

# **CHEMISTRY**

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## **AN ASIAN JOURNAL**

### **Supporting Information**

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#### **Anion Binding of *N*-(*o*-Methoxybenzamido)thioureas: Contribution of the Intramolecular Hydrogen Bond in the *N*-Benzamide Moiety**

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# **Supporting Information**

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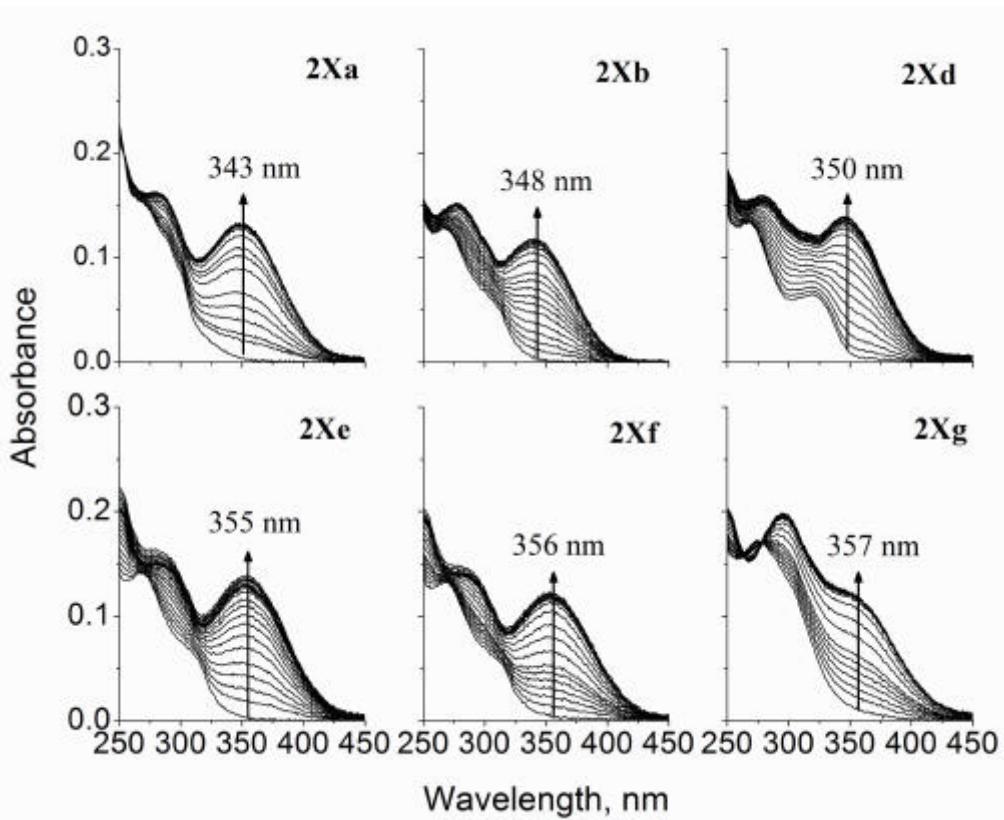


Figure S1. Absorption spectra of **2Xa-g** in MeCN in the presence of  $\text{AcO}^-$  of increasing concentration.  $[\mathbf{2X}] = 1.0 \times 10^{-5} \text{ mol L}^{-1}$ .

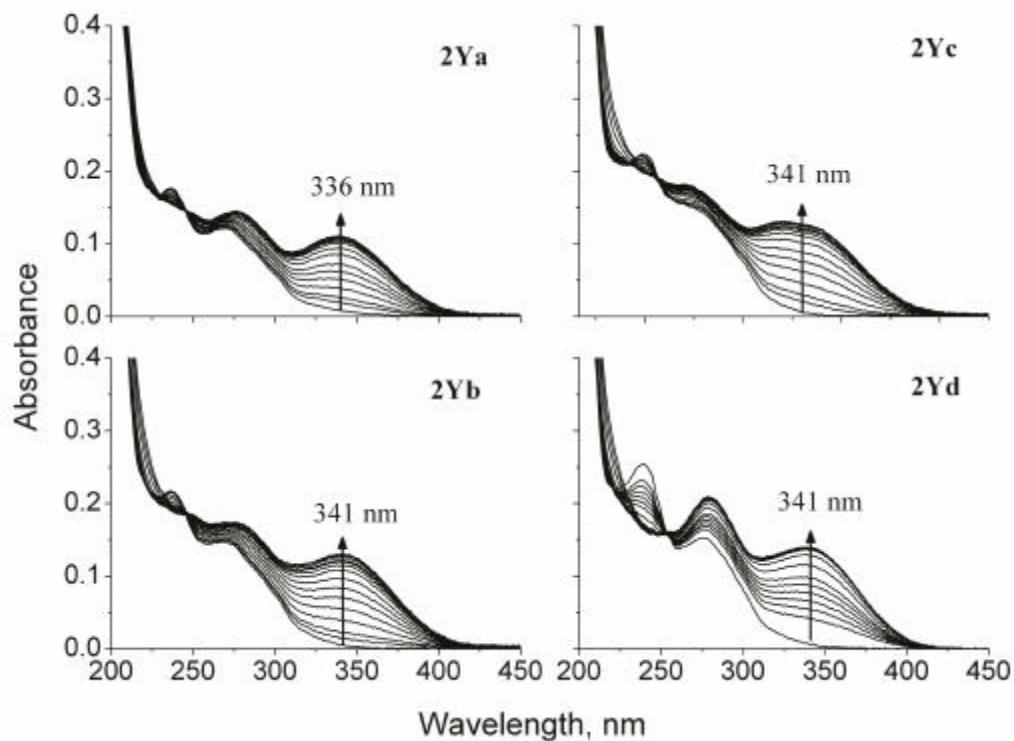
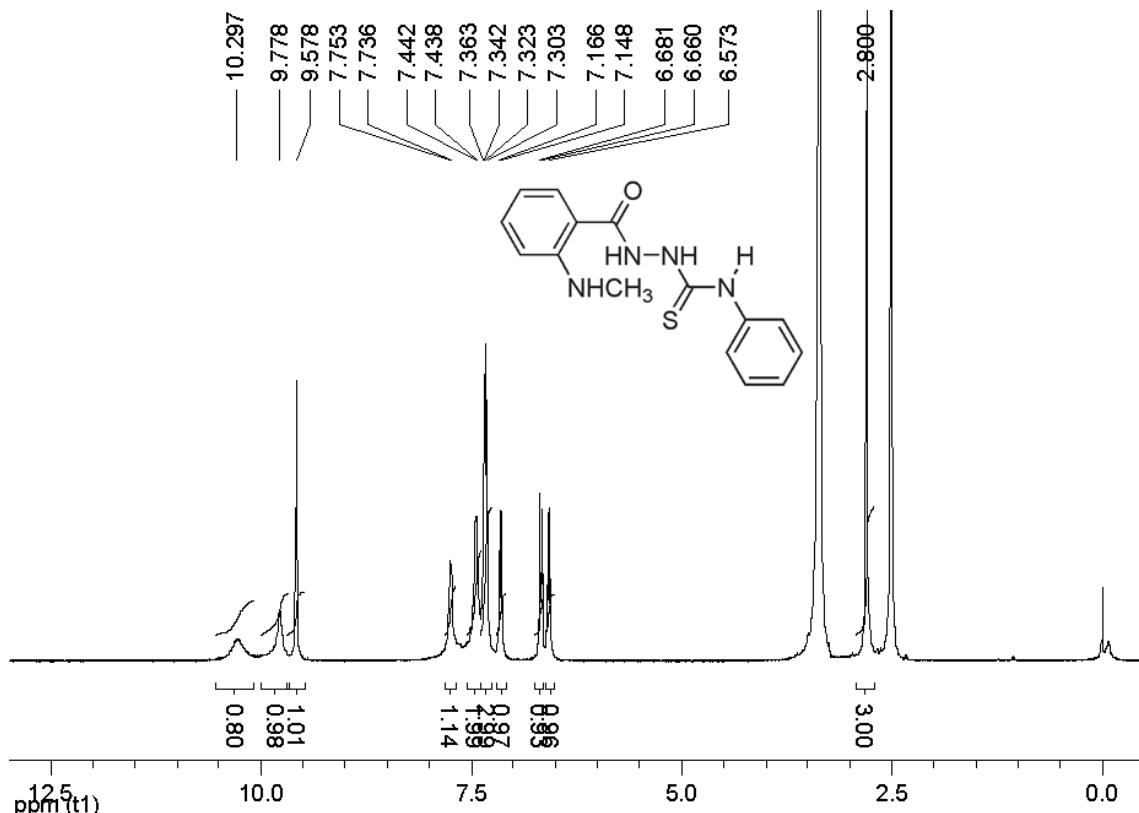


Figure S2. Absorption spectra of **2Ya-d** in MeCN in the presence of  $\text{AcO}^-$  of increasing concentration. S2

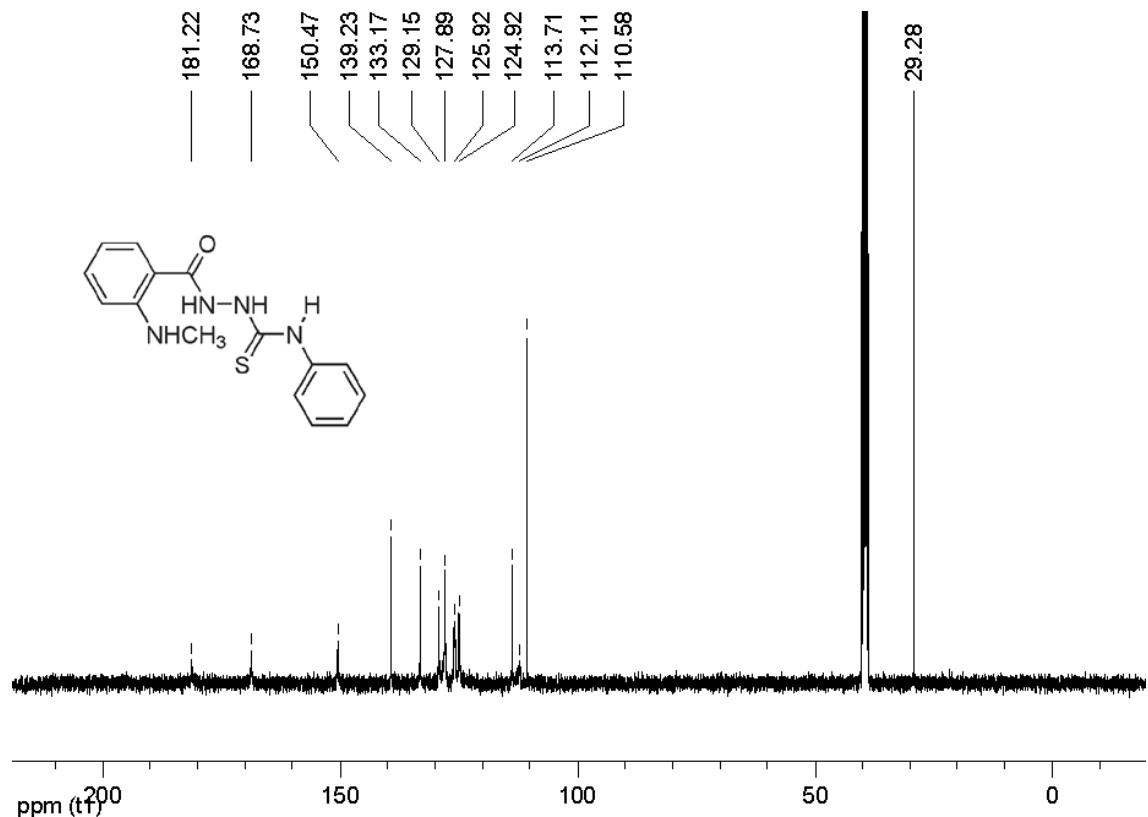
concentration.  $[2\mathbf{Y}] = 1.0 \times 10^{-5}$  mol L<sup>-1</sup>.

