

## Supplementary Material

### Synthesis, structural characterization and cytotoxic activity of heterocyclic compounds containing the furoxan ring

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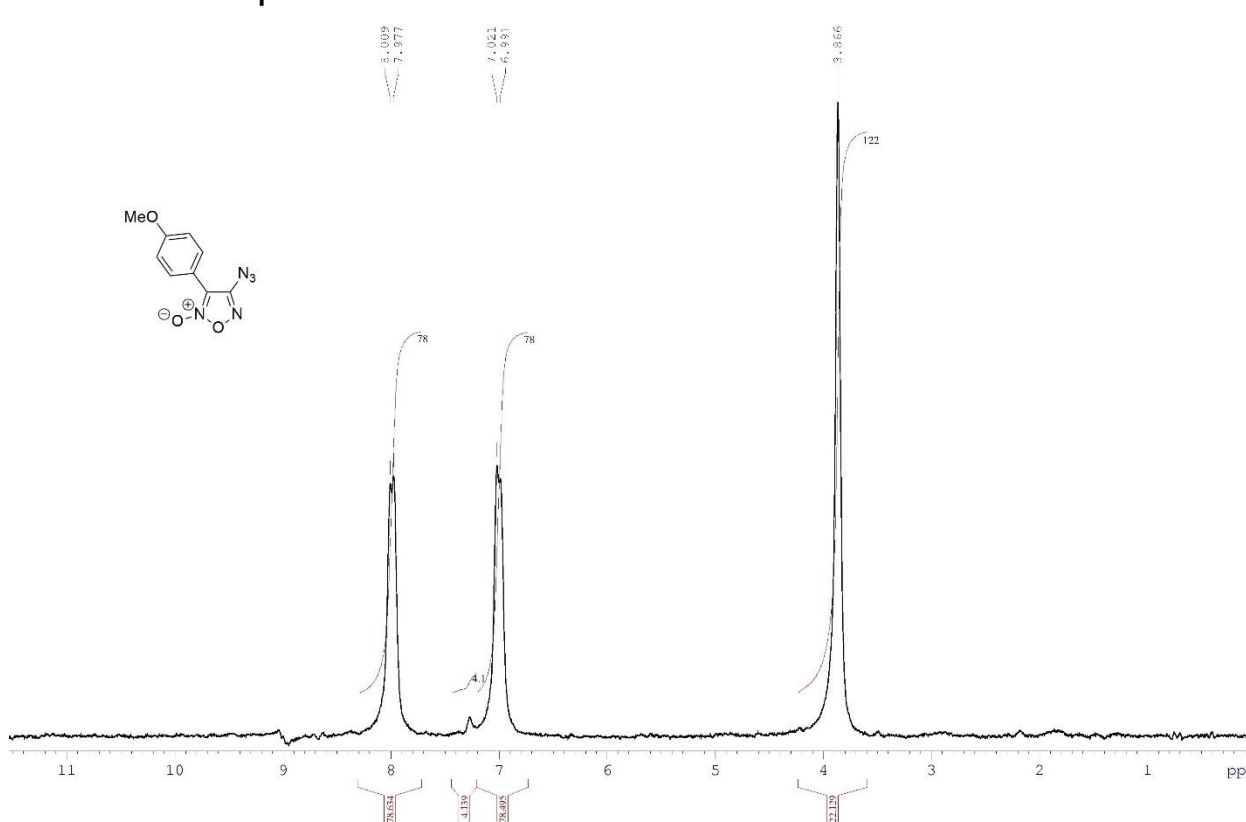
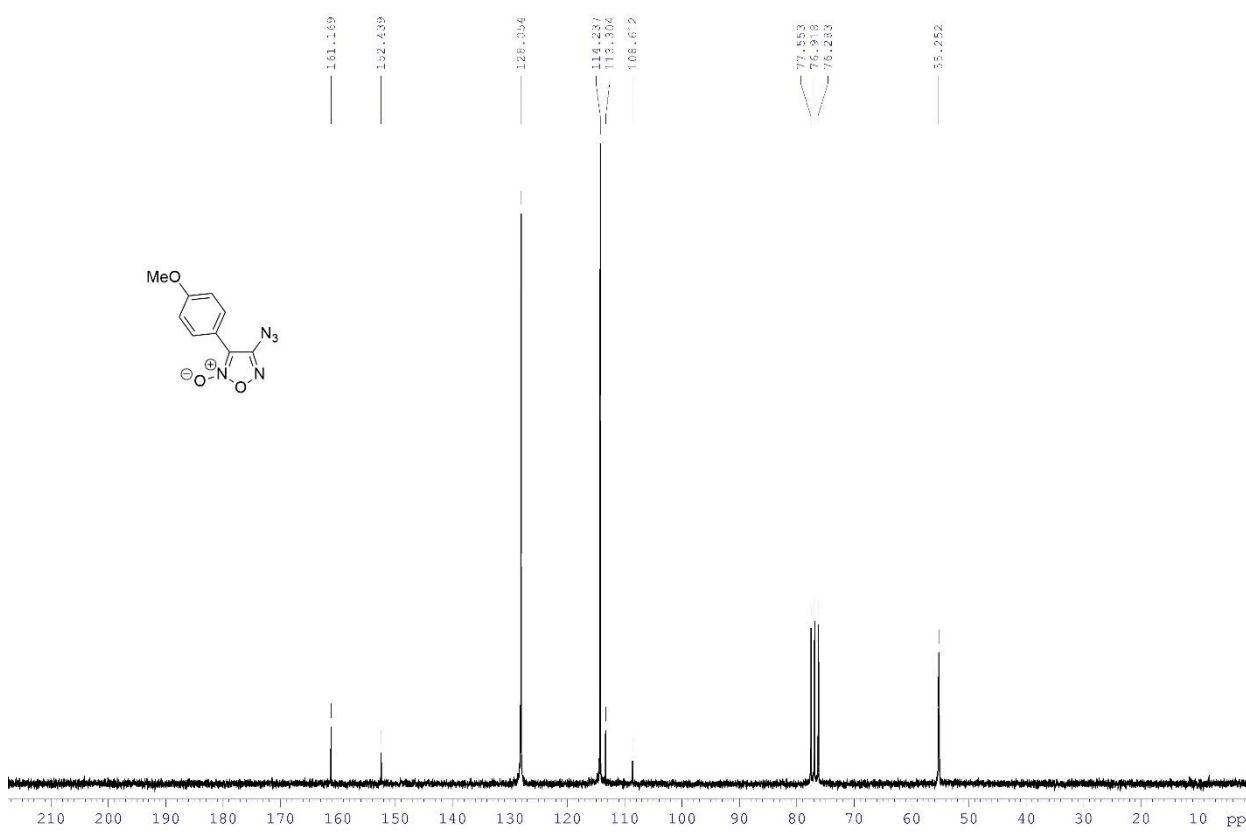
## Cytotoxicity results

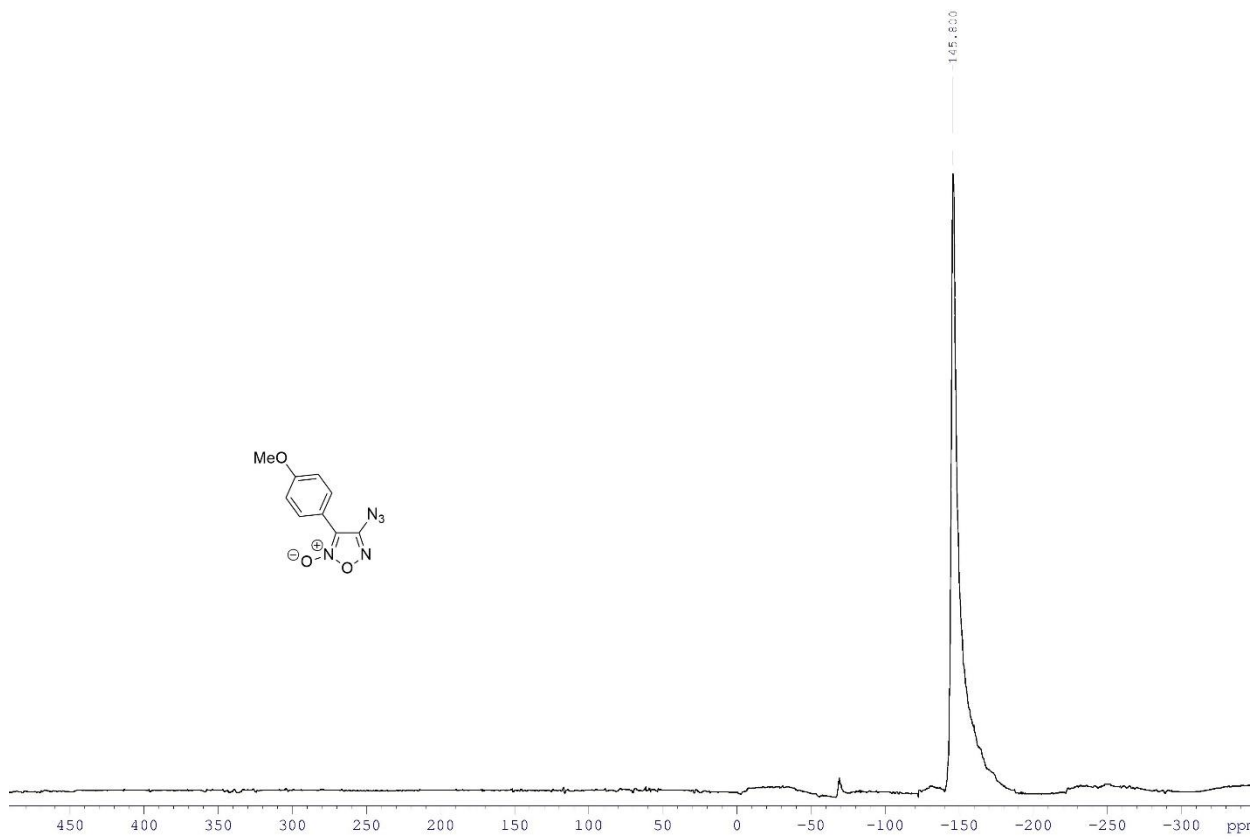
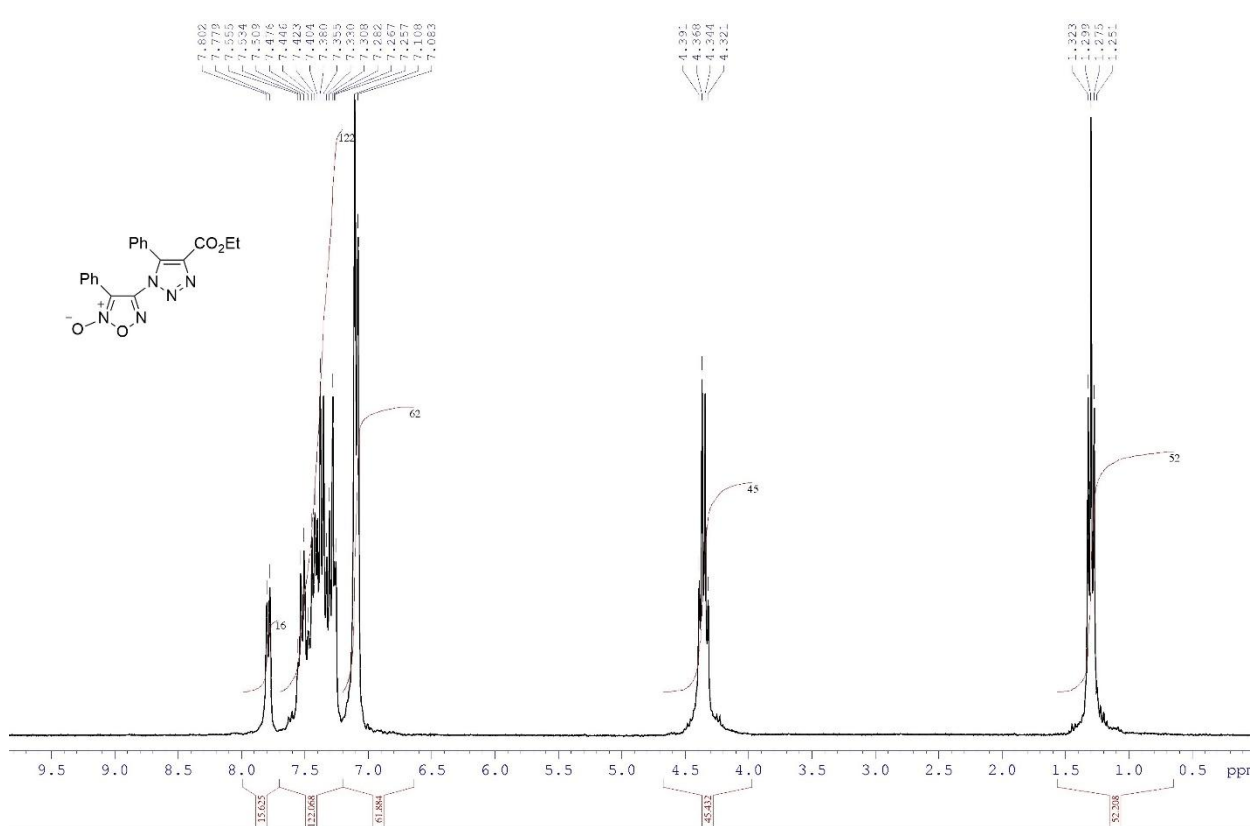
**Table S1.** Cytotoxicity results of hetarylfuloxans **1-5**

