

Supporting Information

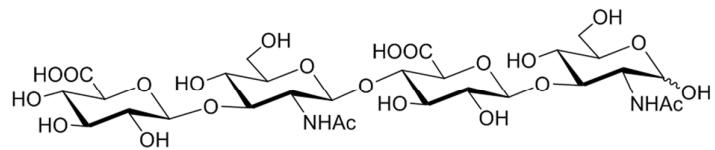
Synthesis of 4-azido-*N*-acetylhexosamine uridine diphosphate donors: Clickable glycosaminoglycans

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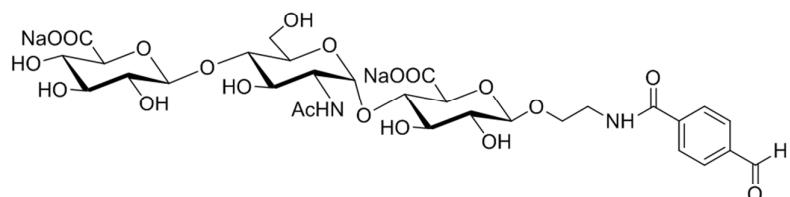
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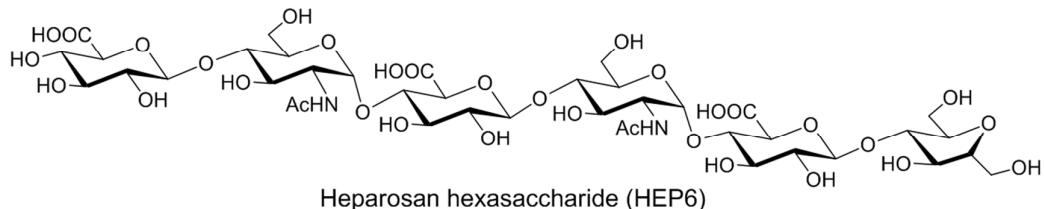
Authors to whom correspondence should be addressed at linhar@rpi.edu and Paul-Deangelis@ouhsc.edu



Hyaluronan tetrasaccharide (HA4)



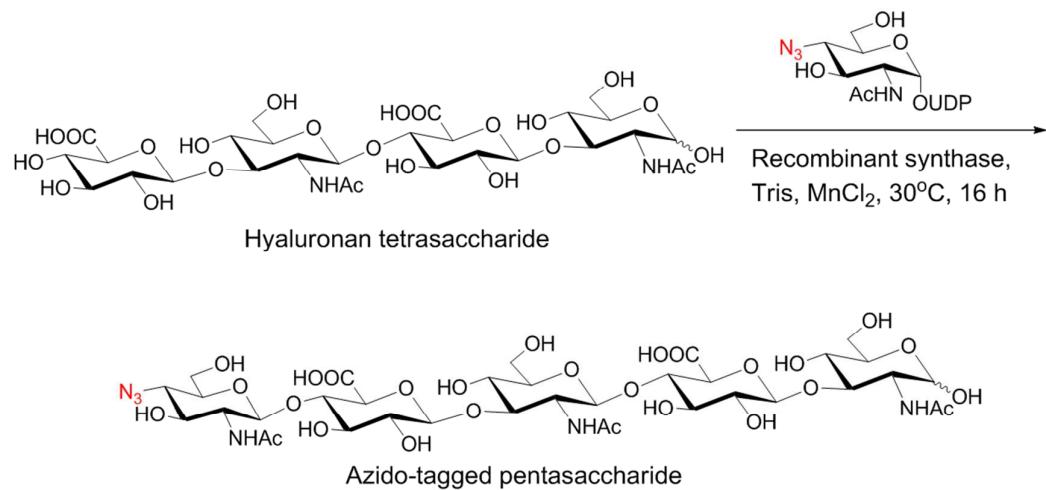
Heparosan trisaccharide-benzaldehyde (HEP3-Benz)



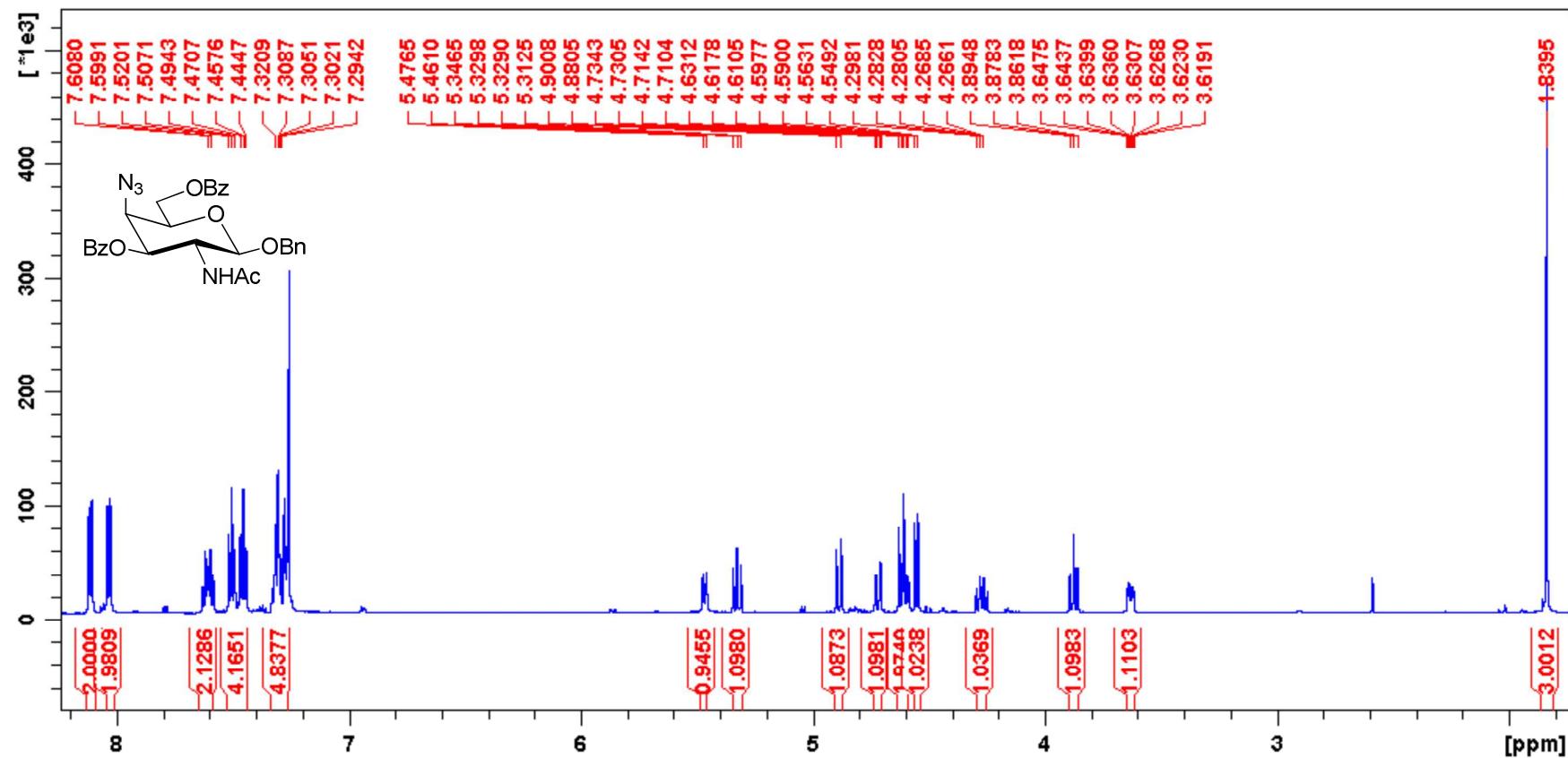
Heparosan hexasaccharide (HEP6)

