

# **Supporting Information**

## **HFIP-Promoted Bischler Indole Synthesis under Microwave Irradiation**

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<sup>2</sup> Department of Applied Chemistry, College of Materials and Energy, South China Agricultural University, Guangzhou 510642, China;

<sup>3</sup> State Key Laboratory for Conservation and Utilization of Subtropical Agro-Bioresources, South China Agricultural University, Guangzhou 510642, China;

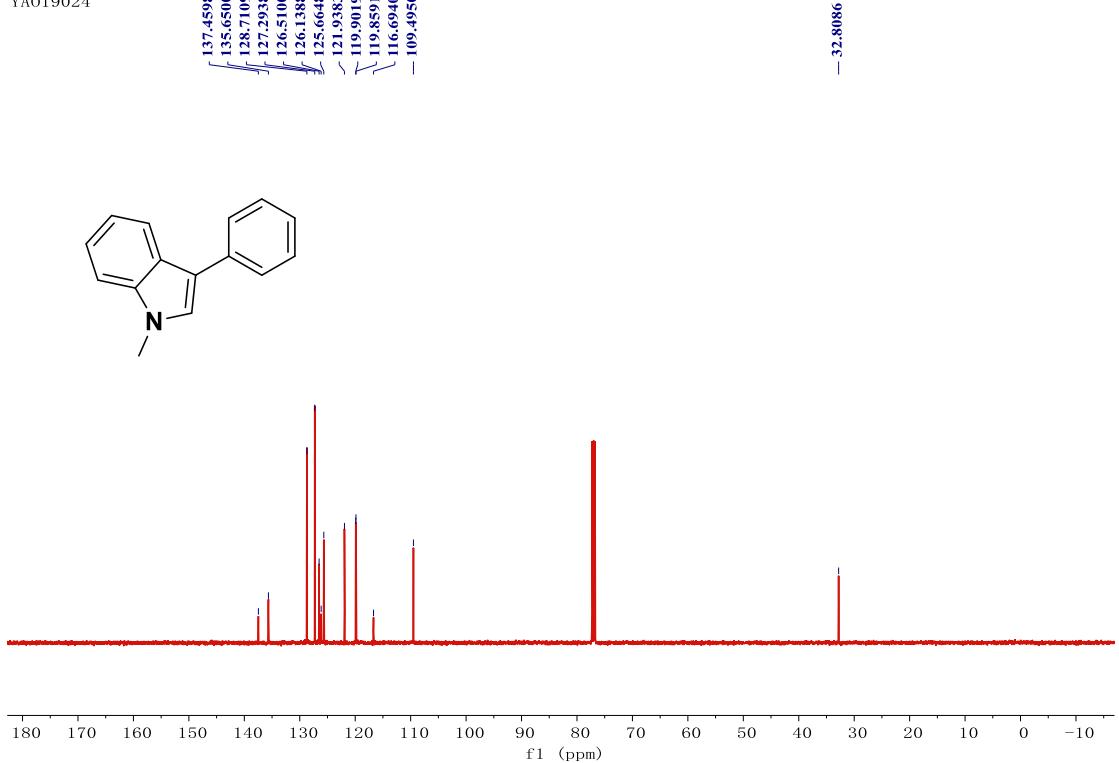
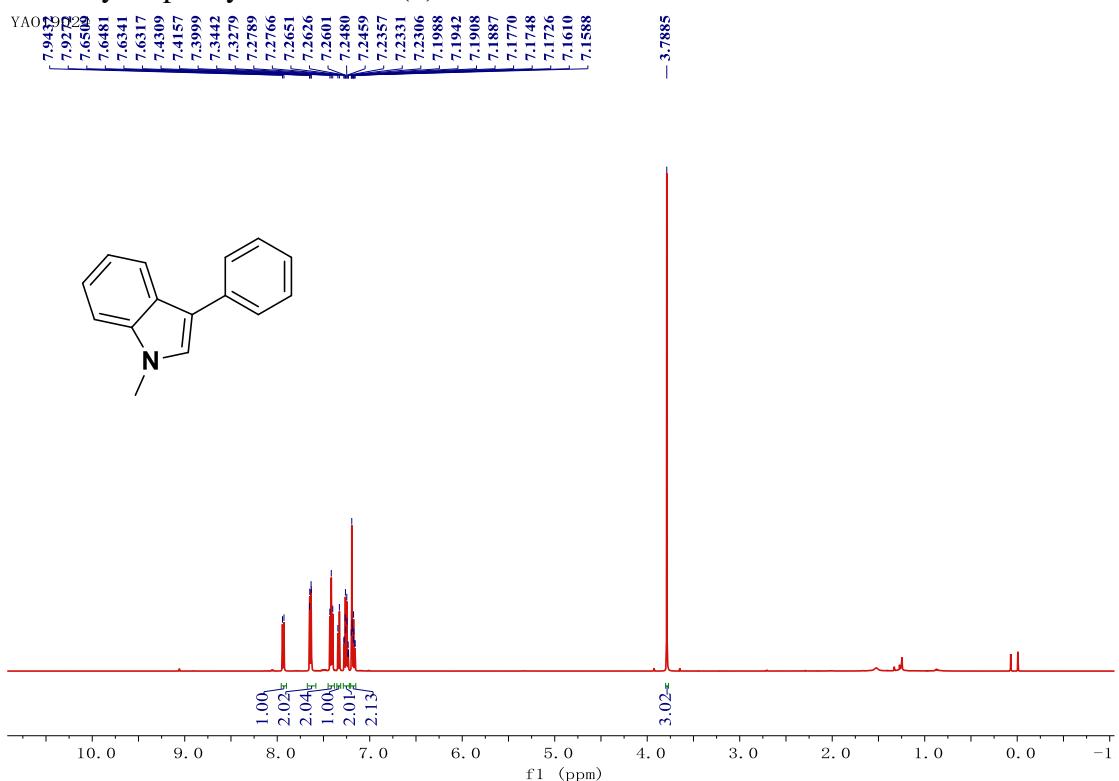
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Copies of <sup>1</sup>H NMR and <sup>13</sup>CNMR Spectra----- S1-S32

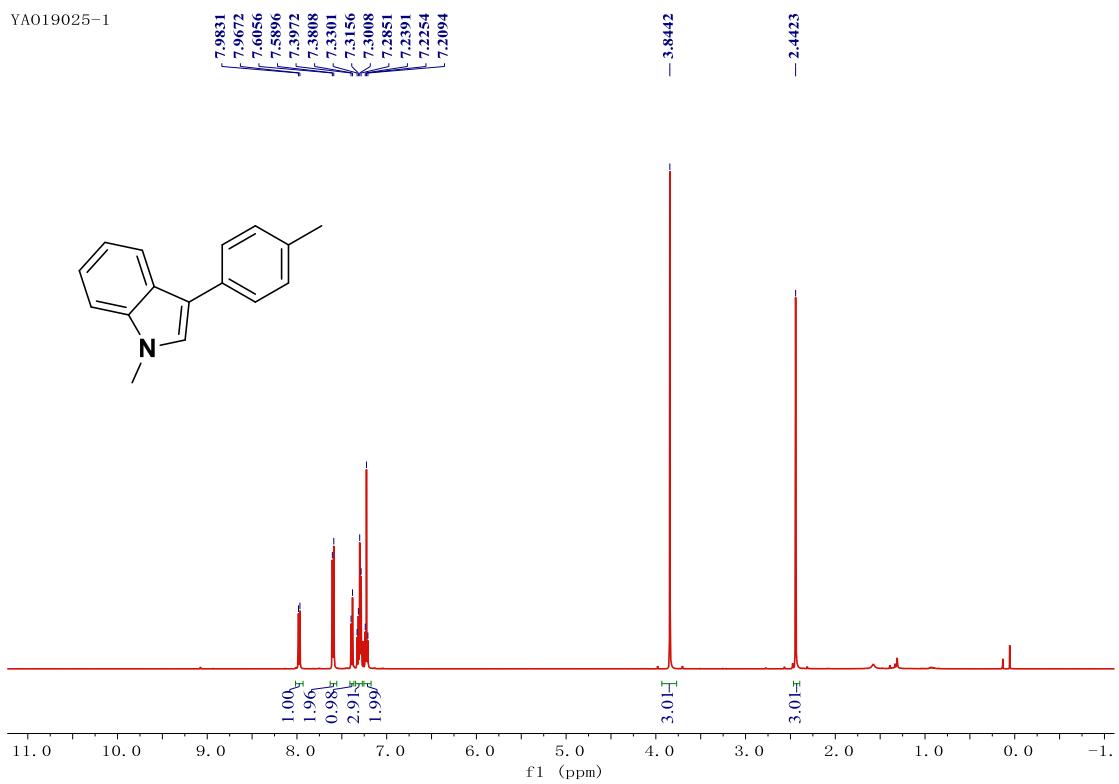
### <sup>1</sup>H and <sup>13</sup>C-NMR Spectra

