

# Supplementary Information

## Synthesis of Dihydropyrimidin-2-one/thione Library and Cytotoxic Activity against the Human U138-MG and Rat C6 Glioma Cell Lines

Rômulo F. S. Canto,<sup>a</sup> Andressa Bernardi,<sup>b</sup> Ana Maria O. Battastini,<sup>b</sup>  
Dennis Russowsky<sup>\*,c</sup> and Vera Lucia Eifler-Lima<sup>\*,a</sup>

<sup>a</sup>Laboratório de Síntese Orgânica Medicinal/LaSOM, Programa de Pós Graduação em Ciências Farmacêuticas, Universidade Federal do Rio Grande do Sul, Av. Ipiranga 2752, 90610-00 Porto Alegre-RS, Brazil

<sup>b</sup>Instituto de Ciências Básicas da Saúde, Universidade Federal do Rio Grande do Sul, Rua Ramiro Barcelos, 2660, 90035-003 Porto Alegre-RS, Brazil

<sup>c</sup>Instituto de Química, Universidade Federal do Rio Grande do Sul, Av. Bento Gonçalves, 9500, 91501-970 Porto Alegre-RS, Brazil

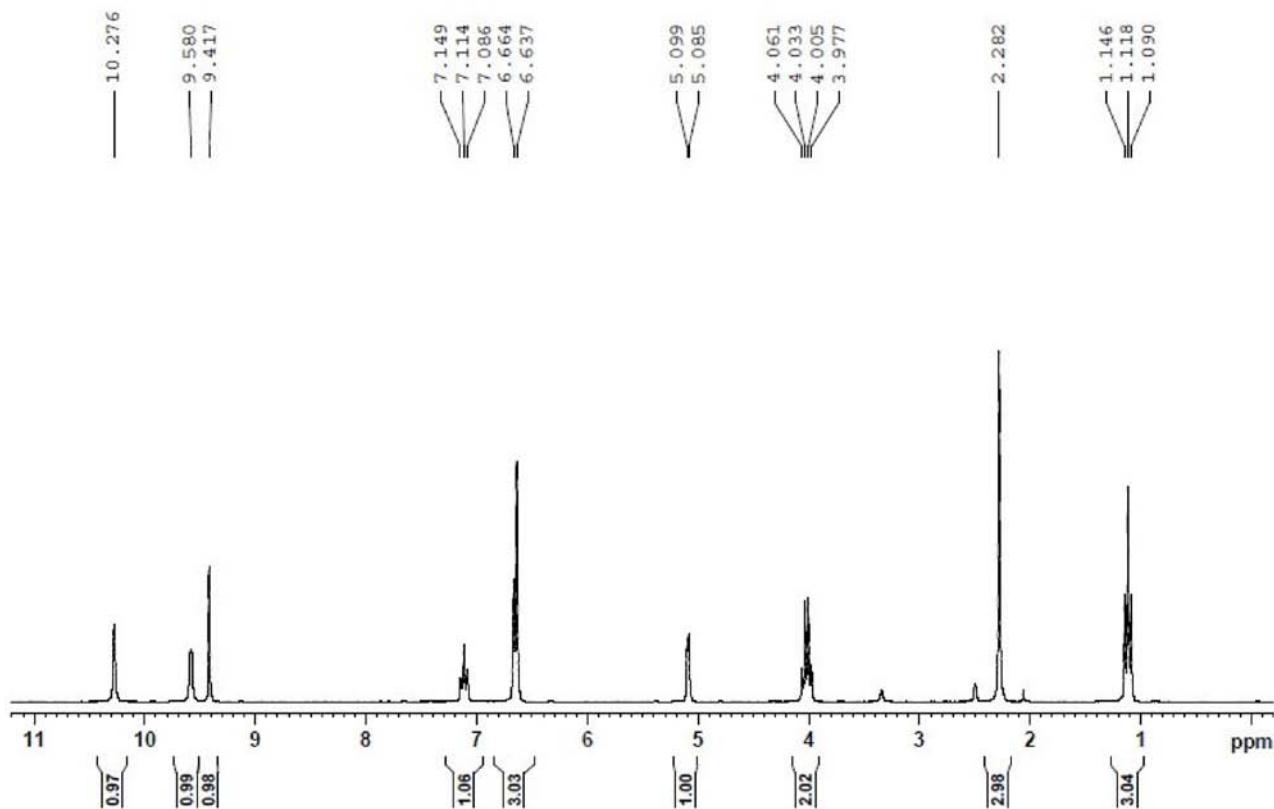
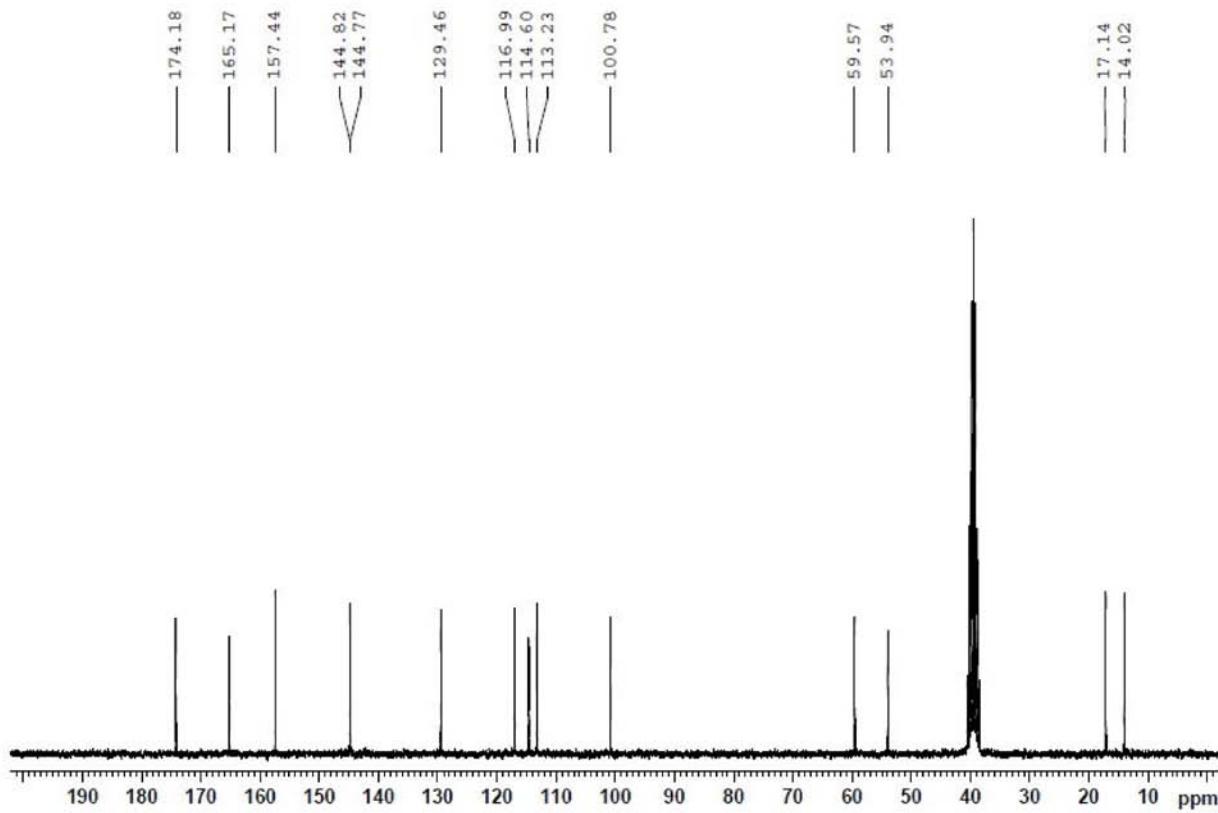
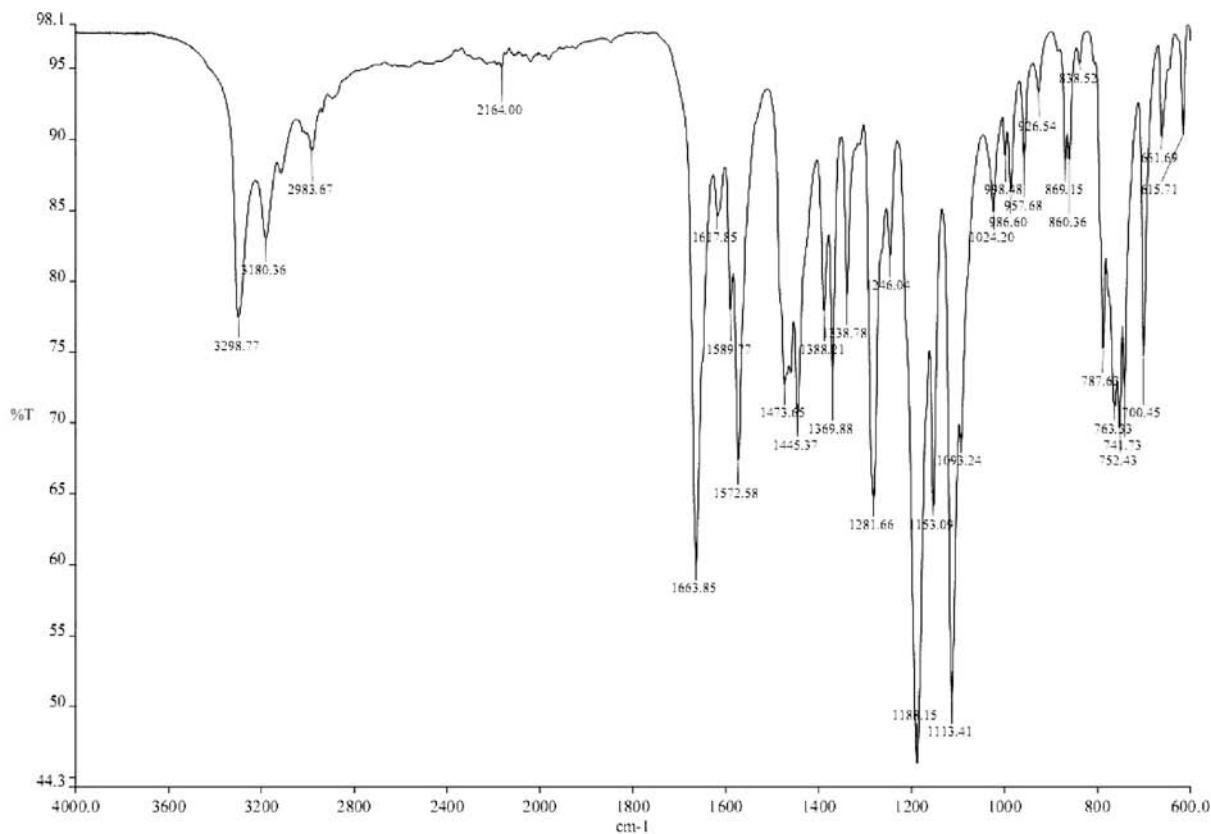


Figure S1. <sup>1</sup>H NMR (250 MHz, DMSO-*d*<sub>6</sub>) of compound **1a** (monastrol).



