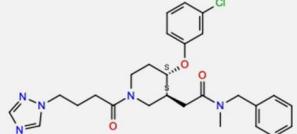
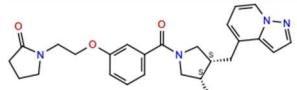
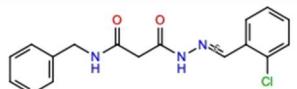
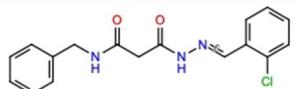
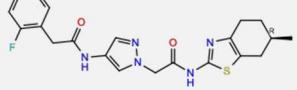
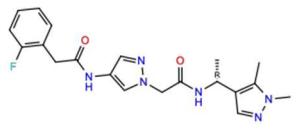
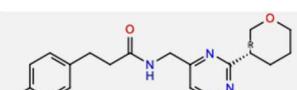


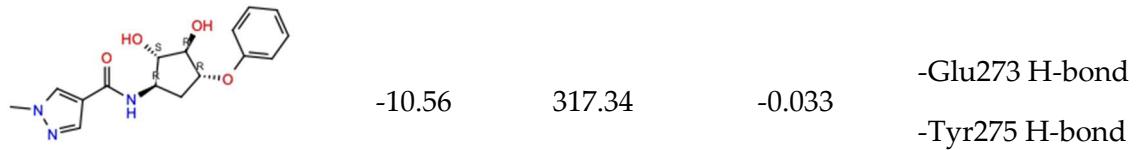
## **Supporting information**

### **Exploration of novel scaffolds targeting cytochrome *b* of *Pyricularia oryzae***

**Cecilia Pinna<sup>1†</sup>, Tommaso Laurenzi<sup>2‡</sup>, Fabio Forlani<sup>1</sup>, Luca Palazzolo<sup>2</sup>, Claire Beatrice Nolan<sup>1</sup>, Michael S. Christodoulou<sup>1</sup>, Paolo Cortesi<sup>1</sup>, Andrea Pinto<sup>1</sup>, Ivano Eberini<sup>2,3\*</sup>, Andrea Kunova<sup>1\*</sup>, and Sabrina Dallavalle<sup>1</sup>**

**Supplementary Table S1.** Compounds selected after high-throughput virtual screening (HTVS) and interaction fingerprint clustering (SIFT)

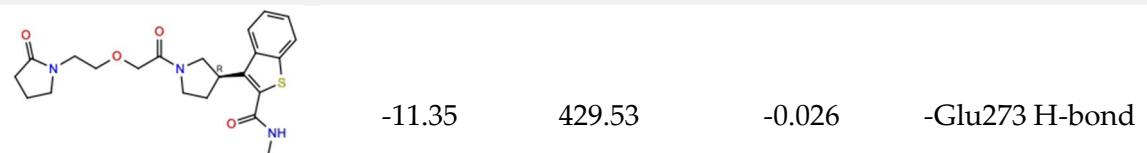
Title	XPGscore [Kcal/mol]	mw	XPGscore/m w	Interactions
	-12.91	510.03	-0.025	-Glu273 H-bond
<b>BioDesign:122364</b>				
	-11.73	448.52	-0.026	-Glu273 H-bond -Met296 H-bond
<b>BioDesign:88775</b>				
	-11.10	372.22	-0.029	-Glu273 H-bond -Tyr280 π-π stacking
<b>Agrochem:9387</b>				
	-10.08	329.79	-0.031	-Glu273 H-bond -Tyr280 π-π stacking
<b>Agrochem:6989_mod</b>				
	-11.44	427.5	-0.027	-Glu273 H-bond -Tyr275 H-bond -Tyr280 π-π stacking
<b>Biodesign:7778</b>				
	-10.90	398.44	-0.027	-Glu273 H-bond -Met125 H-bond -Tyr279 π-π stacking -Tyr280 π-π stacking
<b>Biodesign:7763</b>				
	-10.80	359.85	-0.030	-Tyr275 H-bond
<b>Biodesign:61594</b>				



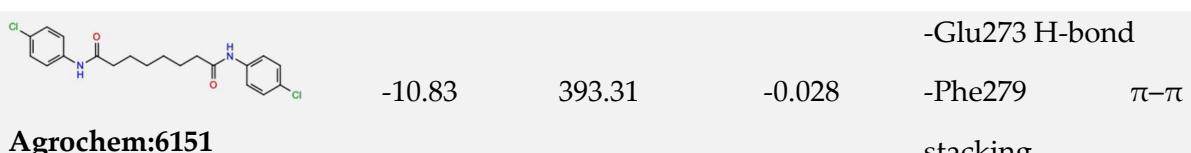
**Biodesign:101550**



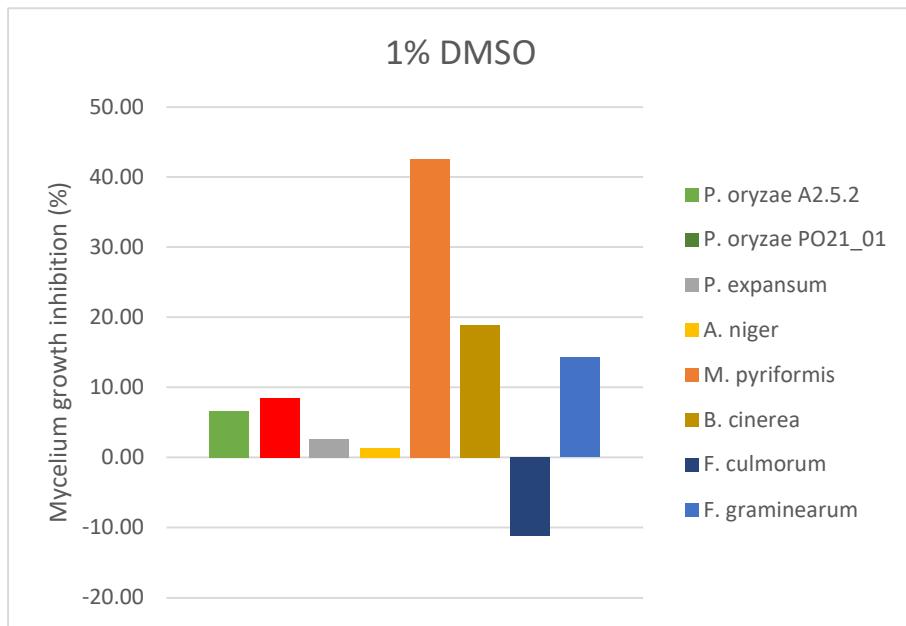
**Biodesign:1678**



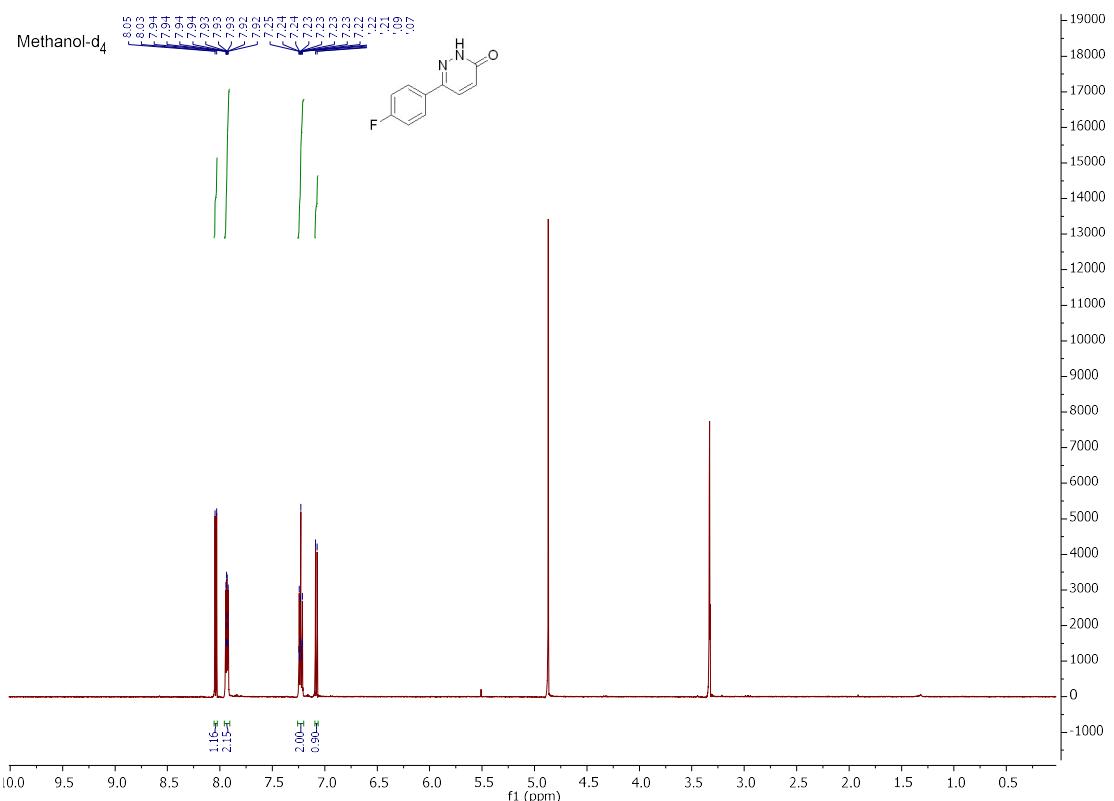
**Biodesign:14185**



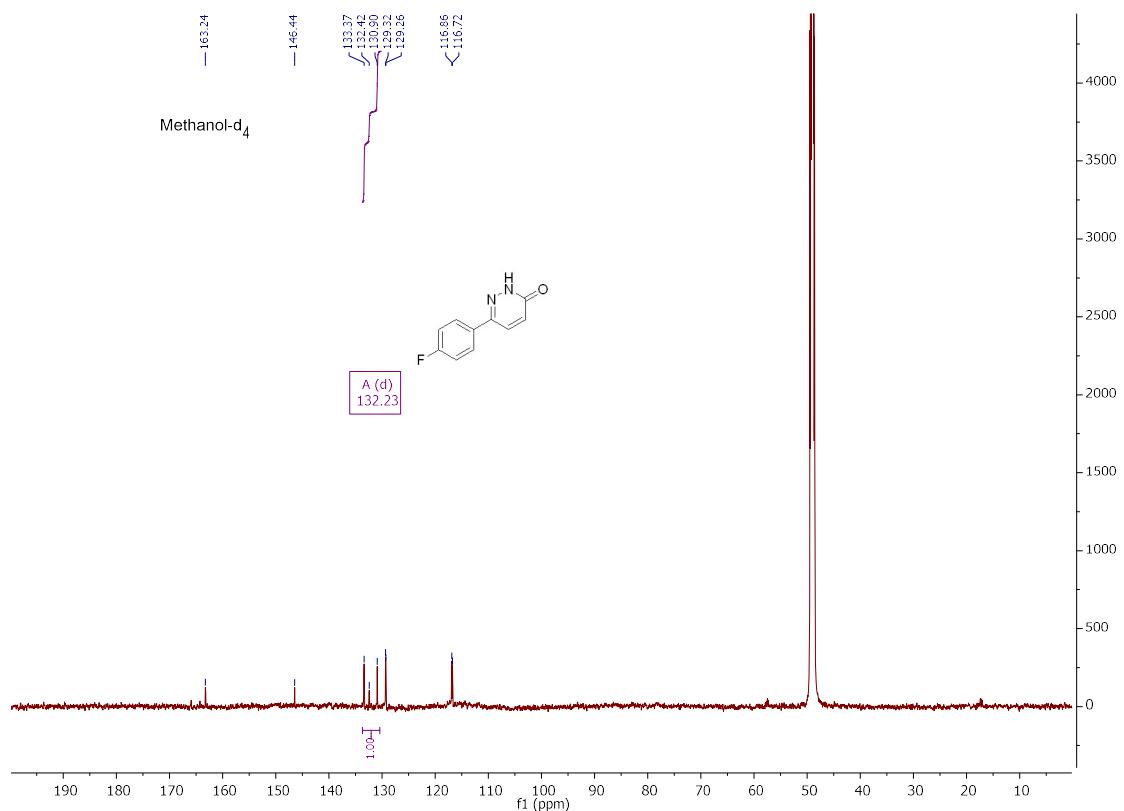
**Agrochem:6151**



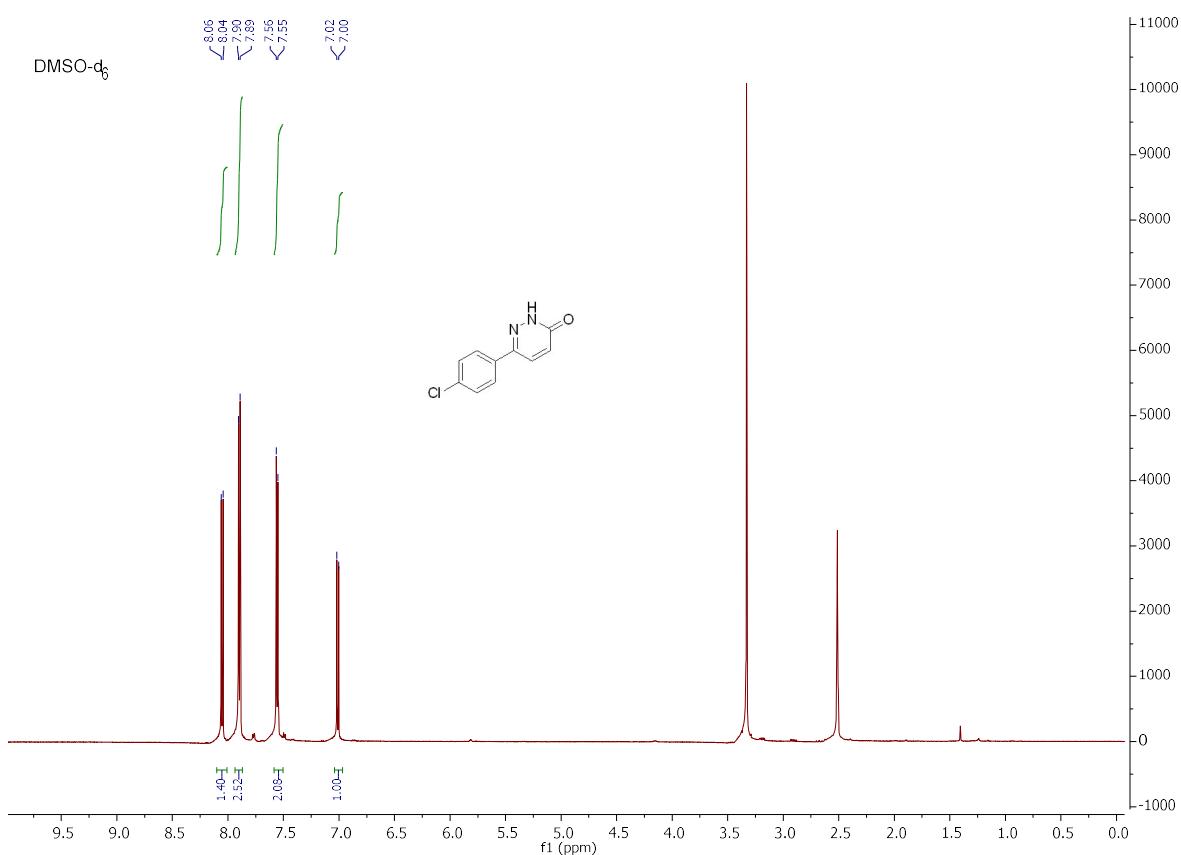
**Supplementary Figure S1.** Inhibition of mycelium growth of diverse fungi by 1% DMSO.



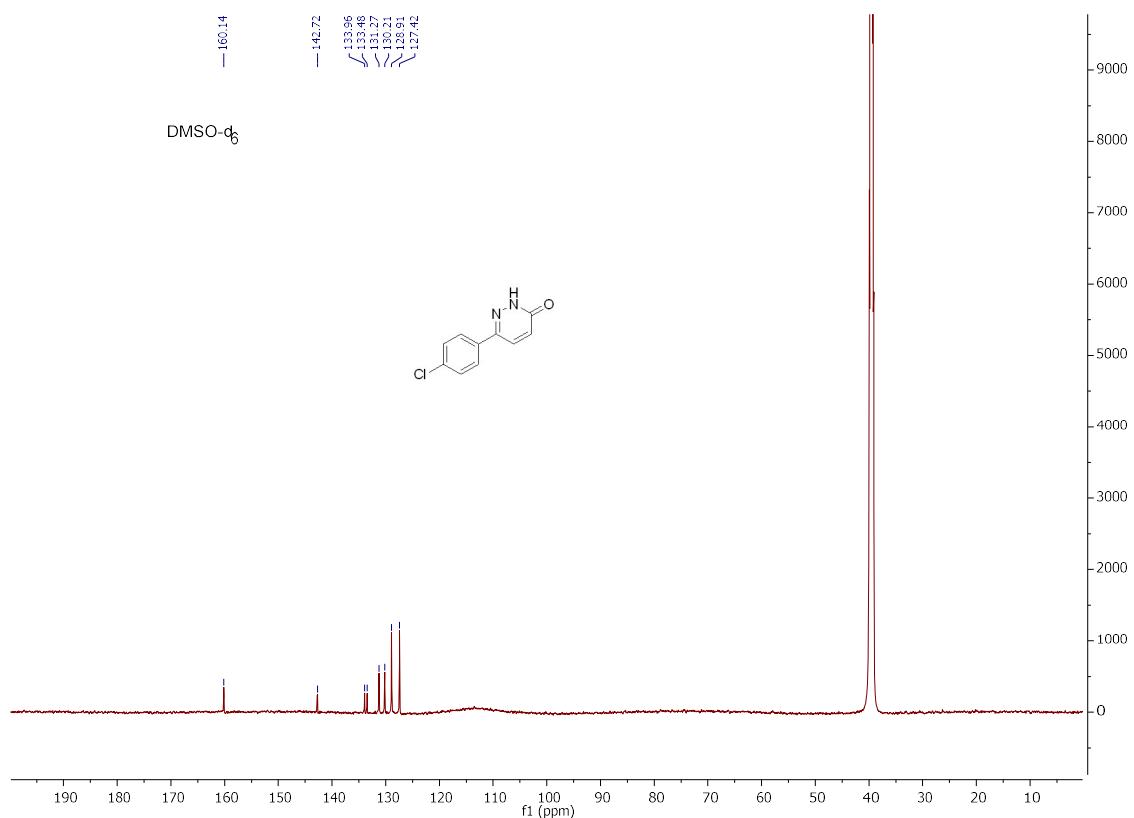
**Supplementary Figure S2.**  $^1\text{H}$ -NMR **1a**.



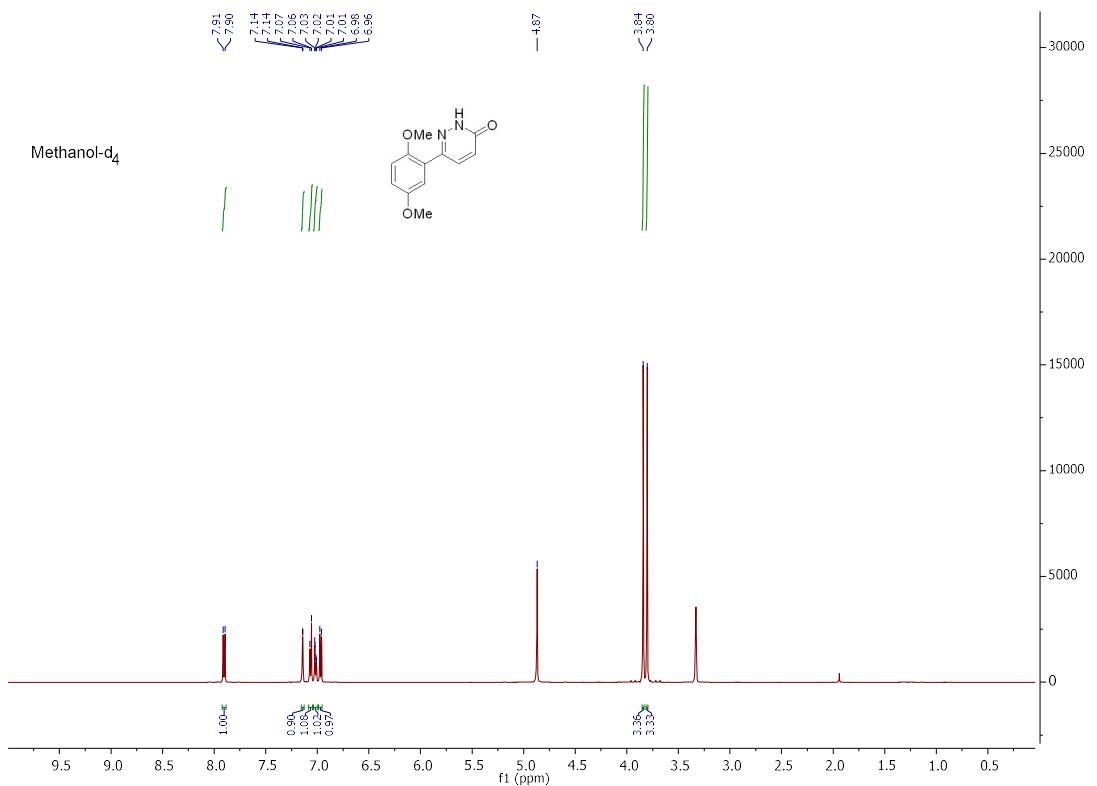
**Supplementary Figure S3.**  $^{13}\text{C}$ -NMR 1a.



