

Supporting Information

for

**Synthesis of phosphoramidites of isoGNA, an isomer
of glycerol nucleic acid**

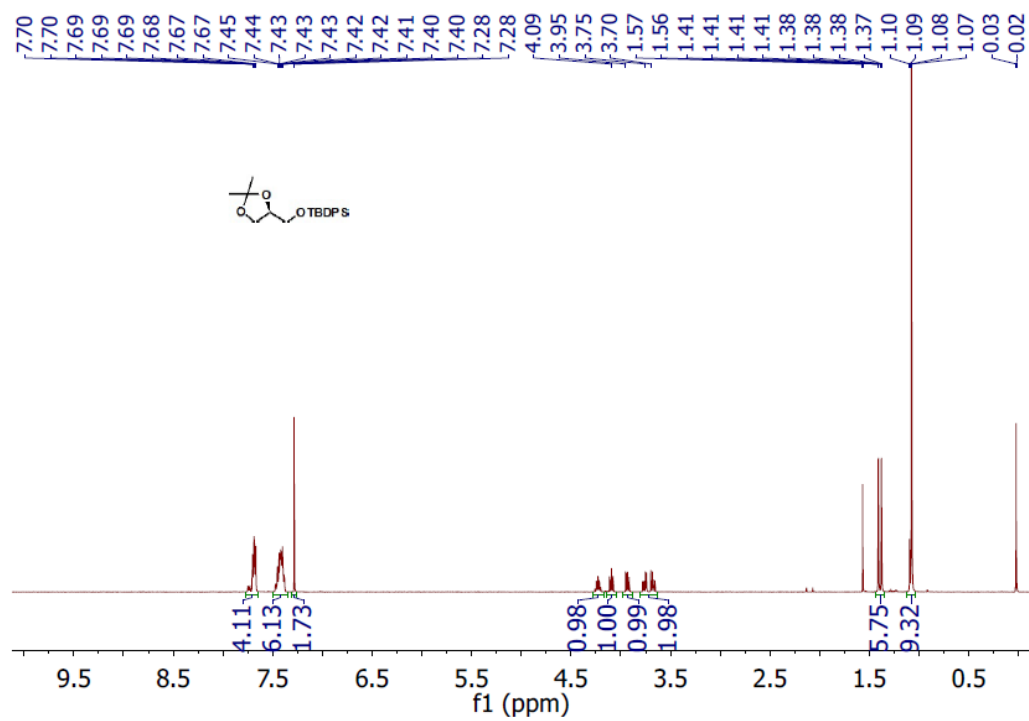
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Pines Rd, La Jolla, CA 92037, USA

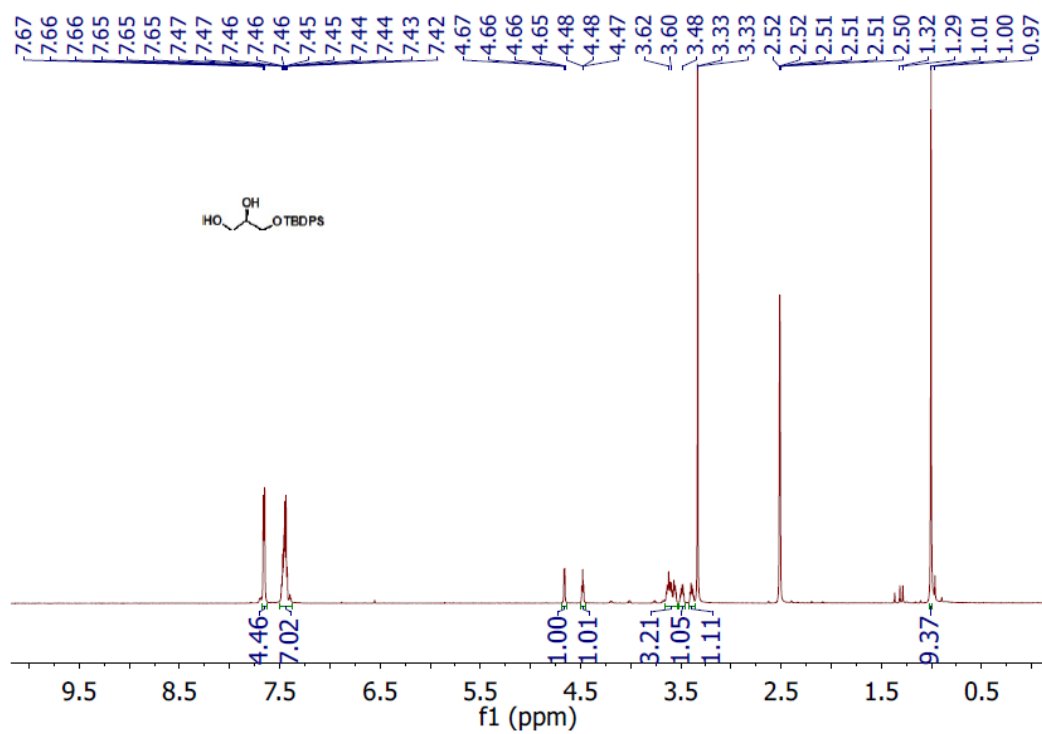
Email: Ramanarayanan Krishnamurthy - rkrishna@scripps.edu

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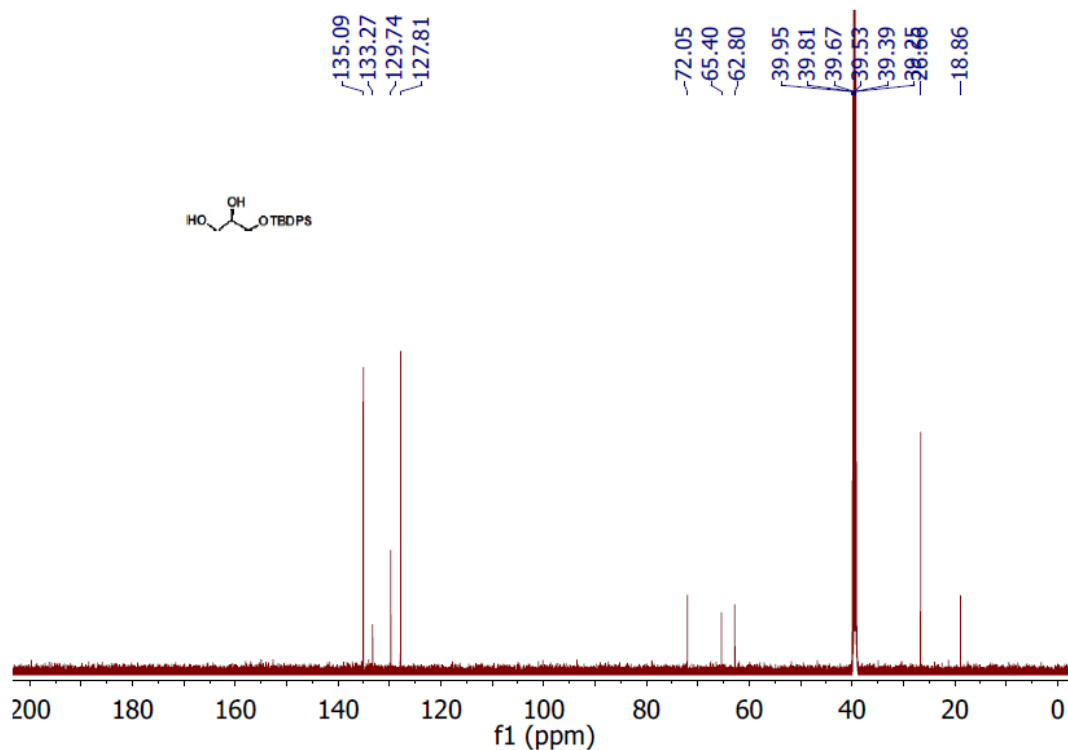
^1H , ^{13}C and ^{31}P NMR spectra



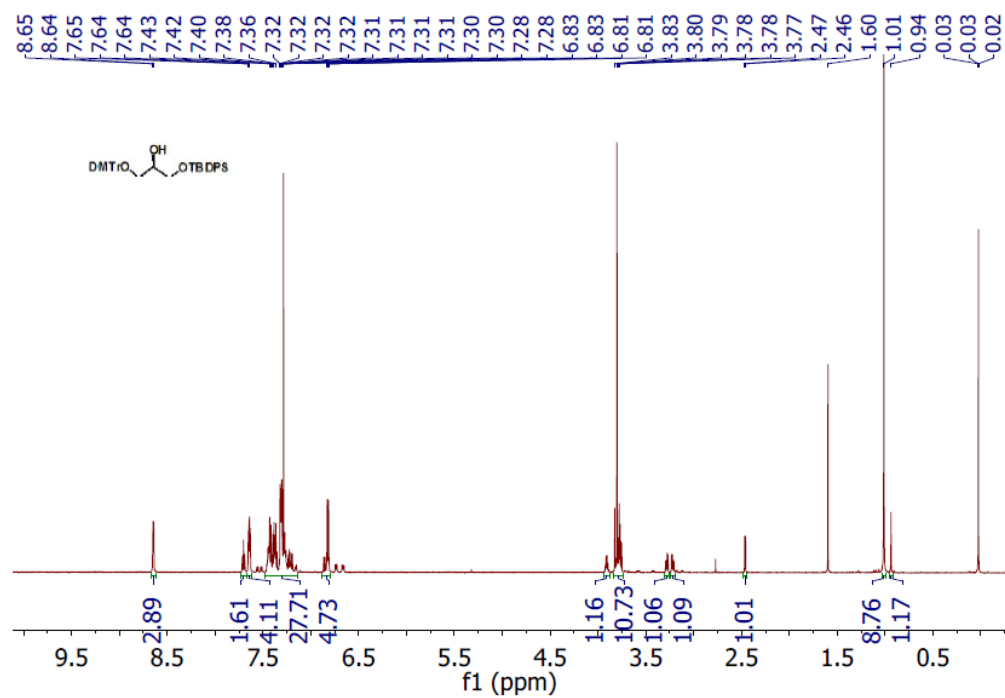
^1H NMR spectrum of **8** in CDCl_3 .



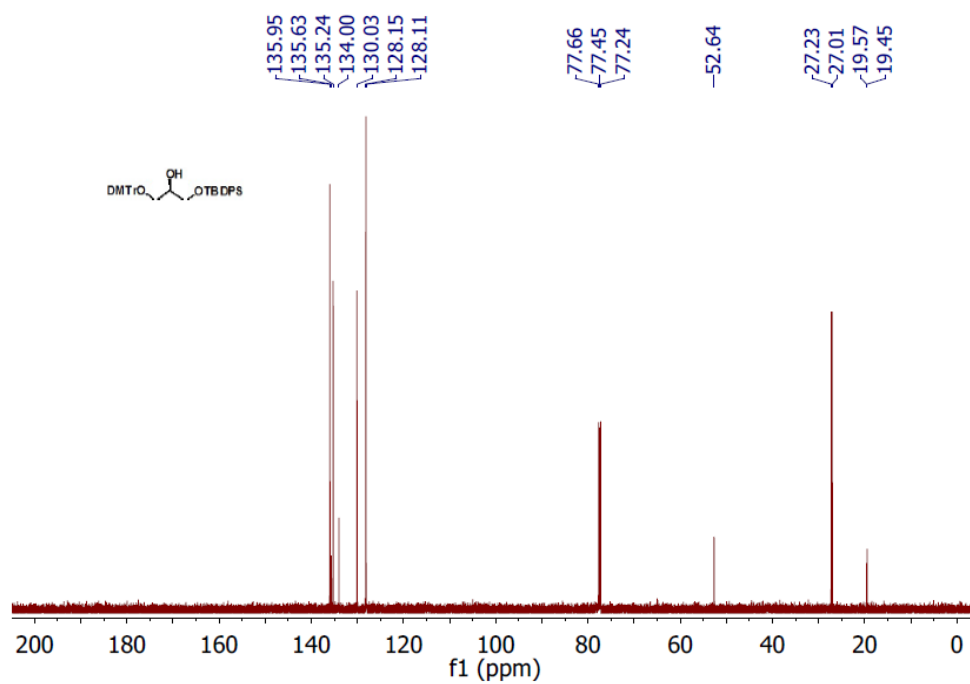
¹H NMR spectrum of **9** in DMSO-*d*₆.



