

Anomeric spironucleosides of β -D-glucopyranosyl uracil as potential inhibitors of glycogen phosphorylase

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Supplementary Materials

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Figure S1. ^1H NMR spectrum of compound **5** (200 MHz, CDCl_3).

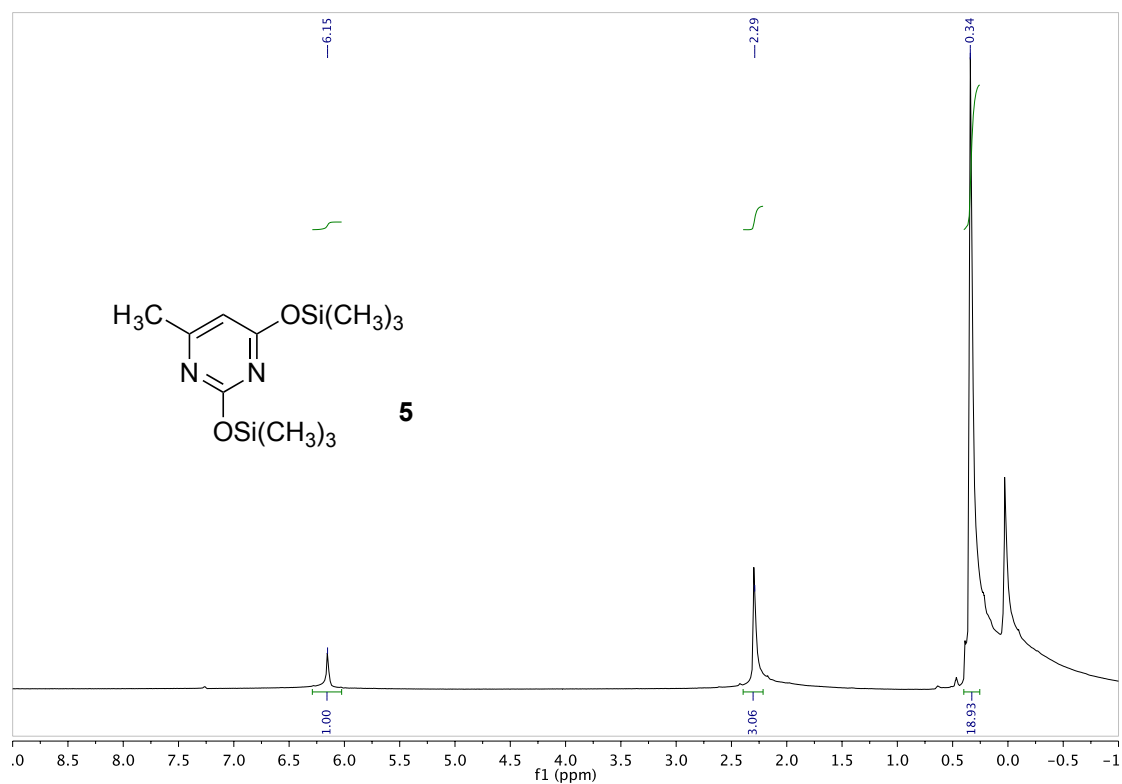


Figure S2. ^{13}C NMR spectrum of compound **5** (50 MHz, CDCl_3).

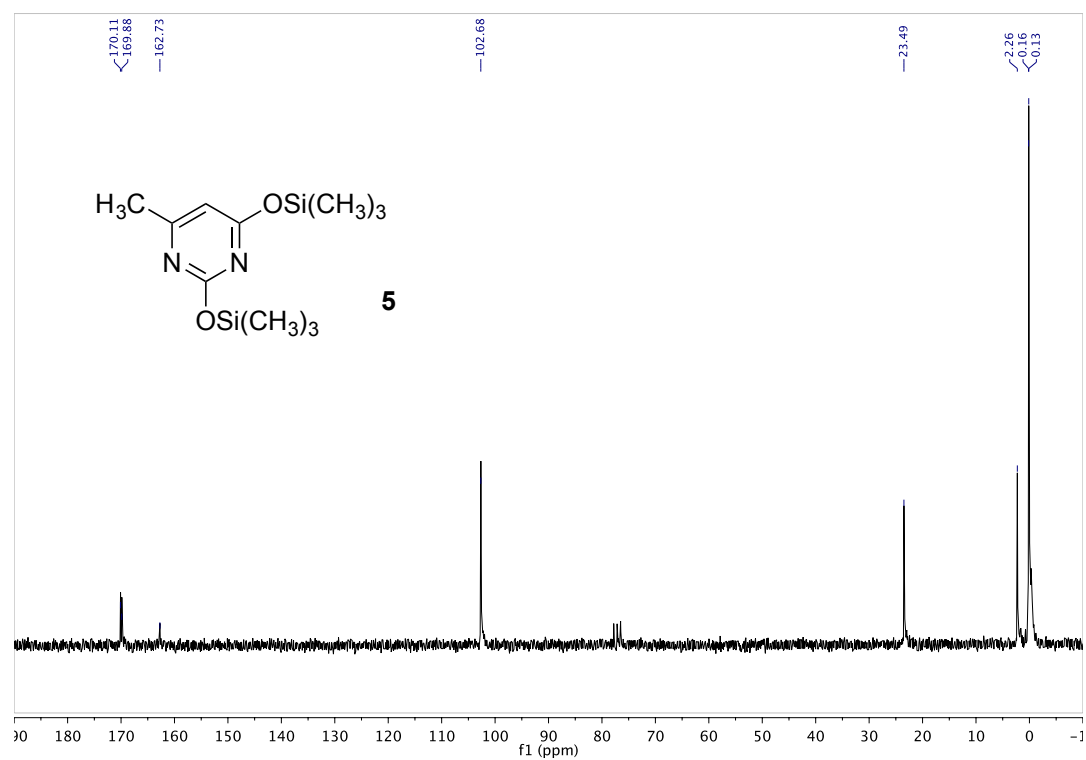


Figure S3. ^1H NMR spectrum of compound **6a** (200 MHz, CDCl_3).

