

Supplementary Material

Preparation of pyridine-stretched 2'-deoxyhypoxanthosine phosphoramidite

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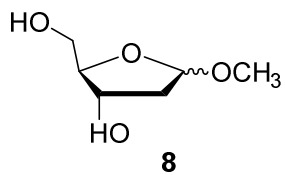
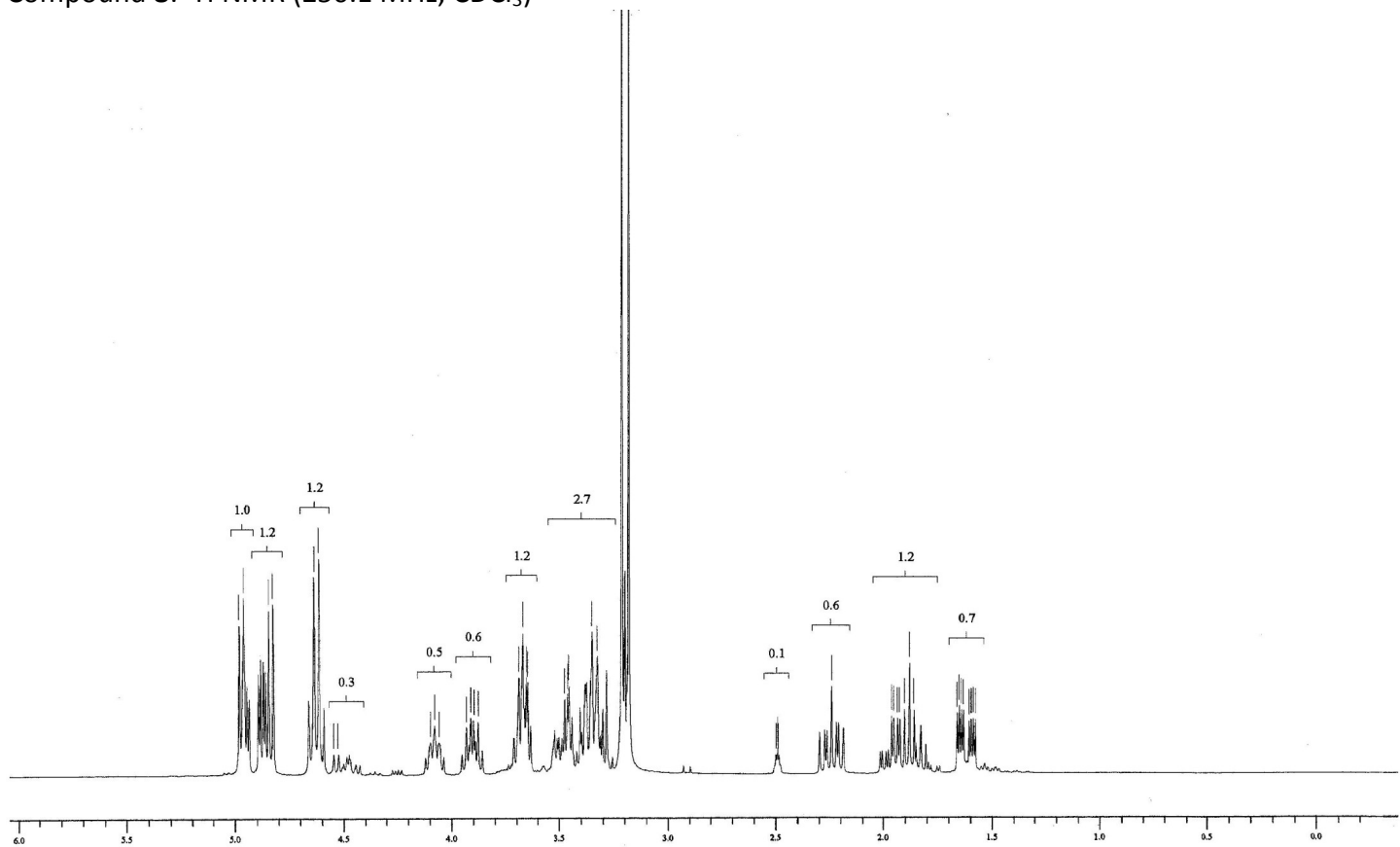
Email: w.fraser@aston.ac.uk, c.a.ramsden@keele.ac.uk

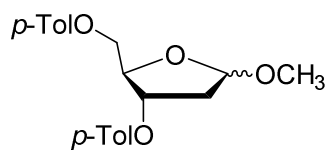
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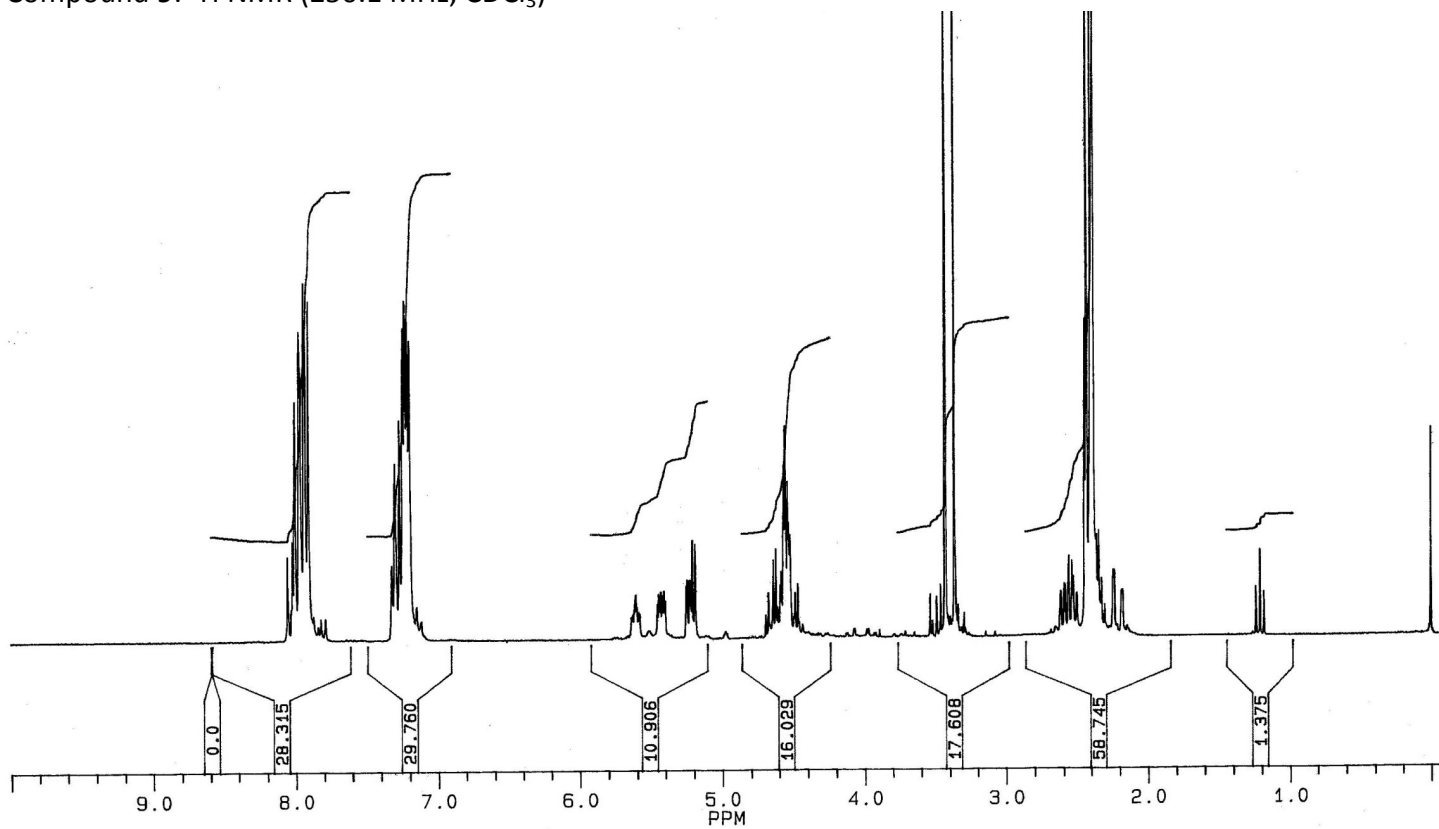
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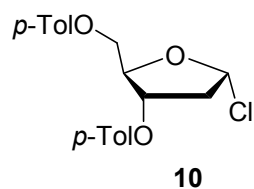
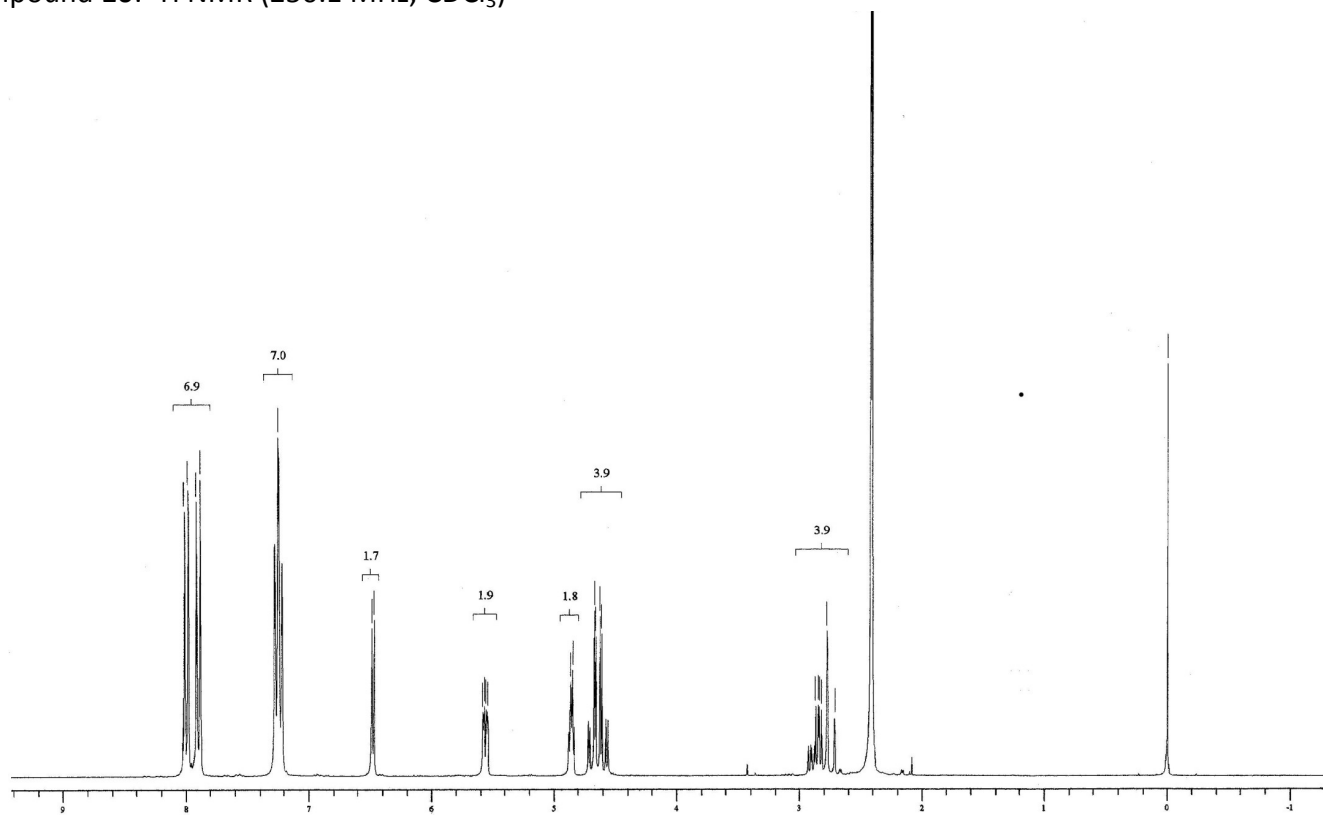
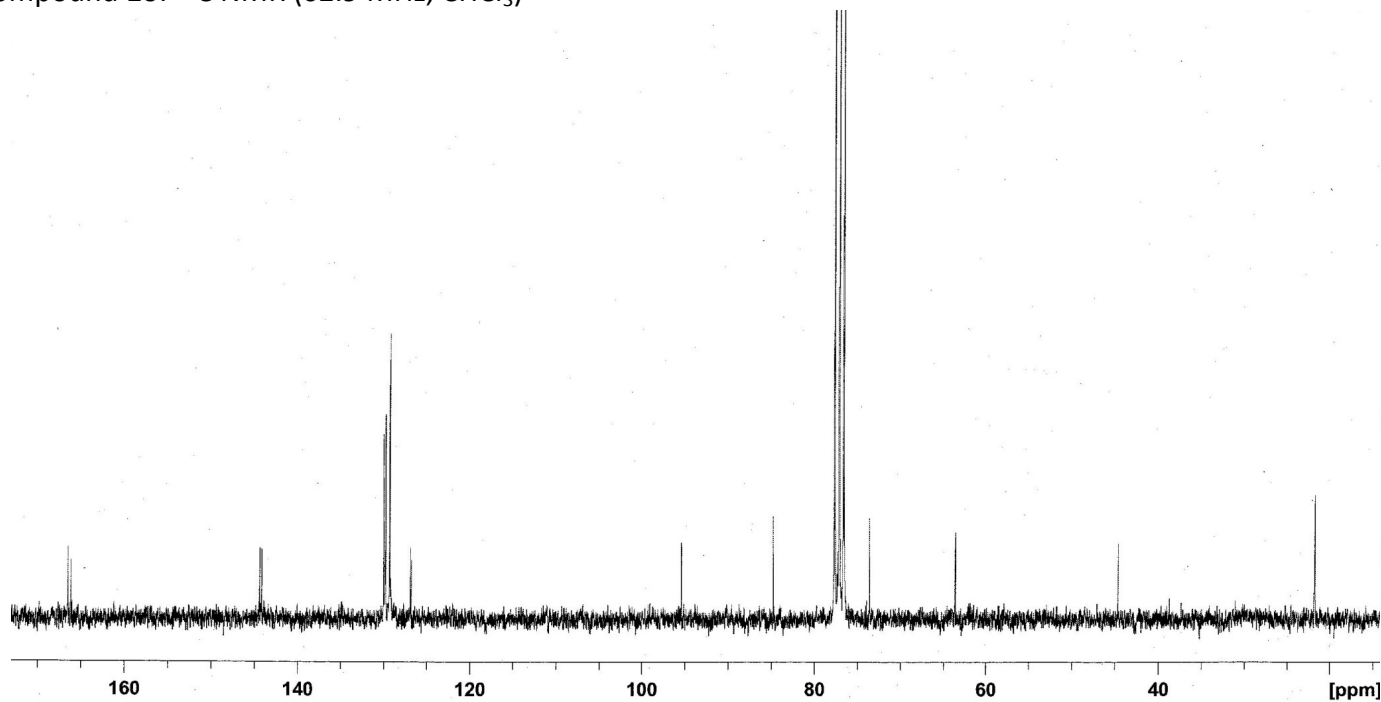
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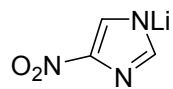
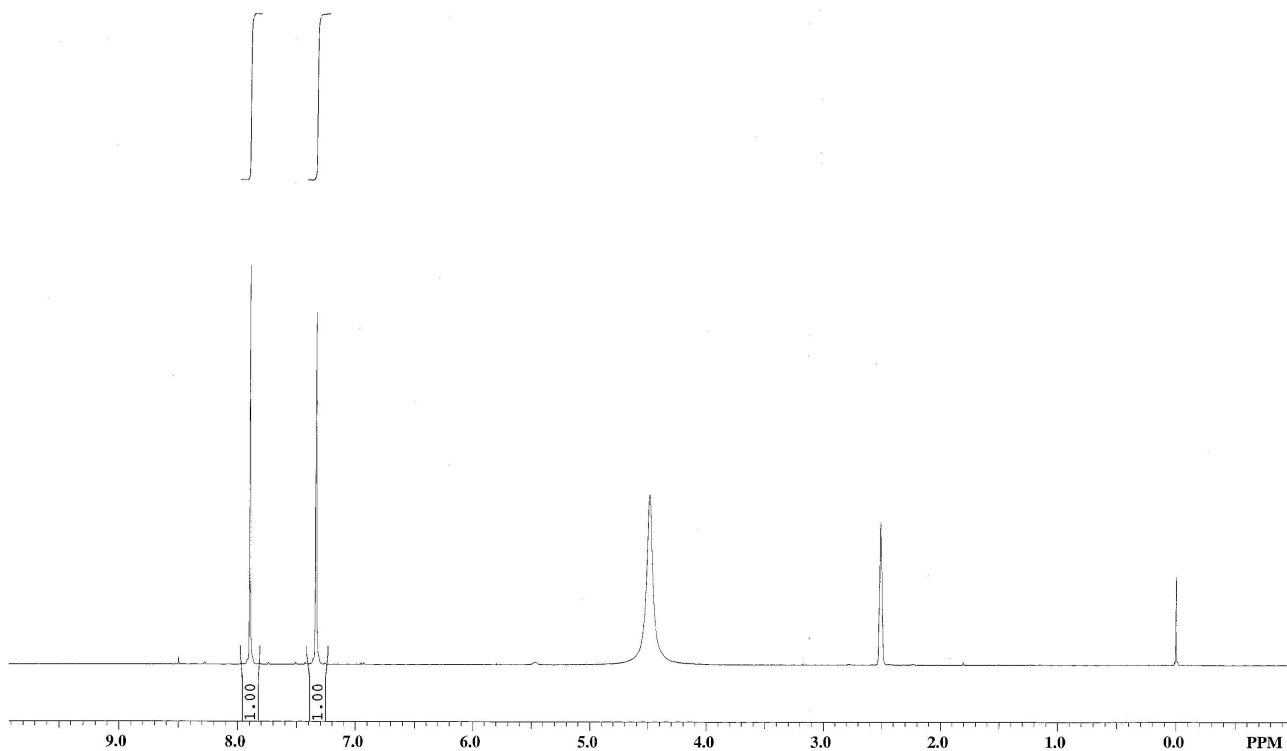
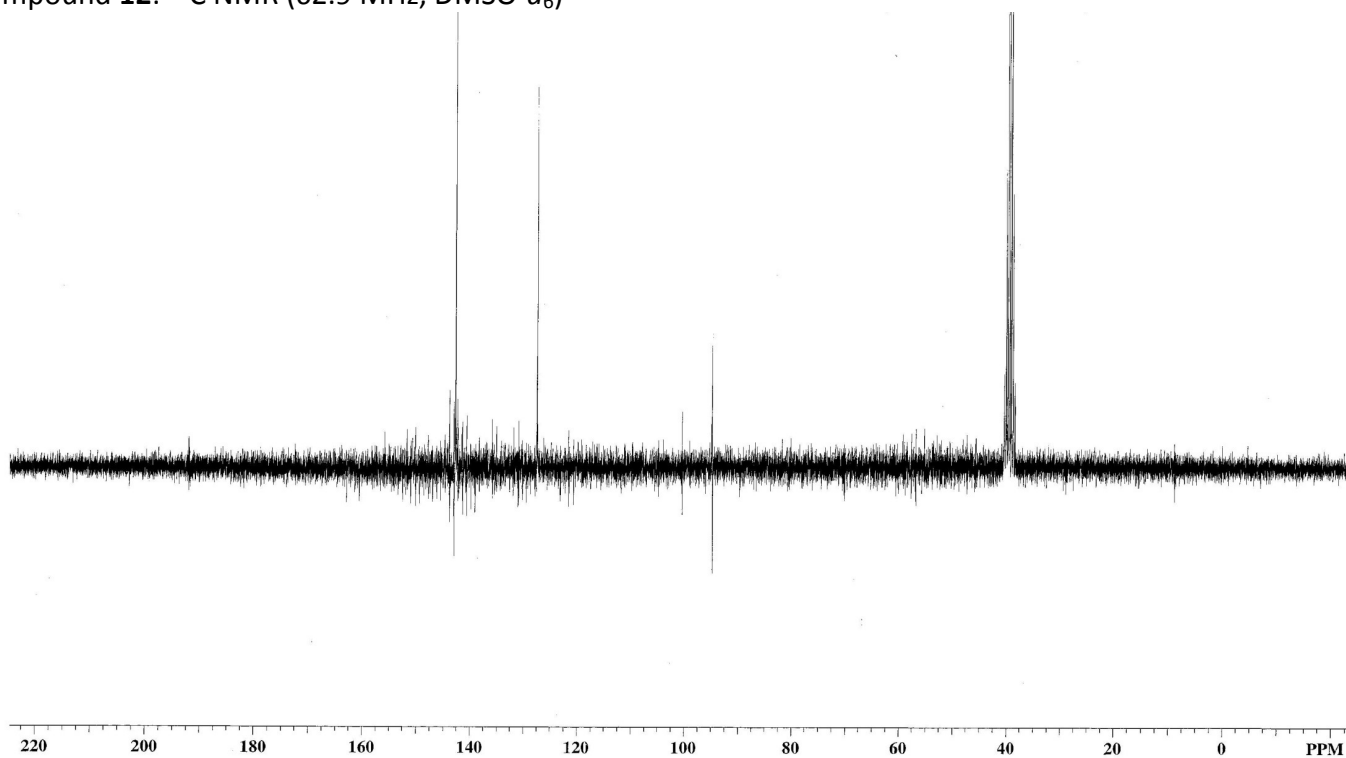
Compound **8**: ^1H NMR (250.1 MHz, CDCl_3)