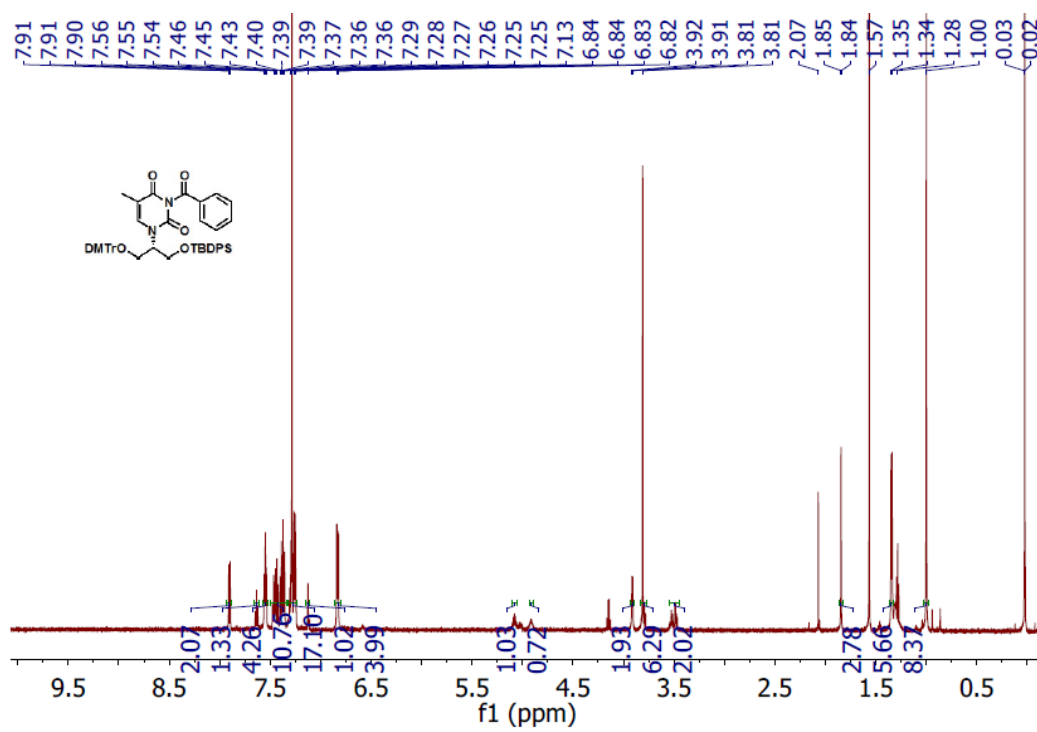
¹³C NMR spectrum of **9** in DMSO-*d*₆.



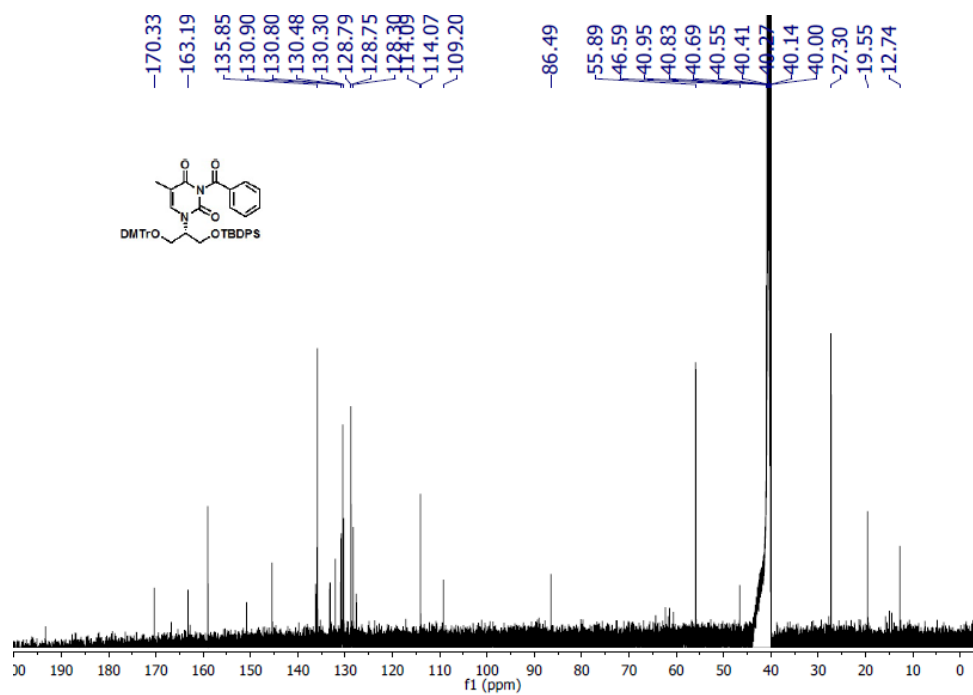
¹H NMR spectrum of **10** in CDCl₃.



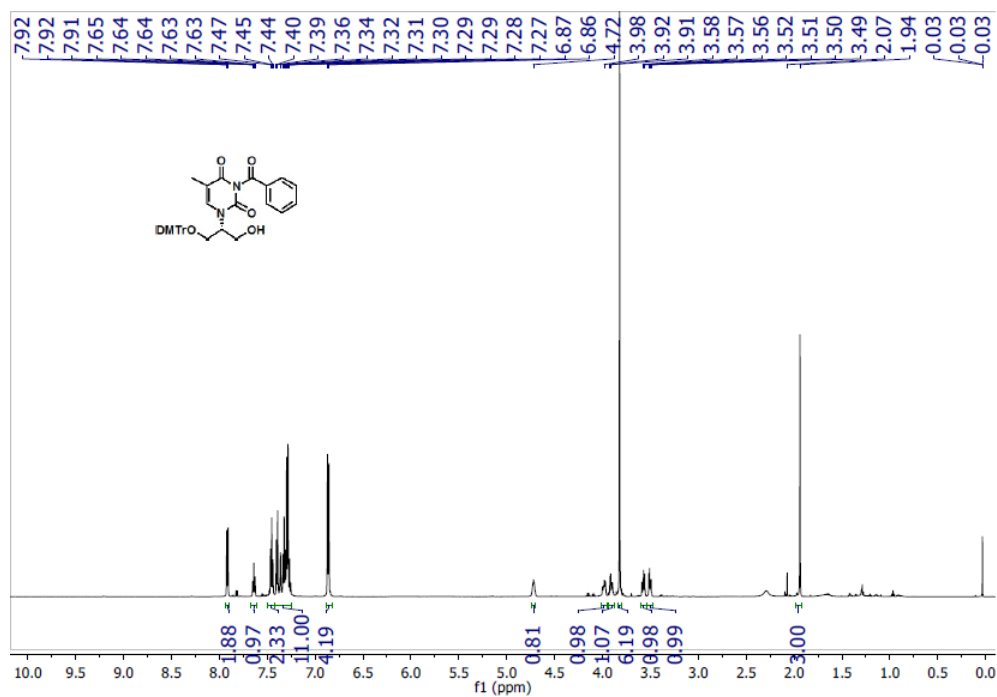
¹³C NMR spectrum of **10** in CDCl₃.



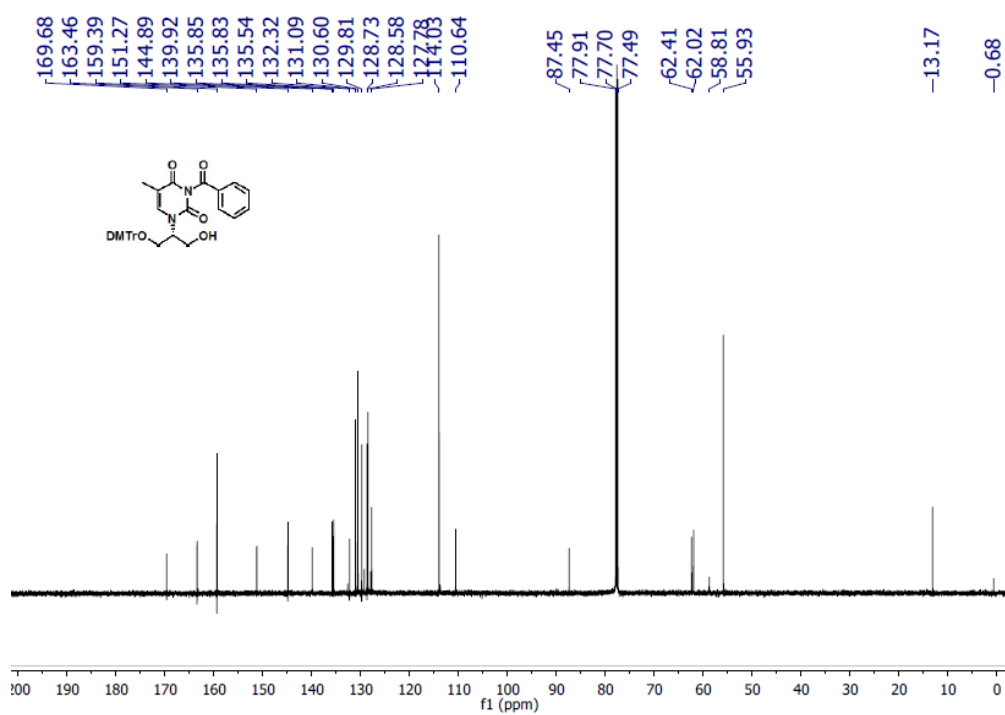
¹H NMR spectrum of **11** in CDCl₃.



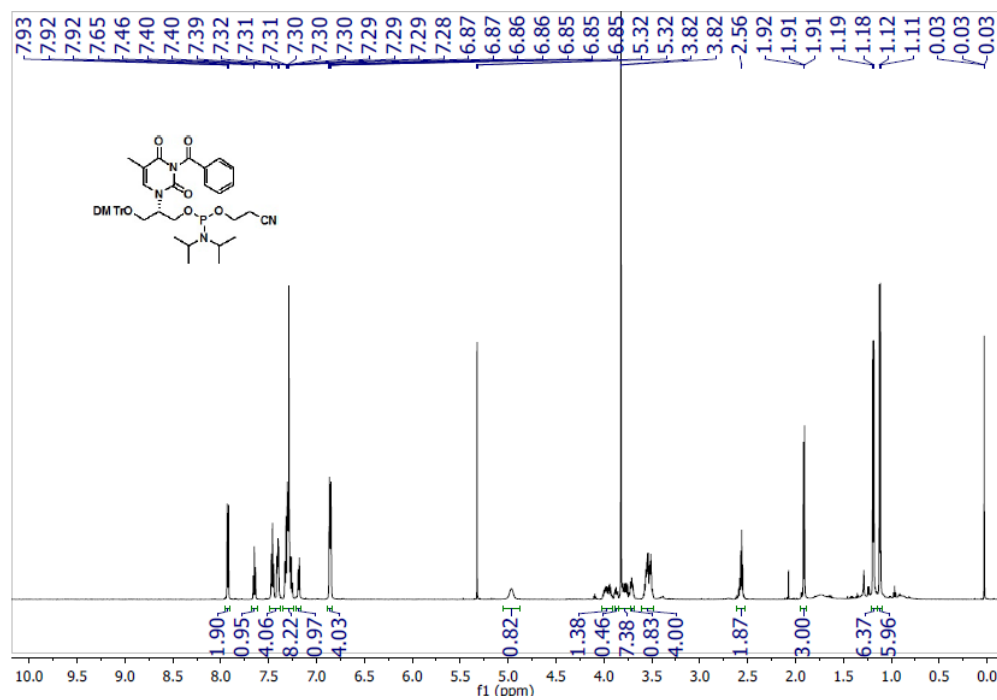
¹³C NMR spectrum of **11** in DMSO-*d*₆.



