

**Supporting Information**

**for**

**IBD-mediated oxidative cyclization of**

**pyrimidinylhydrazones and concurrent Dimroth**

**rearrangement: Synthesis of**

**[1,2,4]triazolo[1,5-c]pyrimidine derivatives**

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200433 Shanghai, P. R. China

Email: Quanrui Wang\* - qrwang@fudan.edu.cn

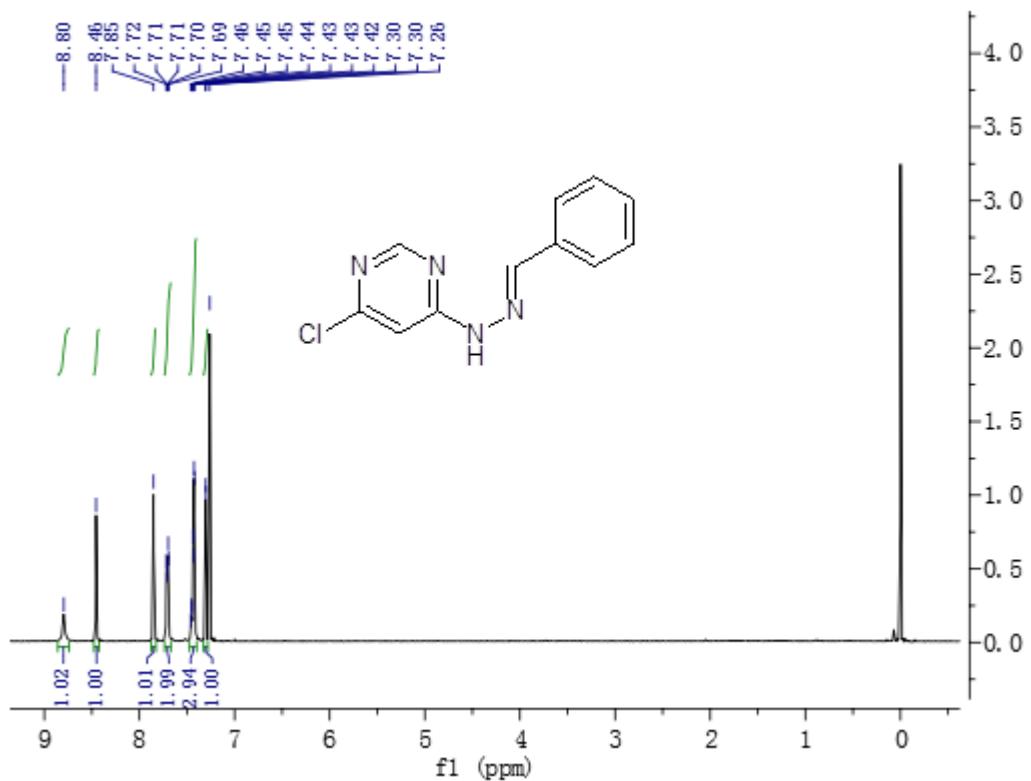
\*Corresponding author

**NMR spectral data for unknown compounds**

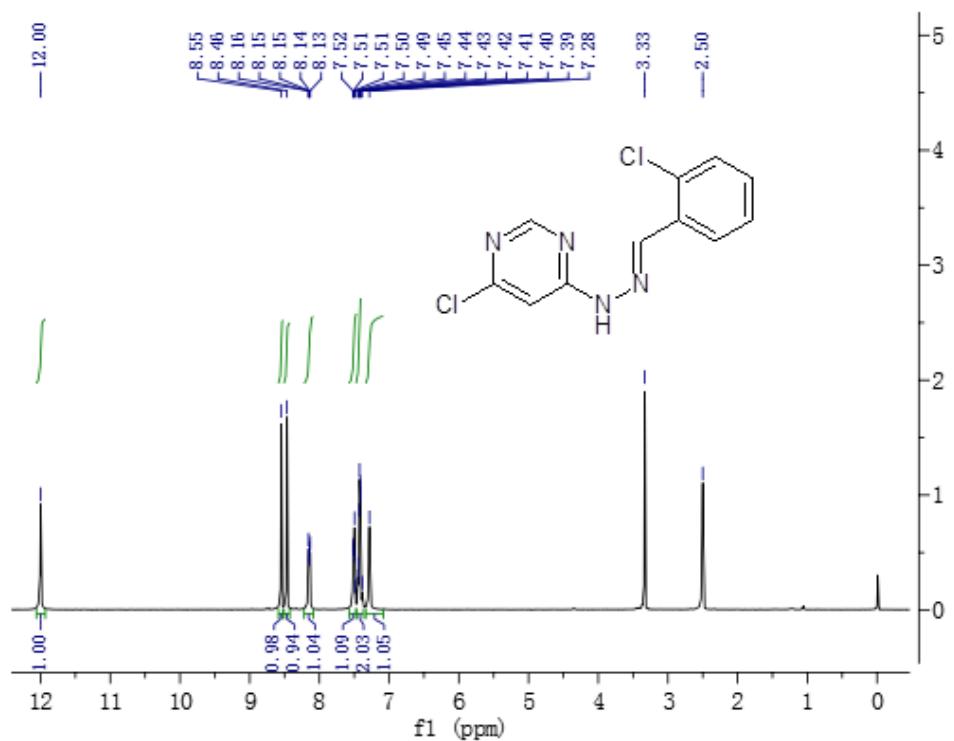
Spectra of (6-chloro-4-pyrimidinyl)hydrazones <b>4</b> .....	S2
Spectra of 7-chloro-5-methyl-3-phenyl[1,2,4]triazolo[4,3-c]pyrimidine ( <b>5f</b> ).....	S15
Spectra of 7-chloro-[1,2,4]triazolo[1,5-c]pyrimidines <b>6</b> .....	S16

## Spectra of (6-chloro-4-pyrimidinyl)hydrazones 4

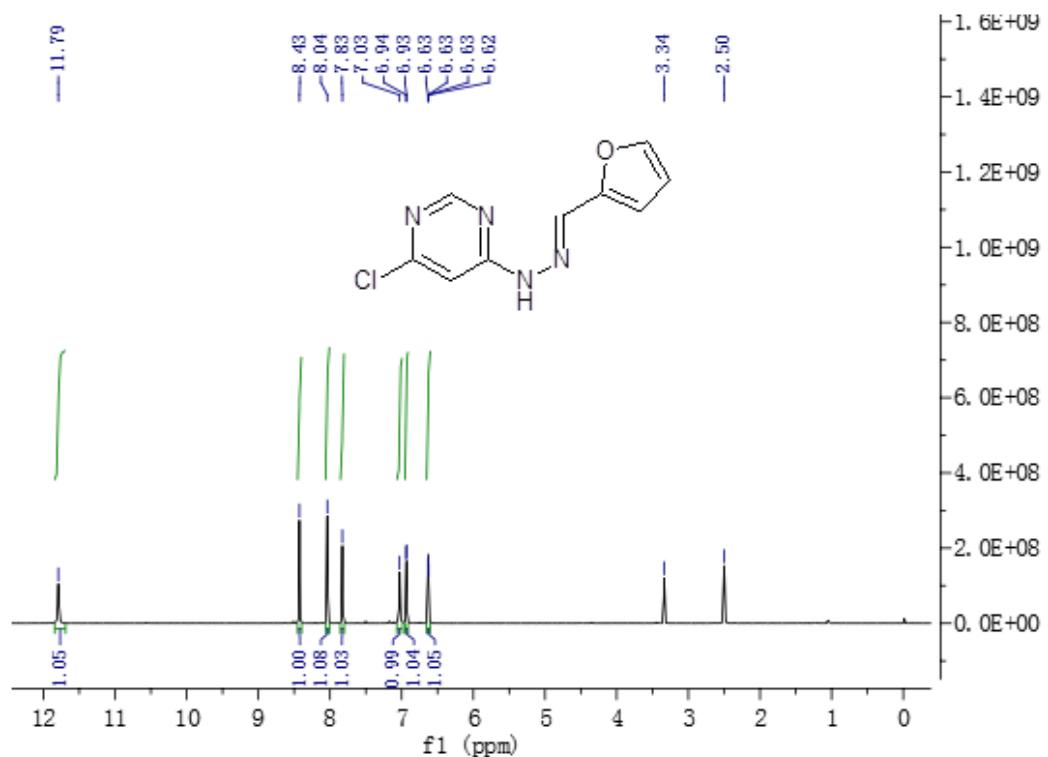
### Benzaldehyde (6-chloro-4-pyrimidinyl)hydrazone (4a)



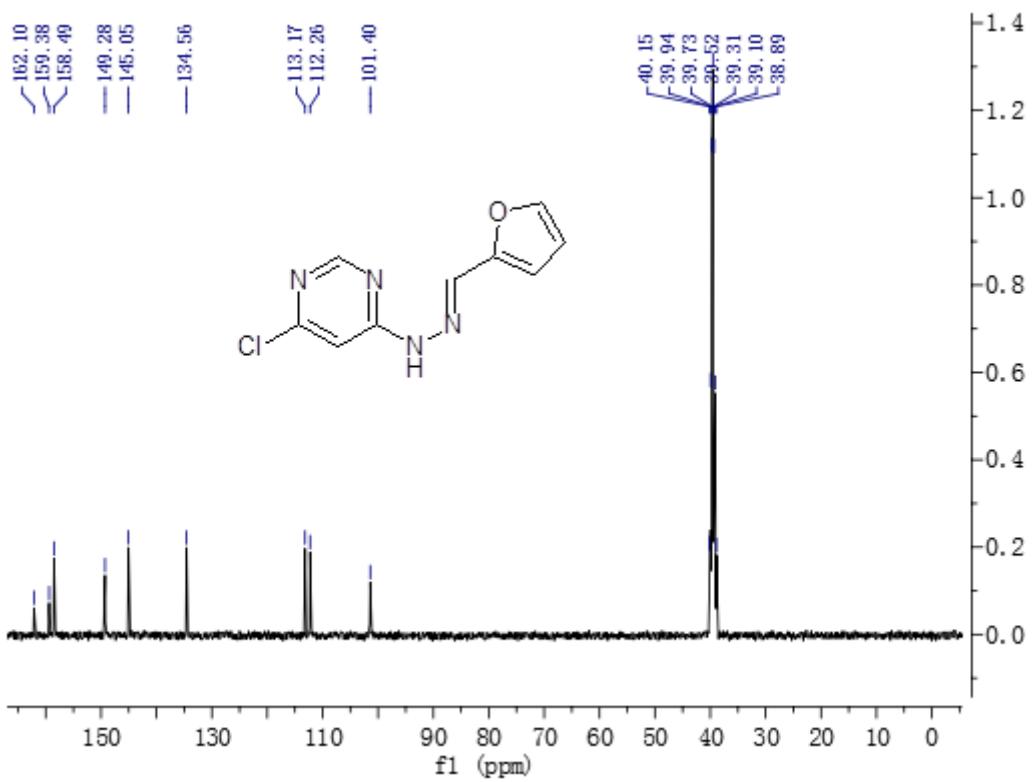
### 2-Chlorobenzaldehyde (6-chloro-4-pyrimidinyl)hydrazone (4b)



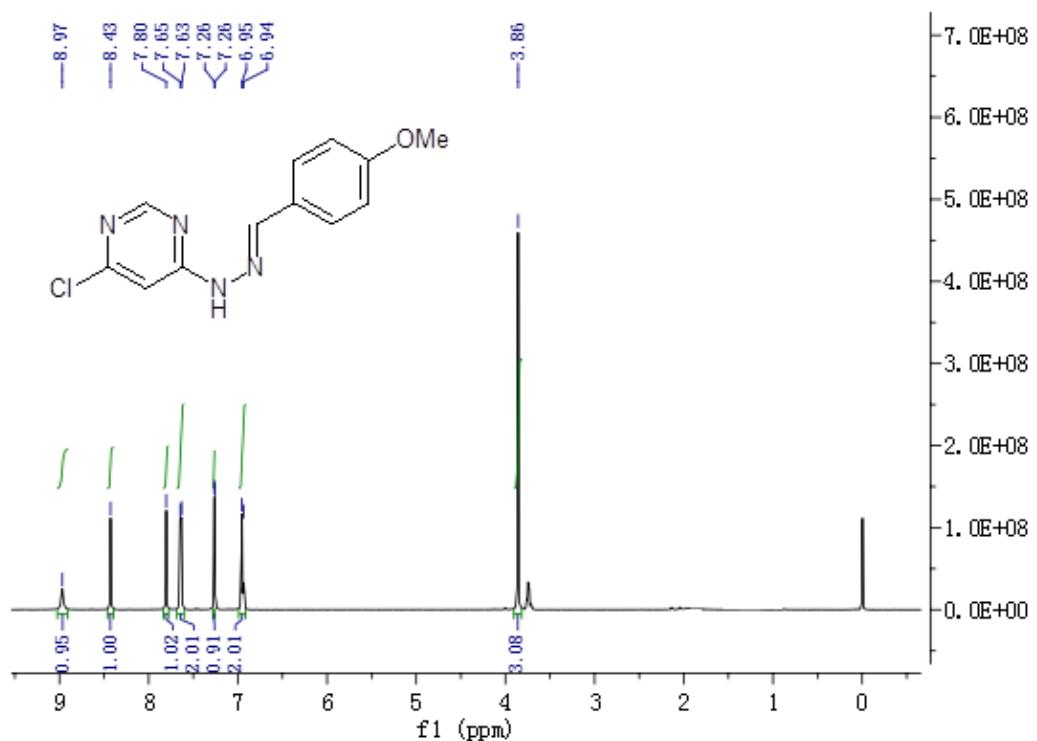
**Furfural (6-chloro-4-pyrimidinyl)hydrazone (4c)**



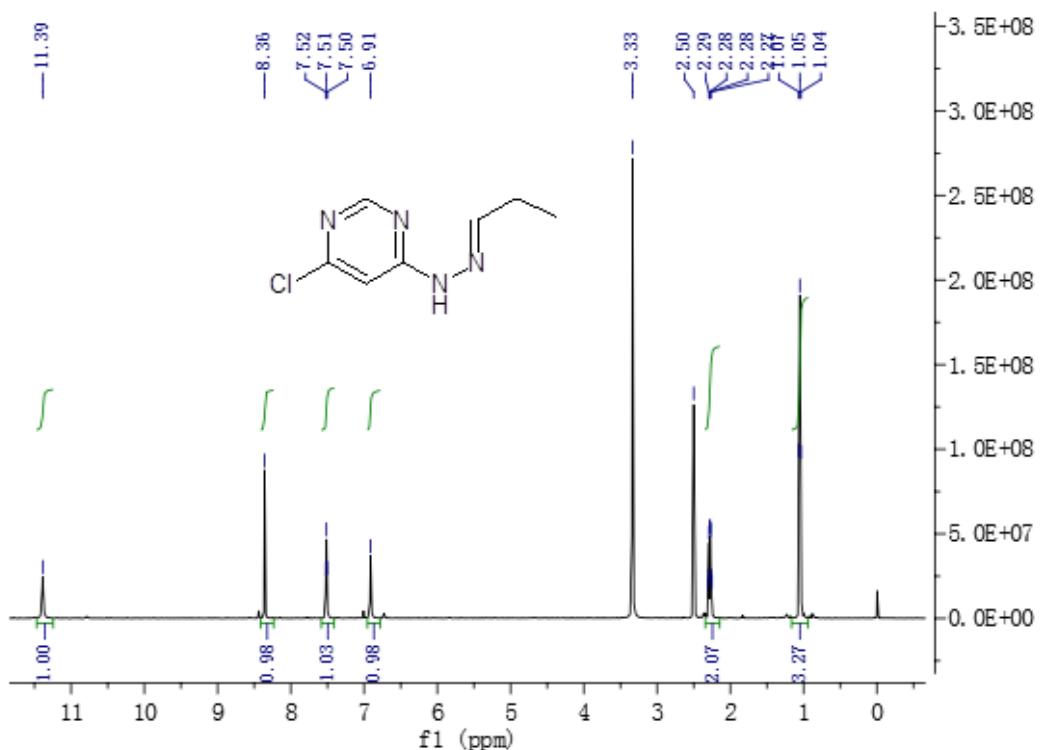
**Furfural (6-chloro-4-pyrimidinyl)hydrazone (4c)**



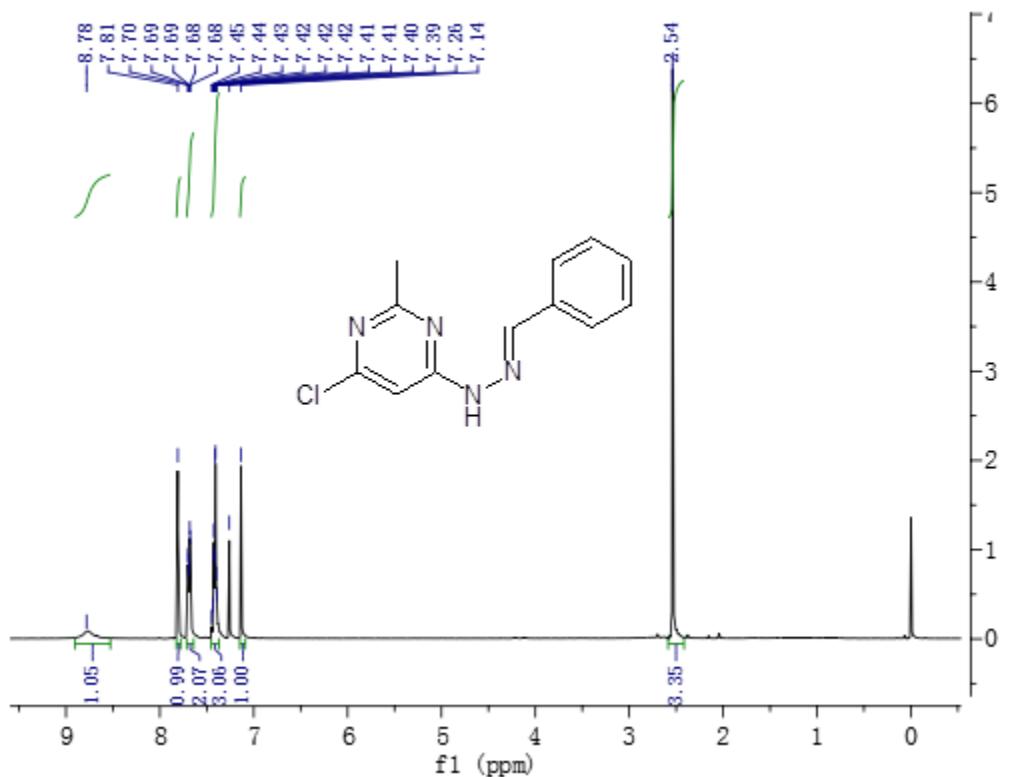
**4-Methoxybenzaldehyde (6-chloro-4-pyrimidinyl)hydrazone (4d)**