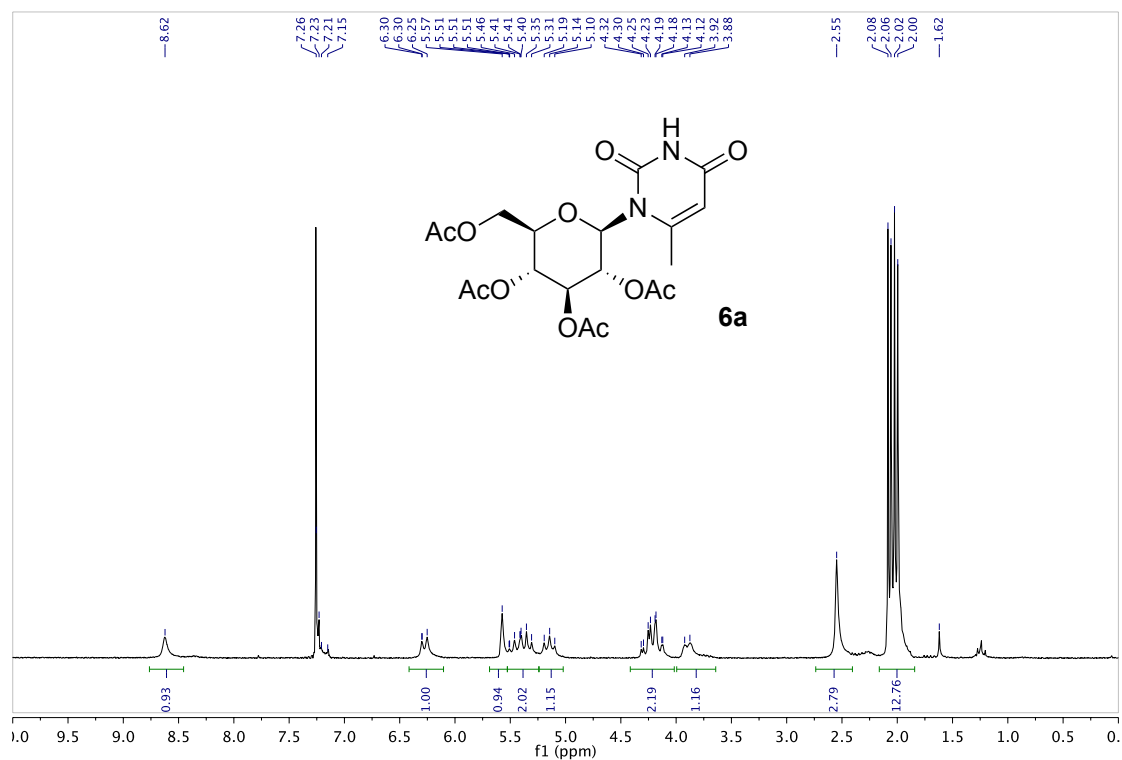


Figure S4. ^{13}C NMR spectrum of compound **6a** (50 MHz, CDCl_3).

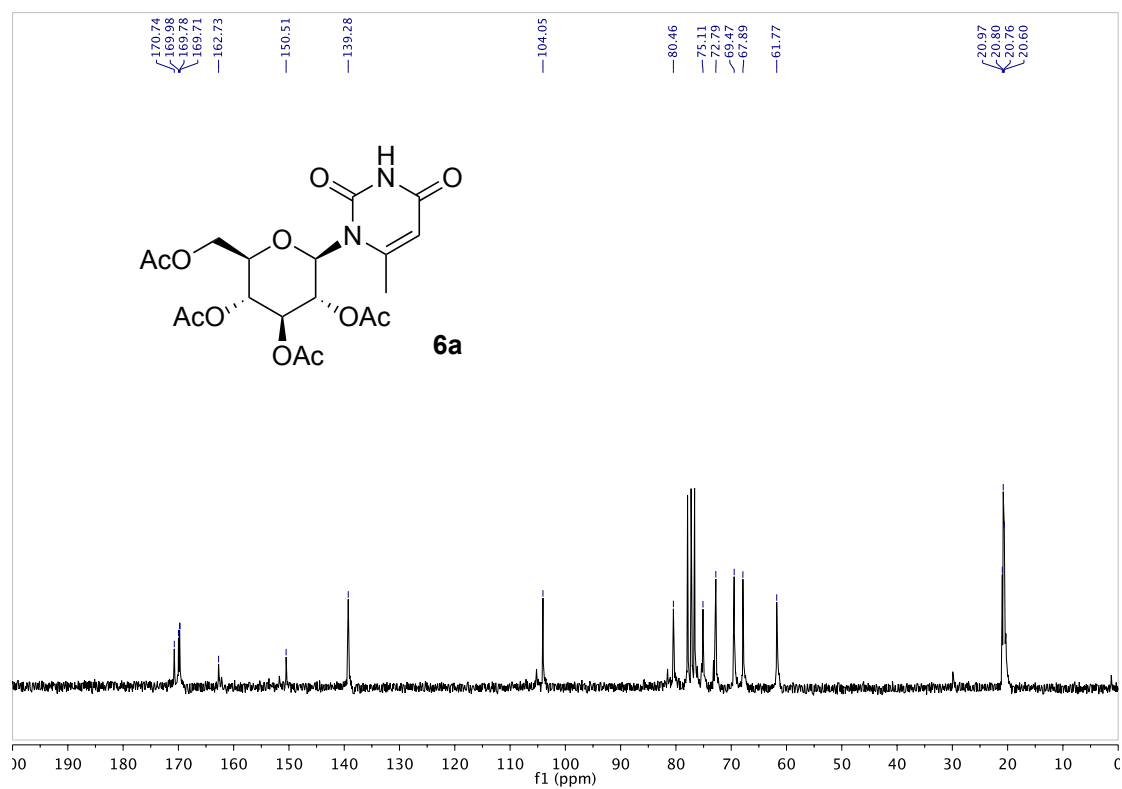


Figure S5. ^1H NMR spectrum of compound **6b** (200 MHz, CDCl_3).

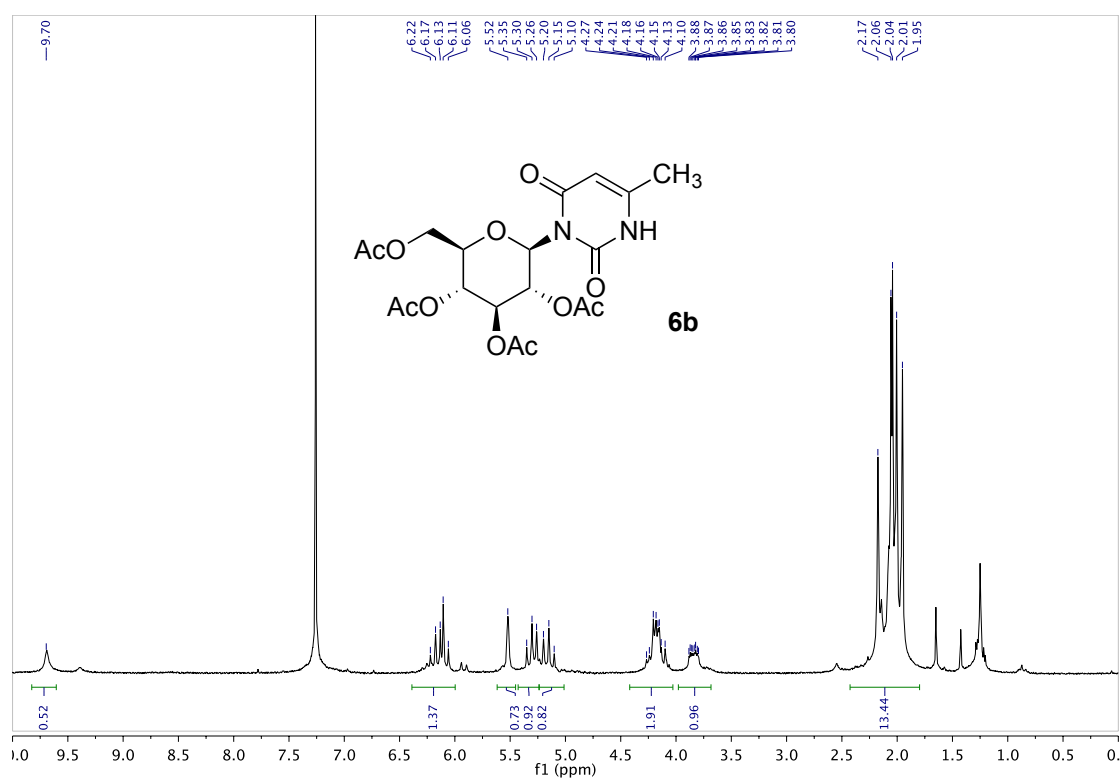


Figure S6. ^{13}C NMR spectrum of compound **6b** (50 MHz, CDCl_3).