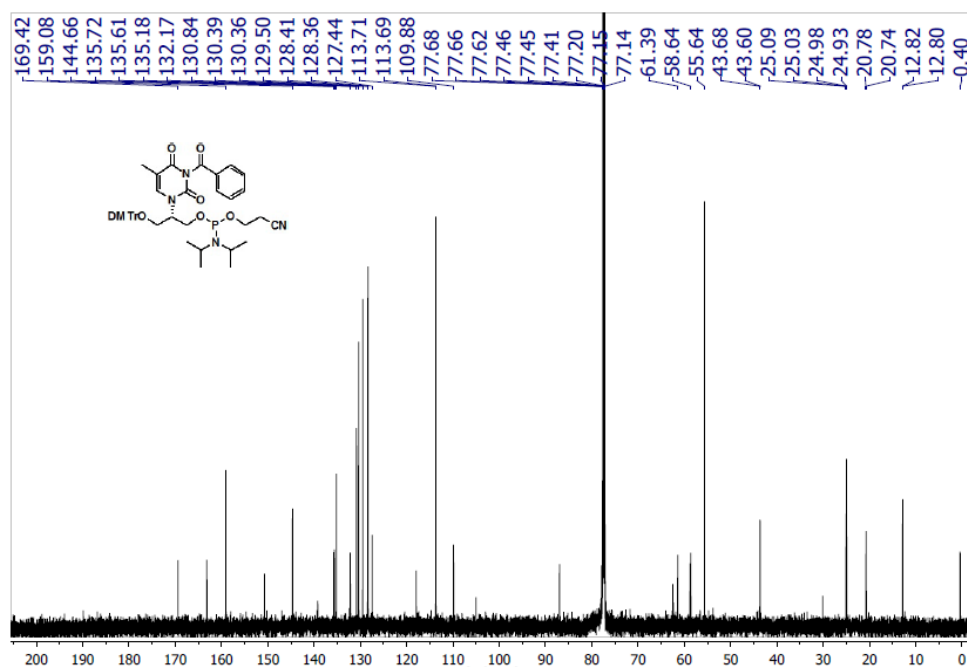
¹H NMR spectrum of **12** in CDCl₃.



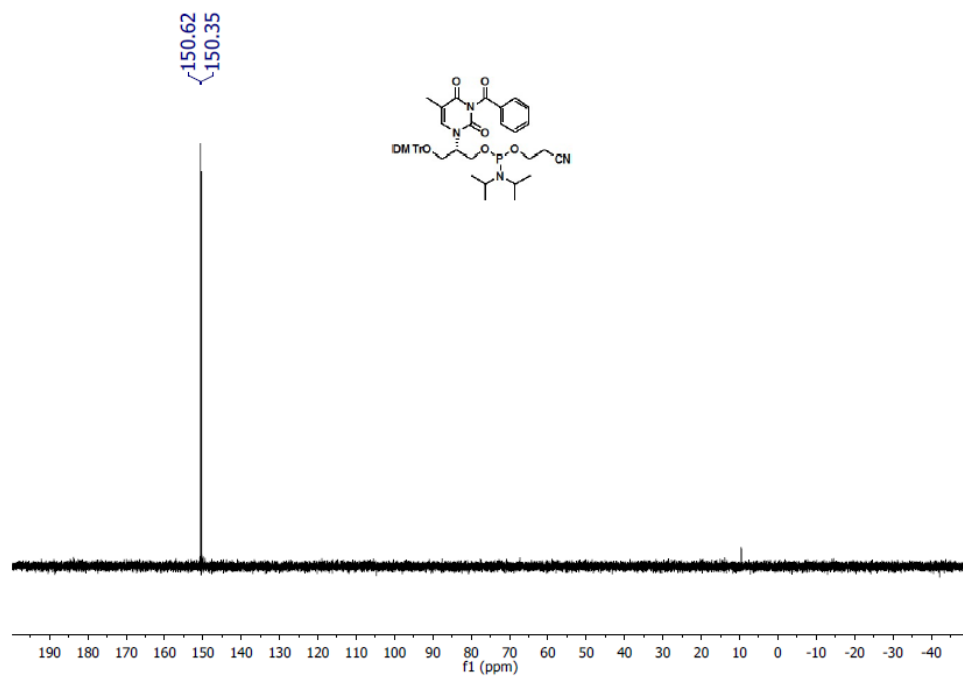
¹³C NMR spectrum of **12** in CDCl₃.

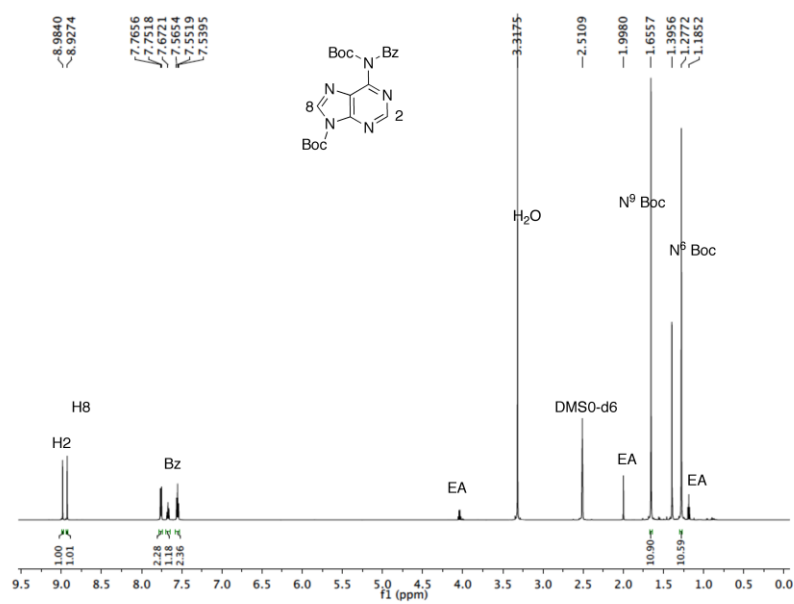


¹H NMR spectrum of **13** in CDCl₃.

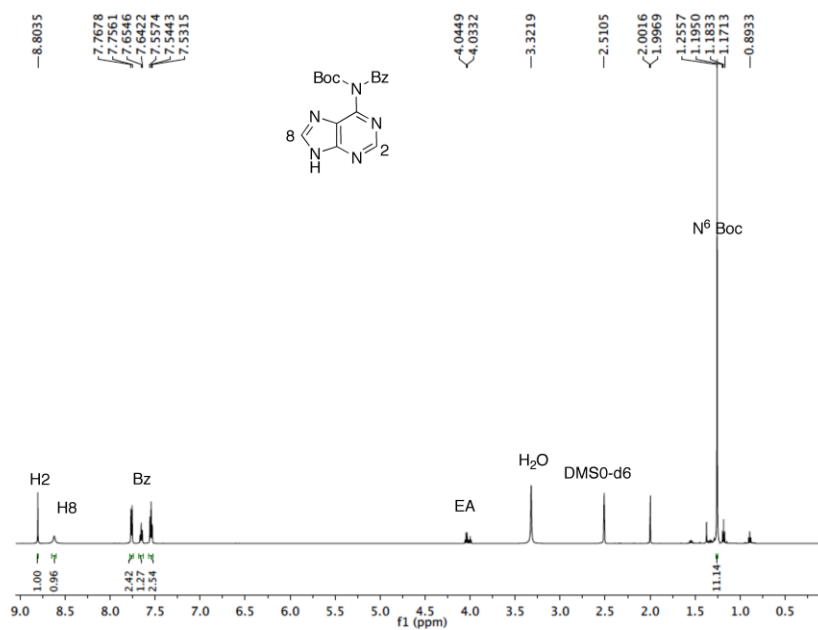


¹³C NMR spectrum of **13** in CDCl₃.

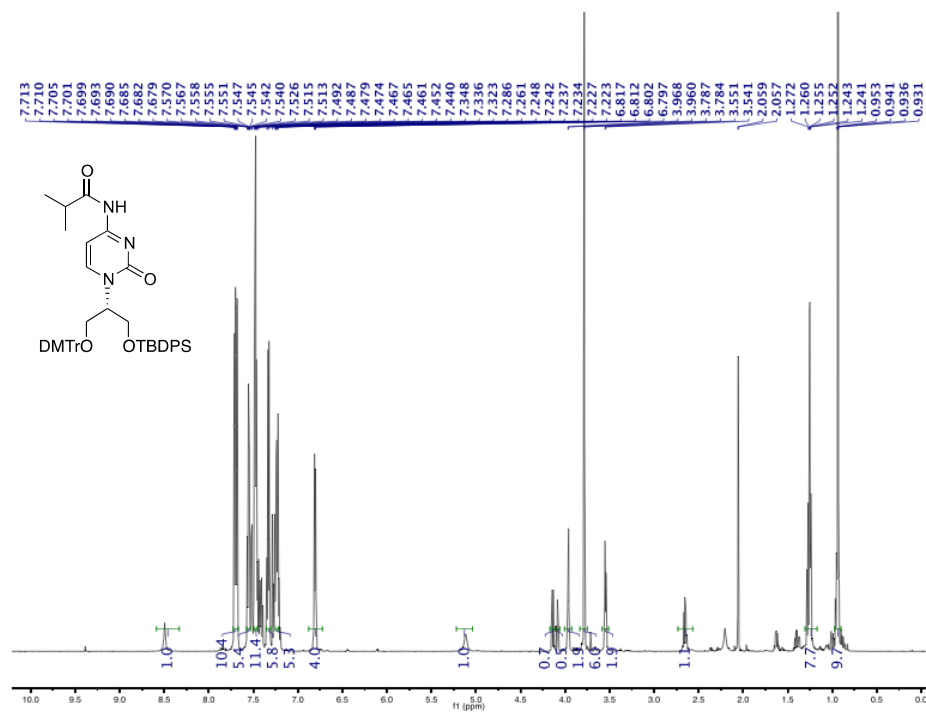




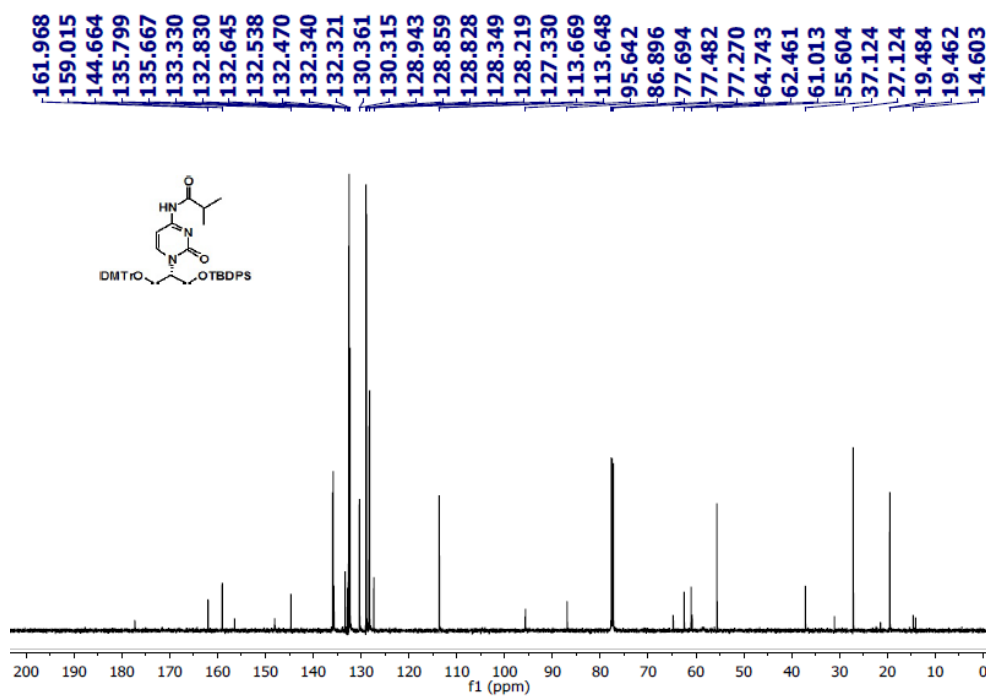
¹H NMR spectrum of **15** in DMSO-*d*₆.