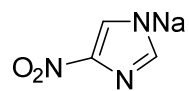
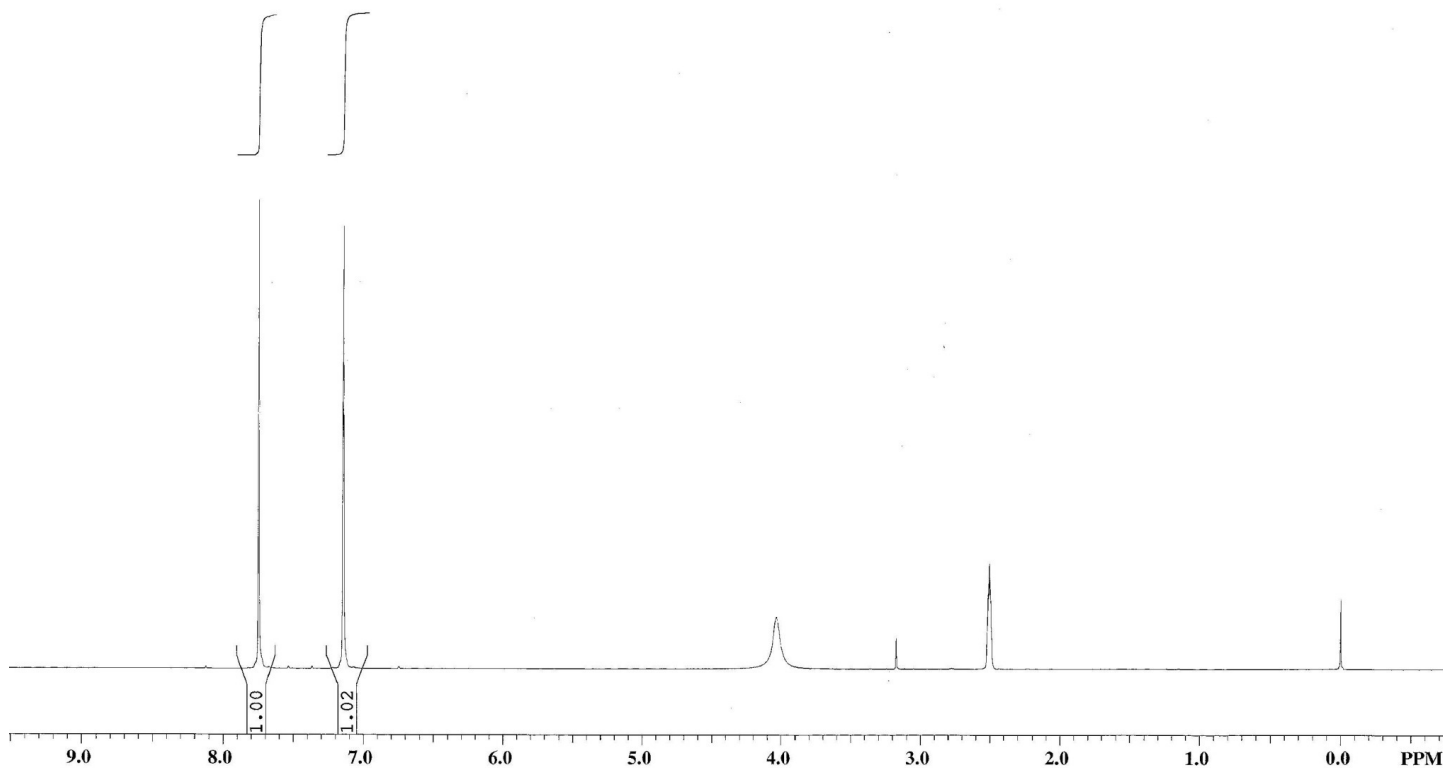
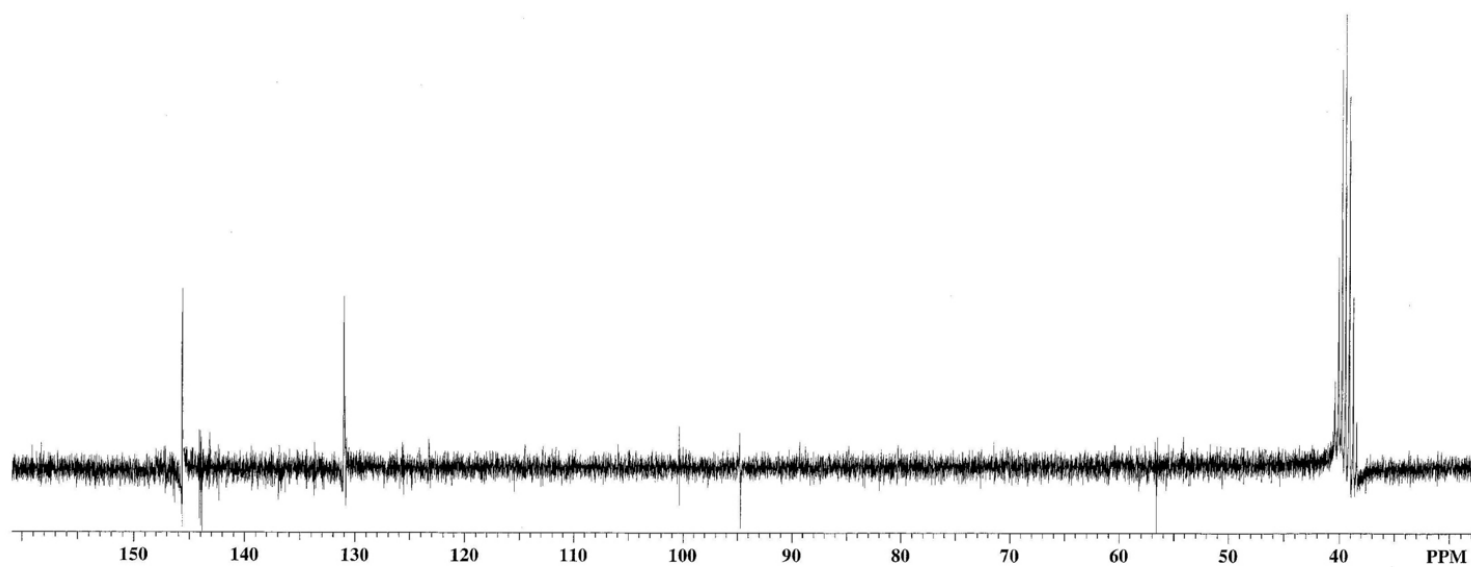
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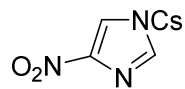
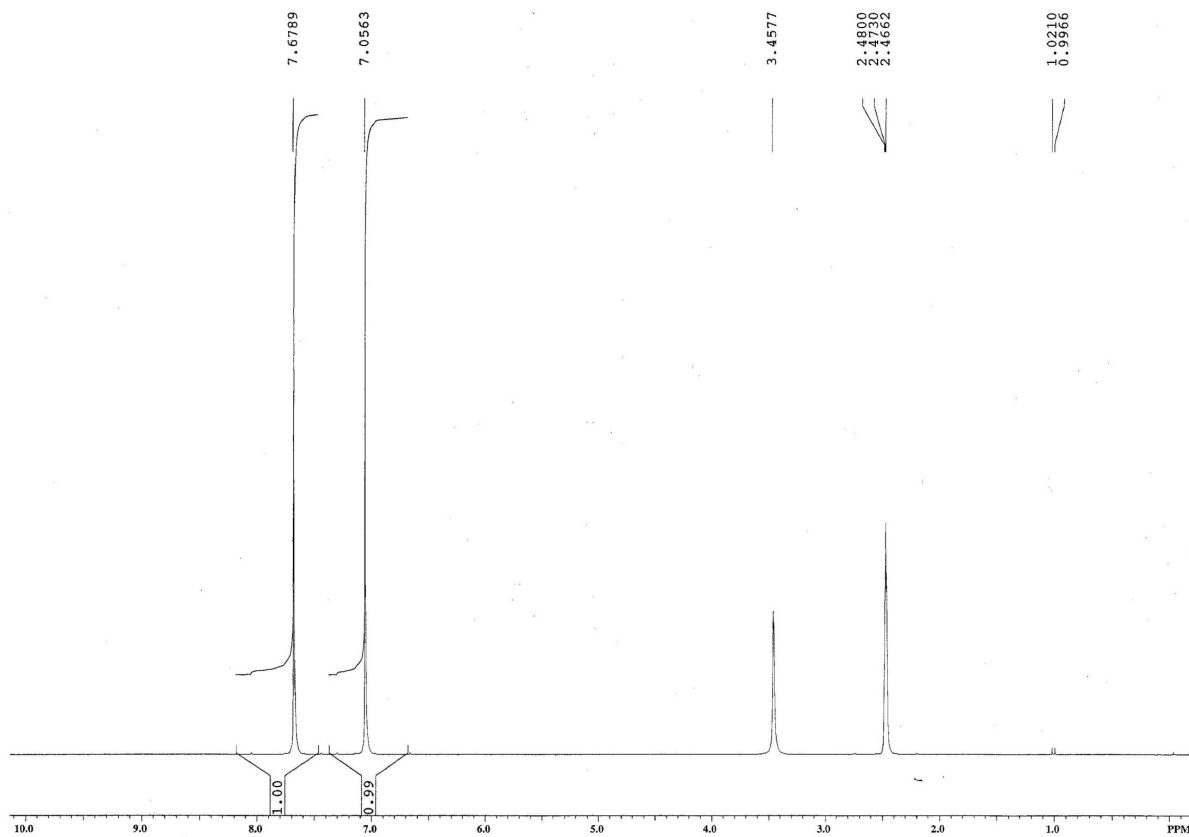
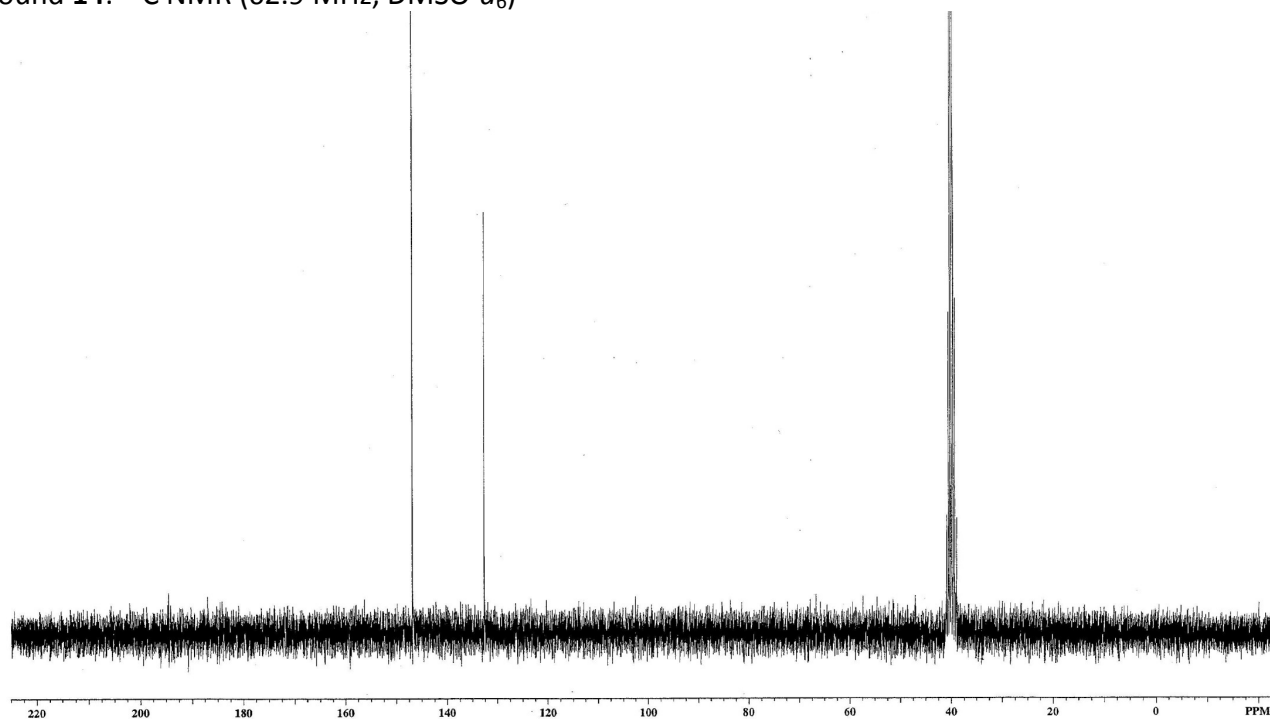
Compound 9: ^1H NMR (250.1 MHz, CDCl_3)

