Preparation of a 4'-thiouridine building-block for solid-phase oligonucleotide synthesis

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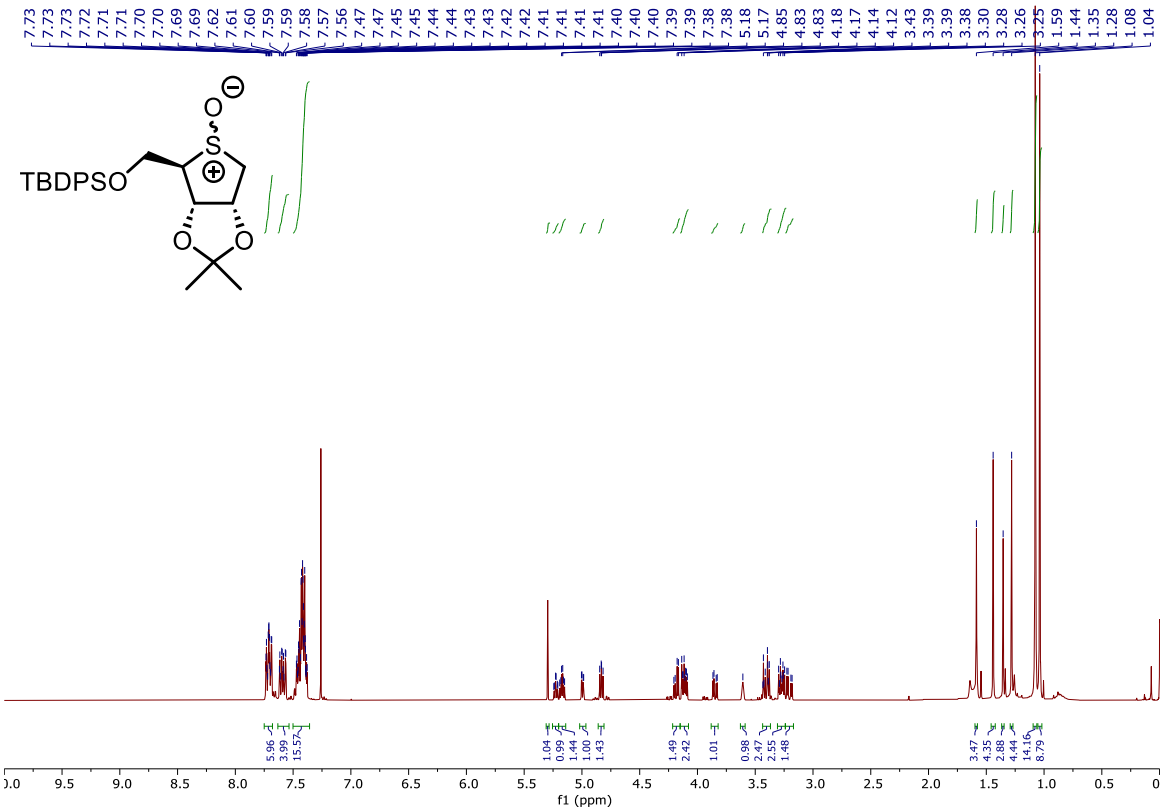
Supporting Information

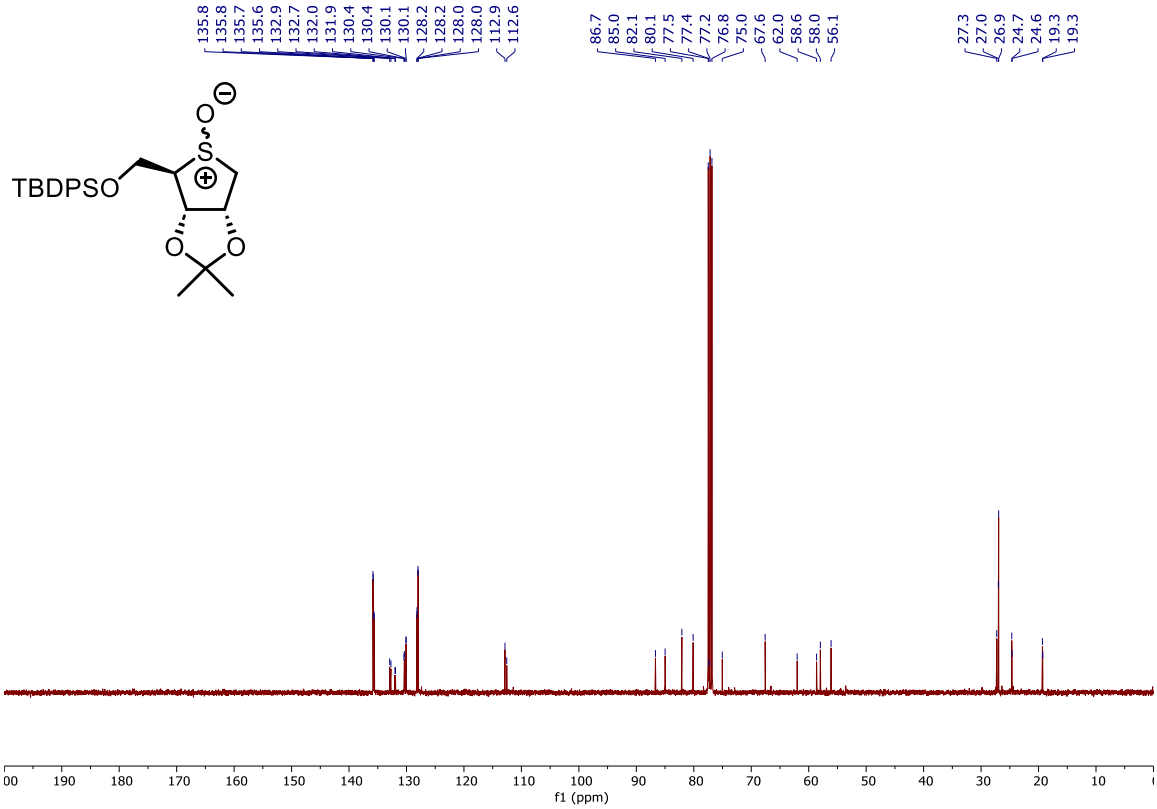
Representative NMR spectra for compounds **2-9**

(2R,3S,4R)-2,3-*O*-Isopopropylidene-5-*O*-*tert*-butyldiphenylsilyl-1-(4-sulfinyl)cyclopentane