*N*-(2-Methylaminobenzamido)-*N'*-phenylthiourea (**2Za**)

<sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>)

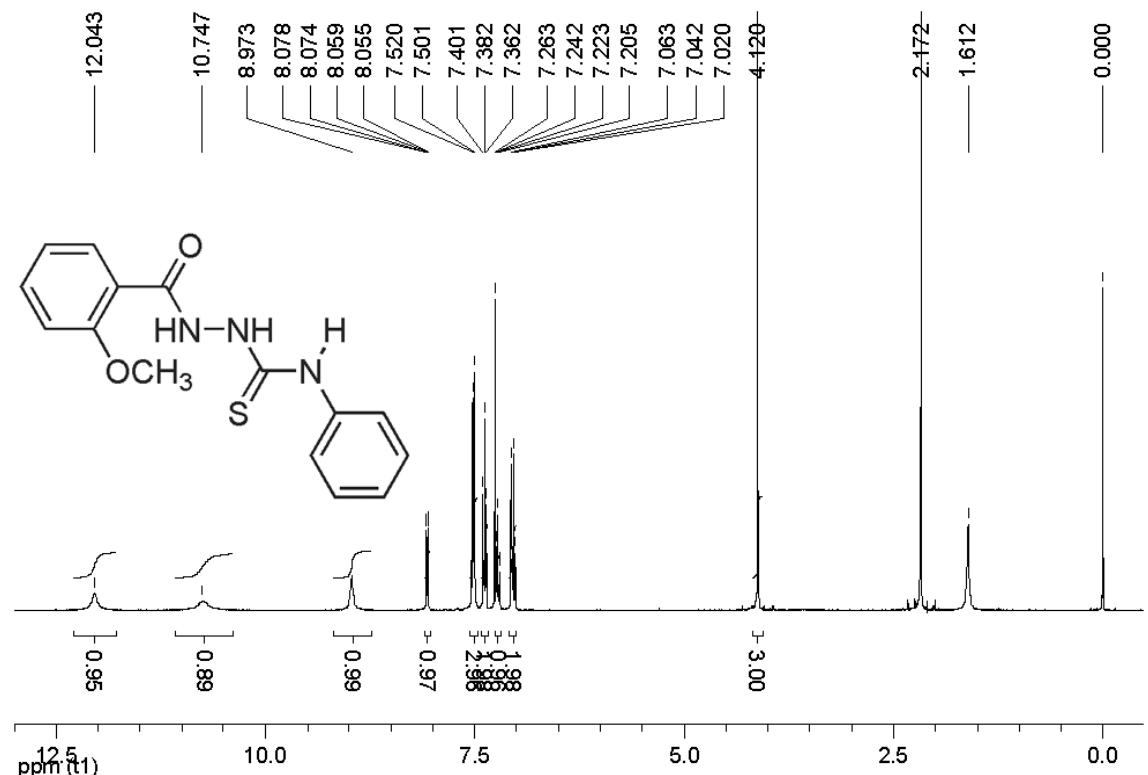


<sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>)

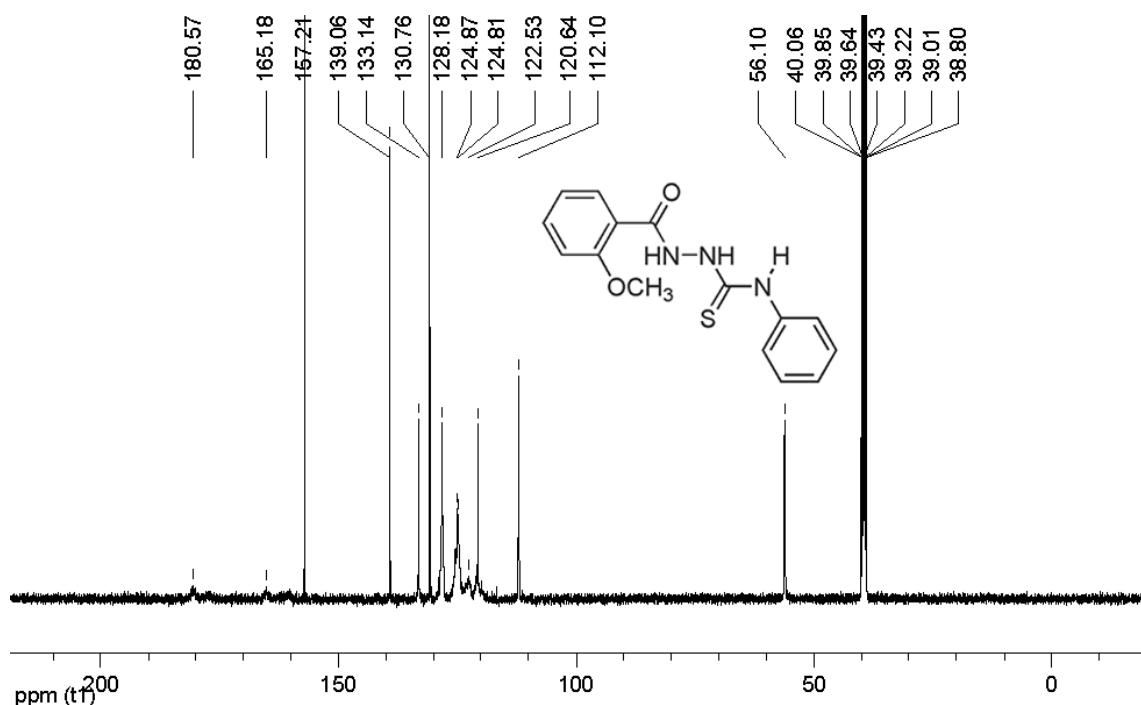


*N*-(2-Methoxybenzamido)-*N'*-phenylthiourea (**2Zb**)

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ )

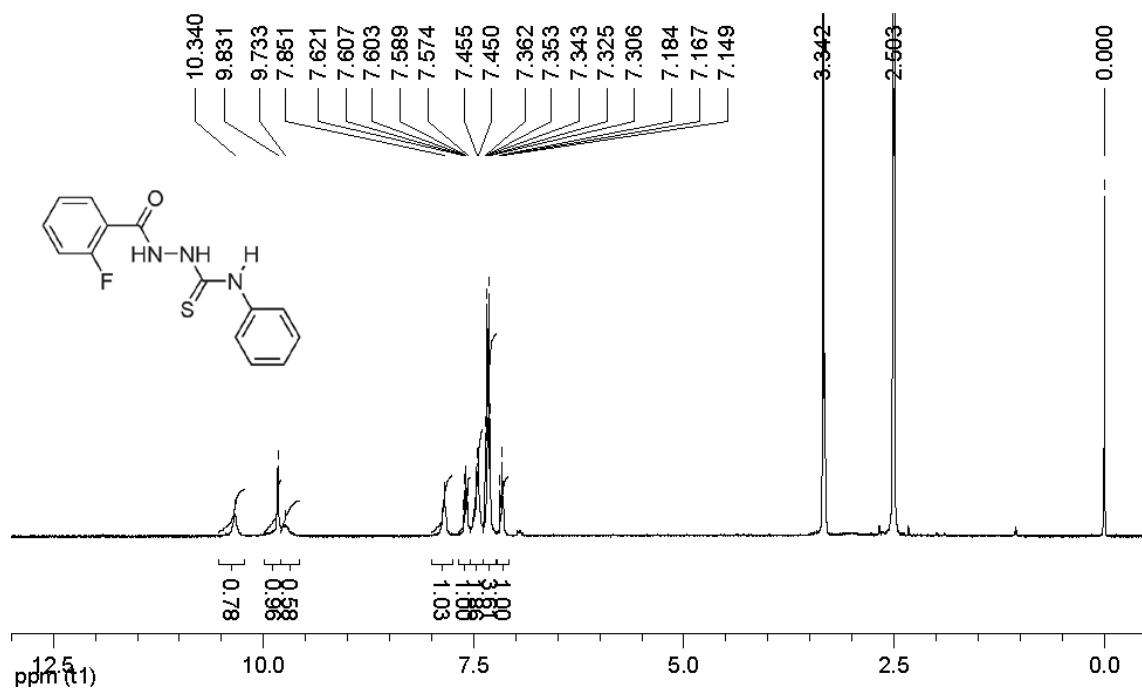


$^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO}-d_6$ )

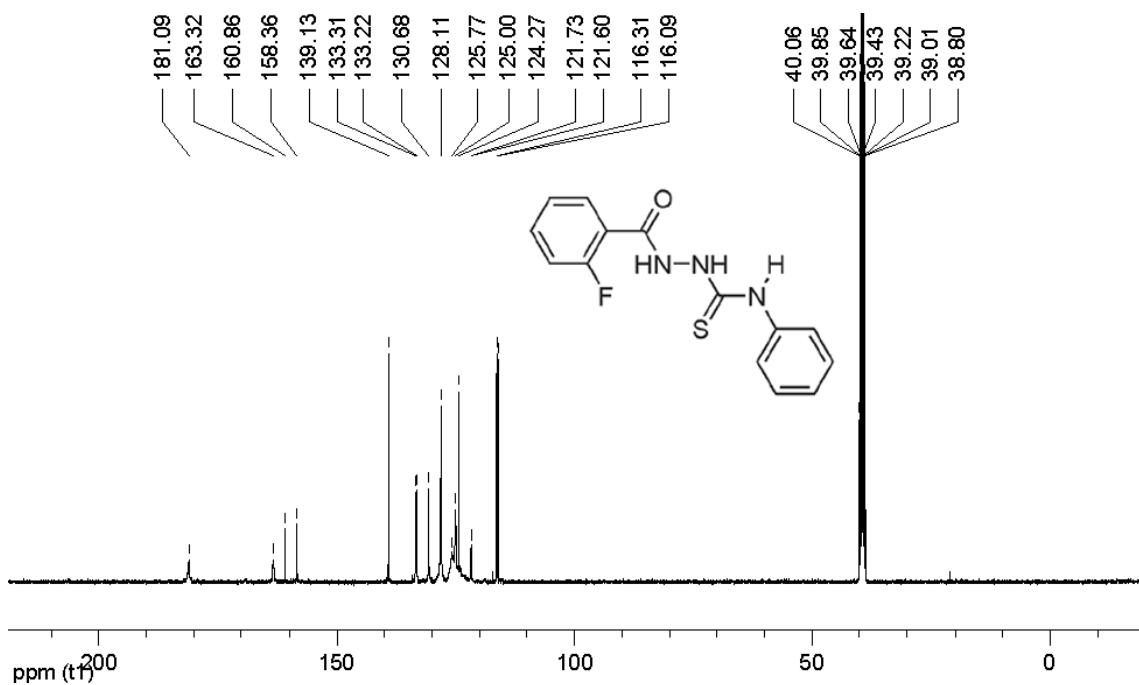


### *N*-(2-Fluorobenzamido)-*N'*-phenylthiourea (**2Zd**)

<sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>)