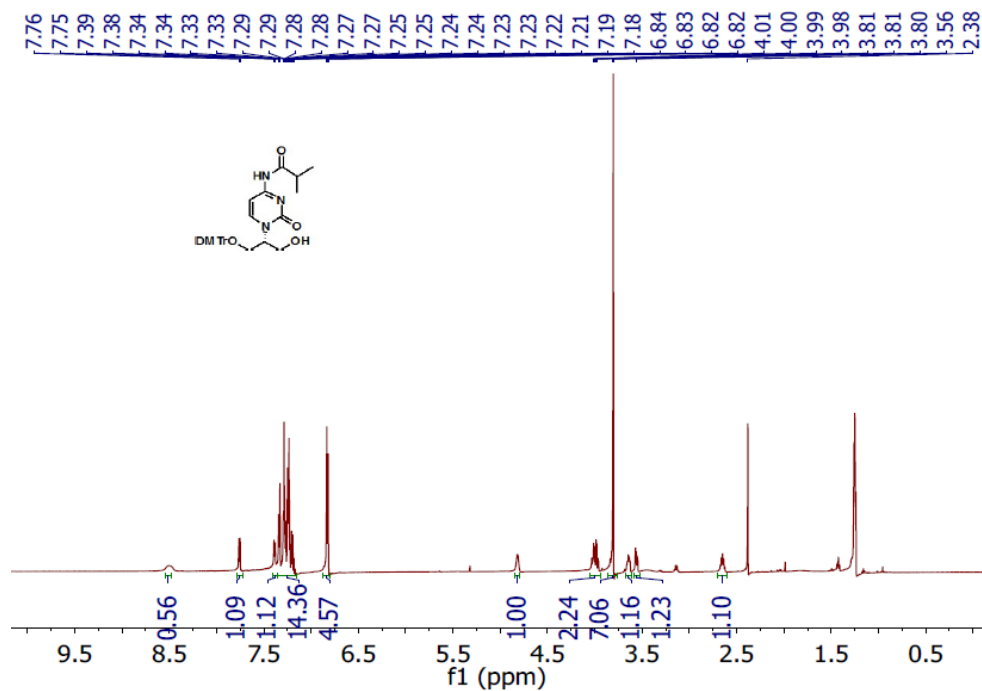
¹H NMR spectrum of **16** in DMSO-*d*₆.



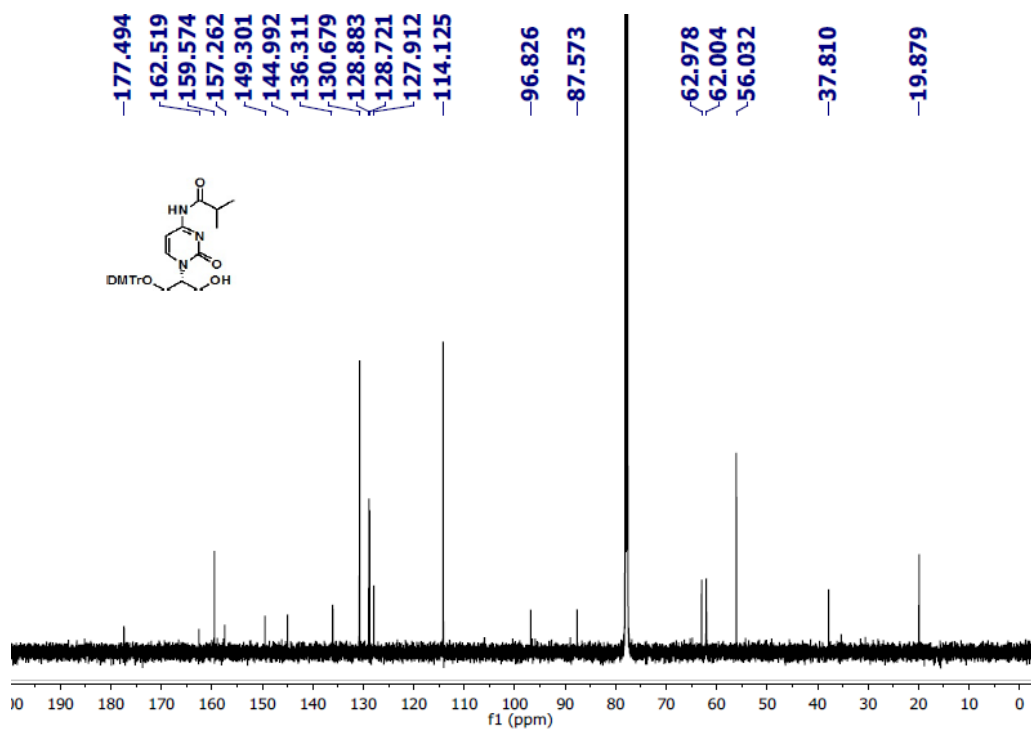
¹H NMR spectrum of **20** in CDCl₃.



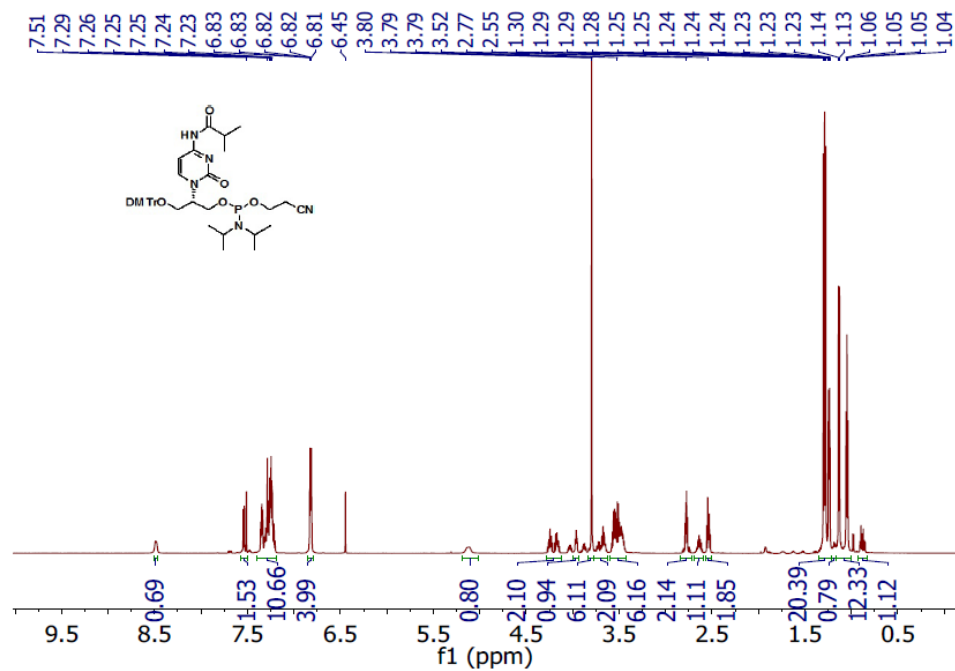
¹³C NMR spectrum of **20** in CDCl₃.



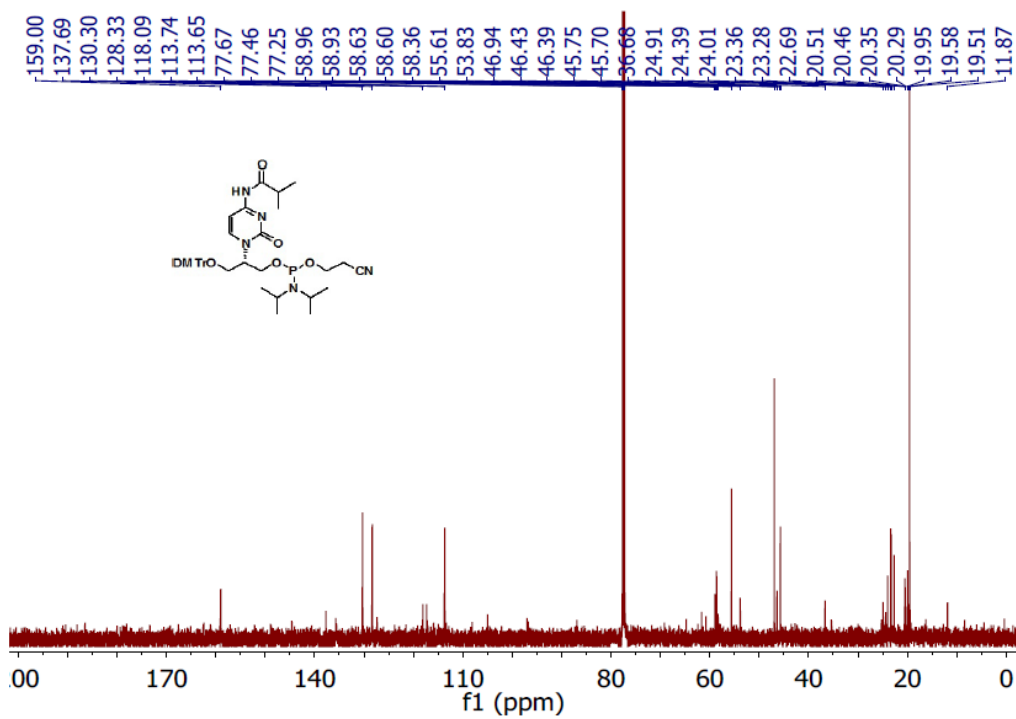
¹H NMR spectrum of **21** in CDCl₃.