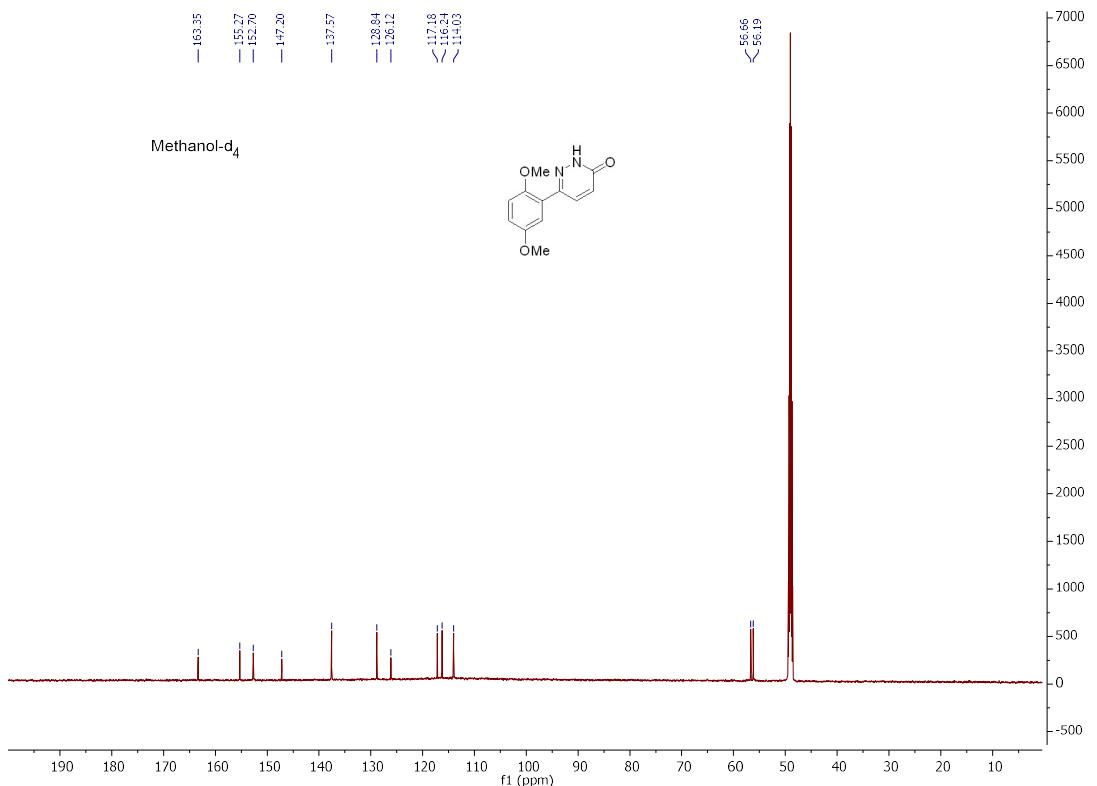
**Supplementary Figure S4.**  $^1\text{H}$ -NMR **1b.**



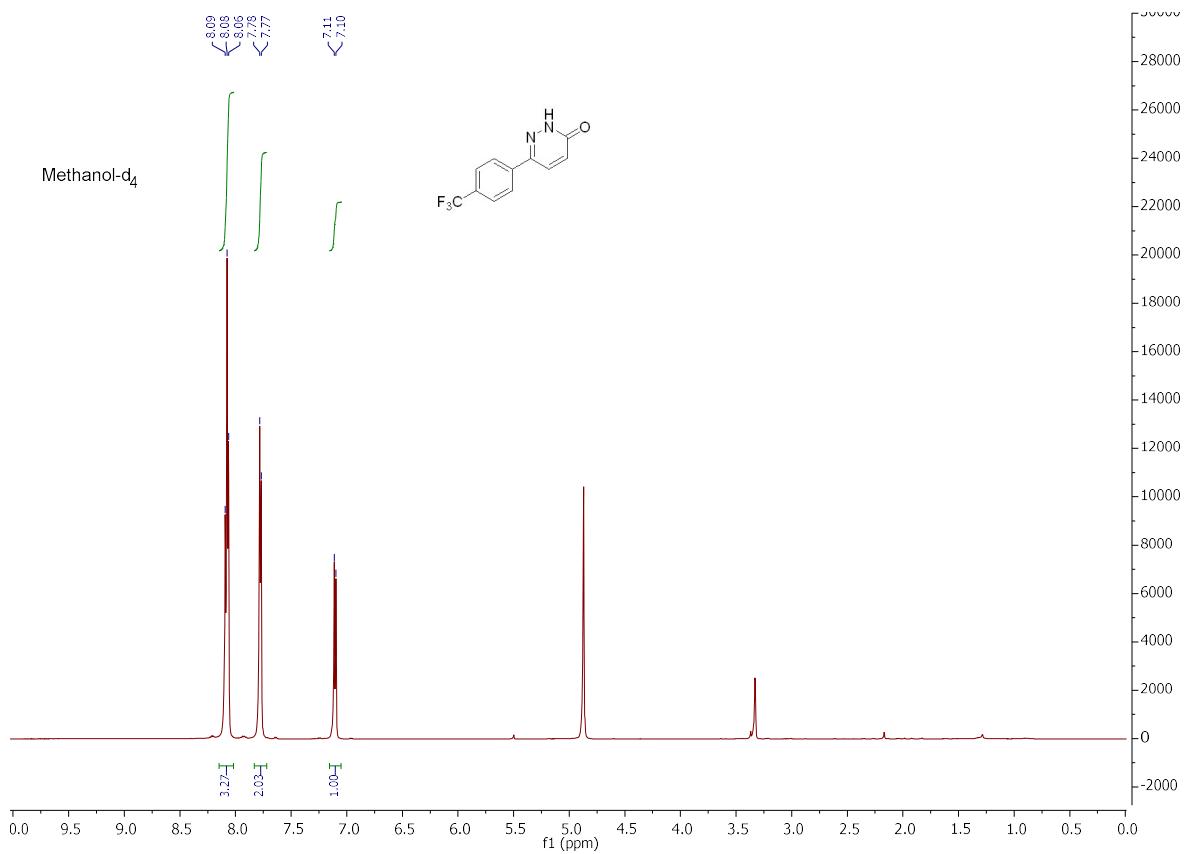
**Supplementary Figure S5.**  $^{13}\text{C}$ -NMR **1b.**



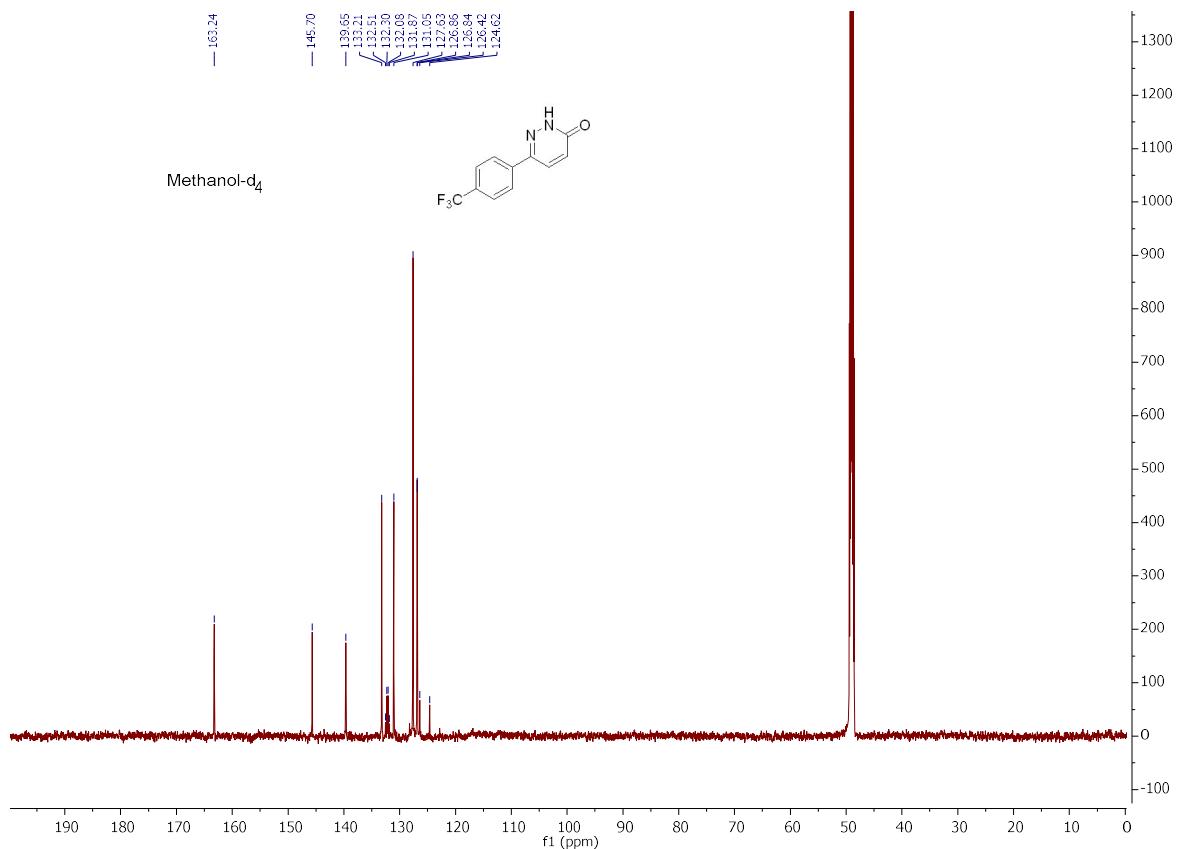
**Supplementary Figure S6.** <sup>1</sup>N-NMR 1c.



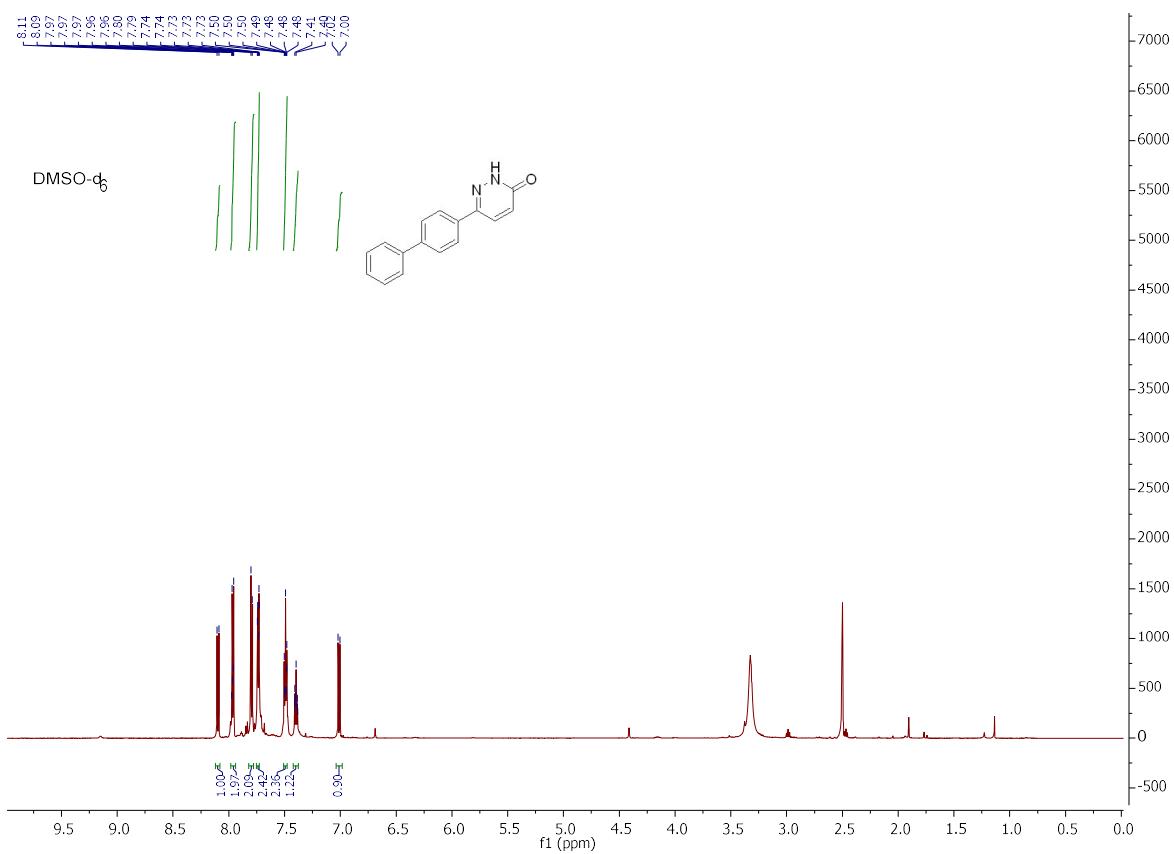
**Supplementary Figure S7.** <sup>13</sup>C-NMR 1c.



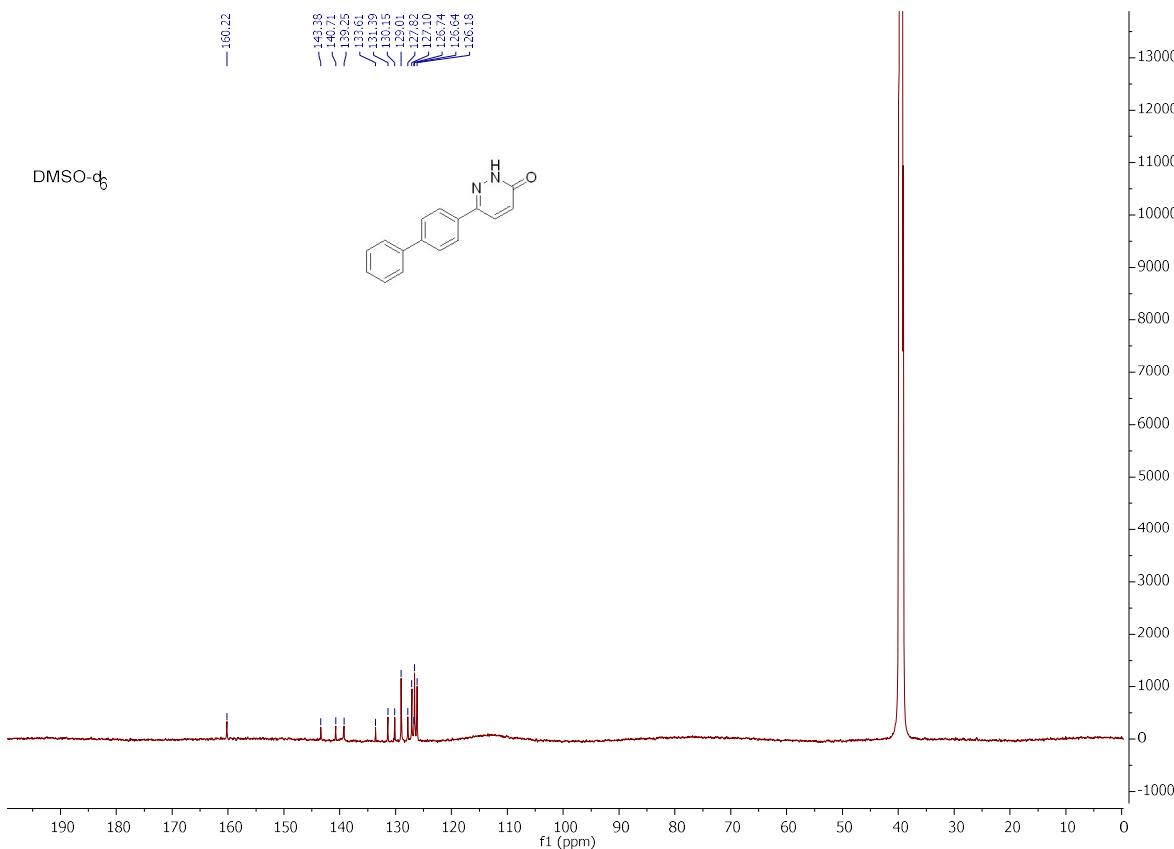
**Supplementary Figure S8.** <sup>1</sup>N-NMR 1d.



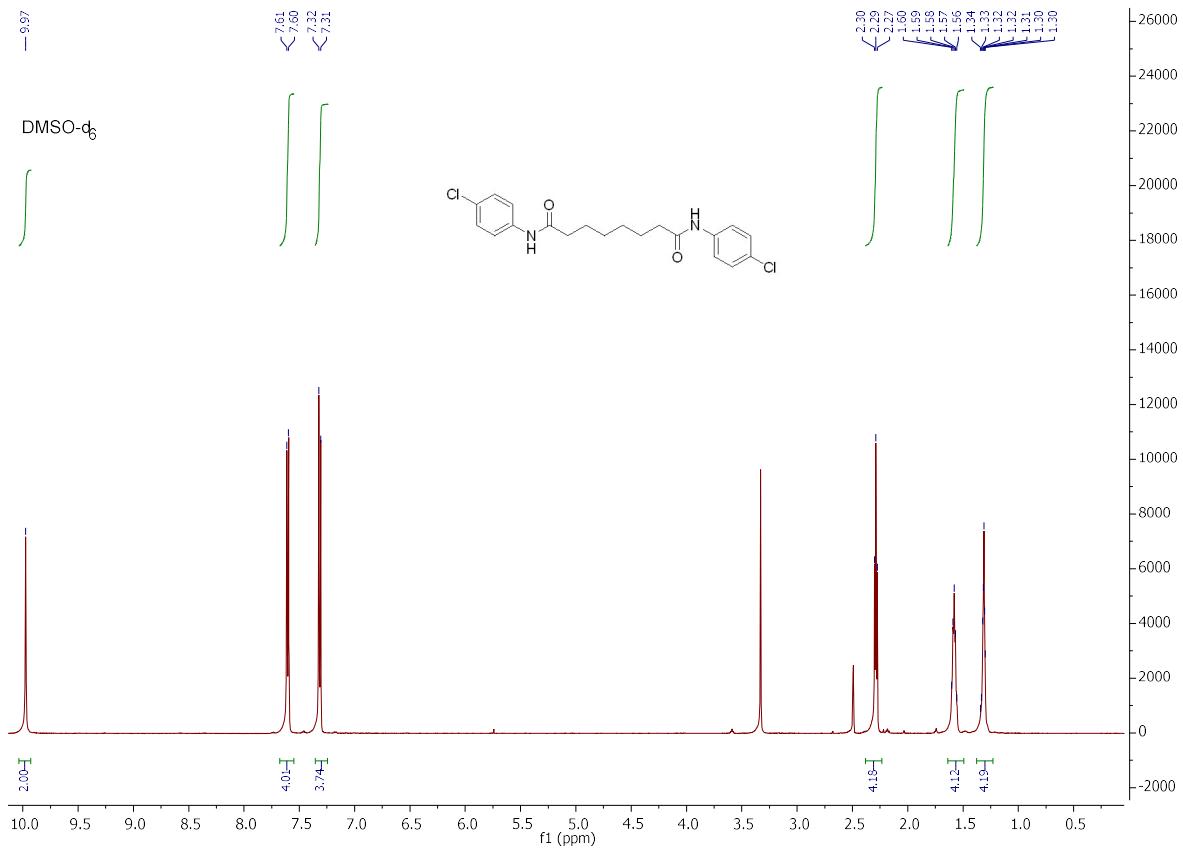
**Supplementary Figure S9.** <sup>13</sup>C-NMR 1d.