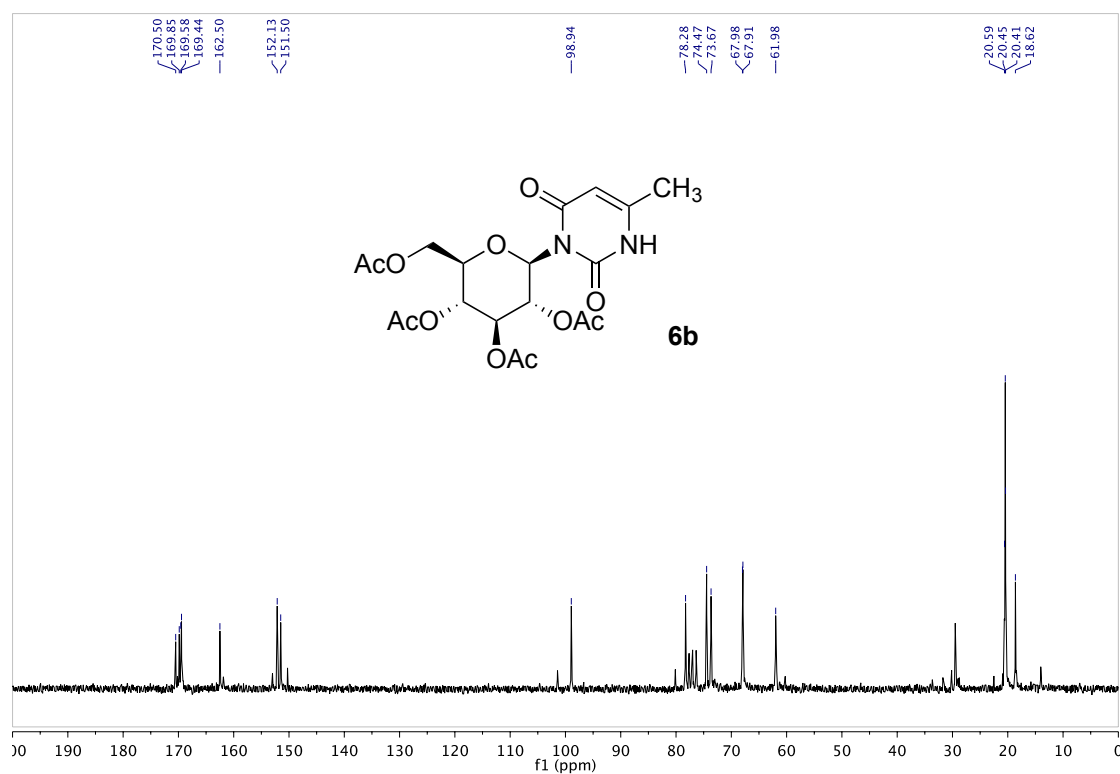


Figure S7. ^1H NMR spectrum of compound **6c** (200 MHz, CDCl_3).

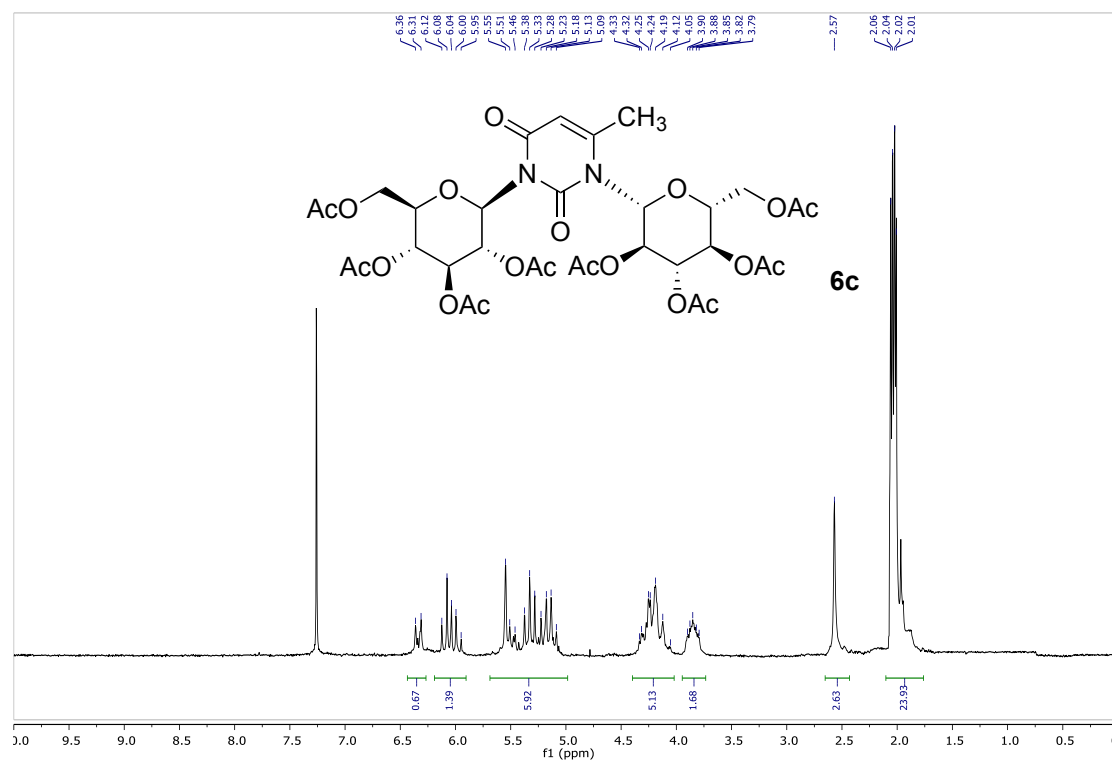


Figure S8. ^{13}C NMR spectrum of compound **6b** (50 MHz, CDCl_3).