**Figure S2.**  $^{13}\text{C}$  NMR (62.5 MHz,  $\text{DMSO}-d_6$ ) of compound **1a** (monastrol).



**Figure S3.** IR (ATR,  $\text{cm}^{-1}$ ) of compound **1a** (monastrol).

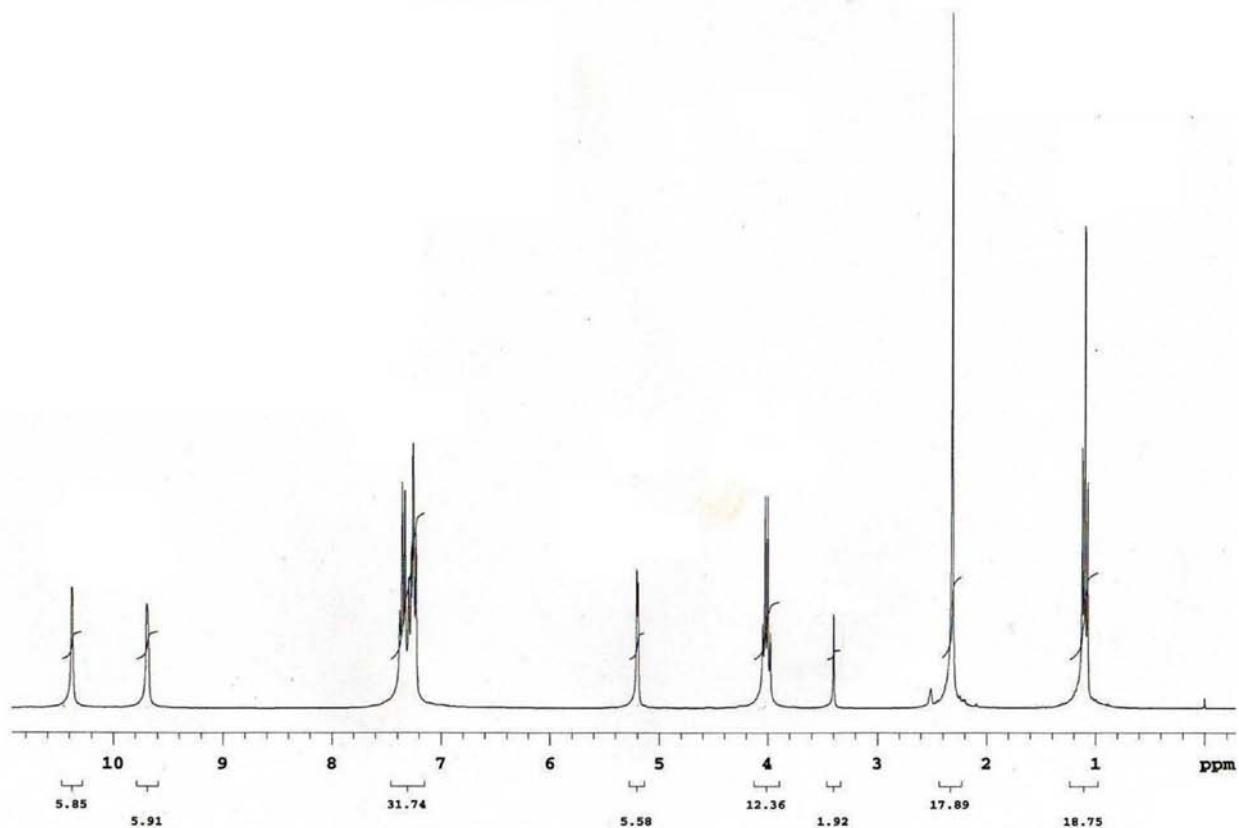


Figure S4. <sup>1</sup>H NMR (300 MHz, DMSO-*d*<sub>6</sub>) of compound 1b.

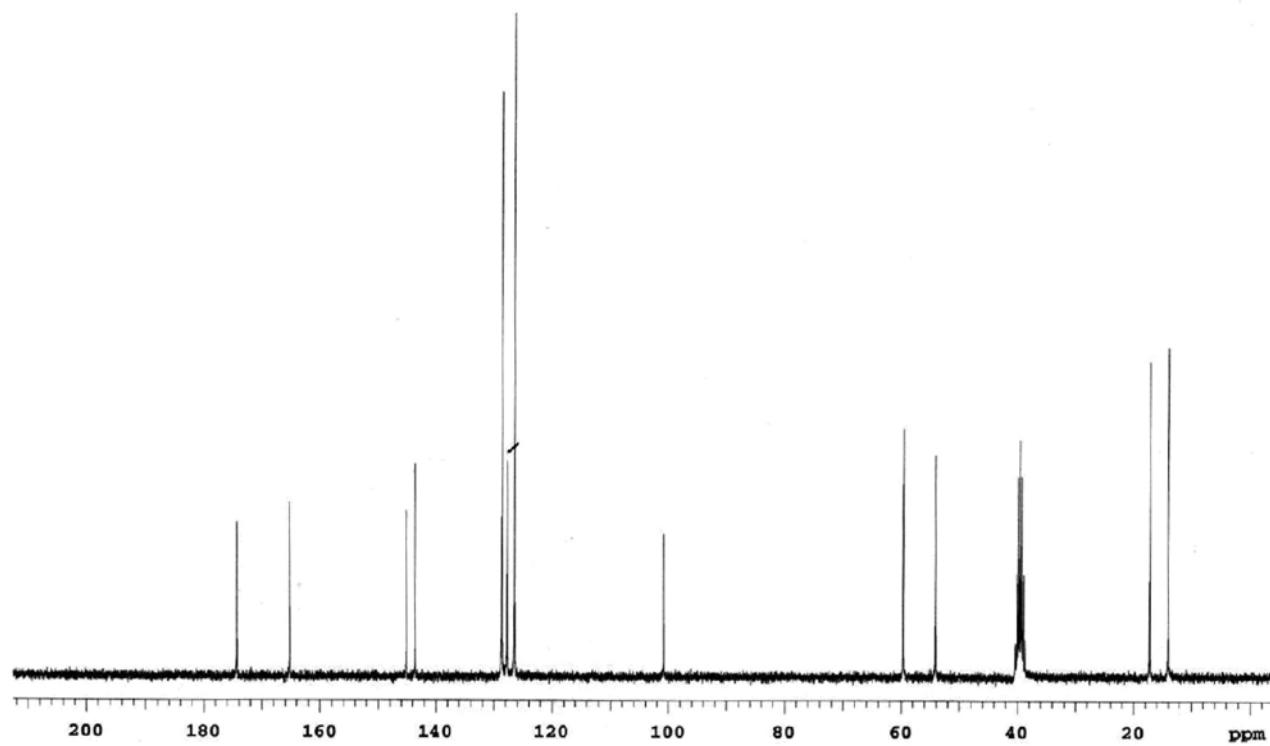
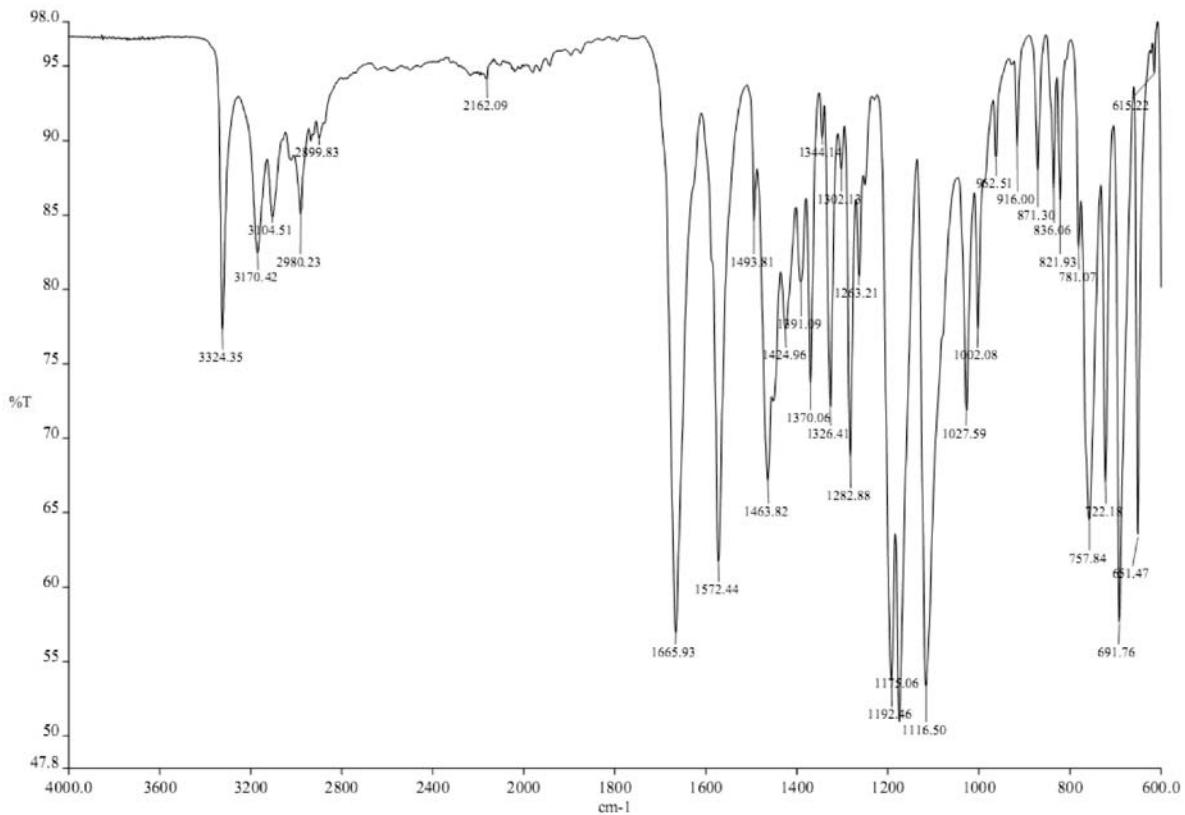
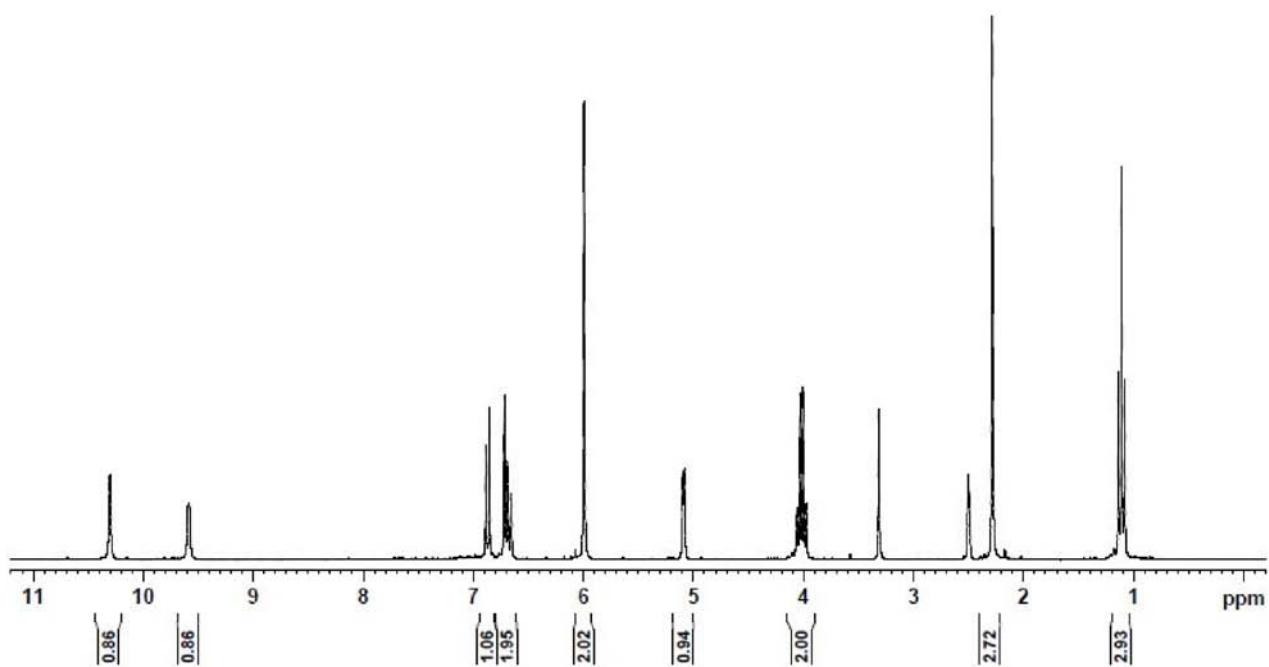