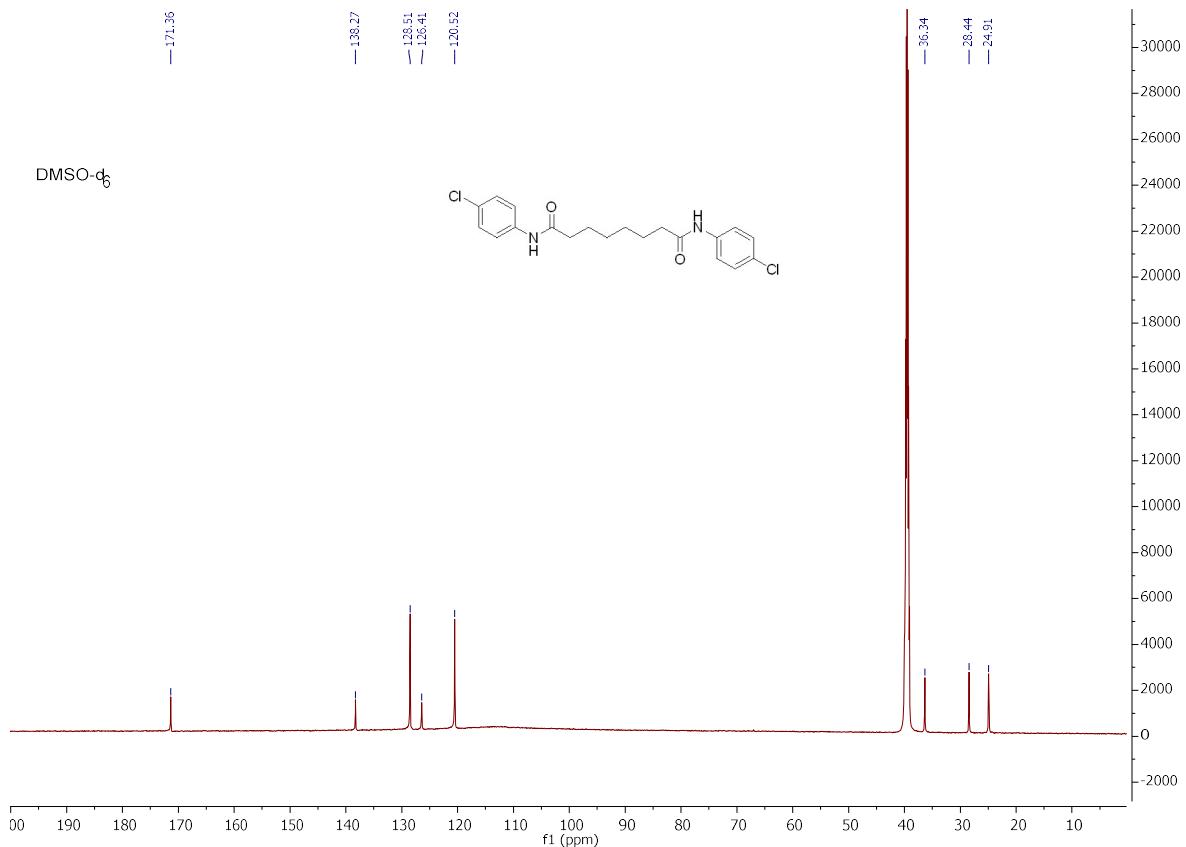
**Supplementary Figure S10.** <sup>1</sup>N-NMR 1e.



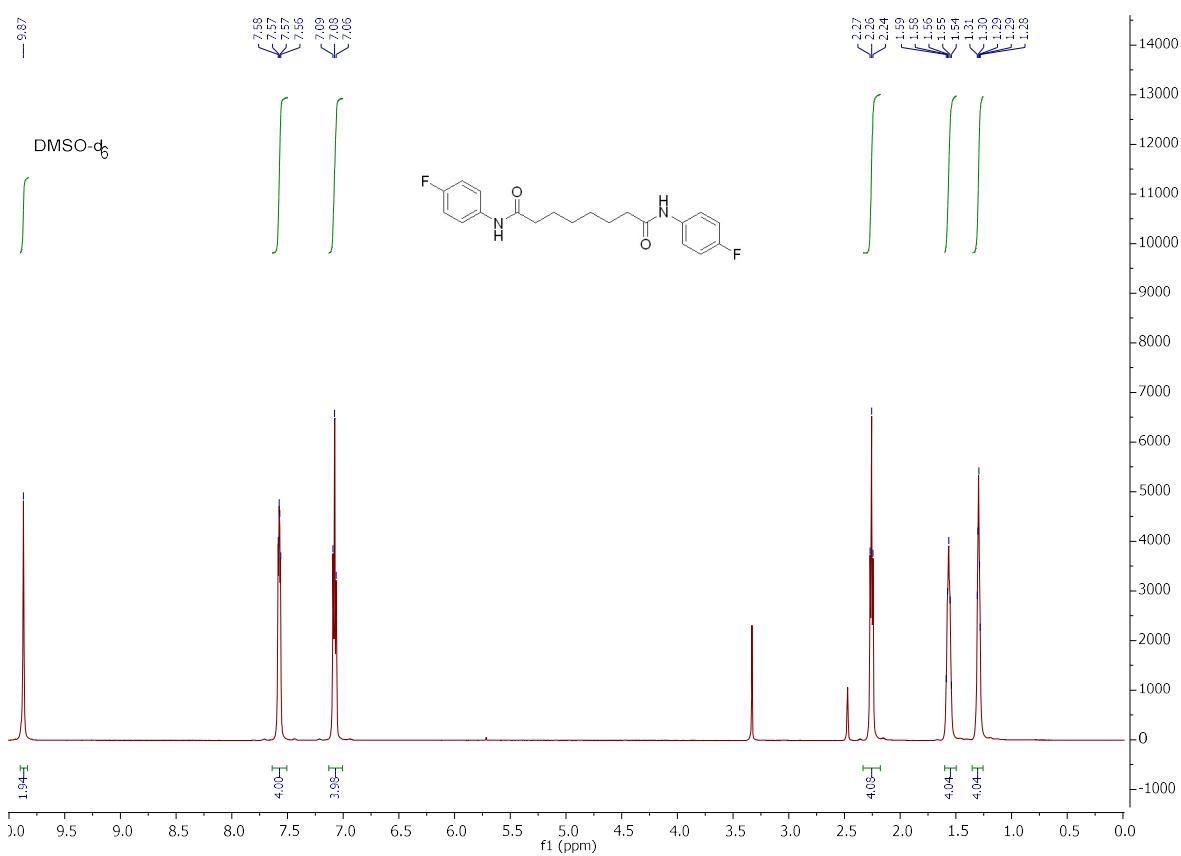
**Supplementary Figure S11.** <sup>13</sup>C-NMR 1e.



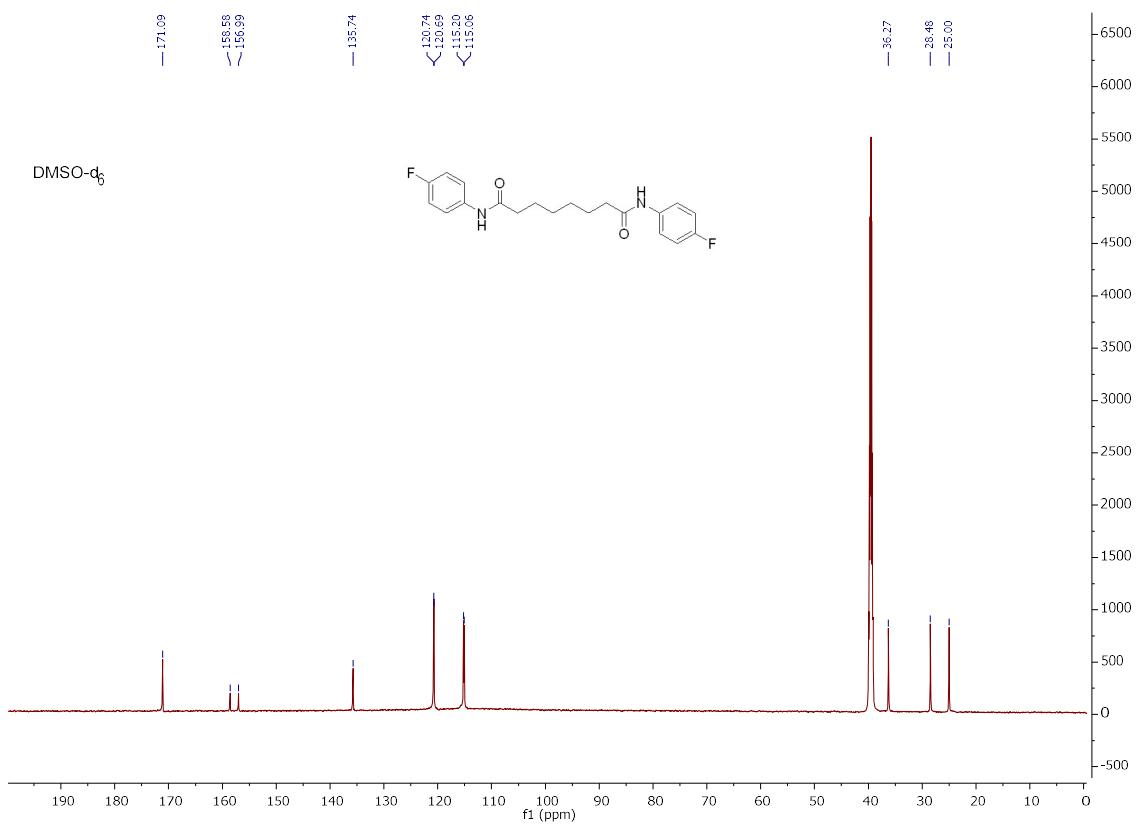
Supplementary Figure S12.  $^1\text{H}$ -NMR 2a.



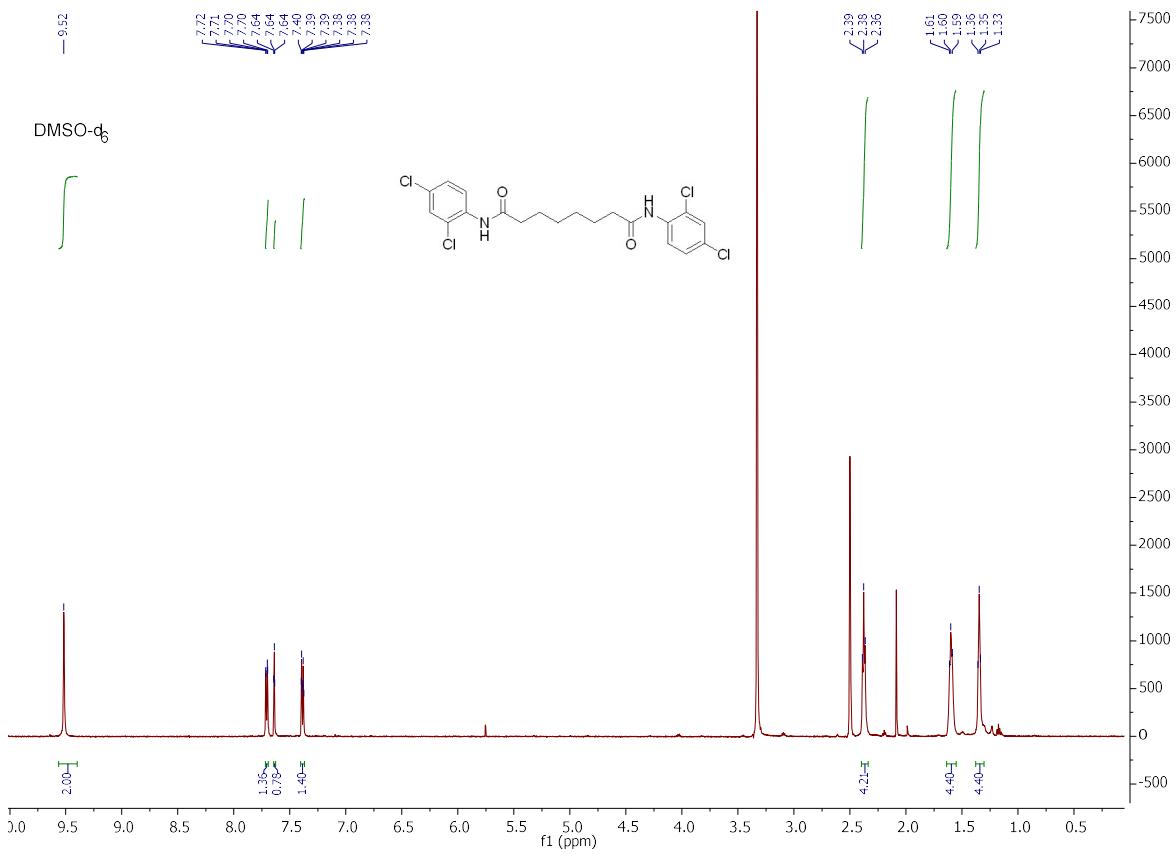
Supplementary Figure S13.  $^{13}\text{C}$ -NMR 2a.



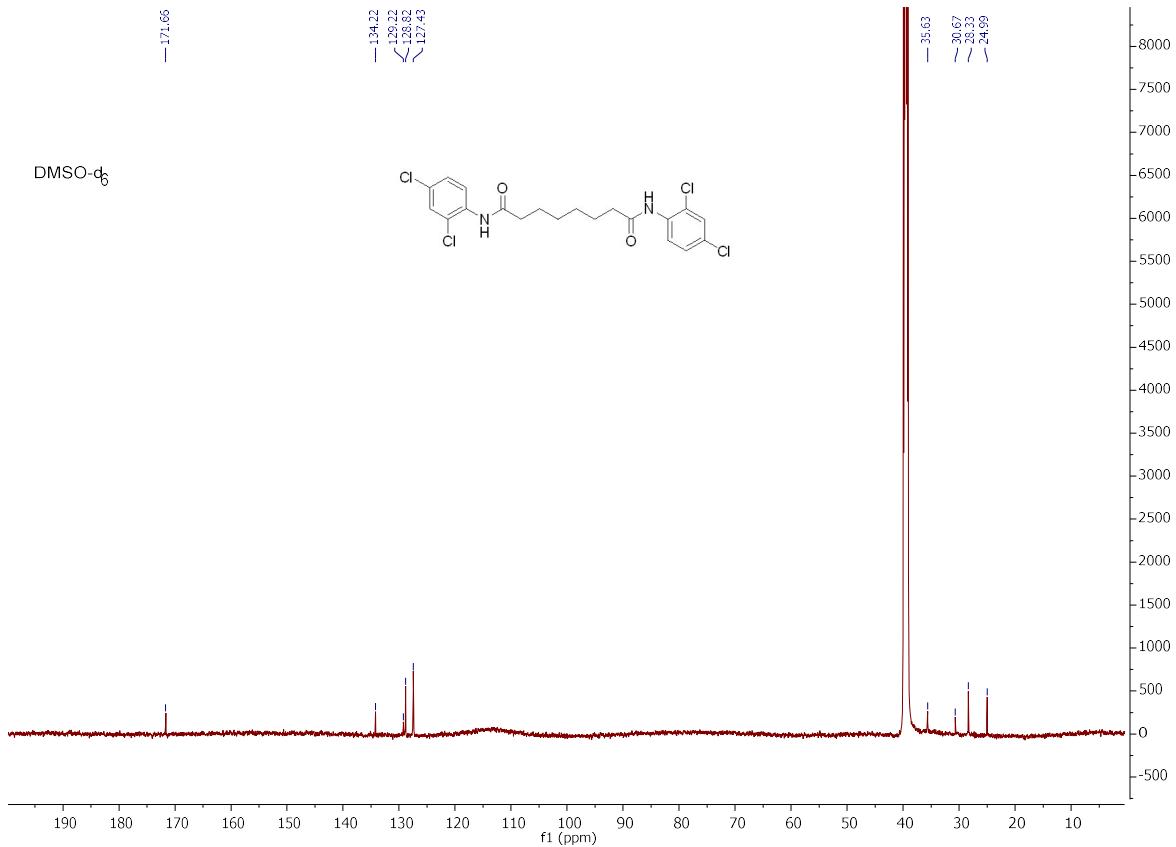
**Supplementary Figure S14.**  $^1\text{H}$ -NMR 2b.



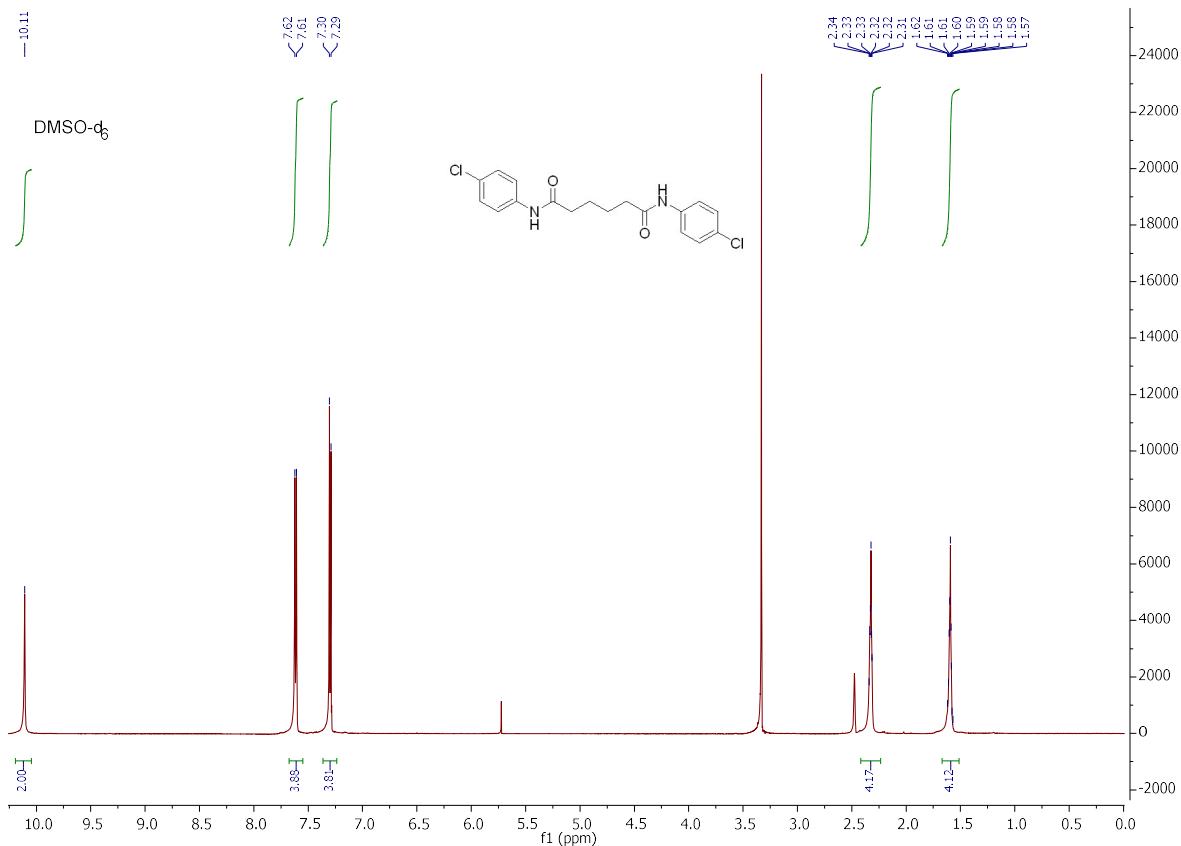
**Supplementary Figure S15.**  $^{13}\text{C}$ -NMR 2b.



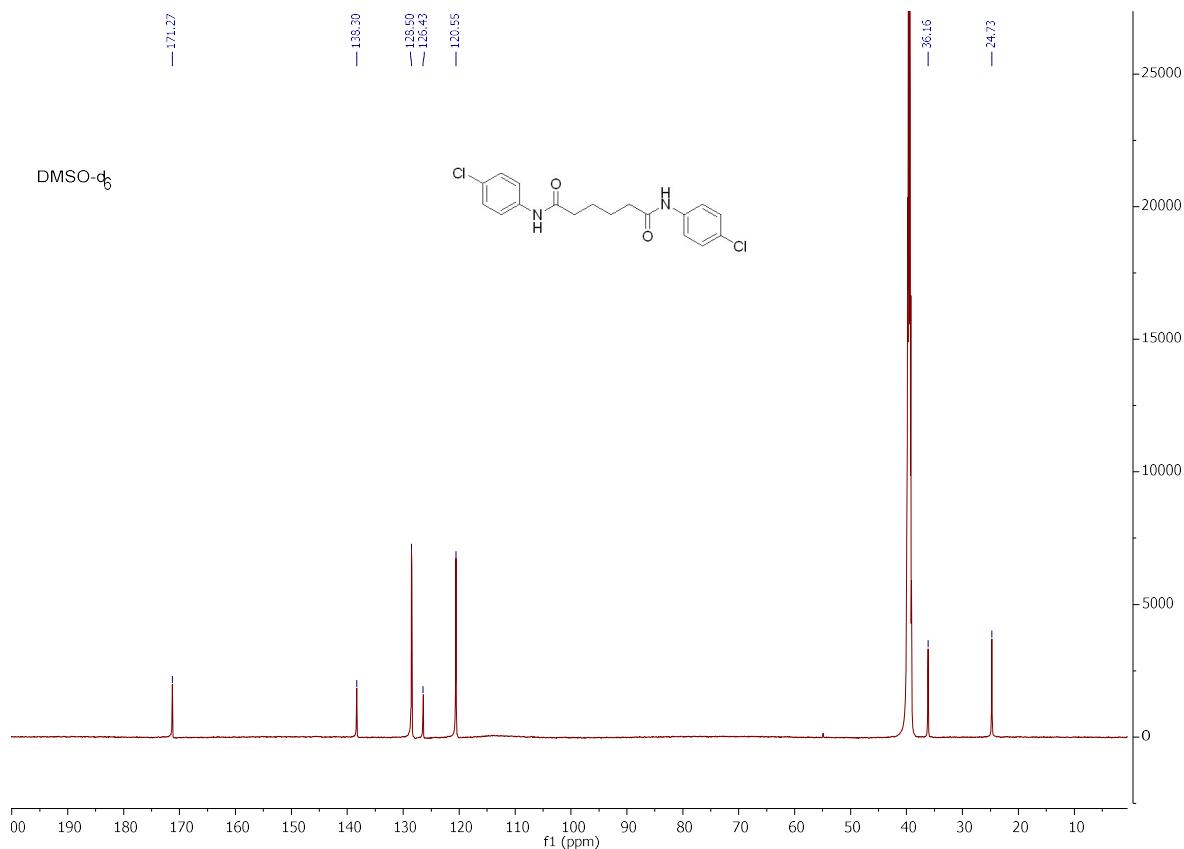
**Supplementary Figure S16.** <sup>1</sup>N-NMR 2c.