#### 1-Methyl-3-phenyl-1*H*-indole (**2**)

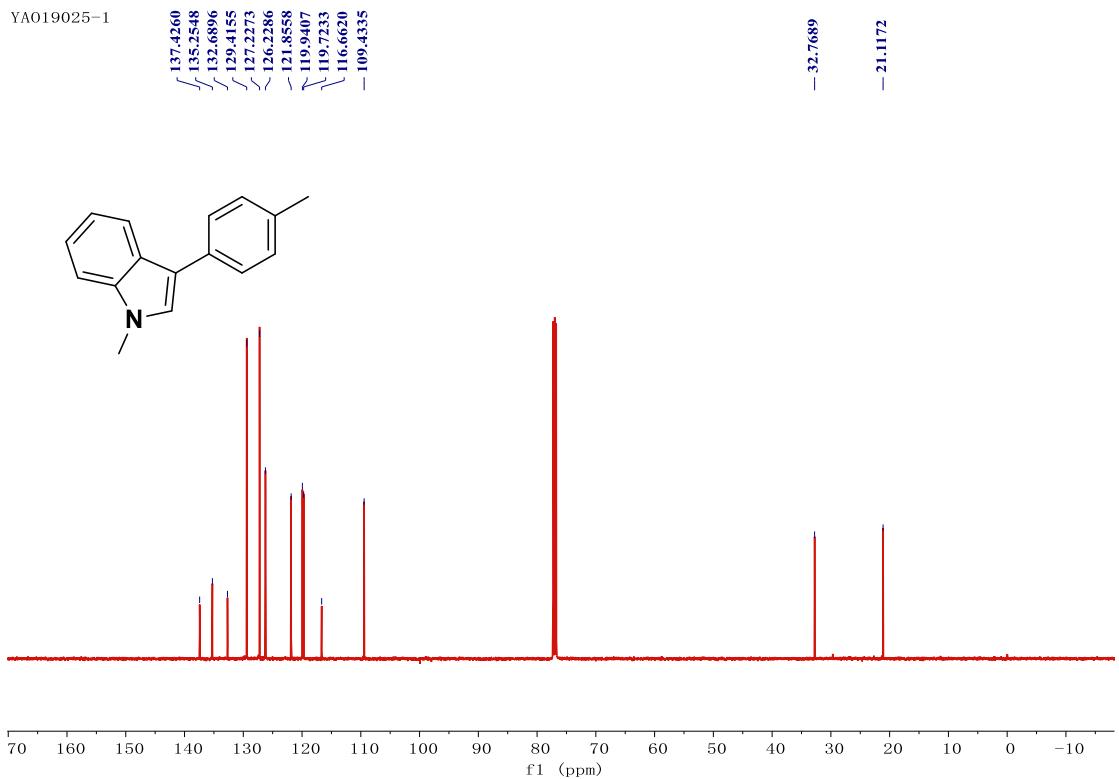


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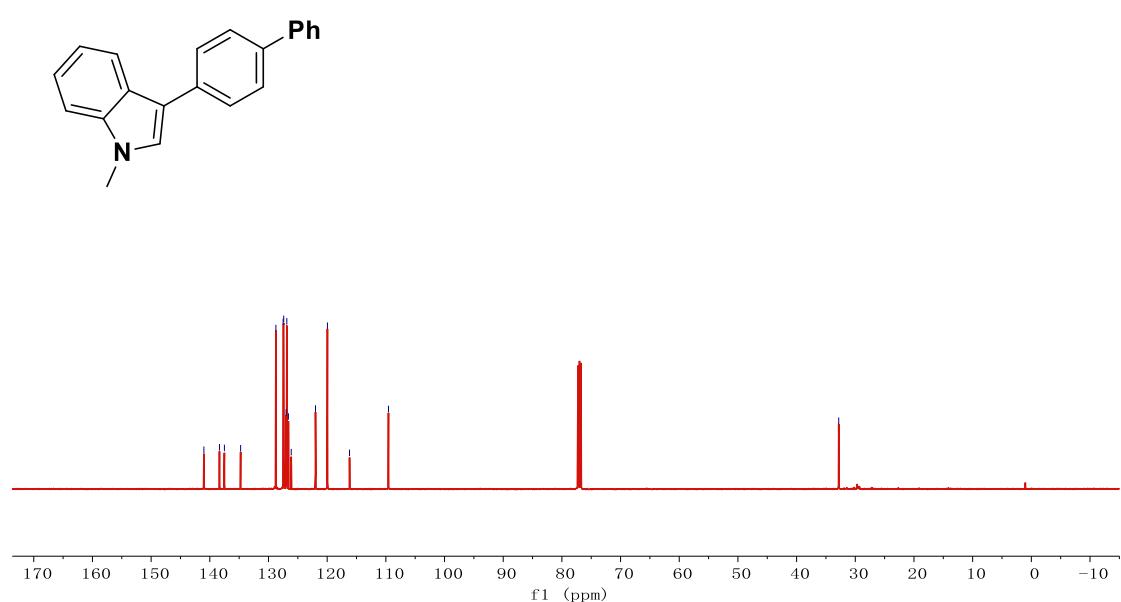
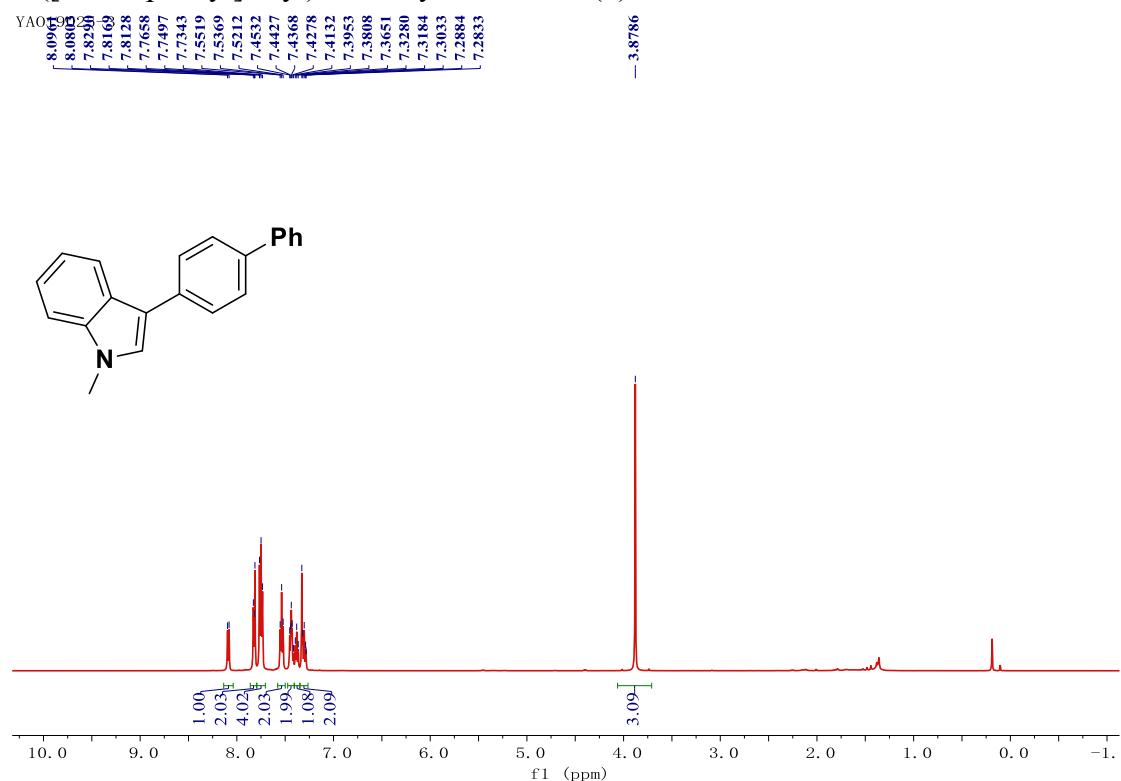
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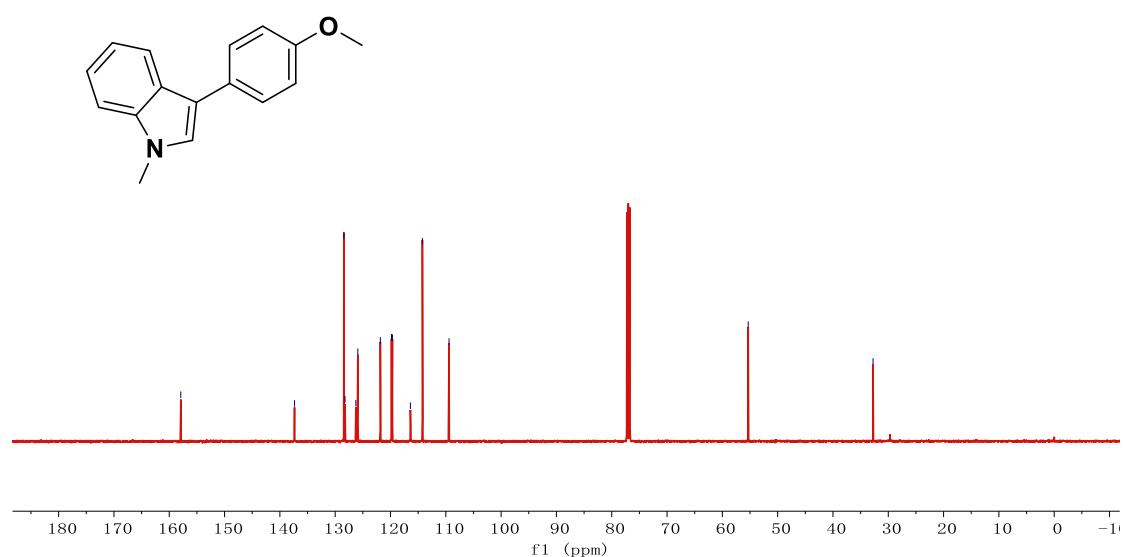
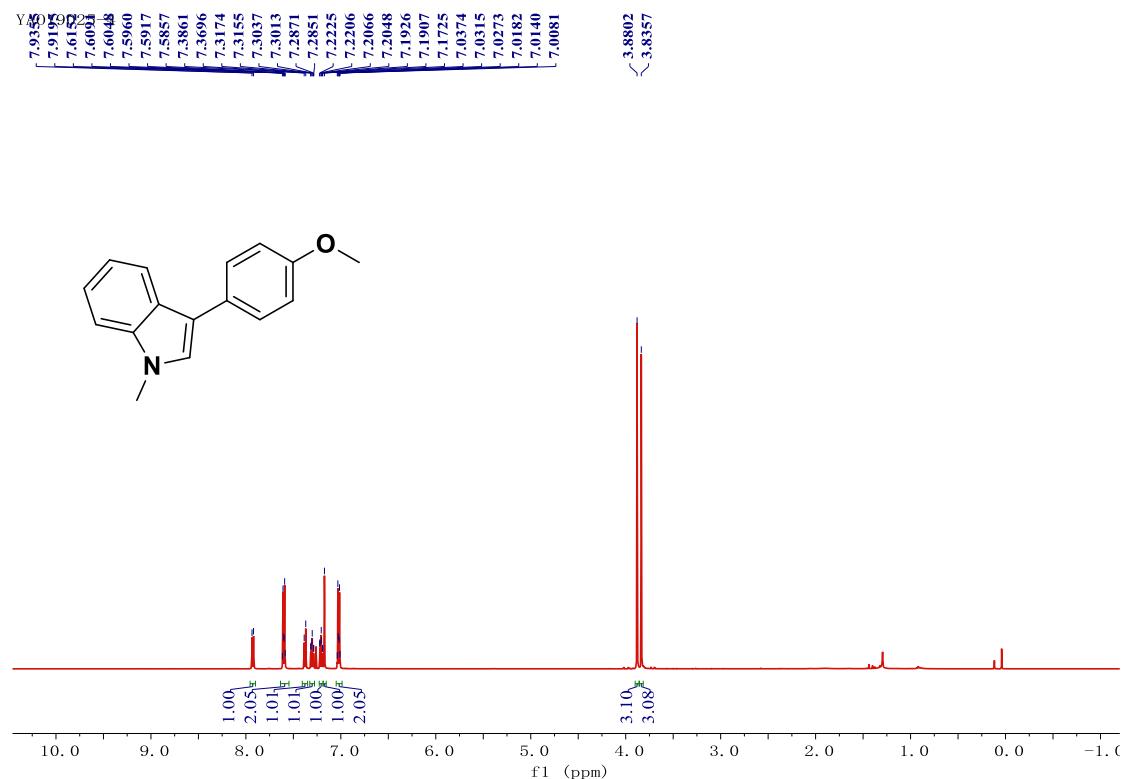
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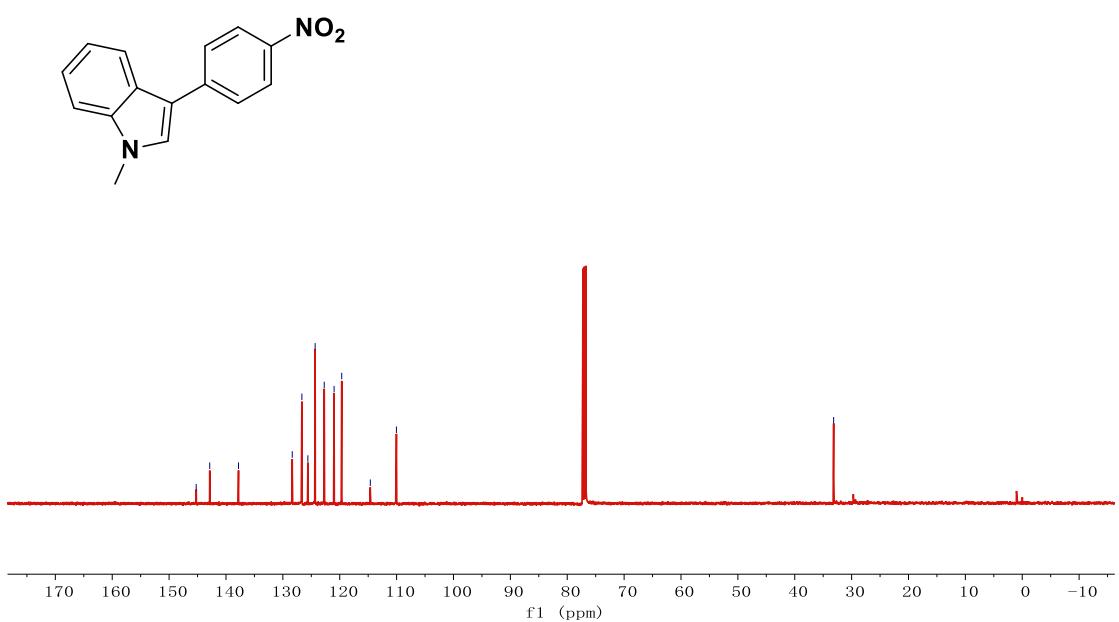
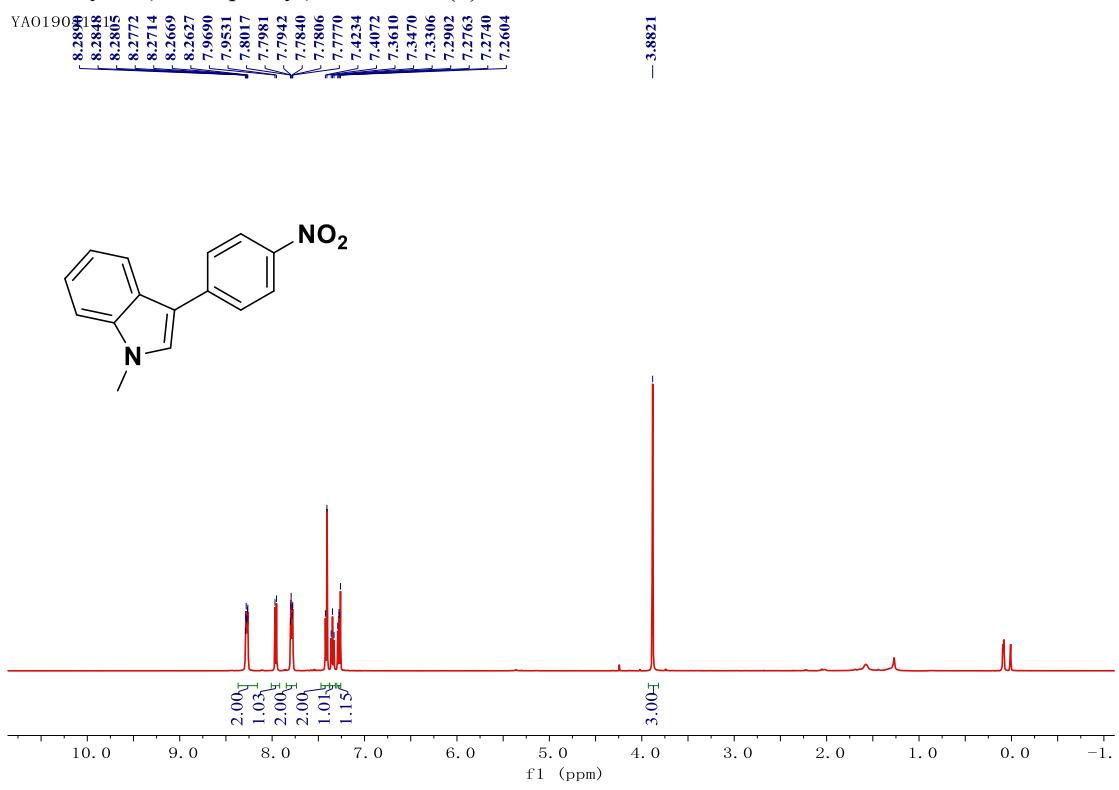
**3-([1,1'-Biphenyl]-4-yl)-1-methyl-1*H*-indole (**4**)**



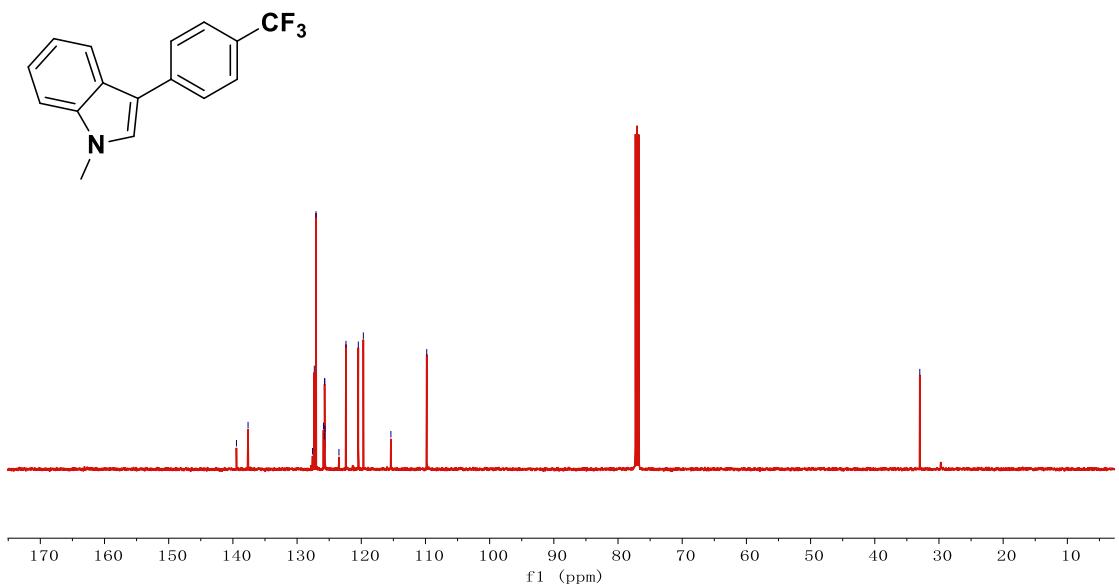
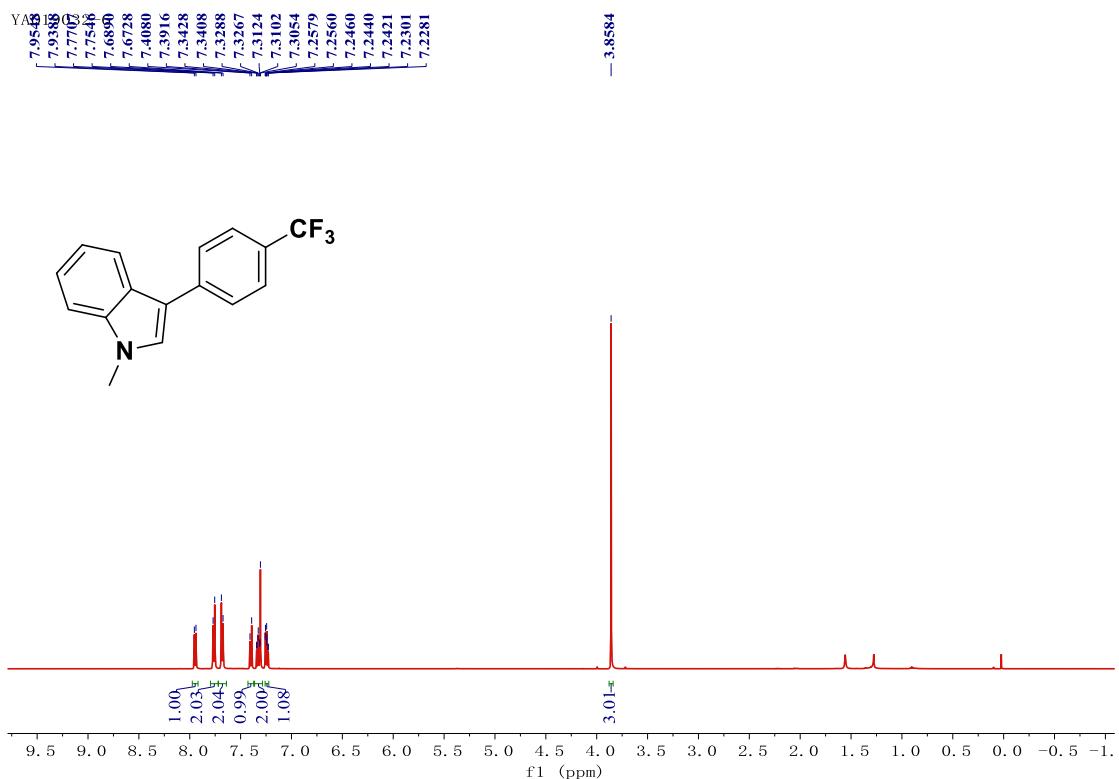
**3-(4-Methoxyphenyl)-1-methyl-1*H*-indole (**5**)**



**1-Methyl-3-(4-nitrophenyl)-1*H*-indole (**6**)**

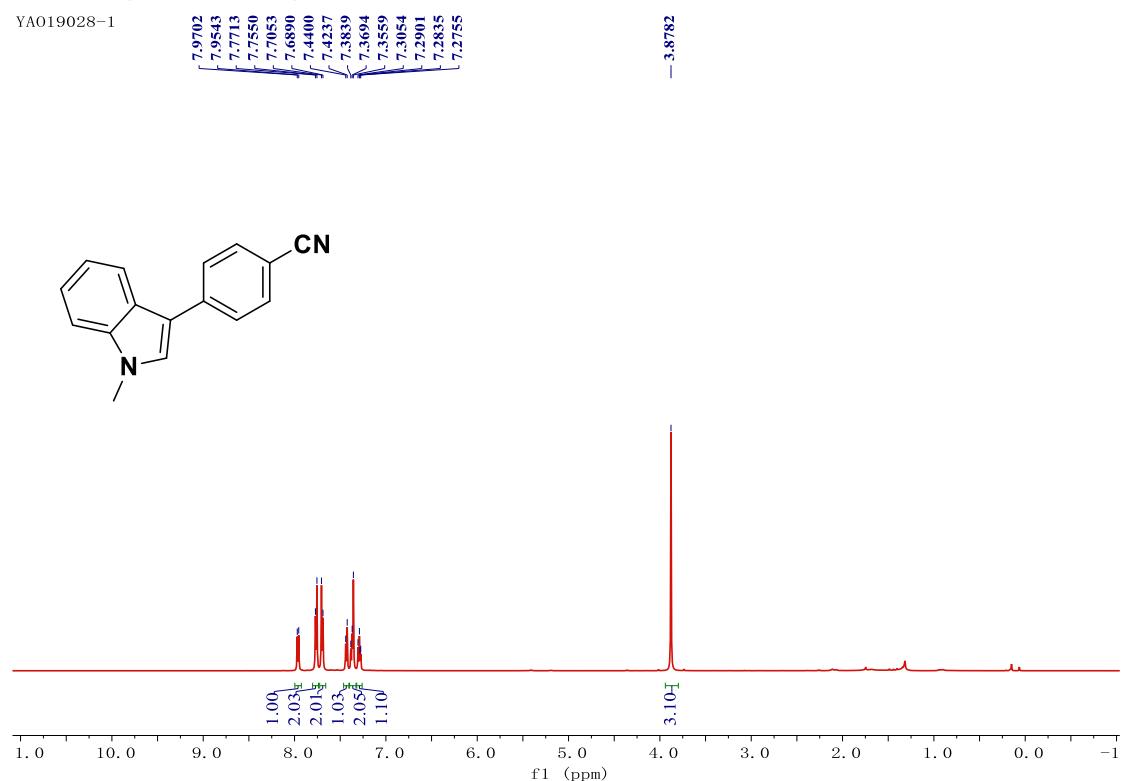


1-Methyl-3-(4-(trifluoromethyl)phenyl)-1*H*-indole (**7**)

