

## Supporting Information

# 2-Acetamido-2-deoxy-D-glucono-1,5-lactone Sulfonylhydrazones: Synthesis and Evaluation as Inhibitors of Human OGA and HexB Enzymes

Mariann Kiss,<sup>1</sup> István Timári,<sup>1</sup> Teréz Barna,<sup>2</sup> Zuzana Mészáros,<sup>3</sup> Kristýna Slámová,<sup>3</sup> Pavla Bojarová,<sup>3</sup> Vladimír Křen,<sup>3</sup> Joseph M. Hayes,<sup>4</sup> László Somsák<sup>1\*</sup>

<sup>1</sup> Department of Organic Chemistry, University of Debrecen, POB 400, H-4002 Debrecen, Hungary; kiss.mariann@science.unideb.hu (M. K.); timari.istvan@science.unideb.hu (I. T.)

<sup>2</sup> Department of Genetics and Applied Microbiology, University of Debrecen, POB 400, H-4002 Debrecen, Hungary; barna.terez@science.unideb.hu (T. B.)

<sup>3</sup> Institute of Microbiology of the Czech Academy of Sciences, Laboratory of Biotransformation, Vídeňská 1083, Praha 4, CZ-142 20 Czech Republic; zuzana.meszaros@biomed.cas.cz (Z. M.); slamova@biomed.cas.cz (K. S.); bojarova@biomed.cas.cz (P. B.); kren@biomed.cas.cz (V. K.)

<sup>4</sup> School of Pharmacy & Biomedical Sciences, University of Central Lancashire, Preston PR1 2HE, United Kingdom; JHayes@uclan.ac.uk (J. H.)

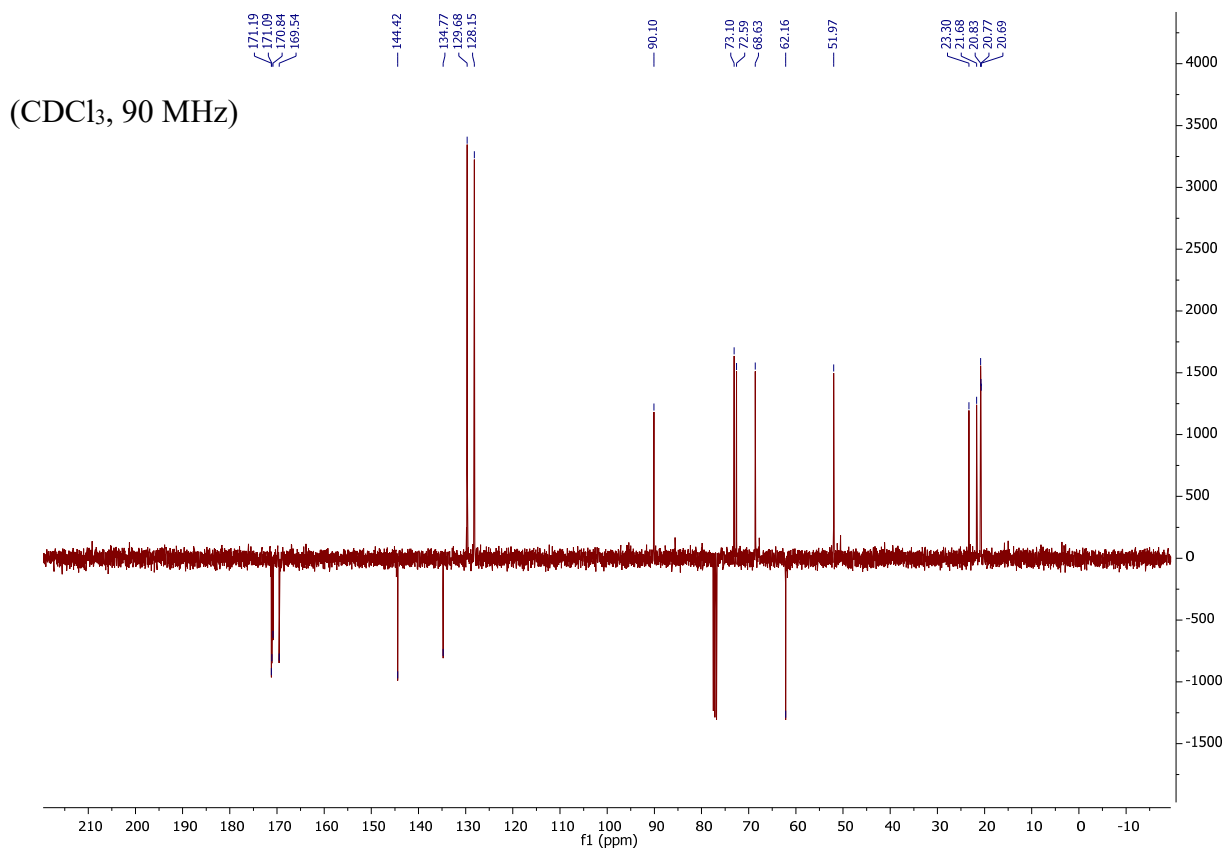
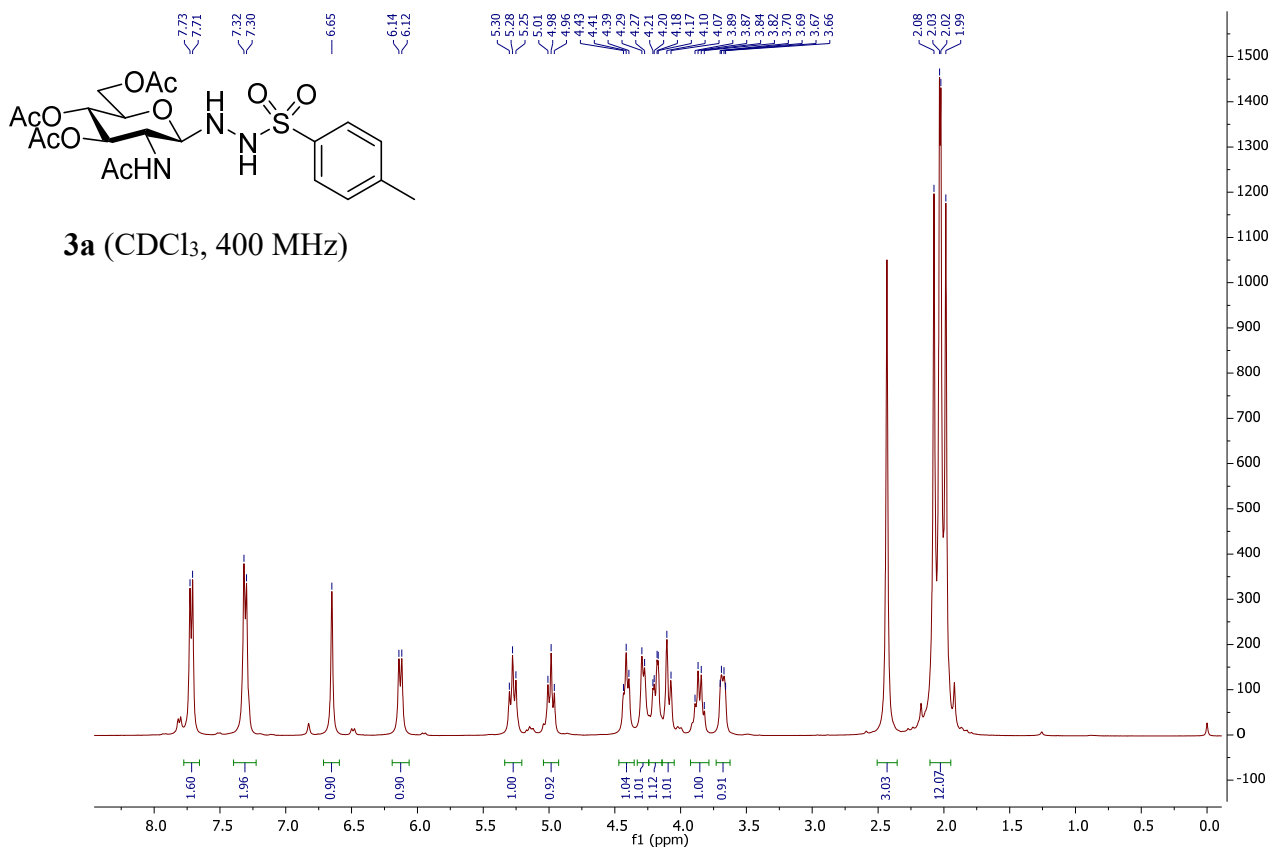
\* Correspondence: somsak.laszlo@science.unideb.hu (L. S.)

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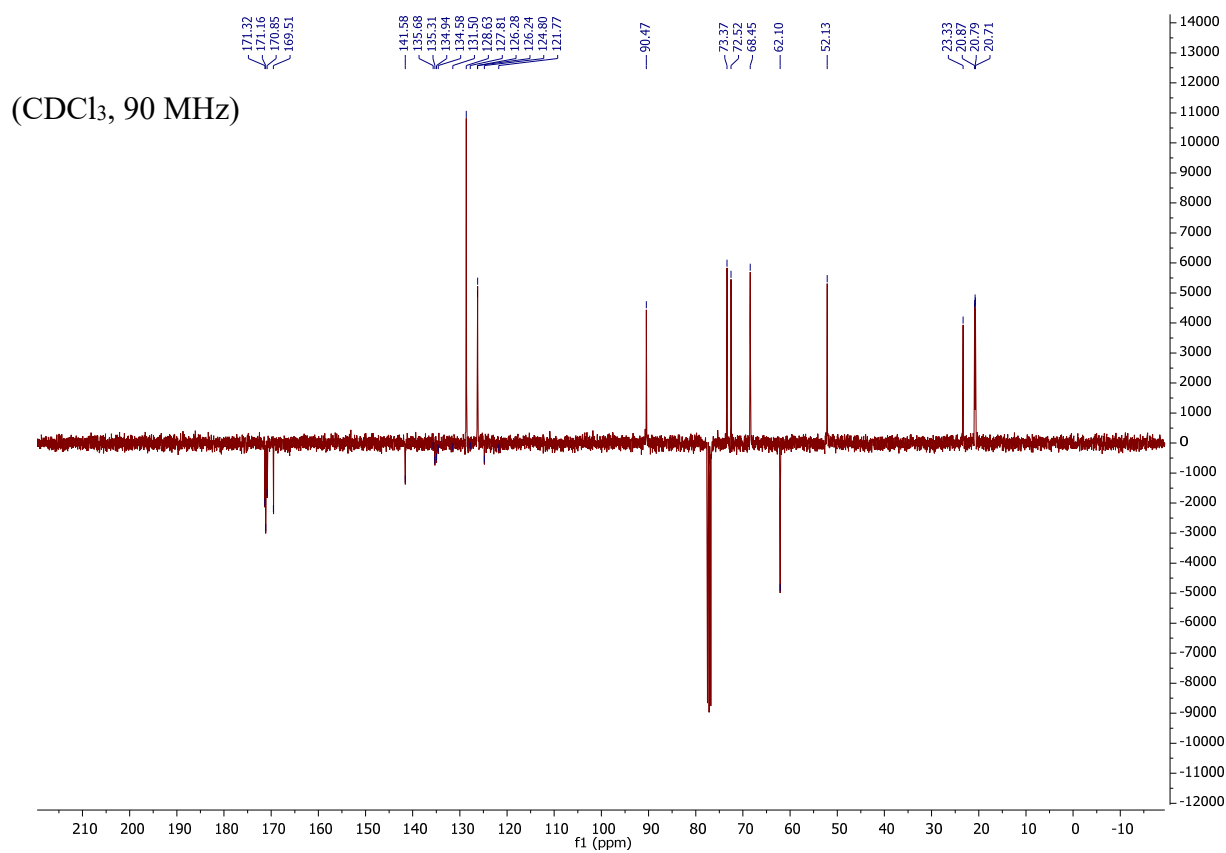
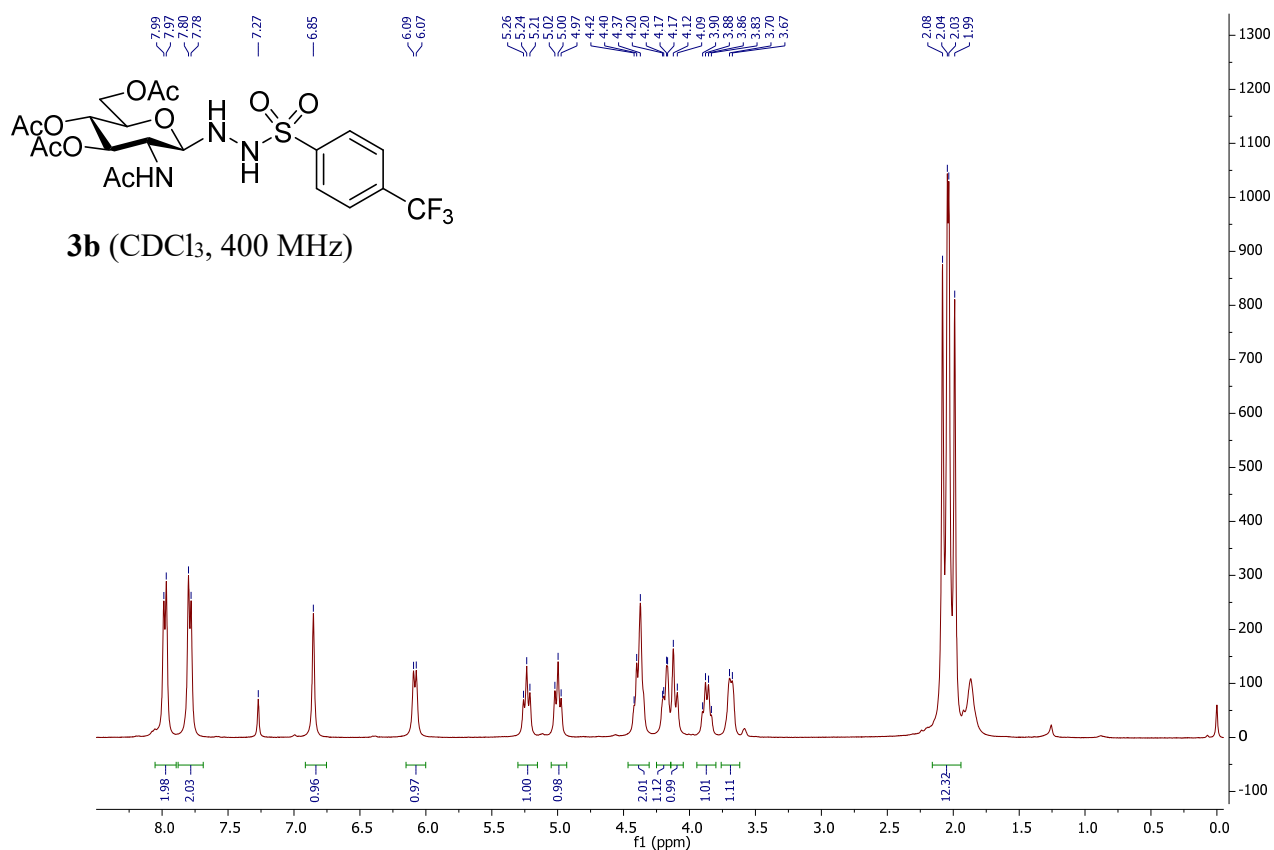
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Copies of  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra