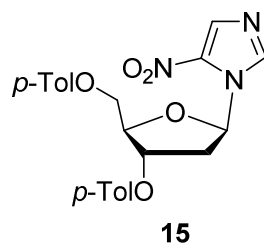
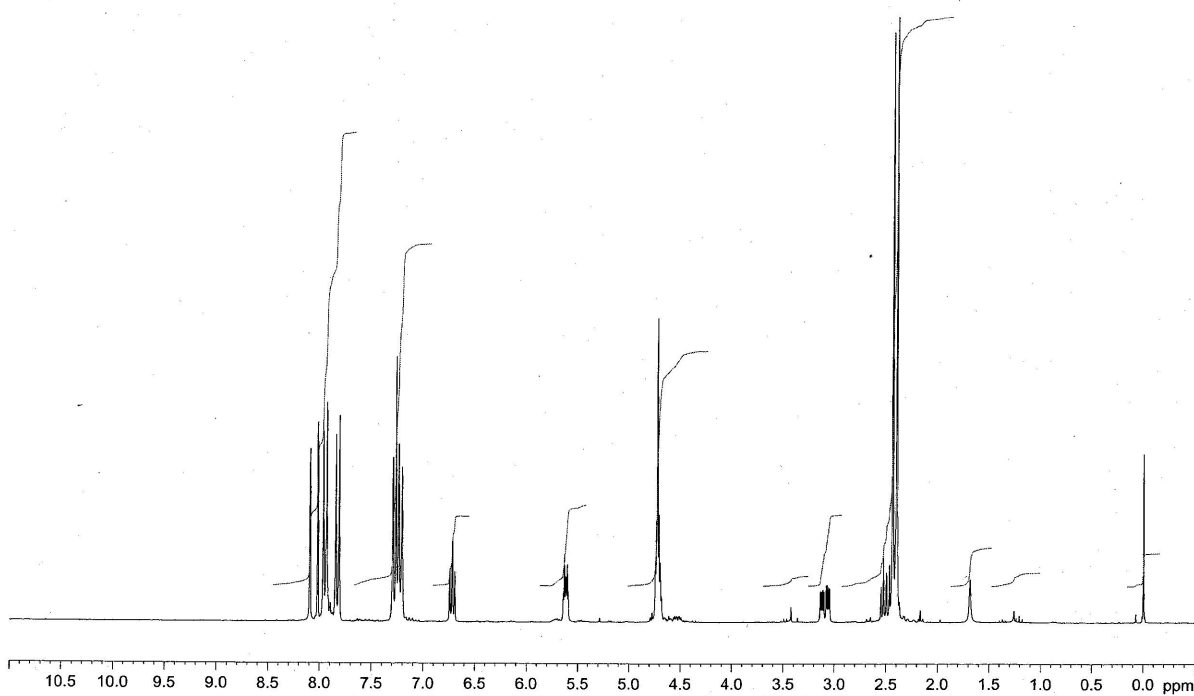
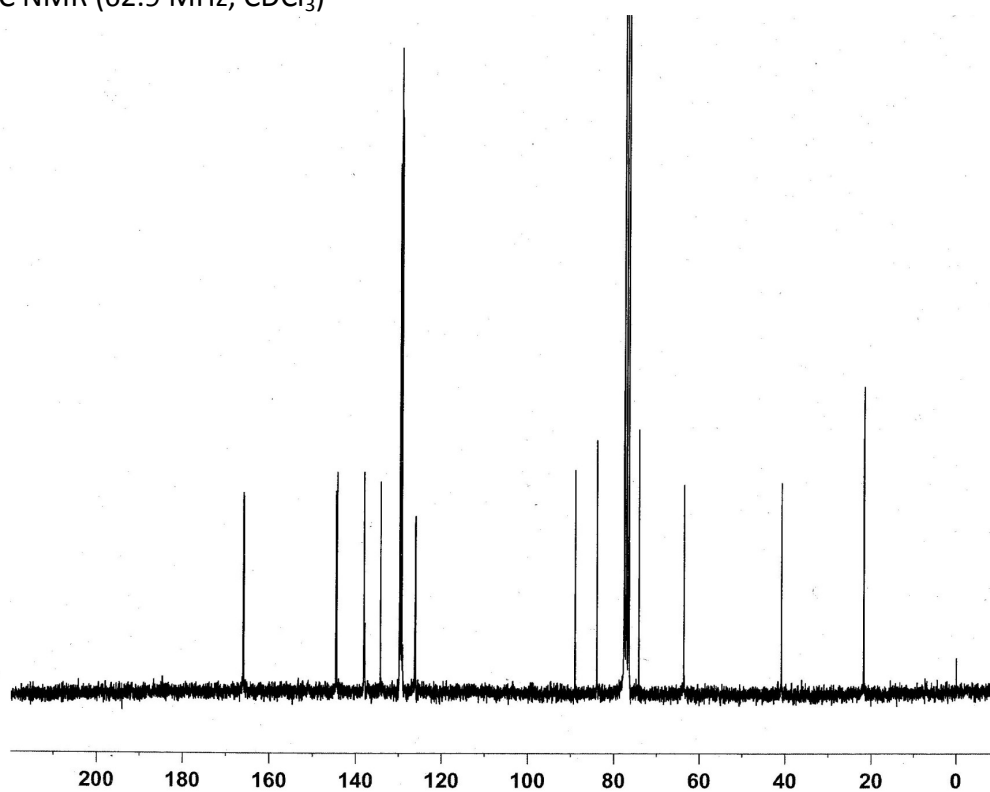
Compound **10**: ^1H NMR (250.1 MHz, CDCl_3)Compound **10**: ^{13}C NMR (62.9 MHz, CHCl_3)

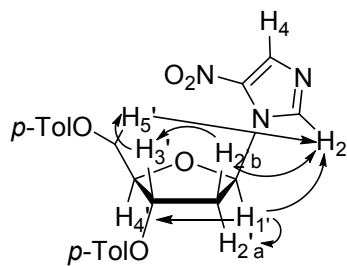
**12**Compound **12**: ^1H NMR (250.1 MHz, DMSO- d_6)Compound **12**: ^{13}C NMR (62.9 MHz, DMSO- d_6)