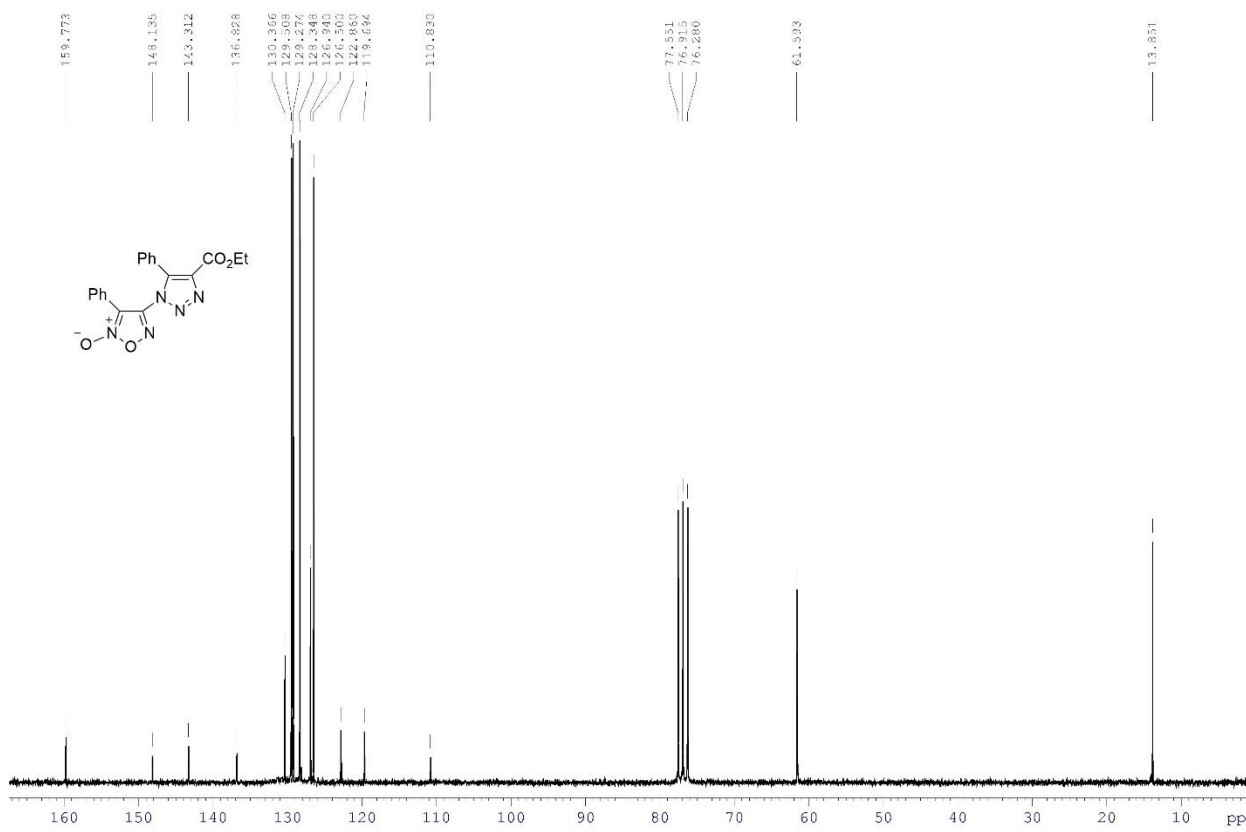
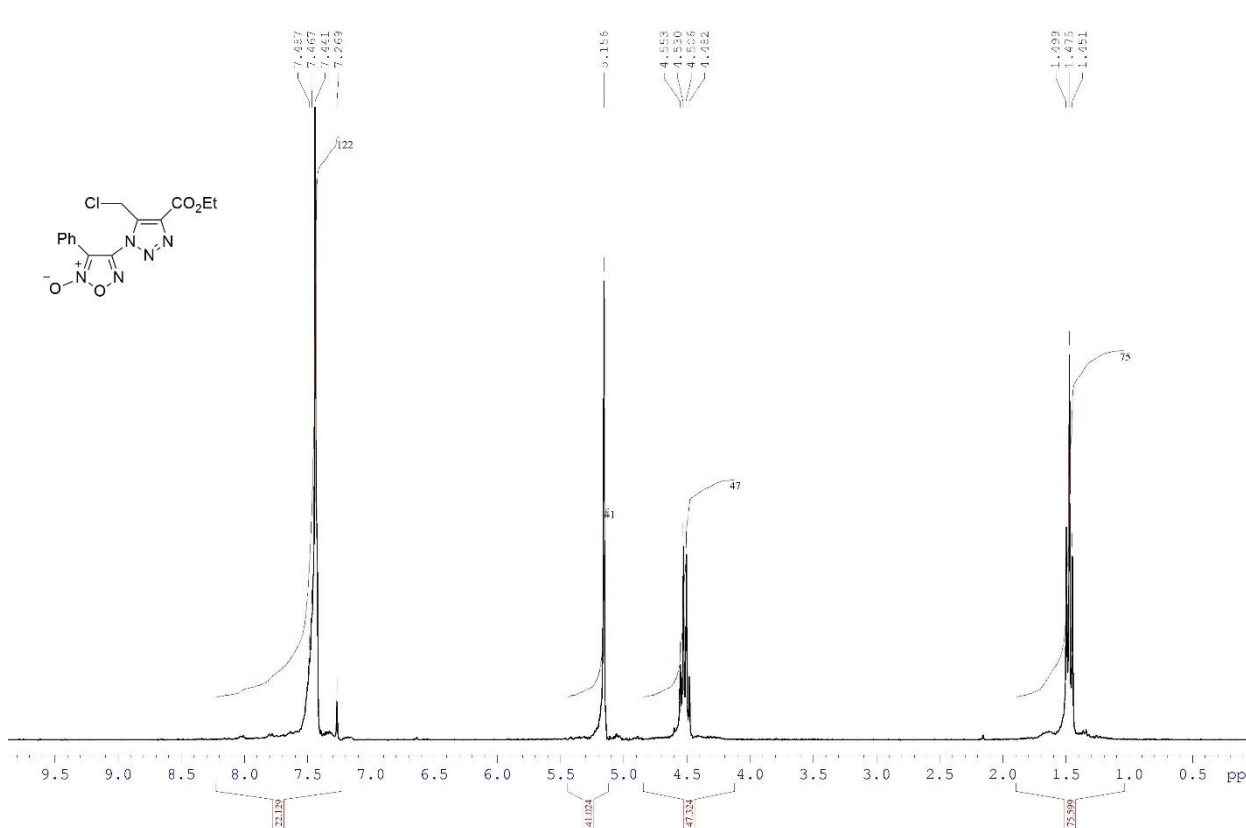
Compound	IC <sub>50</sub> , μM					
	A549	HCT116	HeLa	MCF7	RD	HEK293
<b>1a</b>	11.14±0.01	51.25±0.70	11.34±0.02	46.26±0.22	10.39±0.05	195.38±1.49
<b>1b</b>	74.95±0.59	98.85±1.53	133.04±0.23	>200	72.23±1.64	N/T
<b>1c</b>	167.18±1.44	>200	>200	>200	140.94±5.61	N/T
<b>1d</b>	>200	97.27±3.29	>200	>200	176.14±2,87	N/T
<b>2a</b>	145.79±37.47	99.87±4.17	80.26±23.68	115.53±0.36	87.75±0.49	N/T
<b>2b</b>	8.75±0.45	2.37±0.01	4.55±0.05	3.38±0.14	3.04±0.26	20.44±0.17
<b>2c</b>	>200	>200	>200	>200	>200	N/T
<b>2d</b>	>200	>200	>200	>200	>200	N/T
<b>2e</b>	197.67±10.59	189.25±30.33	64.31±2.18	45.30±0.32	101.45±1.96	N/T
<b>2f</b>	>200	>200	>200	>200	>200	N/T
<b>3a</b>	115.90±3.53	24.80±2.72	>200	>200	>200	N/T
<b>3b</b>	>200	>200	>200	>200	>200	N/T
<b>3c</b>	129.37±1.28	94.19±5.88	92.82±1.05	118.84±4.77	118.38±0.89	N/T
<b>3d</b>	20.67±0.31	16.27±1.00	8.14±0.01	9.26±0.06	10.82±0.02	68.49±0.60
<b>3e</b>	>200	>200	>200	>200	>200	N/T
<b>3f</b>	>200	>200	>200	>200	>200	N/T
<b>3g</b>	172.77±14.49	70.59±1.29	49.65±1.26	127.17±0.19	90.82±2.33	N/T
<b>4a</b>	23.52±1.85	49.44±5.17	5.60±0.21	31.80±2.43	2.98±0.02	61.01±1.83
<b>4b</b>	39.86±2.59	44.40±3.77	21.44±3.08	29.47±1.91	11.77±0.50	69.37±3.82
<b>4c</b>	10.67±3.86	12.77±1.11	1.97±0.40	7.81±0.08	0.53±0.00	20.46±2.00
<b>4d</b>	14.73±0.99	23.58±2.04	3.69±0.19	22.34±0.48	3.49±0.03	39.93±4.83
<b>4e</b>	28.29±2.17	45.13±3.45	5.91±0.27	39.24±3.71	9.71±0.79	58.64±1.95
<b>5a</b>	>200	>200	>200	>200	>200	N/T
<b>5b</b>	32.32±0.20	75.60±2.65	40.94±1.40	>200	54.65±0.55	N/T
<b>5c</b>	>200	180.77±6.15	>200	>200	116.37±8.18	N/T
<b>5d</b>	>200	>200	>200	>200	>200	N/T
<b>5e</b>	>200	>200	>200	>200	>200	N/T
<b>5f</b>	158.13±10.22	80.39±2.06	65.71±7.58	182.79±12.60	78.36±1.98	N/T
<b>5g</b>	>200	>200	>200	>200	>200	N/T
<b>5h</b>	>200	>200	>200	>200	>200	N/T
<b>5i</b>	>200	>200	>200	>200	178.98±6.35	N/T

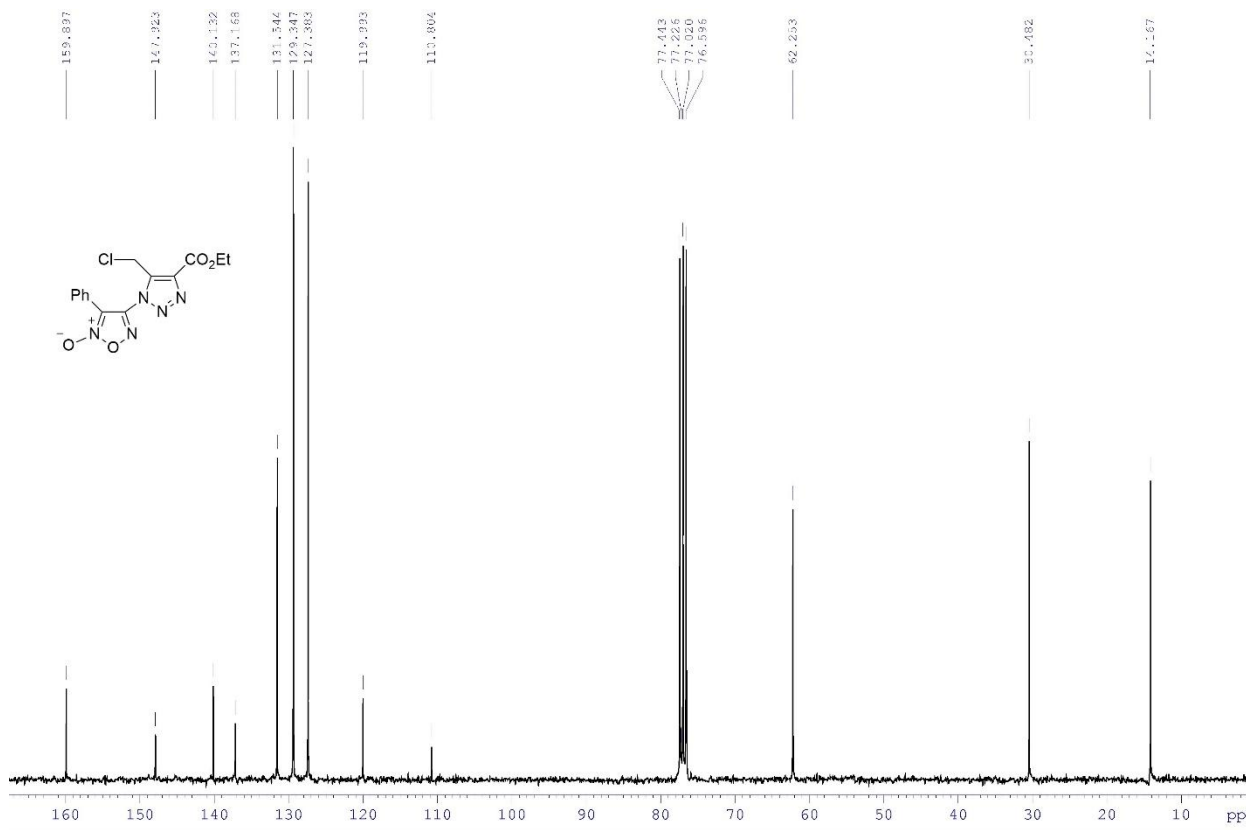
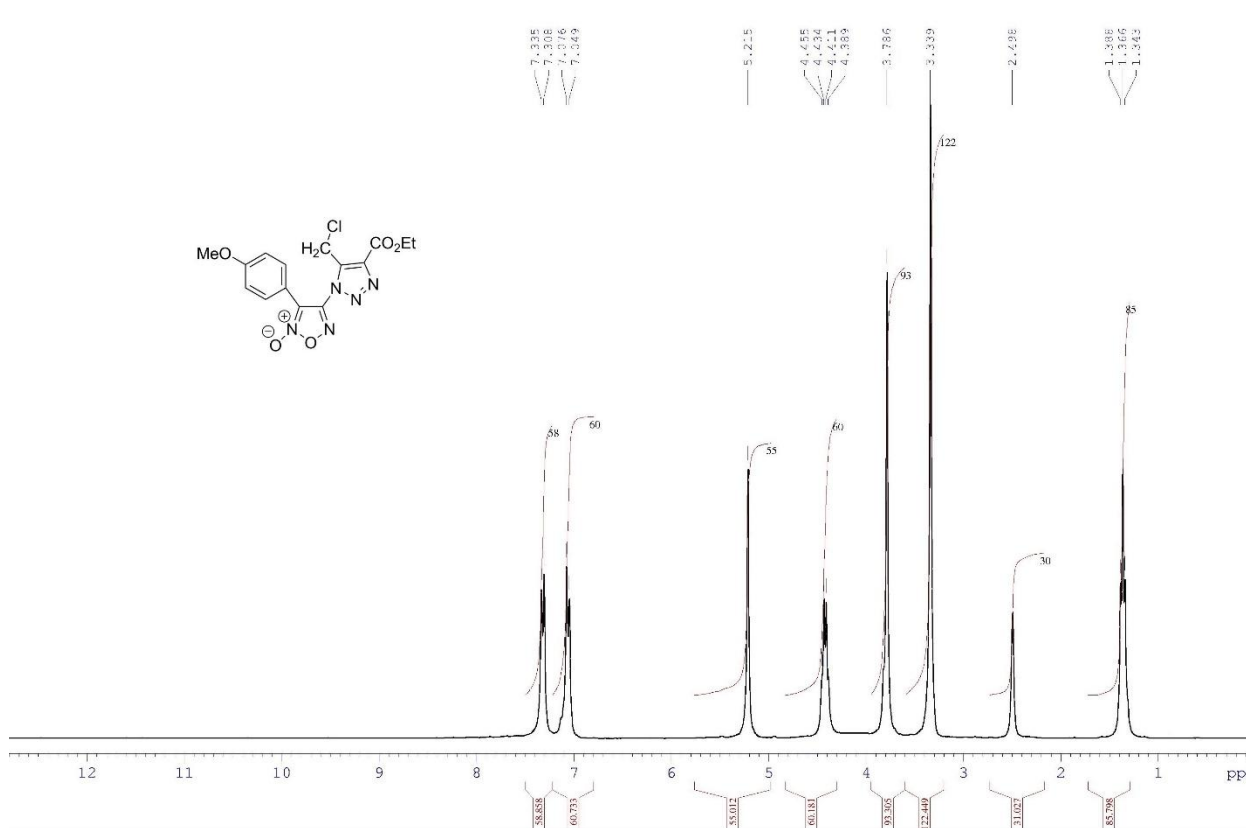
<b>5j</b>	107.48±1.28	>200	118.83±1.75	>200	78.30±1.23	N/T
<b>5k</b>	>200	>200	>200	>200	185.95±9.20	N/T
<b>5l</b>	159.45±1.55	>200	>200	>200	119.47±1.83	
<b>5m</b>	>200	>200	>200	>200	>200	
<b>5n</b>	>200	170.82±7.56	>200	>200	90.16±0.34	
Camptothecin	3.32±0.02	0.06±0.00	0.33±0.07	34.97±0.30	16.00±0.22	112.68±5.55

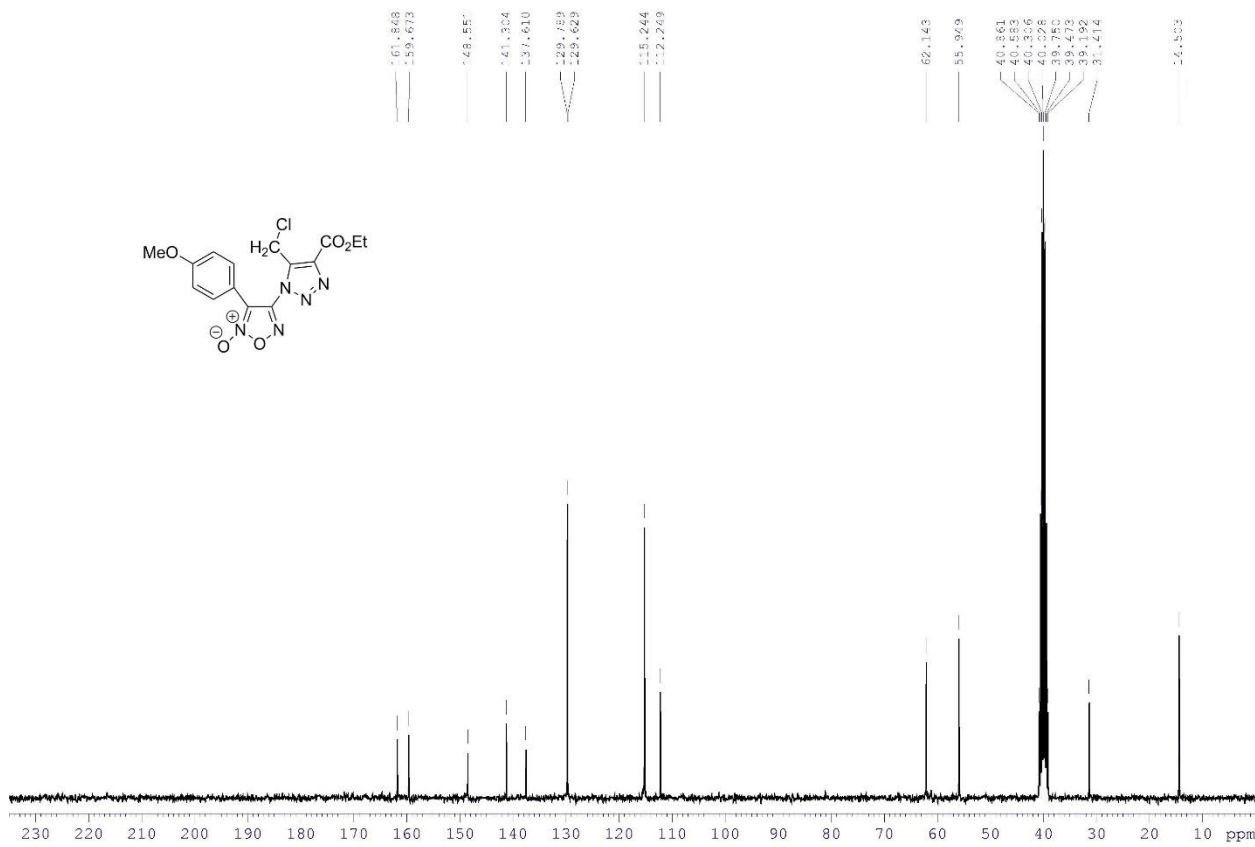
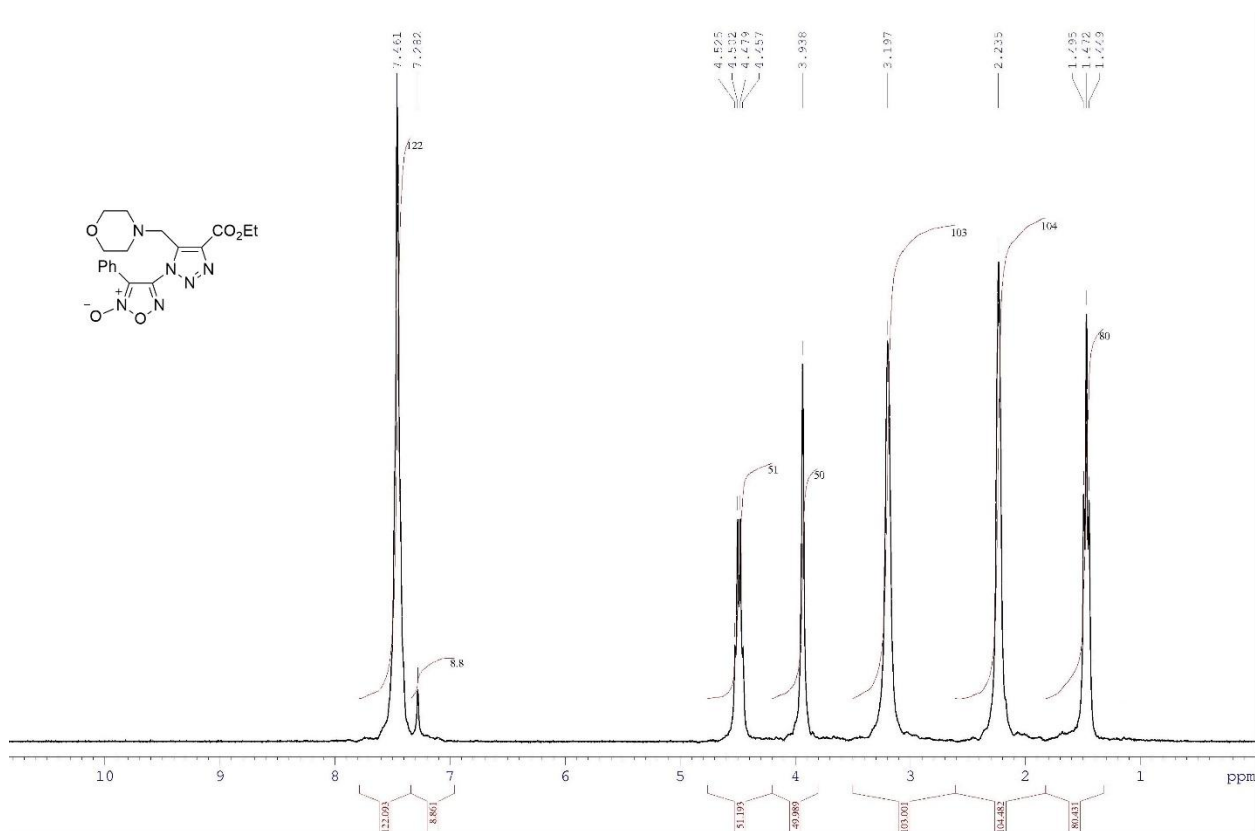
## Copies of NMR spectra