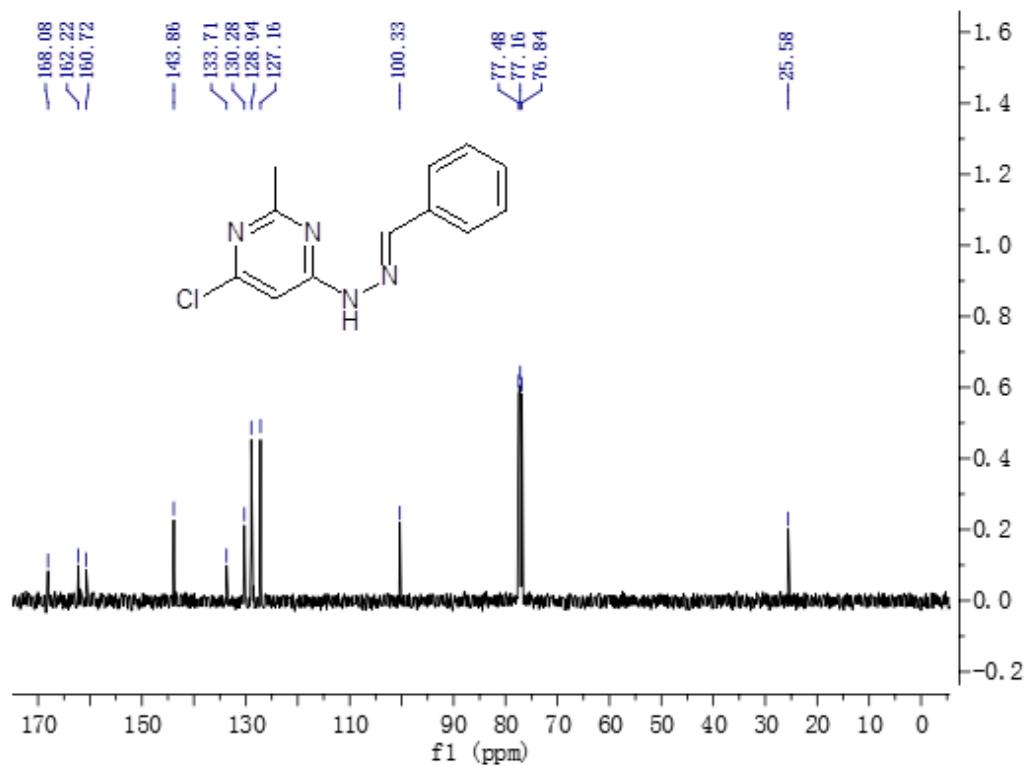
**Propanaldehyde (6-chloro-4-pyrimidinyl)hydrazone (4e)**



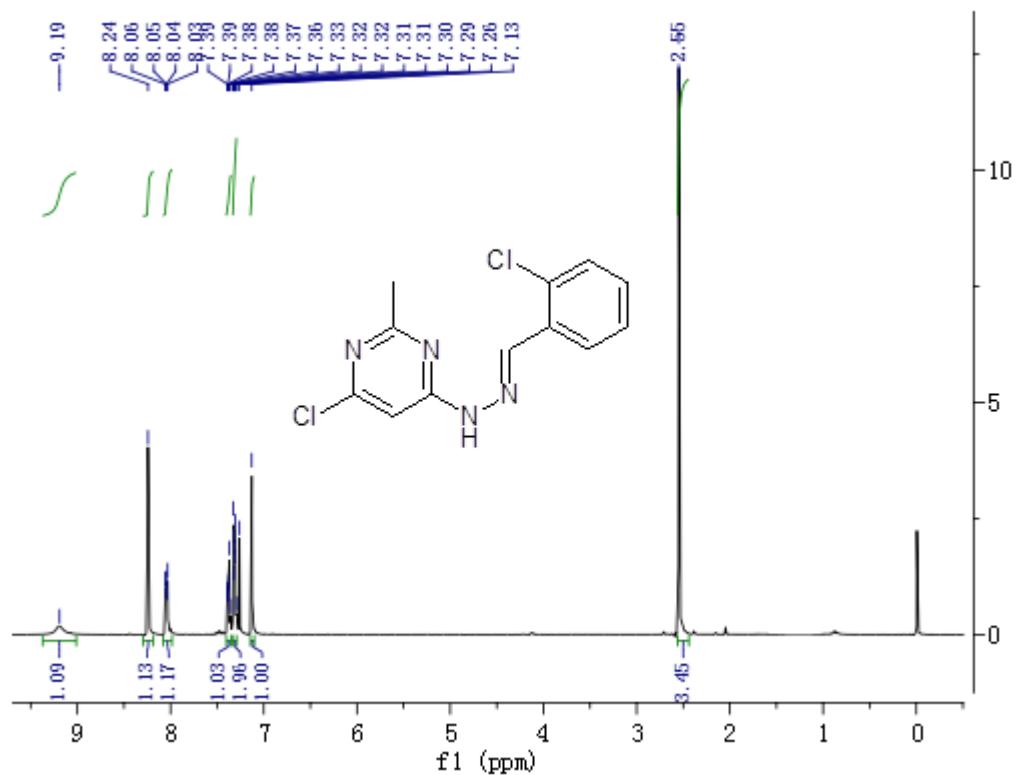
**Benzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4f)**



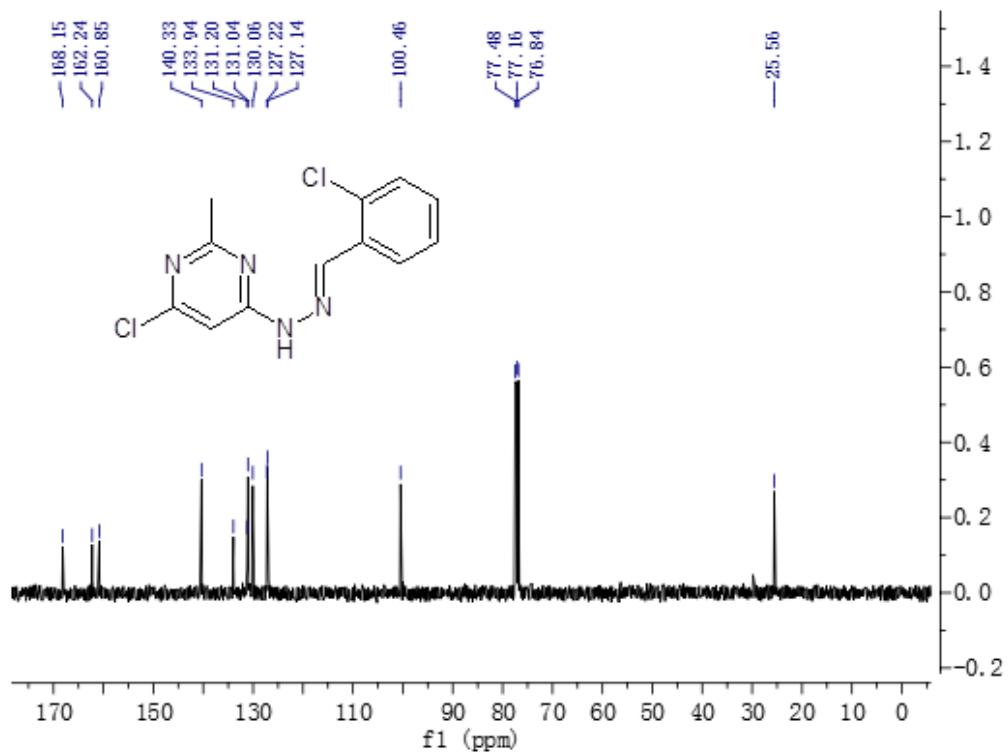
**Benzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4f)**



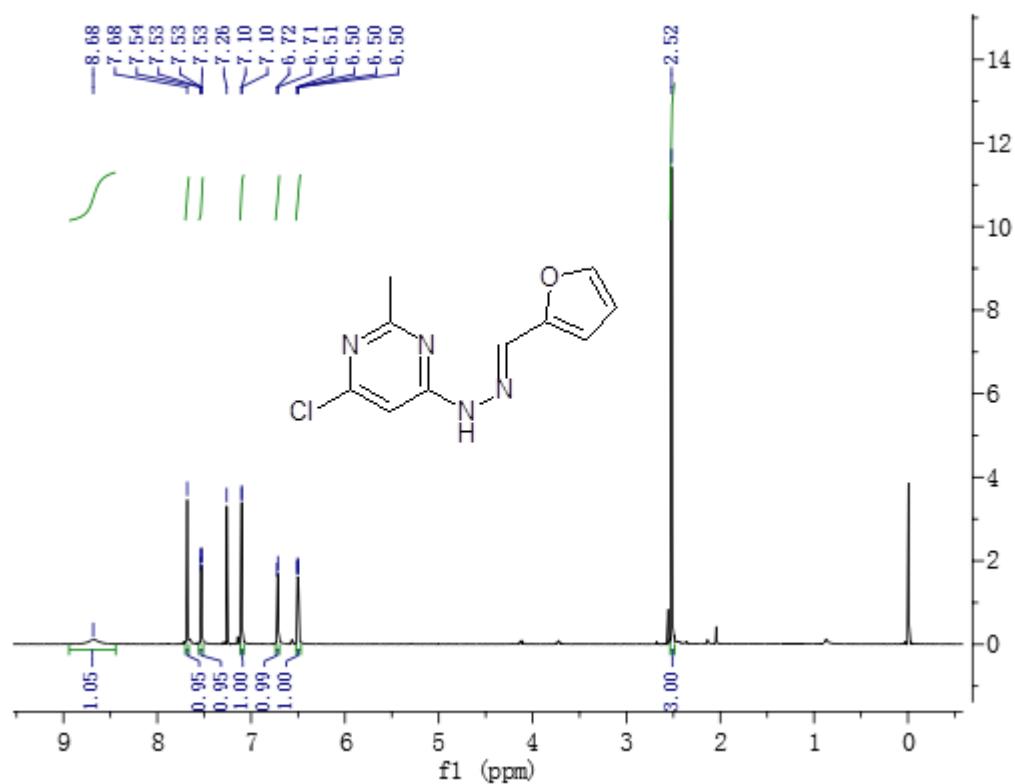
### **2-Chlorobenzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4g)**



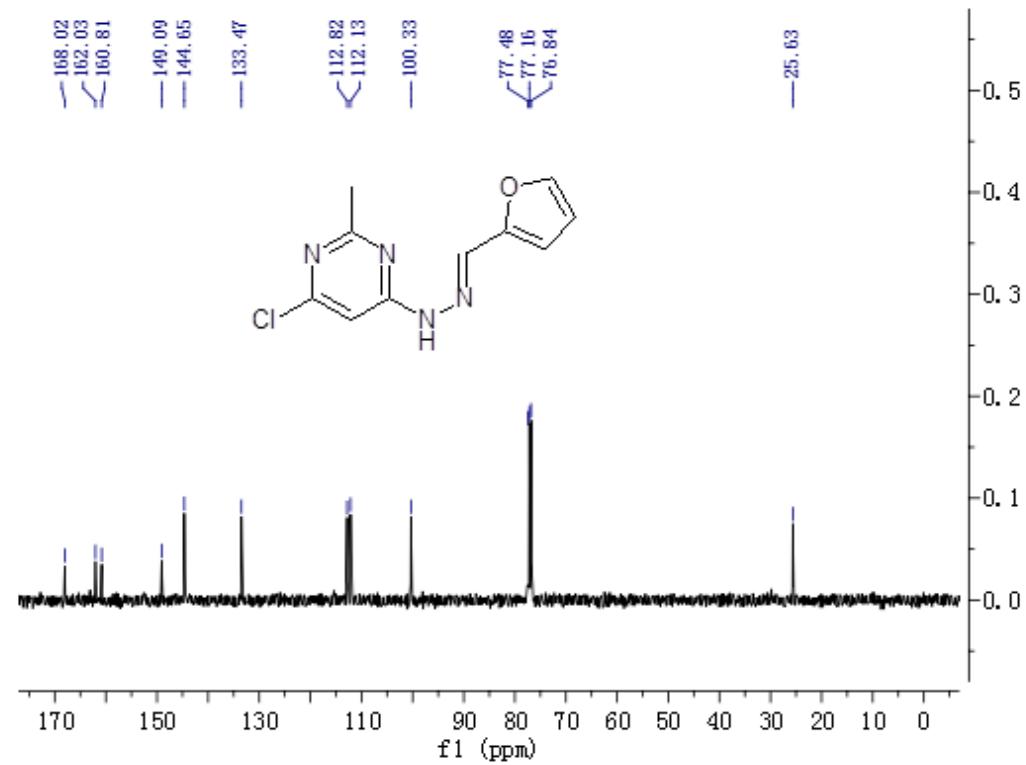
#### 2-Chlorobenzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4g)



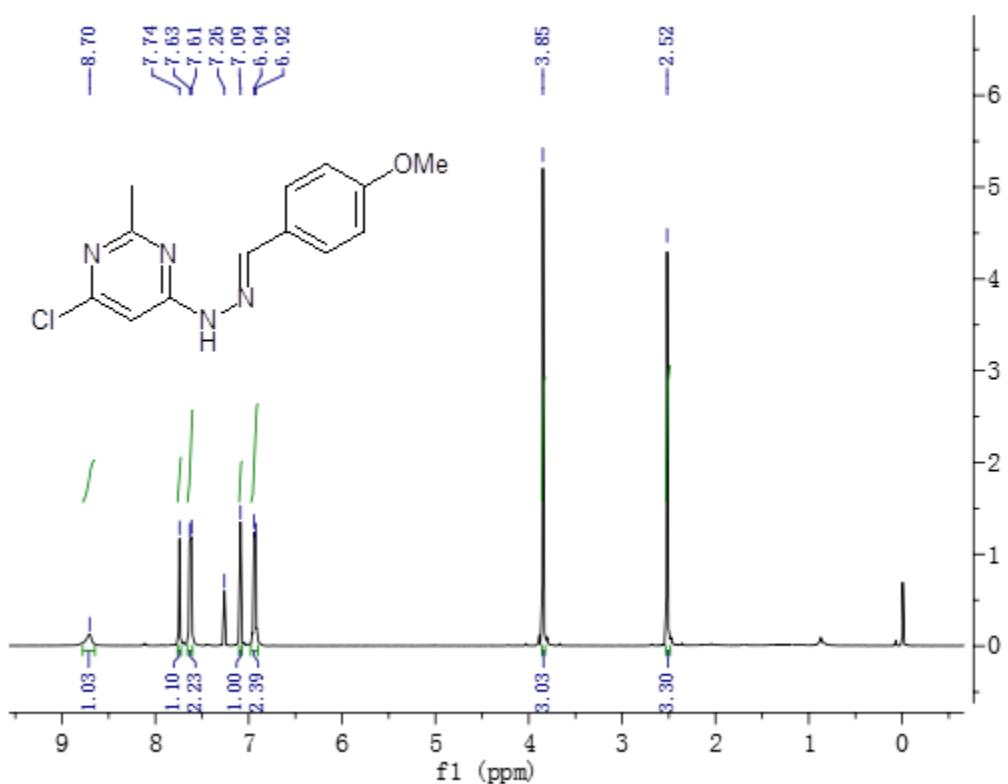
**Furfural (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4h)**



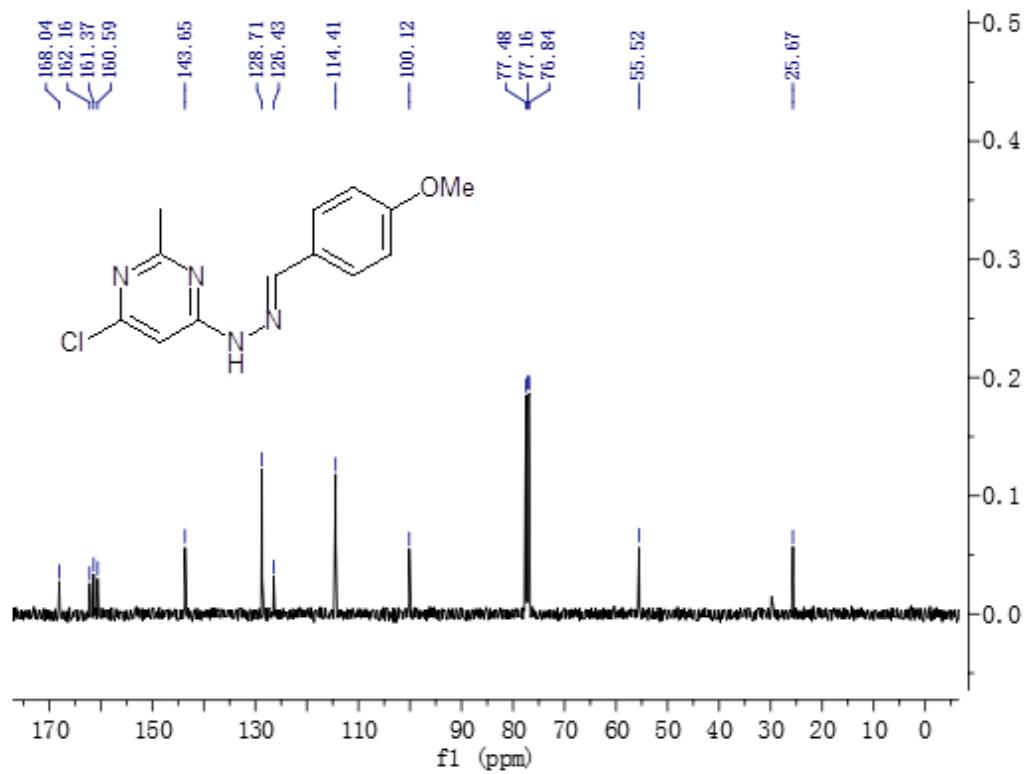
**Furfural (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4h)**