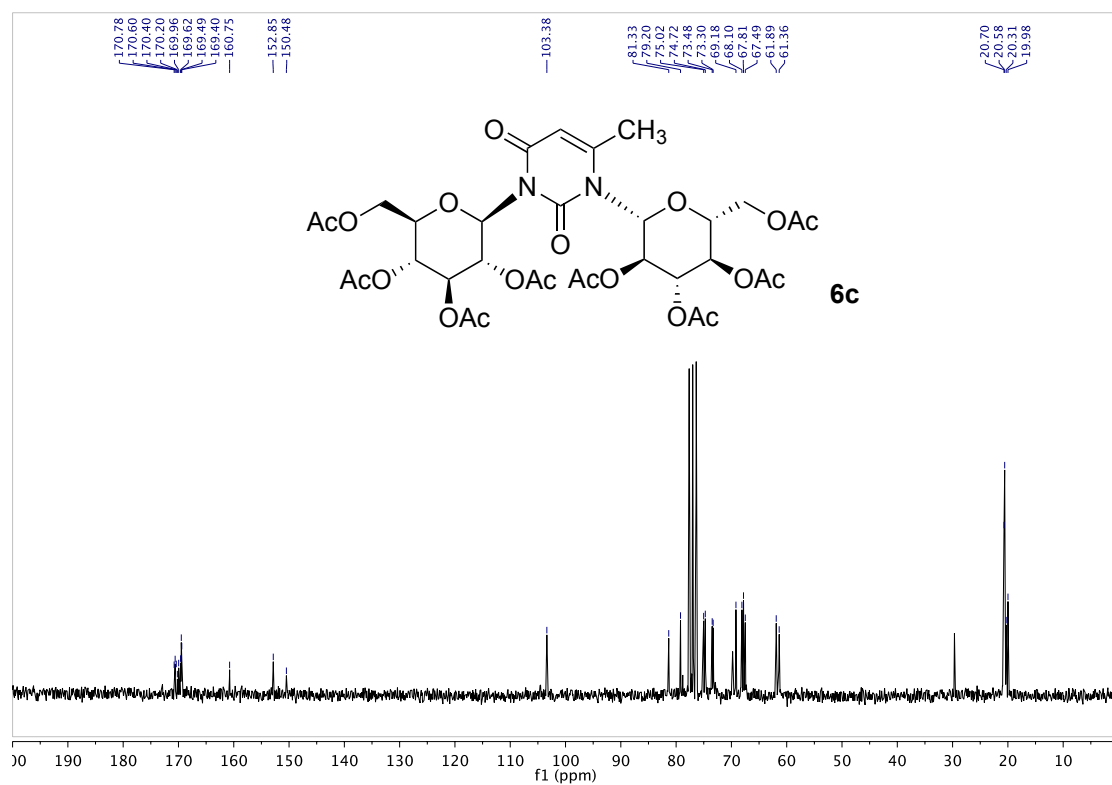


Figure S9. ^1H NMR spectrum of compound **7** (200 MHz, CDCl_3).

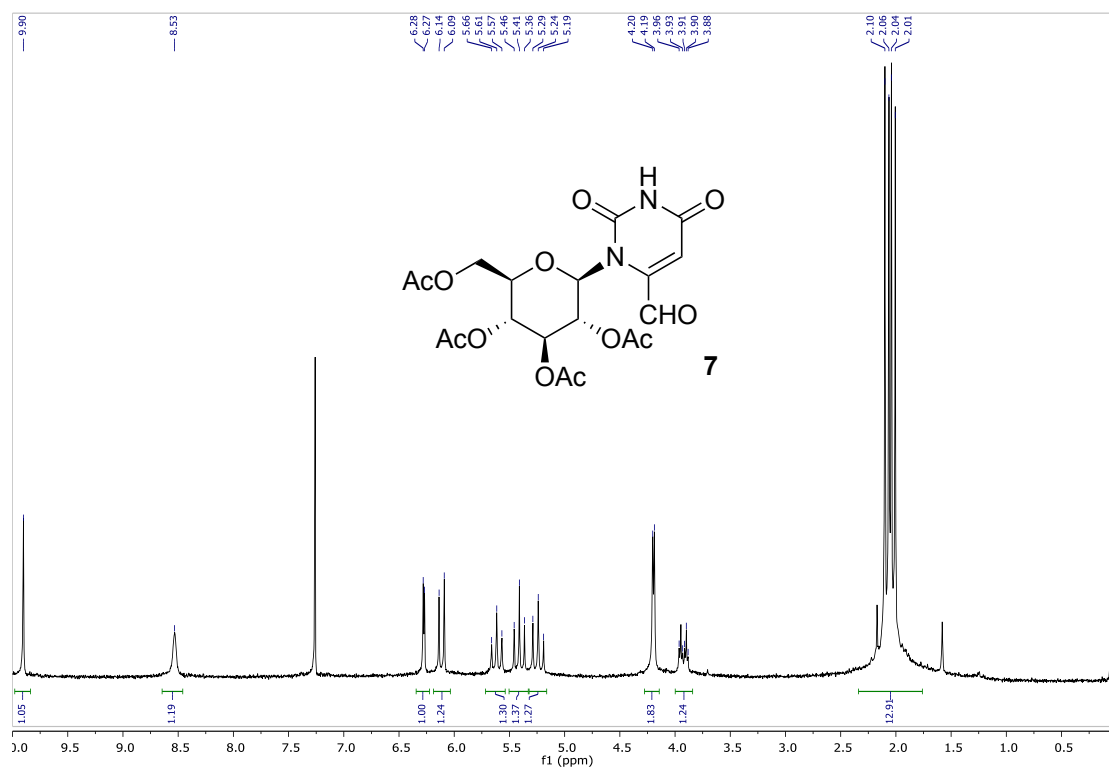


Figure S10. ^{13}C NMR spectrum of compound **7** (50 MHz, CDCl_3).

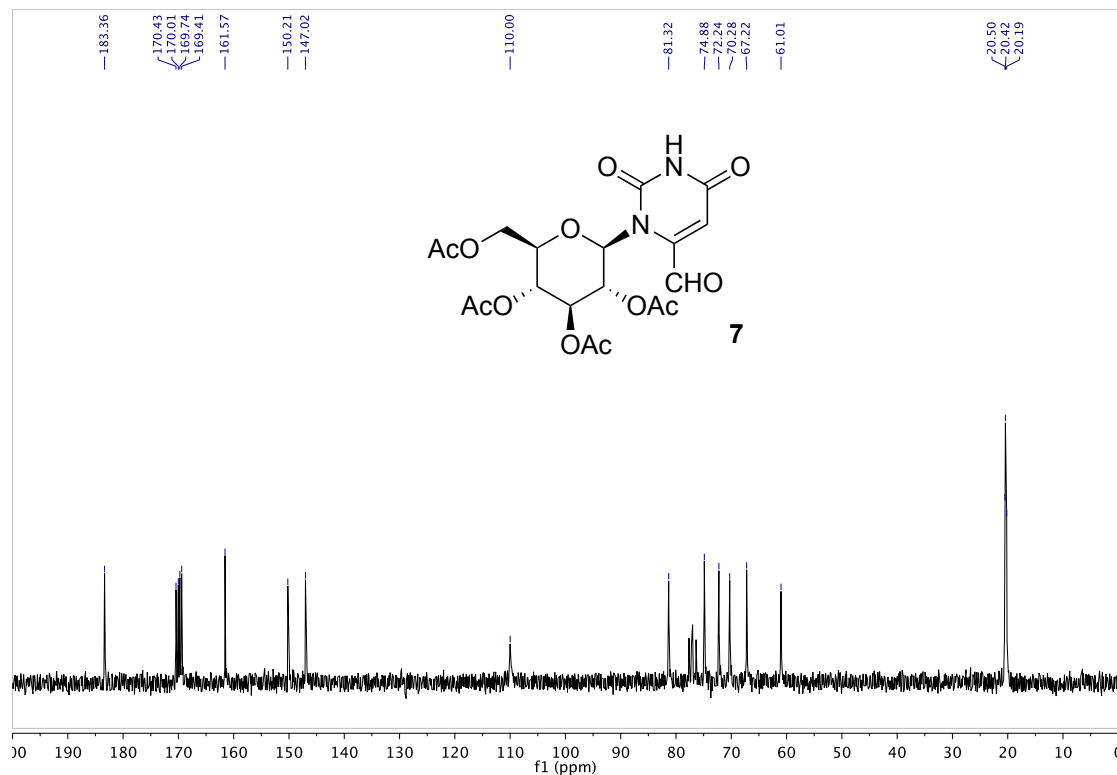


Figure S11. ^1H NMR spectrum of compound **8** (200 MHz, DMSO- d_6).