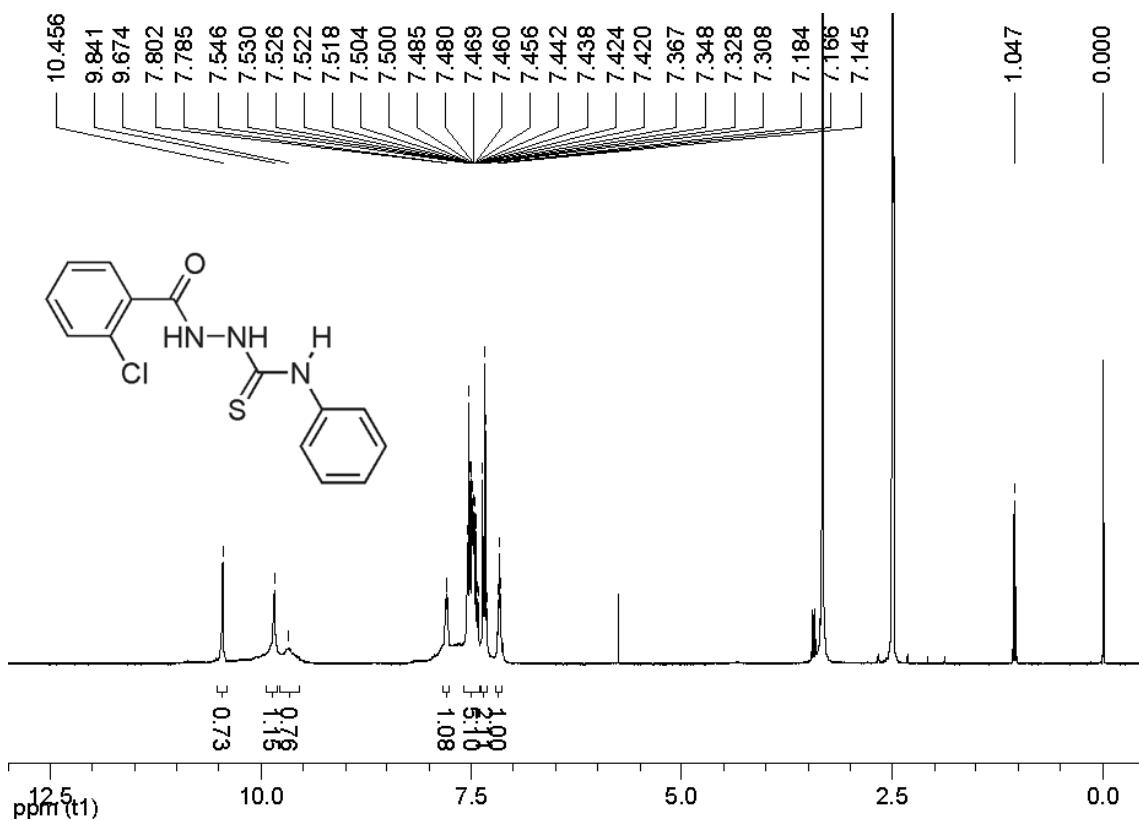


<sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>)

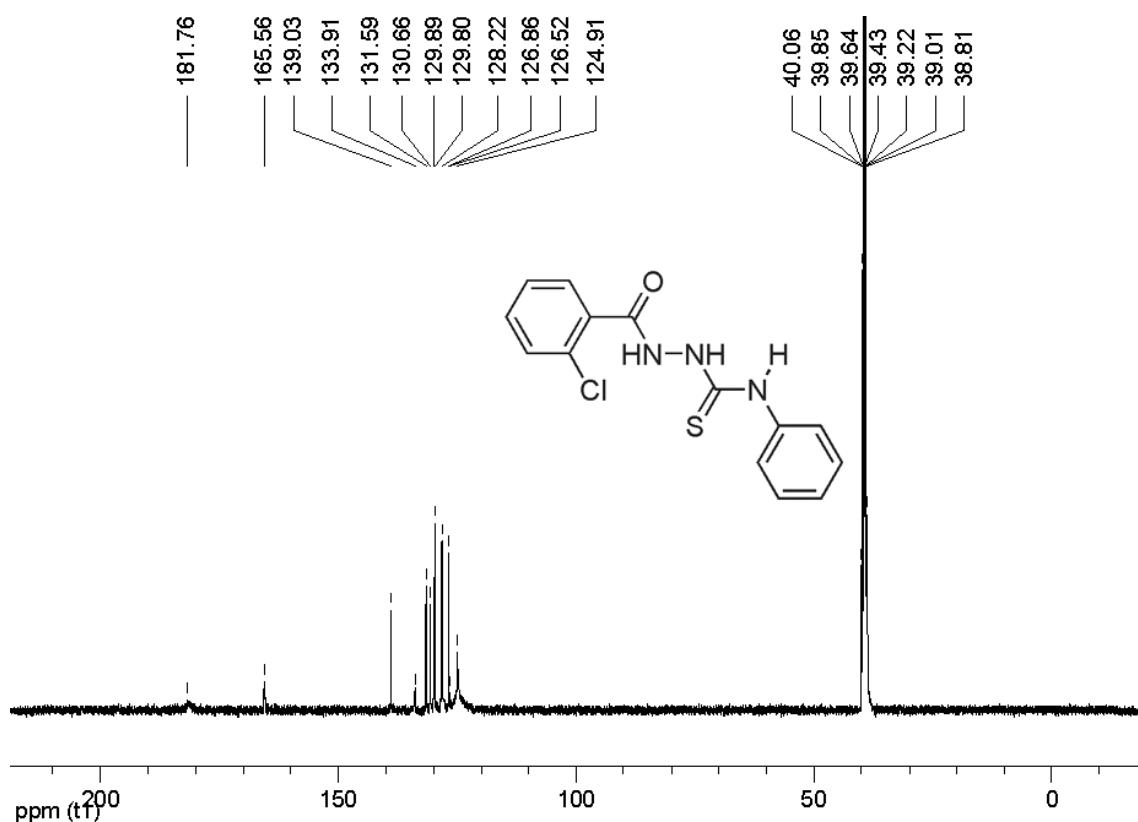


**N-(2-Chlorobenzamido)-N'-phenylthiourea (**2Ze**)**

<sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>)

