#### **Supplementary Material:**

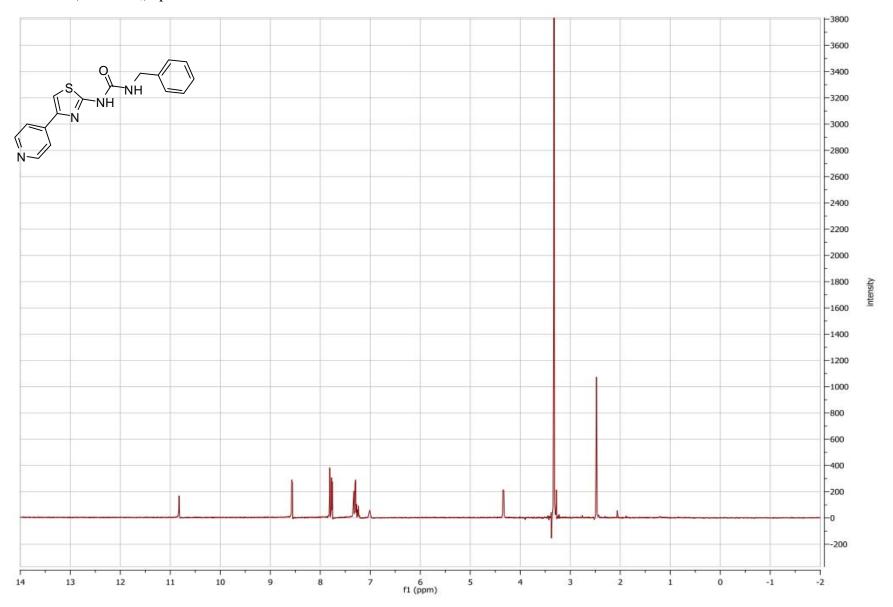
#### Pyridylthiazole-Based Ureas as Inhibitors of Rho Associated Protein Kinases (ROCK1 and 2)

Roberta Pireddu, <sup>1</sup> Kara Forinash, <sup>1</sup> Nan N. Sun, <sup>2</sup> Mathew P. Martin, <sup>1</sup> Shen-Shu Sung, <sup>2</sup> Brian Alexander, <sup>1</sup> Jin-Yi Zhu, <sup>1</sup> Wayne C. Guida, <sup>1,2,4</sup> Ernst Schönbrunn, <sup>1,3</sup> Saïd M. Sebti <sup>1,3,5</sup> and Nicholas J. Lawrence <sup>1,3\*</sup>

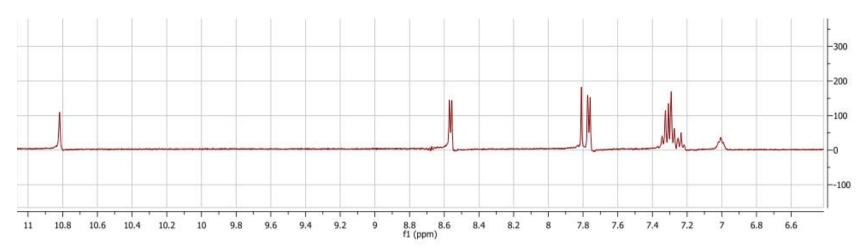
From The <sup>1</sup>Department of Drug Discovery, and <sup>2</sup>Chemical Biology Core Facility, Moffitt Cancer Center; Departments of <sup>3</sup>Oncological Sciences, <sup>4</sup>Chemistry and <sup>5</sup>Molecular Medicine, University of South Florida, Tampa, Florida, 33612

#### <sup>1</sup>H NMR Spectra

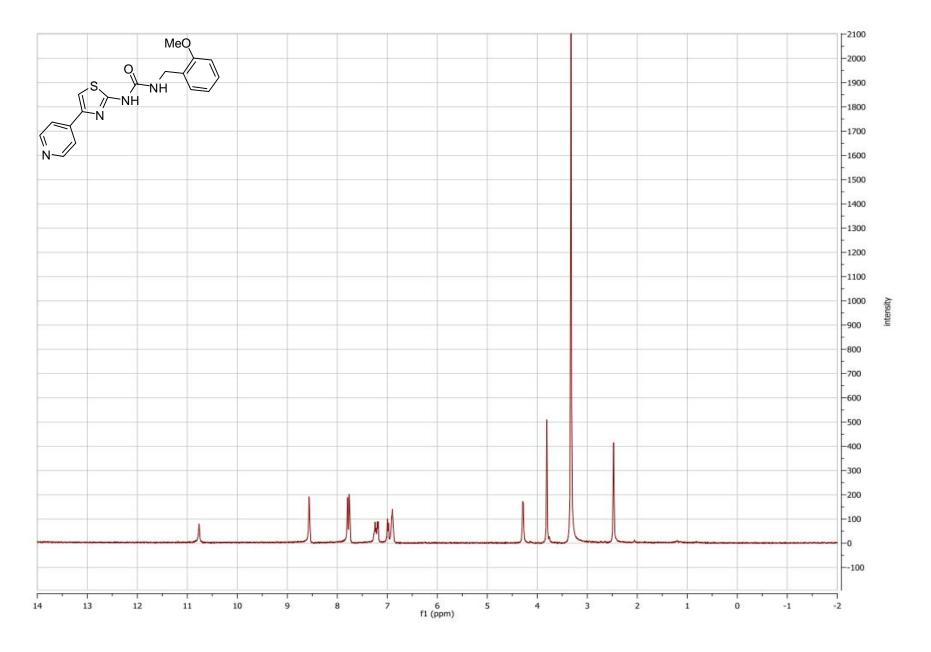
## <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5a**



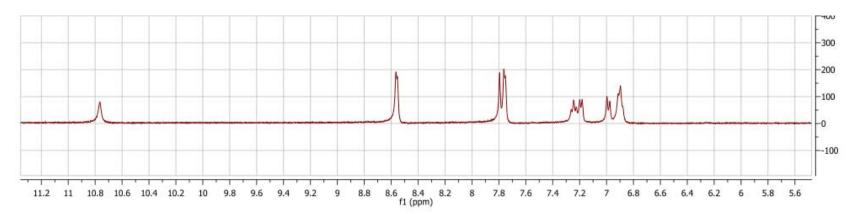
### Expansion of the aromatic region of 5a



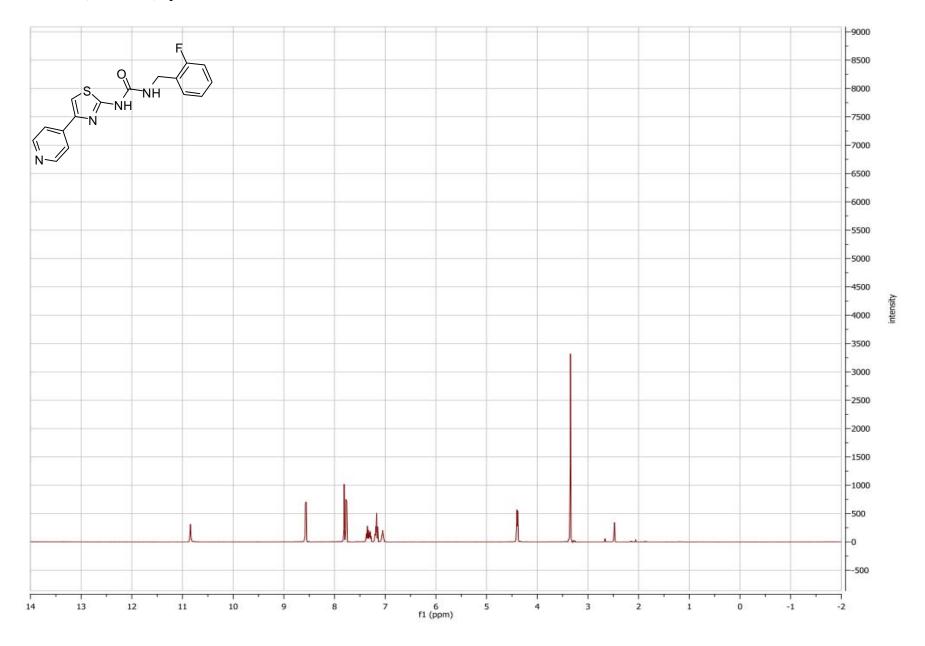
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5e** 



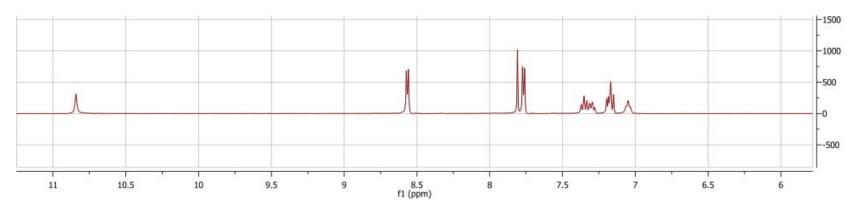
### Expansion of the aromatic region of 5e



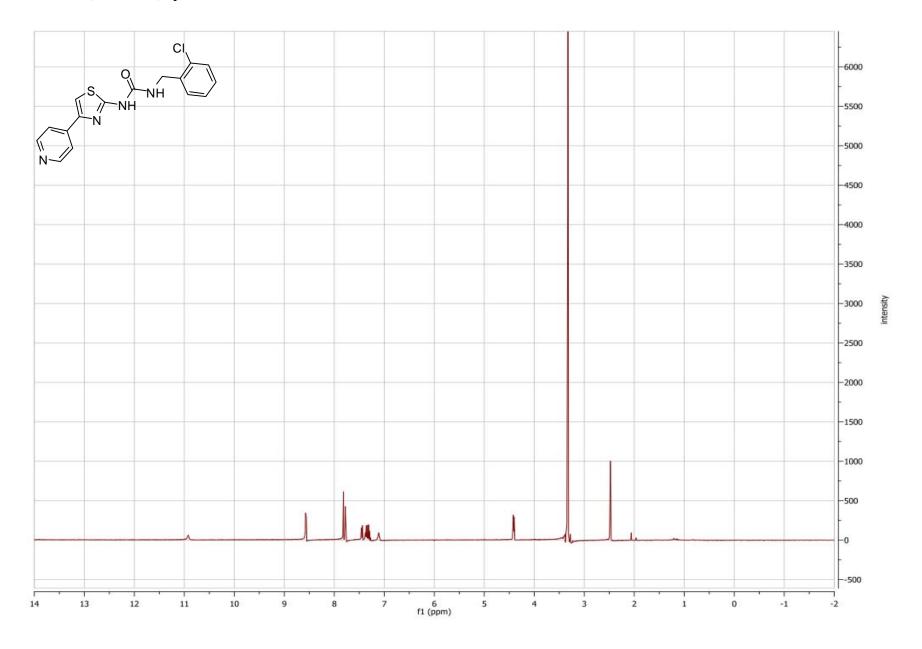
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5r** 



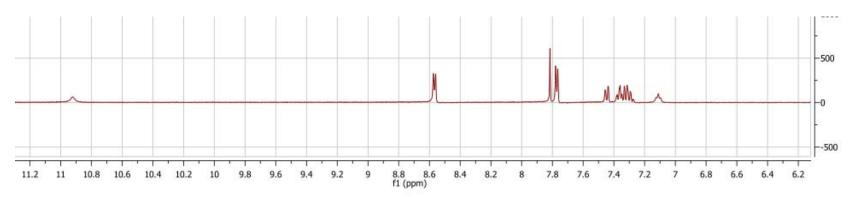
# Expansion of the aromatic region of $\bf 5r$



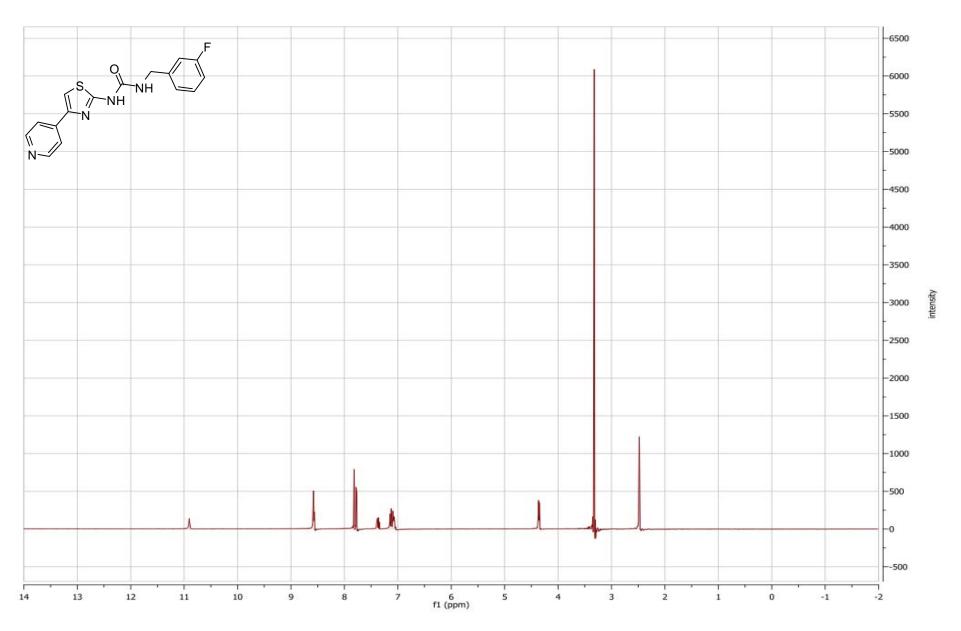
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5u** 



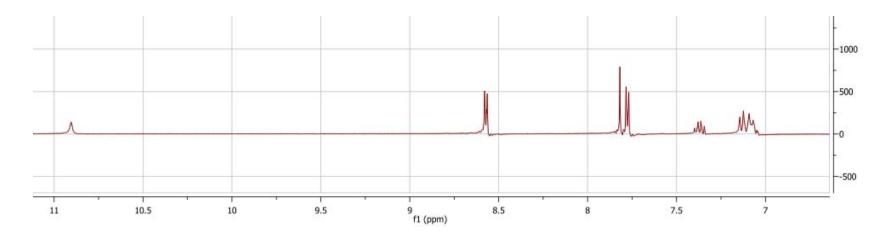
### Expansion of the aromatic region of 5u



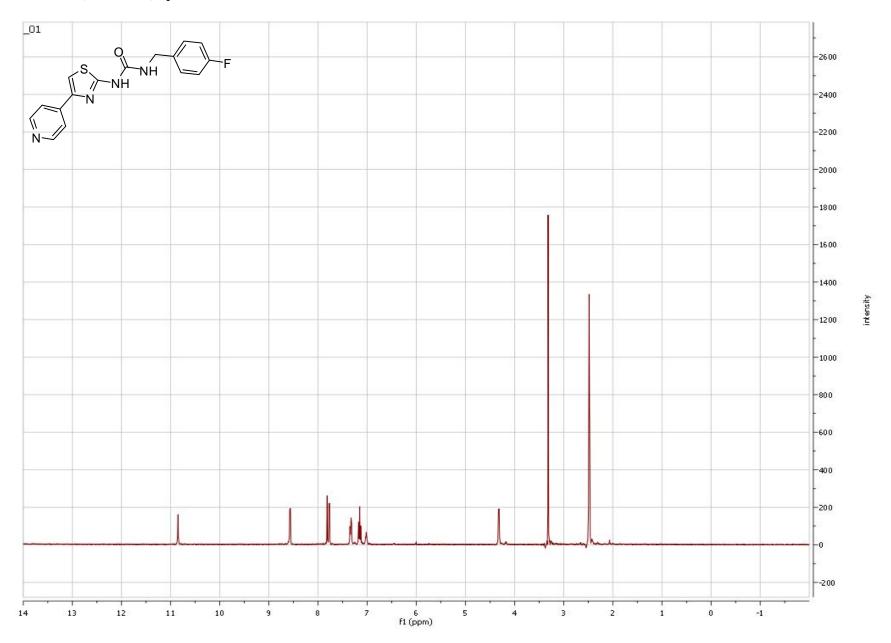
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5q** 



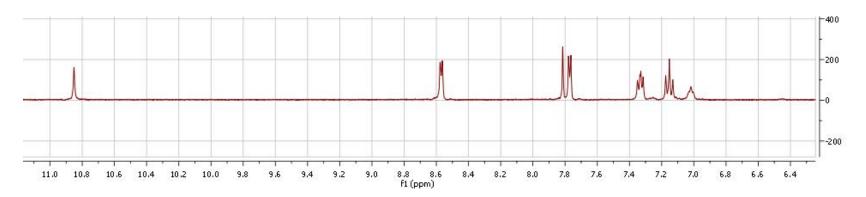
## Expansion of the aromatic region of $\,\mathbf{5q}\,$



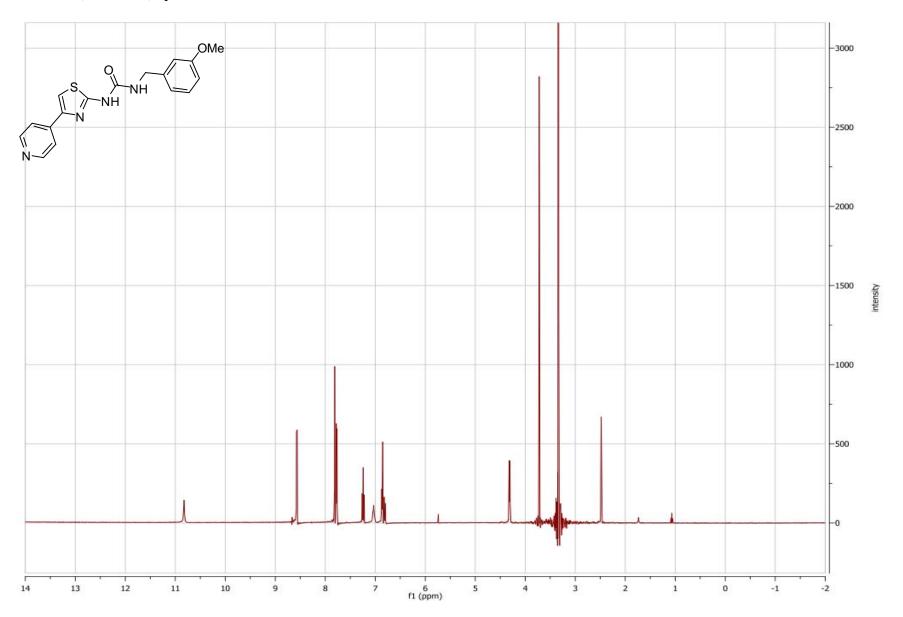
## <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **3s**