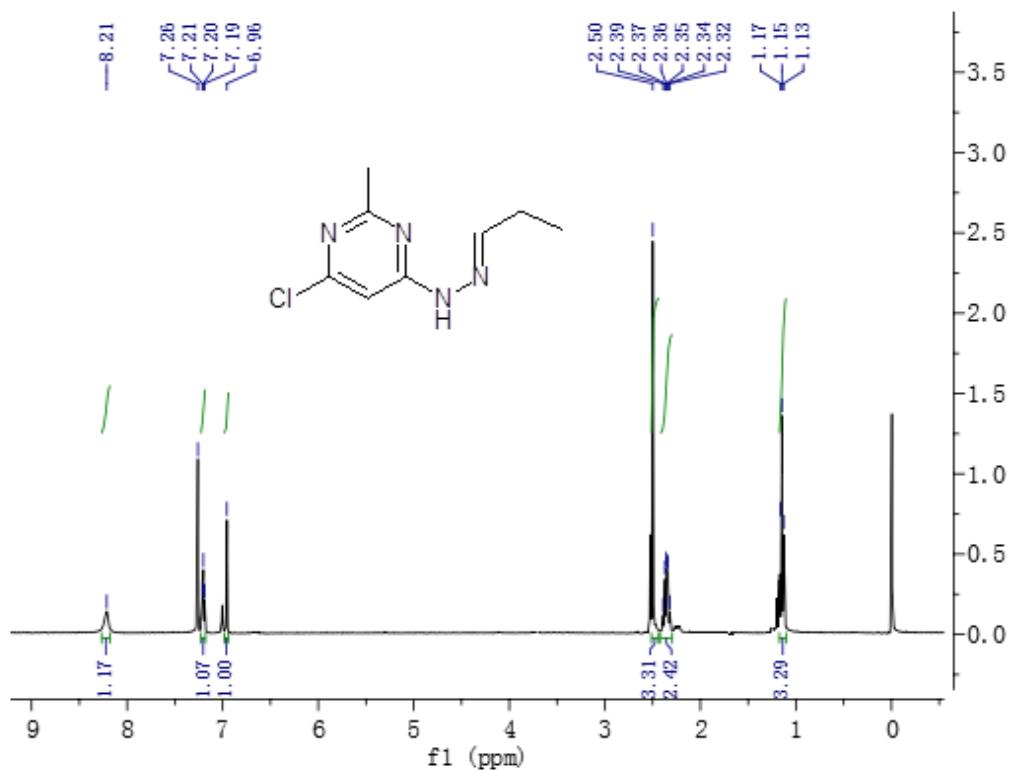
**4-Methoxybenzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4i)**



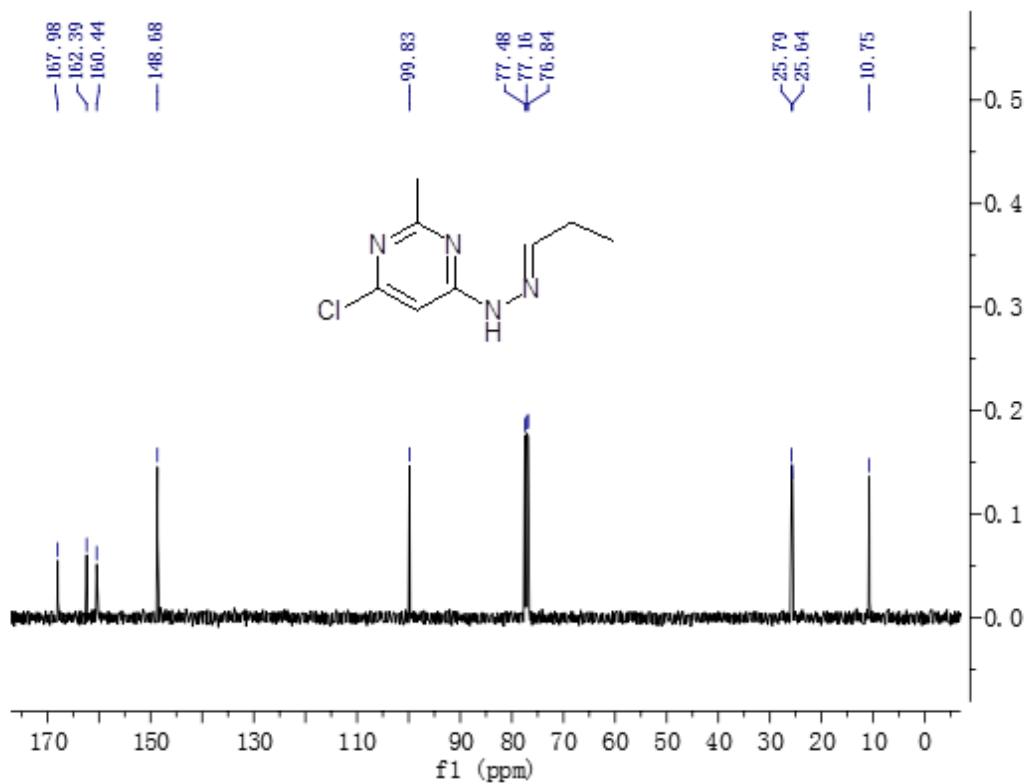
**4-Methoxybenzaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4i)**



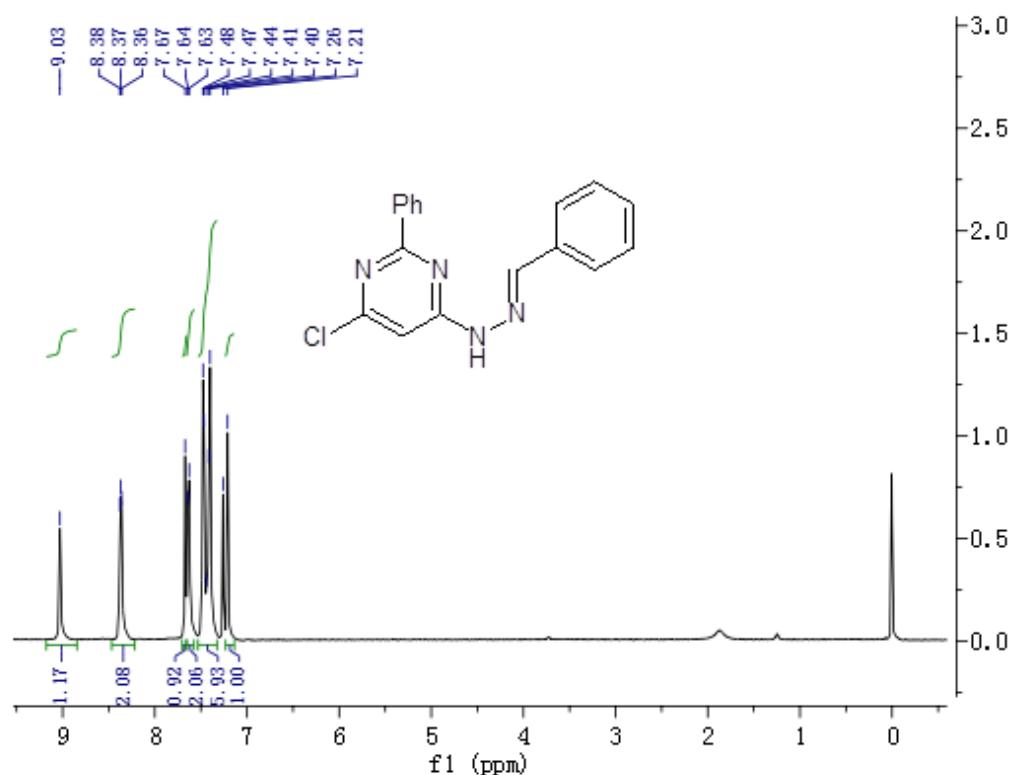
**Propanaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4j)**



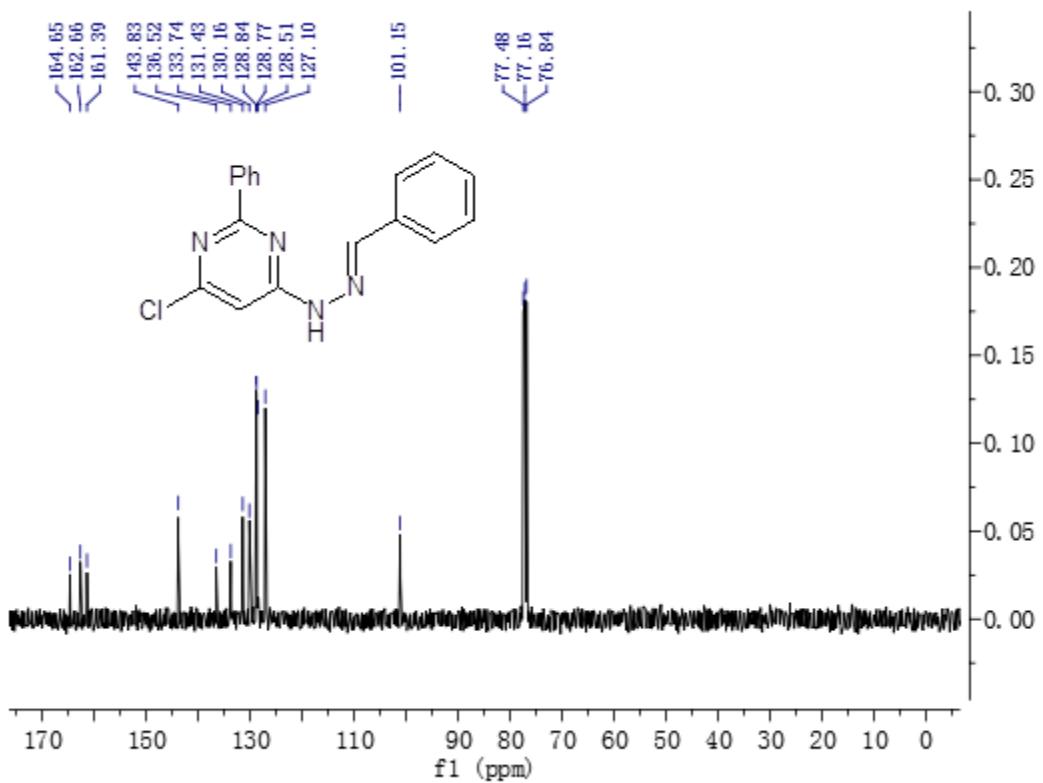
**Propanaldehyde (6-chloro-2-methyl-4-pyrimidinyl)hydrazone (4j)**



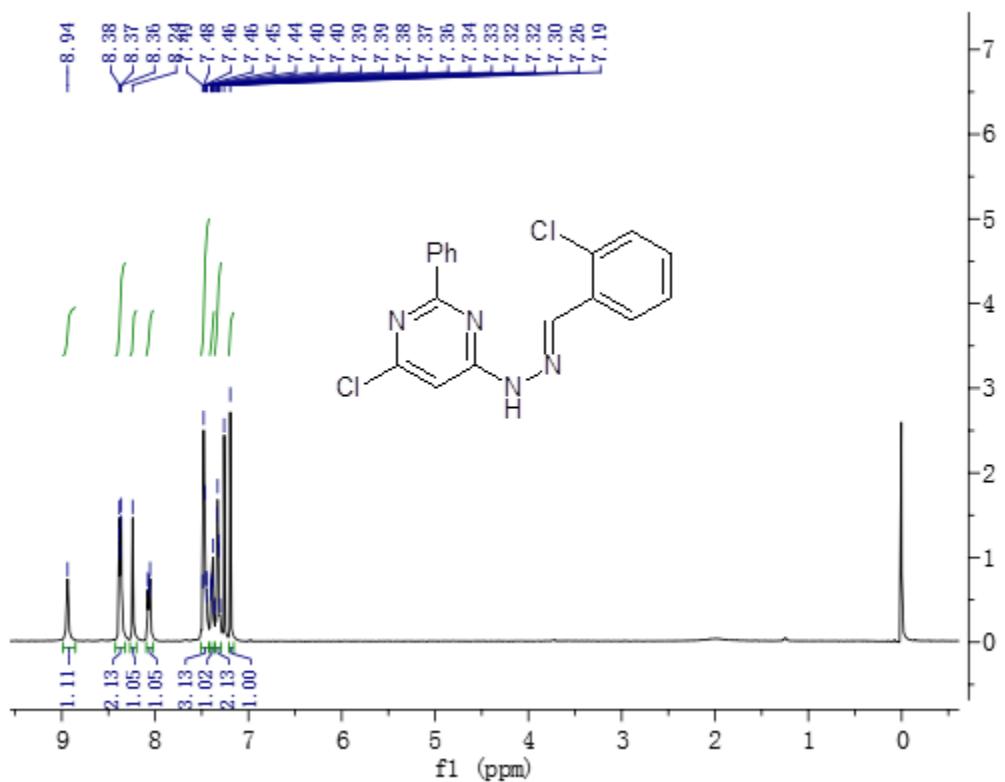
**Benzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4k)**



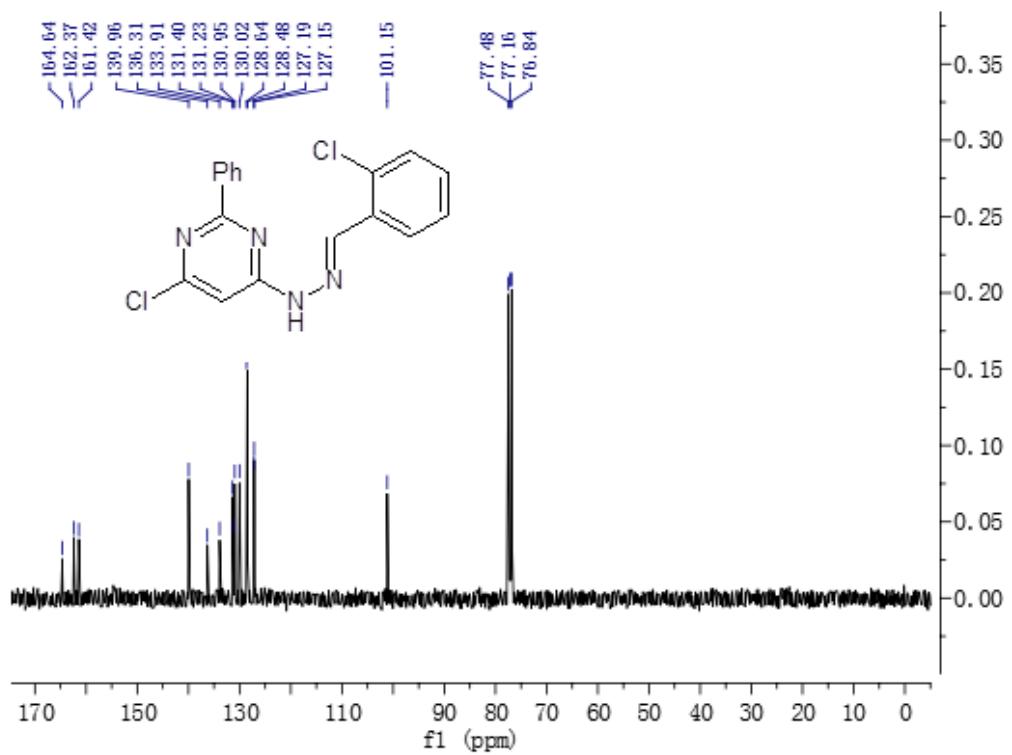
**Benzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4k)**



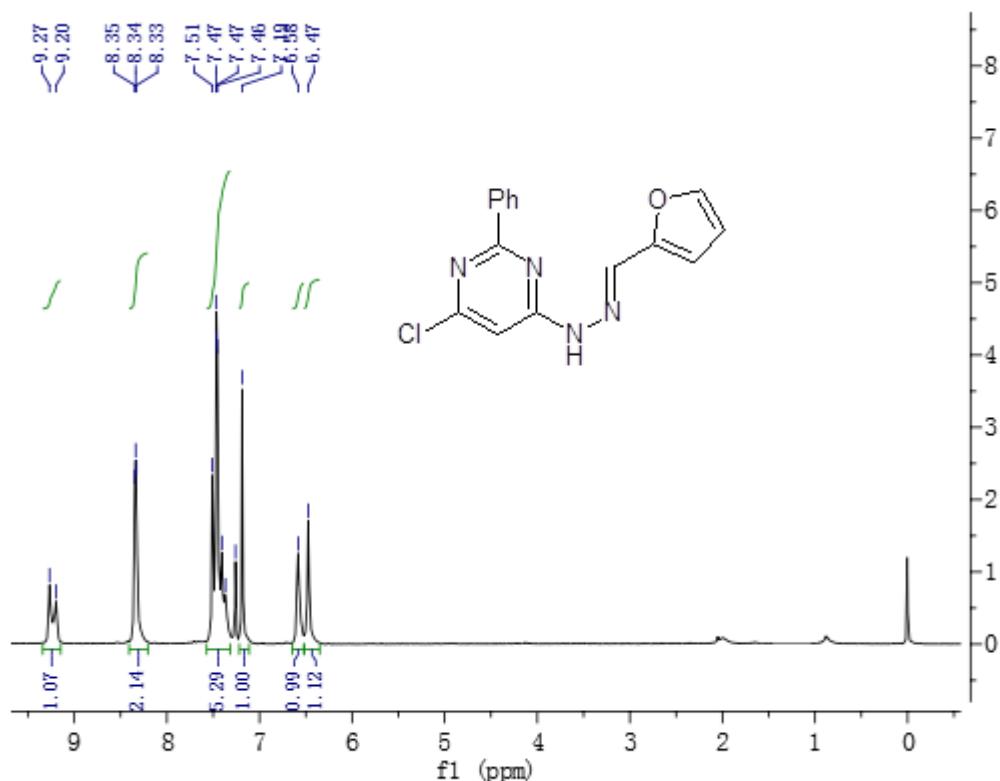
**2-Chlorobenzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4l)**