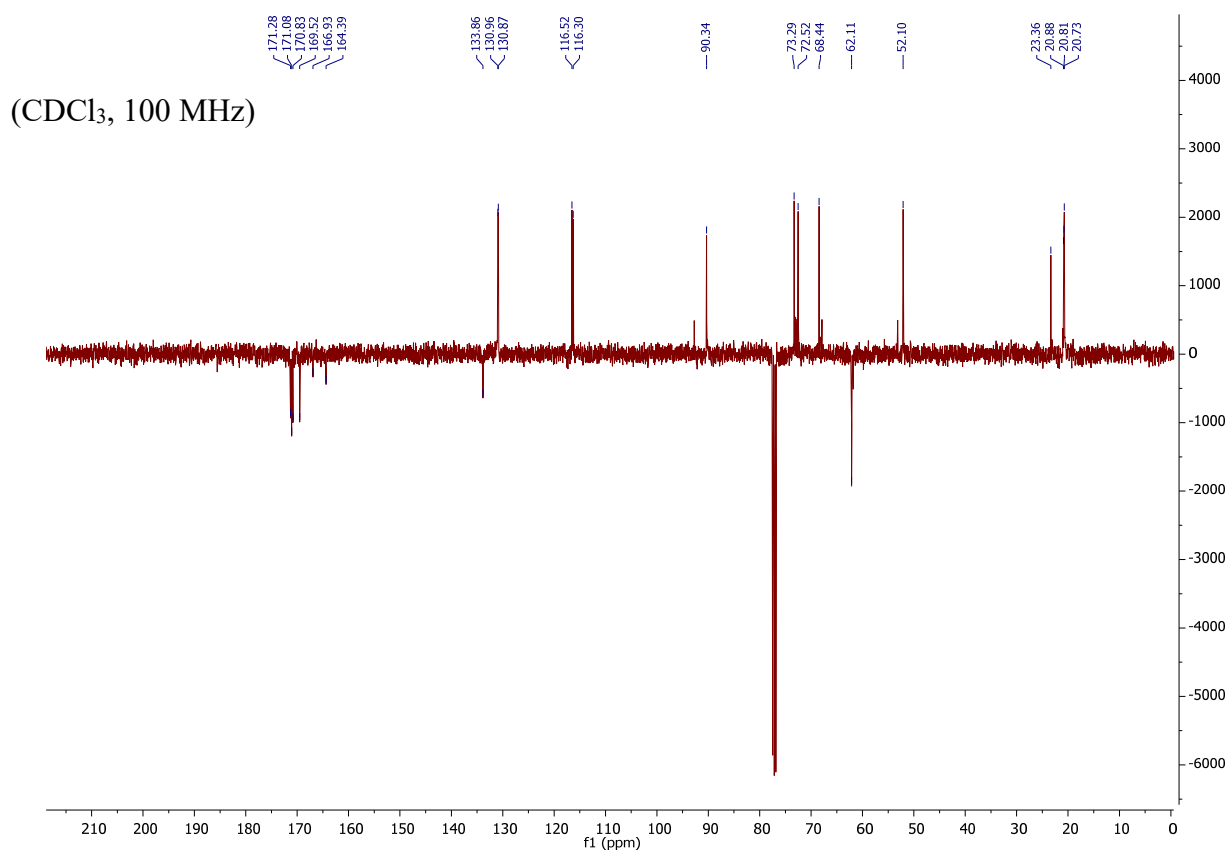
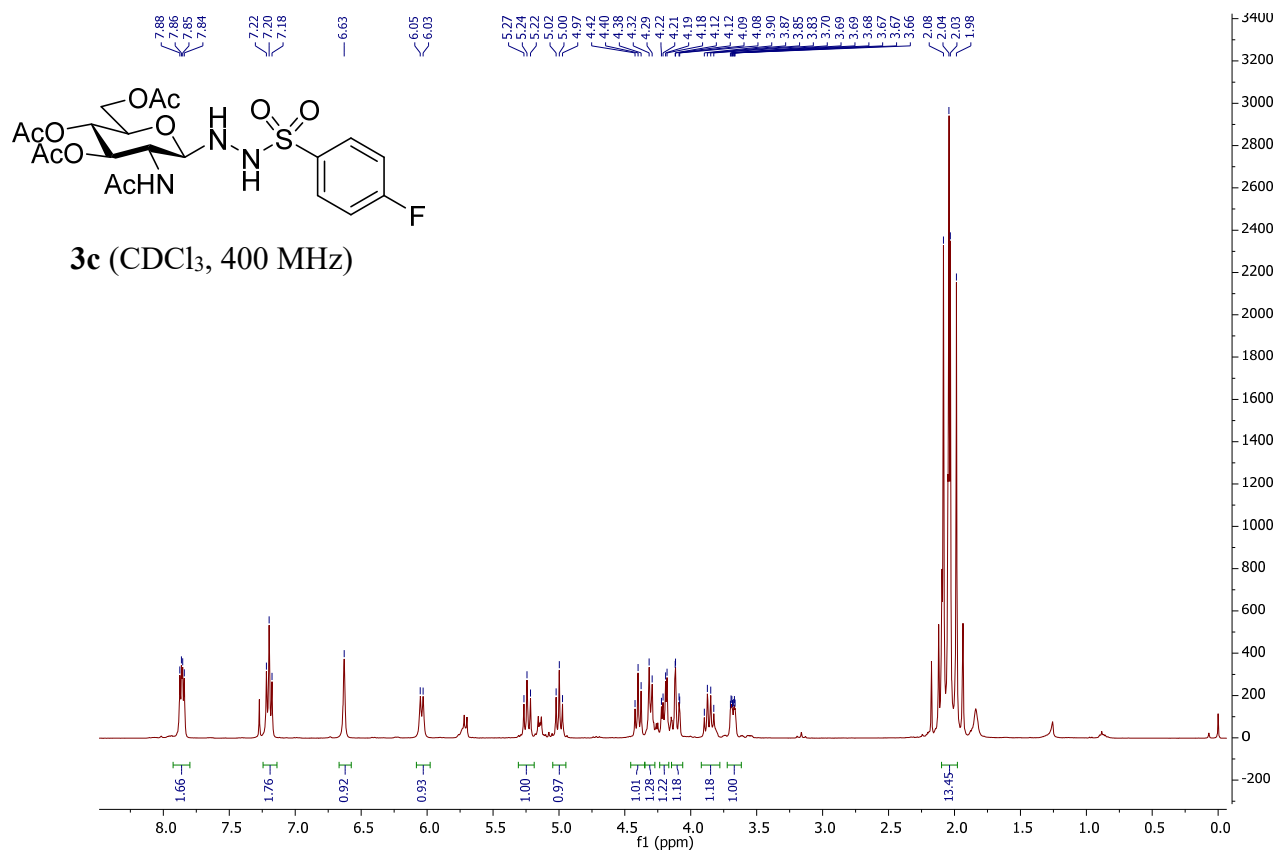
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **3a**



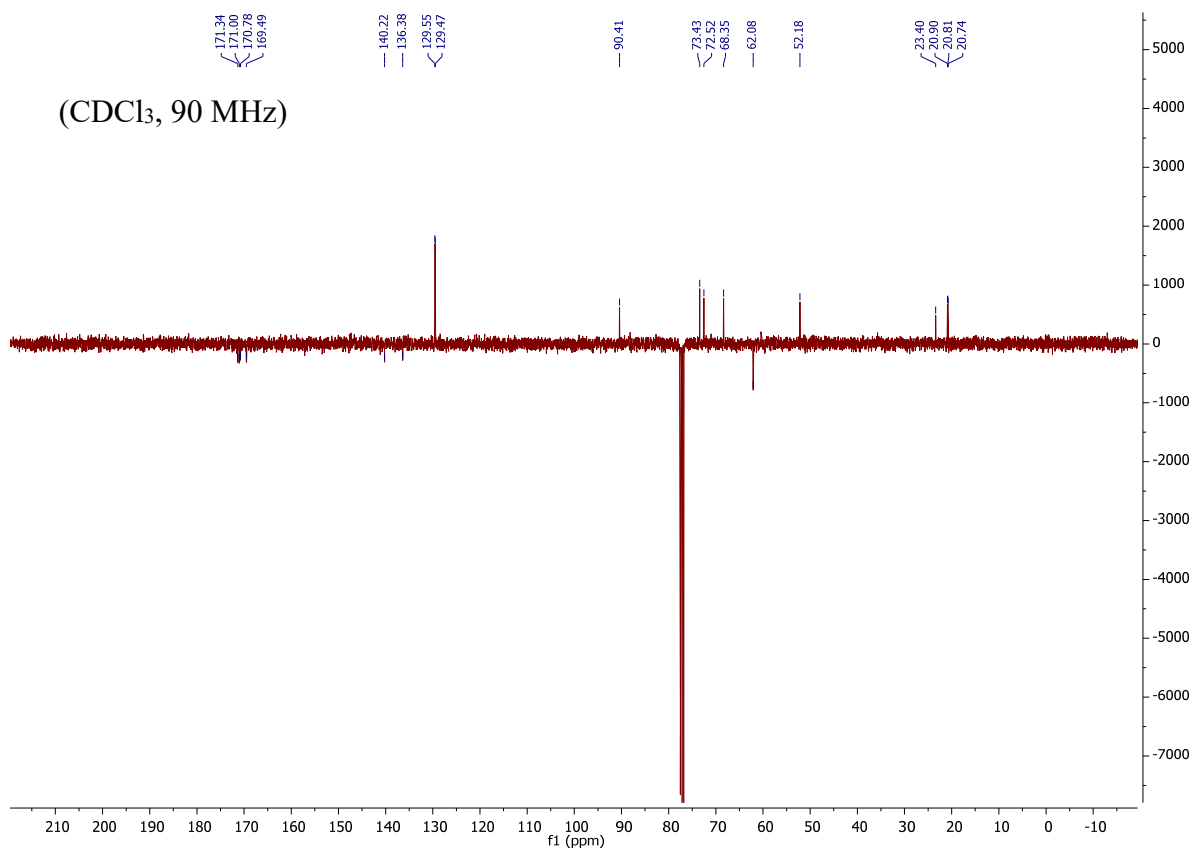
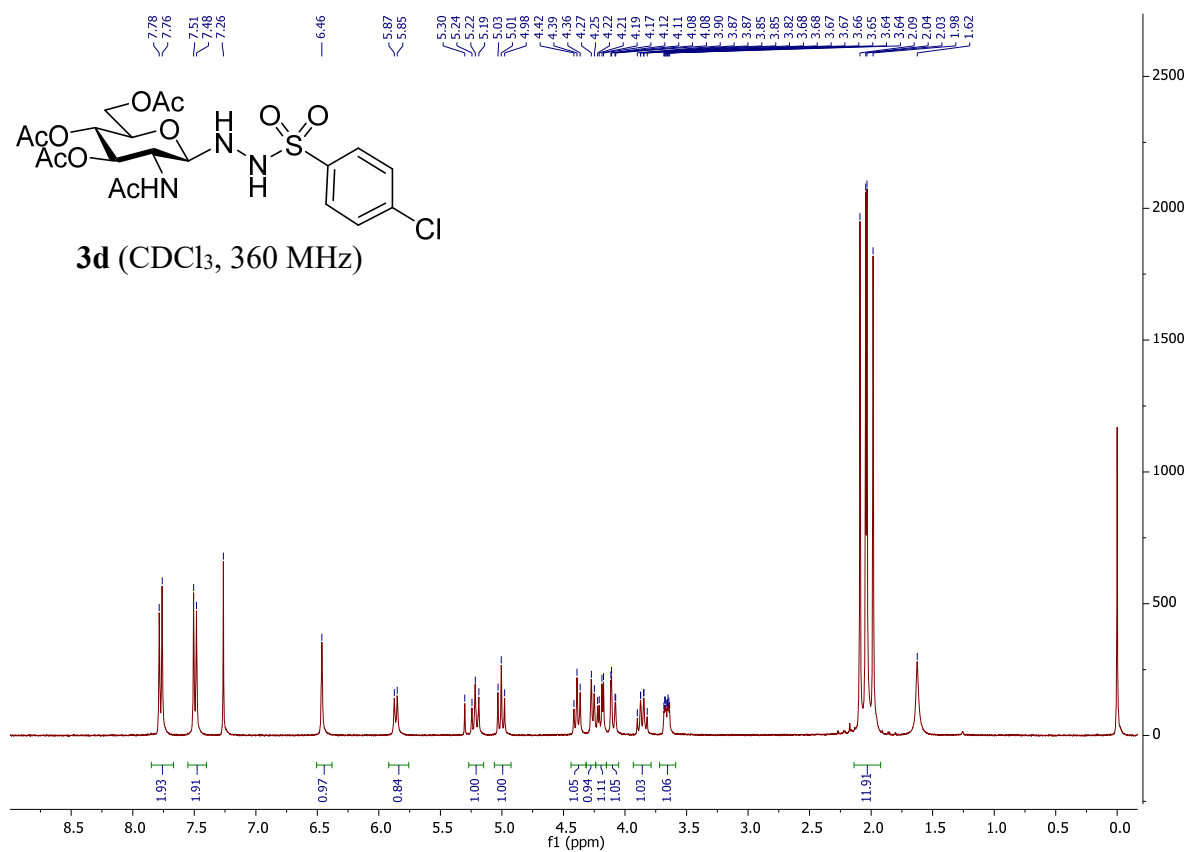
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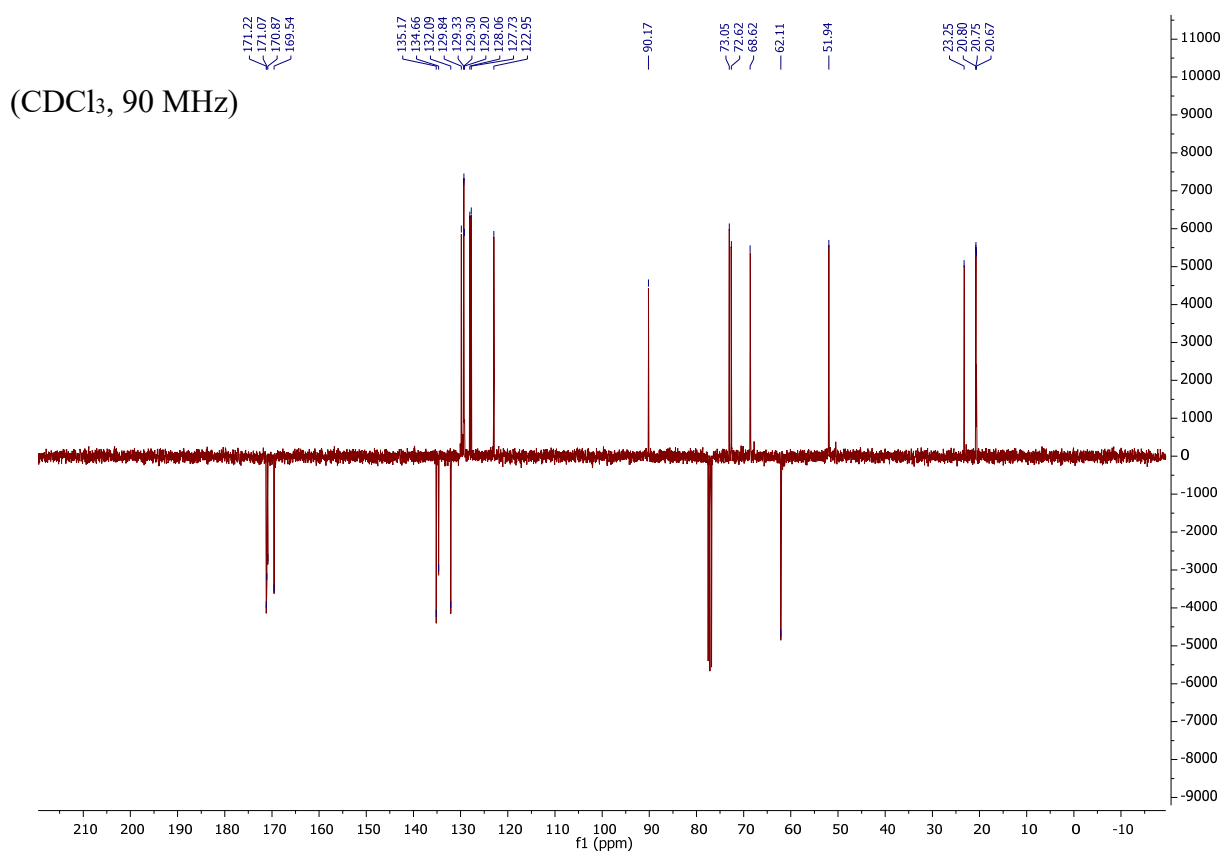
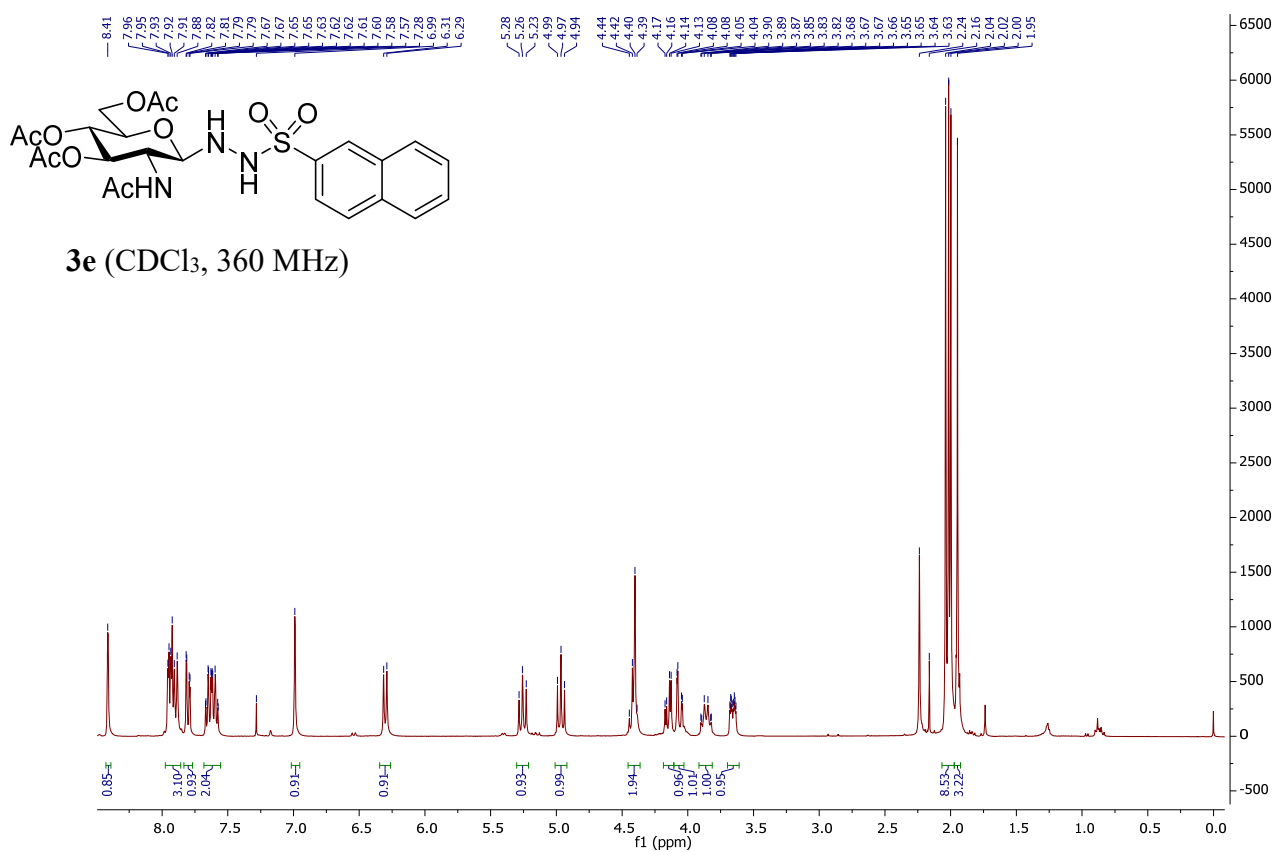
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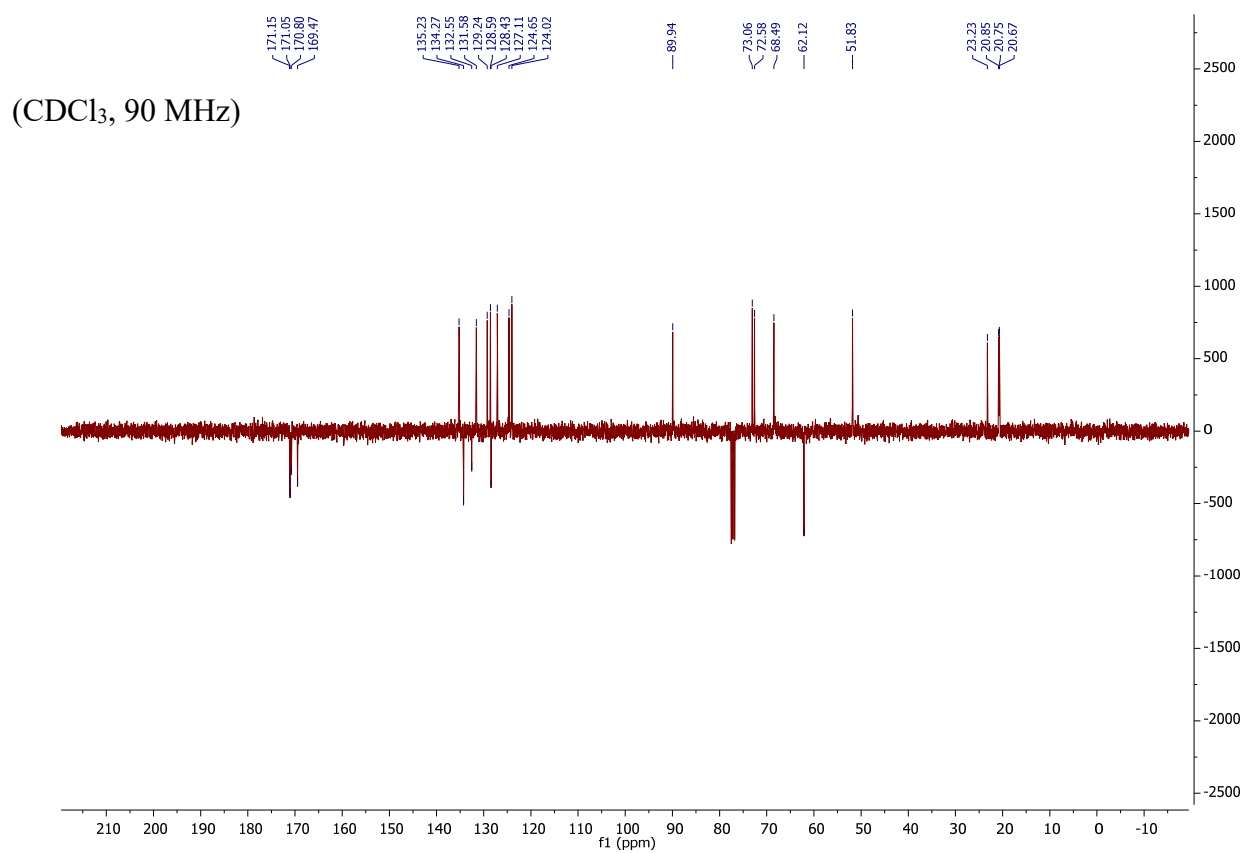
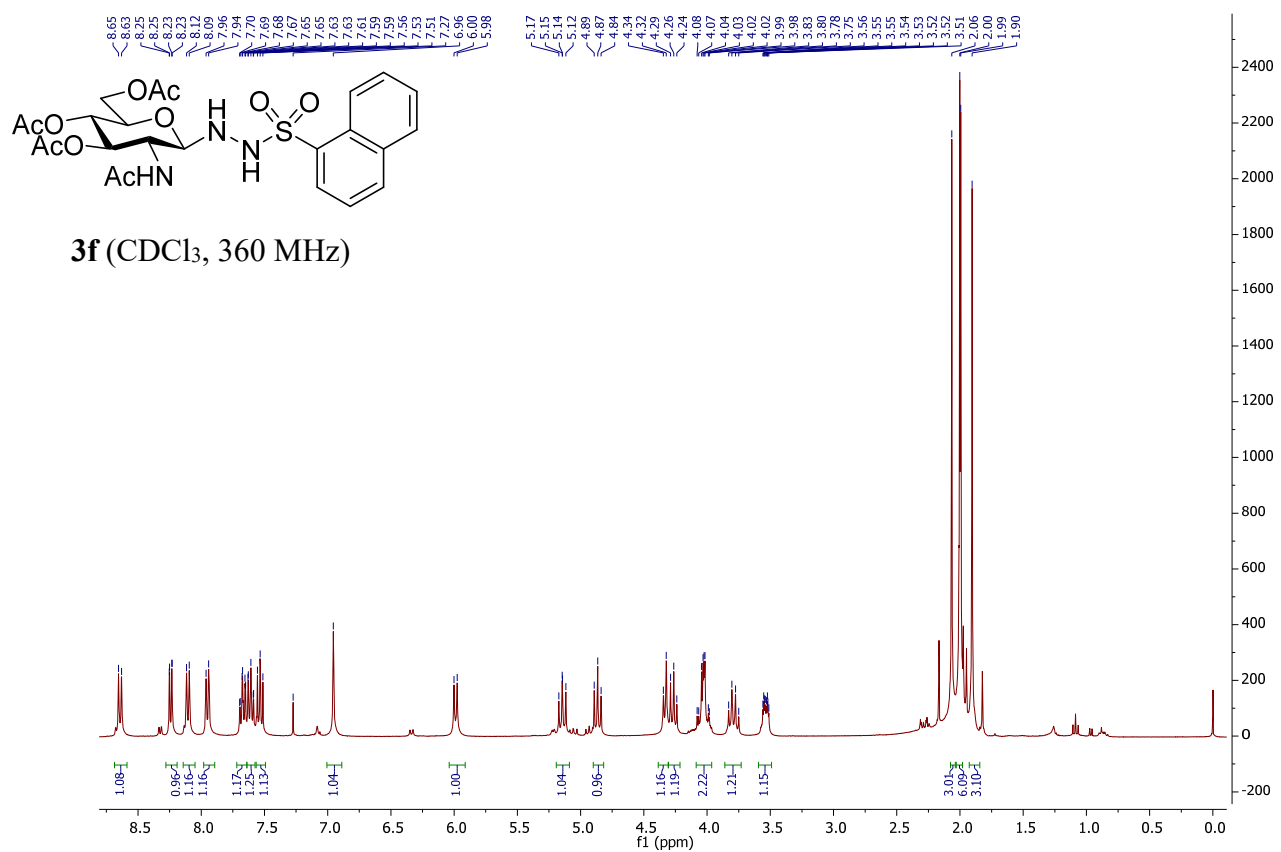
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **3d**