<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of **14b**<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of **14b**

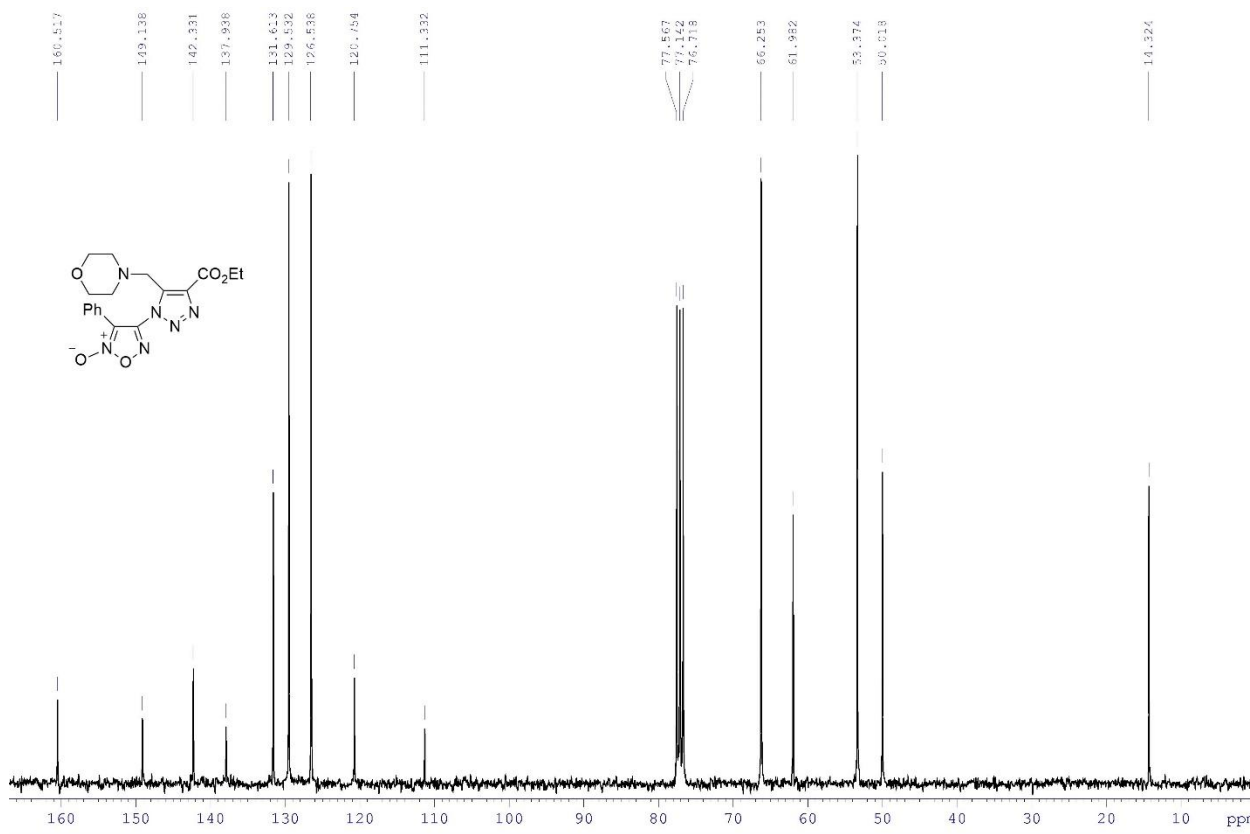
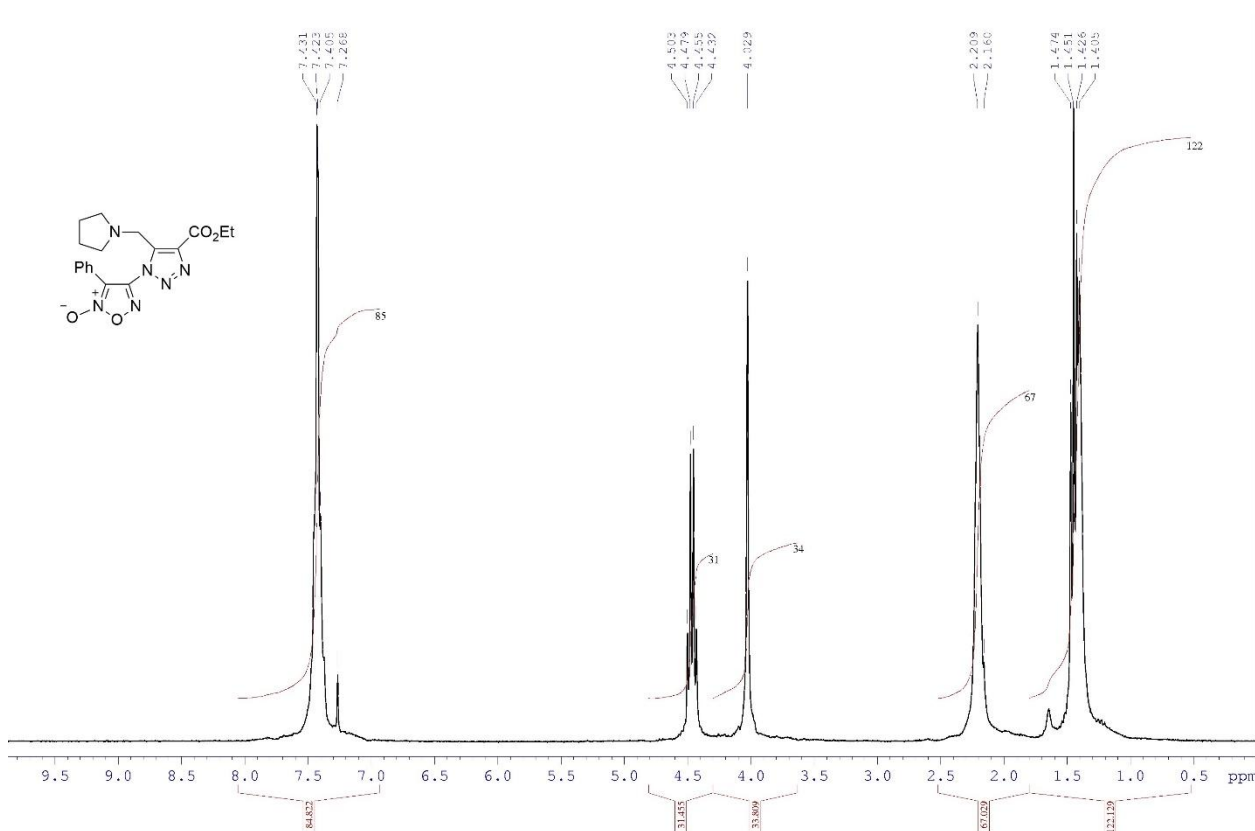
 $^{14}\text{N}$  NMR (21.7 MHz,  $\text{CDCl}_3$ ) of **14b** $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) of **16a**

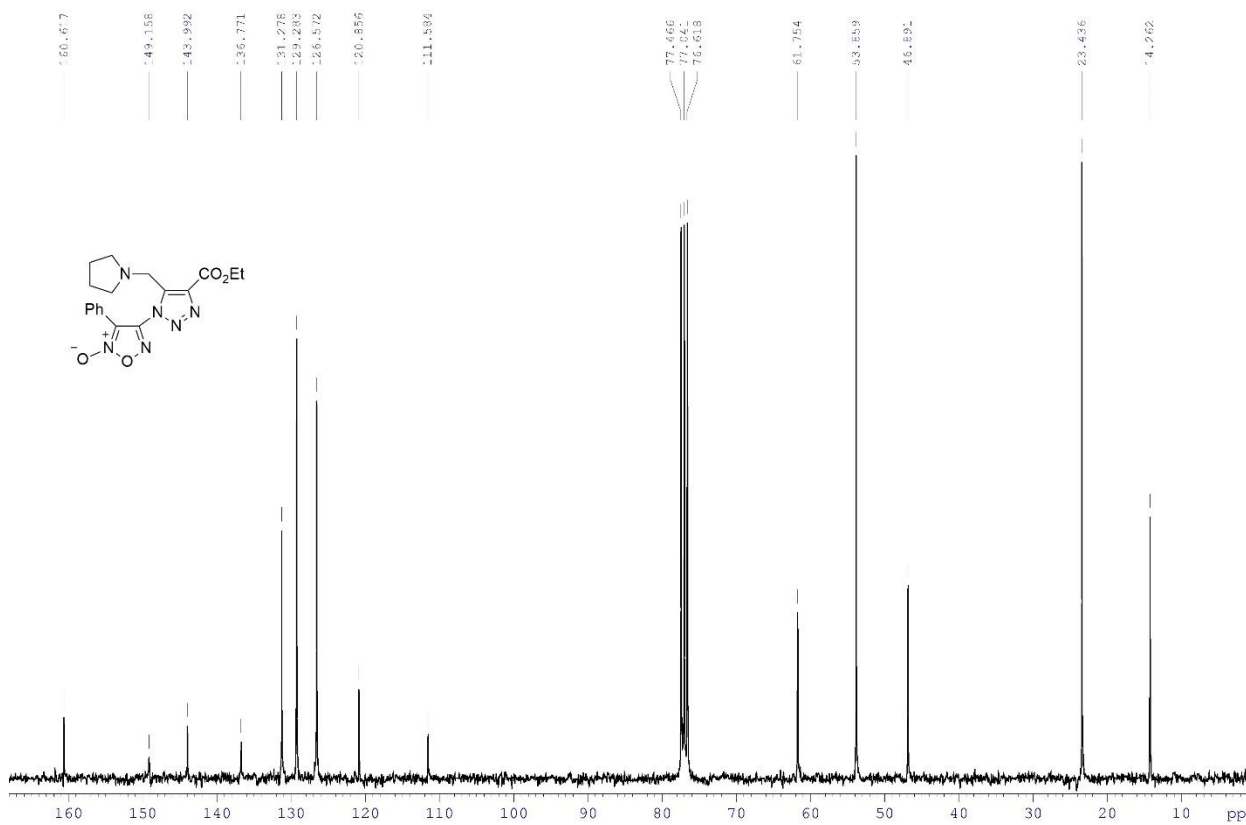
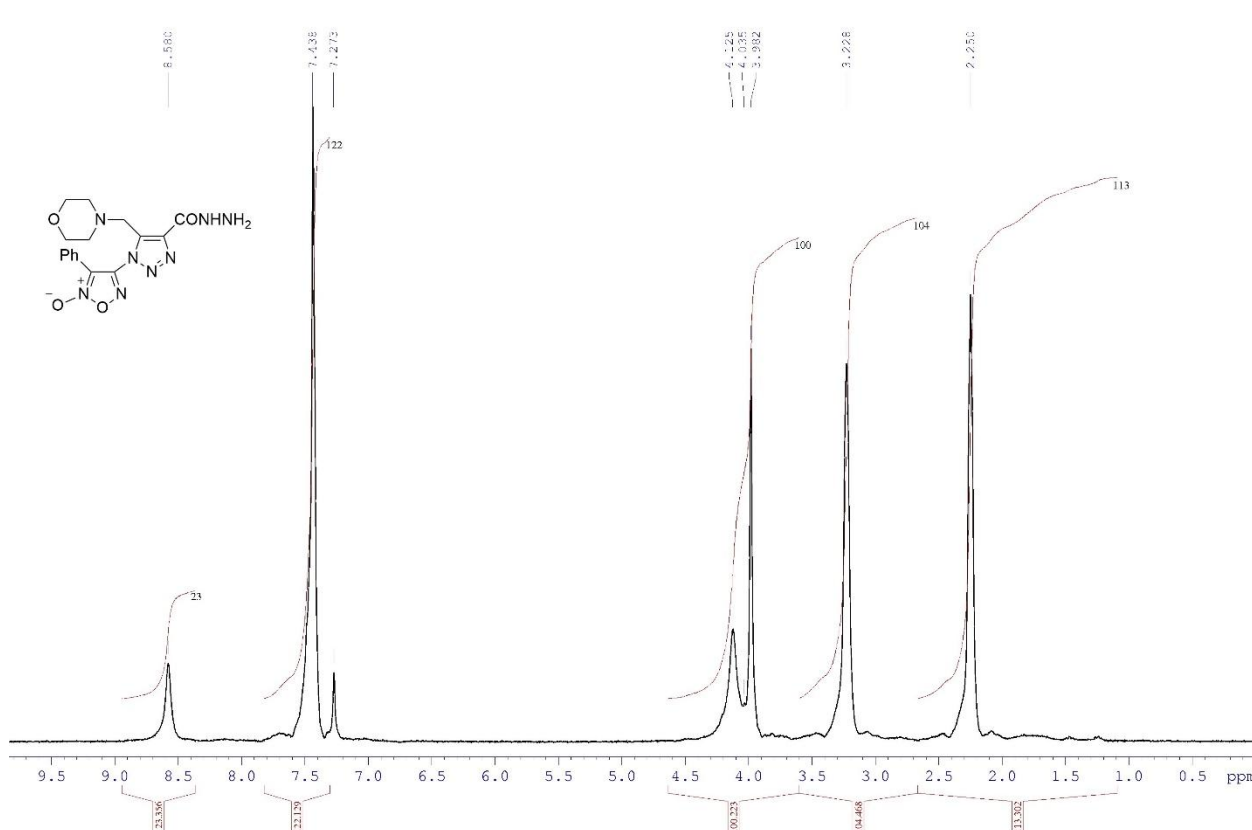
<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of **16a**<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of **16b**