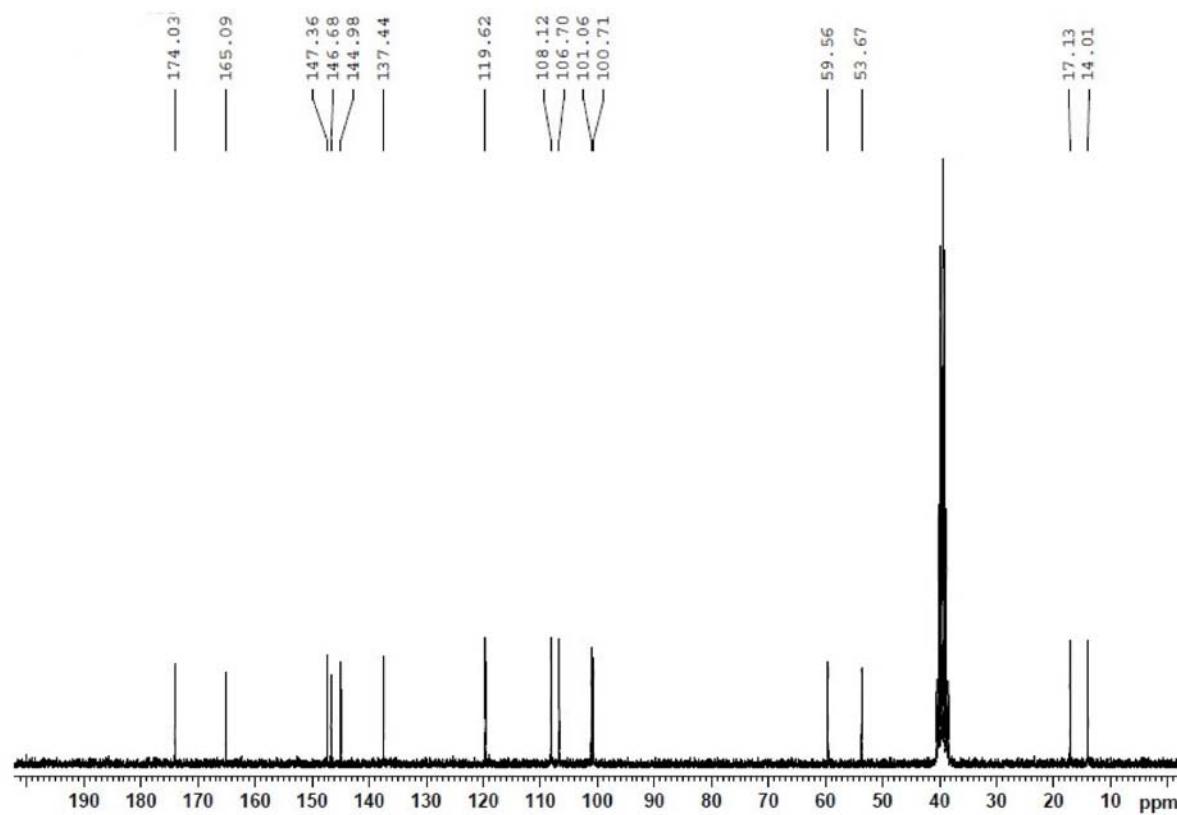
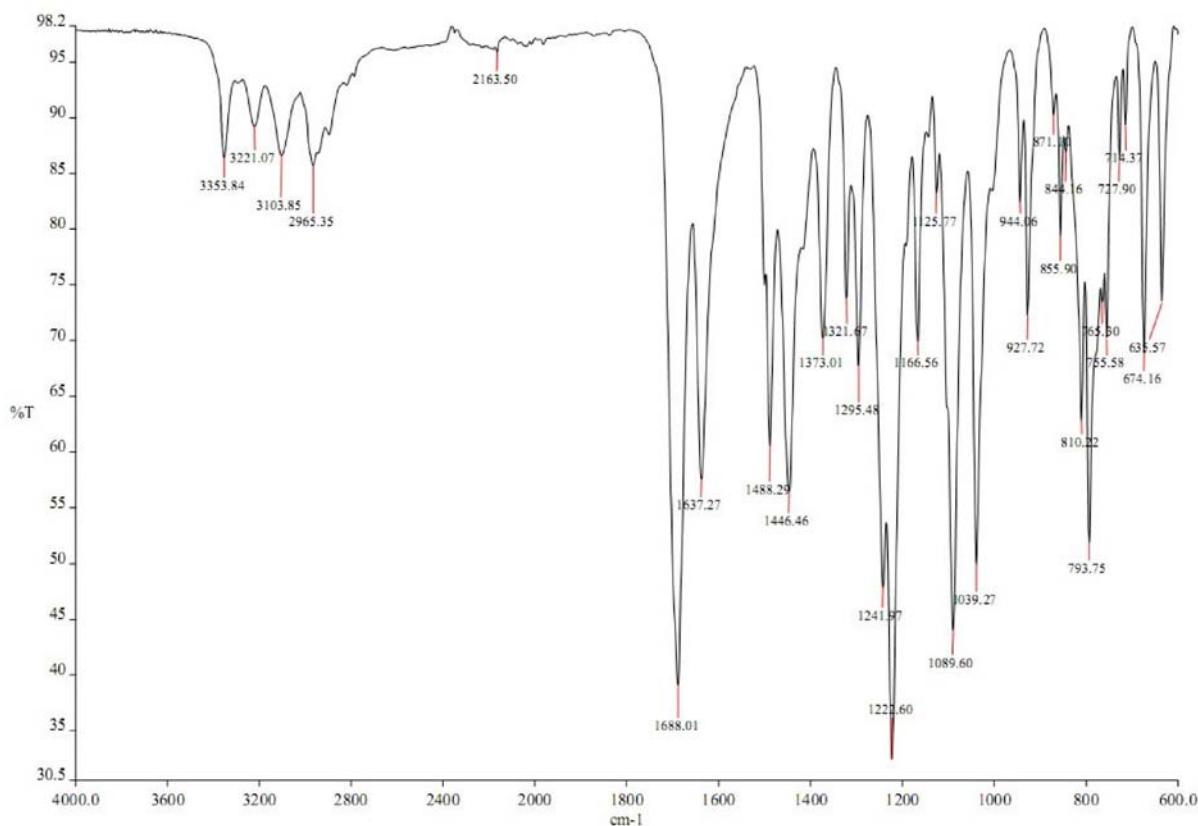
Figure S5. <sup>13</sup>C NMR (75 MHz, DMSO-*d*<sub>6</sub>) of compound 1b.