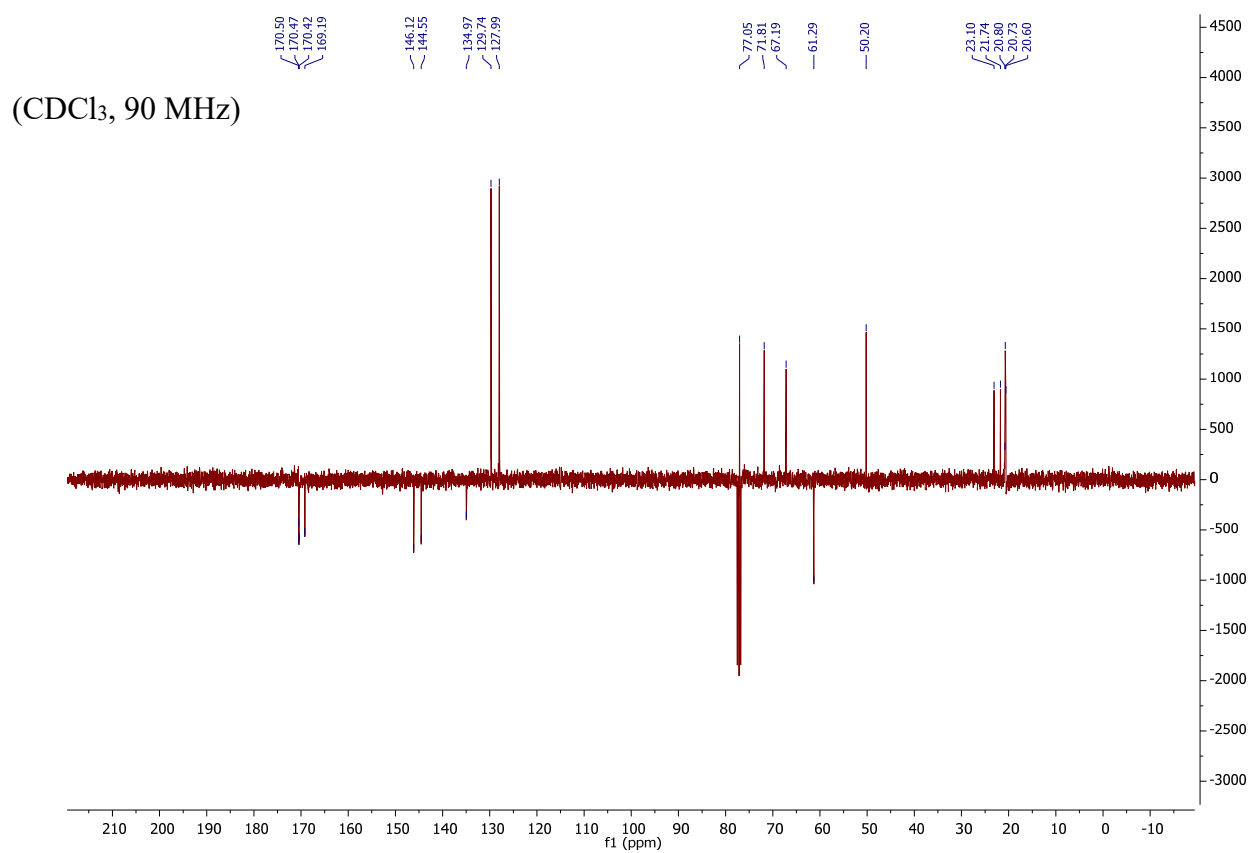
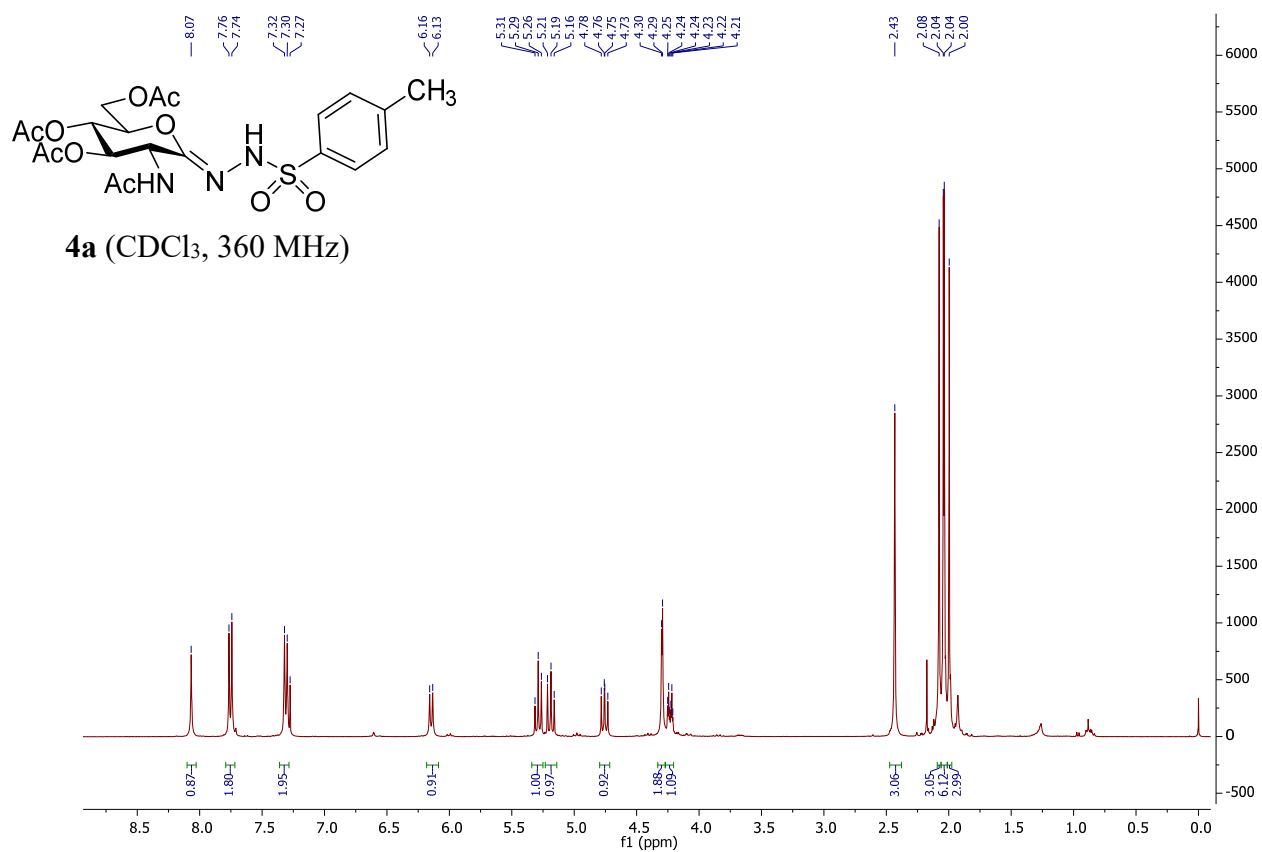
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **3e**