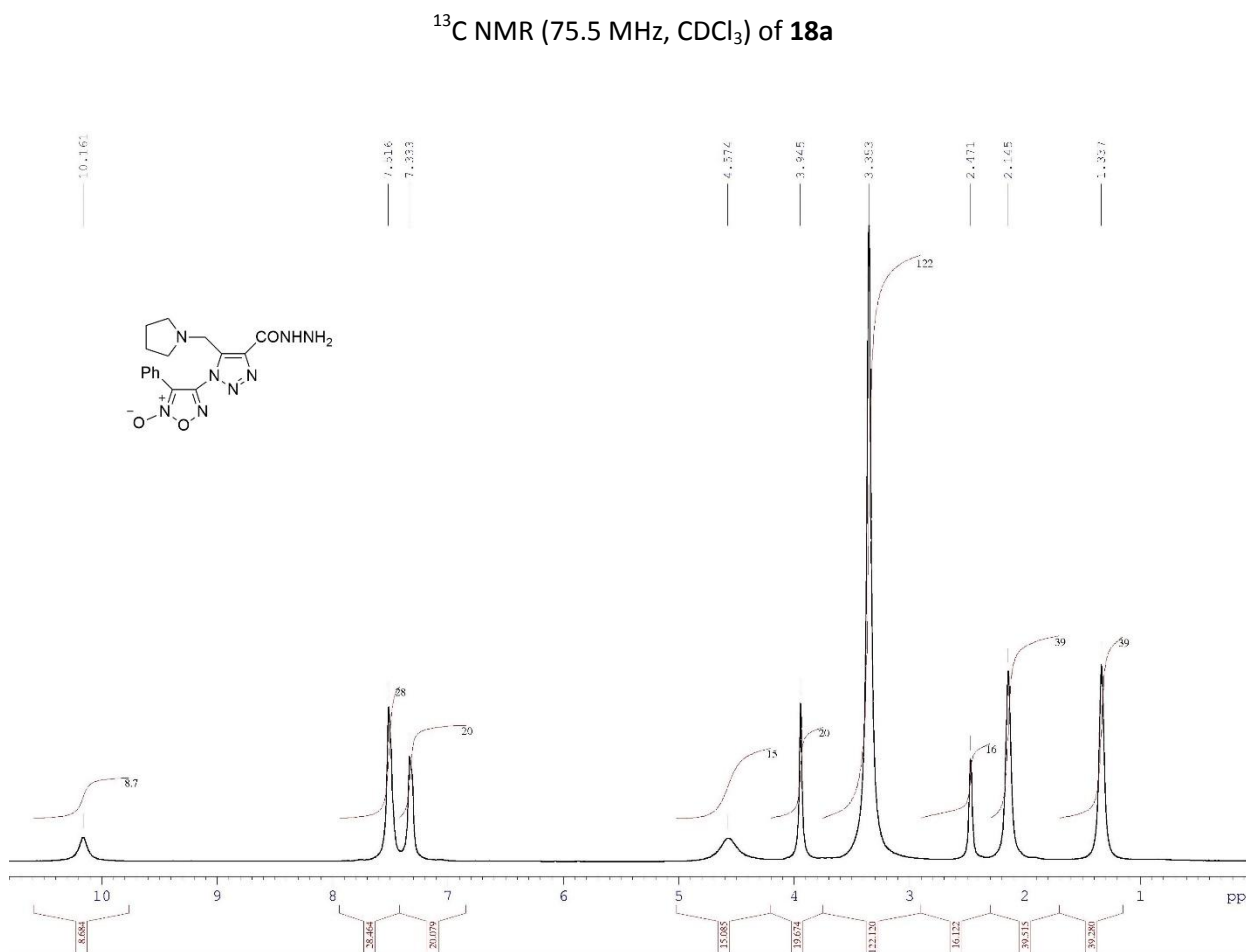
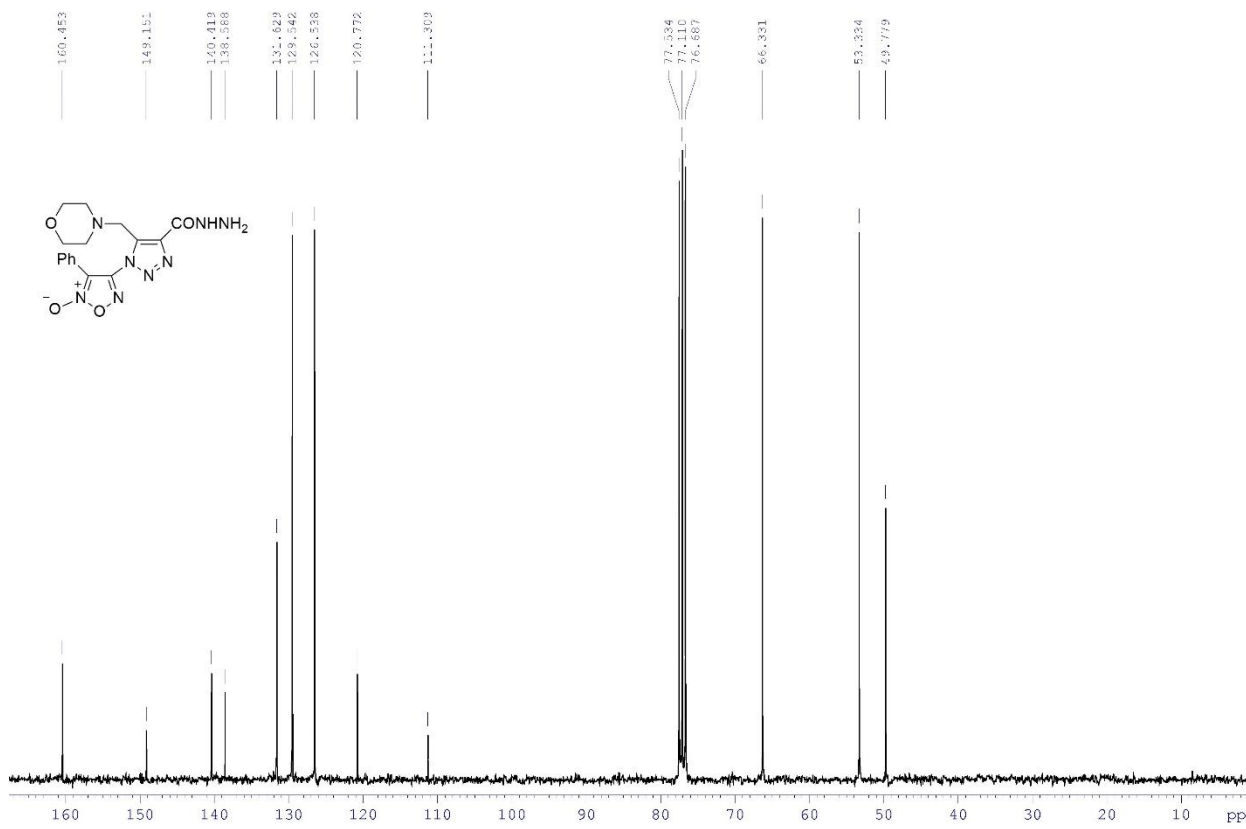
<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of 16b<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of 16c

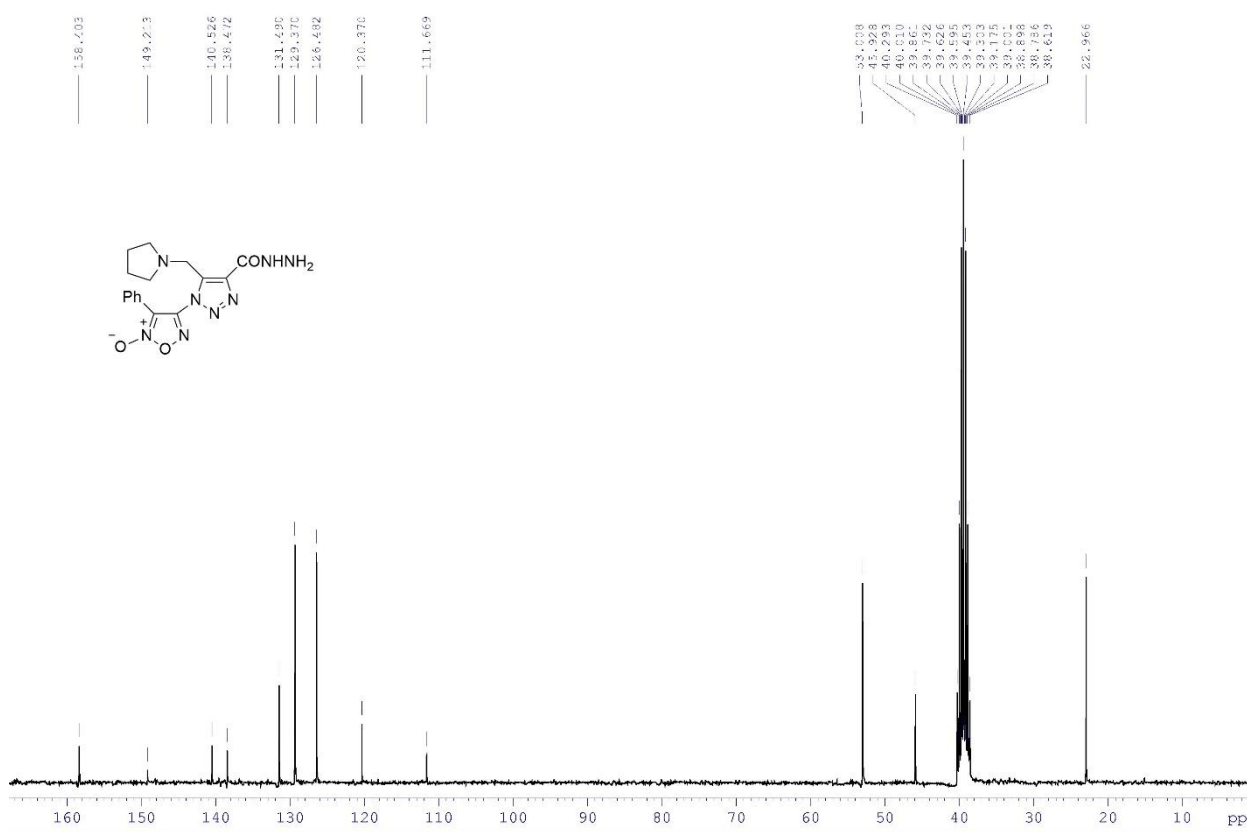
<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of 16c<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of 17a



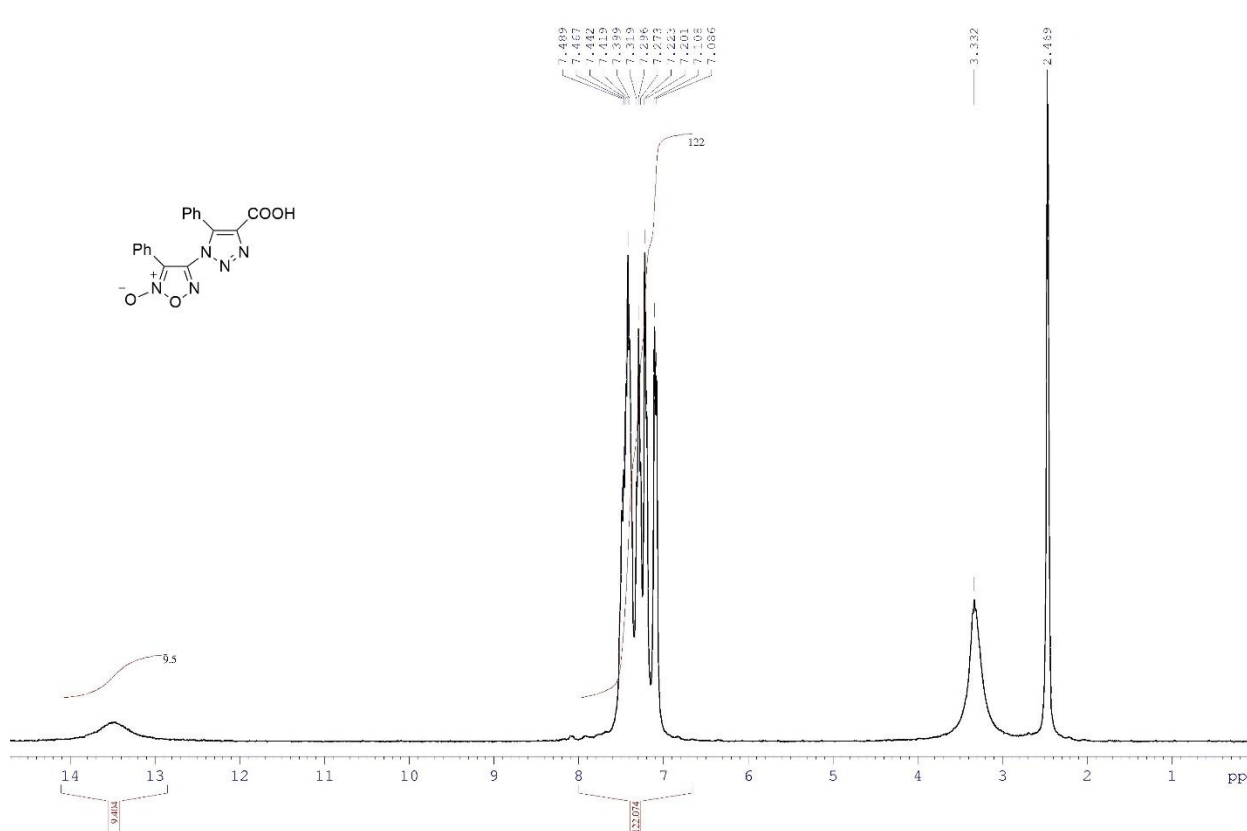
 $^{13}\text{C}$  NMR (75.5 MHz,  $\text{CDCl}_3$ ) of 17a $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) of 17c

<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of 17c<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of 18a

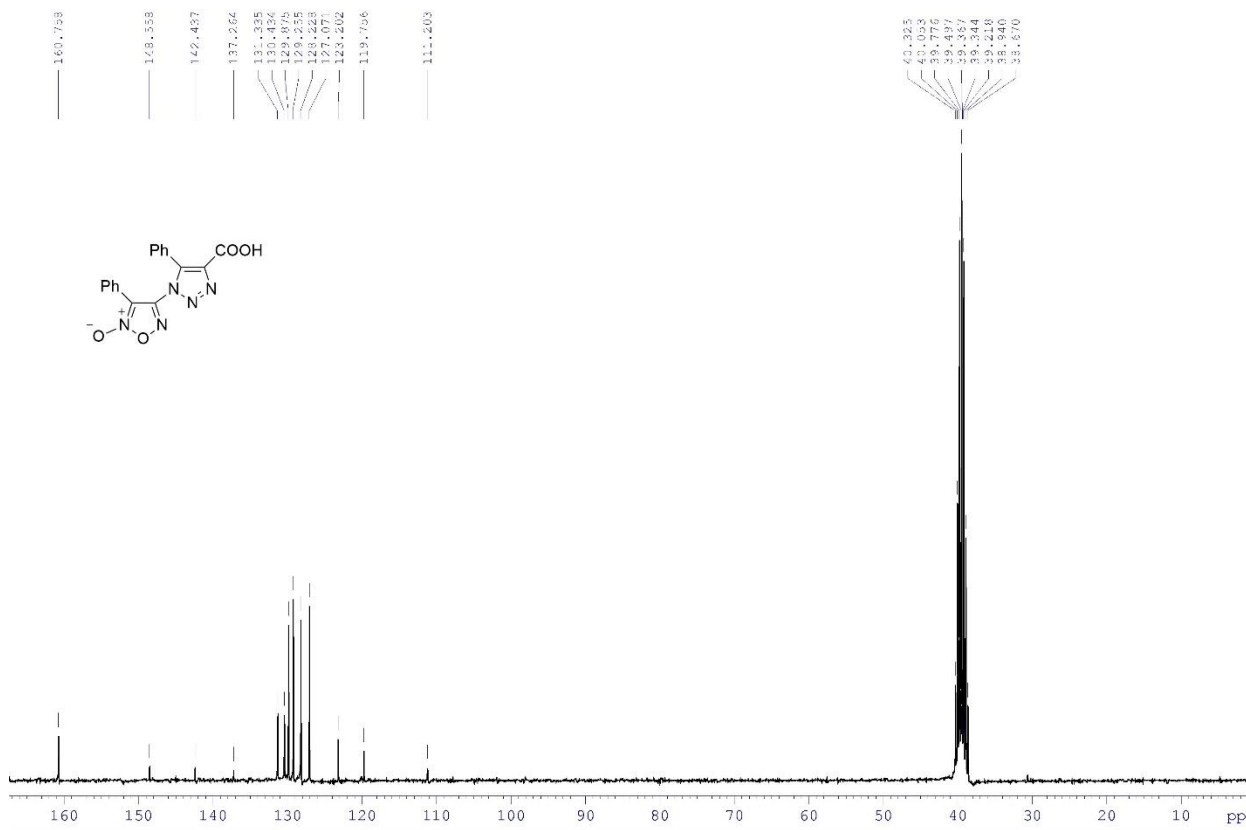
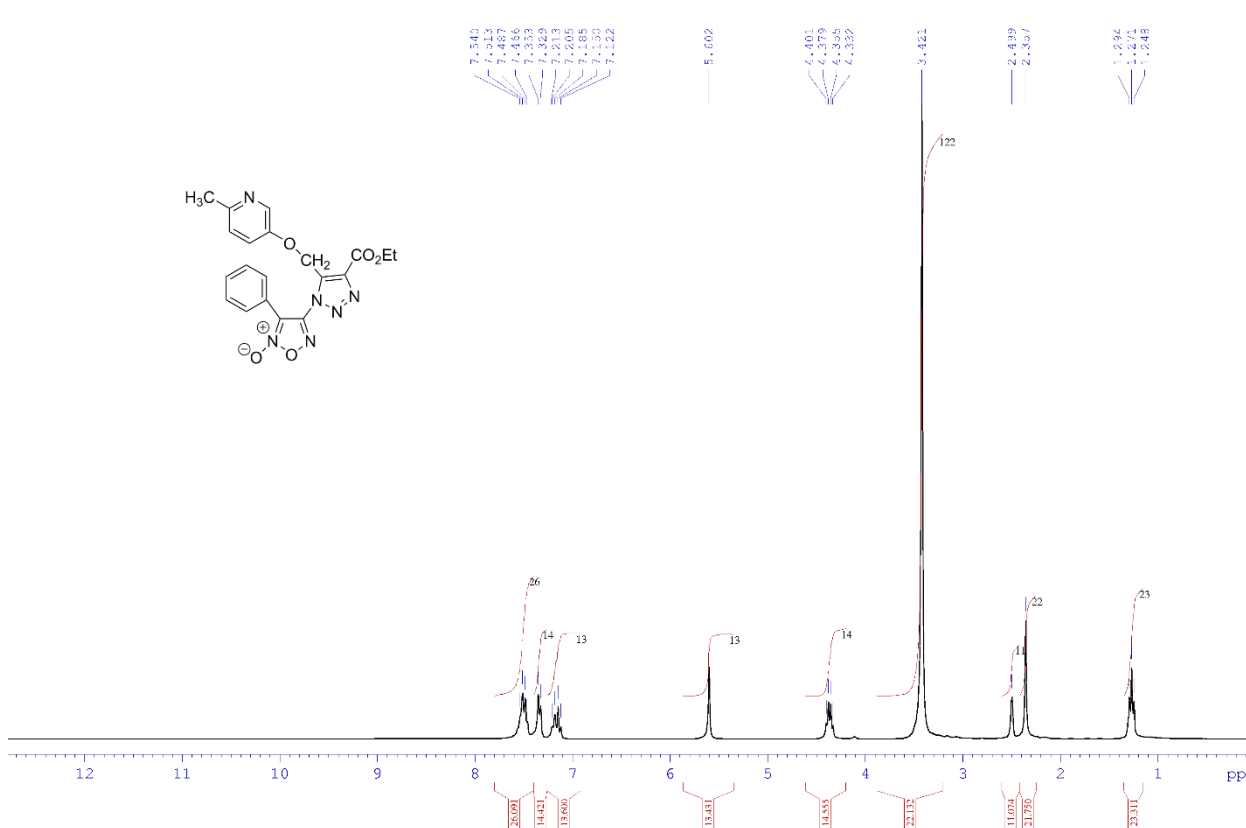


