

## Electronic Supplementary Information

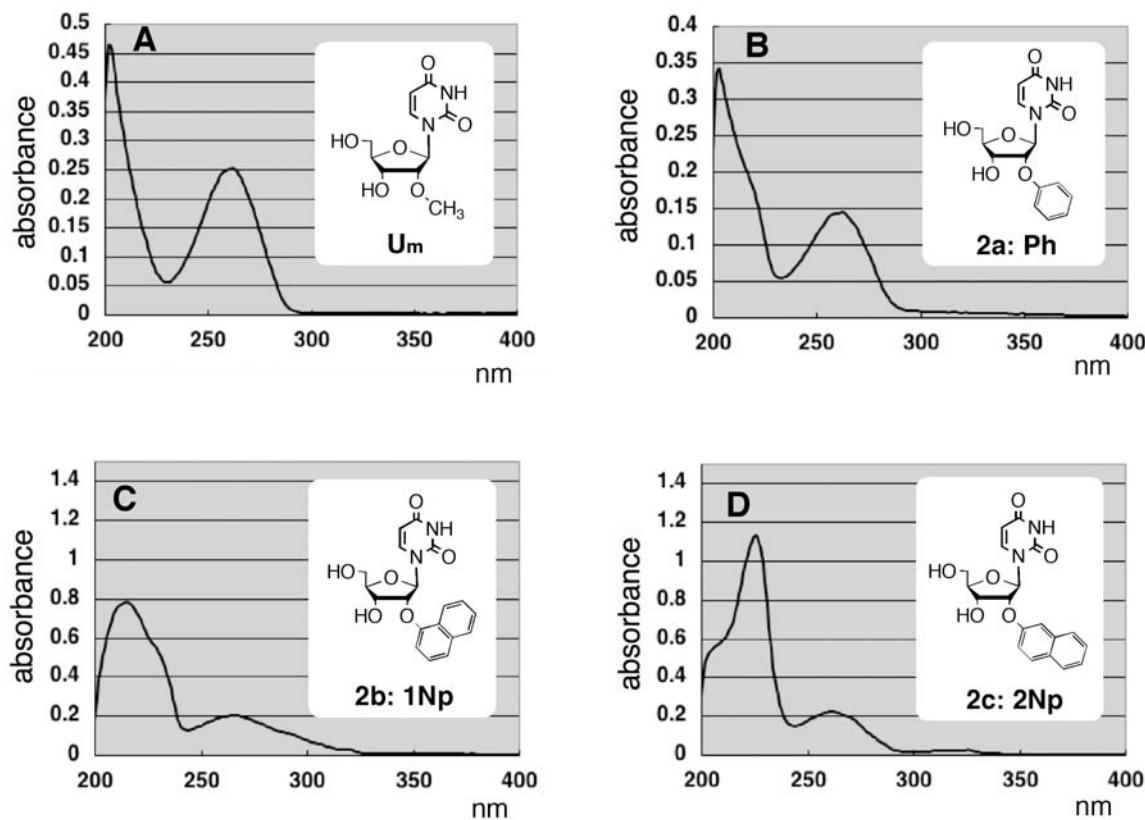
### Synthesis and Hybridization Properties of Oligoribonucleotides Incorporating 2'-O-Naphthyluridines

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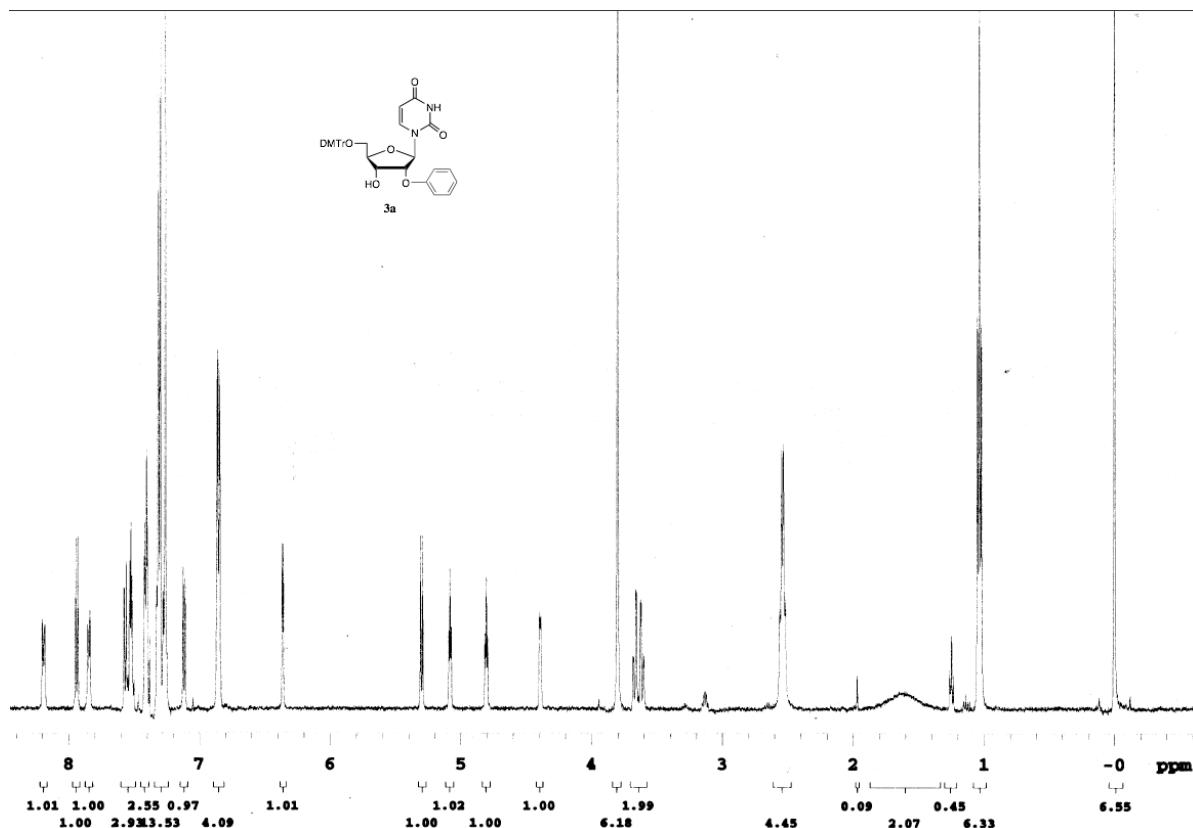
**Fig. S1** UV spectra of 2'-O-methyluridine (Um), 2'-O-aryluridine