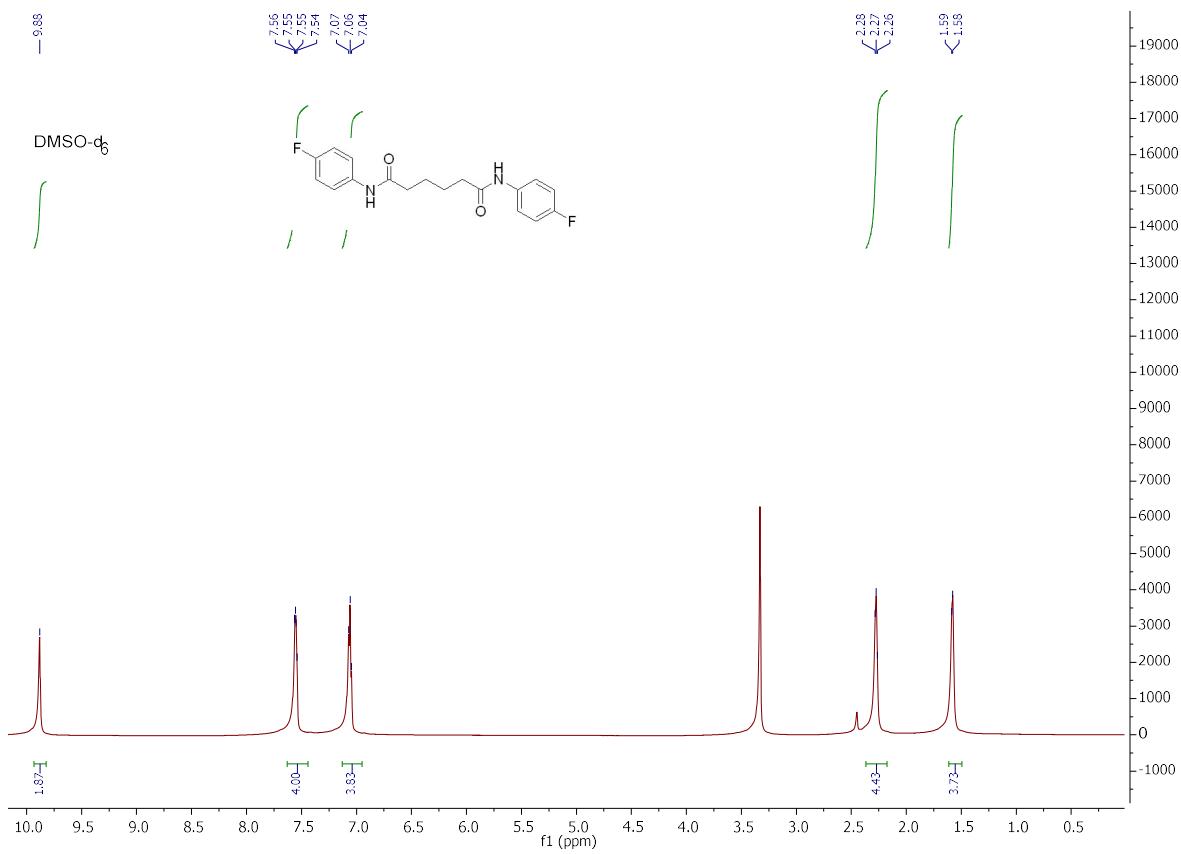
**Supplementary Figure S17.** <sup>13</sup>C-NMR 2c.



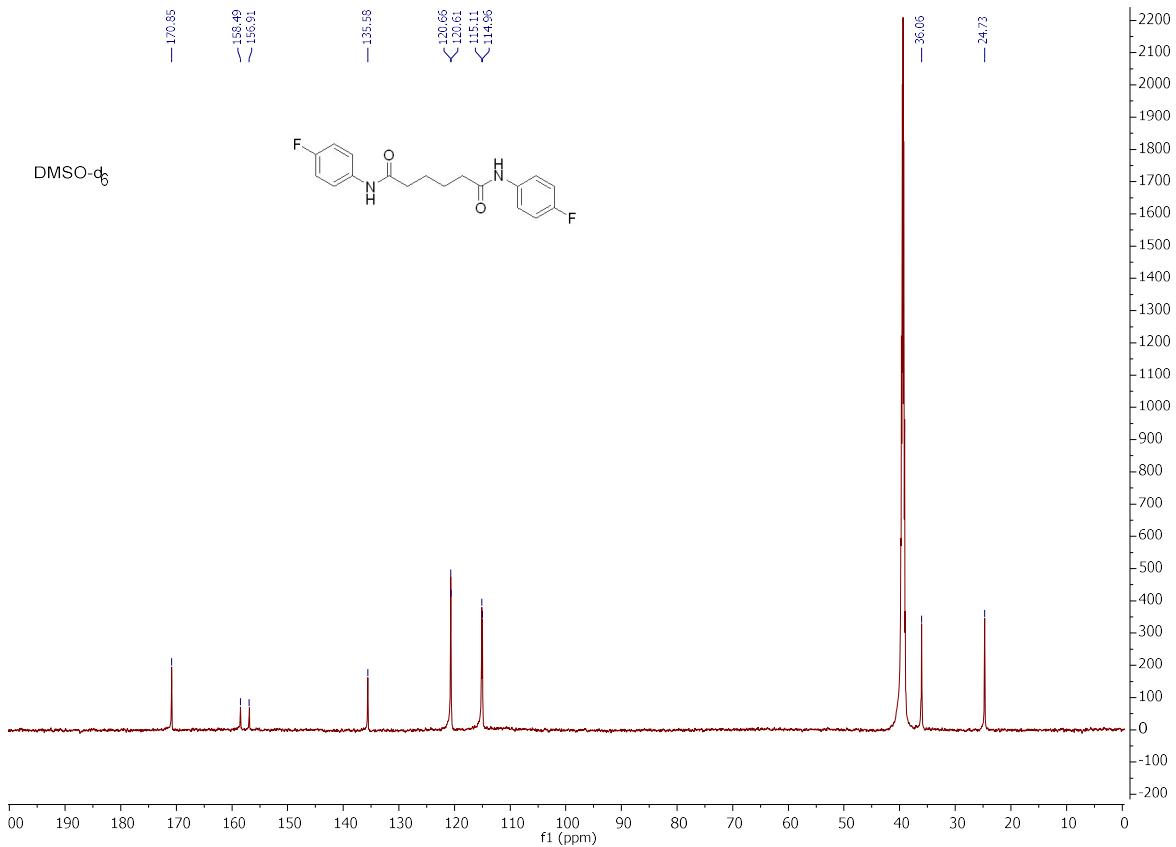
Supplementary Figure S18. <sup>1</sup>H-NMR 2d.



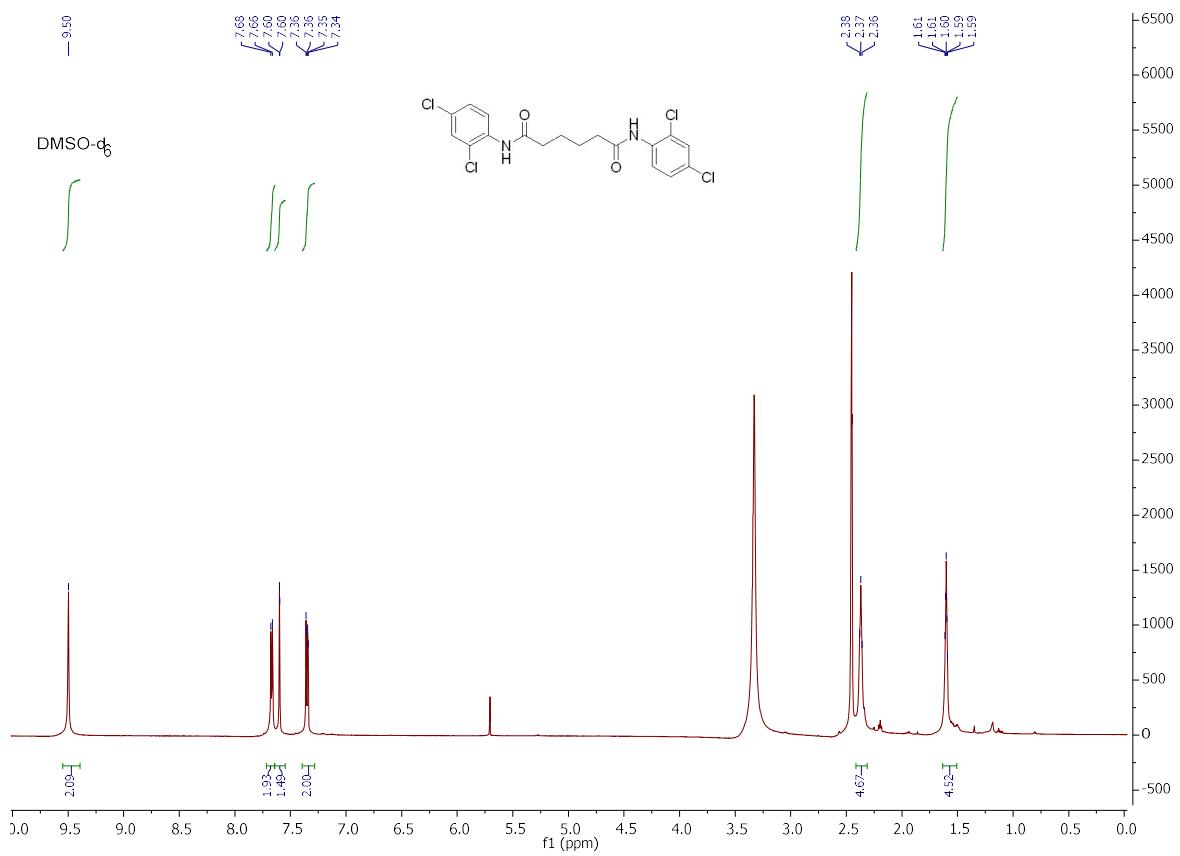
Supplementary Figure S19. <sup>13</sup>C-NMR 2d.



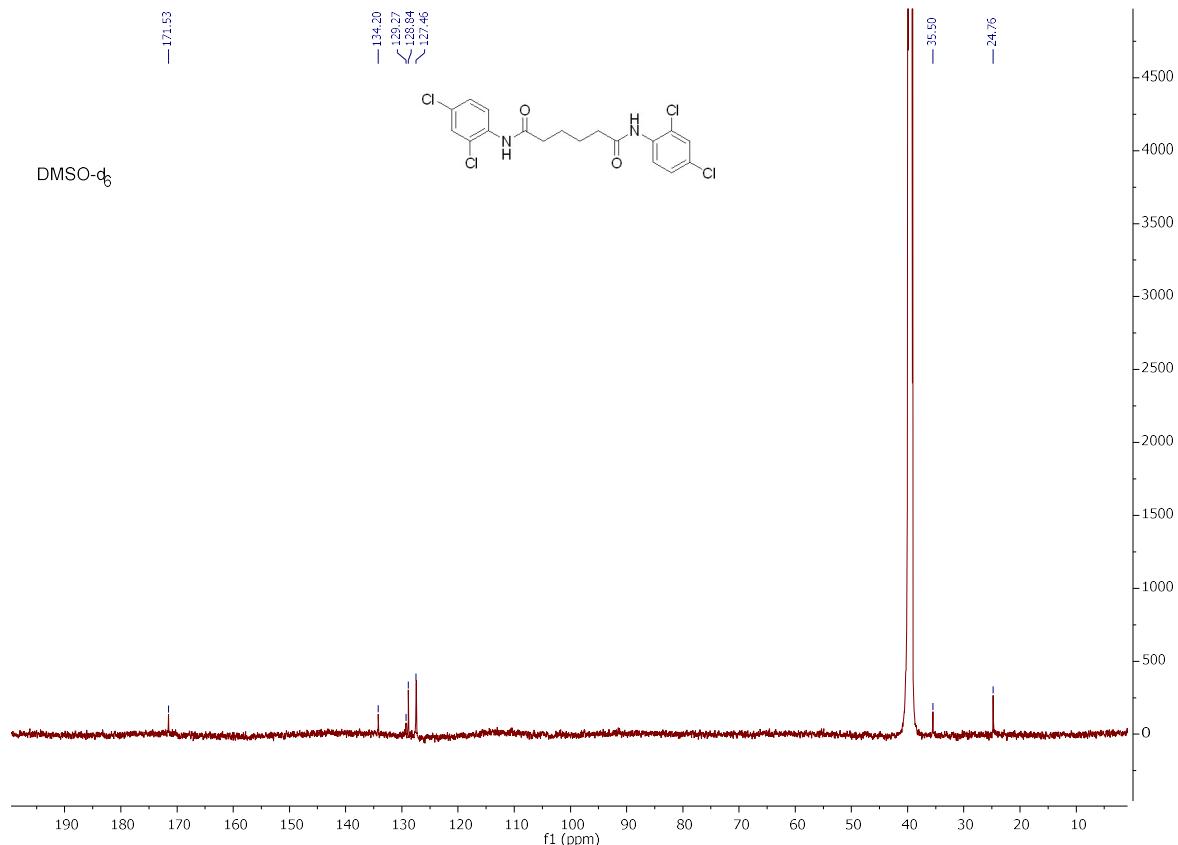
**Supplementary Figure S20.**  $^1\text{H}$ -NMR 2e.



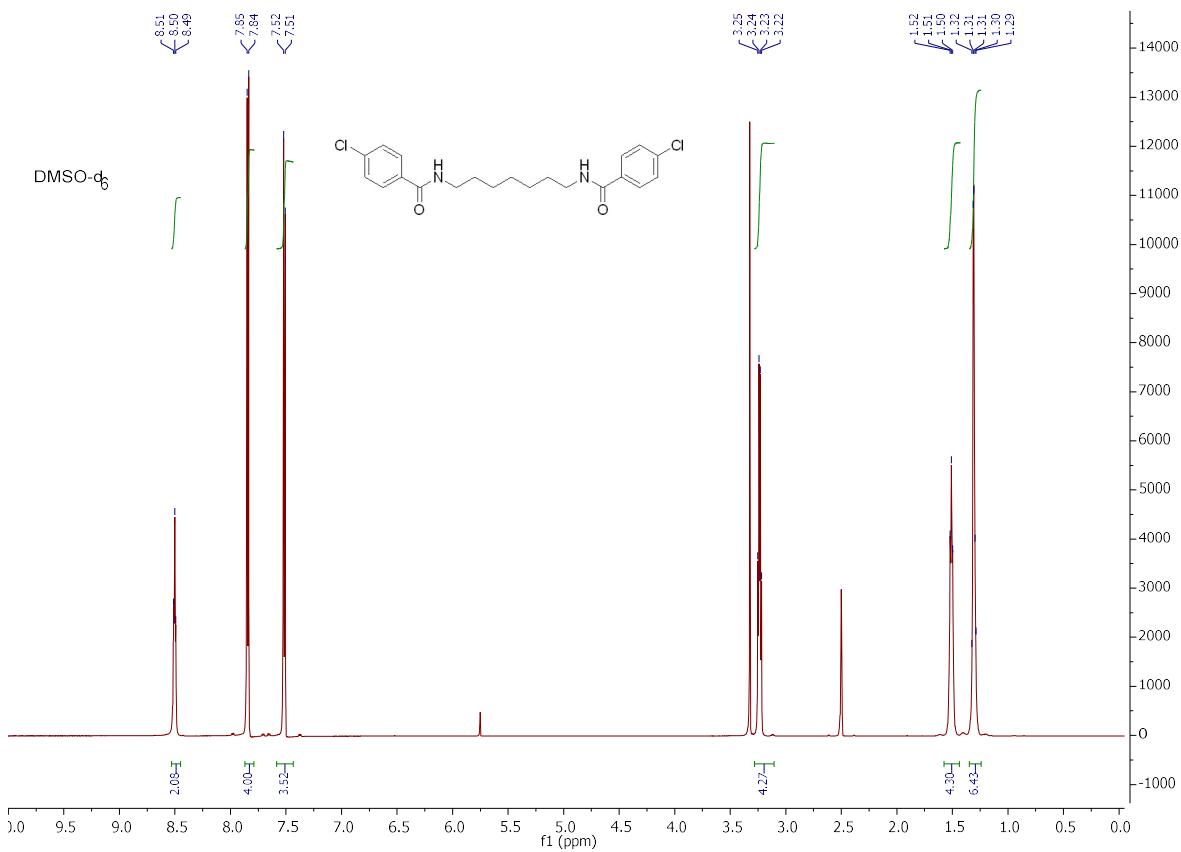
**Supplementary Figure S21.**  $^{13}\text{C}$ -NMR 2e.



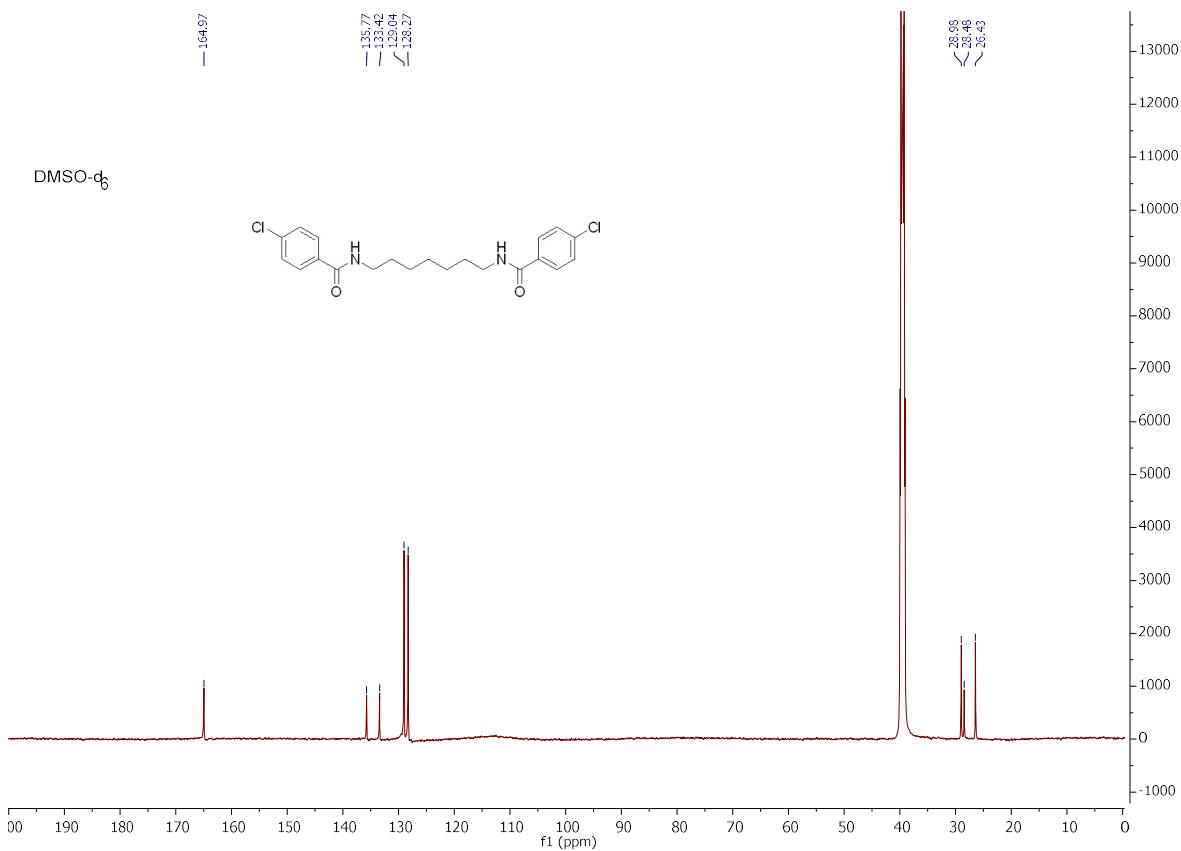
**Supplementary Figure S22.**  $^1\text{H}$ -NMR 2f.