<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **3f**

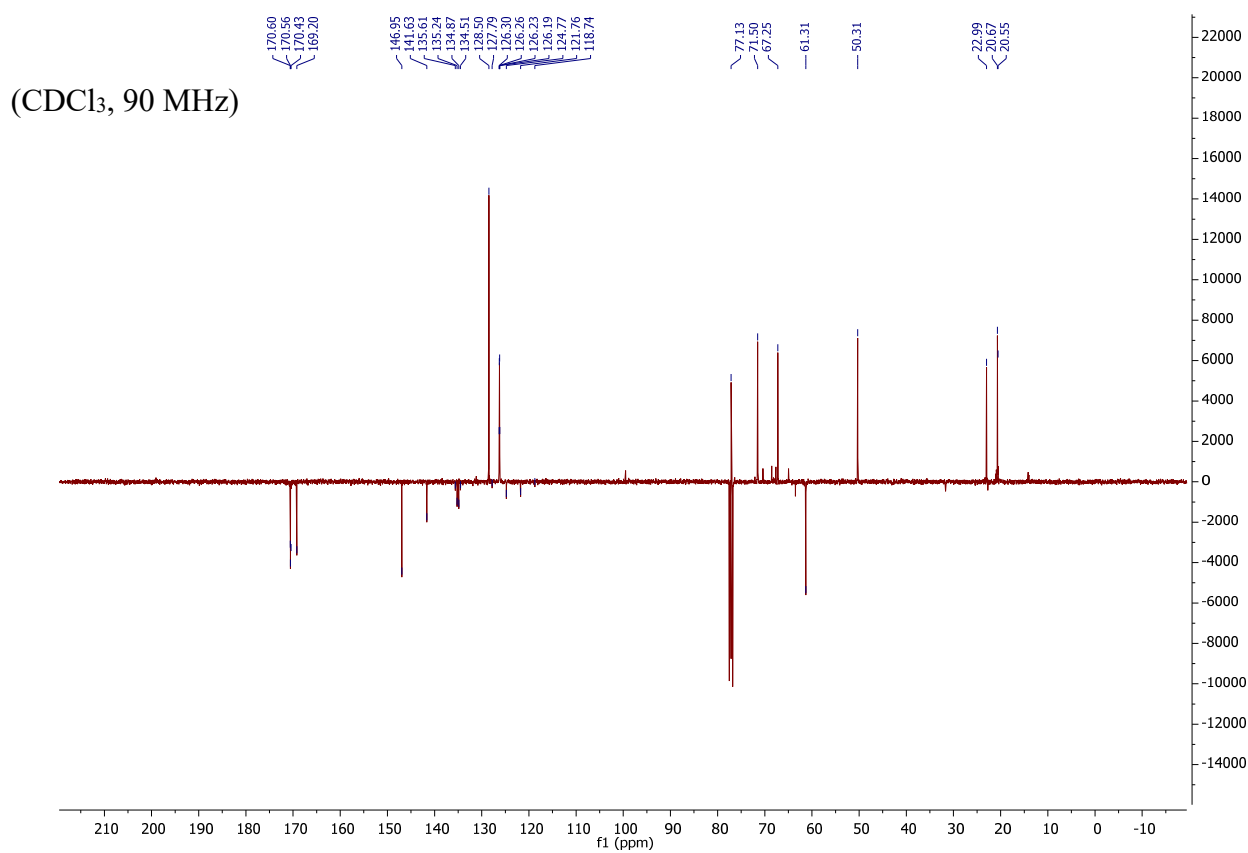
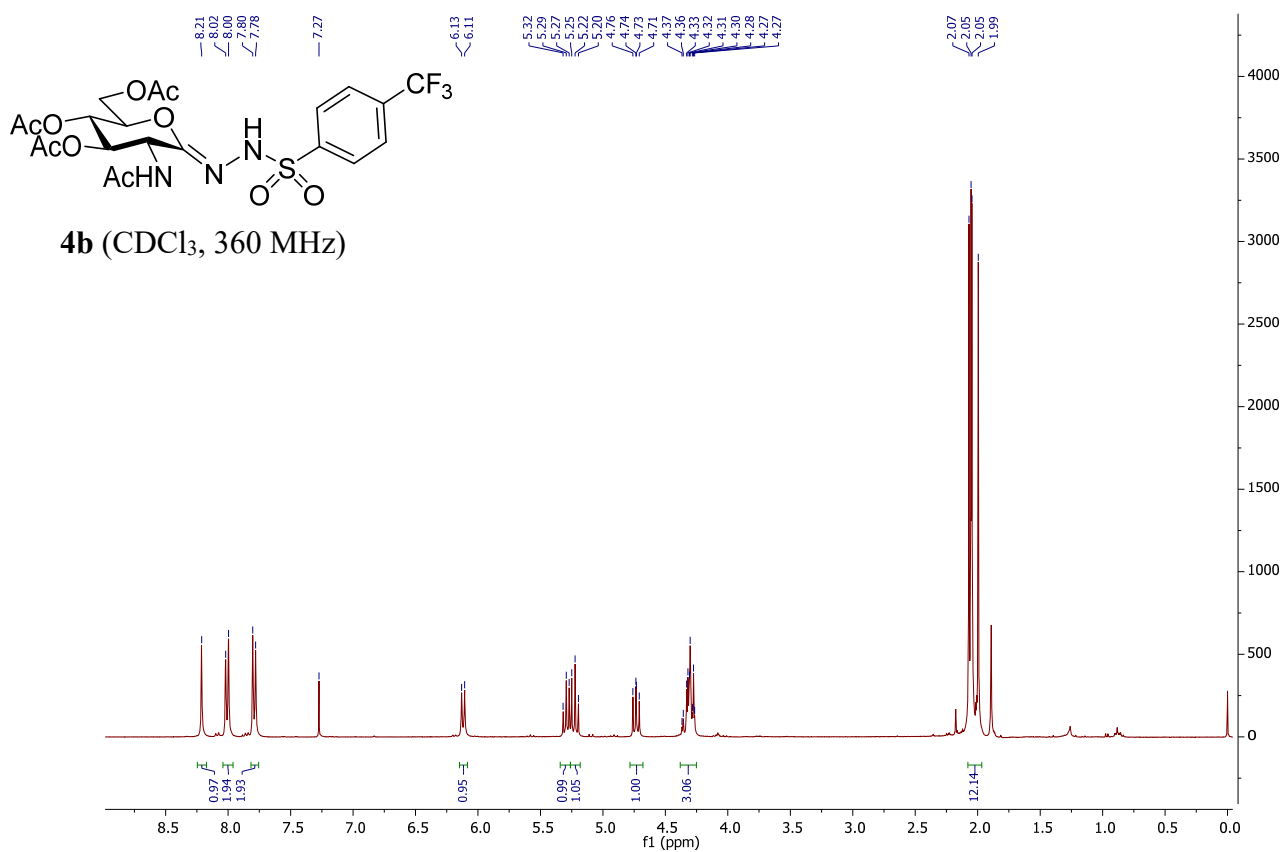


<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **4a**

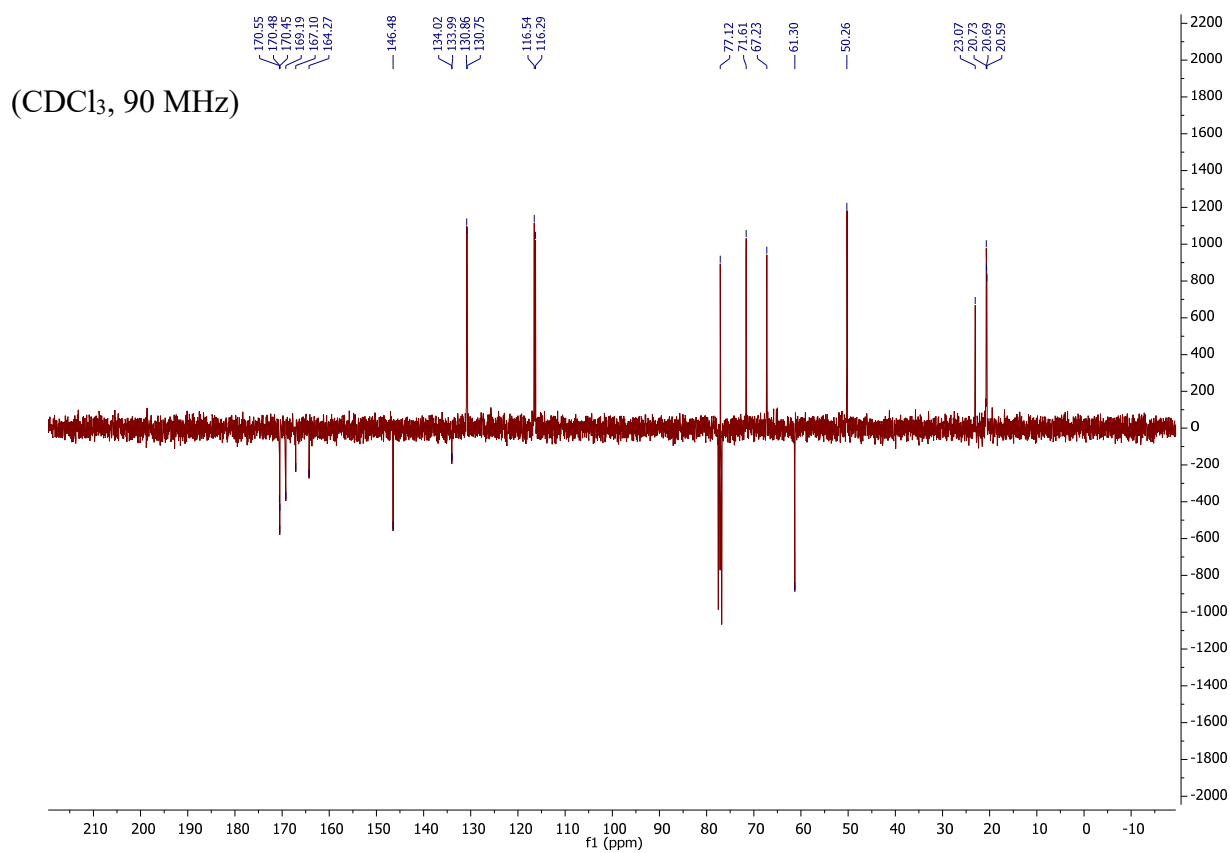
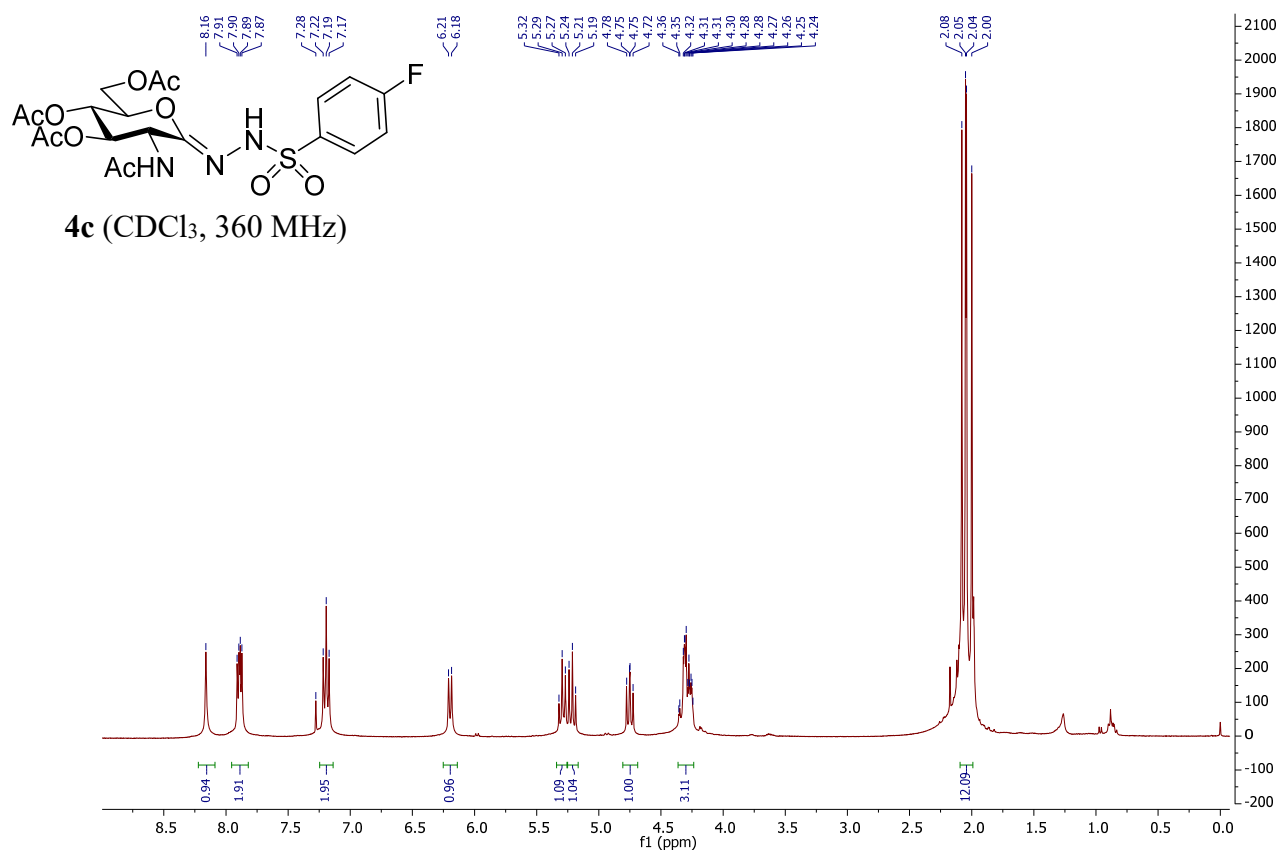


<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **4b**

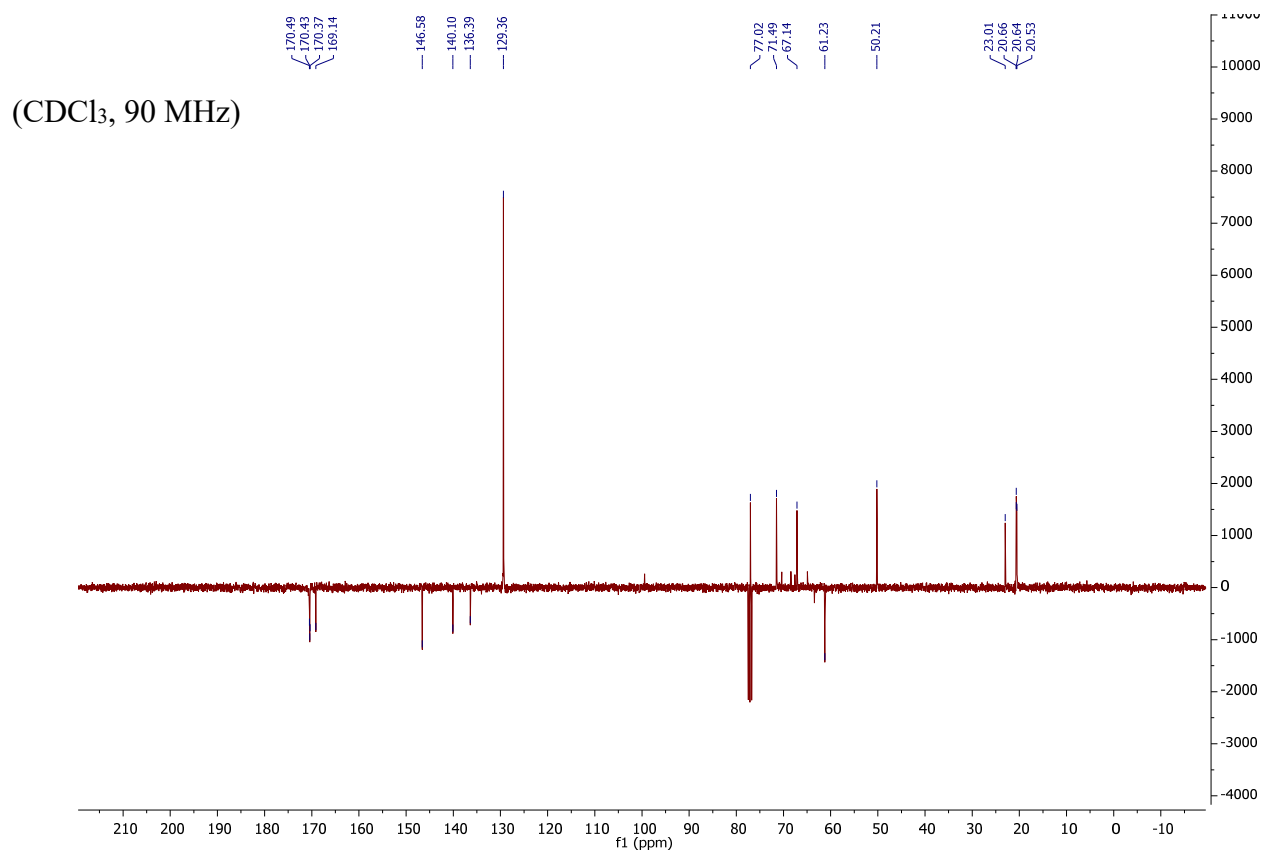
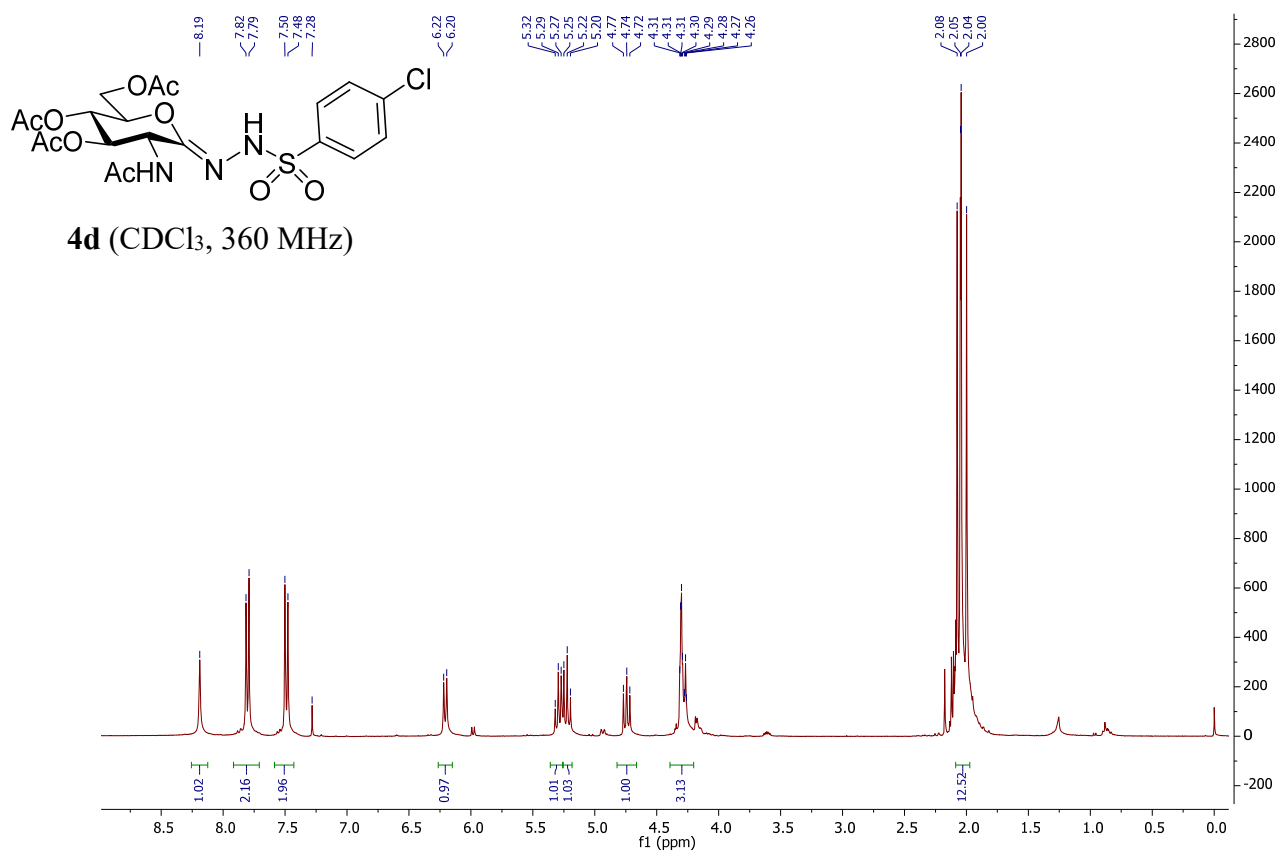




