## **Supporting Information**

## Synthesis of and Antimicrobial Activity a New Series of Thiazolidine-2, 4-diones Carboxamide and Amino acid Derivatives

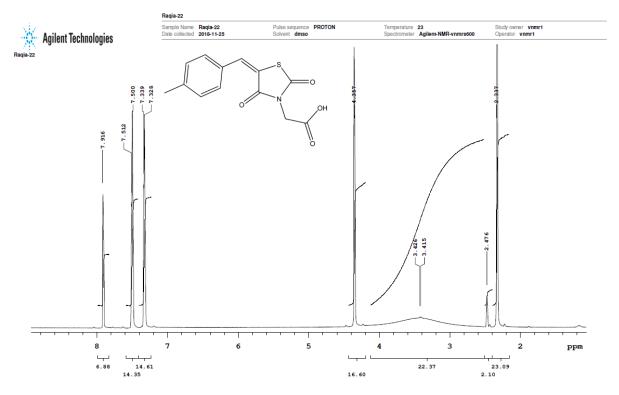
Rakia Abd Alhameed, Zainab Almarhoon, Sarah I. Bukhari, Ayman El-Faham,\* Beatriz G. de la Torre, 4.5 Fernando Albericio\*

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Figure S1 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **3b** 



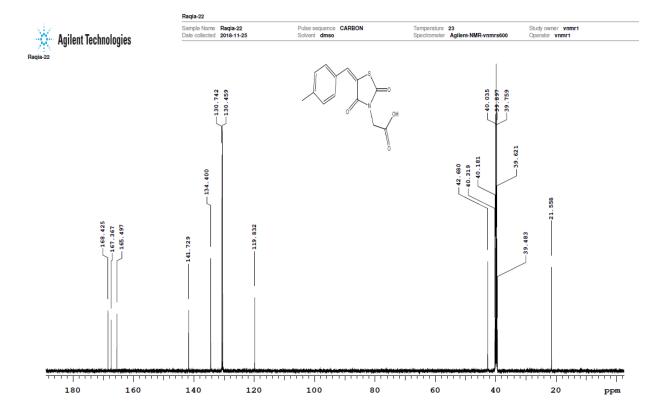
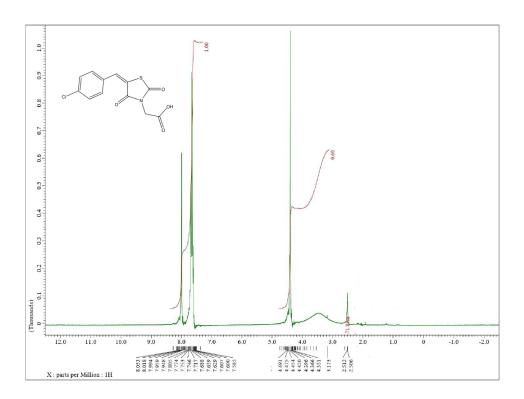


Figure S2 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **3c** 



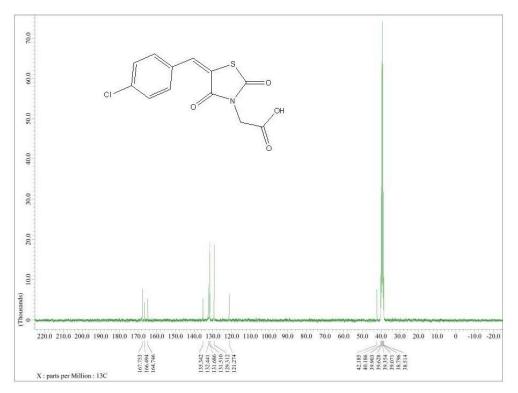
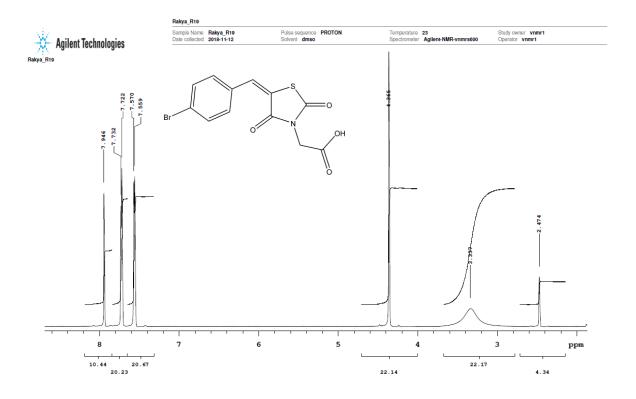


Figure S3 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **3e** 



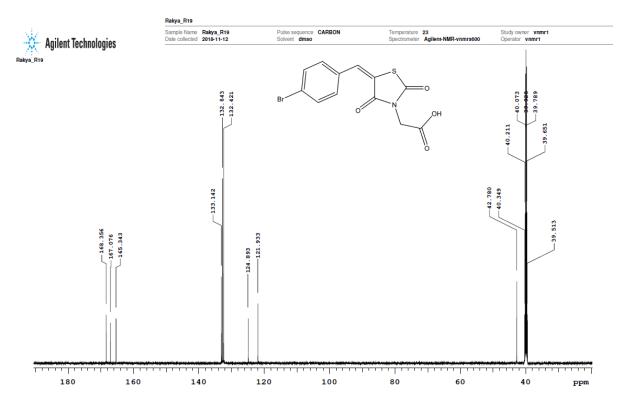
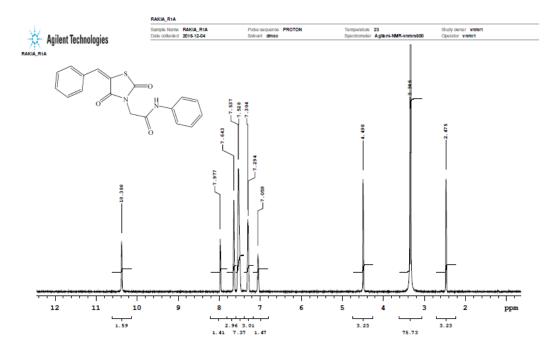


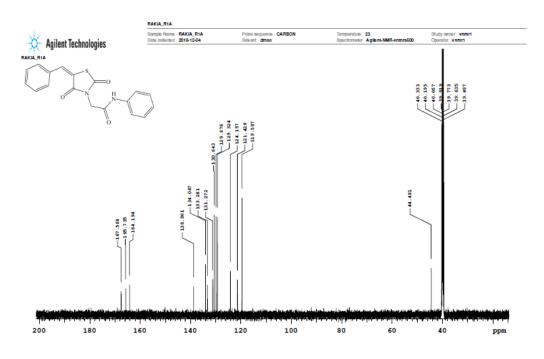
Figure S4 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4a