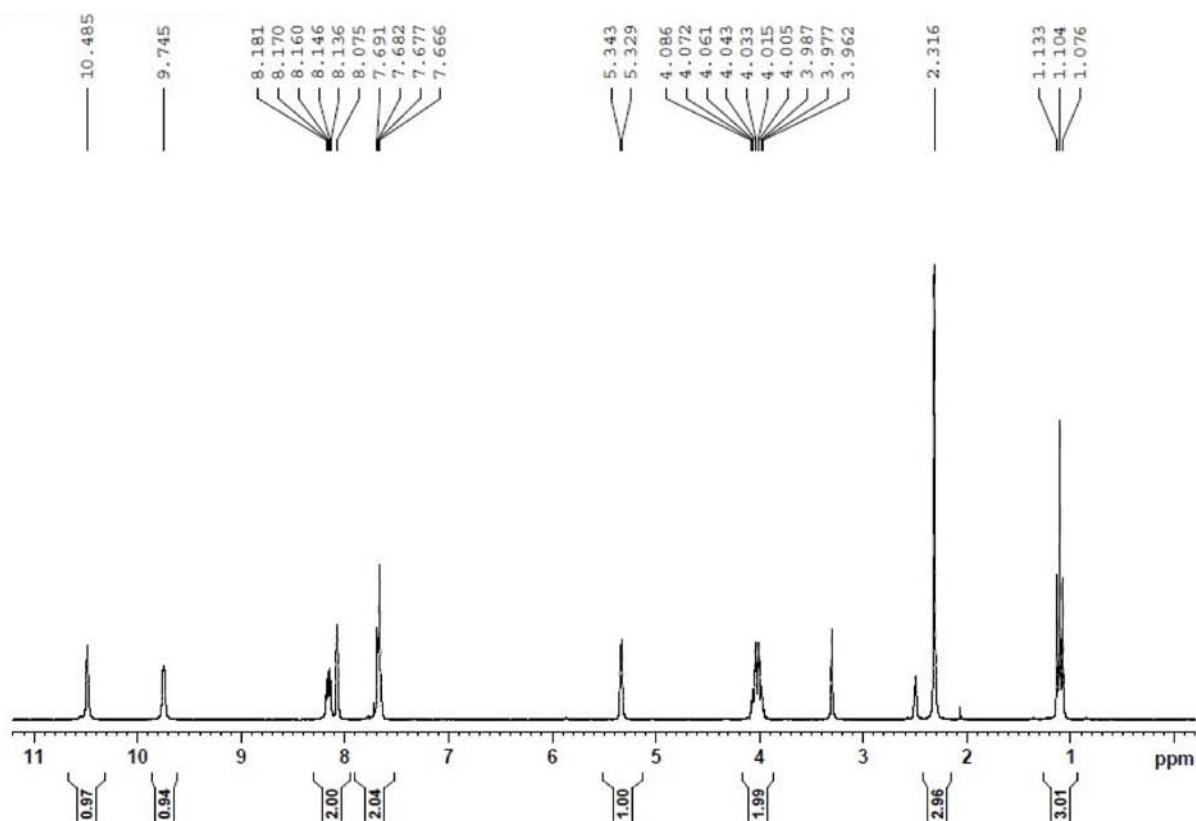


**Figure S6.** IR (ATR,  $\text{cm}^{-1}$ ) of compound **1b**.

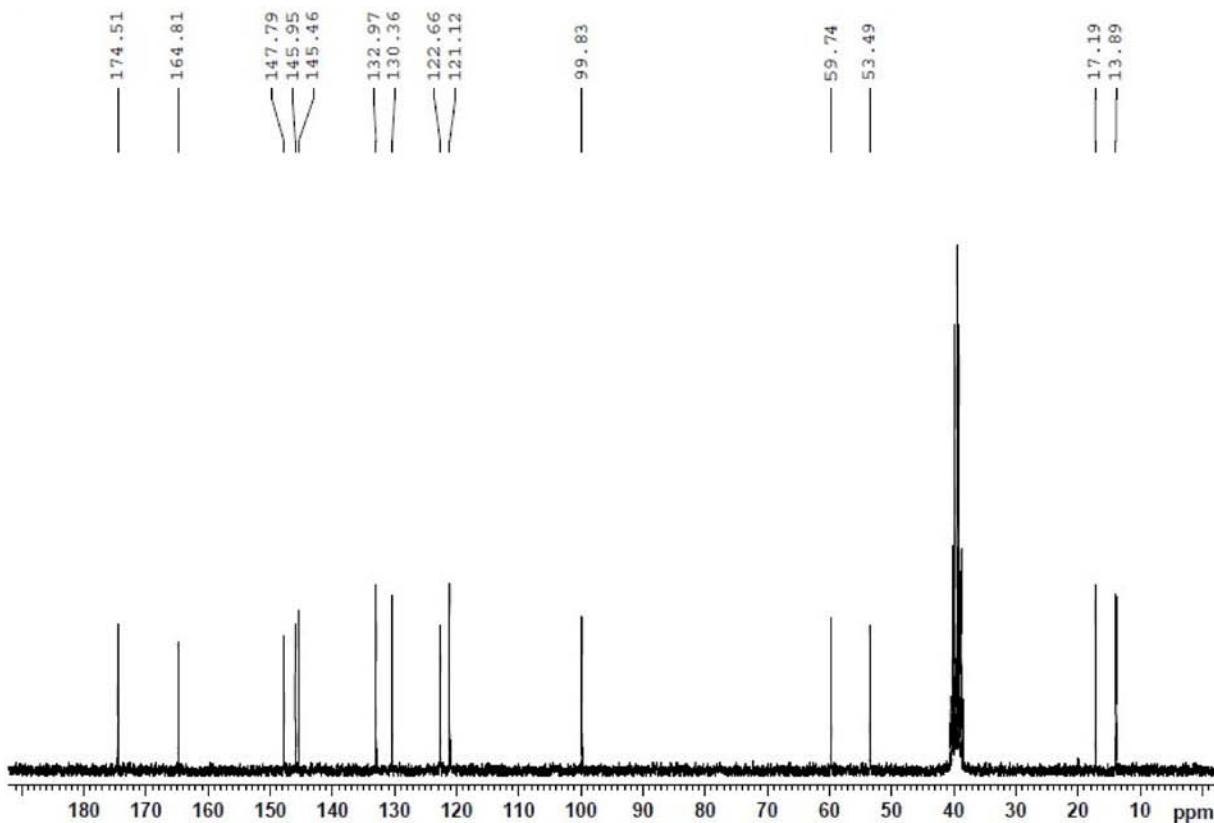


**Figure S7.**  $^1\text{H}$  NMR (250 MHz,  $\text{DMSO}-d_6$ ) of compound **1c**.

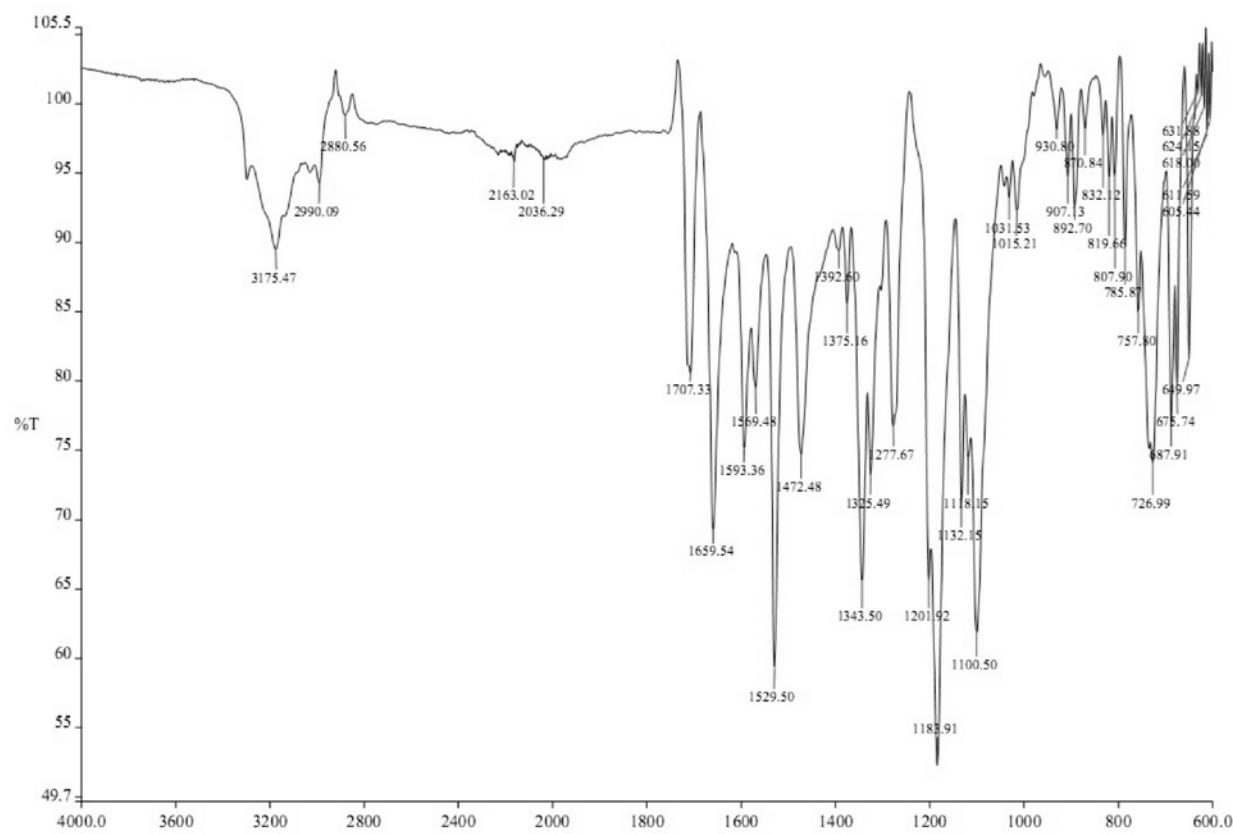
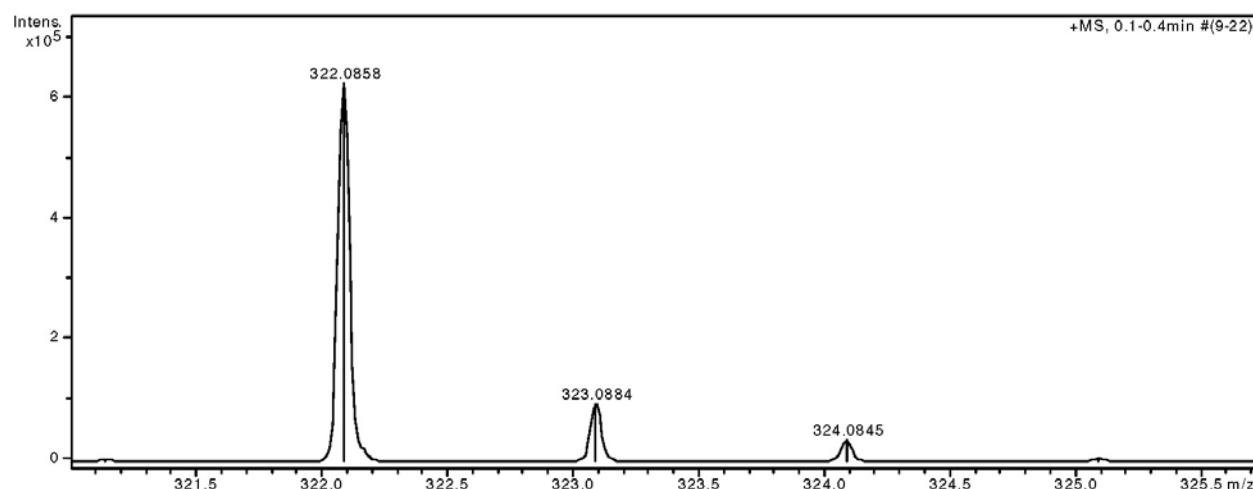
Figure S8. <sup>13</sup>C NMR (62.5 MHz, DMSO-*d*<sub>6</sub>) of compound 1c.Figure S9. IR (ATR, cm<sup>-1</sup>) of compound 1c.



