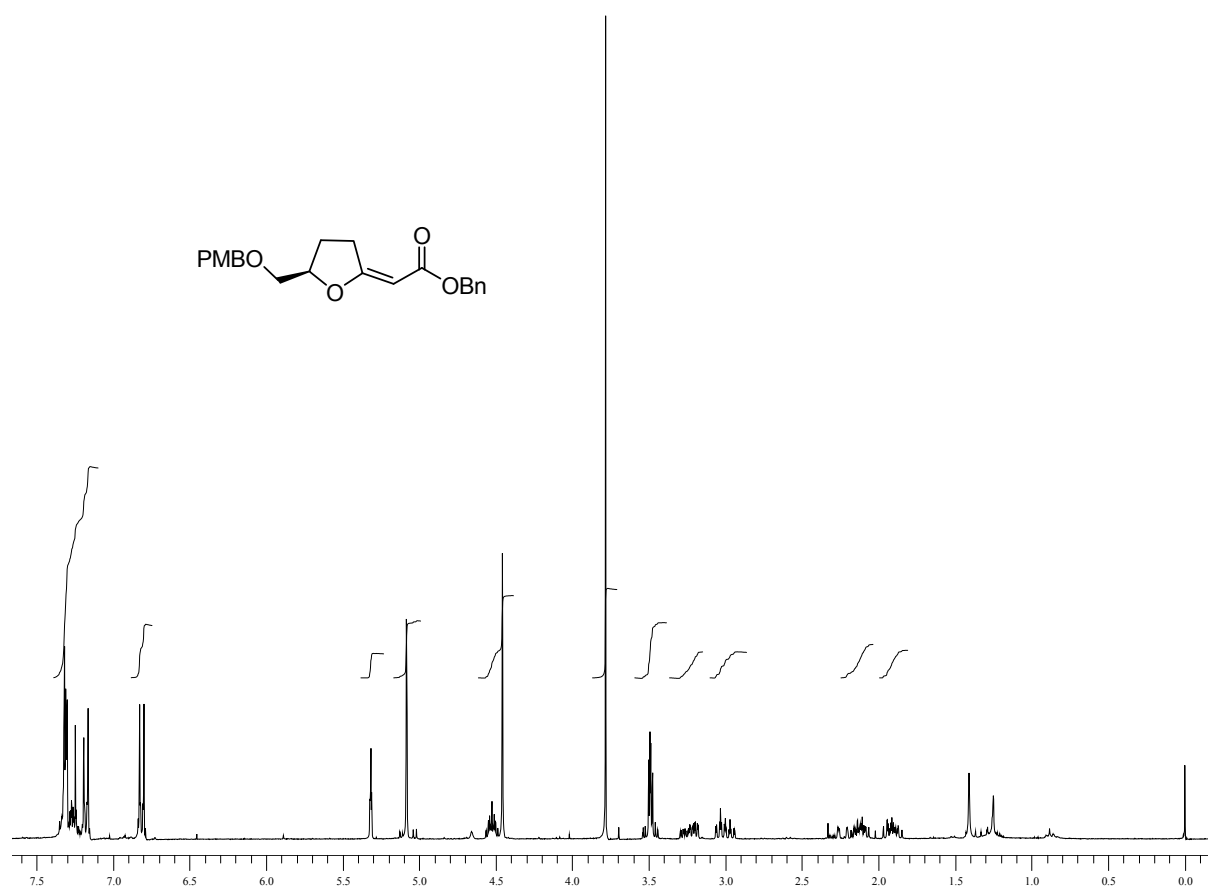
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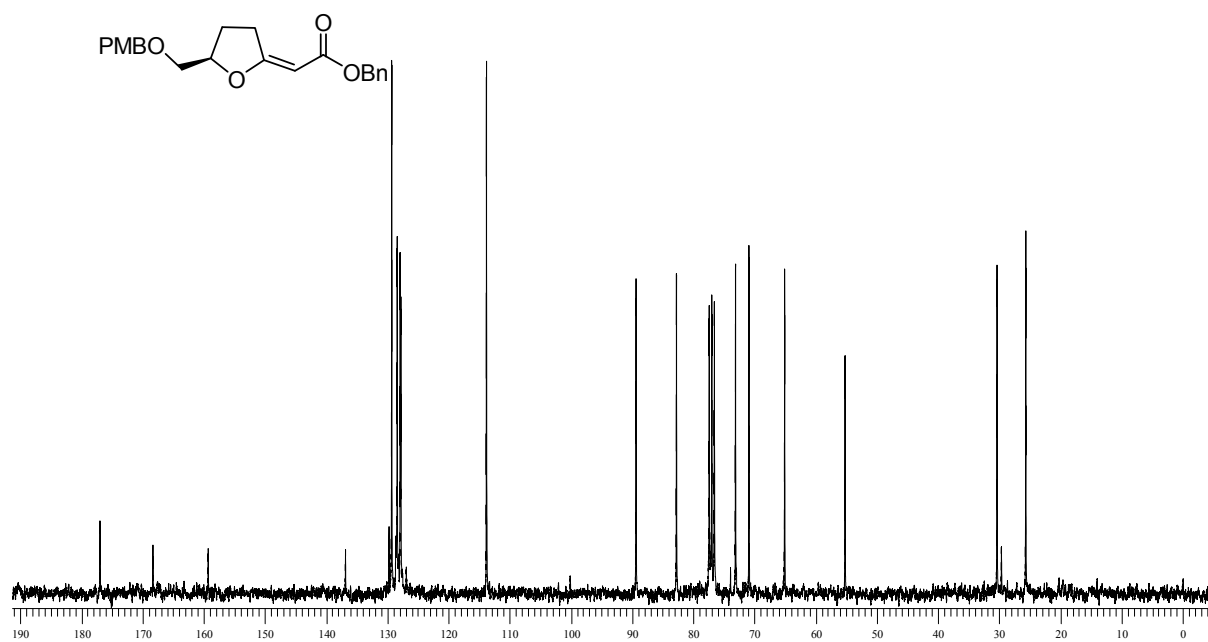
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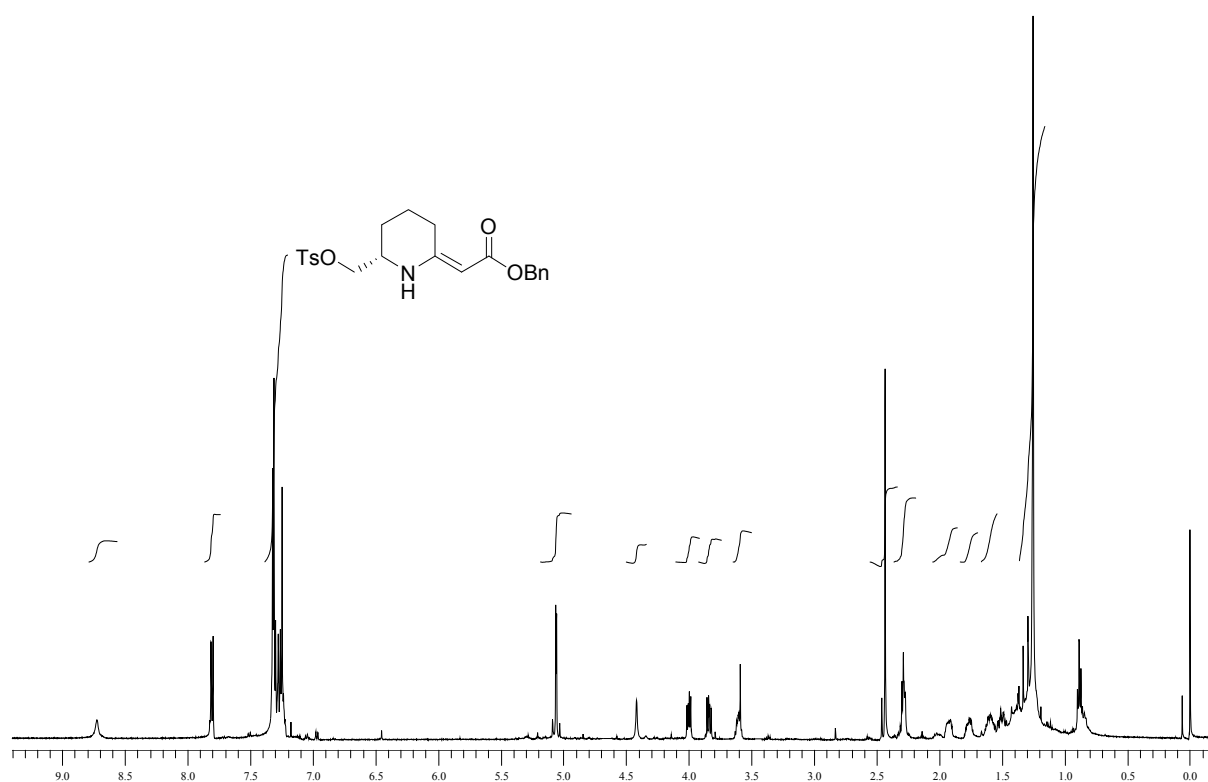
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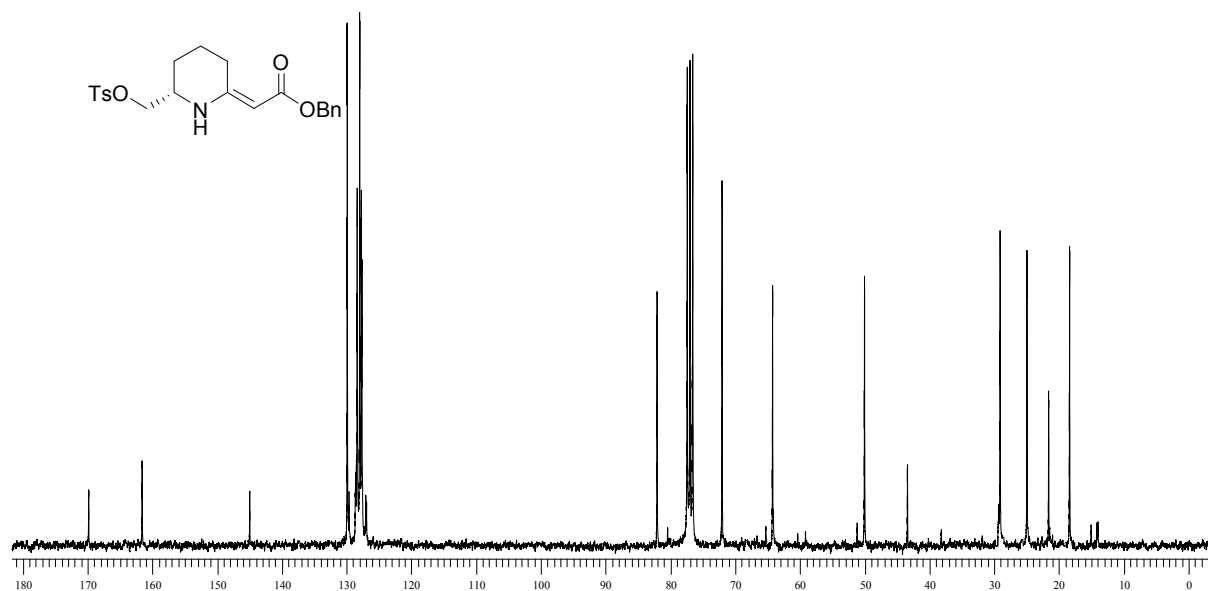
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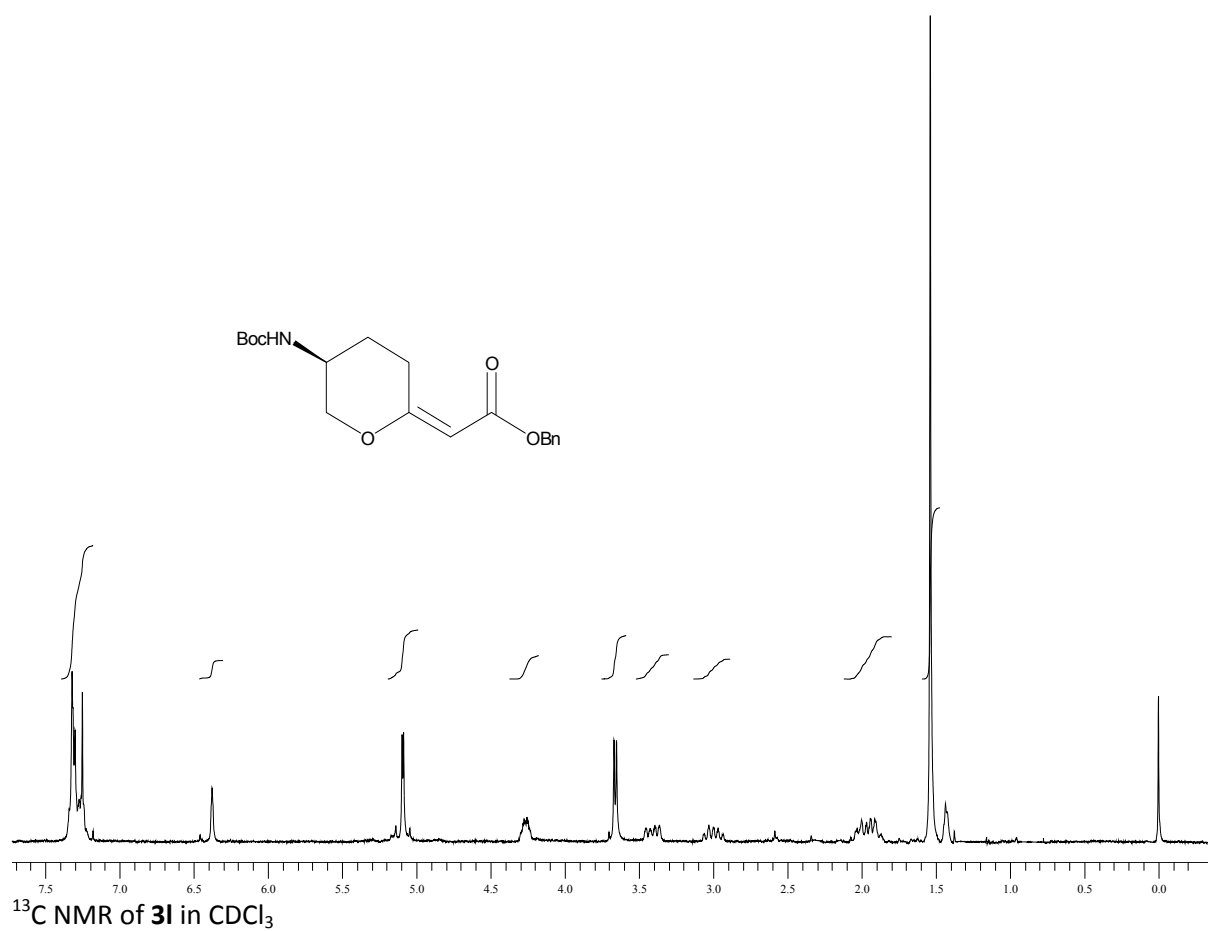