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Plot date 2019-01-21

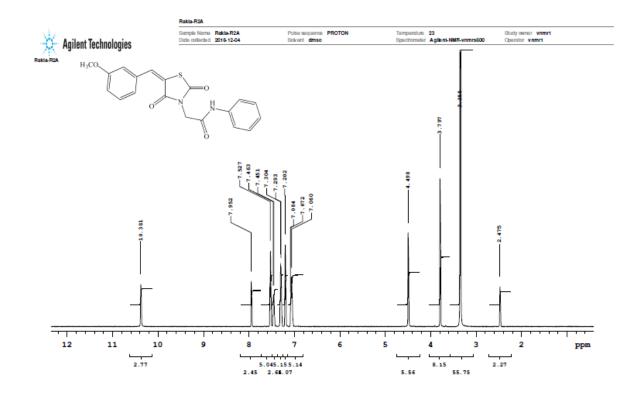


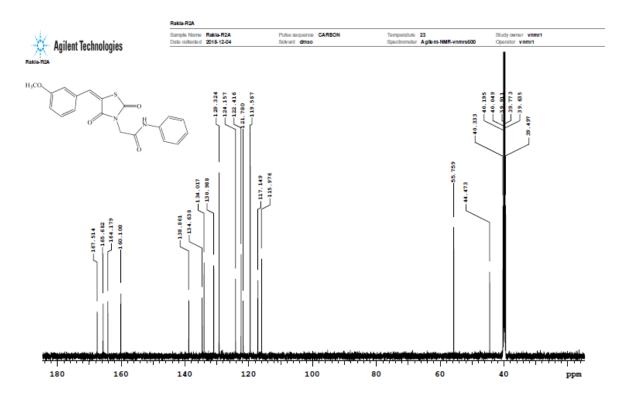
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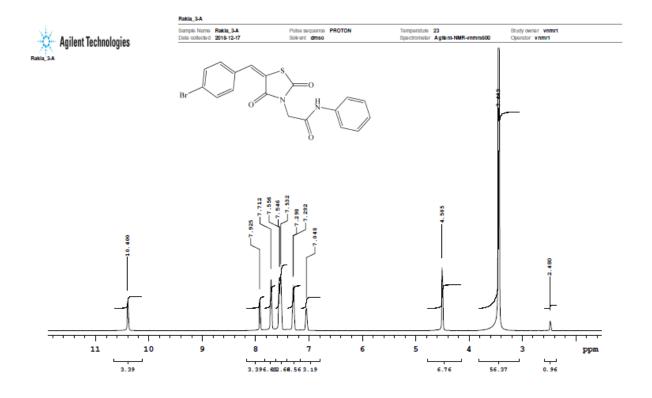
Figure S5 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4b** 





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Figure S6 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4c** 



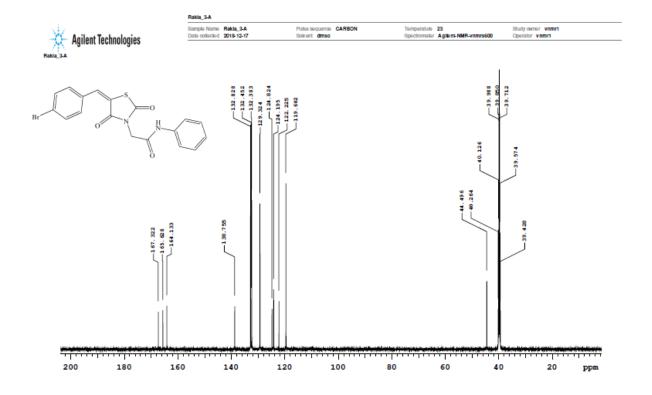
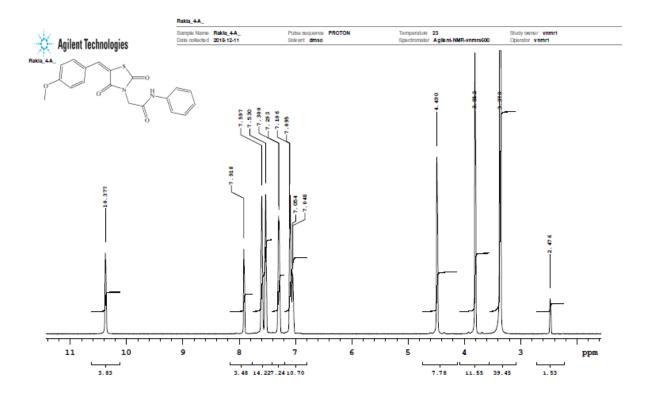


Figure S7 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4d** 



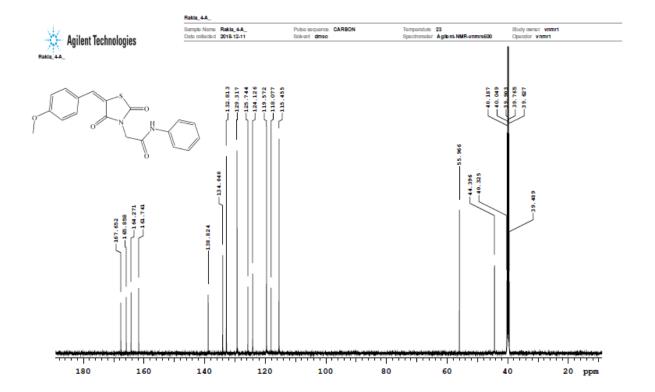
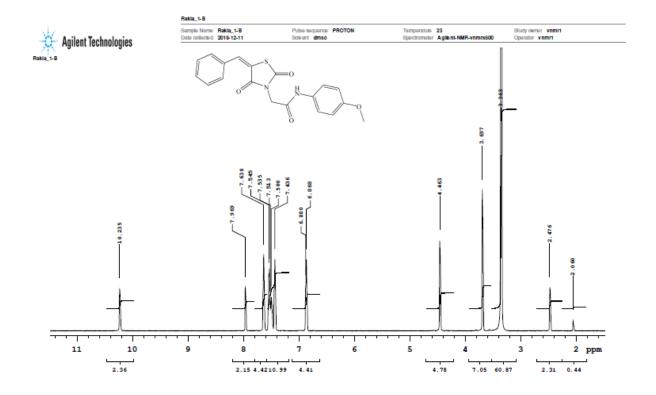


Figure S8 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4e** 



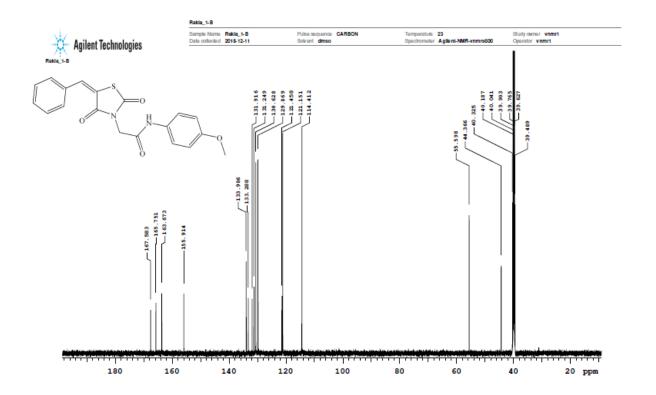
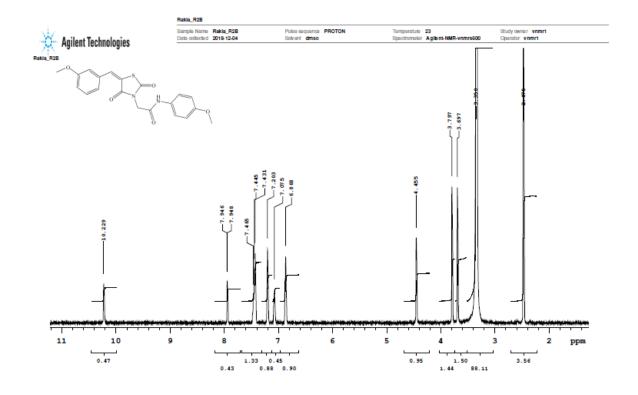