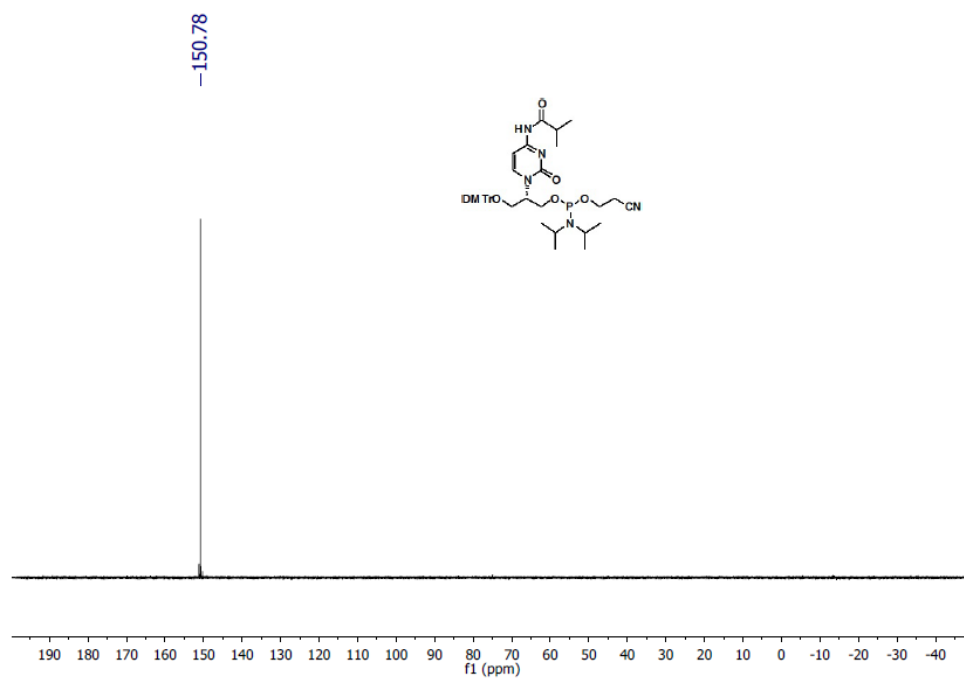
¹³C NMR spectrum of **21** in CDCl₃.



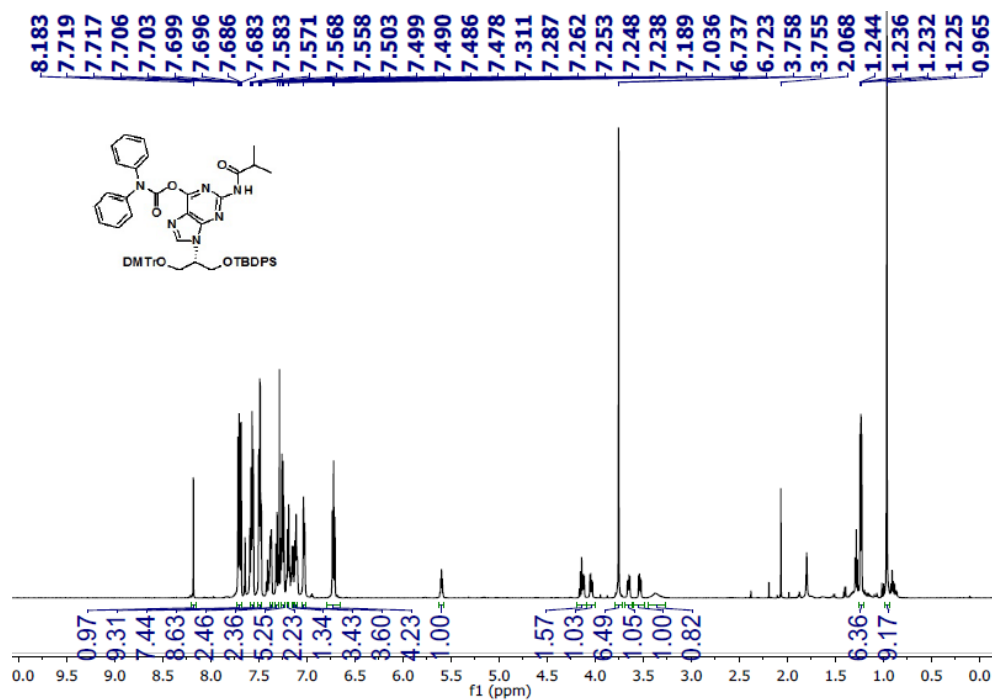
¹H NMR spectrum of **22** in CDCl₃.



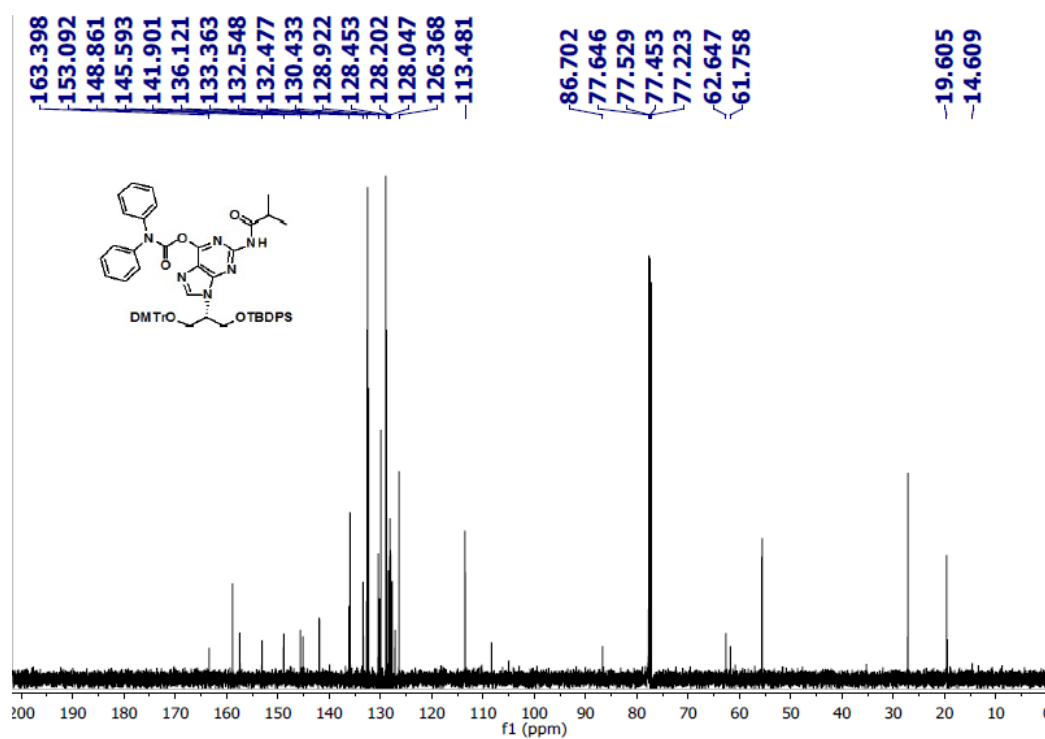
¹³C NMR spectrum of **22** in CDCl₃.



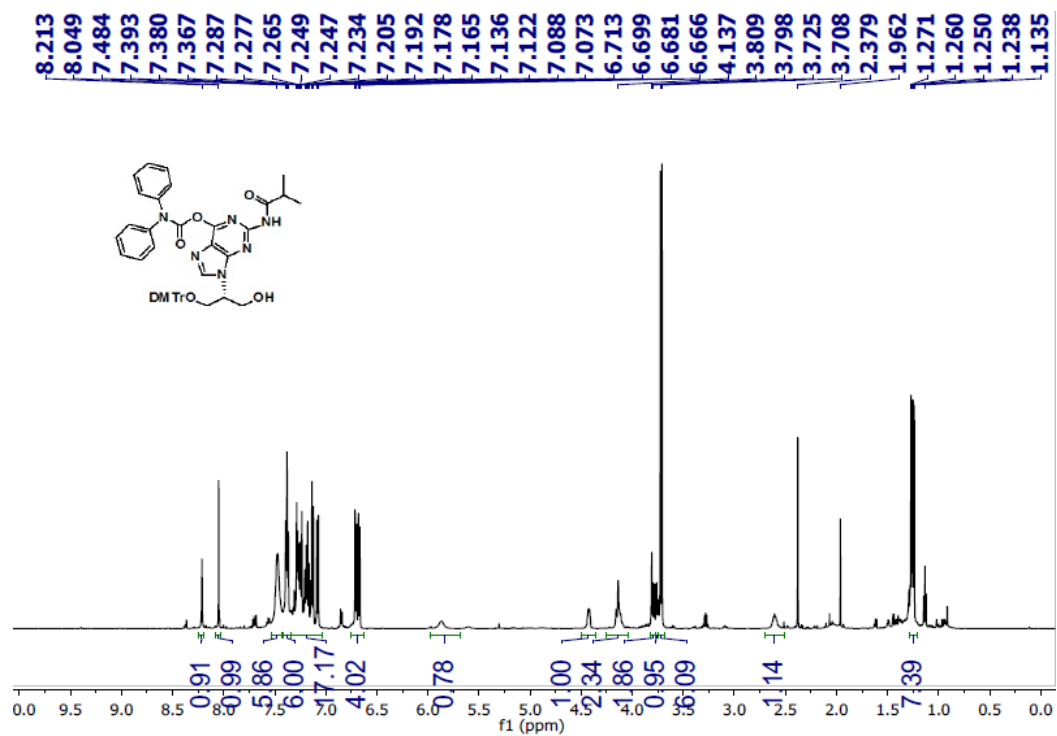
^{31}P NMR spectrum of **22** in CDCl_3



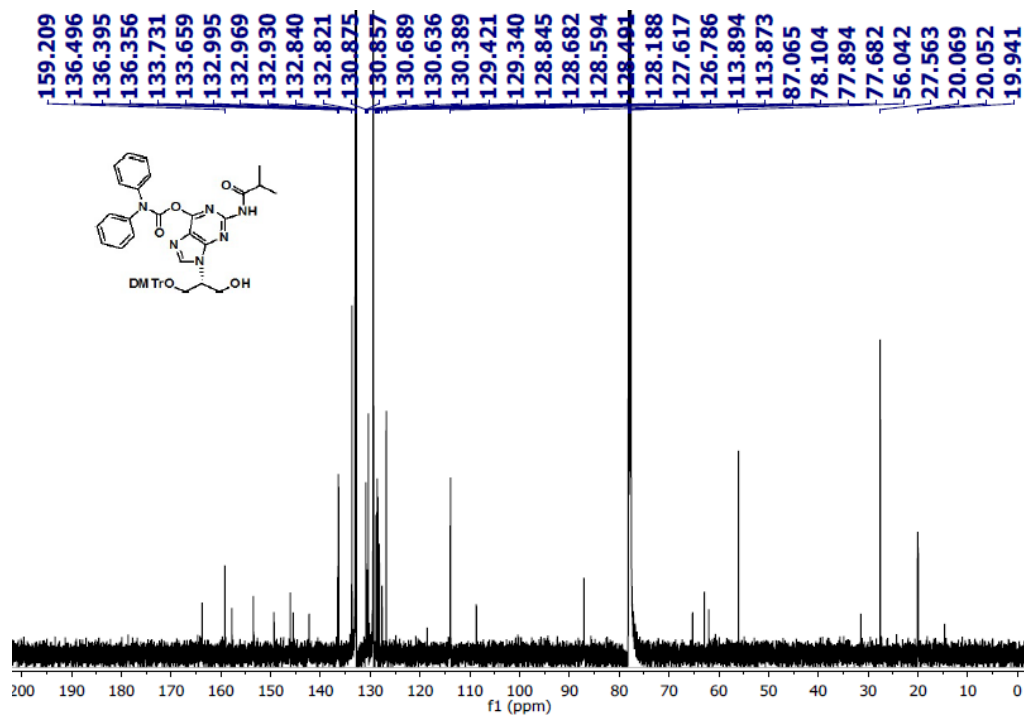
¹H NMR spectrum of **23** in CDCl₃.