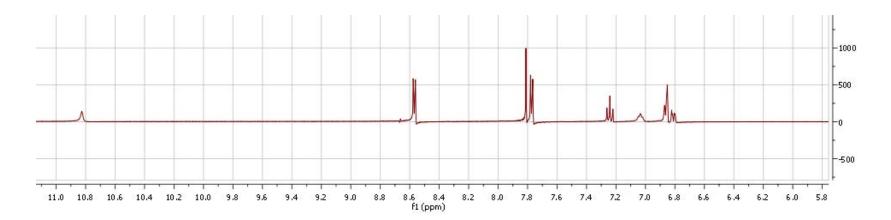
### Expansion of the aromatic region of 3s



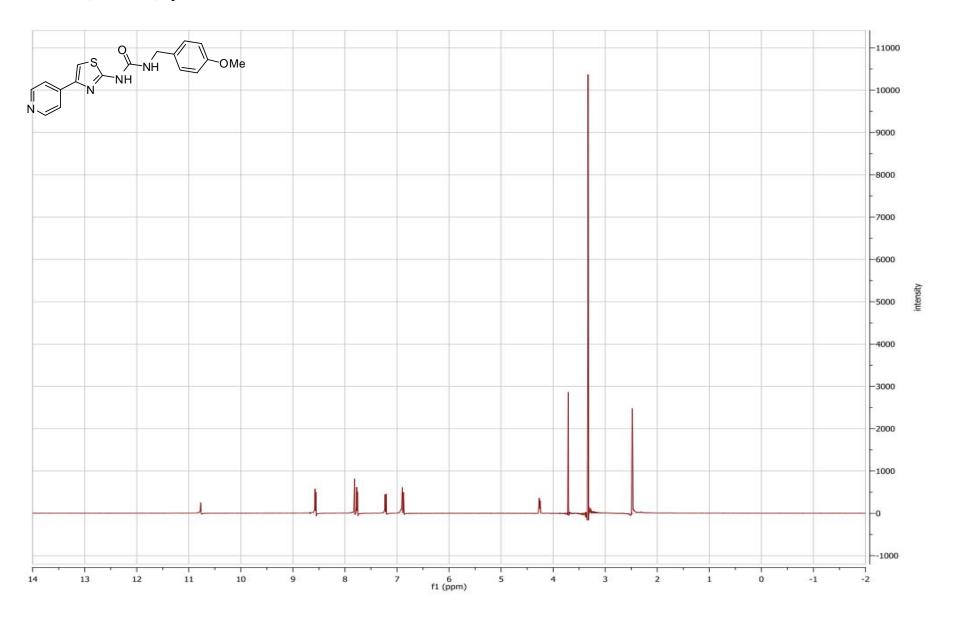
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5b** 



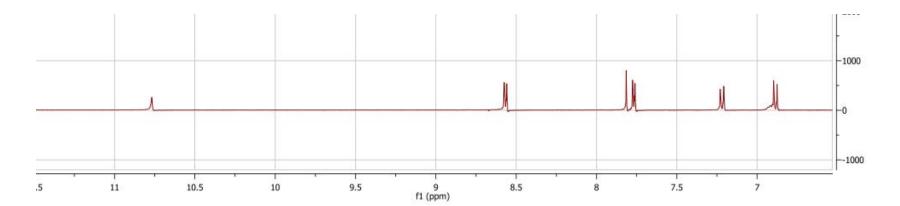
### Expansion of the aromatic region of **5b**



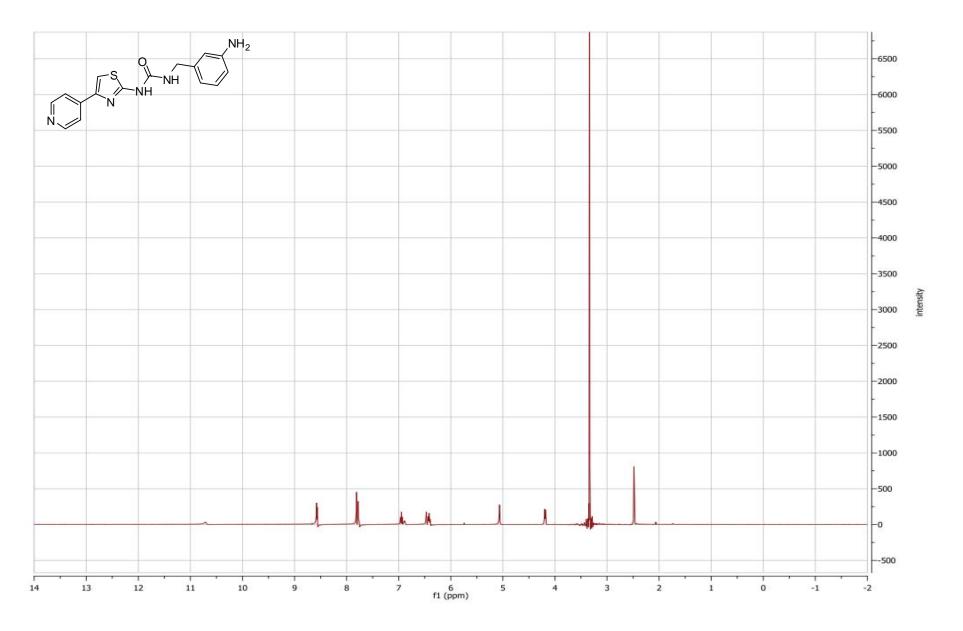
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5d** 



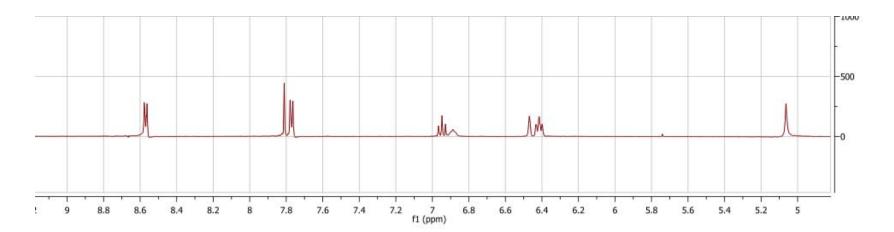
# Expansion of the aromatic region of ${\bf 5d}$



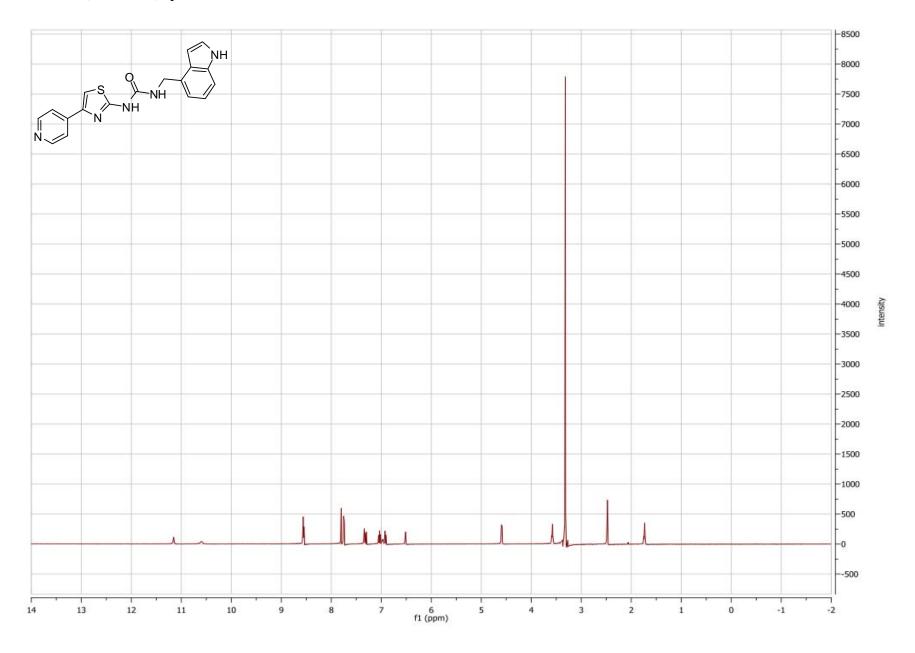
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5e** 



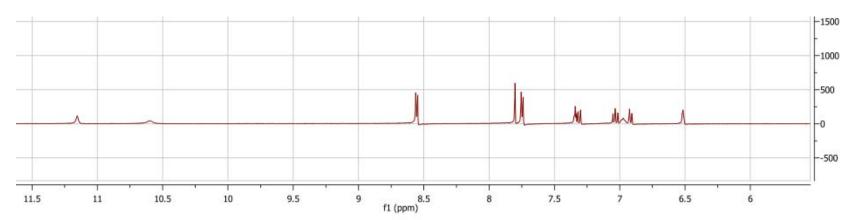
### Expansion of the aromatic region of 5e



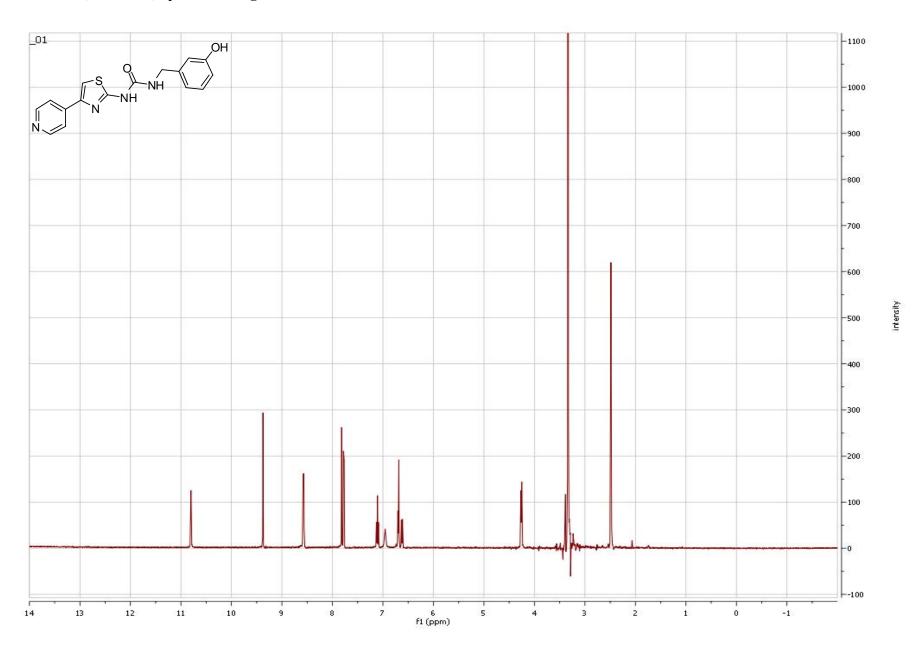
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5f** 



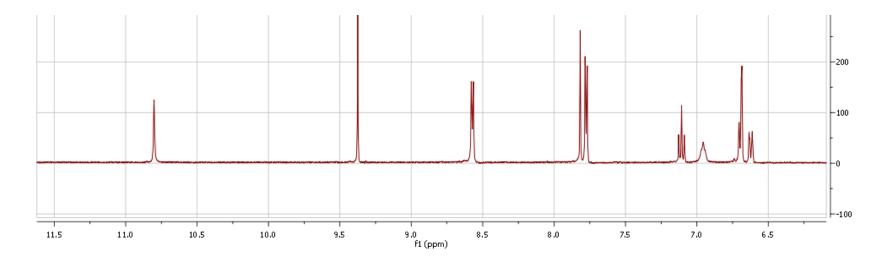
## Expansion of the aromatic region of $\bf 5f$



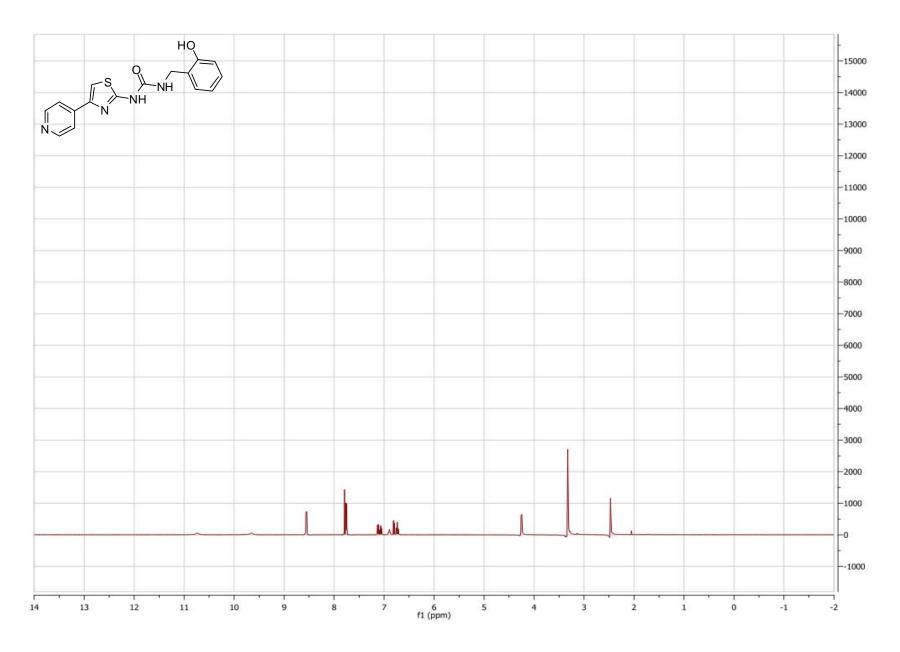
## <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5g**



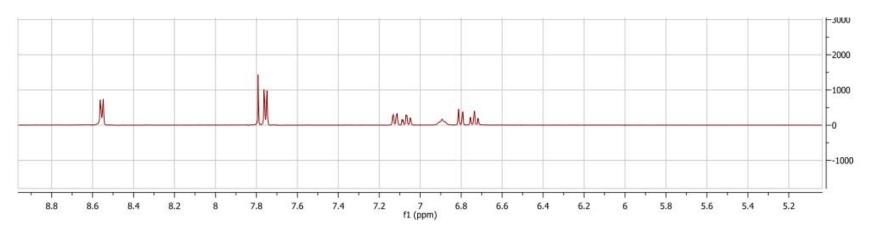
# Expansion of the aromatic region of $\bf 5g$



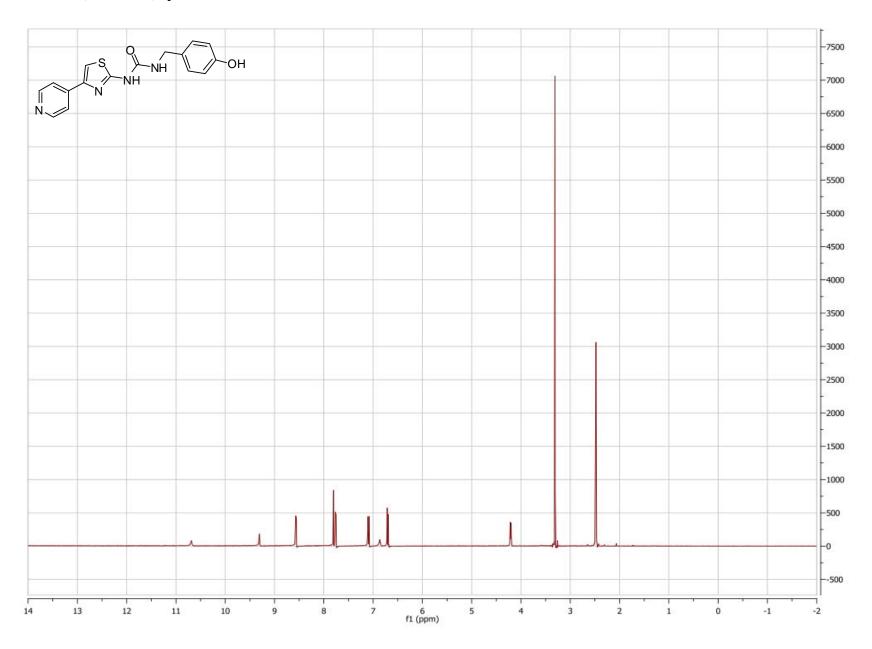
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5h** 



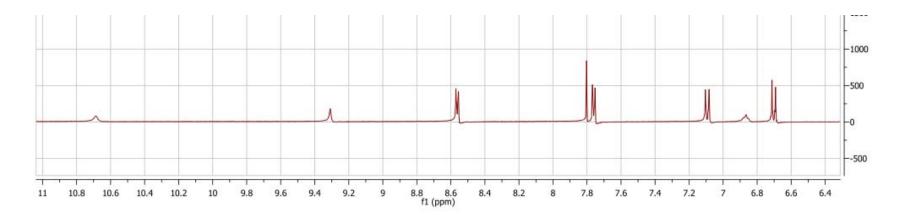
### Expansion of the aromatic region of **5h**



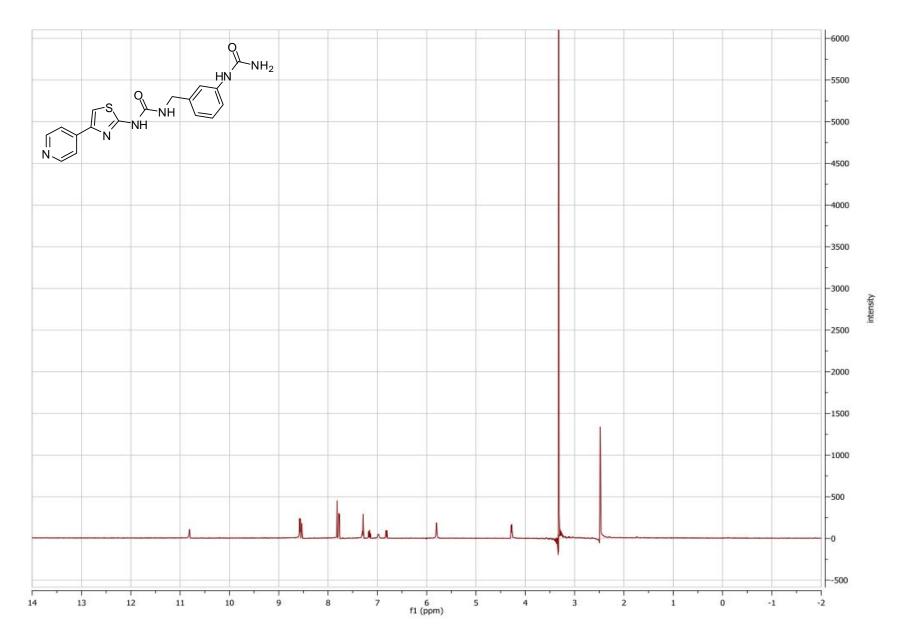
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5i** 