Figure 1S. Structures of oligosaccharide acceptors in GAG synthase reactions

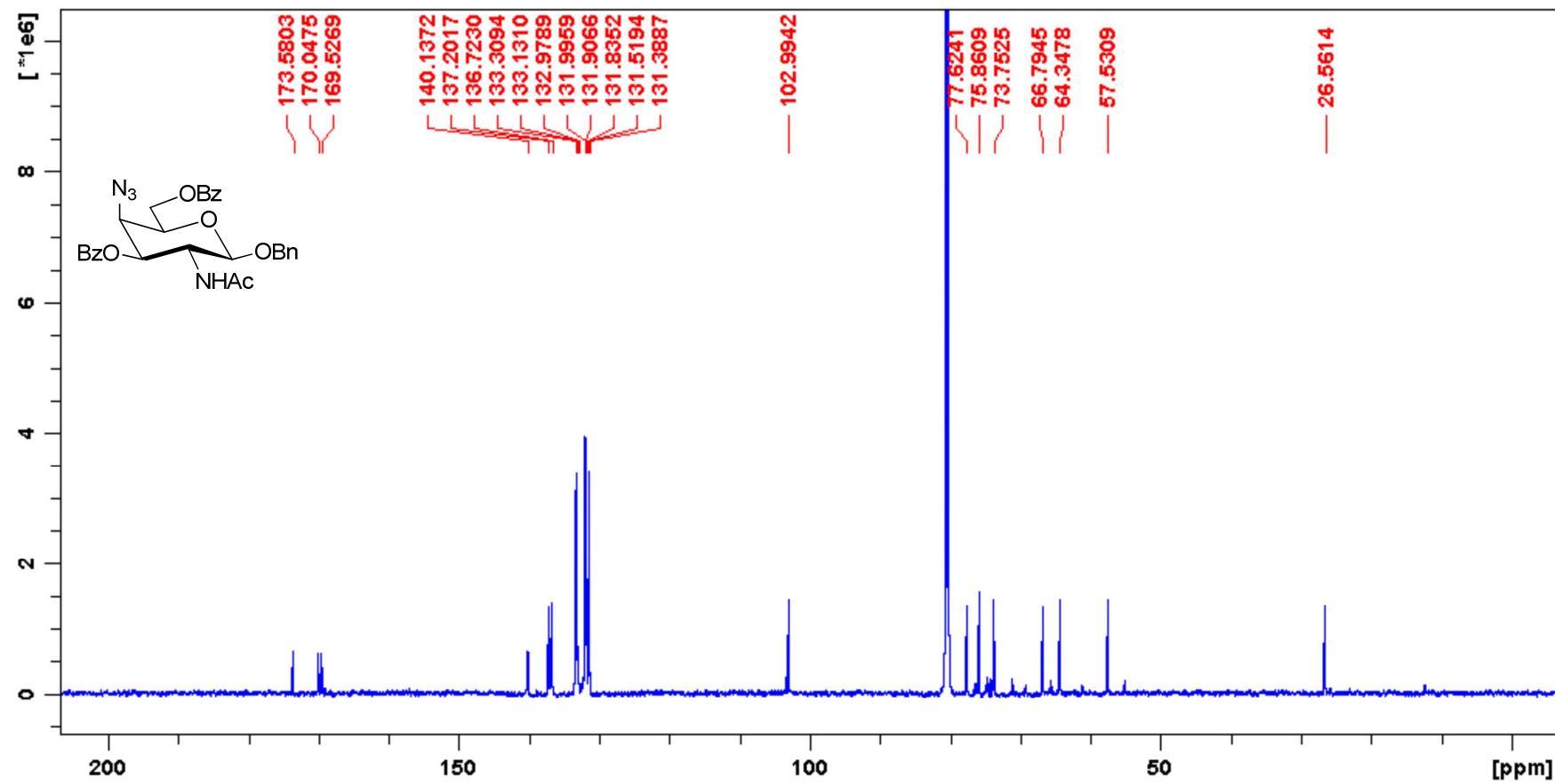
Scheme 1S. Enzymatic synthesis of azido-tagged pentasaccharide from hyaluronan tetrasaccharide



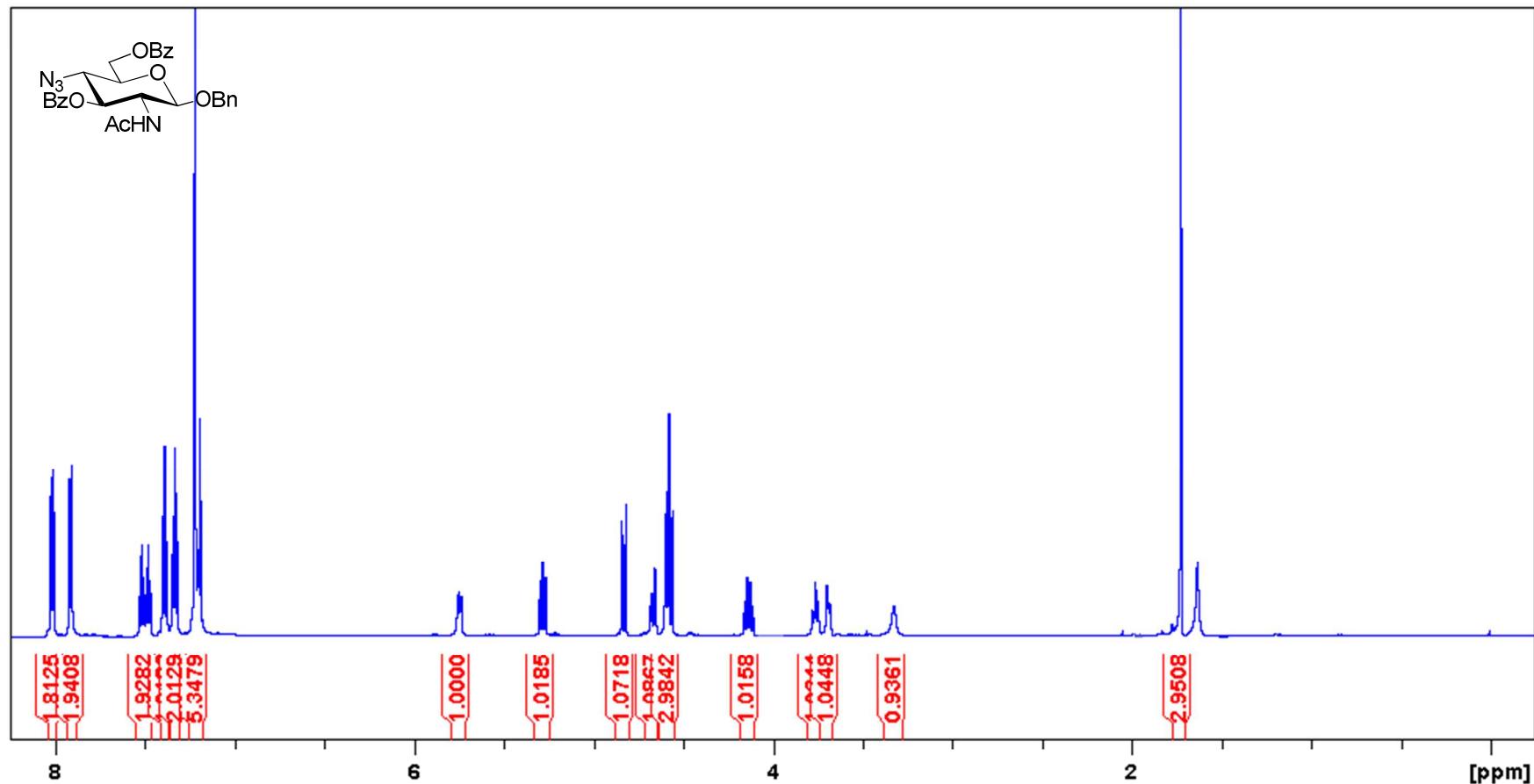
¹H NMR spectrum (600 MHz, CDCl₃) of compound 3a



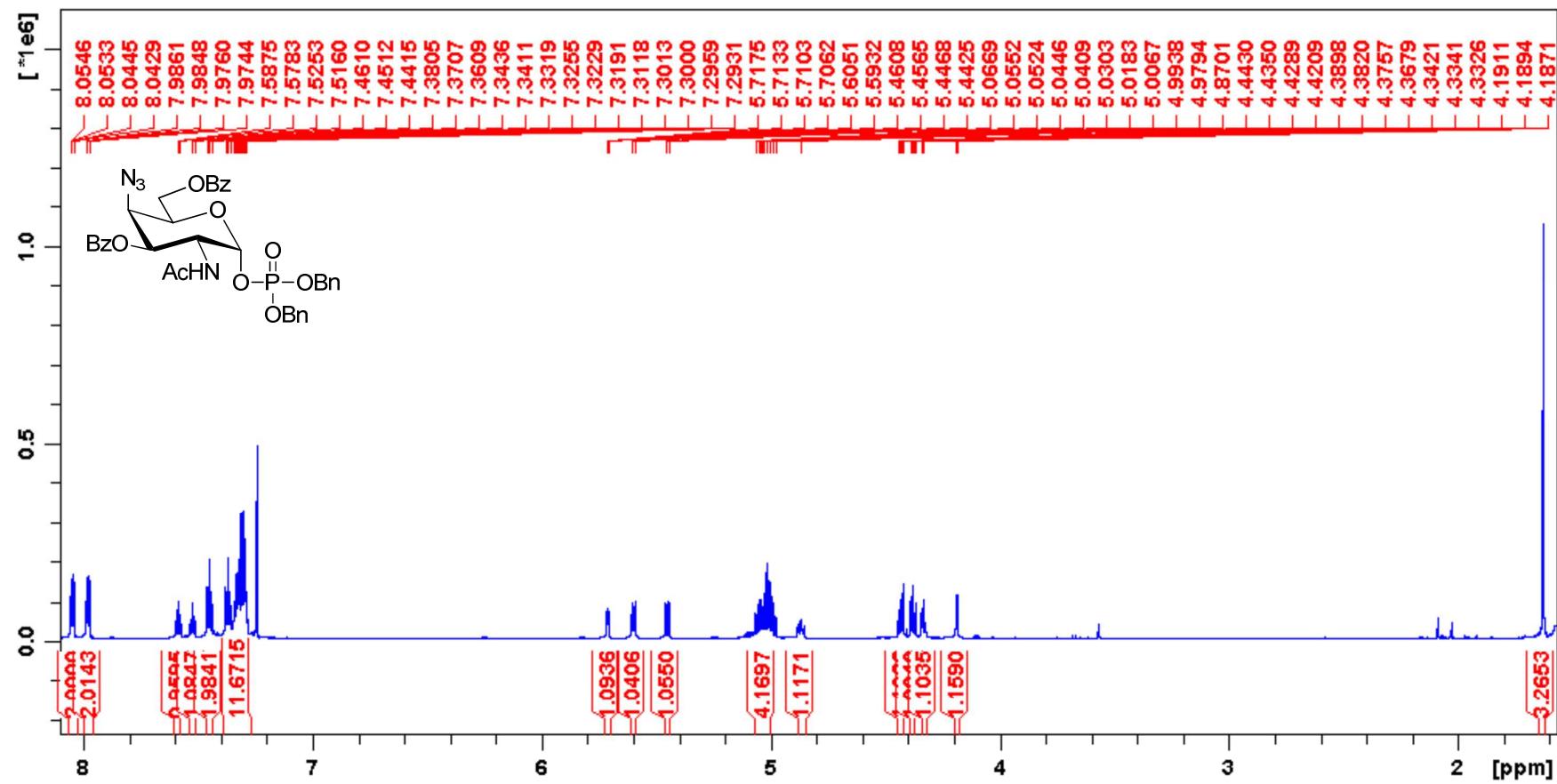
¹³C NMR spectrum (150 MHz, CDCl₃) of compound 3a