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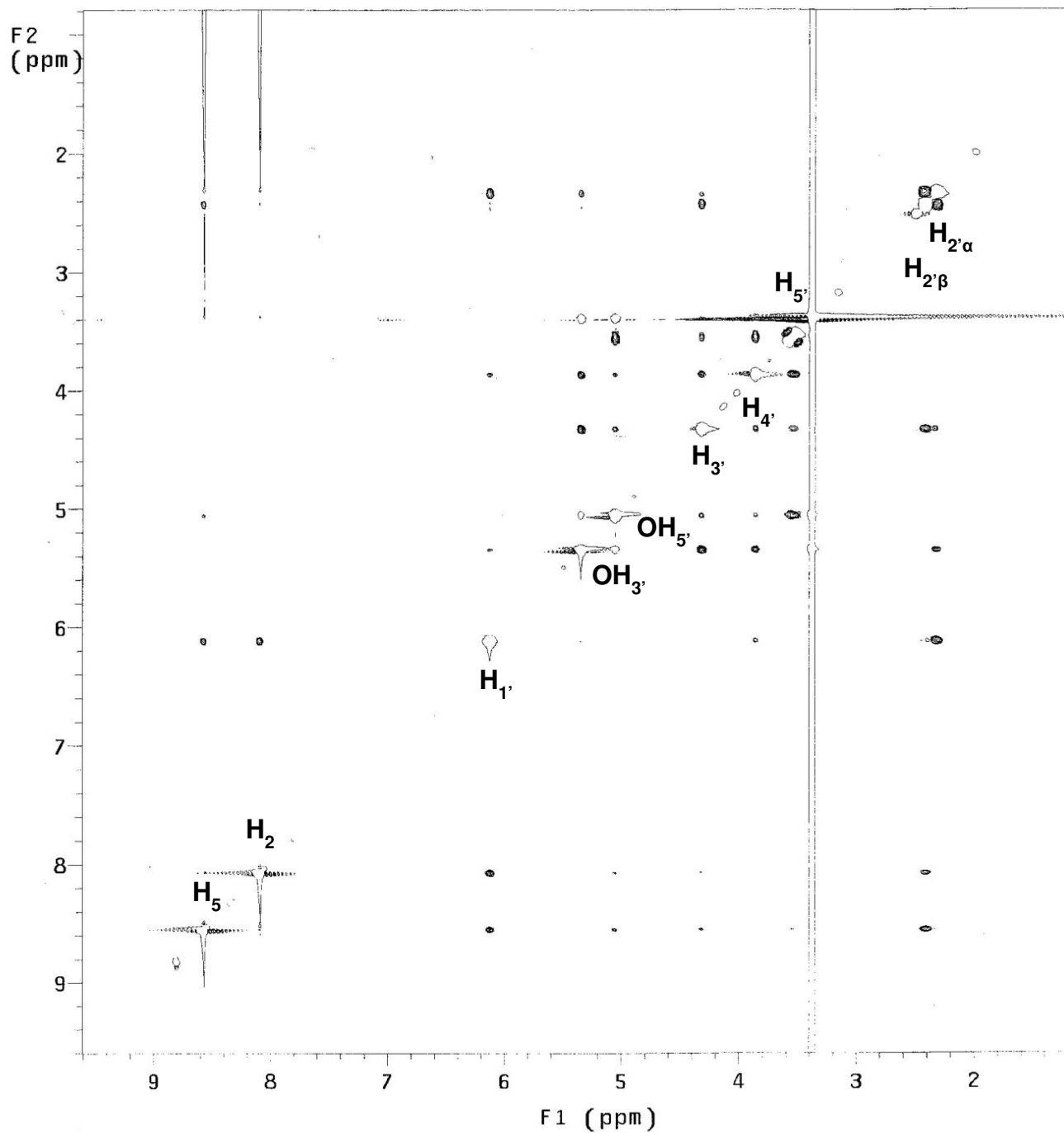
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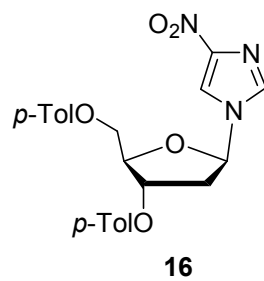
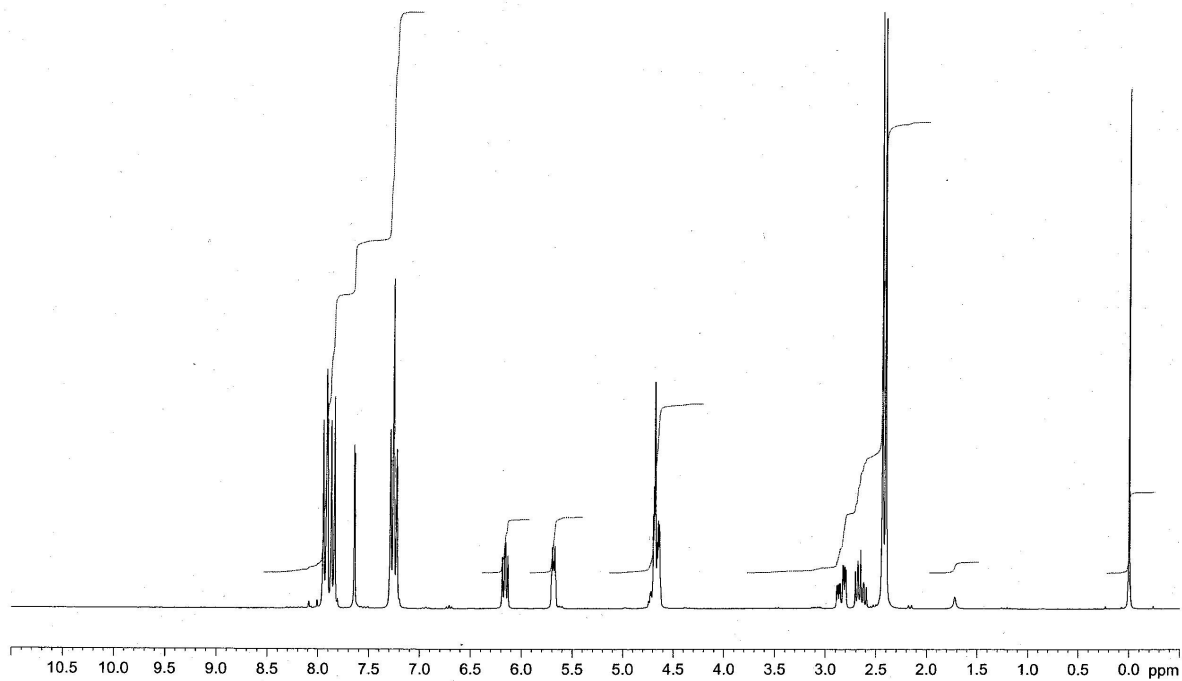
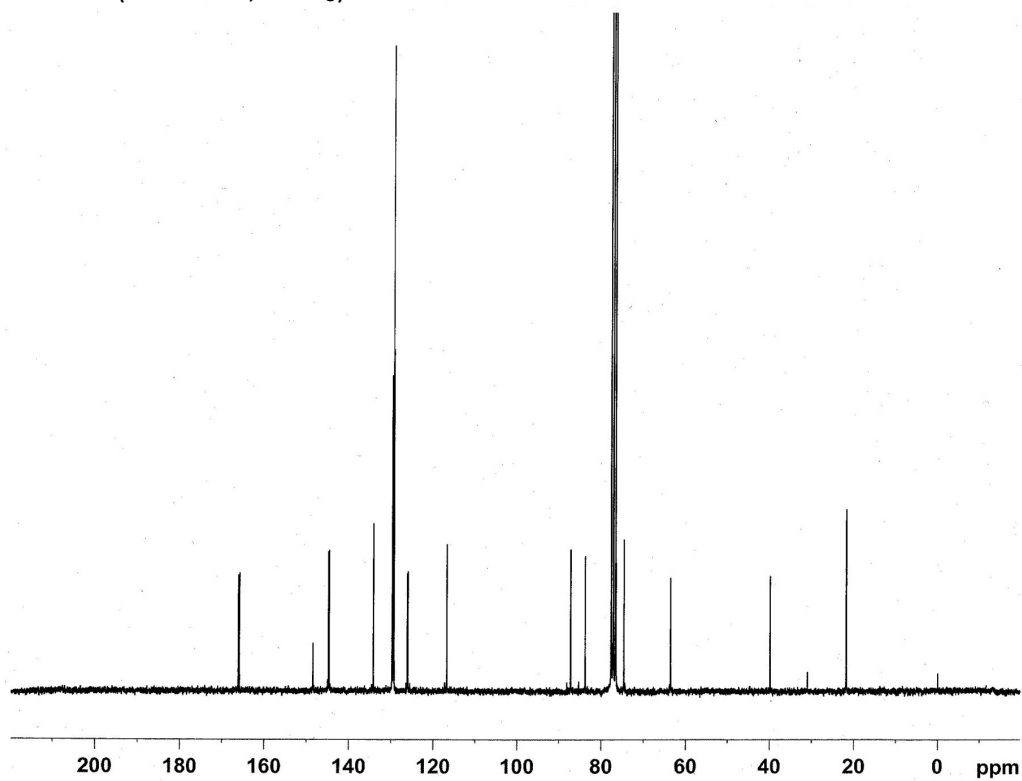
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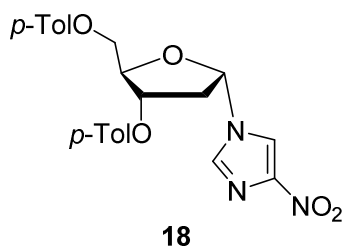
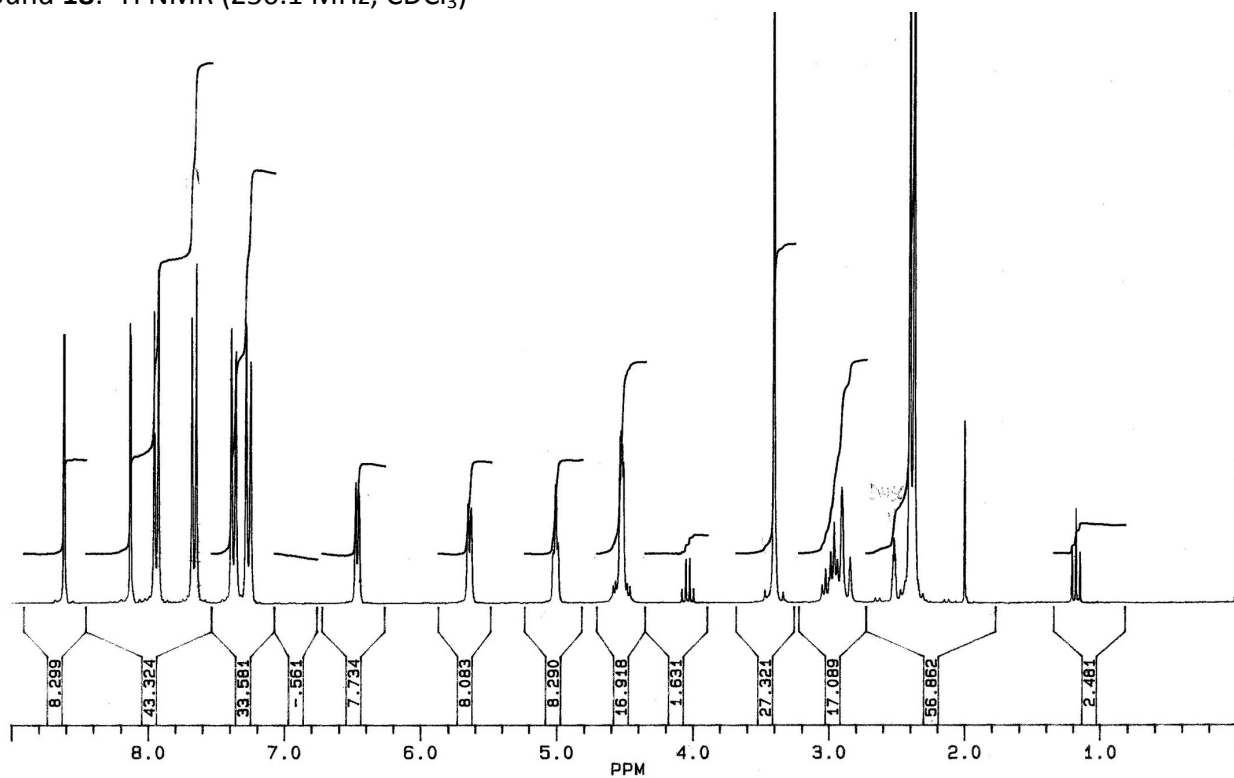
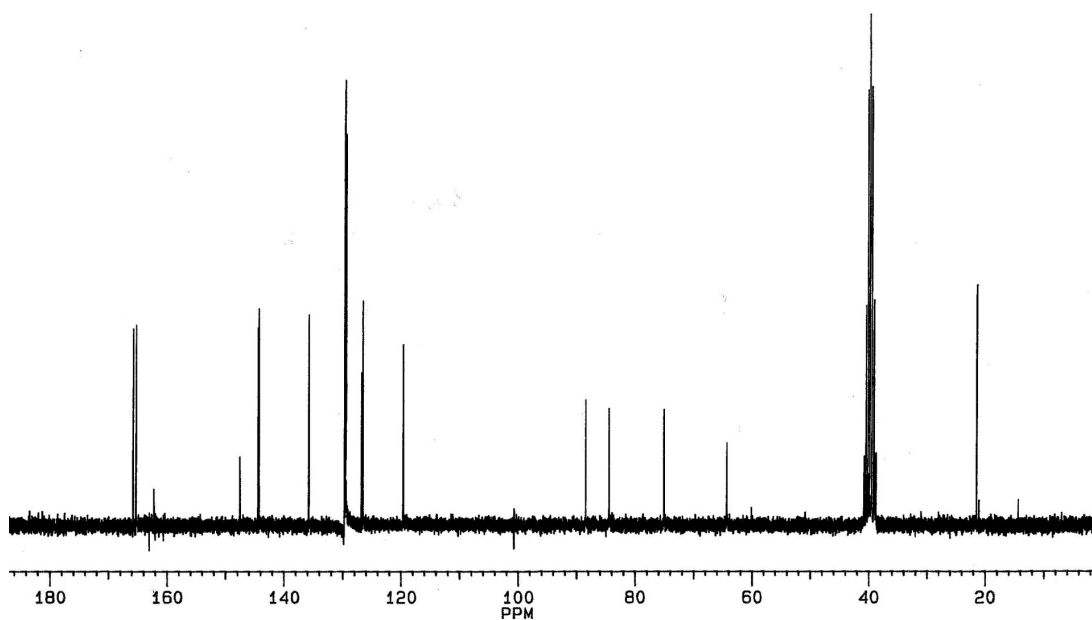
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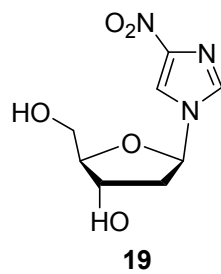
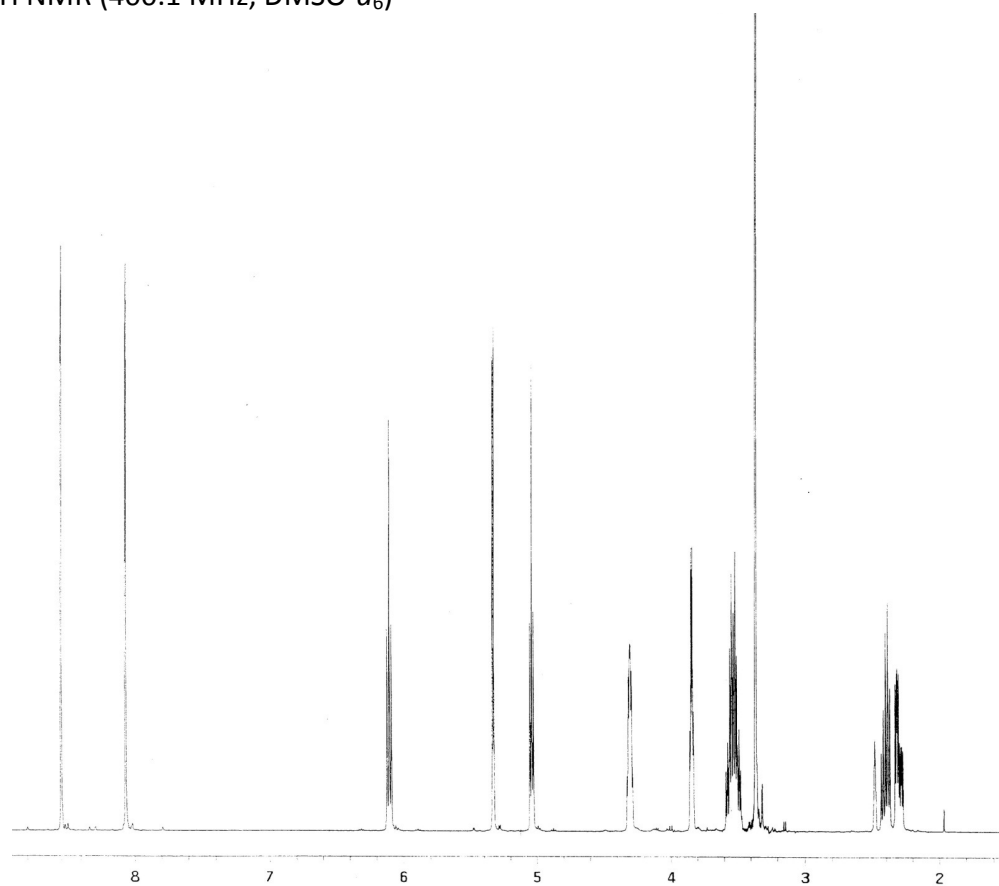
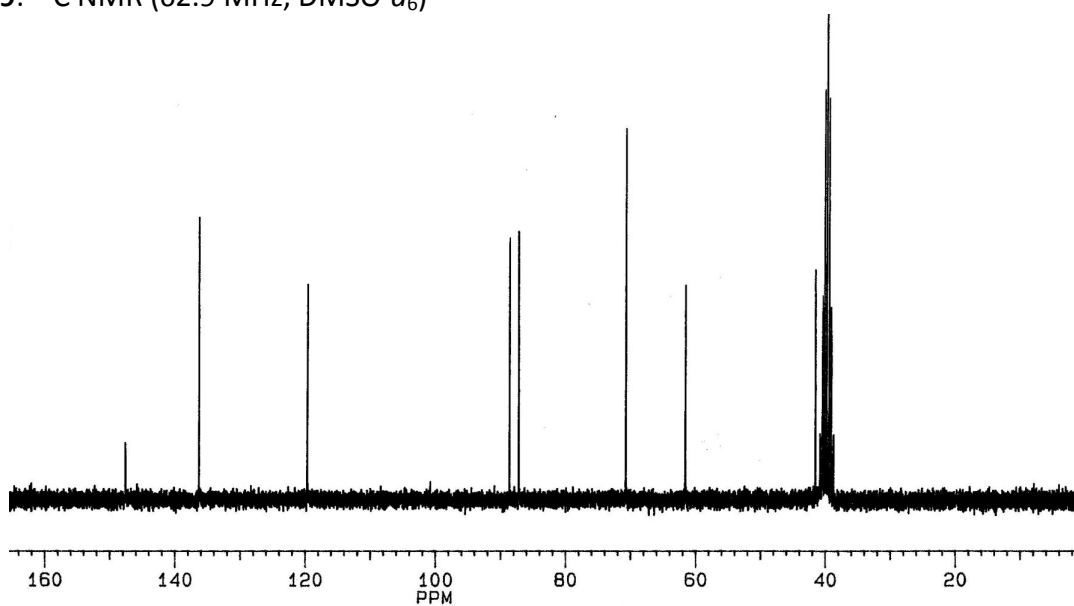


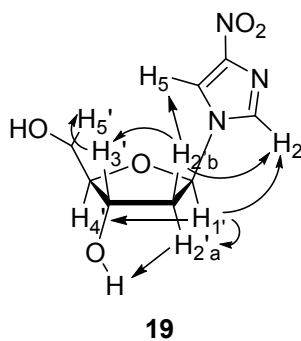
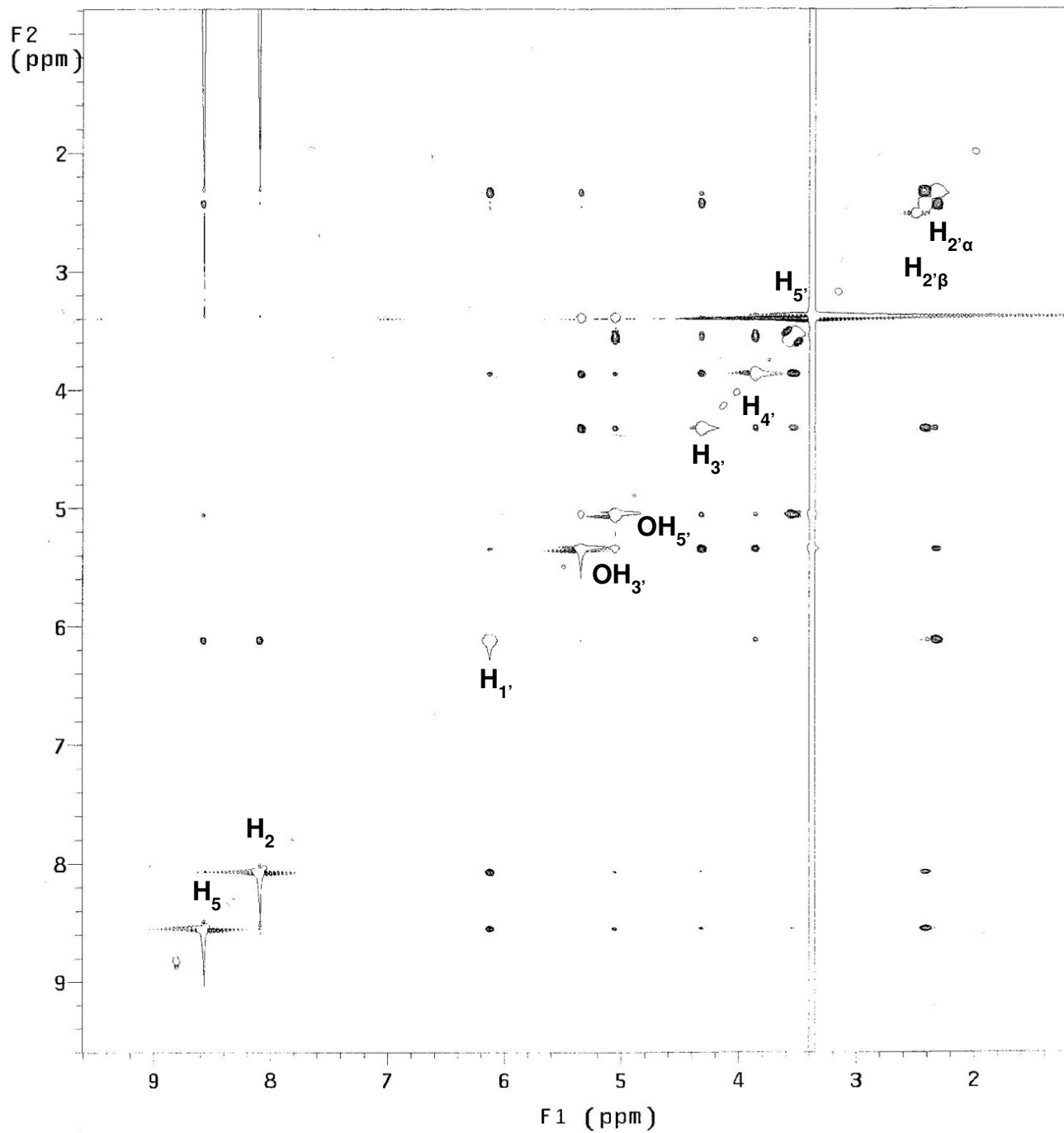
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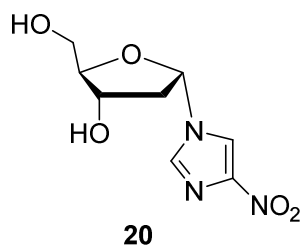
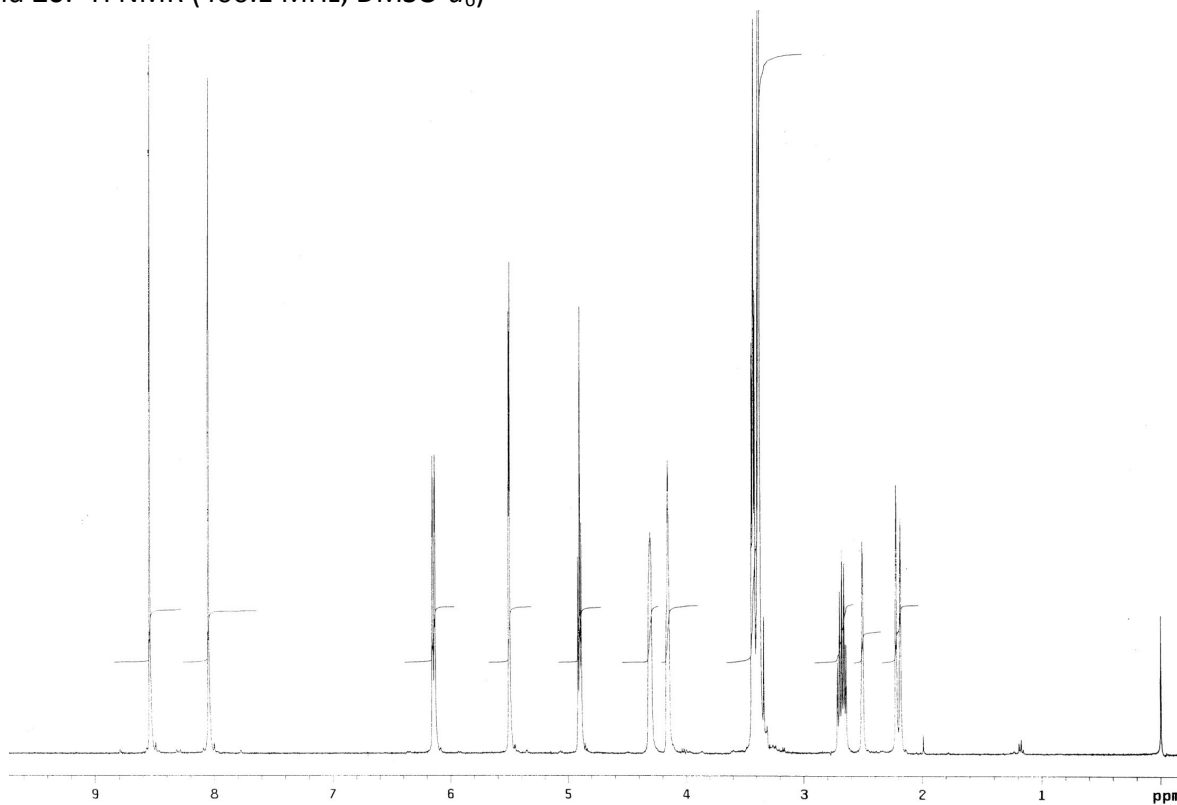
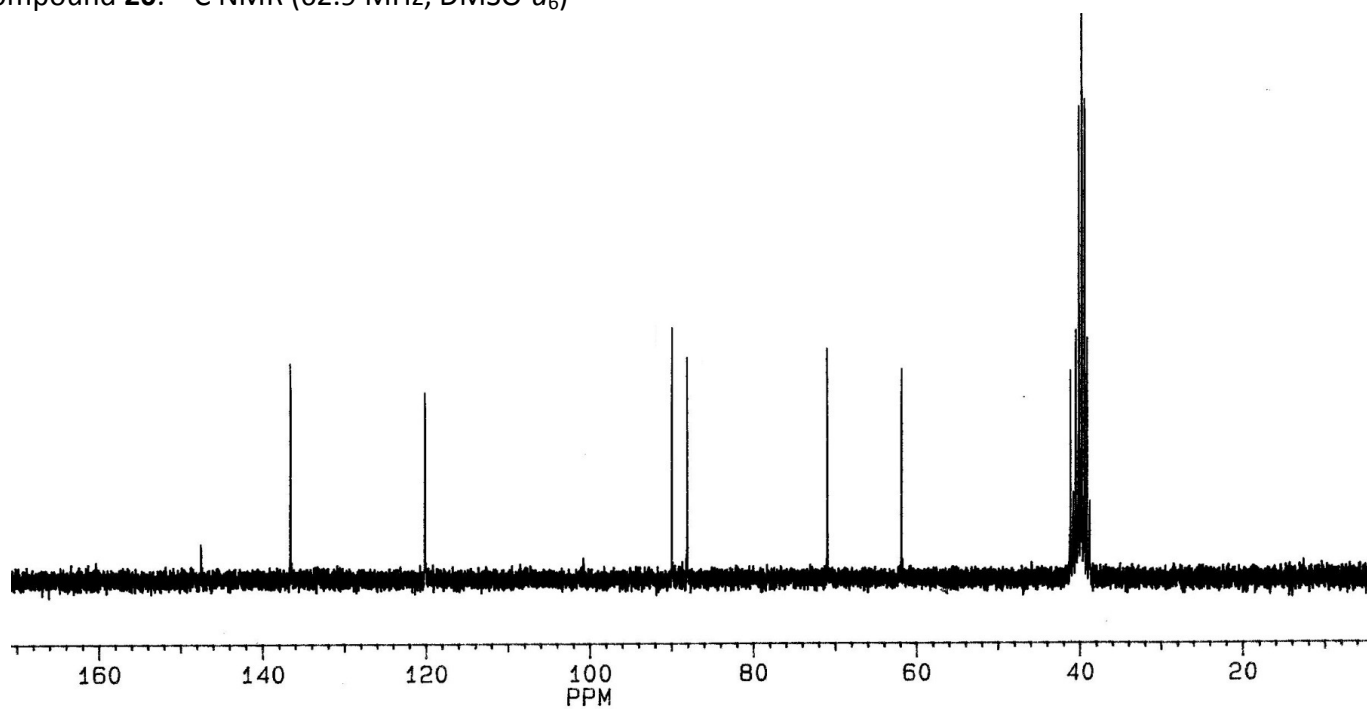
Compound 15: NOESY (400.1 MHz, CDCl₃)