Figure S9 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4f



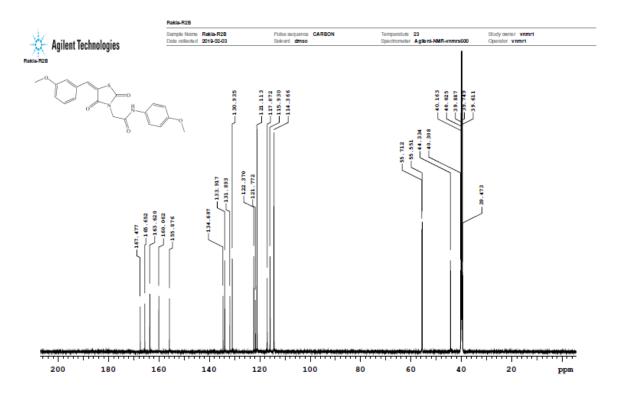
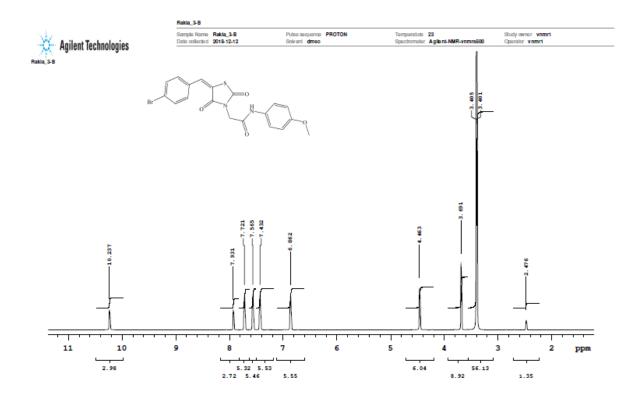


Figure S10 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4g** 



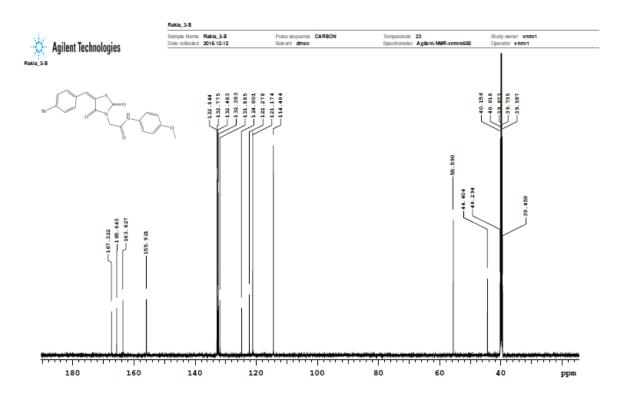
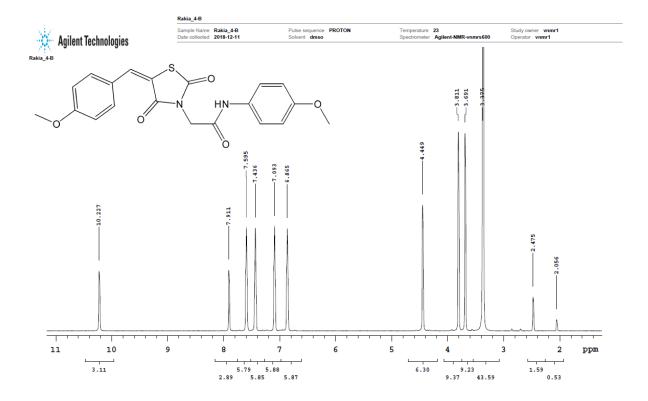


Figure S11 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4h** 



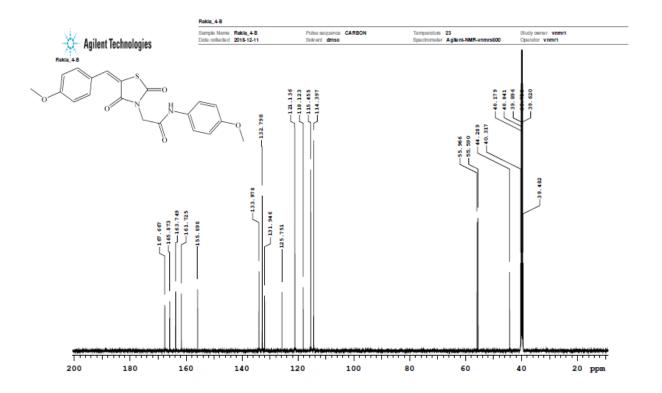
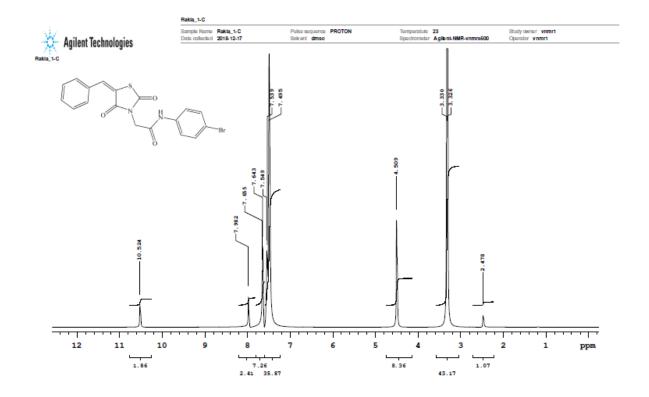


Figure S12 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4i



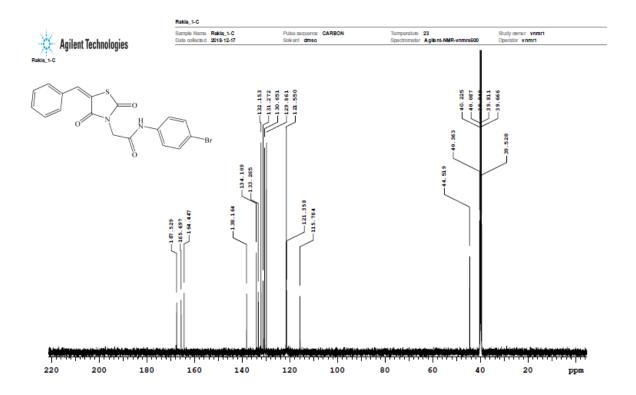
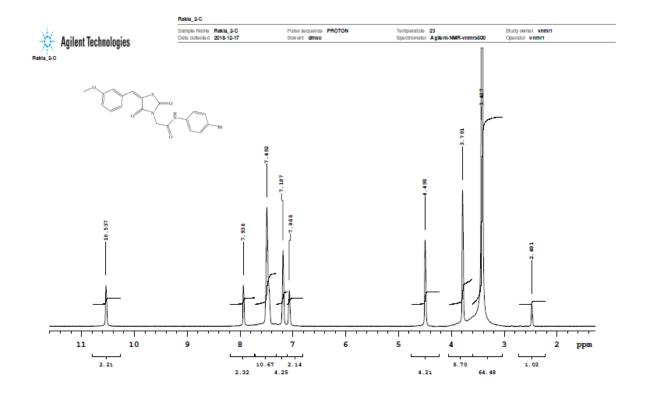


Figure S13 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4j



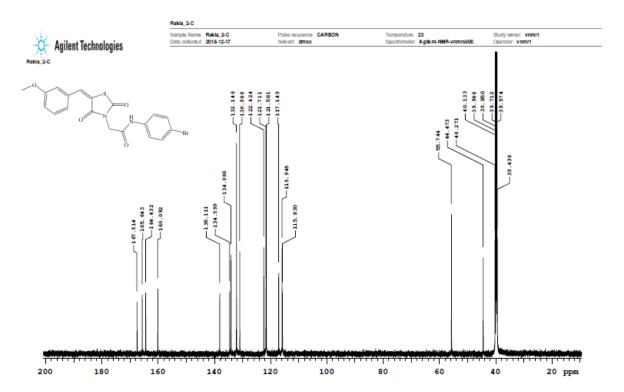
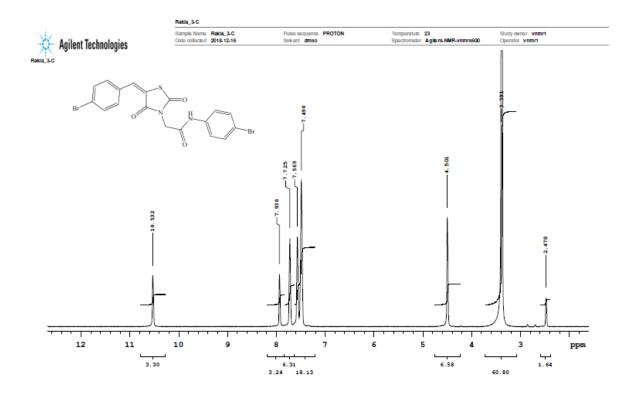