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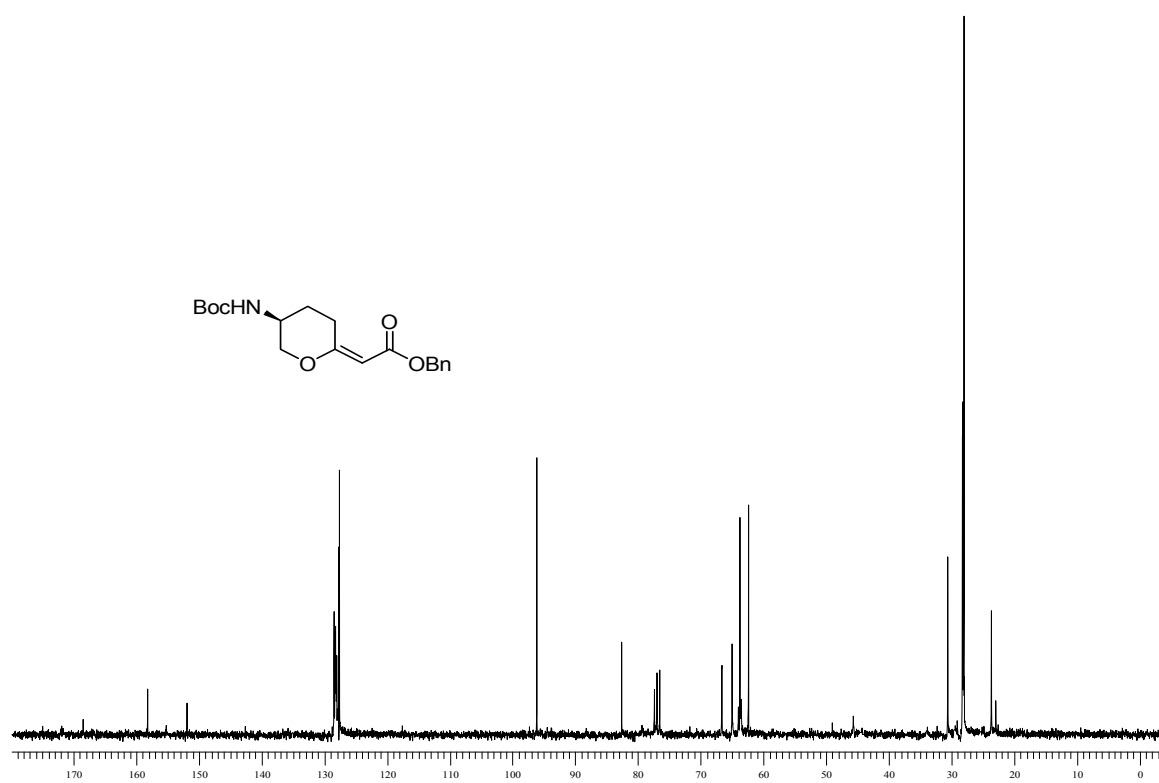
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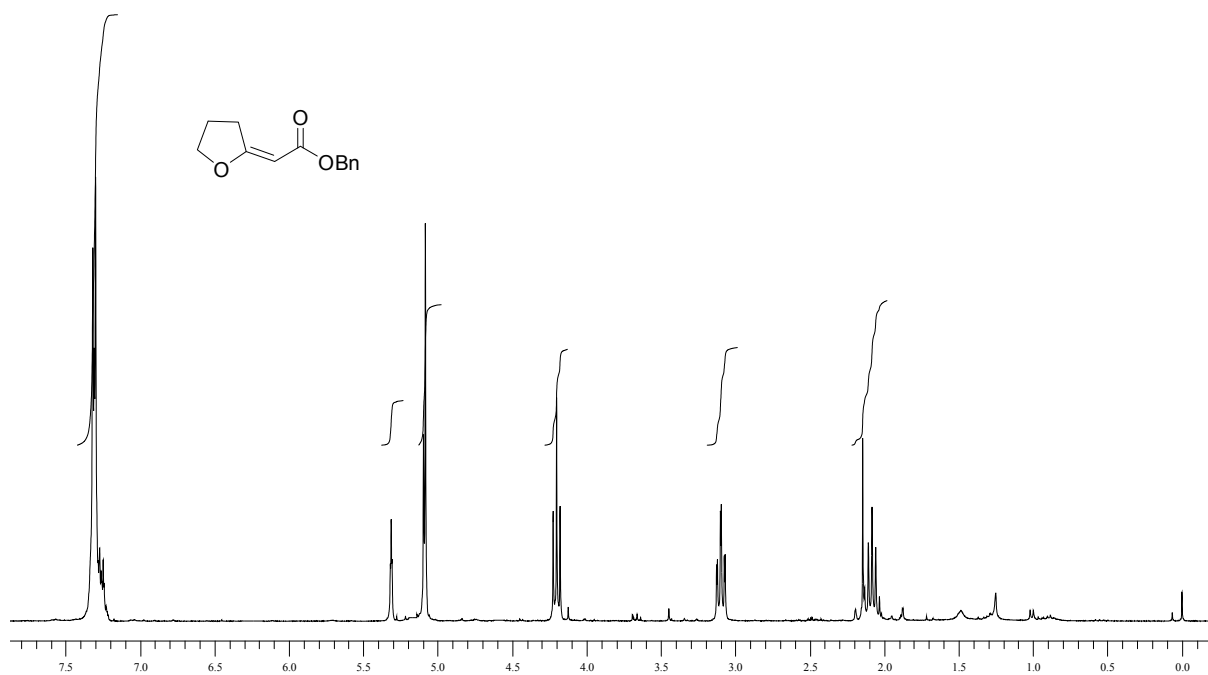
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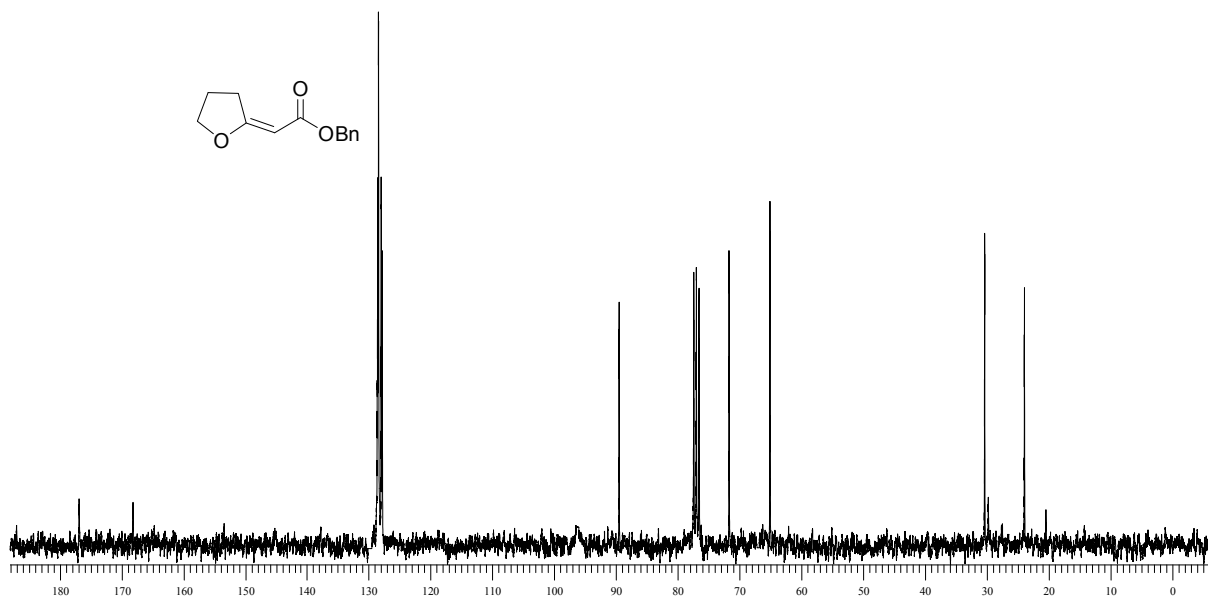
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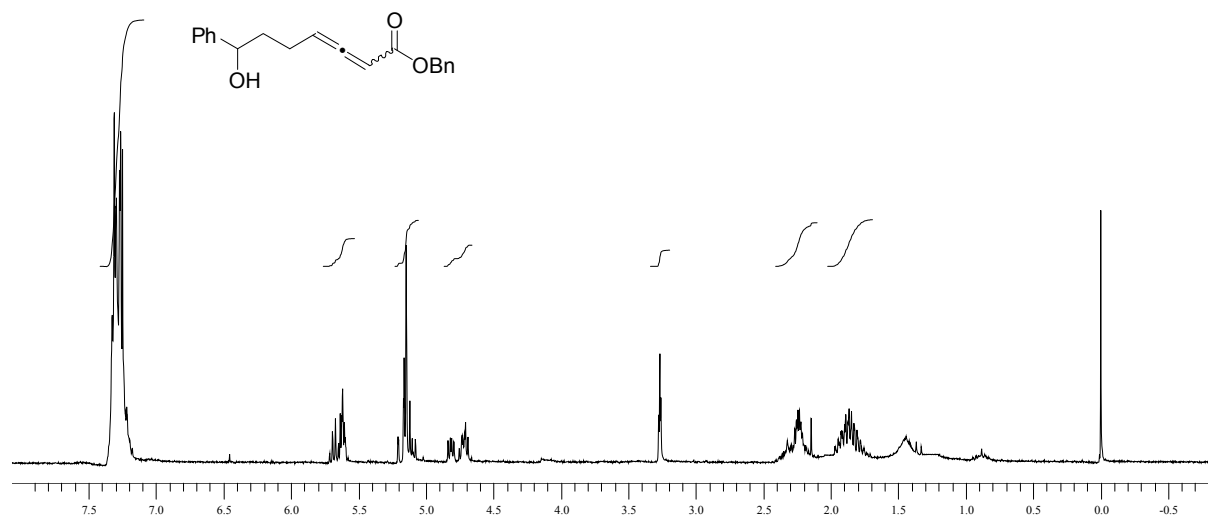
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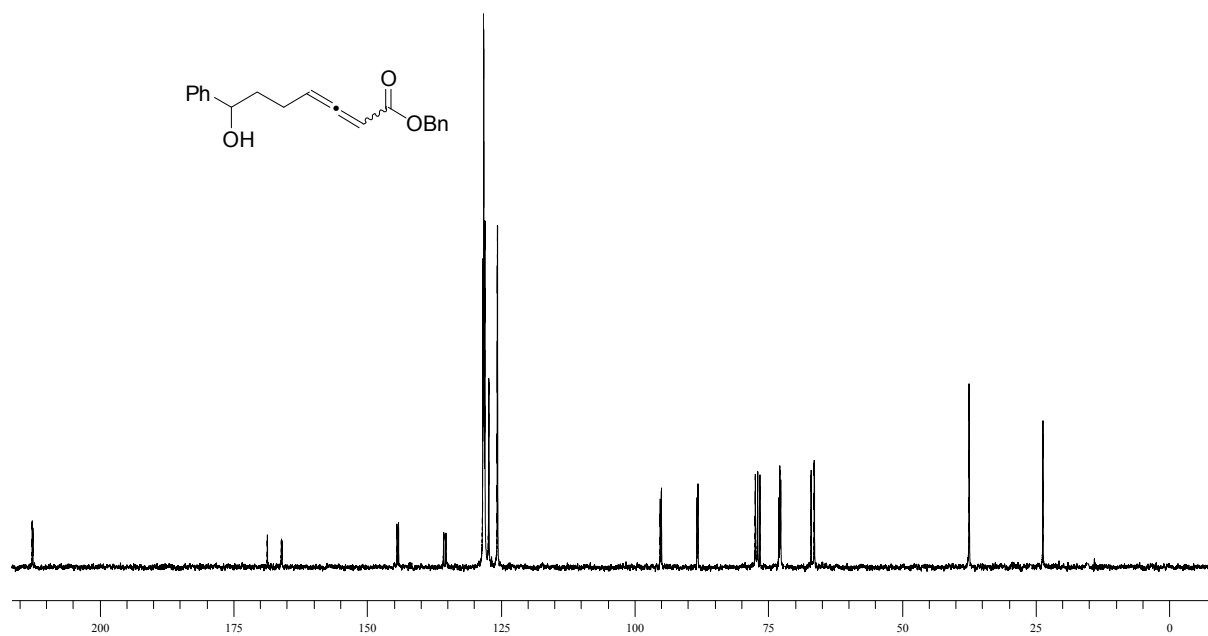