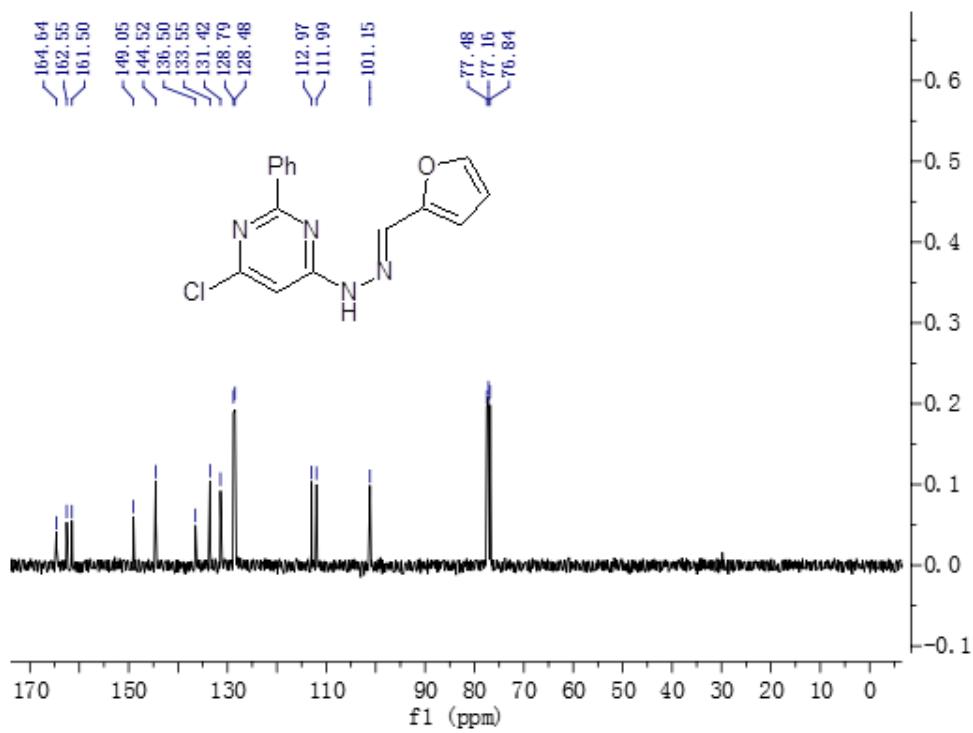
**2-Chlorobenzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4l)**



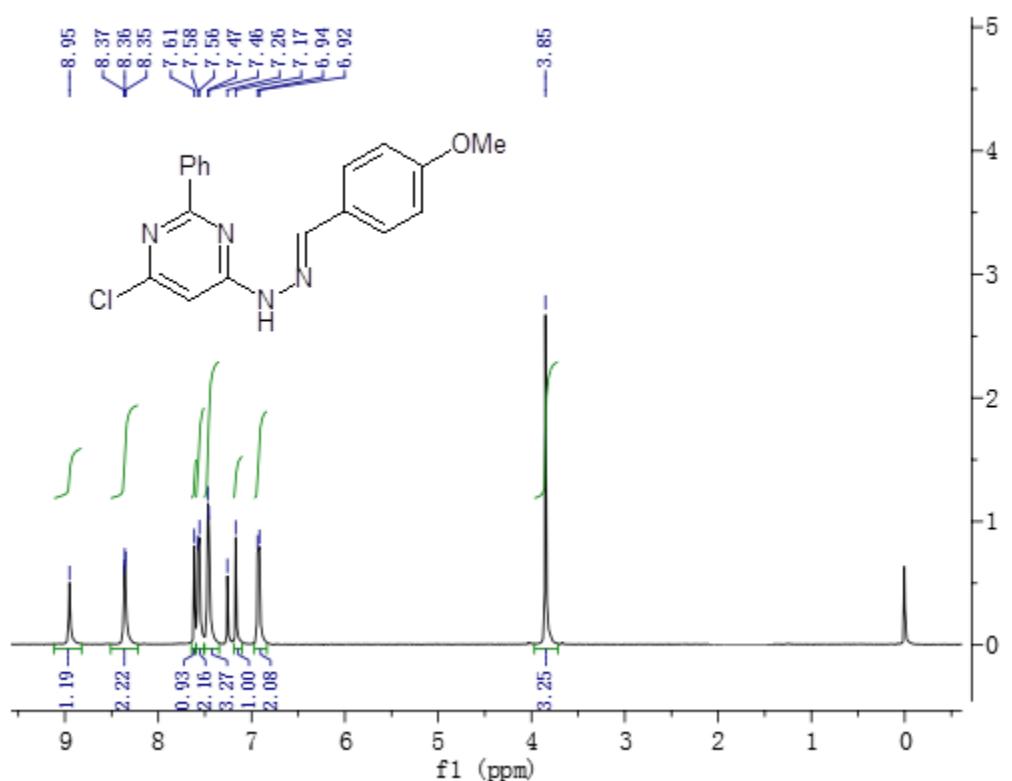
**Furfural (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4m)**



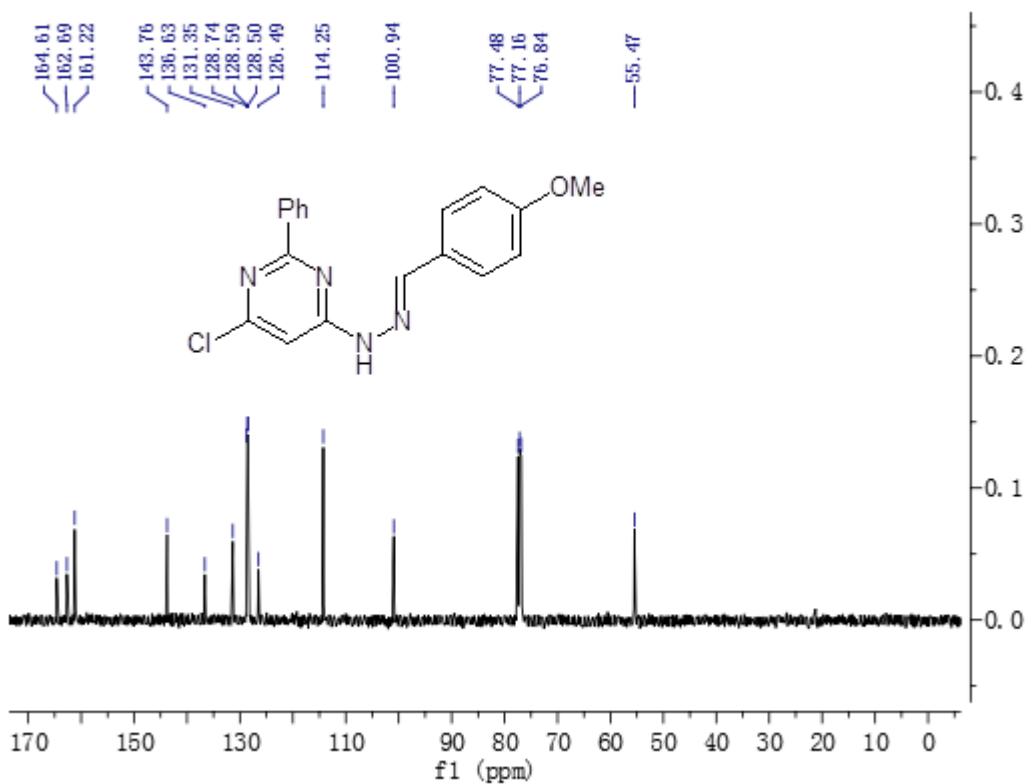
**Furfural (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4m)**



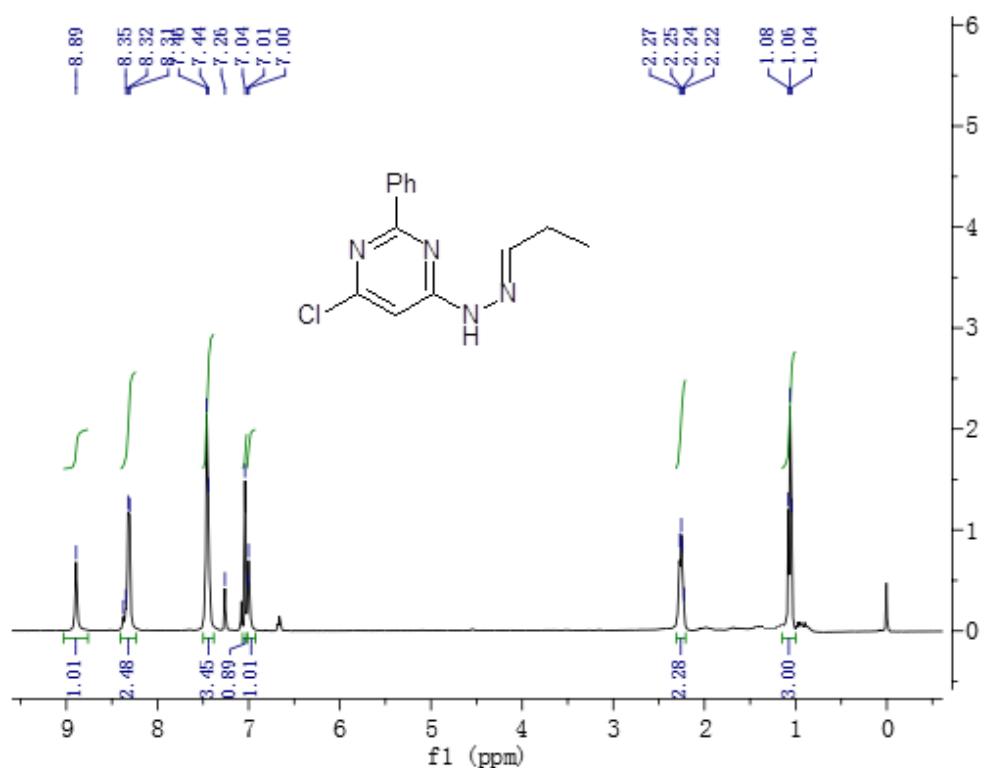
**4-Methoxybenzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4n)**



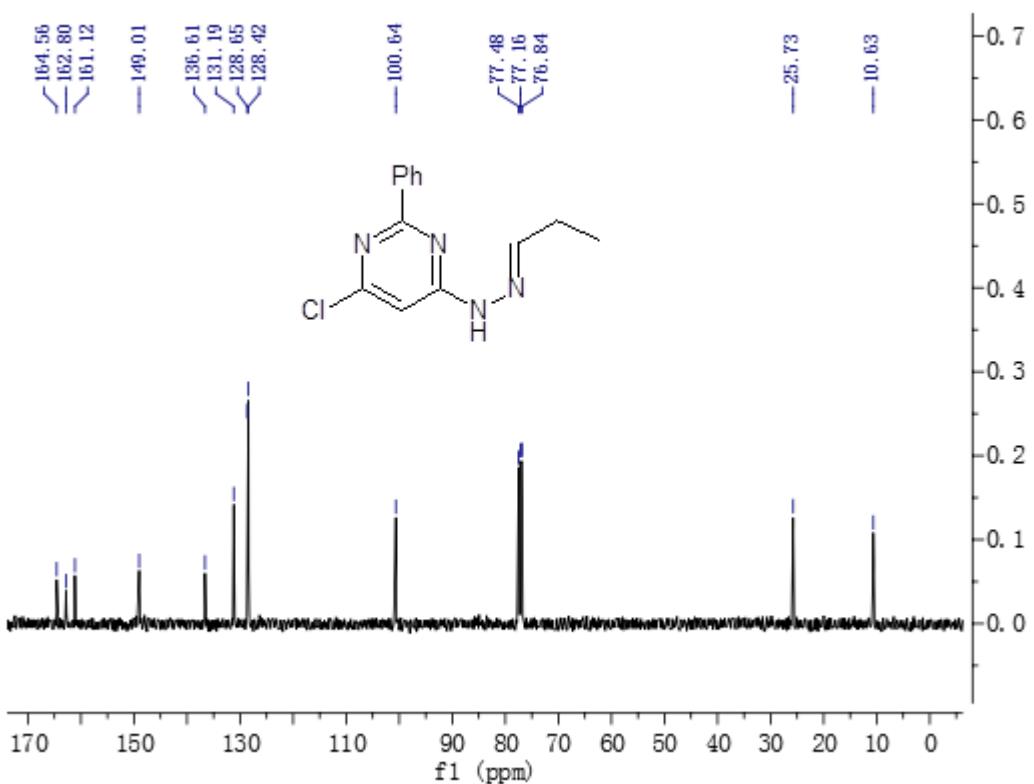
**4-Methoxybenzaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4n)**



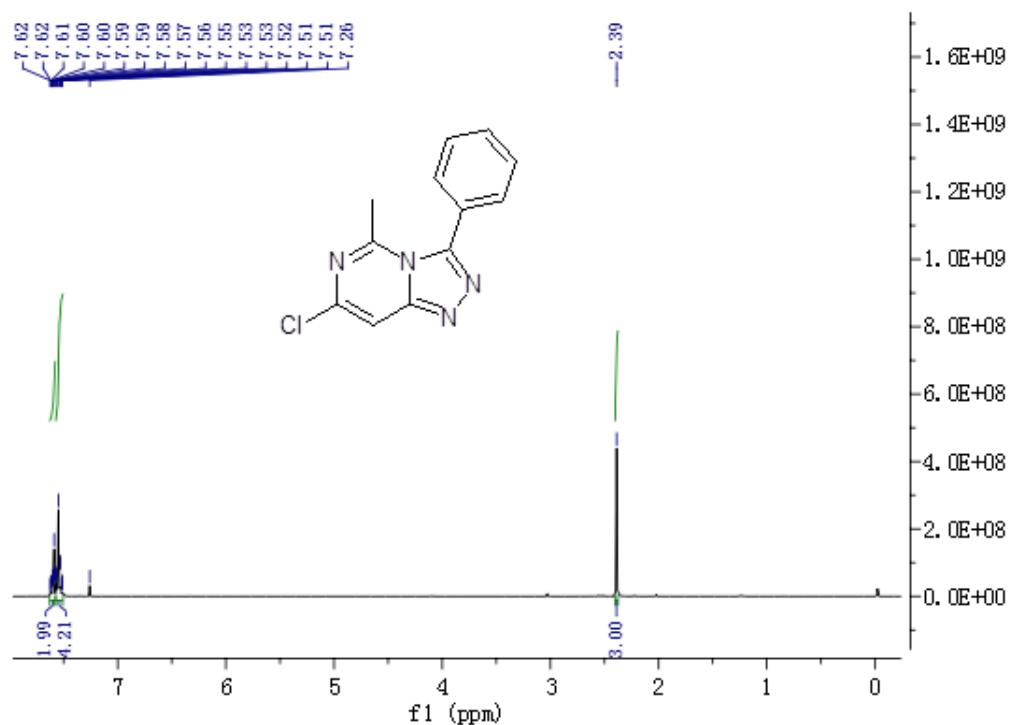
**Propanaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4o)**



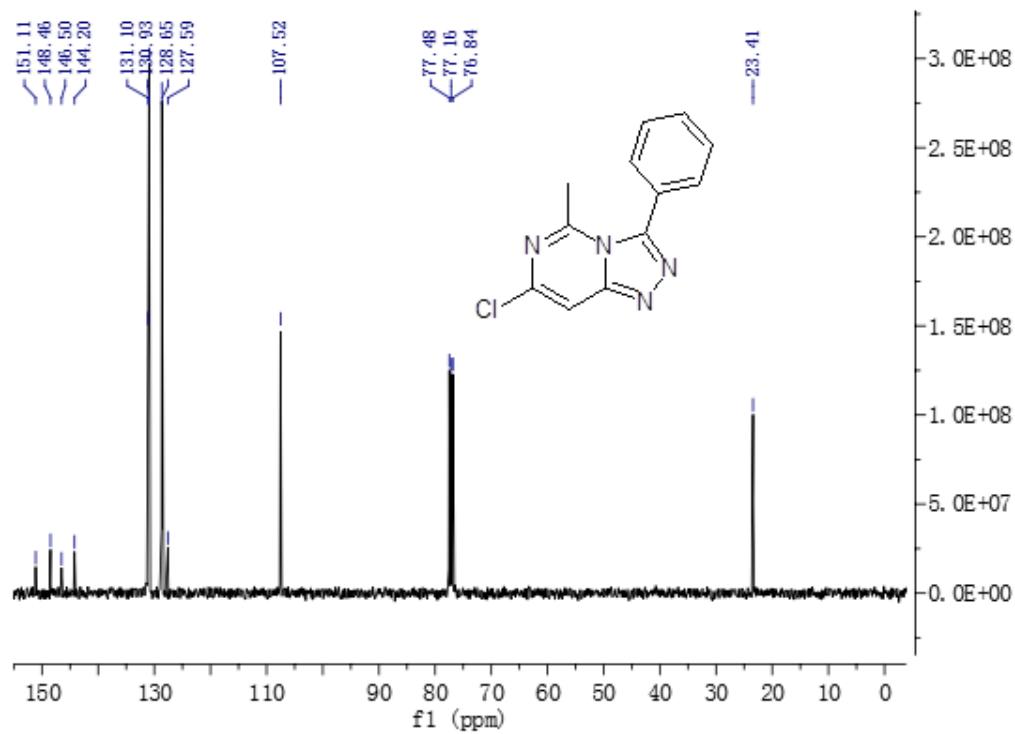
**Propanaldehyde (6-chloro-2-phenyl-4-pyrimidinyl)hydrazone (4o)**



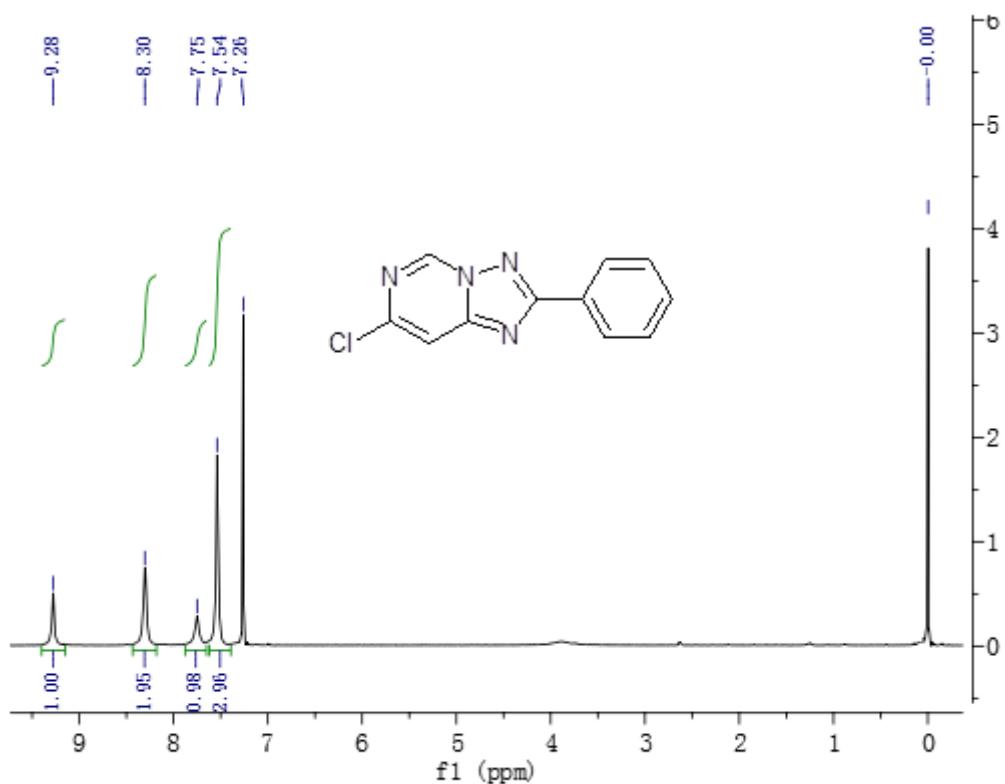
**Spectra of 7-chloro-5-methyl-3-phenyl-[1,2,4]triazolo[4,3-*c*]pyrimidine (5f)**