Figure S14 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4k** 



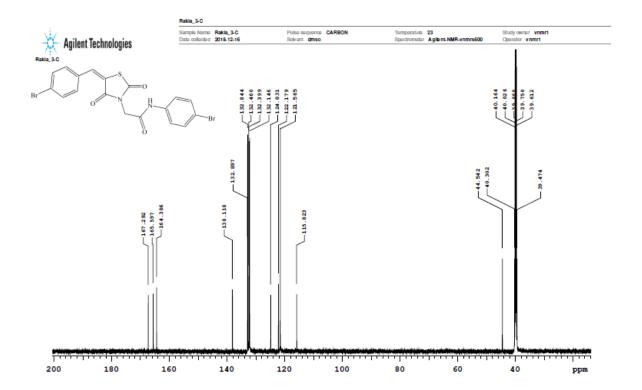
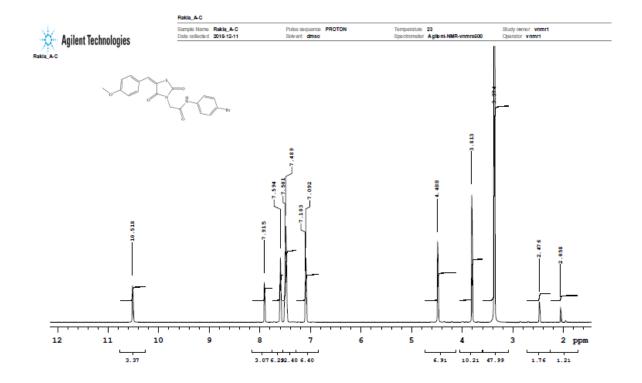


Figure S15 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4I



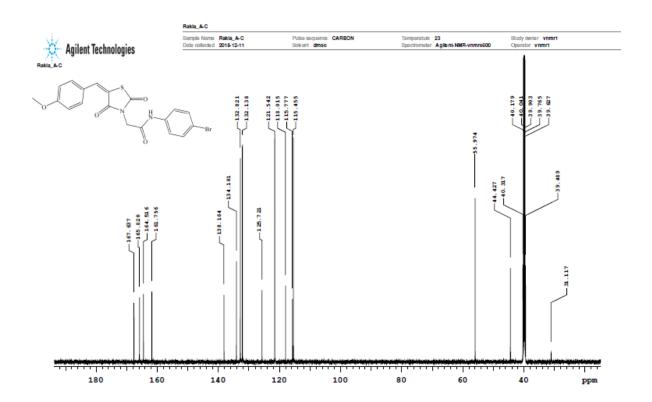
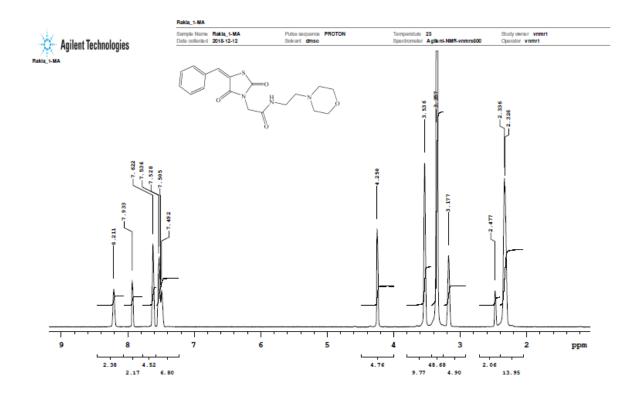


Figure S16 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 4m



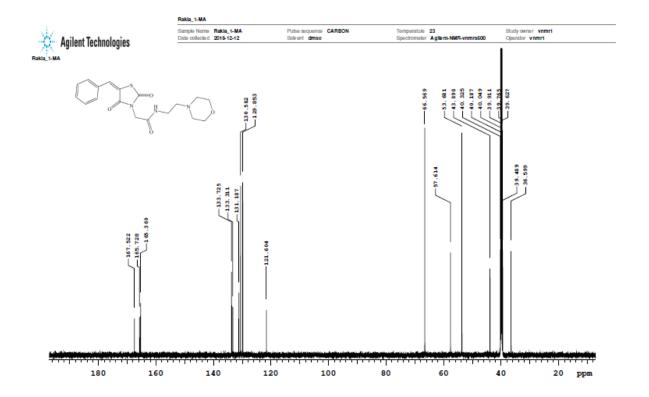
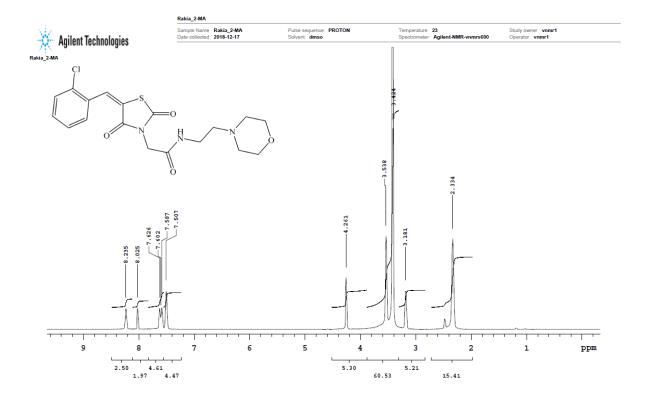


Figure S17 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4n** 



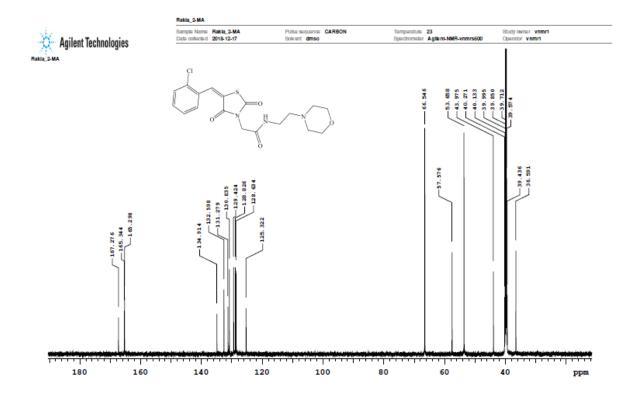
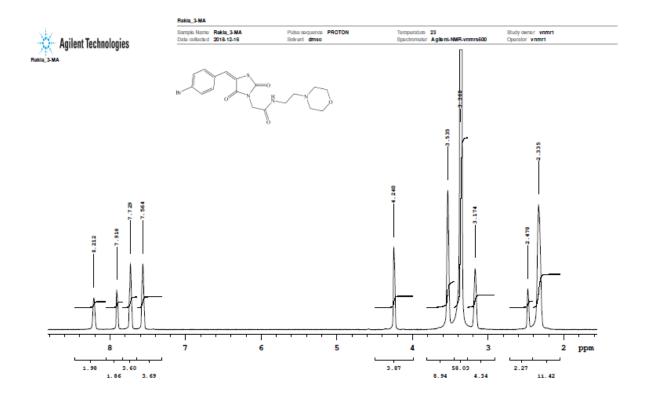