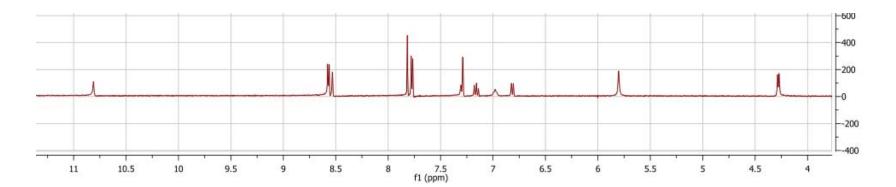
### Expansion of the aromatic region of 5i



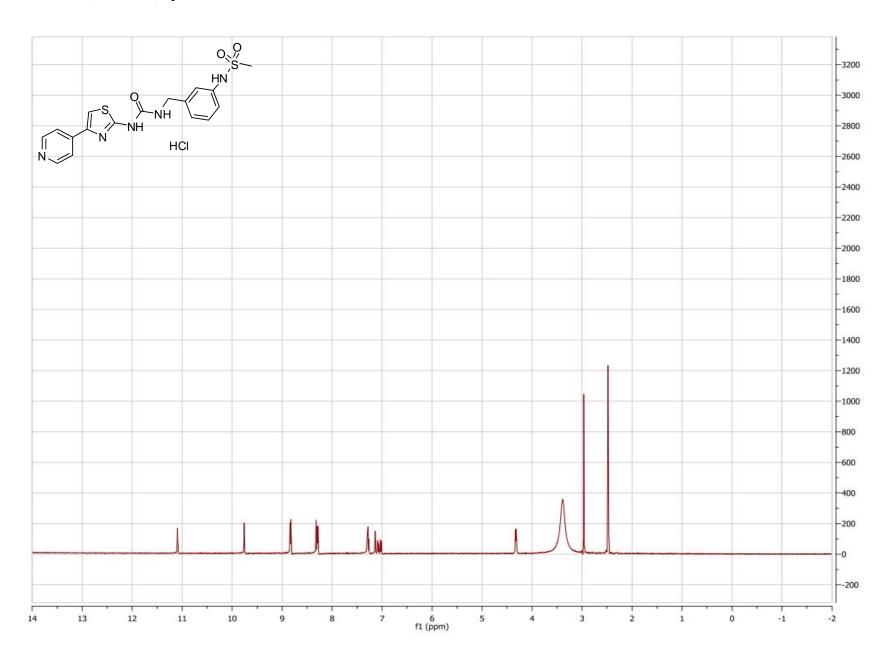
### H NMR (DMSO-d<sub>6</sub>) spectrum of **5j**



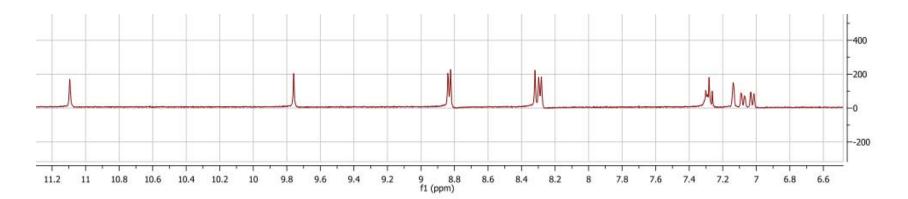
### Expansion of the aromatic region of 5j



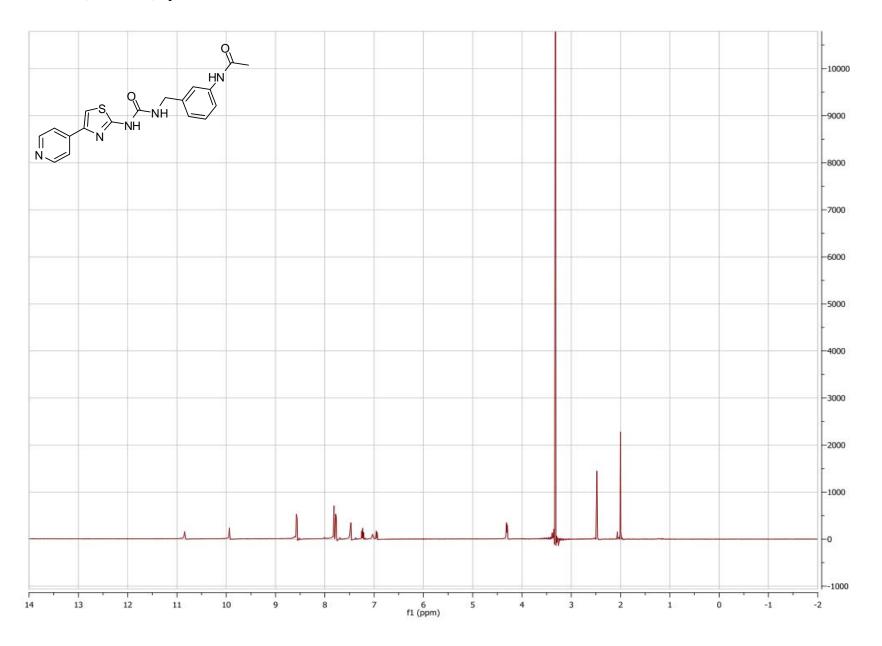
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5k** 



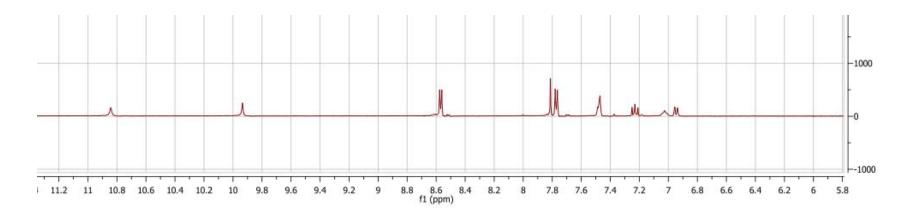
### Expansion of the aromatic region of **5k**



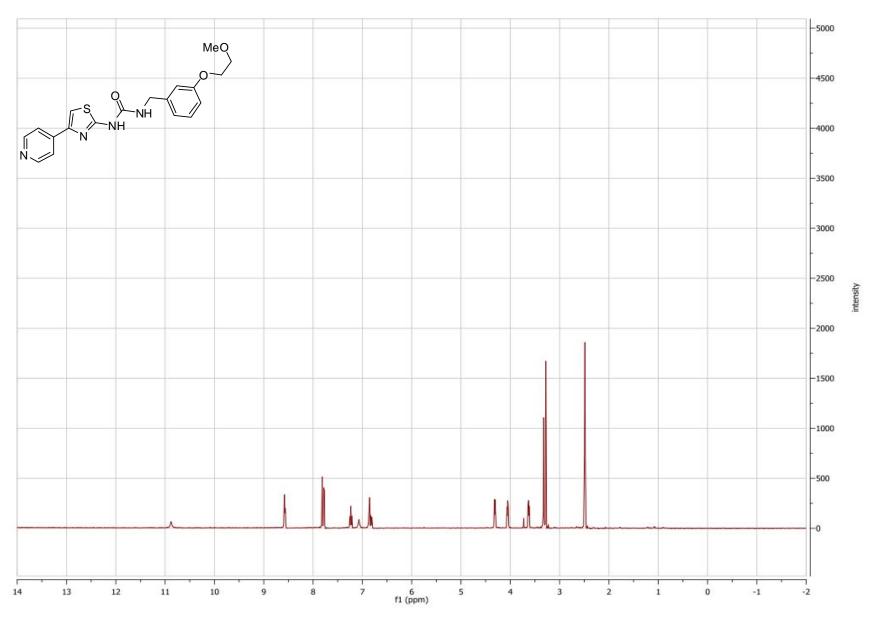
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5**l



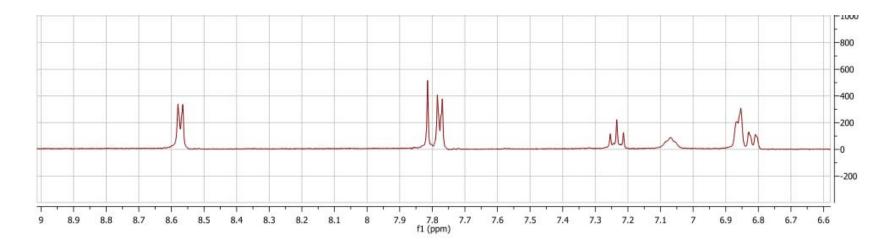
### Expansion of the aromatic region of 51



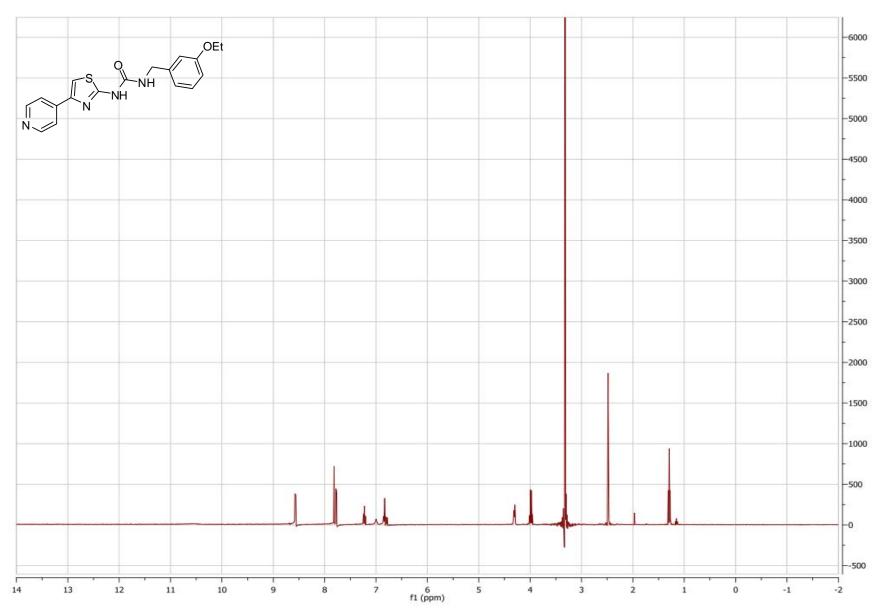
### <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5m**



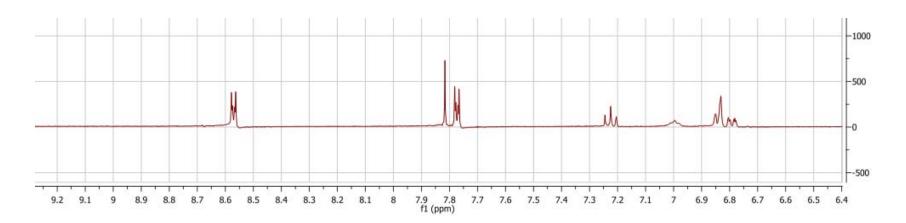
### Expansion of the aromatic region of **5m**



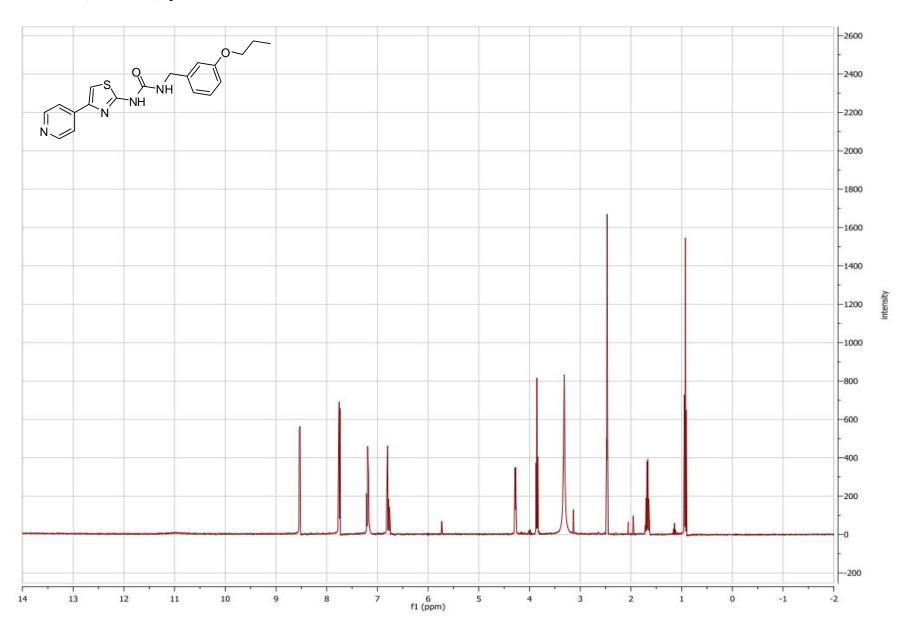
### <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5n**



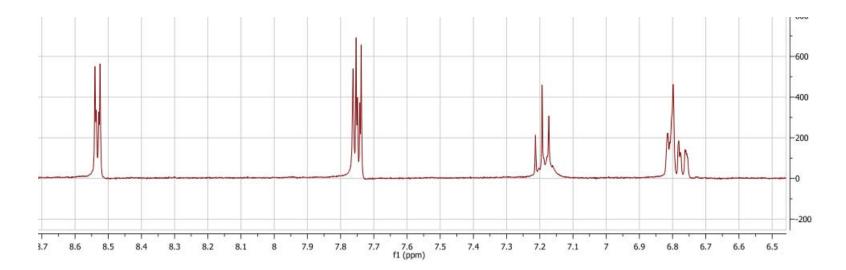
### Expansion of the aromatic region of **5n**



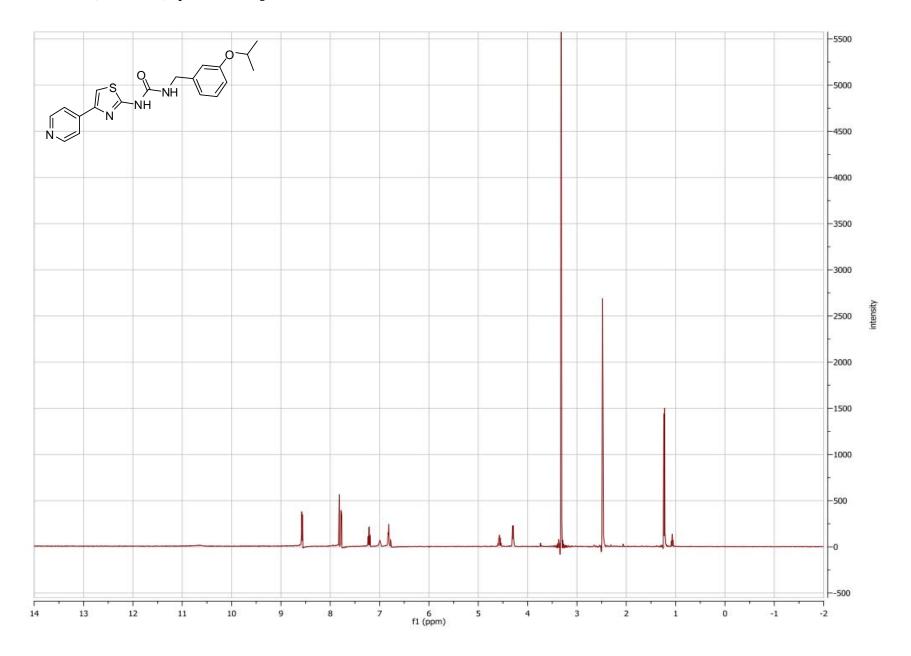
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **50** 



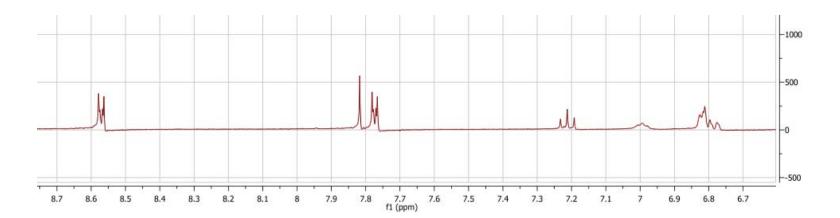
### Expansion of the aromatic region of 50



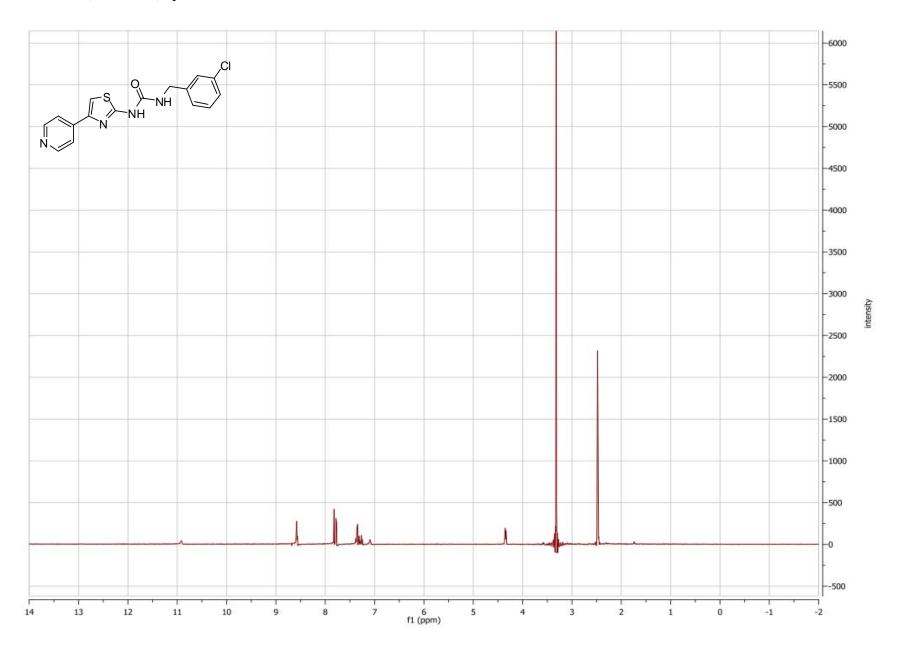
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5p** 



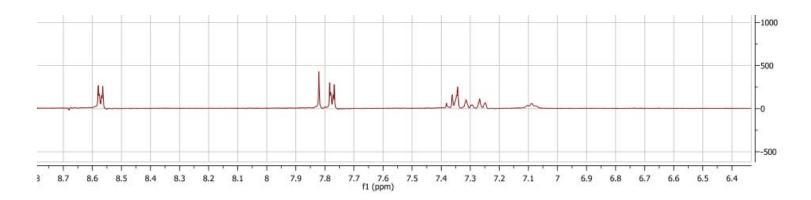
### Expansion of the aromatic region of **5p**