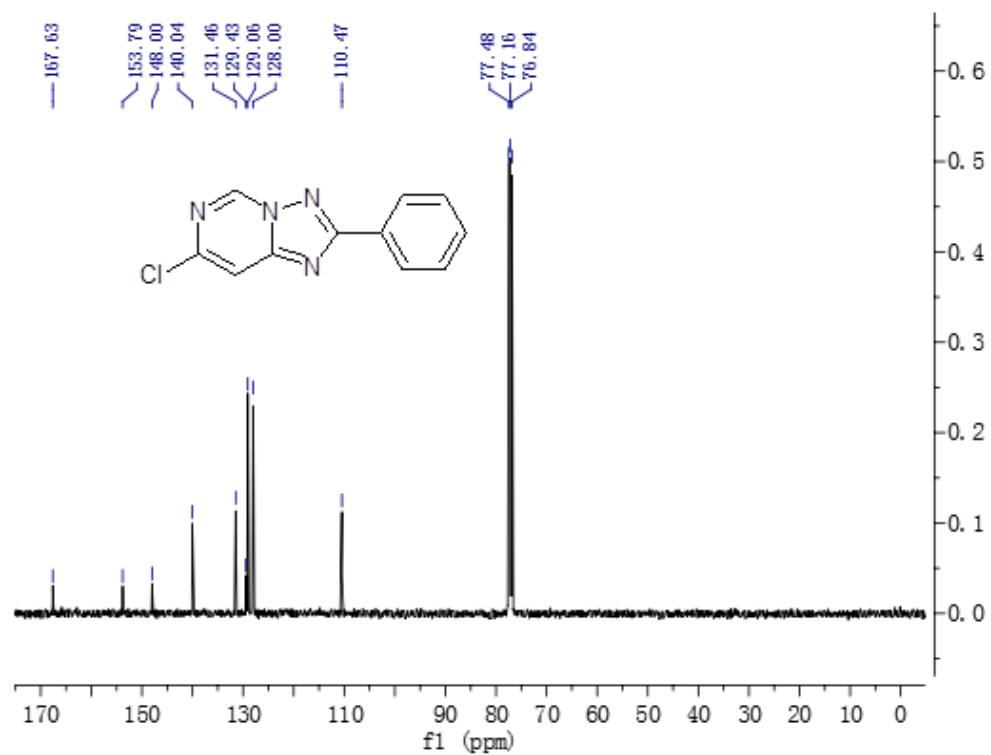
**7-Chloro-5-methyl-3-phenyl-[1,2,4]triazolo[4,3-*c*]pyrimidine (5f)**



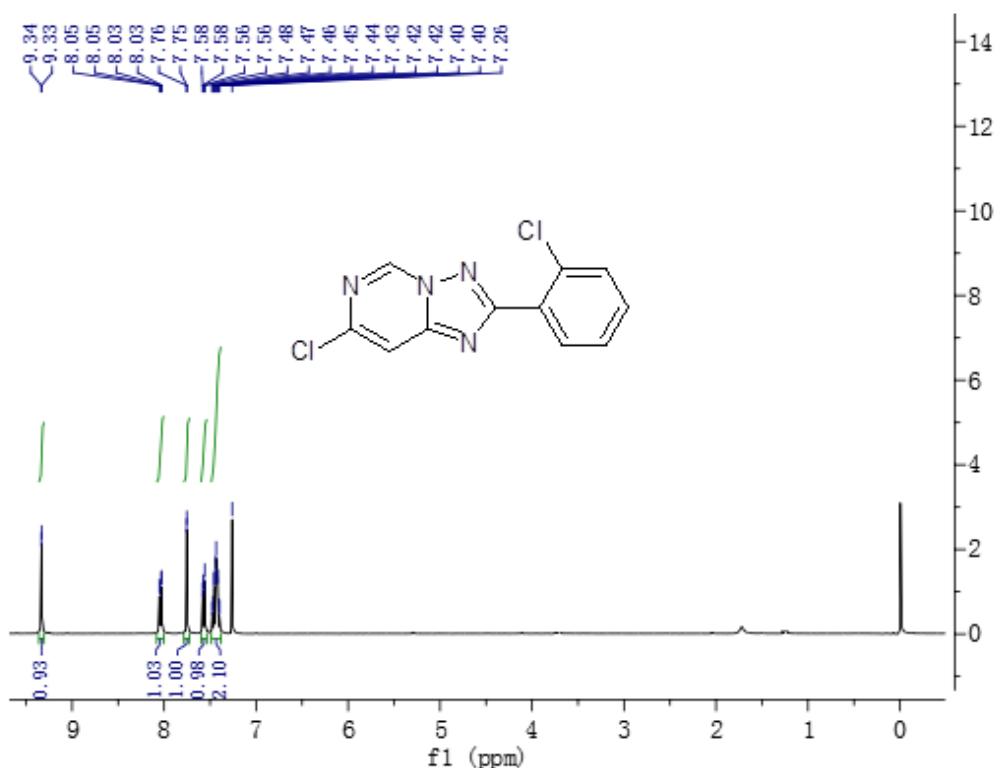
**Spectra of 7-chloro-[1,2,4]triazolo[1,5-*c*]pyrimidines 6**  
**7-Chloro-2-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6a)**



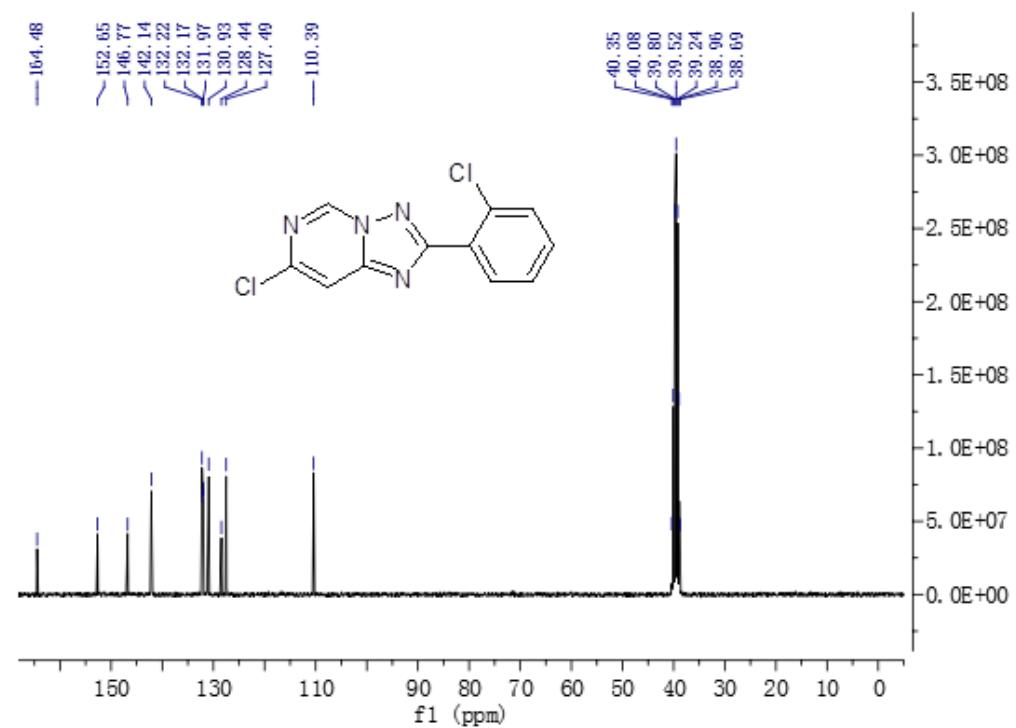
**7-Chloro-2-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6a)**



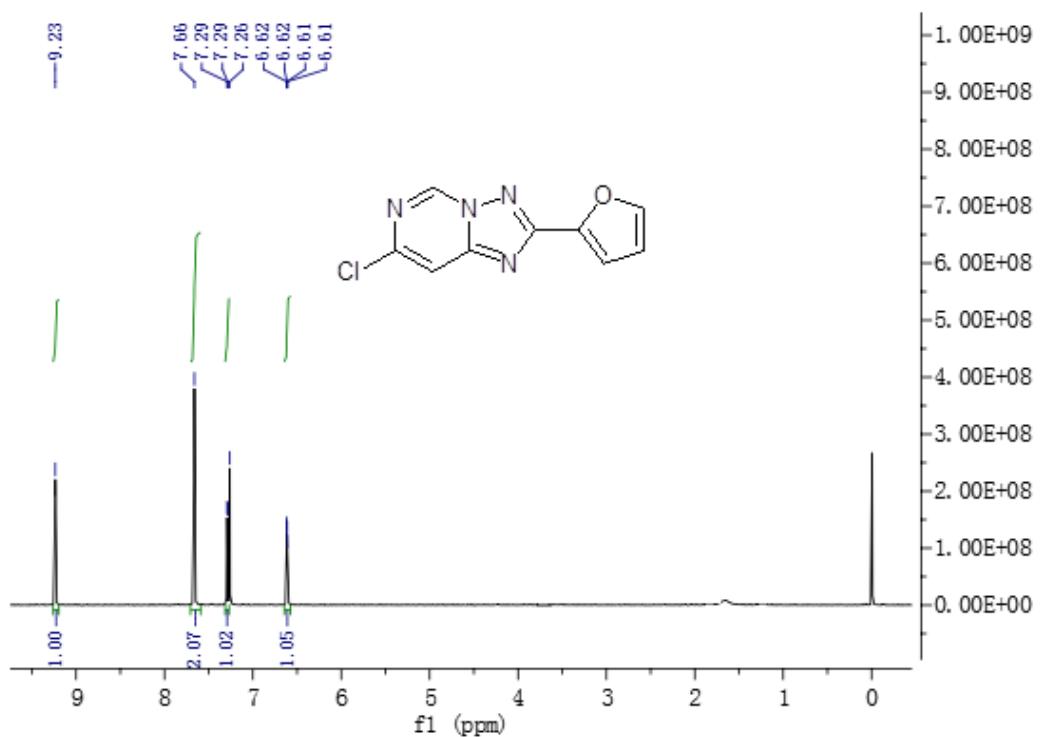
**7-Chloro-2-(2-chlorophenyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6b)**



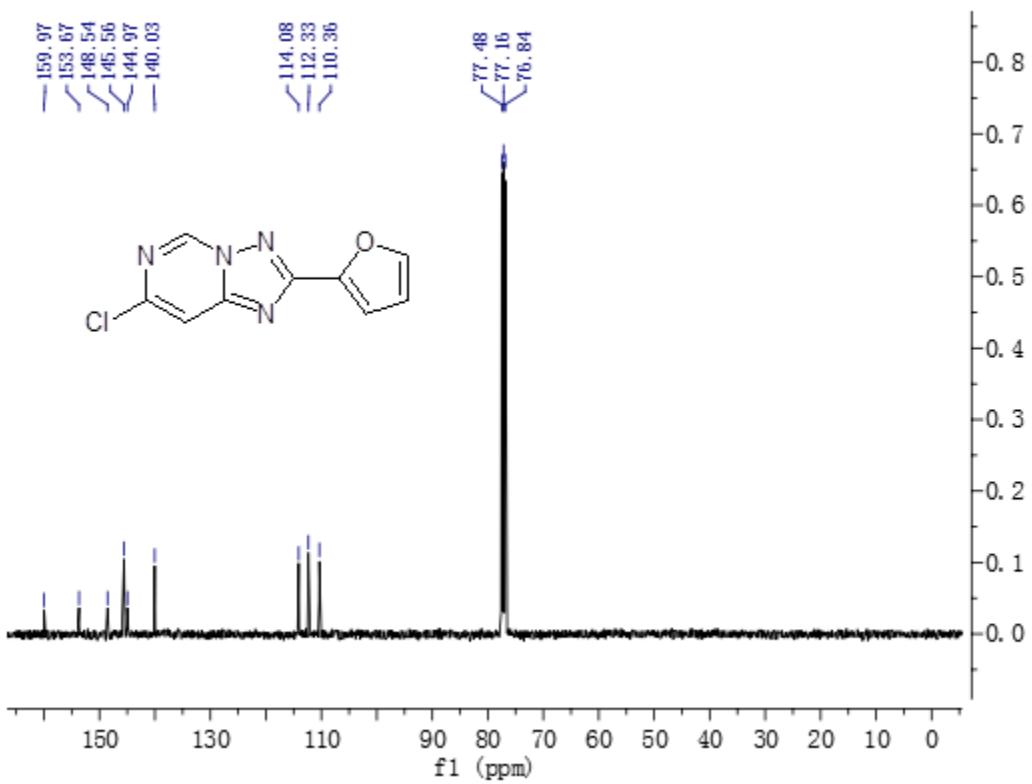
**7-Chloro-2-(2-chlorophenyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6b)**



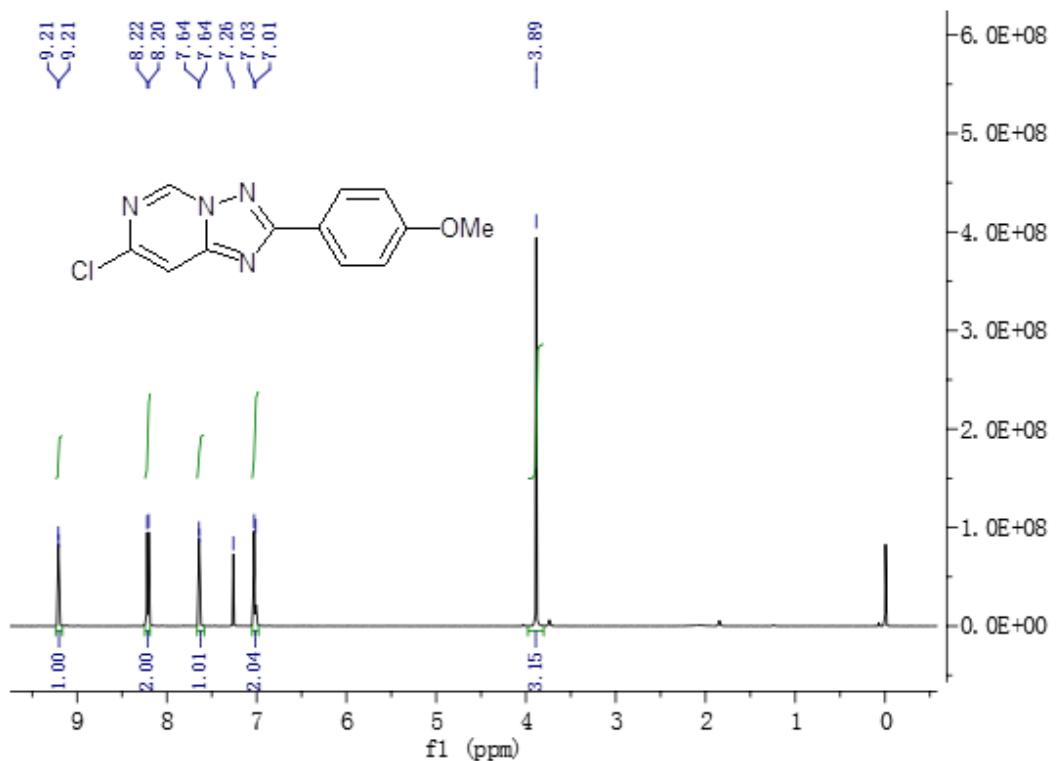
**7-Chloro-2-(2-furanyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6c)**



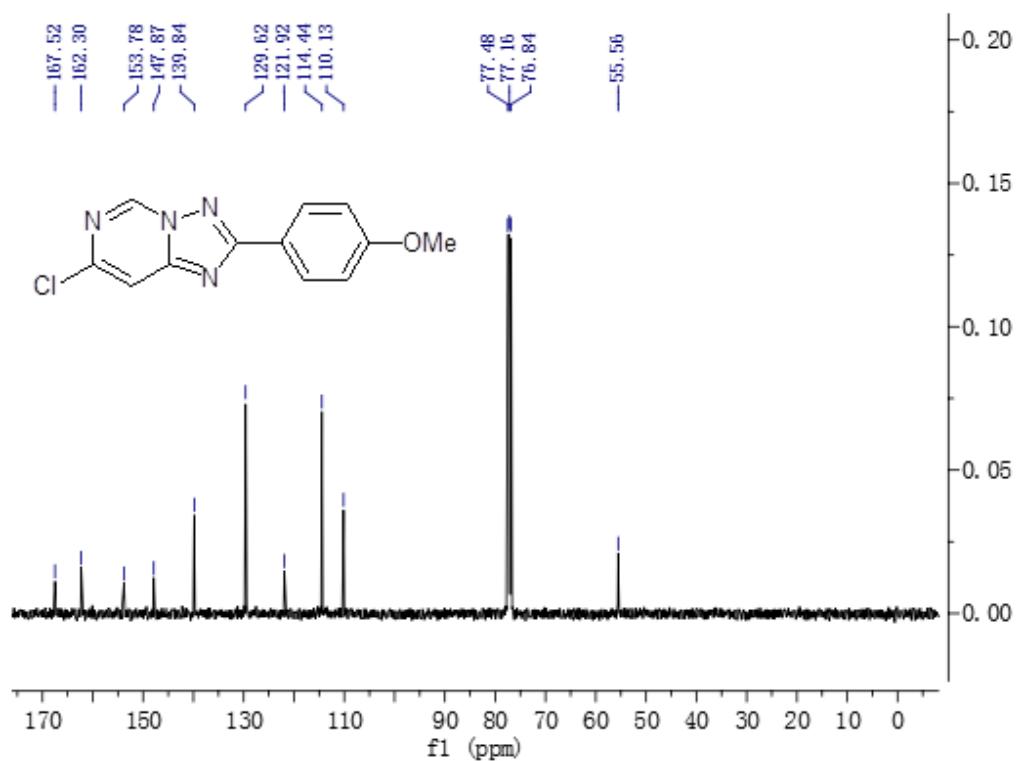
**7-Chloro-2-(2-furanyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6c)**