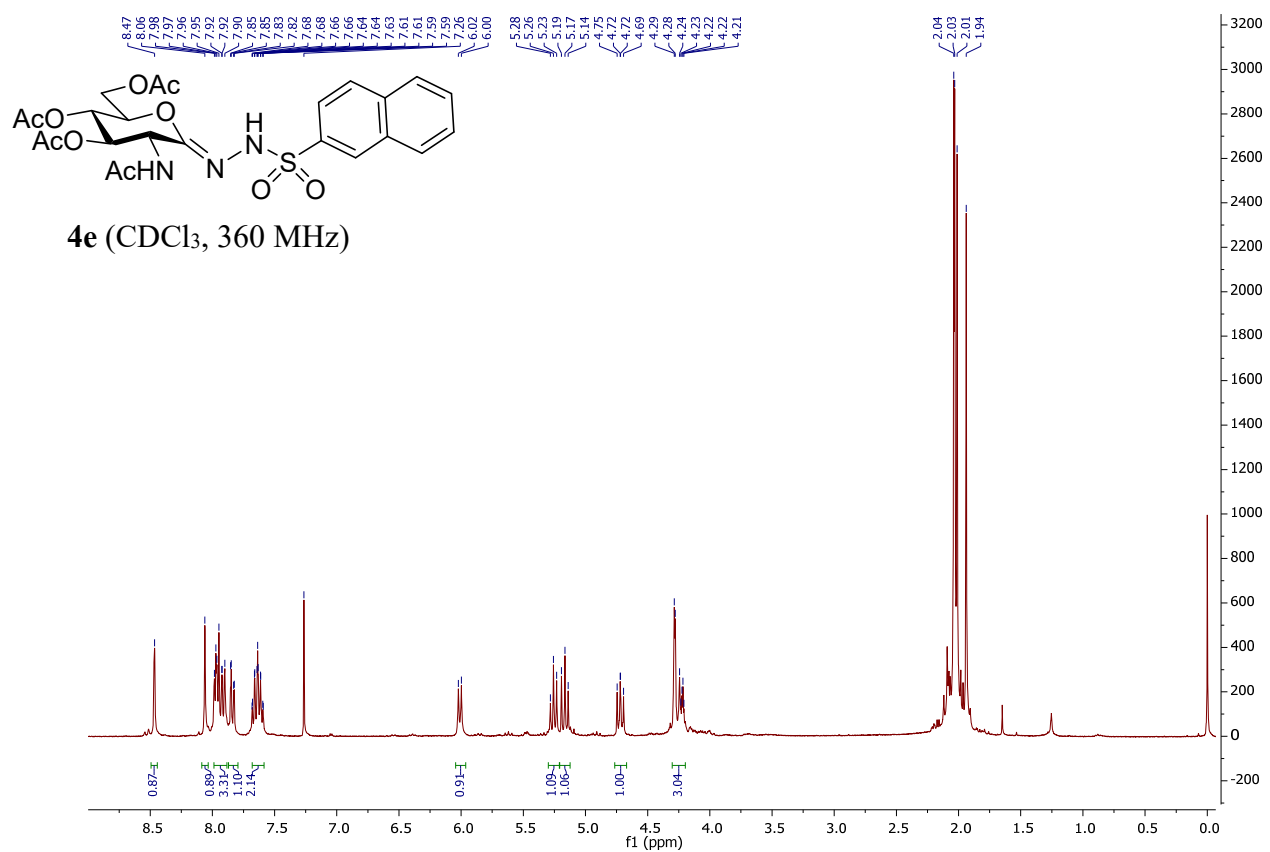
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **4c**



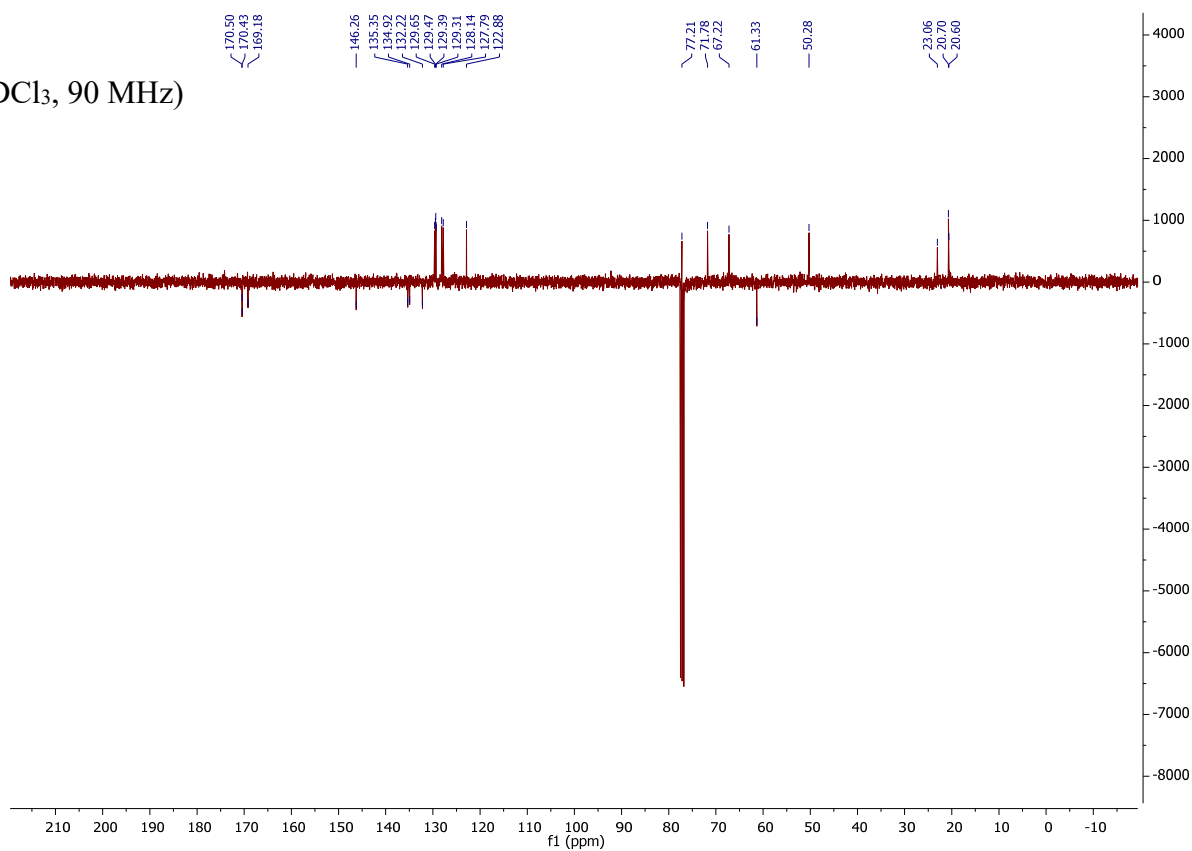
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **4d**



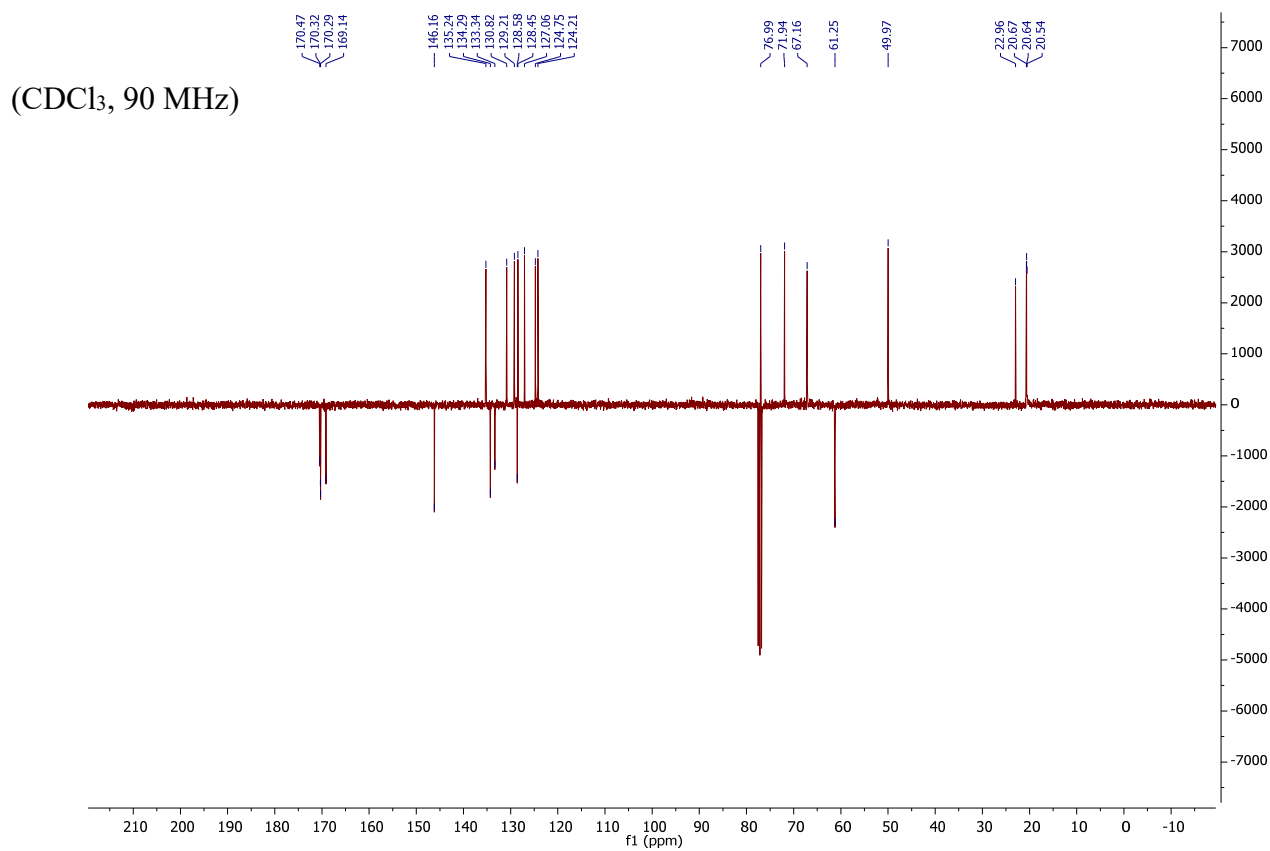
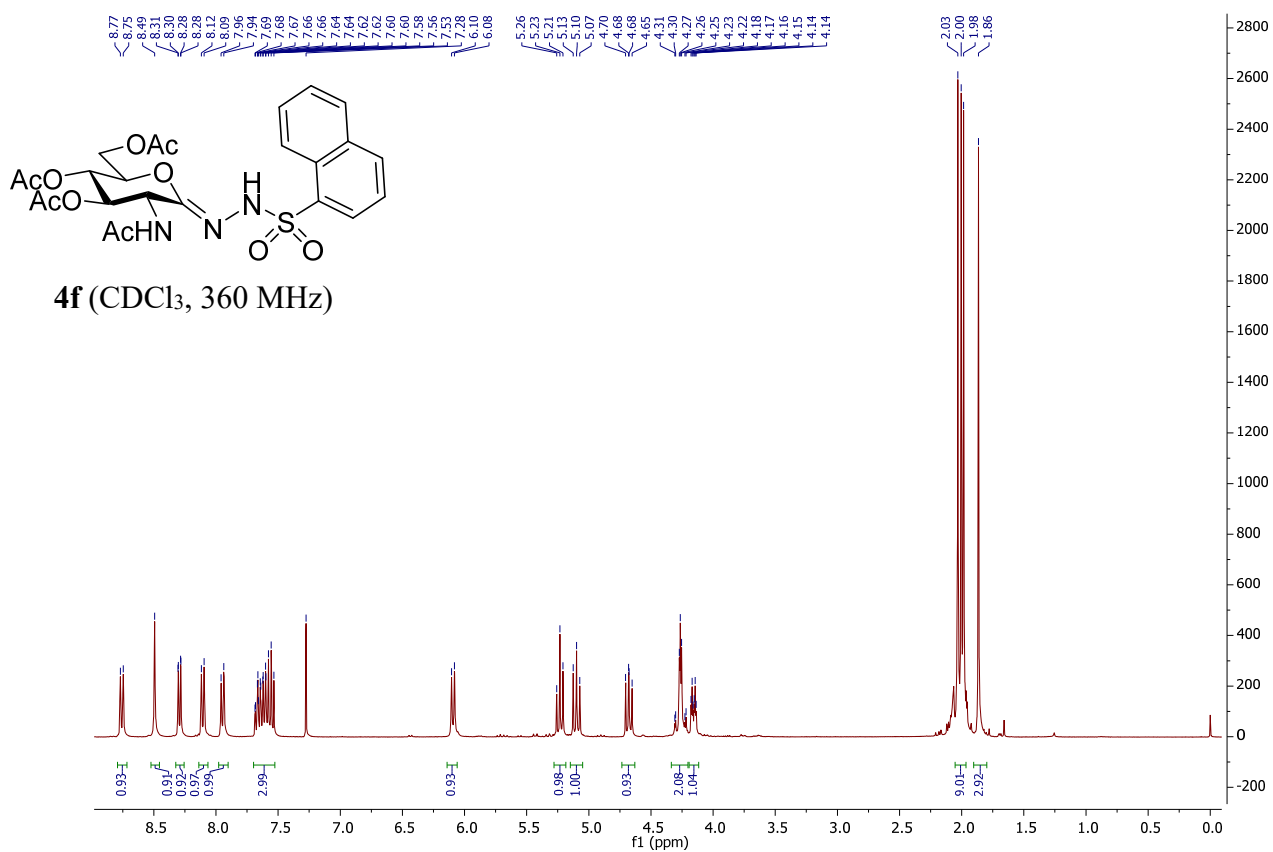
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **4e**



