

Supplementary Information

for

Synthesis of selective inhibitors against *V. cholerae* sialidase and human cytosolic sialidase NEU2

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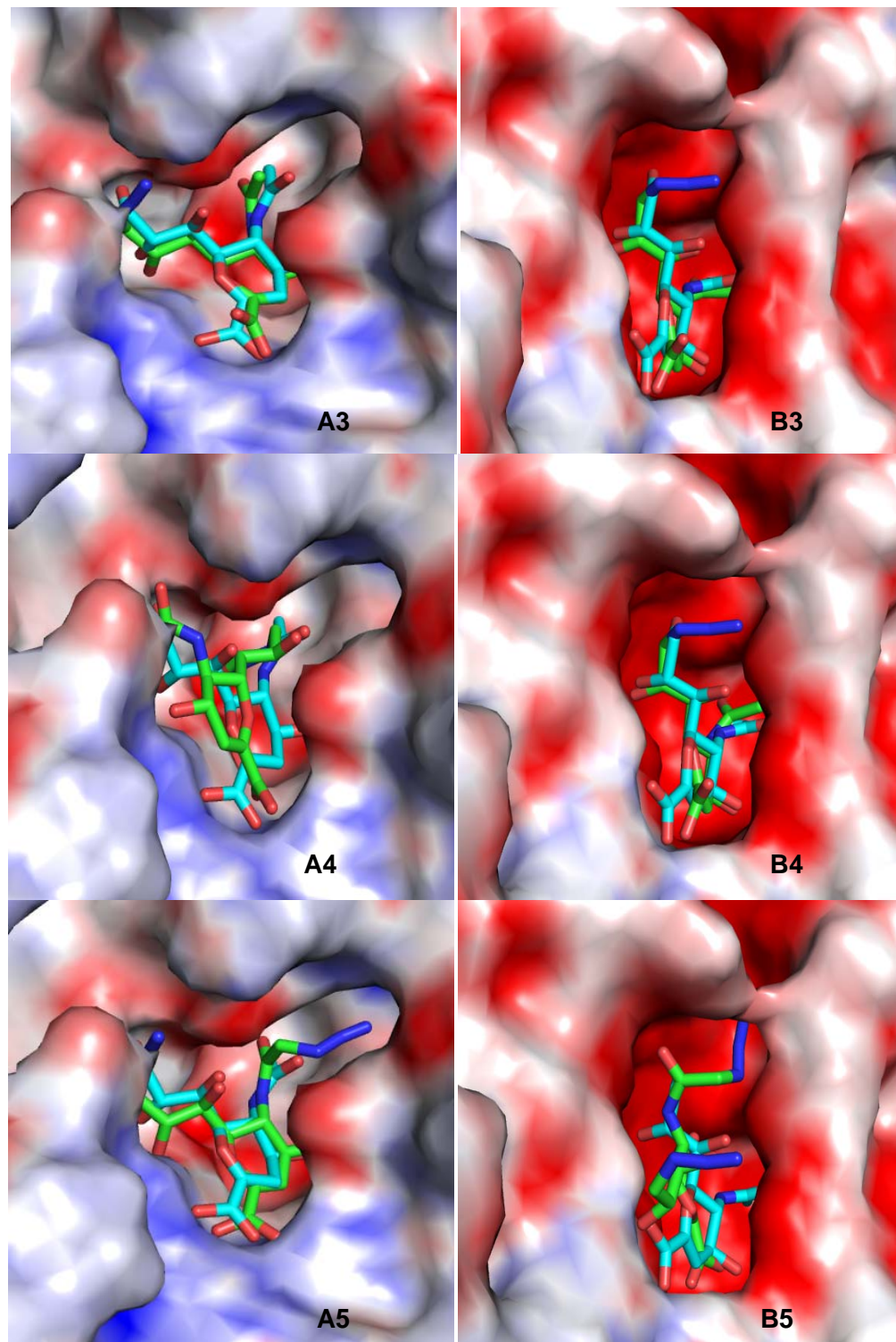
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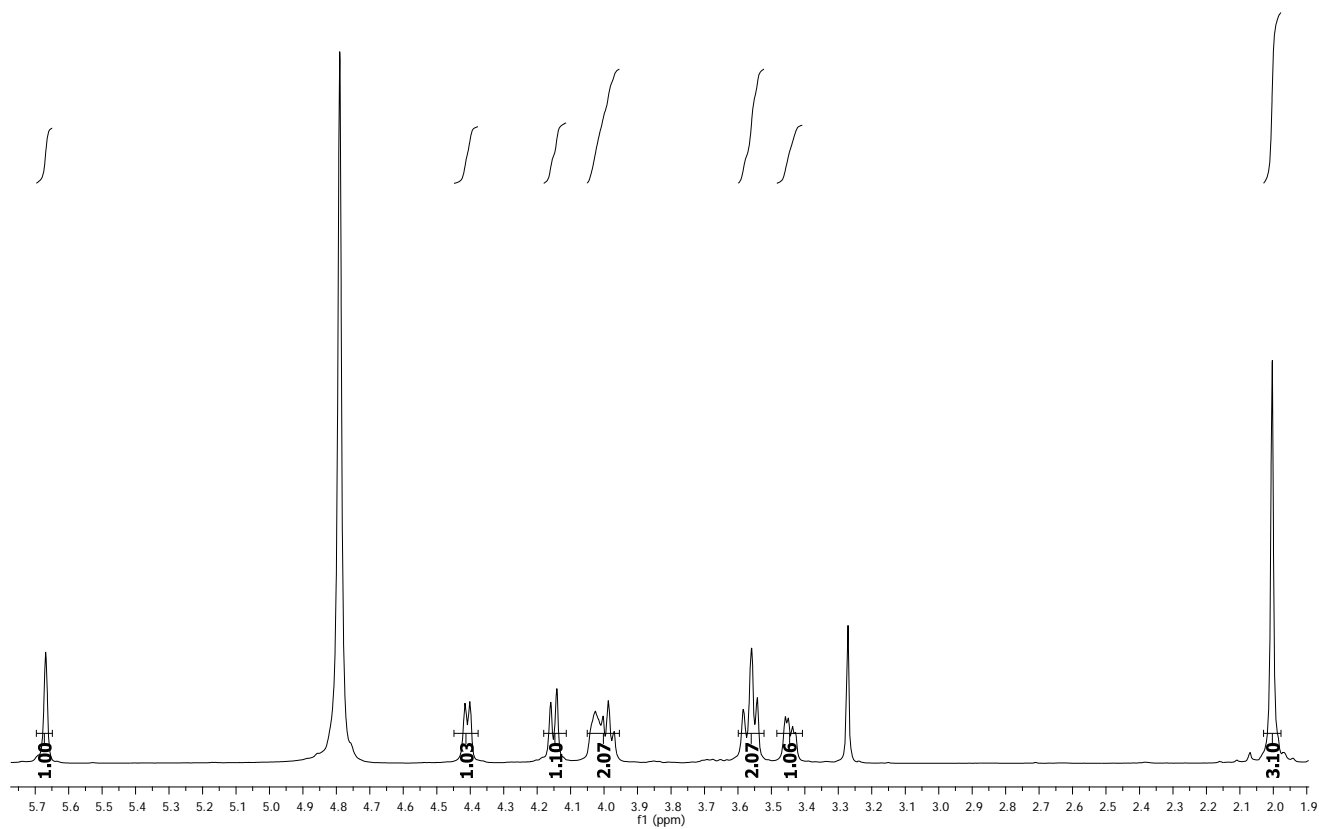
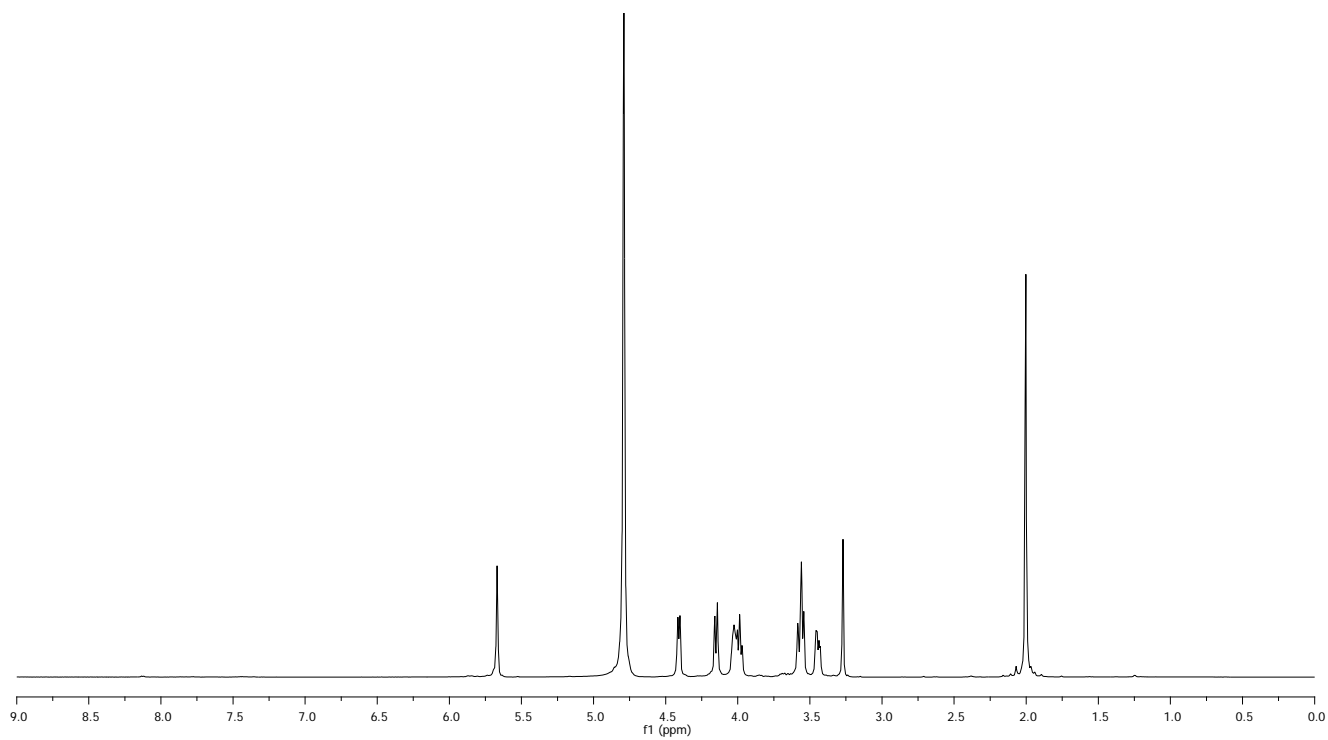
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Figure S1. Overlays of Neu5Ac2en (1) and Neu5Ac9N ₃ 2en (3), Neu5Gc9N ₃ 2en (4), or Neu5AcN ₃ 9N ₃ 2en (5) in the crystal structures of human NEU2 and <i>V. cholerae</i> sialidase	S2
¹ H NMR and ¹³ C NMR spectra of Neu5Ac9N ₃ 2en 3	S3–S4
¹ H NMR and ¹³ C NMR spectra of Neu5Gc9N ₃ 2en 4	S5–S6
¹ H NMR and ¹³ C NMR spectra of Neu5AcN ₃ 9N ₃ 2en 5	S7–S8
¹ H NMR and ¹³ C NMR spectra of Neu5Ac9OMe2en 6	S9–S10
¹ H NMR and ¹³ C NMR spectra of Neu5Ac9NPro2en 7	S11–S12