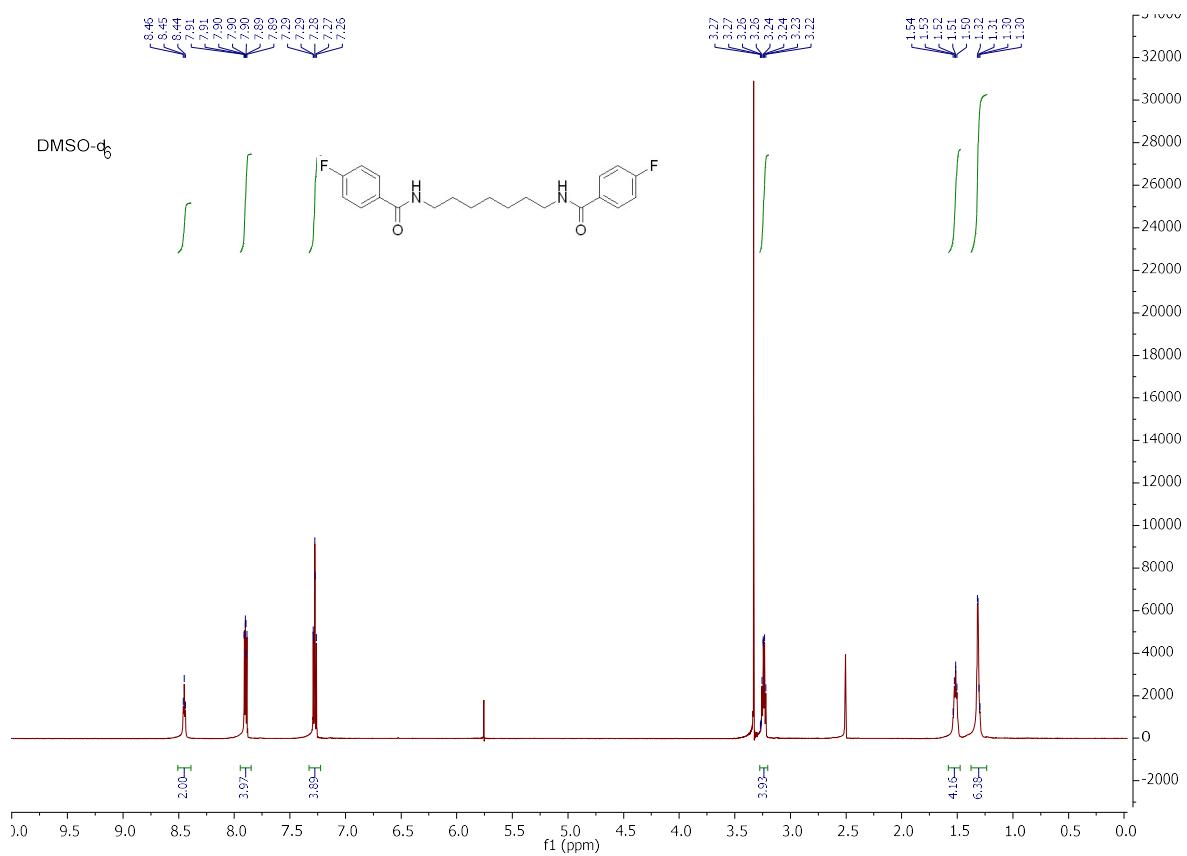
**Supplementary Figure S23.**  $^{13}\text{C}$ -NMR 2f.



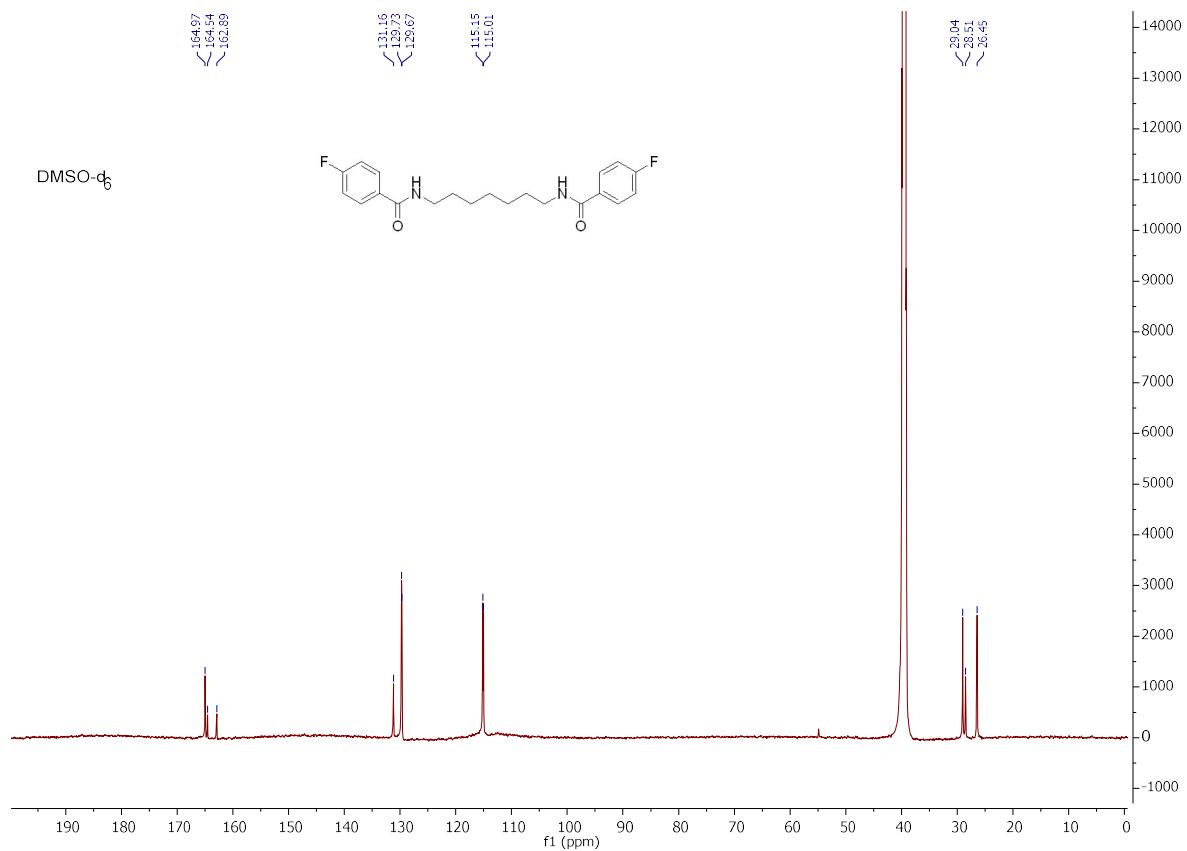
**Supplementary Figure S24.**  $^1\text{H}$ -NMR 5a.



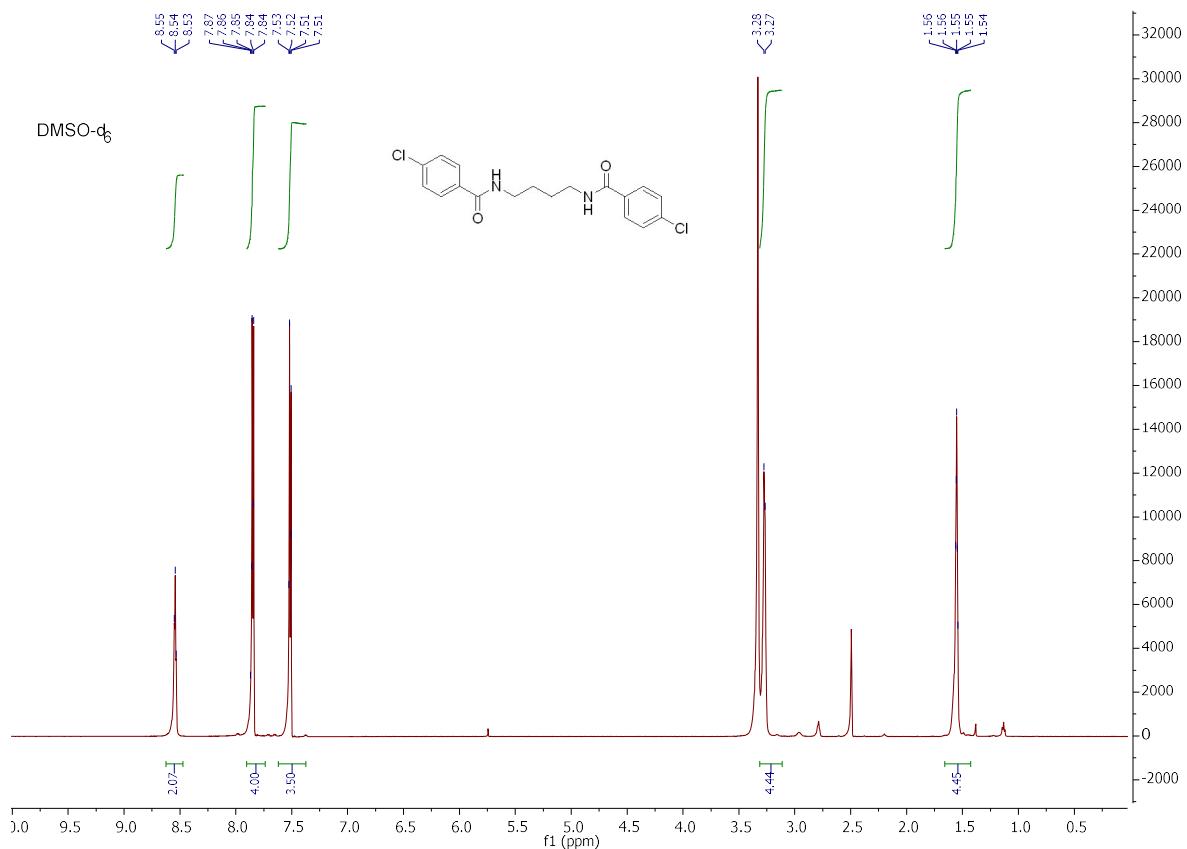
**Supplementary Figure S25.**  $^{13}\text{C}$ -NMR 5a.



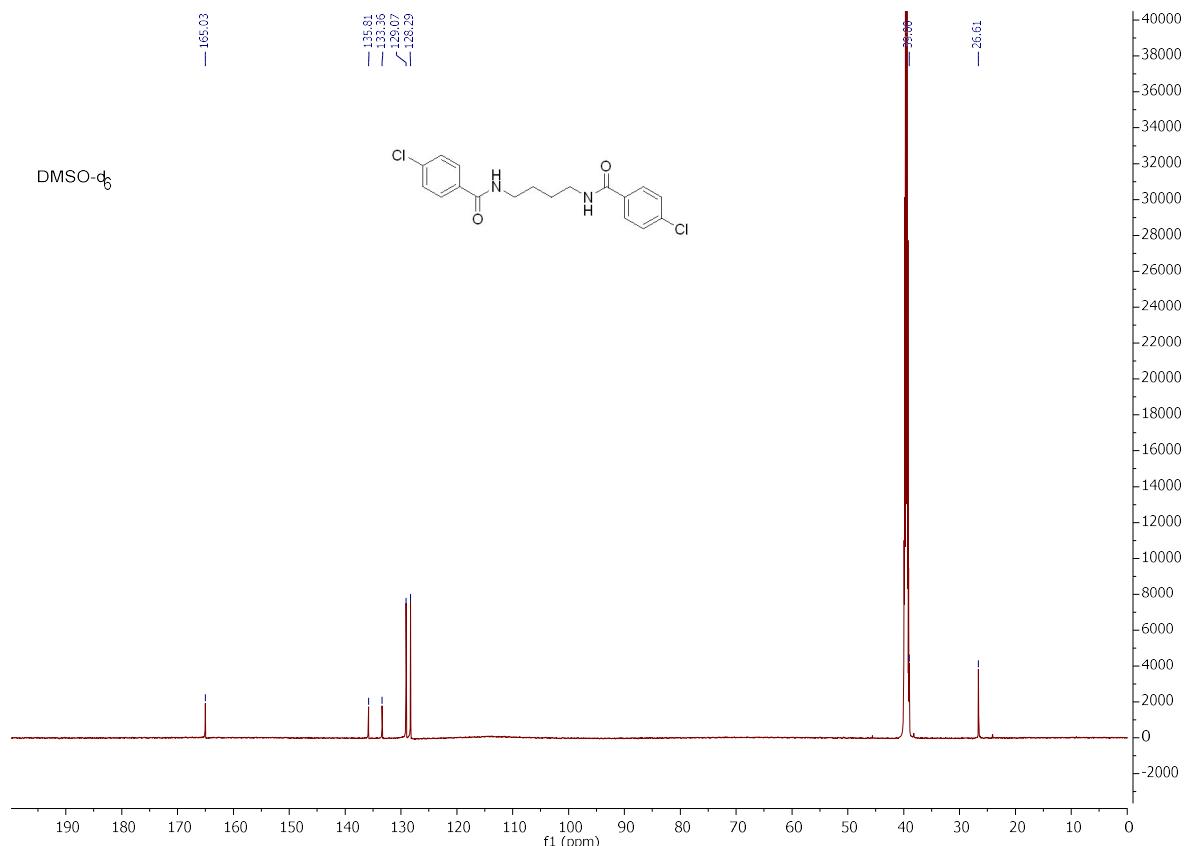
**Supplementary Figure S26.**  $^1\text{N}$ -NMR 5b.



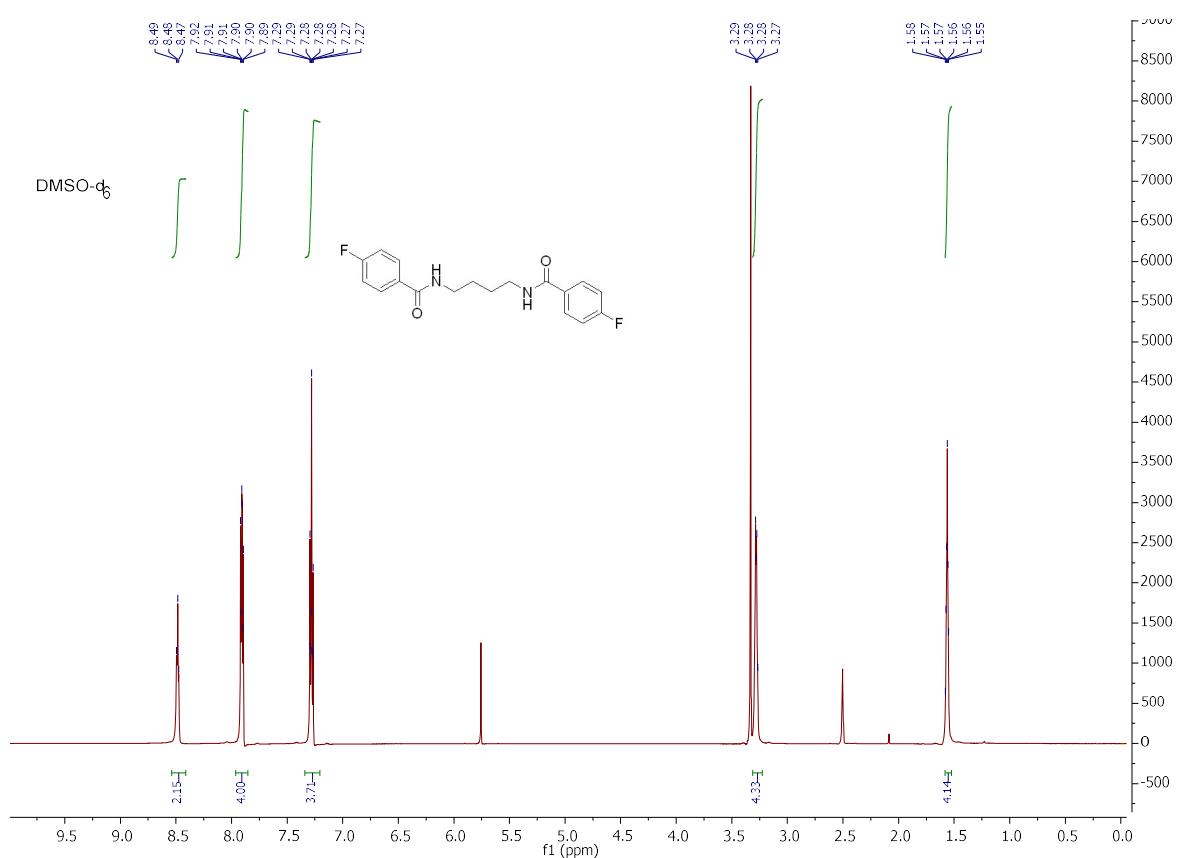
**Supplementary Figure S27.**  $^{13}\text{C}$ -NMR 5b.



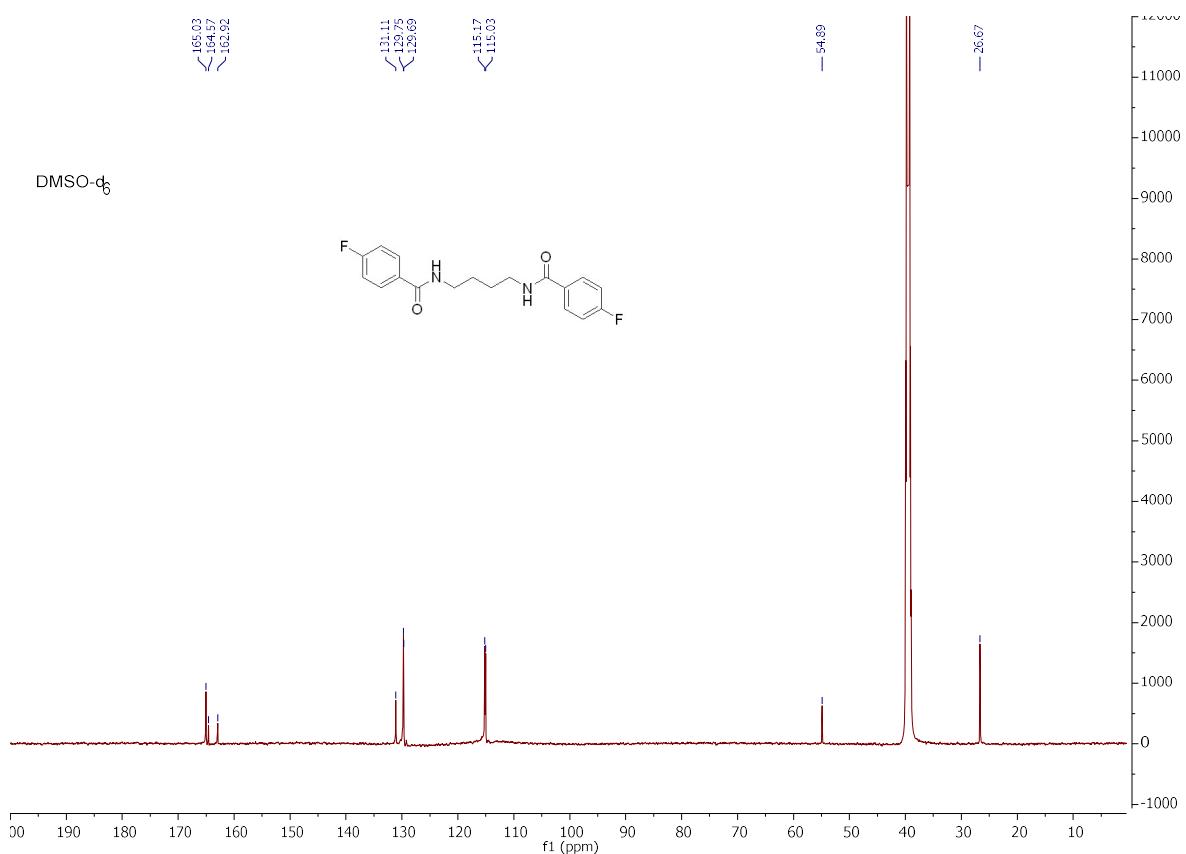
### Supplementary Figure S28. $^1\text{N}$ -NMR 5c.



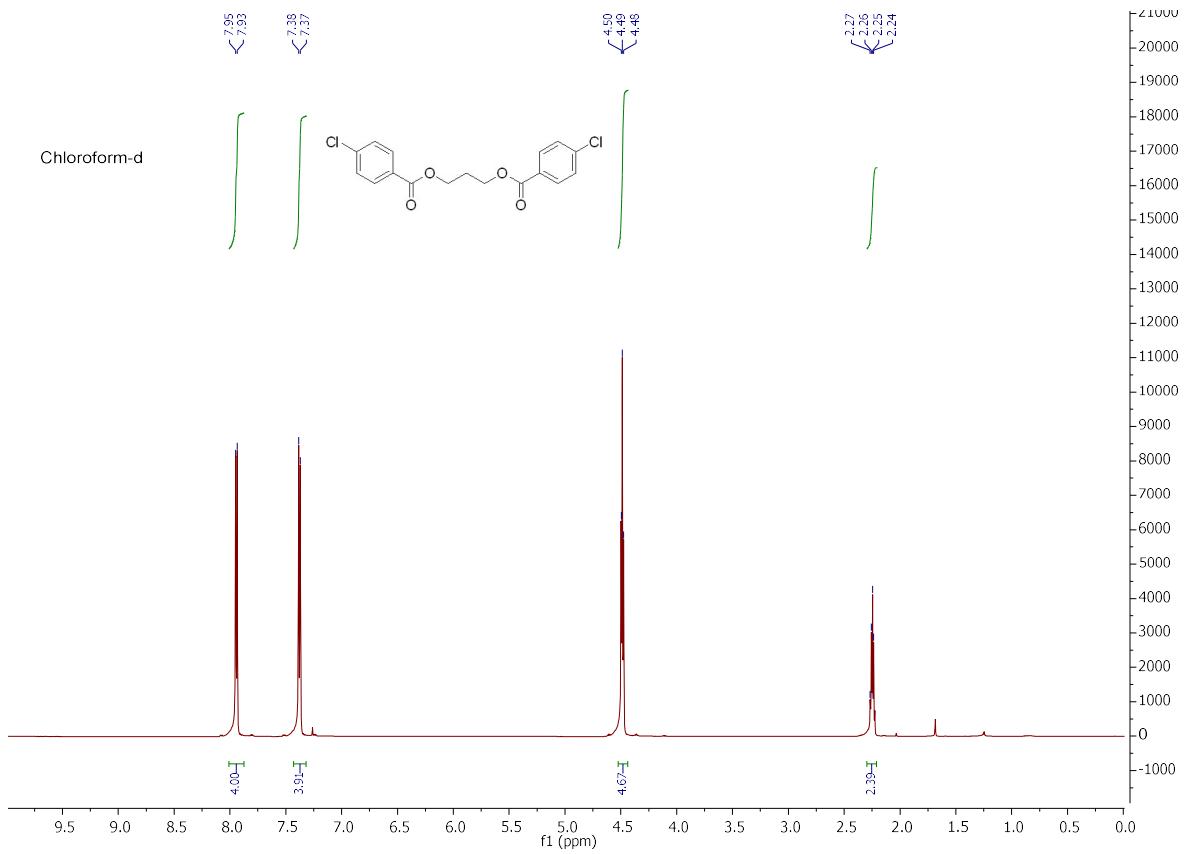
**Supplementary Figure S29.**  $^{13}\text{C}$ -NMR 5c.