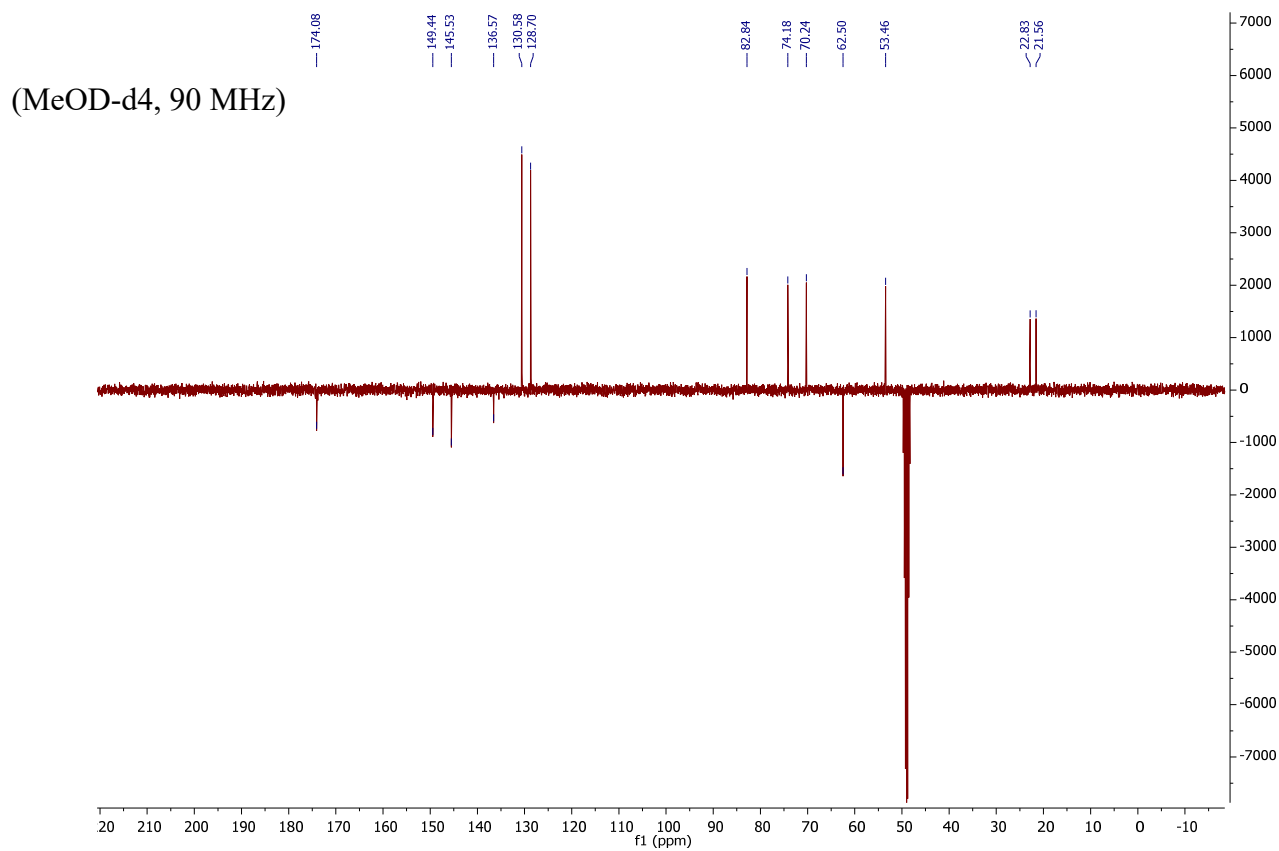
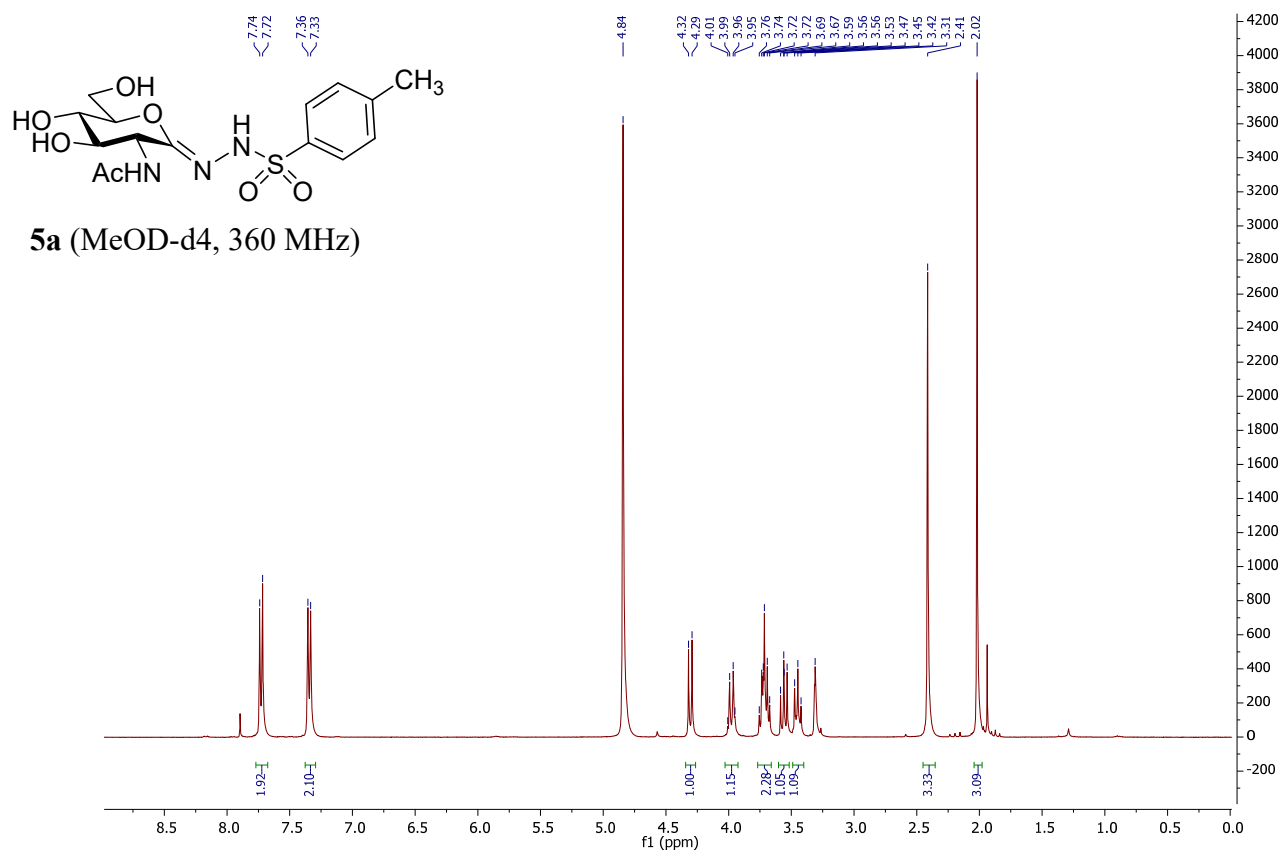
(CDCl<sub>3</sub>, 90 MHz)



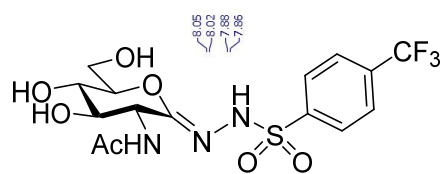
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **4f**



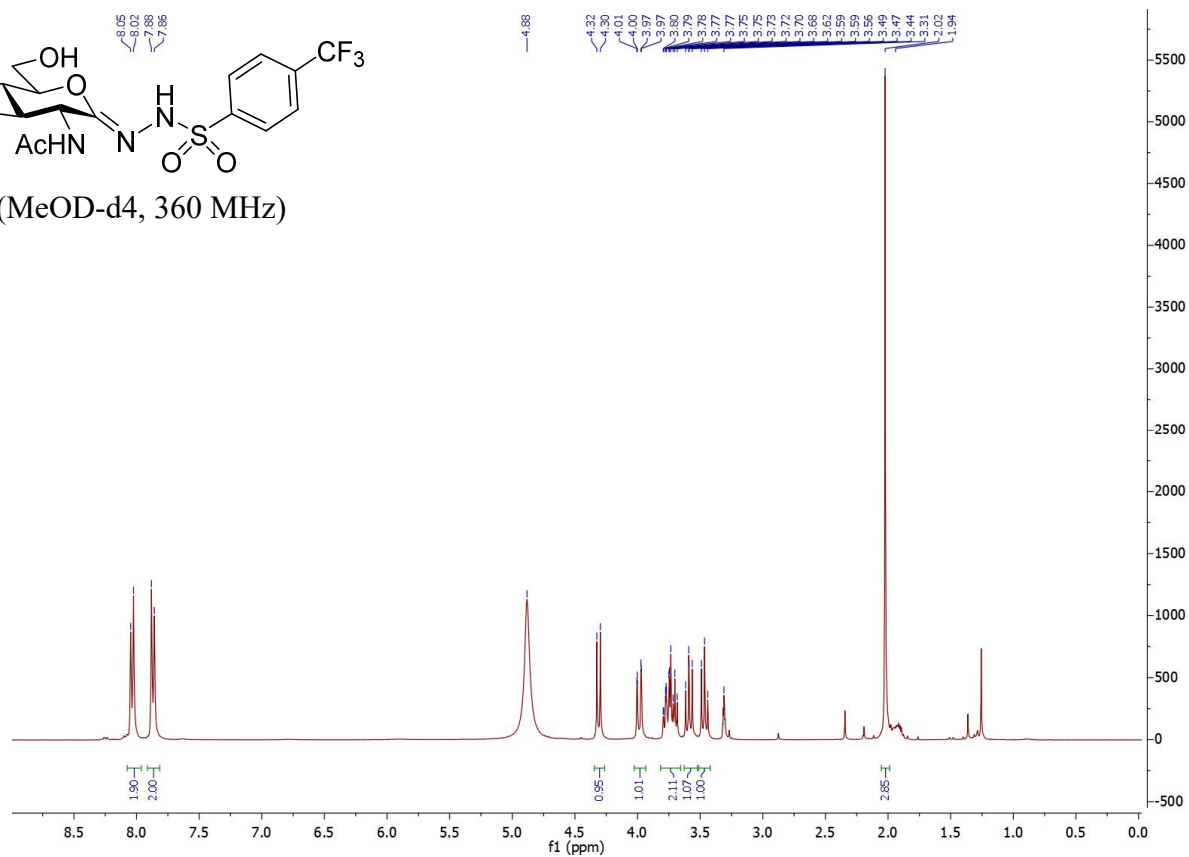
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5a**



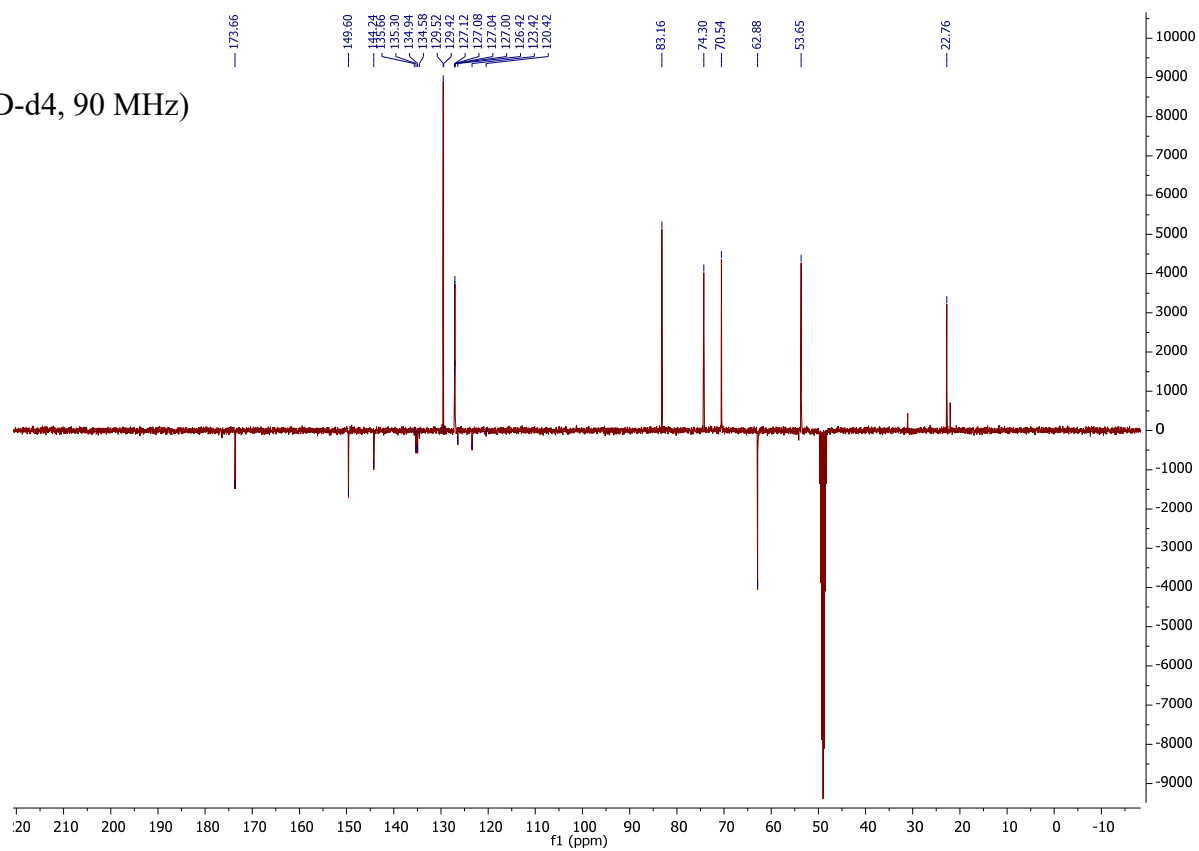
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5b**



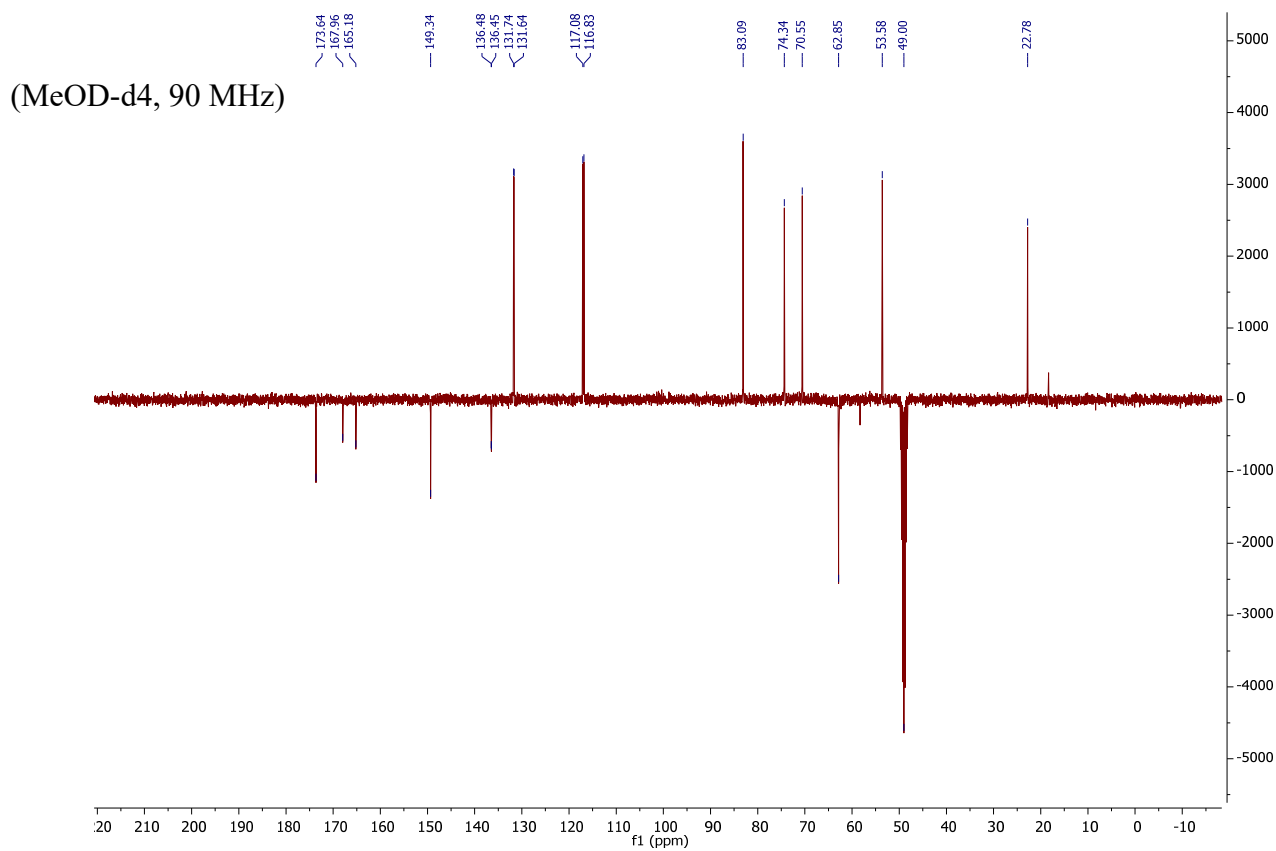
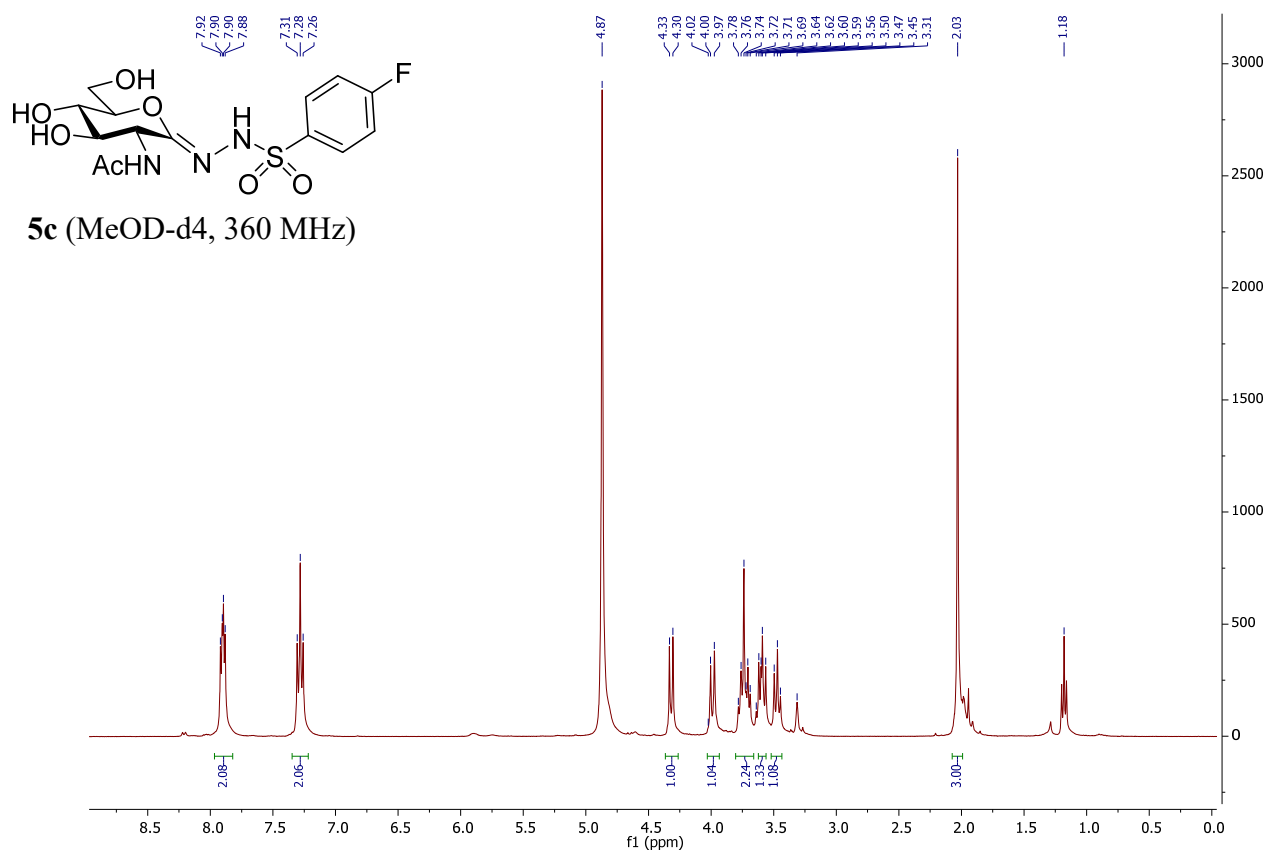
**5b** (MeOD-d<sub>4</sub>, 360 MHz)