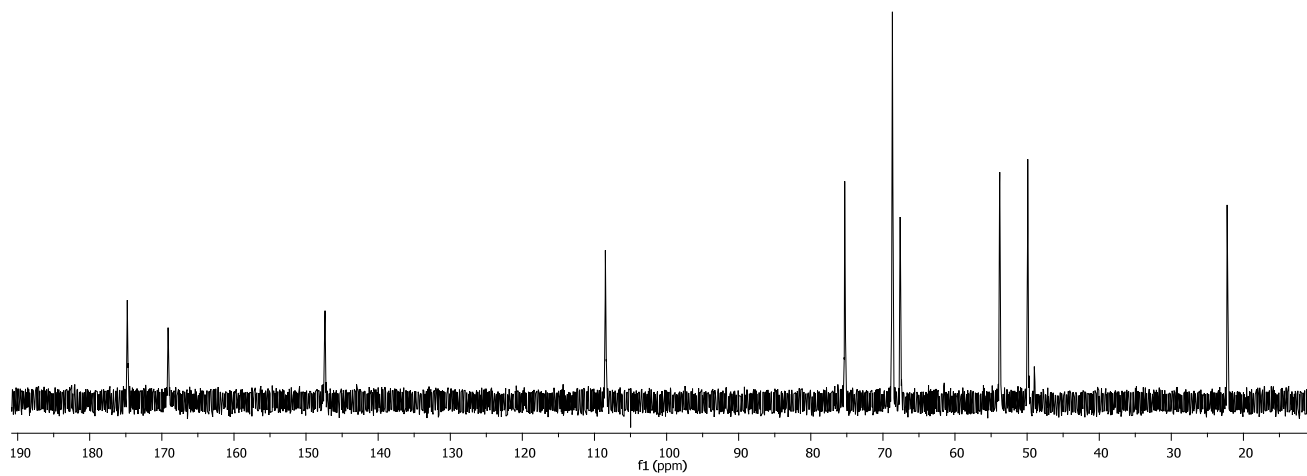
Figure S1. Overlays of Neu5Ac2en (**1**) (C atoms: cyan) and Neu5Ac9N₃2en (**3**), Neu5Gc9N₃2en (**4**), or Neu5AcN₃9N₃2en (**5**) (Compounds **3–5**, C atoms: green) in the crystal structures of human NEU2 (**A**) and *V. cholerae* sialidase (**B**). The surfaces of proteins are colored according to the electrostatic potential. Positive potentials are shown in blue, negative potentials are in red, and neutral potentials are in white.