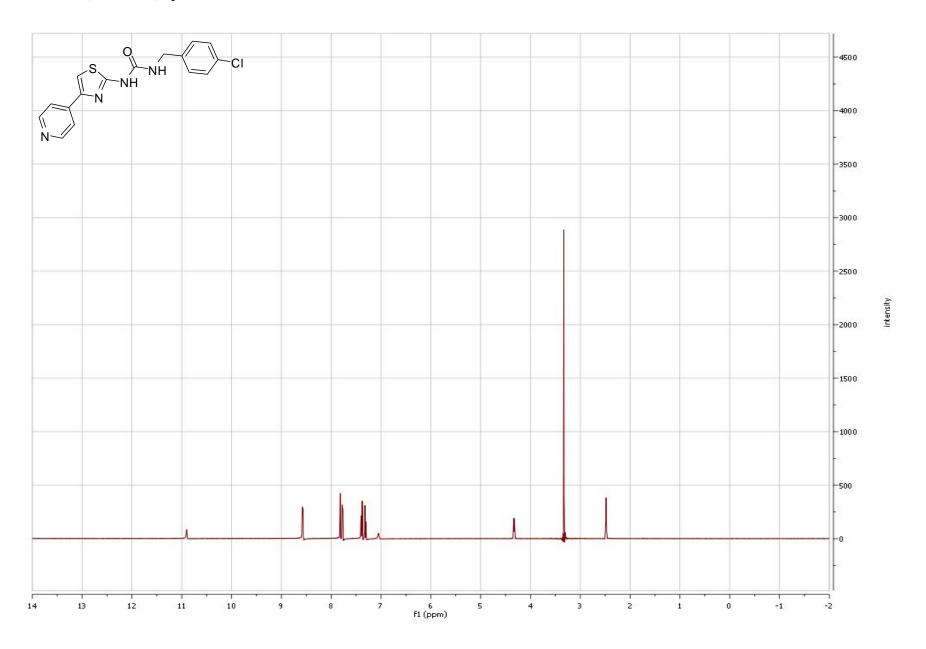
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5t** 



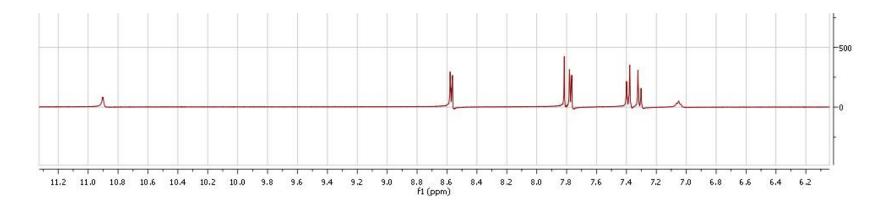
### Expansion of the aromatic region of **5p**



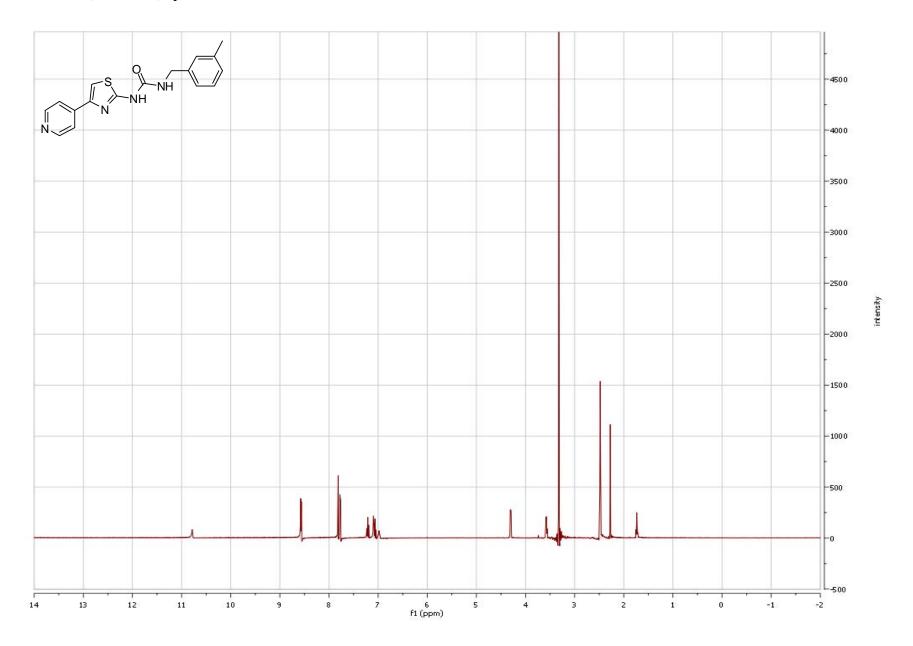
 $^{1}$ H NMR (DMSO-d<sub>6</sub>) spectrum of **5v** 



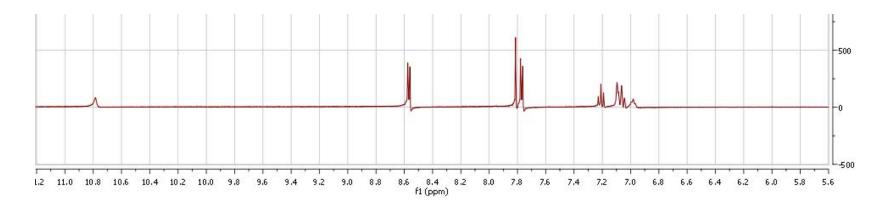
### Expansion of the aromatic region of 5v



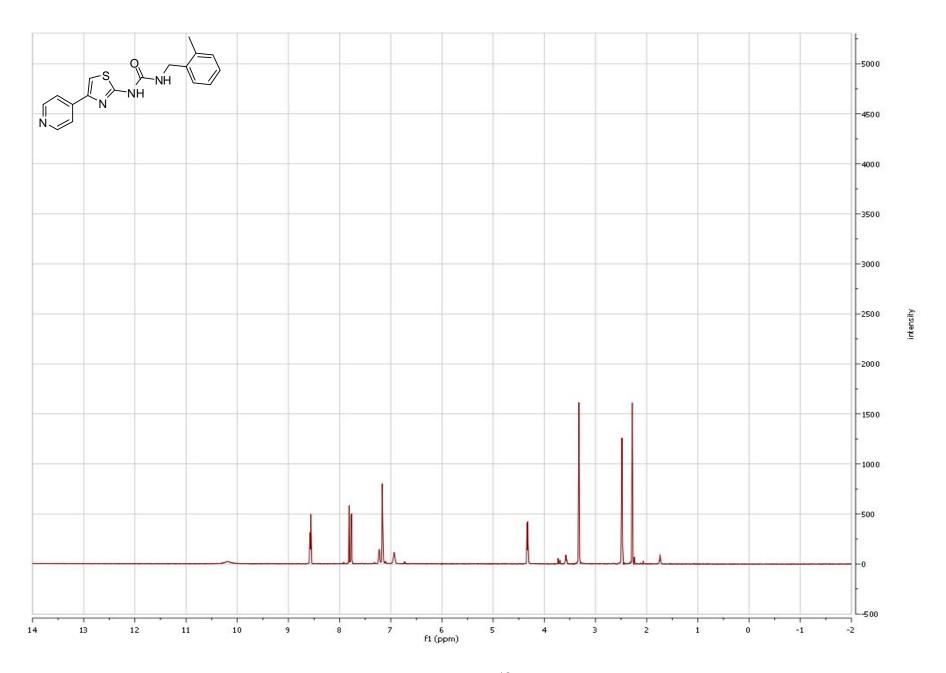
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5w** 



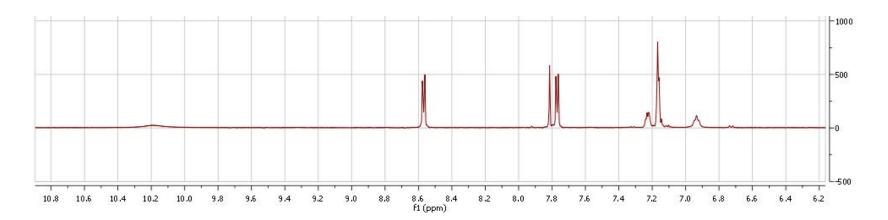
### Expansion of the aromatic region of 5w

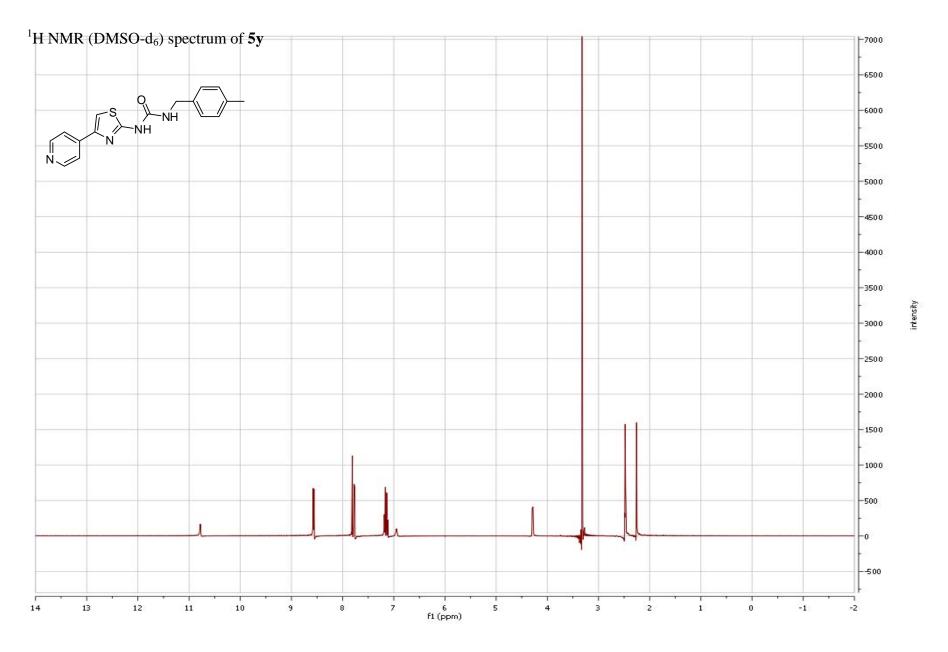


<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5x** 

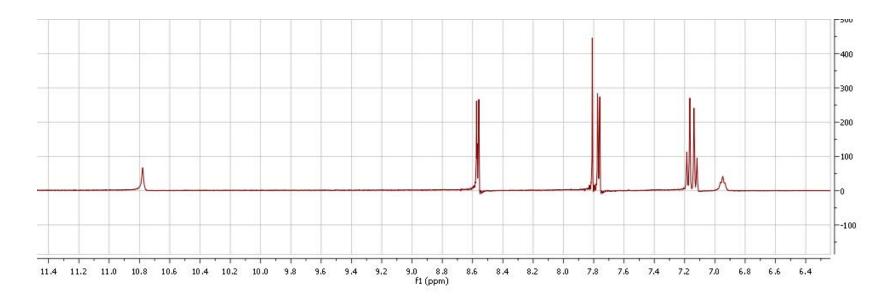


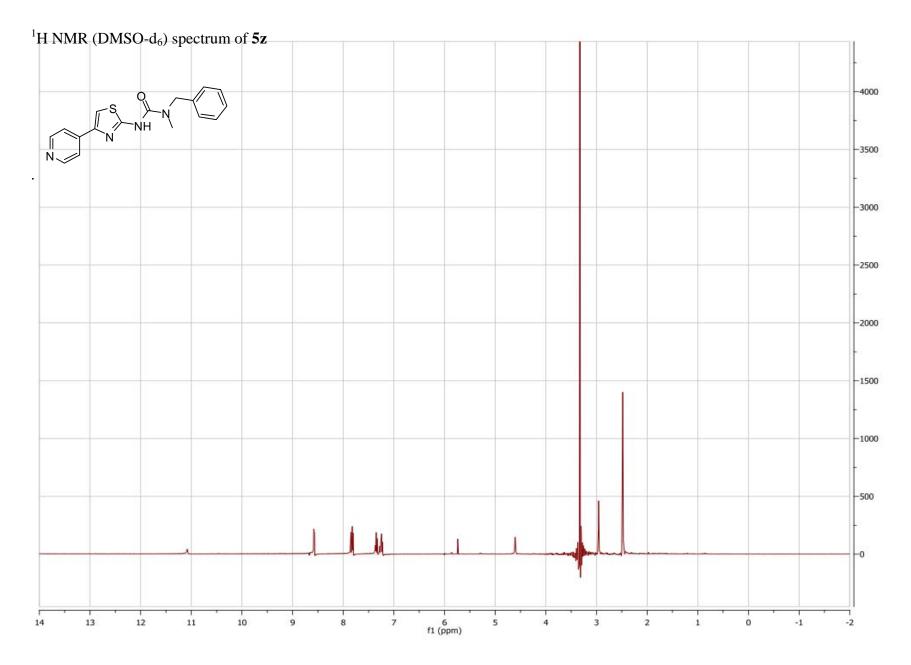
### Expansion of the aromatic region of 5x



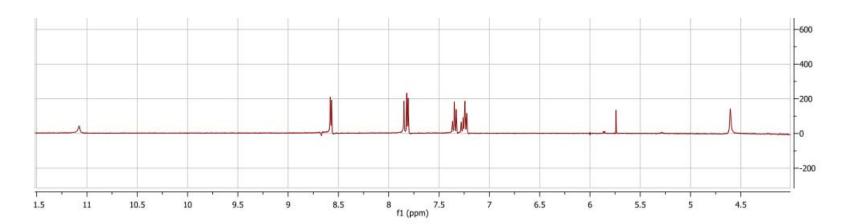


### Expansion of the aromatic region of 5y

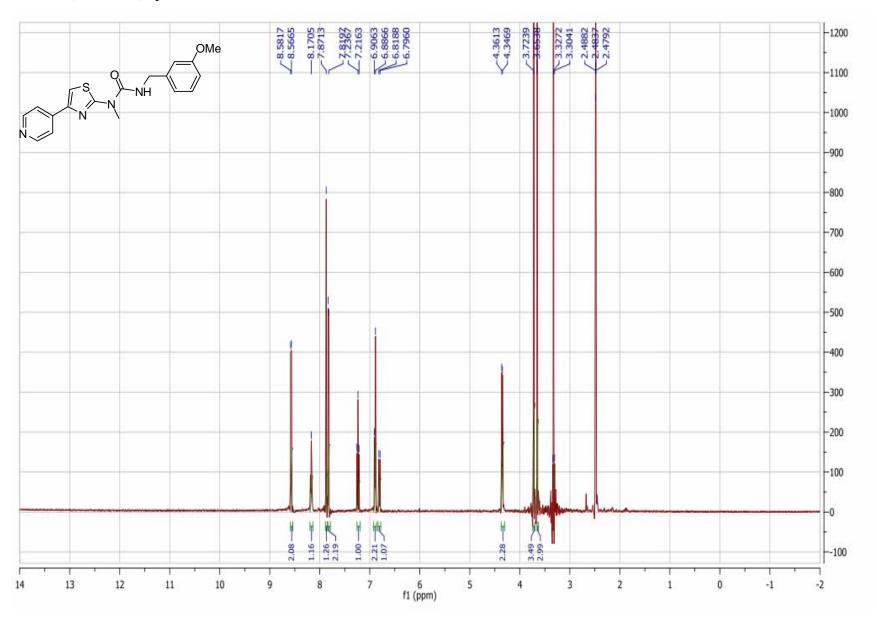




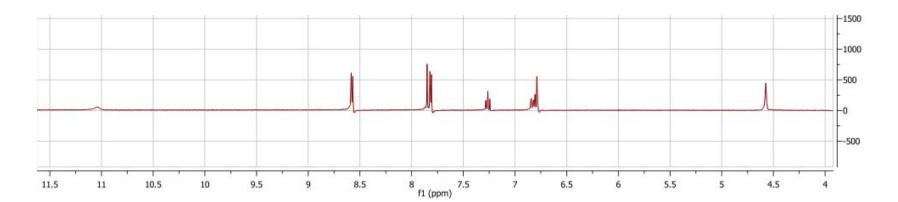
### Expansion of the aromatic region of $\mathbf{5z}$



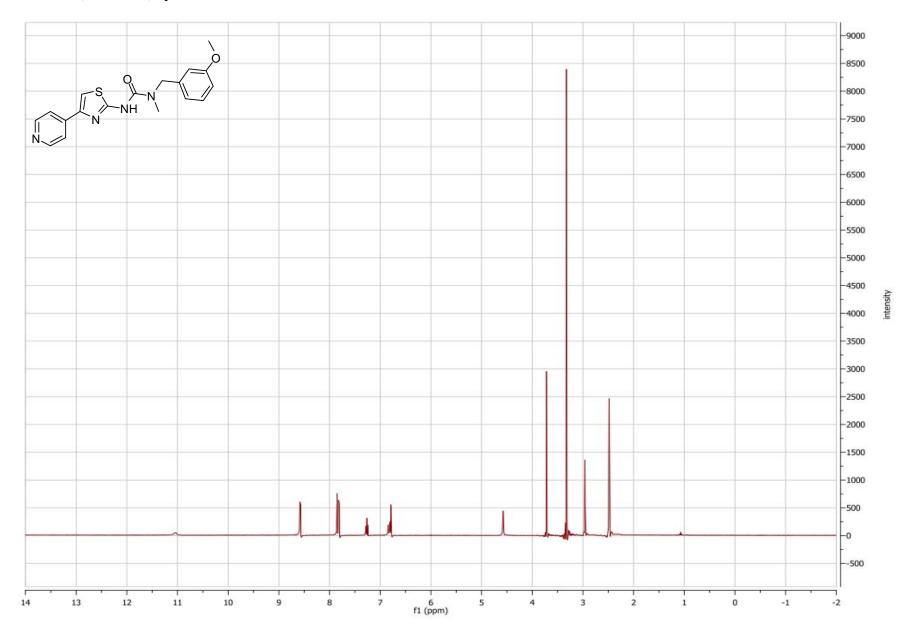
### <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5aa**