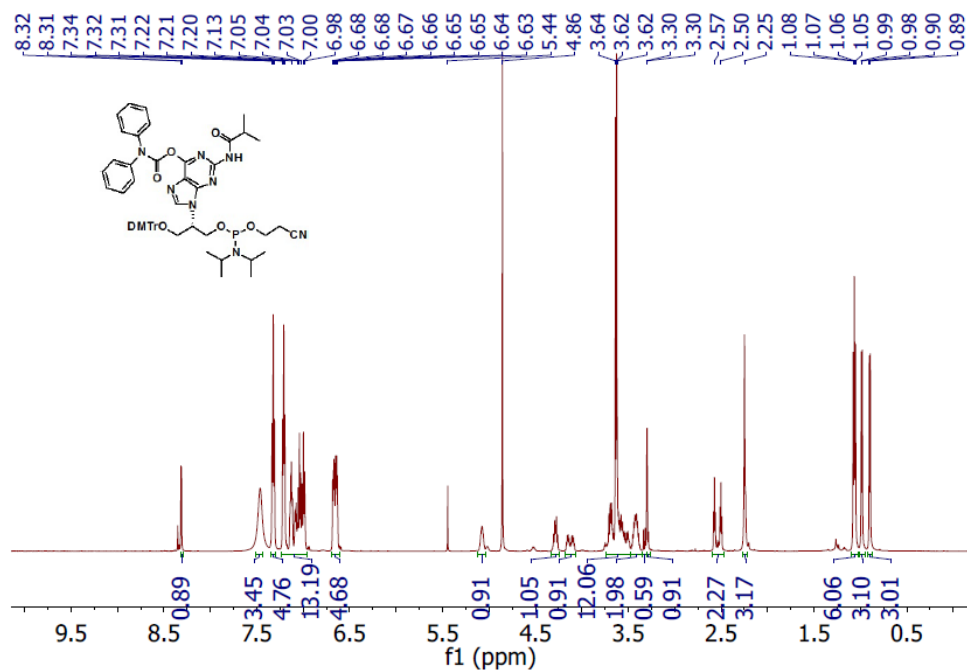
¹³C NMR spectrum of **23** in CDCl₃.



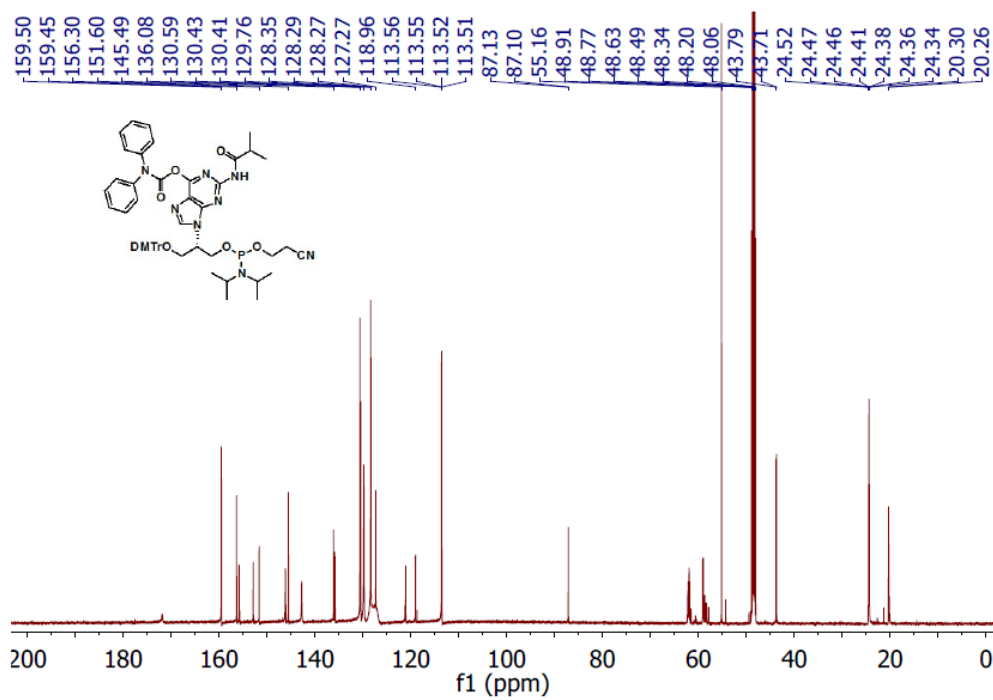
¹H NMR spectrum of **24** in CDCl₃.



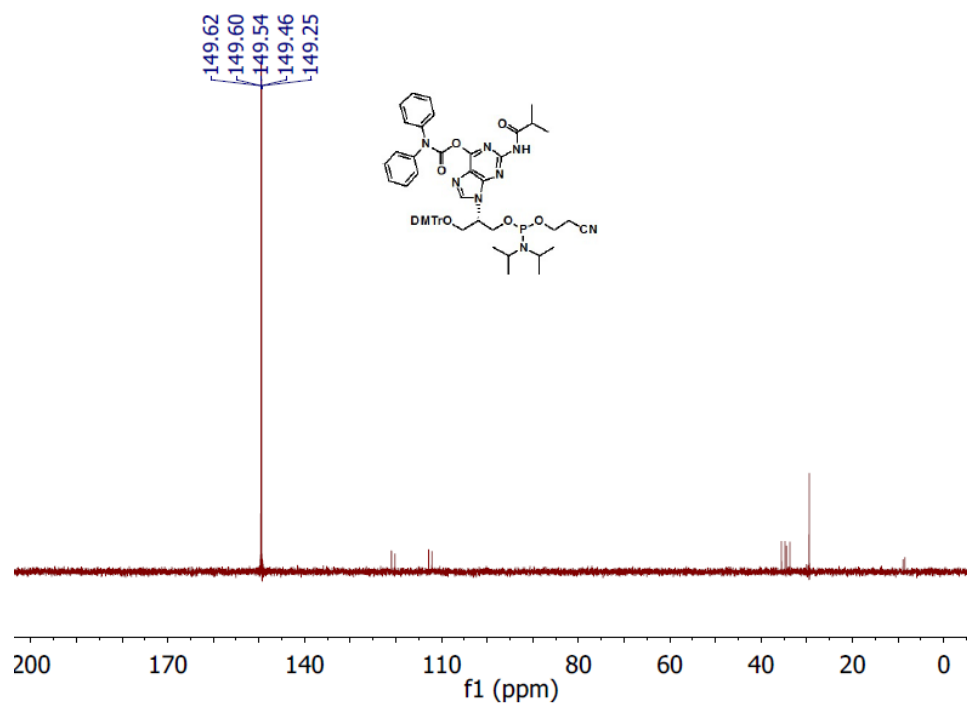
¹³C NMR spectrum of **24** in CDCl₃.



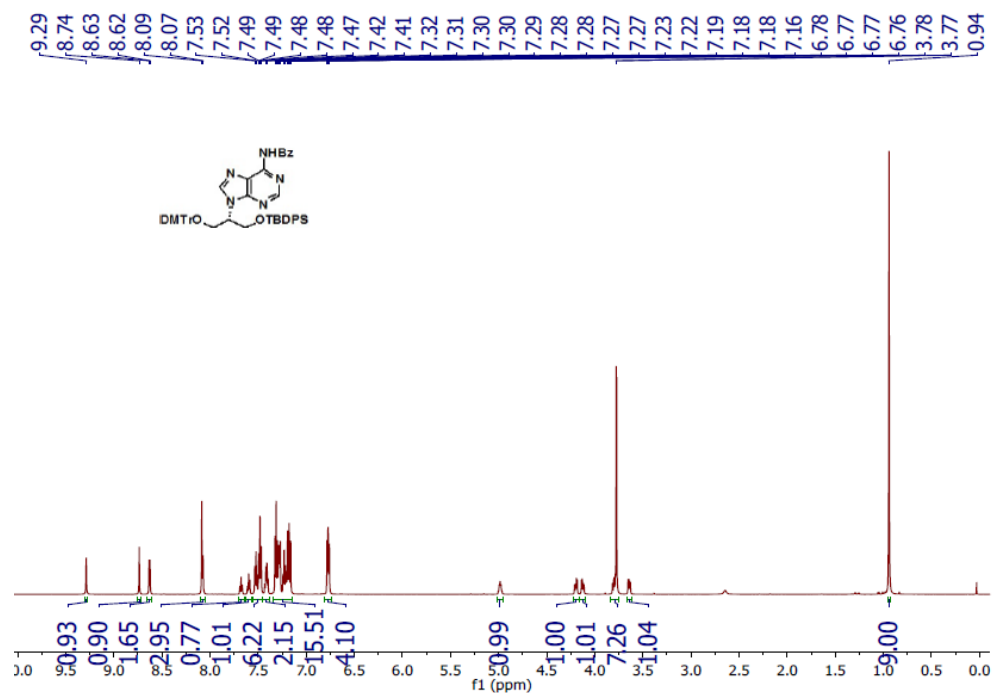
¹H NMR spectrum of **25** in CD₃OD.



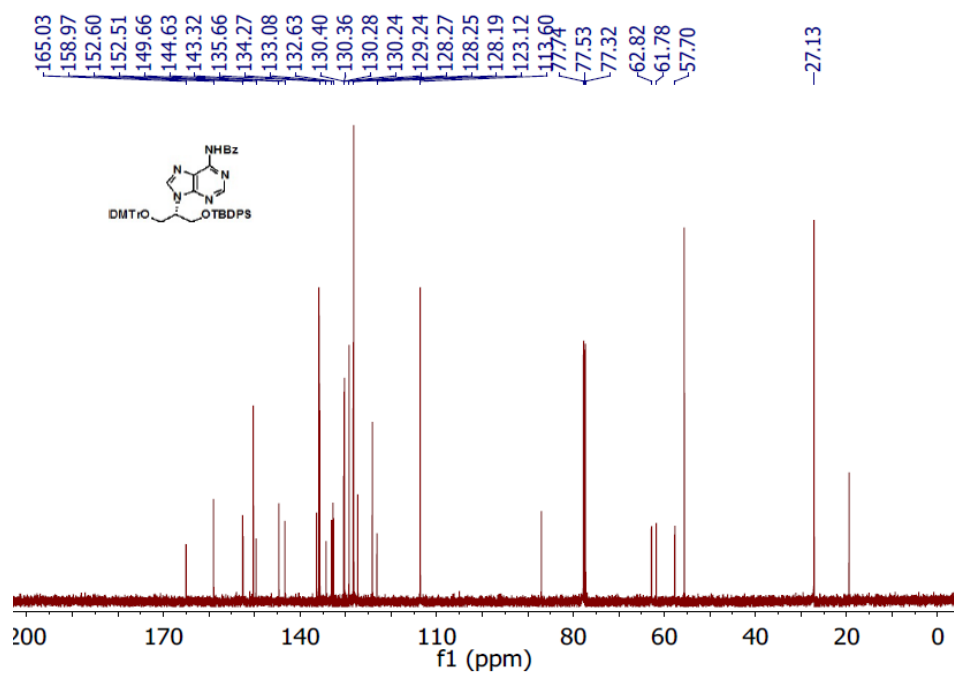
¹³C NMR spectrum of **25** in CD₃OD.