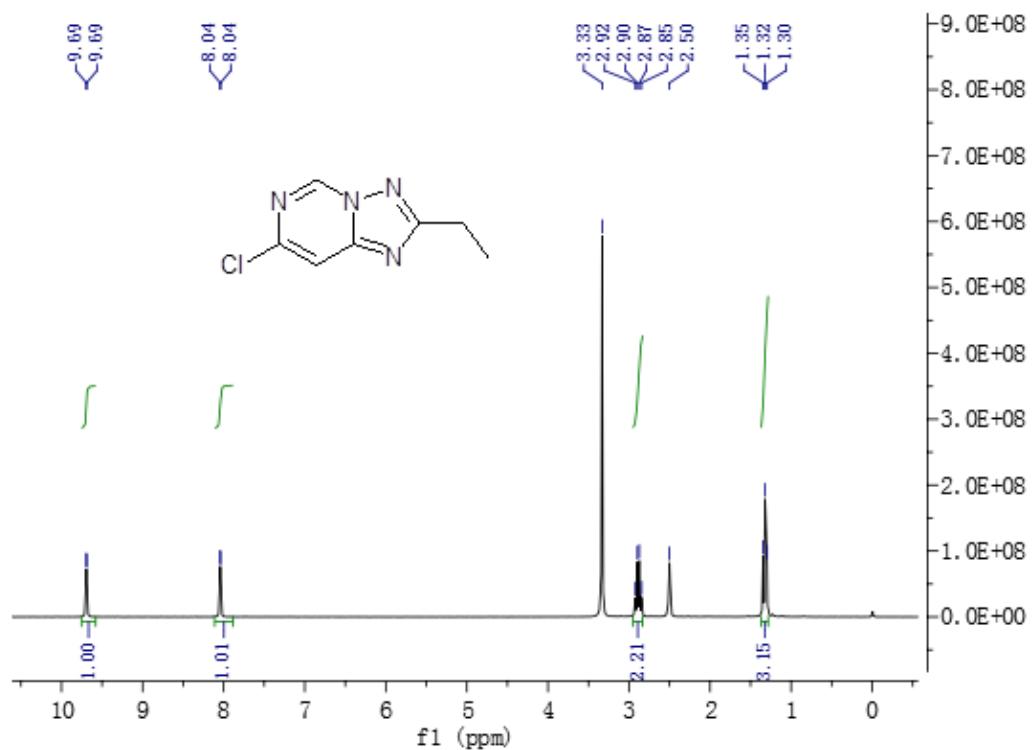
**7-Chloro-2-(4-methoxyphenyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6d)**



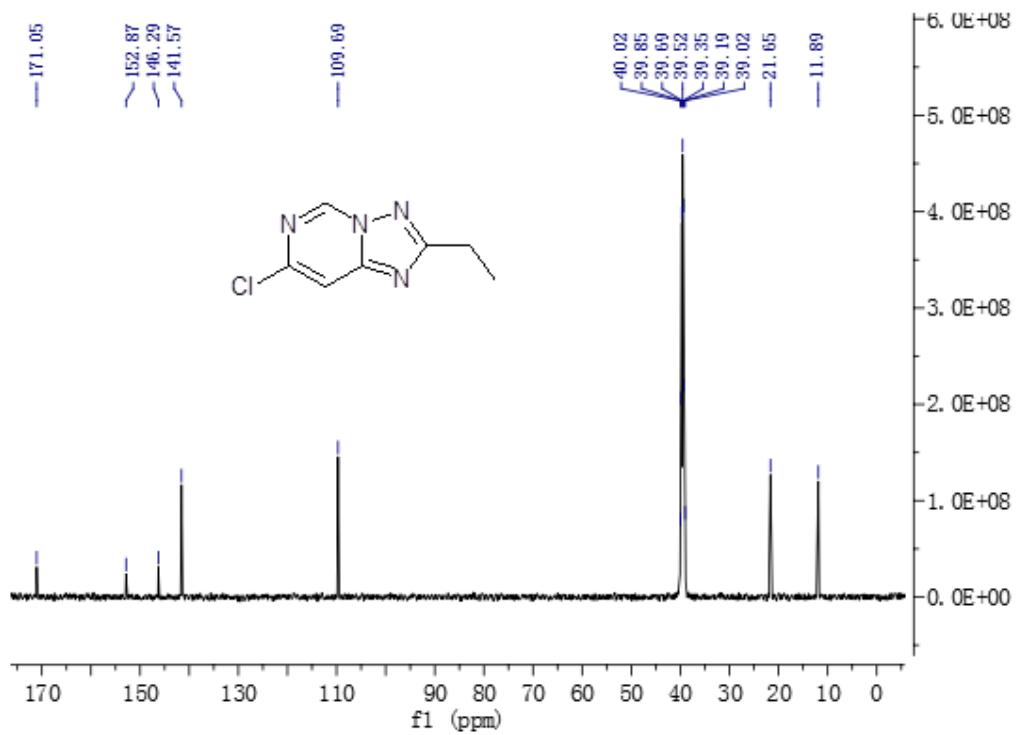
**7-Chloro-2-(4-methoxyphenyl)-[1,2,4]triazolo[1,5-*c*]pyrimidine (6d)**



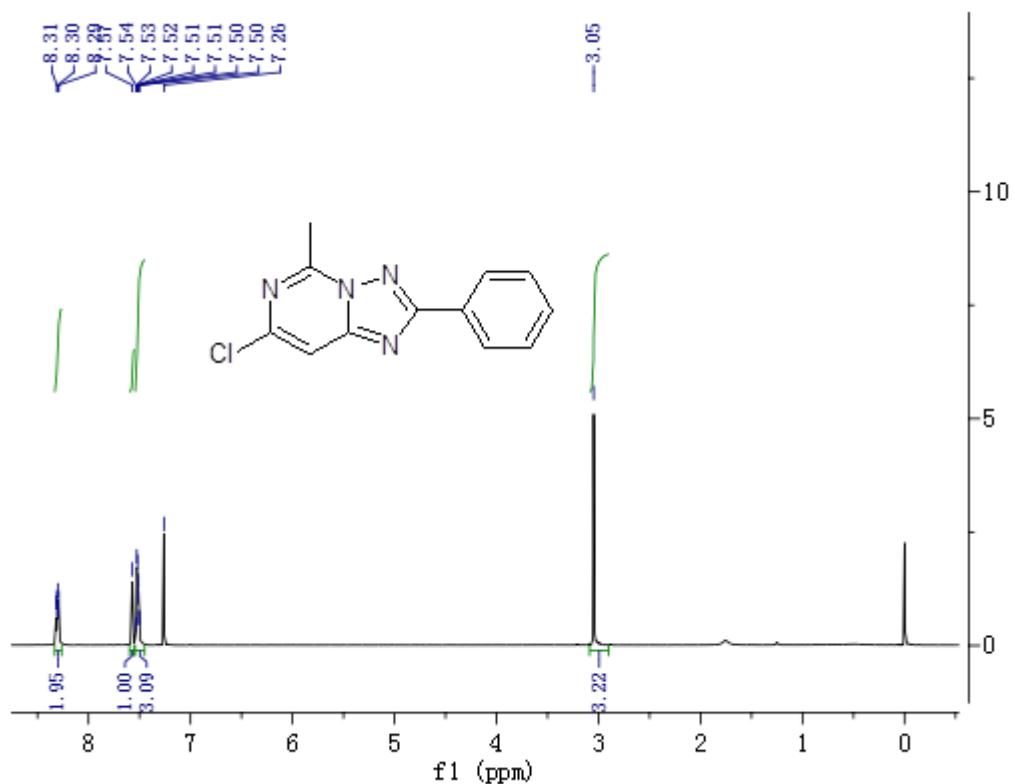
**7-Chloro-2-ethyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6e)**



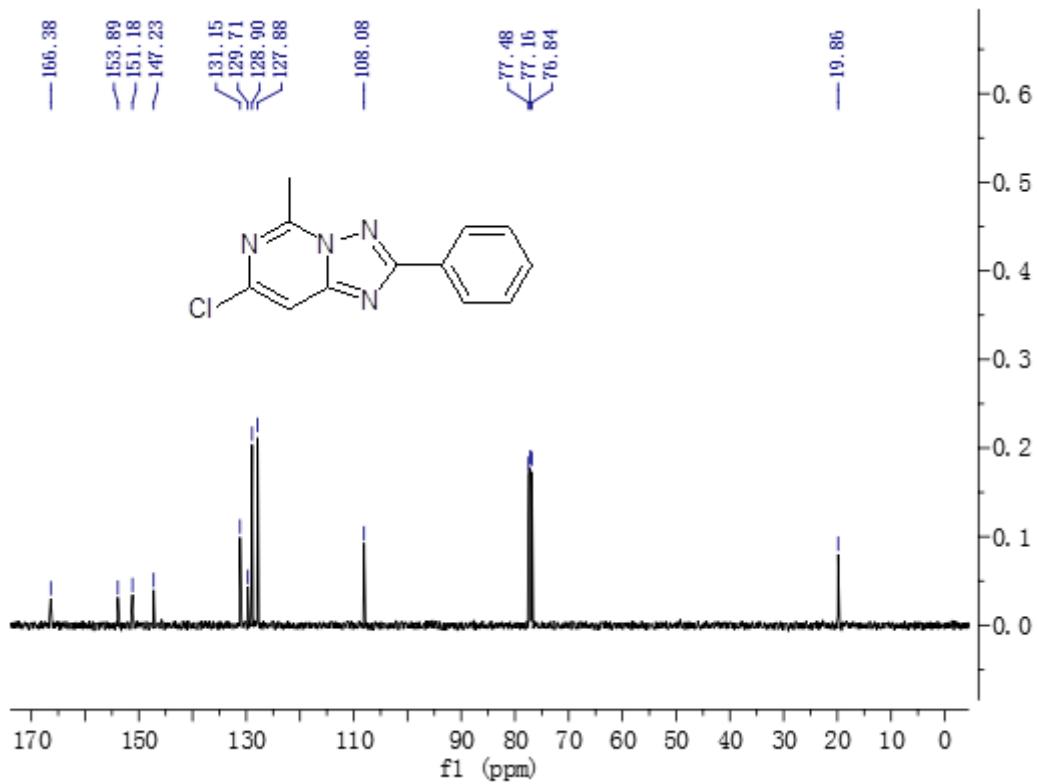
**7-Chloro-2-ethyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6e)**



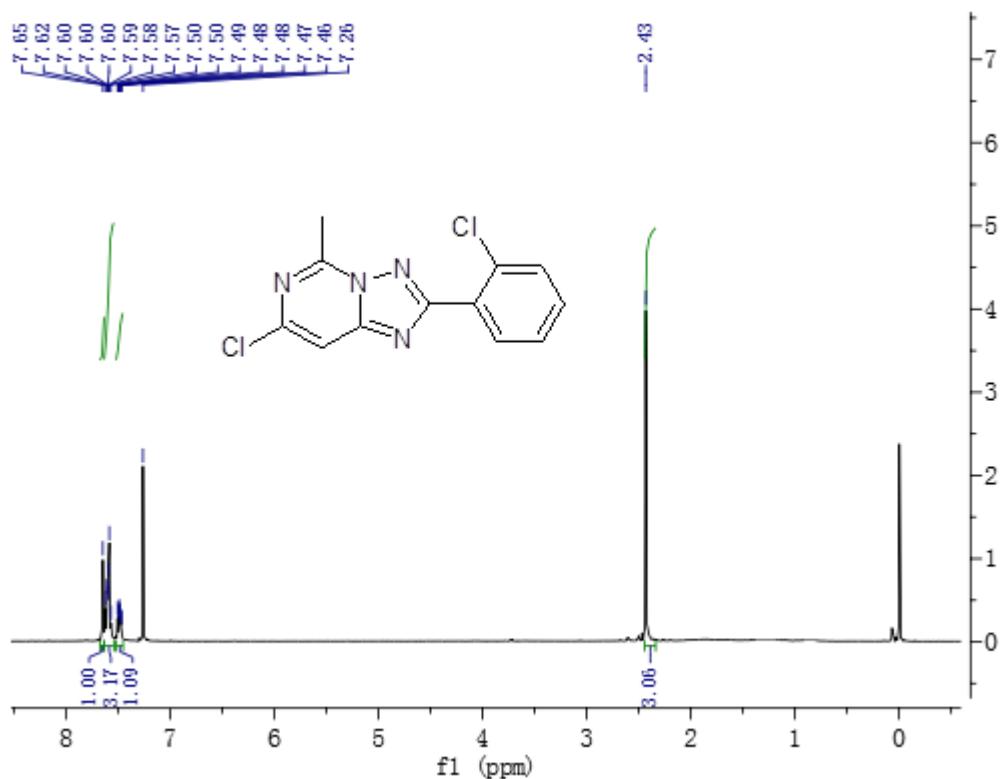
**7-Chloro-5-methyl-2-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6f)**



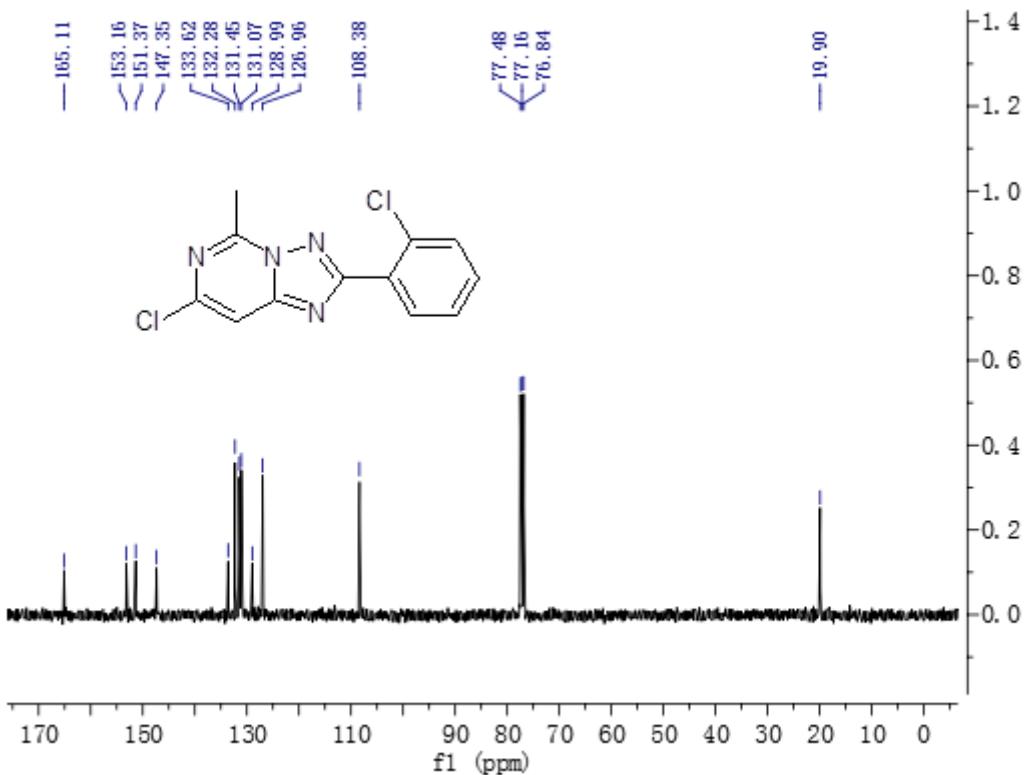
**7-Chloro-5-methyl-2-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6f)**



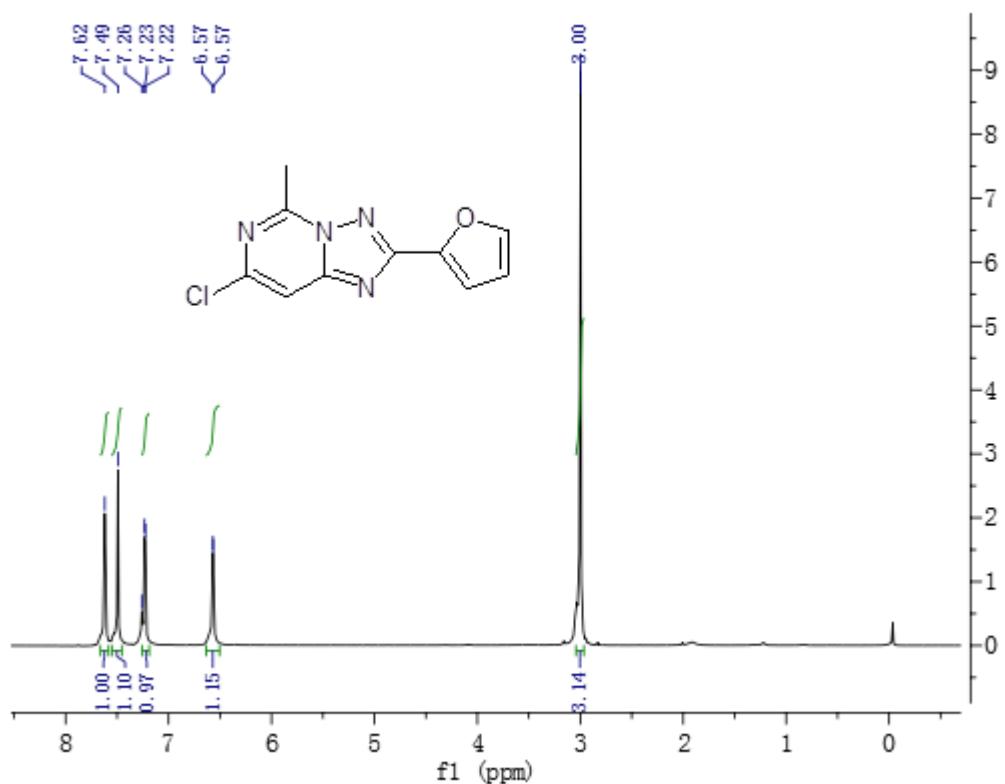
**7-Chloro-2-(2-chlorophenyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6g)**