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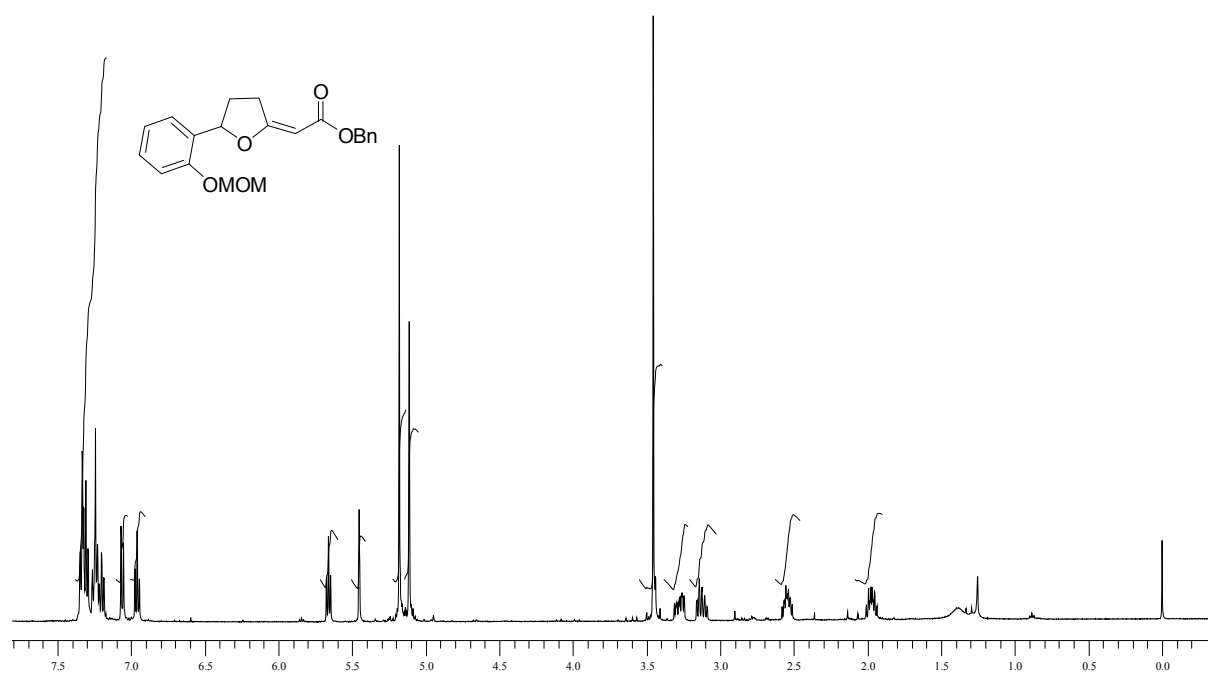
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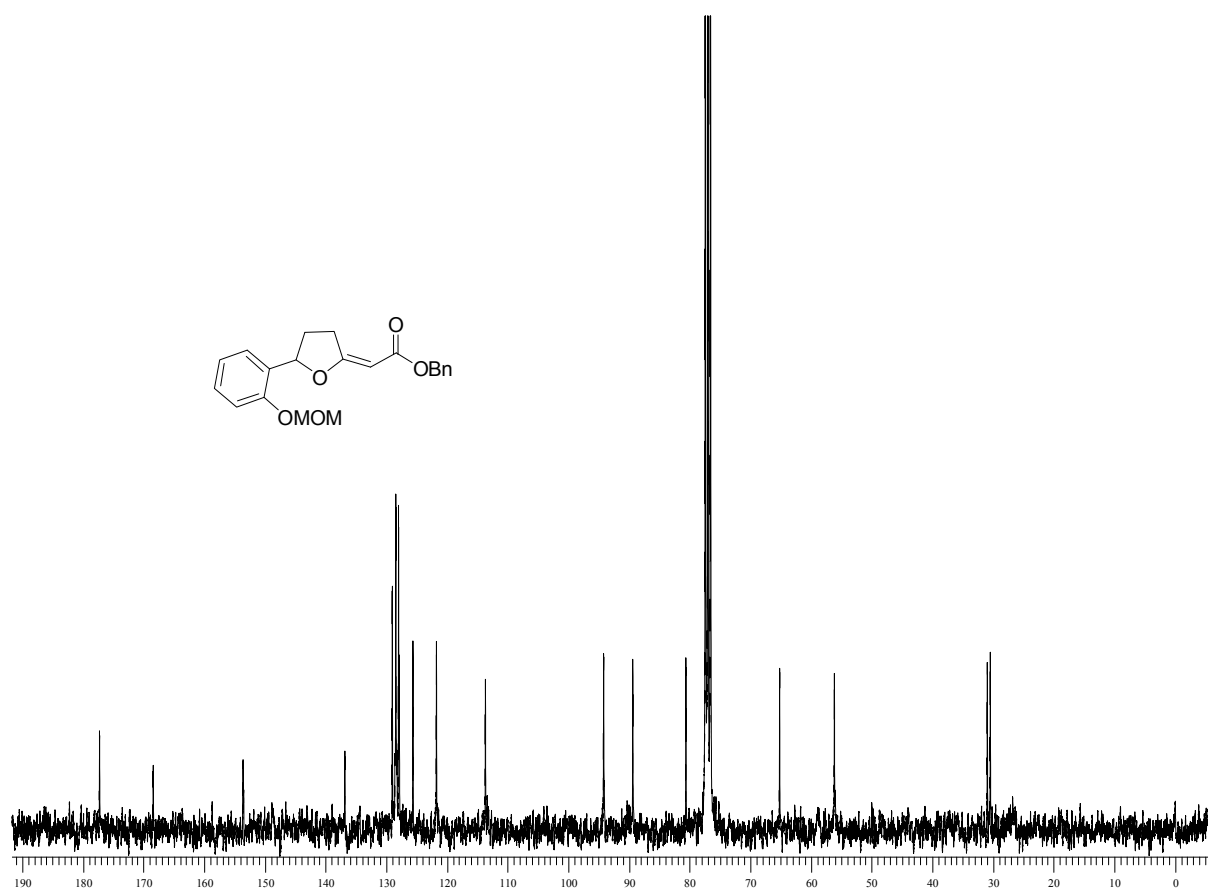
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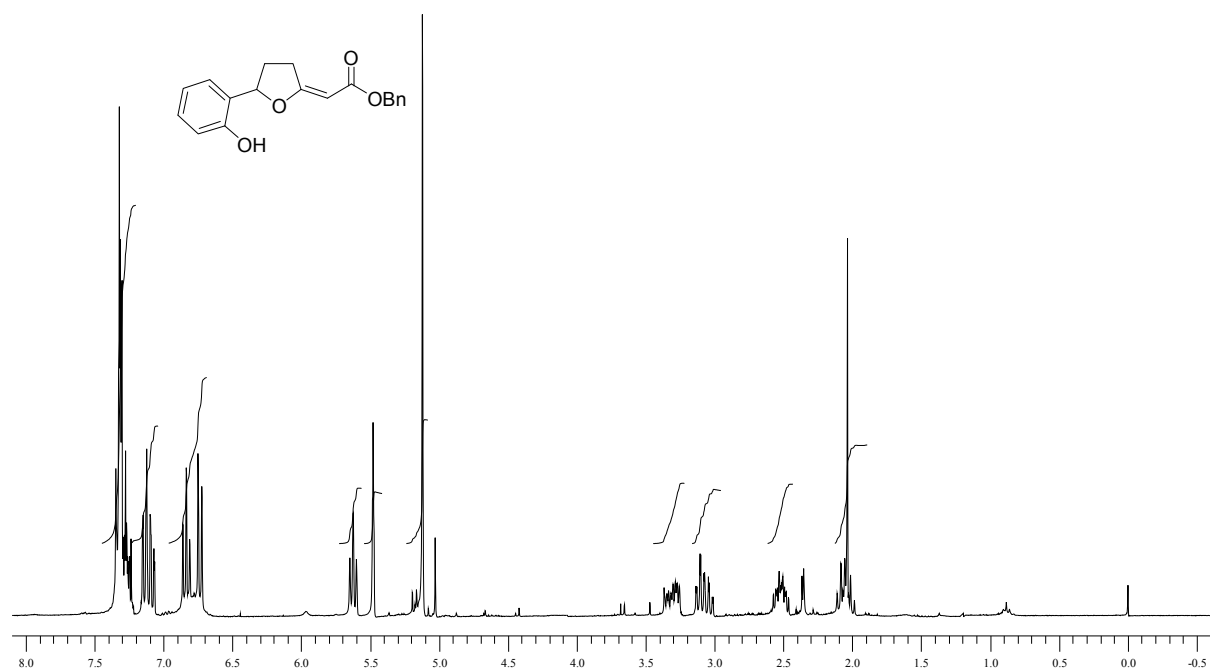
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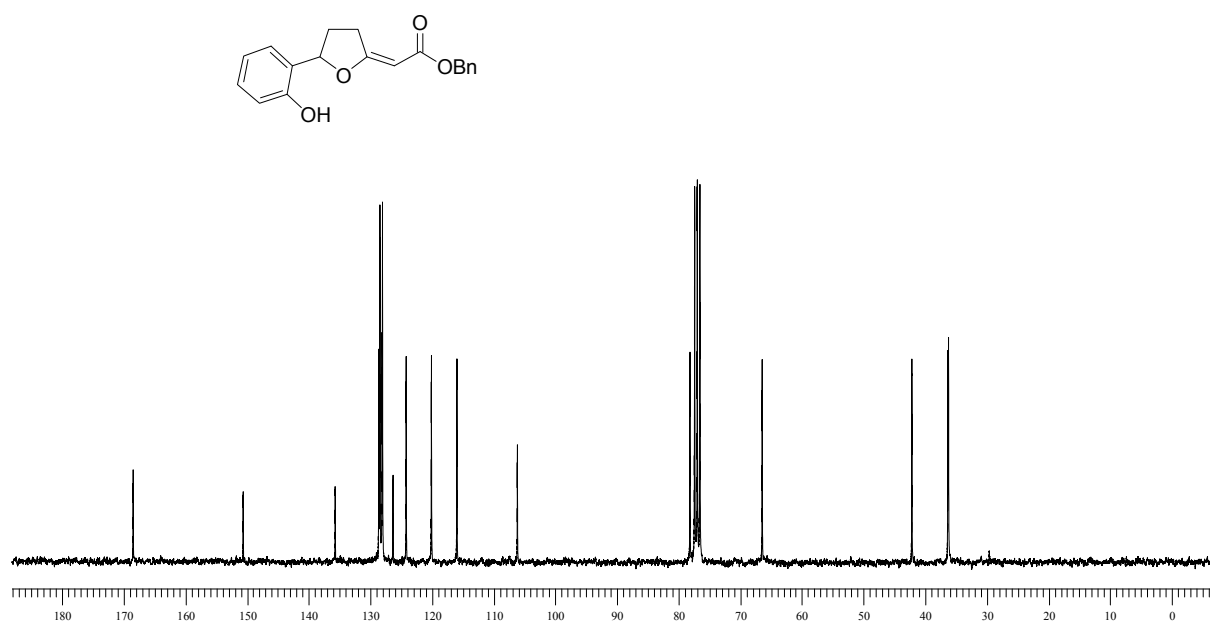