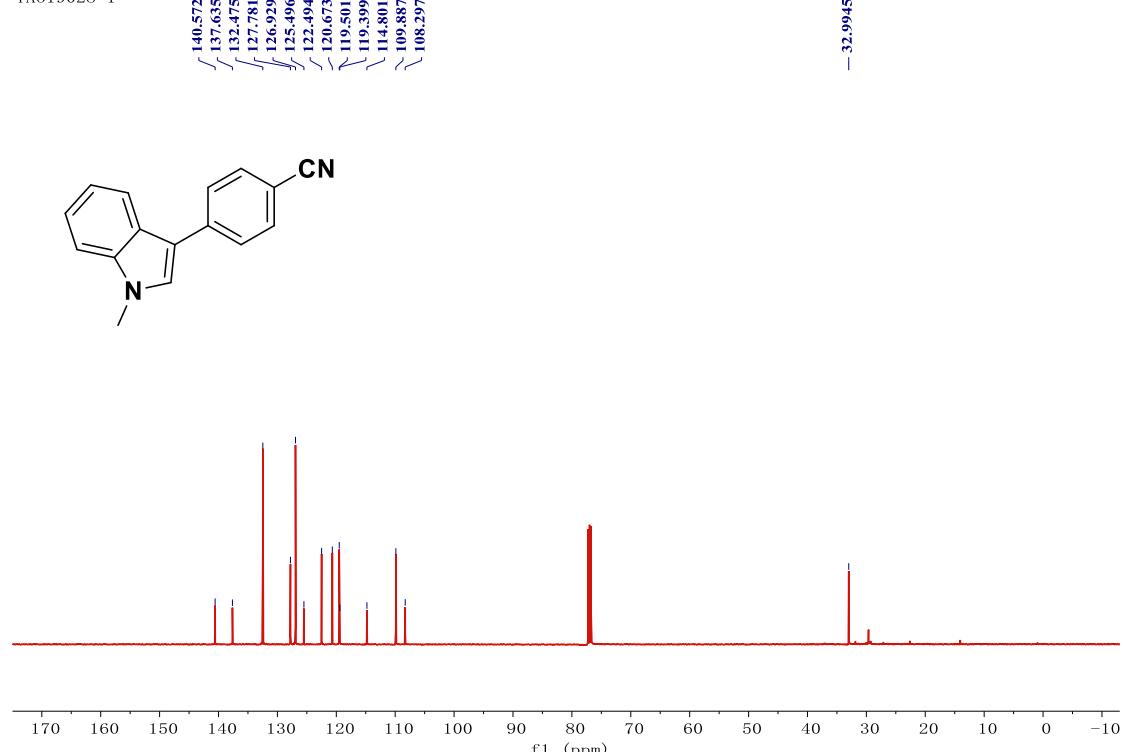


**4-(1-Methyl-1*H*-indol-3-yl)benzonitrile (**8**)**

YAO19028-1

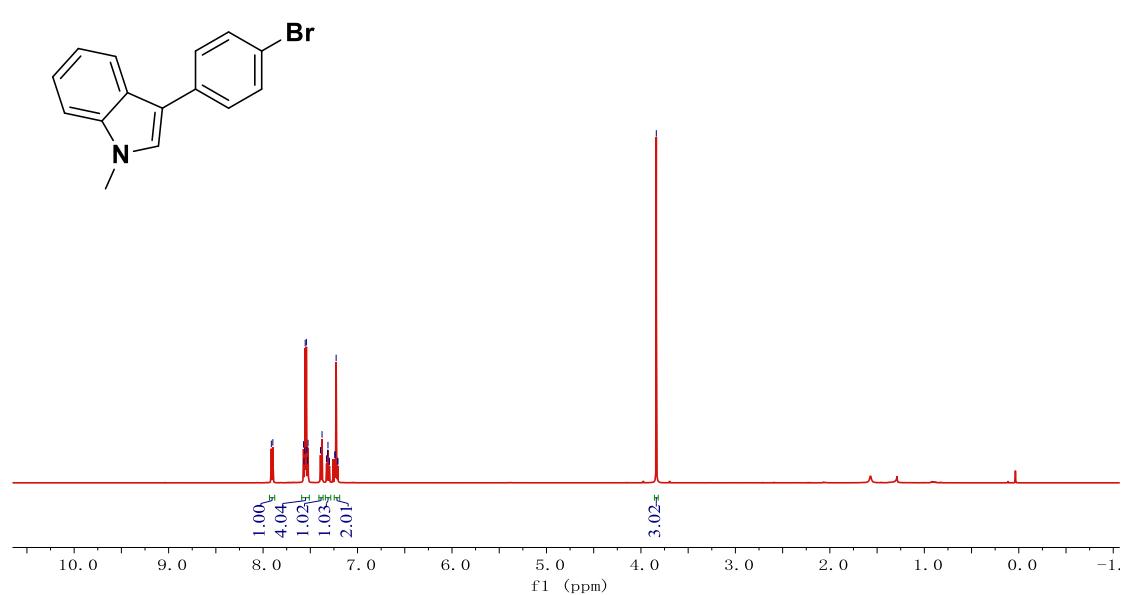


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**3-(4-Bromophenyl)-1-methyl-1*H*-indole (**9**)**

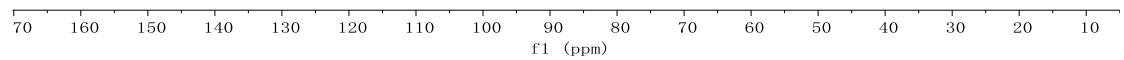
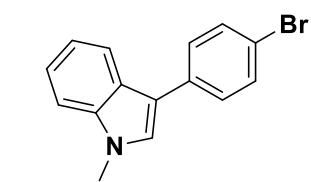
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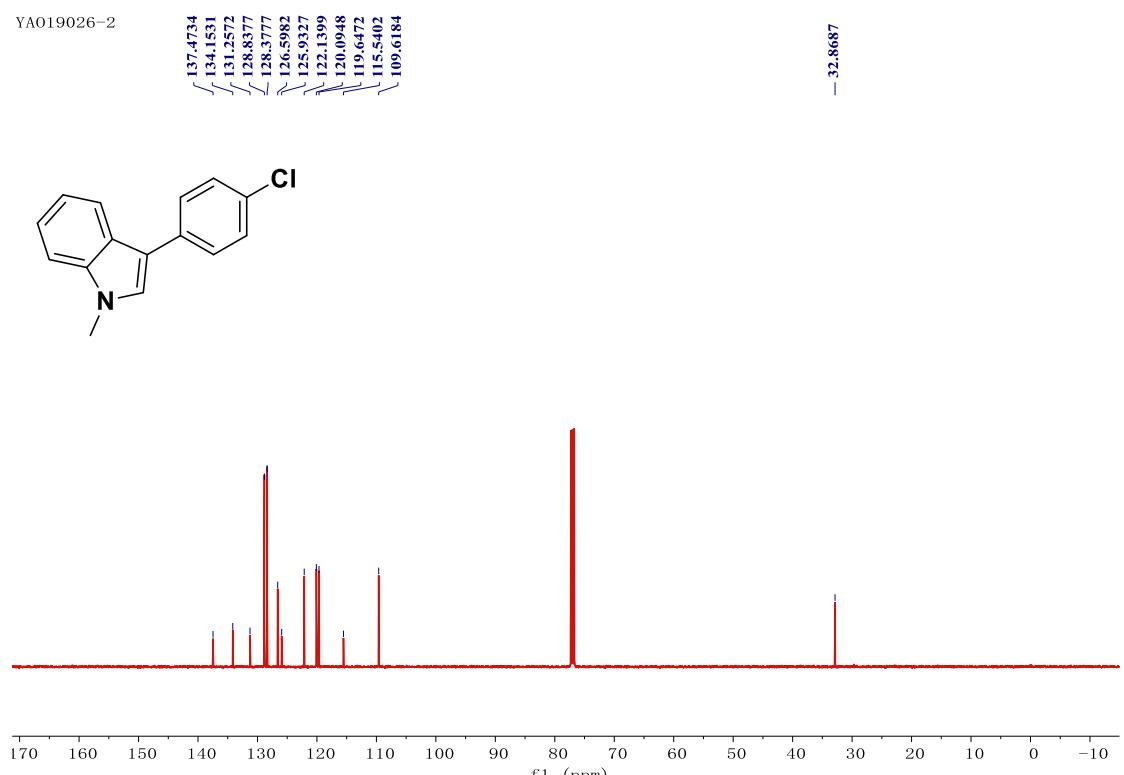
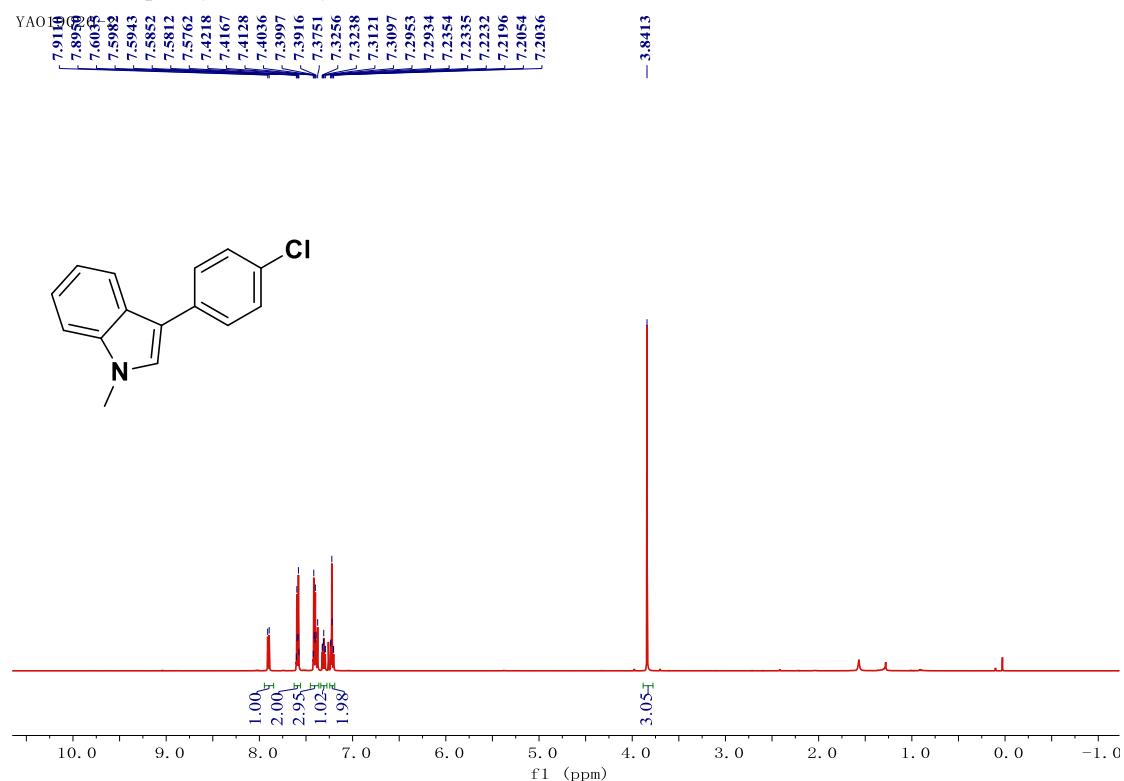
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131.7727  
128.7239  
126.6004  
125.8828  
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119.6431  
119.2365  
115.5336  
109.6278

-3.8373  
-32.8643

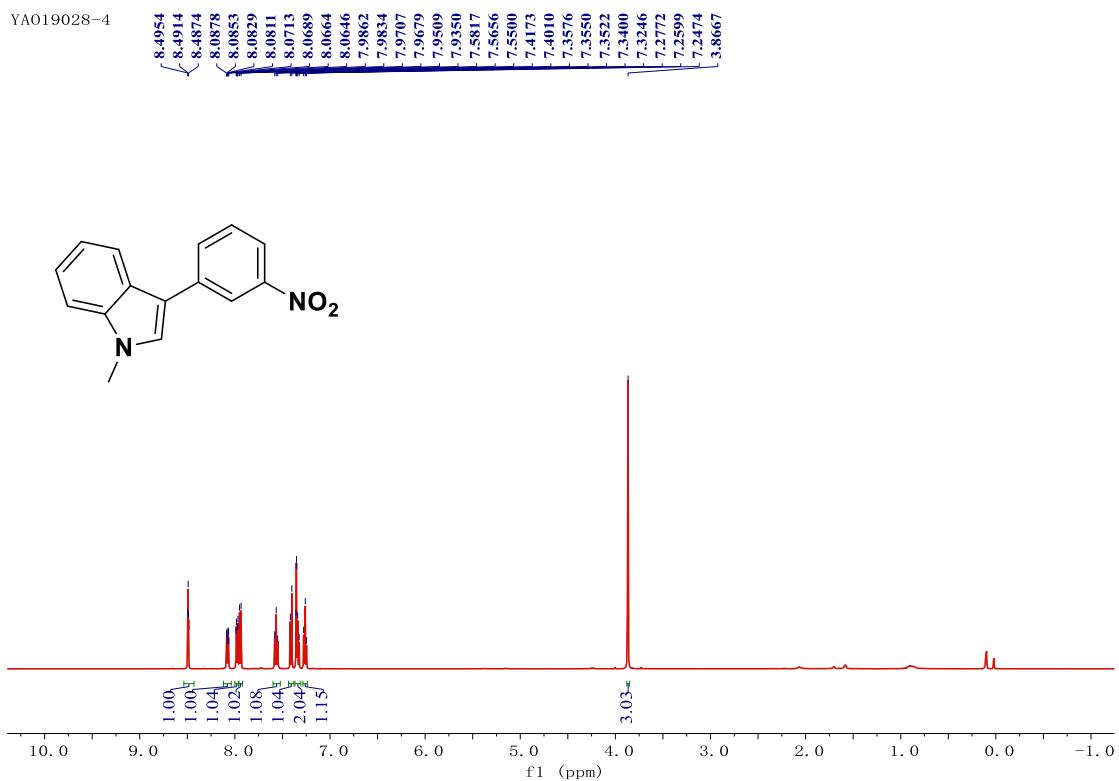


**3-(4-Chlorophenyl)-1-methyl-1*H*-indole (**10**).**



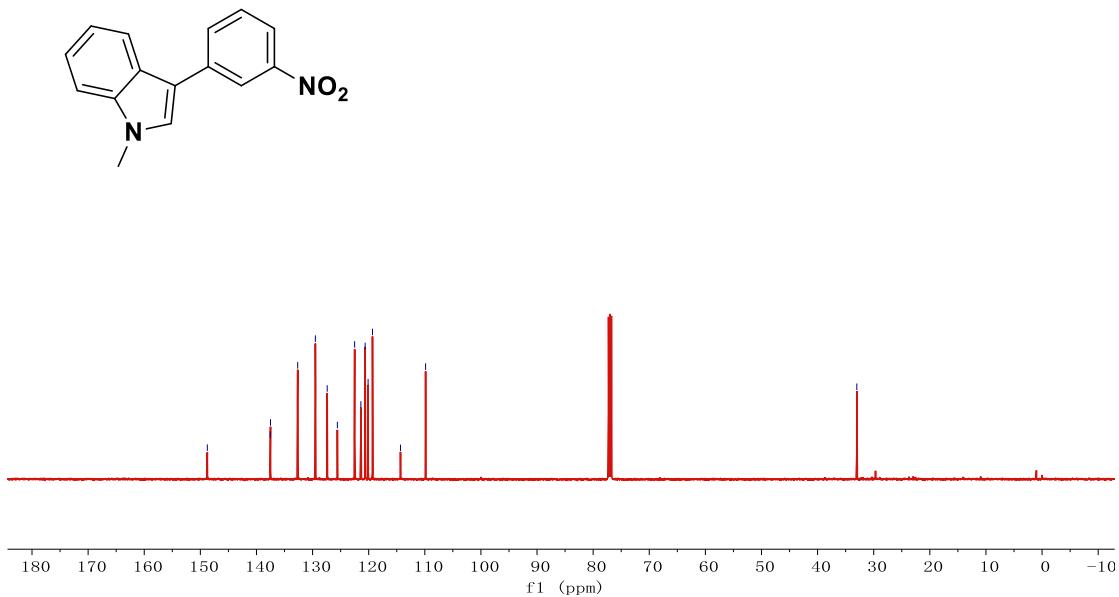
**1-Methyl-3-(3-nitrophenyl)-1*H*-indole (**11**)**