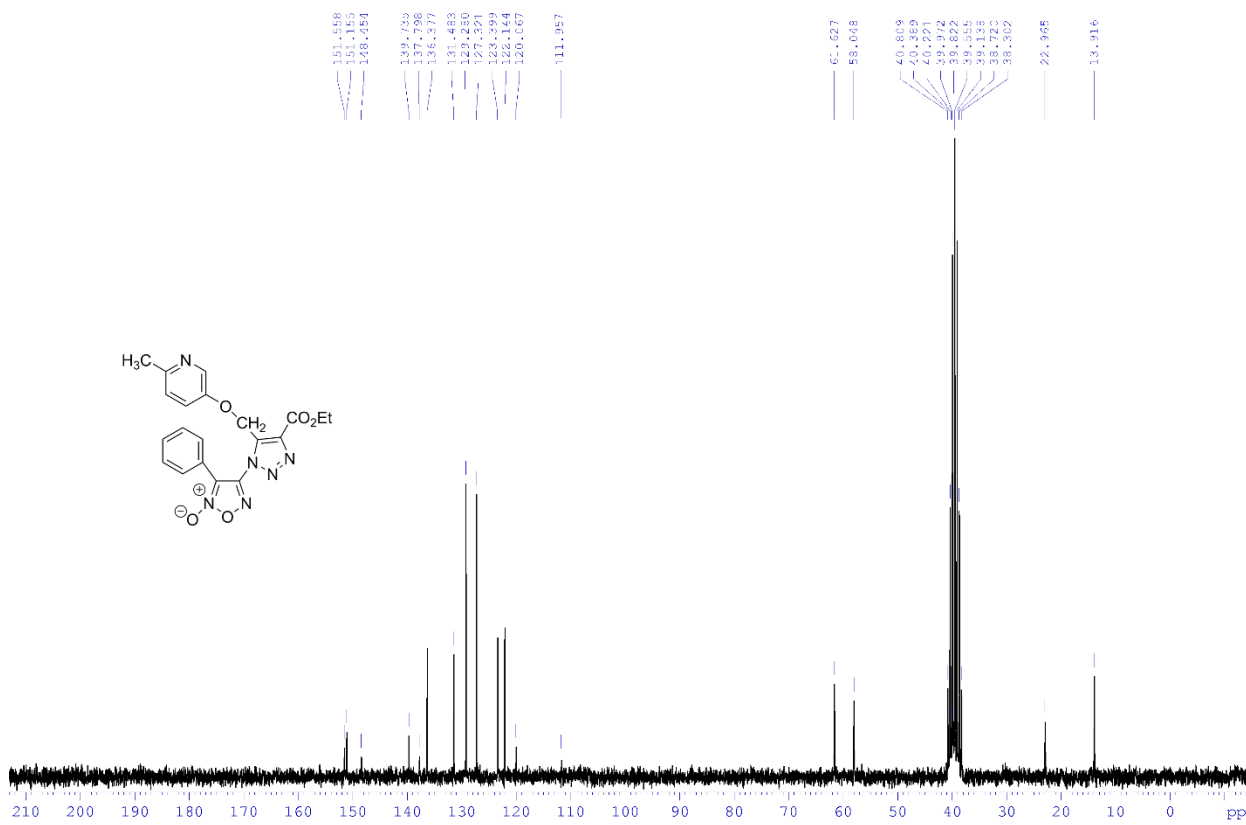
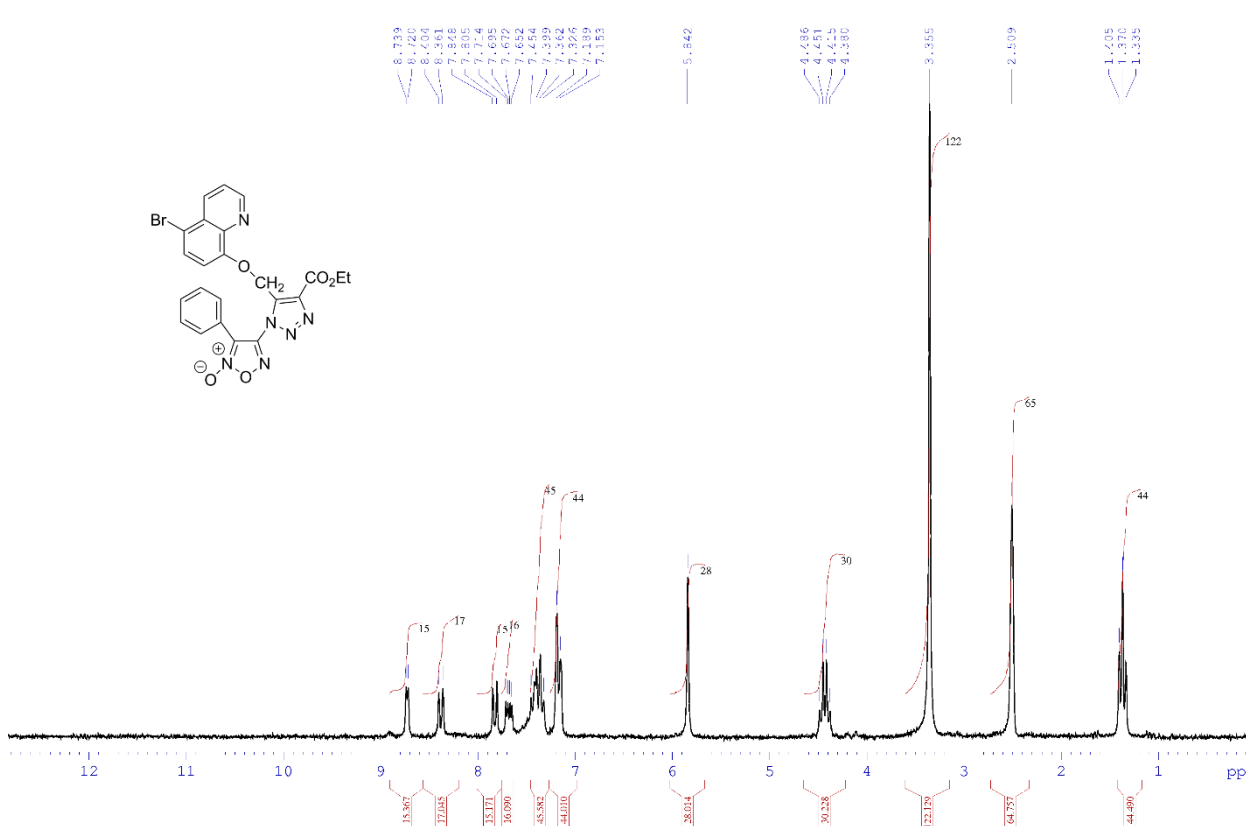


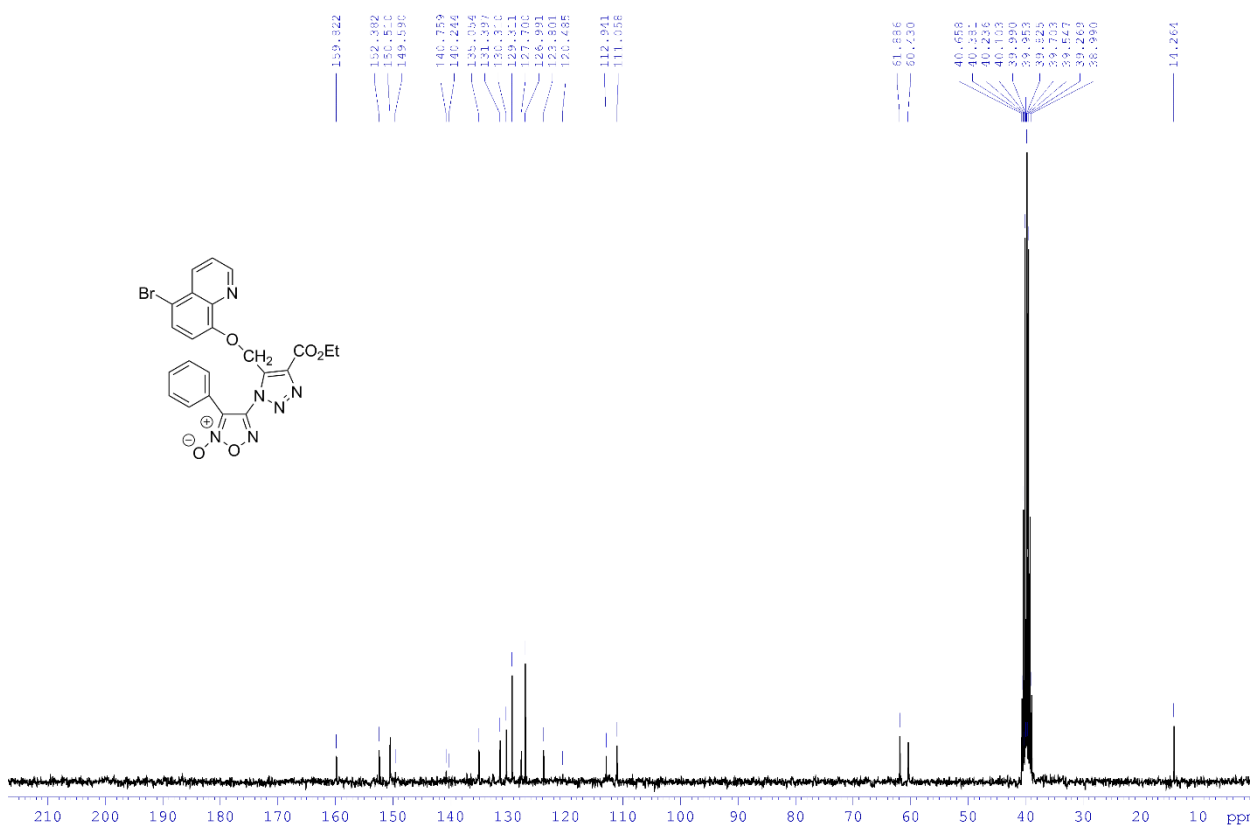
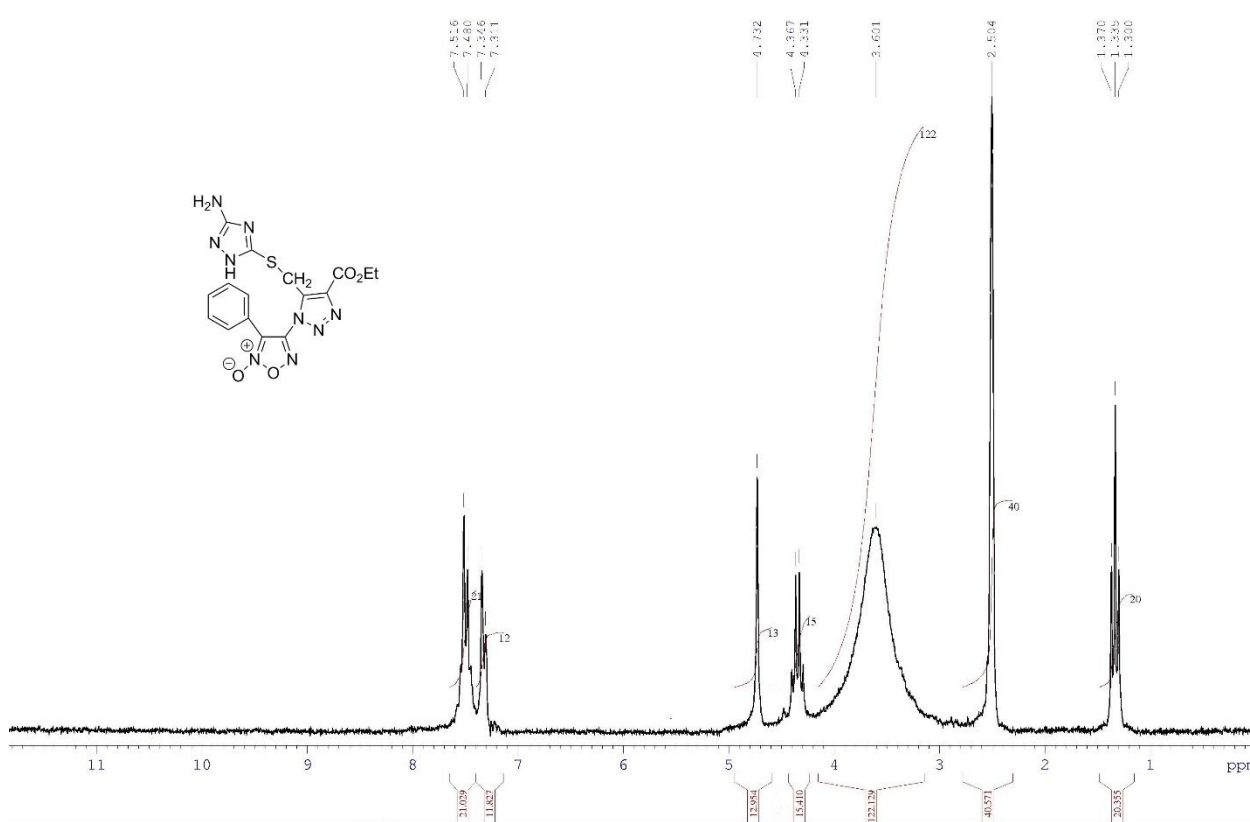
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of 18c

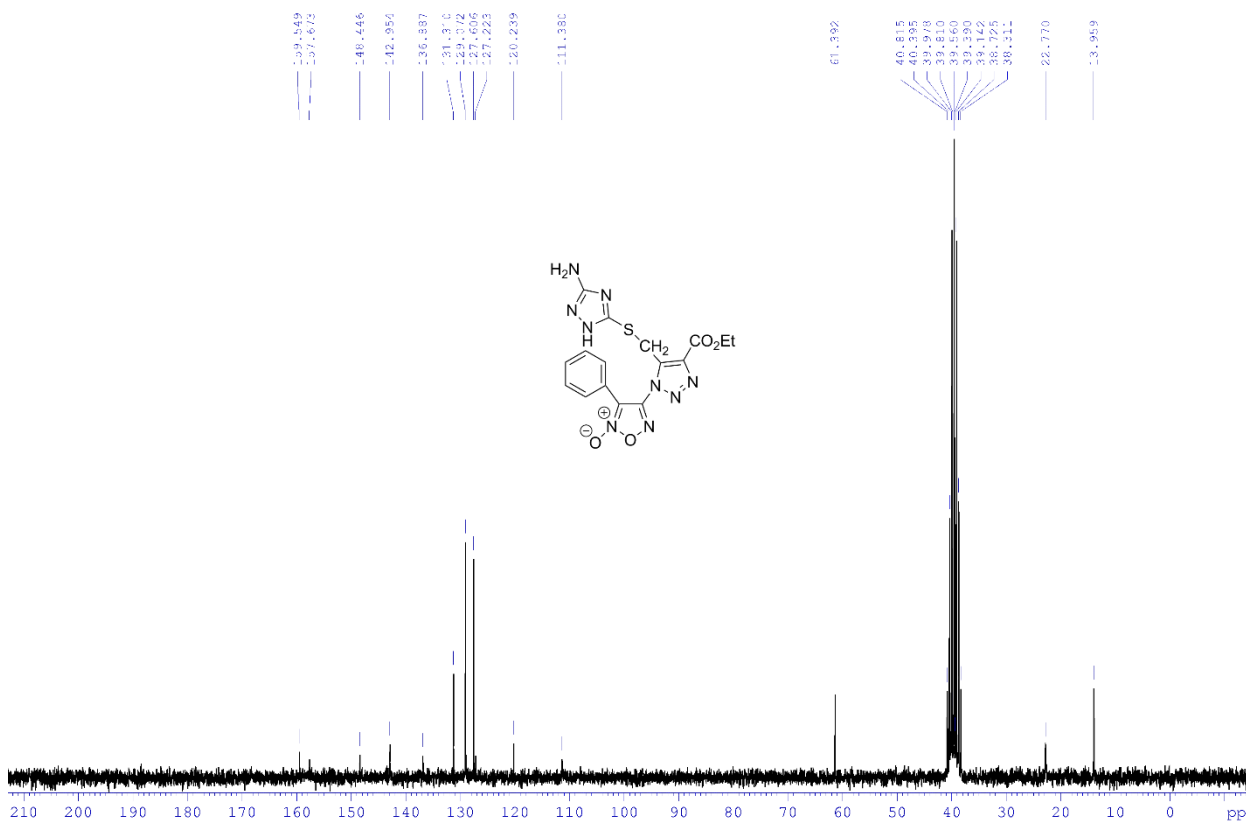
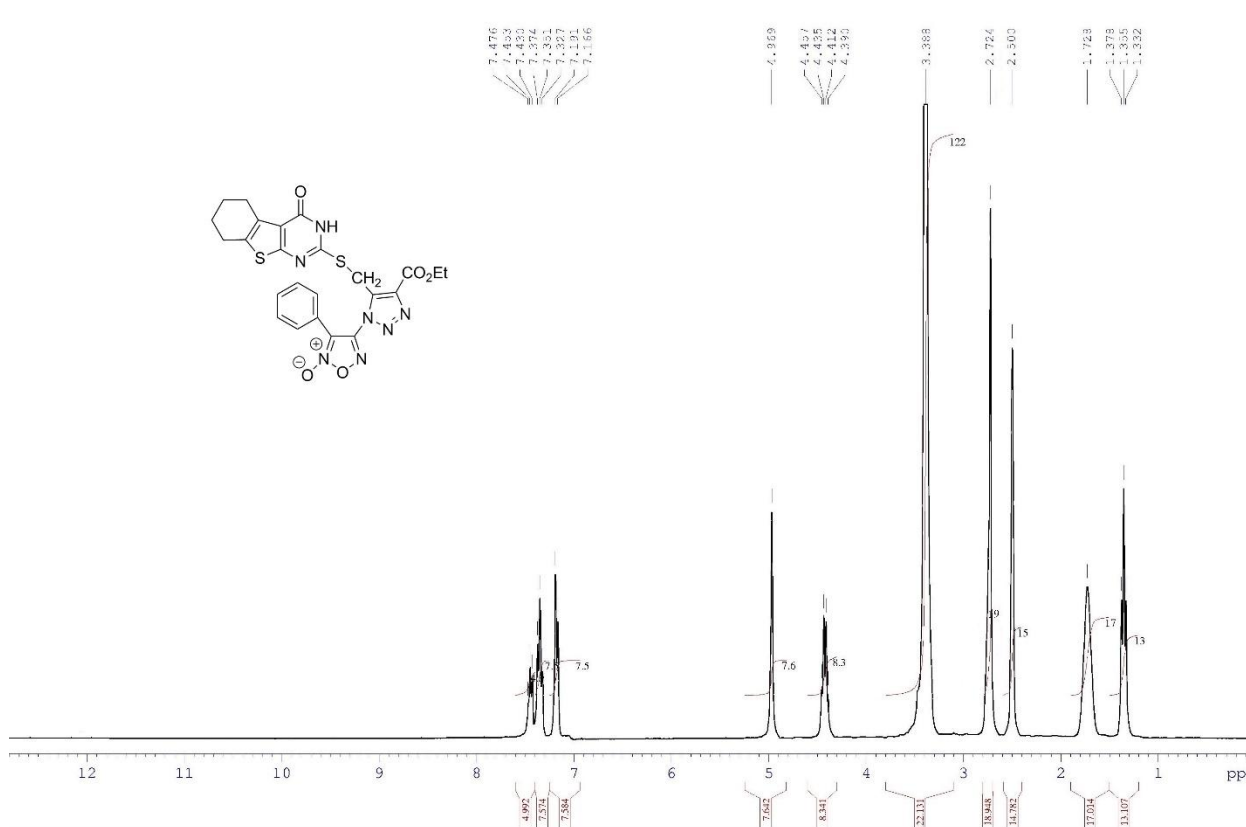