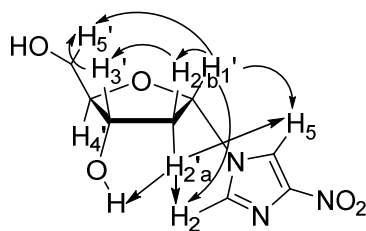
Compound **16**: ^1H NMR (250.1 MHz, CDCl_3)Compound **16**: ^{13}C NMR (62.9 MHz, CDCl_3)

Compound **18**: ^1H NMR (250.1 MHz, CDCl_3)Compound **18**: ^{13}C NMR (62.9 MHz, CDCl_3)

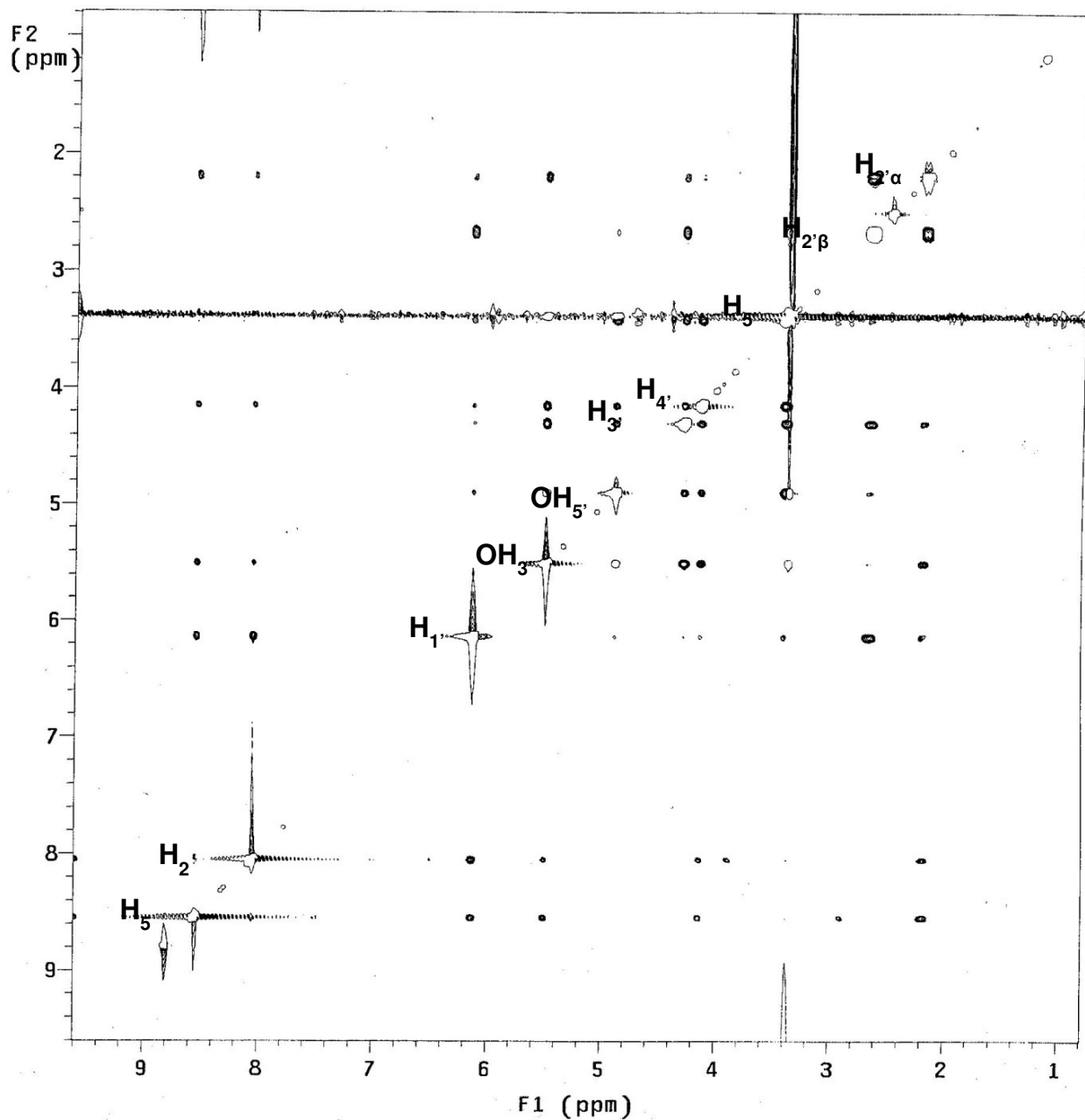
Compound 19: ^1H NMR (400.1 MHz, $\text{DMSO-}d_6$)Compound 19: ^{13}C NMR (62.9 MHz, $\text{DMSO-}d_6$)

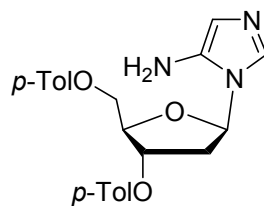
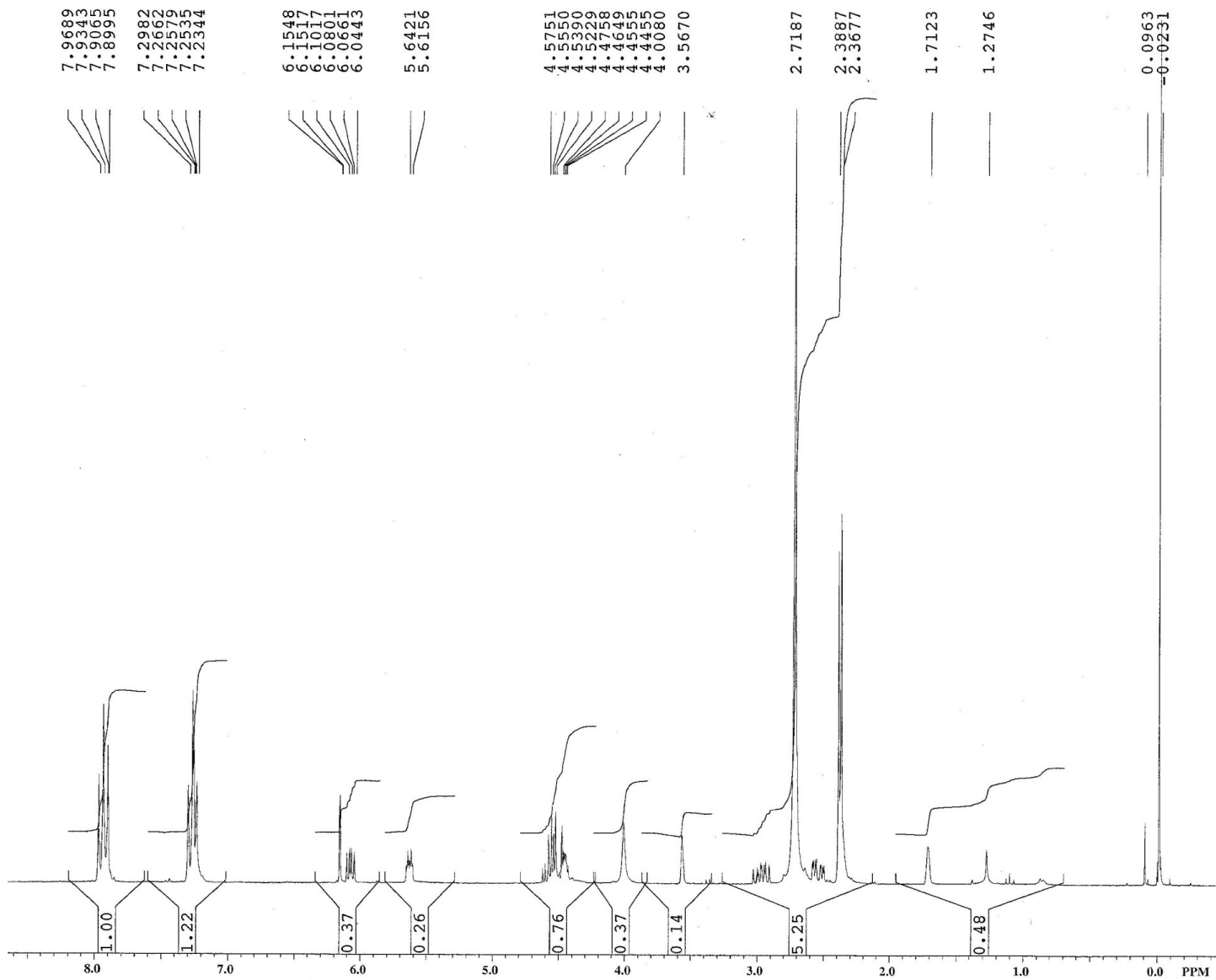
Compound **19**: NOESY (400.1 MHz, DMSO-*d*₆)