derivatives <b>2a-c</b> in methanol.	S2
<sup>1</sup> H NMR Spectrum of <b>3a</b>	S3
<sup>13</sup> C NMR Spectrum of <b>3a</b>	S4
<sup>1</sup> H NMR Spectrum of <b>3b</b>	S5
<sup>13</sup> C NMR Spectrum of <b>3b</b>	S6
<sup>1</sup> H NMR Spectrum of <b>3c</b>	S7
<sup>13</sup> C NMR Spectrum of <b>3c</b>	S8
<sup>1</sup> H NMR Spectrum of <b>4a</b>	S9
<sup>13</sup> C NMR Spectrum of <b>4a</b>	S12
<sup>31</sup> P NMR Spectrum of <b>4a</b>	S11
<sup>1</sup> H NMR Spectrum of <b>4b</b>	S12
<sup>13</sup> C NMR Spectrum of <b>4b</b>	S13
<sup>31</sup> P NMR Spectrum of <b>4b</b>	S14
<sup>1</sup> H NMR Spectrum of <b>4c</b>	S15
<sup>13</sup> C NMR Spectrum of <b>4c</b>	S16
<sup>31</sup> P NMR Spectrum of <b>4c</b>	S17

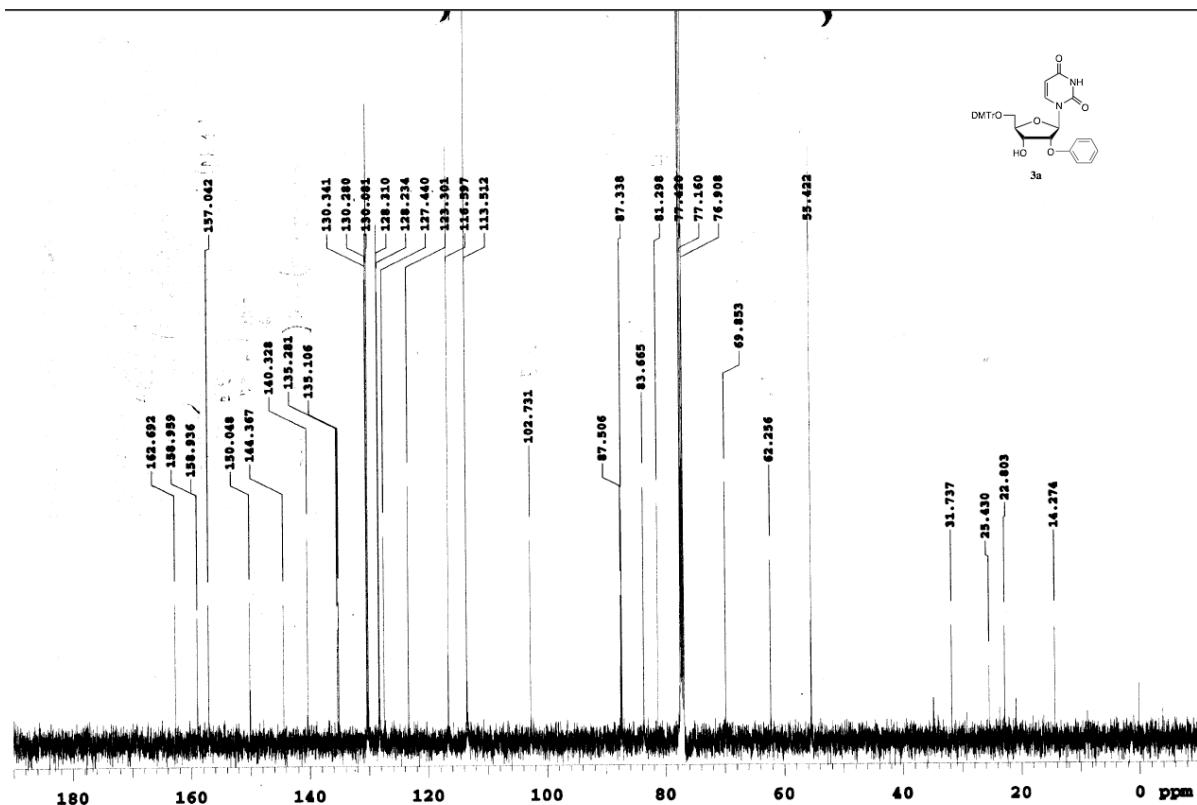


**Fig. S1** UV spectra of 2'-*O*-methyluridine (Um) and 2'-*O*-aryluridine derivatives **2a-c** in methanol.

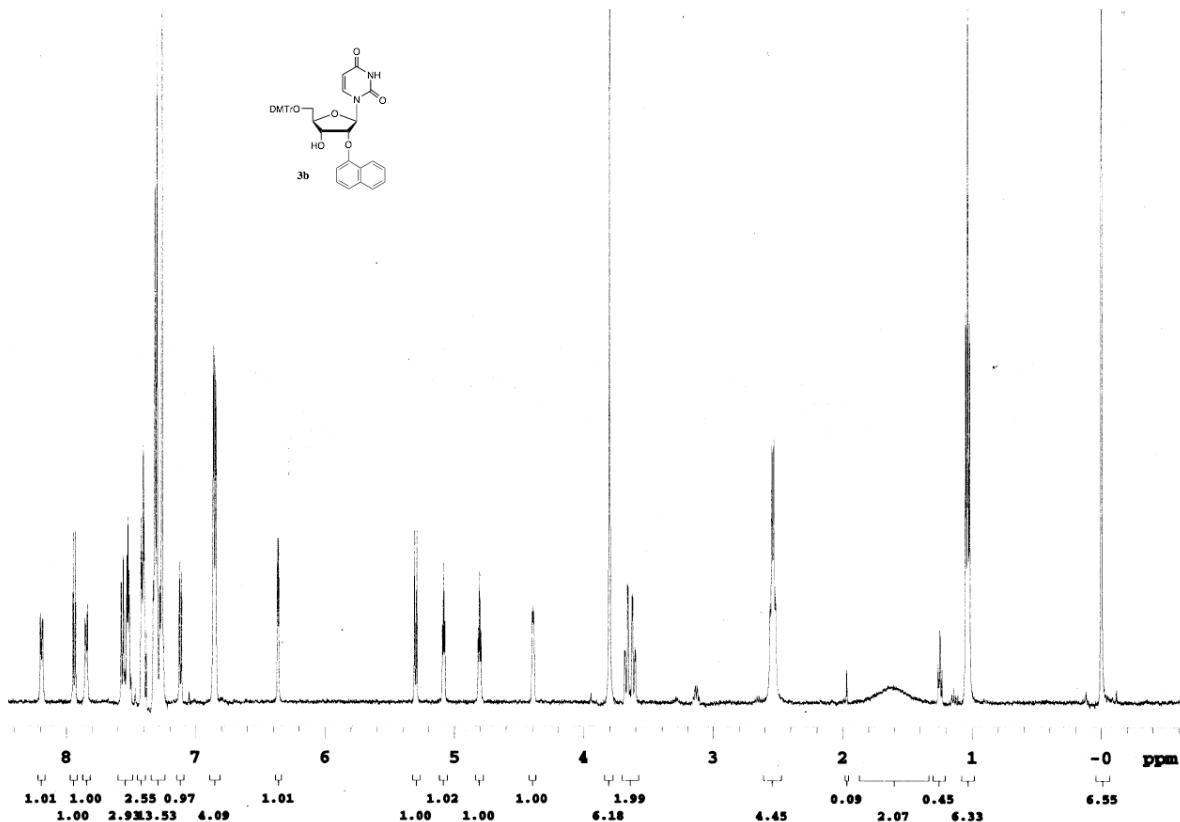
<sup>1</sup>H NMR Spectrum of 2'-*O*-Phenyl-5'-*O*-(4,4'-dimethoxytrityl)uridine (3a)