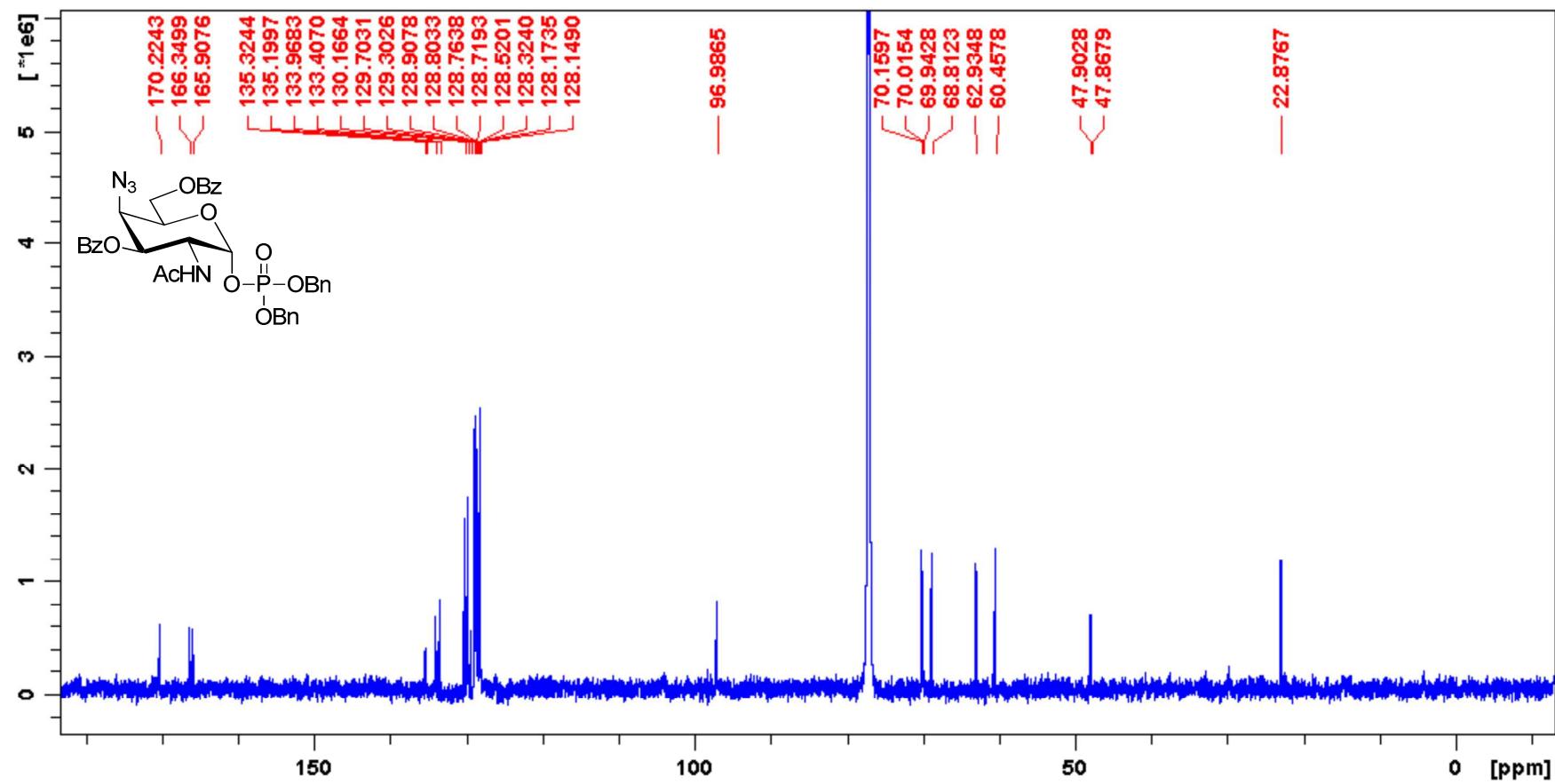
¹H NMR spectrum (600 MHz, CDCl₃) of compound **3b**



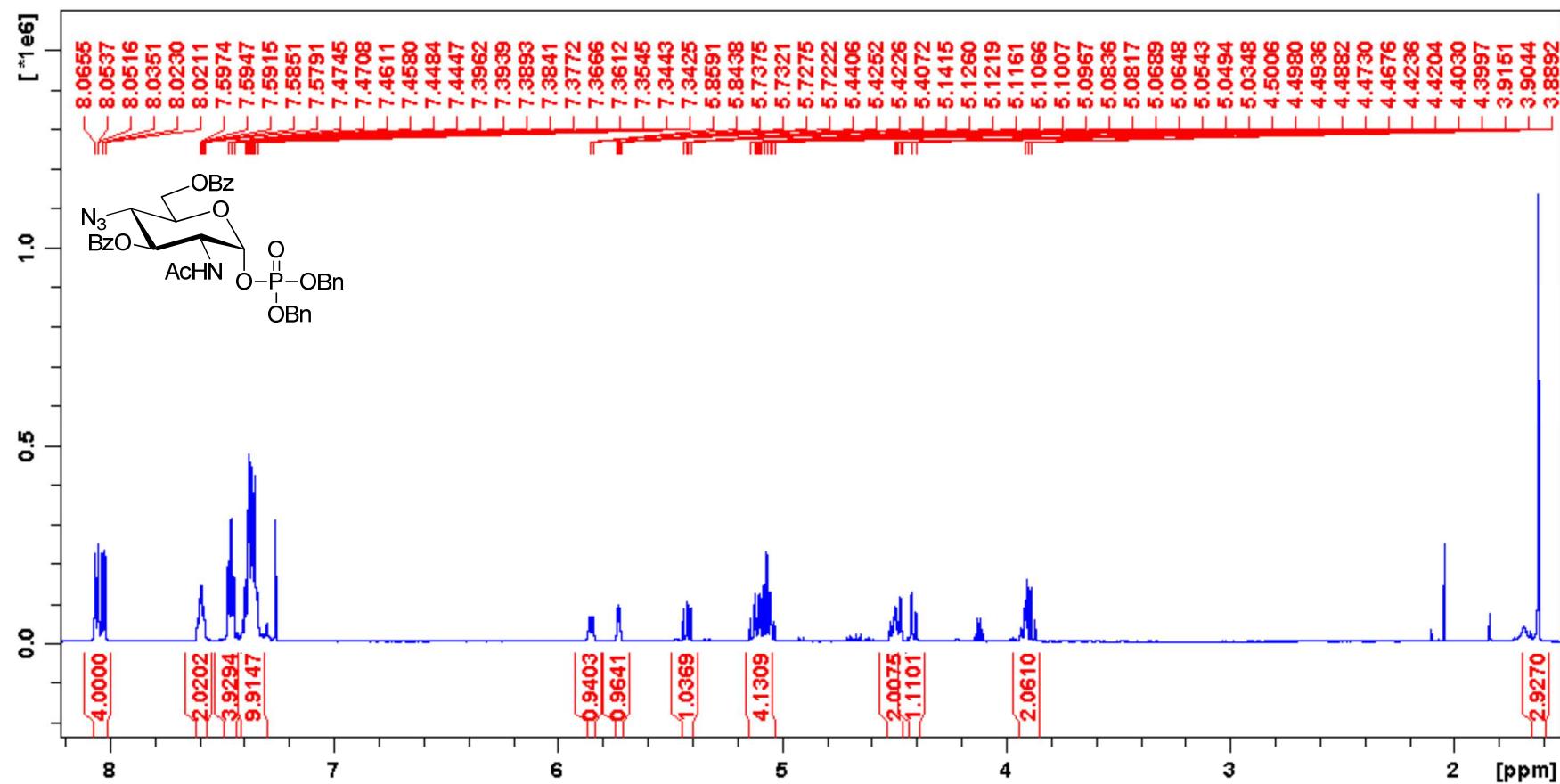
¹H NMR spectrum (800 MHz, CDCl₃) of compound **5a**