**Figure S10.** <sup>1</sup>H NMR (250 MHz, DMSO-*d*<sub>6</sub>) of compound **1d**.



**Figure S11.** <sup>13</sup>C NMR (62.5 MHz, DMSO-*d*<sub>6</sub>) of compound **1d**.

**Figure S12.** IR (ATR,  $\text{cm}^{-1}$ ) of compound **1d**.**Figure S13.** HRMS of compound **1d**.

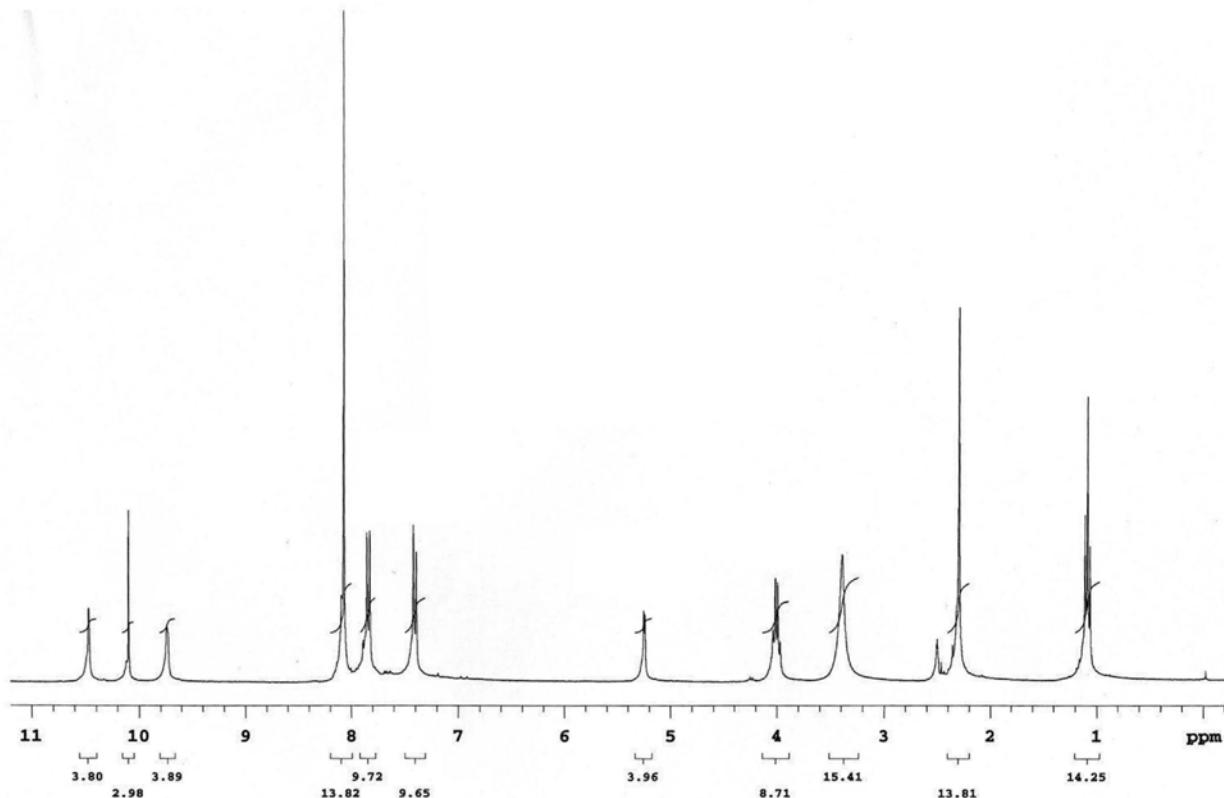


Figure S14. <sup>1</sup>H NMR (300 MHz, DMSO-*d*<sub>6</sub>) of compound 1e.

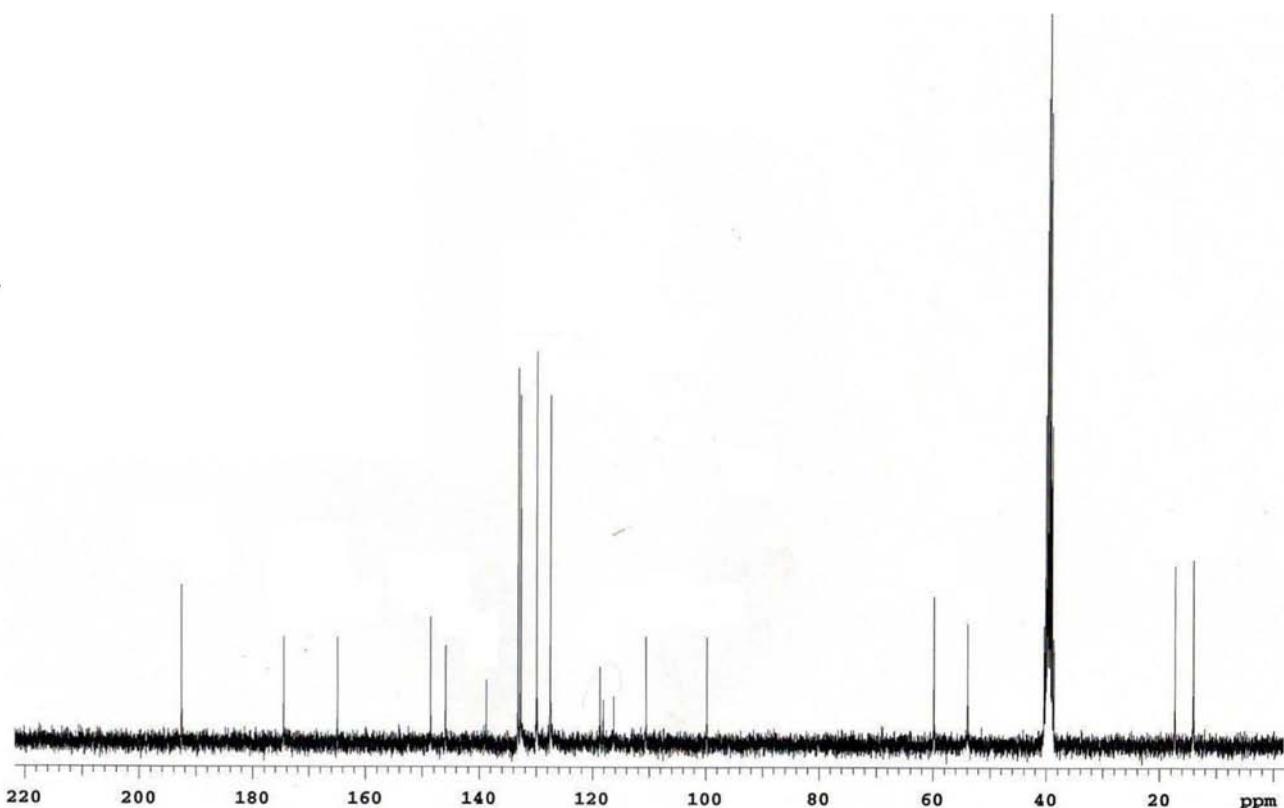
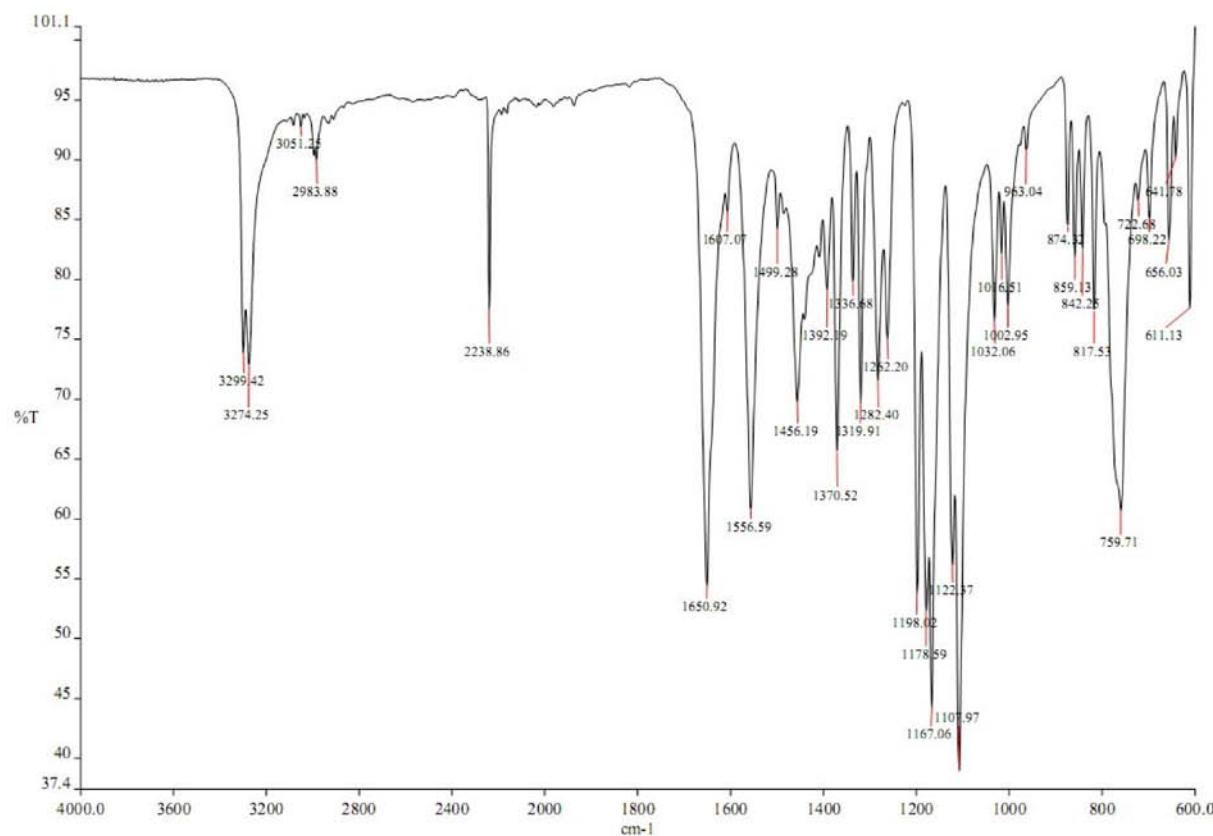
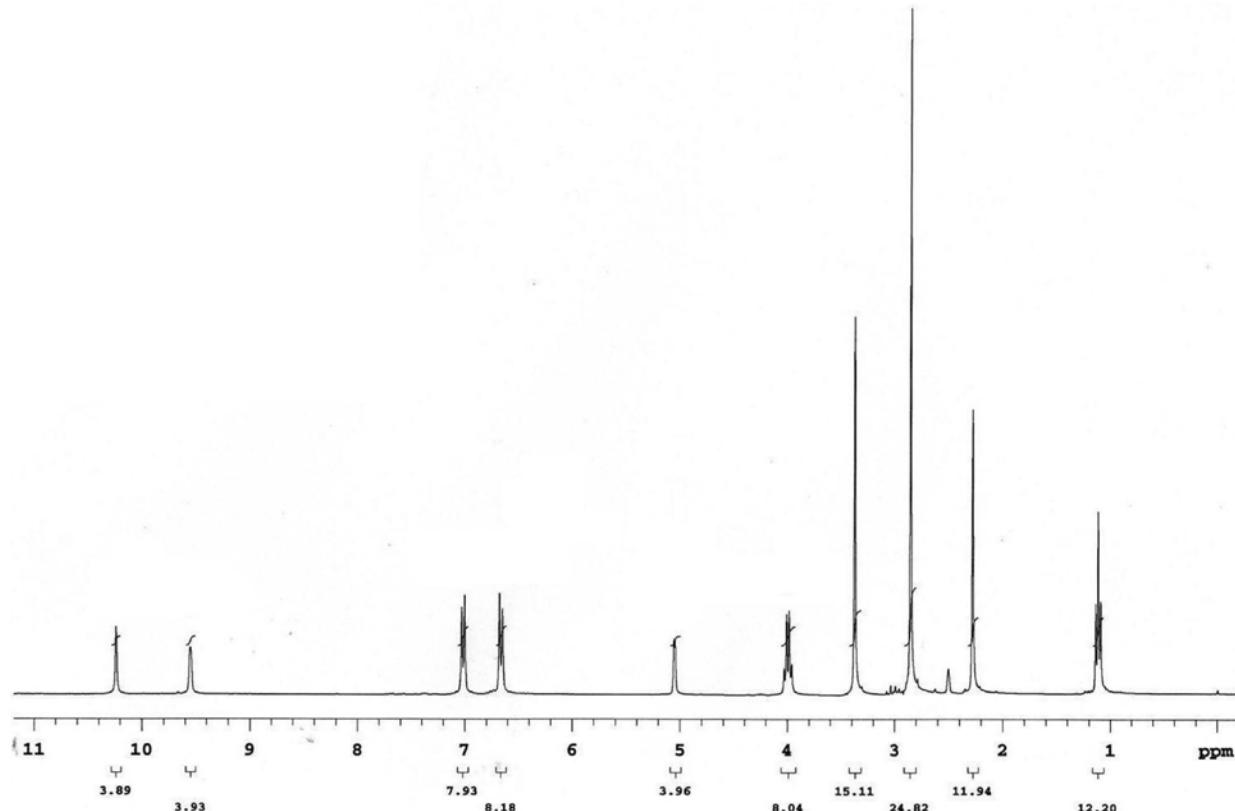
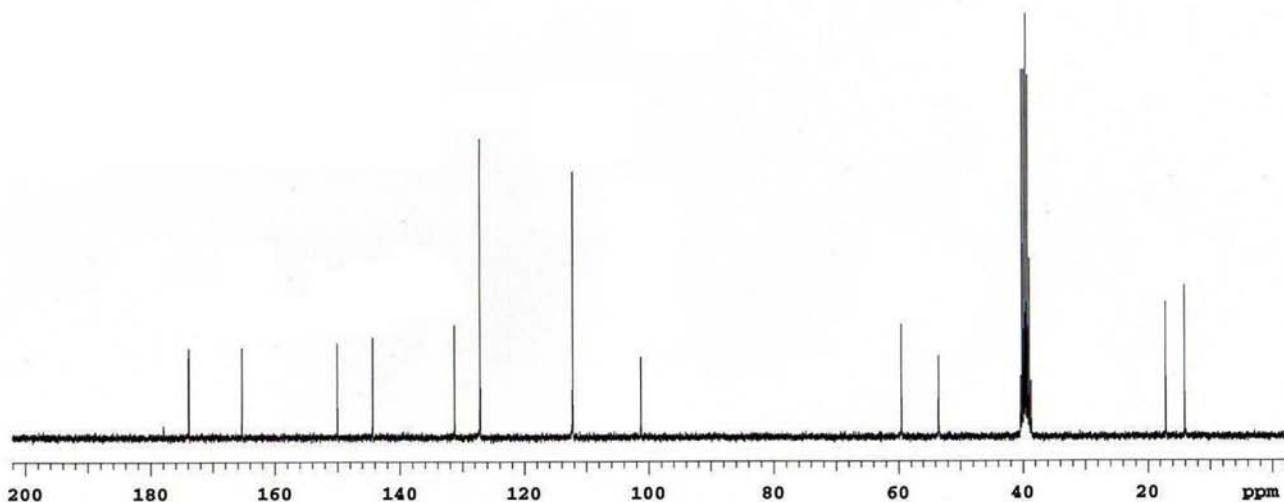
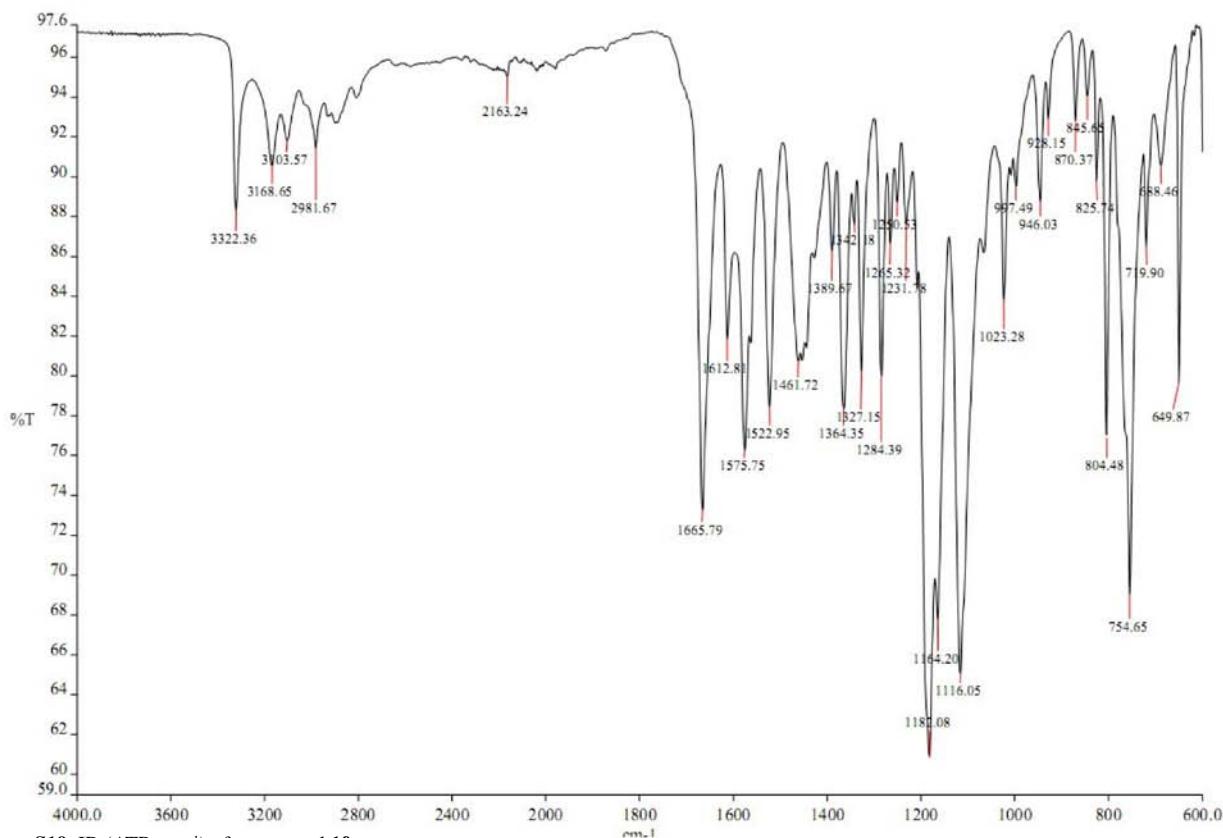