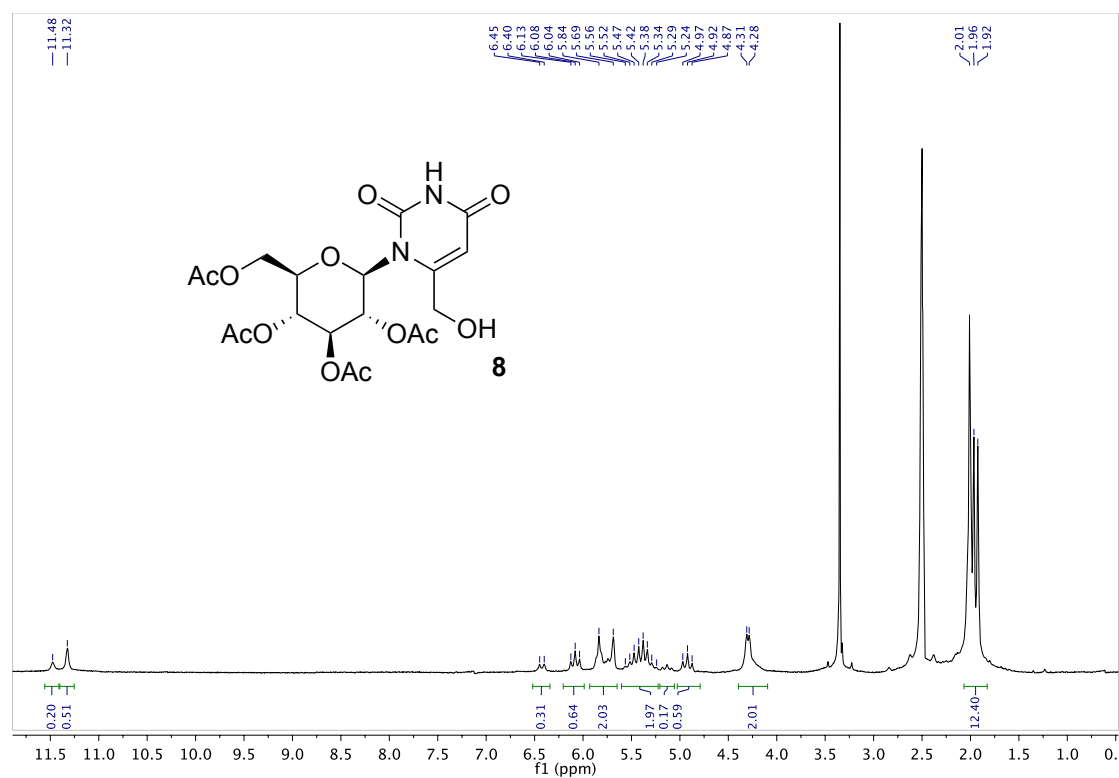


Figure S12. ^{13}C NMR spectrum of compound **8** (50 MHz, CDCl_3).

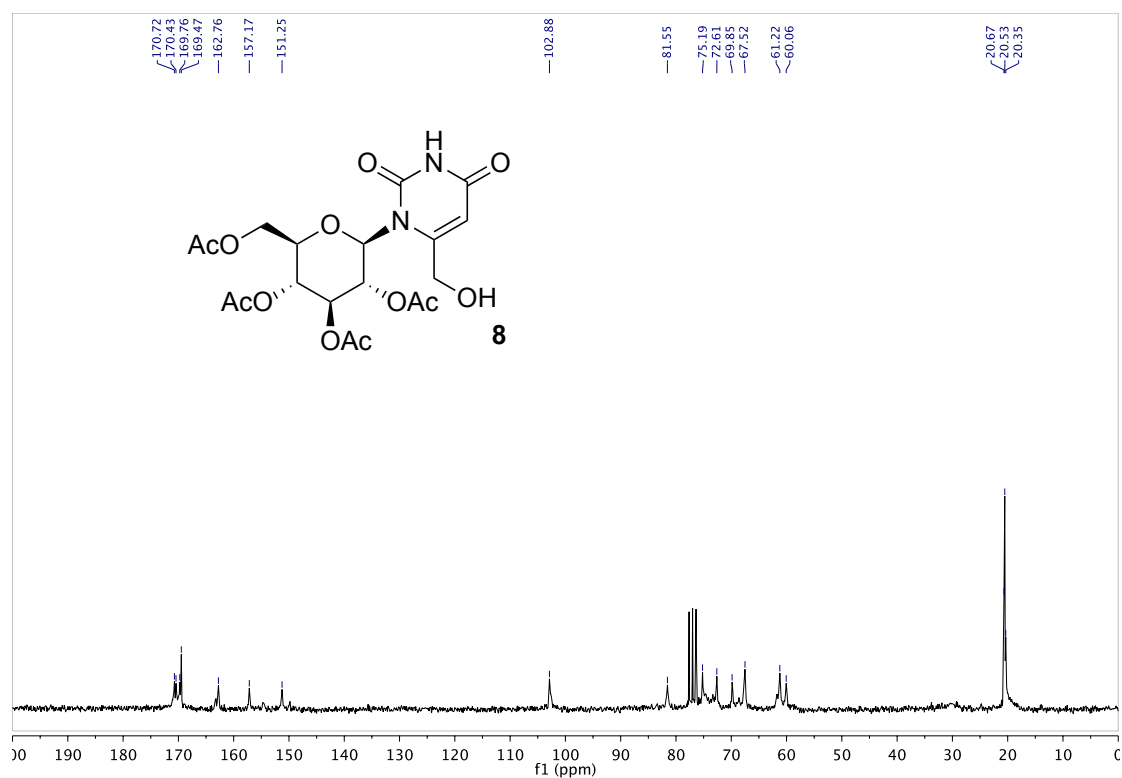


Figure S13. ^1H NMR spectrum of compound **9a** (200 MHz, CDCl_3).

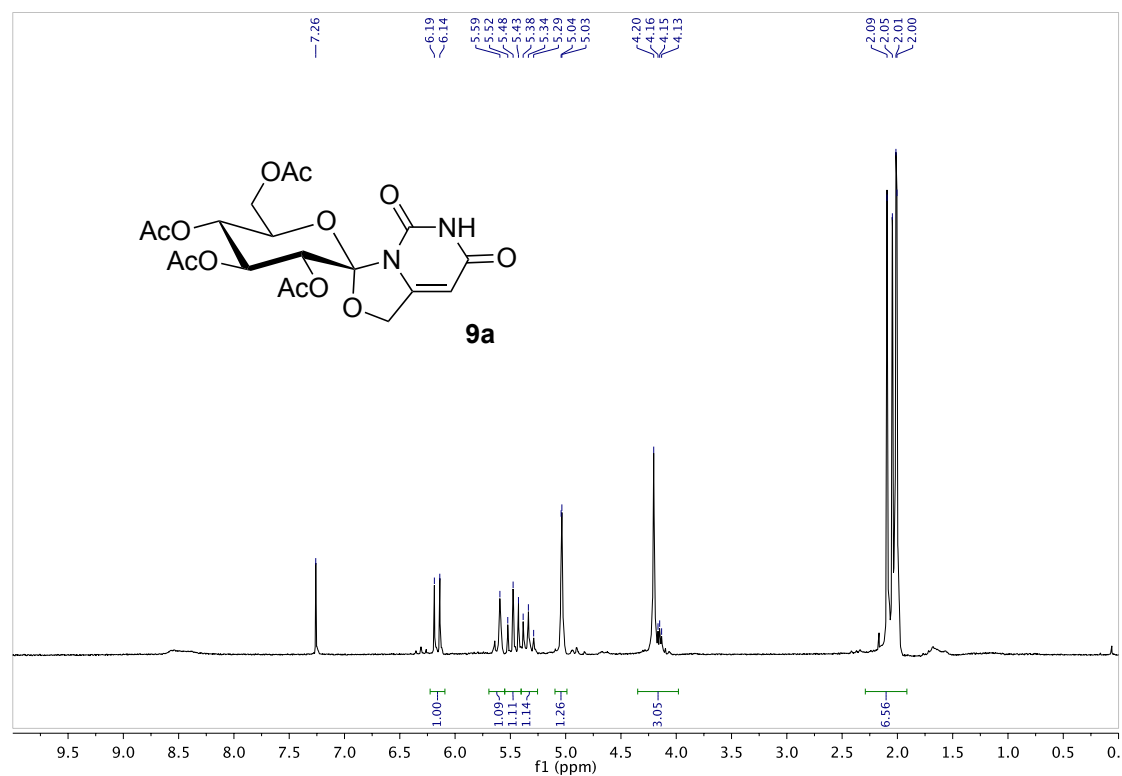


Figure S14. ^{13}C NMR spectrum of compound **9a** (50 MHz, CDCl_3).