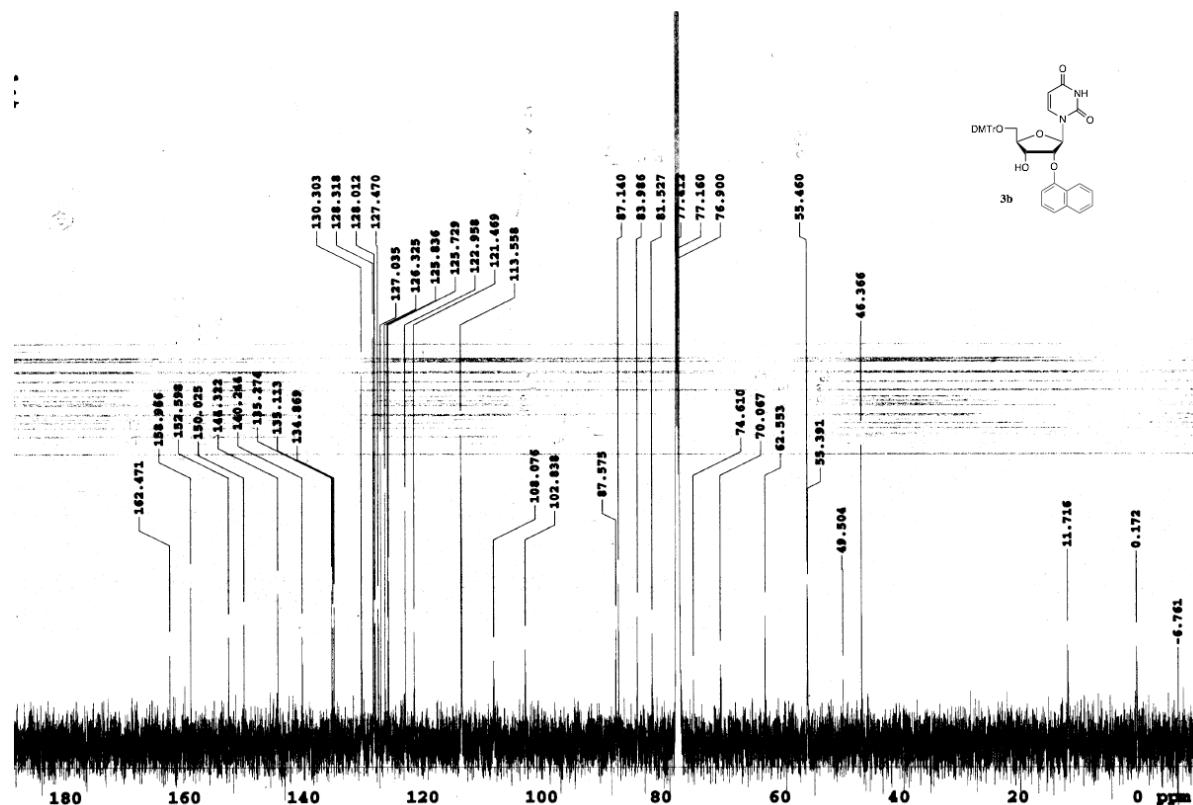
**<sup>13</sup>C NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine (3a)**



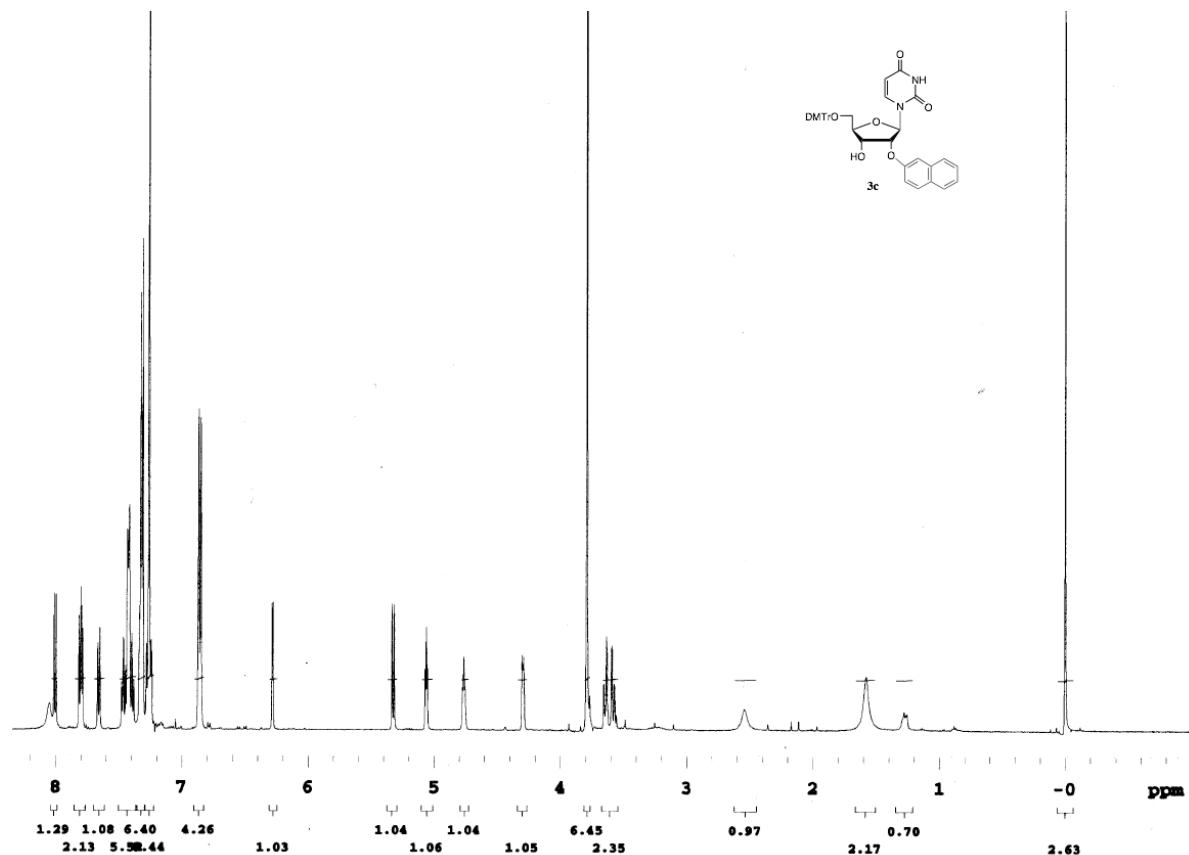
**<sup>1</sup>H NMR Spectrum of 2'-O-(1-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3b)**