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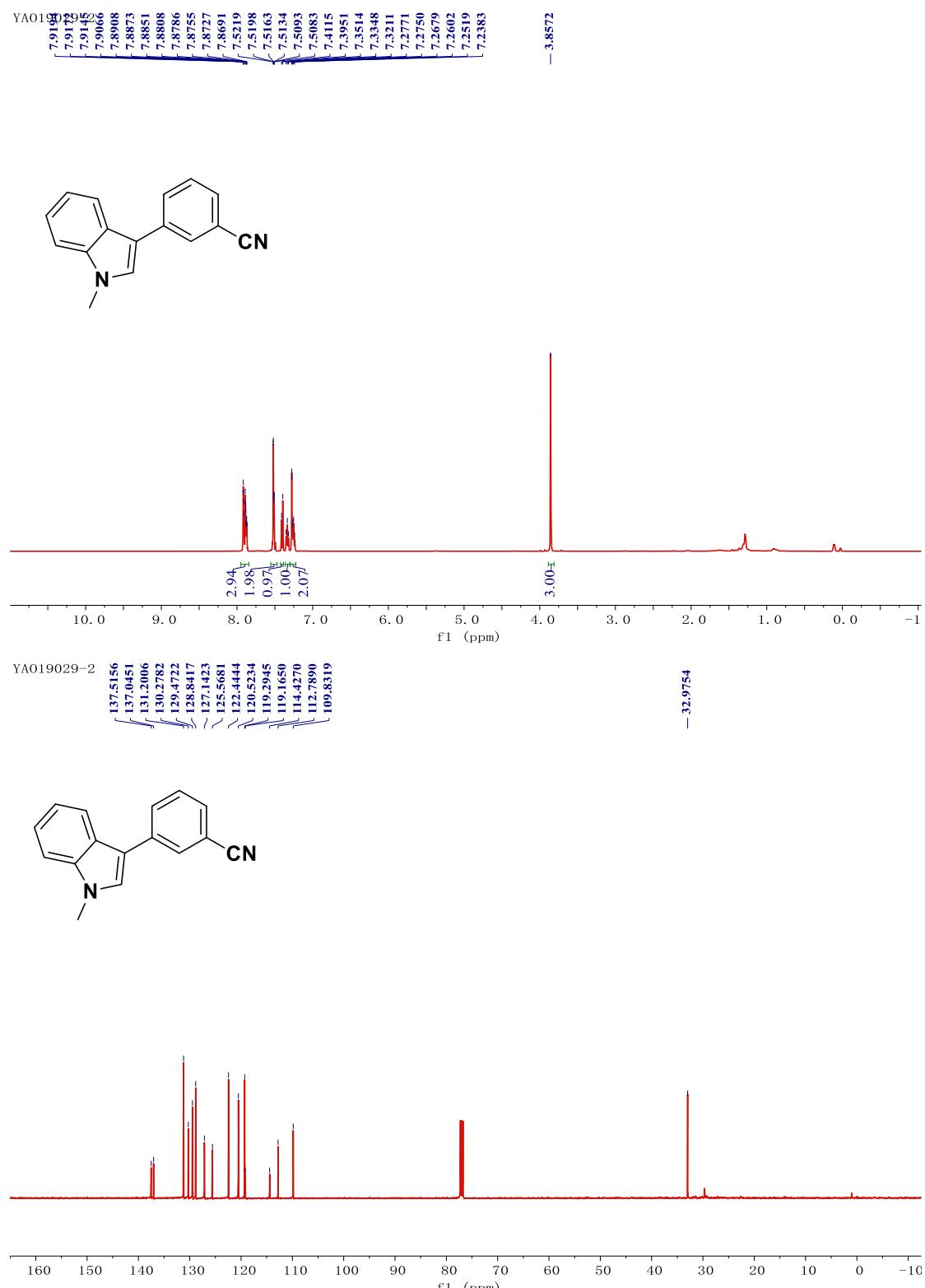


YA019028-4

— 148.7577  
 — 137.5553  
 — 137.4961  
 — 132.6533  
 — 129.5021  
 — 127.3959  
 — 125.5807  
 — 122.5007  
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 — 119.3233  
 — 114.3348  
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 — 33.0092

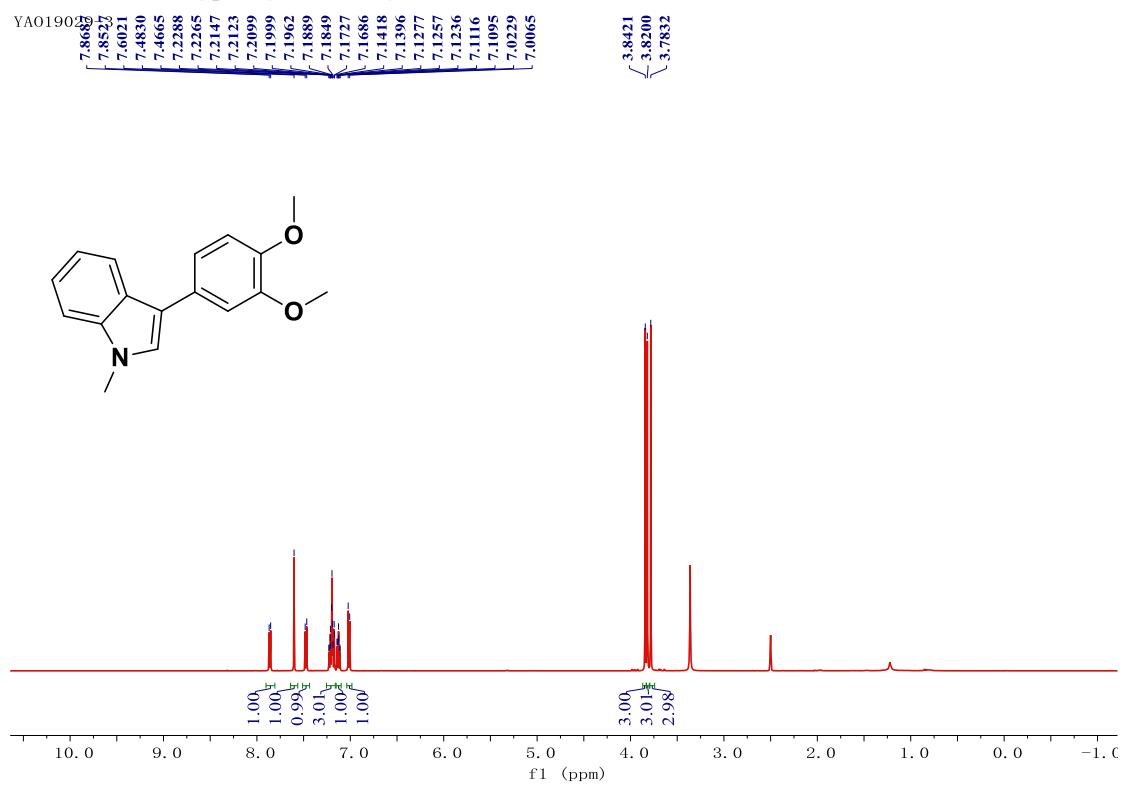


**3-(1-Methyl-1*H*-indol-3-yl)benzonitrile (**12**)**

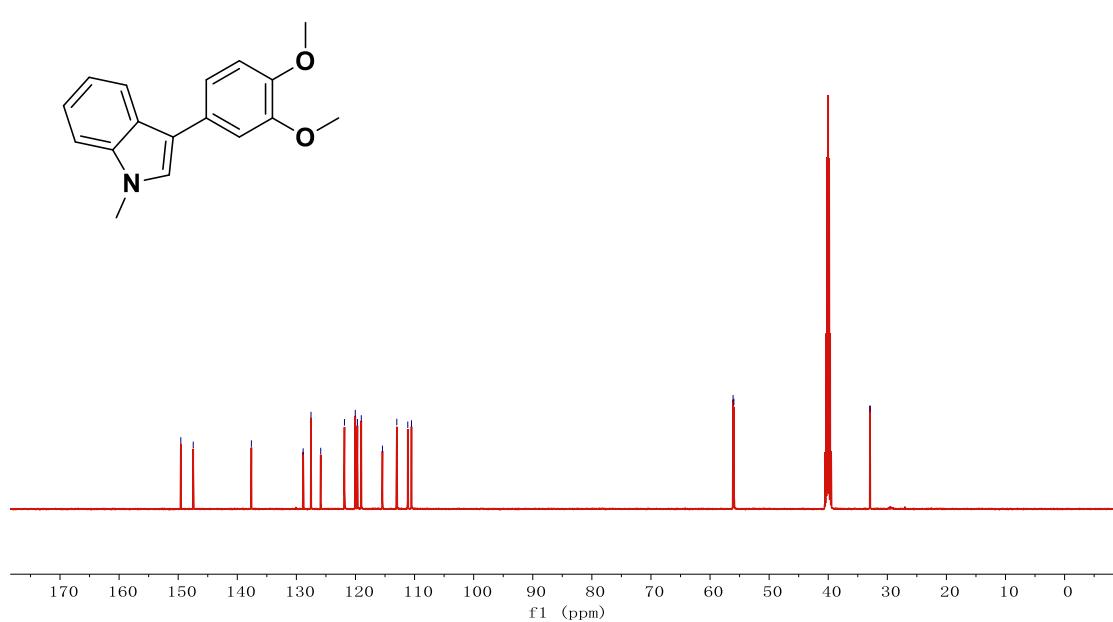
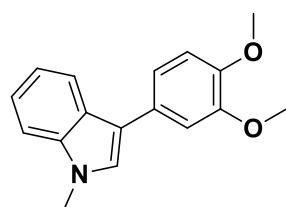


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YAO1902

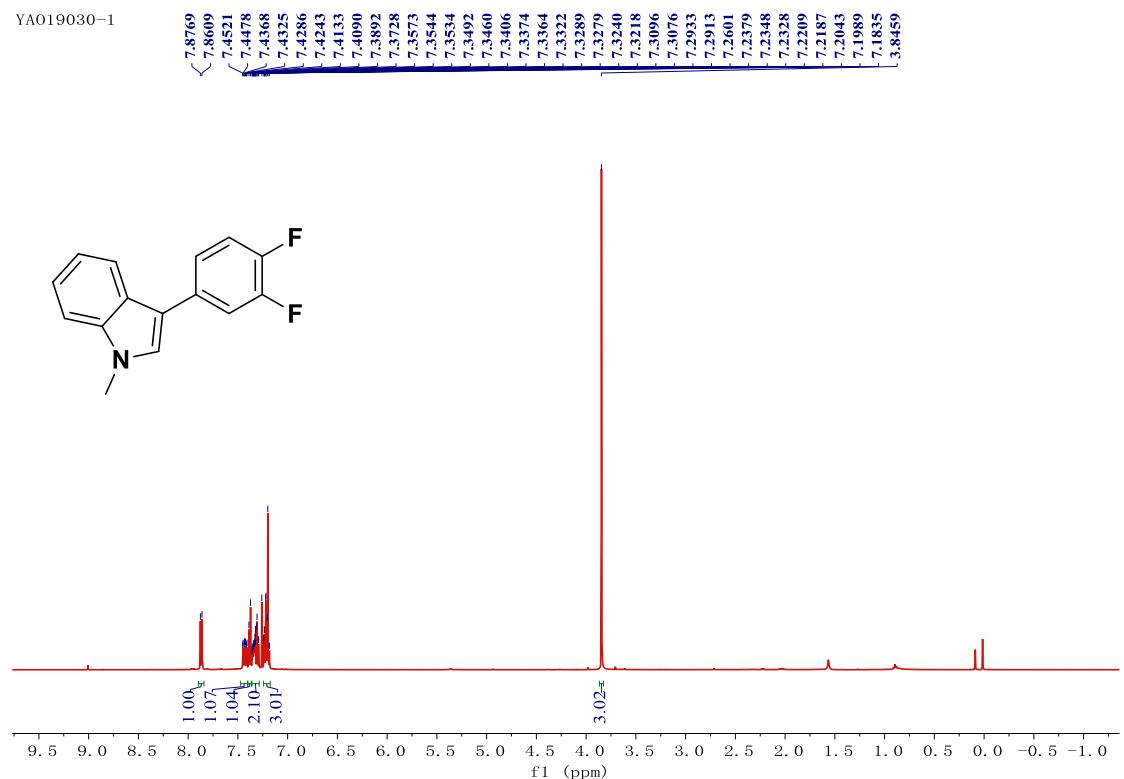


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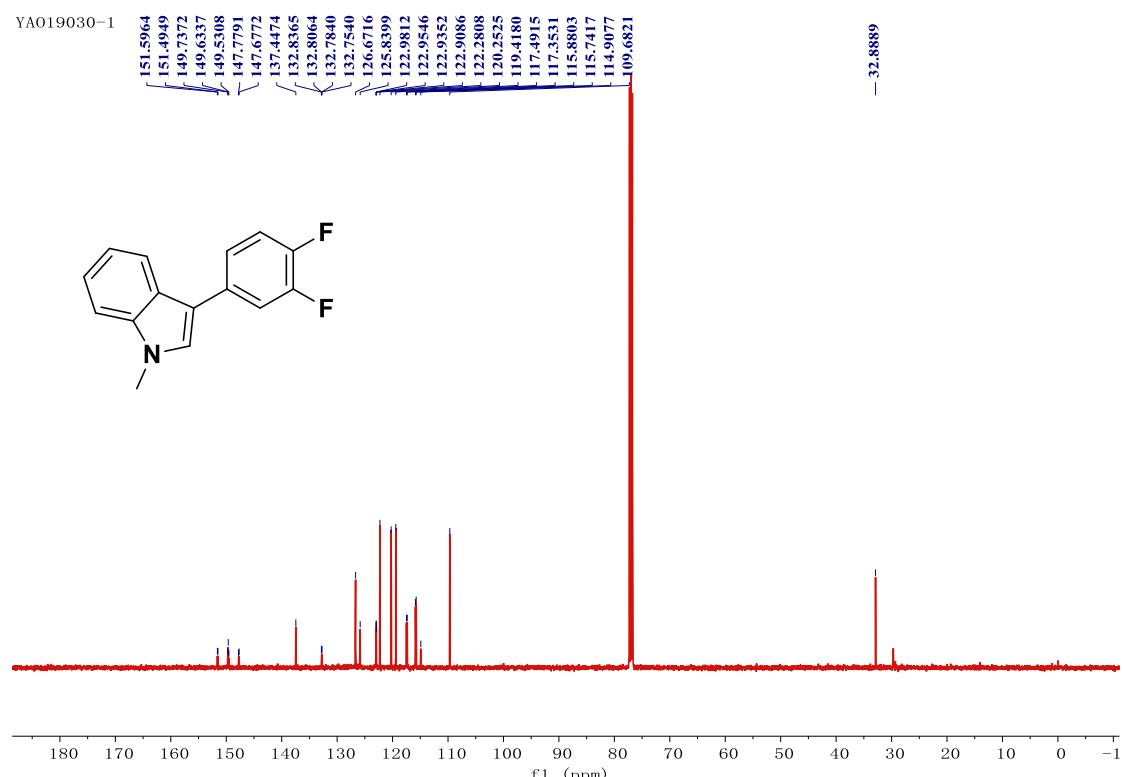