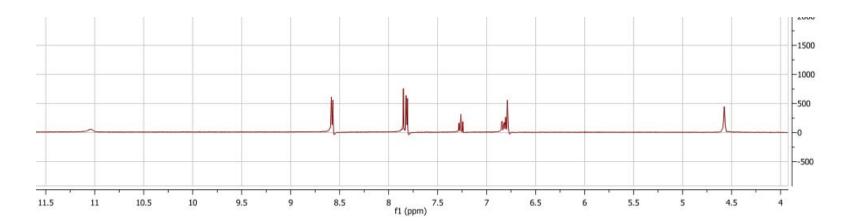
### Expansion of the aromatic region of ${\bf 5aa}$



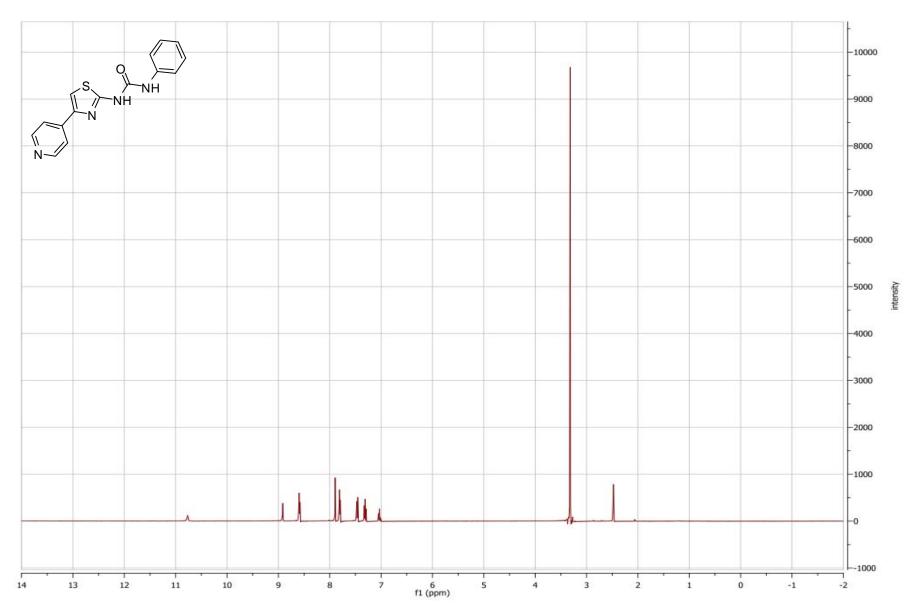
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5ab** 



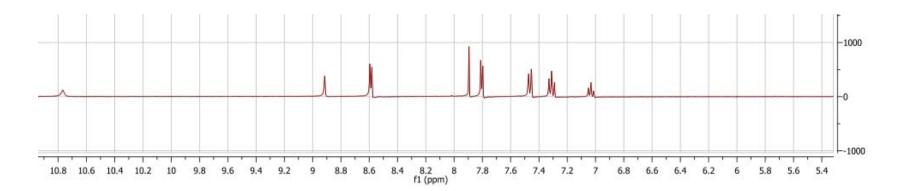
### Expansion of the aromatic region of ${\bf 5ab}$



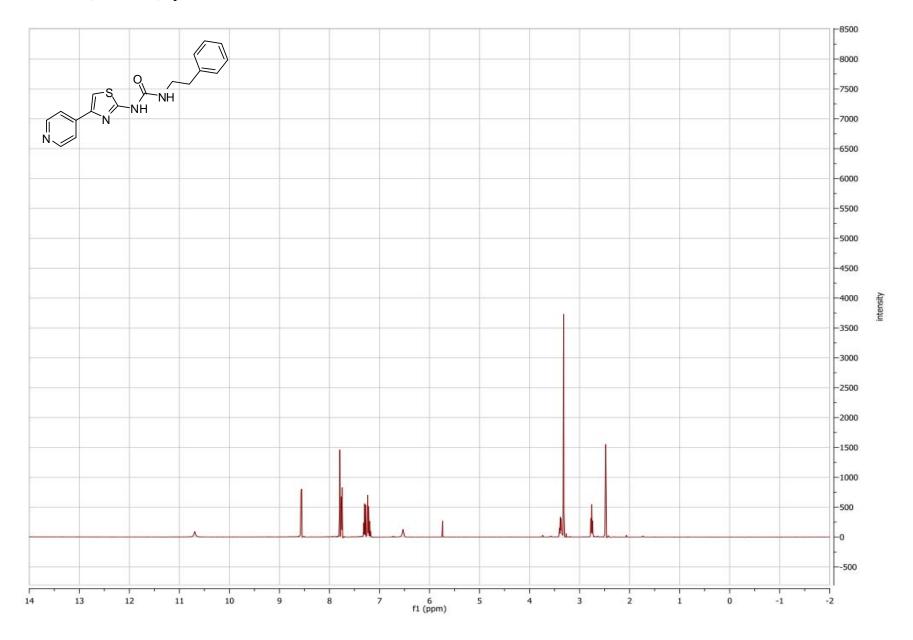
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **12** 



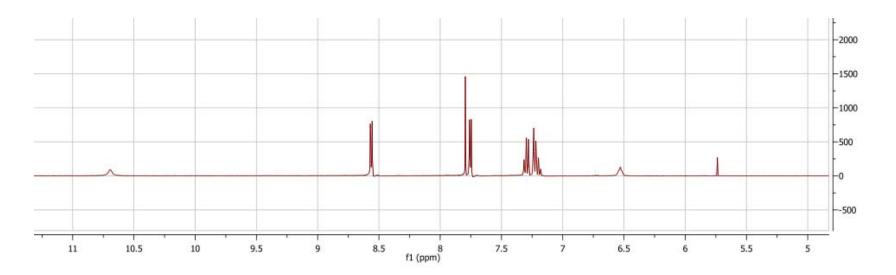
### Expansion of the aromatic region of 12



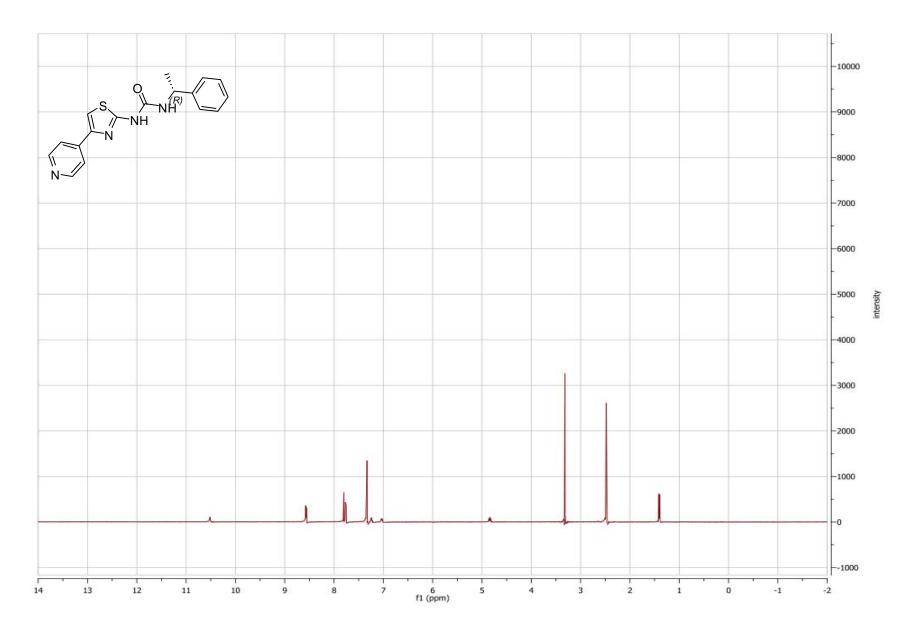
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **13** 



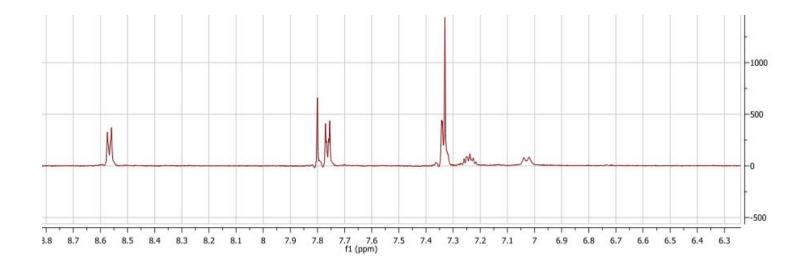
### Expansion of the aromatic region of 13



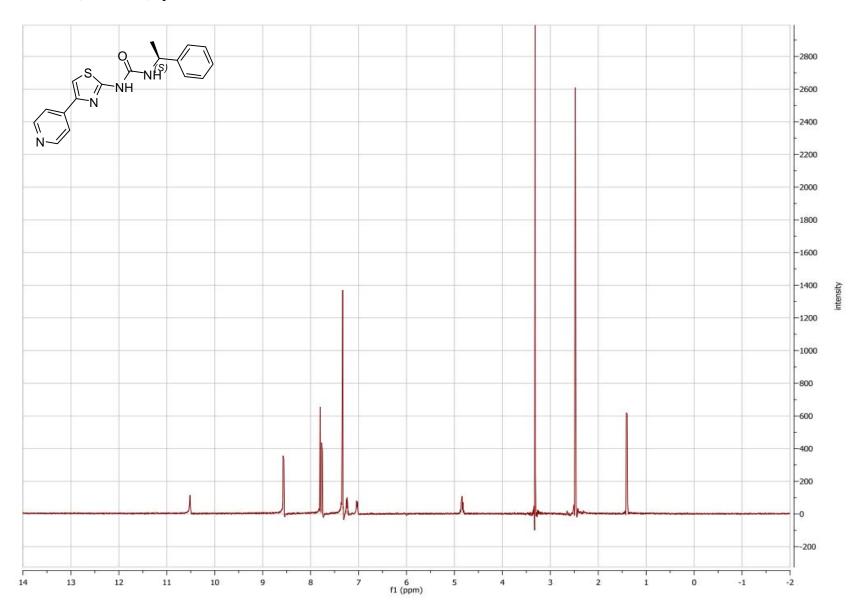
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14a



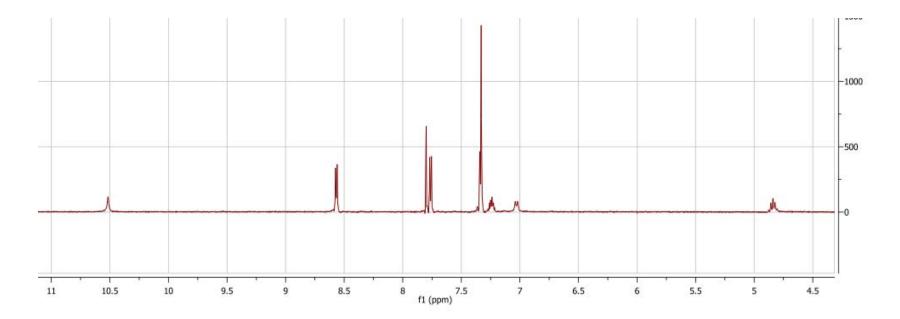
### Expansion of the aromatic region of (R)-14a



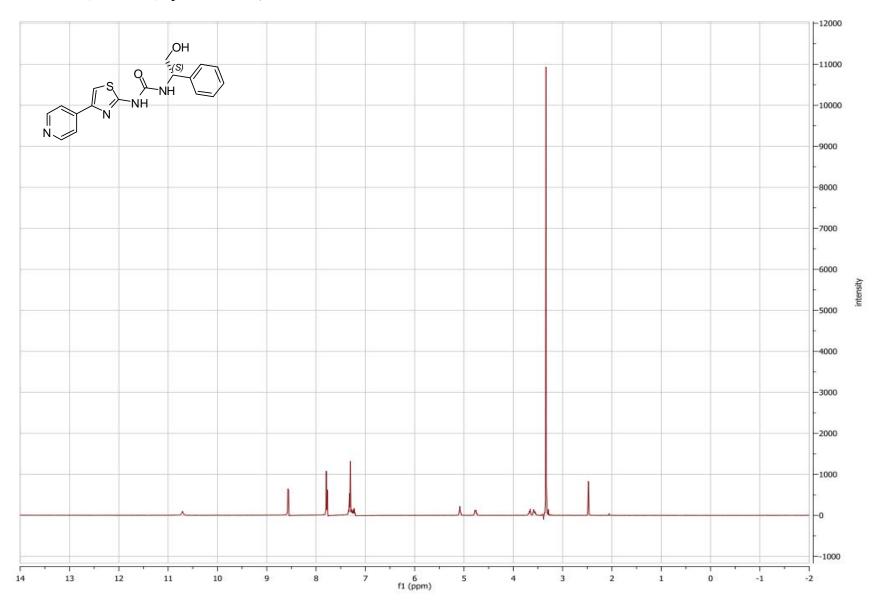
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (S)-14a



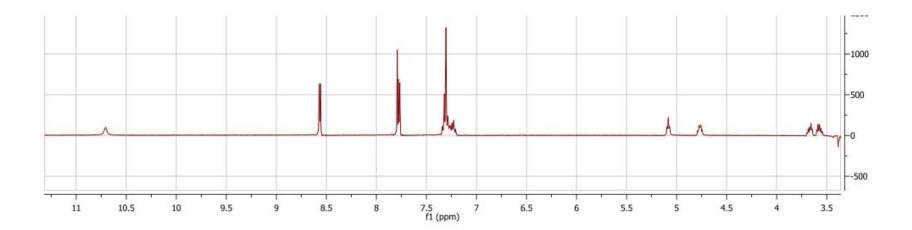
## Expansion of the aromatic region of (S)-14a



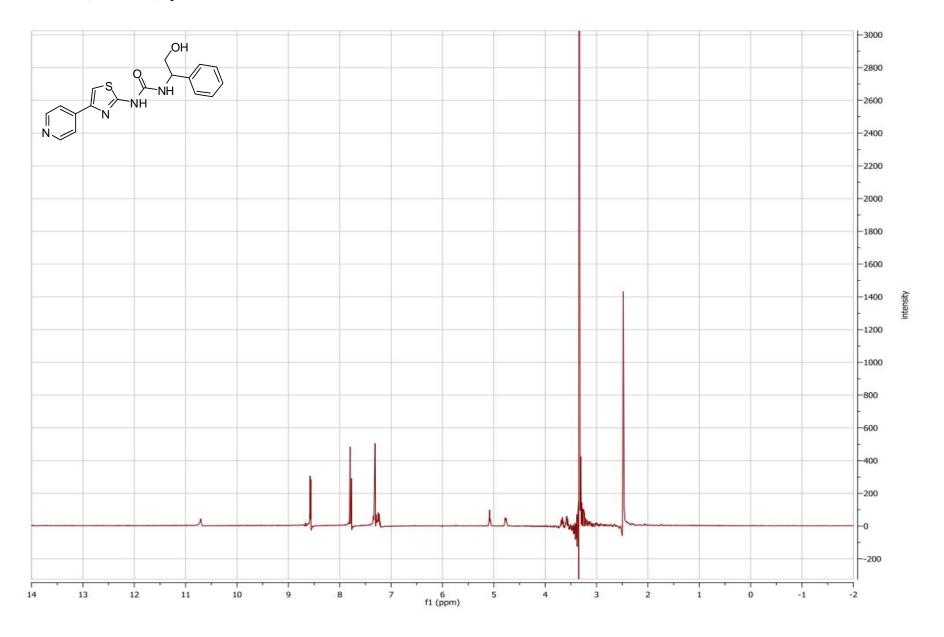
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*,*S*)-14b



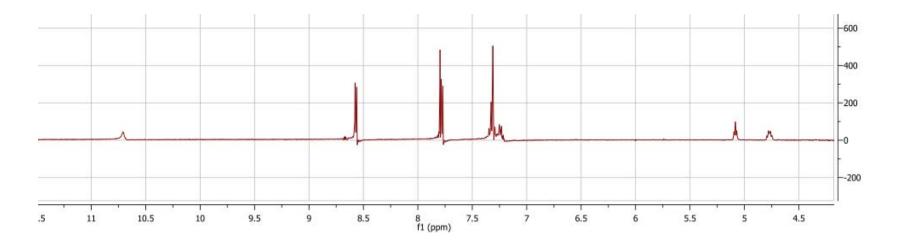
## Expansion of the aromatic region of (R,S)-14b



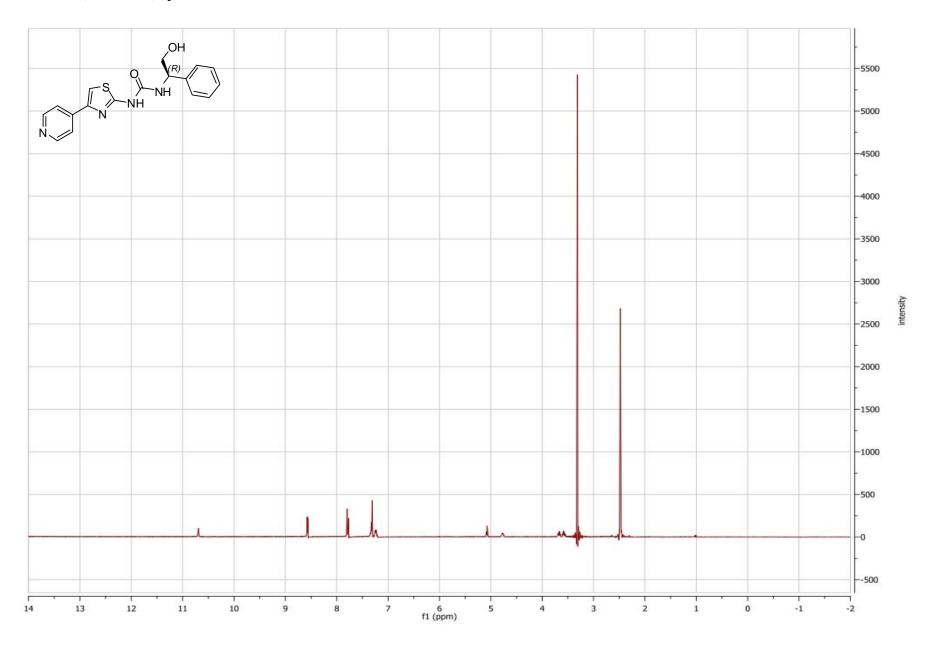
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14b