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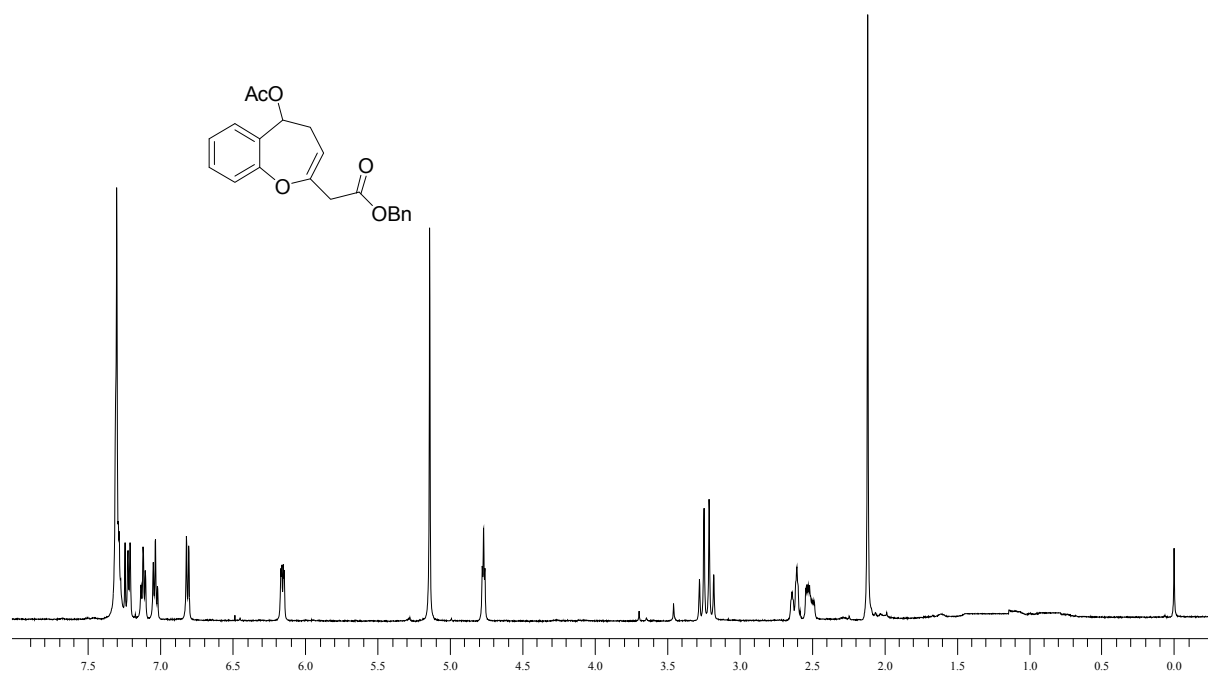
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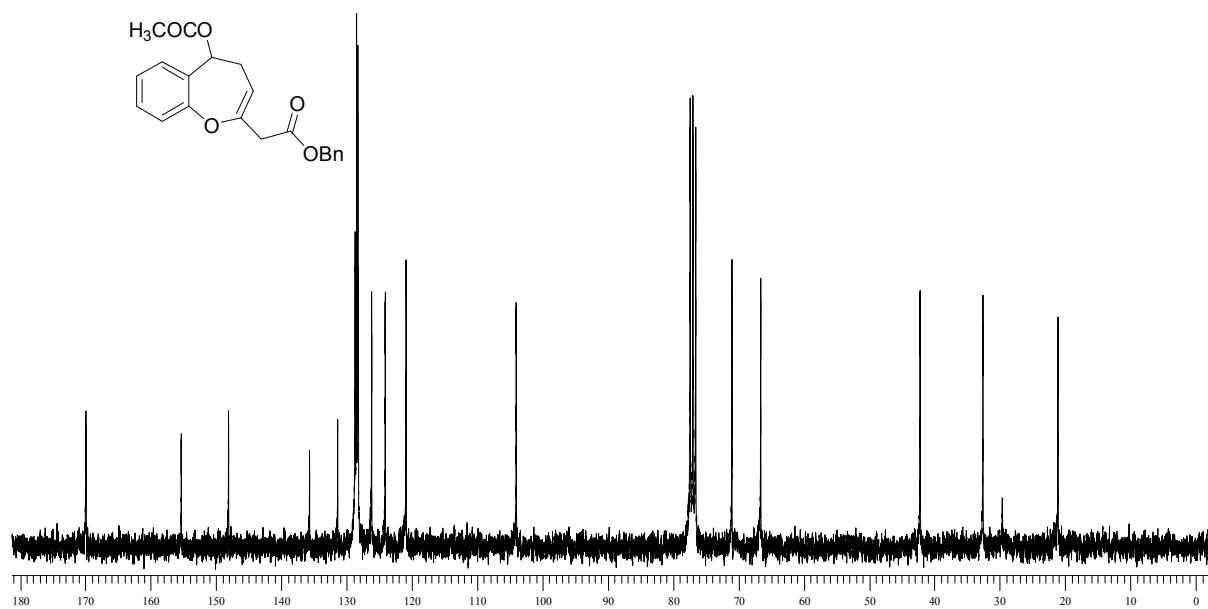
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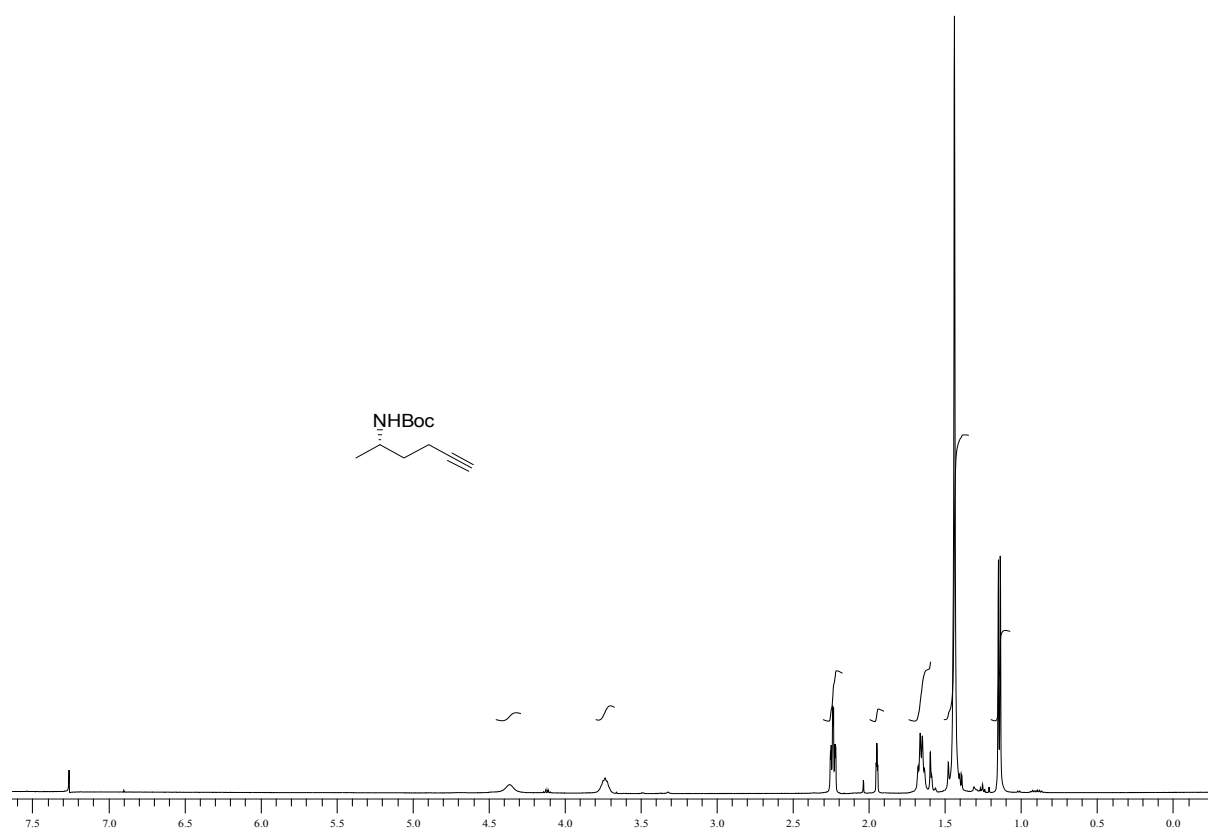
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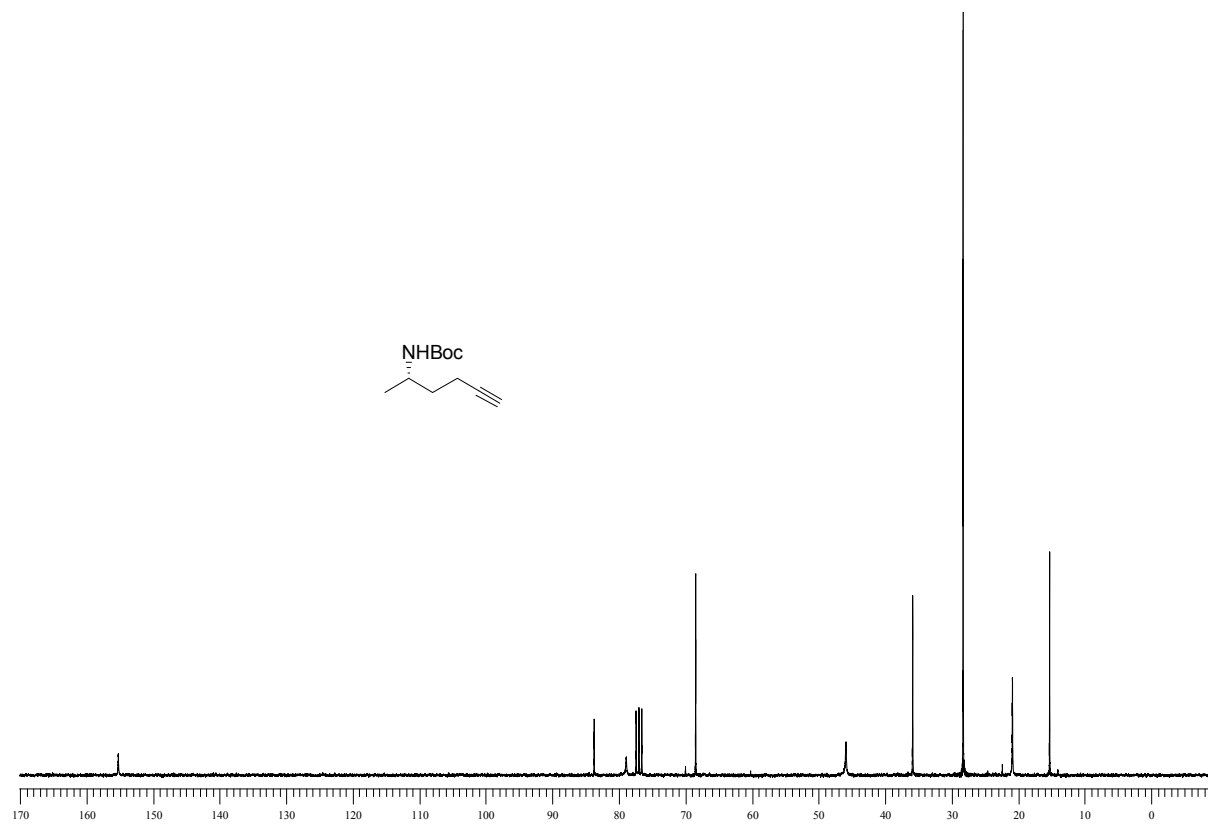
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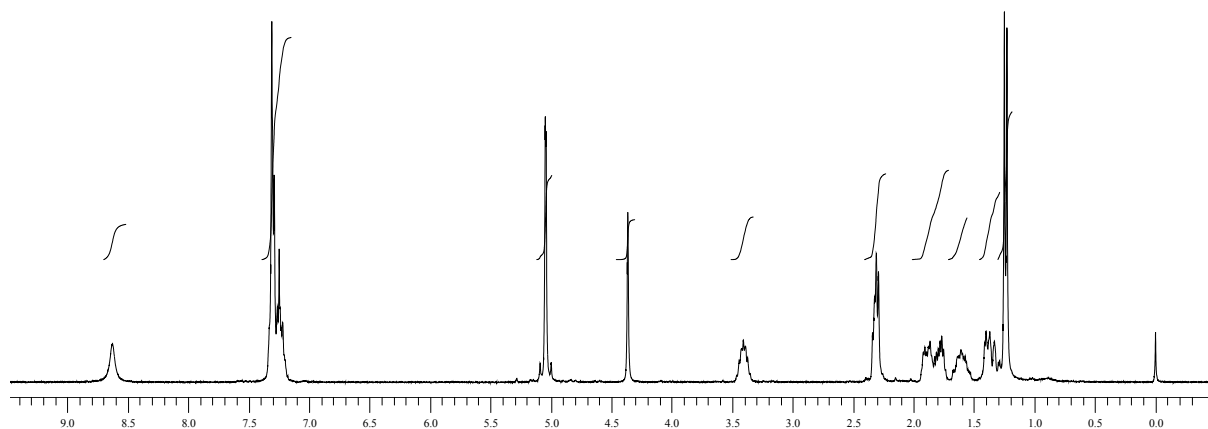