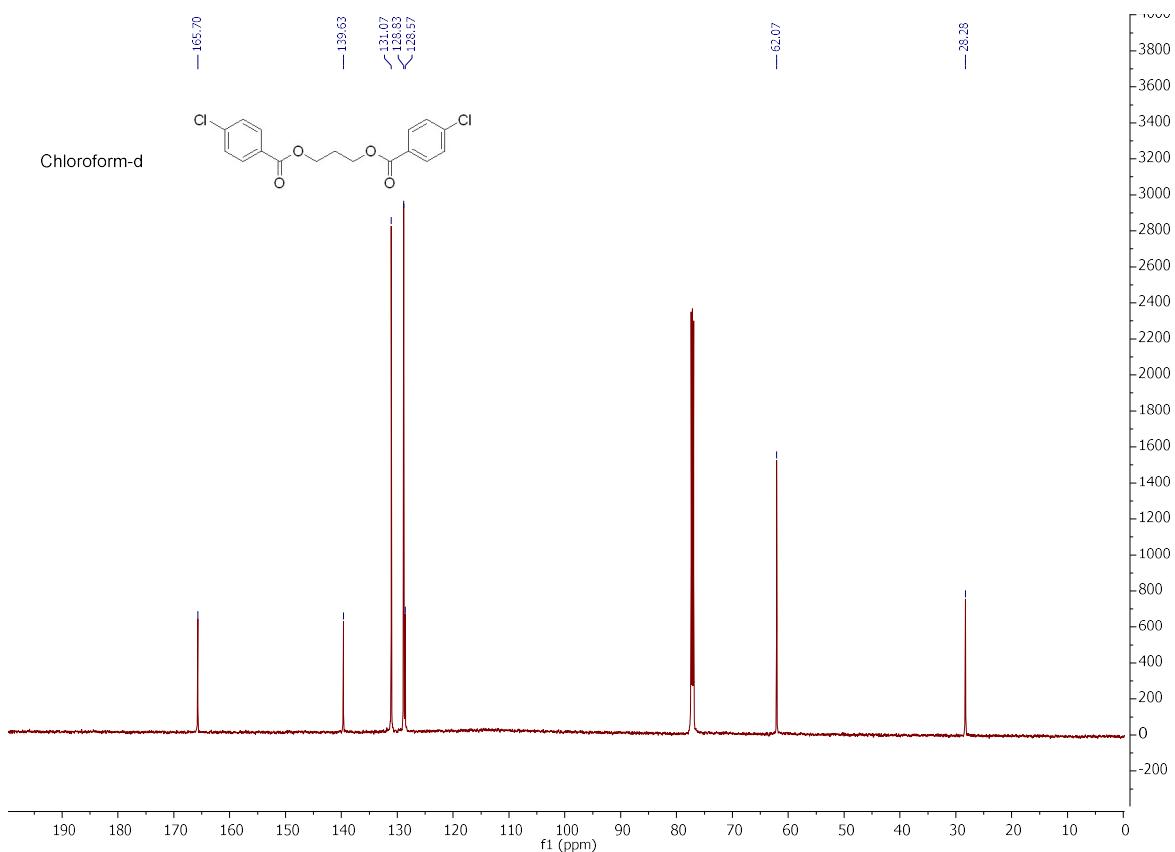
### Supplementary Figure S30. $^1\text{N}$ -NMR 5d.



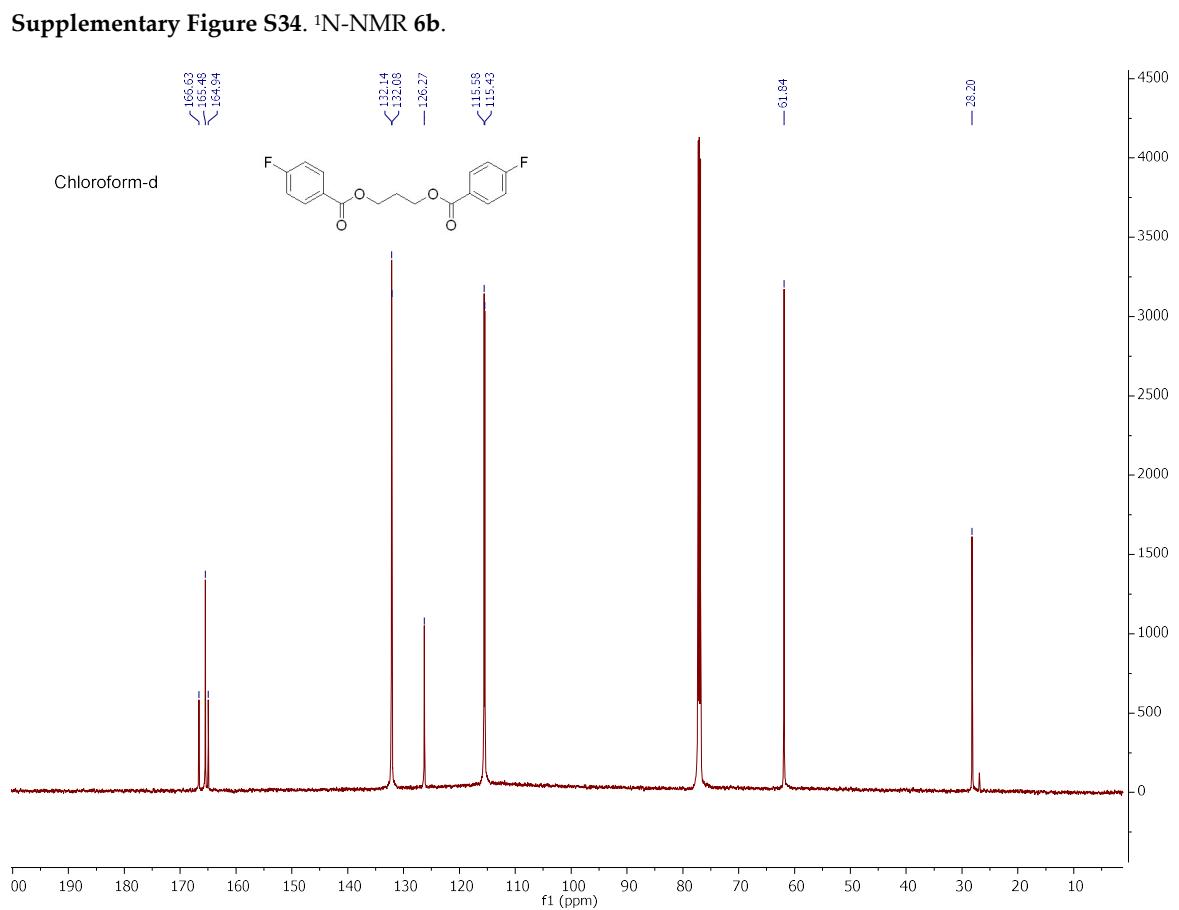
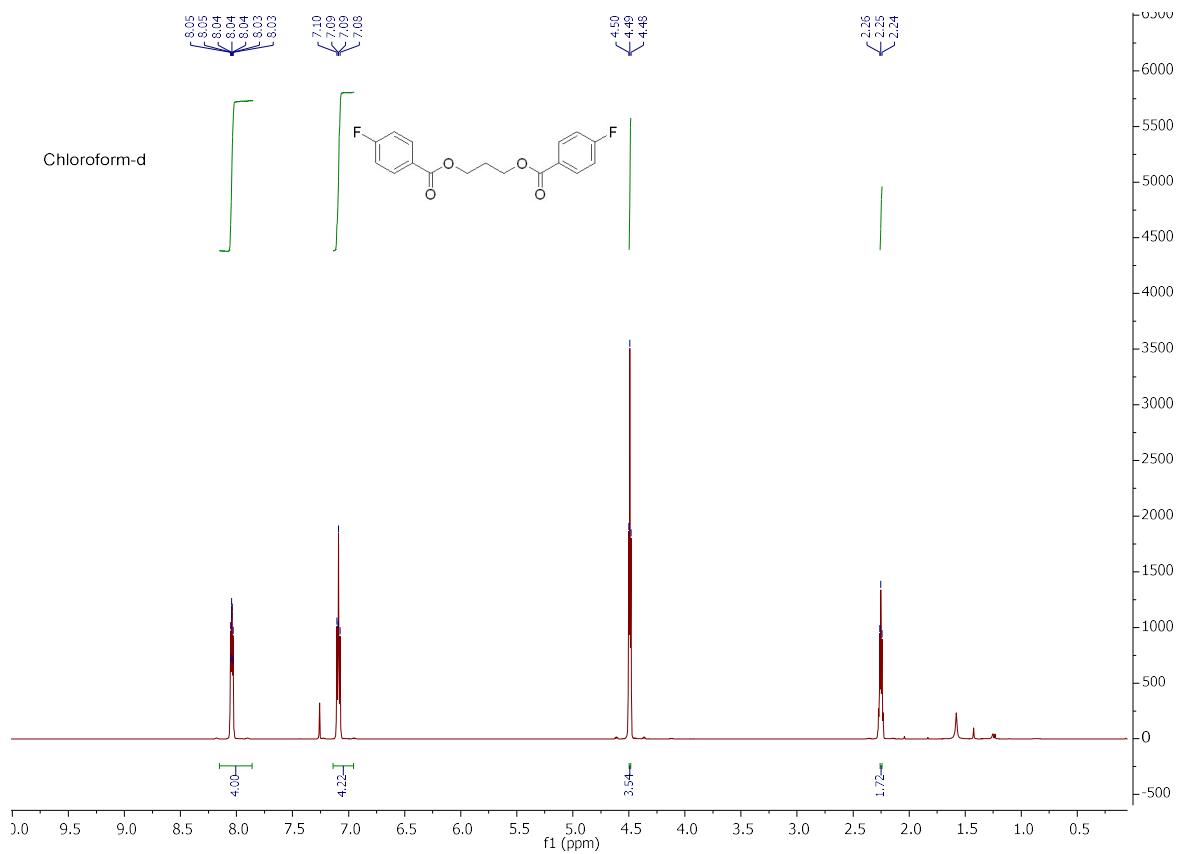
**Supplementary Figure S31.**  $^{13}\text{C}$ -NMR 5d.

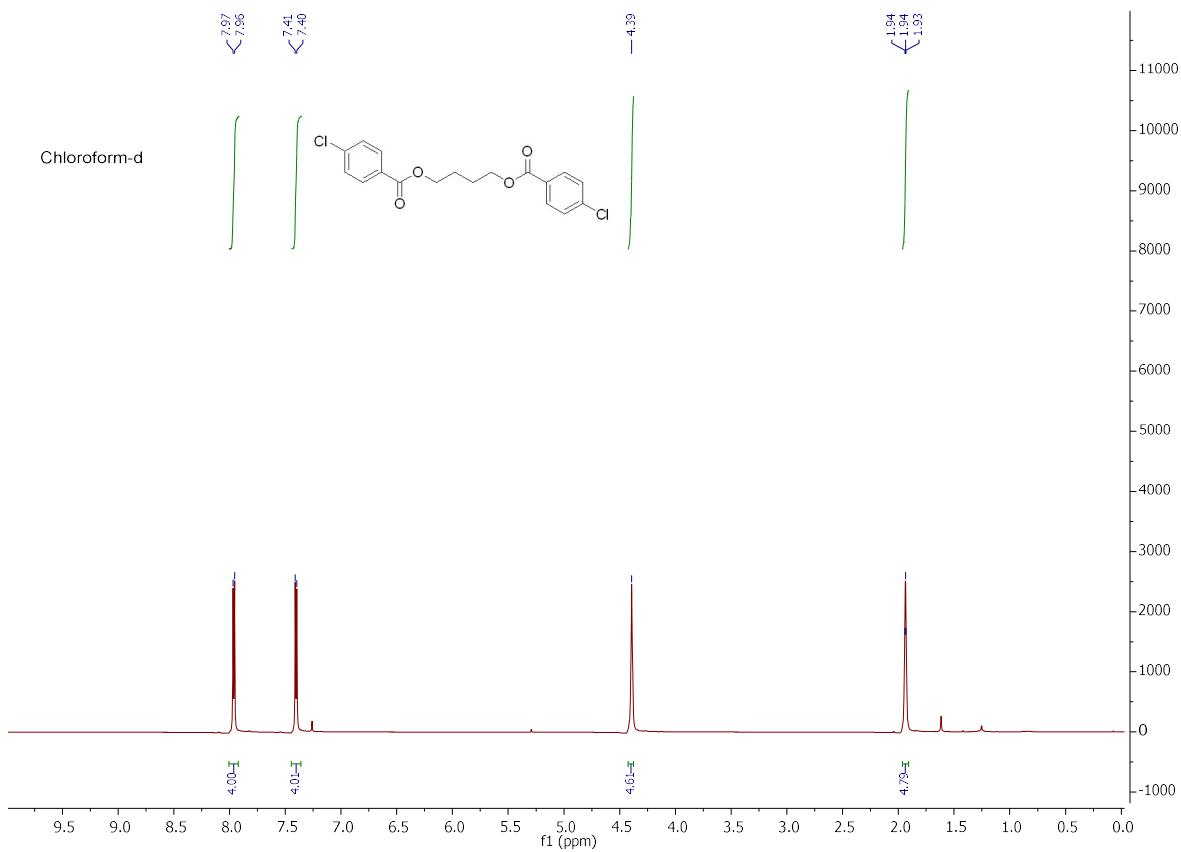


**Supplementary Figure S32.**  $^1\text{H}$ -NMR 6a.

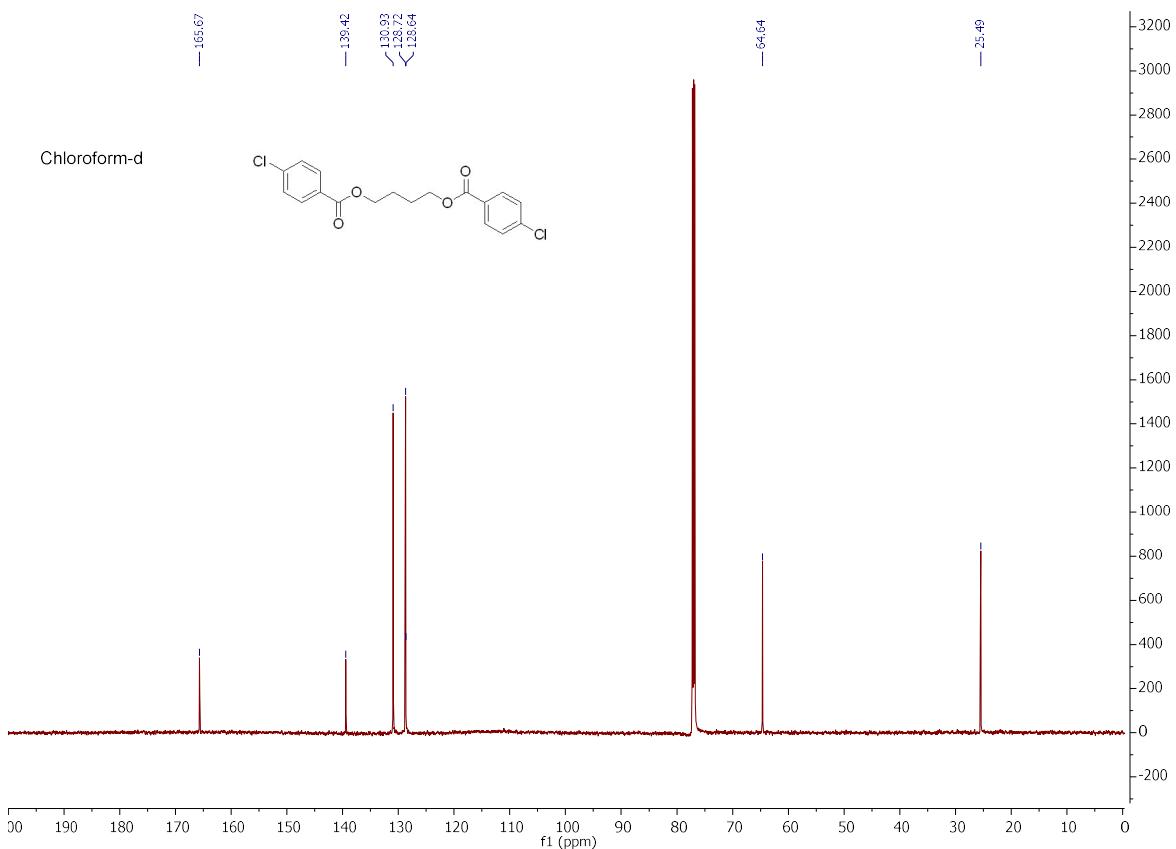


**Supplementary Figure S33.**  $^{13}\text{C}$ -NMR 6a.

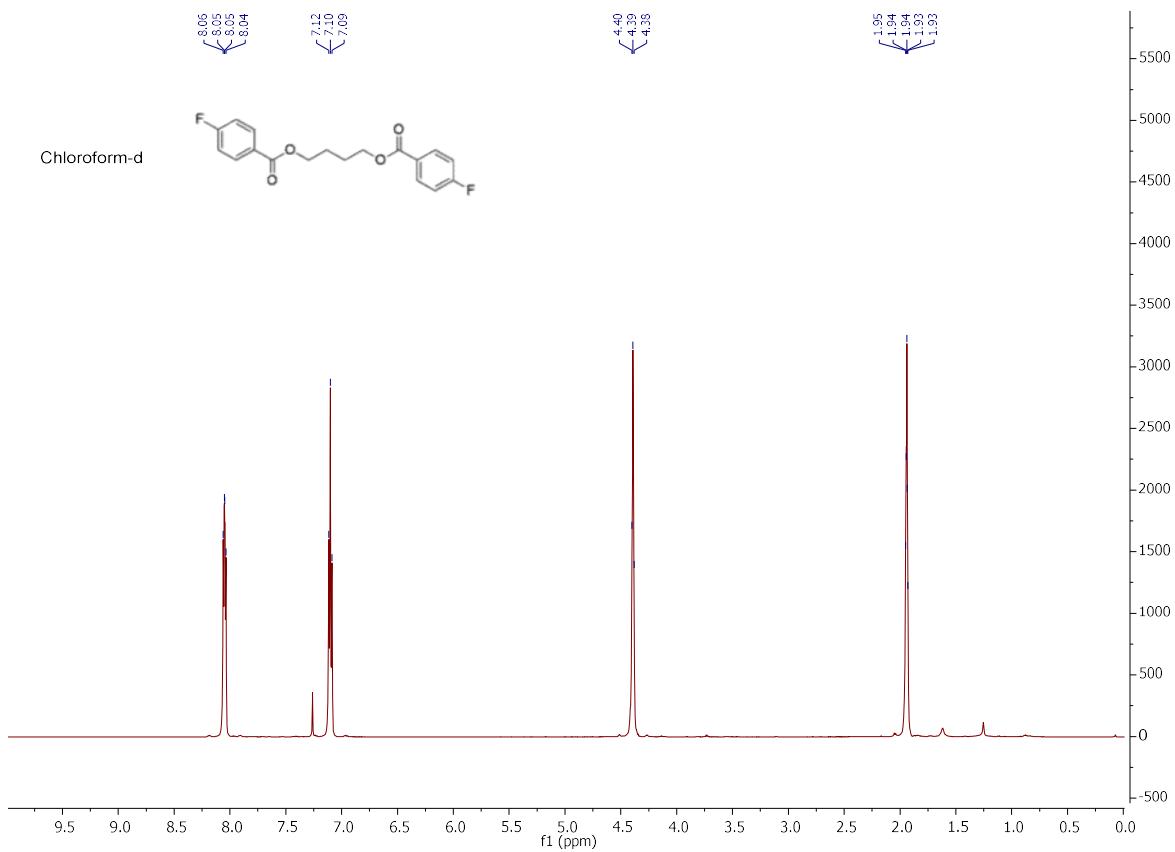




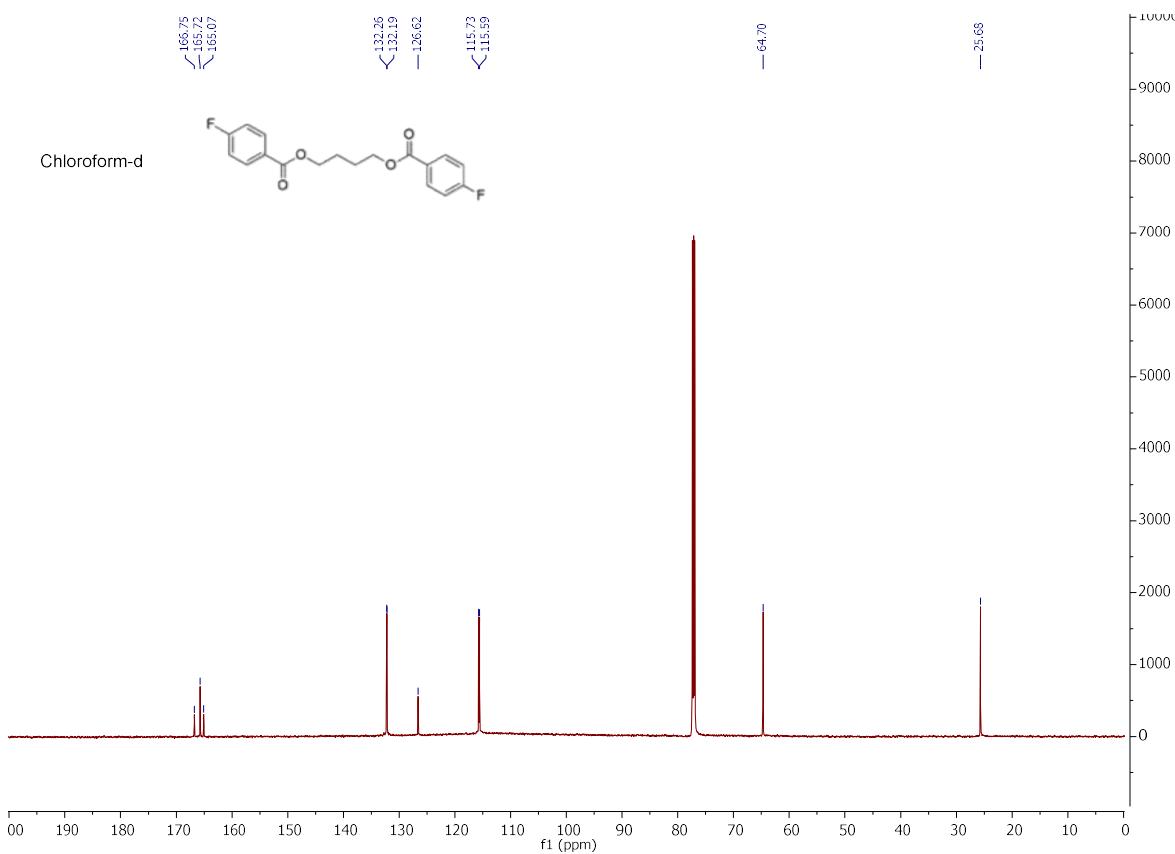
**Supplementary Figure S36.**  $^1\text{H}$ -NMR 6c.