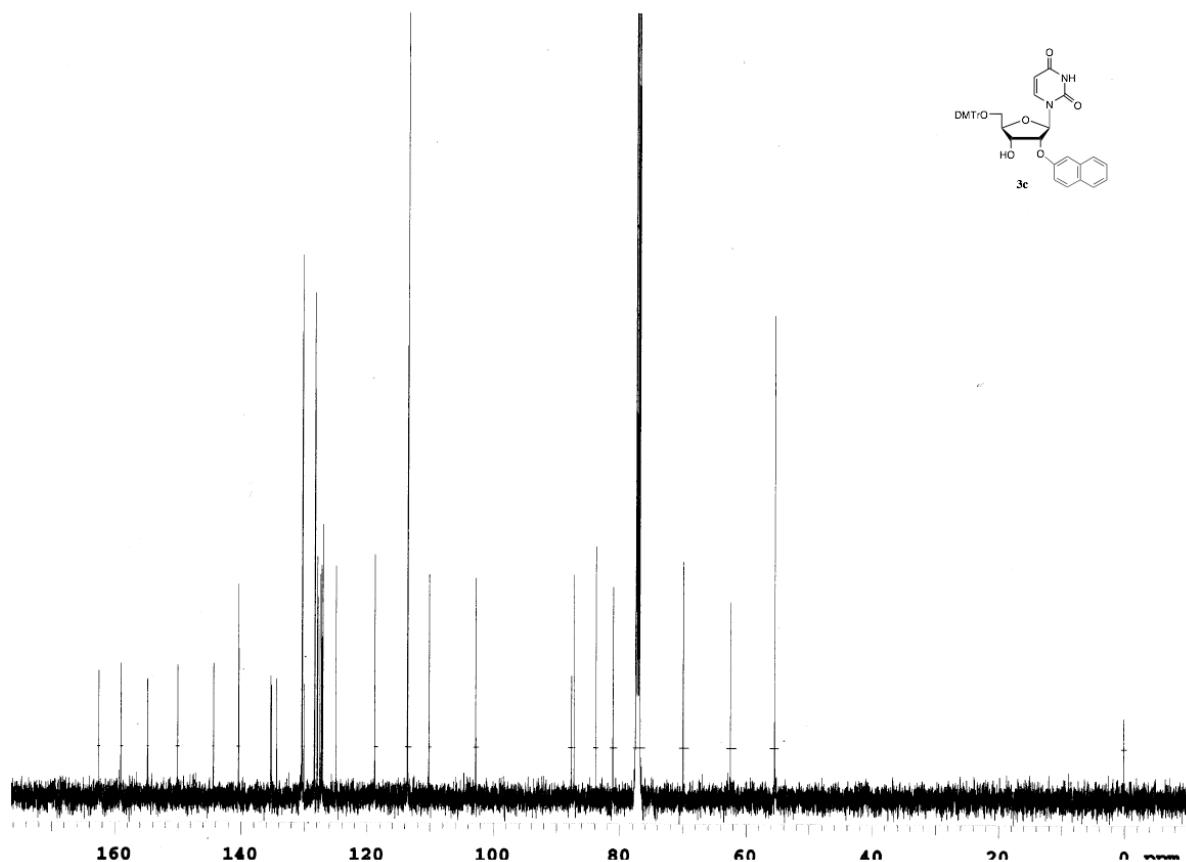
**<sup>13</sup>C NMR Spectrum of 2'-O-(1-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3b)**