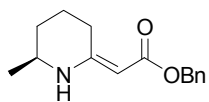
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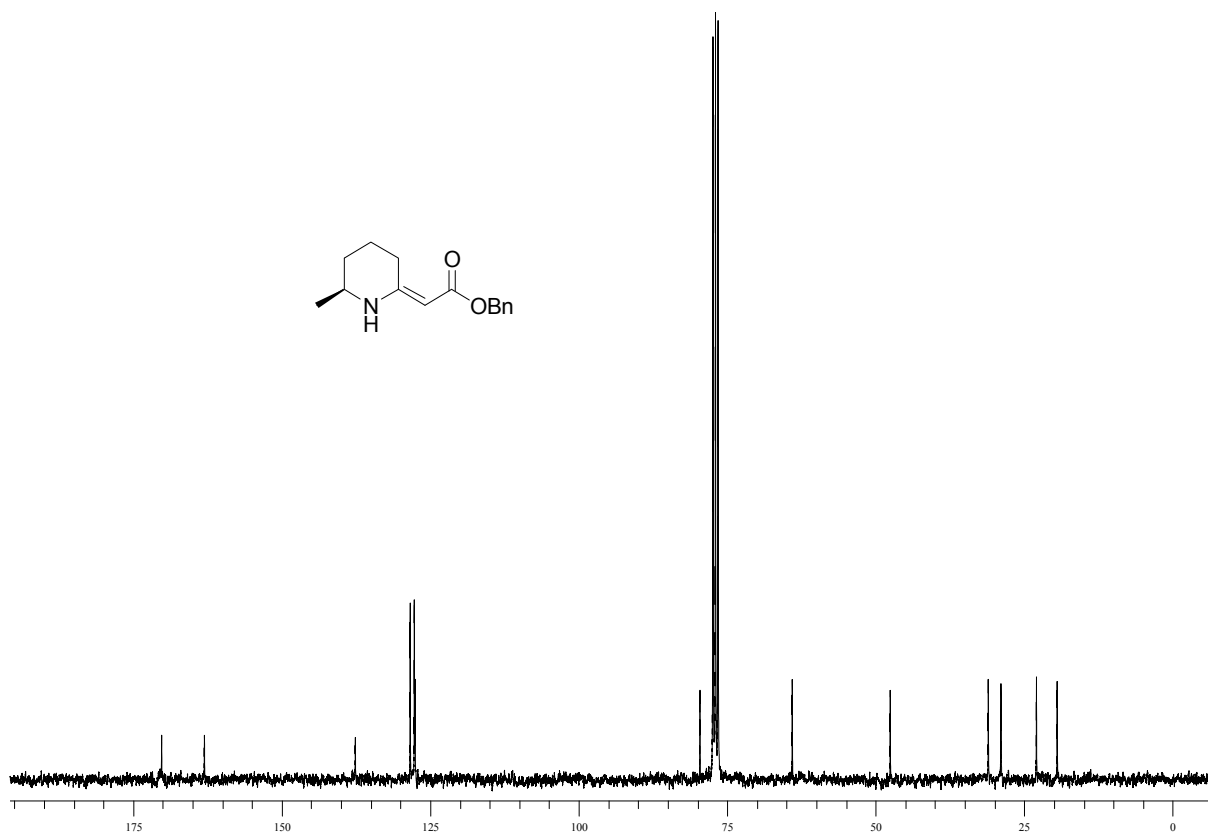
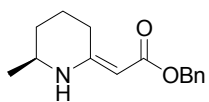
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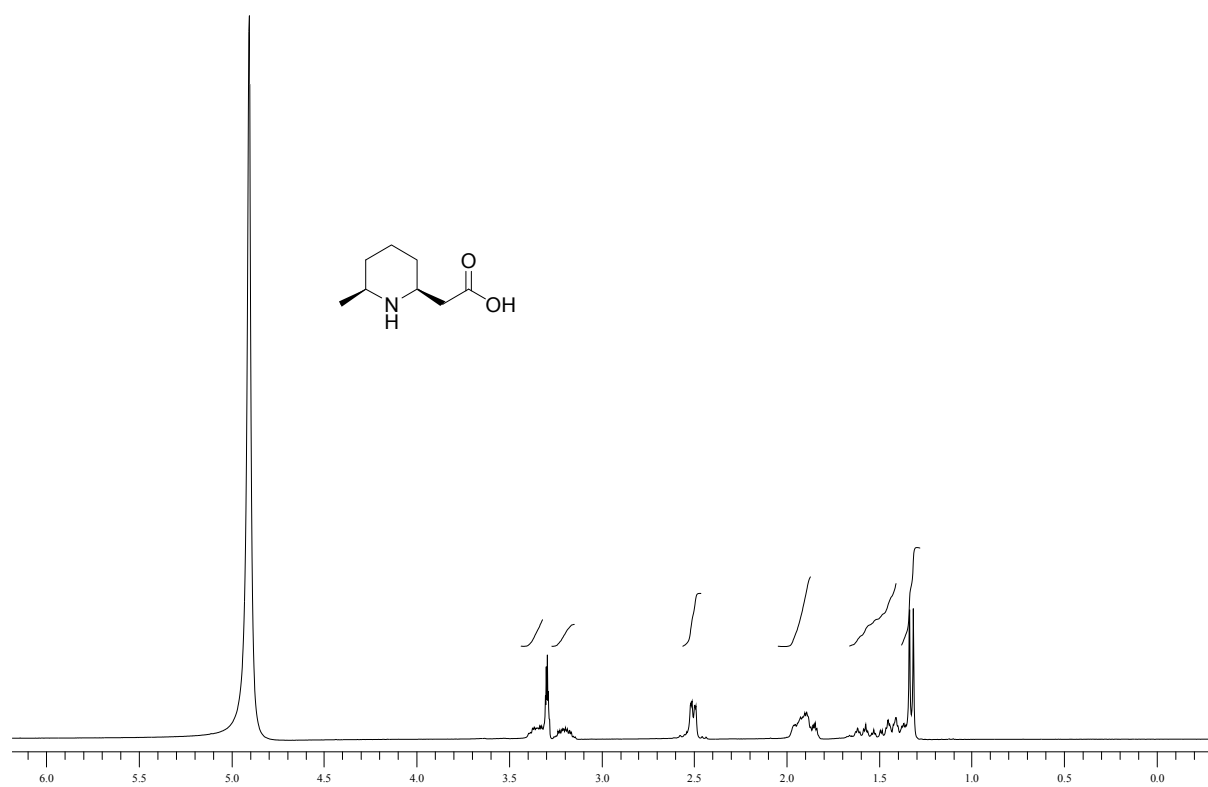
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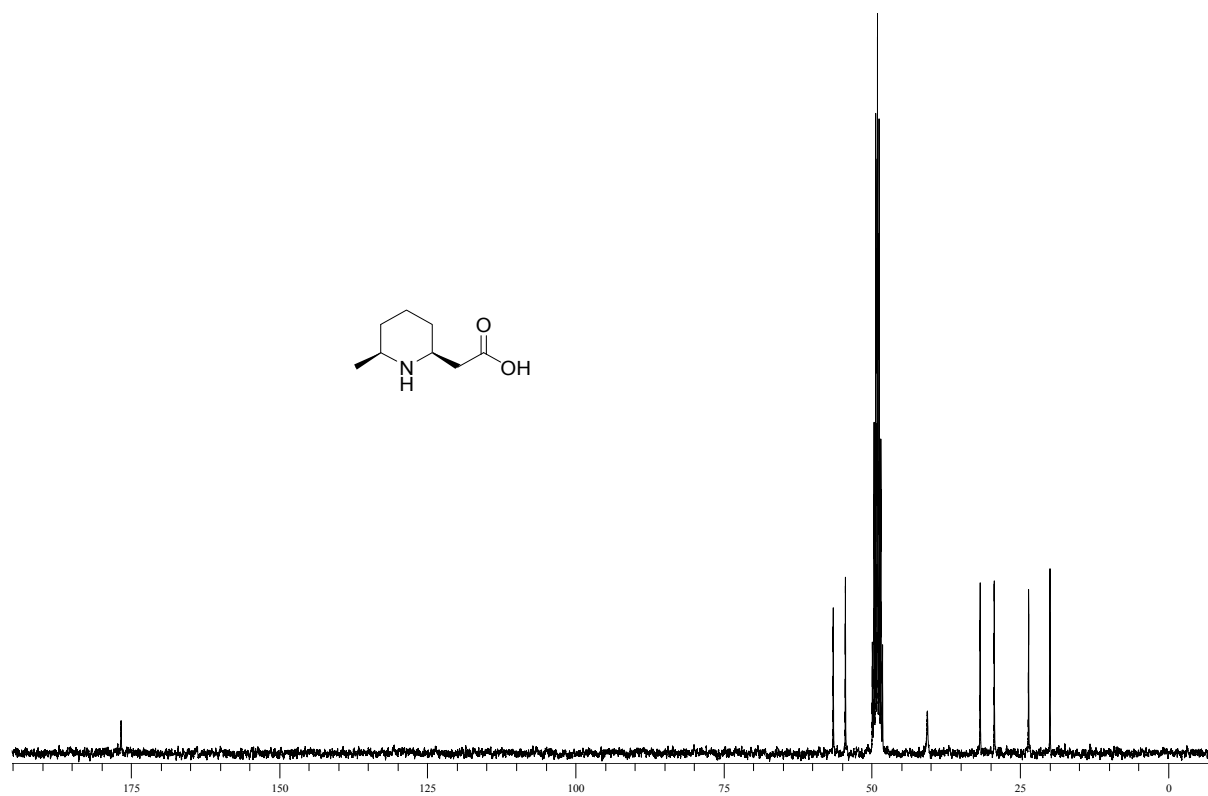
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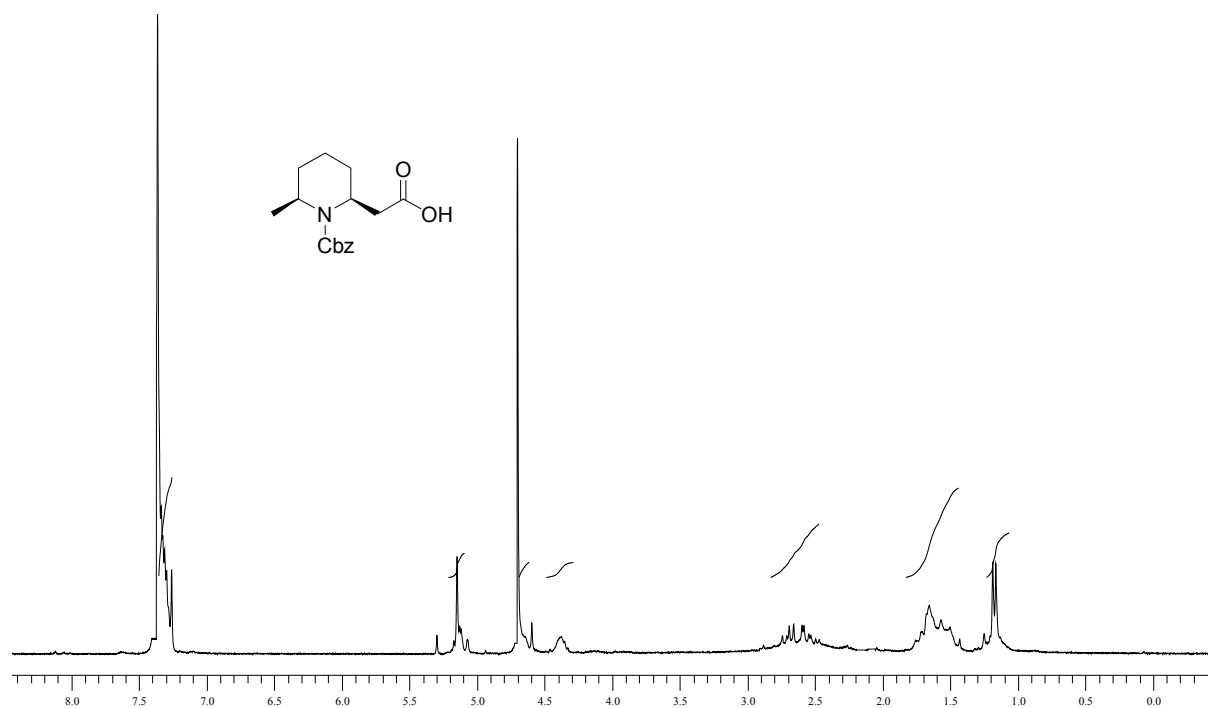