^{1}H NMR (400 MHz, $CDCl_3$)

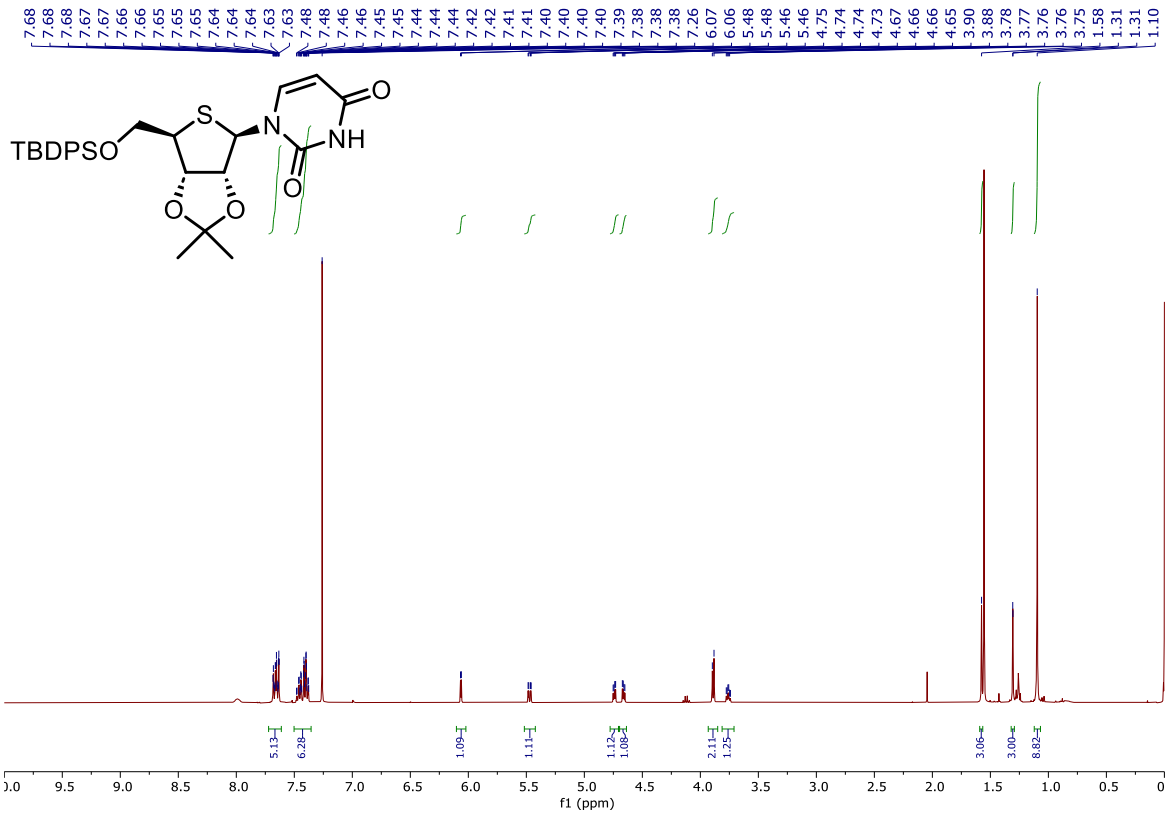


^{13}C NMR (101 MHz, $CDCl_3$)

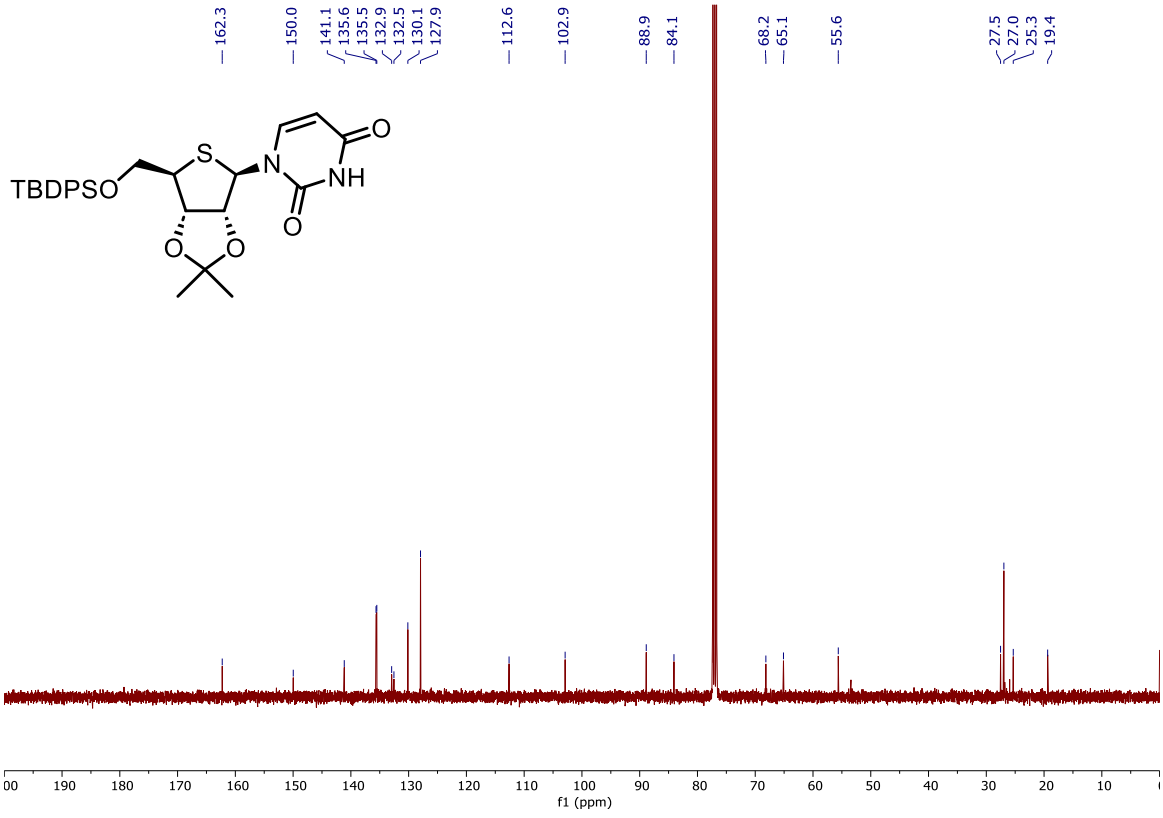


2',3'-*O*-Isopropylidene-5'-*O*-*tert*-butyldiphenylsilyl-4'-thiouridine

^{1}H NMR ($CDCl_3$)