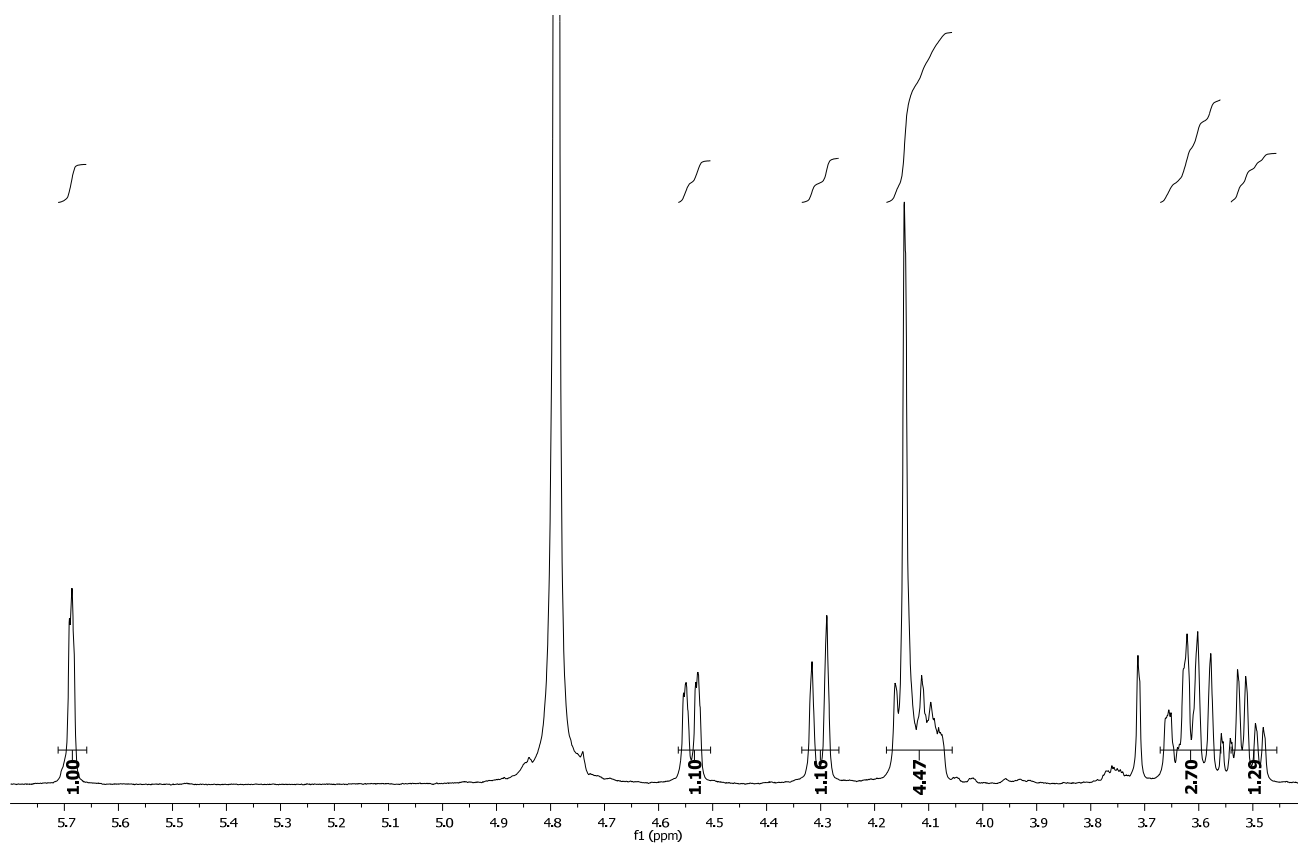
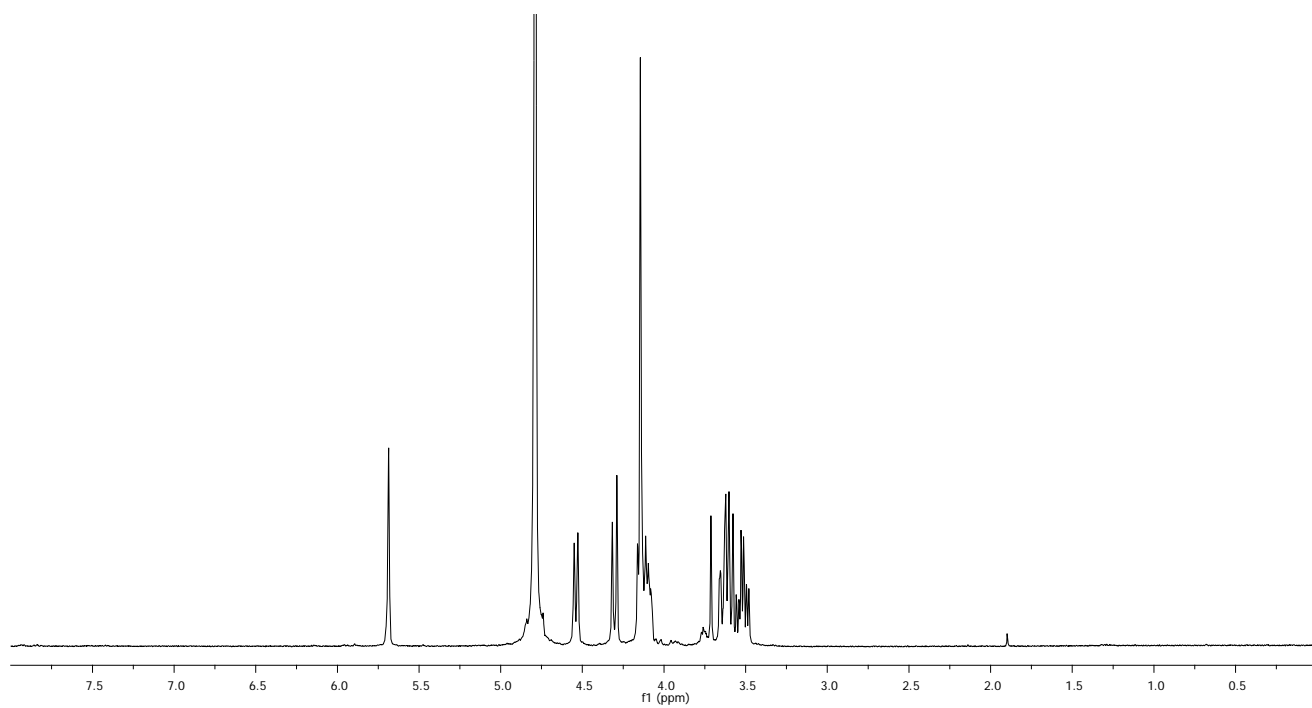
^1H NMR spectrum of Neu5Ac9N₃2en (**3**)