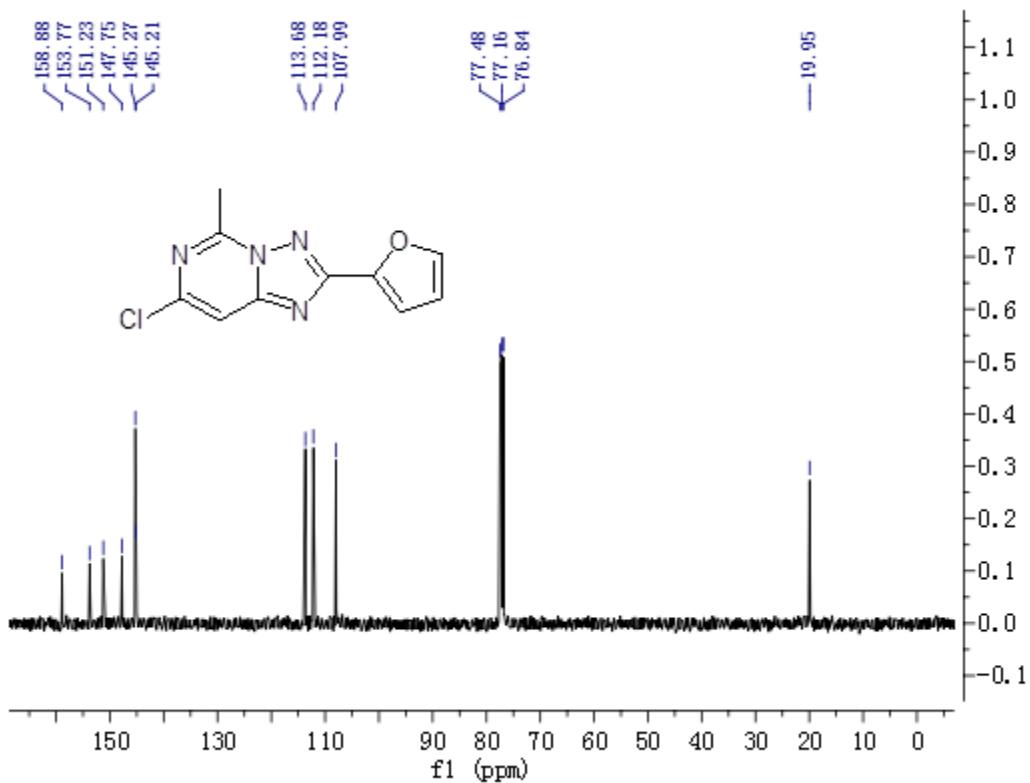
**7-Chloro-2-(2-chlorophenyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6g)**



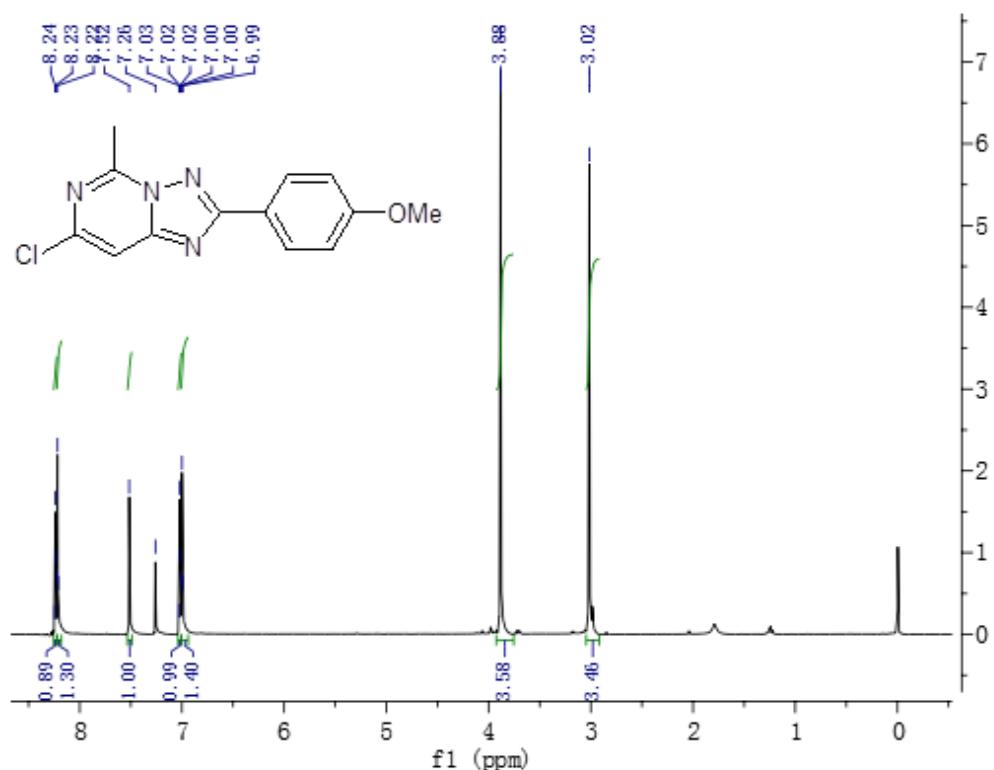
**7-Chloro-2-(2-furanyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6h)**



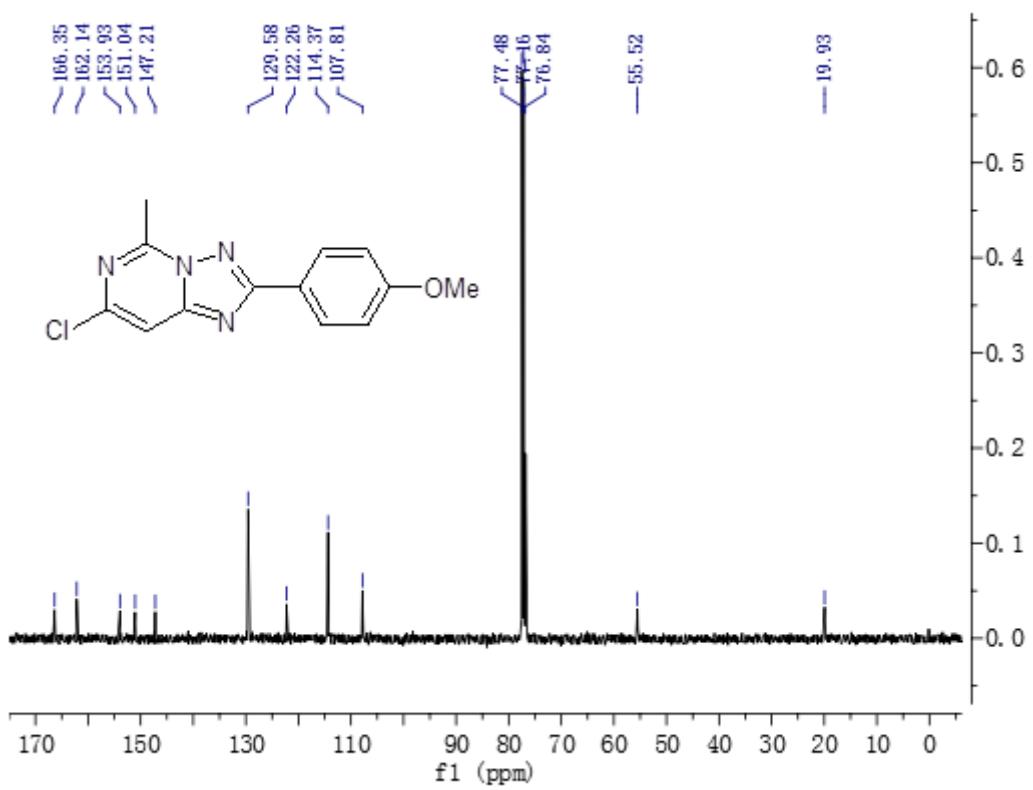
**7-Chloro-2-(2-furanyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6h)**



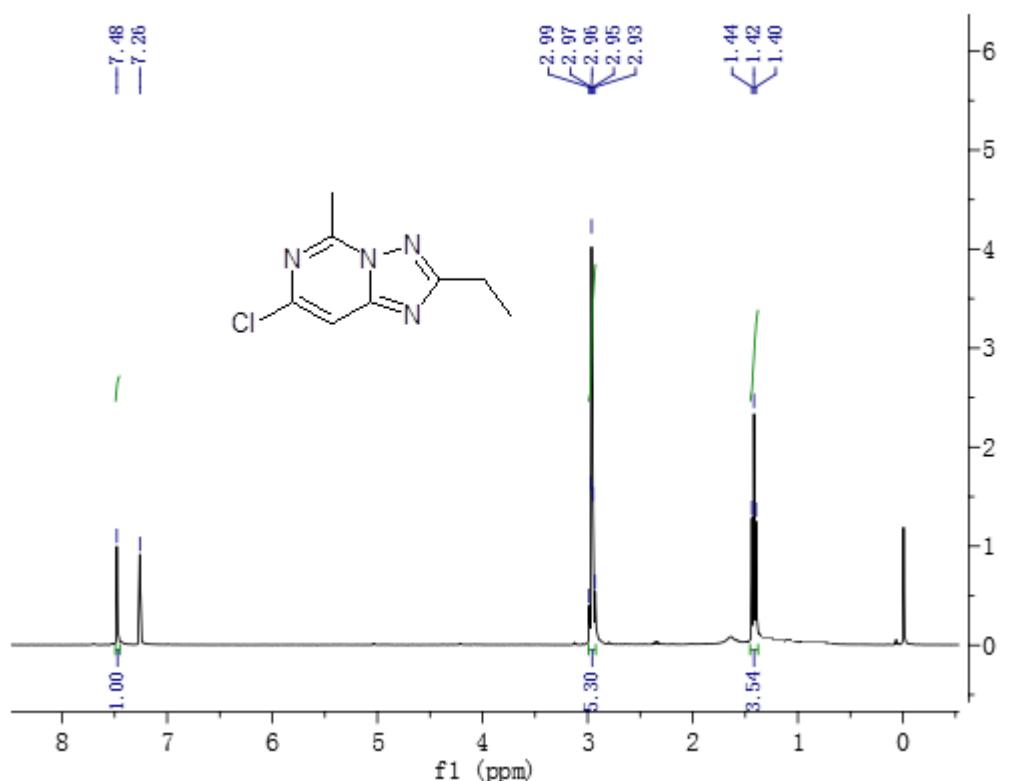
**7-Chloro-2-(4-methoxyphenyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6i)**



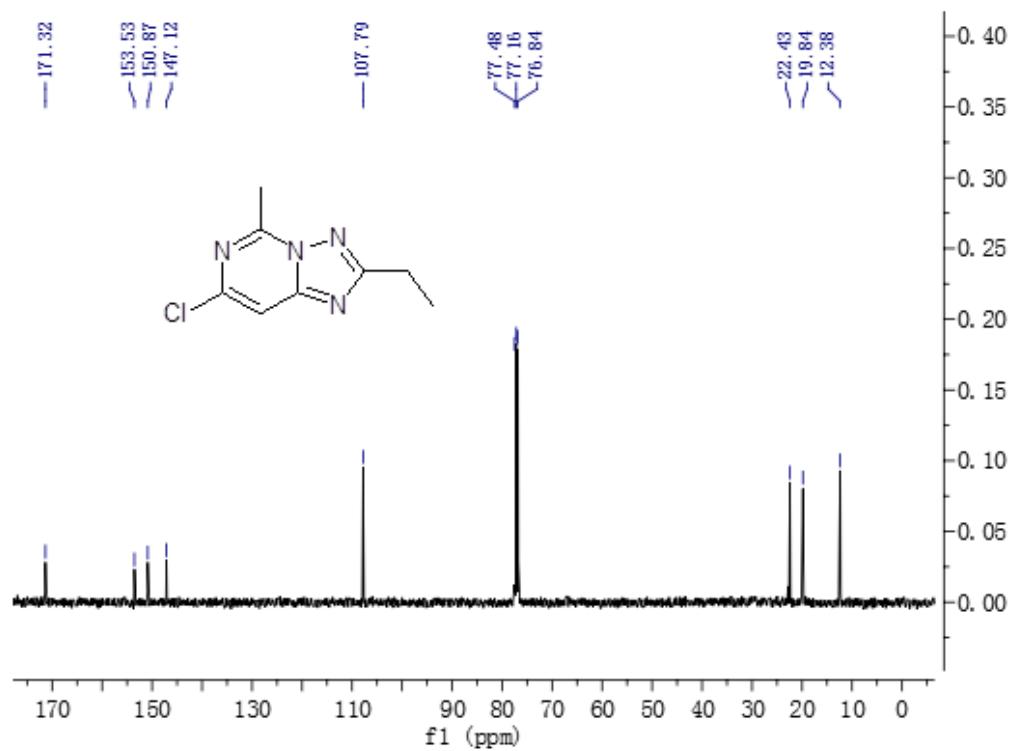
**7-Chloro-2-(4-methoxyphenyl)-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6i)**



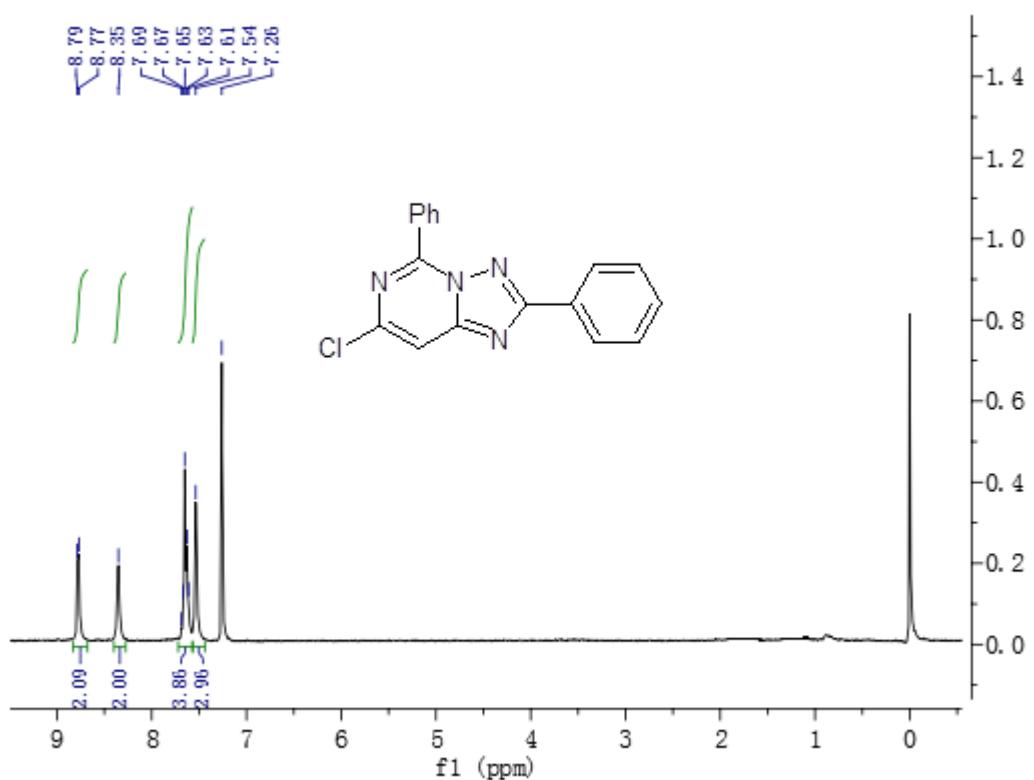
**7-Chloro-2-ethyl-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6j)**



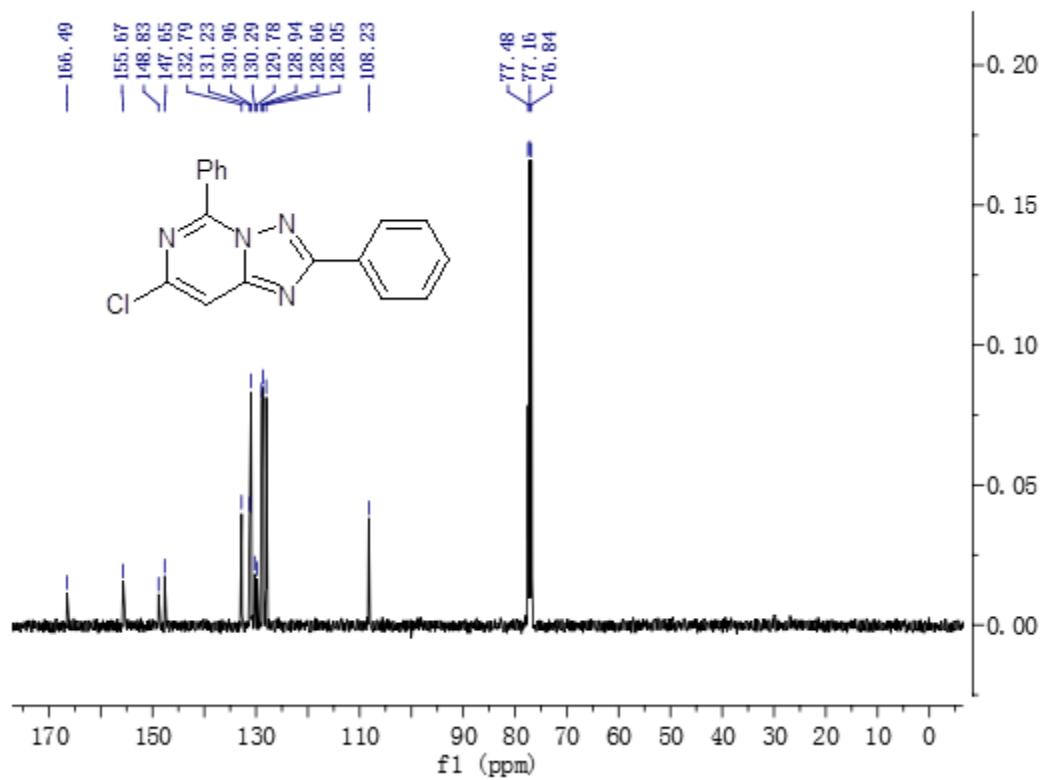
**7-Chloro-2-ethyl-5-methyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6j)**