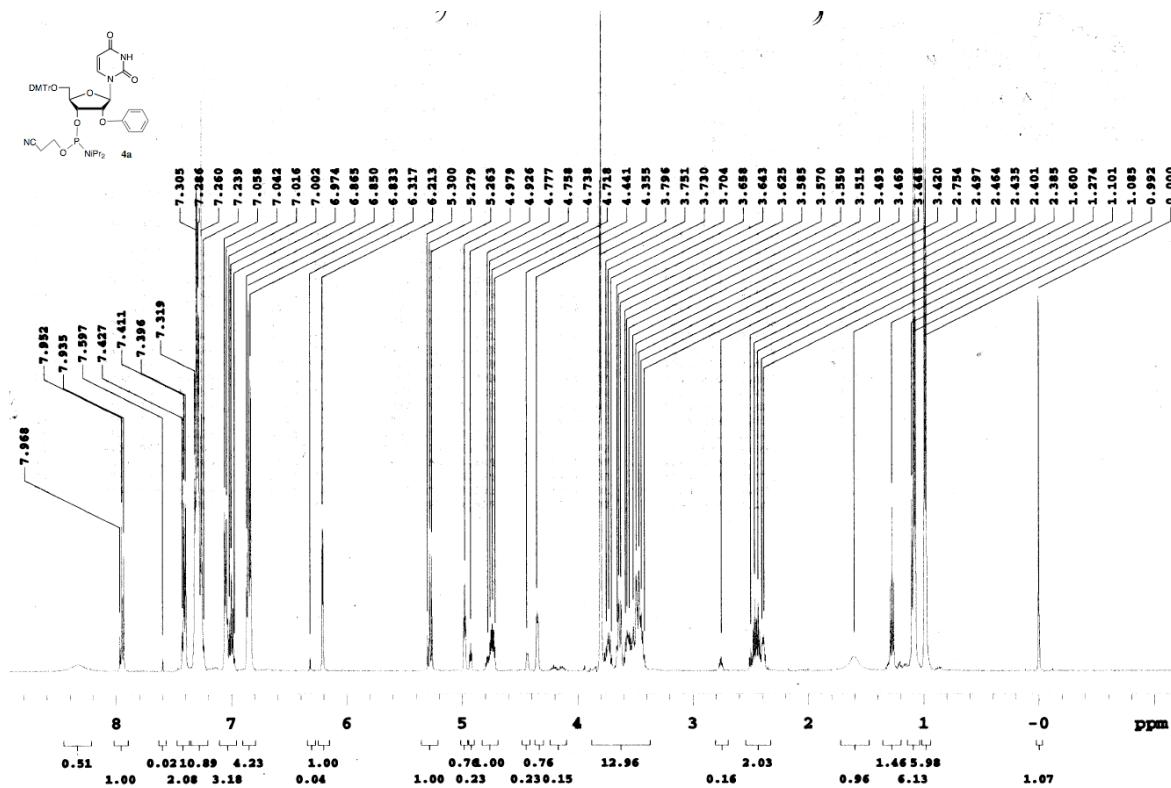
**<sup>1</sup>H NMR Spectrum of 2'-O-(2-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3c)**



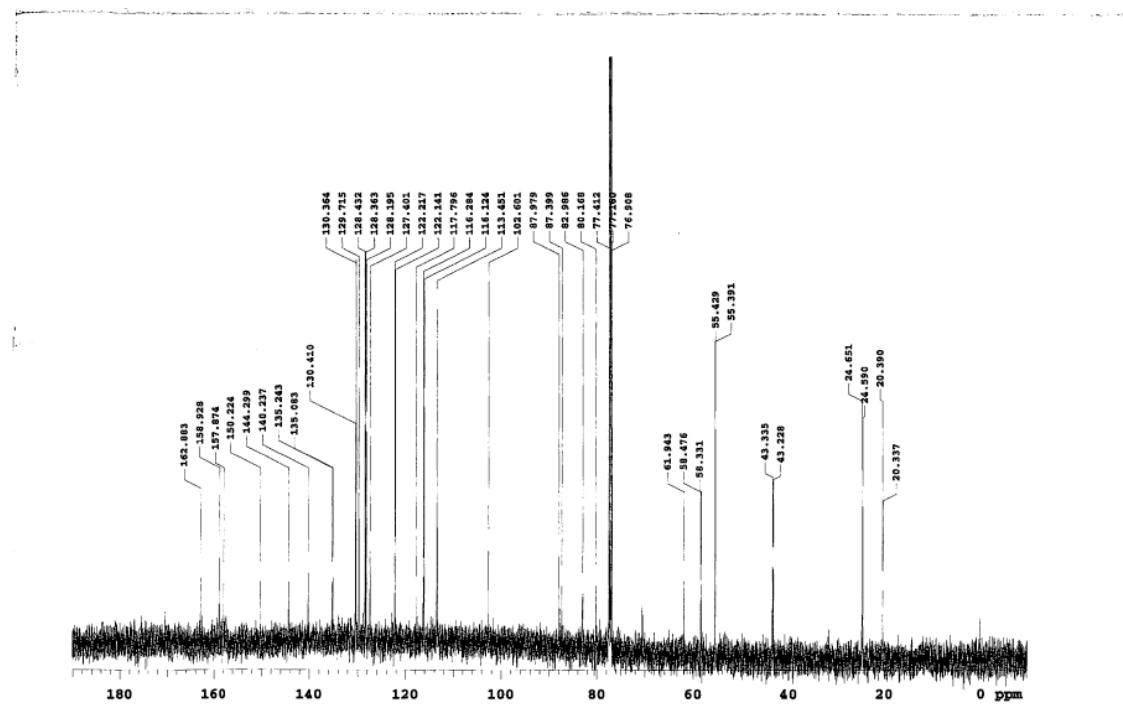
**<sup>13</sup>C NMR Spectrum of 2'-O-(2-Naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine (3c)**



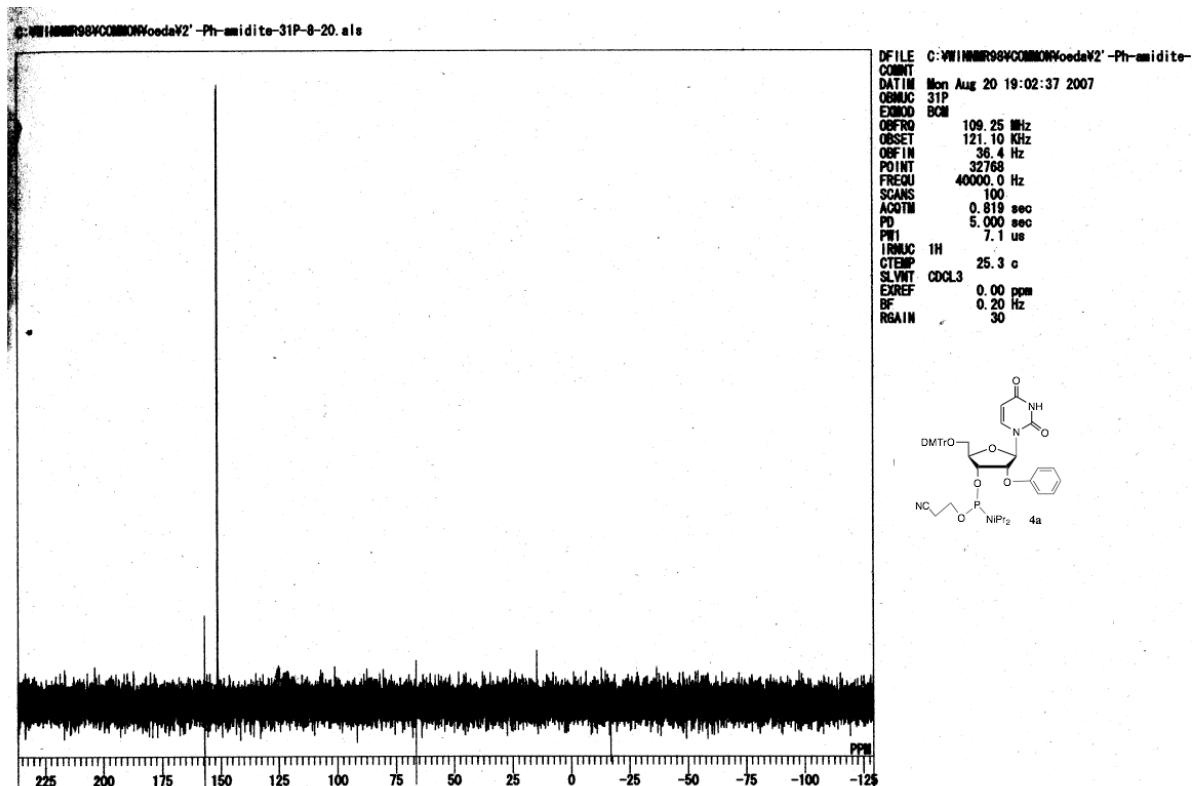
**<sup>1</sup>H NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoroamidite (4a)**