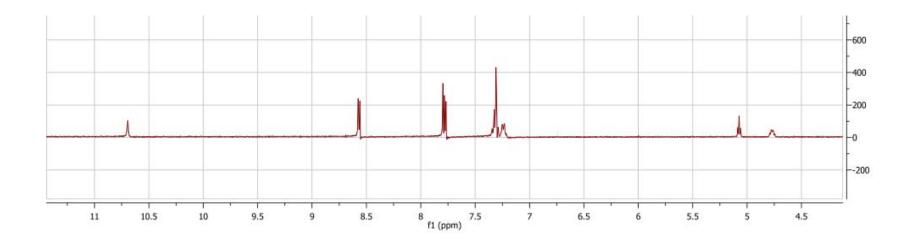
### Expansion of the aromatic region of (S)-14b



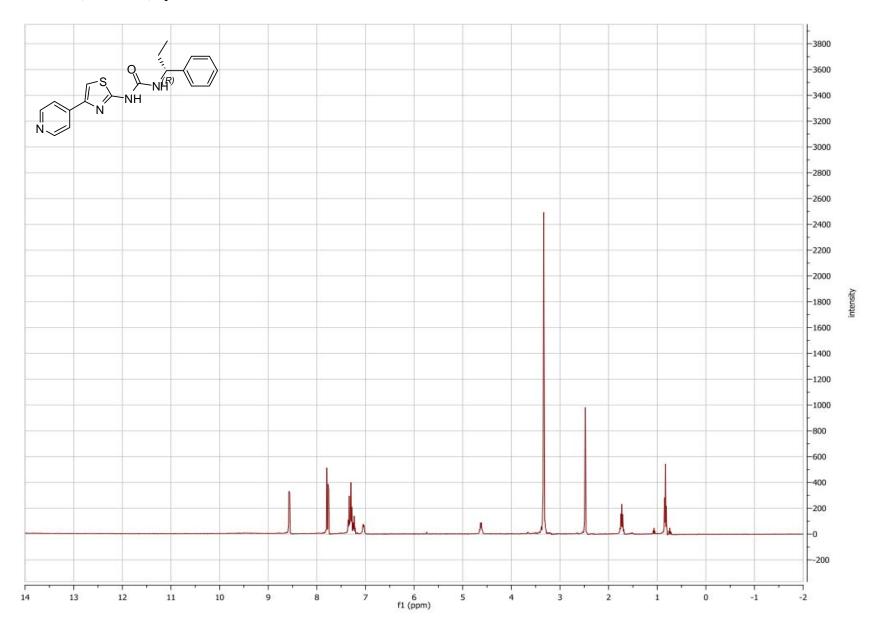
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14b



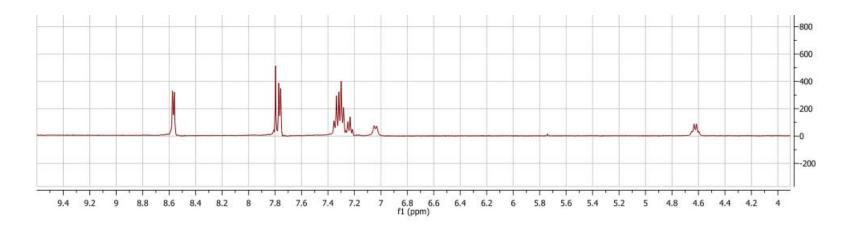
# Expansion of the aromatic region of (R)-14b



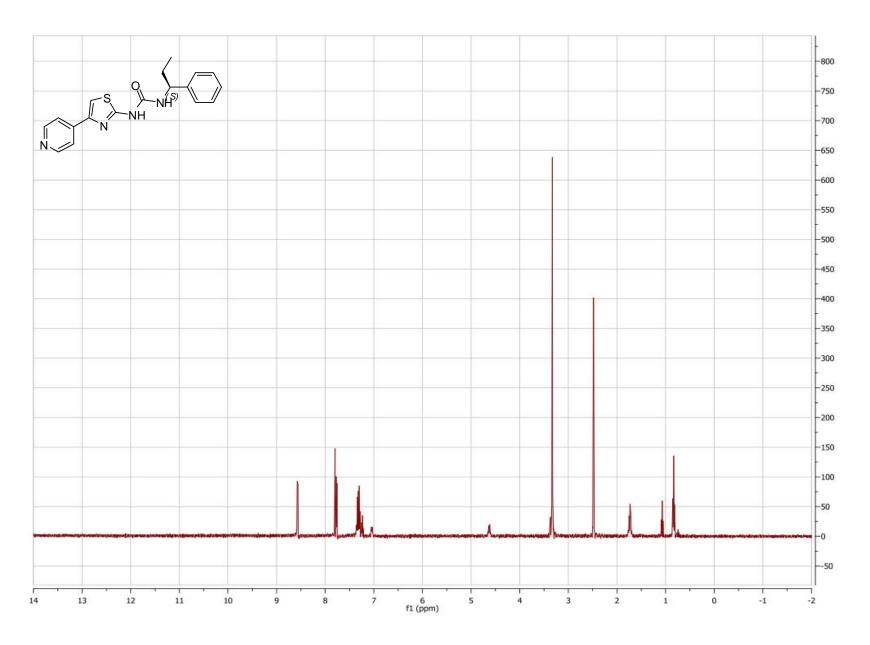
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14c



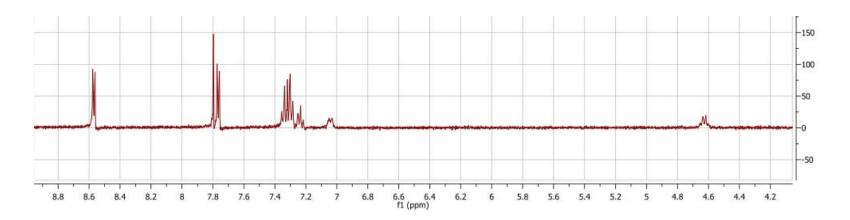
#### Expansion of the aromatic region of (R)-14c



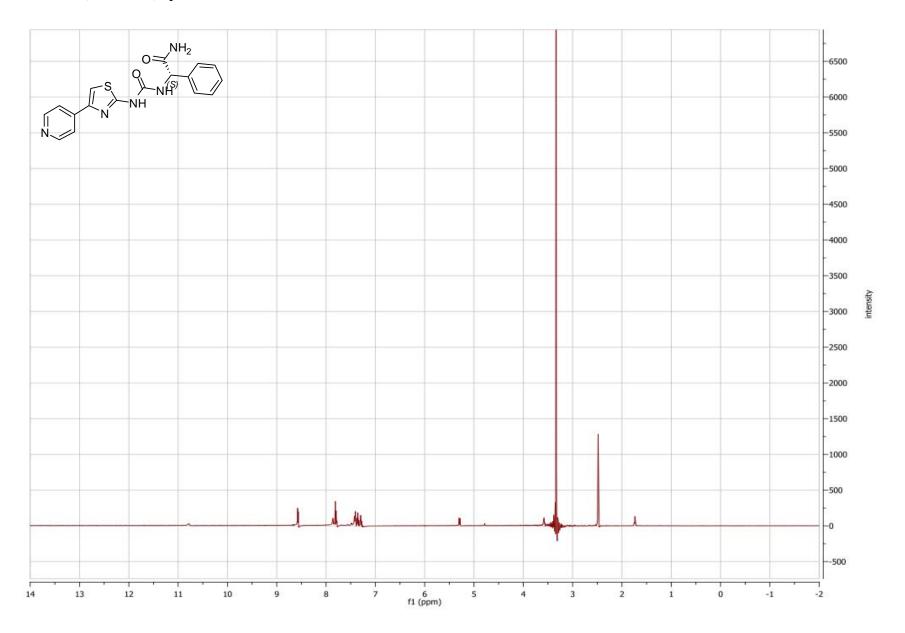
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14c



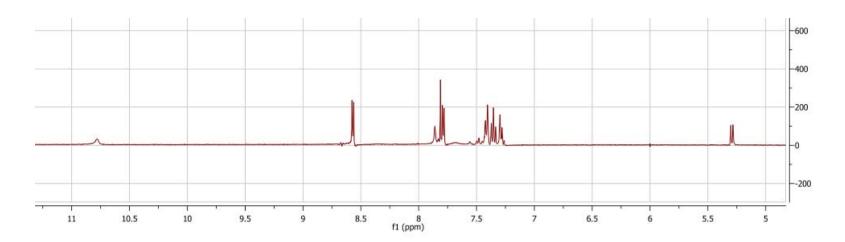
#### Expansion of the aromatic region of (S)-14c



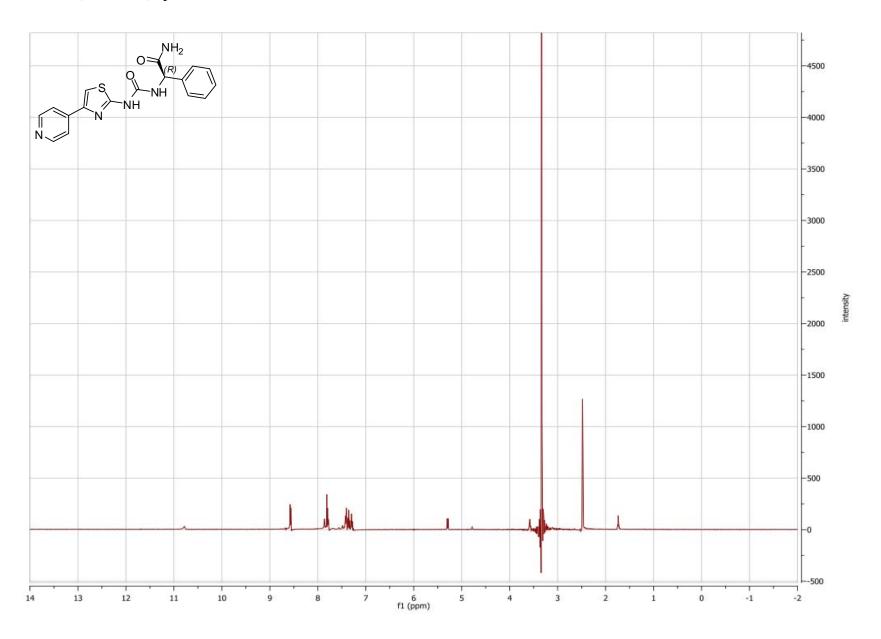
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14d



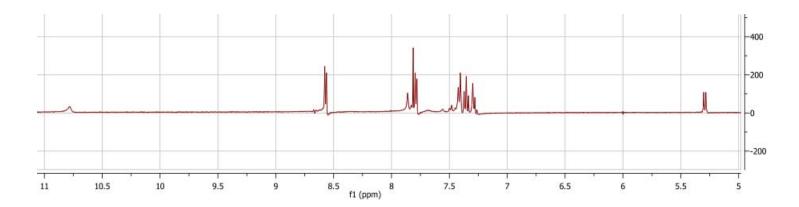
## Expansion of the aromatic region of (S)-14d



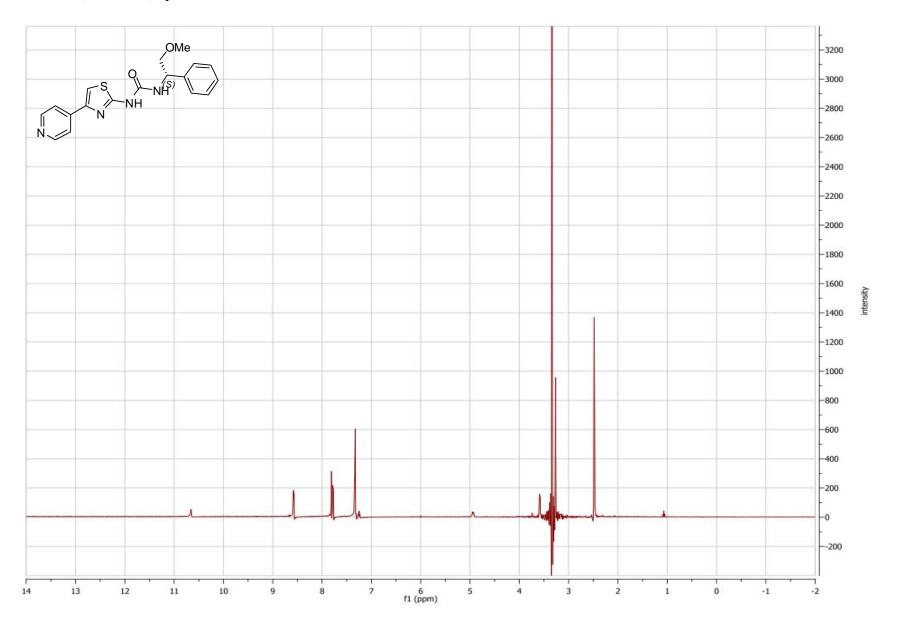
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14d



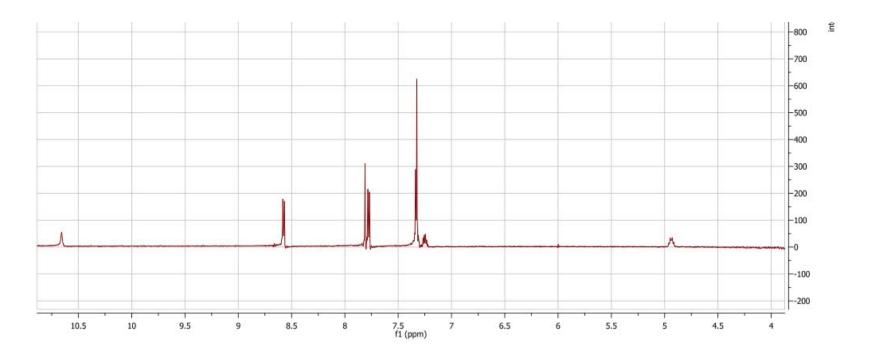
## Expansion of the aromatic region of (R)-14d



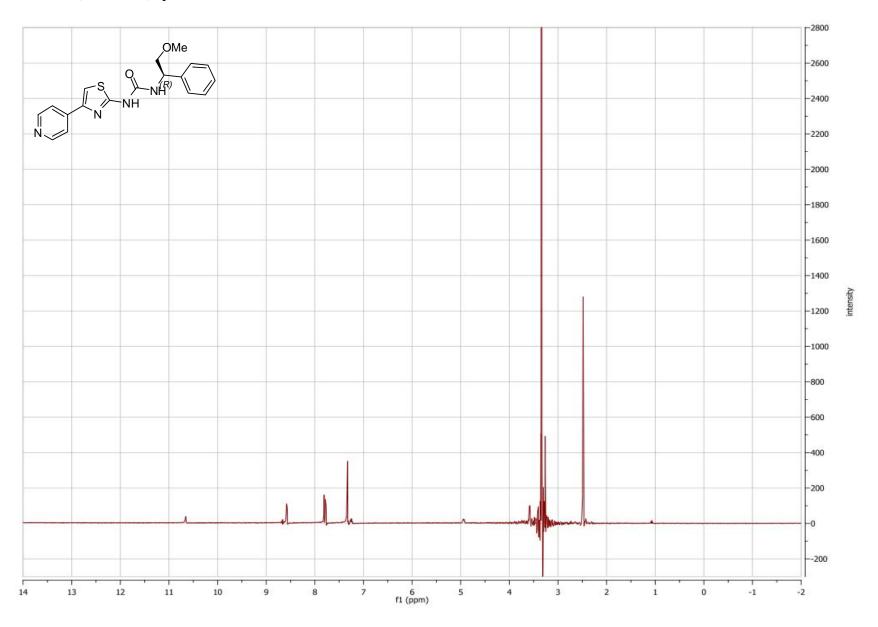
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14e



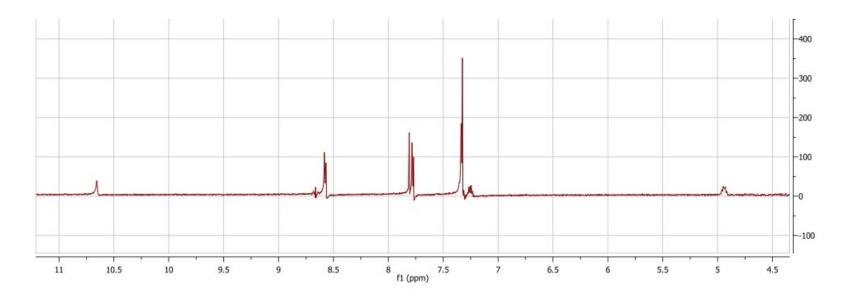
### Expansion of the aromatic region of (R)-14e



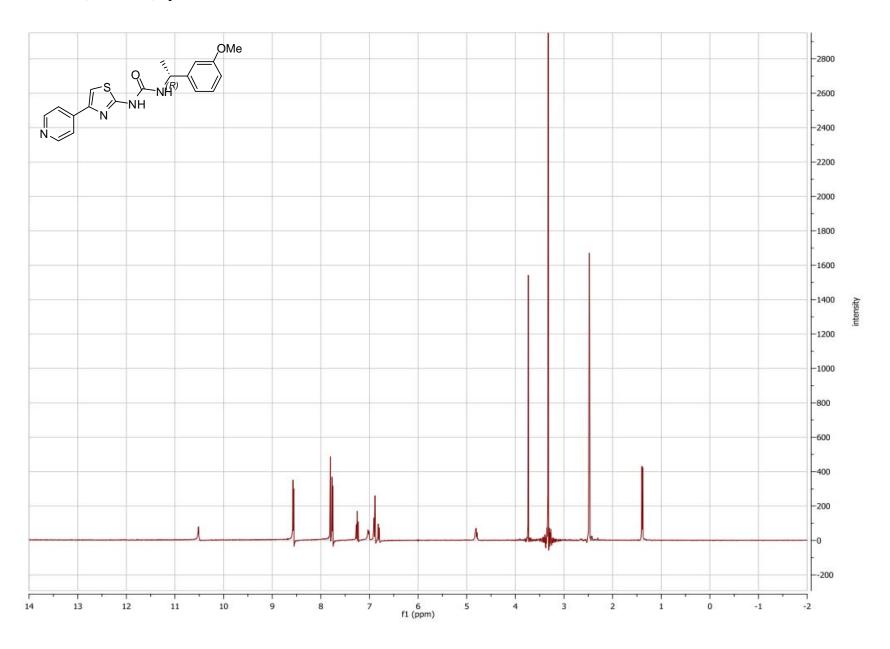
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14e



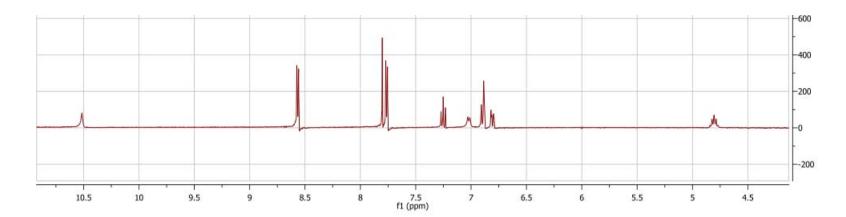
### Expansion of the aromatic region of (S)-14e