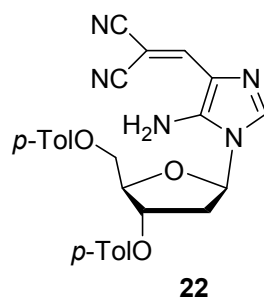
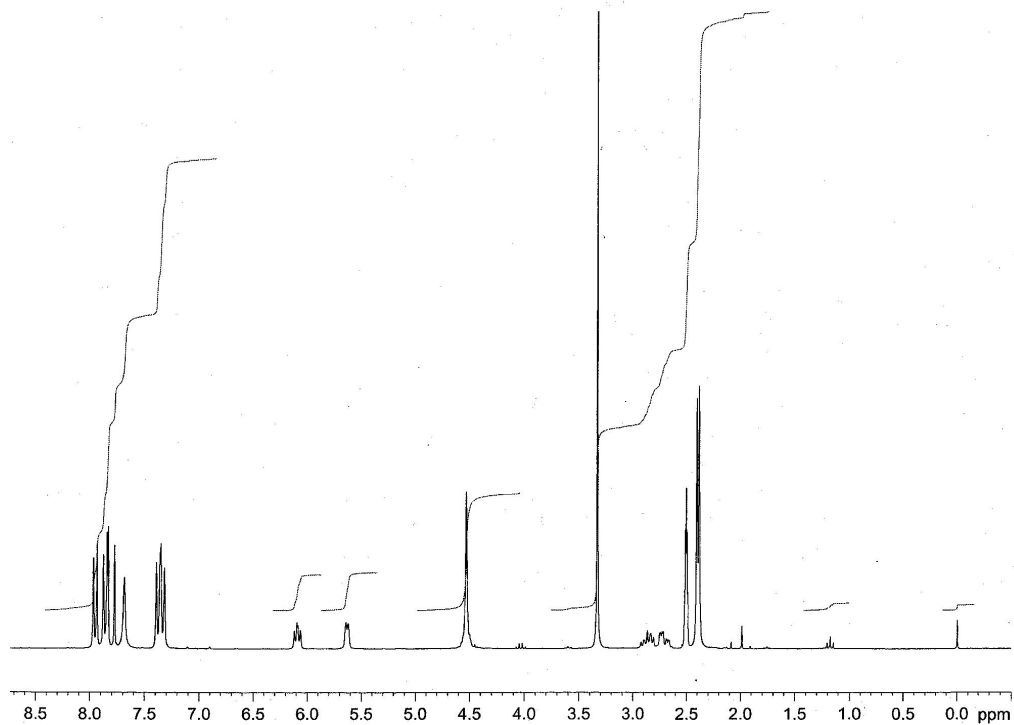
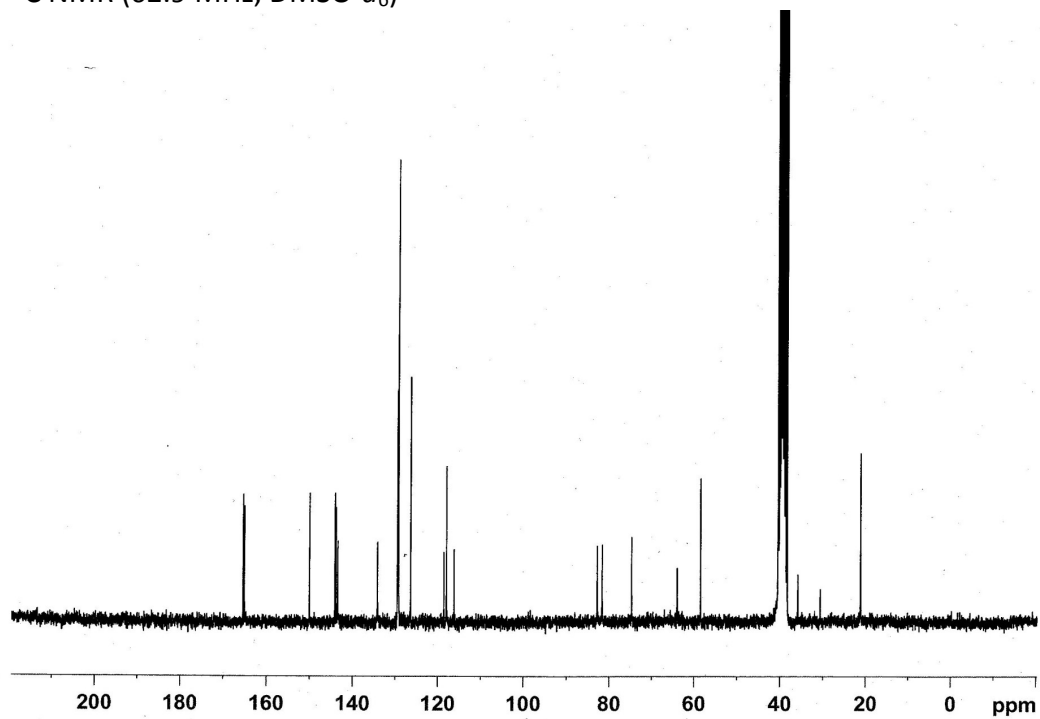
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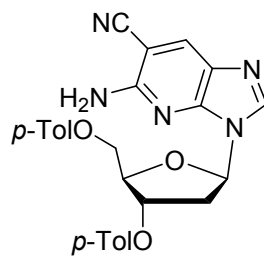
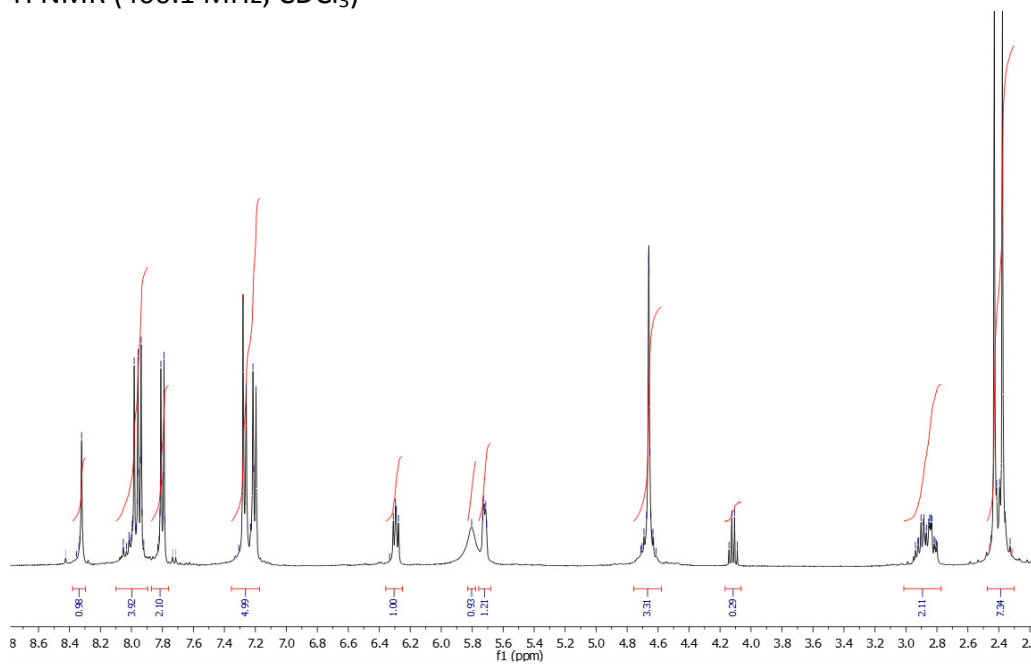
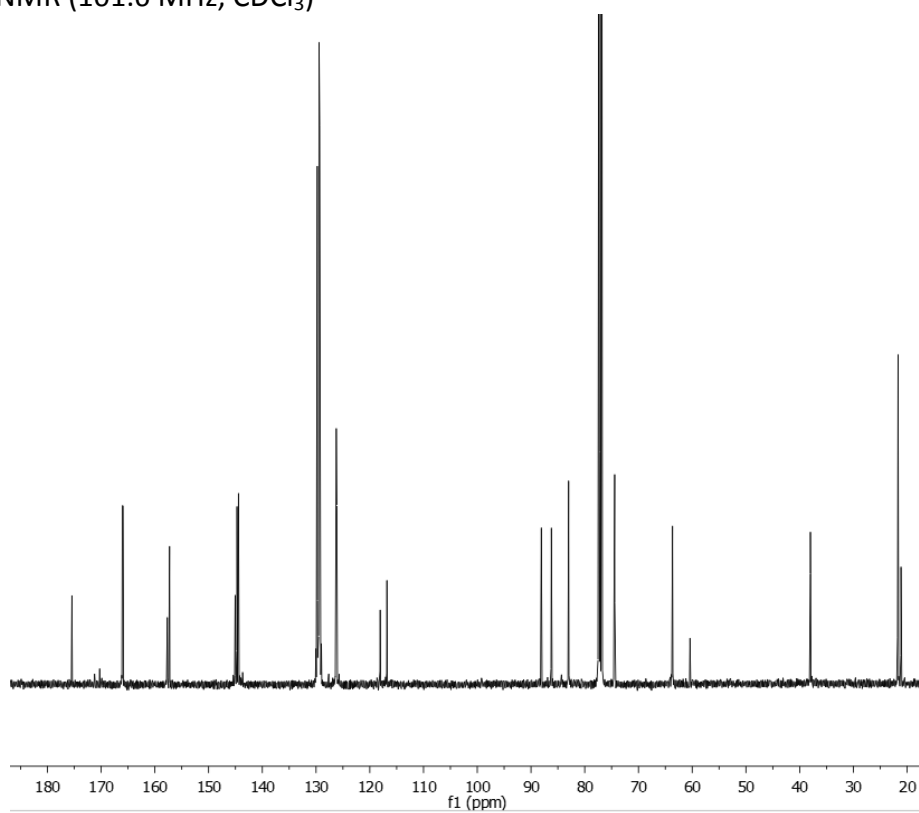


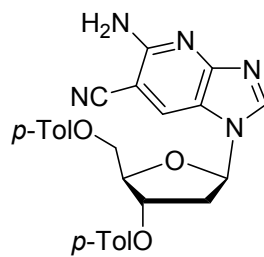
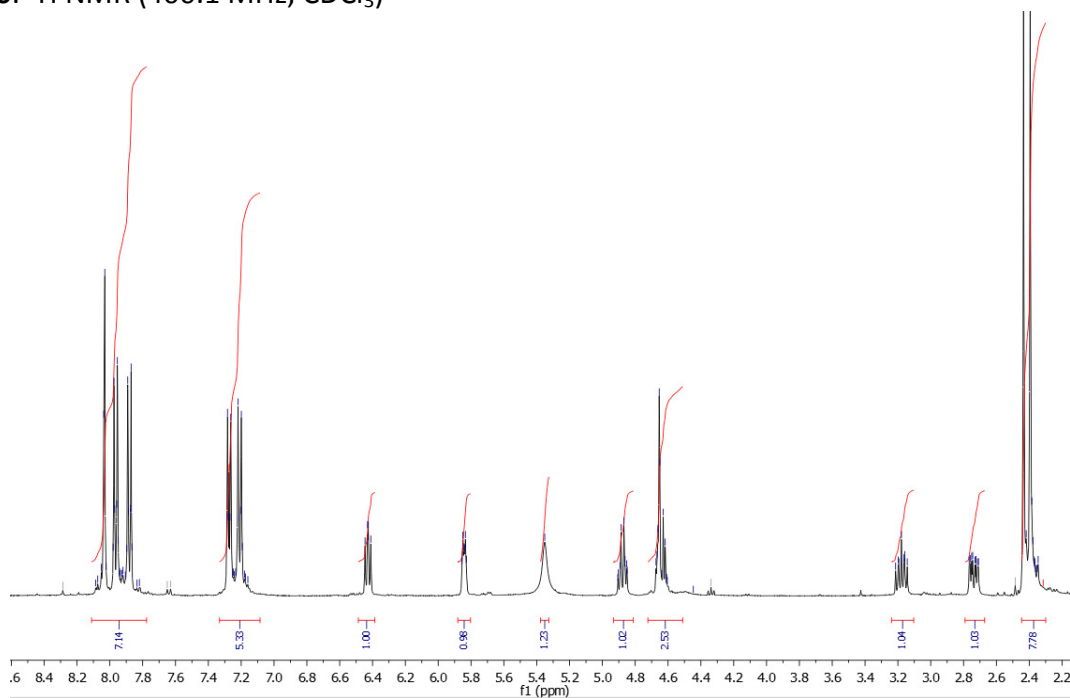
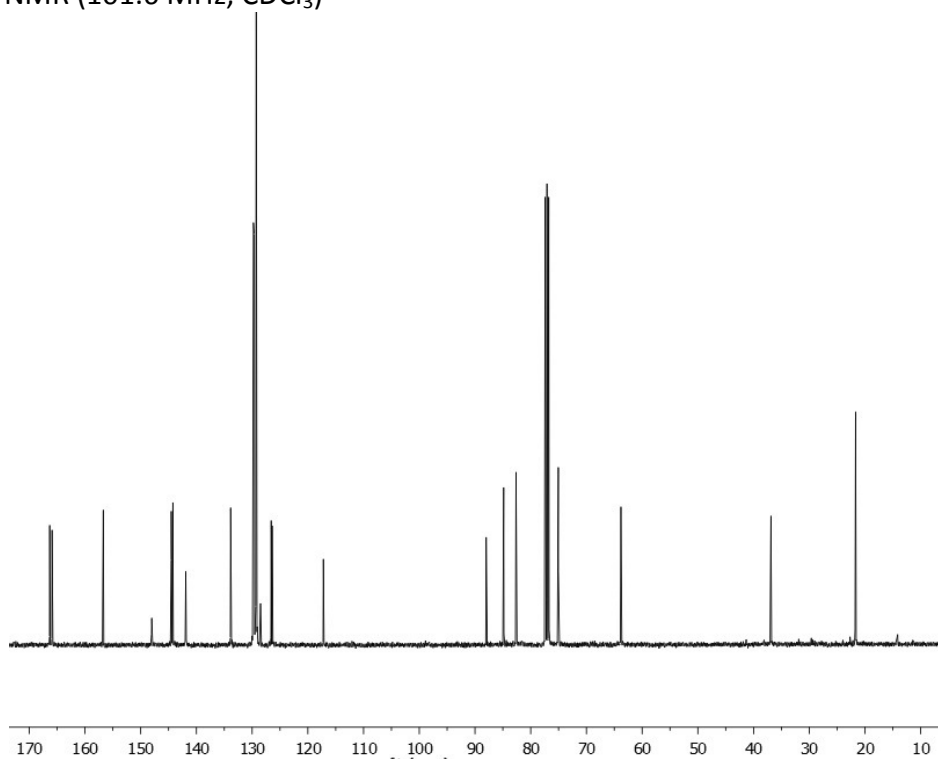
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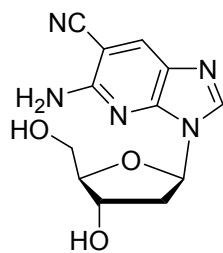
Compound 20: NOESY (400.1 MHz, DMSO- d_6)