Figure S18 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4o** 



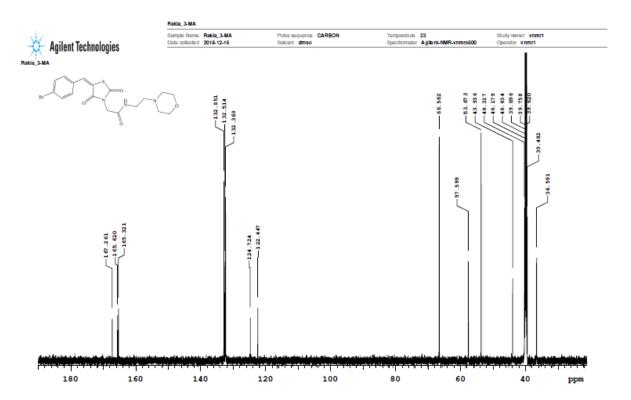
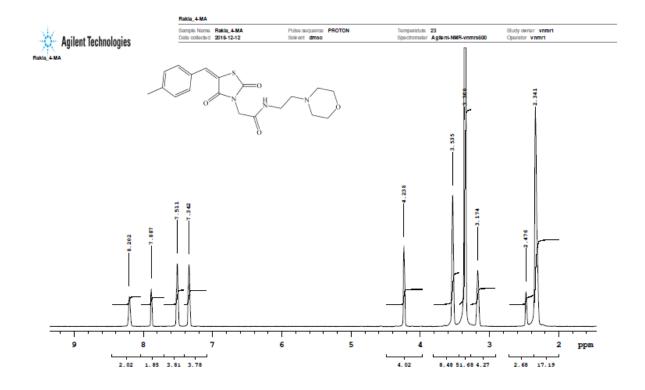


Figure S19 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4p** 



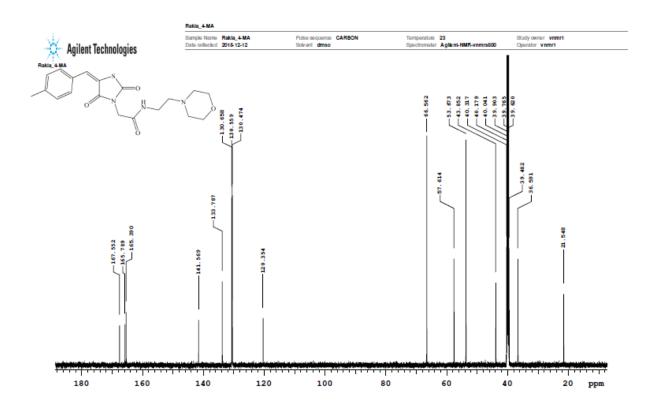
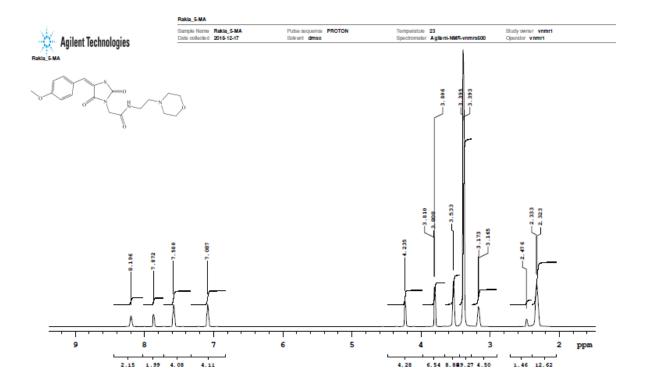


Figure S20 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4q** 



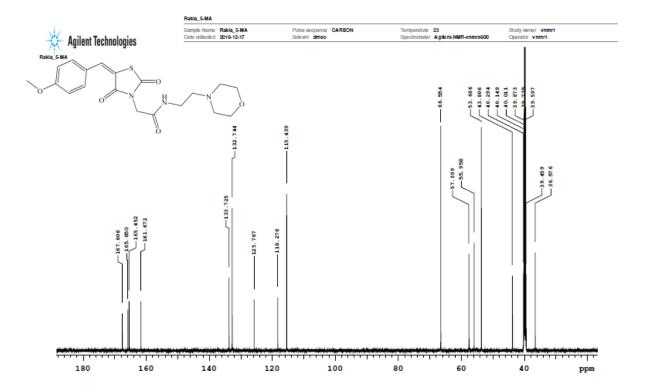
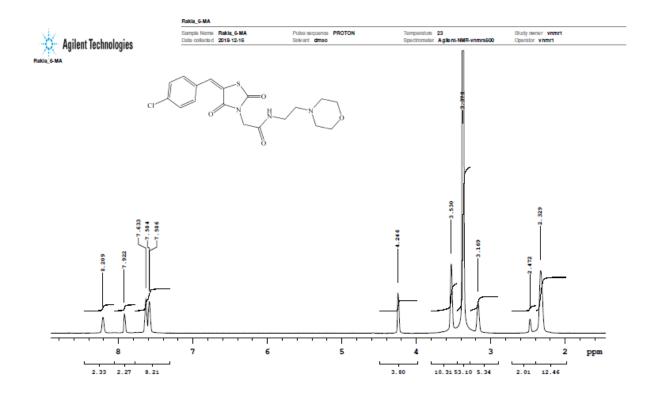


Figure S21 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4r** 



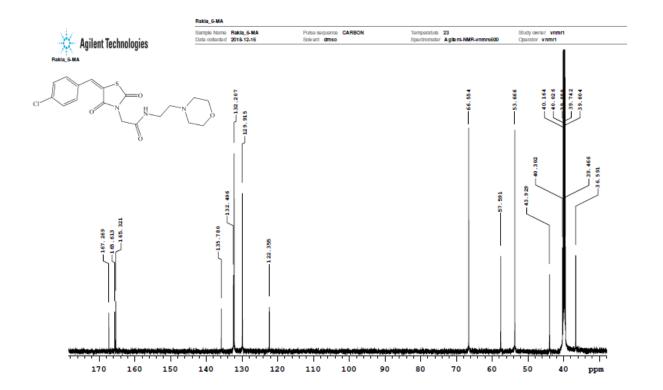
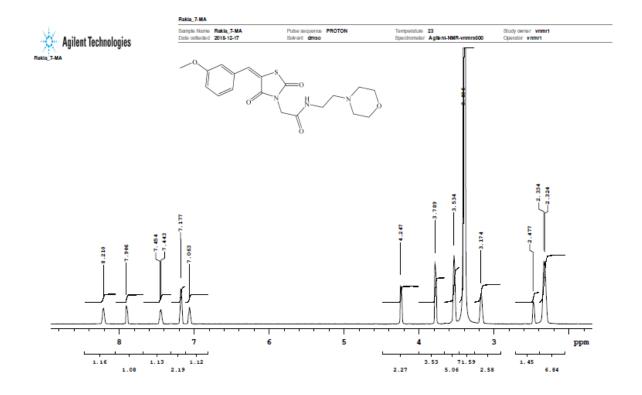


Figure S22 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **4s** 



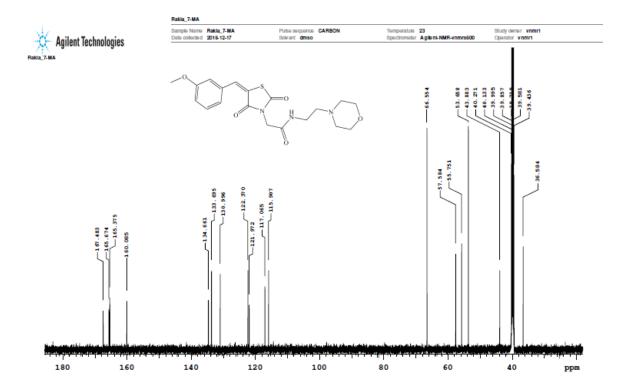
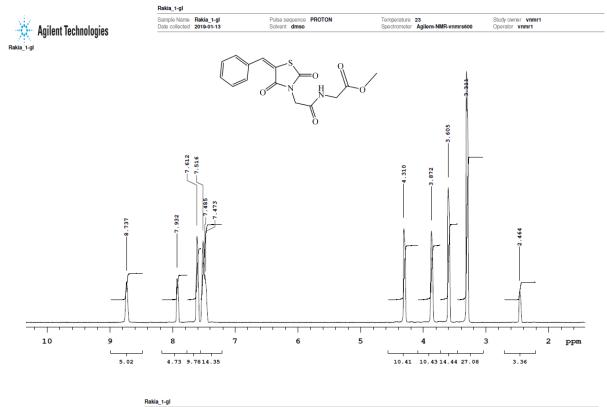