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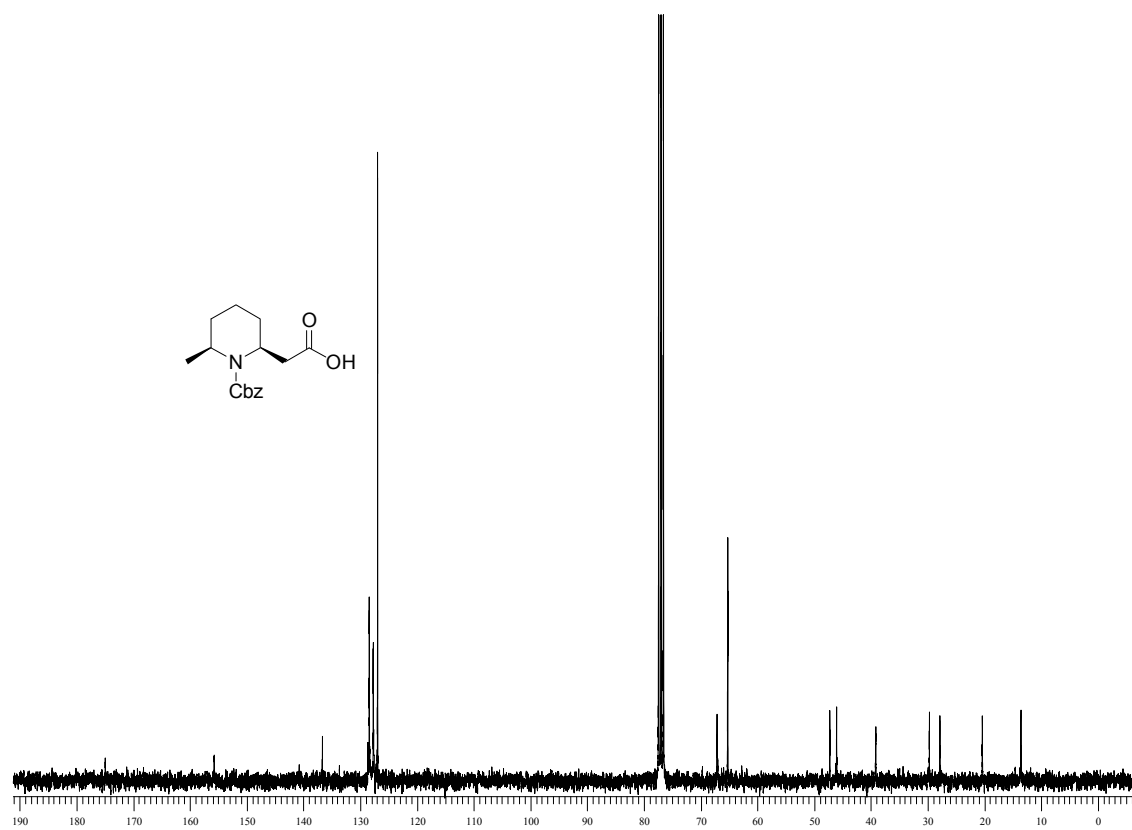
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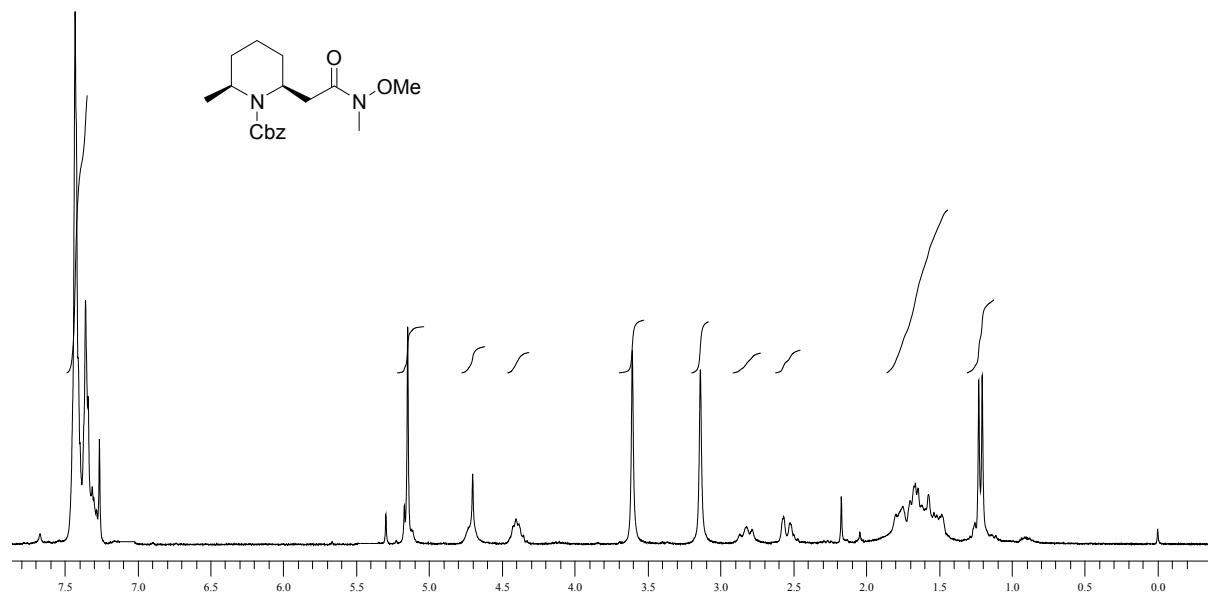
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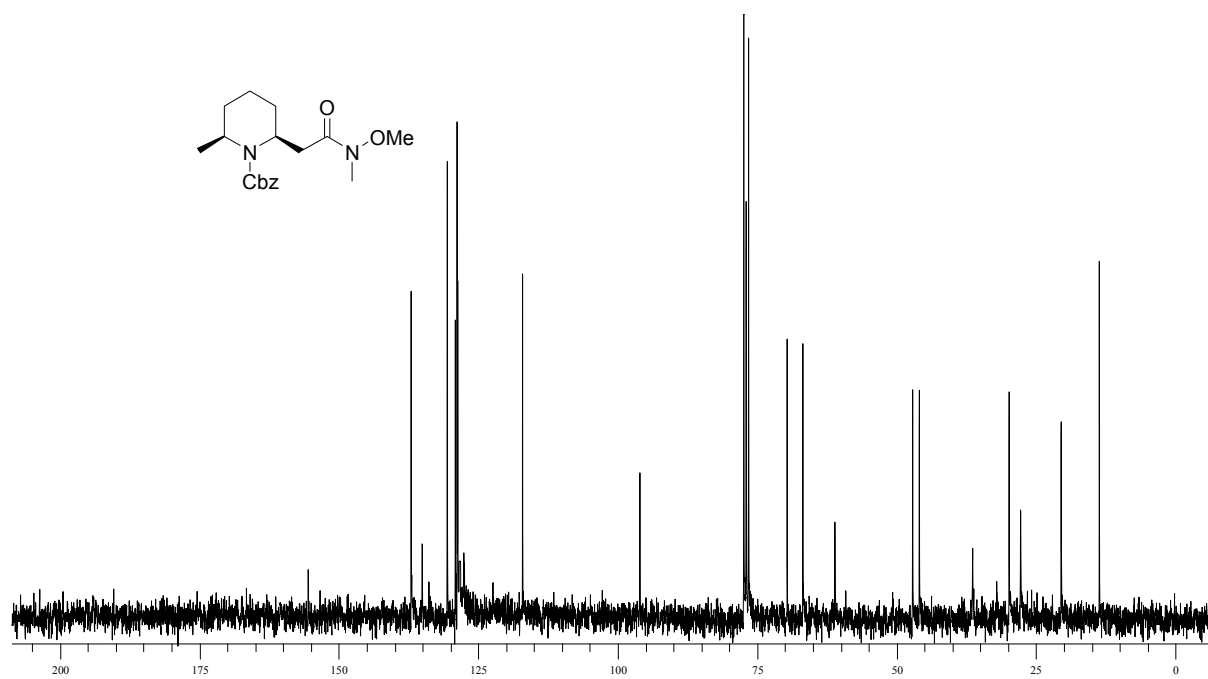
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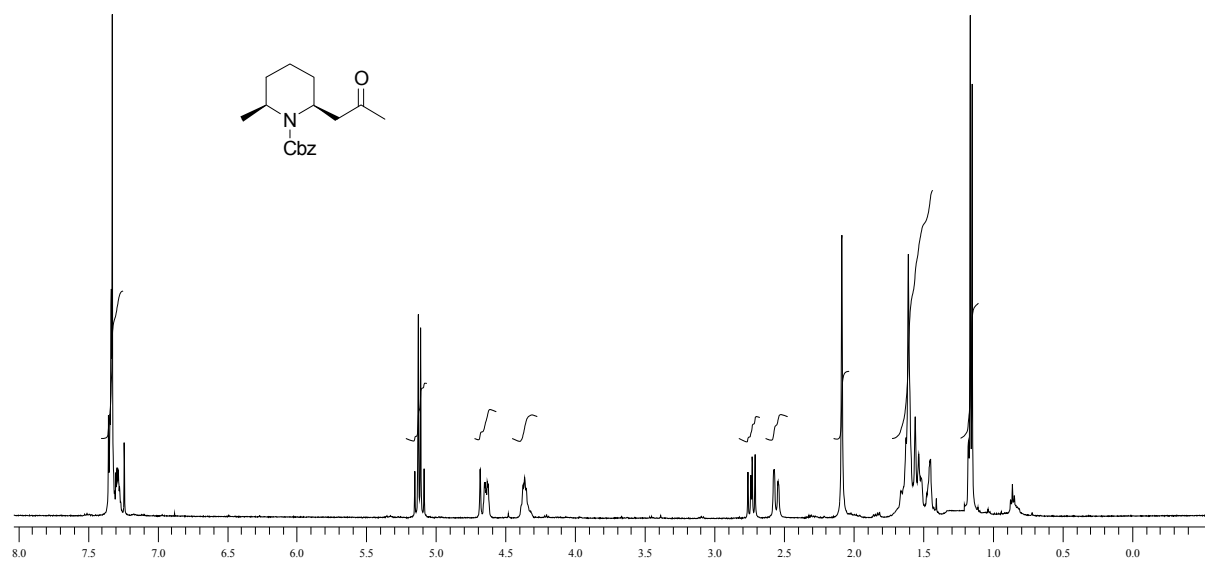