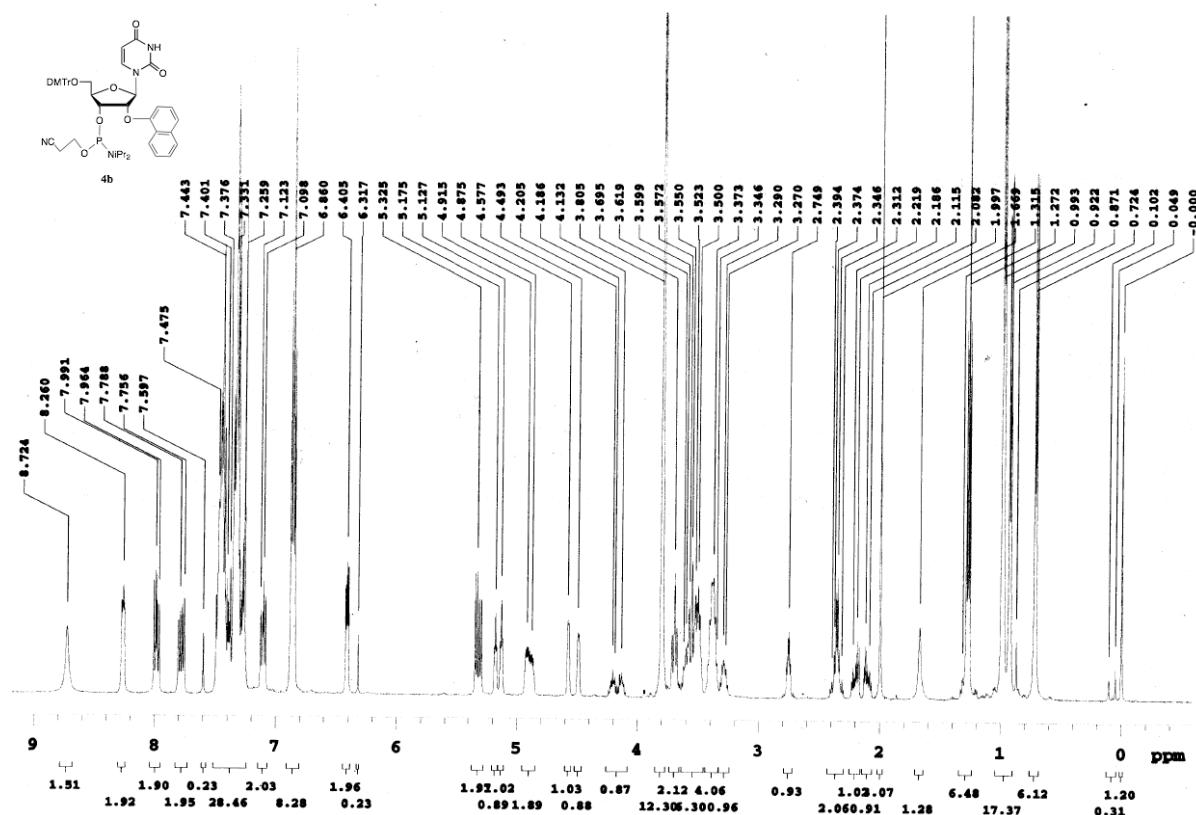
**<sup>13</sup>C NMR Spectrum of 2'-O-phenyl-5'-O-(4, 4'-dimethoxytrityl)uridine 3'-(*N*, *N*-diisopropyl)phosphoramidite (4a)**



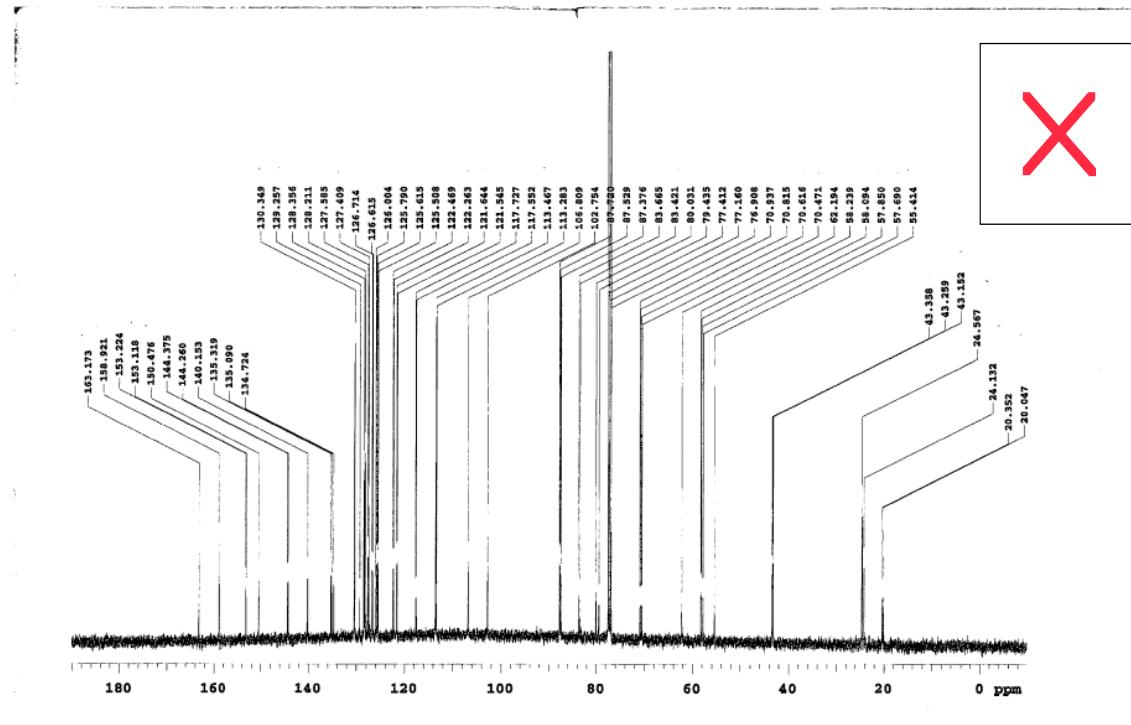
**$^{31}\text{P}$  NMR Spectrum of 2'-O-Phenyl-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoroamidite (4a)**