<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of 20

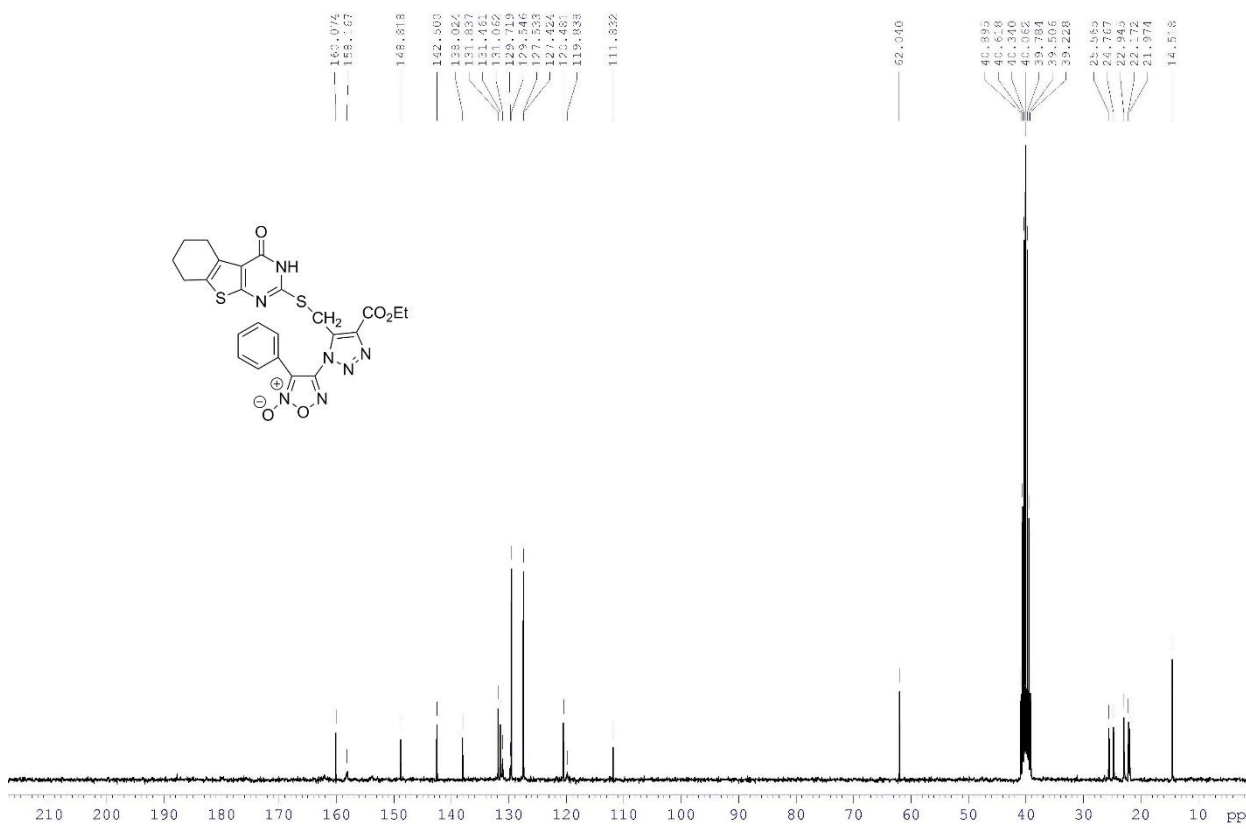
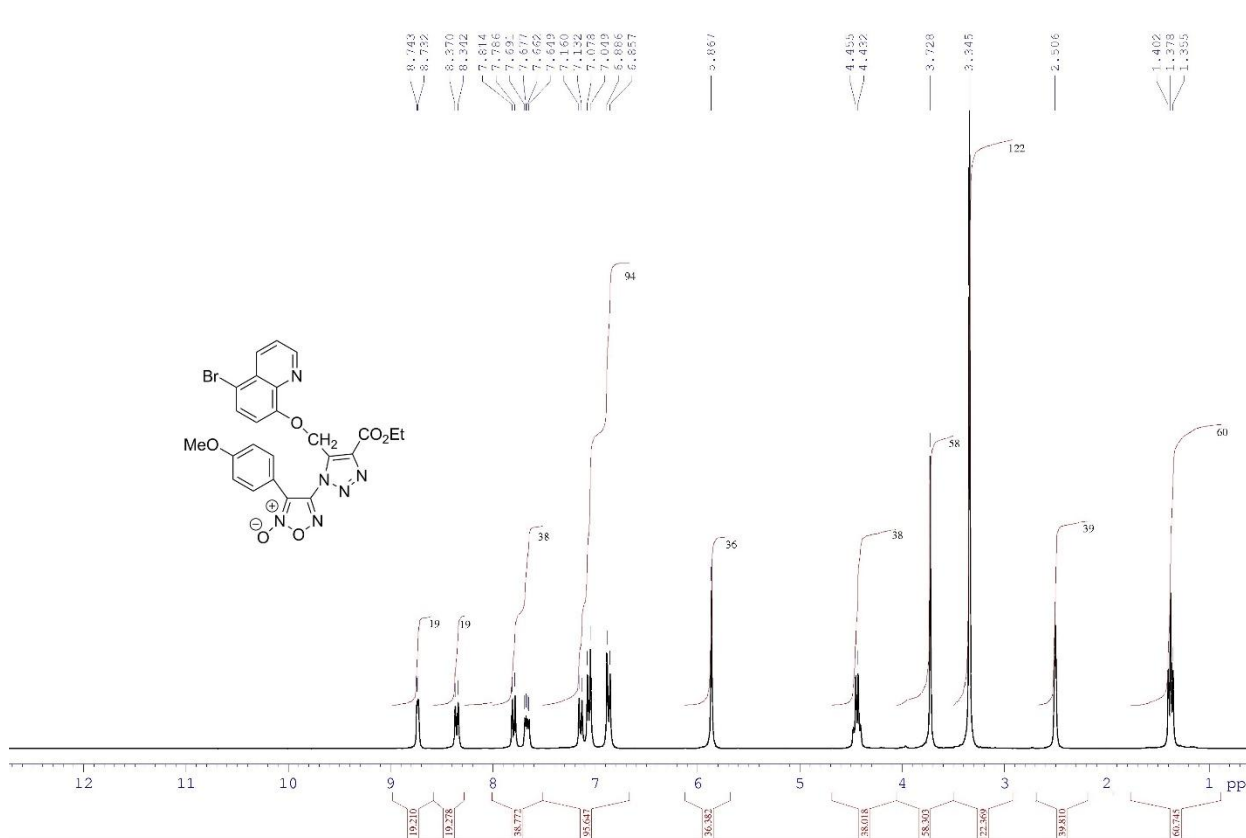
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of **20**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6a**

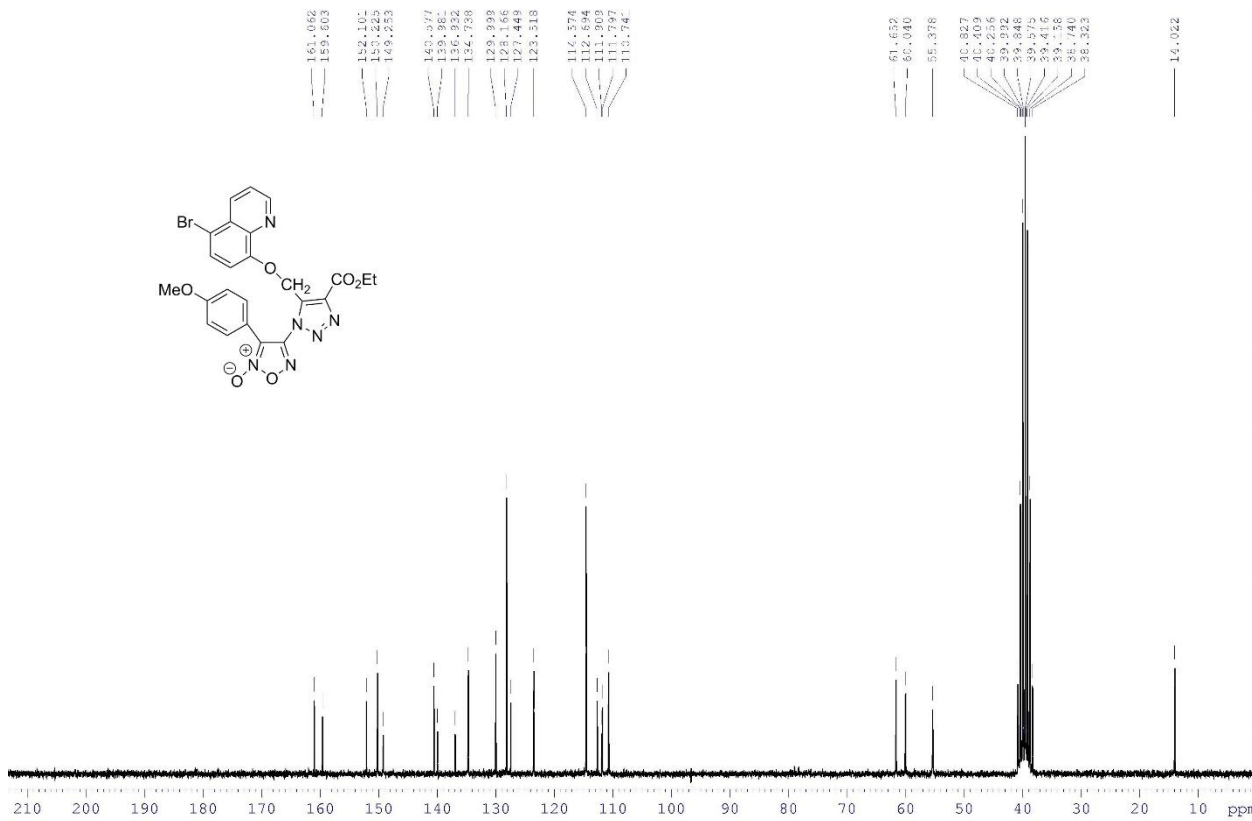
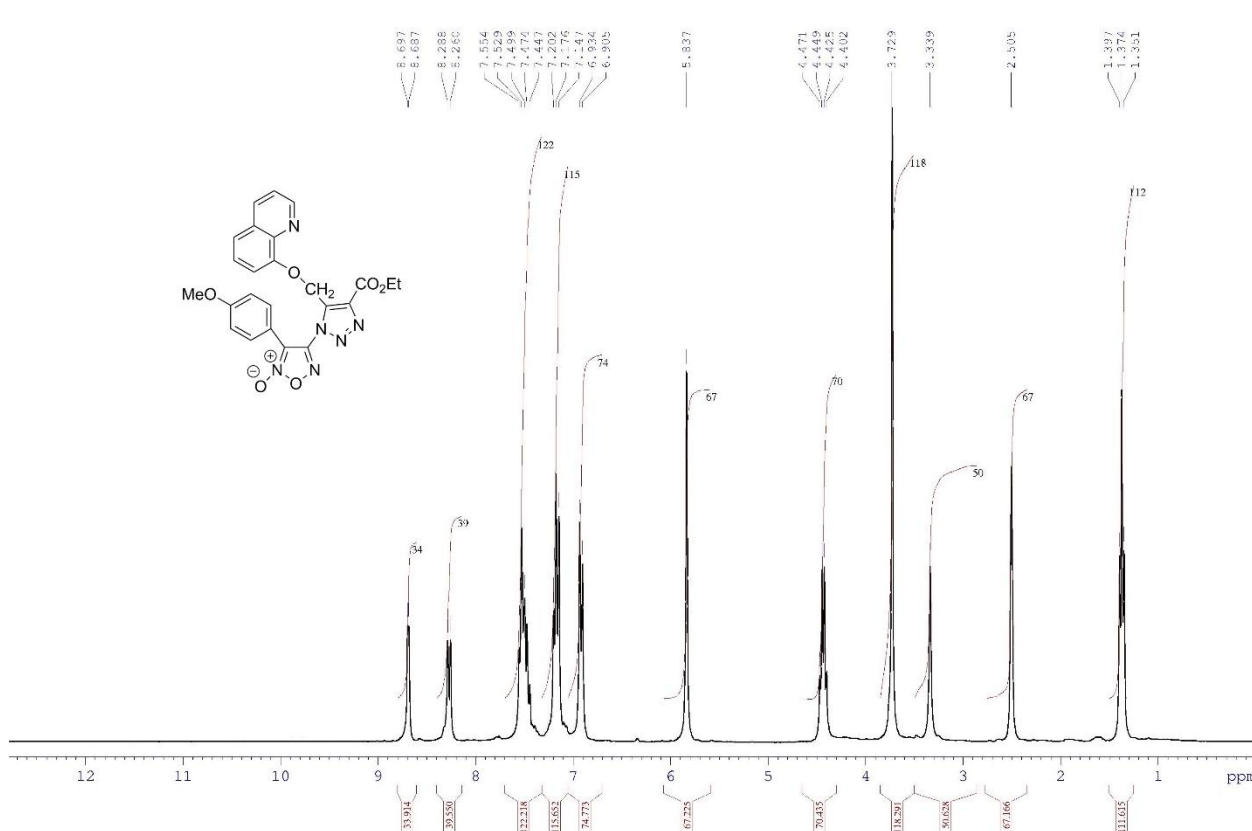
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of **6a**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6b**

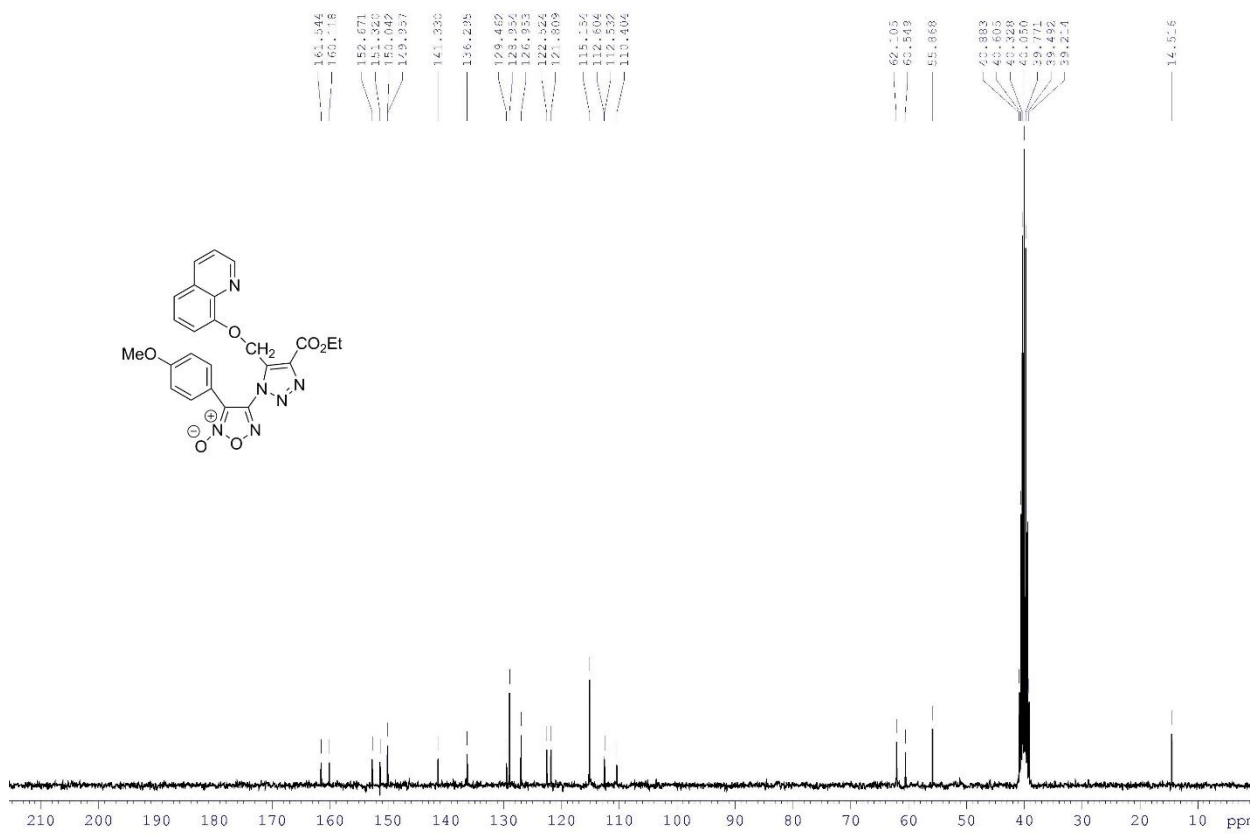
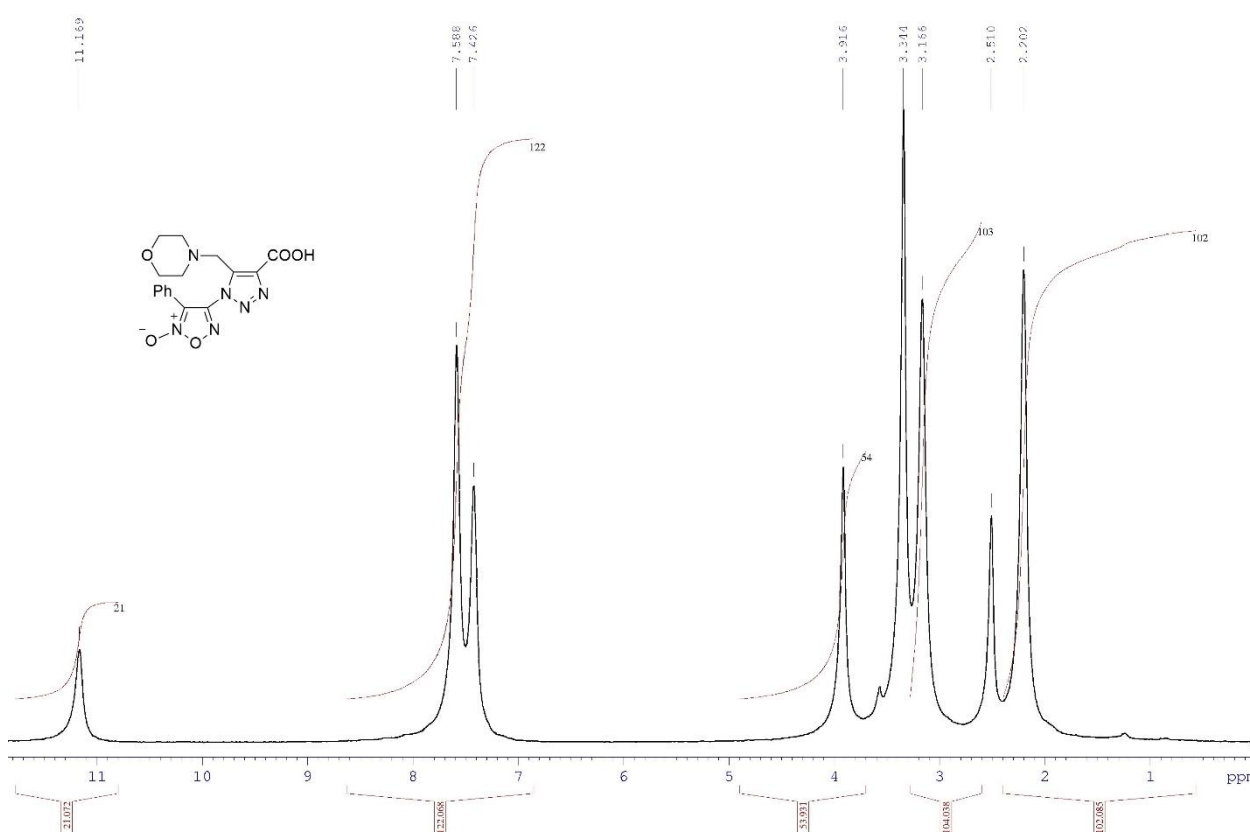
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of **6b**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6c**