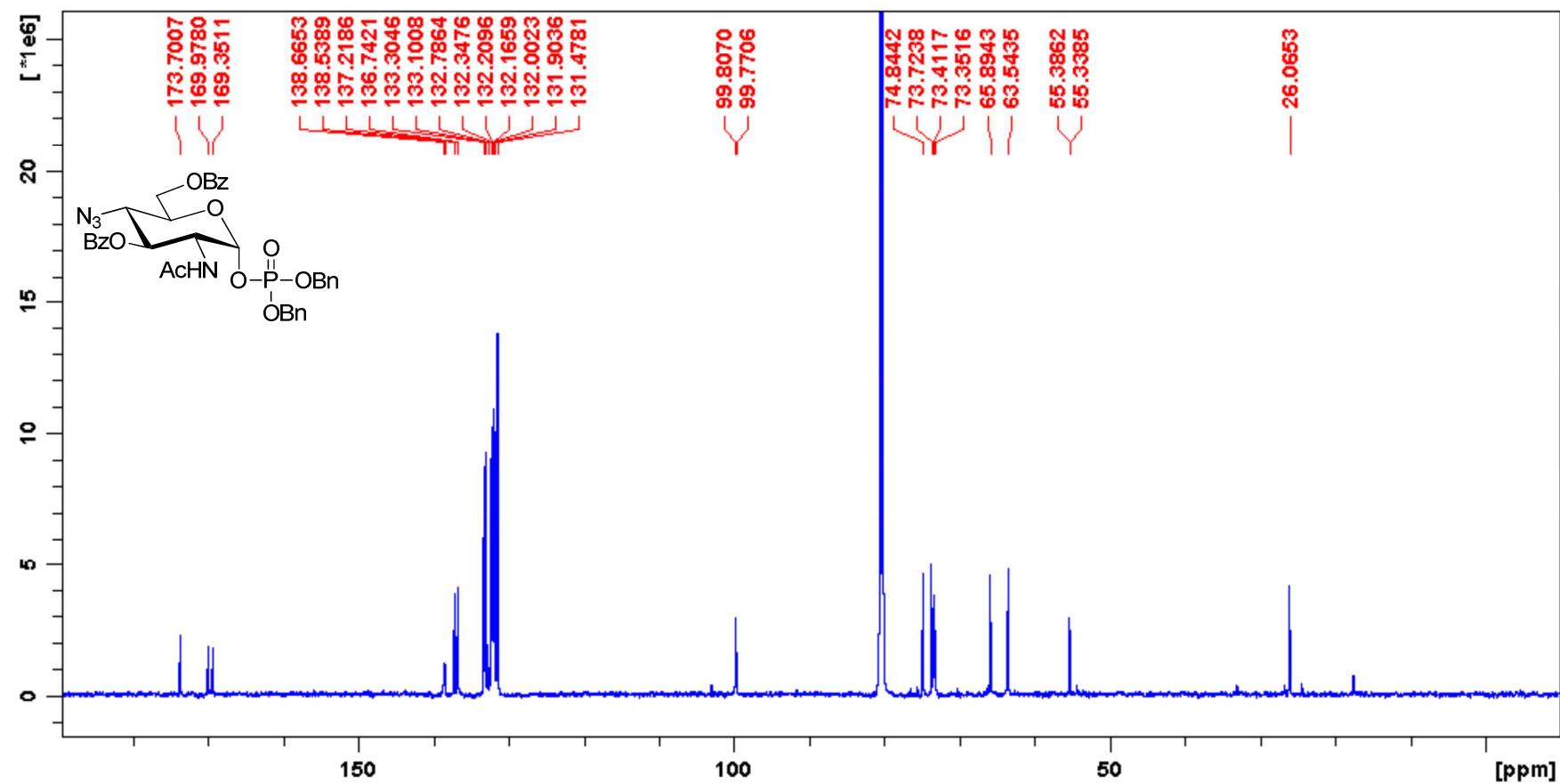
¹³C NMR spectrum (200 MHz, CDCl₃) of compound **5a**



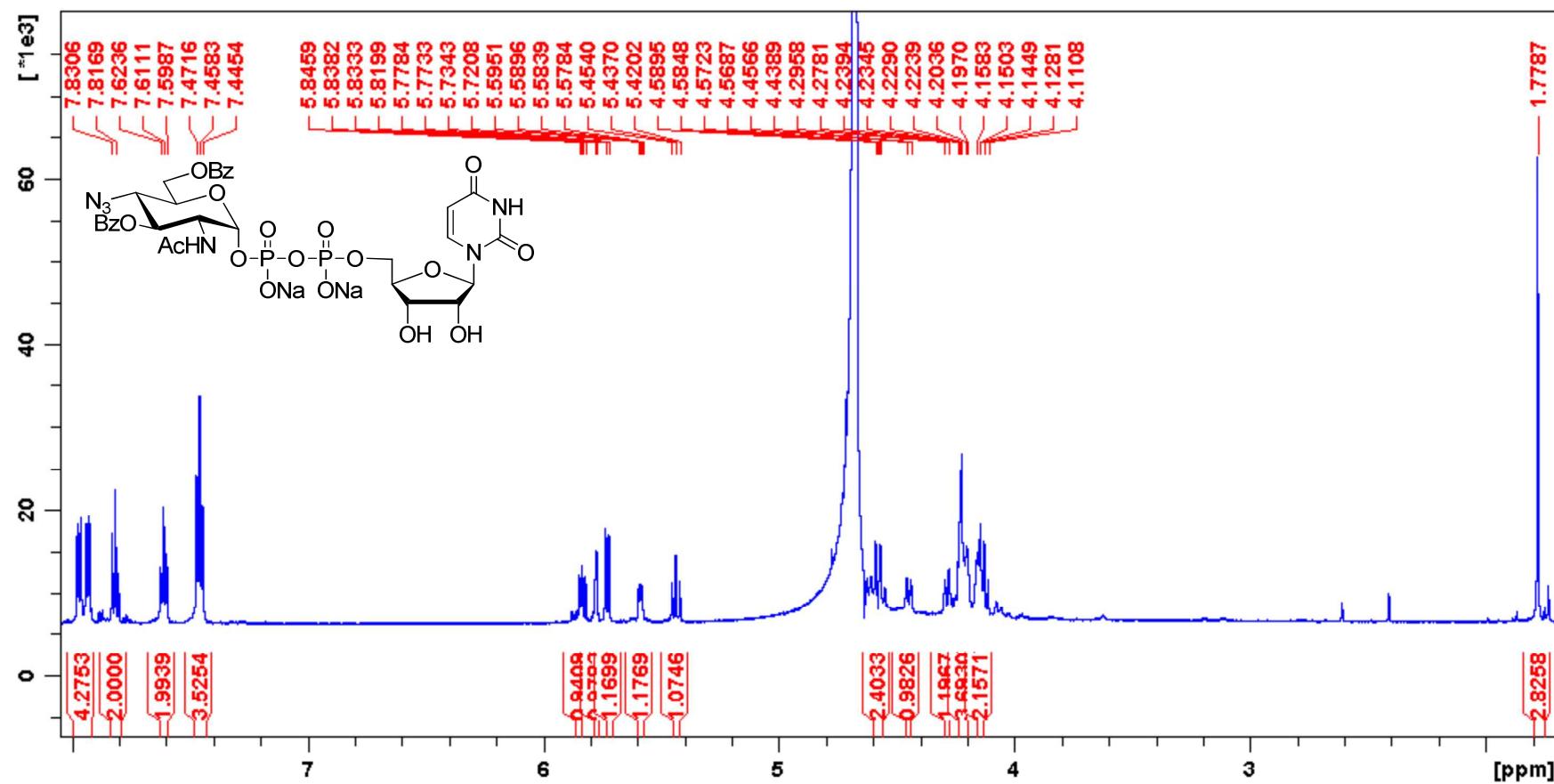
¹H NMR spectrum (600 MHz, CDCl₃) of compound **5b**



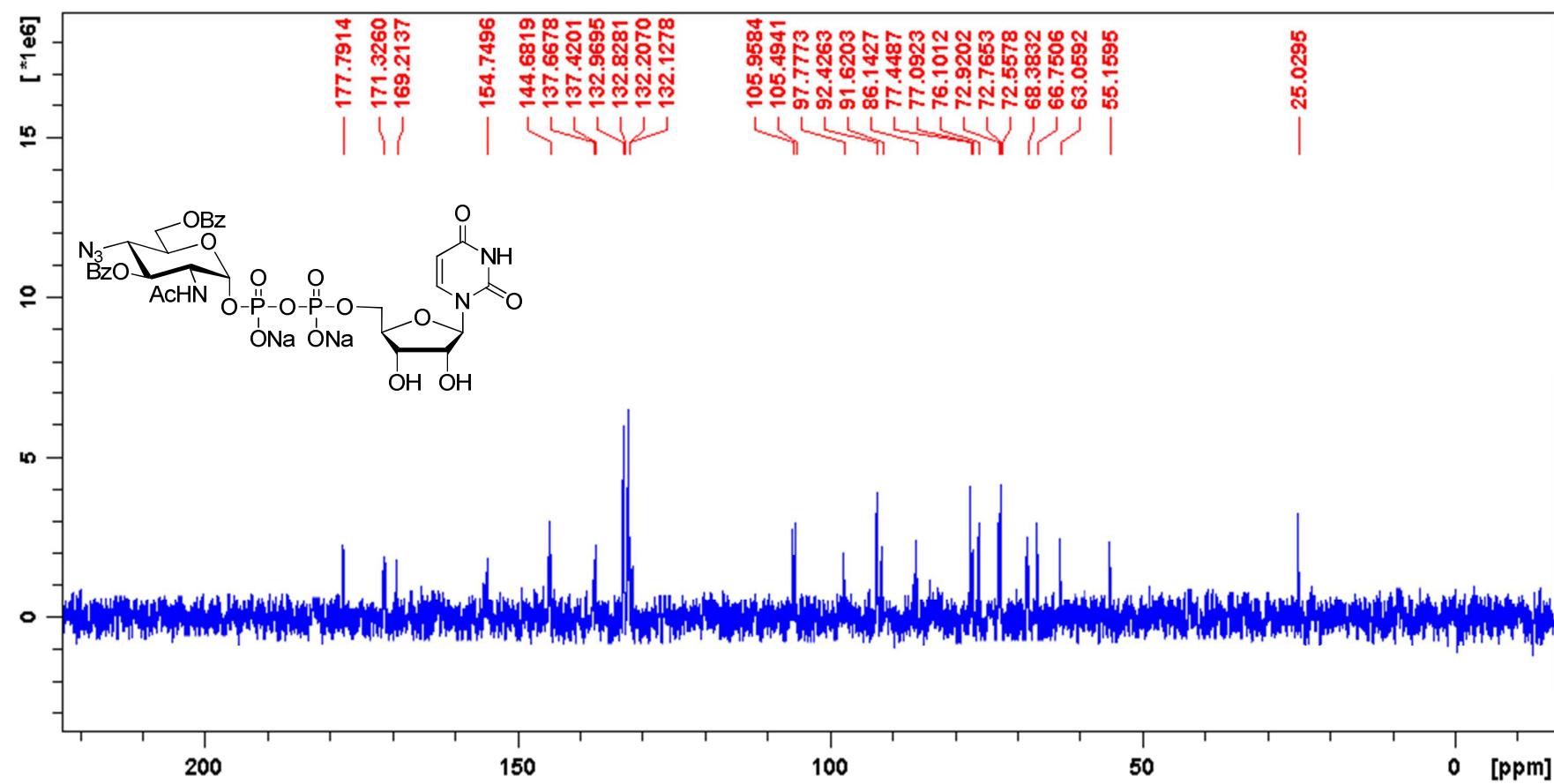
^{13}C NMR spectrum (150 MHz, CDCl_3) of compound **5b**