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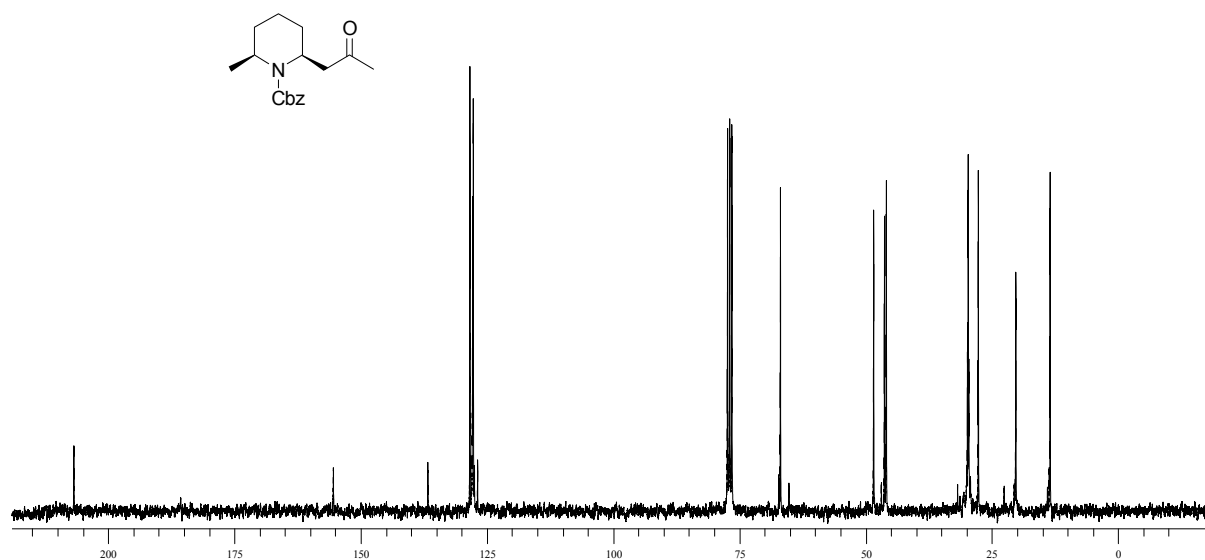
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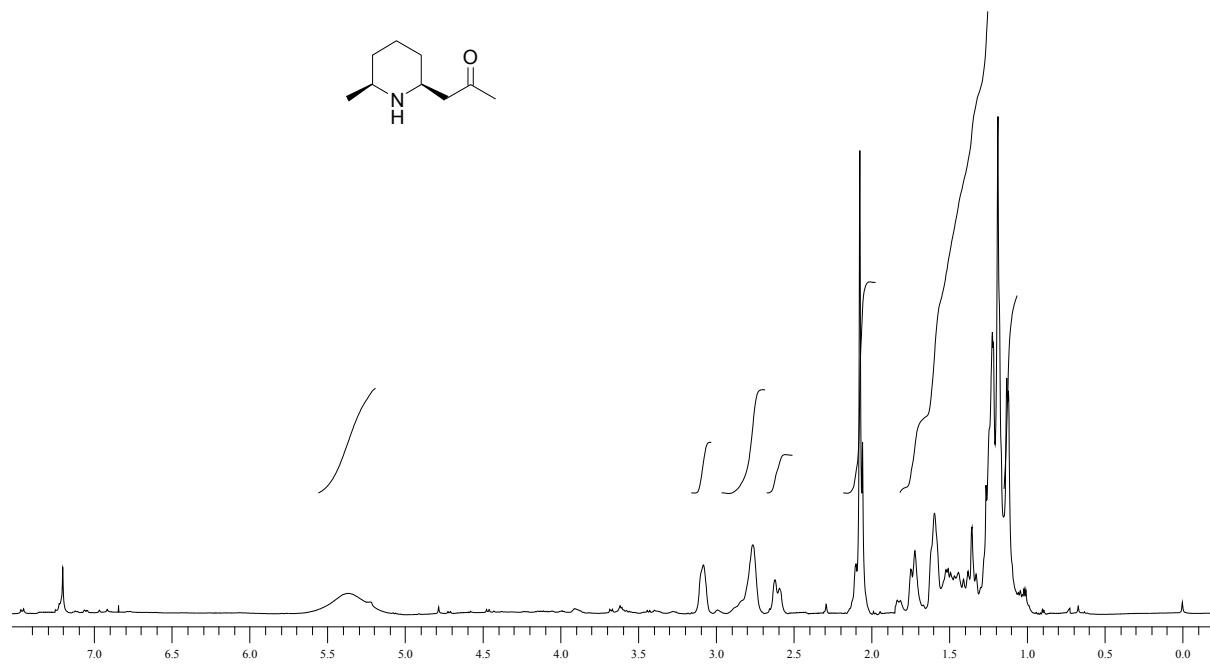
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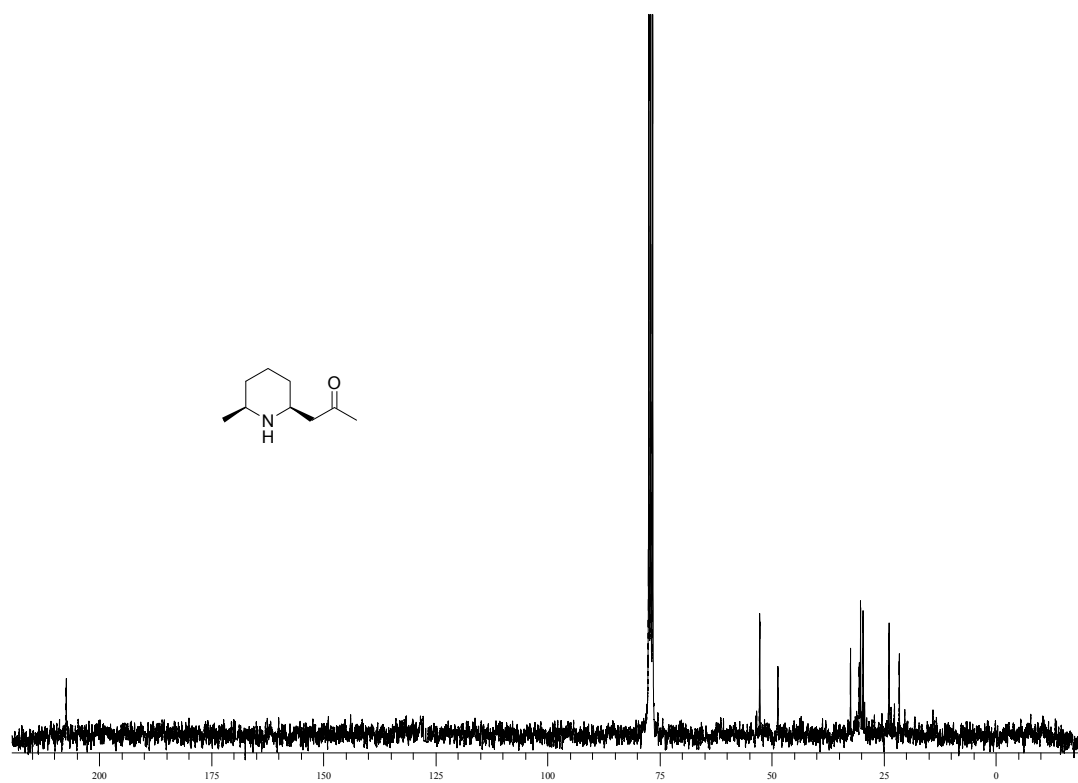
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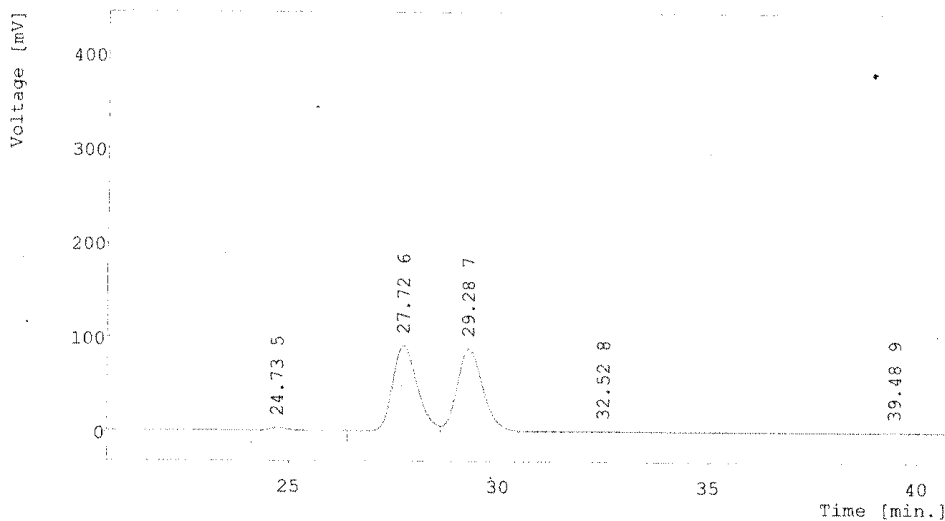
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RSPHN955