**21**Compound **21**: ^1H NMR (250.1 MHz, $\text{THF-}d_8$)

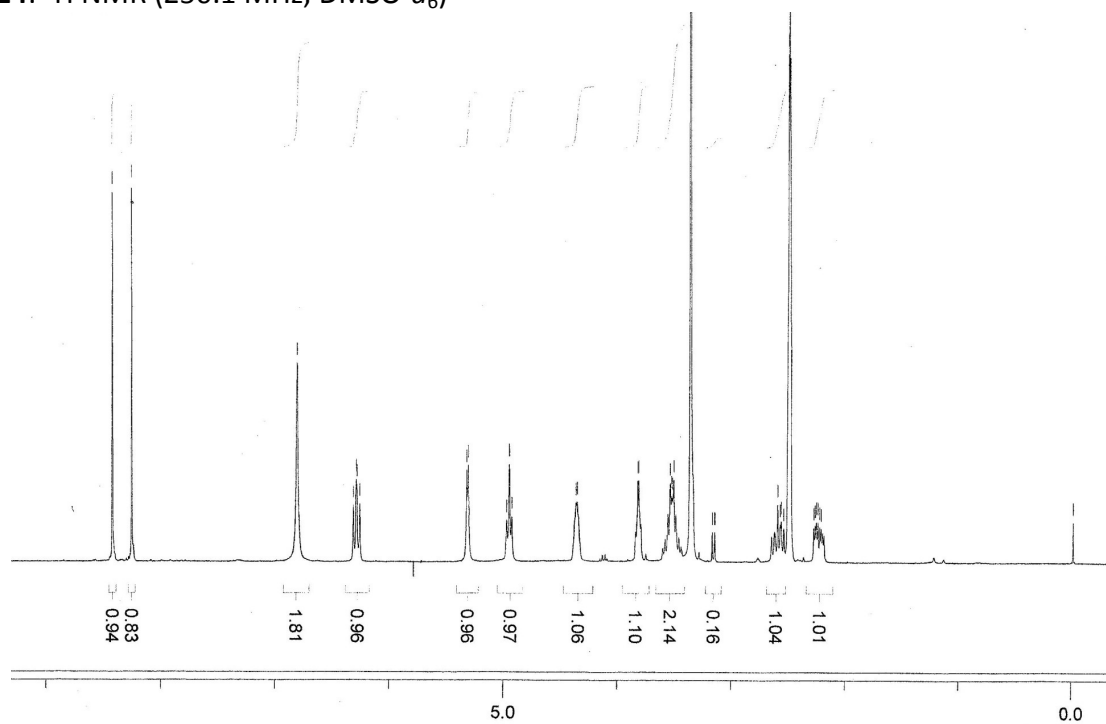
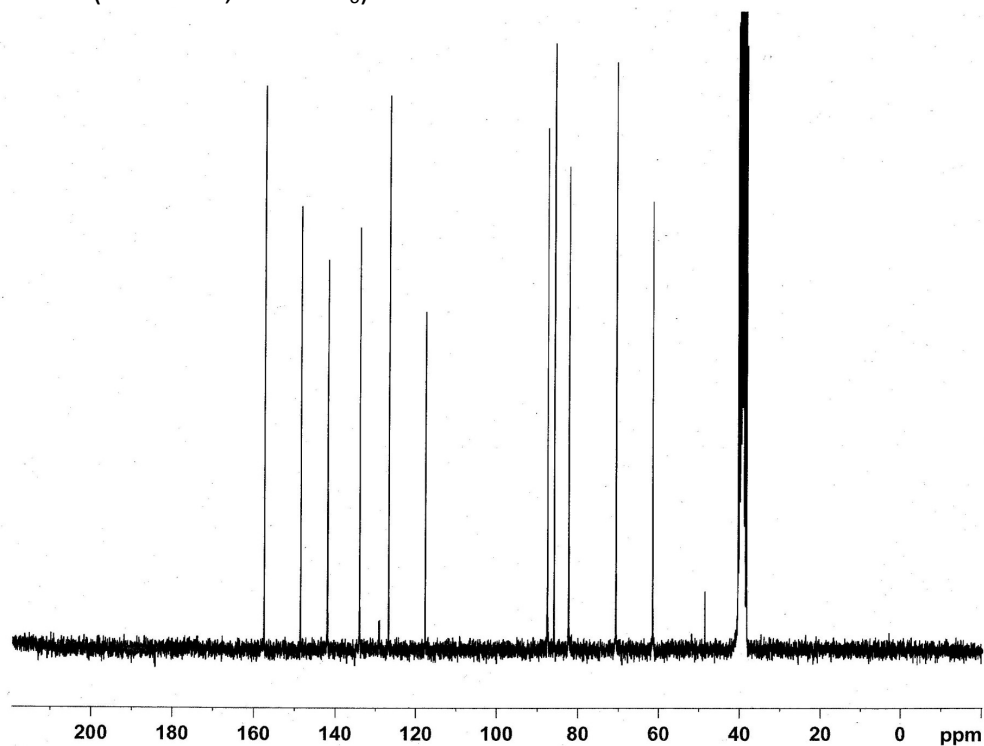
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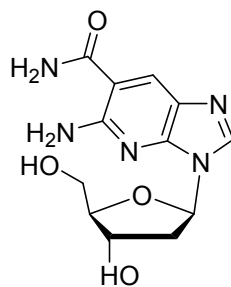
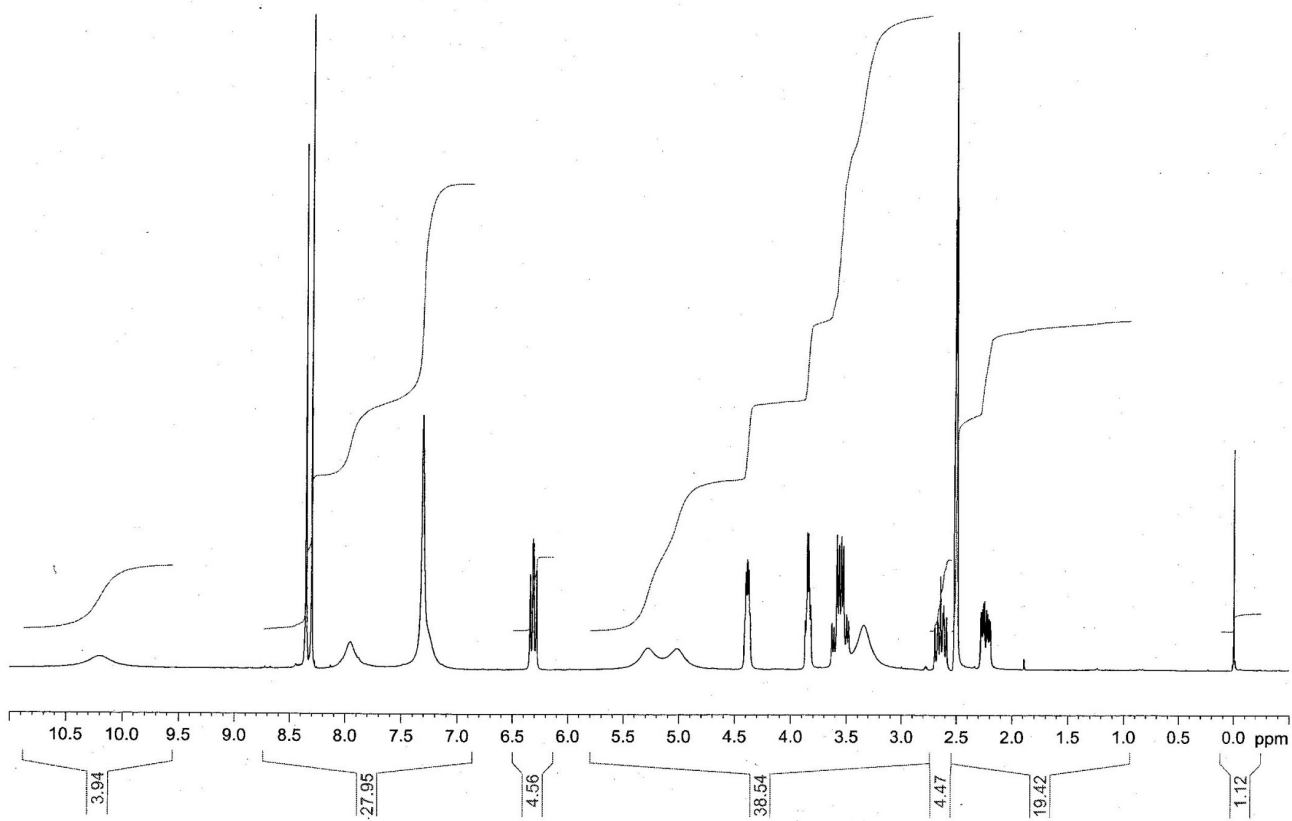
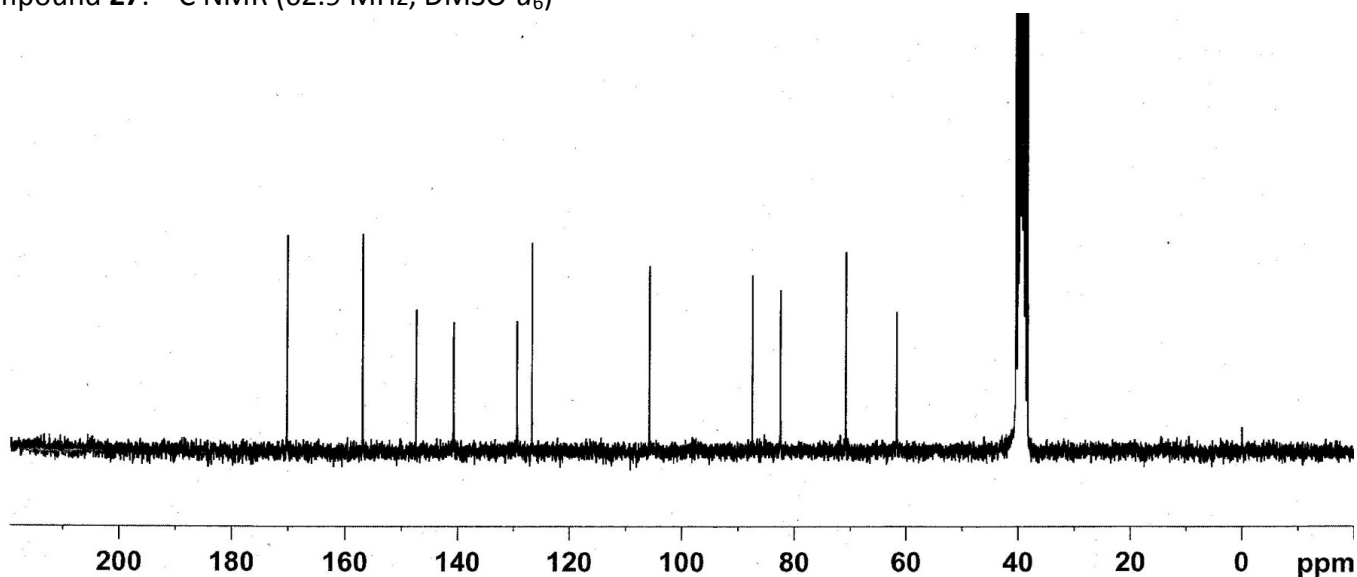
**23**Compound **23**: ¹H NMR (400.1 MHz, CDCl₃)Compound **23**: ¹³C NMR (101.6 MHz, CDCl₃)