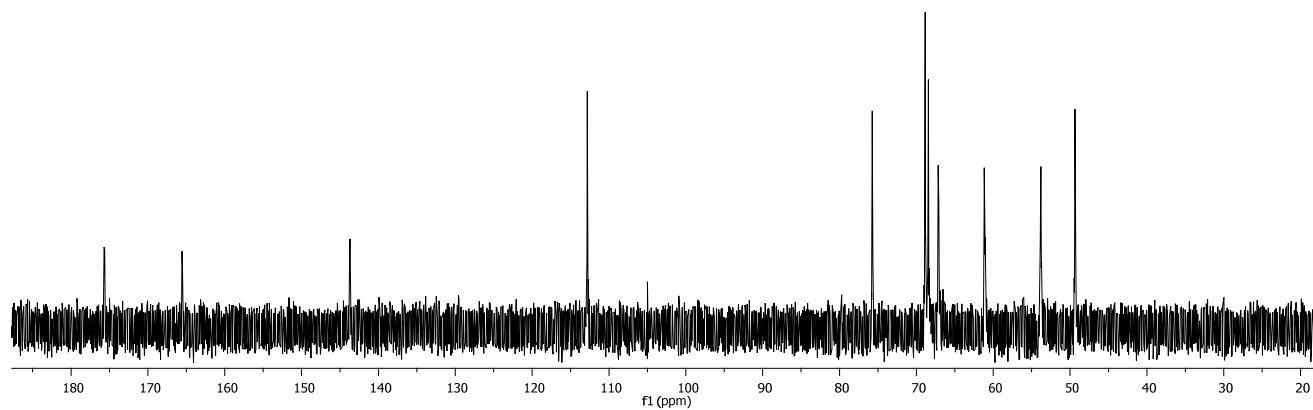
^{13}C NMR spectrum of Neu5Ac9N₃2en (**3**)