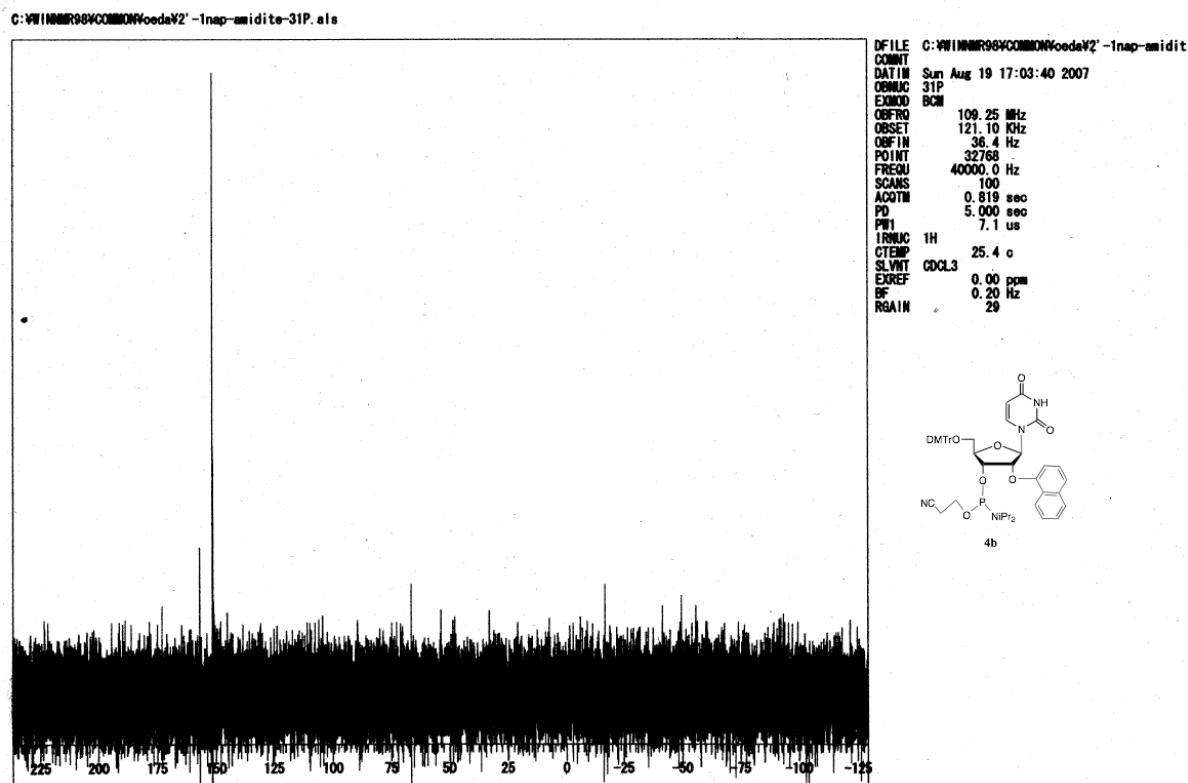
**<sup>1</sup>H NMR Spectrum of 2'-O-((1-naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoroamidite (4b)**



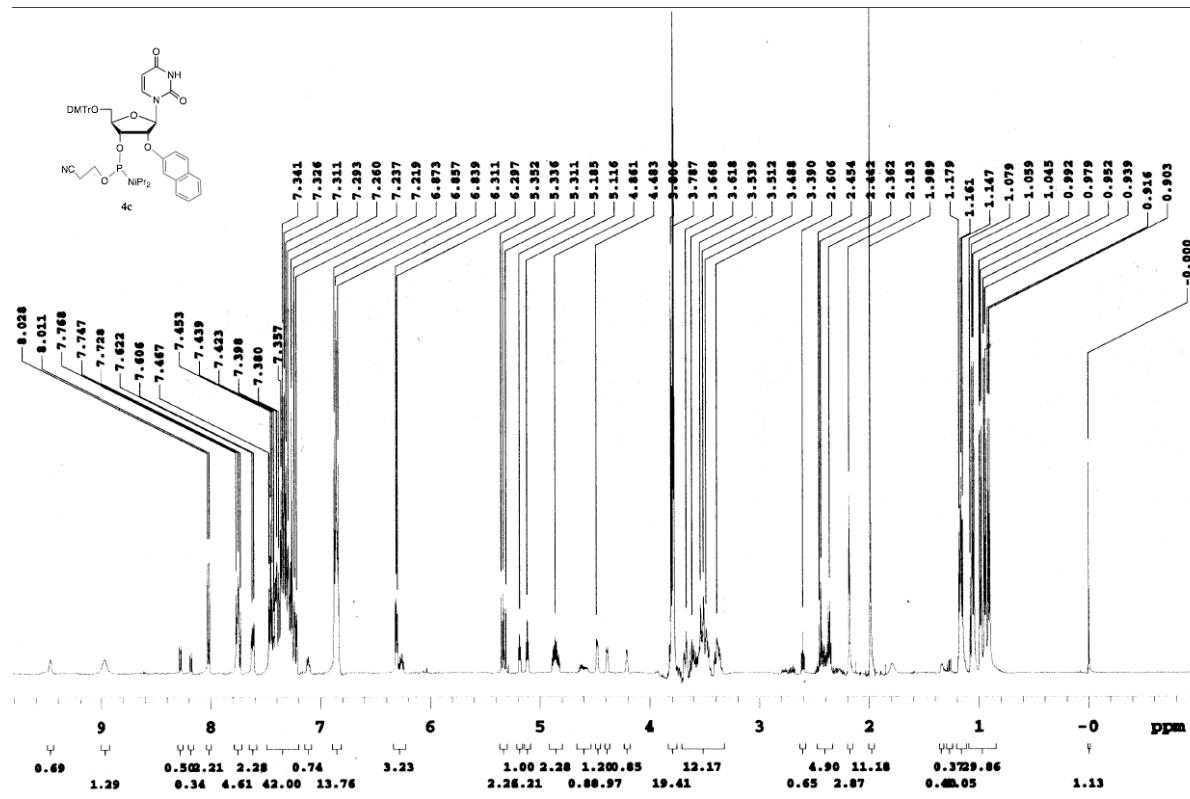
**<sup>13</sup>C NMR Spectrum of 2'-O-(1-naphthyl)-5'-O-(4, 4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoramidite (4b)**