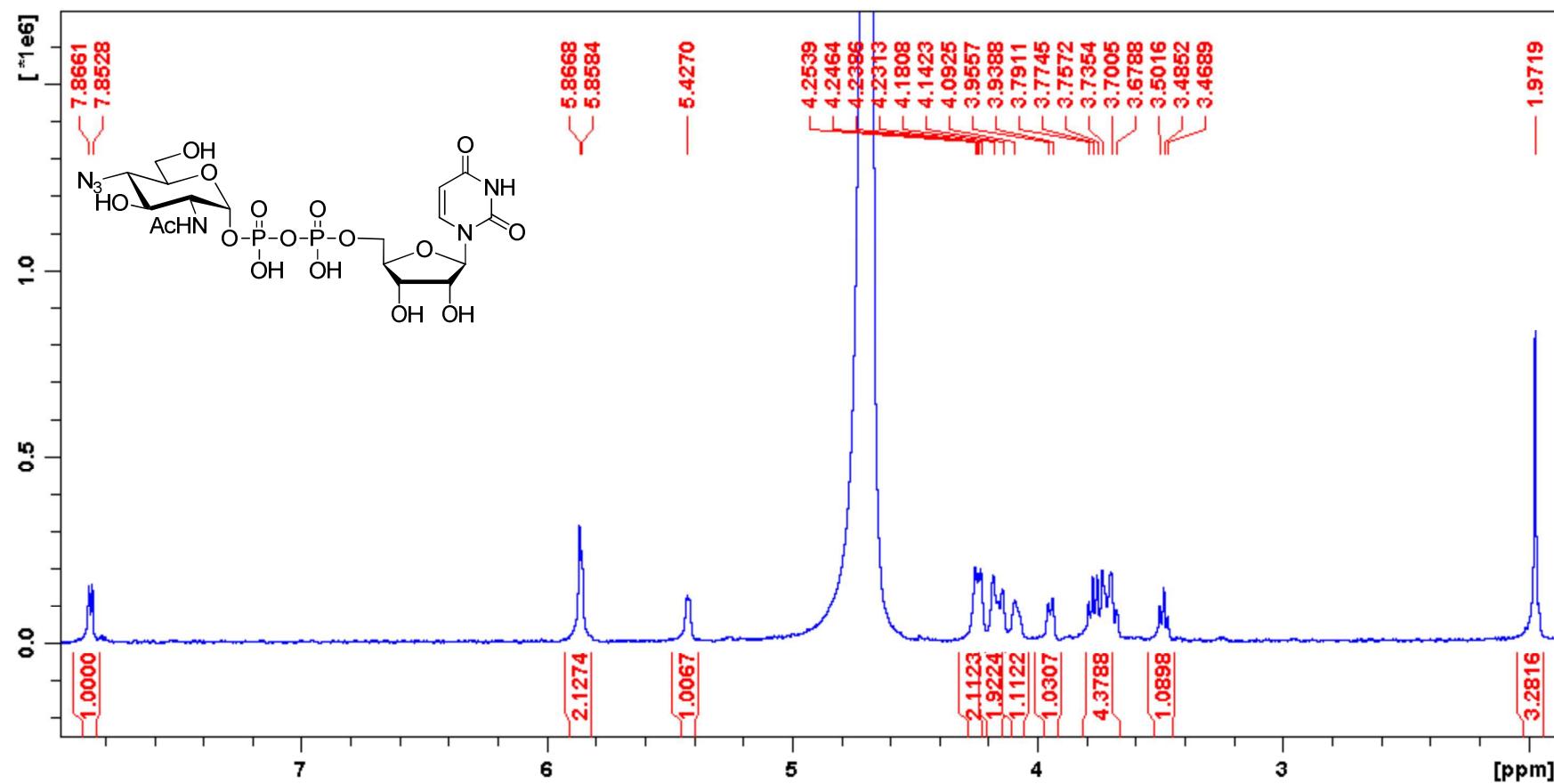
¹H NMR spectrum (600 MHz, D₂O) of compound 8b



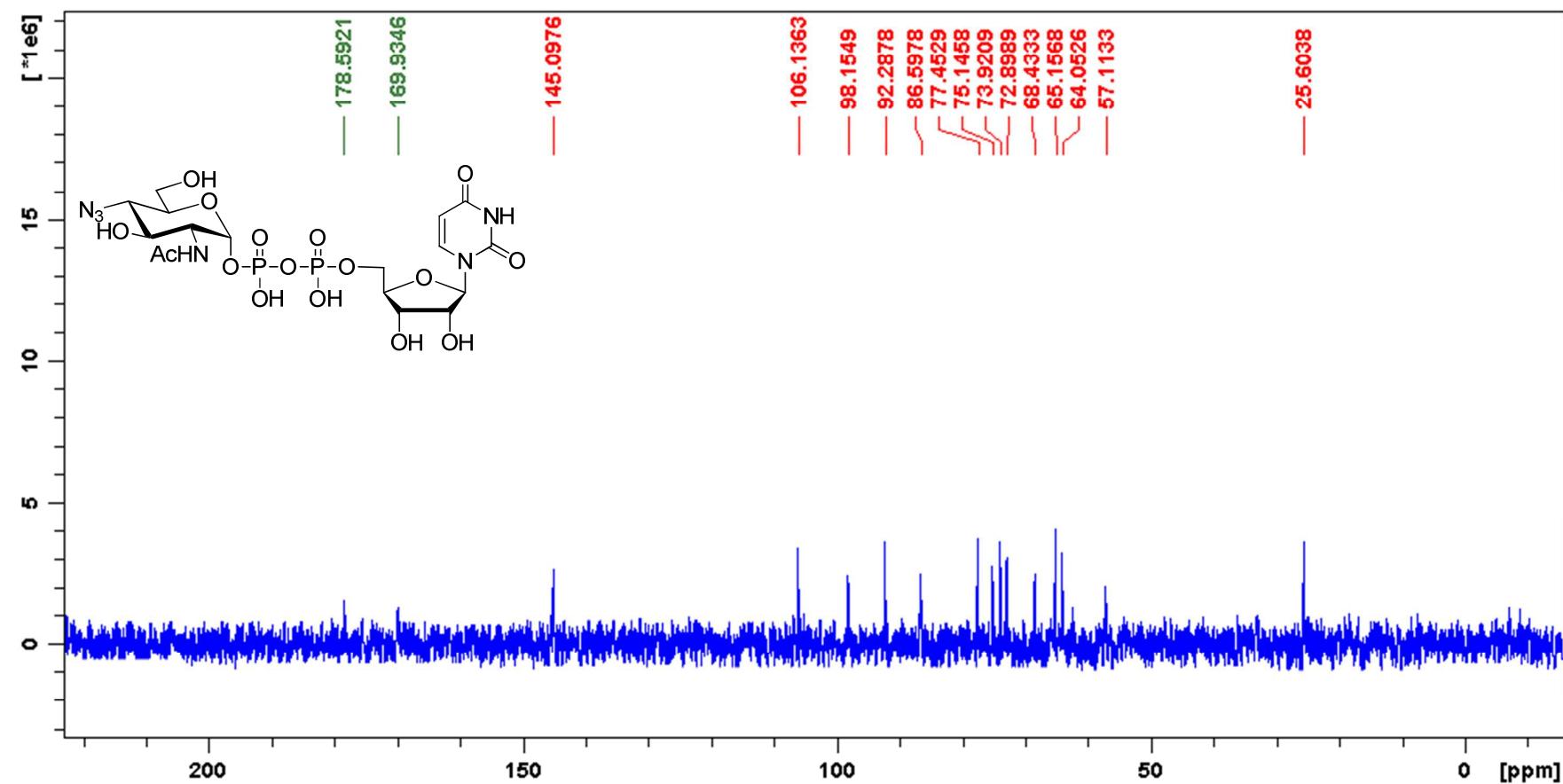
¹³C NMR spectrum (150 MHz, D₂O) of compound **8b**