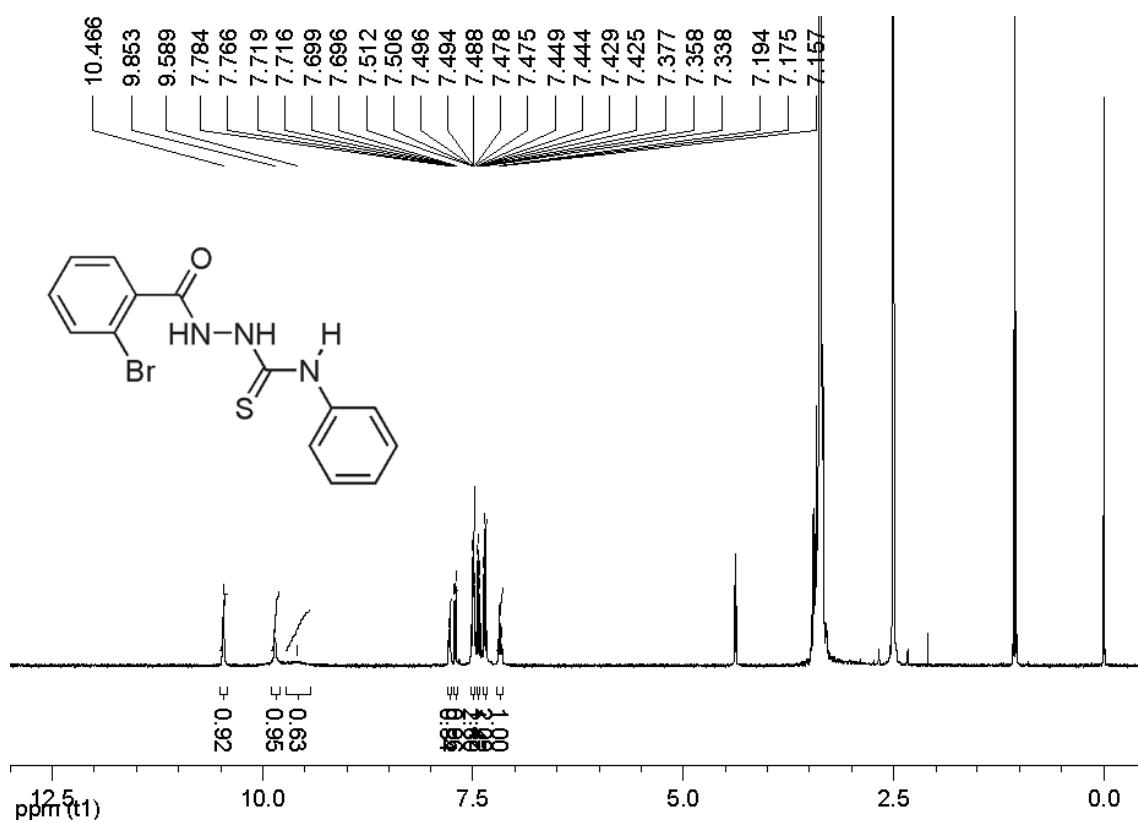


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

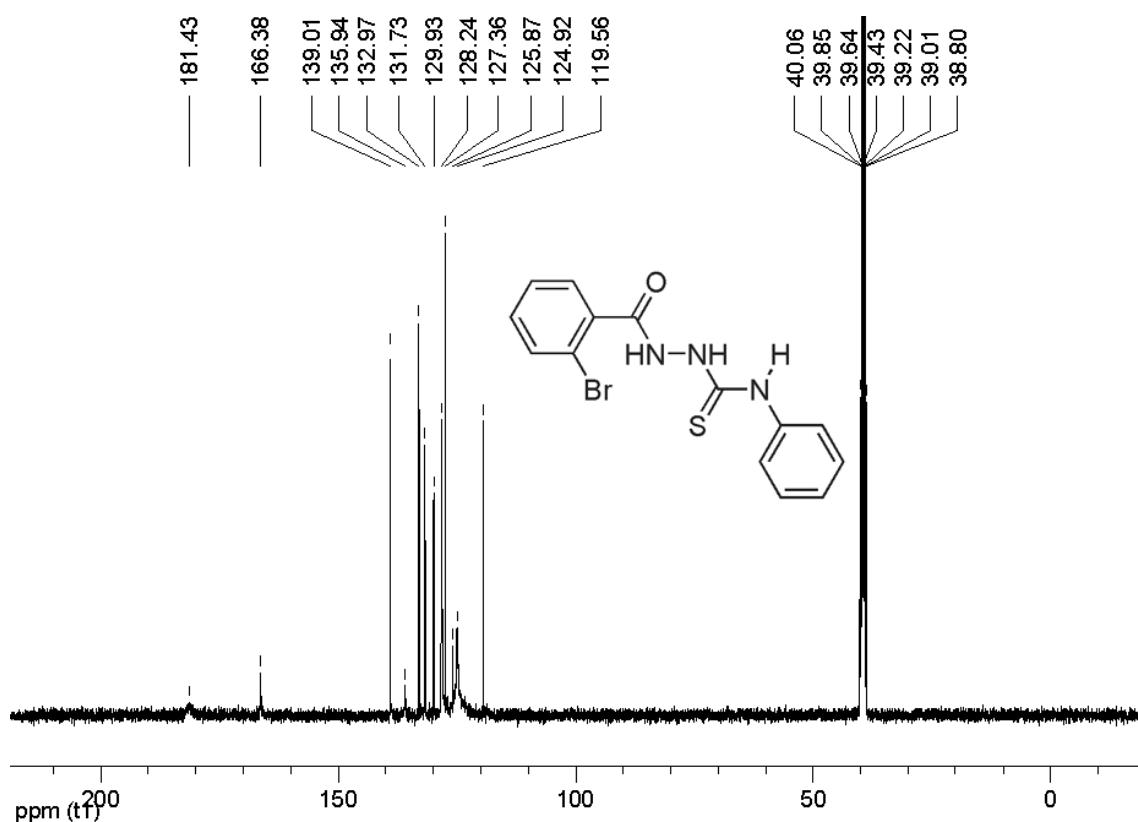


*N*-(2-Bromobenzamido)-*N'*-phenylthiourea (**2Zf**)

$^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ )

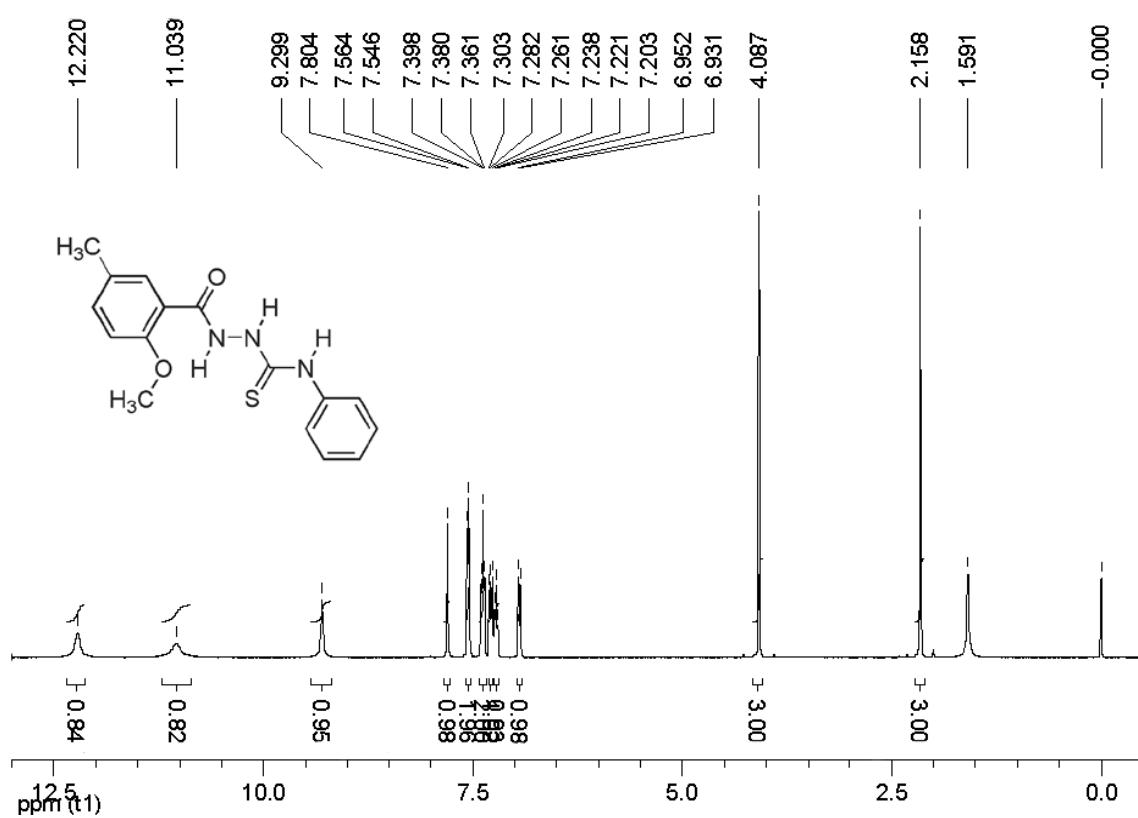


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

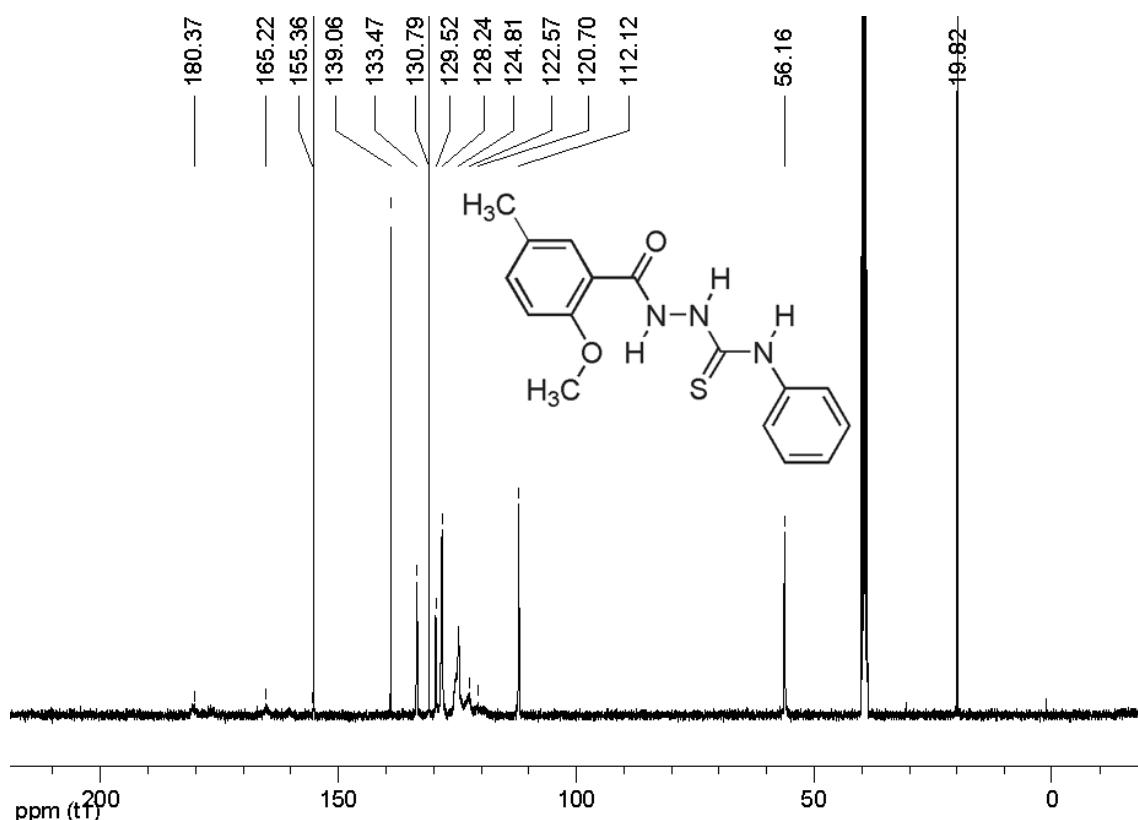


*N*-(2-Methoxy-5-methylbenzamido)-*N'*-phenylthiourea (**2Xa**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)

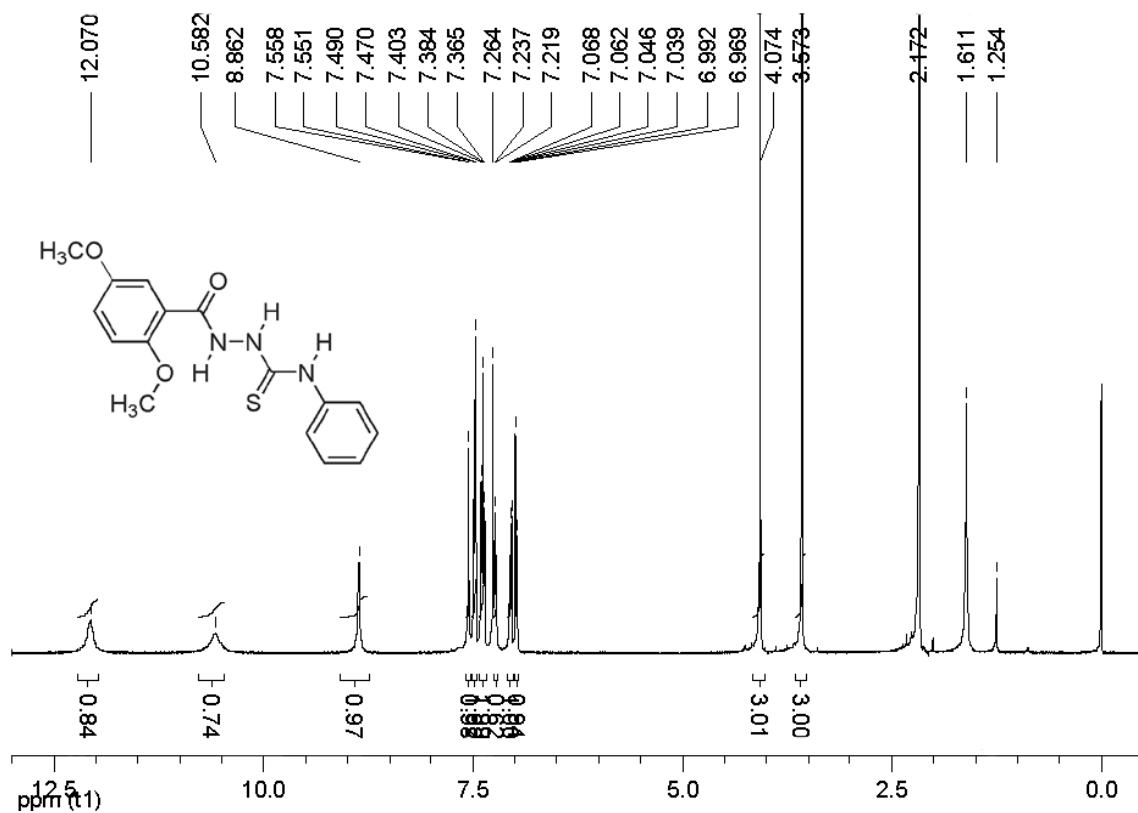


<sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>)