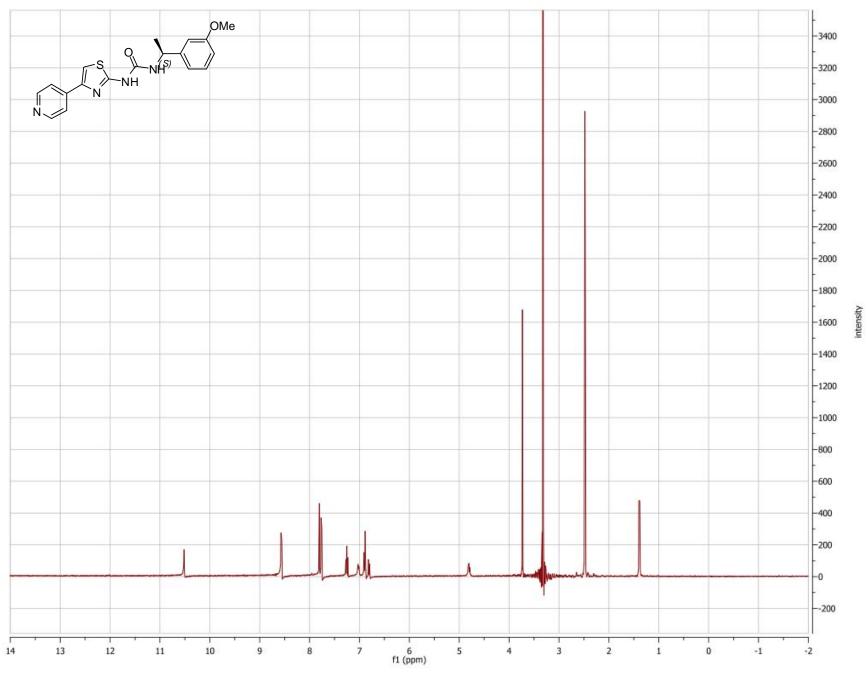
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14f



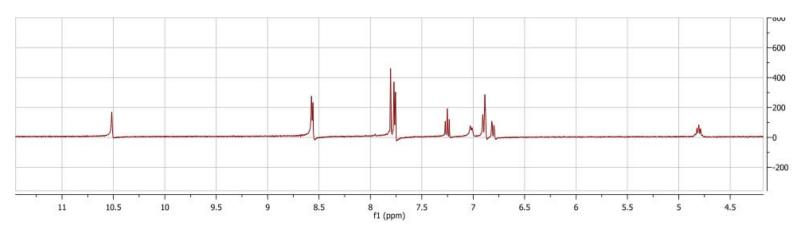
## Expansion of the aromatic region of (R)-14f



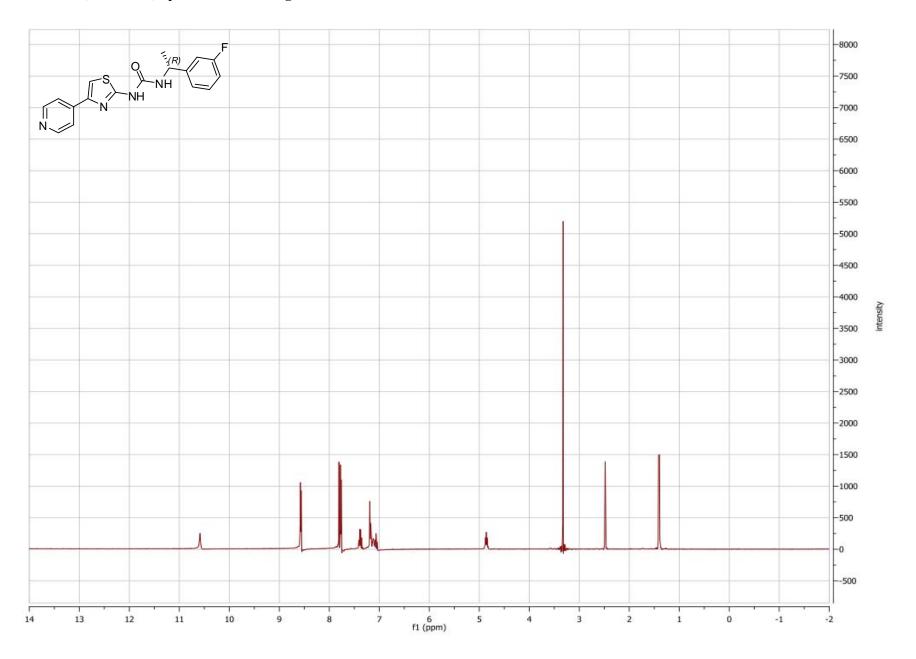
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14f



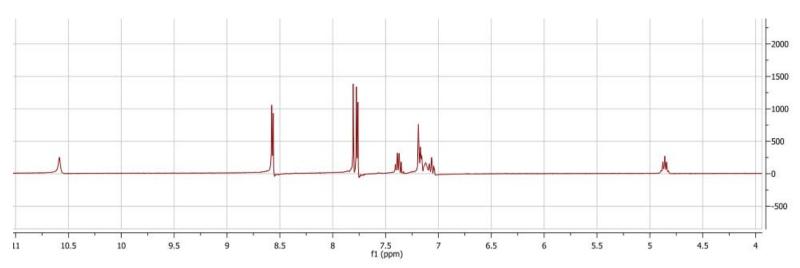
## Expansion of the aromatic region of (S)-14f



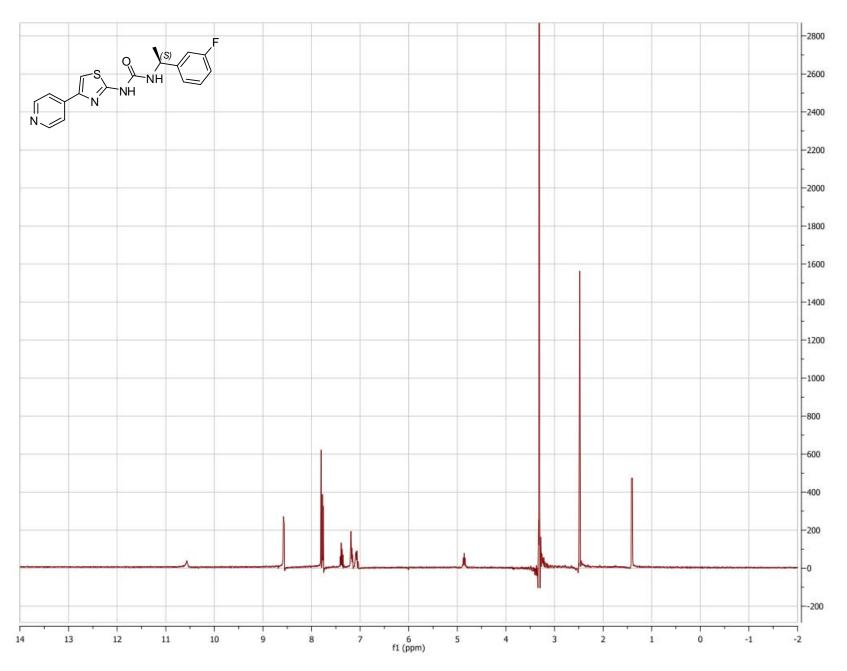
 $^{1}$ H NMR (DMSO-d<sub>6</sub>) spectrum of ( $\mathbf{R}$ )-14 $\mathbf{g}$ 



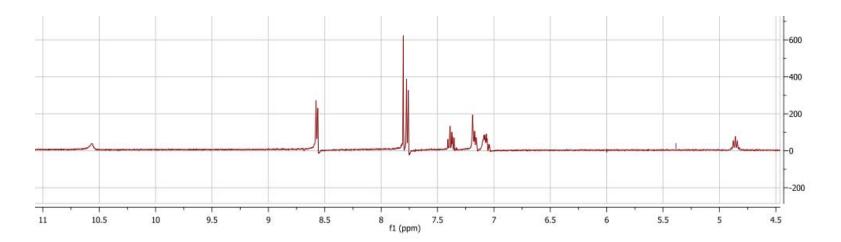
### Expansion of the aromatic region of (R)-14g



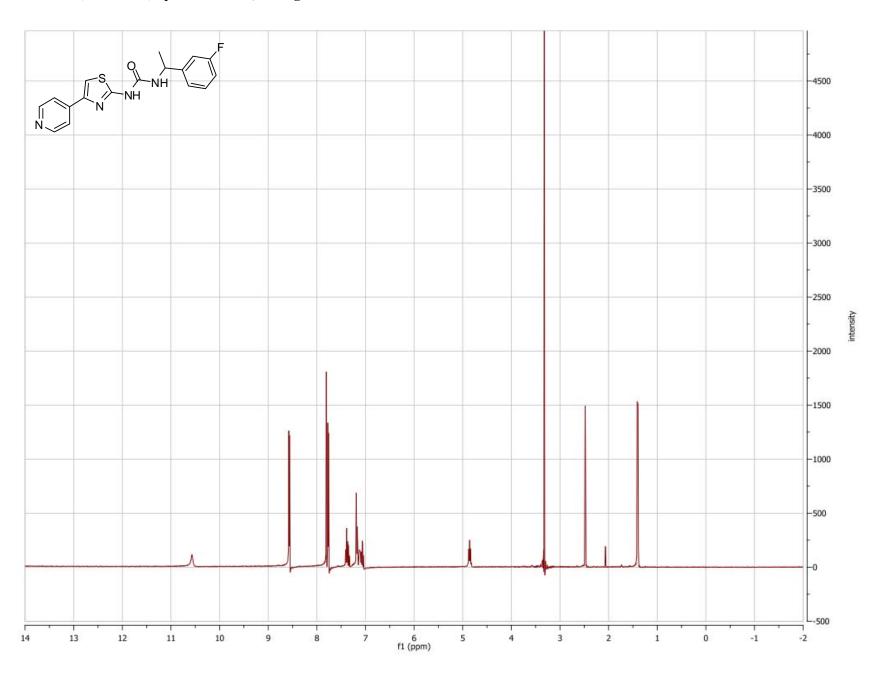
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14g



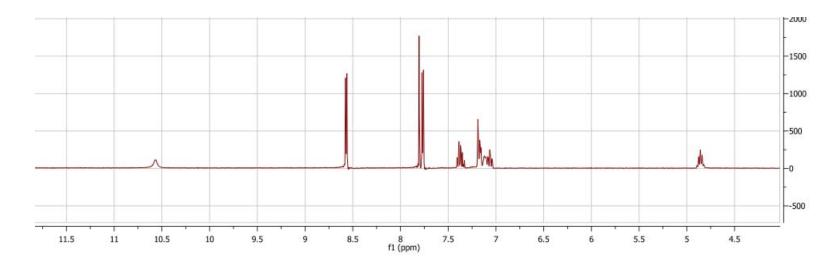
## Expansion of the aromatic region of (S)-14g



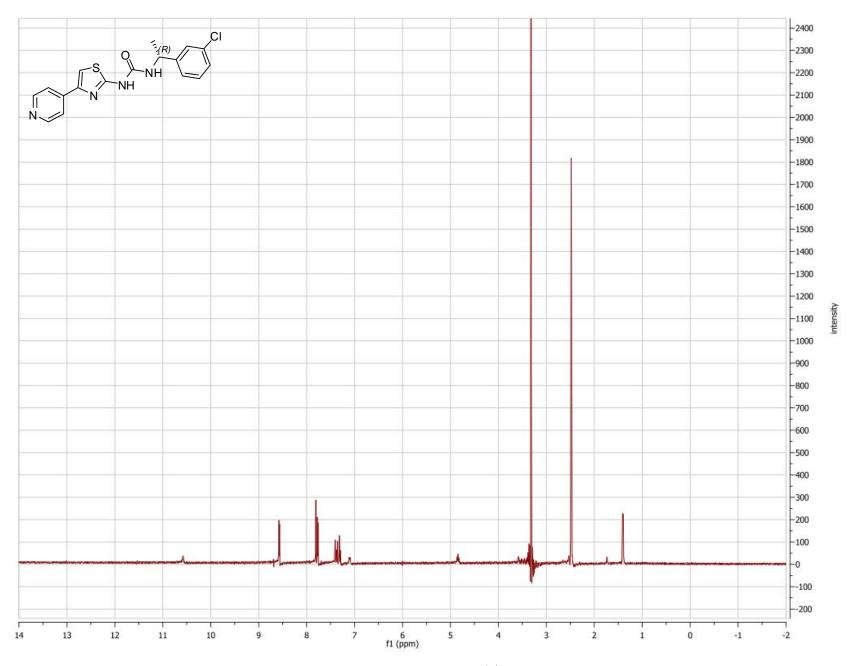
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*,*S*)-14g



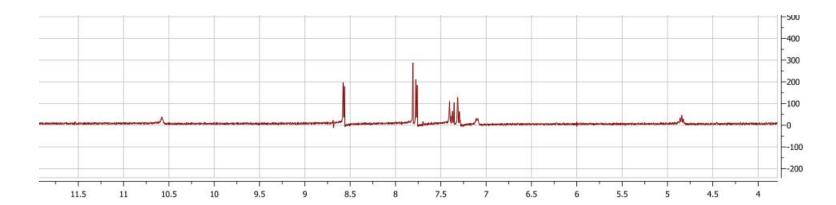
#### Expansion of the aromatic region of (*R*,*S*)-14g



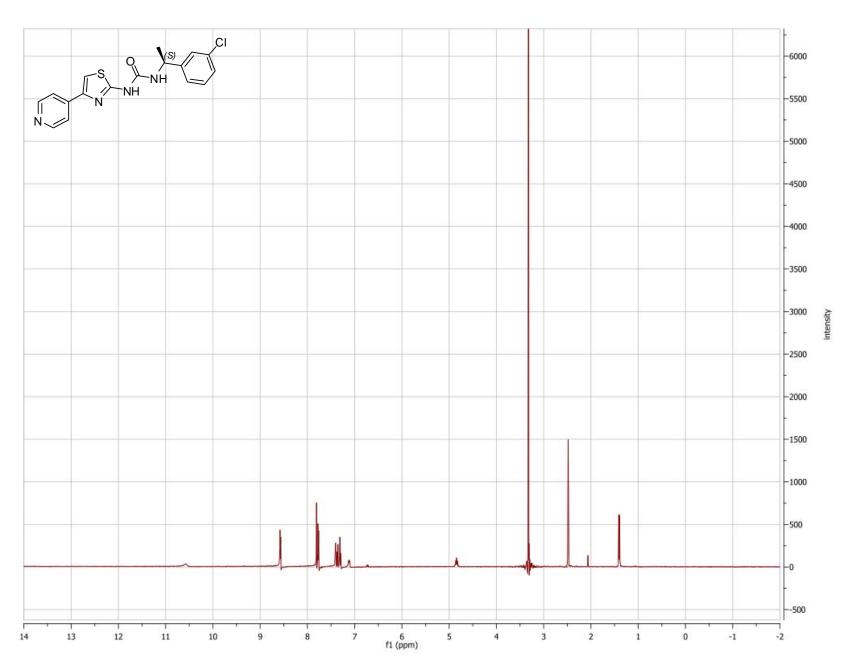
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*R*)-14h



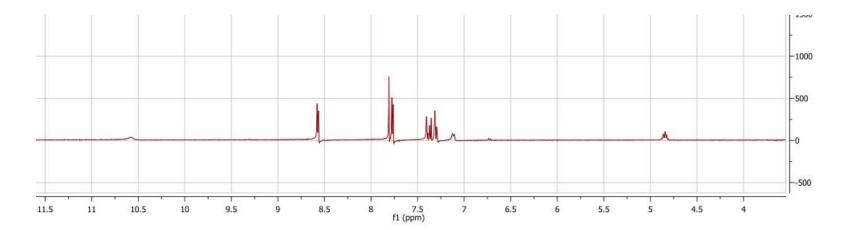
### Expansion of the aromatic region of (R)-14h



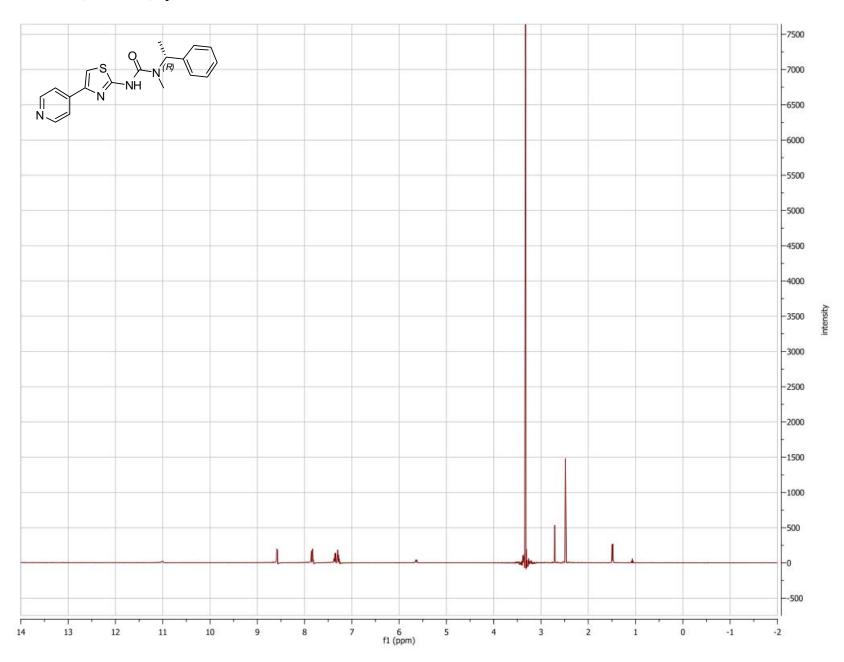
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14g



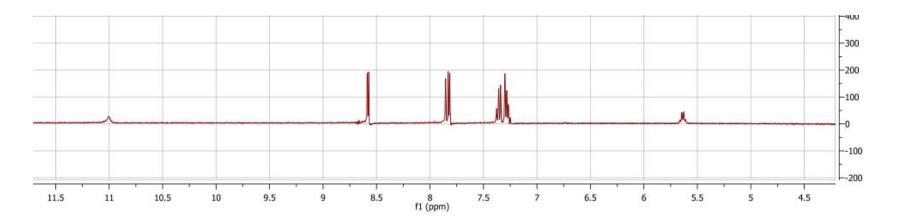
## Expansion of the aromatic region of (S)-14g