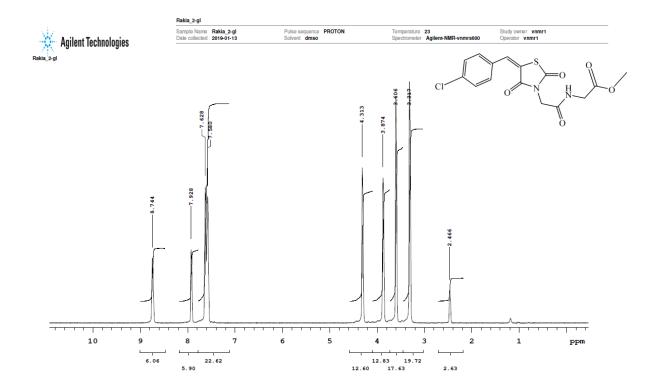
Figure S23 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 5a



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					130,582	121.535	
170 165	160	155 150	 140	<b>1</b> 35	130	125	ppm

Figure S24 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5b** 



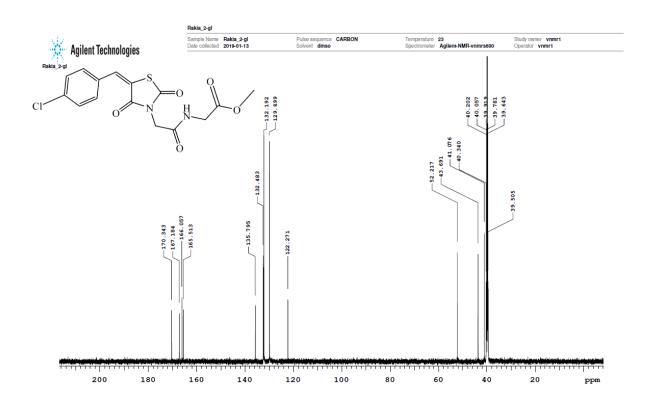
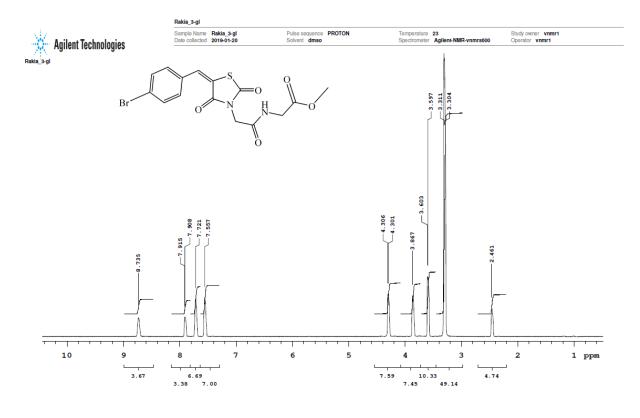


Figure S25 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5c** 



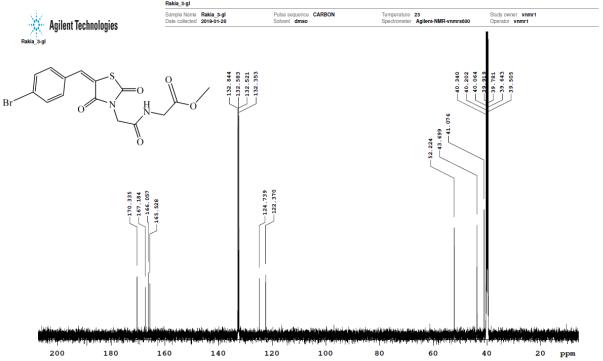
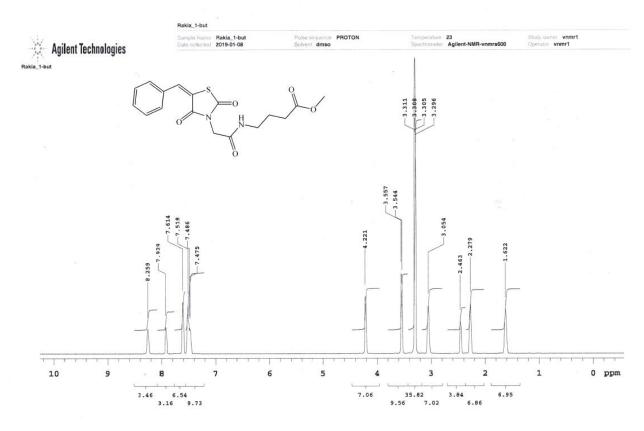


Figure S26 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5d** 



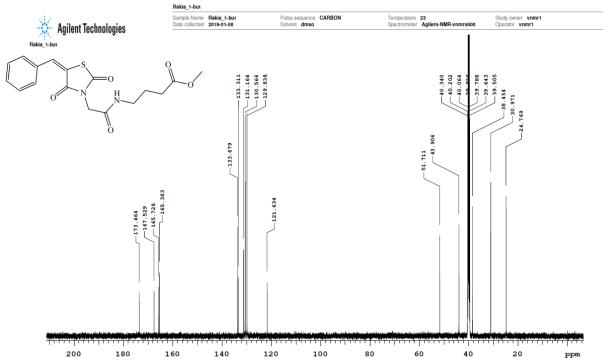
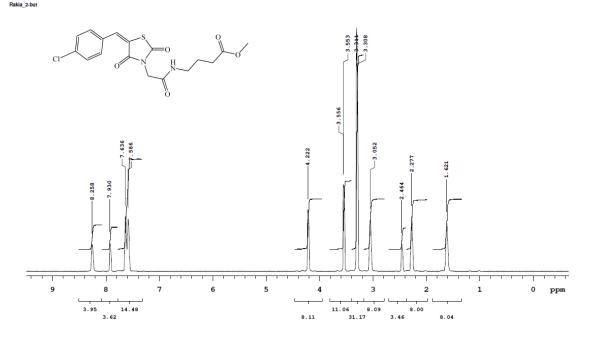


Figure S27 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5e** 





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Sample Name Rakia\_2-but Pulse sequence PROTON Temperature 23 Study owner vnnrt
Date collected 2019-01-09 Solvent dmso Spectrometer Agilen-NMR-vnnrs600 Operator vnnr1

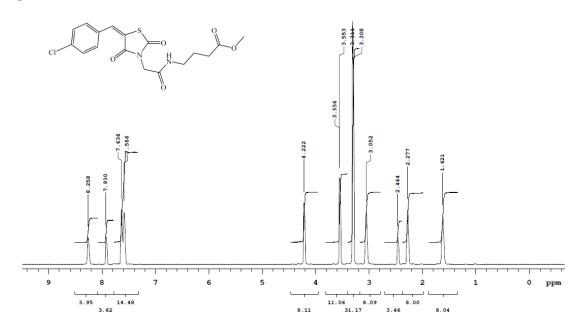
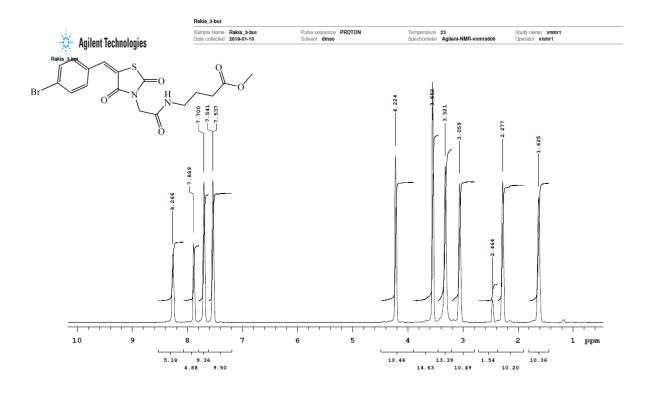