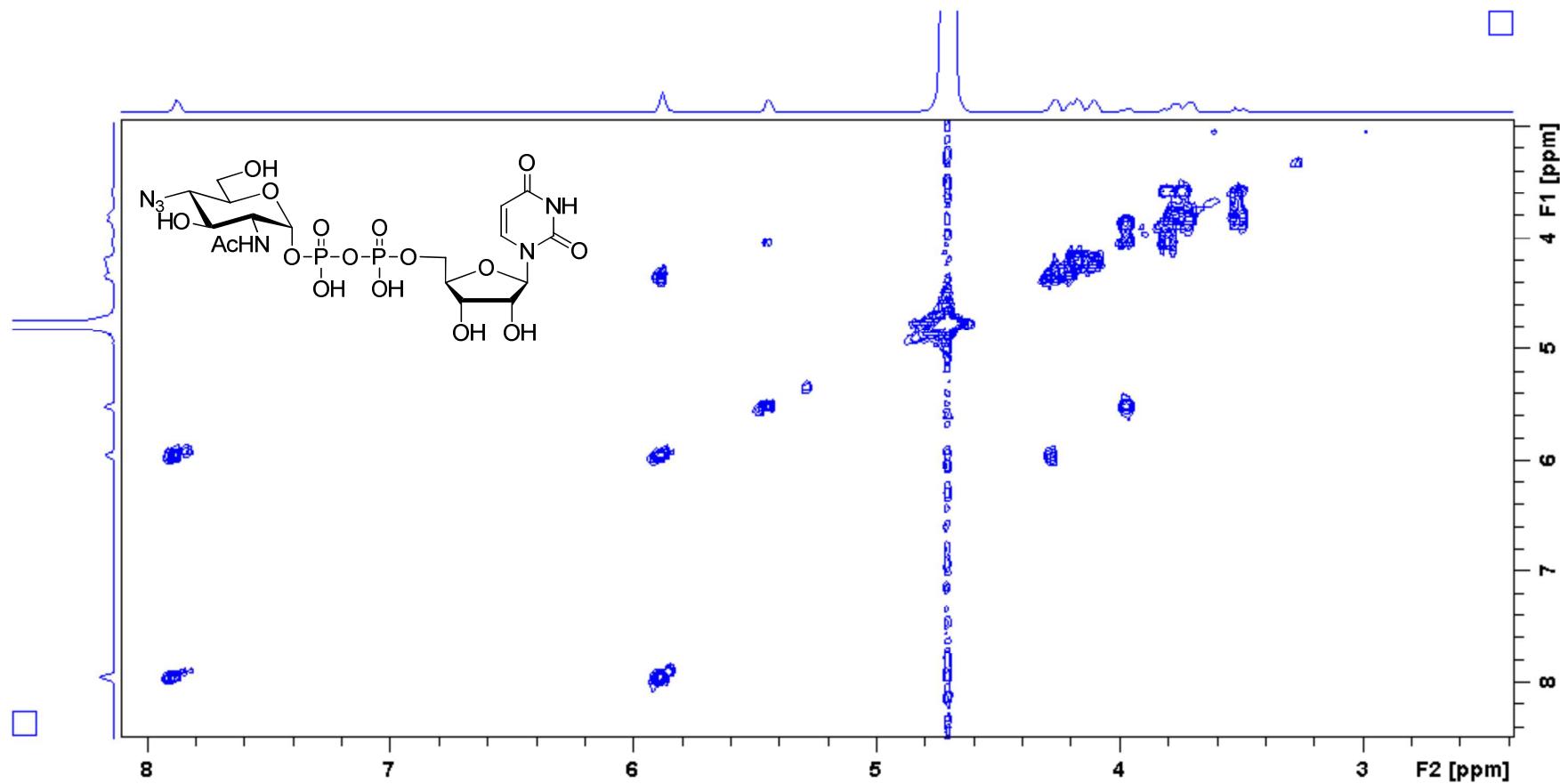
¹H NMR spectrum (600 MHz, D₂O) of compound 7b



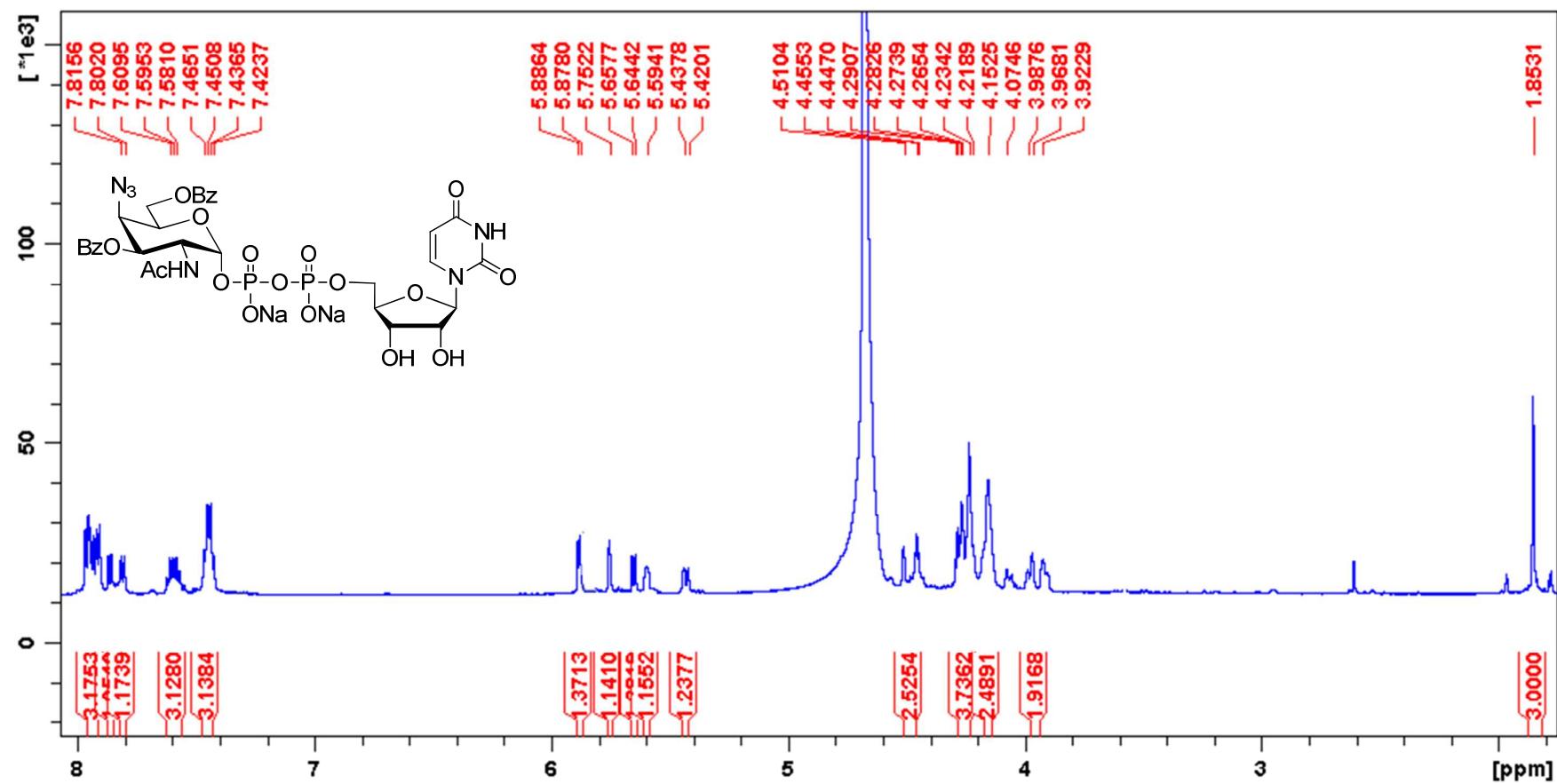
¹³C NMR spectrum (150 MHz, D₂O) of compound 7b



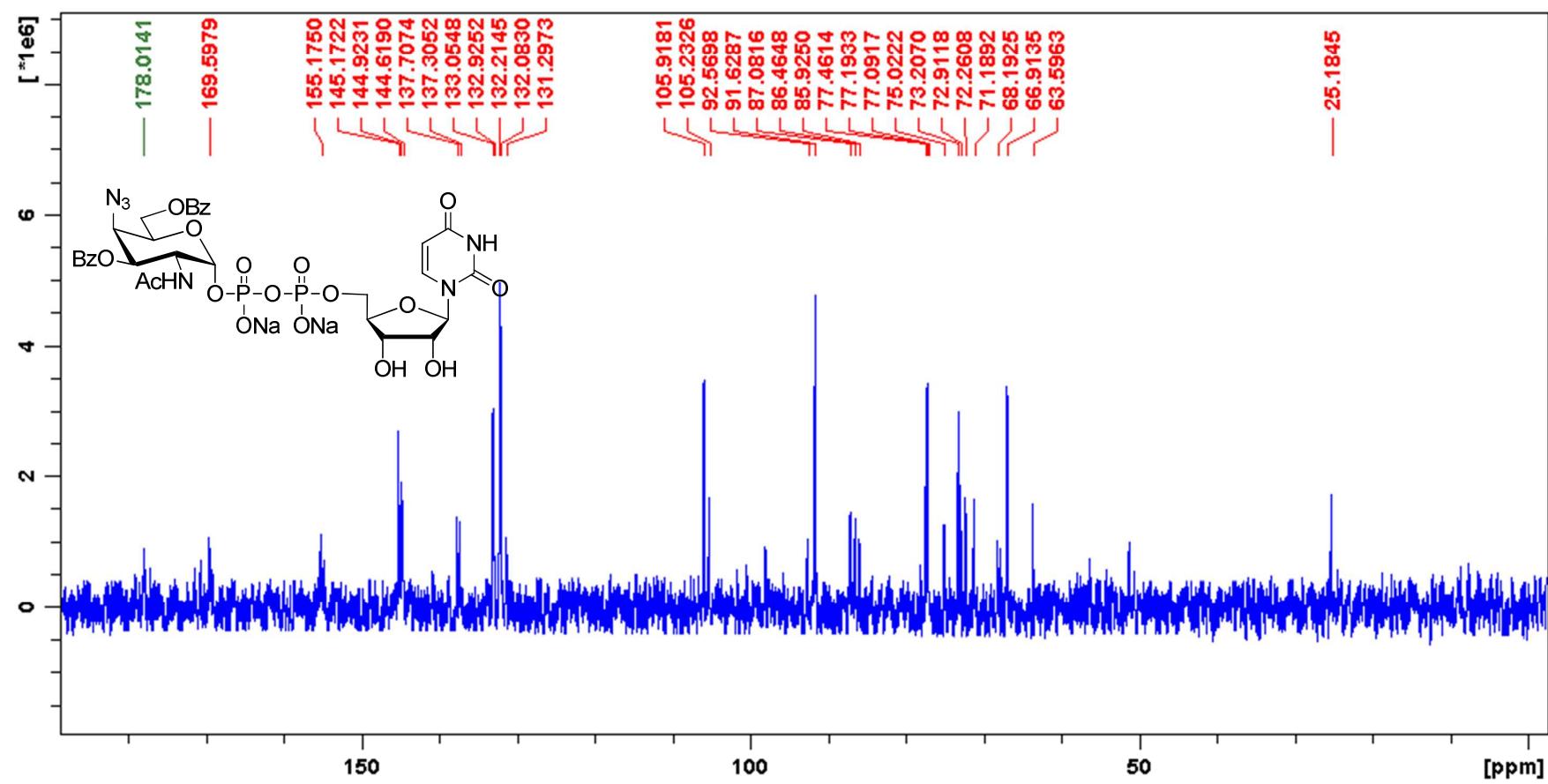
2D COSY NMR spectrum (600 MHz, D₂O) of compound 7b