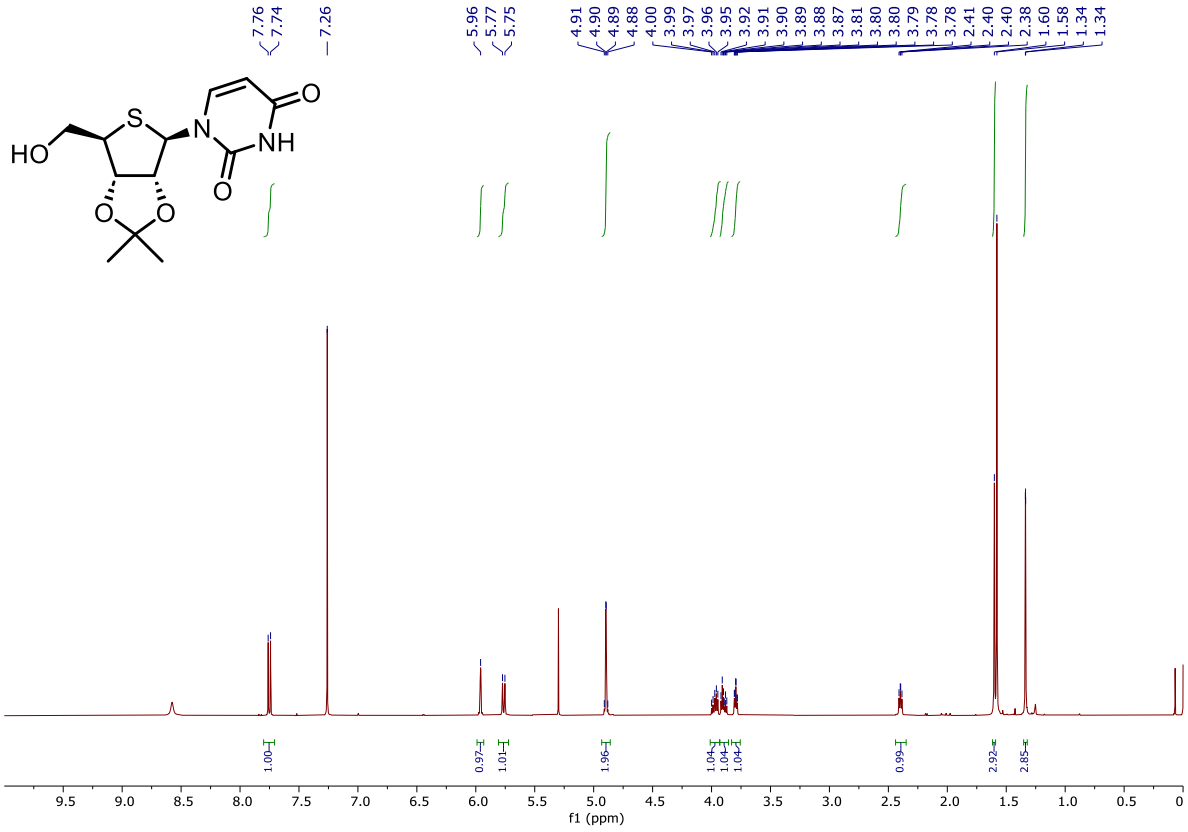


^{13}C MR (400 MHz, $CDCl_3$)

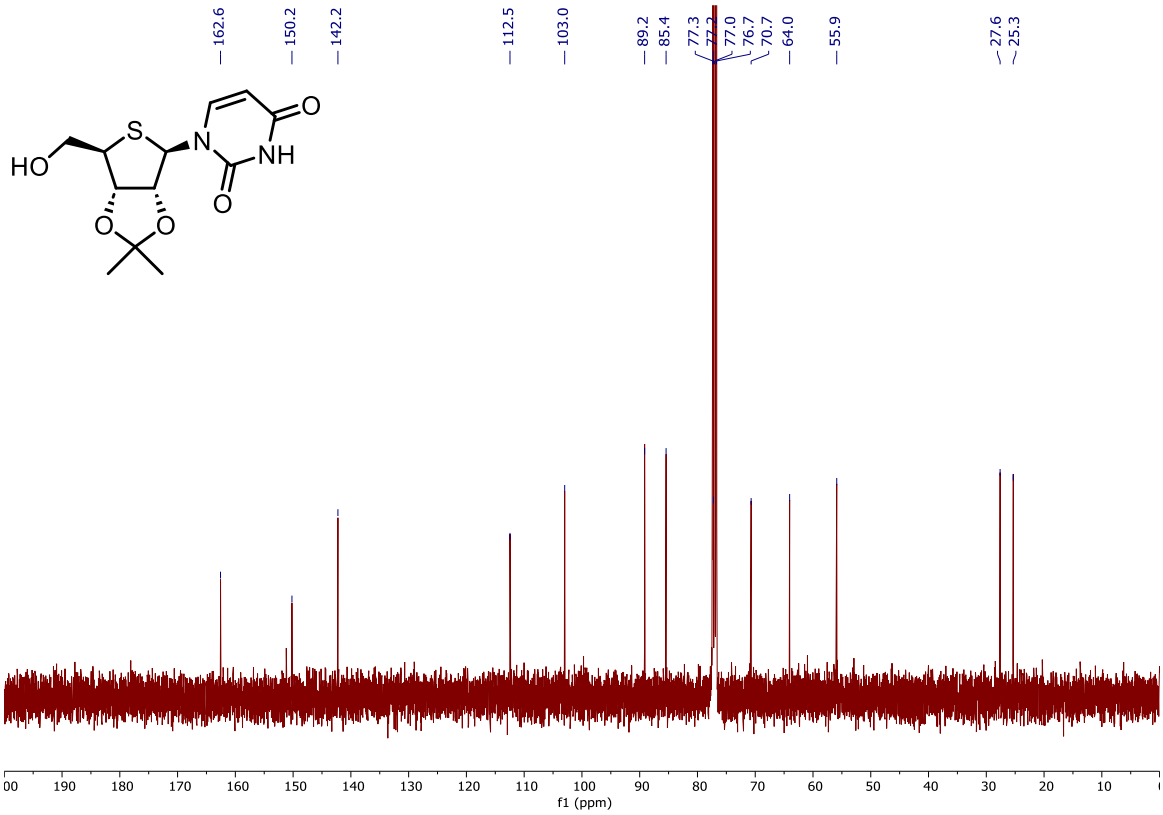


2’-3’-*O*-Isopropylidene-4’-thiouridine

^{1}H NMR (400 MHz, $CDCl_3$)