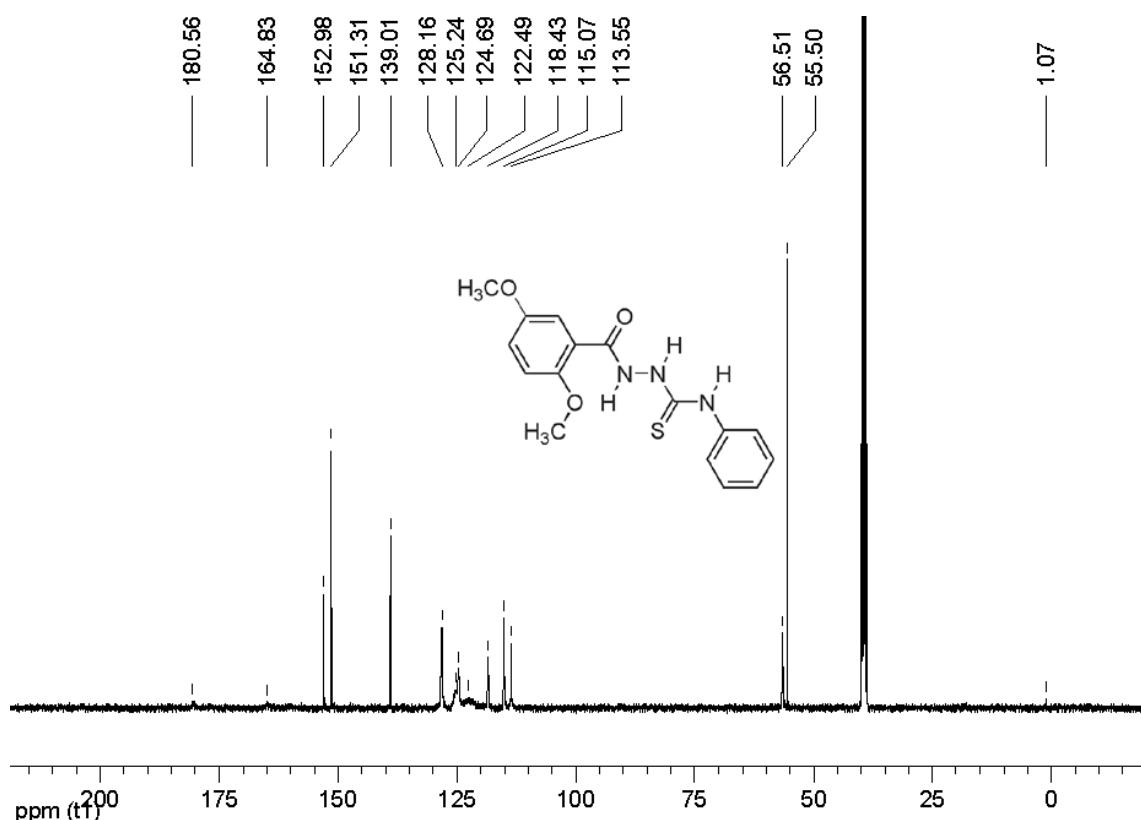


***N*-(2,5-Bismethoxybenzamido)-*N'*-phenylthiourea (**2Xb**)**

<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>)

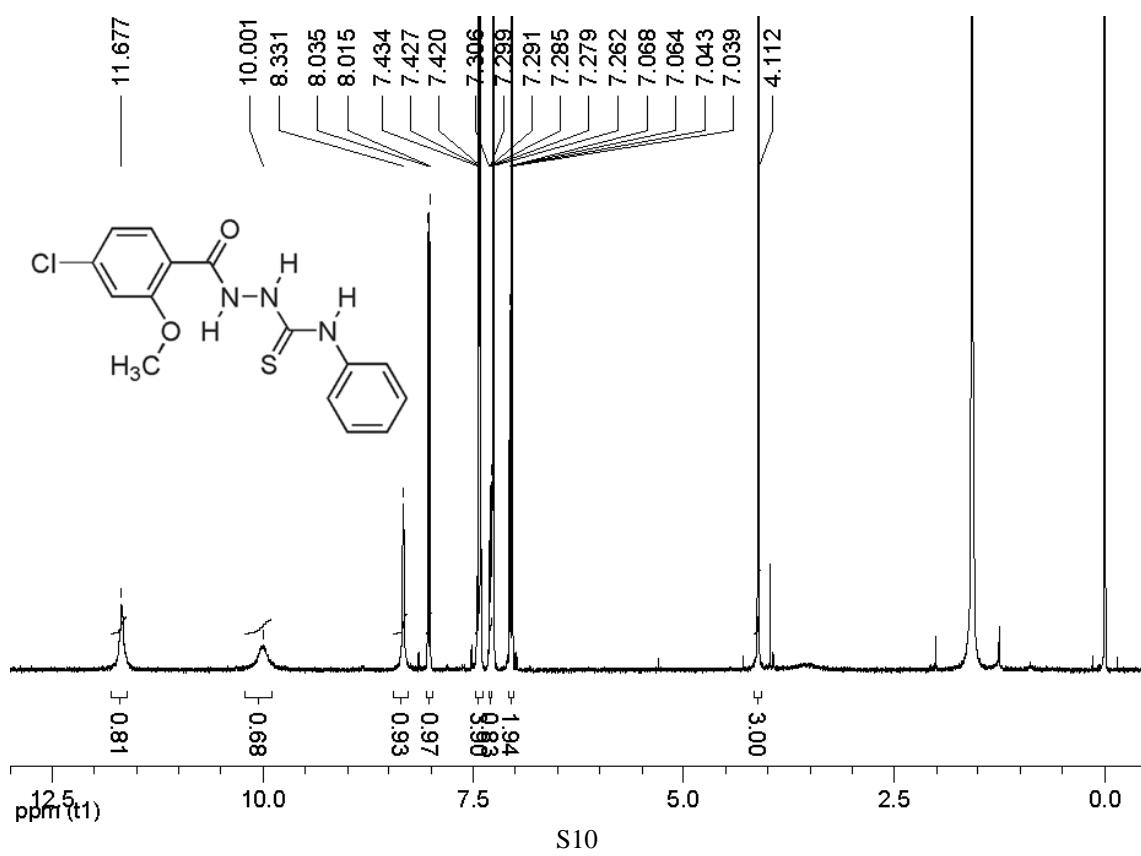


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

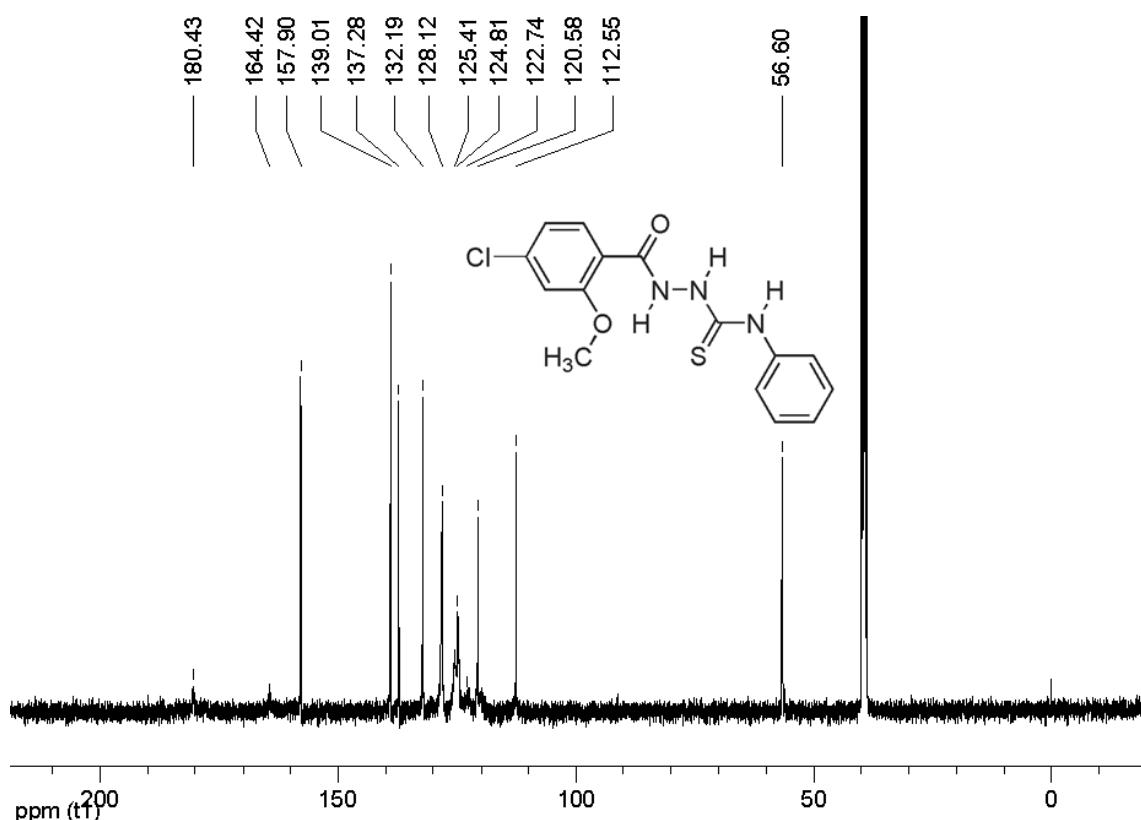


*N*-(2-Methoxy-4-chlorobenzamido)-*N'*-phenylthiourea (**2Xd**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)