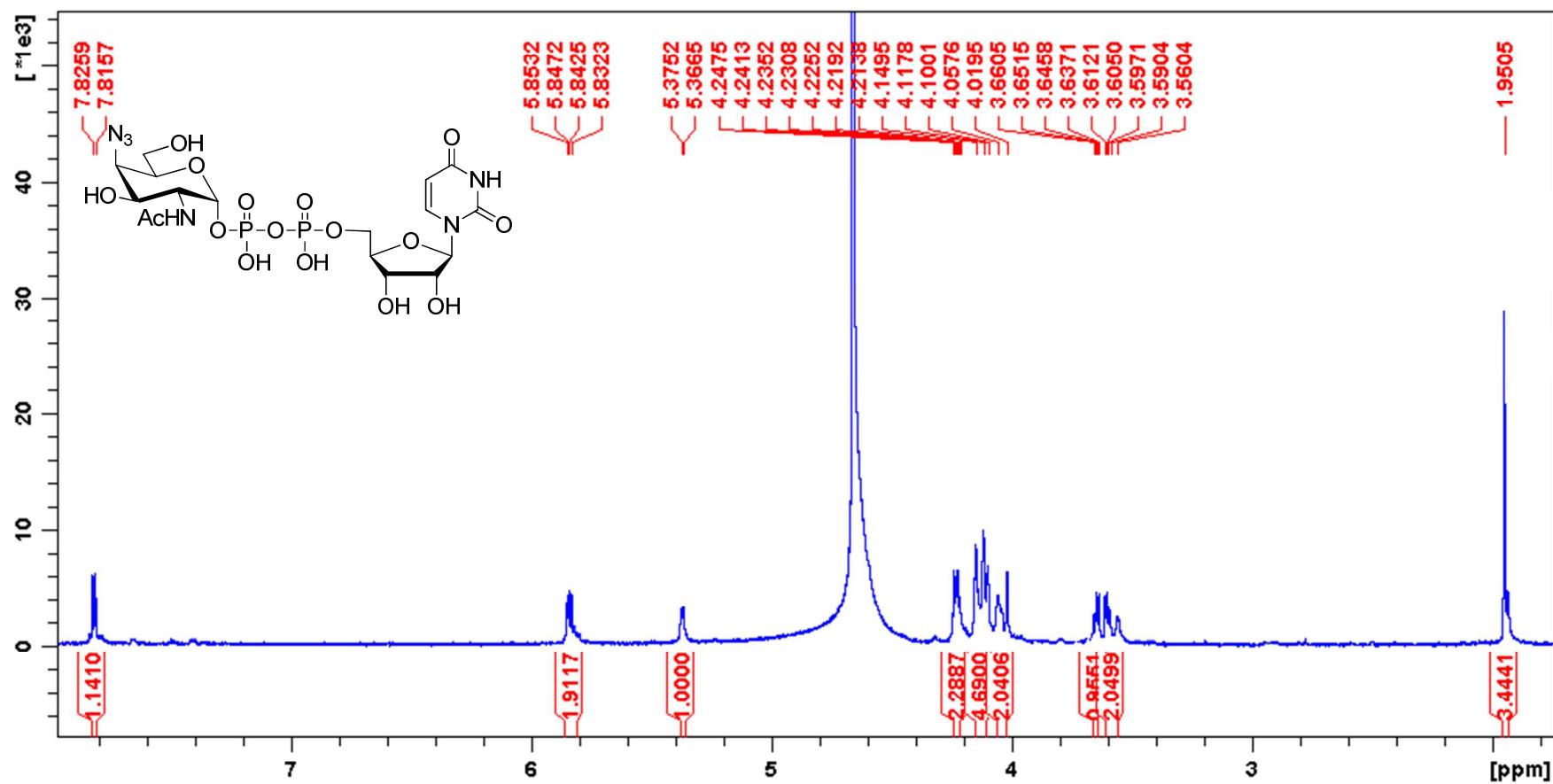
¹H NMR spectrum (600 MHz, D₂O) of compound 8a



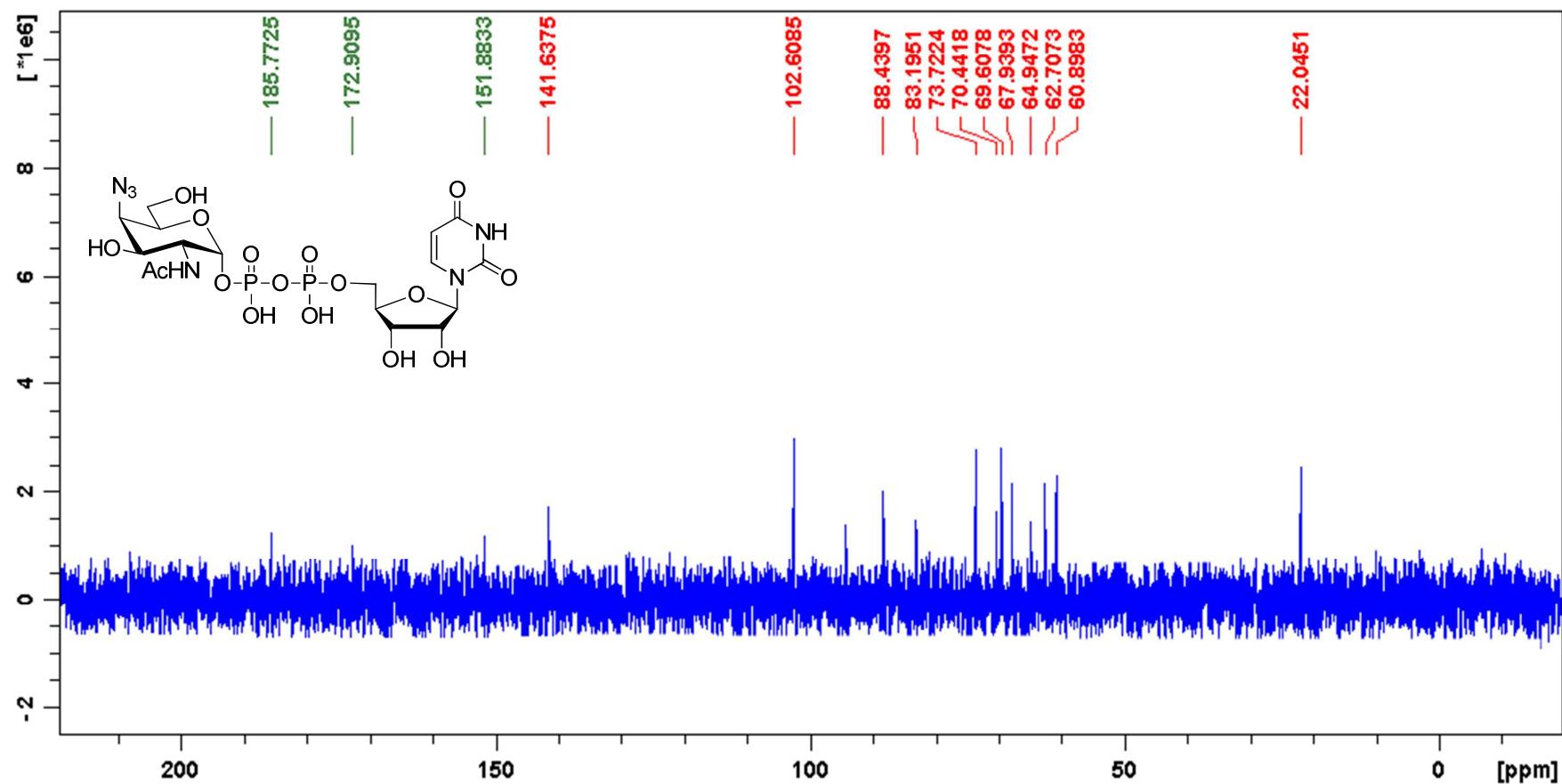
¹³C NMR spectrum (150 MHz, D₂O) of compound 8a