**3-(3,4-Difluorophenyl)-1-methyl-1*H*-indole (**14**)**

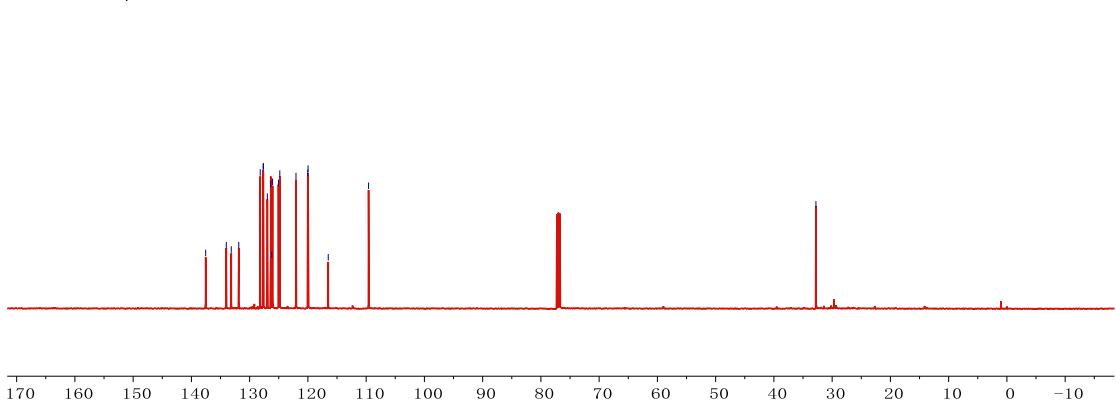
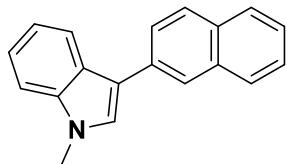
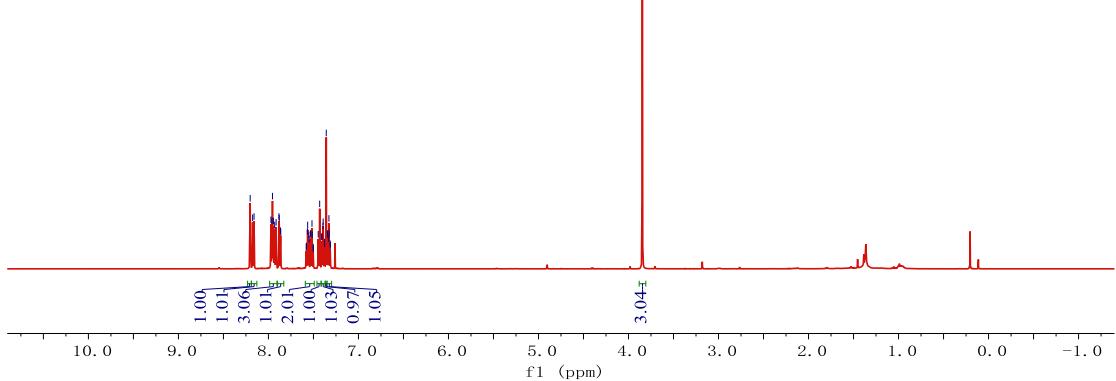
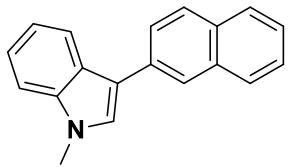
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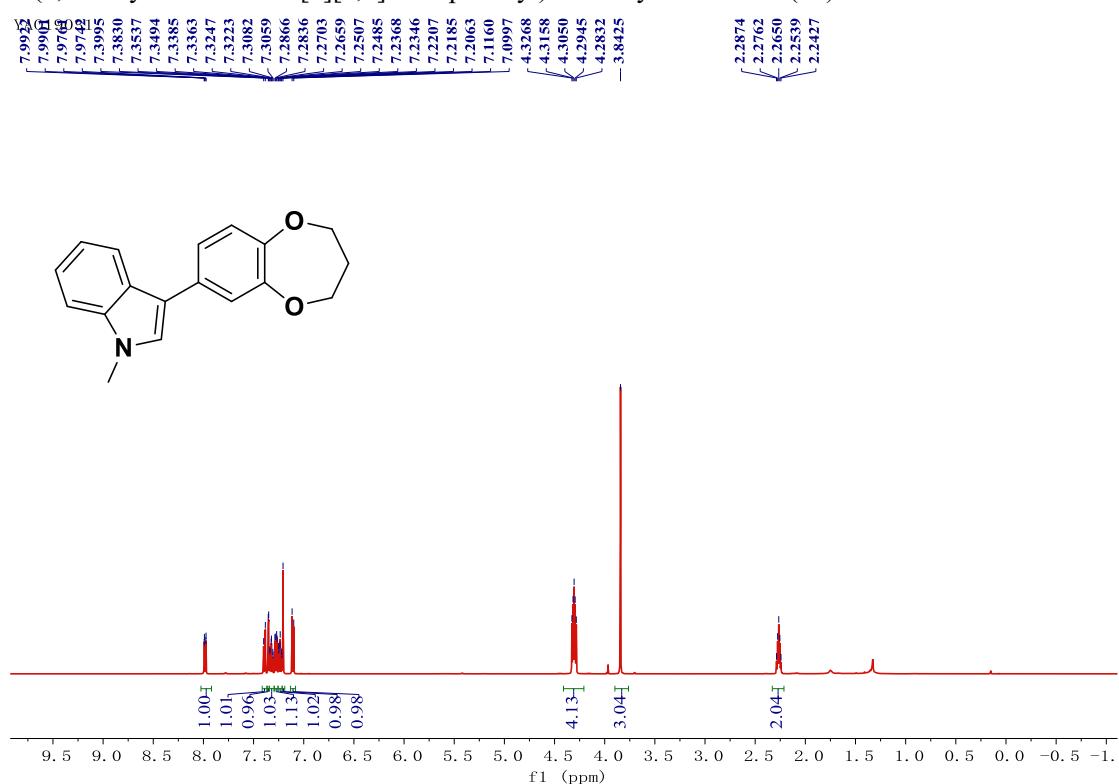
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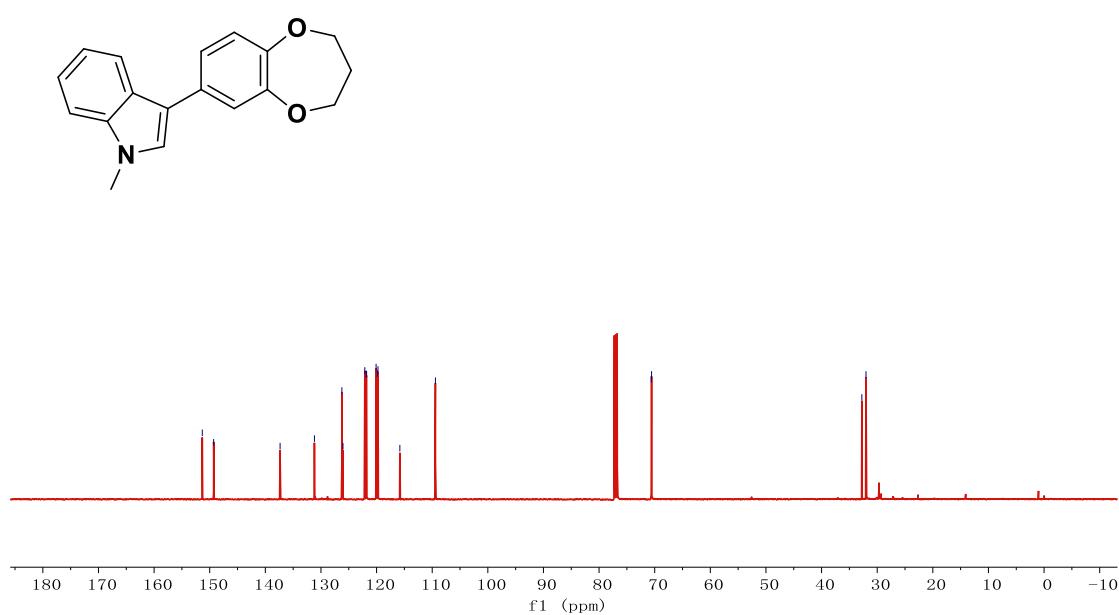
### 1-Methyl-3-(naphthalen-2-yl)-1*H*-indole (**15**)



3-(3,4-Dihydro-2H-benzo[b][1,4]dioxepin-7-yl)-1-methyl-1*H*-indole (**16**)

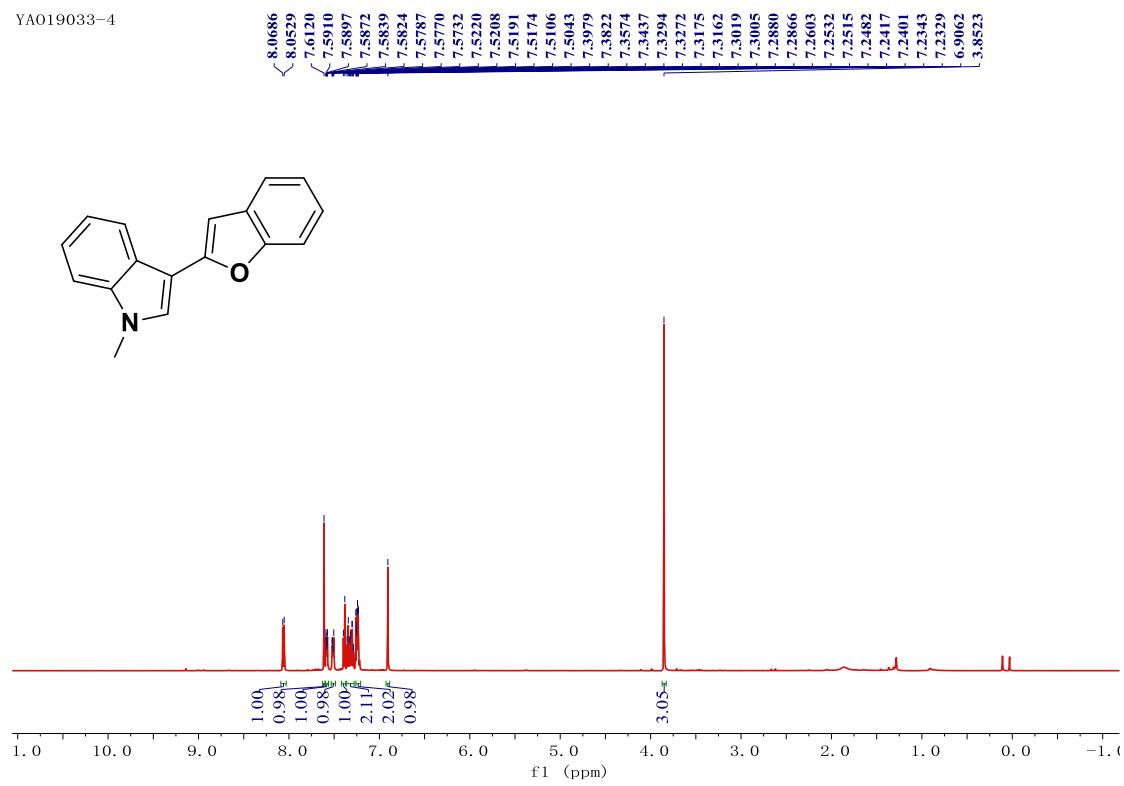


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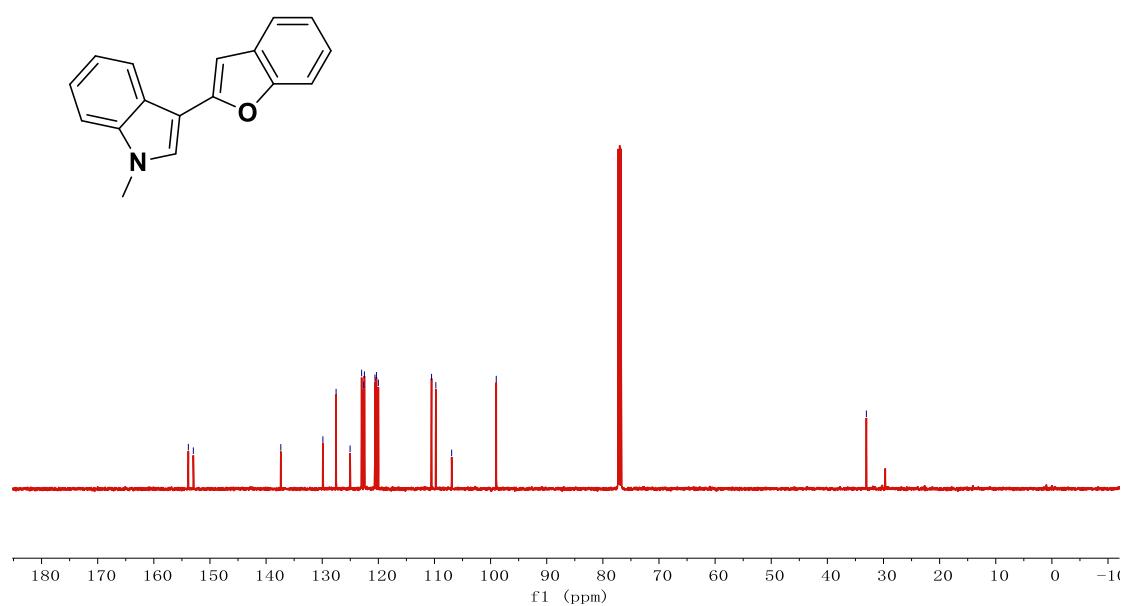


**3-(Benzofuran-2-yl)-1-methyl-1*H*-indole (**17**)**

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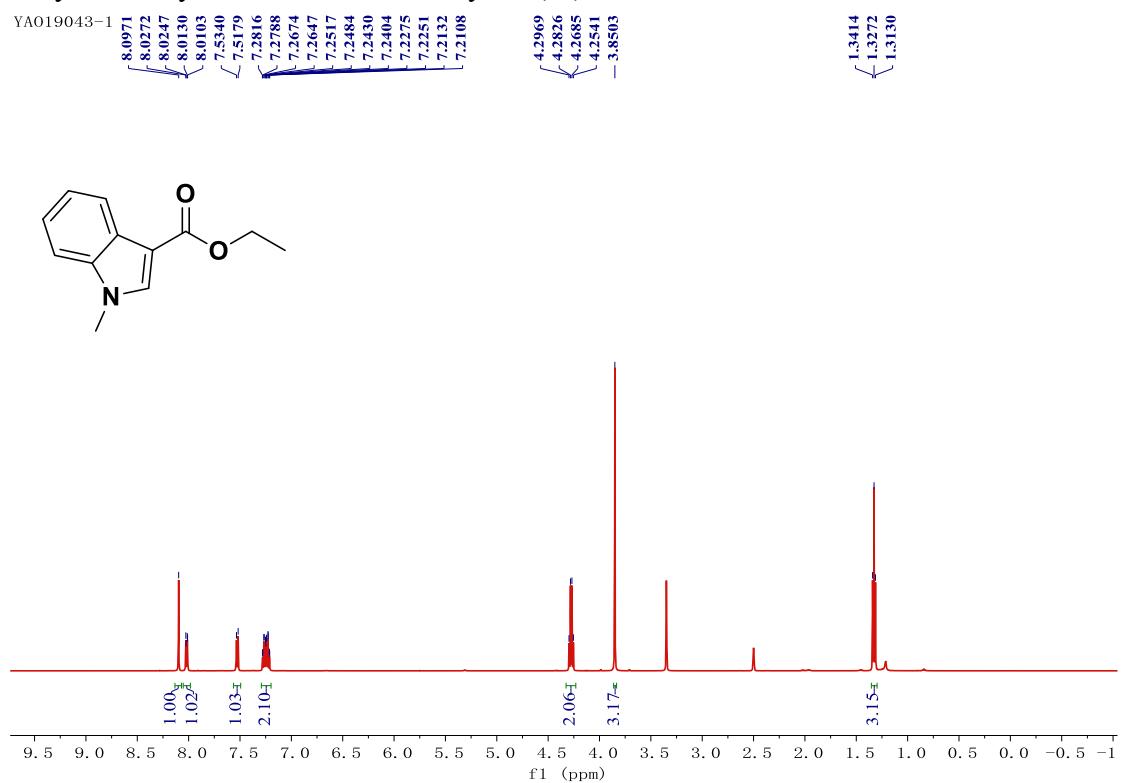


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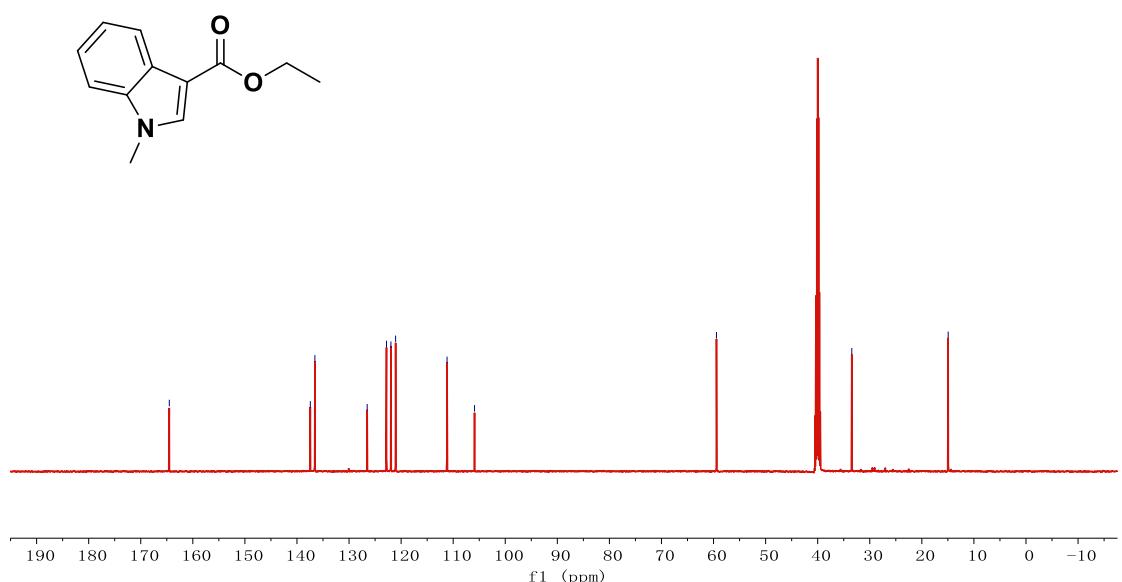


Ethyl 1-methyl-1*H*-indole-3-carboxylate (**18**)

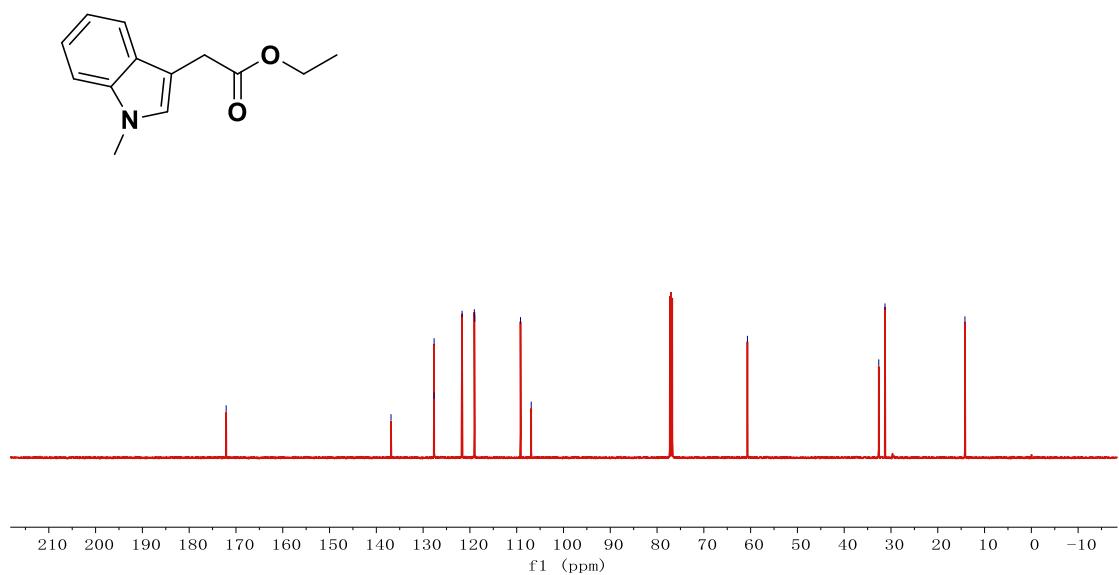
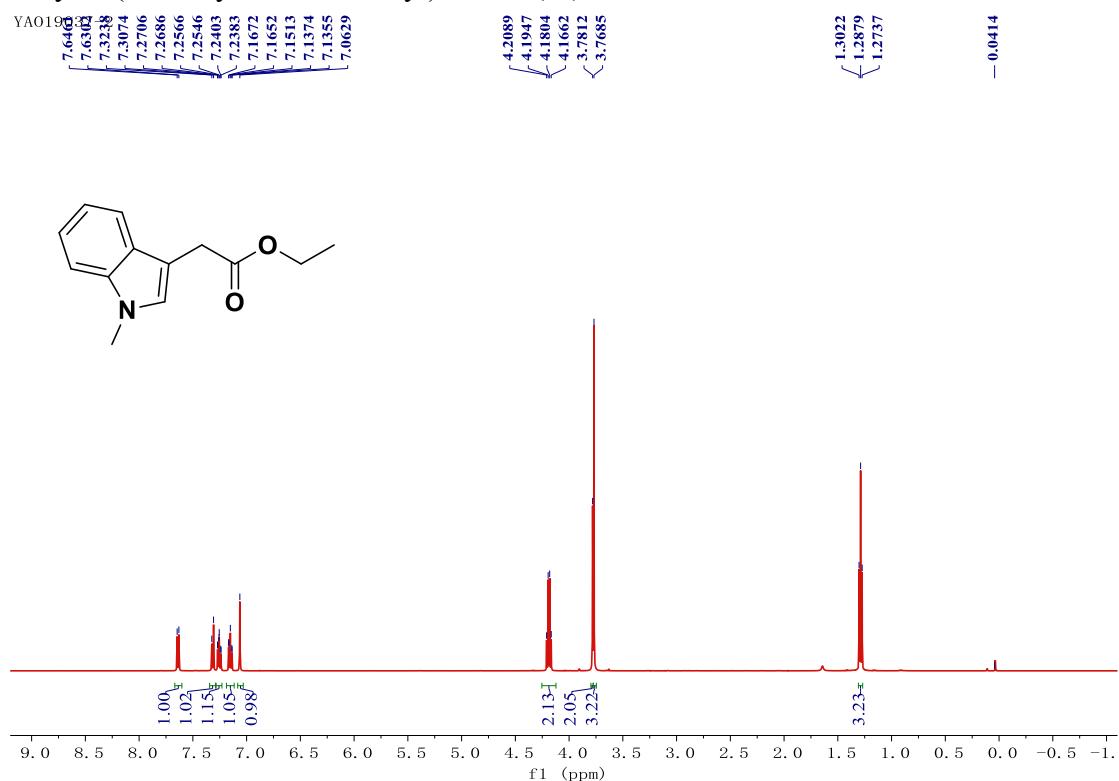
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YAO19043-1