Figure S28 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5f** 



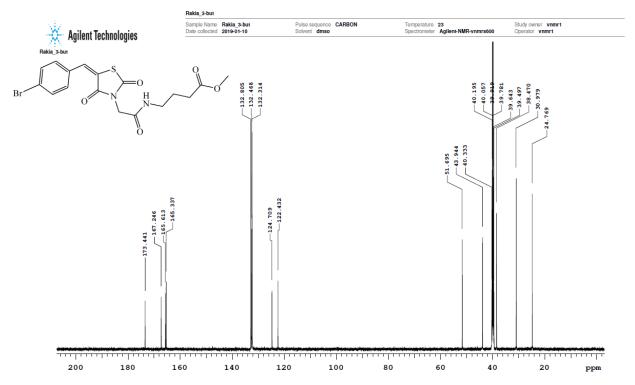
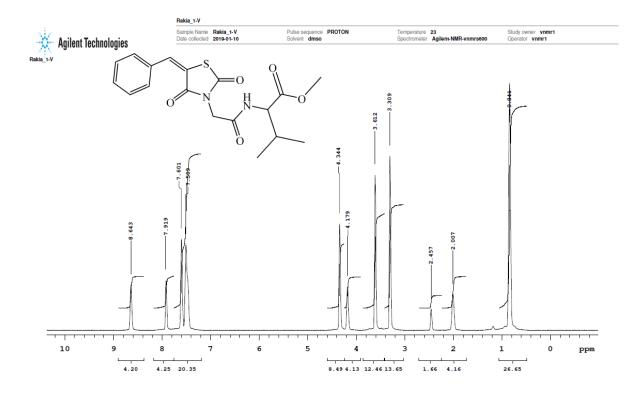


Figure S29 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5g** 



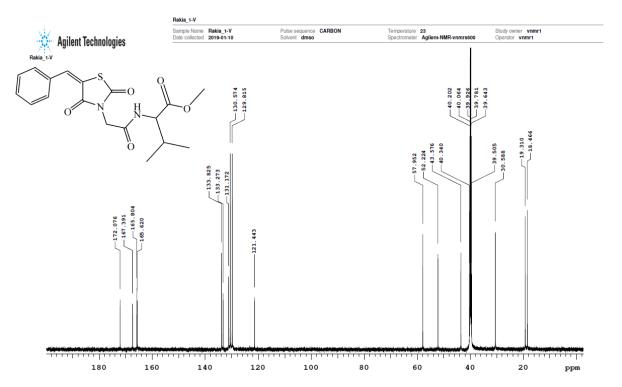
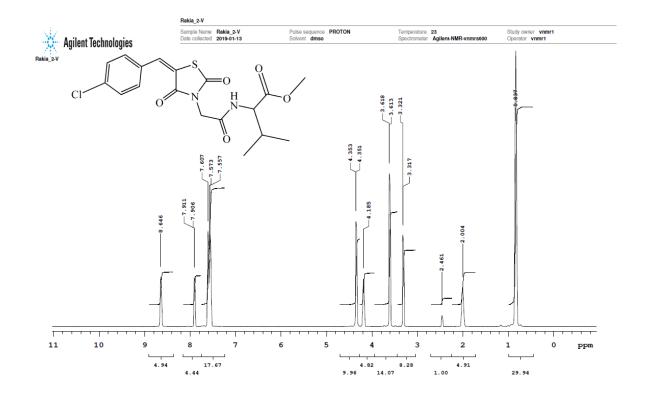


Figure S30 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5h** 



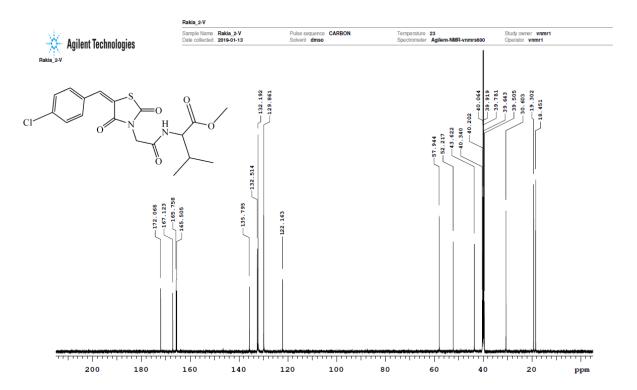
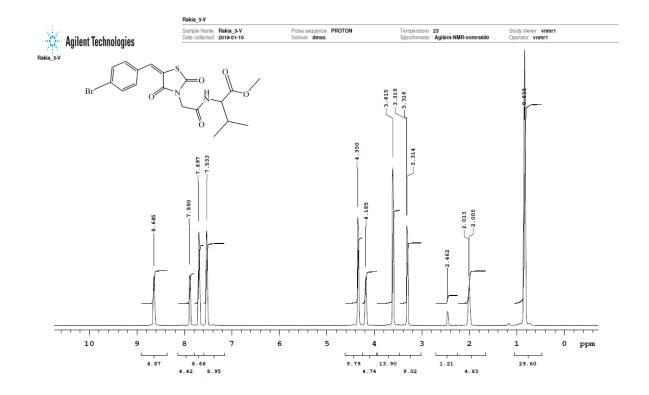


Figure S31 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 5i



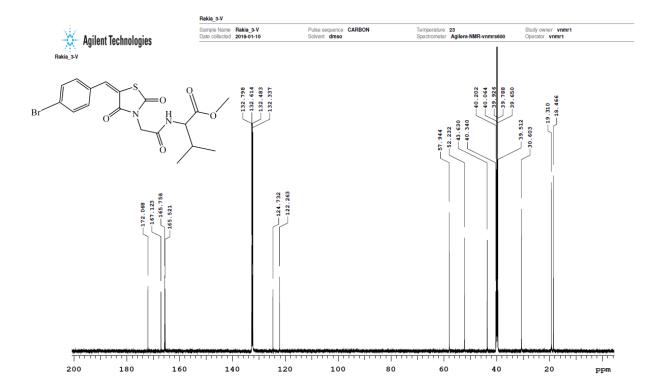
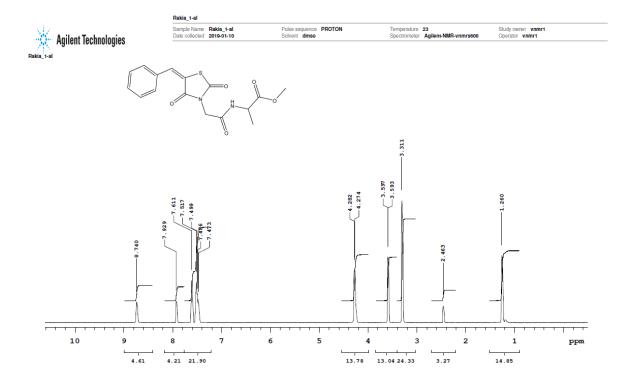