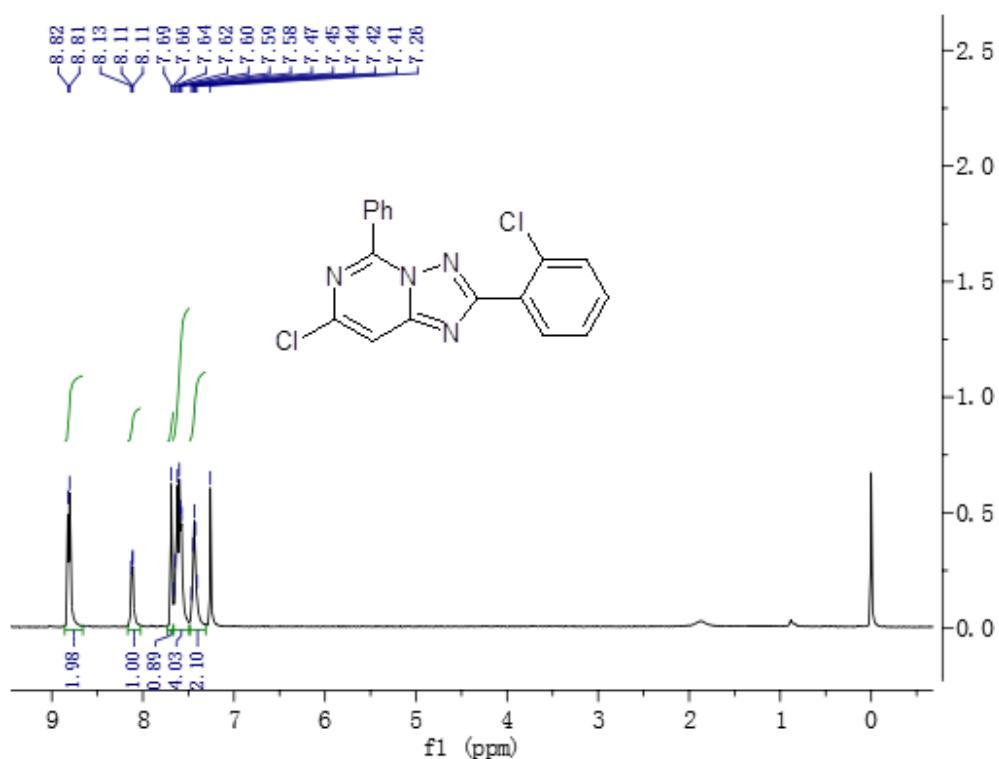
**7-Chloro-2,5-diphenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6k)**



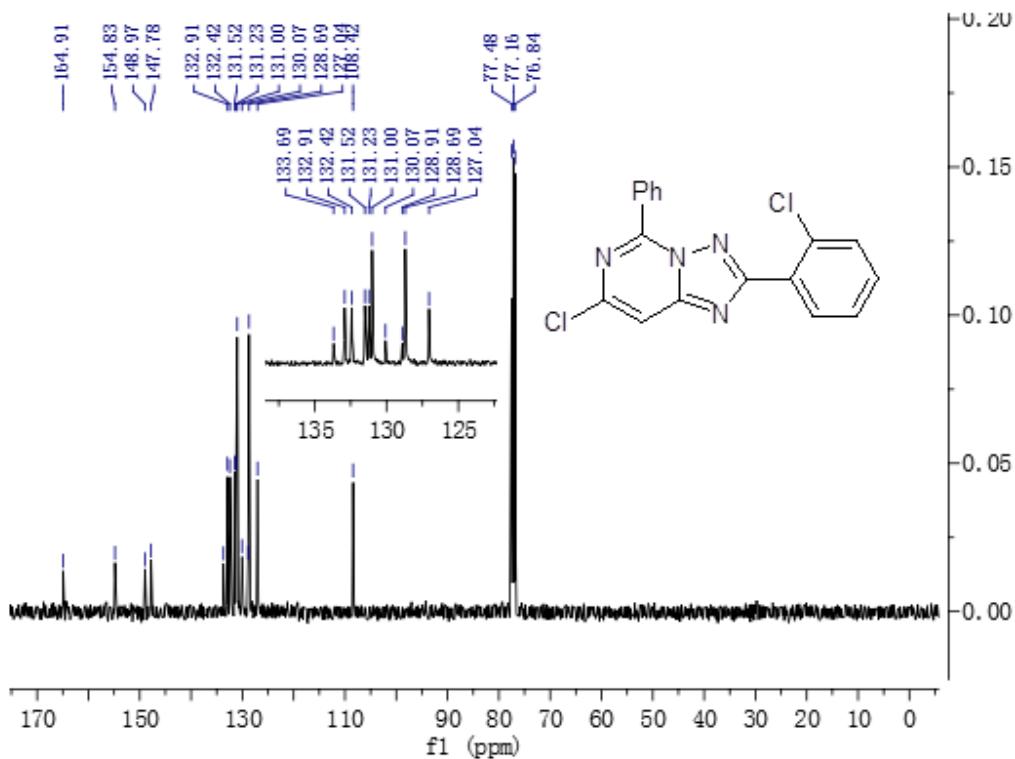
**7-Chloro-2,5-diphenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6k)**



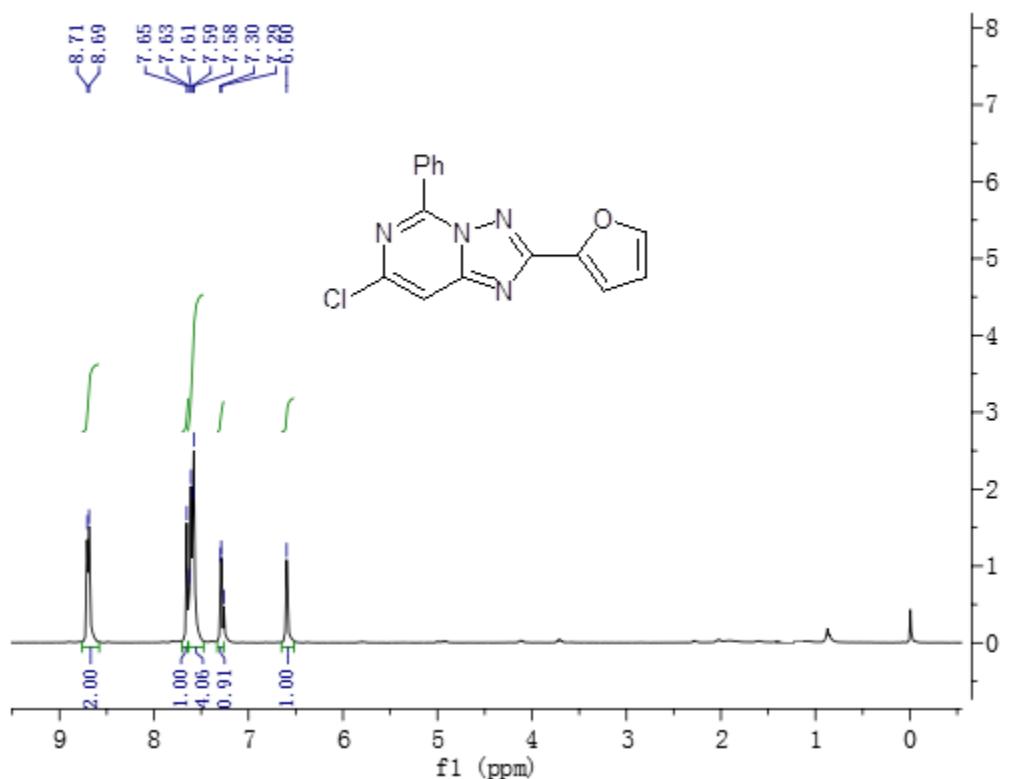
**7-Chloro-2-(2-chlorophenyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6l)**



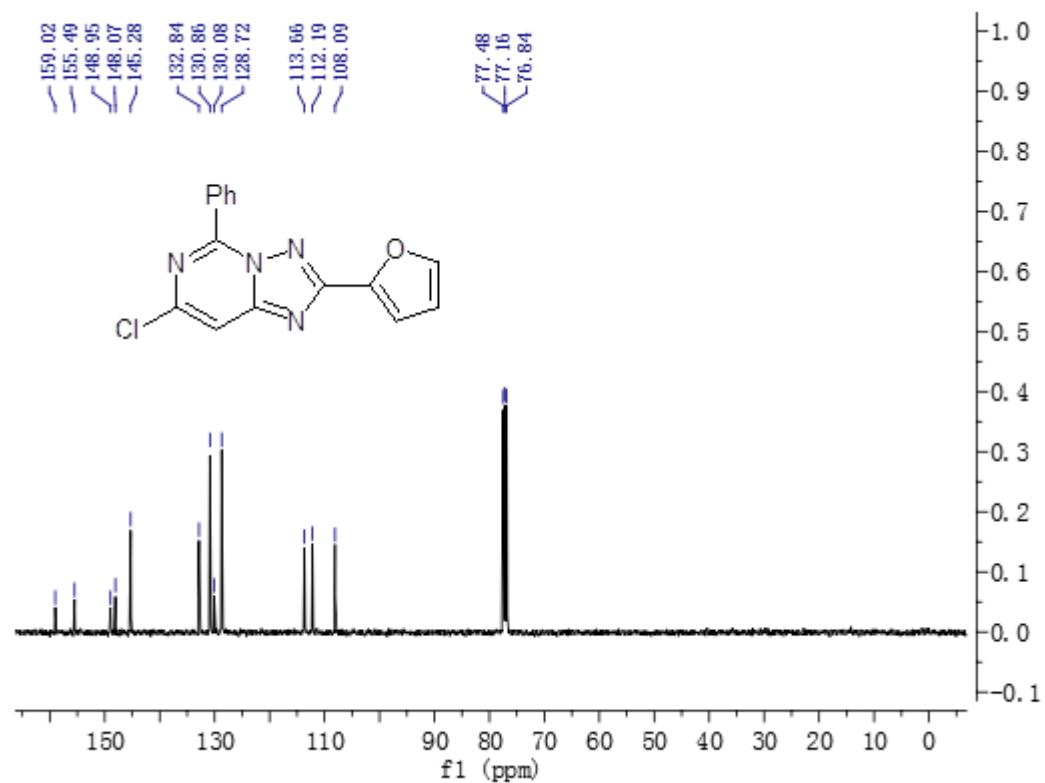
**7-Chloro-2-(2-chlorophenyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6l)**



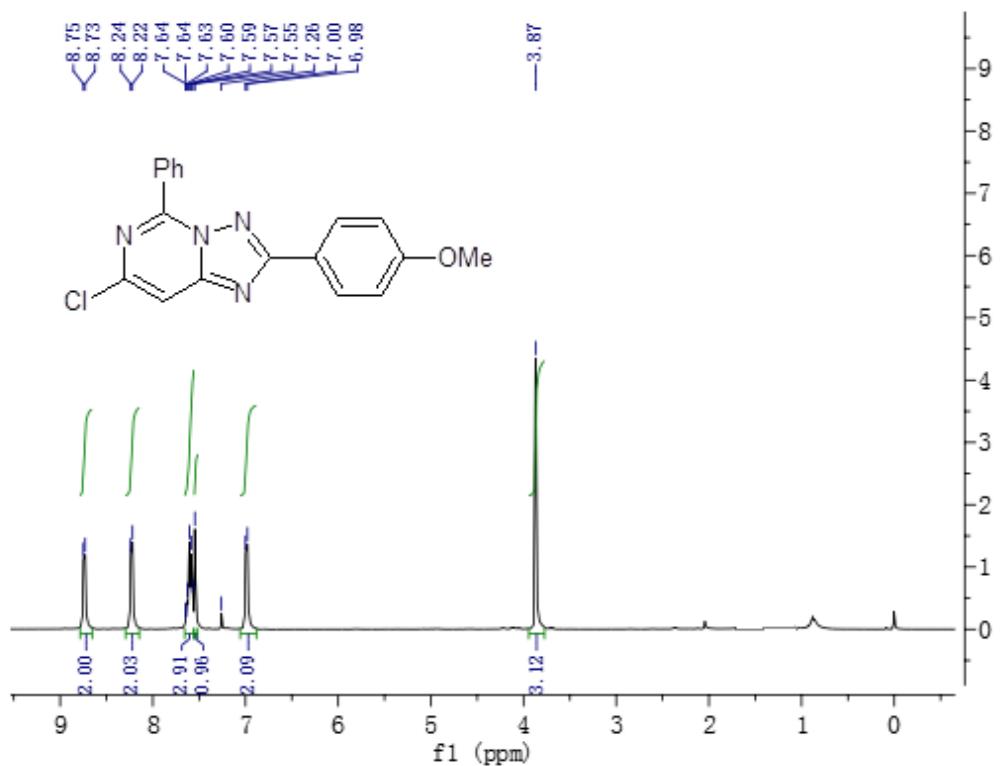
**7-Chloro-2-(2-furanyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6m)**



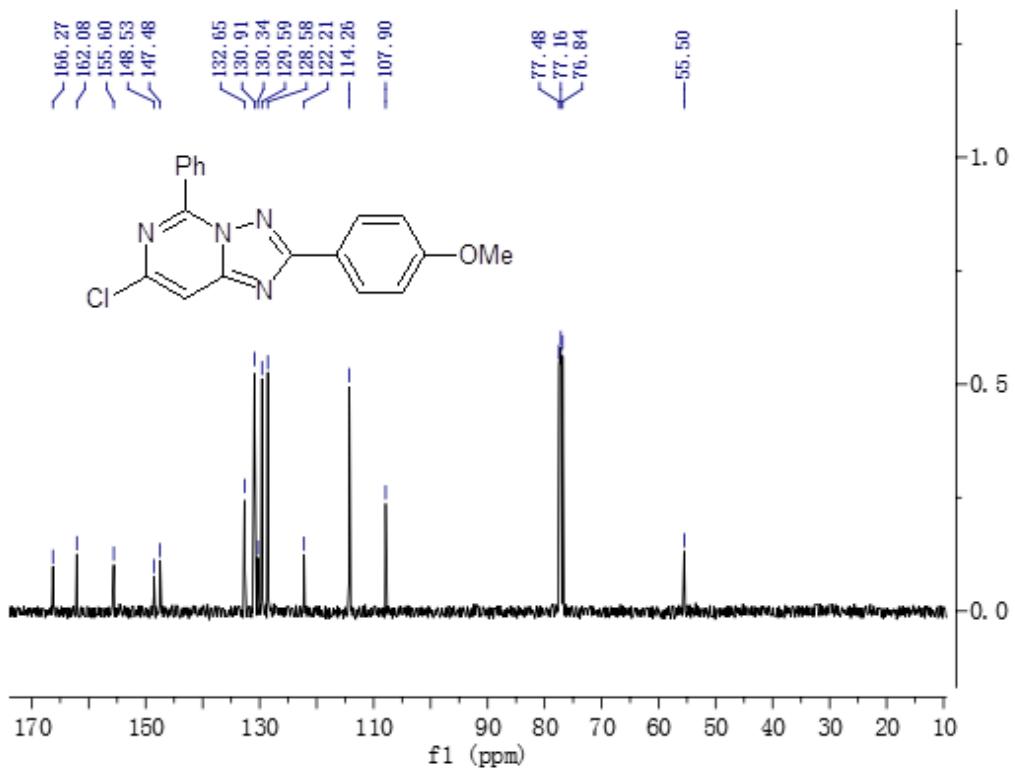
**7-Chloro-2-(2-furanyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6m)**



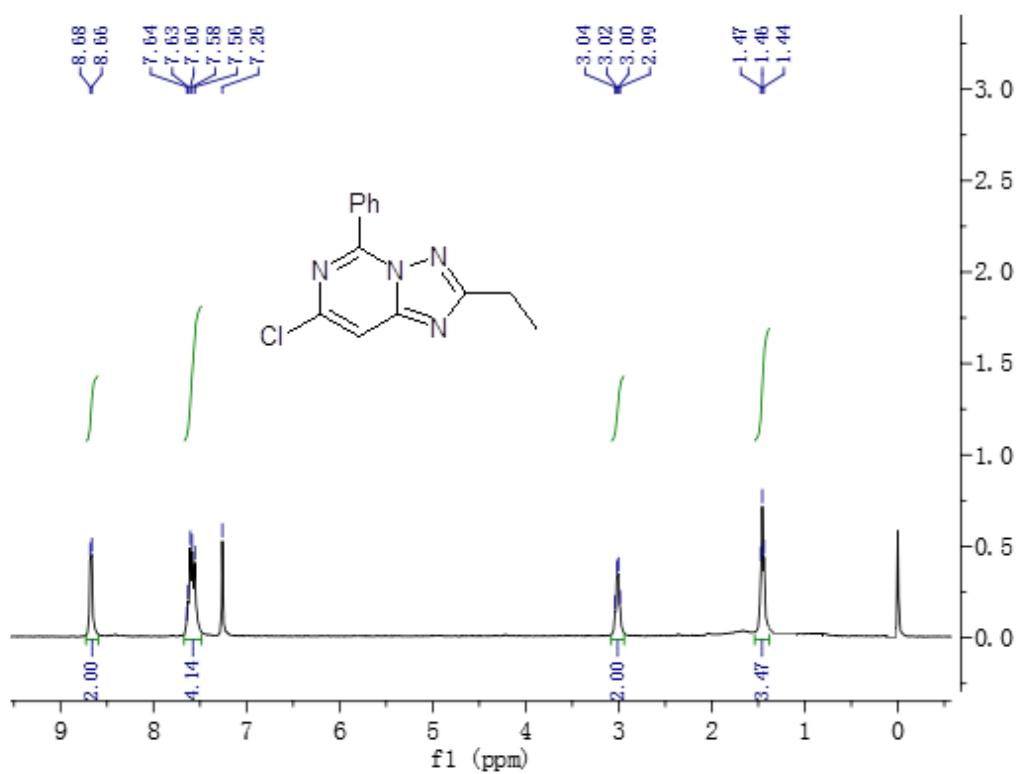
**7-Chloro-2-(4-methoxyphenyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6n)**



**7-Chloro-2-(4-methoxyphenyl)-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (6n)**



**7-Chloro-2-ethyl-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (**60**)**



**7-Chloro-2-ethyl-5-phenyl-[1,2,4]triazolo[1,5-*c*]pyrimidine (**60**)**