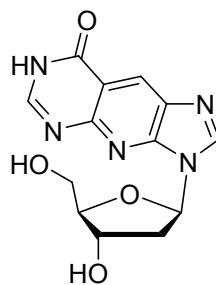
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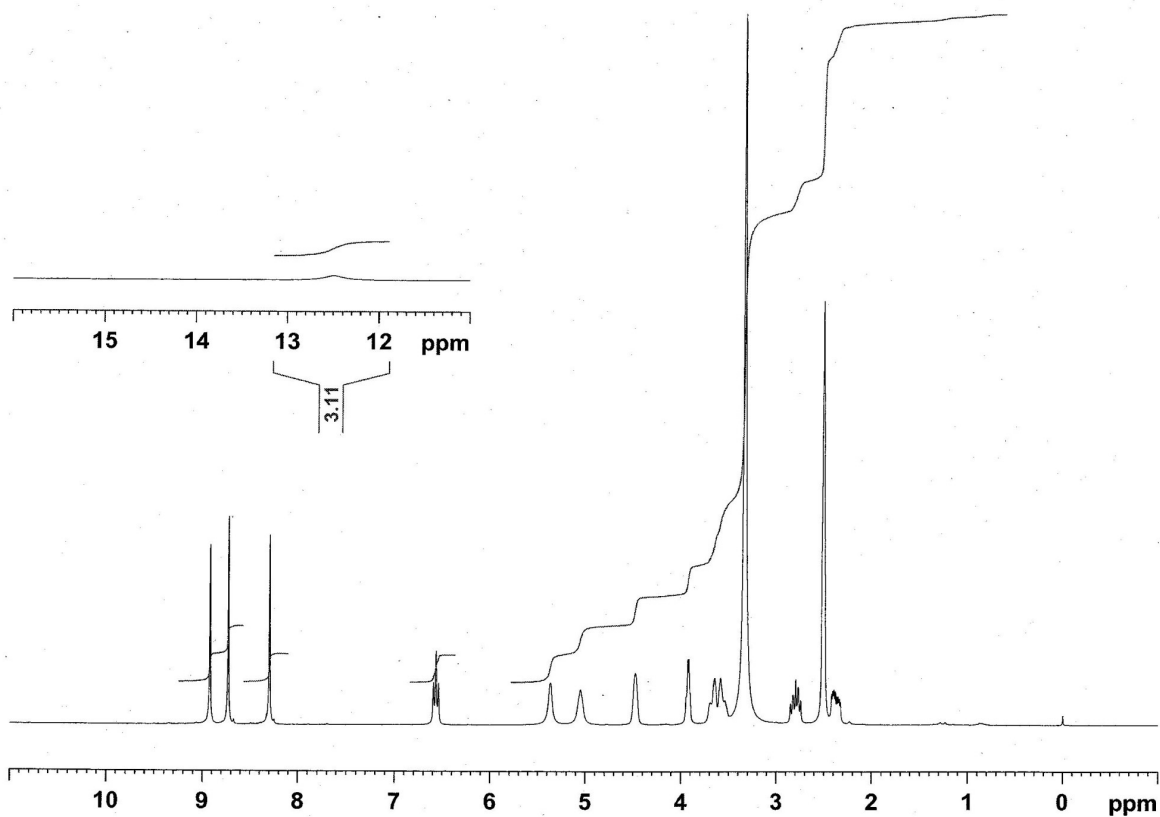
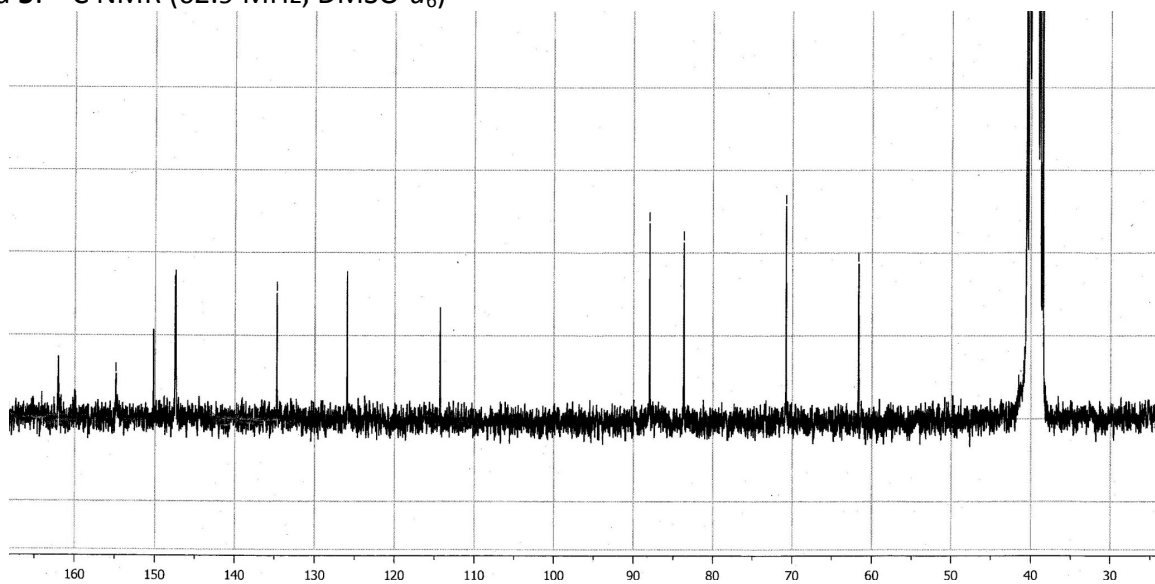
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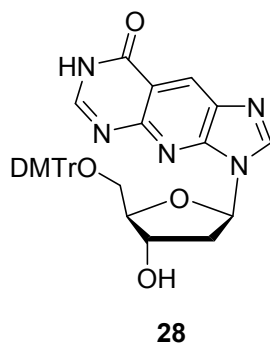
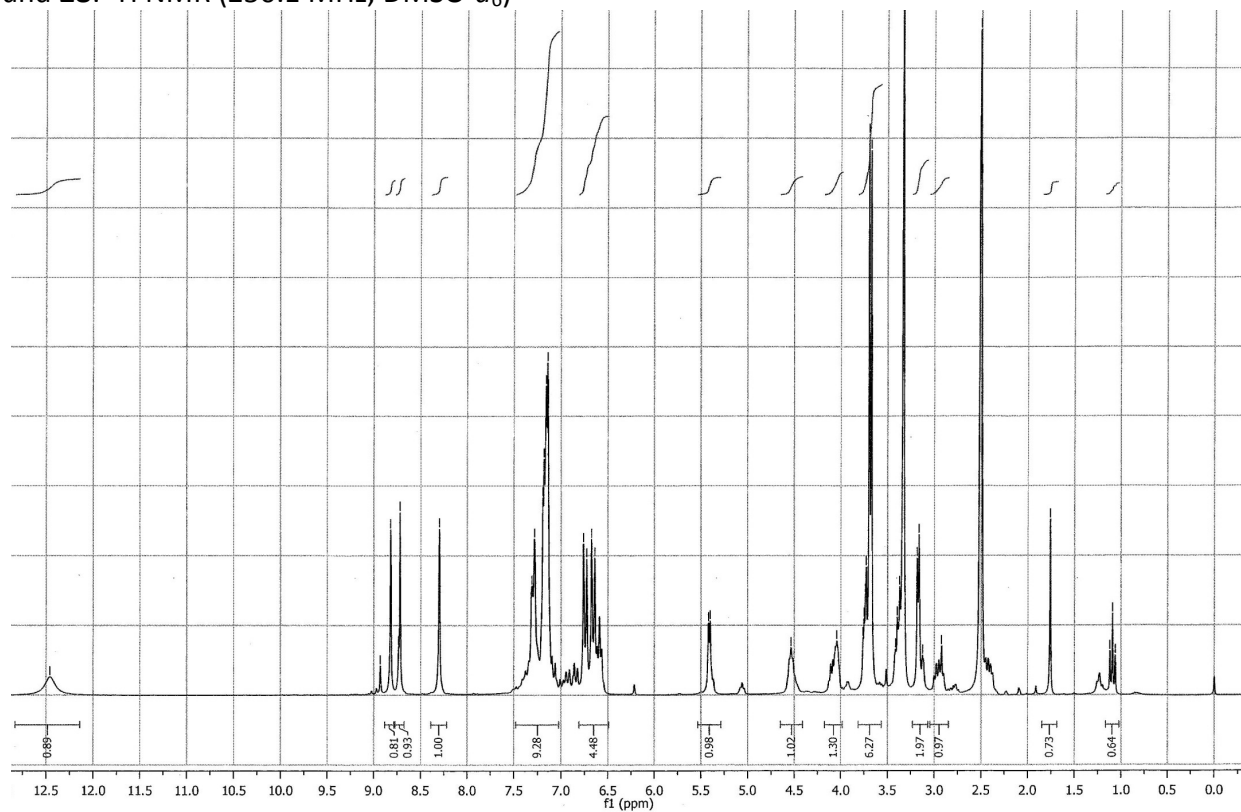
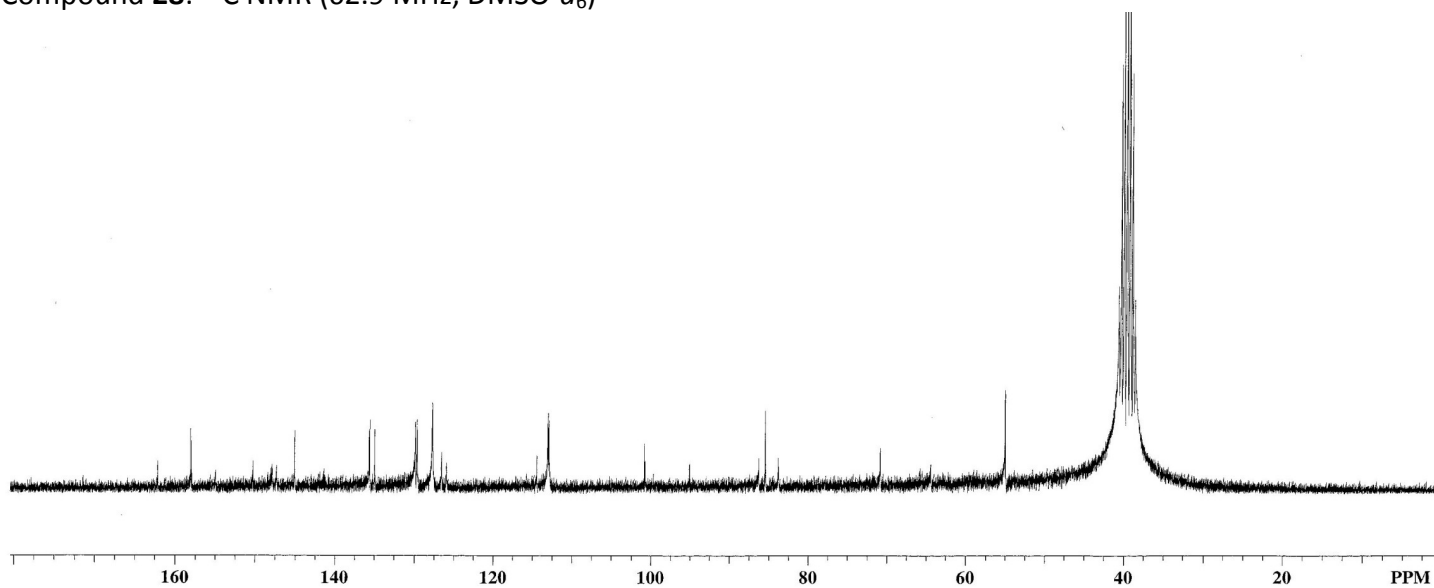
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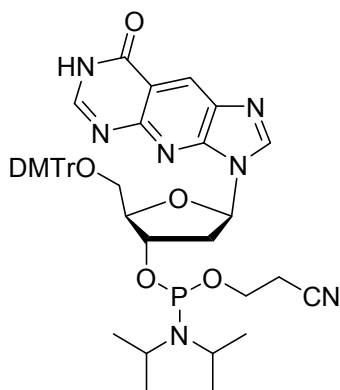
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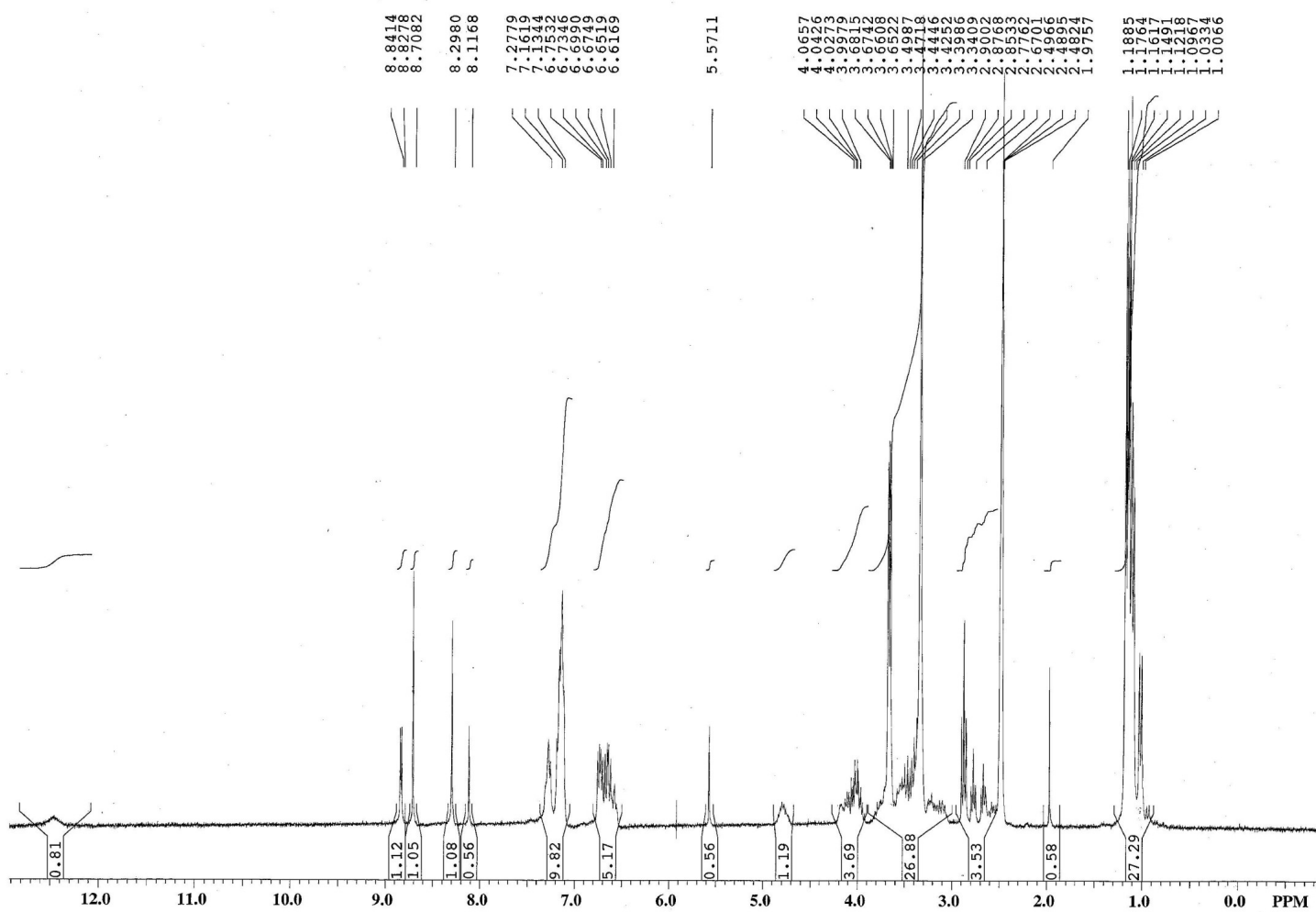
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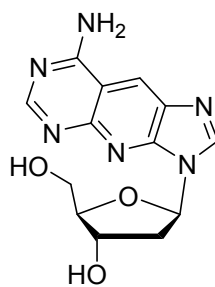
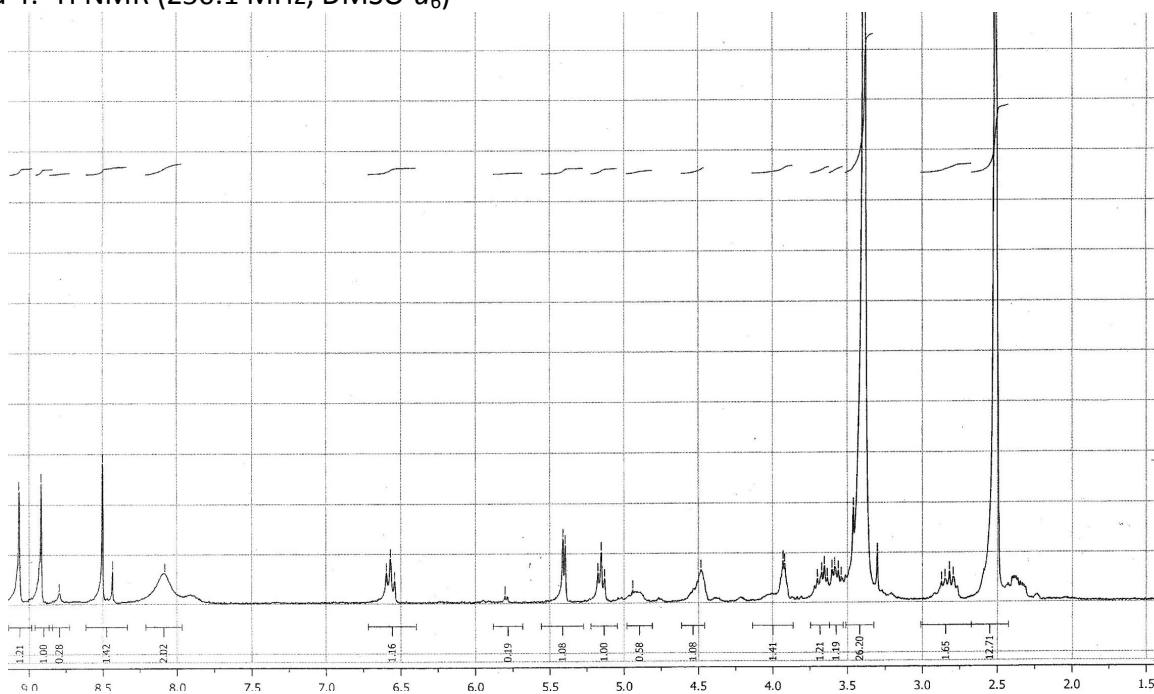
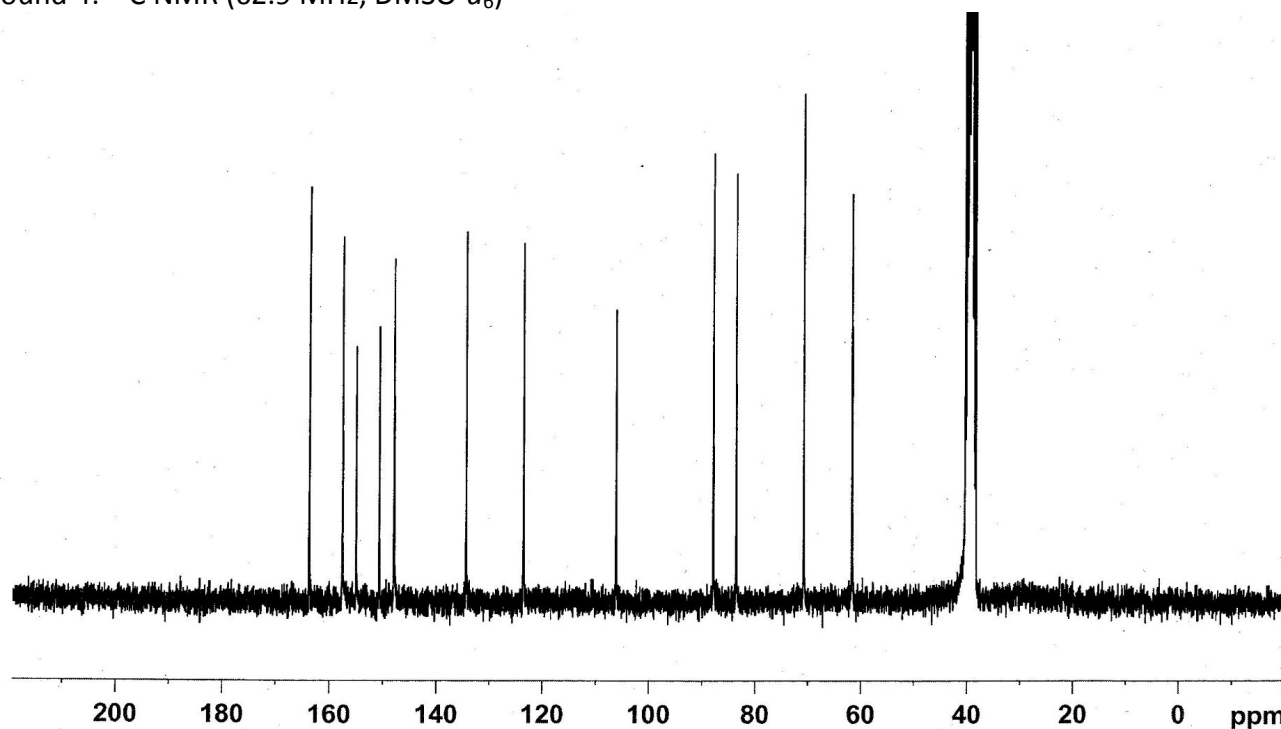
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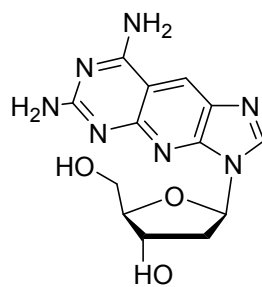
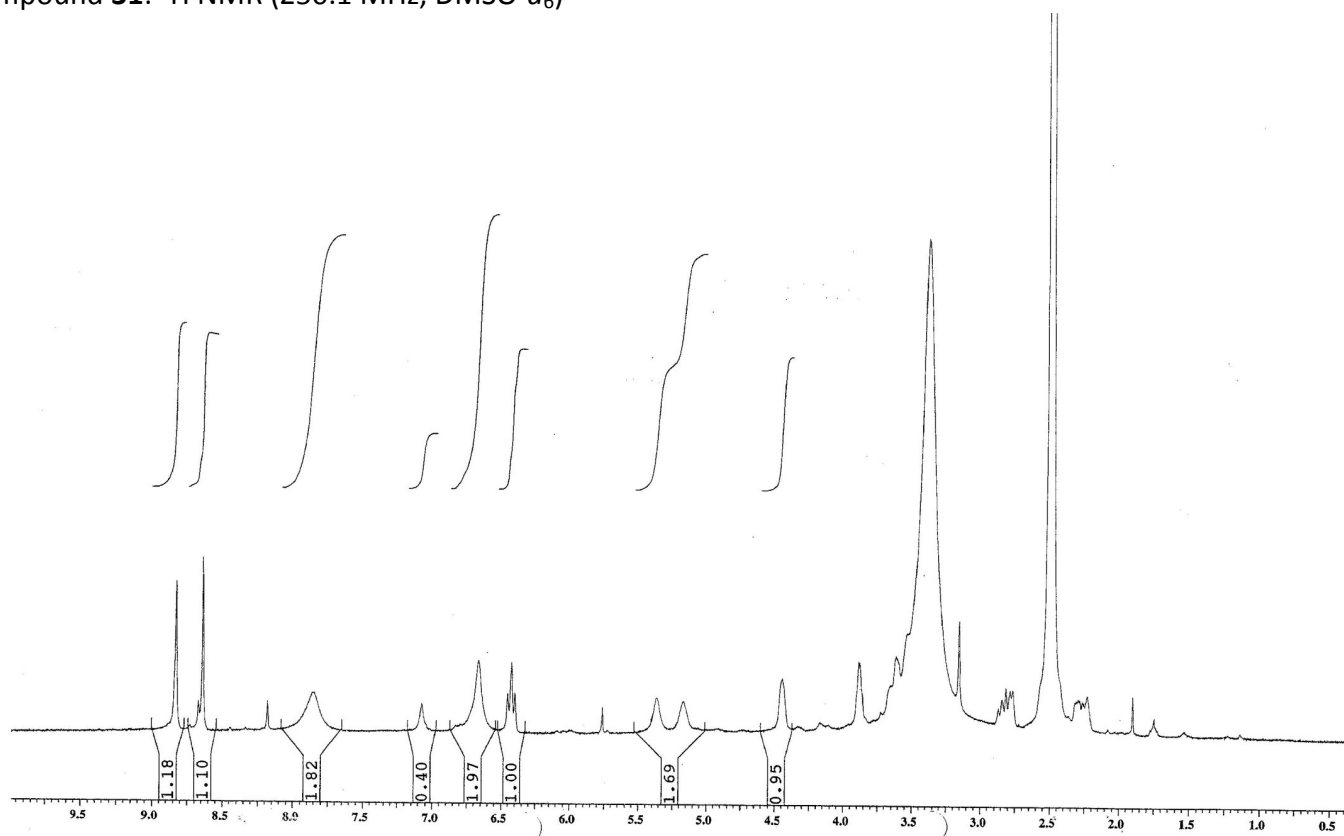
Compound **28**: ^1H NMR (250.1 MHz, $\text{DMSO-}d_6$)Compound **28**: ^{13}C NMR (62.9 MHz, $\text{DMSO-}d_6$)



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Compound 30: ^1H NMR (250.1 MHz, $\text{DMSO-}d_6$)

**4**Compound 4: ^1H NMR (250.1 MHz, $\text{DMSO-}d_6$)Compound 4: ^{13}C NMR (62.9 MHz, $\text{DMSO-}d_6$)

**31**Compound **31**: ^1H NMR (250.1 MHz, $\text{DMSO-}d_6$)Compound **31**: ^{13}C NMR (62.9 MHz, $\text{DMSO-}d_6$)