Figure S32 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 5j



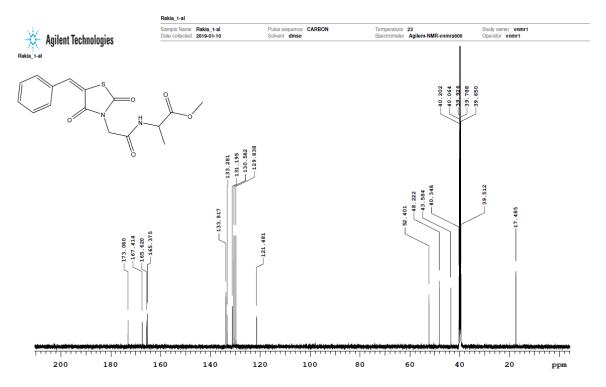
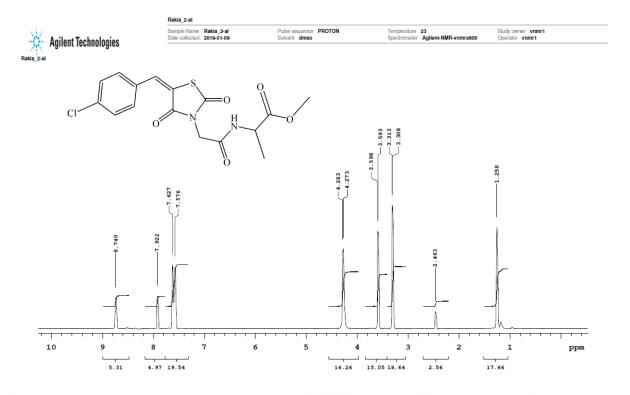


Figure S33 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5k** 



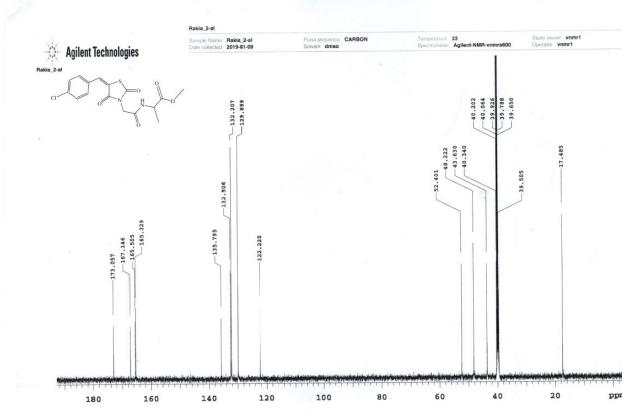
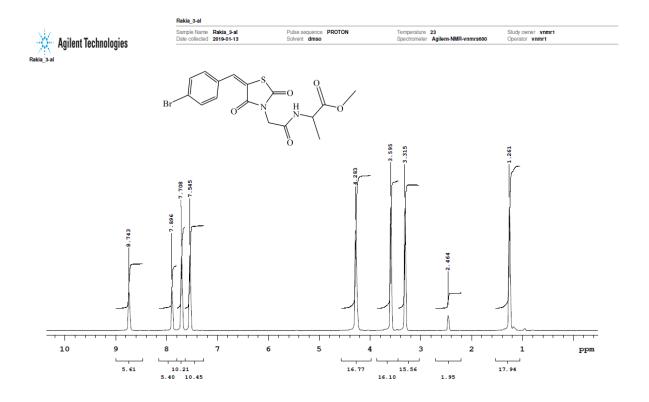


Figure S34 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound 5I



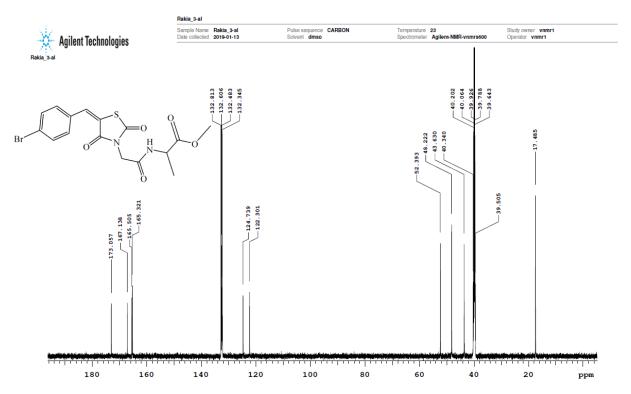
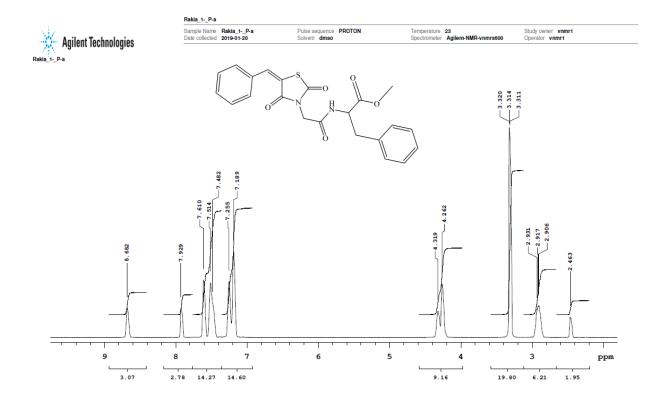


Figure S35 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5m** 



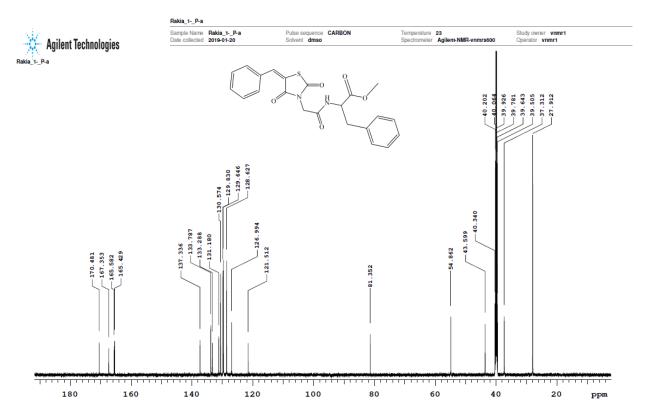
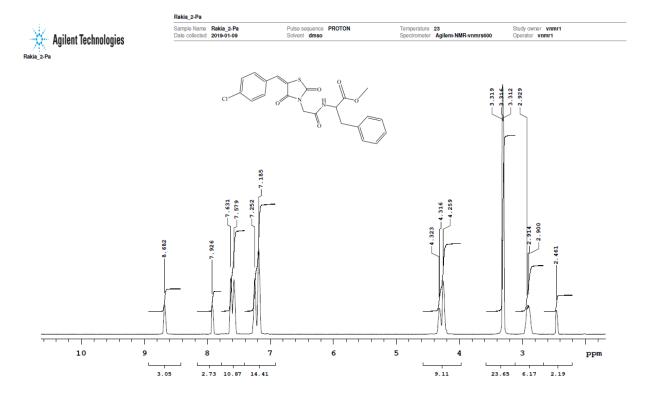


Figure S36 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **5n** 



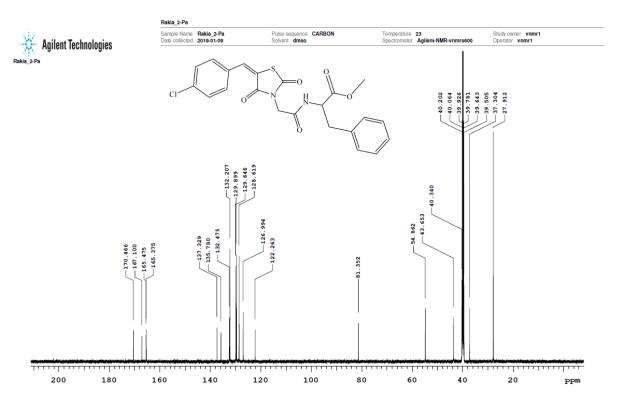


Figure S37 <sup>1</sup>H- and <sup>13</sup>C-NMR for compound **50** 