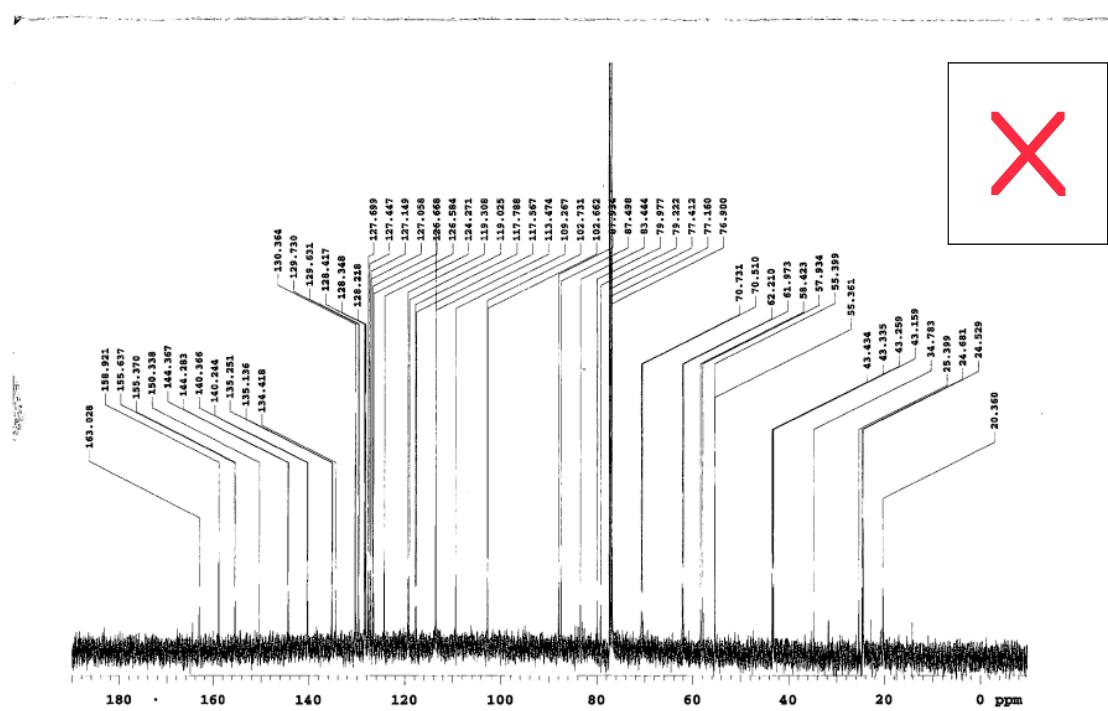
**$^{31}\text{P}$  NMR Spectrum of 2'-O-(-(1-naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoroamidite (4b)**



**<sup>1</sup>H NMR Spectrum of 2'-O-(2-naphthyl)-5'-O-(4,4'-dimethoxytrityl)uridine 3'-(*N,N*-diisopropyl)phosphoroamidite (4c)**

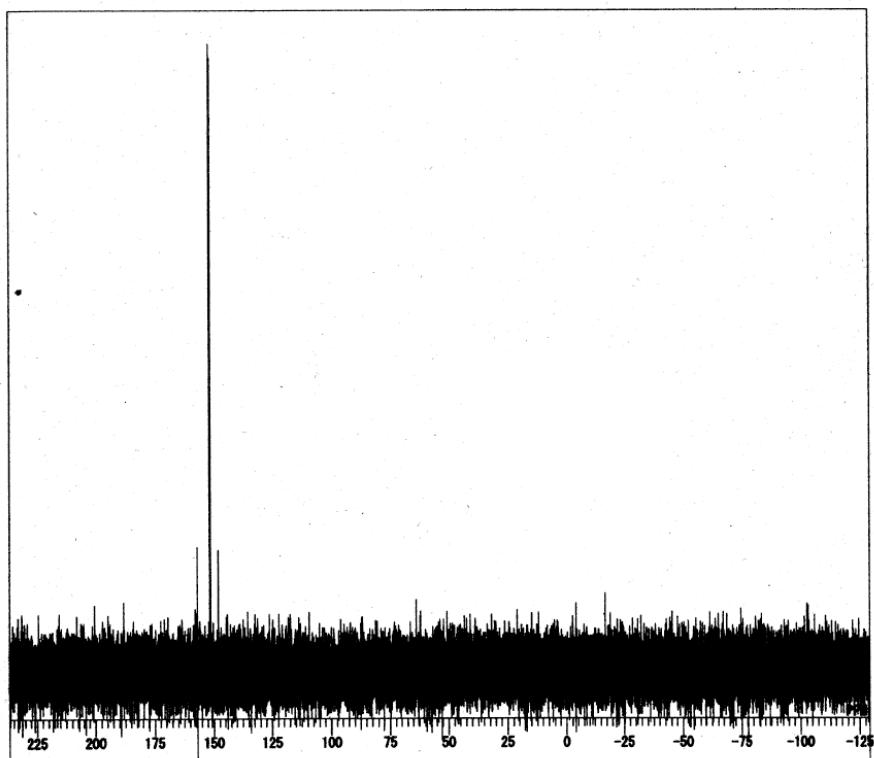


**<sup>13</sup>C NMR Spectrum of 2'-O-(2-naphthyl)-5'-O-(4, 4'-dimethoxytrityl)uridine 3'-(N, N-diisopropyl)phosphoramidite (4c)**



**$^{31}\text{P}$  NMR Spectrum of 2'-O-(2-naphthyl)-5'-O-(4, 4'-dimethoxytrityl)uridine 3'-(*N*, *N*-diisopropyl)phosphoramidite (4c)**

C:\WINNMR98\COMMON\oeda\Y2'-2nap-amidite-31P.ais



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POINT 32768  
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PD 5.000 sec  
PR1 7.1 us  
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DF 0.20 Hz  
RGAIN 30