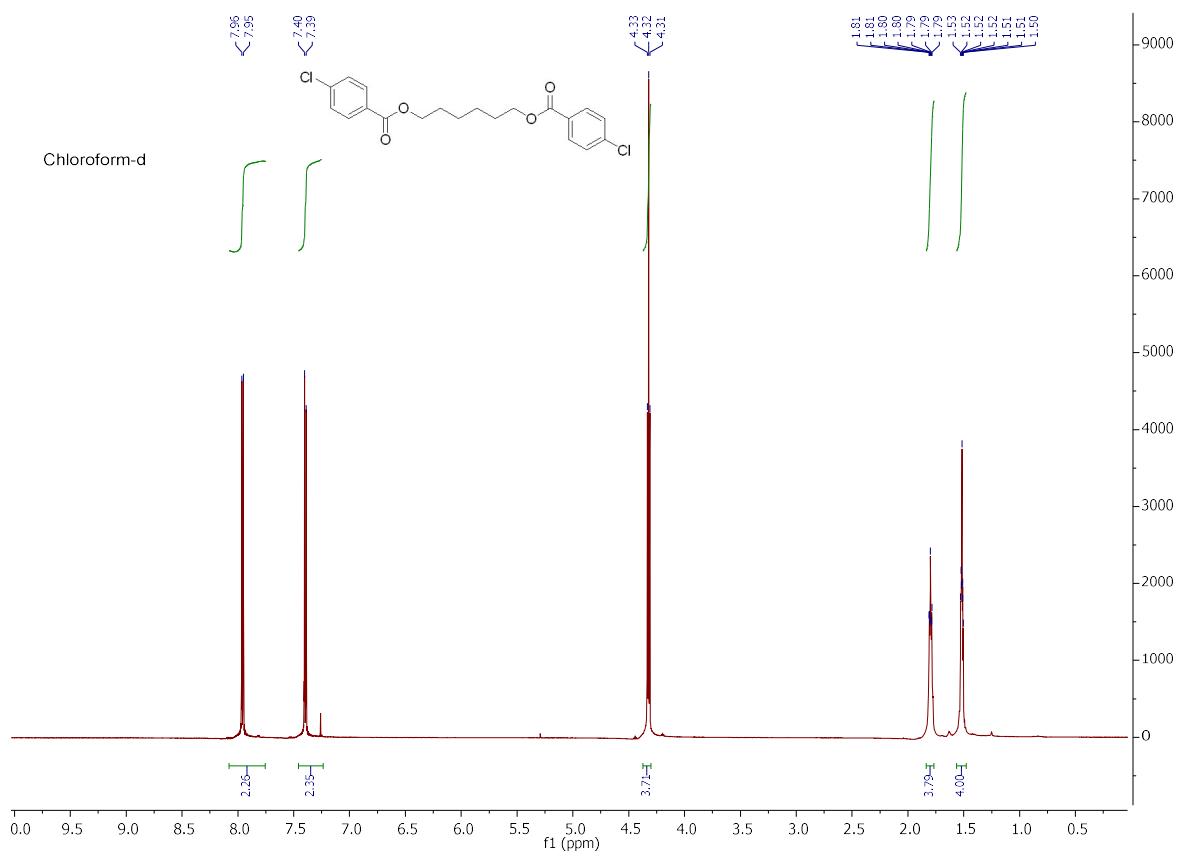
**Supplementary Figure S37.**  $^{13}\text{C}$ -NMR 6c.



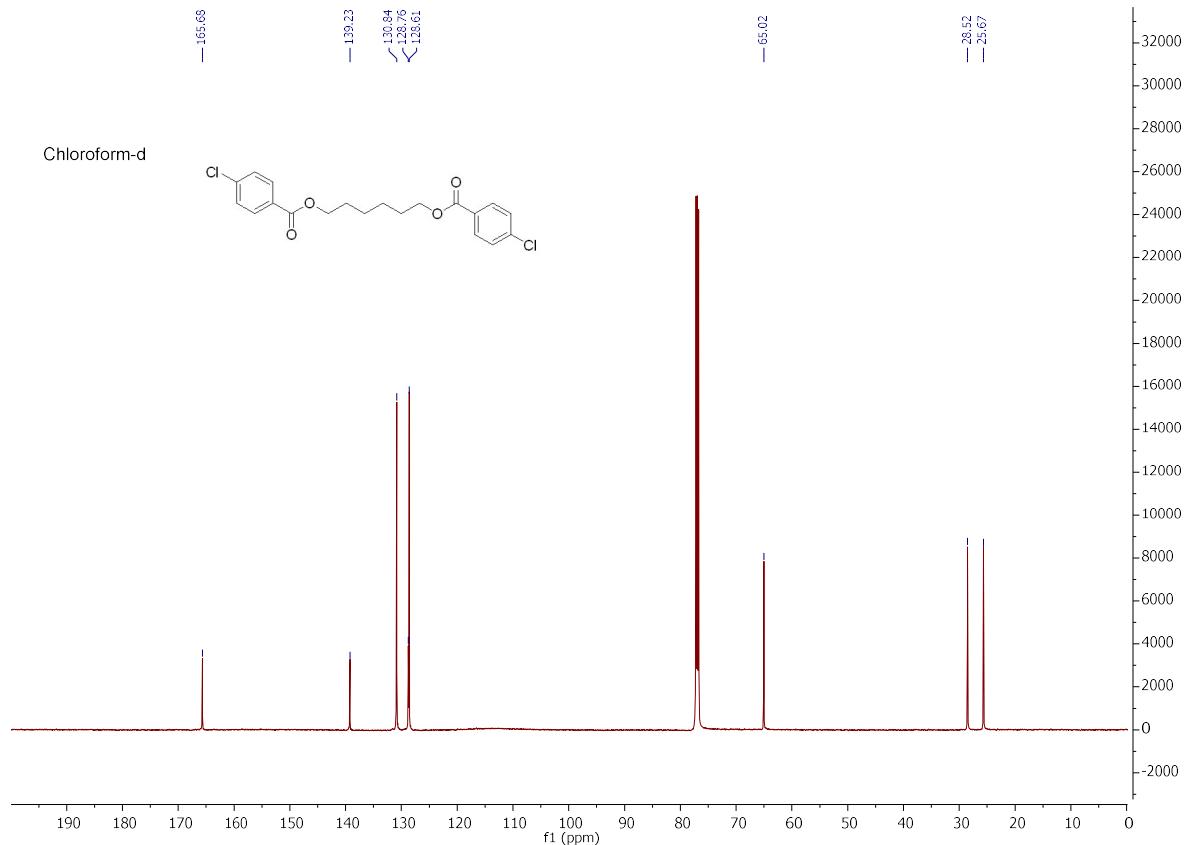
**Supplementary Figure S38.**  $^1\text{H}$ -NMR 6d.



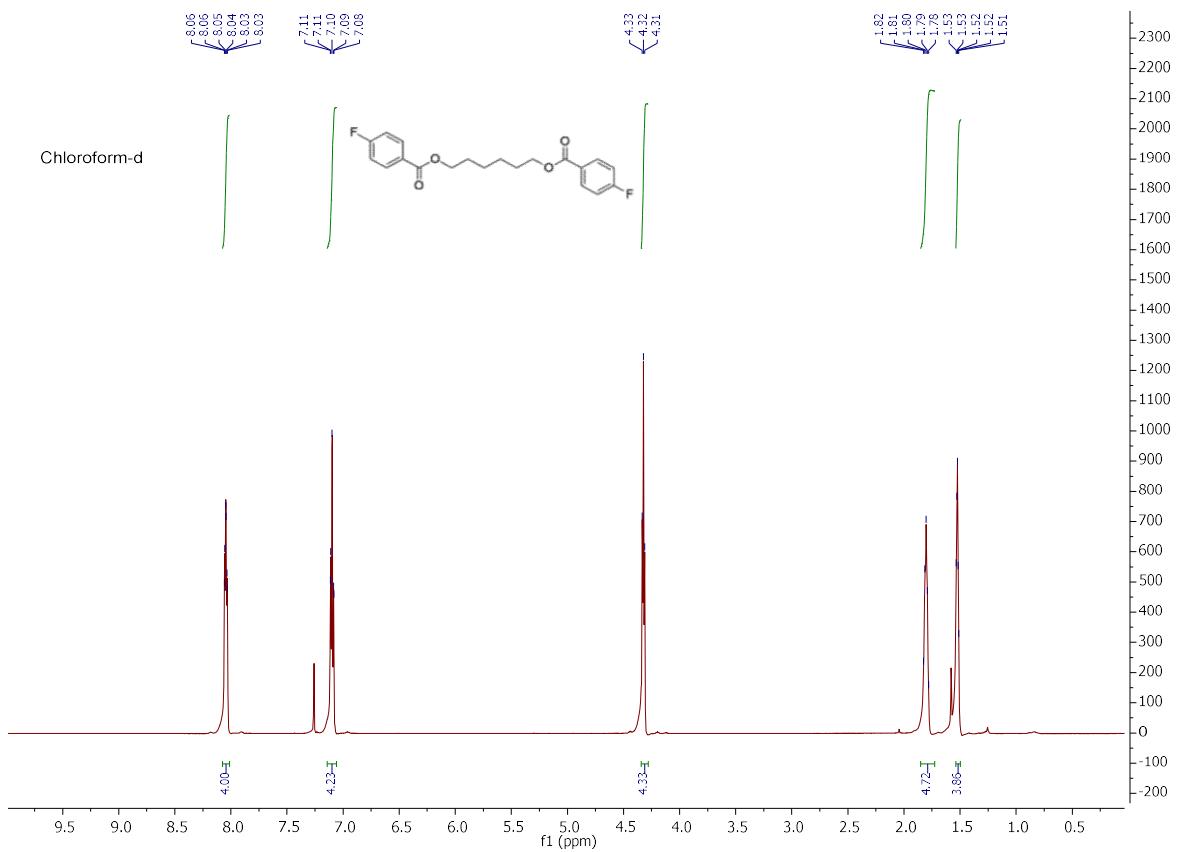
**Supplementary Figure S39.**  $^{13}\text{C}$ -NMR 6d.



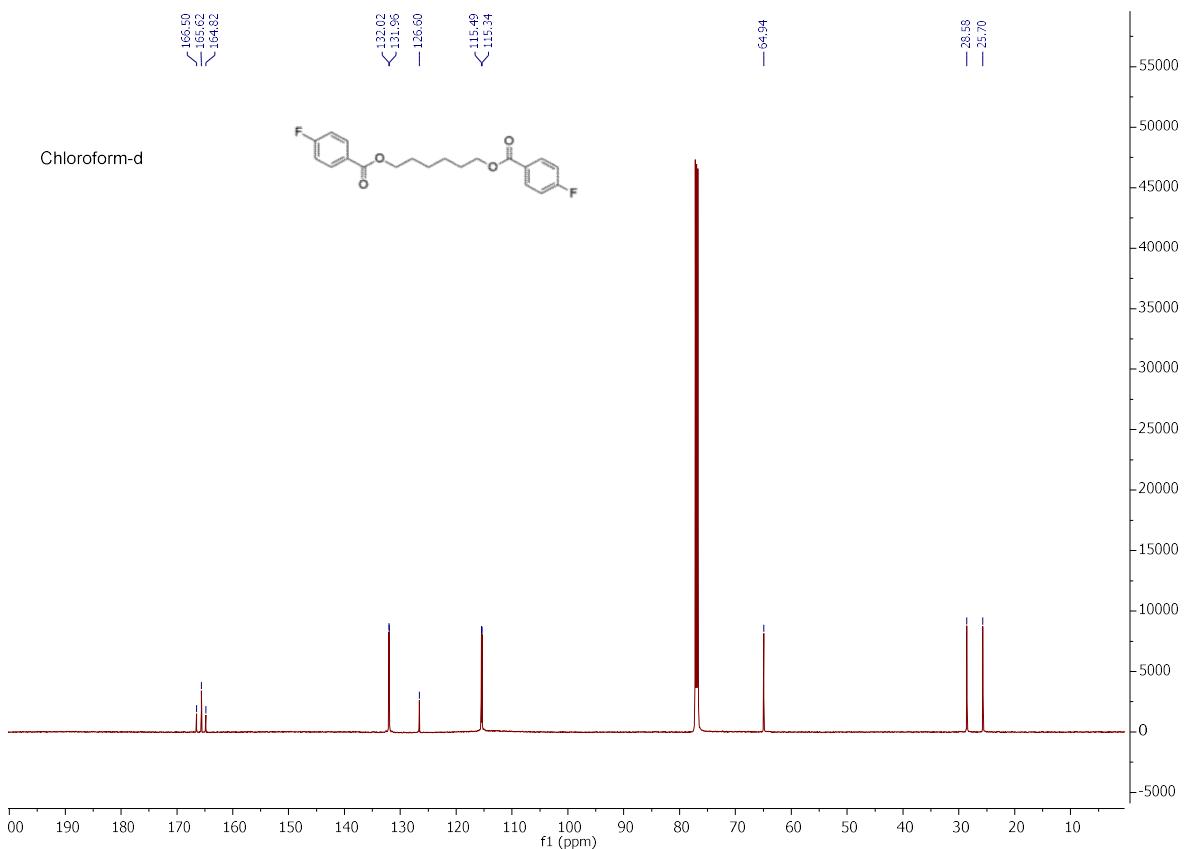
**Supplementary Figure S40.**  $^1\text{H}$ -NMR 6e.



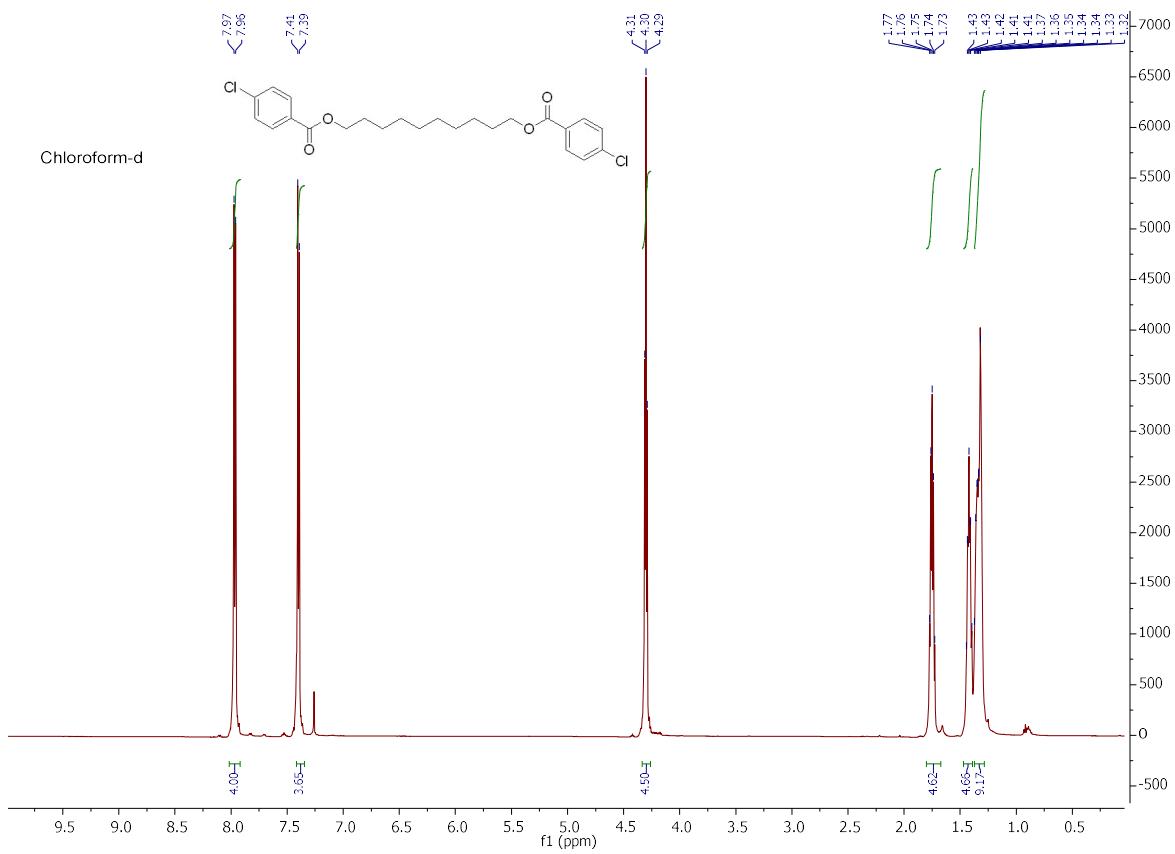
**Supplementary Figure S41.**  $^{13}\text{C}$ -NMR 6e.



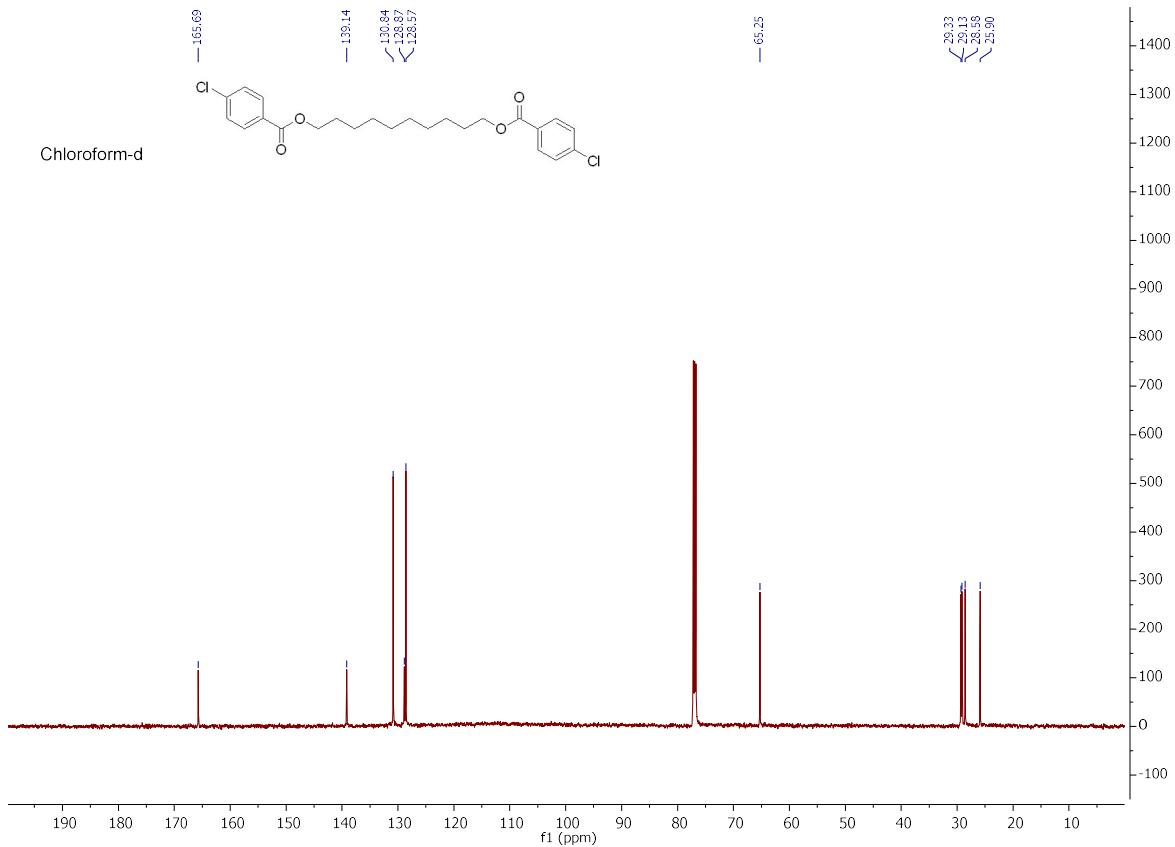
**Supplementary Figure S42.**  $^1\text{H}$ -NMR 6f.