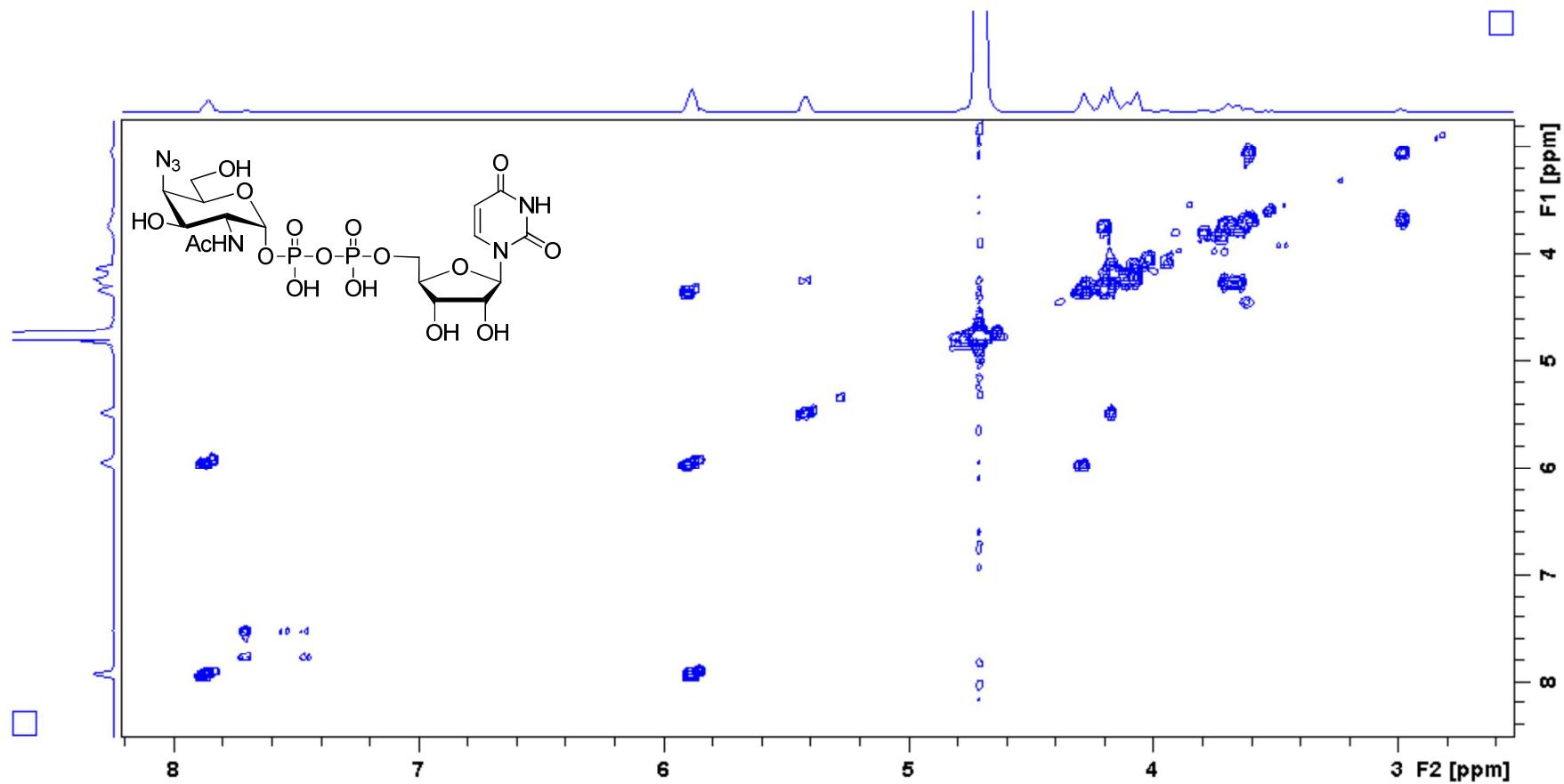
¹H NMR spectrum (600 MHz, D₂O) of compound 7a



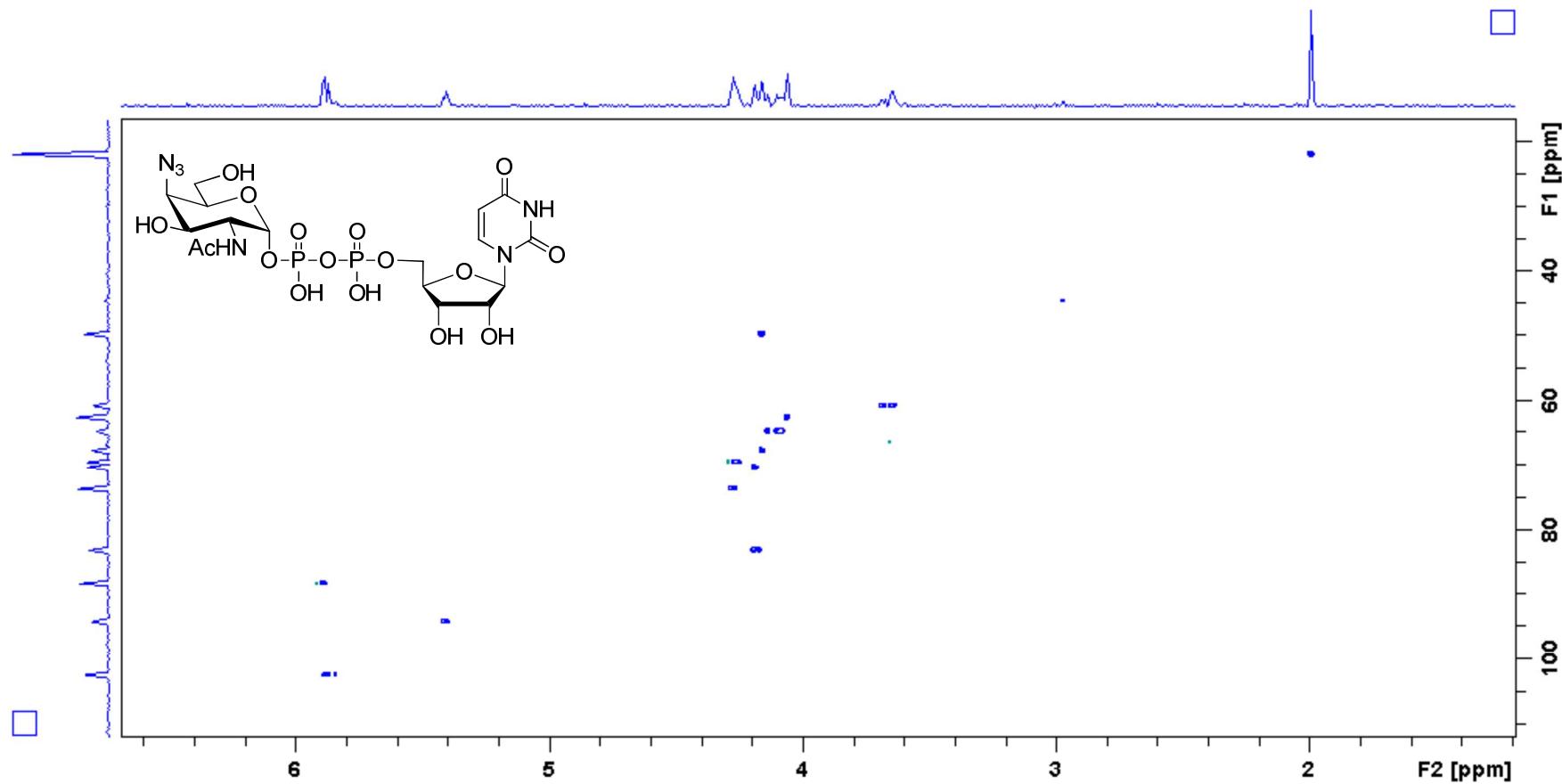
¹³C NMR spectrum (150 MHz, D₂O) of compound 7a

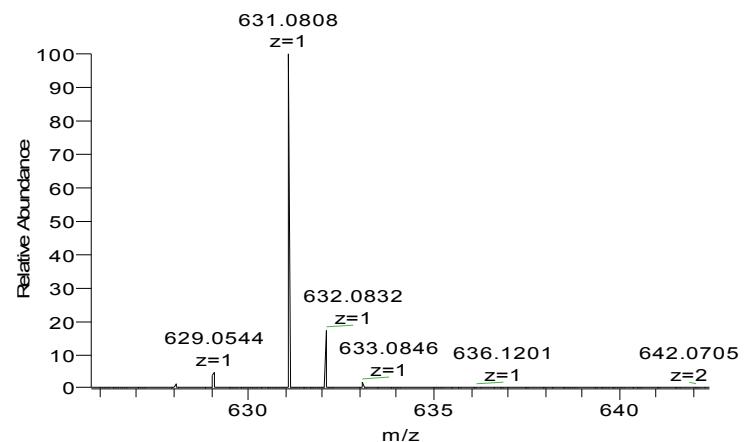


2D COSY NMR spectrum (600 MHz, D₂O) of compound 7a

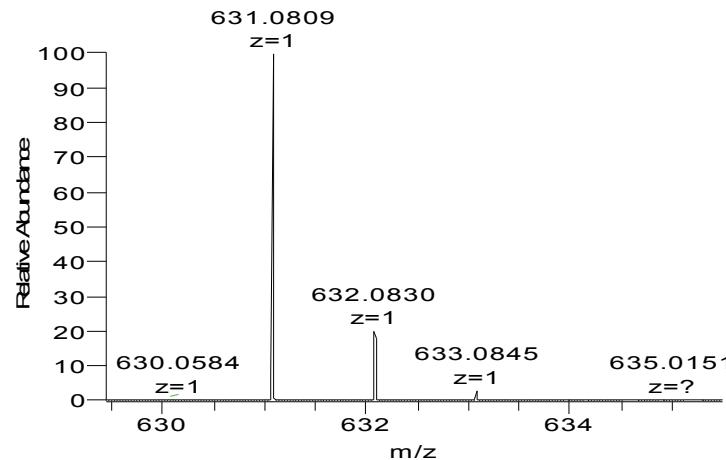


2D HSQC NMR spectrum (600 MHz, D₂O) of compound 7a





HRMS of compound 7a



HRMS of compound 7b