(MeOD-d<sub>4</sub>, 90 MHz)

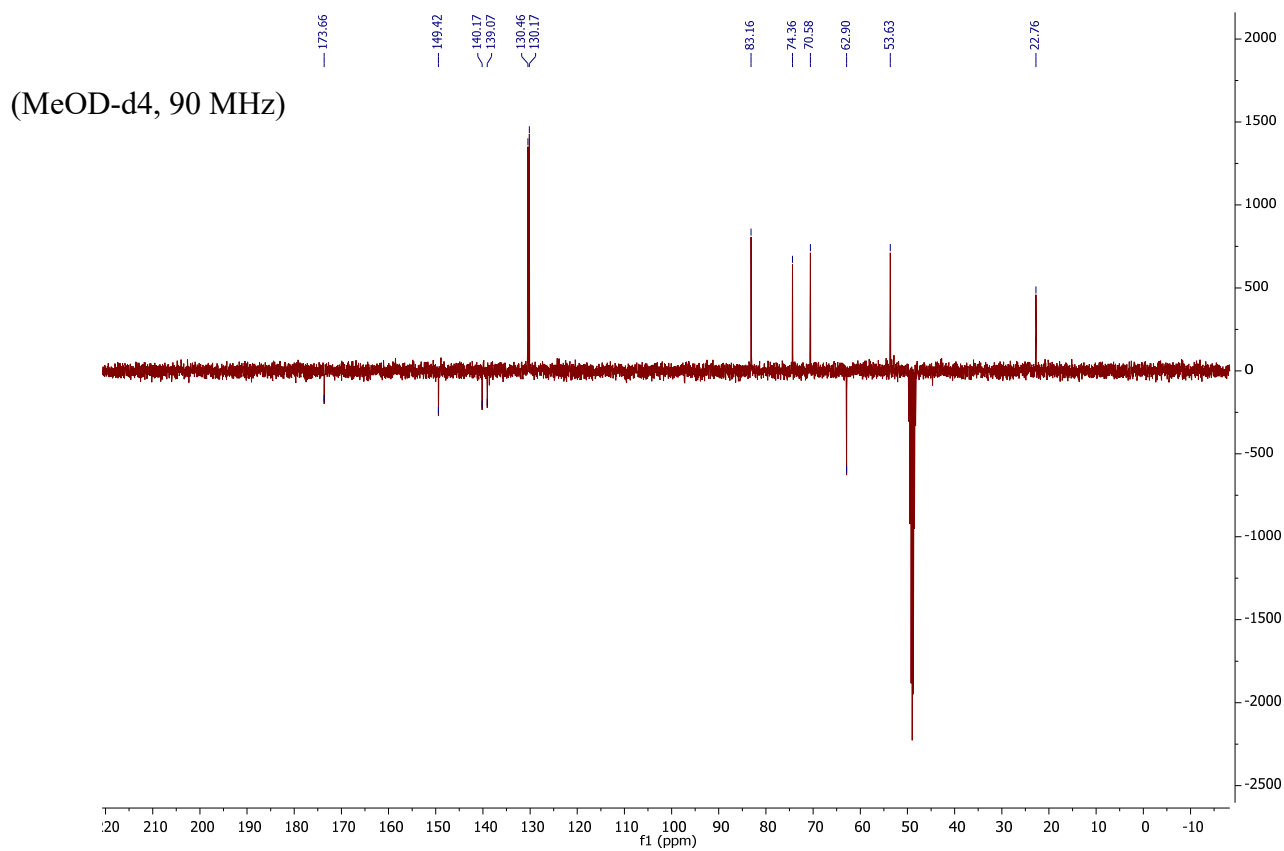
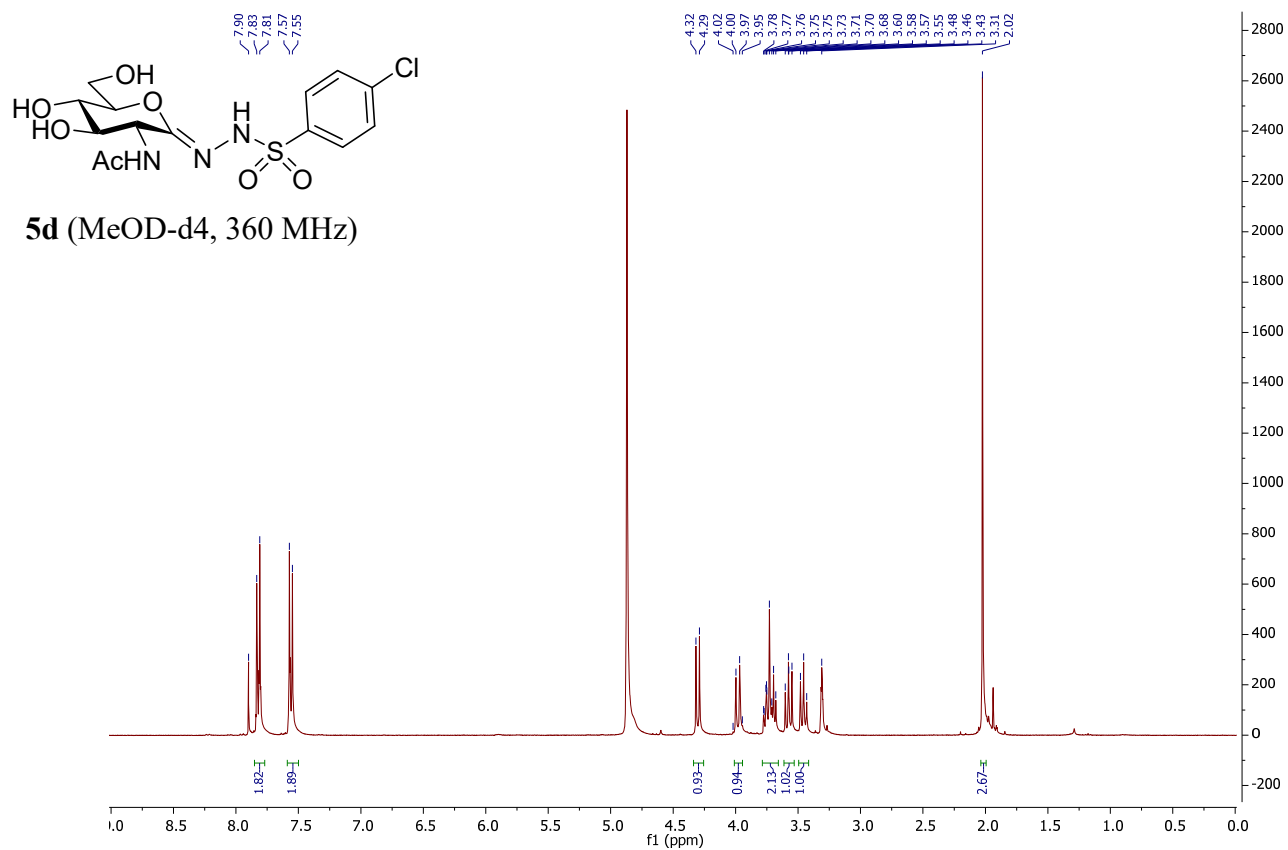


<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5c**

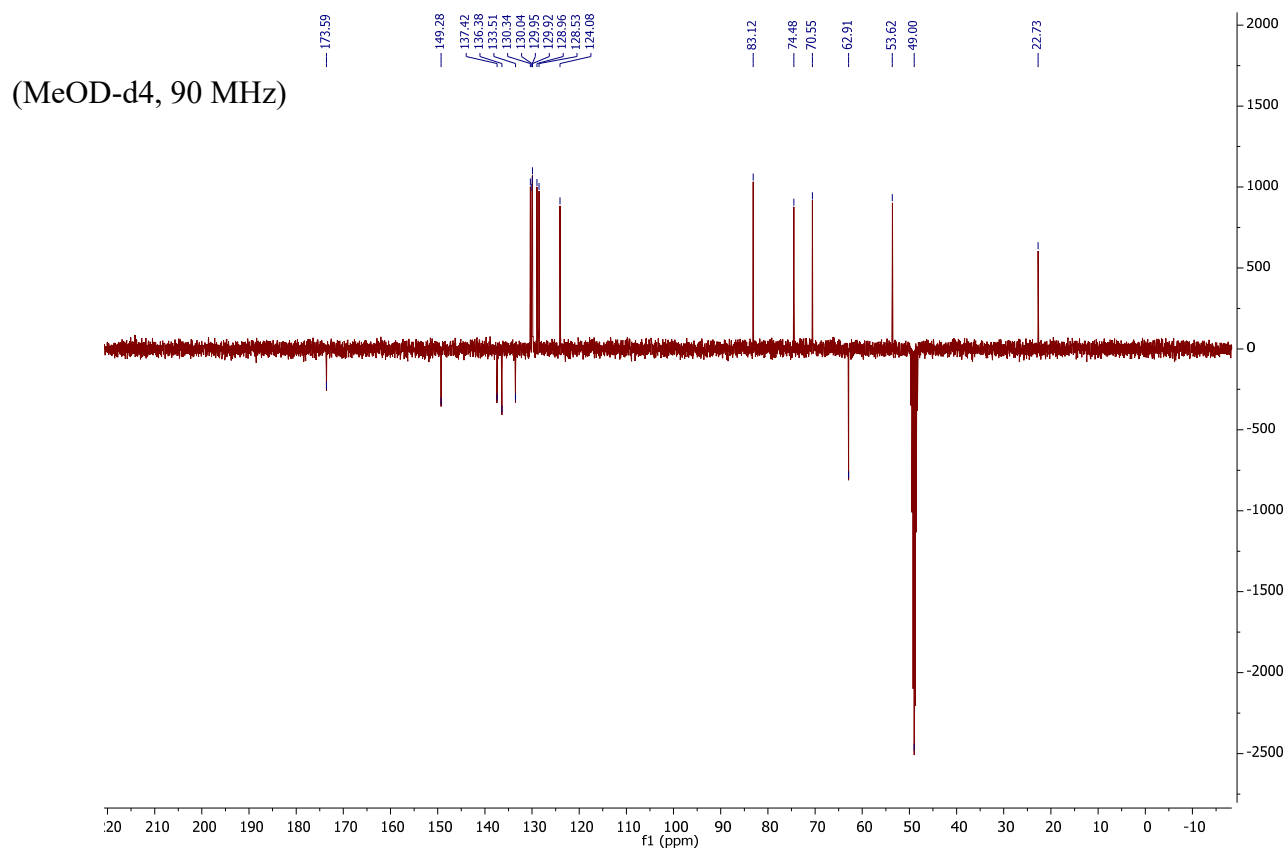
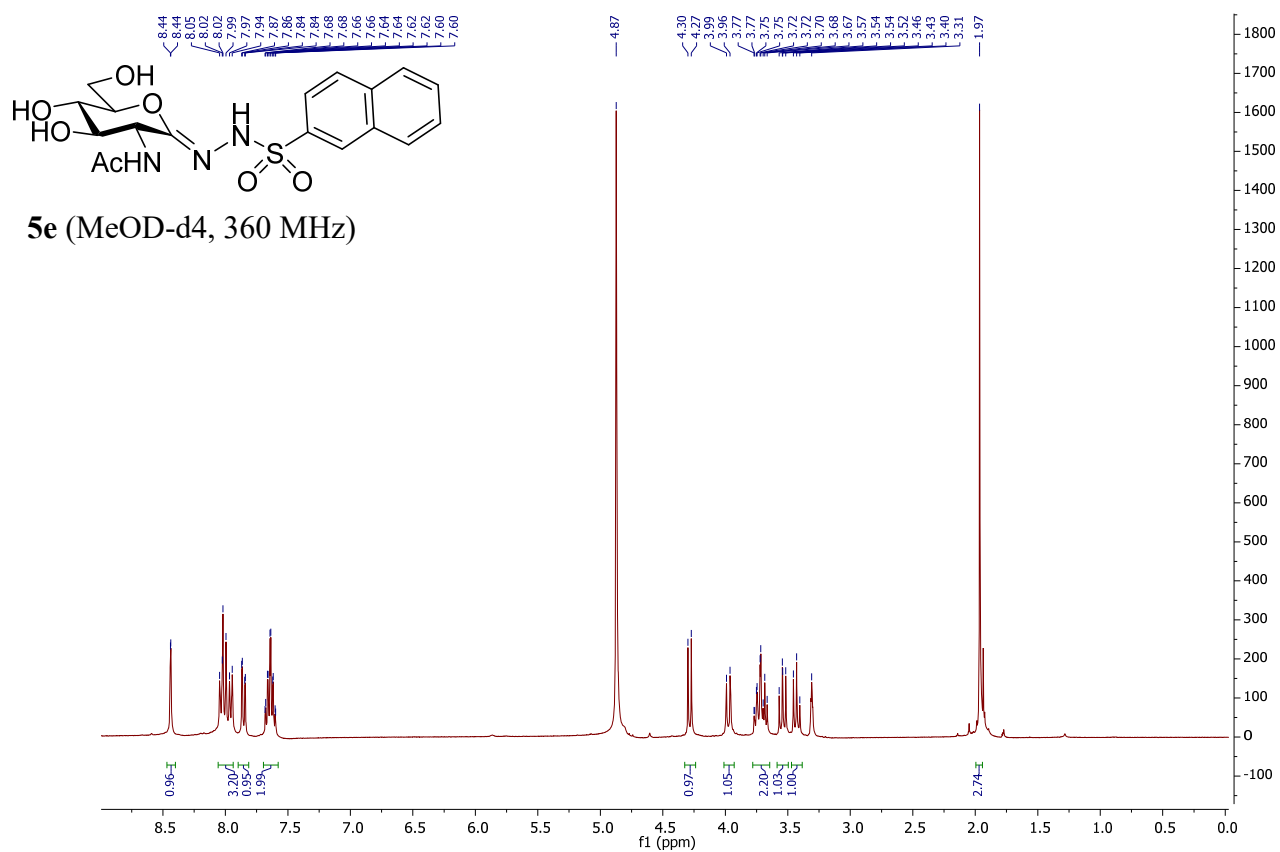