Figure S15. <sup>13</sup>C NMR (75 MHz, DMSO-*d*<sub>6</sub>) of compound 1e.

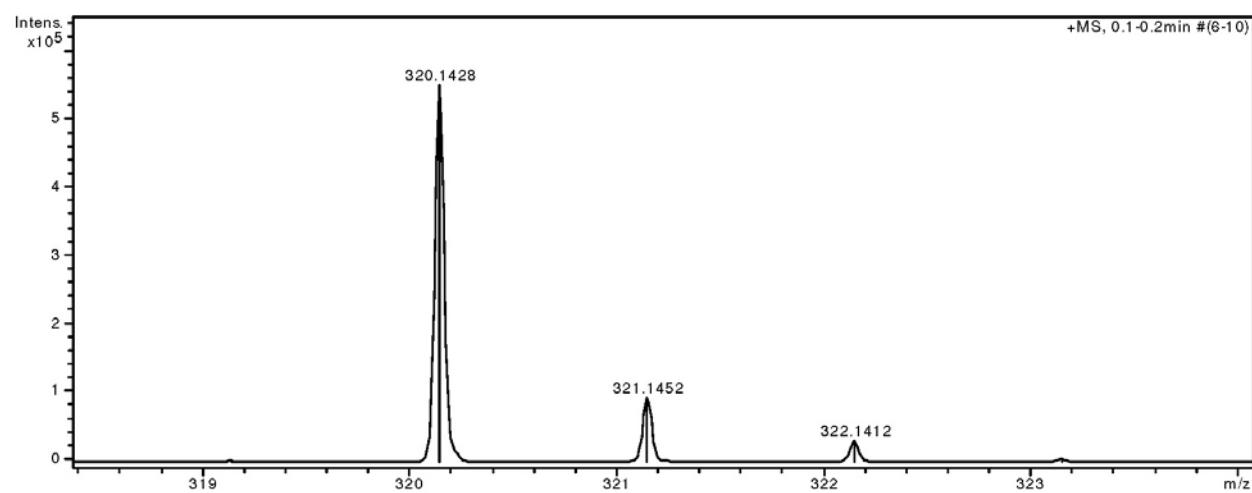
**Figure S16.** IR (ATR,  $\text{cm}^{-1}$ ) of compound **1e**.**Figure S17.**  $^1\text{H}$  NMR (300 MHz,  $\text{DMSO}-d_6$ ) of compound **1f**.



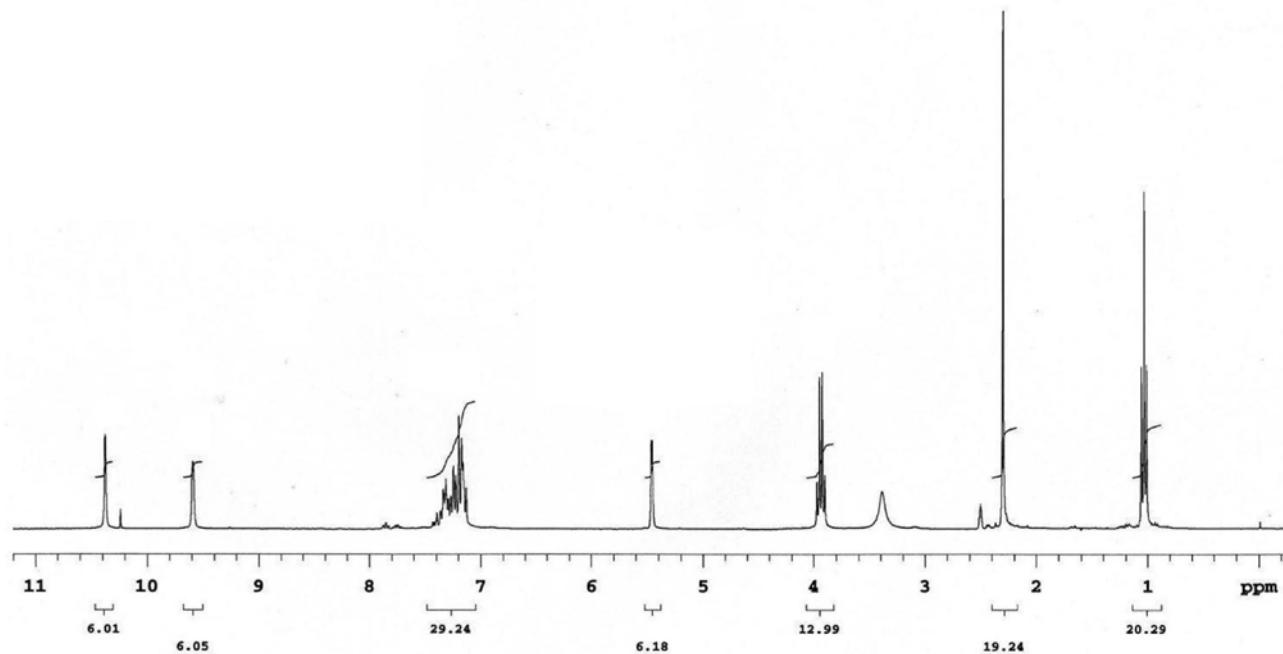
**Figure S18.**  $^{13}\text{C}$  NMR (75 MHz,  $\text{DMSO}-d_6$ ) of compound **1f**.