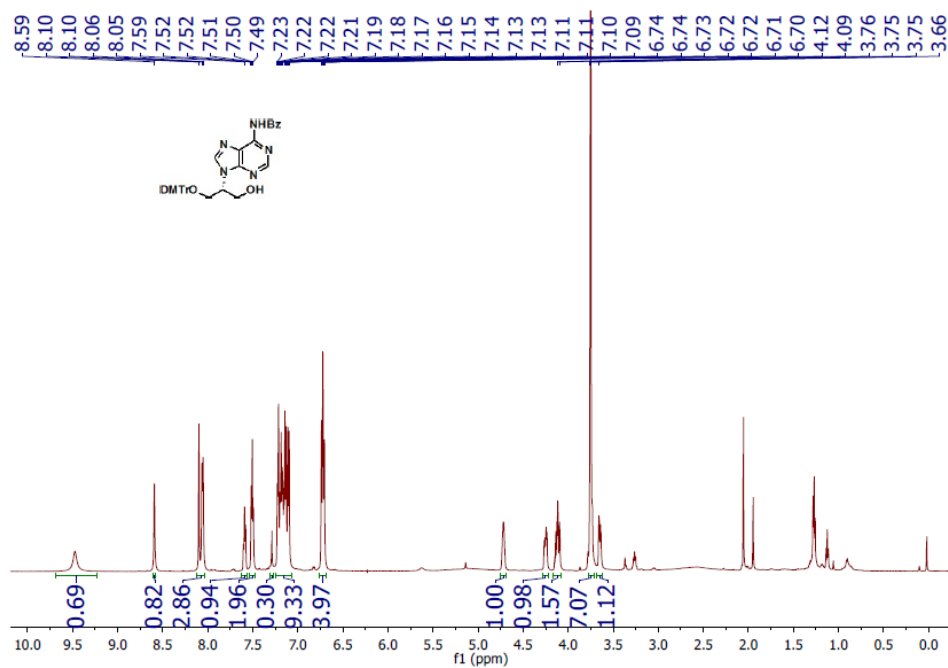
^{31}P NMR spectrum of **25** in CD_3OD .



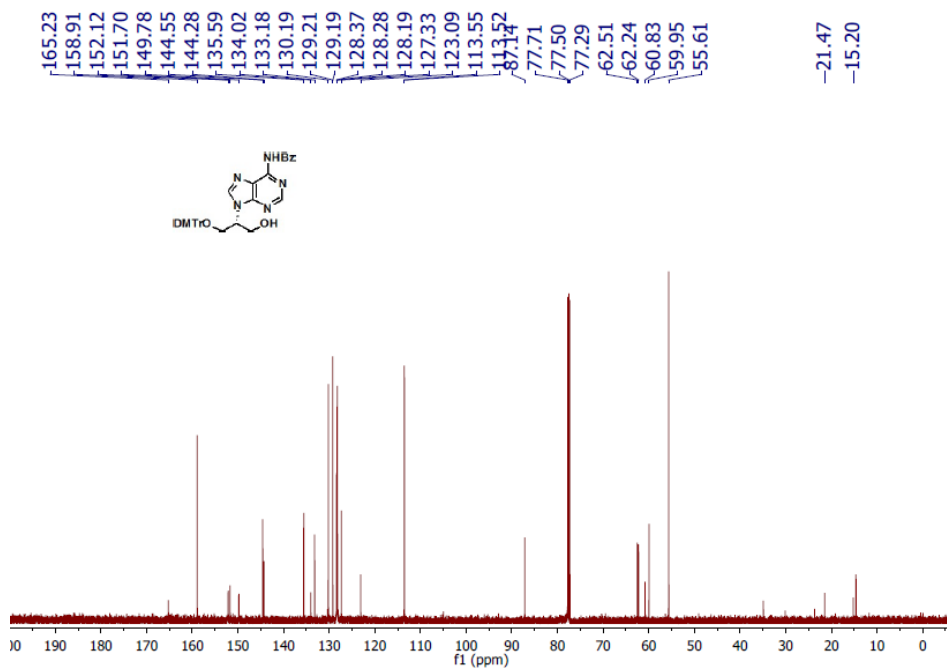
¹H NMR spectrum of **26** in CDCl₃.



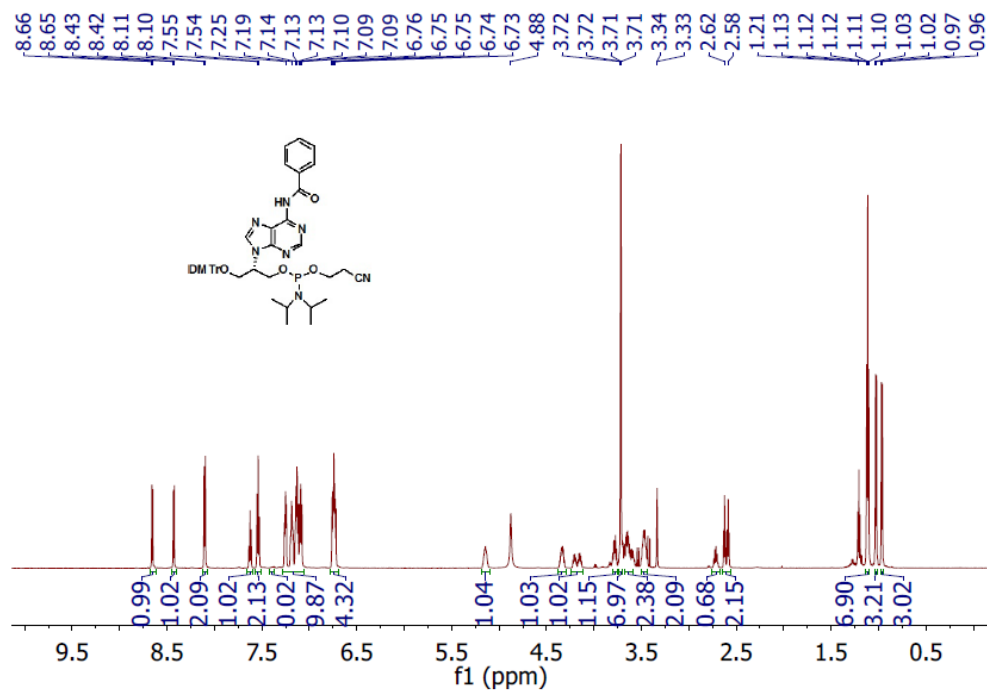
¹³C NMR spectrum of **26** in CDCl₃.



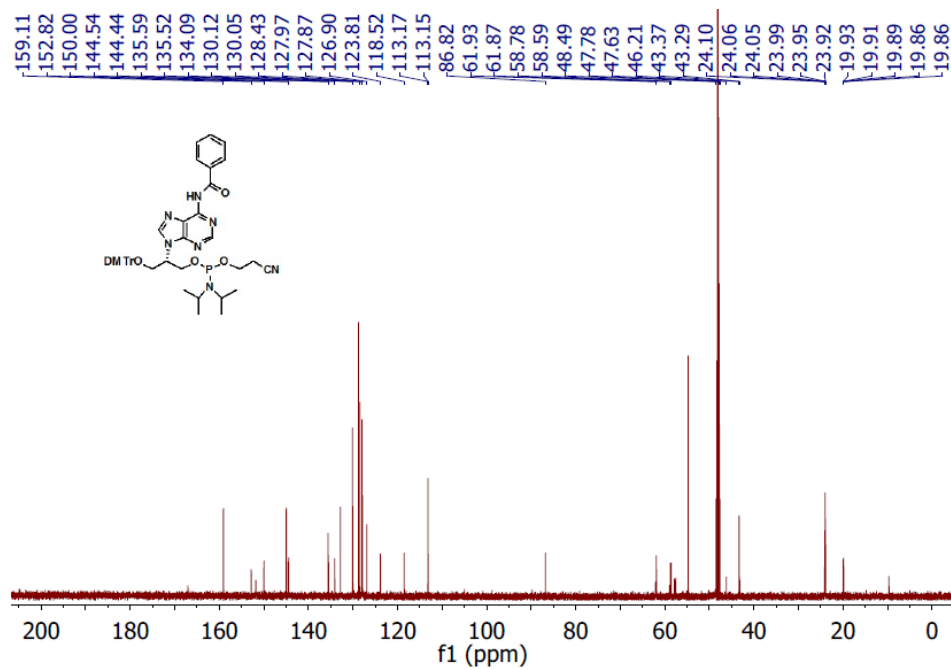
¹H NMR spectrum of **27** in CDCl₃.



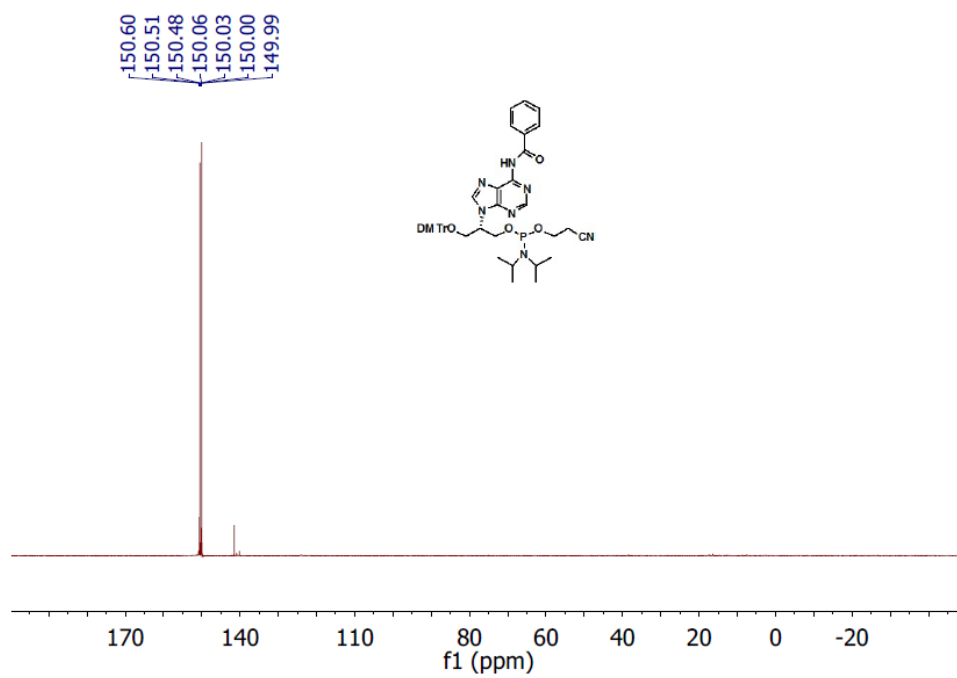
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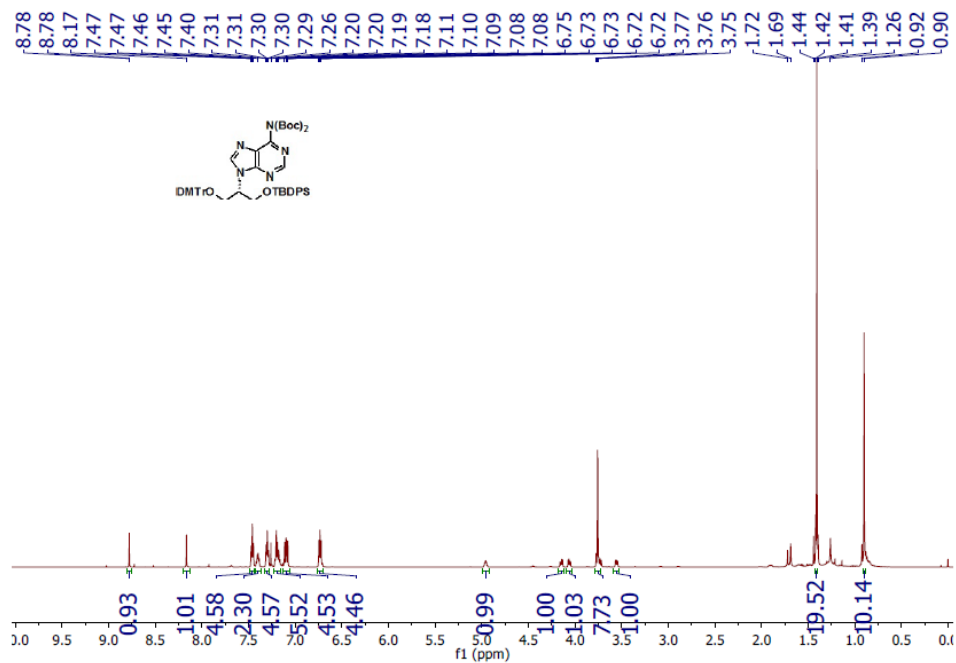
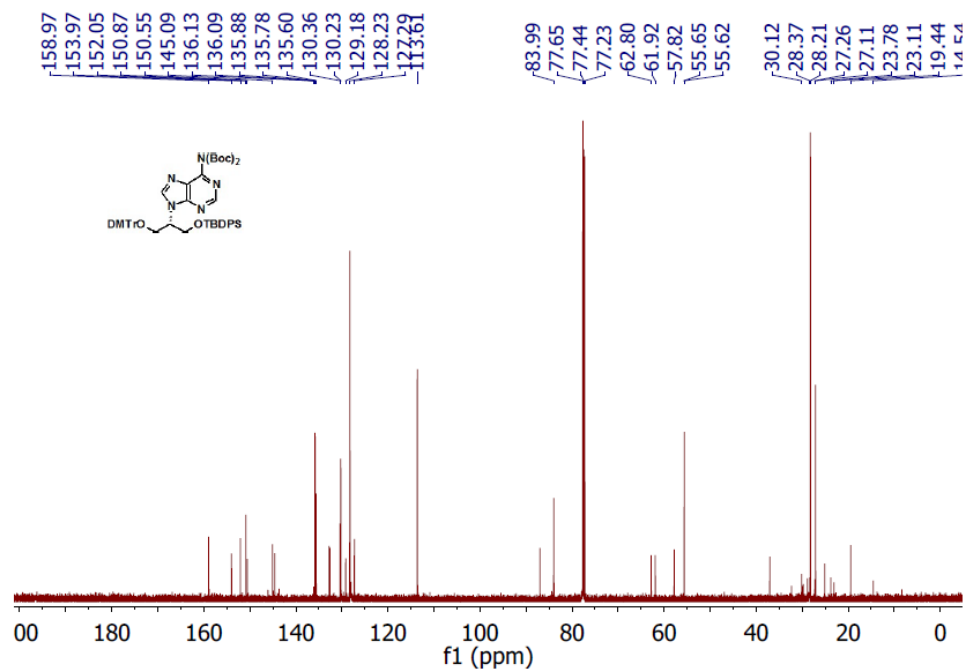
¹H NMR spectrum of **28** in CD₃OD.