<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5d**

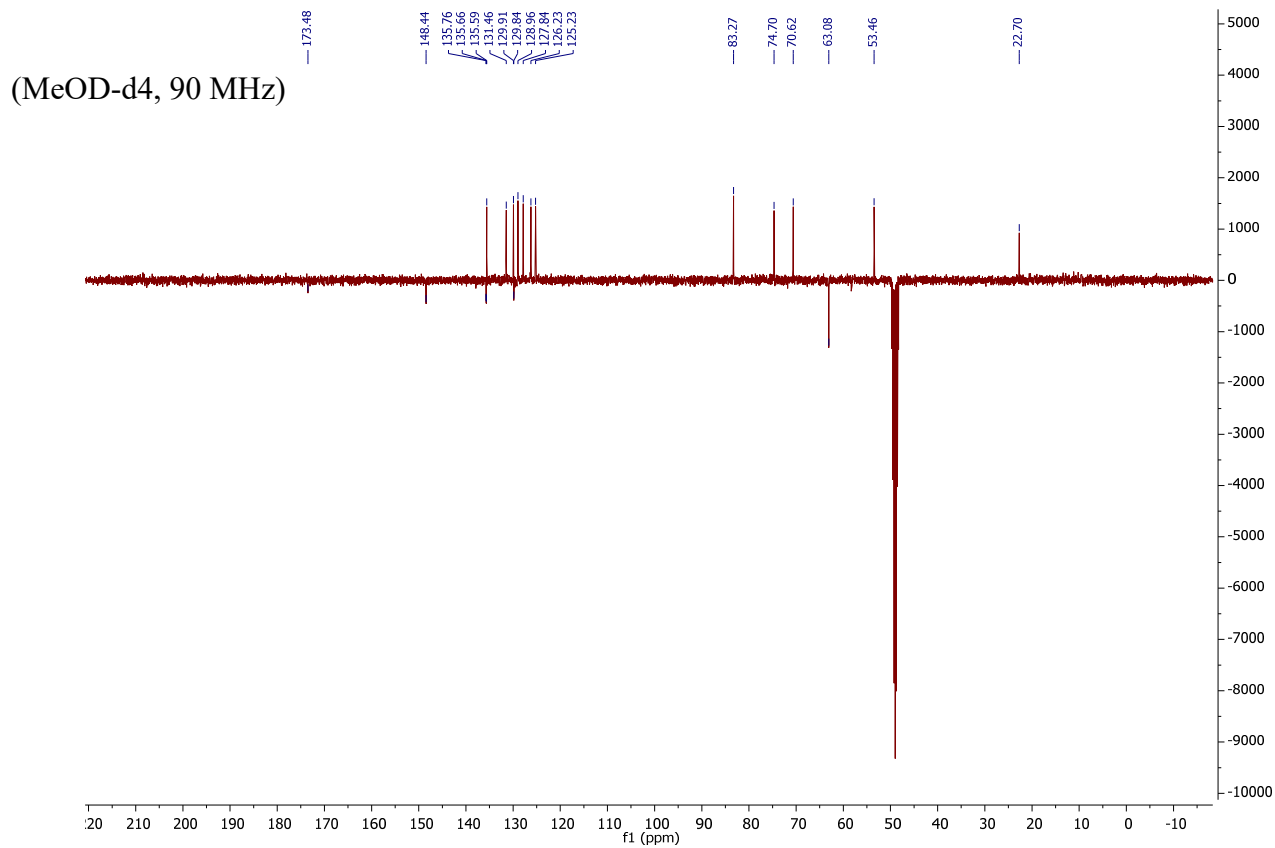
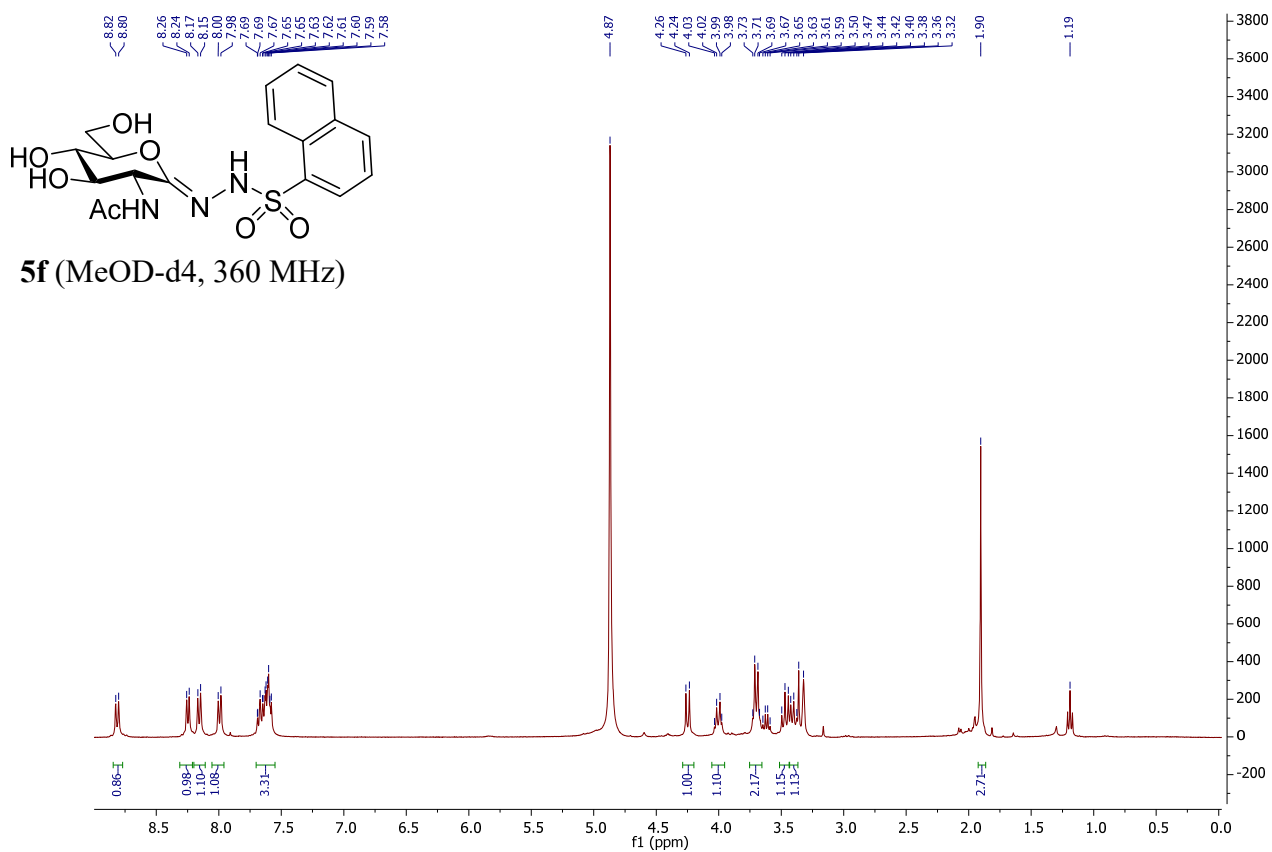


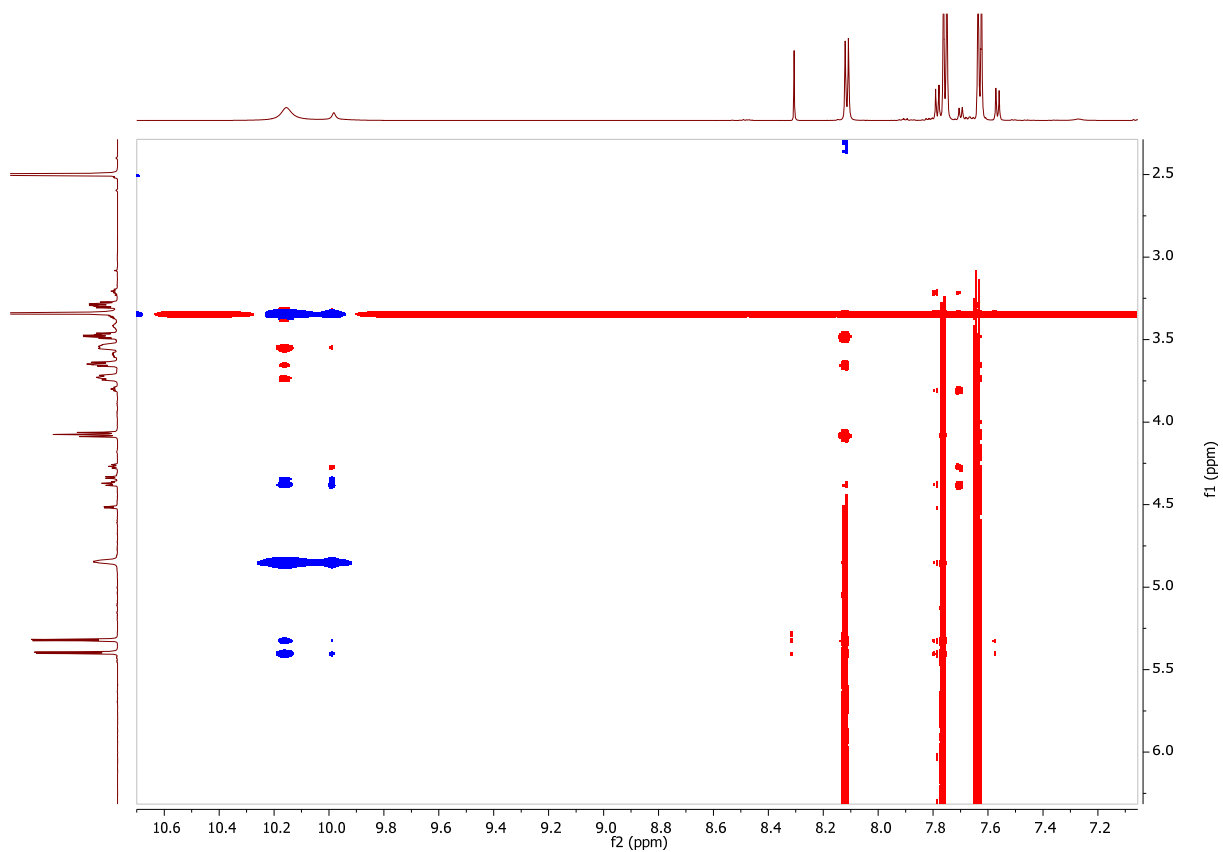


<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5e**

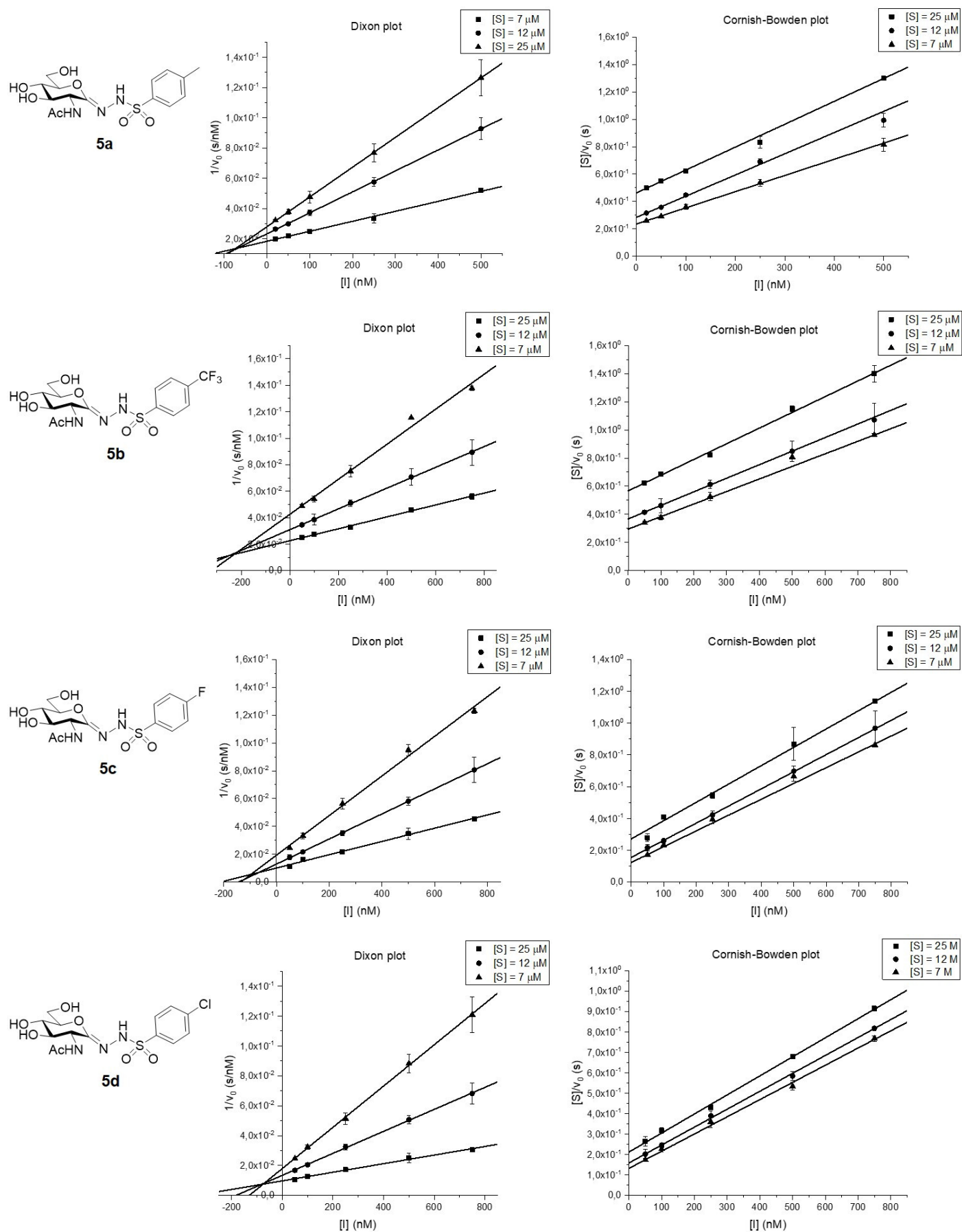


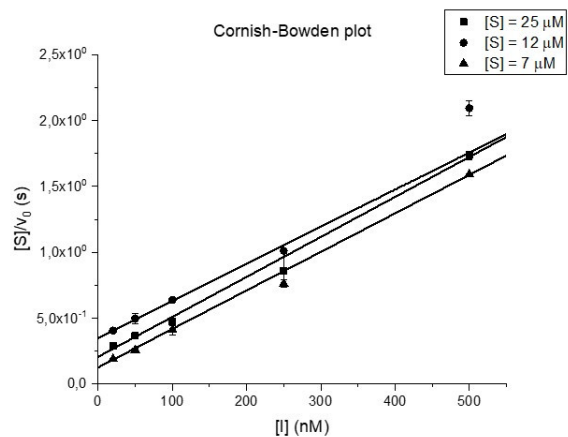
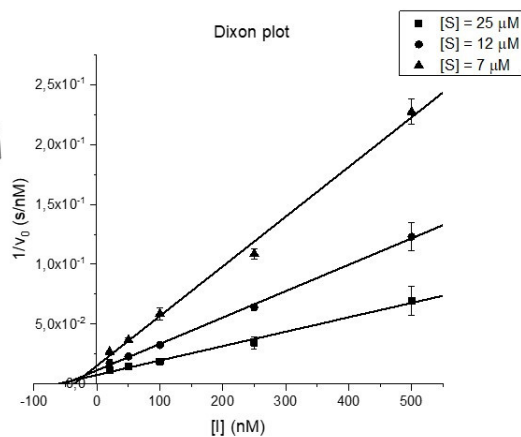
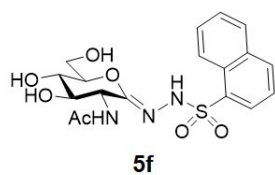
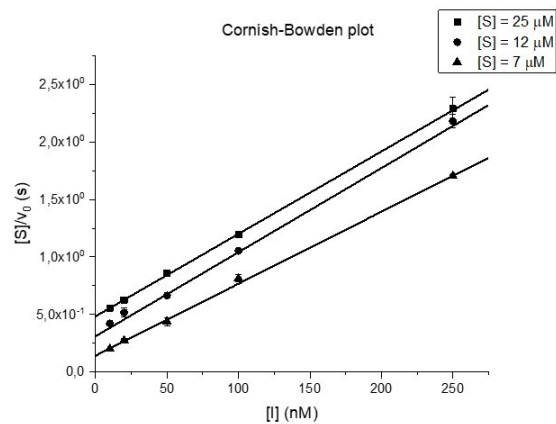
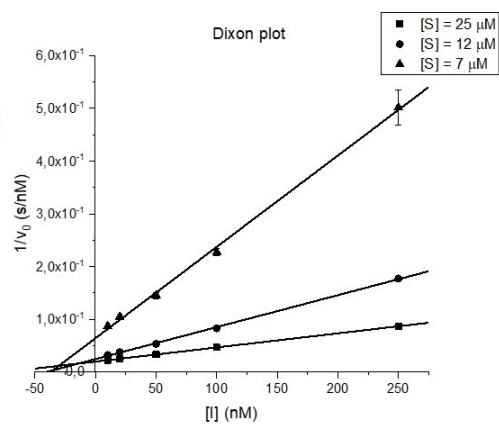
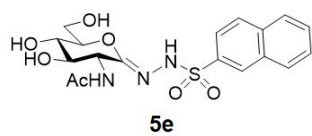
<sup>1</sup>H and <sup>13</sup>C NMR spectra of compound **5f**





## Dixon and Cornish-Bowden plots of hOGA inhibition data





## Michaelis-Menten kinetic curves and Lineweaver-Burk plots of hHexB inhibition