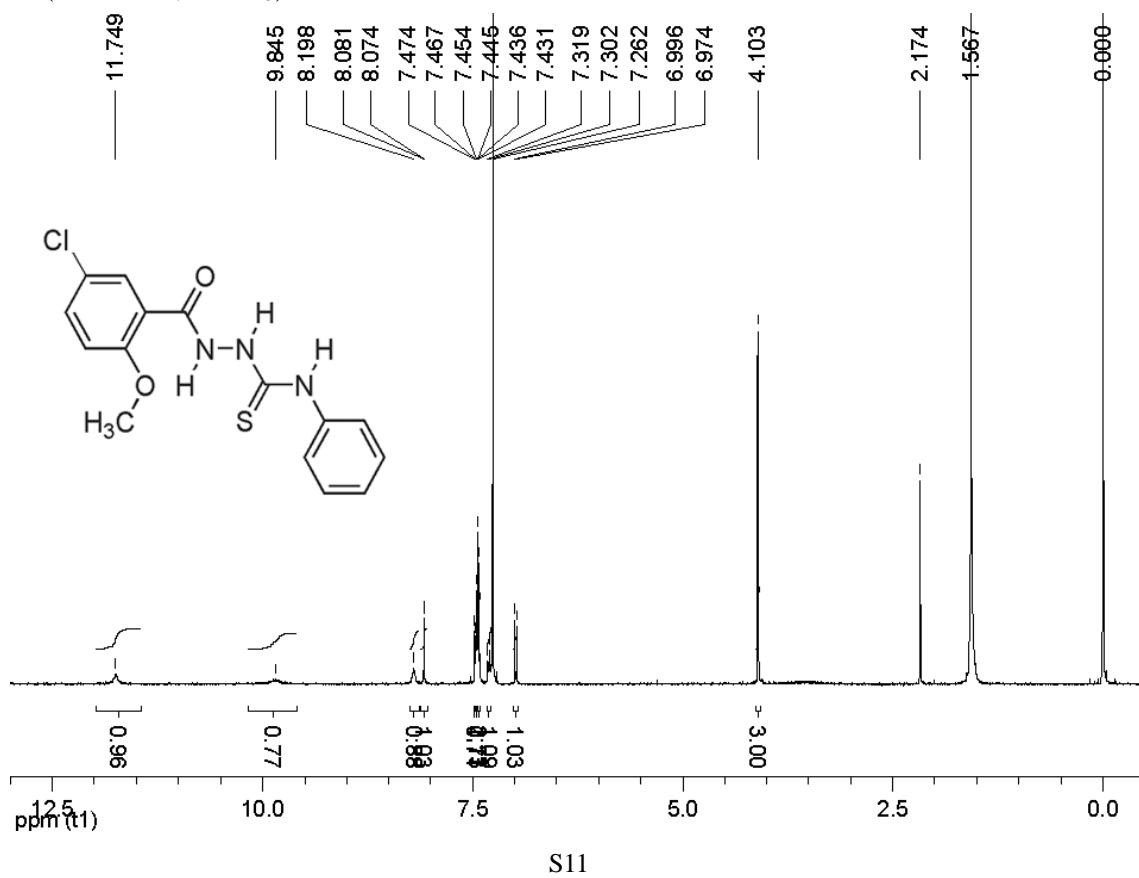


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

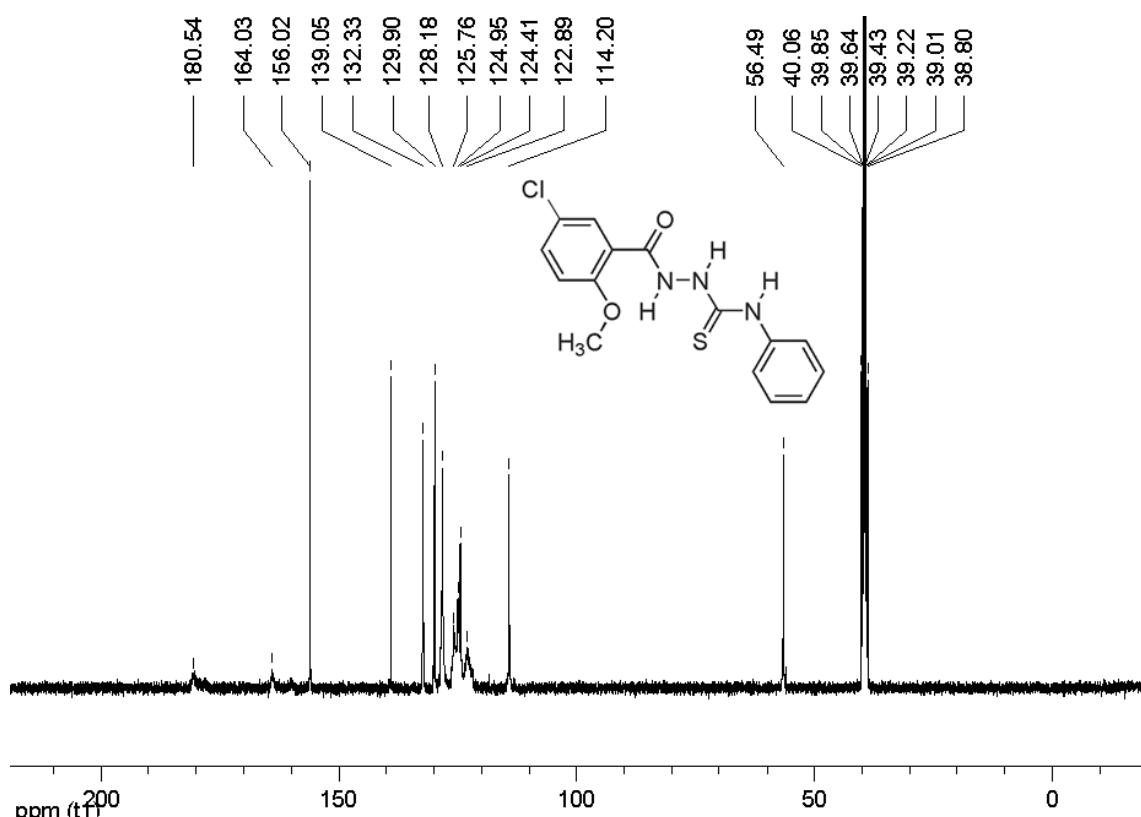


*N*-(2-Methoxy-5-chlorobenzamido)-*N'*-phenylthiourea (**2Xe**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)

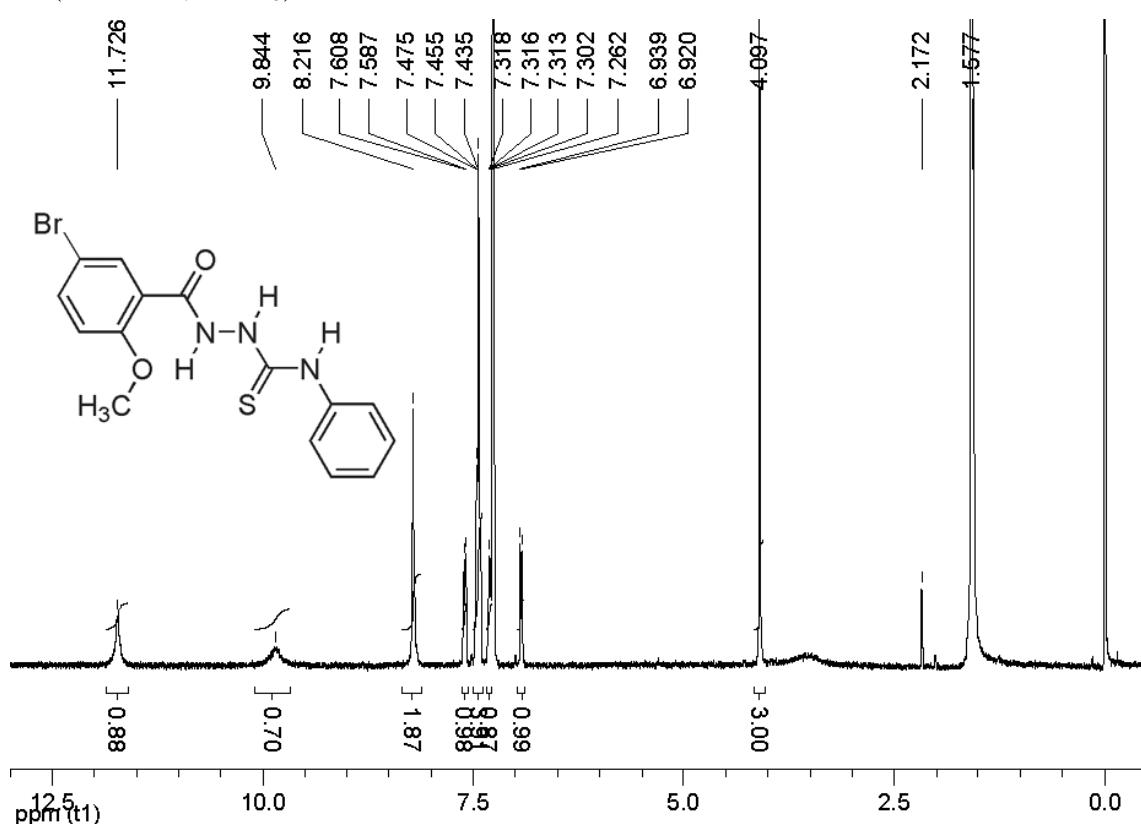


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

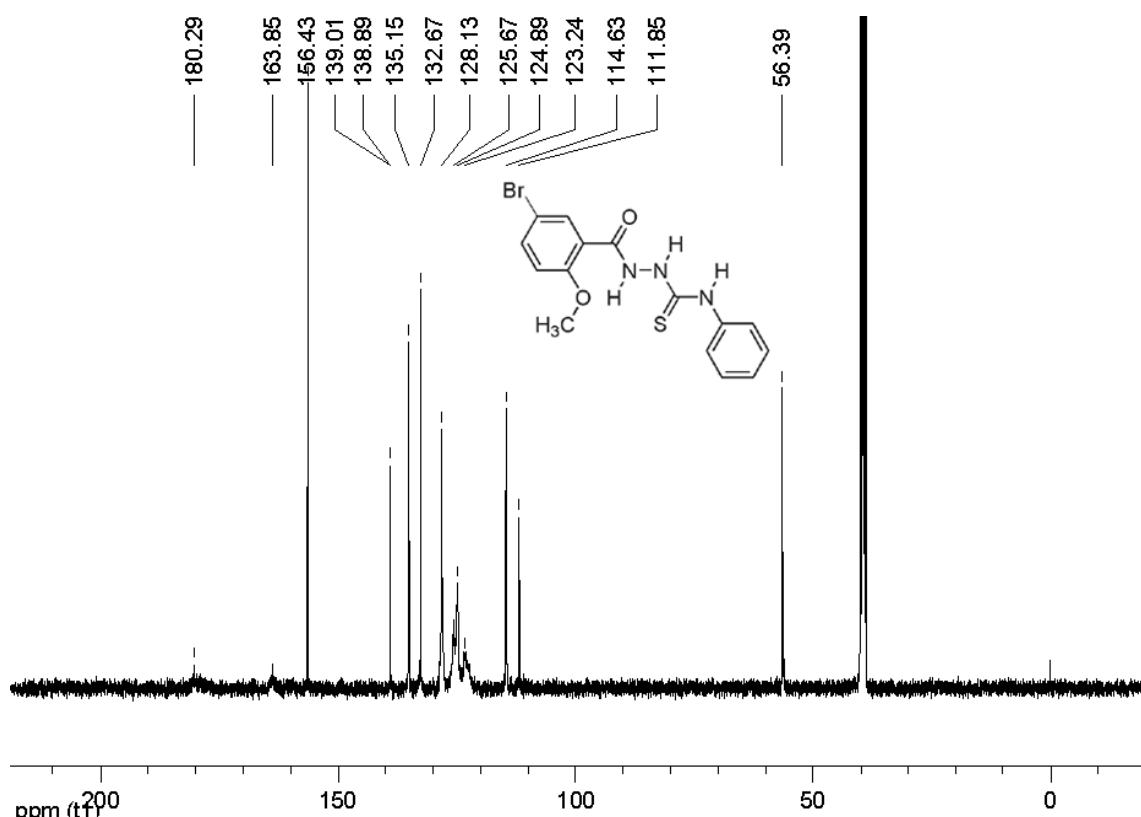


*N*-(2-Methoxy-5-bromobenzamido)-*N'*-phenylthiourea (**2Xf**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)