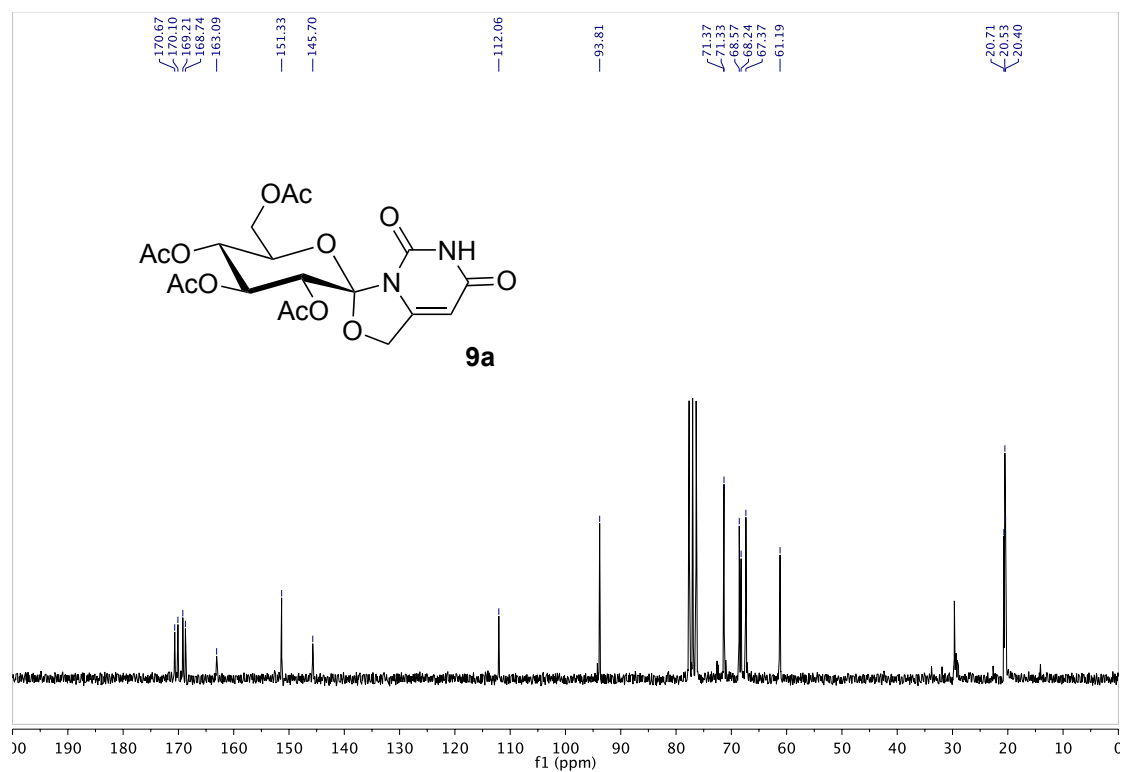


Figure S15. ^1H NMR spectrum of compound **9b** (200 MHz, CDCl_3).

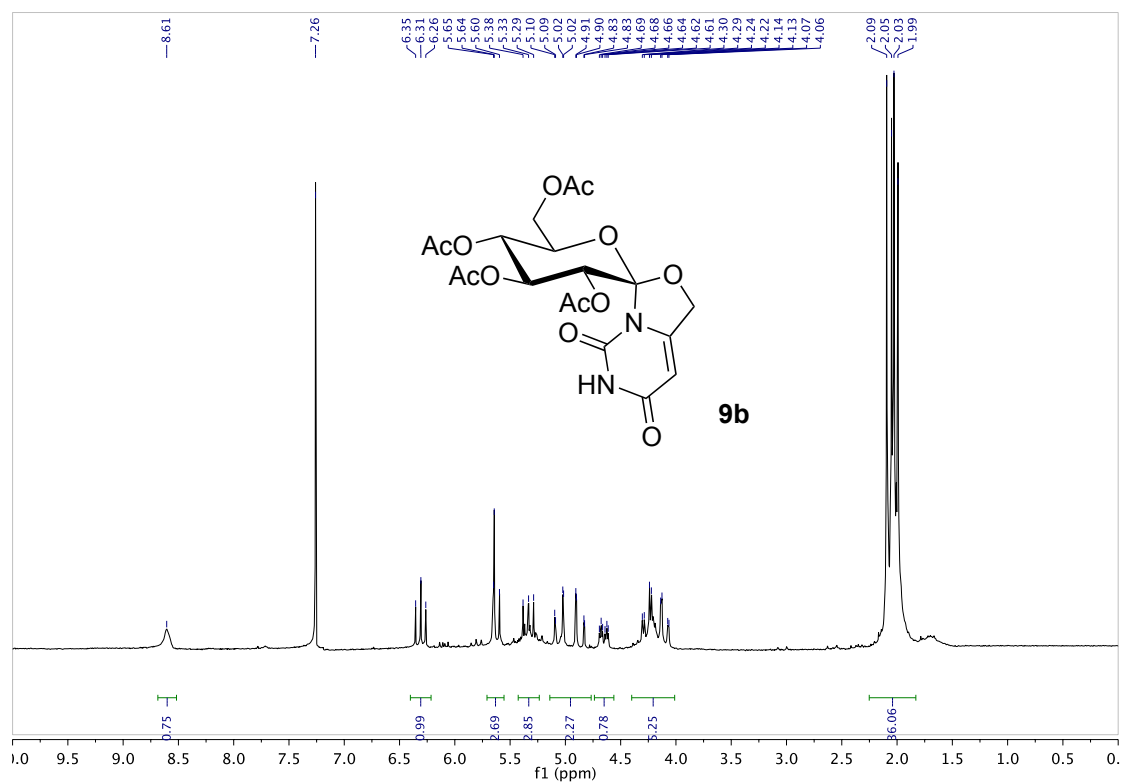


Figure S16. ^{13}C NMR spectrum of compound **9b** (50 MHz, CDCl_3).