Page 1

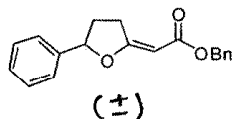
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 Project : **work1**

Analyst : **balu**
 Dilution : **1**
 From : **Wed, 1st Jan, 2003 9:11:40**
 Calibration : **(none)**
 Style : **report**



Result Table - Calculation Method Uncal

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1	6.200	24.0262	1.4104	0.2000	0.3115	0.7654
2	9.267	30.5502	0.3671	0.9600	0.3961	0.1992
3	10.907	8.4745	0.2539	0.6667	0.1099	0.1378
4	13.240	18.9943	0.2579	0.3067	0.2463	0.1400
5	24.733	95.1988	2.9296	0.5067	1.2344	1.5898
6	27.720	3716.1894	90.5392	0.6400	48.1868	49.1330
7	29.280	3770.8966	87.5167	0.6667	48.8961	47.4928
8	32.520	16.4056	0.3930	0.6800	0.2127	0.2133
9	39.480	31.3196	0.6059	0.8267	0.4062	0.3287
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Mobile Phase: Hexane: IPA, 95:5

Flow rate : 0.5 mL/min

λ : 254 nm

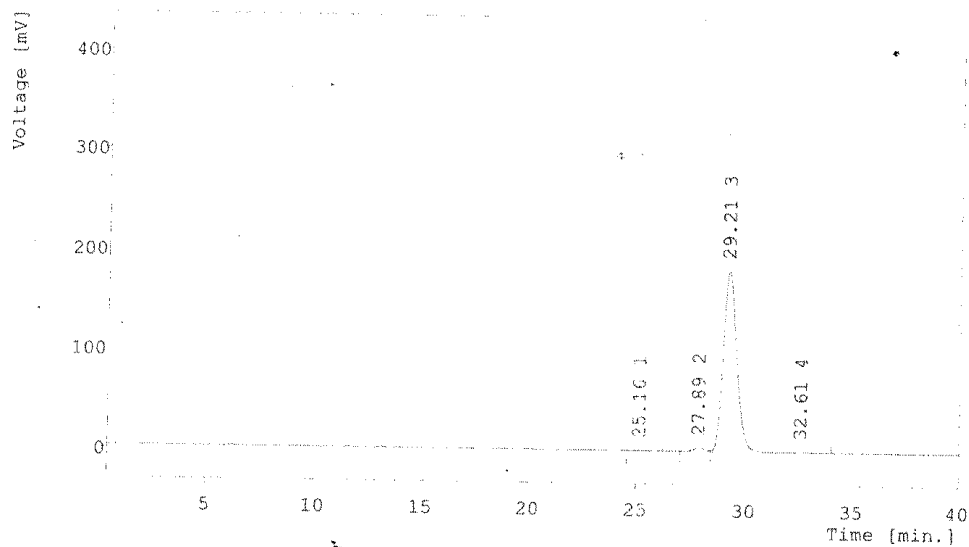
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CHPHE955

Page 1

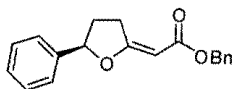
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Analyst : **balakishan**
Dilution : **1**
From : **Wed, 1st Jan, 2003 6:55:38**
Calibration : **(none)**
Style : **report**



Result Table - Calculation Method Uncal

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2	27.893	135.2253	3.5811	0.6267	1.6821	1.9227
3	29.213	7857.3352	181.6674	0.6667	97.7421	97.5381
4	32.613	32.0477	0.5925	0.7600	0.3987	0.3182
-	Total	8038.8473	186.2527			



Mobile Phase: Hexane: IPA, 95:5

Flow rate : 0.5 mL/min

λ : 254 nm

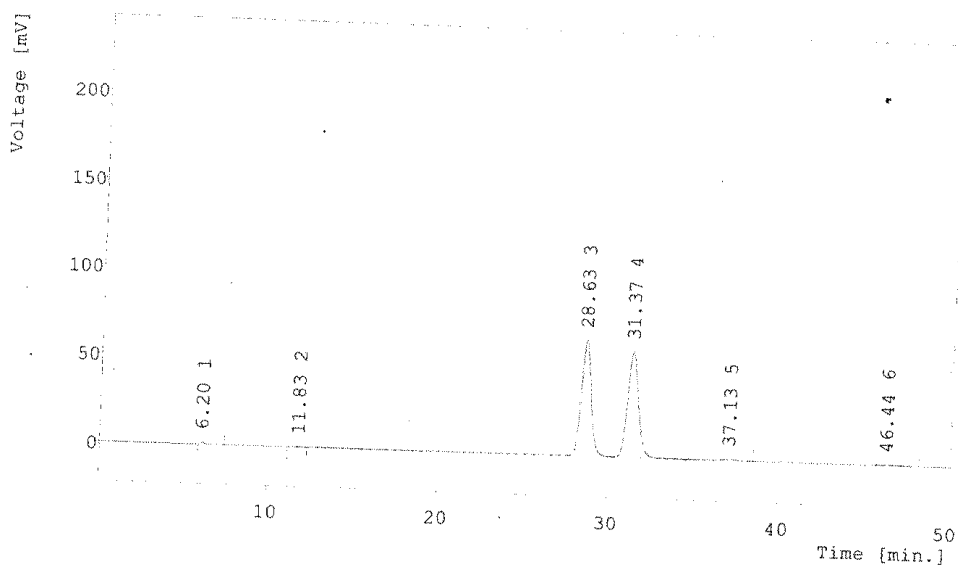
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RSFUR955

Page 1

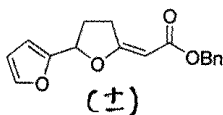
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Analyst : balu
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 From : Tue, 14th Jan, 2003 19:16:13
 Calibration : (none)
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Result Table - Calculation Method Uncal

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2	11.827	14.9084	0.4012	0.6800	0.2694	0.3147
3	28.627	2770.1856	65.4191	0.6133	50.0571	51.3151
4	31.373	2650.6267	59.6036	0.6933	47.8966	46.7534
5	37.133	54.5712	0.6532	0.9600	0.9861	0.5124
6	46.440	25.8346	0.3576	1.1467	0.4668	0.2805
-	Total	5534.0550	127.4851			



Mobile Phase: Hexane: IPA, 95:5

Flow rate : 0.5 mL/min

λ : 254 nm

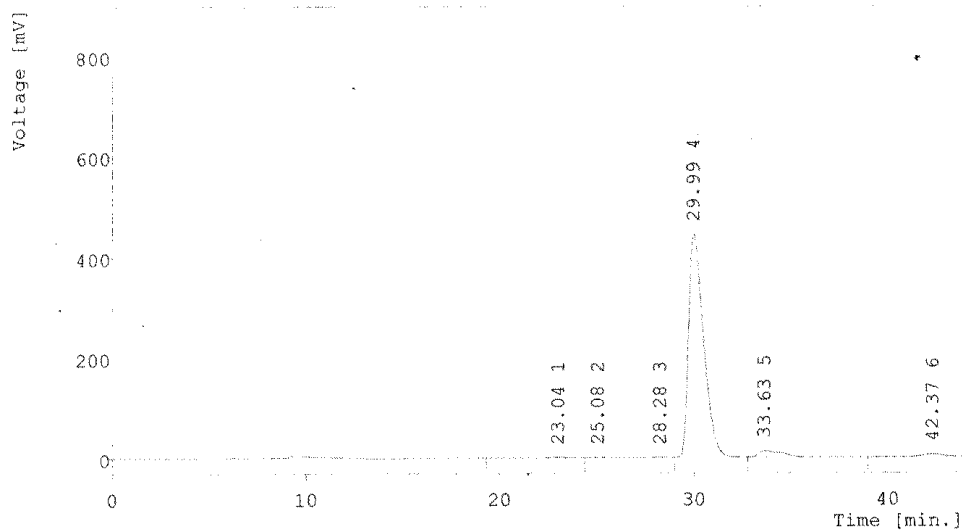
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CHFUR955

Page 1

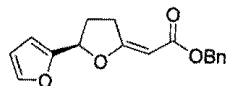
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Result Table - Calculation Method Uncal

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3	28.280	17.3147	0.3092	0.8933	0.0684	0.0664
4	29.987	23794.9224	445.8460	0.8400	93.9675	95.7190
5	33.627	1026.1865	12.6693	1.4533	4.0525	2.7200
6	42.373	372.4821	5.3063	1.0667	1.4710	1.1393
-	Total	25322.4934	465.7861			



Mobile Phase: Hexane: IPA, 95:5

Flow rate : 0.5 mL/min

λ : 254 nm