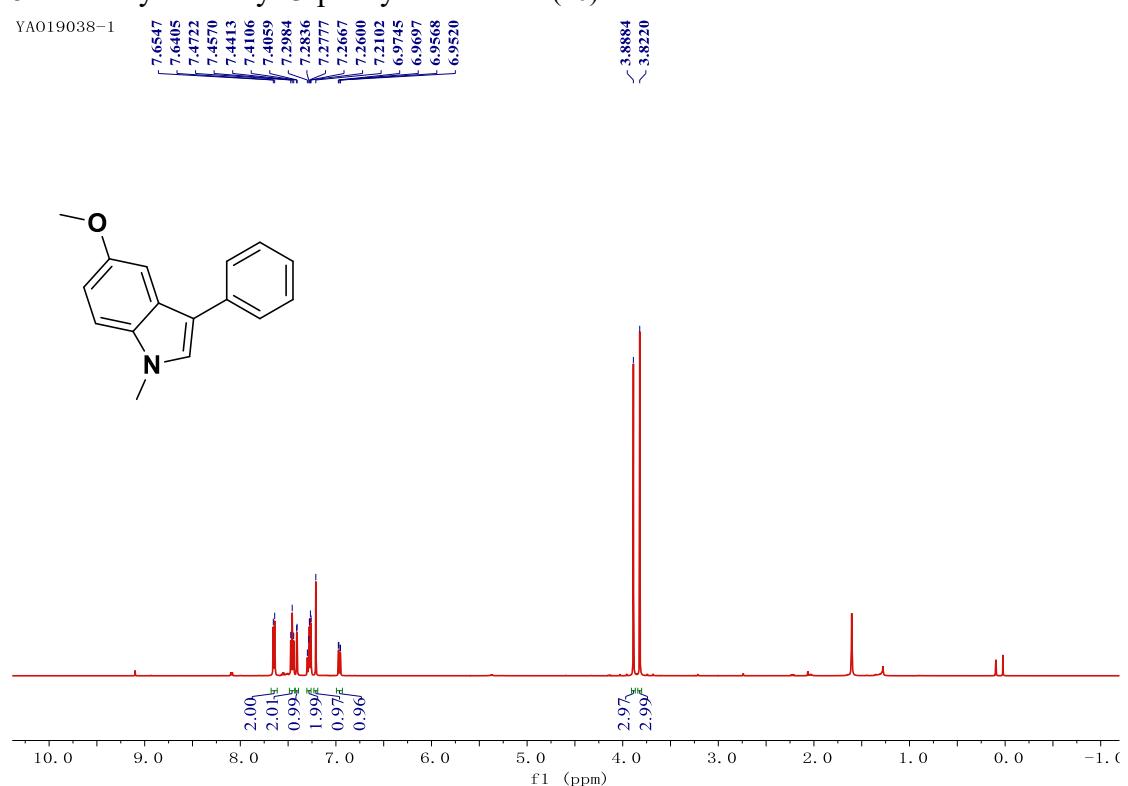


Ethyl 2-(1-methyl-1*H*-indol-3-yl)acetate (**19**)

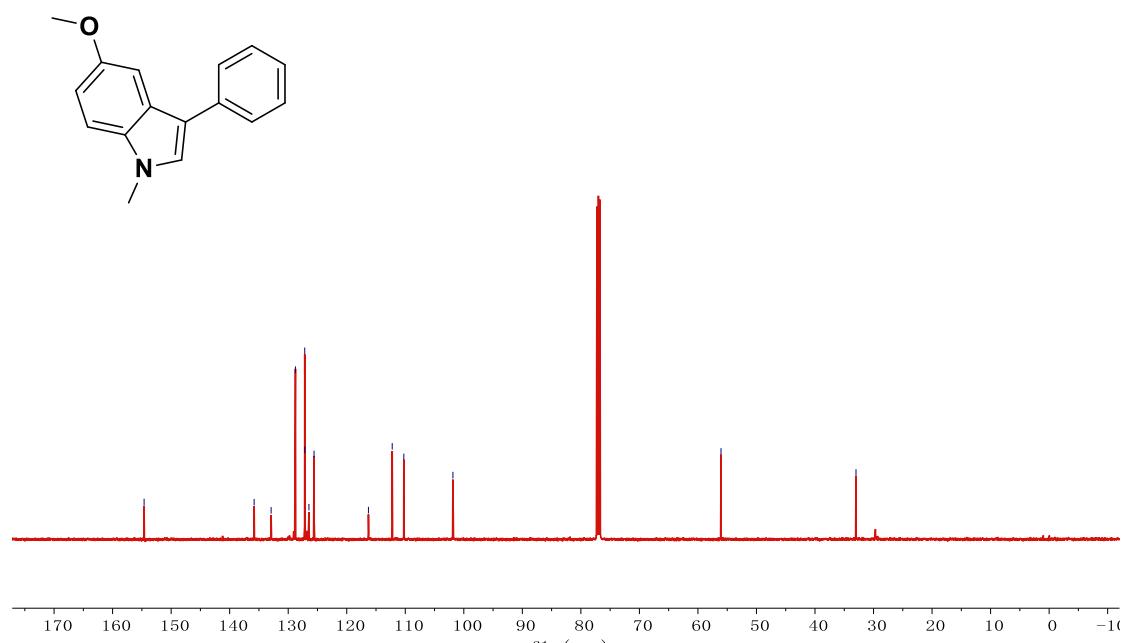


**5-Methoxy-1-methyl-3-phenyl-1*H*-indole (**20**)**

YA019038-1

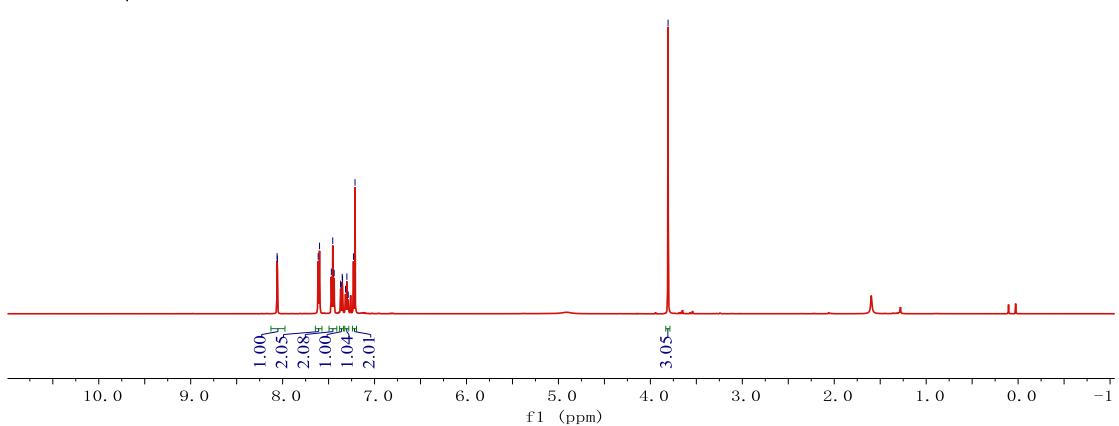
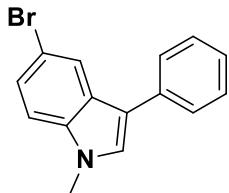


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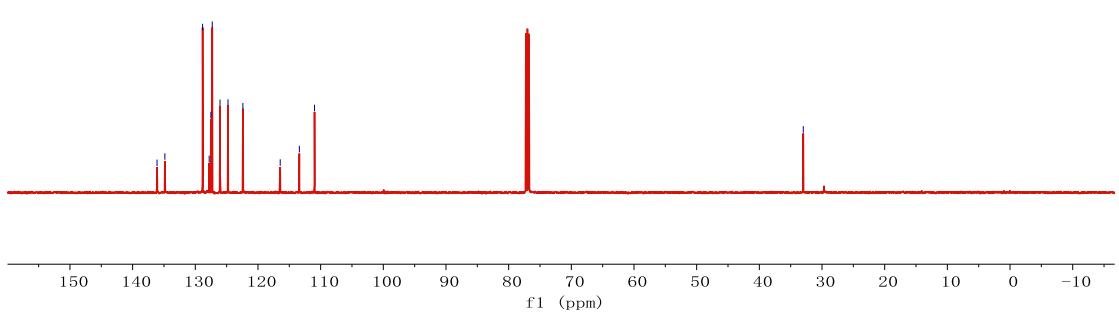
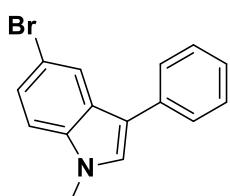


### 5-Bromo-1-methyl-3-phenyl-1*H*-indole (21)

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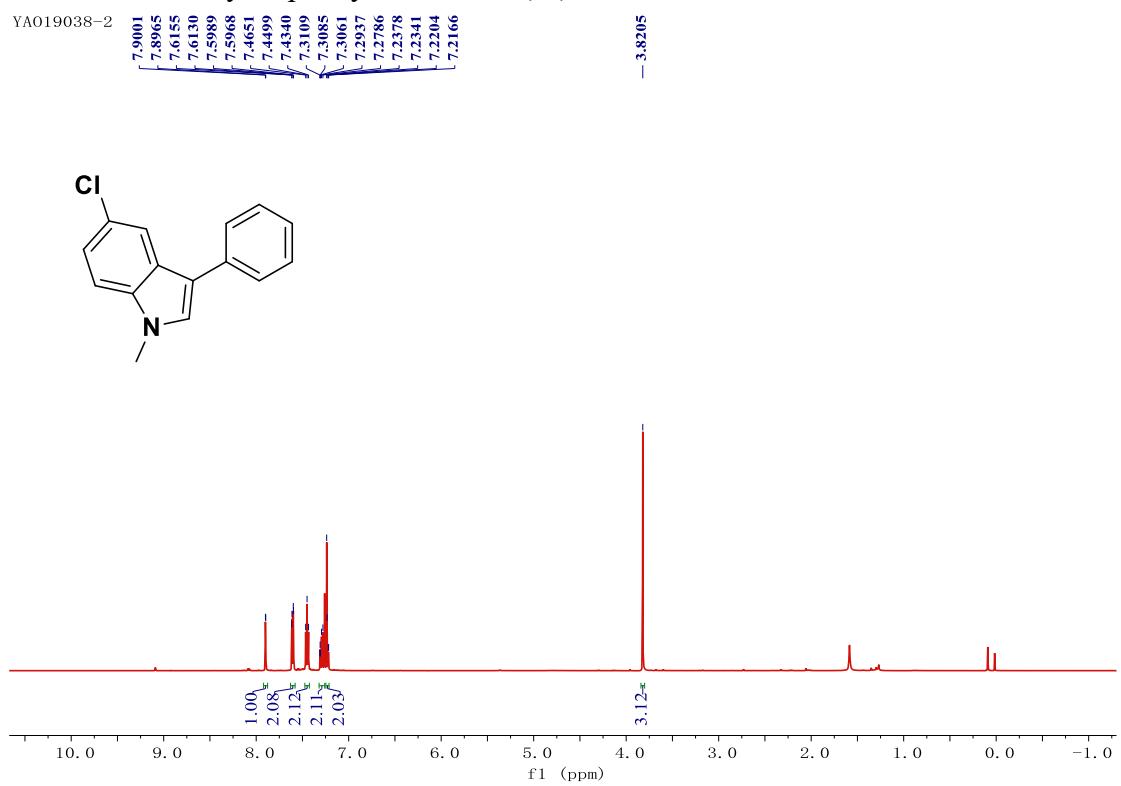


YAO19038-10  
 136.10~~18~~  
 134.8536  
 128.8313  
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 124.7833  
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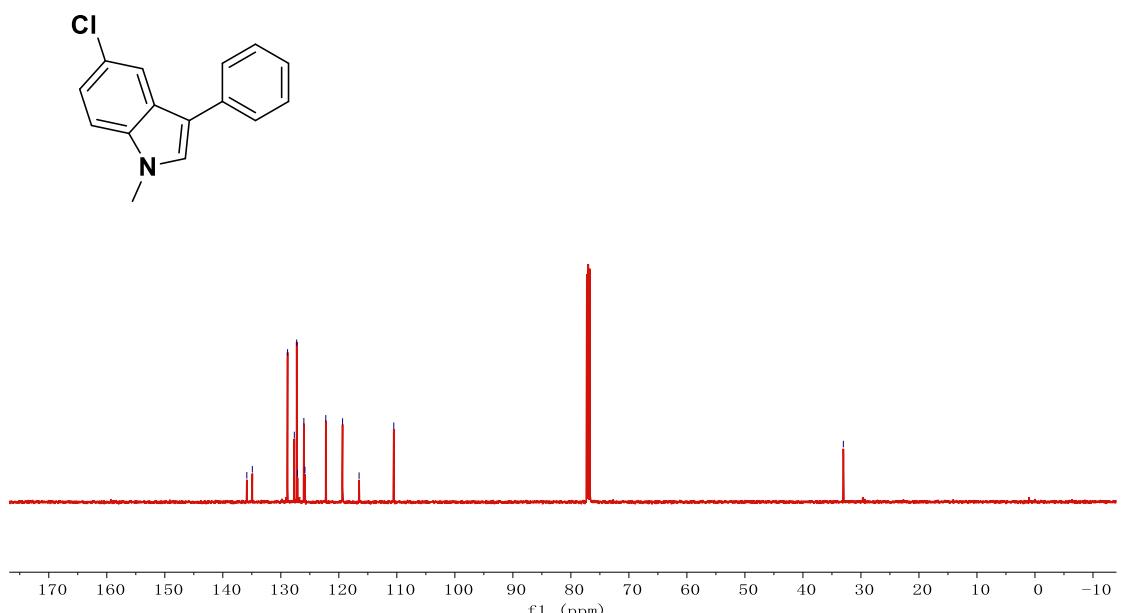