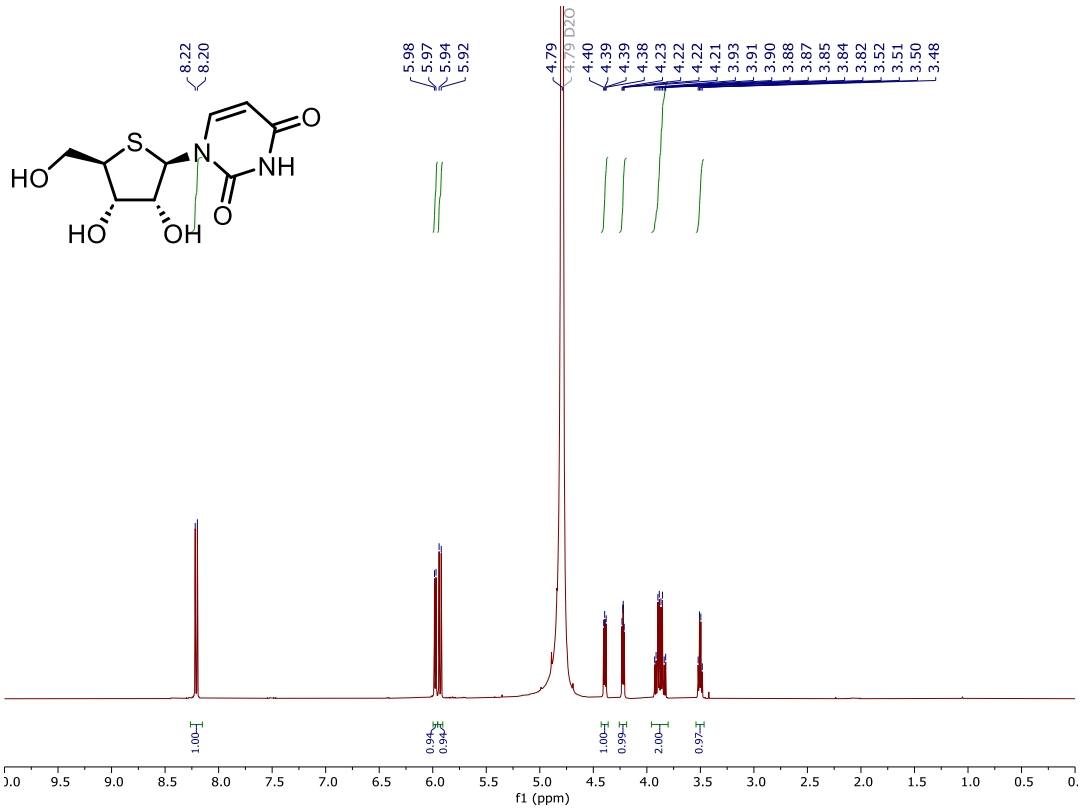


^{13}C NMR (101 MHz, $CDCl_3$)

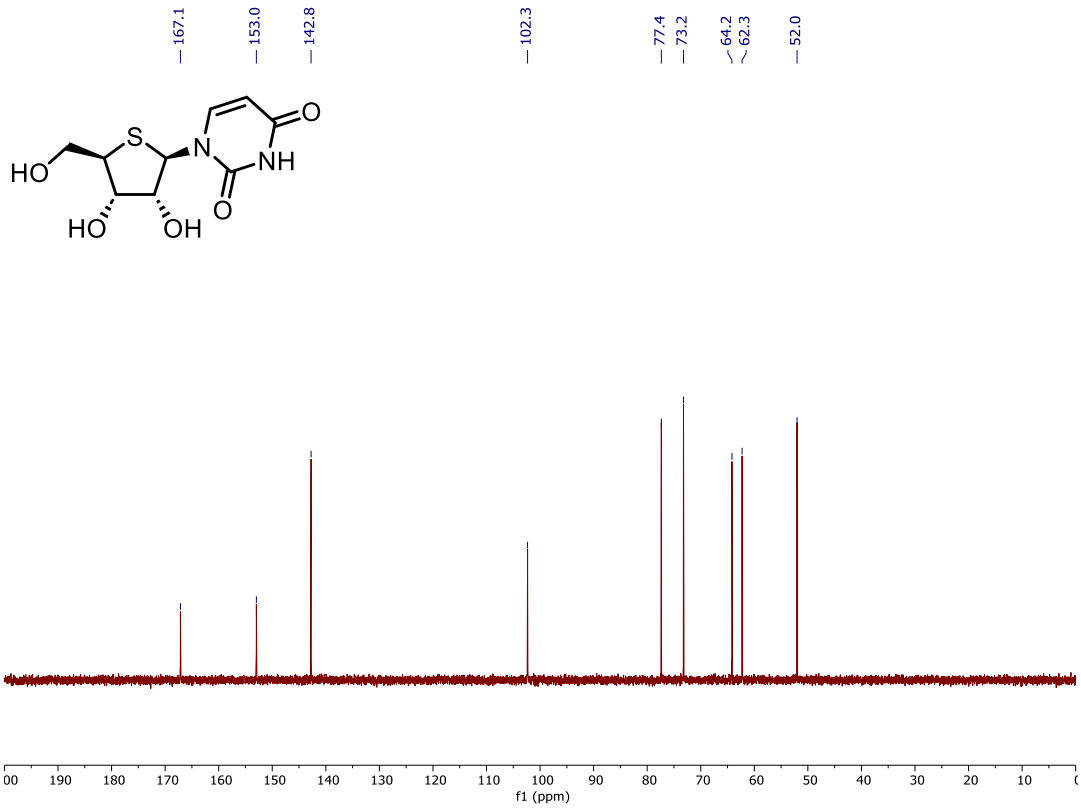


4’-Thiouridine

^{1}H NMR (400 MHz, D_2O):