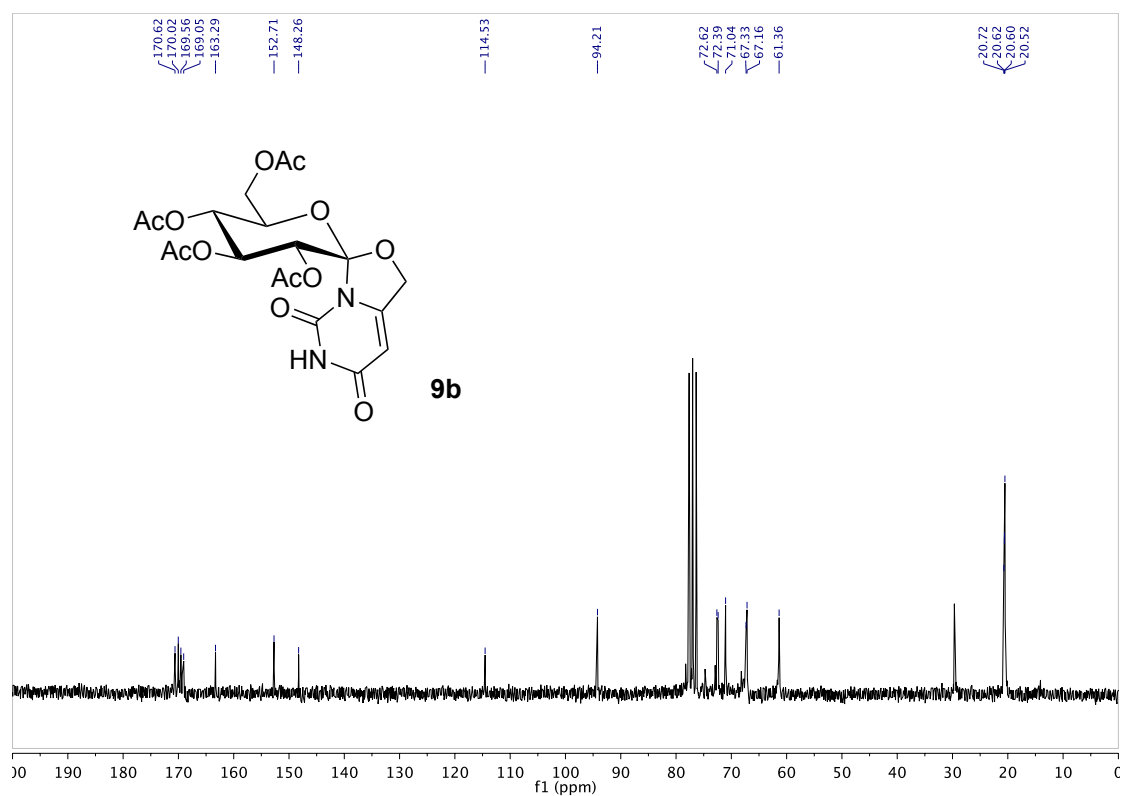


Figure S17. ^1H NMR spectrum of compound **4a** (200 MHz, CDCl_3).

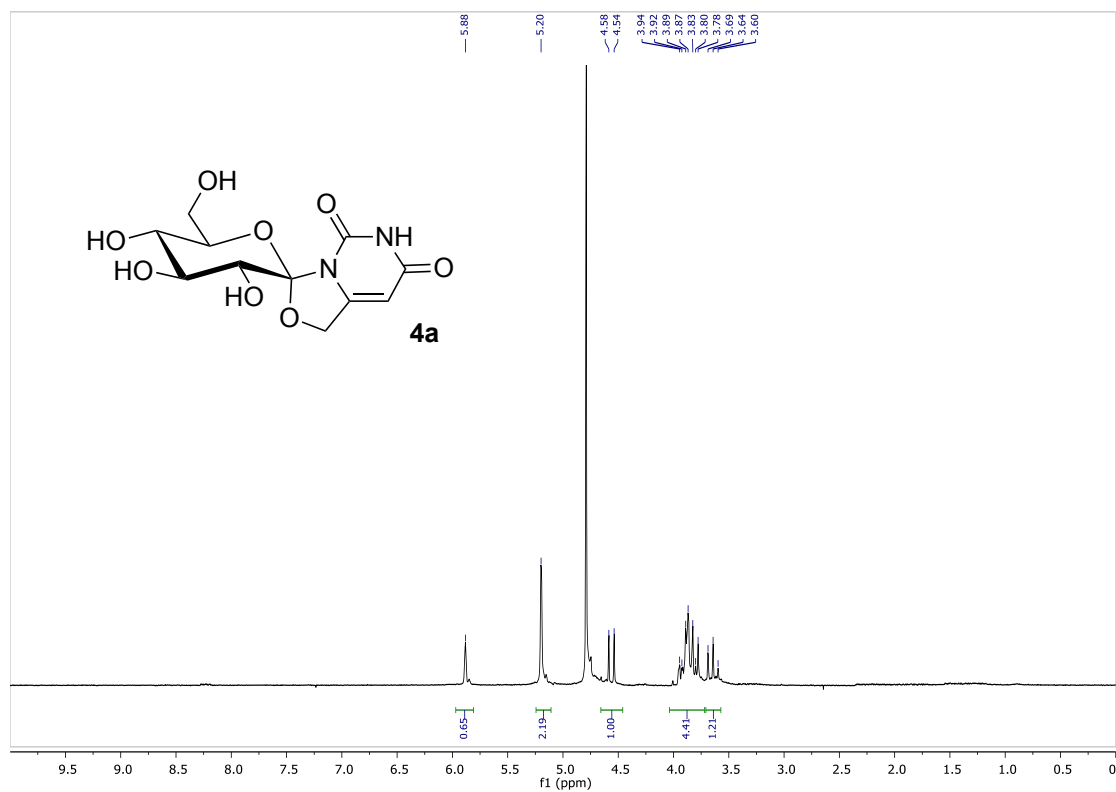


Figure S18. ^{13}C NMR spectrum of compound **4a** (50 MHz, CDCl_3).

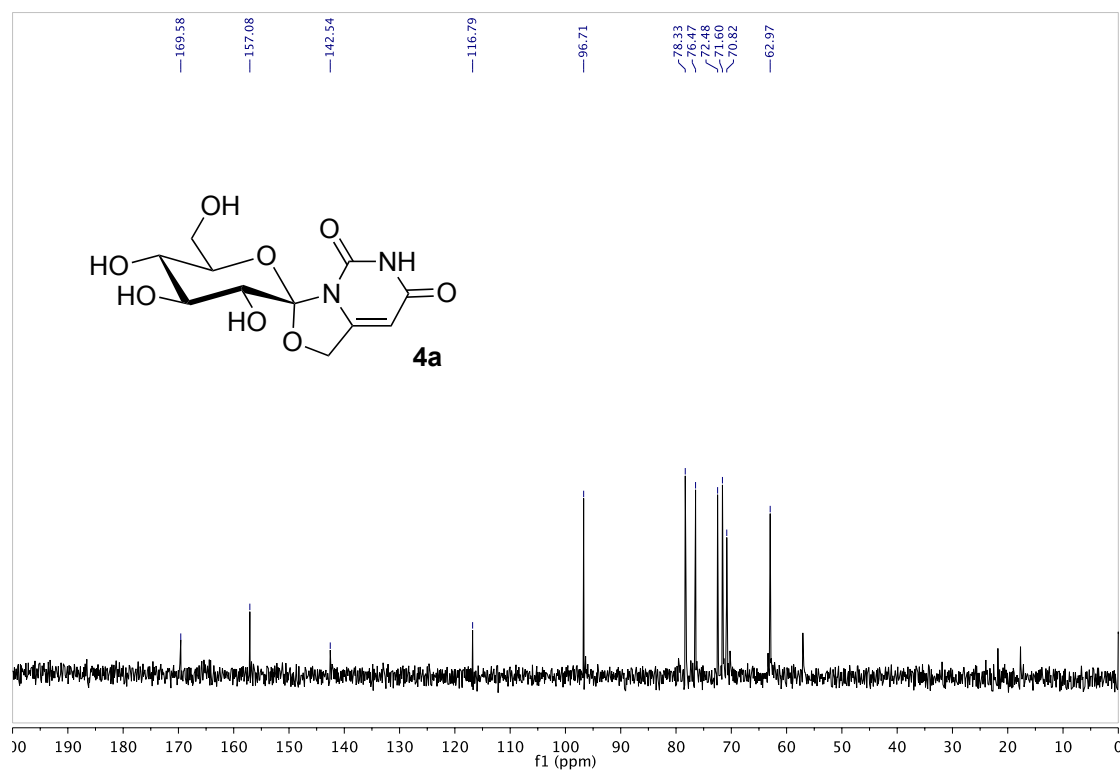


Figure S19. ^1H NMR spectrum of compound **4b** (200 MHz, D_2O).