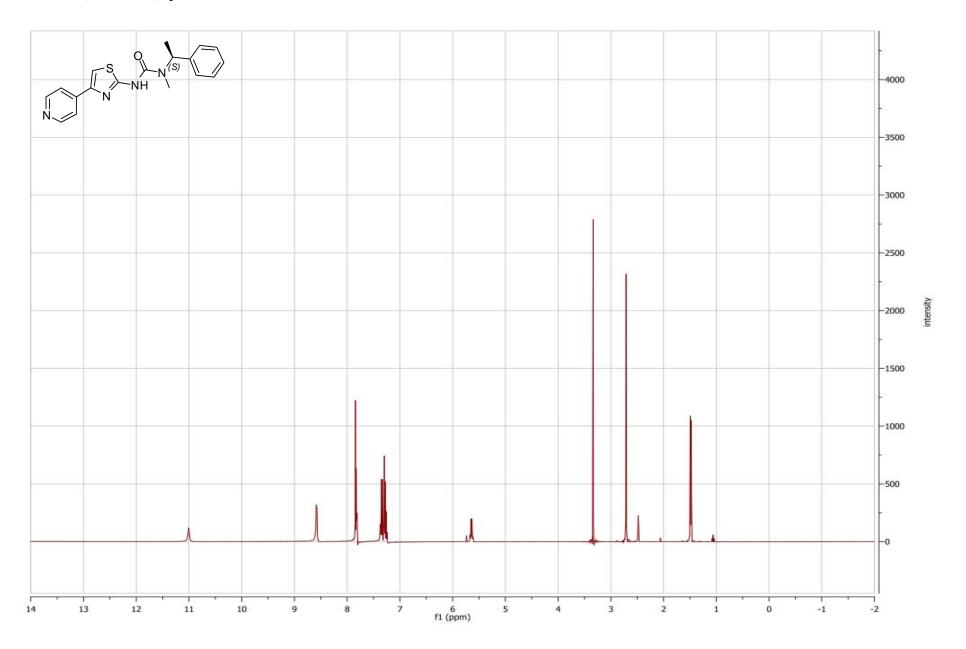
 $^{1}$ H NMR (DMSO-d<sub>6</sub>) spectrum of ( $\mathbf{R}$ )-14i



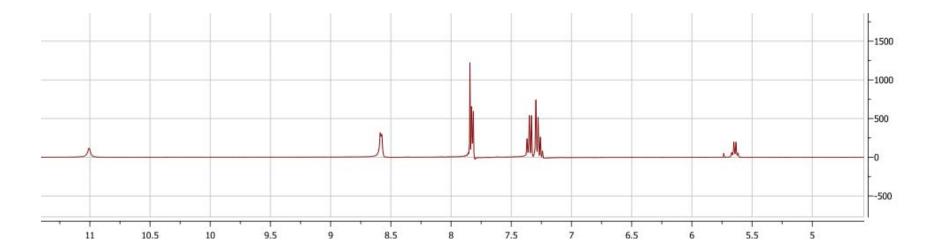
#### Expansion of the aromatic region of (R)-14i



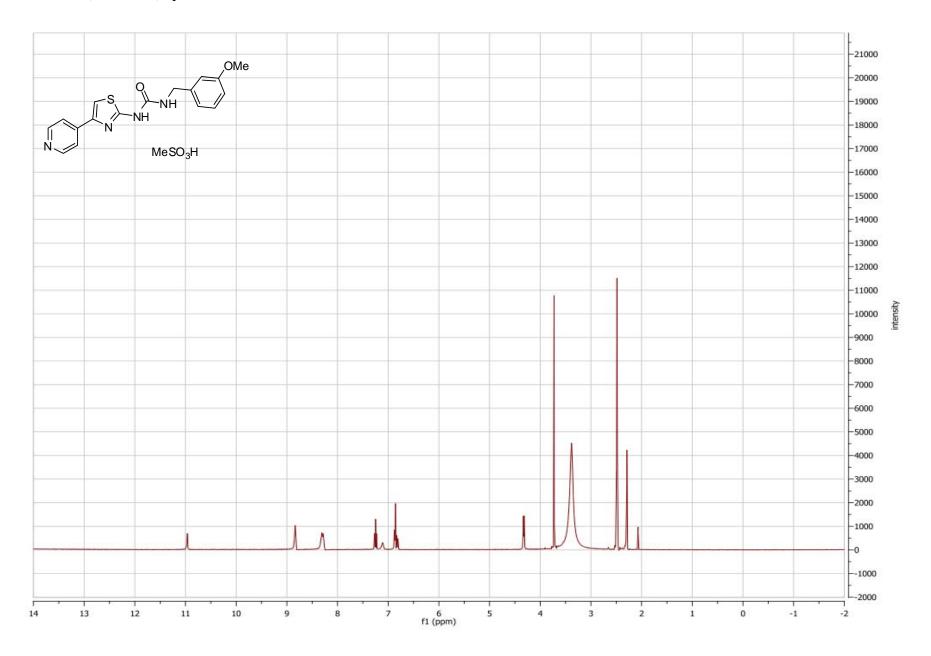
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of (*S*)-14i.



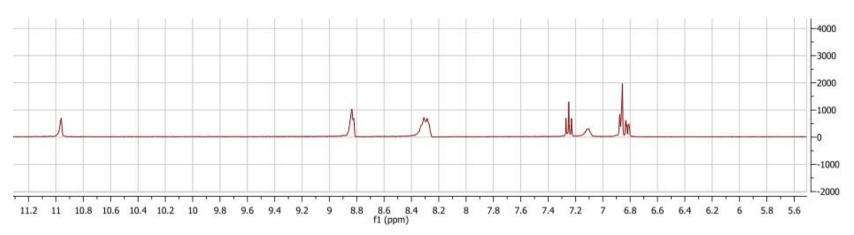
### Expansion of the aromatic region of (S)-14i.



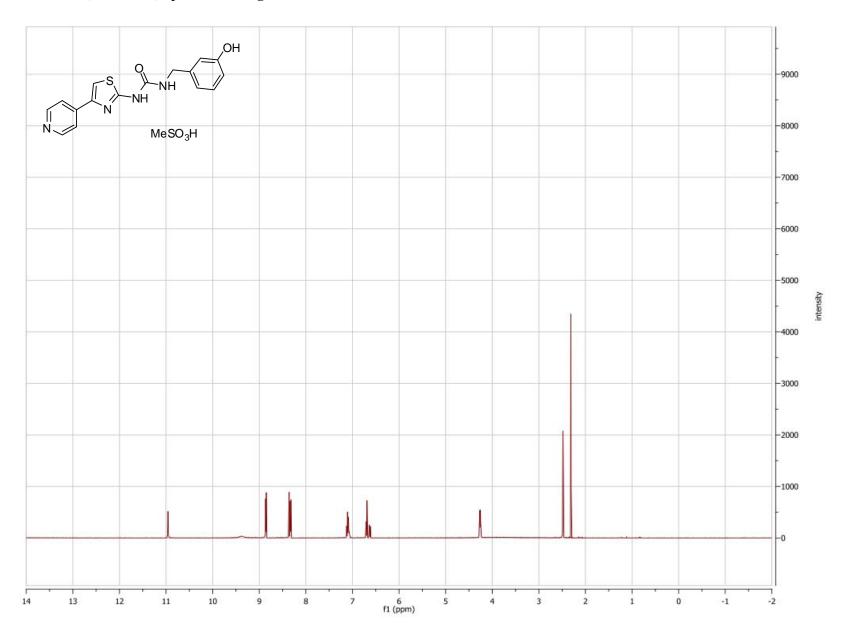
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5b-Mes** 



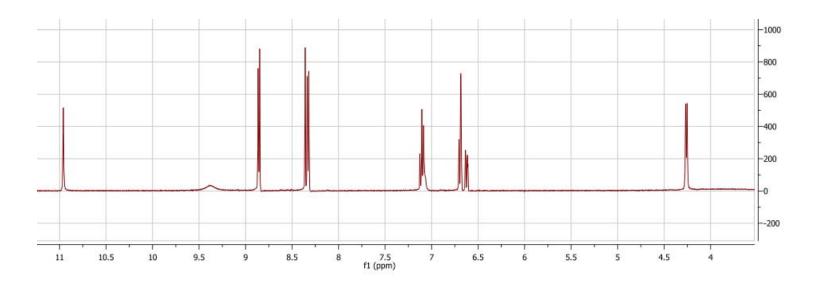
#### Expansion of the aromatic region of **5b-Mes**



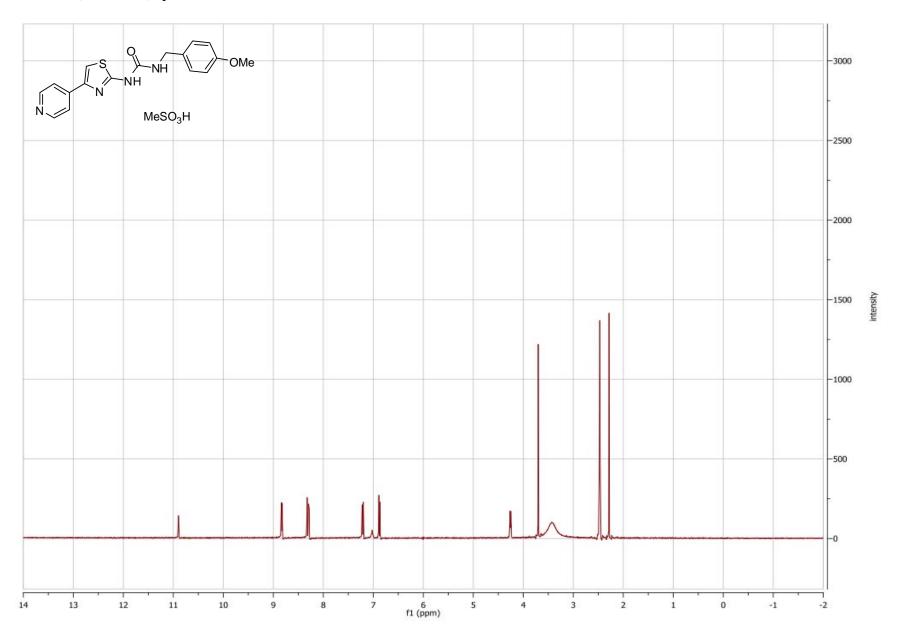
#### <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5g-Mes**



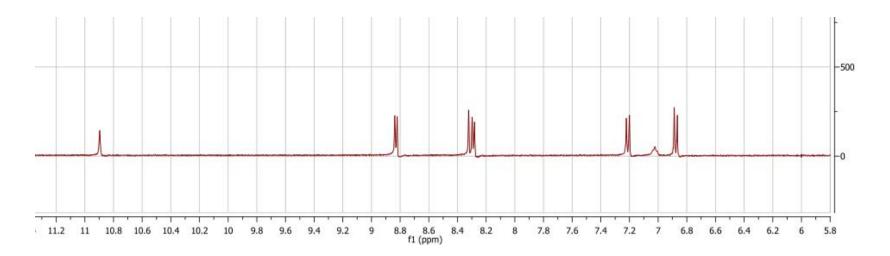
## Expansion of the aromatic region of $\mathbf{5g\text{-}Mes}$



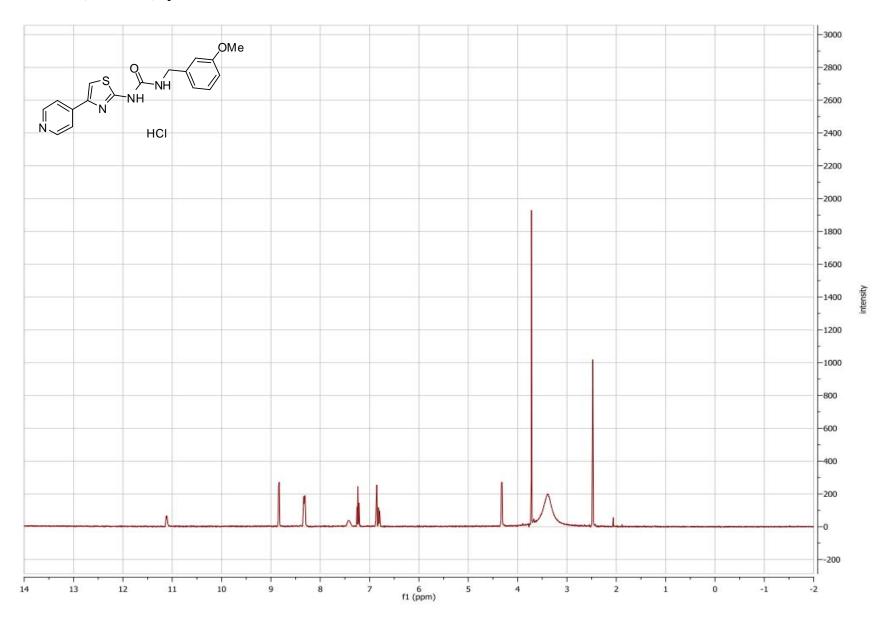
<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5d-Mes** 



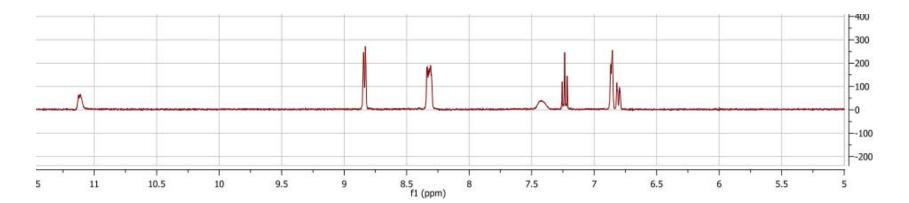
#### Expansion of the aromatic region of **5d-Mes**



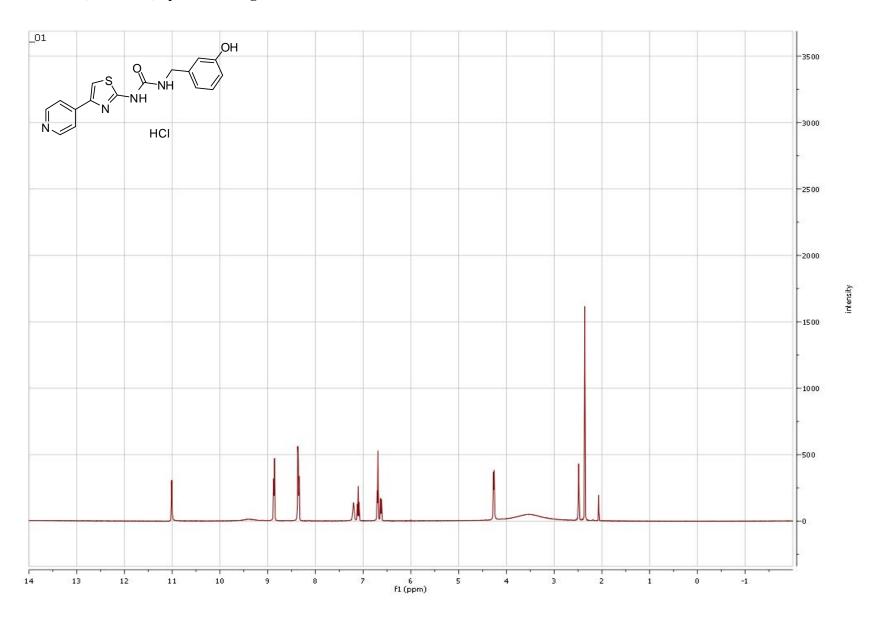
#### <sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5b-HCl**



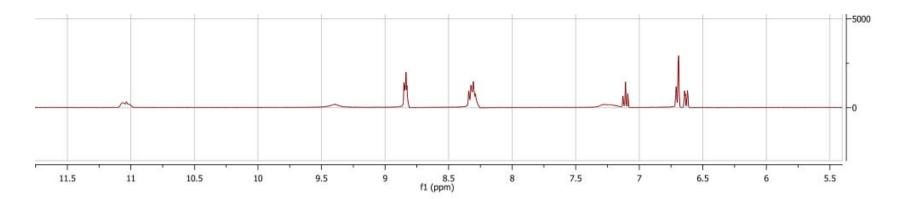
# Expansion of the aromatic region of ${\bf 5b\text{-}HCl}$



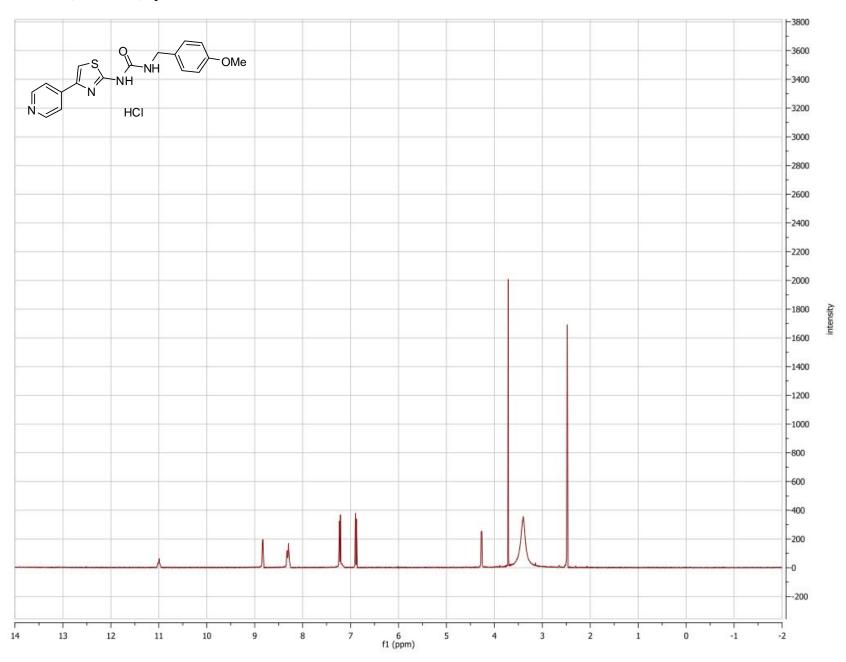
# $^{1}$ H NMR (DMSO-d<sub>6</sub>) spectrum of **5g-HCl**



## Expansion of the aromatic region of $\mathbf{5g\text{-}HCl}$



<sup>1</sup>H NMR (DMSO-d<sub>6</sub>) spectrum of **5d-HCl** 



### Expansion of the aromatic region of **5d-HCl**