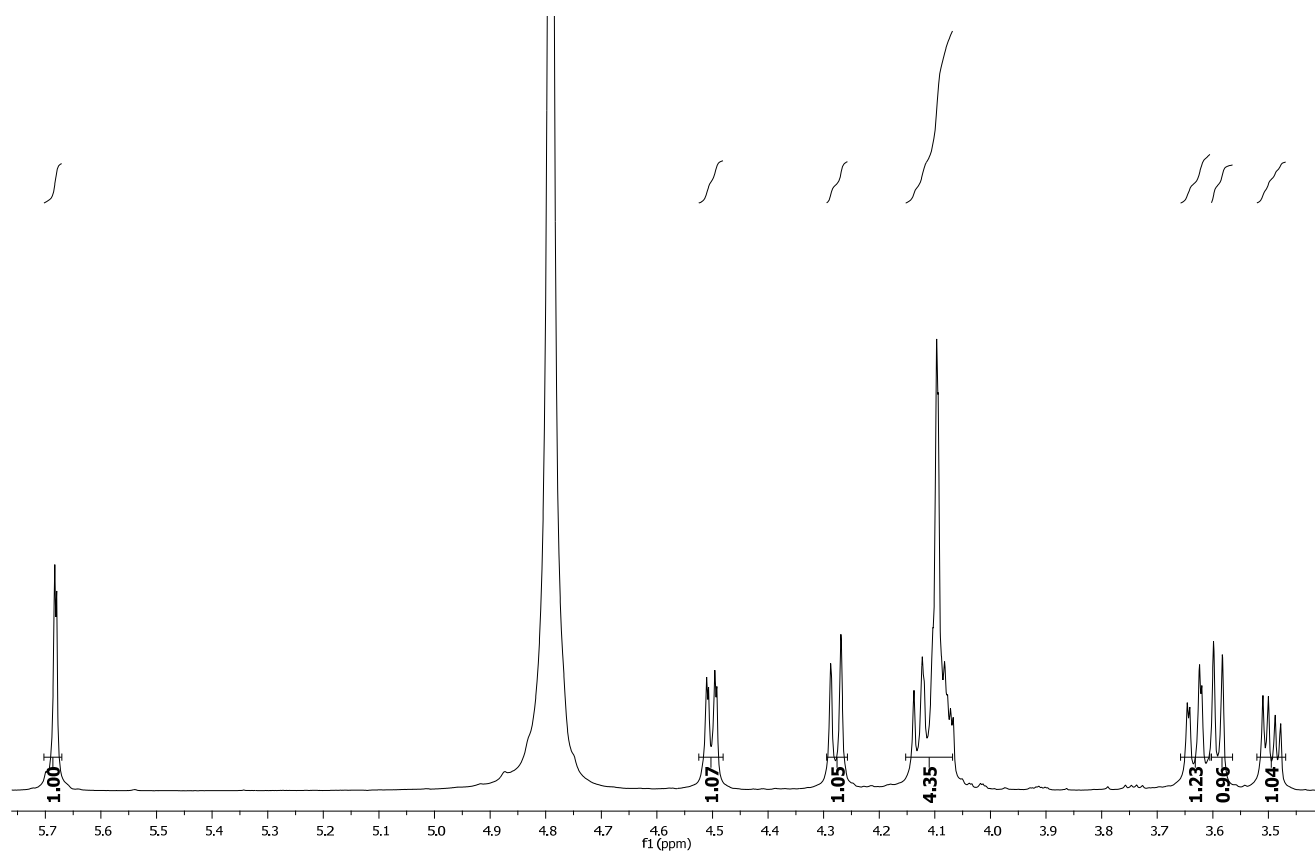
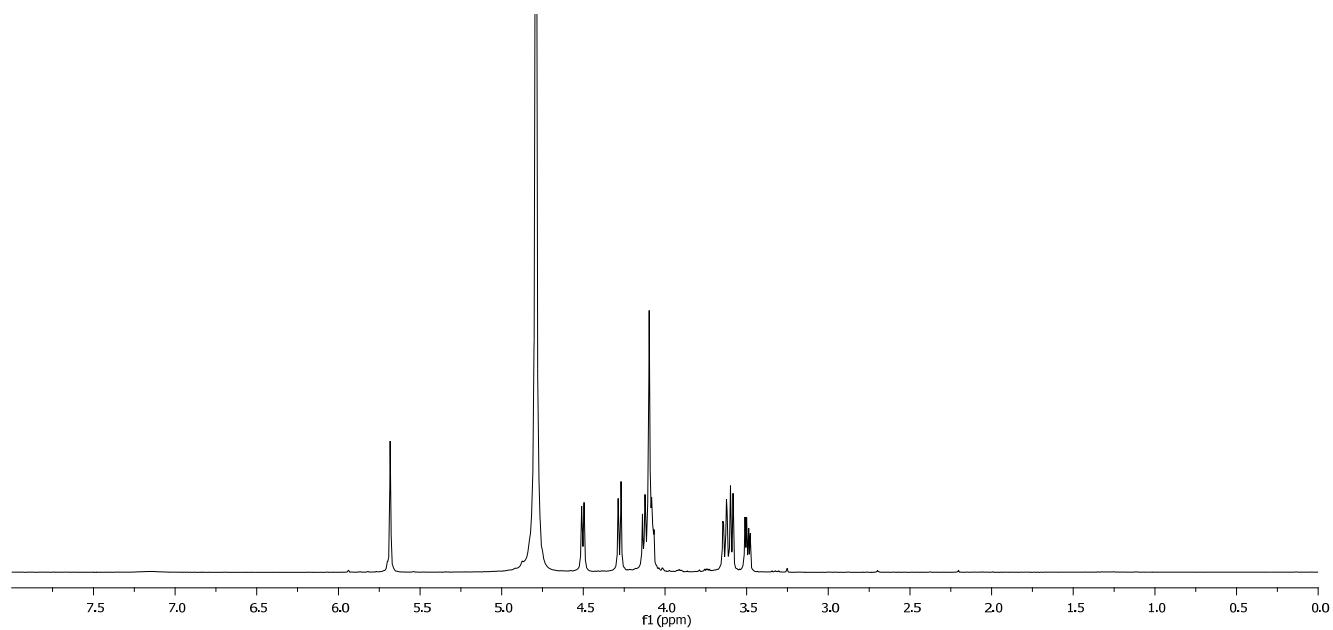
^1H NMR spectrum of Neu5Gc9N₃2en (**4**)