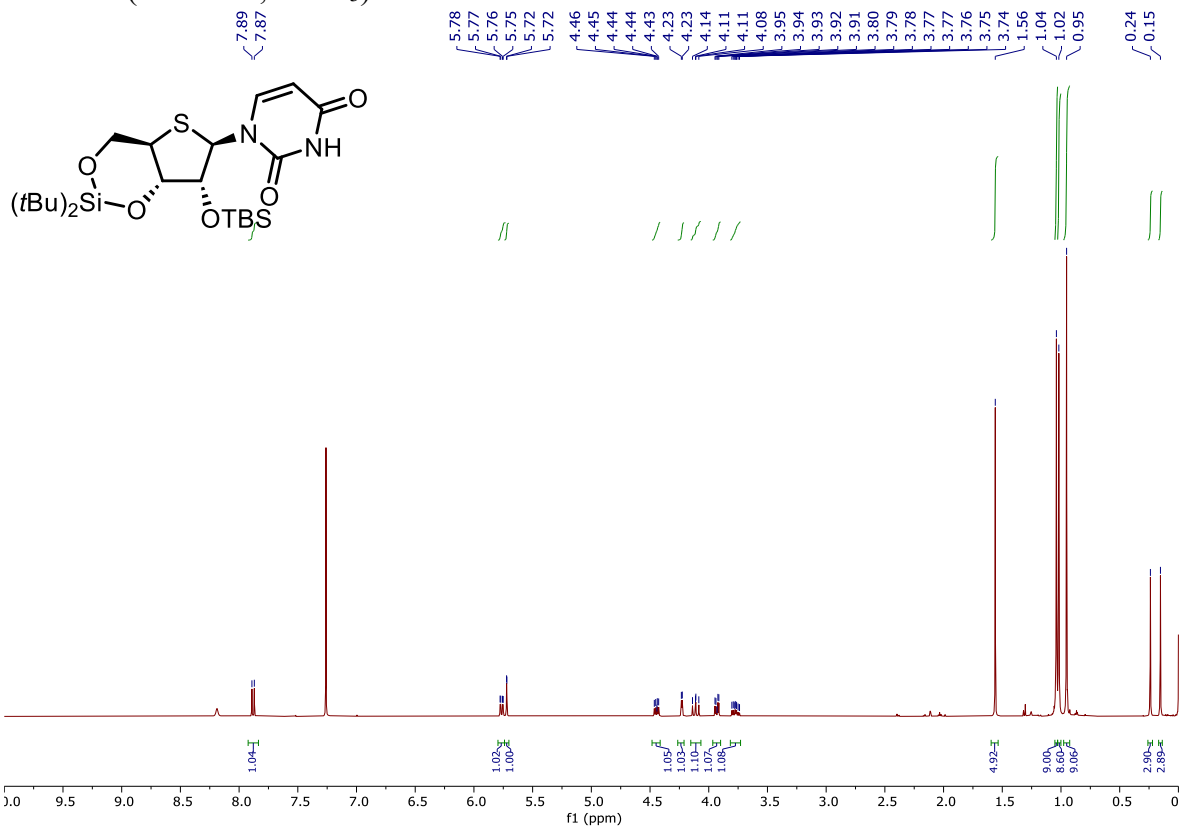


^{13}C NMR (101 MHz, D_2O):

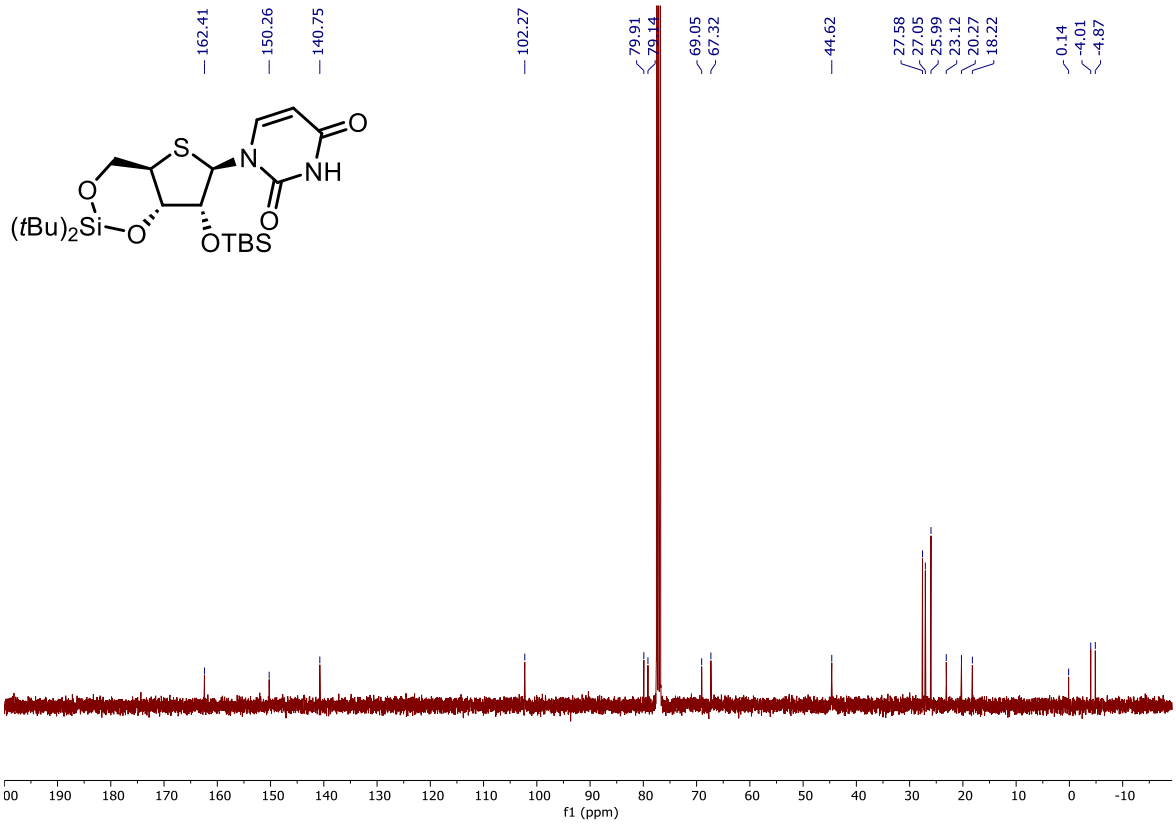


2'-*O*-*tert*-Butyldimethylsilyl-3',5'-di-*tert*-butylsiloxy-4'-thiouridine

^{1}H NMR (400 MHz, $CDCl_3$)