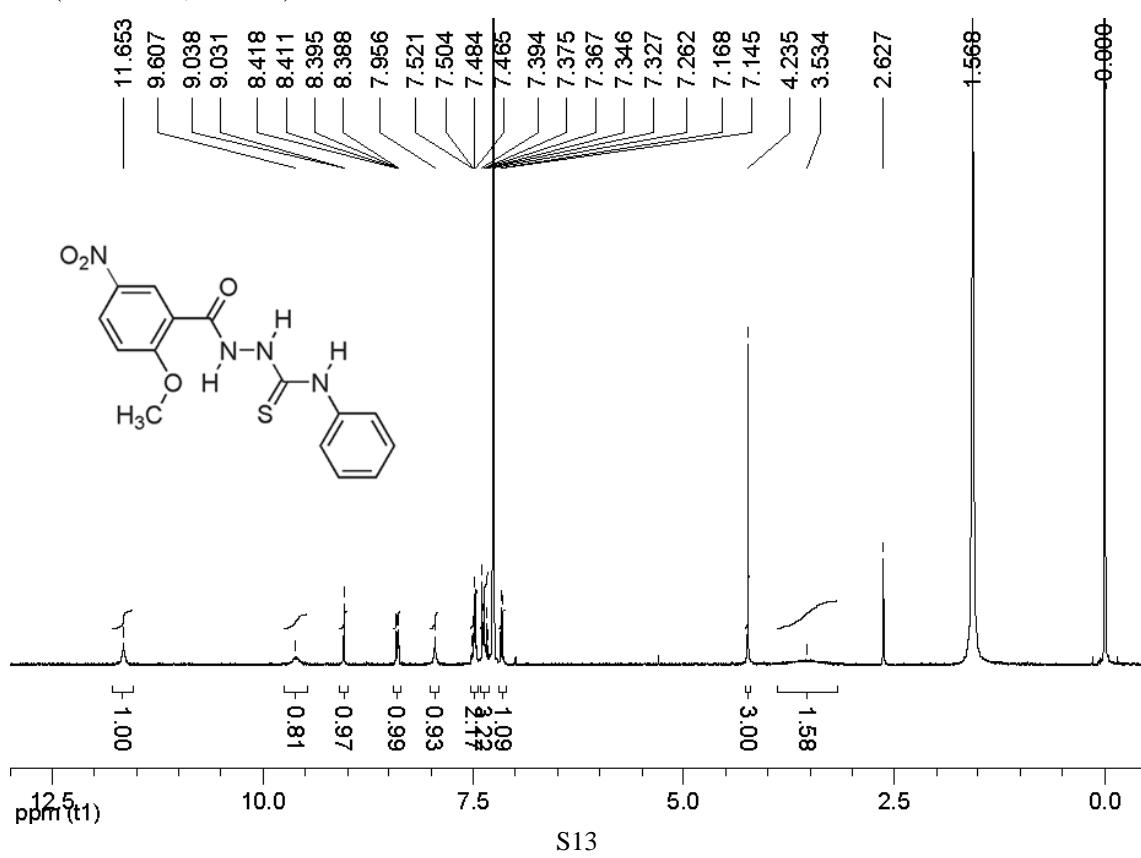


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )



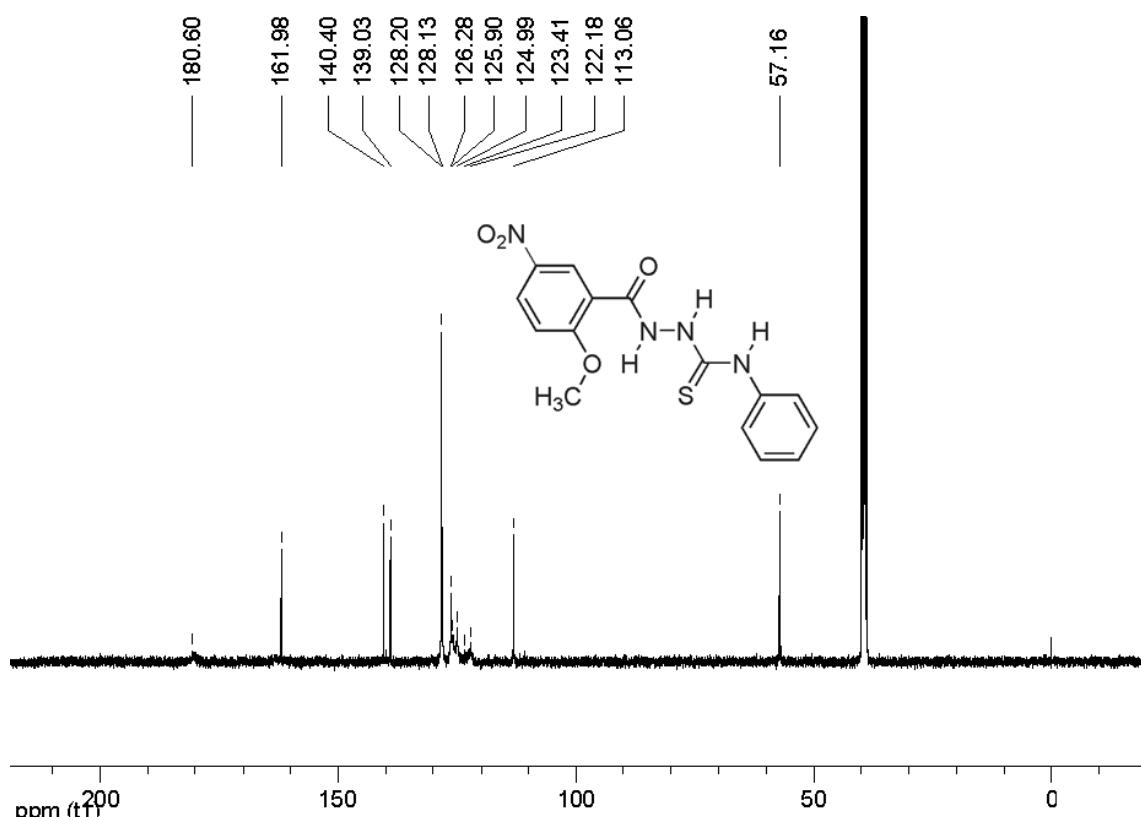
*N*-(2-Methoxy-5-nitrobenzamido)-*N'*-phenylthiourea (**2Xg**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)



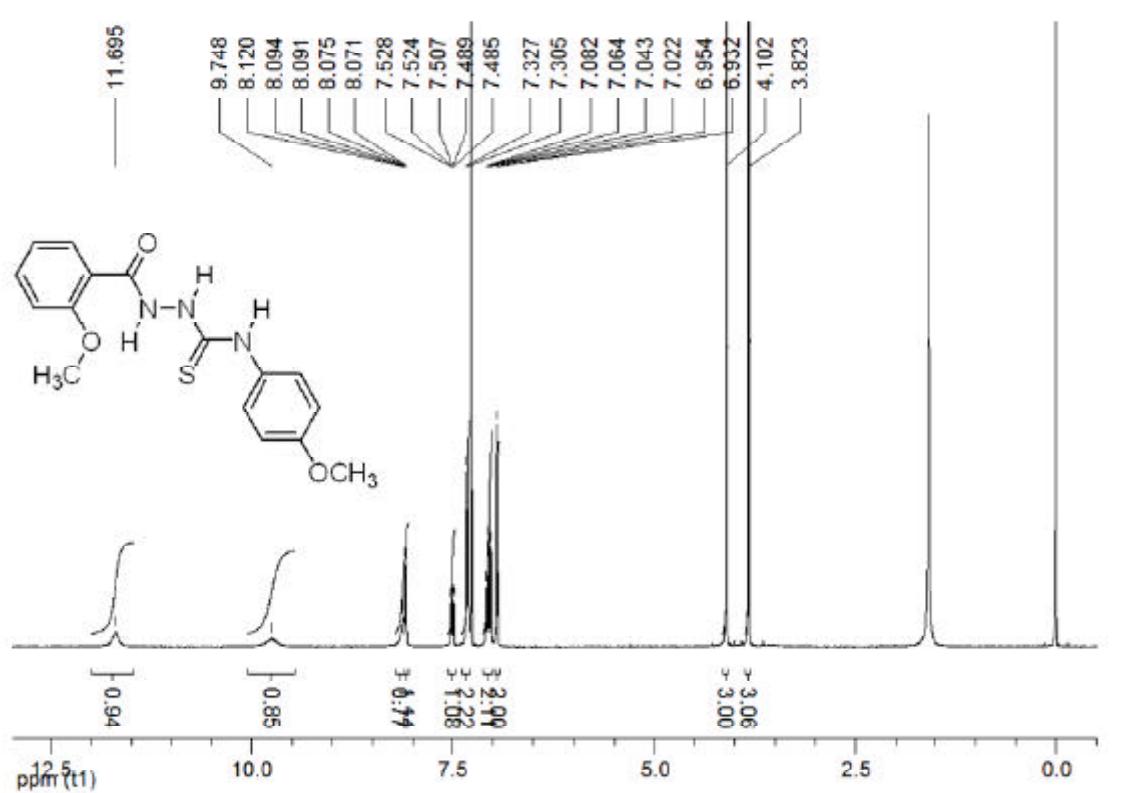
S13

$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )

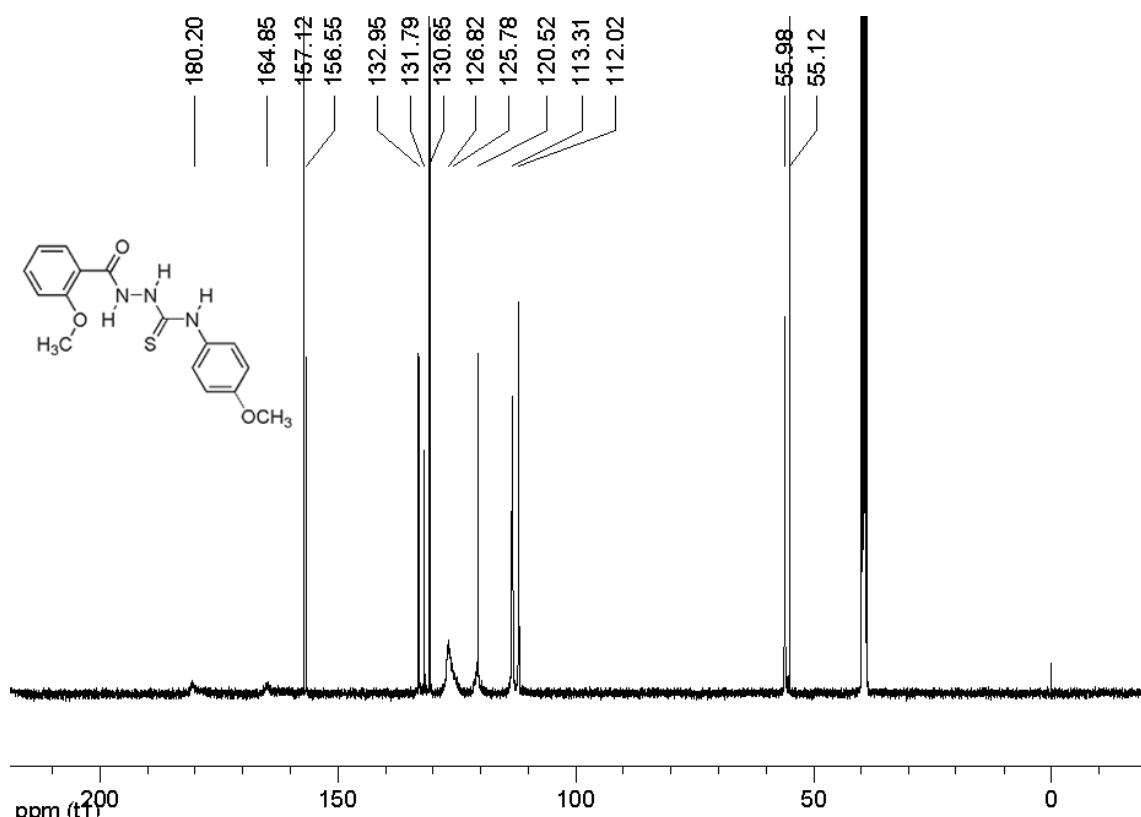


*N*-(2-Methoxybenzamido)-*N'*-(4'-methoxylphenyl)thiourea (**2Ya**)