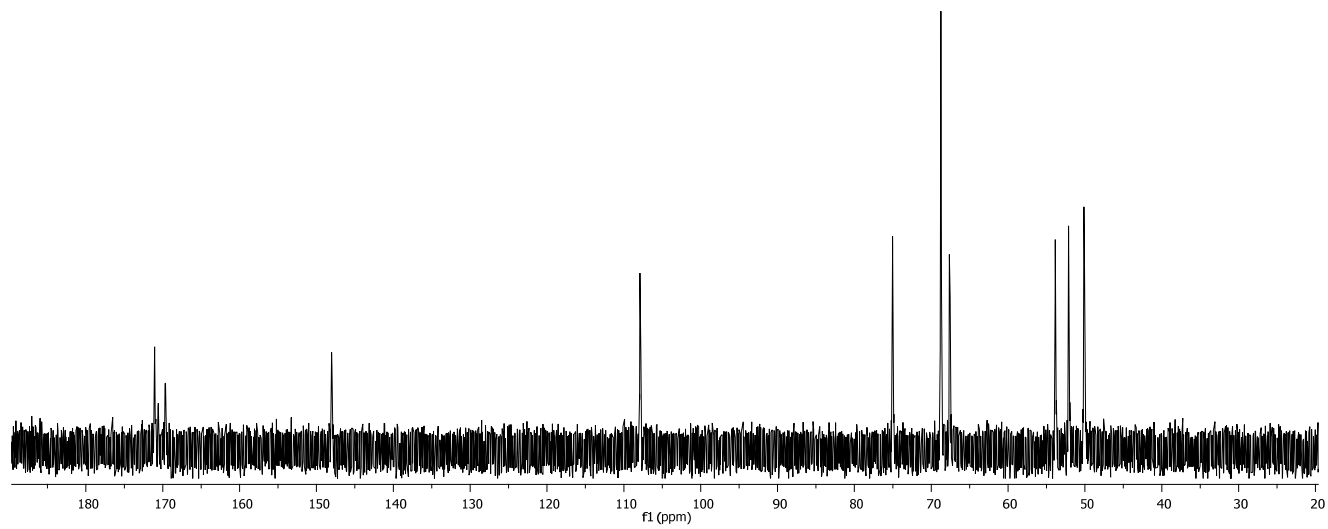
^{13}C NMR spectrum of Neu5Gc9N₃2en (**4**)



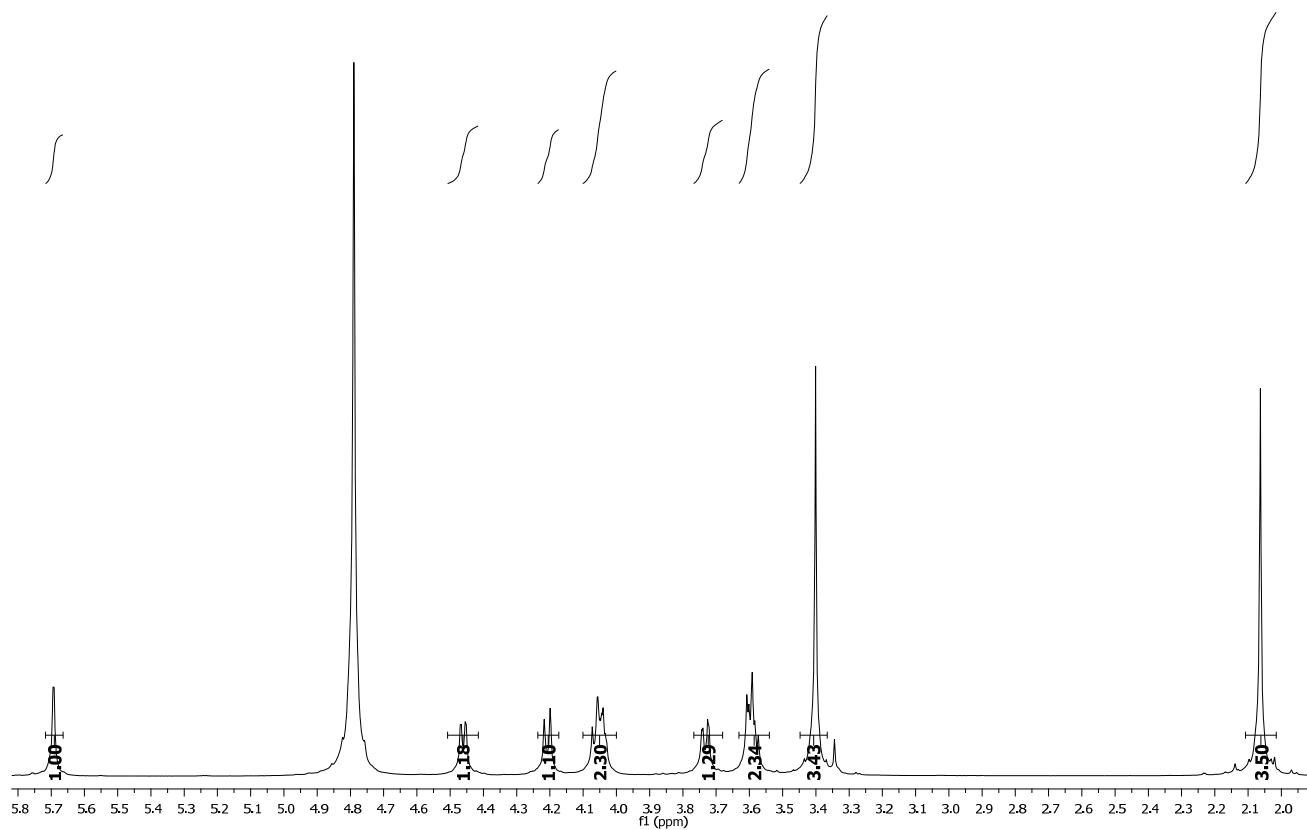
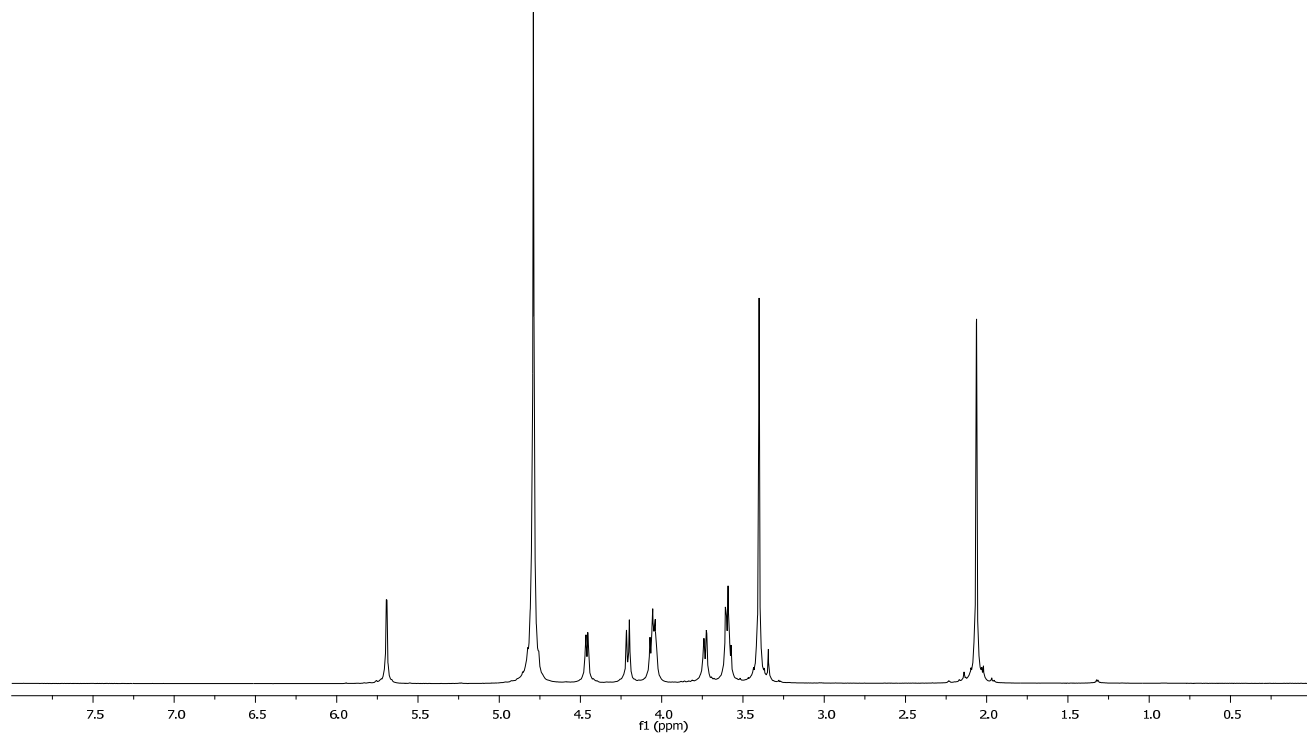
^1H NMR spectrum of Neu5AcN₃9N₃2en (**5**)