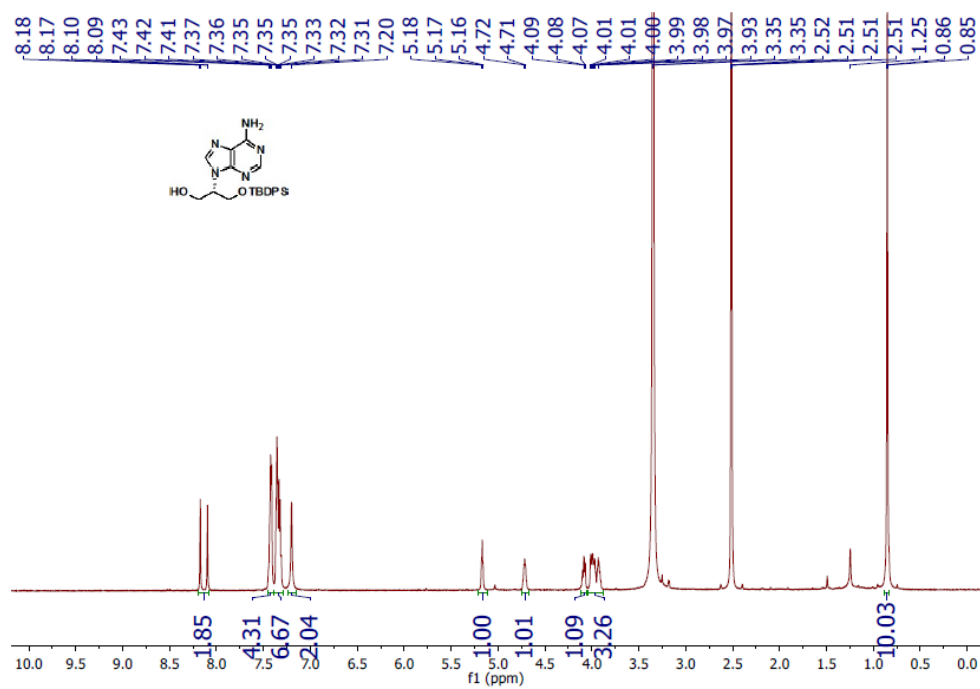


¹³C NMR spectrum of **28** in CD₃OD.

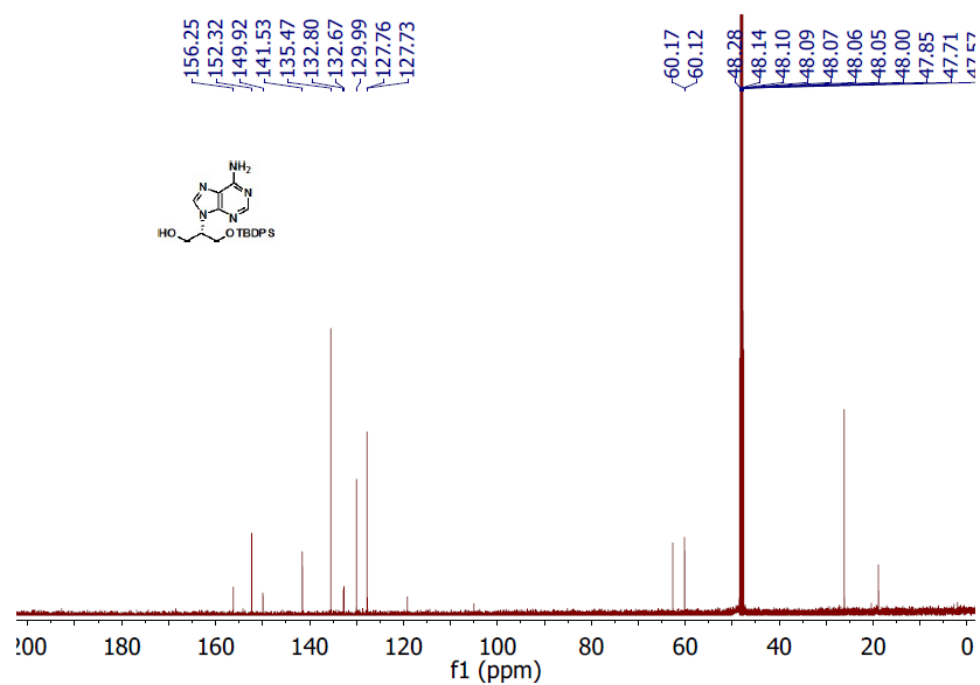


^{31}P NMR spectrum of **28** in CD_3OD .

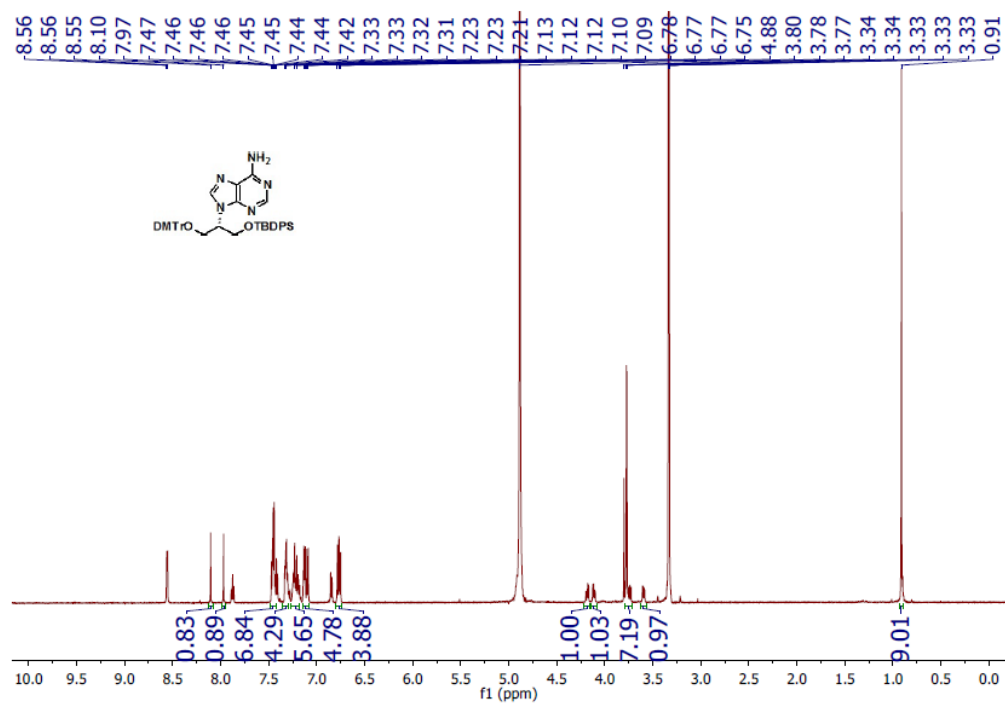
¹H NMR spectrum of **29** in CDCl₃. ^{13}C NMR spectrum of **29** in CDCl_3 .



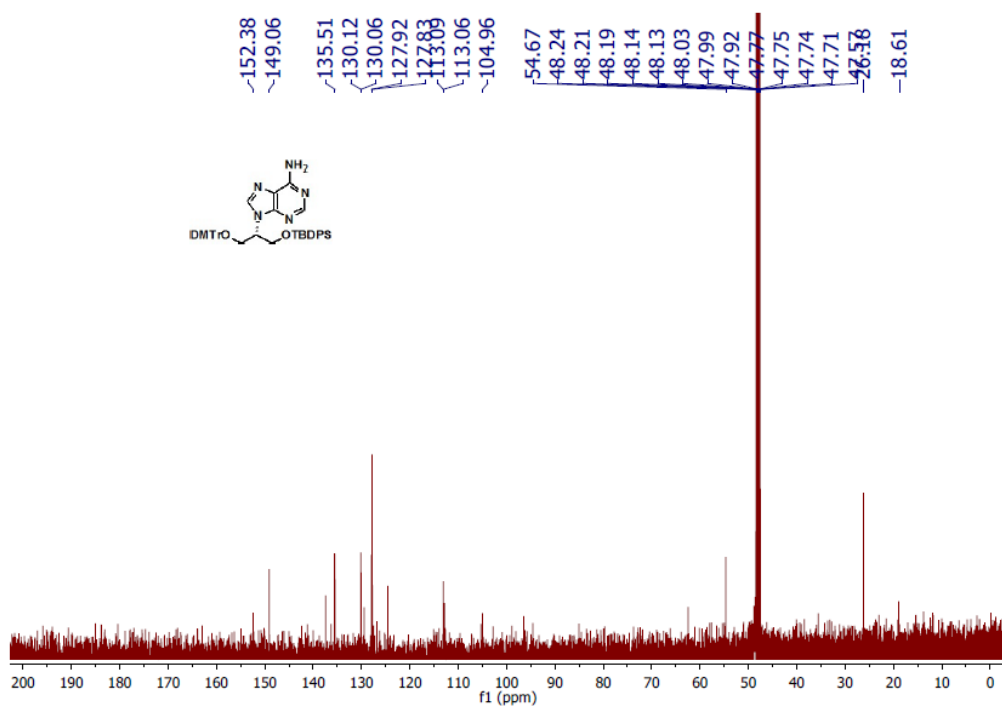
¹H NMR spectrum of **33** in DMSO-d₆.



¹³C NMR spectrum of **33** in DMSO-d₆.



¹H NMR spectrum of **34** in CD₃OD.



¹³C NMR spectrum of **34** in CD₃OD.