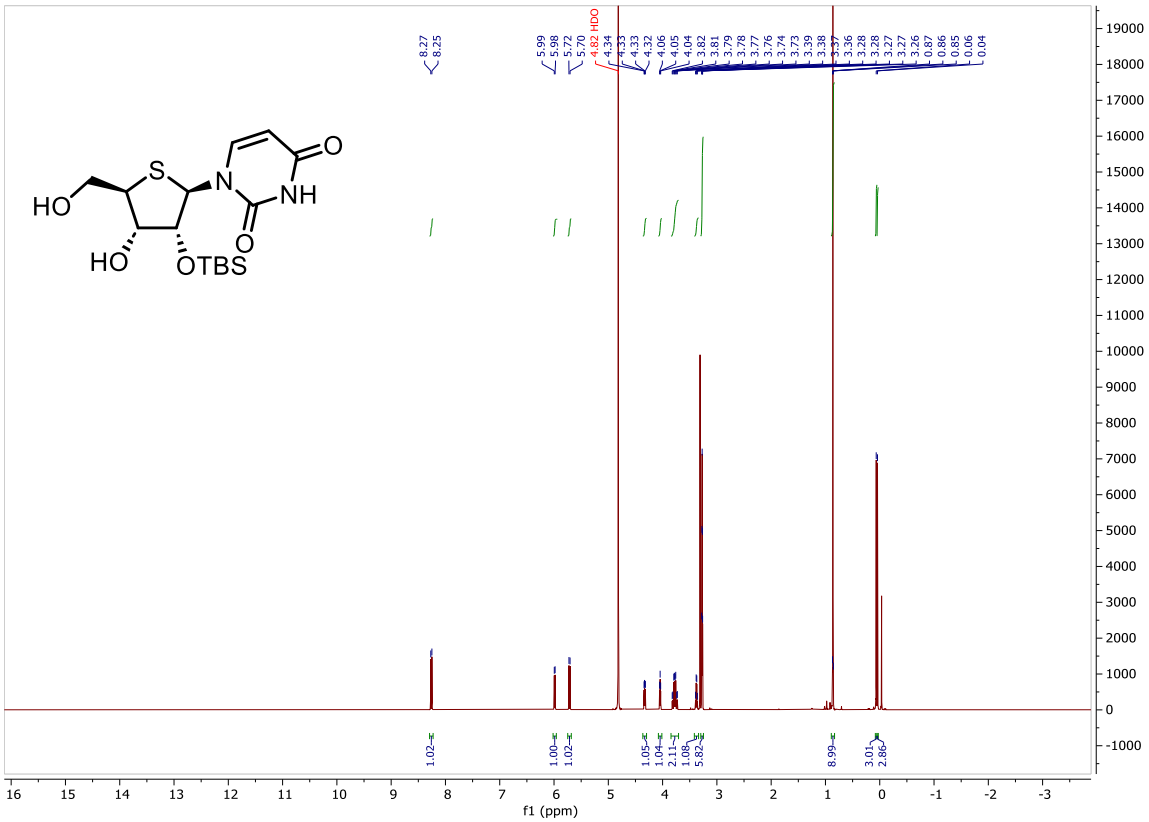


^{13}C NMR (101 MHz, $CDCl_3$)

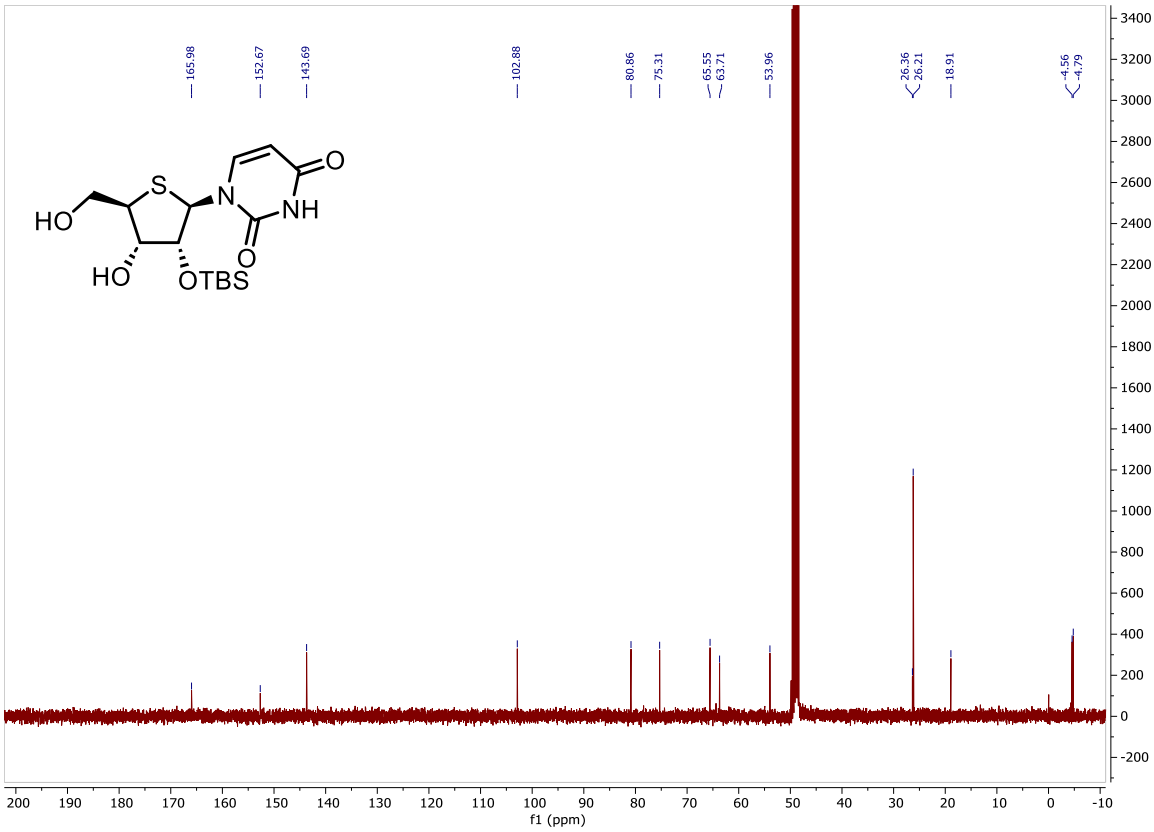


2’-*O-tert*-Butyldimethylsilyl-4’-thiouridine

^{1}H NMR (400 MHz, MeOD)