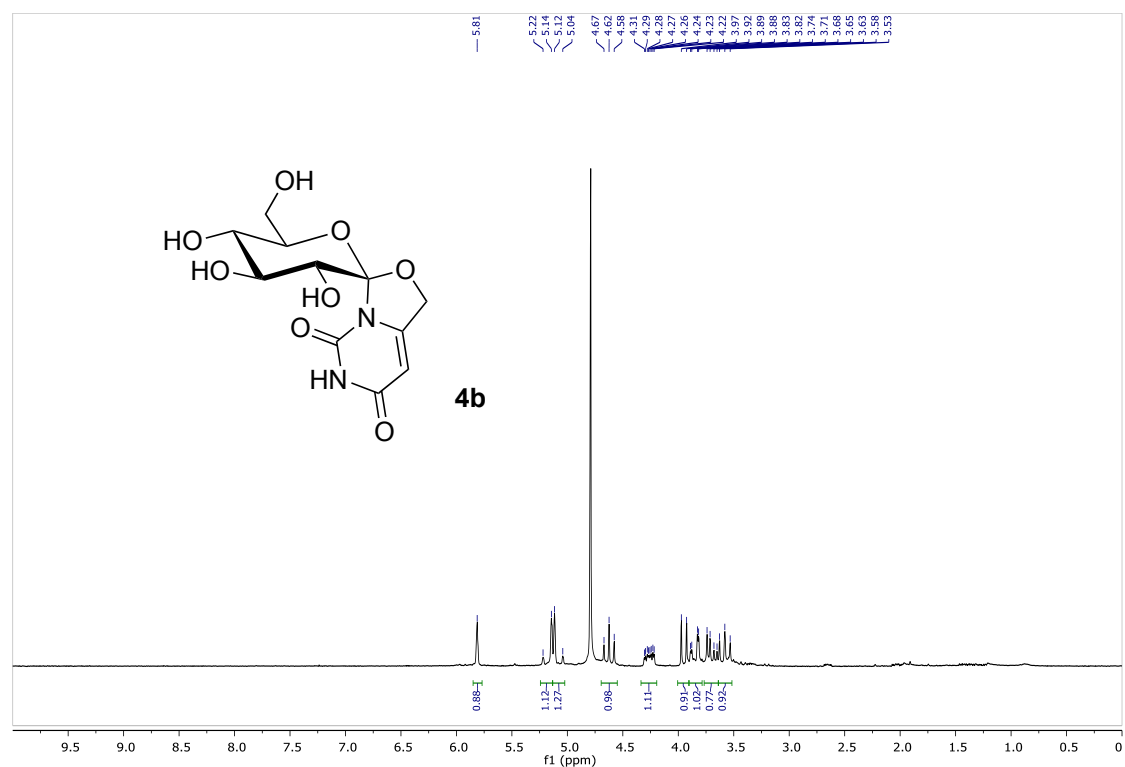
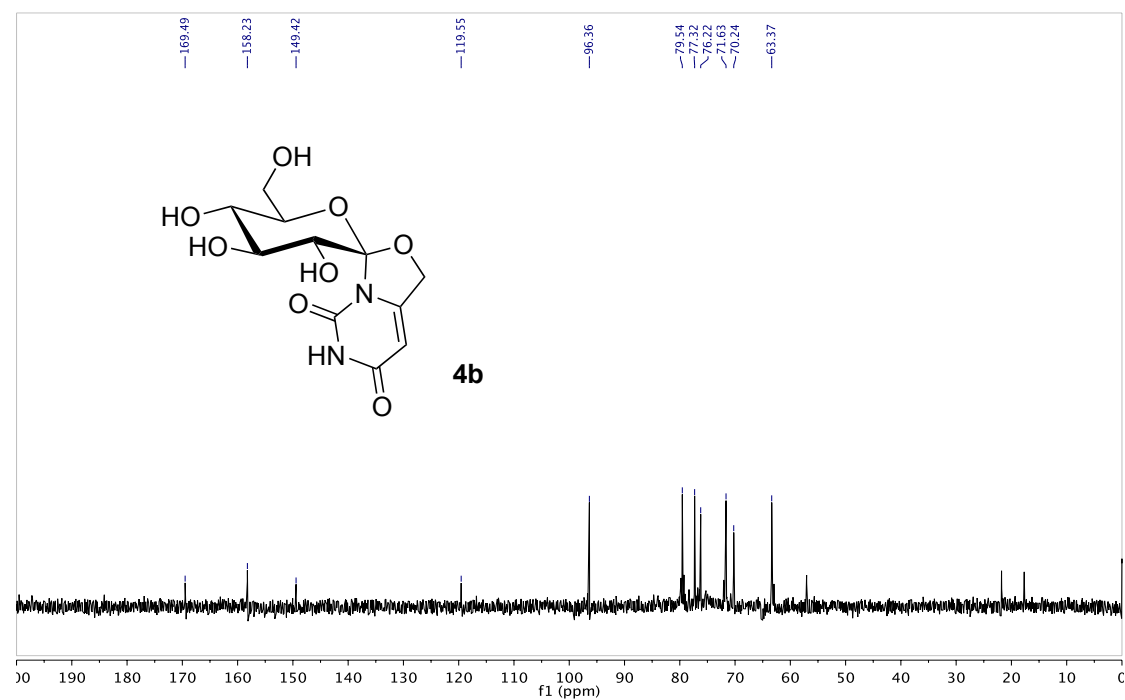
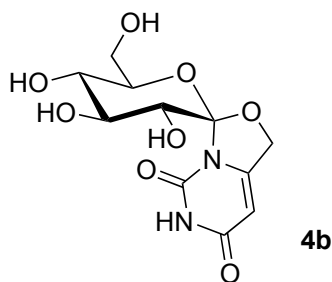


Figure S20. ^{13}C NMR spectrum of compound **4b** (50 MHz, D_2O).



2. Enzyme Kinetics



RMGPb = 5 γ /ml

G1p = 2 mM

AMP = 1 mM

Gly = 0.2%

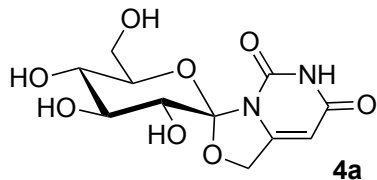
Buffer =

β -glycerophosphate:mercaptoethanol:EDTA
0.5 : 0.5 : 0.01

Km = 3 mM

Table S1. Inhibition vs **4b** concentration.

[4b] (μ M)	% Inhibition
200	6.9
400	19.7
600	25.0
1000	35.0



RMGPb = 5 γ /ml

G1p = 2 mM

AMP = 1 mM

Gly = 0.2%

Buffer =

β -glycerophosphate:mercaptoethanol:EDTA
0.5 : 0.5 : 0.01

Km = 3 mM

Table S2. Inhibition vs **4a** concentration.

[4a] (μ M)	% Inhibition
200	1.7
400	9.4
600	18.3
1000	25.8