**5-Chloro-1-methyl-3-phenyl-1*H*-indole (**22**)**

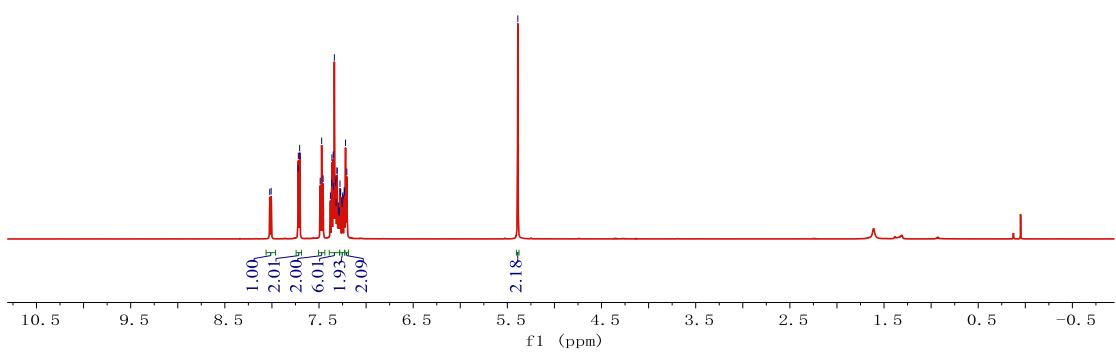
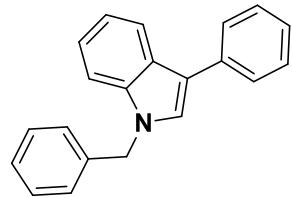
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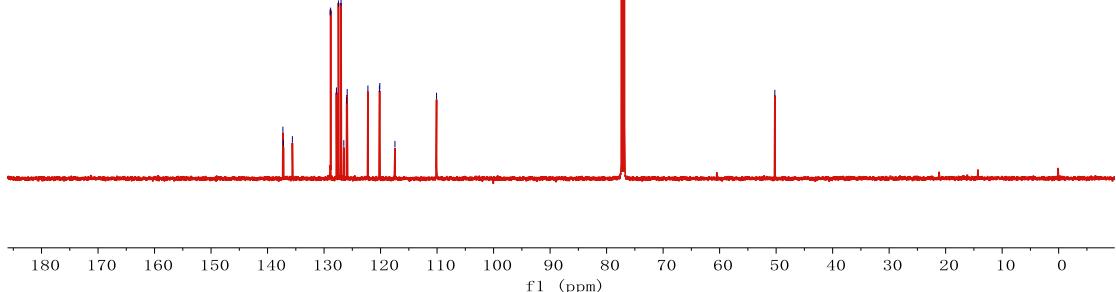
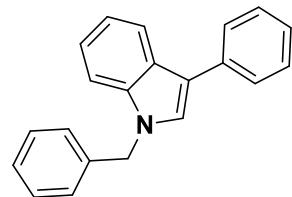
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**1-Benzyl-3-phenyl-1*H*-indole (24)**

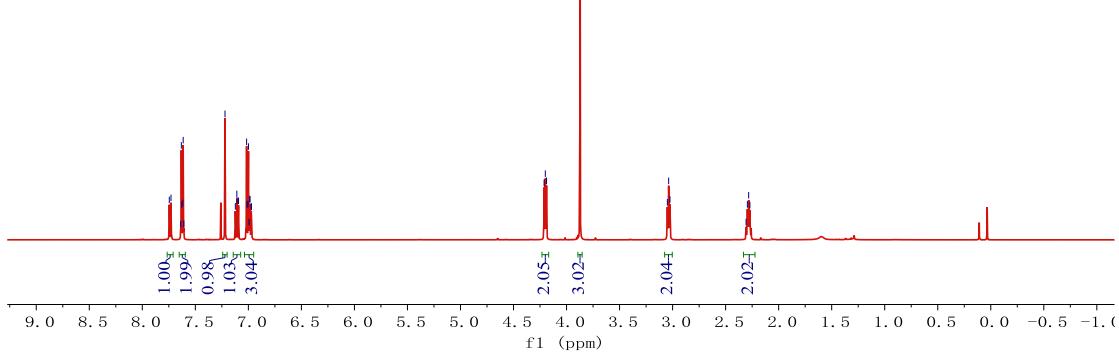
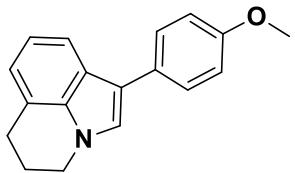


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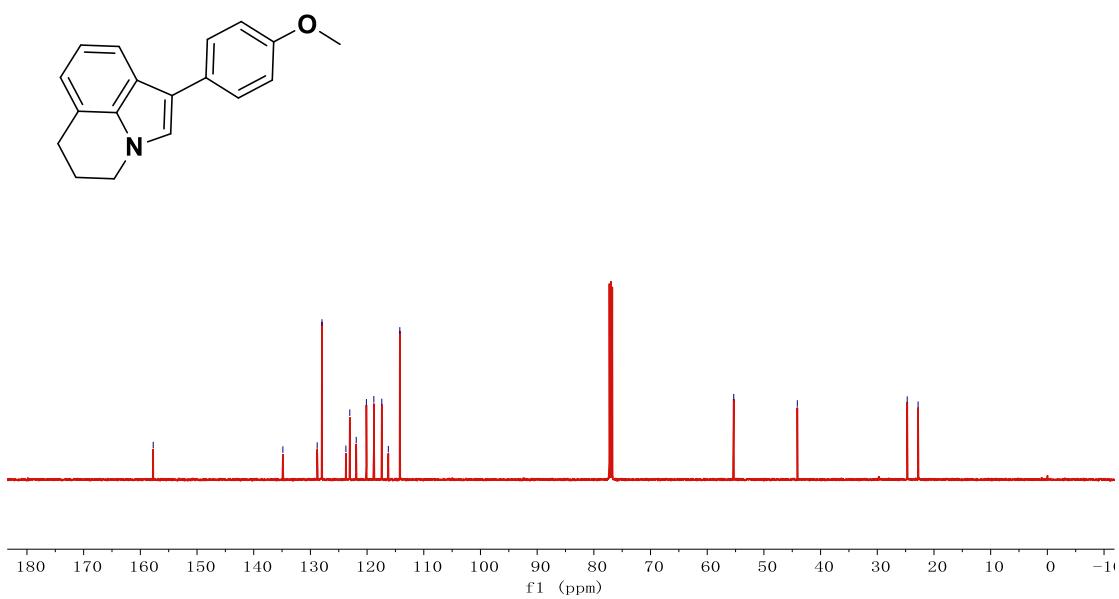
1-(4-Methoxyphenyl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**25**)

YA01994



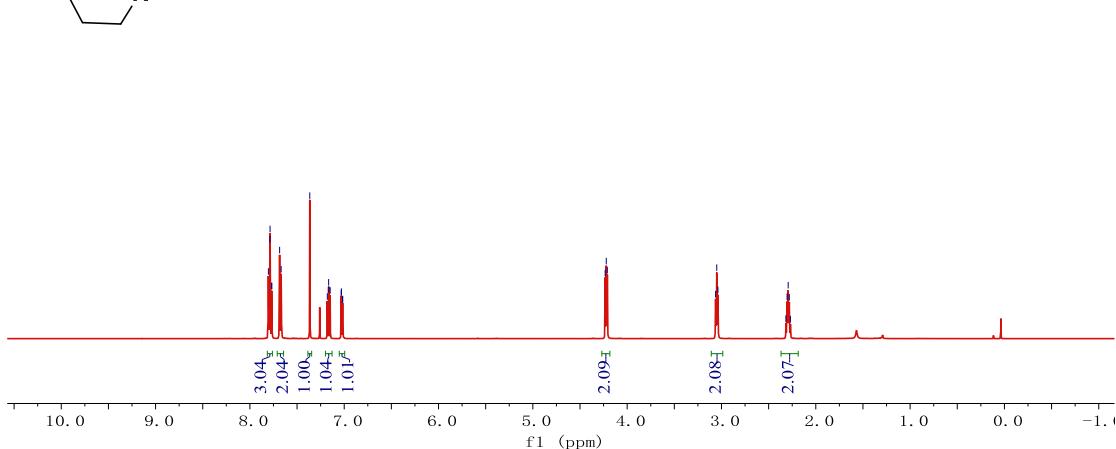
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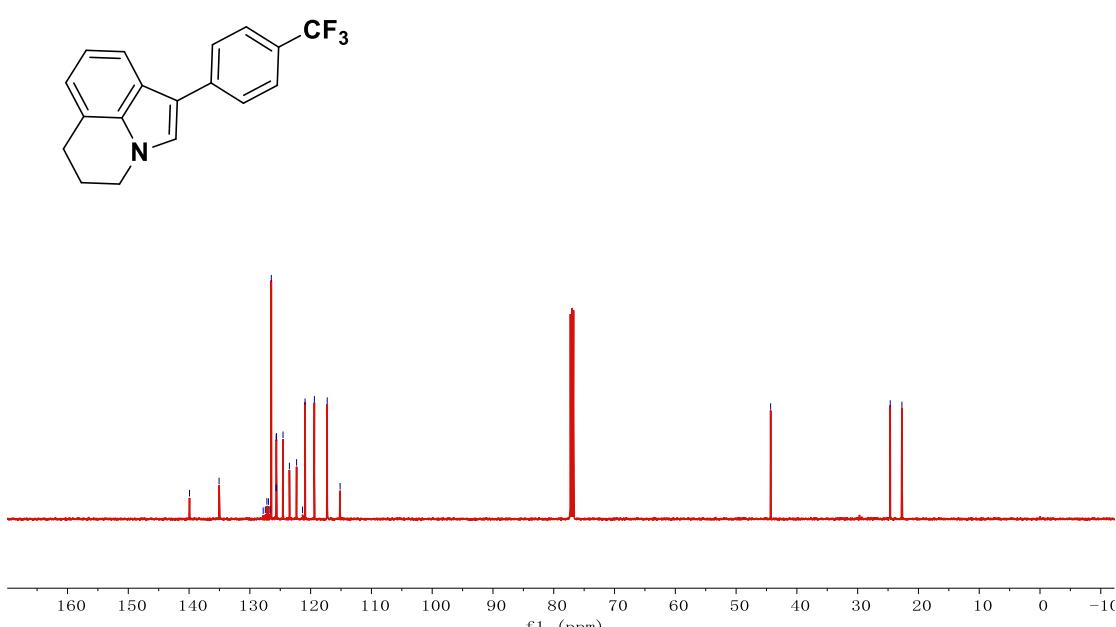


1-[4-(Trifluoromethyl)phenyl]-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**26**)

YAO19040-6



YAO19040-6

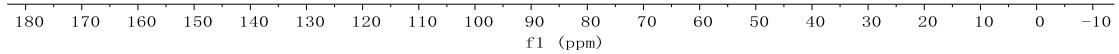


1-(4-Bromophenyl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**27**)

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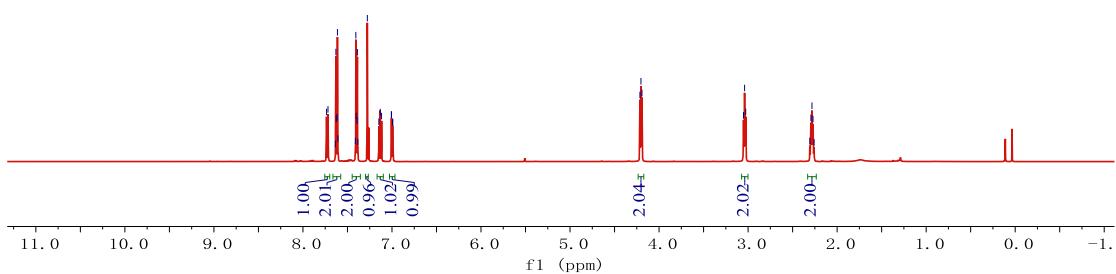
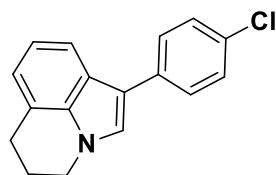


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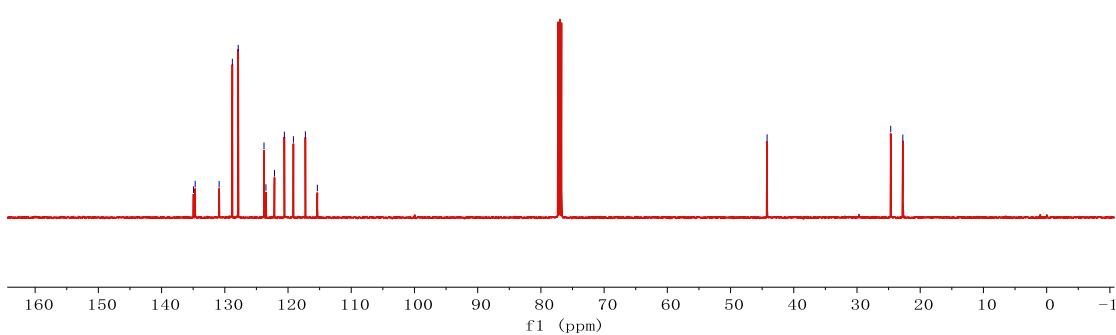
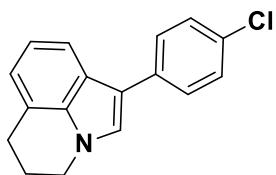


1-(4-Chlorophenyl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**28**)

VA019041-6

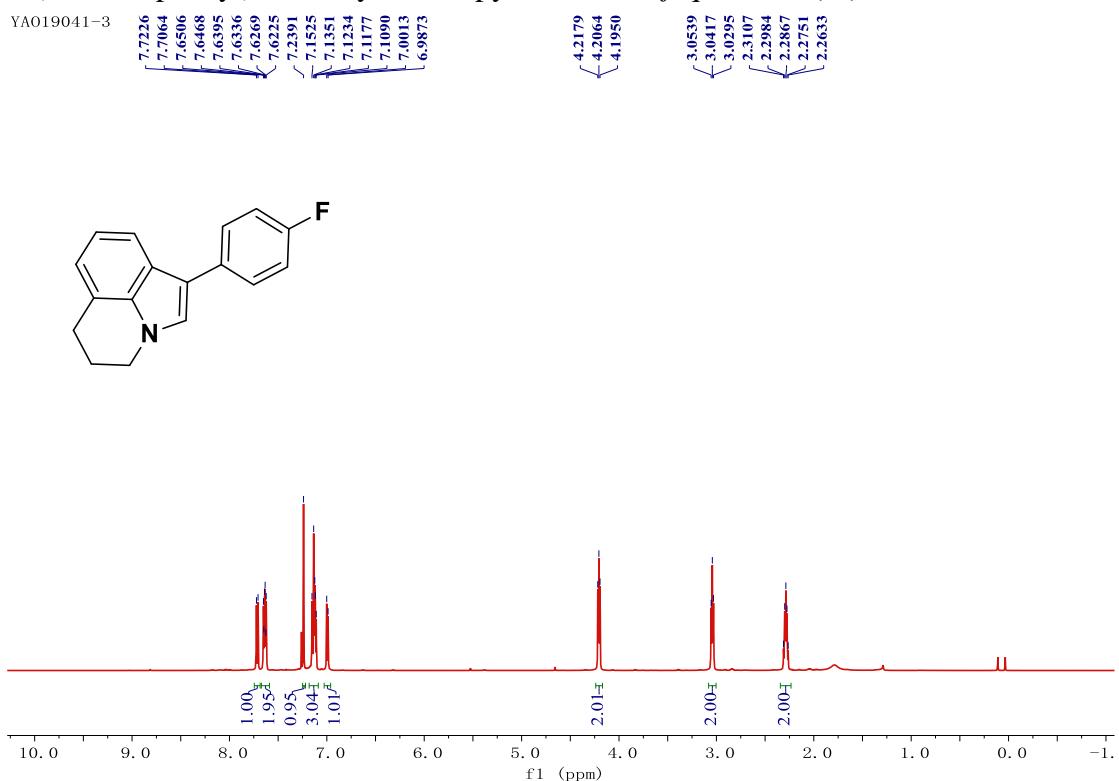


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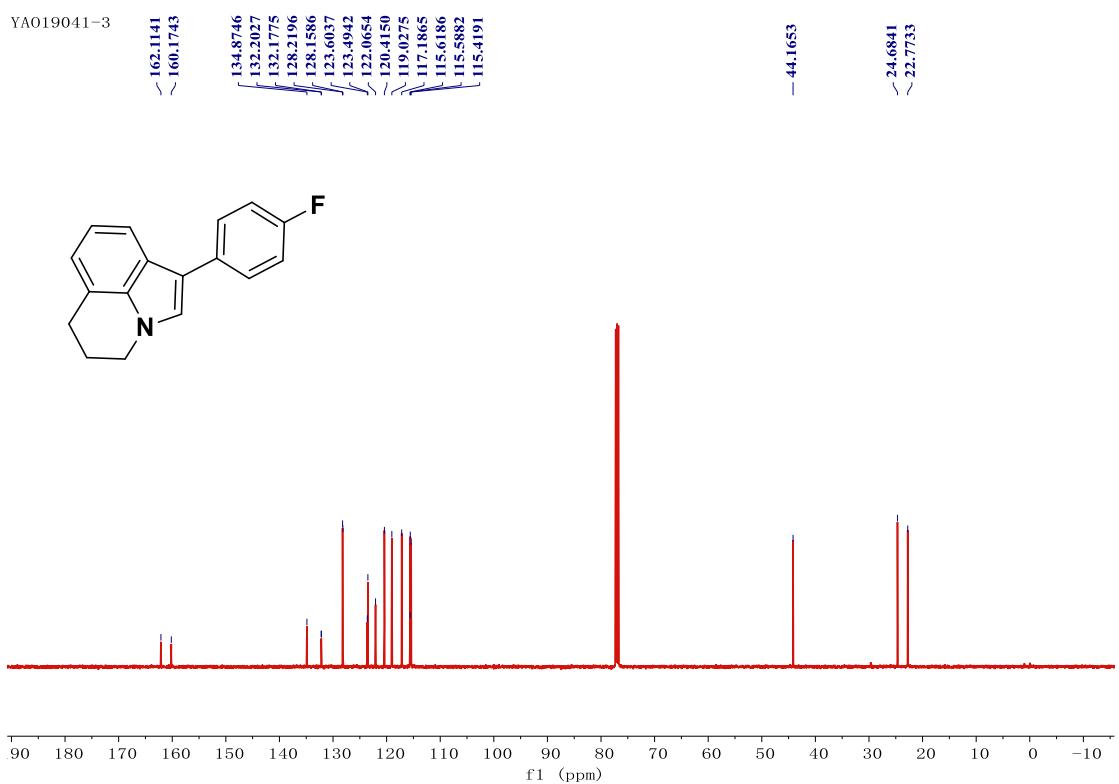