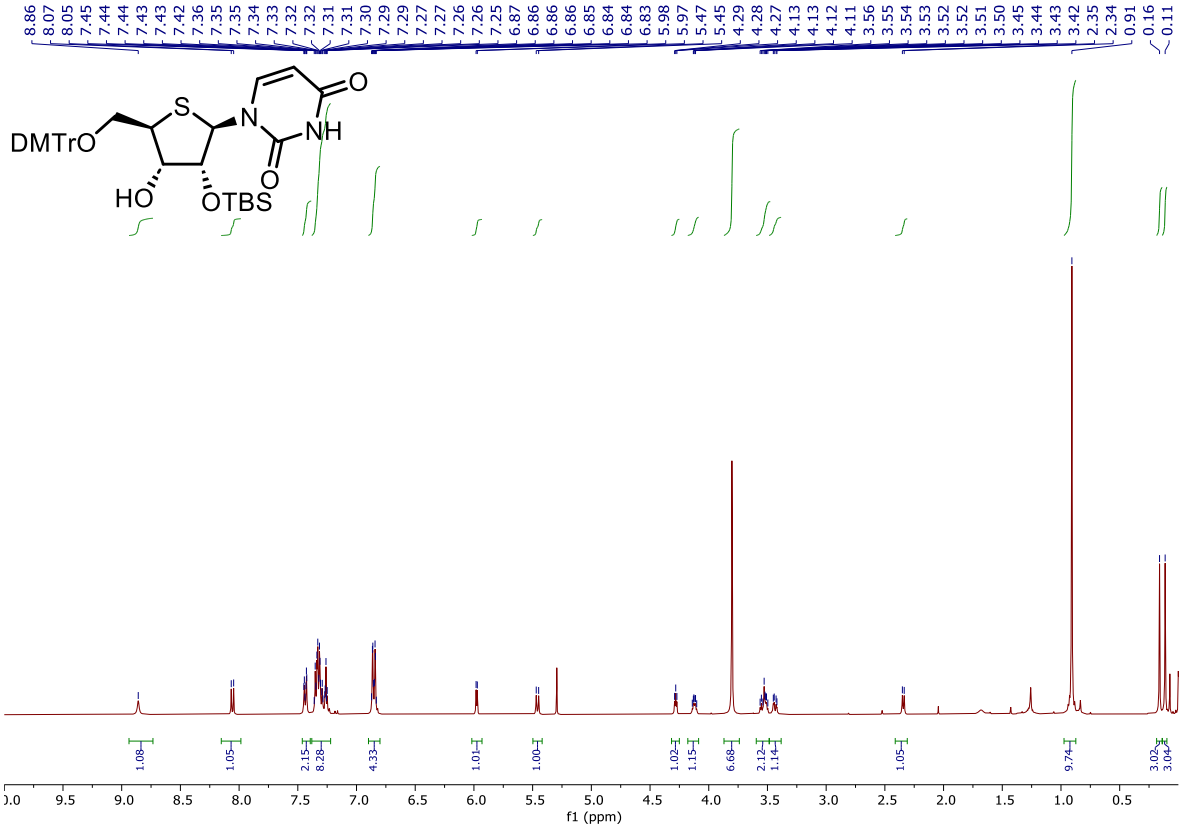


^{13}C NMR (101 MHz, MeOD)

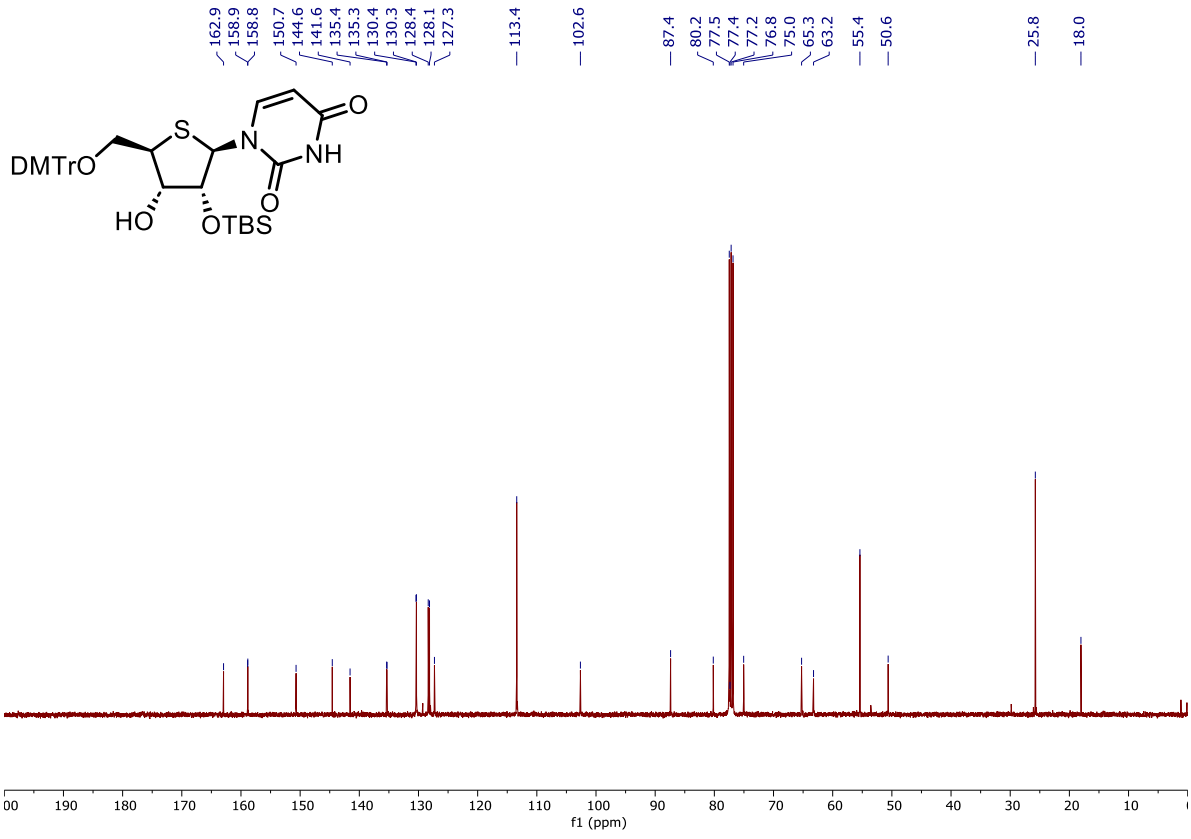


2'-*O*-*tert*-Butyldimethylsilyl-5'-*O*-dimethoxytrityl-4'-thiouridine

^{1}H NMR (400 MHz, $CDCl_3$)