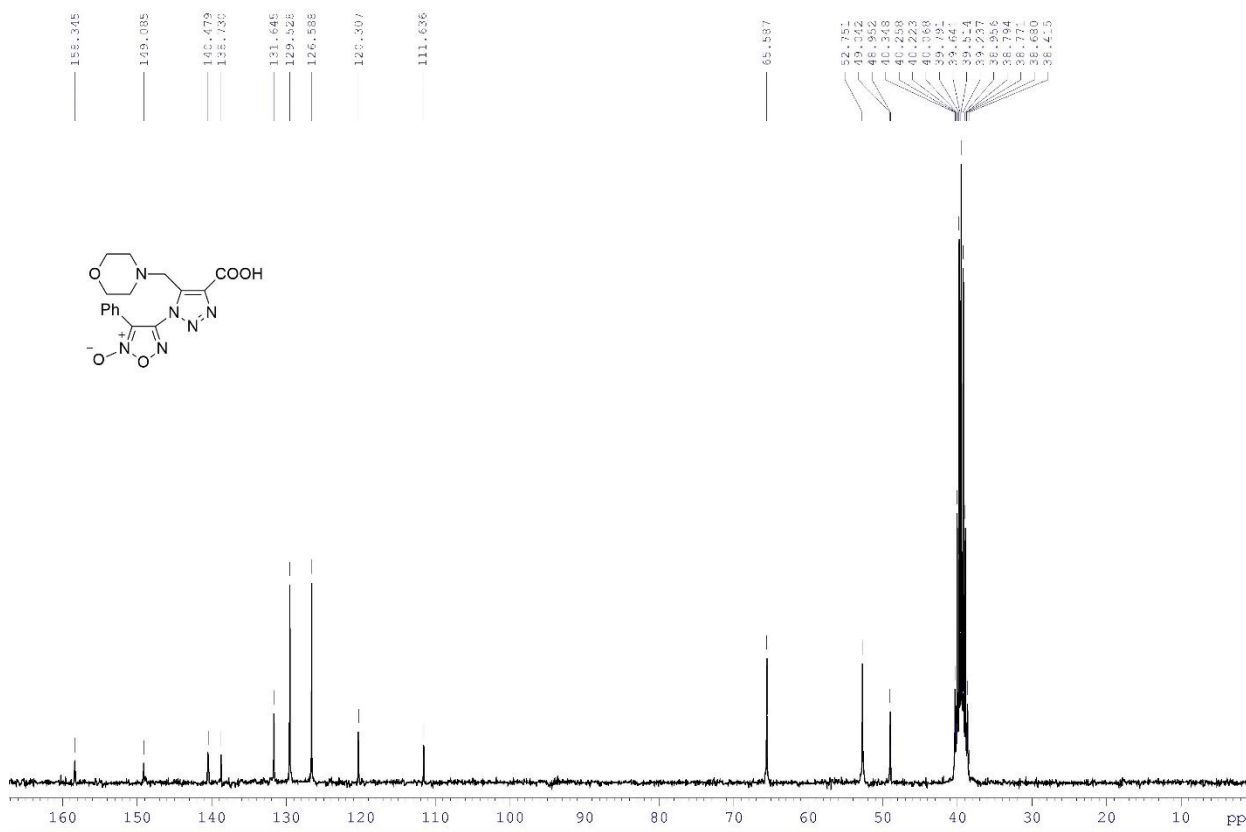
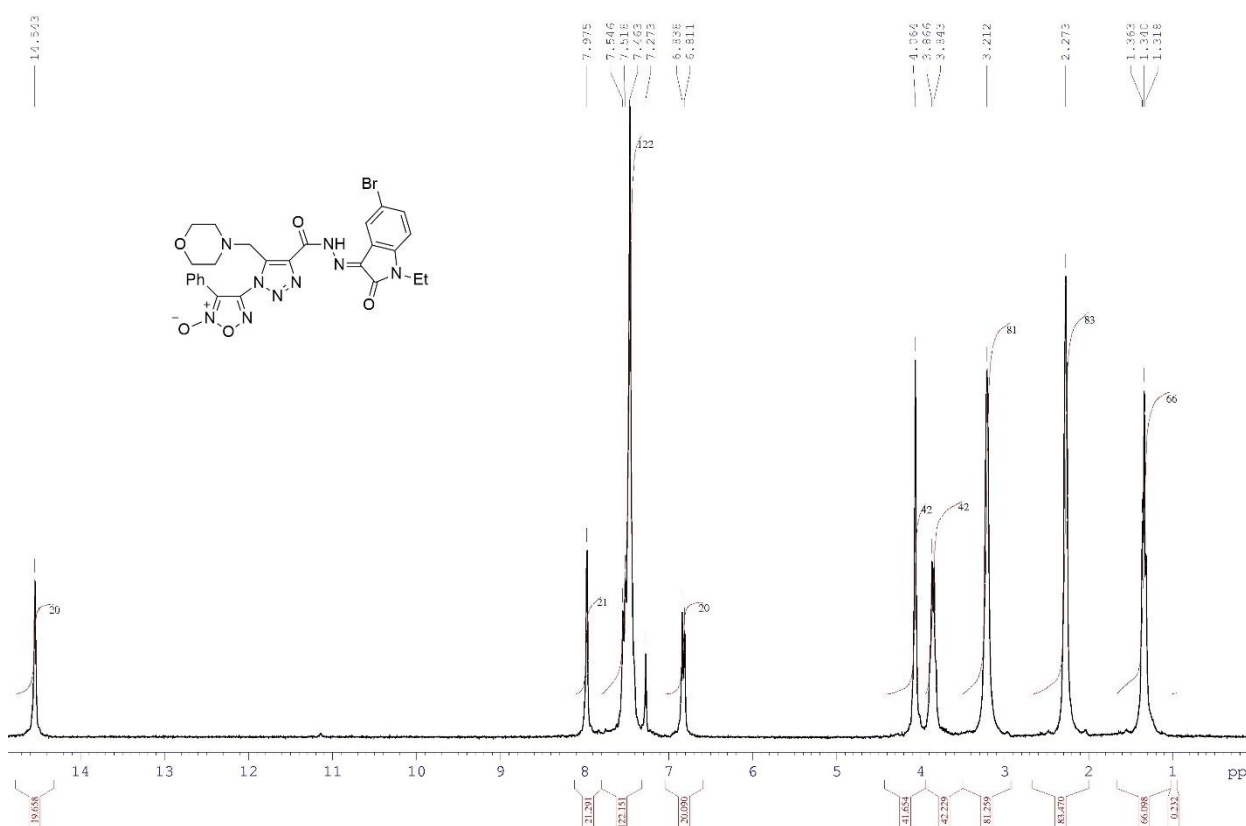
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of 6c<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of 6d

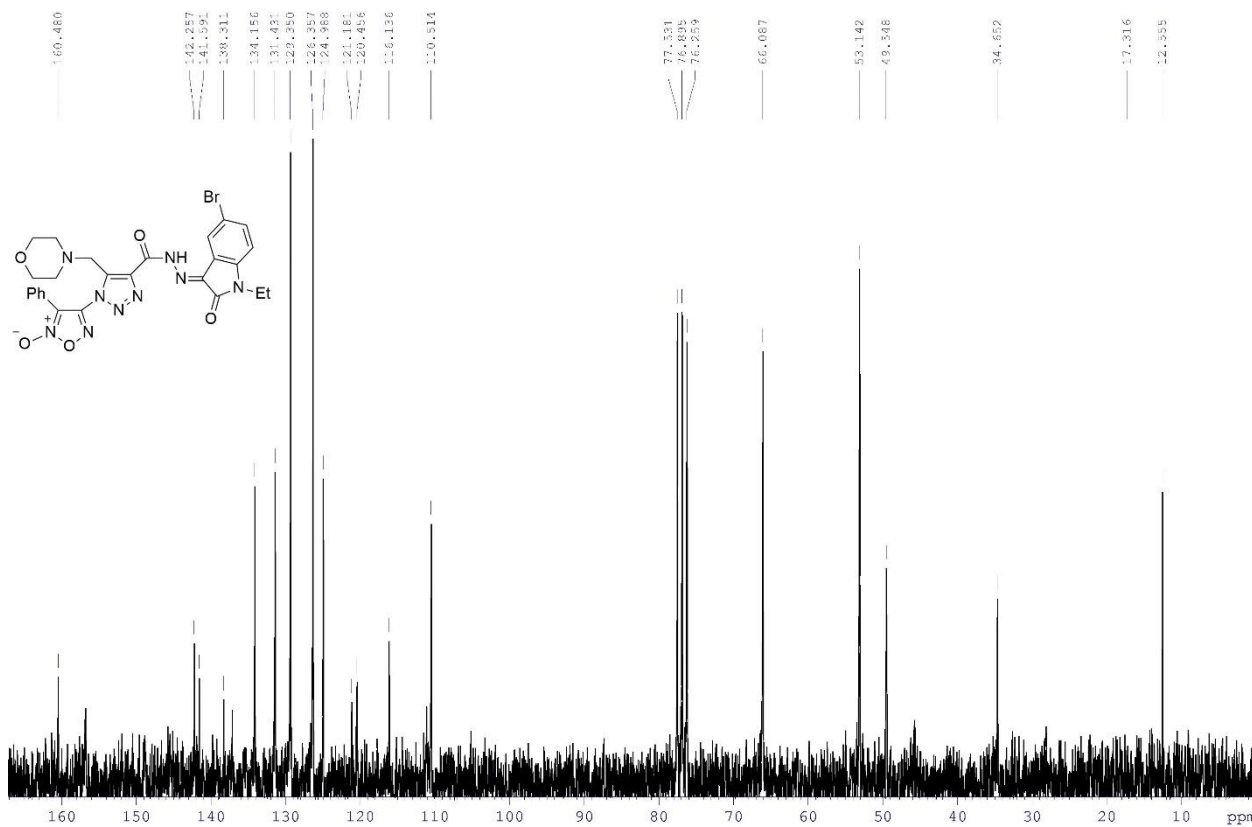
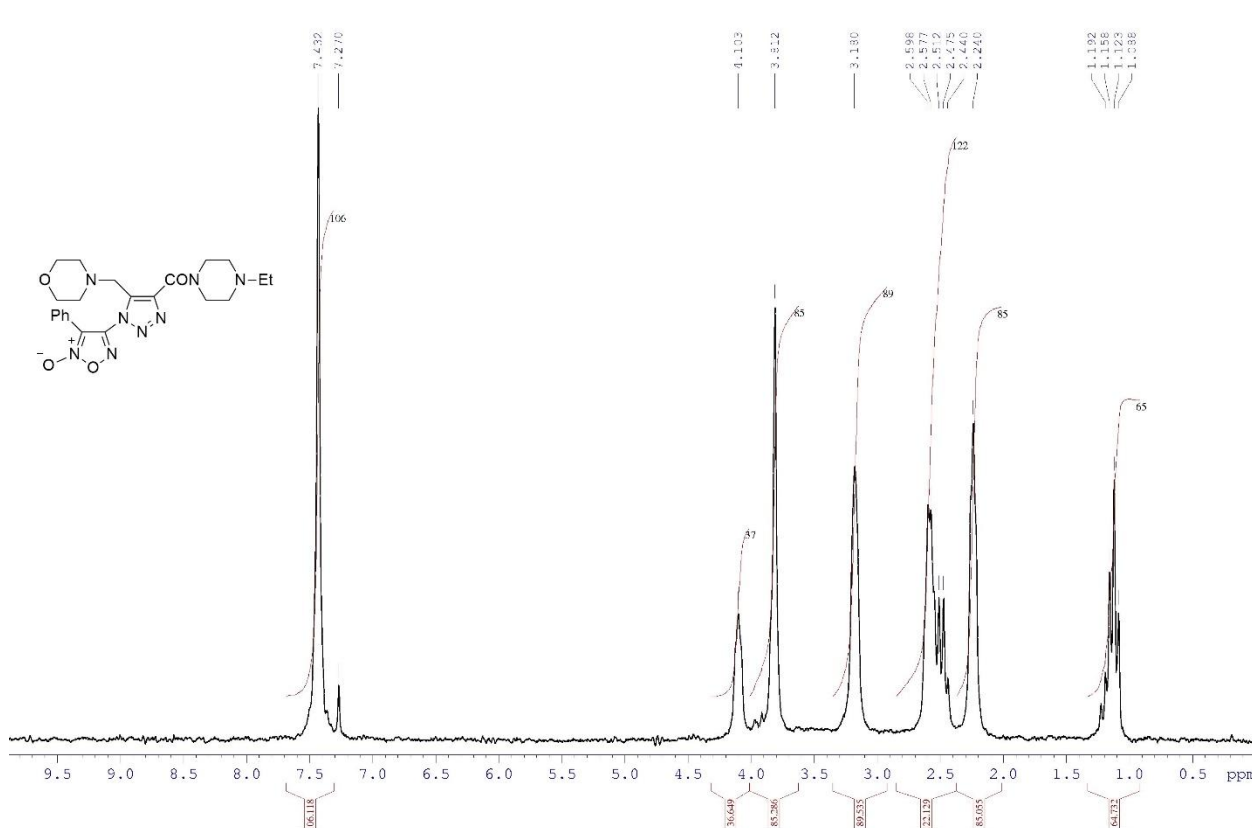