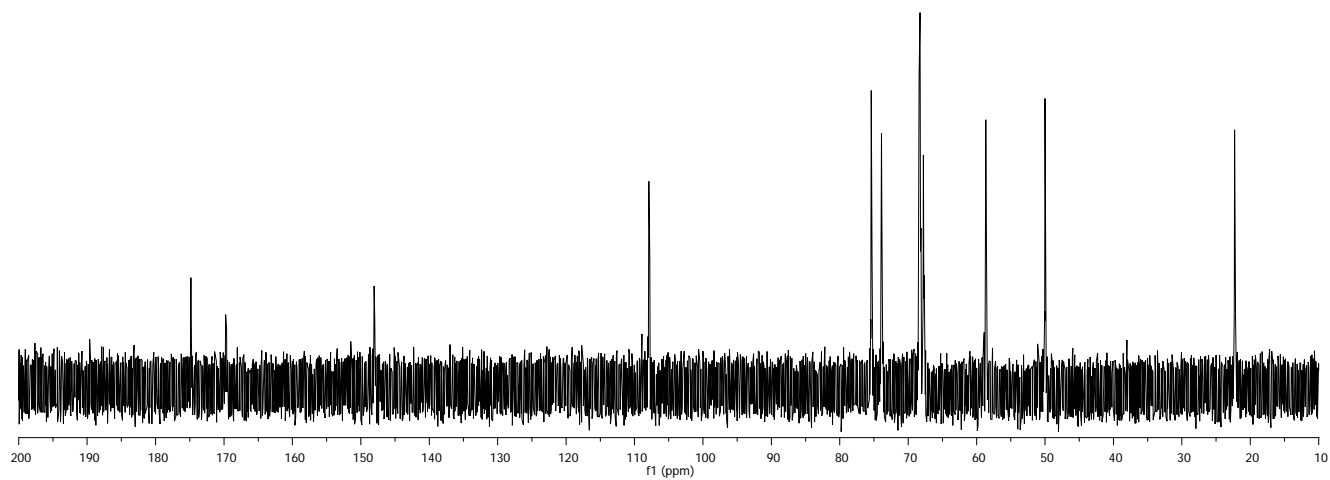
^{13}C NMR spectrum of Neu5AcN₃9N₃2en (**5**)