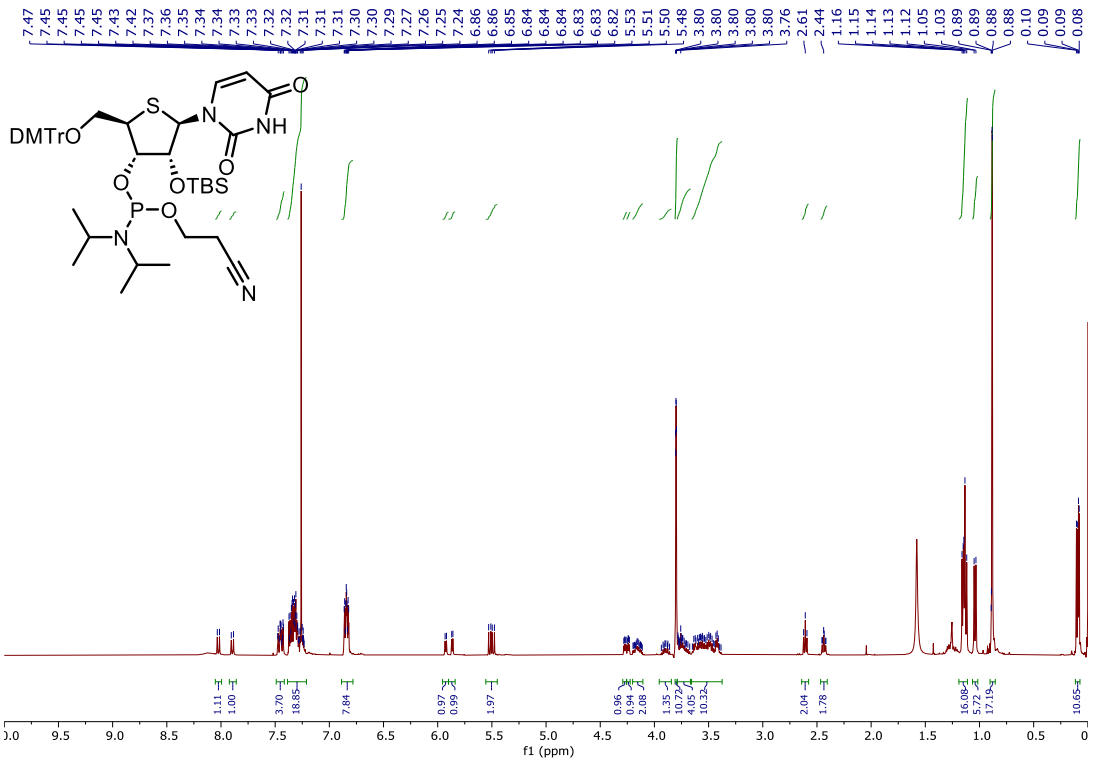


^{13}C NMR (400 MHz, $CDCl_3$)

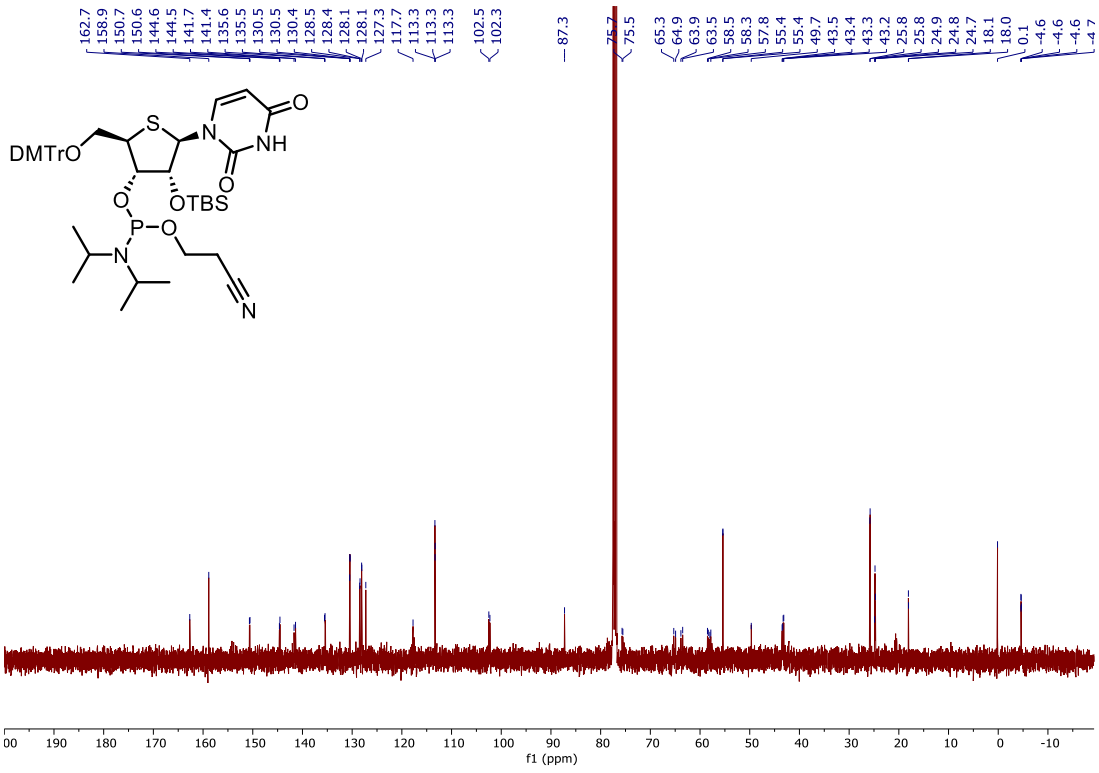


2‘-*O-tert*-butyldimethylsilyl-3’-*O*-[(2-cyanoethoxy)(*N*,*N*-diisopropylamino)phosphino]-5’-*O*-dimethoxytrityl-4’-thiouridine

^{1}H NMR (400 MHz, $CDCl_3$):



^{13}C NMR (101 MHz, $CDCl_3$):



^{31}P NMR (162 MHz, $CDCl_3$):