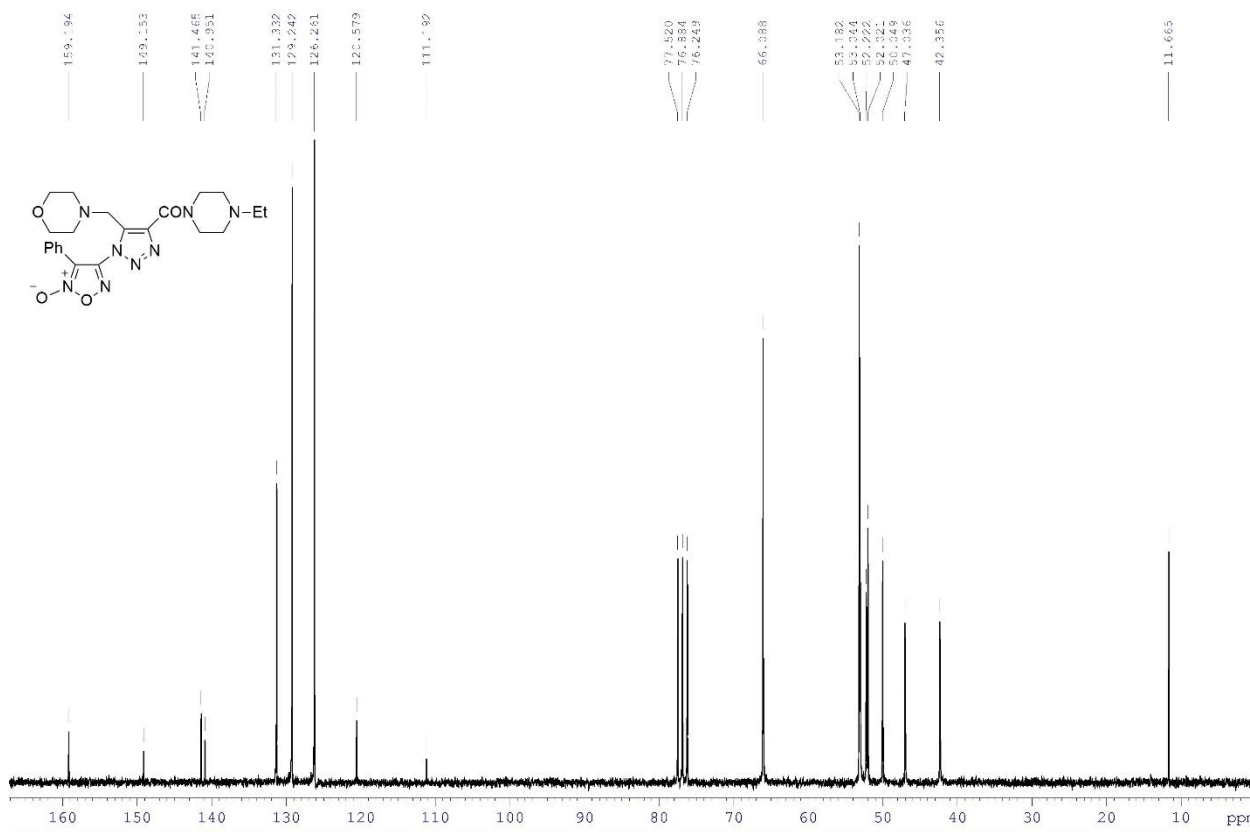
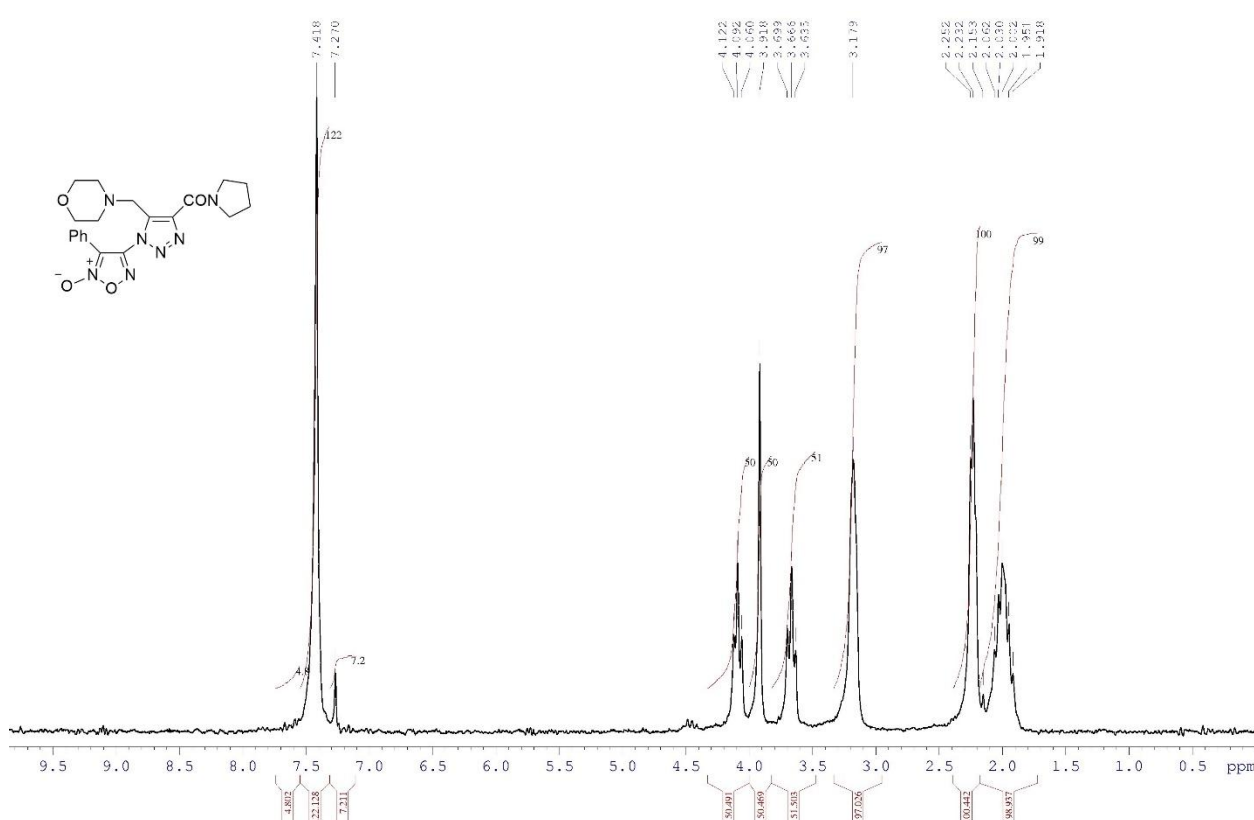
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of **6d**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6e**

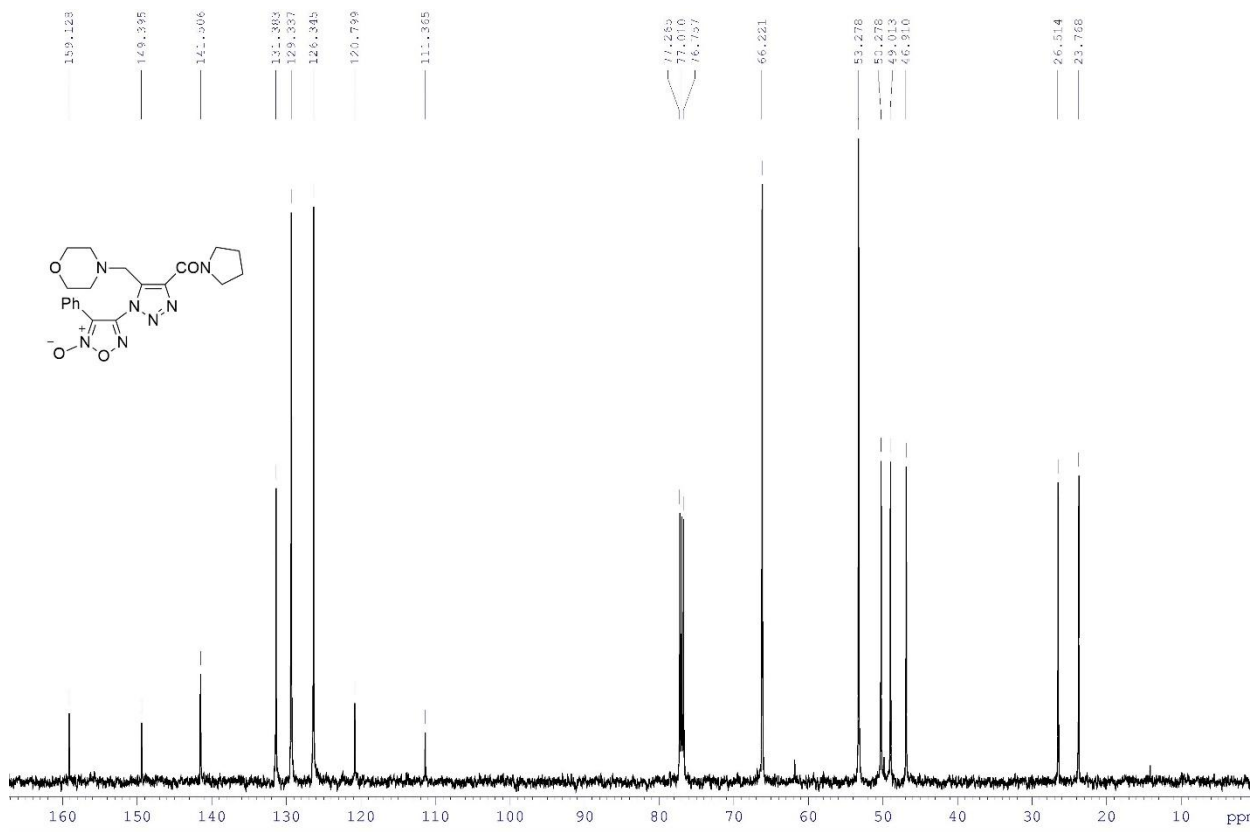
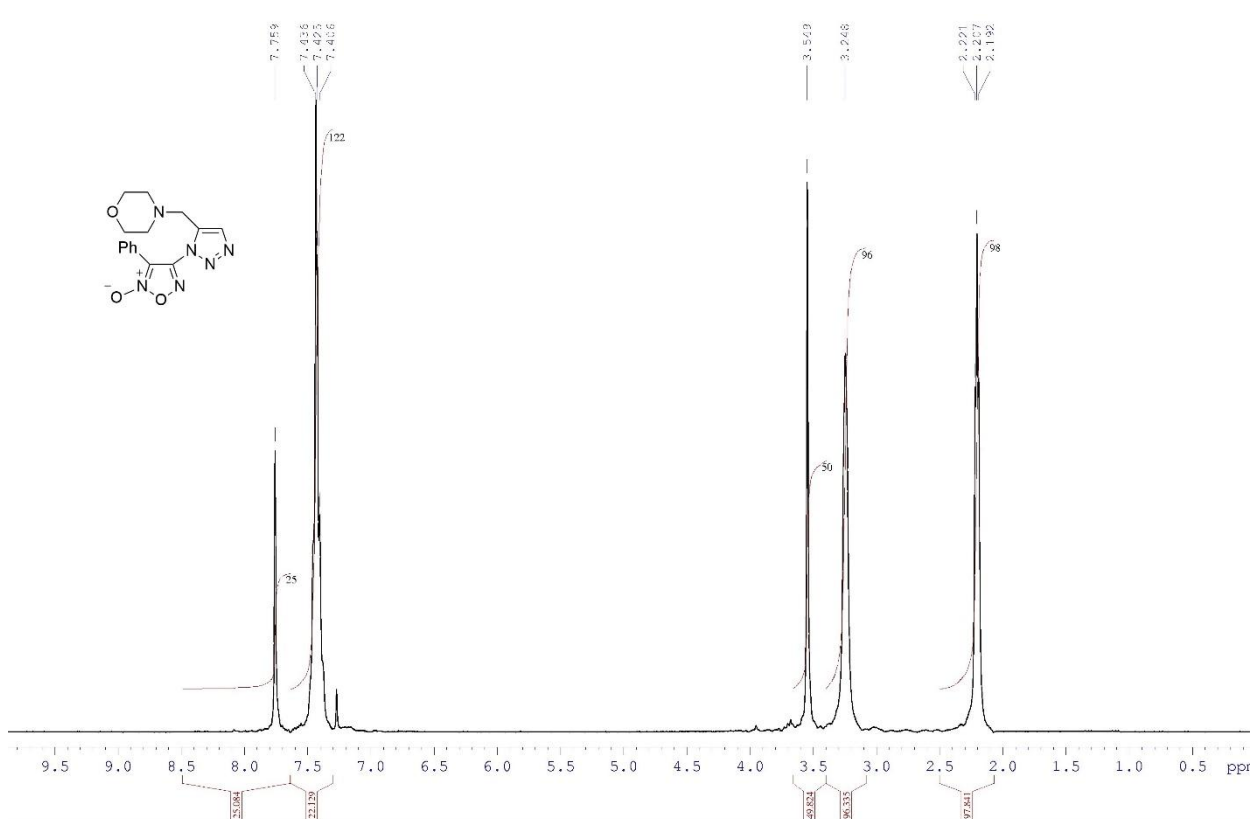
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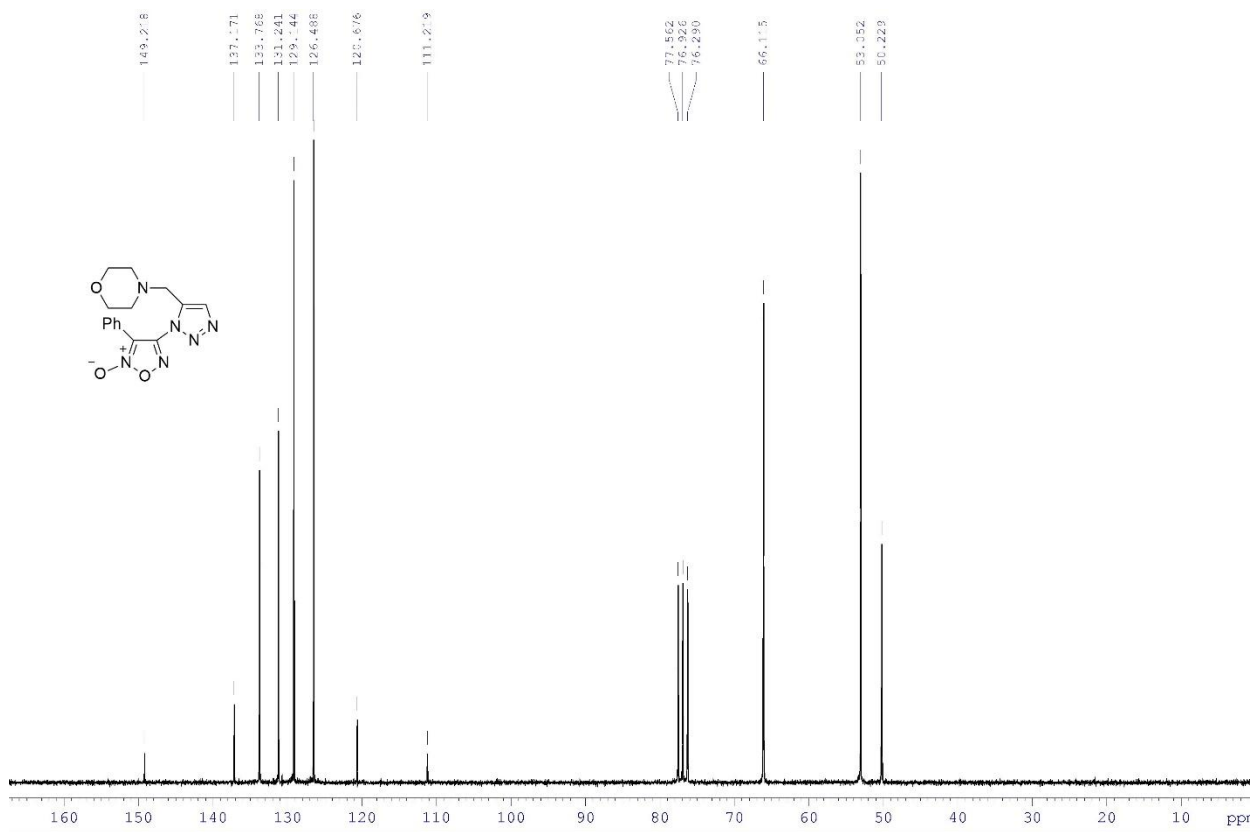
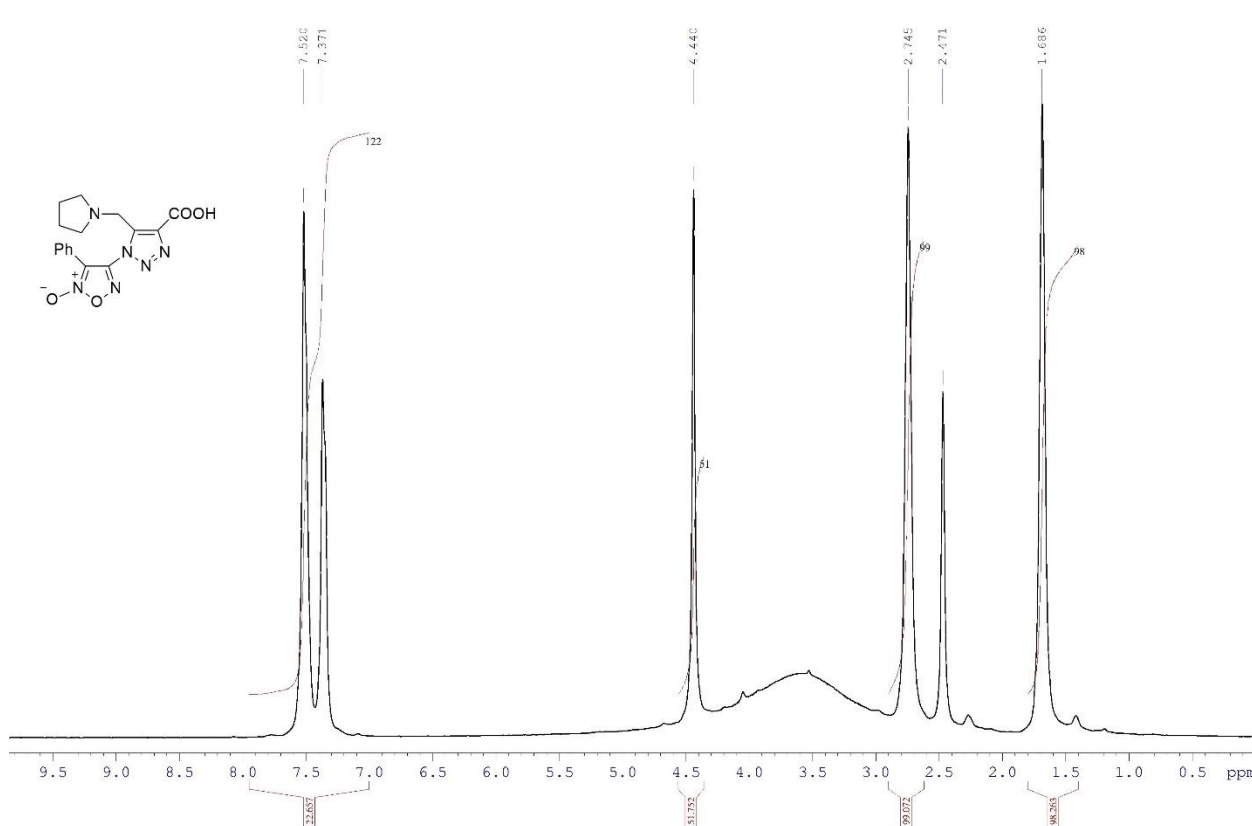
<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of **6f**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6g**

<sup>13</sup>C NMR (75.5 MHz, DMSO-d<sub>6</sub>) of 6g<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of 6h

<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of 6h<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of 6i

<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of **6i**<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of **6j**

<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of **6j**<sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) of **6k**

<sup>13</sup>C NMR (75.5 MHz, CDCl<sub>3</sub>) of **6k**<sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) of **6m**