**1-(4-Fluorophenyl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**29**)**

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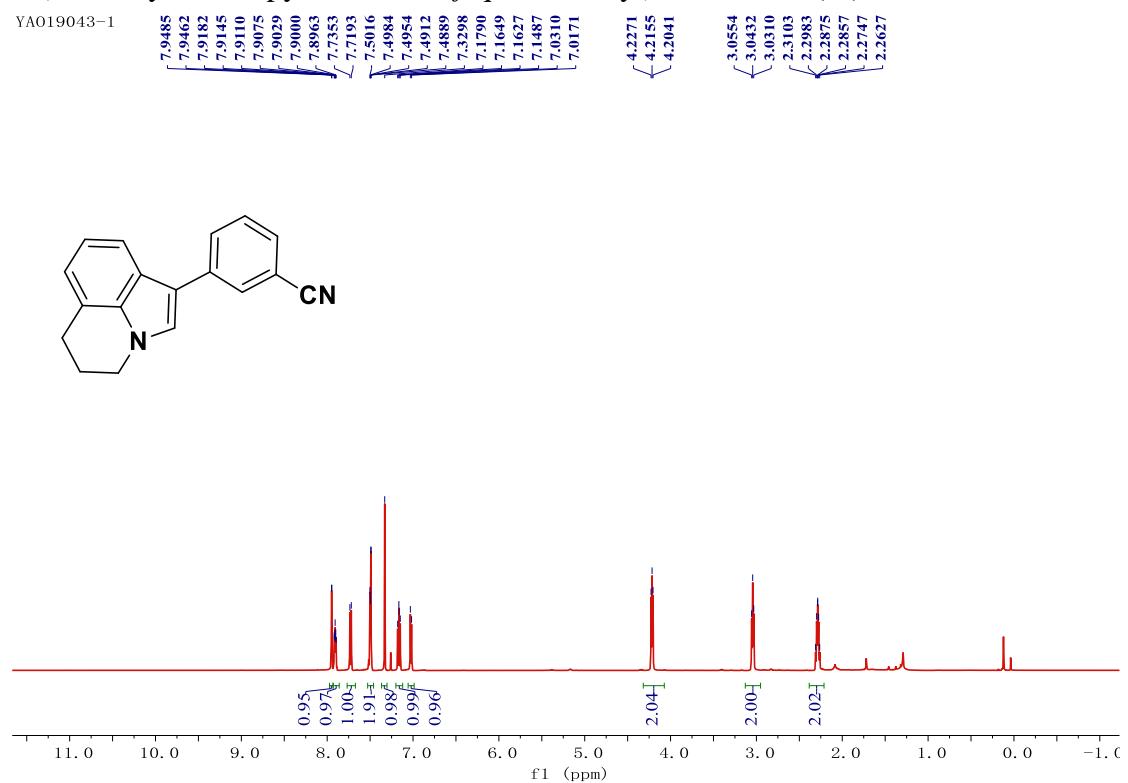


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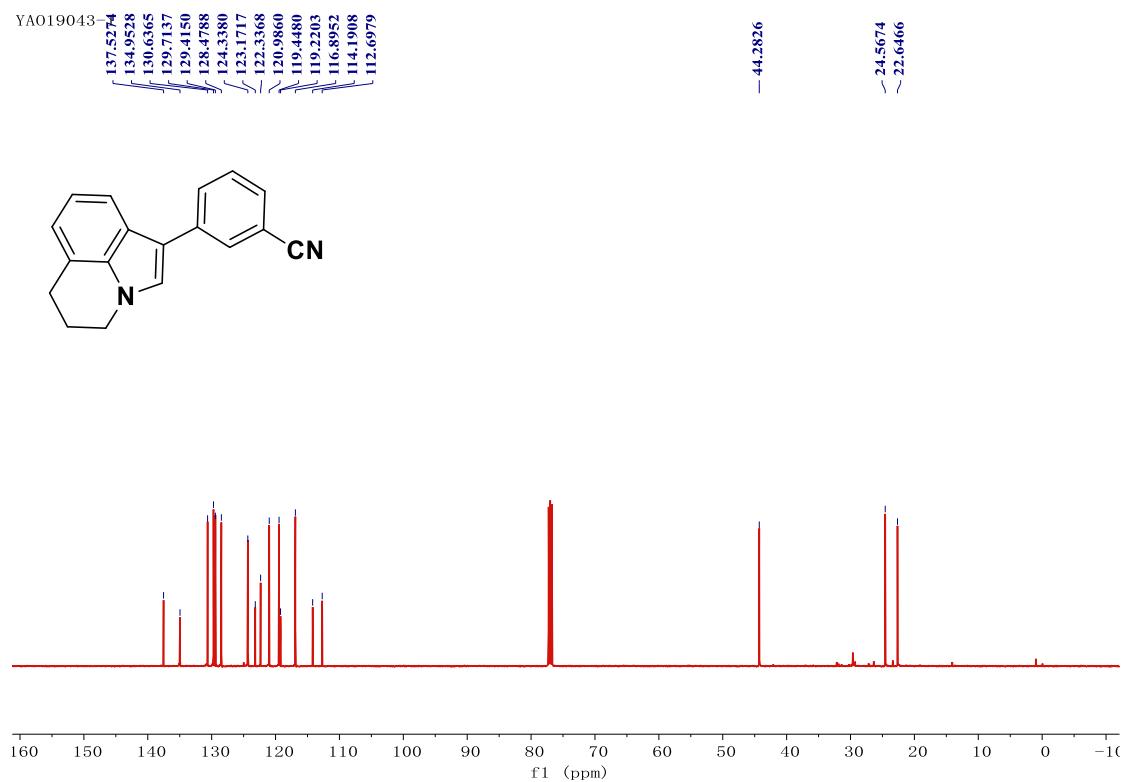


**3-(5,6-Dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinolin-1-yl)benzonitrile (**30**)**

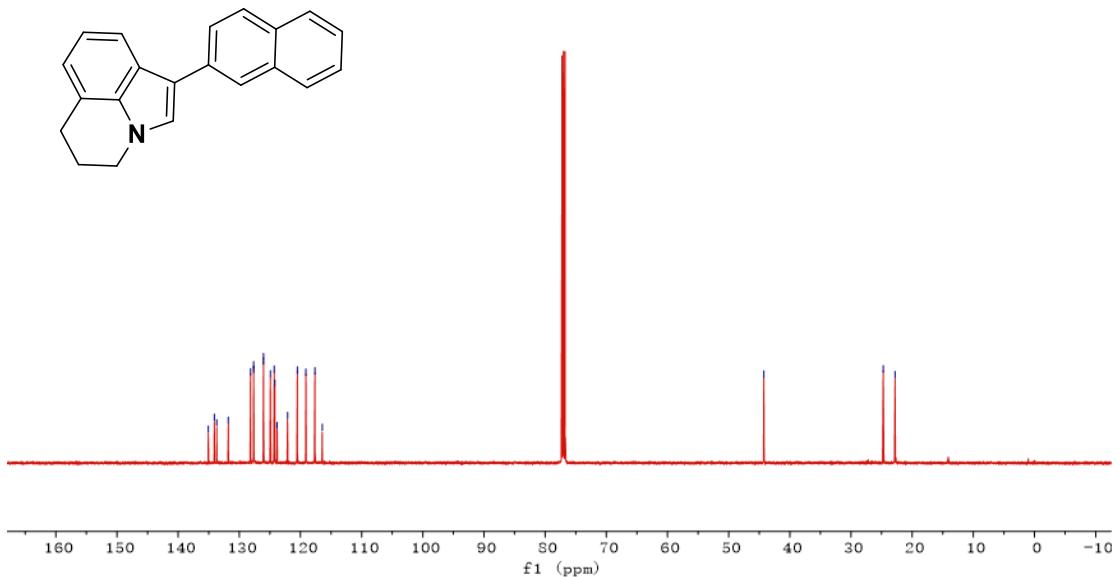
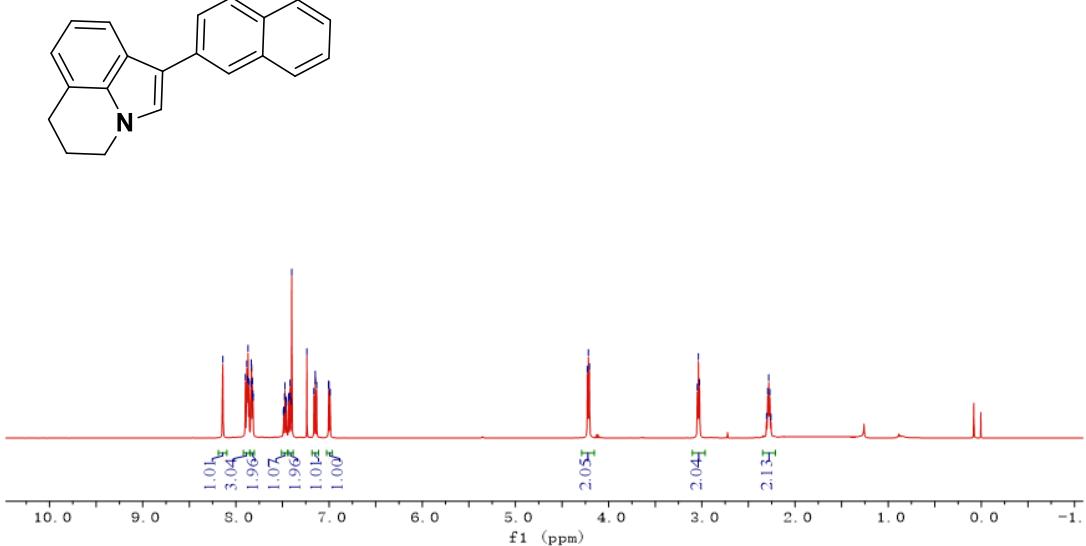
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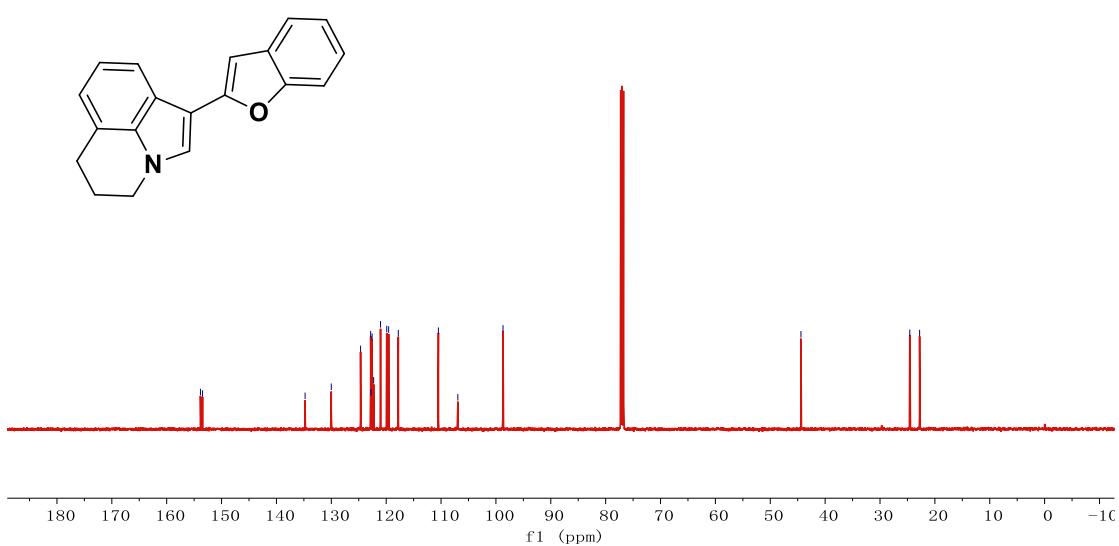
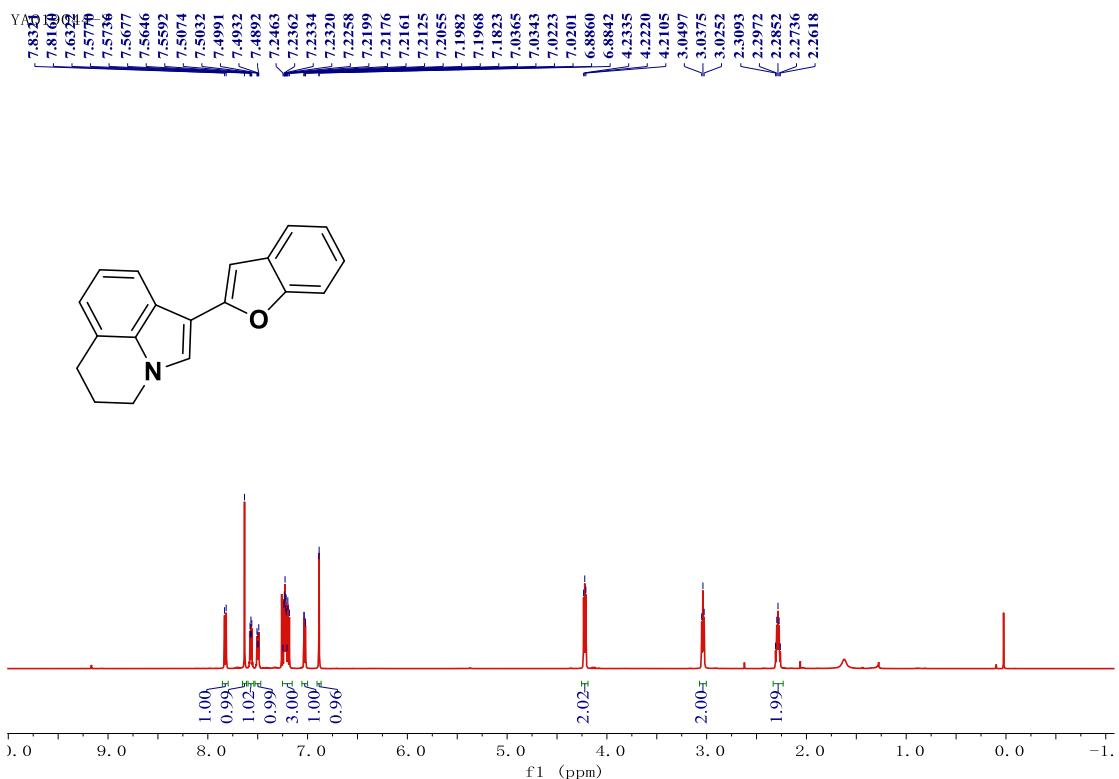
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1-(Naphthalen-2-yl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**31**)



1-(Benzofuran-2-yl)-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (**32**)

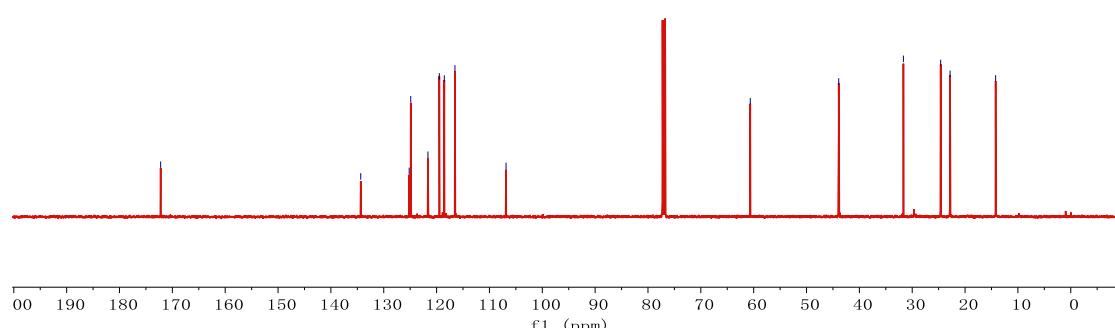
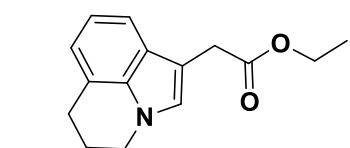


Ethyl 5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline-1-carboxylate (**33**)

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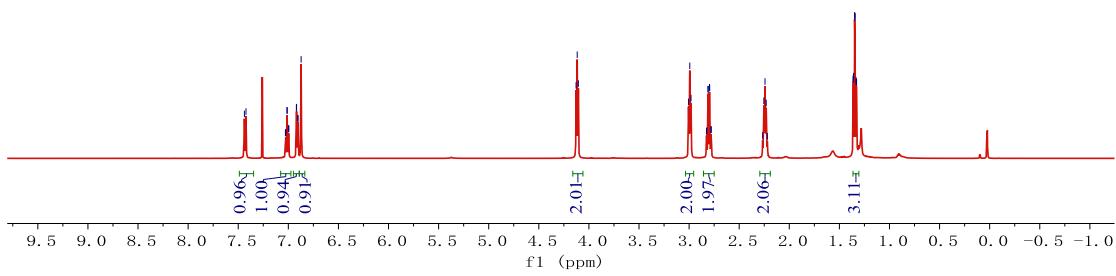
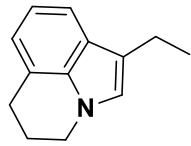


YAO19050-1



**1-Ethyl-5,6-dihydro-4*H*-pyrrolo[3,2,1-*ij*]quinoline (34)**

YAO19050-3



YAO19050-3