**Figure S19.** IR (ATR,  $\text{cm}^{-1}$ ) of compound **1f**.



**Figure S20.** HRMS of compound **1f**.



**Figure S21.** <sup>1</sup>H NMR (300 MHz, DMSO-*d*<sub>6</sub>) of compound **1g**.

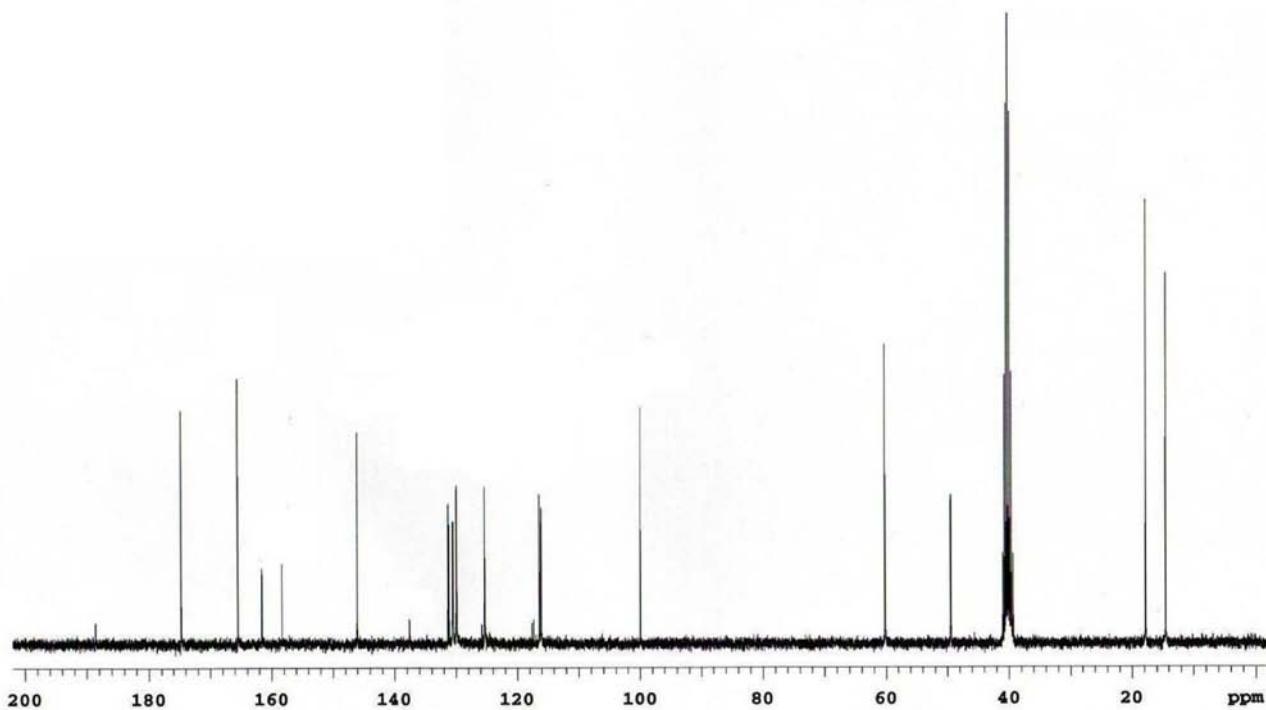


Figure S22.  $^{13}\text{C}$  NMR (75 MHz,  $\text{DMSO}-d_6$ ) of compound 1g.

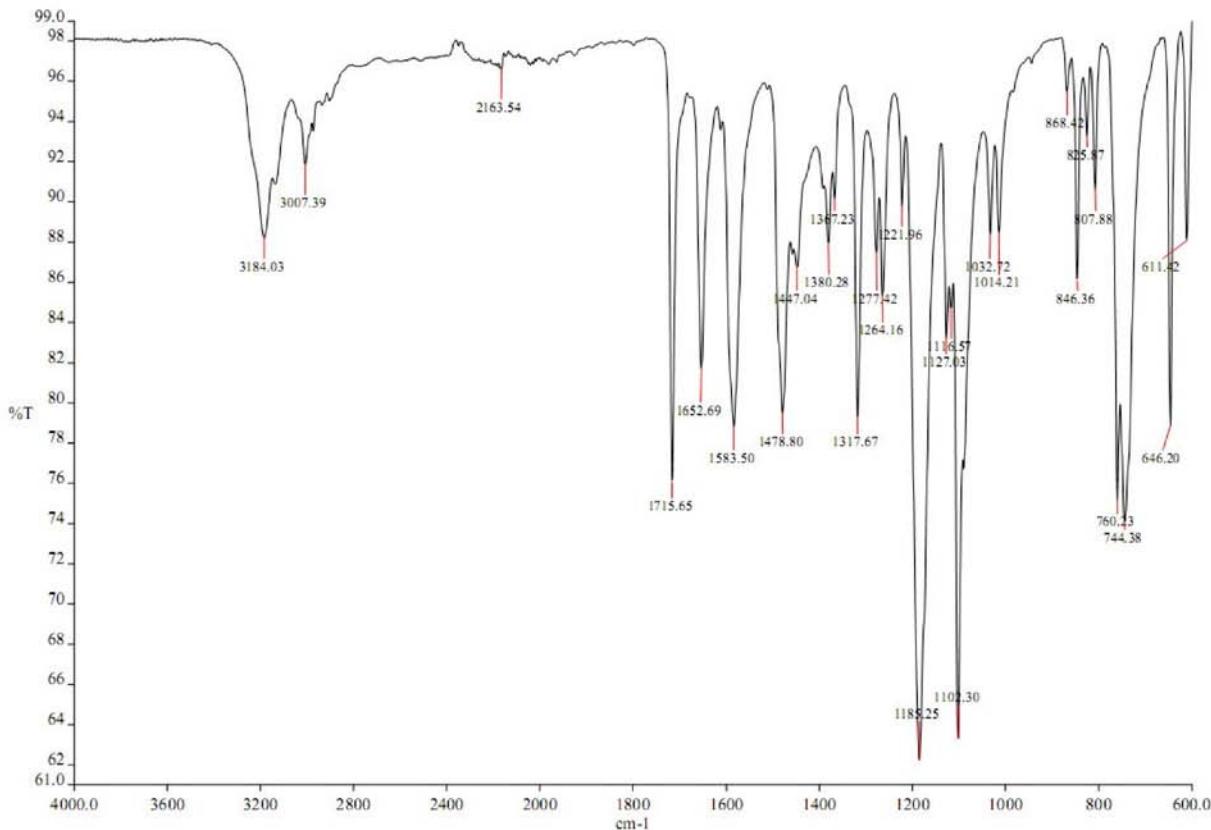
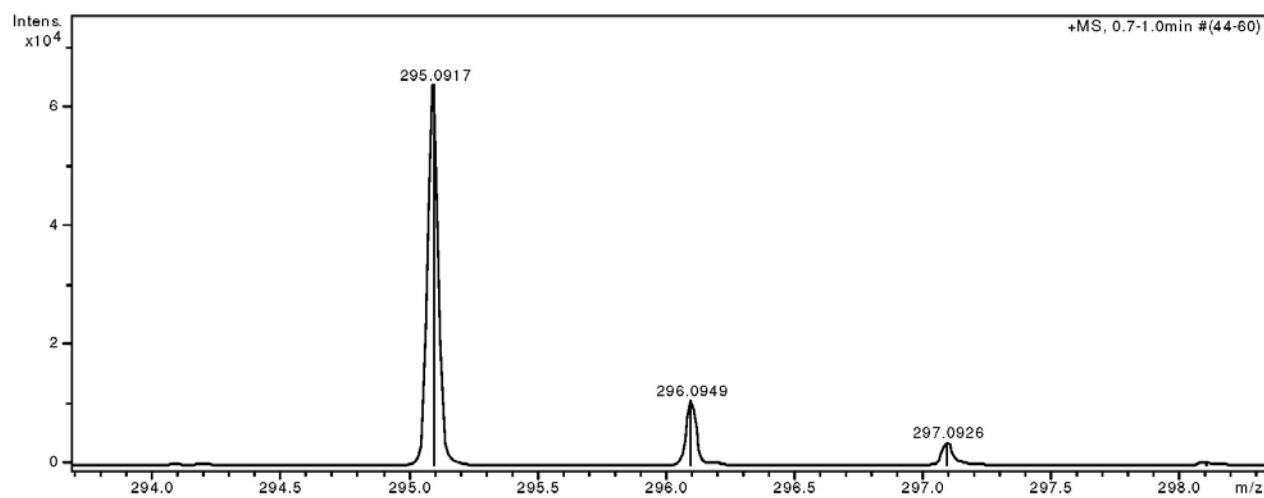
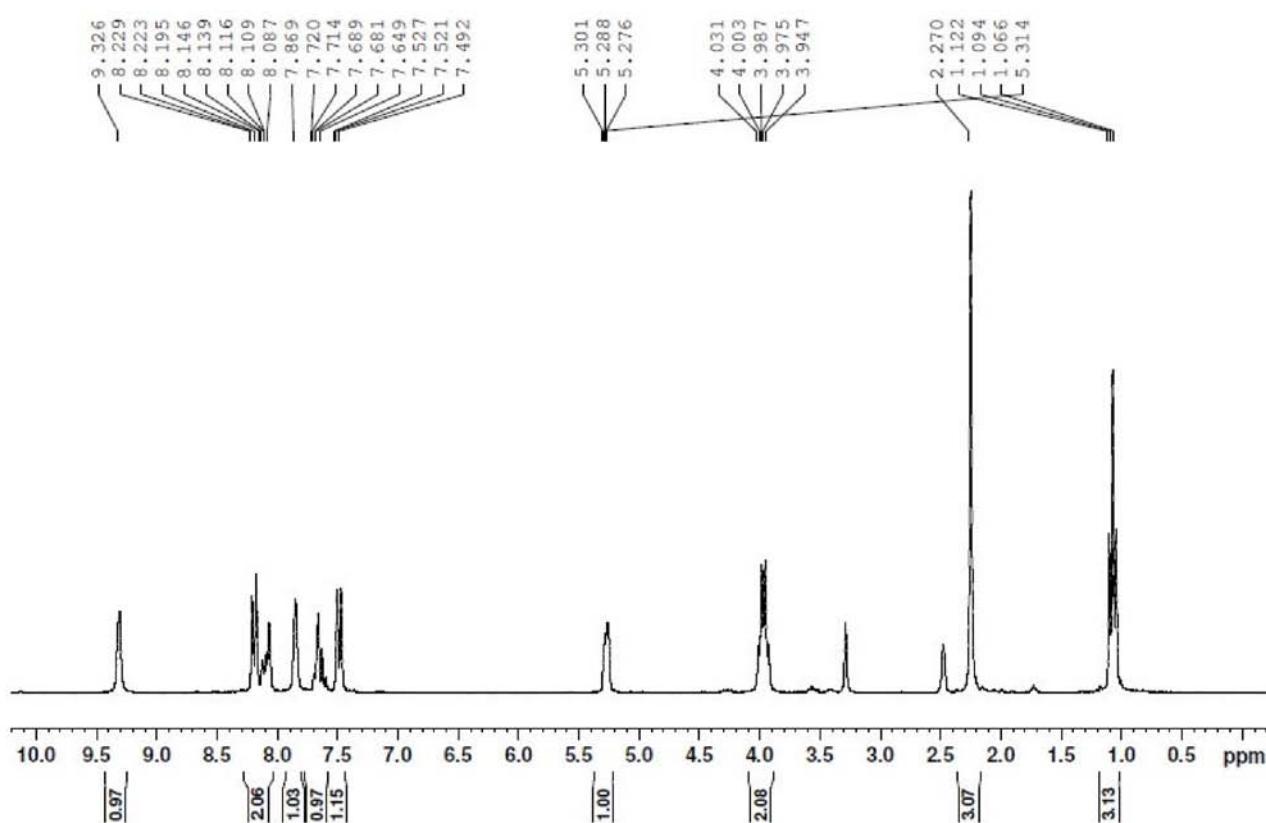