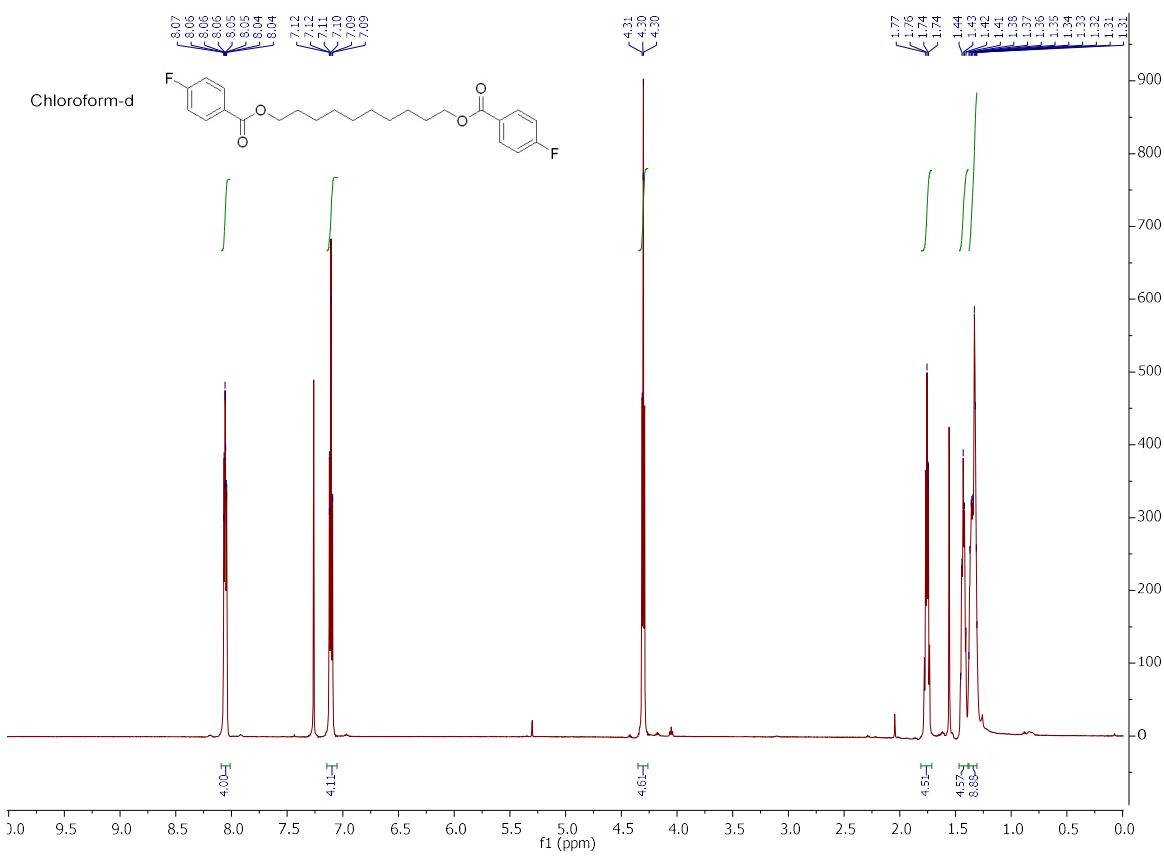
**Supplementary Figure S43.**  $^{13}\text{C}$ -NMR 6f.



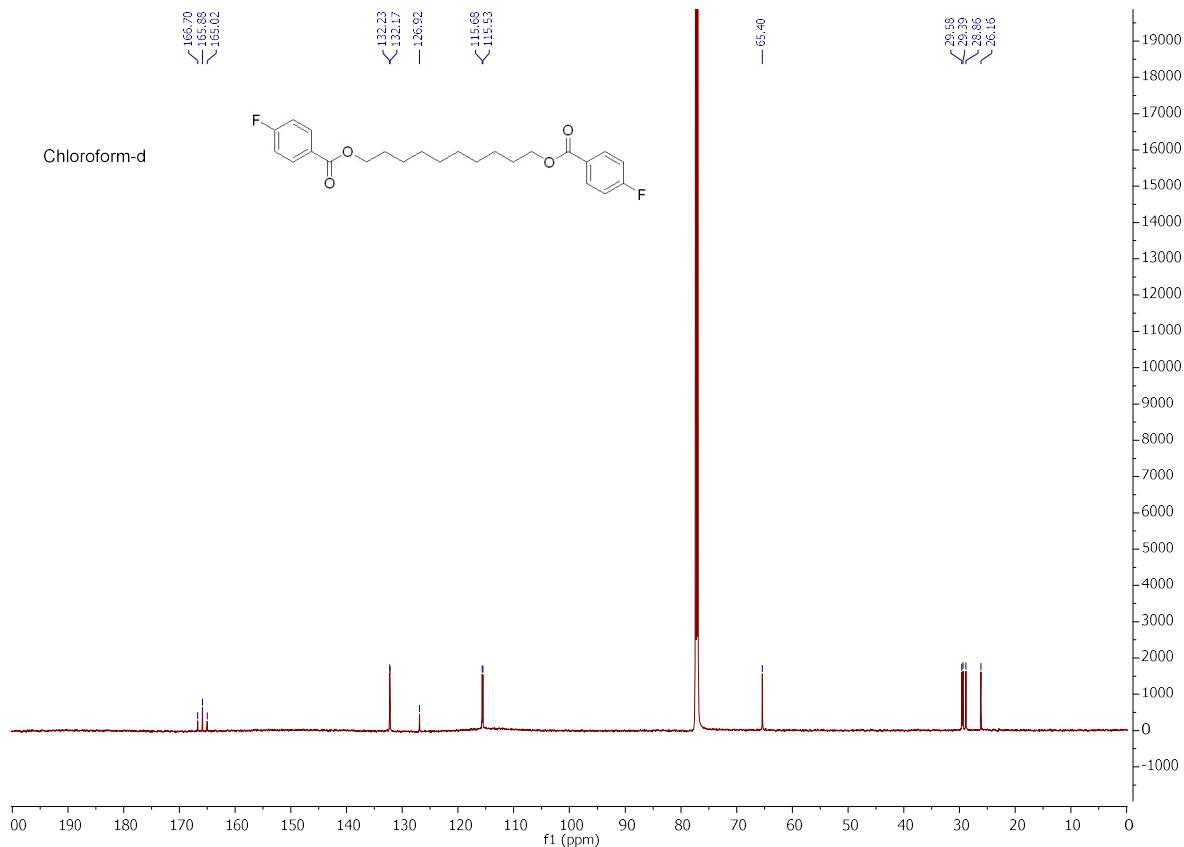
**Supplementary Figure S44.**  $^1\text{H}$ -NMR 6g.



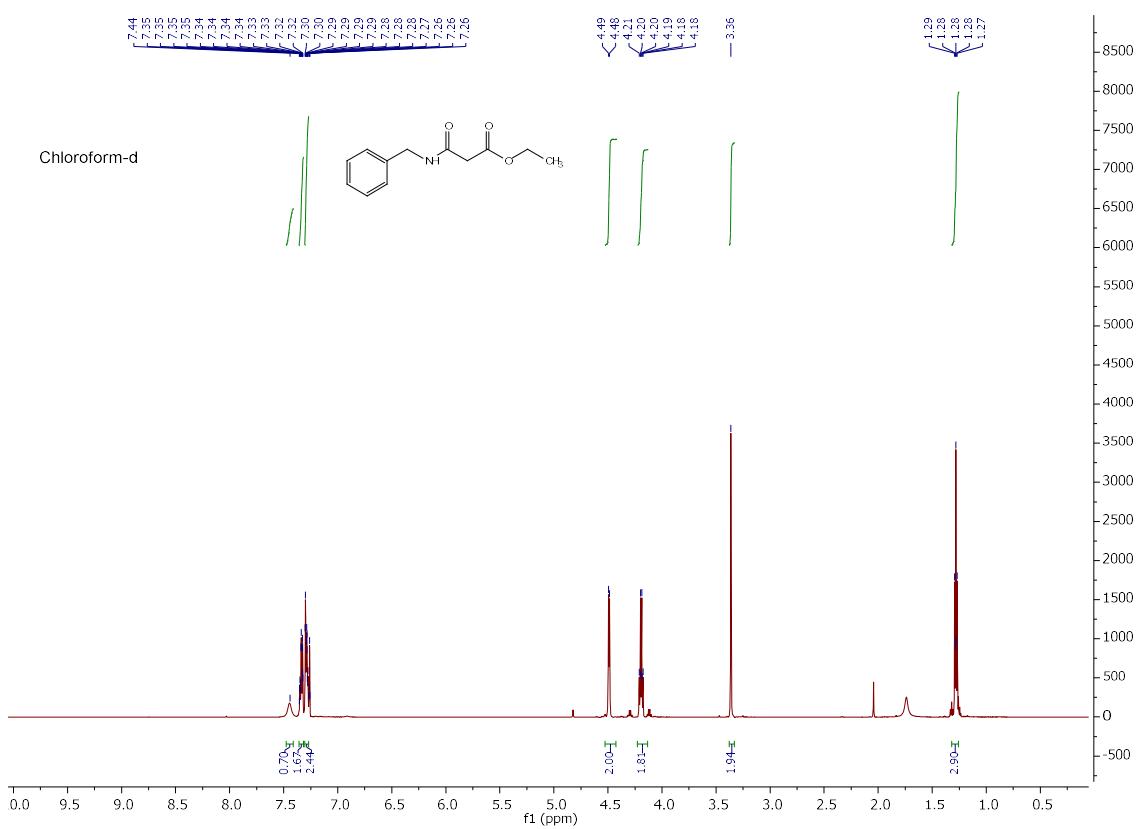
**Supplementary Figure S45.**  $^{13}\text{C}$ -NMR 6g.



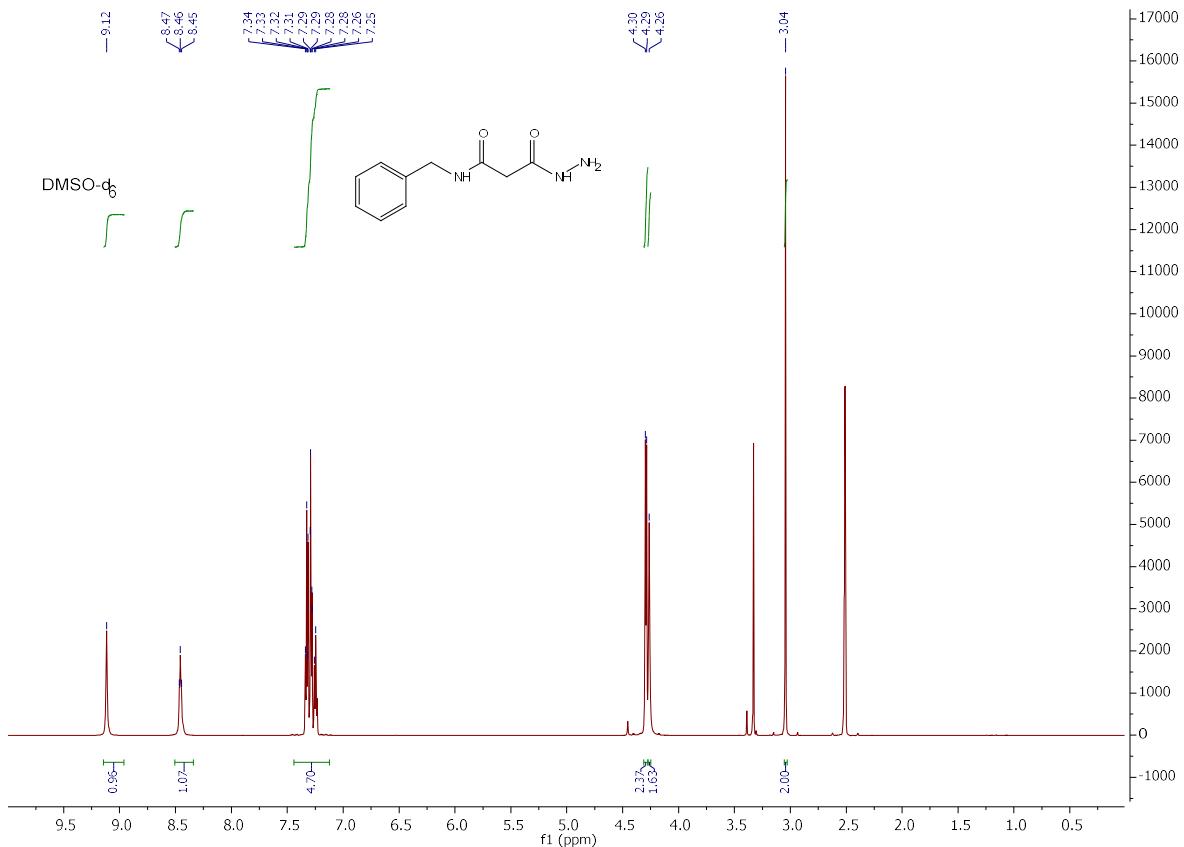
**Supplementary Figure S46.** <sup>1</sup>N-NMR 6h.



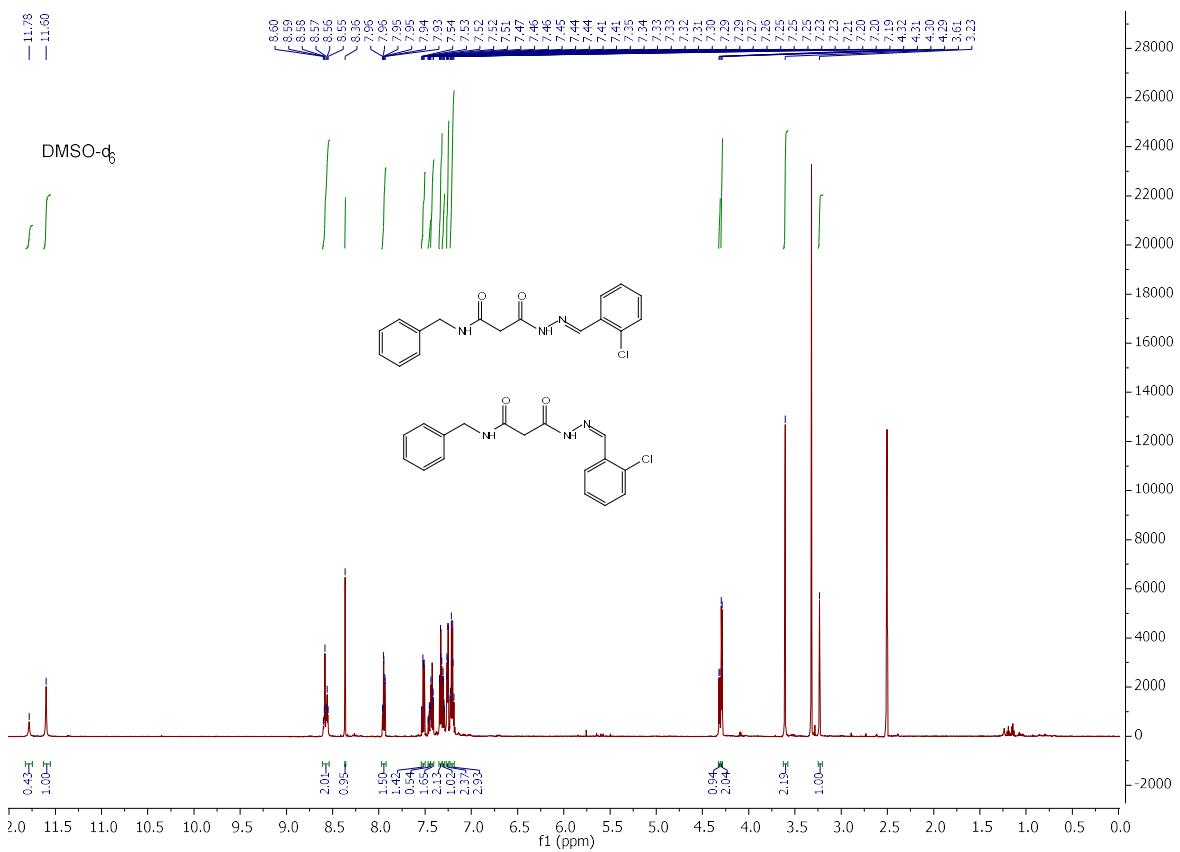
**Supplementary Figure S47.** <sup>13</sup>C-NMR 6h.



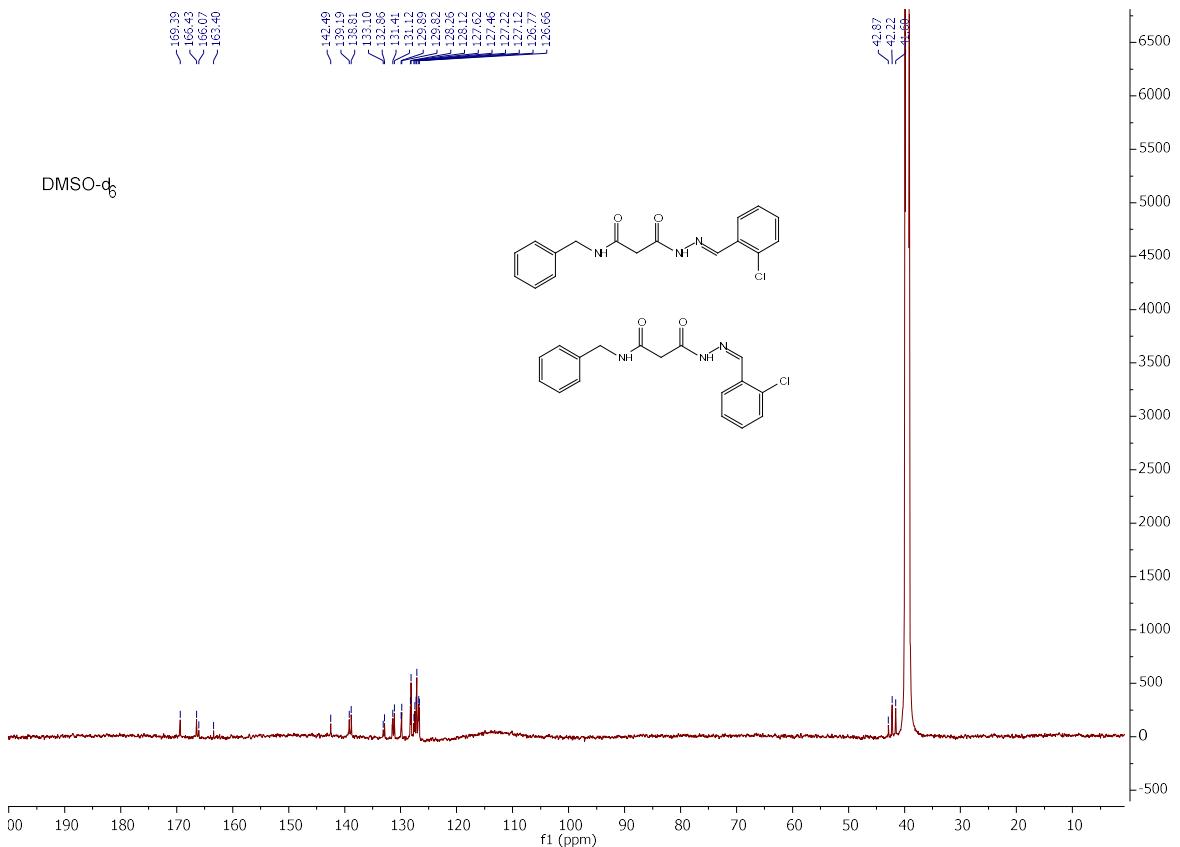
**Supplementary Figure S48.**  $^1\text{H}$ -NMR 9.



**Supplementary Figure S49.**  $^1\text{H}$ -NMR 10.



**Supplementary Figure S50.**  $^1\text{H}$ -NMR 3.



**Supplementary Figure S51.**  $^{13}\text{C}$ -NMR 3.