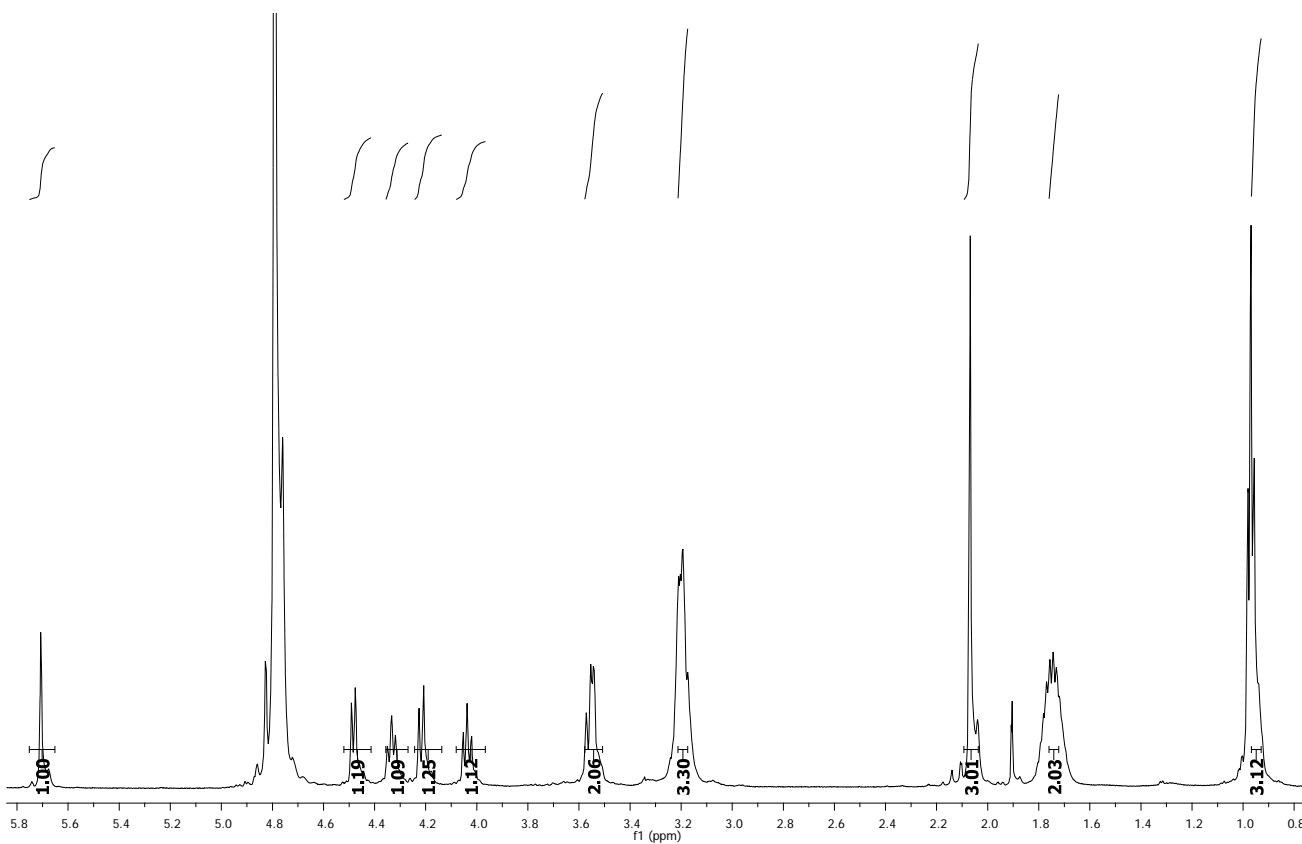
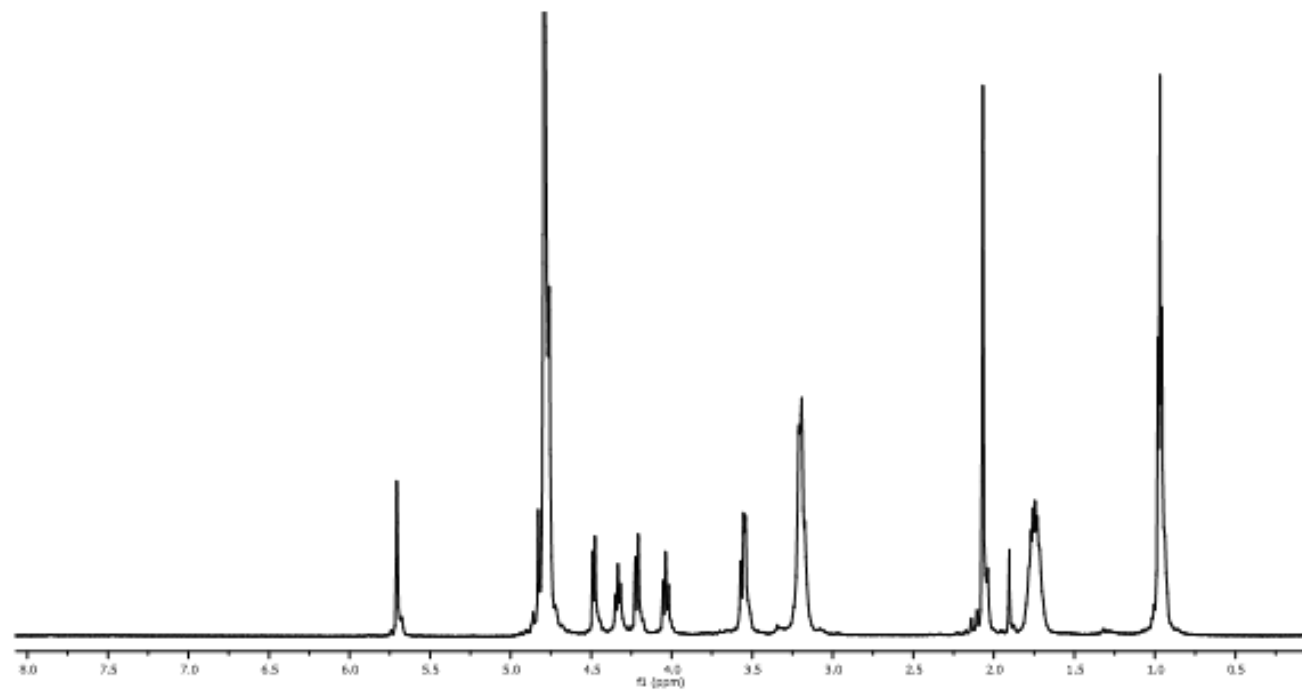
^1H NMR spectrum of Neu5Ac9OMe2en (**6**)



^{13}C NMR spectrum of Neu5Ac9OMe2en (**6**)



^1H NMR spectrum of Neu5Ac9NPro2en (7)



^{13}C NMR spectrum of Neu5Ac9NPro2en (**7**)