Figure S23. IR (ATR,  $\text{cm}^{-1}$ ) of compound 1g.

**Figure S24.** HRMS of compound **1g**.**Figure S25.**  ${}^1\text{H}$  NMR (250 MHz,  $\text{DMSO}-d_6$ ) of compound **2d**.

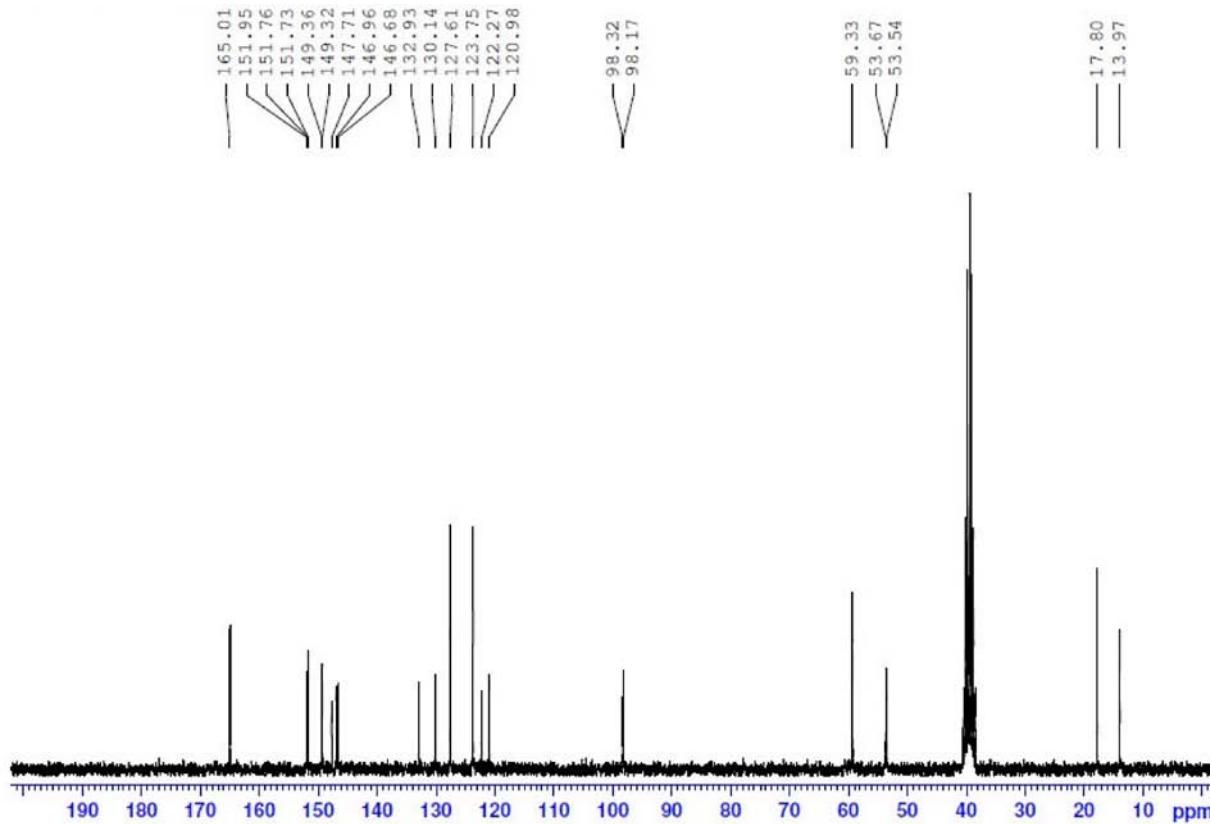


Figure S26.  $^{13}\text{C}$  NMR (62.5 MHz,  $\text{DMSO}-d_6$ ) of compound **2d**.

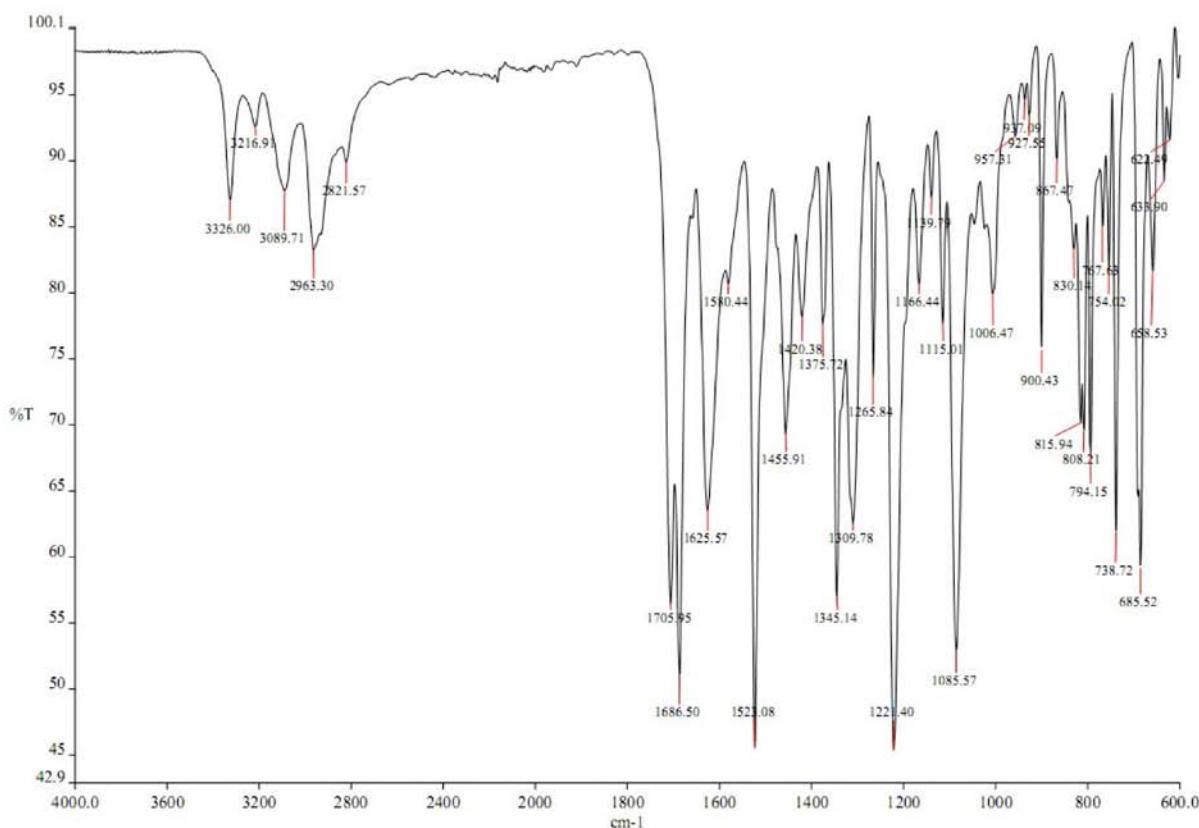
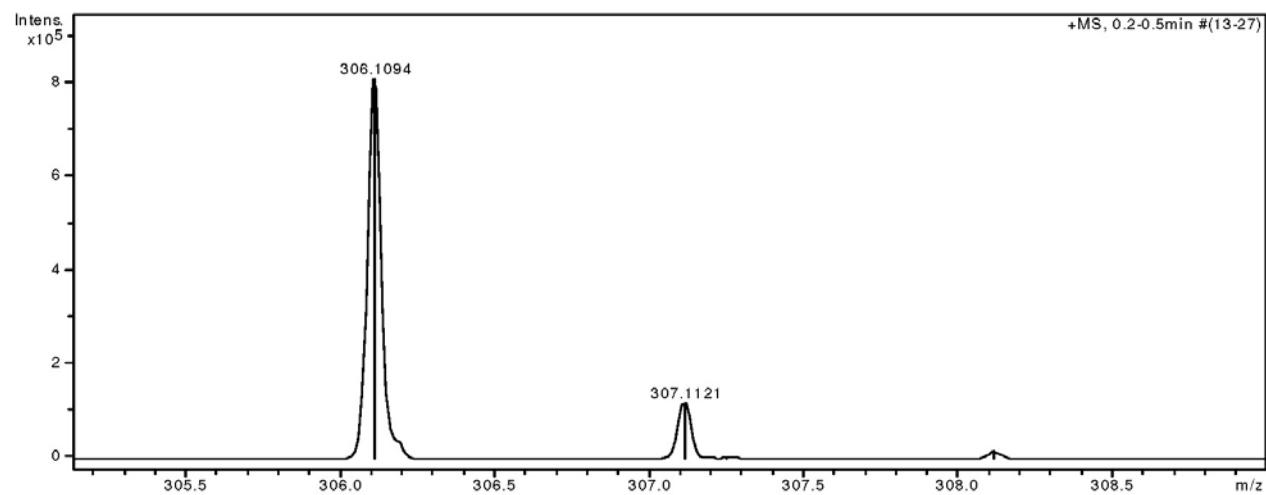


Figure S27. IR (ATR,  $\text{cm}^{-1}$ ) of compound **2d**.



**Figure S28.** HRMS of compound **2d**.