$^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ )

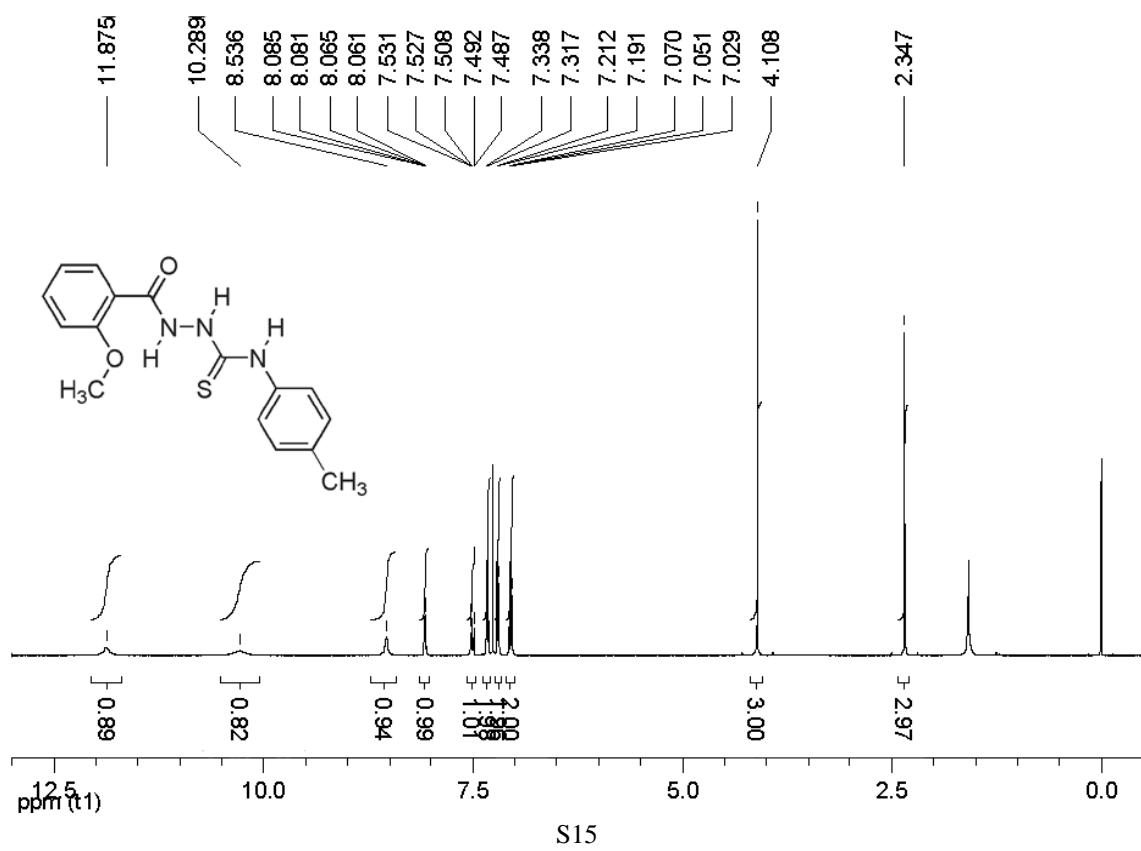


$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )



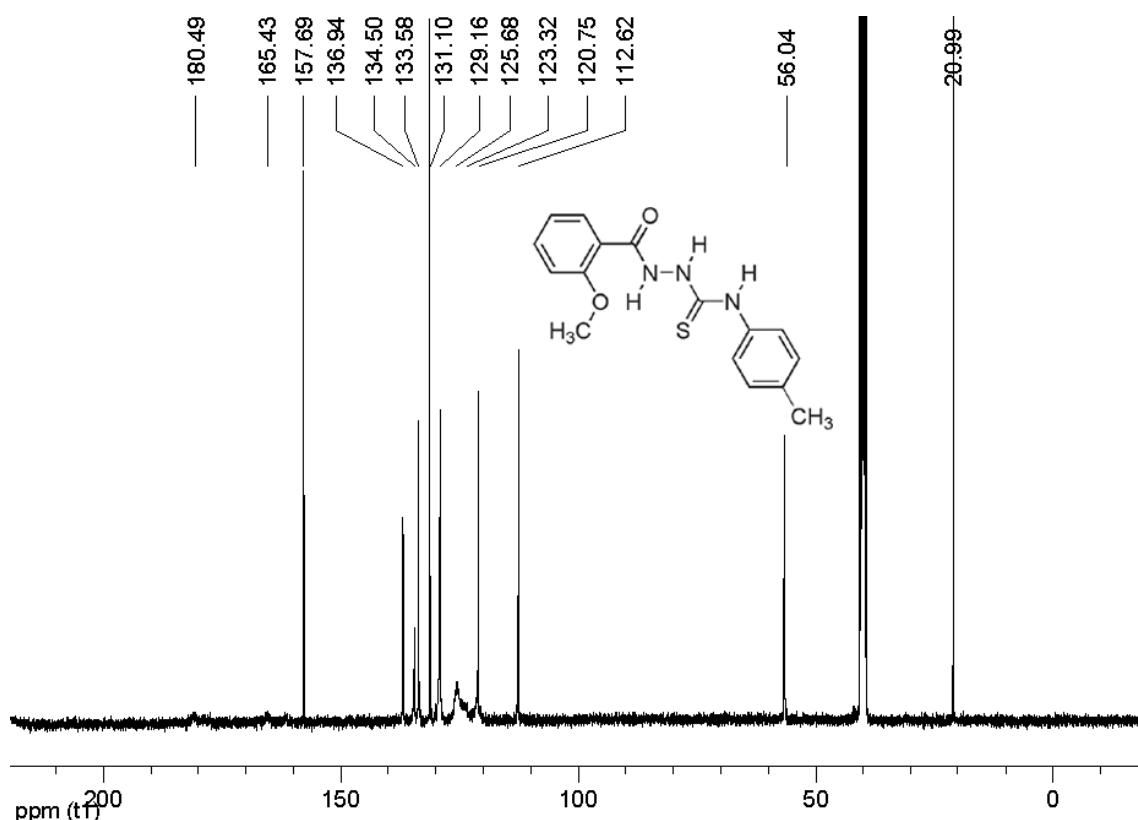
*N*-(2-Methoxybenzamido)-*N'*-(4'-methylphenyl)thiourea (**2Yb**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)



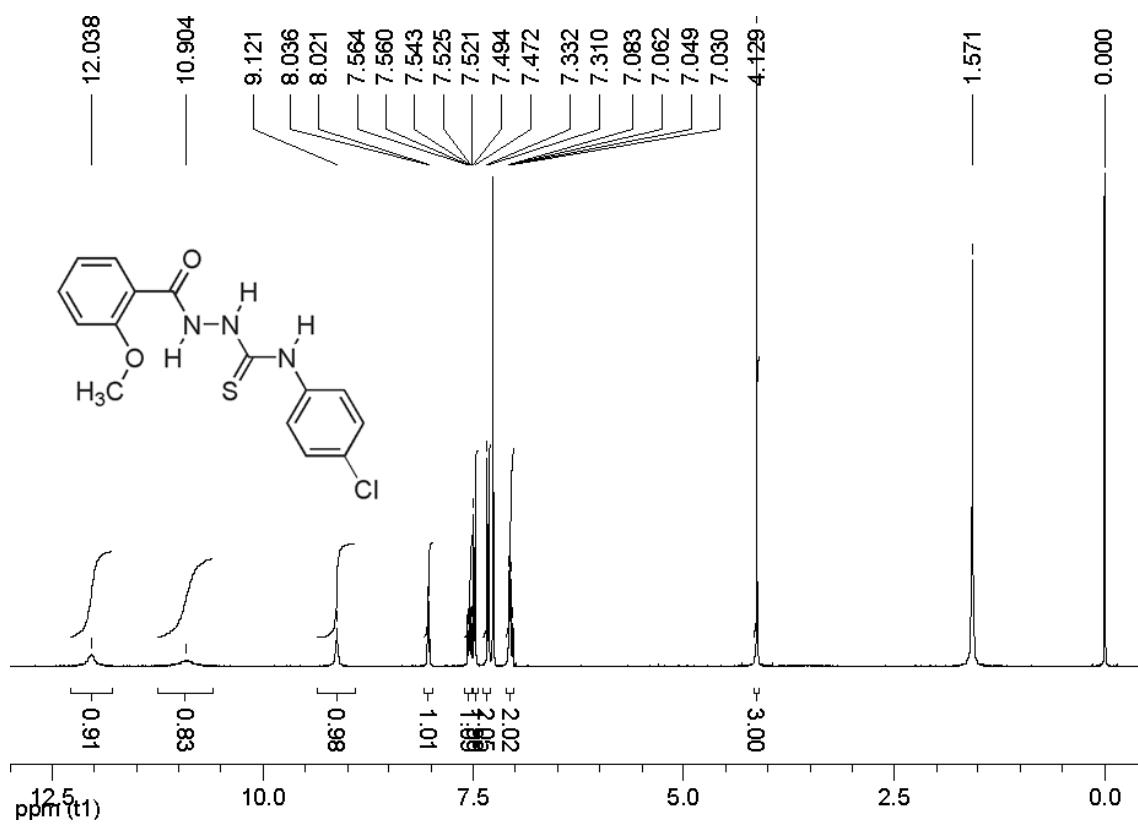
S15

$^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ )



*N*-(2-Methoxybenzamido)-*N'*-(4'-chlorophenyl)thiourea (**2Yd**)

$^1\text{H}$  NMR (400 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR (100 MHz, DMSO-*d*<sub>6</sub>)

